Final

Quarterly Report No. 1 – Data Gap Phase

Remedial Investigation

FORMER SALVAGE YARD
FORMER DOW MILITARY AIRFIELD
233 Odlin Road, Bangor, Maine

FUDS No. D01ME000407

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Prepared for:
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Concord, MA 01742

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LIST OF ACRONYMS

µg/L – micrograms per liter
ADR – Automated Data Review
APP – Accident Prevention Plan
ARA – Absolute Resource Associates
ATV – acoustic televiewer
bgs – below ground surface
CENAE – U.S. Army Corps of Engineers New England District
CERCLA – Comprehensive Environmental Response, Compensation, and Liability Act
cm – centimeters
COC – chain of custody
CORS – Continuously Operating Reference Station
Credere – Credere Associates, LLC
CSM – Conceptual Site Model
CVOC – Chlorinated Volatile Organic Compound
DCE – Dichloroethene
DEHP – Bis(2-ethylhexyl) phthalate
DEP – Department of Environmental Protection
DERP – Defense Environmental Restoration Program
DI – deionized
DO – dissolved oxygen
DoD – Department of Defense
DoE – Department of Energy
DQCR – Daily Quality Control Report
DU – decision unit
DUA – data usability assessment
EcoSSL – Ecological Soil Screening Levels
EDD – electronic data deliverable
EGAD – Environmental and Geographic Analysis Database
ELCR – excess lifetime cancer risk
EM – electromagnetic
EnSafe – EnSafe, Inc.
EPA – U.S. Environmental Protection Agency
EPH – extractable petroleum hydrocarbons
eQAPP – electronic QAPP
ERI – Electrical Resistivity Imaging
ERT – Electrical Resistivity Tomography
ESA – Environmental Site Assessment
FACT – FLUTe Activated Carbon Technique
FLUTe – Flexible Liner Underground Technologies
FUDS – Formerly Used Defense Site
FUDSChem – Formerly Used Defense Site Online Chemical Database
    EMI – environmental measurements FUDSChem submittal
    GWD – groundwater level FUDSChem submittal
    LDI – location definition FUDSChem submittal

LTD – lithology FUDSChem submittal
SLX – location cross reference FUDSChem submittal
WCI – well construction information FUDSChem submittal
WINT – well construction intervals FUDSChem submittal
WMI – well maintenance FUDSChem submittal
GAC – granular activated carbon
GNSS – global navigation satellite system
gpm/ft – gallons per minute per foot
GPR – ground penetrating radar
GPS – global positioning system
HQ – hazard quotient
HRGS – Hager-Richter Geosciences, Inc.
IDW – investigation derived waste
IFT – integrated fracture trace
ISM – incremental sampling methodology
K – hydraulic conductivity
KAS – Katahdin Analytical Services, Inc.
LCS – laboratory control sample
LCSD – laboratory control sample duplicate
LDC – Laboratory Data Consultants, Inc.
LOD – limit of detection
LOQ – limit of quantification
MassDEP – Massachusetts Department of Environmental Protection
MCL – Maximum Contaminants Level
mg/L – milligrams per liter
MGS – Maine Geologic Survey
mL/min – milliliters per minute
MNA – monitored natural attenuation
MPS – multi-parameter sonde
MS – matrix spike
MSD – matrix spike duplicate
mV – millivolts
NAVD88 – North American Vertical Datum 1988
NCP – National Oil and Hazardous Substances Pollution Contingency Plan
NE – northeast
NGS – National Geodetic Survey
NTU – nephelometric turbidity units
NW – northwest
NWI – National Wetland Inventory
OPUS – Online Positioning User Service
ORP – oxidation reduction potential
OTV – optical televiewer
P&D – Plisga & Day Land Surveyors
PAH – polycyclic aromatic hydrocarbons
PAL – project action limit
PAT – Purge Analyzer Tool

PCB – polychlorinated biphenyl
PDT – Project Delivery Team
PID – photoionization detector
PVC – polyvinyl chloride
PWS – Performance Work Statement
Q – pumping rate
QA – quality assurance
QAPP – Quality Assurance Project Plan
QC – quality control
QCM – Quality Control Manager
RAG – Remedial Action Guideline
RI – Remedial Investigation
RQD – rock quality designation
RSL – Regional Screening Level
s – drawdown
SDG – sample delivery group
SE – southeast
SEDD – Staged electronic data deliverable
SIM – selective ion monitoring
SOP – Standard Operating Procedure
SSHO – Site Safety and Health Officer
SVOC – semi-volatile organic compounds
SW – southwest
TCE – trichloroethene
TOC – total organic carbon
U.S. – United States
UFP – Uniform Federal Policy
UPL – upper prediction limit
USACE – U.S. Army Corps of Engineers
USFW – United States Fish and Wildlife
USGS – United States Geological Survey
VC – vinyl chloride
VHPFM – vertical heat pulse flow meter
VOC – volatile organic compound
VPH – volatile petroleum hydrocarbons
VRS – Virtual Reference Station
YSI – Yellow Springs Instruments, Inc.

1. INTRODUCTION

Credere Associates, LLC (Credere) was retained by the United States (U.S.) Army Corps of Engineers (USACE) New England District (CENAE) to prepare this Quarterly Report No. 1 – Data Gap Phase to summarize field activities and evaluate any remaining data gaps as part of the ongoing Remedial Investigation (RI) at the Former Salvage Yard at the Former Dow Military Airfield located at 233 Odlin Road in Bangor, Penobscot County, Maine (Site). A Site Location Plan is provided as **Figure 1-1**, and a Site Vicinity Layout, Drainage Plan, & Map of Wetlands is provided as **Figure 1-2**. A project organization flow chart is included as **Figure 1-3** to outline the chain of command used during field activities.

The scope of the field investigations was detailed in the associated Quality Assurance Project Plan, Revision No. 1 (QAPP; Credere, 2022), which amended and updated the original QAPP for the Site prepared by Credere and dated September 19, 2019 (Credere, 2019) to incorporate updated information and the plan for the additional data gap sampling. The QAPP was prepared in accordance with the Uniform Federal Policy (UFP) for Quality Assurance Project Plans (Department of Defense [DoD] *et al*, 2012) and generally with the U.S. Environmental Protection Agency (EPA) Requirements for Quality Assurance Project Plans (EPA, 2001). The QAPP was also developed in accordance with the Performance Work Statement (PWS) prepared by USACE and dated April 22, 2021 (USACE, 2021) with modification dated January 11, 2022 (USACE, 2022). This work is being completed under contract between USACE and Credere (Contract No. W912WJ-23-C-0012). The work required under the PWS falls under the Defense Environmental Restoration Program (DERP) Formerly Used Defense Sites (FUDS), which complies with the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and the National Oil and Hazardous Substances Pollution Contingency Plan (NCP). Credere is the prime contractor for the project with subcontractors serving supporting roles (e.g., drilling, geophysical services, laboratory sample analysis).

This is the first of four quarterly Data Gap Phase reports and summarizes field activities completed at the Site from April 2022 to November 2023, including additional surface geophysics, an integrated fracture trace (IFT) study, overburden monitoring well maintenance, well abandonment, bedrock drilling, Flexible Liner Underground Technologies (FLUTe) blank liner installation and transmissivity testing, FLUTe Activated Carbon Technique (FACT) sampling, final FLUTe well design and installation, and the first of four quarterly groundwater sampling events. Note that the additional surface geophysics, the IFT study, FLUTe blank liner installation with transmissivity profiling, FACT sampling, and final FLUTe well design were reported in detail in prior deliverables. These activities are summarized briefly herein to provide context and a generally chronological record of Data Gap Phase activities while limiting report redundancy. Other tasks are reported in their entirety herein, while reserving data assessment for subsequent reports upon completion of the four quarterly sampling events (see below).

Three remaining Data Gap Phase reports will be prepared to summarize the remaining quarterly groundwater monitoring events. This Quarterly Report No. 1 provides cumulative documentation of this data gap phase of the larger RI field program. This report outlines the project and field objectives, summarizes the methodologies implemented in the field, documents deviations and important observations, and data management methodologies utilized in this Data Gap Report No.

1 for all samples collected during this phase of work. Complete laboratory analytical reports for RI activities completed under this data gap phase, as well as a summary of data validation results and a data usability assessment are provided in this report. This report provides a limited interpretation of data to evaluate the presence or absence of data gaps; complete analytical data screening or interpretation is reserved for subsequent submittals (e.g., RI and Risk Assessment).

1.1 SITE DESCRIPTION

The Site encompasses approximately 24 acres and comprises five parcels, one currently owned by the City of Bangor, and four privately owned commercial parcels. The Site work area focused on the City of Bangor-owned 14 acres of vacant land behind three developed and one undeveloped commercial parcels along Odlin Road as depicted on **Figure 1-2**. The Site work area comprises a maintained field and other stands of trees and brush along portions of the southern and western boundaries of the Site.

The Site is located approximately 0.25-miles west of Interstate 95, immediately west of Odlin Road, and immediately south of the current Bangor International Airport (BIA). When Dow AFB and the salvage yard were active, the Site was at the southern end of the then boundary of the AFB.

A degraded paved driveway associated with former buildings is located east of former buildings T-133 and T-134 and connects to Telford Drive, which runs along the northern edge of the Site. A formerly utilized rail spur that served the Dow Air Force Base (AFB) from the Maine Central line parallels the southeast boundary of the Site and an onsite spur ran to the west of former building T-134 where materials were on- and off-loaded; however, the onsite spur tracks have since been disassembled, with the tracks removed from the Site and the wooden ties remaining are stacked on the Site, notably on the southern end adjacent to the former rail line. Small sections of track remained intact at the Site until 2020-2021, when remaining tracks and ties were removed by the City along with clearing of vegetation. The track continued south of the Site for another 300 feet and the tracks and ties from that section of the rail line were also removed at that time.

The above-mentioned properties, which are located outside of the Site work area, and the surrounding area to the south and east are commercial and include a fun park, hotel, gas station, and restaurants. The City of Bangor fire training area adjoins the Site to the northwest and is occupied by a bunker and smoke training concrete block house. To the northwest, the Site is adjoined by BIA and is adjacent to the end of the extended runway and the former ready alert area/hangers (former building 600). One of the commercial properties also operated temporarily as a golf driving range, which extended from Odlin Road across the right-of-entry (ROE) boundary. It is unclear how long the facility operated before the parcel was commercially developed (based on 2011 via imagery).

Hydrology

The Site is located within the surficial drainage basin of the Penobscot River. Sucker Brook to the east of the Site flows southerly and discharges to the Penobscot River 2 miles southeast of the Site in the Town of Hampden. Area streams and surface waters are categorized as Urban Impaired due to water quality, which is monitored by the City of Bangor. Stormwater likely infiltrates the mostly permeable areas of the Site or flows overland off the paved developed portions of the Site. Relict

stormwater management culverts and other subsurface utilities are present at the Site from prior development that may act as current preferential pathways for stormwater movement or subsurface flow. Impermeable surfaces at and immediately adjacent to the Site, as well as stormwater management or other subsurface utility structures, are depicted on **Figures 2 and 5**. The Site also likely receives some runoff from the adjoining airport and runways.

According to the U.S. Fish and Wildlife (USFW) National Wetlands Inventory (NWI) data mapper (USFW, 2018), there are no mapped wetlands, riparian lands, or managed lands at the Site. Given the limitations of NWI mapping tools lacking site-specific details, a wetland survey was completed in November 2018 in accordance with federal wetland delineation procedures. The extent of surveyed Site wetlands is shown on **Figure 1-2**. These areas have been reviewed by a USACE Wetland specialist to confirm the vegetation is consistent with the mapped boundaries.

Additionally, as part of the wetlands survey, stream flow paths were traced for offsite contribution, onsite flow paths, and discharge points for the Site. Topographic data including 2-foot and 10-foot contours downloaded from the Maine GeoLibrary was evaluated during flow tracing, and was considered in conjunction with Credere's field observations during the wetland survey. Stormwater and drainage from the airport discharge directly to the adjoining Fielder's Choice facility (mini-golf) retention pond (339 Odlin Road) and flows overland off the airport to an onsite swale along the northwest side of Telford Drive. The Fielder's Choice pond then drains and enters the southwest corner of the Site via an outfall. Drainage from this area continues southerly through the wetlands area toward Odlin Road and enters a 24-inch culvert along Odlin Road. The culvert then travels southwesterly along Odlin Road. A second drainage path at the Site begins on the westerly side of the railroad spur near the center of the Site (west of former Building T-134). Stormwater is dammed by a berm (historical significance not known) and drains to a small stream that meanders southwesterly and then easterly to a culverted pond/basin near the center of the Site. The culvert runs beneath the paved portion of the Site trending southeasterly and discharges to a swale that parallels the southeastern edge of the Site. These flow paths are shown in black arrows on **Figure 1-2**.

1.2 STATEMENT OF OBJECTIVES

The scope of work presented in the QAPP was intended to further assess trichloroethene (TCE) previously detected in SY-OBMW11. TCE was consistently detected in this hybrid (overburden/bedrock interface) well during four groundwater sampling rounds between 2019-2020 at concentrations ranging from 4.1 to 7.5 micrograms per liter (µg/L). The vertical and horizontal extent of TCE or other chlorinated volatile organic compounds (CVOCs) in downgradient fractured bedrock groundwater in the direction of nearby commercial receptors along Odlin Road represented a data gap, and a better understanding the nature and extent of contamination at the Site was needed to support the RI. In addition, if a shallow plume was present, there could also be a potential soil vapor/vapor intrusion receptor pathway that could need to be evaluated. The ongoing data collection will be used to support development of a conceptual site model (CSM) to be completed as part of the RI.

Specifically, the QAPP included the following problems/questions:

- What is the source of the conductive anomaly in the central portion of the Site?

- Does TCE in groundwater identified in SY-OBMW11 and SY-OBMW12 extend vertically into the bedrock aquifer?
- If TCE extends into the bedrock aquifer, what are the offsite migration pathways?
- Are soil vapor concentrations that would represent a vapor encroachment concern to nearby commercial receptors present?
- What is the best approach to repair frost heaved monitoring wells previously installed during 2019 RI activities?

The following specific objectives were established to address the above listed problems/questions:

- Further assess the conductive anomaly areas to attempt to identify the source of the anomalous response
- Assess the bedrock aquifer by bedrock groundwater sampling for the presence and concentrations of TCE and other CVOCs
- Assess local geology to identify potential migrations pathways if the bedrock aquifer is impacted with TCE
- Assess soil vapor concentrations in the vicinity of the nearby commercial buildings to evaluate vapor encroachment
- Remove rigid concrete pads at affected wells and replace with a protective casing system that accommodates seasonal frost heaving of soils; replace heaved monitoring well SY-OBMW4.

The major investigation tasks to accomplish these objectives under this data gap investigation phase included:

- Completing surface geophysics including 3-D electrical resistivity tomography (ERT) to locate the peak of the conductivity anomaly to target the location for replacement well SY-OBMW4R
- Conducting an integrated fracture trace and geologic mapping study to inform final proposed locations of bedrock wells on-site
- Completing casing and drilling of five bedrock boreholes to a depth of 300 feet below ground surface (bgs) to make geological and hydrogeological observations concerning the nature of bedrock and occurrence of groundwater
- Conducting borehole geophysical logging of bedrock boreholes to identify water bearing fractures and structures to select depth intervals for collection of FLUTe FACT strip samples to screen for the presence of CVOCs in the boreholes
- Collecting transmissivity profiling data in each borehole during installation of blank FLUTe borehole liners to be used in conjunction with borehole geophysical data and FACT data to select depth intervals for multi-level FLUTe wells
- Designing, fabricating and installing water FLUTe systems in each of the five bedrock boreholes

- Collecting bedrock groundwater samples to ascertain the presence and distribution of CVOCs, in particular TCE, in the fractured bedrock aquifer.
- Replacing surface protective casings for applicable overburden wells to prevent future frost heaving, and redeveloping the wells

The execution and results of each of these phases of investigation are discussed in this report along with the Quarter 1 groundwater sampling results.

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2. FIELD ACTIVITIES AND METHODS

This section summarizes field activities, methods, and associated standard operating procedures (SOPs). Photographs of pertinent Site observations and Site conditions are included as **Appendix A**. New and existing monitoring well locations and pertinent Site features are depicted on **Figure 2-1**.

2.1 FIELD SCHEDULE

The following table summarizes the weekly schedule for these field tasks implemented as part of the RI:

Work Completed	Integrated Fracture Trace Mapping	Additional Surface Geophysics	Overburden Monitoring Well Redevelopment and Rising Head Testing	Bedrock Drilling, SY-OBMW4R Installation with Rising Head Test, Windshield Well Survey	Borehole Geophysics and FLUTe Blank Installation	FLUTe FACT Strip Sampling and Blank Liner Reinstallation with Transmissivity Profiling	Site Restoration	FLUTe Installation	Groundwater Sampling
April 2022	X	X							
June-July 2022			X						
November 2022-February 2023				X					
February 2023					X				
March 2023						X			
July 2023							X		
October 2023								X	
November 2023									Q1 Sampling

Sampling prior to this data gap phase (i.e., data collected prior to 2022) are excluded for the purposes of this report.

2.2 DIGSAFE UTILITY CLEARANCE AND SURFACE GEOPHYSICAL CLEARANCE

Digsafe ticket number 20224403981 was obtained in November 2022 before bedrock drilling activities began. The Digsafe was renewed in January 2023 (ticket number 20230204250 prior to the second drilling mobilization with an alternate drill rig. The Site was pre-marked with locations of subsurface investigation, and DigSafe was notified of the planned drilling work. Member utilities were notified by DigSafe to mark utilities. Non-member local utilities including the Bangor Water District, Bangor Sewer Department, City of Bangor, and State of Maine Office of

Information Technology as identified by OKTODIG were also contacted (tracking numbers W143961 and W146152 for the first and second drilling mobilizations, respectively).

Individual boring locations were cleared by Northeast Geophysical Services of Bangor, Maine, on October 25, 2022, and again on December 2, 2022 in the presence of Credere staff at the request of USACE and to clear an alternate boring location for SY-BRMW4 with greater setback distance from the overhead utility lines transecting the Site. Each individual bedrock boring location (SY-BRMW1 through SY-BRMW5) as well as the replacement overburden well (SY-OBMW4R) were cleared using a Radiodetection RD7100 utility locator as well as ground penetrating radar (GPR). An approximately 10-foot by 10-foot area around each boring was cleared to allow for some adjustment of the locations if needed by the drill rig. Ultimately, the borings were installed within a foot of the cleared and staked location, and no boring/well locations were substantially affected by the findings of the surface geophysical clearance.

2.3 ADDITIONAL SURFACE GEOPHYSICS

Credere contracted Hager-Richter Geosciences, Inc. (HRGS) of Salem, New Hampshire, to perform an electrical resistivity investigation and additional seismic refraction lines to supplement the existing data collected in 2018 and 2019. The purpose of the additional surface geophysics was to obtain sufficient resolution of the soil conductivity anomaly with depth and spatial extent to allow it to be targeted with a confirmation well (SY-OBMW4R). An additional objective was to tighten resolution of the seismically interpreted bedrock surface and evaluate the potential presence of geologic structures that may manifest as dislocations in the bedrock surface.

Electrical Resistivity Imaging

From April 11-15, 2022, HRGS conducted a 3D electrical resistivity imaging (ERI) survey in the area around the soil conductivity/high electromagnetic (EM) anomaly located in the central portion of the Site near the former SY-OBMW4. The 3D ERI survey was conducted using an AGI Super Sting R8 Res/IP system. The unit consists of a power supply, transmitter, receiver, the associated electronics required to measure current and voltage, digital control programs, and an interface box. The system includes at least 56 electrodes and can be instrumented with up to 112 electrodes. Two different pairs of electrodes are selected automatically by the program for current injection and voltage measurement – with many different combinations. The data was processed in the field with a notebook computer to determine the quality of the data. After acquisition of the raw data, the data were transferred to a computer and inverted using AGI EarthImager 3D software.

Two different inter electrode spacings were used to acquire data with both shallow high resolution and deep penetration. A 12-foot x 12-foot interelectrode spacing allowed imaging the electrical properties of the subsurface as deep as 40 feet with high resolution to a depth of about 30 feet. The prior EM31 survey that identified the anomaly indicated a penetration depth to 18 feet bgs, which would suggest the source of the anomaly to be shallower within overburden. Based on the depth of weathered bedrock in boring SY-SB4 at 26 feet bgs, this gives good resolution within the weathered and shallow bedrock zone. A second 20-foot x 20-foot interelectrode spacing allowed imaging the electrical properties of the subsurface as deep as approximately 80 feet with lower resolution in the shallow subsurface. This provides insight into the shallow bedrock of the Site being targeted for bedrock well installation.

Each 3D ERT acquisition array consisted of 112 electrodes for each of the electrode separations, for a total coverage area of 156 feet x 84 feet for each 12-foot setup and 260 feet by 140 feet for each 20-foot setup. Eight 3D ERT acquisition arrays were required for the 12-foot spacing, and four (4) 3D ERT acquisition arrays setup were required for the 20-foot spacings to cover the area of the large EM anomaly. Line orientation was consistent with prior survey that identified the anomaly and was designed to provide enhanced resolution of the prior results.

Supplemental Seismic Refraction

Supplemental seismic refraction was also conducted to refine the bedrock model in the area of interest. The refraction was conducted using the same procedures as the original survey and was completed according to ASTM D 5777-00 (2011) Standard Guide for Using Seismic Refraction Method for Subsurface Investigations to assess the depth and configuration of the bedrock surface along the additional proposed transects. These locations and transect orientation are based on the bedrock contact orientation (i.e., northeast to southwest) and HRGS' previous work at the Site.

A complete discussion of the additional surface geophysics including methodology and results is included in the Surface Geophysical Surveys report prepared by HRGS dated June 2022 (HRGS, 2022), prepared and previously submitted to USACE under separate cover. Upon completion of the additional surface geophysics processing, HRGS transmitted the coordinates of the peak of the soil conductivity anomaly, which were uploaded to a Trimble R2 global navigation satellite system (GNSS) enabled with real-time corrections for sub-foot accuracy and used to site the replacement overburden well SY-OBMW4R at the peak of the soil conductivity anomaly.

Ultimately, bedrock borings were installed within a foot of the originally planned locations, and no boring/well locations were affected by the findings of the additional surface geophysics, including the ERI or the supplemental seismic refraction.

2.4 OVERBURDEN MONITORING WELL NETWORK

The overburden groundwater program included well maintenance and casing replacement, redevelopment and hydraulic testing in addition to the supplemental surface geophysical investigations described above and abandonment and replacement of SY-OBMW4.

2.4.1 Well Maintenance and Protective Casing Replacement

The overburden wells had originally been installed with cement pads cast around the steel protective surface casings and some of these wells experienced frost heaving of the protective casing during cycles of winter freezing and spring thaw likely due to the poorly drained (clay rich) soil conditions. Most of the existing overburden/hybrid wells, including those with minimal or no indications of vertical movement, were modified proactively to prevent future heaving.

From July 20-21, 2022, the existing steel protective casings and concrete pads were removed and disposed of offsite, and new steel protective casings and gravel pads were installed. Exceptions to this replacement included SY-OBMW7 and SY-OBMW10, which were flush mounted in asphalt, and SY-OBMW5, which showed no signs of heaving and was finished with a steel standpipe in asphalt, and would not benefit from replacement with a gravel pad. This replacement also did not

include the original SY-OBMW4 or the two monitoring wells related to the Brownfields Phase II Environmental Site Assessment (ESA), which were to be abandoned (see **Section 2.4.3**). A drain hole was cut into each replacement casing at approximately 6-inches bgs, to drain any accumulated water below ground into a 2-foot x 2-foot x 2-foot crushed stone gravel pad.

2.4.2 Well Redevelopment and Hydraulic Testing

Overburden monitoring well redevelopment was conducted in June-July 2022 and was performed in accordance with Credere SOP CA-9. Monitoring wells were developed by over pumping with a Whale™ submersible pump and surging with dual surge blocks along the length of the screen to bring the screen and filter pack into hydraulic communication with the aquifer and to evacuate sediment from the well. While purging, temperature, pH, dissolved oxygen (DO), oxidation reduction potential (ORP), specific conductivity, and turbidity were monitored using a Yellow Springs Instruments (YSI) multiparameter sonde (MPS) and separate Hach turbidity meter to assess water quality parameter stability. Development was considered complete when the following parameters were stabilized according to the following criteria over three readings spaced 5 minutes apart:

- pH: ±0.1 standard unit
- Temperature: ±3%
- ORP: ±10 millivolts (mV)
- DO: 10% for values greater than 0.5 milligrams liter (mg/L) or less than 0.5 mg/L
- Specific conductivity: ±3%
- Turbidity less than 10 nephelometric turbidity units (NTUs)

Monitoring well redevelopment logs are included in **Appendix B**.

Purge water was discharged to a vegetated surface near each well to allow for re-infiltration with the exception of water purged from SY-OBMW11, which was treated onsite with an in-line granular activated carbon (GAC) filtration bucket.

Rising Head Slug Testing

Hydraulic testing of the overburden wells was completed by slug testing after well redevelopment. Formation hydraulic conductivity (K) was computed at all existing overburden monitoring wells from rising head slug tests conducted in June-July 2022. The rising head test was completed at SY-OBMW4R upon completion of installation in February 2023. Slug tests were performed in accordance with Credere SOP CA-22.

The rising head tests were performed using weighted high-volume (7-foot long) bailers for slug removal and an In-Situ Level Troll 700 transducer probe temporarily installed in each well that was capable of measuring water depth, temperature, and pressure at 0.250 second intervals, which were used to calculate hydraulic head. The Level Troll was connected to an In-Situ Rugged Reader capable of recording test data and displaying data in real time. Approximately 0.90-gallons of groundwater were removed from the well as a slug for each test. Tests were run in duplicate for comparison.

The slug test recovery data was analyzed in AQTESOLV using the Bouwer & Rice method (Bouwer, H. and R.C. Rice, 1976; Bouwer, 1989). Presentation of the analysis is included in **Appendix C**. The Bouwer and Rice equation is appropriate for fully penetrating or partially penetrating wells in either unconfined or confined aquifers if the screened interval is below the upper confining layer (Bouwer, 1989). While a confined aquifer is rare in nature, a semi-confined or leaky aquifer is more common in a completely saturated aquifer that is bounded above by a semi-pervious layer and below by an impervious or semi-pervious layer. A semi-pervious layer has a low but measurable hydraulic conductivity. Deep bedrock for practical purposes is the lower bounding aquifer. Under pumped conditions, lowering of the piezometric surface will result in vertical flow from the semi-pervious layers into the pumped aquifer. Since K of the semi-confining layer(s) is usually very small, for hydraulic analysis purposes, the vertical flow component can be neglected. Thus, the method of analysis is also appropriate for semi-confined systems. A confined or unconfined scenario was selected for each test based on the placement of the screen and nature of the overburden; these criteria are listed under the solution information for each test in **Appendix C**. The hydraulic conductivity for each individual test as well as the average hydraulic conductivity for each duplicate set of tests is presented in **Table 2-1**.

Comparison of hydraulic testing results with observed stratigraphy over the screened intervals does not indicate that the occasional presence of coarser grained interbedded material increases hydraulic conductivity, suggesting these are isolated/laterally discontinuous deposits, where observed. Most of the overburden wells and the hybrid wells have similar computed ranges for K. This suggests the shallow weathered bedrock encountered in most wells and the immediately overlying overburden have similar hydraulic properties. The exceptions are hybrid well SY-OBMW5 and SY-OBMW12, which have Ks approximately an order of magnitude higher than most other wells. This may indicate proportionally higher contributions of water from weathered bedrock.

Well Hydraulic Performance Evaluation

On a quarterly basis, the hydraulic performance of the wells are being evaluated for changes by tracking estimated hydraulic properties from low stress/low flow purging and water level data. Initially, the use of the United States Geologic Survey (USGS) Purge Analyzer Tool (PAT) analytical code documented under Open-File Report 2019–1104 was considered for this purpose. Review of the PAT tool and application of it to actual field data revealed limitations including that a sand pack is not simulated in the model and the code was intended to simulate open borehole well construction in homogeneous or fractured media. The value of the code is in optimizing sampling purge times based on hydraulic computations. In lieu of the PAT tool, computation of specific capacity values was conducted from low stress/low flow purging and stable drawdown water table data. Specific capacity is a reliable and repeatable measure of well performance.

During low stress/low flow sampling, emphasis was placed on achieving a stable drawdown elevation at a known and measured flow rate for calculation of specific capacity, which is defined as the ratio of the pumping rate (Q) to drawdown (s). Specific capacity is typically measured in gallons per minute per foot (gpm/ft) of drawdown.

In the time frame between the last quarterly sampling event in December 2020 and the first quarterly sampling event of this Data Gap Phase in November 2023, all the overburden wells were redeveloped, as discussed in **Section 2.4.2**. Therefore, a comparison of specific capacity before and after development was conducted. The table below in **Exhibit 2-1** compares specific capacity calculations from the low stress/low flow field data sheets from these two events. Green highlights indicate wells with substantial (order of magnitude) improvement in specific capacity.

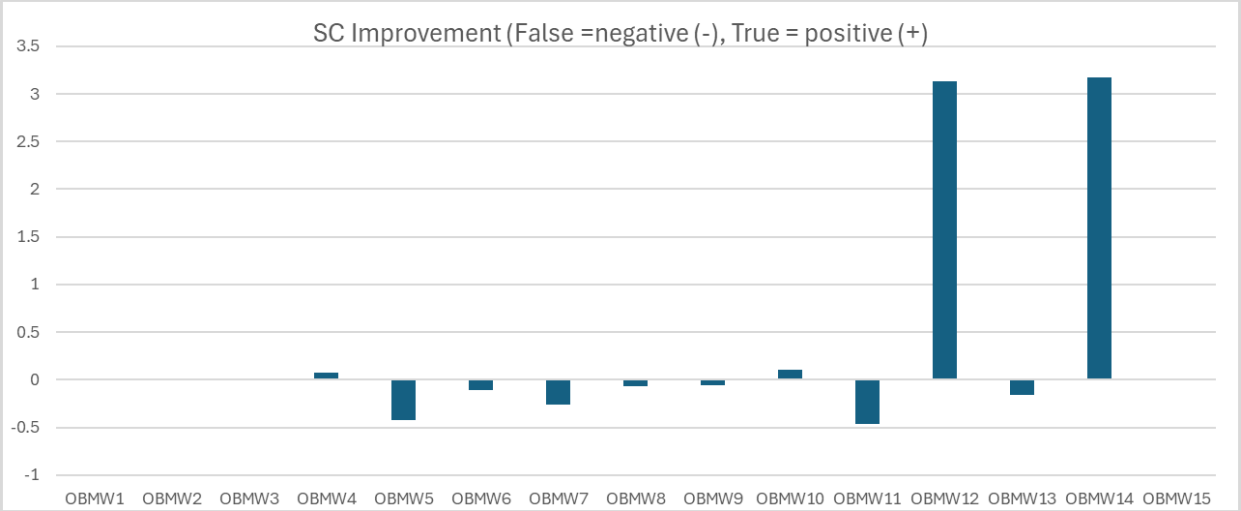
Exhibit 2-1 – Tabulation of Specific Capacity Results (2020-2023)

	December 2020 Low Flow Data			November 2023 Low Flow Data			SC	SC
Well ID	Q	S	SC gpm/ft	Q	S	SC gpm/ft	Logical Test Improved ?	Difference
OBMW1	280	1.7	0.043510691	400	2.1	0.050318486	TRUE	0.006807795
OBMW2	400	0.88	0.120078205	400	0.83	0.127311832	TRUE	0.007233627
OBMW3	400	0.52	0.20320927	400	0.52	0.20320927	FALSE	0
OBMW4	400	0.29	0.364375243	400	0.24	0.440286752	TRUE	0.075911509
OBMW5	400	0.05	2.11337641	320	0.05	1.690701128	FALSE	-0.422675282
OBMW6	400	0.26	0.40641854	400	0.35	0.301910916	FALSE	-0.104507625
OBMW7	400	0.21	0.50318486	220	0.24	0.242157714	FALSE	-0.261027146
OBMW8	240	0.35	0.181146549	400	0.97	0.108936928	FALSE	-0.072209621
OBMW9	120	0.22	0.144093846	170	0.52	0.08636394	FALSE	-0.057729906
OBMW10	280	0.4	0.184920436	400	0.37	0.285591407	TRUE	0.100670971
OBMW11	440	0.1	1.162357025	210	0.08	0.693451635	FALSE	-0.468905391
OBMW12	400	0.27	0.391366002	400	0.03	3.522294017	TRUE	3.130928015
OBMW13	320	0.21	0.402547888	400	0.44	0.24015641	FALSE	-0.162391477
OBMW14	400	0.3	0.352229402	400	0.03	3.522294017	TRUE	3.170064615
OBMW15	300	1.27	0.062402847	400	1.59	0.066458378	TRUE	0.004055531

gpm/ft – gallons per minute per foot
Q – purge rate (ml/min)
S – drawdown (feet)
SC – specific capacity (gpm/ft)

A logical test was then applied to the data to highlight which wells showed an improvement (increase) in hydraulic performance. Most wells showed very slight increases or decreases in specific capacity and these small differences are considered "noise in the data" reflecting a range in sensitivity related to accuracy of flow rate measurements and whether an absolute stable drawdown was achieved. In some wells, drawdown could still be occurring but at a rate so small that it would take an extended time frame to observe definitive water elevation changes. The results of the data are plotted in **Exhibit 2-2** to visually compare these differences.

Exhibit 2-2 – Graphical Representation of Specific Capacity Changes (2020-2023)



Very clearly, SY-OBMW12 and SY-OBMW14 were positively affected by redevelopment and showed almost an order of magnitude decrease in drawdown at comparable flow rates and a corresponding increase in specific capacity. The differences in wells SY-OBMW1- OBMW3 and OBMW15, were so slight as to not even be visible plotted at this scale.

2.4.3 Decommissioning of SY-OBMW4 and Installation of SY-OBMW4R

The SY-OBMW4 riser had heaved and required replacement. Using the opportunity to replace the well, SY-SB4R/SY-OBMW4R was also moved to the peak of the soil conductivity anomaly in the central portion of the Site to aid further assessment of the anomaly's origin. Based on the results of the geophysical survey discussed in **Section 2.3**, SY-SB4R was advanced approximately 15-20 feet northeast of the original location of SY-SB4.

The target location for SY-SB4R/SY-OBMW4R was selected as the peak of the soil conductivity anomaly. The boring location was sited using coordinates provided by HRGS and a GNSS with sub-foot accuracy. The boring was advanced using sonic drilling methods with a Terrasonic 150C drill rig with 6-inch override casing and 4-inch inner casing. The boring was advanced 5 feet into bedrock to confirm the depth of refusal on bedrock and facilitate monitoring well installation with a 2-foot sump. Soil cores were collected continuously in 4-inch diameter by 60-inch length polyethylene sleeves. Sleeves were individually logged according to Credere SOP CA-4, and soil was field screened according to Credere SOP CA-7 for total volatile organic compounds (VOCs) using a RAE Systems photoionization detector (PID) calibrated with a 10-ppm isobutylene gas standard and an instrument response factor of 1.0. The single rock core was logged according to Credere SOP CA-24. Rock quality designation (RQD) was calculated using standard ASTM RQD calculation methods. It is recognized that RQD measurements collected during sonic drilling methods may be biased low due to the potential for sonically induced fractures along natural partings during drilling. As only a single rock core was collected from each boring, these RQDs are considered reliable for purposes of supporting well installation decisions. Boring and well construction logs are included in **Appendix D**.

Two soil samples were collected from SY-SB4R. To be consistent with prior sampling, one soil sample was collected from a 2-foot interval above the transition from surficial fill materials to clay

(but below 0-0.5 feet as this interval has already been sampled nearby in SY-TP18), and the second was collected from 1 foot deeper than the transition to clay or from the interval observed to be the greatest likelihood of a possible source for the conductive anomaly. Based on the conditions observed in the field, these samples were collected from 0.5-2 feet and 2-4 feet bgs.

Visible asphalt and road base materials, landscaping materials, and other organic detritus was removed prior to sampling. In all soil samples, representative soil was collected while wearing new nitrile gloves and using decontaminated hand tools (e.g., stainless steel spoon or spade). VPH/VOC samples were collected directly from the sleeves using a new, dedicated soil syringe immediately after exposure to the atmosphere and determination of the appropriate sample collection depth to minimize loss of volatiles in the sample. The remaining representative soil was placed in a decontaminated stainless-steel bowl (see decontamination SOP CA-2), homogenized, and placed in laboratory provided glassware. Soil samples were placed on ice and submitted to ARA and KAS for analysis. Sample analyses and analytical methods are summarized in **Table 2-2**.

SY-OBMW4R was installed according to Credere SOP CA-8 and consistent with the prior well construction from October 2019. The well was constructed as an overburden well with 2-inch diameter 0.010-inch slotted polyvinyl chloride (PVC) screen installed at the bottom of overburden with a 6-inch solid sump at the bottom at the top of weathered/competent bedrock. Well construction was consistent with prior construction with the exception of a shorter sump to minimize penetration into weathered bedrock. The 10-foot screen was set at least 5 feet below the water table and enough solid PVC riser to reach above the ground surface was installed. Two centralizers were installed on the screen/riser. The well annulus was filled with No. 00S washed silica sand to 1 foot above the top of the screen, and a 2-foot bentonite seal was installed above the sand (i.e., 1 to 3 feet above the screen). The annulus was filled to the surface with sand. A permanent survey notch was cut into the high point of the angularly saw cut top of the PVC riser to allow for consistency of future water level measurements and a vent hole was drilled in the PVC riser below the compression cap. The well was finished with a standpipe, locking cap, and lock. Well development and hydraulic testing were then conducted in accordance with the methodology described in **Section 2.4.2**. A well construction log is included in **Appendix D**.

2.5 INTEGRATED FRACTURE TRACE STUDY

An IFT study was conducted by Credere in 2022 and was reported under separate cover (Credere, 2023a). The study integrated the results of geologic field mapping and a fracture trace photolineament study. Prior to this work, preliminary borehole locations for the bedrock wells were proposed based on inferred down gradient locations from the only well (SY-OBMW11) in which TCE had previously been detected. SY-OBMW11 was a hybrid well screened across both glacial deposits and underlying weathered bedrock. It was not clear if the TCE detected in that well represented diffusive flux from the clay rich till or the weathered bedrock.

The IFT did not identify any possible fracture traces within the boundaries of the Site and therefore did not recommend alternative locations for any of the proposed bedrock borings. The IFT identified a lineament trace that lies outside and close to the northeastern most corner of the Site that is aligned parallel to a well incised drainage that trends towards the north-northwest. The general stratigraphy at the Site consists of glacial till deposited on Ordovician/Silurian bedrock.

Glaciomarine clays onlap the till and likely obscure geologic fabric or scarps related to underlying structure in the bedrock and till mantle.

Both the surficial and bedrock geology of the Bangor 7.5-minute topographic quadrangle, which encompasses the Site, have been mapped, interpreted and published by the Maine Geologic Survey (MGS). Surficial geology was mapped by Kent Syverson and Andrew Thompson and presented in Open-File Report No. 11-6 published in 2011 (MGS, 2011a). Bedrock geology was mapped by Stephen Pollock and published in Open-File report No. 11-57 in 2011 (MGS, 2011b). The Site is located wholly within the Penobscot River Member of the Bangor Formation, which is described as a medium to dark gray, medium to very fine-grained metamorphosed greywacke (metawacke). Siltstone and claystone are minor lithologies within this member. Metawacke beds vary from 15 centimeters (cm) to in excess of 2 meters and may exhibit parallel or ripple cross-laminations and may be graded.

Based on published mapping, bedding and foliation (slatey cleavage) trend northeast bedding in the Penobscot Member dips steeply to the northwest (72 - 88 degrees) and is commonly overturned. Bedding in the Penobscot formation east of the Kenduskeag Stream also dips to the Northwest at moderate to steep angles (50 - 75 degrees) but is normal and not overturned. Foliation also dips northwest at similar steep to vertical angles and is generally subparallel to bedding. Collectively, the foliation and bedding features suggest the Penobscot Formation in vicinity of the Site locally contains a synclinal structure with younger protolith beds (the Lovers Leap and Kenduskeag Members) within its core. MGS mapping to the northeast of the Site indicates the presence of outcrop scale overturned folds within the formation. Steep northwesterly trending joints are ubiquitous where outcrops are present, dipping to the southwest and northeast from 60 – 88 degrees. Joints that strike southwest are also present and these tend to dip to the southeast from 34 – 85 degrees.

Bedrock mapping was conducted by Credere along roadside outcrops and within the Eurovia Quarry that is located approximately one mile southwest of the Site. Representative photos collected during the IFT field effort are included as **Photographs 7 through 11** in **Appendix A**. Equal area stereonet projections of fracture features mapped in outcrop indicate the predominant fractures are bedding parallel features dipping predominantly to the northwest consistent with published MGS geologic maps. A smaller subset of bedding parallel fractures dip steeply to the southeast and likely represent axial plane fractures. These fractures are crosscut by joints that trend northwest and dip steeply to the northeast (NE) and southwest (SW). A smaller subset of joints trend more to the north-northwest (NW)/south-southeast (SE) and to west-NW/east-SE. The Eurovia quarry has been developed to a depth of approximately 0 feet North American Vertical Datum 1988 (NAVD88) and measures approximately 1,200 feet along strike and 1,000 feet across strike. Two unstable fault zones with identifiable breccia fragments in the cuttings were drilled at the Site, in SY-BRMW2 and SY-BRMW5, and are believed to be structurally similar to faults observed at the quarry. The quarry affords exceptional vertical exposures of bedrock and the ability to observe the nature of fault structures that are otherwise difficult to discern in smaller, weathered roadside outcrops. One of the larger faults that could be closely observed at Eurovia showed well developed uncemented breccia (fault gouge) within steeply dipping metawacke with pronounced drag folding. In the quarry exposures, jointing had pronounced iron oxidation along closely spaced planes and appeared to occur as swarms in some localities. Bedding fracture

features were also well oxidized indicating preferential water movement along both bedding plane and joint features. Bedding planes are perhaps more frequent by a factor of 2. Overall, the results of borehole geophysical logging were consistent with the orientation of fracture features observed in outcrop as discussed in the next section.

A complete discussion of the IFT methodology and results is included in the Integrated Fracture Trace Analysis and Report (Credere, 2023a) prepared by Credere and dated October 2023, which was previously submitted to USACE under separate cover. The report also includes the final borehole geophysical logs (summarized in **Section 2.6.1**). The IFT did not affect the final placement of the bedrock monitoring wells.

2.6 BEDROCK INVESTIGATION PROGRAM

The bedrock investigation program, which consisted of drilling and geophysical logging of five 300-foot bedrock boreholes instrumented with Water FLUTe muti-port sampling systems (FLUTe systems), was conducted following completion of the IFT Report (discussed in **Section 2.5**). As the IFT report did not affect the placement of bedrock monitoring wells, wells were installed in the locations originally depicted in the QAPP (except for SY-BRMW4, which was relocated a short distance northwest to allow the drill rig to be a safe distance from the overhead power lines transecting the Site).

2.6.1 Bedrock Drilling and Development

A total of five bedrock wells installed to a depth of 300 feet were planned at locations upgradient, adjacent and downgradient to well SY-OBMW11, where TCE was previously detected. The purpose of these wells is to evaluate the presence or absence of TCE or other related CVOCs in bedrock groundwater and if present allow interpretation of the vertical and horizontal nature and extent. The upgradient well was intended to verify whether TCE had migrated onto the Site from an upgradient (off-site) source.

Bedrock borings were advanced by Cascade Environmental, LLC, using a Terrasonic 150C sonic/air hammer drill rig. Bedrock drilling took place during an initial mobilization from November 30 to December 17, 2022, and during a second mobilization from January 18 to February 2, 2023. Overburden drilling and casing sockets into the top of bedrock were completed by sonic methods. Casing sockets were drilled using 8-inch diameter tooling sufficiently deep into rock with increasing competence to allow 6-inch casing to be telescoped into the rock socket and tremie grouted with Portland type II cement mixed with approximately 3-5% bentonite. The depth of the socket was minimized to avoid excluding an excessive amount of shallow bedrock from the open borehole while still providing a good seal and a secure casing. The total depth of casing ranged from 29 to 47 feet bgs, and the depth of casing into competent bedrock ranged from 3 to 10 feet. This information is summarized in the monitoring well construction logs in **Appendix D**.

After a minimum of 2 days to allow the casing grout to set, boreholes were advanced to approximately 300 feet bgs by air hammer methods. Rock chips were collected from below a cyclone air/drill cuttings separator and logged on approximate 1–2-foot intervals. Water production was also estimated periodically by measuring the time required to fill a 5-gallon bucket with return water, and observations regarding the color/clarity of the return water were also

recorded. Drilling water yields ranged from as little as approximately 0.5 gallons per minute (gpm) in SY-BRMW3 to over 100 gpm in SY-BRMW5. These observations are included in the boring logs in **Appendix D**.

Two boreholes, notably upgradient location SY-BRMW2 and downgradient location SY-BRMW5, intercepted brecciated fault zones that were structurally unstable and resulted in subsequent borehole collapse after development (90 feet and 130 feet bgs respectively). A direct push rig was mobilized to the Site and the boreholes were cleared by pushing obstruction rubble to the bottom of the boreholes. The boreholes remained open and unobstructed for the reminder of the work. These fault zones had similar orientations based upon the borehole geophysics (summarized in **Section 2.6.2**), however, these are interpreted to be separate structures. The structures with largest open aperture in SY-BRMW2 from 87.7 to 92.9 feet bgs dip at moderate angles (47-55 degrees) to the northwest (288 to 330 degrees azimuth) and are predominately parallel to bedding strike. One large aperture feature dipped steeply at 73 degrees to the NE (44 degrees azimuth) and crosscuts bedding. SY-BRMW5 intersected a shallow (60.1 – 62.1 ft bgs) open aperture fault structure and a deeper fault (127.5-128.8 ft bgs). The shallower fault zone in SY-BRMW5 contained intersecting structures, one dipping moderately to the northwest and the other dipping moderately to the southeast, and therefore strike sub parallel to regional bedding strike. In the deeper zone, the largest open aperture feature dips moderately (36 degrees) to the east. Other fault planes dip at moderate angles to the north and southeast. Whether these represent primary and secondary conjugate structures is not clear. The shallower and deeper structures at SY-BRMW5 would be expected to intersect outside the borehole. The distance between SY-BRMW2 and SY-BRMW5 and the depths and orientations of these structures indicate they are separate and distinct features.

After the target depth was reached in each borehole, well development was completed by using the air hammer to flush each well for approximately 1-hour with the air hammer set at the bottom of the well to purge any accumulated sediment. Rods were also gently surged in the borehole. Development was monitored by a Credere geologist and continued until purge water from the borehole ran visibly clear. Unlike sonic drilling, air hammer drilling purges most cuttings from the borehole during drilling.

2.6.2 Borehole Geophysical Investigation

Borehole geophysical logging was conducted by HRGS after borehole development to:

- Assess the depth and orientation of transmissive bedrock features intersected by the borehole
- Assess overall bedrock structures including bedding and fracture orientation, estimates fracture aperture, evidence of hydraulic activity
- Assess the flow conditions in the boreholes under ambient and stressed conditions
- Assess the depths of changes in lithology in the bedrock penetrated by the borehole
- Assess the appropriate depths for installation of the FLUTe well port intervals

The purpose of borehole geophysics was to acquire very detailed, depth specific information about the bedrock structure in each borehole and identify hydraulically active fractures. This information

supported the design of the FLUTe well systems/selection of sampling intervals at depths which could reasonably be expected to produce water, such that samples could be collected to fulfill the objectives of the QAPP and avoid installation of an unusable sampling port. Identification of hydraulically active and potentially active fractures was also used in selecting depth intervals for FACT strip sampling, the results of which were also considered in FLUTe system port design.

Borehole geophysics included the following in the indicated order:

1. fluid temperature & fluid conductivity/resistivity
2. optical televiewer (OTV)
3. acoustic televiewer (ATV) and acoustic caliper
4. vertical heat pulse flow meter (VHPFM) under ambient conditions to measure vertical flow of water in the borehole and where water enters and exists the borehole
5. VHPFM under pumping (stressed) conditions to measure vertical flow of water in the borehole in response to pumping

The borehole geophysical logging tools used, and the associated data collection objectives are shown in the table below in **Exhibit 2-3**. The electrical logs, OTV, ATV and caliper data were reviewed in the field to preliminarily identify prospective water bearing fractures and fracture zones. These data were acquired under ambient conditions except the VHPFM data, which was acquired under both ambient and stressed (pumping) conditions. The VHPFM data was acquired at discrete depths which were determined in the field after reviewing the other borehole geophysical data sets. Ambient VHPFM data was collected when the logging tool was run down the borehole and stressed data was collected while the tool was being retrieved. The VHPFM is placed both above and below a fracture to determine if measurable ambient or stressed borehole flows are upward or downward and where groundwater enters and exits the borehole. The stressed conditions were induced by pumping water out of the borehole at a controlled rate (generally less than 1 gpm) while acquiring the VHPFM data. The pumping rate was monitored continuously by an inline rotameter to maintain a constant flow rate. During the VHPFM logging under ambient and stressed conditions, the water level in the borehole was monitored manually. Data was recorded in digital format in the field on a portable computer. Additional information on data collection, properties measured, and data processing is summarized in **Exhibit 2-3** and following paragraphs below.

Exhibit 2-3 Geophysical Logging Tools and Data Quality Objectives

Logging Tool	Measured Property and Data Quality Objective
Fluid Temperature/Fluid Conductivity, Fluid Resistivity	Measures fluid temperature as indicator of temperature disturbances indicating where water may enter or exit the borehole, electrical resistivity, and conductivity as an indicator of water from different transmissive units collectively these properties evaluated as indicator of water producing zones.
ATV	Measures fractures, foliation and bedding planes and geologic unit contact orientation where sufficient acoustic contrast is present, develop acoustic aperture estimates, and can be implemented in turbid borehole fluids. .

Logging Tool	Measured Property and Data Quality Objective
OTV	Measures fracture and geologic unit contact orientation and vertical extent. Requires relatively clear borehole fluids.
VHPFM	Measures ambient and induced head vertical flow capacity in gallons per minute. Readings taken below and above suspected producing zones under ambient and pumping conditions allow assessment on individual fracture contribution to borehole flow and determine where water enters and exits the borehole. Where flow rates exceed the operational limits of the flow meter, transmissivity data will be used.

Depth data for the logging was collected from ground surface. The borehole logging report (HRGS, 2023) consisted of borehole image logs and borehole geophysical logs, the former at a scale of inch -1.5 feet and consisting of the following data tracks:

Track #	Log & Description
1.	OTV Image
2.	Depth
3.	ATV Amplitude
4.	ATV Travel Time Structure Projection – bedrock structure interpretation plotted in projection view
5.	Caliper – borehole diameter in inches Tadpole Plot – bedrock structure interpretation plotted as tadpoles
6.	OTV Virtual Core
7.	Depth
8.	ATV Virtual Core

The borehole logging report included borehole summary tables of the borehole flows under ambient and pumping conditions, water levels during VHPFM testing, bedrock structure statistical plots, tables of tabulated bedrock structures, and borehole deviation logs. The borehole geophysical report was previously provided to USACE under separate cover as an attachment to the FLUTe Well Design – Depth Interval Selection memorandum prepared by Credere dated September 6, 2023 (Credere, 2023b).

Smaller fractures and fracture intervals are readily identifiable based on borehole logs (caliper, OTV, ATV, temperature, and fluid conductivity) and measurable flows were identified associated with more prominent fractures during VHPFM logging. In addition, the presence of other water bearing and potentially water bearing fractures that do not have VHPFM signatures are indicated by caliper, OTV and ATV logs and by reductions in liner descent rate and computed changes in borehole transmissivity in the FLUTe transmissivity profiles as discussed in the next section.

2.6.3 FLUTe FACT and Transmissivity Profile Testing

After borehole geophysical logging was conducted, blank borehole liners were installed with FACT liner sleeves in each borehole. The FACT sleeves have a 1.5-inch wide continuous strip of activated carbon felt that is emplaced against the borehole wall to sorb organic solvents, if present. When the liners are retrieved (inverted) the carbon strip is sectioned, placed into sample containers

and sent off for laboratory analysis. FACT liners aid in the identification of CVOCs within borehole fracture intervals, for consideration during design of the FLUTe well systems (i.e., selection of sampling port depths). At most boreholes, FLUTe staff set up scaffolding and a PVC casing extension to create greater driving force (increased head) during installation of the FLUTe blank liners, to accommodate the shallow depth to groundwater in the borehole casings. When necessary to increase driving heads, FLUTe also added several feet of bentonite slurry/grout in the inside bottom of the blank liner to initiate liner eversion and installation during transmissivity profiling. The greater density of the bentonite provides additional driving force that accelerates the initial liner eversion and in the case of transmissivity testing improves the consistency of the early time data.

FACT liners were allowed to equilibrate with the borehole wall for between 26 and 36 days. The duration of FACT deployment in each borehole is summarized below:

- SY-BRMW1: 35 Days
- SY-BRMW2: 26 Days
- SY-BRMW3: 36 Days
- SY-BRMW4: 35 Days
- SY-BRMW5: 36 Days

FACT strips were recovered in March 2023 as described in **Section 2.1**. Work was performed primarily in late winter conditions; however, no issues arose with FACT material freezing. The FACT strip in SY-BRMW2 was deployed for a shorter time than other FACT strips, as a collapse in the borehole required remobilization of drilling equipment to clear the obstruction and forced a pause in FLUTe installation activities. Once the borehole was cleared, FLUTe remobilized and installed the FACT strip in SY-BRMW2. Approximately 4 weeks later, all FACT strips were removed in the same week, with SY-BRMW2 removed last. The duration of 26 days meets the objective stated in the QAPP.

During this equilibrium period, geophysical logging data summarized in the HRGS Borehole Geophysical Logging Report (HRGS, 2023) was interpreted, and a spreadsheet was developed to identify borehole zones where potential transmissive fractures were present to make recommendations for the number, location (borehole and depth) and sample designations for FLUTe FACT samples to be collected for analysis of VOCs. This spreadsheet was provided to USACE for review and discussion with the Project Delivery Team (PDT). Intervals targeted for segmenting and laboratory analysis were agreed upon and approved by the PDT on a virtual team meeting on March 7, 2023 and the final proposed sampling plan was transmitted to USACE for submittal to Maine DEP for information purposes. A total of 115 5-foot-long FACT samples were identified and collected.

To sample the FACT liner, blank liners were removed and separated from the carrier cover, FACT strips were sectioned and placed in sampling jars preserved with deionized (DI) water. The FLUTe FACT samples were preserved on ice and sent under chain of custody to Hall Environmental Analysis Laboratory in Albuquerque, NM for analysis for VOCs by EPA Method 8260.

After the FACT liner was sectioned and sampled, the blank liner was re-everted into the borehole and transmissivity profile data collected. The transmissivity profile was completed by measuring the liner tension and velocity propagation down the borehole and continuously measuring water level (head) in the liner as a measure of driving force. As a fracture is sealed by the liner, velocity decreases and is a direct measure of the flow rate into that zone before it was sealed. The liner velocity was measured every 2 seconds and water levels were measured with a transducer. The pressure below the liner was calculated as a function of tension on the liner. The borehole transmissivity was then calculated using the borehole diameter developed from the borehole logging. FLUTe provided a final FACT Data report on August 24, 2023, with the VOC analytical results and the FLUTe Transmissivity Profiles (FLUTe, 2023).

Laboratory analytical data of FACT strip samples did not indicate the presence of VOCs, including CVOCs, except for toluene and benzene. Toluene is known to be a constituent of the FLUTe liner material, and benzene was clearly associated with the toluene. These VOCs are inconsistent with compounds historically detected at the Site and were also detected in sample blanks. Therefore, these compounds are not attributed to the Site environment and are not considered indications of the presence of contamination. The presence of toluene is viewed as a groundwater flow indicator, as it is leached from the FLUTe liner and adsorbed by the adjacent FACT strip under ambient flow conditions. Toluene as a proxy of groundwater flow and such results at the Site are discussed further in the FACT Data report (FLUTe, 2023).

The transmissivity profile data were incorporated into an integrated borehole log with the geophysical data. These non-detect results for other VOCs were not incorporated into the geophysical logs because the data provided no added contribution to the FLUTe interval design/decision process.

2.6.4 Water FLUTe Design and Installation

A FLUTe Well Design – Depth Interval Selection memorandum (Credere, 2023b) was prepared and submitted under separate cover, outlining the data for each decision criteria for the FLUTe design. This memorandum was reviewed and approved by the PDT and subsequently provided to Maine DEP on September 6, 2023, for concurrence on sampling intervals. A conference call was held with Maine DEP on September 8, during which Maine DEP verbally concurred with the design. The memorandum included an integrated borehole log that combined geologic observations, borehole geophysical data, and FLUTe transmissivity profiles was developed to assist selection of fracture intervals to be monitored by the FLUTe ports. The contract specification was three ports per borehole.

As indicated in the QAPP, the primary objective for the FLUTe installation was to select fracture intervals with the potential to contain highest TCE concentrations, and which could be used to map vertical plume distribution, including plume bottoms. The primary decision data was to be evidence of VOCs, primarily CVOCs, in the FACT data, followed by fracture specific hydraulic data from borehole logging, and transmissivity profiling.

Due to absence of FACT strip detections for CVOCs, the secondary decision criteria for proposed intervals was to select water bearing zones that provided a randomized monitoring network that contains a variety of fracture types and orientations with spatial coverage across the aquifer.

Transmissive fractures strike dominantly to the northeast, dipping northwest, parallel to meta-sedimentary bedding. Therefore, three vertically distributed intervals were initially proposed; shallow, mid-depth, and deep, in each borehole, to span the aquifer at each borehole location. The shallow interval is defined as the bottom of casing depth to 100 feet bgs, the mid-depth intervals is designated between 100-200 feet bgs, and the deep interval from 200-300 feet bgs. Within the shallow interval, the shallowest water bearing fractures were prioritized. In several boreholes, large geologic structures (faults) were encountered that represented the most transmissive geologic features.

The proposed secondary objective in the QAPP to create a randomized monitoring network was modified during PDT consultation to move the deepest interval in two boreholes (SY-BRMW1 and SY-BRMW5) to an interval spanning the bottom of casing to approximately the first 10 feet of the bedrock borehole. The shallow interval in SY-BRMW3 was also moved from the shallowest interval containing possible transmissive fractures (approximately 67-77 feet bgs) to just beneath the bottom of casing (approximately 47-62 feet) to capture any possible flow at the base of the casing.

In the absence of FACT data, which did not indicate any contaminated depth intervals, the depths recommended for FLUTe sampling intervals included a mix of larger aperture fractures, as well as smaller aperture fractures. All selected intervals had positive VHPFM response under ambient or pumping conditions and are considered to be highly transmissive relative to other fractures within each borehole. Although more than three transmissive intervals are present in each borehole based on VHPFM and transmissivity profile data that could be successfully sampled, the recommendations included just three primary intervals, as this was the design specification in the QAPP.

The following intervals were proposed for FLUTE liner fabrication:

- SY-BRMW1
    - 42-52 feet below ground surface (bgs) (Port 1)
    - 65-75 feet bgs (Port 2)
    - 150-157 feet bgs (Port 3)
- SY-BRMW2
    - 62-72 feet bgs (Port 1)
    - 82-97 feet bgs (Port 2)
    - 254-264 feet bgs (Port 3)
- SY-BRMW3
    - 47-62 feet bgs (Port 1)
    - 145-155 feet bgs (Port 2)
    - 287-297 feet bgs (Port 3)

- SY-BRMW4
    - 62-72 feet bgs (Port 1)
    - 138-148 feet bgs (Port 2)
    - 291-301 feet bgs (Port 3)
- SY-BRMW5
    - 29-44 feet bgs (Port 1)
    - 56-66 feet bgs (Port 2)
    - 123-133 feet bgs (Port 3)

The FLUTe systems were fabricated and delivered to the Site on October 12, 2023, with installation commencing on October 17, at SY-BRMW2. On October 17, an apparent leak was identified in the SY-BRMW2 Water FLUTe when it reached approximately 270 feet bgs. On October 18 the system was pulled, and it was determined the pump tube line separated at the port where the spacer penetrates the liner in 2 of the 3 ports (the 82-97 foot and 254–264 foot intervals). Ultimately the liner was repaired in the field and re-installed on the last day of the deployment (October 25). The blank liner was re-installed during the time when the system was out of the borehole for evaluation and repair. The reinstallation required the liner to be repositioned upward approximately 16 inches from its original depths but the extra overlap of the ports on the borehole were sufficient to monitor the fracture zones as originally intended. As such, the final sample intervals were repositioned 1.5 feet above the original proposed depth intervals and are listed below:

- SY-BRMW2
    - 60.5-70.5 feet bgs
    - 80.5-95.5 feet bgs
    - 252.5-262.5 feet bgs

The FLUTe system in SY-BRMW5 temporarily hung up on the ledge at the bottom of the fault at approximately 128 feet bgs but eventually everted through that zone. All other FLUTe systems were installed without mishap, tested to demonstrate functionality and confirmed to be viable for groundwater sampling, and secured with a metal locking cover.

2.7 WELL SURVEY

A global positioning system (GPS) survey was conducted by Maine-licensed Plisga & Day Land Surveyors (P&D) on January 4 and 24, 2024, to establish the as-built elevations and coordinates of the bedrock monitoring wells and the replacement overburden well SY-OBMW4R, in accordance with the vertical accuracy required by USACE Engineering and Design Manual "Control and Topographic Surveying" EM 1110-1-1005 1 January 2007 and transfer of those elevations as recommended by EM 1110-1-1003. The two permanent benchmarks installed by P&D in August-November 2020 were used to tie wells into the existing well network (aluminum disks: one installed outside the door at Building 600 across Telford Drive and the second in the concrete catch basin rim within the swale paralleling Telford Drive). An Online Positioning User

Service (OPUS) solution was obtained and three wire levels were run to the benchmarks with required vertical control of +/- 7 millimeters (mm). The surveyors consulted with the USACE geodetic branch to confirm technical requirements prior to conducting the survey work. The benchmark with the best GPS characteristics were submitted to OPUS and three wire line surveys were completed to the other benchmark.

Sample location/well northing and easting coordinates were georeferenced to the Maine Coordinate System of 1983, East Zone (NAD83_2011, Epoch: 2010.000) with units of U.S. Survey Feet using GPS tied to the National Geodetic Survey (NGS) Continuously Operating Reference Station (CORS) network (via Maine Department of Transportation Virtual Reference Station [VRS] GPS control network). Elevations were referenced to NAVD88 (2011) using the GEOID18 model to adjust GPS derived ellipsoidal heights (referencing NAD83 (2011)) to orthometric heights (NAVD88 (2011)) for the permanent benchmarks installed and observed in 2020. Collected survey points were delivered to Credere in Adobe PDF and Microsoft Excel format.

Site survey data was uploaded to the FUDS Online Chemical Database (FUDSChem) via a Location definitions (LDI) Update and Well Maintenance (WMI) submissions.

2.8 GROUNDWATER SAMPLING

2.8.1 Groundwater Sampling Timing

The timing of groundwater sampling was to be based on the high, low, and baseflow conditions from the USGS stream gauging and associated well monitoring networks. The timing objective was to target low flow but increasing water level conditions in the stream and as indicated by the USGS well ME-PEW456 reference well collected over the past 5 years. The reference well is a 6-inch diameter confined open bedrock well installed to a depth of 101 feet below ground surface at a comparable land surface elevation of 194.24 feet NAVD88. The well is located approximately 9 miles northwest of the Site (318 degrees). The Kenduskeag stream Monitoring Station 01037000 is located approximately 4.8 miles north northwest of the Site below where Route 15 crosses the stream (349 degrees). On October 2, 2023, Credere submitted a recommendation by email for the timing of the first/fall sampling event based on stream flow data from Kenduskeag Stream and water level data from. The proposed sampling window was the first full week of November and was approved by USACE.

2.8.2 Synoptic Water Levels and Groundwater Elevations

Synoptic water levels were collected at the Site in conjunction with the groundwater sampling event with the objective of mapping the potentiometric surface for interpretation of groundwater flow directions, water level measurements were made to the nearest 0.01 feet and all water levels meters were compared for relative accuracy by measuring the same well prior to start of a synoptic water level round. Depth to water (all wells) and total well depth (overburden wells only) were measured at each well, including all three ports and the tag line in each FLUTe well, during synoptic gauging round on November 6, 2023. Gauging results and calculated elevation are summarized in **Table 2-1** for overburden wells and **Table 2-3** for bedrock wells.

Monitoring well locations, groundwater elevations, and interpreted bedrock groundwater potentiometric contours for the 2023-2024 Quarter 1 groundwater sampling are depicted on **Figures 2-3a through 2-3c**, and are representative of groundwater elevations from shallow (Zone 1), medium (Zone 2), and deep ports (Zone 3), respectively. Some shallow ports are closely spaced and averaged values were used if the absolute head values were close mathematically for contouring purposes. In all zones interpreted groundwater flow is to the southeast, indicating the downgradient well network is appropriately positioned. Overall, vertical gradients in bedrock are downward but, in most wells, there is a convergence of heads in the middle portion of the aquifer which may reflect a zone dominated by horizontal flow. The possible effect of vertical gradients on interpreted groundwater flow characteristics will be evaluated more fully after multiple monitoring rounds are completed and the transient or temporal consistency of vertical gradients becomes better established. The vertical and horizontal gradients are consistent with a bedrock groundwater system flowing toward and potentially discharging, in part, to the Penobscot River. For the purposes of this report, bedrock has been grouped as shallow, moderate depth and deep based on monitoring port elevations. Calculated groundwater potentiometric elevations are presented in **Table 2-3**.

2.8.3 Overburden Monitoring Wells

Groundwater samples were collected the week of November 6, 2023, from overburden monitoring wells SY-OBMW1 through SY-OBMW15 in accordance with Credere SOP CA-12. Wells were purged with a peristaltic pump and dedicated Teflon-lined tubing using low-flow sampling methodologies. Wells were purged at a stable flow rate between 100 and 400 mL/min. Once a stable flow rate was achieved, groundwater was monitored with a calibrated YSI MPS (see Credere SOP CA-11) with an in-line flow through cell for temperature, pH, DO, ORP, and specific conductivity, and a separate turbidity meter for turbidity. Groundwater was monitored until parameters had stabilized over a period of three readings spaced 5 minutes apart, or at a spacing sufficient to allow for a complete exchange of flow through the flow-through cell based on the flow-through cell volume and flow rate. Purging was considered complete when the following parameters were stabilized over three readings spaced 5 minutes apart according to the following criteria:

- pH: ±1 standard unit
- Temperature: ±3%
- ORP: ±10 mV
- DO: ±0.5 mg/L for values less than 2 mg/L or ±10% for values greater than 2 mg/L[1]
- Specific conductivity: ±3%
- Turbidity less than 5 NTUs or ±10% for values greater than 5 NTU

Groundwater samples were collected immediately after the pump into the appropriate laboratory provided and preserved bottleware in order of decreasing volatility. Dissolved metals samples

1 Stabilization criteria for is DO established in the QAPP (Credere, 2022); this criteria differs from Credere's SOP CA-12: Groundwater Sampling

were field filtered with an in-line 0.45-micron filter. Samples were submitted on ice to ARA and Katahdin in accordance with **Table 2-2**.

No evidence of petroleum, via PID response or the presence of free product, was observed in any monitoring wells. Purge water from SY-OBMW11 was containerized as investigation derived waste (IDW) and treated onsite through a GAC filtration drum then discharged to the ground surface. Purge water for the remaining wells was discharged to the ground surface at each monitoring well and allowed to infiltrate.

Low stress/low flow sampling logs and calibration logs are included in **Appendix E**. Sample analyses and analytical methods are summarized in **Table 2-2**. Monitoring well locations, groundwater elevations, and interpreted overburden groundwater contours for the 2023-2024 Quarter 1 groundwater sampling are depicted on **Figure 2-2**.

2.8.4 Bedrock Monitoring Wells

After a period of stabilization of at least 7 days, bedrock monitoring wells were sampled during the same mobilization as the overburden monitoring wells, the week of November 6, 2023. The Water FLUTe Systems installed in the bedrock monitoring wells (SY-BRMW1 through SY-BRMW5) use a nitrogen gas groundwater purge system that is not designed for low stress/low flow sampling. The FLUTe liner system is installed such that specific fracture zones are captured in individual FLUTe system monitoring ports, as described in **Section 2.6**. The ports were sampled using nitrogen gas and a regulator to purge water from the system. The gas line was pressurized with inert nitrogen gas to the recommended purge pressure (per the manufacturer's design) to force water into the pump tube and the sample tube to the surface. This purge was complete when gas was discharged from the sample tube following the water flow. While under positive pressure a check valve closes and isolates the sampling port tube. Each port was purged four times prior to sampling. Each port generally took about 30 minutes to 1 hour to reach the 90% minimum recharge target prior to commencing the next purge cycle. Due to the extensive bottleware necessary for the analytical suite, several additional sampling purges were generally required at each FLUTe well (in addition to the four purges required by the method) in order to fill all containers, particularly at sample locations which included QC samples (i.e., duplicates or matrix spike/matrix spike duplicate [MS/MSD]).

Groundwater samples were collected directly from the outlet tubing into the appropriate laboratory provided and preserved bottleware in order of decreasing volatility. Dissolved metals samples were field filtered with an in-line 0.45-micron filter. Sample analyses and analytical methods are summarized in **Table 2-2**. FLUTe sampling logs are included in **Appendix E**. Fifteen (15) bedrock groundwater samples were collected, placed on ice, and submitted under chain of custody to ARA and Katahdin for laboratory analysis according to **Table 2-2**.

2.8.5 Comparison of Overburden and Bedrock Monitoring Wells

One collocated overburden and bedrock monitoring well pair is present where groundwater elevations can be meaningfully compared; SY-OBMW11 and SY-BRMW1. Synoptic groundwater level gauging during the November 2023 sampling event indicated virtually identical groundwater elevations; 148.74 feet NAVD88 in SY-BRMW1 Port 1 (42-52 feet bgs), and 148.78 feet NAVD88 in SY-OBMW11. SY-OBMW11 is screened from 21-31 feet bgs. This similarity

in groundwater elevations indicates potential for a weak vertical-downward gradient. Considering the two midpoints of these screens/intervals, 47 feet bgs in BRMW1 Port 1 and 26 feet bgs in SY-OBMW11, this indicates a vertical gradient of 0.0019 vertical feet of groundwater gradient per foot of change in depth/elevation between to two measuring points.

Surface water features at the Site, depicted on **Figure 1-2**, are ephemeral drainages that only flow in response to heavy precipitation and snowmelt events. Elevation of the drainage in the southern portion of the Site near SY-OBMW12 is approximately 150 feet NAVD88; groundwater elevations in SY-OBMW12 ranged from 145.87 to 148.42 during the five measuring periods shown on **Table 2-1**, with one low point at 142.87 feet NAVD88 during a dry period. Therefore, based on water elevation measurements, groundwater discharge to Site surface water features is likely limited to periods of high groundwater conditions.

2.9 INVESTIGATION DERIVED WASTE

No observed media indicated evidence of contamination (e.g., visible petroleum, odor, elevated PID readings), and no gross contamination/saturated soil was encountered during drilling or test pitting. Therefore, no solid IDW was generated during this RI that required containerization and offsite disposal, and groundwater was discharged to the ground surface surrounding each respective boring or well (with the exception of SY-OBMW11).

Purge water for SY-OBMW11 was containerized, as TCE has historically been detected above screening criteria, and treated through a GAC drum prior to discharge to the ground surface. A treated purge water sample (GAC-110923) was collected at the end of the sampling round on November 9, 2023, and analyzed for VOCs by EPA Method 8260D to document the effectiveness of the GAC filtration. TCE was not detected in this effluent sample.

3. DATA MANAGEMENT

3.1 FIELD QUALITY CONTROL

Throughout field activities, Credere had a designated field quality control manager (QCM) and field Site Safety and Health Officer (SSHO) onsite to coordinate field tasks; to provide quality assurance (QA) oversight to ensure field procedures were consistent with the QAPP and Credere SOPs; and to ensure activities were in compliance with the project's Accident Prevention Plan (APP; Credere 2022b).

3.1.1 Field Documentation

Field documentation procedures were completed in accordance with Credere SOP CA-1. The field QCM maintained a field book to record daily events (e.g., personnel onsite, arrival and departure times, daily health and safety briefings, daily field activities, etc.), all samples collected, and all deviations from the QAPP. It was the Field QCM's daily responsibility to review the field book and field logs for accuracy and consistency, match all samples collected to sample chains of custody (COCs), and document field deviations. These events/records were summarized each day in a Daily Quality Control Report (DQCR) prepared by the Field QCM and reviewed by the Credere Project Manager for review and then transmitted to CENAE after each work day (note; DQCRs are not attached to this document). The field book and field logs were scanned for the electronic project file and field logs submitted to the Technical Lead as a final QC check.

3.1.2 Chains of Custody

Credere followed procedures outlined in Credere SOP CA-16 for COCs to ensure each sample was accounted for at all times. The objectives of the sample custody identification and control system were to ensure the following:

- Samples scheduled for collection are uniquely identified
- The correct samples are analyzed and are traceable to their records
- Samples are protected from loss, damage, or tampering
- Alteration of samples (e.g., filtration, preservation) is documented
- A forensic record of sample integrity is established

The COC form included the following:

- Sample number and sample bottle identification number, where applicable
- Names of the sampler(s) and the person shipping the samples
- Purchase order number and/or project number
- Name, telephone number, and fax number or email address of the contact person from Credere
- Project name (including specific portion of the Site if a large project)
- Signature of the sampler

- Date and time that the samples were collected
- Names of those responsible for receiving the samples and the date and time received at the laboratory
- Matrix of the sample
- The number of containers for a particular sample
- Analysis, container type, and preservative information

The field QCM reviewed COCs prior to sample submission to the laboratory for analysis.

3.2 PROJECT DATABASE

All field logs and sample documentation were uploaded to FUDSChem. The electronic QAPP (eQAPP), location IDs, and event planning was continually updated as new locations or sample changes were made based on field constraints.

Generally, the following FUDSChem steps were implemented:

1. Preparation, laboratory review, and screening check review of eQAPP. Subsequent approval and certification of the eQAPP by Credere and the USACE Chemist.
2. Event planning for planned samples prior to field mobilization.
3. Input of Chemfields within 3 days of submittal to the laboratory.
4. Preparation and input of the above field data after demobilization.

Field data was also required to be reported electronically to FUDSChem. The following was reported in FUDSChem:

- LDI prior to sampling
- LDI Update after sampling to adjust locations after sampling as well add surveyed coordinates and elevations, final depths, and diameters
- Location cross references (SLX) once the LDI was complete
- Environmental measurements (EMI) for groundwater parameters and corresponding field forms
- Groundwater levels (GWD) for groundwater gauging data and corresponding field forms
- Well construction intervals (WINT) and corresponding boring logs/well construction diagrams
- Well construction information (WCI) and corresponding well construction diagrams
- Lithology (LTD) for new soil borings and corresponding boring logs

As of the preparation of this report, field data through the 2023-2024 Quarter 1 groundwater sampling round as summarized herein was submitted to FUDSChem for review and approval.

Field data was submitted for the RI, 2023 solids event on February 24, 2023, and for the Groundwater November 2023 event on November 16, 2023.

Electronic data deliverable (EDD) files to meet Maine DEP EDD submittal requirements for upload into the Maine DEP Environmental and Geographic Analysis Database (EGAD) were exported from FUDSChem and will be provided to Maine DEP concurrent with finalization of this report. Field data was also tabulated in EGAD format for Maine DEP submittal.

4. ANALYTICAL DATA TRANSMITTAL

The following sections serve as a data transmittal and opinion of usability for analytical results. The final interpretation of these results is reserved for future reporting when four quarters of data have been collected for the bedrock groundwater, at which time eight quarters of data will be available for overburden groundwater results.

Laboratory analytical results were received from ARA of Portsmouth, New Hampshire, for the following methods:

- EPA method 8260D for VOCs
- EPA method 8270E for semi-volatile organic compounds (SVOCs)
- EPA method 6020A for metals with EPA 7470A for mercury
- Massachusetts Department of Environmental Protection (MassDEP) volatile petroleum hydrocarbons (VPH)-04-1.1
- MassDEP extractable petroleum hydrocarbons (EPH)-04-1.1
- EPA method 8082A for polychlorinated biphenyl (PCB) Aroclors

The following methods were analyzed by KAS of Scarborough, Maine:

- EPA method 7196A for hexavalent chromium
- EPA method 8270D with selective ion monitoring (SIM) for polycyclic aromatic hydrocarbons (PAHs)
- EPA method 8260C with SIM for CVOCs
- Total Organic Carbon (TOC) by Lloyd Kahn or EPA method A5310B
- EPA method 300 for anions
- EPA method RSK-175 for dissolved gases
- EPA method A3500-Fe B for ferrous iron
- EPA method 2320B for alkalinity

Samples collected in November 2023 as part of the Quarter 1 groundwater sampling event of the Data Gap Phase are summarized in **Table 2-2**, which indicates the completed analytical method lists. Analytical results are tabulated in **Table 4-1** for soil samples, **Table 4-2** for overburden monitoring wells, and **Table 4-3** for bedrock monitoring wells. **Appendix F** contains the final laboratory reports from ARA and Katahdin for the Quarter 1 groundwater sampling event. Preliminary screening levels are included in the table and results equal to or exceeding these screening criteria are highlighted accordingly.

Staged electronic data deliverables (SEDDs) for the first quarterly groundwater sampling results were loaded to FUDSChem between January 3 and January 9, 2024.

4.1 ANALYTICAL RESULTS OVERVIEW

This section discusses the results of soil samples collected during the installation of one replacement overburden groundwater monitoring well and the results of overburden and bedrock groundwater samples which is the primary focus of this work and report.

4.1.1 SY-SB4R Soil Results

Three soil samples were collected from the replacement well boring (SY-SB4R); two samples from 0.5-2 feet bgs (a parent sample and a duplicate), and one sample from 2-4 feet bgs. Results for these samples are included in **Table 4-1** along with the soil analytical results from previous borings.

Soil results in **Table 4-1** are compared to the project action limits (PALs), which are the lowest of the following human health and ecological screening levels:

- Human health screening levels:
    - EPA Regional Screening Levels (RSLs) for soil for the residential (unrestricted) exposure scenarios at a hazard quotient (HQ) of 0.1 or an excess lifetime cancer risk (ELCR) of $1x10^{-6}$ (EPA, 2021)
    - Maine DEP Remedial Action Guidelines (RAGs) for Sites Contaminated with Hazardous Substances (Maine DEP, 2023). RAGs were adjusted to represent $1x10^{-6}$ ELCR to be consistent with the above regional screening levels. RAGs are provided for informational purposes only and are only used as primary screening values for MassDEP EPH and VPH fractions.

- Ecological screening levels:
    - EPA Interim Ecological Soil Screening Level (EcoSSL) Documents (EPA, 2016)
    - Soil-based toxicity benchmarks for plants and soil invertebrates developed by the Department of Energy (DoE; Sample et al. 1996, 1998a, 1998b)

Note that the RSLs and EcoSSLs are the PALs, while the RAGs are included for relative comparison.

Maine statewide background upper prediction limits (UPLs) and the Site-specific background data are included in the tables; however, an evaluation of results relative to background is not included herein. A background evaluation will be completed as part of risk assessment/data gap screening in the RI report. Further evaluation of this data will be deferred to that report.

The following compounds were detected above the screening criteria for soil in SY-SB4R:

- Benzo(a)pyrene exceeding the PALs from 0.5-2 feet bgs
- Metals (aluminum, antimony, arsenic, chromium, cobalt, iron, lead, manganese, nickel, selenium, thallium, vanadium, and zinc) exceeding the PALs (RSL and/or EcoSSL) from both sample depths (0.5-2 and 2-4 feet bgs). Hexavalent chromium exceeding the PAL from 2-4 feet bgs

The following groups of compounds had detected analytes but were below the referenced screening criteria in the SY-SB4R samples:

- EPH
- VPH
- VOCs

Further, there were no detections at the limit of detection (LOD) for the following analyte lists:

- PCBs
- SVOCs

4.1.2 Groundwater Results

During the November 2023 sampling event, 30 primary samples (not including QC samples, i.e., duplicates and MS/MSDs), were collected. This included 15 bedrock groundwater samples and 15 overburden/hybrid well groundwater samples. Groundwater analytical results are presented in tables that compare results by shading to the following human health screening levels:

- EPA Tapwater RSLs (EPA, 2021) for comparison to groundwater results.
- EPA Maximum Contaminant Levels (MCLs; EPA, 2021), where established, for comparison to groundwater results.
- Maine DEP RAGs for Sites Contaminated with Hazardous Substances (Maine DEP, 2021). RAGs were adjusted to represent $1x10^{-6}$ ELCR to be consistent with the above regional screening levels. RAGs are provided for informational purposes only and are only used as primary screening values for MassDEP EPH and VPH fractions.

Based on the depth to groundwater, ecological screening for groundwater is not applicable at this Site.

Overburden Groundwater Results

Table 4-2 presents cumulative analytical results for overburden groundwater sampling during RI activities from 2019 to present. Results discussed below are the new results from the November 2023 sampling event only.

Generally, one or more of the following compound/analyte concentrations were detected above the screening criteria for groundwater:

- Metals – arsenic, cobalt, and manganese
- CVOCs – TCE and VC
- SVOCs – bis(2-Ethylhexyl) phthalate (DEHP or BEHP) and bis(2-chlorethoxy) methane

EPA RSLs divide petroleum hydrocarbons to low, medium, and high aliphatics and aromatics. In the absence of RSLs for the specific EPH and VPH petroleum carbon fractions (i.e., C11-C22 aromatics, C19-C15 aromatics), Maine RAGs where available were used as the PAL. Detected concentrations of C11-C22 aromatics exceed the PAL, while all other fractions were not detected or detected below the PAL.

The following analyte lists had no detections at the LOD:

- VOCs (other than CVOCs)
- PAHs
- PCBs
- EPH target compounds
- VPH target compounds and petroleum fractions

The following paragraphs discuss chemical results related to the geophysical conductive anomaly, the occurrence of chlorinated solvents in groundwater, and the detection of DEHP (also known as BEHP).

Generally, results are consistent with prior sampling results for most detected analytes. Chloride and sulfate are elevated in SY-OBMW4R consistent with prior results of several wells including SY-OBMW4, SY-OBMW7 and SY-OBMW15 suggesting that geophysical conductive anomaly is an artifact of road de-icing or de-icing salt storage during historical operations.

The VOC SIM data indicates TCE in SY-OBMW11 is consistent with past detections. The SIM data also reveals the presence of low levels of 1,1-Dichloroethene and cis-1,2-Dichloroethene from biodegradation (reductive dechlorination) of TCE. Analysis of CVOCs by SIM during this round identified concentrations of CVOCs above the PAL (residential RSL) in SY-OBWM11 consistent with prior rounds, but also in SY-OBMW12, which had only one prior TCE exceedance in August 2020, and SY-OBMW14. Both of these wells with exceedances also had detections of vinyl chloride above the PAL (tapwater RSL).

DEHP was also detected in certain November 2023 samples at concentrations that are elevated relative to the low solubility reported for this compound. DEHP water solubility in literature is reported over a wide range from low parts per million to low parts per billion and the reported concentrations are near or above literature values of solubility which would require presence of a non-aqueous phase liquid (NAPL). Similar detections occurred in March 2020 in several wells, but those results were not verified by other sampling rounds. DEHP density is slightly less than water which means it is a light NAPL (LNAPL) with higher viscosity than most NAPLs since it is a plasticizer. Discussion with the laboratories did not identify a laboratory source (including non-USACE samples in the analytical sequence) so any conclusions regarding these detections should be deferred until they can be verified by additional sampling.

Bedrock Groundwater Results

Table 4-3 presents the analytical result for bedrock groundwater during this period (November 2023 sampling). This is the first sampling event for bedrock groundwater.

The following compound/analyte concentrations were detected above the screening criteria for groundwater:

- PAHs – benzo(a)anthracene and benzo(a)pyrene in two wells, and dibenzo(a,h)anthracene and benzo(b)fluoranthene in one well.
- Metals – antimony, arsenic, cobalt, mercury, and manganese
- VOCs – chloroform, TCE, and VC
- SVOCs – bis(2-chloroethoxy) methane and DEHP

EPA RSLs divide petroleum hydrocarbons to low, medium, and high aliphatics and aromatics. In the absence of RSLs for the specific EPH and VPH petroleum carbon fractions (i.e., C11-C22 aromatics, C19-C15 aromatics), Maine RAGs where available were used as the PAL. Detected concentrations of C11-C22 aromatics exceeded the PAL in one sample. This was an estimated concentration below the LOD. The remaining LODs exceeded the PAL.

The following groups of compounds/analytes were detected in the collected groundwater samples at concentration below the referenced screening criteria:

- VPH – toluene was detected in all wells and ports but is assumed to be diffused from the FLUTe liners, as discuss in the FLUTe FACT Data Report with Transmissivity Profiles report (FLUTe, 2023).
- Other VOCs
- Other phthalates

The following analyte lists had no detections at the LOD:

- VPH petroleum fractions
- EPH target compounds
- Hexavalent chromium
- PCBs

The following paragraphs discuss chemical results related to chlorinated solvents in bedrock groundwater, which is the primary focus of this Data Gap Phase investigation, as well as the detection of DEHP.

Similar to overburden, the VOC SIM data indicates TCE at low concentrations but also the presence of low levels of trans-1,2-dichloroethene (trans-DCE) and vinyl chloride (VC) from degradation of TCE and depending on the well location some reported concentrations exceed PALs (tapwater RSLs). The distribution of these compounds is presented in figures in **Section 5**.

Other detected VOCs include tetrahydrofuran and toluene. Toluene is a known artifact of the FLUTe liners. Chloroform was detected above the PAL (tapwater RSLs) in two wells but its presence should be confirmed by subsequent sampling events.

The bedrock groundwater data also detected the presence of DEHP at concentrations that are elevated relative to the low solubility reported for this compound. Per the discussion of similar overburden groundwater results any conclusions regarding these detections should be deferred until they can be verified by additional sampling.

4.2 DATA VALIDATION AND USABILITY

Validation of the SY-SB4R soil sampling event and the November 2023 groundwater sampling event was completed by Laboratory Data Consultants (LDC) of Carlsbad, California, and EnSafe, Inc. (EnSafe) of Mount Pleasant, South Carolina, respectively. Validated results have been incorporated into the attached **Tables 4-1 through 4-3**. Copies of the validation reports for SY-SB4R and Quarter 1 – November 2023 events, as well as the data usability assessment, are included in **Appendix G**.

LDC/EnSafe completed the Stage 2A validation through a combination of Automated Data Review (ADR) software internal to FUDSChem and supplemental manual review based on professional judgment. A project chemist reviewed the QC elements associated with each sample delivery group (SDG) in accordance with the QAPP (Credere, 2022).

Stage 2a level data validation review consisted of: 1) sample identification, preservation, and holding time verification; 2) surrogate, laboratory control sample/laboratory control sample duplicate (LCS/LCSD), and MS/MSD recoveries; 3) LCS/LCSD, MS/MSD, and field duplicate precision; 4) method and field blank contamination issues; and 5) sensitivity of reported results compared to the eQAPP and QAPP requirements.

Data validation reports were then reviewed by the Credere project chemist and technical lead prior to finalization and submittal for USACE review and approval in FUDSChem.

4.2.1 SY-SB4R Soil Event

The following general trends in qualification were encountered in the SY-SB4R soil sampling data set and their impact on the usability of results is summarized below:

- Hexavalent chromium was analyzed outside the hold time due to hood failure at the laboratory and inability to safely extract the samples. These results have been qualified as estimated. Based on results generally consistent with other nearby locations (SY-SB4), these qualifications do not impact the usability of these results.
- Detections in various blank samples (mainly method blanks) for EPH, VPH (mainly for the petroleum fractions), metals, and VOCs resulted in qualification of associated sample results as ‘U’ at the limit of quantification (LOQ) or as estimated concentrations with a potential false positive (J). Qualifications were reviewed and the LOQ or detected concentrations sufficiently met/were below the sensitivity goals. As these qualifications were applied to trace concentrations, the usability of the data is not considered impacted.

- Surrogate, laboratory control sample (LCS)/laboratory control sample duplicate (LCSD), and matrix spike (MS)/matrix spike duplicate (MSD) recovery nonconformances resulted in qualifications of associated results as estimated with bias (J or UJ).

The following were recommended for exclusion (X) during validation:

- The SVOC results for analytes 2,4-dinitriphenol and benzidine for samples SY-SB4R-1, SY-SB4R-10 (duplicate), and SY-SB4R-2 were recommended for exclusion based on LCS and MS percent recovery below the eQAPP lower rejection limit of 20%. The associated results were non-detect and have been rejected (R). Based these analytes not being contaminants of interest for the Site based on historical soil results sitewide, this rejection does not impact the overall usability of the larger data set.

In total, 0.58% of results were rejected (4 of 689 total results) indicating 99.56% of result are usable for RI purposes. Rejected analytes were not COPCs; therefore, completeness for the COPCs is 100%. Data usability assessment (DUA) was performed using the FUDSChem module. A copy of the DUA report is provided in **Appendix G**. Considering the results of this report, the data collected as part of the SY-SB4R soil sampling event are usable for making project decisions relative to the established objectives unless rejected.

4.2.2 November 2023 Groundwater Event

- Several VOC analyte detected results were qualified as estimated (J) due to an air bubble in samples SY-BRMW5-29-44-110823. These results will be confirmed during subsequent quarters in this FLUTe port to assess the impact of this air bubble on the results.
- Chlorinated solvents have emerged as the primary contaminant of interest for Site groundwater. These analytes have been further analyzed by an 8260 SIM method, which provides lower detection limits for improved data quality during this November 2023 sampling round. As a result, additional analytes were detected from this list that were not detected by the standard 8260 method in wells SY-OBMW8, SY-OBMW11, SY-OBMW12, and SY-OBMW14. It is likely these analytes were always present but were not detected in the standard 8260 scan. These results will be specifically reviewed during subsequent sampling rounds for representativeness. Despite the SIM method, the VC limit of detection (LOD) remains above the PAL. This is considered acceptable since the result is already a SIM method.
- The lower detection limits afforded by the SW8260C SIM method compared to standard SW8260C/SW8260D provide an improved understanding of the distribution of relatively low concentrations of CVOCs in the groundwater system. In the standard SW8260D method, the concentrations of TCE daughter products, including VC, were all below reporting limits.
- Detections in various blank samples (mainly method blanks) for EPH, VPH, VOCs, metals, gases (methane), and hexavalent chromium resulted in qualification of associated sample results as ‘U’ at the LOQ or as estimated concentrations with a potential false positive (J). Qualifications were reviewed and applied only to MNA parameters or analytes with no PALs. As this qualification was applied to trace concentrations, the usability of the data is not considered impacted.

- Surrogate, LCS/LCSD, and MS/MSD recovery nonconformances resulted in qualifications of associated results as estimated with bias (J or UJ). These qualifications do not affect the usability of the results relative to the objectives.

The following were recommended for exclusion (X) during validation:

- The PCB results for SY-OBMW4R-1107-23 were recommended for exclusion based on LCS percent recovery below the eQAPP lower rejection limit of 20% due to spilled sample in the lab. The associated results were non-detect and have been rejected (R). Based these analytes not being contaminants of interest for the Site and having been non-detect for all other sampled rounds in SY-OBMW4, this rejection does not impact the overall usability of the data set. Results will be specifically reviewed to confirm PCB results remain non-detect in SY-OBMW4R replacement well for subsequent quarters.
- The EPH C9-C18 aliphatics result for sample SY-BRMW10-65-75-110923 was recommended for exclusion based on LCS/LCSD percent recovery below the eQAPP lower rejection limit of 20%. The associated result has been rejected (R). As this sample was a duplicate, results of the parent sample, analyzed in a separate, acceptable batch, can be used for decision making. Therefore, this rejection does not impact the overall usability of the data set.
- The SVOC benzoic acid results for samples SY-BRMW-10-65-75-110923,SY-BRMW1-150-157-110923, SY-BRMW1-42-52-110923, SY-BRMW1-65-75-110923, SY-BRMW3-145-155-110923, SY-BRMW3-287-297-1109-23, SY-BRMW4-291-301-110923 were recommended for exclusion based on LCS/LCSD percent recovery below the eQAPP lower rejection limit of 20%. The associated results were non-detect and have been rejected (R). As these analytes are not contaminants of interest for the Site based on historical groundwater results sitewide, this rejection does not impact the overall usability of the data set. Additionally, hexachloroethane had an LCSD percent recovery below the lower rejection limit; however, as the LCS was in control, associated samples were qualified as UJ and not rejected. Further, some samples with percent recovery below the LRL were not rejected by using the DoD module 1 lower rejection limit of 10% for benzoic acid, hexachloroethane, and phenol. These results were qualified as non-detected estimated (UJ).

In total, 0.13% of results were rejected (7 of 5,578 total results) indicating 99.95% of results are usable for RI purposes. Rejected analytes were not COPCs; therefore, completeness for the COPCs is 100%.

All final laboratory reports for November 2023 were uploaded to FUDSChem by January 9, 2024. Validation was initiated immediately and was completed by EnSafe by February 5, 2024. DVRs were reviewed and approved by Credere for loading to FUDSChem by February 15, 2024, and DVRs and lab reports were approved as final in FUDSChem by USACE on April 23, 2024.

A DUA was performed using the FUDSChem module. A copy of the DUA report is provided in **Appendix G**. Considering the results of this report, the data collected as part of the November 2023 sampling event are usable for making project decisions relative to the established objectives.

5. SUMMARY

The objective of the bedrock groundwater characterization and continued monitoring of overburden groundwater was to fill any data gaps concerning the presence and nature and extent of VOCs in groundwater that was initially triggered by the detection of TCE in SY-OBMW11 at concentrations just above the MCL. This section summarizes the nature and extent of chlorinated solvents in overburden and fractured bedrock groundwater, addresses recommendations for future well maintenance and concludes on the existence of any remaining data gaps. Note that this section is limited to the first of four quarterly groundwater sampling events, as well as the soil sample collected during the installation of replacement overburden well SY-OBMW4R.

5.1 SY-SB4R SOIL SAMPLING

Concentrations in soil samples collected from replacement overburden boring SY-SB4R exceeded the PALs in several instances, including benzo(a)pyrene from 0.5-2 feet bgs; aluminum, antimony, arsenic, chromium, cobalt, iron, lead manganese, nickel, selenium, thallium, vanadium and zinc and from 0.5-2 and 2-4 feet bgs, and hexavalent chromium from 2-4 feet bgs. These results are consistent with prior discrete and incremental sampling methodology (ISM) sample results throughout the Site.

Additionally, analytical results from 2-4 ft bgs indicated substantially higher sodium concentrations than anywhere else onsite. Consistent with prior interpretation of groundwater results, this is believed to indicate the conductivity anomaly is the result of historical deicing salt (NaCl) stored/used at the Site.

5.2 NATURE AND EXTENT OF CHLORINATED SOLVENTS IN GROUNDWATER

The deep overburden/hybrid well network monitors a confined system of deep overburden/shallow bedrock groundwater contained within weathered bedrock. Transducer data collected during bedrock well drilling and development show the shallow groundwater system to be well connected to underlying confined bedrock groundwater system. Groundwater drilling resulted in Site-wide drawdown of bedrock groundwater with a well-developed northeast – southwest anisotropy with a ratio of approximately 3:1 indicating under pumping conditions bedding plane and bedding parallel fractures were dominant and better connected. Under ambient or non-pumping conditions groundwater flow directions are consistently southeast in all units. This suggests, that bedrock groundwater flow is controlled by an interconnected network of regional joints and bedding plane or bedding parallel fractures. Vertical gradients in bedrock are downward overall, although intermediate depth bedrock groundwater shows some well specific gradient reversals that reflect different head conditions in the fracture network. Whether these gradient reversals are a function of isolated fractures having different spatial connections in the aquifer or a general zone of convergence of shallow and deeper groundwater toward the intermediate depth interval in the aquifer is not known. Such gradient reversals in boreholes are, however, not uncommon and undue emphasis on them is likely not warranted here. The presence of an overall downward groundwater vertical gradient in bedrock is consistent with a regional CSM of groundwater flow in overburden and bedrock that is toward discharge points along the Penobscot River which is tidally influenced in the Bangor area. The downward bedrock gradients would be expected to reverse becoming upward along the immediate margins of the river system, where it is likely that shallower and

intermediate depth groundwater may seek to discharge to the river system. Groundwater not captured by the river system would underflow toward discharge points along the Atlantic coastline in Penobscot Bay.

A summary table of VOCs detected in groundwater and comparison to screening values is presented in **Table 4-2** (overburden) and **Table 4-3** (bedrock). Groundwater potentiometric contour maps indicating a southeasterly direction of groundwater flow are presented for overburden / hybrid wells in **Figure 2-2**; and for the shallow, moderate depth and deep bedrock intervals in **Figure 2-3a**, **2-3b**, and **2-3c**, (Zones 1, 2 and 3) respectively.

A composite contoured figure of the distribution of TCE, trans 1,2 DCE and VC in overburden /hybrid wells which includes some shallow weathered bedrock is presented in **Figure 5-1.** A similar figure for the combined FLUTe data for shallow, moderate depth and deep bedrock groundwater is presented in **Figure 5-2**. The number, magnitude and distribution of these chlorinated compounds did not warrant separate figures for different bedrock depths. **Figure 5-1** indicates a plume of TCE with a source in the vicinity of SY-OBMW11 with decreasing concentrations downgradient in SY-OBMW12 and SY-OBMW14. Downgradient concentrations are slightly above PALs (tapwater RSLs). Other reductive dechlorination biological degradation products are also present near the source and downgradient including trans 1,2, DCE, at concentrations below PALs (tapwater RSLs). VC, which is also a degradation product, eventually appears in the downgradient extent of the plume in SY-OBMW14 at a concentration slightly above the PAL (tapwater RSL). This pattern is consistent with the first order decay of TCE to DCE and subsequently VC with time along the groundwater flow path. Note that the above discussion only includes compounds which were detected and there is no discussion of non-detect compounds.

Figure 5-2 shows a similar distribution of TCE and daughter products trans-1,2-DCE and VC in bedrock though the extent of the plume is broader and more diffuse. TCE was detected above its PAL (tapwater RSL) in two bedrock intervals, from 150-157 ft bgs in SY-BRMW-1 and the 123-133 foot interval in SY-BRMW5. These detected concentrations are highest in SY-BRMW-1, adjacent to SY-OBMW11, and lower down gradient. TCE was also detected in shallower depth intervals in SY-BRMW1 and in the intermediate depth interval (138-148 feet) and deeper interval (291-301 feet) in SY-BRMW4. In all cases these detections are below the PALs (tapwater RSLs). VC was detected in all three ports in SY-BRMW3 at concentrations just above the PAL (tapwater RSL). Trans 1,2 DCE was also present in the deep interval in SY-BRMW3 with the VC.

The detections of TCE in SY-BRMW5 (123-133 feet) is not associated with any detections of DCE or VC, and in this regard is distinct from detections in other wells to the west and southwest. The fracture zone in which TCE is present in SY-BRWM5 is within a fault zone and dip azimuths of the feature with the largest aperture are upward at a shallow angle toward the general vicinity of SY-BRWM1.

5.3 WELL MAINTENANCE RECOMMENDATIONS

If necessary, future overburden well maintenance may be considered if the monitoring wells are planned to be maintained for any ongoing long-term monitoring subsequent to this RI, or future remedial efforts (if any). At the time of the Quarter 1 groundwater sampling event, all overburden well protective casings and road boxes, where present, were documented in good and acceptable

physical condition, and all newly installed bedrock monitoring wells finished with FLUTe systems were also in good condition. All wells appeared in acceptable conditions, with the exception of SY-OBMW7, which showed measurable indications of sediment accumulation based on depth to the bottom of the well measurements shown in **Table 2-1**. Each well was constructed with a 2-foot sump below the bottom of the screen. Water quality samples have not been affected by the sediment accumulation based on water quality parameter measurements and analytical data results. Although this well has been redeveloped, repeated purging to remove accumulated sediment should be evaluated in the future if the well performance indicates a reduction in specific capacity. Note SY-OBMW7 has never detected organic chemicals except one detection of low estimated concentrations of EPH (C11-C22 aromatic fraction).

Future well development recommendations would be based on water quality changes and well hydraulic performance which is monitored by computing specific capacity from low stress/low flow sampling data and tabulated in **Table 2-1**. The initial well development between the December 2020 sampling round and the November 2023 round indicated 1 order of magnitude improvement in two wells (SY-OBMW12 and SY-OBMW14), with most wells being unchanged.

5.4 DATA GAP EVALUATION

Based on the distribution of chlorinated solvents and their respective concentrations presented in **Figure 5-1** and **Figure 5-2**, the nature and extent of TCE, DCE and VC are well delineated both horizontally and vertically within the overburden and fractured bedrock aquifer. Overburden CVOC concentrations are low and would not appear to pose a concern for vapor encroachment on adjoining properties if the plume extent even reached that far. In accordance with the QAPP, a formal assessment of potential vapor encroachment on the downgradient commercial properties will be conducted after the second round of groundwater data has been evaluated. Therefore, the QAPP objectives have been met, and no data gaps are present, based on this round of data, with respect to these compounds.

Several detections of PAHs above the PALs (tapwater RSLs) occurred in shallow interval of SY-BRMW1 and SY-BRMW2. In bedrock several metals also exceed PALs (tapwater RSLs) including arsenic. As discussed previously, the reported detection of DEHP is enigmatic based on compound solubilities and should be corroborated by additional sampling. When all four rounds of groundwater are completed and results interpreted, the data set will be sufficient to define the plume core, develop a list of COPCs, calculate exposure point concentrations, and complete a human health risk assessment for groundwater.

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FIGURES

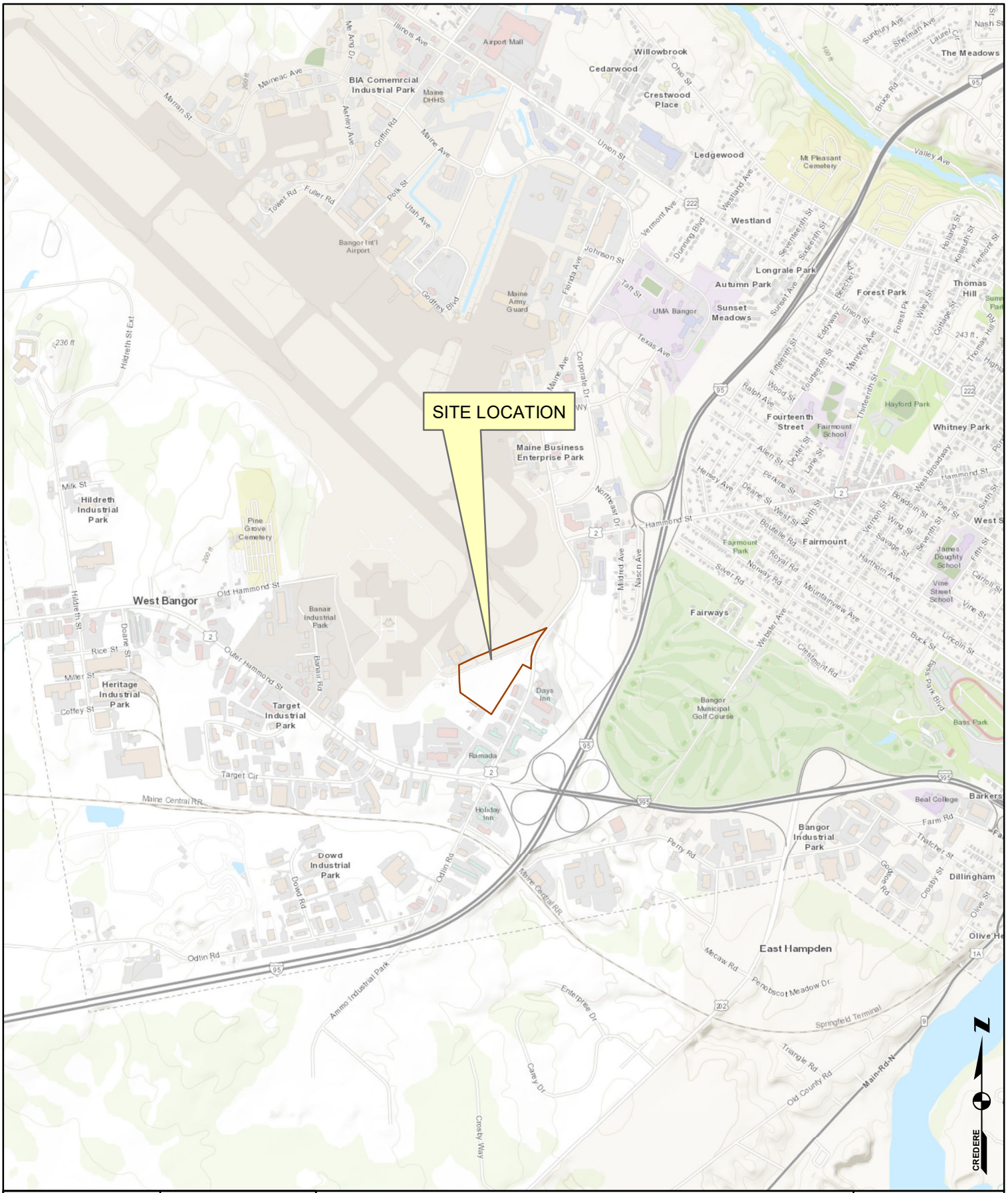

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FIGURE 1-1
SITE LOCATION PLAN

FORMER SALVAGE YARD
233 ODLIN ROAD
BANGOR, MAINE

1,000 0 2,000 Feet

1 INCH = 2,000 FEET



Topographic Map Data Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

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BANGOR INTERNATIONAL AIRPORT
600 BANGOR INTERNATIONAL AIRPORT
1 BANGOR INTERNATIONAL AIRPORT
BUILDING T-162
BUILDING T-163
BUILDING T-164
BUILDING T-133
BUILDING T-165
BUILDING T-134
ASPHALT
233 ODLIN ROAD (CITY OF BANGOR)
240 ODLIN ROAD
POSSIBLE RESIDENCE
248 ODLIN ROAD
252 ODLIN ROAD (PRIVATE)
200 ODLIN ROAD
267 ODLIN ROAD
267 ODLIN ROAD (PRIVATE)
285 ODLIN ROAD (PRIVATE)
301 ODLIN ROAD (PRIVATE)
339 ODLIN ROAD
327 ODLIN ROAD
ODLIN ROAD
SUCKER BROOK
170
160
150
140
200 0 400 Feet
1 INCH = 200 FEET

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FIGURE 1-2
SITE VICINITY LAYOUT, DRAINAGE PLAN, & MAP OF WETLANDS

FORMER SALVAGE YARD
233 ODLIN ROAD
BANGOR, MAINE

- BENCHMARK
- RIGHT-OF-ENTRY PARCEL BOUNDARY
- FORMER SALVAGE YARD SITE AREA
- CURRENT RI INVESTIGATION AREA
- POWER LINES
- HISTORICAL RAILROAD TRACKS
- HISTORICAL SITE BUILDING
- DRAINAGE CULVERT
- DRAINAGE SWALE
- JULY 2019 USACE WETLAND DELINEATION
- APPROXIMATE PARCEL BOUNDARY
- PARCEL BOUNDARY
- SUCKER BROOK
- WETLAND
- DIRECTION OF SURFACE STORM WATER FLOW
- TWO FOOT ELEVATION CONTOUR
- TEN FOOT ELEVATION CONTOUR

NOTES:
1. EXISTING CONDITIONS AND FEATURES SHOWN ON THIS PLAN ARE APPROXIMATE AND ARE BASED ON INFORMATION OBTAINED FROM HISTORICAL PHOTOGRAPHS AND GIS DATA FROM US ARMY CORPS OF ENGINEERS (USACE), USACE 1994 SITE INSPECTION, MAINE GEOLIBRARY (2009 AERIAL IMAGERY AND TOPOGRAPHIC DATA), AND FIELD WORK PERFORMED BY CREDERE IN SPRING/SUMMER 2016, FALL 2018, AND FALL 2019.

2. POSITIONS INCLUDING BENCHMARKS RECORDED BY PSILGA & DAY LAND SURVEYORS, NOVEMBER 15-22, 2019. ELEVATIONS REFERENCE THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88) USING GPS TIED TO THE NGS CORS NETWORK (VIA MAINE DEPARTMENT OF TRANSPORTATION VRS GPS CONTROL NETWORK). ELEVATIONS COMPUTED FROM GEOID 18 BASED ON TWO PERMANENT BENCHMARKS INSTALLED AND OBSERVED IN NOVEMBER 2020, UPON WHICH AN OPUS SOLUTION WAS OBTAINED AND THREE WIRE LEVELS WERE RUN. DECEMBER 2020 POSITIONS RECORDED DURING RESURVEY BY PSILGA & DAY LAND SURVEYORS, AUGUST 10-12, 2020, AND NOVEMBER 9-20, 2020.

https://gis.maine.gov/arcgis/services/imageryBaseMapsEarthCover/orthoMunicipalBangor2009/ImageServer

Service Layer Credits: Maine GeoLibrary

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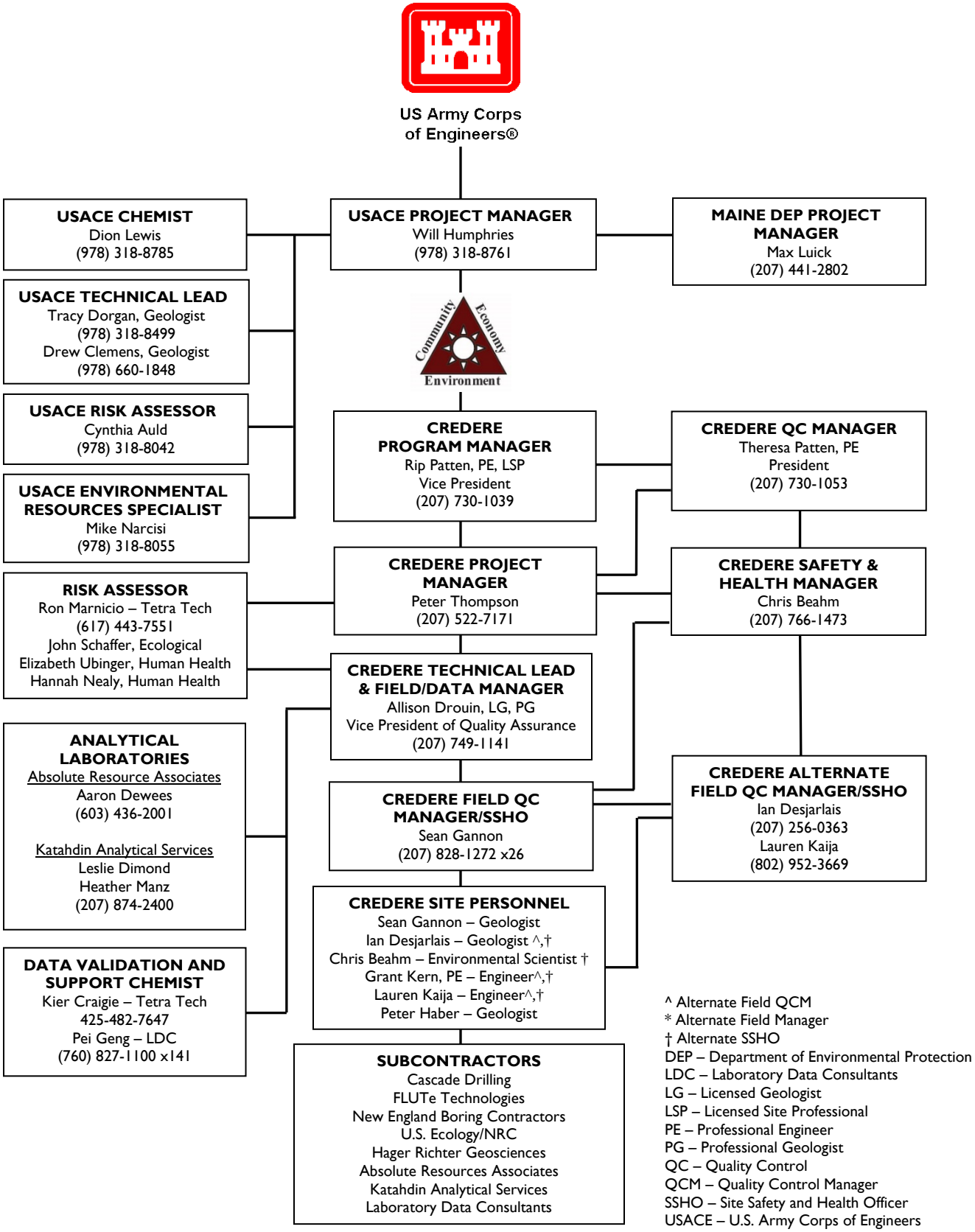
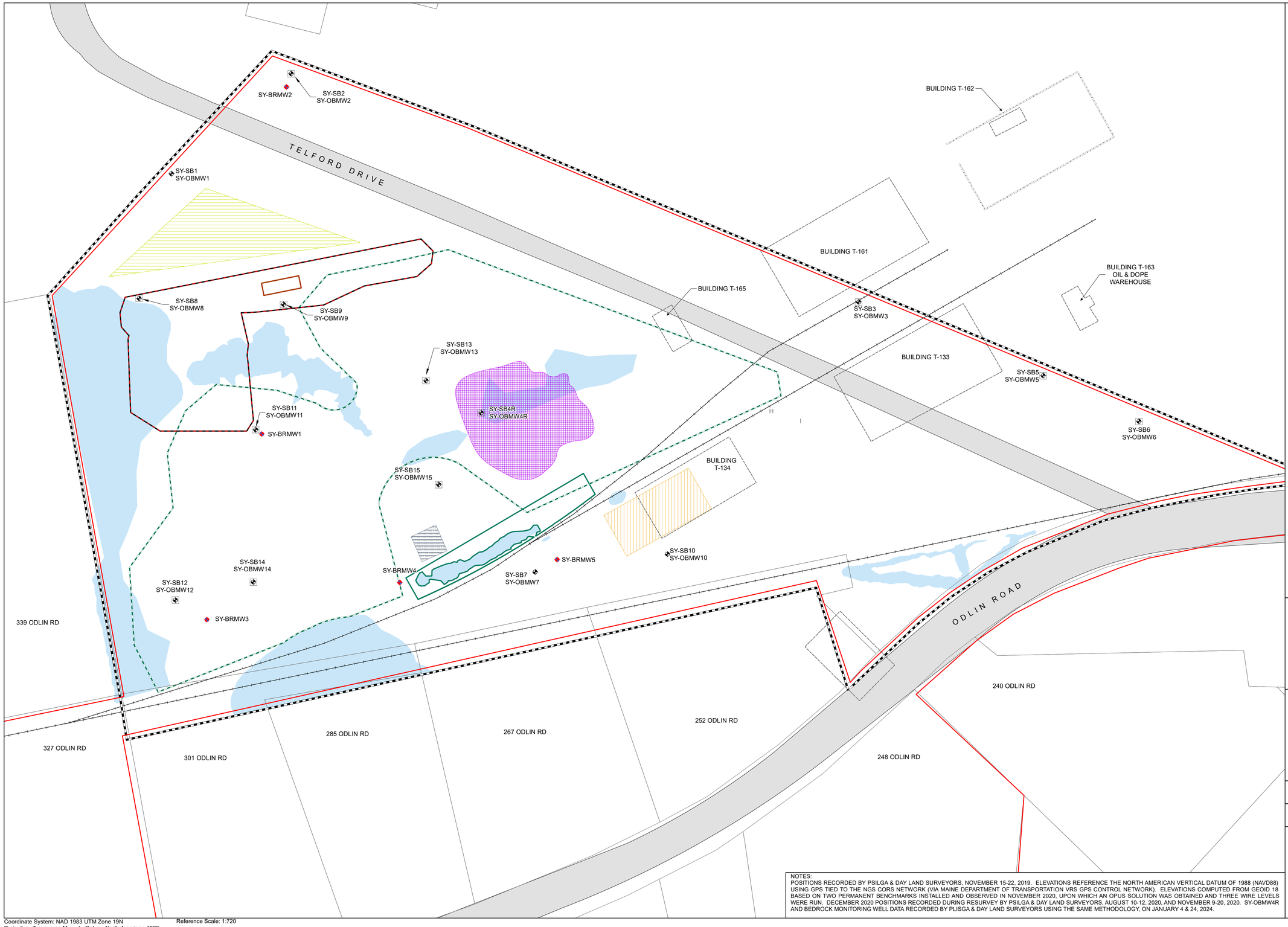
Figure 1-3 – Project Organization Flow Chart





Feet
0 15 30 60 90 120
1 inch = 60 feet

- BEDROCK MONITORING WELL
- SOIL BORING/ HYBRID MONITORING WELL
- SOIL BORING/ OVERBURDEN MONITORING WELL
- HISTORICAL BUILDING
- RIGHT-OF-ENTRY PARCEL BOUNDARY
- CURRENT RI INVESTIGATION AREA
- HISTORICAL RAILROAD TRACKS
- FENCED YARD
- APPROXIMATE PARCEL BOUNDARY
- TRENCH AT DUMPING
- DUMPING AREA
- AREA OF ANOMALOUS SOIL CONDUCTIVITY
- LAYDOWN/DECON AREA
- UNDISTURBED AREA
- PAVED/STORAGE AREA
- COAL AND DEBRIS
- DRAINAGE STRUCTURE
- WETLAND

NOTES:
POSITIONS RECORDED BY PSILGA & DAY LAND SURVEYORS, NOVEMBER 15-22, 2019. ELEVATIONS REFERENCE THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88) USING GPS TIED TO THE NGS CORS NETWORK (VIA MAINE DEPARTMENT OF TRANSPORTATION VRS GPS CONTROL NETWORK). ELEVATIONS COMPUTED FROM GEOID 18 BASED ON TWO PERMANENT BENCHMARKS INSTALLED AND OBSERVED IN NOVEMBER 2020, UPON WHICH AN OPUS SOLUTION WAS OBTAINED AND THREE WIRE LEVELS WERE RUN. DECEMBER 2020 POSITIONS RECORDED DURING RESURVEY BY PSILGA & DAY LAND SURVEYORS, AUGUST 10-12, 2020, AND NOVEMBER 9-20, 2020. SY-OBMW4R AND BEDROCK MONITORING WELL DATA RECORDED BY PLISGA & DAY LAND SURVEYORS USING THE SAME METHODOLOGY, ON JANUARY 4 & 24, 2024.

FIGURE 2-1
SAMPLE LOCATION PLAN

FORMER SALVAGE YARD
233 ODLIN ROAD
BANGOR, MAINE

DRAWN BY: **SCG/ICD**	DATE: **3/20/2024**
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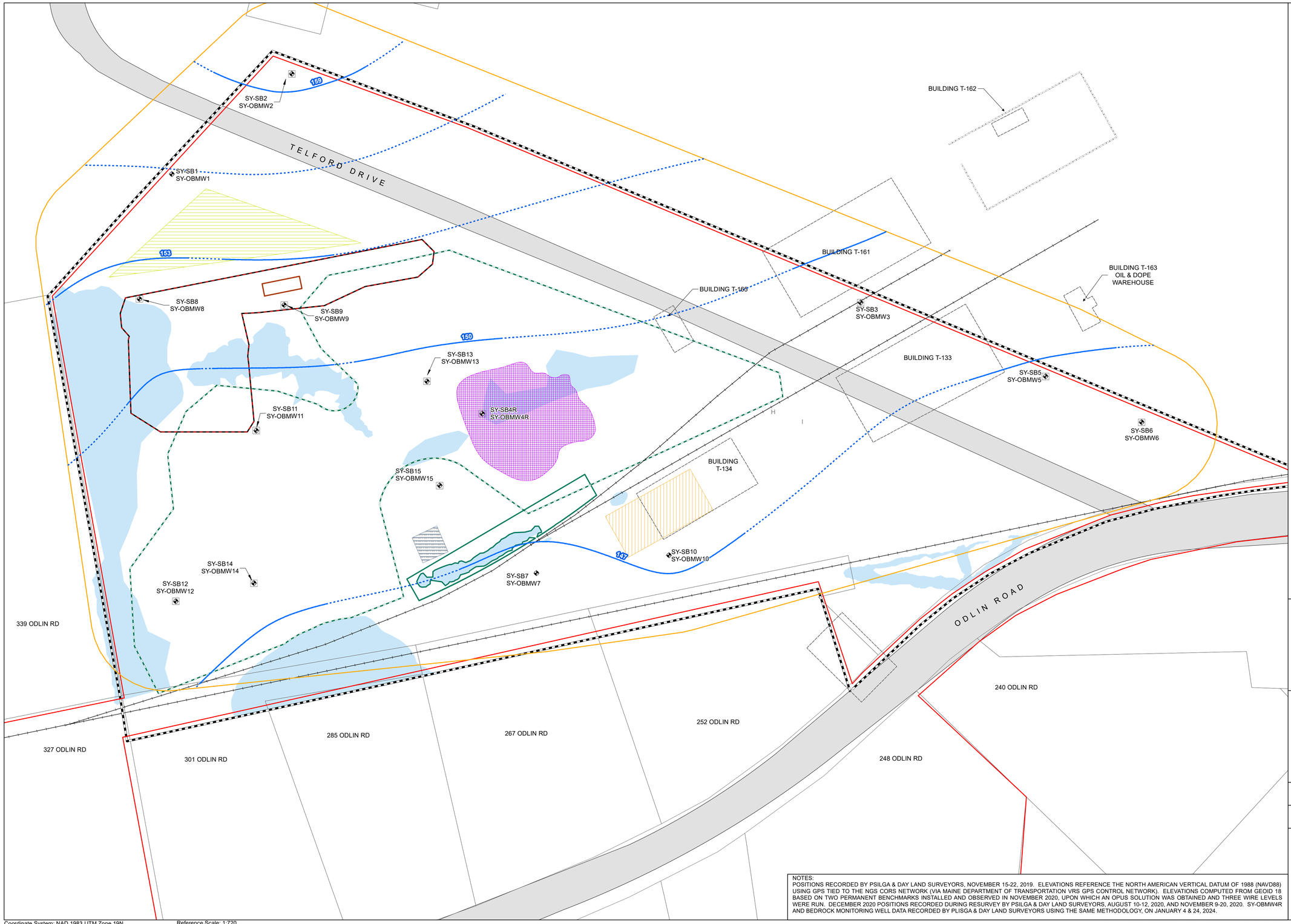
Coordinate System: NAD 1983 UTM Zone 19N
Projection: Transverse MercatorDatum: North American 1983
Reference Scale: 1:720

Document Path: T:\Data\ME\Town\Bangor\18001468 - USACE Dow Salvage Yard\2023 Data Gap Q1\Figure 2-1 - Sampling Plan.mxd



Feet
0 15 30 60 90 120
1 inch = 60 feet

- INTERPRETED GROUNDWATER CONTOUR
- INFERRED GROUNDWATER CONTOUR
- CONTOURING DOMAIN
- SOIL BORING/ HYBRID MONITORING WELL
- SOIL BORING/ OVERBURDEN MONITORING WELL
- HISTORICAL BUILDING
- RIGHT-OF-ENTRY PARCEL
- CURRENT RI INVESTIGATION
- HISTORICAL RAILROAD
- FENCED YARD
- APPROXIMATE PARCEL
- TRENCH AT DUMPING
- DUMPING
- AREA OF ANOMALOUS SOIL
- LAYDOWN/DECON
- UNDISTURBED
- PAVED/STORAGE
- COAL AND
- DRAINAGE STRUCTURE
- WETLAND

NOTES:
POSITIONS RECORDED BY PSILGA & DAY LAND SURVEYORS, NOVEMBER 15-22, 2019. ELEVATIONS REFERENCE THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88) USING GPS TIED TO THE NGS CORS NETWORK (VIA MAINE DEPARTMENT OF TRANSPORTATION VRS GPS CONTROL NETWORK). ELEVATIONS COMPUTED FROM GEOID 18 BASED ON TWO PERMANENT BENCHMARKS INSTALLED AND OBSERVED IN NOVEMBER 2020, UPON WHICH AN OPUS SOLUTION WAS OBTAINED AND THREE WIRE LEVELS WERE RUN. DECEMBER 2020 POSITIONS RECORDED DURING RESURVEY BY PSILGA & DAY LAND SURVEYORS, AUGUST 10-12, 2020, AND NOVEMBER 9-20, 2020. SY-OBMW4R AND BEDROCK MONITORING WELL DATA RECORDED BY PLISGA & DAY LAND SURVEYORS USING THE SAME METHODOLOGY, ON JANUARY 4 & 24, 2024.

FIGURE 2-2
OVERBURDEN GROUNDWATER POTENTIOMETRIC CONTOURS

FORMER SALVAGE YARD
233 ODLIN ROAD
BANGOR, MAINE

DRAWN BY: **SCG/ICD**	DATE: **3/19/2024**
CHECKED BY: **PHT/ASD**	PROJECT: **18001468**

Credere Associates, LLC
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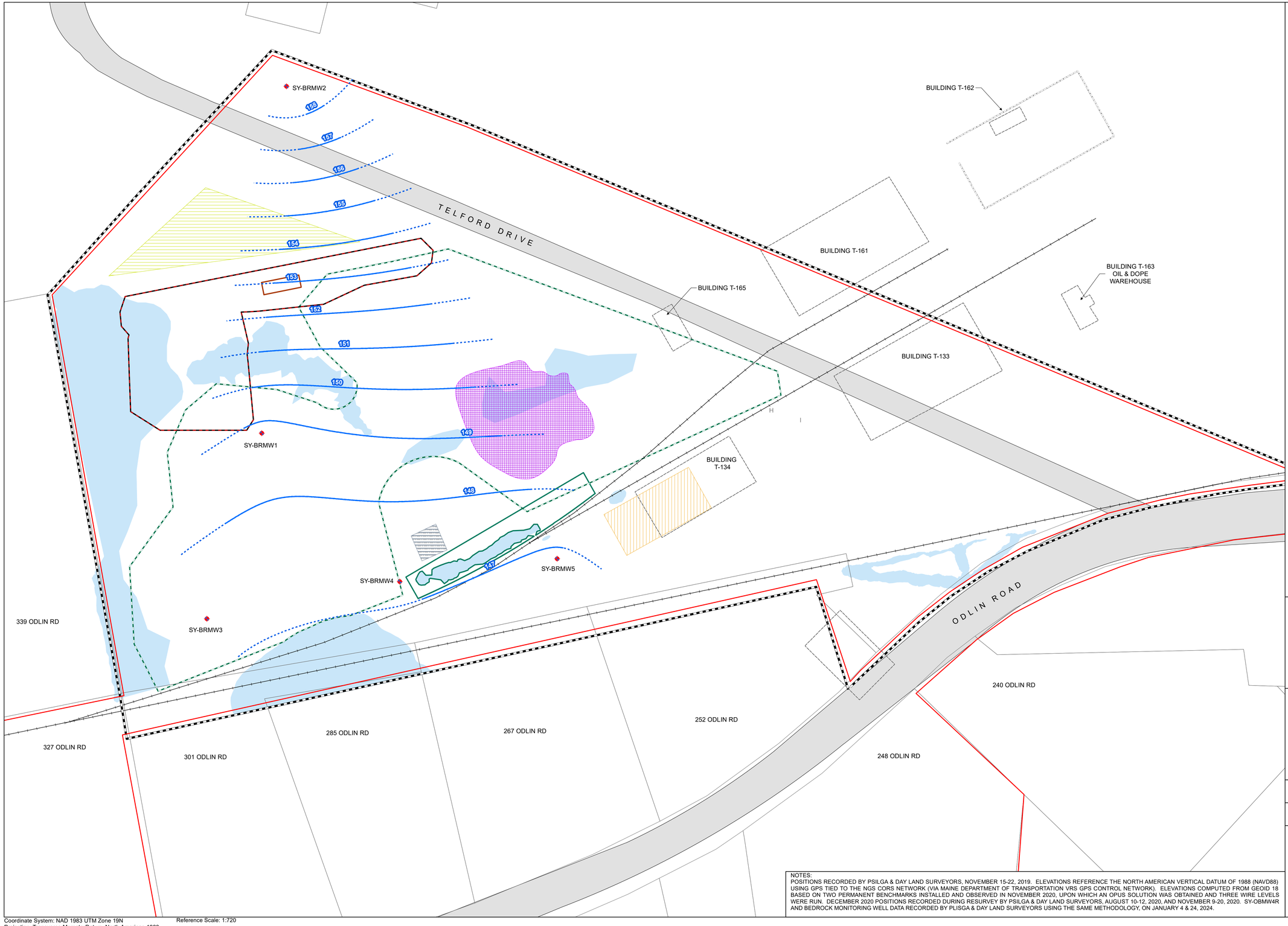
Coordinate System: NAD 1983 UTM Zone 19N
Projection: Transverse MercatorDatum: North American 1983
Reference Scale: 1:720

Document Path: T:\Data\ME\Town\Bangor\18001468 - USACE Dow Salvage Yard\2023 Data Gap Q1\Figure 2-2 - Overburden GW Contours.mxd



N

Feet
0 15 30 60 90 120
1 inch = 60 feet

- INTERPRETED GROUNDWATER CONTOUR
- INFERRED GROUNDWATER CONTOUR
- BEDROCK MONITORING WELL
- HISTORICAL BUILDING
- RIGHT-OF-ENTRY PARCEL BOUNDARY
- CURRENT RI INVESTIGATION
- HISTORICAL RAILROAD TRACKS
- FENCED YARD
- APPROXIMATE PARCEL BOUNDARY
- TRENCH AT DUMPING
- DUMPING
- AREA OF ANOMALOUS SOIL
- LAYDOWN/DECON
- UNDISTURBED
- PAVED/STORAGE
- COAL AND
- DRAINAGE STRUCTURE
- WETLAND

NOTES:
POSITIONS RECORDED BY PSILGA & DAY LAND SURVEYORS, NOVEMBER 15-22, 2019. ELEVATIONS REFERENCE THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88) USING GPS TIED TO THE NGS CORS NETWORK (VIA MAINE DEPARTMENT OF TRANSPORTATION VRS GPS CONTROL NETWORK). ELEVATIONS COMPUTED FROM GEOID 18 BASED ON TWO PERMANENT BENCHMARKS INSTALLED AND OBSERVED IN NOVEMBER 2020, UPON WHICH AN OPUS SOLUTION WAS OBTAINED AND THREE WIRE LEVELS WERE RUN. DECEMBER 2020 POSITIONS RECORDED DURING RESURVEY BY PSILGA & DAY LAND SURVEYORS, AUGUST 10-12, 2020, AND NOVEMBER 9-20, 2020. SY-OBMW4R AND BEDROCK MONITORING WELL DATA RECORDED BY PLISGA & DAY LAND SURVEYORS USING THE SAME METHODOLOGY, ON JANUARY 4 & 24, 2024.

Coordinate System: NAD 1983 UTM Zone 19N
Projection: Transverse MercatorDatum: North American 1983

Reference Scale: 1:720

FIGURE 2-3a
BEDROCK GROUNDWATER POTENTIOMETRIC CONTOURS ZONE 1

FORMER SALVAGE YARD
233 ODLIN ROAD
BANGOR, MAINE

DRAWN BY: **SCG/ICD**	DATE: **7/31/2024**
CHECKED BY: **PHT/ASD**	PROJECT: **18001468**

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Feet
0 15 30 60 90 120
1 inch = 60 feet

- INTERPRETED GROUNDWATER CONTOUR
- BEDROCK MONITORING WELL
- HISTORICAL BUILDING
- RIGHT-OF-ENTRY PARCEL BOUNDARY
- CURRENT RI INVESTIGATION AREA
- HISTORICAL RAILROAD TRACKS
- FENCED YARD
- APPROXIMATE PARCEL BOUNDARY
- TRENCH AT DUMPING
- DUMPING AREA
- AREA OF ANOMALOUS SOIL CONDUCTIVITY
- LAYDOWN/DECON AREA
- UNDISTURBED AREA
- PAVED/STORAGE AREA
- COAL AND DEBRIS
- DRAINAGE STRUCTURE
- WETLAND

NOTES:
POSITIONS RECORDED BY PSILGA & DAY LAND SURVEYORS, NOVEMBER 15-22, 2019. ELEVATIONS REFERENCE THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88) USING GPS TIED TO THE NGS CORS NETWORK (VIA MAINE DEPARTMENT OF TRANSPORTATION VRS GPS CONTROL NETWORK). ELEVATIONS COMPUTED FROM GEOID 18 BASED ON TWO PERMANENT BENCHMARKS INSTALLED AND OBSERVED IN NOVEMBER 2020, UPON WHICH AN OPUS SOLUTION WAS OBTAINED AND THREE WIRE LEVELS WERE RUN. DECEMBER 2020 POSITIONS RECORDED DURING RESURVEY BY PSILGA & DAY LAND SURVEYORS, AUGUST 10-12, 2020, AND NOVEMBER 9-20, 2020. SY-OBMW4R AND BEDROCK MONITORING WELL DATA RECORDED BY PLISGA & DAY LAND SURVEYORS USING THE SAME METHODOLOGY, ON JANUARY 4 & 24, 2024.

FIGURE 2-3B
BEDROCK GROUNDWATER POTENTIOMETRIC CONTOURS ZONE 2

FORMER SALVAGE YARD
233 ODLIN ROAD
BANGOR, MAINE

DRAWN BY: **SCG/ICD**	DATE: **7/31/2024**
CHECKED BY: **PHT/ASD**	PROJECT: **18001468**

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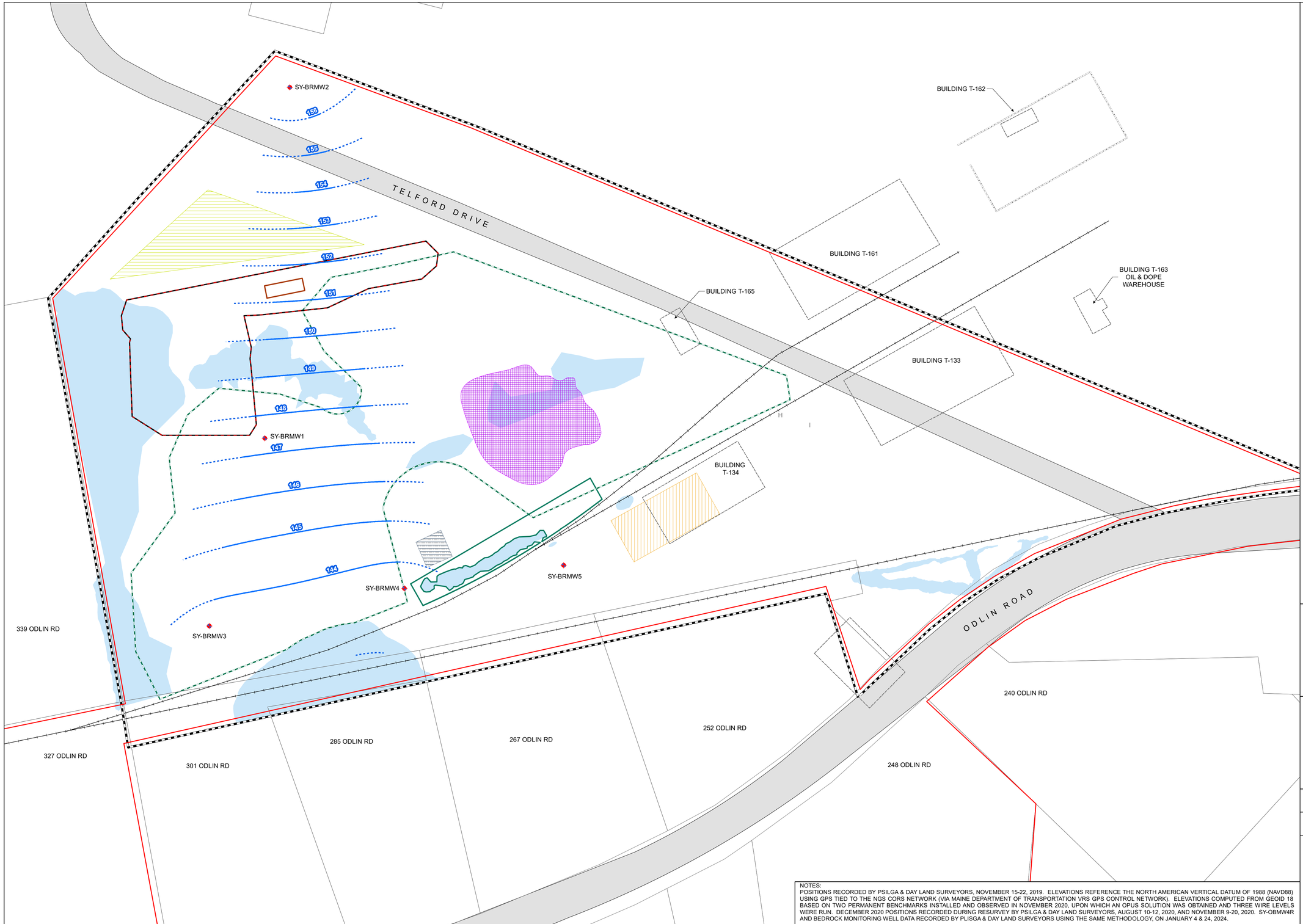
Coordinate System: NAD 1983 UTM Zone 19N
Projection: Transverse MercatorDatum: North American 1983
Reference Scale: 1:720

Document Path: T:\Data\ME\Town\Bangor\18001468 - USACE Dow Salvage Yard\2023 Data Gap Q1\Figure 2-3b - Bedrock GW Contours Zone 2.mxd



N

Feet
0 15 30 60 90 120

1 inch = 60 feet

- INTERPRETED GROUNDWATER CONTOUR
- INFERRED GROUNDWATER CONTOUR
- BEDROCK MONITORING WELL
- HISTORICAL BUILDING
- RIGHT-OF-ENTRY PARCEL BOUNDARY
- CURRENT RI INVESTIGATION AREA
- HISTORICAL RAILROAD TRACKS
- FENCED YARD
- APPROXIMATE PARCEL BOUNDARY
- TRENCH AT DUMPING
- DUMPING AREA
- AREA OF ANOMALOUS SOIL CONDUCTIVITY
- LAYDOWN/DECON AREA
- UNDISTURBED AREA
- PAVED/STORAGE AREA
- COAL AND DEBRIS
- DRAINAGE STRUCTURE
- WETLAND

NOTES:
POSITIONS RECORDED BY PSILGA & DAY LAND SURVEYORS, NOVEMBER 15-22, 2019. ELEVATIONS REFERENCE THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88) USING GPS TIED TO THE NGS CORS NETWORK (VIA MAINE DEPARTMENT OF TRANSPORTATION VRS GPS CONTROL NETWORK). ELEVATIONS COMPUTED FROM GEOID 18 BASED ON TWO PERMANENT BENCHMARKS INSTALLED AND OBSERVED IN NOVEMBER 2020, UPON WHICH AN OPUS SOLUTION WAS OBTAINED AND THREE WIRE LEVELS WERE RUN. DECEMBER 2020 POSITIONS RECORDED DURING RESURVEY BY PSILGA & DAY LAND SURVEYORS, AUGUST 10-12, 2020, AND NOVEMBER 9-20, 2020. SY-OBMW4R AND BEDROCK MONITORING WELL DATA RECORDED BY PLISGA & DAY LAND SURVEYORS USING THE SAME METHODOLOGY, ON JANUARY 4 & 24, 2024.

FIGURE 2-3c
BEDROCK GROUNDWATER POTENTIOMETRIC CONTOURS ZONE 3

FORMER SALVAGE YARD
233 ODLIN ROAD
BANGOR, MAINE

DRAWN BY: **SCG/ICD**	DATE: **7/31/2024**
CHECKED BY: **PHT/ASD**	PROJECT: **18001468**

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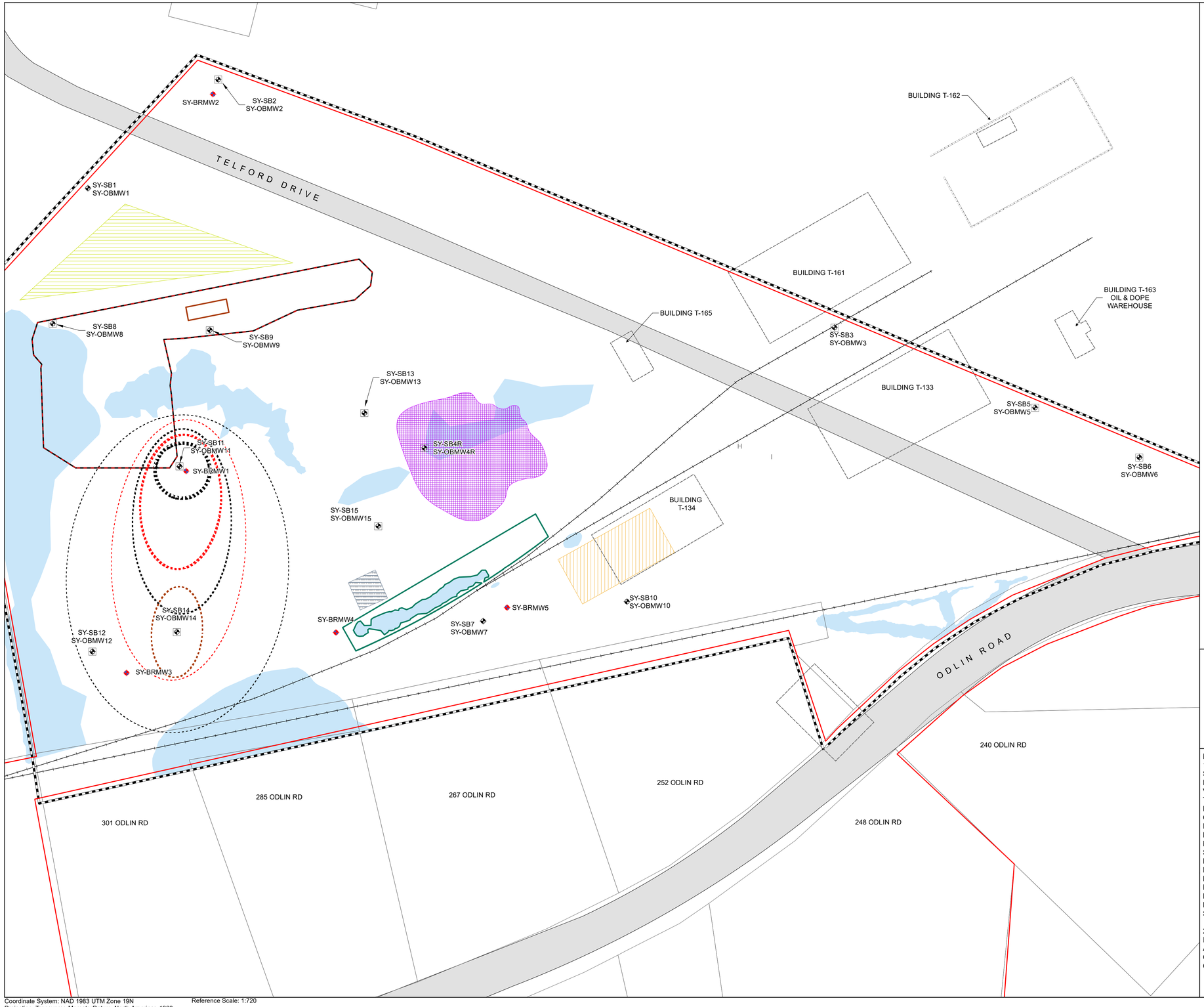
Projection: Transverse MercatorDatum: North American 1983

Reference Scale: 1:720

Document Path: T:\Data\ME\Town\Bangor\18001468 - USACE Dow Salvage Yard\2023 Data Gap Q1\Figure 2-3c - Bedrock GW Contours Zone 3.mxd



Feet

0 30 60 120 180 240

1 inch = 60 feet

- BEDROCK MONITORING WELL
- SOIL BORING/ HYBRID MONITORING WELL
- SOIL BORING/ OVERBURDEN MONITORING WELL
- HISTORICAL BUILDING
- RIGHT-OF-ENTRY PARCEL BOUNDARY
- CURRENT RI INVESTIGATION AREA
- HISTORICAL RAILROAD TRACKS
- FENCED YARD
- AREA OF ANOMALOUS SOIL CONDUCTIVITY
- LAYDOWN/DECON AREA
- DCE PLUME - 0.01 ug/L
- DCE PLUME - 0.1 ug/L
- TCE PLUME - 0.1 ug/L
- TCE PLUME - 0.5 ug/L
- TCE PLUME - 1.0 ug/L
- VC PLUME - 0.01 ug/L
- APPROXIMATE PARCEL BOUNDARY
- TRENCH AT DUMPING AREA
- DUMPING AREA
- UNDISTURBED AREA
- PAVED/STORAGE AREA
- DRAINAGE STRUCTURE
- WETLAND

FIGURE 5-1
OVERBURDEN AND SHALLOW WEATHERED BEDROCK CVOC PLUME

NOTES:

1. POSITIONS RECORDED BY PSILGA & DAY LAND SURVEYORS, NOVEMBER 15-22, 2019. ELEVATIONS REFERENCE THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88) USING GPS TIED TO THE NGS CORS NETWORK (VIA MAINE DEPARTMENT OF TRANSPORTATION VRS GPS CONTROL NETWORK). ELEVATIONS COMPUTED FROM GEOID 18 BASED ON TWO PERMANENT BENCHMARKS INSTALLED AND OBSERVED IN NOVEMBER 2020, UPON WHICH AN OPUS SOLUTION WAS OBTAINED AND THREE WIRE LEVELS WERE RUN. DECEMBER 2020 POSITIONS RECORDED DURING RESURVEY BY PSILGA & DAY LAND SURVEYORS, AUGUST 10-12, 2020, AND NOVEMBER 9-20, 2020. SY-OBMW4R AND BEDROCK MONITORING WELL DATA RECORDED BY PLISGA & DAY LAND SURVEYORS USING THE SAME METHODOLOGY, ON JANUARY 4 & 24, 2024.

2. CVOC PLUME CONTOURS REPRESENT THE INFERRED EXTENT OF CVOCS IN OVERBURDEN AND SHALLOW WEATHERED BEDROCK. CONTOURS ARE FOR ILLUSTRATIVE PURPOSES ONLY.

FORMER SALVAGE YARD
233 ODLIN ROAD
BANGOR, MAINE

DRAWN BY: **SCG**	DATE: **7/31/2024**
CHECKED BY: **PHT/ASD**	PROJECT: **18001468**

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Projection: Transverse MercatorDatum: North American 1983

Reference Scale: 1:720

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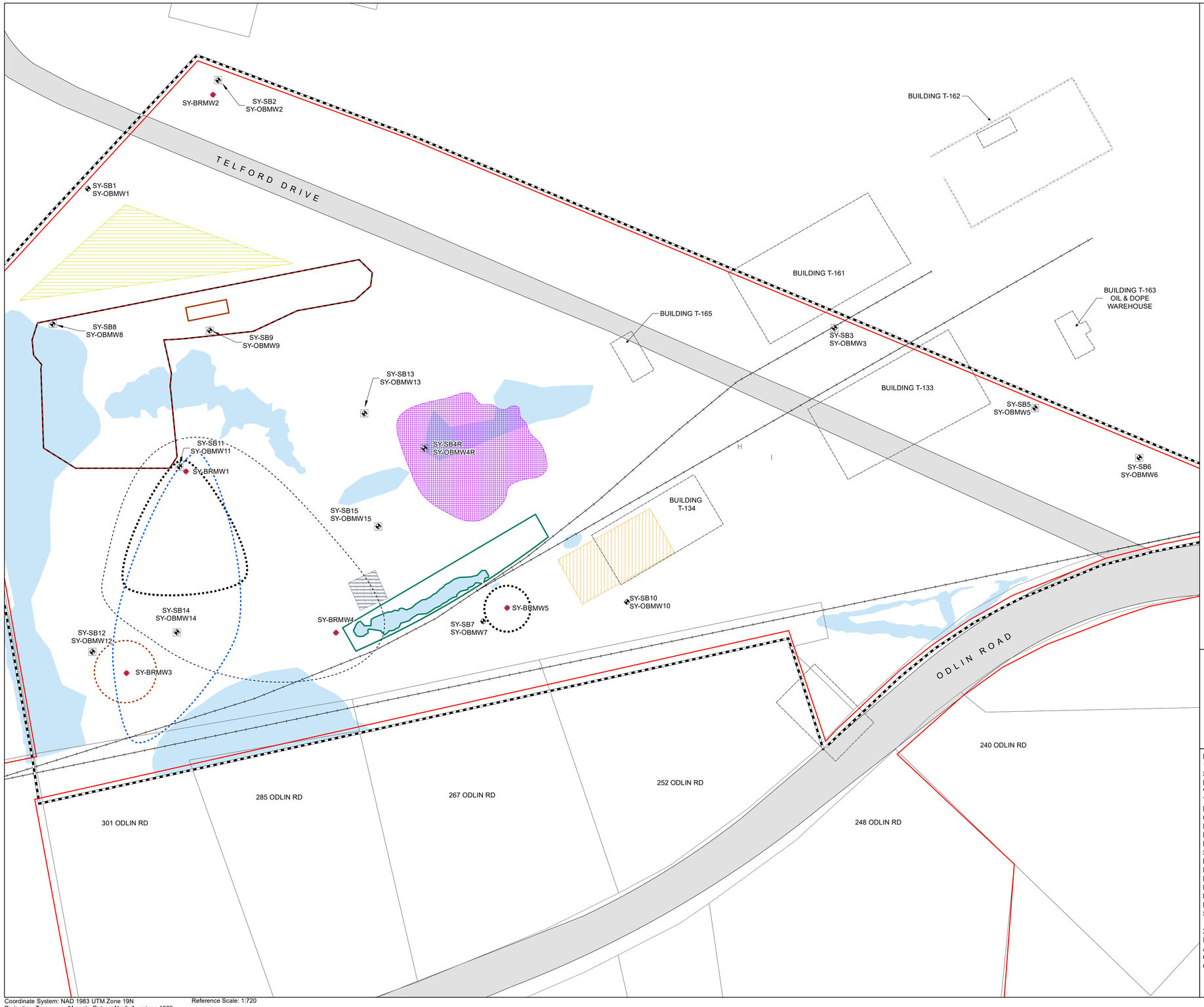

Feet

0 30 60 120 180 240

1 inch = 60 feet

- BEDROCK MONITORING WELL
- SOIL BORING/ HYBRID MONITORING WELL
- SOIL BORING/ OVERBURDEN MONITORING WELL
- HISTORICAL BUILDING
- RIGHT-OF-ENTRY PARCEL BOUNDARY
- CURRENT RI INVESTIGATION AREA
- HISTORICAL RAILROAD TRACKS
- FENCED YARD
- AREA OF ANOMALOUS SOIL CONDUCTIVITY
- LAYDOWN/DECON AREA
- TCE PLUME - 0.05 ug/L
- TCE PLUME - 0.5 ug/L
- TRANS 1,2-DCE PLUME - 0.02 ug/L
- VC PLUME - 0.02 ug/L
- APPROXIMATE PARCEL BOUNDARY
- TRENCH AT DUMPING AREA
- DUMPING AREA
- UNDISTURBED AREA
- PAVED/STORAGE
- DRAINAGE STRUCTURE
- WETLAND

Coordinate System: NAD 1983 UTM Zone 19N
Projection: Transverse MercatorDatum: North American 1983

Reference Scale: 1:720

FIGURE 5-2
BEDROCK CVOC PLUME

NOTES:
1. POSITIONS RECORDED BY PSILGA & DAY LAND SURVEYORS, NOVEMBER 15-22, 2019. ELEVATIONS REFERENCE THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88) USING GPS TIED TO THE NGS CORS NETWORK (VIA MAINE DEPARTMENT OF TRANSPORTATION VRS GPS CONTROL NETWORK). ELEVATIONS COMPUTED FROM GEOID 18 BASED ON TWO PERMANENT BENCHMARKS INSTALLED AND OBSERVED IN NOVEMBER 2020, UPON WHICH AN OPUS SOLUTION WAS OBTAINED AND THREE WIRE LEVELS WERE RUN. DECEMBER 2020 POSITIONS RECORDED DURING RESURVEY BY PSILGA & DAY LAND SURVEYORS, AUGUST 10-12, 2020, AND NOVEMBER 9-20, 2020. SY-OBMW4R AND BEDROCK MONITORING WELL DATA RECORDED BY PLISGA & DAY LAND SURVEYORS USING THE SAME METHODOLOGY, ON JANUARY 4 & 24, 2024.

2. CVOC PLUME CONTOURS REPRESENT THE INFERRED EXTENT OF CVOCS IN OVERBURDEN AND SHALLOW WEATHERED BEDROCK. CONTOURS ARE FOR ILLUSTRATIVE PURPOSES ONLY.

FORMER SALVAGE YARD
233 ODLIN ROAD
BANGOR, MAINE

DRAWN BY: **SCG**	DATE: **7/31/2024**
CHECKED BY: **PHT/ASD**	PROJECT: **18001468**

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Document Path: T:\Data\ME\Town\Bangor\18001468 - USACE Dow Salvage Yard\2023 Data Gap Q1\Figure 5-2 - BR CVOC Plan.mxd

TABLES

Table 2-1
Overburden Monitoring Well Construction Details and Groundwater Elevations
Former Salvage Yard (D01ME00407), Former Dow Military Airfield
233 Odlin Road, Bangor, Maine

Monitoring Well ID	Gauging Date[1]	Approximate Screened Interval (feet bgs)[2]	Ground Surface Elevation[3]	Top of Riser (TOR) Elevation[3]	Top of Casing Elevation[3]	Depth to Bottom (feet BTOR)[1]	Depth to Water (feet BTOR)[1]	Groundwater Elevation (feet NAVD88)	2019-2020 Average Hydraulic Conductivity (ft/s)[4]	2022-2024 Specific Capacity/Hydraulic Conductivty Testing Data				
										2022-2023 Average Rising Head Test Hydraulic Conductivity (ft/s)[4]	2022-2023 Individual Rising Head Test Hydraulic Conductivity (ft/s)[4]	Stabilized Water Level (feet BTOR; for Individual Specific Capacity Tests[5] or during Groundwater Sampling)	Stabilized Flow Rate (gpm)	Specific Capacity (gpm/ft)
SY-OBMW1	12/5/2019	22-32	158.22	160.06	160.46	37.25	5.50	154.56	1.33E-05	NA				
	3/10/2020					37.25	6.20	153.86						
	8/10/2020					37.33	10.33	149.73						
	12/2/2020		158.46	160.15	160.70	37.25	5.95	154.20		1.90E-05	1.89E-05	10.67	0.116	0.047
	6/23/2022					37.25	8.22	151.93				25.42	1.00	0.039
											1.90E-05	25.70	1.00	0.039
												29.14	1.00	0.034
	11/6/2023					37.28	6.42	153.73		NA		8.80	0.11	0.04
SY-OBMW2	12/5/2019	28.5-38.5	164.24	166.46	167.31	43.06	6.24	160.22	7.67E-06	NA				
	3/10/2020					42.34	6.90	159.56						
	8/10/2020					43.20	8.25	158.21						
	12/2/2020		164.22	166.45	167.30	42.10	5.35	161.10		2.37E-05	2.20E-05	9.78	0.095	0.097
	6/24/2022					42.22	8.80	157.65				22.21	1.25	0.056
											2.53E-05	22.26	1.25	0.056
												9.88	0.1056	0.011
	11/6/2023					42.22	6.80	159.65		NA		7.49	0.11	0.15
SY-OBMW3	12/4/2019	22-32	149.27	151.68	151.95	37.68	3.55	148.13	2.26E-05	NA				
	3/12/2020					37.20	4.35	147.33						
	8/10/2020					37.35	7.15	144.53						
	12/2/2020		149.38	151.81	152.03	37.35	3.31	148.50		2.89E-05	2.44E-05	7.44	0.13	0.198
	7/18/2022					37.21	6.80	145.01				12.15	1.15	0.095
											3.34E-05	12.04	1.10	0.091
												12.03	1.10	0.091
	11/6/2023					37.85	3.72	148.09		NA		4.23	0.11	0.21
SY-OBMW4	12/4/2019	16-26	151.75	153.97	154.17	30.93	5.37	148.60	2.21E-05	NA				
	3/9/2020					30.59	6.45	147.52						
	8/10/2020					30.90	9.75	144.22						
	12/2/2020		151.82	154.19	154.27	30.90	5.35	148.84		8.84E-05	9.85E-05	11.75	1.67	0.43
SY-OBMW4R	2/22/2023	25-35	153.11	156.07	156.24	39.04	7.86	148.21				11.91	1.67	0.49
											7.84E-05	11.92	1.67	0.53
												11.96	1.67	0.45
	11/6/2023					39.02	7.62	148.45		NA		7.77	0.11	0.70

Table 2-1
Overburden Monitoring Well Construction Details and Groundwater Elevations
Former Salvage Yard (D01ME00407), Former Dow Military Airfield
233 Odlin Road, Bangor, Maine

Monitoring Well ID	Gauging Date[1]	Approximate Screened Interval (feet bgs)[2]	Ground Surface Elevation[3]	Top of Riser (TOR) Elevation[3]	Top of Casing Elevation[3]	Depth to Bottom (feet BTOR)[1]	Depth to Water (feet BTOR)[1]	Groundwater Elevation (feet NAVD88)	2019-2020 Average Hydraulic Conductivity (ft/s)[4]	2022-2024 Specific Capacity/Hydraulic Conductivty Testing Data				
										2022-2023 Average Rising Head Test Hydraulic Conductivity (ft/s)[4]	2022-2023 Individual Rising Head Test Hydraulic Conductivity (ft/s)[4]	Stabilized Water Level (feet BTOR; for Individual Specific Capacity Tests[5] or during Groundwater Sampling)	Stabilized Flow Rate (gpm)	Specific Capacity (gpm/ft)
SY-OBMW5	12/4/2019	27-37	147.82	150.58	151.01	42.28	4.13	146.45	3.15E-04	2.28E-04				
	3/12/2020					42.19	4.80	145.78						
	8/10/2020					42.19	7.45	143.13						
	12/2/2020		147.95	150.67	151.13	42.20	4.10	146.57		2.05E-04	2.28E-04	8.36	1.33	0.847
	7/19/2022					42.20	6.79	143.88				8.69	1.33	0.153
											1.82E-04	8.37	1.30	0.155
												9.21	1.66	0.180
	11/6/2023					42.20	3.91	146.76		NA		3.95	0.08	1.98
SY-OBMW6	NA	22-32	143.37	146.27	146.54	NA	NA	NA	3.30E-05	NA				
	3/11/2020					37.18	1.02	145.25						
	8/10/2020					37.20	3.60	142.67						
	12/2/2020		143.44	146.35	146.60	37.15	0.45	145.90		6.63E-05	5.42E-05	10.31	1.25	0.193
	7/19/2022					37.16	3.84	142.51				9.60	1.18	0.123
											7.84E-05	8.38	1.11	0.132
												11.91	1.66	0.139
	11/6/2023					37.13	0.22	146.13		NA		0.70	0.11	0.22
SY-OBMW7	12/2/2019	15-25	148.67	147.89	148.67	27.51	1.75	146.14	1.28E-05	NA				
	3/12/2020					27.53	1.52	146.37						
	8/10/2020					22.45	5.18	142.71						
	12/2/2020		148.59	147.86	148.59	22.18	0.84	147.02		3.29E-05	3.32E-05	4.52	0.069	0.099
	6/21/2022					20.14	3.82	144.04				4.42	0.106	0.024
											3.26E-05	4.40	0.132	0.030
												4.27	0.106	0.025
	11/6/2023					20.68	1.30	146.56		NA		2.49	0.06	0.05
SY-OBMW8	12/3/2019	17-27	157.06	159.73	160.03	37.14	7.61	152.12	1.87E-06	NA				
	3/10/2020					37.16	8.51	151.22						
	8/10/2020					31.60	12.60	147.13						
	12/2/2020		157.12	159.70	160.21	31.60	7.80	151.90		2.06E-05	3.69E-05	13.09	0.106	0.037
	6/23/2022					31.62	10.23	149.47				31.62	1.25	0.040
											4.41E-06	31.62	1.25	0.040
												12.87	0.063	0.005
	11/6/2023					31.86	9.13	150.57		NA		10.96	0.11	0.06

Table 2-1
Overburden Monitoring Well Construction Details and Groundwater Elevations
Former Salvage Yard (D01ME00407), Former Dow Military Airfield
233 Odlin Road, Bangor, Maine

Monitoring Well ID	Gauging Date[1]	Approximate Screened Interval (feet bgs)[2]	Ground Surface Elevation[3]	Top of Riser (TOR) Elevation[3]	Top of Casing Elevation[3]	Depth to Bottom (feet BTOR)[1]	Depth to Water (feet BTOR)[1]	Groundwater Elevation (feet NAVD88)	2019-2020 Average Hydraulic Conductivity (ft/s)[4]	2022-2024 Specific Capacity/Hydraulic Conductivty Testing Data				
										2022-2023 Average Rising Head Test Hydraulic Conductivity (ft/s)[4]	2022-2023 Individual Rising Head Test Hydraulic Conductivity (ft/s)[4]	Stabilized Water Level (feet BTOR; for Individual Specific Capacity Tests[5] or during Groundwater Sampling)	Stabilized Flow Rate (gpm)	Specific Capacity (gpm/ft)
SY-OBMW9	12/3/2019	25-35	157.71	159.76	160.10	37.85	6.84	152.92	5.30E-06	NA				
	3/10/2020					37.87	7.49	152.27						
	8/10/2020					37.85	12.30	147.46						
	12/2/2020		157.81	159.76	160.21	37.85	7.65	152.11						
	6/23/2022					37.88	9.76	150.00		1.25E-05	1.15E-05	10.90	0.053	0.046
												11.01	0.053	0.005
											1.34E-05	11.92	0.053	0.004
												12.28	0.085	0.007
	11/6/2023					38.01	8.32	151.44		NA		9.23	0.04	0.05
SY-OBMW10	12/2/2019	18-28	148.16	147.85	148.16	29.78	1.87	145.98	2.72E-06	NA				
	3/9/2020					29.78	2.72	145.13						
	8/10/2020					29.70	5.80	142.05						
	12/2/2020		148.14	147.88	148.14	29.70	2.05	145.83						
	6/21/2022					29.74	4.75	143.13		7.76E-06	7.93E-06	5.52	0.063	0.082
												6.00	0.063	0.011
											7.60E-06	6.86	0.106	0.015
												6.81	0.106	0.016
	11/6/2023					29.68	0.68	147.20		NA		2.53	0.11	0.06
SY-OBMW11	12/3/2019	21-31	162.02	161.75	162.02	37.38	11.68	150.07	2.03E-05	NA				
	3/11/2020					36.90	12.28	149.47						
	8/10/2020					37.09	16.72	145.03						
	12/2/2020		158.83	161.83	162.10	37.05	11.80	150.03						
	6/23/2022					37.09	14.47	147.36		2.17E-05	2.07E-05	14.71	0.106	0.442
												17.47	1.00	0.057
											2.28E-05	19.50	0.63	0.032
												19.40	0.83	0.043
	11/6/2023					37.30	13.05	148.78		NA		13.14	0.06	0.62
SY-OBMW12	12/4/2019	22-32	154.28	157.13	157.57	37.40	9.04	148.09	2.05E-04	NA				
	3/11/2020					37.08	9.50	147.63						
	8/10/2020					37.10	14.26	142.87						
	12/2/2020		154.41	157.22	157.71	37.10	8.80	148.42						
	6/22/2022					37.13	11.35	145.87		2.24E-04	2.27E-04	11.90	0.116	0.211
												13.23	1.00	0.076
											2.22E-04	13.41	1.00	0.075
												13.52	1.00	0.074
	11/6/2023					37.18	9.66	147.56		NA		9.75	0.11	1.17
SY-OBMW13	12/4/2019	12-22	155.08	157.42	157.86	27.15	7.55	149.87	1.24E-05	NA				
	3/10/2020					27.15	8.15	149.27						
	8/10/2020					27.15	12.13	145.29						
	12/2/2020		155.30	157.54	158.09	27.15	7.35	150.19						
	6/22/2022					27.15	10.26	147.28		2.17E-05	1.99E-05	10.74	0.090	0.188
												10.82	0.098	0.009
											2.35E-05	10.98	0.095	0.009
												10.49	0.090	0.009
	11/6/2023					27.18	8.39	149.15		NA		8.74	0.11	0.30

Table 2-1
Overburden Monitoring Well Construction Details and Groundwater Elevations
Former Salvage Yard (D01ME00407), Former Dow Military Airfield
233 Odlin Road, Bangor, Maine

Monitoring Well ID	Gauging Date[1]	Approximate Screened Interval (feet bgs)[2]	Ground Surface Elevation[3]	Top of Riser (TOR) Elevation[3]	Top of Casing Elevation[3]	Depth to Bottom (feet BTOR)[1]	Depth to Water (feet BTOR)[1]	Groundwater Elevation (feet NAVD88)	2019-2020 Average Hydraulic Conductivity (ft/s)[4]	2022-2024 Specific Capacity/Hydraulic Conductivty Testing Data				
										2022-2023 Average Rising Head Test Hydraulic Conductivity (ft/s)[4]	2022-2023 Individual Rising Head Test Hydraulic Conductivity (ft/s)[4]	Stabilized Water Level (feet BTOR; for Individual Specific Capacity Tests[5] or during Groundwater Sampling)	Stabilized Flow Rate (gpm)	Specific Capacity (gpm/ft)
SY-OBMW14	12/4/2019	18-28	153.43	156.08	156.37	31.10	8.20	147.88	1.60E-05	NA				
	3/11/2020					31.25	8.34	147.74						
	8/10/2020					31.20	13.23	142.85						
	12/2/2020		153.53	156.17	156.45	31.25	8.00	148.17						
	6/23/2022					31.23	11.13	145.04		2.65E-05	2.54E-05	11.45	0.132	0.413
												11.20	0.116	0.010
											2.76E-05	11.10	0.116	0.010
												11.10	0.116	0.010
	11/6/2023					31.24	8.90	147.27		NA		9.16	0.11	0.41
SY-OBMW15	12/4/2019	12-22	151.59	153.75	154.21	25.24	4.56	149.19	3.95E-06	NA				
	3/9/2020					24.90	5.08	148.67						
	8/10/2020					25.17	9.30	144.45						
	12/2/2020		151.63	153.80	154.25	25.45	4.45	149.35						
	6/21/2022					25.21	7.02	146.78		4.42E-06	4.50E-06	8.86	0.079	0.043
												9.01	0.079	0.009
											4.35E-06	8.69	0.079	0.009
												8.70	0.079	0.009
	11/6/2023					25.22	5.71	148.09		NA		7.19	0.11	0.07

Notes:
bgs - below ground surface
BTOR - below top of riser
ft/s - feet per second
NAVD88 - North American Vertical Datum of 1988
1 - Gauging data collected during a single synoptic round of measurements during groundwater sampling activities, on November 6, 2023.
2 - Screened interval data taken from boring logs recorded during soil boring/well installation activities.
3 - Elevations recorded by Psilga & Day Land Surveyors, November 15-22, 2019. Elevations reference the North American Vertical Datum of 1988 (NAVD88) using GPS tied to the NGS CORS Network (via Maine Department of Transportation VRS GPS control network). Elevations computed from GEOID 18 based on two permanent benchmarks installed and observed in November 2020, upon which an OPUS solution was obtained and three wire levels were run. December 2020 positions recorded during resurvey by Psilga & Day Land Surveyors, August 10-12, 2020, and November 9-20, 2020. SY-OBMW4R data recorded by Plisga & Day Land Surveyors using the same methodology, on January 4 & 24, 2024.
4 - Hydraulic conductivity calculated using Bouwer & Rice Method (1976) and based on field work performed in December 2019 with the exception of SY-OBMW6, which was assessed in March 2020.
5 - Specific Capacity tests conducted during well development the week of June 20, 2022, and on February 7, 2023 (SY-OBMW4R only), or calculated based on purge data during groundwater sampling conducted the week of November 6, 2023. Four tests were completed during development; 1 at the beginning of development activities (baseline), 2 during development (after surging and recharging), and 1 at the end of development.

Table 2-2
Sample Summary Table
Former Salvage Yard (D01ME00407), Former Dow Military Airfield
233 Odlin Road, Bangor, Maine

Sample Location	Sample ID	Associated QC Sample Type/ID	Sample Depth (feet bgs)	Sample Type	Justification	Target Depth/Methodology^	Analyses													
							VOCs EPA Method 8260D	CVOCs by EPA Method 8260C SIM	SVOCs EPA Method 8270D	BNASIM by EPA Method 8270E SIM	Metals EPA Method 6020A & 7471B/7470A[1]	Hexavalent Chromium EPA Method 7196A	EPH by MADEP EPH-04-1.1	VPH by MADEP VPH-04-1.1	PCBs by EPA Method 8082A	Total Organic Carbon by Lloyd Kahn/A5310B	Anions by EPA Method 300	Dissolved gases by RSK-175	Ferrous Iron by EP A Method A3500-Fe B	Alkalinity by EPA Method 2320B
SY-SB1/ SY-OBMW1	SY-OBMW1-110823			Groundwater	To assess upgradient groundwater migrating onto the Site	Intake depth approximately 30 feet btor (halfway point of screened interval).	x	x	x	x	x	x	x	x	x	x	x	x	x	x
SY-SB2/ SY-OBMW2	SY-OBMW2-110823			Groundwater	To assess upgradient groundwater migrating onto the Site	Intake depth approximately 36 feet btor (halfway point of screened interval).	x	x	x	x	x	x	x	x	x	x	x	x	x	x
SY-SB3/ SY-OBMW3	SY-OBMW3-110823			Groundwater	To assess upgradient groundwater migrating onto the Site and downgradient of offsite Salvage Yard area.	Intake depth approximately 31 feet btor (halfway point of screened interval).	x	x	x	x	x	x	x	x	x	x	x	x	x	x
SY-SB4R/ SY-OBMW4R	SY-SB4-1	FD: SY-SB4-10	0.5-2	Soil	To assess anomalous electrically conductive soil area	2-foot interval above transition to clay but below 0.5 as this depth has been previously sampled in SY-TP18	x		x	x	x	x	x	x	x	x				
	SY-SB4-2		2-4	Soil		2-foot interval into clay or from the interval observed to be the grestest likelihood of a source for the conductive anomaly.	x		x	x	x	x	x	x	x	x				
	SY-OBMW4R-110723			Groundwater	To assess groundwater in the conductive soil anomalous area	Intake depth approximately 32 feet btor (halfway point of screened interval).	x	x	x	x	x	x	x	x	x	x	x	x	x	x
SY-SB5/ SY-OBMW5	SY-OBMW5-110723			Groundwater	To assess upgradient groundwater migrating onto the Site and downgradient of the T-163 Oil and Dope Building.	Intake depth approximately 35 feet btor (halfway point of screened interval).	x	x	x	x	x	x	x	x	x	x	x	x	x	x
SY-SB6/ SY-OBMW6	SY-OBMW6-110723			Groundwater	To assess upgradient groundwater migrating onto the Site and downgradient of the T-163 Oil and Dope Building.	Intake depth approximately 30 feet btor (halfway point of screened interval).	x	x	x	x	x	x	x	x	x	x	x	x	x	x
SY-SB7/ SY-OBMW7	SY-OBMW7-110623			Groundwater	To assess the vicinity of CA-MW-3 with an improved data quality monitoring well	Intake depth approximately 17 feet bgs (within screen, above the midpoint due to sediment infiltration into the well).	x	x	x	x	x	x	x	x	x	x	x	x	x	x
SY-SB8/ SY-OBMW8	SY-OBMW8-110823			Groundwater	To assess groundwater within the body of metallic anomalous area	Intake depth approximately 30 feet bgs (halfway point of screened interval).	x	x	x	x	x	x	x	x	x	x	x	x	x	x
SY-SB9/ SY-OBMW9	SY-OBMW9-110823			Groundwater	To assess groundwater within the body of metallic anomalous area and vicinity of former trench	Intake depth approximately 31 feet btor (halfway point of screened interval).	x	x	x	x	x	x	x	x	x	x	x	x	x	x

Table 2-2
Sample Summary Table
Former Salvage Yard (D01ME00407), Former Dow Military Airfield
233 Odlin Road, Bangor, Maine

Sample Location	Sample ID	Associated QC Sample Type/ID	Sample Depth (feet bgs)	Sample Type	Justification	Target Depth/Methodology^	Analyses													
							VOCs EPA Method 8260D	CVOCs by EPA Method 8260C SIM	SVOCs EPA Method 8270D	BNA/SIM by EPA Method 8270E SIM	Metals EPA Method 6020A & 7471B/7470A[1]	Hexavalent Chromium EPA Method 7196A	EPH by MADEP EPH-04-1.1	VPH by MADEP VPH-04-1.1	PCBs by EPA Method 8082A	Total Organic Carbon by Lloyd Kahn/A5310B	Anions by EPA Method 300	Dissolved gases by RSK-175	Ferrous Iron by EP A Method A3500-Fe B	Alkalinity by EPA Method 2320B
SY-SB10/ SY-OBMW10	SY-OBMW10-110623			Groundwater	To assess downgradient of buried debris area and north of CA-MW-3	Intake depth approximately 23 feet bgs (halfway point of screened interval).	x	x	x	x	x	x	x	x	x	x	x	x	x	x
SY-SB11/ SY-OBMW11	SY-OBMW11-110823	FD: SY-OBMW110-110823		Groundwater	To assess groundwater within the body of metallic anomalous area	Intake depth approximately 30 feet btor (halfway point of screened interval).	x	x	x	x	x	x	x	x	x	x	x	x	x	x
SY-SB12/ SY-OBMW12	SY-OBMW12-110723	MS/MSD		Groundwater	To assess groundwater within the body of metallic anomalous area	Intake depth approximately 30 feet btor (halfway point of screened interval).	x	x	x	x	x	x	x	x	x	x	x	x	x	x
SY-SB13/ SY-OBMW13	SY-OBMW13-110723			Groundwater	To assess groundwater within the body of metallic anomalous area and downgradient of former drum storage area	Intake depth approximately 20 feet btor (halfway point of screened interval).	x	x	x	x	x	x	x	x	x	x	x	x	x	x
SY-SB14/ SY-OBMW14	SY-OBMW14-110723			Groundwater	To assess groundwater within the body of metallic anomalous area	Intake depth approximately 24 feet btor (halfway point of screened interval).	x	x	x	x	x	x	x	x	x	x	x	x	x	x
SY-SB15/SY-OBMW15	SY-OBMW15-110723			Groundwater	To assess groundwater within the body of metallic anomalous area	Intake depth approximately 18 feet btor (halfway point of screened interval).	x	x	x	x	x	x	x	x	x	x	x	x	x	x
SY-BRMW1	SY-BRMW1-42-52-110923			Bedrock groundwater	To assess the vertical migration of TCE identified during prior RI activities into bedrock at the Site	Flow Into and Up Under Pumping Conditions	x	x	x	x	x	x	x	x	x	x	x	x	x	x
	SY-BRMW1-65-75-110923	FD: SY-BRMW10-65-75-110923		Bedrock groundwater		Possible Flow Under Pumping Conditions, Flow In/Out Unknown	x	x	x	x	x	x	x	x	x	x	x	x	x	x
	SY-BRMW1-150-157-110923			Bedrock groundwater		Flow Into and Up Under Pumping Conditions	x	x	x	x	x	x	x	x	x	x	x	x	x	x

Table 2-2
Sample Summary Table
Former Salvage Yard (D01ME00407), Former Dow Military Airfield
233 Odlin Road, Bangor, Maine

Sample Location	Sample ID	Associated QC Sample Type/ID	Sample Depth (feet bgs)	Sample Type	Justification	Target Depth/Methodology^	Analyses													
							VOCs EPA Method 8260D	CVOCs by EPA Method 8260C SIM	SVOCs EPA Method 8270D	BNA/SIM by EPA Method 8270E SIM	Metals EPA Method 6020A & 7471B/7470A[1]	Hexavalent Chromium EPA Method 7196A	EPH by MADEP EPH-04-1.1	VPH by MADEP VPH-04-1.1	PCBs by EPA Method 8082A	Total Organic Carbon by Lloyd Kahn/A5310B	Anions by EPA Method 300	Dissolved gases by RSK-175	Ferrous Iron by EP A Method A3500-Fe B	Alkalinity by EPA Method 2320B
SY-BRMW2	SY-BRMW2-60.5-70.5-110723			Bedrock groundwater	To assess the vertical migration of TCE identified during prior RI activities into bedrock at the Site	Possible Flow Under Pumping Conditions, Flow In/Out Unknown	x	x	x	x	x	x	x	x	x	x	x	x	x	x
	SY-BRMW2-80.5-95.5-110723	MS/MSD		Bedrock groundwater		Flow Into and Down Under Ambient Conditions; Flow Into & Up and Into & Down Under Pumping Conditions	x	x	x	x	x	x	x	x	x	x	x	x	x	x
	SY-BRMW2-252.5-262.5-110723			Bedrock groundwater		Flow Out Under Ambient and Pumping Conditions	x	x	x	x	x	x	x	x	x	x	x	x	x	x
SY-BRMW3	SY-BRMW3-47-62-110923			Bedrock groundwater		Possible Flow Under Pumping Conditions, Flow In/Out Unknown	x	x	x	x	x	x	x	x	x	x	x	x	x	x
	SY-BRMW3-145-155-110923			Bedrock groundwater		Flow Into and Down Under Ambient Conditions; Flow Into and Up Under Pumping Conditions	x	x	x	x	x	x	x	x	x	x	x	x	x	x
	SY-BRMW3-287-297-110923			Bedrock groundwater		Flow Out Under Ambient Conditions; Flow Into and Up Under Pumping Conditions	x	x	x	x	x	x	x	x	x	x	x	x	x	x
SY-BRMW4	SY-BRMW4-62-72-110923	FD: SY-BRMW40-62-72-110923		Bedrock groundwater		Flow Into and Down Under Ambient Conditions; Flow Into and Up Under Pumping Conditions	x	x	x	x	x	x	x	x	x	x	x	x	x	x
	SY-BRMW4-138-148-110923			Bedrock groundwater		Flow Into and Down Under Ambient Conditions; Flow Into & Up and Into & Down Under Pumping Conditions	x	x	x	x	x	x	x	x	x	x	x	x	x	x
	SY-BRMW4-291-301-110923			Bedrock groundwater		Flow Out Under Ambient and Pumping Conditions	x	x	x	x	x	x	x	x	x	x	x	x	x	x
SY-BRMW5	SY-BRMW5-29-44-110823			Bedrock groundwater		Flow Up the Borehole Under Pumping Conditions	x	x	x	x	x	x	x	x	x	x	x	x	x	x
	SY-BRMW5-56-66-110823			Bedrock groundwater		Flow Into and Down Under Ambient Conditions; Flow Into and Up Under Pumping Conditions	x	x	x	x	x	x	x	x	x	x	x	x	x	x
	SY-BRMW5-123-133-110823			Bedrock groundwater		Flow Into and Down Under Ambient Conditions; Flow Into & Up and Into & Down Under Pumping Conditions	x	x	x	x	x	x	x	x	x	x	x	x	x	x

Table 2-2
Sample Summary Table Field Guide
Former Salvage Yard (D01ME00407), Former Dow Military Airfield
233 Odlin Road, Bangor, Maine

Notes

*Samples contingent on Site conditions. Conditions warranting collection indicated under Target Depth/Methodology.

^Samples collected from the midway point of the screen, installed straddling the apparent water table (at time of drilling, for overburden wells). For bedrock wells, summary is shown for the interval selection based on the suspected presence of hydrualically active fractures (based on heat pulse flow meter response).

1 - One metals aqueous sample at each location was unfiltered for total metals, and one was field filtered for dissolved metals analysis

FD - field duplicate

MS/MSD - matrix spike/matrix spike duplicate

Blue indicates groundwater samples

Table 2-3
Bedrock Monitoring Well Construction Details and Groundwater Elevations
Former Salvage Yard (D01ME00407), Former Dow Military Airfield
233 Odlin Road, Bangor, Maine

Monitoring Well ID	Gauging Date[1]	FLUTe Interval (feet bgs)	Ground Surface Elevation[2]	Top of PVC Fitting Elevation[2]	Port Elevation[2]	Port Depth to Water (feet BTOR)[1]	Groundwater Elevation (feet NAVD88)
SY-BRMW1	11/6/2023	42-52	158.52	161.67	161.89	13.15	148.74
		65-75			161.87	13.32	148.55
		150-157			161.87	13.04	148.83
SY-BRMW2	11/6/2023	60.5-70.5	163.14	166.01	166.27	6.75	159.52
		80.5-95.5			166.29	7.91	158.38
		252.5-262.5			166.31	9.40	156.91
SY-BRMW3	11/6/2023	47-62	153.63	156.32	156.59	9.31	147.28
		145-155			156.58	9.80	146.78
		287-297			156.61	13.07	143.54
SY-BRMW4	11/6/2023	62-72	150.85	153.77	154.10	6.89	147.21
		138-148			154.06	6.82	147.24
		297-301			154.08	10.70	143.38
SY-BRMW5	11/6/2023	29-44	148.65	151.44	151.74	4.98	146.76
		56-66			151.62	4.80	146.82
		123-133			151.74	4.68	147.06

Notes:

bgs - below ground surface

NAVD88 - North American Vertical Datum of 1988

1 - Gauging data collected during a single synoptic round of measurements during groundwater sampling activities, on November 6, 2023.

2 - Elevations recorded by Psilga & Day Land Surveyors, January 4 & 24, 2024. Elevations reference the North American Vertical Datum of 1988 (NAVD88) using GPS tied to the NGS CORS Network (via Maine Department of Transportation VRS GPS control network). Elevations computed from GEOID 18 based on two permanent benchmarks installed and observed in November 2020, upon which an OPUS solution was obtained and three wire levels were run.

Table 4-1
Summary of Discrete Soil Sample Analytical Results
Former Dow Salvage Yard
233 Odlin Road, Bangor, Maine

Locations:					SY-SB1			SY-SB2		SY-SB3		SY-SB4			SY-SB4R	
Field Sample ID:					SY-SB1-1	SY-SB1-2	SY-SB1-3	SY-SB2-1	SY-SB2-2	SY-SB3-1	SY-SB3-2	SY-SB4-1	SY-SB4-2	SY-SB4-20	SY-SB4R-1	SY-SB4R-10
Matrix:					S	S	S	S	S	S	S	S	S		S	
Sample Begin Depth:					0.5	3.3	11	0.5	10	0.5	17.5	0.5	3		0.5	
Sample End Depth:					2	5.5	12	2	12	2	19.5	2	5		2	
Sample Date:					10/22/2019	10/22/2019	10/22/2019	10/25/2019	10/25/2019	10/28/2019	10/28/2019	10/21/2019	10/21/2019		02/01/2023	
Analytes	**RSL[1]**	**RAG[2]**	**Background[3]**	**Ecological[4]**												
PAH SIM (mg/kg)																
2-Methylnaphthalene	24	33	NE	29	0.011 U	0.012 U	0.012 U	**0.012 J**	0.011 U	0.012 U	0.013 U	**0.29**	0.012 U	0.012 U	**0.095**	**0.11**
Acenaphthene	360	490	NE	29	0.011 U	0.012 U	0.012 U	**0.064 J**	0.011 U	0.012 U	0.013 U	**0.024**	0.012 U	0.012 U	**0.0041 J**	**0.0043 J**
Acenaphthylene	180	490	NE	29	0.011 U	0.012 U	0.012 U	**0.080 J**	0.011 U	0.012 U	0.013 U	**0.055**	0.012 U	0.012 U	**0.016 J**	**0.024**
Anthracene	1800	250	NE	29	**0.0015 J**	0.012 U	**0.0031 J**	**0.57**	0.011 U	**0.0067 J**	0.013 U	**0.12**	0.012 U	0.012 U	**0.026**	**0.031**
Benzo(a)anthracene	1.1	1.6	0.86	1.1	0.022 U	0.012 U	0.024 U	**3.0**	0.011 U	**0.079**	0.013 U	**0.95**	0.024 U	0.012 U	**0.28**	**0.38**
Benzo(a)pyrene	0.11	0.16	1.5	1.1	0.022 U	0.012 U	0.024 U	**2.4**	0.011 U	**0.092**	0.013 U	**0.94**	0.012 U	0.012 U	**0.22**	**0.26**
Benzo(b)fluoranthene	1.1	1.6	1.3	1.1	0.022 U	0.012 U	0.024 U	**3.2**	0.011 U	**0.12**	0.013 U	**1.6**	0.024 U	0.012 U	**0.34**	**0.40**
Benzo(g,h,i)perylene	180	250	NE	1.1	**0.0058 J**	0.012 U	**0.0056 J**	**1.3**	0.011 U	**0.072**	0.013 U	**0.59**	0.012 U	0.012 U	**0.13**	**0.15**
Benzo(k)fluoranthene	11	16	NE	1.1	0.022 U	0.012 U	0.024 U	**1.3**	0.011 U	**0.052**	0.013 U	**0.47**	0.012 U	0.012 U	**0.10**	**0.13**
Chrysene	110	160	NE	1.1	**0.010 J**	0.012 U	**0.011 J**	**2.6**	0.011 U	**0.11**	0.013 U	**1.7**	**0.0033 J**	0.012 U	**0.32**	**0.43**
Dibenz(a,h)anthracene	0.11	0.16	0.32	1.1	0.011 U	0.012 U	0.012 U	**0.50**	0.011 U	**0.020 J**	0.013 U	**0.22**	0.012 U	0.012 U	**0.028**	**0.053**
Fluoranthene	240	330	NE	1.1	**0.017 J**	0.012 U	**0.018 J**	**4.7**	0.011 U	**0.18**	**0.0028 J**	**2.1**	**0.0030 J**	0.012 U	**0.39**	**0.50**
Fluorene	240	330	NE	29	0.011 U	0.012 U	0.012 U	**0.21 J**	0.011 U	0.012 U	0.013 U	**0.081**	0.012 U	0.012 U	**0.016 J**	**0.018 J**
Indeno(1,2,3-c,d)pyrene	1.1	1.6	0.4	1.1	**0.0049 J**	0.012 U	**0.0046 J**	**1.7**	0.011 U	**0.082**	0.013 U	**0.58**	0.012 U	0.012 U	**0.11**	**0.14**
Naphthalene	3.8	2.9	0.11	29	0.011 U	0.012 U	0.012 U	**0.021 J**	0.011 U	0.012 U	0.013 U	**0.22**	0.012 U	0.012 U	**0.072**	**0.084**
Phenanthrene	180	250	NE	29	**0.0097 J**	0.012 U	**0.019 J**	**2.1**	0.011 U	**0.072**	0.013 U	**1.4**	**0.0028 J**	0.012 U	**0.23**	**0.26**
Pyrene	180	250	NE	1.1	0.022 U	0.012 U	0.024 U	**3.8 J**	0.011 UJ	**0.14 J**	0.013 UJ	**1.9**	0.024 U	0.012 U	**0.44**	**0.49**
MassDEP EPH (ug/g)																
2-Methylnaphthalene	24	33	NE	29	0.10 U	0.12 U	0.13 U	**0.095 J**	0.11 U	0.12 U	0.12 U	**1.4**	0.12 U	0.12 U	**0.056 J**	**0.49**
Acenaphthene	360	490	NE	29	0.10 U	0.12 U	0.13 U	**0.081 J**	0.11 U	0.12 U	0.12 U	0.11 U	0.12 U	0.12 U	0.11 U	0.11 U
Acenaphthylene	180	490	NE	29	0.10 U	0.12 U	0.13 U	**0.92**	0.11 U	0.12 U	0.12 U	**0.10 J**	0.12 U	0.12 U	0.11 U	0.11 U
Anthracene	1800	250	NE	29	0.10 U	0.12 U	0.13 U	**1.4**	0.11 U	0.12 U	0.12 U	**0.20 J**	0.12 U	0.12 U	0.11 U	0.11 U
Benzo(a)anthracene	1.1	1.6	0.86	1.1	0.10 U	0.12 U	0.13 U	**6.1 J**	0.11 U	**0.23**	0.12 U	**1.2**	0.12 U	0.12 U	0.11 U	**0.091 J**
Benzo(a)pyrene	0.11	0.16	1.5	1.1	0.10 U	0.12 U	0.13 U	**6.1 J**	0.11 U	**0.28**	0.12 U	**1.0**	0.12 U	0.12 U	0.11 U	**0.085 J**
Benzo(b)fluoranthene	1.1	1.6	1.3	1.1	0.10 U	0.12 U	0.13 U	**6.0**	0.11 U	**0.24**	0.12 U	**1.3**	0.12 U	0.12 U	0.11 U	**0.098 J**
Benzo(g,h,i)perylene	180	250	NE	1.1	0.10 U	0.12 U	0.13 U	**3.5 J**	0.11 U	**0.20 J**	0.12 U	**0.66**	0.12 U	0.12 U	0.11 U	**0.077 J**
Benzo(k)fluoranthene	11	16	NE	1.1	0.10 U	0.12 U	0.13 U	**5.4 J**	0.11 U	**0.32**	0.12 U	**1.4**	0.12 U	0.12 U	0.11 U	**0.084 J**
Chrysene	110	160	NE	1.1	0.10 U	0.12 U	0.13 U	**6.1 J**	0.11 U	**0.33**	0.12 U	**1.8**	0.12 U	0.12 U	0.11 U	**0.15 J**
Dibenz(a,h)anthracene	0.11	0.16	0.32	1.1	0.10 U	0.12 U	0.13 U	**1.2**	0.11 U	0.12 U	0.12 U	**0.22**	0.12 U	0.12 U	0.11 U	0.11 U
Fluoranthene	240	330	NE	1.1	0.10 U	0.12 U	0.13 U	**11 J**	0.11 U	**0.63**	0.12 U	**2.9**	0.12 U	0.12 U	0.12 U	**0.20 J**
Fluorene	240	330	NE	29	0.10 U	0.12 U	0.13 U	**0.39 J**	0.11 U	0.12 U	0.12 U	**0.15 J**	0.12 U	0.12 U	0.11 U	0.11 U
Indeno(1,2,3-c,d)pyrene	1.1	1.6	0.4	1.1	0.10 U	0.12 U	0.13 U	**3.5**	0.11 U	**0.16 J**	0.12 U	**0.67**	0.12 U	0.12 U	0.11 U	0.11 U
Naphthalene	3.8	2.9	0.11	29	0.10 U	0.12 U	0.13 U	**0.12 J**	0.11 U	0.12 U	0.12 U	**0.95**	0.12 U	0.12 U	0.11 U	**0.37**
Phenanthrene	180	250	NE	29	0.10 U	0.12 U	0.13 U	**4.8 J**	0.11 U	**0.21 J**	0.12 U	**2.3**	0.12 U	0.12 U	0.11 U	**0.27**
Pyrene	180	250	NE	1.1	0.10 U	0.12 U	0.13 U	**8.1 J**	0.11 U	**0.51**	0.12 U	**2.3**	0.12 U	0.12 U	0.11 U	**0.15 J**
C11-C22 Aromatic	NE	260	NE	NE	**6.8 J**	6.0 U	**8.4 J**	**190 J**	**4.7 J**	**14 J**	**6.6 J**	**130**	**5.4 J**	6.0 UJ	23 U	31 U
C11-C22 Extractable Petroleum Hydrocarbons, Aromatic (Unadjusted)	NE	100000	NE	NE	**6.8 J**	6.0 U	**8.4 J**	**260 J**	**4.7 J**	**17 J**	**6.6 J**	**150**	**5.4 J**	6.0 UJ	23 U	34 U
C19-C36 Aliphatic	NE	10000	NE	NE	**11 J**	**3.0 J**	**6.4 J**	**41 J**	**4.0 J**	**5.3 J**	**4.3 J**	**71**	**5.0 J**	**3.9 J**	23 U	22 U
C9-C18 Aliphatic	NE	250	NE	NE	**2.0 J**	**1.4 J**	**1.6 J**	22 U	21 U	23 U	25 U	**23**	**1.6 J**	**1.4 J**	**1.4 J**	**6.0 J**
MassDEP VPH (ug/g)																
Benzene	1.2	1.7	NE	NE	0.046 U	0.038 U	0.040 U	0.037 U	0.031 U	0.035 U	0.041 U	0.037 U	0.037 U	0.036 U	**0.036 J**	0.041 U
Ethylbenzene	5.8	8.6	NE	NE	0.046 U	0.038 U	0.040 U	0.037 U	0.031 U	0.035 U	0.041 U	0.037 U	0.037 U	0.036 U	0.043 U	0.041 U
m,p-Xylene	55	26	NE	NE	0.092 U	0.075 U	0.080 U	0.074 U	0.062 U	0.070 U	0.081 U	0.073 U	0.075 U	0.072 U	**0.10 J**	**0.050 J**
Methyl tert-butyl ether (MTBE)	47	69	NE	NE	0.046 U	0.038 U	0.040 U	0.037 U	0.031 U	0.035 U	0.041 U	0.037 U	0.037 U	0.036 U	0.043 U	0.041 U
Naphthalene	3.8	2.9	NE	NE	0.046 U	0.038 U	0.040 U	0.037 U	0.031 U	0.035 U	0.041 U	**0.036 J**	0.037 U	0.036 U	**0.079 J**	**0.028 J**
o-Xylene	65	26	NE	NE	0.046 U	0.038 U	0.040 U	0.037 U	0.031 U	0.035 U	0.041 U	**0.0024 J**	0.037 U	0.036 U	0.11 U	0.10 U
Toluene	490	75	NE	NE	0.046 U	0.038 U	0.040 U	0.037 U	0.031 U	0.035 U	0.041 U	**0.035 J**	0.037 U	0.036 U	**0.11 J**	**0.034 J**
C5-C8 Aliphatic	NE	43	NE	NE	5.5 U	4.5 U	4.8 U	4.5 U	3.7 U	4.2 U	4.9 U	4.4 U	4.5 U	4.3 U	5.4 U	5.1 U
C9-C10 Aromatic	NE	66	NE	NE	1.7 U	1.4 U	1.5 U	1.4 U	3.8 U	1.3 U	1.5 U	1.4 U	1.4 U	1.4 U	1.6 U	1.5 U
C9-C12 Aliphatic	NE	230	NE	NE	5.5 U	4.5 U	4.8 U	4.5 U	3.7 U	4.2 U	4.9 U	4.4 U	4.5 U	4.3 U	5.2 U	4.9 U
Metals SW6020A/7471B (ug/g)																
Aluminum	7700	2700	NE	NE	**12000**	**18000**	**18000**	**13000**	**8100**	**14000**	**18000**	**5300**	**18000**	**18000**	**19000 J**	**17000 J**
Antimony	3.1	4.3	NE	0.27	0.60 U	0.50 U	0.60 U	0.50 U	**0.63**	**1.2**	**0.71**	0.50 U	0.60 U	**0.70**	**0.44 J**	**0.56**
Arsenic	0.68	0.93	16.4	9.9	**6.4**	**12**	**9.9**	**8.6 J**	**11**	**7.5**	**8.1**	**20**	**11**	**14**	**12**	**12**
Barium	1500	210	469	283	**32**	**34**	**37**	**31**	**47**	**23**	**32**	**28**	**30**	**28**	**44**	**44**
Beryllium	16	11	2.4	10	**0.26 J**	**0.44 J**	**0.40 J**	0.50 U	0.50 U	0.60 U	0.60 U	**0.25 J**	**0.51 J**	**0.47 J**	**0.76**	**0.75**
Cadmium	7.1	4.2	0.26	0.36	0.055 U	**0.036 J**	**0.038 J**	0.50 U	0.50 U	**0.80**	0.60 U	**0.13 J**	**0.11 J**	**0.088 J**	**0.098 J**	**0.14 J**
Chromium	0.3[†]/12000	0.42[†]/2,700	79	0.4	**21**	**35**	**35**	**23**	**28**	**28**	**31**	**14**	**33**	**33**	**33**	**32**
Cobalt	2.3	3.2	14.9	13	**10**	**13**	**14**	**9.3**	**13**	**9.8**	**13**	**4.1 J**	**16**	**17**	**15**	**14**
Copper	310	340	23	28	**19**	**20**	**24**	**15 J**	**19**	**13**	**20**	**15**	**18**	**19**	**15**	**16**
Iron	5500	7500	SSS	NE	**20000**	**30000**	**30000**	**23000**	**15000**	**22000**	**29000**	**18000**	**30000**	**32000**	**29000 J**	**28000 J**
Lead	400	14	32	11	**16**	**13**	**15**	**210 J**	**5.0**	**9.2**	**13**	**12**	**14**	**14**	**13**	**12**
Magnesium	NE	NE	NE	NE	**5600**	**7500**	**8200**	**4300**	**7300**	**5300**	**8100**	**2800**	**6900**	**6900**	**6100**	**6400**
Manganese	180	28	841	220	**480**	**460**	**500**	**500 J**	**710**	**320**	**670**	**100**	**470**	**570**	**400 J**	**530**
Mercury	1.1	0.31	0.123	0.00051	0.074 U	0.091 U	0.086 U	0.079 U	0.076 U	0.087 U	0.088 U	**0.056 J**	0.082 U	0.085 U	0.077 UJ	0.091 UJ
Nickel	150	99	39	30	**26**	**39**	**40**	**25 J**	**37**	**28**	**39**	**15**	**38**	**39**	**33**	**33**
Potassium	NE	NE	NE	NE	**890**	**2200**	**2400**	**970 J**	**2200**	**1400**	**2200**	**540**	**2100**	**2200**	**1600 J**	**1700**
Selenium	39	54	0.61	0.21	6.0 U	5.0 U	6.0 U	**0.40 J**	**0.82 J**	**1.2 J**	**1.1 J**	5.0 U	6.0 U	6.0 U	**3.5 J**	**3.9 J**
Silver	39	54	SSS	2	**0.0071 J**	**0.11 J**	**0.13 J**	2.6 U	2.7 U	3.0 U	3.1 U	**0.024 J**	**0.12 J**	**0.13 J**	2.6 U	2.7 U
Sodium	NE	NE	NE	NE	**63**	**120**	**160**	**110**	**90**	**150**	**220**	**260**	**2000**	**2000**	**380 J**	**500 J**
Thallium	0.078	0.11	0.6	1	0.60 U	0.50 U	0.60 U	0.50 U	0.50 U	**0.63**	**0.26 J**	**0.59**	0.60 U	0.60 U	**0.49 J**	**0.52 J**
Vanadium	39	49	103	2	**15**	**31**	**27**	**20**	**19**	**23**	**24**	**12**	**33**	**36**	**32**	**28**
Zinc	2300	3200	101	8.5	**42**	**56**	**58**	**40 J**	**46**	**47**	**55**	**25**	**54**	**55**	**47 J**	**45**

Table 4-1
Summary of Discrete Soil Sample Analytical Results
Former Dow Salvage Yard
233 Odlin Road, Bangor, Maine

Locations:					SY-SB1			SY-SB2		SY-SB3		SY-SB4			SY-SB4R	
Field Sample ID:					SY-SB1-1	SY-SB1-2	SY-SB1-3	SY-SB2-1	SY-SB2-2	SY-SB3-1	SY-SB3-2	SY-SB4-1	SY-SB4-2	SY-SB4-20	SY-SB4R-1	SY-SB4R-10
Matrix:					S	S	S	S	S	S	S	S	S		S	
Sample Begin Depth:					0.5	3.3	11	0.5	10	0.5	17.5	0.5	3		0.5	
Sample End Depth:					2	5.5	12	2	12	2	19.5	2	5		2	
Sample Date:					10/22/2019	10/22/2019	10/22/2019	10/25/2019	10/25/2019	10/28/2019	10/28/2019	10/21/2019	10/21/2019		02/01/2023	
Analytes	**RSL[1]**	**RAG[2]**	**Background[3]**	**Ecological[4]**												
Hex Chromium SW7196A (mg/kg)																
Chromium, Hexavalent	0.3	0.42	NE	0.4	**0.24 J**	0.35 U	**0.21 J**	0.48 U	0.35 U	0.54 U	0.39 U	0.67 U	**0.34 J**	**0.37 J**	**0.26 J**	0.33 UJ
PCBs SW8082A (ug/g)																
PCB-1016 (Aroclor 1016	0.41	0.31	NE	NE	0.014 U	0.014 U	0.015 U	0.013 U	0.015 U	0.014 U	0.015 U	0.014 U	0.013 U	0.014 U	0.083 U	0.090 U
PCB-1221 (Aroclor 1221	0.2	0.31	NE	NE	0.014 U	0.014 U	0.015 U	0.013 U	0.015 U	0.014 U	0.015 U	0.014 U	0.013 U	0.014 U	0.083 U	0.090 U
PCB-1232 (Aroclor 1232	0.17	0.31	NE	NE	0.014 U	0.014 U	0.015 U	0.013 U	0.015 U	0.014 U	0.015 U	0.014 U	0.013 U	0.014 U	0.083 U	0.090 U
PCB-1242 (Aroclor 1242	0.23	0.31	NE	NE	0.014 U	0.014 U	0.015 U	0.013 U	0.015 U	0.014 U	0.015 U	0.014 U	0.013 U	0.014 U	0.083 U	0.090 U
PCB-1248 (Aroclor 1248)	0.23	0.31	NE	NE	0.014 U	0.014 U	0.015 U	0.013 U	0.015 U	0.014 U	0.015 U	0.014 U	0.013 U	0.014 U	0.083 U	0.090 U
PCB-1254 (Aroclor 1254)	0.12	0.31	NE	NE	0.014 U	0.014 U	0.015 U	0.013 U	0.015 U	0.014 U	0.015 U	0.014 U	0.013 U	0.014 U	0.083 U	0.090 U
PCB-1260 (Aroclor 1260)	0.24	0.31	NE	NE	0.014 U	0.014 U	0.015 U	0.013 U	0.015 U	0.014 U	0.015 U	0.014 U	0.013 U	0.014 U	0.083 U	0.090 U
VOCs SW8260D (ug/g)																
1,1,1,2-Tetrachloroethane	2	3	NE	NE	0.029 U	0.024 U	0.025 U	0.023 U	0.019 U	0.022 U	0.025 U	0.023 U	0.023 U	0.023 U	0.027 U	0.026 U
1,1,1-Trichloroethane	810	64	NE	NE	0.029 U	0.024 U	0.025 U	0.023 U	0.019 U	0.022 U	0.025 U	0.023 U	0.023 U	0.023 U	0.027 U	0.026 U
1,1,2,2-Tetrachloroethane	0.3	0.89	NE	NE	0.029 U	0.024 U	0.025 U	0.023 U	0.019 U	0.022 U	0.025 U	0.023 U	0.023 U	0.023 U	0.027 U	0.026 U
1,1,2-Trichloroethane	0.15	0.22	NE	NE	0.029 U	0.024 U	0.025 U	0.023 U	0.019 U	0.022 U	0.025 U	0.023 U	0.023 U	0.023 U	0.027 U	0.026 U
1,1-Dichloroethane	3.6	5.3	NE	NE	0.029 U	0.024 U	0.025 U	0.023 U	0.019 U	0.022 U	0.025 U	0.023 U	0.023 U	0.023 U	0.027 U	0.026 U
1,1-Dichloroethene	23	8.1	NE	NE	0.029 U	0.024 U	0.025 U	0.023 U	0.019 U	0.022 U	0.025 U	0.023 U	0.023 U	0.023 U	0.027 U	0.026 U
1,1-Dichloropropene	NE	NE	NE	NE	0.029 U	0.024 U	0.025 U	0.023 U	0.019 U	0.022 U	0.025 U	0.023 U	0.023 U	0.023 U	0.027 U	0.026 U
1,2,3-Trichlorobenzene	6.3	8.6	NE	NE	0.029 U	0.024 U	0.025 U	0.023 U	0.019 U	0.022 U	0.025 U	0.091 U	0.023 U	0.023 U	0.027 U	0.026 U
1,2,3-Trichloropropane	0.0051	0.07	NE	NE	0.029 U	0.024 U	0.025 U	0.023 U	0.019 U	0.022 U	0.025 U	0.023 U	0.023 U	0.023 U	0.027 U	0.026 U
1,2,4-Trichlorobenzene	5.8	8.6	NE	NE	0.029 U	0.024 U	0.025 U	0.023 U	0.019 U	0.022 U	0.025 U	0.023 U	0.023 U	0.023 U	0.027 U	0.026 U
1,2,4-Trimethylbenzene	30	18	NE	NE	0.029 U	0.024 U	0.025 U	0.023 U	0.019 U	0.022 U	0.025 U	0.023 U	0.023 U	0.023 U	**0.041 J**	**0.021 J**
1,2-Dibromo-3-chloropropane	0.0053	0.0078	NE	NE	0.057 U	0.047 U	0.050 U	0.046 U	0.038 U	0.044 U	0.051 U	0.046 U	0.047 U	0.045 U	0.054 U	0.051 U
1,2-Dibromoethane (EDB)	0.036	0.054	NE	NE	0.029 U	0.024 U	0.025 U	0.023 U	0.019 U	0.022 U	0.025 U	0.023 U	0.023 U	0.023 U	0.027 U	0.026 U
1,2-Dichlorobenzene	180	36	NE	NE	0.029 U	0.024 U	0.025 U	0.023 U	0.019 U	0.022 U	0.025 U	0.023 U	0.023 U	0.023 U	0.027 U	0.026 U
1,2-Dichloroethane	0.46	0.68	NE	NE	0.029 U	0.024 U	0.025 U	0.023 U	0.019 U	0.022 U	0.025 U	0.023 U	0.023 U	0.023 U	0.027 U	0.026 U
1,2-Dichloropropane	1.6	2.3	NE	NE	0.029 U	0.024 U	0.025 U	0.023 U	0.019 U	0.022 U	0.025 U	0.023 U	0.023 U	0.023 U	0.027 U	0.026 U
1,3,5-Trimethylbenzene	27	16	NE	NE	0.029 U	0.024 U	0.025 U	0.023 U	0.019 U	0.022 U	0.025 U	0.023 U	0.023 U	0.023 U	0.027 U	0.026 U
1,3-Dichlorobenzene	NE	29	NE	NE	0.029 U	0.024 U	0.025 U	0.023 U	0.019 U	0.022 U	0.025 U	0.023 U	0.023 U	0.023 U	0.027 U	0.026 U
1,3-Dichloropropane	160	210	NE	NE	0.029 U	0.024 U	0.025 U	0.023 U	0.019 U	0.022 U	0.025 U	0.023 U	0.023 U	0.023 U	0.027 U	0.026 U
1,4-Dichlorobenzene	2.6	3.9	NE	NE	0.029 U	0.024 U	0.025 U	0.023 U	0.019 U	0.022 U	0.025 U	0.023 U	0.023 U	0.023 U	0.027 U	0.026 U
1,4-Dioxane (p-Dioxane)	5.3	0.74	NE	NE	2.3 U	1.9 U	2.0 U	1.9 U	1.5 U	1.7 U	2.0 U	1.8 U	1.9 U	1.8 U	2.2 U	2.0 U
2,2-Dichloropropane	NE	NE	NE	NE	0.029 U	0.024 U	0.025 U	0.023 U	0.019 U	0.022 U	0.025 U	0.023 U	0.023 U	0.023 U	0.027 U	0.026 U
2-Butanone (MEK)	2700	1100	NE	NE	0.23 U	0.19 U	0.20 U	0.19 U	0.15 U	0.17 U	0.20 U	0.18 U	0.19 U	0.18 U	0.22 U	0.20 U
2-Chlorotoluene	160	80	NE	NE	0.029 U	0.024 U	0.025 U	0.023 U	0.019 U	0.022 U	0.025 U	0.023 U	0.023 U	0.023 U	0.027 U	0.026 U
2-Hexanone	20	29	NE	NE	0.057 U	0.047 U	0.050 U	0.046 U	0.038 U	0.044 U	0.051 U	0.046 U	0.047 U	0.045 U	0.054 U	0.051 U
4-Chlorotoluene	160	210	NE	NE	0.029 U	0.024 U	0.025 U	0.023 U	0.019 U	0.022 U	0.025 U	0.023 U	0.023 U	0.023 U	0.027 U	0.026 U
4-Methyl-2-pentanone (MIBK)	5400	330	NE	NE	0.029 U	0.024 U	0.025 U	0.023 U	0.019 U	0.022 U	0.025 U	0.023 U	0.023 U	0.023 U	0.027 U	0.026 U
Acetone	6100	5200	NE	NE	0.23 U	0.19 U	2.5 U	0.19 U	0.15 U	0.17 U	0.20 U	0.18 U	0.19 U	0.18 U	0.22 U	0.20 U
Benzene	1.2	1.7	NE	NE	0.029 U	0.024 U	0.025 U	0.023 U	0.019 U	0.022 U	0.025 U	**0.011 J**	0.023 U	0.023 U	**0.033 J**	0.026 U
Bromobenzene	29	38	NE	NE	0.029 U	0.024 U	0.025 U	0.023 U	0.019 U	0.022 U	0.025 U	0.023 U	0.023 U	0.023 U	0.027 U	0.026 U
Bromochloromethane	15	22	NE	NE	0.029 U	0.024 U	0.025 U	0.023 U	0.019 U	0.022 U	0.025 U	0.023 U	0.023 U	0.023 U	0.027 U	0.026 U
Bromodichloromethane	0.29	0.44	NE	NE	0.029 U	0.024 U	0.025 U	0.023 U	0.019 U	0.022 U	0.025 U	0.023 U	0.023 U	0.023 U	0.027 U	0.026 U
Bromoform	19	28	NE	NE	0.029 U	0.024 U	0.025 U	0.023 U	0.019 U	0.022 U	0.025 U	0.023 U	0.023 U	0.023 U	0.027 U	0.026 U
Bromomethane	0.68	1	NE	NE	0.11 U	0.094 U	0.10 U	0.093 U	0.077 U	0.087 U	0.10 U	0.091 U	0.094 U	0.090 U	0.11 U	0.10 U
Carbon disulfide	77	69	NE	NE	0.029 U	0.024 U	0.025 U	0.023 U	0.019 U	0.022 U	0.025 U	0.023 U	0.023 U	0.023 U	0.027 U	0.026 U
Carbon tetrachloride	0.65	0.97	NE	NE	0.029 U	0.024 U	0.025 U	0.023 U	0.019 U	0.022 U	0.025 U	0.023 U	0.023 U	0.023 U	0.027 U	0.026 U
Chlorobenzene	28	41	NE	40	0.029 U	0.024 U	0.025 U	0.023 U	0.019 U	0.022 U	0.025 U	0.023 U	0.023 U	0.023 U	0.027 U	0.026 U
Chloroethane	1400	200	NE	NE	0.029 U	0.024 U	0.025 U	0.023 U	0.019 U	0.022 U	0.025 U	0.023 U	0.023 U	0.023 U	0.027 U	0.026 U
Chloroform	0.32	0.47	NE	NE	0.029 U	0.024 U	0.025 U	0.023 U	0.019 U	0.022 U	0.025 U	0.023 U	0.023 U	0.023 U	0.027 U	0.026 U
Chloromethane	11	16	NE	NE	0.029 U	0.024 U	0.025 U	0.023 U	0.019 U	0.022 U	0.025 U	0.023 U	0.023 U	0.023 U	0.027 U	0.026 U
cis-1,2-Dichloroethene	16	20	NE	NE	0.029 U	0.024 U	0.025 U	0.023 U	0.019 U	0.022 U	0.025 U	0.023 U	0.023 U	0.023 U	0.027 U	0.026 U
cis-1,3-Dichloropropene	1.8	2.7	NE	NE	0.029 U	0.024 U	0.025 U	0.023 U	0.019 U	0.022 U	0.025 U	0.023 U	0.023 U	0.023 U	0.027 U	0.026 U
Dibromochloromethane	8.3	11	NE	NE	0.029 U	0.024 U	0.025 U	0.023 U	0.019 U	0.022 U	0.025 U	0.023 U	0.023 U	0.023 U	0.027 U	0.026 U
Dibromomethane	2.4	3.5	NE	NE	0.029 U	0.024 U	0.025 U	0.023 U	0.019 U	0.022 U	0.025 U	0.023 U	0.023 U	0.023 U	0.027 U	0.026 U
Dichlorodifluoromethane	8.7	13	NE	NE	0.029 U	0.024 U	0.025 U	0.023 U	0.019 U	0.022 U	0.025 U	0.023 U	0.023 U	0.023 U	0.027 U	0.026 U
Diethyl ether (Ethyl ether)	1600	81	NE	NE	0.029 U	0.024 U	0.025 U	0.023 U	0.019 U	0.022 U	0.025 U	0.023 U	0.023 U	0.023 U	0.027 U	0.026 U
Ethylbenzene	5.8	8.6	NE	NE	0.029 U	0.024 U	0.025 U	0.023 U	0.019 U	0.022 U	0.025 U	0.023 U	0.023 U	0.023 U	0.027 UJ	0.026 UJ
Hexachlorobutadiene	1.2	1.5	NE	NE	0.057 U	0.047 U	0.050 U	0.046 U	0.038 U	0.044 U	0.051 U	0.046 U	0.047 U	0.045 U	**0.021 J**	0.026 U
Isopropylbenzene (Cumene)	190	26	NE	NE	0.029 U	0.024 U	0.025 U	0.023 U	0.019 U	0.022 U	0.025 U	0.023 U	0.023 U	0.023 U	0.054 U	0.051 U
m,p-Xylene	55	26	NE	NE	0.057 U	0.047 U	0.050 U	0.046 U	0.038 U	0.044 U	0.051 U	**0.040 J**	0.047 U	0.045 U	**0.10 J**	**0.050 J**
Methyl tert-butyl ether (MTBE)	47	69	NE	NE	0.029 U	0.024 U	0.025 U	0.023 U	0.019 U	0.022 U	0.025 U	0.023 U	0.023 U	0.023 U	0.027 UJ	0.026 UJ
Methylene chloride	35	49	NE	NE	0.029 U	0.024 U	0.025 U	0.023 U	0.019 U	0.022 U	0.025 U	0.023 U	0.023 U	0.023 U	0.027 U	0.026 U
Naphthalene	3.8	2.9	NE	NE	0.11 U	0.024 U	0.025 U	0.093 U	0.019 U	**0.015 J**	0.025 U	0.091 U	0.094 U	0.023 U	0.11 U	0.10 U
n-Butylbenzene	390	540	NE	NE	0.029 U	0.024 U	0.025 U	0.023 U	0.019 U	0.022 U	0.025 U	0.023 U	0.023 U	0.023 U	0.027 U	0.026 U
n-Propylbenzene	380	26	NE	NE	0.029 U	0.024 U	0.025 U	0.023 U	0.019 U	0.022 U	0.025 U	0.023 U	0.023 U	0.023 U	0.027 U	0.026 U
o-Xylene	65	26	NE	NE	0.029 U	0.024 U	0.025 U	0.023 U	0.019 U	0.022 U	0.025 U	**0.024 J**	0.023 U	0.023 U	**0.053 J**	**0.021 J**
p-Cymene (p-Isopropyltoluene)	NE	NE	NE	NE	0.029 U	0.024 U	0.025 U	0.023 U	0.019 U	0.022 U	0.025 U	0.023 U	0.023 U	0.023 U	0.027 U	0.026 U
sec-Butylbenzene	780	1100	NE	NE	0.029 U	0.024 U	0.025 U	0.023 U	0.019 U	0.022 U	0.025 U	0.023 U	0.023 U	0.023 U	0.027 U	0.026 U

Table 4-1
Summary of Discrete Soil Sample Analytical Results
Former Dow Salvage Yard
233 Odlin Road, Bangor, Maine

Locations:					SY-SB1			SY-SB2		SY-SB3		SY-SB4			SY-SB4R	
Field Sample ID:					SY-SB1-1	SY-SB1-2	SY-SB1-3	SY-SB2-1	SY-SB2-2	SY-SB3-1	SY-SB3-2	SY-SB4-1	SY-SB4-2	SY-SB4-20	SY-SB4R-1	SY-SB4R-10
Matrix:					S	S	S	S	S	S	S	S	S		S	
Sample Begin Depth:					0.5	3.3	11	0.5	10	0.5	17.5	0.5	3		0.5	
Sample End Depth:					2	5.5	12	2	12	2	19.5	2	5		2	
Sample Date:					10/22/2019	10/22/2019	10/22/2019	10/25/2019	10/25/2019	10/28/2019	10/28/2019	10/21/2019	10/21/2019		02/01/2023	
Analytes	**RSL[1]**	**RAG[2]**	**Background[3]**	**Ecological[4]**												
Styrene	600	83	NE	300	0.029 U	0.024 U	0.025 U	0.023 U	0.019 U	0.022 U	0.025 U	0.023 U	0.023 U	0.023 U	0.027 U	0.026 U
tert-Amyl methyl ether	NE	NE	NE	NE	0.029 U	0.024 U	0.025 U	0.023 U	0.019 U	0.022 U	0.025 U	0.023 U	0.023 U	0.023 U	0.027 UJ	0.026 UJ
tert-Butyl alcohol	NE	NE	NE	NE	0.29 U	0.24 U	0.25 U	0.23 U	0.19 U	0.22 U	0.25 U	0.23 U	0.23 U	0.23 U	0.27 U	0.26 U
tert-Butyl ethyl ether	NE	NE	NE	NE	0.029 U	0.024 U	0.025 U	0.023 U	0.019 U	0.022 U	0.025 U	0.023 U	0.023 U	0.023 U	0.027 U	0.026 U
tert-Butylbenzene	780	1100	NE	NE	0.029 U	0.024 U	0.025 U	0.023 U	0.019 U	0.022 U	0.025 U	0.023 U	0.023 U	0.023 U	0.027 U	0.026 U
Tetrachloroethene (PCE)	8.1	8.5	NE	NE	0.029 U	0.024 U	0.025 U	0.023 U	0.019 U	0.022 U	0.025 U	0.023 U	0.023 U	0.023 U	0.027 U	0.026 U
Tetrahydrofuran	1800	2700	NE	NE	0.23 U	0.19 U	0.20 U	0.19 U	0.15 U	0.17 U	0.20 U	0.18 U	0.19 U	0.18 U	0.22 U	0.20 U
Toluene	490	75	NE	200	**0.023 J**	0.024 U	0.025 U	0.023 U	0.019 U	0.022 U	0.025 U	**0.054 J**	0.023 U	0.023 U	**0.11 J**	**0.034 J**
trans-1,2-Dichloroethene	160	10	NE	NE	0.029 U	0.024 U	0.025 U	0.023 U	0.019 U	0.022 U	0.025 U	0.023 U	0.023 U	0.023 U	0.027 U	0.026 U
trans-1,3-Dichloropropene	1.8	2.7	NE	NE	0.029 U	0.024 U	0.025 U	0.023 U	0.019 U	0.022 U	0.025 U	0.023 U	0.023 U	0.023 U	0.027 U	0.026 U
Trichloroethene (TCE)	0.41	0.39	NE	NE	0.029 U	0.024 U	0.025 U	0.023 U	0.019 U	0.022 U	0.025 U	0.023 U	0.023 U	0.023 U	0.027 U	0.026 U
Trichlorofluoromethane	2300	94	NE	NE	0.029 U	0.024 U	0.025 U	0.023 U	0.019 U	0.022 U	0.025 U	0.023 U	0.023 U	0.023 U	0.027 U	0.026 U
Vinyl chloride	0.0059	0.064	NE	NE	0.029 U	0.024 U	0.025 U	0.023 U	0.019 U	0.022 U	0.025 U	0.023 U	0.023 U	0.023 U	0.027 U	0.026 U
SVOCs SW8270E (ug/g)																
1,2,4-Trichlorobenzene	5.8	8.6	NE	20	0.21 U	0.23 U	0.25 U	0.23 U	0.22 U	0.23 U	0.25 U	0.22 U	0.23 U	0.24 U	0.21 U	0.21 U
1,2-Dichlorobenzene	180	36	NE	NE	0.10 U	0.12 U	0.12 U	0.11 U	0.11 U	0.11 U	0.13 U	0.11 U	0.12 U	0.12 U	0.11 U	0.10 U
1,3-Dichlorobenzene	NE	29	NE	NE	0.10 U	0.12 U	0.12 U	0.11 U	0.11 U	0.11 U	0.13 U	0.11 U	0.12 U	0.12 U	0.11 U	0.10 U
1,4-Dichlorobenzene	2.6	3.9	NE	20	0.10 U	0.12 U	0.12 U	0.11 U	0.11 U	0.11 U	0.13 U	0.11 U	0.12 U	0.12 U	0.11 U	0.10 U
2,2'-Oxybis(1-chloropropane)	310	NE	NE	NE	0.10 U	0.12 U	0.12 U	0.11 U	0.11 U	0.11 U	0.13 U	0.11 U	0.12 U	0.12 U	0.11 U	0.10 U
2,4,5-Trichlorophenol	630	860	NE	9	0.10 U	0.12 U	0.12 U	0.11 U	0.11 U	0.11 U	0.13 U	0.11 U	0.12 U	0.12 U	0.11 U	0.10 U
2,4,6-Trichlorophenol	6.3	8.6	NE	4	0.10 U	0.12 U	0.12 U	0.11 U	0.11 U	0.11 U	0.13 U	0.11 U	0.12 U	0.12 U	0.11 U	0.10 U
2,4-Dichlorophenol	19	26	NE	NE	0.21 U	0.23 U	0.25 U	0.23 U	0.22 U	0.23 U	0.25 U	0.22 U	0.23 U	0.24 U	0.21 U	0.21 U
2,4-Dimethylphenol	130	170	NE	NE	0.10 U	0.12 U	0.12 U	0.11 U	0.11 U	0.11 U	0.13 U	0.11 U	0.12 U	0.12 U	0.11 U	0.10 U
2,4-Dinitrophenol	13	17	NE	20	2.1 U	2.3 U	2.5 U	2.3 U	2.2 U	2.3 U	2.5 U	2.2 U	2.3 U	2.4 U	R	R
2,4-Dinitrotoluene	1.7	2.4	NE	NE	0.10 U	0.12 U	0.12 U	0.11 U	0.11 U	0.11 U	0.13 U	0.11 U	0.12 U	0.12 U	0.11 U	0.10 U
2,6-Dinitrotoluene	0.36	0.5	NE	NE	0.10 U	0.12 U	0.12 U	0.11 U	0.11 U	0.11 U	0.13 U	0.11 U	0.12 U	0.12 U	0.11 U	0.10 U
2-Chloronaphthalene	480	650	NE	NE	0.21 U	0.23 U	0.25 U	0.23 U	0.22 U	0.23 U	0.25 U	0.22 U	0.23 U	0.24 U	0.21 U	0.21 U
2-Chlorophenol	39	54	NE	NE	0.21 U	0.23 U	0.25 U	0.23 U	0.22 U	0.23 U	0.25 U	0.22 U	0.23 U	0.24 U	0.21 U	0.21 U
2-Methylphenol (o-Cresol)	320	430	NE	NE	0.10 U	0.12 U	0.12 U	0.11 U	0.11 U	0.11 U	0.13 U	0.11 U	0.12 U	0.12 U	0.11 U	0.10 U
2-Nitroaniline	63	NE	NE	NE	0.10 U	0.12 U	0.12 U	0.11 U	0.11 U	0.11 U	0.13 U	0.11 U	0.12 U	0.12 U	0.11 U	0.10 U
2-Nitrophenol	NE	NE	NE	NE	0.10 U	0.12 U	0.12 U	0.11 U	0.11 U	0.11 U	0.13 U	0.11 U	0.12 U	0.12 U	0.11 U	0.10 U
3,3'-Dichlorobenzidine	1.2	1.7	NE	NE	2.6 U	2.9 U	3.1 U	2.8 U	2.7 U	2.8 U	3.2 U	2.8 U	2.9 U	3.1 U	2.6 U	2.6 U
3-Nitroaniline	NE	NE	NE	NE	0.10 U	0.12 U	0.12 U	0.11 U	0.11 U	0.11 U	0.13 U	0.11 U	0.12 U	0.12 U	0.11 U	0.10 U
4,6-Dinitro-2-methylphenol	0.51	860	NE	NE	R	R	R	R	R	R	R	R	R	R	1.1 UJ	1.0 UJ
4-Bromophenyl phenyl ether	NE	NE	NE	NE	0.10 U	0.12 U	0.12 U	0.11 U	0.11 U	0.11 U	0.13 U	0.11 U	0.12 U	0.12 U	0.11 U	0.10 U
4-Chloro-3-methylphenol	630	NE	NE	NE	0.10 U	0.12 U	0.12 U	0.11 U	0.11 U	0.11 U	0.13 U	0.11 U	0.12 U	0.12 U	0.11 U	0.10 U
4-Chloroaniline	2.7	3.7	NE	NE	0.10 U	0.12 U	0.12 U	0.11 U	0.11 U	0.11 U	0.13 U	0.11 U	0.12 U	0.12 U	0.11 U	0.10 U
4-Chlorophenyl phenyl ether	NE	NE	NE	NE	0.21 U	0.23 U	0.25 U	0.23 U	0.22 U	0.23 U	0.25 U	0.22 U	0.23 U	0.24 U	0.21 U	0.21 U
4-Methylphenol (p-Cresol)	630	510	NE	NE	0.10 U	0.12 U	0.12 U	0.11 U	0.11 U	0.11 U	0.13 U	0.11 U	0.12 U	0.12 U	0.11 U	0.10 U
4-Nitroaniline	25	35	NE	NE	0.21 U	0.23 U	0.25 U	0.23 U	0.22 U	0.23 U	0.25 U	0.22 U	0.23 U	0.24 U	0.21 U	0.21 U
4-Nitrophenol	NE	61	NE	7	0.52 U	0.58 U	0.61 U	0.57 U	0.55 U	0.56 U	0.63 U	0.56 U	0.58 U	0.61 U	0.53 U	0.52 U
Aniline (Phenylamine, Aminobenzene)	44	610	NE	NE	0.10 U	0.12 U	0.12 U	0.11 UJ	0.11 U	0.11 U	0.13 U	0.11 U	0.12 U	0.12 U	0.11 UJ	0.10 U
Azobenzene	5.6	NE	NE	NE	0.10 U	0.12 U	0.12 U	0.11 U	0.11 U	0.11 U	0.13 U	0.11 U	0.12 U	0.12 U	0.11 U	0.10 U
Benzidine	0.00053	NE	NE	NE	2.6 U	2.9 U	3.1 U	R	2.7 U	2.8 U	3.2 U	2.8 U	2.9 U	3.1 U	R	2.6 UJ
Benzoic acid	25000	1100	NE	NE	4.7 U	5.2 U	5.5 U	5.1 U	4.9 U	5.1 U	5.7 U	5.0 U	5.3 U	5.5 U	4.7 UJ	4.7 UJ
Benzyl alcohol	630	860	NE	NE	0.10 U	0.12 U	0.12 U	0.11 U	0.11 U	0.11 U	0.13 U	0.11 U	0.12 U	0.12 U	0.11 U	0.10 U
Benzyl butyl phthalate	290	390	NE	NE	0.21 U	0.23 U	0.25 U	0.23 U	0.22 U	0.23 U	0.25 U	0.22 U	0.23 U	0.24 U	0.21 U	0.21 U
bis(2-Chloroethoxy) methane	19	NE	NE	NE	0.21 U	0.23 U	0.25 U	0.23 U	0.22 U	0.23 U	0.25 U	0.22 U	0.23 U	0.24 U	0.21 U	0.21 U
bis(2-Chloroethyl) ether	0.23	0.33	NE	NE	0.10 U	0.12 U	0.12 U	0.11 U	0.11 U	0.11 U	0.13 U	0.11 U	0.12 U	0.12 U	0.11 U	0.10 U
bis(2-Ethylhexyl) phthalate	39	53	NE	NE	0.52 U	0.58 U	0.61 U	0.57 U	0.27 U	0.28 U	0.32 U	0.56 U	0.58 U	0.61 U	0.26 U	0.26 U
Carbazole	NE	27	NE	NE	0.10 U	0.12 U	0.12 U	**0.091 J**	0.11 U	0.11 U	0.13 U	**0.097 J**	0.12 U	0.12 U	0.11 U	0.10 U
Dibenzofuran	7.3	11	NE	NE	0.052 U	0.058 U	0.061 U	**0.066**	0.055 U	0.056 U	0.063 U	**0.38**	0.058 U	0.061 U	0.053 U	0.052 U
Diethyl phthalate	5100	6900	NE	100	0.21 U	0.23 U	0.25 U	0.23 U	0.22 U	0.23 U	0.25 U	0.22 U	0.23 U	0.24 U	0.21 U	0.21 U
Dimethyl phthalate	NE	NE	NE	NE	0.21 U	0.23 U	0.25 U	0.23 U	0.22 U	0.23 U	0.25 U	0.22 U	0.23 U	0.24 U	0.21 U	0.21 U
Di-n-butyl phthalate	630	860	NE	200	0.21 U	0.23 U	0.25 U	0.23 U	0.22 U	0.23 U	0.25 U	0.22 U	0.23 U	0.24 U	0.21 U	0.21 U
di-n-Octyl phthalate	63	86	NE	NE	0.21 U	0.23 U	0.25 U	0.23 U	0.22 U	0.23 U	0.25 U	0.22 U	0.23 U	0.24 U	0.21 U	0.21 U
Hexachlorobenzene	0.21	0.3	NE	NE	0.10 U	0.12 U	0.12 U	0.11 U	0.11 U	0.11 U	0.13 U	0.11 U	0.12 U	0.12 U	0.11 U	0.10 U
Hexachlorobutadiene	1.2	1.5	NE	NE	0.10 U	0.12 U	0.12 U	0.11 U	0.11 U	0.11 U	0.13 U	0.11 U	0.12 U	0.12 U	0.11 U	0.10 U
Hexachlorocyclopentadiene	0.18	NE	NE	10	0.42 UJ	0.46 UJ	0.49 UJ	R	0.44 U	0.45 U	0.50 U	0.44 UJ	0.47 UJ	0.49 UJ	0.42 U	0.42 U
Hexachloroethane	1.8	2.7	NE	NE	0.10 U	0.12 U	0.12 U	0.11 U	0.11 U	0.11 U	0.13 U	0.11 U	0.12 U	0.12 U	0.11 U	0.10 U
Isophorone	570	780	NE	NE	0.21 U	0.23 U	0.25 U	0.23 U	0.22 U	0.23 U	0.25 U	0.22 U	0.23 U	0.24 U	0.21 U	0.21 U
Nitrobenzene	5.1	NE	NE	NE	0.10 U	0.12 U	0.12 U	0.11 U	0.11 U	0.11 U	0.13 U	0.11 U	0.12 U	0.12 U	0.11 U	0.10 U
N-Nitrosodimethylamine	0.002	NE	NE	NE	0.10 U	0.12 U	0.12 U	0.11 U	0.11 U	0.11 U	0.13 U	0.11 U	0.12 U	0.12 U	0.11 U	0.10 U
N-Nitrosodi-n-propylamine	0.078	NE	NE	NE	0.10 U	0.12 U	0.12 U	0.11 U	0.11 U	0.11 U	0.13 U	0.11 U	0.12 U	0.12 U	0.11 U	0.10 U
N-Nitrosodiphenylamine	110	150	NE	NE	0.10 U	0.12 U	0.12 U	0.11 U	0.11 U	0.11 U	0.13 U	0.11 U	0.12 U	0.12 U	0.11 U	0.10 U
Pentachlorophenol	180	1.4	NE	2.1	0.52 U	0.58 U	0.61 U	0.57 U	0.55 U	0.56 U	0.63 U	0.56 U	0.58 U	0.61 U	0.53 U	0.52 U
Phenol	1900	2600	NE	30	0.10 U	0.12 U	0.12 U	0.11 U	0.11 U	0.11 U	0.13 U	0.11 U	0.12 U	0.12 U	0.11 U	0.10 U
Pyridine	7.8	NE	NE	NE	0.10 UJ	0.12 UJ	0.12 UJ	0.11 UJ	0.11 U	0.11 U	0.13 U	0.11 UJ	0.12 UJ	0.12 UJ	0.11 U	0.10 U
TOC LYDKHN (ug/g)																
Total Organic Carbon	NE	NE	NE	NE	**6300**	**1200 J**	**5800**	**7300 J**	**2000**	**1500**	**3400**	**490000**	**2200**	**1900**	**35000 J**	**810 J**

Table 4-1
Summary of Discrete Soil Sample Analytical Results
Former Dow Salvage Yard
233 Odlin Road, Bangor, Maine

Locations:					SY-SB5		SY-SB6			SY-SB7				SY-SB8		
Field Sample ID:					SY-SB4R-2	SY-SB5-1	SY-SB5-2	SY-SB6-1	SY-SB6-2	SY-SB6-3	SY-SB7-1	SY-SB7-10	SY-SB7-2	SY-SB7-3	SY-SB8-1	SY-SB8-2	SY-SB8-3
Matrix:					S	S	S	S	S	S	S		S	S	S	S	S
Sample Begin Depth:					2	0.5	18	0.5	18.5	26.5	0.5		0	0	0.5	2	10
Sample End Depth:					4	2	20	2	20	27.5	2		0	0	2	4	12
Sample Date:					02/01/2023	10/24/2019	10/24/2019	10/24/2019	10/24/2019	10/24/2019	10/29/2019		10/29/2019	10/29/2019	10/22/2019	10/22/2019	10/22/2019
Analytes	**RSL[1]**	**RAG[2]**	**Background[3]**	**Ecological[4]**													
PAH SIM (mg/kg)																	
2-Methylnaphthalene	24	33	NE	29	0.012 U	0.012 U	0.012 U	0.011 U	0.013 U	0.011 U	**0.014 J**	**0.017 J**	0.012 U	**0.095**	0.011 U	0.012 U	0.013 U
Acenaphthene	360	490	NE	29	0.012 U	0.012 U	0.012 U	**0.0053 J**	0.013 U	0.011 U	0.011 U	0.012 U	0.012 U	0.012 U	0.011 U	0.012 U	0.013 U
Acenaphthylene	180	490	NE	29	0.012 U	0.012 U	0.012 U	**0.012 J**	0.013 U	0.011 U	**0.013 J**	**0.019 J**	0.012 U	**0.012 J**	0.011 U	0.012 U	0.013 U
Anthracene	1800	250	NE	29	0.012 U	**0.0071 J**	**0.0017 J**	**0.040**	**0.0028 J**	0.011 U	0.011 U	**0.0044 J**	0.012 U	**0.0021 J**	**0.0037 J**	**0.0043 J**	0.013 U
Benzo(a)anthracene	1.1	1.6	0.86	1.1	**0.0026 J**	**0.082**	0.012 U	**0.47**	0.026 U	0.022 U	**0.0097 J**	**0.015 J**	0.012 U	**0.0035 J**	**0.030**	0.023 U	0.013 U
Benzo(a)pyrene	0.11	0.16	1.5	1.1	0.012 U	**0.18 J**	0.025 U	**0.42**	0.013 U	**0.0045 J**	**0.012 J**	**0.021 J**	0.012 U	**0.0054 J**	**0.031**	0.012 U	0.013 U
Benzo(b)fluoranthene	1.1	1.6	1.3	1.1	**0.0036 J**	**0.24 J**	0.025 U	**0.47**	**0.0050 J**	**0.0062 J**	**0.017 J**	**0.024**	0.012 U	**0.0064 J**	**0.050**	0.023 U	0.013 U
Benzo(g,h,i)perylene	180	250	NE	1.1	0.012 U	**0.094 J**	**0.0034 J**	**0.22**	0.013 U	0.011 U	**0.0098 J**	**0.019 J**	0.012 U	**0.0034 J**	**0.018 J**	0.012 U	0.013 U
Benzo(k)fluoranthene	11	16	NE	1.1	0.012 U	**0.073 J**	0.012 U	**0.18**	0.013 U	**0.0056 J**	**0.010 J**	**0.014 J**	0.012 U	**0.0051 J**	0.023 U	0.012 U	0.013 U
Chrysene	110	160	NE	1.1	**0.0041 J**	**0.098 J**	**0.0025 J**	**0.54**	0.013 U	0.011 U	**0.014 J**	**0.019 J**	0.012 U	**0.0030 J**	**0.035**	**0.0044 J**	0.013 U
Dibenz(a,h)anthracene	0.11	0.16	0.32	1.1	0.012 U	**0.032 J**	0.012 U	**0.085**	0.013 U	0.011 U	0.011 U	**0.0044 J**	0.012 U	0.012 U	**0.0064 J**	0.012 U	0.013 U
Fluoranthene	240	330	NE	1.1	**0.0047 J**	**0.11**	**0.0027 J**	**0.50**	**0.0071 J**	**0.0060 J**	**0.020 J**	**0.033**	0.012 U	**0.0078 J**	**0.052**	**0.010 J**	0.013 U
Fluorene	240	330	NE	29	0.012 U	**0.0063 J**	0.012 U	**0.027**	0.013 U	0.011 U	0.011 U	**0.0045 J**	0.012 U	**0.0076 J**	0.011 U	0.012 U	0.013 U
Indeno(1,2,3-c,d)pyrene	1.1	1.6	0.4	1.1	0.012 U	**0.072 J**	**0.0028 J**	**0.17**	0.013 U	**0.0034 J**	**0.010 J**	**0.019 J**	0.012 U	**0.0051 J**	**0.014 J**	0.012 U	0.013 U
Naphthalene	3.8	2.9	0.11	29	0.012 U	0.012 U	0.012 U	0.011 U	0.013 U	0.011 U	**0.014 J**	**0.013 J**	0.012 U	**0.026**	0.011 U	0.012 U	0.013 U
Phenanthrene	180	250	NE	29	**0.0039 J**	**0.038**	**0.0026 J**	**0.36**	**0.010 J**	**0.0032 J**	**0.014 J**	**0.029**	0.012 U	**0.0098 J**	**0.024**	**0.014 J**	0.013 U
Pyrene	180	250	NE	1.1	**0.0047 J**	**0.076**	0.012 U	**1.1 J**	0.013 UJ	0.011 UJ	**0.012 J**	**0.029**	0.012 U	0.012 U	**0.038**	0.023 U	0.013 U
MassDEP EPH (ug/g)																	
2-Methylnaphthalene	24	33	NE	29	**0.031 J**	0.12 U	0.12 U	0.11 U	0.12 U	0.10 U	**0.052 J**	**0.030 J**	0.12 U	0.12 U	0.12 U	0.11 U	0.13 U
Acenaphthene	360	490	NE	29	0.12 U	0.12 U	0.12 U	0.11 U	0.12 U	0.10 U	0.11 U	0.12 U	0.12 U	0.12 U	0.12 U	0.11 U	0.13 U
Acenaphthylene	180	490	NE	29	0.12 U	0.12 U	0.12 U	0.11 U	0.12 U	0.10 U	0.11 U	0.12 U	0.12 U	0.12 U	0.12 U	0.11 U	0.13 U
Anthracene	1800	250	NE	29	0.12 U	0.12 U	0.12 U	0.11 U	0.12 U	0.10 U	0.11 U	0.12 U	0.12 U	0.12 U	0.12 U	0.11 U	0.13 U
Benzo(a)anthracene	1.1	1.6	0.86	1.1	0.12 U	0.12 U	0.12 U	**0.36**	0.12 U	0.10 U	0.11 U	0.12 U	0.12 U	0.12 U	0.12 U	0.11 U	0.13 U
Benzo(a)pyrene	0.11	0.16	1.5	1.1	0.12 U	0.12 U	0.12 U	**0.48**	0.12 U	0.10 U	0.11 U	0.12 U	0.12 U	0.12 U	0.12 U	0.11 U	0.13 U
Benzo(b)fluoranthene	1.1	1.6	1.3	1.1	0.12 U	**0.071 J**	0.12 U	**0.45**	0.12 U	0.10 U	0.11 U	0.12 U	0.12 U	0.12 U	0.12 U	0.11 U	0.13 U
Benzo(g,h,i)perylene	180	250	NE	1.1	0.12 U	**0.070 J**	0.12 U	**0.30**	0.12 U	0.10 U	0.11 U	0.12 U	0.12 U	0.12 U	0.12 U	0.11 U	0.13 U
Benzo(k)fluoranthene	11	16	NE	1.1	0.12 U	**0.075 J**	0.12 U	**0.46**	0.12 U	0.10 U	0.11 U	0.12 U	0.12 U	0.12 U	0.12 U	0.11 U	0.13 U
Chrysene	110	160	NE	1.1	0.12 U	0.12 U	0.12 U	**0.47**	0.12 U	0.10 U	0.11 U	0.12 U	0.12 U	0.12 U	0.12 U	0.11 U	0.13 U
Dibenz(a,h)anthracene	0.11	0.16	0.32	1.1	0.12 U	0.12 U	0.12 U	**0.067 J**	0.12 U	0.10 U	0.11 U	0.12 U	0.12 U	0.12 U	0.12 U	0.11 U	0.13 U
Fluoranthene	240	330	NE	1.1	0.12 U	0.12 U	0.12 U	**0.66**	0.12 U	0.10 U	0.11 U	0.12 U	0.12 U	0.12 U	0.12 U	0.11 U	0.13 U
Fluorene	240	330	NE	29	0.12 U	0.12 U	0.12 U	0.11 U	0.12 U	0.10 U	0.11 U	0.12 U	0.12 U	0.12 U	0.12 U	0.11 U	0.13 U
Indeno(1,2,3-c,d)pyrene	1.1	1.6	0.4	1.1	0.12 U	0.12 U	0.12 U	**0.24**	0.12 U	0.10 U	0.11 U	0.12 U	0.12 U	0.12 U	0.12 U	0.11 U	0.13 U
Naphthalene	3.8	2.9	0.11	29	0.12 U	0.12 U	0.12 U	0.11 U	0.12 U	0.10 U	0.11 U	0.12 U	0.12 U	0.12 U	0.12 U	0.11 U	0.13 U
Phenanthrene	180	250	NE	29	0.12 U	0.12 U	0.12 U	**0.24**	0.12 U	0.10 U	0.11 U	0.12 U	0.12 U	0.12 U	0.12 U	0.11 U	0.13 U
Pyrene	180	250	NE	1.1	0.12 U	0.12 U	0.12 U	**0.63**	0.12 U	0.10 U	0.11 U	0.12 U	0.12 U	0.12 U	0.12 U	0.11 U	0.13 U
C11-C22 Aromatic	NE	260	NE	NE	23 U	23 U	**13 J**	**32**	**8.0 J**	5.3 U	**30**	**27**	**6.2 J**	**11 J**	**11 J**	5.9 U	6.5 UJ
C11-C22 Extractable Petroleum Hydrocarbons, Aromatic (Unadjusted)	NE	100000	NE	NE	23 U	23 U	**13 J**	**37**	**8.0 J**	5.3 U	**30**	**27**	**6.2 J**	**11 J**	**11 J**	5.9 U	6.5 UJ
C19-C36 Aliphatic	NE	10000	NE	NE	23 U	**4.2 J**	**3.6 J**	**9.5 J**	**5.2 J**	**2.7 J**	**12 J**	**8.7 J**	**5.1 J**	**7.8 J**	**6.6 J**	**3.2 J**	8.7 UJ
C9-C18 Aliphatic	NE	250	NE	NE	**1.8 J**	23 U	**1.9 J**	22 U	24 U	21 U	**100**	**96**	24 UJ	**31**	**1.6 J**	**1.5 J**	**1.4 J**
MassDEP VPH (ug/g)																	
Benzene	1.2	1.7	NE	NE	0.041 U	0.038 U	0.048 U	0.039 U	0.038 U	0.030 U	0.037 U	0.034 U	0.033 U	0.040 U	0.054 U	0.027 U	0.049 U
Ethylbenzene	5.8	8.6	NE	NE	0.041 U	0.038 U	0.048 U	0.039 U	0.038 U	0.030 U	0.037 U	0.034 U	0.033 U	0.040 U	0.054 U	0.027 U	0.049 U
m,p-Xylene	55	26	NE	NE	0.082 U	0.077 U	0.095 U	0.079 U	0.076 U	0.060 U	0.074 U	0.068 U	0.067 U	0.081 U	0.11 U	0.055 U	0.097 U
Methyl tert-butyl ether (MTBE)	47	69	NE	NE	0.041 U	0.038 U	0.048 U	0.039 U	0.038 U	0.030 U	0.037 U	0.034 U	0.033 U	0.040 U	0.054 U	0.027 U	0.049 U
Naphthalene	3.8	2.9	NE	NE	0.041 U	0.038 U	0.048 U	0.039 U	0.038 U	0.030 U	**0.024 J**	0.034 U	0.033 U	0.040 U	0.054 U	0.027 U	0.049 U
o-Xylene	65	26	NE	NE	0.10 U	0.038 U	0.048 U	0.039 U	0.038 U	0.030 U	0.037 U	0.034 U	0.033 U	0.040 U	0.054 U	0.027 U	0.049 U
Toluene	490	75	NE	NE	0.041 U	0.038 U	0.048 U	0.039 U	0.038 U	0.030 U	0.037 U	0.034 U	0.033 U	0.040 U	0.054 U	0.027 U	0.049 U
C5-C8 Aliphatic	NE	43	NE	NE	4.9 U	4.6 U	5.7 U	4.7 U	4.6 U	3.6 U	4.6 U	4.1 U	4.0 U	4.9 U	6.5 U	3.3 U	5.8 U
C9-C10 Aromatic	NE	66	NE	NE	1.5 U	1.4 U	1.8 U	1.5 U	1.4 U	3.8 U	**15 J**	**7.1**	1.3 U	5.1 U	2.0 U	1.0 U	1.8 U
C9-C12 Aliphatic	NE	230	NE	NE	4.9 U	4.6 U	5.7 U	4.7 U	4.6 U	3.6 U	**22 J**	**6.9 J**	4.0 U	4.9 U	6.5 U	3.3 U	5.8 U
Metals SW6020A/7471B (ug/g)																	
Aluminum	7700	2700	NE	NE	**18000 J**	**10000**	**16000**	**13000**	**9500**	**7100**	**6000**	**9900**	**15000**	**16000**	**8800**	**13000**	**16000**
Antimony	3.1	4.3	NE	0.27	**0.51 J**	0.60 U	0.60 U	0.60 U	0.60 U	0.50 U	**15**	**11**	0.60 U	**1.2**	0.60 U	0.60 U	0.70 U
Arsenic	0.68	0.93	16.4	9.9	**13**	**6.9**	**8.2**	**6.0**	**7.9**	**6.8**	**7.6 J**	**20 J**	**5.8**	**9.8**	**11**	**8.8**	**8.6**
Barium	1500	210	469	283	**38**	**27**	**24**	**27**	**27**	**14**	**29**	**37**	**27**	**40**	**37**	**24**	**29**
Beryllium	16	11	2.4	10	**0.68**	**0.20 J**	0.60 U	0.60 U	0.60 U	0.50 U	0.50 U	**0.45 J**	0.60 U	**0.56 J**	**0.11 J**	**0.31 J**	**0.35 J**
Cadmium	7.1	4.2	0.26	0.36	**0.094 J**	0.056 U	0.60 U	0.60 U	0.60 U	0.50 U	**1.0**	**0.65**	0.60 U	0.60 U	0.063 U	0.057 U	0.065 U
Chromium	0.3[5]/12000	0.42[5]/2,700	79	0.4	**34**	**24**	**28**	**25**	**30**	**15**	**16**	**22**	**29**	**30**	**18**	**26**	**32**
Cobalt	2.3	3.2	14.9	13	**14**	**9.2**	**11**	**8.9**	**12**	**7.3**	**6.9**	**12**	**11**	**12**	**8.5**	**11**	**16**
Copper	310	340	23	28	**19**	**11**	**16**	**11**	**18**	**12**	**57**	**63**	**13**	**17**	**14**	**14**	**19**
Iron	5500	7500	SSS	NE	**29000 J**	**18000**	**29000**	**22000**	**17000**	**17000**	**16000 J**	**27000 J**	**24000**	**26000**	**22000**	**23000**	**29000**
Lead	400	14	32	11	**12**	**9.6 J**	**9.5**	**12**	**6.2**	**7.4**	**180**	**170**	**10**	**33**	**18**	**11**	**14**
Magnesium	NE	NE	NE	NE	**7500**	**3900**	**7300**	**4500**	**7700**	**4800**	**2700**	**3300**	**5500**	**6200**	**2700**	**5100**	**7400**
Manganese	180	28	841	220	**520**	**520**	**430**	**410**	**560**	**390**	**530**	**420**	**340**	**400**	**1500**	**350**	**870**
Mercury	1.1	0.31	0.123	0.00051	0.083 UJ	0.083 U	0.083 U	0.077 U	0.087 U	0.076 U	**0.058 J**	**0.098 J**	0.080 U	0.088 U	**0.041 J**	0.078 U	0.087 U
Nickel	150	99	39	30	**39**	**23**	**32**	**24**	**35**	**21**	**19**	**21**	**30**	**33**	**24**	**27**	**41**
Potassium	NE	NE	NE	NE	**2600**	**800 J**	**2200**	**1200**	**2200**	**790**	**500**	**710**	**1200**	**2000**	**500**	**910**	**2300**
Selenium	39	54	0.61	0.21	**4.3 J**	6.0 UJ	**0.94 J**	**0.68 J**	**0.56 J**	**0.50 J**	**0.39 J**	6.0 U	**0.53 J**	6.0 U	6.0 U	6.0 U	7.0 U
Silver	39	54	SSS	2	2.7 U	0.28 U	3.2 U	2.8 U	3.0 U	2.6 U	2.5 U	2.9 U	2.9 U	3.0 U	0.32 U	0.29 U	**0.014 J**
Sodium	NE	NE	NE	NE	**2300**	**89**	**230**	**130**	**150**	**130**	**59**	58 U	**130**	**160**	63 U	**96**	**140**
Thallium	0.078	0.11	0.6	1	**0.24 J**	0.60 U	0.60 U	0.60 U	0.60 U	0.26 U	0.25 U	**0.44 J**	**0.052 J**	**0.098 J**	0.60 U	0.60 U	0.70 U
Vanadium	39	49	103	2	**31**	**17**	**24**	**20**	**24**	**8.9**	**9.6 J**	**22 J**	**23**	**26**	**15**	**24**	**26**
Zinc	2300	3200	101	8.5	**52**	**31**	**49**	**40**	**50**	**26**	**74**	**80**	**40**	**50**	**38**	**38**	**59**

Table 4-1
Summary of Discrete Soil Sample Analytical Results
Former Dow Salvage Yard
233 Odlin Road, Bangor, Maine

Analytes	RSL[1]	RAG[2]	Background[3]	Ecological[4]	Locations:	SY-SB5		SY-SB6			SY-SB7				SY-SB8		
					Field Sample ID:	SY-SB5-1	SY-SB5-2	SY-SB6-1	SY-SB6-2	SY-SB6-3	SY-SB7-1	SY-SB7-10	SY-SB7-2	SY-SB7-3	SY-SB8-1	SY-SB8-2	SY-SB8-3
					Matrix:	S	S	S	S	S	S		S	S	S	S	S
					Sample Begin Depth:	0.5	18	0.5	18.5	26.5	0.5		0	0	0.5	2	10
					Sample End Depth:	2	20	2	20	27.5	2		0	0	2	4	12
					Sample Date:	10/24/2019	10/24/2019	10/24/2019	10/24/2019	10/24/2019	10/29/2019		10/29/2019	10/29/2019	10/22/2019	10/22/2019	10/22/2019
Hex Chromium SW7196A (mg/kg)																	
Chromium, Hexavalent	0.3	0.42	NE	0.4	**0.32 J**	**0.49 J**	0.36 U	0.78 U	0.36 U	0.51 U	0.76 U	**0.52 J**	0.36 U	0.75 U	0.70 U	**0.19 J**	**0.21 J**
PCBs SW8082A (ug/g)																	
PCB-1016 (Aroclor 1016)	0.41	0.31	NE	NE	0.095 U	0.016 U	0.017 U	0.014 U	0.015 U	0.013 U	0.014 U	0.015 U	0.013 U	0.015 U	0.016 U	0.015 U	0.016 U
PCB-1221 (Aroclor 1221	0.2	0.31	NE	NE	0.095 U	0.016 U	0.017 U	0.014 U	0.015 U	0.013 U	0.014 U	0.015 U	0.013 U	0.015 U	0.016 U	0.015 U	0.016 U
PCB-1232 (Aroclor 1232	0.17	0.31	NE	NE	0.095 U	0.016 U	0.017 U	0.014 U	0.015 U	0.013 U	0.014 U	0.015 U	0.013 U	0.015 U	0.016 U	0.015 U	0.016 U
PCB-1242 (Aroclor 1242	0.23	0.31	NE	NE	0.095 U	0.016 U	0.017 U	0.014 U	0.015 U	0.013 U	0.014 U	0.015 U	0.013 U	0.015 U	0.016 U	0.015 U	0.016 U
PCB-1248 (Aroclor 1248)	0.23	0.31	NE	NE	0.095 U	0.016 U	0.017 U	0.014 U	0.015 U	0.013 U	0.014 U	0.015 U	0.013 U	0.015 U	0.016 U	0.015 U	0.016 U
PCB-1254 (Aroclor 1254)	0.12	0.31	NE	NE	0.095 U	0.016 U	0.017 U	0.014 U	0.015 U	0.013 U	**0.047**	**0.066**	0.013 U	0.015 U	0.016 U	0.015 U	0.016 U
PCB-1260 (Aroclor 1260)	0.24	0.31	NE	NE	0.095 U	0.016 U	0.017 U	0.014 U	0.015 U	0.013 U	**0.017 J**	0.015 U	0.013 U	0.015 U	0.016 U	0.015 U	0.016 U
VOCs SW8260D (ug/g)																	
1,1,1,2-Tetrachloroethane	2	3	NE	NE	0.025 U	0.024 UJ	0.030 U	0.025 U	0.024 U	0.019 U	0.023 U	0.021 U	0.021 U	0.025 U	0.034 U	0.017 U	0.030 U
1,1,1-Trichloroethane	810	64	NE	NE	0.025 U	0.024 UJ	0.030 U	0.025 U	0.024 U	0.019 U	0.023 U	0.021 U	0.021 U	0.025 U	0.034 U	0.017 U	0.030 U
1,1,2,2-Tetrachloroethane	0.3	0.89	NE	NE	0.025 U	0.024 U	0.030 U	0.025 U	0.024 U	0.019 U	0.023 U	0.021 U	0.021 U	0.025 U	0.034 U	0.017 U	0.030 U
1,1,2-Trichloroethane	0.15	0.22	NE	NE	0.025 U	0.024 U	0.030 U	0.025 U	0.024 U	0.019 U	0.023 U	0.021 U	0.021 U	0.025 U	0.034 U	0.017 U	0.030 U
1,1-Dichloroethane	3.6	5.3	NE	NE	0.025 U	0.024 UJ	0.030 U	0.025 U	0.024 U	0.019 U	0.023 U	0.021 U	0.021 U	0.025 U	0.034 U	0.017 U	0.030 U
1,1-Dichloroethene	23	8.1	NE	NE	0.025 U	0.024 UJ	0.030 U	0.025 U	0.024 U	0.019 U	0.023 U	0.021 U	0.021 U	0.025 U	0.034 U	0.017 U	0.030 U
1,1-Dichloropropene	NE	NE	NE	NE	0.025 U	0.024 UJ	0.030 U	0.025 U	0.024 U	0.019 U	0.023 U	0.021 U	0.021 U	0.025 U	0.034 U	0.017 U	0.030 U
1,2,3-Trichlorobenzene	6.3	8.6	NE	NE	0.025 U	0.024 U	0.030 U	0.025 U	0.024 U	0.019 U	0.023 U	0.021 U	0.021 U	0.025 U	0.034 U	0.017 U	0.030 U
1,2,3-Trichloropropane	0.0051	0.07	NE	NE	0.025 U	0.024 U	0.030 U	0.025 U	0.024 U	0.019 U	0.023 U	0.021 U	0.021 U	0.025 U	0.034 U	0.017 U	0.030 U
1,2,4-Trichlorobenzene	5.8	8.6	NE	NE	0.025 U	0.024 U	0.030 U	0.025 U	0.024 U	0.019 U	0.023 U	0.021 U	0.021 U	0.025 U	0.034 U	0.017 U	0.030 U
1,2,4-Trimethylbenzene	30	18	NE	NE	0.025 U	0.024 U	**0.020 J**	0.025 U	0.024 U	0.019 U	**0.028 J**	0.021 U	0.021 U	0.025 U	0.034 U	0.017 U	0.030 U
1,2-Dibromo-3-chloropropane	0.0053	0.0078	NE	NE	0.051 U	0.048 U	0.059 U	0.049 U	0.048 U	0.038 U	0.046 U	0.043 U	0.042 U	0.051 U	0.068 U	0.034 U	0.061 U
1,2-Dibromoethane (EDB)	0.036	0.054	NE	NE	0.025 U	0.024 UJ	0.030 U	0.025 U	0.024 U	0.019 U	0.023 U	0.021 U	0.021 U	0.025 U	0.034 U	0.017 U	0.030 U
1,2-Dichlorobenzene	180	36	NE	NE	0.025 U	0.024 U	0.030 U	0.025 U	0.024 U	0.019 U	0.023 U	0.021 U	0.021 U	0.025 U	0.034 U	0.017 U	0.030 U
1,2-Dichloroethane	0.46	0.68	NE	NE	0.025 U	0.024 U	0.030 U	0.025 U	0.024 U	0.019 U	0.023 U	0.021 U	0.021 U	0.025 U	0.034 U	0.017 U	0.030 U
1,2-Dichloropropane	1.6	2.3	NE	NE	0.025 U	0.024 U	0.030 U	0.025 U	0.024 U	0.019 U	0.023 U	0.021 U	0.021 U	0.025 U	0.034 U	0.017 U	0.030 U
1,3,5-Trimethylbenzene	27	16	NE	NE	0.025 U	0.024 U	0.030 U	0.025 U	0.024 U	0.019 U	**0.056 J**	0.021 U	0.021 U	**0.024 J**	0.034 U	0.017 U	0.030 U
1,3-Dichlorobenzene	NE	29	NE	NE	0.025 U	0.024 U	0.030 U	0.025 U	0.024 U	0.019 U	0.023 U	0.021 U	0.021 U	0.025 U	0.034 U	0.017 U	0.030 U
1,3-Dichloropropane	160	210	NE	NE	0.025 U	0.024 U	0.030 U	0.025 U	0.024 U	0.019 U	0.023 U	0.021 U	0.021 U	0.025 U	0.034 U	0.017 U	0.030 U
1,4-Dichlorobenzene	2.6	3.9	NE	NE	0.025 U	0.024 U	0.030 U	0.025 U	0.024 U	0.019 U	0.023 U	0.021 U	0.021 U	0.025 U	0.034 U	0.017 U	0.030 U
1,4-Dioxane (p-Dioxane)	5.3	0.74	NE	NE	2.0 U	1.9 U	2.4 U	2.0 U	1.9 U	1.5 U	1.8 U	1.7 U	1.7 U	2.0 U	2.7 U	1.4 U	2.4 U
2,2-Dichloropropane	NE	NE	NE	NE	0.025 U	0.024 UJ	0.030 U	0.025 U	0.024 U	0.019 U	0.023 U	0.021 U	0.021 U	0.025 U	0.034 U	0.017 U	0.030 U
2-Butanone (MEK)	2700	1100	NE	NE	0.20 U	0.19 U	0.24 U	0.20 U	0.19 U	0.15 U	0.18 U	0.17 U	0.17 U	0.20 U	0.27 U	0.14 U	0.24 U
2-Chlorotoluene	160	80	NE	NE	0.025 U	0.024 U	0.030 U	0.025 U	0.024 U	0.019 U	0.023 U	0.021 U	0.021 U	0.025 U	0.034 U	0.017 U	0.030 U
2-Hexanone	20	29	NE	NE	0.051 U	0.048 U	0.059 U	0.049 U	0.048 U	0.038 U	0.046 U	0.043 U	0.042 U	0.051 U	0.068 U	0.034 U	0.061 U
4-Chlorotoluene	160	210	NE	NE	0.025 U	0.024 U	0.030 U	0.025 U	0.024 U	0.019 U	0.023 U	0.021 U	0.021 U	0.025 U	0.034 U	0.017 U	0.030 U
4-Methyl-2-pentanone (MIBK)	5400	330	NE	NE	0.025 U	0.024 U	0.030 U	0.025 U	0.024 U	0.019 U	0.023 U	0.021 U	0.021 U	0.025 U	0.034 U	0.017 U	0.030 U
Acetone	6100	5200	NE	NE	0.20 U	0.19 U	0.24 U	0.20 U	0.19 U	0.15 U	0.18 U	0.17 U	0.17 U	0.20 U	3.4 U	0.14 U	0.24 U
Benzene	1.2	1.7	NE	NE	0.025 U	0.024 UJ	0.030 U	0.025 U	0.024 U	0.019 U	0.023 U	0.021 U	0.021 U	0.025 U	0.034 U	0.017 U	0.030 U
Bromobenzene	29	38	NE	NE	0.025 U	0.024 U	0.030 U	0.025 U	0.024 U	0.019 U	0.023 U	0.021 U	0.021 U	0.025 U	0.034 U	0.017 U	0.030 U
Bromochloromethane	15	22	NE	NE	0.025 U	0.024 UJ	0.030 U	0.025 U	0.024 U	0.019 U	0.023 U	0.021 U	0.021 U	0.025 U	0.034 U	0.017 U	0.030 U
Bromodichloromethane	0.29	0.44	NE	NE	0.025 U	0.024 UJ	0.030 U	0.025 U	0.024 U	0.019 U	0.023 U	0.021 U	0.021 U	0.025 U	0.034 U	0.017 U	0.030 U
Bromoform	19	28	NE	NE	0.025 U	0.024 UJ	0.030 U	0.025 U	0.024 U	0.019 U	0.023 U	0.021 U	0.021 U	0.025 U	0.034 U	0.017 U	0.030 U
Bromomethane	0.68	1	NE	NE	0.10 U	0.096 UJ	0.12 U	0.099 U	0.096 U	0.075 U	0.092 U	0.085 U	0.084 U	0.10 U	0.14 U	0.069 U	0.12 U
Carbon disulfide	77	69	NE	NE	0.025 U	R	0.030 U	0.025 U	0.024 U	0.019 U	0.023 U	0.021 U	0.021 U	0.025 U	0.034 U	0.017 U	0.030 U
Carbon tetrachloride	0.65	0.97	NE	NE	0.025 U	0.024 UJ	0.030 U	0.025 U	0.024 U	0.019 U	0.023 U	0.021 U	0.021 U	0.025 U	0.034 U	0.017 U	0.030 U
Chlorobenzene	28	41	NE	40	0.025 U	0.024 UJ	0.030 U	0.025 U	0.024 U	0.019 U	0.023 U	0.021 U	0.021 U	0.025 U	0.034 U	0.017 U	0.030 U
Chloroethane	1400	200	NE	NE	0.025 U	0.024 UJ	0.030 U	0.025 U	0.024 U	0.019 U	0.023 U	0.021 U	0.021 U	0.025 U	0.034 U	0.017 U	0.030 U
Chloroform	0.32	0.47	NE	NE	0.025 U	0.024 U	0.030 U	0.025 U	0.024 U	0.019 U	0.023 U	0.021 U	0.021 U	0.025 U	0.034 U	0.017 U	0.030 U
Chloromethane	11	16	NE	NE	0.025 U	0.024 UJ	0.030 U	0.025 U	0.024 U	0.019 U	0.023 U	0.021 U	0.021 U	0.025 U	0.034 U	0.017 U	0.030 U
cis-1,2-Dichloroethene	16	20	NE	NE	0.025 U	0.024 UJ	0.030 U	0.025 U	0.024 U	0.019 U	0.023 U	0.021 U	0.021 U	0.025 U	0.034 U	0.017 U	0.030 U
cis-1,3-Dichloropropene	1.8	2.7	NE	NE	0.025 U	0.024 UJ	0.030 U	0.025 U	0.024 U	0.019 U	0.023 U	0.021 U	0.021 U	0.025 U	0.034 U	0.017 U	0.030 U
Dibromochloromethane	8.3	11	NE	NE	0.025 U	0.024 UJ	0.030 U	0.025 U	0.024 U	0.019 U	0.023 U	0.021 U	0.021 U	0.025 U	0.034 U	0.017 U	0.030 U
Dibromomethane	2.4	3.5	NE	NE	0.025 U	0.024 U	0.030 U	0.025 U	0.024 U	0.019 U	0.023 U	0.021 U	0.021 U	0.025 U	0.034 U	0.017 U	0.030 U
Dichlorodifluoromethane	8.7	13	NE	NE	0.025 U	R	0.030 U	0.025 U	0.024 U	0.019 U	0.023 U	0.021 U	0.021 U	0.025 U	0.034 U	0.017 U	0.030 U
Diethyl ether (Ethyl ether)	1600	81	NE	NE	0.025 U	0.024 U	0.030 U	0.025 U	0.024 U	0.019 U	0.023 U	0.021 U	0.021 U	0.025 U	0.034 U	0.017 U	0.030 U
Ethylbenzene	5.8	8.6	NE	NE	0.025 UJ	0.024 UJ	0.030 U	0.025 U	0.024 U	0.019 U	0.023 U	0.021 U	0.021 U	0.025 U	0.034 U	0.017 U	0.030 U
Hexachlorobutadiene	1.2	1.5	NE	NE	0.025 U	0.048 U	0.059 U	0.049 U	0.048 U	0.038 U	0.046 U	0.043 U	0.042 U	0.051 U	0.068 U	0.034 U	0.061 U
Isopropylbenzene (Cumene)	190	26	NE	NE	0.051 U	0.024 U	0.030 U	0.025 U	0.024 U	0.019 U	0.023 U	0.021 U	0.021 U	0.025 U	0.034 U	0.017 U	0.030 U
m,p-Xylene	55	26	NE	NE	0.051 U	0.048 UJ	0.059 U	0.049 U	0.048 U	0.038 U	0.046 U	0.043 U	0.042 U	0.051 U	0.068 U	0.034 U	0.061 U
Methyl tert-butyl ether (MTBE)	47	69	NE	NE	0.025 UJ	0.024 U	0.030 U	0.025 U	0.024 U	0.019 U	0.023 U	0.021 U	0.021 U	0.025 U	0.034 U	0.017 U	0.030 U
Methylene chloride	35	49	NE	NE	0.025 U	0.024 U	0.030 U	0.025 U	0.024 U	0.019 U	0.023 U	0.021 U	0.021 U	0.025 U	0.034 U	0.017 U	0.030 U
Naphthalene	3.8	2.9	NE	NE	0.025 U	0.024 U	0.030 U	0.099 U	0.024 U	0.075 U	**0.040 J**	**0.020 J**	0.021 U	**0.023 J**	0.034 U	0.017 U	0.030 U
n-Butylbenzene	390	540	NE	NE	0.025 U	0.024 U	0.030 U	0.025 U	0.024 U	0.019 U	0.023 U	0.021 U	0.021 U	0.025 U	0.034 U	0.017 U	0.030 U
n-Propylbenzene	380	26	NE	NE	0.025 U	0.024 UJ	0.030 U	0.025 U	0.024 U	0.019 U	**0.014 J**	0.021 U	0.021 U	0.025 U	0.034 U	0.017 U	0.030 U
o-Xylene	65	26	NE	NE	0.025 U	0.024 UJ	0.030 U	0.025 U	0.024 U	0.019 U	0.023 U	0.021 U	0.021 U	0.025 U	0.034 U	0.017 U	0.030 U
p-Cymene (p-Isopropyltoluene)	NE	NE	NE	NE	0.025 U	0.024 U	0.030 U	0.025 U	0.024 U	0.019 U	**0.020 J**	0.021 U	0.021 U	0.025 U	0.034 U	0.017 U	0.030 U
sec-Butylbenzene	780	1100	NE	NE	0.025 U	0.024 U	0.030 U	0.025 U	0.024 U	0.019 U	**0.016 J**	0.021 U	0.021 U	0.025 U	0.034 U	0.017 U	0.030 U

Table 4-1
Summary of Discrete Soil Sample Analytical Results
Former Dow Salvage Yard
233 Odlin Road, Bangor, Maine

Analytes	RSL[1]	RAG[2]	Background[3]	Ecological[4]	Locations:	SY-SB5		SY-SB6			SY-SB7				SY-SB8		
					Field Sample ID:	SY-SB5-1	SY-SB5-2	SY-SB6-1	SY-SB6-2	SY-SB6-3	SY-SB7-1	SY-SB7-10	SY-SB7-2	SY-SB7-3	SY-SB8-1	SY-SB8-2	SY-SB8-3
					Matrix:	S	S	S	S	S	S		S	S	S	S	S
					Sample Begin Depth:	0.5	18	0.5	18.5	26.5	0.5		0	0	0.5	2	10
					Sample End Depth:	2	20	2	20	27.5	2		0	0	2	4	12
					Sample Date:	10/24/2019	10/24/2019	10/24/2019	10/24/2019	10/24/2019	10/29/2019		10/29/2019	10/29/2019	10/22/2019	10/22/2019	10/22/2019
Styrene	600	83	NE	300	0.025 U	0.024 UJ	0.030 U	0.025 U	0.024 U	0.019 U	0.023 U	0.021 U	0.021 U	0.025 U	0.034 U	0.017 U	0.030 U
tert-Amyl methyl ether	NE	NE	NE	NE	0.025 UJ	0.024 U	0.030 U	0.025 U	0.024 U	0.019 U	0.023 U	0.021 U	0.021 U	0.025 U	0.034 U	0.017 U	0.030 U
tert-Butyl alcohol	NE	NE	NE	NE	0.25 U	0.24 U	0.30 U	0.25 U	0.24 U	0.19 U	0.23 U	0.21 U	0.21 U	0.25 U	0.34 U	0.17 U	0.30 U
tert-Butyl ethyl ether	NE	NE	NE	NE	0.025 U	0.024 U	0.030 U	0.025 U	0.024 U	0.019 U	0.023 U	0.021 U	0.021 U	0.025 U	0.034 U	0.017 U	0.030 U
tert-Butylbenzene	780	1100	NE	NE	0.025 U	0.024 U	0.030 U	0.025 U	0.024 U	0.019 U	0.023 U	0.021 U	0.021 U	0.025 U	0.034 U	0.017 U	0.030 U
Tetrachloroethene (PCE)	8.1	8.5	NE	NE	0.025 U	0.024 UJ	0.030 U	0.025 U	0.024 U	0.019 U	0.023 U	0.021 U	0.021 U	0.025 U	0.034 U	0.017 U	0.030 U
Tetrahydrofuran	1800	2700	NE	NE	0.20 U	0.19 U	0.24 U	0.20 U	0.19 U	0.15 U	0.18 U	0.17 U	0.17 U	0.20 U	0.27 U	0.14 U	0.24 U
Toluene	490	75	NE	200	**0.011 J**	0.024 UJ	0.030 U	0.025 U	0.024 U	0.019 U	0.023 U	0.021 U	0.021 U	0.025 U	0.034 U	0.017 U	0.030 U
trans-1,2-Dichloroethene	160	10	NE	NE	0.025 U	0.024 UJ	0.030 U	0.025 U	0.024 U	0.019 U	0.023 U	0.021 U	0.021 U	0.025 U	0.034 U	0.017 U	0.030 U
trans-1,3-Dichloropropene	1.8	2.7	NE	NE	0.025 U	0.024 U	0.030 U	0.025 U	0.024 U	0.019 U	0.023 U	0.021 U	0.021 U	0.025 U	0.034 U	0.017 U	0.030 U
Trichloroethene (TCE)	0.41	0.39	NE	NE	0.025 U	0.024 UJ	0.030 U	0.025 U	0.024 U	0.019 U	0.023 U	0.021 U	0.021 U	0.025 U	0.034 U	0.017 U	0.030 U
Trichlorofluoromethane	2300	94	NE	NE	0.025 U	0.024 UJ	0.030 U	0.025 U	0.024 U	0.019 U	0.023 U	0.021 U	0.021 U	0.025 U	0.034 U	0.017 U	0.030 U
Vinyl chloride	0.0059	0.064	NE	NE	0.025 U	0.024 UJ	0.030 U	0.025 U	0.024 U	0.019 U	0.023 U	0.021 U	0.021 U	0.025 U	0.034 U	0.017 U	0.030 U
SVOCs SW8270E (ug/g)																	
1,2,4-Trichlorobenzene	5.8	8.6	NE	20	0.23 U	0.23 U	0.24 U	0.23 U	0.24 U	0.21 U	0.23 U	0.22 U	0.22 U	0.25 U	0.24 U	0.23 U	0.26 U
1,2-Dichlorobenzene	180	36	NE	NE	0.11 U	0.12 U	0.12 U	0.11 U	0.12 U	0.10 U	0.12 U	0.11 U	0.11 U	0.12 U	0.12 U	0.12 U	0.13 U
1,3-Dichlorobenzene	NE	29	NE	NE	0.11 U	0.12 U	0.12 U	0.11 U	0.12 U	0.10 U	0.12 U	0.11 U	0.11 U	0.12 U	0.12 U	0.12 U	0.13 U
1,4-Dichlorobenzene	2.6	3.9	NE	20	0.11 U	0.12 U	0.12 U	0.11 U	0.12 U	0.10 U	0.12 U	0.11 U	0.11 U	0.12 U	0.12 U	0.12 U	0.13 U
2,2'-Oxybis(1-chloropropane)	310	NE	NE	NE	0.11 U	0.12 U	0.12 U	0.11 U	0.12 U	0.10 U	0.12 U	0.11 U	0.11 U	0.12 U	0.12 U	0.12 U	0.13 U
2,4,5-Trichlorophenol	630	860	NE	9	0.11 U	0.12 U	0.12 U	0.11 U	0.12 U	0.10 U	0.12 U	0.11 U	0.11 U	0.12 U	0.12 U	0.12 U	0.13 U
2,4,6-Trichlorophenol	6.3	8.6	NE	4	0.11 U	0.12 U	0.12 U	0.11 U	0.12 U	0.10 U	0.12 U	0.11 U	0.11 U	0.12 U	0.12 U	0.12 U	0.13 U
2,4-Dichlorophenol	19	26	NE	NE	0.23 U	0.23 U	0.24 U	0.23 U	0.24 U	0.21 U	0.23 U	0.22 U	0.22 U	0.25 U	0.24 U	0.23 U	0.26 U
2,4-Dimethylphenol	130	170	NE	NE	0.11 U	0.12 U	0.12 U	0.11 U	0.12 U	0.10 U	0.12 U	0.11 U	0.11 U	0.12 U	0.12 U	0.12 U	0.13 U
2,4-Dinitrophenol	13	17	NE	20	R	2.3 U	2.4 U	2.3 U	2.4 U	2.1 U	2.3 U	2.2 U	2.2 U	2.5 U	2.4 U	2.3 U	2.6 U
2,4-Dinitrotoluene	1.7	2.4	NE	NE	0.11 U	0.12 U	0.12 U	0.11 U	0.12 U	0.10 U	0.12 U	0.11 U	0.11 U	0.12 U	0.12 U	0.12 U	0.13 U
2,6-Dinitrotoluene	0.36	0.5	NE	NE	0.11 U	0.12 U	0.12 U	0.11 U	0.12 U	0.10 U	0.12 U	0.11 U	0.11 U	0.12 U	0.12 U	0.12 U	0.13 U
2-Chloronaphthalene	480	650	NE	NE	0.23 U	0.23 U	0.24 U	0.23 U	0.24 U	0.21 U	0.23 U	0.22 U	0.22 U	0.25 U	0.24 U	0.23 U	0.26 U
2-Chlorophenol	39	54	NE	NE	0.23 U	0.23 U	0.24 U	0.23 U	0.24 U	0.21 U	0.23 U	0.22 U	0.22 U	0.25 U	0.24 U	0.23 U	0.26 U
2-Methylphenol (o-Cresol)	320	430	NE	NE	0.11 U	0.12 U	0.12 U	0.11 U	0.12 U	0.10 U	0.12 U	0.11 U	0.11 U	0.12 U	0.12 U	0.12 U	0.13 U
2-Nitroaniline	63	NE	NE	NE	0.11 U	0.12 U	0.12 U	0.11 U	0.12 U	0.10 U	0.12 U	0.11 U	0.11 U	0.12 U	0.12 U	0.12 U	0.13 U
2-Nitrophenol	NE	NE	NE	NE	0.11 U	0.12 U	0.12 U	0.11 U	0.12 U	0.10 U	0.12 U	0.11 U	0.11 U	0.12 U	0.12 U	0.12 U	0.13 U
3,3'-Dichlorobenzidine	1.2	1.7	NE	NE	2.9 U	2.9 U	3.0 U	2.8 U	3.0 U	2.6 U	2.9 U	2.8 U	2.8 U	3.1 U	3.0 U	2.9 U	3.2 U
3-Nitroaniline	NE	NE	NE	NE	0.11 U	0.12 U	0.12 U	0.11 U	0.12 U	0.10 U	0.12 U	0.11 U	0.11 U	0.12 U	0.12 U	0.12 U	0.13 U
4,6-Dinitro-2-methylphenol	0.51	860	NE	NE	1.1 UJ	R	R	R	R	R	R	R	R	R	R	R	R
4-Bromophenyl phenyl ether	NE	NE	NE	NE	0.11 U	0.12 U	0.12 U	0.11 U	0.12 U	0.10 U	0.12 U	0.11 U	0.11 U	0.12 U	0.12 U	0.12 U	0.13 U
4-Chloro-3-methylphenol	630	NE	NE	NE	0.11 U	0.12 U	0.12 U	0.11 U	0.12 U	0.10 U	0.12 U	0.11 U	0.11 U	0.12 U	0.12 U	0.12 U	0.13 U
4-Chloroaniline	2.7	3.7	NE	NE	0.11 U	0.12 U	0.12 U	0.11 U	0.12 U	0.10 U	0.12 U	0.11 U	0.11 U	0.12 U	0.12 U	0.12 U	0.13 U
4-Chlorophenyl phenyl ether	NE	NE	NE	NE	0.23 U	0.23 U	0.24 U	0.23 U	0.24 U	0.21 U	0.23 U	0.22 U	0.22 U	0.25 U	0.24 U	0.23 U	0.26 U
4-Methylphenol (p-Cresol)	630	510	NE	NE	0.11 U	0.12 U	0.12 U	0.11 U	0.12 U	0.10 U	0.12 U	0.11 U	0.11 U	0.12 U	0.12 U	0.12 U	0.13 U
4-Nitroaniline	25	35	NE	NE	0.23 U	0.23 U	0.24 U	0.23 U	0.24 U	0.21 U	0.23 U	0.22 U	0.22 U	0.25 U	0.24 U	0.23 U	0.26 U
4-Nitrophenol	NE	61	NE	7	0.57 U	0.58 U	0.60 U	0.57 U	0.61 U	0.52 U	0.58 U	0.56 U	0.56 U	0.62 U	0.60 U	0.58 U	0.64 U
Aniline (Phenylamine, Aminobenzene)	44	610	NE	NE	0.11 U	0.12 UJ	0.12 U	0.11 U	0.12 U	0.10 U	0.12 U	0.11 U	0.11 U	0.12 U	0.12 U	0.12 U	0.13 U
Azobenzene	5.6	NE	NE	NE	0.11 U	0.12 U	0.12 U	0.11 U	0.12 U	0.10 U	0.12 U	0.11 U	0.11 U	0.12 U	0.12 U	0.12 U	0.13 U
Benzidine	0.00053	NE	NE	NE	2.9 UJ	R	3.0 U	2.8 U	3.0 U	2.6 U	2.9 U	2.8 U	2.8 U	3.1 U	3.0 U	2.9 U	3.2 U
Benzoic acid	25000	1100	NE	NE	5.2 UJ	5.2 U	5.4 U	5.1 U	5.5 U	4.6 U	5.2 U	5.1 U	5.0 U	5.6 U	5.4 U	5.2 U	5.7 U
Benzyl alcohol	630	860	NE	NE	0.11 U	0.12 U	0.12 U	0.11 U	0.12 U	0.10 U	0.12 U	0.11 U	0.11 U	0.12 U	0.12 U	0.12 U	0.13 U
Benzyl butyl phthalate	290	390	NE	NE	0.23 U	0.23 U	0.24 U	0.23 U	0.24 U	0.21 U	0.23 U	0.22 U	0.22 U	0.25 U	0.24 U	0.23 U	0.26 U
bis(2-Chloroethoxy) methane	19	NE	NE	NE	0.23 U	0.23 U	0.24 U	0.23 U	0.24 U	0.21 U	0.23 U	0.22 U	0.22 U	0.25 U	0.24 U	0.23 U	0.26 U
bis(2-Chloroethyl) ether	0.23	0.33	NE	NE	0.11 U	0.12 U	0.12 U	0.11 U	0.12 U	0.10 U	0.12 U	0.11 U	0.11 U	0.12 U	0.12 U	0.12 U	0.13 U
bis(2-Ethylhexyl) phthalate	39	53	NE	NE	0.29 U	0.29 U	0.30 U	0.57 U	0.30 U	0.26 U	**0.24 J**	0.28 U	0.28 U	0.31 U	0.60 U	0.58 U	0.32 U
Carbazole	NE	27	NE	NE	0.11 U	0.12 U	0.12 U	0.11 U	0.12 U	0.10 U	0.12 U	0.11 U	0.11 U	0.12 U	0.12 U	0.12 U	0.13 U
Dibenzofuran	7.3	11	NE	NE	0.057 U	0.058 U	0.060 U	0.057 U	0.061 U	0.052 U	0.058 U	0.056 U	0.056 U	0.062 U	0.060 U	0.058 U	0.064 U
Diethyl phthalate	5100	6900	NE	100	0.23 U	0.23 U	0.24 U	0.23 U	0.24 U	0.21 U	0.23 U	0.22 U	0.22 U	0.25 U	0.24 U	0.23 U	0.26 U
Dimethyl phthalate	NE	NE	NE	NE	0.23 U	0.23 U	0.24 U	0.23 U	0.24 U	0.21 U	0.23 U	0.22 U	0.22 U	0.25 U	0.24 U	0.23 U	0.26 U
Di-n-butyl phthalate	630	860	NE	200	0.23 U	0.23 U	0.24 U	0.23 U	0.24 U	0.21 U	0.23 U	0.22 U	0.22 U	0.25 U	0.24 U	0.23 U	0.26 U
di-n-Octyl phthalate	63	86	NE	NE	0.23 U	0.23 U	0.24 U	0.23 U	0.24 U	0.21 U	0.23 U	0.22 U	0.22 U	0.25 U	0.24 U	0.23 U	0.26 U
Hexachlorobenzene	0.21	0.3	NE	NE	0.11 U	0.12 U	0.12 U	0.11 U	0.12 U	0.10 U	0.12 U	0.11 U	0.11 U	0.12 U	0.12 U	0.12 U	0.13 U
Hexachlorobutadiene	1.2	1.5	NE	NE	0.11 U	0.12 U	0.12 U	0.11 U	0.12 U	0.10 U	0.12 U	0.11 U	0.11 U	0.12 U	0.12 U	0.12 U	0.13 U
Hexachlorocyclopentadiene	0.18	NE	NE	10	0.46 U	R	0.48 UJ	0.45 U	0.49 U	0.41 U	0.46 U	0.45 U	0.45 U	0.50 U	0.48 UJ	0.47 UJ	0.51 UJ
Hexachloroethane	1.8	2.7	NE	NE	0.11 U	0.12 U	0.12 U	0.11 U	0.12 U	0.10 U	0.12 U	0.11 U	0.11 U	0.12 U	0.12 U	0.12 U	0.13 U
Isophorone	570	780	NE	NE	0.23 U	0.23 U	0.24 U	0.23 U	0.24 U	0.21 U	0.23 U	0.22 U	0.22 U	0.25 U	0.24 U	0.23 U	0.26 U
Nitrobenzene	5.1	NE	NE	NE	0.11 U	0.12 U	0.12 U	0.11 U	0.12 U	0.10 U	0.12 U	0.11 U	0.11 U	0.12 U	0.12 U	0.12 U	0.13 U
N-Nitrosodimethylamine	0.002	NE	NE	NE	0.11 U	0.12 U	0.12 U	0.11 U	0.12 U	0.10 U	0.12 U	0.11 U	0.11 U	0.12 U	0.12 U	0.12 U	0.13 U
N-Nitrosodi-n-propylamine	0.078	NE	NE	NE	0.11 U	0.12 U	0.12 U	0.11 U	0.12 U	0.10 U	0.12 U	0.11 U	0.11 U	0.12 U	0.12 U	0.12 U	0.13 U
N-Nitrosodiphenylamine	110	150	NE	NE	0.11 U	0.12 U	0.12 U	0.11 U	0.12 U	0.10 U	0.12 U	0.11 U	0.11 U	0.12 U	0.12 U	0.12 U	0.13 U
Pentachlorophenol	180	1.4	NE	2.1	0.57 U	0.58 U	0.60 U	0.57 U	**0.10 J**	0.52 U	0.58 U	0.56 U	0.56 U	0.62 U	0.60 U	0.58 U	0.64 U
Phenol	1900	2600	NE	30	0.11 U	0.12 U	0.12 U	0.11 U	0.12 U	0.10 U	0.12 U	0.11 U	0.11 U	0.12 U	0.12 U	0.12 U	0.13 U
Pyridine	7.8	NE	NE	NE	0.11 U	0.12 UJ	0.12 UJ	0.11 U	0.12 U	0.10 U	0.12 U	0.11 U	0.11 U	0.12 U	0.12 UJ	0.12 UJ	0.13 UJ
TOC LYDKHN (ug/g)																	
Total Organic Carbon	NE	NE	NE	NE	**1700 J**	**10000 J**	**3000**	**6300**	**4200**	**1700**	**14000 J**	**5200 J**	**1800**	**4200**	**13000**	**1200 J**	**2200**

Table 4-1
Summary of Discrete Soil Sample Analytical Results
Former Dow Salvage Yard
233 Odlin Road, Bangor, Maine

Locations:					SY-SB9			SY-SB10			SY-SB11			SY-SB12	
Field Sample ID:					SY-SB9-1	SY-SB9-2	SY-SB9-3	SY-SB10-1	SY-SB10-2	SY-SB10-3	SY-SB11-1	SY-SB11-2	SY-SB11-3	SY-SB12-1	SY-SB12-2
Matrix:					S	S	S	S	S	S	S	S	S	S	S
Sample Begin Depth:					0.5	11	20	0.5	5	17.7	0.5	2	5	0.5	19
Sample End Depth:					2	12	22	2	7	19.7	2	4	7	2	20
Sample Date:					10/23/2019	10/23/2019	10/23/2019	10/28/2019	10/28/2019	10/28/2019	10/30/2019	10/30/2019	10/30/2019	10/30/2019	10/30/2019
Analytes	**RSL[1]**	**RAG[2]**	**Background[3]**	**Ecological[4]**											
PAH SIM (mg/kg)															
2-Methylnaphthalene	24	33	NE	29	0.012 U	0.012 U	0.011 U	0.0098 U	0.012 UJ	0.013 U	0.011 U	**0.022**	0.012 U	**0.021 J**	0.012 U
Acenaphthene	360	490	NE	29	0.012 U	**0.012 J**	0.011 U	0.0098 U	0.012 UJ	0.013 U	**0.014 J**	**0.17**	**0.0056 J**	**0.021 J**	0.012 U
Acenaphthylene	180	490	NE	29	0.012 U	0.012 U	0.011 U	0.0098 U	0.012 UJ	0.013 U	0.011 U	**0.014 J**	0.012 U	**0.067**	0.012 U
Anthracene	1800	250	NE	29	**0.022 J**	**0.028**	0.011 U	**0.0030 J**	0.012 UJ	0.013 U	**0.083**	**0.49**	**0.0071 J**	**0.072**	0.012 U
Benzo(a)anthracene	1.1	1.6	0.86	1.1	**0.23**	**0.26**	0.022 U	**0.10**	0.012 UJ	0.013 U	**0.67**	**1.8**	**0.039**	**0.79**	**0.0044 J**
Benzo(a)pyrene	0.11	0.16	1.5	1.1	**0.26**	**0.34**	0.022 U	**0.12**	0.012 UJ	0.013 U	**0.56**	**1.6**	**0.039**	**0.99**	0.012 U
Benzo(b)fluoranthene	1.1	1.6	1.3	1.1	**0.27**	**0.38**	0.022 U	**0.14**	0.012 UJ	**0.0038 J**	**0.84**	**2.4**	**0.046**	**1.1**	**0.0049 J**
Benzo(g,h,i)perylene	180	250	NE	1.1	**0.12**	**0.19**	0.011 U	**0.097**	0.012 UJ	0.013 U	**0.43**	**0.92**	**0.030**	**0.49**	0.012 U
Benzo(k)fluoranthene	11	16	NE	1.1	**0.18**	**0.21**	0.011 U	**0.058**	0.012 UJ	**0.0047 J**	**0.26**	**0.83**	**0.019 J**	**0.35**	0.012 U
Chrysene	110	160	NE	1.1	**0.30**	**0.42**	0.011 U	**0.14**	0.012 UJ	0.013 U	**0.69**	**2.0**	**0.040**	**1.1**	**0.0061 J**
Dibenz(a,h)anthracene	0.11	0.16	0.32	1.1	**0.042**	**0.057**	0.011 U	**0.034**	0.012 UJ	0.013 U	**0.14**	**0.34**	**0.0084 J**	**0.11**	0.012 U
Fluoranthene	240	330	NE	1.1	**0.37**	**0.37**	**0.0040 J**	**0.10**	0.012 UJ	**0.0032 J**	**1.0**	**3.8**	**0.071**	**1.1**	**0.0045 J**
Fluorene	240	330	NE	29	**0.0096 J**	**0.015 J**	0.011 U	0.0098 U	0.012 UJ	0.013 U	**0.019 J**	**0.22**	**0.0048 J**	**0.053**	0.012 U
Indeno(1,2,3-c,d)pyrene	1.1	1.6	0.4	1.1	**0.11**	**0.21**	0.011 U	**0.088**	0.012 U	0.013 U	**0.49**	**1.0**	**0.037**	**0.72**	0.012 U
Naphthalene	3.8	2.9	0.11	29	0.012 U	0.012 U	0.011 U	0.0098 U	0.012 UJ	0.013 U	0.011 U	**0.034**	0.012 U	**0.016 J**	**0.0036 J**
Phenanthrene	180	250	NE	29	**0.14**	**0.16**	**0.0033 J**	**0.041**	0.012 UJ	**0.0026 J**	**0.41**	**1.6**	**0.036**	**0.54**	**0.0030 J**
Pyrene	180	250	NE	1.1	**0.45**	**0.49**	0.022 U	**0.14**	0.012 UJ	0.013 U	**1.1**	**3.0**	**0.055**	**1.5**	**0.011 J**
MassDEP EPH (ug/g)															
2-Methylnaphthalene	24	33	NE	29	0.12 U	0.11 U	0.11 U	0.10 U	0.12 U	0.13 U	**0.073 J**	**0.19 J**	0.12 U	0.11 U	0.13 U
Acenaphthene	360	490	NE	29	0.12 U	0.11 U	0.11 U	0.10 U	0.12 U	0.13 U	**0.16 J**	**0.35**	0.12 U	0.11 U	0.13 U
Acenaphthylene	180	490	NE	29	0.12 U	0.11 U	0.11 U	0.10 U	0.12 U	0.13 U	0.12 U	0.11 U	0.12 U	**0.069 J**	0.13 U
Anthracene	1800	250	NE	29	0.12 U	0.11 U	0.11 U	0.10 U	0.12 U	0.13 U	**0.38**	**1.9**	0.12 U	**0.13 J**	0.13 U
Benzo(a)anthracene	1.1	1.6	0.86	1.1	**0.21 J**	**0.20 J**	0.11 U	**0.071 J**	0.12 U	0.13 U	**1.5**	**6.0**	0.12 U	**0.95**	0.13 U
Benzo(a)pyrene	0.11	0.16	1.5	1.1	**0.36**	**0.27**	0.11 U	0.10 U	0.12 U	0.13 U	**1.5**	**6.6**	0.12 U	**1.0**	0.13 U
Benzo(b)fluoranthene	1.1	1.6	1.3	1.1	**0.26**	**0.21 J**	0.11 U	**0.10 J**	0.12 U	0.13 U	**1.4**	**6.3**	0.12 U	**0.90**	0.13 U
Benzo(g,h,i)perylene	180	250	NE	1.1	**0.25**	**0.18 J**	0.11 U	**0.065 J**	0.12 U	0.13 U	**0.82**	**4.0**	0.12 U	**0.65**	0.13 U
Benzo(k)fluoranthene	11	16	NE	1.1	**0.35**	**0.23**	0.11 U	**0.079 J**	0.12 U	0.13 U	**1.5**	**5.7**	0.12 U	**0.95**	0.13 U
Chrysene	110	160	NE	1.1	**0.31**	**0.24**	0.11 U	**0.11 J**	0.12 U	0.13 U	**1.6**	**6.2**	0.12 U	**1.1**	0.13 U
Dibenz(a,h)anthracene	0.11	0.16	0.32	1.1	0.12 U	0.11 U	0.11 U	0.10 U	0.12 U	0.13 U	**0.24**	**1.3**	0.12 U	**0.15 J**	0.13 U
Fluoranthene	240	330	NE	1.1	**0.52**	**0.35**	0.11 U	**0.11 J**	0.12 U	0.13 U	**3.4**	**14**	0.12 U	**1.7**	0.13 U
Fluorene	240	330	NE	29	0.12 U	0.11 U	0.11 U	0.10 U	0.12 U	0.13 U	**0.13 J**	**0.46**	0.12 U	0.11 U	0.13 U
Indeno(1,2,3-c,d)pyrene	1.1	1.6	0.4	1.1	**0.19 J**	**0.13 J**	0.11 U	0.10 U	0.12 U	0.13 U	**0.76**	**3.8**	0.12 U	**0.54**	0.13 U
Naphthalene	3.8	2.9	0.11	29	0.12 U	0.11 U	0.11 U	0.10 U	0.12 U	0.13 U	0.12 U	**0.17 J**	0.12 U	0.11 U	0.13 U
Phenanthrene	180	250	NE	29	**0.16 J**	**0.077 J**	0.11 U	0.10 U	0.12 U	0.13 U	**1.8**	**6.5**	0.12 U	**0.54**	0.13 U
Pyrene	180	250	NE	1.1	**0.48**	**0.33**	0.11 U	**0.13 J**	0.12 U	0.13 U	**2.5**	**11**	0.12 U	**1.6**	0.13 U
C11-C22 Aromatic	NE	260	NE	NE	**37**	**24**	**10 J**	**13 J**	**6.7 J**	**6.9 J**	**60**	**150 J**	**6.8 J**	**99**	26 U
C11-C22 Extractable Petroleum Hydrocarbons, Aromatic (Unadjusted)	NE	100000	NE	NE	**41**	**26**	**10 J**	**14 J**	**6.8 J**	**6.9 J**	**78**	**230 J**	**6.8 J**	**110**	26 U
C19-C36 Aliphatic	NE	10000	NE	NE	**23 J**	**13 J**	**4.8 J**	**9.4 J**	**6.6 J**	**6.5 J**	**27**	**93 J**	**13 J**	**130**	26 U
C9-C18 Aliphatic	NE	250	NE	NE	**4.6 J**	**2.4 J**	**1.7 J**	21 U	24 U	25 U	23 U	22 UJ	24 U	23 U	26 U
MassDEP VPH (ug/g)															
Benzene	1.2	1.7	NE	NE	0.038 U	0.030 U	0.030 U	0.044 U	0.035 U	0.044 U	0.038 U	0.037 U	0.034 U	0.034 U	0.045 U
Ethylbenzene	5.8	8.6	NE	NE	0.038 U	0.030 U	0.030 U	0.044 U	0.035 U	0.044 U	0.038 U	0.037 U	0.034 U	0.034 U	0.045 U
m,p-Xylene	55	26	NE	NE	0.077 U	0.060 U	0.059 U	0.088 U	0.071 U	0.088 U	0.075 U	0.074 U	0.068 U	0.069 U	0.091 U
Methyl tert-butyl ether (MTBE)	47	69	NE	NE	0.038 U	0.030 U	0.030 U	0.044 U	0.035 U	0.044 U	0.038 U	0.037 U	0.034 U	0.034 U	0.045 U
Naphthalene	3.8	2.9	NE	NE	0.038 U	0.030 U	0.030 U	0.044 U	0.035 U	0.044 U	0.038 U	**0.035 J**	0.034 U	0.034 U	0.045 U
o-Xylene	65	26	NE	NE	0.038 U	0.030 U	0.030 U	0.044 U	0.035 U	0.044 U	0.038 U	0.037 U	0.034 U	0.034 U	0.045 U
Toluene	490	75	NE	NE	0.038 U	0.030 U	0.030 U	0.044 U	0.035 U	0.044 U	0.038 U	0.037 U	0.034 U	0.034 U	0.045 U
C5-C8 Aliphatic	NE	43	NE	NE	4.6 U	3.6 U	3.6 U	5.3 U	4.2 U	5.3 U	4.5 U	4.4 U	4.1 U	4.1 U	5.4 U
C9-C10 Aromatic	NE	66	NE	NE	1.4 U	1.1 U	1.1 U	1.6 U	1.3 U	1.7 U	1.4 U	1.4 U	1.3 U	1.3 U	1.7 U
C9-C12 Aliphatic	NE	230	NE	NE	4.6 U	3.6 U	3.6 U	5.3 U	4.2 U	5.3 U	4.5 U	4.4 U	4.1 U	4.1 U	5.4 U
Metals SW6020A/7471B (ug/g)															
Aluminum	7700	2700	NE	NE	**14000**	**7000**	**10000**	**6200**	**17000**	**18000**	**8300**	**13000**	**19000**	**12000**	**18000**
Antimony	3.1	4.3	NE	0.27	0.60 U	0.50 U	**0.64**	0.50 U	0.60 U	0.60 U	0.60 U	**0.60**	0.60 U	0.60 U	0.60 U
Arsenic	0.68	0.93	16.4	9.9	**9.0**	**7.3**	**9.9**	**7.9**	**12 J**	**3.8**	**11**	**7.9**	**11**	**9.1**	**8.1**
Barium	1500	210	469	283	**33**	**19**	**28**	**14**	**35**	**28**	**28**	**38**	**45**	**29**	**38**
Beryllium	16	11	2.4	10	**0.32 J**	**0.12 J**	0.60 U	0.50 U	**0.46 J**	0.60 U	**0.18 J**	**0.24 J**	**0.42 J**	**0.24 J**	**0.41 J**
Cadmium	7.1	4.2	0.26	0.36	0.059 U	0.050 U	0.60 U	0.50 U	0.058 U	0.60 U	0.60 U	0.60 U	0.056 U	0.058 U	0.062 U
Chromium	0.3[†]/12000	0.42[†]/2,700	79	0.4	**27**	**18**	**23**	**17**	**32**	**33**	**20**	**29**	**32**	**26**	**36**
Cobalt	2.3	3.2	14.9	13	**12**	**6.1**	**10.0**	**7.3**	**15**	**14**	**6.6**	**11**	**13**	**9.6**	**15**
Copper	310	340	23	28	**19**	**16**	**17**	**17**	**18**	**18**	**17**	**18**	**16**	**27**	**22**
Iron	5500	7500	SSS	NE	**24000**	**14000**	**21000**	**16000**	**29000**	**26000**	**21000**	**22000**	**29000**	**23000**	**31000**
Lead	400	14	32	11	**23**	**14**	**10**	**16**	**14**	**14**	**19**	**38**	**13**	**40**	**14**
Magnesium	NE	NE	NE	NE	**5000**	**3600**	**5600**	**3800**	**6800**	**8300**	**3200**	**5500**	**6200**	**5500**	**9400**
Manganese	180	28	841	220	**530**	**380**	**600**	**680**	**550 J**	**440**	**320**	**530**	**340**	**370**	**520**
Mercury	1.1	0.31	0.123	0.00051	0.080 U	0.077 U	0.077 U	0.071 U	**0.083**	0.089 U	0.091 U	0.078 U	0.083 U	**0.049 J**	0.10 U
Nickel	150	99	39	30	**32**	**20**	**32**	**22**	**38**	**38**	**23**	**30**	**34**	**30**	**43**
Potassium	NE	NE	NE	NE	**1300**	**860**	**1400**	**670**	**2200 J**	**2400**	**860**	**1300**	**1800**	**1300**	**3000**
Selenium	39	54	0.61	0.21	6.0 U	5.0 U	**0.90 J**	**0.30 J**	6.0 UJ	**0.88 J**	6.0 U	6.0 U	6.0 U	6.0 U	6.0 U
Silver	39	54	SSS	2	0.29 U	0.25 U	2.8 U	2.6 U	2.9 U	3.1 U	0.28 U	2.8 U	2.8 U	0.29 U	3.1 U
Sodium	NE	NE	NE	NE	**1100**	**200**	**360**	**92**	**150**	**200**	**79**	**100**	**86**	**120**	**210**
Thallium	0.078	0.11	0.6	1	0.60 U	0.50 U	0.60 U	**0.087 J**	**0.52 J**	**0.11 J**	**0.24 J**	**0.14 J**	**0.14 J**	**0.094 J**	**0.14 J**
Vanadium	39	49	103	2	**23**	**12**	**14**	**8.6**	**32**	**28**	**17**	**21**	**29**	**47**	**29**
Zinc	2300	3200	101	8.5	**49**	**34**	**40**	**29**	**56 J**	**56**	**48**	**57**	**48**	**45**	**61**

Table 4-1
Summary of Discrete Soil Sample Analytical Results
Former Dow Salvage Yard
233 Odlin Road, Bangor, Maine

				Locations:	SY-SB9			SY-SB10			SY-SB11			SY-SB12	
				Field Sample ID:	SY-SB9-1	SY-SB9-2	SY-SB9-3	SY-SB10-1	SY-SB10-2	SY-SB10-3	SY-SB11-1	SY-SB11-2	SY-SB11-3	SY-SB12-1	SY-SB12-2
				Matrix:	S	S	S	S	S	S	S	S	S	S	S
				Sample Begin Depth:	0.5	11	20	0.5	5	17.7	0.5	2	5	0.5	19
				Sample End Depth:	2	12	22	2	7	19.7	2	4	7	2	20
				Sample Date:	10/23/2019	10/23/2019	10/23/2019	10/28/2019	10/28/2019	10/28/2019	10/30/2019	10/30/2019	10/30/2019	10/30/2019	10/30/2019
Analytes	**RSL[1]**	**RAG[2]**	**Background[3]**	**Ecological[4]**											
Hex Chromium SW7196A (mg/kg)															
Chromium, Hexavalent	0.3	0.42	NE	0.4	-	-	-	0.31 U	0.60 UJ	0.37 U	0.67 U	0.46 U	0.34 U	**0.99**	0.36 U
PCBs SW8082A (ug/g)															
PCB-1016 (Aroclor 1016)	0.41	0.31	NE	NE	0.014 U	0.013 U	0.014 U	0.014 U	0.016 U	0.015 U	0.012 U	0.015 U	0.016 U	0.015 U	0.016 U
PCB-1221 (Aroclor 1221)	0.2	0.31	NE	NE	0.014 U	0.013 U	0.014 U	0.014 U	0.016 U	0.015 U	0.012 U	0.015 U	0.016 U	0.015 U	0.016 U
PCB-1232 (Aroclor 1232)	0.17	0.31	NE	NE	0.014 U	0.013 U	0.014 U	0.014 U	0.016 U	0.015 U	0.012 U	0.015 U	0.016 U	0.015 U	0.016 U
PCB-1242 (Aroclor 1242)	0.23	0.31	NE	NE	0.014 U	0.013 U	0.014 U	0.014 U	0.016 U	0.015 U	0.012 U	0.015 U	0.016 U	0.015 U	0.016 U
PCB-1248 (Aroclor 1248)	0.23	0.31	NE	NE	0.014 U	0.013 U	0.014 U	0.014 U	0.016 U	0.015 U	0.012 U	0.015 U	0.016 U	0.015 U	0.016 U
PCB-1254 (Aroclor 1254)	0.12	0.31	NE	NE	0.014 U	0.013 U	0.014 U	0.014 U	0.016 U	0.015 U	0.012 U	**0.037 J**	0.016 U	0.015 U	0.016 U
PCB-1260 (Aroclor 1260)	0.24	0.31	NE	NE	0.014 U	0.013 U	0.014 U	**0.016 J**	0.016 U	0.015 U	**0.012 J**	**0.020 J**	0.016 U	**0.015 J**	0.016 U
VOCs SW8260D (ug/g)															
1,1,1,2-Tetrachloroethane	2	3	NE	NE	0.024 U	0.019 U	0.019 U	0.027 U	0.022 U	0.027 U	0.023 U	0.023 U	0.021 U	0.022 U	0.028 U
1,1,1-Trichloroethane	810	64	NE	NE	0.024 U	0.019 U	0.019 U	0.027 U	0.022 U	0.027 U	0.023 U	0.023 U	0.021 U	0.022 U	0.028 U
1,1,2,2-Tetrachloroethane	0.3	0.89	NE	NE	0.024 U	0.019 U	0.019 U	0.027 U	0.022 U	0.027 U	0.023 U	0.023 U	0.021 U	0.022 U	0.028 U
1,1,2-Trichloroethane	0.15	0.22	NE	NE	0.024 U	0.019 U	0.019 U	0.027 U	0.022 U	0.027 U	0.023 U	0.023 U	0.021 U	0.022 U	0.028 U
1,1-Dichloroethane	3.6	5.3	NE	NE	0.024 U	0.019 U	0.019 U	0.027 U	0.022 U	0.027 U	0.023 U	0.023 U	0.021 U	0.022 U	0.028 U
1,1-Dichloroethene	23	8.1	NE	NE	0.024 U	0.019 U	0.019 U	0.027 U	0.022 UJ	0.027 U	0.023 U	0.023 U	0.021 U	0.022 U	0.028 U
1,1-Dichloropropene	NE	NE	NE	NE	0.024 U	0.019 U	0.019 U	0.027 U	0.022 UJ	0.027 U	0.023 U	0.023 U	0.021 U	0.022 U	0.028 U
1,2,3-Trichlorobenzene	6.3	8.6	NE	NE	0.024 U	0.019 U	0.019 U	0.027 U	0.022 U	0.027 U	0.023 U	0.023 U	0.021 U	0.022 U	0.028 U
1,2,3-Trichloropropane	0.0051	0.07	NE	NE	0.024 U	0.019 U	0.019 U	0.027 U	0.022 U	0.027 U	0.023 U	0.023 U	0.021 U	0.022 U	0.028 U
1,2,4-Trichlorobenzene	5.8	8.6	NE	NE	0.024 U	0.019 U	0.019 U	0.027 U	0.022 U	0.027 U	0.023 U	0.023 U	0.021 U	0.022 U	0.028 U
1,2,4-Trimethylbenzene	30	18	NE	NE	0.024 U	0.019 U	0.019 U	0.027 U	0.022 U	0.027 U	0.023 U	0.023 U	0.021 U	0.022 U	0.028 U
1,2-Dibromo-3-chloropropane	0.0053	0.0078	NE	NE	0.048 U	0.037 U	0.037 U	0.055 U	0.044 U	0.055 U	0.047 U	0.046 U	0.042 U	0.043 U	0.057 U
1,2-Dibromoethane (EDB)	0.036	0.054	NE	NE	0.024 U	0.019 U	0.019 U	0.027 U	0.022 U	0.027 U	0.023 U	0.023 U	0.021 U	0.022 U	0.028 U
1,2-Dichlorobenzene	180	36	NE	NE	0.024 U	0.019 U	0.019 U	0.027 U	0.022 U	0.027 U	0.023 U	0.023 U	0.021 U	0.022 U	0.028 U
1,2-Dichloroethane	0.46	0.68	NE	NE	0.024 U	0.019 U	0.019 U	0.027 U	0.022 U	0.027 U	0.023 U	0.023 U	0.021 U	0.022 U	0.028 U
1,2-Dichloropropane	1.6	2.3	NE	NE	0.024 U	0.019 U	0.019 U	0.027 U	0.022 U	0.027 U	0.023 U	0.023 U	0.021 U	0.022 U	0.028 U
1,3,5-Trimethylbenzene	27	16	NE	NE	0.024 U	0.019 U	0.019 U	0.027 U	0.022 U	0.027 U	0.023 U	0.023 U	0.021 U	0.022 U	0.028 U
1,3-Dichlorobenzene	NE	29	NE	NE	0.024 U	0.019 U	0.019 U	0.027 U	0.022 U	0.027 U	0.023 U	0.023 U	0.021 U	0.022 U	0.028 U
1,3-Dichloropropane	160	210	NE	NE	0.024 U	0.019 U	0.019 U	0.027 U	0.022 U	0.027 U	0.023 U	0.023 U	0.021 U	0.022 U	0.028 U
1,4-Dichlorobenzene	2.6	3.9	NE	NE	0.024 U	0.019 U	0.019 U	0.027 U	0.022 U	0.027 U	0.023 U	0.023 U	0.021 U	0.022 U	0.028 U
1,4-Dioxane (p-Dioxane)	5.3	0.74	NE	NE	1.9 U	1.5 U	1.5 U	2.2 U	1.8 U	2.2 U	1.9 U	1.8 U	1.7 U	1.7 U	2.3 U
2,2-Dichloropropane	NE	NE	NE	NE	0.024 U	0.019 U	0.019 U	0.027 U	0.022 U	0.027 U	0.023 U	0.023 U	0.021 U	0.022 U	0.028 U
2-Butanone (MEK)	2700	1100	NE	NE	0.19 U	0.15 U	0.15 U	0.22 U	0.18 U	0.22 U	0.19 U	0.18 U	0.17 U	0.17 U	0.23 U
2-Chlorotoluene	160	80	NE	NE	0.024 U	0.019 U	0.019 U	0.027 U	0.022 U	0.027 U	0.023 U	0.023 U	0.021 U	0.022 U	0.028 U
2-Hexanone	20	29	NE	NE	0.048 U	0.037 U	0.037 U	0.055 U	0.044 U	0.055 U	0.047 U	0.046 U	0.042 U	0.043 U	0.057 U
4-Chlorotoluene	160	210	NE	NE	0.024 U	0.019 U	0.019 U	0.027 U	0.022 U	0.027 U	0.023 U	0.023 U	0.021 U	0.022 U	0.028 U
4-Methyl-2-pentanone (MIBK)	5400	330	NE	NE	0.024 U	0.019 U	0.019 U	0.027 U	0.022 U	0.027 U	0.023 U	0.023 U	0.021 U	0.022 U	0.028 U
Acetone	6100	5200	NE	NE	0.19 U	0.15 U	0.15 U	0.22 U	0.18 U	0.22 U	0.19 U	0.18 U	0.17 U	0.17 U	0.23 U
Benzene	1.2	1.7	NE	NE	0.024 U	0.019 U	0.019 U	0.027 U	0.022 U	0.027 U	0.023 U	0.023 U	0.021 U	0.022 U	0.028 U
Bromobenzene	29	38	NE	NE	0.024 U	0.019 U	0.019 U	0.027 U	0.022 U	0.027 U	0.023 U	0.023 U	0.021 U	0.022 U	0.028 U
Bromochloromethane	15	22	NE	NE	0.024 U	0.019 U	0.019 U	0.027 U	0.022 U	0.027 U	0.023 U	0.023 U	0.021 U	0.022 U	0.028 U
Bromodichloromethane	0.29	0.44	NE	NE	0.024 U	0.019 U	0.019 U	0.027 U	0.022 U	0.027 U	0.023 U	0.023 U	0.021 U	0.022 U	0.028 U
Bromoform	19	28	NE	NE	0.024 U	0.019 U	0.019 U	0.027 U	0.022 U	0.027 U	0.023 U	0.023 U	0.021 U	0.022 U	0.028 U
Bromomethane	0.68	1	NE	NE	0.096 U	0.074 U	0.074 U	0.11 U	0.088 U	0.11 U	0.094 U	0.092 U	0.084 U	0.086 U	0.11 U
Carbon disulfide	77	69	NE	NE	0.024 U	0.019 U	0.019 U	0.027 U	0.022 UJ	0.027 U	0.023 U	0.023 U	0.021 U	0.022 U	0.028 U
Carbon tetrachloride	0.65	0.97	NE	NE	0.024 U	0.019 U	0.019 U	0.027 U	0.022 UJ	0.027 U	0.023 U	0.023 U	0.021 U	0.022 U	0.028 U
Chlorobenzene	28	41	NE	40	0.024 U	0.019 U	0.019 U	0.027 U	0.022 U	0.027 U	0.023 U	0.023 U	0.021 U	0.022 U	0.028 U
Chloroethane	1400	200	NE	NE	0.024 U	0.019 U	0.019 U	0.027 U	0.022 U	0.027 U	0.023 U	0.023 U	0.021 U	0.022 U	0.028 U
Chloroform	0.32	0.47	NE	NE	0.024 U	0.019 U	0.019 U	0.027 U	0.022 U	0.027 U	0.023 U	0.023 U	0.021 U	0.022 U	0.028 U
Chloromethane	11	16	NE	NE	0.024 U	0.019 U	0.019 U	0.027 U	0.022 U	0.027 U	0.023 U	0.023 U	0.021 U	0.022 U	0.028 U
cis-1,2-Dichloroethene	16	20	NE	NE	0.024 U	0.019 U	0.019 U	0.027 U	0.022 U	0.027 U	0.023 U	0.023 U	0.021 U	0.022 U	0.028 U
cis-1,3-Dichloropropene	1.8	2.7	NE	NE	0.024 U	0.019 U	0.019 U	0.027 U	0.022 U	0.027 U	0.023 U	0.023 U	0.021 U	0.022 U	0.028 U
Dibromochloromethane	8.3	11	NE	NE	0.024 U	0.019 U	0.019 U	0.027 U	0.022 UJ	0.027 U	0.023 U	0.023 U	0.021 U	0.022 U	0.028 U
Dibromomethane	2.4	3.5	NE	NE	0.024 U	0.019 U	0.019 U	0.027 U	0.022 U	0.027 U	0.023 U	0.023 U	0.021 U	0.022 U	0.028 U
Dichlorodifluoromethane	8.7	13	NE	NE	0.024 U	0.019 U	0.019 U	0.027 U	R	0.027 U	0.023 U	0.023 U	0.021 U	0.022 U	0.028 U
Diethyl ether (Ethyl ether)	1600	81	NE	NE	0.024 U	0.019 U	0.019 U	0.027 U	0.022 U	0.027 U	0.023 U	0.023 U	0.021 U	0.022 U	0.028 U
Ethylbenzene	5.8	8.6	NE	NE	0.024 U	0.019 U	0.019 U	0.027 U	0.022 UJ	0.027 U	0.023 U	0.023 U	0.021 U	0.022 U	0.028 U
Hexachlorobutadiene	1.2	1.5	NE	NE	0.048 U	0.037 U	0.037 U	0.055 U	0.044 U	0.055 U	0.047 U	0.046 U	0.042 U	0.043 U	0.057 U
Isopropylbenzene (Cumene)	190	26	NE	NE	0.024 U	0.019 U	0.019 U	0.027 U	0.022 U	0.027 U	0.023 U	0.023 U	0.021 U	0.022 U	0.028 U
m,p-Xylene	55	26	NE	NE	0.048 U	0.037 U	0.037 U	0.055 U	0.044 U	0.055 U	0.047 U	0.046 U	0.042 U	0.043 U	0.057 U
Methyl tert-butyl ether (MTBE)	47	69	NE	NE	0.024 U	0.019 U	0.019 U	0.027 U	0.022 U	0.027 U	0.023 U	0.023 U	0.021 U	0.022 U	0.028 U
Methylene chloride	35	49	NE	NE	0.024 U	0.019 U	0.019 U	0.027 U	0.022 U	0.027 U	0.023 U	0.023 U	0.021 U	0.022 U	0.028 U
Naphthalene	3.8	2.9	NE	NE	0.024 U	0.019 U	0.019 U	0.027 U	0.022 U	0.027 U	**0.035 J**	**0.062 J**	**0.015 J**	0.022 U	0.028 U
n-Butylbenzene	390	540	NE	NE	0.024 U	0.019 U	0.019 U	0.027 U	0.022 U	0.027 U	0.023 U	0.023 U	0.021 U	0.022 U	0.028 U
n-Propylbenzene	380	26	NE	NE	0.024 U	0.019 U	0.019 U	0.027 U	0.022 U	0.027 U	0.023 U	0.023 U	0.021 U	0.022 U	0.028 U
o-Xylene	65	26	NE	NE	0.024 U	0.019 U	0.019 U	0.027 U	0.022 U	0.027 U	0.023 U	0.023 U	0.021 U	0.022 U	0.028 U
p-Cymene (p-Isopropyltoluene)	NE	NE	NE	NE	0.024 U	0.019 U	0.019 U	0.027 U	0.022 U	0.027 U	0.023 U	0.023 U	0.021 U	0.022 U	0.028 U
sec-Butylbenzene	780	1100	NE	NE	0.024 U	0.019 U	0.019 U	0.027 U	0.022 U	0.027 U	0.023 U	0.023 U	0.021 U	0.022 U	0.028 U

Table 4-1
Summary of Discrete Soil Sample Analytical Results
Former Dow Salvage Yard
233 Odlin Road, Bangor, Maine

Locations:					SY-SB9			SY-SB10			SY-SB11			SY-SB12	
Field Sample ID:					SY-SB9-1	SY-SB9-2	SY-SB9-3	SY-SB10-1	SY-SB10-2	SY-SB10-3	SY-SB11-1	SY-SB11-2	SY-SB11-3	SY-SB12-1	SY-SB12-2
Matrix:					S	S	S	S	S	S	S	S	S	S	S
Sample Begin Depth:					0.5	11	20	0.5	5	17.7	0.5	2	5	0.5	19
Sample End Depth:					2	12	22	2	7	19.7	2	4	7	2	20
Sample Date:					10/23/2019	10/23/2019	10/23/2019	10/28/2019	10/28/2019	10/28/2019	10/30/2019	10/30/2019	10/30/2019	10/30/2019	10/30/2019
Analytes	**RSL[1]**	**RAG[2]**	**Background[3]**	**Ecological[4]**											
Styrene	600	83	NE	300	0.024 U	0.019 U	0.019 U	0.027 U	0.022 U	0.027 U	0.023 U	0.023 U	0.021 U	0.022 U	0.028 U
tert-Amyl methyl ether	NE	NE	NE	NE	0.024 U	0.019 U	0.019 U	0.027 U	0.022 U	0.027 U	0.023 U	0.023 U	0.021 U	0.022 U	0.028 U
tert-Butyl alcohol	NE	NE	NE	NE	0.24 U	0.19 U	0.19 U	0.27 U	0.22 U	0.27 U	0.23 U	0.23 U	0.21 U	0.22 U	0.28 U
tert-Butyl ethyl ether	NE	NE	NE	NE	0.024 U	0.019 U	0.019 U	0.027 U	0.022 U	0.027 U	0.023 U	0.023 U	0.021 U	0.022 U	0.028 U
tert-Butylbenzene	780	1100	NE	NE	0.024 U	0.019 U	0.019 U	0.027 U	0.022 U	0.027 U	0.023 U	0.023 U	0.021 U	0.022 U	0.028 U
Tetrachloroethene (PCE)	8.1	8.5	NE	NE	0.024 U	0.019 U	0.019 U	0.027 U	0.022 UJ	0.027 U	0.023 U	0.023 U	0.021 U	0.022 U	0.028 U
Tetrahydrofuran	1800	2700	NE	NE	0.19 U	0.15 U	0.15 U	0.22 U	0.18 U	0.22 U	0.19 U	0.18 U	0.17 U	0.17 U	0.23 U
Toluene	490	75	NE	200	0.024 U	0.019 U	0.019 U	0.027 U	0.022 U	0.027 U	**0.023 J**	**0.018 J**	0.021 U	**0.011 J**	0.028 U
trans-1,2-Dichloroethene	160	10	NE	NE	0.024 U	0.019 U	0.019 U	0.027 U	0.022 UJ	0.027 U	0.023 U	0.023 U	0.021 U	0.022 U	0.028 U
trans-1,3-Dichloropropene	1.8	2.7	NE	NE	0.024 U	0.019 U	0.019 U	0.027 U	0.022 U	0.027 U	0.023 U	0.023 U	0.021 U	0.022 U	0.028 U
Trichloroethene (TCE)	0.41	0.39	NE	NE	0.024 U	0.019 U	0.019 U	0.027 U	0.022 UJ	0.027 U	0.023 U	0.023 U	0.021 U	0.022 U	0.028 U
Trichlorofluoromethane	2300	94	NE	NE	0.024 U	0.019 U	0.019 U	0.027 U	0.022 UJ	0.027 U	0.023 U	0.023 U	0.021 U	0.022 U	0.028 U
Vinyl chloride	0.0059	0.064	NE	NE	0.024 U	0.019 U	0.019 U	0.027 U	0.022 U	0.027 U	0.023 U	0.023 U	0.021 U	0.022 U	0.028 U
SVOCs SW8270E (ug/g)															
1,2,4-Trichlorobenzene	5.8	8.6	NE	20	0.24 U	0.23 U	0.22 U	0.21 U	0.24 U	0.25 U	0.23 U	0.22 U	0.24 U	0.23 U	0.25 U
1,2-Dichlorobenzene	180	36	NE	NE	0.12 U	0.11 U	0.11 U	0.10 U	0.12 U	0.13 U	0.11 U	0.11 U	0.12 U	0.11 U	0.13 U
1,3-Dichlorobenzene	NE	29	NE	NE	0.12 U	0.11 U	0.11 U	0.10 U	0.12 U	0.13 U	0.11 U	0.11 U	0.12 U	0.11 U	0.13 U
1,4-Dichlorobenzene	2.6	3.9	NE	20	0.12 U	0.11 U	0.11 U	0.10 U	0.12 U	0.13 U	0.11 U	0.11 U	0.12 U	0.11 U	0.13 U
2,2'-Oxybis(1-chloropropane)	310	NE	NE	NE	0.12 U	0.11 U	0.11 U	0.10 U	0.12 U	0.13 U	0.11 U	0.11 U	0.12 U	0.11 U	0.13 U
2,4,5-Trichlorophenol	630	860	NE	9	0.12 U	0.11 U	0.11 U	0.10 U	0.12 U	0.13 U	0.11 U	0.11 U	0.12 U	0.11 U	0.13 U
2,4,6-Trichlorophenol	6.3	8.6	NE	4	0.12 U	0.11 U	0.11 U	0.10 U	0.12 U	0.13 U	0.11 U	0.11 U	0.12 U	0.11 U	0.13 U
2,4-Dichlorophenol	19	26	NE	NE	0.24 U	0.23 U	0.22 U	0.21 U	0.24 U	0.25 U	0.23 U	0.22 U	0.24 U	0.23 U	0.25 U
2,4-Dimethylphenol	130	170	NE	NE	0.12 U	0.11 U	0.11 U	0.10 U	0.12 U	0.13 U	0.11 U	0.11 U	0.12 U	0.11 U	0.13 U
2,4-Dinitrophenol	13	17	NE	20	2.4 U	2.3 U	2.2 U	2.1 U	2.4 U	2.5 U	2.3 U	2.2 U	2.4 U	2.3 U	2.5 U
2,4-Dinitrotoluene	1.7	2.4	NE	NE	0.12 U	0.11 U	0.11 U	0.10 U	0.12 U	0.13 U	0.11 U	0.11 U	0.12 U	0.11 U	0.13 U
2,6-Dinitrotoluene	0.36	0.5	NE	NE	0.12 U	0.11 U	0.11 U	0.10 U	0.12 U	0.13 U	0.11 U	0.11 U	0.12 U	0.11 U	0.13 U
2-Chloronaphthalene	480	650	NE	NE	0.24 U	0.23 U	0.22 U	0.21 U	0.24 U	0.25 U	0.23 U	0.22 U	0.24 U	0.23 U	0.25 U
2-Chlorophenol	39	54	NE	NE	0.24 U	0.23 U	0.22 U	0.21 U	0.24 U	0.25 U	0.23 U	0.22 U	0.24 U	0.23 U	0.25 U
2-Methylphenol (o-Cresol)	320	430	NE	NE	0.12 U	0.11 U	0.11 U	0.10 U	0.12 U	0.13 U	0.11 U	0.11 U	0.12 U	0.11 U	0.13 U
2-Nitroaniline	63	NE	NE	NE	0.12 U	0.11 U	0.11 U	0.10 U	0.12 U	0.13 U	0.11 U	0.11 U	0.12 U	0.11 U	0.13 U
2-Nitrophenol	NE	NE	NE	NE	0.12 U	0.11 U	0.11 U	0.10 U	0.12 U	0.13 U	0.11 U	0.11 U	0.12 U	0.11 U	0.13 U
3,3'-Dichlorobenzidine	1.2	1.7	NE	NE	3.0 U	2.9 U	2.8 U	2.6 U	3.0 U	3.1 U	2.9 U	2.8 U	3.0 U	2.8 U	3.1 U
3-Nitroaniline	NE	NE	NE	NE	0.12 U	0.11 U	0.11 U	0.10 U	0.12 U	0.13 U	0.11 U	0.11 U	0.12 U	0.11 U	0.13 U
4,6-Dinitro-2-methylphenol	0.51	860	NE	NE	R	R	R	R	R	R	R	R	R	R	R
4-Bromophenyl phenyl ether	NE	NE	NE	NE	0.12 U	0.11 U	0.11 U	0.10 U	0.12 U	0.13 U	0.11 U	0.11 U	0.12 U	0.11 U	0.13 U
4-Chloro-3-methylphenol	630	NE	NE	NE	0.12 U	0.11 U	0.11 U	0.10 U	0.12 U	0.13 U	0.11 U	0.11 U	0.12 U	0.11 U	0.13 U
4-Chloroaniline	2.7	3.7	NE	NE	0.12 U	0.11 U	0.11 U	0.10 U	0.12 U	0.13 U	0.11 U	0.11 U	0.12 U	0.11 U	0.13 U
4-Chlorophenyl phenyl ether	NE	NE	NE	NE	0.24 U	0.23 U	0.22 U	0.21 U	0.24 U	0.25 U	0.23 U	0.22 U	0.24 U	0.23 U	0.25 U
4-Methylphenol (p-Cresol)	630	510	NE	NE	0.12 U	0.11 U	0.11 U	0.10 U	0.12 U	0.13 U	0.11 U	0.11 U	0.12 U	0.11 U	0.13 U
4-Nitroaniline	25	35	NE	NE	0.24 U	0.23 U	0.22 U	0.21 U	0.24 U	0.25 U	0.23 U	0.22 U	0.24 U	0.23 U	0.25 U
4-Nitrophenol	NE	61	NE	7	0.61 U	0.57 U	0.56 U	0.52 U	0.59 U	0.63 U	0.57 U	0.56 U	0.60 U	0.57 U	0.63 U
Aniline (Phenylamine, Aminobenzene)	44	610	NE	NE	0.12 U	**0.026 J**	0.11 U	0.10 U	0.12 U	0.13 U	0.11 U	0.11 U	0.12 U	0.11 U	0.13 U
Azobenzene	5.6	NE	NE	NE	0.12 U	0.11 U	0.11 U	0.10 U	0.12 U	0.13 U	0.11 U	0.11 U	0.12 U	0.11 U	0.13 U
Benzidine	0.00053	NE	NE	NE	3.0 U	2.9 U	2.8 U	2.6 U	R	3.1 U	2.9 U	2.8 U	3.0 U	2.8 U	3.1 U
Benzoic acid	25000	1100	NE	NE	5.5 U	5.2 U	5.0 U	4.6 U	5.3 U	5.6 U	5.1 U	5.0 U	5.4 U	5.1 U	5.6 U
Benzyl alcohol	630	860	NE	NE	0.12 U	0.11 U	0.11 U	0.10 U	0.12 U	0.13 U	0.11 U	0.11 U	0.12 U	0.11 U	0.13 U
Benzyl butyl phthalate	290	390	NE	NE	0.24 U	0.23 U	0.22 U	0.21 U	0.24 U	0.25 U	0.23 U	0.22 U	0.24 U	0.23 U	0.25 U
bis(2-Chloroethoxy) methane	19	NE	NE	NE	0.24 U	0.23 U	0.22 U	0.21 U	0.24 U	0.25 U	0.23 U	0.22 U	0.24 U	0.23 U	0.25 U
bis(2-Chloroethyl) ether	0.23	0.33	NE	NE	0.12 U	0.11 U	0.11 U	0.10 U	0.12 U	0.13 U	0.11 U	0.11 U	0.12 U	0.11 U	0.13 U
bis(2-Ethylhexyl) phthalate	39	53	NE	NE	0.30 U	0.29 U	0.28 U	**0.21 J**	0.30 U	0.31 U	**0.23 J**	**0.24 J**	0.30 U	0.57 U	0.31 U
Carbazole	NE	27	NE	NE	0.12 U	0.11 U	0.11 U	0.10 U	0.12 U	0.13 U	**0.041 J**	**0.12 J**	0.12 U	0.11 U	0.13 U
Dibenzofuran	7.3	11	NE	NE	0.061 U	0.057 U	0.056 U	0.052 U	0.059 U	0.063 U	0.057 U	**0.065**	0.060 U	0.057 U	0.063 U
Diethyl phthalate	5100	6900	NE	100	0.24 U	0.23 U	0.22 U	0.21 U	0.24 U	0.25 U	0.23 U	0.22 U	0.24 U	0.23 U	0.25 U
Dimethyl phthalate	NE	NE	NE	NE	0.24 U	0.23 U	0.22 U	0.21 U	0.24 U	0.25 U	0.23 U	0.22 U	0.24 U	0.23 U	0.25 U
Di-n-butyl phthalate	630	860	NE	200	0.24 U	0.23 U	0.22 U	0.21 U	0.24 U	0.25 U	0.23 U	0.22 U	0.24 U	0.23 U	0.25 U
di-n-Octyl phthalate	63	86	NE	NE	0.24 U	0.23 U	0.22 U	0.21 U	0.24 U	0.25 U	0.23 U	0.22 U	0.24 U	0.23 U	0.25 U
Hexachlorobenzene	0.21	0.3	NE	NE	0.12 U	0.11 U	0.11 U	0.10 U	0.12 U	0.13 U	0.11 U	0.11 U	0.12 U	0.11 U	0.13 U
Hexachlorobutadiene	1.2	1.5	NE	NE	0.12 U	0.11 U	0.11 U	0.10 U	0.12 U	0.13 U	0.11 U	0.11 U	0.12 U	0.11 U	0.13 U
Hexachlorocyclopentadiene	0.18	NE	NE	10	0.49 UJ	0.46 UJ	0.45 UJ	0.41 U	0.47 UJ	0.50 U	0.46 U	0.45 U	0.48 U	0.45 U	0.50 U
Hexachloroethane	1.8	2.7	NE	NE	0.12 U	0.11 U	0.11 U	0.10 U	0.12 U	0.13 U	0.11 U	0.11 U	0.12 U	0.11 U	0.13 U
Isophorone	570	780	NE	NE	0.24 U	0.23 U	0.22 U	0.21 U	0.24 U	0.25 U	0.23 U	0.22 U	0.24 U	0.23 U	0.25 U
Nitrobenzene	5.1	NE	NE	NE	0.12 U	0.11 U	0.11 U	0.10 U	0.12 U	0.13 U	0.11 U	0.11 U	0.12 U	0.11 U	0.13 U
N-Nitrosodimethylamine	0.002	NE	NE	NE	0.12 U	0.11 U	0.11 U	0.10 U	0.12 U	0.13 U	0.11 U	0.11 U	0.12 U	0.11 U	0.13 U
N-Nitrosodi-n-propylamine	0.078	NE	NE	NE	0.12 U	0.11 U	0.11 U	0.10 U	0.12 U	0.13 U	0.11 U	0.11 U	0.12 U	0.11 U	0.13 U
N-Nitrosodiphenylamine	110	150	NE	NE	0.12 U	0.11 U	0.11 U	0.10 U	0.12 U	0.13 U	0.11 U	0.11 U	0.12 U	0.11 U	0.13 U
Pentachlorophenol	180	1.4	NE	2.1	0.61 U	0.57 U	0.56 U	0.52 U	R	0.63 U	R	R	R	R	R
Phenol	1900	2600	NE	30	0.12 U	0.11 U	0.11 U	0.10 U	0.12 U	0.13 U	0.11 U	0.11 U	0.12 U	0.11 U	0.13 U
Pyridine	7.8	NE	NE	NE	0.12 UJ	0.11 UJ	0.11 UJ	0.10 U	0.12 U	0.13 U	0.11 U	0.11 U	0.12 U	0.11 U	0.13 U
TOC LYDKHN (ug/g)															
Total Organic Carbon	NE	NE	NE	NE	-	-	-	**2300**	**1700 J**	**3100**	**21000**	**13000**	**6900**	**10000**	**3300**

Table 4-1
Summary of Discrete Soil Sample Analytical Results
Former Dow Salvage Yard
233 Odlin Road, Bangor, Maine

				Locations:	SY-SB13		SY-SB14		SY-SB15			SY-SB16		SY-SB17	
				Field Sample ID:	SY-SB13-1	SY-SB13-2	SY-SB14-1	SY-SB14-2	SY-SB15-1	SY-SB15-2	SY-SB15-3	SY-SB16-1	SY-SB16-2	SY-SB17-1	SY-SB17-3
				Matrix:	S	S	S	S	S	S	S	S	S	S	S
				Sample Begin Depth:	0.5	12	0.5	15.5	0.5	0.75	12	0.5	13	0.5	4
				Sample End Depth:	2	14	2	17.5	2	2.83	14	2	15	2	5
				Sample Date:	10/30/2019	10/30/2019	10/31/2019	10/31/2019	10/29/2019	10/29/2019	10/29/2019	10/31/2019	10/31/2019	11/01/2019	11/01/2019
Analytes	**RSL[1]**	**RAG[2]**	**Background[3]**	**Ecological[4]**											
PAH SIM (mg/kg)															
2-Methylnaphthalene	24	33	NE	29	0.010 U	0.012 U	0.012 U	0.012 U	**0.0054 J**	0.012 U	0.013 U	0.012 U	0.013 U	**0.038**	0.012 U
Acenaphthene	360	490	NE	29	0.010 U	0.012 U	**0.0032 J**	0.012 U	**0.017 J**	0.012 U	0.013 U	0.012 U	0.013 U	**0.043**	0.012 U
Acenaphthylene	180	490	NE	29	0.010 U	0.012 U	**0.0077 J**	0.012 U	**0.0021 J**	0.012 U	0.013 U	0.012 U	0.013 U	**0.019 J**	0.012 U
Anthracene	1800	250	NE	29	**0.0022 J**	0.012 U	**0.013 J**	0.012 U	**0.11**	0.012 U	0.013 U	0.012 U	0.013 U	**0.12**	**0.0031 J**
Benzo(a)anthracene	1.1	1.6	0.86	1.1	**0.014 J**	0.012 U	**0.15**	0.012 U	**0.47**	**0.010 J**	0.013 U	0.012 U	0.013 U	**0.62**	**0.036**
Benzo(a)pyrene	0.11	0.16	1.5	1.1	**0.012 J**	0.012 U	**0.17**	0.012 U	**0.34**	**0.0079 J**	0.013 U	**0.0044 J**	**0.0047 J**	**0.73**	**0.048**
Benzo(b)fluoranthene	1.1	1.6	1.3	1.1	**0.024**	0.012 U	**0.20**	0.012 U	**0.50**	**0.016 J**	0.013 U	**0.0041 J**	**0.0047 J**	**1.1**	**0.069**
Benzo(g,h,i)perylene	180	250	NE	1.1	**0.0099 J**	0.012 U	**0.10**	0.012 U	**0.20**	**0.0078 J**	0.013 U	0.012 U	0.026 U	**0.38**	**0.045**
Benzo(k)fluoranthene	11	16	NE	1.1	**0.0082 J**	0.012 U	**0.091**	0.012 U	**0.19**	**0.0073 J**	0.013 U	0.012 U	0.013 U	**0.38**	**0.031**
Chrysene	110	160	NE	1.1	**0.021**	0.012 U	**0.16**	**0.0024 J**	**0.41**	**0.011 J**	0.013 U	**0.0027 J**	0.013 U	**0.86**	**0.052**
Dibenz(a,h)anthracene	0.11	0.16	0.32	1.1	**0.0033 J**	0.012 U	**0.038**	0.012 U	**0.081**	**0.0025 J**	0.013 U	0.012 U	0.013 U	**0.13**	0.023 U
Fluoranthene	240	330	NE	1.1	**0.029**	0.012 U	**0.20**	0.012 U	**0.92**	**0.016 J**	0.013 U	0.012 U	0.013 U	**1.4**	**0.052**
Fluorene	240	330	NE	29	0.010 U	0.012 U	**0.0049 J**	0.012 U	**0.022 J**	0.012 U	0.013 U	0.012 U	0.013 U	**0.041**	0.012 U
Indeno(1,2,3-c,d)pyrene	1.1	1.6	0.4	1.1	**0.0079 J**	0.012 U	**0.13**	0.012 U	**0.27**	**0.0047 J**	0.013 U	0.012 U	0.026 U	**0.52**	**0.062**
Naphthalene	3.8	2.9	0.11	29	0.010 U	0.012 U	**0.0033 J**	0.012 U	0.012 U	0.012 U	0.013 U	0.012 U	**0.0035 J**	**0.029**	0.012 U
Phenanthrene	180	250	NE	29	**0.021**	0.012 U	**0.066**	0.012 U	**0.42**	**0.0058 J**	0.013 U	0.012 U	0.013 U	**0.63**	**0.022 J**
Pyrene	180	250	NE	1.1	**0.019 J**	0.012 U	**0.24**	**0.0069 J**	**0.76**	**0.011 J**	0.013 U	**0.0062 J**	**0.0064 J**	**1.0**	**0.075**
MassDEP EPH (ug/g)															
2-Methylnaphthalene	24	33	NE	29	0.12 U	0.13 U	0.12 U	0.13 U	**0.24 J**	0.12 U	0.12 U	0.12 U	0.12 U	**0.16 J**	0.12 U
Acenaphthene	360	490	NE	29	0.12 U	0.13 U	0.12 U	0.13 U	0.14 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
Acenaphthylene	180	490	NE	29	0.12 U	0.13 U	0.12 U	0.13 U	0.14 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
Anthracene	1800	250	NE	29	0.12 U	0.13 U	0.12 U	0.13 U	**0.24 J**	0.12 U	0.12 U	0.12 U	0.12 U	**0.069 J**	0.12 U
Benzo(a)anthracene	1.1	1.6	0.86	1.1	0.12 U	0.13 U	**0.13 J**	0.13 U	**0.87**	0.12 U	0.12 U	0.12 U	0.12 U	**0.55**	**0.13 J**
Benzo(a)pyrene	0.11	0.16	1.5	1.1	0.12 U	0.13 U	**0.15 J**	0.13 U	**0.71**	0.12 U	0.12 U	0.12 U	0.12 U	**0.66**	**0.11 J**
Benzo(b)fluoranthene	1.1	1.6	1.3	1.1	0.12 U	0.13 U	**0.15 J**	0.13 U	**0.74**	0.12 U	0.12 U	0.12 U	0.12 U	**0.72**	**0.21 J**
Benzo(g,h,i)perylene	180	250	NE	1.1	0.12 U	0.13 U	**0.12 J**	0.13 U	**0.42**	0.12 U	0.12 U	0.12 U	0.12 U	**0.43**	**0.062 J**
Benzo(k)fluoranthene	11	16	NE	1.1	0.12 U	0.13 U	**0.20 J**	0.13 U	**0.81**	0.12 U	0.12 U	0.12 U	0.12 U	**0.77**	**0.17 J**
Chrysene	110	160	NE	1.1	0.12 U	0.13 U	**0.17 J**	0.13 U	**0.95**	0.12 U	0.12 U	0.12 U	0.12 U	**0.79**	**0.26**
Dibenz(a,h)anthracene	0.11	0.16	0.32	1.1	0.12 U	0.13 U	0.12 U	0.13 U	**0.13 J**	0.12 U	0.12 U	0.12 U	0.12 U	**0.13 J**	0.12 U
Fluoranthene	240	330	NE	1.1	0.12 U	0.13 U	**0.30**	0.13 U	**2.1**	0.12 U	0.12 U	0.12 U	0.12 U	**1.5**	**0.40**
Fluorene	240	330	NE	29	0.12 U	0.13 U	0.12 U	0.13 U	0.14 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
Indeno(1,2,3-c,d)pyrene	1.1	1.6	0.4	1.1	0.12 U	0.13 U	0.12 U	0.13 U	**0.36**	0.12 U	0.12 U	0.12 U	0.12 U	**0.37**	0.12 U
Naphthalene	3.8	2.9	0.11	29	0.12 U	0.13 U	0.12 U	0.13 U	**0.14 J**	0.12 U	0.12 U	0.12 U	0.12 U	**0.11 J**	0.12 U
Phenanthrene	180	250	NE	29	0.12 U	0.13 U	**0.080 J**	0.13 U	**1.1**	0.12 U	0.12 U	0.12 U	0.12 U	**0.53**	0.12 U
Pyrene	180	250	NE	1.1	0.12 U	0.13 U	**0.26**	0.13 U	**1.4**	0.12 U	0.12 U	0.12 U	0.12 U	**1.1**	**0.34**
C11-C22 Aromatic	NE	260	NE	NE	**7.9 J**	**5.3 J**	24 U	25 U	**45**	**5.4 J**	**5.1 J**	24 U	25 U	**98**	**25**
C11-C22 Extractable Petroleum Hydrocarbons, Aromatic (Unadjusted)	NE	100000	NE	NE	**8.0 J**	**5.3 J**	24 U	25 U	**55**	**5.4 J**	**5.1 J**	24 U	25 U	**110**	**26**
C19-C36 Aliphatic	NE	10000	NE	NE	**6.2 J**	**4.3 J**	24 U	25 U	**17 J**	**4.4 J**	**5.0 J**	24 U	25 U	**190**	23 U
C9-C18 Aliphatic	NE	250	NE	NE	23 U	26 U	24 U	25 U	27 U	24 U	24 U	24 U	25 U	24 U	23 U
MassDEP VPH (ug/g)															
Benzene	1.2	1.7	NE	NE	0.032 U	0.041 U	0.034 U	0.035 U	0.048 U	0.036 U	0.036 U	0.036 U	0.036 U	**0.088 J**	0.039 U
Ethylbenzene	5.8	8.6	NE	NE	0.032 U	0.041 U	0.034 U	0.035 U	0.048 U	0.036 U	0.036 U	0.036 U	0.036 U	0.041 U	0.039 U
m,p-Xylene	55	26	NE	NE	0.063 U	0.082 U	0.068 U	0.069 U	0.096 U	0.072 U	0.072 U	0.073 U	0.072 U	**0.051 J**	0.078 U
Methyl tert-butyl ether (MTBE)	47	69	NE	NE	0.032 U	0.041 U	0.034 U	0.035 U	0.048 U	0.036 U	0.036 U	0.036 U	0.036 U	0.041 U	0.039 U
Naphthalene	3.8	2.9	NE	NE	0.032 U	0.041 U	0.034 U	0.035 U	0.048 U	0.036 U	0.036 U	0.036 U	0.036 U	**0.086 J**	0.039 U
o-Xylene	65	26	NE	NE	0.032 U	0.041 U	0.034 U	0.035 U	0.048 U	0.036 U	0.036 U	0.036 U	0.036 U	**0.041 J**	0.039 U
Toluene	490	75	NE	NE	0.032 U	0.041 U	0.034 U	0.035 U	0.048 U	0.036 U	0.036 U	0.036 U	0.036 U	**0.52**	0.039 U
C5-C8 Aliphatic	NE	43	NE	NE	3.8 U	4.9 U	4.1 U	4.2 U	5.8 U	4.3 U	4.3 U	4.4 U	4.3 U	4.9 U	4.7 U
C9-C10 Aromatic	NE	66	NE	NE	1.2 U	1.5 U	1.3 U	1.3 U	1.8 U	1.3 U	1.3 U	1.4 U	1.3 U	5.1 U	1.5 U
C9-C12 Aliphatic	NE	230	NE	NE	3.8 U	4.9 U	4.1 U	4.2 U	5.8 U	4.3 U	4.3 U	4.4 U	4.3 U	4.9 U	4.7 U
Metals SW6020A/7471B (ug/g)															
Aluminum	7700	2700	NE	NE	**13000**	**16000**	**12000**	**17000**	**8200**	**14000**	**17000**	**17000**	**14000**	**11000**	**13000**
Antimony	3.1	4.3	NE	0.27	0.50 U	0.60 U	**1.1**	0.70 U	0.60 U	0.50 U	0.60 U	0.60 U	**0.71**	**0.63**	**0.69**
Arsenic	0.68	0.93	16.4	9.9	**9.1**	**10**	**8.7**	**16**	**7.2**	**9.1**	**8.8**	**11**	**5.8**	**9.1**	**8.6**
Barium	1500	210	469	283	**34**	**29**	**39**	**35**	**38**	**35**	**35**	**38**	**26**	**38**	**22**
Beryllium	16	11	2.4	10	**0.37 J**	**0.35 J**	**0.37 J**	**0.42 J**	**0.16 J**	**0.51**	**0.44 J**	**0.48 J**	0.60 U	0.60 U	0.60 U
Cadmium	7.1	4.2	0.26	0.36	0.051 U	0.064 U	**2.4**	0.065 U	0.60 U	0.055 U	0.065 U	0.061 U	**0.80**	**1.4**	**2.2**
Chromium	0.3[†]/12000	0.42[†]/2,700	79	0.4	**24**	**33**	**55**	**35**	**15**	**29**	**33**	**34**	**29**	**24**	**55**
Cobalt	2.3	3.2	14.9	13	**10**	**14**	**8.2**	**15**	**6.1**	**12**	**14**	**11**	**13**	**7.5**	**7.6**
Copper	310	340	23	28	**12**	**22**	**29**	**22**	**12**	**16**	**21**	**18**	**22**	**16**	**14**
Iron	5500	7500	SSS	NE	**22000**	**29000**	**22000**	**32000**	**16000**	**26000**	**29000**	**28000**	**26000**	**21000**	**28000**
Lead	400	14	32	11	**12**	**13**	**52**	**14**	**26**	**13**	**13**	**11**	**13**	**51**	**130**
Magnesium	NE	NE	NE	NE	**4700**	**7700**	**4100**	**8600**	**2200**	**5800**	**8400**	**6200**	**7000**	**3800**	**3800**
Manganese	180	28	841	220	**370**	**460**	**300**	**530**	**210**	**370**	**540**	**330**	**390**	**370**	**260**
Mercury	1.1	0.31	0.123	0.00051	0.087 U	0.083 U	**0.35**	0.090 U	0.093 U	0.088 U	0.083 U	0.087 U	0.086 U	**0.049 J**	0.082 U
Nickel	150	99	39	30	**24**	**40**	**27**	**42**	**16**	**32**	**38**	**36**	**38**	**24**	**25**
Potassium	NE	NE	NE	NE	**980**	**2400**	**970**	**2900**	**590**	**1400**	**2700**	**2000**	**2100**	**910**	**750**
Selenium	39	54	0.61	0.21	5.0 U	6.0 U	6.0 U	7.0 U	6.0 U	5.0 U	6.0 U	6.0 U	**2.2 J**	**1.7 J**	**2.0 J**
Silver	39	54	SSS	2	2.5 U	3.2 U	2.8 U	3.3 U	3.1 U	2.7 U	3.2 U	3.1 U	3.1 U	2.8 U	2.9 U
Sodium	NE	NE	NE	NE	**88**	**160**	**61**	**190**	**92**	**260**	**300**	**110**	**140**	**66 J**	**65 J**
Thallium	0.078	0.11	0.6	1	**0.11 J**	**0.16 J**	**0.076 J**	**0.11 J**	**0.32 J**	**0.22 J**	**0.20 J**	**0.31 J**	0.60 U	0.60 U	0.29 U
Vanadium	39	49	103	2	**23**	**26**	**18**	**31**	**43**	**30**	**28**	**29**	**23**	**21**	**19**
Zinc	2300	3200	101	8.5	**38**	**61**	**95**	**66**	**49**	**46**	**57**	**55**	**62**	**94**	**53**

Table 4-1
Summary of Discrete Soil Sample Analytical Results
Former Dow Salvage Yard
233 Odlin Road, Bangor, Maine

				Locations:	SY-SB13		SY-SB14		SY-SB15			SY-SB16		SY-SB17	
				Field Sample ID:	SY-SB13-1	SY-SB13-2	SY-SB14-1	SY-SB14-2	SY-SB15-1	SY-SB15-2	SY-SB15-3	SY-SB16-1	SY-SB16-2	SY-SB17-1	SY-SB17-3
				Matrix:	S	S	S	S	S	S	S	S	S	S	S
				Sample Begin Depth:	0.5	12	0.5	15.5	0.5	0.75	12	0.5	13	0.5	4
				Sample End Depth:	2	14	2	17.5	2	2.83	14	2	15	2	5
				Sample Date:	10/30/2019	10/30/2019	10/31/2019	10/31/2019	10/29/2019	10/29/2019	10/29/2019	10/31/2019	10/31/2019	11/01/2019	11/01/2019
Analytes	**RSL[1]**	**RAG[2]**	**Background[3]**	**Ecological[4]**											
Hex Chromium SW7196A (mg/kg)															
Chromium, Hexavalent	0.3	0.42	NE	0.4	**0.17 J**	0.35 U	0.82 U	0.38 U	0.78 U	**0.35 J**	0.36 U	0.53 U	0.40 U	1.2 U	0.73 U
PCBs SW8082A (ug/g)															
PCB-1016 (Aroclor 1016)	0.41	0.31	NE	NE	0.014 U	0.016 U	0.083 U	0.016 U	0.015 U	0.014 U	0.016 U	0.013 U	0.016 U	0.014 U	0.012 U
PCB-1221 (Aroclor 1221)	0.2	0.31	NE	NE	0.014 U	0.016 U	0.083 U	0.016 U	0.015 U	0.014 U	0.016 U	0.013 U	0.016 U	0.014 U	0.012 U
PCB-1232 (Aroclor 1232)	0.17	0.31	NE	NE	0.014 U	0.016 U	0.083 U	0.016 U	0.015 U	0.014 U	0.016 U	0.013 U	0.016 U	0.014 U	0.012 U
PCB-1242 (Aroclor 1242)	0.23	0.31	NE	NE	0.014 U	0.016 U	0.083 U	0.016 U	0.015 U	0.014 U	0.016 U	0.013 U	0.016 U	0.014 U	0.012 U
PCB-1248 (Aroclor 1248)	0.23	0.31	NE	NE	0.014 U	0.016 U	0.083 U	0.016 U	0.015 U	0.014 U	0.016 U	0.013 U	0.016 U	0.014 U	0.012 U
PCB-1254 (Aroclor 1254)	0.12	0.31	NE	NE	0.014 U	0.016 U	0.083 U	0.016 U	0.015 U	0.014 U	0.016 U	0.013 U	0.016 U	0.014 U	0.012 U
PCB-1260 (Aroclor 1260)	0.24	0.31	NE	NE	0.014 U	0.016 U	**2.5**	0.016 U	0.015 U	0.014 U	0.016 U	0.013 U	0.016 U	**0.032 J**	0.012 U
VOCs SW8260D (ug/g)															
1,1,1,2-Tetrachloroethane	2	3	NE	NE	0.020 U	0.026 U	0.021 U	0.022 U	0.030 U	0.022 U	0.022 U	0.023 U	0.022 UJ	0.025 U	0.024 U
1,1,1-Trichloroethane	810	64	NE	NE	0.020 U	0.026 U	0.021 U	0.022 U	0.030 U	0.022 U	0.022 U	0.023 U	0.022 UJ	0.025 U	0.024 U
1,1,2,2-Tetrachloroethane	0.3	0.89	NE	NE	0.020 U	0.026 U	0.021 U	0.022 U	0.030 U	0.022 U	0.022 U	0.023 U	0.022 UJ	0.025 U	0.024 U
1,1,2-Trichloroethane	0.15	0.22	NE	NE	0.020 U	0.026 U	0.021 U	0.022 U	0.030 U	0.022 U	0.022 U	0.023 U	0.022 UJ	0.025 U	0.024 U
1,1-Dichloroethane	3.6	5.3	NE	NE	0.020 U	0.026 U	0.021 U	0.022 U	0.030 U	0.022 U	0.022 U	0.023 U	0.022 UJ	0.025 U	0.024 U
1,1-Dichloroethene	23	8.1	NE	NE	0.020 U	0.026 U	0.021 U	0.022 U	0.030 U	0.022 U	0.022 U	0.023 U	0.022 UJ	0.025 U	0.024 U
1,1-Dichloropropene	NE	NE	NE	NE	0.020 U	0.026 U	0.021 U	0.022 U	0.030 U	0.022 U	0.022 U	0.023 U	0.022 UJ	0.025 U	0.024 U
1,2,3-Trichlorobenzene	6.3	8.6	NE	NE	0.020 U	0.026 U	**0.020 J**	0.022 U	0.030 U	0.022 U	0.022 U	0.023 U	0.022 UJ	**0.014 J**	0.024 U
1,2,3-Trichloropropane	0.0051	0.07	NE	NE	0.020 U	0.026 U	0.021 U	0.022 U	0.030 U	0.022 U	0.022 U	0.023 U	0.022 UJ	0.025 U	0.024 U
1,2,4-Trichlorobenzene	5.8	8.6	NE	NE	0.020 U	0.026 U	**0.026 J**	0.022 U	0.030 U	0.022 U	0.022 U	0.023 U	0.022 UJ	0.025 U	0.024 U
1,2,4-Trimethylbenzene	30	18	NE	NE	0.020 U	0.026 U	0.021 U	0.022 U	0.030 U	0.022 U	0.022 U	0.023 U	0.022 UJ	**0.052 J**	0.024 U
1,2-Dibromo-3-chloropropane	0.0053	0.0078	NE	NE	0.039 U	0.051 U	0.043 U	0.043 U	0.060 U	0.045 U	0.045 U	0.045 U	0.045 UJ	0.051 U	0.049 U
1,2-Dibromoethane (EDB)	0.036	0.054	NE	NE	0.020 U	0.026 U	0.021 U	0.022 U	0.030 U	0.022 U	0.022 U	0.023 U	0.022 UJ	0.025 U	0.024 U
1,2-Dichlorobenzene	180	36	NE	NE	0.020 U	0.026 U	0.021 U	0.022 U	0.030 U	0.022 U	0.022 U	0.023 U	0.022 UJ	0.025 U	0.024 U
1,2-Dichloroethane	0.46	0.68	NE	NE	0.020 U	0.026 U	0.021 U	0.022 U	0.030 U	0.022 U	0.022 U	0.023 U	0.022 UJ	0.025 U	0.024 U
1,2-Dichloropropane	1.6	2.3	NE	NE	0.020 U	0.026 U	0.021 U	0.022 U	0.030 U	0.022 U	0.022 U	0.023 U	0.022 UJ	0.025 U	0.024 U
1,3,5-Trimethylbenzene	27	16	NE	NE	0.020 U	0.026 U	0.021 U	0.022 U	0.030 U	0.022 U	0.022 U	0.023 U	0.022 UJ	0.025 U	0.024 U
1,3-Dichlorobenzene	NE	29	NE	NE	0.020 U	0.026 U	0.021 U	0.022 U	0.030 U	0.022 U	0.022 U	0.023 U	0.022 UJ	0.025 U	0.024 U
1,3-Dichloropropane	160	210	NE	NE	0.020 U	0.026 U	0.021 U	0.022 U	0.030 U	0.022 U	0.022 U	0.023 U	0.022 UJ	0.025 U	0.024 U
1,4-Dichlorobenzene	2.6	3.9	NE	NE	0.020 U	0.026 U	0.021 U	0.022 U	0.030 U	0.022 U	0.022 U	0.023 U	0.022 UJ	0.025 U	0.024 U
1,4-Dioxane (p-Dioxane)	5.3	0.74	NE	NE	1.6 U	2.1 U	1.7 U	1.7 U	2.4 U	1.8 U	1.8 U	1.8 U	1.8 UJ	2.0 U	2.0 U
2,2-Dichloropropane	NE	NE	NE	NE	0.020 U	0.026 U	0.021 U	0.022 U	0.030 U	0.022 U	0.022 U	0.023 U	0.022 UJ	0.025 U	0.024 U
2-Butanone (MEK)	2700	1100	NE	NE	0.16 U	0.21 U	0.17 U	0.17 U	0.24 U	0.18 U	0.18 U	0.18 U	0.18 UJ	0.20 U	0.20 U
2-Chlorotoluene	160	80	NE	NE	0.020 U	0.026 U	0.021 U	0.022 U	0.030 U	0.022 U	0.022 U	0.023 U	0.022 UJ	0.025 U	0.024 U
2-Hexanone	20	29	NE	NE	0.039 U	0.051 U	0.043 U	0.043 U	0.060 U	0.045 U	0.045 U	0.045 U	0.045 UJ	0.051 U	0.049 U
4-Chlorotoluene	160	210	NE	NE	0.020 U	0.026 U	0.021 U	0.022 U	0.030 U	0.022 U	0.022 U	0.023 U	0.022 UJ	0.025 U	0.024 U
4-Methyl-2-pentanone (MIBK)	5400	330	NE	NE	0.020 U	0.026 U	0.021 U	0.022 U	0.030 U	0.022 U	0.022 U	0.023 U	0.022 UJ	0.025 U	0.024 U
Acetone	6100	5200	NE	NE	0.16 U	0.21 U	0.17 U	0.17 U	0.24 U	0.18 U	0.18 U	0.18 U	0.18 UJ	2.5 U	0.20 U
Benzene	1.2	1.7	NE	NE	0.020 U	0.026 U	0.021 U	0.022 U	0.030 U	0.022 U	0.022 U	0.023 U	0.022 UJ	**0.14**	0.024 U
Bromobenzene	29	38	NE	NE	0.020 U	0.026 U	0.021 U	0.022 U	0.030 U	0.022 U	0.022 U	0.023 U	0.022 UJ	0.025 U	0.024 U
Bromochloromethane	15	22	NE	NE	0.020 U	0.026 U	0.021 U	0.022 U	0.030 U	0.022 U	0.022 U	0.023 U	0.022 UJ	0.025 U	0.024 U
Bromodichloromethane	0.29	0.44	NE	NE	0.020 U	0.026 U	0.021 U	0.022 U	0.030 U	0.022 U	0.022 U	0.023 U	0.022 UJ	0.025 U	0.024 U
Bromoform	19	28	NE	NE	0.020 U	0.026 U	0.021 U	0.022 U	0.030 U	0.022 U	0.022 U	0.023 U	0.022 UJ	0.025 U	0.024 U
Bromomethane	0.68	1	NE	NE	0.079 U	0.10 U	0.085 U	0.087 U	0.12 U	0.090 U	0.090 U	0.091 U	0.090 UJ	0.10 U	0.098 U
Carbon disulfide	77	69	NE	NE	0.020 U	0.026 U	0.021 U	0.022 U	0.030 U	0.022 U	0.022 U	0.023 U	0.022 UJ	0.025 U	0.024 U
Carbon tetrachloride	0.65	0.97	NE	NE	0.020 U	0.026 U	0.021 U	0.022 U	0.030 U	0.022 U	0.022 U	0.023 U	0.022 UJ	0.025 U	0.024 U
Chlorobenzene	28	41	NE	40	0.020 U	0.026 U	0.021 U	0.022 U	0.030 U	0.022 U	0.022 U	0.023 U	0.022 UJ	0.025 U	0.024 U
Chloroethane	1400	200	NE	NE	0.020 U	0.026 U	0.021 U	0.022 U	0.030 U	0.022 U	0.022 U	0.023 U	0.022 UJ	0.025 U	0.024 U
Chloroform	0.32	0.47	NE	NE	0.020 U	0.026 U	0.021 U	0.022 U	0.030 U	0.022 U	0.022 U	0.023 U	0.022 UJ	0.025 U	0.024 U
Chloromethane	11	16	NE	NE	0.020 U	0.026 U	0.021 U	0.022 U	0.030 U	0.022 U	0.022 U	0.023 U	0.022 UJ	0.025 U	0.024 U
cis-1,2-Dichloroethene	16	20	NE	NE	0.020 U	0.026 U	0.021 U	0.022 U	0.030 U	0.022 U	0.022 U	0.023 U	0.022 UJ	0.025 U	0.024 U
cis-1,3-Dichloropropene	1.8	2.7	NE	NE	0.020 U	0.026 U	0.021 U	0.022 U	0.030 U	0.022 U	0.022 U	0.023 U	0.022 UJ	0.025 U	0.024 U
Dibromochloromethane	8.3	11	NE	NE	0.020 U	0.026 U	0.021 U	0.022 U	0.030 U	0.022 U	0.022 U	0.023 U	0.022 UJ	0.025 U	0.024 U
Dibromomethane	2.4	3.5	NE	NE	0.020 U	0.026 U	0.021 U	0.022 U	0.030 U	0.022 U	0.022 U	0.023 U	0.022 UJ	0.025 U	0.024 U
Dichlorodifluoromethane	8.7	13	NE	NE	0.020 U	0.026 U	0.021 U	0.022 U	0.030 U	0.022 U	0.022 U	0.023 U	0.022 UJ	0.025 U	0.024 U
Diethyl ether (Ethyl ether)	1600	81	NE	NE	0.020 U	0.026 U	0.021 U	0.022 U	0.030 U	0.022 U	0.022 U	0.023 U	0.022 UJ	0.025 U	0.024 U
Ethylbenzene	5.8	8.6	NE	NE	0.020 U	0.026 U	0.021 U	0.022 U	0.030 U	0.022 U	0.022 U	0.023 U	0.022 UJ	**0.047 J**	0.024 U
Hexachlorobutadiene	1.2	1.5	NE	NE	0.039 U	0.051 U	0.043 U	0.043 U	0.060 U	0.045 U	0.045 U	0.045 U	0.045 UJ	0.051 U	0.049 U
Isopropylbenzene (Cumene)	190	26	NE	NE	0.020 U	0.026 U	0.021 U	0.022 U	0.030 U	0.022 U	0.022 U	0.023 U	0.022 UJ	**0.020 J**	0.024 U
m,p-Xylene	55	26	NE	NE	0.039 U	0.051 U	0.043 U	0.043 U	0.060 U	0.045 U	0.045 U	0.045 U	0.045 UJ	**0.15**	0.049 U
Methyl tert-butyl ether (MTBE)	47	69	NE	NE	0.020 U	0.026 U	0.021 U	0.022 U	0.030 U	0.022 U	0.022 U	0.023 U	0.022 UJ	0.025 U	0.024 U
Methylene chloride	35	49	NE	NE	0.020 U	0.026 U	0.085 U	0.022 U	0.030 U	0.022 U	0.022 U	0.023 U	0.022 UJ	0.025 U	0.024 U
Naphthalene	3.8	2.9	NE	NE	0.020 U	0.026 U	0.085 UJ	0.022 U	**0.020 J**	0.022 U	0.022 U	0.023 U	0.022 UJ	**0.15 J**	0.098 U
n-Butylbenzene	390	540	NE	NE	0.020 U	0.026 U	0.021 U	0.022 U	0.030 U	0.022 U	0.022 U	0.023 U	0.022 UJ	0.025 U	0.024 U
n-Propylbenzene	380	26	NE	NE	0.020 U	0.026 U	0.021 U	0.022 U	0.030 U	0.022 U	0.022 U	0.023 U	0.022 UJ	**0.022 J**	0.024 U
o-Xylene	65	26	NE	NE	0.020 U	0.026 U	0.021 U	0.022 U	0.030 U	0.022 U	0.022 U	0.023 U	0.022 UJ	**0.084 J**	0.024 U
p-Cymene (p-Isopropyltoluene)	NE	NE	NE	NE	0.020 U	0.026 U	0.021 U	0.022 U	0.030 U	0.022 U	0.022 U	0.023 U	0.022 UJ	0.025 U	0.024 U
sec-Butylbenzene	780	1100	NE	NE	0.020 U	0.026 U	0.021 U	0.022 U	0.030 U	0.022 U	0.022 U	0.023 U	0.022 UJ	0.025 U	0.024 U

Table 4-1
Summary of Discrete Soil Sample Analytical Results
Former Dow Salvage Yard
233 Odlin Road, Bangor, Maine

Locations:					SY-SB13		SY-SB14		SY-SB15			SY-SB16		SY-SB17	
Field Sample ID:					SY-SB13-1	SY-SB13-2	SY-SB14-1	SY-SB14-2	SY-SB15-1	SY-SB15-2	SY-SB15-3	SY-SB16-1	SY-SB16-2	SY-SB17-1	SY-SB17-3
Matrix:					S	S	S	S	S	S	S	S	S	S	S
Sample Begin Depth:					0.5	12	0.5	15.5	0.5	0.75	12	0.5	13	0.5	4
Sample End Depth:					2	14	2	17.5	2	2.83	14	2	15	2	5
Sample Date:					10/30/2019	10/30/2019	10/31/2019	10/31/2019	10/29/2019	10/29/2019	10/29/2019	10/31/2019	10/31/2019	11/01/2019	11/01/2019
Analytes	**RSL[1]**	**RAG[2]**	**Background[3]**	**Ecological[4]**											
Styrene	600	83	NE	300	0.020 U	0.026 U	0.021 U	0.022 U	0.030 U	0.022 U	0.022 U	0.023 U	0.022 UJ	0.025 U	0.024 U
tert-Amyl methyl ether	NE	NE	NE	NE	0.020 U	0.026 U	0.021 U	0.022 U	0.030 U	0.022 U	0.022 U	0.023 U	0.022 UJ	0.025 U	0.024 U
tert-Butyl alcohol	NE	NE	NE	NE	0.20 U	0.26 U	0.21 U	0.22 U	0.30 U	0.22 U	0.22 U	0.23 U	0.22 UJ	0.25 U	0.24 U
tert-Butyl ethyl ether	NE	NE	NE	NE	0.020 U	0.026 U	0.021 U	0.022 U	0.030 U	0.022 U	0.022 U	0.023 U	0.022 UJ	0.025 U	0.024 U
tert-Butylbenzene	780	1100	NE	NE	0.020 U	0.026 U	0.021 U	0.022 U	0.030 U	0.022 U	0.022 U	0.023 U	0.022 UJ	0.025 U	0.024 U
Tetrachloroethene (PCE)	8.1	8.5	NE	NE	0.020 U	0.026 U	0.021 U	0.022 U	0.030 U	0.022 U	0.022 U	0.023 U	0.022 UJ	0.025 U	0.024 U
Tetrahydrofuran	1800	2700	NE	NE	0.16 U	0.21 U	0.17 U	0.17 U	0.24 U	0.18 U	0.18 U	0.18 U	0.18 UJ	0.20 U	0.20 U
Toluene	490	75	NE	200	0.020 U	**0.018 J**	0.021 U	0.022 U	0.030 U	0.022 U	0.022 U	0.023 U	0.022 UJ	**0.76**	**0.014 J**
trans-1,2-Dichloroethene	160	10	NE	NE	0.020 U	0.026 U	0.021 U	0.022 U	0.030 U	0.022 U	0.022 U	0.023 U	0.022 UJ	0.025 U	0.024 U
trans-1,3-Dichloropropene	1.8	2.7	NE	NE	0.020 U	0.026 U	0.021 U	0.022 U	0.030 U	0.022 U	0.022 U	0.023 U	0.022 UJ	0.025 U	0.024 U
Trichloroethene (TCE)	0.41	0.39	NE	NE	0.020 U	0.026 U	**0.021 J**	0.022 U	0.030 U	0.022 U	0.022 U	0.023 U	0.022 UJ	0.025 U	0.024 U
Trichlorofluoromethane	2300	94	NE	NE	0.020 U	0.026 U	0.021 U	0.022 U	0.030 U	0.022 U	0.022 U	0.023 U	0.022 UJ	0.025 U	0.024 U
Vinyl chloride	0.0059	0.064	NE	NE	0.020 U	0.026 U	0.021 U	0.022 U	0.030 U	0.022 U	0.022 U	0.023 U	0.022 UJ	0.025 U	0.024 U
SVOCs SW8270E (ug/g)															
1,2,4-Trichlorobenzene	5.8	8.6	NE	20	0.23 U	0.24 U	0.25 U	0.26 U	0.27 U	0.23 U	0.24 U	0.23 U	0.26 U	0.23 U	0.22 U
1,2-Dichlorobenzene	180	36	NE	NE	0.11 U	0.12 U	0.12 U	0.13 U	0.14 U	0.12 U	0.12 U	0.12 U	0.13 U	0.11 U	0.11 U
1,3-Dichlorobenzene	NE	29	NE	NE	0.11 U	0.12 U	0.12 U	0.13 U	0.14 U	0.12 U	0.12 U	0.12 U	0.13 U	0.11 U	0.11 U
1,4-Dichlorobenzene	2.6	3.9	NE	20	0.11 U	0.12 U	0.12 U	0.13 U	0.14 U	0.12 U	0.12 U	0.12 U	0.13 U	0.11 U	0.11 U
2,2'-Oxybis(1-chloropropane)	310	NE	NE	NE	0.11 U	0.12 U	0.12 U	0.13 U	0.14 U	0.12 U	0.12 U	0.12 U	0.13 U	0.11 U	0.11 U
2,4,5-Trichlorophenol	630	860	NE	9	0.11 U	0.12 U	0.12 U	0.13 U	0.14 U	0.12 U	0.12 U	0.12 U	0.13 U	0.11 U	0.11 U
2,4,6-Trichlorophenol	6.3	8.6	NE	4	0.11 U	0.12 U	0.12 U	0.13 U	0.14 U	0.12 U	0.12 U	0.12 U	0.13 U	0.11 U	0.11 U
2,4-Dichlorophenol	19	26	NE	NE	0.23 U	0.24 U	0.25 U	0.26 U	0.27 U	0.23 U	0.24 U	0.23 U	0.26 U	0.23 U	0.22 U
2,4-Dimethylphenol	130	170	NE	NE	0.11 U	0.12 U	0.12 U	0.13 U	0.14 U	0.12 U	0.12 U	0.12 U	0.13 U	0.11 U	0.11 U
2,4-Dinitrophenol	13	17	NE	20	2.3 U	2.4 U	2.5 U	2.6 U	2.7 U	2.3 U	2.4 U	2.3 U	2.6 U	2.3 U	2.2 U
2,4-Dinitrotoluene	1.7	2.4	NE	NE	0.11 U	0.12 U	0.12 U	0.13 U	0.14 U	0.12 U	0.12 U	0.12 U	0.13 U	0.11 U	0.11 U
2,6-Dinitrotoluene	0.36	0.5	NE	NE	0.11 U	0.12 U	0.12 U	0.13 U	0.14 U	0.12 U	0.12 U	0.12 U	0.13 U	0.11 U	0.11 U
2-Chloronaphthalene	480	650	NE	NE	0.23 U	0.24 U	0.25 U	0.26 U	0.27 U	0.23 U	0.24 U	0.23 U	0.26 U	0.23 U	0.22 U
2-Chlorophenol	39	54	NE	NE	0.23 U	0.24 U	0.25 U	0.26 U	0.27 U	0.23 U	0.24 U	0.23 U	0.26 U	0.23 U	0.22 U
2-Methylphenol (o-Cresol)	320	430	NE	NE	0.11 U	0.12 U	0.12 U	0.13 U	0.14 U	0.12 U	0.12 U	0.12 U	0.13 U	0.11 U	0.11 U
2-Nitroaniline	63	NE	NE	NE	0.11 U	0.12 U	0.12 U	0.13 U	0.14 U	0.12 U	0.12 U	0.12 U	0.13 U	0.11 U	0.11 U
2-Nitrophenol	NE	NE	NE	NE	0.11 U	0.12 U	0.12 U	0.13 U	0.14 U	0.12 U	0.12 U	0.12 U	0.13 U	0.11 U	0.11 U
3,3'-Dichlorobenzidine	1.2	1.7	NE	NE	2.8 U	3.1 U	3.1 U	3.2 U	3.4 U	2.9 U	3.0 U	2.9 U	3.3 U	2.9 U	2.8 U
3-Nitroaniline	NE	NE	NE	NE	0.11 U	0.12 U	0.12 U	0.13 U	0.14 U	0.12 U	0.12 U	0.12 U	0.13 U	0.11 U	0.11 U
4,6-Dinitro-2-methylphenol	0.51	860	NE	NE	R	R	R	R	R	R	R	R	R	R	R
4-Bromophenyl phenyl ether	NE	NE	NE	NE	0.11 U	0.12 U	0.12 U	0.13 U	0.14 U	0.12 U	0.12 U	0.12 U	0.13 U	0.11 U	0.11 U
4-Chloro-3-methylphenol	630	NE	NE	NE	0.11 U	0.12 U	0.12 U	0.13 U	0.14 U	0.12 U	0.12 U	0.12 U	0.13 U	0.11 U	0.11 U
4-Chloroaniline	2.7	3.7	NE	NE	0.11 U	0.12 U	0.12 U	0.13 U	0.14 U	0.12 U	0.12 U	0.12 U	0.13 U	0.11 U	0.11 U
4-Chlorophenyl phenyl ether	NE	NE	NE	NE	0.23 U	0.24 U	0.25 U	0.26 U	0.27 U	0.23 U	0.24 U	0.23 U	0.26 U	0.23 U	0.22 U
4-Methylphenol (p-Cresol)	630	510	NE	NE	0.11 U	0.12 U	0.12 U	0.13 U	0.14 U	0.12 U	0.12 U	0.12 U	0.13 U	0.11 U	0.11 U
4-Nitroaniline	25	35	NE	NE	0.23 U	0.24 U	0.25 U	0.26 U	0.27 U	0.23 U	0.24 U	0.23 U	0.26 U	0.23 U	0.22 U
4-Nitrophenol	NE	61	NE	7	0.57 U	0.61 U	0.62 U	0.65 U	0.68 U	0.58 U	0.60 U	0.58 U	0.65 U	0.57 U	0.56 U
Aniline (Phenylamine, Aminobenzene)	44	610	NE	NE	0.11 U	0.12 U	0.12 U	0.13 U	0.14 U	0.12 U	0.12 U	0.12 U	0.13 U	0.11 U	0.11 U
Azobenzene	5.6	NE	NE	NE	0.11 U	0.12 U	0.12 U	0.13 U	0.14 U	0.12 U	0.12 U	0.12 U	0.13 U	0.11 U	0.11 U
Benzidine	0.00053	NE	NE	NE	2.8 U	3.1 U	3.1 U	3.2 U	3.4 U	2.9 U	3.0 U	2.9 U	3.3 U	2.9 U	2.8 U
Benzoic acid	25000	1100	NE	NE	5.1 U	5.5 U	5.6 U	5.8 U	6.2 U	5.2 U	5.4 U	5.2 U	5.9 U	5.1 U	5.0 U
Benzyl alcohol	630	860	NE	NE	0.11 U	0.12 U	0.12 U	0.13 U	0.14 U	0.12 U	0.12 U	0.12 U	0.13 U	0.11 U	0.11 U
Benzyl butyl phthalate	290	390	NE	NE	0.23 U	0.24 U	0.25 U	0.26 U	0.27 U	0.23 U	0.24 U	0.23 U	0.26 U	0.23 U	0.22 U
bis(2-Chloroethoxy) methane	19	NE	NE	NE	0.23 U	0.24 U	0.25 U	0.26 U	0.27 U	0.23 U	0.24 U	0.23 U	0.26 U	0.23 U	0.22 U
bis(2-Chloroethyl) ether	0.23	0.33	NE	NE	0.11 U	0.12 U	0.12 U	0.13 U	0.14 U	0.12 U	0.12 U	0.12 U	0.13 U	0.11 U	0.11 U
bis(2-Ethylhexyl) phthalate	39	53	NE	NE	0.28 U	0.31 U	0.31 U	0.32 U	**0.29 J**	0.29 U	0.30 U	0.29 U	0.33 U	0.57 U	0.28 U
Carbazole	NE	27	NE	NE	0.11 U	0.12 U	0.12 U	0.13 U	0.14 U	0.12 U	0.12 U	0.12 U	0.13 U	**0.076 J**	0.11 U
Dibenzofuran	7.3	11	NE	NE	0.057 U	0.061 U	0.062 U	0.065 U	0.068 U	0.058 U	0.060 U	0.058 U	0.065 U	**0.056 J**	0.056 U
Diethyl phthalate	5100	6900	NE	100	0.23 U	0.24 U	0.25 U	0.26 U	0.27 U	0.23 U	0.24 U	0.23 U	0.26 U	0.23 U	0.22 U
Dimethyl phthalate	NE	NE	NE	NE	0.23 U	0.24 U	0.25 U	0.26 U	0.27 U	0.23 U	0.24 U	0.23 U	0.26 U	0.23 U	0.22 U
Di-n-butyl phthalate	630	860	NE	200	0.23 U	0.24 U	0.25 U	0.26 U	0.27 U	0.23 U	0.24 U	0.23 U	0.26 U	0.23 U	0.22 U
di-n-Octyl phthalate	63	86	NE	NE	0.23 U	0.24 U	0.25 U	0.26 U	0.27 U	0.23 U	0.24 U	0.23 U	0.26 U	0.23 U	0.22 U
Hexachlorobenzene	0.21	0.3	NE	NE	0.11 U	0.12 U	0.12 U	0.13 U	0.14 U	0.12 U	0.12 U	0.12 U	0.13 U	0.11 U	0.11 U
Hexachlorobutadiene	1.2	1.5	NE	NE	0.11 U	0.12 U	0.12 U	0.13 U	0.14 U	0.12 U	0.12 U	0.12 U	0.13 U	0.11 U	0.11 U
Hexachlorocyclopentadiene	0.18	NE	NE	10	0.45 U	0.49 U	0.50 U	0.52 U	0.55 U	0.46 U	0.48 U	0.47 U	0.52 U	0.46 U	0.45 U
Hexachloroethane	1.8	2.7	NE	NE	0.11 U	0.12 U	0.12 U	0.13 U	0.14 U	0.12 U	0.12 U	0.12 U	0.13 U	0.11 U	0.11 U
Isophorone	570	780	NE	NE	0.23 U	0.24 U	0.25 U	0.26 U	0.27 U	0.23 U	0.24 U	0.23 U	0.26 U	0.23 U	0.22 U
Nitrobenzene	5.1	NE	NE	NE	0.11 U	0.12 U	0.12 U	0.13 U	0.14 U	0.12 U	0.12 U	0.12 U	0.13 U	0.11 U	0.11 U
N-Nitrosodimethylamine	0.002	NE	NE	NE	0.11 U	0.12 U	0.12 U	0.13 U	0.14 U	0.12 U	0.12 U	0.12 U	0.13 U	0.11 U	0.11 U
N-Nitrosodi-n-propylamine	0.078	NE	NE	NE	0.11 U	0.12 U	0.12 U	0.13 U	0.14 U	0.12 U	0.12 U	0.12 U	0.13 U	0.11 U	0.11 U
N-Nitrosodiphenylamine	110	150	NE	NE	0.11 U	0.12 U	0.12 U	0.13 U	0.14 U	0.12 U	0.12 U	0.12 U	0.13 U	0.11 U	0.11 U
Pentachlorophenol	180	1.4	NE	2.1	R	R	R	R	0.68 U	R	R	R	R	R	R
Phenol	1900	2600	NE	30	0.11 U	0.12 U	0.12 U	0.13 U	0.14 U	0.12 U	0.12 U	0.12 U	0.13 U	0.11 U	0.11 U
Pyridine	7.8	NE	NE	NE	0.11 U	0.12 U	0.12 U	0.13 U	0.14 U	0.12 U	0.12 U	0.12 U	0.13 U	0.11 U	0.11 U
TOC LYDKHN (ug/g)															
Total Organic Carbon	NE	NE	NE	NE	**94000**	**5400**	**9900**	**4600**	**100000**	**7700**	**2900**	**2300**	**3300**	**41000**	**7500**

Table 4-1
Summary of Discrete Soil Sample Analytical Results
Former Dow Salvage Yard
233 Odlin Road, Bangor, Maine

Analytes	RSL[1]	RAG[2]	Background[3]	Ecological[4]	Locations:	SY-SB18			SY-SB19			SY-SB20		SY-SS1	SY-SS2	SY-SS3	SY-SS4
					Field Sample ID:	SY-SB18-1	SY-SB18-2	SY-SB18-3	SY-SB19-1	SY-SB19-2	SY-SB19-3	SY-SB20-1	SY-SB20-2	SY-SS1	SY-SS2	SY-SS3	SY-SS4
					Matrix:	S	S	S	S	S	S	S	S	S	S	S	S
					Sample Begin Depth:	0.5	3	5	0.5	10	13	0.5	0	0.5	0.5	0.5	0.5
					Sample End Depth:	2	5	7	2	12	15	2	0	2	2	2	2
					Sample Date:	11/01/2019	11/01/2019	11/01/2019	10/31/2019	10/31/2019	10/31/2019	11/04/2019	11/04/2019	11/05/2019	11/05/2019	11/04/2019	11/04/2019
PAH SIM (mg/kg)																	
2-Methylnaphthalene	24	33	NE	29		**0.0060 J**	**0.083**	0.012 U	**0.22**	0.013 U	0.013 U	0.012 U	0.012 U	0.012 U	0.010 U	0.012 U	0.011 U
Acenaphthene	360	490	NE	29		**0.0096 J**	**0.0058 J**	0.012 U	**0.32**	0.013 U	0.013 U	0.012 U	0.012 U	0.012 U	0.010 U	0.012 U	0.011 U
Acenaphthylene	180	490	NE	29		**0.027**	**0.0055 J**	0.012 U	**1.5**	0.013 U	0.013 U	0.012 U	0.012 U	0.012 U	0.010 U	0.012 U	**0.010 J**
Anthracene	1800	250	NE	29		**0.059**	**0.012 J**	0.012 U	**1.4**	0.013 U	0.013 U	**0.011 J**	0.012 U	**0.0090 J**	**0.0029 J**	0.012 U	**0.0041 J**
Benzo(a)anthracene	1.1	1.6	0.86	1.1		**0.41**	**0.077**	**0.0031 J**	**8.0**	**0.011 J**	0.013 U	**0.19**	0.012 U	**0.073**	**0.050**	**0.0085 J**	**0.13**
Benzo(a)pyrene	0.11	0.16	1.5	1.1		**0.49**	**0.12**	**0.0048 J**	**11**	**0.012 J**	0.013 U	**0.18**	0.012 U	**0.064**	**0.068**	**0.011 J**	**0.36**
Benzo(b)fluoranthene	1.1	1.6	1.3	1.1		**0.61**	**0.32**	**0.0059 J**	**10**	**0.014 J**	0.013 U	**0.29**	**0.0032 J**	**0.093**	**0.12**	**0.016 J**	**0.40**
Benzo(g,h,i)perylene	180	250	NE	1.1		**0.38**	**0.26**	0.012 U	**11**	0.026 U	0.013 U	**0.13**	0.012 U	**0.042**	**0.060**	**0.0093 J**	**0.27**
Benzo(k)fluoranthene	11	16	NE	1.1		**0.24**	**0.087**	0.012 U	**3.3**	**0.0066 J**	0.013 U	**0.097**	0.012 U	**0.035**	**0.036**	**0.0076 J**	**0.14**
Chrysene	110	160	NE	1.1		**0.49**	**0.19**	**0.0044 J**	**8.6**	**0.012 J**	0.013 U	**0.21**	**0.0024 J**	**0.071**	**0.075**	**0.011 J**	**0.16**
Dibenz(a,h)anthracene	0.11	0.16	0.32	1.1		**0.13**	**0.080**	0.012 U	**1.7**	0.013 U	0.013 U	**0.038**	0.012 U	**0.014 J**	**0.014 J**	0.012 U	**0.10**
Fluoranthene	240	330	NE	1.1		**0.84**	**0.16**	**0.0037 J**	**9.0**	**0.016 J**	**0.0027 J**	**0.35**	0.012 U	**0.10**	**0.11**	**0.014 J**	**0.060**
Fluorene	240	330	NE	29		**0.024**	**0.0049 J**	0.012 U	**0.78**	0.013 U	0.013 U	**0.0053 J**	0.012 U	0.012 U	0.010 U	0.012 U	0.011 U
Indeno(1,2,3-c,d)pyrene	1.1	1.6	0.4	1.1		**0.47**	**0.25**	0.012 U	**11**	0.026 U	0.013 U	**0.13**	0.012 U	**0.046**	**0.054**	**0.0070 J**	**0.31**
Naphthalene	3.8	2.9	0.11	29		**0.0053 J**	**0.062**	0.012 U	**0.17 J**	**0.0038 J**	0.013 U	0.012 U	0.012 U	0.012 U	0.010 U	0.012 U	0.011 U
Phenanthrene	180	250	NE	29		**0.36**	**0.13**	**0.0026 J**	**4.9**	**0.0068 J**	0.013 U	**0.11**	0.012 U	**0.028**	**0.031**	**0.0044 J**	**0.012 J**
Pyrene	180	250	NE	1.1		**0.65**	**0.15**	**0.0080 J**	**14**	**0.023 J**	**0.0063 J**	**0.36**	0.012 U	**0.071**	**0.096**	**0.0087 J**	**0.098**
MassDEP EPH (ug/g)																	
2-Methylnaphthalene	24	33	NE	29		0.11 U	**0.20 J**	0.11 U	**0.36 J**	0.12 U	0.12 U	0.11 U	0.12 U	0.12 U	0.11 U	0.12 U	0.11 U
Acenaphthene	360	490	NE	29		0.11 U	0.12 U	0.11 U	**0.53 J**	0.12 U	0.12 U	0.11 U	0.12 U	0.12 U	0.11 U	0.12 U	0.11 U
Acenaphthylene	180	490	NE	29		0.11 U	0.12 U	0.11 U	**0.84 J**	0.12 U	0.12 U	0.11 U	0.12 U	0.12 U	0.11 U	0.12 U	**0.062 J**
Anthracene	1800	250	NE	29		**0.058 J**	0.12 U	0.11 U	**2.7 J**	0.12 U	0.12 U	0.11 U	0.12 U	0.12 U	0.11 U	0.12 U	0.11 U
Benzo(a)anthracene	1.1	1.6	0.86	1.1		**0.62**	**0.67**	0.11 U	**7.8 J**	0.12 U	0.12 U	**0.15 J**	0.12 U	**0.12 J**	0.11 U	0.12 U	**0.16 J**
Benzo(a)pyrene	0.11	0.16	1.5	1.1		**0.67**	**0.80**	0.11 U	**7.4 J**	0.12 U	0.12 U	**0.17 J**	0.12 U	**0.14 J**	0.11 U	0.12 U	**0.41**
Benzo(b)fluoranthene	1.1	1.6	1.3	1.1		**0.60**	**0.82**	0.11 U	**6.2 J**	0.12 U	0.12 U	**0.20 J**	0.12 U	**0.15 J**	**0.058 J**	0.12 U	**0.25**
Benzo(g,h,i)perylene	180	250	NE	1.1		**0.46**	**0.55**	0.11 U	**4.6 J**	0.12 U	0.12 U	**0.11 J**	0.12 U	**0.082 J**	**0.037 J**	0.12 U	**0.18 J**
Benzo(k)fluoranthene	11	16	NE	1.1		**0.64**	**0.79**	0.11 U	**5.7 J**	0.12 U	0.12 U	**0.17 J**	0.12 U	**0.13 J**	0.11 U	0.12 U	**0.25**
Chrysene	110	160	NE	1.1		**0.75**	**0.98**	0.11 U	**8.3 J**	0.12 U	0.12 U	**0.18 J**	0.12 U	**0.14 J**	0.11 U	0.12 U	**0.22 J**
Dibenz(a,h)anthracene	0.11	0.16	0.32	1.1		**0.088 J**	**0.15 J**	0.11 U	**1.2 J**	0.12 U	0.12 U	0.11 U	0.12 U	0.12 U	0.11 U	0.12 U	0.11 U
Fluoranthene	240	330	NE	1.1		**1.2**	**0.64**	0.11 U	**17 J**	0.12 U	0.12 U	**0.32**	0.12 U	**0.19 J**	0.11 U	0.12 U	**0.15 J**
Fluorene	240	330	NE	29		0.11 U	0.12 U	0.11 U	**0.81 J**	0.12 U	0.12 U	0.11 U	0.12 U	0.12 U	0.11 U	0.12 U	0.11 U
Indeno(1,2,3-c,d)pyrene	1.1	1.6	0.4	1.1		**0.37**	**0.41**	0.11 U	**3.9 J**	0.12 U	0.12 U	**0.098 J**	0.12 U	0.12 U	0.11 U	0.12 U	**0.16 J**
Naphthalene	3.8	2.9	0.11	29		0.11 U	**0.18 J**	0.11 U	**0.45 J**	0.12 U	0.12 U	0.11 U	0.12 U	0.12 U	0.11 U	0.12 U	0.11 U
Phenanthrene	180	250	NE	29		**0.68**	**0.36**	0.11 U	**9.4 J**	0.12 U	0.12 U	**0.089 J**	0.12 U	0.12 U	0.11 U	0.12 U	0.11 U
Pyrene	180	250	NE	1.1		**1.1**	**0.64**	0.11 U	**17 J**	0.12 U	0.12 U	**0.28**	0.12 U	**0.16 J**	0.11 U	0.12 U	**0.16 J**
C11-C22 Aromatic	NE	260	NE	NE		**92**	**120**	23 UJ	**340 J**	24 UJ	25 U	**11 J**	**7.8 J**	**12 J**	**11 J**	**8.6 J**	**28**
C11-C22 Extractable Petroleum Hydrocarbons, Aromatic (Unadjusted)	NE	100000	NE	NE		**99**	**130**	23 UJ	**430 J**	24 UJ	25 U	**13 J**	**7.8 J**	**14 J**	**11 J**	**8.6 J**	**30**
C19-C36 Aliphatic	NE	10000	NE	NE		**120**	**190**	23 UJ	**260 J**	24 UJ	25 U	**9.3 J**	**8.2 J**	**7.7 J**	**5.6 J**	**4.9 J**	**7.7 J**
C9-C18 Aliphatic	NE	250	NE	NE		22 U	**39**	23 UJ	**43 J**	**33 J**	25 U	23 U	24 U	24 U	23 U	23 U	23 U
MassDEP VPH (ug/g)																	
Benzene	1.2	1.7	NE	NE		0.039 U	**0.032 J**	0.054 U	0.031 U	0.044 U	0.036 U	0.045 U	0.040 U	0.038 U	0.029 U	0.058 U	0.037 U
Ethylbenzene	5.8	8.6	NE	NE		0.039 U	0.066 U	0.054 U	0.031 U	0.044 U	0.036 U	0.045 U	0.040 U	0.038 U	0.029 U	0.058 U	0.037 U
m,p-Xylene	55	26	NE	NE		0.077 U	0.13 U	0.11 U	0.063 U	0.087 U	0.072 U	0.090 U	0.079 U	0.076 U	0.057 U	0.12 U	0.075 U
Methyl tert-butyl ether (MTBE)	47	69	NE	NE		0.039 U	0.066 U	0.054 U	0.031 U	0.044 U	0.036 U	0.045 U	0.040 U	0.038 U	0.029 U	0.058 U	0.037 U
Naphthalene	3.8	2.9	NE	NE		0.039 U	**0.12 J**	0.054 U	0.031 U	0.044 U	0.036 U	0.045 U	0.040 U	0.038 U	0.029 U	0.058 U	0.037 U
o-Xylene	65	26	NE	NE		0.039 U	0.066 U	0.054 U	0.031 U	**0.14**	0.036 U	0.045 U	0.040 U	0.038 U	0.029 U	0.058 U	0.037 U
Toluene	490	75	NE	NE		0.039 U	**0.057 J**	0.054 U	0.031 U	0.044 U	0.036 U	0.045 U	0.040 U	0.038 U	0.029 U	0.058 U	0.037 U
C5-C8 Aliphatic	NE	43	NE	NE		4.6 U	7.9 U	6.4 U	3.8 U	5.2 U	4.3 U	5.4 U	4.8 U	4.6 U	3.4 U	6.9 U	4.5 U
C9-C10 Aromatic	NE	66	NE	NE		1.5 U	2.5 U	2.0 U	1.2 U	**140**	1.3 U	1.7 U	1.5 U	1.4 U	1.1 U	2.2 U	1.4 U
C9-C12 Aliphatic	NE	230	NE	NE		4.6 U	7.9 U	6.4 U	3.8 U	**110**	4.3 U	5.4 U	4.8 U	4.6 U	3.4 U	6.9 U	4.5 U
Metals SW6020A/7471B (ug/g)																	
Aluminum	7700	2700	NE	NE		**7100**	**9600**	**14000**	**5600**	**16000**	**18000**	**12000**	**15000**	**15000**	**8500**	**9200**	**13000**
Antimony	3.1	4.3	NE	0.27		**0.62**	**18**	0.60 U	0.50 U	0.60 U	0.60 U	**1.2**	**0.58**	0.60 U	0.60 U	0.60 U	0.60 U
Arsenic	0.68	0.93	16.4	9.9		**9.1**	**8.2**	**8.2**	**5.6**	**12**	**12**	**12**	**7.7**	**12**	**7.5**	**10**	**10**
Barium	1500	210	469	283		**38**	**320**	**26**	**20**	**30**	**38**	**28**	**27**	**44**	**27**	**26**	**27**
Beryllium	16	11	2.4	10		0.50 U	0.60 U	**0.40 J**	0.50 U	**0.35 J**	**0.38 J**	0.60 U	**0.53**	0.60 U	0.60 U	0.60 U	0.60 U
Cadmium	7.1	4.2	0.26	0.36		**68**	**1.9**	0.058 U	0.50 U	0.062 U	0.063 U	0.60 U	0.50 U	0.60 U	0.60 U	0.60 U	0.60 U
Chromium	0.3[†]/12000	0.42[†]/2,700	79	0.4		**210**	**38**	**25**	**15**	**33**	**36**	**23**	**30**	**25**	**17**	**18**	**27**
Cobalt	2.3	3.2	14.9	13		**7.2**	**9.0**	**8.8**	**5.7**	**13**	**14**	**11**	**13**	**9.5**	**6.1**	**8.9**	**11**
Copper	310	340	23	28		**14**	**160**	**10**	**13**	**19**	**19**	**19**	**19**	**12**	**12**	**10.0**	**17**
Iron	5500	7500	SSS	NE		**18000**	**22000**	**20000**	**12000**	**30000**	**32000**	**23000**	**28000**	**26000**	**21000**	**22000**	**25000**
Lead	400	14	32	11		**29**	**620**	**8.1**	**35**	**13**	**33**	**18**	**13**	**24**	**21**	**17**	**14**
Magnesium	NE	NE	NE	NE		**3100**	**4500**	**4500**	**2900**	**6800**	**7700**	**4400**	**7900**	**4100**	**2900**	**3100**	**5100**
Manganese	180	28	841	220		**560**	**400**	**290**	**370**	**420**	**480**	**580**	**420**	**270**	**350**	**530**	**380**
Mercury	1.1	0.31	0.123	0.00051		**0.039 J**	**0.39**	0.078 U	**0.074 J**	0.086 U	0.10 U	0.089 U	0.085 U	0.089 U	**0.036 J**	0.092 U	0.095 U
Nickel	150	99	39	30		**21**	**35**	**24**	**18**	**39**	**41**	**32**	**38**	**27**	**19**	**18**	**29**
Potassium	NE	NE	NE	NE		**590**	**1100**	**1100**	**610**	**2300**	**2900**	**1200**	**2600**	**980**	**540**	**630**	**1300**
Selenium	39	54	0.61	0.21		**2.5 J**	**0.65 J**	6.0 U	**1.2 J**	6.0 U	6.0 U	6.0 U	5.0 U	6.0 U	6.0 U	6.0 U	6.0 U
Silver	39	54	SSS	2		2.6 U	3.0 U	0.29 U	2.7 U	3.1 U	3.1 U	2.9 U	2.7 U	2.9 U	2.8 U	2.8 U	2.8 U
Sodium	NE	NE	NE	NE		53 U	**240**	**85**	**130**	**180**	**260**	58 U	**160**	**58 J**	56 U	57 U	**68 J**
Thallium	0.078	0.11	0.6	1		0.26 U	0.30 U	**0.063 J**	0.50 U	**0.11 J**	**0.12 J**	0.60 U	0.50 U	0.60 U	0.60 U	0.60 U	0.60 U
Vanadium	39	49	103	2		**12**	**25**	**22**	**21**	**30**	**31**	**18**	**26**	**24**	**18**	**22**	**23**
Zinc	2300	3200	101	8.5		**52**	**1700**	**34**	**34**	**60**	**63**	**54**	**61**	**57**	**37**	**35**	**49**

Table 4-1
Summary of Discrete Soil Sample Analytical Results
Former Dow Salvage Yard
233 Odlin Road, Bangor, Maine

Locations:					SY-SB18			SY-SB19			SY-SB20		SY-SS1	SY-SS2	SY-SS3	SY-SS4
Field Sample ID:					SY-SB18-1	SY-SB18-2	SY-SB18-3	SY-SB19-1	SY-SB19-2	SY-SB19-3	SY-SB20-1	SY-SB20-2	SY-SS1	SY-SS2	SY-SS3	SY-SS4
Matrix:					S	S	S	S	S	S	S	S	S	S	S	S
Sample Begin Depth:					0.5	3	5	0.5	10	13	0.5	0	0.5	0.5	0.5	0.5
Sample End Depth:					2	5	7	2	12	15	2	0	2	2	2	2
Sample Date:					11/01/2019	11/01/2019	11/01/2019	10/31/2019	10/31/2019	10/31/2019	11/04/2019	11/04/2019	11/05/2019	11/05/2019	11/04/2019	11/04/2019
Analytes	**RSL[1]**	**RAG[2]**	**Background[3]**	**Ecological[4]**												
Hex Chromium SW7196A (mg/kg)																
Chromium, Hexavalent	0.3	0.42	NE	0.4	**8.2**	1.2 U	**0.64**	0.46 UJ	0.63 U	0.61 U	0.73 U	0.36 U	0.75 U	1.5 UJ	0.68 U	0.66 U
PCBs SW8082A (ug/g)																
PCB-1016 (Aroclor 1016	0.41	0.31	NE	NE	0.013 U	0.014 U	0.016 U	0.012 UJ	0.016 U	0.017 U	0.015 U	0.015 U	0.016 U	0.013 U	0.014 U	0.014 U
PCB-1221 (Aroclor 1221	0.2	0.31	NE	NE	0.013 U	0.014 U	0.016 U	0.012 U	0.016 U	0.017 U	0.015 U	0.015 U	0.016 U	0.013 U	0.014 U	0.014 U
PCB-1232 (Aroclor 1232	0.17	0.31	NE	NE	0.013 U	0.014 U	0.016 U	0.012 U	0.016 U	0.017 U	0.015 U	0.015 U	0.016 U	0.013 U	0.014 U	0.014 U
PCB-1242 (Aroclor 1242	0.23	0.31	NE	NE	0.013 U	0.014 U	0.016 U	0.012 U	0.016 U	0.017 U	0.015 U	0.015 U	0.016 U	0.013 U	0.014 U	0.014 U
PCB-1248 (Aroclor 1248)	0.23	0.31	NE	NE	0.013 U	0.014 U	0.016 U	0.012 U	0.016 U	0.017 U	0.015 U	0.015 U	0.016 U	0.013 U	0.014 U	0.014 U
PCB-1254 (Aroclor 1254)	0.12	0.31	NE	NE	0.013 U	0.014 U	0.016 U	**0.076**	0.016 U	0.017 U	0.015 U	0.015 U	0.016 U	0.013 U	0.014 U	0.014 U
PCB-1260 (Aroclor 1260)	0.24	0.31	NE	NE	0.013 U	0.014 U	0.016 U	**0.015 J**	0.016 U	0.017 U	0.015 U	0.015 U	0.016 U	0.013 U	0.014 U	0.014 U
VOCs SW8260D (ug/g)																
1,1,1,2-Tetrachloroethane	2	3	NE	NE	0.024 U	0.041 U	0.025 U	0.020 U	0.027 U	0.022 U	0.028 U	0.025 U	0.024 U	0.018 U	0.036 U	0.023 U
1,1,1-Trichloroethane	810	64	NE	NE	0.024 U	0.041 U	0.025 U	0.020 U	0.027 U	0.022 U	0.028 U	0.025 U	0.024 U	0.018 U	0.036 U	0.023 U
1,1,2,2-Tetrachloroethane	0.3	0.89	NE	NE	0.024 U	0.041 U	0.025 U	0.020 U	0.027 U	0.022 U	0.028 U	0.025 U	0.024 U	0.018 U	0.036 U	0.023 U
1,1,2-Trichloroethane	0.15	0.22	NE	NE	0.024 U	0.041 U	0.025 U	0.020 U	0.027 U	0.022 U	0.028 U	0.025 U	0.024 U	0.018 U	0.036 U	0.023 U
1,1-Dichloroethane	3.6	5.3	NE	NE	0.024 U	0.041 U	0.025 U	0.020 U	0.027 U	0.022 U	0.028 U	0.025 U	0.024 U	0.018 U	0.036 U	0.023 U
1,1-Dichloroethene	23	8.1	NE	NE	0.024 U	0.041 U	0.025 U	0.020 U	0.027 U	0.022 U	0.028 U	0.025 U	0.024 U	0.018 U	0.036 U	0.023 U
1,1-Dichloropropene	NE	NE	NE	NE	0.024 U	0.041 U	0.025 U	0.020 U	0.027 U	0.022 U	0.028 U	0.025 U	0.024 U	0.018 U	0.036 U	0.023 U
1,2,3-Trichlorobenzene	6.3	8.6	NE	NE	0.024 U	0.041 U	0.025 U	0.020 U	0.027 U	0.022 U	0.028 U	0.025 U	0.024 U	0.018 U	0.036 U	0.023 U
1,2,3-Trichloropropane	0.0051	0.07	NE	NE	0.024 U	0.041 U	0.025 U	0.020 U	0.027 U	0.022 U	0.028 U	0.025 U	0.024 U	0.018 U	0.036 U	0.023 U
1,2,4-Trichlorobenzene	5.8	8.6	NE	NE	0.024 U	0.041 U	0.025 U	0.020 U	0.027 U	0.022 U	0.028 U	0.025 U	0.024 U	0.018 U	0.036 U	0.023 U
1,2,4-Trimethylbenzene	30	18	NE	NE	0.024 U	0.041 U	0.025 U	0.020 U	0.027 U	0.022 U	0.028 U	0.025 U	0.024 U	0.018 U	0.036 U	0.023 U
1,2-Dibromo-3-chloropropane	0.0053	0.0078	NE	NE	0.048 U	0.083 U	0.050 U	0.039 U	0.055 U	0.045 U	0.056 U	0.050 U	0.048 U	0.036 U	0.072 U	0.047 U
1,2-Dibromoethane (EDB)	0.036	0.054	NE	NE	0.024 U	0.041 U	0.025 U	0.020 U	0.027 U	0.022 U	0.028 U	0.025 U	0.024 U	0.018 U	0.036 U	0.023 U
1,2-Dichlorobenzene	180	36	NE	NE	0.024 U	0.041 U	0.025 U	0.020 U	0.027 U	0.022 U	0.028 U	0.025 U	0.024 U	0.018 U	0.036 U	0.023 U
1,2-Dichloroethane	0.46	0.68	NE	NE	0.024 U	0.041 U	0.025 U	0.020 U	0.027 U	0.022 U	0.028 U	0.025 U	0.024 U	0.018 U	0.036 U	0.023 U
1,2-Dichloropropane	1.6	2.3	NE	NE	0.024 U	0.041 U	0.025 U	0.020 U	0.027 U	0.022 U	0.028 U	0.025 U	0.024 U	0.018 U	0.036 U	0.023 U
1,3,5-Trimethylbenzene	27	16	NE	NE	0.024 U	0.041 U	0.025 U	0.020 U	0.027 U	0.022 U	0.028 U	0.025 U	0.024 U	0.018 U	0.036 U	0.023 U
1,3-Dichlorobenzene	NE	29	NE	NE	0.024 U	0.041 U	0.025 U	0.020 U	0.027 U	0.022 U	0.028 U	0.025 U	0.024 U	0.018 U	0.036 U	0.023 U
1,3-Dichloropropane	160	210	NE	NE	0.024 U	0.041 U	0.025 U	0.020 U	0.027 U	0.022 U	0.028 U	0.025 U	0.024 U	0.018 U	0.036 U	0.023 U
1,4-Dichlorobenzene	2.6	3.9	NE	NE	0.024 U	0.041 U	0.025 U	0.020 U	0.027 U	0.022 U	0.028 U	0.025 U	0.024 U	0.018 U	0.036 U	0.023 U
1,4-Dioxane (p-Dioxane)	5.3	0.74	NE	NE	1.9 U	3.3 U	2.0 U	1.6 U	2.2 U	1.8 U	2.3 U	2.0 U	1.9 U	1.4 U	2.9 U	1.9 U
2,2-Dichloropropane	NE	NE	NE	NE	0.024 U	0.041 U	0.025 U	0.020 U	0.027 U	0.022 U	0.028 U	0.025 U	0.024 U	0.018 U	0.036 U	0.023 U
2-Butanone (MEK)	2700	1100	NE	NE	0.19 U	**0.098 J**	0.20 U	0.16 U	0.22 U	0.18 U	0.23 U	0.20 U	0.19 U	0.14 U	0.29 U	0.19 U
2-Chlorotoluene	160	80	NE	NE	0.024 U	0.041 U	0.025 U	0.020 U	0.027 U	0.022 U	0.028 U	0.025 U	0.024 U	0.018 U	0.036 U	0.023 U
2-Hexanone	20	29	NE	NE	0.048 U	0.083 U	0.050 U	0.039 U	0.055 U	0.045 U	0.056 U	0.050 U	0.048 U	0.036 U	0.072 U	0.047 U
4-Chlorotoluene	160	210	NE	NE	0.024 U	0.041 U	0.025 U	0.020 U	0.027 U	0.022 U	0.028 U	0.025 U	0.024 U	0.018 U	0.036 U	0.023 U
4-Methyl-2-pentanone (MIBK)	5400	330	NE	NE	**0.026 J**	0.041 U	0.025 U	0.020 U	0.027 U	0.022 U	0.028 U	0.025 U	0.024 U	0.018 U	0.036 U	0.023 U
Acetone	6100	5200	NE	NE	0.19 U	4.1 U	0.20 U	0.16 U	0.22 U	0.18 U	0.23 U	0.20 U	0.19 U	0.14 U	0.29 U	0.19 U
Benzene	1.2	1.7	NE	NE	0.024 U	**0.075 J**	0.025 U	0.020 U	0.027 U	0.022 U	0.028 U	0.025 U	0.024 U	0.018 U	0.036 U	0.023 U
Bromobenzene	29	38	NE	NE	0.024 U	0.041 U	0.025 U	0.020 U	0.027 U	0.022 U	0.028 U	0.025 U	0.024 U	0.018 U	0.036 U	0.023 U
Bromochloromethane	15	22	NE	NE	0.024 U	0.041 U	0.025 U	0.020 U	0.027 U	0.022 U	0.028 U	0.025 U	0.024 U	0.018 U	0.036 U	0.023 U
Bromodichloromethane	0.29	0.44	NE	NE	0.024 U	0.041 U	0.025 U	0.020 U	0.027 U	0.022 U	0.028 U	0.025 U	0.024 U	0.018 U	0.036 U	0.023 U
Bromoform	19	28	NE	NE	0.024 U	0.041 U	0.025 U	0.020 U	0.027 U	0.022 U	0.028 U	0.025 U	0.024 U	0.018 U	0.036 U	0.023 U
Bromomethane	0.68	1	NE	NE	0.097 U	0.17 U	0.10 U	0.078 U	0.11 U	0.089 U	0.11 U	0.099 U	0.095 U	0.071 U	0.14 U	0.093 U
Carbon disulfide	77	69	NE	NE	0.024 U	0.041 U	0.025 U	0.020 U	0.027 U	0.022 U	0.028 U	**0.019 J**	0.024 U	0.018 U	0.036 U	0.023 U
Carbon tetrachloride	0.65	0.97	NE	NE	0.024 U	0.041 U	0.025 U	0.020 U	0.027 U	0.022 U	0.028 U	0.025 U	0.024 U	0.018 U	0.036 U	0.023 U
Chlorobenzene	28	41	NE	40	0.024 U	0.041 U	0.025 U	0.020 U	0.027 U	0.022 U	0.028 U	0.025 U	0.024 U	0.018 U	0.036 U	0.023 U
Chloroethane	1400	200	NE	NE	0.024 U	0.041 U	0.025 U	0.020 U	0.027 U	0.022 U	0.028 U	0.025 U	0.024 U	0.018 U	0.036 U	0.023 U
Chloroform	0.32	0.47	NE	NE	0.024 U	0.041 U	0.025 U	0.020 U	0.027 U	0.022 U	0.028 U	0.025 U	0.024 U	0.018 U	0.036 U	0.023 U
Chloromethane	11	16	NE	NE	0.024 U	0.041 U	0.025 U	0.020 U	0.027 U	0.022 U	0.028 U	0.025 U	0.024 U	0.018 U	0.036 U	0.023 U
cis-1,2-Dichloroethene	16	20	NE	NE	0.024 U	0.041 U	0.025 U	0.020 U	0.027 U	0.022 U	0.028 U	0.025 U	0.024 U	0.018 U	0.036 U	0.023 U
cis-1,3-Dichloropropene	1.8	2.7	NE	NE	0.024 U	0.041 U	0.025 U	0.020 U	0.027 U	0.022 U	0.028 U	0.025 U	0.024 U	0.018 U	0.036 U	0.023 U
Dibromochloromethane	8.3	11	NE	NE	0.024 U	0.041 U	0.025 U	0.020 UJ	0.027 U	0.022 U	0.028 U	0.025 U	0.024 U	0.018 U	0.036 U	0.023 U
Dibromomethane	2.4	3.5	NE	NE	0.024 U	0.041 U	0.025 U	0.020 U	0.027 U	0.022 U	0.028 U	0.025 U	0.024 U	0.018 U	0.036 U	0.023 U
Dichlorodifluoromethane	8.7	13	NE	NE	0.024 U	0.041 U	0.025 U	0.020 U	0.027 U	0.022 U	0.028 U	0.025 U	0.024 U	0.018 U	0.036 U	0.023 U
Diethyl ether (Ethyl ether)	1600	81	NE	NE	0.024 U	0.041 U	0.025 U	0.020 U	0.027 U	0.022 U	0.028 U	0.025 U	0.024 U	0.018 U	0.036 U	0.023 U
Ethylbenzene	5.8	8.6	NE	NE	0.024 U	**0.027 J**	0.025 U	0.020 U	0.027 U	0.022 U	0.028 U	0.025 U	0.024 U	0.018 U	0.036 U	0.023 U
Hexachlorobutadiene	1.2	1.5	NE	NE	0.048 U	0.083 U	0.050 U	0.039 U	0.055 U	0.045 U	0.056 U	0.050 U	0.048 U	0.036 U	0.072 U	0.047 U
Isopropylbenzene (Cumene)	190	26	NE	NE	0.024 U	0.041 U	0.025 U	0.020 U	0.027 U	0.022 U	0.028 U	0.025 U	0.024 U	0.018 U	0.036 U	0.023 U
m,p-Xylene	55	26	NE	NE	0.048 U	**0.075 J**	0.050 U	0.039 U	0.055 U	0.045 U	0.056 U	0.050 U	0.048 U	0.036 U	0.072 U	0.047 U
Methyl tert-butyl ether (MTBE)	47	69	NE	NE	0.024 U	0.041 U	0.025 U	0.020 U	0.027 U	0.022 U	0.028 U	0.025 U	0.024 U	0.018 U	0.036 U	0.023 U
Methylene chloride	35	49	NE	NE	0.024 U	0.041 U	0.025 U	0.078 U	0.027 U	0.089 U	0.028 U	0.025 U	0.024 U	0.018 U	0.036 U	0.023 U
Naphthalene	3.8	2.9	NE	NE	0.024 U	**0.17 J**	0.025 U	0.078 U	0.027 U	0.022 U	0.028 U	0.025 U	0.024 U	0.018 U	0.036 U	0.023 U
n-Butylbenzene	390	540	NE	NE	0.024 U	0.041 U	0.025 U	0.020 U	0.027 U	0.022 U	0.028 U	0.025 U	0.024 U	0.018 U	0.036 U	0.023 U
n-Propylbenzene	380	26	NE	NE	0.024 U	0.041 U	0.025 U	0.020 U	0.027 U	0.022 U	0.028 U	0.025 U	0.024 U	0.018 U	0.036 U	0.023 U
o-Xylene	65	26	NE	NE	0.024 U	**0.028 J**	0.025 U	0.020 U	0.027 U	0.022 U	0.028 U	0.025 U	0.024 U	0.018 U	0.036 U	0.023 U
p-Cymene (p-Isopropyltoluene)	NE	NE	NE	NE	0.024 U	0.041 U	0.025 U	0.020 U	0.027 U	0.022 U	0.028 U	0.025 U	0.024 U	0.018 U	0.036 U	0.023 U
sec-Butylbenzene	780	1100	NE	NE	0.024 U	0.041 U	0.025 U	0.020 U	0.027 U	0.022 U	0.028 U	0.025 U	0.024 U	0.018 U	0.036 U	0.023 U

Table 4-1
Summary of Discrete Soil Sample Analytical Results
Former Dow Salvage Yard
233 Odlin Road, Bangor, Maine

Locations:					SY-SB18			SY-SB19			SY-SB20		SY-SS1	SY-SS2	SY-SS3	SY-SS4		
Field Sample ID:					SY-SB18-1	SY-SB18-2	SY-SB18-3	SY-SB19-1	SY-SB19-2	SY-SB19-3	SY-SB20-1	SY-SB20-2	SY-SS1	SY-SS2	SY-SS3	SY-SS4		
Matrix:					S	S	S	S	S	S	S	S	S	S	S	S		
Sample Begin Depth:					0.5	3	5	0.5	10	13	0.5	0	0.5	0.5	0.5	0.5		
Sample End Depth:					2	5	7	2	12	15	2	0	2	2	2	2		
Sample Date:					11/01/2019	11/01/2019	11/01/2019	10/31/2019	10/31/2019	10/31/2019	11/04/2019	11/04/2019	11/05/2019	11/05/2019	11/04/2019	11/04/2019		
Analytes	**RSL[1]**	**RAG[2]**	**Background[3]**	**Ecological[4]**														
Styrene	600	83	NE	300	0.024 U	0.041 U	0.025 U	0.020 U	0.027 U	0.022 U	0.028 U	0.025 U	0.024 U	0.018 U	0.036 U	0.023 U		
tert-Amyl methyl ether	NE	NE	NE	NE	0.024 U	0.041 U	0.025 U	0.020 U	0.027 U	0.022 U	0.028 U	0.025 U	0.024 U	0.018 U	0.036 U	0.023 U		
tert-Butyl alcohol	NE	NE	NE	NE	0.24 U	0.41 U	0.25 U	0.20 U	0.27 U	0.22 U	0.28 U	0.25 U	0.24 U	0.18 U	0.36 U	0.23 U		
tert-Butyl ethyl ether	NE	NE	NE	NE	0.024 U	0.041 U	0.025 U	0.020 U	0.027 U	0.022 U	0.028 U	0.025 U	0.024 U	0.018 U	0.036 U	0.023 U		
tert-Butylbenzene	780	1100	NE	NE	0.024 U	0.041 U	0.025 U	0.020 U	0.027 U	0.022 U	0.028 U	0.025 U	0.024 U	0.018 U	0.036 U	0.023 U		
Tetrachloroethene (PCE)	8.1	8.5	NE	NE	0.024 U	0.041 U	0.025 U	0.020 U	0.027 U	0.022 U	0.028 U	0.025 U	0.024 U	0.018 U	0.036 U	0.023 U		
Tetrahydrofuran	1800	2700	NE	NE	0.19 U	0.33 U	0.20 U	0.16 U	0.22 U	0.18 U	0.23 U	0.20 U	0.19 U	0.14 U	0.29 U	0.19 U		
Toluene	490	75	NE	200	**0.012 J**	**0.13 J**	0.025 U	0.020 U	**0.016 J**	0.022 U	0.028 U	0.025 U	0.024 U	0.018 U	0.036 U	0.023 U		
trans-1,2-Dichloroethene	160	10	NE	NE	0.024 U	0.041 U	0.025 U	0.020 U	0.027 U	0.022 U	0.028 U	0.025 U	0.024 U	0.018 U	0.036 U	0.023 U		
trans-1,3-Dichloropropene	1.8	2.7	NE	NE	0.024 U	0.041 U	0.025 U	0.020 U	0.027 U	0.022 U	0.028 U	0.025 U	0.024 U	0.018 U	0.036 U	0.023 U		
Trichloroethene (TCE)	0.41	0.39	NE	NE	0.024 U	0.041 U	0.025 U	0.020 U	0.027 U	0.022 U	0.028 U	0.025 U	0.024 U	0.018 U	0.036 U	0.023 U		
Trichlorofluoromethane	2300	94	NE	NE	0.024 U	0.041 U	0.025 U	0.020 U	0.027 U	0.022 U	0.028 U	0.025 U	0.024 U	0.018 U	0.036 U	0.023 U		
Vinyl chloride	0.0059	0.064	NE	NE	0.024 U	0.041 U	0.025 U	0.020 U	0.027 U	0.022 U	0.028 U	0.025 U	0.024 U	0.018 U	0.036 U	0.023 U		
SVOCs SW8270E (ug/g)																		
1,2,4-Trichlorobenzene	5.8	8.6	NE	20	0.22 U	0.24 U	0.24 U	0.21 U	0.24 U	0.26 U	0.23 U	0.25 U	0.23 U	0.22 U	0.24 U	0.23 U		
1,2-Dichlorobenzene	180	36	NE	NE	0.11 U	0.12 U	0.12 U	0.11 U	0.12 U	0.13 U	0.12 U	0.12 U	0.12 U	0.11 U	0.12 U	0.12 U		
1,3-Dichlorobenzene	NE	29	NE	NE	0.11 U	0.12 U	0.12 U	0.11 U	0.12 U	0.13 U	0.12 U	0.12 U	0.12 U	0.11 U	0.12 U	0.12 U		
1,4-Dichlorobenzene	2.6	3.9	NE	20	0.11 U	0.12 U	0.12 U	0.11 U	0.12 U	0.13 U	0.12 U	0.12 U	0.12 U	0.11 U	0.12 U	0.12 U		
2,2'-Oxybis(1-chloropropane)	310	NE	NE	NE	0.11 U	0.12 U	0.12 U	0.11 U	0.12 U	0.13 U	0.12 U	0.12 U	0.12 U	0.11 U	0.12 U	0.12 U		
2,4,5-Trichlorophenol	630	860	NE	9	0.11 U	0.12 U	0.12 U	0.11 U	0.12 U	0.13 U	0.12 U	0.12 U	0.12 U	0.11 U	0.12 U	0.12 U		
2,4,6-Trichlorophenol	6.3	8.6	NE	4	0.11 U	0.12 U	0.12 U	0.11 U	0.12 U	0.13 U	0.12 U	0.12 U	0.12 U	0.11 U	0.12 U	0.12 U		
2,4-Dichlorophenol	19	26	NE	NE	0.22 U	0.24 U	0.24 U	0.21 U	0.24 U	0.26 U	0.23 U	0.25 U	0.23 U	0.22 U	0.24 U	0.23 U		
2,4-Dimethylphenol	130	170	NE	NE	0.11 U	0.12 U	0.12 U	0.11 U	0.12 U	0.13 U	0.12 U	0.12 U	0.12 U	0.11 U	0.12 U	0.12 U		
2,4-Dinitrophenol	13	17	NE	20	2.2 U	2.4 U	2.4 U	2.1 U	2.4 U	2.6 U	2.3 U	2.5 U	2.3 U	2.2 U	2.4 U	2.3 U		
2,4-Dinitrotoluene	1.7	2.4	NE	NE	0.11 U	0.12 U	0.12 U	0.11 U	0.12 U	0.13 U	0.12 U	0.12 U	0.12 U	0.11 U	0.12 U	0.12 U		
2,6-Dinitrotoluene	0.36	0.5	NE	NE	0.11 U	0.12 U	0.12 U	0.11 U	0.12 U	0.13 U	0.12 U	0.12 U	0.12 U	0.11 U	0.12 U	0.12 U		
2-Chloronaphthalene	480	650	NE	NE	0.22 U	0.24 U	0.24 U	0.21 U	0.24 U	0.26 U	0.23 U	0.25 U	0.23 U	0.22 U	0.24 U	0.23 U		
2-Chlorophenol	39	54	NE	NE	0.22 U	0.24 U	0.24 U	0.21 U	0.24 U	0.26 U	0.23 U	0.25 U	0.23 U	0.22 U	0.24 U	0.23 U		
2-Methylphenol (o-Cresol)	320	430	NE	NE	0.11 U	**0.037 J**	0.12 U	0.11 U	0.12 U	0.13 U	0.12 U	0.12 U	0.12 U	0.11 U	0.12 U	0.12 U		
2-Nitroaniline	63	NE	NE	NE	0.11 U	0.12 U	0.12 U	0.11 U	0.12 U	0.13 U	0.12 U	0.12 U	0.12 U	0.11 U	0.12 U	0.12 U		
2-Nitrophenol	NE	NE	NE	NE	0.11 U	0.12 U	0.12 U	0.11 U	0.12 U	0.13 U	0.12 U	0.12 U	0.12 U	0.11 U	0.12 U	0.12 U		
3,3'-Dichlorobenzidine	1.2	1.7	NE	NE	2.8 U	3.0 U	3.0 U	2.6 U	3.0 U	3.2 U	2.9 U	3.1 U	2.9 U	2.8 U	3.0 U	2.9 U		
3-Nitroaniline	NE	NE	NE	NE	0.11 U	0.12 U	0.12 U	0.11 U	0.12 U	0.13 U	0.12 U	0.12 U	0.12 U	0.11 U	0.12 U	0.12 U		
4,6-Dinitro-2-methylphenol	0.51	860	NE	NE	R	R	R	R	R	R	R	R	R	R	R	R		
4-Bromophenyl phenyl ether	NE	NE	NE	NE	0.11 U	0.12 U	0.12 U	0.11 U	0.12 U	0.13 U	0.12 U	0.12 U	0.12 U	0.11 U	0.12 U	0.12 U		
4-Chloro-3-methylphenol	630	NE	NE	NE	0.11 U	0.12 U	0.12 U	0.11 U	0.12 U	0.13 U	0.12 U	0.12 U	0.12 U	0.11 U	0.12 U	0.12 U		
4-Chloroaniline	2.7	3.7	NE	NE	0.11 U	0.12 U	0.12 U	0.11 U	0.12 U	0.13 U	0.12 U	0.12 U	0.12 U	0.11 U	0.12 U	0.12 U		
4-Chlorophenyl phenyl ether	NE	NE	NE	NE	0.22 U	0.24 U	0.24 U	0.21 U	0.24 U	0.26 U	0.23 U	0.25 U	0.23 U	0.22 U	0.24 U	0.23 U		
4-Methylphenol (p-Cresol)	630	510	NE	NE	0.11 U	**0.16 J**	0.12 U	**0.055 J**	0.12 U	0.13 U	0.12 U	0.12 U	0.12 U	0.11 U	0.12 U	0.12 U		
4-Nitroaniline	25	35	NE	NE	0.22 U	0.24 U	0.24 U	0.21 U	0.24 U	0.26 U	0.23 U	0.25 U	0.23 U	0.22 U	0.24 U	0.23 U		
4-Nitrophenol	NE	61	NE	7	0.55 U	0.60 U	0.60 U	0.53 U	0.60 U	0.64 U	0.58 U	0.61 U	0.58 U	0.56 U	0.60 U	0.58 U		
Aniline (Phenylamine, Aminobenzene)	44	610	NE	NE	0.11 U	0.12 U	0.12 U	0.11 UJ	0.12 U	0.13 U	0.12 U	0.12 U	0.12 U	0.11 U	0.12 U	0.12 U		
Azobenzene	5.6	NE	NE	NE	0.11 U	0.12 U	0.12 U	0.11 U	0.12 U	0.13 U	0.12 U	0.12 U	0.12 U	0.11 U	0.12 U	0.12 U		
Benzidine	0.00053	NE	NE	NE	2.8 U	3.0 U	3.0 U	R	3.0 U	3.2 U	2.9 U	3.1 U	2.9 U	2.8 U	3.0 U	2.9 U		
Benzoic acid	25000	1100	NE	NE	5.0 U	5.4 U	5.4 U	4.7 U	5.4 U	5.7 U	5.3 U	5.5 U	5.2 U	5.0 U	5.4 U	5.2 U		
Benzyl alcohol	630	860	NE	NE	0.11 U	0.12 U	0.12 U	0.11 U	0.12 U	0.13 U	0.12 U	0.12 U	0.12 U	0.11 U	0.12 U	0.12 U		
Benzyl butyl phthalate	290	390	NE	NE	0.22 U	0.24 U	0.24 U	0.21 U	0.24 U	0.26 U	0.23 U	0.25 U	0.23 U	0.22 U	0.24 U	0.23 U		
bis(2-Chloroethoxy) methane	19	NE	NE	NE	0.22 U	0.24 U	0.24 U	0.21 U	0.24 U	0.26 U	0.23 U	0.25 U	0.23 U	0.22 U	0.24 U	0.23 U		
bis(2-Chloroethyl) ether	0.23	0.33	NE	NE	0.11 U	0.12 U	0.12 U	0.11 U	0.12 U	0.13 U	0.12 U	0.12 U	0.12 U	0.11 U	0.12 U	0.12 U		
bis(2-Ethylhexyl) phthalate	39	53	NE	NE	0.28 U	0.30 U	0.30 U	0.53 U	0.30 U	0.32 U	0.58 U	0.31 U	0.58 U	0.28 U	0.60 U	0.58 U		
Carbazole	NE	27	NE	NE	**0.091 J**	0.12 U	0.12 U	**2.1 J**	0.12 U	0.13 U	0.12 U	0.12 U	0.12 U	0.11 U	0.12 U	0.12 U		
Dibenzofuran	7.3	11	NE	NE	0.055 U	0.060 U	0.060 U	**1.0**	0.060 U	0.064 U	0.058 U	0.061 U	0.058 U	0.056 U	0.060 U	0.058 U		
Diethyl phthalate	5100	6900	NE	100	0.22 U	0.24 U	0.24 U	0.21 U	0.24 U	0.26 U	0.23 U	0.25 U	0.23 U	0.22 U	0.24 U	0.23 U		
Dimethyl phthalate	NE	NE	NE	NE	0.22 U	0.24 U	0.24 U	0.21 U	0.24 U	0.26 U	0.23 U	0.25 U	0.23 U	0.22 U	0.24 U	0.23 U		
Di-n-butyl phthalate	630	860	NE	200	**0.39 J**	0.24 U	0.24 U	0.21 U	0.24 U	0.26 U	0.23 U	0.25 U	0.23 U	0.22 U	0.24 U	0.23 U		
di-n-Octyl phthalate	63	86	NE	NE	0.22 U	0.24 U	0.24 U	0.21 U	0.24 U	0.26 U	0.23 U	0.25 U	0.23 U	0.22 U	0.24 U	0.23 U		
Hexachlorobenzene	0.21	0.3	NE	NE	0.11 U	0.12 U	0.12 U	0.11 U	0.12 U	0.13 U	0.12 U	0.12 U	0.12 U	0.11 U	0.12 U	0.12 U		
Hexachlorobutadiene	1.2	1.5	NE	NE	0.11 U	0.12 U	0.12 U	0.11 U	0.12 U	0.13 U	0.12 U	0.12 U	0.12 U	0.11 U	0.12 U	0.12 U		
Hexachlorocyclopentadiene	0.18	NE	NE	10	0.44 U	0.48 U	0.48 U	R	0.48 U	0.51 U	0.47 UJ	0.49 UJ	0.47 UJ	0.45 UJ	0.48 UJ	0.46 UJ		
Hexachloroethane	1.8	2.7	NE	NE	0.11 U	0.12 U	0.12 U	0.11 U	0.12 U	0.13 U	0.12 U	0.12 U	0.12 U	0.11 U	0.12 U	0.12 U		
Isophorone	570	780	NE	NE	0.22 U	0.24 U	0.24 U	0.21 U	0.24 U	0.26 U	0.23 U	0.25 U	0.23 U	0.22 U	0.24 U	0.23 U		
Nitrobenzene	5.1	NE	NE	NE	0.11 U	0.12 U	0.12 U	0.11 U	0.12 U	0.13 U	0.12 U	0.12 U	0.12 U	0.11 U	0.12 U	0.12 U		
N-Nitrosodimethylamine	0.002	NE	NE	NE	0.11 U	0.12 U	0.12 U	0.11 U	0.12 U	0.13 U	0.12 U	0.12 U	0.12 U	0.11 U	0.12 U	0.12 U		
N-Nitrosodi-n-propylamine	0.078	NE	NE	NE	0.11 U	0.12 U	0.12 U	0.11 U	0.12 U	0.13 U	0.12 U	0.12 U	0.12 U	0.11 U	0.12 U	0.12 U		
N-Nitrosodiphenylamine	110	150	NE	NE	0.11 U	0.12 U	0.12 U	0.11 U	0.12 U	0.13 U	0.12 U	0.12 U	0.12 U	0.11 U	0.12 U	0.12 U		
Pentachlorophenol	180	1.4	NE	2.1	R	0.60 U	R	0.53 U	R	R	0.58 U	0.61 U	0.58 U	0.56 U	0.60 U	0.58 U		
Phenol	1900	2600	NE	30	0.11 U	0.12 U	0.12 U	0.11 U	0.12 U	0.13 U	0.12 U	0.12 U	0.12 U	0.11 U	0.12 U	0.12 U		
Pyridine	7.8	NE	NE	NE	0.11 U	0.12 U	0.12 U	0.11 UJ	0.12 U	0.13 U	0.12 UJ	0.12 UJ	0.12 UJ	0.11 UJ	0.12 UJ	0.12 UJ		
TOC LYDKHN (ug/g)																		
Total Organic Carbon	NE	NE	NE	NE	**12000**	**55000**	**2800**	**44000**	**2500**	**2400**	**6100**	**2400**	**8600**	**11000**	**15000**	**5900**		

Table 4-1
Summary of Discrete Soil Sample Analytical Results
Former Dow Salvage Yard
233 Odlin Road, Bangor, Maine

				Locations:	SY-SS5	SY-SS6	SY-SS7	SY-SS8	SY-SS9	SY-SS10	SY-SS11	SY-SS12	SY-SS13	SY-TP1	
				Field Sample ID:	SY-SS5	SY-SS6	SY-SS7	SY-SS8	SY-SS9	SY-SS10	SY-SS11	SY-SS12	SY-SS13	SY-TP1-DUD	SY-TP1-DUS
				Matrix:	S	S	S	S	Tar	S	S	S	S	S	S
				Sample Begin Depth:	0.5	0.5	0	0	0	0	0	0	0	2.2	0.5
				Sample End Depth:	2	2	2	2	0.5	0.5	0.5	0.5	0.5	2.2	2
				Sample Date:	11/05/2019	11/05/2019	11/05/2019	11/05/2019	10/01/2019	10/01/2019	10/02/2019	10/02/2019	10/02/2019	09/30/2019	09/30/2019
Analytes	**RSL[1]**	**RAG[2]**	**Background[3]**	**Ecological[4]**											
PAH SIM (mg/kg)															
2-Methylnaphthalene	24	33	NE	29	0.011 U	0.012 U	0.011 U	0.012 U	**84**	0.093 U	0.023 U	0.012 U	0.032 U	0.019 U	0.34 U
Acenaphthene	360	490	NE	29	0.011 U	0.012 U	0.011 U	0.012 U	**150**	**0.093**	**0.020 J**	0.012 U	0.016 U	0.019 U	**4.1**
Acenaphthylene	180	490	NE	29	0.011 U	0.012 U	0.011 U	0.012 U	1.2 U	**0.18**	**0.020 J**	0.012 U	0.016 U	0.0097 U	**0.064 J**
Anthracene	1800	250	NE	29	0.011 U	0.012 U	0.011 U	0.012 U	**150**	**0.39**	**0.082**	**0.0098 J**	**0.0074 J**	**0.047**	**14**
Benzo(a)anthracene	1.1	1.6	0.86	1.1	**0.0028 J**	**0.020 J**	**0.0036 J**	**0.0055 J**	**79**	**2.9**	**0.58**	**0.059**	**0.036**	**0.27**	**52**
Benzo(a)pyrene	0.11	0.16	1.5	1.1	**0.0052 J**	**0.025**	**0.0055 J**	**0.0070 J**	**43**	**3.5**	**0.52**	**0.056**	**0.045**	**0.23**	**45**
Benzo(b)fluoranthene	1.1	1.6	1.3	1.1	**0.0060 J**	**0.031**	**0.0077 J**	**0.0083 J**	**72**	**4.4**	**0.83 J**	**0.077**	**0.071**	**0.34**	**60**
Benzo(g,h,i)perylene	180	250	NE	1.1	**0.0036 J**	**0.020 J**	**0.0060 J**	**0.0072 J**	**17**	**2.1**	**0.32**	**0.029**	**0.028 J**	**0.12**	**23**
Benzo(k)fluoranthene	11	16	NE	1.1	**0.0043 J**	**0.012 J**	**0.0041 J**	**0.0052 J**	**24**	**1.4**	**0.38**	**0.032**	**0.027 J**	**0.13**	**26**
Chrysene	110	160	NE	1.1	**0.0045 J**	**0.028**	**0.0073 J**	**0.0076 J**	**74**	**3.2**	**0.99 J**	**0.061**	**0.054**	**0.23**	**50**
Dibenz(a,h)anthracene	0.11	0.16	0.32	1.1	0.011 U	**0.0060 J**	0.011 U	0.012 U	**5.9**	**0.56**	**0.090**	**0.0094 J**	**0.0084 J**	**0.044**	**8.5**
Fluoranthene	240	330	NE	1.1	**0.0036 J**	**0.022 J**	**0.0092 J**	**0.0081 J**	**240**	**4.1**	**1.1 J**	**0.12**	**0.10**	**0.40**	**90**
Fluorene	240	330	NE	29	0.011 U	0.012 U	0.011 U	0.012 U	**170**	**0.18**	**0.028**	0.012 U	0.016 U	0.019 U	**3.6**
Indeno(1,2,3-c,d)pyrene	1.1	1.6	0.4	1.1	**0.0031 J**	**0.016 J**	**0.0044 J**	**0.0049 J**	**34**	**2.7**	**0.46**	**0.044**	**0.044**	**0.12**	**48**
Naphthalene	3.8	2.9	0.11	29	0.011 U	0.012 U	0.011 U	0.012 U	**100**	**0.056 J**	**0.0094 J**	0.012 U	0.016 U	0.0097 U	0.34 U
Phenanthrene	180	250	NE	29	0.011 U	**0.0082 J**	**0.0036 J**	**0.0032 J**	**470**	**2.0**	**0.41**	**0.028**	**0.046**	**0.16**	**38**
Pyrene	180	250	NE	1.1	0.011 U	**0.024**	**0.0057 J**	**0.0052 J**	**170**	**4.9**	**1.8 J**	**0.066**	**0.052**	**0.32**	**84**
MassDEP EPH (ug/g)															
2-Methylnaphthalene	24	33	NE	29	0.11 U	0.12 U	0.12 U	0.12 U	**850**	**0.21 J**	**0.14 J**	0.11 U	**0.092 J**	0.098 U	**0.19 J**
Acenaphthene	360	490	NE	29	0.11 U	0.12 U	0.12 U	0.12 U	**1300**	**0.15 J**	**0.12 J**	0.11 U	0.15 U	0.098 U	**1.5**
Acenaphthylene	180	490	NE	29	0.11 U	0.12 U	0.12 U	0.12 U	48 U	**0.37**	**0.075 J**	0.11 U	0.15 U	0.098 U	0.49 U
Anthracene	1800	250	NE	29	0.11 U	0.12 U	0.12 U	0.12 U	**1400**	**0.44**	**0.25**	0.11 U	0.15 U	0.098 U	**6.3**
Benzo(a)anthracene	1.1	1.6	0.86	1.1	0.11 U	0.12 U	0.12 U	0.12 U	**780**	**2.5**	**1.2**	0.11 U	0.15 U	**0.11 J**	**22**
Benzo(a)pyrene	0.11	0.16	1.5	1.1	0.11 U	0.12 U	0.12 U	0.12 U	**390**	**2.6**	**1.1**	0.11 U	0.15 U	**0.16 J**	**17**
Benzo(b)fluoranthene	1.1	1.6	1.3	1.1	0.11 U	0.12 U	0.12 U	0.12 U	**320**	**2.4**	**1.3**	0.11 U	**0.043 J**	**0.19 J**	**17**
Benzo(g,h,i)perylene	180	250	NE	1.1	0.11 U	0.12 U	0.12 U	0.12 U	**110**	**2.1**	**0.66**	0.11 U	0.15 U	**0.099 J**	**8.4**
Benzo(k)fluoranthene	11	16	NE	1.1	0.11 U	0.12 U	0.12 U	0.12 U	**420**	**2.1**	**1.3**	0.11 U	0.15 U	**0.13 J**	**20**
Chrysene	110	160	NE	1.1	0.11 U	0.12 U	0.12 U	0.12 U	**650**	**2.8**	**1.9**	0.11 U	0.15 U	**0.14 J**	**21**
Dibenz(a,h)anthracene	0.11	0.16	0.32	1.1	0.11 U	0.12 U	0.12 U	0.12 U	**46 J**	**0.49**	**0.19 J**	0.11 U	0.15 U	0.098 U	**3.4**
Fluoranthene	240	330	NE	1.1	0.11 U	0.12 U	0.12 U	0.12 U	**3100**	**5.0**	**3.3**	0.11 U	0.15 U	**0.23**	**55**
Fluorene	240	330	NE	29	0.11 U	0.12 U	0.12 U	0.12 U	**2000**	**0.19 J**	**0.12 J**	0.11 U	0.15 U	0.098 U	**1.6**
Indeno(1,2,3-c,d)pyrene	1.1	1.6	0.4	1.1	0.11 U	0.12 U	0.12 U	0.12 U	**130**	**1.6**	**0.64**	0.11 U	0.15 U	**0.089 J**	**9.1**
Naphthalene	3.8	2.9	0.11	29	0.11 U	0.12 U	0.12 U	0.12 U	**930**	**0.29**	**0.28**	0.11 U	0.31 U	0.098 U	0.49 U
Phenanthrene	180	250	NE	29	0.11 U	0.12 U	0.12 U	0.12 U	**5700**	**2.1**	**1.6**	**0.059 J**	**0.15 J**	**0.075 J**	**18**
Pyrene	180	250	NE	1.1	0.11 U	0.12 U	0.12 U	0.12 U	**1900**	**5.6**	**2.6**	0.11 U	0.15 U	**0.24**	**37**
C11-C22 Aromatic	NE	260	NE	NE	**5.7 J**	**11 J**	**7.4 J**	**8.2 J**	**25000**	**160 J**	**87**	**26**	**73**	**11 J**	**420**
C11-C22 Extractable Petroleum Hydrocarbons, Aromatic (Unadjusted)	NE	100000	NE	NE	**5.7 J**	**11 J**	**7.4 J**	**8.2 J**	**45000**	**190 J**	**100**	**27**	**74**	**13 J**	**660**
C19-C36 Aliphatic	NE	10000	NE	NE	**4.0 J**	**6.2 J**	**5.7 J**	**3.0 J**	**11000**	**130 J**	**80**	**24**	**34**	**4.5 J**	**33 J**
C9-C18 Aliphatic	NE	250	NE	NE	23 U	25 U	25 U	25 U	**5500**	**12 J**	**2.4 J**	**0.99 J**	**1.8 J**	20 U	20 UJ
MassDEP VPH (ug/g)															
Benzene	1.2	1.7	NE	NE	0.029 U	0.038 U	0.034 U	0.039 U	34 U	0.054 U	0.036 U	0.041 U	0.066 U	-	-
Ethylbenzene	5.8	8.6	NE	NE	0.029 U	0.038 U	0.034 U	0.039 U	34 U	0.054 U	0.036 U	0.041 U	0.066 U	-	-
m,p-Xylene	55	26	NE	NE	0.057 U	0.076 U	0.069 U	0.078 U	69 U	0.11 U	0.071 U	0.081 U	0.13 U	-	-
Methyl tert-butyl ether (MTBE)	47	69	NE	NE	0.029 U	0.038 U	0.034 U	0.039 U	34 U	0.054 U	0.036 U	0.041 U	0.066 U	-	-
Naphthalene	3.8	2.9	NE	NE	0.029 U	0.038 U	0.034 U	0.039 U	**4900**	0.054 U	0.036 U	0.041 U	0.066 U	-	-
o-Xylene	65	26	NE	NE	0.029 U	0.038 U	0.034 U	0.039 U	34 U	0.054 U	0.036 U	0.041 U	0.066 U	-	-
Toluene	490	75	NE	NE	0.029 U	0.038 U	0.034 U	0.039 U	34 U	0.054 U	0.036 U	0.041 U	0.066 U	-	-
C5-C8 Aliphatic	NE	43	NE	NE	3.4 U	4.6 U	4.1 U	4.7 U	4100 U	6.5 U	4.3 U	4.9 U	7.9 U	-	-
C9-C10 Aromatic	NE	66	NE	NE	1.1 U	1.4 U	1.3 U	1.5 U	1300 U	2.0 U	1.3 U	1.5 U	2.5 U	-	-
C9-C12 Aliphatic	NE	230	NE	NE	3.4 U	4.6 U	4.1 U	4.7 U	4100 U	6.5 U	4.3 U	4.9 U	7.9 U	-	-
Metals SW6020A/7471B (ug/g)															
Aluminum	7700	2700	NE	NE	**11000**	**15000**	**12000**	**17000**	**2100 J**	**7500**	**7900**	**2200**	**10000**	**13000**	**11000**
Antimony	3.1	4.3	NE	0.27	0.60 U	0.60 U	0.60 U	0.60 U	2.8 U	**2.7**	**1.1**	**0.63 J**	**0.90 J**	**1.1**	**0.65**
Arsenic	0.68	0.93	16.4	9.9	**7.5**	**7.4**	**8.3**	**15**	**5.7 J**	**9.1**	**8.3**	**2.6 J**	**5.1**	**7.1**	**9.6**
Barium	1500	210	469	283	**21**	**43**	**31**	**46**	**53**	**79**	**92**	**7.4**	**27**	**37**	**70**
Beryllium	16	11	2.4	10	0.60 U	0.60 U	0.60 U	0.60 U	0.28 U	0.50 U	0.60 U	0.60 U	0.80 U	**0.74**	**0.22 J**
Cadmium	7.1	4.2	0.26	0.36	0.056 U	0.60 U	0.60 U	0.60 U	**5.0**	**2.7**	**860**	**3.4**	**1.7**	**0.36 J**	**0.87**
Chromium	0.3[†]/12000	0.42[†]/2,700	79	0.4	**24**	**22**	**22**	**27**	**76**	**27**	**250**	6.0 U	**21**	**26**	**38**
Cobalt	2.3	3.2	14.9	13	**8.2**	**7.9**	**8.7**	**8.3**	28 U	**7.8**	**10**	6.0 U	8.0 U	**11**	**8.4**
Copper	310	340	23	28	**15**	**7.5**	**11**	**9.3**	28 U	**44**	**16**	6.0 U	8.0 U	**9.5**	**19**
Iron	5500	7500	SSS	NE	**22000**	**21000**	**21000**	**24000**	**5900**	**22000**	**29000**	**3400**	**18000**	**21000**	**21000**
Lead	400	14	32	11	**11**	**25**	**13**	**14**	**61**	**95**	**39**	**3.9**	**16**	**10**	**180 J**
Magnesium	NE	NE	NE	NE	**4400**	**2900**	**3900**	**4300**	**24000**	**5200**	**8100**	**2700**	**2500**	**4500**	**4300**
Manganese	180	28	841	220	**300**	**270**	**360**	**350**	**100**	**640**	**540**	**87**	**140**	**400**	**450 J**
Mercury	1.1	0.31	0.123	0.00051	0.095 U	**0.049 J**	0.084 U	0.092 U	0.14 U	**0.24**	0.10 U	0.095 U	**0.074 J**	0.068 UJ	0.072 UJ
Nickel	150	99	39	30	**26**	**20**	**24**	**24**	**210**	**26**	**31**	6.0 U	**15**	**24**	**25**
Potassium	NE	NE	NE	NE	**1200**	**680**	**710**	**1100**	**430 J**	**750**	**870**	**200**	**600**	**1000**	**1000**
Selenium	39	54	0.61	0.21	6.0 U	6.0 U	6.0 U	6.0 U	**1.1 J**	**1.1 J**	6.0 U	0.60 U	8.0 U	**2.1 J**	**1.5 J**
Silver	39	54	SSS	2	2.8 U	3.0 U	3.0 U	3.1 U	1.4 U	2.6 U	2.9 U	3.0 U	3.9 U	**0.24 J**	**0.024 J**
Sodium	NE	NE	NE	NE	56 U	60 U	61 U	**69 J**	**360 J**	**140 J**	58 U	60 U	**110 J**	**68 J**	**100 J**
Thallium	0.078	0.11	0.6	1	0.60 U	0.60 U	0.60 U	0.60 U	2.8 U	0.50 U	0.60 U	0.30 U	0.39 U	0.50 U	0.50 U
Vanadium	39	49	103	2	**20**	**22**	**20**	**28**	28 U	**19**	**17**	**1.7 J**	**19**	**24**	**19**
Zinc	2300	3200	101	8.5	**46**	**52**	**47**	**49**	**16000**	**130**	**68**	**14**	**49**	**36**	**54**

Table 4-1
Summary of Discrete Soil Sample Analytical Results
Former Dow Salvage Yard
233 Odlin Road, Bangor, Maine

				Locations:	SY-SS5	SY-SS6	SY-SS7	SY-SS8	SY-SS9	SY-SS10	SY-SS11	SY-SS12	SY-SS13	SY-TP1	
				Field Sample ID:	SY-SS5	SY-SS6	SY-SS7	SY-SS8	SY-SS9	SY-SS10	SY-SS11	SY-SS12	SY-SS13	SY-TP1-DUD	SY-TP1-DUS
				Matrix:	S	S	S	S	Tar	S	S	S	S	S	S
				Sample Begin Depth:	0.5	0.5	0	0	0	0	0	0	0	2.2	0.5
				Sample End Depth:	2	2	2	2	0.5	0.5	0.5	0.5	0.5	2.2	2
				Sample Date:	11/05/2019	11/05/2019	11/05/2019	11/05/2019	10/01/2019	10/01/2019	10/02/2019	10/02/2019	10/02/2019	09/30/2019	09/30/2019
Analytes	**RSL[1]**	**RAG[2]**	**Background[3]**	**Ecological[4]**											
Hex Chromium SW7196A (mg/kg)															
Chromium, Hexavalent	0.3	0.42	NE	0.4	**0.32 J**	0.71 U	0.74 U	1.5 U	**0.80 J**	0.67 U	**4.4**	0.64 U	9.6 U	0.30 U	**1.5**
PCBs SW8082A (ug/g)															
PCB-1016 (Aroclor 1016)	0.41	0.31	NE	NE	0.015 U	0.016 U	0.014 U	0.014 U	0.15 U	0.012 U	0.014 U	0.013 U	0.018 U	0.013 U	0.013 U
PCB-1221 (Aroclor 1221)	0.2	0.31	NE	NE	0.015 U	0.016 U	0.014 U	0.014 U	0.15 U	0.012 U	0.014 U	0.013 U	0.018 U	0.013 U	0.013 U
PCB-1232 (Aroclor 1232)	0.17	0.31	NE	NE	0.015 U	0.016 U	0.014 U	0.014 U	0.15 U	0.012 U	0.014 U	0.013 U	0.018 U	0.013 U	0.013 U
PCB-1242 (Aroclor 1242)	0.23	0.31	NE	NE	0.015 U	0.016 U	0.014 U	0.014 U	0.15 U	0.012 U	0.014 U	0.013 U	0.018 U	0.013 U	0.013 U
PCB-1248 (Aroclor 1248)	0.23	0.31	NE	NE	0.015 U	0.016 U	0.014 U	0.014 U	0.15 U	0.012 U	0.014 U	0.013 U	0.018 U	0.013 U	0.013 U
PCB-1254 (Aroclor 1254)	0.12	0.31	NE	NE	0.015 U	0.016 U	0.014 U	0.014 U	0.15 U	0.012 U	0.014 U	0.013 U	0.018 U	0.013 U	**0.027 J**
PCB-1260 (Aroclor 1260)	0.24	0.31	NE	NE	0.015 U	0.016 U	0.014 U	0.014 U	0.15 U	**0.10 J**	**0.025 J**	0.013 U	0.018 U	0.013 UJ	**0.027 J**
VOCs SW8260D (ug/g)															
1,1,1,2-Tetrachloroethane	2	3	NE	NE	0.018 U	0.024 U	0.022 U	0.024 U	11 U	0.034 U	0.022 U	0.025 U	0.041 U	-	-
1,1,1-Trichloroethane	810	64	NE	NE	0.018 U	0.024 U	0.022 U	0.024 U	11 U	0.034 U	0.022 U	0.025 U	0.041 U	-	-
1,1,2,2-Tetrachloroethane	0.3	0.89	NE	NE	0.018 U	0.024 U	0.022 U	0.024 U	11 U	0.034 U	0.022 U	0.025 U	0.041 U	-	-
1,1,2-Trichloroethane	0.15	0.22	NE	NE	0.018 U	0.024 U	0.022 U	0.024 U	11 U	0.034 U	0.022 U	0.025 U	0.041 U	-	-
1,1-Dichloroethane	3.6	5.3	NE	NE	0.018 U	0.024 U	0.022 U	0.024 U	11 U	0.034 U	0.022 U	0.025 U	0.041 U	-	-
1,1-Dichloroethene	23	8.1	NE	NE	0.018 U	0.024 U	0.022 U	0.024 U	11 U	0.034 U	0.022 U	0.025 U	0.041 U	-	-
1,1-Dichloropropene	NE	NE	NE	NE	0.018 U	0.024 U	0.022 U	0.024 U	11 U	0.034 U	0.022 U	0.025 U	0.041 U	-	-
1,2,3-Trichlorobenzene	6.3	8.6	NE	NE	0.018 U	0.024 U	0.022 U	0.024 U	11 U	0.034 U	0.022 U	0.025 U	0.041 U	-	-
1,2,3-Trichloropropane	0.0051	0.07	NE	NE	0.018 U	0.024 U	0.022 U	0.024 U	11 U	0.034 U	0.022 U	0.025 U	0.041 U	-	-
1,2,4-Trichlorobenzene	5.8	8.6	NE	NE	0.018 U	0.024 U	0.022 U	0.024 U	11 U	0.034 U	0.022 U	0.025 U	0.041 U	-	-
1,2,4-Trimethylbenzene	30	18	NE	NE	0.018 U	0.024 U	0.022 U	0.024 U	**37 J**	**0.037 J**	0.022 U	0.025 U	0.041 U	-	-
1,2-Dibromo-3-chloropropane	0.0053	0.0078	NE	NE	0.036 U	0.048 U	0.043 U	0.049 U	21 U	0.067 U	0.044 U	0.051 U	0.083 U	-	-
1,2-Dibromoethane (EDB)	0.036	0.054	NE	NE	0.018 U	0.024 U	0.022 U	0.024 U	11 U	0.034 U	0.022 U	0.025 U	0.041 U	-	-
1,2-Dichlorobenzene	180	36	NE	NE	0.018 U	0.024 U	0.022 U	0.024 U	11 U	0.034 U	0.022 U	0.025 U	0.041 U	-	-
1,2-Dichloroethane	0.46	0.68	NE	NE	0.018 U	0.024 U	0.022 U	0.024 U	11 U	0.034 U	0.022 U	0.025 U	0.041 U	-	-
1,2-Dichloropropane	1.6	2.3	NE	NE	0.018 U	0.024 U	0.022 U	0.024 U	11 U	0.034 U	0.022 U	0.025 U	0.041 U	-	-
1,3,5-Trimethylbenzene	27	16	NE	NE	0.018 U	0.024 U	0.022 U	0.024 U	**13 J**	0.034 U	0.022 U	0.025 U	0.041 U	-	-
1,3-Dichlorobenzene	NE	29	NE	NE	0.018 U	0.024 U	0.022 U	0.024 U	11 U	0.034 U	0.022 U	0.025 U	0.041 U	-	-
1,3-Dichloropropane	160	210	NE	NE	0.018 U	0.024 U	0.022 U	0.024 U	11 U	0.034 U	0.022 U	0.025 U	0.041 U	-	-
1,4-Dichlorobenzene	2.6	3.9	NE	NE	0.018 U	0.024 U	0.022 U	0.024 U	11 U	0.034 U	0.022 U	0.025 U	0.041 U	-	-
1,4-Dioxane (p-Dioxane)	5.3	0.74	NE	NE	1.4 U	1.9 U	1.7 U	2.0 U	860 U	2.7 U	1.8 U	2.0 U	3.3 U	-	-
2,2-Dichloropropane	NE	NE	NE	NE	0.018 U	0.024 U	0.022 U	0.024 U	11 U	0.034 U	0.022 U	0.025 U	0.041 U	-	-
2-Butanone (MEK)	2700	1100	NE	NE	0.14 U	0.19 U	0.17 U	0.20 U	86 U	0.27 U	0.18 U	0.20 U	0.33 U	-	-
2-Chlorotoluene	160	80	NE	NE	0.018 U	0.024 U	0.022 U	0.024 U	11 U	0.034 U	0.022 U	0.025 U	0.041 U	-	-
2-Hexanone	20	29	NE	NE	0.036 U	0.048 U	0.043 U	0.049 U	21 U	0.067 U	0.044 U	0.051 U	0.083 U	-	-
4-Chlorotoluene	160	210	NE	NE	0.018 U	0.024 U	0.022 U	0.024 U	11 U	0.034 U	0.022 U	0.025 U	0.041 U	-	-
4-Methyl-2-pentanone (MIBK)	5400	330	NE	NE	0.018 U	0.024 U	0.022 U	0.024 U	11 U	0.034 U	0.022 U	0.025 U	0.041 U	-	-
Acetone	6100	5200	NE	NE	0.14 U	2.4 U	0.17 U	0.20 U	86 U	0.27 U	0.18 U	0.20 U	0.33 U	-	-
Benzene	1.2	1.7	NE	NE	0.018 U	0.024 U	0.022 U	0.024 U	11 U	0.034 U	0.022 U	0.025 U	0.041 U	-	-
Bromobenzene	29	38	NE	NE	0.018 U	0.024 U	0.022 U	0.024 U	11 U	0.034 U	0.022 U	0.025 U	0.041 U	-	-
Bromochloromethane	15	22	NE	NE	0.018 U	0.024 U	0.022 U	0.024 U	11 U	0.034 U	0.022 U	0.025 U	0.041 U	-	-
Bromodichloromethane	0.29	0.44	NE	NE	0.018 U	0.024 U	0.022 U	0.024 U	11 U	0.034 U	0.022 U	0.025 U	0.041 U	-	-
Bromoform	19	28	NE	NE	0.018 U	0.024 U	0.022 U	0.024 U	11 U	0.034 U	0.022 U	0.025 U	0.041 U	-	-
Bromomethane	0.68	1	NE	NE	0.072 U	0.096 U	0.086 U	0.098 U	43 U	0.13 U	0.089 U	0.10 U	0.17 U	-	-
Carbon disulfide	77	69	NE	NE	0.018 U	0.024 U	0.022 U	0.024 U	11 U	0.034 U	0.022 U	0.025 U	0.041 U	-	-
Carbon tetrachloride	0.65	0.97	NE	NE	0.018 U	0.024 U	0.022 U	0.024 U	11 U	0.034 U	0.022 U	0.025 U	0.041 U	-	-
Chlorobenzene	28	41	NE	40	0.018 U	0.024 U	0.022 U	0.024 U	11 U	0.034 U	0.022 U	0.025 U	0.041 U	-	-
Chloroethane	1400	200	NE	NE	0.018 U	0.024 U	0.022 U	0.024 U	11 U	0.034 U	0.022 U	0.025 U	0.041 U	-	-
Chloroform	0.32	0.47	NE	NE	0.018 U	0.024 U	0.022 U	0.024 U	11 U	0.034 U	0.022 U	0.025 U	0.041 U	-	-
Chloromethane	11	16	NE	NE	0.018 U	0.024 U	0.022 U	0.024 U	11 U	0.034 U	0.022 U	0.025 U	0.041 U	-	-
cis-1,2-Dichloroethene	16	20	NE	NE	0.018 U	0.024 U	0.022 U	0.024 U	11 U	0.034 U	0.022 U	0.025 U	0.041 U	-	-
cis-1,3-Dichloropropene	1.8	2.7	NE	NE	0.018 U	0.024 U	0.022 U	0.024 U	11 U	0.034 U	0.022 U	0.025 U	0.041 U	-	-
Dibromochloromethane	8.3	11	NE	NE	0.018 U	0.024 U	0.022 U	0.024 U	11 U	0.034 U	0.022 U	0.025 U	0.041 U	-	-
Dibromomethane	2.4	3.5	NE	NE	0.018 U	0.024 U	0.022 U	0.024 U	11 U	0.034 U	0.022 U	0.025 U	0.041 U	-	-
Dichlorodifluoromethane	8.7	13	NE	NE	0.018 U	0.024 U	0.022 U	0.024 U	11 U	0.034 U	0.022 U	0.025 U	0.041 U	-	-
Diethyl ether (Ethyl ether)	1600	81	NE	NE	0.018 U	0.024 U	0.022 U	0.024 U	11 U	0.034 U	0.022 U	0.025 U	0.041 U	-	-
Ethylbenzene	5.8	8.6	NE	NE	0.018 U	0.024 U	0.022 U	0.024 U	**5.0 J**	0.034 U	0.022 U	0.025 U	0.041 U	-	-
Hexachlorobutadiene	1.2	1.5	NE	NE	0.036 U	0.048 U	0.043 U	0.049 U	21 U	0.067 U	0.044 U	0.051 U	0.083 U	-	-
Isopropylbenzene (Cumene)	190	26	NE	NE	0.018 U	0.024 U	0.022 U	0.024 U	11 U	0.034 U	0.022 U	0.025 U	0.041 U	-	-
m,p-Xylene	55	26	NE	NE	0.036 U	0.048 U	0.043 U	0.049 U	**15 J**	0.067 U	0.044 U	0.051 U	0.083 U	-	-
Methyl tert-butyl ether (MTBE)	47	69	NE	NE	0.018 U	0.024 U	0.022 U	0.024 U	11 U	0.034 U	0.022 U	0.025 U	0.041 U	-	-
Methylene chloride	35	49	NE	NE	0.018 U	0.024 U	0.022 U	0.024 U	11 U	0.034 U	0.022 U	0.025 U	0.041 U	-	-
Naphthalene	3.8	2.9	NE	NE	0.018 U	0.024 U	0.022 U	0.024 U	**5300**	0.13 U	0.089 U	0.10 U	0.17 U	-	-
n-Butylbenzene	390	540	NE	NE	0.018 U	0.024 U	0.022 U	0.024 U	11 U	0.034 U	0.022 U	0.025 U	0.041 U	-	-
n-Propylbenzene	380	26	NE	NE	0.018 U	0.024 U	0.022 U	0.024 U	**7.6 J**	0.034 U	0.022 U	0.025 U	0.041 U	-	-
o-Xylene	65	26	NE	NE	0.018 U	0.024 U	0.022 U	0.024 U	11 U	0.034 U	0.022 U	0.025 U	0.041 U	-	-
p-Cymene (p-Isopropyltoluene)	NE	NE	NE	NE	0.018 U	0.024 U	0.022 U	0.024 U	11 U	0.034 U	0.022 U	0.025 U	0.041 U	-	-
sec-Butylbenzene	780	1100	NE	NE	0.018 U	0.024 U	0.022 U	0.024 U	**6.8 J**	0.034 U	0.022 U	0.025 U	0.041 U	-	-

Table 4-1
Summary of Discrete Soil Sample Analytical Results
Former Dow Salvage Yard
233 Odlin Road, Bangor, Maine

				Locations:	SY-SS5	SY-SS6	SY-SS7	SY-SS8	SY-SS9	SY-SS10	SY-SS11	SY-SS12	SY-SS13	SY-TP1	
				Field Sample ID:	SY-SS5	SY-SS6	SY-SS7	SY-SS8	SY-SS9	SY-SS10	SY-SS11	SY-SS12	SY-SS13	SY-TP1-DUD	SY-TP1-DUS
				Matrix:	S	S	S	S	Tar	S	S	S	S	S	S
				Sample Begin Depth:	0.5	0.5	0	0	0	0	0	0	0	2.2	0.5
				Sample End Depth:	2	2	2	2	0.5	0.5	0.5	0.5	0.5	2.2	2
				Sample Date:	11/05/2019	11/05/2019	11/05/2019	11/05/2019	10/01/2019	10/01/2019	10/02/2019	10/02/2019	10/02/2019	09/30/2019	09/30/2019
Analytes	**RSL[1]**	**RAG[2]**	**Background[3]**	**Ecological[4]**											
Styrene	600	83	NE	300	0.018 U	0.024 U	0.022 U	0.024 U	11 U	0.034 U	0.022 U	0.025 U	0.041 U	-	-
tert-Amyl methyl ether	NE	NE	NE	NE	0.018 U	0.024 U	0.022 U	0.024 U	11 U	0.034 U	0.022 U	0.025 U	0.041 U	-	-
tert-Butyl alcohol	NE	NE	NE	NE	0.18 U	0.24 U	0.22 U	0.24 U	110 U	0.34 U	0.22 U	0.25 U	0.41 U	-	-
tert-Butyl ethyl ether	NE	NE	NE	NE	0.018 U	0.024 U	0.022 U	0.024 U	11 U	0.034 U	0.022 U	0.025 U	0.041 U	-	-
tert-Butylbenzene	780	1100	NE	NE	0.018 U	0.024 U	0.022 U	0.024 U	11 U	0.034 U	0.022 U	0.025 U	0.041 U	-	-
Tetrachloroethene (PCE)	8.1	8.5	NE	NE	0.018 U	0.024 U	0.022 U	0.024 U	11 U	0.034 U	0.022 U	0.025 U	0.041 U	-	-
Tetrahydrofuran	1800	2700	NE	NE	0.14 U	0.19 U	0.17 U	0.20 U	86 U	0.27 U	0.18 U	0.20 U	0.33 U	-	-
Toluene	490	75	NE	200	0.018 U	**0.014 J**	0.022 U	0.024 U	11 U	0.13 U	0.089 U	0.10 U	0.041 U	-	-
trans-1,2-Dichloroethene	160	10	NE	NE	0.018 U	0.024 U	0.022 U	0.024 U	11 U	0.034 U	0.022 U	0.025 U	0.041 U	-	-
trans-1,3-Dichloropropene	1.8	2.7	NE	NE	0.018 U	0.024 U	0.022 U	0.024 U	11 U	0.034 U	0.022 U	0.025 U	0.041 U	-	-
Trichloroethene (TCE)	0.41	0.39	NE	NE	0.018 U	0.024 U	0.022 U	0.024 U	11 U	0.034 U	0.022 U	0.025 U	0.041 U	-	-
Trichlorofluoromethane	2300	94	NE	NE	0.018 U	0.024 U	0.022 U	0.024 U	11 U	0.034 U	0.022 U	0.025 U	0.041 U	-	-
Vinyl chloride	0.0059	0.064	NE	NE	0.018 U	0.024 U	0.022 U	0.024 U	11 U	0.034 U	0.022 U	0.025 U	0.041 U	-	-
SVOCs SW8270E (ug/g)															
1,2,4-Trichlorobenzene	5.8	8.6	NE	20	0.22 U	0.24 U	0.23 U	0.25 U	220 U	0.23 U	0.23 U	0.24 U	0.31 U	0.19 U	0.19 U
1,2-Dichlorobenzene	180	36	NE	NE	0.11 U	0.12 U	0.12 U	0.12 U	110 U	0.11 U	0.11 U	0.12 U	0.15 U	0.095 U	0.096 U
1,3-Dichlorobenzene	NE	29	NE	NE	0.11 U	0.12 U	0.12 U	0.12 U	110 U	0.11 U	0.11 U	0.12 U	0.15 U	0.095 U	0.096 U
1,4-Dichlorobenzene	2.6	3.9	NE	20	0.11 U	0.12 U	0.12 U	0.12 U	110 U	0.11 U	0.11 U	0.12 U	0.15 U	0.095 U	0.096 U
2,2'-Oxybis(1-chloropropane)	310	NE	NE	NE	0.11 U	0.12 U	0.12 U	0.12 U	110 U	0.11 U	0.11 U	0.12 U	0.15 U	0.095 U	0.096 U
2,4,5-Trichlorophenol	630	860	NE	9	0.11 U	0.12 U	0.12 U	0.12 U	110 U	0.11 U	0.11 U	0.12 U	0.15 U	0.095 U	0.096 U
2,4,6-Trichlorophenol	6.3	8.6	NE	4	0.11 U	0.12 U	0.12 U	0.12 U	110 U	0.11 U	0.11 U	0.12 U	0.15 U	0.095 U	0.096 U
2,4-Dichlorophenol	19	26	NE	NE	0.22 U	0.24 U	0.23 U	0.25 U	220 U	0.23 U	0.23 U	0.24 U	0.31 U	0.19 U	0.19 U
2,4-Dimethylphenol	130	170	NE	NE	0.11 U	0.12 U	0.12 U	0.12 U	110 U	0.11 U	0.11 U	0.12 U	0.15 U	0.095 U	0.096 U
2,4-Dinitrophenol	13	17	NE	20	2.2 U	2.4 U	2.3 U	2.5 U	2200 U	2.3 U	2.3 U	2.4 U	3.1 U	1.9 U	1.9 U
2,4-Dinitrotoluene	1.7	2.4	NE	NE	0.11 U	0.12 U	0.12 U	0.12 U	110 U	0.11 U	0.11 U	0.12 U	0.15 U	0.095 U	0.096 U
2,6-Dinitrotoluene	0.36	0.5	NE	NE	0.11 U	0.12 U	0.12 U	0.12 U	110 U	0.11 U	0.11 U	0.12 U	0.15 U	0.095 U	0.096 U
2-Chloronaphthalene	480	650	NE	NE	0.22 U	0.24 U	0.23 U	0.25 U	220 U	0.23 U	0.23 U	0.24 U	0.31 U	0.19 U	0.19 U
2-Chlorophenol	39	54	NE	NE	0.22 U	0.24 U	0.23 U	0.25 U	220 U	0.23 U	0.23 U	0.24 U	0.31 U	0.19 U	0.19 U
2-Methylphenol (o-Cresol)	320	430	NE	NE	0.11 U	0.12 U	0.12 U	0.12 U	110 U	0.11 U	0.11 U	0.12 U	0.15 U	0.095 U	0.096 U
2-Nitroaniline	63	NE	NE	NE	0.11 U	0.12 U	0.12 U	0.12 U	110 U	0.11 U	0.11 U	0.12 U	0.15 U	0.095 U	0.096 U
2-Nitrophenol	NE	NE	NE	NE	0.11 U	0.12 U	0.12 U	0.12 U	110 U	0.11 U	0.11 U	0.12 U	0.15 U	0.095 U	0.096 U
3,3'-Dichlorobenzidine	1.2	1.7	NE	NE	2.7 U	3.0 U	2.9 U	3.1 U	2700 U	2.8 U	2.8 U	3.0 U	3.9 U	2.4 U	2.4 U
3-Nitroaniline	NE	NE	NE	NE	0.11 U	0.12 U	0.12 U	0.12 U	110 U	0.11 U	0.11 U	0.12 U	0.15 U	0.095 U	0.096 U
4,6-Dinitro-2-methylphenol	0.51	860	NE	NE	R	R	R	R	R	R	R	R	R	R	R
4-Bromophenyl phenyl ether	NE	NE	NE	NE	0.11 U	0.12 U	0.12 U	0.12 U	110 U	0.11 U	0.11 U	0.12 U	0.15 U	0.095 U	0.096 U
4-Chloro-3-methylphenol	630	NE	NE	NE	0.11 U	0.12 U	0.12 U	0.12 U	110 U	0.11 U	0.11 U	0.12 U	0.15 U	0.095 U	0.096 U
4-Chloroaniline	2.7	3.7	NE	NE	0.11 U	0.12 U	0.12 U	0.12 U	110 U	0.11 U	0.11 U	0.12 U	0.15 U	0.095 U	0.096 U
4-Chlorophenyl phenyl ether	NE	NE	NE	NE	0.22 U	0.24 U	0.23 U	0.25 U	220 U	0.23 U	0.23 U	0.24 U	0.31 U	0.19 U	0.19 U
4-Methylphenol (p-Cresol)	630	510	NE	NE	0.11 U	0.12 U	0.12 U	0.12 U	110 U	0.11 U	0.11 U	0.12 U	0.15 U	0.095 U	0.096 U
4-Nitroaniline	25	35	NE	NE	0.22 U	0.24 U	0.23 U	0.25 U	220 U	0.23 U	0.23 U	0.24 U	0.31 U	0.19 U	0.19 U
4-Nitrophenol	NE	61	NE	7	0.55 U	0.61 U	0.58 U	0.62 U	540 U	0.57 U	0.57 U	0.61 U	0.77 U	0.47 U	0.48 U
Aniline (Phenylamine, Aminobenzene)	44	610	NE	NE	0.11 U	0.12 U	0.12 U	0.12 U	110 U	0.11 U	0.11 U	0.12 U	0.15 U	0.095 UJ	0.096 UJ
Azobenzene	5.6	NE	NE	NE	0.11 U	0.12 U	0.12 U	0.12 U	110 U	0.11 U	0.11 U	0.12 U	0.15 U	0.095 U	0.096 U
Benzidine	0.00053	NE	NE	NE	2.7 U	3.0 U	2.9 U	3.1 U	2700 U	2.8 U	2.8 U	3.0 U	3.9 U	2.4 UJ	2.4 UJ
Benzoic acid	25000	1100	NE	NE	4.9 U	5.5 U	5.2 U	5.6 U	4800 U	5.1 U	5.1 U	5.4 U	6.9 U	4.3 U	4.3 U
Benzyl alcohol	630	860	NE	NE	0.11 U	0.12 U	0.12 U	0.12 U	110 U	0.11 U	0.11 U	0.24 U	0.31 U	0.095 U	0.096 U
Benzyl butyl phthalate	290	390	NE	NE	0.22 U	0.24 U	0.23 U	0.25 U	220 U	0.23 U	0.23 U	0.24 U	0.31 U	0.19 U	0.19 U
bis(2-Chloroethoxy) methane	19	NE	NE	NE	0.22 U	0.24 U	0.23 U	0.25 U	220 U	0.23 U	0.23 U	0.24 U	0.31 U	0.19 U	0.19 U
bis(2-Chloroethyl) ether	0.23	0.33	NE	NE	0.11 U	0.12 U	0.12 U	0.12 U	110 U	0.11 U	0.11 U	0.12 U	0.15 U	0.095 U	0.096 U
bis(2-Ethylhexyl) phthalate	39	53	NE	NE	0.27 U	0.61 U	0.29 U	0.31 U	270 U	0.57 U	0.57 U	0.30 U	0.39 U	0.24 U	**0.53**
Carbazole	NE	27	NE	NE	0.11 U	0.12 U	0.12 U	0.12 U	**360**	**0.16 J**	**0.055 J**	0.12 U	0.15 U	0.095 U	**3.2**
Dibenzofuran	7.3	11	NE	NE	0.055 U	0.061 U	0.058 U	0.062 U	**850**	**0.15**	0.057 U	0.061 U	0.077 U	0.047 U	**1.7**
Diethyl phthalate	5100	6900	NE	100	0.22 U	0.24 U	0.23 U	0.25 U	220 U	0.23 U	0.23 U	0.24 U	0.31 U	0.19 U	0.19 U
Dimethyl phthalate	NE	NE	NE	NE	0.22 U	0.24 U	0.23 U	0.25 U	220 U	0.23 U	0.23 U	0.24 U	0.31 U	0.19 U	0.19 U
Di-n-butyl phthalate	630	860	NE	200	0.22 U	0.24 U	0.23 U	0.25 U	220 U	0.23 U	0.23 U	0.24 U	0.31 U	0.19 U	0.19 U
di-n-Octyl phthalate	63	86	NE	NE	0.22 U	0.24 U	0.23 U	0.25 U	220 U	0.23 U	0.23 U	0.24 U	0.31 U	0.19 U	0.19 U
Hexachlorobenzene	0.21	0.3	NE	NE	0.11 U	0.12 U	0.12 U	0.12 U	110 U	0.11 U	0.11 U	0.12 U	0.15 U	0.095 U	0.096 U
Hexachlorobutadiene	1.2	1.5	NE	NE	0.11 U	0.12 U	0.12 U	0.12 U	110 U	0.11 U	0.11 U	0.12 U	0.15 U	0.095 U	0.096 U
Hexachlorocyclopentadiene	0.18	NE	NE	10	0.44 UJ	0.48 UJ	0.46 UJ	0.50 UJ	430 U	0.45 U	0.45 U	0.48 U	0.62 U	0.38 UJ	0.39 UJ
Hexachloroethane	1.8	2.7	NE	NE	0.11 U	0.12 U	0.12 U	0.12 U	110 U	0.11 U	0.11 U	0.12 U	0.15 U	0.095 U	0.096 U
Isophorone	570	780	NE	NE	0.22 U	0.24 U	0.23 U	0.25 U	220 U	0.23 U	0.23 U	0.24 U	0.31 U	0.19 U	0.19 U
Nitrobenzene	5.1	NE	NE	NE	0.11 U	0.12 U	0.12 U	0.12 U	110 U	0.11 U	0.11 U	0.12 U	0.15 U	0.095 U	0.096 U
N-Nitrosodimethylamine	0.002	NE	NE	NE	0.11 U	0.12 U	0.12 U	0.12 U	110 U	0.11 U	0.11 U	0.12 U	0.15 U	0.095 U	0.096 U
N-Nitrosodi-n-propylamine	0.078	NE	NE	NE	0.11 U	0.12 U	0.12 U	0.12 U	110 U	0.11 U	0.11 U	0.12 U	0.15 U	0.095 U	0.096 U
N-Nitrosodiphenylamine	110	150	NE	NE	0.11 U	0.12 U	0.12 U	0.12 U	110 U	0.11 U	0.11 U	0.12 U	0.15 U	0.095 U	0.096 U
Pentachlorophenol	180	1.4	NE	2.1	0.55 U	0.61 U	0.58 U	0.62 U	540 U	**0.11 J**	0.57 U	0.61 U	0.77 U	0.47 U	0.48 U
Phenol	1900	2600	NE	30	0.11 U	0.12 U	0.12 U	0.12 U	110 U	0.11 U	0.11 U	0.12 U	0.15 U	0.095 U	0.096 U
Pyridine	7.8	NE	NE	NE	0.11 UJ	0.12 UJ	0.12 UJ	0.12 UJ	110 U	0.11 U	0.11 U	0.12 U	0.15 U	0.095 UJ	0.096 UJ
TOC LYDKHN (ug/g)															
Total Organic Carbon	NE	NE	NE	NE	**3300**	**22000**	**18000**	**9800**	**130000**	**80000**	**21000**	**13000**	**110000**	**7300**	**110000**

Table 4-1
Summary of Discrete Soil Sample Analytical Results
Former Dow Salvage Yard
233 Odlin Road, Bangor, Maine

Analytes	RSL[1]	RAG[2]	Background[3]	Ecological[4]	SY-TP2			SY-TP3					SY-TP4		SY-TP5	
Locations:					SY-TP2			SY-TP3					SY-TP4		SY-TP5	
Field Sample ID:					SY-TP2-DUD	SY-TP2-DUDA	SY-TP2-DUS	SY-TP3-A	SY-TP3-AA	SY-TP3-DUD	SY-TP3-DUS	SY-TP3-DUSA	SY-TP4-DUD	SY-TP4-DUS	SY-TP5-DUD	SY-TP5-DUS
Matrix:					S		S	S		S	S		S	S	S	S
Sample Begin Depth:					2.5		0.5	1.5		4	0.5		2.5	0.5	2.5	0.5
Sample End Depth:					2.5		2	1.5		4	2		2.5	2	2.5	2
Sample Date:					09/30/2019		09/30/2019	09/30/2019		09/30/2019	09/30/2019		09/30/2019	09/30/2019	09/30/2019	09/30/2019
PAH SIM (mg/kg)																
2-Methylnaphthalene	24	33	NE	29	0.020 U	0.017 U	**0.13**	**0.12**	**0.14**	0.0096 U	**0.12**	**0.17**	0.020 U	**0.087**	0.0094 U	**0.054**
Acenaphthene	360	490	NE	29	0.010 U	0.017 U	**0.061**	**0.013 J**	**0.014 J**	0.0096 U	0.026 U	**0.030**	0.010 U	**0.041**	0.0094 U	0.018 U
Acenaphthylene	180	490	NE	29	0.010 U	0.0086 U	**0.015 J**	**0.012 J**	**0.011 J**	0.0096 U	**0.013 J**	**0.018 J**	0.010 U	**0.023**	0.0094 U	**0.0059 J**
Anthracene	1800	250	NE	29	0.010 U	0.017 U	**0.37**	**0.049**	**0.051**	0.0096 U	**0.16**	**0.13**	0.020 U	**0.29**	0.0094 U	**0.033**
Benzo(a)anthracene	1.1	1.6	0.86	1.1	**0.031**	**0.036**	**1.7**	**0.43**	**0.42**	0.0096 U	**0.74**	**0.73**	**0.11**	**1.4**	0.019 U	**0.22**
Benzo(a)pyrene	0.11	0.16	1.5	1.1	**0.029**	**0.029**	**1.4**	**0.23**	**0.23**	0.0096 U	**0.59**	**0.62**	**0.090**	**1.3**	0.019 U	**0.15**
Benzo(b)fluoranthene	1.1	1.6	1.3	1.1	**0.043**	**0.052**	**1.8**	**0.46**	**0.53**	0.0096 U	**0.88**	**1.1**	**0.16**	**1.6**	**0.031**	**0.27**
Benzo(g,h,i)perylene	180	250	NE	1.1	**0.032**	**0.027**	**0.83**	**0.16**	**0.16**	**0.0073 J**	**0.34**	**0.35**	**0.050**	**0.48**	**0.013 J**	**0.091**
Benzo(k)fluoranthene	11	16	NE	1.1	**0.0083 J**	**0.0075 J**	**0.76**	**0.17**	**0.15**	0.0096 U	**0.28**	**0.28**	**0.041**	**0.76**	0.0094 U	**0.082**
Chrysene	110	160	NE	1.1	**0.024**	**0.026**	**1.7**	**0.45**	**0.45**	0.0096 U	**0.83**	**0.87**	**0.12**	**1.5**	0.019 U	**0.23**
Dibenz(a,h)anthracene	0.11	0.16	0.32	1.1	**0.0060 J**	0.0086 U	**0.25**	**0.074**	**0.072**	**0.0020 J**	**0.14**	**0.15**	**0.019 J**	**0.24**	**0.0036 J**	**0.036**
Fluoranthene	240	330	NE	1.1	0.043 U	0.045 U	**2.9**	**0.62**	**0.78**	0.019 U	**1.0**	**1.2**	**0.24**	**2.4**	0.031 U	**0.31**
Fluorene	240	330	NE	29	0.010 U	0.017 U	**0.082**	**0.017 J**	**0.019 J**	0.0096 U	**0.036**	**0.047**	0.020 U	**0.055**	0.0094 U	0.018 U
Indeno(1,2,3-c,d)pyrene	1.1	1.6	0.4	1.1	**0.024**	**0.018**	**1.8**	**0.29**	**0.24**	0.019 U	**0.75**	**0.62**	**0.069**	**0.89**	0.019 U	**0.11**
Naphthalene	3.8	2.9	0.11	29	0.010 U	0.017 U	**0.088**	**0.093**	**0.10**	0.0096 U	**0.089 J**	**0.13 J**	0.020 U	**0.056**	0.0094 U	**0.029**
Phenanthrene	180	250	NE	29	0.020 U	0.045 U	**1.4**	**0.47**	**0.49**	0.019 U	**0.70**	**0.79**	**0.12**	**0.96**	0.019 U	**0.24**
Pyrene	180	250	NE	1.1	**0.052**	**0.062**	**3.0**	**0.49**	**0.49**	0.0096 U	**1.4**	**1.2**	**0.17**	**2.2**	0.028 U	**0.34**
MassDEP EPH (ug/g)																
2-Methylnaphthalene	24	33	NE	29	0.097 U	0.10 U	**0.35**	**1.8 J**	**1.8 J**	0.094 U	**0.24**	**0.24**	0.099 UJ	**0.24**	0.098 U	**0.056 J**
Acenaphthene	360	490	NE	29	0.097 U	0.10 U	**0.074 J**	0.11 U	0.11 U	0.094 U	0.099 U	0.092 U	0.099 UJ	0.098 U	0.098 U	0.098 U
Acenaphthylene	180	490	NE	29	0.097 U	0.10 U	**0.049 J**	0.11 U	0.11 U	0.094 U	0.099 U	0.092 U	0.099 UJ	**0.094 J**	0.098 U	0.098 U
Anthracene	1800	250	NE	29	0.097 U	0.10 U	**0.50**	**0.12 J**	**0.15 J**	0.094 U	**0.099 J**	**0.078 J**	0.099 UJ	**0.22**	0.098 U	0.098 U
Benzo(a)anthracene	1.1	1.6	0.86	1.1	0.097 U	0.10 U	**2.1**	**0.54**	**0.61**	0.094 U	**0.54**	**0.45**	0.099 UJ	**0.93**	0.098 U	**0.18 J**
Benzo(a)pyrene	0.11	0.16	1.5	1.1	0.097 U	0.10 U	**1.8**	**0.48**	**0.49**	0.094 U	**0.49**	**0.39**	0.099 UJ	**0.71**	0.098 U	**0.15 J**
Benzo(b)fluoranthene	1.1	1.6	1.3	1.1	**0.021 J**	0.10 U	**1.6**	**0.63**	**0.72**	0.094 U	**0.51**	**0.57**	**0.029 J**	**0.79**	0.098 U	**0.20**
Benzo(g,h,i)perylene	180	250	NE	1.1	**0.030 J**	0.10 U	**1.1**	**0.31**	**0.32**	0.094 U	**0.36**	**0.31**	**0.022 J**	**0.34**	0.098 U	**0.11 J**
Benzo(k)fluoranthene	11	16	NE	1.1	0.097 U	0.10 U	**2.0**	**0.51**	**0.51**	0.094 U	**0.55**	**0.40**	0.099 U	**0.74**	0.098 U	**0.15 J**
Chrysene	110	160	NE	1.1	0.097 U	0.10 U	**2.2**	**0.80**	**0.84**	0.094 U	**0.67**	**0.61**	0.099 UJ	**1.0**	0.098 U	**0.21**
Dibenz(a,h)anthracene	0.11	0.16	0.32	1.1	0.097 U	0.10 U	**0.39**	**0.11 J**	**0.11 J**	0.094 U	**0.14 J**	**0.10 J**	0.099 UJ	**0.13 J**	0.098 U	0.098 U
Fluoranthene	240	330	NE	1.1	0.097 U	0.10 U	**5.2**	**1.0**	**1.3**	0.094 U	**1.2**	**1.0**	0.099 UJ	**2.2**	0.098 U	**0.46**
Fluorene	240	330	NE	29	0.097 U	0.10 U	**0.12 J**	**0.10 J**	**0.11 J**	0.094 U	0.099 U	0.092 U	0.099 UJ	0.098 U	0.098 U	0.098 U
Indeno(1,2,3-c,d)pyrene	1.1	1.6	0.4	1.1	0.097 U	0.10 U	**1.1**	**0.29**	**0.29**	0.094 U	**0.35**	**0.30**	0.099 UJ	**0.31**	0.098 U	**0.10 J**
Naphthalene	3.8	2.9	0.11	29	0.097 U	0.10 U	**0.28**	**1.2**	**1.4**	0.094 U	**0.20**	**0.19**	0.099 UJ	**0.17 J**	0.098 U	0.098 U
Phenanthrene	180	250	NE	29	0.097 U	0.10 U	**2.1**	**1.5**	**1.6**	0.094 U	**0.73**	**0.68**	0.099 U	**0.85**	0.098 U	**0.20 J**
Pyrene	180	250	NE	1.1	0.097 U	0.10 U	**3.1**	**1.1**	**1.2**	0.094 U	**0.87**	**0.72**	0.099	**1.5**	0.098 U	**0.34**
C11-C22 Aromatic	NE	260	NE	NE	**74**	**85**	**79**	**98**	**94**	**3.9 J**	**49**	**36**	**15 J**	**53**	**19 J**	**25 J**
C11-C22 Extractable Petroleum Hydrocarbons, Aromatic (Unadjusted)	NE	100000	NE	NE	**74**	**85**	**100**	**110 J**	**110 J**	**3.9 J**	**56**	**43**	**15 J**	**64**	**19 J**	**28 J**
C19-C36 Aliphatic	NE	10000	NE	NE	**340**	**290**	**66**	**38 J**	**38 J**	**3.7 J**	**36**	**28**	**8.6 J**	**25**	**31 J**	**14 J**
C9-C18 Aliphatic	NE	250	NE	NE	**30**	**23**	20 U	**21 J**	**19 J**	4.8 UJ	20 U	18 U	5.1 UJ	20 U	5.0 UJ	20 UJ
MassDEP VPH (ug/g)																
Benzene	1.2	1.7	NE	NE	-	-	-	0.042 U	0.039 U	-	-	-	-	-	-	-
Ethylbenzene	5.8	8.6	NE	NE	-	-	-	0.042 U	0.039 U	-	-	-	-	-	-	-
m,p-Xylene	55	26	NE	NE	-	-	-	0.085 U	0.078 U	-	-	-	-	-	-	-
Methyl tert-butyl ether (MTBE)	47	69	NE	NE	-	-	-	0.042 U	0.039 U	-	-	-	-	-	-	-
Naphthalene	3.8	2.9	NE	NE	-	-	-	**0.064 J**	**0.047 J**	-	-	-	-	-	-	-
o-Xylene	65	26	NE	NE	-	-	-	0.042 U	0.039 U	-	-	-	-	-	-	-
Toluene	490	75	NE	NE	-	-	-	0.042 U	0.039 U	-	-	-	-	-	-	-
C5-C8 Aliphatic	NE	43	NE	NE	-	-	-	5.1 U	4.7 U	-	-	-	-	-	-	-
C9-C10 Aromatic	NE	66	NE	NE	-	-	-	1.6 U	1.5 U	-	-	-	-	-	-	-
C9-C12 Aliphatic	NE	230	NE	NE	-	-	-	5.1 U	4.7 U	-	-	-	-	-	-	-
Metals SW6020A/7471B (ug/g)																
Aluminum	7700	2700	NE	NE	**14000**	**15000**	**9500**	**5000**	**6500**	**16000**	**7000**	**7200**	**17000**	**7400**	**21000**	**9100**
Antimony	3.1	4.3	NE	0.27	**0.69**	**0.62**	**1.0**	0.60 U	0.50 U	0.50 U	**0.75**	**0.66**	**0.54**	**0.99**	0.50 U	**0.56**
Arsenic	0.68	0.93	16.4	9.9	**6.9**	**6.9**	**16**	**12**	**13**	**11 J**	**11**	**9.9**	**8.4**	**11**	**8.0**	**7.3**
Barium	1500	210	469	283	**50**	**49**	**54**	**27 J**	**42 J**	**36**	**26**	**32**	**46**	**93**	**52**	**45**
Beryllium	16	11	2.4	10	**0.55**	**0.48 J**	**0.35 J**	0.60 U	0.50 U	**0.82**	**0.23 J**	**0.21 J**	**0.66**	**0.54**	**0.69**	0.40 U
Cadmium	7.1	4.2	0.26	0.36	**0.17 J**	**0.12 J**	**0.36 J**	0.60 U	0.50 U	0.50 U	**0.072 J**	**0.040 J**	0.50 U	0.50 U	0.50 U	**0.43**
Chromium	0.3[†]/12000	0.42[†]/2,700	79	0.4	**24**	**25**	**21**	**14**	**16**	**30**	**18**	**18**	**29**	**13**	**38**	**21**
Cobalt	2.3	3.2	14.9	13	**11**	**11**	**9.4**	6.0 U	**6.0**	**9.2**	**6.6**	**6.4**	**9.5**	**7.0**	**7.9**	**7.7**
Copper	310	340	23	28	**6.3**	**6.1**	**33**	**17**	**17**	**16**	**20**	**18**	**8.2**	**40**	**7.8**	**18**
Iron	5500	7500	SSS	NE	**21000**	**22000**	**22000**	**16000**	**17000**	**27000**	**17000**	**17000**	**23000**	**16000**	**24000**	**17000**
Lead	400	14	32	11	**36**	**34**	**33**	**21**	**15**	**12**	**21**	**20**	**15**	**26**	**32**	**26**
Magnesium	NE	NE	NE	NE	**3400**	**3500**	**3900**	**2500**	**4100**	**5600**	**3200**	**3500**	**4100**	**1700**	**4100**	**3700**
Manganese	180	28	841	220	**330**	**370**	**1000**	**150**	**200**	**320 J**	**250**	**250**	**270**	**230**	**210**	**320**
Mercury	1.1	0.31	0.123	0.00051	**0.041 J**	**0.044 J**	**0.041 J**	0.086 UJ	0.092 UJ	0.072 UJ	0.061 UJ	0.075 UJ	**0.042 J**	**0.66 J**	**0.033 J**	0.078 UJ
Nickel	150	99	39	30	**20**	**21**	**28**	**17**	**21**	**31**	**20**	**21**	**23**	**22**	**25**	**37**
Potassium	NE	NE	NE	NE	**780**	**870**	**1000**	**640**	**710**	**1900 J**	**850**	**860**	**1200**	**490**	**1700**	**900**
Selenium	39	54	0.61	0.21	**1.1 J**	**1.6 J**	**1.9 J**	**2.7 J**	**2.0 J**	5.0 UJ	**1.4 J**	**1.2 J**	5.0 U	5.0 U	5.0 U	4.0 U
Silver	39	54	SSS	2	**0.15 J**	**0.11 J**	**0.075 J**	2.8 U	2.4 U	2.3 U	**0.046 J**	**0.033 J**	2.6 U	2.6 U	2.5 U	2.2 U
Sodium	NE	NE	NE	NE	**250 J**	**200 J**	**130 J**	**270 J**	**310 J**	**1900**	**280**	**310**	**150**	**190**	**110**	**130**
Thallium	0.078	0.11	0.6	1	0.50 U	0.50 U	0.50 U	0.60 U	0.50 U	0.50 U	0.50 U	0.24 U	0.50 U	0.50 U	0.50 U	0.40 U
Vanadium	39	49	103	2	**24**	**24**	**17**	**12**	**13**	**28**	**14**	**14**	**31**	**30**	**37**	**180**
Zinc	2300	3200	101	8.5	**41**	**46**	**64**	**29**	**35**	**46**	**40**	**40**	**46**	**61**	**47**	**83**

Table 4-1
Summary of Discrete Soil Sample Analytical Results
Former Dow Salvage Yard
233 Odlin Road, Bangor, Maine

Locations:					SY-TP2			SY-TP3					SY-TP4		SY-TP5	
Field Sample ID:					SY-TP2-DUD	SY-TP2-DUDA	SY-TP2-DUS	SY-TP3-A	SY-TP3-AA	SY-TP3-DUD	SY-TP3-DUS	SY-TP3-DUSA	SY-TP4-DUD	SY-TP4-DUS	SY-TP5-DUD	SY-TP5-DUS
Matrix:					S		S	S		S	S		S	S	S	S
Sample Begin Depth:					2.5		0.5	1.5		4	0.5		2.5	0.5	2.5	0.5
Sample End Depth:					2.5		2	1.5		4	2		2.5	2	2.5	2
Sample Date:					09/30/2019		09/30/2019	09/30/2019		09/30/2019	09/30/2019		09/30/2019	09/30/2019	09/30/2019	09/30/2019
Analytes	**RSL[1]**	**RAG[2]**	**Background[3]**	**Ecological[4]**												
Hex Chromium SW7196A (mg/kg)																
Chromium, Hexavalent	0.3	0.42	NE	0.4	0.62 U	**0.23 J**	0.63 U	**0.19 J**	**0.29 J**	**0.23 J**	**0.17 J**	**0.28 J**	0.64 U	**0.22 J**	**0.38 J**	0.28 U
PCBs SW8082A (ug/g)																
PCB-1016 (Aroclor 1016	0.41	0.31	NE	NE	0.013 U	0.013 U	0.013 U	0.014 U	0.015 U	0.013 U	**0.027 J**	**0.053**	0.013 U	0.012 U	0.013 U	0.013 U
PCB-1221 (Aroclor 1221	0.2	0.31	NE	NE	0.013 U	0.013 U	0.013 U	0.014 U	0.015 U	0.013 U	0.013 U	0.013 U	0.013 U	0.012 U	0.013 U	0.013 U
PCB-1232 (Aroclor 1232	0.17	0.31	NE	NE	0.013 U	0.013 U	0.013 U	0.014 U	0.015 U	0.013 U	0.013 U	0.013 U	0.013 U	0.012 U	0.013 U	0.013 U
PCB-1242 (Aroclor 1242	0.23	0.31	NE	NE	0.013 U	0.013 U	0.013 U	0.014 U	0.015 U	0.013 U	0.013 U	0.013 U	0.013 U	0.012 U	0.013 U	0.013 U
PCB-1248 (Aroclor 1248)	0.23	0.31	NE	NE	0.013 U	0.013 U	0.013 U	0.014 U	0.015 U	0.013 U	0.013 U	0.013 U	0.013 U	0.012 U	0.013 U	0.013 U
PCB-1254 (Aroclor 1254)	0.12	0.31	NE	NE	0.013 U	0.013 U	0.013 U	0.014 U	0.015 U	0.013 U	0.013 U	0.013 U	0.013 U	0.012 U	0.013 U	0.013 U
PCB-1260 (Aroclor 1260)	0.24	0.31	NE	NE	0.013 UJ	0.013 UJ	0.013 UJ	0.014 U	0.015 U	0.013 UJ	**0.019 J**	**0.020 J**	0.013 UJ	**0.031 J**	0.013 U	0.013 UJ
VOCs SW8260D (ug/g)																
1,1,1,2-Tetrachloroethane	2	3	NE	NE	-	-	-	0.026 U	0.024 U	-	-	-	-	-	-	-
1,1,1-Trichloroethane	810	64	NE	NE	-	-	-	0.026 U	0.024 U	-	-	-	-	-	-	-
1,1,2,2-Tetrachloroethane	0.3	0.89	NE	NE	-	-	-	0.026 U	0.024 U	-	-	-	-	-	-	-
1,1,2-Trichloroethane	0.15	0.22	NE	NE	-	-	-	0.026 U	0.024 U	-	-	-	-	-	-	-
1,1-Dichloroethane	3.6	5.3	NE	NE	-	-	-	0.026 U	0.024 U	-	-	-	-	-	-	-
1,1-Dichloroethene	23	8.1	NE	NE	-	-	-	0.026 U	0.024 U	-	-	-	-	-	-	-
1,1-Dichloropropene	NE	NE	NE	NE	-	-	-	0.026 U	0.024 U	-	-	-	-	-	-	-
1,2,3-Trichlorobenzene	6.3	8.6	NE	NE	-	-	-	0.026 U	0.024 U	-	-	-	-	-	-	-
1,2,3-Trichloropropane	0.0051	0.07	NE	NE	-	-	-	0.026 U	0.024 U	-	-	-	-	-	-	-
1,2,4-Trichlorobenzene	5.8	8.6	NE	NE	-	-	-	0.026 U	0.024 U	-	-	-	-	-	-	-
1,2,4-Trimethylbenzene	30	18	NE	NE	-	-	-	**0.041 J**	**0.048 J**	-	-	-	-	-	-	-
1,2-Dibromo-3-chloropropane	0.0053	0.0078	NE	NE	-	-	-	0.053 U	0.049 U	-	-	-	-	-	-	-
1,2-Dibromoethane (EDB)	0.036	0.054	NE	NE	-	-	-	0.026 U	0.024 U	-	-	-	-	-	-	-
1,2-Dichlorobenzene	180	36	NE	NE	-	-	-	0.026 U	0.024 U	-	-	-	-	-	-	-
1,2-Dichloroethane	0.46	0.68	NE	NE	-	-	-	0.026 U	0.024 U	-	-	-	-	-	-	-
1,2-Dichloropropane	1.6	2.3	NE	NE	-	-	-	0.026 U	0.024 U	-	-	-	-	-	-	-
1,3,5-Trimethylbenzene	27	16	NE	NE	-	-	-	**0.019 J**	**0.023 J**	-	-	-	-	-	-	-
1,3-Dichlorobenzene	NE	29	NE	NE	-	-	-	0.026 U	0.024 U	-	-	-	-	-	-	-
1,3-Dichloropropane	160	210	NE	NE	-	-	-	0.026 U	0.024 U	-	-	-	-	-	-	-
1,4-Dichlorobenzene	2.6	3.9	NE	NE	-	-	-	0.026 U	0.024 U	-	-	-	-	-	-	-
1,4-Dioxane (p-Dioxane)	5.3	0.74	NE	NE	-	-	-	2.1 U	2.0 U	-	-	-	-	-	-	-
2,2-Dichloropropane	NE	NE	NE	NE	-	-	-	0.026 U	0.024 U	-	-	-	-	-	-	-
2-Butanone (MEK)	2700	1100	NE	NE	-	-	-	0.21 U	0.20 U	-	-	-	-	-	-	-
2-Chlorotoluene	160	80	NE	NE	-	-	-	0.026 U	0.024 U	-	-	-	-	-	-	-
2-Hexanone	20	29	NE	NE	-	-	-	0.053 U	0.049 U	-	-	-	-	-	-	-
4-Chlorotoluene	160	210	NE	NE	-	-	-	0.026 U	0.024 U	-	-	-	-	-	-	-
4-Methyl-2-pentanone (MIBK)	5400	330	NE	NE	-	-	-	0.026 U	0.024 U	-	-	-	-	-	-	-
Acetone	6100	5200	NE	NE	-	-	-	0.21 U	0.20 U	-	-	-	-	-	-	-
Benzene	1.2	1.7	NE	NE	-	-	-	0.026 U	0.024 U	-	-	-	-	-	-	-
Bromobenzene	29	38	NE	NE	-	-	-	0.026 U	0.024 U	-	-	-	-	-	-	-
Bromochloromethane	15	22	NE	NE	-	-	-	0.026 U	0.024 U	-	-	-	-	-	-	-
Bromodichloromethane	0.29	0.44	NE	NE	-	-	-	0.026 U	0.024 U	-	-	-	-	-	-	-
Bromoform	19	28	NE	NE	-	-	-	0.026 U	0.024 U	-	-	-	-	-	-	-
Bromomethane	0.68	1	NE	NE	-	-	-	0.11 U	0.098 U	-	-	-	-	-	-	-
Carbon disulfide	77	69	NE	NE	-	-	-	0.026 U	0.024 U	-	-	-	-	-	-	-
Carbon tetrachloride	0.65	0.97	NE	NE	-	-	-	0.026 U	0.024 U	-	-	-	-	-	-	-
Chlorobenzene	28	41	NE	40	-	-	-	0.026 U	0.024 U	-	-	-	-	-	-	-
Chloroethane	1400	200	NE	NE	-	-	-	0.026 U	0.024 U	-	-	-	-	-	-	-
Chloroform	0.32	0.47	NE	NE	-	-	-	0.026 U	0.024 U	-	-	-	-	-	-	-
Chloromethane	11	16	NE	NE	-	-	-	**0.13**	**0.091 J**	-	-	-	-	-	-	-
cis-1,2-Dichloroethene	16	20	NE	NE	-	-	-	0.026 U	0.024 U	-	-	-	-	-	-	-
cis-1,3-Dichloropropene	1.8	2.7	NE	NE	-	-	-	0.026 U	0.024 U	-	-	-	-	-	-	-
Dibromochloromethane	8.3	11	NE	NE	-	-	-	0.026 U	0.024 U	-	-	-	-	-	-	-
Dibromomethane	2.4	3.5	NE	NE	-	-	-	0.026 U	0.024 U	-	-	-	-	-	-	-
Dichlorodifluoromethane	8.7	13	NE	NE	-	-	-	0.026 U	0.024 U	-	-	-	-	-	-	-
Diethyl ether (Ethyl ether)	1600	81	NE	NE	-	-	-	0.026 U	0.024 U	-	-	-	-	-	-	-
Ethylbenzene	5.8	8.6	NE	NE	-	-	-	0.026 U	0.024 U	-	-	-	-	-	-	-
Hexachlorobutadiene	1.2	1.5	NE	NE	-	-	-	0.053 U	0.049 U	-	-	-	-	-	-	-
Isopropylbenzene (Cumene)	190	26	NE	NE	-	-	-	0.026 U	0.024 U	-	-	-	-	-	-	-
m,p-Xylene	55	26	NE	NE	-	-	-	**0.043 J**	**0.038 J**	-	-	-	-	-	-	-
Methyl tert-butyl ether (MTBE)	47	69	NE	NE	-	-	-	0.026 U	0.024 U	-	-	-	-	-	-	-
Methylene chloride	35	49	NE	NE	-	-	-	0.026 U	0.024 U	-	-	-	-	-	-	-
Naphthalene	3.8	2.9	NE	NE	-	-	-	0.11 U	0.098 U	-	-	-	-	-	-	-
n-Butylbenzene	390	540	NE	NE	-	-	-	0.026 U	0.024 U	-	-	-	-	-	-	-
n-Propylbenzene	380	26	NE	NE	-	-	-	0.026 U	0.024 U	-	-	-	-	-	-	-
o-Xylene	65	26	NE	NE	-	-	-	**0.024 J**	**0.022 J**	-	-	-	-	-	-	-
p-Cymene (p-Isopropyltoluene)	NE	NE	NE	NE	-	-	-	0.026 U	0.024 U	-	-	-	-	-	-	-
sec-Butylbenzene	780	1100	NE	NE	-	-	-	0.026 U	0.024 U	-	-	-	-	-	-	-

Table 4-1
Summary of Discrete Soil Sample Analytical Results
Former Dow Salvage Yard
233 Odlin Road, Bangor, Maine

Locations:					SY-TP2			SY-TP3					SY-TP4		SY-TP5	
Field Sample ID:					SY-TP2-DUD	SY-TP2-DUDA	SY-TP2-DUS	SY-TP3-A	SY-TP3-AA	SY-TP3-DUD	SY-TP3-DUS	SY-TP3-DUSA	SY-TP4-DUD	SY-TP4-DUS	SY-TP5-DUD	SY-TP5-DUS
Matrix:					S		S	S		S	S		S	S	S	S
Sample Begin Depth:					2.5		0.5	1.5		4	0.5		2.5	0.5	2.5	0.5
Sample End Depth:					2.5		2	1.5		4	2		2.5	2	2.5	2
Sample Date:					09/30/2019		09/30/2019	09/30/2019		09/30/2019	09/30/2019		09/30/2019	09/30/2019	09/30/2019	09/30/2019
Analytes	**RSL[1]**	**RAG[2]**	**Background[3]**	**Ecological[4]**												
Styrene	600	83	NE	300	-	-	-	0.026 U	0.024 U	-	-	-	-	-	-	-
tert-Amyl methyl ether	NE	NE	NE	NE	-	-	-	0.026 U	0.024 U	-	-	-	-	-	-	-
tert-Butyl alcohol	NE	NE	NE	NE	-	-	-	0.26 U	0.24 U	-	-	-	-	-	-	-
tert-Butyl ethyl ether	NE	NE	NE	NE	-	-	-	0.026 U	0.024 U	-	-	-	-	-	-	-
tert-Butylbenzene	780	1100	NE	NE	-	-	-	0.026 U	0.024 U	-	-	-	-	-	-	-
Tetrachloroethene (PCE)	8.1	8.5	NE	NE	-	-	-	0.026 U	0.024 U	-	-	-	-	-	-	-
Tetrahydrofuran	1800	2700	NE	NE	-	-	-	0.21 U	0.20 U	-	-	-	-	-	-	-
Toluene	490	75	NE	200	-	-	-	0.11 U	0.098 U	-	-	-	-	-	-	-
trans-1,2-Dichloroethene	160	10	NE	NE	-	-	-	0.026 U	0.024 U	-	-	-	-	-	-	-
trans-1,3-Dichloropropene	1.8	2.7	NE	NE	-	-	-	0.026 U	0.024 U	-	-	-	-	-	-	-
Trichloroethene (TCE)	0.41	0.39	NE	NE	-	-	-	0.026 U	0.024 U	-	-	-	-	-	-	-
Trichlorofluoromethane	2300	94	NE	NE	-	-	-	0.026 U	0.024 U	-	-	-	-	-	-	-
Vinyl chloride	0.0059	0.064	NE	NE	-	-	-	0.026 U	0.024 U	-	-	-	-	-	-	-
SVOCs SW8270E (ug/g)																
1,2,4-Trichlorobenzene	5.8	8.6	NE	20	0.20 U	0.20 U	0.19 U	0.21 U	0.21 U	0.19 U	0.20 U	0.19 U	0.20 U	0.20 U	0.20 U	0.20 U
1,2-Dichlorobenzene	180	36	NE	NE	0.098 U	0.10 U	0.097 U	0.11 U	0.11 U	0.096 U	0.098 U	0.097 U	0.098 U	0.10 U	0.098 U	0.10 U
1,3-Dichlorobenzene	NE	29	NE	NE	0.098 U	0.10 U	0.097 U	0.11 U	0.11 U	0.096 U	0.098 U	0.097 U	0.098 U	0.10 U	0.098 U	0.10 U
1,4-Dichlorobenzene	2.6	3.9	NE	20	0.098 U	0.10 U	0.097 U	0.11 U	0.11 U	0.096 U	0.098 U	0.097 U	0.098 U	0.10 U	0.098 U	0.10 U
2,2'-Oxybis(1-chloropropane)	310	NE	NE	NE	0.098 U	0.10 U	0.097 U	0.11 U	0.11 U	0.096 U	0.098 U	0.097 U	0.098 U	0.10 U	0.098 U	0.10 U
2,4,5-Trichlorophenol	630	860	NE	9	0.098 U	0.10 U	0.097 U	0.11 U	0.11 U	0.096 U	0.098 U	0.097 U	0.098 U	0.10 U	0.098 U	0.10 U
2,4,6-Trichlorophenol	6.3	8.6	NE	4	0.098 U	0.10 U	0.097 U	0.11 U	0.11 U	0.096 U	0.098 U	0.097 U	0.098 U	0.10 U	0.098 U	0.10 U
2,4-Dichlorophenol	19	26	NE	NE	0.20 U	0.20 U	0.19 U	0.21 U	0.21 U	0.19 U	0.20 U	0.19 U	0.20 U	0.20 U	0.20 U	0.20 U
2,4-Dimethylphenol	130	170	NE	NE	0.098 U	0.10 U	0.097 U	0.11 U	0.11 U	0.096 U	0.098 U	0.097 U	0.098 U	0.10 U	0.098 U	0.10 U
2,4-Dinitrophenol	13	17	NE	20	2.0 U	2.0 U	1.9 U	2.1 U	2.1 U	1.9 U	2.0 U	1.9 U	2.0 U	2.0 U	2.0 U	2.0 U
2,4-Dinitrotoluene	1.7	2.4	NE	NE	0.098 U	0.10 U	0.097 U	0.11 U	0.11 U	0.096 U	0.098 U	0.097 U	0.098 U	0.10 U	0.098 U	0.10 U
2,6-Dinitrotoluene	0.36	0.5	NE	NE	0.098 U	0.10 U	0.097 U	0.11 U	0.11 U	0.096 U	0.098 U	0.097 U	0.098 U	0.10 U	0.098 U	0.10 U
2-Chloronaphthalene	480	650	NE	NE	0.20 U	0.20 U	0.19 U	0.21 U	0.21 U	0.19 U	0.20 U	0.19 U	0.20 U	0.20 U	0.20 U	0.20 U
2-Chlorophenol	39	54	NE	NE	0.20 U	0.20 U	0.19 U	0.21 U	0.21 U	0.19 U	0.20 U	0.19 U	0.20 U	0.20 U	0.20 U	0.20 U
2-Methylphenol (o-Cresol)	320	430	NE	NE	0.098 U	0.10 U	0.097 U	0.11 U	0.11 U	0.096 U	0.098 U	0.097 U	0.098 U	0.10 U	0.098 U	0.10 U
2-Nitroaniline	63	NE	NE	NE	0.098 U	0.10 U	0.097 U	0.11 U	0.11 U	0.096 U	0.098 U	0.097 U	0.098 U	0.10 U	0.098 U	0.10 U
2-Nitrophenol	NE	NE	NE	NE	0.098 U	0.10 U	0.097 U	0.11 U	0.11 U	0.096 U	0.098 U	0.097 U	0.098 U	0.10 U	0.098 U	0.10 U
3,3'-Dichlorobenzidine	1.2	1.7	NE	NE	2.4 U	2.5 U	2.4 U	2.6 U	2.6 U	2.4 U	2.5 U	2.4 U	2.4 U	2.6 U	2.5 U	2.5 U
3-Nitroaniline	NE	NE	NE	NE	0.098 U	0.10 U	0.097 U	0.11 U	0.11 U	0.096 U	0.098 U	0.097 U	0.098 U	0.10 U	0.098 U	0.10 U
4,6-Dinitro-2-methylphenol	0.51	860	NE	NE	R	R	R	R	R	R	R	R	R	R	R	R
4-Bromophenyl phenyl ether	NE	NE	NE	NE	0.098 U	0.10 U	0.097 U	0.11 U	0.11 U	0.096 U	0.098 U	0.097 U	0.098 U	0.10 U	0.098 U	0.10 U
4-Chloro-3-methylphenol	630	NE	NE	NE	0.098 U	0.10 U	0.097 U	0.11 U	0.11 U	0.096 U	0.098 U	0.097 U	0.098 U	0.10 U	0.098 U	0.10 U
4-Chloroaniline	2.7	3.7	NE	NE	0.098 U	0.10 U	0.097 U	0.11 U	0.11 U	0.096 U	0.098 U	0.097 U	0.098 U	0.10 U	0.098 U	0.10 U
4-Chlorophenyl phenyl ether	NE	NE	NE	NE	0.20 U	0.20 U	0.19 U	0.21 U	0.21 U	0.19 U	0.20 U	0.19 U	0.20 U	0.20 U	0.20 U	0.20 U
4-Methylphenol (p-Cresol)	630	510	NE	NE	0.098 U	0.10 U	0.097 U	0.11 U	0.11 U	0.096 U	0.098 U	0.097 U	0.098 U	0.10 U	0.098 U	0.10 U
4-Nitroaniline	25	35	NE	NE	0.20 U	0.20 U	0.19 U	0.21 U	0.21 U	0.19 U	0.20 U	0.19 U	0.20 U	0.20 U	0.20 U	0.20 U
4-Nitrophenol	NE	61	NE	7	0.49 U	0.50 U	0.49 U	0.53 U	0.53 U	0.48 U	0.49 U	0.48 U	0.49 U	0.51 U	0.49 U	0.50 U
Aniline (Phenylamine, Aminobenzene)	44	610	NE	NE	0.098 UJ	0.10 UJ	0.097 UJ	0.11 UJ	0.11 UJ	0.096 UJ	0.098 UJ	0.097 UJ	0.098 UJ	0.10 UJ	0.098 UJ	0.10 UJ
Azobenzene	5.6	NE	NE	NE	0.098 U	0.10 U	0.097 U	0.11 U	0.11 U	0.096 U	0.098 U	0.097 U	0.098 U	0.10 U	0.098 U	0.10 U
Benzidine	0.00053	NE	NE	NE	2.4 UJ	2.5 UJ	2.4 UJ	R	R	2.4 UJ	2.5 UJ	2.4 UJ	2.4 UJ	2.6 UJ	2.5 UJ	2.5 UJ
Benzoic acid	25000	1100	NE	NE	4.4 U	4.5 U	4.4 U	4.7 U	4.8 U	4.3 U	4.4 U	4.4 U	4.4 U	4.6 U	4.4 U	4.5 U
Benzyl alcohol	630	860	NE	NE	0.098 U	0.10 U	0.097 U	0.11 U	0.11 U	0.096 U	0.098 U	0.097 U	0.098 U	0.10 U	0.098 U	0.10 U
Benzyl butyl phthalate	290	390	NE	NE	0.20 U	0.20 U	0.19 U	0.21 U	0.21 U	0.19 U	0.20 U	0.19 U	0.20 U	0.20 U	0.20 U	0.20 U
bis(2-Chloroethoxy) methane	19	NE	NE	NE	0.20 U	0.20 U	0.19 U	0.21 U	0.21 U	0.19 U	0.20 U	0.19 U	0.20 U	0.20 U	0.20 U	0.20 U
bis(2-Chloroethyl) ether	0.23	0.33	NE	NE	0.098 U	0.10 U	0.097 U	0.11 U	0.11 U	0.096 U	0.098 U	0.097 U	0.098 U	0.10 U	0.098 U	0.10 U
bis(2-Ethylhexyl) phthalate	39	53	NE	NE	0.24 U	0.50 U	0.24 U	0.26 U	0.26 U	0.24 U	0.49 U	0.48 U	0.24 U	0.26 U	0.25 U	0.25 U
Carbazole	NE	27	NE	NE	0.098 U	0.10 U	**0.15 J**	**0.076 J**	**0.070 J**	0.096 U	**0.049 J**	**0.034 J**	0.098 U	**0.039 J**	0.098 U	0.10 U
Dibenzofuran	7.3	11	NE	NE	0.049 U	0.050 U	**0.29**	**0.28**	**0.31**	0.048 U	**0.16**	**0.15**	0.049 U	**0.12**	0.049 U	**0.059**
Diethyl phthalate	5100	6900	NE	100	0.20 U	0.20 U	0.19 U	0.21 U	0.21 U	0.19 U	0.20 U	0.19 U	0.20 U	0.20 U	0.20 U	0.20 U
Dimethyl phthalate	NE	NE	NE	NE	0.20 U	0.20 U	0.19 U	0.21 U	0.21 U	0.19 U	0.20 U	0.19 U	0.20 U	0.20 U	0.20 U	0.20 U
Di-n-butyl phthalate	630	860	NE	200	0.20 U	0.20 U	0.19 U	0.21 U	0.21 U	0.19 U	0.20 U	0.19 U	0.20 U	0.20 U	0.20 U	0.20 U
di-n-Octyl phthalate	63	86	NE	NE	0.20 U	0.20 U	0.19 U	0.21 U	0.21 U	0.19 U	0.20 U	0.19 U	0.20 U	0.20 U	0.20 U	0.20 U
Hexachlorobenzene	0.21	0.3	NE	NE	0.098 U	0.10 U	0.097 U	0.11 U	0.11 U	0.096 U	0.098 U	0.097 U	0.098 U	0.10 U	0.098 U	0.10 U
Hexachlorobutadiene	1.2	1.5	NE	NE	0.098 U	0.10 U	0.097 U	0.11 U	0.11 U	0.096 U	0.098 U	0.097 U	0.098 U	0.10 U	0.098 U	0.10 U
Hexachlorocyclopentadiene	0.18	NE	NE	10	0.39 UJ	0.40 UJ	0.39 UJ	R	R	0.39 UJ	0.39 UJ	0.39 UJ	0.39 UJ	0.41 UJ	0.39 UJ	0.40 UJ
Hexachloroethane	1.8	2.7	NE	NE	0.098 U	0.10 U	0.097 U	**0.046 J**	0.11 U	0.096 U	0.098 U	**0.033 J**	0.098 U	0.10 U	0.098 U	0.10 U
Isophorone	570	780	NE	NE	0.20 U	0.20 U	0.19 U	0.21 U	0.21 U	0.19 U	0.20 U	0.19 U	0.20 U	0.20 U	0.20 U	0.20 U
Nitrobenzene	5.1	NE	NE	NE	0.098 U	0.10 U	0.097 U	0.11 U	0.11 U	0.096 U	0.098 U	0.097 U	0.098 U	0.10 U	0.098 U	0.10 U
N-Nitrosodimethylamine	0.002	NE	NE	NE	0.098 U	0.10 U	0.097 U	0.11 U	0.11 U	0.096 U	0.098 U	0.097 U	0.098 U	0.10 U	0.098 U	0.10 U
N-Nitrosodi-n-propylamine	0.078	NE	NE	NE	0.098 U	0.10 U	0.097 U	0.11 U	0.11 U	0.096 U	0.098 U	0.097 U	0.098 U	0.10 U	0.098 U	0.10 U
N-Nitrosodiphenylamine	110	150	NE	NE	0.098 U	0.10 U	0.097 U	0.11 U	0.11 U	0.096 U	0.098 U	0.097 U	0.098 U	0.10 U	0.098 U	0.10 U
Pentachlorophenol	180	1.4	NE	2.1	0.49 U	0.50 U	0.49 U	0.53 U	0.53 U	0.48 U	0.49 U	0.48 U	0.49 U	0.51 U	0.49 U	0.50 U
Phenol	1900	2600	NE	30	0.098 U	0.10 U	0.097 U	0.11 U	0.11 U	0.096 U	0.098 U	0.097 U	0.098 U	0.10 U	0.098 U	0.10 U
Pyridine	7.8	NE	NE	NE	0.098 UJ	0.10 UJ	0.097 UJ	0.11 U	0.11 U	0.096 UJ	0.098 UJ	0.097 UJ	0.098 UJ	0.10 UJ	0.098 UJ	0.10 UJ
TOC LYDKHN (ug/g)																
Total Organic Carbon	NE	NE	NE	NE	**28000**	**28000**	**130000**	**250000**	**270000**	**2300**	**140000**	**130000**	**22000**	**210000**	**16000**	**70000**

Table 4-1
Summary of Discrete Soil Sample Analytical Results
Former Dow Salvage Yard
233 Odlin Road, Bangor, Maine

Locations:					SY-TP6			SY-TP7		SY-TP8			SY-TP9	
Field Sample ID:					SY-TP6-A	SY-TP6-DUD	SY-TP6-DUS	SY-TP7-DUD	SY-TP7-DUS	SY-TP8-DUD	SY-TP8-DUS	SY-TP8-DUSA	SY-TP9-DUD	SY-TP9-DUS
Matrix:					S	S	S	S	S	S	S	S	S	S
Sample Begin Depth:					0.75	2.4	0.5	4	0.5	8	0.5	0.5	6	0.5
Sample End Depth:					0.75	2.4	2	4	2	8	2	2	6	2
Sample Date:					09/30/2019	09/30/2019	09/30/2019	09/30/2019	09/30/2019	10/01/2019	10/01/2019	10/01/2019	09/30/2019	09/30/2019
Analytes	**RSL[1]**	**RAG[2]**	**Background[3]**	**Ecological[4]**										
PAH SIM (mg/kg)														
2-Methylnaphthalene	24	33	NE	29	0.025 U	0.020 U	0.019 U	0.0087 U	**0.023**	0.0091 U	1.6 U	1.9 U	0.017 U	**0.023**
Acenaphthene	360	490	NE	29	0.025 U	0.020 U	**0.033**	0.0087 U	**0.029**	0.0091 U	**1.0 J**	**1.1 J**	0.018 U	**0.20**
Acenaphthylene	180	490	NE	29	0.012 U	**0.011 J**	**0.014 J**	0.0087 U	**0.065**	0.0091 U	**0.70 J**	**0.64 J**	**0.0021 J**	**0.026**
Anthracene	1800	250	NE	29	0.031 U	0.025 U	**0.14**	0.017 U	**0.12**	**0.0075 J**	**1.8**	**2.3**	**0.084**	**1.2**
Benzo(a)anthracene	1.1	1.6	0.86	1.1	**0.078**	**0.22**	**0.73**	**0.021**	**1.4**	**0.055**	**10**	**11**	**0.44 J**	**5.0**
Benzo(a)pyrene	0.11	0.16	1.5	1.1	**0.052**	**0.25**	**0.73**	**0.026**	**1.4**	**0.077**	**16**	**17**	**0.45 J**	**4.5**
Benzo(b)fluoranthene	1.1	1.6	1.3	1.1	**0.086**	**0.33**	**1.0**	**0.032**	**1.8**	**0.089**	**18**	**19**	**0.58 J**	**6.1**
Benzo(g,h,i)perylene	180	250	NE	1.1	**0.031**	**0.14**	**0.34**	**0.016 J**	**0.85**	**0.067**	**13**	**11**	**0.23**	**2.7**
Benzo(k)fluoranthene	11	16	NE	1.1	**0.028**	**0.040**	**0.37**	**0.014 J**	**0.64**	**0.039**	**8.4**	**9.1**	**0.23**	**2.2**
Chrysene	110	160	NE	1.1	**0.059**	**0.31**	**0.91**	**0.026**	**1.7**	**0.070**	**14**	**14**	**0.43 J**	**4.8**
Dibenz(a,h)anthracene	0.11	0.16	0.32	1.1	**0.012 J**	**0.044**	**0.14**	**0.0058 J**	**0.22**	**0.013 J**	**2.5**	**2.3**	**0.079**	**0.82**
Fluoranthene	240	330	NE	1.1	**0.17**	**0.58**	**1.6**	0.037 U	**2.1**	**0.085**	**17**	**20**	**0.62 J**	**10**
Fluorene	240	330	NE	29	0.025 U	0.022 U	**0.047**	0.0087 U	**0.058**	**0.0038 J**	**1.3 J**	**1.4 J**	0.020 U	**0.19**
Indeno(1,2,3-c,d)pyrene	1.1	1.6	0.4	1.1	**0.038**	**0.049**	**0.46**	**0.030**	**0.89**	**0.095**	**17**	**14**	**0.37**	**4.3**
Naphthalene	3.8	2.9	0.11	29	0.025 U	0.010 U	0.019 U	0.0087 U	**0.024**	0.0091 U	**0.36 J**	**0.56 J**	0.017 U	**0.043**
Phenanthrene	180	250	NE	29	**0.14**	**0.31**	**0.79**	0.017 U	**0.82**	**0.035**	**6.7**	**9.0**	**0.32**	**4.7**
Pyrene	180	250	NE	1.1	**0.12**	**0.49**	**1.4**	0.030 U	**2.0**	**0.077**	**17**	**17**	**0.60 J**	**9.6**
MassDEP EPH (ug/g)														
2-Methylnaphthalene	24	33	NE	29	0.12 U	0.10 U	0.098 U	0.092 U	**0.026 J**	0.094 U	**0.14 J**	**0.20**	0.095 U	0.099 U
Acenaphthene	360	490	NE	29	0.12 U	0.10 U	0.098 U	0.092 U	0.097 U	0.094 U	**0.22**	**0.20**	0.095 U	**0.17 J**
Acenaphthylene	180	490	NE	29	0.12 U	0.10 U	0.098 U	0.092 U	**0.10 J**	0.094 U	**0.41 J**	**1.1 J**	0.095 U	**0.071 J**
Anthracene	1800	250	NE	29	0.12 U	0.10 U	0.098 U	0.092 U	**0.092 J**	0.094 U	**0.47**	**0.70**	0.095 U	**1.0**
Benzo(a)anthracene	1.1	1.6	0.86	1.1	0.12 U	**0.27**	**0.37**	0.092 U	**0.95**	0.094 U	**1.8**	**2.6**	**0.25**	**4.5**
Benzo(a)pyrene	0.11	0.16	1.5	1.1	0.12 U	**0.31**	**0.39**	0.092 U	**1.2**	**0.072 J**	**2.4**	**3.7**	**0.28**	**4.1**
Benzo(b)fluoranthene	1.1	1.6	1.3	1.1	0.12 U	**0.30**	**0.44**	**0.032 J**	**1.1**	**0.044 J**	**1.8**	**2.8**	**0.24**	**3.7**
Benzo(g,h,i)perylene	180	250	NE	1.1	0.12 U	**0.19 J**	**0.27**	**0.025 J**	**0.73**	**0.057 J**	**2.3**	**3.8**	**0.20**	**2.9**
Benzo(k)fluoranthene	11	16	NE	1.1	0.12 U	**0.29**	**0.41**	0.092 U	**0.98**	0.094 U	**1.8**	**2.8**	**0.22**	**4.0**
Chrysene	110	160	NE	1.1	0.12 U	**0.39**	**0.50**	0.092 U	**1.2**	0.094 U	**2.1**	**3.0**	**0.26**	**4.4**
Dibenz(a,h)anthracene	0.11	0.16	0.32	1.1	0.12 U	**0.058 J**	**0.083 J**	0.092 U	**0.21**	0.094 U	**0.51**	**0.78**	0.095 U	**0.80**
Fluoranthene	240	330	NE	1.1	0.12 U	**0.77**	**0.92**	0.092 U	**1.5**	0.094 U	**2.6**	**4.1**	**0.51**	**10**
Fluorene	240	330	NE	29	0.12 U	0.10 U	0.098 U	0.092 U	0.097 U	0.094 U	**0.20**	**0.20**	0.095 U	**0.15 J**
Indeno(1,2,3-c,d)pyrene	1.1	1.6	0.4	1.1	0.12 U	**0.18 J**	**0.22**	0.092 U	**0.65**	0.094 U	**1.7**	**2.7**	**0.17 J**	**2.5**
Naphthalene	3.8	2.9	0.11	29	0.12 U	0.10 U	0.098 U	0.092 U	0.097 U	0.094 UJ	**0.16 J**	**0.26 J**	0.095 U	0.099 U
Phenanthrene	180	250	NE	29	0.12 U	**0.36**	**0.28**	0.092 U	**0.53**	0.094 U	**1.4**	**1.6**	**0.19 J**	**4.5**
Pyrene	180	250	NE	1.1	0.12 U	**0.60**	**0.67**	0.092 U	**1.6**	**0.069 J**	**4.2**	**5.6**	**0.40**	**8.1**
C11-C22 Aromatic	NE	260	NE	NE	**15 J**	**29**	**34 J**	**11 J**	**62**	**24**	**170 J**	**230 J**	**15 J**	**76**
C11-C22 Extractable Petroleum Hydrocarbons, Aromatic (Unadjusted)	NE	100000	NE	NE	**15 J**	**33**	**38 J**	**12 J**	**72**	**24**	**190 J**	**270 J**	**18 J**	**130**
C19-C36 Aliphatic	NE	10000	NE	NE	**14 J**	**11 J**	**25 J**	**9.1 J**	**59**	**11 J**	**92 J**	**120 J**	**10 J**	**27**
C9-C18 Aliphatic	NE	250	NE	NE	**1.5 J**	20 U	20 UJ	18 U	19 U	**2.0 J**	**12 J**	**15 J**	19 U	20 U
MassDEP VPH (ug/g)														
Benzene	1.2	1.7	NE	NE	0.086 U	-	-	-	-	-	-	-	-	-
Ethylbenzene	5.8	8.6	NE	NE	0.086 U	-	-	-	-	-	-	-	-	-
m,p-Xylene	55	26	NE	NE	0.17 U	-	-	-	-	-	-	-	-	-
Methyl tert-butyl ether (MTBE)	47	69	NE	NE	0.086 U	-	-	-	-	-	-	-	-	-
Naphthalene	3.8	2.9	NE	NE	0.086 U	-	-	-	-	-	-	-	-	-
o-Xylene	65	26	NE	NE	0.086 U	-	-	-	-	-	-	-	-	-
Toluene	490	75	NE	NE	0.086 U	-	-	-	-	-	-	-	-	-
C5-C8 Aliphatic	NE	43	NE	NE	10 U	-	-	-	-	-	-	-	-	-
C9-C10 Aromatic	NE	66	NE	NE	3.2 U	-	-	-	-	-	-	-	-	-
C9-C12 Aliphatic	NE	230	NE	NE	10 U	-	-	-	-	-	-	-	-	-
Metals SW6020A/7471B (ug/g)														
Aluminum	7700	2700	NE	NE	**1400**	**14000**	**13000**	**15000**	**12000**	**12000 J**	**6400 J**	**5800 J**	**21000**	**34**
Antimony	3.1	4.3	NE	0.27	0.60 U	0.50 U	0.50 U	0.50 U	**0.65**	0.50 U	**0.72**	0.50 U	0.50 U	0.50 U
Arsenic	0.68	0.93	16.4	9.9	**3.6**	**7.4**	**11**	**5.4**	**11**	**7.6**	**7.4**	**6.5**	**9.2**	0.50 U
Barium	1500	210	469	283	**46**	**32**	**37**	**38**	**46**	**27**	**160 J**	**46 J**	**39**	5.0 U
Beryllium	16	11	2.4	10	0.60 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.049 U	0.50 U
Cadmium	7.1	4.2	0.26	0.36	0.60 U	0.50 U	0.50 U	0.50 U	**0.72**	0.50 U	**0.68**	0.50 U	0.50 U	0.50 U
Chromium	0.3[†]/12000	0.42[†]/2,700	79	0.4	6.0 U	**25**	**31**	**25**	**27**	**25**	**35**	**48**	**5.2**	5.0 U
Cobalt	2.3	3.2	14.9	13	6.0 U	**8.6**	**11**	**6.6**	**9.3**	**8.8**	**6.4**	**6.0**	5.0 U	5.0 U
Copper	310	340	23	28	**16**	**8.5**	**20**	**7.7**	**18**	**11**	**16**	**16**	**98**	5.0 U
Iron	5500	7500	SSS	NE	**2500**	**21000**	**25000**	**18000**	**21000**	**20000**	**15000**	**14000**	**5100**	**59**
Lead	400	14	32	11	**17**	**13**	**19**	**8.7**	**47**	**9.1**	**100**	**130**	**4.7**	2.5 U
Magnesium	NE	NE	NE	NE	**240 J**	**3700**	**5700**	**4200**	**5800**	**4200**	**3200**	**3000**	**660**	50 U
Manganese	180	28	841	220	**150**	**220**	**450**	**180**	**450**	**210**	**420**	**450**	**40**	5.0 U
Mercury	1.1	0.31	0.123	0.00051	0.093 UJ	**0.045 J**	0.075 UJ	0.072 UJ	**0.11 J**	0.075 U	**0.086 J**	**0.061 J**	0.072 UJ	**0.050 J**
Nickel	150	99	39	30	**8.7**	**23**	**36**	**23**	**28**	**24**	**23**	**20**	5.0 U	5.0 U
Potassium	NE	NE	NE	NE	**220 J**	**730**	**1200**	**1000**	**1500**	**950**	**710**	**670**	**950**	25 U
Selenium	39	54	0.61	0.21	**0.45 J**	5.0 U	5.0 U	5.0 U	5.0 U	**1.8 J**	**0.83 J**	**0.51 J**	5.0 U	0.50 U
Silver	39	54	SSS	2	2.8 U	2.4 U	2.5 U	2.3 U	2.5 U	2.5 U	2.3 U	2.4 U	2.4 U	2.5 U
Sodium	NE	NE	NE	NE	**66 J**	**270**	**310**	**82**	**150**	**66**	**100**	**73**	**510**	50 U
Thallium	0.078	0.11	0.6	1	0.28 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.24 U	0.50 U
Vanadium	39	49	103	2	**55**	**25**	**23**	**21**	**23**	**21**	**26**	**27**	**3.5 J**	0.50 U
Zinc	2300	3200	101	8.5	**32**	**38**	**56**	**32**	**64**	**35**	**160**	**170**	**140**	**60**

Table 4-1
Summary of Discrete Soil Sample Analytical Results
Former Dow Salvage Yard
233 Odlin Road, Bangor, Maine

				Locations:	SY-TP6			SY-TP7		SY-TP8			SY-TP9	
				Field Sample ID:	SY-TP6-A	SY-TP6-DUD	SY-TP6-DUS	SY-TP7-DUD	SY-TP7-DUS	SY-TP8-DUD	SY-TP8-DUS	SY-TP8-DUSA	SY-TP9-DUD	SY-TP9-DUS
				Matrix:	S	S	S	S	S	S	S	S	S	S
				Sample Begin Depth:	0.75	2.4	0.5	4	0.5	8	0.5	0.5	6	0.5
				Sample End Depth:	0.75	2.4	2	4	2	8	2	2	6	2
				Sample Date:	09/30/2019	09/30/2019	09/30/2019	09/30/2019	09/30/2019	10/01/2019	10/01/2019	10/01/2019	09/30/2019	09/30/2019
Analytes	**RSL[1]**	**RAG[2]**	**Background[3]**	**Ecological[4]**										
Hex Chromium SW7196A (mg/kg)														
Chromium, Hexavalent	0.3	0.42	NE	0.4	0.54 U	**0.37 J**	**0.70**	0.38 U	**2.7**	**0.47 J**	**10**	**15**	**0.29 J**	0.41 U
PCBs SW8082A (ug/g)														
PCB-1016 (Aroclor 1016	0.41	0.31	NE	NE	0.016 U	0.011 U	0.013 U	0.012 U	0.012 U	0.013 U	0.013 U	0.013 U	0.013 U	0.011 U
PCB-1221 (Aroclor 1221	0.2	0.31	NE	NE	0.016 U	0.011 U	0.013 U	0.012 U	0.012 U	0.013 U	0.013 U	0.013 U	0.013 U	0.011 U
PCB-1232 (Aroclor 1232	0.17	0.31	NE	NE	0.016 U	0.011 U	0.013 U	0.012 U	0.012 U	0.013 U	0.013 U	0.013 U	0.013 U	0.011 U
PCB-1242 (Aroclor 1242	0.23	0.31	NE	NE	0.016 U	0.011 U	0.013 U	0.012 U	0.012 U	0.013 U	0.013 U	0.013 U	0.013 U	0.011 U
PCB-1248 (Aroclor 1248)	0.23	0.31	NE	NE	0.016 U	0.011 U	0.013 U	0.012 U	0.012 U	0.013 U	0.013 U	0.013 U	0.013 U	0.011 U
PCB-1254 (Aroclor 1254)	0.12	0.31	NE	NE	0.016 U	0.011 U	0.013 U	0.012 U	0.012 U	0.013 U	0.013 U	**0.029 J**	0.013 U	0.011 U
PCB-1260 (Aroclor 1260)	0.24	0.31	NE	NE	0.016 U	0.011 U	**0.016 J**	0.012 U	**0.12**	0.013 U	**0.051**	**0.036 J**	0.013 U	0.011 U
VOCs SW8260D (ug/g)														
1,1,1,2-Tetrachloroethane	2	3	NE	NE	0.054 U	-	-	-	-	-	-	-	-	-
1,1,1-Trichloroethane	810	64	NE	NE	0.054 U	-	-	-	-	-	-	-	-	-
1,1,2,2-Tetrachloroethane	0.3	0.89	NE	NE	0.054 U	-	-	-	-	-	-	-	-	-
1,1,2-Trichloroethane	0.15	0.22	NE	NE	0.054 U	-	-	-	-	-	-	-	-	-
1,1-Dichloroethane	3.6	5.3	NE	NE	0.054 U	-	-	-	-	-	-	-	-	-
1,1-Dichloroethene	23	8.1	NE	NE	0.054 U	-	-	-	-	-	-	-	-	-
1,1-Dichloropropene	NE	NE	NE	NE	0.054 U	-	-	-	-	-	-	-	-	-
1,2,3-Trichlorobenzene	6.3	8.6	NE	NE	0.054 U	-	-	-	-	-	-	-	-	-
1,2,3-Trichloropropane	0.0051	0.07	NE	NE	0.054 U	-	-	-	-	-	-	-	-	-
1,2,4-Trichlorobenzene	5.8	8.6	NE	NE	0.054 U	-	-	-	-	-	-	-	-	-
1,2,4-Trimethylbenzene	30	18	NE	NE	0.054 U	-	-	-	-	-	-	-	-	-
1,2-Dibromo-3-chloropropane	0.0053	0.0078	NE	NE	0.11 U	-	-	-	-	-	-	-	-	-
1,2-Dibromoethane (EDB)	0.036	0.054	NE	NE	0.054 U	-	-	-	-	-	-	-	-	-
1,2-Dichlorobenzene	180	36	NE	NE	0.054 U	-	-	-	-	-	-	-	-	-
1,2-Dichloroethane	0.46	0.68	NE	NE	0.054 U	-	-	-	-	-	-	-	-	-
1,2-Dichloropropane	1.6	2.3	NE	NE	0.054 U	-	-	-	-	-	-	-	-	-
1,3,5-Trimethylbenzene	27	16	NE	NE	0.054 U	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	NE	29	NE	NE	0.054 U	-	-	-	-	-	-	-	-	-
1,3-Dichloropropane	160	210	NE	NE	0.054 U	-	-	-	-	-	-	-	-	-
1,4-Dichlorobenzene	2.6	3.9	NE	NE	0.054 U	-	-	-	-	-	-	-	-	-
1,4-Dioxane (p-Dioxane)	5.3	0.74	NE	NE	4.3 U	-	-	-	-	-	-	-	-	-
2,2-Dichloropropane	NE	NE	NE	NE	0.054 U	-	-	-	-	-	-	-	-	-
2-Butanone (MEK)	2700	1100	NE	NE	0.43 U	-	-	-	-	-	-	-	-	-
2-Chlorotoluene	160	80	NE	NE	0.054 U	-	-	-	-	-	-	-	-	-
2-Hexanone	20	29	NE	NE	0.11 U	-	-	-	-	-	-	-	-	-
4-Chlorotoluene	160	210	NE	NE	0.054 U	-	-	-	-	-	-	-	-	-
4-Methyl-2-pentanone (MIBK)	5400	330	NE	NE	0.054 U	-	-	-	-	-	-	-	-	-
Acetone	6100	5200	NE	NE	0.43 U	-	-	-	-	-	-	-	-	-
Benzene	1.2	1.7	NE	NE	0.054 U	-	-	-	-	-	-	-	-	-
Bromobenzene	29	38	NE	NE	0.054 U	-	-	-	-	-	-	-	-	-
Bromochloromethane	15	22	NE	NE	0.054 U	-	-	-	-	-	-	-	-	-
Bromodichloromethane	0.29	0.44	NE	NE	0.054 U	-	-	-	-	-	-	-	-	-
Bromoform	19	28	NE	NE	0.054 U	-	-	-	-	-	-	-	-	-
Bromomethane	0.68	1	NE	NE	0.22 U	-	-	-	-	-	-	-	-	-
Carbon disulfide	77	69	NE	NE	0.054 U	-	-	-	-	-	-	-	-	-
Carbon tetrachloride	0.65	0.97	NE	NE	0.054 U	-	-	-	-	-	-	-	-	-
Chlorobenzene	28	41	NE	40	0.054 U	-	-	-	-	-	-	-	-	-
Chloroethane	1400	200	NE	NE	0.054 U	-	-	-	-	-	-	-	-	-
Chloroform	0.32	0.47	NE	NE	0.054 U	-	-	-	-	-	-	-	-	-
Chloromethane	11	16	NE	NE	0.054 U	-	-	-	-	-	-	-	-	-
cis-1,2-Dichloroethene	16	20	NE	NE	0.054 U	-	-	-	-	-	-	-	-	-
cis-1,3-Dichloropropene	1.8	2.7	NE	NE	0.054 U	-	-	-	-	-	-	-	-	-
Dibromochloromethane	8.3	11	NE	NE	0.054 U	-	-	-	-	-	-	-	-	-
Dibromomethane	2.4	3.5	NE	NE	0.054 U	-	-	-	-	-	-	-	-	-
Dichlorodifluoromethane	8.7	13	NE	NE	0.054 U	-	-	-	-	-	-	-	-	-
Diethyl ether (Ethyl ether)	1600	81	NE	NE	0.054 U	-	-	-	-	-	-	-	-	-
Ethylbenzene	5.8	8.6	NE	NE	0.054 U	-	-	-	-	-	-	-	-	-
Hexachlorobutadiene	1.2	1.5	NE	NE	0.11 U	-	-	-	-	-	-	-	-	-
Isopropylbenzene (Cumene)	190	26	NE	NE	0.054 U	-	-	-	-	-	-	-	-	-
m,p-Xylene	55	26	NE	NE	0.11 U	-	-	-	-	-	-	-	-	-
Methyl tert-butyl ether (MTBE)	47	69	NE	NE	0.054 U	-	-	-	-	-	-	-	-	-
Methylene chloride	35	49	NE	NE	0.054 U	-	-	-	-	-	-	-	-	-
Naphthalene	3.8	2.9	NE	NE	0.22 U	-	-	-	-	-	-	-	-	-
n-Butylbenzene	390	540	NE	NE	0.054 U	-	-	-	-	-	-	-	-	-
n-Propylbenzene	380	26	NE	NE	0.054 U	-	-	-	-	-	-	-	-	-
o-Xylene	65	26	NE	NE	0.054 U	-	-	-	-	-	-	-	-	-
p-Cymene (p-Isopropyltoluene)	NE	NE	NE	NE	0.054 U	-	-	-	-	-	-	-	-	-
sec-Butylbenzene	780	1100	NE	NE	0.054 U	-	-	-	-	-	-	-	-	-

Table 4-1
Summary of Discrete Soil Sample Analytical Results
Former Dow Salvage Yard
233 Odlin Road, Bangor, Maine

				Locations:	SY-TP6			SY-TP7		SY-TP8			SY-TP9	
				Field Sample ID:	SY-TP6-A	SY-TP6-DUD	SY-TP6-DUS	SY-TP7-DUD	SY-TP7-DUS	SY-TP8-DUD	SY-TP8-DUS	SY-TP8-DUSA	SY-TP9-DUD	SY-TP9-DUS
				Matrix:	S	S	S	S	S	S	S	S	S	S
				Sample Begin Depth:	0.75	2.4	0.5	4	0.5	8	0.5	0.5	6	0.5
				Sample End Depth:	0.75	2.4	2	4	2	8	2	2	6	2
				Sample Date:	09/30/2019	09/30/2019	09/30/2019	09/30/2019	09/30/2019	10/01/2019	10/01/2019	10/01/2019	09/30/2019	09/30/2019
Analytes	**RSL[1]**	**RAG[2]**	**Background[3]**	**Ecological[4]**										
Styrene	600	83	NE	300	0.054 U	-	-	-	-	-	-	-	-	-
tert-Amyl methyl ether	NE	NE	NE	NE	0.054 U	-	-	-	-	-	-	-	-	-
tert-Butyl alcohol	NE	NE	NE	NE	0.54 U	-	-	-	-	-	-	-	-	-
tert-Butyl ethyl ether	NE	NE	NE	NE	0.054 U	-	-	-	-	-	-	-	-	-
tert-Butylbenzene	780	1100	NE	NE	0.054 U	-	-	-	-	-	-	-	-	-
Tetrachloroethene (PCE)	8.1	8.5	NE	NE	0.054 U	-	-	-	-	-	-	-	-	-
Tetrahydrofuran	1800	2700	NE	NE	0.43 U	-	-	-	-	-	-	-	-	-
Toluene	490	75	NE	200	0.054 U	-	-	-	-	-	-	-	-	-
trans-1,2-Dichloroethene	160	10	NE	NE	0.054 U	-	-	-	-	-	-	-	-	-
trans-1,3-Dichloropropene	1.8	2.7	NE	NE	0.054 U	-	-	-	-	-	-	-	-	-
Trichloroethene (TCE)	0.41	0.39	NE	NE	0.054 U	-	-	-	-	-	-	-	-	-
Trichlorofluoromethane	2300	94	NE	NE	0.054 U	-	-	-	-	-	-	-	-	-
Vinyl chloride	0.0059	0.064	NE	NE	0.054 U	-	-	-	-	-	-	-	-	-
SVOCs SW8270E (ug/g)														
1,2,4-Trichlorobenzene	5.8	8.6	NE	20	0.24 U	0.20 U	0.20 U	0.20 U	0.19 U	0.19 U	0.98 U	0.96 U	0.20 U	0.20 U
1,2-Dichlorobenzene	180	36	NE	NE	0.12 U	0.099 U	0.10 U	0.099 U	0.096 U	0.097 U	0.49 U	0.48 U	0.099 U	0.098 U
1,3-Dichlorobenzene	NE	29	NE	NE	0.12 U	0.099 U	0.10 U	0.099 U	0.096 U	0.097 U	0.49 U	0.48 U	0.099 U	0.098 U
1,4-Dichlorobenzene	2.6	3.9	NE	20	0.12 U	0.099 U	0.10 U	0.099 U	0.096 U	0.097 U	0.49 U	0.48 U	0.099 U	0.098 U
2,2'-Oxybis(1-chloropropane)	310	NE	NE	NE	0.12 U	0.099 U	0.10 U	0.099 U	0.096 U	0.097 U	0.49 U	0.48 U	0.099 U	0.098 U
2,4,5-Trichlorophenol	630	860	NE	9	0.12 U	0.099 U	0.10 U	0.099 U	0.096 U	0.097 U	0.49 U	0.48 U	0.099 U	0.098 U
2,4,6-Trichlorophenol	6.3	8.6	NE	4	0.12 U	0.099 U	0.10 U	0.099 U	0.096 U	0.097 U	0.49 U	0.48 U	0.099 U	0.098 U
2,4-Dichlorophenol	19	26	NE	NE	0.24 U	0.20 U	0.20 U	0.20 U	0.19 U	0.19 U	0.98 U	0.96 U	0.20 U	0.20 U
2,4-Dimethylphenol	130	170	NE	NE	0.12 U	0.099 U	0.10 U	0.099 U	0.096 U	0.097 U	0.49 U	0.48 U	0.099 U	0.098 U
2,4-Dinitrophenol	13	17	NE	20	2.4 U	2.0 U	2.0 U	2.0 U	1.9 U	1.9 U	9.8 U	9.6 U	2.0 U	2.0 U
2,4-Dinitrotoluene	1.7	2.4	NE	NE	0.12 U	0.099 U	0.10 U	0.099 U	0.096 U	0.097 U	0.49 U	0.48 U	0.099 U	0.098 U
2,6-Dinitrotoluene	0.36	0.5	NE	NE	0.12 U	0.099 U	0.10 U	0.099 U	0.096 U	0.097 U	0.49 U	0.48 U	0.099 U	0.098 U
2-Chloronaphthalene	480	650	NE	NE	0.24 U	0.20 U	0.20 U	0.20 U	0.19 U	0.19 U	0.98 U	0.96 U	0.20 U	0.20 U
2-Chlorophenol	39	54	NE	NE	0.24 U	0.20 U	0.20 U	0.20 U	0.19 U	0.19 U	0.98 U	0.96 U	0.20 U	0.20 U
2-Methylphenol (o-Cresol)	320	430	NE	NE	0.12 U	0.099 U	0.10 U	0.099 U	0.096 U	0.097 U	0.49 U	0.48 U	0.099 U	0.098 U
2-Nitroaniline	63	NE	NE	NE	0.12 U	0.099 U	0.10 U	0.099 U	0.096 U	0.097 U	0.49 U	0.48 U	0.099 U	0.098 U
2-Nitrophenol	NE	NE	NE	NE	0.12 U	0.099 U	0.10 U	0.099 U	0.096 U	0.097 U	0.49 U	0.48 U	0.099 U	0.098 U
3,3'-Dichlorobenzidine	1.2	1.7	NE	NE	3.0 U	2.5 U	2.5 U	2.5 U	2.4 U	2.4 U	12 U	12 U	2.5 U	2.4 U
3-Nitroaniline	NE	NE	NE	NE	0.12 U	0.099 U	0.10 U	0.099 U	0.096 U	0.097 U	0.49 U	0.48 U	0.099 U	0.098 U
4,6-Dinitro-2-methylphenol	0.51	860	NE	NE	R	R	R	R	R	R	R	R	R	R
4-Bromophenyl phenyl ether	NE	NE	NE	NE	0.12 U	0.099 U	0.10 U	0.099 U	0.096 U	0.097 U	0.49 U	0.48 U	0.099 U	0.098 U
4-Chloro-3-methylphenol	630	NE	NE	NE	0.12 U	0.099 U	0.10 U	0.099 U	0.096 U	0.097 U	0.49 U	0.48 U	0.099 U	0.098 U
4-Chloroaniline	2.7	3.7	NE	NE	0.12 U	0.099 U	0.10 U	0.099 U	0.096 U	0.097 U	0.49 U	0.48 U	0.099 U	0.098 U
4-Chlorophenyl phenyl ether	NE	NE	NE	NE	0.24 U	0.20 U	0.20 U	0.20 U	0.19 U	0.19 U	0.98 U	0.96 U	0.20 U	0.20 U
4-Methylphenol (p-Cresol)	630	510	NE	NE	0.12 U	0.099 U	0.10 U	0.099 U	0.096 U	0.097 U	0.49 U	0.48 U	0.099 U	0.098 U
4-Nitroaniline	25	35	NE	NE	0.24 U	0.20 U	0.20 U	0.20 U	0.19 U	0.19 U	0.98 U	0.96 U	0.20 U	0.20 U
4-Nitrophenol	NE	61	NE	7	0.61 U	0.49 U	0.50 U	0.49 U	0.48 U	0.48 U	2.4 U	2.4 U	0.50 U	0.49 U
Aniline (Phenylamine, Aminobenzene)	44	610	NE	NE	0.12 U	0.099 UJ	0.10 UJ	0.099 U	0.096 U	0.097 U	0.49 U	0.48 U	0.099 U	0.098 U
Azobenzene	5.6	NE	NE	NE	0.12 U	0.099 U	0.10 U	0.099 U	0.096 U	0.097 U	0.49 U	0.48 U	0.099 U	0.098 U
Benzidine	0.00053	NE	NE	NE	3.0 U	2.5 UJ	2.5 UJ	2.5 U	2.4 U	2.4 U	12 U	12 U	2.5 U	2.4 U
Benzoic acid	25000	1100	NE	NE	5.5 U	4.5 U	4.5 U	4.4 U	4.3 U	4.4 U	22 U	22 U	4.5 U	4.4 U
Benzyl alcohol	630	860	NE	NE	0.12 U	0.099 U	0.10 U	0.099 U	0.096 U	0.097 U	0.49 U	0.48 U	0.099 U	0.098 U
Benzyl butyl phthalate	290	390	NE	NE	0.24 U	0.20 U	0.20 U	0.20 U	0.19 U	0.19 U	0.98 U	0.96 U	0.20 U	0.20 U
bis(2-Chloroethoxy) methane	19	NE	NE	NE	0.24 U	0.20 U	0.20 U	0.20 U	0.19 U	0.19 U	0.98 U	0.96 U	0.20 U	0.20 U
bis(2-Chloroethyl) ether	0.23	0.33	NE	NE	0.12 U	0.099 U	0.10 U	0.099 U	0.096 U	0.097 U	0.49 U	0.48 U	0.099 U	0.098 U
bis(2-Ethylhexyl) phthalate	39	53	NE	NE	0.61 U	0.49 U	0.50 U	0.49 U	0.48 U	0.48 U	1.2 U	1.2 U	0.25 U	0.49 U
Carbazole	NE	27	NE	NE	0.12 U	0.099 U	**0.035 J**	0.099 U	**0.056 J**	0.097 U	**1.2**	**0.52 J**	0.099 U	**0.40**
Dibenzofuran	7.3	11	NE	NE	0.061 U	0.049 U	0.050 U	0.049 U	0.048 U	0.048 U	**1.5 J**	**0.30 J**	0.050 U	**0.15**
Diethyl phthalate	5100	6900	NE	100	0.24 U	0.20 U	0.20 U	0.20 U	0.19 U	0.19 U	0.98 U	0.96 U	0.20 U	0.20 U
Dimethyl phthalate	NE	NE	NE	NE	0.24 U	0.20 U	0.20 U	0.20 U	0.19 U	0.19 U	0.98 U	0.96 U	0.20 U	0.20 U
Di-n-butyl phthalate	630	860	NE	200	0.24 U	0.20 U	0.20 U	0.20 U	0.19 U	0.19 U	0.98 U	0.96 U	0.20 U	0.20 U
di-n-Octyl phthalate	63	86	NE	NE	0.24 U	0.20 U	0.20 U	0.20 U	0.19 U	0.19 U	0.98 U	0.96 U	0.20 U	0.20 U
Hexachlorobenzene	0.21	0.3	NE	NE	0.12 U	0.099 U	0.10 U	0.099 U	0.096 U	0.097 U	0.49 U	0.48 U	0.099 U	0.098 U
Hexachlorobutadiene	1.2	1.5	NE	NE	0.12 U	0.099 U	0.10 U	0.099 U	0.096 U	0.097 U	0.49 U	0.48 U	0.099 U	0.098 U
Hexachlorocyclopentadiene	0.18	NE	NE	10	0.49 U	0.40 UJ	0.40 UJ	0.39 U	0.39 U	0.39 U	2.0 U	1.9 U	0.40 U	0.39 U
Hexachloroethane	1.8	2.7	NE	NE	0.12 U	0.099 U	0.10 U	0.099 U	0.096 U	0.097 U	0.49 U	0.48 U	0.099 U	0.098 U
Isophorone	570	780	NE	NE	0.24 U	0.20 U	0.20 U	0.20 U	0.19 U	0.19 U	0.98 U	0.96 U	0.20 U	0.20 U
Nitrobenzene	5.1	NE	NE	NE	0.12 U	0.099 U	0.10 U	0.099 U	0.096 U	0.097 U	0.49 U	0.48 U	0.099 U	0.098 U
N-Nitrosodimethylamine	0.002	NE	NE	NE	0.12 U	0.099 U	0.10 U	0.099 U	0.096 U	0.097 U	0.49 U	0.48 U	0.099 U	0.098 U
N-Nitrosodi-n-propylamine	0.078	NE	NE	NE	0.12 U	0.099 U	0.10 U	0.099 U	0.096 U	0.097 U	0.49 U	0.48 U	0.099 U	0.098 U
N-Nitrosodiphenylamine	110	150	NE	NE	0.12 U	0.099 U	0.10 U	0.099 U	0.096 U	0.097 U	0.49 U	0.48 U	0.099 U	0.098 U
Pentachlorophenol	180	1.4	NE	2.1	0.61 U	0.49 U	0.50 U	0.49 U	0.48 U	0.48 U	2.4 U	2.4 U	0.50 U	0.49 U
Phenol	1900	2600	NE	30	0.12 U	0.099 U	0.10 U	0.099 U	0.096 U	0.097 U	0.49 U	0.48 U	0.099 U	0.098 U
Pyridine	7.8	NE	NE	NE	0.12 U	0.099 UJ	0.10 UJ	0.099 U	0.096 U	0.097 U	0.49 U	0.48 U	0.099 U	0.098 U
TOC LYDKHN (ug/g)														
Total Organic Carbon	NE	NE	NE	NE	**230000**	**19000**	**62000**	**11000**	**18000**	**3400**	**38000**	**39000**	**8200**	**17000**

Table 4-1
Summary of Discrete Soil Sample Analytical Results
Former Dow Salvage Yard
233 Odlin Road, Bangor, Maine

Locations:					SY-TP10		SY-TP11		SY-TP12					SY-TP13		SY-TP14	
Field Sample ID:					SY-TP10-DUD	SY-TP10-DUS	SY-TP11-DUD	SY-TP11-DUS	SY-TP12-A	SY-TP12-AA	SY-TP12-B	SY-TP12-DUD	SY-TP12-DUS	SY-TP13-DUD	SY-TP13-DUS	SY-TP14-DUD	SY-TP14-DUS
Matrix:					S	S	S	S	S		S	S	S	S	S	S	S
Sample Begin Depth:					8	0.5	8	0.5	5.5		8.5	9	0.5	3.5	0.5	4	0.5
Sample End Depth:					8	2	8	2	5.5		8.5	9	2	3.5	2	4	2
Sample Date:					10/01/2019	10/01/2019	10/01/2019	10/01/2019	10/01/2019		10/01/2019	10/01/2019	10/01/2019	10/01/2019	10/01/2019	10/01/2019	10/01/2019
Analytes	**RSL[1]**	**RAG[2]**	**Background[3]**	**Ecological[4]**													
PAH SIM (mg/kg)																	
2-Methylnaphthalene	24	33	NE	29	0.0086 U	0.16 U	0.0096 U	0.068 U	0.020 U	**0.020**	**0.024**	0.020 U	**0.042**	0.0093 U	0.018 U	0.0095 U	0.0091 U
Acenaphthene	360	490	NE	29	0.0086 U	**0.10 J**	0.0096 U	**0.20**	**0.075**	**0.046**	**0.010 J**	**0.0093 J**	**0.047**	0.0093 U	0.0090 U	0.0095 U	0.0091 U
Acenaphthylene	180	490	NE	29	**0.0083 J**	**0.39**	0.0096 U	**0.062 J**	**0.014 J**	**0.019**	**0.0080 J**	**0.011 J**	**0.093**	0.0093 U	0.0090 U	0.0095 U	0.0091 U
Anthracene	1800	250	NE	29	**0.014 J**	**0.66**	**0.024**	**0.85**	**0.27**	**0.23**	**0.038**	**0.045**	**0.24**	0.0093 U	**0.0049 J**	0.0095 U	0.0091 U
Benzo(a)anthracene	1.1	1.6	0.86	1.1	**0.11**	**4.6**	**0.17**	**4.3**	**1.1**	**1.3**	**0.21**	**0.34 J**	**0.046**	**0.0033 J**	**0.018**	**0.0031 J**	**0.0059 J**
Benzo(a)pyrene	0.11	0.16	1.5	1.1	**0.099**	**4.7**	**0.12**	**3.9**	**0.90**	**1.2**	**0.23**	**0.33**	**2.1**	**0.0044 J**	**0.021**	0.0095 U	**0.0081 J**
Benzo(b)fluoranthene	1.1	1.6	1.3	1.1	**0.14**	**6.4**	**0.22**	**4.5**	**1.4**	**1.8**	**0.36**	**0.42 J**	**3.2**	0.019 U	**0.032**	0.019 U	0.018 U
Benzo(g,h,i)perylene	180	250	NE	1.1	**0.052**	**2.4**	**0.060**	**2.3**	**0.59**	**0.81**	**0.12**	**0.17**	**1.3**	0.0093 U	**0.012 J**	0.0095 U	**0.0041 J**
Benzo(k)fluoranthene	11	16	NE	1.1	**0.056**	**2.1**	**0.074**	**1.5**	**0.43**	**0.58**	**0.12**	**0.17**	**0.83**	0.0093 U	**0.011 J**	0.0095 U	0.0091 U
Chrysene	110	160	NE	1.1	**0.089**	**5.1**	**0.14**	**4.7**	**1.1**	**1.4**	**0.17**	**0.33**	**2.6**	**0.0023 J**	**0.025**	**0.0020 J**	**0.0085 J**
Dibenz(a,h)anthracene	0.11	0.16	0.32	1.1	**0.0098 J**	**0.88**	**0.014 J**	**0.77**	**0.17**	**0.19**	**0.044**	**0.054**	**0.42**	0.0093 U	**0.0041 J**	0.0095 U	**0.0041 J**
Fluoranthene	240	330	NE	1.1	**0.15**	**7.3**	**0.25**	**8.2**	**1.9**	**2.7**	**0.34**	**0.52 J**	**3.6**	0.019 U	**0.044**	0.019 U	0.018 U
Fluorene	240	330	NE	29	**0.0045 J**	**0.29**	**0.0042 J**	**0.21**	**0.10**	**0.060**	**0.017 J**	**0.020**	**0.12**	0.0093 U	**0.0035 J**	0.0095 U	0.0091 U
Indeno(1,2,3-c,d)pyrene	1.1	1.6	0.4	1.1	**0.069**	**3.3**	**0.095**	**4.0**	**0.79**	**0.98**	**0.20**	**0.22**	**1.8**	0.0093 U	**0.021**	0.0095 U	**0.0024 J**
Naphthalene	3.8	2.9	0.11	29	0.0086 U	**0.090 J**	0.0096 U	**0.057 J**	**0.015 J**	**0.014 J**	**0.014 J**	**0.0098 J**	**0.026**	0.0093 U	0.0090 U	0.0095 U	0.0091 U
Phenanthrene	180	250	NE	29	**0.038**	**2.8**	**0.090**	**4.2**	**1.0**	**1.1**	**0.20**	**0.25**	**1.5**	0.019 U	**0.027**	0.019 U	0.018 U
Pyrene	180	250	NE	1.1	**0.16**	**7.3**	**0.22**	**8.7**	**1.6**	**2.0**	**0.24**	**0.57 J**	**3.6**	**0.0024 J**	**0.026**	0.0095 U	**0.0083 J**
MassDEP EPH (ug/g)																	
2-Methylnaphthalene	24	33	NE	29	0.10 U	**0.053 J**	0.098 U	**0.037 J**	**0.18 J**	**0.23**	**0.17 J**	0.097 U	**0.094 J**	0.10 U	0.10 U	0.10 U	0.097 U
Acenaphthene	360	490	NE	29	0.10 U	0.095 U	0.098 U	0.10 U	0.11 U	**0.077 J**	**0.076 J**	0.097 U	**0.075 J**	0.10 U	0.10 U	0.10 U	0.097 U
Acenaphthylene	180	490	NE	29	0.10 U	**0.27**	0.098 U	**0.16 J**	0.11 U	0.11 U	0.12 U	0.097 U	**0.11 J**	0.10 U	0.10 U	0.10 U	0.097 U
Anthracene	1800	250	NE	29	0.10 U	**0.32**	0.098 U	**0.42**	**0.11 J**	**0.22**	**0.22 J**	0.097 U	**0.34**	0.10 U	0.10 U	0.10 U	0.097 U
Benzo(a)anthracene	1.1	1.6	0.86	1.1	0.10 U	**2.2**	0.098 U	**2.4**	**0.75**	**1.0**	**0.55**	**0.17 J**	**2.3**	0.10 U	0.10 U	0.10 U	0.097 U
Benzo(a)pyrene	0.11	0.16	1.5	1.1	**0.077 J**	**2.4**	**0.064 J**	**2.5**	**0.85**	**1.1**	**0.54**	**0.21**	**2.4**	0.10 U	0.10 U	0.10 U	0.097 U
Benzo(b)fluoranthene	1.1	1.6	1.3	1.1	**0.038 J**	**2.0**	**0.052 J**	**2.6**	**0.92**	**1.1**	**0.57**	**0.20**	**2.3**	0.10 U	**0.024 J**	0.10 U	0.097 U
Benzo(g,h,i)perylene	180	250	NE	1.1	**0.055 J**	**2.0**	**0.042 J**	**1.8**	**0.59**	**0.79**	**0.32**	**0.16 J**	**1.5**	0.10 U	0.10 U	0.10 U	0.097 U
Benzo(k)fluoranthene	11	16	NE	1.1	**0.071 J**	**2.0**	0.098 U	**2.5**	**0.89**	**1.1**	**0.51**	**0.14 J**	**2.5**	0.10 U	0.10 U	0.10 U	0.097 U
Chrysene	110	160	NE	1.1	0.10 U	**2.5**	0.098 U	**2.7**	**0.91**	**1.1**	**0.64**	**0.21**	**2.7**	0.10 U	0.10 U	0.10 U	0.097 U
Dibenz(a,h)anthracene	0.11	0.16	0.32	1.1	0.10 U	**0.53**	0.098 U	**0.51**	**0.17 J**	**0.22 J**	**0.088 J**	0.097 U	**0.45**	0.10 U	0.10 U	0.10 U	0.097 U
Fluoranthene	240	330	NE	1.1	0.10 U	**3.5**	**0.10 J**	**5.1**	**1.4**	**1.9**	**1.4**	**0.41**	**4.9**	0.10 U	0.10 U	0.10 U	0.097 U
Fluorene	240	330	NE	29	0.10 U	**0.088 J**	0.098 U	**0.065 J**	0.11 U	**0.087 J**	**0.096 J**	0.097 U	**0.16 J**	0.10 U	0.10 U	0.10 U	0.097 U
Indeno(1,2,3-c,d)pyrene	1.1	1.6	0.4	1.1	0.10 U	**1.7**	0.098 U	**1.6**	**0.56**	**0.69**	**0.28**	**0.11 J**	**1.4**	0.10 U	0.10 U	0.10 U	0.097 U
Naphthalene	3.8	2.9	0.11	29	0.10 UJ	0.095 UJ	0.098 UJ	0.10 UJ	**0.15 J**	**0.17 J**	0.24 U	0.097 U	0.10 U	0.10 UJ	0.10 UJ	0.10 UJ	0.097 UJ
Phenanthrene	180	250	NE	29	0.10 U	**1.7**	0.098 U	**2.0**	**0.70 J**	**1.3 J**	**0.98**	**0.13 J**	**2.3**	0.10 U	0.10 U	0.10 U	0.097 U
Pyrene	180	250	NE	1.1	**0.081 J**	**4.9**	**0.074 J**	**4.2**	**1.6**	**2.2**	**1.1**	**0.30**	**4.1**	0.10 U	0.10 U	0.10 U	0.097 U
C11-C22 Aromatic	NE	260	NE	NE	**14 J**	**160 J**	**10 J**	**92**	**38**	**50**	**48**	**27 J**	**87**	**9.9 J**	**18 J**	**5.0 J**	**13 J**
C11-C22 Extractable Petroleum Hydrocarbons, Aromatic (Unadjusted)	NE	100000	NE	NE	**14 J**	**190 J**	**11 J**	**120**	**48**	**64**	**56**	**29 J**	**110**	**9.9 J**	**18 J**	**5.0 J**	**13 J**
C19-C36 Aliphatic	NE	10000	NE	NE	**8.0 J**	**73 J**	**6.9 J**	**48**	**25**	**36**	**42**	**21 J**	**26**	**3.5 J**	**9.3 J**	**6.3 J**	**7.1 J**
C9-C18 Aliphatic	NE	250	NE	NE	**1.7 J**	**9.5 J**	**1.6 J**	**4.7 J**	**3.0 J**	**3.9 J**	**4.3 J**	19 UJ	20 U	**1.3 J**	**1.5 J**	**1.5 J**	**1.5 J**
MassDEP VPH (ug/g)																	
Benzene	1.2	1.7	NE	NE	-	-	-	-	0.034 U	0.040 U	0.042 U	-	-	-	-	-	-
Ethylbenzene	5.8	8.6	NE	NE	-	-	-	-	0.034 U	0.040 U	0.042 U	-	-	-	-	-	-
m,p-Xylene	55	26	NE	NE	-	-	-	-	0.068 U	0.080 U	0.085 U	-	-	-	-	-	-
Methyl tert-butyl ether (MTBE)	47	69	NE	NE	-	-	-	-	0.034 U	0.040 U	0.042 U	-	-	-	-	-	-
Naphthalene	3.8	2.9	NE	NE	-	-	-	-	0.034 U	0.040 U	0.042 U	-	-	-	-	-	-
o-Xylene	65	26	NE	NE	-	-	-	-	0.034 U	0.040 U	0.042 U	-	-	-	-	-	-
Toluene	490	75	NE	NE	-	-	-	-	0.034 U	0.040 U	0.042 U	-	-	-	-	-	-
C5-C8 Aliphatic	NE	43	NE	NE	-	-	-	-	4.1 U	4.8 U	5.1 U	-	-	-	-	-	-
C9-C10 Aromatic	NE	66	NE	NE	-	-	-	-	1.3 U	1.5 U	1.6 U	-	-	-	-	-	-
C9-C12 Aliphatic	NE	230	NE	NE	-	-	-	-	4.1 U	4.8 U	5.1 U	-	-	-	-	-	-
Metals SW6020A/7471B (ug/g)																	
Aluminum	7700	2700	NE	NE	**13000 J**	**8800 J**	**13000 J**	**13000 J**	**8700**	**9200**	**14000**	**13000 J**	**11000 J**	**11000 J**	**15000 J**	**15000 J**	**16000 J**
Antimony	3.1	4.3	NE	0.27	**0.65**	**3.3**	**0.56**	**0.96**	0.50 U	0.50 U	**0.53**	**0.84**	**0.96**	0.50 U	0.50 U	0.50 U	0.50 U
Arsenic	0.68	0.93	16.4	9.9	**9.4**	**9.1**	**9.0**	**9.4**	**7.5**	**8.7**	**7.9**	**9.3**	**9.2**	**7.3**	**7.1**	**10**	**6.4**
Barium	1500	210	469	283	**24**	**150**	**24**	**68**	**30**	**36**	**74**	**65**	**44**	**21**	**34**	**26**	**35**
Beryllium	16	11	2.4	10	**0.50**	0.50 U	**0.46**	**0.52**	0.50 U	0.50 U	0.50 U	**0.58**	**0.72**	0.50 U	0.50 U	0.50 U	0.50 U
Cadmium	7.1	4.2	0.26	0.36	**0.53**	**78**	0.40 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Chromium	0.3[†]/12000	0.42[†]/2,700	79	0.4	**25**	**70**	**25**	**32**	**21**	**26**	**25**	**24**	**25**	**21**	**23**	**31**	**24**
Cobalt	2.3	3.2	14.9	13	**9.9**	**8.5**	**10**	**10**	**8.5**	**8.5**	**8.7**	**8.5**	**8.7**	**9.4**	**7.4**	**12**	**7.0**
Copper	310	340	23	28	**13**	**31**	**14**	**21**	**18**	**17**	**14**	**14**	**21**	**14**	**11**	**18**	**8.1**
Iron	5500	7500	SSS	NE	**22000**	**19000**	**22000**	**21000**	**15000**	**19000**	**22000**	**24000**	**19000**	**19000**	**19000**	**27000**	**19000**
Lead	400	14	32	11	**10**	**180**	**27**	**77**	**32**	**33**	**71**	**74**	**34**	**8.8**	**10**	**11**	**9.2**
Magnesium	NE	NE	NE	NE	**4900**	**3800**	**5100**	**5200**	**4200**	**4600**	**4300**	**3800**	**3900**	**4100**	**3700**	**6000**	**3000**
Manganese	180	28	841	220	**460**	**490**	**410**	**570**	**570**	**720**	**260**	**380**	**480**	**350**	**210**	**450**	**160**
Mercury	1.1	0.31	0.123	0.00051	0.078 U	**2.4**	0.073 U	**0.059 J**	0.084 UJ	0.077 UJ	0.10 UJ	**0.030 J**	0.078 UJ	0.068 UJ	**0.037 J**	0.070 UJ	**0.060 J**
Nickel	150	99	39	30	**29**	**81**	**30**	**32**	**22**	**24**	**25**	**26**	**26**	**24**	**24**	**34**	**23**
Potassium	NE	NE	NE	NE	**1300**	**860**	**1300**	**1000**	**820**	**1000**	**1200**	**1000**	**810**	**970**	**800**	**1900**	**670**
Selenium	39	54	0.61	0.21	**2.1 J**	**1.1 J**	**1.7 J**	**1.5 J**	**1.1 J**	**0.99 J**	**1.2 J**	**1.2 J**	**1.5 J**	**1.2 J**	**1.6 J**	**2.4 J**	**1.1 J**
Silver	39	54	SSS	2	2.4 U	2.5 U	2.2 U	2.5 U	2.3 U	2.5 U	2.7 U	2.3 U	2.4 U	2.3 U	2.4 U	2.5 U	2.3 U
Sodium	NE	NE	NE	NE	**78**	**86**	**84**	**88**	**88 J**	**140 J**	**96 J**	**76**	**110**	**190**	**75**	**110**	47 U
Thallium	0.078	0.11	0.6	1	0.50 U	0.50 U	0.40 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Vanadium	39	49	103	2	**25**	**180**	**24**	**22**	**15**	**17**	**30**	**29**	**20**	**20**	**20**	**28**	**22**
Zinc	2300	3200	101	8.5	**41**	**190**	**42**	**85**	**44**	**38**	**96**	**110**	**54**	**34**	**36**	**51**	**44**

Table 4-1
Summary of Discrete Soil Sample Analytical Results
Former Dow Salvage Yard
233 Odlin Road, Bangor, Maine

Locations:					SY-TP10		SY-TP11		SY-TP12					SY-TP13		SY-TP14	
Field Sample ID:					SY-TP10-DUD	SY-TP10-DUS	SY-TP11-DUD	SY-TP11-DUS	SY-TP12-A	SY-TP12-AA	SY-TP12-B	SY-TP12-DUD	SY-TP12-DUS	SY-TP13-DUD	SY-TP13-DUS	SY-TP14-DUD	SY-TP14-DUS
Matrix:					S	S	S	S	S		S	S	S	S	S	S	S
Sample Begin Depth:					8	0.5	8	0.5	5.5		8.5	9	0.5	3.5	0.5	4	0.5
Sample End Depth:					8	2	8	2	5.5		8.5	9	2	3.5	2	4	2
Sample Date:					10/01/2019	10/01/2019	10/01/2019	10/01/2019	10/01/2019		10/01/2019	10/01/2019	10/01/2019	10/01/2019	10/01/2019	10/01/2019	10/01/2019
Analytes	**RSL[1]**	**RAG[2]**	**Background[3]**	**Ecological[4]**													
Hex Chromium SW7196A (mg/kg)																	
Chromium, Hexavalent	0.3	0.42	NE	0.4	**0.48 J**	**3.4**	**0.36 J**	**0.45 J**	**0.24 J**	**0.43 J**	0.75 U	0.58 U	**0.81**	**0.33 J**	0.60 U	**0.43 J**	0.57 UJ
PCBs SW8082A (ug/g)																	
PCB-1016 (Aroclor 1016)	0.41	0.31	NE	NE	0.013 U	0.064 U	0.013 U	0.013 U	0.014 U	0.014 U	0.014 U	0.013 U	0.013 U	0.013 U	0.013 U	0.012 U	0.013 U
PCB-1221 (Aroclor 1221	0.2	0.31	NE	NE	0.013 U	0.064 U	0.013 U	0.013 U	0.014 U	0.014 U	0.014 U	0.013 U	0.013 U	0.013 U	0.013 U	0.012 U	0.013 U
PCB-1232 (Aroclor 1232	0.17	0.31	NE	NE	0.013 U	0.064 U	0.013 U	0.013 U	0.014 U	0.014 U	0.014 U	0.013 U	0.013 U	0.013 U	0.013 U	0.012 U	0.013 U
PCB-1242 (Aroclor 1242	0.23	0.31	NE	NE	0.013 U	0.064 U	0.013 U	0.013 U	0.014 U	0.014 U	0.014 U	0.013 U	0.013 U	0.013 U	0.013 U	0.012 U	0.013 U
PCB-1248 (Aroclor 1248)	0.23	0.31	NE	NE	0.013 U	0.064 U	0.013 U	0.013 U	0.014 U	0.014 U	0.014 U	0.013 U	0.013 U	0.013 U	0.013 U	0.012 U	0.013 U
PCB-1254 (Aroclor 1254)	0.12	0.31	NE	NE	0.013 U	0.064 U	0.013 U	0.013 U	0.014 U	0.014 U	0.014 U	0.013 U	0.013 U	0.013 U	0.013 U	0.012 U	0.013 U
PCB-1260 (Aroclor 1260)	0.24	0.31	NE	NE	0.013 U	**0.24 J**	0.013 U	**0.052**	**0.016 J**	**0.017 J**	0.014 U	0.013 U	0.013 U	0.013 U	0.013 U	0.012 U	0.013 U
VOCs SW8260D (ug/g)																	
1,1,1,2-Tetrachloroethane	2	3	NE	NE	-	-	-	-	0.021 U	0.025 U	0.027 U	-	-	-	-	-	-
1,1,1-Trichloroethane	810	64	NE	NE	-	-	-	-	0.021 U	0.025 U	0.027 U	-	-	-	-	-	-
1,1,2,2-Tetrachloroethane	0.3	0.89	NE	NE	-	-	-	-	0.021 U	0.025 U	0.027 U	-	-	-	-	-	-
1,1,2-Trichloroethane	0.15	0.22	NE	NE	-	-	-	-	0.021 U	0.025 U	0.027 U	-	-	-	-	-	-
1,1-Dichloroethane	3.6	5.3	NE	NE	-	-	-	-	0.021 U	0.025 U	0.027 U	-	-	-	-	-	-
1,1-Dichloroethene	23	8.1	NE	NE	-	-	-	-	0.021 U	0.025 U	0.027 U	-	-	-	-	-	-
1,1-Dichloropropene	NE	NE	NE	NE	-	-	-	-	0.021 U	0.025 U	0.027 U	-	-	-	-	-	-
1,2,3-Trichlorobenzene	6.3	8.6	NE	NE	-	-	-	-	0.021 U	0.025 U	0.027 U	-	-	-	-	-	-
1,2,3-Trichloropropane	0.0051	0.07	NE	NE	-	-	-	-	0.021 U	0.025 U	0.027 U	-	-	-	-	-	-
1,2,4-Trichlorobenzene	5.8	8.6	NE	NE	-	-	-	-	0.021 U	0.025 U	0.027 U	-	-	-	-	-	-
1,2,4-Trimethylbenzene	30	18	NE	NE	-	-	-	-	0.021 U	0.025 U	0.027 U	-	-	-	-	-	-
1,2-Dibromo-3-chloropropane	0.0053	0.0078	NE	NE	-	-	-	-	0.042 U	0.050 U	0.053 U	-	-	-	-	-	-
1,2-Dibromoethane (EDB)	0.036	0.054	NE	NE	-	-	-	-	0.021 U	0.025 U	0.027 U	-	-	-	-	-	-
1,2-Dichlorobenzene	180	36	NE	NE	-	-	-	-	0.021 U	0.025 U	0.027 U	-	-	-	-	-	-
1,2-Dichloroethane	0.46	0.68	NE	NE	-	-	-	-	0.021 U	0.025 U	0.027 U	-	-	-	-	-	-
1,2-Dichloropropane	1.6	2.3	NE	NE	-	-	-	-	0.021 U	0.025 U	0.027 U	-	-	-	-	-	-
1,3,5-Trimethylbenzene	27	16	NE	NE	-	-	-	-	0.021 U	0.025 U	0.027 U	-	-	-	-	-	-
1,3-Dichlorobenzene	NE	29	NE	NE	-	-	-	-	0.021 U	0.025 U	0.027 U	-	-	-	-	-	-
1,3-Dichloropropane	160	210	NE	NE	-	-	-	-	0.021 U	0.025 U	0.027 U	-	-	-	-	-	-
1,4-Dichlorobenzene	2.6	3.9	NE	NE	-	-	-	-	0.021 U	0.025 U	0.027 U	-	-	-	-	-	-
1,4-Dioxane (p-Dioxane)	5.3	0.74	NE	NE	-	-	-	-	1.7 U	2.0 U	2.1 U	-	-	-	-	-	-
2,2-Dichloropropane	NE	NE	NE	NE	-	-	-	-	0.021 U	0.025 U	0.027 U	-	-	-	-	-	-
2-Butanone (MEK)	2700	1100	NE	NE	-	-	-	-	0.17 U	0.20 U	0.21 U	-	-	-	-	-	-
2-Chlorotoluene	160	80	NE	NE	-	-	-	-	0.021 U	0.025 U	0.027 U	-	-	-	-	-	-
2-Hexanone	20	29	NE	NE	-	-	-	-	0.042 U	0.050 U	0.053 U	-	-	-	-	-	-
4-Chlorotoluene	160	210	NE	NE	-	-	-	-	0.021 U	0.025 U	0.027 U	-	-	-	-	-	-
4-Methyl-2-pentanone (MIBK)	5400	330	NE	NE	-	-	-	-	0.021 U	0.025 U	0.027 U	-	-	-	-	-	-
Acetone	6100	5200	NE	NE	-	-	-	-	0.17 U	0.20 U	0.21 U	-	-	-	-	-	-
Benzene	1.2	1.7	NE	NE	-	-	-	-	0.021 U	0.025 U	0.027 U	-	-	-	-	-	-
Bromobenzene	29	38	NE	NE	-	-	-	-	0.021 U	0.025 U	0.027 U	-	-	-	-	-	-
Bromochloromethane	15	22	NE	NE	-	-	-	-	0.021 U	0.025 U	0.027 U	-	-	-	-	-	-
Bromodichloromethane	0.29	0.44	NE	NE	-	-	-	-	0.021 U	0.025 U	0.027 U	-	-	-	-	-	-
Bromoform	19	28	NE	NE	-	-	-	-	0.021 U	0.025 U	0.027 U	-	-	-	-	-	-
Bromomethane	0.68	1	NE	NE	-	-	-	-	0.084 U	0.099 U	0.11 U	-	-	-	-	-	-
Carbon disulfide	77	69	NE	NE	-	-	-	-	0.021 U	0.025 U	0.027 U	-	-	-	-	-	-
Carbon tetrachloride	0.65	0.97	NE	NE	-	-	-	-	0.021 U	0.025 U	0.027 U	-	-	-	-	-	-
Chlorobenzene	28	41	NE	40	-	-	-	-	0.021 U	0.025 U	0.027 U	-	-	-	-	-	-
Chloroethane	1400	200	NE	NE	-	-	-	-	0.021 U	0.025 U	0.027 U	-	-	-	-	-	-
Chloroform	0.32	0.47	NE	NE	-	-	-	-	0.021 U	0.025 U	0.027 U	-	-	-	-	-	-
Chloromethane	11	16	NE	NE	-	-	-	-	0.021 U	0.025 U	0.027 U	-	-	-	-	-	-
cis-1,2-Dichloroethene	16	20	NE	NE	-	-	-	-	0.021 U	0.025 U	0.027 U	-	-	-	-	-	-
cis-1,3-Dichloropropene	1.8	2.7	NE	NE	-	-	-	-	0.021 U	0.025 U	0.027 U	-	-	-	-	-	-
Dibromochloromethane	8.3	11	NE	NE	-	-	-	-	0.021 U	0.025 U	0.027 U	-	-	-	-	-	-
Dibromomethane	2.4	3.5	NE	NE	-	-	-	-	0.021 U	0.025 U	0.027 U	-	-	-	-	-	-
Dichlorodifluoromethane	8.7	13	NE	NE	-	-	-	-	0.021 U	0.025 U	0.027 U	-	-	-	-	-	-
Diethyl ether (Ethyl ether)	1600	81	NE	NE	-	-	-	-	0.021 U	0.025 U	0.027 U	-	-	-	-	-	-
Ethylbenzene	5.8	8.6	NE	NE	-	-	-	-	0.021 U	0.025 U	0.027 U	-	-	-	-	-	-
Hexachlorobutadiene	1.2	1.5	NE	NE	-	-	-	-	0.042 U	0.050 U	0.053 U	-	-	-	-	-	-
Isopropylbenzene (Cumene)	190	26	NE	NE	-	-	-	-	0.021 U	0.025 U	0.027 U	-	-	-	-	-	-
m,p-Xylene	55	26	NE	NE	-	-	-	-	0.042 U	0.050 U	0.053 U	-	-	-	-	-	-
Methyl tert-butyl ether (MTBE)	47	69	NE	NE	-	-	-	-	0.021 U	0.025 U	0.027 U	-	-	-	-	-	-
Methylene chloride	35	49	NE	NE	-	-	-	-	0.021 U	0.025 U	0.027 U	-	-	-	-	-	-
Naphthalene	3.8	2.9	NE	NE	-	-	-	-	0.084 U	0.099 U	0.11 U	-	-	-	-	-	-
n-Butylbenzene	390	540	NE	NE	-	-	-	-	0.021 U	0.025 U	0.027 U	-	-	-	-	-	-
n-Propylbenzene	380	26	NE	NE	-	-	-	-	0.021 U	0.025 U	0.027 U	-	-	-	-	-	-
o-Xylene	65	26	NE	NE	-	-	-	-	0.021 U	0.025 U	0.027 U	-	-	-	-	-	-
p-Cymene (p-Isopropyltoluene)	NE	NE	NE	NE	-	-	-	-	0.021 U	0.025 U	0.027 U	-	-	-	-	-	-
sec-Butylbenzene	780	1100	NE	NE	-	-	-	-	0.021 U	0.025 U	0.027 U	-	-	-	-	-	-

Table 4-1
Summary of Discrete Soil Sample Analytical Results
Former Dow Salvage Yard
233 Odlin Road, Bangor, Maine

				Locations:	SY-TP10		SY-TP11		SY-TP12					SY-TP13		SY-TP14	
				Field Sample ID:	SY-TP10-DUD	SY-TP10-DUS	SY-TP11-DUD	SY-TP11-DUS	SY-TP12-A	SY-TP12-AA	SY-TP12-B	SY-TP12-DUD	SY-TP12-DUS	SY-TP13-DUD	SY-TP13-DUS	SY-TP14-DUD	SY-TP14-DUS
				Matrix:	S	S	S	S	S		S	S	S	S	S	S	S
				Sample Begin Depth:	8	0.5	8	0.5	5.5		8.5	9	0.5	3.5	0.5	4	0.5
				Sample End Depth:	8	2	8	2	5.5		8.5	9	2	3.5	2	4	2
				Sample Date:	10/01/2019	10/01/2019	10/01/2019	10/01/2019	10/01/2019		10/01/2019	10/01/2019	10/01/2019	10/01/2019	10/01/2019	10/01/2019	10/01/2019
Analytes	**RSL[1]**	**RAG[2]**	**Background[3]**	**Ecological[4]**													
Styrene	600	83	NE	300	-	-	-	-	0.021 U	0.025 U	0.027 U	-	-	-	-	-	-
tert-Amyl methyl ether	NE	NE	NE	NE	-	-	-	-	0.021 U	0.025 U	0.027 U	-	-	-	-	-	-
tert-Butyl alcohol	NE	NE	NE	NE	-	-	-	-	0.21 U	0.25 U	0.27 U	-	-	-	-	-	-
tert-Butyl ethyl ether	NE	NE	NE	NE	-	-	-	-	0.021 U	0.025 U	0.027 U	-	-	-	-	-	-
tert-Butylbenzene	780	1100	NE	NE	-	-	-	-	0.021 U	0.025 U	0.027 U	-	-	-	-	-	-
Tetrachloroethene (PCE)	8.1	8.5	NE	NE	-	-	-	-	0.021 U	0.025 U	0.027 U	-	-	-	-	-	-
Tetrahydrofuran	1800	2700	NE	NE	-	-	-	-	0.17 U	0.20 U	0.21 U	-	-	-	-	-	-
Toluene	490	75	NE	200	-	-	-	-	0.021 U	0.025 U	0.11 U	-	-	-	-	-	-
trans-1,2-Dichloroethene	160	10	NE	NE	-	-	-	-	0.021 U	0.025 U	0.027 U	-	-	-	-	-	-
trans-1,3-Dichloropropene	1.8	2.7	NE	NE	-	-	-	-	0.021 U	0.025 U	0.027 U	-	-	-	-	-	-
Trichloroethene (TCE)	0.41	0.39	NE	NE	-	-	-	-	0.021 U	0.025 U	0.027 U	-	-	-	-	-	-
Trichlorofluoromethane	2300	94	NE	NE	-	-	-	-	0.021 U	0.025 U	0.027 U	-	-	-	-	-	-
Vinyl chloride	0.0059	0.064	NE	NE	-	-	-	-	0.021 U	0.025 U	0.027 U	-	-	-	-	-	-
SVOCs SW8270E (ug/g)																	
1,2,4-Trichlorobenzene	5.8	8.6	NE	20	0.20 U	0.20 U	0.20 U	0.19 U	0.21 U	0.23 U	0.25 U	0.20 U	0.20 U	0.19 U	0.20 U	0.20 U	0.20 U
1,2-Dichlorobenzene	180	36	NE	NE	0.10 U	0.098 U	0.10 U	0.096 U	0.11 U	0.11 U	0.12 U	0.098 U	0.099 U	0.095 U	0.10 U	0.099 U	0.10 U
1,3-Dichlorobenzene	NE	29	NE	NE	0.10 U	0.098 U	0.10 U	0.096 U	0.11 U	0.11 U	0.12 U	0.098 U	0.099 U	0.095 U	0.10 U	0.099 U	0.10 U
1,4-Dichlorobenzene	2.6	3.9	NE	20	0.10 U	0.098 U	0.10 U	0.096 U	0.11 U	0.11 U	0.12 U	0.098 U	0.099 U	0.095 U	0.10 U	0.099 U	0.10 U
2,2'-Oxybis(1-chloropropane)	310	NE	NE	NE	0.10 U	0.098 U	0.10 U	0.096 U	0.11 U	0.11 U	0.12 U	0.098 U	0.099 U	0.095 U	0.10 U	0.099 U	0.10 U
2,4,5-Trichlorophenol	630	860	NE	9	0.10 U	0.098 U	0.10 U	0.096 U	0.11 U	0.11 U	0.12 U	0.098 U	0.099 U	0.095 U	0.10 U	0.099 U	0.10 U
2,4,6-Trichlorophenol	6.3	8.6	NE	4	0.10 U	0.098 U	0.10 U	0.096 U	0.11 U	0.11 U	0.12 U	0.098 U	0.099 U	0.095 U	0.10 U	0.099 U	0.10 U
2,4-Dichlorophenol	19	26	NE	NE	0.20 U	0.20 U	0.20 U	0.19 U	0.21 U	0.23 U	0.25 U	0.20 U	0.20 U	0.19 U	0.20 U	0.20 U	0.20 U
2,4-Dimethylphenol	130	170	NE	NE	0.10 U	0.098 U	0.10 U	0.096 U	0.11 U	0.11 U	0.12 U	0.098 U	0.099 U	0.095 U	0.10 U	0.099 U	0.10 U
2,4-Dinitrophenol	13	17	NE	20	2.0 U	2.0 U	2.0 U	1.9 U	2.1 U	2.3 U	2.5 U	2.0 U	2.0 U	1.9 U	2.0 U	2.0 U	2.0 U
2,4-Dinitrotoluene	1.7	2.4	NE	NE	0.10 U	0.098 U	0.10 U	0.096 U	0.11 U	0.11 U	0.12 U	0.098 U	0.099 U	0.095 U	0.10 U	0.099 U	0.10 U
2,6-Dinitrotoluene	0.36	0.5	NE	NE	0.10 U	0.098 U	0.10 U	0.096 U	0.11 U	0.11 U	0.12 U	0.098 U	0.099 U	0.095 U	0.10 U	0.099 U	0.10 U
2-Chloronaphthalene	480	650	NE	NE	0.20 U	0.20 U	0.20 U	0.19 U	0.21 U	0.23 U	0.25 U	0.20 U	0.20 U	0.19 U	0.20 U	0.20 U	0.20 U
2-Chlorophenol	39	54	NE	NE	0.20 U	0.20 U	0.20 U	0.19 U	0.21 U	0.23 U	0.25 U	0.20 U	0.20 U	0.19 U	0.20 U	0.20 U	0.20 U
2-Methylphenol (o-Cresol)	320	430	NE	NE	0.10 U	0.098 U	0.10 U	0.096 U	0.11 U	0.11 U	0.12 U	0.098 U	0.099 U	0.095 U	0.10 U	0.099 U	0.10 U
2-Nitroaniline	63	NE	NE	NE	0.10 U	0.098 U	0.10 U	0.096 U	0.11 U	0.11 U	0.12 U	0.098 U	0.099 U	0.095 U	0.10 U	0.099 U	0.10 U
2-Nitrophenol	NE	NE	NE	NE	0.10 U	0.098 U	0.10 U	0.096 U	0.11 U	0.11 U	0.12 U	0.098 U	0.099 U	0.095 U	0.10 U	0.099 U	0.10 U
3,3'-Dichlorobenzidine	1.2	1.7	NE	NE	2.5 U	2.5 U	2.5 U	2.4 U	2.6 U	2.8 U	3.1 U	2.4 U	2.5 U	2.4 U	2.5 U	2.5 U	2.5 U
3-Nitroaniline	NE	NE	NE	NE	0.10 U	0.098 U	0.10 U	0.096 U	0.11 U	0.11 U	0.12 U	0.098 U	0.099 U	0.095 U	0.10 U	0.099 U	0.10 U
4,6-Dinitro-2-methylphenol	0.51	860	NE	NE	R	R	R	R	R	R	R	R	R	R	R	R	R
4-Bromophenyl phenyl ether	NE	NE	NE	NE	0.10 U	0.098 U	0.10 U	0.096 U	0.11 U	0.11 U	0.12 U	0.098 U	0.099 U	0.095 U	0.10 U	0.099 U	0.10 U
4-Chloro-3-methylphenol	630	NE	NE	NE	0.10 U	0.098 U	0.10 U	0.096 U	0.11 U	0.11 U	0.12 U	0.098 U	0.099 U	0.095 U	0.10 U	0.099 U	0.10 U
4-Chloroaniline	2.7	3.7	NE	NE	0.10 U	0.098 U	0.10 U	0.096 U	0.11 U	0.11 U	0.12 U	0.098 U	0.099 U	0.095 U	0.10 U	0.099 U	0.10 U
4-Chlorophenyl phenyl ether	NE	NE	NE	NE	0.20 U	0.20 U	0.20 U	0.19 U	0.21 U	0.23 U	0.25 U	0.20 U	0.20 U	0.19 U	0.20 U	0.20 U	0.20 U
4-Methylphenol (p-Cresol)	630	510	NE	NE	0.10 U	0.098 U	0.10 U	0.096 U	0.11 U	0.11 U	0.12 U	0.098 U	0.099 U	0.095 U	0.10 U	0.099 U	0.10 U
4-Nitroaniline	25	35	NE	NE	0.20 U	0.20 U	0.20 U	0.19 U	0.21 U	0.23 U	0.25 U	0.20 U	0.20 U	0.19 U	0.20 U	0.20 U	0.20 U
4-Nitrophenol	NE	61	NE	7	0.50 U	0.49 U	0.50 U	0.48 U	0.53 U	0.56 U	0.61 U	0.49 U	0.50 U	0.48 U	0.50 U	0.49 U	0.50 U
Aniline (Phenylamine, Aminobenzene)	44	610	NE	NE	0.10 U	0.098 U	0.10 U	0.096 U	0.11 U	0.11 U	0.12 U	0.098 U	0.099 U	0.095 U	0.10 U	0.099 U	0.10 U
Azobenzene	5.6	NE	NE	NE	0.10 U	0.098 U	0.10 U	0.096 U	0.11 U	0.11 U	0.12 U	0.098 U	0.099 U	0.095 U	0.10 U	0.099 U	0.10 U
Benzidine	0.00053	NE	NE	NE	2.5 U	2.5 U	2.5 U	2.4 U	2.6 U	2.8 U	3.1 U	2.4 U	2.5 U	2.4 U	2.5 U	2.5 U	2.5 U
Benzoic acid	25000	1100	NE	NE	4.5 U	4.4 U	4.5 U	4.3 U	4.8 U	5.1 U	5.5 U	4.4 U	4.5 U	4.3 U	4.5 U	4.5 U	4.5 U
Benzyl alcohol	630	860	NE	NE	0.10 U	0.098 U	0.10 U	0.096 U	0.11 U	0.11 U	0.12 U	0.098 U	0.099 U	0.095 U	0.10 U	0.099 U	0.10 U
Benzyl butyl phthalate	290	390	NE	NE	0.20 U	0.20 U	0.20 U	0.19 U	0.21 U	0.23 U	0.25 U	0.20 U	0.20 U	0.19 U	0.20 U	0.20 U	0.20 U
bis(2-Chloroethoxy) methane	19	NE	NE	NE	0.20 U	0.20 U	0.20 U	0.19 U	0.21 U	0.23 U	0.25 U	0.20 U	0.20 U	0.19 U	0.20 U	0.20 U	0.20 U
bis(2-Chloroethyl) ether	0.23	0.33	NE	NE	0.10 U	0.098 U	0.10 U	0.096 U	0.11 U	0.11 U	0.12 U	0.098 U	0.099 U	0.095 U	0.10 U	0.099 U	0.10 U
bis(2-Ethylhexyl) phthalate	39	53	NE	NE	0.25 U	0.49 U	0.25 U	0.48 U	0.53 U	0.56 U	0.31 U	0.49 U	0.50 U	0.48 U	0.50 U	0.25 U	0.50 U
Carbazole	NE	27	NE	NE	0.10 U	**0.29**	0.10 U	**0.15 J**	**0.22**	**0.17 J**	**0.059 J**	0.098 U	**0.11 J**	0.095 U	0.10 U	0.099 U	0.10 U
Dibenzofuran	7.3	11	NE	NE	0.050 U	**0.084**	0.050 U	**0.063**	**0.093**	**0.13**	0.061 U	0.049 U	0.050 U	0.048 U	0.050 U	0.049 U	0.050 U
Diethyl phthalate	5100	6900	NE	100	0.20 U	0.20 U	0.20 U	0.19 U	0.21 U	0.23 U	0.25 U	0.20 U	0.20 U	0.19 U	0.20 U	0.20 U	0.20 U
Dimethyl phthalate	NE	NE	NE	NE	0.20 U	0.20 U	0.20 U	0.19 U	0.21 U	0.23 U	0.25 U	0.20 U	0.20 U	0.19 U	0.20 U	0.20 U	0.20 U
Di-n-butyl phthalate	630	860	NE	200	0.20 U	0.20 U	0.20 U	0.19 U	0.21 U	0.23 U	0.25 U	0.20 U	0.20 U	0.19 U	0.20 U	0.20 U	0.20 U
di-n-Octyl phthalate	63	86	NE	NE	0.20 U	0.20 U	0.20 U	0.19 U	0.21 U	0.23 U	0.25 U	0.20 U	0.20 U	0.19 U	0.20 U	0.20 U	0.20 U
Hexachlorobenzene	0.21	0.3	NE	NE	0.10 U	0.098 U	0.10 U	0.096 U	0.11 U	0.11 U	0.12 U	0.098 U	0.099 U	0.095 U	0.10 U	0.099 U	0.10 U
Hexachlorobutadiene	1.2	1.5	NE	NE	0.10 U	0.098 U	0.10 U	0.096 U	0.11 U	0.11 U	0.12 U	0.098 U	0.099 U	0.095 U	0.10 U	0.099 U	0.10 U
Hexachlorocyclopentadiene	0.18	NE	NE	10	0.40 U	0.39 U	0.40 U	0.39 U	0.42 U	0.45 U	0.49 U	0.39 U	0.40 U	0.38 U	0.40 U	0.40 U	0.40 U
Hexachloroethane	1.8	2.7	NE	NE	0.10 U	0.098 U	0.10 U	0.096 U	0.11 U	0.11 U	0.12 U	0.098 U	0.099 U	0.095 U	0.10 U	0.099 U	0.10 U
Isophorone	570	780	NE	NE	0.20 U	0.20 U	0.20 U	0.19 U	0.21 U	0.23 U	0.25 U	0.20 U	0.20 U	0.19 U	0.20 U	0.20 U	0.20 U
Nitrobenzene	5.1	NE	NE	NE	0.10 U	0.098 U	0.10 U	0.096 U	0.11 U	0.11 U	0.12 U	0.098 U	0.099 U	0.095 U	0.10 U	0.099 U	0.10 U
N-Nitrosodimethylamine	0.002	NE	NE	NE	0.10 U	0.098 U	0.10 U	0.096 U	0.11 U	0.11 U	0.12 U	0.098 U	0.099 U	0.095 U	0.10 U	0.099 U	0.10 U
N-Nitrosodi-n-propylamine	0.078	NE	NE	NE	0.10 U	0.098 U	0.10 U	0.096 U	0.11 U	0.11 U	0.12 U	0.098 U	0.099 U	0.095 U	0.10 U	0.099 U	0.10 U
N-Nitrosodiphenylamine	110	150	NE	NE	0.10 U	0.098 U	0.10 U	0.096 U	0.11 U	0.11 U	0.12 U	0.098 U	0.099 U	0.095 U	0.10 U	0.099 U	0.10 U
Pentachlorophenol	180	1.4	NE	2.1	0.50 U	0.49 U	0.50 U	0.48 U	0.53 U	0.56 U	0.61 U	0.49 U	0.50 U	0.48 U	0.50 U	0.49 U	0.50 U
Phenol	1900	2600	NE	30	0.10 U	0.098 U	0.10 U	0.096 U	0.11 U	0.11 U	0.12 U	0.098 U	0.099 U	0.095 U	0.10 U	0.099 U	0.10 U
Pyridine	7.8	NE	NE	NE	0.10 U	0.098 U	0.10 U	0.096 U	0.11 U	0.11 U	0.12 U	0.098 U	0.099 U	0.095 U	0.10 U	0.099 U	0.10 U
TOC LYDKHN (ug/g)																	
Total Organic Carbon	NE	NE	NE	NE	**1800**	**24000**	**1700**	**16000**	**19000 J**	**7600 J**	**41000**	**19000**	**23000**	**2700**	**15000**	**1500**	**19000**

Table 4-1
Summary of Discrete Soil Sample Analytical Results
Former Dow Salvage Yard
233 Odlin Road, Bangor, Maine

				Locations:	SY-TP15		SY-TP18	BG-1	BG-1	BG-2	BG-2		BG-3	BG-3	BG-4	BG-5
				Field Sample ID:	SY-TP15-DUD	SY-TP15-DUS	SY-TP18-A	BG-1C	BG-1F	BG-2C	BG-2F	BG-20F	BG-3C	BG-3F	BG-4C	BG-5C
				Matrix:	S	S	S	S	S	S	S	S	S	S	S	S
				Sample Begin Depth:	3	0.5	0	4	0.5	3	0.5	0	6	0	0	0
				Sample End Depth:	3	2	0.5	6	2	5	2	0	8	0.75	0	0
				Sample Date:	10/02/2019	10/02/2019	10/02/2019	10/22/2019	10/22/2019	10/23/2019	10/23/2019	10/23/2019	10/23/2019	10/23/2019	11/04/2019	11/04/2019
Analytes	**RSL[1]**	**RAG[2]**	**Background[3]**	**Ecological[4]**												
PAH SIM (mg/kg)																
2-Methylnaphthalene	24	33	NE	29	0.0099 U	**0.030**	0.023 UJ	0.012 U	0.012 U	0.012 U	0.012 U	0.012 U	0.020 U	0.013 U	0.012 U	0.011 U
Acenaphthene	360	490	NE	29	0.0099 UJ	**0.0036 J**	0.012 UJ	0.012 U	0.012 U	0.012 U	0.012 U	0.012 U	0.020 U	0.013 U	0.012 U	0.011 U
Acenaphthylene	180	490	NE	29	0.0099 U	0.010 U	0.012 UJ	0.012 U	0.012 U	0.012 U	0.012 U	0.012 U	0.020 U	0.013 U	0.012 U	0.011 U
Anthracene	1800	250	NE	29	**0.0019 J**	**0.057**	**0.0078 J**	**0.0047 J**	0.012 U	0.012 U	0.012 U	0.012 U	**0.0088 J**	0.013 U	0.012 U	0.011 U
Benzo(a)anthracene	1.1	1.6	0.86	1.1	**0.0026 J**	**0.11**	**0.12 J**	0.024 U	0.012 U	0.012 U	0.012 U	0.024 U	0.040 U	0.027 U	0.012 U	**0.0083 J**
Benzo(a)pyrene	0.11	0.16	1.5	1.1	0.0099 UJ	**0.11**	**0.14 J**	0.024 U	0.012 U	0.025 U	0.024 U	0.024 U	0.040 U	**0.029**	0.012 U	**0.011 J**
Benzo(b)fluoranthene	1.1	1.6	1.3	1.1	0.020 UJ	**0.18**	**0.21 J**	0.024 U	0.012 U	0.012 U	0.024 U	0.024 U	0.040 U	**0.034**	0.012 U	**0.013 J**
Benzo(g,h,i)perylene	180	250	NE	1.1	0.0099 UJ	**0.065**	**0.076 J**	0.012 U	0.012 U	0.012 U	0.012 U	0.012 U	0.020 U	**0.020 J**	0.012 U	**0.011 J**
Benzo(k)fluoranthene	11	16	NE	1.1	0.0099 UJ	**0.074**	**0.094 J**	0.024 U	0.012 U	0.012 U	0.024 U	0.012 U	0.020 U	0.027 U	0.012 U	**0.0080 J**
Chrysene	110	160	NE	1.1	0.0099 UJ	**0.16**	**0.16 J**	**0.0027 J**	**0.0028 J**	0.012 U	0.012 U	0.012 U	0.020 U	**0.022 J**	**0.0026 J**	**0.014 J**
Dibenz(a,h)anthracene	0.11	0.16	0.32	1.1	0.0099 UJ	**0.018 J**	**0.024 J**	0.012 U	0.012 U	0.012 U	0.012 U	0.012 U	0.020 U	0.013 U	0.012 U	**0.0039 J**
Fluoranthene	240	330	NE	1.1	0.020 U	**0.21**	**0.23 J**	**0.011 J**	**0.0027 J**	0.012 U	**0.0033 J**	**0.0043 J**	**0.017 J**	**0.032**	0.012 U	**0.015 J**
Fluorene	240	330	NE	29	0.0099 U	**0.011 J**	0.012 UJ	0.012 U	0.012 U	0.012 U	0.012 U	0.012 U	0.020 U	0.013 U	0.012 U	0.011 U
Indeno(1,2,3-c,d)pyrene	1.1	1.6	0.4	1.1	0.0099 UJ	**0.099**	**0.14 J**	0.012 U	0.012 U	0.012 U	0.012 U	0.012 U	0.020 U	**0.0094 J**	0.012 U	**0.0079 J**
Naphthalene	3.8	2.9	0.11	29	0.0099 U	**0.017 J**	0.012 UJ	0.012 U	0.012 U	0.012 U	0.012 U	0.012 U	0.020 U	0.013 U	0.012 U	0.011 U
Phenanthrene	180	250	NE	29	0.020 UJ	**0.11**	**0.070 J**	**0.014 J**	**0.0027 J**	0.012 U	0.012 U	**0.0029 J**	**0.024 J**	**0.021 J**	0.012 U	**0.011 J**
Pyrene	180	250	NE	1.1	0.0099 UJ	**0.15**	**0.12 J**	0.024 U	0.012 U	0.025 U	0.024 U	0.024 U	0.040 U	0.027 U	0.012 U	**0.014 J**
MassDEP EPH (ug/g)																
2-Methylnaphthalene	24	33	NE	29	0.098 U	**0.064 J**	**0.36**	-	-	-	-	-	-	-	-	-
Acenaphthene	360	490	NE	29	0.098 U	0.095 U	0.11 U	-	-	-	-	-	-	-	-	-
Acenaphthylene	180	490	NE	29	0.098 UJ	0.095 U	0.11 U	-	-	-	-	-	-	-	-	-
Anthracene	1800	250	NE	29	0.098 U	0.095 U	0.11 U	-	-	-	-	-	-	-	-	-
Benzo(a)anthracene	1.1	1.6	0.86	1.1	0.098 U	0.095 U	**0.064 J**	-	-	-	-	-	-	-	-	-
Benzo(a)pyrene	0.11	0.16	1.5	1.1	0.098 U	**0.053 J**	**0.091 J**	-	-	-	-	-	-	-	-	-
Benzo(b)fluoranthene	1.1	1.6	1.3	1.1	0.098 U	**0.063 J**	**0.13 J**	-	-	-	-	-	-	-	-	-
Benzo(g,h,i)perylene	180	250	NE	1.1	0.098 U	**0.038 J**	**0.059 J**	-	-	-	-	-	-	-	-	-
Benzo(k)fluoranthene	11	16	NE	1.1	0.098 U	0.095 U	**0.084 J**	-	-	-	-	-	-	-	-	-
Chrysene	110	160	NE	1.1	0.098 U	**0.059 J**	**0.12 J**	-	-	-	-	-	-	-	-	-
Dibenz(a,h)anthracene	0.11	0.16	0.32	1.1	0.098 U	0.095 U	0.11 U	-	-	-	-	-	-	-	-	-
Fluoranthene	240	330	NE	1.1	0.098 U	**0.10 J**	**0.14 J**	-	-	-	-	-	-	-	-	-
Fluorene	240	330	NE	29	0.098 U	0.095 U	0.11 U	-	-	-	-	-	-	-	-	-
Indeno(1,2,3-c,d)pyrene	1.1	1.6	0.4	1.1	0.098 U	0.095 U	0.11 U	-	-	-	-	-	-	-	-	-
Naphthalene	3.8	2.9	0.11	29	0.098 UJ	0.095 UJ	0.22 U	-	-	-	-	-	-	-	-	-
Phenanthrene	180	250	NE	29	0.098 U	**0.071 J**	**0.26**	-	-	-	-	-	-	-	-	-
Pyrene	180	250	NE	1.1	0.098 U	**0.082 J**	**0.11 J**	-	-	-	-	-	-	-	-	-
C11-C22 Aromatic	NE	260	NE	NE	**4.9 J**	**18 J**	**42**	-	-	-	-	-	-	-	-	-
C11-C22 Extractable Petroleum Hydrocarbons, Aromatic (Unadjusted)	NE	100000	NE	NE	**4.9 J**	**18 J**	**43**	-	-	-	-	-	-	-	-	-
C19-C36 Aliphatic	NE	10000	NE	NE	**4.1 J**	**8.5 J**	**21 J**	-	-	-	-	-	-	-	-	-
C9-C18 Aliphatic	NE	250	NE	NE	**1.6 J**	**3.0 J**	**6.1 J**	-	-	-	-	-	-	-	-	-
MassDEP VPH (ug/g)																
Benzene	1.2	1.7	NE	NE	-	-	0.047 U	-	-	-	-	-	-	-	-	-
Ethylbenzene	5.8	8.6	NE	NE	-	-	0.047 U	-	-	-	-	-	-	-	-	-
m,p-Xylene	55	26	NE	NE	-	-	0.093 U	-	-	-	-	-	-	-	-	-
Methyl tert-butyl ether (MTBE)	47	69	NE	NE	-	-	0.047 U	-	-	-	-	-	-	-	-	-
Naphthalene	3.8	2.9	NE	NE	-	-	0.047 U	-	-	-	-	-	-	-	-	-
o-Xylene	65	26	NE	NE	-	-	0.047 U	-	-	-	-	-	-	-	-	-
Toluene	490	75	NE	NE	-	-	0.047 U	-	-	-	-	-	-	-	-	-
C5-C8 Aliphatic	NE	43	NE	NE	-	-	5.6 U	-	-	-	-	-	-	-	-	-
C9-C10 Aromatic	NE	66	NE	NE	-	-	1.7 U	-	-	-	-	-	-	-	-	-
C9-C12 Aliphatic	NE	230	NE	NE	-	-	5.6 U	-	-	-	-	-	-	-	-	-
Metals SW6020A/7471B (ug/g)																
Aluminum	7700	2700	NE	NE	**15000 J**	**10000 J**	**3500**	**16000**	**18000**	**15000**	**16000**	**18000**	**16000**	**16000**	**15000**	**14000**
Antimony	3.1	4.3	NE	0.27	0.50 U	**0.93**	**0.67 J**	0.60 U	0.60 U	0.60 U	0.60 U	0.60 U	0.60 U	0.60 U	0.50 U	0.60 U
Arsenic	0.68	0.93	16.4	9.9	**12**	**7.5**	**4.9**	**12**	**12**	**13**	**9.4**	**9.7**	**10**	**8.2**	**12**	**11**
Barium	1500	210	469	283	**33**	**56**	**10**	**29**	**42**	**32**	**49**	**53**	**30**	**45**	**25**	**27**
Beryllium	16	11	2.4	10	**0.55**	**0.77**	0.50 U	**0.36 J**	**0.53 J**	**0.44 J**	**0.39 J**	0.60 U	**0.35 J**	**0.30 J**	**0.54**	0.60 U
Cadmium	7.1	4.2	0.26	0.36	0.50 U	0.40 U	0.50 U	**0.030 J**	0.058 U	0.057 U	0.058 U	0.60 U	0.063 U	0.061 U	0.50 U	0.60 U
Chromium	0.3[†]/12000	0.42[†]/2,700	79	0.4	**35**	**21**	**9.3**	**31**	**33**	**30**	**29**	**31**	**31**	**26**	**31**	**28**
Cobalt	2.3	3.2	14.9	13	**14**	**9.2**	5.0 U	**14**	**13**	**18**	**14**	**18**	**14**	**11**	**13**	**11**
Copper	310	340	23	28	**20**	**16**	**10**	**20**	**21**	**19**	**12**	**13**	**21**	**8.9**	**19**	**13**
Iron	5500	7500	SSS	NE	**31000**	**19000**	**9200**	**30000**	**30000**	**35000**	**25000**	**28000**	**29000**	**23000**	**30000**	**26000**
Lead	400	14	32	11	**12**	**19**	**11**	**13**	**14**	**17**	**12**	**13**	**13**	**15**	**13**	**12**
Magnesium	NE	NE	NE	NE	**6400**	**3300**	**1900**	**6800**	**6700**	**6800**	**5100**	**5500**	**7300**	**4200**	**6600**	**5500**
Manganese	180	28	841	220	**630**	**480**	**150**	**480**	**490**	**800**	**620**	**660**	**540**	**330**	**470**	**370**
Mercury	1.1	0.31	0.123	0.00051	0.068 UJ	**0.034 J**	0.091 U	0.083 U	0.090 U	0.087 U	0.080 U	0.084 U	0.085 U	**0.039 J**	0.084 U	0.081 U
Nickel	150	99	39	30	**39**	**22**	**12**	**38**	**39**	**38**	**29**	**30**	**37**	**23**	**36**	**30**
Potassium	NE	NE	NE	NE	**1700**	**750**	**470**	**1900**	**1800**	**1800**	**1200**	**1300**	**2300**	**1000**	**2300**	**1700**
Selenium	39	54	0.61	0.21	**1.9 J**	**1.3 J**	5.0 U	6.0 U	6.0 U	6.0 U	6.0 U	**1.3 J**	6.0 U	6.0 U	5.0 U	6.0 U
Silver	39	54	SSS	2	2.5 U	2.2 U	2.6 U	**0.11 J**	**0.030 J**	**0.033 J**	0.29 U	3.1 U	**0.035 J**	0.31 U	2.7 U	3.0 U
Sodium	NE	NE	NE	NE	**210**	**61**	**74 J**	**110**	**150**	**140**	**110**	**120**	**150**	**81**	**130**	**76 J**
Thallium	0.078	0.11	0.6	1	0.50 U	0.40 U	0.50 U	0.60 U	0.60 U	0.60 U	0.60 U	0.60 U	0.60 U	0.60 U	0.50 U	0.60 U
Vanadium	39	49	103	2	**28**	**21**	**7.2**	**29**	**31**	**30**	**26**	**28**	**25**	**27**	**26**	**24**
Zinc	2300	3200	101	8.5	**52**	**66**	**21**	**58**	**55**	**51**	**37**	**44**	**57**	**47**	**62**	**48**

Table 4-1
Summary of Discrete Soil Sample Analytical Results
Former Dow Salvage Yard
233 Odlin Road, Bangor, Maine

Locations:					SY-TP15		SY-TP18	BG-1	BG-1	BG-2	BG-2		BG-3	BG-3	BG-4	BG-5
Field Sample ID:					SY-TP15-DUD	SY-TP15-DUS	SY-TP18-A	BG-1C	BG-1F	BG-2C	BG-2F	BG-20F	BG-3C	BG-3F	BG-4C	BG-5C
Matrix:					S	S	S	S	S	S	S	S	S	S	S	S
Sample Begin Depth:					3	0.5	0	4	0.5	3	0.5	0	6	0	0	0
Sample End Depth:					3	2	0.5	6	2	5	2	0	8	0.75	0	0
Sample Date:					10/02/2019	10/02/2019	10/02/2019	10/22/2019	10/22/2019	10/23/2019	10/23/2019	10/23/2019	10/23/2019	10/23/2019	11/04/2019	11/04/2019
Analytes	**RSL[1]**	**RAG[2]**	**Background[3]**	**Ecological[4]**												
Hex Chromium SW7196A (mg/kg)																
Chromium, Hexavalent	0.3	0.42	NE	0.4	**0.60 J**	0.63 U	0.72 U	-	-	-	-	-	-	-	-	-
PCBs SW8082A (ug/g)																
PCB-1016 (Aroclor 1016	0.41	0.31	NE	NE	0.013 U	0.013 U	0.015 U	-	-	-	-	-	-	-	-	-
PCB-1221 (Aroclor 1221	0.2	0.31	NE	NE	0.013 U	0.013 U	0.015 U	-	-	-	-	-	-	-	-	-
PCB-1232 (Aroclor 1232	0.17	0.31	NE	NE	0.013 U	0.013 U	0.015 U	-	-	-	-	-	-	-	-	-
PCB-1242 (Aroclor 1242	0.23	0.31	NE	NE	0.013 U	0.013 U	0.015 U	-	-	-	-	-	-	-	-	-
PCB-1248 (Aroclor 1248)	0.23	0.31	NE	NE	0.013 U	0.013 U	0.015 U	-	-	-	-	-	-	-	-	-
PCB-1254 (Aroclor 1254)	0.12	0.31	NE	NE	0.013 U	0.013 U	**0.090 J**	-	-	-	-	-	-	-	-	-
PCB-1260 (Aroclor 1260)	0.24	0.31	NE	NE	0.013 U	0.013 U	**0.015 J**	-	-	-	-	-	-	-	-	-
VOCs SW8260D (ug/g)																
1,1,1,2-Tetrachloroethane	2	3	NE	NE	-	-	0.029 U	-	-	-	-	-	-	-	-	-
1,1,1-Trichloroethane	810	64	NE	NE	-	-	0.029 U	-	-	-	-	-	-	-	-	-
1,1,2,2-Tetrachloroethane	0.3	0.89	NE	NE	-	-	0.029 U	-	-	-	-	-	-	-	-	-
1,1,2-Trichloroethane	0.15	0.22	NE	NE	-	-	0.029 U	-	-	-	-	-	-	-	-	-
1,1-Dichloroethane	3.6	5.3	NE	NE	-	-	0.029 U	-	-	-	-	-	-	-	-	-
1,1-Dichloroethene	23	8.1	NE	NE	-	-	0.029 U	-	-	-	-	-	-	-	-	-
1,1-Dichloropropene	NE	NE	NE	NE	-	-	0.029 U	-	-	-	-	-	-	-	-	-
1,2,3-Trichlorobenzene	6.3	8.6	NE	NE	-	-	0.029 U	-	-	-	-	-	-	-	-	-
1,2,3-Trichloropropane	0.0051	0.07	NE	NE	-	-	0.029 U	-	-	-	-	-	-	-	-	-
1,2,4-Trichlorobenzene	5.8	8.6	NE	NE	-	-	0.029 U	-	-	-	-	-	-	-	-	-
1,2,4-Trimethylbenzene	30	18	NE	NE	-	-	0.029 U	-	-	-	-	-	-	-	-	-
1,2-Dibromo-3-chloropropane	0.0053	0.0078	NE	NE	-	-	0.058 U	-	-	-	-	-	-	-	-	-
1,2-Dibromoethane (EDB)	0.036	0.054	NE	NE	-	-	0.029 U	-	-	-	-	-	-	-	-	-
1,2-Dichlorobenzene	180	36	NE	NE	-	-	0.029 U	-	-	-	-	-	-	-	-	-
1,2-Dichloroethane	0.46	0.68	NE	NE	-	-	0.029 U	-	-	-	-	-	-	-	-	-
1,2-Dichloropropane	1.6	2.3	NE	NE	-	-	0.029 U	-	-	-	-	-	-	-	-	-
1,3,5-Trimethylbenzene	27	16	NE	NE	-	-	0.029 U	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	NE	29	NE	NE	-	-	0.029 U	-	-	-	-	-	-	-	-	-
1,3-Dichloropropane	160	210	NE	NE	-	-	0.029 U	-	-	-	-	-	-	-	-	-
1,4-Dichlorobenzene	2.6	3.9	NE	NE	-	-	0.029 U	-	-	-	-	-	-	-	-	-
1,4-Dioxane (p-Dioxane)	5.3	0.74	NE	NE	-	-	2.3 U	-	-	-	-	-	-	-	-	-
2,2-Dichloropropane	NE	NE	NE	NE	-	-	0.029 U	-	-	-	-	-	-	-	-	-
2-Butanone (MEK)	2700	1100	NE	NE	-	-	0.23 U	-	-	-	-	-	-	-	-	-
2-Chlorotoluene	160	80	NE	NE	-	-	0.029 U	-	-	-	-	-	-	-	-	-
2-Hexanone	20	29	NE	NE	-	-	0.058 U	-	-	-	-	-	-	-	-	-
4-Chlorotoluene	160	210	NE	NE	-	-	0.029 U	-	-	-	-	-	-	-	-	-
4-Methyl-2-pentanone (MIBK)	5400	330	NE	NE	-	-	0.029 U	-	-	-	-	-	-	-	-	-
Acetone	6100	5200	NE	NE	-	-	0.23 U	-	-	-	-	-	-	-	-	-
Benzene	1.2	1.7	NE	NE	-	-	0.029 U	-	-	-	-	-	-	-	-	-
Bromobenzene	29	38	NE	NE	-	-	0.029 U	-	-	-	-	-	-	-	-	-
Bromochloromethane	15	22	NE	NE	-	-	0.029 U	-	-	-	-	-	-	-	-	-
Bromodichloromethane	0.29	0.44	NE	NE	-	-	0.029 U	-	-	-	-	-	-	-	-	-
Bromoform	19	28	NE	NE	-	-	0.029 U	-	-	-	-	-	-	-	-	-
Bromomethane	0.68	1	NE	NE	-	-	0.12 U	-	-	-	-	-	-	-	-	-
Carbon disulfide	77	69	NE	NE	-	-	0.029 U	-	-	-	-	-	-	-	-	-
Carbon tetrachloride	0.65	0.97	NE	NE	-	-	0.029 U	-	-	-	-	-	-	-	-	-
Chlorobenzene	28	41	NE	40	-	-	0.029 U	-	-	-	-	-	-	-	-	-
Chloroethane	1400	200	NE	NE	-	-	0.029 U	-	-	-	-	-	-	-	-	-
Chloroform	0.32	0.47	NE	NE	-	-	0.029 U	-	-	-	-	-	-	-	-	-
Chloromethane	11	16	NE	NE	-	-	0.029 U	-	-	-	-	-	-	-	-	-
cis-1,2-Dichloroethene	16	20	NE	NE	-	-	0.029 U	-	-	-	-	-	-	-	-	-
cis-1,3-Dichloropropene	1.8	2.7	NE	NE	-	-	0.029 U	-	-	-	-	-	-	-	-	-
Dibromochloromethane	8.3	11	NE	NE	-	-	0.029 U	-	-	-	-	-	-	-	-	-
Dibromomethane	2.4	3.5	NE	NE	-	-	0.029 U	-	-	-	-	-	-	-	-	-
Dichlorodifluoromethane	8.7	13	NE	NE	-	-	0.029 U	-	-	-	-	-	-	-	-	-
Diethyl ether (Ethyl ether)	1600	81	NE	NE	-	-	0.029 U	-	-	-	-	-	-	-	-	-
Ethylbenzene	5.8	8.6	NE	NE	-	-	0.029 U	-	-	-	-	-	-	-	-	-
Hexachlorobutadiene	1.2	1.5	NE	NE	-	-	0.058 U	-	-	-	-	-	-	-	-	-
Isopropylbenzene (Cumene)	190	26	NE	NE	-	-	0.029 U	-	-	-	-	-	-	-	-	-
m,p-Xylene	55	26	NE	NE	-	-	0.058 U	-	-	-	-	-	-	-	-	-
Methyl tert-butyl ether (MTBE)	47	69	NE	NE	-	-	0.029 U	-	-	-	-	-	-	-	-	-
Methylene chloride	35	49	NE	NE	-	-	0.029 U	-	-	-	-	-	-	-	-	-
Naphthalene	3.8	2.9	NE	NE	-	-	0.12 U	-	-	-	-	-	-	-	-	-
n-Butylbenzene	390	540	NE	NE	-	-	0.029 U	-	-	-	-	-	-	-	-	-
n-Propylbenzene	380	26	NE	NE	-	-	0.029 U	-	-	-	-	-	-	-	-	-
o-Xylene	65	26	NE	NE	-	-	0.029 U	-	-	-	-	-	-	-	-	-
p-Cymene (p-Isopropyltoluene)	NE	NE	NE	NE	-	-	0.029 U	-	-	-	-	-	-	-	-	-
sec-Butylbenzene	780	1100	NE	NE	-	-	0.029 U	-	-	-	-	-	-	-	-	-

Table 4-1
Summary of Discrete Soil Sample Analytical Results
Former Dow Salvage Yard
233 Odlin Road, Bangor, Maine

Analytes	RSL[1]	RAG[2]	Background[3]	Ecological[4]	Locations:	SY-TP15		SY-TP18	BG-1	BG-1	BG-2	BG-2		BG-3	BG-3	BG-4	BG-5
					Field Sample ID:	SY-TP15-DUD	SY-TP15-DUS	SY-TP18-A	BG-1C	BG-1F	BG-2C	BG-2F	BG-20F	BG-3C	BG-3F	BG-4C	BG-5C
					Matrix:	S	S	S	S	S	S	S	S	S	S	S	S
					Sample Begin Depth:	3	0.5	0	4	0.5	3	0.5	0	6	0	0	0
					Sample End Depth:	3	2	0.5	6	2	5	2	0	8	0.75	0	0
					Sample Date:	10/02/2019	10/02/2019	10/02/2019	10/22/2019	10/22/2019	10/23/2019	10/23/2019	10/23/2019	10/23/2019	10/23/2019	11/04/2019	11/04/2019
Styrene	600	83	NE	300	-	-	0.029 U	-	-	-	-	-	-	-	-	-	-
tert-Amyl methyl ether	NE	NE	NE	NE	-	-	0.029 U	-	-	-	-	-	-	-	-	-	-
tert-Butyl alcohol	NE	NE	NE	NE	-	-	0.29 U	-	-	-	-	-	-	-	-	-	-
tert-Butyl ethyl ether	NE	NE	NE	NE	-	-	0.029 U	-	-	-	-	-	-	-	-	-	-
tert-Butylbenzene	780	1100	NE	NE	-	-	0.029 U	-	-	-	-	-	-	-	-	-	-
Tetrachloroethene (PCE)	8.1	8.5	NE	NE	-	-	0.029 U	-	-	-	-	-	-	-	-	-	-
Tetrahydrofuran	1800	2700	NE	NE	-	-	0.23 U	-	-	-	-	-	-	-	-	-	-
Toluene	490	75	NE	200	-	-	0.12 U	-	-	-	-	-	-	-	-	-	-
trans-1,2-Dichloroethene	160	10	NE	NE	-	-	0.029 U	-	-	-	-	-	-	-	-	-	-
trans-1,3-Dichloropropene	1.8	2.7	NE	NE	-	-	0.029 U	-	-	-	-	-	-	-	-	-	-
Trichloroethene (TCE)	0.41	0.39	NE	NE	-	-	0.029 U	-	-	-	-	-	-	-	-	-	-
Trichlorofluoromethane	2300	94	NE	NE	-	-	0.029 U	-	-	-	-	-	-	-	-	-	-
Vinyl chloride	0.0059	0.064	NE	NE	-	-	0.029 U	-	-	-	-	-	-	-	-	-	-
SVOCs SW8270E (ug/g)																	
1,2,4-Trichlorobenzene	5.8	8.6	NE	20	0.20 U	0.20 U	0.24 U	-	-	-	-	-	-	-	-	-	-
1,2-Dichlorobenzene	180	36	NE	NE	0.10 U	0.099 U	0.12 U	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	NE	29	NE	NE	0.10 U	0.099 U	0.12 U	-	-	-	-	-	-	-	-	-	-
1,4-Dichlorobenzene	2.6	3.9	NE	20	0.10 U	0.099 U	0.12 U	-	-	-	-	-	-	-	-	-	-
2,2'-Oxybis(1-chloropropane)	310	NE	NE	NE	0.10 U	0.099 U	0.12 U	-	-	-	-	-	-	-	-	-	-
2,4,5-Trichlorophenol	630	860	NE	9	0.10 U	0.099 U	0.12 U	-	-	-	-	-	-	-	-	-	-
2,4,6-Trichlorophenol	6.3	8.6	NE	4	0.10 U	0.099 U	0.12 U	-	-	-	-	-	-	-	-	-	-
2,4-Dichlorophenol	19	26	NE	NE	0.20 U	0.20 U	0.24 U	-	-	-	-	-	-	-	-	-	-
2,4-Dimethylphenol	130	170	NE	NE	0.10 U	0.099 U	0.12 U	-	-	-	-	-	-	-	-	-	-
2,4-Dinitrophenol	13	17	NE	20	2.0 U	2.0 U	2.4 U	-	-	-	-	-	-	-	-	-	-
2,4-Dinitrotoluene	1.7	2.4	NE	NE	0.10 U	0.099 U	0.12 U	-	-	-	-	-	-	-	-	-	-
2,6-Dinitrotoluene	0.36	0.5	NE	NE	0.10 U	0.099 U	0.12 U	-	-	-	-	-	-	-	-	-	-
2-Chloronaphthalene	480	650	NE	NE	0.20 U	0.20 U	0.24 U	-	-	-	-	-	-	-	-	-	-
2-Chlorophenol	39	54	NE	NE	0.20 U	0.20 U	0.24 U	-	-	-	-	-	-	-	-	-	-
2-Methylphenol (o-Cresol)	320	430	NE	NE	0.10 U	0.099 U	0.12 U	-	-	-	-	-	-	-	-	-	-
2-Nitroaniline	63	NE	NE	NE	0.10 U	0.099 U	0.12 U	-	-	-	-	-	-	-	-	-	-
2-Nitrophenol	NE	NE	NE	NE	0.10 U	0.099 U	0.12 U	-	-	-	-	-	-	-	-	-	-
3,3'-Dichlorobenzidine	1.2	1.7	NE	NE	2.5 U	2.5 U	2.9 U	-	-	-	-	-	-	-	-	-	-
3-Nitroaniline	NE	NE	NE	NE	0.10 U	0.099 U	0.12 U	-	-	-	-	-	-	-	-	-	-
4,6-Dinitro-2-methylphenol	0.51	860	NE	NE	R	R	R	-	-	-	-	-	-	-	-	-	-
4-Bromophenyl phenyl ether	NE	NE	NE	NE	0.10 U	0.099 U	0.12 U	-	-	-	-	-	-	-	-	-	-
4-Chloro-3-methylphenol	630	NE	NE	NE	0.10 U	0.099 U	0.12 U	-	-	-	-	-	-	-	-	-	-
4-Chloroaniline	2.7	3.7	NE	NE	0.10 U	0.099 U	0.12 U	-	-	-	-	-	-	-	-	-	-
4-Chlorophenyl phenyl ether	NE	NE	NE	NE	0.20 U	0.20 U	0.24 U	-	-	-	-	-	-	-	-	-	-
4-Methylphenol (p-Cresol)	630	510	NE	NE	0.10 U	0.099 U	**0.043 J**	-	-	-	-	-	-	-	-	-	-
4-Nitroaniline	25	35	NE	NE	0.20 U	0.20 U	0.24 U	-	-	-	-	-	-	-	-	-	-
4-Nitrophenol	NE	61	NE	7	0.51 U	0.49 U	0.59 U	-	-	-	-	-	-	-	-	-	-
Aniline (Phenylamine, Aminobenzene)	44	610	NE	NE	R	0.099 U	0.12 U	-	-	-	-	-	-	-	-	-	-
Azobenzene	5.6	NE	NE	NE	0.10 U	0.099 U	0.12 U	-	-	-	-	-	-	-	-	-	-
Benzidine	0.00053	NE	NE	NE	R	2.5 U	2.9 U	-	-	-	-	-	-	-	-	-	-
Benzoic acid	25000	1100	NE	NE	4.6 U	4.5 U	5.3 U	-	-	-	-	-	-	-	-	-	-
Benzyl alcohol	630	860	NE	NE	0.10 U	0.099 U	0.12 U	-	-	-	-	-	-	-	-	-	-
Benzyl butyl phthalate	290	390	NE	NE	0.20 U	0.20 U	0.24 U	-	-	-	-	-	-	-	-	-	-
bis(2-Chloroethoxy) methane	19	NE	NE	NE	0.20 U	0.20 U	0.24 U	-	-	-	-	-	-	-	-	-	-
bis(2-Chloroethyl) ether	0.23	0.33	NE	NE	0.10 U	0.099 U	0.12 U	-	-	-	-	-	-	-	-	-	-
bis(2-Ethylhexyl) phthalate	39	53	NE	NE	0.25 U	0.25 U	0.29 U	-	-	-	-	-	-	-	-	-	-
Carbazole	NE	27	NE	NE	0.10 U	0.099 U	0.12 U	-	-	-	-	-	-	-	-	-	-
Dibenzofuran	7.3	11	NE	NE	0.051 U	0.049 U	**0.067**	-	-	-	-	-	-	-	-	-	-
Diethyl phthalate	5100	6900	NE	100	0.20 U	0.20 U	0.24 U	-	-	-	-	-	-	-	-	-	-
Dimethyl phthalate	NE	NE	NE	NE	0.20 U	0.20 U	0.24 U	-	-	-	-	-	-	-	-	-	-
Di-n-butyl phthalate	630	860	NE	200	0.20 U	0.20 U	0.24 U	-	-	-	-	-	-	-	-	-	-
di-n-Octyl phthalate	63	86	NE	NE	0.20 U	0.20 U	0.24 U	-	-	-	-	-	-	-	-	-	-
Hexachlorobenzene	0.21	0.3	NE	NE	0.10 U	0.099 U	0.12 U	-	-	-	-	-	-	-	-	-	-
Hexachlorobutadiene	1.2	1.5	NE	NE	0.10 U	0.099 U	0.12 U	-	-	-	-	-	-	-	-	-	-
Hexachlorocyclopentadiene	0.18	NE	NE	10	0.41 UJ	0.40 U	0.47 U	-	-	-	-	-	-	-	-	-	-
Hexachloroethane	1.8	2.7	NE	NE	0.10 U	0.099 U	0.12 U	-	-	-	-	-	-	-	-	-	-
Isophorone	570	780	NE	NE	0.20 U	0.20 U	0.24 U	-	-	-	-	-	-	-	-	-	-
Nitrobenzene	5.1	NE	NE	NE	0.10 U	0.099 U	0.12 U	-	-	-	-	-	-	-	-	-	-
N-Nitrosodimethylamine	0.002	NE	NE	NE	0.10 U	0.099 U	0.12 U	-	-	-	-	-	-	-	-	-	-
N-Nitrosodi-n-propylamine	0.078	NE	NE	NE	0.10 U	0.099 U	0.12 U	-	-	-	-	-	-	-	-	-	-
N-Nitrosodiphenylamine	110	150	NE	NE	0.10 U	0.099 U	0.12 U	-	-	-	-	-	-	-	-	-	-
Pentachlorophenol	180	1.4	NE	2.1	0.51 U	0.49 U	0.59 U	-	-	-	-	-	-	-	-	-	-
Phenol	1900	2600	NE	30	0.10 U	0.099 U	0.12 U	-	-	-	-	-	-	-	-	-	-
Pyridine	7.8	NE	NE	NE	R	0.099 U	0.12 U	-	-	-	-	-	-	-	-	-	-
TOC LYDKHN (ug/g)																	
Total Organic Carbon	NE	NE	NE	NE	**1800 J**	**63000**	**76000**	-	-	-	-	-	-	-	-	-	-

Table 4-1
Summary of Discrete Soil Sample Analytical Results
Former Dow Salvage Yard
233 Odlin Road, Bangor, Maine

Locations:					BG-6	BG-7	BG-8	BG-9	BG-10
Field Sample ID:					BG-6	BG-7	BG-8	BG-9	BG-10
Matrix:					S	S	S	S	S
Sample Begin Depth:					0.5	0.5	0.5	0.5	0.5
Sample End Depth:					2	2	2	2	2
Sample Date:					11/05/2019	11/05/2019	11/05/2019	11/05/2019	11/05/2019
Analytes	**RSL[1]**	**RAG[2]**	**Background[3]**	**Ecological[4]**					
PAH SIM (mg/kg)									
2-Methylnaphthalene	24	33	NE	29	0.012 U	0.012 U	0.013 U	0.013 U	0.012 U
Acenaphthene	360	490	NE	29	0.012 U	0.012 U	0.013 U	0.013 U	0.012 U
Acenaphthylene	180	490	NE	29	0.012 U	0.012 U	0.013 U	0.013 U	0.012 U
Anthracene	1800	250	NE	29	0.012 U	0.012 U	0.013 U	0.013 U	**0.0024 J**
Benzo(a)anthracene	1.1	1.6	0.86	1.1	0.012 U	0.012 U	**0.011 J**	**0.0056 J**	**0.027**
Benzo(a)pyrene	0.11	0.16	1.5	1.1	0.012 U	**0.0045 J**	**0.015 J**	**0.0083 J**	**0.031**
Benzo(b)fluoranthene	1.1	1.6	1.3	1.1	0.012 U	**0.0054 J**	**0.020 J**	**0.011 J**	**0.048**
Benzo(g,h,i)perylene	180	250	NE	1.1	**0.0026 J**	0.012 U	**0.013 J**	**0.0088 J**	**0.028**
Benzo(k)fluoranthene	11	16	NE	1.1	0.012 U	0.012 U	**0.0087 J**	**0.0058 J**	**0.019 J**
Chrysene	110	160	NE	1.1	**0.0026 J**	**0.0050 J**	**0.016 J**	**0.011 J**	**0.038**
Dibenz(a,h)anthracene	0.11	0.16	0.32	1.1	0.012 U	0.012 U	**0.0042 J**	0.013 U	**0.0077 J**
Fluoranthene	240	330	NE	1.1	0.012 U	**0.0038 J**	**0.020 J**	**0.015 J**	**0.057**
Fluorene	240	330	NE	29	0.012 U	0.012 U	0.013 U	0.013 U	0.012 U
Indeno(1,2,3-c,d)pyrene	1.1	1.6	0.4	1.1	0.012 U	0.012 U	**0.013 J**	**0.0060 J**	**0.026**
Naphthalene	3.8	2.9	0.11	29	0.012 U	0.012 U	0.013 U	0.013 U	0.012 U
Phenanthrene	180	250	NE	29	0.012 U	**0.0025 J**	**0.0096 J**	**0.0074 J**	**0.032**
Pyrene	180	250	NE	1.1	0.012 U	0.012 U	**0.014 J**	**0.011 J**	**0.052**
MassDEP EPH (ug/g)									
2-Methylnaphthalene	24	33	NE	29	-	-	-	-	-
Acenaphthene	360	490	NE	29	-	-	-	-	-
Acenaphthylene	180	490	NE	29	-	-	-	-	-
Anthracene	1800	250	NE	29	-	-	-	-	-
Benzo(a)anthracene	1.1	1.6	0.86	1.1	-	-	-	-	-
Benzo(a)pyrene	0.11	0.16	1.5	1.1	-	-	-	-	-
Benzo(b)fluoranthene	1.1	1.6	1.3	1.1	-	-	-	-	-
Benzo(g,h,i)perylene	180	250	NE	1.1	-	-	-	-	-
Benzo(k)fluoranthene	11	16	NE	1.1	-	-	-	-	-
Chrysene	110	160	NE	1.1	-	-	-	-	-
Dibenz(a,h)anthracene	0.11	0.16	0.32	1.1	-	-	-	-	-
Fluoranthene	240	330	NE	1.1	-	-	-	-	-
Fluorene	240	330	NE	29	-	-	-	-	-
Indeno(1,2,3-c,d)pyrene	1.1	1.6	0.4	1.1	-	-	-	-	-
Naphthalene	3.8	2.9	0.11	29	-	-	-	-	-
Phenanthrene	180	250	NE	29	-	-	-	-	-
Pyrene	180	250	NE	1.1	-	-	-	-	-
C11-C22 Aromatic	NE	260	NE	NE	-	-	-	-	-
C11-C22 Extractable Petroleum Hydrocarbons, Aromatic (Unadjusted)	NE	100000	NE	NE	-	-	-	-	-
C19-C36 Aliphatic	NE	10000	NE	NE	-	-	-	-	-
C9-C18 Aliphatic	NE	250	NE	NE	-	-	-	-	-
MassDEP VPH (ug/g)									
Benzene	1.2	1.7	NE	NE	-	-	-	-	-
Ethylbenzene	5.8	8.6	NE	NE	-	-	-	-	-
m,p-Xylene	55	26	NE	NE	-	-	-	-	-
Methyl tert-butyl ether (MTBE)	47	69	NE	NE	-	-	-	-	-
Naphthalene	3.8	2.9	NE	NE	-	-	-	-	-
o-Xylene	65	26	NE	NE	-	-	-	-	-
Toluene	490	75	NE	NE	-	-	-	-	-
C5-C8 Aliphatic	NE	43	NE	NE	-	-	-	-	-
C9-C10 Aromatic	NE	66	NE	NE	-	-	-	-	-
C9-C12 Aliphatic	NE	230	NE	NE	-	-	-	-	-
Metals SW6020A/7471B (ug/g)									
Aluminum	7700	2700	NE	NE	**19000**	**14000**	**18000**	**16000**	**13000**
Antimony	3.1	4.3	NE	0.27	**0.66**	**1.0**	**0.32 J**	**0.58 J**	0.70 U
Arsenic	0.68	0.93	16.4	9.9	**12**	**9.2**	**8.1**	**8.8**	**8.6**
Barium	1500	210	469	283	**54**	**34**	**42**	**42**	**33**
Beryllium	16	11	2.4	10	0.60 U	0.60 U	0.70 U	0.60 U	0.70 U
Cadmium	7.1	4.2	0.26	0.36	0.062 U	0.059 U	0.068 U	0.059 U	0.70 U
Chromium	0.3[†]/12000	0.42[†]/2,700	79	0.4	**35**	**23**	**24**	**26**	**22**
Cobalt	2.3	3.2	14.9	13	**15**	**10**	**9.3**	**11**	**9.0**
Copper	310	340	23	28	**18**	**26**	**9.9**	**15**	**12**
Iron	5500	7500	SSS	NE	**30000**	**22000**	**23000**	**23000**	**20000**
Lead	400	14	32	11	**14**	**13**	**16**	**17**	**27**
Magnesium	NE	NE	NE	NE	**6500**	**4600**	**4300**	**4700**	**3500**
Manganese	180	28	841	220	**610**	**320**	**250 J**	**370**	**300**
Mercury	1.1	0.31	0.123	0.00051	0.085 U	0.087 U	**0.067 J**	**0.038 J**	**0.053 J**
Nickel	150	99	39	30	**40**	**31**	**24**	**25**	**23**
Potassium	NE	NE	NE	NE	**2100**	**1100**	**1100**	**1100**	**750**
Selenium	39	54	0.61	0.21	6.0 U	6.0 U	7.0 U	6.0 U	7.0 U
Silver	39	54	SSS	2	3.1 U	3.0 U	3.4 U	3.0 U	3.4 U
Sodium	NE	NE	NE	NE	**82 J**	**420**	68 U	**68 J**	67 U
Thallium	0.078	0.11	0.6	1	0.60 U	0.30 U	0.34 U	0.30 U	0.70 U
Vanadium	39	49	103	2	**31**	**23**	**25**	**25**	**23**
Zinc	2300	3200	101	8.5	**57**	**89**	**47**	**46**	**46**

Table 4-1
Summary of Discrete Soil Sample Analytical Results
Former Dow Salvage Yard
233 Odlin Road, Bangor, Maine

				Locations:	BG-6	BG-7	BG-8	BG-9	BG-10
				Field Sample ID:	BG-6	BG-7	BG-8	BG-9	BG-10
				Matrix:	S	S	S	S	S
				Sample Begin Depth:	0.5	0.5	0.5	0.5	0.5
				Sample End Depth:	2	2	2	2	2
				Sample Date:	11/05/2019	11/05/2019	11/05/2019	11/05/2019	11/05/2019
Analytes	**RSL[1]**	**RAG[2]**	**Background[3]**	**Ecological[4]**					
Hex Chromium SW7196A (mg/kg)									
Chromium, Hexavalent	0.3	0.42	NE	0.4	-	-	-	-	-
PCBs SW8082A (ug/g)									
PCB-1016 (Aroclor 1016	0.41	0.31	NE	NE	-	-	-	-	-
PCB-1221 (Aroclor 1221	0.2	0.31	NE	NE	-	-	-	-	-
PCB-1232 (Aroclor 1232	0.17	0.31	NE	NE	-	-	-	-	-
PCB-1242 (Aroclor 1242	0.23	0.31	NE	NE	-	-	-	-	-
PCB-1248 (Aroclor 1248)	0.23	0.31	NE	NE	-	-	-	-	-
PCB-1254 (Aroclor 1254)	0.12	0.31	NE	NE	-	-	-	-	-
PCB-1260 (Aroclor 1260)	0.24	0.31	NE	NE	-	-	-	-	-
VOCs SW8260D (ug/g)									
1,1,1,2-Tetrachloroethane	2	3	NE	NE	-	-	-	-	-
1,1,1-Trichloroethane	810	64	NE	NE	-	-	-	-	-
1,1,2,2-Tetrachloroethane	0.3	0.89	NE	NE	-	-	-	-	-
1,1,2-Trichloroethane	0.15	0.22	NE	NE	-	-	-	-	-
1,1-Dichloroethane	3.6	5.3	NE	NE	-	-	-	-	-
1,1-Dichloroethene	23	8.1	NE	NE	-	-	-	-	-
1,1-Dichloropropene	NE	NE	NE	NE	-	-	-	-	-
1,2,3-Trichlorobenzene	6.3	8.6	NE	NE	-	-	-	-	-
1,2,3-Trichloropropane	0.0051	0.07	NE	NE	-	-	-	-	-
1,2,4-Trichlorobenzene	5.8	8.6	NE	NE	-	-	-	-	-
1,2,4-Trimethylbenzene	30	18	NE	NE	-	-	-	-	-
1,2-Dibromo-3-chloropropane	0.0053	0.0078	NE	NE	-	-	-	-	-
1,2-Dibromoethane (EDB)	0.036	0.054	NE	NE	-	-	-	-	-
1,2-Dichlorobenzene	180	36	NE	NE	-	-	-	-	-
1,2-Dichloroethane	0.46	0.68	NE	NE	-	-	-	-	-
1,2-Dichloropropane	1.6	2.3	NE	NE	-	-	-	-	-
1,3,5-Trimethylbenzene	27	16	NE	NE	-	-	-	-	-
1,3-Dichlorobenzene	NE	29	NE	NE	-	-	-	-	-
1,3-Dichloropropane	160	210	NE	NE	-	-	-	-	-
1,4-Dichlorobenzene	2.6	3.9	NE	NE	-	-	-	-	-
1,4-Dioxane (p-Dioxane)	5.3	0.74	NE	NE	-	-	-	-	-
2,2-Dichloropropane	NE	NE	NE	NE	-	-	-	-	-
2-Butanone (MEK)	2700	1100	NE	NE	-	-	-	-	-
2-Chlorotoluene	160	80	NE	NE	-	-	-	-	-
2-Hexanone	20	29	NE	NE	-	-	-	-	-
4-Chlorotoluene	160	210	NE	NE	-	-	-	-	-
4-Methyl-2-pentanone (MIBK)	5400	330	NE	NE	-	-	-	-	-
Acetone	6100	5200	NE	NE	-	-	-	-	-
Benzene	1.2	1.7	NE	NE	-	-	-	-	-
Bromobenzene	29	38	NE	NE	-	-	-	-	-
Bromochloromethane	15	22	NE	NE	-	-	-	-	-
Bromodichloromethane	0.29	0.44	NE	NE	-	-	-	-	-
Bromoform	19	28	NE	NE	-	-	-	-	-
Bromomethane	0.68	1	NE	NE	-	-	-	-	-
Carbon disulfide	77	69	NE	NE	-	-	-	-	-
Carbon tetrachloride	0.65	0.97	NE	NE	-	-	-	-	-
Chlorobenzene	28	41	NE	40	-	-	-	-	-
Chloroethane	1400	200	NE	NE	-	-	-	-	-
Chloroform	0.32	0.47	NE	NE	-	-	-	-	-
Chloromethane	11	16	NE	NE	-	-	-	-	-
cis-1,2-Dichloroethene	16	20	NE	NE	-	-	-	-	-
cis-1,3-Dichloropropene	1.8	2.7	NE	NE	-	-	-	-	-
Dibromochloromethane	8.3	11	NE	NE	-	-	-	-	-
Dibromomethane	2.4	3.5	NE	NE	-	-	-	-	-
Dichlorodifluoromethane	8.7	13	NE	NE	-	-	-	-	-
Diethyl ether (Ethyl ether)	1600	81	NE	NE	-	-	-	-	-
Ethylbenzene	5.8	8.6	NE	NE	-	-	-	-	-
Hexachlorobutadiene	1.2	1.5	NE	NE	-	-	-	-	-
Isopropylbenzene (Cumene)	190	26	NE	NE	-	-	-	-	-
m,p-Xylene	55	26	NE	NE	-	-	-	-	-
Methyl tert-butyl ether (MTBE)	47	69	NE	NE	-	-	-	-	-
Methylene chloride	35	49	NE	NE	-	-	-	-	-
Naphthalene	3.8	2.9	NE	NE	-	-	-	-	-
n-Butylbenzene	390	540	NE	NE	-	-	-	-	-
n-Propylbenzene	380	26	NE	NE	-	-	-	-	-
o-Xylene	65	26	NE	NE	-	-	-	-	-
p-Cymene (p-Isopropyltoluene)	NE	NE	NE	NE	-	-	-	-	-
sec-Butylbenzene	780	1100	NE	NE	-	-	-	-	-

Table 4-1
Summary of Discrete Soil Sample Analytical Results
Former Dow Salvage Yard
233 Odlin Road, Bangor, Maine

Locations:					BG-6	BG-7	BG-8	BG-9	BG-10
Field Sample ID:					BG-6	BG-7	BG-8	BG-9	BG-10
Matrix:					S	S	S	S	S
Sample Begin Depth:					0.5	0.5	0.5	0.5	0.5
Sample End Depth:					2	2	2	2	2
Sample Date:					11/05/2019	11/05/2019	11/05/2019	11/05/2019	11/05/2019
Analytes	**RSL[1]**	**RAG[2]**	**Background[3]**	**Ecological[4]**					
Styrene	600	83	NE	300	-	-	-	-	-
tert-Amyl methyl ether	NE	NE	NE	NE	-	-	-	-	-
tert-Butyl alcohol	NE	NE	NE	NE	-	-	-	-	-
tert-Butyl ethyl ether	NE	NE	NE	NE	-	-	-	-	-
tert-Butylbenzene	780	1100	NE	NE	-	-	-	-	-
Tetrachloroethene (PCE)	8.1	8.5	NE	NE	-	-	-	-	-
Tetrahydrofuran	1800	2700	NE	NE	-	-	-	-	-
Toluene	490	75	NE	200	-	-	-	-	-
trans-1,2-Dichloroethene	160	10	NE	NE	-	-	-	-	-
trans-1,3-Dichloropropene	1.8	2.7	NE	NE	-	-	-	-	-
Trichloroethene (TCE)	0.41	0.39	NE	NE	-	-	-	-	-
Trichlorofluoromethane	2300	94	NE	NE	-	-	-	-	-
Vinyl chloride	0.0059	0.064	NE	NE	-	-	-	-	-
SVOCs SW8270E (ug/g)									
1,2,4-Trichlorobenzene	5.8	8.6	NE	20	-	-	-	-	-
1,2-Dichlorobenzene	180	36	NE	NE	-	-	-	-	-
1,3-Dichlorobenzene	NE	29	NE	NE	-	-	-	-	-
1,4-Dichlorobenzene	2.6	3.9	NE	20	-	-	-	-	-
2,2'-Oxybis(1-chloropropane)	310	NE	NE	NE	-	-	-	-	-
2,4,5-Trichlorophenol	630	860	NE	9	-	-	-	-	-
2,4,6-Trichlorophenol	6.3	8.6	NE	4	-	-	-	-	-
2,4-Dichlorophenol	19	26	NE	NE	-	-	-	-	-
2,4-Dimethylphenol	130	170	NE	NE	-	-	-	-	-
2,4-Dinitrophenol	13	17	NE	20	-	-	-	-	-
2,4-Dinitrotoluene	1.7	2.4	NE	NE	-	-	-	-	-
2,6-Dinitrotoluene	0.36	0.5	NE	NE	-	-	-	-	-
2-Chloronaphthalene	480	650	NE	NE	-	-	-	-	-
2-Chlorophenol	39	54	NE	NE	-	-	-	-	-
2-Methylphenol (o-Cresol)	320	430	NE	NE	-	-	-	-	-
2-Nitroaniline	63	NE	NE	NE	-	-	-	-	-
2-Nitrophenol	NE	NE	NE	NE	-	-	-	-	-
3,3'-Dichlorobenzidine	1.2	1.7	NE	NE	-	-	-	-	-
3-Nitroaniline	NE	NE	NE	NE	-	-	-	-	-
4,6-Dinitro-2-methylphenol	0.51	860	NE	NE	-	-	-	-	-
4-Bromophenyl phenyl ether	NE	NE	NE	NE	-	-	-	-	-
4-Chloro-3-methylphenol	630	NE	NE	NE	-	-	-	-	-
4-Chloroaniline	2.7	3.7	NE	NE	-	-	-	-	-
4-Chlorophenyl phenyl ether	NE	NE	NE	NE	-	-	-	-	-
4-Methylphenol (p-Cresol)	630	510	NE	NE	-	-	-	-	-
4-Nitroaniline	25	35	NE	NE	-	-	-	-	-
4-Nitrophenol	NE	61	NE	7	-	-	-	-	-
Aniline (Phenylamine, Aminobenzene)	44	610	NE	NE	-	-	-	-	-
Azobenzene	5.6	NE	NE	NE	-	-	-	-	-
Benzidine	0.00053	NE	NE	NE	-	-	-	-	-
Benzoic acid	25000	1100	NE	NE	-	-	-	-	-
Benzyl alcohol	630	860	NE	NE	-	-	-	-	-
Benzyl butyl phthalate	290	390	NE	NE	-	-	-	-	-
bis(2-Chloroethoxy) methane	19	NE	NE	NE	-	-	-	-	-
bis(2-Chloroethyl) ether	0.23	0.33	NE	NE	-	-	-	-	-
bis(2-Ethylhexyl) phthalate	39	53	NE	NE	-	-	-	-	-
Carbazole	NE	27	NE	NE	-	-	-	-	-
Dibenzofuran	7.3	11	NE	NE	-	-	-	-	-
Diethyl phthalate	5100	6900	NE	100	-	-	-	-	-
Dimethyl phthalate	NE	NE	NE	NE	-	-	-	-	-
Di-n-butyl phthalate	630	860	NE	200	-	-	-	-	-
di-n-Octyl phthalate	63	86	NE	NE	-	-	-	-	-
Hexachlorobenzene	0.21	0.3	NE	NE	-	-	-	-	-
Hexachlorobutadiene	1.2	1.5	NE	NE	-	-	-	-	-
Hexachlorocyclopentadiene	0.18	NE	NE	10	-	-	-	-	-
Hexachloroethane	1.8	2.7	NE	NE	-	-	-	-	-
Isophorone	570	780	NE	NE	-	-	-	-	-
Nitrobenzene	5.1	NE	NE	NE	-	-	-	-	-
N-Nitrosodimethylamine	0.002	NE	NE	NE	-	-	-	-	-
N-Nitrosodi-n-propylamine	0.078	NE	NE	NE	-	-	-	-	-
N-Nitrosodiphenylamine	110	150	NE	NE	-	-	-	-	-
Pentachlorophenol	180	1.4	NE	2.1	-	-	-	-	-
Phenol	1900	2600	NE	30	-	-	-	-	-
Pyridine	7.8	NE	NE	NE	-	-	-	-	-
TOC LYDKHN (ug/g)									
Total Organic Carbon	NE	NE	NE	NE	-	-	-	-	-

Table 4-1
Discrete Soil Sample Summary of Analytical Results
Former Dow Salvage Yard
233 Odlin Road, Bangor, Maine

NOTES:

1 - U.S. EPA Regional Screening Levels, (ELCR 1x10-6, HQ 0.1), Residential, May 2021

2 - Maine Department of Environmental Protection Remedial Action Guidelines (RAGs) lowest of exposure scenarios, November 15, 2023, provided for information purposes only.

3 - Background values Maine DEP UPLS from RAGs, or Summary Report for Evaluation of PAHs and metals in Background Soils in Maine (November 2012)

4 - Ecological screening values lowest of a. and b. below

a. EPA Interim Ecological Soil Screening Levels (EcoSSLs)

b. Soil based toxicity benchmarks for plants and soil invertebrates developed by DOE

Detects are displayed in bold font

Results exceed residential RSL

Results exceed only ecological screening levels

Results exceed residential RSL but are consistent with background

Reported lab limit exceeds screening criteria

For EPH and VPH fraction results, only adjusted results are presented.

NE - not established

† - hexavalent chromium criteria

Data Qualifier Definitions

U - The analyte was not detected and was reported as less than the LOD or as defined by the customer. The LOD has been adjusted for any dilution or concentration of the sample.

J - Estimated: The analyte was positively identified, the quantitation is an estimation due to discrepancies in meeting certain analyte-specific quality control criteria.

UJ - The analyte was not detected and was reported as less than the LOD or as defined by the customer. However, the associated numerical value is approximate.

Units

PERCENT = percent

PPT = parts per thousand

ug/kg = microgram per kilogram

ug/L = microgram per liter

mg/L = milligram per liter

mg/kg = milligrams per kilogram

Analyses

PAH - polycyclic aromatic hydrocarbons

SIM - selective ion monitoring

EPH - extractable petroleum hydrocarbons

VPH - volatile petroleum hydrocarbons

MassDEP - Massachsuetts Department of Environmental Protection

PCBs - polychlorinated biphenyls

VOC - volatile organic compounds

SVOCs - semi-volatile organic compounds

LOD - limit of detection

Table 4-2
Summary of Cumulative Overburden Groundwater Analytical Results
Former Dow Salvage Yard
233 Odlin Road, Bangor, Maine

				Locations:	SY-OBMW1					SY-OBMW2				
				Field Sample ID:	SY-OBMW1-120519	SY-OBMW1-031020	SY-OBMW1-081220	SY-OBMW1-120120	SY-OBMW1-110823	SY-OBMW2-120519	SY-OBMW2-031020	SY-OBMW2-081320	SY-OBMW2-120120	SY-OBMW2-110823
				Matrix:	WG	WG	WG	WG	WG	WG	WG	WG	WG	WG
				Sample Begin Depth:	22	22	22	22	22	28.5	28.5	28.5	28.5	28.5
				Sample End Depth:	32	32	32	32	32	38.5	38.5	38.5	38.5	38.5
				Sample Date:	12/05/2019	03/10/2020	08/12/2020	12/01/2020	11/08/2023	12/05/2019	03/10/2020	08/13/2020	12/01/2020	11/08/2023
Analytes	**RSL[1]**	**MCL[2]**	**RAG[3]**											
PAH SIM (ug/L)														
2-Methylnaphthalene	3.6	NE	3.6		0.093 U	0.093 U	0.094 U	0.096 U	0.093 U	0.093 U	0.094 U	0.095 U	0.094 U	0.094 UJ
Acenaphthene	53	NE	54		0.093 U	0.093 U	0.094 U	0.096 U	0.093 U	0.093 U	0.094 U	0.095 U	0.094 U	0.094 UJ
Acenaphthylene	NE	NE	52		0.093 U	0.093 U	0.094 U	0.096 U	0.093 U	0.093 U	0.094 U	0.095 U	0.094 U	0.094 UJ
Anthracene	180	NE	180		0.093 U	**0.041 J**	0.094 U	0.096 U	0.093 U	0.093 U	0.094 U	0.095 U	0.094 U	0.094 UJ
Benzo(a)anthracene	0.03	NE	0.03		0.093 U	0.19 U	0.094 U	0.096 U	0.093 U	0.093 U	0.094 U	0.095 U	0.094 U	0.094 UJ
Benzo(a)pyrene	0.025	0.2	0.025		0.093 U	**0.094 J**	0.094 U	0.096 U	0.093 U	0.093 U	0.094 U	0.19 U	0.094 U	0.094 UJ
Benzo(b)fluoranthene	0.25	NE	0.25		0.093 U	**0.11 J**	0.094 U	0.096 U	0.093 U	0.093 U	0.094 U	0.095 U	0.094 U	0.094 UJ
Benzo(g,h,i)perylene	NE	NE	60		0.093 U	0.19 U	0.094 U	0.096 U	0.093 U	0.093 U	0.19 U	0.095 UJ	0.094 U	0.094 UJ
Benzo(k)fluoranthene	2.5	NE	2.5		0.093 U	**0.11 J**	0.094 U	0.096 U	0.093 U	0.093 U	0.094 U	0.095 U	0.094 U	0.094 UJ
Chrysene	25	NE	25		0.19 U	0.093 U	0.094 U	0.096 U	0.093 U	0.19 U	0.094 U	0.19 U	0.094 U	0.094 UJ
Dibenz(a,h)anthracene	0.025	NE	0.025		0.093 U	**0.11 J**	0.094 U	0.096 U	0.093 U	0.093 U	0.094 U	0.095 UJ	0.094 U	0.094 UJ
Fluoranthene	80	NE	80		0.093 U	0.093 U	0.094 U	0.096 U	0.093 U	0.093 U	0.094 U	0.095 U	0.094 U	0.094 UJ
Fluorene	29	NE	29		0.093 U	0.093 U	0.094 U	0.096 U	0.093 U	0.093 U	0.094 U	0.095 U	0.094 U	0.094 UJ
Indeno(1,2,3-c,d)pyrene	0.25	NE	0.25		0.093 U	0.19 U	0.094 U	0.096 U	0.093 U	0.093 U	0.19 U	0.095 UJ	**0.060 J**	0.094 UJ
Naphthalene	0.17	NE	0.12		0.093 U	0.093 U	0.094 U	0.096 U	0.093 U	0.093 U	0.094 U	0.095 U	0.094 U	0.094 UJ
Phenanthrene	NE	NE	18		**0.054 J**	0.093 U	0.094 U	0.096 U	0.093 U	0.093 U	0.094 U	0.095 U	0.094 U	0.094 UJ
Pyrene	12	NE	12		0.093 U	**0.10 J**	0.094 U	0.096 U	0.093 U	0.093 U	**0.080 J**	0.095 U	0.094 U	0.094 UJ
MassDEP EPH (ug/L)														
2-Methylnaphthalene	3.6	NE	3.6		0.50 U	0.50 U	0.50 U	0.50 U	0.70 U	0.50 U	0.50 U	0.50 U	0.50 U	0.70 U
Acenaphthene	53	NE	54		0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Acenaphthylene	NE	NE	52		0.50 U	0.50 U	0.50 UJ	0.50 U	0.50 U	0.50 U	0.50 U	0.50 UJ	0.50 U	0.50 U
Anthracene	180	NE	180		0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Benzo(a)anthracene	0.03	NE	0.03		0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Benzo(a)pyrene	0.025	0.2	0.025		0.20 U	0.20 U	0.20 U	0.20 U	0.70 U	0.20 U	0.20 U	0.20 U	0.20 U	0.70 U
Benzo(b)fluoranthene	0.25	NE	0.25		0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Benzo(g,h,i)perylene	NE	NE	60		0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Benzo(k)fluoranthene	2.5	NE	2.5		0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Chrysene	25	NE	25		0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Dibenz(a,h)anthracene	0.025	NE	0.025		0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Fluoranthene	80	NE	80		0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Fluorene	29	NE	29		0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Indeno(1,2,3-c,d)pyrene	0.25	NE	0.25		0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Naphthalene	0.17	NE	0.12		0.50 U	0.50 U	0.50 UJ	0.50 UJ	0.70 U	0.50 U	0.50 U	0.50 UJ	0.50 UJ	0.70 U
Phenanthrene	NE	NE	18		0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Pyrene	12	NE	12		0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
C11-C22 Aromatic	NE	NE	60		85 U	85 U	100 U	85 U	100 U	85 U	85 U	110 U	85 U	85 U
C19-C36 Aliphatic	NE	NE	4000		88 U	88 U	88 U	88 U	97 U	88 U	88 U	88 U	88 U	97 U
C9-C18 Aliphatic	NE	NE	35		66 U	66 UJ	66 UJ	66 U	95 UJ	66 U	66 UJ	66 UJ	66 U	95 UJ
MassDEP VPH (ug/L)														
Benzene	0.46	5	0.46		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	1.5	700	1.5		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
m,p-Xylene	19	10000	19		2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Methyl tert-butyl ether (MTBE)	14	NE	1300		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Naphthalene	0.17	NE	0.12		1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U
o-Xylene	19	10000	19		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	110	1000	110		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
C5-C8 Aliphatic	NE	NE	18		100 U	100 U	100 U	100 U	50 U	100 U	100 U	100 U	100 U	50 U
C9-C10 Aromatic	NE	NE	7.1		**4.1 J**	15 U	100 U	100 U	50 U	**4.0 J**	15 U	100 U	100 U	50 U
C9-C12 Aliphatic	NE	NE	35		45 U	45 U	45 U	45 U	50 U	45 U	45 U	45 U	45 U	50 U

Table 4-2
Summary of Cumulative Overburden Groundwater Analytical Results
Former Dow Salvage Yard
233 Odlin Road, Bangor, Maine

			Locations:	SY-OBMW1					SY-OBMW2				
			Field Sample ID:	SY-OBMW1-120519	SY-OBMW1-031020	SY-OBMW1-081220	SY-OBMW1-120120	SY-OBMW1-110823	SY-OBMW2-120519	SY-OBMW2-031020	SY-OBMW2-081320	SY-OBMW2-120120	SY-OBMW2-110823
			Matrix:	WG	WG	WG	WG	WG	WG	WG	WG	WG	WG
			Sample Begin Depth:	22	22	22	22	22	28.5	28.5	28.5	28.5	28.5
			Sample End Depth:	32	32	32	32	32	38.5	38.5	38.5	38.5	38.5
			Sample Date:	12/05/2019	03/10/2020	08/12/2020	12/01/2020	11/08/2023	12/05/2019	03/10/2020	08/13/2020	12/01/2020	11/08/2023
Analytes	**RSL[1]**	**MCL[2]**	**RAG[3]**										
Total Metals SW6020A/7470A (mg/L)													
Aluminum	2	NE	2	**0.055**	0.050 U	0.050 U	**0.015 J**	**0.025 J**	0.050 U	0.050 U	0.050 U	**0.0092 J**	**0.012 J**
Antimony	0.00078	0.006	0.00078	**0.00047 J**	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U
Arsenic	0.000052	0.01	0.000052	**0.0098**	**0.014**	**0.0094**	**0.011**	**0.010**	**0.0020 J**	**0.0031 J**	0.0050 U	**0.0032 J**	**0.0039**
Barium	380	2	0.38	**0.0098 J**	0.010 U	0.010 U	**0.0076 J**	**0.0075 J**	**0.0063 J**	0.010 U	0.010 U	**0.0052 J**	**0.0073 J**
Beryllium	0.0025	0.004	0.0025	0.00010 U	0.00010 U	0.0010 U	**0.000022 J**	0.00050 U	0.00010 U	**0.00010 J**	0.00010 U	0.00010 U	0.00050 U
Cadmium	0.00092	0.005	0.0018	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.0010 U	0.00050 U	0.00050 U	0.00050 U
Chromium	0.000035[4]/2.2	0.1	0.0000035[4]/2.3	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.025 U	0.0010 U	0.010 U	0.0010 U	0.0010 U	0.025 U
Cobalt	0.0006	NE	0.0006	**0.00054 J**	0.010 U	0.010 U	**0.00043 J**	0.00050 U	**0.00020 J**	0.010 U	0.010 U	**0.000070 J**	0.00050 U
Copper	0.08	1.3	0.08	0.0010 U	0.010 U	0.010 U	**0.00054 J**	0.0075 U	0.0010 U	0.010 U	0.010 U	**0.00077 J**	0.0075 U
Iron	1.4	NE	1.4	**0.039 J**	0.050 U	0.050 U	**0.018 J**	**0.034 J**	**0.030 J**	0.050 U	0.050 U	**0.0070 J**	0.030 U
Lead	0.015	0.015	NE	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U
Magnesium	NE	NE	NE	**14**	**12**	**16**	**15**	**16**	**9.2**	**9.2**	**11**	**11**	**18**
Manganese	0.043	NE	0.043	**0.55**	**0.37**	**0.32**	**0.25**	**0.17**	**0.22**	**0.066**	**0.078**	**0.047**	**0.073**
Mercury	0.000063	0.002	0.000063	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00015 U	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00015 U
Nickel	0.039	NE	0.039	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.025 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.025 U
Potassium	NE	NE	NE	**2.1**	**1.8**	**1.5**	**1.7**	**1.7**	**1.3**	**1.2**	**1.2**	**1.3**	**1.6**
Selenium	0.01	0.05	0.01	0.0010 U	**0.0017 J**	0.0010 U	0.010 U	0.0050 U	0.0010 U	**0.0024 J**	0.0010 U	0.010 U	0.0050 U
Silver	0.0094	NE	0.0094	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	**0.000046 J**	0.00050 U	0.00050 U	0.00050 U
Sodium	NE	NE	NE	**21**	**21**	**20**	**20**	**20**	**9.2**	**8.6**	**8.6**	**9.5**	**13**
Thallium	0.00002	0.002	0.00002	0.0010 U	0.00050 U	0.00050 U	**0.00022 J**	0.00080 U	0.0010 U	0.0010 U	0.00050 U	**0.000045 J**	0.00080 U
Vanadium	0.0086	NE	0.0086	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0050 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0050 U
Zinc	0.6	NE	0.6	0.0040 U	0.0040 U	0.0040 U	0.0040 U	0.0040 U	0.0040 U	0.010 U	0.010 U	0.0040 U	0.0040 U
Dissolved Metals (mg/L)													
Aluminum	2	NE	2	**0.020 J**	0.050 U	**0.020 J**	**0.013 J**	0.027 U	**0.021 J**	0.050 U	**0.013 J**	**0.0082 J**	0.027 U
Antimony	0.00078	0.006	0.00078	**0.00053 J**	0.00050 U	0.00054 U	0.00054 U	0.00054 U	0.00054 U	0.00050 U	0.00054 U	0.00054 U	0.00054 U
Arsenic	0.000052	0.01	0.000052	**0.0098**	**0.014**	**0.011**	**0.011**	**0.010**	**0.0020 J**	**0.0032 J**	**0.0041 J**	**0.0047 J**	**0.0040**
Barium	380	2	0.38	**0.0096 J**	0.010 U	**0.0082 J**	**0.0071 J**	**0.0072 J**	**0.0075 J**	0.010 U	**0.0061 J**	**0.0050 J**	**0.0071 J**
Beryllium	0.0025	0.004	0.0025	0.00011 U	**0.000011 J**	**0.00017 J**	0.0011 U	0.00054 U	0.00011 U	**0.00018 J**	**0.00016 J**	0.00011 U	0.00054 U
Cadmium	0.00092	0.005	0.0018	0.00054 U	0.00050 U	**0.00021 J**	0.00054 U	0.00054 U	0.00054 U	0.0010 U	**0.00020 J**	0.00054 U	0.00054 U
Chromium	0.000035[4]/2.2	0.1	0.0000035[4]/2.3	0.0011 U	0.0010 U	0.0011 U	0.0011 U	0.027 U	0.0011 U	0.010 U	0.0011 U	0.0011 U	0.027 U
Cobalt	0.0006	NE	0.0006	**0.00049 J**	0.010 U	**0.00056 J**	**0.00044 J**	0.00054 U	**0.00017 J**	0.010 U	**0.00014 J**	**0.000038 J**	0.00054 U
Copper	0.08	1.3	0.08	**0.0011 J**	0.010 U	0.0011 U	0.011 U	0.0080 U	**0.00085 J**	0.010 U	0.0011 U	0.011 U	0.0080 U
Iron	1.4	NE	1.4	0.011 U	0.050 U	**0.012 J**	**0.0091 J**	0.032 U	0.011 U	0.050 U	**0.0041 J**	**0.0042 J**	0.032 U
Lead	0.015	0.015	NE	0.00054 U	**0.0017 J**	**0.00021 J**	0.00054 U	0.00054 U	0.00054 U	**0.00057 J**	**0.00020 J**	0.00054 U	0.00054 U
Magnesium	NE	NE	NE	**13**	**12 J**	**16**	**14**	**14**	**9.1**	**8.7 J**	**12**	**9.7**	**17**
Manganese	0.043	NE	0.043	**0.48**	**0.38 J**	**0.36**	**0.23**	**0.16**	**0.20**	**0.064 J**	**0.028**	**0.028**	**0.017**
Mercury	0.000063	0.002	0.000063	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00015 U	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00015 U
Nickel	0.039	NE	0.039	0.0011 U	0.0010 U	0.0011 U	0.0011 U	0.027 U	0.0011 U	0.0010 U	0.0011 U	0.0011 U	0.027 U
Potassium	NE	NE	NE	**2.0**	**1.8**	**1.6**	**1.5**	**1.5**	**1.3**	**1.3**	**1.2**	**1.1**	**1.5**
Selenium	0.01	0.05	0.01	0.0011 U	0.0010 U	0.0011 U	0.0011 U	0.0054 U	0.0011 U	**0.0011 J**	0.0011 U	0.0011 U	0.0054 U
Silver	0.0094	NE	0.0094	0.00054 U	0.00050 U	**0.000097 J**	0.00054 U	0.00054 U	0.00054 U	**0.000080 J**	**0.000091 J**	0.00054 U	0.00054 U
Sodium	NE	NE	NE	**21**	**20**	**19**	**20**	**19**	**9.4**	**9.5**	**8.7**	**9.6**	**12**
Thallium	0.00002	0.002	0.00002	0.0010 U	**0.000052 J**	**0.00021 J**	**0.00019 J**	0.00086 U	0.0010 U	**0.00086 J**	**0.00014 J**	0.00054 U	0.00086 U
Vanadium	0.0086	NE	0.0086	0.0011 U	0.0010 U	0.0011 U	0.0011 U	0.0054 U	0.0011 U	0.0010 U	0.0011 U	0.0011 U	0.0054 U
Zinc	0.6	NE	0.6	0.0043 U	0.0040 U	0.0043 U	0.011 U	0.0043 U	0.0043 U	0.0040 U	0.0043 U	0.0043 U	0.0043 U
Hexavalent Chromium SW7196A (mg/L)													
Chromium, Hexavalent	0.000035	NE	0.000035	0.013 U	0.013 U	0.013 U	0.025 U	0.012 U	0.013 U	0.013 U	0.025 U	0.025 U	0.012 U
PCBs SW8082A (ug/L)													
PCB-1016 (Aroclor 1016	0.14	0.5	0.0079	0.10 U	0.10 U	0.10 U	0.10 U	0.12 U	0.10 U	0.10 U	0.10 U	0.10 U	0.12 U
PCB-1221 (Aroclor 1221	0.0047	0.5	0.0079	0.10 U	0.10 U	0.10 U	0.10 U	0.12 U	0.10 U	0.10 U	0.10 U	0.10 U	0.12 U
PCB-1232 (Aroclor 1232	0.0047	0.5	0.0079	0.10 U	0.10 U	0.10 U	0.10 U	0.12 U	0.10 U	0.10 U	0.10 U	0.10 U	0.12 U
PCB-1242 (Aroclor 1242	0.0078	0.5	0.0079	0.10 U	0.10 U	0.10 U	0.10 U	0.12 U	0.10 U	0.10 U	0.10 U	0.10 U	0.12 U
PCB-1248 (Aroclor 1248	0.0078	0.5	0.0079	0.10 U	0.10 U	0.10 U	0.10 U	0.12 U	0.10 U	0.10 U	0.10 U	0.10 U	0.12 U
PCB-1254 (Aroclor 1254	0.0078	0.5	0.0079	0.10 U	0.10 U	0.10 U	0.10 U	0.12 U	0.10 U	0.10 U	0.10 U	0.10 U	0.12 U
PCB-1260 (Aroclor 1260)	0.0078	0.5	0.0079	0.10 U	0.10 U	0.10 U	0.10 U	0.12 U	0.10 U	0.10 U	0.10 U	0.10 U	0.12 U

Table 4-2
Summary of Cumulative Overburden Groundwater Analytical Results
Former Dow Salvage Yard
233 Odlin Road, Bangor, Maine

Locations:				SY-OBMW1					SY-OBMW2				
Field Sample ID:				SY-OBMW1-120519	SY-OBMW1-031020	SY-OBMW1-081220	SY-OBMW1-120120	SY-OBMW1-110823	SY-OBMW2-120519	SY-OBMW2-031020	SY-OBMW2-081320	SY-OBMW2-120120	SY-OBMW2-110823
Matrix:				WG	WG	WG	WG	WG	WG	WG	WG	WG	WG
Sample Begin Depth:				22	22	22	22	22	28.5	28.5	28.5	28.5	28.5
Sample End Depth:				32	32	32	32	32	38.5	38.5	38.5	38.5	38.5
Sample Date:				12/05/2019	03/10/2020	08/12/2020	12/01/2020	11/08/2023	12/05/2019	03/10/2020	08/13/2020	12/01/2020	11/08/2023
Analytes	**RSL[1]**	**MCL[2]**	**RAG[3]**										
CVOCs SW8260D SIM (ug/L)													
1,1-Dichloroethene	28	7	29	NS	NS	NS	NS	0.025 U	NS	NS	NS	NS	0.025 U
cis-1,2-Dichloroethene	3.6	70	2.5	NS	NS	NS	NS	0.025 U	NS	NS	NS	NS	0.025 U
Tetrachloroethene (PCE)	4.1	5	4.1	NS	NS	NS	NS	0.025 U	NS	NS	NS	NS	0.025 U
trans-1,2-Dichloroethene	36	100	6.8	NS	NS	NS	NS	0.025 U	NS	NS	NS	NS	0.025 U
Trichloroethene (TCE)	0.28	5	0.28	NS	NS	NS	NS	0.025 U	NS	NS	NS	NS	0.025 U
Vinyl chloride	0.019	2	0.019	NS	NS	NS	NS	0.050 U	NS	NS	NS	NS	0.050 U
VOCs SW8260D (ug/L)													
1,1,1,2-Tetrachloroethane	0.57	NE	0.57	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,1-Trichloroethane	800	200	800	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	0.076	NE	0.076	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	0.041	5	0.042	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	2.8	NE	2.8	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	28	7	29	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U
1,1-Dichloropropene	NE	NE	0.47	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,3-Trichlorobenzene	0.7	NE	0.7	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,3-Trichloropropane	0.00075	NE	0.00075	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,4-Trichlorobenzene	0.4	70	0.4	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,4-Trimethylbenzene	5.6	NE	5.6	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromo-3-chloropropane	0.00033	0.2	0.00033	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
1,2-Dibromoethane (EDB)	0.0075	0.05	0.0075	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	30	600	30	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	0.17	5	0.17	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	0.82	5	0.83	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3,5-Trimethylbenzene	6	NE	6	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	NE	NE	30	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichloropropane	37	NE	37	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	0.48	75	0.48	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dioxane (p-Dioxane)	0.46	NE	0.46	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2,2-Dichloropropane	NE	NE	NE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Butanone (MEK)	560	NE	560	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2-Chlorotoluene	24	NE	24	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Hexanone	3.8	NE	3.8	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
4-Chlorotoluene	25	NE	25	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
4-Methyl-2-pentanone (MIBK)	630	NE	630	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Acetone	1400	NE	1400	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Benzene	0.46	5	0.46	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromobenzene	6.2	NE	6.2	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromochloromethane	8.3	NE	8.3	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	0.13	80	0.13	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Bromoform	3.3	80	3.3	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane	0.75	NE	0.76	2.0 U	2.0 U	2.0 U	2.0 U	1.5 U	2.0 U	2.0 U	2.0 U	2.0 U	1.5 U
Carbon disulfide	81	NE	81	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon tetrachloride	0.46	5	0.46	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	7.8	100	7.8	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	2100	NE	2100	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform	0.22	80	0.22	1.0 U	1.0 U	1.0 U	1.0 U	1.5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.5 U
Chloromethane	19	NE	19	**9.5**	**1.0 J**	1.0 U	1.0 U	1.0 U	1.0 U	**1.2 J**	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	3.6	70	2.5	1.0 U	1.0 U	1.0 U	1.0 U	1.5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.5 U
cis-1,3-Dichloropropene	0.47	NE	0.47	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dibromochloromethane	0.87	80	0.87	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dibromomethane	0.83	NE	0.83	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dichlorodifluoromethane	NE	NE	20	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Diethyl ether (Ethyl ether)	390	NE	390	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	1.5	700	1.5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Hexachlorobutadiene	0.14	NE	0.14	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U
Isopropylbenzene (Cumene)	45	NE	45	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U
m,p-Xylene	19	10000	19	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
Methyl tert-butyl ether (MTBE)	14	NE	14	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methylene chloride	11	5	11	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Naphthalene	0.17	NE	0.12	1.0 U	1.0 U	1.0 U	1.0 U	1.5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.5 U
n-Butylbenzene	100	NE	100	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
n-Propylbenzene	66	NE	66	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
o-Xylene	19	10000	19	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
p-Cymene (p-Isopropyltoluene)	NE	NE	NE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
sec-Butylbenzene	200	NE	200	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Styrene	120	100	120	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
tert-Amyl methyl ether	NE	NE	NE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
tert-Butyl alcohol	NE	NE	NE	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
tert-Butyl ethyl ether	NE	NE	NE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
tert-Butylbenzene	69	NE	69	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene (PCE)	4.1	5	4.1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U

Table 4-2
Summary of Cumulative Overburden Groundwater Analytical Results
Former Dow Salvage Yard
233 Odlin Road, Bangor, Maine

				Locations:	SY-OBMW1					SY-OBMW2				
				Field Sample ID:	SY-OBMW1-120519	SY-OBMW1-031020	SY-OBMW1-081220	SY-OBMW1-120120	SY-OBMW1-110823	SY-OBMW2-120519	SY-OBMW2-031020	SY-OBMW2-081320	SY-OBMW2-120120	SY-OBMW2-110823
				Matrix:	WG	WG	WG	WG	WG	WG	WG	WG	WG	WG
				Sample Begin Depth:	22	22	22	22	22	28.5	28.5	28.5	28.5	28.5
				Sample End Depth:	32	32	32	32	32	38.5	38.5	38.5	38.5	38.5
				Sample Date:	12/05/2019	03/10/2020	08/12/2020	12/01/2020	11/08/2023	12/05/2019	03/10/2020	08/13/2020	12/01/2020	11/08/2023
Analytes	**RSL[1]**	**MCL[2]**	**RAG[3]**											
Tetrahydrofuran	340	NE	340		1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
Toluene	110	1000	1200		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	36	100	6.8		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	0.47	NE	NE		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene (TCE)	0.28	5	0.28		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichlorofluoromethane	520	NE	520		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl chloride	0.019	2	0.019		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
SVOCs SW8270E (ug/L)														
1,2,4-Trichlorobenzene	0.4	70	0.4		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	30	600	30		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	NE	NE	30		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	0.48	75	0.48		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2,2'-Oxybis(1-chloropropane)	NE	NE	NE		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2,4,5-Trichlorophenol	120	NE	120		1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2,4,6-Trichlorophenol	1.2	NE	1.2		1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2,4-Dichlorophenol	4.6	NE	4.6		1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2,4-Dimethylphenol	36	NE	36		1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2,4-Dinitrophenol	3.9	NE	3.9		45 U	45 U	45 U	45 U	45 UJ	45 U	45 U	45 U	45 U	45 U
2,4-Dinitrotoluene	0.24	NE	0.24		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2,6-Dinitrotoluene	0.049	NE	0.049		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Chloronaphthalene	75	NE	75		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Chlorophenol	9.1	NE	9.1		1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Methylphenol (o-Cresol)	93	NE	93		1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Nitroaniline	19	NE	NE		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Nitrophenol	NE	NE	NE		1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
3,3'-Dichlorobenzidine	0.13	NE	0.13		25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U
3-Nitroaniline	NE	NE	NE		1.0 U	1.0 U	1.0 U	1.0 U	1.5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.5 U
4,6-Dinitro-2-methylphenol	0.15	NE	NE		10 U	10 U	10 U	10 U	10 UJ	10 U	10 U	10 U	10 U	10 U
4-Bromophenyl phenyl ether	NE	NE	NE		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
4-Chloro-3-methylphenol	140	NE	150		1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U
4-Chloroaniline	0.37	NE	NE		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
4-Chlorophenyl phenyl ether	NE	NE	NE		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
4-Methylphenol (p-Cresol)	190	NE	190		1.0 U	1.0 U	1.0 U	1.0 U	1.5 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.5 U
4-Nitroaniline	3.8	NE	38		1.0 U	1.0 U	1.0 U	1.0 U	3.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.0 U
4-Nitrophenol	NE	NE	NE		5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ
Aniline (Phenylamine, Aminobenzene)	13	NE	13		1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U
Azobenzene	0.12	NE	NE		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Benzidine	0.00011	NE	NE		25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U
Benzoic acid	7500	NE	7500		45 U	45 U	45 U	45 U	45 UJ	45 U	45 U	45 U	45 U	45 UJ
Benzyl alcohol	200	NE	200		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Benzyl butyl phthalate	16	NE	16		5.0 U	1.0 U	1.0 U	1.0 U	3.0 UJ	5.0 U	1.0 U	1.0 U	1.0 U	3.0 UJ
bis(2-Chloroethoxy) methane	5.9	NE	NE		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
bis(2-Chloroethyl) ether	0.014	NE	0.014		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
bis(2-Ethylhexyl) phthalate	5.6	6	5.6		5.0 U	5.0 U	1.0 U	1.0 U	3.0 U	5.0 U	5.0 U	1.0 U	5.0 U	3.0 U
Carbazole	NE	NE	1.5		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dibenzofuran	0.79	NE	0.79		0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U
Diethyl phthalate	1500	6	1500		1.0 UJ	1.0 U	1.0 U	1.0 U	**4.7 J**	1.0 UJ	1.0 U	1.0 U	1.0 U	**2.4 J**
Dimethyl phthalate	NE	NE	NE		R	1.0 U	1.0 UJ	1.0 U	1.0 UJ	R	1.0 U	1.0 UJ	1.0 U	1.0 UJ
Di-n-butyl phthalate	90	NE	NE		1.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U
di-n-Octyl phthalate	20	NE	200		1.0 U	1.0 U	1.0 U	1.0 U	3.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.0 U
Hexachlorobenzene	0.0098	1	0.0098		1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U
Hexachlorobutadiene	0.14	NE	0.14		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Hexachlorocyclopentadiene	0.041	50	NE		4.0 UJ	4.0 UJ	4.0 UJ	4.0 UJ	4.0 UJ	4.0 UJ	4.0 UJ	4.0 UJ	4.0 UJ	4.0 UJ
Hexachloroethane	0.33	NE	0.33		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Isophorone	78	NE	78		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Nitrobenzene	0.14	NE	NE		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
N-Nitrosodimethylamine	0.00011	NE	NE		1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 UJ
N-Nitrosodi-n-propylamine	0.011	NE	NE		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
N-Nitrosodiphenylamine	12	NE	12		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Pentachlorophenol	0.041	1	0.041		5.0 U	5.0 U	5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Phenol	580	NE	580		1.0 UJ	1.0 UJ	1.0 UJ	1.0 UJ	1.0 UJ	1.0 UJ	1.0 UJ	1.0 UJ	1.0 UJ	1.0 UJ
Pyridine	12	NE	NE		1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U

Table 4-2
Summary of Cumulative Overburden Groundwater Analytical Results
Former Dow Salvage Yard
233 Odlin Road, Bangor, Maine

			Locations:	SY-OBMW1					SY-OBMW2					
			Field Sample ID:	SY-OBMW1-120519	SY-OBMW1-031020	SY-OBMW1-081220	SY-OBMW1-120120	SY-OBMW1-110823	SY-OBMW2-120519	SY-OBMW2-031020	SY-OBMW2-081320	SY-OBMW2-120120	SY-OBMW2-110823
			Matrix:	WG	WG	WG	WG	WG	WG	WG	WG	WG	WG
			Sample Begin Depth:	22	22	22	22	22	28.5	28.5	28.5	28.5	28.5
			Sample End Depth:	32	32	32	32	32	38.5	38.5	38.5	38.5	38.5
			Sample Date:	12/05/2019	03/10/2020	08/12/2020	12/01/2020	11/08/2023	12/05/2019	03/10/2020	08/13/2020	12/01/2020	11/08/2023
Analytes	**RSL[1]**	**MCL[2]**	**RAG[3]**										
E300 (mg/L)													
Chloride	NE	NE	NE	**5.5**	**5.9**	**9.4**	**9.2**	**8.0**	**26**	**34**	**40**	**35**	**110**
Nitrate	NE	NE	NE	0.025 U	0.025 U	0.025 U	0.050 U	0.025 U	**0.054**	**0.15**	**0.19**	**0.29**	**0.19**
Sulfate	NE	NE	NE	**6.1**	**5.8**	**6.7**	**6.2**	**5.9**	**7.1**	**8.8**	**8.9**	**8.9**	**8.5**
RSK175 (ug/L)													
Ethane	NE	NE	NE	5.0 U	5.0 U	5.0 U	5.0 U	9.8 U	5.0 U	5.0 U	5.0 U	5.0 U	9.8 U
Ethene	NE	NE	NE	5.0 U	5.0 U	5.0 U	5.0 U	9.8 U	5.0 U	5.0 U	5.0 U	5.0 U	9.8 U
Methane	NE	NE	NE	10 U	10 U	**5.7 J**	10 U	**5.5 J**	10 U	10 U	**2.8 J**	10 U	10 U
A2320B (mg/L)													
Alkalinity, Total (as CaCO3)	NE	NE	NE	**180**	**180**	**180**	**180**	**190**	**130**	**140**	**150**	**140**	**150**
A3500B (mg/L)													
Iron, Ferrous	NE	NE	NE	0.050 U	0.050 UJ	0.050 UJ	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 UJ	0.050 U
A5310B (mg/L)													
Total Organic Carbon	NE	NE	NE	**1.4**	**1.2**	**1.5**	**1.2**	**1.5**	1.0 U	1.0 U	**0.25 J**	**0.37 J**	0.75 U

Table 4-2
Summary of Cumulative Overburden Groundwater Analytical Results
Former Dow Salvage Yard
233 Odlin Road, Bangor, Maine

Locations:				SY-OBMW3					SY-OBMW4					SY-OBMW4R
Field Sample ID:				SY-OBMW3-120419	SY-OBMW3-031220	SY-OBMW3-081320	SY-OBMW3-120220	SY-OBMW3-110823	SY-OBMW4-120419	SY-OBMW4-030920	SY-OBMW4-081020	SY-OBMW4-120220	SY-OBMW4R-110723
Matrix:				WG	WG	WG	WG	WG	WG	WG	WG	WG	WG
Sample Begin Depth:				22	22	22	22	22	16	16	16	16	0
Sample End Depth:				32	32	32	32	32	26	26	26	26	0
Sample Date:				12/04/2019	03/12/2020	08/13/2020	12/02/2020	11/08/2023	12/04/2019	03/09/2020	08/10/2020	12/02/2020	11/07/2023
Analytes	**RSL[1]**	**MCL[2]**	**RAG[3]**										
PAH SIM (ug/L)													
2-Methylnaphthalene	3.6	NE	3.6	0.093 U	0.097 U	0.094 U	0.095 U	0.094 U	0.093 U	0.095 U	0.094 U	0.095 U	0.094 U
Acenaphthene	53	NE	54	0.093 U	0.097 U	0.094 U	0.095 U	0.094 U	0.093 U	0.095 U	0.094 U	0.095 U	0.094 U
Acenaphthylene	NE	NE	52	0.093 U	0.097 U	0.094 U	0.095 U	0.094 U	0.093 U	0.095 U	0.094 U	0.095 U	0.094 U
Anthracene	180	NE	180	0.093 U	0.097 U	0.094 U	0.095 U	0.094 U	0.093 U	0.095 U	0.094 U	0.095 U	0.094 U
Benzo(a)anthracene	0.03	NE	0.03	0.093 U	**0.073 J**	0.094 U	0.095 U	0.094 U	0.093 U	0.095 U	0.094 U	0.095 U	0.094 U
Benzo(a)pyrene	0.025	0.2	0.025	0.093 U	0.097 U	0.19 U	0.095 U	0.094 U	0.093 U	0.095 U	0.094 U	0.095 U	0.094 U
Benzo(b)fluoranthene	0.25	NE	0.25	**0.16 J**	**0.099 J**	0.094 U	0.095 U	0.094 U	**0.15 J**	0.095 U	0.094 U	0.095 U	0.094 U
Benzo(g,h,i)perylene	NE	NE	60	0.093 U	**0.089 J**	0.094 UJ	0.095 U	0.094 U	0.093 U	0.095 U	0.094 U	0.095 U	0.094 U
Benzo(k)fluoranthene	2.5	NE	2.5	0.093 U	0.097 U	0.094 U	0.095 U	0.094 U	0.093 U	0.095 U	0.094 U	0.095 U	0.094 U
Chrysene	25	NE	25	0.093 U	0.097 U	0.19 U	0.095 U	0.094 U	0.093 U	0.095 U	0.094 U	0.095 U	0.094 U
Dibenz(a,h)anthracene	0.025	NE	0.025	0.093 U	0.097 U	0.094 UJ	0.095 U	0.094 U	0.093 U	0.095 U	0.094 U	0.095 U	0.094 U
Fluoranthene	80	NE	80	0.093 U	**0.16 J**	0.094 U	0.095 U	0.094 U	0.093 U	0.095 U	0.094 U	0.095 U	0.094 U
Fluorene	29	NE	29	0.093 U	0.097 U	0.094 U	0.095 U	0.094 U	0.093 U	0.095 U	0.094 U	0.095 U	0.094 U
Indeno(1,2,3-c,d)pyrene	0.25	NE	0.25	0.093 U	0.42 U	0.094 UJ	0.095 U	0.094 U	0.093 U	0.095 U	0.094 U	0.095 U	0.094 U
Naphthalene	0.17	NE	0.12	0.093 U	0.097 U	0.094 U	0.095 U	0.094 U	0.093 U	0.095 U	0.094 U	0.095 U	0.094 U
Phenanthrene	NE	NE	18	0.093 U	0.097 U	0.094 U	0.095 U	0.094 U	0.093 U	0.095 U	0.094 U	0.095 U	0.094 U
Pyrene	12	NE	12	0.093 U	0.097 U	0.094 U	0.095 U	0.094 U	0.093 U	0.095 U	0.094 U	0.095 U	0.094 U
MassDEP EPH (ug/L)													
2-Methylnaphthalene	3.6	NE	3.6	0.50 U	0.50 U	0.50 U	0.50 U	0.70 U	0.50 U	0.50 U	0.50 U	0.50 U	0.70 UJ
Acenaphthene	53	NE	54	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Acenaphthylene	NE	NE	52	0.50 U	0.50 U	0.50 UJ	0.50 U	0.50 U	0.50 U	0.50 U	0.50 UJ	0.50 U	0.50 U
Anthracene	180	NE	180	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Benzo(a)anthracene	0.03	NE	0.03	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Benzo(a)pyrene	0.025	0.2	0.025	0.20 U	0.20 U	0.20 U	0.20 U	0.70 U	0.20 U	0.20 U	0.20 U	0.20 U	0.70 U
Benzo(b)fluoranthene	0.25	NE	0.25	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Benzo(g,h,i)perylene	NE	NE	60	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Benzo(k)fluoranthene	2.5	NE	2.5	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Chrysene	25	NE	25	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Dibenz(a,h)anthracene	0.025	NE	0.025	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 UJ
Fluoranthene	80	NE	80	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Fluorene	29	NE	29	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Indeno(1,2,3-c,d)pyrene	0.25	NE	0.25	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 UJ
Naphthalene	0.17	NE	0.12	0.50 U	0.50 U	0.50 UJ	0.50 UJ	0.70 U	0.50 U	0.50 U	0.50 UJ	0.50 UJ	0.70 UJ
Phenanthrene	NE	NE	18	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Pyrene	12	NE	12	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
C11-C22 Aromatic	NE	NE	60	85 U	85 U	100 U	85 U	100 UJ	85 U	85 U	100 U	85 U	**71 J**
C19-C36 Aliphatic	NE	NE	4000	88 U	88 U	88 U	88 U	97 UJ	88 U	88 U	88 U	88 U	97 U
C9-C18 Aliphatic	NE	NE	35	66 U	66 UJ	66 UJ	66 U	95 UJ	66 U	66 UJ	66 UJ	66 U	95 UJ
MassDEP VPH (ug/L)													
Benzene	0.46	5	0.46	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	1.5	700	1.5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
m,p-Xylene	19	10000	19	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Methyl tert-butyl ether (MTBE)	14	NE	1300	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Naphthalene	0.17	NE	0.12	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U
o-Xylene	19	10000	19	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	110	1000	110	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
C5-C8 Aliphatic	NE	NE	18	100 U	100 U	100 U	100 U	50 U	100 U	100 U	100 U	100 U	50 U
C9-C10 Aromatic	NE	NE	7.1	**4.0 J**	15 U	100 U	100 U	50 U	**4.0 J**	15 U	100 U	100 U	50 U
C9-C12 Aliphatic	NE	NE	35	100 U	45 U	45 U	45 U	50 U	45 U	45 U	45 U	45 U	50 U

Table 4-2
Summary of Cumulative Overburden Groundwater Analytical Results
Former Dow Salvage Yard
233 Odlin Road, Bangor, Maine

Locations:				SY-OBMW3					SY-OBMW4					SY-OBMW4R
Field Sample ID:				SY-OBMW3-120419	SY-OBMW3-031220	SY-OBMW3-081320	SY-OBMW3-120220	SY-OBMW3-110823	SY-OBMW4-120419	SY-OBMW4-030920	SY-OBMW4-081020	SY-OBMW4-120220	SY-OBMW4R-110723
Matrix:				WG	WG	WG	WG	WG	WG	WG	WG	WG	WG
Sample Begin Depth:				22	22	22	22	22	16	16	16	16	0
Sample End Depth:				32	32	32	32	32	26	26	26	26	0
Sample Date:				12/04/2019	03/12/2020	08/13/2020	12/02/2020	11/08/2023	12/04/2019	03/09/2020	08/10/2020	12/02/2020	11/07/2023
Analytes	**RSL[1]**	**MCL[2]**	**RAG[3]**										
Total Metals SW6020A/7470A (mg/L)													
Aluminum	2	NE	2	**0.25**	**0.16**	**0.13**	**0.016 J**	**0.019 J**	**0.25**	0.050 U	**0.085**	**0.0052 J**	**0.10**
Antimony	0.00078	0.006	0.00078	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U
Arsenic	0.000052	0.01	0.000052	**0.0010 J**	**0.00089 J**	0.0050 U	**0.00079 J**	**0.0012 J**	**0.0035 J**	**0.0038 J**	**0.0060**	**0.0035 J**	**0.00070 J**
Barium	380	2	0.38	**0.0044 J**	0.010 U	0.010 U	**0.0025 J**	**0.0025 J**	**0.18**	**0.18**	**0.15**	**0.17**	**0.039**
Beryllium	0.0025	0.004	0.0025	0.00010 U	0.00010 U	0.0010 U	0.00010 U	0.00050 U	0.0010 U	**0.00014 J**	0.0010 U	0.00010 U	0.00050 U
Cadmium	0.00092	0.005	0.0018	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.0010 U	**0.00023 J**	0.00050 U	0.00050 U
Chromium	0.000035[5]/2.2	0.1	0.0000035[5]/2.3	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.025 U	0.0010 U	0.010 U	**0.0015 J**	**0.00058 J**	0.025 U
Cobalt	0.0006	NE	0.0006	**0.00020 J**	0.010 U	0.010 U	**0.000039 J**	0.00050 U	**0.00083 J**	0.010 U	0.010 U	**0.00057 J**	**0.0015 J**
Copper	0.08	1.3	0.08	0.0010 U	0.010 U	0.010 U	**0.00056 J**	0.0075 U	**0.00030 J**	0.010 U	**0.0012 J**	**0.0019 J**	**0.0068 J**
Iron	1.4	NE	1.4	**0.27**	**0.21**	**0.14**	**0.025 J**	**0.035 J**	**0.90**	**0.56**	**0.63**	**0.37**	**0.19**
Lead	0.015	0.015	NE	**0.00013 J**	0.0050 U	0.0050 U	0.00050 U	0.00050 U	**0.00036 J**	0.0050 U	**0.00036 J**	0.00050 U	**0.00017 J**
Magnesium	NE	NE	NE	**12**	**10**	**11**	**11**	**13**	**140**	**130**	**130**	**140**	**110**
Manganese	0.043	NE	0.043	**0.24**	**0.094**	**0.088**	**0.056**	**0.085**	**3.4**	**2.7**	**3.1**	**2.8**	**1.4**
Mercury	0.000063	0.002	0.000063	0.00010 U	0.00010 U	**0.000050 J**	**0.000040 J**	0.00015 U	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00015 U
Nickel	0.039	NE	0.039	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.025 U	0.0010 U	0.010 U	**0.0014 J**	0.0010 U	0.025 U
Potassium	NE	NE	NE	**1.3**	**1.2**	**1.1**	**1.2**	**1.4**	**5.6**	**5.2**	**5.4**	**5.3**	**4.8**
Selenium	0.01	0.05	0.01	0.0010 U	**0.0012 J**	0.0010 U	0.010 U	0.0050 U	**0.0031 J**	**0.0030 J**	**0.0030 J**	0.010 U	0.0050 U
Silver	0.0094	NE	0.0094	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	**0.000097 J**	**0.00014 J**	0.00050 U	0.00050 U
Sodium	NE	NE	NE	**8.3**	**7.5**	**7.5**	**8.3**	**8.3**	**740**	**820**	**710**	**790**	**410**
Thallium	0.00002	0.002	0.00002	0.0010 U	0.00050 U	0.00050 U	0.00050 U	0.00080 U	0.0010 U	0.0010 U	0.0010 U	0.00050 U	0.00080 U
Vanadium	0.0086	NE	0.0086	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0050 U	0.0010 U	0.0010 U	0.010 U	0.0010 U	0.0050 U
Zinc	0.6	NE	0.6	0.0040 U	0.0040 U	0.0040 U	0.0040 U	0.0040 U	0.0040 U	0.010 U	0.040 U	0.0040 U	0.0040 U
Dissolved Metals (mg/L)													
Aluminum	2	NE	2	**0.0094 J**	0.050 U	**1.8**	**0.0037 J**	0.027 U	**0.013 J**	0.050 U	0.010 U	0.011 U	0.027 U
Antimony	0.00078	0.006	0.00078	0.00054 U	0.00050 U	**0.00056 J**	0.00054 U	0.00054 U	0.00054 U	0.00050 U	**0.00044 J**	0.00054 U	**0.00018 J**
Arsenic	0.000052	0.01	0.000052	**0.00093 J**	**0.00069 J**	**0.0019 J**	**0.00056 J**	**0.0011 J**	**0.0033 J**	**0.0032 J**	**0.0037 J**	**0.0030 J**	0.0011 U
Barium	380	2	0.38	**0.0028 J**	0.010 U	**0.021**	**0.0021 J**	**0.0021 J**	**0.17**	**0.17**	**0.15**	**0.15**	**0.039**
Beryllium	0.0025	0.004	0.0025	0.00011 U	0.00010 U	**0.00050 J**	0.00011 U	0.00054 U	0.00011 U	**0.00011 J**	0.0010 U	0.00011 U	0.00054 U
Cadmium	0.00092	0.005	0.0018	0.00054 U	0.00050 U	**0.00052 J**	0.00054 U	0.00054 U	0.00054 U	0.0010 U	**0.00032 J**	0.00054 U	0.00054 U
Chromium	0.000035[5]/2.2	0.1	0.0000035[5]/2.3	0.0011 U	0.0010 U	**0.0019 J**	0.0011 U	0.027 U	0.0011 U	0.010 U	0.0010 U	0.0011 U	0.027 U
Cobalt	0.0006	NE	0.0006	**0.000074 J**	0.010 U	**0.0018 J**	**0.000039 J**	0.00054 U	**0.00063 J**	0.010 U	0.010 U	**0.00053 J**	**0.0013 J**
Copper	0.08	1.3	0.08	**0.0014 J**	0.010 U	**0.0035 J**	0.011 U	0.0080 U	**0.0040 J**	0.010 U	0.0010 U	0.011 U	0.0080 U
Iron	1.4	NE	1.4	**0.0052 J**	0.050 U	**0.70**	**0.0043 J**	0.032 U	**0.53**	**0.44**	**0.39**	**0.34**	0.032 U
Lead	0.015	0.015	NE	0.00054 U	**0.00045 J**	**0.0029 J**	0.00054 U	0.00054 U	0.00054 U	**0.00045 J**	**0.00033 J**	0.00054 U	0.00054 U
Magnesium	NE	NE	NE	**11**	**9.6 J**	**13**	**10**	**11**	**140**	**120 J**	**130**	**110**	**120**
Manganese	0.043	NE	0.043	**0.20**	**0.086 J**	**0.53**	**0.051**	**0.048**	**2.7**	**2.4 J**	**3.1**	**2.7**	**1.3**
Mercury	0.000063	0.002	0.000063	0.00010 U	0.00010 U	0.00010 U	**0.000040 J**	0.00015 U	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00015 U
Nickel	0.039	NE	0.039	0.0011 U	0.0010 U	**0.0018 J**	0.0011 U	0.027 U	0.0011 U	0.010 U	0.0010 U	0.0011 U	0.027 U
Potassium	NE	NE	NE	**1.1**	**1.1**	**1.5**	**1.1**	**1.2**	**5.6**	**5.1**	**5.7**	**4.8**	**4.6**
Selenium	0.01	0.05	0.01	0.0011 U	**0.00093 J**	0.0011 U	0.011 U	0.0054 U	0.010 U	**0.0019 J**	**0.0012 J**	0.011 U	0.0054 U
Silver	0.0094	NE	0.0094	0.00054 U	0.00050 U	**0.00026 J**	0.00054 U	0.00054 U	0.00054 U	**0.000083 J**	**0.00015 J**	0.00054 U	0.00054 U
Sodium	NE	NE	NE	**8.2**	**8.1**	**7.3**	**8.2**	**7.6**	**780**	**760**	**710**	**800**	**400**
Thallium	0.00002	0.002	0.00002	0.0010 U	0.00050 U	**0.00029 J**	0.00054 U	0.00086 U	0.0010 U	**0.00035 J**	0.0010 U	0.00054 U	0.00086 U
Vanadium	0.0086	NE	0.0086	0.0011 U	0.0010 U	**0.0022 J**	0.0011 U	0.0054 U	0.0011 U	0.0010 U	0.0010 U	0.0011 U	0.0054 U
Zinc	0.6	NE	0.6	0.0043 U	0.0040 U	**0.0044 J**	0.011 U	0.0043 U	0.0043 U	**0.0035 J**	0.0040 U	0.0043 U	0.0043 U
Hexavalent Chromium SW7196A (mg/L)													
Chromium, Hexavalent	0.000035	NE	0.000035	0.013 U	0.013 U	0.025 U	0.025 U	0.012 U	0.013 U	0.025 U	**0.00096 J**	0.025 U	0.012 U
PCBs SW8082A (ug/L)													
PCB-1016 (Aroclor 1016)	0.14	0.5	0.0079	0.10 U	0.10 U	0.10 U	0.10 U	0.12 U	0.10 U	0.10 U	0.10 U	0.10 U	R
PCB-1221 (Aroclor 1221)	0.0047	0.5	0.0079	0.10 U	0.10 U	0.10 U	0.10 U	0.12 U	0.10 U	0.10 U	0.10 U	0.10 U	R
PCB-1232 (Aroclor 1232)	0.0047	0.5	0.0079	0.10 U	0.10 U	0.10 U	0.10 U	0.12 U	0.10 U	0.10 U	0.10 U	0.10 U	R
PCB-1242 (Aroclor 1242)	0.0078	0.5	0.0079	0.10 U	0.10 U	0.10 U	0.10 U	0.12 U	0.10 U	0.10 U	0.10 U	0.10 U	R
PCB-1248 (Aroclor 1248)	0.0078	0.5	0.0079	0.10 U	0.10 U	0.10 U	0.10 U	0.12 U	0.10 U	0.10 U	0.10 U	0.10 U	R
PCB-1254 (Aroclor 1254)	0.0078	0.5	0.0079	0.10 U	0.10 U	0.10 U	0.10 U	0.12 U	0.10 U	0.10 U	0.10 U	0.10 U	R
PCB-1260 (Aroclor 1260)	0.0078	0.5	0.0079	0.10 U	0.10 U	0.10 U	0.10 U	0.12 U	0.10 U	0.10 U	0.10 U	0.10 U	R

Table 4-2
Summary of Cumulative Overburden Groundwater Analytical Results
Former Dow Salvage Yard
233 Odlin Road, Bangor, Maine

Locations:				SY-OBMW3					SY-OBMW4				SY-OBMW4R
Field Sample ID:				SY-OBMW3-120419	SY-OBMW3-031220	SY-OBMW3-081320	SY-OBMW3-120220	SY-OBMW3-110823	SY-OBMW4-120419	SY-OBMW4-030920	SY-OBMW4-081020	SY-OBMW4-120220	SY-OBMW4R-110723
Matrix:				WG	WG	WG	WG	WG	WG	WG	WG	WG	WG
Sample Begin Depth:				22	22	22	22	22	16	16	16	16	0
Sample End Depth:				32	32	32	32	32	26	26	26	26	0
Sample Date:				12/04/2019	03/12/2020	08/13/2020	12/02/2020	11/08/2023	12/04/2019	03/09/2020	08/10/2020	12/02/2020	11/07/2023
Analytes	**RSL[1]**	**MCL[2]**	**RAG[3]**										
CVOCs SW8260D SIM (ug/L)													
1,1-Dichloroethene	28	7	29	NS	NS	NS	NS	0.025 U	NS	NS	NS	NS	0.025 U
cis-1,2-Dichloroethene	3.6	70	2.5	NS	NS	NS	NS	0.025 U	NS	NS	NS	NS	0.025 U
Tetrachloroethene (PCE)	4.1	5	4.1	NS	NS	NS	NS	0.025 U	NS	NS	NS	NS	0.025 U
trans-1,2-Dichloroethene	36	100	6.8	NS	NS	NS	NS	0.025 U	NS	NS	NS	NS	0.025 U
Trichloroethene (TCE)	0.28	5	0.28	NS	NS	NS	NS	0.025 U	NS	NS	NS	NS	0.025 U
Vinyl chloride	0.019	2	0.019	NS	NS	NS	NS	0.050 U	NS	NS	NS	NS	0.050 U
VOCs SW8260D (ug/L)													
1,1,1,2-Tetrachloroethane	0.57	NE	0.57	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,1-Trichloroethane	800	200	800	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	0.076	NE	0.076	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	0.041	5	0.042	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	2.8	NE	2.8	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	28	7	29	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U
1,1-Dichloropropene	NE	NE	0.47	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,3-Trichlorobenzene	0.7	NE	0.7	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,3-Trichloropropane	0.00075	NE	0.00075	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,4-Trichlorobenzene	0.4	70	0.4	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,4-Trimethylbenzene	5.6	NE	5.6	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromo-3-chloropropane	0.00033	0.2	0.00033	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
1,2-Dibromoethane (EDB)	0.0075	0.05	0.0075	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	30	600	30	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	0.17	5	0.17	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	0.82	5	0.83	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3,5-Trimethylbenzene	6	NE	6	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	NE	NE	30	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichloropropane	37	NE	37	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	0.48	75	0.48	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dioxane (p-Dioxane)	0.46	NE	0.46	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2,2-Dichloropropane	NE	NE	NE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Butanone (MEK)	560	NE	560	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2-Chlorotoluene	24	NE	24	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Hexanone	3.8	NE	3.8	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
4-Chlorotoluene	25	NE	25	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
4-Methyl-2-pentanone (MIBK)	630	NE	630	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Acetone	1400	NE	1400	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Benzene	0.46	5	0.46	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromobenzene	6.2	NE	6.2	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromochloromethane	8.3	NE	8.3	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	0.13	80	0.13	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Bromoform	3.3	80	3.3	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane	0.75	NE	0.76	2.0 U	2.0 U	2.0 U	2.0 U	1.5 U	2.0 U	2.0 U	2.0 U	2.0 U	1.5 U
Carbon disulfide	81	NE	81	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon tetrachloride	0.46	5	0.46	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	7.8	100	7.8	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	2100	NE	2100	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform	0.22	80	0.22	1.0 U	1.0 U	1.0 U	1.0 U	1.5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.5 U
Chloromethane	19	NE	19	**17**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**4.1**	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	3.6	70	2.5	1.0 U	1.0 U	1.0 U	1.0 U	1.5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.5 U
cis-1,3-Dichloropropene	0.47	NE	0.47	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dibromochloromethane	0.87	80	0.87	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dibromomethane	0.83	NE	0.83	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dichlorodifluoromethane	NE	NE	20	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Diethyl ether (Ethyl ether)	390	NE	390	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	1.5	700	1.5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Hexachlorobutadiene	0.14	NE	0.14	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U
Isopropylbenzene (Cumene)	45	NE	45	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U
m,p-Xylene	19	10000	19	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
Methyl tert-butyl ether (MTBE)	14	NE	14	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methylene chloride	11	5	11	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Naphthalene	0.17	NE	0.12	1.0 U	1.0 U	1.0 U	1.0 U	1.5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.5 U
n-Butylbenzene	100	NE	100	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
n-Propylbenzene	66	NE	66	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
o-Xylene	19	10000	19	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
p-Cymene (p-Isopropyltoluene)	NE	NE	NE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
sec-Butylbenzene	200	NE	200	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Styrene	120	100	120	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
tert-Amyl methyl ether	NE	NE	NE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
tert-Butyl alcohol	NE	NE	NE	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
tert-Butyl ethyl ether	NE	NE	NE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
tert-Butylbenzene	69	NE	69	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene (PCE)	4.1	5	4.1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U

Table 4-2
Summary of Cumulative Overburden Groundwater Analytical Results
Former Dow Salvage Yard
233 Odlin Road, Bangor, Maine

Locations:				SY-OBMW3					SY-OBMW4				SY-OBMW4R
Field Sample ID:				SY-OBMW3-120419	SY-OBMW3-031220	SY-OBMW3-081320	SY-OBMW3-120220	SY-OBMW3-110823	SY-OBMW4-120419	SY-OBMW4-030920	SY-OBMW4-081020	SY-OBMW4-120220	SY-OBMW4R-110723
Matrix:				WG	WG	WG	WG	WG	WG	WG	WG	WG	WG
Sample Begin Depth:				22	22	22	22	22	16	16	16	16	0
Sample End Depth:				32	32	32	32	32	26	26	26	26	0
Sample Date:				12/04/2019	03/12/2020	08/13/2020	12/02/2020	11/08/2023	12/04/2019	03/09/2020	08/10/2020	12/02/2020	11/07/2023
Analytes	**RSL[1]**	**MCL[2]**	**RAG[3]**										
Tetrahydrofuran	340	NE	340	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
Toluene	110	1000	1200	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	36	100	6.8	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	0.47	NE	NE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene (TCE)	0.28	5	0.28	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichlorofluoromethane	520	NE	520	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl chloride	0.019	2	0.019	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
SVOCs SW8270E (ug/L)													
1,2,4-Trichlorobenzene	0.4	70	0.4	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	30	600	30	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ
1,3-Dichlorobenzene	NE	NE	30	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ
1,4-Dichlorobenzene	0.48	75	0.48	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ
2,2'-Oxybis(1-chloropropane)	NE	NE	NE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2,4,5-Trichlorophenol	120	NE	120	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2,4,6-Trichlorophenol	1.2	NE	1.2	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2,4-Dichlorophenol	4.6	NE	4.6	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2,4-Dimethylphenol	36	NE	36	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2,4-Dinitrophenol	3.9	NE	3.9	45 U	45 U	45 U	45 U	45 U	45 U	45 U	45 U	45 U	45 U
2,4-Dinitrotoluene	0.24	NE	0.24	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2,6-Dinitrotoluene	0.049	NE	0.049	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Chloronaphthalene	75	NE	75	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Chlorophenol	9.1	NE	9.1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Methylphenol (o-Cresol)	93	NE	93	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Nitroaniline	19	NE	NE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Nitrophenol	NE	NE	NE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
3,3'-Dichlorobenzidine	0.13	NE	0.13	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U
3-Nitroaniline	NE	NE	NE	1.0 U	1.0 U	1.0 U	1.0 U	1.5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.5 U
4,6-Dinitro-2-methylphenol	0.15	NE	NE	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
4-Bromophenyl phenyl ether	NE	NE	NE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
4-Chloro-3-methylphenol	140	NE	150	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 UJ
4-Chloroaniline	0.37	NE	NE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
4-Chlorophenyl phenyl ether	NE	NE	NE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
4-Methylphenol (p-Cresol)	190	NE	190	1.0 U	1.0 U	1.0 U	1.0 U	1.5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.5 U
4-Nitroaniline	3.8	NE	38	1.0 U	1.0 U	1.0 U	1.0 U	3.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.0 U
4-Nitrophenol	NE	NE	NE	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ
Aniline (Phenylamine, Aminobenzene)	13	NE	13	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U
Azobenzene	0.12	NE	NE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Benzidine	0.00011	NE	NE	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U
Benzoic acid	7500	NE	7500	45 U	45 U	45 U	45 U	45 UJ	45 U	45 U	45 U	45 U	45 UJ
Benzyl alcohol	200	NE	200	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Benzyl butyl phthalate	16	NE	16	5.0 U	1.0 U	1.0 U	1.0 U	3.0 UJ	5.0 U	**0.28 J**	1.0 U	1.0 U	3.0 U
bis(2-Chloroethoxy) methane	5.9	NE	NE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
bis(2-Chloroethyl) ether	0.014	NE	0.014	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
bis(2-Ethylhexyl) phthalate	5.6	6	5.6	5.0 U	5.0 U	1.0 U	1.0 U	**160**	**5.5**	5.0 U	1.0 U	1.0 U	3.0 U
Carbazole	NE	NE	1.5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dibenzofuran	0.79	NE	0.79	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U
Diethyl phthalate	1500	6	1500	1.0 UJ	1.0 U	1.0 U	1.0 U	**2.8 J**	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 UJ
Dimethyl phthalate	NE	NE	NE	R	1.0 U	1.0 UJ	1.0 U	1.0 UJ	R	1.0 U	1.0 UJ	1.0 U	1.0 UJ
Di-n-butyl phthalate	90	NE	NE	1.0 U	1.0 U	5.0 U	1.0 U	1.0 U	5.0 U	**0.23 J**	5.0 U	1.0 U	1.0 U
di-n-Octyl phthalate	20	NE	200	1.0 U	1.0 U	1.0 U	1.0 U	3.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.0 U
Hexachlorobenzene	0.0098	1	0.0098	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U
Hexachlorobutadiene	0.14	NE	0.14	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ
Hexachlorocyclopentadiene	0.041	50	NE	4.0 UJ	4.0 UJ	4.0 UJ	4.0 UJ	4.0 UJ	4.0 UJ	4.0 UJ	4.0 UJ	4.0 UJ	4.0 UJ
Hexachloroethane	0.33	NE	0.33	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ
Isophorone	78	NE	78	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Nitrobenzene	0.14	NE	NE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
N-Nitrosodimethylamine	0.00011	NE	NE	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 UJ	1.0 U	1.0 UJ	1.0 U	1.0 UJ
N-Nitrosodi-n-propylamine	0.011	NE	NE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
N-Nitrosodiphenylamine	12	NE	12	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Pentachlorophenol	0.041	1	0.041	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Phenol	580	NE	580	1.0 UJ	1.0 UJ	1.0 UJ	1.0 UJ	1.0 UJ	1.0 UJ	1.0 UJ	1.0 UJ	1.0 UJ	1.0 UJ
Pyridine	12	NE	NE	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U

Table 4-2
Summary of Cumulative Overburden Groundwater Analytical Results
Former Dow Salvage Yard
233 Odlin Road, Bangor, Maine

			Locations:	SY-OBMW3					SY-OBMW4					SY-OBMW4R
			Field Sample ID:	SY-OBMW3-120419	SY-OBMW3-031220	SY-OBMW3-081320	SY-OBMW3-120220	SY-OBMW3-110823	SY-OBMW4-120419	SY-OBMW4-030920	SY-OBMW4-081020	SY-OBMW4-120220	SY-OBMW4R-110723
			Matrix:	WG	WG	WG	WG	WG	WG	WG	WG	WG	WG
			Sample Begin Depth:	22	22	22	22	22	16	16	16	16	0
			Sample End Depth:	32	32	32	32	32	26	26	26	26	0
			Sample Date:	12/04/2019	03/12/2020	08/13/2020	12/02/2020	11/08/2023	12/04/2019	03/09/2020	08/10/2020	12/02/2020	11/07/2023
Analytes	**RSL[1]**	**MCL[2]**	**RAG[3]**										
E300 (mg/L)													
Chloride	NE	NE	NE	**7.0**	**8.7**	**9.5**	**11**	**21**	**2100 J**	**2000**	**2000**	**1900**	**1200**
Nitrate	NE	NE	NE	0.050 U	**0.034 J**	**0.052**	**0.072 J**	**0.022 J**	0.025 U	**0.068**	0.025 U	**0.20 J**	**0.056**
Sulfate	NE	NE	NE	**11**	**12**	**12**	**12**	**11**	**290**	**190**	**170**	**160**	**150**
RSK175 (ug/L)													
Ethane	NE	NE	NE	5.0 U	5.0 U	5.0 U	5.0 U	9.8 U	5.0 U	5.0 U	5.0 U	5.0 U	9.8 U
Ethene	NE	NE	NE	5.0 U	5.0 U	5.0 U	5.0 U	9.8 U	5.0 U	5.0 U	5.0 U	5.0 U	9.8 U
Methane	NE	NE	NE	10 U	10 U	**2.6 J**	10 U	10 U	**14**	**12**	**9.7 J**	**11**	10 U
A2320B (mg/L)													
Alkalinity, Total (as CaCO3)	NE	NE	NE	**150**	**150**	**130**	**150**	**160**	**190**	**180**	**180**	**180**	**210**
A3500B (mg/L)													
Iron, Ferrous	NE	NE	NE	**0.063 J**	0.050 U	0.050 U	0.050 UJ	0.050 U	**0.76 J**	**0.40 J**	**0.44**	**0.48 J**	**0.076 J**
A5310B (mg/L)													
Total Organic Carbon	NE	NE	NE	1.0 U	1.0 U	**0.23 J**	**0.15 J**	**0.88 J**	**1.3**	**1.1**	**0.96 J**	**0.87 J**	**1.5**

Table 4-2
Summary of Cumulative Overburden Groundwater Analytical Results
Former Dow Salvage Yard
233 Odlin Road, Bangor, Maine

Locations:				SY-OBMW5					SY-OBMW6				
Field Sample ID:				SY-OBMW5-120419	SY-OBMW5-031220	SY-OBMW5-081320	SY-OBMW5-120220	SY-OBMW5-110723	SY-OBMW6-031120	SY-OBMW6-081320	SY-OBMW6-120220	SY-OBMW6-110723
Matrix:				WG	WG	WG	WG	WG	WG	WG	WG	WG
Sample Begin Depth:				27	27	27	27	27	22	22	22	22
Sample End Depth:				37	37	37	37	37	32	32	32	32
Sample Date:				12/04/2019	03/12/2020	08/13/2020	12/02/2020	11/07/2023	03/11/2020	08/13/2020	12/02/2020	11/07/2023
Analytes	**RSL[1]**	**MCL[2]**	**RAG[3]**									
PAH SIM (ug/L)												
2-Methylnaphthalene	3.6	NE	3.6	0.093 U	0.095 U	0.095 U	0.094 U	0.093 U	0.093 U	0.094 U	0.095 U	0.093 U
Acenaphthene	53	NE	54	0.093 U	0.095 U	0.095 U	0.094 U	0.093 U	0.093 U	0.094 U	0.095 U	0.093 U
Acenaphthylene	NE	NE	52	0.093 U	0.095 U	0.095 U	0.094 U	0.093 U	0.093 U	0.094 U	0.095 U	0.093 U
Anthracene	180	NE	180	0.093 U	0.095 U	0.095 U	0.094 U	0.093 U	0.093 U	0.094 U	0.095 U	0.093 U
Benzo(a)anthracene	0.03	NE	0.03	0.093 U	0.095 U	0.095 U	0.094 U	0.093 U	**0.049 J**	0.094 U	0.095 U	0.093 U
Benzo(a)pyrene	0.025	0.2	0.025	0.093 U	0.095 U	0.19 U	0.094 U	0.093 U	**0.11 J**	0.19 U	0.095 U	0.093 U
Benzo(b)fluoranthene	0.25	NE	0.25	**0.16 J**	0.095 U	0.095 U	0.094 U	0.093 U	**0.10 J**	0.094 U	0.095 U	0.093 U
Benzo(g,h,i)perylene	NE	NE	60	0.093 U	0.095 U	**0.073 J**	0.094 U	0.093 U	0.19 U	**0.079 J**	0.095 U	0.093 U
Benzo(k)fluoranthene	2.5	NE	2.5	0.093 U	0.095 U	0.095 U	0.094 U	0.093 U	**0.12 J**	0.094 U	0.095 U	0.093 U
Chrysene	25	NE	25	0.093 U	0.095 U	0.19 U	0.094 U	0.093 U	0.093 U	0.19 U	0.095 U	0.093 U
Dibenz(a,h)anthracene	0.025	NE	0.025	0.093 U	0.095 U	0.095 UJ	0.094 U	0.093 U	0.093 U	0.094 UJ	0.095 U	0.093 U
Fluoranthene	80	NE	80	0.093 U	0.095 U	0.095 U	0.094 U	0.093 U	0.093 U	0.094 U	0.095 U	0.093 U
Fluorene	29	NE	29	0.093 U	0.095 U	0.095 U	0.094 U	0.093 U	0.093 U	0.094 U	0.095 U	0.093 U
Indeno(1,2,3-c,d)pyrene	0.25	NE	0.25	0.093 U	0.39 U	**0.064 J**	0.094 U	0.093 U	0.19 U	**0.066 J**	0.095 U	0.093 U
Naphthalene	0.17	NE	0.12	0.093 U	0.095 U	0.095 U	0.094 U	0.093 U	0.093 U	0.094 U	0.095 U	0.093 U
Phenanthrene	NE	NE	18	0.093 U	0.095 U	0.095 U	0.094 U	0.093 U	0.093 U	0.094 U	0.095 U	0.093 U
Pyrene	12	NE	12	0.093 U	0.095 U	0.095 U	0.094 U	0.093 U	0.093 U	0.094 U	0.095 U	0.093 U
MassDEP EPH (ug/L)												
2-Methylnaphthalene	3.6	NE	3.6	0.50 U	0.50 U	0.50 U	0.50 U	0.70 UJ	0.50 U	0.50 U	0.50 U	0.70 UJ
Acenaphthene	53	NE	54	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Acenaphthylene	NE	NE	52	0.50 U	0.50 U	0.50 UJ	0.50 U	0.50 U	0.50 U	0.50 UJ	0.50 U	0.50 U
Anthracene	180	NE	180	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Benzo(a)anthracene	0.03	NE	0.03	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Benzo(a)pyrene	0.025	0.2	0.025	0.20 U	0.20 U	0.20 U	0.20 U	0.70 U	0.20 U	0.20 U	0.20 U	0.70 U
Benzo(b)fluoranthene	0.25	NE	0.25	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Benzo(g,h,i)perylene	NE	NE	60	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Benzo(k)fluoranthene	2.5	NE	2.5	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Chrysene	25	NE	25	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Dibenz(a,h)anthracene	0.025	NE	0.025	0.50 U	0.50 U	0.50 U	0.50 U	0.50 UJ	0.50 U	0.50 U	0.50 U	0.50 UJ
Fluoranthene	80	NE	80	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Fluorene	29	NE	29	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Indeno(1,2,3-c,d)pyrene	0.25	NE	0.25	0.50 U	0.50 U	0.50 U	0.50 U	0.50 UJ	0.50 U	0.50 U	0.50 U	0.50 UJ
Naphthalene	0.17	NE	0.12	0.50 U	0.50 U	0.50 UJ	0.50 UJ	0.70 UJ	0.50 U	0.50 UJ	0.50 UJ	0.70 UJ
Phenanthrene	NE	NE	18	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Pyrene	12	NE	12	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
C11-C22 Aromatic	NE	NE	60	85 U	85 U	100 U	85 U	**63 J**	85 U	110 UJ	85 U	**79 J**
C19-C36 Aliphatic	NE	NE	4000	88 U	88 U	88 U	88 U	97 U	88 U	88 UJ	88 U	97 U
C9-C18 Aliphatic	NE	NE	35	66 U	66 UJ	66 UJ	66 U	95 UJ	66 UJ	66 UJ	66 U	95 UJ
MassDEP VPH (ug/L)												
Benzene	0.46	5	0.46	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	1.5	700	1.5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U
m,p-Xylene	19	10000	19	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Methyl tert-butyl ether (MTBE)	14	NE	1300	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Naphthalene	0.17	NE	0.12	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U	4.0 U
o-Xylene	19	10000	19	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	110	1000	110	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
C5-C8 Aliphatic	NE	NE	18	100 U	100 U	100 U	100 U	50 U	100 U	100 U	100 U	50 U
C9-C10 Aromatic	NE	NE	7.1	**3.8** J	15 U	100 U	100 U	50 U	15 U	100 U	100 U	50 U
C9-C12 Aliphatic	NE	NE	35	45 U	45 U	45 U	45 U	50 U	45 U	45 U	45 U	50 U

Table 4-2
Summary of Cumulative Overburden Groundwater Analytical Results
Former Dow Salvage Yard
233 Odlin Road, Bangor, Maine

	Locations:			SY-OBMW5					SY-OBMW6			
	Field Sample ID:			SY-OBMW5-120419	SY-OBMW5-031220	SY-OBMW5-081320	SY-OBMW5-120220	SY-OBMW5-110723	SY-OBMW6-031120	SY-OBMW6-081320	SY-OBMW6-120220	SY-OBMW6-110723
	Matrix:			WG	WG	WG	WG	WG	WG	WG	WG	WG
	Sample Begin Depth:			27	27	27	27	27	22	22	22	22
	Sample End Depth:			37	37	37	37	37	32	32	32	32
	Sample Date:			12/04/2019	03/12/2020	08/13/2020	12/02/2020	11/07/2023	03/11/2020	08/13/2020	12/02/2020	11/07/2023
Analytes	**RSL[1]**	**MCL[2]**	**RAG[3]**									
Total Metals SW6020A/7470A (mg/L)												
Aluminum	2	NE	2	**0.28**	**0.065**	0.050 U	**0.031 J**	**0.058**	**2.1**	**2.8**	**0.14**	0.025 U
Antimony	0.00078	0.006	0.00078	0.00050 U	0.00050 U	0.00050 U	0.00050 U	**0.00030 J**	0.00050 U	0.00050 U	0.00050 U	**0.00047 J**
Arsenic	0.000052	0.01	0.000052	**0.0035 J**	**0.0020 J**	0.0050 U	**0.0024 J**	**0.0036**	**0.0032 J**	0.0050 U	**0.0028 J**	**0.0028**
Barium	380	2	0.38	**0.0069 J**	0.010 U	0.010 U	**0.0049 J**	**0.0036 J**	**0.012**	**0.012**	**0.0047 J**	**0.0042 J**
Beryllium	0.0025	0.004	0.0025	0.00010 U	0.00010 U	0.00010 U	**0.000012 J**	0.00050 U	**0.00029 J**	0.0010 U	**0.000021 J**	0.00050 U
Cadmium	0.00092	0.005	0.0018	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U
Chromium	0.000035[5]/2.2	0.1	0.0000035[5]/2.3	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.025 U	0.010 U	0.010 U	0.0010 U	0.025 U
Cobalt	0.0006	NE	0.0006	**0.00028 J**	0.010 U	0.010 U	**0.000062 J**	0.00050 U	0.010 U	0.010 U	**0.000070 J**	0.00050 U
Copper	0.08	1.3	0.08	0.0010 U	0.010 U	0.010 U	**0.00058 J**	0.0075 U	0.010 U	0.010 U	**0.00062 J**	0.0075 U
Iron	1.4	NE	1.4	**0.31**	**0.078**	0.050 U	**0.015 J**	**0.058**	**1.8**	**2.1**	**0.11**	0.030 U
Lead	0.015	0.015	NE	**0.00015 J**	0.0050 U	0.00050 U	**0.00018 J**	**0.00021 J**	0.0050 U	0.0050 U	**0.00019 J**	0.00050 U
Magnesium	NE	NE	NE	**7.5**	**6.6**	**7.8**	**7.8**	**8.7**	**7.9**	**9.1**	**8.4**	**9.6**
Manganese	0.043	NE	0.043	**0.38**	**0.094**	**0.069**	**0.054**	**0.089**	**0.035**	**0.040**	**0.0026 J**	0.0050 U
Mercury	0.000063	0.002	0.000063	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00015 U	0.00010 U	0.00010 U	0.00010 U	0.00015 U
Nickel	0.039	NE	0.039	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.025 U	0.010 U	0.010 U	0.0010 U	0.025 U
Potassium	NE	NE	NE	**1.3**	**1.1**	**1.1**	**1.2**	**1.2**	**1.5**	**1.5**	**1.3**	**1.4**
Selenium	0.01	0.05	0.01	0.0010 U	**0.0020 J**	0.0010 U	0.010 U	0.0050 U	**0.0015 J**	0.0010 U	0.0010 U	0.0050 U
Silver	0.0094	NE	0.0094	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U
Sodium	NE	NE	NE	**6.3**	**5.9**	**5.4**	**6.4**	**6.7**	**7.8**	**6.4**	**6.9**	**6.9**
Thallium	0.00002	0.002	0.00002	0.0010 U	0.00050 U	0.00050 U	0.00050 U	0.00080 U	0.00050 U	0.00050 U	0.00050 U	**0.00084 J**
Vanadium	0.0086	NE	0.0086	**0.00071 J**	0.0010 U	0.0010 U	0.0010 U	0.0050 U	**0.0018 J**	**0.0023 J**	0.0010 U	0.0050 U
Zinc	0.6	NE	0.6	0.0040 U	0.0040 U	0.0040 U	0.0040 U	0.0040 U	**0.012**	0.010 U	0.0040 U	0.0040 U
Dissolved Metals (mg/L)												
Aluminum	2	NE	2	**0.030 J**	0.050 U	**0.029 J**	**0.023 J**	**0.015 J**	**0.28**	**0.024 J**	**0.013 J**	0.027 U
Antimony	0.00078	0.006	0.00078	0.00054 U	0.00050 U	0.00054 U	0.00054 U	**0.00025 J**	0.00050 U	0.00054 U	0.00054 U	**0.00042 J**
Arsenic	0.000052	0.01	0.000052	**0.0031 J**	**0.0022 J**	**0.0020 J**	**0.0025 J**	**0.0034**	**0.0026 J**	**0.0024 J**	**0.0028 J**	**0.0026 J**
Barium	380	2	0.38	**0.0064 J**	0.010 U	**0.0055 J**	**0.0045 J**	**0.0034 J**	0.010 U	**0.0052 J**	**0.0039 J**	**0.0043 J**
Beryllium	0.0025	0.004	0.0025	0.00011 U	0.00010 U	**0.000017 J**	0.00011 U	0.00054 U	**0.000072 J**	**0.000080 J**	0.00011 U	0.00054 U
Cadmium	0.00092	0.005	0.0018	0.00054 U	0.00050 U	0.00054 U	0.00054 U	0.00054 U	0.00050 U	0.00054 U	0.00054 U	0.00054 U
Chromium	0.000035[5]/2.2	0.1	0.0000035[5]/2.3	0.0011 U	0.0010 U	0.0011 U	0.0011 U	0.027 U	0.0010 U	0.0011 U	0.0011 U	0.027 U
Cobalt	0.0006	NE	0.0006	**0.00010 J**	0.010 U	**0.000086 J**	**0.000051 J**	0.00054 U	0.010 U	**0.00014 J**	0.00011 U	0.00054 U
Copper	0.08	1.3	0.08	**0.0012 J**	0.010 U	0.0011 U	0.011 U	0.0080 U	0.010 U	0.0011 U	0.011 U	0.0080 U
Iron	1.4	NE	1.4	**0.0038 J**	0.050 U	0.011 U	**0.025 J**	0.032 U	**0.17**	**0.0076 J**	**0.0050 J**	0.032 U
Lead	0.015	0.015	NE	0.00054 U	**0.00015 J**	0.00054 U	0.00054 U	0.00054 U	**0.0013 J**	**0.00015 J**	0.00054 U	0.00054 U
Magnesium	NE	NE	NE	**7.4**	**6.1 J**	**8.2**	**7.2**	**8.4**	**6.7 J**	**9.0**	**7.4**	**9.4**
Manganese	0.043	NE	0.043	**0.30**	**0.086 J**	**0.068**	**0.050**	**0.060**	**0.013 J**	**0.0064 J**	0.0054 U	0.0054 U
Mercury	0.000063	0.002	0.000063	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00015 U	0.00010 U	0.00010 U	0.00010 U	0.00015 U
Nickel	0.039	NE	0.039	0.0011 U	0.0010 U	0.0011 U	0.0011 U	0.027 U	0.0010 U	0.0011 U	0.0011 U	0.027 U
Potassium	NE	NE	NE	**1.2**	**1.1**	**1.1**	**1.1**	**1.1**	**1.2**	**1.2**	**1.1**	**1.3**
Selenium	0.01	0.05	0.01	0.010 U	**0.00072 J**	0.0011 U	0.0011 U	0.0054 U	0.0010 U	**0.0019 J**	0.011 U	0.0054 U
Silver	0.0094	NE	0.0094	0.00054 U	0.00050 U	0.00054 U	0.00054 U	0.00054 U	0.00050 U	**0.000044 J**	0.00054 U	0.00054 U
Sodium	NE	NE	NE	**6.4**	**6.1**	**5.8**	**6.4**	**6.4**	**8.3**	**6.1**	**6.4**	**7.0**
Thallium	0.00002	0.002	0.00002	0.0010 U	0.00050 U	0.00054 U	0.00054 U	0.00086 U	**0.000060 J**	**0.000045 J**	0.00054 U	0.00086 U
Vanadium	0.0086	NE	0.0086	0.0011 U	0.0010 U	0.0011 U	0.0011 U	0.0054 U	0.0010 U	0.0011 U	0.0011 U	0.0054 U
Zinc	0.6	NE	0.6	0.0043 U	0.0040 U	0.0043 U	0.0043 U	0.0043 U	**0.0032 J**	0.0043 U	0.0043 U	0.0043 U
Hexavalent Chromium SW7196A (mg/L)												
Chromium, Hexavalent	0.000035	NE	0.000035	0.013 U	0.013 U	0.025 U	0.025 U	0.012 U	0.013 U	0.025 U	0.025 U	0.012 U
PCBs SW8082A (ug/L)												
PCB-1016 (Aroclor 1016)	0.14	0.5	0.0079	0.10 U	0.10 U	0.10 U	0.10 U	0.12 U	0.10 UJ	0.10 U	0.10 U	0.12 U
PCB-1221 (Aroclor 1221)	0.0047	0.5	0.0079	0.10 U	0.10 U	0.10 U	0.10 U	0.12 U	0.10 UJ	0.10 U	0.10 U	0.12 U
PCB-1232 (Aroclor 1232)	0.0047	0.5	0.0079	0.10 U	0.10 U	0.10 U	0.10 U	0.12 U	0.10 UJ	0.10 U	0.10 U	0.12 U
PCB-1242 (Aroclor 1242)	0.0078	0.5	0.0079	0.10 U	0.10 U	0.10 U	0.10 U	0.12 U	0.10 UJ	0.10 U	0.10 U	0.12 U
PCB-1248 (Aroclor 1248)	0.0078	0.5	0.0079	0.10 U	0.10 U	0.10 U	0.10 U	0.12 U	0.10 UJ	0.10 U	0.10 U	0.12 U
PCB-1254 (Aroclor 1254)	0.0078	0.5	0.0079	0.10 U	0.10 U	0.10 U	0.10 U	0.12 U	0.10 UJ	0.10 U	0.10 U	0.12 U
PCB-1260 (Aroclor 1260)	0.0078	0.5	0.0079	0.10 U	0.10 U	0.10 U	0.10 U	0.12 U	0.10 UJ	0.10 U	0.10 U	0.12 U

Table 4-2
Summary of Cumulative Overburden Groundwater Analytical Results
Former Dow Salvage Yard
233 Odlin Road, Bangor, Maine

Locations:				SY-OBMW5					SY-OBMW6				
Field Sample ID:				SY-OBMW5-120419	SY-OBMW5-031220	SY-OBMW5-081320	SY-OBMW5-120220	SY-OBMW5-110723	SY-OBMW6-031120	SY-OBMW6-081320	SY-OBMW6-120220	SY-OBMW6-110723
Matrix:				WG	WG	WG	WG	WG	WG	WG	WG	WG
Sample Begin Depth:				27	27	27	27	27	22	22	22	22
Sample End Depth:				37	37	37	37	37	32	32	32	32
Sample Date:				12/04/2019	03/12/2020	08/13/2020	12/02/2020	11/07/2023	03/11/2020	08/13/2020	12/02/2020	11/07/2023
Analytes	**RSL[1]**	**MCL[2]**	**RAG[3]**									
CVOCs SW8260D SIM (ug/L)												
1,1-Dichloroethene	28	7	29	NS	NS	NS	NS	0.025 U	NS	NS	NS	0.025 U
cis-1,2-Dichloroethene	3.6	70	2.5	NS	NS	NS	NS	0.025 U	NS	NS	NS	0.025 U
Tetrachloroethene (PCE)	4.1	5	4.1	NS	NS	NS	NS	0.025 U	NS	NS	NS	0.025 U
trans-1,2-Dichloroethene	36	100	6.8	NS	NS	NS	NS	0.025 U	NS	NS	NS	0.025 U
Trichloroethene (TCE)	0.28	5	0.28	NS	NS	NS	NS	0.025 U	NS	NS	NS	0.025 U
Vinyl chloride	0.019	2	0.019	NS	NS	NS	NS	0.050 U	NS	NS	NS	0.050 U
VOCs SW8260D (ug/L)												
1,1,1,2-Tetrachloroethane	0.57	NE	0.57	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,1-Trichloroethane	800	200	800	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	0.076	NE	0.076	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	0.041	5	0.042	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	2.8	NE	2.8	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	28	7	29	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	1.0 U	1.0 U	1.0 U	0.50 U
1,1-Dichloropropene	NE	NE	0.47	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,3-Trichlorobenzene	0.7	NE	0.7	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,3-Trichloropropane	0.00075	NE	0.00075	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,4-Trichlorobenzene	0.4	70	0.4	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,4-Trimethylbenzene	5.6	NE	5.6	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromo-3-chloropropane	0.00033	0.2	0.00033	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
1,2-Dibromoethane (EDB)	0.0075	0.05	0.0075	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	30	600	30	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	0.17	5	0.17	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	0.82	5	0.83	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3,5-Trimethylbenzene	6	NE	6	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	NE	NE	30	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichloropropane	37	NE	37	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	0.48	75	0.48	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dioxane (p-Dioxane)	0.46	NE	0.46	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2,2-Dichloropropane	NE	NE	NE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Butanone (MEK)	560	NE	560	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2-Chlorotoluene	24	NE	24	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Hexanone	3.8	NE	3.8	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
4-Chlorotoluene	25	NE	25	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
4-Methyl-2-pentanone (MIBK)	630	NE	630	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Acetone	1400	NE	1400	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	**5.8 J**	5.0 U
Benzene	0.46	5	0.46	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromobenzene	6.2	NE	6.2	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromochloromethane	8.3	NE	8.3	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	0.13	80	0.13	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Bromoform	3.3	80	3.3	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane	0.75	NE	0.76	2.0 U	2.0 U	2.0 U	2.0 U	1.5 U	2.0 U	2.0 U	2.0 U	1.5 U
Carbon disulfide	81	NE	81	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon tetrachloride	0.46	5	0.46	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	7.8	100	7.8	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	2100	NE	2100	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform	0.22	80	0.22	1.0 U	1.0 U	1.0 U	1.0 U	1.5 U	1.0 U	1.0 U	1.0 U	1.5 U
Chloromethane	19	NE	19	1.0 U	**2.2**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	3.6	70	2.5	1.0 U	1.0 U	1.0 U	1.0 U	1.5 U	1.0 U	1.0 U	1.0 U	1.5 U
cis-1,3-Dichloropropene	0.47	NE	0.47	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dibromochloromethane	0.87	80	0.87	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dibromomethane	0.83	NE	0.83	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dichlorodifluoromethane	NE	NE	20	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Diethyl ether (Ethyl ether)	390	NE	390	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	1.5	700	1.5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Hexachlorobutadiene	0.14	NE	0.14	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	0.50 U	0.50 U	0.50 U	1.0 U
Isopropylbenzene (Cumene)	45	NE	45	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	1.0 U	1.0 U	1.0 U	0.50 U
m,p-Xylene	19	10000	19	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
Methyl tert-butyl ether (MTBE)	14	NE	14	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methylene chloride	11	5	11	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Naphthalene	0.17	NE	0.12	1.0 U	1.0 U	1.0 U	1.0 U	1.5 U	1.0 U	1.0 U	1.0 U	1.5 U
n-Butylbenzene	100	NE	100	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
n-Propylbenzene	66	NE	66	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
o-Xylene	19	10000	19	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
p-Cymene (p-Isopropyltoluene)	NE	NE	NE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
sec-Butylbenzene	200	NE	200	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Styrene	120	100	120	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
tert-Amyl methyl ether	NE	NE	NE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
tert-Butyl alcohol	NE	NE	NE	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
tert-Butyl ethyl ether	NE	NE	NE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
tert-Butylbenzene	69	NE	69	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene (PCE)	4.1	5	4.1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U

Table 4-2
Summary of Cumulative Overburden Groundwater Analytical Results
Former Dow Salvage Yard
233 Odlin Road, Bangor, Maine

			Locations:	SY-OBMW5					SY-OBMW6				
			Field Sample ID:	SY-OBMW5-120419	SY-OBMW5-031220	SY-OBMW5-081320	SY-OBMW5-120220	SY-OBMW5-110723	SY-OBMW6-031120	SY-OBMW6-081320	SY-OBMW6-120220	SY-OBMW6-110723
			Matrix:	WG	WG	WG	WG	WG	WG	WG	WG	WG
			Sample Begin Depth:	27	27	27	27	27	22	22	22	22
			Sample End Depth:	37	37	37	37	37	32	32	32	32
			Sample Date:	12/04/2019	03/12/2020	08/13/2020	12/02/2020	11/07/2023	03/11/2020	08/13/2020	12/02/2020	11/07/2023
Analytes	**RSL[1]**	**MCL[2]**	**RAG[3]**									
Tetrahydrofuran	340	NE	340	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
Toluene	110	1000	1200	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	36	100	6.8	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	0.47	NE	NE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene (TCE)	0.28	5	0.28	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichlorofluoromethane	520	NE	520	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl chloride	0.019	2	0.019	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
SVOCs SW8270E (ug/L)												
1,2,4-Trichlorobenzene	0.4	70	0.4	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	30	600	30	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 UJ
1,3-Dichlorobenzene	NE	NE	30	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 UJ
1,4-Dichlorobenzene	0.48	75	0.48	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 UJ
2,2'-Oxybis(1-chloropropane)	NE	NE	NE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2,4,5-Trichlorophenol	120	NE	120	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U
2,4,6-Trichlorophenol	1.2	NE	1.2	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U
2,4-Dichlorophenol	4.6	NE	4.6	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U
2,4-Dimethylphenol	36	NE	36	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U
2,4-Dinitrophenol	3.9	NE	3.9	45 U	45 U	45 U	45 U	45 U	220 U	45 U	45 U	45 U
2,4-Dinitrotoluene	0.24	NE	0.24	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2,6-Dinitrotoluene	0.049	NE	0.049	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Chloronaphthalene	75	NE	75	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Chlorophenol	9.1	NE	9.1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U
2-Methylphenol (o-Cresol)	93	NE	93	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U
2-Nitroaniline	19	NE	NE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Nitrophenol	NE	NE	NE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U
3,3'-Dichlorobenzidine	0.13	NE	0.13	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U
3-Nitroaniline	NE	NE	NE	1.0 U	1.0 U	1.0 U	1.0 U	1.5 U	1.0 U	1.0 U	1.0 U	1.5 U
4,6-Dinitro-2-methylphenol	0.15	NE	NE	10 U	10 U	10 U	10 U	10 U	50 U	10 U	10 U	10 U
4-Bromophenyl phenyl ether	NE	NE	NE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
4-Chloro-3-methylphenol	140	NE	150	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 UJ	5.0 U	1.0 U	1.0 U	1.0 UJ
4-Chloroaniline	0.37	NE	NE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
4-Chlorophenyl phenyl ether	NE	NE	NE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
4-Methylphenol (p-Cresol)	190	NE	190	1.0 U	1.0 U	1.0 U	1.0 U	1.5 U	5.0 U	1.0 U	1.0 U	1.5 U
4-Nitroaniline	3.8	NE	38	1.0 U	1.0 U	1.0 U	1.0 U	3.0 U	1.0 U	1.0 U	1.0 U	3.0 U
4-Nitrophenol	NE	NE	NE	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ	25 UJ	5.0 UJ	5.0 UJ	5.0 UJ
Aniline (Phenylamine, Aminobenzene)	13	NE	13	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Azobenzene	0.12	NE	NE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Benzidine	0.00011	NE	NE	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U
Benzoic acid	7500	NE	7500	45 U	45 U	45 U	45 U	45 UJ	220 U	45 U	45 U	45 UJ
Benzyl alcohol	200	NE	200	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Benzyl butyl phthalate	16	NE	16	5.0 U	1.0 U	1.0 U	1.0 U	3.0 U	1.0 U	1.0 U	1.0 U	3.0 U
bis(2-Chloroethoxy) methane	5.9	NE	NE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
bis(2-Chloroethyl) ether	0.014	NE	0.014	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
bis(2-Ethylhexyl) phthalate	5.6	6	5.6	5.0 U	5.0 U	1.0 U	1.0 U	3.0 U	**120**	1.0 U	1.0 U	3.0 U
Carbazole	NE	NE	1.5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dibenzofuran	0.79	NE	0.79	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U
Diethyl phthalate	1500	6	1500	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 UJ
Dimethyl phthalate	NE	NE	NE	R	1.0 U	1.0 UJ	1.0 U	1.0 UJ	1.0 U	1.0 UJ	1.0 U	1.0 UJ
Di-n-butyl phthalate	90	NE	NE	5.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	5.0 U	1.0 U	1.0 U
di-n-Octyl phthalate	20	NE	200	1.0 U	1.0 U	1.0 U	1.0 U	3.0 U	1.0 U	1.0 U	1.0 U	3.0 U
Hexachlorobenzene	0.0098	1	0.0098	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Hexachlorobutadiene	0.14	NE	0.14	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 UJ
Hexachlorocyclopentadiene	0.041	50	NE	4.0 UJ	4.0 UJ	4.0 UJ	4.0 UJ	4.0 UJ	4.0 UJ	4.0 UJ	4.0 UJ	4.0 UJ
Hexachloroethane	0.33	NE	0.33	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 UJ
Isophorone	78	NE	78	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Nitrobenzene	0.14	NE	NE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
N-Nitrosodimethylamine	0.00011	NE	NE	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 UJ
N-Nitrosodi-n-propylamine	0.011	NE	NE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
N-Nitrosodiphenylamine	12	NE	12	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Pentachlorophenol	0.041	1	0.041	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	25 U	5.0 U	5.0 U	5.0 U
Phenol	580	NE	580	1.0 UJ	1.0 UJ	1.0 UJ	1.0 UJ	1.0 UJ	5.0 UJ	1.0 UJ	1.0 UJ	1.0 UJ
Pyridine	12	NE	NE	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U

Table 4-2
Summary of Cumulative Overburden Groundwater Analytical Results
Former Dow Salvage Yard
233 Odlin Road, Bangor, Maine

	Locations:			SY-OBMW5					SY-OBMW6				
	Field Sample ID:			SY-OBMW5-120419	SY-OBMW5-031220	SY-OBMW5-081320	SY-OBMW5-120220	SY-OBMW5-110723	SY-OBMW6-031120	SY-OBMW6-081320	SY-OBMW6-120220	SY-OBMW6-110723
	Matrix:			WG	WG	WG	WG	WG	WG	WG	WG	WG
	Sample Begin Depth:			27	27	27	27	27	22	22	22	22
	Sample End Depth:			37	37	37	37	37	32	32	32	32
	Sample Date:			12/04/2019	03/12/2020	08/13/2020	12/02/2020	11/07/2023	03/11/2020	08/13/2020	12/02/2020	11/07/2023
Analytes	**RSL[1]**	**MCL[2]**	**RAG[3]**									
E300 (mg/L)												
Chloride	NE	NE	NE	**7.6**	**8.7**	**9.4**	**12**	**18**	**12**	**14**	**14**	**25**
Nitrate	NE	NE	NE	**0.061**	**0.094**	**0.10**	**0.14 J**	**0.062**	**0.098**	**0.13**	**0.15 J**	**0.073**
Sulfate	NE	NE	NE	**11**	**11**	**11**	**11**	**12**	**14**	**14**	**13**	**13**
RSK175 (ug/L)												
Ethane	NE	NE	NE	5.0 U	5.0 U	5.0 U	5.0 U	9.8 U	5.0 U	5.0 U	5.0 U	9.8 U
Ethene	NE	NE	NE	5.0 U	5.0 U	5.0 U	5.0 U	9.8 U	5.0 U	5.0 U	5.0 U	9.8 U
Methane	NE	NE	NE	10 U	10 U	**2.5 J**	10 U	10 U	10 U	**2.4 J**	10 U	10 U
A2320B (mg/L)												
Alkalinity, Total (as CaCO3)	NE	NE	NE	**110**	**120**	**120**	**110**	**120**	**110**	**110**	**110**	**100**
A3500B (mg/L)												
Iron, Ferrous	NE	NE	NE	**0.096 J**	0.050 UJ	0.050 U	0.050 UJ	0.050 U	**1.2**	**0.58**	0.050 UJ	0.050 U
A5310B (mg/L)												
Total Organic Carbon	NE	NE	NE	1.0 U	1.0 U	**0.15 J**	**0.10 J**	**0.50 J**	1.0 U	**0.12 J**	0.50 U	**0.63 J**

Table 4-2
Summary of Cumulative Overburden Groundwater Analytical Results
Former Dow Salvage Yard
233 Odlin Road, Bangor, Maine

			Locations:	SY-OBMW7					SY-OBMW8				
			Field Sample ID:	SY-OBMW7-120219	SY-OBMW7-031220	SY-OBMW7-081120	SY-OBMW7-120220	SY-OBMW7-110623	SY-OBMW8-120319	SY-OBMW8-031020	SY-OBMW8-081220	SY-OBMW8-120120	SY-OBMW8-110823
			Matrix:	WG	WG	WG	WG	WG	WG	WG	WG	WG	WG
			Sample Begin Depth:	15	15	15	15	15	17	17	17	17	17
			Sample End Depth:	25	25	25	25	25	27	27	27	27	27
			Sample Date:	12/02/2019	03/12/2020	08/11/2020	12/02/2020	11/06/2023	12/03/2019	03/10/2020	08/12/2020	12/01/2020	11/08/2023
Analytes	**RSL[1]**	**MCL[2]**	**RAG[3]**										
PAH SIM (ug/L)													
2-Methylnaphthalene	3.6	NE	3.6	0.093 U	0.094 U	0.097 U	0.095 U	0.093 U	0.093 U	0.094 U	0.094 U	0.094 U	0.093 U
Acenaphthene	53	NE	54	0.093 U	0.094 U	0.097 U	0.095 U	0.093 U	0.093 U	0.094 U	0.094 U	0.094 U	0.093 U
Acenaphthylene	NE	NE	52	0.093 U	0.094 U	0.097 U	0.095 U	0.093 U	0.093 U	0.094 U	0.094 U	0.094 U	0.093 U
Anthracene	180	NE	180	0.093 U	0.094 U	0.097 U	0.095 U	0.093 U	0.093 U	0.094 U	0.094 U	0.094 U	0.093 U
Benzo(a)anthracene	0.03	NE	0.03	0.093 U	0.094 U	0.097 U	0.095 U	0.093 U	0.093 U	0.094 U	0.094 U	0.094 U	0.093 U
Benzo(a)pyrene	0.025	0.2	0.025	0.093 U	0.094 U	0.097 U	0.095 U	0.093 U	0.093 U	0.094 U	0.094 U	0.094 U	0.093 U
Benzo(b)fluoranthene	0.25	NE	0.25	0.093 U	0.094 U	0.097 U	0.095 U	0.093 U	0.093 U	0.094 U	0.094 U	0.094 U	0.093 U
Benzo(g,h,i)perylene	NE	NE	60	0.093 U	0.094 U	0.097 U	0.095 U	0.093 U	0.093 U	0.19 U	0.094 U	0.094 U	0.093 U
Benzo(k)fluoranthene	2.5	NE	2.5	0.093 U	0.094 U	0.097 U	0.095 U	0.093 U	0.093 U	0.094 U	0.094 U	0.094 U	0.093 U
Chrysene	25	NE	25	0.093 U	0.094 U	0.097 U	0.095 U	0.093 U	0.093 U	0.094 U	0.094 U	0.094 U	0.093 U
Dibenz(a,h)anthracene	0.025	NE	0.025	0.093 U	0.094 U	0.097 U	0.095 U	0.093 U	0.093 U	**0.089 J**	0.094 U	0.094 U	0.093 U
Fluoranthene	80	NE	80	0.093 U	0.094 U	0.097 U	0.095 U	0.093 U	0.093 U	0.094 U	0.094 U	0.094 U	0.093 U
Fluorene	29	NE	29	0.093 U	0.094 U	0.097 U	0.095 U	0.093 U	0.093 U	0.094 U	0.094 U	0.094 U	0.093 U
Indeno(1,2,3-c,d)pyrene	0.25	NE	0.25	0.093 U	0.094 U	0.097 U	0.095 U	0.093 U	0.093 U	0.19 U	0.094 U	0.094 U	0.093 U
Naphthalene	0.17	NE	0.12	0.093 U	0.094 U	0.097 U	0.095 U	0.093 U	0.093 U	0.094 U	0.094 U	0.094 U	0.093 U
Phenanthrene	NE	NE	18	0.093 U	0.094 U	0.097 U	0.095 U	0.093 U	0.093 U	0.094 U	0.094 U	0.094 U	0.093 U
Pyrene	12	NE	12	0.19 U	0.094 U	0.097 U	0.095 U	0.093 U	0.093 U	**0.081 J**	0.094 U	0.094 U	0.093 U
MassDEP EPH (ug/L)													
2-Methylnaphthalene	3.6	NE	3.6	0.50 U	0.50 U	0.50 U	0.50 U	0.70 UJ	0.50 U	0.50 U	0.50 U	0.50 U	0.71 U
Acenaphthene	53	NE	54	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.51 U
Acenaphthylene	NE	NE	52	0.50 U	0.50 U	0.50 UJ	0.50 U	0.50 U	0.50 U	0.50 U	0.50 UJ	0.50 U	0.51 U
Anthracene	180	NE	180	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.51 U
Benzo(a)anthracene	0.03	NE	0.03	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.51 U
Benzo(a)pyrene	0.025	0.2	0.025	0.20 U	0.20 U	0.20 U	0.20 U	0.70 U	0.20 U	0.20 U	0.20 U	0.20 U	0.71 U
Benzo(b)fluoranthene	0.25	NE	0.25	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.51 U
Benzo(g,h,i)perylene	NE	NE	60	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.51 U
Benzo(k)fluoranthene	2.5	NE	2.5	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.51 U
Chrysene	25	NE	25	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.51 U
Dibenz(a,h)anthracene	0.025	NE	0.025	0.50 U	0.50 U	0.50 U	0.50 U	0.50 UJ	0.50 U	0.50 U	0.50 U	0.50 U	0.51 U
Fluoranthene	80	NE	80	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.51 U
Fluorene	29	NE	29	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.51 U
Indeno(1,2,3-c,d)pyrene	0.25	NE	0.25	0.50 U	0.50 U	0.50 U	0.50 U	0.50 UJ	0.50 U	0.50 U	0.50 U	0.50 U	0.51 U
Naphthalene	0.17	NE	0.12	0.50 U	0.50 U	0.50 UJ	0.50 UJ	0.70 UJ	0.50 U	0.50 U	0.50 UJ	0.50 UJ	0.71 U
Phenanthrene	NE	NE	18	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.51 U
Pyrene	12	NE	12	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.51 U
C11-C22 Aromatic	NE	NE	60	85 UJ	85 U	100 U	85 U	**68 J**	85 UJ	85 U	100 U	85 U	100 U
C19-C36 Aliphatic	NE	NE	4000	88 UJ	88 U	88 U	88 U	97 U	88 UJ	88 U	88 U	88 U	98 U
C9-C18 Aliphatic	NE	NE	35	66 UJ	66 UJ	66 UJ	66 U	95 UJ	66 UJ	66 UJ	66 UJ	66 U	96 UJ
MassDEP VPH (ug/L)													
Benzene	0.46	5	0.46	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	1.5	700	1.5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
m,p-Xylene	19	10000	19	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Methyl tert-butyl ether (MTBE)	14	NE	1300	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Naphthalene	0.17	NE	0.12	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U
o-Xylene	19	10000	19	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	110	1000	110	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
C5-C8 Aliphatic	NE	NE	18	100 U	100 U	100 U	100 U	50 U	100 U	100 U	100 U	100 U	50 U
C9-C10 Aromatic	NE	NE	7.1	**3.9** J	15 U	100 U	100 U	50 U	**3.6 J**	15 U	100 U	100 U	50 U
C9-C12 Aliphatic	NE	NE	35	100 U	45 U	45 U	45 U	50 U	45 U	45 U	45 U	45 U	50 U

Table 4-2
Summary of Cumulative Overburden Groundwater Analytical Results
Former Dow Salvage Yard
233 Odlin Road, Bangor, Maine

				Locations:	SY-OBMW7					SY-OBMW8				
				Field Sample ID:	SY-OBMW7-120219	SY-OBMW7-031220	SY-OBMW7-081120	SY-OBMW7-120220	SY-OBMW7-110623	SY-OBMW8-120319	SY-OBMW8-031020	SY-OBMW8-081220	SY-OBMW8-120120	SY-OBMW8-110823
				Matrix:	WG	WG	WG	WG	WG	WG	WG	WG	WG	WG
				Sample Begin Depth:	15	15	15	15	15	17	17	17	17	17
				Sample End Depth:	25	25	25	25	25	27	27	27	27	27
				Sample Date:	12/02/2019	03/12/2020	08/11/2020	12/02/2020	11/06/2023	12/03/2019	03/10/2020	08/12/2020	12/01/2020	11/08/2023
Analytes	**RSL[1]**	**MCL[2]**	**RAG[3]**											
Total Metals SW6020A/7470A (mg/L)														
Aluminum	2	NE	2	0.050 U	0.050 U	0.050 U	**0.085**	**0.022 J**	**0.22**	**0.22**	0.050 U	**0.016 J**	**0.016 J**
Antimony	0.00078	0.006	0.00078	0.00050 U	0.00050 U	0.00050 U	0.0010 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U
Arsenic	0.000052	0.01	0.000052	**0.0031 J**	**0.0020 J**	0.0050 U	**0.00092 J**	**0.0026**	**0.0082**	**0.011**	**0.010**	**0.013**	**0.011**
Barium	380	2	0.38	**0.050**	**0.035**	**0.048**	**0.028**	**0.018**	**0.0076 J**	0.010 U	0.010 U	**0.0061 J**	**0.0058 J**
Beryllium	0.0025	0.004	0.0025	0.0010 U	0.00010 U	0.00010 U	0.00010 U	0.00050 U	0.00010 U	**0.000072 J**	0.00010 U	**0.000015 J**	0.00050 U
Cadmium	0.00092	0.005	0.0018	**0.00010 J**	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.0010 U	0.00050 U	0.00050 U	0.00050 U
Chromium	0.000035[5]/2.2	0.1	0.0000035[5]/2.3	0.0010 U	0.010 U	0.0010 U	0.0010 U	0.025 U	0.0010 U	0.010 U	0.0010 U	0.0010 U	0.025 U
Cobalt	0.0006	NE	0.0006	**0.00086 J**	0.010 U	0.010 U	**0.00017 J**	**0.00076 J**	**0.00022 J**	0.010 U	0.010 U	**0.00022 J**	0.00050 U
Copper	0.08	1.3	0.08	**0.00032 J**	0.010 U	0.010 U	**0.0034 J**	0.0075 U	**0.00045 J**	0.010 U	0.010 U	**0.00070 J**	0.0075 U
Iron	1.4	NE	1.4	**0.072**	**0.064**	0.050 U	**0.10**	**0.037 J**	**0.24**	**0.32**	**0.065**	**0.038 J**	**0.030 J**
Lead	0.015	0.015	NE	0.00050 U	0.00050 U	0.00050 U	**0.00040 J**	0.00050 U	**0.00011 J**	0.00050 U	0.00050 U	0.00050 U	0.00050 U
Magnesium	NE	NE	NE	**63**	**40**	**81**	**23**	**67**	**10**	**11**	**12**	**11**	**14**
Manganese	0.043	NE	0.043	**1.3**	**0.62**	**1.5**	**0.26**	**0.48**	**0.21**	**0.67**	**0.44**	**0.52**	**0.43**
Mercury	0.000063	0.002	0.000063	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00015 U	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00015 U
Nickel	0.039	NE	0.039	0.0010 U	0.010 U	0.0010 U	**0.00084 J**	0.025 U	0.0010 U	0.010 U	0.0010 U	0.0010 U	0.025 U
Potassium	NE	NE	NE	**5.2**	**4.3**	**3.8**	**6.0**	**5.5**	**2.0**	**1.4**	**1.4**	**1.6**	**1.4**
Selenium	0.01	0.05	0.01	0.0010 U	**0.0014 J**	**0.0011 J**	0.010 U	0.0050 U	**0.00065 J**	**0.0022 J**	0.0010 U	0.010 U	0.0050 U
Silver	0.0094	NE	0.0094	**0.000024 J**	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	**0.000042 J**	0.00050 U	0.00050 U	0.00050 U
Sodium	NE	NE	NE	**310**	**190**	**340**	**120**	**100**	**17**	**15**	**15**	**16**	**14**
Thallium	0.00002	0.002	0.00002	0.0010 U	0.00050 U	0.00050 U	0.00050 U	0.00080 U	0.0010 U	0.0010 U	0.00050 U	**0.00012 J**	0.00080 U
Vanadium	0.0086	NE	0.0086	0.0010 U	0.0010 U	0.0010 U	**0.00067 J**	0.0050 U	**0.0013 J**	0.0010 U	0.0010 U	0.0010 U	0.0050 U
Zinc	0.6	NE	0.6	**0.036**	**0.10**	**0.012**	**0.25**	0.0040 U	0.0040 U	0.010 U	0.0040 U	0.0040 U	0.0040 U
Dissolved Metals (mg/L)														
Aluminum	2	NE	2	**0.018 J**	0.050 U	**0.033 J**	**0.0055 J**	0.027 U	**0.018 J**	0.050 U	**0.027 J**	**0.012 J**	0.027 U
Antimony	0.00078	0.006	0.00078	0.00054 U	0.00050 U	0.00054 U	**0.00054 J**	**0.00023 J**	0.00054 U	0.00050 U	0.00054 U	0.00054 U	0.00054 U
Arsenic	0.000052	0.01	0.000052	**0.0032 J**	**0.0020 J**	**0.0045 J**	**0.00083 J**	**0.0028**	**0.0077**	**0.011**	**0.012**	**0.014**	**0.011**
Barium	380	2	0.38	**0.051**	**0.036**	**0.053**	**0.026**	**0.018**	**0.0075 J**	0.010 U	**0.0064 J**	**0.0059 J**	**0.0057 J**
Beryllium	0.0025	0.004	0.0025	0.00011 U	0.00010 U	**0.00023 J**	0.00011 U	0.00054 U	0.00011 U	**0.000017 J**	**0.000049 J**	0.00011 U	0.00054 U
Cadmium	0.00092	0.005	0.0018	0.00054 U	0.00050 U	**0.00031 J**	0.00054 U	0.00054 U	0.00054 U	0.00050 U	0.00054 U	0.00054 U	0.00054 U
Chromium	0.000035[5]/2.2	0.1	0.0000035[5]/2.3	0.0011 U	0.0010 U	**0.00063 J**	0.0011 U	0.027 U	0.0011 U	0.0010 U	0.0011 U	0.0011 U	0.027 U
Cobalt	0.0006	NE	0.0006	**0.00084 J**	0.010 U	**0.0013 J**	**0.00013 J**	**0.00066 J**	**0.000083 J**	0.010 U	**0.00024 J**	**0.00026 J**	0.00054 U
Copper	0.08	1.3	0.08	**0.0030 J**	0.010 U	**0.00058 J**	0.011 U	0.0080 U	**0.0014 J**	0.010 U	0.0011 U	0.011 U	0.0080 U
Iron	1.4	NE	1.4	**0.058**	0.050 U	**0.045 J**	**0.0096 J**	0.032 U	0.011 U	0.050 U	**0.025 J**	**0.036 J**	0.032 U
Lead	0.015	0.015	NE	0.00054 U	**0.00044 J**	**0.00058 J**	0.00054 U	0.00054 U	0.00054 U	**0.00031 J**	**0.00019 J**	0.00054 U	0.00054 U
Magnesium	NE	NE	NE	**60**	**36 J**	**77**	**21**	**62**	**9.9**	**9.8 J**	**12**	**10**	**13**
Manganese	0.043	NE	0.043	**1.2**	**0.66 J**	**1.6**	**0.25**	**0.46**	**0.16**	**0.65 J**	**0.48**	**0.51**	**0.36**
Mercury	0.000063	0.002	0.000063	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00015 U	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00015 U
Nickel	0.039	NE	0.039	0.0011 U	0.0010 U	0.0011 U	0.0011 U	0.027 U	0.0011 U	0.0010 U	0.0011 U	0.0011 U	0.027 U
Potassium	NE	NE	NE	**5.2**	**4.1**	**3.9**	**5.3**	**5.2**	**1.9**	**1.4**	**1.3**	**1.4**	**1.4**
Selenium	0.01	0.05	0.01	0.010 U	**0.00055 J**	**0.0025 J**	0.011 U	0.0054 U	0.010 U	**0.0011 J**	0.0011 U	0.011 U	0.0054 U
Silver	0.0094	NE	0.0094	0.00054 U	0.00050 U	**0.00017 J**	0.00054 U	0.00054 U	0.00054 U	0.00050 U	**0.000037 J**	0.00054 U	0.00054 U
Sodium	NE	NE	NE	**290**	**190**	**330**	**120**	**100**	**17**	**15**	**14**	**15**	**13**
Thallium	0.00002	0.002	0.00002	0.0010 U	**0.0000046 J**	**0.00076 J**	0.00054 U	0.00086 U	0.0010 U	**0.00025 J**	**0.0000096 J**	**0.0000079 J**	0.00086 U
Vanadium	0.0086	NE	0.0086	0.0011 U	0.0010 U	**0.00097 J**	0.0011 U	0.0054 U	0.010 U	0.0010 U	0.0011 U	0.0011 U	0.0054 U
Zinc	0.6	NE	0.6	**0.037**	**0.088**	**0.014**	**0.23**	0.0043 U	0.0043 U	0.0040 U	0.0043 U	0.0043 U	0.0043 U
Hexavalent Chromium SW7196A (mg/L)														
Chromium, Hexavalent	0.000035	NE	0.000035	0.013 U	0.013 U	0.013 U	0.025 U	0.012 U	0.013 U	0.013 U	0.013 U	0.025 U	0.012 U
PCBs SW8082A (ug/L)														
PCB-1016 (Aroclor 1016	0.14	0.5	0.0079	0.10 UJ	0.10 U	0.10 U	0.10 U	-	0.10 UJ	0.10 U	0.10 U	0.10 U	0.12 U
PCB-1221 (Aroclor 1221	0.0047	0.5	0.0079	0.10 UJ	0.10 U	0.10 U	0.10 U	-	0.10 UJ	0.10 U	0.10 U	0.10 U	0.12 U
PCB-1232 (Aroclor 1232	0.0047	0.5	0.0079	0.10 UJ	0.10 U	0.10 U	0.10 U	-	0.10 UJ	0.10 U	0.10 U	0.10 U	0.12 U
PCB-1242 (Aroclor 1242	0.0078	0.5	0.0079	0.10 UJ	0.10 U	0.10 U	0.10 U	-	0.10 UJ	0.10 U	0.10 U	0.10 U	0.12 U
PCB-1248 (Aroclor 1248	0.0078	0.5	0.0079	0.10 UJ	0.10 U	0.10 U	0.10 U	-	0.10 UJ	0.10 U	0.10 U	0.10 U	0.12 U
PCB-1254 (Aroclor 1254	0.0078	0.5	0.0079	0.10 UJ	0.10 U	0.10 U	0.10 U	-	0.10 UJ	0.10 U	0.10 U	0.10 U	0.12 U
PCB-1260 (Aroclor 1260)	0.0078	0.5	0.0079	0.10 UJ	0.10 U	0.10 U	0.10 U	-	0.10 UJ	0.10 U	0.10 U	0.10 U	0.12 U

Table 4-2
Summary of Cumulative Overburden Groundwater Analytical Results
Former Dow Salvage Yard
233 Odlin Road, Bangor, Maine

Locations:				SY-OBMW7					SY-OBMW8				
Field Sample ID:				SY-OBMW7-120219	SY-OBMW7-031220	SY-OBMW7-081120	SY-OBMW7-120220	SY-OBMW7-110623	SY-OBMW8-120319	SY-OBMW8-031020	SY-OBMW8-081220	SY-OBMW8-120120	SY-OBMW8-110823
Matrix:				WG	WG	WG	WG	WG	WG	WG	WG	WG	WG
Sample Begin Depth:				15	15	15	15	15	17	17	17	17	17
Sample End Depth:				25	25	25	25	25	27	27	27	27	27
Sample Date:				12/02/2019	03/12/2020	08/11/2020	12/02/2020	11/06/2023	12/03/2019	03/10/2020	08/12/2020	12/01/2020	11/08/2023
Analytes	**RSL[1]**	**MCL[2]**	**RAG[3]**										
CVOCs SW8260D SIM (ug/L)													
1,1-Dichloroethene	28	7	29	NS	NS	NS	NS	0.025 U	NS	NS	NS	NS	0.025 U
cis-1,2-Dichloroethene	3.6	70	2.5	NS	NS	NS	NS	0.025 U	NS	NS	NS	NS	0.025 U
Tetrachloroethene (PCE)	4.1	5	4.1	NS	NS	NS	NS	0.025 U	NS	NS	NS	NS	0.025 U
trans-1,2-Dichloroethene	36	100	6.8	NS	NS	NS	NS	0.025 U	NS	NS	NS	NS	0.025 U
Trichloroethene (TCE)	0.28	5	0.28	NS	NS	NS	NS	0.025 U	NS	NS	NS	NS	**0.074**
Vinyl chloride	0.019	2	0.019	NS	NS	NS	NS	0.050 U	NS	NS	NS	NS	0.050 U
VOCs SW8260D (ug/L)													
1,1,1,2-Tetrachloroethane	0.57	NE	0.57	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,1-Trichloroethane	800	200	800	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	0.076	NE	0.076	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	0.041	5	0.042	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	2.8	NE	2.8	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	28	7	29	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U
1,1-Dichloropropene	NE	NE	0.47	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,3-Trichlorobenzene	0.7	NE	0.7	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,3-Trichloropropane	0.00075	NE	0.00075	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,4-Trichlorobenzene	0.4	70	0.4	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,4-Trimethylbenzene	5.6	NE	5.6	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromo-3-chloropropane	0.00033	0.2	0.00033	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
1,2-Dibromoethane (EDB)	0.0075	0.05	0.0075	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	30	600	30	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	0.17	5	0.17	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	0.82	5	0.83	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3,5-Trimethylbenzene	6	NE	6	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	NE	NE	30	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichloropropane	37	NE	37	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	0.48	75	0.48	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dioxane (p-Dioxane)	0.46	NE	0.46	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2,2-Dichloropropane	NE	NE	NE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Butanone (MEK)	560	NE	560	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2-Chlorotoluene	24	NE	24	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Hexanone	3.8	NE	3.8	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
4-Chlorotoluene	25	NE	25	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
4-Methyl-2-pentanone (MIBK)	630	NE	630	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Acetone	1400	NE	1400	5.0 U	**3.9 J**	5.0 U	5.0 U	5.0 U	5.0 U	**3.7 J**	5.0 U	5.0 U	5.0 U
Benzene	0.46	5	0.46	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromobenzene	6.2	NE	6.2	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromochloromethane	8.3	NE	8.3	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	0.13	80	0.13	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Bromoform	3.3	80	3.3	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane	0.75	NE	0.76	2.0 U	2.0 U	2.0 U	2.0 U	1.5 U	2.0 U	2.0 U	2.0 U	2.0 U	1.5 U
Carbon disulfide	81	NE	81	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon tetrachloride	0.46	5	0.46	1.0 U	1.0 U	1.0 U	1.0 U	**0.34 J**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	7.8	100	7.8	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	2100	NE	2100	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform	0.22	80	0.22	1.0 U	1.0 U	1.0 U	1.0 U	1.5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.5 U
Chloromethane	19	NE	19	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**1.9 J**	**0.72 J**	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	3.6	70	2.5	1.0 U	1.0 U	1.0 U	1.0 U	1.5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.5 U
cis-1,3-Dichloropropene	0.47	NE	0.47	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dibromochloromethane	0.87	80	0.87	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dibromomethane	0.83	NE	0.83	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dichlorodifluoromethane	NE	NE	20	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Diethyl ether (Ethyl ether)	390	NE	390	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	1.5	700	1.5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Hexachlorobutadiene	0.14	NE	0.14	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U
Isopropylbenzene (Cumene)	45	NE	45	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U
m,p-Xylene	19	10000	19	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
Methyl tert-butyl ether (MTBE)	14	NE	14	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methylene chloride	11	5	11	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Naphthalene	0.17	NE	0.12	1.0 U	1.0 U	1.0 U	1.0 U	1.5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.5 U
n-Butylbenzene	100	NE	100	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
n-Propylbenzene	66	NE	66	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
o-Xylene	19	10000	19	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
p-Cymene (p-Isopropyltoluene)	NE	NE	NE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
sec-Butylbenzene	200	NE	200	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Styrene	120	100	120	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
tert-Amyl methyl ether	NE	NE	NE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
tert-Butyl alcohol	NE	NE	NE	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
tert-Butyl ethyl ether	NE	NE	NE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
tert-Butylbenzene	69	NE	69	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene (PCE)	4.1	5	4.1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U

Table 4-2
Summary of Cumulative Overburden Groundwater Analytical Results
Former Dow Salvage Yard
233 Odlin Road, Bangor, Maine

				Locations:	SY-OBMW7					SY-OBMW8				
				Field Sample ID:	SY-OBMW7-120219	SY-OBMW7-031220	SY-OBMW7-081120	SY-OBMW7-120220	SY-OBMW7-110623	SY-OBMW8-120319	SY-OBMW8-031020	SY-OBMW8-081220	SY-OBMW8-120120	SY-OBMW8-110823
				Matrix:	WG	WG	WG	WG	WG	WG	WG	WG	WG	WG
				Sample Begin Depth:	15	15	15	15	15	17	17	17	17	17
				Sample End Depth:	25	25	25	25	25	27	27	27	27	27
				Sample Date:	12/02/2019	03/12/2020	08/11/2020	12/02/2020	11/06/2023	12/03/2019	03/10/2020	08/12/2020	12/01/2020	11/08/2023
Analytes	**RSL[1]**	**MCL[2]**	**RAG[3]**											
Tetrahydrofuran	340	NE	340		1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
Toluene	110	1000	1200		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	36	100	6.8		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	0.47	NE	NE		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene (TCE)	0.28	5	0.28		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichlorofluoromethane	520	NE	520		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl chloride	0.019	2	0.019		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
SVOCs SW8270E (ug/L)														
1,2,4-Trichlorobenzene	0.4	70	0.4		1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	30	600	30		1.0 U	10 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	NE	NE	30		1.0 U	10 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	0.48	75	0.48		1.0 U	10 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2,2'-Oxybis(1-chloropropane)	NE	NE	NE		1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2,4,5-Trichlorophenol	120	NE	120		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2,4,6-Trichlorophenol	1.2	NE	1.2		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2,4-Dichlorophenol	4.6	NE	4.6		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2,4-Dimethylphenol	36	NE	36		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2,4-Dinitrophenol	3.9	NE	3.9		45 U	45 U	45 U	45 U	45 U	45 U	45 U	45 U	45 U	45 U
2,4-Dinitrotoluene	0.24	NE	0.24		1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2,6-Dinitrotoluene	0.049	NE	0.049		1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Chloronaphthalene	75	NE	75		1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Chlorophenol	9.1	NE	9.1		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Methylphenol (o-Cresol)	93	NE	93		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Nitroaniline	19	NE	NE		1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Nitrophenol	NE	NE	NE		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
3,3'-Dichlorobenzidine	0.13	NE	0.13		25 U	250 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U
3-Nitroaniline	NE	NE	NE		1.0 U	10 U	1.0 U	1.0 U	1.5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.5 U
4,6-Dinitro-2-methylphenol	0.15	NE	NE		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
4-Bromophenyl phenyl ether	NE	NE	NE		1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
4-Chloro-3-methylphenol	140	NE	150		1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U
4-Chloroaniline	0.37	NE	NE		1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
4-Chlorophenyl phenyl ether	NE	NE	NE		1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
4-Methylphenol (p-Cresol)	190	NE	190		1.0 U	1.0 U	1.0 U	1.0 U	1.5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.5 U
4-Nitroaniline	3.8	NE	38		1.0 U	10 U	1.0 U	1.0 U	3.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.0 U
4-Nitrophenol	NE	NE	NE		5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ
Aniline (Phenylamine, Aminobenzene)	13	NE	13		1.0 UJ	10 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U
Azobenzene	0.12	NE	NE		1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Benzidine	0.00011	NE	NE		25 U	250 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U
Benzoic acid	7500	NE	7500		45 U	45 U	45 U	45 U	45 UJ	45 U	45 U	45 U	45 U	45 UJ
Benzyl alcohol	200	NE	200		1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Benzyl butyl phthalate	16	NE	16		5.0 U	10 U	1.0 U	1.0 U	3.0 U	5.0 U	1.0 U	1.0 U	1.0 U	3.0 UJ
bis(2-Chloroethoxy) methane	5.9	NE	NE		1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**57**
bis(2-Chloroethyl) ether	0.014	NE	0.014		1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
bis(2-Ethylhexyl) phthalate	5.6	6	5.6		5.0 U	**880**	1.0 U	1.0 U	3.0 U	5.0 U	**11**	1.0 U	1.0 U	**57**
Carbazole	NE	NE	1.5		1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dibenzofuran	0.79	NE	0.79		0.40 U	4.0 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U
Diethyl phthalate	1500	6	1500		1.0 UJ	10 U	1.0 U	1.0 U	1.0 UJ	1.0 UJ	1.0 U	1.0 U	1.0 U	**0.68 J**
Dimethyl phthalate	NE	NE	NE		R	10 U	1.0 UJ	1.0 U	1.0 UJ	R	1.0 U	1.0 UJ	1.0 U	1.0 UJ
Di-n-butyl phthalate	90	NE	NE		5.0 U	10 U	5.0 U	1.0 U	1.0 U	5.0 U	1.0 U	5.0 U	1.0 U	1.0 U
di-n-Octyl phthalate	20	NE	200		1.0 U	10 U	1.0 U	1.0 U	3.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.0 U
Hexachlorobenzene	0.0098	1	0.0098		1.0 UJ	10 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U
Hexachlorobutadiene	0.14	NE	0.14		1.0 U	10 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Hexachlorocyclopentadiene	0.041	50	NE		4.0 UJ	40 UJ	4.0 UJ	4.0 UJ	4.0 UJ	4.0 UJ	4.0 UJ	4.0 UJ	4.0 UJ	4.0 UJ
Hexachloroethane	0.33	NE	0.33		1.0 U	10 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Isophorone	78	NE	78		1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Nitrobenzene	0.14	NE	NE		1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
N-Nitrosodimethylamine	0.00011	NE	NE		1.0 UJ	10 U	1.0 U	1.0 U	1.0 UJ	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 UJ
N-Nitrosodi-n-propylamine	0.011	NE	NE		1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
N-Nitrosodiphenylamine	12	NE	12		1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Pentachlorophenol	0.041	1	0.041		5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Phenol	580	NE	580		1.0 UJ	1.0 UJ	1.0 UJ	1.0 UJ	1.0 UJ	1.0 UJ	1.0 UJ	1.0 UJ	1.0 UJ	1.0 UJ
Pyridine	12	NE	NE		1.0 UJ	10 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U

Table 4-2
Summary of Cumulative Overburden Groundwater Analytical Results
Former Dow Salvage Yard
233 Odlin Road, Bangor, Maine

			Locations:	SY-OBMW7					SY-OBMW8					
			Field Sample ID:	SY-OBMW7-120219	SY-OBMW7-031220	SY-OBMW7-081120	SY-OBMW7-120220	SY-OBMW7-110623	SY-OBMW8-120319	SY-OBMW8-031020	SY-OBMW8-081220	SY-OBMW8-120120	SY-OBMW8-110823
			Matrix:	WG	WG	WG	WG	WG	WG	WG	WG	WG	WG
			Sample Begin Depth:	15	15	15	15	15	17	17	17	17	17
			Sample End Depth:	25	25	25	25	25	27	27	27	27	27
			Sample Date:	12/02/2019	03/12/2020	08/11/2020	12/02/2020	11/06/2023	12/03/2019	03/10/2020	08/12/2020	12/01/2020	11/08/2023
Analytes	**RSL[1]**	**MCL[2]**	**RAG[3]**										
E300 (mg/L)													
Chloride	NE	NE	NE	**800 J**	**500**	**930**	**300**	**760**	**9.6**	**10**	**9.2**	**7.4**	**9.5**
Nitrate	NE	NE	NE	0.025 R	**0.28**	0.025 U	**0.19**	**0.018 J**	**0.026 J**	0.025 U	0.025 U	0.050 U	0.025 U
Sulfate	NE	NE	NE	**130 J**	**200**	**150**	**55**	**98**	**7.1**	**6.6**	**6.3**	**4.8**	**8.7**
RSK175 (ug/L)													
Ethane	NE	NE	NE	5.0 U	5.0 U	5.0 U	5.0 U	9.8 U	5.0 U	5.0 U	5.0 U	5.0 U	9.8 U
Ethene	NE	NE	NE	5.0 U	5.0 U	5.0 U	5.0 U	9.8 U	5.0 U	5.0 U	5.0 U	5.0 U	9.8 U
Methane	NE	NE	NE	**12**	10 U	**9.7 J**	10 U	**7.2 J**	**11**	10 U	**7.8 J**	**13**	**6.6 J**
A2320B (mg/L)													
Alkalinity, Total (as CaCO3)	NE	NE	NE	**200**	**160**	**190**	**130**	**210**	**140**	**140**	**130**	**140**	**160**
A3500B (mg/L)													
Iron, Ferrous	NE	NE	NE	**0.096 J**	0.050 UJ	0.050 U	**0.039 J**	**0.096 J**	**0.030 J**	0.050 U	0.050 UJ	0.050 U	0.050 U
A5310B (mg/L)													
Total Organic Carbon	NE	NE	NE	**1.2**	**2.0 J**	**0.88 J**	**5.8**	**2.0**	**1.3**	1.0 U	**0.55 J**	**0.52 J**	**1.1**

Table 4-2
Summary of Cumulative Overburden Groundwater Analytical Results
Former Dow Salvage Yard
233 Odlin Road, Bangor, Maine

Locations:				SY-OBMW9					SY-OBMW10				
Field Sample ID:				SY-OBMW9-120319	SY-OBMW9-031020	SY-OBMW9-081220	SY-OBMW9-120120	SY-OBMW9-110823	SY-OBMW10-120219	SY-OBMW10-030920	SY-OBMW10-081120	SY-OBMW10-120220	SY-OBMW10-110623
Matrix:				WG	WG	WG	WG	WG	WG	WG	WG	WG	WG
Sample Begin Depth:				26	26	26	25	25	18	18	18	18	18
Sample End Depth:				36	36	36	35	35	28	28	28	28	28
Sample Date:				12/03/2019	03/10/2020	08/12/2020	12/01/2020	11/08/2023	12/02/2019	03/09/2020	08/11/2020	12/02/2020	11/06/2023
Analytes	**RSL[1]**	**MCL[2]**	**RAG[3]**										
PAH SIM (ug/L)													
2-Methylnaphthalene	3.6	NE	3.6	0.095 U	0.096 U	0.094 UJ	0.093 U	0.094 U	0.093 U	0.095 U	0.096 U	0.094 U	0.093 UJ
Acenaphthene	53	NE	54	0.095 U	0.096 U	0.094 UJ	0.093 U	0.094 U	0.093 U	0.095 U	0.096 U	0.094 U	0.093 UJ
Acenaphthylene	NE	NE	52	0.095 U	0.096 U	0.094 UJ	0.093 U	0.094 U	0.093 U	0.095 U	0.096 U	0.094 U	0.093 UJ
Anthracene	180	NE	180	0.095 U	0.096 UJ	0.094 UJ	0.093 U	0.094 U	0.093 U	0.095 U	0.096 U	0.094 U	0.093 UJ
Benzo(a)anthracene	0.03	NE	0.03	0.095 UJ	0.19 UJ	0.094 UJ	0.093 U	0.094 U	0.093 U	0.095 U	0.096 U	0.094 U	0.093 UJ
Benzo(a)pyrene	0.025	0.2	0.025	0.095 UJ	**0.080 J**	0.094 UJ	**0.082 J**	0.094 U	0.093 U	0.095 U	0.096 U	0.094 U	0.093 UJ
Benzo(b)fluoranthene	0.25	NE	0.25	0.095 UJ	**0.11 J**	0.094 UJ	0.093 U	0.094 U	0.093 U	0.095 U	0.096 U	0.094 U	0.093 UJ
Benzo(g,h,i)perylene	NE	NE	60	R	0.19 UJ	R	0.093 U	0.094 U	0.093 U	0.095 U	0.096 U	0.094 U	0.093 UJ
Benzo(k)fluoranthene	2.5	NE	2.5	0.095 UJ	0.096 UJ	0.094 UJ	**0.070 J**	0.094 U	0.093 U	0.095 U	0.096 U	0.094 U	0.093 UJ
Chrysene	25	NE	25	0.095 UJ	0.096 UJ	0.094 UJ	**0.065 J**	0.094 U	0.093 U	0.095 U	0.096 U	0.094 U	0.093 UJ
Dibenz(a,h)anthracene	0.025	NE	0.025	R	0.096 UJ	R	0.093 U	0.094 U	0.093 U	0.095 U	0.096 U	0.094 U	0.093 UJ
Fluoranthene	80	NE	80	0.095 UJ	0.096 U	0.094 UJ	0.093 U	0.094 U	0.093 U	0.095 U	0.096 U	0.094 U	0.093 UJ
Fluorene	29	NE	29	0.095 U	0.096 U	0.094 UJ	0.093 U	0.094 U	0.093 U	0.095 U	0.096 U	0.094 U	0.093 UJ
Indeno(1,2,3-c,d)pyrene	0.25	NE	0.25	0.095 UJ	0.19 UJ	R	**0.067 J**	0.094 U	0.093 U	0.095 U	0.096 U	0.094 U	0.093 UJ
Naphthalene	0.17	NE	0.12	0.095 U	0.096 U	0.094 UJ	0.093 U	0.094 U	0.093 U	0.095 U	0.096 U	0.094 U	0.093 UJ
Phenanthrene	NE	NE	18	0.095 U	0.096 U	0.094 UJ	0.093 U	0.094 U	0.093 U	0.095 U	0.096 U	0.094 U	0.093 UJ
Pyrene	12	NE	12	0.095 U	**0.080 J**	0.094 UJ	0.093 U	0.094 U	0.19 U	0.095 U	0.096 U	0.094 U	0.093 UJ
MassDEP EPH (ug/L)													
2-Methylnaphthalene	3.6	NE	3.6	0.50 U	0.50 U	0.50 U	0.50 U	0.70 U	0.50 U	0.50 U	0.50 U	0.50 U	0.70 UJ
Acenaphthene	53	NE	54	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Acenaphthylene	NE	NE	52	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 UJ	0.50 U	0.50 U
Anthracene	180	NE	180	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Benzo(a)anthracene	0.03	NE	0.03	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Benzo(a)pyrene	0.025	0.2	0.025	0.20 U	0.20 U	0.20 U	0.20 U	0.70 U	0.20 U	0.20 U	0.20 U	0.20 U	0.70 U
Benzo(b)fluoranthene	0.25	NE	0.25	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Benzo(g,h,i)perylene	NE	NE	60	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Benzo(k)fluoranthene	2.5	NE	2.5	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Chrysene	25	NE	25	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Dibenz(a,h)anthracene	0.025	NE	0.025	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 UJ
Fluoranthene	80	NE	80	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Fluorene	29	NE	29	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Indeno(1,2,3-c,d)pyrene	0.25	NE	0.25	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 UJ
Naphthalene	0.17	NE	0.12	0.50 U	0.50 U	0.50 UJ	0.50 UJ	0.70 U	0.50 U	0.50 U	0.50 UJ	0.50 UJ	0.70 UJ
Phenanthrene	NE	NE	18	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Pyrene	12	NE	12	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
C11-C22 Aromatic	NE	NE	60	85 U	85 U	100 U	85 U	100 U	85 UJ	85 U	100 U	85 U	**87 J**
C19-C36 Aliphatic	NE	NE	4000	88 U	88 U	88 U	88 U	97 U	100 UJ	88 U	88 U	88 U	97 U
C9-C18 Aliphatic	NE	NE	35	66 U	66 UJ	66 UJ	66 U	95 UJ	66 UJ	66 UJ	66 UJ	66 U	95 UJ
MassDEP VPH (ug/L)													
Benzene	0.46	5	0.46	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	1.5	700	1.5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
m,p-Xylene	19	10000	19	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Methyl tert-butyl ether (MTBE)	14	NE	1300	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Naphthalene	0.17	NE	0.12	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U
o-Xylene	19	10000	19	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	110	1000	110	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
C5-C8 Aliphatic	NE	NE	18	100 U	100 U	100 U	100 U	50 U	100 U	100 U	100 U	100 U	50 U
C9-C10 Aromatic	NE	NE	7.1	**3.7** J	15 U	100 U	100 U	50 U	**3.9** J	15 U	100 U	100 U	50 U
C9-C12 Aliphatic	NE	NE	35	45 U	45 U	45 U	45 U	50 U	100 U	45 U	45 U	45 U	50 U

Table 4-2
Summary of Cumulative Overburden Groundwater Analytical Results
Former Dow Salvage Yard
233 Odlin Road, Bangor, Maine

Locations:				SY-OBMW9					SY-OBMW10				
Field Sample ID:				SY-OBMW9-120319	SY-OBMW9-031020	SY-OBMW9-081220	SY-OBMW9-120120	SY-OBMW9-110823	SY-OBMW10-120219	SY-OBMW10-030920	SY-OBMW10-081120	SY-OBMW10-120220	SY-OBMW10-110623
Matrix:				WG	WG	WG	WG	WG	WG	WG	WG	WG	WG
Sample Begin Depth:				26	26	26	25	25	18	18	18	18	18
Sample End Depth:				36	36	36	35	35	28	28	28	28	28
Sample Date:				12/03/2019	03/10/2020	08/12/2020	12/01/2020	11/08/2023	12/02/2019	03/09/2020	08/11/2020	12/02/2020	11/06/2023
Analytes	**RSL[1]**	**MCL[2]**	**RAG[3]**										
Total Metals SW6020A/7470A (mg/L)													
Aluminum	2	NE	2	0.050 U	0.050 U	0.050 U	**0.014 J**	**0.012 J**	0.050 U	0.050 U	0.050 U	**0.0055 J**	**0.12**
Antimony	0.00078	0.006	0.00078	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U
Arsenic	0.000052	0.01	0.000052	**0.0085**	**0.0075**	**0.0072**	**0.0092**	**0.0088**	**0.0055**	**0.0051**	**0.0062**	**0.0041 J**	**0.0029**
Barium	380	2	0.38	**0.016**	**0.014**	**0.013**	**0.016**	**0.014**	**0.036**	**0.020**	**0.013**	**0.014**	**0.050**
Beryllium	0.0025	0.004	0.0025	0.00010 U	0.00010 U	0.00010 U	**0.000064 J**	0.00050 U	0.0010 U	**0.000048 J**	0.0010 U	0.00010 U	0.00050 U
Cadmium	0.00092	0.005	0.0018	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.0010 U	**0.00020 J**	0.00050 U	0.00050 U
Chromium	0.000035[5]/2.2	0.1	0.0000035[5]/2.3	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.025 U	0.0010 U	0.010 U	**0.0013 J**	0.0010 U	0.025 U
Cobalt	0.0006	NE	0.0006	**0.00014 J**	0.010 U	0.010 U	**0.00030 J**	0.00050 U	**0.0010 J**	0.010 U	0.010 U	**0.00027 J**	**0.00061 J**
Copper	0.08	1.3	0.08	0.0010 U	0.010 UJ	0.010 U	**0.0012 J**	0.0075 U	**0.00036 J**	0.010 U	**0.00066 J**	**0.0013 J**	**0.0055 J**
Iron	1.4	NE	1.4	**0.030 J**	**0.68 J**	**0.20 J**	**0.17**	**0.084**	**0.33**	**0.33**	**0.22**	**0.23**	**0.22**
Lead	0.015	0.015	NE	0.00050 U	0.0050 U	0.00050 U	**0.00019 J**	**0.00028 J**	0.00050 U	0.0050 U	**0.00021 J**	0.00050 U	**0.00023 J**
Magnesium	NE	NE	NE	**14**	**12**	**19**	**18**	**16**	**57**	**61**	**54**	**62**	**63**
Manganese	0.043	NE	0.043	**0.13**	**0.74 J**	**0.34 J**	**0.34**	**0.12**	**0.67**	**0.44**	**0.43**	**0.44**	**1.1**
Mercury	0.000063	0.002	0.000063	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00015 U	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00015 U
Nickel	0.039	NE	0.039	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.025 U	0.0010 U	0.010 U	**0.00069 J**	0.0010 U	0.025 U
Potassium	NE	NE	NE	**2.0**	**1.9**	**2.0 J**	**2.4**	**2.1**	**4.9**	**4.8**	**4.5**	**5.0**	**4.2**
Selenium	0.01	0.05	0.01	0.0010 U	**0.0020 J**	0.0010 U	0.010 U	0.0050 U	0.0010 U	**0.0024 J**	**0.00070 J**	0.010 U	0.0050 U
Silver	0.0094	NE	0.0094	0.00050 U	0.00050 U	0.00050 U	**0.000030 J**	0.00050 U	**0.000060 J**	**0.000028 J**	**0.00011 J**	0.00050 U	0.00050 U
Sodium	NE	NE	NE	**200**	**170**	**160**	**200**	**150**	**83**	**110**	**70**	**120**	**290**
Thallium	0.00002	0.002	0.00002	0.0010 U	0.00050 U	0.00050 U	**0.00067 J**	0.00080 U	0.0010 U	0.0010 U	**0.0011**	**0.000056 J**	0.00080 U
Vanadium	0.0086	NE	0.0086	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0050 U	**0.00066 J**	0.0010 U	0.010 U	0.0010 U	0.0050 U
Zinc	0.6	NE	0.6	0.0040 U	0.0040 U	0.0040 U	**0.0040 J**	0.0040 U	0.0040 U	0.010 U	0.0040 U	0.0040 U	**0.094**
Dissolved Metals (mg/L)													
Aluminum	2	NE	2	**0.018 J**	0.050 U	**0.019 J**	**0.0088 J**	0.027 U	**0.0093 J**	0.050 U	0.010 U	**0.0052 J**	0.027 U
Antimony	0.00078	0.006	0.00078	0.00054 U	0.00050 U	0.00054 U	0.00054 U	0.00054 U	0.00054 U	0.00050 U	0.00050 U	0.00054 U	**0.00025 J**
Arsenic	0.000052	0.01	0.000052	**0.0088**	**0.0067**	**0.0075**	**0.0092**	**0.0091**	**0.0052**	**0.0050 J**	**0.0059**	**0.0047 J**	**0.0026 J**
Barium	380	2	0.38	**0.015**	**0.013**	**0.015**	**0.015**	**0.015**	**0.041**	**0.021**	**0.012**	**0.013**	**0.050**
Beryllium	0.0025	0.004	0.0025	0.00011 U	0.00010 U	0.00011 UJ	0.0011 U	0.00054 U	0.00011 U	**0.000024 J**	0.0010 U	0.00011 U	0.00054 U
Cadmium	0.00092	0.005	0.0018	0.00054 UJ	0.00050 U	0.00054 U	0.00054 U	0.00054 U	0.00054 U	0.00050 U	0.00050 U	0.00054 U	0.00054 U
Chromium	0.000035[5]/2.2	0.1	0.0000035[5]/2.3	0.0011 U	0.0010 U	0.0011 U	0.0011 U	0.027 U	0.0011 U	0.0010 U	0.0010 U	0.0011 U	0.027 U
Cobalt	0.0006	NE	0.0006	**0.00014 J**	0.010 U	**0.00026 J**	**0.00031 J**	0.00054 U	**0.00063 J**	0.010 U	0.010 U	**0.00025 J**	**0.00060 J**
Copper	0.08	1.3	0.08	**0.0015 J**	0.010 U	0.0011 U	0.011 U	0.0080 U	**0.0013 J**	0.010 U	0.0010 U	0.011 U	0.0080 U
Iron	1.4	NE	1.4	**0.019 J**	0.050 U	**0.11**	**0.050 J**	**0.059**	**0.31**	**0.30**	**0.22**	**0.22**	**0.067**
Lead	0.015	0.015	NE	0.00054 U	**0.0011 J**	0.00054 U	0.00054 U	0.00054 U	0.00054 U	**0.0026 J**	0.00050 U	0.00054 U	0.00054 U
Magnesium	NE	NE	NE	**13**	**11 J**	**19**	**18**	**16**	**54**	**51 J**	**53**	**56**	**59**
Manganese	0.043	NE	0.043	**0.14**	**0.68 J**	**0.26 J**	**0.29**	**0.13**	**0.58**	**0.43 J**	**0.42**	**0.41**	**1.1**
Mercury	0.000063	0.002	0.000063	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00015 U	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00015 U
Nickel	0.039	NE	0.039	0.0011 U	0.0010 U	0.0011 UJ	0.0011 U	0.027 U	0.0011 U	0.0010 U	0.0010 U	0.0011 U	0.027 U
Potassium	NE	NE	NE	**1.9**	**1.8 J**	**2.0 J**	**2.2**	**2.0**	**5.1**	**4.7**	**4.8**	**4.4**	**4.0**
Selenium	0.01	0.05	0.01	0.010 U	0.0010 U	0.0011 U	0.011 U	0.0054 U	0.010 U	**0.0019 J**	0.0010 U	0.011 U	0.0054 U
Silver	0.0094	NE	0.0094	0.00054 UJ	0.00050 U	0.00054 U	**0.000032 J**	0.00054 U	0.00054 U	0.00050 U	0.00050 U	0.00054 U	0.00054 U
Sodium	NE	NE	NE	**190**	**160**	**160**	**210**	**150**	**80**	**110**	**70**	**120**	**280**
Thallium	0.00002	0.002	0.00002	0.0010 U	0.00050 U	**0.000053 J**	**0.00051 J**	0.00086 U	0.0010 U	**0.000071 J**	0.0010 U	0.00054 U	0.00086 U
Vanadium	0.0086	NE	0.0086	0.0011 U	0.0010 U	0.0011 U	0.0011 U	0.0054 U	0.0011 U	0.0010 U	0.0010 U	0.0011 U	0.0054 U
Zinc	0.6	NE	0.6	0.0043 U	0.0040 U	0.0043 U	0.0043 U	0.0043 U	0.0043 U	**0.0033 J**	0.010 U	0.0043 U	**0.087**
Hexavalent Chromium SW7196A (mg/L)													
Chromium, Hexavalent	0.000035	NE	0.000035	0.013 U	**0.00084 J**	0.013 U	0.025 U	0.012 U	0.013 U	0.025 U	0.013 U	0.025 U	0.012 U
PCBs SW8082A (ug/L)													
PCB-1016 (Aroclor 1016)	0.14	0.5	0.0079	0.10 U	0.10 U	0.10 U	0.10 U	0.12 U	0.10 U	0.10 U	0.10 U	0.10 U	0.12 U
PCB-1221 (Aroclor 1221)	0.0047	0.5	0.0079	0.10 U	0.10 U	0.10 U	0.10 U	0.12 U	0.10 U	0.10 U	0.10 U	0.10 U	0.12 U
PCB-1232 (Aroclor 1232)	0.0047	0.5	0.0079	0.10 U	0.10 U	0.10 U	0.10 U	0.12 U	0.10 U	0.10 U	0.10 U	0.10 U	0.12 U
PCB-1242 (Aroclor 1242)	0.0078	0.5	0.0079	0.10 U	0.10 U	0.10 U	0.10 U	0.12 U	0.10 U	0.10 U	0.10 U	0.10 U	0.12 U
PCB-1248 (Aroclor 1248)	0.0078	0.5	0.0079	0.10 U	0.10 U	0.10 U	0.10 U	0.12 U	0.10 U	0.10 U	0.10 U	0.10 U	0.12 U
PCB-1254 (Aroclor 1254)	0.0078	0.5	0.0079	0.10 U	0.10 U	0.10 U	0.10 U	0.12 U	0.10 U	0.10 U	0.10 U	0.10 U	0.12 U
PCB-1260 (Aroclor 1260)	0.0078	0.5	0.0079	0.10 U	0.10 U	0.10 U	0.10 U	0.12 U	0.10 U	0.10 U	0.10 U	0.10 U	0.12 U

Table 4-2
Summary of Cumulative Overburden Groundwater Analytical Results
Former Dow Salvage Yard
233 Odlin Road, Bangor, Maine

				Locations:	SY-OBMW9					SY-OBMW10				
				Field Sample ID:	SY-OBMW9-120319	SY-OBMW9-031020	SY-OBMW9-081220	SY-OBMW9-120120	SY-OBMW9-110823	SY-OBMW10-120219	SY-OBMW10-030920	SY-OBMW10-081120	SY-OBMW10-120220	SY-OBMW10-110623
				Matrix:	WG	WG	WG	WG	WG	WG	WG	WG	WG	WG
				Sample Begin Depth:	26	26	26	25	25	18	18	18	18	18
				Sample End Depth:	36	36	36	35	35	28	28	28	28	28
				Sample Date:	12/03/2019	03/10/2020	08/12/2020	12/01/2020	11/08/2023	12/02/2019	03/09/2020	08/11/2020	12/02/2020	11/06/2023
Analytes	**RSL[1]**	**MCL[2]**	**RAG[3]**											
CVOCs SW8260D SIM (ug/L)														
1,1-Dichloroethene	28	7	29		NS	NS	NS	NS	0.025 U	NS	NS	NS	NS	0.025 U
cis-1,2-Dichloroethene	3.6	70	2.5		NS	NS	NS	NS	0.025 U	NS	NS	NS	NS	0.025 U
Tetrachloroethene (PCE)	4.1	5	4.1		NS	NS	NS	NS	0.025 U	NS	NS	NS	NS	0.025 U
trans-1,2-Dichloroethene	36	100	6.8		NS	NS	NS	NS	0.025 U	NS	NS	NS	NS	0.025 U
Trichloroethene (TCE)	0.28	5	0.28		NS	NS	NS	NS	0.025 U	NS	NS	NS	NS	0.025 U
Vinyl chloride	0.019	2	0.019		NS	NS	NS	NS	0.050 U	NS	NS	NS	NS	0.050 U
VOCs SW8260D (ug/L)														
1,1,1,2-Tetrachloroethane	0.57	NE	0.57		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,1-Trichloroethane	800	200	800		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	0.076	NE	0.076		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	0.041	5	0.042		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	2.8	NE	2.8		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	28	7	29		1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U
1,1-Dichloropropene	NE	NE	0.47		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,3-Trichlorobenzene	0.7	NE	0.7		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,3-Trichloropropane	0.00075	NE	0.00075		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,4-Trichlorobenzene	0.4	70	0.4		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,4-Trimethylbenzene	5.6	NE	5.6		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromo-3-chloropropane	0.00033	0.2	0.00033		1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
1,2-Dibromoethane (EDB)	0.0075	0.05	0.0075		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	30	600	30		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	0.17	5	0.17		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	0.82	5	0.83		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3,5-Trimethylbenzene	6	NE	6		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	NE	NE	30		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichloropropane	37	NE	37		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	0.48	75	0.48		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dioxane (p-Dioxane)	0.46	NE	0.46		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2,2-Dichloropropane	NE	NE	NE		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Butanone (MEK)	560	NE	560		5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2-Chlorotoluene	24	NE	24		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Hexanone	3.8	NE	3.8		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
4-Chlorotoluene	25	NE	25		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
4-Methyl-2-pentanone (MIBK)	630	NE	630		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Acetone	1400	NE	1400		5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Benzene	0.46	5	0.46		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromobenzene	6.2	NE	6.2		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromochloromethane	8.3	NE	8.3		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	0.13	80	0.13		0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Bromoform	3.3	80	3.3		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane	0.75	NE	0.76		2.0 U	2.0 U	2.0 U	2.0 U	1.5 U	2.0 U	2.0 U	2.0 U	2.0 U	1.5 U
Carbon disulfide	81	NE	81		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon tetrachloride	0.46	5	0.46		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	7.8	100	7.8		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	2100	NE	2100		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform	0.22	80	0.22		1.0 U	1.0 U	1.0 U	1.0 U	1.5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.5 U
Chloromethane	19	NE	19		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	3.6	70	2.5		1.0 U	1.0 U	1.0 U	1.0 U	1.5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.5 U
cis-1,3-Dichloropropene	0.47	NE	0.47		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dibromochloromethane	0.87	80	0.87		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dibromomethane	0.83	NE	0.83		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dichlorodifluoromethane	NE	NE	20		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Diethyl ether (Ethyl ether)	390	NE	390		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	1.5	700	1.5		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Hexachlorobutadiene	0.14	NE	0.14		0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U
Isopropylbenzene (Cumene)	45	NE	45		1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U
m,p-Xylene	19	10000	19		1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
Methyl tert-butyl ether (MTBE)	14	NE	14		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methylene chloride	11	5	11		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Naphthalene	0.17	NE	0.12		1.0 U	1.0 U	1.0 U	1.0 U	1.5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.5 U
n-Butylbenzene	100	NE	100		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
n-Propylbenzene	66	NE	66		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
o-Xylene	19	10000	19		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
p-Cymene (p-Isopropyltoluene)	NE	NE	NE		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
sec-Butylbenzene	200	NE	200		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Styrene	120	100	120		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
tert-Amyl methyl ether	NE	NE	NE		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
tert-Butyl alcohol	NE	NE	NE		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
tert-Butyl ethyl ether	NE	NE	NE		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
tert-Butylbenzene	69	NE	69		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene (PCE)	4.1	5	4.1		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U

Table 4-2
Summary of Cumulative Overburden Groundwater Analytical Results
Former Dow Salvage Yard
233 Odlin Road, Bangor, Maine

			Locations:	SY-OBMW9					SY-OBMW10				
			Field Sample ID:	SY-OBMW9-120319	SY-OBMW9-031020	SY-OBMW9-081220	SY-OBMW9-120120	SY-OBMW9-110823	SY-OBMW10-120219	SY-OBMW10-030920	SY-OBMW10-081120	SY-OBMW10-120220	SY-OBMW10-110623
			Matrix:	WG	WG	WG	WG	WG	WG	WG	WG	WG	WG
			Sample Begin Depth:	26	26	26	25	25	18	18	18	18	18
			Sample End Depth:	36	36	36	35	35	28	28	28	28	28
			Sample Date:	12/03/2019	03/10/2020	08/12/2020	12/01/2020	11/08/2023	12/02/2019	03/09/2020	08/11/2020	12/02/2020	11/06/2023
Analytes	**RSL[1]**	**MCL[2]**	**RAG[3]**										
Tetrahydrofuran	340	NE	340	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
Toluene	110	1000	1200	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	36	100	6.8	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	0.47	NE	NE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene (TCE)	0.28	5	0.28	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichlorofluoromethane	520	NE	520	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl chloride	0.019	2	0.019	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
SVOCs SW8270E (ug/L)													
1,2,4-Trichlorobenzene	0.4	70	0.4	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	30	600	30	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ
1,3-Dichlorobenzene	NE	NE	30	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ
1,4-Dichlorobenzene	0.48	75	0.48	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ
2,2'-Oxybis(1-chloropropane)	NE	NE	NE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2,4,5-Trichlorophenol	120	NE	120	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2,4,6-Trichlorophenol	1.2	NE	1.2	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2,4-Dichlorophenol	4.6	NE	4.6	1.0 UJ	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2,4-Dimethylphenol	36	NE	36	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2,4-Dinitrophenol	3.9	NE	3.9	45 U	45 U	45 U	45 U	45 U	45 U	45 U	45 U	45 U	45 U
2,4-Dinitrotoluene	0.24	NE	0.24	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2,6-Dinitrotoluene	0.049	NE	0.049	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Chloronaphthalene	75	NE	75	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Chlorophenol	9.1	NE	9.1	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Methylphenol (o-Cresol)	93	NE	93	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Nitroaniline	19	NE	NE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Nitrophenol	NE	NE	NE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
3,3'-Dichlorobenzidine	0.13	NE	0.13	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U
3-Nitroaniline	NE	NE	NE	1.0 U	1.0 U	1.0 U	1.0 U	1.5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.5 U
4,6-Dinitro-2-methylphenol	0.15	NE	NE	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
4-Bromophenyl phenyl ether	NE	NE	NE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
4-Chloro-3-methylphenol	140	NE	150	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 UJ
4-Chloroaniline	0.37	NE	NE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
4-Chlorophenyl phenyl ether	NE	NE	NE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
4-Methylphenol (p-Cresol)	190	NE	190	1.0 U	1.0 U	1.0 U	1.0 U	1.5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.5 U
4-Nitroaniline	3.8	NE	38	1.0 U	1.0 U	1.0 U	1.0 U	3.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.0 U
4-Nitrophenol	NE	NE	NE	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ
Aniline (Phenylamine, Aminobenzene)	13	NE	13	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U
Azobenzene	0.12	NE	NE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Benzidine	0.00011	NE	NE	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U
Benzoic acid	7500	NE	7500	45 U	45 U	45 U	45 U	45 UJ	45 U	45 U	45 U	45 U	45 UJ
Benzyl alcohol	200	NE	200	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Benzyl butyl phthalate	16	NE	16	5.0 U	1.0 U	1.0 U	1.0 U	3.0 UJ	5.0 U	1.0 U	1.0 U	1.0 U	3.0 U
bis(2-Chloroethoxy) methane	5.9	NE	NE	1.0 U	1.0 U	1.0 U	1.0 U	**16**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
bis(2-Chloroethyl) ether	0.014	NE	0.014	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
bis(2-Ethylhexyl) phthalate	5.6	6	5.6	5.0 U	5.0 U	1.0 U	1.0 U	**16**	5.0 U	5.0 U	1.0 U	1.0 U	3.0 U
Carbazole	NE	NE	1.5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dibenzofuran	0.79	NE	0.79	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U
Diethyl phthalate	1500	6	1500	1.0 UJ	1.0 U	1.0 U	1.0 U	**4.3 J**	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 UJ
Dimethyl phthalate	NE	NE	NE	R	1.0 U	1.0 UJ	1.0 U	1.0 UJ	R	1.0 U	1.0 UJ	1.0 U	1.0 UJ
Di-n-butyl phthalate	90	NE	NE	5.0 U	1.0 U	5.0 U	1.0 U	1.0 U	5.0 U	1.0 U	5.0 U	1.0 U	1.0 U
di-n-Octyl phthalate	20	NE	200	1.0 U	1.0 U	1.0 U	1.0 U	3.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.0 U
Hexachlorobenzene	0.0098	1	0.0098	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U
Hexachlorobutadiene	0.14	NE	0.14	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ
Hexachlorocyclopentadiene	0.041	50	NE	4.0 UJ	4.0 UJ	4.0 UJ	4.0 UJ	4.0 UJ	4.0 UJ	4.0 UJ	4.0 UJ	4.0 UJ	4.0 UJ
Hexachloroethane	0.33	NE	0.33	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ
Isophorone	78	NE	78	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Nitrobenzene	0.14	NE	NE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
N-Nitrosodimethylamine	0.00011	NE	NE	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 UJ	1.0 U	1.0 UJ	1.0 U	1.0 UJ
N-Nitrosodi-n-propylamine	0.011	NE	NE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
N-Nitrosodiphenylamine	12	NE	12	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Pentachlorophenol	0.041	1	0.041	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Phenol	580	NE	580	R	1.0 UJ	1.0 UJ	1.0 UJ	1.0 UJ	1.0 UJ	1.0 UJ	1.0 UJ	1.0 UJ	1.0 UJ
Pyridine	12	NE	NE	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U

Table 4-2
Summary of Cumulative Overburden Groundwater Analytical Results
Former Dow Salvage Yard
233 Odlin Road, Bangor, Maine

			Locations:	SY-OBMW9					SY-OBMW10					
			Field Sample ID:	SY-OBMW9-120319	SY-OBMW9-031020	SY-OBMW9-081220	SY-OBMW9-120120	SY-OBMW9-110823	SY-OBMW10-120219	SY-OBMW10-030920	SY-OBMW10-081120	SY-OBMW10-120220	SY-OBMW10-110623
			Matrix:	WG	WG	WG	WG	WG	WG	WG	WG	WG	WG
			Sample Begin Depth:	26	26	26	25	25	18	18	18	18	18
			Sample End Depth:	36	36	36	35	35	28	28	28	28	28
			Sample Date:	12/03/2019	03/10/2020	08/12/2020	12/01/2020	11/08/2023	12/02/2019	03/09/2020	08/11/2020	12/02/2020	11/06/2023
Analytes	**RSL[1]**	**MCL[2]**	**RAG[3]**										
E300 (mg/L)													
Chloride	NE	NE	NE	**2000**	**120**	**180**	**210**	**100**	**440 J**	**460**	**430**	**490**	**480**
Nitrate	NE	NE	NE	0.025 UJ	0.050 U	0.025 U	**0.072**	0.025 U	0.025 R	0.050 U	**0.054**	**0.10 J**	**0.044 J**
Sulfate	NE	NE	NE	**34**	**68**	**60**	**55**	**49**	**56 J**	**68**	**61**	**74**	**77**
RSK175 (ug/L)													
Ethane	NE	NE	NE	5.0 U	5.0 UJ	5.0 UJ	5.0 U	9.8 U	5.0 U	5.0 U	5.0 U	5.0 U	9.8 U
Ethene	NE	NE	NE	5.0 U	5.0 U	5.0 UJ	5.0 U	9.8 U	5.0 U	5.0 U	5.0 U	5.0 U	9.8 U
Methane	NE	NE	NE	**37**	**27**	**29 J**	**39**	**24**	10 U	**8.2 J**	**6.6 J**	10 U	10 U
A2320B (mg/L)													
Alkalinity, Total (as CaCO3)	NE	NE	NE	**310**	**300**	**310**	**270**	**310**	**140**	**150**	**160**	**150**	**160**
A3500B (mg/L)													
Iron, Ferrous	NE	NE	NE	**0.052 J**	0.050 UJ	0.050 UJ	**0.027 J**	**0.056 J**	**0.33**	**0.22 J**	**0.27**	**0.25 J**	0.050 U
A5310B (mg/L)													
Total Organic Carbon	NE	NE	NE	**1.4**	**1.6**	**1.1**	**0.97 J**	**2.0**	**1.3**	1.0 U	0.50 U	**0.36 J**	**0.78 J**

Table 4-2
Summary of Cumulative Overburden Groundwater Analytical Results
Former Dow Salvage Yard
233 Odlin Road, Bangor, Maine

Locations:				SY-OBMW11																	
Field Sample ID:				SY-OBMW11-120319	SY-OBMW110-120319			SY-OBMW11-031120	SY-OBMW110-031120			SY-OBMW11-081420	SY-OBMW110-081420			SY-OBMW11-113020	SY-OBMW110-113020			SY-OBMW11-110823	SY-OBMW110-110823
Matrix:				WG				WG				WG				WG				WG	
Sample Begin Depth:				21				21				21				21				21	
Sample End Depth:				31				31				31				31				31	
Sample Date:				12/03/2019				03/11/2020				08/14/2020				11/30/2020				11/08/2023	
Analytes	**RSL[1]**	**MCL[2]**	**RAG[3]**																		
PAH SIM (ug/L)																					
2-Methylnaphthalene	3.6	NE	3.6	0.092 U		0.093 U		0.097 U		0.097 U		0.093 U		0.094 U		0.094 U		0.095 U		0.093 U	0.093 U
Acenaphthene	53	NE	54	0.092 U		0.093 U		0.097 U		0.097 U		0.093 U		0.094 U		0.094 U		0.095 U		0.093 U	0.093 U
Acenaphthylene	NE	NE	52	0.092 U		0.093 U		0.097 U		0.097 U		0.093 U		0.094 U		0.094 U		0.095 U		0.093 U	0.093 U
Anthracene	180	NE	180	0.092 U		0.093 U		0.097 U		0.097 U		0.093 U		0.094 U		0.094 U		0.095 U		0.093 U	0.093 U
Benzo(a)anthracene	0.03	NE	0.03	0.092 U		0.093 U		**0.052 J**		**0.050 J**		0.093 U		0.094 U		0.094 U		0.095 U		0.093 U	0.093 U
Benzo(a)pyrene	0.025	0.2	0.025	0.092 U		0.093 U		**0.067 J**		**0.065 J**		0.093 U		0.094 U		0.094 U		0.095 U		0.093 U	0.093 U
Benzo(b)fluoranthene	0.25	NE	0.25	0.092 U		0.093 U		**0.10 J**		**0.10 J**		0.093 U		0.094 U		0.094 U		0.095 U		0.093 U	0.093 U
Benzo(g,h,i)perylene	NE	NE	60	0.092 U		0.093 U		**0.23**		**0.23**		0.093 UJ		0.094 UJ		0.094 U		0.095 U		0.093 U	0.093 U
Benzo(k)fluoranthene	2.5	NE	2.5	0.092 U		0.093 U		**0.091 J**		**0.096 J**		0.093 U		0.094 U		0.094 U		0.095 U		0.093 U	0.093 U
Chrysene	25	NE	25	0.092 U		0.093 U		0.097 U		0.097 U		0.093 U		0.094 U		0.094 U		0.095 U		0.093 U	0.093 U
Dibenz(a,h)anthracene	0.025	NE	0.025	0.092 U		0.093 U		**0.13 J**		**0.14 J**		0.093 UJ		0.094 UJ		0.094 U		0.095 U		0.093 U	0.093 U
Fluoranthene	80	NE	80	0.092 U		0.093 U		0.097 U		0.097 U		0.093 U		0.094 U		0.094 U		0.095 U		0.093 U	0.093 U
Fluorene	29	NE	29	0.092 U		0.093 U		0.097 U		0.097 U		0.093 U		0.094 U		0.094 U		0.095 U		0.093 U	0.093 U
Indeno(1,2,3-c,d)pyrene	0.25	NE	0.25	0.092 U		0.093 U		0.19 U		0.19 U		0.093 UJ		0.094 UJ		0.094 U		0.095 U		0.093 U	0.093 U
Naphthalene	0.17	NE	0.12	0.092 U		0.093 U		0.097 U		0.097 U		0.093 U		0.094 U		0.094 U		0.095 U		0.093 U	0.093 U
Phenanthrene	NE	NE	18	0.092 U		0.093 U		0.097 U		0.097 U		0.093 U		0.094 U		0.094 U		0.095 U		0.093 U	0.093 U
Pyrene	12	NE	12	0.092 U		0.093 U		0.097 U		0.097 U		0.093 U		0.094 U		0.094 U		0.095 U		0.093 U	0.093 U
MassDEP EPH (ug/L)																					
2-Methylnaphthalene	3.6	NE	3.6	0.50 U		0.50 U		0.50 U		0.50 U		0.50 U		0.50 U		0.50 U		0.50 U		0.70 U	0.70 U
Acenaphthene	53	NE	54	0.50 U		0.50 U		0.50 U		0.50 U		0.50 U		0.50 U		0.50 U		0.50 U		0.50 U	0.50 U
Acenaphthylene	NE	NE	52	0.50 U		0.50 U		0.50 U		0.50 U		0.50 UJ		0.50 UJ		0.50 U		0.50 U		0.50 U	0.50 U
Anthracene	180	NE	180	0.50 U		0.50 U		0.50 U		0.50 U		0.50 U		0.50 U		0.50 U		0.50 U		0.50 U	0.50 U
Benzo(a)anthracene	0.03	NE	0.03	0.50 U		0.50 U		0.50 U		0.50 U		0.50 U		0.50 U		0.50 U		0.50 U		0.50 U	0.50 U
Benzo(a)pyrene	0.025	0.2	0.025	0.20 U		0.20 U		0.20 U		0.20 U		0.20 U		0.20 U		0.20 U		0.20 U		0.70 U	0.70 U
Benzo(b)fluoranthene	0.25	NE	0.25	0.50 U		0.50 U		0.50 U		0.50 U		0.50 U		0.50 U		0.50 U		0.50 U		0.50 U	0.50 U
Benzo(g,h,i)perylene	NE	NE	60	0.50 U		0.50 U		0.50 U		0.50 U		0.50 U		0.50 U		0.50 U		0.50 U		0.50 U	0.50 U
Benzo(k)fluoranthene	2.5	NE	2.5	0.50 U		0.50 U		0.50 U		0.50 U		0.50 U		0.50 U		0.50 U		0.50 U		0.50 U	0.50 U
Chrysene	25	NE	25	0.50 U		0.50 U		0.50 U		0.50 U		0.50 U		0.50 U		0.50 U		0.50 U		0.50 U	0.50 U
Dibenz(a,h)anthracene	0.025	NE	0.025	0.50 U		0.50 U		0.50 U		0.50 U		0.50 U		0.50 U		0.50 U		0.50 U		0.50 U	0.50 U
Fluoranthene	80	NE	80	0.50 U		0.50 U		0.50 U		0.50 U		0.50 U		0.50 U		0.50 U		0.50 U		0.50 U	0.50 U
Fluorene	29	NE	29	0.50 U		0.50 U		0.50 U		0.50 U		0.50 U		0.50 U		0.50 U		0.50 U		0.50 U	0.50 U
Indeno(1,2,3-c,d)pyrene	0.25	NE	0.25	0.50 U		0.50 U		0.50 U		0.50 U		0.50 U		0.50 U		0.50 U		0.50 U		0.50 U	0.50 U
Naphthalene	0.17	NE	0.12	0.50 U		0.50 U		0.50 U		0.50 U		0.50 UJ		0.50 UJ		0.50 UJ		0.50 UJ		0.70 U	0.70 U
Phenanthrene	NE	NE	18	0.50 U		0.50 U		0.50 U		0.50 U		0.50 U		0.50 U		0.50 U		0.50 U		0.50 U	0.50 U
Pyrene	12	NE	12	0.50 U		0.50 U		0.50 U		0.50 U		0.50 U		0.50 U		0.50 U		0.50 U		0.50 U	0.50 U
C11-C22 Aromatic	NE	NE	60	85 UJ		85 UJ		85 U		85 U		100 U		100 U		85 UJ		X		100 U	100 U
C19-C36 Aliphatic	NE	NE	4000	88 UJ		88 UJ		88 U		88 U		88 U		88 U		88 U		100 U		97 U	97 U
C9-C18 Aliphatic	NE	NE	35	66 UJ		66 UJ		66 UJ		66 UJ		66 UJ		66 UJ		66 U		66 U		95 UJ	95 UJ
MassDEP VPH (ug/L)																					
Benzene	0.46	5	0.46	1.0 U		1.0 U		1.0 U		1.0 U		1.0 U		1.0 U		1.0 U		1.0 U		1.0 U	1.0 U
Ethylbenzene	1.5	700	1.5	1.0 U		1.0 U		1.0 U		1.0 U		1.0 U		1.0 U		1.0 U		1.0 U		1.0 U	1.0 U
m,p-Xylene	19	10000	19	2.0 U		2.0 U		2.0 U		2.0 U		2.0 U		2.0 U		2.0 U		2.0 U		2.0 U	2.0 U
Methyl tert-butyl ether (MTBE)	14	NE	1300	1.0 U		1.0 U		1.0 U		1.0 U		1.0 U		1.0 U		1.0 U		1.0 U		1.0 U	1.0 U
Naphthalene	0.17	NE	0.12	1.0 U		1.0 U		1.0 U		1.0 U		1.0 U		1.0 U		1.0 U		1.0 U		4.0 U	4.0 U
o-Xylene	19	10000	19	1.0 U		1.0 U		1.0 U		1.0 U		1.0 U		1.0 U		1.0 U		1.0 U		1.0 U	1.0 U
Toluene	110	1000	110	1.0 U		1.0 U		1.0 U		1.0 U		1.0 U		1.0 U		1.0 U		1.0 U		1.0 U	1.0 U
C5-C8 Aliphatic	NE	NE	18	100 U		100 U		100 U		100 U		100 U		100 U		100 U		100 U		50 U	50 U
C9-C10 Aromatic	NE	NE	7.1	**3.6** J		**3.8** J		15 U		15 U		100 U		100 U		100 U		100 U		50 U	50 U
C9-C12 Aliphatic	NE	NE	35	100 U		100 U		45 U		45 U		45 U		45 U		45 U		45 U		50 U	50 U

Table 4-2
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Former Dow Salvage Yard
233 Odlin Road, Bangor, Maine

				Locations:	SY-OBMW11									
				Field Sample ID:	SY-OBMW11-120319	SY-OBMW110-120319	SY-OBMW11-031120	SY-OBMW110-031120	SY-OBMW11-081420	SY-OBMW110-081420	SY-OBMW11-113020	SY-OBMW110-113020	SY-OBMW11-110823	SY-OBMW110-110823
				Matrix:	WG		WG		WG		WG		WG	
				Sample Begin Depth:	21		21		21		21		21	
				Sample End Depth:	31		31		31		31		31	
				Sample Date:	12/03/2019		03/11/2020		08/14/2020		11/30/2020		11/08/2023	
Analytes	**RSL[1]**	**MCL[2]**	**RAG[3]**											
Total Metals SW6020A/7470A (mg/L)														
Aluminum	2	NE	2		**0.12 J**	0.050 UJ	**0.058**	0.050 U	0.050 U	0.050 U	**0.020 J**	**0.020 J**	**0.015 J**	**0.010 J**
Antimony	0.00078	0.006	0.00078		0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U
Arsenic	0.000052	0.01	0.000052		**0.00086 J**	**0.00071 J**	**0.00090 J**	**0.00085 J**	0.0050 U	0.0050 U	**0.00074 J**	**0.00059 J**	**0.0015 J**	**0.0014 J**
Barium	380	2	0.38		**0.013**	**0.013**	**0.013**	**0.014**	**0.011**	**0.012**	**0.012**	**0.012**	**0.021**	**0.021**
Beryllium	0.0025	0.004	0.0025		0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00010 U	**0.000064 J**	**0.000027 J**	0.00050 U	0.00050 U
Cadmium	0.00092	0.005	0.0018		0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U
Chromium	0.000035[5]/2.2	0.1	0.0000035[5]/2.3		**0.0011 J**	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.025 U	0.025 U
Cobalt	0.0006	NE	0.0006		**0.00039 J**	**0.00023 J**	0.010 U	0.010 U	0.010 U	0.010 U	**0.00028 J**	**0.00024 J**	**0.00047 J**	**0.00047 J**
Copper	0.08	1.3	0.08		**0.00064 J**	0.0010 U	0.010 U	0.010 U	0.010 U	0.010 U	**0.0013 J**	**0.0011 J**	0.0075 U	0.0075 U
Iron	1.4	NE	1.4		**0.13 J**	**0.028 J**	**0.092**	**0.055**	0.050 U	0.050 U	**0.031 J**	**0.031 J**	**0.075**	**0.061**
Lead	0.015	0.015	NE		0.00050 U	0.00050 U	0.0050 U	0.0050 U	0.00050 U	0.00050 U	**0.00011 J**	**0.00010 J**	0.00050 U	0.00050 U
Magnesium	NE	NE	NE		**51**	**49**	**55**	**54**	**56**	**58**	**50**	**50**	**89**	**88**
Manganese	0.043	NE	0.043		**0.25**	**0.25**	**0.21**	**0.20**	**0.18**	**0.20**	**0.22**	**0.22**	**0.31**	**0.31**
Mercury	0.000063	0.002	0.000063		0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00015 U	0.00015 U
Nickel	0.039	NE	0.039		**0.0021 J**	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.025 U	0.025 U
Potassium	NE	NE	NE		**3.4**	**3.2**	**3.1**	**3.2**	**2.7**	**2.9**	**3.0**	**3.0**	**3.9**	**3.8**
Selenium	0.01	0.05	0.01		**0.00067 J**	0.0010 U	**0.0023 J**	**0.0022 J**	**0.00080 J**	**0.0015 J**	0.010 U	0.010 U	0.0050 U	0.0050 U
Silver	0.0094	NE	0.0094		0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	**0.000027 J**	0.00050 U	0.00050 U	0.00050 U
Sodium	NE	NE	NE		**130**	**130**	**130**	**130**	**100**	**120**	**110**	**110**	**220**	**210**
Thallium	0.00002	0.002	0.00002		0.00050 U	0.0010 U	0.0010 U	0.00050 U	0.00050 U	0.00050 U	**0.00061 J**	**0.00023 J**	0.00080 U	0.00080 U
Vanadium	0.0086	NE	0.0086		0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0050 U	0.0050 U
Zinc	0.6	NE	0.6		0.0040 U	0.0040 U	0.0040 U	0.0040 U	0.0040 U	0.0040 U	0.0040 U	0.0040 U	0.0040 U	0.0040 U
Dissolved Metals (mg/L)														
Aluminum	2	NE	2		**0.0039 J**	**0.0031 J**	0.050 U	0.050 U	0.011 U	0.011 U	0.011 U	0.011 U	0.027 U	0.027 U
Antimony	0.00078	0.006	0.00078		0.00054 U	0.00054 U	0.00050 U	0.00050 U	0.00054 U	0.00054 U	0.00054 U	0.00054 U	0.00054 U	0.00054 U
Arsenic	0.000052	0.01	0.000052		**0.00072 J**	**0.00052 J**	**0.00063 J**	**0.00071 J**	**0.00041 J**	**0.00040 J**	**0.00063 J**	**0.00049 J**	**0.00095 J**	**0.0010 J**
Barium	380	2	0.38		**0.012**	**0.012**	**0.013**	**0.013**	**0.012**	**0.012**	**0.010 J**	**0.010 J**	**0.022**	**0.022**
Beryllium	0.0025	0.004	0.0025		**0.00011 J**	0.00011 U	0.00010 U	**0.00011 J**	0.00011 U	0.00011 U	0.0011 U	0.0011 U	0.00054 U	0.00054 U
Cadmium	0.00092	0.005	0.0018		0.00054 U	0.00054 U	0.00050 U	0.0010 U	0.00054 U	0.00054 U	0.00054 U	0.00054 U	0.00054 U	0.00054 U
Chromium	0.000035[5]/2.2	0.1	0.0000035[5]/2.3		0.0011 U	0.0011 U	0.0010 U	0.0010 U	0.0011 U	0.0011 U	0.0011 U	0.0011 U	0.027 U	0.027 U
Cobalt	0.0006	NE	0.0006		**0.00035 J**	**0.00023 J**	0.010 U	0.010 U	**0.00019 J**	**0.00018 J**	**0.00026 J**	**0.00021 J**	**0.00040 J**	**0.00042 J**
Copper	0.08	1.3	0.08		**0.0016 J**	**0.0013 J**	0.010 U	0.010 U	0.0011 U	0.0011 U	0.011 U	0.011 U	0.0080 U	0.0080 U
Iron	1.4	NE	1.4		**0.0042 J**	**0.0037 J**	0.050 U	0.050 U	0.011 U	0.011 U	**0.0035 J**	0.011 U	**0.039 J**	**0.048 J**
Lead	0.015	0.015	NE		0.00054 U	0.00054 U	**0.00027 J**	**0.0030 J**	0.00054 U	0.00054 U	0.00054 U	0.00054 U	0.00054 U	0.00054 U
Magnesium	NE	NE	NE		**51**	**50**	**45 J**	**45 J**	**54**	**51**	**46**	**45**	**85**	**83**
Manganese	0.043	NE	0.043		**0.22**	**0.22**	**0.19 J**	**0.20 J**	**0.20**	**0.20**	**0.19**	**0.19**	**0.30**	**0.30**
Mercury	0.000063	0.002	0.000063		0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00015 U	0.00015 U
Nickel	0.039	NE	0.039		0.0011 U	0.0011 U	0.0010 U	0.010 U	0.0011 U	0.0011 U	0.0011 U	0.0011 U	0.027 U	0.027 U
Potassium	NE	NE	NE		**3.1**	**3.1**	**2.9**	**2.9**	**3.0**	**3.1**	**2.7**	**2.6**	**3.6**	**3.7**
Selenium	0.01	0.05	0.01		0.010 U	0.010 U	**0.0017 J**	0.0010 U	**0.0023 J**	0.0011 U	0.011 U	0.011 U	0.0054 U	0.0054 U
Silver	0.0094	NE	0.0094		**0.00013 J**	0.00054 U	0.00050 U	**0.000052 J**	0.00054 U	0.00054 U	**0.000031 J**	0.00054 U	0.00054 U	0.00054 U
Sodium	NE	NE	NE		**130**	**130**	**120**	**110**	**120**	**120**	**120**	**110**	**200**	**200**
Thallium	0.00002	0.002	0.00002		**0.0014**	0.0010 U	**0.000075 J**	**0.00020 J**	0.00054 U	0.00054 U	**0.00039 J**	**0.00011 J**	0.00086 U	0.00086 U
Vanadium	0.0086	NE	0.0086		0.0011 U	0.0011 U	0.0010 U	0.0010 U	0.0011 U	0.0011 U	0.0011 U	0.0011 U	0.0054 U	0.0054 U
Zinc	0.6	NE	0.6		0.0043 U	0.0043 U	0.0040 UJ	**0.011 J**	0.0043 U	0.0043 U	0.0043 U	0.0043 U	0.0043 U	0.0043 U
Hexavalent Chromium SW7196A (mg/L)														
Chromium, Hexavalent	0.000035	NE	0.000035		**0.00086 J**	**0.00094 J**	0.013 U	0.013 UJ	0.025 U	0.025 U	0.025 U	0.025 U	0.012 U	0.012 U
PCBs SW8082A (ug/L)														
PCB-1016 (Aroclor 1016)	0.14	0.5	0.0079		0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.12 U	0.12 U
PCB-1221 (Aroclor 1221)	0.0047	0.5	0.0079		0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.12 U	0.12 U
PCB-1232 (Aroclor 1232)	0.0047	0.5	0.0079		0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.12 U	0.12 U
PCB-1242 (Aroclor 1242)	0.0078	0.5	0.0079		0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.12 U	0.12 U
PCB-1248 (Aroclor 1248)	0.0078	0.5	0.0079		0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.12 U	0.12 U
PCB-1254 (Aroclor 1254)	0.0078	0.5	0.0079		0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.12 U	0.12 U
PCB-1260 (Aroclor 1260)	0.0078	0.5	0.0079		0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.12 U	0.12 U

Table 4-2
Summary of Cumulative Overburden Groundwater Analytical Results
Former Dow Salvage Yard
233 Odlin Road, Bangor, Maine

Locations:				SY-OBMW11													
Field Sample ID:				SY-OBMW11-120319	SY-OBMW110-120319	SY-OBMW11-031120	SY-OBMW110-031120	SY-OBMW11-081420	SY-OBMW110-081420	SY-OBMW11-113020	SY-OBMW110-113020	SY-OBMW11-110823	SY-OBMW110-110823				
Matrix:				WG		WG		WG		WG		WG					
Sample Begin Depth:				21		21		21		21		21					
Sample End Depth:				31		31		31		31		31					
Sample Date:				12/03/2019		03/11/2020		08/14/2020		11/30/2020		11/08/2023					
Analytes	**RSL[1]**	**MCL[2]**	**RAG[3]**														
CVOCs SW8260D SIM (ug/L)																	
1,1-Dichloroethene	28	7	29	NS		NS		NS		NS		**0.048 J**		**0.052**			
cis-1,2-Dichloroethene	3.6	70	2.5	NS		NS		NS		NS		**0.088**		**0.078**			
Tetrachloroethene (PCE)	4.1	5	4.1	NS		NS		NS		NS		0.025 U		0.025 U			
trans-1,2-Dichloroethene	36	100	6.8	NS		NS		NS		NS		0.025 U		0.025 U			
Trichloroethene (TCE)	0.28	5	0.28	NS		NS		NS		NS		**5.4**		**5.0**			
Vinyl chloride	0.019	2	0.019	NS		NS		NS		NS		0.050 U		0.050 U			
VOCs SW8260D (ug/L)																	
1,1,1,2-Tetrachloroethane	0.57	NE	0.57	1.0 U		1.0 U		1.0 U		1.0 U		1.0 U		1.0 U			
1,1,1-Trichloroethane	800	200	800	1.0 U		1.0 U		1.0 U		1.0 U		1.0 U		1.0 U			
1,1,2,2-Tetrachloroethane	0.076	NE	0.076	1.0 U		1.0 U		1.0 U		1.0 U		1.0 U		1.0 U			
1,1,2-Trichloroethane	0.041	5	0.042	1.0 U		1.0 U		1.0 U		1.0 U		1.0 U		1.0 U			
1,1-Dichloroethane	2.8	NE	2.8	1.0 U		1.0 U		1.0 U		1.0 U		1.0 U		1.0 U			
1,1-Dichloroethene	28	7	29	1.0 U		1.0 U		1.0 U		1.0 U		0.50 U		0.50 U			
1,1-Dichloropropene	NE	NE	0.47	1.0 U		1.0 U		1.0 U		1.0 U		1.0 U		1.0 U			
1,2,3-Trichlorobenzene	0.7	NE	0.7	1.0 U		1.0 U		1.0 U		1.0 U		1.0 U		1.0 U			
1,2,3-Trichloropropane	0.00075	NE	0.00075	1.0 U		1.0 U		1.0 U		1.0 U		1.0 U		1.0 U			
1,2,4-Trichlorobenzene	0.4	70	0.4	1.0 U		1.0 U		1.0 U		1.0 U		1.0 U		1.0 U			
1,2,4-Trimethylbenzene	5.6	NE	5.6	1.0 U		1.0 U		1.0 U		1.0 U		1.0 U		1.0 U			
1,2-Dibromo-3-chloropropane	0.00033	0.2	0.00033	1.5 U		1.5 U		1.5 U		1.5 U		1.5 U		1.5 U			
1,2-Dibromoethane (EDB)	0.0075	0.05	0.0075	1.0 U		1.0 U		1.0 U		1.0 U		1.0 U		1.0 U			
1,2-Dichlorobenzene	30	600	30	1.0 U		1.0 U		1.0 U		1.0 U		1.0 U		1.0 U			
1,2-Dichloroethane	0.17	5	0.17	1.0 U		1.0 U		1.0 U		1.0 U		1.0 U		1.0 U			
1,2-Dichloropropane	0.82	5	0.83	1.0 U		1.0 U		1.0 U		1.0 U		1.0 U		1.0 U			
1,3,5-Trimethylbenzene	6	NE	6	1.0 U		1.0 U		1.0 U		1.0 U		1.0 U		1.0 U			
1,3-Dichlorobenzene	NE	NE	30	1.0 U		1.0 U		1.0 U		1.0 U		1.0 U		1.0 U			
1,3-Dichloropropane	37	NE	37	1.0 U		1.0 U		1.0 U		1.0 U		1.0 U		1.0 U			
1,4-Dichlorobenzene	0.48	75	0.48	1.0 U		1.0 U		1.0 U		1.0 U		1.0 U		1.0 U			
1,4-Dioxane (p-Dioxane)	0.46	NE	0.46	10 U		10 U		10 U		10 U		10 U		10 U			
2,2-Dichloropropane	NE	NE	NE	1.0 U		1.0 U		1.0 U		1.0 U		1.0 U		1.0 U			
2-Butanone (MEK)	560	NE	560	5.0 U		5.0 U		5.0 U		5.0 U		5.0 U		5.0 U			
2-Chlorotoluene	24	NE	24	1.0 U		1.0 U		1.0 U		1.0 U		1.0 U		1.0 U			
2-Hexanone	3.8	NE	3.8	1.0 U		1.0 U		1.0 U		1.0 U		1.0 U		1.0 U			
4-Chlorotoluene	25	NE	25	1.0 U		1.0 U		1.0 U		1.0 U		1.0 U		1.0 U			
4-Methyl-2-pentanone (MIBK)	630	NE	630	1.0 U		1.0 U		1.0 U		1.0 U		1.0 U		1.0 U			
Acetone	1400	NE	1400	5.0 U		5.0 U		5.0 U		5.0 U		5.0 U		5.0 U			
Benzene	0.46	5	0.46	1.0 U		1.0 U		1.0 U		1.0 U		1.0 U		1.0 U			
Bromobenzene	6.2	NE	6.2	1.0 U		1.0 U		1.0 U		1.0 U		1.0 U		1.0 U			
Bromochloromethane	8.3	NE	8.3	1.0 U		1.0 U		1.0 U		1.0 U		1.0 U		1.0 U			
Bromodichloromethane	0.13	80	0.13	0.50 U		0.50 U		0.50 U		0.50 U		0.50 U		0.50 U			
Bromoform	3.3	80	3.3	1.0 U		1.0 U		1.0 U		1.0 U		1.0 U		1.0 U			
Bromomethane	0.75	NE	0.76	2.0 U		2.0 U		2.0 U		2.0 U		2.0 U		1.5 U			
Carbon disulfide	81	NE	81	1.0 U		1.0 U		1.0 U		1.0 U		1.0 U		1.0 U			
Carbon tetrachloride	0.46	5	0.46	1.0 U		1.0 U		1.0 U		1.0 U		1.0 U		1.0 U			
Chlorobenzene	7.8	100	7.8	1.0 U		1.0 U		1.0 U		1.0 U		1.0 U		1.0 U			
Chloroethane	2100	NE	2100	1.0 U		1.0 U		1.0 U		1.0 U		1.0 U		1.0 U			
Chloroform	0.22	80	0.22	1.0 U		1.0 U		1.0 U		1.0 U		1.0 U		1.5 U			
Chloromethane	19	NE	19	1.0 U		1.0 U		1.0 U		1.0 U		1.0 U		1.0 U			
cis-1,2-Dichloroethene	3.6	70	2.5	1.0 U		1.0 U		1.0 U		1.0 U		1.0 U		1.5 U			
cis-1,3-Dichloropropene	0.47	NE	0.47	1.0 U		1.0 U		1.0 U		1.0 U		1.0 U		1.0 U			
Dibromochloromethane	0.87	80	0.87	1.0 U		1.0 U		1.0 U		1.0 U		1.0 U		1.0 U			
Dibromomethane	0.83	NE	0.83	1.0 U		1.0 U		1.0 U		1.0 U		1.0 U		1.0 U			
Dichlorodifluoromethane	NE	NE	20	1.0 U		1.0 U		1.0 U		1.0 U		1.0 U		1.0 U			
Diethyl ether (Ethyl ether)	390	NE	390	1.0 U		1.0 U		1.0 U		1.0 U		1.0 U		1.0 U			
Ethylbenzene	1.5	700	1.5	1.0 U		1.0 U		1.0 U		1.0 U		1.0 U		1.0 U			
Hexachlorobutadiene	0.14	NE	0.14	0.50 U		0.50 U		0.50 U		0.50 U		0.50 U		1.0 U			
Isopropylbenzene (Cumene)	45	NE	45	1.0 U		1.0 U		1.0 U		1.0 U		1.0 U		0.50 U			
m,p-Xylene	19	10000	19	1.5 U		1.5 U		1.5 U		1.5 U		1.5 U		1.5 U			
Methyl tert-butyl ether (MTBE)	14	NE	14	1.0 U		1.0 U		1.0 U		1.0 U		1.0 U		1.0 U			
Methylene chloride	11	5	11	1.0 U		1.0 U		1.0 U		1.0 U		1.0 U		1.0 U			
Naphthalene	0.17	NE	0.12	1.0 U		1.0 U		1.0 U		1.0 U		1.0 U		1.5 U			
n-Butylbenzene	100	NE	100	1.0 U		1.0 U		1.0 U		1.0 U		1.0 U		1.0 U			
n-Propylbenzene	66	NE	66	1.0 U		1.0 U		1.0 U		1.0 U		1.0 U		1.0 U			
o-Xylene	19	10000	19	1.0 U		1.0 U		1.0 U		1.0 U		1.0 U		1.0 U			
p-Cymene (p-Isopropyltoluene)	NE	NE	NE	1.0 U		1.0 U		1.0 U		1.0 U		1.0 U		1.0 U			
sec-Butylbenzene	200	NE	200	1.0 U		1.0 U		1.0 U		1.0 U		1.0 U		1.0 U			
Styrene	120	100	120	1.0 U		1.0 U		1.0 U		1.0 U		1.0 U		1.0 U			
tert-Amyl methyl ether	NE	NE	NE	1.0 U		1.0 U		1.0 U		1.0 U		1.0 U		1.0 U			
tert-Butyl alcohol	NE	NE	NE	10 U		10 U		10 U		10 U		10 U		10 U			
tert-Butyl ethyl ether	NE	NE	NE	1.0 U		1.0 U		1.0 U		1.0 U		1.0 U		1.0 U			
tert-Butylbenzene	69	NE	69	1.0 U		1.0 U		1.0 U		1.0 U		1.0 U		1.0 U			
Tetrachloroethene (PCE)	4.1	5	4.1	1.0 U		1.0 U		1.0 U		1.0 U		1.0 U		1.0 U			

Table 4-2
Summary of Cumulative Overburden Groundwater Analytical Results
Former Dow Salvage Yard
233 Odlin Road, Bangor, Maine

Locations:				SY-OBMW11																	
Field Sample ID:				SY-OBMW11-120319	SY-OBMW110-120319	SY-OBMW11-031120	SY-OBMW110-031120	SY-OBMW11-081420	SY-OBMW110-081420	SY-OBMW11-113020	SY-OBMW110-113020	SY-OBMW11-110823	SY-OBMW110-110823								
Matrix:				WG		WG		WG		WG		WG									
Sample Begin Depth:				21		21		21		21		21									
Sample End Depth:				31		31		31		31		31									
Sample Date:				12/03/2019		03/11/2020		08/14/2020		11/30/2020		11/08/2023									
Analytes	**RSL[1]**	**MCL[2]**	**RAG[3]**																		
Tetrahydrofuran	340	NE	340	1.5 U		1.5 U		1.5 U		1.5 U		1.5 U									
Toluene	110	1000	1200	1.0 U		1.0 U		1.0 U		1.0 U		1.0 U									
trans-1,2-Dichloroethene	36	100	6.8	1.0 U		1.0 U		1.0 U		1.0 U		1.0 U									
trans-1,3-Dichloropropene	0.47	NE	NE	1.0 U		1.0 U		1.0 U		1.0 U		1.0 U									
Trichloroethene (TCE)	0.28	5	0.28	**4.1**		**4.4**		**5.4**		**5.8**		**5.4**									
Trichlorofluoromethane	520	NE	520	1.0 U		1.0 U		1.0 U		1.0 U		1.0 U									
Vinyl chloride	0.019	2	0.019	1.0 U		1.0 U		1.0 U		1.0 U		1.0 U									
SVOCs SW8270E (ug/L)																					
1,2,4-Trichlorobenzene	0.4	70	0.4	1.0 U		1.0 U		1.0 U		1.0 U		1.0 U									
1,2-Dichlorobenzene	30	600	30	1.0 U		1.0 U		1.0 U		1.0 U		1.0 U									
1,3-Dichlorobenzene	NE	NE	30	1.0 U		1.0 U		1.0 U		1.0 U		1.0 U									
1,4-Dichlorobenzene	0.48	75	0.48	1.0 U		1.0 U		1.0 U		1.0 U		1.0 U									
2,2'-Oxybis(1-chloropropane)	NE	NE	NE	1.0 U		1.0 U		1.0 U		1.0 U		1.0 U									
2,4,5-Trichlorophenol	120	NE	120	1.0 U		1.0 U		1.0 U		1.0 U		1.0 U									
2,4,6-Trichlorophenol	1.2	NE	1.2	1.0 U		1.0 U		1.0 U		1.0 U		1.0 U									
2,4-Dichlorophenol	4.6	NE	4.6	1.0 U		1.0 U		1.0 U		1.0 U		1.0 U									
2,4-Dimethylphenol	36	NE	36	1.0 U		1.0 U		1.0 U		1.0 U		1.0 U									
2,4-Dinitrophenol	3.9	NE	3.9	45 U		45 U		45 U		45 U		45 U									
2,4-Dinitrotoluene	0.24	NE	0.24	1.0 U		1.0 U		1.0 U		1.0 U		1.0 U									
2,6-Dinitrotoluene	0.049	NE	0.049	1.0 U		1.0 U		1.0 U		1.0 U		1.0 U									
2-Chloronaphthalene	75	NE	75	1.0 U		1.0 U		1.0 U		1.0 U		1.0 U									
2-Chlorophenol	9.1	NE	9.1	1.0 U		1.0 U		1.0 U		1.0 U		1.0 U									
2-Methylphenol (o-Cresol)	93	NE	93	1.0 U		1.0 U		1.0 U		1.0 U		1.0 U									
2-Nitroaniline	19	NE	NE	1.0 U		1.0 U		1.0 U		1.0 U		1.0 U									
2-Nitrophenol	NE	NE	NE	1.0 U		1.0 U		1.0 U		1.0 U		1.0 U									
3,3'-Dichlorobenzidine	0.13	NE	0.13	25 U		25 U		25 U		25 U		25 U									
3-Nitroaniline	NE	NE	NE	1.0 U		1.0 U		1.0 U		1.0 U		1.0 U									
4,6-Dinitro-2-methylphenol	0.15	NE	NE	10 U		10 U		10 U		10 U		10 U									
4-Bromophenyl phenyl ether	NE	NE	NE	1.0 U		1.0 U		1.0 U		1.0 U		1.0 U									
4-Chloro-3-methylphenol	140	NE	150	1.0 UJ		1.0 UJ		1.0 U		1.0 U		1.0 U									
4-Chloroaniline	0.37	NE	NE	1.0 U		1.0 U		1.0 U		1.0 U		1.0 U									
4-Chlorophenyl phenyl ether	NE	NE	NE	1.0 U		1.0 U		1.0 U		1.0 U		1.0 U									
4-Methylphenol (p-Cresol)	190	NE	190	1.0 U		1.0 U		1.0 U		1.0 U		1.5 U									
4-Nitroaniline	3.8	NE	38	1.0 U		1.0 U		1.0 U		1.0 U		3.0 U									
4-Nitrophenol	NE	NE	NE	5.0 UJ		5.0 UJ		5.0 UJ		5.0 UJ		5.0 UJ									
Aniline (Phenylamine, Aminobenzene)	13	NE	13	1.0 UJ		1.0 UJ		1.0 U		1.0 U		1.0 U									
Azobenzene	0.12	NE	NE	1.0 U		1.0 U		1.0 U		1.0 U		1.0 U									
Benzidine	0.00011	NE	NE	25 U		25 U		25 U		25 U		25 U									
Benzoic acid	7500	NE	7500	45 U		45 U		45 U		45 U		45 UJ									
Benzyl alcohol	200	NE	200	1.0 U		1.0 U		1.0 U		**0.64 J**		1.0 U									
Benzyl butyl phthalate	16	NE	16	5.0 U		5.0 U		1.0 U		1.0 U		3.0 UJ									
bis(2-Chloroethoxy) methane	5.9	NE	NE	1.0 U		1.0 U		1.0 U		1.0 U		1.0 U									
bis(2-Chloroethyl) ether	0.014	NE	0.014	1.0 U		1.0 U		1.0 U		1.0 U		1.0 U									
bis(2-Ethylhexyl) phthalate	5.6	6	5.6	5.0 U		5.0 U		5.0 U		1.0 U		**200**									
Carbazole	NE	NE	1.5	1.0 U		1.0 U		1.0 U		1.0 U		1.0 U									
Dibenzofuran	0.79	NE	0.79	0.40 U		0.40 U		0.40 U		0.40 U		0.40 U									
Diethyl phthalate	1500	6	1500	1.0 UJ		1.0 UJ		1.0 U		1.0 U		**2.9 J**									
Dimethyl phthalate	NE	NE	NE	R		R		1.0 U		1.0 UJ		1.0 UJ									
Di-n-butyl phthalate	90	NE	NE	1.0 U		5.0 U		1.0 U		5.0 U		1.0 U									
di-n-Octyl phthalate	20	NE	200	1.0 U		1.0 U		1.0 U		1.0 U		3.0 U									
Hexachlorobenzene	0.0098	1	0.0098	1.0 UJ		1.0 UJ		1.0 U		1.0 U		1.0 U									
Hexachlorobutadiene	0.14	NE	0.14	1.0 U		1.0 U		1.0 U		1.0 U		1.0 U									
Hexachlorocyclopentadiene	0.041	50	NE	4.0 UJ		4.0 UJ		4.0 UJ		4.0 UJ		4.0 UJ									
Hexachloroethane	0.33	NE	0.33	1.0 U		1.0 U		1.0 U		1.0 U		1.0 U									
Isophorone	78	NE	78	1.0 U		1.0 U		1.0 U		1.0 U		1.0 U									
Nitrobenzene	0.14	NE	NE	1.0 U		1.0 U		1.0 U		1.0 U		1.0 U									
N-Nitrosodimethylamine	0.00011	NE	NE	1.0 UJ		1.0 UJ		1.0 U		1.0 U		1.0 UJ									
N-Nitrosodi-n-propylamine	0.011	NE	NE	1.0 U		1.0 U		1.0 U		1.0 U		1.0 U									
N-Nitrosodiphenylamine	12	NE	12	1.0 U		1.0 U		1.0 U		1.0 U		1.0 U									
Pentachlorophenol	0.041	1	0.041	5.0 U		5.0 U		5.0 U		5.0 U		5.0 U									
Phenol	580	NE	580	1.0 UJ		1.0 UJ		1.0 UJ		1.0 UJ		1.0 UJ									
Pyridine	12	NE	NE	1.0 UJ		1.0 UJ		1.0 U		1.0 U		1.0 U									

Table 4-2
Summary of Cumulative Overburden Groundwater Analytical Results
Former Dow Salvage Yard
233 Odlin Road, Bangor, Maine

Locations:				SY-OBMW11																	
Field Sample ID:				SY-OBMW11-120319	SY-OBMW110-120319			SY-OBMW11-031120	SY-OBMW110-031120			SY-OBMW11-081420	SY-OBMW110-081420			SY-OBMW11-113020	SY-OBMW110-113020			SY-OBMW11-110823	SY-OBMW110-110823
Matrix:				WG				WG				WG				WG				WG	
Sample Begin Depth:				21				21				21				21				21	
Sample End Depth:				31				31				31				31				31	
Sample Date:				12/03/2019				03/11/2020				08/14/2020				11/30/2020				11/08/2023	
Analytes	**RSL[1]**	**MCL[2]**	**RAG[3]**																		
E300 (mg/L)																					
Chloride	NE	NE	NE	**400 J**		**3000 J**		**410**		**400**		**420**		**400**		**370**		**360**		**650**	**650**
Nitrate	NE	NE	NE	**1.1 J**		**1.1 J**		**1.3**		**1.3**		**1.6**		**1.5**		**1.2**		**1.2**		**1.8**	**1.8**
Sulfate	NE	NE	NE	**78 J**		**44 J**		**160**		**160**		**70**		**69**		**60**		**60**		**200**	**200**
RSK175 (ug/L)																					
Ethane	NE	NE	NE	5.0 U		5.0 U		5.0 U		5.0 U		5.0 U		5.0 U		5.0 U		5.0 U		9.8 U	9.8 U
Ethene	NE	NE	NE	5.0 U		5.0 U		5.0 U		5.0 U		5.0 U		5.0 U		5.0 U		5.0 U		9.8 U	9.8 U
Methane	NE	NE	NE	10 U		10 U		10 U		10 U		**4.0 J**		**3.9 J**		**6.2 J**		**6.2 J**		**5.3 J**	**5.8 J**
A2320B (mg/L)																					
Alkalinity, Total (as CaCO3)	NE	NE	NE	**170**		**170**		**170**		**160**		**140**		**160**		**160**		**160**		**200**	**200**
A3500B (mg/L)																					
Iron, Ferrous	NE	NE	NE	0.050 U		0.050 U		0.050 UJ		0.050 UJ		0.050 U		0.050 U		0.050 U		0.050 U		**0.037 J**	**0.056 J**
A5310B (mg/L)																					
Total Organic Carbon	NE	NE	NE	**1.1**		1.0 U		**1.4**		**1.3**		**0.70 J**		**0.64 J**		**0.56 J**		**0.57 J**		**1.6**	**1.5**

Table 4-2
Summary of Cumulative Overburden Groundwater Analytical Results
Former Dow Salvage Yard
233 Odlin Road, Bangor, Maine

			Locations:	SY-OBMW12					SY-OBMW13				
			Field Sample ID:	SY-OBMW12-120419	SY-OBMW12-031120	SY-OBMW12-081420	SY-OBMW12-113020	SY-OBMW12-110723	SY-OBMW13-120419	SY-OBMW13-031020	SY-OBMW13-081120	SY-OBMW13-120120	SY-OBMW13-110723
			Matrix:	WG	WG	WG	WG	WG	WG	WG	WG	WG	WG
			Sample Begin Depth:	22	22	22	22	22	12	12	12	12	12
			Sample End Depth:	32	32	32	32	32	22	22	22	22	22
			Sample Date:	12/04/2019	03/11/2020	08/14/2020	11/30/2020	11/07/2023	12/04/2019	03/10/2020	08/11/2020	12/01/2020	11/07/2023
Analytes	**RSL[1]**	**MCL[2]**	**RAG[3]**										
PAH SIM (ug/L)													
2-Methylnaphthalene	3.6	NE	3.6	0.094 U	0.095 U	0.095 U	0.094 U	0.094 U	0.093 U	0.093 U	0.094 U	0.095 U	0.094 U
Acenaphthene	53	NE	54	0.094 U	0.095 U	0.095 U	0.094 U	0.094 U	0.093 U	0.093 U	0.094 U	0.095 U	0.094 U
Acenaphthylene	NE	NE	52	0.094 U	0.095 U	0.095 U	0.094 U	0.094 U	0.093 U	0.093 U	0.094 U	0.095 U	0.094 U
Anthracene	180	NE	180	0.094 U	0.095 U	0.095 U	0.094 U	0.094 U	0.093 U	0.093 U	0.094 U	0.095 U	0.094 U
Benzo(a)anthracene	0.03	NE	0.03	0.094 U	0.095 U	0.095 U	0.094 U	0.094 U	**0.21**	0.093 U	0.094 U	0.095 UJ	0.094 U
Benzo(a)pyrene	0.025	0.2	0.025	0.094 U	0.095 U	0.095 U	0.094 U	0.094 U	0.093 U	**0.067 J**	0.094 U	0.095 UJ	0.094 U
Benzo(b)fluoranthene	0.25	NE	0.25	**0.16 J**	0.095 U	0.095 U	0.094 U	0.094 U	0.093 U	**0.098 J**	0.094 U	0.095 UJ	0.094 U
Benzo(g,h,i)perylene	NE	NE	60	0.094 U	0.095 U	0.095 UJ	0.094 U	0.094 UJ	0.093 U	0.19 U	0.094 U	0.095 UJ	0.094 U
Benzo(k)fluoranthene	2.5	NE	2.5	0.094 U	0.095 U	0.095 U	0.094 U	0.094 U	0.093 U	0.093 U	0.094 U	0.095 UJ	0.094 U
Chrysene	25	NE	25	0.094 U	0.095 U	0.19 U	0.094 U	0.094 U	0.093 U	0.093 U	**0.034 J**	**0.048 J**	0.094 U
Dibenz(a,h)anthracene	0.025	NE	0.025	0.094 U	0.095 U	0.095 UJ	0.094 U	0.094 UJ	0.093 U	**0.10 J**	0.094 U	0.095 UJ	0.094 U
Fluoranthene	80	NE	80	0.094 U	0.095 U	0.095 U	0.094 U	0.094 U	0.093 U	0.093 U	0.094 U	0.095 U	0.094 U
Fluorene	29	NE	29	0.094 U	0.095 U	0.095 U	0.094 U	0.094 U	0.093 U	0.093 U	0.094 U	0.095 U	0.094 U
Indeno(1,2,3-c,d)pyrene	0.25	NE	0.25	0.094 U	0.095 U	0.095 UJ	0.094 U	0.094 UJ	0.093 U	0.19 U	0.094 U	**0.058 J**	0.094 U
Naphthalene	0.17	NE	0.12	0.094 U	0.095 U	0.095 U	0.094 U	0.094 U	0.093 U	0.093 U	0.094 U	0.095 U	0.094 U
Phenanthrene	NE	NE	18	0.094 U	0.095 U	0.095 U	0.094 U	0.094 U	0.093 U	0.093 U	0.094 U	0.095 U	0.094 U
Pyrene	12	NE	12	0.094 U	0.095 U	0.095 U	0.094 U	0.094 U	0.093 U	**0.076 J**	0.094 U	0.095 UJ	0.094 U
MassDEP EPH (ug/L)													
2-Methylnaphthalene	3.6	NE	3.6	0.50 U	0.50 U	0.50 U	0.50 U	0.70 UJ	0.50 U	0.50 U	0.50 U	0.50 UJ	0.70 UJ
Acenaphthene	53	NE	54	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Acenaphthylene	NE	NE	52	0.50 U	0.50 U	0.50 UJ	0.50 U	0.50 U	0.50 U	0.50 U	0.50 UJ	0.50 UJ	0.50 U
Anthracene	180	NE	180	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Benzo(a)anthracene	0.03	NE	0.03	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Benzo(a)pyrene	0.025	0.2	0.025	0.20 U	0.20 U	0.20 U	0.20 U	0.70 U	0.20 U	0.20 U	0.20 U	0.20 U	0.70 U
Benzo(b)fluoranthene	0.25	NE	0.25	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Benzo(g,h,i)perylene	NE	NE	60	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Benzo(k)fluoranthene	2.5	NE	2.5	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Chrysene	25	NE	25	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Dibenz(a,h)anthracene	0.025	NE	0.025	0.50 U	0.50 U	0.50 U	0.50 U	0.50 UJ	0.50 U	0.50 U	0.50 U	0.50 U	0.50 UJ
Fluoranthene	80	NE	80	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Fluorene	29	NE	29	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Indeno(1,2,3-c,d)pyrene	0.25	NE	0.25	0.50 U	0.50 U	0.50 U	0.50 U	0.50 UJ	0.50 U	0.50 U	0.50 U	0.50 U	0.50 UJ
Naphthalene	0.17	NE	0.12	0.50 U	0.50 U	0.50 UJ	0.50 UJ	0.70 UJ	0.50 U	0.50 U	0.50 UJ	0.50 UJ	0.70 UJ
Phenanthrene	NE	NE	18	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Pyrene	12	NE	12	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
C11-C22 Aromatic	NE	NE	60	85 UJ	85 U	100 U	85 U	**99 J**	85 U	85 U	100 U	85 U	**62 J**
C19-C36 Aliphatic	NE	NE	4000	88 UJ	88 U	88 U	88 U	97 U	88 U	88 U	88 U	88 U	97 UJ
C9-C18 Aliphatic	NE	NE	35	66 UJ	66 UJ	66 UJ	66 U	95 UJ	66 U	66 UJ	66 UJ	66 UJ	95 UJ
MassDEP VPH (ug/L)													
Benzene	0.46	5	0.46	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	1.5	700	1.5	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U
m,p-Xylene	19	10000	19	2.0 U	2.0 U	2.0 UJ	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Methyl tert-butyl ether (MTBE)	14	NE	1300	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Naphthalene	0.17	NE	0.12	1.0 U	1.0 U	1.0 UJ	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U
o-Xylene	19	10000	19	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	110	1000	110	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
C5-C8 Aliphatic	NE	NE	18	100 U	100 U	100 UJ	100 U	50 U	100 U	100 U	100 U	100 U	50 U
C9-C10 Aromatic	NE	NE	7.1	**3.7** J	15 U	100 UJ	100 U	50 U	**4.4** J	15 U	100 U	100 U	50 U
C9-C12 Aliphatic	NE	NE	35	100 U	45 U	45 UJ	45 U	50 U	45 U	45 U	45 U	45 U	50 U

Table 4-2
Summary of Cumulative Overburden Groundwater Analytical Results
Former Dow Salvage Yard
233 Odlin Road, Bangor, Maine

			Locations:	SY-OBMW12					SY-OBMW13					
			Field Sample ID:	SY-OBMW12-120419	SY-OBMW12-031120	SY-OBMW12-081420	SY-OBMW12-113020	SY-OBMW12-110723	SY-OBMW13-120419	SY-OBMW13-031020	SY-OBMW13-081120	SY-OBMW13-120120	SY-OBMW13-110723
			Matrix:	WG	WG	WG	WG	WG	WG	WG	WG	WG	WG
			Sample Begin Depth:	22	22	22	22	22	12	12	12	12	12
			Sample End Depth:	32	32	32	32	32	22	22	22	22	22
			Sample Date:	12/04/2019	03/11/2020	08/14/2020	11/30/2020	11/07/2023	12/04/2019	03/10/2020	08/11/2020	12/01/2020	11/07/2023
Analytes	**RSL[1]**	**MCL[2]**	**RAG[3]**										
Total Metals SW6020A/7470A (mg/L)													
Aluminum	2	NE	2	**0.59**	**0.12**	0.050 U	**0.024 J**	**0.032 J**	0.050 U	**0.056**	0.050 U	**0.0072 J**	**0.010 J**
Antimony	0.00078	0.006	0.00078	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	**0.00027 J**
Arsenic	0.000052	0.01	0.000052	**0.0021 J**	**0.0023 J**	0.0050 U	**0.0017 J**	**0.0019 J**	**0.0011 J**	**0.00064 J**	0.0050 U	**0.00046 J**	**0.0010 J**
Barium	380	2	0.38	**0.014**	0.010 U	0.010 U	**0.0081 J**	**0.0074 J**	**0.021**	**0.022**	**0.018**	**0.018**	**0.0096 J**
Beryllium	0.0025	0.004	0.0025	0.00010 U	0.00010 U	0.00010 U	**0.000011 J**	0.00050 U	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00050 U
Cadmium	0.00092	0.005	0.0018	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U
Chromium	0.000035[4]/2.2	0.1	0.000035[4]/2.3	0.0010 U	0.010 U	0.0010 U	0.0010 U	0.025 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.025 U
Cobalt	0.0006	NE	0.0006	**0.00088 J**	0.010 U	0.010 U	**0.00024 J**	0.00050 U	**0.0017 J**	0.010 U	0.010 U	**0.0013 J**	**0.00078 J**
Copper	0.08	1.3	0.08	**0.0010 J**	0.010 U	0.010 U	**0.00067 J**	0.0075 U	0.0010 U	0.010 U	0.010 U	**0.0011 J**	0.0075 U
Iron	1.4	NE	1.4	**0.80**	**0.19**	**0.069**	**0.050 J**	**0.067**	**0.016 J**	**0.092**	0.050 U	**0.012 J**	0.030 U
Lead	0.015	0.015	NE	**0.00037 J**	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	**0.00013 J**
Magnesium	NE	NE	NE	**21**	**19**	**23**	**21**	**21**	**49**	**44**	**42**	**44**	**29**
Manganese	0.043	NE	0.043	**0.49**	**0.38**	**0.40**	**0.40**	**0.39**	**0.78**	**0.45**	**0.25**	**0.28**	**0.057**
Mercury	0.000063	0.002	0.000063	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00015 U	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00015 U
Nickel	0.039	NE	0.039	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.025 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.025 U
Potassium	NE	NE	NE	**3.1**	**2.8**	**2.7**	**2.8**	**2.7**	**3.6**	**3.2**	**2.9**	**2.9**	**2.4**
Selenium	0.01	0.05	0.01	0.0010 U	**0.0014 J**	0.0010 U	0.010 U	0.0050 U	0.0010 U	**0.0019 J**	0.0010 U	0.010 U	0.0050 U
Silver	0.0094	NE	0.0094	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U
Sodium	NE	NE	NE	**21**	**23**	**27**	**24**	**18**	**71**	**64**	**51**	**62**	**39**
Thallium	0.00002	0.002	0.00002	0.0010 U	0.00050 U	0.00050 U	**0.000061 J**	0.00080 U	0.0010 U	0.0010 U	0.00050 U	0.00050 U	0.00080 U
Vanadium	0.0086	NE	0.0086	**0.0011 J**	0.0010 U	0.0010 U	0.0010 U	0.0050 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0050 U
Zinc	0.6	NE	0.6	**0.0033 J**	0.010 U	0.0040 U	0.0040 U	0.0040 U	0.0040 U	0.0040 U	0.0040 U	0.0040 U	0.0040 U
Dissolved Metals (mg/L)													
Aluminum	2	NE	2	**0.012 J**	0.050 U	**0.011 J**	**0.0080 J**	0.027 U	**0.0074 J**	0.050 U	**0.0096 J**	**0.0036 J**	0.027 U
Antimony	0.00078	0.006	0.00078	0.00054 U	0.00050 U	0.00054 U	0.00054 U	0.00054 U	0.00054 U	0.00050 U	0.00054 U	0.00054 U	**0.00027 J**
Arsenic	0.000052	0.01	0.000052	**0.0017 J**	**0.0022 J**	**0.0016 J**	**0.0015 J**	**0.0016 J**	**0.0010 J**	**0.00050 J**	**0.00058 J**	**0.00057 J**	**0.00088 J**
Barium	380	2	0.38	**0.0099 J**	0.010 U	**0.0090 J**	**0.0071 J**	**0.0068 J**	**0.023**	**0.021**	**0.016**	**0.017**	**0.0094 J**
Beryllium	0.0025	0.004	0.0025	**0.000016 J**	**0.000020 J**	0.00011 U	0.00011 U	0.00054 U	0.00011 U	0.00010 U	**0.000049 J**	0.00011 U	0.00054 U
Cadmium	0.00092	0.005	0.0018	0.00054 U	0.00050 U	0.00054 U	0.00054 U	0.00054 U	0.00054 U	0.00050 U	0.00054 U	0.00054 U	0.00054 U
Chromium	0.000035[4]/2.2	0.1	0.000035[4]/2.3	0.0011 U	0.0010 U	0.0011 U	0.0011 U	0.027 U	0.0011 U	0.0010 U	0.0011 U	0.0011 U	0.027 U
Cobalt	0.0006	NE	0.0006	**0.00039 J**	0.010 U	**0.00021 J**	**0.00021 J**	0.00054 U	**0.0016 J**	0.010 U	**0.0015 J**	**0.0011 J**	**0.00068 J**
Copper	0.08	1.3	0.08	**0.0013 J**	0.010 U	0.0011 U	0.011 U	0.0080 U	**0.0026 J**	0.010 U	0.0011 U	0.0011 UJ	0.0080 U
Iron	1.4	NE	1.4	**0.020 J**	0.050 U	**0.027 J**	**0.026 J**	0.032 U	**0.0097 J**	0.050 U	**0.0077 J**	**0.0071 J**	0.032 U
Lead	0.015	0.015	NE	0.00054 U	**0.00096 J**	0.00054 U	0.00054 U	0.00054 U	0.00054 U	**0.00046 J**	**0.00017 J**	0.00054 U	0.00054 U
Magnesium	NE	NE	NE	**20**	**18 J**	**25**	**20**	**20**	**49**	**39 J**	**37**	**40**	**26**
Manganese	0.043	NE	0.043	**0.41**	**0.37 J**	**0.42**	**0.35**	**0.34**	**0.72**	**0.43 J**	**0.27**	**0.25**	**0.048**
Mercury	0.000063	0.002	0.000063	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00015 U	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00015 U
Nickel	0.039	NE	0.039	**0.00081 J**	0.0010 U	0.0011 U	0.0011 U	0.027 U	0.0011 U	0.0010 U	0.0011 U	0.0011 U	0.027 U
Potassium	NE	NE	NE	**2.7**	**2.8**	**2.7**	**2.4**	**2.6 J**	**3.6**	**3.2**	**2.8**	**2.5**	**2.2**
Selenium	0.01	0.05	0.01	0.010 U	**0.00088 J**	0.0011 U	0.011 U	0.0054 U	0.010 U	**0.00062 J**	**0.00082 J**	0.011 U	0.0054 U
Silver	0.0094	NE	0.0094	0.00054 U	0.00050 U	0.00054 U	0.00054 U	0.00054 U	0.00054 U	0.00050 U	**0.000035 J**	0.00054 U	0.00054 U
Sodium	NE	NE	NE	**21**	**23**	**25**	**25**	**18**	**71**	**65**	**53**	**62**	**37**
Thallium	0.00002	0.002	0.00002	0.0010 U	**0.000076 J**	0.00054 U	0.00054 U	0.00086 U	0.0010 U	**0.00015 J**	**0.00024 J**	0.00054 U	0.00086 U
Vanadium	0.0086	NE	0.0086	0.0011 U	0.0010 U	0.0011 U	0.0011 U	0.0054 U	0.0011 U	0.0010 U	0.0011 U	0.0011 U	0.0054 U
Zinc	0.6	NE	0.6	0.0043 U	0.0040 U	0.0043 U	0.011 U	0.0043 U	**0.0036 J**	0.0040 U	0.0043 U	0.0043 U	0.0043 U
Hexavalent Chromium SW7196A (mg/L)													
Chromium, Hexavalent	0.000035	NE	0.000035	0.013 U	0.013 U	0.025 U	0.025 U	0.012 U	0.013 U	0.013 U	0.013 U	0.025 U	0.012 U
PCBs SW8082A (ug/L)													
PCB-1016 (Aroclor 1016	0.14	0.5	0.0079	0.10 U	0.10 U	0.10 U	0.10 U	0.12 U	0.10 U	0.10 U	0.10 U	0.10 U	0.12 U
PCB-1221 (Aroclor 1221	0.0047	0.5	0.0079	0.10 U	0.10 U	0.10 U	0.10 U	0.12 U	0.10 U	0.10 U	0.10 U	0.10 U	0.12 U
PCB-1232 (Aroclor 1232	0.0047	0.5	0.0079	0.10 U	0.10 U	0.10 U	0.10 U	0.12 U	0.10 U	0.10 U	0.10 U	0.10 U	0.12 U
PCB-1242 (Aroclor 1242	0.0078	0.5	0.0079	0.10 U	0.10 U	0.10 U	0.10 U	0.12 U	0.10 U	0.10 U	0.10 U	0.10 U	0.12 U
PCB-1248 (Aroclor 1248	0.0078	0.5	0.0079	0.10 U	0.10 U	0.10 U	0.10 U	0.12 U	0.10 U	0.10 U	0.10 U	0.10 U	0.12 U
PCB-1254 (Aroclor 1254	0.0078	0.5	0.0079	0.10 U	0.10 U	0.10 U	0.10 U	0.12 U	0.10 U	0.10 U	0.10 U	0.10 U	0.12 U
PCB-1260 (Aroclor 1260)	0.0078	0.5	0.0079	0.10 U	0.10 U	0.10 U	0.10 U	0.12 U	0.10 U	0.10 U	0.10 U	0.10 U	0.12 U

Table 4-2
Summary of Cumulative Overburden Groundwater Analytical Results
Former Dow Salvage Yard
233 Odlin Road, Bangor, Maine

Locations:				SY-OBMW12					SY-OBMW13				
Field Sample ID:				SY-OBMW12-120419	SY-OBMW12-031120	SY-OBMW12-081420	SY-OBMW12-113020	SY-OBMW12-110723	SY-OBMW13-120419	SY-OBMW13-031020	SY-OBMW13-081120	SY-OBMW13-120120	SY-OBMW13-110723
Matrix:				WG	WG	WG	WG	WG	WG	WG	WG	WG	WG
Sample Begin Depth:				22	22	22	22	22	12	12	12	12	12
Sample End Depth:				32	32	32	32	32	22	22	22	22	22
Sample Date:				12/04/2019	03/11/2020	08/14/2020	11/30/2020	11/07/2023	12/04/2019	03/10/2020	08/11/2020	12/01/2020	11/07/2023
Analytes	**RSL[1]**	**MCL[2]**	**RAG[3]**										
CVOCs SW8260D SIM (ug/L)													
1,1-Dichloroethene	28	7	29	NS	NS	NS	NS	0.025 U	NS	NS	NS	NS	0.025 U
cis-1,2-Dichloroethene	3.6	70	2.5	NS	NS	NS	NS	0.025 U	NS	NS	NS	NS	0.025 U
Tetrachloroethene (PCE)	4.1	5	4.1	NS	NS	NS	NS	0.025 U	NS	NS	NS	NS	0.025 U
trans-1,2-Dichloroethene	36	100	6.8	NS	NS	NS	NS	0.025 U	NS	NS	NS	NS	0.025 U
Trichloroethene (TCE)	0.28	5	0.28	NS	NS	NS	NS	**0.29**	NS	NS	NS	NS	0.025 U
Vinyl chloride	0.019	2	0.019	NS	NS	NS	NS	**0.15 J**	NS	NS	NS	NS	0.050 U
VOCs SW8260D (ug/L)													
1,1,1,2-Tetrachloroethane	0.57	NE	0.57	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,1-Trichloroethane	800	200	800	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	0.076	NE	0.076	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	0.041	5	0.042	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	2.8	NE	2.8	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	28	7	29	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U
1,1-Dichloropropene	NE	NE	0.47	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,3-Trichlorobenzene	0.7	NE	0.7	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,3-Trichloropropane	0.00075	NE	0.00075	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,4-Trichlorobenzene	0.4	70	0.4	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,4-Trimethylbenzene	5.6	NE	5.6	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromo-3-chloropropane	0.00033	0.2	0.00033	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
1,2-Dibromoethane (EDB)	0.0075	0.05	0.0075	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	30	600	30	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	0.17	5	0.17	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	0.82	5	0.83	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3,5-Trimethylbenzene	6	NE	6	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	NE	NE	30	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichloropropane	37	NE	37	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	0.48	75	0.48	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dioxane (p-Dioxane)	0.46	NE	0.46	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2,2-Dichloropropane	NE	NE	NE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Butanone (MEK)	560	NE	560	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2-Chlorotoluene	24	NE	24	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Hexanone	3.8	NE	3.8	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
4-Chlorotoluene	25	NE	25	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
4-Methyl-2-pentanone (MIBK)	630	NE	630	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Acetone	1400	NE	1400	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Benzene	0.46	5	0.46	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromobenzene	6.2	NE	6.2	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromochloromethane	8.3	NE	8.3	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	0.13	80	0.13	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Bromoform	3.3	80	3.3	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane	0.75	NE	0.76	2.0 U	2.0 U	2.0 U	2.0 U	1.5 U	2.0 U	2.0 U	2.0 U	2.0 U	1.5 U
Carbon disulfide	81	NE	81	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon tetrachloride	0.46	5	0.46	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	7.8	100	7.8	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	2100	NE	2100	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform	0.22	80	0.22	1.0 U	1.0 U	1.0 U	1.0 U	1.5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.5 U
Chloromethane	19	NE	19	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	3.6	70	2.5	1.0 U	1.0 U	1.0 U	1.0 U	1.5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.5 U
cis-1,3-Dichloropropene	0.47	NE	0.47	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dibromochloromethane	0.87	80	0.87	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dibromomethane	0.83	NE	0.83	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dichlorodifluoromethane	NE	NE	20	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Diethyl ether (Ethyl ether)	390	NE	390	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	1.5	700	1.5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Hexachlorobutadiene	0.14	NE	0.14	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U
Isopropylbenzene (Cumene)	45	NE	45	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U
m,p-Xylene	19	10000	19	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
Methyl tert-butyl ether (MTBE)	14	NE	14	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methylene chloride	11	5	11	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Naphthalene	0.17	NE	0.12	1.0 U	1.0 U	1.0 U	1.0 U	1.5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.5 U
n-Butylbenzene	100	NE	100	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
n-Propylbenzene	66	NE	66	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
o-Xylene	19	10000	19	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
p-Cymene (p-Isopropyltoluene)	NE	NE	NE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
sec-Butylbenzene	200	NE	200	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Styrene	120	100	120	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
tert-Amyl methyl ether	NE	NE	NE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
tert-Butyl alcohol	NE	NE	NE	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
tert-Butyl ethyl ether	NE	NE	NE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
tert-Butylbenzene	69	NE	69	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene (PCE)	4.1	5	4.1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U

Table 4-2
Summary of Cumulative Overburden Groundwater Analytical Results
Former Dow Salvage Yard
233 Odlin Road, Bangor, Maine

Locations:				SY-OBMW12					SY-OBMW13						
Field Sample ID:				SY-OBMW12-120419	SY-OBMW12-031120	SY-OBMW12-081420	SY-OBMW12-113020	SY-OBMW12-110723	SY-OBMW13-120419	SY-OBMW13-031020	SY-OBMW13-081120	SY-OBMW13-120120	SY-OBMW13-110723		
Matrix:				WG	WG	WG	WG	WG	WG	WG	WG	WG	WG		
Sample Begin Depth:				22	22	22	22	22	12	12	12	12	12		
Sample End Depth:				32	32	32	32	32	22	22	22	22	22		
Sample Date:				12/04/2019	03/11/2020	08/14/2020	11/30/2020	11/07/2023	12/04/2019	03/10/2020	08/11/2020	12/01/2020	11/07/2023		
Analytes	**RSL[1]**	**MCL[2]**	**RAG[3]**												
Tetrahydrofuran	340	NE	340	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U		
Toluene	110	1000	1200	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U		
trans-1,2-Dichloroethene	36	100	6.8	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U		
trans-1,3-Dichloropropene	0.47	NE	NE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U		
Trichloroethene (TCE)	0.28	5	0.28	1.0 U	1.0 U	**0.69 J**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U		
Trichlorofluoromethane	520	NE	520	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U		
Vinyl chloride	0.019	2	0.019	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U		
SVOCs SW8270E (ug/L)															
1,2,4-Trichlorobenzene	0.4	70	0.4	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U		
1,2-Dichlorobenzene	30	600	30	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ		
1,3-Dichlorobenzene	NE	NE	30	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ		
1,4-Dichlorobenzene	0.48	75	0.48	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ		
2,2'-Oxybis(1-chloropropane)	NE	NE	NE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U		
2,4,5-Trichlorophenol	120	NE	120	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U		
2,4,6-Trichlorophenol	1.2	NE	1.2	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U		
2,4-Dichlorophenol	4.6	NE	4.6	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U		
2,4-Dimethylphenol	36	NE	36	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U		
2,4-Dinitrophenol	3.9	NE	3.9	45 U	45 U	45 U	45 U	45 U	45 U	45 U	45 U	45 U	45 U		
2,4-Dinitrotoluene	0.24	NE	0.24	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U		
2,6-Dinitrotoluene	0.049	NE	0.049	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U		
2-Chloronaphthalene	75	NE	75	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U		
2-Chlorophenol	9.1	NE	9.1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U		
2-Methylphenol (o-Cresol)	93	NE	93	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U		
2-Nitroaniline	19	NE	NE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U		
2-Nitrophenol	NE	NE	NE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U		
3,3'-Dichlorobenzidine	0.13	NE	0.13	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U		
3-Nitroaniline	NE	NE	NE	1.0 U	1.0 U	1.0 U	1.0 U	1.5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.5 U		
4,6-Dinitro-2-methylphenol	0.15	NE	NE	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U		
4-Bromophenyl phenyl ether	NE	NE	NE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U		
4-Chloro-3-methylphenol	140	NE	150	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 UJ		
4-Chloroaniline	0.37	NE	NE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U		
4-Chlorophenyl phenyl ether	NE	NE	NE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U		
4-Methylphenol (p-Cresol)	190	NE	190	1.0 U	1.0 U	1.0 U	1.0 U	1.5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.5 U		
4-Nitroaniline	3.8	NE	38	1.0 U	1.0 U	1.0 U	1.0 U	3.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.0 U		
4-Nitrophenol	NE	NE	NE	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ		
Aniline (Phenylamine, Aminobenzene)	13	NE	13	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U		
Azobenzene	0.12	NE	NE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U		
Benzidine	0.00011	NE	NE	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U		
Benzoic acid	7500	NE	7500	45 U	45 U	45 U	45 U	45 UJ	45 U	45 U	45 U	45 U	45 UJ		
Benzyl alcohol	200	NE	200	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**0.55 J**	1.0 U		
Benzyl butyl phthalate	16	NE	16	5.0 U	1.0 U	1.0 U	1.0 U	3.0 U	5.0 U	1.0 U	1.0 U	1.0 U	3.0 U		
bis(2-Chloroethoxy) methane	5.9	NE	NE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U		
bis(2-Chloroethyl) ether	0.014	NE	0.014	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U		
bis(2-Ethylhexyl) phthalate	5.6	6	5.6	5.0 U	5.0 U	1.0 U	5.0 U	3.0 U	5.0 U	5.0 U	1.0 U	15 UJ	3.0 U		
Carbazole	NE	NE	1.5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U		
Dibenzofuran	0.79	NE	0.79	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U		
Diethyl phthalate	1500	6	1500	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 UJ		
Dimethyl phthalate	NE	NE	NE	R	1.0 U	1.0 UJ	1.0 U	1.0 UJ	R	1.0 U	1.0 UJ	1.0 U	1.0 UJ		
Di-n-butyl phthalate	90	NE	NE	5.0 U	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	1.0 U		
di-n-Octyl phthalate	20	NE	200	1.0 U	1.0 U	1.0 U	1.0 U	3.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.0 U		
Hexachlorobenzene	0.0098	1	0.0098	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U		
Hexachlorobutadiene	0.14	NE	0.14	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ		
Hexachlorocyclopentadiene	0.041	50	NE	4.0 UJ	4.0 UJ	4.0 UJ	4.0 UJ	4.0 UJ	4.0 UJ	4.0 UJ	4.0 UJ	4.0 UJ	4.0 UJ		
Hexachloroethane	0.33	NE	0.33	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ		
Isophorone	78	NE	78	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U		
Nitrobenzene	0.14	NE	NE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U		
N-Nitrosodimethylamine	0.00011	NE	NE	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 UJ		
N-Nitrosodi-n-propylamine	0.011	NE	NE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U		
N-Nitrosodiphenylamine	12	NE	12	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U		
Pentachlorophenol	0.041	1	0.041	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U		
Phenol	580	NE	580	1.0 UJ	1.0 UJ	1.0 UJ	1.0 UJ	1.0 UJ	1.0 UJ	1.0 UJ	1.0 UJ	1.0 UJ	1.0 UJ		
Pyridine	12	NE	NE	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U		

Table 4-2
Summary of Cumulative Overburden Groundwater Analytical Results
Former Dow Salvage Yard
233 Odlin Road, Bangor, Maine

			Locations:	SY-OBMW12					SY-OBMW13					
			Field Sample ID:	SY-OBMW12-120419	SY-OBMW12-031120	SY-OBMW12-081420	SY-OBMW12-113020	SY-OBMW12-110723	SY-OBMW13-120419	SY-OBMW13-031020	SY-OBMW13-081120	SY-OBMW13-120120	SY-OBMW13-110723
			Matrix:	WG	WG	WG	WG	WG	WG	WG	WG	WG	WG
			Sample Begin Depth:	22	22	22	22	22	12	12	12	12	12
			Sample End Depth:	32	32	32	32	32	22	22	22	22	22
			Sample Date:	12/04/2019	03/11/2020	08/14/2020	11/30/2020	11/07/2023	12/04/2019	03/10/2020	08/11/2020	12/01/2020	11/07/2023
Analytes	**RSL[1]**	**MCL[2]**	**RAG[3]**										
E300 (mg/L)													
Chloride	NE	NE	NE	**39 J**	**53**	**68**	**47**	**27**	**69 J**	**260**	**240**	**220**	**56**
Nitrate	NE	NE	NE	0.025 U	**0.019 J**	0.025 U	0.050 U	0.025 U	**0.33**	**0.44**	**0.40**	**0.40**	**0.51**
Sulfate	NE	NE	NE	**9.8**	**16**	**20**	**15**	**12**	**120 J**	**260**	**100**	**80**	**68**
RSK175 (ug/L)													
Ethane	NE	NE	NE	5.0 U	5.0 U	5.0 U	5.0 U	9.8 U	5.0 U	5.0 U	5.0 U	5.0 U	9.8 U
Ethene	NE	NE	NE	5.0 U	5.0 U	5.0 U	5.0 U	9.8 U	5.0 U	5.0 U	5.0 U	5.0 U	9.8 U
Methane	NE	NE	NE	**28**	**22**	**19**	**26**	**17**	10 U	10 U	**3.0 J**	10 U	10 U
A2320B (mg/L)													
Alkalinity, Total (as CaCO3)	NE	NE	NE	**200**	**200**	**190**	**200**	**200**	**180**	**170**	**170**	**180**	**220**
A3500B (mg/L)													
Iron, Ferrous	NE	NE	NE	**0.085 J**	0.050 U	0.050 U	0.050 U	0.050 U	0.050 UJ	0.050 U	0.050 U	0.050 U	0.050 U
A5310B (mg/L)													
Total Organic Carbon	NE	NE	NE	1.0 U	**1.1**	**0.66 J**	**0.62 J**	**1.5**	**1.4**	1.0 U	**0.89 J**	**0.71 J**	**1.7**

Table 4-2
Summary of Cumulative Overburden Groundwater Analytical Results
Former Dow Salvage Yard
233 Odlin Road, Bangor, Maine

Locations:				SY-OBMW14					SY-OBMW15				
Field Sample ID:				SY-OBMW14-120419	SY-OBMW14-031120	SY-OBMW14-081420	SY-OBMW14-113020	SY-OBMW14-110723	SY-OBMW15-120419	SY-OBMW15-030920	SY-OBMW15-081120	SY-OBMW15-120220	SY-OBMW15-110723
Matrix:				WG	WG	WG	WG	WG	WG	WG	WG	WG	WG
Sample Begin Depth:				18	18	18	18	18	12	12	12	12	12
Sample End Depth:				28	28	28	28	28	22	22	22	22	22
Sample Date:				12/04/2019	03/11/2020	08/14/2020	11/30/2020	11/07/2023	12/04/2019	03/09/2020	08/11/2020	12/02/2020	11/07/2023
Analytes	**RSL[1]**	**MCL[2]**	**RAG[3]**										
PAH SIM (ug/L)													
2-Methylnaphthalene	3.6	NE	3.6	0.094 U	0.094 U	0.094 U	0.094 U	0.095 U	0.093 U	0.095 U	0.094 U	0.096 U	0.095 U
Acenaphthene	53	NE	54	0.094 U	0.094 U	0.094 U	0.094 U	0.095 U	0.093 U	0.095 U	0.094 U	0.096 U	0.095 U
Acenaphthylene	NE	NE	52	0.094 U	0.094 U	0.094 U	0.094 U	0.095 U	0.093 U	0.095 U	0.094 U	0.096 U	0.095 U
Anthracene	180	NE	180	0.094 U	0.094 U	0.094 U	0.094 U	0.095 U	0.093 U	0.095 U	0.094 U	0.096 U	0.095 U
Benzo(a)anthracene	0.03	NE	0.03	0.094 U	0.094 U	0.094 U	0.094 U	0.095 U	0.093 U	0.095 U	0.094 U	0.096 U	0.095 U
Benzo(a)pyrene	0.025	0.2	0.025	0.094 U	0.094 U	0.094 U	0.094 U	0.095 U	0.093 U	0.095 U	0.094 U	0.096 U	0.095 U
Benzo(b)fluoranthene	0.25	NE	0.25	0.094 U	0.094 U	0.094 U	0.094 U	0.095 U	0.093 U	0.095 U	0.094 U	0.096 U	0.095 U
Benzo(g,h,i)perylene	NE	NE	60	0.094 U	0.094 U	0.094 UJ	0.094 U	0.095 U	0.093 U	0.095 U	0.094 U	0.096 U	0.095 U
Benzo(k)fluoranthene	2.5	NE	2.5	0.094 U	0.094 U	0.094 U	0.094 U	0.095 U	0.093 U	0.095 U	0.094 U	0.096 U	0.095 U
Chrysene	25	NE	25	0.094 U	0.094 U	0.094 U	0.094 U	0.095 U	0.093 U	0.095 U	0.094 U	0.096 U	0.095 U
Dibenz(a,h)anthracene	0.025	NE	0.025	0.094 U	0.094 U	0.094 UJ	0.094 U	0.095 U	0.093 U	0.095 U	0.094 U	0.096 U	0.095 U
Fluoranthene	80	NE	80	0.094 U	0.094 U	0.094 U	0.094 U	0.095 U	0.093 U	0.095 U	0.094 U	0.096 U	0.095 U
Fluorene	29	NE	29	0.094 U	0.094 U	0.094 U	0.094 U	0.095 U	0.093 U	0.095 U	0.094 U	0.096 U	0.095 U
Indeno(1,2,3-c,d)pyrene	0.25	NE	0.25	0.094 U	0.19 U	0.094 UJ	0.094 U	0.095 U	0.093 U	0.095 U	0.094 U	0.096 U	0.095 U
Naphthalene	0.17	NE	0.12	0.094 U	0.094 U	0.094 U	0.094 U	0.095 U	0.093 U	0.095 U	0.094 U	0.096 U	0.095 U
Phenanthrene	NE	NE	18	0.094 U	0.094 U	0.094 U	0.094 U	0.095 U	0.093 U	0.095 U	0.094 U	0.096 U	0.095 U
Pyrene	12	NE	12	0.094 U	0.094 U	0.094 U	0.094 U	0.095 U	0.093 U	0.095 U	0.094 U	0.096 U	0.095 U
MassDEP EPH (ug/L)													
2-Methylnaphthalene	3.6	NE	3.6	0.50 U	0.50 U	0.50 U	0.50 U	0.70 UJ	0.50 U	0.50 U	0.50 U	0.50 U	0.70 UJ
Acenaphthene	53	NE	54	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Acenaphthylene	NE	NE	52	0.50 U	0.50 U	0.50 UJ	0.50 U	0.50 U	0.50 U	0.50 U	0.50 UJ	0.50 U	0.50 U
Anthracene	180	NE	180	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Benzo(a)anthracene	0.03	NE	0.03	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Benzo(a)pyrene	0.025	0.2	0.025	0.20 U	0.20 U	0.20 U	0.20 U	0.70 U	0.20 U	0.20 U	0.20 U	0.20 U	0.70 U
Benzo(b)fluoranthene	0.25	NE	0.25	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Benzo(g,h,i)perylene	NE	NE	60	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	**0.24 J**
Benzo(k)fluoranthene	2.5	NE	2.5	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Chrysene	25	NE	25	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Dibenz(a,h)anthracene	0.025	NE	0.025	0.50 U	0.50 U	0.50 U	0.50 U	0.50 UJ	0.50 U	0.50 U	0.50 U	0.50 U	0.50 UJ
Fluoranthene	80	NE	80	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	**0.23 J**
Fluorene	29	NE	29	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Indeno(1,2,3-c,d)pyrene	0.25	NE	0.25	0.50 U	0.50 U	0.50 U	0.50 U	0.50 UJ	0.50 U	0.50 U	0.50 U	0.50 U	0.50 UJ
Naphthalene	0.17	NE	0.12	0.50 U	0.50 U	0.50 UJ	0.50 UJ	0.70 UJ	0.50 U	0.50 U	0.50 UJ	0.50 UJ	0.70 UJ
Phenanthrene	NE	NE	18	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Pyrene	12	NE	12	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	**0.29 J**
C11-C22 Aromatic	NE	NE	60	85 UJ	85 U	100 U	85 U	**60 J**	85 U	85 U	100 U	85 U	**61 J**
C19-C36 Aliphatic	NE	NE	4000	88 UJ	88 U	88 U	100 U	**120 J**	88 U	88 U	88 U	88 U	97 U
C9-C18 Aliphatic	NE	NE	35	66 UJ	66 UJ	66 UJ	66 U	95 UJ	66 U	66 UJ	66 UJ	66 U	95 UJ
MassDEP VPH (ug/L)													
Benzene	0.46	5	0.46	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	1.5	700	1.5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
m,p-Xylene	19	10000	19	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Methyl tert-butyl ether (MTBE)	14	NE	1300	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Naphthalene	0.17	NE	0.12	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U
o-Xylene	19	10000	19	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	110	1000	110	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
C5-C8 Aliphatic	NE	NE	18	100 U	100 U	100 U	100 U	50 U	100 U	45 U	100 U	100 U	50 U
C9-C10 Aromatic	NE	NE	7.1	**4.0** J	15 U	100 U	100 U	50 U	**4.0** J	15 U	100 U	100 U	50 U
C9-C12 Aliphatic	NE	NE	35	45 U	45 U	45 U	45 U	50 U	45 U	45 U	45 U	45 U	50 U

Table 4-2
Summary of Cumulative Overburden Groundwater Analytical Results
Former Dow Salvage Yard
233 Odlin Road, Bangor, Maine

Locations:				SY-OBMW14					SY-OBMW15						
Field Sample ID:				SY-OBMW14-120419	SY-OBMW14-031120	SY-OBMW14-081420	SY-OBMW14-113020	SY-OBMW14-110723	SY-OBMW15-120419	SY-OBMW15-030920	SY-OBMW15-081120	SY-OBMW15-120220	SY-OBMW15-110723		
Matrix:				WG	WG	WG	WG	WG	WG	WG	WG	WG	WG		
Sample Begin Depth:				18	18	18	18	18	12	12	12	12	12		
Sample End Depth:				28	28	28	28	28	22	22	22	22	22		
Sample Date:				12/04/2019	03/11/2020	08/14/2020	11/30/2020	11/07/2023	12/04/2019	03/09/2020	08/11/2020	12/02/2020	11/07/2023		
Analytes	**RSL[1]**	**MCL[2]**	**RAG[3]**												
Total Metals SW6020A/7470A (mg/L)															
Aluminum	2	NE	2	0.050 U	0.050 U	0.050 U	**0.0069 J**	0.025 U	0.050 U	0.050 U	0.050 U	**0.014 J**	**0.013 J**		
Antimony	0.00078	0.006	0.00078	0.00050 U	0.00050 U	0.00050 U	0.00050 U	**0.00015 J**	0.00050 U	0.00050 U	0.00050 U	0.00050 U	**0.00032 J**		
Arsenic	0.000052	0.01	0.000052	**0.0018 J**	**0.0017 J**	0.0050 U	**0.00099 J**	**0.0016 J**	**0.00050 J**	0.0010 U	**0.00058 J**	**0.00037 J**	**0.00096 J**		
Barium	380	2	0.38	**0.0059 J**	0.010 U	0.010 U	**0.0051 J**	**0.0049 J**	**0.015**	0.010 U	**0.012**	**0.012**	**0.0031 J**		
Beryllium	0.0025	0.004	0.0025	0.00010 U	0.00010 U	0.00010 U	**0.000015 J**	0.00050 U	0.0010 U	**0.000064 J**	0.0010 U	0.00010 U	0.00050 U		
Cadmium	0.00092	0.005	0.0018	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.0010 U	**0.00018 J**	0.00050 U	0.00050 U		
Chromium	0.000035[5]/2.2	0.1	0.0000035[5]/2.3	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.025 U	0.0010 U	0.010 U	**0.0012 J**	**0.00076 J**	0.025 U		
Cobalt	0.0006	NE	0.0006	**0.00011 J**	0.010 U	0.010 U	**0.00010 J**	0.00050 U	**0.00045 J**	0.010 U	0.010 U	**0.000088 J**	0.00050 U		
Copper	0.08	1.3	0.08	0.0010 U	0.010 U	0.010 U	**0.00068 J**	0.0075 U	0.0010 U	0.010 U	**0.00063 J**	**0.0027 J**	0.0075 U		
Iron	1.4	NE	1.4	**0.032 J**	**0.11**	0.050 U	**0.029 J**	**0.043 J**	**0.013 J**	**0.065**	**0.030 J**	**0.034 J**	0.030 U		
Lead	0.015	0.015	NE	**0.00014 J**	0.0050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	**0.0072**	**0.00019 J**	0.00050 U	**0.00022 J**		
Magnesium	NE	NE	NE	**22**	**22**	**27**	**25**	**27**	**62**	**70**	**98**	**130**	**44**		
Manganese	0.043	NE	0.043	**0.38**	**0.34**	**0.42**	**0.43**	**0.44**	**0.13**	**0.033**	**0.14**	**0.12**	**0.037**		
Mercury	0.000063	0.002	0.000063	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00015 U	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00015 U		
Nickel	0.039	NE	0.039	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.025 U	0.0010 U	0.010 U	**0.00090 J**	**0.00071 J**	0.025 U		
Potassium	NE	NE	NE	**2.8**	**2.8**	**3.3**	**3.0**	**3.1**	**3.1**	**2.4**	**3.6**	**3.8**	**1.9**		
Selenium	0.01	0.05	0.01	**0.00076 J**	**0.0013 J**	0.0010 U	0.010 U	0.0050 U	**0.00069 J**	**0.0032 J**	**0.0011 J**	0.010 U	0.0050 U		
Silver	0.0094	NE	0.0094	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	**0.000066 J**	**0.000098 J**	0.00050 U	0.00050 U		
Sodium	NE	NE	NE	**28**	**32**	**36**	**36**	**37**	**250**	**250**	**220**	**270**	**130**		
Thallium	0.00002	0.002	0.00002	0.0010 U	0.0010 U	0.00050 U	**0.00010 J**	0.00080 U	0.0010 U	0.0010 U	0.0010 U	0.00050 U	0.00080 U		
Vanadium	0.0086	NE	0.0086	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0050 U	**0.00068 J**	0.0010 U	0.010 U	**0.00083 J**	0.0050 U		
Zinc	0.6	NE	0.6	0.0040 U	0.0040 U	0.0040 U	0.0040 U	0.0040 U	0.0040 U	0.010 U	0.0040 U	0.0040 U	0.0040 U		
Dissolved Metals (mg/L)															
Aluminum	2	NE	2	**0.013 J**	0.050 U	**0.0050 J**	0.011 U	0.027 U	**0.0041 J**	0.050 U	**0.14**	0.011 U	0.027 U		
Antimony	0.00078	0.006	0.00078	0.00054 U	0.00050 U	0.00054 U	0.00054 U	0.00054 U	0.00054 U	0.00050 U	0.00050 U	0.00054 U	0.00054 U		
Arsenic	0.000052	0.01	0.000052	**0.0017 J**	**0.0012 J**	**0.00074 J**	**0.00085 J**	**0.0013 J**	**0.00061 J**	0.0010 U	0.0010 U	0.0011 U	0.0011 U		
Barium	380	2	0.38	**0.0066 J**	0.010 U	**0.0056 J**	**0.0050 J**	**0.0049 J**	**0.015**	0.010 U	**0.013**	**0.010 J**	**0.0031 J**		
Beryllium	0.0025	0.004	0.0025	0.00011 U	**0.000039 J**	0.00011 U	0.00011 U	0.00054 U	0.00011 U	**0.000037 J**	0.0010 U	0.00011 U	0.00054 U		
Cadmium	0.00092	0.005	0.0018	0.00054 U	0.00050 U	0.00054 U	0.00054 U	0.00054 U	0.00054 U	0.0010 U	0.00050 U	0.00054 U	0.00054 U		
Chromium	0.000035[5]/2.2	0.1	0.0000035[5]/2.3	0.0011 U	0.0010 U	0.0011 U	0.0011 U	0.027 U	0.0011 U	0.010 U	0.0010 U	**0.00080 J**	0.027 U		
Cobalt	0.0006	NE	0.0006	**0.00014 J**	0.010 U	**0.000067 J**	**0.00010 J**	0.00054 U	**0.00042 J**	0.010 U	0.010 U	**0.000087 J**	0.00054 U		
Copper	0.08	1.3	0.08	**0.0012 J**	0.010 U	0.0011 U	0.011 U	0.0080 U	**0.0029 J**	0.010 U	0.0010 U	0.011 U	0.0080 U		
Iron	1.4	NE	1.4	**0.014 J**	0.050 U	**0.019 J**	**0.018 J**	0.032 U	0.011 U	0.050 U	**0.0068 J**	**0.0088 J**	0.032 U		
Lead	0.015	0.015	NE	0.00054 U	**0.0014 J**	0.00054 U	0.00054 U	0.00054 U	0.00054 U	**0.0042 J**	0.00050 U	0.00054 U	0.00054 U		
Magnesium	NE	NE	NE	**21**	**20 J**	**30**	**25**	**25**	**59**	**59 J**	**110**	**110**	**46**		
Manganese	0.043	NE	0.043	**0.33**	**0.34 J**	**0.44**	**0.42**	**0.41**	**0.12**	**0.029 J**	**0.17**	**0.094**	**0.038**		
Mercury	0.000063	0.002	0.000063	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00015 U	0.00010 U	0.00010 U	0.00010 U	0.00010 U	0.00015 U		
Nickel	0.039	NE	0.039	0.0011 U	0.0010 U	0.0011 U	0.0011 U	0.027 U	0.0011 U	0.010 U	0.0010 U	**0.00068 J**	0.027 U		
Potassium	NE	NE	NE	**2.7**	**2.7**	**2.9**	**2.7**	**2.8**	**3.2**	**2.3**	**3.8**	**3.3**	**1.8**		
Selenium	0.01	0.05	0.01	0.0011 U	0.0010 U	**0.00083 J**	0.011 U	0.0054 U	0.010 U	**0.0015 J**	**0.0011 J**	0.011 U	0.0054 U		
Silver	0.0094	NE	0.0094	0.00054 U	**0.000021 J**	0.00054 U	0.00054 U	0.00054 U	0.00054 U	**0.000030 J**	**0.000032 J**	0.00054 U	0.00054 U		
Sodium	NE	NE	NE	**28**	**32**	**35**	**35**	**35**	**250**	**270**	**220**	**250**	**130**		
Thallium	0.00002	0.002	0.00002	0.0010 U	**0.00011 J**	0.00054 U	0.00054 U	0.00086 U	0.0010 U	**0.00013 J**	0.0010 U	0.00054 U	0.00086 U		
Vanadium	0.0086	NE	0.0086	0.0011 U	0.0010 U	0.0011 U	0.0011 U	0.0054 U	0.010 U	0.0010 U	0.0010 U	0.0011 U	0.0054 U		
Zinc	0.6	NE	0.6	0.0043 U	0.0040 U	0.0043 U	0.0043 U	0.0043 U	0.0043 U	**0.0035 J**	0.0040 U	0.0043 U	0.0043 U		
Hexavalent Chromium SW7196A (mg/L)															
Chromium, Hexavalent	0.000035	NE	0.000035	0.013 U	0.013 U	0.025 U	0.025 U	0.012 U	0.013 U	0.025 U	0.013 U	0.025 U	0.012 U		
PCBs SW8082A (ug/L)															
PCB-1016 (Aroclor 1016)	0.14	0.5	0.0079	0.10 U	0.10 U	0.10 U	0.10 U	0.12 U	0.10 U	0.10 U	0.10 U	0.10 U	0.12 U		
PCB-1221 (Aroclor 1221)	0.0047	0.5	0.0079	0.10 U	0.10 U	0.10 U	0.10 U	0.12 U	0.10 U	0.10 U	0.10 U	0.10 U	0.12 U		
PCB-1232 (Aroclor 1232)	0.0047	0.5	0.0079	0.10 U	0.10 U	0.10 U	0.10 U	0.12 U	0.10 U	0.10 U	0.10 U	0.10 U	0.12 U		
PCB-1242 (Aroclor 1242)	0.0078	0.5	0.0079	0.10 U	0.10 U	0.10 U	0.10 U	0.12 U	0.10 U	0.10 U	0.10 U	0.10 U	0.12 U		
PCB-1248 (Aroclor 1248)	0.0078	0.5	0.0079	0.10 U	0.10 U	0.10 U	0.10 U	0.12 U	0.10 U	0.10 U	0.10 U	0.10 U	0.12 U		
PCB-1254 (Aroclor 1254)	0.0078	0.5	0.0079	0.10 U	0.10 U	0.10 U	0.10 U	0.12 U	0.10 U	0.10 U	0.10 U	0.10 U	0.12 U		
PCB-1260 (Aroclor 1260)	0.0078	0.5	0.0079	0.10 U	0.10 U	0.10 U	0.10 U	0.12 U	0.10 U	0.10 U	0.10 U	0.10 U	0.12 U		

Table 4-2
Summary of Cumulative Overburden Groundwater Analytical Results
Former Dow Salvage Yard
233 Odlin Road, Bangor, Maine

Locations:				SY-OBMW14					SY-OBMW15						
Field Sample ID:				SY-OBMW14-120419	SY-OBMW14-031120	SY-OBMW14-081420	SY-OBMW14-113020	SY-OBMW14-110723	SY-OBMW15-120419	SY-OBMW15-030920	SY-OBMW15-081120	SY-OBMW15-120220	SY-OBMW15-110723		
Matrix:				WG	WG	WG	WG	WG	WG	WG	WG	WG	WG		
Sample Begin Depth:				18	18	18	18	18	12	12	12	12	12		
Sample End Depth:				28	28	28	28	28	22	22	22	22	22		
Sample Date:				12/04/2019	03/11/2020	08/14/2020	11/30/2020	11/07/2023	12/04/2019	03/09/2020	08/11/2020	12/02/2020	11/07/2023		
Analytes	**RSL[1]**	**MCL[2]**	**RAG[3]**												
CVOCs SW8260D SIM (ug/L)															
1,1-Dichloroethene	28	7	29	NS	NS	NS	NS	**0.024 J**	NS	NS	NS	NS	0.025 U		
cis-1,2-Dichloroethene	3.6	70	2.5	NS	NS	NS	NS	0.025 U	NS	NS	NS	NS	0.025 U		
Tetrachloroethene (PCE)	4.1	5	4.1	NS	NS	NS	NS	0.025 U	NS	NS	NS	NS	0.025 U		
trans-1,2-Dichloroethene	36	100	6.8	NS	NS	NS	NS	0.025 U	NS	NS	NS	NS	0.025 U		
Trichloroethene (TCE)	0.28	5	0.28	NS	NS	NS	NS	**0.46**	NS	NS	NS	NS	0.025 U		
Vinyl chloride	0.019	2	0.019	NS	NS	NS	NS	**0.026 J**	NS	NS	NS	NS	0.050 U		
VOCs SW8260D (ug/L)															
1,1,1,2-Tetrachloroethane	0.57	NE	0.57	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U		
1,1,1-Trichloroethane	800	200	800	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U		
1,1,2,2-Tetrachloroethane	0.076	NE	0.076	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U		
1,1,2-Trichloroethane	0.041	5	0.042	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U		
1,1-Dichloroethane	2.8	NE	2.8	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U		
1,1-Dichloroethene	28	7	29	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U		
1,1-Dichloropropene	NE	NE	0.47	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U		
1,2,3-Trichlorobenzene	0.7	NE	0.7	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U		
1,2,3-Trichloropropane	0.00075	NE	0.00075	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U		
1,2,4-Trichlorobenzene	0.4	70	0.4	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U		
1,2,4-Trimethylbenzene	5.6	NE	5.6	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U		
1,2-Dibromo-3-chloropropane	0.00033	0.2	0.00033	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U		
1,2-Dibromoethane (EDB)	0.0075	0.05	0.0075	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U		
1,2-Dichlorobenzene	30	600	30	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U		
1,2-Dichloroethane	0.17	5	0.17	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U		
1,2-Dichloropropane	0.82	5	0.83	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U		
1,3,5-Trimethylbenzene	6	NE	6	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U		
1,3-Dichlorobenzene	NE	NE	30	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U		
1,3-Dichloropropane	37	NE	37	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U		
1,4-Dichlorobenzene	0.48	75	0.48	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U		
1,4-Dioxane (p-Dioxane)	0.46	NE	0.46	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U		
2,2-Dichloropropane	NE	NE	NE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U		
2-Butanone (MEK)	560	NE	560	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U		
2-Chlorotoluene	24	NE	24	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U		
2-Hexanone	3.8	NE	3.8	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U		
4-Chlorotoluene	25	NE	25	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U		
4-Methyl-2-pentanone (MIBK)	630	NE	630	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U		
Acetone	1400	NE	1400	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U		
Benzene	0.46	5	0.46	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U		
Bromobenzene	6.2	NE	6.2	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U		
Bromochloromethane	8.3	NE	8.3	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U		
Bromodichloromethane	0.13	80	0.13	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U		
Bromoform	3.3	80	3.3	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U		
Bromomethane	0.75	NE	0.76	2.0 U	2.0 U	2.0 U	2.0 U	1.5 U	2.0 U	2.0 U	2.0 U	2.0 U	1.5 U		
Carbon disulfide	81	NE	81	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U		
Carbon tetrachloride	0.46	5	0.46	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U		
Chlorobenzene	7.8	100	7.8	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U		
Chloroethane	2100	NE	2100	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U		
Chloroform	0.22	80	0.22	1.0 U	1.0 U	1.0 U	1.0 U	1.5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.5 U		
Chloromethane	19	NE	19	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U		
cis-1,2-Dichloroethene	3.6	70	2.5	1.0 U	1.0 U	1.0 U	1.0 U	1.5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.5 U		
cis-1,3-Dichloropropene	0.47	NE	0.47	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U		
Dibromochloromethane	0.87	80	0.87	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U		
Dibromomethane	0.83	NE	0.83	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U		
Dichlorodifluoromethane	NE	NE	20	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U		
Diethyl ether (Ethyl ether)	390	NE	390	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U		
Ethylbenzene	1.5	700	1.5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U		
Hexachlorobutadiene	0.14	NE	0.14	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U		
Isopropylbenzene (Cumene)	45	NE	45	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U		
m,p-Xylene	19	10000	19	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U		
Methyl tert-butyl ether (MTBE)	14	NE	14	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U		
Methylene chloride	11	5	11	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U		
Naphthalene	0.17	NE	0.12	1.0 U	1.0 U	1.0 U	1.0 U	1.5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.5 U		
n-Butylbenzene	100	NE	100	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U		
n-Propylbenzene	66	NE	66	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U		
o-Xylene	19	10000	19	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U		
p-Cymene (p-Isopropyltoluene)	NE	NE	NE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U		
sec-Butylbenzene	200	NE	200	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U		
Styrene	120	100	120	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U		
tert-Amyl methyl ether	NE	NE	NE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U		
tert-Butyl alcohol	NE	NE	NE	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U		
tert-Butyl ethyl ether	NE	NE	NE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U		
tert-Butylbenzene	69	NE	69	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U		
Tetrachloroethene (PCE)	4.1	5	4.1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U		

Table 4-2
Summary of Cumulative Overburden Groundwater Analytical Results
Former Dow Salvage Yard
233 Odlin Road, Bangor, Maine

Locations:				SY-OBMW14					SY-OBMW15				
Field Sample ID:				SY-OBMW14-120419	SY-OBMW14-031120	SY-OBMW14-081420	SY-OBMW14-113020	SY-OBMW14-110723	SY-OBMW15-120419	SY-OBMW15-030920	SY-OBMW15-081120	SY-OBMW15-120220	SY-OBMW15-110723
Matrix:				WG	WG	WG	WG	WG	WG	WG	WG	WG	WG
Sample Begin Depth:				18	18	18	18	18	12	12	12	12	12
Sample End Depth:				28	28	28	28	28	22	22	22	22	22
Sample Date:				12/04/2019	03/11/2020	08/14/2020	11/30/2020	11/07/2023	12/04/2019	03/09/2020	08/11/2020	12/02/2020	11/07/2023
Analytes	**RSL[1]**	**MCL[2]**	**RAG[3]**										
Tetrahydrofuran	340	NE	340	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
Toluene	110	1000	1200	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	36	100	6.8	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	0.47	NE	NE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene (TCE)	0.28	5	0.28	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichlorofluoromethane	520	NE	520	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl chloride	0.019	2	0.019	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
SVOCs SW8270E (ug/L)													
1,2,4-Trichlorobenzene	0.4	70	0.4	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	30	600	30	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ
1,3-Dichlorobenzene	NE	NE	30	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ
1,4-Dichlorobenzene	0.48	75	0.48	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ
2,2'-Oxybis(1-chloropropane)	NE	NE	NE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2,4,5-Trichlorophenol	120	NE	120	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2,4,6-Trichlorophenol	1.2	NE	1.2	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2,4-Dichlorophenol	4.6	NE	4.6	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2,4-Dimethylphenol	36	NE	36	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2,4-Dinitrophenol	3.9	NE	3.9	45 U	45 U	45 U	45 U	45 U	45 U	45 U	45 U	45 U	45 U
2,4-Dinitrotoluene	0.24	NE	0.24	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2,6-Dinitrotoluene	0.049	NE	0.049	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Chloronaphthalene	75	NE	75	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Chlorophenol	9.1	NE	9.1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Methylphenol (o-Cresol)	93	NE	93	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Nitroaniline	19	NE	NE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Nitrophenol	NE	NE	NE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
3,3'-Dichlorobenzidine	0.13	NE	0.13	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U
3-Nitroaniline	NE	NE	NE	1.0 U	1.0 U	1.0 U	1.0 U	1.5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.5 U
4,6-Dinitro-2-methylphenol	0.15	NE	NE	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
4-Bromophenyl phenyl ether	NE	NE	NE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
4-Chloro-3-methylphenol	140	NE	150	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 UJ
4-Chloroaniline	0.37	NE	NE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
4-Chlorophenyl phenyl ether	NE	NE	NE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
4-Methylphenol (p-Cresol)	190	NE	190	1.0 U	1.0 U	1.0 U	1.0 U	1.5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.5 U
4-Nitroaniline	3.8	NE	38	1.0 U	1.0 U	1.0 U	1.0 U	3.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.0 U
4-Nitrophenol	NE	NE	NE	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ
Aniline (Phenylamine, Aminobenzene)	13	NE	13	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U
Azobenzene	0.12	NE	NE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Benzidine	0.00011	NE	NE	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U
Benzoic acid	7500	NE	7500	45 U	45 U	45 U	45 U	45 UJ	45 U	45 U	45 U	45 U	45 UJ
Benzyl alcohol	200	NE	200	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**0.53 J**	1.0 U	1.0 U
Benzyl butyl phthalate	16	NE	16	5.0 U	1.0 U	1.0 U	1.0 U	3.0 U	5.0 U	1.0 U	1.0 U	1.0 U	3.0 U
bis(2-Chloroethoxy) methane	5.9	NE	NE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
bis(2-Chloroethyl) ether	0.014	NE	0.014	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
bis(2-Ethylhexyl) phthalate	5.6	6	5.6	5.0 U	5.0 U	1.0 U	5.0 U	3.0 U	5.0 U	5.0 U	1.0 U	1.0 U	3.0 U
Carbazole	NE	NE	1.5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dibenzofuran	0.79	NE	0.79	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U
Diethyl phthalate	1500	6	1500	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 UJ
Dimethyl phthalate	NE	NE	NE	R	1.0 U	1.0 UJ	1.0 U	1.0 UJ	R	1.0 U	1.0 UJ	1.0 U	1.0 UJ
Di-n-butyl phthalate	90	NE	NE	1.0 U	1.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	5.0 U	1.0 U	1.0 U
di-n-Octyl phthalate	20	NE	200	1.0 U	1.0 U	1.0 U	1.0 U	3.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.0 U
Hexachlorobenzene	0.0098	1	0.0098	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U
Hexachlorobutadiene	0.14	NE	0.14	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ
Hexachlorocyclopentadiene	0.041	50	NE	4.0 UJ	4.0 UJ	4.0 UJ	4.0 UJ	4.0 UJ	4.0 UJ	4.0 UJ	4.0 UJ	4.0 UJ	4.0 UJ
Hexachloroethane	0.33	NE	0.33	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ
Isophorone	78	NE	78	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Nitrobenzene	0.14	NE	NE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
N-Nitrosodimethylamine	0.00011	NE	NE	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 UJ	1.0 U	1.0 UJ	1.0 U	1.0 UJ
N-Nitrosodi-n-propylamine	0.011	NE	NE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
N-Nitrosodiphenylamine	12	NE	12	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Pentachlorophenol	0.041	1	0.041	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Phenol	580	NE	580	1.0 UJ	1.0 UJ	1.0 UJ	1.0 UJ	1.0 UJ	1.0 UJ	1.0 UJ	1.0 UJ	1.0 UJ	1.0 UJ
Pyridine	12	NE	NE	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U

Table 4-2
Summary of Cumulative Overburden Groundwater Analytical Results
Former Dow Salvage Yard
233 Odlin Road, Bangor, Maine

			Locations:	SY-OBMW14					SY-OBMW15				
			Field Sample ID:	SY-OBMW14-120419	SY-OBMW14-031120	SY-OBMW14-081420	SY-OBMW14-113020	SY-OBMW14-110723	SY-OBMW15-120419	SY-OBMW15-030920	SY-OBMW15-081120	SY-OBMW15-120220	SY-OBMW15-110723
			Matrix:	WG	WG	WG	WG	WG	WG	WG	WG	WG	WG
			Sample Begin Depth:	18	18	18	18	18	12	12	12	12	12
			Sample End Depth:	28	28	28	28	28	22	22	22	22	22
			Sample Date:	12/04/2019	03/11/2020	08/14/2020	11/30/2020	11/07/2023	12/04/2019	03/09/2020	08/11/2020	12/02/2020	11/07/2023
Analytes	**RSL[1]**	**MCL[2]**	**RAG[3]**										
E300 (mg/L)													
Chloride	NE	NE	NE	**69 J**	**87**	**120**	**110**	**99**	**450 J**	**420**	**680**	**720**	**220**
Nitrate	NE	NE	NE	0.050 U	0.025 U	0.025 U	0.050 U	0.025 U	**0.25**	**0.44**	**0.47**	**0.64**	**0.20**
Sulfate	NE	NE	NE	**14 J**	**20**	**35**	**28**	**25**	**310 J**	**320**	**350**	**350**	**200**
RSK175 (ug/L)													
Ethane	NE	NE	NE	5.0 U	5.0 U	5.0 U	5.0 U	9.8 U	5.0 U	5.0 U	5.0 U	5.0 U	9.8 U
Ethene	NE	NE	NE	5.0 U	5.0 U	5.0 U	5.0 U	9.8 U	5.0 U	5.0 U	5.0 U	5.0 U	9.8 U
Methane	NE	NE	NE	**28**	**22**	**20**	**23**	**18**	10 U	**3.2 J**	**2.5 J**	10 U	**9.1 J**
A2320B (mg/L)													
Alkalinity, Total (as CaCO3)	NE	NE	NE	**180**	**180**	**160**	**170**	**180**	**140**	**130**	**150**	**160**	**140**
A3500B (mg/L)													
Iron, Ferrous	NE	NE	NE	0.050 UJ	0.050 UJ	0.050 U	0.050 U	0.050 U	0.050 UJ	0.050 UJ	0.050 U	0.050 U	0.050 U
A5310B (mg/L)													
Total Organic Carbon	NE	NE	NE	1.0 U	1.0 U	**0.49 J**	**0.50 J**	**1.2**	**1.4**	**1.2**	0.50 U	**1.0**	**2.7**

Table 4-2
Cumulative Summary of Overburden Groundwater Analytical Results
Former Dow Salvage Yard
233 Odlin Road, Bangor, Maine

NOTES:

1 - U.S. EPA Regional Screening Levels, Tapwater (ELCR 1x10-6, HQ 0.1), November 2021

2 - U.S. EPA Maximum Contaminant Levels, May 2021

3 - Maine Department of Environmental Protection Remedial Action Guidelines (RAGs) lowest of exposure scenarios, November 15, 2023

Detects are displayed in bold font

Results exceed RSL

Reported lab limit exceeds screening criteria

For EPH and VPH fraction results, only adjusted results are presented.

NE - not established

† - hexavalent chromium criteria

Data Qualifier Definitions

U - The analyte was not detected and was reported as less than the LOD or as defined by the customer. The LOD has been adjusted for any dilution or concentration of the sample.

J - Estimated: The analyte was positively identified, the quantitation is an estimation due to discrepancies in meeting certain analyte-specific quality control criteria.

UJ - The analyte was not detected and was reported as less than the LOD or as defined by the customer. However, the associated numerical value is approximate.

Units

PERCENT = percent

PPT = parts per thousand

ug/kg = microgram per kilogram

ug/L = microgram per liter

mg/L = milligram per liter

mg/kg = milligrams per kilogram

Analyses

PAH - polycyclic aromatic hydrocarbons

SIM - selective ion monitoring

EPH - extractable petroleum hydrocarbons

VPH - volatile petroleum hydrocarbons

MassDEP - Massachsuetts Department of Environmental Protection

PCBs - polychlorinated biphenyls

VOC - volatile organic compounds

SVOCs - semi-volatile organic compounds

Table 4-3
Summary of Bedrock Groundwater Analytical Results
Former Dow Salvage Yard
233 Odlin Road, Bangor, Maine

Locations:				SY-BRMW1				SY-BRMW2			SY-BRMW3		
Field Sample ID:				SY-BRMW1-42-52-110923	SY-BRMW1-65-75-110923	SY-BRMW10-65-75-110923	SY-BRMW1-150-157-110923	SY-BRMW2-60.5-70.5-110723	SY-BRMW2-80.5-95.5-110723	SY-BRMW2-252.5-262.5-110723	SY-BRMW3-47-62-110923	SY-BRMW3-145-155-110923	SY-BRMW3-287-297-110923
Matrix:				WG	WG		WG	WG	WG	WG	WG	WG	WG
Sample Begin Depth:				42	65		150	60.5	80.5	252.5	47	145	287
Sample End Depth:				52	75		157	70.5	95.5	262.5	62	155	297
Sample Date:				11/09/2023	11/09/2023		11/09/2023	11/07/2023	11/07/2023	11/07/2023	11/09/2023	11/09/2023	11/09/2023
Analytes	**RSL[1]**	**MCL[2]**	**RAG[3]**										
PAH SIM (ug/L)													
2-Methylnaphthalene	3.6	NE	3.6	0.094 U	0.095 U	0.095 UJ	0.095 U	0.093 U	0.094 U	0.093 U	0.093 U	0.094 U	0.094 U
Acenaphthene	53	NE	54	0.094 U	0.095 U	0.095 UJ	0.095 U	0.093 U	0.094 U	0.093 U	0.093 U	0.094 U	0.094 U
Acenaphthylene	NE	NE	52	0.094 U	0.095 U	0.095 UJ	0.095 U	0.093 U	0.094 U	0.093 U	0.093 U	0.094 U	0.094 U
Anthracene	180	NE	180	0.094 U	**0.12 J**	0.095 UJ	0.095 U	0.093 U	0.094 U	0.093 U	**0.063 J**	0.094 U	0.094 U
Benzo(a)anthracene	0.03	NE	0.03	0.094 U	**0.18 J**	0.095 UJ	0.095 U	0.093 U	0.094 U	0.093 U	**0.21**	0.094 U	0.094 U
Benzo(a)pyrene	0.025	0.2	0.025	0.094 U	**0.073 J**	0.095 UJ	0.095 U	0.093 U	0.094 UJ	0.093 U	**0.14 J**	0.094 U	0.094 U
Benzo(b)fluoranthene	0.25	NE	0.25	0.094 U	**0.20**	0.095 UJ	0.095 U	0.093 U	0.094 U	0.093 U	**0.28**	0.094 U	0.094 U
Benzo(g,h,i)perylene	NE	NE	60	0.094 U	**0.11 J**	0.095 UJ	0.095 U	0.093 U	0.094 UJ	0.093 U	**0.092 J**	0.094 U	0.094 U
Benzo(k)fluoranthene	2.5	NE	2.5	0.094 U	**0.22**	0.095 UJ	0.095 U	0.093 U	0.094 UJ	0.093 U	**0.13 J**	0.094 U	0.094 U
Chrysene	25	NE	25	0.094 U	**0.23**	0.095 UJ	**0.054 J**	0.093 U	0.094 U	0.093 U	**0.25**	0.094 U	0.094 U
Dibenz(a,h)anthracene	0.025	NE	0.025	0.094 U	**0.15 J**	0.095 UJ	0.095 U	0.093 U	0.094 UJ	0.093 U	0.093 U	0.094 U	0.094 U
Fluoranthene	80	NE	80	0.094 U	**0.27**	0.095 UJ	0.095 U	0.093 U	0.094 U	0.093 U	**0.40**	0.094 U	0.094 U
Fluorene	29	NE	29	0.094 U	**0.089 J**	0.095 UJ	0.095 U	0.093 U	0.094 U	0.093 U	0.093 U	0.094 U	0.094 U
Indeno(1,2,3-c,d)pyrene	0.25	NE	0.25	0.094 U	**0.11 J**	0.095 UJ	0.095 U	0.093 U	0.094 UJ	0.093 U	**0.14 J**	0.094 U	0.094 U
Naphthalene	0.17	NE	0.12	0.094 U	0.095 U	0.095 UJ	0.095 U	0.093 U	0.094 U	0.093 U	0.093 U	0.094 U	0.094 U
Phenanthrene	NE	NE	18	0.094 U	**0.16 J**	0.095 UJ	0.095 U	0.093 U	0.094 U	0.093 U	**0.13 J**	0.094 U	0.094 U
Pyrene	12	NE	12	0.094 U	**0.27**	0.095 UJ	**0.084 J**	0.093 U	0.094 U	0.093 U	**0.34**	0.094 U	0.094 U
MassDEP EPH (ug/L)													
2-Methylnaphthalene	3.6	NE	3.6	0.70 U	0.70 U	0.70 U	0.70 U	0.70 UJ	0.70 UJ	0.70 UJ	0.70 U	0.70 U	0.70 U
Acenaphthene	53	NE	54	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Acenaphthylene	NE	NE	52	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 UJ	0.50 U	0.50 U	0.50 U	0.50 U
Anthracene	180	NE	180	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Benzo(a)anthracene	0.03	NE	0.03	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Benzo(a)pyrene	0.025	0.2	0.025	0.70 U	0.70 U	0.70 U	0.70 U	0.70 U	0.70 U	0.70 U	0.70 U	0.70 U	0.70 U
Benzo(b)fluoranthene	0.25	NE	0.25	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Benzo(g,h,i)perylene	NE	NE	60	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Benzo(k)fluoranthene	2.5	NE	2.5	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Chrysene	25	NE	25	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Dibenz(a,h)anthracene	0.025	NE	0.025	0.50 U	0.50 U	0.50 U	0.50 U	0.50 UJ	0.50 UJ	0.50 UJ	0.50 U	0.50 U	0.50 U
Fluoranthene	80	NE	80	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Fluorene	29	NE	29	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Indeno(1,2,3-c,d)pyrene	0.25	NE	0.25	0.50 U	0.50 U	0.50 U	0.50 U	0.50 UJ	0.50 UJ	0.50 UJ	0.50 U	0.50 U	0.50 U
Naphthalene	0.17	NE	0.12	0.70 U	0.70 U	0.70 U	0.70 U	0.70 UJ	0.70 UJ	0.70 UJ	0.70 U	0.70 U	0.70 U
Phenanthrene	NE	NE	18	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Pyrene	12	NE	12	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
C11-C22 Aromatic	NE	NE	60	85 U	85 U	85 U	85 U	**66 J**	85 UJ	85 UJ	85 U	100 U	85 U
C19-C36 Aliphatic	NE	NE	4000	97 U	97 U	97 UJ	97 U	97 U	97 UJ	97 UJ	97 U	97 U	97 U
C9-C18 Aliphatic	NE	NE	35	95 UJ	95 UJ	R	95 UJ	95 UJ	95 UJ	95 UJ	95 UJ	95 UJ	95 UJ
MassDEP VPH (ug/L)													
Benzene	0.46	5	0.46	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	1.5	700	1.5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
m,p-Xylene	19	10000	19	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Methyl tert-butyl ether (MTBE)	14	NE	1300	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Naphthalene	0.17	NE	0.12	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U
o-Xylene	19	10000	19	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	110	1000	110	**11**	**8.4**	**9.6**	**3.3**	**6.2**	**1.5 J**	**3.4**	**12**	**5.0**	**14**
C5-C8 Aliphatic	NE	NE	18	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
C9-C10 Aromatic	NE	NE	7.1	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
C9-C12 Aliphatic	NE	NE	35	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U

Table 4-3
Summary of Bedrock Groundwater Analytical Results
Former Dow Salvage Yard
233 Odlin Road, Bangor, Maine

				Locations:	SY-BRMW1				SY-BRMW2			SY-BRMW3		
				Field Sample ID:	SY-BRMW1-42-52-110923	SY-BRMW1-65-75-110923	SY-BRMW10-65-75-110923	SY-BRMW1-150-157-110923	SY-BRMW2-60.5-70.5-110723	SY-BRMW2-80.5-95.5-110723	SY-BRMW2-252.5-262.5-110723	SY-BRMW3-47-62-110923	SY-BRMW3-145-155-110923	SY-BRMW3-287-297-110923
				Matrix:	WG	WG		WG	WG	WG	WG	WG	WG	WG
				Sample Begin Depth:	42	65		150	60.5	80.5	252.5	47	145	287
				Sample End Depth:	52	75		157	70.5	95.5	262.5	62	155	297
				Sample Date:	11/09/2023	11/09/2023		11/09/2023	11/07/2023	11/07/2023	11/07/2023	11/09/2023	11/09/2023	11/09/2023
Total Metals SW6020A/7470A (mg/L)														
Aluminum	2	NE	2		0.025 U	0.050 U	0.025 U	**0.028 J**	0.025 U	0.025 U	0.025 U	0.050 U	0.025 U	0.050 U
Antimony	0.00078	0.006	0.00078		0.00077 J	**0.00084 J**	**0.00094 J**	**0.00053 J**	**0.00062 J**	**0.00023 J**	**0.0010**	**0.0027**	**0.00064 J**	**0.0014 J**
Arsenic	0.000052	0.01	0.000052		**0.0021 J**	**0.0019 J**	**0.0020 J**	**0.0022 J**	**0.00075 J**	0.0010 U	**0.0031**	**0.027**	**0.011**	**0.051**
Barium	380	2	0.38		**0.045**	**0.030**	**0.029**	**0.0056 J**	**0.064**	**0.062**	**0.063**	**0.082**	**0.096**	**0.083**
Beryllium	0.0025	0.004	0.0025		0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U
Cadmium	0.00092	0.005	0.0018		0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U
Chromium	0.000035[†]/2.2	0.1	0.0000035[†]/2.3		0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U
Cobalt	0.0006	NE	0.0006		**0.0014**	**0.0020**	**0.0019**	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.010 U	**0.00065**	**0.0012**
Copper	0.08	1.3	0.08		0.0075 U	0.0075 U	0.0075 U	0.0075 U	0.0075 U	0.0075 U	0.0075 U	0.0075 U	0.0075 U	0.0075 U
Iron	1.4	NE	1.4		**2.0**	**0.20**	**0.21**	0.030 U	0.030 U	0.030 U	0.030 U	0.030 U	0.030 U	**0.081**
Lead	0.015	0.015	NE		**0.0022 J**	**0.0048 J**	**0.0040 J**	**0.0024 J**	**0.0020 J**	**0.0020 J**	**0.0025 J**	**0.0021 J**	**0.0014 J**	**0.0034 J**
Magnesium	NE	NE	NE		**110**	**130**	**130**	**29**	**11**	**9.5**	**11**	**23**	**17**	**20**
Manganese	0.043	NE	0.043		**1.2**	**1.2**	**1.2**	**0.12**	**0.043**	**0.0047 J**	**0.011**	**0.26**	**0.43**	**0.69**
Mercury	0.000063	0.002	0.000063		0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U	**0.00018 J**
Nickel	0.039	NE	0.039		0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U
Potassium	NE	NE	NE		**6.5**	**6.6**	**6.6**	**3.5**	**4.4**	**1.2 J**	**0.68**	**7.4**	**3.2**	**3.3**
Selenium	0.01	0.05	0.01		0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U
Silver	0.0094	NE	0.0094		0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U
Sodium	NE	NE	NE		**160**	**130**	**130**	**49**	**11**	**6.9**	**11**	**25**	**13**	**17**
Thallium	0.00002	0.002	0.00002		0.00080 U	0.00080 U	0.00080 U	0.00080 U	0.00080 U	0.00080 U	0.00080 U	0.00080 U	0.00080 U	0.00080 U
Vanadium	0.0086	NE	0.0086		0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U
Zinc	0.6	NE	0.6		0.010 U	0.010 U	0.010 U	0.010 U	**0.0055 J**	**0.0024 J**	**0.0034 J**	0.0040 U	0.0040 U	0.0040 U
Dissolved Metals (mg/L)														
Aluminum	2	NE	2		0.027 U	0.027 U	0.027 U	0.027 U	0.027 U	0.027 U	0.027 U	0.027 U	0.027 U	0.027 U
Antimony	0.00078	0.006	0.00078		**0.00064 J**	**0.00061 J**	**0.00059 J**	**0.00042 J**	**0.00088 J**	**0.00024 J**	**0.0011**	**0.0020**	**0.00046 J**	**0.0014**
Arsenic	0.000052	0.01	0.000052		**0.0022 J**	**0.0014 J**	**0.0015 J**	**0.0020 J**	**0.00084 J**	**0.0011 U**	**0.0023 J**	**0.022**	**0.011**	**0.053**
Barium	380	2	0.38		**0.040**	**0.025**	**0.024**	**0.0053 J**	**0.062**	**0.066**	**0.064**	**0.078**	**0.085**	**0.082**
Beryllium	0.0025	0.004	0.0025		0.00054 U	0.00054 U	0.00054 U	0.00054 U	0.00054 U	0.00054 U	0.00054 U	0.00054 U	0.00054 U	0.00054 U
Cadmium	0.00092	0.005	0.0018		0.00054 U	0.00054 U	0.00054 U	0.00054 U	0.00054 U	0.00054 U	0.00054 U	0.00054 U	0.00054 U	0.00054 U
Chromium	0.000035[†]/2.2	0.1	0.0000035[†]/2.3		0.027 U	0.027 U	0.027 U	0.027 U	0.027 U	0.027 U	0.027 U	0.027 U	0.027 U	0.027 U
Cobalt	0.0006	NE	0.0006		**0.0012 J**	**0.0015 J**	**0.0015 J**	0.00054 U	0.00054 U	0.00054 U	0.00054 U	**0.00037 J**	**0.00067 J**	**0.0013 J**
Copper	0.08	1.3	0.08		0.0080 U	0.0080 U	0.0080 U	0.0080 U	0.0080 U	0.0080 U	0.0080 U	0.0080 U	0.0080 U	0.0080 U
Iron	1.4	NE	1.4		**1.3**	**0.12**	**0.15 J**	0.032 U	0.032 U	0.032 U	0.032 U	0.032 U	0.032 U	0.032 U
Lead	0.015	0.015	NE		0.00054 U	**0.00026 J**	0.00054 U	**0.00025 J**	**0.0011 J**	**0.0021 J**	**0.0033 J**	**0.0022 J**	**0.00039 J**	**0.00069 J**
Magnesium	NE	NE	NE		**120**	**130**	**140**	**28**	**10**	**8.9**	**10.0**	**23**	**17**	**20**
Manganese	0.043	NE	0.043		**1.1**	**0.96**	**0.95**	**0.12**	**0.042**	**0.0044 J**	**0.0099 J**	**0.28**	**0.40**	**0.64**
Mercury	0.000063	0.002	0.000063		0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U
Nickel	0.039	NE	0.039		0.027 U	0.027 U	0.027 U	0.027 U	0.027 U	0.027 U	0.027 U	0.027 U	0.027 U	0.027 U
Potassium	NE	NE	NE		**6.2**	**6.1**	**6.2**	**3.0**	**4.0**	**0.75**	**0.64**	**6.3**	**2.9**	**3.1**
Selenium	0.01	0.05	0.01		0.0054 U	0.0054 U	0.0054 U	0.0054 U	0.0054 U	0.0054 U	0.0054 U	0.0054 U	0.0054 U	0.0054 U
Silver	0.0094	NE	0.0094		0.00054 U	0.00054 U	0.00054 U	0.00054 U	0.00054 U	0.00054 U	0.00054 U	0.00054 U	0.00054 U	0.00054 U
Sodium	NE	NE	NE		**160**	**130**	**130**	**46**	**11**	**6.4**	**9.8**	**23**	**13**	**16**
Thallium	0.00002	0.002	0.00002		0.00086 U	0.00086 U	0.00086 U	0.00086 U	0.00086 U	0.00086 U	0.00086 U	0.00086 U	0.00086 U	0.00086 U
Vanadium	0.0086	NE	0.0086		0.0054 U	0.0054 U	0.0054 U	0.0054 U	0.0054 U	0.0054 U	0.0054 U	0.0054 U	0.0054 U	0.0054 U
Zinc	0.6	NE	0.6		**0.0026 J**	**0.0036 J**	0.0043 U	**0.0024 J**	**0.0041 J**	**0.0060 J**	**0.0052 J**	0.0043 U	0.0043 U	0.0043 U
Hexavalent Chromium SW7196A (mg/L)														
Chromium, Hexavalent	0.000035	NE	0.000035		0.025 U	0.012 U	0.025 U	0.025 U	0.012 U	0.012 U	0.012 U	0.012 U	0.012 U	0.012 U
PCBs SW8082A (ug/L)														
PCB-1016 (Aroclor 1016)	0.14	0.5	0.0079		0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
PCB-1221 (Aroclor 1221)	0.0047	0.5	0.0079		0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
PCB-1232 (Aroclor 1232)	0.0047	0.5	0.0079		0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
PCB-1242 (Aroclor 1242)	0.0078	0.5	0.0079		0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
PCB-1248 (Aroclor 1248)	0.0078	0.5	0.0079		0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
PCB-1254 (Aroclor 1254)	0.0078	0.5	0.0079		0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
PCB-1260 (Aroclor 1260)	0.0078	0.5	0.0079		0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
CVOCs SW8260D SIM (ug/L)														
1,1-Dichloroethene	28	7	29		0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U
cis-1,2-Dichloroethene	3.6	70	2.5		0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U
Tetrachloroethene (PCE)	4.1	5	4.1		0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U
trans-1,2-Dichloroethene	36	100	6.8		**0.030 J**	**0.022 J**	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	**0.043 J**
Trichloroethene (TCE)	0.28	5	0.28		**0.066**	**0.081**	**0.082**	**0.86**	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U
Vinyl chloride	0.019	2	0.019		0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	**0.054 J**	**0.027 J**	**0.024 J**

Table 4-3
Summary of Bedrock Groundwater Analytical Results
Former Dow Salvage Yard
233 Odlin Road, Bangor, Maine

Locations:				SY-BRMW1				SY-BRMW2			SY-BRMW3		
Field Sample ID:				SY-BRMW1-42-52-110923	SY-BRMW1-65-75-110923	SY-BRMW10-65-75-110923	SY-BRMW1-150-157-110923	SY-BRMW2-60.5-70.5-110723	SY-BRMW2-80.5-95.5-110723	SY-BRMW2-252.5-262.5-110723	SY-BRMW3-47-62-110923	SY-BRMW3-145-155-110923	SY-BRMW3-287-297-110923
Matrix:				WG	WG		WG	WG	WG	WG	WG	WG	WG
Sample Begin Depth:				42	65		150	60.5	80.5	252.5	47	145	287
Sample End Depth:				52	75		157	70.5	95.5	262.5	62	155	297
Sample Date:				11/09/2023	11/09/2023		11/09/2023	11/07/2023	11/07/2023	11/07/2023	11/09/2023	11/09/2023	11/09/2023
VOCs SW8260D (ug/L)													
1,1,1,2-Tetrachloroethane	0.57	NE	0.57	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,1-Trichloroethane	800	200	800	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	0.076	NE	0.076	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	0.041	5	0.042	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	2.8	NE	2.8	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	28	7	29	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,1-Dichloropropene	NE	NE	0.47	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,3-Trichlorobenzene	0.7	NE	0.7	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,3-Trichloropropane	0.00075	NE	0.00075	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,4-Trichlorobenzene	0.4	70	0.4	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,4-Trimethylbenzene	5.6	NE	5.6	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromo-3-chloropropane	0.00033	0.2	0.00033	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
1,2-Dibromoethane (EDB)	0.0075	0.05	0.0075	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	30	600	30	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	0.17	5	0.17	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	0.82	5	0.83	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3,5-Trimethylbenzene	6	NE	6	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	NE	NE	30	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichloropropane	37	NE	37	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	0.48	75	0.48	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dioxane (p-Dioxane)	0.46	NE	0.46	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2,2-Dichloropropane	NE	NE	NE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Butanone (MEK)	560	NE	560	**9.1 J**	**4.4 J**	**6.3 J**	**3.8 J**	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2-Chlorotoluene	24	NE	24	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Hexanone	3.8	NE	3.8	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
4-Chlorotoluene	25	NE	25	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
4-Methyl-2-pentanone (MIBK)	630	NE	630	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Acetone	1400	NE	1400	**4.9 J**	5.0 U	**4.2 J**	5.0 U	**3.2 J**	5.0 U	**3.7 J**	**2.5 J**	5.0 U	**3.7 J**
Benzene	0.46	5	0.46	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromobenzene	6.2	NE	6.2	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromochloromethane	8.3	NE	8.3	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	0.13	80	0.13	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Bromoform	3.3	80	3.3	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane	0.75	NE	0.76	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
Carbon disulfide	81	NE	81	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon tetrachloride	0.46	5	0.46	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	7.8	100	7.8	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	2100	NE	2100	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform	0.22	80	0.22	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	**1.6 J**	1.5 U	1.5 U	**1.7 J**
Chloromethane	19	NE	19	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	3.6	70	2.5	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
cis-1,3-Dichloropropene	0.47	NE	0.47	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dibromochloromethane	0.87	80	0.87	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dibromomethane	0.83	NE	0.83	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dichlorodifluoromethane	NE	NE	20	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Diethyl ether (Ethyl ether)	390	NE	390	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	1.5	700	1.5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Hexachlorobutadiene	0.14	NE	0.14	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Isopropylbenzene (Cumene)	45	NE	45	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
m,p-Xylene	19	10000	19	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
Methyl tert-butyl ether (MTBE)	14	NE	14	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methylene chloride	11	5	11	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Naphthalene	0.17	NE	0.12	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
n-Butylbenzene	100	NE	100	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
n-Propylbenzene	66	NE	66	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
o-Xylene	19	10000	19	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
p-Cymene (p-Isopropyltoluene)	NE	NE	NE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
sec-Butylbenzene	200	NE	200	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Styrene	120	100	120	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U

Table 4-3
Summary of Bedrock Groundwater Analytical Results
Former Dow Salvage Yard
233 Odlin Road, Bangor, Maine

				Locations:	SY-BRMW1				SY-BRMW2			SY-BRMW3		
				Field Sample ID:	SY-BRMW1-42-52-110923	SY-BRMW1-65-75-110923	SY-BRMW10-65-75-110923	SY-BRMW1-150-157-110923	SY-BRMW2-60.5-70.5-110723	SY-BRMW2-80.5-95.5-110723	SY-BRMW2-252.5-262.5-110723	SY-BRMW3-47-62-110923	SY-BRMW3-145-155-110923	SY-BRMW3-287-297-110923
				Matrix:	WG	WG		WG	WG	WG	WG	WG	WG	WG
				Sample Begin Depth:	42	65		150	60.5	80.5	252.5	47	145	287
				Sample End Depth:	52	75		157	70.5	95.5	262.5	62	155	297
				Sample Date:	11/09/2023	11/09/2023		11/09/2023	11/07/2023	11/07/2023	11/07/2023	11/09/2023	11/09/2023	11/09/2023
tert-Amyl methyl ether	NE	NE	NE		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
tert-Butyl alcohol	NE	NE	NE		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
tert-Butyl ethyl ether	NE	NE	NE		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
tert-Butylbenzene	69	NE	69		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene (PCE)	4.1	5	4.1		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrahydrofuran	340	NE	340		**4.2**	**4.1**	**3.7**	**5.0**	1.5 U	1.5 U	1.5 U	**1.1 J**	**2.2**	**1.7 J**
Toluene	110	1000	1200		**11**	**7.9**	**9.4**	**2.9**	**6.3 J**	**1.8 J**	**1.3 J**	**12**	**4.4**	**12**
trans-1,2-Dichloroethene	36	100	6.8		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	0.47	NE	NE		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene (TCE)	0.28	5	0.28		1.0 U	1.0 U	1.0 U	**0.70 J**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichlorofluoromethane	520	NE	520		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl chloride	0.019	2	0.019		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
SVOCs SW8270E (ug/L)														
1,2,4-Trichlorobenzene	0.4	70	0.4		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	30	600	30		1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 UJ	1.0 UJ	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	NE	NE	30		1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 UJ	1.0 UJ	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	0.48	75	0.48		1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 UJ	1.0 UJ	1.0 U	1.0 U	1.0 U
2,2'-Oxybis(1-chloropropane)	NE	NE	NE		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2,4,5-Trichlorophenol	120	NE	120		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U
2,4,6-Trichlorophenol	1.2	NE	1.2		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2,4-Dichlorophenol	4.6	NE	4.6		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U
2,4-Dimethylphenol	36	NE	36		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2,4-Dinitrophenol	3.9	NE	3.9		45 U	45 U	45 U	45 U	45 U	45 U	45 U	45 U	45 U	45 U
2,4-Dinitrotoluene	0.24	NE	0.24		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2,6-Dinitrotoluene	0.049	NE	0.049		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Chloronaphthalene	75	NE	75		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Chlorophenol	9.1	NE	9.1		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Methylphenol (o-Cresol)	93	NE	93		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Nitroaniline	19	NE	NE		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Nitrophenol	NE	NE	NE		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
3,3'-Dichlorobenzidine	0.13	NE	0.13		25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U
3-Nitroaniline	NE	NE	NE		1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
4,6-Dinitro-2-methylphenol	0.15	NE	NE		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
4-Bromophenyl phenyl ether	NE	NE	NE		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
4-Chloro-3-methylphenol	140	NE	150		1.0 UJ	1.0 UJ	1.0 UJ	1.0 UJ	1.0 UJ	1.0 UJ	1.0 UJ	1.0 U	1.0 UJ	1.0 UJ
4-Chloroaniline	0.37	NE	NE		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
4-Chlorophenyl phenyl ether	NE	NE	NE		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
4-Methylphenol (p-Cresol)	190	NE	190		1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
4-Nitroaniline	3.8	NE	38		3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U
4-Nitrophenol	NE	NE	NE		5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ
Aniline (Phenylamine, Aminobenzene)	13	NE	13		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Azobenzene	0.12	NE	NE		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Benzidine	0.00011	NE	NE		25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U
Benzoic acid	7500	NE	7500		R	R	R	R	45 UJ	45 UJ	45 UJ	45 UJ	R	R
Benzyl alcohol	200	NE	200		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Benzyl butyl phthalate	16	NE	16		3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 UJ	3.0 U	3.0 U
bis(2-Chloroethoxy) methane	5.9	NE	NE		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
bis(2-Chloroethyl) ether	0.014	NE	0.014		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
bis(2-Ethylhexyl) phthalate	5.6	6	5.6		3.0 U	**120 J**	3.0 UJ	3.0 U	3.0 U	3.0 U	3.0 U	**190**	3.0 U	3.0 U
Carbazole	NE	NE	1.5		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dibenzofuran	0.79	NE	0.79		0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U
Diethyl phthalate	1500	6	1500		**0.50 J**	**0.54 J**	**3.4 J**	**0.41 J**	1.0 UJ	1.0 UJ	1.0 UJ	**0.83 J**	**0.59 J**	**0.74 J**
Dimethyl phthalate	NE	NE	NE		1.0 UJ	1.0 UJ	1.0 UJ	1.0 UJ	1.0 UJ	1.0 UJ	1.0 UJ	1.0 UJ	1.0 UJ	1.0 UJ
Di-n-butyl phthalate	90	NE	NE		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
di-n-Octyl phthalate	20	NE	200		3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U
Hexachlorobenzene	0.0098	1	0.0098		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Hexachlorobutadiene	0.14	NE	0.14		1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 UJ	1.0 UJ	1.0 U	1.0 U	1.0 U
Hexachlorocyclopentadiene	0.041	50	NE		4.0 UJ	4.0 UJ	4.0 UJ	4.0 UJ	4.0 UJ	4.0 UJ	4.0 UJ	4.0 UJ	4.0 UJ	4.0 UJ
Hexachloroethane	0.33	NE	0.33		1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 UJ	1.0 UJ	1.0 U	1.0 U	1.0 U
Isophorone	78	NE	78		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Nitrobenzene	0.14	NE	NE		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U

Table 4-3
Summary of Bedrock Groundwater Analytical Results
Former Dow Salvage Yard
233 Odlin Road, Bangor, Maine

				Locations:	SY-BRMW1				SY-BRMW2			SY-BRMW3		
				Field Sample ID:	SY-BRMW1-42-52-110923	SY-BRMW1-65-75-110923	SY-BRMW10-65-75-110923	SY-BRMW1-150-157-110923	SY-BRMW2-60.5-70.5-110723	SY-BRMW2-80.5-95.5-110723	SY-BRMW2-252.5-262.5-110723	SY-BRMW3-47-62-110923	SY-BRMW3-145-155-110923	SY-BRMW3-287-297-110923
				Matrix:	WG	WG		WG	WG	WG	WG	WG	WG	WG
				Sample Begin Depth:	42	65		150	60.5	80.5	252.5	47	145	287
				Sample End Depth:	52	75		157	70.5	95.5	262.5	62	155	297
				Sample Date:	11/09/2023	11/09/2023		11/09/2023	11/07/2023	11/07/2023	11/07/2023	11/09/2023	11/09/2023	11/09/2023
N-Nitrosodimethylamine	0.00011	NE	NE		1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 UJ	1.0 UJ	1.0 UJ	1.0 U	1.0 U
N-Nitrosodi-n-propylamine	0.011	NE	NE		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
N-Nitrosodiphenylamine	12	NE	12		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Pentachlorophenol	0.041	1	0.041		5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Phenol	580	NE	580		1.0 UJ	1.0 UJ	1.0 UJ	1.0 UJ	1.0 UJ	1.0 UJ	1.0 UJ	1.0 UJ	1.0 UJ	1.0 UJ
Pyridine	12	NE	NE		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
E300 (mg/L)														
Chloride	NE	NE	NE		**760**	**850**	**860**	**140**	**17**	**5.8**	**3.3**	**65**	**12**	**23**
Nitrate	NE	NE	NE		0.025 U	**0.022 J**	**0.033 J**	**0.11**	**0.16**	**0.30**	**0.10**	0.025 U	0.025 U	0.025 U
Sulfate	NE	NE	NE		**230**	**240**	**250**	**32**	**9.3**	**7.7**	**7.9**	**17**	**5.9**	**8.6**
RSK175 (ug/L)														
Ethane	NE	NE	NE		9.8 U	9.8 U	9.8 U	9.8 U	9.8 U	9.8 U	9.8 U	9.8 U	9.8 U	9.8 U
Ethene	NE	NE	NE		9.8 U	9.8 U	9.8 U	9.8 U	9.8 U	9.8 U	9.8 U	9.8 U	9.8 U	9.8 U
Methane	NE	NE	NE		10 U	10 U	10 U	**6.4 J**	10 U	10 U	10 U	**20 J**	**14 J**	**9.2 J**
A2320B (mg/L)														
Alkalinity, Total (as CaCO3)	NE	NE	NE		**140**	**130**	**130**	**160**	**100**	**100**	**110**	**150**	**160**	**180**
A3500B (mg/L)														
Iron, Ferrous	NE	NE	NE		**2.6**	**0.16**	**0.18**	**0.027 J**	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	**0.056 J**
A5310B (mg/L)														
Total Organic Carbon	NE	NE	NE		**3.9**	**2.3**	**2.2**	**1.4**	**2.1**	**0.57 J**	**1.3**	**4.4**	**1.5**	**4.7**

Table 4-3
Summary of Bedrock Groundwater Analytical Results
Former Dow Salvage Yard
233 Odlin Road, Bangor, Maine

Locations:				SY-BRMW4				SY-BRMW5			
Field Sample ID:				SY-BRMW4-62-72-110923	SY-BRMW40-62-72-110923	SY-BRMW4-138-148-110923	SY-BRMW4-291-301-110923	SY-BRMW5-29-44-110823	SY-BRMW5-56-66-110823	SY-BRMW5-123-133-110823
Matrix:				WG		WG	WG	WG	WG	WG
Sample Begin Depth:				62		138	291	29	56	123
Sample End Depth:				72		148	301	44	66	133
Sample Date:				11/09/2023		11/09/2023	11/09/2023	11/08/2023	11/08/2023	11/08/2023
Analytes	**RSL[1]**	**MCL[2]**	**RAG[3]**							
PAH SIM (ug/L)										
2-Methylnaphthalene	3.6	NE	3.6	0.093 U	0.094 U	0.094 UJ	0.094 U	0.093 UJ	0.093 U	0.093 U
Acenaphthene	53	NE	54	0.093 U	0.094 U	0.094 UJ	0.094 U	0.093 UJ	0.093 U	0.093 U
Acenaphthylene	NE	NE	52	0.093 U	0.094 U	0.094 UJ	0.094 U	0.093 UJ	0.093 U	0.093 U
Anthracene	180	NE	180	0.093 U	0.094 U	0.094 UJ	0.094 U	0.093 UJ	0.093 U	0.093 U
Benzo(a)anthracene	0.03	NE	0.03	0.093 U	0.094 U	0.094 UJ	0.094 U	0.093 UJ	0.093 U	0.093 U
Benzo(a)pyrene	0.025	0.2	0.025	0.093 U	0.094 U	0.094 UJ	0.094 U	0.093 UJ	0.093 U	0.093 U
Benzo(b)fluoranthene	0.25	NE	0.25	0.093 U	0.094 U	0.094 UJ	**0.099 J**	0.093 UJ	0.093 U	0.093 U
Benzo(g,h,i)perylene	NE	NE	60	0.093 U	0.094 U	0.094 UJ	0.094 U	0.093 UJ	0.093 U	0.093 U
Benzo(k)fluoranthene	2.5	NE	2.5	0.093 U	0.094 U	0.094 UJ	0.094 U	0.093 UJ	0.093 U	0.093 U
Chrysene	25	NE	25	0.093 U	0.094 U	**0.035 J**	**0.063 J**	0.093 UJ	0.093 U	0.093 U
Dibenz(a,h)anthracene	0.025	NE	0.025	0.093 U	0.094 U	0.094 UJ	0.094 U	0.093 UJ	0.093 U	0.093 U
Fluoranthene	80	NE	80	0.093 U	0.094 U	0.094 UJ	**0.092 J**	0.093 UJ	0.093 U	0.093 U
Fluorene	29	NE	29	0.093 U	0.094 U	0.094 UJ	0.094 U	0.093 UJ	0.093 U	0.093 U
Indeno(1,2,3-c,d)pyrene	0.25	NE	0.25	0.093 U	0.094 U	0.094 UJ	**0.050 J**	0.093 UJ	0.093 U	0.093 U
Naphthalene	0.17	NE	0.12	0.093 U	0.094 U	0.094 UJ	0.094 U	0.093 UJ	0.093 U	0.093 U
Phenanthrene	NE	NE	18	0.093 U	0.094 U	0.094 UJ	0.094 U	0.093 UJ	0.093 U	0.093 U
Pyrene	12	NE	12	0.093 U	0.094 U	0.094 UJ	**0.10 J**	0.093 UJ	0.093 U	0.093 U
MassDEP EPH (ug/L)										
2-Methylnaphthalene	3.6	NE	3.6	0.70 U	0.70 U	0.70 U	0.70 U	0.70 U	0.70 U	0.70 U
Acenaphthene	53	NE	54	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Acenaphthylene	NE	NE	52	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Anthracene	180	NE	180	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Benzo(a)anthracene	0.03	NE	0.03	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Benzo(a)pyrene	0.025	0.2	0.025	0.70 U	0.70 U	0.70 U	0.70 U	0.70 U	0.70 U	0.70 U
Benzo(b)fluoranthene	0.25	NE	0.25	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Benzo(g,h,i)perylene	NE	NE	60	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Benzo(k)fluoranthene	2.5	NE	2.5	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Chrysene	25	NE	25	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Dibenz(a,h)anthracene	0.025	NE	0.025	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Fluoranthene	80	NE	80	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Fluorene	29	NE	29	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Indeno(1,2,3-c,d)pyrene	0.25	NE	0.25	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Naphthalene	0.17	NE	0.12	0.70 U	0.70 U	0.70 U	0.70 U	0.70 U	0.70 U	0.70 U
Phenanthrene	NE	NE	18	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Pyrene	12	NE	12	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
C11-C22 Aromatic	NE	NE	60	85 U	100 U	85 U	85 U	100 U	100 U	100 U
C19-C36 Aliphatic	NE	NE	4000	97 U	97 U	97 U	97 U	97 U	97 U	97 U
C9-C18 Aliphatic	NE	NE	35	95 UJ	95 UJ	95 UJ	95 UJ	95 UJ	95 UJ	95 UJ
MassDEP VPH (ug/L)										
Benzene	0.46	5	0.46	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	1.5	700	1.5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U
m,p-Xylene	19	10000	19	2.0 U	2.0 U	2.0 U	2.0 U	2.0 UJ	2.0 U	2.0 U
Methyl tert-butyl ether (MTBE)	14	NE	1300	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U
Naphthalene	0.17	NE	0.12	4.0 U	4.0 U	4.0 U	4.0 U	4.0 UJ	4.0 U	4.0 U
o-Xylene	19	10000	19	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U
Toluene	110	1000	110	**1.7 J**	**2.0 J**	**7.6**	**12**	**1.1 J**	**1.0 U**	**1.7 J**
C5-C8 Aliphatic	NE	NE	18	50 U	50 U	50 U	50 U	50 UJ	50 U	50 U
C9-C10 Aromatic	NE	NE	7.1	50 U	50 U	50 U	50 U	50 UJ	50 U	50 U
C9-C12 Aliphatic	NE	NE	35	50 U	50 U	50 U	50 U	50 UJ	50 U	50 U

Table 4-3
Summary of Bedrock Groundwater Analytical Results
Former Dow Salvage Yard
233 Odlin Road, Bangor, Maine

Locations:				SY-BRMW4				SY-BRMW5		
Field Sample ID:				SY-BRMW4-62-72-110923	SY-BRMW40-62-72-110923	SY-BRMW4-138-148-110923	SY-BRMW4-291-301-110923	SY-BRMW5-29-44-110823	SY-BRMW5-56-66-110823	SY-BRMW5-123-133-110823
Matrix:				WG	WG	WG	WG	WG	WG	WG
Sample Begin Depth:				62		138	291	29	56	123
Sample End Depth:				72		148	301	44	66	133
Sample Date:				11/09/2023		11/09/2023	11/09/2023	11/08/2023	11/08/2023	11/08/2023
Total Metals SW6020A/7470A (mg/L)										
Aluminum	2	NE	2	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U
Antimony	0.00078	0.006	0.00078	**0.00050 J**	**0.00048 J**	**0.00060 J**	**0.00092 J**	**0.00093 J**	**0.00024 J**	**0.00053 J**
Arsenic	0.000052	0.01	0.000052	**0.0029**	**0.0028**	**0.0090**	**0.010**	**0.0013 J**	**0.0020 J**	**0.0023 J**
Barium	380	2	0.38	**0.034**	**0.034**	**0.046**	**0.16**	**0.066**	**0.027**	**0.026**
Beryllium	0.0025	0.004	0.0025	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U
Cadmium	0.00092	0.005	0.0018	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U
Chromium	0.000035[†]/2.2	0.1	0.0000035[†]/2.3	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U
Cobalt	0.0006	NE	0.0006	**0.0012 J**	**0.0013 J**	**0.00057 J**	**0.0027**	**0.00087 J**	0.00050 U	**0.00044 J**
Copper	0.08	1.3	0.08	0.0075 U	0.0075 U	0.0075 U	0.0075 U	**0.0059 J**	0.0075 U	0.0075 U
Iron	1.4	NE	1.4	**0.11**	**0.12**	**0.16**	**0.087**	**0.23**	0.030 U	0.030 U
Lead	0.015	0.015	NE	**0.0015 J**	**0.0014 J**	**0.0018 J**	**0.0016 J**	**0.0039 J**	**0.0044 J**	**0.0012 J**
Magnesium	NE	NE	NE	**59**	**58**	**60**	**73**	**69**	**72**	**52**
Manganese	0.043	NE	0.043	**0.38**	**0.39**	**0.052**	**0.49**	**0.34**	**0.034**	**0.036**
Mercury	0.000063	0.002	0.000063	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U
Nickel	0.039	NE	0.039	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U
Potassium	NE	NE	NE	**4.8**	**4.7**	**4.0**	**3.8**	**5.5**	**5.0**	**3.6**
Selenium	0.01	0.05	0.01	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U
Silver	0.0094	NE	0.0094	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U	0.00050 U
Sodium	NE	NE	NE	**50**	**49**	**85**	**80**	**190**	**67**	**110**
Thallium	0.00002	0.002	0.00002	0.00080 U	0.00080 U	0.00080 U	0.00080 U	0.00080 U	0.00080 U	0.00080 U
Vanadium	0.0086	NE	0.0086	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U
Zinc	0.6	NE	0.6	0.0040 U	0.0040 U	0.0040 U	0.010 U	**0.0044 J**	0.0040 U	0.0040 U
Dissolved Metals (mg/L)										
Aluminum	2	NE	2	**0.011 J**	0.027 U	0.027 U	0.027 U	0.027 U	0.027 U	**0.017 J**
Antimony	0.00078	0.006	0.00078	**0.00074 J**	**0.00050 J**	**0.00045 J**	**0.0011**	**0.00093 J**	**0.00028 J**	**0.00056 J**
Arsenic	0.000052	0.01	0.000052	**0.0037**	**0.0022 J**	**0.0042**	**0.020**	**0.00096 J**	**0.0018 J**	**0.0022 J**
Barium	380	2	0.38	**0.040**	**0.033**	**0.043**	**0.13**	**0.068**	**0.028**	**0.027**
Beryllium	0.0025	0.004	0.0025	0.00054 U	0.00054 U	0.00054 U	0.00054 U	0.00054 U	0.00054 U	0.00054 U
Cadmium	0.00092	0.005	0.0018	0.00054 U	0.00054 U	0.00054 U	0.00054 U	0.00054 U	0.00054 U	0.00054 U
Chromium	0.000035[†]/2.2	0.1	0.0000035[†]/2.3	0.027 U	0.027 U	0.027 U	0.027 U	0.027 U	0.027 U	0.027 U
Cobalt	0.0006	NE	0.0006	**0.0017 J**	**0.0011 J**	0.00054 U	**0.0026 J**	**0.00082 J**	0.00054 U	**0.00037 J**
Copper	0.08	1.3	0.08	0.0080 U	0.0080 U	0.0080 U	0.0080 U	0.0080 U	0.0080 U	0.0080 U
Iron	1.4	NE	1.4	**0.21 J**	**0.074 J**	**0.044 J**	**0.051 J**	**0.17**	0.032 U	**0.042 J**
Lead	0.015	0.015	NE	**0.00017 J**	**0.0019 J**	**0.0014 J**	**0.00057 J**	**0.00077 J**	**0.0018 J**	**0.00038 J**
Magnesium	NE	NE	NE	**55**	**55**	**57**	**67**	**66**	**67**	**47**
Manganese	0.043	NE	0.043	**0.55 J**	**0.33 J**	**0.021**	**0.47**	**0.33**	**0.031**	**0.036**
Mercury	0.000063	0.002	0.000063	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U
Nickel	0.039	NE	0.039	0.027 U	0.027 U	0.027 U	0.027 U	0.027 U	0.027 U	0.027 U
Potassium	NE	NE	NE	**5.0**	**4.4**	**3.7**	**3.6**	**5.2**	**4.8**	**3.3**
Selenium	0.01	0.05	0.01	0.0054 U	0.0054 U	0.0054 U	0.0054 U	0.0054 U	0.0054 U	0.0054 U
Silver	0.0094	NE	0.0094	0.00054 U	0.00054 U	0.00054 U	0.00054 U	0.00054 U	0.00054 U	0.00054 U
Sodium	NE	NE	NE	**46**	**48**	**82**	**84**	**190**	**63**	**95**
Thallium	0.00002	0.002	0.00002	0.00086 U	0.00086 U	0.00086 U	0.00086 U	0.00086 U	0.00086 U	0.00086 U
Vanadium	0.0086	NE	0.0086	0.0054 U	0.0054 U	0.0054 U	0.0054 U	0.0054 U	0.0054 U	0.0054 U
Zinc	0.6	NE	0.6	**0.0025 J**	0.0043 U	**0.0038 J**	**0.0049 J**	**0.0027 J**	0.0043 U	0.0043 U
Hexavalent Chromium SW7196A (mg/L)										
Chromium, Hexavalent	0.000035	NE	0.000035	0.025 U	0.025 U	0.012 U	0.012 U	0.012 U	0.012 U	0.012 U
PCBs SW8082A (ug/L)										
PCB-1016 (Aroclor 1016)	0.14	0.5	0.0079	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
PCB-1221 (Aroclor 1221)	0.0047	0.5	0.0079	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
PCB-1232 (Aroclor 1232)	0.0047	0.5	0.0079	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
PCB-1242 (Aroclor 1242)	0.0078	0.5	0.0079	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
PCB-1248 (Aroclor 1248)	0.0078	0.5	0.0079	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
PCB-1254 (Aroclor 1254)	0.0078	0.5	0.0079	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
PCB-1260 (Aroclor 1260)	0.0078	0.5	0.0079	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
CVOCs SW8260D SIM (ug/L)										
1,1-Dichloroethene	28	7	29	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U
cis-1,2-Dichloroethene	3.6	70	2.5	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U
Tetrachloroethene (PCE)	4.1	5	4.1	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U
trans-1,2-Dichloroethene	36	100	6.8	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U
Trichloroethene (TCE)	0.28	5	0.28	0.025 U	0.025 U	**0.079**	**0.070**	0.025 U	0.025 U	**0.58**
Vinyl chloride	0.019	2	0.019	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U

Table 4-3
Summary of Bedrock Groundwater Analytical Results
Former Dow Salvage Yard
233 Odlin Road, Bangor, Maine

Locations:				SY-BRMW4				SY-BRMW5			
Field Sample ID:				SY-BRMW4-62-72-110923	SY-BRMW40-62-72-110923	SY-BRMW4-138-148-110923	SY-BRMW4-291-301-110923	SY-BRMW5-29-44-110823	SY-BRMW5-56-66-110823	SY-BRMW5-123-133-110823
Matrix:				WG	WG	WG	WG	WG	WG	WG
Sample Begin Depth:				62		138	291	29	56	123
Sample End Depth:				72		148	301	44	66	133
Sample Date:				11/09/2023		11/09/2023	11/09/2023	11/08/2023	11/08/2023	11/08/2023
VOCs SW8260D (ug/L)										
1,1,1,2-Tetrachloroethane	0.57	NE	0.57	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,1-Trichloroethane	800	200	800	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	0.076	NE	0.076	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	0.041	5	0.042	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	2.8	NE	2.8	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	28	7	29	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
1,1-Dichloropropene	NE	NE	0.47	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,3-Trichlorobenzene	0.7	NE	0.7	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,3-Trichloropropane	0.00075	NE	0.00075	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,4-Trichlorobenzene	0.4	70	0.4	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,4-Trimethylbenzene	5.6	NE	5.6	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromo-3-chloropropane	0.00033	0.2	0.00033	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
1,2-Dibromoethane (EDB)	0.0075	0.05	0.0075	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	30	600	30	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	0.17	5	0.17	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	0.82	5	0.83	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3,5-Trimethylbenzene	6	NE	6	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	NE	NE	30	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichloropropane	37	NE	37	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	0.48	75	0.48	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dioxane (p-Dioxane)	0.46	NE	0.46	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2,2-Dichloropropane	NE	NE	NE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Butanone (MEK)	560	NE	560	**13**	**14**	**11**	**2.7 J**	**6.6 J**	5.0 U	**15**
2-Chlorotoluene	24	NE	24	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Hexanone	3.8	NE	3.8	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
4-Chlorotoluene	25	NE	25	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
4-Methyl-2-pentanone (MIBK)	630	NE	630	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Acetone	1400	NE	1400	**2.7 J**	**3.5 J**	5.0 U	5.0 U	**2.3 J**	5.0 U	5.0 U
Benzene	0.46	5	0.46	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromobenzene	6.2	NE	6.2	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromochloromethane	8.3	NE	8.3	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	0.13	80	0.13	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Bromoform	3.3	80	3.3	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane	0.75	NE	0.76	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
Carbon disulfide	81	NE	81	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon tetrachloride	0.46	5	0.46	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	7.8	100	7.8	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	2100	NE	2100	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform	0.22	80	0.22	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
Chloromethane	19	NE	19	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	3.6	70	2.5	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
cis-1,3-Dichloropropene	0.47	NE	0.47	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dibromochloromethane	0.87	80	0.87	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dibromomethane	0.83	NE	0.83	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dichlorodifluoromethane	NE	NE	20	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Diethyl ether (Ethyl ether)	390	NE	390	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	1.5	700	1.5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Hexachlorobutadiene	0.14	NE	0.14	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Isopropylbenzene (Cumene)	45	NE	45	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
m,p-Xylene	19	10000	19	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
Methyl tert-butyl ether (MTBE)	14	NE	14	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methylene chloride	11	5	11	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Naphthalene	0.17	NE	0.12	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
n-Butylbenzene	100	NE	100	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
n-Propylbenzene	66	NE	66	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
o-Xylene	19	10000	19	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
p-Cymene (p-Isopropyltoluene)	NE	NE	NE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
sec-Butylbenzene	200	NE	200	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Styrene	120	100	120	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U

Table 4-3
Summary of Bedrock Groundwater Analytical Results
Former Dow Salvage Yard
233 Odlin Road, Bangor, Maine

Locations:				SY-BRMW4				SY-BRMW5			
Field Sample ID:				SY-BRMW4-62-72-110923	SY-BRMW40-62-72-110923	SY-BRMW4-138-148-110923	SY-BRMW4-291-301-110923	SY-BRMW5-29-44-110823	SY-BRMW5-56-66-110823	SY-BRMW5-123-133-110823
Matrix:				WG		WG	WG	WG	WG	WG
Sample Begin Depth:				62		138	291	29	56	123
Sample End Depth:				72		148	301	44	66	133
Sample Date:				11/09/2023		11/09/2023	11/09/2023	11/08/2023	11/08/2023	11/08/2023
tert-Amyl methyl ether	NE	NE	NE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
tert-Butyl alcohol	NE	NE	NE	10 U	10 U	10 U	10 U	10 U	10 U	10 U
tert-Butyl ethyl ether	NE	NE	NE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
tert-Butylbenzene	69	NE	69	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene (PCE)	4.1	5	4.1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrahydrofuran	340	NE	340	1.5 U	**3.4**	1.5 U	**4.2**	1.5 U	1.5 U	1.5 U
Toluene	110	1000	1200	**1.5 J**	**1.6 J**	**6.3**	**9.8**	**1.1 J**	1.0 U	**1.4 J**
trans-1,2-Dichloroethene	36	100	6.8	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	0.47	NE	NE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene (TCE)	0.28	5	0.28	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**0.54 J**
Trichlorofluoromethane	520	NE	520	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl chloride	0.019	2	0.019	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
SVOCs SW8270E (ug/L)										
1,2,4-Trichlorobenzene	0.4	70	0.4	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	30	600	30	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	NE	NE	30	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	0.48	75	0.48	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2,2'-Oxybis(1-chloropropane)	NE	NE	NE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2,4,5-Trichlorophenol	120	NE	120	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2,4,6-Trichlorophenol	1.2	NE	1.2	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2,4-Dichlorophenol	4.6	NE	4.6	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2,4-Dimethylphenol	36	NE	36	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2,4-Dinitrophenol	3.9	NE	3.9	45 U	45 U	45 U	45 U	45 U	45 U	45 U
2,4-Dinitrotoluene	0.24	NE	0.24	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2,6-Dinitrotoluene	0.049	NE	0.049	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Chloronaphthalene	75	NE	75	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Chlorophenol	9.1	NE	9.1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Methylphenol (o-Cresol)	93	NE	93	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Nitroaniline	19	NE	NE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Nitrophenol	NE	NE	NE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
3,3'-Dichlorobenzidine	0.13	NE	0.13	25 U	25 U	25 U	25 U	25 U	25 U	25 U
3-Nitroaniline	NE	NE	NE	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
4,6-Dinitro-2-methylphenol	0.15	NE	NE	10 U	10 U	10 U	10 U	10 U	10 U	10 U
4-Bromophenyl phenyl ether	NE	NE	NE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
4-Chloro-3-methylphenol	140	NE	150	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U
4-Chloroaniline	0.37	NE	NE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
4-Chlorophenyl phenyl ether	NE	NE	NE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
4-Methylphenol (p-Cresol)	190	NE	190	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
4-Nitroaniline	3.8	NE	38	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U
4-Nitrophenol	NE	NE	NE	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ
Aniline (Phenylamine, Aminobenzene)	13	NE	13	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Azobenzene	0.12	NE	NE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Benzidine	0.00011	NE	NE	25 U	25 U	25 U	25 U	25 U	25 U	25 U
Benzoic acid	7500	NE	7500	45 UJ	45 UJ	45 UJ	R	45 UJ	45 UJ	45 UJ
Benzyl alcohol	200	NE	200	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Benzyl butyl phthalate	16	NE	16	3.0 UJ	3.0 UJ	3.0 UJ	3.0 U	3.0 UJ	3.0 UJ	3.0 UJ
bis(2-Chloroethoxy) methane	5.9	NE	NE	1.0 U	1.0 U	1.0 U	1.0 U	**10**	**25**	**15**
bis(2-Chloroethyl) ether	0.014	NE	0.014	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
bis(2-Ethylhexyl) phthalate	5.6	6	5.6	**160**	**130**	**120**	3.0 U	**10**	**25**	**15**
Carbazole	NE	NE	1.5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dibenzofuran	0.79	NE	0.79	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U
Diethyl phthalate	1500	6	1500	**0.46 J**	**0.37 J**	**5.8 J**	**3.2 J**	**5.7 J**	**9.1 J**	**8.3 J**
Dimethyl phthalate	NE	NE	NE	1.0 UJ	1.0 UJ	1.0 UJ	1.0 UJ	1.0 UJ	1.0 UJ	1.0 UJ
Di-n-butyl phthalate	90	NE	NE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
di-n-Octyl phthalate	20	NE	200	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U
Hexachlorobenzene	0.0098	1	0.0098	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Hexachlorobutadiene	0.14	NE	0.14	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Hexachlorocyclopentadiene	0.041	50	NE	4.0 UJ	4.0 UJ	4.0 UJ	4.0 UJ	4.0 UJ	4.0 UJ	4.0 UJ
Hexachloroethane	0.33	NE	0.33	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Isophorone	78	NE	78	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Nitrobenzene	0.14	NE	NE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U

Table 4-3
Summary of Bedrock Groundwater Analytical Results
Former Dow Salvage Yard
233 Odlin Road, Bangor, Maine

				Locations:	SY-BRMW4				SY-BRMW5		
				Field Sample ID:	SY-BRMW4-62-72-110923	SY-BRMW40-62-72-110923	SY-BRMW4-138-148-110923	SY-BRMW4-291-301-110923	SY-BRMW5-29-44-110823	SY-BRMW5-56-66-110823	SY-BRMW5-123-133-110823
				Matrix:	WG		WG	WG	WG	WG	WG
				Sample Begin Depth:	62		138	291	29	56	123
				Sample End Depth:	72		148	301	44	66	133
				Sample Date:	11/09/2023		11/09/2023	11/09/2023	11/08/2023	11/08/2023	11/08/2023
N-Nitrosodimethylamine	0.00011	NE	NE		1.0 UJ	1.0 UJ	1.0 UJ	1.0 U	1.0 UJ	1.0 UJ	1.0 UJ
N-Nitrosodi-n-propylamine	0.011	NE	NE		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
N-Nitrosodiphenylamine	12	NE	12		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Pentachlorophenol	0.041	1	0.041		5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Phenol	580	NE	580		1.0 UJ	1.0 UJ	1.0 UJ	1.0 UJ	1.0 UJ	1.0 UJ	1.0 UJ
Pyridine	12	NE	NE		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
E300 (mg/L)											
Chloride	NE	NE	NE		**320**	**320**	**410**	**480**	**620**	**410**	**370**
Nitrate	NE	NE	NE		0.025 U	0.025 U	**0.16**	**0.020 J**	**0.55**	**0.30**	**0.35**
Sulfate	NE	NE	NE		**92**	**94**	**66**	**68**	**120**	**160**	**74**
RSK175 (ug/L)											
Ethane	NE	NE	NE		9.8 U	9.8 U	9.8 U	9.8 U	9.8 U	9.8 U	9.8 U
Ethene	NE	NE	NE		9.8 U	9.8 U	9.8 U	9.8 U	9.8 U	9.8 U	9.8 U
Methane	NE	NE	NE		**6.1 J**	**5.3 J**	10 U	10 U	5.2 U	10 U	5.2 U
A2320B (mg/L)											
Alkalinity, Total (as CaCO3)	NE	NE	NE		**110**	**110**	**120**	**110**	**190**	**150**	**140**
A3500B (mg/L)											
Iron, Ferrous	NE	NE	NE		**0.076 J**	**0.096 J**	**0.096 J**	**0.047 J**	**0.20**	0.050 U	0.050 U
A5310B (mg/L)											
Total Organic Carbon	NE	NE	NE		**2.0**	**2.2**	**1.7**	**2.7**	**2.7**	**1.1**	**2.8**

Table 4-3
Cumulative Summary of Bedrock Groundwater Analytical Results
Former Dow Salvage Yard
233 Odlin Road, Bangor, Maine

NOTES:

1 - U.S. EPA Regional Screening Levels, Tapwater (ELCR 1x10-6, HQ 0.1), November 2021

2 - U.S. EPA Maximum Contaminant Levels, May 2021

3 - Maine Department of Environmental Protection Remedial Action Guidelines (RAGs) lowest of exposure scenarios, November 15, 2023

Detects are displayed in bold font

Results exceed RSL

Reported lab limit exceeds screening criteria

For EPH and VPH fraction results, only adjusted results are presented.

NE - not established

† - hexavalent chromium criteria

Data Qualifier Definitions

U - The analyte was not detected and was reported as less than the LOD or as defined by the customer. The LOD has been adjusted for any dilution or concentration of the sample.

J - Estimated: The analyte was positively identified, the quantitation is an estimation due to discrepancies in meeting certain analyte-specific quality control criteria.

UJ - The analyte was not detected and was reported as less than the LOD or as defined by the customer. However, the associated numerical value is approximate.

Units

PERCENT = percent

PPT = parts per thousand

ug/kg = microgram per kilogram

ug/L = microgram per liter

mg/L = milligram per liter

mg/kg = milligrams per kilogram

Analyses

PAH - polycyclic aromatic hydrocarbons

SIM - selective ion monitoring

EPH - extractable petroleum hydrocarbons

VPH - volatile petroleum hydrocarbons

MassDEP - Massachsuetts Department of Environmental Protection

PCBs - polychlorinated biphenyls

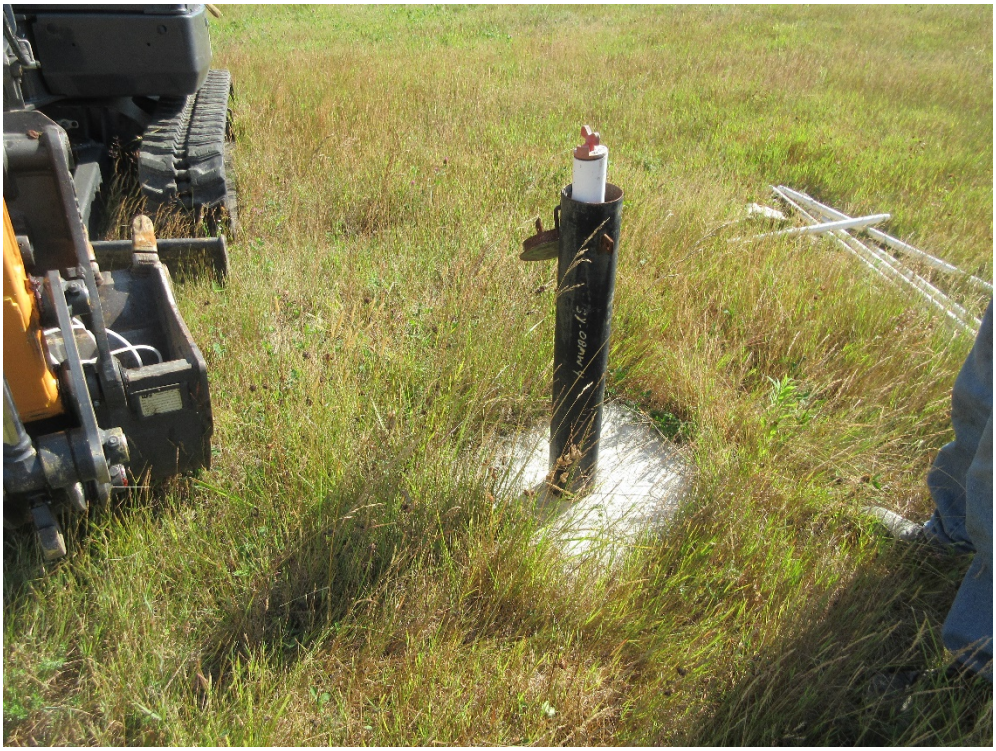
VOC - volatile organic compounds

SVOCs - semi-volatile organic compounds

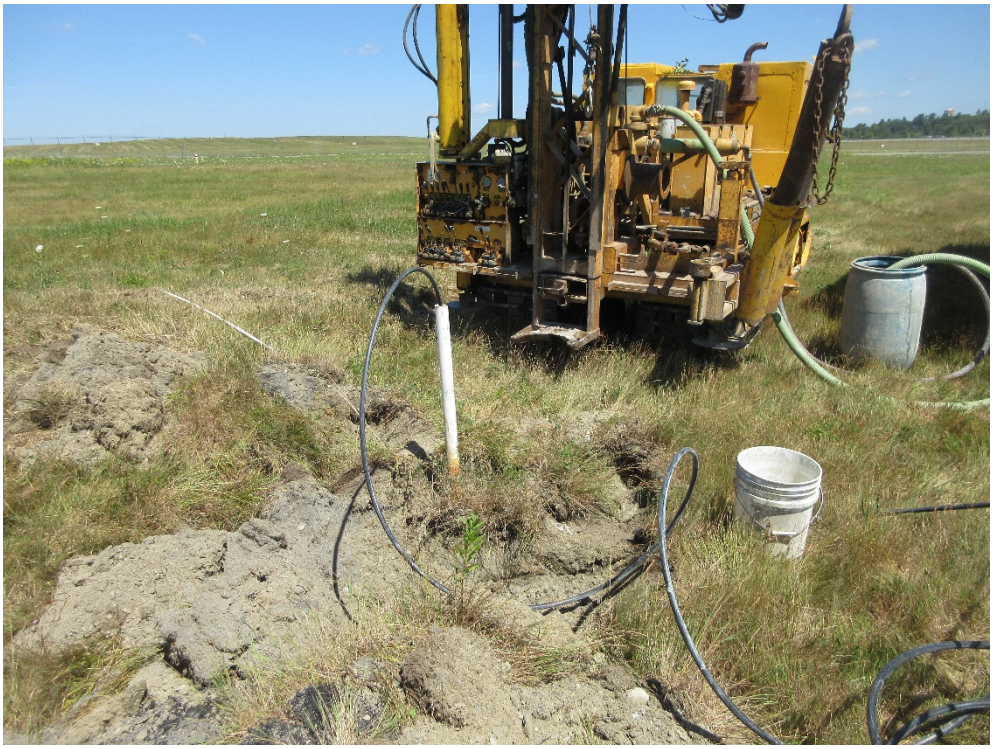
APPENDIX A

PHOTO LOG

Appendix A – Data Gap Assessment Photo Log
Former Salvage Yard (D01ME00407), Former Dow Military Airfield
233 Odlin Road, Bangor, Maine



1. SY-OBMW4 prior to abandonment; heaved riser visible above protective casing.



2. SY-OBMW4 during abandonment; hose for tremie grouting visible.

Appendix A – Data Gap Assessment Photo Log
Former Salvage Yard (D01ME00407), Former Dow Military Airfield
233 Odlin Road, Bangor, Maine



3. Photo showing the ~6” drain hole cut into each replacement protective casing, which drained into the gravel pad at each well.



4. Photo showing the 2’x2’x2’ steel cube filled with gravel, fabricated to facilitate the installation of the specified size gravel pads.

Appendix A – Data Gap Assessment Photo Log
Former Salvage Yard (D01ME00407), Former Dow Military Airfield
233 Odlin Road, Bangor, Maine



5. Photo of a replacement protective casing at one well after installation.



6. Photo showing grain size of the gravel used in the replacement overburden well pads.



7. View of foliation plane orientations (218° Dipping 80°N) at outcrop near the Alert Building, northwest of the Site, observed during the Integrated Fracture Trace study.



8. View showing dense-high frequency foliation planes in outcrop along I-95 Highway South. Trending 228°; Dipping 60°. Based on planar orientation, these features likely intersect the Eurovia Quarry to the northeast of this outcrop location. This location was selected for feature density transect with a measured frequency of 46 features per 90 feet thickness (1.95 feet/ fracture), observed during the Integrated Fracture Trace study.



9. View showing water bearing hinge within Z-type folds, similar to those depicted in the previous photo. Due to mine safety procedures, field crew were not permitted to stand in proximity to quarry wall and collect direct measurements or place GPS receiver. Width of wetted fold axis ~10-15 feet across. Observed during the Integrated Fracture Trace study.



10. View showing example of a minor fault feature within the Eurovia Quarry wall. These types of features are interpreted to be not laterally continuous, but perhaps may interconnect. Observed during the Integrated Fracture Trace study.

Appendix A – Data Gap Assessment Photo Log
Former Salvage Yard (D01ME00407), Former Dow Military Airfield
233 Odlin Road, Bangor, Maine



11. View showing the large fault feature observed at bottom of Eurovia Quarry near elevation of ~0 feet NAVD88. Fault plane is on left of photo, with gouge material and yellowish-brown debris. Curved planes in center/right of photo are deformed metamorphic bedding planes related to metamorphic protolith material (e.g. massive sandstone beds). The fault is confirmed by visibly observable discontinuity of planar sub-features on either side of the interpreted fault. This feature trends 210°; dipping 70°. Creating a surface intercept model of this planar geometry observable at this location shows this plane does not intercept the Site at surface or within the proposed drilling depth domain of ~300' bgs (~-150 feet NAVD88). Observed during the Integrated Fracture Trace study.

Appendix A – Data Gap Assessment Photo Log
Former Salvage Yard (D01ME00407), Former Dow Military Airfield
233 Odlin Road, Bangor, Maine



12. Drilling activities underway at SY-BRMW1.



13. Close up of rock core showing foliation and cross cutting quartz veinlets.



14. Clay recovered from SY-BRMW3, approximately 20’ bgs.



15. Metawacke recovered from SY-BRMW3, approximately 38-44’ bgs. Weathered fractures visible.



16. Supplemental surface geophysical clearance underway at SY-BRMW4.



17. Decon of drilling equipment underway.

Appendix A – Data Gap Assessment Photo Log
Former Salvage Yard (D01ME00407), Former Dow Military Airfield
233 Odlin Road, Bangor, Maine



18. Till recovered from SY-BRMW4, 26-31’ bgs.



19. Bedrock recovered from SY-BRMW4, 31-36’ bgs.

Appendix A – Data Gap Assessment Photo Log
Former Salvage Yard (D01ME00407), Former Dow Military Airfield
233 Odlin Road, Bangor, Maine



20. Till recovered from SY-BRMW2, 16-26’ bgs.



21. Bedrock recovered from SY-BRMW2, 31-36’ bgs.

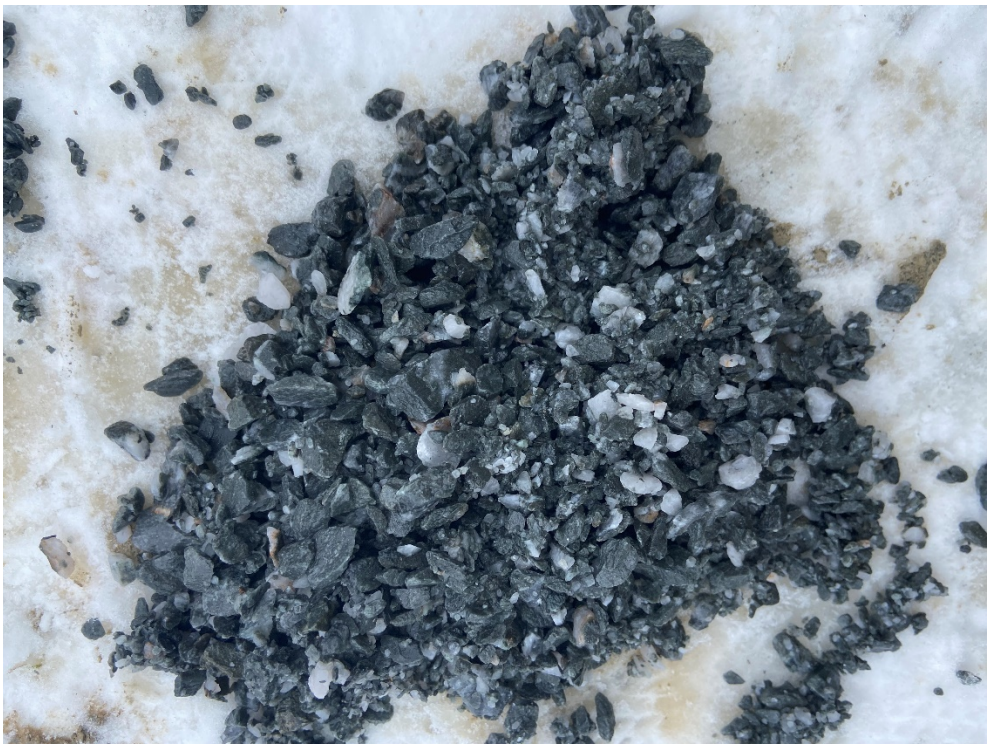


22. Weathered bedding plane fractures in rock recovered from SY-BRMW2, 31-36’ bgs.



23. Layout of rock chips for observation and characterization (120’-300’ bgs) at SY-BRMW2.

Appendix A – Data Gap Assessment Photo Log
Former Salvage Yard (D01ME00407), Former Dow Military Airfield
233 Odlin Road, Bangor, Maine



24. Example of quartz veinlets observed throughout borehole at SY-BRMW2.



25. Example of large rock fragments with iron oxides on surfaces observed in fracture zones at SY-BRMW2.

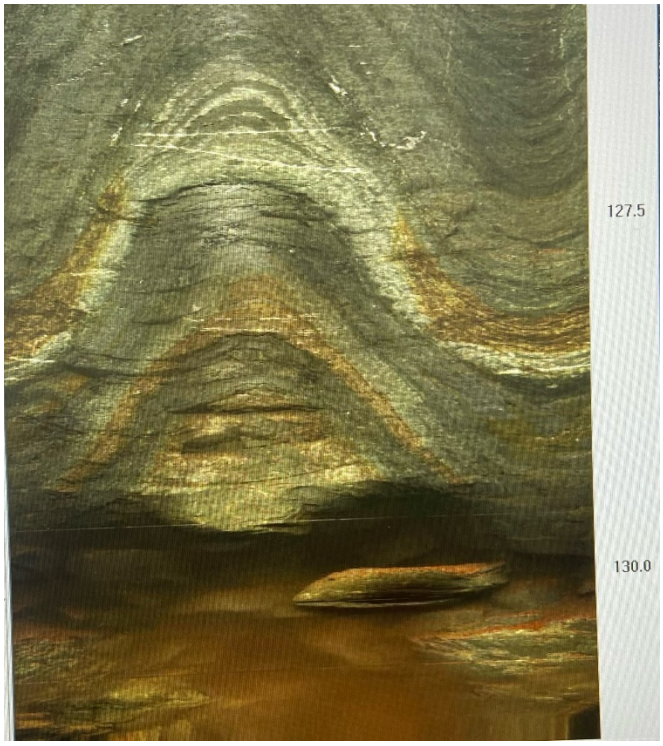


26. Return water running visually clear during development of SY-BRMW4.

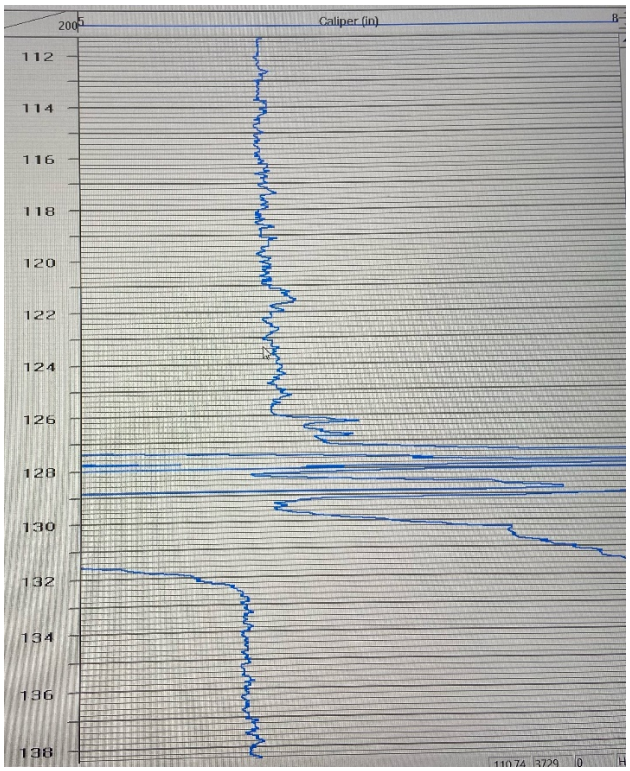


27. SY-OBMW4R after installation of the protective standpipe and locking cap.

Appendix A – Data Gap Assessment Photo Log
Former Salvage Yard (D01ME00407), Former Dow Military Airfield
233 Odlin Road, Bangor, Maine



28. Screenshot of optical televiewer field data provided by Hager-Richter at the collapsed zone, an apparent fault. Above the fault zone bedding is steep and intact, dipping NW. The void in the middle appears to show fragments of rock lying horizontally which may indicate breccia or drag folded beds below the fault zone.



29. Screenshot of caliper log field data provided by Hager-Richter at the collapsed zone in SY-BRMW5, showing an apparent large void.



30. FLUTe blank liner/FACT strip installation underway at SY-BRMW4.



31. Borehole geophysical logging underway at SY-BRMW1.



32. FLUTe crew installing FACT liner in SY-BRMW5. Shallow groundwater levels required installation of temporary PVC riser section for liner installation.



33. Sectioning/sampling of FACT strip from SY-BRMW4 underway.



34. Setup for blank liner reinstallation/transmissivity profiling underway at SY-BRMW1.



35. Blank liner/FACT removal underway at SY-BRMW2.



36. Installation of FLUTe multilevel well system underway at SY-BRMW2.



37. Permanent FLUTe liner (part of the multilevel well system) laid out and filled with air (via leaf blower) for inspection/attempt to identify leak.



38. One of the separated water line couplings. Visible is the inside of the FLUTe liner when deployed in the borehole. The tear in the clear poly may have occurred as the water line was pulled under tension before separating from the coupling.



39. SY-BRMW1 after completion of installation.



40. Installation of multilevel well system underway at SY-BRMW3.



41. Completed sampling manifold of multilevel well system installed in SY-BRMW3.

APPENDIX B

OVERBURDEN MONITORING WELL REDEVELOPMENT LOGS

MONITORING WELL DEVELOPMENT LOG

Credere Associates, LLC. 776 Main Street. Westbrook, ME 04092

PROJECT NAME: Former Salvage Yard, Former Dow Military Airfield DATE: 6/23/22

PROJECT NUMBER: Credere No. 18001468, FUDS No. D01ME000407

LOCATION ID: SY-OBMW1

LOCATION ACTIVITY START: 0800 END: 1345

WELL DATA:

WELL DEPTH (ft): 37.25 [X] MEASURED [ ] HISTORICAL

WATER DEPTH VIA WLM (ft): 8.22

WATER DEPTH VIA TRANSDUCER (ft): NA

[X] TOP OF WELL [ ] TOP OF CASING [ ] FROM GRADE [ ] ____

WATER LEVEL EQUIPMENT USED: [X] ELECT. COND. PROBE [ ] FLOAT ACTIVATED PROBE [X] PRESSURE TRANSDUCER [ ] ____

ESTIMATED SEDIMENT THICKNESS IN WELL PRIOR TO DEVELOPMENT: Trace (same as previous but felt muddy when sounding)

DEPTH OF PUMP INTAKE (ft): ~30 STICK UP HEIGHT: 2.24

WELL MATERIAL:	WELL LOCKED:	PROTECTIVE CASING SECURE:	GRAVEL PAD CONDITION:		AMBIENT AIR PID:	
[X] PVC	[X] YES	[X] YES	[ ] GOOD	[ ] POOR	0.049	PPM
[ ] SS	[ ] NO	[ ] NO	[ ] FAIR	NA	WELL MOUTH PID: 0.000	PPM
[ ] ____						

EQUIPMENT DATA:

Water Quality Instrument Sonde Model/SN: YSI Quatro / 22A100144

Water Quality Instrument Handset Model/SN: YSI Pro Quatro / 22B101958

Turbidity Meter Model/SN: Hach 2100Q / 170300056467

Transducer Model/SN: Solinst

[X]	Peristaltic Pump	[X]	New HDPE		
[X]	Submerisble	[X]	New Vinyl Tubing		
[ ]	Bladder pump	[X]	Surge Blocks		
[ ]	Hand pump	[ ]			
[ ]	Dedicated HDPE	[X]	Tef. LDPE		

GROUNDWATER PARAMETER DATA:

TIME	TEMP (°C)	SP. COND. (mS/cm)	pH	ORP (mV)	D.O. (mg/l)	TURBID. (NTU)	Flow Rate (gal/min)	DTW via WLM (ft)	Comments (indicate surging, transducer reading, etc.)
1230	9.5	0.2882	8.19	155.8	0.83	376	1.25	22.25	0810: Pump on, DTW 8.20
1235	9.5	0.2883	8.26	147.3	0.27	443	1.25	24.96	0825: pump off, water very clear
1240	9.1	0.2891	8.26	138.6	0.61	122	1	25.78	
1245	9.3	0.2888	8.24	131.9	0.27	326	1	26.47	0835: surge
1250	9.2	0.2889	8.24	71.7	0.19	748	1	26.91	0910: WL 10.83, Pump
1255	9.3	0.2882	8.23	76.5	0.11	+++	1	27.30	0A - purge/spc test
1300	9.2	0.2877	8.22	78.7	0.23	+++	1	27.80	1010 - pump off
1305	9.3	0.2877	8.23	72.4	0.28	+++	1	28.15	1015 - surge, recharge
1310	9.4	0.2876	8.21	67.0	0.27	+++	1	28.37	1040 15.52
1315	9.4	0.2877	8.21	60.8	0.32	+++	1	28.50	1045 14.70
1320	parameters stable - monitor DTW & Turbidity						1	28.91	1050 14.37
1325						+++	1	29.10	1055 - poor recharge, water above screen, pump on for SPC.
1330						614	1	29.14	
					Turb. still very high after extended purge				WL 14.22
									1130 - pump off
									1200 - 15.10
									1205 - 14.83
									1210 - 14.25
									1215 - 14.07
									1220 - 13.81
									1225 - 13.60 steady recharge, water above screen

Personnel Initials: SG

Screen recharge target = 37.25 - 12 = 25.25

90% target = 37.25 - 8.22 = 29.03 × .9 = 26.13; 37.25 - 26.13 = 11.12 to 5

begin final spc/parameters (pump on)

MONITORING WELL DEVELOPMENT LOG

Credere Associates. LLC. 776 Main Street. Westbrook. ME 04092

PROJECT NAME: Former Salvage Yard, Former Dow Military Airfield DATE: 6/23-24/22

PROJECT NUMBER: Credere No. 18001468, FUDS No. D01ME000407

LOCATION ID: SY-08MW1

SPECIFIC CAPACITY TESTING INFORMATION

Historical Stabilized Flow Rate/Date 400/280, Aug/Dec 2020

Test 1
- Start Time 1643/8.22
- End Time 1723/10.67
- Flow Rate 440. (2 pump)/0.116 gal
- Drawdown 2.45
- Calculated Specific Capacity 0.047

Test 2
- Start Time 0910/~~10.83~~ 8.22
- End Time 1010/25.42
- Flow Rate 16PM (whale)
- Drawdown ~~11.59~~ 17.2
- Calculated Specific Capacity ~~0.069~~ 0.058

Static = 8.22

Test 3
- Start Time 1055/~~11.44~~ 8.22
- End Time 1130/25.70
- Flow Rate 1gpm
- Drawdown ~~11.28~~ 17.48
- Calculated Specific Capacity ~~0.089~~ 0.057

Test 4
- Start Time 1225/~~13.60~~ 8.22 ~~Drawdown on canvas side~~
- End Time 1330/29.14
- Flow Rate ~~1.85 gpm~~ 1gpm
- Drawdown 20.92
- Calculated Specific Capacity 0.048

Notes
T3-1gpm-20.80@8min 25.70@35
21.86@10min
24.22@20
25.15@25
25.44@30

DETAILED STABALIZATION CRITERIA

pH: ±0.1 standard units
Temperature: ± 3%
ORP: ±10 mV
DO: ±0.5 mg/L for values less than 2 mg/L or ±10% for values greater than 2 mg/L
Specific conductance: ± 3%
Turbidity: <10 NTU

PURGE DATA

[ ] 0.04 GAL/FT (1" DIAM.)
[X] 0.16 GAL/FT (2" DIAM.)
[ ] 0.65 GAL/FT (4".DIAM.)
[ ] 1.47 GAL/FT (6" DIAM.)

x length of water column = 29.03

Total Well Volume: 4.64

Total Purge Volume: 175

# of well volumes: 37.72

3 well volume = 13.92

FINALWATER DEPTH VIA TRANSDUCER (ft): NA Final depth = 37.33

FINAL WATER DEPTH VIA WLM (ft): NA

ESTIMATED SEDIMENT THICKNESS IN WELL FOLLOWING DEVELOPMENT: trace-none

COMMENTS

T1-440-9.10@5min
9.78@15min
10.02@20min
10.24@25
10.42@30
10.58@35 10.67@40

T2-1gpm-18.50@5min
-20.68@13min
-23.03@24min
-24.03@30
-24.75@35
-25.03@40
-24.85@45 (pump stopped briefly)
25.40@55
25.72@60

PERSONNEL INFORMATION

Name (printed): Sean Gannon Signature:

MONITORING WELL DEVELOPMENT LOG

Credere Associates, LLC. 776 Main Street. Westbrook. ME 04092

PROJECT NAME: Former Salvage Yard, Former Dow Military Airfield DATE: 6-24-22

PROJECT NUMBER: Credere No. 18001468, FUDS No. D01ME000407

LOCATION ID: SY-OBMW2

LOCATION ACTIVITY
START: 0815
END: 1230

WELL DATA:

WELL DEPTH (ft): 42.59 / 42.22 [X] MEASURED [ ] HISTORICAL

WATER DEPTH VIA WLM (ft): 8.80 (top of casing)

WATER DEPTH VIA TRANSDUCER (ft): NA

[X] TOP OF WELL [ ] TOP OF CASING [ ] FROM GRADE [ ] _____

WATER LEVEL EQUIPMENT USED:
[X] ELECT. COND. PROBE
[ ] FLOAT ACTIVATED PROBE
[X] PRESSURE TRANSDUCER
[ ] _____

ESTIMATED SEDIMENT THICKNESS IN WELL PRIOR TO DEVELOPMENT: Trace (muddy but deeper than previous sounding)

DEPTH OF PUMP INTAKE (ft): ~35 STICK UP HEIGHT: 3.07

WELL MATERIAL:	WELL LOCKED:	PROTECTIVE CASING SECURE:	GRAVEL PAD CONDITION:	AMBIENT AIR PID:	WELL MOUTH PID:
[X] PVC	[X] YES	[X] YES	NA	0.056 PPM	0.060 PPM
[ ] SS	[ ] NO	[ ] NO	[ ] GOOD [ ] POOR		
[ ] _____			[ ] FAIR		

EQUIPMENT DATA:

Water Quality Instrument Sonde Model/SN: YSI Pro+ 21M100503

Water Quality Instrument Handset Model/SN: YSI Pro+ 17E100949

Turbidity Meter Model/SN: Hach 2100Q / 20120002142

Transducer Model/SN: Solinst

[X]	Peristaltic Pump	[X]	New HDPE
[X]	Submerisble	[X]	New Vinyl Tubing
[ ]	Bladder pump	[X]	Surge Blocks
[X]	Hand pump	[X]	whale pump
[X]	Dedicated HDPE	[X]	Tef. LDPE

GROUNDWATER PARAMETER DATA:

TIME	TEMP (°C)	SP. COND. (mS/cm)	pH	ORP (mV)	D.O. (mg/l)	TURBID. (NTU)	Flow Rate (gal/min)	DTW via WLM (ft)	Comments (indicate surging, transducer reading, etc.)
1120	11.1	0.291	7.82	207.5	3.04	91.3	360	9.33	whale pump on 0915
1125	11.1	0.289	7.78	207.8	3.28	91.4	400	9.82	off 0930 surge 0935
1130	10.9	0.288	7.71	207.7	2.94	90.8	400	9.88	whale pump used
1135	10.9	0.290	7.69	206.3	2.38	44.4	400	9.88	for specific cap. #2
1140	10.9	0.290	7.68	202.6	0.98	32.9	400	9.84	on 0943, off 1011
1145	10.9	0.291	7.68	200.8	0.89	26.5	400	9.82	surge 1015
1150	10.9	0.291	7.68	199.2	1.01	26.5	400	9.80	#3 SCT w/whale pump
1155	10.9	0.291	7.69	197.6	0.72	17.6	400	9.77	on 1030, off 1102
1200	10.9	0.291	7.69	196.7	0.92	15.6	400	9.76	
1205	10.8	0.290	7.70	195.4	0.81	13.5	400	9.75	using low flow
1210	10.9	0.291	7.70	194.9	0.78	12.0	400	9.74	for SCT #4
1215	10.8	0.291	7.70	193.6	0.74	9.82	400	9.75	

Personnel Initials:

diff from top of casing to top of PVC riser = 0.83'

MONITORING WELL DEVELOPMENT LOG

Credere Associates. LLC. 776 Main Street. Westbrook. ME 04092

PROJECT NAME: Former Salvage Yard, Former Dow Military Airfield DATE: 6-24-22

PROJECT NUMBER: Credere No. 18001468, FUDS No. D01ME000407

LOCATION ID: SY-08MW2

SPECIFIC CAPACITY TESTING INFORMATION

Historical Stabilized Flow Rate/Date 400 mL/min 12-1-2020

Test 1

Start Time 0825 / 8.80'
End Time 0850 / 9.78'
Flow Rate 360 mL/min / .095 gal/min
Drawdown 0.98'
Calculated Specific Capacity 0.097

Test 2

Start Time 0943 / 9.23'
End Time 1011 / 22.21'
Flow Rate 1.25 GPM
Drawdown 12.98'
Calculated Specific Capacity 0.096

Test 3

Start Time 1030 / 8.83'
End Time 1102 / 22.26'
Flow Rate 1.25 GPM
Drawdown 13.43'
Calculated Specific Capacity 0.093

Test 4

Start Time 1120 / 9.33'
End Time 1135 / 9.88'
Flow Rate 400 mL/min / 0.106 gal/min
Drawdown 0.55
Calculated Specific Capacity 0.192

Notes

T2 - whole pump & T3 whole pump
~~T4~~ T4 - low flow

DETAILED STABALIZATION CRITERIA

pH: ±0.1 standard units
Temperature: ± 3%
ORP: ±10 mV
DO: ±0.5 mg/L for values less than 2 mg/L or ±10% for values greater than 2 mg/L
Specific conductance: ± 3%
Turbidity: <10 NTU

PURGE DATA

[ ] 0.04 GAL/FT (1" DIAM.)
[X] 0.16 GAL/FT (2" DIAM.)
[ ] 0.65 GAL/FT (4" DIAM.)
[ ] 1.47 GAL/FT (6" DIAM.)

x length of water column = 33.79

Total Well Volume: 5.41 gal

Total Purge Volume: 16.25 gal

# of well volumes: 3

FINALWATER DEPTH VIA TRANSDUCER (ft): NA

FINAL WATER DEPTH VIA WLM (ft): NA

ESTIMATED SEDIMENT THICKNESS IN WELL FOLLOWING DEVELOPMENT: 0.37', bottom solid

COMMENTS

T1		T2		T3 min	DTW	T4 min	DTW
360 mL/min	9.50 @ 5 min	1.25 GPM	20.24 @ 5 min	5	20.55		
350 mL/min	9.57 @ 10 min	1.25	21.50 @ 10 min	10	21.13		
Switched 360 mL/min	9.61 @ 15 min	1.25	21.83 @ 15 min	15	21.86		
-> 440 mL/min	9.71 @ 20 min	1.25	22.15 @ 18 min	20	21.82		
battery 440	9.78 @ 25 min	1.25	22.27 @ 21 min	23	22.10		
		1.25	22.19 @ 25 min	25	22.16		
		1.25	22.21 @ 28 min	28	22.20		
				30	22.27		
				32	22.26		

PERSONNEL INFORMATION

Name (printed): Lauren Kaija Signature:

MONITORING WELD DEVELOPMENT LOG

Credere Associates, LLC. 776 Main Street. Westbrook. ME 04092

PROJECT NAME: Former Salvage Yard, Former Dow Military Airfield

DATE: 7-18-2022

PROJECT NUMBER: Credere No. 18001468, FUDS No. D01ME000407

LOCATION ID: SY-OBMW 3

LOCATION ACTIVITY
START: 1045
END: ~~1445~~ 1506

WELL DATA:

WELL DEPTH (ft): final: 37.92 / 37.21 [X] MEASURED [ ] HISTORICAL

[X] TOP OF WELL [ ] TOP OF CASING [ ] FROM GRADE [ ] ____

WATER LEVEL EQUIPMENT USED:
[X] ELECT. COND. PROBE
[ ] FLOAT ACTIVATED PROBE
[X] PRESSURE TRANSDUCER
[ ] ____

WATER DEPTH VIA WLM (ft): 6.80

WATER DEPTH VIA TRANSDUCER (ft): ~30'

Minor bearing of PVC

ESTIMATED SEDIMENT THICKNESS IN WELL PRIOR TO DEVELOPMENT: ~0.1 ft

DEPTH OF PUMP INTAKE (ft): ~30' STICK UP HEIGHT: 2.68'

WELL MATERIAL:	WELL LOCKED:	PROTECTIVE CASING SECURE:	GRAVEL PAD CONDITION:	
[X] PVC	[X] YES	[X] YES	[ ] GOOD [ ] POOR	AMBIENT AIR PID: 0.064 PPM
[ ] SS	[ ] NO	[ ] NO	[X] FAIR	WELL MOUTH PID: 0.094 PPM
[ ] ____				

EQUIPMENT DATA:

Water Quality Instrument Sonde Model/SN: YSI 14L29

Water Quality Instrument Handset Model/SN: YSI 15A101441

Turbidity Meter Model/SN: Hach 2100Q ~~2100~~ 20120D002142

Transducer Model/SN: Solinst N/A

[X]	Peristaltic Pump	[ ]	New HDPE
[ ]	Submerisble	[X]	New Vinyl Tubing
[ ]	Bladder pump	[X]	Surge Blocks
[ ]	Hand pump	[X]	whale pump
[X]	Dedicated HDPE	[ ]	____

GROUNDWATER PARAMETER DATA:

TIME	TEMP (°C)	SP. COND. (mS/cm)	pH	ORP (mV)	D.O. (mg/l)	TURBID. (NTU)	Flow Rate (gal/min)	DTW via WLM (ft)	Comments (indicate surging, transducer reading, etc.)
1335	11.18	0.330	8.15	122.5	1.05	++++	400	8.85	began purge #1 @ 1133
1340	11.10	0.328	8.01	109.8	0.56	++++	400	8.55	off 1155 @ 1gpm
1350	11.10	0.328	8.06	87.2	0.32	724	400	8.12	surge @ 1200
1400	10.85	0.328	8.08	75.0	0.27	729	400	8.32	began combined purge &
1405	10.88	0.329	8.08	70.6	0.24	658	400	8.26	spc test #2 @ 1205
1410	10.90	0.328	8.10	66.5	0.23	630	400	8.23	off 1233 surge 1235
1415	10.85	0.328	8.10	62.1	0.22	623	400	8.19	purge & spc test #3
									began @ 1247 off 1313
									began sampling @ 1330
									DTW: 8.90
									(recharging during
									low flow)

Personnel Initials: [illegible]

MONITORING WELL DEVELOPMENT LOG

Credere Associates. LLC. 776 Main Street. Westbrook. ME 04092

PROJECT NAME: Former Salvage Yard, Former Dow Military Airfield DATE: 7-18-2022

PROJECT NUMBER: Credere No. 18001468, FUDS No. D01ME000407

LOCATION ID: SY-OBMW-3

SPECIFIC CAPACITY TESTING INFORMATION

Historical Stabilized Flow Rate/Date 400 mL/min / 12-2-2020

Test 1

Start Time 1058
End Time 1128
Flow Rate 480 mL/min (0.127 gpm)
Drawdown 0.64'
Calculated Specific Capacity 0.198

Test 2

Start Time 1205
End Time 1233
Flow Rate 1.25 gpm ((1.15 gpm)
Drawdown 5.35'
Calculated Specific Capacity 0.215

Test 3

Start Time 1247
End Time 1313
Flow Rate 1.10 gpm
Drawdown 5.24'
Calculated Specific Capacity 0.210

Test 4

Start Time 1416
End Time ~~1443~~ 1452
Flow Rate 1.10 gpm
Drawdown ~~4.50'~~ 5.23'
Calculated Specific Capacity ~~0.244~~ 0.210

7-18-22

Notes

T1 - grop pump
T2 - whale pump
T3 - whale pump
T4 - whale pump (interface probe received me)

DETAILED STABALIZATION CRITERIA

pH: ±0.1 standard units
Temperature: ± 3%
ORP: ±10 mV
DO: ±0.5 mg/L for values less than 2 mg/L or ±10% for values greater than 2 mg/L
Specific conductance: ± 3%
Turbidity: <10 NTU

PURGE DATA

[ ] 0.04 GAL/FT (1" DIAM.)
[X] 0.16 GAL/FT (2" DIAM.)
[ ] 0.65 GAL/FT (4" DIAM.)
[ ] 1.47 GAL/FT (6" DIAM.)

x length of water column = 30.41

Total Well Volume: 4.87 gal

Total Purge Volume: 50 gal

# of well volumes: 10

FINALWATER DEPTH VIA TRANSDUCER (ft): —

FINAL WATER DEPTH VIA WLM (ft): —

ESTIMATED SEDIMENT THICKNESS IN WELL FOLLOWING DEVELOPMENT: —

COMMENTS

T1	T2	T3	T4
480 / 7.15 @ 5 min	1.25 / 9.40 @ start	/ 9.00 @ start	1.25 / 10.56 @ 5 min
480 / 7.27 @ 10 min	1.25 / 11.02 @ 5 min	1.10 / 10.98 @ 5 min	1.10 / 11.00 @ 10
480 / 7.31 @ 15 min	1.25 / 11.48 @ 10 min	1.10 / 11.60 @ 10 min	1.10 / 11.19 @ 15
480 / 7.39 @ 20 min	1.15 / 11.78 @ 15 min	1.10 / 11.85 @ 15 min	1.10 / 11.40 @ 20
480 / 7.42 @ 23 min	1.15 / 12.14 @ 20 min	1.10 / 12.04 @ 20 min	1.10 / 11.50 @ 25
480 / 7.44 @ 26 min	1.15 / 12.17 @ 25 min	1.10 / 12.03 @ 25 min	1.10 / ~~11.30~~ @ 28
480 / 7.44 @ 30 min	1.10 / 12.15 @ 28 min	1.10 / 12.04 @ 26 min	11.60
			1.10 / 12.03 @ 33 min
			1.10 / 12.03 @ 36 min

7-18-22

PERSONNEL INFORMATION

Name (printed): Lauren Karja

Signature:

MONITORING WELL DEVELOPMENT LOG

Credere Associates. LLC. 776 Main Street. Westbrook. ME 04092

PROJECT NAME: Former Salvage Yard, Former Dow Military Airfield DATE: 2-7-23

PROJECT NUMBER: Credere No. 18001468, FUDS No. D01ME000407

LOCATION ID: SY-08MW4R

LOCATION ACTIVITY START: 0845 END: 1515

WELL DATA:

WELL DEPTH (ft): 39.04 [X] MEASURED [ ] HISTORICAL

WATER DEPTH VIA WLM (ft): 7.86

[X] TOP OF WELL [ ] TOP OF CASING [ ] FROM GRADE [ ] _____

WATER LEVEL EQUIPMENT USED: [X] ELECT. COND. PROBE [ ] FLOAT ACTIVATED PROBE [ ] PRESSURE TRANSDUCER [ ] _____

ESTIMATED SEDIMENT THICKNESS IN WELL PRIOR TO DEVELOPMENT: ~1in

DEPTH OF PUMP INTAKE (ft): ~37 (Purge) ~32 (low flow) STICK UP HEIGHT: 2.78

WELL MATERIAL:	WELL LOCKED:	PROTECTIVE CASING SECURE:	GRAVEL PAD CONDITION:	AMBIENT AIR PID:	PPM
[X] PVC	[X] YES	[X] YES	[ ] GOOD [ ] POOR		
[ ] SS	[ ] NO	[ ] NO	[X] FAIR	WELL MOUTH PID:	PPM
[ ] _____					

EQUIPMENT DATA:

Water Quality Instrument Sonde Model/SN: YSI 600336/14L29

Water Quality Instrument Handset Model/SN: YSI 556/15A101441

Turbidity Meter Model/SN: Hach 2100Q / 17030C056467

[X]	Peristaltic Pump	[ ]	New HDPE
[X]	Submerisble	[X]	New Vinyl Tubing
[ ]	Bladder pump	[X]	Surge Blocks
[ ]	Hand pump	[ ]	_____
[ ]	Dedicated HDPE	[X]	New Teflon lined LDPE

GROUNDWATER PARAMETER DATA:

TIME	TEMP (°C)	SP. COND. (mS/cm)	pH	ORP (mV)	D.O. (mg/l)	TURBID. (NTU)	Flow Rate (~~gal~~/min)	DTW via WLM (ft)	Comments (indicate surging, transducer reading, etc.)
1310	8.74	3.645	10.56	-86.9	1.30	—	400	8.80	-Spc.1 0930-1020
1320	8.70	3.690	10.56	-108.1	0.40	—	400	8.65	-Surge 1 ~1030
1330	8.71	3.677	10.59	-118.9	0.34	—	400	8.60	-Purge + Spc 2 @1035
1335	8.78	3.687	10.60	-125.7	0.31	—	400	8.55	-Surge 2 ~1130
1340	8.63	3.715	10.64	-133.7	0.30	—	400	8.52	-Spc 3 & Purge ~1135
1350	8.69	3.710	10.64	-140.1	0.29	—	400	8.50	Spc 3 over @ 1210
1355	8.47	3.714	10.61	-143.2	0.42	—	400	8.50	extra Surge @ 1215,
1400	8.50	3.720	10.58	-146.3	0.36	—	400	8.50	allow to Purge until
									visually clear
									-whale off, setup
									low flow @1250,
									water very clear
									- low flow start 1305
									-1405 begin Final
									Spc test

Personnel Initials: SG

MONITORING WELL DEVELOPMENT LOG

Credere Associates. LLC. 776 Main Street. Westbrook. ME 04092

Community Economy Environment

PROJECT NAME: Former Salvage Yard, Former Dow Military Airfield DATE: 2/7/23

PROJECT NUMBER: Credere No. 18001468, FUDS No. D01ME000407

LOCATION ID: SY-08MW4R

SPECIFIC CAPACITY TESTING INFORMATION

Historical Stabilized Flow Rate/Date ___ / ___ (new well)

Test 1

Start Time 0930 ~75gal
End Time 1020
Flow Rate 1.25 gpm - 1.67
Peristaltic pump/submersible pump
Drawdown 3.90
Calculated Specific Capacity 0.32 gpm/Ft - 0.43 gpm/ft

Test 2

Start Time 1035 ~84gal
End Time 1125
Flow Rate 1.67
Peristaltic pump/submersible pump
Drawdown 3.42
Calculated Specific Capacity 0.49 gpm/Ft

Test 3

Start Time 1135 ~58gal
End Time 1210
Flow Rate 1.67 gpm
Peristaltic pump/submersible pump
Drawdown 3.16
Calculated Specific Capacity 0.53

Test 4

Start Time 1405 ~109 gal
End Time 1510
Flow Rate 1.67
Peristaltic pump/submersible pump
Drawdown 3.70
Calculated Specific Capacity 0.45

TEST 1 7.85

Flow Rate mL or gal per minute	Depth to Water (ft BTOC)	Elapsed Time (min)
1.25	10.61	5
1.25	11.12	10
1.25	11.31	15
1.25	11.42	20
1.25	11.53	25
1.25	11.59	30
1.25	11.66	35
1.25	11.70	40
1.25	11.73	45
1.67	11.75	50

TEST 2 8.99

Flow Rate mL or gal per minute	Depth to Water (ft BTOC)	Elapsed Time (min)
1.67	11.22	5
1.67	11.49	10
1.67	11.61	15
1.67	11.65	20
1.67	11.75	25
1.67	11.78	30
1.67	11.85	35
1.67	11.85	40
1.67	11.89	45
1.67	11.91	50

TEST 3 8.76

Flow Rate mL or gal per minute	Depth to Water (ft BTOC)	Elapsed Time (min)
1.67	11.45	5
1.67	11.69	10
1.67	11.76	15
1.67	11.85	20
1.67	11.90	25
1.67	11.90	30
1.67	11.92	35

TEST 4 8.26

Flow Rate mL or gal per minute	Depth to Water (ft BTOC)	Elapsed Time (min)
11.09	1.67	5
11.42	1.67	10
1.67	11.60	15
1.67	11.70	20
1.67	11.80	25
1.67	11.97	50
1.67	11.95	55
1.67	11.96	65

PURGE DATA 75, 84, 58, 58, 109 +5

[ ] 0.04 GAL/FT (1" DIAM.)
[x] 0.16 GAL/FT (2" DIAM.)
[ ] 0.65 GAL/FT (4" DIAM.)
[ ] 1.47 GAL/FT (6" DIAM.)

x length of water column = 31.18

Total Well Volume: 4.99 gal

Total Purge Volume: ~389 gal

# of well volumes: ~78

DETAILED STABALIZATION CRITERIA

pH: ±0.1 standard units
Temperature: ± 3%
ORP: ±10 mV
DO: ±0.5 mg/L for values less than 2 mg/L or ±10% for values greater than 2 mg/L
Specific conductance: ± 3%
Turbidity: <10 NTU

COMMENTS 31.18 x .9 = 28.06 (90% target)
34.04 - 28.06 = 10.98' btoc

PERSONNEL INFORMATION

Name (printed): Sean Gannon Signature: [signature]

MONITORING WELL DEVELOPMENT LOG

Credere Associates. LLC. 776 Main Street. Westbrook. ME 04092

PROJECT NAME: Former Salvage Yard, Former Dow Military Airfield DATE: 7-19-2022

PROJECT NUMBER: Credere No. 18001468, FUDS No. D01ME000407

LOCATION ID: SY-OBMW 5

LOCATION ACTIVITY
START: 0800
END: 1200

WELL DATA: final: 42.08

WELL DEPTH (ft): 42.20 [X] MEASURED [ ] HISTORICAL

WATER DEPTH VIA WLM (ft): 6.79

WATER DEPTH VIA TRANSDUCER (ft): NA

[X] TOP OF WELL
[ ] TOP OF CASING
[ ] FROM GRADE
[ ] _____

WATER LEVEL EQUIPMENT USED:
[X] ELECT. COND. PROBE
[ ] FLOAT ACTIVATED PROBE
[X] PRESSURE TRANSDUCER
[ ] _____

ESTIMATED SEDIMENT THICKNESS IN WELL PRIOR TO DEVELOPMENT: trace (muddy, same as previous sounding)

DEPTH OF PUMP INTAKE (ft): ~35' STICK UP HEIGHT: 3.19'

WELL MATERIAL:	WELL LOCKED:	PROTECTIVE CASING SECURE:	GRAVEL PAD CONDITION:	
[X] PVC	[X] YES	[X] YES	[X] GOOD	[ ] POOR
[ ] SS	[ ] NO	[ ] NO	[ ] FAIR	
[ ] _____				

AMBIENT AIR PID: 0.056 PPM
WELL MOUTH PID: 0.220 PPM

EQUIPMENT DATA:

Water Quality Instrument Sonde Model/SN: YSI 14L29
Water Quality Instrument Handset Model/SN: YSI 15A101441
Turbidity Meter Model/SN: Hach 2100Q / 20120D002142
Transducer Model/SN: Solinst

[X]	Peristaltic Pump	[ ]	New HDPE
[ ]	Submerisble	[X]	New Vinyl Tubing
[ ]	Bladder pump	[X]	Surge Blocks
[ ]	Hand pump	[X]	whale pump
[X]	Dedicated HDPE	[ ]	

GROUNDWATER PARAMETER DATA:

TIME	TEMP (°C)	SP. COND. (mS/cm)	pH	ORP (mV)	D.O. (mg/l)	TURBID. (NTU)	Flow Rate (gal/min)	DTW via WLM (ft)	Comments (indicate surging, transducer reading, etc.)
1015	12.78	0.282	8.27	178.7	4.90	1111+	400	7.33	combined purge &
1025	12.48	0.272	7.87	164.3	1.13	617	400	7.27	spc test #1 @ 0809
1030	12.36	0.271	7.92	154.9	0.64	461	400	7.25	off 0829, surge 0832
1035	12.32	0.271	7.97	147.3	0.45	411	400	7.23	purge & spc T #2
1040	12.33	0.272	8.04	138.2	0.37	320	400	7.21	@ 0845 off 0910
1045	12.24	0.271	8.09	130.1	0.28	344	400	7.19	surge @ 0915
1050	12.12	0.270	8.11	126.2	0.26	316	400	7.17	purge & spc T #3
1055	12.05	0.270	8.12	123.7	0.24	312	400	7.16	@ 0930. off 0955
	stable, turbidity with ~ 10%								low flow beg in @
									1008. DTW: 7.35
									spc test #4 @ 1100
									off

Personnel Initials: JRR

90% recharge: 35.41 x .9 = 31.87
42.20 - 31.87 = 10.33 (DTW)

MONITORING WELL DEVELOPMENT LOG

Credere Associates. LLC. 776 Main Street. Westbrook. ME 04092

PROJECT NAME: Former Salvage Yard, Former Dow Military Airfield DATE: 7-19-2022

PROJECT NUMBER: Credere No. 18001468, FUDS No. D01ME000407

LOCATION ID: SY OBMW-5

SPECIFIC CAPACITY TESTING INFORMATION

Historical Stabilized Flow Rate/Date 400 mL/min 8-13-2020, 12-2-2020

Test 1

Start Time 0809
End Time 0829
Flow Rate ~1.33 gpm (averaged)
Drawdown 1.57'
Calculated Specific Capacity 0.847

Test 2

Start Time 0845
End Time 0910
Flow Rate ~1.33 gpm (averaged)
Drawdown 1.90'
Calculated Specific Capacity 0.7

Test 3

Start Time 0930
End Time 0955
Flow Rate ~1.3 gpm
Drawdown 1.58'
Calculated Specific Capacity 0.823

Test 4 - new whale pump

Start Time 1100
End Time 1140
Flow Rate 1.66 gpm
Drawdown 2.42'
Calculated Specific Capacity 0.687

Notes

All tests done w/ whale pump
possibly better stability & recharge from rain last night?
seems clearer/clearer too (less clay/sediment)

- large margin of error estimating flow rate in gpm
- aquifer getting more stressed over time purging?

DETAILED STABALIZATION CRITERIA

pH: ±0.1 standard units
Temperature: ± 3%
ORP: ±10 mV
DO: ±0.5 mg/L for values less than 2 mg/L or ±10% for values greater than 2 mg/L
Specific conductance: ± 3%
Turbidity: <10 NTU

PURGE DATA

[ ] 0.04 GAL/FT (1" DIAM.)
[X] 0.16 GAL/FT (2" DIAM.)
[ ] 0.65 GAL/FT (4" DIAM.)
[ ] 1.47 GAL/FT (6" DIAM.)

x length of water column = 35.41

Total Well Volume: 5.67 gal

Total Purge Volume: 57 gal

# of well volumes: 10

FINALWATER DEPTH VIA TRANSDUCER (ft): —

FINAL WATER DEPTH VIA WLM (ft): —

ESTIMATED SEDIMENT THICKNESS IN WELL FOLLOWING DEVELOPMENT: —

COMMENTS

T1	T2 ~7.3 @start	T3 ~7.15 @start	T4 ~7.10 @start
1.66 gpm / 8.15 @5min	1.4gpm / 8.40 @5min	1.4gpm / 8.57 @5min	1.66gpm / 8.28 @5min
1.33gpm / 8.31 @10min	1.4gpm / 8.62 @10min	1.4gpm / 8.47 @10min	1.66gpm / 8.72 @10min
1.33gpm / 8.36 @15min	1.4gpm / 8.62 @15min	~1 gpm / 8.24 @15min	1.66gpm / 8.89 @15min
1.1gpm / 8.56 @20min	1.25gpm / 8.69 @20min	1.5gpm / 8.37 @20min	1.66gpm / 9.02 @20min
	1.25gpm / 8.69 @25min	1.25gpm / 8.37 @25min	1.66gpm / 9.10 @25min
			1.66gpm / 9.18 @30min
			1.66 / 9.20 @35min
			1.66 / 9.21 @40min

pulled & restarted whale pump
issues staying @ constant flow rate (old pump?)

PERSONNEL INFORMATION

Name (printed): Lauren Kaijs

Signature:

MONITORING WELL DEVELOPMENT LOG

Credere Associates, LLC. 776 Main Street. Westbrook, ME 04092

PROJECT NAME: Former Salvage Yard, Former Dow Military Airfield DATE: 7-19-2022

PROJECT NUMBER: Credere No. 18001468, FUDS No. D01ME000407

LOCATION ID: SY-OBMW6

LOCATION ACTIVITY
START: 1200
END: 1700

WELL DATA:

WELL DEPTH (ft): 37.16 [X] MEASURED [ ] HISTORICAL

WATER DEPTH VIA WLM (ft): 3.84'

WATER DEPTH VIA TRANSDUCER (ft): —

[X] TOP OF WELL
[ ] TOP OF CASING
[ ] FROM GRADE
[ ] _____

WATER LEVEL EQUIPMENT USED:
[X] ELECT. COND. PROBE
[ ] FLOAT ACTIVATED PROBE
[X] PRESSURE TRANSDUCER
[ ] _____

ESTIMATED SEDIMENT THICKNESS IN WELL PRIOR TO DEVELOPMENT: trace (felt muddy, little difference in soundings)

DEPTH OF PUMP INTAKE (ft): ~30' STICK UP HEIGHT: 3.11'

WELL MATERIAL:	WELL LOCKED:	PROTECTIVE CASING SECURE:	GRAVEL PAD CONDITION:		
[X] PVC	[X] YES	[X] YES	[X] GOOD	[ ] POOR	AMBIENT AIR PID: 0.082 PPM
[ ] SS	[ ] NO	[ ] NO	[ ] FAIR		WELL MOUTH PID: 0.186 PPM
[ ] _____					

EQUIPMENT DATA:

Water Quality Instrument Sonde Model/SN: YSI 4L29

Water Quality Instrument Handset Model/SN: YSI 15A101441

Turbidity Meter Model/SN: Hach 2100Q / 20120D002142

Transducer Model/SN: Solinst NA

[X]	Peristaltic Pump	[ ]	New HDPE
[ ]	Submerisble	[X]	New Vinyl Tubing
[ ]	Bladder pump	[X]	Surge Blocks
[ ]	Hand pump	[X]	whale pump
[X]	Dedicated HDPE	[ ]	

GROUNDWATER PARAMETER DATA:

TIME	TEMP (°C)	SP. COND. (mS/cm)	pH	ORP (mV)	D.O. (mg/l)	TURBID. (NTU)	Flow Rate (gal/min)	DTW via WLM (ft)	Comments (indicate surging, transducer reading, etc.)
1435	12.19	0.286	8.61	45.1	3.25	967	400	5.17	combined purge & sp first
1440	12.01	0.286	8.48	41.5	1.60	777	400	5.08	@ 1208, off 1248
1445	11.84	0.285	8.39	34.1	0.80	415	400	4.95	surge @ 1250
1450	11.77	0.285	8.39	32.5	0.60	382	400	4.87	#2 purge & spCT
1455	11.67	0.285	8.40	31.0	0.49	303	400	4.76	@ 1255, off 1320
1500	11.71	0.285	8.40	30.6	0.37	230	400	4.67	surge @ 1325
1505	11.64	0.285	8.39	29.6	0.37	180	400	4.60	#3 purge/spCT
1510	11.71	0.285	8.37	29.0	0.37	244	400	4.53	@ 1340 off 1405
1515	11.73	0.285	8.40	28.6	0.35	262	400	4.50	low flow @ 1430
1520	11.67	0.285	8.39	28.5	0.33	245	400	4.47	DTW: 5.32'

Personnel Initials: KAB

MONITORING WELL DEVELOPMENT LOG

Credere Associates. LLC. 776 Main Street. Westbrook. ME 04092

PROJECT NAME: Former Salvage Yard, Former Dow Military Airfield DATE: 7-19-2022

PROJECT NUMBER: Credere No. 18001468, FUDS No. D01ME000407

LOCATION ID: SY-OBMW-6

SPECIFIC CAPACITY TESTING INFORMATION

Historical Stabilized Flow Rate/Date 400 mL/min / 12-2-2020

Test 1
- Start Time 1208
- End Time 1248
- Flow Rate 1.25 gpm
- Drawdown 6.17'
- Calculated Specific Capacity 0.232

Test 2
- Start Time 1255
- End Time 1320
- Flow Rate 1.18
- Drawdown 5.76'
- Calculated Specific Capacity 0.205

-adjusted flow rate @ 10 min & 15 min

Test 3
- Start Time 1340
- End Time 1405
- Flow Rate 1.11 gpm
- Drawdown 4.54'
- Calculated Specific Capacity 0.214

-adjusted flow rate @ 5 min

Test 4
- Start Time 1522
- End Time 1642
- Flow Rate 1.66 gpm
- Drawdown 8.07'
- Calculated Specific Capacity 0.206

Notes

All tests w/ whale pump
T1 -switched to flow regulator & determined stability @ ~1.25 gpm & DTW = 10.31'
for calculated SpC, used lowest flow rate & @ stabilization (did not average

T4 cont.
11.91 @ 75 min
11.91 @ 80 min

DETAILED STABALIZATION CRITERIA

pH: ±0.1 standard units
Temperature: ± 3%
ORP: ±10 mV
DO: ±0.5 mg/L for values less than 2 mg/L or ±10% for values greater than 2 mg/L
Specific conductance: ± 3%
Turbidity: <10 NTU

PURGE DATA

[ ] 0.04 GAL/FT (1" DIAM.)
[x] 0.16 GAL/FT (2" DIAM.)
[ ] 0.65 GAL/FT (4" DIAM.)
[ ] 1.47 GAL/FT (6" DIAM.)

x length of water column = 33.32

Total Well Volume: 5.33 gal

Total Purge Volume: 54 gal

# of well volumes: 10

FINALWATER DEPTH VIA TRANSDUCER (ft): —

FINAL WATER DEPTH VIA WLM (ft): —

ESTIMATED SEDIMENT THICKNESS IN WELL FOLLOWING DEVELOPMENT: —

COMMENTS T1	T2 ~6' @ start	T3 ~5' @ start	T4 ~4.2' @ start
1.5 gpm / 8.15 @ 5 min	1.33 / 9.17 @ 5 min	1.25 gpm / 8.04 @ 5 min	1.66 gpm / 8.70 @ 5 min
1.5 gpm / 9.13 @ 10 min	1.25 / 9.35 @ 10 min	1.11 gpm / 8.15 @ 10 min	9.15 @ 10 min
1.5 gpm / 9.70 @ 15 min	1.18 / 9.54 @ 15 min	1.11 gpm / 8.36 @ 15 min	10.09 @ 15 min
1.5 gpm / 9.89 @ 20 min	1.18 / 9.60 @ 20 min	1.11 gpm / 8.38 @ 20 min	10.40 @ 20 min
1.5 gpm / 10.13 @ 25 min	1.18 / 9.60 @ 25 min	1.11 gpm / 8.38 @ 25 min	10.64 @ 25 min
1.4 gpm / 10.43 @ 30 min			10.95 @ 30 min
1.25 gpm / 10.31 @ 40 min			11.17 @ 35 min
			11.31 @ 40 min
			11.45 @ 45 min
			11.55 @ 50 min
			11.59 @ 55 min
			11.70 @ 60 min
			11.80 @ 65 min
			11.87 @ 70 min

PERSONNEL INFORMATION

Name (printed): Lauren Kaiz Signature:

DTB = 37.16
DTW = 3.84

90% recharge: 33.32 × .9 = 29.99
37.16 − 29.99 = 7.17

MONITORING WELL DEVELOPMENT LOG

Credere Associates, LLC, 776 Main Street, Westbrook, ME 04092

PROJECT NAME: Former Salvage Yard, Former Dow Military Airfield DATE: 6.21.22

PROJECT NUMBER: Credere No. 18001468, FUDS No. D01ME000407

LOCATION ID: SY-08MW7

LOCATION ACTIVITY START: 1000 END: 1300

WELL DATA:

WELL DEPTH (ft): 20.14 [X] MEASURED [ ] HISTORICAL [X] TOP OF WELL [ ] TOP OF CASING [ ] FROM GRADE [ ] ____

WATER LEVEL EQUIPMENT USED: [X] ELECT. COND. PROBE [ ] FLOAT ACTIVATED PROBE [X] PRESSURE TRANSDUCER [ ] ____

WATER DEPTH VIA WLM (ft): 3.82

WATER DEPTH VIA TRANSDUCER (ft): NA

PVC to grade - 0.68'

ESTIMATED SEDIMENT THICKNESS IN WELL PRIOR TO DEVELOPMENT: ~2 Ft

DEPTH OF PUMP INTAKE (ft): ~15' STICK UP HEIGHT: —

WELL MATERIAL:	WELL LOCKED:	PROTECTIVE CASING SECURE:	GRAVEL PAD CONDITION:	AMBIENT AIR PID:
[X] PVC	[ ] YES	[ ] YES	NA	0.025 PPM
[ ] SS	[X] NO	[ ] NO	[ ] GOOD [ ] POOR	
[ ] ____			[ ] FAIR	WELL MOUTH PID: 0.000 PPM

EQUIPMENT DATA:

Water Quality Instrument Sonde Model/SN: YSI Quatro / 22A100144

Water Quality Instrument Handset Model/SN: YSI ProQ / 22B101958

Turbidity Meter Model/SN: Hach 2100Q / 20120D002147

Transducer Model/SN: Solinst —

[X]	Peristaltic Pump	[X]	New HDPE
[X]	Submerisble	[X]	New Vinyl Tubing
[X]	Bladder pump	[X]	Surge Blocks
[ ]	Hand pump	[ ]	____
[ ]	Dedicated HDPE	[ ]	____

GROUNDWATER PARAMETER DATA:

TIME	TEMP (°C)	SP. COND. (mS/cm)	pH	ORP (mV)	D.O. (mg/l)	TURBID. (NTU)	Flow Rate (gal/min)	DTW via WLM (ft)	Comments (indicate surging, transducer reading, etc.)
0840							1	9.30	Purge via whale
0850						5.59	1	11.40	1GPM 1545-
0915						77.0	1	8.70	1615, +rans. pulled
1030						10.7	1	6.70	at ~1605
1125	10.5	3.239	7.48	155.9	0.23	+++	400	5.36	Pump on 0840
1195	9.9	3.235	7.66	-45.8	0.07	173	400	4.57	WL 3.59
1210	10.0	3.291	8.33	-66.3	0.12	54.4	400	4.40	-water running
1240	10.1	3.320	7.59	-65.4	0.04	19.2	400	4.35	very clear
1245	10.2	3.326	7.51	-65.8	-0.03	19.1	400	4.30	0855-purge
1250	10.1	3.322	7.58	-66.6	-0.03	17.6	400	4.30	5 of surge
1255	10.2	3.324	7.41	-65.2	-0.04	16.3	400	4.30	0900-pump on,
									very turbid, much
									clear within 5 min
									0920-pump off,
									recharge for SPC test
									0950-surge
									0955-pump on,
									very turbid
									pump off 1030
									recharge for SPC test
									1105-whale pump on,
									additional purge due to
									high turbidity

Personnel Initials: SO

1120 pump off

1255-pump off, recharge for SPC test

Water column 20.14 - 3.59 = 16.55 x .9 = 14.9

Recharge target 20.14 ± 14.9 = 5.24' bTOC

MONITORING WELL DEVELOPMENT LOG

Credere Associates. LLC. 776 Main Street. Westbrook. ME 04092

PROJECT NAME: Former Salvage Yard, Former Dow Military Airfield DATE: 6/21/22

PROJECT NUMBER: Credere No. 18001468, FUDS No. D01ME000407

LOCATION ID: SY-08MW7

SPECIFIC CAPACITY TESTING INFORMATION

Historical Stabilized Flow Rate/Date 400 ml/min, DEC 2020

Test 1

Start Time 1005
End Time 1025
Flow Rate 260 ml/min / 0.07
Drawdown 3.82 - 4.52 = 0.70
Calculated Specific Capacity 0.10 gpm/ft

Test 2

Start Time 935 / ~~3.96~~ 3.82
End Time 0950
Flow Rate 400 / 0.106
Drawdown 0.96 / 0.6
Calculated Specific Capacity 0.23 / 0.177

Test 3

Start Time 1055 / ~~4.40~~ 3.82
End Time 1105
Flow Rate 500 / 0.132 No drawdown at max pump rate
Drawdown — / 0.58
Calculated Specific Capacity — / 0.228

Test 4

Start Time 1310 / ~~3.76~~ 3.82
End Time 1325
Flow Rate 400 / .106
Drawdown 0.51 / 0.45
Calculated Specific Capacity 0.208 / 0.236

Notes

T4 - 500ml - 4.19 @ 3min
-4.24 @ 5min
400 ml -4.27 @ 10min
-4.27 @ 15min
↳ pump slowing

DETAILED STABALIZATION CRITERIA

pH: ±0.1 standard units
Temperature: ± 3%
ORP: ±10 mV
DO: ±0.5 mg/L for values less than 2 mg/L or ±10% for values greater than 2 mg/L
Specific conductance: ± 3%
Turbidity: <10 NTU

PURGE DATA

[ ] 0.04 GAL/FT (1" DIAM.)
[X] 0.16 GAL/FT (2" DIAM.)
[ ] 0.65 GAL/FT (4" DIAM.)
[ ] 1.47 GAL/FT (6" DIAM.)

x length of water column = 16.32

Total Well Volume: 2.61

Total Purge Volume: ~125

# of well volumes: ~48

3 well Volume = 7.83

DTB = 20.64

FINALWATER DEPTH VIA TRANSDUCER (ft): NA

FINAL WATER DEPTH VIA WLM (ft): NA

ESTIMATED SEDIMENT THICKNESS IN WELL FOLLOWING DEVELOPMENT: ~1.5'

COMMENTS

T1 - 280ml - 4.40 @ 5min
220 ml - 4.40 @ 10min
260 ml - 4.42 @ 15min
300 ml - 4.52 @ 20min

T2 - 400ml - 4.42 @ 5min
-4.42 @ 10min
-4.42 @ 15min

T3 - 500ml - 4.40 @ 5min
-4.40 @ 10min

PERSONNEL INFORMATION

Name (printed): Sean Gannon Signature:

MONITORING WELL DEVELOPMENT LOG

Credere Associates, LLC. 776 Main Street. Westbrook. ME 04092

PROJECT NAME: Former Salvage Yard, Former Dow Military Airfield

DATE: 6-23-2022

PROJECT NUMBER: Credere No. 18001468, FUDS No. D01ME000407

LOCATION ID: SY-08MW8

LOCATION ACTIVITY
START: 1300
END: 1730

WELL DATA:

WELL DEPTH (ft): 31.62 (final: 31.90) [X] MEASURED [ ] HISTORICAL

[X] TOP OF WELL [ ] TOP OF CASING [ ] FROM GRADE [ ] _____

WATER LEVEL EQUIPMENT USED:
[X] ELECT. COND. PROBE
[ ] FLOAT ACTIVATED PROBE
[X] PRESSURE TRANSDUCER
[ ] _____

WATER DEPTH VIA WLM (ft): 10.23

WATER DEPTH VIA TRANSDUCER (ft): NA

ESTIMATED SEDIMENT THICKNESS IN WELL PRIOR TO DEVELOPMENT: trace (feels muddy, little difference in soundings)

DEPTH OF PUMP INTAKE (ft): DTB STICK UP HEIGHT: 2.97'

WELL MATERIAL:	WELL LOCKED:	PROTECTIVE CASING SECURE:	GRAVEL PAD CONDITION:		
[X] PVC	[X] YES	[X] YES	[X] GOOD	[ ] POOR	AMBIENT AIR PID: 0.041 PPM
[ ] SS	[ ] NO	[ ] NO	[ ] FAIR		WELL MOUTH PID: 0.044 PPM
[ ] _____					

EQUIPMENT DATA:

Water Quality Instrument Sonde Model/SN: YSI 05F2673AA

Water Quality Instrument Handset Model/SN: YSI 05G1108AD

Turbidity Meter Model/SN: Hach 2100Q / 20120D002142

Transducer Model/SN: Solinst N/A

[X]	Peristaltic Pump	[X]	New HDPE
[X]	Submerisble	[X]	New Vinyl Tubing
[ ]	Bladder pump	[ ]	Surge Blocks
[ ]	Hand pump	[X]	whale pump
[ ]	Dedicated HDPE	[ ]	TEFLON

GROUNDWATER PARAMETER DATA:

TIME	TEMP (°C)	SP. COND. (mS/cm)	pH	ORP (mV)	D.O. (mg/l)	TURBID. (NTU)	Flow Rate (gal/min)	DTW via WLM (ft)	Comments (indicate surging, transducer reading, etc.)
	no parameters	after		first purge - unanticipated			change		whale pump on 1345,
		in development procedure							well dry @ 1355
									(1.25 GPM)
1507	12.32	0.528	7.00	53.9	-0.07	overrange	1.25	—	whale pump on 1502
									well dry @ 1510
									recharge to screen
									@ 1531
									(DTW: 19.62') ← surge @ 1533
1545	10.40	0.444	7.00	44.0	-2.07	overrange	1.25 gal/min	—	whale pump on 1540
									DTW @ start: 14.49'
1628	13.03	0.419	7.31	20.1	-0.52	337	300 ml/min	12.20	well dry @ 1547
1636	10.87	0.413	7.07	31.4	-0.35	180	300 ml/m	12.71	recharge to screen
1640	10.46	0.409	7.09	31.0	-0.21	125	240	12.79	@ 1609
1645	10.38	0.403	7.06	39.1	-0.20	102	220	12.75	~~surge @ 1622~~
1650	10.06	0.399	7.03	45.3	-0.18	88.7	240	12.70	recharge to >90%
1655	10.19	0.392	7.06	51.8	-0.17	79.7	240	12.76	& low flow parameters
1700	10.39	0.393	7.05	50.1	-0.15	82.5	240	12.78	@ 1628
1705	10.25	0.388	7.03	52.7	-0.14	85.0	240	12.81	
1710	10.44	0.392	7.00	50.7	-0.15	80.4	240	12.81	
1715	10.36	0.394	7.03	49.0	-0.14	83.3	240	12.81	

Personnel Initials: LAK

MONITORING WELL DEVELOPMENT LOG

Credere Associates. LLC. 776 Main Street. Westbrook. ME 04092

Community Economy Environment

PROJECT NAME: Former Salvage Yard, Former Dow Military Airfield DATE: 6-23-22

PROJECT NUMBER: Credere No. 18001468, FUDS No. D01ME000407

LOCATION ID: SY-OBMW-8

SPECIFIC CAPACITY TESTING INFORMATION

Historical Stabilized Flow Rate/Date 320 mL/min 8.12.2020 / 240 mL/min / 12.1.2020

Test 1

Start Time 1308 / 10.23
End Time 1340 / 13.09
Flow Rate 400 / .106
Drawdown 2.86
Calculated Specific Capacity 0.037

Test 2

Start Time 1502 / 10.90
End Time 1510 / 31.62
Flow Rate 1.25 gal/min
Drawdown 20.72'
Calculated Specific Capacity 0.0603

Test 3

Start Time 1540 / 14.49'
End Time 1547 / 31.62
Flow Rate 1.25 gal/min
Drawdown 17.13
Calculated Specific Capacity 0.073

Test 4

Start Time 1628
End Time 1715
Flow Rate 240 mL/min / 0.064
Drawdown 0.61
Calculated Specific Capacity 0.104

Notes

T2 & T3 w/ whale pump, purged dry
T4 w/ parameters / low flow

DETAILED STABALIZATION CRITERIA

pH: ±0.1 standard units
Temperature: ± 3%
ORP: ±10 mV
DO: ±0.5 mg/L for values less than 2 mg/L or ±10% for values greater than 2 mg/L
Specific conductance: ± 3%
Turbidity: <10 NTU

PURGE DATA

[ ] 0.04 GAL/FT (1" DIAM.)
[x] 0.16 GAL/FT (2" DIAM.)
[ ] 0.65 GAL/FT (4" DIAM.)
[ ] 1.47 GAL/FT (6" DIAM.)

x length of water column = 21.67

Total Well Volume: 3.47 gal

Total Purge Volume: 10.5 gal

# of well volumes: 3

FINALWATER DEPTH VIA TRANSDUCER (ft): NA

FINAL WATER DEPTH VIA WLM (ft): NA

ESTIMATED SEDIMENT THICKNESS IN WELL FOLLOWING DEVELOPMENT: 0.28

COMMENTS

developed via purging dry 4 times & parameters w/ cat cup
1427 : DTW ~~1450~~ surge @ ~~1430~~ 1450 taken @ end
1450 : 10.90' = DTW
T1 400 mL / 12.11 @ 5 mins
400 mL / 12.63 @ 10 mins
400 mL / 12.70 @ 15 mins
400 mL / 12.90 @ 20 mins
400 mL / 12.97 @ 25 mins
360 ~~400~~ mL / 13.09 @ 30 mins

PERSONNEL INFORMATION

Name (printed): Lauren Kaija Signature: Lauren Kaija

MONITORING WELL DEVELOPMENT LOG

Credere Associates. LLC. 776 Main Street. Westbrook. ME 04092

PROJECT NAME: Former Salvage Yard, Former Dow Military Airfield

DATE: 6/23/2023

PROJECT NUMBER: Credere No. 18001468, FUDS No. D01ME000407

LOCATION ACTIVITY
START: 0806
END: 1800

LOCATION ID: SY-OBMW 9

WELL DATA:

WELL DEPTH (ft): 37.88 [X] MEASURED [ ] HISTORICAL

WATER DEPTH VIA WLM (ft): 9.76

WATER DEPTH VIA TRANSDUCER (ft): NA

[X] TOP OF WELL [ ] TOP OF CASING [ ] FROM GRADE [ ] _____

WATER LEVEL EQUIPMENT USED:
[X] ELECT. COND. PROBE
[ ] FLOAT ACTIVATED PROBE
[X] PRESSURE TRANSDUCER
[ ] _____

ESTIMATED SEDIMENT THICKNESS IN WELL PRIOR TO DEVELOPMENT: trace (muddy, little diff. in Sounding 5)

DEPTH OF PUMP INTAKE (ft): ~30' STICK UP HEIGHT: 2.39'

WELL MATERIAL:	WELL LOCKED:	PROTECTIVE CASING SECURE:	GRAVEL PAD CONDITION:		AMBIENT AIR PID:	WELL MOUTH PID:
[X] PVC	[X] YES	[X] YES	NA		0.045 PPM	0.065 PPM
[ ] SS	[ ] NO	[ ] NO	[ ] GOOD	[ ] POOR		
[ ] _____			[ ] FAIR			

EQUIPMENT DATA:

Water Quality Instrument Sonde Model/SN: YSI QUATRO 21M100503

Water Quality Instrument Handset Model/SN: YSI Pro1 17E100949

Turbidity Meter Model/SN: Hach 2100Q / 16030C048465

Transducer Model/SN: Solinst 3001 LT20/

[X]	Peristaltic Pump	[X]	New HDPE
[X]	Submerisble	[X]	New Vinyl Tubing
[ ]	Bladder pump	[X]	Surge Blocks
[ ]	Hand pump	[ ]	
[X]	Dedicated HDPE	[ ]	TEF. LDPE

GROUNDWATER PARAMETER DATA:

TIME	TEMP (°C)	SP. COND. (mS/cm)	pH	ORP (mV)	D.O. (mg/l)	TURBID. (NTU)	Flow Rate (gal/min)	DTW via WLM (ft)	Comments (indicate surging, transducer reading, etc.)
1130	/	/	/	/	/	/	2.6PM	/	COMPLETE QS1 / BEGIN PURGE 1
1144	↓	↓	↓	↓	↓	↓	~2.6Pm	14.1	PURGE 1 - 18 GALLONS
1210	↓	↓	↓	↓	↓	↓	↓	12.23	COMPLETE SURGE (1)
1250	↓	↓	↓	↓	↓	↓	200 mL/m	11.01	BEGIN QS2
1320	↓	↓	↓	↓	↓	↓	2.6Pm	↓	BEGIN PURGE (2) WELL IS
1355	/	/	/	/	/	/	/	↓	BEGIN SURGE (2)
1400	/	/	/	/	/	/	/	20.40	COMPLETE SURGE (2)
1445	↓	/	/	/	/	/	/	11.70	QS3 TEST
1515	/	/	/	/	/	/	2.6 PM	/	BEGIN PURGE (3) WELL
1550	/	/	/	/	/	/	2.6Pm	21.7	COMPLETE PURGE (3)
1630	12.6	1.142	8.03	144.6	4.02	239	200 mL/m	12.30	BEGIN UNPLUG
1635	11.7	1.160	7.75	147.0	1.03	172	200 mL/m	12.51	
1640	11.5	1.149	7.68	150.3	0.76	142	200 mL/m	12.44	/
1645	11.8	1.146	7.68	155.4	0.78	142	200 mL	12.40	
1650	/	/	/	/	/	/	180 mL	/	REPLACE BATTERY - RPM
1655	10.8	1.136	7.69	166.3	1.04	139	200	12.38	
1700	11.0	1.136	7.74	172.3	1.04	128	200	12.30	/
1705	11.3	1.130	7.76	175.4	1.14	115	200	12.18	
1710	11.2	1.132	7.74	179.5	1.12	92.3	200	12.11	(WELL IS RECHARGING)
1715	10.9	1.134	7.72	181.3	1.21	132	200	12.09	/
1720	/	/	/	/	/	/	320	11.55	BEGIN QS4
1740	/	/	/	/	/	/	320	12.28	COMPLETE QS4

Personnel Initials: (JD)

MONITORING WELL DEVELOPMENT LOG

Credere Associates. LLC. 776 Main Street. Westbrook. ME 04092

PROJECT NAME: Former Salvage Yard, Former Dow Military Airfield DATE: 6/23/2022

PROJECT NUMBER: Credere No. 18001468, FUDS No. D01ME000407

LOCATION ID: SY-OBMW9

SPECIFIC CAPACITY TESTING INFORMATION

Historical Stabilized Flow Rate/Date 200 ml/min / 8/12/2020

Test 1

Start Time 1040
End Time 1100
Flow Rate 0.05283 gpm
Drawdown 1.14' (10.9-9.76)
Calculated Specific Capacity 0.04634 gpm/ft

Test 2

Start Time 1250
End Time 135
Flow Rate 0.05283 gpm
Drawdown 1.11 (11.01-9.9)
Calculated Specific Capacity 0.04759 gpm/ft

Test 3

Start Time 1445
End Time 1510
Flow Rate 0.05283 gpm
Drawdown 0.22 (11.92-11.70)
Calculated Specific Capacity 0.2401 gpm/ft

Test 4

Start Time 1720
End Time 1740
Flow Rate 0.08453 gpm
Drawdown 0.73 (12.28-11.55
Calculated Specific Capacity 0.1158 gpm/ft

Notes

90% QS1 RECHARGE = DTW 9.9' MPE
TEST 3 HAD SLOW ASYMPTOTIC RECHARGE - DID
NOT MAKE IT TO STATIC WITHIN 0.75HR.
TEST 4 HAD SLOW ASTP RECHARGE; - INCREASE
PURGE RATE TO OVERCOME LINEAR COMPONENT. - DOESN'T MAKE SENSE

DETAILED STABALIZATION CRITERIA

pH: ±0.1 standard units
Temperature: ± 3%
ORP: ±10 mV
DO: ±0.5 mg/L for values less than 2 mg/L or ±10% for values greater than 2 mg/L
Specific conductance: ± 3%
Turbidity: <10 NTU

PURGE DATA

[ ] 0.04 GAL/FT (1" DIAM.)
[x] 0.16 GAL/FT (2" DIAM.)
[ ] 0.65 GAL/FT (4" DIAM.)
[ ] 1.47 GAL/FT (6" DIAM.)

x length of water column = 28.12

Total Well Volume: 4.5

Total Purge Volume: 92

# of well volumes: 20

FINALWATER DEPTH VIA TRANSDUCER (ft): NA

FINAL WATER DEPTH VIA WLM (ft): 12.28

ESTIMATED SEDIMENT THICKNESS IN WELL FOLLOWING DEVELOPMENT: <0.1 (TRACE)

COMMENTS QS1 = 1 GALLON PURGE(1) = 18 GALLONS ; QS2 = 1 GALLON ; PURGE(2) = 35 GALLONS ; QS3 - 1 GALLON ; PURGE 3 = 35 GALLONS. QS4 = 1 gallon. SLOW RECHARGE ON TESTS QS3/4 TO 90% OF ORIGINAL STATIC (9.9') WAS SLOW GOING ICM SUGGESTS PERFORMING QS5 (FINAL) AT A LATER DATE TO CHARACTERIZE WELL MORE COMPLETELY; OVERALL SIGNIFICANT INCREASE IN GW QUALITY (↓NTUs) THROUGH DEVELOPMENT

PERSONNEL INFORMATION

Name (printed): IAN DESJARLAIS Signature:

MONITORING WELL DEVELOPMENT LOG

Credere Associates, LLC. 776 Main Street. Westbrook. ME 04092

PROJECT NAME: Former Salvage Yard, Former Dow Military Airfield DATE: 6.21.22

PROJECT NUMBER: Credere No. 18001468, FUDS No. D01ME000407

LOCATION ID: SY-OBMW10

LOCATION ACTIVITY
START: 0830
END:

WELL DATA:

WELL DEPTH (ft): 29.74 [X] MEASURED [ ] HISTORICAL

WATER DEPTH VIA WLM (ft): 4.75

WATER DEPTH VIA TRANSDUCER (ft): NA

[X] TOP OF WELL
[ ] TOP OF CASING
[ ] FROM GRADE
[ ] _____

WATER LEVEL EQUIPMENT USED:
[X] ELECT. COND. PROBE
[ ] FLOAT ACTIVATED PROBE
[X] PRESSURE TRANSDUCER
[ ] _____

ESTIMATED SEDIMENT THICKNESS IN WELL PRIOR TO DEVELOPMENT: trace ~ 0.05

DEPTH OF PUMP INTAKE (ft): ~22.7 STICK UP HEIGHT: —

WELL MATERIAL:	WELL LOCKED:	PROTECTIVE CASING SECURE:	GRAVEL PAD CONDITION:	AMBIENT AIR PID:	WELL MOUTH PID:
[X] PVC	[ ] YES	[X] YES	NA	0.034 PPM	0.010 PPM
[ ] SS	[X] NO	[ ] NO	[ ] GOOD [ ] POOR		
[ ] _____			[ ] FAIR		

EQUIPMENT DATA:

Water Quality Instrument Sonde Model/SN: YSI Quatro / 22A100144

Water Quality Instrument Handset Model/SN: YSI Pro Q / 22B101958

Turbidity Meter Model/SN: Hach 2100Q / 20120000 2142

Transducer Model/SN: Solinst —

[X]	Peristaltic Pump	[X]	New HDPE
[X]	Submerisble	[X]	New Vinyl Tubing
[ ]	Bladder pump	[X]	Surge Blocks
[ ]	Hand pump	[X]	Ded. tef-lined HDPE for cap. test
[ ]	Dedicated HDPE	[ ]	

GROUNDWATER PARAMETER DATA:

TIME	TEMP (°C)	SP. COND. (mS/cm)	pH	ORP (mV)	D.O. (mg/l)	TURBID. (NTU)	Flow Rate (gal/min)	DTW via WLM (ft)	Comments (indicate surging, transducer reading, etc.)
1115	10.6	1.269	7.97	101.3	0.59	926	1	24.55	Pump on 1110
1145	10.5	1.706	7.81	-71.1	4.68	460	1	25.71	
1210	10.6	1.690	7.77	-43.0	4.23	+++	1	18.1	Surge - turb
1225	10.4	1.705	7.79	-72.9	2.29	+++	1	24.35	increase
1335	10.7	1.694	7.83	-28.9	3.27	+++	1	21.75	1230 - pause for
1350	10.5	1.719	7.77	-72.2	1.21	464	1	24.80	capacity test 330
1410	10.6	1.696	7.79	-51.0	2.51	+++	1	24.40	surge at 1325
1500	10.7	1.715	7.86	-35.7	2.14	+++	1	20.52	- turb increase
1515	10.7	1.745	7.79	-66.5	0.90	621	1	27.60	surge at 1355
1555	10.8	1.761	7.76	-57.4	3.05	396	1	26.9	-1415 pause for
1640	10.8	1.753	7.76	-49.6	2.57	149	300 mL	9.96	capacity test
1645	10.5	1.777	7.76	-59.7	1.70	44.5	320	7.85	-1450 pump on
1655	10.4	1.768	7.77	-55.6	1.94	43.4	320	7.30	-1630 switch
1700	10.4	1.760	7.77	-55.7	1.91	38.8	320	7.04	to low flow
1705	10.4	1.756	7.78	-58.5	1.94	21.0	320	6.96	
1710	10.4	1.755	7.76	-58.2	1.90	31.4	320	7.00	

Personnel Initials: SG

MONITORING WELL DEVELOPMENT LOG

Credere Associates. LLC. 776 Main Street. Westbrook. ME 04092

PROJECT NAME: Former Salvage Yard, Former Dow Military Airfield DATE: 6/21/22

PROJECT NUMBER: Credere No. 18001468, FUDS No. D01ME000407

LOCATION ID: SY-08MW10

SPECIFIC CAPACITY TESTING INFORMATION

Historical Stabilized Flow Rate/Date 400mL/min, Dec 2020

Test 1
- Start Time 0840/4.75'
- End Time 0900
- Flow Rate 260ml/0.07gal
- Drawdown 0.77'
- Calculated Specific Capacity 0.09 gpm/Ft

Test 2
- Start Time 1258/5.44
- End Time 1318
- Flow Rate 260/0.07gal
- Drawdown 5.44 - 6.00
- Calculated Specific Capacity 0.125

Test 3
- Start Time 1432/6.20'
- End Time 1442
- Flow Rate 400/0.106
- Drawdown 0.66
- Calculated Specific Capacity 0.16

Test 4
- Start Time 1718/5.90
- End Time 1728
- Flow Rate 400/.106
- Drawdown 0.91
- Calculated Specific Capacity 0.116

Notes
T4 - 480ml/6.49@2min
400ml/6.75@4min
400/6.82@7min
360/6.82@9min
400/6.81@10min

DETAILED STABALIZATION CRITERIA

pH: ±0.1 standard units
Temperature: ± 3%
ORP: ±10 mV
DO: ±0.5 mg/L for values less than 2 mg/L or ±10% for values greater than 2 mg/L
Specific conductance: ± 3%
Turbidity: <10 NTU

PURGE DATA

[ ] 0.04 GAL/FT (1" DIAM.)
[X] 0.16 GAL/FT (2" DIAM.)
[ ] 0.65 GAL/FT (4" DIAM.)
[ ] 1.47 GAL/FT (6" DIAM.)

x length of water column = 24.99

Total Well Volume: 3.99

Total Purge Volume: ~230

# of well volumes: ~57.5

3 well volumes = ~12 gal

FINALWATER DEPTH VIA TRANSDUCER (ft): NA

FINAL WATER DEPTH VIA WLM (ft): 6.81

ESTIMATED SEDIMENT THICKNESS IN WELL FOLLOWING DEVELOPMENT: Tr<-None (29.72)

COMMENTS

T1 - 300ml/5.30 after 2min
5.50' @5min
200ml - 5.42@8min
- 5.41@12min
260ml - 5.48@15min
- 5.52@20min

T2 - 300ml/5.95'@2min
-240ml/6.10'@5min
-180ml/6.00@7min
-200/5.90@16min
-260/6.00@20min

T3 - 460ml/6.87@2min
400/6.88@6min
400/6.85@8min
400/6.86@10min

PERSONNEL INFORMATION

Name (printed): Sean Gannon Signature:

MONITORING WELL DEVELOPMENT LOG

Credere Associates. LLC. 776 Main Street. Westbrook. ME 04092

PROJECT NAME: Former Salvage Yard, Former Dow Military Airfield DATE: 6/23/22

PROJECT NUMBER: Credere No. 18001468, FUDS No. D01ME000407

LOCATION ID: SY-08MW11

LOCATION ACTIVITY START: 1110 END: 1600

WELL DATA:

WELL DEPTH (ft): 37.09 [X] MEASURED [ ] HISTORICAL

WATER DEPTH VIA WLM (ft): 14.47

WATER DEPTH VIA TRANSDUCER (ft): NA

[X] TOP OF WELL [ ] TOP OF CASING [ ] FROM GRADE [ ] _____

WATER LEVEL EQUIPMENT USED: [X] ELECT. COND. PROBE [ ] FLOAT ACTIVATED PROBE [X] PRESSURE TRANSDUCER [ ] _____

ESTIMATED SEDIMENT THICKNESS IN WELL PRIOR TO DEVELOPMENT: trace ~ 0.05

DEPTH OF PUMP INTAKE (ft): ~30 STICK UP HEIGHT: 3.25'

WELL MATERIAL:	WELL LOCKED:	PROTECTIVE CASING SECURE:	GRAVEL PAD CONDITION:	AMBIENT AIR PID:
[X] PVC	[X] YES	[X] YES	NA	0.062 PPM
[ ] SS	[ ] NO	[ ] NO	[ ] GOOD [ ] POOR	
[ ] _____			[ ] FAIR	WELL MOUTH PID: 0.338 PPM

EQUIPMENT DATA:

Water Quality Instrument Sonde Model/SN: YSI Quatro / 22A100144

Water Quality Instrument Handset Model/SN: YSI ProQuatro / 22B101958

Turbidity Meter Model/SN: Hach 2100Q / 17030C056467

Transducer Model/SN: Solinst

[X]	Peristaltic Pump	[X]	New HDPE		
[X]	Submerisble	[X]	New Vinyl Tubing		
[ ]	Bladder pump	[X]	Surge Blocks		
[ ]	Hand pump	[X]	Tef. LDPE		
[ ]	Dedicated HDPE	[ ]	_____		

GROUNDWATER PARAMETER DATA:

TIME	TEMP (°C)	SP. COND. (mS/cm)	pH	ORP (mV)	D.O. (mg/l)	TURBID. (NTU)	Flow Rate ~~(gal/min)~~ (mL/min)	DTW via WLM (ft)	Comments (indicate surging, transducer reading, etc.)
1410	9.9	1.651	7.65	111.1	1.88	32.7	400	15.07	1145 - begin submersible Purge,
1425	9.8	1.676	7.64	103.5	1.22	25.7	400	14.98	water treated in line
1450	9.7	1.679	7.63	78.6	0.76	33.9	400	14.92	through GAC bucket
1455	9.7	1.676	7.64	78.6	0.68	34.1	400	14.90	1210 - pump off, Surge
1500	9.7	1.677	7.63	78.1	0.65	34.3	400	14.90	1225 - pump on, SPC TEST
1505	9.7	1.677	7.63	63.1	0.66	34.0	400	14.90	1255 - pump off, Surge
1510	9.8	1.683	7.63	65.3	0.59	34.2	400	14.90	1315 - pump on, SPC Test,
1515	9.6	1.674	7.64	69.7	0.52	30.1	400	14.90	Flow rate slightly lower
									when first turned in line.
									water running more
									consistently silty
									than at other wells, brown
									where others are gray
									1350 - pump off,
									water visually clear -
									recharge for parameters
									1400 - low flow
									pump on - WL - 15.05
									1515 - turbidity
									above target, but stable
									1530 pump on
									1600 pump off

Personnel Initials: SO

MONITORING WELL DEVELOPMENT LOG

Credere Associates. LLC. 776 Main Street. Westbrook. ME 04092

PROJECT NAME: Former Salvage Yard, Former Dow Military Airfield DATE: 6/23/22

PROJECT NUMBER: Credere No. 18001468, FUDS No. D01ME000407

LOCATION ID: SY-OBMW11

SPECIFIC CAPACITY TESTING INFORMATION

Historical Stabilized Flow Rate/Date 440 ml, Dec/Aug 2020

Test 1
- Start Time 11/14 1122/14.47
- End Time 1140
- Flow Rate 400 ml/0.1069
- Drawdown 0.24
- Calculated Specific Capacity 0.44

Test 2
- Start Time 1225/14.75
- End Time 1255
- Flow Rate 1GPM
- Drawdown 2.72
- Calculated Specific Capacity 0.37

Test 3
- Start Time 1315/14.80
- End Time 1350
- Flow Rate ~0.63 GPM
- Drawdown 4.7
- Calculated Specific Capacity 0.134

Test 4
- Start Time 1530/14.74
- End Time 1555
- Flow Rate 0.83 gpm
- Drawdown 4.66
- Calculated Specific Capacity 0.178

Notes

T4 - 0.83gpm - 18.58@5min
" 19.01@10
" 19.25@15
" 19.33@20
19.40@25

37.09-14.47=22.62
37.09-20.36=16.73

DETAILED STABALIZATION CRITERIA

pH: ±0.1 standard units
Temperature: ± 3%
ORP: ±10 mV
DO: ±0.5 mg/L for values less than 2 mg/L or ±10% for values greater than 2 mg/L
Specific conductance: ± 3%
Turbidity: <10 NTU

PURGE DATA

[ ] 0.04 GAL/FT (1" DIAM.)
[X] 0.16 GAL/FT (2" DIAM.)
[ ] 0.65 GAL/FT (4" DIAM.)
[ ] 1.47 GAL/FT (6" DIAM.)

x length of water column = 22.62

Total Well Volume: 3.62

3 well volume = 10.86

Total Purge Volume: ~100

# of well volumes: ~28

FINALWATER DEPTH VIA TRANSDUCER (ft): NA

FINAL WATER DEPTH VIA WLM (ft): NA

ESTIMATED SEDIMENT THICKNESS IN WELL FOLLOWING DEVELOPMENT: Trace

COMMENTS	T2	T3 - 1GPM - 17.75@5min
T1 - 1GPM - 14.77@5min	17.11@6min	~0.63 18.30@10min
14.68@8min	15.50@10min	18.85@15min
14.68@10min	17.35@20min	19.05@~~25~~ 25
14.70@13min	17.47@25	19.45@~~25~~ 30
14.70@15min	17.47@30	19.50@~~30~~ 35
14.71@18min		

PERSONNEL INFORMATION

Name (printed): Sean Gannon Signature:

MONITORING WELL DEVELOPMENT LOG

Credere Associates, LLC. 776 Main Street. Westbrook. ME 04092

PROJECT NAME: Former Salvage Yard, Former Dow Military Airfield DATE: 6/22/22

PROJECT NUMBER: Credere No. 18001468, FUDS No. D01ME000407

LOCATION ID: SY-08MW12

LOCATION ACTIVITY START: 1215 END: 1400

WELL DATA:

WELL DEPTH (ft): 37.13 [~~/~~] MEASURED [ ] HISTORICAL

WATER DEPTH VIA WLM (ft): 11.35

WATER DEPTH VIA TRANSDUCER (ft): NA

[X] TOP OF WELL [ ] TOP OF CASING [ ] FROM GRADE [ ] _____

WATER LEVEL EQUIPMENT USED: [X] ELECT. COND. PROBE [ ] FLOAT ACTIVATED PROBE [X] PRESSURE TRANSDUCER [ ] _____

ESTIMATED SEDIMENT THICKNESS IN WELL PRIOR TO DEVELOPMENT: trace – 0.05

DEPTH OF PUMP INTAKE (ft): ~30' STICK UP HEIGHT: 3.3'

WELL MATERIAL:	WELL LOCKED:	PROTECTIVE CASING SECURE:	GRAVEL PAD CONDITION:	AMBIENT AIR PID: 0.039 PPM
[ ] PVC	[ ] YES	[ ] YES	[ ] GOOD [ ] POOR	
[ ] SS	[ ] NO	[ ] NO	[ ] FAIR	WELL MOUTH PID: 0.085 PPM
[ ] _____				

EQUIPMENT DATA:

Water Quality Instrument Sonde Model/SN: YSI Quatro / 22A100144

Water Quality Instrument Handset Model/SN: YSI ProQuatro / 22B101958

Turbidity Meter Model/SN: Hach 2100Q / 17030C056467

Transducer Model/SN: Solinst

[X]	Peristaltic Pump	[X]	New HDPE		
[X]	Submerisble	[X]	New Vinyl Tubing		
[ ]	Bladder pump	[X]	Surge Blocks		
[ ]	Hand pump	[X]	Tef. LDPE		
[ ]	Dedicated HDPE	[ ]			

GROUNDWATER PARAMETER DATA:

TIME	TEMP (°C)	SP. COND. (mS/cm)	pH	ORP (mV)	D.O. (mg/l)	TURBID. (NTU)	Flow Rate (~~gal~~/min)	DTW via WLM (ft) 34	Comments (indicate surging, transducer reading, etc.)
0905	9.4	0.502	7.88	209.1	0.93	—	400	11.~~22~~	pump on 1225,
0910	9.3	0.500	7.87	185.3	0.33	—	400	11.40	16PM - purge while
0920	9.3	0.499	7.87	98.4	0.05	29.4	400	11.44	working on other wells
0925	9.3	0.499	7.87	53.0	0.05	17.6	400	11.50	1345 - pump off, recharge
0930	9.3	0.499	7.89	14.9	0.05	12.5	400	11.81	for spc test, WL - 13.20
0940	9.3	0.500	7.89	-22.9	0.04	14.4	~~360~~	12.10	1525 - surge
1000	9.6	0.500	7.88	-61.5	0.02	10.6	~~1580~~	11.93	1545 - pump on, combined
1005	9.4	0.500	7.87	-67.3	0.08	5.97	400	11.85	with spc test, 16pm
1010	9.4	0.500	7.88	-74.2	0.00	5.36	400	11.89	-1625 - pump off, surge
1015	9.5	0.500	7.87	-76.4	-0.2	3.72	400	11.75	-1647 - pump on - 16pm,
									comb. w/ spc
									-1715 - pump off
									water relatively clr,
									257 NTU
									-low flow 00 - 0900
									WL - 11.22

Personnel Initials: SG

Water column = 25.78' 90% = 23.20

90% recharge = 37.13 – 23.20 = 13.93' ~~695~~ for

MONITORING WELL DEVELOPMENT LOG

Credere Associates. LLC. 776 Main Street. Westbrook. ME 04092

PROJECT NAME: Former Salvage Yard, Former Dow Military Airfield DATE: 6/22/22

PROJECT NUMBER: Credere No. 18001468, FUDS No. D01ME000407

LOCATION ID: SY-08MW12

SPECIFIC CAPACITY TESTING INFORMATION

Historical Stabilized Flow Rate/Date 400ml/min, Dec/Aug 2020

Test 1
Start Time 1505/11.90/11.35
End Time 1520/11.90 .55
Flow Rate 440/0.116
Drawdown No drwdn @ max geopump rate
Calculated Specific Capacity —/0.211

Test 2
Start Time 1545/11.80 (with whale pump – geopump not producing enough stress on aq.)
End Time 1620
Flow Rate 1GPM
Drawdown 1.43
Calculated Specific Capacity 0.699

Test 3
Start Time 1647/12.11
End Time 1512
Flow Rate 1GPM (whale pump)
Drawdown 1.3
Calculated Specific Capacity 0.769

Test 4
Start Time 10:30/11.52
End Time 1055
Flow Rate 1 GPM (whale pump)
Drawdown 1.97
Calculated Specific Capacity 0.508

Notes
T4 - 1GPM – 12.82 @ 5 min
13.26 @ 10 min
13.50 @ 15 min
13.56 @ 20 min
13.52 @ 23 min, 13.49 @ 25 min

DETAILED STABALIZATION CRITERIA

pH: ±0.1 standard units
Temperature: ± 3%
ORP: ±10 mV
DO: ±0.5 mg/L for values less than 2 mg/L or ±10% for values greater than 2 mg/L
Specific conductance: ± 3%
Turbidity: <10 NTU

PURGE DATA

[ ] 0.04 GAL/FT (1" DIAM.)
[X] 0.16 GAL/FT (2" DIAM.)
[ ] 0.65 GAL/FT (4" DIAM.)
[ ] 1.47 GAL/FT (6" DIAM.)

x length of water column = 25.78

Total Well Volume: 4.12

Total Purge Volume: 150

# of well volumes: ~36

3 well volume = 12.36

FINALWATER DEPTH VIA TRANSDUCER (ft): NA (Depth to bottom at end = 37.10)

FINAL WATER DEPTH VIA WLM (ft): —

ESTIMATED SEDIMENT THICKNESS IN WELL FOLLOWING DEVELOPMENT: Trace

COMMENTS

T1 - 440ml/min - 11.90 @ 5 min
11.90 @ 10 min

T2 - 1GPM - 12.78 @ 5 min
-12.84 @ 10 min
-13.01 @ 15 min
-13.13 @ 20 min
-13.18 @ 25
-13.21 @ 30
-13.23 @ 35

T3 - 1GPM - 13.02 @ 5 min
-13.30 @ 15 min
-13.38 @ 20
-13.41 @ 25

PERSONNEL INFORMATION

Name (printed): Sean Garner Signature:

MONITORING WELL DEVELOPMENT LOG

Credere Associates, LLC. 776 Main Street. Westbrook. ME 04092

PROJECT NAME: Former Salvage Yard, Former Dow Military Airfield DATE: 6/22/2022

PROJECT NUMBER: Credere No. 18001468, FUDS No. D01ME000407

LOCATION ID: SY-08MW13

LOCATION ACTIVITY
START: 13.20
END: 0930

WELL DATA:

WELL DEPTH (ft): 27.15 [X] MEASURED [ ] HISTORICAL

WATER DEPTH VIA WLM (ft): 10.26

WATER DEPTH VIA TRANSDUCER (ft): NA

[X] TOP OF WELL
[ ] TOP OF CASING
[ ] FROM GRADE
[ ] _____

WATER LEVEL EQUIPMENT USED:
[X] ELECT. COND. PROBE
[ ] FLOAT ACTIVATED PROBE
[X] PRESSURE TRANSDUCER
[ ] _____

ESTIMATED SEDIMENT THICKNESS IN WELL PRIOR TO DEVELOPMENT: trace (feels muddy, same as previous sounding)

DEPTH OF PUMP INTAKE (ft): ~20' TOR STICK UP HEIGHT: 2.78

WELL MATERIAL:	WELL LOCKED:	PROTECTIVE CASING SECURE:	GRAVEL PAD CONDITION:		AMBIENT AIR PID:	PPM
[X] PVC	[X] YES	[X] YES	[ ] GOOD	[ ] POOR	0.088	
[ ] SS	[ ] NO	[ ] NO	[ ] FAIR	NA	WELL MOUTH PID: 0.120	PPM
[ ] _____						

EQUIPMENT DATA:

Water Quality Instrument Sonde Model/SN: YSI QUATRO 21M160503

Water Quality Instrument Handset Model/SN: YSI Pro+ 17E100949

Turbidity Meter Model/SN: Hach 2100Q / 16030C048465

Transducer Model/SN: Solinst 3001 LT20

[X]	Peristaltic Pump	[X]	New HDPE
[X]	Submerisble	[X]	New Vinyl Tubing
[ ]	Bladder pump	[X]	Surge Blocks
[ ]	Hand pump	[ ]	Tef. Lope
[X]	Dedicated HDPE	[ ]	

GROUNDWATER PARAMETER DATA:

TIME	TEMP (°C)	SP. COND. (mS/cm)	pH	ORP (mV)	D.O. (mg/l)	TURBID. (NTU)	Flow Rate (gal/min)	DTW via WLM (ft)	Comments (indicate surging, transducer reading, etc.)
1410	/	/	/	/	/	/	4GPM	10.62	BEGIN PURGE #1
1425	/	/	/	/	/	/	—	13.82	BEGIN SURGE #1
1430	/	/	/	/	/	/	/	11.40	SURGE COMPLETE - RETRIEVE
1450	/	/	/	/	/	/	/	/	CHECK DTW
1500	/	/	/	/	/	/	/	10.3	BEGIN QS/2
1525	/	/	/	/	/	/	/	10.82	BEGIN PURGE #2
1530	/	/	/	/	/	/	/	18.2'	PUMP STUPPED @ 7 GALLONS
1545	/	/	/	/	/	/	4GPM	21.14	TOTAL PURGE 2 @ 35 GALLONS
1555	/	/	/	/	/	/	/	12.01	COMPLETE SURGE #2
1645	/	/	/	/	/	/	@ 4GPM	/	BEGIN PURGE #3 · 4GPM
1705	/	/	/	/	/	/	@ 4GPM	18.2	COMPLETE PURGE #3
1730	/	/	/	/	/	/	/	11.10	BREAK DOWN SETUP
0815	/	/	/	/	/	/	/	10.15	SETUP 6/23/2022 - LOWFLOW
0825	9.3	1135	7.20	309.7	2.69	70.0	340	10.5	BEGIN FINAL LOWFLOW
0830	9.3	1.139	7.42	303.2	2.22	17.3	340	10.58	
0835	9.3	1.140	7.47	298.0	2.24	13.2	340	10.59	
0840	9.3	1.141	7.49	294.4	2.31	8.77	340	10.61	
0845	9.3	1.143	7.51	291.7	2.26	9.10	340	10.61	
0850	9.4	1.138	7.52	288.7	2.24	7.47	340	10.63	
0855	9.6	1.132	7.50	288.5	2.20	9.22	340	10.63	
0900	9.4	1.132	7.53	286.0	2.21	6.98	340	10.63	ALL STABLE - RECHARGE
/	/	/	/	/	/	/	/	/	/ FOR QS/4

Personnel Initials: (LH)

MONITORING WELL DEVELOPMENT LOG

Credere Associates. LLC. 776 Main Street. Westbrook. ME 04092

PROJECT NAME: Former Salvage Yard, Former Dow Military Airfield DATE: 06/22/2022

PROJECT NUMBER: Credere No. 18001468, FUDS No. D01ME000407

LOCATION ID: SY-OBMW13

SPECIFIC CAPACITY TESTING INFORMATION

Historical Stabilized Flow Rate/Date 400 ml/min / 08/11/2020

Test 1
- Start Time 13:45
- End Time 14:05
- Flow Rate 0.0898 gpm
- Drawdown 0.48' (10.74 - 10.26)
- Calculated Specific Capacity 0.1871 gpm/ft

Test 2
- Start Time 1500
- End Time 1520
- Flow Rate ~~0.9~~ 0.0977 gpm
- Drawdown 0.52' (10.82 - 10.3)
- Calculated Specific Capacity 0.1878 gpm/ft

Test 3
- Start Time 1625
- End Time 1640
- Flow Rate 0.0951 gpm
- Drawdown 0.68 (10.98 - 10.3)
- Calculated Specific Capacity 0.1398 gpm/ft

Test 4
- Start Time 0913 (6/23)
- End Time 0930
- Flow Rate 0.0898 gpm
- Drawdown 0.25 (10.49 - 10.24)
- Calculated Specific Capacity 0.3741 gpm/ft

Notes

90% RECHARGE OF QS1 = DTW 10.3'
TEST #3 WAS LOWER QS THAN #1&2?
TEST 4 SHOWS SIGNIFICANT CAPACITY

DETAILED STABALIZATION CRITERIA

pH: ±0.1 standard units
Temperature: ± 3%
ORP: ±10 mV
DO: ±0.5 mg/L for values less than 2 mg/L or ±10% for values greater than 2 mg/L
Specific conductance: ± 3%
Turbidity: <10 NTU

PURGE DATA

[ ] 0.04 GAL/FT (1" DIAM.)
[X] 0.16 GAL/FT (2" DIAM.)
[ ] 0.65 GAL/FT (4" DIAM.)
[ ] 1.47 GAL/FT (6" DIAM.)

x length of water column = 16.89

Total Well Volume: 2.7 gal

Total Purge Volume: 93 gal

# of well volumes: 34

3 well vol. = 8.1

FINALWATER DEPTH VIA TRANSDUCER (ft): NA

FINAL WATER DEPTH VIA WLM (ft): 10.63

ESTIMATED SEDIMENT THICKNESS IN WELL FOLLOWING DEVELOPMENT: <0.1'

COMMENTS QS1 = 1.3 GAL.; PURGE(1) 14 GALLONS; QS2 = 1.8 gal; PURGE 2 = 7 gal. PUMP STOPPED PURGE 2 CONTINUED - PUMP RESUMED PRODUCING WATER @ 4 GPM; CUMULATIVE PURGE VOLUME FOR PURGE #2 = 35 GALLONS QS3 = 1.9 gal; PURGE #3 = 35 GALLONS; LOW FLOW = 4 GALLONS; 0900 (6/23) COMPLETE LOW FLOW GW STABILIZATION; BEGIN RECHARGE PRIOR TO QS4;

PERSONNEL INFORMATION

Name (printed): IAN DESJARLAIS Signature:

MONITORING WELL DEVELOPMENT LOG

Credere Associates, LLC, 776 Main Street, Westbrook, ME 04092

Community Economy Environment

PROJECT NAME: Former Salvage Yard, Former Dow Military Airfield DATE: 6-23-22

PROJECT NUMBER: Credere No. 18001468, FUDS No. D01ME000407

LOCATION ID: SY-OBMW14

LOCATION ACTIVITY
START: 1430, 6-22-2022
END: 1245, 6-23-2022

WELL DATA:

WELL DEPTH (ft): final: 31.48 31.23

[X] MEASURED
[ ] HISTORICAL

[X] TOP OF WELL
[ ] TOP OF CASING
[ ] FROM GRADE
[ ] _____

WATER LEVEL EQUIPMENT USED:
[X] ELECT. COND. PROBE
[ ] FLOAT ACTIVATED PROBE
[X] PRESSURE TRANSDUCER
[ ] _____

WATER DEPTH VIA WLM (ft): 11.13 ~~final:~~ 6-23-22

WATER DEPTH VIA TRANSDUCER (ft): NA

ESTIMATED SEDIMENT THICKNESS IN WELL PRIOR TO DEVELOPMENT: trace (muddy, little diff. in soundings)

DEPTH OF PUMP INTAKE (ft): ~26.6'

STICK UP HEIGHT: ~3.65'

WELL MATERIAL:	WELL LOCKED:	PROTECTIVE CASING SECURE:	GRAVEL PAD CONDITION:	
[X] PVC [ ] SS [ ] _____	[X] YES [ ] NO	[X] YES [ ] NO	[X] GOOD [ ] POOR [ ] FAIR	AMBIENT AIR PID: 0.034 PPM WELL MOUTH PID: 0.006 PPM

EQUIPMENT DATA:

Water Quality Instrument Sonde Model/SN: YSI 600XL / 05F2673AA

Water Quality Instrument Handset Model/SN: YSI 650 / 05G1108AD

Turbidity Meter Model/SN: Hach 2100Q / 20120000 2142

Transducer Model/SN: Solinst N/A

[X] Peristaltic Pump
[X] Submerisble
[ ] Bladder pump
[ ] Hand pump
[X] Dedicated HDPE

[X] New HDPE
[X] New Vinyl Tubing
[X] Surge Blocks
[ ] Tef. LDPE
[ ] _____

GROUNDWATER PARAMETER DATA:

TIME	TEMP (°C)	SP. COND. (mS/cm)	pH	ORP (mV)	D.O. (mg/l)	TURBID. (NTU)	Flow Rate (gal/min)	DTW via WLM (ft)	Comments (indicate surging, transducer reading, etc.)
1120	—	—	—	—	—	—	400	11.01	whale pump on 1430,
1125	10.09	0.877	6.89	54.1	2.12	64.2	400	11.20	1.66 GPM, off 1440
1130	9.90	0.873	6.93	45.6	1.67	65.8	400	11.20	Surge at 1620
1135	9.75	0.864	6.98	42.0	1.28	54.1	400	11.19	- whale pump on 0924,
1140	9.92	0.857	6.99	40.8	1.24	36.9	400	11.13	1.4 GPM / 1.25 GPM
1145	9.71	0.853	7.01	34.3	0.43	32.2	400	11.13	off 0950, surge @ 0952
1150	9.69	0.852	7.02	33.0	0.56	38.0	400	11.12	- whale pump on 1030,
1155	9.68	0.849	7.06	29.1	0.44	27.7	400	11.12	off 1050
1200	9.65	0.848	7.09	26.5	0.09	34.6	400	11.11	low flow purge begins
1205	9.60	0.846	7.09	23.1	-0.06	38.2	400	11.09	@ 1120
									(slowly recharging)

Personnel Initials: JAK

31.48

MONITORING WELL DEVELOPMENT LOG

Credere Associates. LLC. 776 Main Street. Westbrook. ME 04092

PROJECT NAME: Former Salvage Yard, Former Dow Military Airfield DATE: 6/22/22

PROJECT NUMBER: Credere No. 18001468, FUDS No. D01ME000407

LOCATION ID: SY-08MW14

SPECIFIC CAPACITY TESTING INFORMATION

Historical Stabilized Flow Rate/Date 400 ml/min, Dec 2020 LAMG

Test 1
- Start Time 1405/11.13
- End Time 1425/11.45
- Flow Rate 500 ml (0.132 gal)
- Drawdown 0.32
- Calculated Specific Capacity 0.413 gal/min/ft

Test 2
- Start Time 0850/10.14
- End Time 0918/11.10
- Flow Rate 440 mL (0.116 gal)
- Drawdown 0.66
- Calculated Specific Capacity 0.176

Test 3
- Start Time 1010/11.03
- End Time 1025/11.20
- Flow Rate 440 mL (0.116)
- Drawdown 0.17
- Calculated Specific Capacity 0.682

Test 4
- Start Time 1210/10.81
- End Time 1228/11.10
- Flow Rate 440 mL (0.116 gal)
- Drawdown 0.29
- Calculated Specific Capacity 0.400

Notes

~~T1 performed w/ whale pump~~ JAK 6-23-22

all tests w/ geopump

DETAILED STABALIZATION CRITERIA

pH: ±0.1 standard units
Temperature: ± 3%
ORP: ±10 mV
DO: ±0.5 mg/L for values less than 2 mg/L or ±10% for values greater than 2 mg/L
Specific conductance: ± 3%
Turbidity: <10 NTU

PURGE DATA

[ ] 0.04 GAL/FT (1" DIAM.)
[X] 0.16 GAL/FT (2" DIAM.)
[ ] 0.65 GAL/FT (4" DIAM.)
[ ] 1.47 GAL/FT (6" DIAM.)

x length of water column = 20.35

Total Well Volume: 3.26 gal

Total Purge Volume: 10 gal

# of well volumes: 3.1

FINALWATER DEPTH VIA TRANSDUCER (ft): n/a

FINAL WATER DEPTH VIA WLM (ft): n/a

ESTIMATED SEDIMENT THICKNESS IN WELL FOLLOWING DEVELOPMENT: 0.25 bottom solid

COMMENTS

T1	T2	T3	T4
- 440ml/11.39@5min	- 450 ml/min/10.95 @8min	440 ml/11.28@5min	440/11.02@5min
360/11.39@10min	440 ml/11.01@14min	440 ml/11.22@10min	440/11.07@10min
- pump slowing, switch batt.	440 mL/11.05@17min	440 mL/11.20@15min	440/11.09@15min
500 ml/11.45@15min	440/11.08@21min	started too early	440/11.10@17min
11.45@20min		before recharge	

PERSONNEL INFORMATION

Name (printed): Lauren Kaija Signature:

MONITORING WELL DEVELOPMENT LOG

Credere Associates, LLC. 776 Main Street. Westbrook, ME 04092

PROJECT NAME: Former Salvage Yard, Former Dow Military Airfield

DATE: 6/21-22/2022

PROJECT NUMBER: Credere No. 18001468, FUDS No. D01ME000407

LOCATION ID: SY-OBMW15

LOCATION ACTIVITY
START: 15:20 (6/21)
END: 12:15 (6/22)

WELL DATA:

WELL DEPTH (ft): 25.21 [X] MEASURED [ ] HISTORICAL

WATER DEPTH VIA WLM (ft): 7.02'

WATER DEPTH VIA TRANSDUCER (ft): NA

ESTIMATED SEDIMENT THICKNESS IN WELL PRIOR TO DEVELOPMENT: ~0.2'

DEPTH OF PUMP INTAKE (ft): ~18' STICK UP HEIGHT: 2.62

[X] TOP OF WELL
[ ] TOP OF CASING
[ ] FROM GRADE
[ ] _____

WATER LEVEL EQUIPMENT USED:
[X] ELECT. COND. PROBE
[ ] FLOAT ACTIVATED PROBE
[X] PRESSURE TRANSDUCER
[ ] _____

WELL MATERIAL:	WELL LOCKED:	PROTECTIVE CASING SECURE:	GRAVEL PAD CONDITION:	AMBIENT AIR PID:	WELL MOUTH PID:
[X] PVC [ ] SS [ ] _____	[X] YES [ ] NO	[X] YES [ ] NO	[X] GOOD [ ] POOR [ ] FAIR	0.058 PPM	0.031 PPM

EQUIPMENT DATA:

Water Quality Instrument Sonde Model/SN: YSI PRO+ 17E100745

Water Quality Instrument Handset Model/SN: YSI QUATRO 21M100503

Turbidity Meter Model/SN: Hach 2100Q / 16030C048465

Transducer Model/SN: Solinst 300i LTM20/2158530

[X]	Peristaltic Pump	[ ]	New HDPE
[X]	Submerisble	[ ]	New Vinyl Tubing
[ ]	Bladder pump	[X]	Surge Blocks
[ ]	Hand pump	[ ]	_____
[X]	Dedicated HDPE	[ ]	_____

GROUNDWATER PARAMETER DATA:

TIME	TEMP (°C)	SP. COND. (mS/cm)	pH	ORP (mV)	D.O. (mg/l)	TURBID. (NTU)	Flow Rate (gal/min)	DTW via WLM (ft)	Comments (indicate surging, transducer reading, etc.)
1520	/	/	/	/	/	/	/	/	BEGIN
1541	11.8	2.307	6.46	306.5	4.18	33.4	650mL/m	17.36	WHALE PUMP PURGE -
/	/	/	/	/	/	/	/	/	SURGE W/ DOUBLE WATERRA
1558	/	/	/	/	/	/	/	/	WHALE PUMP PURGE.
17:20	/	/	/	/	/	/	/	/	DTW @ STATIC - BEGIN QS/2
17:40	/	/	/	/	/	/	/	/	COMPLETE QS/2 - BEGIN SURGE
17:50	/	/	/	/	/	/	/	/	SURGE #/COMP - BEGIN PURGE
18.00	/	/	/	/	/	/	/	/	COMPLETE 2ND PURGE.
—	—	—	—	—	—	—	—	—	BREAK DOWN FOR DAY
6/22 0930	/	/	/	/	/	/	/	7.23	6/22 - WHALE PURGE
0940	/	/	/	/	/	/	/	/	BEGIN WHALE PUMP TEST
0952	/	/	/	/	/	/	/	19.68	PUMP STOPS → BEGIN SURGE
10.00	/	/	/	/	/	/	/	/	COMPLETE SURGE - RECHA
1110	/	/	/	/	/	/	/	/	BEGIN PURGE #3
1117	/	/	/	/	/	/	1gpm	17.9'	9 GAL PURGE - STOPPED
1135 1140	10.3	2.314	7.79	209.2	8.67	79.4	310mL	9.12	DTW @ 8.8' - RECHARGED
1145	10.4	2.295	7.50	232.8	7.87	42.5	300mL	9.11	/
1150	10.2	2.263	7.45	232.4	7.36	34.1	290mL	9.03	PUMP SLOWED
1155	10.3	2.251	7.43	231.0	6.30	14.70	300mL	8.94	/
1200	10.2	2.245	7.39	230.9	5.82	22.50	300mL	8.81	/
1205	10.3	2.243	7.44	230.8	5.64	31.7	300mL	8.78	NEED DO TO STABILIZE
1210	10.5	2.243	7.42	231.0	5.40	48.9	300mL	8.77	NTU - ALL ITEMS STABLE

Personnel Initials: TSC

MONITORING WELL DEVELOPMENT LOG

Credere Associates. LLC. 776 Main Street. Westbrook. ME 04092

PROJECT NAME: Former Salvage Yard, Former Dow Military Airfield DATE: 06/21/2022

PROJECT NUMBER: Credere No. 18001468, FUDS No. D01ME000407

LOCATION ID: SY-OBMW15

SPECIFIC CAPACITY TESTING INFORMATION

Historical Stabilized Flow Rate/Date 300 mL/min / 12/2/2020

Test 1

Start Time 12:58
End Time 13:20
Flow Rate 300 mL/min (0.079251615 7gal/min)
Drawdown 1.47 (7.39 → 8.86)
Calculated Specific Capacity 0.053912663 74 gpm/ft

Test 2

Start Time ~~16:50~~ ~~17:15~~ 17:20
End Time 17:40
Flow Rate 300 mL/m (0.079251615 7gal/min)
Drawdown 1.43 (7.58 - 9.01')
Calculated Specific Capacity 0.055420710279 7gpm/ft

Test 3

Start Time 1045 (6/22/22)
End Time 1165
Flow Rate 300mL/min (0.079251615 7gpm)
Drawdown 1.17' (8.69 - 7.52)
Calculated Specific Capacity 0.0676 gpm/ft

Test 4

Start Time 12:35
End Time 13:00
Flow Rate 300 mL/m = 0.0792 gpm
Drawdown 1.2' 8.70 - 7.5
Calculated Specific Capacity 0.066 gpm/ft

Notes

90% RECHARGE OF INIT'AL QS/ITEST = 7.53 DTW
RECHARGE LEVEL PRIOR TO FINAL LOW FLOW PAR
IS ~ TD OF QS TESTS (~8.5' DTW)
@ 12:33: DTW REACHE 7.5'; INITIATE FIN'L
QS TEST

DETAILED STABALIZATION CRITERIA

pH: ±0.1 standard units
Temperature: ± 3%
ORP: ±10 mV
DO: ±0.5 mg/L for values less than 2 mg/L or ±10% for values greater than 2 mg/L
Specific conductance: ± 3%
Turbidity: <10 NTU

PURGE DATA

[ ] 0.04 GAL/FT (1" DIAM.)
[X] 0.16 GAL/FT (2" DIAM.)
[ ] 0.65 GAL/FT (4" DIAM.)
[ ] 1.47 GAL/FT (6" DIAM.)

x length of water column =

Total Well Volume: 2.9

Total Purge Volume: 49

# of well volumes: 16

FINALWATER DEPTH VIA TRANSDUCER (ft): NA

FINAL WATER DEPTH VIA WLM (ft): 8.77

ESTIMATED SEDIMENT THICKNESS IN WELL FOLLOWING DEVELOPMENT: 0.04'

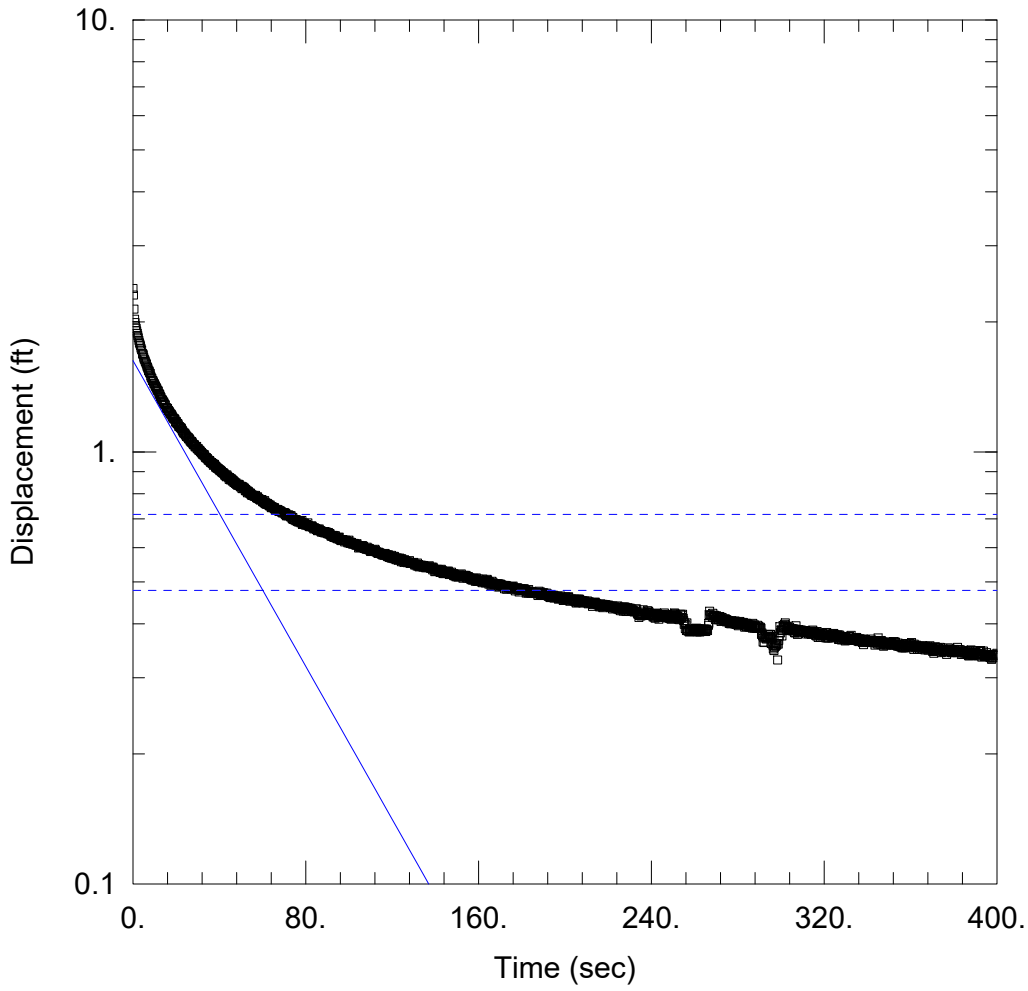
COMMENTS QS/1 VOLUME PURGED = ~2 gallons; PURGE(1) = 15 gallons; QS 2 = 2 GAL; PURGE(2) = 17 gallon QS 3 = 2 GALLONS; ~~PURGE(3) = 15 GALLONS~~ PURGE(3) 9 GALLONS, LOW FLOW PARAMETERS COLLECTED USING YSI FLOWTHROUGH CELL; ; C;

PERSONNEL INFORMATION

Name (printed): IAN DESJARLAIS Signature:

APPENDIX C

2022 HYDRAULIC CONDUCTIVITY ANALYSIS



SY-OBMW1-1

Data Set: P:\...\MW1-1.aqt
Date: 03/14/24 Time: 12:37:14

PROJECT INFORMATION

Company: Credere Associates
Client: USACE
Project: 18001468
Location: Bangor, ME
Test Well: SY-OBMW1
Test Date: 7-18-22

AQUIFER DATA

Saturated Thickness: 15. ft Anisotropy Ratio (Kz/Kr): 1.

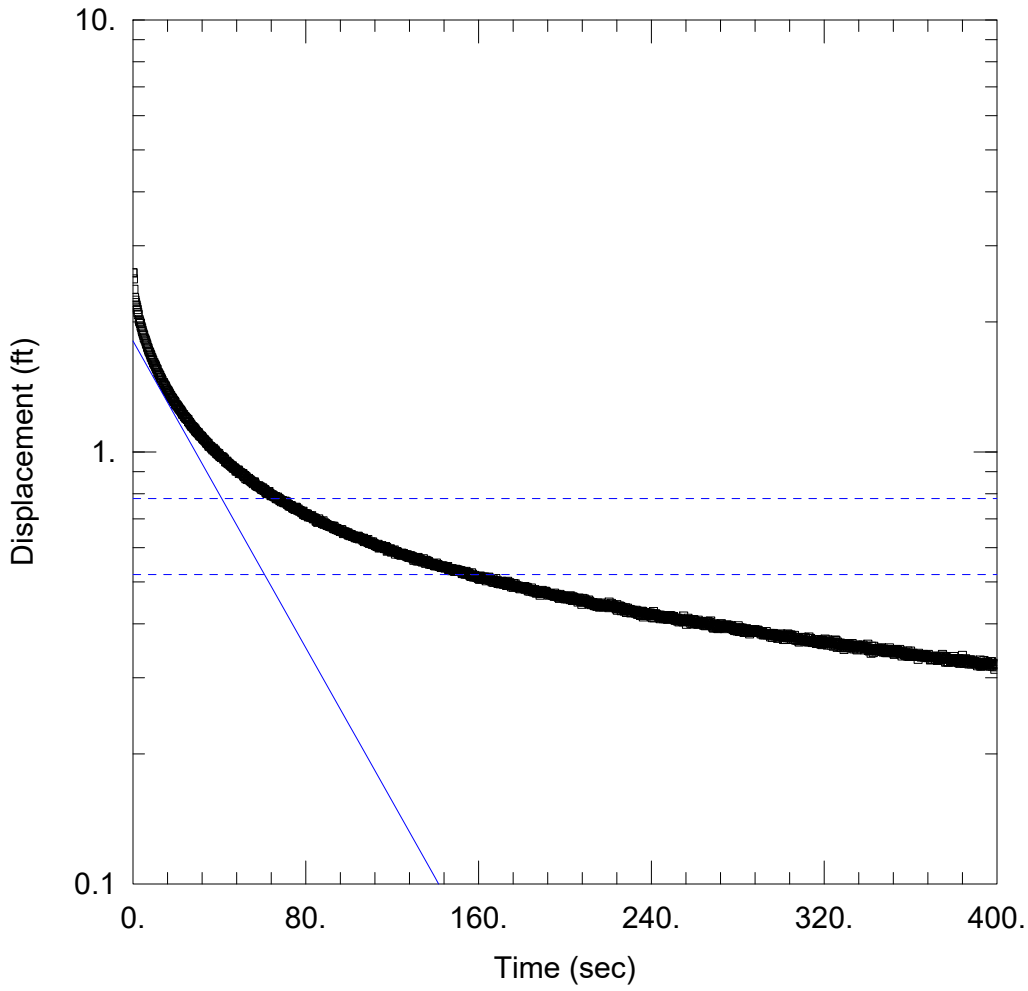
WELL DATA (SY-OBMW1)

Initial Displacement: 2.39 ft Static Water Column Height: 27.34 ft
Total Well Penetration Depth: 13. ft Screen Length: 10. ft
Casing Radius: 0.083 ft Well Radius: 0.25 ft

SOLUTION

Aquifer Model: Confined Solution Method: Bouwer-Rice

K = 1.893E-5 ft/sec y0 = 1.627 ft



SY-OBMW1-2

Data Set: P:\...\MW1-2.aqt
Date: 03/14/24 Time: 12:38:55

PROJECT INFORMATION

Company: Credere Associates
Client: USACE
Project: 18001468
Location: Bangor, ME
Test Well: SY-OBMW1
Test Date: 7-18-22

AQUIFER DATA

Saturated Thickness: 15. ft Anisotropy Ratio (Kz/Kr): 1.

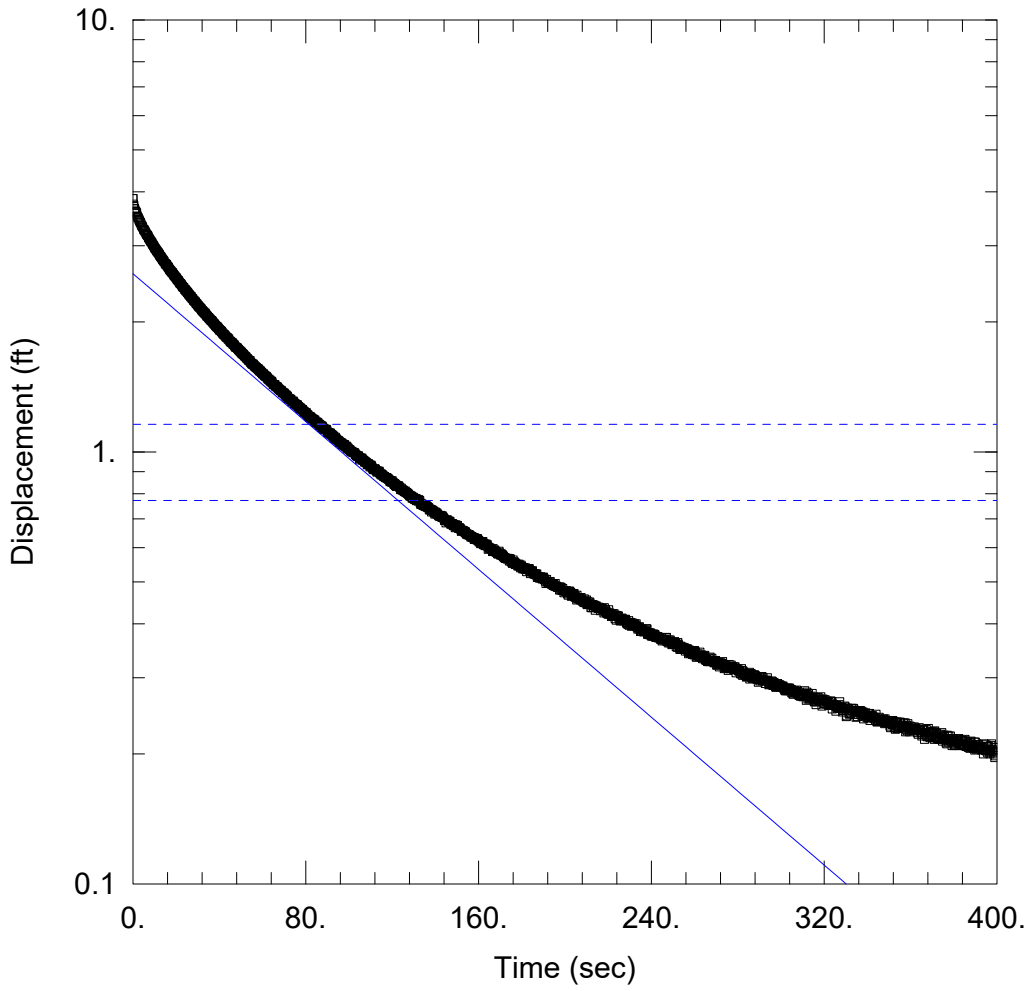
WELL DATA (SY-OBMW1)

Initial Displacement: 2.6 ft Static Water Column Height: 27.23 ft
Total Well Penetration Depth: 13. ft Screen Length: 10. ft
Casing Radius: 0.083 ft Well Radius: 0.25 ft

SOLUTION

Aquifer Model: Confined Solution Method: Bouwer-Rice

K = 1.9E-5 ft/sec y0 = 1.806 ft



SY-OBMW2-1

Data Set: P:\...\MW2-1.aqt
Date: 03/14/24 Time: 12:51:59

PROJECT INFORMATION

Company: Credere Associates
Client: USACE
Project: 18001468
Location: Bangor, ME
Test Well: SY-OBMW2
Test Date: 7-18-22

AQUIFER DATA

Saturated Thickness: 5. ft Anisotropy Ratio (Kz/Kr): 1.

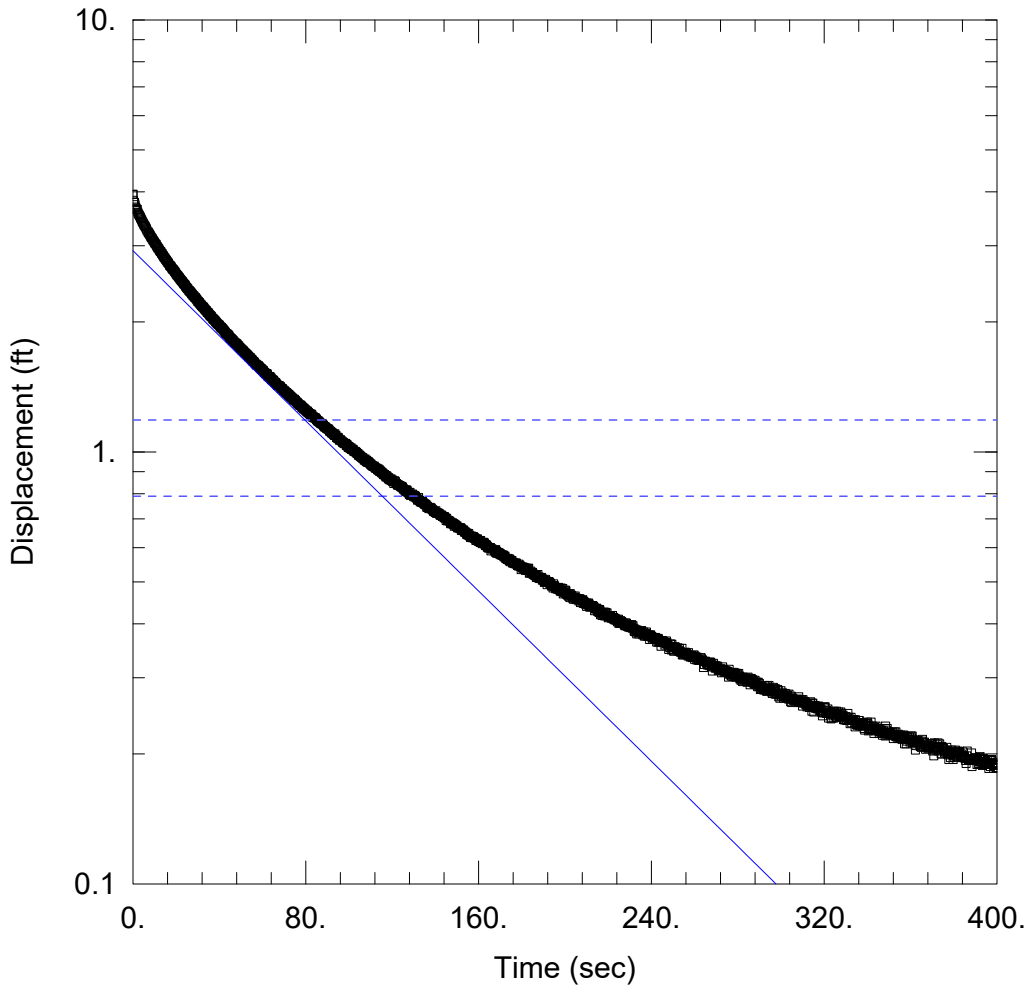
WELL DATA (SY-OBMW2-1)

Initial Displacement: 3.86 ft Static Water Column Height: 35.03 ft
Total Well Penetration Depth: 33.03 ft Screen Length: 10. ft
Casing Radius: 0.083 ft Well Radius: 0.25 ft

SOLUTION

Aquifer Model: Unconfined Solution Method: Bouwer-Rice

K = 2.201E-5 ft/sec y0 = 2.586 ft



SY-OBMW2-2

Data Set: P:\...\MW2-2.aqt
Date: 03/14/24 Time: 12:50:44

PROJECT INFORMATION

Company: Credere Associates
Client: USACE
Project: 18001468
Location: Bangor, ME
Test Well: SY-OBMW2
Test Date: 7-18-22

AQUIFER DATA

Saturated Thickness: 5. ft Anisotropy Ratio (Kz/Kr): 1.

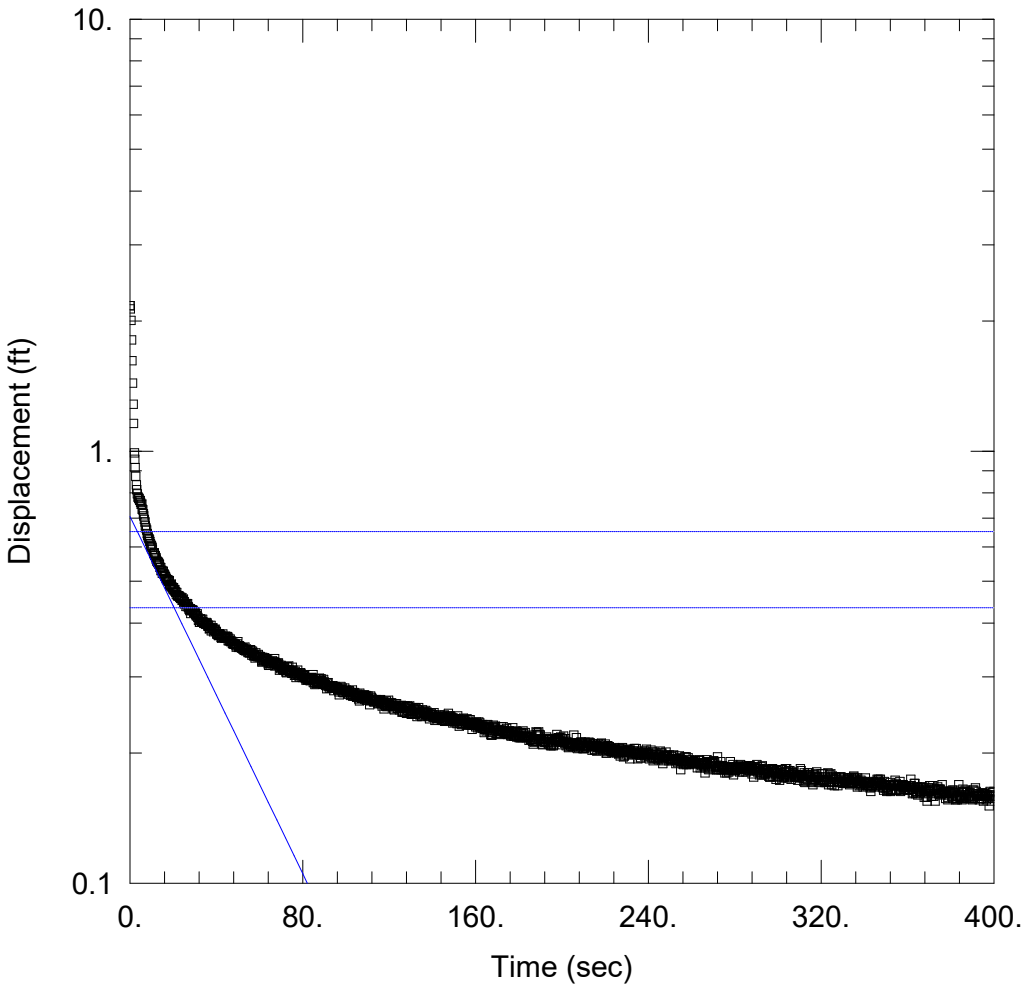
WELL DATA (SY-OBMW2)

Initial Displacement: 3.95 ft Static Water Column Height: 35. ft
Total Well Penetration Depth: 33. ft Screen Length: 10. ft
Casing Radius: 0.083 ft Well Radius: 0.25 ft

SOLUTION

Aquifer Model: Unconfined Solution Method: Bouwer-Rice

K = 2.533E-5 ft/sec y0 = 2.923 ft



SY-OBMW3-1

Data Set: P:\...\MW3-1.aqt
Date: 03/15/24 Time: 08:42:56

PROJECT INFORMATION

Company: Credere Associates
Client: USACE
Project: 18001468
Location: Bangor, ME
Test Well: SY-OBMW3
Test Date: 7-19-22

AQUIFER DATA

Saturated Thickness: 25. ft Anisotropy Ratio (Kz/Kr): 1.

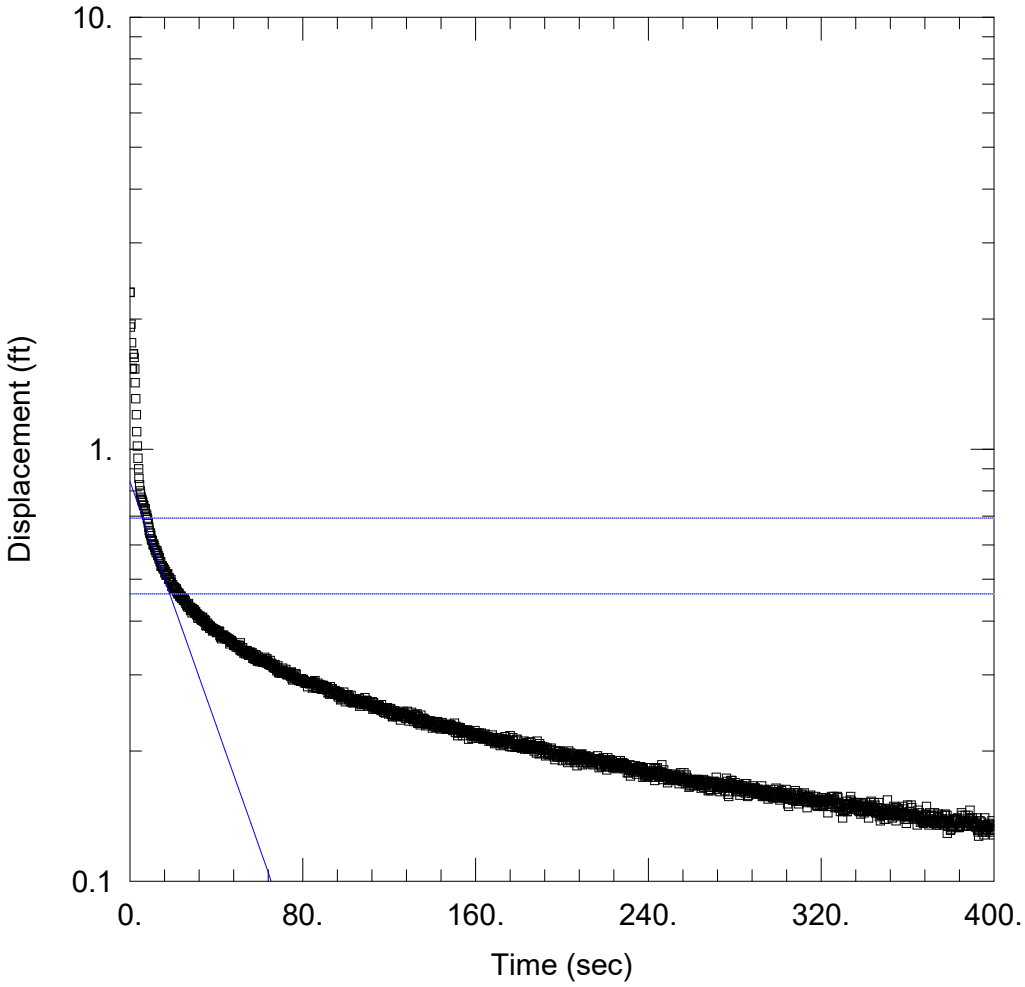
WELL DATA (SY-OBMW3-1)

Initial Displacement: 2.17 ft
Total Well Penetration Depth: 23. ft
Casing Radius: 0.083 ft
Static Water Column Height: 30.6 ft
Screen Length: 10. ft
Well Radius: 0.25 ft

SOLUTION

Aquifer Model: Confined Solution Method: Bouwer-Rice

K = 2.443E-5 ft/sec y0 = 0.7059 ft



SY-OBMW3-2

Data Set: P:\...\MW3-2.aqt
Date: 03/15/24 Time: 08:53:47

PROJECT INFORMATION

Company: Credere Associates
Client: USACE
Project: 18001468
Location: Bangor, ME
Test Well: SY-OBMW3
Test Date: 7-19-22

AQUIFER DATA

Saturated Thickness: 25. ft Anisotropy Ratio (Kz/Kr): 1.

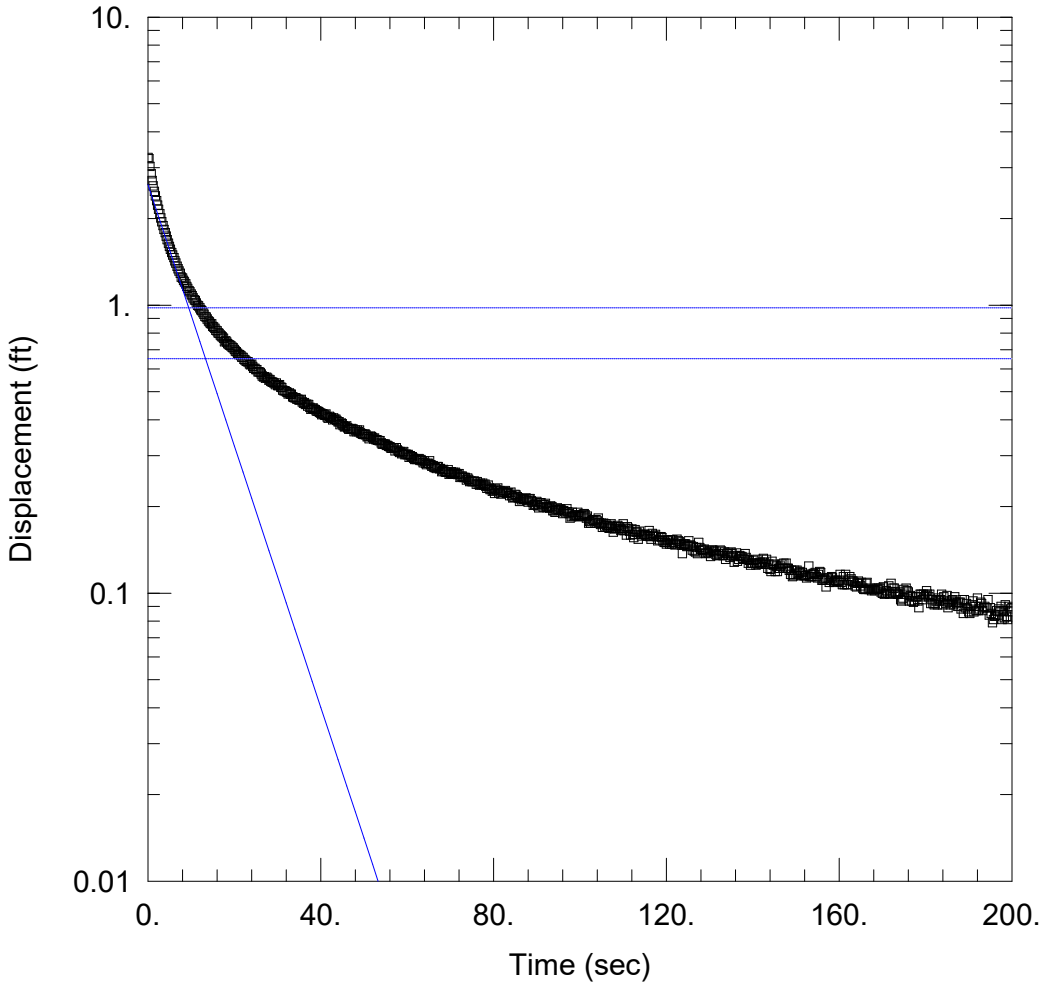
WELL DATA (SY-OBMW3)

Initial Displacement: 2.31 ft
Total Well Penetration Depth: 23. ft
Casing Radius: 0.083 ft
Static Water Column Height: 30.53 ft
Screen Length: 10. ft
Well Radius: 0.25 ft

SOLUTION

Aquifer Model: Confined
Solution Method: Bouwer-Rice

K = 3.341E-5 ft/sec
y0 = 0.841 ft



SY-OBMW4R-1

Data Set: P:\...\MW4R-1.aqt
Date: 03/15/24 Time: 08:56:34

PROJECT INFORMATION

Company: Credere Associates
Client: USACE
Project: 18001468
Location: Bangor, ME
Test Well: SY-OBMW4R
Test Date: 2-22-2023

AQUIFER DATA

Saturated Thickness: 16. ft Anisotropy Ratio (Kz/Kr): 1.

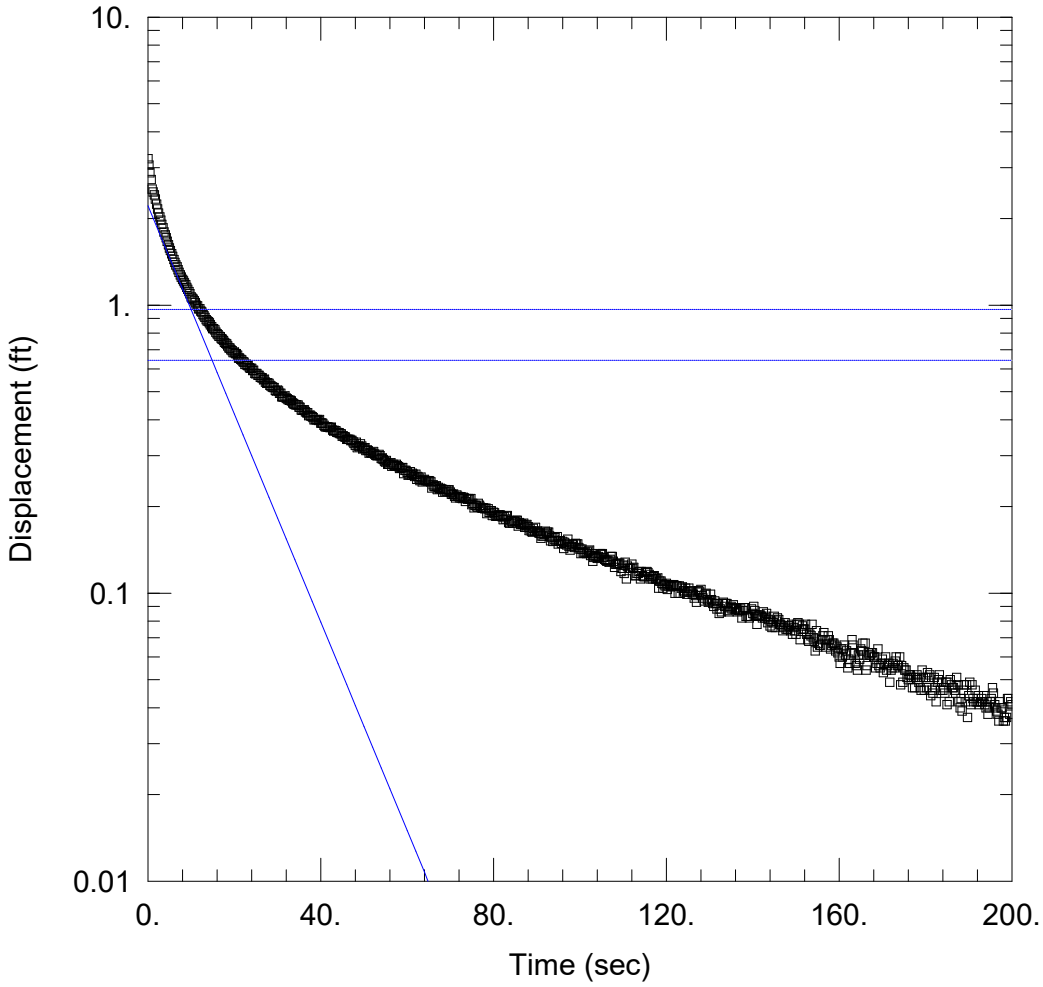
WELL DATA (SY-OBMW4R)

Initial Displacement: 3.26 ft Static Water Column Height: 35.75 ft
Total Well Penetration Depth: 14. ft Screen Length: 10. ft
Casing Radius: 0.083 ft Well Radius: 0.25 ft

SOLUTION

Aquifer Model: Confined Solution Method: Bouwer-Rice

K = 9.845E-5 ft/sec y0 = 2.619 ft



SY-OBMW4R-2

Data Set: P:\...\MW4R-2.aqt
Date: 03/15/24 Time: 09:00:25

PROJECT INFORMATION

Company: Credere Associates
Client: USACE
Project: 18001468
Location: Bangor, ME
Test Well: SY-OBMW4R
Test Date: 2-22-2023

AQUIFER DATA

Saturated Thickness: 16. ft Anisotropy Ratio (Kz/Kr): 1.

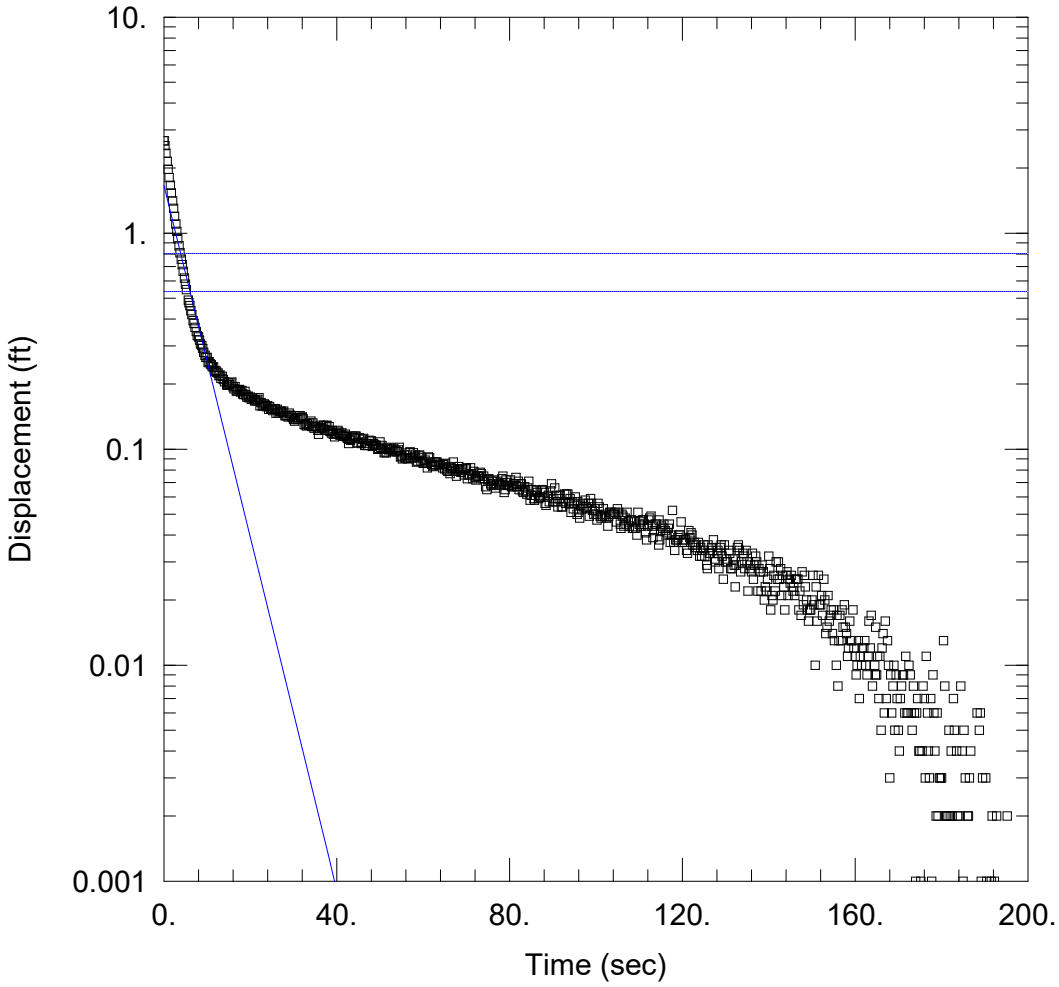
WELL DATA (SY-OBMW4R)

Initial Displacement: 3.22 ft Static Water Column Height: 35.68 ft
Total Well Penetration Depth: 14. ft Screen Length: 10. ft
Casing Radius: 0.083 ft Well Radius: 0.25 ft

SOLUTION

Aquifer Model: Confined Solution Method: Bouwer-Rice

K = 7.842E-5 ft/sec y0 = 2.213 ft



SY-OBMW5-1

Data Set: P:\...\MW5-1.aqt
Date: 03/15/24 Time: 09:03:15

PROJECT INFORMATION

Company: Credere Associates
Client: USACE
Project: 18001468
Location: Bangor, ME
Test Well: SY-OBMW5
Test Date: 7-19-22

AQUIFER DATA

Saturated Thickness: 10. ft Anisotropy Ratio (Kz/Kr): 1.

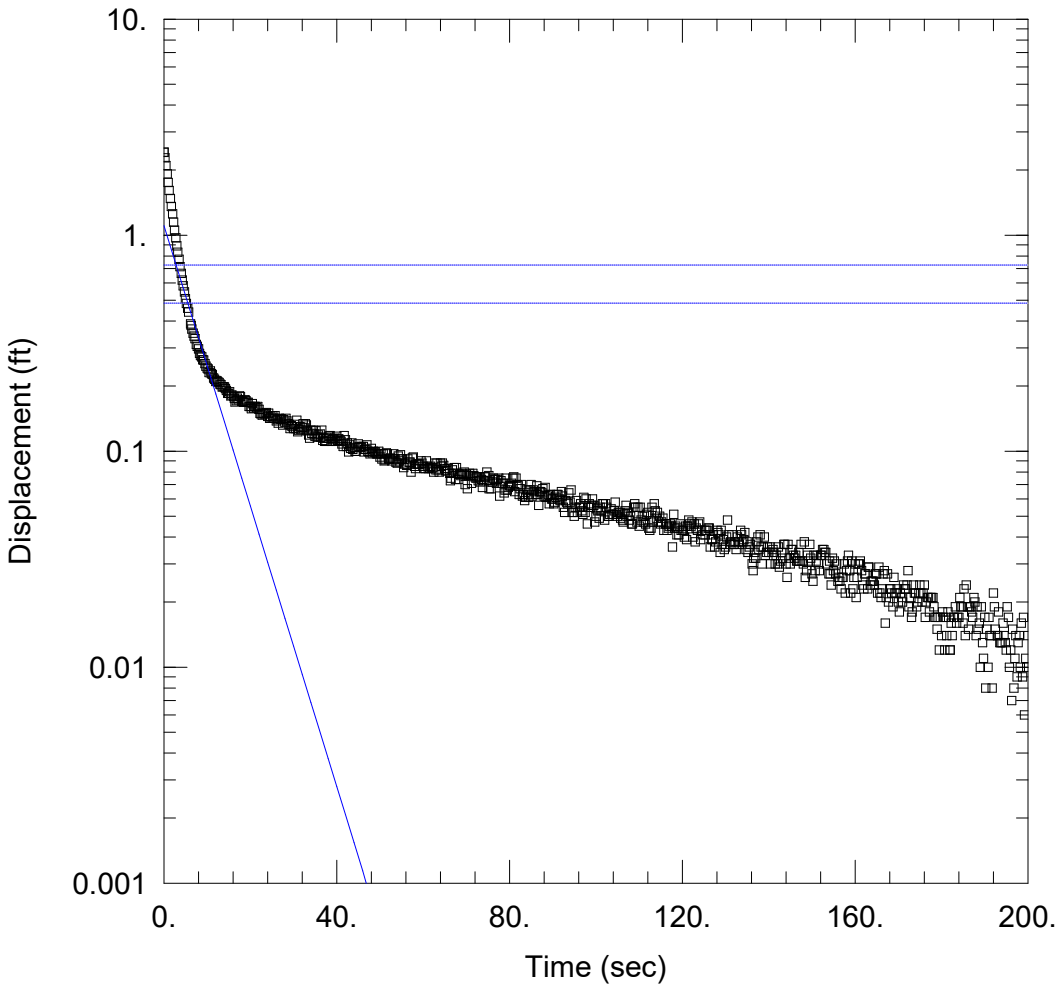
WELL DATA (SY-OBMW5)

Initial Displacement: 2.68 ft
Total Well Penetration Depth: 32.81 ft
Casing Radius: 0.083 ft
Static Water Column Height: 34.81 ft
Screen Length: 10. ft
Well Radius: 0.25 ft

SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice

K = 0.0002283 ft/sec
y0 = 1.659 ft



SY-OBMW5-2

Data Set: P:\...\MW5-2.aqt
Date: 03/15/24 Time: 09:13:36

PROJECT INFORMATION

Company: Credere Associates
Client: USACE
Project: 18001468
Location: Bangor, ME
Test Well: SY-OBMW5
Test Date: 7-19-22

AQUIFER DATA

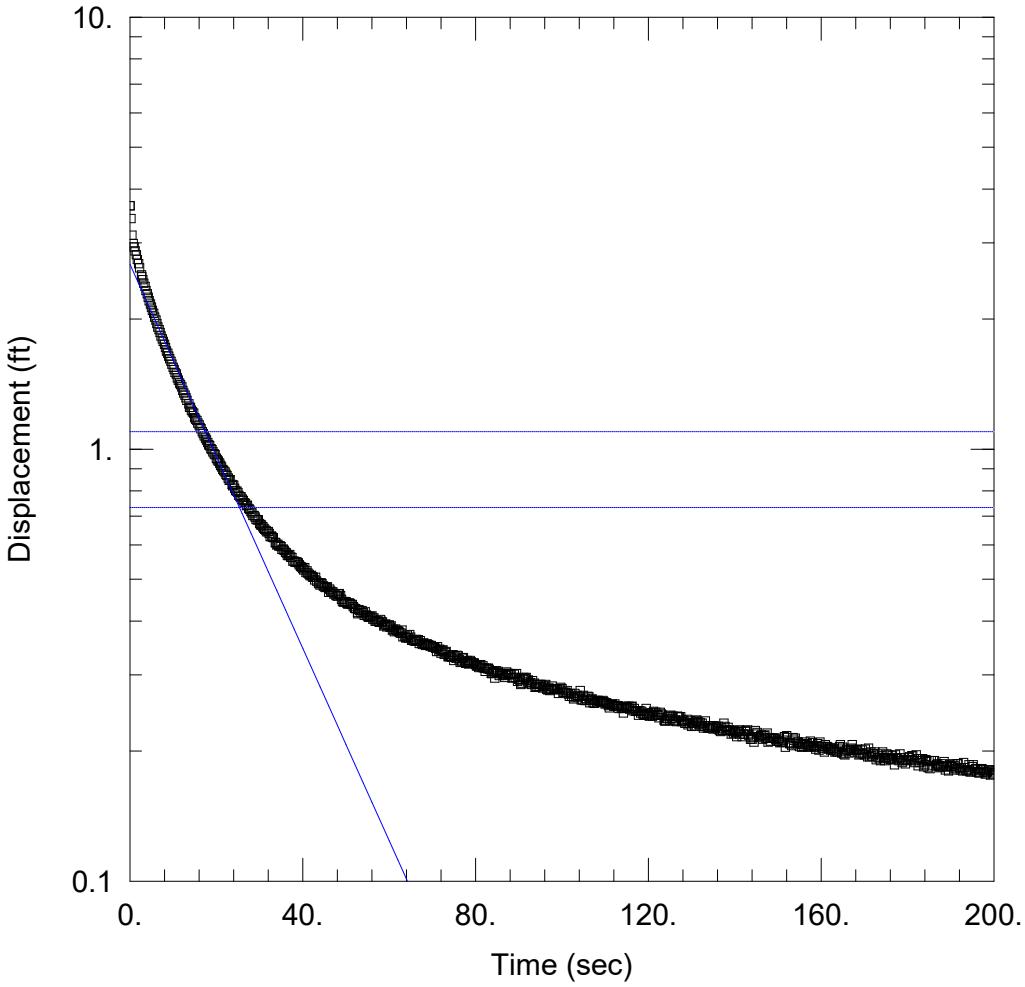
Saturated Thickness: 10. ft Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (SY-OBMW5)

Initial Displacement: 2.42 ft Static Water Column Height: 35.02 ft
Total Well Penetration Depth: 33.02 ft Screen Length: 10. ft
Casing Radius: 0.083 ft Well Radius: 0.25 ft

SOLUTION

Aquifer Model: Unconfined Solution Method: Bouwer-Rice
K = 0.0001821 ft/sec y0 = 1.106 ft



SY-OBMW6-1

Data Set: P:\...\MW6-1.aqt
Date: 03/15/24 Time: 09:15:46

PROJECT INFORMATION

Company: Credere Associates
Client: USACE
Project: 18001468
Location: Bangor, ME
Test Well: SY-OBMW6
Test Date: 7-20-22

AQUIFER DATA

Saturated Thickness: 30. ft Anisotropy Ratio (Kz/Kr): 1.

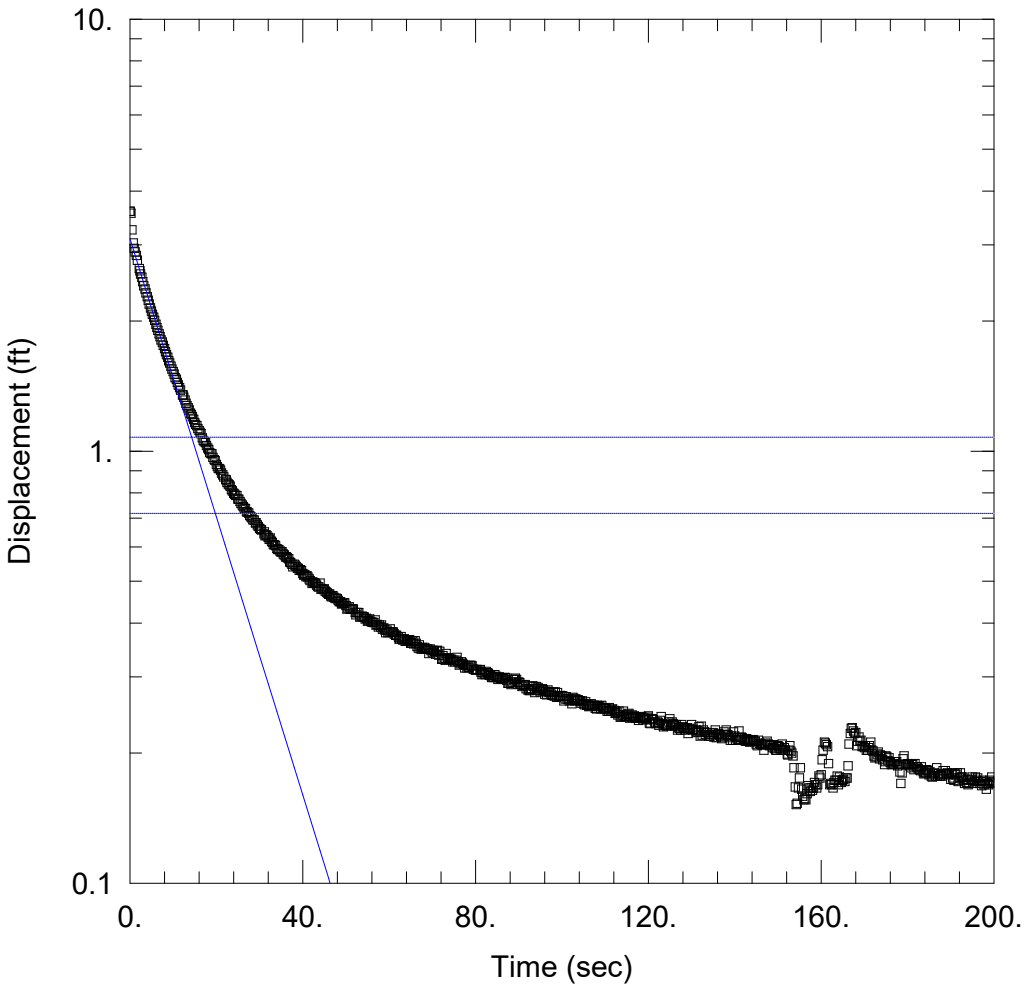
WELL DATA (SY-OBMW6)

Initial Displacement: 3.66 ft
Total Well Penetration Depth: 28. ft
Casing Radius: 0.083 ft
Static Water Column Height: 34.79 ft
Screen Length: 10. ft
Well Radius: 0.25 ft

SOLUTION

Aquifer Model: Confined
Solution Method: Bouwer-Rice

K = 5.419E-5 ft/sec
y0 = 2.678 ft



SY-OBMW6-2

Data Set: P:\...\MW6-2.aqt
Date: 03/15/24 Time: 09:27:57

PROJECT INFORMATION

Company: Credere Associates
Client: USACE
Project: 18001468
Location: Bangor, ME
Test Well: SY-OBMW6
Test Date: 7-20-22

AQUIFER DATA

Saturated Thickness: 30. ft Anisotropy Ratio (Kz/Kr): 1.

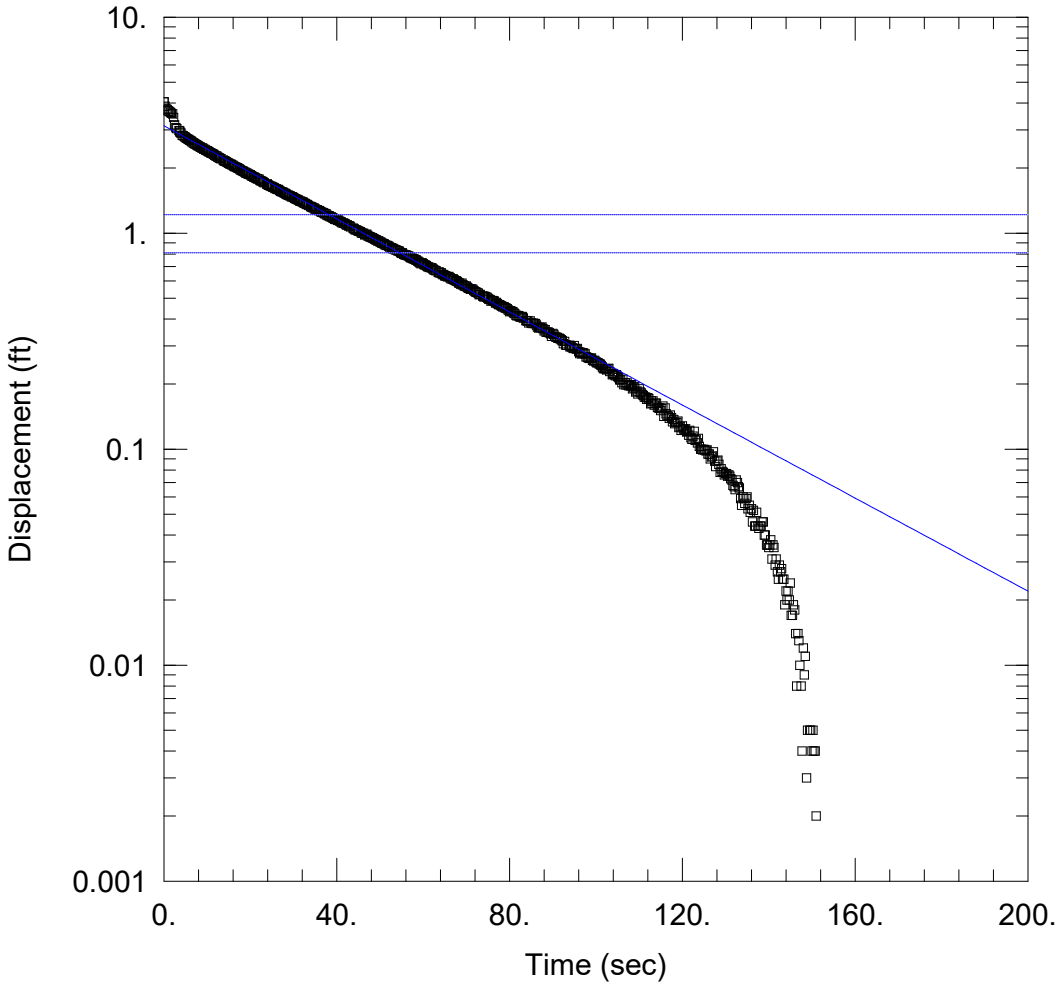
WELL DATA (SY-OBMW6)

Initial Displacement: 3.59 ft Static Water Column Height: 34.74 ft
Total Well Penetration Depth: 28. ft Screen Length: 10. ft
Casing Radius: 0.083 ft Well Radius: 0.25 ft

SOLUTION

Aquifer Model: Confined Solution Method: Bouwer-Rice

K = 7.843E-5 ft/sec y0 = 3.099 ft



SY-OBMW7-1

Data Set: P:\...\MW7-1.aqt
Date: 03/15/24 Time: 09:33:12

PROJECT INFORMATION

Company: Credere Associates
Client: USACE
Project: 18001468
Location: Bangor, ME
Test Well: SY-OBMW7
Test Date: 7-19-22

AQUIFER DATA

Saturated Thickness: 14. ft Anisotropy Ratio (Kz/Kr): 1.

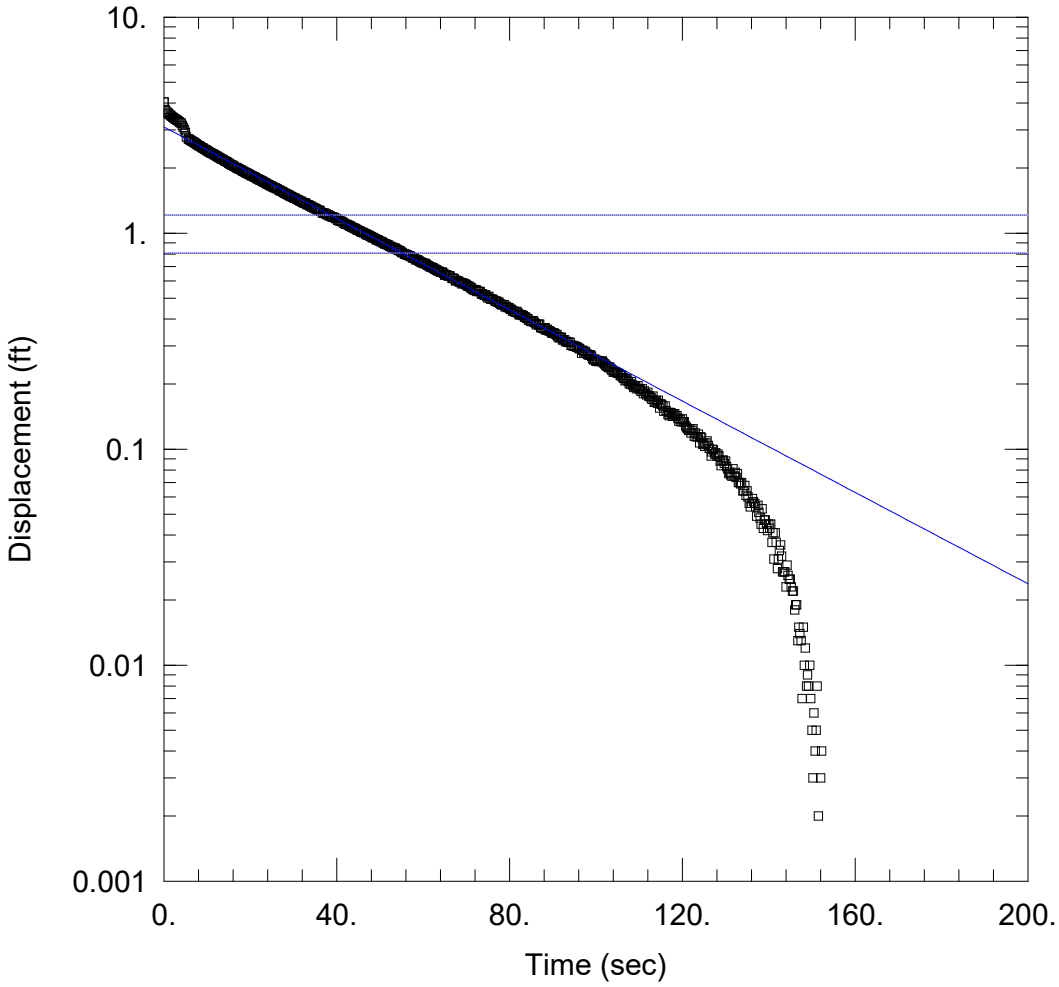
WELL DATA (SY-OBMW7)

Initial Displacement: 4.05 ft
Total Well Penetration Depth: 7.36 ft
Casing Radius: 0.083 ft
Static Water Column Height: 25.16 ft
Screen Length: 5.36 ft
Well Radius: 0.25 ft

SOLUTION

Aquifer Model: Confined
Solution Method: Bouwer-Rice

K = 3.318E-5 ft/sec
y0 = 3.138 ft



SY-OBMW7-2

Data Set: P:\...\MW7-2.aqt
Date: 03/15/24 Time: 09:32:38

PROJECT INFORMATION

Company: Credere Associates
Client: USACE
Project: 18001468
Location: Bangor, ME
Test Well: SY-OBMW7
Test Date: 7-19-22

AQUIFER DATA

Saturated Thickness: 14. ft Anisotropy Ratio (Kz/Kr): 1.

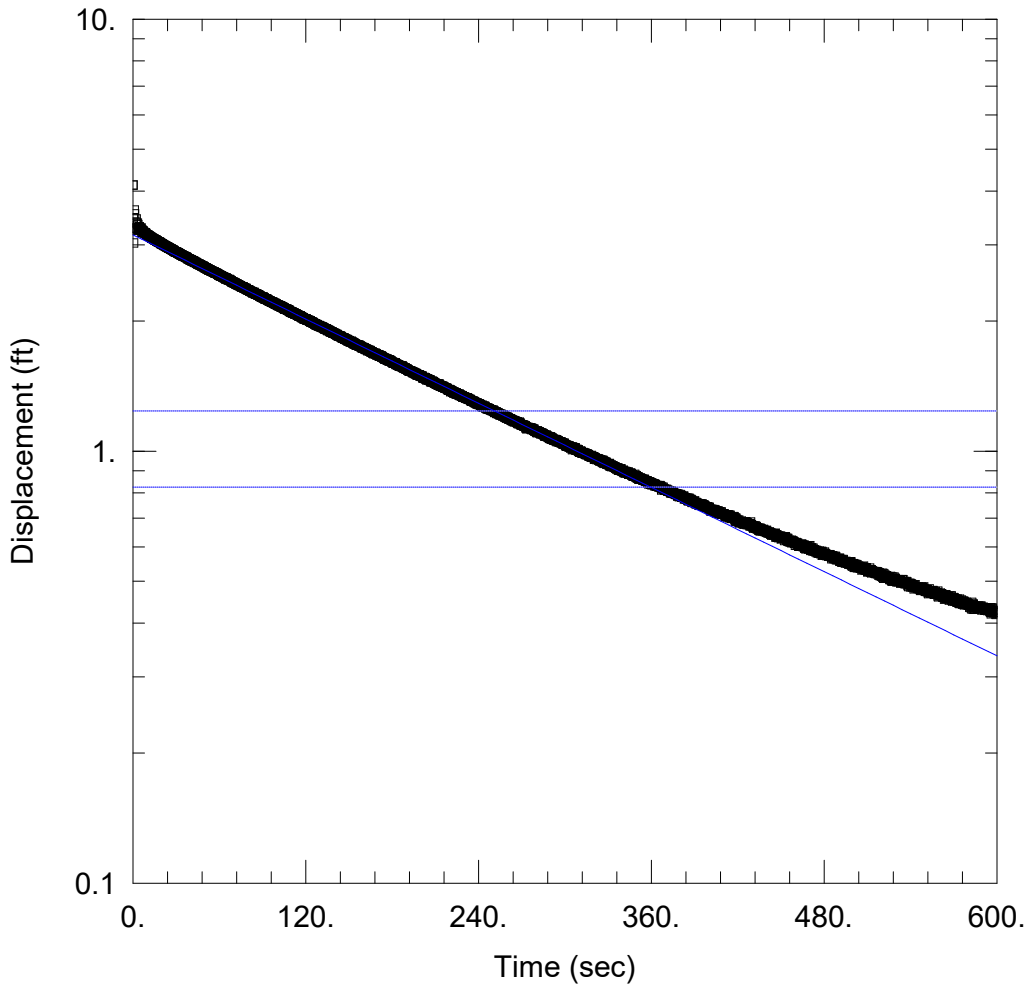
WELL DATA (SY-OBMW7)

Initial Displacement: 4.04 ft
Total Well Penetration Depth: 7.36 ft
Casing Radius: 0.083 ft
Static Water Column Height: 25.02 ft
Screen Length: 5.36 ft
Well Radius: 0.25 ft

SOLUTION

Aquifer Model: Confined Solution Method: Bouwer-Rice

K = 3.258E-5 ft/sec y0 = 3.101 ft



SY-OBMW8-1

Data Set: P:\...\MW8-1.aqt
Date: 03/15/24 Time: 09:42:07

PROJECT INFORMATION

Company: Credere Associates
Client: USACE
Project: 18001468
Location: Bangor, ME
Test Well: SY-OBMW8
Test Date: 7-18-22

AQUIFER DATA

Saturated Thickness: 20. ft Anisotropy Ratio (Kz/Kr): 1.

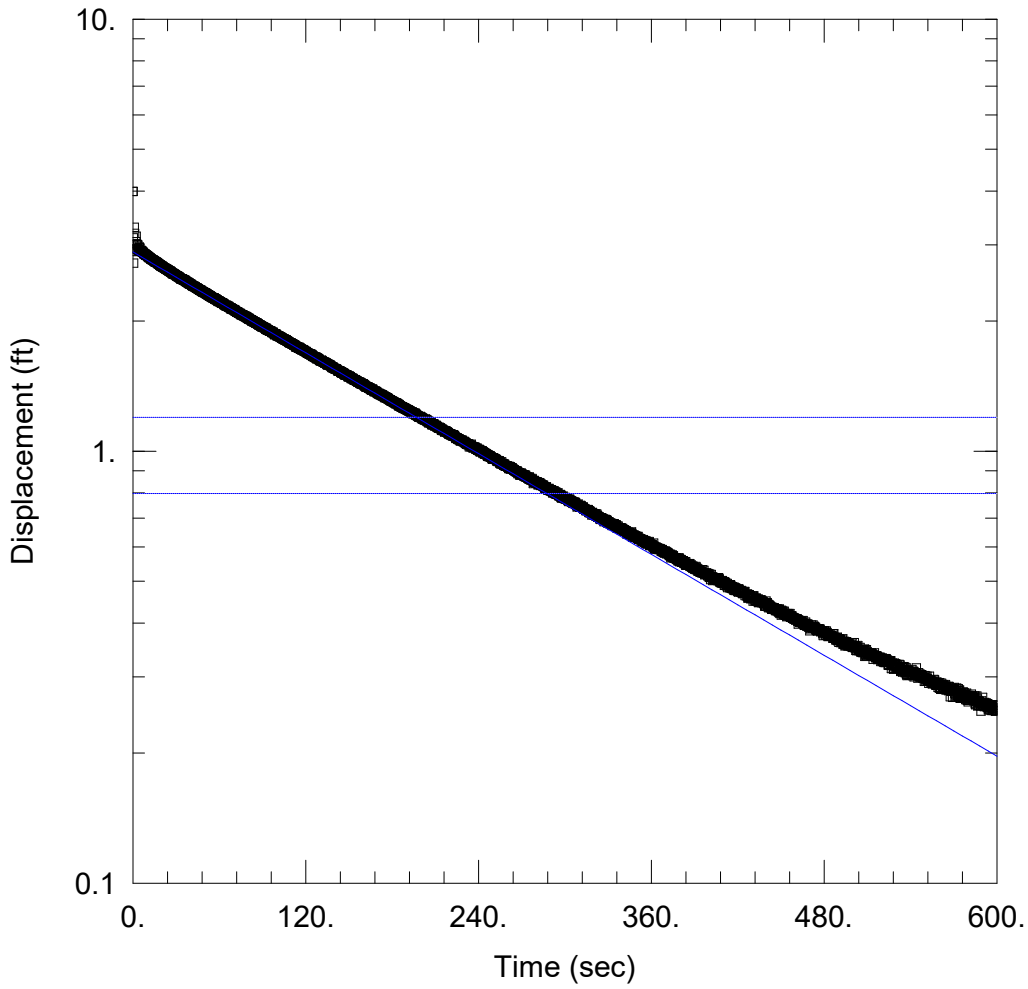
WELL DATA (SY-OBMW8)

Initial Displacement: 4.13 ft
Total Well Penetration Depth: 18. ft
Casing Radius: 0.083 ft
Static Water Column Height: 21.27 ft
Screen Length: 10. ft
Well Radius: 0.25 ft

SOLUTION

Aquifer Model: Confined
Solution Method: Bouwer-Rice

K = 3.687E-6 ft/sec
y0 = 3.167 ft



SY-OBMW8-2

Data Set: P:\...\MW8-2.aqt
Date: 03/15/24 Time: 09:43:14

PROJECT INFORMATION

Company: Credere Associates
Client: USACE
Project: 18001468
Location: Bangor, ME
Test Well: SY-OBMW8
Test Date: 7-18-22

AQUIFER DATA

Saturated Thickness: 20. ft Anisotropy Ratio (Kz/Kr): 1.

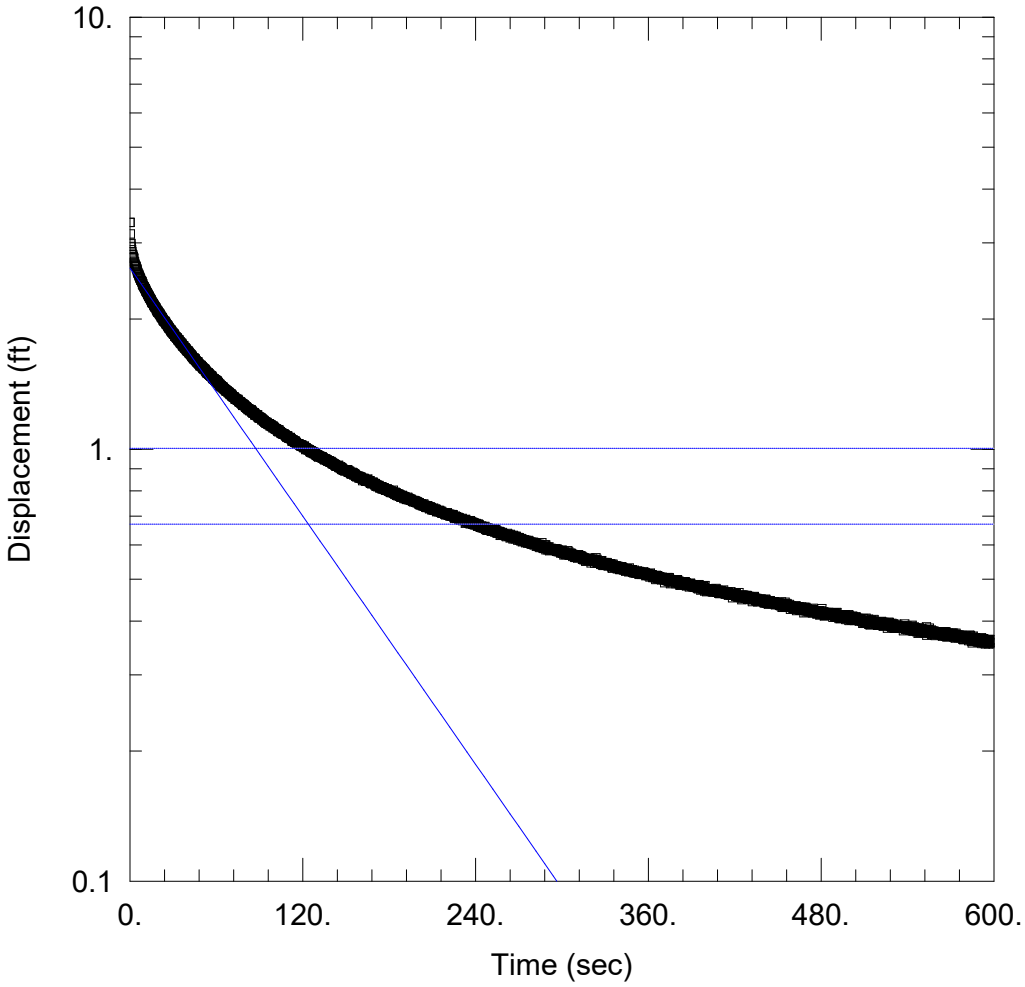
WELL DATA (SY-OBMW8)

Initial Displacement: 3.99 ft
Total Well Penetration Depth: 18. ft
Casing Radius: 0.083 ft
Static Water Column Height: 21.2 ft
Screen Length: 10. ft
Well Radius: 0.25 ft

SOLUTION

Aquifer Model: Confined
Solution Method: Bouwer-Rice

K = 4.414E-6 ft/sec
y0 = 2.89 ft



SY-OBMW9-1

Data Set: P:\...\MW9-1.aqt
Date: 03/15/24 Time: 09:41:04

PROJECT INFORMATION

Company: Credere Associates
Client: USACE
Project: 18001468
Location: Bangor, ME
Test Well: SY-OBMW9
Test Date: 7-18-22

AQUIFER DATA

Saturated Thickness: 28. ft Anisotropy Ratio (Kz/Kr): 1.

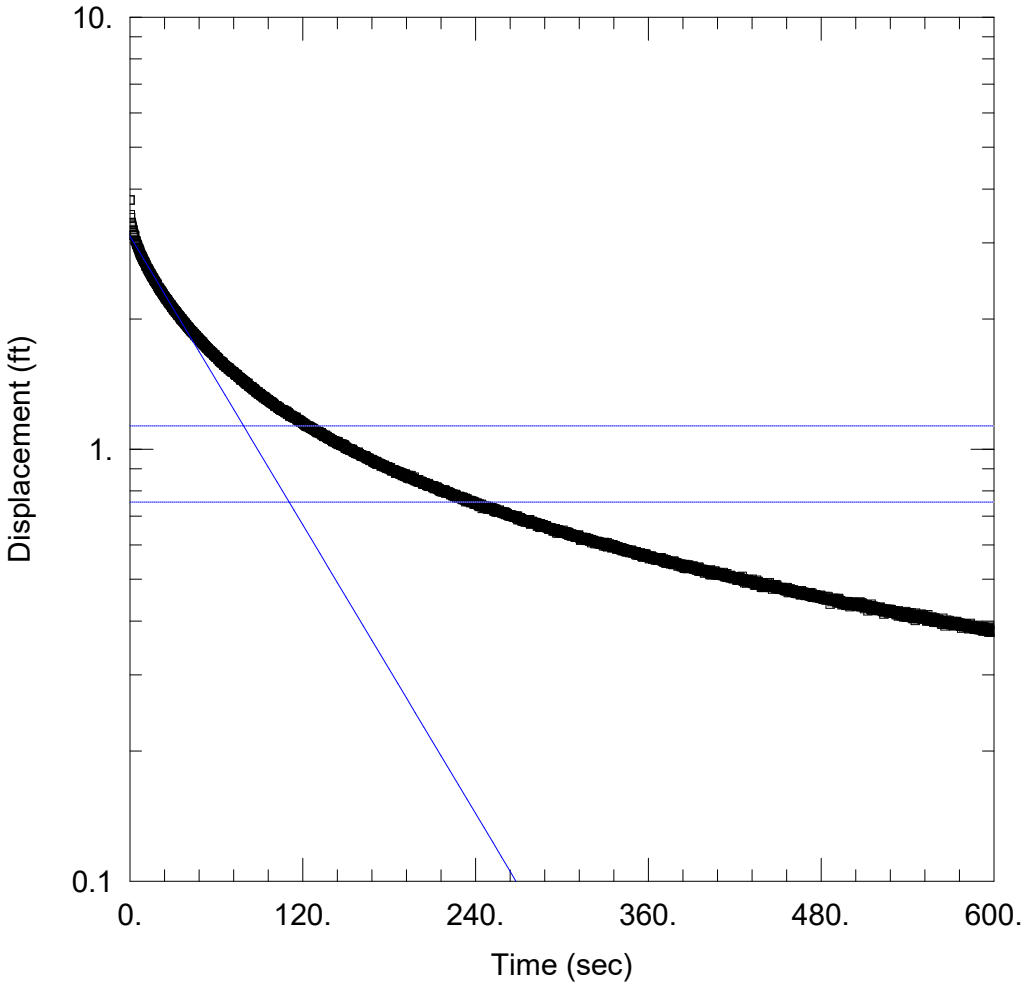
WELL DATA (SY-OBMW9)

Initial Displacement: 3.35 ft
Total Well Penetration Depth: 26. ft
Casing Radius: 0.083 ft
Static Water Column Height: 28.85 ft
Screen Length: 10. ft
Well Radius: 0.25 ft

SOLUTION

Aquifer Model: Confined
Solution Method: Bouwer-Rice

K = 1.154E-5 ft/sec
y0 = 2.626 ft



SY-OBMW9-2

Data Set: P:\...\MW9-2.aqt
Date: 03/15/24 Time: 09:40:25

PROJECT INFORMATION

Company: Credere Associates
Client: USACE
Project: 18001468
Location: Bangor, ME
Test Well: SY-OBMW9
Test Date: 7-18-22

AQUIFER DATA

Saturated Thickness: 28. ft Anisotropy Ratio (Kz/Kr): 1.

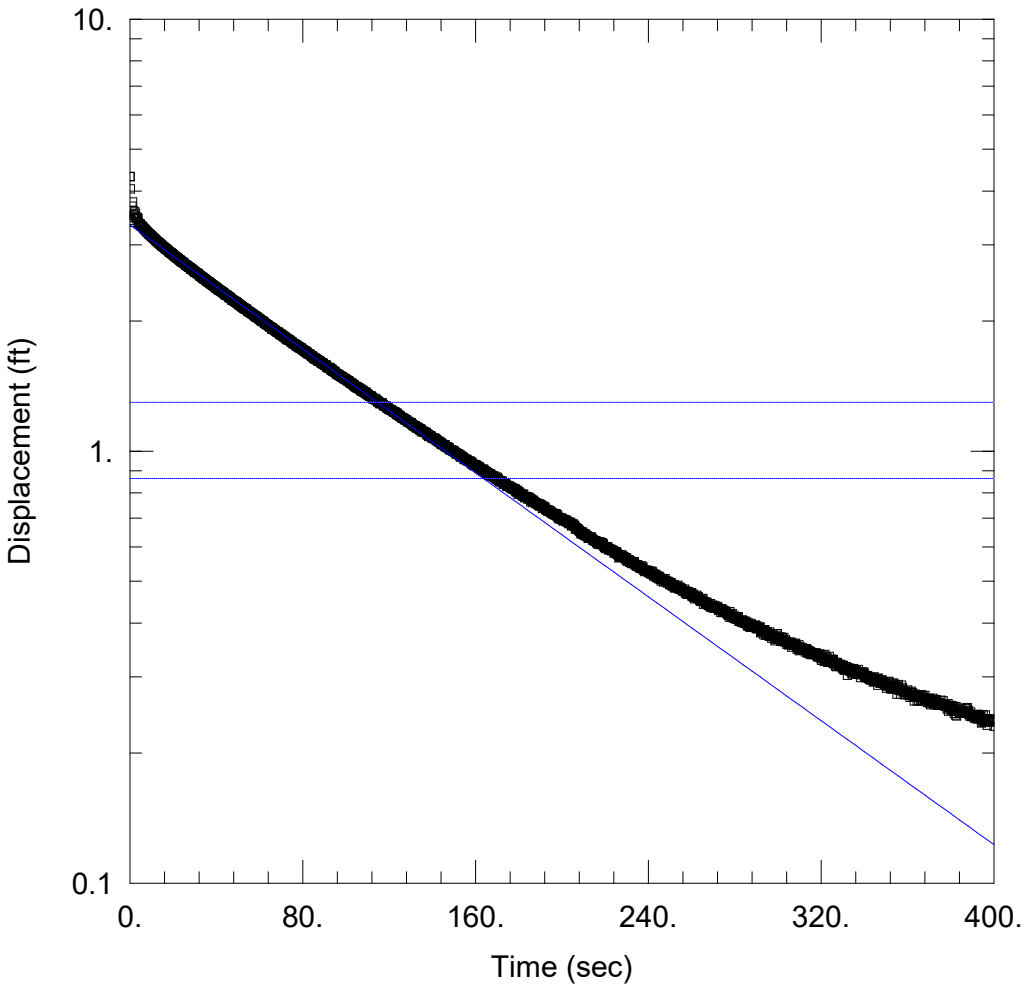
WELL DATA (SY-OBMW9)

Initial Displacement: 3.77 ft
Total Well Penetration Depth: 26. ft
Casing Radius: 0.083 ft
Static Water Column Height: 28.75 ft
Screen Length: 10. ft
Well Radius: 0.25 ft

SOLUTION

Aquifer Model: Confined
Solution Method: Bouwer-Rice

K = 1.342E-5 ft/sec
y0 = 3.111 ft



SY-OBMW10-1

Data Set: P:\...\MW10-1.aqt
Date: 03/15/24 Time: 09:51:50

PROJECT INFORMATION

Company: Credere Associates
Client: USACE
Project: 18001468
Location: Bangor, ME
Test Well: SY-OBMW10
Test Date: 7-19-22

AQUIFER DATA

Saturated Thickness: 17.5 ft Anisotropy Ratio (Kz/Kr): 1.

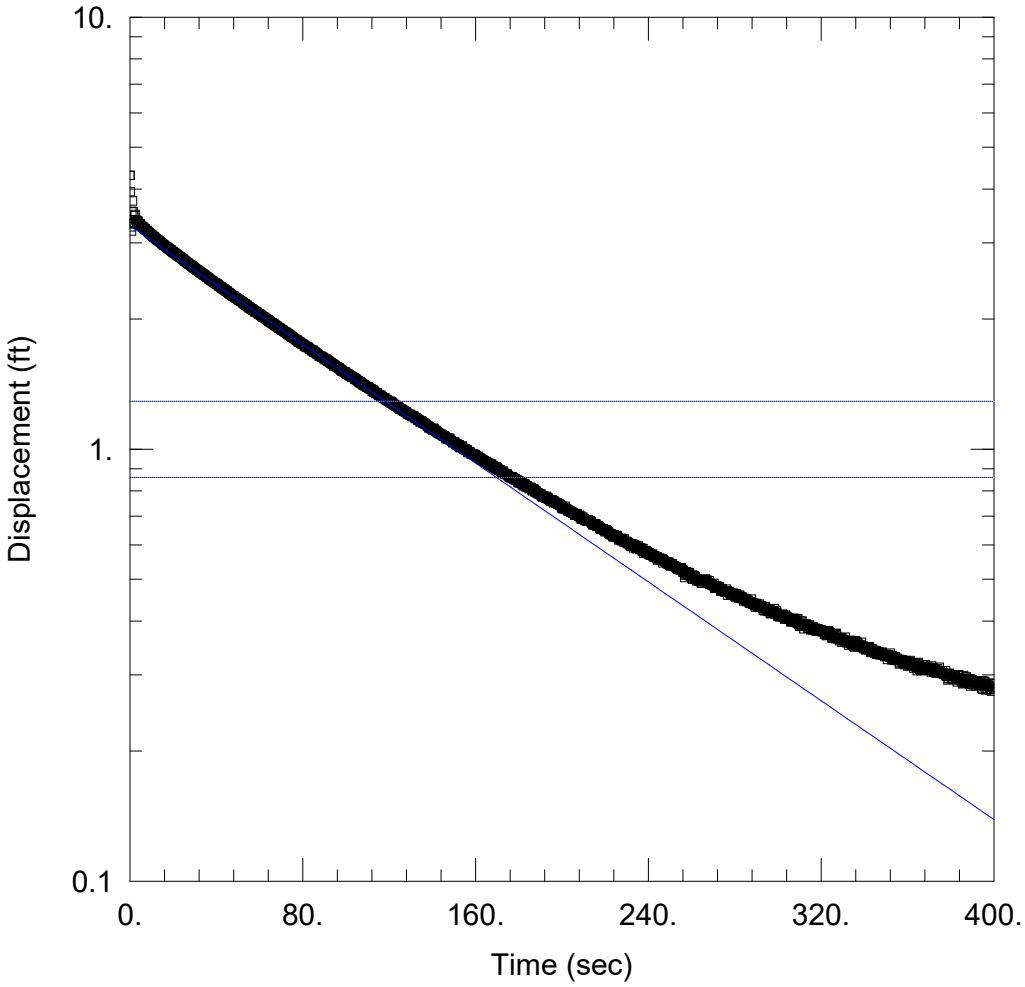
WELL DATA (SY-OBMW10)

Initial Displacement: 4.32 ft
Total Well Penetration Depth: 15.5 ft
Casing Radius: 0.083 ft
Static Water Column Height: 29.79 ft
Screen Length: 10. ft
Well Radius: 0.25 ft

SOLUTION

Aquifer Model: Confined
Solution Method: Bouwer-Rice

K = 7.926E-6 ft/sec
y0 = 3.337 ft



SY-OBMW10-2

Data Set: P:\...\MW10-2.aqt
Date: 03/15/24 Time: 09:50:59

PROJECT INFORMATION

Company: Credere Associates
Client: USACE
Project: 18001468
Location: Bangor, ME
Test Well: SY-OBMW10
Test Date: 7-19-22

AQUIFER DATA

Saturated Thickness: 17.5 ft Anisotropy Ratio (Kz/Kr): 1.

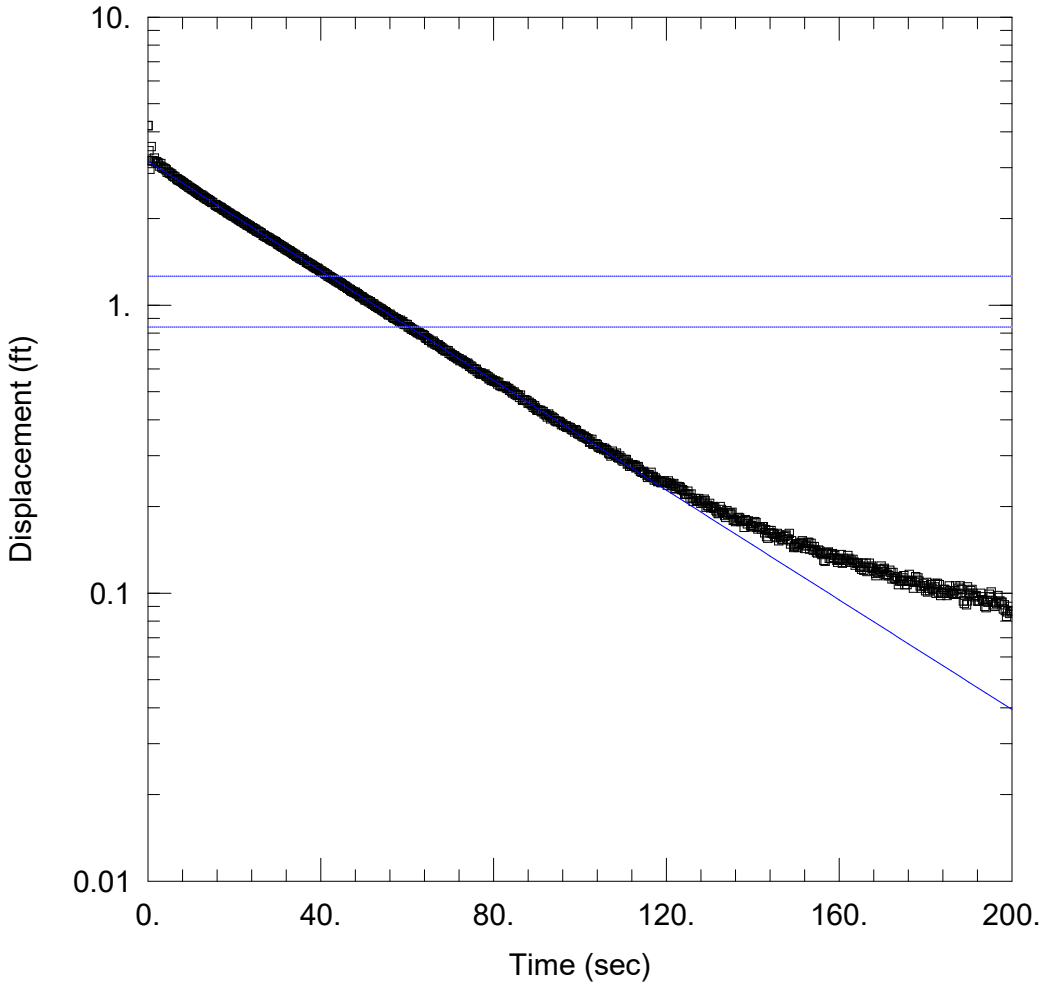
WELL DATA (SY-OBMW10)

Initial Displacement: 4.3 ft
Total Well Penetration Depth: 15.5 ft
Casing Radius: 0.083 ft
Static Water Column Height: 29.75 ft
Screen Length: 10. ft
Well Radius: 0.25 ft

SOLUTION

Aquifer Model: Confined
Solution Method: Bouwer-Rice

K = 7.6E-6 ft/sec
y0 = 3.294 ft



SY-OBMW11-1

Data Set: P:\...\MW11-1.aqt
Date: 03/15/24 Time: 09:53:41

PROJECT INFORMATION

Company: Credere Associates
Client: USACE
Project: 18001468
Location: Bangor, ME
Test Well: SY-OBMW11
Test Date: 7-19-22

AQUIFER DATA

Saturated Thickness: 16. ft Anisotropy Ratio (Kz/Kr): 1.

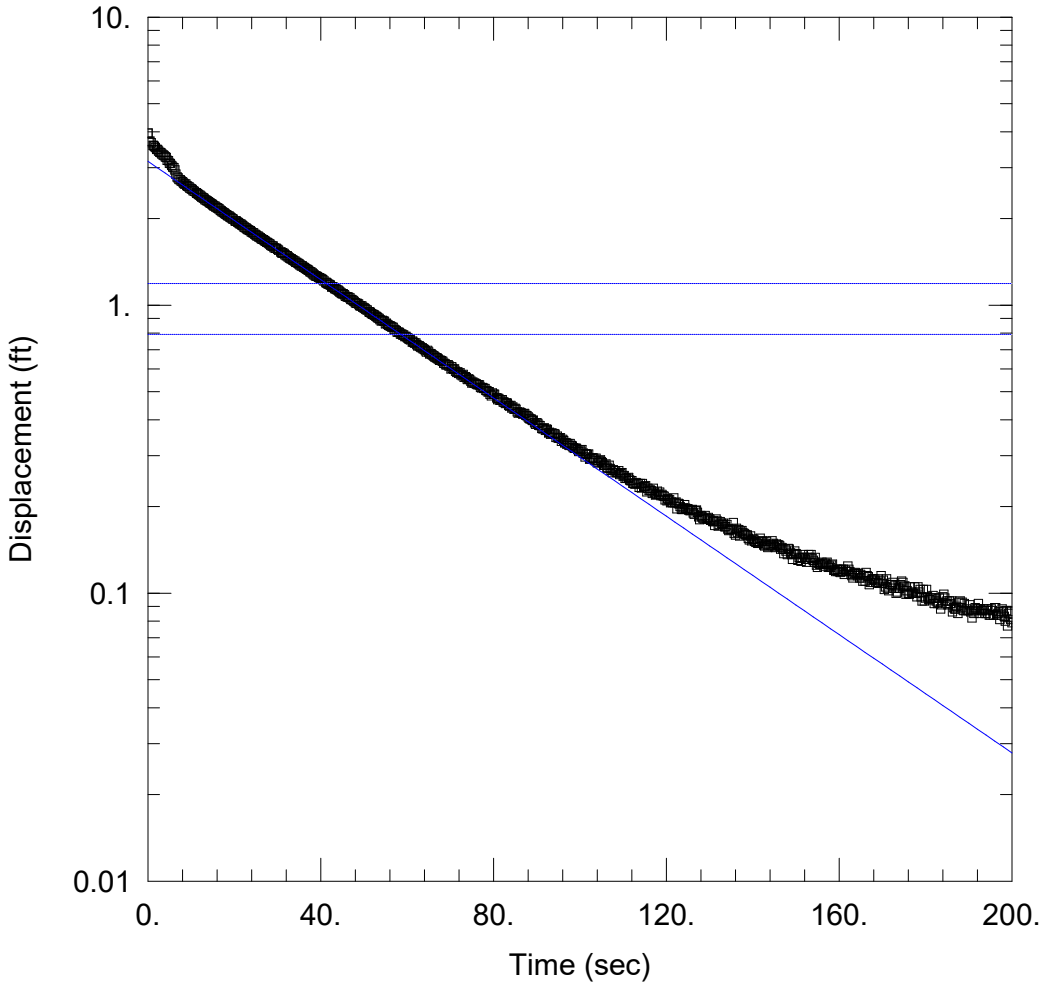
WELL DATA (SY-OBMW11)

Initial Displacement: 4.2 ft
Total Well Penetration Depth: 14. ft
Casing Radius: 0.083 ft
Static Water Column Height: 21.7 ft
Screen Length: 10. ft
Well Radius: 0.25 ft

SOLUTION

Aquifer Model: Confined
Solution Method: Bouwer-Rice

K = 2.066E-5 ft/sec
y0 = 3.16 ft



SY-OBMW11-2

Data Set: P:\...\MW11-2.aqt
Date: 03/15/24 Time: 10:01:52

PROJECT INFORMATION

Company: Credere Associates
Client: USACE
Project: 18001468
Location: Bangor, ME
Test Well: SY-OBMW11
Test Date: 7-19-22

AQUIFER DATA

Saturated Thickness: 16. ft Anisotropy Ratio (Kz/Kr): 1.

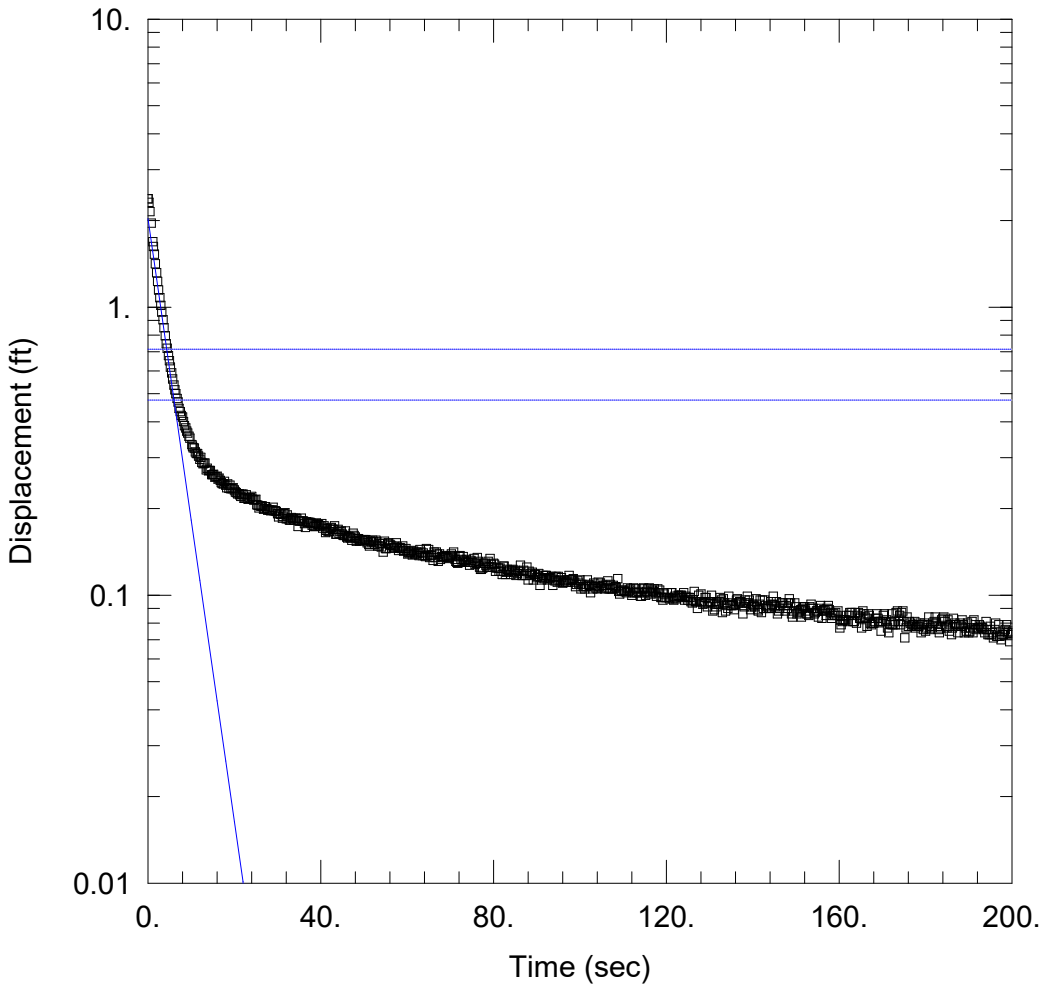
WELL DATA (SY-OBMW11)

Initial Displacement: 3.96 ft
Total Well Penetration Depth: 14. ft
Casing Radius: 0.083 ft
Static Water Column Height: 21.69 ft
Screen Length: 10. ft
Well Radius: 0.25 ft

SOLUTION

Aquifer Model: Confined
Solution Method: Bouwer-Rice

K = 2.228E-5 ft/sec
y0 = 3.155 ft



SY-OBMW12-1

Data Set: P:\...\MW12-1.aqt
Date: 03/15/24 Time: 10:04:59

PROJECT INFORMATION

Company: Credere Associates
Client: USACE
Project: 18001468
Location: Bangor, ME
Test Well: SY-OBMW12
Test Date: 7-19-22

AQUIFER DATA

Saturated Thickness: 16. ft Anisotropy Ratio (Kz/Kr): 1.

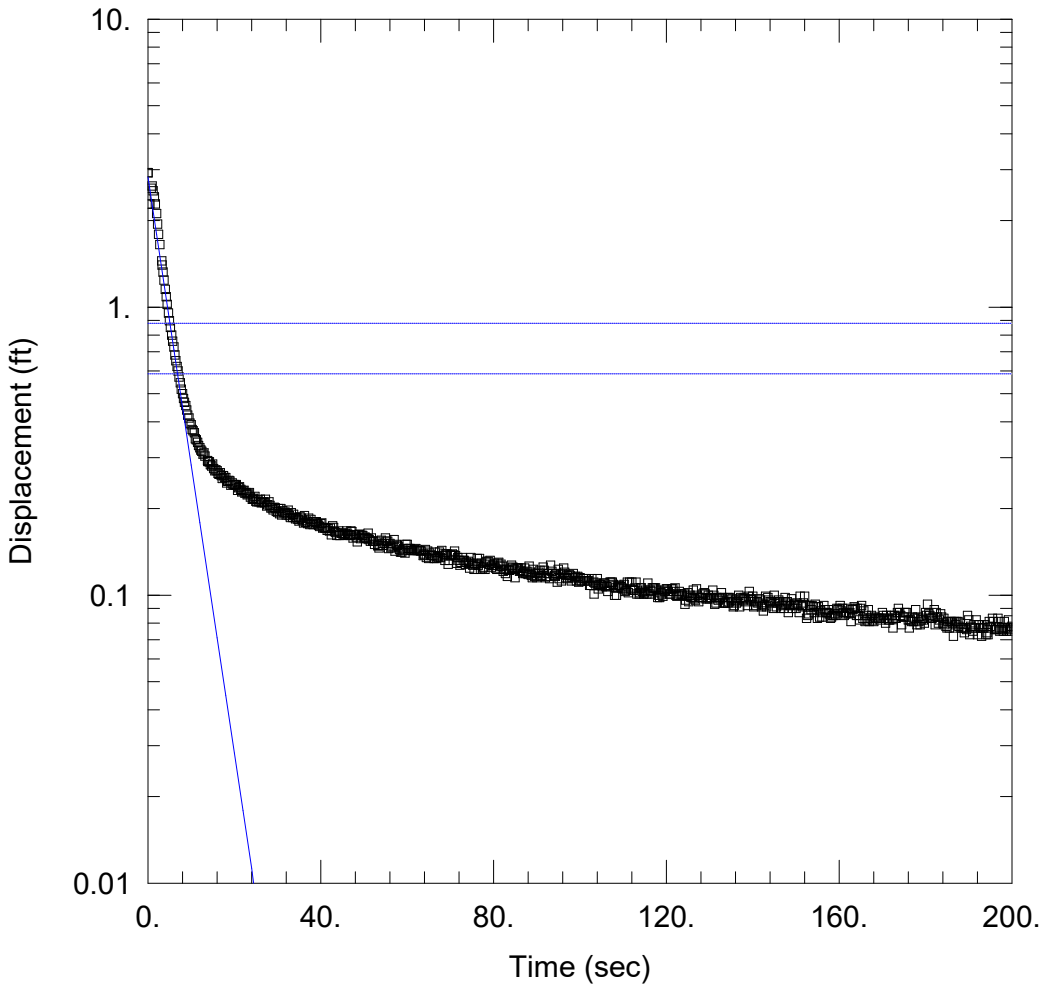
WELL DATA (SY-OBMW12)

Initial Displacement: 2.38 ft
Total Well Penetration Depth: 14. ft
Casing Radius: 0.083 ft
Static Water Column Height: 25.9 ft
Screen Length: 10. ft
Well Radius: 0.25 ft

SOLUTION

Aquifer Model: Confined
Solution Method: Bouwer-Rice

K = 0.0002271 ft/sec
y0 = 2.03 ft



SY-OBMW12-2

Data Set: P:\...\MW12-2.aqt
Date: 03/15/24 Time: 10:09:13

PROJECT INFORMATION

Company: Credere Associates
Client: USACE
Project: 18001468
Location: Bangor, ME
Test Well: SY-OBMW12
Test Date: 7-19-22

AQUIFER DATA

Saturated Thickness: 16. ft Anisotropy Ratio (Kz/Kr): 1.

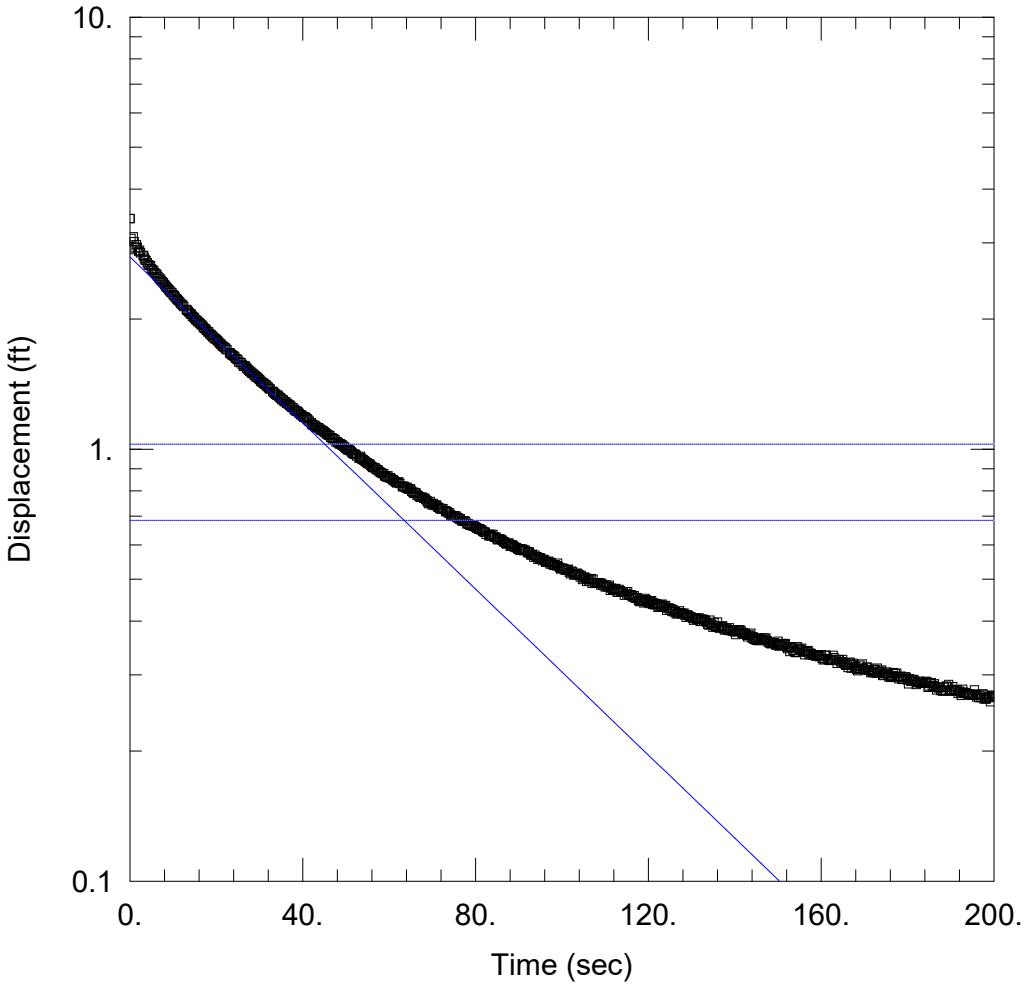
WELL DATA (SY-OBMW12)

Initial Displacement: 2.93 ft
Total Well Penetration Depth: 14. ft
Casing Radius: 0.083 ft
Static Water Column Height: 25.91 ft
Screen Length: 10. ft
Well Radius: 0.25 ft

SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice

K = 0.000217 ft/sec
y0 = 2.832 ft



SY-OBMW13-1

Data Set: P:\...\MW13-1.aqt
Date: 03/15/24 Time: 10:39:30

PROJECT INFORMATION

Company: Credere Associates
Client: USACE
Project: 18001468
Location: Bangor, ME
Test Well: SY-OBMW13
Test Date: 7-19-22

AQUIFER DATA

Saturated Thickness: 13. ft Anisotropy Ratio (Kz/Kr): 1.

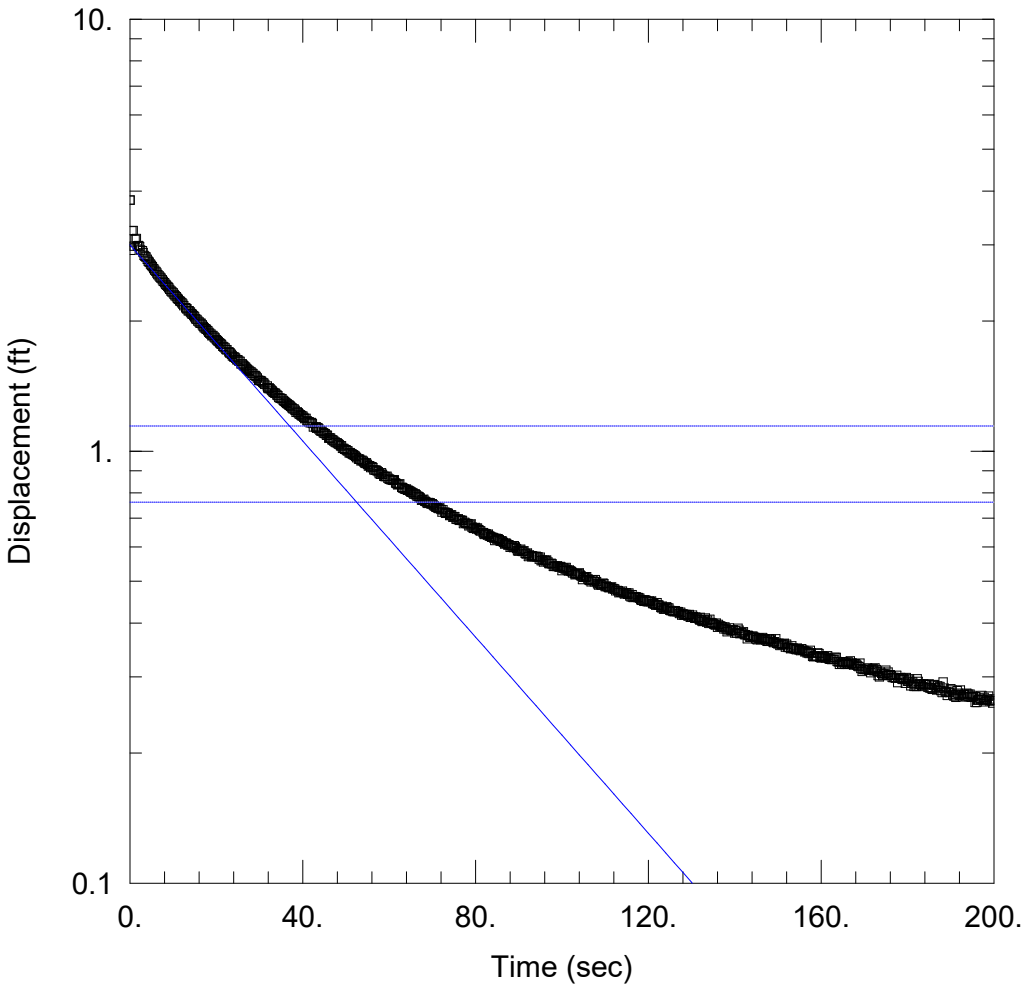
WELL DATA (SY-OBMW13)

Initial Displacement: 3.42 ft
Total Well Penetration Depth: 11. ft
Casing Radius: 0.083 ft
Static Water Column Height: 16.21 ft
Screen Length: 10. ft
Well Radius: 0.25 ft

SOLUTION

Aquifer Model: Confined
Solution Method: Bouwer-Rice

K = 1.99E-5 ft/sec
y0 = 2.785 ft



SY-OBMW13-2

Data Set: P:\...\MW13-2.aqt
Date: 03/15/24 Time: 10:40:28

PROJECT INFORMATION

Company: Credere Associates
Client: USACE
Project: 18001468
Location: Bangor, ME
Test Well: SY-OBMW13
Test Date: 7-19-22

AQUIFER DATA

Saturated Thickness: 13. ft Anisotropy Ratio (Kz/Kr): 1.

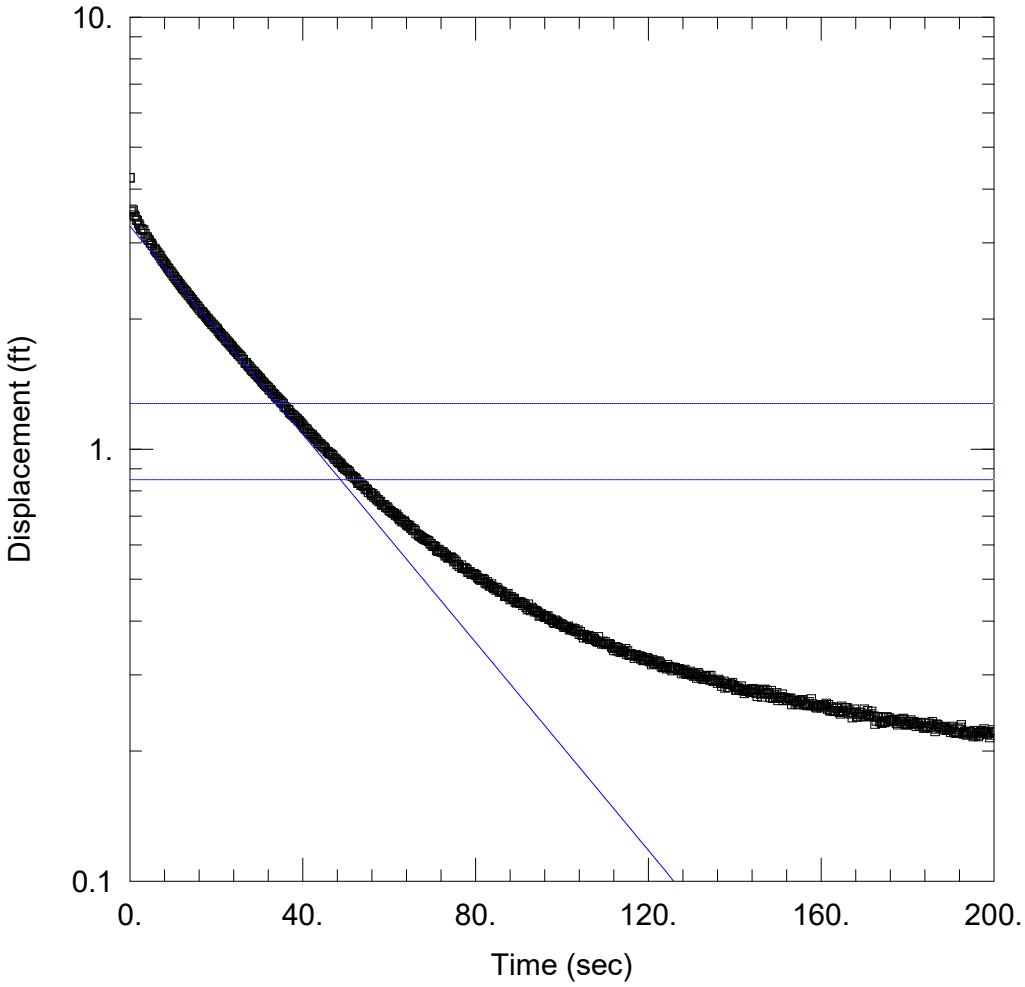
WELL DATA (SY-OBMW13)

Initial Displacement: 3.81 ft
Total Well Penetration Depth: 11. ft
Casing Radius: 0.083 ft
Static Water Column Height: 16.19 ft
Screen Length: 10. ft
Well Radius: 0.25 ft

SOLUTION

Aquifer Model: Confined
Solution Method: Bouwer-Rice

K = 2.35E-5 ft/sec
y0 = 3.001 ft



SY-OBMW14-1

Data Set: P:\...\MW14-1.aqt
Date: 03/15/24 Time: 10:42:51

PROJECT INFORMATION

Company: Credere Associates
Client: USACE
Project: 18001468
Location: Bangor, ME
Test Well: SY-OBMW14
Test Date: 7-18-22

AQUIFER DATA

Saturated Thickness: 14. ft Anisotropy Ratio (Kz/Kr): 1.

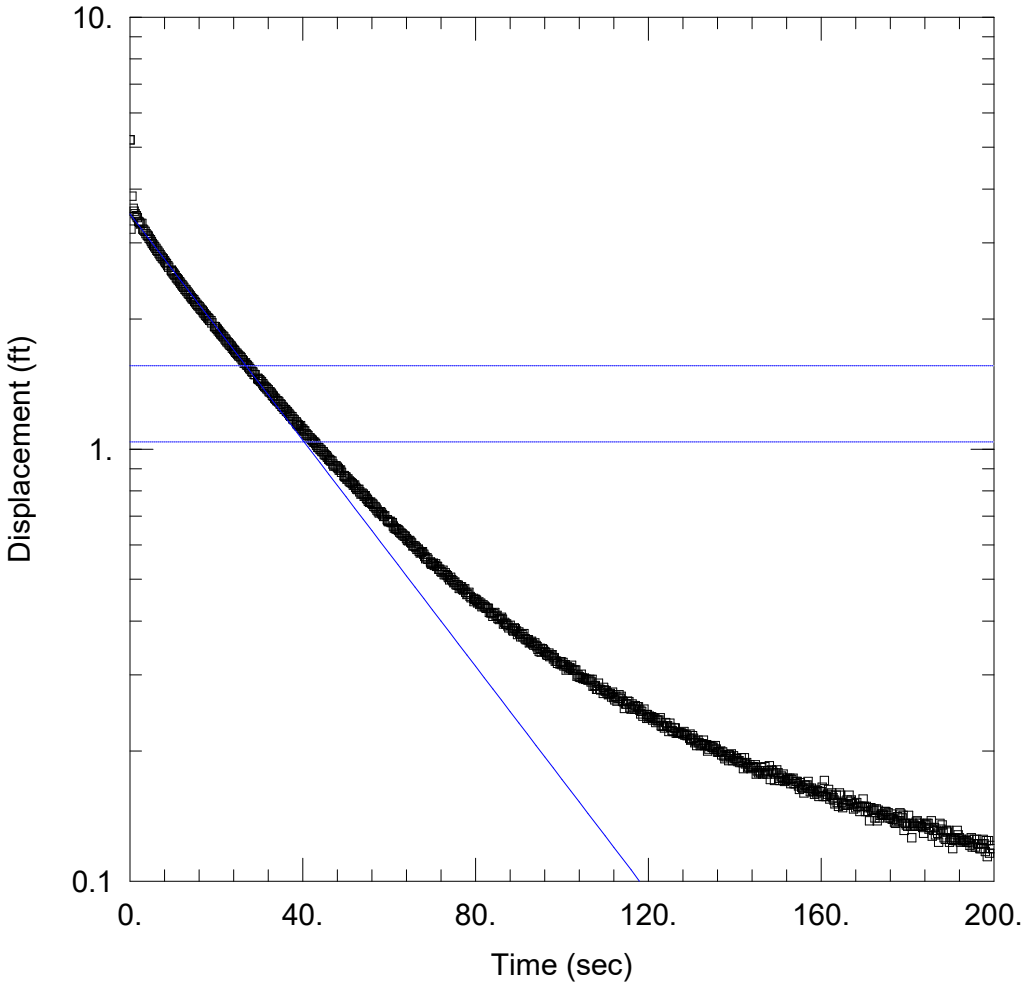
WELL DATA (SY-OBMW14)

Initial Displacement: 4.25 ft
Total Well Penetration Depth: 12. ft
Casing Radius: 0.083 ft
Static Water Column Height: 20.84 ft
Screen Length: 10. ft
Well Radius: 0.25 ft

SOLUTION

Aquifer Model: Confined
Solution Method: Bouwer-Rice

K = 2.537E-5 ft/sec
y0 = 3.28 ft



SY-OBMW14-2

Data Set: P:\...\MW14-2.aqt
Date: 03/15/24 Time: 10:43:54

PROJECT INFORMATION

Company: Credere Associates
Client: USACE
Project: 18001468
Location: Bangor, ME
Test Well: SY-OBMW14
Test Date: 7-18-22

AQUIFER DATA

Saturated Thickness: 14. ft Anisotropy Ratio (Kz/Kr): 1.

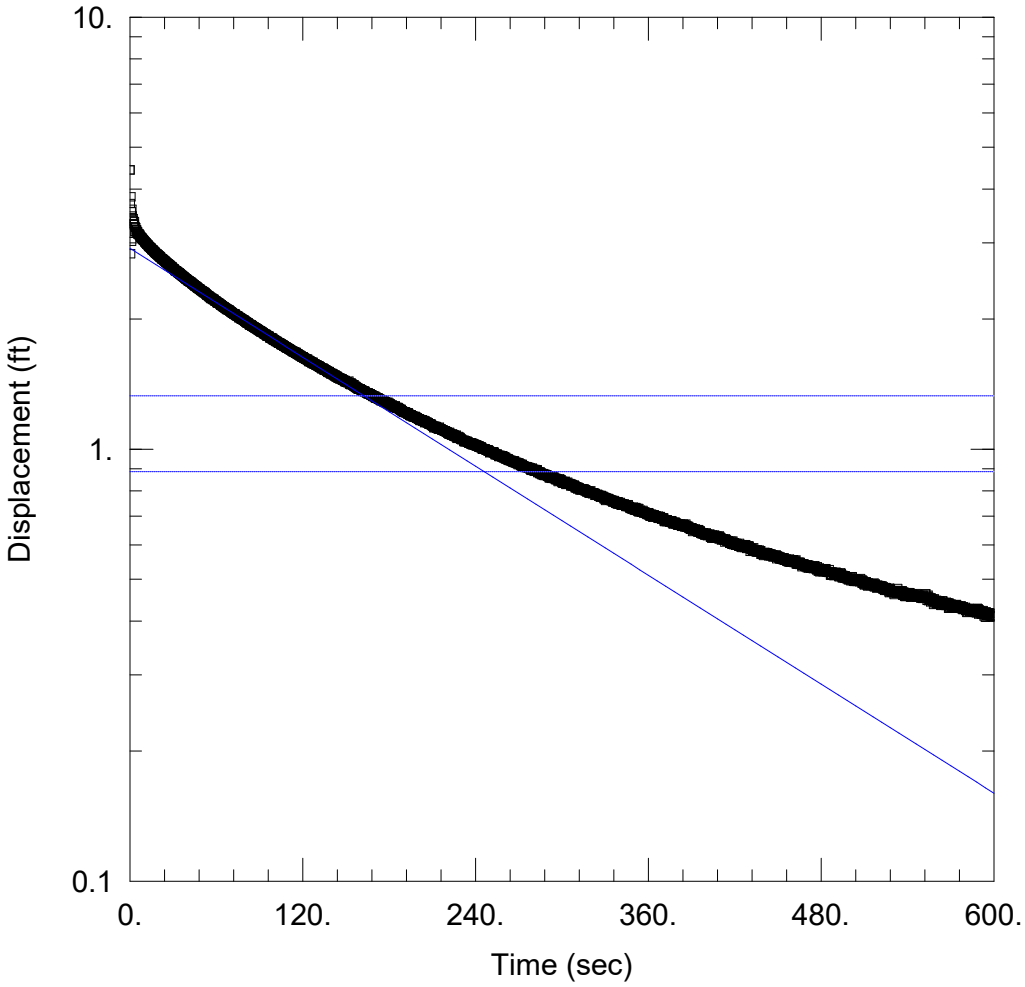
WELL DATA (SY-OBMW14)

Initial Displacement: 5.2 ft Static Water Column Height: 20.66 ft
Total Well Penetration Depth: 12. ft Screen Length: 10. ft
Casing Radius: 0.083 ft Well Radius: 0.25 ft

SOLUTION

Aquifer Model: Confined Solution Method: Bouwer-Rice

K = 2.757E-5 ft/sec y0 = 3.5 ft



SY-OBMW15-1

Data Set: P:\...\MW15-1.aqt
Date: 03/15/24 Time: 10:48:49

PROJECT INFORMATION

Company: Credere Associates
Client: USACE
Project: 18001468
Location: Bangor, ME
Test Well: SY-OBMW15
Test Date: 7-19-22

AQUIFER DATA

Saturated Thickness: 15. ft Anisotropy Ratio (Kz/Kr): 1.

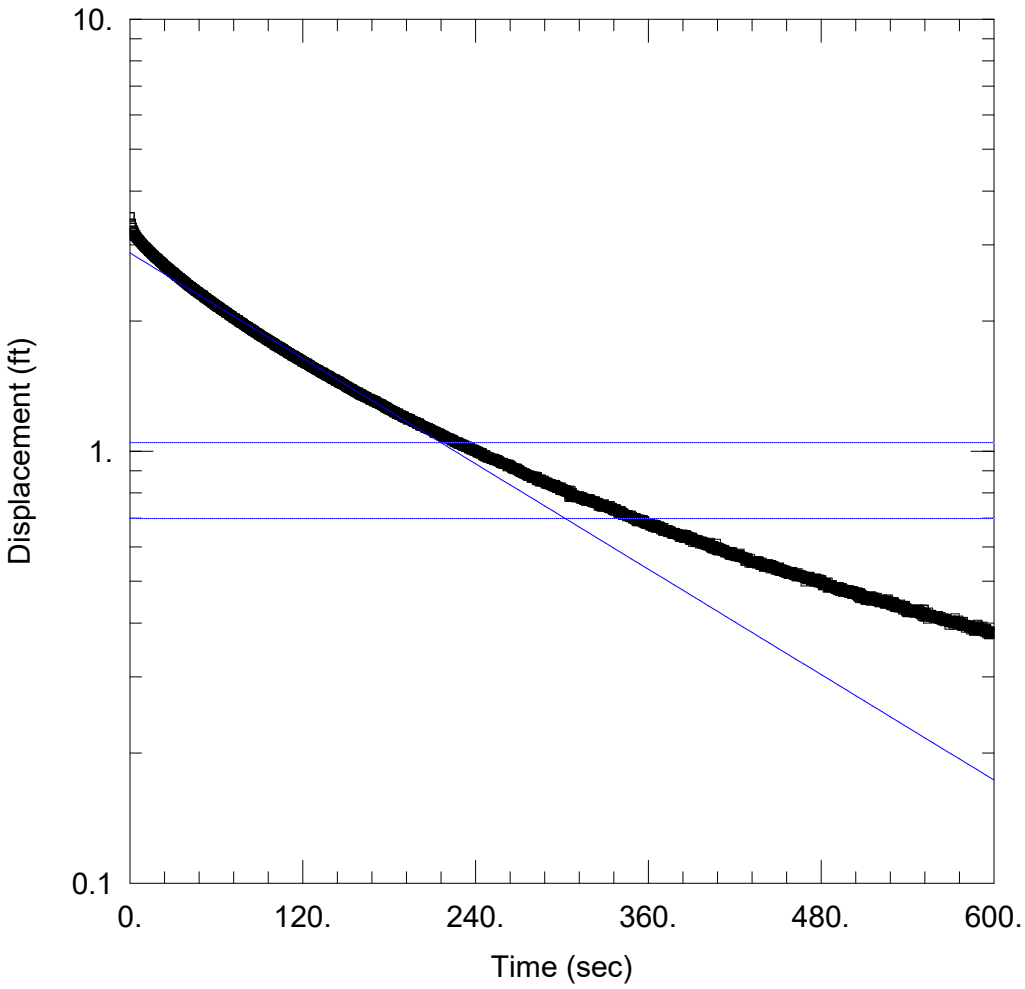
WELL DATA (SY-OBMW15)

Initial Displacement: 4.43 ft
Total Well Penetration Depth: 13. ft
Casing Radius: 0.083 ft
Static Water Column Height: 19.28 ft
Screen Length: 10. ft
Well Radius: 0.25 ft

SOLUTION

Aquifer Model: Confined
Solution Method: Bouwer-Rice

K = 4.497E-6 ft/sec
y0 = 2.916 ft



SY-OBMW15-2

Data Set: P:\...\MW15-2.aqt
Date: 03/15/24 Time: 10:49:06

PROJECT INFORMATION

Company: Credere Associates
Client: USACE
Project: 18001468
Location: Bangor, ME
Test Well: SY-OBMW15
Test Date: 7-19-22

AQUIFER DATA

Saturated Thickness: 15. ft Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (SY-OBMW15)

Initial Displacement: 3.49 ft
Total Well Penetration Depth: 13. ft
Casing Radius: 0.083 ft
Static Water Column Height: 19.27 ft
Screen Length: 10. ft
Well Radius: 0.25 ft

SOLUTION

Aquifer Model: Confined
Solution Method: Bouwer-Rice

K = 4.351E-6 ft/sec
y0 = 2.875 ft

APPENDIX D

BORING LOGS AND MONITORING WELL CONSTRUCTION DETAILS

Credere Associates, LLC
776 Main Street
Westbrook, Maine 04092
Phone: 207-828-1272
Fax: 207-887-1051

Boring Log

SY-BRMW1

CLIENT United States Army Corps of Engineers
PROJECT NAME Former Salvage Yard, Former Dow Military Airfield
PROJECT # 18001468
PROJECT LOCATION 233 Odlin Road, Bangor, Maine
DATE STARTED 12/2/22 **LOGGED BY** SG, PT, ID
DEPTH TO WATER 13.10 ft.* **WELL DIAMETER** 6 in.
CONTRACTOR Cascade Drilling, LP/Arlen Little, Al Sizemore
WELL MATERIALS Steel Flush Thread; FLUTe Liner
DRILLING METHOD Sonic (overburden)/air hammer (bedrock)
ANNULUS MATERIALS NA, NA
DRILLING EQUIPMENT Terra Sonic 150C Crawler, borehole diam. 6 in.
MP ELEVATION 161.67 **GROUND ELEVATION** 158.52
NOTES SG - Sean Gannon; PT - Peter Thompson; ID - Ian Desjarlais. * - feet below top of casing, water level measurements taken on 2/6/23.

Depth (ft)	Penetration/ Recovery (in)	Blow Counts	Field Screening (ppm)	Lab Analytical Sample	Graphic Log	LITHOLOGY
0	60/27		1.1 - 1.3			0-27" Dark brown, moist, poorly sorted, SILT and fine to coarse SAND, little fine Gravel (angular to rounded), trace coarse Gravel (angular to rounded). 0-5 feet drilled in approximately 2 minutes.
5	24/20		0.0 - 0.0			0-20" GRANITE COBBLE in dark brown, moist, Silt and fine Sand matrix, some granite and metawacke rock fragments (angular). 5-7 feet drilled in approximately 2.25 minutes.
	36/36		0.1 - 0.1			0-12" Dark olive brown, moist, poorly sorted, SILT and fine to coarse SAND matrix, some granite cobbles. 7-10 feet drilled in approximately 3 minutes.
10	84/82		0.2 - 0.2			12-36" Brown to light gray, moist, CLAY, mottled, cohesive (Presumpscot Formation) 0-82" Brown to olive gray, moist, CLAY, mottled, cohesive, stiff. 10-17 feet drilled in approximately 2 minutes.
15						
	120/113		0.3 - 0.3			0-79" Gray, moist, SILT and CLAY, no mottling, soft, very plastic. 17-27 feet drilled in approximately 5 minutes.
20						
						79-120" Dark olive gray, moist, TILL (poorly sorted SILT and fine to coarse SAND, little to some well rounded Gravel)
25	120/120		0.3 - 0.3			0-24" Dark gray, moist, TILL (poorly sorted SILT and fine to coarse SAND, little to some gravel, trace cobbles). 27-37 feet drilled in approximately 5 minutes.
						24-42" METAWACKE (boulder)
30						42-74" Dark gray, moist, TILL (poorly sorted Silt and fine to coarse Sand, trace Clay, little to some subangular cobbles and subrounded gravel), coarser than above
						74-84" METAWACKE (boulder)
						84-96" Dark gray, moist, TILL (Silt and fine to coarse Sand and Silt, some Cobbles)
35						96-120" METAWACKE (weathered bedrock). Top of bedrock at 35 ft. Foliation perpendicular to core, indicating likely boulders above competent bedrock.
	60/38		0.0 - 0.3			0-38" Gray-green, fine grained METAWACKE, trace calcite veinlets, moderately competent, not chemically weathered, appears dry. Oxidized bedding plane fracture at 39 feet with foliation approximately 60 degrees

WELL DIAGRAM
Casing Top Elev: 161.67 (ft)
Casing Type: Stick Up (3.15')

- Steel Casing (4")
- Portland Cement/Bentonite Grout Mixture Around Steel Casing
- 35' Depth to competent bedrock
- 5' Casing into competent bedrock

CREDERE ENV 2015 - GINT STD US LAB.GDT - 3/28/24 14:02 - P:\18001468 USACE DOW SALVAGE YARD\WORK\FIELD DOCUMENTATION\GINT\DOW_BEDROCK BORING LOGS_REV 07-2023.GPJ

Credere Associates, LLC
776 Main Street
Westbrook, Maine 04092
Phone: 207-828-1272
Fax: 207-887-1051

Boring Log

CLIENT United States Army Corps of Engineers
PROJECT NAME Former Salvage Yard, Former Dow Military Airfield
PROJECT # 18001468
PROJECT LOCATION 233 Odlin Road, Bangor, Maine

Depth (ft)	Penetration/ Recovery (in)	Blow Counts	Field Screening (ppm)	Lab Analytical Sample	Graphic Log	LITHOLOGY	WELL DIAGRAM
40						to core. 38 inch core recovered. RQD=21% (very poor). 37-42 feet drilled in approximately 6 minutes.	40' Total depth of casing
						42-50 feet drilled in approximately 7 minutes.	
45							Port 1 depth interval 42-52' bgs
50			0.0 - 0.0			Light gray METAWACKE, approximately 10-30% quartz, no visible oxidation. 50-60 feet drilled in approximately 15 minutes. Estimated water return less than 1 gallon per minute.	
						Same as above, except approximately 30% quartz	
55						Same as above, except approximately 10% quartz	
							Open hole bedrock with blank liner
60			0.0 - 0.0			Light gray METAWACKE, approximately 10% quartz. Significant rig chatter noted. 60-70 feet drilled in approximatley 13 minutes. Estimated water return less than 1 gallon per minute.	
65						Same as above, except slurry is much thicker and gray, with approximately 15% iron oxide on quartz grains.	
70			0.0 - 0.0			Same as above, with continued rig chatter. 70-80 feet drilled in approximately 11 minutes. Estimated water return less than 1 gallon per minute.	Port 2 depth interval 65-75' bgs
						Slurry becoming brown with greenish blue to gray Metawacke cuttings, approximately 10% quartz and 15% iron oxide.	
75						Slurry becoming greenish gray with approximately 15% iron oxide and 20% quartz.	

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Credere Associates, LLC
776 Main Street
Westbrook, Maine 04092
Phone: 207-828-1272
Fax: 207-887-1051

Boring Log

SY-BRMW1

CLIENT United States Army Corps of Engineers
PROJECT NAME Former Salvage Yard, Former Dow Military Airfield
PROJECT # 18001468
PROJECT LOCATION 233 Odlin Road, Bangor, Maine

Depth (ft)	Penetration/ Recovery (in)	Blow Counts	Field Screening (ppm)	Lab Analytical Sample	Graphic Log	LITHOLOGY	WELL DIAGRAM
80			0.0 - 0.0			Greenish blue to gray METAWACKE, with approximately 20% iron oxide and 20% quartz and very thick brown slurry. Slight rig chatter noted. 80-90 feet drilled in approximately 8 minutes. Estimated water return less than 1 gallon per minute.	
85							
90			0.0 - 0.0			Same as above, except slurry thinning and brown. 90-100 feet drilled in approximately 16 minutes. Estimated water return less than 1 gallon per minute.	
95						Same as above, except gray slurry. Rig chatter noted.	
100			0.0 - 0.0			Same as above, except 30% quartz, no fines/optically clear water, rig chatter noted. 100-110 feet drilled in approximately 11 minutes. Estimated water return less than 1 gallon per minute.	
105						Slurry becoming brown, with 85% quartz, 10% iron oxides/hematite, and 5% Metawacke.	
						Greenish-gray METAWACKE, with 15% iron oxides, and no quartz.	
110			0.0 - 0.0			Greenish-gray METAWACKE, no iron oxide, no quartz. Light gray slurry. 110-120 feet drilled in approximately 12 minutes. Estimated water return less than 1 gallon per minute.	← Open hole bedrock with blank liner
115							

CREDERE ENV 2015 - GINT STD US LAB.GDT - 3/28/24 14:02 - P:\18001468 USACE DOW SALVAGE YARD\WORK\FIELD DOCUMENTATION\GINT\DOW_BEDROCK BORING LOGS_REV 07-2023.GPJ

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Fax: 207-887-1051

Boring Log

SY-BRMW1

CLIENT United States Army Corps of Engineers
PROJECT NAME Former Salvage Yard, Former Dow Military Airfield
PROJECT # 18001468
PROJECT LOCATION 233 Odlin Road, Bangor, Maine

Depth (ft)	Penetration/ Recovery (in)	Blow Counts	Field Screening (ppm)	Lab Analytical Sample	Graphic Log	LITHOLOGY	WELL DIAGRAM
120			0.0 - 0.0			Greenish-gray METAWACKE, approxmately 10% iron oxide, 10% quartz, with 30% brown Metawacke cuttings. Rig chatter noted. 120-130 feet drilled in approximately 16 minutes. Estimated water return less than 1 gallon per minute.	
125							
130			0.0 - 0.0			Same as above. 130-140 feet drilled in approximately 9 minutes. Estimated water return less than 1 gallon per minute.	
135							
140			0.0 - 0.0			Greenish-gray METAWACKE, trace iron oxide, trace quartz. 140-150 feet drilled in approximately 9 minutes. Estimated water return less than 1 gallon per minute.	
						Slurry becoming brownish-gray, with approximately 20% iron oxides and 10% quartz.	
145						Slurry becoming gray.	
150			0.0 - 0.0			Gray METAWACKE, no iron oxide, approximately 35% quartz. 150-160 feet drilled in approximately 14 minutes. Estimated water return less than 1 gallon per minute.	Port 3 depth interval 150-157' bgs
155						Slurry becoming very dark reddish-brown, with approximately 30% quartz. Increase in water return to an estimated 10 gallons per minute.	
						Gray Metawacke with approximately 30% iron oxide.	

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Fax: 207-887-1051

Boring Log

SY-BRMW1

CLIENT United States Army Corps of Engineers
PROJECT NAME Former Salvage Yard, Former Dow Military Airfield
PROJECT # 18001468
PROJECT LOCATION 233 Odlin Road, Bangor, Maine

Depth (ft)	Penetration/ Recovery (in)	Blow Counts	Field Screening (ppm)	Lab Analytical Sample	Graphic Log	LITHOLOGY	WELL DIAGRAM
160			0.0 - 0.0			Gray METAWACKE, approximately 15% iron oxide, 5% quartz. 160-170 feet drilled in approximately 14 minutes. Estimated water return approximately 10 gallons per minute.	
165						Same as above, except no iron oxide.	
170			0.0 - 0.0			Gray METAWACKE, approximately 5% quartz, no iron oxide. 170-180 feet drilled in approximately 12 minutes. Estimated water return approximately 10 gallons per minute.	
175							
180			0.0 - 0.0			Dark reddish-brown slurry. Driller reports no resistance for 1 foot interval (gap) at approximately 179-180 feet. Gray METAWACKE, approximately 5% quartz, no iron oxide. 180-190 feet drilled in approximately 17 minutes. Estimated water return approximately 10 gallons per minute.	
185							
190			0.0 - 0.0			Gray METAWACKE, trace quartz, no iron oxide. 190-200 feet drilled in approximately 13 minutes. Estimated water return decreasing to approximately 5-10 gallons per minute.	
195							

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Credere Associates, LLC
776 Main Street
Westbrook, Maine 04092
Phone: 207-828-1272
Fax: 207-887-1051

Boring Log

SY-BRMW1

CLIENT United States Army Corps of Engineers
PROJECT NAME Former Salvage Yard, Former Dow Military Airfield
PROJECT # 18001468
PROJECT LOCATION 233 Odlin Road, Bangor, Maine

Depth (ft)	Penetration/ Recovery (in)	Blow Counts	Field Screening (ppm)	Lab Analytical Sample	Graphic Log	LITHOLOGY	WELL DIAGRAM
200			0.0 - 0.0			Gray METAWACKE, approximately 20% quartz, no iron oxide. 200-210 feet drilled in approximately 17 minutes. Estimated water return approximately 5-10 gallons per minute.	
						Gray METAWACKE with approximately 40% quartz, no iron oxide. Drill rate decreasing, inidicating high quartz/silicified zone.	
205							
210			0.0 - 0.0			Light gray METAWACKE, approximately 20% quartz, no iron oxide. Slurry is a light milky gray. 210-220 feet drilled in approximately 12 minutes. Estimated water return approximately 5 gallons per minute.	
215							
220			0.0 - 0.0			Same as above, except no quartz. 220-230 feet drilled in approximately 11 minutes. Estimated water return approximately 5 gallons per minute.	
225							Open hole bedrock with blank liner
230			0.0 - 0.0			Light gray METAWACKE, approximately 20% quartz, no iron oxide. 230-240 feet drilled in approximately 13 minutes. Estimated water return approximately 5 gallons per minute.	
						Light gray METAWACKE, with approximately 30% quartz (gravel sized cuttings, approixmately 2 centimeters in size).	
235							

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PROJECT NAME Former Salvage Yard, Former Dow Military Airfield
PROJECT # 18001468
PROJECT LOCATION 233 Odlin Road, Bangor, Maine

Depth (ft)	Penetration/ Recovery (in)	Blow Counts	Field Screening (ppm)	Lab Analytical Sample	Graphic Log	LITHOLOGY	WELL DIAGRAM
240			0.0 - 0.0			Light gray METAWACKE, approximately 15% quartz, no iron oxide. 240-250 feet drilled in approximately 15 minutes. Estimated water return approximately 5 gallons per minute.	
245						Gray METAWACKE, approixmately 20% quartz.	
250			0.0 - 0.0			Greenish-gray METAWACKE, approximately 15% quartz, no iron oxide. 250-260 feet drilled in approximately 11 minutes. Estimated water return approximately 5 gallons per minute.	
255							
260			0.0 - 0.0			Greenish-gray METAWACKE, no quartz, no iron oxide. 260-270 feet drilled in approximately 13 minutes. Estimated water return approximately 5 gallons per minute.	
265							
270			0.0 - 0.0			Same as above, except trace quartz. 270-280 feet drilled in approximately 15 minutes. Estimated water return approximately 5 gallons per minute.	
275						Same as above, except approximately 25% quartz.	

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Boring Log

SY-BRMW1

CLIENT United States Army Corps of Engineers
PROJECT NAME Former Salvage Yard, Former Dow Military Airfield
PROJECT # 18001468
PROJECT LOCATION 233 Odlin Road, Bangor, Maine

Depth (ft)	Penetration/ Recovery (in)	Blow Counts	Field Screening (ppm)	Lab Analytical Sample	Graphic Log	LITHOLOGY	WELL DIAGRAM
280			0.0 - 0.0			Greenish-gray METAWACKE and 40% massive black slatey SHALE, no iron oxide, no quartz. Rig chatter noted.	
285							
290			0.0 - 0.0			Same as above, except approximately 15% black slatey Shale. 290-300 feet drilled in approximately 16 minutes. Estimated water return approximately 5 gallons per minute.	
295						Same as above, except trace black slatey Shale.	
300						Total Depth 300' below ground surface. Well developed by surge and pump via air hammer bit in cycles until return water visually appeared relatively clear.	
305							
310							
315							

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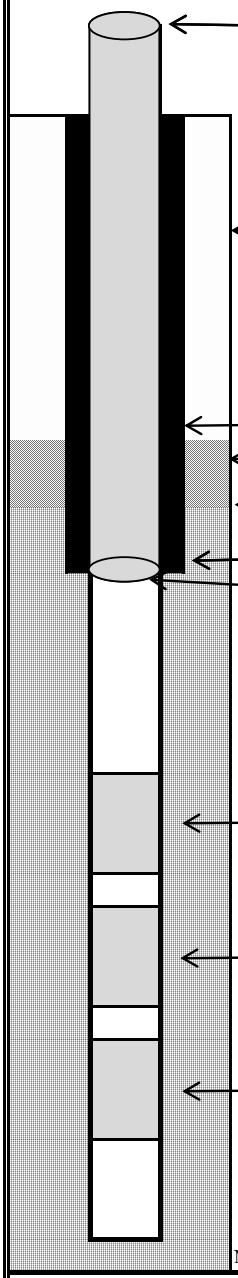
Credere Associates LLC

Boring/Well ID: SY-BRMW1

BEDROCK FLUTE WELL CONSTRUCTION DETAILS

SITE INFORMATION	DRILLING EQUIPMENT
Project Number/Client: 18001468/USACE	**Equipment (make/model):** Terrasonic 150C
Site Location: Dow Salvage Yard, Bangor, ME	**Casing/Auger/Core Diameter:** 6"/ 4"
Date Start - Finish: 12/2/2022 - 1/29/2023	**Drill Casing Material:** Steel
Credere Representative: S. Gannon	**CONTRACTOR**
Well Type Bedrock Open Hole with FLUTe System	**Drilling Contractor/Foreman:** Cascade/Al Sizemore



Top of well elevation (PVC FLUTe coupling; ft NAVD88): 161.67
Stickup height (in): 3.15
Ground elevation (ft NAVD88): 158.52

Port 1 connection elevation (ft NAVD88): 161.89
Port 2 connection elevation (ft NAVD88): 161.87
Port 3 connection elevation (ft NAVD88): 161.87
Top of tag line elevation (ft NAVD88): 161.77

Overburden thickness (ft): 35
Casing type: steel
Casing diameter (in): 6
Borehole diameter in overburden (in): 8

Generalized description of overburden: Brown silt and sand with little gravel and cobbles, transitioning to gray clay at approx. 8' bgs and to gray till at approx. 24' bgs

Grout material: Portland cement/bentonite gel grout
Weathered bedrock thickness (ft): 2
Depth to competent bedrock (ft bgs): 37
Depth of casing into competent bedrock (ft): 5
Bottom of permanent casing (ft bgs): 42

Generalized description of rock type (fracture depths, etc.): Fine grained gray metawacke with quartz veins; faults present at approx. 153' and 181' bgs. Other possible transmissive fractures present at approx. 43' and 71-73' bgs.

Depth to water (ft bgs): 13.10
Borehole diameter in bedrock (in): 6
Port 1 depth interval (ft bgs): 42-52
Port 2 depth interval (ft bgs): 65-75
Port 3 depth interval (ft bgs): 150-157
Depth of borehole (ft bgs): 300

Not to scale

Hydraulically Active Fractures Present? (Based on Heat Pulse Flow Meter Response)	
Port 1	Yes - Flow Into and Up Under Pumping Conditions
42-52 feet bgs	
Port 2	Possible Flow Under Pumping Conditions, Flow In/Out Unknown
65-75 feet bgs	
Port 3	Yes - Flow Into and Up Under Pumping Conditions
150-157 feet bgs	

Remarks and Well Details

bgs - below ground surface

NAVD88 - North American Vertical Datum of 1988

- Developed by surging with air hammer

- Locking cap and padlock installed

- Elevations recorded by Psilga & Day Land Surveyors, January 4 & 24, 2024. Elevations reference the North American Vertical Datum of 1988 (NAVD88) using GPS tied to the NGS CORS Network (via Maine Department of Transportation VRS GPS control network). Elevations computed from GEOID 18 based on two permanent benchmarks installed and observed in November 2020, upon which an OPUS solution was obtained and three wire levels were run.

Well ID: SY-BRMW1

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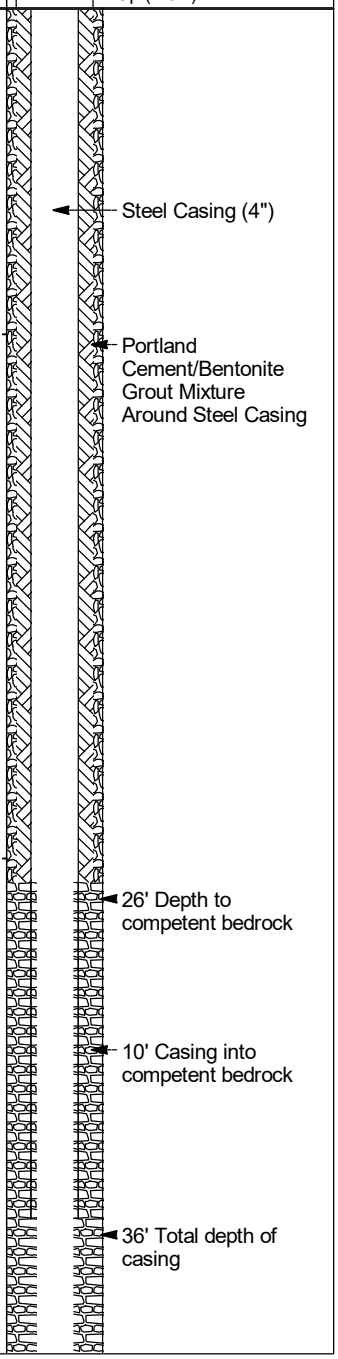
Boring Log

SY-BRMW2

CLIENT United States Army Corps of Engineers
PROJECT NAME Former Salvage Yard, Former Dow Military Airfield
PROJECT # 18001468
PROJECT LOCATION 233 Odlin Road, Bangor, Maine
DATE STARTED 1/20/23 **LOGGED BY** SG, LK, PT
DEPTH TO WATER 6.83 ft.* **WELL DIAMETER** 6 in.
CONTRACTOR Cascade Drilling, LP/Al Sizemore
WELL MATERIALS Steel Flush Thread; FLUTe Liner
DRILLING METHOD Sonic (overburden)/air hammer (bedrock)
ANNULUS MATERIALS NA, NA
DRILLING EQUIPMENT Terra Sonic 150C Crawler, borehole diam. 6 in.
MP ELEVATION 166.06 **GROUND ELEVATION** 163.14
NOTES SG - Sean Gannon; LK - Lauren Kaija; PT - Peter Thompson. * - feet below top of casing, water level measurements taken on 2/6/23.

Depth (ft)	Penetration/ Recovery (in)	Blow Counts	Field Screening (ppm)	Lab Analytical Sample	Graphic Log	LITHOLOGY
0	72/84		0.1 - 0.1			0-12" Dark brown, moist, SILT and fine SAND, trace fine Gravel, mottled. 0-6 feet drilled in approximately 1 minute. 12-84" Light brown, moist, SILT and fine SAND, trace fine Gravel, mottled (recovery exceeds penetration due to in situ density of material and mechanical breaks upon retrieval)
5	120/132		0.7 - 0.7			0-49" Same as above. 6-16 feet drilled in approximately 5 minutes.
10						49-132" Grayish brown, moist, TILL (SILT and CLAY, some subrounded to subangular fine to coarse Sand, little subrounded to subangular fine to coarse Gravel), poorly sorted, much more dense than above, much less to no mottling, especially deeper
15	120/132		0.1 - 0.1			0-123" Same as above, except transitioning to more greenish-gray, especially after 24". 16-26 feet drilled in approximately 25 minutes.
20						
25	60/50		0.0 - 0.0			123-132" Light gray METAWACKE, weathered, with iron oxide. 0-50" Light gray METAWACKE with trace quartz veins (less than 1 centimeter), no massive quartz, weathered, substantial iron oxide on weathered fractures and unconsolidated rock. Multiple bedding plane fractures approximately 60 degrees to core. 26-31 feet drilled in approximately 5 minutes.
30	60/60		0.0 - 0.0			0-60" Same as above, except with trace larger (approximately 1 centimeter to 1 inch) quartz veins, substantial iron oxide on fractures. Weathered bedding plane fractures approximately 60 degrees to core. Lower rock competency first approximately 1 foot consistent with bottom of last core, higher rock competency rest of core. RQD = 55"/60" = 92% = excellent. 31-36 feet drilled in approximately 10 minutes.
35			0.0 - 0.0			Light gray, dry, METAWACKE, little Quartz, approximately 10% iron oxide. Smooth and consistent drilling, no rig chatter. 36-40 feet drilled in approximately 4 minutes. No water return.



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Boring Log

SY-BRMW2

CLIENT United States Army Corps of Engineers
PROJECT NAME Former Salvage Yard, Former Dow Military Airfield
PROJECT # 18001468
PROJECT LOCATION 233 Odlin Road, Bangor, Maine

Depth (ft)	Penetration/ Recovery (in)	Blow Counts	Field Screening (ppm)	Lab Analytical Sample	Graphic Log	LITHOLOGY	WELL DIAGRAM
40			0.0 - 0.0			Light gray, dry, METAWACKE, approximately 50% iron oxide, no quartz. Consistent drill rate, no noticeable rig chatter. 40-45 feet drilled in approximately 7 minutes. No water return.	
45			0.0 - 0.0			Light gray, dry, METAWACKE, trace iron oxide, trace quartz. 45-50 feet drilled in approximately 7 minutes. No water return.	
50			0.0 - 0.0			Light gray, dry, METAWACKE, approximately 50% iron oxide, no quartz. Smooth drilling. 50-55 feet drilled in approximately 7 minutes. No water return.	
55			0.0 - 0.0			Same as above, drill rate a little slower. 55-60 feet drilled in approximately 9 minutes. No water return.	
60			0.0 - 0.0			Same as above, except approximately 60% iron oxide. Steady drill rate. 60-65 feet drilled in approximately 7 minutes. No water return.	
65			0.0 - 0.0			Same as above, except approximately 50% iron oxide. Steady drill rate. 65-70 feet drilled in approximately 7 minutes. No water return.	Port 1 depth interval 60.5-70.5' bgs
70			0.0 - 0.0			Light gray, dry, METAWACKE, trace iron oxide, no quartz. 70-75 feet drilled in approximately 7 minutes. No water return.	
75			0.0 - 0.0			Light gray, dry, METAWACKE, trace iron oxide, trace quartz. 75-80 feet drilled in approximately 9 minutes. No water return. Driller noted zone of soft rock approximately 79-80 feet, water return.	Open hole bedrock with blank liner

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CLIENT United States Army Corps of Engineers
PROJECT NAME Former Salvage Yard, Former Dow Military Airfield
PROJECT # 18001468
PROJECT LOCATION 233 Odlin Road, Bangor, Maine

Depth (ft)	Penetration/ Recovery (in)	Blow Counts	Field Screening (ppm)	Lab Analytical Sample	Graphic Log	LITHOLOGY	WELL DIAGRAM
80			0.0 - 0.0			Light gray METAWACKE (bigger cuttings), red oxidiation and weathering. 80-85 feet drilled in approximately 5 minutes. Estimated water return approximatly 1/4-1/2 gallon per minute (no drilling water added, water from formation). Driller noted soft rock between 84-86 feet.	
85			0.0 - 0.0			Light gray METAWACKE, increased red oxidiation and weathering. 85-90 feet drilled in approximately 5 minutes. Estimated water return approximatly 2-3 gallons per minute.	Port 2 depth interval 80.5-95.5' bgs
90			0.0 - 0.0			Light gray METAWACKE, approximately 3-5% iron oxide. 90-95 feet drilled in approximately 10 minutes, except 94-95 feet drilled in approximately 1-1.5 minutes. Estimated water return approximately 5 gallons per minute, increasing to up to approximately 10 gallons per minute around 94-95 feet, possibly indicating fracture.	
95			0.0 - 0.0			Same as above. 95-100 feet drilled in approximately 7 minutes. Estimated water return approximately 5-10 gallons per minute.	
100			0.0 - 0.0			Gray METAWACKE, fine cuttings, little to no iron oxide, some quartz. 100-105 feet drilled in approximately 6 minutes. Estimated water return approximately 5-10 gallons per minute, some bursts noted.	
105			0.0 - 0.0			Gray METAWACKE, fine cuttings, some quartz, trace iron oxide. 105-110 feet drilled in approximately 7 minutes. Estimated water return approximately 10 gallons per minute.	
110			0.0 - 0.0			Gray METAWACKE, fine cuttings, some quartz, less iron oxide than above. 110-115 feet drilled in approximately 7 minutes. Estimated water return approximately 10 gallons per minute.	
115			0.0 - 0.0			Same as above. Consistent drill rate, very little to no rig chatter noted. 115-120 feet drilled in approximately 7 minutes. Estimated water return approximately 5-10 gallons per minute.	

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CLIENT United States Army Corps of Engineers
PROJECT NAME Former Salvage Yard, Former Dow Military Airfield
PROJECT # 18001468
PROJECT LOCATION 233 Odlin Road, Bangor, Maine

Depth (ft)	Penetration/ Recovery (in)	Blow Counts	Field Screening (ppm)	Lab Analytical Sample	Graphic Log	LITHOLOGY	WELL DIAGRAM
120			0.0 - 0.0			Same as above. Possible small fracture at 121-122 feet. Return water becoming clearer, more iron oxide (approximately 10-15%), larger cuttings. 120-125 feet drilled in approximately 7 minutes. Estimated water return approximately 10 gallons per minute.	
125			0.0 - 0.0			Gray METAWACKE, similar sized cuttings as above. Little to no iron oxide, more quartz. 125-130 feet drilled in approximately 7 minutes. Estimated water return approximately 5-10 gallons per minute.	
130			0.0 - 0.0			Same as above, slight change in composition, very little to no iron oxide, replaced by quartz. 130-135 feet drilled in approximately 6 minutes. Estimated water return approximately 5-10 gallons per minute.	
135			0.0 - 0.0			Similar to above, light gray METAWACKE with minor quartz veinlets, trace to no iron oxide. Consistent drill rate, driller noted soft rock at 138-140 feet. 135-140 feet drilled in approximately 8 minutes. Estimated water return approximately 5-8 gallons per minute.	
140			0.0 - 0.0			Dark gray METAWACKE, trace iron oxide, increasing to 10-15% iron oxide at 147-148 feet, trace quartz. 140-150 feet drilled in approximately 13-14 minutes. Estimated water return approximately 5-10 gallons per minute. Slight increase in water return at approximately 147-148 feet, estimated water return approximately 10 gallons per minute. No change in return water color.	
145			0.0 - 0.0				
150			0.0 - 0.0			Dark gray METAWACKE, with some larger cuttings with iron oxide, trace quartz. Smooth drill rate noted. Return water more clear than above. No noticeable change in water return. 150-160 feet drilled in approximately 12-13 minutes. Estimated water return approximately 5-10 gallons per minute.	
155			0.0 - 0.0				

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PROJECT # 18001468
PROJECT LOCATION 233 Odlin Road, Bangor, Maine

Depth (ft)	Penetration/ Recovery (in)	Blow Counts	Field Screening (ppm)	Lab Analytical Sample	Graphic Log	LITHOLOGY	WELL DIAGRAM
160			0.0 - 0.0			Dark gray METAWACKE, approximately 5-8% quartz veinlets, very little to no iron oxide, possible graphite or manganese oxides in return water, return water is dark. Smooth drill rate noted. 160-170 feet drilled in approximately 9 minutes. Estimated water return approximately 8-10 gallons per minute.	
165			0.0 - 0.0				
170			0.0 - 0.0			Gray METAWACKE, significant amounts of quartz, little to no iron oxide, no major changes in drill rate noted. 170-175 feet drilled in approximately 5 minutes. Estimated water return approximately 8-10 gallons per minute.	Open hole bedrock with blank liner
175			0.0 - 0.0			Same as above, no major changes in iron oxide noted to indicate fractures. Substantial quartz veinlets. 175-180 feet drilled in approximately 5 minutes. Estimated water return approximately 8-10 gallons per minute.	
180			0.0 - 0.0			No major change from above, approximately 50% quartz, no iron oxide. Water increasing clarity down to 190 feet. 180-190 feet drilled in approximately 12-13 minutes. Estimated water return approximately 10 gallons per minute.	
185			0.0 - 0.0				
190			0.0 - 0.0			Dark gray to black METAWACKE, approximately 20-30% quartz. Weathered cuttings (with iron oxide) becoming notably larger around 195 feet, with less quartz (approximately 20%). 190-200 feet drilled in approximately 12-13 minutes. Estimated water return approximately 10 gallons per minute.	
195			0.0 - 0.0				

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PROJECT NAME Former Salvage Yard, Former Dow Military Airfield
PROJECT # 18001468
PROJECT LOCATION 233 Odlin Road, Bangor, Maine

Depth (ft)	Penetration/ Recovery (in)	Blow Counts	Field Screening (ppm)	Lab Analytical Sample	Graphic Log	LITHOLOGY	WELL DIAGRAM
200			0.0 - 0.0			Same as above. Iron oxide cuttings presumed to be falling down from above in borehole, less quartz, mostly clean gray to black Metawacke. Slight soft spot noted at approximately 204-205 feet. No major change in water return or drill rate noted. 200-210 feet drilled in approximately 12-14 minutes. Estimated water return approximately 10 gallons per minute.	
205			0.0 - 0.0				
210			0.0 - 0.0			Dark gray METAWACKE, trace Quartz. 210-220 feet drilled in approximately 11 minutes. Estimated water return approximately 10 gallons per minute.	
215			0.0 - 0.0				
220			0.0 - 0.0			Same as above. 220-230 feet drilled in approximately 13 minutes. Estimated water return approximately 10 gallons per minute.	
225			0.0 - 0.0				
230			0.0 - 0.0			Same as above, with iron oxide cuttings apparently falling in from above in borehole, and increasing quartz with depth, up to approximately 10-20% at most. 230-240 feet drilled in approximately 14 minutes. Estimated water return approximately 10 gallons per minute.	
235			0.0 - 0.0				

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PROJECT # 18001468
PROJECT LOCATION 233 Odlin Road, Bangor, Maine

Depth (ft)	Penetration/ Recovery (in)	Blow Counts	Field Screening (ppm)	Lab Analytical Sample	Graphic Log	LITHOLOGY	WELL DIAGRAM
240			0.0 - 0.0			Same as above, with less quartz (approximately 5-10%), trace iron oxide. 240-245 feet drilled in approximately 7 minutes. Estimated water return approximately 10-12 gallons per minute.	
245			0.0 - 0.0			Gray METAWACKE, trace weathered bedrock, trace quartz. Possible small fracture noted between 246-250 feet. Slight increase in water return and drill rate. 245-250 feet drilled in approximately 7 minutes. Estimated water return approximately 10-15 gallons per minute.	
250			0.0 - 0.0			Similar to above, with some iron oxide, quartz, and weathered bedrock. Wider variety of colors noted. Possible continuation of above fracture from 250-253 feet. 250-255 feet drilled in approximately 5-6 minutes. Estimated water return approximately 10-15 gallons per minute.	
255			0.0 - 0.0			Similar to above, with more iron oxide, more quartz, more weathered bedrock, likely still soft rock. 255-260 feet drilled in approximately 5-6 minutes. Estimated water return approximately 10-15 gallons per minute.	Port 3 depth interval 252.5-262.5' bgs
260			0.0 - 0.0			Similar to above, rock seems soft, large zone of quartz encountered, approximately 25% large iron oxide and other large cuttings appear to be falling in from higher in borehole. 260-265 feet drilled in approximately 4-5 minutes. Estimated water return approximately 15 gallons per minute.	
265			0.0 - 0.0			Weathered rock, increasing to approximately 60% quartz, less but still substantial iron oxide, return water clearing up. 265-270 feet drilled in approximately 4-5 minutes. Estimated water return approximately 15 gallons per minute.	
270			0.0 - 0.0			Dark gray METAWACKE, trace quartz, trace iron oxide. No major changes in drill rate or water return noted. 270-280 feet drilled in approximately 10-12 minutes. Estimated water return approximately 10-15 gallons per minute.	
275			0.0 - 0.0				Open hole bedrock with blank liner

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Boring Log

CLIENT United States Army Corps of Engineers **PROJECT NAME** Former Salvage Yard, Former Dow Military Airfield

PROJECT # 18001468 **PROJECT LOCATION** 233 Odlin Road, Bangor, Maine

Depth (ft)	Penetration/ Recovery (in)	Blow Counts	Field Screening (ppm)	Lab Analytical Sample	Graphic Log	LITHOLOGY	WELL DIAGRAM
280			0.0 - 0.0			Same as above, no significant changes, maximum 5% quartz, no iron oxide. 280-290 feet drilled in approximatley 12 minutes. Estimated water return approximately 10 gallons per minute.	
285			0.0 - 0.0				
290			0.0 - 0.0			Same as above. 290-300 feet drilled in approximately 14 minutes. Estimated water return approximately 10 gallons per minute.	
295			0.0 - 0.0				
300						Total Depth 300' below ground surface. Well developed by surge and pump via air hammer bit in cycles until return water visually appeared relatively clear.	
305							
310							
315							

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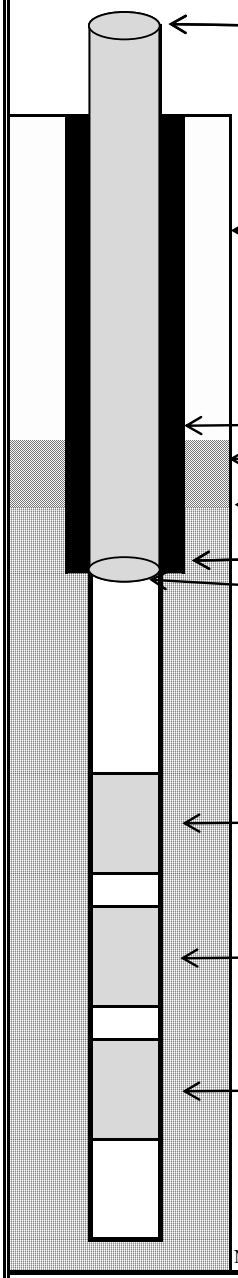
Credere Associates LLC

Boring/Well ID: SY-BRMW2

SITE INFORMATION	DRILLING EQUIPMENT
Project Number/Client: 18001468/USACE	**Equipment (make/model):** Terrasonic 150C
Site Location: Dow Salvage Yard, Bangor, ME	**Casing/Auger/Core Diameter:** 6"/ 4"
Date Start - Finish: 1/20/2023 - 1/24/2023	**Drill Casing Material:** Steel
Credere Representative: S. Gannon	**CONTRACTOR**
Well Type Bedrock Open Hole with FLUTe System	**Drilling Contractor/Foreman:** Cascade/Al Sizemore

BEDROCK FLUTE WELL CONSTRUCTION DETAILS



Top of well elevation (PVC FLUTe coupling; ft NAVD88): 166.01
Stickup height (in): 2.87
Ground elevation (ft NAVD88): 163.14

Port 1 connection elevation (ft NAVD88): 166.27
Port 2 connection elevation (ft NAVD88): 166.29
Port 3 connection elevation (ft NAVD88): 166.31
Top of tag line elevation (ft NAVD88): 166.34

Overburden thickness (ft): 26
Casing type: steel
Casing diameter (in): 6
Borehole diameter in overburden (in): 8

Generalized description of overburden: Brown silt and sand, transitioning to gray till at approx. 10' bgs.

Grout material: Portland cement/bentonite gel grout
Weathered bedrock thickness (ft): 1
Depth to competent bedrock (ft bgs): 26
Depth of casing into competent bedrock (ft): 10
Bottom of permanent casing (ft bgs): 36

Depth to water (ft bgs): 6.83

Generalized description of rock type (fracture depths, etc.): Fine grained gray metawacke with quartz veins; fault present at approx. 85-95' bgs. Other possible transmissive fractures present at approx. 64-69' and 258-261' bgs.

Borehole diameter in bedrock (in): 6

Port 1 depth interval (ft bgs): 60.5-70.5
Port 2 depth interval (ft bgs): 80.5-95.5
Port 3 depth interval (ft bgs): 252.5-262.5

Depth of borehole (ft bgs): 295

Not to scale

Hydraulically Active Fractures Present? (Based on Heat Pulse Flow Meter Response)	
Port 1 60.5-70.5 feet bgs	Possible Flow Under Pumping Conditions, Flow In/Out Unknown
Port 2 80.5-95.5 feet bgs	Yes - Flow Into and Down Under Ambient Conditions; Flow Into & Up and Into & Down Under Pumping Conditions
Port 3 252.5-262.5 feet bgs	Yes - Flow Out Under Ambient and Pumping Conditions

Remarks and Well Details

bgs - below ground surface

NAVD88 - North American Vertical Datum of 1988

- Developed by surging with air hammer

- Locking cap and padlock installed

- Elevations recorded by Psilga & Day Land Surveyors, January 4 & 24, 2024. Elevations reference the North American Vertical Datum of 1988 (NAVD88) using GPS tied to the NGS CORS Network (via Maine Department of Transportation VRS GPS control network). Elevations computed from GEOID 18 based on two permanent benchmarks installed and observed in November 2020, upon which an OPUS solution was obtained and three wire levels were run.

Well ID: SY-BRMW2

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Boring Log

SY-BRMW3

CLIENT United States Army Corps of Engineers
PROJECT NAME Former Salvage Yard, Former Dow Military Airfield
PROJECT # 18001468
PROJECT LOCATION 233 Odlin Road, Bangor, Maine
DATE STARTED 12/14/22 **LOGGED BY** SG, ID
DEPTH TO WATER 10.70 ft.* **WELL DIAMETER** 6 in.
CONTRACTOR Cascade Drilling, LP/Arlen Little, Al Sizemore
WELL MATERIALS Steel Flush Thread; FLUTe Liner
DRILLING METHOD Sonic (overburden)/air hammer (bedrock)
ANNULUS MATERIALS NA, NA
DRILLING EQUIPMENT Terra Sonic 150C Crawler, borehole diam. 6 in.
MP ELEVATION 153.63 **GROUND ELEVATION** 153.63
NOTES SG - Sean Gannon; ID - Ian Desjarlais. * - feet below top of casing, water level measurements taken on 2/6/23.

Depth (ft)	Penetration/ Recovery (in)	Blow Counts	Field Screening (ppm)	Lab Analytical Sample	Graphic Log	LITHOLOGY
0	72/72		0.10 - 0.10			0-20" Medium brown, moist, poorly sorted, SILT and fine to coarse SAND, little fine gravel, trace concrete, little coarse gravel. 0-6 feet drilled in approximately 1 minute.
						20-34" Dark brown, moist, SILT and CLAY, mottled
						34-72" Light brown, moist, SILT and CLAY, mottled
5	120/120		0.06 - 0.06			0-12" Medium brown, moist, fine to coarse SAND, some fine Gravel, little coarse Gravel. 6-16 feet drilled in approximately 2 minutes.
						12-120" Light brown, moist, SILT and CLAY, some gray Clay, transitioning to higher proportion of Clay especially after 66", all gray Clay last 6".
10						
15	120/120		0.04 - 0.04			0-114" Light gray, wet, CLAY (expanding). 16-26 feet drilled in approximately 2 minutes.
20						
25	96/92		0.01 - 0.01			114-120" Light gray, wet, loose TILL (fine to coarse SAND, angular fine Gravel, trace coarse Gravel)
						0-30" Light gray, moist, TILL (SILT, some Clay, some fine to coarse Sand, little angular fine to coarse gravel). 26-34 feet drilled in approximately 10 minutes.
30						30-68" Light gray, dry, fractured rock/rock flour (BOULDER), little angular fine to coarse Gravel
						68-92" Light gray, moist, TILL (SILT, some Clay, some fine to coarse Sand, little angular fine to coarse gravel). Driller reports consistent drilling conditions between 27-38 feet.
	24/24		0.01 - 0.01			0-24" Same as above. 34-36 feet drilled in approximately 10 minutes.
35	24/60		0.01 - 0.01			0-30" Poorly sorted, coarse SAND and fine to coarse GRAVEL (gray metawacke, sandstone, diorite; Sand is subround to subangular, Gravel is more angular). 36-38 feet drilled in approximately 15 minutes.
	72/42		0.01 - 0.01			30-60" Weathered BEDROCK (gray metawacke with quartz/calcite veins and massive quartz/calcite). Several pieces 1-3". RQD=0%.

WELL DIAGRAM
Casing Top Elev: 156.32 (ft)
Casing Type: Stick Up (2.69')

- Steel Casing (4")
- Portland Cement/Bentonite Grout Mixture Around Steel Casing
- 38' Depth to competent bedrock

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Boring Log

SY-BRMW3

CLIENT United States Army Corps of Engineers
PROJECT NAME Former Salvage Yard, Former Dow Military Airfield
PROJECT # 18001468
PROJECT LOCATION 233 Odlin Road, Bangor, Maine

Depth (ft)	Penetration/ Recovery (in)	Blow Counts	Field Screening (ppm)	Lab Analytical Sample	Graphic Log	LITHOLOGY	WELL DIAGRAM
40						Some mechanical fractures, some weathered fractures (rounded surfaces with iron oxide).	
						0-42" Light gray METAWACKE, massive and vein quartz/calcite present, many weathered and mechanical fractures present, with iron oxide on weathered fractures. One apparent bedding plane fracture present, fracture approximately 60 degrees to core. 38-44 feet drilled in approximately 20 minutes.	9' Casing into competent bedrock
			0.0 - 0.0				
45						Light gray, dry, METAWACKE, little quartz (approximately 10%)	47' Total depth of casing
50			0.0 - 0.0			Same as above, except wet. Return water is a thick slurry. 50-60 feet drilled in approximately 15 minutes.	
							Port 1 depth interval 47-62' bgs
55							
60			0.0 - 0.0			Light gray METAWACKE, some iron oxide (approximately 20%). 60-70 feet drilled in approximately 14 minutes.	
65							
70			0.0 - 0.0			Same as above, except trace iron oxide (approximately 5%). 70-80 feet drilled in approximately 11 minutes.	
						"Soft" conditions per driller; observe shift from gray-green to light brown in cuttings.	
75						Only rock cuttings present in cyclone effluent, no return water. Cuttings are 40% quartz, no iron oxide.	

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SY-BRMW3

CLIENT United States Army Corps of Engineers
PROJECT NAME Former Salvage Yard, Former Dow Military Airfield
PROJECT # 18001468
PROJECT LOCATION 233 Odlin Road, Bangor, Maine

Depth (ft)	Penetration/ Recovery (in)	Blow Counts	Field Screening (ppm)	Lab Analytical Sample	Graphic Log	LITHOLOGY	WELL DIAGRAM
80			0.0 - 0.0			Same as above, except return water changes to light bluish gray. 80-90 feet drilled in approximately 9 minutes.	
85							
90			0.0 - 0.0			Light gray METAWACKE. No iron oxide or quartz observed. Low to intermittent water production. Rig chatter noted. 90-100 feet drilled in approximately 12 minutes. Estimated water return approximately 0.5 gallons per minute (return water is a thick slurry).	
95							
100			0.0 - 0.0			Same as above, except no rig chatter. 100-110 feet drilled in approximately 9 minutes. Estimated water return approximately 0.5 gallons per minute (return water is a thick slurry).	Open hole bedrock with blank liner
105							
110			0.0 - 0.0			Light gray METAWACKE, approximately 20% iron oxide; return water/effluent is thick slurry. 110-120 feet drilled in approximately 9 minutes. Estimated water return approximately 0.5 gallons per minute (return water is a thick slurry).	
115							

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Boring Log

CLIENT United States Army Corps of Engineers **PROJECT NAME** Former Salvage Yard, Former Dow Military Airfield

PROJECT # 18001468 **PROJECT LOCATION** 233 Odlin Road, Bangor, Maine

Depth (ft)	Penetration/ Recovery (in)	Blow Counts	Field Screening (ppm)	Lab Analytical Sample	Graphic Log	LITHOLOGY	WELL DIAGRAM
120			0.0 - 0.0			Same as above, except no iron oxide. 120-130 feet drilled in approximately 9 minutes. Estimated water return approximately 0.5 gallons per minute (return water is a thick slurry).	
125							
130			0.0 - 0.0			Same as above, except approximately 15% medium grained iron oxide granules. 130-140 feet drilled in approximately 10 minutes. Estimated water return approximately 0.5 gallons per minute.	
135						Slurry color changes to brown	
140			0.0 - 0.0			Same as above, excpet change to gray slurry. 140-150 feet drilled in approximately 11 minutes. Driller reports rapid advancement/no resistance on drill bit 147-150. Change to brown slurry at approximately 147-150 (interpeted fracture zone). Estimated water return approximately 0.5 gallons per minute.	
145							
150			0.0 - 0.0			Gray slurry with primarily coarse grained iron oxide/hematite cuttings, some gray metawacke cuttings (approximately 30%). 150-160 feet drilled in approximately 11 minutes. Estimated water return approximately 0.5 gallons per minute.	Port 2 depth interval 145-155' bgs
155							

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CLIENT United States Army Corps of Engineers
PROJECT NAME Former Salvage Yard, Former Dow Military Airfield
PROJECT # 18001468
PROJECT LOCATION 233 Odlin Road, Bangor, Maine

Depth (ft)	Penetration/ Recovery (in)	Blow Counts	Field Screening (ppm)	Lab Analytical Sample	Graphic Log	LITHOLOGY	WELL DIAGRAM
160			0.0 - 0.0			Gray METAWACKE, approximately 40% iron oxide/hematite cuttings, fine to medium grained, trace quartz (approximately 10%). 160-170 feet drilled in approximately 11 minutes. Estimated water return approximately 0.5 gallons per minute.	
165						Same as above, except no iron oxide	
170			0.0 - 0.0			Gray METAWACKE, little quartz, trace iron oxide. 170-180 feet drilled in approximately 12 minutes. Estimated water return approximately 0.5 gallons per minute.	
175							
180			0.0 - 0.0			Same as above, except no quartz. 180-190 feet drilled in approximately 12 minutes. Estimated water return approximately 0.5 gallons per minute.	
185							
190			0.0 - 0.0			Light gray METAWACKE, approximately 15% quartz, 10% iron oxide. 190-200 feet drilled in approximately 20 minutes. Estimated water return approximately 0.5 gallons per minute.	
195							

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CLIENT United States Army Corps of Engineers
PROJECT NAME Former Salvage Yard, Former Dow Military Airfield
PROJECT # 18001468
PROJECT LOCATION 233 Odlin Road, Bangor, Maine

Depth (ft)	Penetration/ Recovery (in)	Blow Counts	Field Screening (ppm)	Lab Analytical Sample	Graphic Log	LITHOLOGY	WELL DIAGRAM
200			0.0 - 0.0			Light gray METAWACKE, trace iron oxide. 200-210 feet drilled in approximately 16 minutes. Estimated water return approximately 0.5 gallons per minute.	
205							
210			0.0 - 0.0			Same as above, except graphite-like film observed on drilling effluent/runoff. 210-220 feet drilled in approximately 15 minutes. Estimated water return approximately 0.5 gallons per minute.	
215							
220			0.0 - 0.0			Same as above, rig chatter noted. 220-230 feet drilled in approximately 13 minutes. Estimated water return approximately 0.5 gallons per minute.	Open hole bedrock with blank liner
225							
230			0.0 - 0.0			Light gray METAWACKE, little quartz, trace iron oxide. 230-240 feet drilled in approximately 16 minutes. Estimated water return approximately 0.5 gallons per minute.	
235							

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SY-BRMW3

CLIENT United States Army Corps of Engineers
PROJECT NAME Former Salvage Yard, Former Dow Military Airfield
PROJECT # 18001468
PROJECT LOCATION 233 Odlin Road, Bangor, Maine

Depth (ft)	Penetration/ Recovery (in)	Blow Counts	Field Screening (ppm)	Lab Analytical Sample	Graphic Log	LITHOLOGY	WELL DIAGRAM
240			0.0 - 0.0			Light gray METAWACKE, approximately 25% iron oxide (coarse grained hematite), return water brown. 240-250 feet drilled in approximately 13 minutes. Estimated water return approximately 0.5 gallons per minute.	
245							
250			0.0 - 0.0			Gray METAWACKE, little quartz, no iron oxide. At 252 feet, iron oxide and quartz in cuttings, driller reports increase in water production, however no measurable increase was discernable in drilling effluent. 250-260 feet drilled in approximately 14 minutes. Estimated water return approximately 0.5 gallons per minute.	
255							
260			0.0 - 0.0			Same as above, except approximately 40% iron oxide cuttings, return water becoming brown. Heavy rig chatter noted. 260-270 feet drilled in approximately 15 minutes. Estimated water return approximately 0.5 gallons per minute.	
265							
270			0.0 - 0.0			Dark gray METAWACKE (approximately 40%) and QUARTZ (approximately 60%), trace iron oxide. 270-280 feet drilled in approximately 14 minutes.	
275						90% Quartz, 10% dark gray Metawacke.	

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Boring Log

SY-BRMW3

CLIENT United States Army Corps of Engineers
PROJECT NAME Former Salvage Yard, Former Dow Military Airfield
PROJECT # 18001468
PROJECT LOCATION 233 Odlin Road, Bangor, Maine

Depth (ft)	Penetration/ Recovery (in)	Blow Counts	Field Screening (ppm)	Lab Analytical Sample	Graphic Log	LITHOLOGY	WELL DIAGRAM
280			0.0 - 0.0			Light gray METAWACKE, trace iron oxide (approximately 10%). 280-290 feet drilled in approximately 11 minutes. Estimated water return approximately 0.5 gallons per minute.	
285							
290			0.0 - 0.0			Light gray METAWACKE (approximately 50%), approximately 40% iron oxide, 10% quartz. 290-300 feet drilled in approximately 12 minutes. Estimated water return approximately 0.5 gallons per minute.	Port 3 depth interval 287-297' bgs
295						Approximately 15% iron oxide, 10% quartz	
300						Total Depth 300' below ground surface. Well developed by surge and pump via air hammer bit in cycles until return water visually appeared relatively clear.	Open hole bedrock with blank liner
305							
310							
315							

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Credere Associates LLC

Boring/Well ID: SY-BRMW3

SITE INFORMATION

Project Number/Client: 18001468/USACE

Site Location: Dow Salvage Yard, Bangor, ME

Date Start - Finish: 12/14/2022 - 1/27/2023

Credere Representative: S. Gannon

Well Type: Bedrock Open Hole with FLUTe System

DRILLING EQUIPMENT

Equipment (make/model): Terrasonic 150C

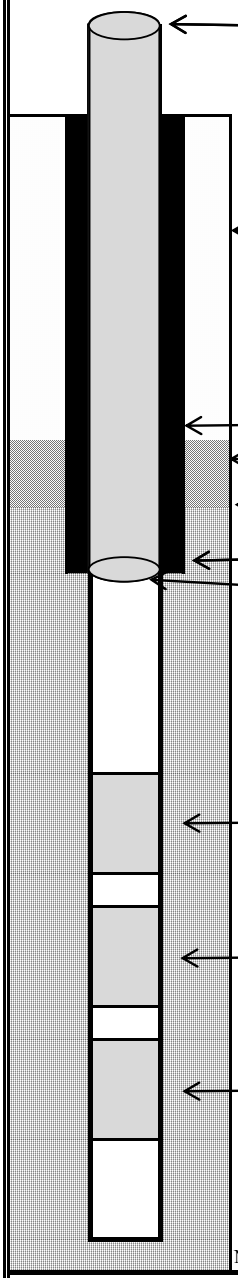
Casing/Auger/Core Diameter: 6"/ 4"

Drill Casing Material: Steel

CONTRACTOR

Drilling Contractor/Foreman: Cascade/Al Sizemore

BEDROCK FLUTE WELL CONSTRUCTION DETAILS



Top of well elevation (PVC FLUTe coupling; ft NAVD88): 156.32

Stickup height (in): 2.69

Ground elevation (ft NAVD88): 153.63

Overburden thickness (ft): 37

Casing type: steel

Casing diameter (in): 6

Borehole diameter in overburden (in): 8

Grout material: Portland cement/bentonite gel grout

Weathered bedrock thickness (ft): 1

Depth to competent bedrock (ft bgs): 38

Depth of casing into competent bedrock (ft): 9

Bottom of permanent casing (ft bgs): 47

Depth to water (ft bgs): 10.70

Borehole diameter in bedrock (in): 6

Port 1 depth interval (ft bgs): 47-62

Port 2 depth interval (ft bgs): 145-155

Port 3 depth interval (ft bgs): 287-297

Depth of borehole (ft bgs): 302

Not to scale

Port 1 connection elevation (ft NAVD88): 156.59

Port 2 connection elevation (ft NAVD88): 156.58

Port 3 connection elevation (ft NAVD88): 156.61

Top of tag line elevation (ft NAVD88): 156.64

Generalized description of overburden: Brown silt and clay, transitioning to wet/expanding gray clay at approx. 16' bgs and to gray till at approx. 26' bgs

Generalized description of rock type (fracture depths, etc.): Fine grained gray metawacke with quartz veins; fault present at approx. 149-152' bgs. Other possible transmissive fractures present at approx. 73', 101', 252', and 291' bgs.

Hydraulically Active Fractures Present? (Based on Heat Pulse Flow Meter Response)	
Port 1 47-62 feet bgs	Possible Flow Under Pumping Conditions, Flow In/Out Unknown
Port 2 145-155 feet bgs	Yes - Flow Into and Down Under Ambient Conditions; Flow Into and Up Under Pumping Conditions
Port 3 287-297 feet bgs	Yes - Flow Out Under Ambient Conditions; Flow Into and Up Under Pumping Conditions

Remarks and Well Details

bgs - below ground surface

NAVD88 - North American Vertical Datum of 1988

- Developed by surging with air hammer

- Locking cap and padlock installed

- Elevations recorded by Psilga & Day Land Surveyors, January 4 & 24, 2024. Elevations reference the North American Vertical Datum of 1988 (NAVD88) using GPS tied to the NGS CORS Network (via Maine Department of Transportation VRS GPS control network). Elevations computed from GEOID 18 based on two permanent benchmarks installed and observed in November 2020, upon which an OPUS solution was obtained and three wire levels were run.

Well ID: SY-BRMW3

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Boring Log

SY-BRMW4

CLIENT United States Army Corps of Engineers
PROJECT NAME Former Salvage Yard, Former Dow Military Airfield
PROJECT # 18001468
PROJECT LOCATION 233 Odlin Road, Bangor, Maine
DATE STARTED 1/19/23 **LOGGED BY** SG, ID
DEPTH TO WATER 7.40 ft.* **WELL DIAMETER** 6 in.
CONTRACTOR Cascade Drilling, LP/Al Sizemore
WELL MATERIALS Steel Flush Thread; FLUTe Liner
DRILLING METHOD Sonic (overburden)/air hammer (bedrock)
ANNULUS MATERIALS NA, NA
DRILLING EQUIPMENT Terra Sonic 150C Crawler, borehole diam. 6 in.
MP ELEVATION 150.85 **GROUND ELEVATION** 150.85
NOTES SG - Sean Gannon; ID - Ian Desjarlais. * - feet below top of casing, water level measurements taken on 2/6/23.

Depth (ft)	Penetration/ Recovery (in)	Blow Counts	Field Screening (ppm)	Lab Analytical Sample	Graphic Log	LITHOLOGY	WELL DIAGRAM (Casing Top Elev: 153.77 (ft); Casing Type: Stick Up (2.92'))
0	72/66		0.0 - 0.0			0-6" TOPSOIL (organic material, fine to coarse SAND). 0-6 feet drilled in approximately 1 minute.	
						6-32" Dark brown, moist, fine SAND and SILT, moist, mottled	
						32-66" Light brownish gray, moist, fine SAND and SILT, some Clay, mottled	
5	120/120		0.0 - 0.0			0-72" Light brown, moist, SILT and CLAY, mottled	Steel Casing (4")
10							Portland Cement/Bentonite Grout Mixture Around Steel Casing
						72-120" Brownish gray, moist, CLAY, some Silt, mottled	
15	120/156		0.0 - 0.0			0-18" Light gray, wet (drill water), SILT and CLAY, some fine to coarse Sand. Abrupt transition to till, material may be slough. 16-26 feet drilled in approximately 5 minutes.	
						18-156" Dark gray, moist, TILL (SILT and CLAY, some poorly sorted fine to coarse Sand and little subround fine Gravel, very dense relative to above)	
20							
25	60/72		0.0 - 0.0			0-24" Same as above. 26-31 feet drilled in approximately 2 minutes.	
						24-72" Light brownish gray TILL (SILT and CLAY, some poorly sorted fine to coarse Sand and little subround fine Grave, less dense relative to above)	
30	60/39		0.0 - 0.0			0-39" Light gray METAWACKE, trace quartz veins (<1cm), little larger quartz veins (approximately 1 cm-1 inch), little massive quartz, 2 weathered fractures present with little iron oxide (fractures <10 degrees to core), apparent weathered (rounded, no iron oxide) bedding plane fracture at bottom (fracture approximately 60 degrees to core), RQD = 39"/60" = 65% = fair. Driller reports very hard/competent rock, slow to drill. 31-36 feet drilled in approximately 5 minutes.	31' Depth to competent bedrock
							5' Casing into competent bedrock
35			0.0 - 0.0			Light gray METAWACKE. 36-40 feet drilled in approximately 9 minutes. Estimated water return less than 1 gallon per minute.	36' Total depth of casing
						Same as above, except approximately 15% iron oxide, 20% quartz.	

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Boring Log

SY-BRMW4

CLIENT United States Army Corps of Engineers
PROJECT NAME Former Salvage Yard, Former Dow Military Airfield
PROJECT # 18001468
PROJECT LOCATION 233 Odlin Road, Bangor, Maine

Depth (ft)	Penetration/ Recovery (in)	Blow Counts	Field Screening (ppm)	Lab Analytical Sample	Graphic Log	LITHOLOGY	WELL DIAGRAM
40			0.0 - 0.0			Light gray METAWACKE, with slight color variability (brownish). 40-50 feet drilled in approximately 14 minutes. Estimated water return less than 1 gallon per minute.	
45						Same as above, except trace quartz	
50			0.0 - 0.0			Same as above, with brownish-gray return water/cuttings. 50-60 feet drilled in approximately 12 minutes. Estimated water return less than 1 gallon per minute.	
55						Same as above, with return water changing to gray	
60			0.0 - 0.0			Light greenish-gray METAWACKE, approximately 10% quartz, no iron oxide. 60-70 feet drilled in approximately 13 minutes. Estimated water return less than 1 gallon per minute.	
						Same as above, except approximately 15% iron oxide	
65						Same as above, return water becoming brown	Port 1 depth interval 62-72' bgs
70			0.0 - 0.0			Same as above, except approximately 30% iron oxide, return water becoming gray	
75						Same as above, except trace iron oxide	

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Boring Log

SY-BRMW4

CLIENT United States Army Corps of Engineers
PROJECT NAME Former Salvage Yard, Former Dow Military Airfield
PROJECT # 18001468
PROJECT LOCATION 233 Odlin Road, Bangor, Maine

Depth (ft)	Penetration/ Recovery (in)	Blow Counts	Field Screening (ppm)	Lab Analytical Sample	Graphic Log	LITHOLOGY	WELL DIAGRAM
80			0.0 - 0.0			Same as above, except approximately 10% iron oxide, 10% quartz. 80-90 feet drilled in approximately 16 minutes. Estimated water return less than 1 gallon per minute.	
85							
90			0.0 - 0.0			Gray METAWACKE, no iron oxide, approximately 10% quartz. 90-100 feet drilled in approximately 12 minutes. Estimated water return less than 1 gallon per minute.	
						Light to dark-gray METAWACKE, no quartz.	
95						Same as above, except approximately 15% quartz.	
100			0.0 - 0.0			Light gray METAWACKE, no iron oxide, no quartz. 100-110 feet drilled in approximately 12 minutes. Estimated water return less than 1 gallon per minute.	
						Same as above, except approximately 20% quartz	
105							← Open hole bedrock with blank liner
						Same as above, except approximately 85% quartz	
						Same as above, except approximately 40% quartz, 10% iron oxide	
110			0.0 - 0.0			Light gray METAWACKE, approximately 15% iron oxide, 10% quartz. 110-120 feet drilled in approximately 16 minutes. Estimated water return less than 1 gallon per minute.	
115						Same as above, return water becoming greenish-gray	

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Boring Log

SY-BRMW4

CLIENT United States Army Corps of Engineers
PROJECT NAME Former Salvage Yard, Former Dow Military Airfield
PROJECT # 18001468
PROJECT LOCATION 233 Odlin Road, Bangor, Maine

Depth (ft)	Penetration/ Recovery (in)	Blow Counts	Field Screening (ppm)	Lab Analytical Sample	Graphic Log	LITHOLOGY	WELL DIAGRAM
120			0.0 - 0.0			Light gray METAWACKE, approximately 15% quartz, no iron oxide. Estimated water return less than 1 gallon per minute.	
125						Same as above, except approximately 30% quartz. Return water becoming gray.	
130			0.0 - 0.0			Same as above. 130-140 feet drilled in approximately 12 minutes. Estimated water return approximately 1 gallon per minute.	
135							
140			0.0 - 0.0			Same as above, except approximately 35-50% iron oxide, no quartz. 140-150 feet drilled in approximately 13 minutes. Estimated water return approximately 1 gallon per minute.	
						Same as above, except trace iron oxide, trace quartz. Estimated water return approximately 5 gallons per minute at 143-145 feet. Return water becoming brown.	Port 2 depth interval 138-148' bgs
145							
150			0.0 - 0.0			Dark gray METAWACKE, little quartz, no observable iron oxide. 150-160 feet drilled in approximately 11 minutes. Estimated water return approximately 20 gallons per minute and becoming more gray.	
155							

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PROJECT NAME Former Salvage Yard, Former Dow Military Airfield
PROJECT # 18001468
PROJECT LOCATION 233 Odlin Road, Bangor, Maine

Depth (ft)	Penetration/ Recovery (in)	Blow Counts	Field Screening (ppm)	Lab Analytical Sample	Graphic Log	LITHOLOGY	WELL DIAGRAM
160			0.0 - 0.0			Same as above. 160-170 feet drilled in approximately 10 minutes. Estimated water return approximately 20 gallons per minute.	
						Dark gray METAWACKE, approximately 20-50% quartz, 5% iron oxide	
165						Same as above, except approximately 10% quartz, trace iron oxide	
170			0.0 - 0.0			Dark gray METAWACKE, little quartz, trace iron oxide. 170-180 feet drilled in approximately 11 minutes. Estimated water return approximately 20 gallons per minute.	
175							
180			0.0 - 0.0			Same as above, except trace quartz and no observable iron oxide. 180-190 feet drilled in approximately 13 minutes. Estimated water return approximately 25 gallons per minute.	
185							
190			0.0 - 0.0			Same as above. 190-200 feet drilled in approximately 16 minutes. Estimated water return approximately 25 gallons per minute.	
195							

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PROJECT # 18001468
PROJECT LOCATION 233 Odlin Road, Bangor, Maine

Depth (ft)	Penetration/ Recovery (in)	Blow Counts	Field Screening (ppm)	Lab Analytical Sample	Graphic Log	LITHOLOGY	WELL DIAGRAM
200			0.0 - 0.0			Same as above, trace iron oxide, and approximately 25% quartz at 206 to 208 feet. 200-210 feet drilled in approximately 10 minutes. Estimated water return approximately 25 gallons per minute.	
205							
210			0.0 - 0.0			Dark gray METAWACKE, trace quartz, no iron oxide. 210-220 feet drilled in approximately 12 minutes. Estimated water return approximately 25 gallons per minute.	
215						Same as above, except approximately 10-15% iron oxide and trace quartz	
220			0.0 - 0.0			Dark gray METAWACKE, trace quartz, trace iron oxide, 1 larger (fist-sized) cobble, coarse gravel, weathered with oxidation, from 220 to 222 feet. 220-230 feet drilled in approximately 15 minutes. Estimated water return approximately 30 gallons per minute.	Open hole bedrock with blank liner
225							
230			0.0 - 0.0			Dark gray METAWACKE, little quartz, trace iron oxide. 230-240 feet drilled in approximately 20 minutes (slow advance due to power issues with compressor). Estimated water return approximately 30 gallons per minute.	
235							

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Boring Log

SY-BRMW4

CLIENT United States Army Corps of Engineers
PROJECT NAME Former Salvage Yard, Former Dow Military Airfield
PROJECT # 18001468
PROJECT LOCATION 233 Odlin Road, Bangor, Maine

Depth (ft)	Penetration/ Recovery (in)	Blow Counts	Field Screening (ppm)	Lab Analytical Sample	Graphic Log	LITHOLOGY	WELL DIAGRAM
240			0.0 - 0.0			Same as above. 240-250 feet drilled in approximately 15 minutes. Estimated water return approximately 30 gallons per minute.	
245							
250			0.0 - 0.0			Same as above	
255						Same as above, except approximately 50% quartz, trace iron oxide	
260			0.0 - 0.0			Dark gray METAWACKE, little quartz, trace iron oxide. 260-270 feet drilled in approximately 13 minutes. Estimated water return approximately 30 gallons per minute.	
265							
270			0.0 - 0.0			Same as above. 270-280 feet drilled in approximately 14 minutes. Estimated water return approximately 30 gallons per minute.	
275							

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CLIENT United States Army Corps of Engineers
PROJECT NAME Former Salvage Yard, Former Dow Military Airfield
PROJECT # 18001468
PROJECT LOCATION 233 Odlin Road, Bangor, Maine

Depth (ft)	Penetration/ Recovery (in)	Blow Counts	Field Screening (ppm)	Lab Analytical Sample	Graphic Log	LITHOLOGY	WELL DIAGRAM
280			0.0 - 0.0			Dark gray METAWACKE, approximately 20% iron oxide, no quartz, little fine to coarse gravel. 280-290 feet drilled in approximately 14 minutes. Estimated water return approximately 40 gallons per minute and running more muddy/brown.	
285						Same as above, except trace iron oxide, no quartz	
290			0.0 - 0.0			Same as above. 290-300 feet drilled in approximately 19 minutes. Estimated water return approximately 40 gallons per minute.	
295							Port 3 depth interval 291-301' bgs
300						Total Depth 300' below ground surface. Well developed by surge and pump via air hammer bit in cycles until return water visually appeared relatively clear.	Open hole bedrock with blank liner
305							
310							
315							

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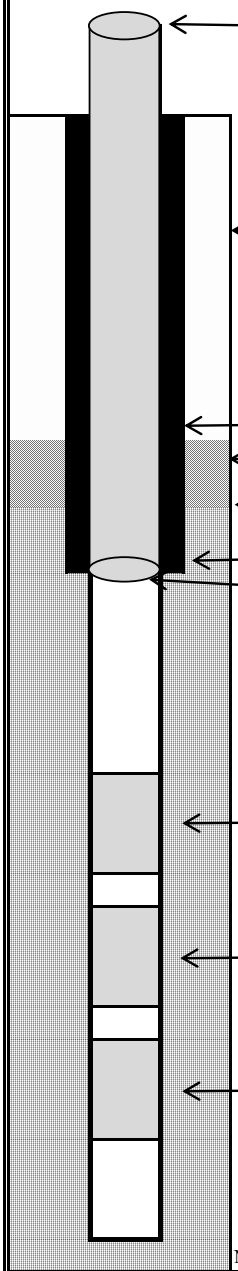
Credere Associates LLC

Boring/Well ID: SY-BRMW4

BEDROCK FLUTE WELL CONSTRUCTION DETAILS

SITE INFORMATION	DRILLING EQUIPMENT
Project Number/Client: 18001468/USACE	**Equipment (make/model):** Terrasonic 150C
Site Location: Dow Salvage Yard, Bangor, ME	**Casing/Auger/Core Diameter:** 6"/ 4"
Date Start - Finish: 1/19/2023 - 1/31/2023	**Drill Casing Material:** Steel
Credere Representative: S. Gannon	**CONTRACTOR**
Well Type Bedrock Open Hole with FLUTe System	**Drilling Contractor/Foreman:** Cascade/Al Sizemore



Top of well elevation (PVC FLUTe coupling; ft NAVD88): 153.77

Stickup height (in): 2.92

Ground elevation (ft NAVD88): 150.85

Overburden thickness (ft): 31

Casing type: steel

Casing diameter (in): 6

Borehole diameter in overburden (in): 8

Grout material: Portland cement/bentonite gel grout

Weathered bedrock thickness (ft): 0

Depth to competent bedrock (ft bgs): 31

Depth of casing into competent bedrock (ft): 5

Bottom of permanent casing (ft bgs): 36

Depth to water (ft bgs): 7.40

Borehole diameter in bedrock (in): 6

Port 1 depth interval (ft bgs): 62-72

Port 2 depth interval (ft bgs): 138-148

Port 3 depth interval (ft bgs): 291-301

Depth of borehole (ft bgs): 301.5

Not to scale

Port 1 connection elevation (ft NAVD88): 154.10

Port 2 connection elevation (ft NAVD88): 154.06

Port 3 connection elevation (ft NAVD88): 154.08

Top of tag line elevation (ft NAVD88): 154.12

Generalized description of overburden: Brown silt, sand, and clay transitioning to gray till at approx. 17' bgs

Generalized description of rock type (fracture depths, etc.): Fine grained gray metawacke with quartz veins; no faults present. Possible transmissive fractures present at approx. 68', 142', and 301' bgs.

Hydraulically Active Fractures Present? (Based on Heat Pulse Flow Meter Response)	
Port 1	Yes - Flow Into and Down Under Ambient Conditions; Flow Into and Up Under Pumping Conditions
62-72 feet bgs	
Port 2	Yes - Flow Into and Down Under Ambient Conditions; Flow Into & Up and Into & Down Under Pumping Conditions
138-148 feet bgs	
Port 3	Yes - Flow Out Under Ambient and Pumping Conditions
291-301 feet bgs	

Remarks and Well Details

bgs - below ground surface

NAVD88 - North American Vertical Datum of 1988

- Developed by surging with air hammer

- Locking cap and padlock installed

- Elevations recorded by Psilga & Day Land Surveyors, January 4 & 24, 2024. Elevations reference the North American Vertical Datum of 1988 (NAVD88) using GPS tied to the NGS CORS Network (via Maine Department of Transportation VRS GPS control network). Elevations computed from GEOID 18 based on two permanent benchmarks installed and observed in November 2020, upon which an OPUS solution was obtained and three wire levels were run.

Well ID: SY-BRMW4

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Boring Log

SY-BRMW5

CLIENT United States Army Corps of Engineers
PROJECT NAME Former Salvage Yard, Former Dow Military Airfield
PROJECT # 18001468
PROJECT LOCATION 233 Odlin Road, Bangor, Maine
DATE STARTED 12/7/22 **LOGGED BY** SG, LK
DEPTH TO WATER 4.70 ft.* **WELL DIAMETER** 6 in.
CONTRACTOR Cascade Drilling, LP/Arlen Little, Al Sizemore
WELL MATERIALS Steel Flush Thread; FLUTe Liner
DRILLING METHOD Sonic (overburden)/air hammer (bedrock)
ANNULUS MATERIALS NA, NA
DRILLING EQUIPMENT Terra Sonic 150C Crawler, borehole diam. 6 in.
MP ELEVATION 148.65 **GROUND ELEVATION** 148.65
NOTES SG - Sean Gannon; LK - Lauren Kaija. * - feet below top of casing, water level measurements taken on 2/6/23.

Depth (ft)	Penetration/ Recovery (in)	Blow Counts	Field Screening (ppm)	Lab Analytical Sample	Graphic Log	LITHOLOGY
0	84/84		1.0 - 1.6			0-13" Brown, moist, FILL (poorly sorted fine to coarse SAND, some fine Gravel), some Silt. 0-7 feet drilled in approximately 2 minutes.
						13-84" Light brown, moist, fine SAND and SILT, mottled/iron oxide
5						
	120/100		0.6 - 1.7			0-12" Light brown, moist, SILT and CLAY, some mottling (less than above). 7-17 feet drilled in approximately 2 minutes.
						12-30" Same as above, except more mottling
10						30-63" Same as above, except trace mottling
						63-100" Light gray, saturated/wet, CLAY, expanding, trace mottling throughout. Band of mottling and gravel 74-77".
15	120/135		0.6 - 0.8			0-30" Light brown, moist, CLAY, little Silt, mottled throughout. 17-27 feet drilled in approximately 6 minutes. Recovery exceeds penetration due to expanding clays.
						30-62" Light gray, saturated, CLAY, very soft, expanding
20						62-97" Light gray, saturated, CLAY, more Silt and fine to coarse Sand in last 12" where material begins to transition to till, less expanding than above
25						97-135" Light gray, moist, TILL (SILT, fine to coarse SAND, and fine to coarse Gravel, poorly sorted, gravel is subangular), transitioning to rock flour at approximately 26 feet (presumed bedrock interface)
	60/60					0-60" Light gray METAWACKE, approximately 5% quartz (veinlets), weathered fractures (rounded with iron oxide) present, several low angle fractures (0-10 degrees to core) present, one fracture approximately 50 degrees to core present, RQD = 50/60 = 83% = good. 27-32 feet drilled in approximately 5 minutes.
30						
			0.0			Dark gray METAWACKE, no observable iron oxide, or quartz/calcite. 32-40 feet drilled in approximately 10 minutes. Estimated water return approximately 1 gallon per minute. Cuttings observed to be approximately coarse sand-sized.
35			0.0 - 0.0			

WELL DIAGRAM
Casing Top Elev: 151.44 (ft)
Casing Type: Stick Up (2.79')

- Steel Casing (4")
- Portland Cement/Bentonite Grout Mixture Around Steel Casing
- 26' Depth to competent bedrock
- 3' Casing into competent bedrock
- 29' Total depth of casing
- Port 1 depth interval 29-44' bgs

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Boring Log

SY-BRMW5

CLIENT United States Army Corps of Engineers
PROJECT NAME Former Salvage Yard, Former Dow Military Airfield
PROJECT # 18001468
PROJECT LOCATION 233 Odlin Road, Bangor, Maine

Depth (ft)	Penetration/ Recovery (in)	Blow Counts	Field Screening (ppm)	Lab Analytical Sample	Graphic Log	LITHOLOGY	WELL DIAGRAM
40			0.0 - 0.0			Same as above. 40-50 feet drilled in approximately 11 minutes. Estimated water return approximately 1 gallon per minute. Same as above, except little quartz, trace iron oxide, larger grain size. Rig chatter noted.	
45			0.0 - 0.0			Same as above, possible soft zone at approximately 46 to 49 feet (faster advance rate, smaller cuttings)	
50			0.0 - 0.0			Same as above, except some iron oxide, trace quartz. 50-60 feet drilled in approximately 7 minutes. Estimated water return approximately 1 gallon per minute. Rig chatter noted	Open hole bedrock with blank liner
55			0.0 - 0.0			Same as above. Cuttings observed to be coarse gravel-sized. Water return increasing to an estimated 5 to 10 gallons per minute and very turbid. Soft bedrock conditions noted.	
60			0.0 - 0.0			Dark gray METAWACKE, some quartz, some iron oxide. 60-70 feet drilled in approximately 10 minutes. Estimated water return approximately 5 to 10 gallons per minute.	Port 2 depth interval 56-66' bgs
65			0.1 - 0.1			Dark gray METAWACKE, some quartz, less than approximately 5% iron oxide, some fine gravel. Cuttings inconsistent with rest of run (maybe falling from above). Water return rate increasing and water running turbid.	
70			0.1 - 0.1			Same as above, except quartz throughout, some iron oxide. Cuttings observed to be larger, coarse gravel-sized. Return water running more clear. 70-80 feet drilled in approximately 10 minutes. Estimated water return approximately 10 to 15 gallons per minute. Rig chatter noted	
75			0.1 - 0.1			Same as above, except trace to no iron oxide. Cuttings observed to be smaller, fine-gravel sized.	

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Boring Log

SY-BRMW5

CLIENT United States Army Corps of Engineers
PROJECT NAME Former Salvage Yard, Former Dow Military Airfield
PROJECT # 18001468
PROJECT LOCATION 233 Odlin Road, Bangor, Maine

Depth (ft)	Penetration/ Recovery (in)	Blow Counts	Field Screening (ppm)	Lab Analytical Sample	Graphic Log	LITHOLOGY	WELL DIAGRAM
80			0.1 - 0.1			Dark gray METAWACKE and QUARTZ (approximately 50%), no iron oxide. 80-90 feet drilled in approximately 8 minutes. Estimated water return approximately 15 gallons per minute and running gray.	
85			0.1 - 0.1			Dark gray METAWACKE, trace quartz. Rig chatter noted.	
						Same as above, except no quartz. Very soft bedrock conditions noted.	
90			0.1 - 0.1			Dark gray METAWACKE, approximately 15-20% iron oxide lessening down to 95 feet, no quartz observed. Soft bedrock conditions and quick drill rate noted. 90-100 feet drilled in approximately 5 minutes. Estimated water return approximately 10 to 15 gallons per minute.	
95			0.1 - 0.1			Dark gray METAWACKE, approximately 25% quartz, trace iron oxide	← Open hole bedrock with blank liner
100			0.1 - 0.1			Dark gray METAWACKE, little quartz, trace iron oxide. 100-110 feet drilled in approximately 6 minutes. Estimated water return approximately 15 gallons per minute and running relatively clear.	
						Same as above, except increasing to approximately 25% quartz	
105			0.1 - 0.1			Same as above, except decreasing to trace quartz	
						Same as above, except increasing to approximately 50% quartz. Rig chatter noted.	
110			0.1 - 0.1			Dark gray METAWACKE, approximately 10% quartz, trace iron oxide. 110-120 feet drilled in approximately 8 minutes, drill rate noted to be steady and fast. Estimated water return approximately 15 gallons per minute and running relatively clear.	
115			0.1 - 0.1				

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PROJECT # 18001468
PROJECT LOCATION 233 Odlin Road, Bangor, Maine

Depth (ft)	Penetration/ Recovery (in)	Blow Counts	Field Screening (ppm)	Lab Analytical Sample	Graphic Log	LITHOLOGY	WELL DIAGRAM
120			0.1 - 0.1			Dark gray METAWACKE and IRON OXIDE (approximately 50%). Driller reports large fracture at approximately 124 feet. 120-130 feet drilled in approximately 6 minutes. Estimated water return approximately 15 to 20 gallons per minute.	
125			0.1 - 0.1			Same as above. Large increase in rate of water return noted, driller observed to raise and lower rods to purge fracture. Water returning clear below fracture.	Port 3 depth interval 123-133' bgs
						Dark gray METAWACKE, trace quartz, trace iron oxide	
130			0.1 - 0.1			Dark gray METAWACKE, little quartz, trace iron oxide. 130-140 feet drilled in approximately 10 minutes. Return to consistent drilling rate noted. Estimated water return approximately 30 gallons per minute.	
135			0.1 - 0.1				
140			0.1 - 0.1			Same as above. 140-150 feet drilled in approximately 8 minutes. Estimated water return approximately 30 gallons per minute and running clear.	
145			0.1 - 0.1				
150			0.1 - 0.1			Dark gray METAWACKE, approximately 10 to 20% quartz, no iron oxide. 150-160 feet drilled in approximately 13 minutes and noted to be slower possibly due to solid bedrock with few to no fractures. Estimated water return approximately 30 gallons per minute.	
155			0.1 - 0.1				

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PROJECT # 18001468
PROJECT LOCATION 233 Odlin Road, Bangor, Maine

Depth (ft)	Penetration/ Recovery (in)	Blow Counts	Field Screening (ppm)	Lab Analytical Sample	Graphic Log	LITHOLOGY	WELL DIAGRAM
160			0.1 - 0.1			Same as above except approximately 20% quartz and trace to no iron oxide. 160-170 feet drilling in approximately 14 minutes. Estimated water return approximately 30 gallons per minute.	
165			0.1 - 0.1				
170			0.1 - 0.1			Same as above. 170-180 feet drilled in approximately 14 minutes. Updated, more accurate estimate of water return approximately 50 gallons per minute.	
175			0.1 - 0.1			Same as above, except slight increase in iron oxide	
180			0.1 - 0.1			Dark gray METAWACKE, approximately 20% quartz, trace iron oxide. 180-190 feet drilled in approximately 12 minutes. Estimated water return approximately 50 gallons per minute.	
185			0.1 - 0.1				
190			0.1 - 0.1			Same as above. 190-200 feet drilled in approximately 12 minutes. Estimated water return approximately 50 gallons per minute.	
195			0.1 - 0.1				

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PROJECT LOCATION 233 Odlin Road, Bangor, Maine

Depth (ft)	Penetration/ Recovery (in)	Blow Counts	Field Screening (ppm)	Lab Analytical Sample	Graphic Log	LITHOLOGY	WELL DIAGRAM
200			0.1 - 0.1			Same as above. 200-210 feet drilled in approximately 10 minutes. Estimated water return approximately 50 gallons per minute.	
205			0.1 - 0.1				
210			0.1 - 0.1			Same as above. 210-220 feet drilled in approximately 10 minutes. Updated accurate estimate of water return approximately 100 gallons per minute.	
215			0.1 - 0.1				Open hole bedrock with blank liner
220			0.0 - 0.0			Dark gray METAWACKE, trace quartz, no observable iron oxide. 220-230 feet drilled in approximately 7 minutes. Estimated water return approximately 100 gallons per minute and running gray.	
225			0.0 - 0.0			Dark gray METAWACKE with band of QUARTZ (approximately 50%)	
230			0.0 - 0.0			Dark gray METAWACKE, trace quartz, no observable iron oxide. 230-240 feet drilled in approximately 10 minutes. Estimated water return increasing to approximately 100 to 125 gallons per minute and running brown when flushing after adding another drill rod.	
235			0.0 - 0.0				

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PROJECT LOCATION 233 Odlin Road, Bangor, Maine

Depth (ft)	Penetration/ Recovery (in)	Blow Counts	Field Screening (ppm)	Lab Analytical Sample	Graphic Log	LITHOLOGY	WELL DIAGRAM
240			0.0 - 0.0			Same as above. 240-250 feet drilled in approximately 8 minutes. Estimated water return approximately 125 gallons per minute.	
245			0.0 - 0.0				
250			0.0 - 0.0			Same as above. 250-260 feet drilled in approximately 9 minutes. Estimated water return approximately 125 gallons per minute.	
255			0.0 - 0.0			Same as above, except trace quartz	
260			0.0 - 0.0			Same as above. 260-270 feet drilled in approximately 9 minutes. Estimated water return approximately 125 gallons per minute.	
265			0.0 - 0.0			Same as above, except approximately 10 to 20% quartz	
270			0.0 - 0.0			Same as above, except trace quartz. 270-280 feet drilled in approximately 10 minutes. Estimated water return approximately 125 gallons per minute.	
275			0.0 - 0.0				

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CLIENT United States Army Corps of Engineers
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PROJECT LOCATION 233 Odlin Road, Bangor, Maine

Depth (ft)	Penetration/ Recovery (in)	Blow Counts	Field Screening (ppm)	Lab Analytical Sample	Graphic Log	LITHOLOGY	WELL DIAGRAM
280			0.0 - 0.0			Same as above. 280-290 feet drilled in approximately 12 minutes. Estimated water return approximately 125 gallons per minute.	
285			0.0 - 0.0				
290			0.0 - 0.0			Same as above. 290-300 feet drilled in approximately 12 minutes. Estimated water return approximately 125 gallons per minute.	
295			0.0 - 0.0				
300						Total Depth 300' below ground surface. Well developed by surge and pump via air hammer bit in cycles until return water visually appeared relatively clear.	
305							
310							
315							

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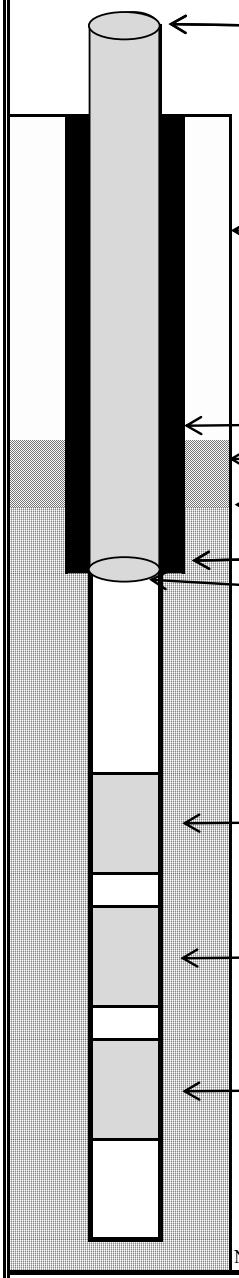
Credere Associates LLC

Boring/Well ID: SY-BRMW5

BEDROCK FLUTE WELL CONSTRUCTION DETAILS

SITE INFORMATION	DRILLING EQUIPMENT
Project Number/Client: 18001468/USACE	**Equipment (make/model):** Terrasonic 150C
Site Location: Dow Salvage Yard, Bangor, ME	**Casing/Auger/Core Diameter:** 6"/ 4"
Date Start - Finish: 12/7/2022 - 1/26/2023	**Drill Casing Material:** Steel
Credere Representative: S. Gannon	**CONTRACTOR**
Well Type Bedrock Open Hole with FLUTe System	**Drilling Contractor/Foreman:** Cascade/Al Sizemore



Top of well elevation (PVC FLUTe coupling; ft NAVD88): 151.44

Stickup height (in): 2.79

Ground elevation (ft NAVD88): 148.65

Overburden thickness (ft): 25

Casing type: steel

Casing diameter (in): 6

Borehole diameter in overburden (in): 8

Grout material: Portland cement/bentonite gel grout

Weathered bedrock thickness (ft): 1

Depth to competent bedrock (ft bgs): 26

Depth of casing into competent bedrock (ft): 3

Bottom of permanent casing (ft bgs): 29

Depth to water (ft bgs): 4.70

Borehole diameter in bedrock (in): 6

Port 1 depth interval (ft bgs): 29-44

Port 2 depth interval (ft bgs): 56-66

Port 3 depth interval (ft bgs): 123-133

Depth of borehole (ft bgs): 301.5

Not to scale

Port 1 connection elevation (ft NAVD88): 151.74

Port 2 connection elevation (ft NAVD88): 151.62

Port 3 connection elevation (ft NAVD88): 151.74

Top of tag line elevation (ft NAVD88): 151.77

Generalized description of overburden: Brown silt and sand, transitioning to brown silt and clay at approx. 7' bgs, to gray clay at approx. 13' bgs, and to gray till approx. 24' bgs.

Generalized description of rock type (fracture depths, etc.): Fine grained gray metawacke with quartz veins; faults present at approx. 59-63', 89-91', 99-101', and 127-129' bgs. Other possible transmissive fracture present at approx. 284' bgs.

Hydraulically Active Fractures Present? (Based on Heat Pulse Flow Meter Response)	
Port 1	Flow Up the Borehole Under Pumping Conditions
29-44 feet bgs	
Port 2	Yes - Flow Into and Down Under Ambient Conditions; Flow Into and Up Under Pumping Conditions
56-66 feet bgs	
Port 3	Yes - Flow Into and Down Under Ambient Conditions; Flow Into & Up and Into & Down Under Pumping Conditions
123-133 feet bgs	

Remarks and Well Details

bgs - below ground surface

NAVD88 - North American Vertical Datum of 1988

- Developed by surging with air hammer

- Locking cap and padlock installed

- Elevations recorded by Psilga & Day Land Surveyors, January 4 & 24, 2024. Elevations reference the North American Vertical Datum of 1988 (NAVD88) using GPS tied to the NGS CORS Network (via Maine Department of Transportation VRS GPS control network). Elevations computed from GEOID 18 based on two permanent benchmarks installed and observed in November 2020, upon which an OPUS solution was obtained and three wire levels were run.

Well ID: SY-BRMW5

Credere Associates, LLC
776 Main Street
Westbrook, Maine 04092
Phone: 207-828-1272
Fax: 207-887-1051

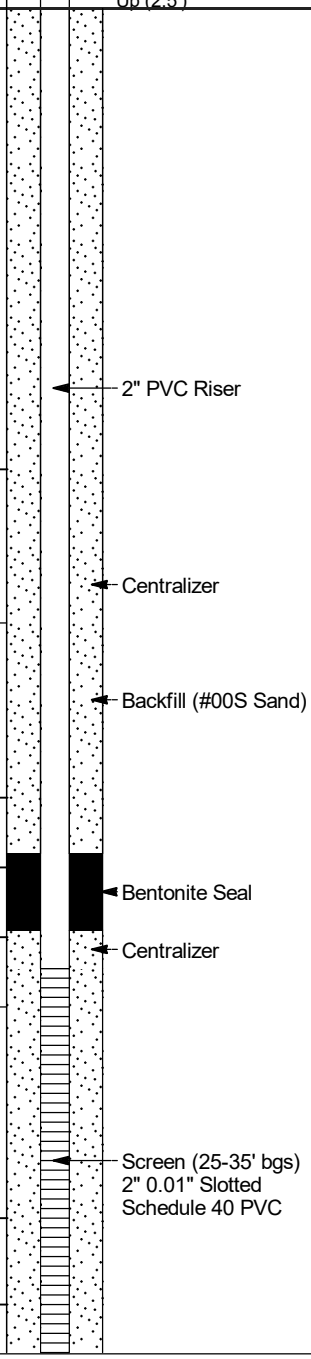
Boring Log

SY-OBMW4R

CLIENT United States Army Corps of Engineers
PROJECT NAME Former Dow Air Force Base, Salvage Yard
PROJECT # 18001468
PROJECT LOCATION 233 Odlin Road, Bangor, ME
DATE STARTED 2/1/23 **LOGGED BY** S. Gannon
DEPTH TO WATER 7.86 **WELL DIAMETER** 2
CONTRACTOR Cascade/Al Sizemore
WELL MATERIALS PVC, 0.010" slotted screen, solid riser
DRILLING METHOD Sonic
ANNULUS MATERIALS #00S Silica Sand, Bentonite Chips
DRILLING EQUIPMENT Terra Sonic 150C Crawler, borehole diam. 6
MP ELEVATION 156.07 **GROUND ELEVATION** 153.11
NOTES

Depth (ft)	Penetration/ Recovery (in)	Field Screening (ppm)	Lab Analytical Sample	Graphic Log	LITHOLOGY
0	72/54	0.1 - 0.1	SY-SB4R-1 (0.5-2) SY-SB4R-2 (2-4)		0-54" Dark brown, moist, SILT and fine to coarse SAND, trace Coal.
5	120/144	0.1 - 0.1			0-72" Same as above.
10					72-108" Light yellow-brown, moist, CLAY, no mottling, expanding, becoming more gray towards bottom of core.
15	120/132	0.1 - 0.1			108-144" Light gray, moist, CLAY, no mottling, expanding. Recovery exceeds penetration due to expanding clays. 0-60" Light gray, moist, CLAY and SILT, some fine to coarse Sand, loose/soft relative to above.
20					60-84" Light gray, moist, CLAY, not expanding.
25					84-108" Light gray, moist, SILT and CLAY, some fine to coarse Sand. 108-122" Brownish-gray BOULDER (angular fractured metawacke with oxidation in silty slurry), wet. 0-80" Light gray, wet, SILT and CLAY, some fine to coarse Sand, loose relative to above.
30					80-106" Light gray, dry, TILL (SILT and CLAY, some poorly sorted fine to coarse Sand and little fine Gravel, very dense relative to above). 106-132" Light gray, dry, angular mechanically fractured METAWACKE, rock flour present. Weathered bedrock encountered at approximately 33-34' bgs.

WELL DIAGRAM
Casing Top Elev: 160.06 (ft)
Casing Type: Stick Up (2.5')



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Credere Associates, LLC
776 Main Street
Westbrook, Maine 04092
Phone: 207-828-1272
Fax: 207-887-1051

Boring Log

SY-OBMW4R

CLIENT United States Army Corps of Engineers
PROJECT NAME Former Dow Air Force Base, Salvage Yard
PROJECT # 18001468
PROJECT LOCATION 233 Odlin Road, Bangor, ME

Depth (ft)	Penetration/ Recovery (in)	Field Screening (ppm)	Lab Analytical Sample	Graphic Log	LITHOLOGY	WELL DIAGRAM
35	60/58	0.1 - 0.1			0-58" Light gray METAWACKE with quartz veins and trace massive quartz. Weathered fractures (rounded with iron oxide) present, few drilling/mechanical fractures. RQD = 58/60 = 97% = excellent. 35-40 feet drilled in approximately 6 minutes.	Sump; Backfill (#00S Sand)
40					End of boring (40' below ground surface)	
45						
50						
55						
60						
65						
70						

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Credere Associates LLC

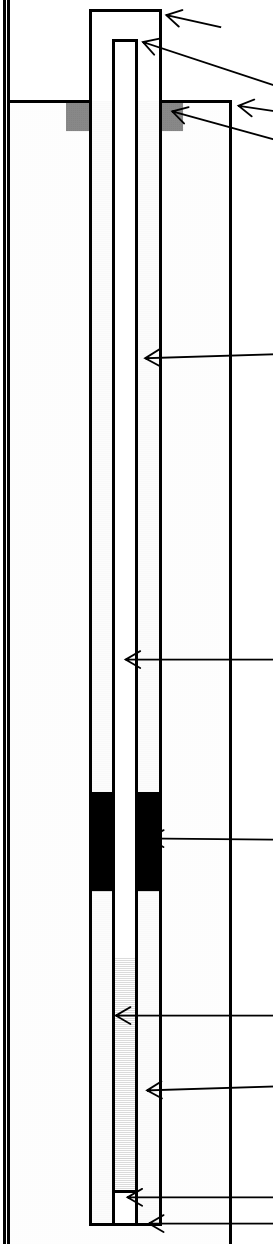
Boring/Well ID:
SY-SB4R
SY-OBMW4R

SITE INFORMATION
Project Number/Client: 18001468/USACE
Site Location: Dow Salvage Yard, Bangor, ME
Date Start/Finish: February 1, 2023
Credere Representative: S. Gannon
Well Type: Overburden

DRILLING EQUIPMENT
Equipment (make/model): Terrasonic 150C
Casing/Auger/Core Diameter: 6"/ 4"
Drill Casing Material: Steel

CONTRACTOR
Drilling Contractor/Foreman: Cascade/Al Sizemore

OVERBURDEN/HYBRID WELL CONSTRUCTION DETAILS



Top of stickup elevation (ft AMSL): 156.24
Stickup height (ft): 3.13
Top of well/PVC elevation (ft AMSL): 156.07
Ground elevation (ft AMSL): 153.11
Concrete thickness (if roadbox; ft): 1

Well completion: stickup with locking protective steel standpipe
Lock installed? Yes

Generalized description of overburden: Brown silt and sand, transitioning to brown silt and clay at approx. 6' bgs, to brown clay at approx. 12' bgs, to gray clay at approx 15' bgs, and to gray till at approx. 33' bgs.

Borehole diamter (in): 4

Backfill material: sand
Backfill depth (ft bgs): 1-20

Centralizer approx. 15 ft bgs

Well riser material: PVC
Well riser length/depth (ft/ft bgs): 25+Stickup
Well riser diameter (in): 2

Bentonite depth interval (ft bgs): 20-22

Centralizer approx. 30 ft bgs

Screen material: 0.010" slot PVC
Well diameter (in): 2
Screen length/interval (ft/ft bgs): 10/25-35

Annulus material: sand
Annulus depth interval (ft bgs): 22-40
Annulus material size: #00S

Depth to water (ft bgs): 7.86
Sump depth (ft bgs): 35-37
Depth of borehole (ft bgs): 40

Development Date: February 07, 2023
Development method: Whale pump with surging
Total well volume: 4.99
Total purge volume (g): ~389
No. of well volumes purged: ~78
Final turbidity (NTU): N/A*

Field Parameters
DO (mg/L): 0.36
pH: 10.58
Sp. Conductivity (mS/cm): 3.72
ORP (mV): -146.3
Temperature (°C): 8.5

Remarks and Well Details

Sand: Holliston 00S

Bentonite: CETCO Pure Gold L053019TCB

N/A - Not Applicable

* - Turbidity meter malfunctioned during well development. Water purged until running visually clear, all other development objectives met.

- Elevations recorded by Psilga & Day Land Surveyors, January 4 & 24, 2024. Elevations reference the North American Vertical Datum of 1988 (NAVD88) using GPS tied to the NGS CORS Network (via Maine Department of Transportation VRS GPS control network). Elevations computed from GEOID 18 based on two permanent benchmarks installed and observed in November 2020, upon which an OPUS solution was obtained and three wire levels were run.

Well ID: SY-OBMW4R

APPENDIX E

GROUNDWATER SAMPLING FIELD LOGS

LOW FLOW SAMPLING LOG (PERISTALTIC PUMP)

Credere Associates. LLC. 776 Main Street. Westbrook. ME 04092

PROJECT NAME: USACE Dow Salvage Yard

DATE: 9/08/23

PROJECT NUMBER: 18001468

LOCATION ACTIVITY START: 830 END: 1015

SAMPLE LOCATION ID: SY-OBMW1

WELL DATA:

WELL DEPTH (ft): ~~37~~ 37.44 [X] MEASURED [ ] HISTORICAL

WATER DEPTH (ft): 6.22 [X] MEASURED [ ] HISTORICAL

[X] TOP OF WELL [ ] TOP OF CASING [ ] FROM GRADE [ ] _____

WATER LEVEL EQUIPMENT USED: [X] ELECT. COND. PROBE [ ] FLOAT ACTIVATED PROBE [ ] PRESSURE TRANSDUCER

DEPTH OF PUMP INTAKE (ft): ~30.44 Stick-up (in): 2.24

AMBIENT AIR VOC: - PPM

WELL MOUTH VOC: 0.013 PPM

WELL MATERIAL: [X] PVC [ ] SS [ ] _____

WELL LOCKED: [X] YES [ ] NO

PROTECTIVE CASING SECURE: [X] YES [ ] NO

CONCRETE COLLAR INTACT: [X] YES [ ] NA [ ] NO

PVC or CASING HEAVING?: [ ] YES [ ] NA [X] NO

EQUIPMENT DATA:

PURGING	SAMPLING	
[X]	[X]	Peristaltic Pump
[ ]	[ ]	Submerisble:
[ ]	[ ]	Bladder pump
[ ]	[ ]	Hand pump
[ ]	[ ]	Dedicated HDPE
[ ]	[ ]	New HDPE
[ ]	[ ]	Dedicated Teflon Lined LDPE
[ ]	[ ]	New Teflon Lined LDPE
	[X]	Filter (0.45 micron)
[ ]	[ ]	_____

EQUIPMENT

Peristaltic Pump, Water Level Meter

YSI Quatro Sonde with 250 mL Flow Cell

YSI Sonde SN: 19F100686

YSI Prot Handset

YSI Handset SN: 21K100829

Hach 2100 Turbiditmeter Turbidity Meter SN: 16030C048465

DECON. FLUIDS USED

[ ] DISTILLED WATER
[X] DEIONIZED WATER
[ ] POTABLE WATER
[X] ALCONOX/LIQUINOX
[ ] NONE
[ ] _____
[ ] _____
[ ] _____

Sampler: P. Haber

FIELD ANALYSIS DATA:

TIME	TEMP (°C)	SP. COND. (mS/cm)	pH	ORP (mV)	D.O. (mg/l)	TURBID. (ntu)	Flow Rate (mL/min)	DTW (ft)	Comments/Flow Rate (indicate stable flow rate)
830	9.1	29000	7.97	162.0	0.55	750	360	6.70	SP. COND in mS/cm
835	9.3	29600	7.97	148.9	0.42	32.7	400	7.30	(Nano)
840	9.3	29600	7.97	141.1	0.36	17.6	400	7.63	
845	9.2	29600	7.97	137.2	0.36	10.9	400	7.80	
850	9.2	29600	7.97	130.1	0.35	9.09	400	8.07	
855	9.2	29650	7.98	129.6	0.34	8.24	400	8.20	
900	9.2	29600	7.98	123.5	0.33	6.43	400	8.32	
905	9.2	29500	7.98	120.4	0.33	5.96	400	8.42	
910	9.1	29400	7.99	116.5	0.33	6.06	400	8.55	
915	9.2	29400	7.99	113.5	0.32	4.54	400	8.68	
920	9.2	29600	7.99	111.6	0.31	4.12	400	8.72	
925	9.1	29400	8.00	109.1	0.32	4.59	400	8.80	
5 min	3%	3%	±0.1	±10	<0.5 or10%,	<5	100-400 mL/min	<0.3 ft drawndown	

Sampler's Initials RCH

LOW FLOW SAMPLING LOG (PERISTALTIC PUMP)

Credere Associates, LLC. 776 Main Street. Westbrook. ME 04092

Community Economy Environment

PROJECT NAME: USACE Dow Salvage Yard DATE: 11/08/23

PROJECT NUMBER: 18001468

SAMPLE LOCATION ID: SY-OBMW-1

FINAL MONITORING PARAMETERS AFTER SAMPLING

TIME	TEMP (°C)	SP. COND. (~~mS/cm~~ µS/cm)	pH	ORP (mV)	D.O. (mg/l)	TURBID. (ntu)	Flow Rate (mL/min)	DTW (ft)
10.5	7.8	29420 Unit in mS/cm (nano)	8.72	93.2	0.48	—	120	9.02

SAMPLE DATA:

SAMPLE BOTTLE ID TIME	SAMPLE BOTTLE ID LOCATION	PRESERVATION METHOD	SAMPLE CONTAINER #	SAMPLE CONTAINER TYPE	LABORATORY ANALYSIS
435	SY-OBMW1	HCl	2	40 mL VOA	VOC
		HCl	2	40 mL VOA	VPH
		None	1	1 L Amber	SVOC
		None	1	1 L Amber	PCB
		HCl	1	1 L Amber	EPH
		HNO3	1	250 mL Poly	Total Metals
		HNO3 (filtered)	1	250 mL Poly	Dissolved Metals
		HCl	3	40 mL VOA	CVOC SIM
		HCl	2	40 mL VOA	TOC
		HCl	3	40 mL VOA	Dissolved Gasses
		None	1	500 mL Poly	Alkalinity, Hexavalent Chromium, Anions
		HCl	1	250 mL Poly	Ferrous Iron
		None	2	1 L Amber	BNASIM

PURGE DATA

[ ] 0.04 GAL/FT (1" DIAM.)
[x] 0.16 GAL/FT (2" DIAM.)
[ ] 0.65 GAL/FT (4" DIAM.)
[ ] 1.47 GAL/FT (6" DIAM.)

x length of water column = 31.22

Total Well Volume: ~~4.9~~ 5.00

Total Purge Volume: 9 gal

# of well volumes: ~1.8

COMMENTS For final monitoring parameters, water stopped pumping and a turbidity reading could not be taken. Prior to this and during sampling, water still appeared clear.

DETAILED STABALIZATION CRITERIA

pH: ±0.1 standard units
Temperature: ± 3%
ORP: ±10 mV
DO: less than 0.5 mg/L or ±10% for values greater than 0.5 mg/L
Specific conductivitiy: ± 3%
Turbidity: <5 NTU or 10% for reading >5 NTU (filtered only)
Drawdown: no more than 0.3 feet

SAMPLER INFORMATION

Name (printed): Peter Haber Signature: [signature]

LOW FLOW SAMPLING LOG (PERISTALTIC PUMP)

Credere Associates. LLC. 776 Main Street. Westbrook. ME 04092

PROJECT NAME: USACE Dow Salvage Yard

DATE: 11/8/23

PROJECT NUMBER: 18001468

LOCATION ACTIVITY
START: 0805
END: 0945

SAMPLE LOCATION ID: SY-08MW-2

WELL DATA:

WELL DEPTH (ft): 42.22 [X] MEASURED [ ] HISTORICAL

WATER DEPTH (ft): 6.66 [ ] MEASURED [ ] HISTORICAL

[X] TOP OF WELL [ ] TOP OF CASING [ ] FROM GRADE [ ] _____

WATER LEVEL EQUIPMENT USED:
[X] ELECT. COND. PROBE
[ ] FLOAT ACTIVATED PROBE
[ ] PRESSURE TRANSDUCER

DEPTH OF PUMP INTAKE (ft): ~35.2~ Stick-up (ft): 3.07

AMBIENT AIR VOC: — PPM
WELL MOUTH VOC: 0.018 PPM

WELL MATERIAL: [X] PVC [ ] SS [ ] _____

WELL LOCKED: [X] YES [ ] NO

PROTECTIVE CASING SECURE: [X] YES [ ] NO

CONCRETE COLLAR INTACT: [ ] YES [X] NA [ ] NO

PVC or CASING HEAVING?: [ ] YES [ ] NA [X] NO

EQUIPMENT DATA:

PURGING	SAMPLING	
[X]	[X]	Peristaltic Pump
[ ]	[ ]	Submerisble:
[ ]	[ ]	Bladder pump
[ ]	[ ]	Hand pump
[ ]	[ ]	Dedicated HDPE
[ ]	[ ]	New HDPE
[X]	[X]	Dedicated Teflon Lined LDPE
[ ]	[ ]	New Teflon Lined LDPE
	[X]	Filter (0.45 micron)
[ ]	[ ]	_____

EQUIPMENT
Peristaltic Pump, Water Level Meter
YSI Quatro Sonde with 250 mL Flow Cell
YSI Sonde SN: 21M100503
YSI Pro + Handset
YSI Handset SN: 17E100949
Hach 2100 Turbiditmeter
Turbidity Meter SN: 23070200004108

Sampler: G. Kern

DECON. FLUIDS USED
[ ] DISTILLED WATER
[ ] DEIONIZED WATER
[ ] POTABLE WATER
[ ] ALCONOX/LIQUINOX
[ ] NONE
[ ] _____
[ ] _____
[ ] _____

FIELD ANALYSIS DATA:

TIME	TEMP (°C)	SP. COND. (mS/cm)	pH	ORP (mV)	D.O. (mg/l)	TURBID. (ntu)	Flow Rate (mL/min)	DTW (ft)	Comments/Flow Rate (indicate stable flow rate)
0820	10.0	0.5083	8.49	135.9	3.26	5.47	200	6.66	
0825	9.8	0.5331	8.03	134.9	0.64	4.01	200	6.95	
0830	9.7	0.5551	7.86	133.9	0.37	3.23	200	6.99	
0835	10.1	0.5581	7.79	130.0	0.29	2.55	300	7.13	
0840	10.1	0.5632	7.75	125.8	0.25	3.21	300	7.16	
0845	10.6	0.5594	7.69	126.0	0.27	2.46	400	7.35	YSI shut-off / restarted
0850	10.6	0.5631	7.73	116.2	0.21	1.70	400	7.47	
0855	10.5	0.5655	7.73	112.8	0.19	0.97	400	7.49	
0900	10.6	0.5673	7.73	108.7	0.18	0.88	400	7.49	
0905									sampled
5 min	3%	3%	±0.1	±10	<0.5 or10%,	<5	100-400 mL/min	<0.3 ft drawndown	

Sampler's Initials
GWK

LOW FLOW SAMPLING LOG (PERISTALTIC PUMP)

Credere Associates. LLC. 776 Main Street. Westbrook. ME 04092

PROJECT NAME: USACE Dow Salvage Yard DATE: 11/8/23

PROJECT NUMBER: 18001468

SAMPLE LOCATION ID: SY_OS_MW-2

FINAL MONITORING PARAMETERS AFTER SAMPLING

TIME	TEMP (°C)	SP. COND. (mS/cm)	pH	ORP (mV)	D.O. (mg/l)	TURBID. (ntu)	Flow Rate (mL/min)	DTW (ft)
0935	10.6	0.5781	7.71	136.4	0.48	1.05	400	7.48

SAMPLE DATA:

SAMPLE BOTTLE ID TIME	SAMPLE BOTTLE ID LOCATION	PRESERVATION METHOD	SAMPLE CONTAINER #	SAMPLE CONTAINER TYPE	LABORATORY ANALYSIS
0905	SY-OS-MW-2	HCl	2	40 mL VOA	VOC
		HCl	2	40 mL VOA	VPH
		None	1	1 L Amber	SVOC
		None	1	1 L Amber	PCB
		HCl	1	1 L Amber	EPH
		HNO3	1	250 mL Poly	Total Metals
		HNO3 (filtered)	1	250 mL Poly	Dissolved Metals
		HCl	3	40 mL VOA	CVOC SIM
		HCl	2	40 mL VOA	TOC
		HCl	3	40 mL VOA	Dissolved Gasses
		None	1	500 mL Poly	Alkalinity, Hexavalent Chromium, Anions
X	X	HCl	1	250 mL Poly	Ferrous Iron
		None	2	1 L Amber	BNASIM

PURGE DATA

[ ] 0.04 GAL/FT (1" DIAM.)
[X] 0.16 GAL/FT (2" DIAM.)
[ ] 0.65 GAL/FT (4" DIAM.)
[ ] 1.47 GAL/FT (6" DIAM.)

x length of water column = 35.56

Total Well Volume: 5.7 gallons

Total Purge Volume: 4 gallons

# of well volumes: 0.7 gallons

COMMENTS 2 1 Liter ambers collected for BNA SIM

DETAILED STABALIZATION CRITERIA

pH: ±0.1 standard units
Temperature: ± 3%
ORP: ±10 mV
DO: less than 0.5 mg/L or ±10% for values greater than 0.5 mg/L
Specific conductivitiy: ± 3%
Turbidity: <5 NTU or 10% for reading >5 NTU (filtered only)
Drawdown: no more than 0.3 feet

SAMPLER INFORMATION

Name (printed): Grant Kern Signature:

LOW FLOW SAMPLING LOG (PERISTALTIC PUMP)

Credere Associates. LLC. 776 Main Street. Westbrook. ME 04092

PROJECT NAME: USACE Dow Salvage Yard DATE: 11/8/23

PROJECT NUMBER: 18001468 LOCATION ACTIVITY START: 1005 END: 1155

SAMPLE LOCATION ID: SV-OBMW-3

WELL DATA:

WELL DEPTH (ft): 37.90' [X] MEASURED [ ] HISTORICAL [X] TOP OF WELL [ ] TOP OF CASING [ ] FROM GRADE [ ] ____

WATER DEPTH (ft): 3.71 [X] MEASURED [ ] HISTORICAL

WATER LEVEL EQUIPMENT USED: [X] ELECT. COND. PROBE [ ] FLOAT ACTIVATED PROBE [ ] PRESSURE TRANSDUCER

DEPTH OF PUMP INTAKE (ft): ~30.9' Stick-up (ft): 2.68

AMBIENT AIR VOC: - PPM

WELL MOUTH VOC: 0.000 PPM

WELL MATERIAL: [X] PVC [ ] SS [ ] ____

WELL LOCKED: [X] YES [ ] NO

PROTECTIVE CASING SECURE: [X] YES [ ] NO

CONCRETE COLLAR INTACT: [ ] YES [X] NA [ ] NO

PVC or CASING HEAVING?: [ ] YES [ ] NA [X] NO

EQUIPMENT DATA:

PURGING	SAMPLING	
[X]	[X]	Peristaltic Pump
[ ]	[ ]	Submerisble:
[ ]	[ ]	Bladder pump
[ ]	[ ]	Hand pump
[ ]	[ ]	Dedicated HDPE
[ ]	[ ]	New HDPE
[ ]	[X]	Dedicated Teflon Lined LDPE
[ ]	[ ]	New Teflon Lined LDPE
	[X]	Filter (0.45 micron)
[ ]	[ ]	____

EQUIPMENT

Peristaltic Pump, Water Level Meter

YSI Quatro Sonde with 250 mL Flow Cell

YSI Sonde SN: 21M100503

YSI Pro1 Handset

YSI Handset SN: 17E100949

Hach 2100 Turbiditmeter

Turbidity Meter SN: 22070D000408

DECON. FLUIDS USED

[ ] DISTILLED WATER
[X] DEIONIZED WATER
[ ] POTABLE WATER
[X] ALCONOX/LIQUINOX
[ ] NONE
[ ] ____
[ ] ____
[ ] ____

Sampler: G. Korn

FIELD ANALYSIS DATA:

TIME	TEMP (°C)	SP. COND. (mS/cm)	pH	ORP (mV)	D.O. * (mg/l)	TURBID. (ntu)	Flow Rate (mL/min)	DTW (ft)	Comments/Flow Rate (indicate stable flow rate)
1025							300	3.71	Start Pump
1030	9.3	0.3055	7.83	157.1	2.73	20.2	300	3.86	
1035	9.6	0.3068	7.93	146.2	0.24	10.8	400	3.93	
1040	9.7	0.3099	7.94	141.2	0.06	8.73	400	4.02	
1045	9.6	0.3091	7.92	136.4	0.01	5.61	400	4.10	
1050	9.6	0.3097	7.94	132.2	-0.32	3.52	400	4.12	
1055	9.6	0.3092	7.93	129.8	-0.42	2.91	400	4.16	
1100	9.6	0.3105	7.95	128.0	-0.53	2.66	400	4.16	
1105	9.6	0.3101	7.93	124.2	-0.69	2.27	400	4.23	
1110	9.5	0.3110	7.93	122.2	-0.69	1.47	400	4.23	
1115									Sampled
5 min	3%	3%	±0.1	±10	<0.5 or10%,	<5	100-400 mL/min	<0.3 ft drawndown	

Sampler's Initials GWK

* DO reading negative/below 0 mg/L

LOW FLOW SAMPLING LOG (PERISTALTIC PUMP)

Credere Associates. LLC. 776 Main Street. Westbrook. ME 04092

PROJECT NAME: USACE Dow Salvage Yard DATE: 11/8/23

PROJECT NUMBER: 18001468

SAMPLE LOCATION ID: SY-OBMW-3

FINAL MONITORING PARAMETERS AFTER SAMPLING

TIME	TEMP (°C)	SP. COND. (mS/cm)	pH	ORP (mV)	D.O. (mg/l)	TURBID. (ntu)	Flow Rate (mL/min)	DTW (ft)
1145	9.5	0.3132	7.86	121.2	0.51	1.70	40c	4.32

SAMPLE DATA:

SAMPLE BOTTLE ID TIME	SAMPLE BOTTLE ID LOCATION	PRESERVATION METHOD	SAMPLE CONTAINER #	SAMPLE CONTAINER TYPE	LABORATORY ANALYSIS *
1115	SY-OBMW-3	HCl	2	40 mL VOA	VOC
		HCl	2	40 mL VOA	VPH
		None	1	1 L Amber	SVOC
		None	1	1 L Amber	PCB
		HCl	1	1 L Amber	EPH
		HNO3	1	250 mL Poly	Total Metals
		HNO3 (filtered)	1	250 mL Poly	Dissolved Metals
		HCl	3	40 mL VOA	CVOC SIM
		HCl	2	40 mL VOA	TOC
		HCl	3	40 mL VOA	Dissolved Gasses
		None	1	500 mL Poly	Alkalinity, Hexavalent Chromium, Anions
		HCl	1	250 mL Poly	Ferrous Iron
		None	2	1 L Amber	BNASIM

PURGE DATA

[ ] 0.04 GAL/FT (1" DIAM.)
[✓] 0.16 GAL/FT (2" DIAM.)
[ ] 0.65 GAL/FT (4" DIAM.)
[ ] 1.47 GAL/FT (6" DIAM.)

x length of water column = 34.19

Total Well Volume: 5.47 gallons

Total Purge Volume: 5 gallons

# of well volumes: 0.9

COMMENTS *2 BNA SIM

DETAILED STABALIZATION CRITERIA

pH: ±0.1 standard units
Temperature: ± 3%
ORP: ±10 mV
DO: less than 0.5 mg/L or ±10% for values greater than 0.5 mg/L
Specific conductivitiy: ± 3%
Turbidity: <5 NTU or 10% for reading >5 NTU (filtered only)
Drawdown: no more than 0.3 feet

SAMPLER INFORMATION

Name (printed): Grant Kern Signature:

LOW FLOW SAMPLING LOG (PERISTALTIC PUMP)

Credere Associates. LLC. 776 Main Street. Westbrook. ME 04092

PROJECT NAME: USACE Dow Salvage Yard

DATE: 11/7/23

PROJECT NUMBER: 18001468

LOCATION ACTIVITY
START: 0845
END: 1145

SAMPLE LOCATION ID: SY-08MW4R

WELL DATA:

WELL DEPTH (ft): 39.08'
[X] MEASURED
[ ] HISTORICAL

WATER DEPTH (ft): 7.53'
[X] MEASURED
[ ] HISTORICAL

[X] TOP OF WELL
[ ] TOP OF CASING
[ ] FROM GRADE
[ ] _____

WATER LEVEL EQUIPMENT USED:
[X] ELECT. COND. PROBE
[ ] FLOAT ACTIVATED PROBE
[ ] PRESSURE TRANSDUCER

DEPTH OF PUMP INTAKE (ft): ~32'~

Stick-up (ft): 3.16'

AMBIENT AIR VOC: — PPM
WELL MOUTH VOC: 0.233 PPM

WELL MATERIAL:
[X] PVC
[ ] SS
[ ] _____

WELL LOCKED:
[X] YES
[ ] NO

PROTECTIVE CASING SECURE:
[X] YES
[ ] NO

CONCRETE COLLAR INTACT:
[ ] YES [X] NA
[ ] NO

PVC or CASING HEAVING?:
[ ] YES [ ] NA
[X] NO

EQUIPMENT DATA:

PURGING	SAMPLING	
[X]	[X]	Peristaltic Pump
[ ]	[ ]	Submerisble:
[ ]	[ ]	Bladder pump
[ ]	[ ]	Hand pump
[ ]	[ ]	Dedicated HDPE
[ ]	[ ]	New HDPE
[X]	[X]	Dedicated Teflon Lined LDPE
[ ]	[ ]	New Teflon Lined LDPE
	[X]	Filter (0.45 micron)
[ ]	[ ]	_____

EQUIPMENT
Peristaltic Pump, Water Level Meter
YSI QuatroPro Sonde with 250 mL Flow Cell
YSI Sonde SN: 21M100503
YSI Pro + Handset
YSI Handset SN: 17E100949
Hach 2100 Turbiditmeter
Turbidity Meter SN: 20070D000408

DECON. FLUIDS USED
[ ] DISTILLED WATER
[X] DEIONIZED WATER
[ ] POTABLE WATER
[X] ALCONOX/LIQUINOX
[ ] NONE
[ ] _____
[ ] _____
[ ] _____

Sampler: G. Kern

FIELD ANALYSIS DATA:

TIME	TEMP (°C)	SP. COND. (mS/cm)	pH	ORP (mV)	D.O. * (mg/l)	TURBID. (ntu)	Flow Rate (mL/min)	DTW (ft)	Comments/Flow Rate (indicate stable flow rate)
0905						56.2		7.53	start Pump
0910	10.6	4.389	7.24	78.9	0.27	53.9	200	7.61	
0915	10.5	4.368	7.23	76.0	0.19	50.2	200	7.62	
0920	10.3	4.363	7.24	65.7	0.08	38.7	360	7.69	
0925	10.1	4.393	7.23	52.0	0.01	31.9	400	7.71	
0930	10.1	4.400	7.24	35.0	-0.4%	30.5	400	7.74	
0935	10.0	4.394	7.25	23.9	-0.6%	20.3	400	7.75	
0940	10.0	4.319	7.25	19.1	-0.7%	22.2	400	7.75	
0945	10.0	4.306	7.26	15.1	-0.8%	19.1	400	7.76	
0950	10.0	4.257	7.26	9.7	-6.8%	19.1	400	7.76	
0955	10.0	4.289	7.26	9.6	-0.8%	20.0	400	7.77	
1000	10.2	4.247	7.26	7.8	-0.8%	23.5	400	7.77	
1005						22.0	400	7.77	YSI turned off/readings off
1015	10.9	4.164	7.26	-3.9	0.05	22.3	400	7.77	
1025	10.2	4.140	7.27	-6.8	0.07	16.3	400	7.77	
1030	10.2	4.145	7.27	-7.6	0.06	13.5	400	7.77	
1035	10.2	4.149	7.27	-8.5	-0.5%	14.0	400	7.77	
1040	10.2	4.144	7.27	-8.6	-0.3%	12.2	400	7.77	
1045	10.2	4.130	7.28	-9.1	0.01	9.72	400	7.77	
1050	10.2	4.128	7.28	-9.0	-0.1%	10.8	400	7.77	
1055	10.2	4.123	7.28	-8.8	-0.6%	8.80	400	7.77	
1100	10.2	4.126	7.28	-8.2	-0.2%	9.12	400	7.77	
5 min	3%	3%	±0.1	±10	<0.5 or10%,	<5	100-400 mL/min	<0.3 ft drawndown	

Sampler's Initials GWK

* DO reading below 0 mg/L

1105 10.2 4.126 7.28 -6.6 -0.3% 9.24 400 7.77 (sampled)

LOW FLOW SAMPLING LOG (PERISTALTIC PUMP)

Credere Associates. LLC. 776 Main Street. Westbrook. ME 04092

PROJECT NAME: USACE Dow Salvage Yard DATE: 11/7/23

PROJECT NUMBER: 18001468

SAMPLE LOCATION ID: SY-08MW4R

FINAL MONITORING PARAMETERS AFTER SAMPLING

TIME	TEMP (°C)	SP. COND. (mS/cm)	pH	ORP (mV)	D.O. (mg/l)	TURBID. (ntu)	Flow Rate (mL/min)	DTW (ft)
1130	10.2	4.136	7.26	-7.6	-0.22	6.36	400	7.77

SAMPLE DATA:

SAMPLE BOTTLE ID TIME	SAMPLE BOTTLE ID LOCATION	PRESERVATION METHOD	SAMPLE CONTAINER #	SAMPLE CONTAINER TYPE	LABORATORY ANALYSIS
1105	SY-08MW4R	HCl	2	40 mL VOA	VOC
		HCl	2	40 mL VOA	VPH
		None	1	1 L Amber	SVOC
		None	1	1 L Amber	PCB
		HCl	1	1 L Amber	EPH
		HNO3	1	250 mL Poly	Total Metals
		HNO3 (filtered)	1	250 mL Poly	Dissolved Metals
		HCl	3	40 mL VOA	CVOC SIM
		HCl	2	40 mL VOA	TOC
		HCl	3	40 mL VOA	Dissolved Gasses
		None	1	500 mL Poly	Alkalinity, Hexavalent Chromium, Anions
		HCl	1	250 mL Poly	Ferrous Iron
		None	2	1 L Amber	BNASIM

PURGE DATA

[ ] 0.04 GAL/FT (1" DIAM.)
[X] 0.16 GAL/FT (2" DIAM.)
[ ] 0.65 GAL/FT (4" DIAM.)
[ ] 1.47 GAL/FT (6" DIAM.)

x length of water column = 31.55

Total Well Volume: 5.0 gallons

Total Purge Volume: 12 gallons

# of well volumes: 2.4

COMMENTS * 2 1 Liter amber collected for BNA SIM analysis

DETAILED STABALIZATION CRITERIA

pH: ±0.1 standard units
Temperature: ± 3%
ORP: ±10 mV
DO: less than 0.5 mg/L or ±10% for values greater than 0.5 mg/L
Specific conductivitiy: ± 3%
Turbidity: <5 NTU or 10% for reading >5 NTU (filtered only)
Drawdown: no more than 0.3 feet

SAMPLER INFORMATION

Name (printed): Grant Kern Signature:

LOW FLOW SAMPLING LOG (PERISTALTIC PUMP)

Credere Associates. LLC. 776 Main Street. Westbrook. ME 04092

PROJECT NAME: USACE Dow Salvage Yard

DATE: 11/07/23

PROJECT NUMBER: 18001468

LOCATION ACTIVITY START: ~~12~~ 1200

SAMPLE LOCATION ID: SY-OBMW5

END:

WELL DATA:

WELL DEPTH (ft): 42.44 [ ] MEASURED [ ] HISTORICAL

WATER DEPTH (ft): 3.86 [X] MEASURED [ ] HISTORICAL

[X] TOP OF WELL [ ] TOP OF CASING [ ] FROM GRADE [ ] _____

WATER LEVEL EQUIPMENT USED: [X] ELECT. COND. PROBE [ ] FLOAT ACTIVATED PROBE [ ] PRESSURE TRANSDUCER

DEPTH OF PUMP INTAKE (ft): ~35.44 Stick-up (in): 3.19'

AMBIENT AIR VOC: — PPM

WELL MOUTH VOC: 0.085 PPM

WELL MATERIAL: [X] PVC [ ] SS [ ] _____

WELL LOCKED: [X] YES [ ] NO

PROTECTIVE CASING SECURE: [X] YES [ ] NO

CONCRETE COLLAR INTACT: [X] YES [ ] NA [ ] NO

PVC or CASING HEAVING?: [ ] YES [ ] NA [X] NO

EQUIPMENT DATA:

PURGING	SAMPLING	
[X]	[X]	Peristaltic Pump
[ ]	[ ]	Submerisble:
[ ]	[ ]	Bladder pump
[ ]	[ ]	Hand pump
[ ]	[ ]	Dedicated HDPE
[ ]	[ ]	New HDPE
[X]	[X]	Dedicated Teflon Lined LDPE
[ ]	[ ]	New Teflon Lined LDPE
	[X]	Filter (0.45 micron)
[ ]	[ ]	_____

EQUIPMENT

Peristaltic Pump, Water Level Meter

YSI Quatro Sonde with 250 mL Flow Cell

YSI Sonde SN: 19F100686

YSI Pro+ Handset

YSI Handset SN: 21K100829

Hach 2100 Turbiditmeter Turbidity Meter SN: 16030C048465

Sampler: P. Haber

DECON. FLUIDS USED

- [X] DISTILLED WATER
- [X] DEIONIZED WATER
- [ ] POTABLE WATER
- [X] ALCONOX/LIQUINOX
- [ ] NONE
- [ ] _____
- [ ] _____
- [ ] _____

FIELD ANALYSIS DATA:

TIME	TEMP (°C)	SP. COND. (mS/cm)	pH	ORP (mV)	D.O. (mg/l)	TURBID. (ntu)	Flow Rate (mL/min)	DTW (ft)	Comments/Flow Rate (indicate stable flow rate)
1200	10.9	271300	7.96	-1.1	1.59	15.8	400	3.90	SP. COND in nS/cm (nano)
1205	10.9	267100	7.98	-4.1	0.64	11.7	360	3.94	
1210	10.8	267300	7.99	-4.4	0.37	9.70	320	3.94	
1215	11.0	267000	7.98	-3.8	0.41	8.21	320	3.95	
1220	10.9	267600	7.98	-3.2	0.35	8.98	320	3.96	
1225	10.9	268000	7.98	-2.5	0.43	8.82	320	3.96	
1230	10.9	270000	7.98	-2.1	0.26	6.59	320	3.97	
1235	10.8	273000	7.98	-1.8	0.47	5.78	320	3.96	
1240	10.8	273300	7.98	-1.6	0.32	5.52	320	3.97	
1245	10.8	273600	7.98	-1.6	0.31	5.67	320	3.97	
1250	10.8	274100	7.98	-1.5	0.35	5.36	320	3.96	
1255	10.8	274300	7.98	-1.5	0.34	4.63	320	3.96	
1300	10.8	275500	7.98	-1.4	0.21	5.52	300	3.96	
1305	10.8	274100	7.98	-1.4	0.20	4.35	300	3.96	
1310	10.8	275200	7.98	-1.2	0.21	4.61	300	3.95	
1315	10.8	274000	7.98	-1.3	0.22	4.75	300	3.95	
5 min	3%	3%	±0.1	±10	<0.5 or10%,	<5	100-400 mL/min	<0.3 ft drawndown	

Sampler's Initials PCH

LOW FLOW SAMPLING LOG (PERISTALTIC PUMP)

Credere Associates. LLC. 776 Main Street. Westbrook. ME 04092

PROJECT NAME: USACE Dow Salvage Yard DATE: 11/07/23

PROJECT NUMBER: 18001468

SAMPLE LOCATION ID: SY-OBMWS

FINAL MONITORING PARAMETERS AFTER SAMPLING

TIME	TEMP (°C)	SP. COND (~~mS/cm~~ µS/cm)	pH	ORP (mV)	D.O. (mg/l)	TURBID. (ntu)	Flow Rate (mL/min)	DTW (ft)
1405	11.0	28300 units in µS/cm	7.99	88.7	2.13	4.26	220	3.96

SAMPLE DATA:

SAMPLE BOTTLE ID TIME	SAMPLE BOTTLE ID LOCATION	PRESERVATION METHOD	SAMPLE CONTAINER #	SAMPLE CONTAINER TYPE	LABORATORY ANALYSIS
1325	SY-OBMWS	HCl	2	40 mL VOA	VOC
		HCl	2	40 mL VOA	VPH
		None	1	1 L Amber	SVOC
		None	1	1 L Amber	PCB
		HCl	1	1 L Amber	EPH
		HNO3	1	250 mL Poly	Total Metals
		HNO3 (filtered)	1	250 mL Poly	Dissolved Metals
		HCl	3	40 mL VOA	CVOC SIM
		HCl	2	40 mL VOA	TOC
		HCl	3	40 mL VOA	Dissolved Gasses
		None	1	500 mL Poly	Alkalinity, Hexavalent Chromium, Anions
		HCl	1	250 mL Poly	Ferrous Iron
		None	2	1 L Amber	BNASIM

PURGE DATA

[ ] 0.04 GAL/FT (1" DIAM.)
[X] 0.16 GAL/FT (2" DIAM.)
[ ] 0.65 GAL/FT (4" DIAM.)
[ ] 1.47 GAL/FT (6" DIAM.)

x length of water column = 38.58

Total Well Volume: 6.17

Total Purge Volume: 7gal

# of well volumes: ~1.13

COMMENTS

DETAILED STABALIZATION CRITERIA

pH: ±0.1 standard units
Temperature: ± 3%
ORP: ±10 mV
DO: less than 0.5 mg/L or ±10% for values greater than 0.5 mg/L
Specific conductivitiy: ± 3%
Turbidity: <5 NTU or 10% for reading >5 NTU (filtered only)
Drawdown: no more than 0.3 feet

SAMPLER INFORMATION

Name (printed): Peter Haber Signature: Peter Haber

LOW FLOW SAMPLING LOG (PERISTALTIC PUMP)

Credere Associates. LLC. 776 Main Street. Westbrook. ME 04092

PROJECT NAME: USACE Dow Salvage Yard

DATE: 11/07/23

PROJECT NUMBER: 18001468

LOCATION ACTIVITY START: 920 END: 1020

SAMPLE LOCATION ID: SY-OBMW06

WELL DATA:

WELL DEPTH (ft): 37.27 [ ] MEASURED [ ] HISTORICAL

WATER DEPTH (ft): 0.30 [X] MEASURED [ ] HISTORICAL

[X] TOP OF WELL [ ] TOP OF CASING [ ] FROM GRADE [ ] _____

WATER LEVEL EQUIPMENT USED: [X] ELECT. COND. PROBE [ ] FLOAT ACTIVATED PROBE [ ] PRESSURE TRANSDUCER

DEPTH OF PUMP INTAKE (ft): ~30.27 Stick-up (in): 3.4'

AMBIENT AIR VOC: — PPM

WELL MOUTH VOC: 0.000 PPM

WELL MATERIAL: [X] PVC [ ] SS [ ] _____

WELL LOCKED: [X] YES [ ] NO

PROTECTIVE CASING SECURE: [X] YES [ ] NO

CONCRETE COLLAR INTACT: [X] YES [ ] NA [ ] NO

PVC or CASING HEAVING?: [ ] YES [ ] NA [X] NO

EQUIPMENT DATA:

PURGING	SAMPLING	
[X]	[X]	Peristaltic Pump
[ ]	[ ]	Submerisble:
[ ]	[ ]	Bladder pump
[ ]	[ ]	Hand pump
[ ]	[ ]	Dedicated HDPE
[ ]	[ ]	New HDPE
[X]	[X]	Dedicated Teflon Lined LDPE
[ ]	[ ]	New Teflon Lined LDPE
	[X]	Filter (0.45 micron)
[ ]	[ ]	_____

EQUIPMENT

Peristaltic Pump, Water Level Meter

YSI Quatro Sonde with 250 mL Flow Cell

YSI Sonde SN: 19F100696

YSI PRO+ Handset

YSI Handset SN: 21K100829

Hach 2100 Turbiditmeter Turbidity Meter SN: 1603000489G5

Sampler: P. Haber

DECON. FLUIDS USED

[ ] DISTILLED WATER
[X] DEIONIZED WATER
[ ] POTABLE WATER
[X] ALCONOX/LIQUINOX
[ ] NONE
[ ] _____
[ ] _____
[ ] _____

FIELD ANALYSIS DATA:

TIME	TEMP (°C)	SP. COND. (mS/cm)	pH	ORP (mV)	D.O. (mg/l)	TURBID. (ntu)	Flow Rate (mL/min)	DTW (ft)	Comments/Flow Rate (indicate stable flow rate)
920	10.4	57600	8.42	59.3	11.24	3.84	360	0.35	SP.COND in mS/CM
925	10.3	56200	8.40	59.3	11.16	2.55	360	0.48	(nano)
930	10.3	55900	8.53	57.7	10.99	2.17	380	0.55	
935	10.3	56200	8.47	48.4	10.89	1.78	400	0.61	
940	10.1	30700	8.92	51.7	10.59	2.03	400	0.62	
950	10.2	22200	8.81	54.5	10.23	1.30	400	0.62	
955	10.2	22200	8.76	60.1	10.09	1.65	400	0.64	
1000	10.1	23500	8.79	60.3	10.08	3.16	400	0.67	
1010	10.2	26000	8.67	53.7	9.48	2.00	400	0.71	
1015	10.2	22400	8.64	58.8	9.39	1.91	400	0.71	
1020	10.3	21500	8.57	56.9	9.09	1.55	400	0.70	
5 min	3%	3%	±0.1	±10	<0.5 or10%,	<5	100-400 mL/min	<0.3 ft drawndown	

Sampler's Initials PCH

LOW FLOW SAMPLING LOG (PERISTALTIC PUMP)

Credere Associates. LLC. 776 Main Street. Westbrook. ME 04092

PROJECT NAME: USACE Dow Salvage Yard DATE: 11/07/23

PROJECT NUMBER: 18001468

SAMPLE LOCATION ID: SY-OBMW6

FINAL MONITORING PARAMETERS AFTER SAMPLING

TIME	TEMP (°C)	SPSP COND. (mS/cm)	pH	ORP (mV)	D.O. (mg/l)	TURBID. (ntu)	Flow Rate (mL/min)	DTW (ft)
1100	10.6	1.8400	8.13	71.3	8.65	1.46	360	0.73

SAMPLE DATA:

SAMPLE BOTTLE ID TIME	SAMPLE BOTTLE ID LOCATION	PRESERVATION METHOD	SAMPLE CONTAINER #	SAMPLE CONTAINER TYPE	LABORATORY ANALYSIS
1030	SY-OBMW6	HCl	2	40 mL VOA	VOC
		HCl	2	40 mL VOA	VPH
		None	1	1 L Amber	SVOC
		None	1	1 L Amber	PCB
		HCl	1	1 L Amber	EPH
		HNO3	1	250 mL Poly	Total Metals
		HNO3 (filtered)	1	250 mL Poly	Dissolved Metals
		HCl	3	40 mL VOA	CVOC SIM
		HCl	2	40 mL VOA	TOC
		HCl	3	40 mL VOA	Dissolved Gasses
		None	1	500 mL Poly	Alkalinity, Hexavalent Chromium, Anions
		HCl	1	250 mL Poly	Ferrous Iron
		None	2	1 L Amber	BNASIM

PURGE DATA

[ ] 0.04 GAL/FT (1" DIAM.)
[X] 0.16 GAL/FT (2" DIAM.)
[ ] 0.65 GAL/FT (4" DIAM.)
[ ] 1.47 GAL/FT (6" DIAM.)

x length of water column = 36.97

Total Well Volume: 5.92

Total Purge Volume: 8 gal

# of well volumes: 1.35

COMMENTS

DETAILED STABALIZATION CRITERIA

pH: ±0.1 standard units
Temperature: ± 3%
ORP: ±10 mV
DO: less than 0.5 mg/L or ±10% for values greater than 0.5 mg/L
Specific conductivitiy: ± 3%
Turbidity: <5 NTU or 10% for reading >5 NTU (filtered only)
Drawdown: no more than 0.3 feet

SAMPLER INFORMATION

Name (printed): Peter Haber Signature: Peter Haber

LOW FLOW SAMPLING LOG (PERISTALTIC PUMP)

Credere Associates. LLC. 776 Main Street. Westbrook. ME 04092

Community Economy Environment

PROJECT NAME: USACE Dow Salvage Yard DATE: 11/06/23

PROJECT NUMBER: 18001468 LOCATION ACTIVITY START: 1400

SAMPLE LOCATION ID: SY-OBMW7 END: 1710

WELL DATA:

WELL DEPTH (ft): 20.68 FG [ ] MEASURED [ ] HISTORICAL

WATER DEPTH (ft): 1.98' FG/1.3'TOC [ ] MEASURED [ ] HISTORICAL

[ ] TOP OF WELL [ ] TOP OF CASING [X] FROM GRADE [ ] _____

WATER LEVEL EQUIPMENT USED: [X] ELECT. COND. PROBE [ ] FLOAT ACTIVATED PROBE [ ] PRESSURE TRANSDUCER

DEPTH OF PUMP INTAKE (ft): 13.6' FG Stick-up (ft): -0.68'

AMBIENT AIR VOC: 0.0 PPM

WELL MOUTH VOC: 0.062 PPM

WELL MATERIAL: [X] PVC [ ] SS [ ] _____

WELL LOCKED: [ ] YES [X] NO

PROTECTIVE CASING SECURE: [X] YES [ ] NO

CONCRETE COLLAR INTACT: [X] YES [ ] NA [ ] NO

PVC or CASING HEAVING?: [ ] YES [X] NA [ ] NO

EQUIPMENT DATA:

PURGING	SAMPLING	
[X]	[X]	Peristaltic Pump
[ ]	[ ]	Submerisble:
[ ]	[ ]	Bladder pump
[ ]	[ ]	Hand pump
[ ]	[ ]	Dedicated HDPE
[ ]	[ ]	New HDPE
[X]	[X]	Dedicated Teflon Lined LDPE
[ ]	[ ]	New Teflon Lined LDPE
	[X]	Filter (0.45 micron)

EQUIPMENT

Peristaltic Pump, Water Level Meter

YSI QUATRO Sonde with 258 mL Flow Cell

YSI Sonde SN: 20A100144

YSI PRO QUATRO Handset

YSI Handset SN: 22B101958

Hach 2100 Turbiditmeter Turbidity Meter SN: 15030C040050

Sampler: IAN DESJARDINS

DECON. FLUIDS USED

[ ] DISTILLED WATER
[X] DEIONIZED WATER
[ ] POTABLE WATER
[X] ALCONOX/LIQUINOX
[ ] NONE
[ ] _____
[ ] _____
[ ] _____

FIELD ANALYSIS DATA:

TIME	TEMP (°C)	SP. COND. (mS/cm)	pH	ORP (mV)	D.O. (mg/l)	TURBID. (ntu)	Flow Rate (mL/min)	DTW (ft)	Comments/Flow Rate (indicate stable flow rate)
1424	/	/	/	/	/	/	/		/
1430	11.6	0.4492	6.98	152.0	6.88	140	220	2.25	
1435	11.5	0.4017	6.95	142.1	5.62	143	220	2.34	
1440	11.3	0.3823	6.92	127.8	3.38	148	220	2.34	
1445	11.0	0.4060	6.93	103.7	1.82	225	220	2.34	
1450	11.0	0.944	6.85	6.3	0.94	92.5	220	2.35	SPC↑ ORP↓↓ NTU↓
1455	10.9	1.859	7.02	-34.8	0.40	63.6	220	2.37	
1500	10.7	2.199	7.11	-44.2	0.17	35.5	220	2.39	
1505	10.8	2.314	7.15	-49.3	0.12	43.4	220	2.40	
1510	10.7	2.367	7.16	-50.8	0.10	26.6	220	2.43	
1515	10.7	2.389	7.19	-52.0	0.10	21.9	220	2.43	
1520	10.6	2.427	7.19	-52.7	0.06	32.0	220	2.44	
1525	10.6	2.455	7.22	-53.7	0.05	14.2	220	2.44	
1530	10.6	2.465	7.22	-54.2	0.02	17.2	220	2.44	
1535	10.6	2.470	7.23	-55.2	0.00	11.0	220	2.44	
1540	10.7	2.471	7.23	-55.3	-0.01	37.0	220	2.44	NTU↑ ALL ELSE STABLE
1545	10.6	2.476	7.23	-55.1	-0.01	15.5	220	2.44	
1550	10.6	2.481	7.24	-55.4	-0.03	22.5	220	2.44	
1555	10.6	2.487	7.24	-55.7	-0.02	14.1	220	2.47	
1600	10.5	2.488	7.24	-54.9	-0.04	21.0	220	2.49	
1605	10.6	2.496	7.30	-51.2	0.37	16.7	220	2.49	
1610	10.4	2.500	7.26	-55.6	0.02	14.0	220	2.49	SAMPLE OK PER S.C.
5 min	3%	3%	±0.1	±10	<0.5 or10%,	<5	100-400 mL/min	<0.3 ft drawndown	

Sampler's Initials

LOW FLOW SAMPLING LOG (PERISTALTIC PUMP)
Credere Associates. LLC. 776 Main Street. Westbrook. ME 04092

Community Economy Environment

PROJECT NAME: USACE Dow Salvage Yard DATE: 11/06/23

PROJECT NUMBER: 18001468

SAMPLE LOCATION ID: SY-OBMW7

FINAL MONITORING PARAMETERS AFTER SAMPLING

TIME	TEMP (°C)	SP. COND. (mS/cm)	pH	ORP (mV)	D.O. (mg/l)	TURBID. (ntu)	Flow Rate (mL/min)	DTW (ft)
1704	10.3	2.423	7.28	52.1	4.10	4.56	220	2.50

SAMPLE DATA:

SAMPLE BOTTLE ID TIME	LOCATION	PRESERVATION METHOD	SAMPLE CONTAINER #	TYPE	LABORATORY ANALYSIS
1610	SY-OBMW7	HCl	2	40 mL VOA	VOC
1610		HCl	2	40 mL VOA	VPH
		None	1	1 L Amber	SVOC
		None	1	1 L Amber	PCB
		HCl	1	1 L Amber	EPH
		HNO3	1	250 mL Poly	Total Metals
		HNO3 (filtered)	1	250 mL Poly	Dissolved Metals
		HCl	3	40 mL VOA	CVOC SIM
		HCl	2	40 mL VOA	TOC
		HCl	3	40 mL VOA	Dissolved Gasses
		None	1	500 mL Poly	Alkalinity, Hexavalent Chromium, Anions
		HCl	1	250 mL Poly	Ferrous Iron
		None	2	1 L amber	BNA SIM

PURGE DATA

[ ] 0.04 GAL/FT (1" DIAM.)
[X] 0.16 GAL/FT (2" DIAM.)
[ ] 0.65 GAL/FT (4" DIAM.)
[ ] 1.47 GAL/FT (6" DIAM.)

x length of water column = x 18.7' =

Total Well Volume: 2.992

Total Purge Volume: ~6.1 gallon

# of well volumes: ~2.0

23100 mL

COMMENTS PURGED UNTIL ALL PARAMETERS STABLE, EXCEPT NTUs DUE TO DAYLIGHT LEFT SAMPLE COLLECTED AT 1610 AS NTUs WERE FLUCTUATING. ~~NOTE ACTUAL SAMPLE CONTAINER PROVIDED BY LAB DIFFERED FROM THOSE LISTED ABOVE. FOL (SG) WILL UPDATE~~ SG 11/7 – containers above reflect what was provided by lab, which differed from the bottles listed in QAPP-Appendix A- Sample table.

DETAILED STABALIZATION CRITERIA

pH: ±0.1 standard units
Temperature: ± 3%
ORP: ±10 mV
DO: less than 0.5 mg/L or ±10% for values greater than 0.5 mg/L
Specific conductivitiy: ± 3%
Turbidity: <5 NTU or 10% for reading >5 NTU (filtered only)
Drawdown: no more than 0.3 feet

SAMPLER INFORMATION

Name (printed): IAN DESJARLAIS Signature: [signature]

LOW FLOW SAMPLING LOG (PERISTALTIC PUMP)

Credere Associates. LLC. 776 Main Street. Westbrook. ME 04092

PROJECT NAME: USACE Dow Salvage Yard

DATE: 11/08/23

PROJECT NUMBER: 18001468

LOCATION ACTIVITY
START: 1125
END: 1330

SAMPLE LOCATION ID: SY-OBMW8

WELL DATA:

WELL DEPTH (ft): ~~40~~ 32.07 [X] MEASURED [ ] HISTORICAL

WATER DEPTH (ft): 9.03 [X] MEASURED [ ] HISTORICAL

[P] TOP OF WELL [ ] TOP OF CASING [ ] FROM GRADE [ ] _____

WATER LEVEL EQUIPMENT USED:
[X] ELECT. COND. PROBE
[ ] FLOAT ACTIVATED PROBE
[ ] PRESSURE TRANSDUCER

DEPTH OF PUMP INTAKE (ft): ~29.07

Stick-up (in): 2.97'

AMBIENT AIR VOC: — PPM
WELL MOUTH VOC: 0.974 PPM

WELL MATERIAL: [X] PVC [ ] SS [ ] _____

WELL LOCKED: [X] YES [ ] NO

PROTECTIVE CASING SECURE: [X] YES [ ] NO

CONCRETE COLLAR INTACT: [X] YES [ ] NA [ ] NO

PVC or CASING HEAVING?: [ ] YES [ ] NA [X] NO

EQUIPMENT DATA:

PURGING	SAMPLING		
[X]	[X]	Peristaltic Pump	
[ ]	[ ]	Submerisble:	
[ ]	[ ]	Bladder pump	
[ ]	[ ]	Hand pump	
[ ]	[ ]	Dedicated HDPE	
[ ]	[ ]	New HDPE	
[X]	[X]	Dedicated Teflon Lined LDPE	
[ ]	[ ]	New Teflon Lined LDPE	
	[X]	Filter (0.45 micron)	
[ ]	[ ]	_____	

EQUIPMENT
Peristaltic Pump, Water Level Meter
YSI Quatro Sonde with 250 mL Flow Cell
YSI Sonde SN: 19F100886
YSI Prot Handset
YSI Handset SN: 21K100829
Hach 2100 Turbiditmeter
Turbidity Meter SN: 1603000[illegible]

DECON. FLUIDS USED
[ ] DISTILLED WATER
[X] DEIONIZED WATER
[ ] POTABLE WATER
[X] ALCONOX/LIQUINOX
[ ] NONE
[ ] _____
[ ] _____
[ ] _____

Sampler: P. Huber

FIELD ANALYSIS DATA:

TIME	TEMP (°C)	SP. COND. (mS/cm)	pH	ORP (mV)	D.O. (mg/l)	TURBID. (ntu)	Flow Rate (mL/min)	DTW (ft)	Comments/Flow Rate (indicate stable flow rate)
1125	9.4	287300	7.79	136.1	0.55	49.1	400	9.99	SP.COND in nS/cm (nanO)
1130	9.5	285100	7.78	129.3	0.56	44.1	400	10.60	
1135	9.4	293500	7.73	125.5	0.48	16.6	400	10.70	
1140	9.4	295200	7.71	120.8	0.48	13.0	400	10.79	
1145	9.4	299200	7.70	116.0	0.42	5.93	400	10.82	
1150	9.4	300100	7.70	112.2	0.39	6.06	400	10.85	
1155	9.3	302400	7.69	108.8	0.47	4.83	400	10.85	
1200	9.4	301200	7.69	104.8	0.44	7.04	400	10.99	
1205	9.3	297700	7.70	101.9	0.40	7.79	400	10.92	
1210	9.3	296100	7.71	99.5	0.40	5.60	400	10.94	
1215	9.3	294200	7.70	96.9	0.24	4.71	400	10.95	
1220	9.3	294100	7.71	94.0	0.23	10.8	400	10.96	
1225	9.2	296200	7.72	92.8	0.22	5.21	400	10.97	
1230	9.3	286000	7.72	90.1	0.23	4.60	400	10.97	
1235	9.3	278000	7.73	87.6	0.22	4.40	400	10.98	
1240	9.2	273100	7.74	85.7	0.22	3.89	400	10.96	
5 min	3%	3%	±0.1	±10	<0.5 or10%,	<5	100-400 mL/min	<0.3 ft drawndown	

Sampler's Initials PCH

LOW FLOW SAMPLING LOG (PERISTALTIC PUMP)

Credere Associates. LLC. 776 Main Street. Westbrook. ME 04092

PROJECT NAME: USACE Dow Salvage Yard DATE: 11/08/23

PROJECT NUMBER: 18001468

SAMPLE LOCATION ID: SY-OB-MW8

FINAL MONITORING PARAMETERS AFTER SAMPLING

TIME	TEMP (°C)	SP. COND. (mS/cm)	pH	ORP (mV)	D.O. (mg/l)	TURBID. (ntu)	Flow Rate (mL/min)	DTW (ft)
1330	9.2	25150	7.80	139.4	0.44	4.00	400	11.01

SAMPLE DATA:

SAMPLE BOTTLE ID TIME	SAMPLE BOTTLE ID LOCATION	PRESERVATION METHOD	SAMPLE CONTAINER #	SAMPLE CONTAINER TYPE	LABORATORY ANALYSIS
1250	SY-OB-MW8	HCl	2	40 mL VOA	VOC
		HCl	2	40 mL VOA	VPH
		None	1	1 L Amber	SVOC
		None	1	1 L Amber	PCB
		HCl	1	1 L Amber	EPH
		HNO3	1	250 mL Poly	Total Metals
		HNO3 (filtered)	1	250 mL Poly	Dissolved Metals
		HCl	3	40 mL VOA	CVOC SIM
		HCl	2	40 mL VOA	TOC
		HCl	3	40 mL VOA	Dissolved Gasses
		None	1	500 mL Poly	Alkalinity, Hexavalent Chromium, Anions
		HCl	1	250 mL Poly	Ferrous Iron
		None	2	1 L Amber	BNA SIM

PURGE DATA

[ ] 0.04 GAL/FT (1" DIAM.)
[x] 0.16 GAL/FT (2" DIAM.)
[ ] 0.65 GAL/FT (4" DIAM.)
[ ] 1.47 GAL/FT (6" DIAM.)

x length of water column = 23.04

Total Well Volume: 3.69

Total Purge Volume: 11 gal

# of well volumes: ~2.98

COMMENTS

DETAILED STABALIZATION CRITERIA

pH: ±0.1 standard units
Temperature: ± 3%
ORP: ±10 mV
DO: less than 0.5 mg/L or ±10% for values greater than 0.5 mg/L
Specific conductivitiy: ± 3%
Turbidity: <5 NTU or 10% for reading >5 NTU (filtered only)
Drawdown: no more than 0.3 feet

SAMPLER INFORMATION

Name (printed): Peter Haber Signature:

LOW FLOW SAMPLING LOG (PERISTALTIC PUMP)

Credere Associates. LLC. 776 Main Street. Westbrook. ME 04092

PROJECT NAME: USACE Dow Salvage Yard

DATE: 11/8/23

PROJECT NUMBER: 18001468

LOCATION ACTIVITY
START: 0810
END: 1215

SAMPLE LOCATION ID: SY-OBMW9

WELL DATA:

WELL DEPTH (ft): 37.2' TOR — [X] MEASURED [ ] HISTORICAL

WATER DEPTH (ft): 8.25' TOR — [X] MEASURED [ ] HISTORICAL

[ ] TOP OF WELL [ ] TOP OF CASING [ ] FROM GRADE [X] TOP OF RISER

WATER LEVEL EQUIPMENT USED: [X] ELECT. COND. PROBE [ ] FLOAT ACTIVATED PROBE [ ] PRESSURE TRANSDUCER

DEPTH OF PUMP INTAKE (ft): ~30' TOR — Stick-up (in): 2.39'

AMBIENT AIR VOC: PPM

WELL MOUTH VOC: 0.028 PPM

WELL MATERIAL: [X] PVC [ ] SS [ ] ____

WELL LOCKED: [X] YES [ ] NO

PROTECTIVE CASING SECURE: [X] YES [ ] NO

CONCRETE COLLAR INTACT: [X] YES [ ] NA [ ] NO

PVC or CASING HEAVING?: [ ] YES [ ] NA [X] NO

EQUIPMENT DATA:

PURGING	SAMPLING	
[Y]	[X]	Peristaltic Pump
[ ]	[ ]	Submerisble:
[ ]	[ ]	Bladder pump
[ ]	[ ]	Hand pump
[ ]	[ ]	Dedicated HDPE
[ ]	[ ]	New HDPE
[Y]	[X]	Dedicated Teflon Lined LDPE
[ ]	[ ]	New Teflon Lined LDPE
	[X]	Filter (0.45 micron)
[ ]	[ ]	

EQUIPMENT
Peristaltic Pump, Water Level Meter
YSI QUATRO Sonde with 250 mL Flow Cell
YSI Sonde SN: 22A100144
YSI PRO QUATRO Handset
YSI Handset SN: 22B101958
Hach 2100 Turbiditmeter
Turbidity Meter SN: 15030C040050

DECON. FLUIDS USED
[ ] DISTILLED WATER
[Y] DEIONIZED WATER
[ ] POTABLE WATER
[Y] ALCONOX/LIQUINOX
[ ] NONE
[ ]
[ ]
[ ]

Sampler: IANDESMm

FIELD ANALYSIS DATA:

TIME	TEMP (°C)	SP. COND. (mS/cm)	pH	ORP (mV)	D.O. (mg/l)	TURBID. (ntu)	Flow Rate (mL/min)	DTW (ft)	Comments/Flow Rate (indicate stable flow rate)
0855	8.5	0.393	7.61	337.8	4.80	9.18	165	8.71	0850-BEGIN PURGE
0900	8.8	0.858	7.50	350.9	2.97	2.83	165	8.75	"
0905	8.5	0.862	7.51	358.6	2.04	3.02	165	8.76	
0910	8.7	0.862	7.51	357.8	1.43	2.10	165	8.77	NTU = 7.12 @
0915	8.7	0.865	7.54	287.6	1.27	1.65	165	8.77	" NOT A MISTAKE @
0920	8.9	0.865	7.53	335.0	0.61	6.52	165	8.78	
0925	9.1	/	/	/	/	/	125	/	PUMP SLOWED DOWN/LOW T DRAWDOWN - FILTER PACK
0930	9.3	0.867	7.49	304.3	0.18	10.2	170	8.82	
0935	9.1	0.864	7.51	305.2	0.10	11.6	170	8.89	
0940	9.1	0.864	7.53	305.5	0.04	1.80	170	8.98	
0945	9.0	0.862	7.52	322.5	0.01	1.40	170	9.07	
0950	9.0	0.860	7.53	316.3	0.01	1.76	170	9.12	
0955	9.0	0.862	7.53	312.8	0.00	5.16	170	9.19	
1000	9.0	0.861	7.53	329.6	-0.01	1.02	170	9.21	
1005	8.8	0.863	7.52	335.7	-0.03	2.01	170	9.23	
1010	8.7	0.864	7.53	335.1	-0.02	2.48	170	9.23	
1015	8.6	0.863	7.54	335.0	-0.02	0.83	170	9.23	
1016									COLLECT SAMPLE
5 min	3%	3%	±0.1	±10	<0.5 or10%,	<5	100-400 mL/min	<0.3 ft drawndown	

Sampler's Initials

LOW FLOW SAMPLING LOG (PERISTALTIC PUMP)

Credere Associates. LLC. 776 Main Street. Westbrook. ME 04092

PROJECT NAME: USACE Dow Salvage Yard DATE: 11/8/23

PROJECT NUMBER: 18001468

SAMPLE LOCATION ID: SY-OBMW9

FINAL MONITORING PARAMETERS AFTER SAMPLING

TIME	TEMP (°C)	SP. COND. (mS/cm)	pH	ORP (mV)	D.O. (mg/l)	TURBID. (ntu)	Flow Rate (mL/min)	DTW (ft)
1125	8.6	0.864	7.53	336.2	-0.03	0.71	165	9.10

SAMPLE DATA:

SAMPLE BOTTLE ID TIME	SAMPLE BOTTLE ID LOCATION	PRESERVATION METHOD	SAMPLE CONTAINER #	SAMPLE CONTAINER TYPE	LABORATORY ANALYSIS
1016	SY-OBMW9	HCl	2	40 mL VOA	VOC
		HCl	2	40 mL VOA	VPH
		None	1	1 L Amber	SVOC
		None	1	1 L Amber	PCB
		HCl	1	1 L Amber	EPH
		HNO3	1	250 mL Poly	Total Metals
		HNO3 (filtered)	1	250 mL Poly	Dissolved Metals
		HCl	3	40 mL VOA	CVOC SIM
		HCl	2	40 mL VOA	TOC
		HCl	3	40 mL VOA	Dissolved Gasses
		None	1	500 mL Poly	Alkalinity, Hexavalent Chromium, Anions
		HCl	1	250 mL Poly	Ferrous Iron
		None	2	1 L Amber	BNASIM

PURGE DATA

[ ] 0.04 GAL/FT (1" DIAM.)
[X] 0.16 GAL/FT (2" DIAM.)
[ ] 0.65 GAL/FT (4" DIAM.)
[ ] 1.47 GAL/FT (6" DIAM.)

x length of water column = 28.95

Total Well Volume: 4.6

Total Purge Volume: 3.77

# of well volumes: 0.81

COMMENTS PLUS BNASIM / 1L AMBER / NO PRESERVATIVE

DETAILED STABALIZATION CRITERIA

pH: ±0.1 standard units
Temperature: ± 3%
ORP: ±10 mV
DO: less than 0.5 mg/L or ±10% for values greater than 0.5 mg/L
Specific conductivitiy: ± 3%
Turbidity: <5 NTU or 10% for reading >5 NTU (filtered only)
Drawdown: no more than 0.3 feet

SAMPLER INFORMATION

Name (printed): IAN DESJARDIN Signature:

LOW FLOW SAMPLING LOG (PERISTALTIC PUMP)

Credere Associates. LLC. 776 Main Street. Westbrook. ME 04092

PROJECT NAME: USACE Dow Salvage Yard

DATE: 11/08/23

PROJECT NUMBER: 18001468

LOCATION ACTIVITY
START: 1420
END: 1650

SAMPLE LOCATION ID: S40B MW#10

WELL DATA:

WELL DEPTH (ft): 29.62 [X] MEASURED [ ] HISTORICAL

WATER DEPTH (ft): 0.68 [X] MEASURED [ ] HISTORICAL

[X] TOP OF WELL [ ] TOP OF CASING [ ] FROM GRADE [ ] _____

WATER LEVEL EQUIPMENT USED:
[X] ELECT. COND. PROBE
[ ] FLOAT ACTIVATED PROBE
[ ] PRESSURE TRANSDUCER

DEPTH OF PUMP INTAKE (ft): 22.62 Stick-up (in): NA

AMBIENT AIR VOC: — PPM
WELL MOUTH VOC: 0.057 PPM

WELL MATERIAL: [X] PVC [ ] SS [ ] _____

WELL LOCKED: [ ] YES [X] NO

PROTECTIVE CASING SECURE: [X] YES [ ] NO

CONCRETE COLLAR INTACT: [ ] YES [X] NA [ ] NO

PVC or CASING HEAVING?: [ ] YES [X] NA [ ] NO

EQUIPMENT DATA:

PURGING	SAMPLING	
[X]	[X]	Peristaltic Pump
[ ]	[ ]	Submerisble:
[ ]	[ ]	Bladder pump
[ ]	[ ]	Hand pump
[ ]	[ ]	Dedicated HDPE
[ ]	[ ]	New HDPE
[X]	[X]	Dedicated Teflon Lined LDPE
[ ]	[ ]	New Teflon Lined LDPE
	[X]	Filter (0.45 micron)
[ ]	[ ]	_____

EQUIPMENT
Peristaltic Pump, Water Level Meter
YSI Quatro Sonde with 280 mL Flow Cell
YSI Sonde SN: 21F102523
YSI Pro+ Handset
YSI Handset SN: 18J101137
Hach 2100 Turbiditmeter Turbidity Meter SN: 21040000520
Sampler: P. Haber

DECON. FLUIDS USED
[ ] DISTILLED WATER
[X] DEIONIZED WATER
[ ] POTABLE WATER
[X] ALCONOX/LIQUINOX
[ ] NONE
[ ] _____
[ ] _____
[ ] _____

FIELD ANALYSIS DATA:

TIME	TEMP (°C)	SP. COND. (mS/cm)	pH	ORP (mV)	D.O. (mg/l)	TURBID. (ntu)	Flow Rate (mL/min)	DTW (ft)	Comments/Flow Rate (indicate stable flow rate)
~~1420~~	12.0	3190	7.58	144.8	0.13	22.7	300	2.16	SP. COND. in mS/cm (micro)
1425	11.9	3180	7.51	138.1	0.09	27.0	340	2.29	
1430	11.7	3160	7.58	129.0	0.09	68.7	360	2.36	
1435	11.7	3150	7.44	128.4	0.07	31.9	380	2.43	
1440	11.6	3160	7.16	127.9	0.06	64.1	400	2.45	
1445	11.6	3160	7.19	128.2	0.10	14.8	400	2.47	
1450	11.6	3160	7.46	116.3	0.09	24.3	400	2.47	
1455	11.5	3160	7.30	115.2	0.11	32.3	400	2.49	
1500	11.5	3170	7.21	119.3	0.15	37.0	400	2.51	
1505	11.5	3170	7.25	118.2	0.22	55.0	400	2.53	
1510	11.4	3170	7.59	102.4	0.21	42.3	400	2.53	
1515	11.5	3160	7.68	94.2	0.16	47.7	400	2.53	
1520	11.5	3180	7.18	109.6	0.12	27.0	400	2.54	
1525	11.4	3170	7.24	110.2	0.10	20.3	400	2.53	
1530	11.4	3160	7.47	102.3	0.09	54.6	400	2.55	
1535	11.4	3170	7.62	92.5	0.09	8.24	400	2.57	
1540	11.4	3180	7.26	101.6	0.08	4.87	400	2.55	
1545	11.4	3180	7.21	103.0	0.08	5.12	400	2.48	
1550	11.3	3170	7.26	106.0	0.07	7.92	400	2.53	
1555	11.4	3170	7.27	102.5	0.23	6.29	400	2.55	
1600	11.3	3170	7.17	108.3	0.08	8.16	400	2.53	
1605	11.3	3170	7.25	104.5	0.08	2.97	400	2.55	
5 min	3%	3%	±0.1	±10	<0.5 or10%,	<5	100-400 mL/min	<0.3 ft drawndown	

Sampler's Initials PCH

LOW FLOW SAMPLING LOG (PERISTALTIC PUMP)

Credere Associates. LLC. 776 Main Street. Westbrook. ME 04092

PROJECT NAME: USACE Dow Salvage Yard DATE: 11/06/23

PROJECT NUMBER: 18001468

SAMPLE LOCATION ID: SY-OBMW10

FINAL MONITORING PARAMETERS AFTER SAMPLING

TIME	TEMP (°C)	SP. COND. (mS/cm)	pH	ORP (mV)	D.O. (mg/l)	TURBID. (ntu)	Flow Rate (mL/min)	DTW (ft)
1650	11.3	3190 uMhos/cm	7.55	90.7	0.11	3.60	400	2.52

SAMPLE DATA:

SAMPLE BOTTLE ID TIME	SAMPLE BOTTLE ID LOCATION	PRESERVATION METHOD	SAMPLE CONTAINER #	SAMPLE CONTAINER TYPE	LABORATORY ANALYSIS
1620	SY-OBMW10	HCl	2	40 mL VOA	VOC
		HCl	2	40 mL VOA	VPH
		None	1	1 L Amber	SVOC
		None	1	1 L Amber	PCB
		HCl	1	1 L Amber	EPH
		HNO3	1	250 mL Poly	Total Metals
		HNO3 (filtered)	1	250 mL Poly	Dissolved Metals
		HCl	3	40 mL VOA	CVOC SIM
		HCl	2	40 mL VOA	TOC
		HCl	3	40 mL VOA	Dissolved Gasses
		None	1	500 mL Poly	Alkalinity, Hexavalent Chromium, Anions
		HCl	1	250 mL Poly	Ferrous Iron
		None	2	1L Amber	BNASIM

PURGE DATA

[ ] 0.04 GAL/FT (1" DIAM.)
[X] 0.16 GAL/FT (2" DIAM.)
[ ] 0.65 GAL/FT (4" DIAM.)
[ ] 1.47 GAL/FT (6" DIAM.)

x length of water column = 28.94

Total Well Volume: 4.63

Total Purge Volume: 12 gal

# of well volumes: 2.59

COMMENTS

DETAILED STABALIZATION CRITERIA

pH: ±0.1 standard units
Temperature: ± 3%
ORP: ±10 mV
DO: less than 0.5 mg/L or ±10% for values greater than 0.5 mg/L
Specific conductivitiy: ± 3%
Turbidity: <5 NTU or 10% for reading >5 NTU (filtered only)
Drawdown: no more than 0.3 feet

SAMPLER INFORMATION

Name (printed): Peter Heber Signature: Peter Heber

LOW FLOW SAMPLING LOG (PERISTALTIC PUMP)

Credere Associates. LLC. 776 Main Street. Westbrook. ME 04092

PROJECT NAME: USACE Dow Salvage Yard DATE: 11/6/23

PROJECT NUMBER: 18001468 LOCATION ACTIVITY START: _____

SAMPLE LOCATION ID: SY-03 MW10 END: _____

WELL DATA:

WELL DEPTH (ft): SEE PAGE 1 [ ] MEASURED [ ] HISTORICAL

WATER DEPTH (ft): _____ [ ] MEASURED [ ] HISTORICAL

[ ] TOP OF WELL [ ] TOP OF CASING [ ] FROM GRADE [ ] _____

WATER LEVEL EQUIPMENT USED:
[X] ELECT. COND. PROBE
[ ] FLOAT ACTIVATED PROBE
[ ] PRESSURE TRANSDUCER

DEPTH OF PUMP INTAKE (ft): _____ Stick-up (in): _____

AMBIENT AIR VOC: _____ PPM

WELL MOUTH VOC: _____ PPM

WELL MATERIAL:
[ ] PVC
[ ] SS
[ ] _____

WELL LOCKED:
[ ] YES
[ ] NO

PROTECTIVE CASING SECURE:
[ ] YES
[ ] NO

CONCRETE COLLAR INTACT:
[ ] YES [ ] NA
[ ] NO

PVC or CASING HEAVING?:
[ ] YES [ ] NA
[ ] NO

EQUIPMENT DATA:

PURGING	SAMPLING	
[ ]	[ ]	Peristaltic Pump
[ ]	[ ]	Submerisble:
[ ]	[ ]	Bladder pump
[ ]	[ ]	Hand pump
[ ]	[ ]	Dedicated HDPE
[ ]	[ ]	New HDPE
[ ]	[ ]	Dedicated Teflon Lined LDPE
[ ]	[ ]	New Teflon Lined LDPE
	[ ]	Filter (0.45 micron)
[ ]	[ ]	_____

EQUIPMENT
Peristaltic Pump, Water Level Meter
YSI _____ Sonde with _____ mL Flow Cell SEE PAGE 1
YSI Sonde SN: _____
YSI _____ Handset
YSI Handset SN: _____
Hach 2100 Turbiditmeter
Turbidity Meter SN: _____

DECON. FLUIDS USED
[ ] DISTILLED WATER
[ ] DEIONIZED WATER
[ ] POTABLE WATER
[ ] ALCONOX/LIQUINOX
[ ] NONE
[ ] _____
[ ] _____
[ ] _____

Sampler: _____

FIELD ANALYSIS DATA:

TIME	TEMP (°C)	SP. COND. (mS/cm)	pH	ORP (mV)	D.O. (mg/l)	TURBID. (ntu)	Flow Rate (mL/min)	DTW (ft)	Comments/Flow Rate (indicate stable flow rate)
1610	11.4	3.170	7.32	101.7	0.09	2.76	400	2.53	
5 min	3%	3%	±0.1	±10	<0.5 or10%,	<5	100-400 mL/min	<0.3 ft drawndown	

Sampler's Initials

LOW FLOW SAMPLING LOG (PERISTALTIC PUMP)

Credere Associates. LLC. 776 Main Street. Westbrook. ME 04092

PROJECT NAME: USACE Dow Salvage Yard

DATE: 11/8/23

PROJECT NUMBER: 18001468

LOCATION ACTIVITY
START: 1215
END: 1615

SAMPLE LOCATION ID: SY-OBMW11

WELL DATA:

WELL DEPTH (ft): 37.27 TOR — [X] MEASURED [ ] HISTORICAL

WATER DEPTH (ft): 12.99 TOR — [X] MEASURED [ ] HISTORICAL

[ ] TOP OF WELL [ ] TOP OF CASING [ ] FROM GRADE [X] TOP OF RISE

WATER LEVEL EQUIPMENT USED: [X] ELECT. COND. PROBE [ ] FLOAT ACTIVATED PROBE [ ] PRESSURE TRANSDUCER

DEPTH OF PUMP INTAKE (ft): ~30' TOR — Stick-up (in): 3.25'

AMBIENT AIR VOC: - PPM

WELL MOUTH VOC: 0.057 PPM

WELL MATERIAL: [X] PVC [ ] SS [ ] ____

WELL LOCKED: [X] YES [ ] NO

PROTECTIVE CASING SECURE: [X] YES [ ] NO

CONCRETE COLLAR INTACT: [X] YES [ ] NA [ ] NO

PVC or CASING HEAVING?: [ ] YES [ ] NA [X] NO

EQUIPMENT DATA:

PURGING / SAMPLING

- [X] / [X] Peristaltic Pump
- [ ] / [ ] Submerisble:
- [ ] / [ ] Bladder pump
- [ ] / [ ] Hand pump
- [ ] / [ ] Dedicated HDPE
- [ ] / [ ] New HDPE
- [X] / [X] Dedicated Teflon Lined LDPE
- [ ] / [ ] New Teflon Lined LDPE
- [ ] / [X] Filter (0.45 micron)

EQUIPMENT
Peristaltic Pump, Water Level Meter
YSI QUATRO Sonde with 250 mL Flow Cell
YSI Sonde SN: 22A1601144
YSI PRO QUATRO Handset
YSI Handset SN: 22B1019588
Hach 2100 Turbiditmeter Turbidity Meter SN: 15030CC040650

DECON. FLUIDS USED
[ ] DISTILLED WATER
[X] DEIONIZED WATER
[ ] POTABLE WATER
[X] ALCONOX/LIQUINOX
[ ] NONE
[ ] ____
[ ] ____
[ ] ____

Sampler: IAN DESMARAIS

FIELD ANALYSIS DATA:

TIME	TEMP (°C)	SP. COND. (mS/cm)	pH	ORP (mV)	D.O. (mg/l)	TURBID. (ntu)	Flow Rate (mL/min)	DTW (ft)	Comments/Flow Rate (indicate stable flow rate)
1300	9.6	2.605	7.03	362.9	1.71	20.7	135	13.06	1255, BEGIN PURGE
1305	9.5	2.699	7.00	158.5	0.42	21.3	135	13.06	SPEED CONTROL SET AT
1310	9.4	1.445	7.02	107.9	0.22	9.11	135	13.07	MAX-ONLY FLOW WITH 135
1315	9.4	2.635	7.02	53.5	0.21	11.3	175	13.09	NEW GRUNDFOS PUMP BATTERY
1320	9.0	2.663	7.03	44.0	0.18	11.2	175	13.09	/
1325	9.2	2.572	7.03	14.2	0.11	5.86	210	13.12	↑RATE PER PREVIOUS
1330	9.1	2.581	7.04	25.3	0.09	5.18	210	13.13	/
1335	9.2	2.562	7.03	36.3	0.07	5.91	210	13.13	/
1340	9.3	2.522	7.05	24.4	0.05	4.35	210	13.14	/
1345	9.4	2.496	6.98	69.8	0.04	3.47	210	13.15	ORP↓ ALL ELSE STABLE
1351	9.2	2.478	7.04	75.5	0.05	2.28	210	13.14	/
1356	9.1	2.459	7.04	64.9	0.03	1.94	210	13.14	/
1401	9.3	2.440	6.99	54.8	0.02	1.84	210	13.14	ORP↓
1406	9.3	2.422	7.09	25.6	0.01	1.69	210	13.14	/
1411	9.3	2.411	7.05	28.2	-0.00	1.92	210	13.14	/
1416	9.3	2.406	7.05	26.7	0.01	1.83	210	13.14	ALL STABLE
1417									COLLECT SAMPLE
5 min	3%	3%	±0.1	±10	<0.5 or10%,	<5	100-400 mL/min	<0.3 ft drawndown	

Sampler's Initials IO

LOW FLOW SAMPLING LOG (PERISTALTIC PUMP)

Credere Associates. LLC. 776 Main Street. Westbrook. ME 04092

PROJECT NAME: USACE Dow Salvage Yard DATE: 11/8/23

PROJECT NUMBER: 18001468

SAMPLE LOCATION ID: 54-OBMW11

FINAL MONITORING PARAMETERS AFTER SAMPLING

TIME	TEMP (°C)	SP. COND. (mS/cm)	pH	ORP (mV)	D.O. (mg/l)	TURBID. (ntu)	Flow Rate (mL/min)	DTW (ft)
1355	8.8	2.175	5.42	162.2	1.86	1.48	200	1317

SAMPLE DATA:

SAMPLE BOTTLE ID TIME	SAMPLE BOTTLE ID LOCATION	PRESERVATION METHOD	#	SAMPLE CONTAINER TYPE	LABORATORY ANALYSIS
1417	54OBMW11	HCl	4	40 mL VOA	VOC
		HCl	4	40 mL VOA	VPH
		None	2	1 L Amber	SVOC
		None	2	1 L Amber	PCB
		HCl	2	1 L Amber	EPH
		HNO3	2	250 mL Poly	Total Metals
		HNO3 (filtered)	2	250 mL Poly	Dissolved Metals
		HCl	6	40 mL VOA	CVOC SIM
		HCl	4	40 mL VOA	TOC
		HCl	6	40 mL VOA	Dissolved Gasses
		None	2	500 mL Poly	Alkalinity, Hexavalent Chromium, Anions
		HCl	2	250 mL Poly	Ferrous Iron
		None	4	1 L Amber	BNASIM

PURGE DATA

[ ] 0.04 GAL/FT (1" DIAM.)
[X] 0.16 GAL/FT (2" DIAM.)
[ ] 0.65 GAL/FT (4" DIAM.)
[ ] 1.47 GAL/FT (6" DIAM.)

x length of water column = 24.28

Total Well Volume: 3.88

Total Purge Volume: 4.14

# of well volumes: 1.04

COMMENTS FIELD DUP @ 1422 ALL CONTAINERS/ANALYSES AS PRIMARY SAMPLE LISTED ABOVE + BNASIM/1LAMBER/NON PRESERV

*NOTE GEO PUMP WAS SET AT MAX SPEED BUT FLOW RATE MAXED AT 200 WITH NEW BATTERY

DETAILED STABALIZATION CRITERIA

pH: ±0.1 standard units
Temperature: ± 3%
ORP: ±10 mV
DO: less than 0.5 mg/L or ±10% for values greater than 0.5 mg/L
Specific conductivitiy: ± 3%
Turbidity: <5 NTU or 10% for reading >5 NTU (filtered only)
Drawdown: no more than 0.3 feet

SAMPLER INFORMATION

Name (printed): IAN DESJARDIN Signature:

LOW FLOW SAMPLING LOG (PERISTALTIC PUMP)

Credere Associates. LLC. 776 Main Street. Westbrook. ME 04092

Community Economy Environment

PROJECT NAME: USACE Dow Salvage Yard

DATE: 11/7/23

PROJECT NUMBER: 18001468

SAMPLE LOCATION ID: S4-OBMW-12

LOCATION ACTIVITY
START: 0820
END: 1225

WELL DATA:

WELL DEPTH (ft): 36.95 TOR

WATER DEPTH (ft): 9.62 TOR

[X] MEASURED
[ ] HISTORICAL
[X] MEASURED
[ ] HISTORICAL

[ ] TOP OF WELL
[ ] TOP OF CASING
[ ] FROM GRADE
[X] TOP OF RISER

WATER LEVEL EQUIPMENT USED:
[X] ELECT. COND. PROBE
[ ] FLOAT ACTIVATED PROBE
[ ] PRESSURE TRANSDUCER

DEPTH OF PUMP INTAKE (ft): ~30' TOR

Stick-up (in): 32' TOC / ~0.35'

AMBIENT AIR VOC: — PPM
WELL MOUTH VOC: 0.054 PPM

WELL MATERIAL:
[X] PVC
[ ] SS
[ ] _____

WELL LOCKED:
[X] YES
[ ] NO

PROTECTIVE CASING SECURE:
[X] YES
[ ] NO

CONCRETE COLLAR INTACT:
[X] YES [ ] NA
[ ] NO

PVC or CASING HEAVING?:
[ ] YES [ ] NA
[X] NO

EQUIPMENT DATA:

PURGING	SAMPLING	
[X]	[X]	Peristaltic Pump
[ ]	[ ]	Submerisble:
[ ]	[ ]	Bladder pump
[ ]	[ ]	Hand pump
[X]	[X]	Dedicated HDPE
[ ]	[ ]	New HDPE
[X]	[X]	Dedicated Teflon Lined LDPE
[ ]	[ ]	New Teflon Lined LDPE
	[X]	Filter (0.45 micron)
[X]	[X]	HERON SKINNY DIP

EQUIPMENT
Peristaltic Pump, Water Level Meter
YSI QUATRO Sonde with 250 mL Flow Cell
YSI Sonde SN: 10102030
YSI PRO QUATRO Handset
YSI Handset SN: 22B101958
Hach 2100 Turbiditmeter
Turbidity Meter SN: 15030C040050

DECON. FLUIDS USED
[ ] DISTILLED WATER
[X] DEIONIZED WATER
[ ] POTABLE WATER
[X] ALCONOX/LIQUINOX
[ ] NONE
[ ] ____
[ ] ____
[ ] ____

Sampler: IAN DESJARL

FIELD ANALYSIS DATA:

TIME	TEMP (°C)	SP. COND. (mS/cm)	pH	ORP (mV)	D.O. (mg/l)	TURBID. (ntu)	Flow Rate (mL/min)	DTW (ft)	Comments/Flow Rate (indicate stable flow rate)
0915	10.0	0.478	7.33	145.9	1.02	10.3	400	9.73	0910-BEGIN PURGE
0920	9.9	0.478	7.64	124.7	0.31	10.9	400	9.73	
0925	9.9	0.478	7.67	103.7	0.17	6.80	400	9.74	
0930	9.9	0.478	7.70	78.7	0.10	4.51	400	9.74	
0935	9.9	0.477	7.69	64.2	0.05	6.46	400	9.74	
0940	9.9	0.477	7.72	33.2	0.03	4.6	400	9.75	ORP ↓
0940	9.8	0.477	7.70	30.1	0.01	3.72	400	9.75	
0945	9.8	0.477	7.71	11.1	0.01	2.56	400	9.75	
0950	9.8	0.477	7.69	20.2	-0.01	2.92	400	9.75	ORP ↑
0955	9.8	0.477	7.71	13.7	-0.02	2.69	400	9.75	
1000	9.8	0.478	7.70	14.0	-0.01	2.75	400	9.75	
1005	9.8	0.477	7.70	18.0	-0.01	2.80	400	9.75	All STABLE
1007									COLLECT SAMPLE
5 min	3%	3%	±0.1	±10	<0.5 or10%,	<5	100-400 mL/min	<0.3 ft drawndown	

Sampler's Initials

LOW FLOW SAMPLING LOG (PERISTALTIC PUMP)

Credere Associates. LLC. 776 Main Street. Westbrook. ME 04092

PROJECT NAME: USACE Dow Salvage Yard DATE: 11/7/23

PROJECT NUMBER: 18001468

SAMPLE LOCATION ID: SY-OBMW12 110723

FINAL MONITORING PARAMETERS AFTER SAMPLING

TIME	TEMP (°C)	SP. COND. (mS/cm)	pH	ORP (mV) *	D.O. (mg/l)	TURBID. (ntu)	Flow Rate (mL/min)	DTW (ft)
1148	9.9	0.475	7.89	242.3*	0.09	1.18	406	9.81

SAMPLE DATA:

SAMPLE BOTTLE ID TIME	SAMPLE BOTTLE ID LOCATION	PRESERVATION METHOD	SAMPLE CONTAINER #	SAMPLE CONTAINER TYPE	LABORATORY ANALYSIS
1007	SY-OBMW12	HCl	2 *3	40 mL VOA	VOC
		HCl	2	40 mL VOA	VPH
		None	1	1 L Amber	SVOC
		None	1	1 L Amber	PCB
		HCl	1	1 L Amber	EPH
		HNO3	1	250 mL Poly	Total Metals
		HNO3 (filtered)	1	250 mL Poly	Dissolved Metals
		HCl	3	40 mL VOA	CVOC SIM
		HCl	2	40 mL VOA	TOC
		HCl	3	40 mL VOA	Dissolved Gasses
		None	1	500 mL Poly	Alkalinity, Hexavalent Chromium, Anions
2		HCl	1	250 mL Poly	Ferrous Iron
		None	2	1 L Amber	BNASIM

PURGE DATA

[ ] 0.04 GAL/FT (1" DIAM.)
[X] 0.16 GAL/FT (2" DIAM.)
[ ] 0.65 GAL/FT (4" DIAM.)
[ ] 1.47 GAL/FT (6" DIAM.)

x length of water column = 27.98

Total Well Volume: 4.4

Total Purge Volume: 6.3

# of well volumes: 1.4

COMMENTS WELL STABILIZED FOR ALL PARAMETERS: COLLECTED MS/MSD SAMPLES. FINAL MONITORING PARAMETERS ALL LOOK GOOD, EXCEPT ORP WHICH INCREASED SIGNIFICANTLY, WILL BUMP CHECK ORP PRIOR TO NEXT SAMPLING LOCATION.

DETAILED STABALIZATION CRITERIA

pH: ±0.1 standard units
Temperature: ± 3%
ORP: ±10 mV
DO: less than 0.5 mg/L or ±10% for values greater than 0.5 mg/L
Specific conductivitiy: ± 3%
Turbidity: <5 NTU or 10% for reading >5 NTU (filtered only)
Drawdown: no more than 0.3 feet

SAMPLER INFORMATION

Name (printed): IAN DESJARLAIS Signature:

LOW FLOW SAMPLING LOG (PERISTALTIC PUMP)

Credere Associates. LLC. 776 Main Street. Westbrook. ME 04092

PROJECT NAME: USACE Dow Salvage Yard DATE: 11/7/2023

PROJECT NUMBER: 18001468 LOCATION ACTIVITY START: 1345

SAMPLE LOCATION ID: SY-OB MW13 END: 1500

WELL DATA:

WELL DEPTH (ft): 27.19 [X] MEASURED [ ] HISTORICAL [X] TOP OF WELL [ ] TOP OF CASING [ ] FROM GRADE [ ] ____

WATER DEPTH (ft): 8.30 [X] MEASURED [ ] HISTORICAL

WATER LEVEL EQUIPMENT USED: [X] ELECT. COND. PROBE [ ] FLOAT ACTIVATED PROBE [ ] PRESSURE TRANSDUCER

DEPTH OF PUMP INTAKE (ft): ~20.0~ Stick-up (ft): 2.78'

AMBIENT AIR VOC: — PPM

WELL MOUTH VOC: 0.124 PPM

WELL MATERIAL: [X] PVC [ ] SS [ ] ____

WELL LOCKED: [X] YES [ ] NO

PROTECTIVE CASING SECURE: [X] YES [ ] NO

CONCRETE COLLAR INTACT: [X] YES [ ] NA [ ] NO

PVC or CASING HEAVING?: [ ] YES [ ] NA [X] NO

EQUIPMENT DATA:

PURGING	SAMPLING	
[X]	[X]	Peristaltic Pump
[ ]	[ ]	Submerisble:
[ ]	[ ]	Bladder pump
[ ]	[ ]	Hand pump
[ ]	[ ]	Dedicated HDPE
[ ]	[ ]	New HDPE
[X]	[X]	Dedicated Teflon Lined LDPE
[ ]	[ ]	New Teflon Lined LDPE
	[X]	Filter (0.45 micron)
[ ]	[ ]	____

EQUIPMENT

Peristaltic Pump, Water Level Meter

YSI Quatro Sonde with 250 mL Flow Cell

YSI Sonde SN: 21M100503

YSI Pro+ Handset

YSI Handset SN: 17E100949

Hach 2100 Turbiditmeter

Turbidity Meter SN: 22070000 6408

DECON. FLUIDS USED

[ ] DISTILLED WATER
[X] DEIONIZED WATER
[ ] POTABLE WATER
[X] ALCONOX/LIQUINOX
[ ] NONE
[ ] ____
[ ] ____
[ ] ____

Sampler: G. Kern

FIELD ANALYSIS DATA:

TIME	TEMP (°C)	SP. COND. (mS/cm)	pH	ORP (mV)	D.O. (mg/l)	TURBID. (ntu)	Flow Rate (mL/min)	DTW (ft)	Comments/Flow Rate (indicate stable flow rate)
1350	11.2	0.628	6.93	219.0	1.80	6.45	300	8.30	Start Pump
1355	11.2	0.5381	6.97	213.6	0.91	5.96	300	8.55	
1400	11.1	0.5496	7.05	207.7	0.62	4.53	300	8.58	
1405	10.9	0.620	7.09	201.7	0.50	3.18	400	8.69	
1410	10.9	0.6445	7.13	199.1	0.43	1.37	400	8.71	
1415	10.9	0.6572	7.16	196.3	0.37	1.26	400	8.71	
1420	10.9	0.6629	7.18	193.8	0.31	1.70	400	8.71	
1425	10.7	0.6681	7.21	192.0	0.26	1.05	400	8.74	Sampled
5 min	3%	3%	±0.1	±10	<0.5 or10%,	<5	100-400 mL/min	<0.3 ft drawndown	

Sampler's Initials GMK

LOW FLOW SAMPLING LOG (PERISTALTIC PUMP)

Credere Associates. LLC. 776 Main Street. Westbrook. ME 04092

PROJECT NAME: USACE Dow Salvage Yard DATE: 11/7/23

PROJECT NUMBER: 18001468

SAMPLE LOCATION ID: SY-OBMW-13

FINAL MONITORING PARAMETERS AFTER SAMPLING

TIME	TEMP (°C)	SP. COND. (mS/cm)	pH	ORP (mV)	D.O. (mg/l)	TURBID. (ntu)	Flow Rate (mL/min)	DTW (ft)
1500	10.8	0.6856	7.22	190.8	0.24	1.20	400	8.75

SAMPLE DATA:

SAMPLE BOTTLE ID TIME	SAMPLE BOTTLE ID LOCATION	PRESERVATION METHOD	SAMPLE CONTAINER #	SAMPLE CONTAINER TYPE	LABORATORY ANALYSIS
1405	SY-OBMW-13	HCl	2	40 mL VOA	VOC
		HCl	2	40 mL VOA	VPH
		None	1	1 L Amber	SVOC
		None	1	1 L Amber	PCB
		HCl	1	1 L Amber	EPH
		HNO3	1	250 mL Poly	Total Metals
		HNO3 (filtered)	1	250 mL Poly	Dissolved Metals
		HCl	3	40 mL VOA	CVOC SIM
		HCl	2	40 mL VOA	TOC
		HCl	3	40 mL VOA	Dissolved Gasses
		None	1	500 mL Poly	Alkalinity, Hexavalent Chromium, Anions
		HCl	1	250 mL Poly	Ferrous Iron
		None	2	1 L Amber	BNASIM

PURGE DATA

[ ] 0.04 GAL/FT (1" DIAM.)
[X] 0.16 GAL/FT (2" DIAM.)
[ ] 0.65 GAL/FT (4" DIAM.)
[ ] 1.47 GAL/FT (6" DIAM.)

x length of water column = 18.89

Total Well Volume: 3.0 gallons

Total Purge Volume: 4 gallons

# of well volumes: 1.33

COMMENTS * 2 liter amber collected for BNA SIM analysis

DETAILED STABALIZATION CRITERIA

pH: ±0.1 standard units
Temperature: ± 3%
ORP: ±10 mV
DO: less than 0.5 mg/L or ±10% for values greater than 0.5 mg/L
Specific conductivitiy: ± 3%
Turbidity: <5 NTU or 10% for reading >5 NTU (filtered only)
Drawdown: no more than 0.3 feet

SAMPLER INFORMATION

Name (printed): Grant Kern Signature:

LOW FLOW SAMPLING LOG (PERISTALTIC PUMP)

Credere Associates. LLC. 776 Main Street. Westbrook. ME 04092

PROJECT NAME: USACE Dow Salvage Yard

DATE: 11/7/23

PROJECT NUMBER: 18001468

LOCATION ACTIVITY
START: 12:50
END: 1500

SAMPLE LOCATION ID: SY-OBMW-14

WELL DATA:

WELL DEPTH (ft): 30.95 [X] MEASURED [ ] HISTORICAL

WATER DEPTH (ft): 8.86' TOR [X] MEASURED [ ] HISTORICAL @ [ ] TOP OF WELL [ ] TOP OF CASING [ ] FROM GRADE [X] TOP OF RISER

WATER LEVEL EQUIPMENT USED:
[X] ELECT. COND. PROBE
[ ] FLOAT ACTIVATED PROBE
[ ] PRESSURE TRANSDUCER

DEPTH OF PUMP INTAKE (ft): ~24' TOR Stick-up (ft): 3.22'/TOR: ~0.31'

AMBIENT AIR VOC: — PPM
WELL MOUTH VOC: 0.252 PPM

WELL MATERIAL:
[X] PVC
[ ] SS
[ ] _____

WELL LOCKED:
[X] YES
[ ] NO

PROTECTIVE CASING SECURE:
[X] YES
[ ] NO

CONCRETE COLLAR INTACT:
[X] YES [ ] NA
[ ] NO

PVC or CASING HEAVING?:
[ ] YES [ ] NA
[X] NO

EQUIPMENT DATA:

PURGING	SAMPLING	
[X]	[X]	Peristaltic Pump
[ ]	[ ]	Submerisble:
[ ]	[ ]	Bladder pump
[ ]	[ ]	Hand pump
[X]	[X]	Dedicated HDPE
[ ]	[ ]	New HDPE
[ ]	[ ]	Dedicated Teflon Lined LDPE
[ ]	[ ]	New Teflon Lined LDPE
[ ]	[X]	Filter (0.45 micron)
[ ]	[ ]	_____

EQUIPMENT
Peristaltic Pump, Water Level Meter
YSI DATAQ Sonde with 2.5U mL Flow Cell
YSI Sonde SN: 10102030
YSI PRO QUATRO Handset
YSI Handset SN: 22B101958
Hach 2100 Turbiditmeter Turbidity Meter SN: 150300040050

DECON. FLUIDS USED
[ ] DISTILLED WATER
[X] DEIONIZED WATER
[ ] POTABLE WATER
[X] ALCONOX/LIQUINOX
[ ] NONE
[ ] _____
[ ] _____
[ ] _____

Sampler: MN & DESJARLAIS @

FIELD ANALYSIS DATA:

TIME	TEMP (°C)	SP. COND. (mS/cm)	pH	ORP (mV)	D.O. (mg/l)	TURBID. (ntu)	Flow Rate (mL/min)	DTW (ft)	Comments/Flow Rate (indicate stable flow rate)
1320	10.2	0.698	7.25	207.6	0.78	3.11	400	9.13	1315 BEGIN PURGE
1325	10.1	0.704	7.63	226.8	0.20	1.32	400	9.16	
1330	10.1	0.704	7.66	232.7	0.09	1.47	400	9.16	
1335	10.1	0.704	7.67	244.2	0.02	0.80	400	9.16	
1340	10.1	0.705	7.66	248.4	-0.02	0.98	400	9.16	ALL ARE STABLE
1345	10.1	0.704	7.64	245.7	-0.03	0.81	400	9.16	NOTE NEGATIVE DO
1350	10.1	0.706	7.68	250.9	-0.03	0.72	400	9.16	
1355	10.2	0.707	7.67	253.2	-0.03	0.95	400	9.16	
1400	10.2	0.704	7.64	249.4	-0.04	0.82	400	9.16	COLLECT SAMPLES @1400
5 min	3%	3%	±0.1	±10	<0.5 or10%,	<5	100-400 mL/min	<0.3 ft drawndown	

Sampler's Initials

LOW FLOW SAMPLING LOG (PERISTALTIC PUMP)

Credere Associates. LLC. 776 Main Street. Westbrook. ME 04092

PROJECT NAME: USACE Dow Salvage Yard DATE: 11/7/23

PROJECT NUMBER: 18001468

SAMPLE LOCATION ID: SY-OBMW-14

FINAL MONITORING PARAMETERS AFTER SAMPLING

TIME	TEMP (°C)	SP. COND. (mS/cm)	pH	ORP (mV)	D.O. (mg/l)	TURBID. (ntu)	Flow Rate (mL/min)	DTW (ft)
1443	10.2	0.711	7.63	270.8	2.96	0.95	400	9.10

SAMPLE DATA:

SAMPLE BOTTLE ID TIME	SAMPLE BOTTLE ID LOCATION	PRESERVATION METHOD	SAMPLE CONTAINER #	SAMPLE CONTAINER TYPE	LABORATORY ANALYSIS
1460	SY-OBMW14	HCl	2	40 mL VOA	VOC
		HCl	2	40 mL VOA	VPH
		None	1	1 L Amber	SVOC
		None	1	1 L Amber	PCB
		HCl	1	1 L Amber	EPH
		HNO3	1	250 mL Poly	Total Metals
		HNO3 (filtered)	1	250 mL Poly	Dissolved Metals
		HCl	3	40 mL VOA	CVOC SIM
		HCl	2	40 mL VOA	TOC
		HCl	3	40 mL VOA	Dissolved Gasses
		None	1	500 mL Poly	Alkalinity, Hexavalent Chromium, Anions
↓	↓	HCl	1	250 mL Poly	Ferrous Iron
		None	2	1 L Amber	BNASIM

PURGE DATA

[ ] 0.04 GAL/FT (1" DIAM.)
[X] 0.16 GAL/FT (2" DIAM.)
[ ] 0.65 GAL/FT (4" DIAM.)
[ ] 1.47 GAL/FT (6" DIAM.)

x length of water column = 22.09

Total Well Volume: 3.53

Total Purge Volume: 4.8

# of well volumes: 1.35

COMMENTS ANALYSIS ADD: BNASIM/1 AMBER LITER/NONE;
NOTE- DO+ORP UP AFTER SAMPLE COLLECTION - LIKELY DUE TO STAGNATION OF WATER IN FLOW THROUGH CELL THAT WAS IDLE FOR ~45 MINUTES, EMPTIED FTC AND DO READING STEADILY DROPPED. - NOT LIKELY AN ISSUE WITH YSI OR GROUNDWATER PURGED

DETAILED STABALIZATION CRITERIA

pH: ±0.1 standard units
Temperature: ± 3%
ORP: ±10 mV
DO: less than 0.5 mg/L or ±10% for values greater than 0.5 mg/L
Specific conductivitiy: ± 3%
Turbidity: <5 NTU or 10% for reading >5 NTU (filtered only)
Drawdown: no more than 0.3 feet/10 minutes

SAMPLER INFORMATION

Name (printed): IAN DESJARLAIS Signature:

LOW FLOW SAMPLING LOG (PERISTALTIC PUMP)

Credere Associates. LLC. 776 Main Street. Westbrook. ME 04092

PROJECT NAME: USACE Dow Salvage Yard DATE: 11/7/23

PROJECT NUMBER: 18001468

SAMPLE LOCATION ID: SY-08/MW-15

LOCATION ACTIVITY
START: 1150
END: 1340

WELL DATA:

WELL DEPTH (ft): 25.21' [X] MEASURED [ ] HISTORICAL

WATER DEPTH (ft): 5.60 [X] MEASURED [ ] HISTORICAL

[X] TOP OF WELL
[ ] TOP OF CASING
[ ] FROM GRADE
[ ] _____

WATER LEVEL EQUIPMENT USED:
[X] ELECT. COND. PROBE
[ ] FLOAT ACTIVATED PROBE
[ ] PRESSURE TRANSDUCER

DEPTH OF PUMP INTAKE (ft): ~18.20'~ Stick-up (in): 2.62 ft

AMBIENT AIR VOC: — PPM
WELL MOUTH VOC: 0.050 PPM

WELL MATERIAL:
[X] PVC
[ ] SS
[ ] _____

WELL LOCKED:
[X] YES
[ ] NO

PROTECTIVE CASING SECURE:
[X] YES
[ ] NO

CONCRETE COLLAR INTACT:
[ ] YES [X] NA
[ ] NO

PVC or CASING HEAVING?:
[X] YES [ ] NA
[ ] NO

EQUIPMENT DATA:

PURGING	SAMPLING	
[X]	[X]	Peristaltic Pump
[ ]	[ ]	Submerisble:
[ ]	[ ]	Bladder pump
[ ]	[ ]	Hand pump
[ ]	[ ]	Dedicated HDPE
[ ]	[ ]	New HDPE
[ ]	[ ]	Dedicated Teflon Lined LDPE
[X]	[X]	New Teflon Lined LDPE
	[X]	Filter (0.45 micron)
[ ]	[ ]	

EQUIPMENT
Peristaltic Pump, Water Level Meter
YSI Quatro Sonde with 250 mL Flow Cell
YSI Sonde SN: 21M100503
YSI Pro f Handset
YSI Handset SN: 17E100749
Hach 2100 Turbiditmeter
Turbidity Meter SN: 22070D000408

DECON. FLUIDS USED
[ ] DISTILLED WATER
[X] DEIONIZED WATER
[ ] POTABLE WATER
[X] ALCONOX/LIQUINOX
[ ] NONE
[ ] _____
[ ] _____
[ ] _____

Sampler: G. Kern

FIELD ANALYSIS DATA: GWK/11/7/23

TIME	TEMP (°C)	SP. COND. (mS/cm)	pH	ORP (mV)	D.O. (mg/l)	TURBID. (ntu)	Flow Rate (mL/min)	DTW (ft)	Comments/Flow Rate (indicate stable flow rate)
1200	12.2	1.173	6.64	147.1	2.06	5.74	~~360~~ 340	5.60	start Pump
1205	12.0	1.044	6.38	152.4	0.95	5.85	140	6.29	
1210	12.1	1.033	6.38	153.0	0.95	6.93	140	6.30	
1215	12.1	1.011	6.38	154.7	0.95	3.12	200	6.53	
1220	12.0	0.996	6.36	157.2	0.89	2.46	300	6.60	
1225	11.9	1.013	6.35	159.3	0.91	2.25	300	6.71	
1230	11.8	1.015	6.35	161.1	0.93	1.45	340	6.92	
1235	11.7	1.022	6.26	165.2	1.04	1.25	340	6.97	
1240	11.6	1.032	6.35	165.7	0.90	0.89	400	7.12	
1245	11.5	1.034	6.36	167.0	0.87	0.65	400	7.17	
1250	11.5	1.035	6.36	167.9	0.83	0.55	400	7.19	Sampled
5 min	3%	3%	±0.1	±10	<0.5 or10%,	<5	100-400 mL/min	<0.3 ft drawndown	

Sampler's Initials
GWK

LOW FLOW SAMPLING LOG (PERISTALTIC PUMP)

Credere Associates. LLC. 776 Main Street. Westbrook. ME 04092

PROJECT NAME: USACE Dow Salvage Yard DATE: 11/07/23

PROJECT NUMBER: 18001468

SAMPLE LOCATION ID: SY-OB MW-15

FINAL MONITORING PARAMETERS AFTER SAMPLING

TIME	TEMP (°C)	SP. COND. (mS/cm)	pH	ORP (mV)	D.O. (mg/l)	TURBID. (ntu)	Flow Rate (mL/min)	DTW (ft)
1320	11.3	1.432	6.38	229.0	1.03	0.45	400	7.20

SAMPLE DATA:

SAMPLE BOTTLE ID TIME	SAMPLE BOTTLE ID LOCATION	PRESERVATION METHOD	SAMPLE CONTAINER #	SAMPLE CONTAINER TYPE	LABORATORY ANALYSIS
1250	SY-OB-MW-15	HCl	2	40 mL VOA	VOC
		HCl	2	40 mL VOA	VPH
		None	1	1 L Amber	SVOC
		None	1	1 L Amber	PCB
		HCl	1	1 L Amber	EPH
		HNO3	1	250 mL Poly	Total Metals
		HNO3 (filtered)	1	250 mL Poly	Dissolved Metals
		HCl	3	40 mL VOA	CVOC SIM
		HCl	2	40 mL VOA	TOC
		HCl	3	40 mL VOA	Dissolved Gasses
		None	1	500 mL Poly	Alkalinity, Hexavalent Chromium, Anions
		HCl None	1 2	250 mL Poly 1 L Amber	Ferrous Iron BNASIM

PURGE DATA

[ ] 0.04 GAL/FT (1" DIAM.)
[x] 0.16 GAL/FT (2" DIAM.)
[ ] 0.65 GAL/FT (4" DIAM.)
[ ] 1.47 GAL/FT (6" DIAM.)

x length of water column = 19.61

Total Well Volume: 3.1 gallons

Total Purge Volume: 6 gallons

# of well volumes: 1.9

COMMENTS # 2 1 Liter amber collected for BNA SIM analysis

DETAILED STABALIZATION CRITERIA

pH: ±0.1 standard units
Temperature: ± 3%
ORP: ±10 mV
DO: less than 0.5 mg/L or ±10% for values greater than 0.5 mg/L
Specific conductivitiy: ± 3%
Turbidity: <5 NTU or 10% for reading >5 NTU (filtered only)
Drawdown: no more than 0.3 feet

SAMPLER INFORMATION

Name (printed): Grant Kern Signature:

FLUTe SAMPLING LOG

Credere Associates. LLC. 776 Main Street. Westbrook. ME 04092

Community Economy Environment

PROJECT NAME: USACE Dow Salvage Yard

PROJECT NUMBER: 18001468

SAMPLE LOCATION ID: SY-BRMW1-PORT1

LOCATION ACTIVITY
START DATE: 11/9/23
START TIME: 0815
END DATE: 11/9/23
END TIME: 1550

WELL DATA:

WELL DEPTH (ft): 30.0 [ ] MEASURED [X] HISTORICAL

WATER DEPTH (tag line) (ft): 1.44 [X] MEASURED [ ] HISTORICAL

WATER DEPTH (in FLUTe) (ft): 13.41

[ ] TOP OF WELL [ ] TOP OF CASING [ ] FROM GRADE [X] TOP OF TUBE

WATER LEVEL EQUIPMENT USED:
[X] ELECT. COND. PROBE
[ ] FLOAT ACTIVATED PROBE
[ ] PRESSURE TRANSDUCER
[ ] _____
[ ] _____

FLUTe Interval (ft): 42-52 ft BGS

Well Diameter (in): 6"

WELL MATERIAL:	WELL LOCKED:	PROTECTIVE CASING SECURE:	CONCRETE COLLAR INTACT:
[ ] PVC	[X] YES	[X] YES	[X] YES
[ ] SS	[ ] NO	[ ] NO	[ ] NO
[X] STEEL			

AMBIENT AIR VOC: - PPM

WELL MOUTH VOC: 2.669 PPM

EQUIPMENT DATA:

Water Quality Instrument Sonde SN: 22A101144

Water Quality Instrument Handset SN: 22B101958

Turbidity Meter SN: 15C30C0400S0

Sample Pressure (psi): 16 (VOLATILES) 42 (OTHER)

Compressed gas: N2

Sampler: IAN DESJARDINS

FIELD ANALYSIS DATA:

DATE	PUMP ON	PUMP OFF	TEMP (°C)	SP. COND. (mS/cm)	pH	ORP (mV)	D.O. (mg/l)	TURBID. (ntu)	Purge Pressure (psi)	DTW (ft)	Total Purge (G)
11/9/23	0945	0953	6.7	1.570	7.26	15.1	4.73	1.38	52	13.41	1.0
11/9/23	0952	0958	6.0	2.008	7.22	-137.9	1.01	2.36	58	14.75	1.0
11/9/23	1032	1038	8.3	3.406	7.25	-137.0	1.96	0.74	58	20.34	1.0
11/9/23	1114	1119	8.7	2.511	7.22	-120.9	1.62	2.32	56	16.95	0.95

FINAL MONITORING PARAMETERS AFTER SAMPLING

TIME	TEMP (°C)	SP. COND.	pH	ORP (mV)	D.O. (mg/l)	TURBID. (ntu)	DTW (ft)
1311	7.7	2.842	7.32	-105.1	3.02	0.64	19.90

19.90

SAMPLE DATA:

SAMPLE BOTTLE ID TIME	SAMPLE BOTTLE ID LOCATION	PRESERVATION METHOD	SAMPLE CONTAINER #	SAMPLE CONTAINER TYPE	LABORATORY ANALYSIS
1145	SY-BRMW1-P1	HCl	2	40 mL VOA	VOC
		HCl	2	40 mL VOA	VPH
		None	1	1 L Amber	SVOC
		None	1	1 L Amber	PCB
		HCl	1	1 L Amber	EPH
		HNO3	1	250 mL Poly	Total Metals
		HNO3 (filtered)	1	250 mL Poly	Dissolved Metals
		HCl	3	40 mL VOA	CVOC SIM
		HCl	3	40 mL VOA	TOC
		HCl	3	40 mL VOA	Dissolved Gasses
		None	1	500 mL Poly	Alkalinity, Hexavalent Chromium, Anions
		HCl	1	250 mL Poly	Ferrous Iron
		None	2	1 L Amber	BNASIM

PURGE DATA

FLUTe Volume (g): 1.18 g

Number of purges: ~~3.95~~ 3 FOR

Total purge volume (g): 3.95

98" - 13.41" = 84.59" * 0.9 = 76.11"

98" - 76.11" = 21.89" = 90% RECHARGE

COMMENTS + BNASIM x1 / 1L AMBER / NON PRESERVED

DTW PURGE 13.41' TOT - 90% DRAWDOWN RECHARGE DTW = 21.89' TOT (DTW)

SAMPLER INFORMATION

Name (printed): IAN DESJARDINS

Signature:

FLUTe SAMPLING LOG

Credere Associates. LLC. 776 Main Street. Westbrook. ME 04092

Community Economy Environment

PROJECT NAME: USACE Dow Salvage Yard

PROJECT NUMBER: 18001468

SAMPLE LOCATION ID: SY-BRMW1-PORT2

LOCATION ACTIVITY
START DATE: 11/9/23
START TIME: 0935
END DATE: 11/9/23
END TIME: 1555

WELL DATA:

WELL DEPTH (ft): 301 [ ] MEASURED [X] HISTORICAL

WATER DEPTH (tag line) (ft): 144 [X] MEASURED [ ] HISTORICAL

WATER DEPTH (in FLUTe) (ft): 13.34

[ ] TOP OF WELL [ ] TOP OF CASING [ ] FROM GRADE [X] TOP OF FLUTE

WATER LEVEL EQUIPMENT USED:
[X] ELECT. COND. PROBE
[ ] FLOAT ACTIVATED PROBE
[ ] PRESSURE TRANSDUCER
[ ] _____
[ ] _____

FLUTe Interval (ft): 65-75 ft BGS Well Diameter (in): 6

WELL MATERIAL:	WELL LOCKED:	PROTECTIVE CASING SECURE:	CONCRETE COLLAR INTACT:
[ ] PVC	[X] YES	[X] YES	[X] YES
[ ] SS	[ ] NO	[ ] NO	[ ] NO
[X] STEEL			

AMBIENT AIR VOC: — PPM

WELL MOUTH VOC: 4.724 PPM

EQUIPMENT DATA:

Water Quality Instrument Sonde SN: 22A100144

Water Quality Instrument Handset SN: 22B101958

Turbidity Meter SN: 15D30C09W5D

Sample Pressure (psi): 16 (VOLATILES) 40 (OTHERS)

Compressed gas: NITROGEN

Sampler: IANDESJARDINS

FIELD ANALYSIS DATA:

DATE	PUMP ON	PUMP OFF	TEMP (°C)	SP. COND. (mS/cm)	pH	ORP (mV)	D.O. (mg/l)	TURBID. (ntu)	Purge Pressure (psi)	DTW (ft)	Total Purge (G)
11/9/23	0938	90	7.0	1.876	7.16	97.3	1.07	1.20	55	13.34	0.25
11/9/23	1016	1021	8.5	2.710	7.17	-85.5	1.60	1.92	58	15.75	0.3
11/9/23	1108	1112	8.5	2.914	7.21	-76.4	1.70	1.13	58	19.15	0.5
11/9/23	1135	1139	8.0	3.027	7.24	-69.4	1.46	0.35	58	20.30	0.6

FINAL MONITORING PARAMETERS AFTER SAMPLING

TIME	TEMP (°C)	SP. COND.	pH	ORP (mV)	D.O. (mg/l)	TURBID. (ntu)	DTW (ft)
	5.5	2.933	7.21	-50.8	4.61	0.51	20.4

SAMPLE DATA:

SAMPLE BOTTLE ID TIME	SAMPLE BOTTLE ID LOCATION	PRESERVATION METHOD	#	SAMPLE CONTAINER TYPE	LABORATORY ANALYSIS
1350	SY-BRMW1-P2	HCl	2	40 mL VOA	VOC
		HCl	2	40 mL VOA	VPH
		None	1	1 L Amber	SVOC
		None	1	1 L Amber	PCB
		HCl	1	1 L Amber	EPH
		HNO3	1	250 mL Poly	Total Metals
		HNO3 (filtered)	1	250 mL Poly	Dissolved Metals
		HCl	3	40 mL VOA	CVOC SIM
		HCl	2	40 mL VOA	TOC
		HCl	3	40 mL VOA	Dissolved Gasses
		None	1	500 mL Poly	Alkalinity, Hexavalent Chromium, Anions
		HCl	1	250 mL Poly	Ferrous Iron
		None	2	1 L Amber	BNASIM

PURGE DATA

FLUTe Volume (g): 1.2 g

Number of purges: 4 (FOUR)

Total purge volume (g): 1.65 g

300 - 37.1 = 212.9, 73.71 DRAWDOWN
300 - 13.34 = 286.61 * 0.9 = 66.3 + 212.9 = 279.24
300 - 279.24 = 20.76 DTW @ 90%

COMMENTS FIRST PURGE ATTEMPT AT 55 PSI - ONLY AIR COMING OUT OF PURGE TUBE (SMALLER TUBE) - DUP @ 1355
DTW AFTER PURGE - 87.1' TOC 90% DRAWDOWN RECOVERY AT 26.76' TOC (DTW)

SAMPLER INFORMATION

Name (printed): IANDESJARDINS Signature:

FLUTe SAMPLING LOG

Credere Associates. LLC. 776 Main Street. Westbrook. ME 04092

Community Economy Environment

PROJECT NAME: USACE Dow Salvage Yard

PROJECT NUMBER: 18001468

SAMPLE LOCATION ID: SY-BRMW1 - PORT 3

LOCATION ACTIVITY
START DATE: 11/9/23
START TIME: 0815
END DATE: 11/9/23
END TIME: 1555

WELL DATA:

WELL DEPTH (ft): 301

WATER DEPTH (tag line) (ft): 1.44

WATER DEPTH (in FLUTe) (ft): 13.17

[ ] MEASURED
[X] HISTORICAL
[X] MEASURED
[ ] HISTORICAL

[ ] TOP OF WELL
[ ] TOP OF CASING
[ ] FROM GRADE
[X] Top of Tube

WATER LEVEL EQUIPMENT USED:
[X] ELECT. COND. PROBE
[ ] FLOAT ACTIVATED PROBE
[ ] PRESSURE TRANSDUCER
[ ] _____
[ ] _____

FLUTe Interval (ft): 150-157' ft BGS

Well Diameter (in): 6

WELL MATERIAL: [ ] PVC [ ] SS [X] STEEL

WELL LOCKED: [X] YES [ ] NO

PROTECTIVE CASING SECURE: [X] YES [ ] NO

CONCRETE COLLAR INTACT: [X] YES [ ] NO

AMBIENT AIR VOC: — PPM

WELL MOUTH VOC: 0.687 PPM

EQUIPMENT DATA:

Water Quality Instrument Sonde SN: 22A100144

Water Quality Instrument Handset SN: 22B101058

Turbidity Meter SN: 150300400050

Sample Pressure (psi): 16 (VILADISS) 40 (OTHER)

Compressed gas: NITROGEN

Sampler: IAN DESJARDINS

FIELD ANALYSIS DATA:

DATE	PUMP ON	PUMP OFF	TEMP (°C)	SP. COND. (mS/cm)	pH	ORP (mV)	D.O. (mg/l)	TURBID. (ntu)	Purge Pressure (psi)	DTW (ft)	Total Purge (G)
11/9/23	0909	0914	8.1	0.896	7.22	19.4	2.18	1.17	58	13.17	0.85
11/9/23	1006	1011	8.2	0.799	7.42	-133.6	2.67	0.33	58	13.66	0.8
11/9/23	1058	1103	7.5	0.825	7.48	-105.9	1.00	0.62	58	13.62	0.7
11/9/23	1124	1129	8.6	0.829	7.52	-127.9	2.07	0.68	58	20.95	0.8

FINAL MONITORING PARAMETERS AFTER SAMPLING

TIME	TEMP (°C)	SP. COND.	pH	ORP (mV)	D.O. (mg/l)	TURBID. (ntu)	DTW (ft)
	7.8	0.840	7.55	-102.3	2.56	0.49	20.21

SAMPLE DATA:

SAMPLE BOTTLE ID TIME	SAMPLE BOTTLE ID LOCATION	PRESERVATION METHOD	SAMPLE CONTAINER #	SAMPLE CONTAINER TYPE	LABORATORY ANALYSIS
1240	SY-BRMW1-P3	HCl	2	40 mL VOA	VOC
		HCl	2	40 mL VOA	VPH
		None	1	1 L Amber	SVOC
		None	1	1 L Amber	PCB
		HCl	1	1 L Amber	EPH
		HNO3	1	250 mL Poly	Total Metals
		HNO3 (filtered)	1	250 mL Poly	Dissolved Metals
		HCl	3	40 mL VOA	CVOC SIM
		HCl	2	40 mL VOA	TOC
		HCl	3	40 mL VOA	Dissolved Gasses
		None	1	500 mL Poly	Alkalinity, Hexavalent Chromium, Anions
		HCl	1	250 mL Poly	Ferrous Iron
		None	2	1 L Amber	BNASIM

PURGE DATA

FLUTe Volume (g): 1.2

Number of purges: FOUR

Total purge volume (g): 3.15 g

95' - 13.17 = 81.83' * 0.9 = 73.65'

95 - 73.65 = 21.35 = 90% DRAWDOWN RECOVERY

COMMENTS +BNASIM / 1X 1L AMBER / NEW PRESERVE.

DTW (PURGE) = 95' TOT 90% DRAWDOWN RECOVERY IS AT 21.35' TOT (DTW)

SAMPLER INFORMATION

Name (printed): IAN DESJARDINS

Signature:

FLUTe SAMPLING LOG

Credere Associates. LLC. 776 Main Street. Westbrook. ME 04092

PROJECT NAME: USACE Dow Salvage Yard

PROJECT NUMBER: 18001468

SAMPLE LOCATION ID: SY-BRMW2 P1

LOCATION ACTIVITY
START DATE: 11/07/23
START TIME: 0935
END DATE: 11/07/23
END TIME: 1340

WELL DATA:
WELL DEPTH (ft): ~~300~~ 295 [X] MEASURED [ ] HISTORICAL
WATER DEPTH (tag line) (ft): 1.49 [X] MEASURED [ ] HISTORICAL
WATER DEPTH (in FLUTe) (ft): 5.92
[✓] TOP OF WELL [X] TOP OF CASING [ ] FROM GRADE [ ] _____

WATER LEVEL EQUIPMENT USED:
[X] ELECT. COND. PROBE
[ ] FLOAT ACTIVATED PROBE
[ ] PRESSURE TRANSDUCER
[ ] _____
[ ] _____

FLUTe Interval (ft): 60.5 - 70.5
Well Diameter (in): 5.875

WELL MATERIAL: [ ] PVC [X] SS [ ] _____
WELL LOCKED: [X] YES [ ] NO
PROTECTIVE CASING SECURE: [X] YES [ ] NO
CONCRETE COLLAR INTACT: [X] YES [ ] NO

AMBIENT AIR VOC: 0 PPM
WELL MOUTH VOC: 0.304 PPM

EQUIPMENT DATA:
Water Quality Instrument Sonde SN: 21F100523
Water Quality Instrument Handset SN: 18J100137
Turbidity Meter SN: 21040D000570
Sample Pressure (psi): 40
Compressed gas: Nitrogen
Sampler: C. Beaton

FIELD ANALYSIS DATA:

DATE	PUMP ON	PUMP OFF	TEMP (°C)	SP. COND. (mS/cm)	pH	ORP (mV)	D.O. (mg/l)	TURBID. (ntu)	Purge Pressure (psi)	DTW (ft)	Total Purge (G)
11/7/23	0921	0926	10.1	0.500	7.86	-19.6	1.93	0.92	55	5.92	1.00
11/7/23	1004	1010	10.1	0.251	8.09	51.0	1.31	0.50	55	8.75	1.00
11/7/23	1042	1047	10.2	0.245	8.13	54.2	1.41	0.48	55	10.11	0.75
11/7/23	1113	1118	10.1	0.243	8.11	54.6	1.33	0.41	55	13.90	0.75

FINAL MONITORING PARAMETERS AFTER SAMPLING

TIME	TEMP (°C)	SP. COND.	pH	ORP (mV)	D.O. (mg/l)	TURBID. (ntu)	DTW (ft)
1335	10.3	0.240	8.19	-	2.37	0.57	15.50

SAMPLE DATA:

SAMPLE BOTTLE ID TIME	LOCATION	PRESERVATION METHOD	#	SAMPLE CONTAINER TYPE	LABORATORY ANALYSIS
1225	SYBRMW2-110723	HCl	2	40 mL VOA	VOC
		HCl	2	40 mL VOA	VPH
		None	1	1 L Amber	SVOC
		None	1	1 L Amber	PCB
		HCl	1	1 L Amber	EPH
		HNO3	1	250 mL Poly	Total Metals
		HNO3 (filtered)	1	250 mL Poly	Dissolved Metals
		HCl	3	40 mL VOA	CVOC SIM
		HCl	2	40 mL VOA	TOC
		HCl	3	40 mL VOA	Dissolved Gasses
		None	1	500 mL Poly	Alkalinity, Hexavalent Chromium, Anions
		HCl	1	250 mL Poly	Ferrous Iron
		None	2	1 L Amber	BNASIM

PURGE DATA
FLUTe Volume (g): 1.00
Number of purges: 4
Total purge volume (g): 3.75

COMMENTS
295 - 5.92 = 289.08
289.08 X 0.90 = 260.17
295 - 260.17 = 34.83

SAMPLER INFORMATION
Name (printed): Chris Beaton
Signature: Chris Beaton

FLUTe SAMPLING LOG

Credere Associates. LLC. 776 Main Street. Westbrook. ME 04092

PROJECT NAME: USACE Dow Salvage Yard

PROJECT NUMBER: 18001468

SAMPLE LOCATION ID: SY-BRMW 2 PZ

LOCATION ACTIVITY
START DATE: 11/07/23
START TIME: 0930
END DATE: 11/07/23
END TIME: 1640

WELL DATA:

WELL DEPTH (ft): ~~300~~ 295 [ ] MEASURED [X] HISTORICAL

WATER DEPTH (tag line) (ft): 1.49 [X] MEASURED [ ] HISTORICAL

WATER DEPTH (in FLUTe) (ft): 6.92

[ ] TOP OF WELL [X] TOP OF CASING [ ] FROM GRADE [ ] _____

WATER LEVEL EQUIPMENT USED:
[X] ELECT. COND. PROBE
[ ] FLOAT ACTIVATED PROBE
[ ] PRESSURE TRANSDUCER
[ ] _____
[ ] _____

FLUTe Interval (ft): 80.5 - 95.5 Well Diameter (in): 5.875

WELL MATERIAL:	WELL LOCKED:	PROTECTIVE CASING SECURE:	CONCRETE COLLAR INTACT:
[ ] PVC	[X] YES	[X] YES	[X] YES
[X] SS	[ ] NO	[ ] NO	[ ] NO
[ ] _____			

AMBIENT AIR VOC: 0- PPM

WELL MOUTH VOC: 0.367 PPM

EQUIPMENT DATA:

Water Quality Instrument Sonde SN: 21F100523

Water Quality Instrument Handset SN: 18J100137

Turbidity Meter SN: 210 40P000570

Sample Pressure (psi): 40

Compressed gas: Nitrogen

Sampler: CoBeamon

FIELD ANALYSIS DATA:

DATE	PUMP ON	PUMP OFF	TEMP (°C)	SP. COND. (mS/cm)	pH	ORP (mV)	D.O. (mg/l)	TURBID. (ntu)	Purge Pressure (psi)	DTW (ft)	Total Purge (G)
11/7/23	0932	0940	10.1	0.200	7.71	23.0	2.64	0.88	55	6.92	1.00
11/7/23	1017	1025	10.1	0.201	7.81	52.7	1.56	0.27	55	10.85	1.00
11/7/23	1051	1058	10.1	0.199	7.86	48.7	1.68	0.24	55	13.00	1.00
11/7/23	1122	1129	10.0	0.197	7.97	52.2	2.04	0.19	55	15.00	1.00

DTW 6.92

FINAL MONITORING PARAMETERS AFTER SAMPLING

TIME	TEMP (°C)	SP. COND.	pH	ORP (mV)	D.O. (mg/l)	TURBID. (ntu)	DTW (ft)
1630	10.2	0.201	8.57	44.1	1.67	0.41	15.50

SAMPLE DATA:

TIME	LOCATION	PRESERVATION METHOD	#	SAMPLE CONTAINER TYPE	LABORATORY ANALYSIS
1340	SY-BRMW 2-110723	HCl	6	40 mL VOA	VOC
		HCl	6	40 mL VOA	VPH
		None	3	1 L Amber	SVOC
		None	3	1 L Amber	PCB
		HCl	3	1 L Amber	EPH
		HNO3	3	250 mL Poly	Total Metals
		HNO3 (filtered)	3	250 mL Poly	Dissolved Metals
		HCl	9	40 mL VOA	CVOC SIM
		HCl	6	40 mL VOA	TOC
		HCl	9	40 mL VOA	Dissolved Gasses
		None	3	500 mL Poly	Alkalinity, Hexavalent Chromium, Anions
		HCl	3	250 mL Poly	Ferrous Iron
		None	6	1 L Amber	BNASIM

PURGE DATA

FLUTe Volume (g): 1

Number of purges: 4

Total purge volume (g): 4.00

COMMENTS

295 - 6.92 = 288.08
288.08 X 0.90 = 259.27
295 - 259.27 = 35.73

MS/MSD on 130 sampled

SAMPLER INFORMATION

Name (printed): Chris Beamon

Signature: [signature]

FLUTe SAMPLING LOG

Credere Associates. LLC. 776 Main Street. Westbrook. ME 04092

Community Economy Environment

PROJECT NAME: USACE Dow Salvage Yard

PROJECT NUMBER: 18001468

SAMPLE LOCATION ID: SY-BRMW2 P3

LOCATION ACTIVITY
START DATE: 11/07/23
START TIME: 0935
END DATE: 11/07/23
END TIME: 1620

WELL DATA:

WELL DEPTH (ft): ~~300~~ 295 [X] MEASURED [ ] HISTORICAL

WATER DEPTH (tag line) (ft): 1.49 [X] MEASURED [ ] HISTORICAL

WATER DEPTH (in FLUTe) (ft): 9.23

[ ] TOP OF WELL [X] TOP OF CASING [ ] FROM GRADE [ ] _____

WATER LEVEL EQUIPMENT USED:
[X] ELECT. COND. PROBE
[ ] FLOAT ACTIVATED PROBE
[ ] PRESSURE TRANSDUCER
[ ] _____
[ ] _____

FLUTe Interval (ft): 252.5 – 262.5

Well Diameter (in): 5.875

WELL MATERIAL:	WELL LOCKED:	PROTECTIVE CASING SECURE:	CONCRETE COLLAR INTACT:
[ ] PVC	[X] YES	[X] YES	[X] YES
[X] SS	[ ] NO	[ ] NO	[ ] NO
[ ] _____			

AMBIENT AIR VOC: 0 PPM

WELL MOUTH VOC: 0.547 PPM

EQUIPMENT DATA:

Water Quality Instrument Sonde SN: 21F100523

Water Quality Instrument Handset SN: 18J100131

Turbidity Meter SN: 21010D000510

Sample Pressure (psi): 40

Compressed gas: Nitrogen

Sampler: C. Beahm

FIELD ANALYSIS DATA:

DATE	PUMP ON	PUMP OFF	TEMP (°C)	SP. COND. (mS/cm)	pH	ORP (mV)	D.O. (mg/l)	TURBID. (ntu)	Purge Pressure (psi)	DTW (ft)	Total Purge (G)
11/7/23	0947	0955	10.1	0.200	7.71	23.0	2.69	0.63	55	9.23	1.00
11/7/23	1030	1039	10.1	0.207	7.60	56.4	3.40	0.31	55	11.88	1.00
11/7/23	1101	1109	10.0	0.211	7.71	54.8	1.52	0.26	55	13.05	1.00
11/7/23	1130	1140	10.0	0.212	7.72	56.9	0.74	0.62	55	13.05	1.00

FINAL MONITORING PARAMETERS AFTER SAMPLING

TIME	TEMP (°C)	SP. COND.	pH	ORP (mV)	D.O. (mg/l)	TURBID. (ntu)	DTW (ft)
1610	10.1	0.216	8.31	67.7	1.84	0.62	16.04

SAMPLE DATA:

SAMPLE BOTTLE ID TIME	LOCATION	PRESERVATION METHOD	SAMPLE CONTAINER #	TYPE	LABORATORY ANALYSIS
1535	SY-BRMW2-110723	HCl	2	40 mL VOA	VOC
		HCl	2	40 mL VOA	VPH
		None	1	1 L Amber	SVOC
		None	1	1 L Amber	PCB
		HCl	1	1 L Amber	EPH
		HNO3	1	250 mL Poly	Total Metals
		HNO3 (filtered)	1	250 mL Poly	Dissolved Metals
		HCl	3	40 mL VOA	CVOC SIM
		HCl	2	40 mL VOA	TOC
		HCl	3	40 mL VOA	Dissolved Gasses
		None	1	500 mL Poly	Alkalinity, Hexavalent Chromium, Anions
		HCl	1	250 mL Poly	Ferrous Iron
		None	2	1 L Amber	BNASIM

PURGE DATA

FLUTe Volume (g): 1.00

Number of purges: 4

Total purge volume (g): 4.00

COMMENTS

295 - 9.23 = 285.77

285.77 x 0.90 = 257.19

295 - 257.19 = 37.81

SAMPLER INFORMATION

Name (printed): Christofer Beahm

Signature: Christofer Beahm

FLUTe SAMPLING LOG

Credere Associates. LLC. 776 Main Street. Westbrook. ME 04092

Community Economy Environment

PROJECT NAME: USACE Dow Salvage Yard

PROJECT NUMBER: 18001468

SAMPLE LOCATION ID: SY BRMW3 P1

LOCATION ACTIVITY
START DATE: 11/08/23
START TIME: 1330
END DATE: 11/09/23
END TIME: 1330

WELL DATA:

WELL DEPTH (ft): 302 [X] MEASURED [ ] HISTORICAL

WATER DEPTH (tag line) (ft): 1.15 [X] MEASURED [ ] HISTORICAL

WATER DEPTH (in FLUTe) (ft): 9.50

[ ] TOP OF WELL [X] TOP OF CASING [ ] FROM GRADE [ ] _____

WATER LEVEL EQUIPMENT USED:
[X] ELECT. COND. PROBE
[ ] FLOAT ACTIVATED PROBE
[ ] PRESSURE TRANSDUCER
[ ] _____
[ ] _____

FLUTe Interval (ft): 47 - 62

Well Diameter (in): 5.875

WELL MATERIAL:	WELL LOCKED:	PROTECTIVE CASING SECURE:	CONCRETE COLLAR INTACT:
[ ] PVC	[X] YES	[X] YES	[X] YES
[X] SS	[ ] NO	[ ] NO	[ ] NO
[ ] _____			

AMBIENT AIR VOC: 0 PPM

WELL MOUTH VOC: 3.395 PPM

EQUIPMENT DATA:

Water Quality Instrument Sonde SN: 21F100523

Water Quality Instrument Handset SN: 18J100137

Turbidity Meter SN: 21040D000570

Sample Pressure (psi): 40

Compressed gas: Nitrogen

Sampler: C. Beamin

FIELD ANALYSIS DATA:

DATE	PUMP ON	PUMP OFF	TEMP (°C)	SP. COND. (mS/cm)	pH	ORP (mV)	D.O. (mg/l)	TURBID. (ntu)	Purge Pressure (psi)	DTW (ft)	Total Purge (G)
11/08/23	1353	1359	8.7	0.329	8.88	23.0	0.26	0.70	55	9.30	1.125
11/08/23	1428	1434	8.8	0.314	9.73	4.4	0.07	0.24	55	15.46	1.125
11/09/23	0827	0834	8.6	0.391	8.92	110.9	0.14	0.32	55	10.18	1.125
11/09/23	0859	0905	8.6	0.258	9.25	65.1	0.01	0.34	55	18.00	1.125

FINAL MONITORING PARAMETERS AFTER SAMPLING

TIME	TEMP (°C)	SP. COND.	pH	ORP (mV)	D.O. (mg/l)	TURBID. (ntu)	DTW (ft)
1250	8.8	0.427	8.82	40.8	0.10	0.26	16.10

SAMPLE DATA:

SAMPLE BOTTLE ID TIME	LOCATION	PRESERVATION METHOD	#	SAMPLE CONTAINER TYPE	LABORATORY ANALYSIS
0945	SY-BRMW-110923	HCl	2	40 mL VOA	VOC
		HCl	2	40 mL VOA	VPH
		None	1	1 L Amber	SVOC
		None	1	1 L Amber	PCB
		HCl	1	1 L Amber	EPH
		HNO3	1	250 mL Poly	Total Metals
		HNO3 (filtered)	1	250 mL Poly	Dissolved Metals
		HCl	3	40 mL VOA	CVOC SIM
		HCl	2	40 mL VOA	TOC
		HCl	3	40 mL VOA	Dissolved Gasses
		None	1	500 mL Poly	Alkalinity, Hexavalent Chromium, Anions
		HCl	1	250 mL Poly	Ferrous Iron
		None	2	1 L Amber	BNASIM

PURGE DATA

FLUTe Volume (g): 1.125

Number of purges: 4

Total purge volume (g): 4.5

COMMENTS

302 - 9.50 = 292.5
292.5 X 0.90 = 263.25
302 - 263.25 = 38.75

SAMPLER INFORMATION

Name (printed): Chris Beamin

Signature: Chris Beamin

FLUTe SAMPLING LOG

Credere Associates. LLC. 776 Main Street. Westbrook. ME 04092

Community Economy Environment

PROJECT NAME: USACE Dow Salvage Yard

PROJECT NUMBER: 18001468

SAMPLE LOCATION ID: SY-BRMW3 P2

LOCATION ACTIVITY
START DATE: 11/08/23
START TIME: 1320
END DATE: 11/09/23
END TIME: 1330

WELL DATA:

WELL DEPTH (ft): 302 [X] MEASURED [ ] HISTORICAL

WATER DEPTH (tag line) (ft): 1.15 [X] MEASURED [ ] HISTORICAL

WATER DEPTH (in FLUTe) (ft): 9.82

FLUTe Interval (ft): 145 - 155

[ ] TOP OF WELL [X] TOP OF CASING [ ] FROM GRADE [ ] _____

Well Diameter (in): 5.873

WATER LEVEL EQUIPMENT USED:
[X] ELECT. COND. PROBE
[ ] FLOAT ACTIVATED PROBE
[ ] PRESSURE TRANSDUCER
[ ] _____
[ ] _____

WELL MATERIAL:	WELL LOCKED:	PROTECTIVE CASING SECURE:	CONCRETE COLLAR INTACT:
[ ] PVC	[X] YES	[X] YES	[X] YES
[X] SS	[ ] NO	[ ] NO	[ ] NO
[ ] _____			

AMBIENT AIR VOC: - PPM

WELL MOUTH VOC: 3.770 PPM

EQUIPMENT DATA:

Water Quality Instrument Sonde SN: 21F100523

Water Quality Instrument Handset SN: 18J10013T

Turbidity Meter SN: 21040D000570

Sample Pressure (psi): 40

Compressed gas: Nitrogen

Sampler: C. Beamm

FIELD ANALYSIS DATA:

DATE	PUMP ON	PUMP OFF	TEMP (°C)	SP. COND. (mS/cm)	pH	ORP (mV)	D.O. (mg/l)	TURBID. (ntu)	Purge Pressure (psi)	DTW (ft)	Total Purge (G)
11/8/23	1402	1409	9.0	0.321	8.15	73.2	0.02	0.37	55	9.82	1.125
11/8/23	1437	1443	8.07	0.286	8.60	16.3	0.11	0.28	55	13.24	1.125
11/9/23	0839	0846	8.5	0.271	8.12	102.5	0.09	0.20	55	10.40	1.125
11/9/23	0909	0915	8.6	0.199	8.13	67.5	0.10	0.24	55	16.00	1.125

FINAL MONITORING PARAMETERS AFTER SAMPLING

TIME	TEMP (°C)	SP. COND.	pH	ORP (mV)	D.O. (mg/l)	TURBID. (ntu)	DTW (ft)
1255	8.07	0.285	8.36	40.6	0.02	0.30	10.45

SAMPLE DATA:

SAMPLE BOTTLE ID TIME	LOCATION	PRESERVATION METHOD	#	SAMPLE CONTAINER TYPE	LABORATORY ANALYSIS
1000	SY-BRMW-110923	HCl	2	40 mL VOA	VOC
		HCl	2	40 mL VOA	VPH
		None	1	1 L Amber	SVOC
		None	1	1 L Amber	PCB
		HCl	1	1 L Amber	EPH
		HNO3	1	250 mL Poly	Total Metals
		HNO3 (filtered)	1	250 mL Poly	Dissolved Metals
		HCl	3	40 mL VOA	CVOC SIM
		HCl	2	40 mL VOA	TOC
		HCl	3	40 mL VOA	Dissolved Gasses
		None	1	500 mL Poly	Alkalinity, Hexavalent Chromium, Anions
		HCl	1	250 mL Poly	Ferrous Iron
		None	2	1 L Amber	BNASIM

PURGE DATA

FLUTe Volume (g): 1.125

Number of purges: 4

Total purge volume (g): 4.5

COMMENTS

302 - 9.82 = 292.18
292.18 X 0.90 = 262.96
302 - 262.96 = 39.04

SAMPLER INFORMATION

Name (printed): CMB Beamm

Signature: CMB Beamm

FLUTe SAMPLING LOG

Credere Associates. LLC. 776 Main Street. Westbrook. ME 04092

Community Economy Environment

PROJECT NAME: USACE Dow Salvage Yard

PROJECT NUMBER: 18001468

SAMPLE LOCATION ID: SY-BRMW3 P3

LOCATION ACTIVITY
START DATE: 1/08/23
START TIME: 1350
END DATE: 1/09/23
END TIME: 1330

WELL DATA:

WELL DEPTH (ft): 302 [X] MEASURED [ ] HISTORICAL [ ] TOP OF WELL [X] TOP OF CASING [ ] FROM GRADE [ ] _____

WATER DEPTH (tag line) (ft): 1.15 [X] MEASURED [ ] HISTORICAL

WATER DEPTH (in FLUTe) (ft): 13.10

FLUTe Interval (ft): 287-297

Well Diameter (in): 5.875

WATER LEVEL EQUIPMENT USED:
[X] ELECT. COND. PROBE
[ ] FLOAT ACTIVATED PROBE
[ ] PRESSURE TRANSDUCER
[ ] _____
[ ] _____

WELL MATERIAL: [ ] PVC [X] SS [ ] _____

WELL LOCKED: [X] YES [ ] NO

PROTECTIVE CASING SECURE: [X] YES [ ] NO

CONCRETE COLLAR INTACT: [X] YES [ ] NO

AMBIENT AIR VOC: - PPM

WELL MOUTH VOC: 2.875 PPM

EQUIPMENT DATA:

Water Quality Instrument Sonde SN: 21F100523

Water Quality Instrument Handset SN: 18J100137

Turbidity Meter SN: 21040D000570

Sample Pressure (psi): 40

Compressed gas: Nitrogen

Sampler: C. Beahm

FIELD ANALYSIS DATA:

DATE	PUMP ON	PUMP OFF	TEMP (°C)	SP. COND. (mS/cm)	pH	ORP (mV)	D.O. (mg/l)	TURBID. (ntu)	Purge Pressure (psi)	DTW (ft)	Total Purge (G)
1/8/23	1413	1420	8.8	0.319	7.80	68.8	0.12	0.94	55	13.10	1.125
1/8/23	1450	1457	8.9	0.295	8.01	0.9	0.30	0.53	55	14.25	1.125
1/9/23	0249	0856	8.5	0.313	8.05	88.8	0.15	0.41	55	14.00	1.125
1/9/23	0917	0924	8.6	0.314	8.05	52.3	0.10	0.42	55	15.60	1.125

FINAL MONITORING PARAMETERS AFTER SAMPLING

TIME	TEMP (°C)	SP. COND.	pH	ORP (mV)	D.O. (mg/l)	TURBID. (ntu)	DTW (ft)
1300	8.8	0.321	8.13	43.6	0.01	0.39	13.90

SAMPLE DATA:

SAMPLE BOTTLE ID TIME	LOCATION	PRESERVATION METHOD	#	SAMPLE CONTAINER TYPE	LABORATORY ANALYSIS
1015	SY-BRMW3-110923	HCl	2	40 mL VOA	VOC
		HCl	2	40 mL VOA	VPH
		None	1	1 L Amber	SVOC
		None	1	1 L Amber	PCB
		HCl	1	1 L Amber	EPH
		HNO3	1	250 mL Poly	Total Metals
		HNO3 (filtered)	1	250 mL Poly	Dissolved Metals
		HCl	3	40 mL VOA	CVOC SIM
		HCl	2	40 mL VOA	TOC
		HCl	3	40 mL VOA	Dissolved Gasses
		None	1	500 mL Poly	Alkalinity, Hexavalent Chromium, Anions
		HCl	1	250 mL Poly	Ferrous Iron
		None	2	1 L Amber	BNASIM

PURGE DATA

FLUTe Volume (g): 1.125

Number of purges: 4

Total purge volume (g): 4.5

COMMENTS

302 - 13.10 = 288.9
288.9 X 0.90 = 260.01
302 - 260 = 42

SAMPLER INFORMATION

Name (printed): Chris Beahm

Signature: Chris Beahm

FLUTe SAMPLING LOG

Credere Associates. LLC. 776 Main Street. Westbrook. ME 04092

Community Economy Environment

PROJECT NAME: USACE Dow Salvage Yard

PROJECT NUMBER: 18001468

SAMPLE LOCATION ID: SY-BRMW4 P1

LOCATION ACTIVITY
START DATE: 11/8/23
START TIME: 1302
END DATE: 11/9/23
END TIME: 1155

WELL DATA:
WELL DEPTH (ft): 312 [X] MEASURED [ ] HISTORICAL
WATER DEPTH (tag line) (ft): 1.29 [X] MEASURED [ ] HISTORICAL
WATER DEPTH (in FLUTe) (ft): 6.94
[ ] TOP OF WELL [X] TOP OF CASING [ ] FROM GRADE [ ] _____

WATER LEVEL EQUIPMENT USED:
[X] ELECT. COND. PROBE
[ ] FLOAT ACTIVATED PROBE
[ ] PRESSURE TRANSDUCER
[ ] _____
[ ] _____

FLUTe Interval (ft): 302-312 Well Diameter (in): 5.875

WELL MATERIAL: [ ] PVC [X] SS [ ] _____
WELL LOCKED: [X] YES [ ] NO
PROTECTIVE CASING SECURE: [X] YES [ ] NO
CONCRETE COLLAR INTACT: [X] YES [ ] NO

AMBIENT AIR VOC: — PPM
WELL MOUTH VOC: 2.961 PPM

EQUIPMENT DATA:
Water Quality Instrument Sonde SN: 19F100686
Water Quality Instrument Handset SN: 21K100829
Turbidity Meter SN: 160300484653
Sample Pressure (psi): 40
Compressed gas: Nitrogen
Sampler: P. Haber

FIELD ANALYSIS DATA:

DATE	PUMP ON	PUMP OFF	TEMP (°C)	SP. COND. (mS/cm)	pH	ORP (mV)	D.O. (mg/l)	TURBID. (ntu)	Purge Pressure (psi)	DTW (ft)	Total Purge (G)
11.8	1302	1310	8.6	1.125	7.68	174.0	1.13	1.82	55	6.94	1.125
11.8	1410	1417	8.4	1.213	7.49	-36.8	1.12	0.90	55	7.70	1.125
11.8	1458	1504	8.4	1.206	7.75	-19.0	0.58	0.47	55	9.80	1.0
11.9	823	829	7.3	1.244	7.42	212.4	1.93	2.40	55	9.59	1.125

FINAL MONITORING PARAMETERS AFTER SAMPLING

TIME	TEMP (°C)	SP. COND.	pH	ORP (mV)	D.O. (mg/l)	TURBID. (ntu)	DTW (ft)
1155	8.0	1.135	7.45	108.9	0.82	1.49	10.30

SAMPLE DATA:

SAMPLE BOTTLE ID TIME	SAMPLE BOTTLE ID LOCATION	PRESERVATION METHOD	#	SAMPLE CONTAINER TYPE	LABORATORY ANALYSIS
900	SY-BRMW4	HCl	4	40 mL VOA	VOC
		HCl	4	40 mL VOA	VPH
		None	2	1 L Amber	SVOC
		None	2	1 L Amber	PCB
		HCl	2	1 L Amber	EPH
		HNO3	2	250 mL Poly	Total Metals
		HNO3 (filtered)	2	250 mL Poly	Dissolved Metals
		HCl	6	40 mL VOA	CVOC SIM
		HCl	4	40 mL VOA	TOC
		HCl	6	40 mL VOA	Dissolved Gasses
		None	2	500 mL Poly	Alkalinity, Hexavalent Chromium, Anions
		HCl	2	250 mL Poly	Ferrous Iron
		None	4	1 L Amber	BNASIM

PURGE DATA
FLUTe Volume (g): 1.125
Number of purges: 4
Total purge volume (g): 4.5

COMMENTS Water Column: 295.06 ft
(295.06)(0.9) = 265.55
302 - 265.55 = 36

SAMPLER INFORMATION
Name (printed): Peter Haber Signature: Peter Haber

FLUTe SAMPLING LOG

Credere Associates. LLC. 776 Main Street. Westbrook. ME 04092

PROJECT NAME: USACE Dow Salvage Yard

PROJECT NUMBER: 18001468

SAMPLE LOCATION ID: SY-BRMW 4 P2

LOCATION ACTIVITY
START DATE: 11/9/23
START TIME: 1312
END DATE: 11/9/23
END TIME: 1045

WELL DATA:

WELL DEPTH (ft): 302 [X] MEASURED [ ] HISTORICAL

WATER DEPTH (tag line) (ft): 1.29 [X] MEASURED [ ] HISTORICAL

WATER DEPTH (in FLUTe) (ft): 6.92

[X] TOP OF WELL [X] TOP OF CASING [ ] FROM GRADE [ ] _____

WATER LEVEL EQUIPMENT USED:
[X] ELECT. COND. PROBE
[ ] FLOAT ACTIVATED PROBE
[ ] PRESSURE TRANSDUCER
[ ] _____
[ ] _____

FLUTe Interval (ft): 138-148 Well Diameter (in): 5.875

WELL MATERIAL:	WELL LOCKED:	PROTECTIVE CASING SECURE:	CONCRETE COLLAR INTACT:
[ ] PVC	[X] YES	[X] YES	[X] YES
[X] SS	[ ] NO	[ ] NO	[ ] NO
[ ] _____			

AMBIENT AIR VOC: — PPM

WELL MOUTH VOC: 2.603 PPM

EQUIPMENT DATA:

Water Quality Instrument Sonde SN: 19F100686

Water Quality Instrument Handset SN: 21K100829

Turbidity Meter SN: 160300048465

Sample Pressure (psi): 40

Compressed gas: Nitrogen

Sampler: P. Haber

FIELD ANALYSIS DATA:

DATE	PUMP ON	PUMP OFF	TEMP (°C)	SP. COND. (mS/cm)	pH	ORP (mV)	D.O. (mg/l)	TURBID. (ntu)	Purge Pressure (psi)	DTW (ft)	Total Purge (G)
11.8	1312	1320	8.2	1.357	7.69	174.8	1.03	0.63	55	6.92	1.125
11.8	1921	1428	8.7	1.366	7.55	-56.4	0.90	1.41	55	7.69	
11.8	1507	1513	8.4	1.327	7.79	-35.7	0.94	0.27	55	8.35	1.125
11.9	835	841	7.8	1.303	7.41	227.1	1.07	1.67	55	7.93	1.125

FINAL MONITORING PARAMETERS AFTER SAMPLING

TIME	TEMP (°C)	SP. COND.	pH	ORP (mV)	D.O. (mg/l)	TURBID. (ntu)	DTW (ft)
1045	5.3	1.325	7.44	114.0	0.80	1.35	13.35

SAMPLE DATA:

SAMPLE BOTTLE ID TIME	LOCATION	PRESERVATION METHOD	#	SAMPLE CONTAINER TYPE	LABORATORY ANALYSIS
1440	SY-BRMW4	HCl	2	40 mL VOA	VOC
		HCl	2	40 mL VOA	VPH
		None	1	1 L Amber	SVOC
		None	1	1 L Amber	PCB
		HCl	1	1 L Amber	EPH
		HNO3	1	250 mL Poly	Total Metals
		HNO3 (filtered)	1	250 mL Poly	Dissolved Metals
		HCl	3	40 mL VOA	CVOC SIM
		HCl	2	40 mL VOA	TOC
		HCl	3	40 mL VOA	Dissolved Gasses
		None	1	500 mL Poly	Alkalinity, Hexavalent Chromium, Anions
		HCl	1	250 mL Poly	Ferrous Iron
		None	2	1 L Amber	BNASIM

PURGE DATA

FLUTe Volume (g): 1.125

Number of purges: 4

Total purge volume (g): 4.5

COMMENTS

302 - 6.92 = 295.08
(295.08)(0.9) = 265.57
302 - 265.57 = 36.43

SAMPLER INFORMATION

Name (printed): Peter Haber Signature: Peter Haber

FLUTe SAMPLING LOG

Credere Associates. LLC. 776 Main Street. Westbrook. ME 04092

PROJECT NAME: USACE Dow Salvage Yard

PROJECT NUMBER: 18001468

SAMPLE LOCATION ID: SV-BRMW 4 P3

LOCATION ACTIVITY
START DATE: 11/8/23
START TIME: 1325
END DATE: 11/9/23
END TIME: 1205

WELL DATA:

WELL DEPTH (ft): 302 [N] MEASURED [ ] HISTORICAL

WATER DEPTH (tag line) (ft): 1.29 [X] MEASURED [ ] HISTORICAL

WATER DEPTH (in FLUTe) (ft): 10.75

[ ] TOP OF WELL [X] TOP OF CASING [ ] FROM GRADE [ ] _____

WATER LEVEL EQUIPMENT USED:
[X] ELECT. COND. PROBE
[ ] FLOAT ACTIVATED PROBE
[ ] PRESSURE TRANSDUCER
[ ] _____
[ ] _____

FLUTe Interval (ft): 291 - 301 Well Diameter (in): _____

WELL MATERIAL:	WELL LOCKED:	PROTECTIVE CASING SECURE:	CONCRETE COLLAR INTACT:
[ ] PVC	[X] YES	[X] YES	[X] YES
[X] SS	[ ] NO	[ ] NO	[ ] NO
[ ] _____			

AMBIENT AIR VOC: — PPM

WELL MOUTH VOC: 2.987 PPM

EQUIPMENT DATA:

Water Quality Instrument Sonde SN: 19F10686

Water Quality Instrument Handset SN: 21K100829

Turbidity Meter SN: 16030C048465

Sample Pressure (psi): 40

Compressed gas: Nitrogen

Sampler: P. Haber

FIELD ANALYSIS DATA:

DATE	PUMP ON	PUMP OFF	TEMP (°C)	SP. COND. (mS/cm)	pH	ORP (mV)	D.O. (mg/l)	TURBID. (ntu)	Purge Pressure (psi)	DTW (ft)	Total Purge (G)
11.8	1325	1333	8.4	1.456	7.62	118.1	0.42	0.60	55	10.75	1
11.8	1432	1438	8.9	1.504	7.55	-32.2	1.00	0.33	55	11.24	1
11.8	1516	1522	8.3	1.585	7.65	-11.8	0.94	0.49	55	11.32	1
11.9	845	852	8.0	1.494	7.39	175.6	1.37	1.76	55	11.44	1

FINAL MONITORING PARAMETERS AFTER SAMPLING

TIME	TEMP (°C)	SP. COND.	pH	ORP (mV)	D.O. (mg/l)	TURBID. (ntu)	DTW (ft)
1205	8.1	1.480	7.41	104.4	0.70	1.30	14.70

SAMPLE DATA:

SAMPLE BOTTLE ID TIME	SAMPLE BOTTLE ID LOCATION	PRESERVATION METHOD	SAMPLE CONTAINER #	SAMPLE CONTAINER TYPE	LABORATORY ANALYSIS
1100	SV-BRMW4	HCl	2	40 mL VOA	VOC
		HCl	2	40 mL VOA	VPH
		None	1	1 L Amber	SVOC
		None	1	1 L Amber	PCB
		HCl	1	1 L Amber	EPH
		HNO3	1	250 mL Poly	Total Metals
		HNO3 (filtered)	1	250 mL Poly	Dissolved Metals
		HCl	3	40 mL VOA	CVOC SIM
		HCl	2	40 mL VOA	TOC
		HCl	3	40 mL VOA	Dissolved Gasses
		None	1	500 mL Poly	Alkalinity, Hexavalent Chromium, Anions
		HCl	1	250 mL Poly	Ferrous Iron
		None	2	1 L Amber	BNASIM

PURGE DATA

FLUTe Volume (g): 1.0

Number of purges: 4

Total purge volume (g): 4.0

COMMENTS

302 - 10.75 = 291.25
(291.25)(0.9) = 262.13
302 - 262.13 = 39.87

SAMPLER INFORMATION

Name (printed): Peter Haber Signature: Peter Haber

FLUTe SAMPLING LOG

Credere Associates. LLC. 776 Main Street. Westbrook. ME 04092

Community Economy Environment

PROJECT NAME: USACE Dow Salvage Yard

PROJECT NUMBER: 18001468

SAMPLE LOCATION ID: SY-BRMW5 P1

LOCATION ACTIVITY
START DATE: 11/08/23
START TIME: 0820
END DATE: 11/08/23
END TIME: 1300

WELL DATA:

WELL DEPTH (ft): 301.5

WATER DEPTH (tag line) (ft): 1.00

WATER DEPTH (in FLUTe) (ft): 5.07

[X] MEASURED
[ ] HISTORICAL
[X] MEASURED
[ ] HISTORICAL

[ ] TOP OF WELL
[X] TOP OF CASING
[ ] FROM GRADE
[ ] _____

WATER LEVEL EQUIPMENT USED:
[X] ELECT. COND. PROBE
[ ] FLOAT ACTIVATED PROBE
[ ] PRESSURE TRANSDUCER
[ ] _____
[ ] _____

FLUTe Interval (ft): 29-44 ft bgs

Well Diameter (in): 5.875

WELL MATERIAL:
[ ] PVC
[X] SS
[ ] _____

WELL LOCKED:
[X] YES
[ ] NO

PROTECTIVE CASING SECURE:
[X] YES
[ ] NO

CONCRETE COLLAR INTACT:
[X] YES
[ ] NO

AMBIENT AIR VOC: — PPM

WELL MOUTH VOC: 0.392 PPM

EQUIPMENT DATA:

Water Quality Instrument Sonde SN: 21F100523

Water Quality Instrument Handset SN: 18J100137

Turbidity Meter SN: 21040D000570

Sample Pressure (psi): ~~39~~ CRB 40PSI

Compressed gas: Nitrogen

Sampler: C. Beahm

FIELD ANALYSIS DATA:

DATE	PUMP ON	PUMP OFF	TEMP (°C)	SP. COND. (mS/cm)	pH	ORP (mV)	D.O. (mg/l)	TURBID. (ntu)	Purge Pressure (psi)	DTW (ft)	Total Purge (G)
11/8/23	0830	0836	8.8	1.35	7.90	17.2	0.8	2.40	55	5.07	1.00
11/8/23	0905	0910	9.1	1.75	7.46	32.2	0.16	2.25	55	15.73	1.00
11/8/23	0941	0948	9.0	1.75	7.34	45.3	0.09	1.15	55	9.00	1.00
11/8/23	1009	1015	8.9	1.85	7.44	36.6	0.12	0.94	55	16.00	1.00

FINAL MONITORING PARAMETERS AFTER SAMPLING

TIME	TEMP (°C)	SP. COND.	pH	ORP (mV)	D.O. (mg/l)	TURBID. (ntu)	DTW (ft)
1255	9.1	1.83	7.65	105.8	6.0	0.80	14.05

SAMPLE DATA:

SAMPLE BOTTLE ID TIME	LOCATION	PRESERVATION METHOD	SAMPLE CONTAINER #	TYPE	LABORATORY ANALYSIS
1100	SY-BRMW5-110823	HCl	2	40 mL VOA	VOC
		HCl	2	40 mL VOA	VPH
		None	1	1 L Amber	SVOC
		None	1	1 L Amber	PCB
		HCl	1	1 L Amber	EPH
		HNO3	1	250 mL Poly	Total Metals
		HNO3 (filtered)	1	250 mL Poly	Dissolved Metals
		HCl	3	40 mL VOA	CVOC SIM
		HCl	2	40 mL VOA	TOC
		HCl	3	40 mL VOA	Dissolved Gasses
		None	1	500 mL Poly	Alkalinity, Hexavalent Chromium, Anions
		HCl	1	250 mL Poly	Ferrous Iron
		None	2	1 L Amber	BNASIM

PURGE DATA

FLUTe Volume (g): 1.00

Number of purges: 4

Total purge volume (g): 4.00

COMMENTS

301.5 - 5.07 = 296.43
296.43 x 0.90 = 266.78
301.5 - 266.78 = 34.72

SAMPLER INFORMATION

Name (printed): Chris Beahm

Signature: [signature]

FLUTe SAMPLING LOG

Credere Associates. LLC. 776 Main Street. Westbrook. ME 04092

PROJECT NAME: USACE Dow Salvage Yard

PROJECT NUMBER: 18001468

SAMPLE LOCATION ID: SY-DRMW5 P2

LOCATION ACTIVITY
START DATE: 11/08/23
START TIME: 0835
END DATE: 11/08/23
END TIME: 1310

WELL DATA:

WELL DEPTH (ft): 301.5 [X] MEASURED [ ] HISTORICAL [ ] TOP OF WELL [X] TOP OF CASING [ ] FROM GRADE [ ] _____

WATER DEPTH (tag line) (ft): 1.00 [X] MEASURED [ ] HISTORICAL

WATER DEPTH (in FLUTe) (ft): 1.24

WATER LEVEL EQUIPMENT USED:
[X] ELECT. COND. PROBE
[ ] FLOAT ACTIVATED PROBE
[ ] PRESSURE TRANSDUCER
[ ] _____
[ ] _____

FLUTe Interval (ft): 56-66 ft bgs Well Diameter (in): 5.875

WELL MATERIAL:	WELL LOCKED:	PROTECTIVE CASING SECURE:	CONCRETE COLLAR INTACT:
[ ] PVC	[X] YES	[X] YES	[X] YES
[X] SS	[ ] NO	[ ] NO	[ ] NO
[ ] _____			

AMBIENT AIR VOC: — PPM

WELL MOUTH VOC: 0.555 PPM

EQUIPMENT DATA:

Water Quality Instrument Sonde SN: 21F100523

Water Quality Instrument Handset SN: 18J100137

Turbidity Meter SN: 21040D000570

Sample Pressure (psi): 40

Compressed gas: Nitrogen

Sampler: C. Beahm

FIELD ANALYSIS DATA:

DATE	PUMP ON	PUMP OFF	TEMP (°C)	SP. COND. (mS/cm)	pH	ORP (mV)	D.O. (mg/l)	TURBID. (ntu)	Purge Pressure (psi)	DTW (ft)	Total Purge (G)
11/8/23	0838	0844	8.8	1.38	7.45	35.5	0.07	0.74	55	14.84	1.00
11/8/23	0911	0925	9.2	1.37	7.50	44.3	0.32	0.22	55	7.28	1.00
11/8/23	0951	0957	9.0	1.33	7.61	43.3	0.11	0.25	55	11.00	1.00
11/8/23	1021	1027	8.6	1.41	7.67	48.6	0.16	0.39	55	12.35	1.00

FINAL MONITORING PARAMETERS AFTER SAMPLING

TIME	TEMP (°C)	SP. COND.	pH	ORP (mV)	D.O. (mg/l)	TURBID. (ntu)	DTW (ft)
1300	9.01	1.40	7.62	83.3	0.19	0.22	15.55

SAMPLE DATA:

SAMPLE BOTTLE ID TIME	LOCATION	PRESERVATION METHOD	#	SAMPLE CONTAINER TYPE	LABORATORY ANALYSIS
1115	SY-DRMW5-110823	HCl	2	40 mL VOA	VOC
		HCl	2	40 mL VOA	VPH
		None	1	1 L Amber	SVOC
		None	1	1 L Amber	PCB
		HCl	1	1 L Amber	EPH
		HNO3	1	250 mL Poly	Total Metals
		HNO3 (filtered)	1	250 mL Poly	Dissolved Metals
		HCl	3	40 mL VOA	CVOC SIM
		HCl	2	40 mL VOA	TOC
		HCl	3	40 mL VOA	Dissolved Gasses
		None	1	500 mL Poly	Alkalinity, Hexavalent Chromium, Anions
		HCl	1	250 mL Poly	Ferrous Iron
		None	2	1 L Amber	BNASIM

PURGE DATA

FLUTe Volume (g): 1.00

Number of purges: 4

Total purge volume (g): 4.00

COMMENTS

301.5 - 4.84 = 296.66
296.66 X 0.90 = 266.99
301.5 - 266.99 = 34.51

SAMPLER INFORMATION

Name (printed): Chris Beahm Signature: C Beahm

FLUTe SAMPLING LOG

Credere Associates. LLC. 776 Main Street. Westbrook. ME 04092

PROJECT NAME: USACE Dow Salvage Yard

PROJECT NUMBER: 18001468

SAMPLE LOCATION ID: SY-BRMW5 P3

LOCATION ACTIVITY
START DATE: 11/8/23
START TIME: 0840
END DATE: 11/8/23
END TIME: 1315

WELL DATA:

WELL DEPTH (ft): 301.5 [X] MEASURED [ ] HISTORICAL [ ] TOP OF WELL [X] TOP OF CASING [ ] FROM GRADE [ ] _____

WATER DEPTH (tag line) (ft): 1.00 [X] MEASURED [ ] HISTORICAL

WATER DEPTH (in FLUTe) (ft): 4.75

WATER LEVEL EQUIPMENT USED:
[X] ELECT. COND. PROBE
[ ] FLOAT ACTIVATED PROBE
[ ] PRESSURE TRANSDUCER
[ ] _____
[ ] _____

FLUTe Interval (ft): 123-133 ft bgs Well Diameter (in): 5.875

WELL MATERIAL:	WELL LOCKED:	PROTECTIVE CASING SECURE:	CONCRETE COLLAR INTACT:
[ ] PVC	[X] YES	[X] YES	[X] YES
[X] SS	[ ] NO	[ ] NO	[ ] NO
[ ] _____			

AMBIENT AIR VOC: — PPM

WELL MOUTH VOC: 0.762 PPM

EQUIPMENT DATA:

Water Quality Instrument Sonde SN: 21F100523

Water Quality Instrument Handset SN: 18J100137

Turbidity Meter SN: 21040Doc570

Sample Pressure (psi): 40

Compressed gas: Nitrogen

Sampler: C. Bealum

FIELD ANALYSIS DATA:

DATE	PUMP ON	PUMP OFF	TEMP (°C)	SP. COND. (mS/cm)	pH	ORP (mV)	D.O. (mg/l)	TURBID. (ntu)	Purge Pressure (psi)	DTW (ft)	Total Purge (G)
11/8/23	0847	0853	8.9	~~1.52~~ 1.28 CRB	7.51	51.4	0.03	0.39	55	4.75	1.25
11/8/23	0928	0934	9.1	1.23	7.56	61.8	0.38	0.29	55	6.12	1.00
11/8/23	0959	1005	8.9	1.20	7.66	58.1	0.08	0.27	55	9.05	1.00
11/8/23	1032	1038	8.8	1.20	7.72	65.7	0.11	0.22	55	5.35	1.00

CRB SPC 1.28

FINAL MONITORING PARAMETERS AFTER SAMPLING

TIME	TEMP (°C)	SP. COND.	pH	ORP (mV)	D.O. (mg/l)	TURBID. (ntu)	DTW (ft)
1310	9.1	1.21	7.63	90.1	0.08	0.37	14.15

SAMPLE DATA:

SAMPLE BOTTLE ID TIME	LOCATION	PRESERVATION METHOD	#	SAMPLE CONTAINER TYPE	LABORATORY ANALYSIS
1140	SY-BRMW5-110823	HCl	2	40 mL VOA	VOC
		HCl	2	40 mL VOA	VPH
		None	1	1 L Amber	SVOC
		None	1	1 L Amber	PCB
		HCl	1	1 L Amber	EPH
		HNO3	1	250 mL Poly	Total Metals
		HNO3 (filtered)	1	250 mL Poly	Dissolved Metals
		HCl	3	40 mL VOA	CVOC SIM
		HCl	2	40 mL VOA	TOC
		HCl	3	40 mL VOA	Dissolved Gasses
		None	1	500 mL Poly	Alkalinity, Hexavalent Chromium, Anions
		HCl	1	250 mL Poly	Ferrous Iron
		None	2	1 L Amber	BNASIM

PURGE DATA

FLUTe Volume (g): 1.25

Number of purges: 4

Total purge volume (g): 4.25

COMMENTS

301.5 - 4.75 = 296.75
296.75 X 0.90 267.07
301.5 - 267.07 ~ 34.43

SAMPLER INFORMATION

Name (printed): Chris Bealum

Signature: Chris Bealum

INSTRUMENT CALIBRATION LOG

Credere Associates. LLC. 776 Main Street. Westbrook. ME 04092

Community Economy Environment

PROJECT NAME: Dow

DATE: 11/6/23

PROJECT NUMBER: 18001468

WEATHER: Partly cloudy, 45°F
(barometric pressure, temperature, precipitation)

WATER QUALITY INSTRUMENT SONDE MODEL/SN: YSI Quatro/21F100523

WATER QUALITY INSTRUMENT HANDSET MODEL/SN: YSI Pro+/18J100137

TURBIDITY METER MODEL/SN: Hach 2100Q/ 21040D000570

FIELD STAFF ASSIGNED TO EQUIPMENT: Haber

Temperature

Temp Probe Reading 12.8

Bulb Thermometer Reading —

pH 3 POINT CALIBRATION

ph 4 solution #: 22370021 pH 7 solution #: 43041410 pH 10 solution #: 22420:39

Expiration: 9/24 Expiration: 4/25 Expiration: 9/17/24

	Morning		Evening Check		Comment
	before	after	before	after (if needed)	
pH 4 calibration	4.23	3.96	4.79		
pH 7 calibration	7.18	6.99	7.49		
pH 10 calibration	9.69	9.99	9.96		

CONDUCTIVITY CALIBRATION

Conductivity solution #: 24005017 Expiration: 8/24

	Morning		Evening Check		Comment
	before	after	before	after (if needed)	
Conduc. Calibration	~~728~~ 737	~~1413~~ 1420	1550		

DO Calibration

Morning Barometric Pressure (mm Hg): 761.3 Evening Barometric Pressure (mmHg): 759.5 Zero DO solution #: 20470161

Calibration value*: 100 Calibration value*: 100 Expiration: 11/25

	Morning		Evening Check		Comment
	before	after	before	after (if needed)	
DO Calibration	105	99.0	100.8		
Zero DO Check	0.00	NA	0.00	NA	

ORP Calibration

ORP solution #: 22130200 Morning Solution temperature: 12.8°C Evening Solution temperature: 8.6

Expiration: 4/27 Adjusted zobell reading*: 246.6 Adjusted zobell reading*: 251.8

	Morning		Evening Check		Comment
	before	after	before	after (if needed)	
ORP Calibration	243.7	246.7	253.6		

TURBIDITY CHECK

	Morning		Evening Check		Comment
	before	after (if needed)	before	after (if needed)	
10 NTU check	10.5		11.0		
20 NTU check	20.5		21.7		
100 NTU check	97.3		101		
800 NTU check	791		813		

CALIBRATOR SIGNATURE

[signature]

* see second page attachment for adjustment tables

INSTRUMENT CALIBRATION LOG

Credere Associates. LLC. 776 Main Street. Westbrook. ME 04092

Community Economy Environment

PROJECT NAME: DOW SY- USACE

DATE: 11/6/23

PROJECT NUMBER: ~~7~~ 18001468

WEATHER: 76L/OVERCAST/NO PRECIP FORECASTED/40's
(barometric pressure, temperature, precipitation)

WATER QUALITY INSTRUMENT SONDE MODEL/SN: YSI Quatro 22A100144

WATER QUALITY INSTRUMENT HANDSET MODEL/SN: YSI ProQ / 22B101958

TURBIDITY METER MODEL/SN: Hach 2100Q/ 15030C040050

FIELD STAFF ASSIGNED TO EQUIPMENT: IAN DESJARLAIS

Temperature

Temp Probe Reading 12.4

Bulb Thermometer Reading 12.3

pH 3 POINT CALIBRATION

ph 4 solution #: 22370021 pH 7 solution #: 43041410 pH 10 solution #: 22420139

Expiration: 9/24 Expiration: 4/25 Expiration: 9/17/24

	Morning		Evening Check		Comment
	before	after	before	after (if needed)	
pH 4 calibration	4.03	4.01	4.13		
pH 7 calibration	7.25	6.97	7.11	/	
pH 10 calibration	9.96	10.00	10.0	/	

CONDUCTIVITY CALIBRATION

Conductivity solution #: 24005017 Expiration: 8/24

	Morning		Evening Check		Comment
	before	after	before	after (if needed)	
Conduc. Calibration	1.414	1.413	1.287	/	DRIFT

DO Calibration

Morning Barometric Pressure (mm Hg): 762.4 Evening Barometric Pressure (mmHg): 762.2 Zero DO solution #: 20170161

Calibration value*: 100.2 Calibration value*: 100.3 Expiration: 11/25

	Morning		Evening Check		Comment
	before	after	before	after (if needed)	
DO Calibration	101.6	100.3	101.2	/	
Zero DO Check	0.28	NA	0.46	NA	

ORP Calibration

ORP solution #: 22130200 Morning Solution temperature: 12.4 Evening Solution temperature: 7.7

Expiration: 4/27 Adjusted zobell reading*: 241.8 Adjusted zobell reading*: ~254

	Morning		Evening Check		Comment
	before	after	before	after (if needed)	
ORP Calibration	239.2	241.8	246.5	/	DRIFT

TURBIDITY CHECK

	Morning		Evening Check		Comment
	before	after (if needed)	before	after (if needed)	
10 NTU check	9.84	/	10.7	/	/
20 NTU check	20.0	/	20.3	/	/
100 NTU check	99.0	/	113	/	/
800 NTU check	792.0	/	811	/	

CALIBRATOR SIGNATURE

[signature]

* see second page attachment for adjustment tables

INSTRUMENT CALIBRATION LOG

Credere Associates. LLC. 776 Main Street. Westbrook. ME 04092

PROJECT NAME: Former Dow Military Air DATE: 11/7/2023

PROJECT NUMBER: 18001468

WEATHER: Overcast, Rain Showers, 57°F
(barometric pressure, temperature, precipitation)

WATER QUALITY INSTRUMENT SONDE MODEL/SN: YSI Quatro 21M 100503

WATER QUALITY INSTRUMENT HANDSET MODEL/SN: YSI Pro1 / 17E100949

TURBIDITY METER MODEL/SN: Hach 2100Q/ 22070D000408

FIELD STAFF ASSIGNED TO EQUIPMENT: Grant Kern

Temperature
Temp Probe Reading 7.6°C
Bulb Thermometer Reading 7.7°C

pH 3 POINT CALIBRATION

ph 4 solution #: 22370021 Expiration: 9/24
pH 7 solution #: 430 41 410 Expiration: 4/2025
pH 10 solution #: 22420139 Expiration: 9/17/2024

	Morning		Evening Check		
	before	after	before	after (if needed)	Comment
pH 4 calibration	4.39	4.00	4.39	4.00	
pH 7 calibration	8.32	7.01	7.32	7.00	
pH 10 calibration	9.88	10.00	9.42	9.99	

CONDUCTIVITY CALIBRATION

Conductivity solution #: 24005017 Expiration: 8/2024

	Morning		Evening Check		
	before	after	before	after (if needed)	Comment
Conduc. Calibration	1.553	1.413	1.402	1.413	

DO Calibration

Morning
Barometric Pressure (mm Hg): 752.4
Calibration value*: 99.1

Evening
Barometric Pressure (mmHg): 746.7
Calibration value*: 98.1

Zero DO solution #: 20470161
Expiration: 11/25

	Morning		Evening Check		
	before	after	before	after (if needed)	Comment
DO Calibration	90.5	98.7	95.2	97.8	
Zero DO Check	0.4	NA	0.8	NA	

ORP Calibration

ORP solution #: 22130200
Expiration: 4/27

Morning
Solution temperature: 7.7°C
Adjusted zobell reading*: 253.9

Evening
Solution temperature: 11.2
Adjusted zobell reading*: 248.8

	Morning		Evening Check		
	before	after	before	after (if needed)	Comment
ORP Calibration	251.2	253.9	249.0		

TURBIDITY CHECK

	Morning		Evening Check		
	before	after (if needed)	before	after (if needed)	Comment
10 NTU check	9.64		10.6		
20 NTU check	20.3		21.7		
100 NTU check	100		100		
800 NTU check	794		806		

CALIBRATOR SIGNATURE

* see second page attachment for adjustment tables

INSTRUMENT CALIBRATION LOG

Credere Associates. LLC. 776 Main Street. Westbrook. ME 04092

PROJECT NAME: DOW S4 - USACE

DATE: 11/7/23

PROJECT NUMBER: 18001468

WEATHER: 751.5/50°F) RAINING
(barometric pressure, temperature, precipitation)

WATER QUALITY INSTRUMENT SONDE MODEL/SN: YSI QUATRO / 22A100144

WATER QUALITY INSTRUMENT HANDSET MODEL/SN: YSI ProQuat 22B101958

TURBIDITY METER MODEL/SN: Hach 2100Q/ 15030C040050

FIELD STAFF ASSIGNED TO EQUIPMENT: IAN DESJARLAIS

Temperature

Temp Probe Reading 7.2

Bulb Thermometer Reading 7.3

pH 3 POINT CALIBRATION

pH 4 solution #: 22370021 Expiration: 9/24

pH 7 solution #: 430 4/410 Expiration: 4/25

pH 10 solution #: 22420139 Expiration: 9/17/24

	Morning		Evening Check		
	before	after	before	after (if needed)	Comment
pH 4 calibration	4.03	4.03	3.97		
pH 7 calibration	6.96	6.99	6.99		
pH 10 calibration	10.1	10.1	10.2		

CONDUCTIVITY CALIBRATION

Conductivity solution #: 2400507 Expiration: 8/24

	Morning		Evening Check		
	before	after	before	after (if needed)	Comment
Conduc. Calibration	1260	1413	1466	✓	DRIFT

DO Calibration

Morning
Barometric Pressure (mm Hg): 751.5
Calibration value*: 98.6

Evening
Barometric Pressure (mmHg): 745.9
Calibration value*: 98.2

Zero DO solution #: 20470161
Expiration: 11/25

	Morning		Evening Check		
	before	after	before	after (if needed)	Comment
DO Calibration	95.8	98.9	100.2	✓	✓
Zero DO Check	0.40	NA	0.47	NA	

ORP Calibration

ORP solution #: 2213020D Expiration: 4/27

Morning
Solution temperature: 7.3
Adjusted zobell reading*: 254.1

Evening
Solution temperature: 11.4
Adjusted zobell reading*: 248.6

	Morning		Evening Check		
	before	after	before	after (if needed)	Comment
ORP Calibration	250.5	254.1	246.0	✓	✓

TURBIDITY CHECK

	Morning		Evening Check		
	before	after (if needed)	before	after (if needed)	Comment
10 NTU check	8.81		10.2		
20 NTU check	19.5		22.0		
100 NTU check	99.1		108.0		
800 NTU check	787		791.0		

CALIBRATOR SIGNATURE

* see second page attachment for adjustment tables

INSTRUMENT CALIBRATION LOG

Credere Associates. LLC. 776 Main Street. Westbrook. ME 04092

PROJECT NAME: Dow DATE: 11/7/23

PROJECT NUMBER: 18014684

WEATHER: Light rain, 50°F
(barometric pressure, temperature, precipitation)

WATER QUALITY INSTRUMENT SONDE MODEL/SN: YSI Pro10 / 19F100586

WATER QUALITY INSTRUMENT HANDSET MODEL/SN: YSI Pro+ / 21K100829

TURBIDITY METER MODEL/SN: Hach 2100Q/ 16030C048765

FIELD STAFF ASSIGNED TO EQUIPMENT: Peter Haber

Temperature
Temp Probe Reading 7.0°C

Bulb Thermometer Reading 7.6°C

pH 3 POINT CALIBRATION

ph 4 solution #: 22370021 pH 7 solution #: 4304440 pH 10 solution #: 22420139

Expiration: 9/24 Expiration: ~~4~~ 4/25 Expiration: 9/17/24

	Morning		Evening Check		
	before	after	before	after (if needed)	Comment
pH 4 calibration	3.94	3.98	3.97	/	
pH 7 calibration	7.10	6.99	7.01	/	
pH 10 calibration	9.87	10.00	9.87	/	

CONDUCTIVITY CALIBRATION

Conductivity solution #: 2400517 Expiration: 8/24

	Morning		Evening Check		
	before	after	before	after (if needed)	Comment
Conduc. Calibration	959	942	1291	/	

DO Calibration

Morning Barometric Pressure (mm Hg): 748.6 Evening Barometric Pressure (mmHg): 742.7 Zero DO solution #: 20470161

Calibration value*: 98.5 Calibration value*: 97.8 Expiration: 11/25

	Morning		Evening Check		
	before	after	before	after (if needed)	Comment
DO Calibration	101.9	98.6	98.2	/	
Zero DO Check	1.5	NA	0.39	NA	

ORP Calibration

ORP solution #: 22130200 Morning Solution temperature: 7.0°C Evening Solution temperature: 11.2

Expiration: 4/27 Adjusted zobell reading*: 254.4 Adjusted zobell reading*: 249

	Morning		Evening Check		
	before	after	before	after (if needed)	Comment
ORP Calibration	252.9	254.4	246.7	/	

TURBIDITY CHECK

	Morning		Evening Check		
	before	after (if needed)	before	after (if needed)	Comment
10 NTU check	11.7	/	12.4	/	DRIFT
20 NTU check	22.8	/	22.2	/	DRIFT
100 NTU check	109	/	109	/	DRIFT
800 NTU check	780	7	770	/	DRIFT

CALIBRATOR SIGNATURE

Peter Haber

* see second page attachment for adjustment tables

INSTRUMENT CALIBRATION LOG

Credere Associates. LLC. 776 Main Street. Westbrook. ME 04092

Community Economy Environment

PROJECT NAME: Former Dow Salvage Yard DATE: 11/07/23

PROJECT NUMBER: 18001468

WEATHER: light rain, Cloudy, 50°F
(barometric pressure, temperature, precipitation)

WATER QUALITY INSTRUMENT SONDE MODEL/SN: YSI Prot, 21F100523

WATER QUALITY INSTRUMENT HANDSET MODEL/SN: YSI Prot, 18J100137

TURBIDITY METER MODEL/SN: Hach 2100Q/ 21040D000570

FIELD STAFF ASSIGNED TO EQUIPMENT: C. Beahm

Temperature

Temp Probe Reading 7.6

Bulb Thermometer Reading 7.8

pH 3 POINT CALIBRATION

ph 4 solution #: 22370021 pH 7 solution #: 43041410 pH 10 solution #: 224201389

Expiration: 9/24 Expiration: 4/25 Expiration: 9/17/24

	Morning		Evening Check		Comment
	before	after	before	after (if needed)	
pH 4 calibration	5.15	4.07	4.92		
pH 7 calibration	7.57	7.02	7.95	7.00	
pH 10 calibration	10.15	10.04	9.04		

CONDUCTIVITY CALIBRATION

Conductivity solution #: 24005017 Expiration: 8/24

	Morning		Evening Check		Comment
	before	after	before	after (if needed)	
Conduc. Calibration	2.962	1.410	1.29		

DO Calibration

Morning Barometric Pressure (mm Hg): 750.5 Evening Barometric Pressure (mmHg): 745.0 Zero DO solution #: 20470161

Calibration value*: 100.6 Calibration value*: 98 Expiration: 11/25

	Morning		Evening Check		Comment
	before	after	before	after (if needed)	
DO Calibration	100.8	100.6	96.6		
Zero DO Check	0.3	NA	0.3	NA	

ORP Calibration

ORP solution #: 22130200 Morning Solution temperature: 7.6 Evening Solution temperature: 11.2

Expiration: 4/27 Adjusted zobell reading*: 254.4 Adjusted zobell reading*: 249.2

	Morning		Evening Check		Comment
	before	after	before	after (if needed)	
ORP Calibration	256.4	254.3	244.9		

TURBIDITY CHECK

	Morning		Evening Check		Comment
	before	after (if needed)	before	after (if needed)	
10 NTU check	11.4		10.6		
20 NTU check	20.7		19.0		
100 NTU check	101		104		
800 NTU check	812		834		

CALIBRATOR SIGNATURE

[signature]



* see second page attachment for adjustment tables

INSTRUMENT CALIBRATION LOG

Credere Associates. LLC. 776 Main Street. Westbrook. ME 04092

PROJECT NAME: Former Dow Salvage DATE: 11/08/23

PROJECT NUMBER: 180214.8

WEATHER: Overcast, 32°F, wind 5-10mph
(barometric pressure, temperature, precipitation)

WATER QUALITY INSTRUMENT SONDE MODEL/SN: YSI Pro+, 21F100523

WATER QUALITY INSTRUMENT HANDSET MODEL/SN: YSI Prot, 18J100137

TURBIDITY METER MODEL/SN: Hach 2100Q/ 21040D000570

FIELD STAFF ASSIGNED TO EQUIPMENT: C. Beahm

Temperature
Temp Probe Reading 3.3
Bulb Thermometer Reading 3.4

pH 3 POINT CALIBRATION

ph 4 solution #: 43041410 pH 7 solution #: 22370021 pH 10 solution #: 22420139
Expiration: 4/25 Expiration: 9/24 Expiration: 9/11/24

	Morning		Evening Check		
	before	after	before	after (if needed)	Comment
pH 4 calibration	2.78	4.01	4.29		
pH 7 calibration	5.87	7.00	7.19		
pH 10 calibration	9.00	10.03	10.57		

CONDUCTIVITY CALIBRATION

Conductivity solution #: 24005017 Expiration: 8/24

	Morning		Evening Check		
	before	after	before	after (if needed)	Comment
Conduc. Calibration	1563	1413	1321		

DO Calibration Morning
Barometric Pressure (mm Hg): 752.5 Evening Barometric Pressure (mmHg): 752.7 Zero DO solution #: 24701161

Calibration value*: 99.8 Calibration value*: 99.9 Expiration: 11/25

	Morning		Evening Check		
	before	after	before	after (if needed)	Comment
DO Calibration	104.4	99.9	98.3		
Zero DO Check	0.3	NA	0.4	NA	

ORP Calibration Morning
ORP solution #: 22170200 Solution temperature: 3.4 Evening Solution temperature: 4.8

Expiration: 4/27 Adjusted zobell reading*: 269.9 Adjusted zobell reading*: 257.0

	Morning		Evening Check		
	before	after	before	after (if needed)	Comment
ORP Calibration	261.6	269.9	268.8		

TURBIDITY CHECK

	Morning		Evening Check		
	before	after (if needed)	before	after (if needed)	Comment
10 NTU check	10.5		11.9		
20 NTU check	20.6		22.7		
100 NTU check	103		106		
800 NTU check	778		824		

CALIBRATOR SIGNATURE

* see second page attachment for adjustment tables

INSTRUMENT CALIBRATION LOG

Credere Associates. LLC. 776 Main Street. Westbrook. ME 04092

PROJECT NAME: DOW 5Y - USACE

DATE: 11/8/23

PROJECT NUMBER: 18001468

WEATHER: 753 / 30s / PTLY CLOUDY
(barometric pressure, temperature, precipitation)

WATER QUALITY INSTRUMENT SONDE MODEL/SN: YSI EXO2 22A100,44

WATER QUALITY INSTRUMENT HANDSET MODEL/SN: YSI Pro20i / 22B101958

TURBIDITY METER MODEL/SN: Hach 2100Q/ 15030C010050

FIELD STAFF ASSIGNED TO EQUIPMENT: IAN DESJARLAIS

Temperature

Temp Probe Reading 3.5

Bulb Thermometer Reading 3.6

pH 3 POINT CALIBRATION

ph 4 solution #: 22370021 Expiration: 9/24

pH 7 solution #: 43041410 Expiration: 4/25

pH 10 solution #: 22426134 Expiration: 9/17/24

	Morning		Evening Check		
	before	after	before	after (if needed)	Comment
pH 4 calibration	4.25	3.96	4.03	/	/
pH 7 calibration	7.07	7.01	6.83	/	
pH 10 calibration	10.12	10.02	9.58	/	

CONDUCTIVITY CALIBRATION

Conductivity solution #: 24005019 Expiration: 8/24

	Morning		Evening Check		
	before	after	before	after (if needed)	Comment
Conduc. Calibration	1604	1413	1293	/	DRIFT

DO Calibration Morning

Barometric Pressure (mm Hg): 753.7

Calibration value*: 99.2

Evening

Barometric Pressure (mmHg): 755.5

Calibration value*: 99.1

Zero DO solution #: 20470161

Expiration: 11/25

	Morning		Evening Check		
	before	after	before	after (if needed)	Comment
DO Calibration	98.8	99.8	100.1	/	/
Zero DO Check	0.82	NA	0.52	NA	ZERO DO NOT MET

ORP Calibration

ORP solution #: 22130200

Expiration: 4/27

Morning

Solution temperature: 35°

Adjusted zobell reading*: 258.95

Evening

Solution temperature: 4.5

Adjusted zobell reading*: 257.6

	Morning		Evening Check		
	before	after	before	after (if needed)	Comment
ORP Calibration	257.6	259.2	247.9	/	DRIFT

TURBIDITY CHECK

	Morning		Evening Check		
	before	after (if needed)	before	after (if needed)	Comment
10 NTU check	9.89	/	9.86	/	/
20 NTU check	20.2		20.3		
100 NTU check	98.8		99.1	/	
800 NTU check	793		802		/

CALIBRATOR SIGNATURE

* see second page attachment for adjustment tables

INSTRUMENT CALIBRATION LOG

Credere Associates. LLC. 776 Main Street. Westbrook. ME 04092

PROJECT NAME: Dow

DATE: 11/08/23

PROJECT NUMBER: 18001468

WEATHER: Mostly Cloudy, 35°F
(barometric pressure, temperature, precipitation)

WATER QUALITY INSTRUMENT SONDE MODEL/SN: YSI Quatro, 19F101686

WATER QUALITY INSTRUMENT HANDSET MODEL/SN: YSI Pro+, 21K100829

TURBIDITY METER MODEL/SN: Hach 2100Q/ 16030C048465

FIELD STAFF ASSIGNED TO EQUIPMENT: P. Haber

Temperature

Temp Probe Reading: 3.1

Bulb Thermometer Reading: 3.0

pH 3 POINT CALIBRATION

ph 4 solution #: 22370121 — Expiration: 9/24

pH 7 solution #: 43071410 — Expiration: 4/25

pH 10 solution #: 22420139 — Expiration: 9/17/24

	Morning		Evening Check		
	before	after	before	after (if needed)	Comment
pH 4 calibration	3.97	4.00	4.03		
pH 7 calibration	6.90	7.00	6.95		
pH 10 calibration	9.96	10.02	10.02		

CONDUCTIVITY CALIBRATION

Conductivity solution #: 24075017 — Expiration: 8/24

	Morning		Evening Check		
	before	after	before	after (if needed)	Comment
Conduc. Calibration	1795	1336	1302		

DO Calibration

Morning Barometric Pressure (mm Hg): 750.3 — Calibration value*: 94

Evening Barometric Pressure (mmHg): 750.4 — Calibration value*: 99

Zero DO solution #: 24470161 — Expiration: 11/25

	Morning		Evening Check		
	before	after	before	after (if needed)	Comment
DO Calibration	96.9	98.7	102.1		
Zero DO Check	3.3	NA	2.6	NA	

ORP Calibration

ORP solution #: 22130200 — Expiration: 4/27

Morning Solution temperature: 3.1 — Adjusted zobell reading*: 259.6

Evening Solution temperature: 4.7 — Adjusted zobell reading*: 258.3

	Morning		Evening Check		
	before	after	before	after (if needed)	Comment
ORP Calibration	258.2	259.6	268.5		

TURBIDITY CHECK

	Morning		Evening Check		
	before	after (if needed)	before	after (if needed)	Comment
10 NTU check	11.2		11.9		
20 NTU check	22.7		22.4		
100 NTU check	103		115		
800 NTU check	796		792		

CALIBRATOR SIGNATURE

Peter Haber

* see second page attachment for adjustment tables

INSTRUMENT CALIBRATION LOG

Credere Associates. LLC. 776 Main Street. Westbrook. ME 04092

Community Economy Environment

PROJECT NAME: Dow

DATE: 11/8/2023

PROJECT NUMBER: 18001468

WEATHER: Partly Cloudy, 35°F
(barometric pressure, temperature, precipitation)

WATER QUALITY INSTRUMENT SONDE MODEL/SN: YSI Quattro/ 21M100503

WATER QUALITY INSTRUMENT HANDSET MODEL/SN: YSI Pro1 / 17E100949

TURBIDITY METER MODEL/SN: Hach 2100Q/ 220700000408

FIELD STAFF ASSIGNED TO EQUIPMENT: Grant Kern

Temperature

Temp Probe Reading 3.1°C

Bulb Thermometer Reading 3.1°C

pH 3 POINT CALIBRATION

ph 4 solution #: 22370021 pH 7 solution #: 43041410 pH 10 solution #: 22420439

Expiration: 9/24 Expiration: 4/25 Expiration: 9/17/24

	Morning		Evening Check		Comment
	before	after	before	after (if needed)	
pH 4 calibration	4.07	4.00	4.41		
pH 7 calibration	6.50	7.00	7.26		
pH 10 calibration	10.33	10.01	10.29		

CONDUCTIVITY CALIBRATION

Conductivity solution #: 240050.7 Expiration: 8/24

	Morning		Evening Check		Comment
	before	after	before	after (if needed)	
Conduc. Calibration	1.623	1.413	1.390		

DO Calibration

Morning Barometric Pressure (mm Hg): 754.8 Evening Barometric Pressure (mmHg): 755.7 Zero DO solution #: 20470161

Calibration value*: 99.4 Calibration value*: 99 Expiration: 11/25

	Morning		Evening Check		Comment
	before	after	before	after (if needed)	
DO Calibration	107.6	99.5	111.0		
Zero DO Check	0.1	NA	0.4	NA	

ORP Calibration

ORP solution #: 22130200 Morning Solution temperature: 3.1°C Evening Solution temperature: 4.5

Expiration: 4/27 Adjusted zobell reading*: 259 Adjusted zobell reading*: 257.0

	Morning		Evening Check		Comment
	before	after	before	after (if needed)	
ORP Calibration	260.2	259.0	245.8		

TURBIDITY CHECK

	Morning		Evening Check		Comment
	before	after (if needed)	before	after (if needed)	
10 NTU check	9.97		10.2		
20 NTU check	20.3		20.8		
100 NTU check	99.6		103		
800 NTU check	792		803		

CALIBRATOR SIGNATURE

* see second page attachment for adjustment tables

INSTRUMENT CALIBRATION LOG

Credere Associates. LLC. 776 Main Street. Westbrook. ME 04092

Community Economy Environment

PROJECT NAME: Dow

DATE: 11/09/23

PROJECT NUMBER: 18001468

WEATHER: 756.5 ~~758.9~~, 30°F, clear
(barometric pressure, temperature, precipitation)

WATER QUALITY INSTRUMENT SONDE MODEL/SN: YSI Quatre, 21F100523

WATER QUALITY INSTRUMENT HANDSET MODEL/SN: YSI Pro+, 18J100137

TURBIDITY METER MODEL/SN: Hach 2100Q/ 21040D000570

FIELD STAFF ASSIGNED TO EQUIPMENT: Beahm

Temperature

Temp Probe Reading -0.3

Bulb Thermometer Reading 0.1

pH 3 POINT CALIBRATION

ph 4 solution #: 22370021 pH 7 solution #: 43041410 pH 10 solution #: 22420139

Expiration: 9/24 Expiration: 4/25 Expiration: 9/17/24

	Morning		Evening Check		Comment
	before	after	before	after (if needed)	
pH 4 calibration	3.92	4.00	4.04		
pH 7 calibration	7.07	7.00	7.15		
pH 10 calibration	9.93	10.00	9.94		

CONDUCTIVITY CALIBRATION

Conductivity solution #: 24005017 Expiration: 8/24

	Morning		Evening Check		Comment
	before	after	before	after (if needed)	
Conduc. Calibration	1.348	1.41	1.468		

DO Calibration

Morning Barometric Pressure (mm Hg): ~~759.0~~ 756.5 Evening Barometric Pressure (mmHg): 754.6 Zero DO solution #: 20470161

Calibration value*: 99.2 Calibration value*: 99.1 Expiration: 11/25

	Morning		Evening Check		Comment
	before	after	before	after (if needed)	
DO Calibration	101.7	99.4	98.7		
Zero DO Check	0.5	NA	0.4	NA	

ORP Calibration

ORP solution #: 22130200 Morning Solution temperature: -0.3 Evening Solution temperature: 1.3

Expiration: 4/27 Adjusted zobell reading*: 264.0 Adjusted zobell reading*: 262.2

	Morning		Evening Check		Comment
	before	after	before	after (if needed)	
ORP Calibration	277.4	264.1	263.6		

TURBIDITY CHECK

	Morning		Evening Check		Comment
	before	after (if needed)	before	after (if needed)	
10 NTU check	10.5		10.7		
20 NTU check	21.0		21.9		
100 NTU check	100		106		
800 NTU check	813		823		

CALIBRATOR SIGNATURE

* see second page attachment for adjustment tables

INSTRUMENT CALIBRATION LOG

Credere Associates. LLC. 776 Main Street. Westbrook. ME 04092

PROJECT NAME: Dow

DATE: 11/9/23

PROJECT NUMBER: 18001468

WEATHER: Overcast 30°F
(barometric pressure, temperature, precipitation)

WATER QUALITY INSTRUMENT SONDE MODEL/SN: YSI 2wster 19F101686

WATER QUALITY INSTRUMENT HANDSET MODEL/SN: YSI Pro 21K101759

TURBIDITY METER MODEL/SN: Hach 2100Q/ 16030048465

FIELD STAFF ASSIGNED TO EQUIPMENT: P. Hall

Temperature

Temp Probe Reading -0.4

Bulb Thermometer Reading -0.2

pH 3 POINT CALIBRATION

ph 4 solution #: 22370021 pH 7 solution #: 43041410 pH 10 solution #: 22420139

Expiration: 9/25 Expiration: 4/25 Expiration: 9/17/24

	Morning		Evening Check		
	before	after	before	after (if needed)	Comment
pH 4 calibration	4.12	3.89	4.08		
pH 7 calibration	6.99	6.97	7.12		
pH 10 calibration	10.10	10.00	10.09		

CONDUCTIVITY CALIBRATION

Conductivity solution #: 24005017 Expiration: 8/24

	Morning		Evening Check		
	before	after	before	after (if needed)	Comment
Conduc. Calibration	1681	1510	1563		

DO Calibration Morning

Barometric Pressure (mm Hg): 754.4 Evening Barometric Pressure (mmHg): 754.6 Zero DO solution #: 20470161

Calibration value*: 94 Calibration value*: 99.1 Expiration: 11/25

	Morning		Evening Check		
	before	after	before	after (if needed)	Comment
DO Calibration	101.7	94.3	98.2		
Zero DO Check	2.9	NA	0.4	NA	

ORP Calibration Morning Evening

ORP solution #: 22130220 Solution temperature: -0.4 Solution temperature: 1.3

Expiration: 4/27 Adjusted zobell reading*: 263.5 Adjusted zobell reading*: 262.2

	Morning		Evening Check		
	before	after	before	after (if needed)	Comment
ORP Calibration	275.6	263.5	262.8		

TURBIDITY CHECK

	Morning		Evening Check		
	before	after (if needed)	before	after (if needed)	Comment
10 NTU check	11.0		10.7		
20 NTU check	21.6		21.2		
100 NTU check	104		110		
800 NTU check	795		812		

CALIBRATOR SIGNATURE

Pat Hall

* see second page attachment for adjustment tables

INSTRUMENT CALIBRATION LOG

Credere Associates. LLC. 776 Main Street. Westbrook. ME 04092

Community Economy Environment

PROJECT NAME: DOW SY-USACE

DATE: 11/9/23

PROJECT NUMBER: 18001468

WEATHER: 758.1 / 30 S / SNOW FOR FEASTER
(barometric pressure, temperature, precipitation)

WATER QUALITY INSTRUMENT SONDE MODEL/SN: YSI QUATRO / 22A100144

WATER QUALITY INSTRUMENT HANDSET MODEL/SN: YSI PRO / 22B10.958

TURBIDITY METER MODEL/SN: Hach 2100Q/ 15030C040050

FIELD STAFF ASSIGNED TO EQUIPMENT: IAN DESMARLAIS

Temperature

Temp Probe Reading -0.1

Bulb Thermometer Reading -0.1

pH 3 POINT CALIBRATION

ph 4 solution #: 22370021 pH 7 solution #: 43041410 pH 10 solution #: 22420139

Expiration: 9/24 Expiration: 9/25 Expiration: 9/17/24

	Morning		Evening Check		Comment
	before	after	before	after (if needed)	
pH 4 calibration	6.06	4.0	3.90		
pH 7 calibration	6.98	7.0	6.70		
pH 10 calibration	9.01	10.0	9.49		

CONDUCTIVITY CALIBRATION

Conductivity solution #: 24005017 Expiration: 8/24

	Morning		Evening Check		Comment
	before	after	before	after (if needed)	
Conduc. Calibration	1.301	1.413	1.488		

DO Calibration

Morning Barometric Pressure (mm Hg): 758.1 Evening Barometric Pressure (mmHg): 756.9 Zero DO solution #: 20170161

Calibration value*: 99.8 + Calibration value*: 99.6 Expiration: 11/25

	Morning		Evening Check		Comment
	before	after	before	after (if needed)	
DO Calibration	91.7	99.5	98.6		
Zero DO Check	0.3	NA	0.5	NA	SLOW STABILIZATION

ORP Calibration

ORP solution #: 22130200 Morning Solution temperature: -0.1 Evening Solution temperature: -0.1

Expiration: 4/27 Adjusted zobell reading*: 263.6 Adjusted zobell reading*: 263.6

	Morning		Evening Check		Comment
	before	after	before	after (if needed)	
ORP Calibration	262.6	263.5	265.0		

TURBIDITY CHECK

	Morning		Evening Check		Comment
	before	after (if needed)	before	after (if needed)	
10 NTU check	9.84		11.3		
20 NTU check	20.0		20.3		
100 NTU check	99.6		103		
800 NTU check	793		812		

CALIBRATOR SIGNATURE

* see second page attachment for adjustment tables

+ PROQUATRO AUTO CALCS DO CALIBRATION VALUE FOR PRESSURE

APPENDIX F

LABORATORY ANALYTICAL REPORTS

Laboratory Report

Absolute Resource associates
124 Heritage Avenue Portsmouth NH 03801

Allison Drouin
CREDERE Associates
776 Main Street
Westbrook, ME 04092

PO Number: 18001468
Job ID: 64446
Date Received: 2/6/23

Project: Dow 18001468

Attached please find results for the analysis of the samples received on the date referenced above.

Unless otherwise noted in the attached report, the analyses performed met the requirements of Absolute Resource Associates' Quality Assurance Plan. The Standard Operating Procedures are based upon USEPA SW-846, USEPA Methods for Chemical Analysis of Water and Wastewater, Standard Methods for the Examination of Water and Wastewater and other recognized methodologies. The results contained in this report pertain only to the samples as indicated on the chain of custody.

Absolute Resource Associates maintains certification with the agencies listed below. The reported results apply to the sample(s) in the condition as received at the time the laboratory took custody. This report shall not be reproduced except in full, without written approval of the laboratory. The liability of ARA is limited to the cost of the requested analyses, unless otherwise agreed upon in writing.

We appreciate the opportunity to provide laboratory services. If you have any questions regarding the enclosed report, please contact the laboratory and we will be glad to assist you.

Sincerely,
Absolute Resource Associates

Aaron DeWees
Chief Operating Officer

Date of Approval: 4/6/2023
Total number of pages: 149

Absolute Resource Associates Certifications

New Hampshire	1732	Massachusetts	M-NH902
Maine	NH902		

Absolute Resource associates

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Project ID: Dow 18001468

Sample Association Table

Field ID	Matrix	Date-Time Sampled	Lab#	Analysis
SY-SB4R-1	Solid	2/1/2023 11:45	64446-001	
				ABN Extractables in solids by 8270 DoD
				Arsenic in solids by 6020
				Barium in solids by 6020
				Cadmium in solids by 6020
				Chromium in solids by 6020
				Combo: RCRA 8 Metals
				EPH in solids by MADEP Method
				Lead in solids by 6020
				Mercury in solids by 7471
				PCBs in solids by 8082 DoD
				SEDD Generation
				Selenium in solids by 6020
				Silver in solids by 6020
				Solids Digestion for ICPMS Analysis
				VOCs in solids list by 8260 DoD
				VPH in solids by MA DEP Method
SY-SB4R-10	Solid	2/1/2023 11:50	64446-002	
				ABN Extractables in solids by 8270 DoD
				Arsenic in solids by 6020
				Barium in solids by 6020
				Cadmium in solids by 6020
				Chromium in solids by 6020
				Combo: RCRA 8 Metals
				EPH in solids by MADEP Method
				Lead in solids by 6020
				Mercury in solids by 7471
				PCBs in solids by 8082 DoD
				Selenium in solids by 6020
				Silver in solids by 6020
				Solids Digestion for ICPMS Analysis
				VOCs in solids list by 8260 DoD
				VPH in solids by MA DEP Method
SY-SB4R-2	Solid	2/1/2023 11:55	64446-003	
				ABN Extractables in solids by 8270 DoD
				Arsenic in solids by 6020
				Barium in solids by 6020
				Cadmium in solids by 6020
				Chromium in solids by 6020
				Combo: RCRA 8 Metals
				EPH in solids by MADEP Method
				Lead in solids by 6020
				Mercury in solids by 7471
				PCBs in solids by 8082 DoD
				Selenium in solids by 6020
				Silver in solids by 6020
				Solids Digestion for ICPMS Analysis
				VOCs in solids list by 8260 DoD
				VPH in solids by MA DEP Method

Project ID: Dow 18001468

Sample Association Table

Field ID	Matrix	Date-Time Sampled	Lab#	Analysis
Trip Blank	Solid	2/1/2023 0:00	64446-004	
				Report on Weight As Received basis
				VOCs in solids list by 8260 DoD

Project ID: Dow 18001468
Job ID: 64446
Sample#: 64446-001
Sample ID: SY-SB4R-1
Matrix: Solid Percent Dry: 86.8% Results expressed on a dry weight basis.
Sampled: 2/1/23 11:45

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
dichlorodifluoromethane	0.027 U	0.11	0.027	0.014	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	18:43	SW5035A8260D
chloromethane	0.027 U	0.11	0.027	0.022	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	18:43	SW5035A8260D
vinyl chloride	0.027 U	0.11	0.027	0.015	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	18:43	SW5035A8260D
bromomethane	0.11 U	0.27	0.11	0.054	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	18:43	SW5035A8260D
chloroethane	0.027 U	0.11	0.027	0.011	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	18:43	SW5035A8260D
trichlorofluoromethane	0.027 U	0.11	0.027	0.015	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	18:43	SW5035A8260D
diethyl ether	0.027 U#	0.11	0.027	0.012	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	18:43	SW5035A8260D
acetone	0.22 U	2.7	0.22	0.036	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	18:43	SW5035A8260D
1,1-dichloroethene	0.027 U	0.11	0.027	0.022	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	18:43	SW5035A8260D
methylene chloride	0.027 U	0.11	0.027	0.025	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	18:43	SW5035A8260D
carbon disulfide	0.027 U	0.11	0.027	0.018	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	18:43	SW5035A8260D
methyl t-butyl ether (MTBE)	0.027 U#	0.11	0.027	0.016	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	18:43	SW5035A8260D
trans-1,2-dichloroethene	0.027 U	0.11	0.027	0.015	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	18:43	SW5035A8260D
ethyl t-butyl ether (ETBE)	0.027 U	0.11	0.027	0.015	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	18:43	SW5035A8260D
1,1-dichloroethane	0.027 U	0.11	0.027	0.010	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	18:43	SW5035A8260D
t-butanol (TBA)	0.27 U	2.7	0.27	0.14	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	18:43	SW5035A8260D
2-butanone (MEK)	0.22 U	0.33	0.22	0.060	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	18:43	SW5035A8260D
2,2-dichloropropane	0.027 U	0.11	0.027	0.015	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	18:43	SW5035A8260D
cis-1,2-dichloroethene	0.027 U	0.11	0.027	0.011	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	18:43	SW5035A8260D
chloroform	0.027 U	0.11	0.027	0.017	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	18:43	SW5035A8260D
bromochloromethane	0.027 U	0.11	0.027	0.0080	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	18:43	SW5035A8260D
tetrahydrofuran (THF)	0.22 U	0.54	0.22	0.092	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	18:43	SW5035A8260D
1,1,1-trichloroethane	0.027 U	0.11	0.027	0.017	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	18:43	SW5035A8260D
1,1-dichloropropene	0.027 U	0.11	0.027	0.015	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	18:43	SW5035A8260D
t-amyl-methyl ether (TAME)	0.027 U#	0.11	0.027	0.020	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	18:43	SW5035A8260D
carbon tetrachloride	0.027 U	0.11	0.027	0.0066	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	18:43	SW5035A8260D
1,2-dichloroethane	0.027 U	0.11	0.027	0.013	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	18:43	SW5035A8260D
benzene	0.033 J	0.11	0.027	0.011	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	18:43	SW5035A8260D
trichloroethene	0.027 U	0.11	0.027	0.011	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	18:43	SW5035A8260D
1,2-dichloropropane	0.027 U	0.11	0.027	0.012	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	18:43	SW5035A8260D
bromodichloromethane	0.027 U	0.11	0.027	0.014	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	18:43	SW5035A8260D
1,4-dioxane	2.2 U	2.7	2.2	0.64	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	18:43	SW5035A8260D
dibromomethane	0.027 U	0.11	0.027	0.014	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	18:43	SW5035A8260D
4-methyl-2-pentanone (MIBK)	0.027 U	0.49	0.027	0.013	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	18:43	SW5035A8260D
cis-1,3-dichloropropene	0.027 U	0.11	0.027	0.014	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	18:43	SW5035A8260D
toluene	0.11	0.11	0.027	0.011	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	18:43	SW5035A8260D
trans-1,3-dichloropropene	0.027 U	0.11	0.027	0.014	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	18:43	SW5035A8260D
2-hexanone	0.054 U	0.54	0.054	0.029	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	18:43	SW5035A8260D
1,1,2-trichloroethane	0.027 U	0.11	0.027	0.015	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	18:43	SW5035A8260D
1,3-dichloropropane	0.027 U	0.11	0.027	0.014	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	18:43	SW5035A8260D
tetrachloroethene	0.027 U	0.11	0.027	0.015	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	18:43	SW5035A8260D
dibromochloromethane	0.027 U	0.11	0.027	0.014	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	18:43	SW5035A8260D

Project ID: Dow 18001468
Job ID: 64446
Sample#: 64446-001
Sample ID: SY-SB4R-1
Matrix: Solid Percent Dry: 86.8% Results expressed on a dry weight basis.
Sampled: 2/1/23 11:45

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
1,2-dibromoethane (EDB)	0.027 U	0.11	0.027	0.013	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	18:43	SW5035A8260D
chlorobenzene	0.027 U	0.11	0.027	0.014	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	18:43	SW5035A8260D
1,1,1,2-tetrachloroethane	0.027 U	0.11	0.027	0.023	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	18:43	SW5035A8260D
ethylbenzene	0.021 J	0.11	0.027	0.012	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	18:43	SW5035A8260D
m&p-xylenes	0.10 J	0.11	0.054	0.027	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	18:43	SW5035A8260D
o-xylene	0.053 J	0.11	0.027	0.018	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	18:43	SW5035A8260D
styrene	0.027 U	0.11	0.027	0.012	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	18:43	SW5035A8260D
bromoform	0.027 U	0.11	0.027	0.015	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	18:43	SW5035A8260D
isopropylbenzene	0.027 U	0.11	0.027	0.016	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	18:43	SW5035A8260D
1,1,2,2-tetrachloroethane	0.027 U	0.11	0.027	0.017	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	18:43	SW5035A8260D
1,2,3-trichloropropane	0.027 U	0.11	0.027	0.014	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	18:43	SW5035A8260D
n-propylbenzene	0.027 U	0.11	0.027	0.016	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	18:43	SW5035A8260D
bromobenzene	0.027 U	0.11	0.027	0.016	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	18:43	SW5035A8260D
2-chlorotoluene	0.027 U	0.11	0.027	0.022	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	18:43	SW5035A8260D
4-chlorotoluene	0.027 U	0.11	0.027	0.014	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	18:43	SW5035A8260D
tert-butylbenzene	0.027 U	0.11	0.027	0.020	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	18:43	SW5035A8260D
1,2,4-trimethylbenzene	0.041 J	0.11	0.027	0.019	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	18:43	SW5035A8260D
sec-butylbenzene	0.027 U	0.11	0.027	0.015	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	18:43	SW5035A8260D
1,3-dichlorobenzene	0.027 U	0.11	0.027	0.021	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	18:43	SW5035A8260D
4-isopropyltoluene	0.027 U	0.11	0.027	0.018	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	18:43	SW5035A8260D
1,4-dichlorobenzene	0.027 U	0.11	0.027	0.017	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	18:43	SW5035A8260D
1,2-dichlorobenzene	0.027 U	0.11	0.027	0.017	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	18:43	SW5035A8260D
n-butylbenzene	0.027 U	0.11	0.027	0.017	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	18:43	SW5035A8260D
1,2-dibromo-3-chloropropane (DBCP)	0.054 U	0.11	0.054	0.032	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	18:43	SW5035A8260D
1,3,5-trimethylbenzene	0.027 U	0.11	0.027	0.015	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	18:43	SW5035A8260D
1,2,4-trichlorobenzene	0.027 U	0.11	0.027	0.019	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	18:43	SW5035A8260D
hexachlorobutadiene	0.054 U	0.11	0.054	0.032	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	18:43	SW5035A8260D
naphthalene	0.080 J	0.11	0.027	0.017	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	18:43	SW5035A8260D
1,2,3-trichlorobenzene	0.027 U	0.11	0.027	0.012	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	18:43	SW5035A8260D
Surrogate Recovery		Limits											
dibromofluoromethane SUR	99	78-114			%	1	LMM	2/8/23	12:56	15933	2/9/23	18:43	SW5035A8260D
toluene-D8 SUR	96	88-110			%	1	LMM	2/8/23	12:56	15933	2/9/23	18:43	SW5035A8260D
4-bromofluorobenzene SUR	92	86-115			%	1	LMM	2/8/23	12:56	15933	2/9/23	18:43	SW5035A8260D
a,a,a-trifluorotoluene SUR	108	70-130			%	1	LMM	2/8/23	12:56	15933	2/9/23	18:43	SW5035A8260D

 # = The percent recovery for the LCS/D was below the acceptance criteria. The reported result is an estimate.

Project ID: Dow 18001468
Job ID: 64446
Sample#: 64446-002
Sample ID: SY-SB4R-10
Matrix: Solid Percent Dry: 87.6% Results expressed on a dry weight basis.
Sampled: 2/1/23 11:50

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
dichlorodifluoromethane	0.026 U	0.10	0.026	0.014	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	19:14	SW5035A8260D
chloromethane	0.026 U	0.10	0.026	0.021	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	19:14	SW5035A8260D
vinyl chloride	0.026 U	0.10	0.026	0.014	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	19:14	SW5035A8260D
bromomethane	0.10 U	0.26	0.10	0.051	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	19:14	SW5035A8260D
chloroethane	0.026 U	0.10	0.026	0.010	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	19:14	SW5035A8260D
trichlorofluoromethane	0.026 U	0.10	0.026	0.014	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	19:14	SW5035A8260D
diethyl ether	0.026 U#	0.10	0.026	0.011	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	19:14	SW5035A8260D
acetone	0.20 U	2.6	0.20	0.034	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	19:14	SW5035A8260D
1,1-dichloroethene	0.026 U	0.10	0.026	0.021	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	19:14	SW5035A8260D
methylene chloride	0.026 U	0.10	0.026	0.023	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	19:14	SW5035A8260D
carbon disulfide	0.026 U	0.10	0.026	0.017	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	19:14	SW5035A8260D
methyl t-butyl ether (MTBE)	0.026 U#	0.10	0.026	0.015	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	19:14	SW5035A8260D
trans-1,2-dichloroethene	0.026 U	0.10	0.026	0.014	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	19:14	SW5035A8260D
ethyl t-butyl ether (ETBE)	0.026 U	0.10	0.026	0.014	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	19:14	SW5035A8260D
1,1-dichloroethane	0.026 U	0.10	0.026	0.0098	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	19:14	SW5035A8260D
t-butanol (TBA)	0.26 U	2.6	0.26	0.13	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	19:14	SW5035A8260D
2-butanone (MEK)	0.20 U	0.31	0.20	0.057	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	19:14	SW5035A8260D
2,2-dichloropropane	0.026 U	0.10	0.026	0.014	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	19:14	SW5035A8260D
cis-1,2-dichloroethene	0.026 U	0.10	0.026	0.010	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	19:14	SW5035A8260D
chloroform	0.026 U	0.10	0.026	0.016	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	19:14	SW5035A8260D
bromochloromethane	0.026 U	0.10	0.026	0.0076	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	19:14	SW5035A8260D
tetrahydrofuran (THF)	0.20 U	0.51	0.20	0.087	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	19:14	SW5035A8260D
1,1,1-trichloroethane	0.026 U	0.10	0.026	0.016	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	19:14	SW5035A8260D
1,1-dichloropropene	0.026 U	0.10	0.026	0.015	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	19:14	SW5035A8260D
t-amyl-methyl ether (TAME)	0.026 U#	0.10	0.026	0.019	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	19:14	SW5035A8260D
carbon tetrachloride	0.026 U	0.10	0.026	0.0062	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	19:14	SW5035A8260D
1,2-dichloroethane	0.026 U	0.10	0.026	0.012	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	19:14	SW5035A8260D
benzene	0.026 U	0.10	0.026	0.010	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	19:14	SW5035A8260D
trichloroethene	0.026 U	0.10	0.026	0.011	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	19:14	SW5035A8260D
1,2-dichloropropane	0.026 U	0.10	0.026	0.011	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	19:14	SW5035A8260D
bromodichloromethane	0.026 U	0.10	0.026	0.013	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	19:14	SW5035A8260D
1,4-dioxane	2.0 U	2.6	2.0	0.60	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	19:14	SW5035A8260D
dibromomethane	0.026 U	0.10	0.026	0.014	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	19:14	SW5035A8260D
4-methyl-2-pentanone (MIBK)	0.026 U	0.46	0.026	0.013	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	19:14	SW5035A8260D
cis-1,3-dichloropropene	0.026 U	0.10	0.026	0.013	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	19:14	SW5035A8260D
toluene	0.034 J	0.10	0.026	0.010	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	19:14	SW5035A8260D
trans-1,3-dichloropropene	0.026 U	0.10	0.026	0.013	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	19:14	SW5035A8260D
2-hexanone	0.051 U	0.51	0.051	0.027	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	19:14	SW5035A8260D
1,1,2-trichloroethane	0.026 U	0.10	0.026	0.014	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	19:14	SW5035A8260D
1,3-dichloropropane	0.026 U	0.10	0.026	0.013	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	19:14	SW5035A8260D
tetrachloroethene	0.026 U	0.10	0.026	0.014	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	19:14	SW5035A8260D
dibromochloromethane	0.026 U	0.10	0.026	0.014	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	19:14	SW5035A8260D

Project ID: Dow 18001468
Job ID: 64446
Sample#: 64446-002
Sample ID: SY-SB4R-10
Matrix: Solid Percent Dry: 87.6% Results expressed on a dry weight basis.
Sampled: 2/1/23 11:50

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
1,2-dibromoethane (EDB)	0.026 U	0.10	0.026	0.012	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	19:14	SW5035A8260D
chlorobenzene	0.026 U	0.10	0.026	0.013	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	19:14	SW5035A8260D
1,1,1,2-tetrachloroethane	0.026 U	0.10	0.026	0.022	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	19:14	SW5035A8260D
ethylbenzene	0.026 U	0.10	0.026	0.012	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	19:14	SW5035A8260D
m&p-xylenes	0.050 J	0.10	0.051	0.025	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	19:14	SW5035A8260D
o-xylene	0.021 J	0.10	0.026	0.017	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	19:14	SW5035A8260D
styrene	0.026 U	0.10	0.026	0.011	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	19:14	SW5035A8260D
bromoform	0.026 U	0.10	0.026	0.014	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	19:14	SW5035A8260D
isopropylbenzene	0.026 U	0.10	0.026	0.015	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	19:14	SW5035A8260D
1,1,2,2-tetrachloroethane	0.026 U	0.10	0.026	0.016	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	19:14	SW5035A8260D
1,2,3-trichloropropane	0.026 U	0.10	0.026	0.013	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	19:14	SW5035A8260D
n-propylbenzene	0.026 U	0.10	0.026	0.015	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	19:14	SW5035A8260D
bromobenzene	0.026 U	0.10	0.026	0.015	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	19:14	SW5035A8260D
2-chlorotoluene	0.026 U	0.10	0.026	0.021	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	19:14	SW5035A8260D
4-chlorotoluene	0.026 U	0.10	0.026	0.014	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	19:14	SW5035A8260D
tert-butylbenzene	0.026 U	0.10	0.026	0.019	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	19:14	SW5035A8260D
1,2,4-trimethylbenzene	0.021 J	0.10	0.026	0.018	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	19:14	SW5035A8260D
sec-butylbenzene	0.026 U	0.10	0.026	0.014	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	19:14	SW5035A8260D
1,3-dichlorobenzene	0.026 U	0.10	0.026	0.020	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	19:14	SW5035A8260D
4-isopropyltoluene	0.026 U	0.10	0.026	0.017	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	19:14	SW5035A8260D
1,4-dichlorobenzene	0.026 U	0.10	0.026	0.016	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	19:14	SW5035A8260D
1,2-dichlorobenzene	0.026 U	0.10	0.026	0.016	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	19:14	SW5035A8260D
n-butylbenzene	0.026 U	0.10	0.026	0.017	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	19:14	SW5035A8260D
1,2-dibromo-3-chloropropane (DBCP)	0.051 U	0.10	0.051	0.030	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	19:14	SW5035A8260D
1,3,5-trimethylbenzene	0.026 U	0.10	0.026	0.014	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	19:14	SW5035A8260D
1,2,4-trichlorobenzene	0.026 U	0.10	0.026	0.018	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	19:14	SW5035A8260D
hexachlorobutadiene	0.051 U	0.10	0.051	0.030	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	19:14	SW5035A8260D
naphthalene	0.051 J	0.10	0.026	0.016	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	19:14	SW5035A8260D
1,2,3-trichlorobenzene	0.026 U	0.10	0.026	0.012	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	19:14	SW5035A8260D
Surrogate Recovery		Limits											
dibromofluoromethane SUR	100	78-114			%	1	LMM	2/8/23	12:56	15933	2/9/23	19:14	SW5035A8260D
toluene-D8 SUR	97	88-110			%	1	LMM	2/8/23	12:56	15933	2/9/23	19:14	SW5035A8260D
4-bromofluorobenzene SUR	93	86-115			%	1	LMM	2/8/23	12:56	15933	2/9/23	19:14	SW5035A8260D
a,a,a-trifluorotoluene SUR	101	70-130			%	1	LMM	2/8/23	12:56	15933	2/9/23	19:14	SW5035A8260D

 # = The percent recovery for the LCS/D was below the acceptance criteria. The reported result is an estimate.

Project ID: Dow 18001468
Job ID: 64446
Sample#: 64446-003
Sample ID: SY-SB4R-2
Matrix: Solid Percent Dry: 80.2% Results expressed on a dry weight basis.
Sampled: 2/1/23 11:55

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
dichlorodifluoromethane	0.025 U	0.10	0.025	0.014	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	19:44	SW5035A8260D
chloromethane	0.025 U	0.10	0.025	0.021	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	19:44	SW5035A8260D
vinyl chloride	0.025 U	0.10	0.025	0.014	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	19:44	SW5035A8260D
bromomethane	0.10 U	0.25	0.10	0.051	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	19:44	SW5035A8260D
chloroethane	0.025 U	0.10	0.025	0.010	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	19:44	SW5035A8260D
trichlorofluoromethane	0.025 U	0.10	0.025	0.014	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	19:44	SW5035A8260D
diethyl ether	0.025 U#	0.10	0.025	0.011	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	19:44	SW5035A8260D
acetone	0.20 U	2.5	0.20	0.034	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	19:44	SW5035A8260D
1,1-dichloroethene	0.025 U	0.10	0.025	0.021	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	19:44	SW5035A8260D
methylene chloride	0.025 U	0.10	0.025	0.023	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	19:44	SW5035A8260D
carbon disulfide	0.025 U	0.10	0.025	0.017	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	19:44	SW5035A8260D
methyl t-butyl ether (MTBE)	0.025 U#	0.10	0.025	0.015	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	19:44	SW5035A8260D
trans-1,2-dichloroethene	0.025 U	0.10	0.025	0.014	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	19:44	SW5035A8260D
ethyl t-butyl ether (ETBE)	0.025 U	0.10	0.025	0.014	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	19:44	SW5035A8260D
1,1-dichloroethane	0.025 U	0.10	0.025	0.0098	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	19:44	SW5035A8260D
t-butanol (TBA)	0.25 U	2.5	0.25	0.13	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	19:44	SW5035A8260D
2-butanone (MEK)	0.20 U	0.31	0.20	0.057	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	19:44	SW5035A8260D
2,2-dichloropropane	0.025 U	0.10	0.025	0.014	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	19:44	SW5035A8260D
cis-1,2-dichloroethene	0.025 U	0.10	0.025	0.010	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	19:44	SW5035A8260D
chloroform	0.025 U	0.10	0.025	0.016	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	19:44	SW5035A8260D
bromochloromethane	0.025 U	0.10	0.025	0.0075	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	19:44	SW5035A8260D
tetrahydrofuran (THF)	0.20 U	0.51	0.20	0.086	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	19:44	SW5035A8260D
1,1,1-trichloroethane	0.025 U	0.10	0.025	0.016	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	19:44	SW5035A8260D
1,1-dichloropropene	0.025 U	0.10	0.025	0.015	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	19:44	SW5035A8260D
t-amyl-methyl ether (TAME)	0.025 U#	0.10	0.025	0.019	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	19:44	SW5035A8260D
carbon tetrachloride	0.025 U	0.10	0.025	0.0062	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	19:44	SW5035A8260D
1,2-dichloroethane	0.025 U	0.10	0.025	0.012	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	19:44	SW5035A8260D
benzene	0.025 U	0.10	0.025	0.010	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	19:44	SW5035A8260D
trichloroethene	0.025 U	0.10	0.025	0.010	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	19:44	SW5035A8260D
1,2-dichloropropane	0.025 U	0.10	0.025	0.011	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	19:44	SW5035A8260D
bromodichloromethane	0.025 U	0.10	0.025	0.013	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	19:44	SW5035A8260D
1,4-dioxane	2.0 U	2.5	2.0	0.60	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	19:44	SW5035A8260D
dibromomethane	0.025 U	0.10	0.025	0.013	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	19:44	SW5035A8260D
4-methyl-2-pentanone (MIBK)	0.025 U	0.46	0.025	0.013	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	19:44	SW5035A8260D
cis-1,3-dichloropropene	0.025 U	0.10	0.025	0.013	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	19:44	SW5035A8260D
toluene	0.011 J	0.10	0.025	0.010	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	19:44	SW5035A8260D
trans-1,3-dichloropropene	0.025 U	0.10	0.025	0.013	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	19:44	SW5035A8260D
2-hexanone	0.051 U	0.51	0.051	0.027	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	19:44	SW5035A8260D
1,1,2-trichloroethane	0.025 U	0.10	0.025	0.014	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	19:44	SW5035A8260D
1,3-dichloropropane	0.025 U	0.10	0.025	0.013	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	19:44	SW5035A8260D
tetrachloroethene	0.025 U	0.10	0.025	0.014	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	19:44	SW5035A8260D
dibromochloromethane	0.025 U	0.10	0.025	0.014	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	19:44	SW5035A8260D

Project ID: Dow 18001468
Job ID: 64446
Sample#: 64446-003
Sample ID: SY-SB4R-2
Matrix: Solid Percent Dry: 80.2% Results expressed on a dry weight basis.
Sampled: 2/1/23 11:55

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
1,2-dibromoethane (EDB)	0.025 U	0.10	0.025	0.012	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	19:44	SW5035A8260D
chlorobenzene	0.025 U	0.10	0.025	0.013	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	19:44	SW5035A8260D
1,1,1,2-tetrachloroethane	0.025 U	0.10	0.025	0.021	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	19:44	SW5035A8260D
ethylbenzene	0.025 U	0.10	0.025	0.012	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	19:44	SW5035A8260D
m&p-xylenes	0.051 U	0.10	0.051	0.025	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	19:44	SW5035A8260D
o-xylene	0.025 U	0.10	0.025	0.017	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	19:44	SW5035A8260D
styrene	0.025 U	0.10	0.025	0.011	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	19:44	SW5035A8260D
bromoform	0.025 U	0.10	0.025	0.014	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	19:44	SW5035A8260D
isopropylbenzene	0.025 U	0.10	0.025	0.015	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	19:44	SW5035A8260D
1,1,2,2-tetrachloroethane	0.025 U	0.10	0.025	0.016	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	19:44	SW5035A8260D
1,2,3-trichloropropane	0.025 U	0.10	0.025	0.013	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	19:44	SW5035A8260D
n-propylbenzene	0.025 U	0.10	0.025	0.015	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	19:44	SW5035A8260D
bromobenzene	0.025 U	0.10	0.025	0.015	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	19:44	SW5035A8260D
2-chlorotoluene	0.025 U	0.10	0.025	0.021	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	19:44	SW5035A8260D
4-chlorotoluene	0.025 U	0.10	0.025	0.014	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	19:44	SW5035A8260D
tert-butylbenzene	0.025 U	0.10	0.025	0.019	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	19:44	SW5035A8260D
1,2,4-trimethylbenzene	0.025 U	0.10	0.025	0.018	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	19:44	SW5035A8260D
sec-butylbenzene	0.025 U	0.10	0.025	0.014	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	19:44	SW5035A8260D
1,3-dichlorobenzene	0.025 U	0.10	0.025	0.019	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	19:44	SW5035A8260D
4-isopropyltoluene	0.025 U	0.10	0.025	0.017	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	19:44	SW5035A8260D
1,4-dichlorobenzene	0.025 U	0.10	0.025	0.016	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	19:44	SW5035A8260D
1,2-dichlorobenzene	0.025 U	0.10	0.025	0.016	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	19:44	SW5035A8260D
n-butylbenzene	0.025 U	0.10	0.025	0.016	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	19:44	SW5035A8260D
1,2-dibromo-3-chloropropane (DBCP)	0.051 U	0.10	0.051	0.030	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	19:44	SW5035A8260D
1,3,5-trimethylbenzene	0.025 U	0.10	0.025	0.014	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	19:44	SW5035A8260D
1,2,4-trichlorobenzene	0.025 U	0.10	0.025	0.018	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	19:44	SW5035A8260D
hexachlorobutadiene	0.051 U	0.10	0.051	0.030	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	19:44	SW5035A8260D
naphthalene	0.025 U	0.10	0.025	0.016	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	19:44	SW5035A8260D
1,2,3-trichlorobenzene	0.025 U	0.10	0.025	0.012	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	19:44	SW5035A8260D
Surrogate Recovery		Limits											
dibromofluoromethane SUR	100	78-114			%	1	LMM	2/8/23	12:56	15933	2/9/23	19:44	SW5035A8260D
toluene-D8 SUR	96	88-110			%	1	LMM	2/8/23	12:56	15933	2/9/23	19:44	SW5035A8260D
4-bromofluorobenzene SUR	94	86-115			%	1	LMM	2/8/23	12:56	15933	2/9/23	19:44	SW5035A8260D
a,a,a-trifluorotoluene SUR	108	70-130			%	1	LMM	2/8/23	12:56	15933	2/9/23	19:44	SW5035A8260D

 # = The percent recovery for the LCS/D was below the acceptance criteria. The reported result is an estimate.

Project ID: Dow 18001468
Job ID: 64446
Sample#: 64446-004
Sample ID: Trip Blank
Matrix: Solid Results expressed on a weight as received basis.
Sampled: 2/1/23 0:00

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
dichlorodifluoromethane	0.025 U	0.10	0.025	0.013	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	14:36	SW5035A8260D
chloromethane	0.025 U	0.10	0.025	0.020	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	14:36	SW5035A8260D
vinyl chloride	0.025 U	0.10	0.025	0.014	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	14:36	SW5035A8260D
bromomethane	0.10 U	0.25	0.10	0.050	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	14:36	SW5035A8260D
chloroethane	0.025 U	0.10	0.025	0.010	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	14:36	SW5035A8260D
trichlorofluoromethane	0.025 U	0.10	0.025	0.014	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	14:36	SW5035A8260D
diethyl ether	0.025 U#	0.10	0.025	0.011	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	14:36	SW5035A8260D
acetone	0.20 U	2.5	0.20	0.033	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	14:36	SW5035A8260D
1,1-dichloroethene	0.025 U	0.10	0.025	0.020	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	14:36	SW5035A8260D
methylene chloride	0.025 U	0.10	0.025	0.023	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	14:36	SW5035A8260D
carbon disulfide	0.025 U	0.10	0.025	0.017	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	14:36	SW5035A8260D
methyl t-butyl ether (MTBE)	0.025 U#	0.10	0.025	0.015	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	14:36	SW5035A8260D
trans-1,2-dichloroethene	0.025 U	0.10	0.025	0.014	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	14:36	SW5035A8260D
ethyl t-butyl ether (ETBE)	0.025 U	0.10	0.025	0.014	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	14:36	SW5035A8260D
1,1-dichloroethane	0.025 U	0.10	0.025	0.0096	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	14:36	SW5035A8260D
t-butanol (TBA)	0.25 U	2.5	0.25	0.13	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	14:36	SW5035A8260D
2-butanone (MEK)	0.20 U	0.30	0.20	0.056	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	14:36	SW5035A8260D
2,2-dichloropropane	0.025 U	0.10	0.025	0.013	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	14:36	SW5035A8260D
cis-1,2-dichloroethene	0.025 U	0.10	0.025	0.010	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	14:36	SW5035A8260D
chloroform	0.025 U	0.10	0.025	0.015	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	14:36	SW5035A8260D
bromochloromethane	0.025 U	0.10	0.025	0.0074	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	14:36	SW5035A8260D
tetrahydrofuran (THF)	0.20 U	0.50	0.20	0.085	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	14:36	SW5035A8260D
1,1,1-trichloroethane	0.025 U	0.10	0.025	0.015	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	14:36	SW5035A8260D
1,1-dichloropropene	0.025 U	0.10	0.025	0.014	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	14:36	SW5035A8260D
t-amyl-methyl ether (TAME)	0.025 U#	0.10	0.025	0.018	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	14:36	SW5035A8260D
carbon tetrachloride	0.025 U	0.10	0.025	0.0061	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	14:36	SW5035A8260D
1,2-dichloroethane	0.025 U	0.10	0.025	0.012	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	14:36	SW5035A8260D
benzene	0.025 U	0.10	0.025	0.010	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	14:36	SW5035A8260D
trichloroethene	0.025 U	0.10	0.025	0.010	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	14:36	SW5035A8260D
1,2-dichloropropane	0.025 U	0.10	0.025	0.011	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	14:36	SW5035A8260D
bromodichloromethane	0.025 U	0.10	0.025	0.013	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	14:36	SW5035A8260D
1,4-dioxane	2.0 U	2.5	2.0	0.59	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	14:36	SW5035A8260D
dibromomethane	0.025 U	0.10	0.025	0.013	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	14:36	SW5035A8260D
4-methyl-2-pentanone (MIBK)	0.025 U	0.45	0.025	0.012	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	14:36	SW5035A8260D
cis-1,3-dichloropropene	0.025 U	0.10	0.025	0.013	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	14:36	SW5035A8260D
toluene	0.025 U	0.10	0.025	0.010	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	14:36	SW5035A8260D
trans-1,3-dichloropropene	0.025 U	0.10	0.025	0.013	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	14:36	SW5035A8260D
2-hexanone	0.050 U	0.50	0.050	0.026	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	14:36	SW5035A8260D
1,1,2-trichloroethane	0.025 U	0.10	0.025	0.014	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	14:36	SW5035A8260D
1,3-dichloropropane	0.025 U	0.10	0.025	0.013	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	14:36	SW5035A8260D
tetrachloroethene	0.025 U	0.10	0.025	0.013	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	14:36	SW5035A8260D
dibromochloromethane	0.025 U	0.10	0.025	0.013	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	14:36	SW5035A8260D

Project ID: Dow 18001468
Job ID: 64446
Sample#: 64446-004
Sample ID: Trip Blank
Matrix: Solid Results expressed on a weight as received basis.
Sampled: 2/1/23 0:00

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
1,2-dibromoethane (EDB)	0.025 U	0.10	0.025	0.012	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	14:36	SW5035A8260D
chlorobenzene	0.025 U	0.10	0.025	0.013	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	14:36	SW5035A8260D
1,1,1,2-tetrachloroethane	0.025 U	0.10	0.025	0.021	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	14:36	SW5035A8260D
ethylbenzene	0.025 U	0.10	0.025	0.012	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	14:36	SW5035A8260D
m&p-xylenes	0.050 U	0.10	0.050	0.025	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	14:36	SW5035A8260D
o-xylene	0.025 U	0.10	0.025	0.017	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	14:36	SW5035A8260D
styrene	0.025 U	0.10	0.025	0.011	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	14:36	SW5035A8260D
bromoform	0.025 U	0.10	0.025	0.014	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	14:36	SW5035A8260D
isopropylbenzene	0.025 U	0.10	0.025	0.015	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	14:36	SW5035A8260D
1,1,2,2-tetrachloroethane	0.025 U	0.10	0.025	0.016	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	14:36	SW5035A8260D
1,2,3-trichloropropane	0.025 U	0.10	0.025	0.012	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	14:36	SW5035A8260D
n-propylbenzene	0.025 U	0.10	0.025	0.015	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	14:36	SW5035A8260D
bromobenzene	0.025 U	0.10	0.025	0.015	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	14:36	SW5035A8260D
2-chlorotoluene	0.025 U	0.10	0.025	0.020	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	14:36	SW5035A8260D
4-chlorotoluene	0.025 U	0.10	0.025	0.013	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	14:36	SW5035A8260D
tert-butylbenzene	0.025 U	0.10	0.025	0.018	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	14:36	SW5035A8260D
1,2,4-trimethylbenzene	0.025 U	0.10	0.025	0.017	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	14:36	SW5035A8260D
sec-butylbenzene	0.025 U	0.10	0.025	0.014	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	14:36	SW5035A8260D
1,3-dichlorobenzene	0.025 U	0.10	0.025	0.019	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	14:36	SW5035A8260D
4-isopropyltoluene	0.025 U	0.10	0.025	0.016	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	14:36	SW5035A8260D
1,4-dichlorobenzene	0.025 U	0.10	0.025	0.016	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	14:36	SW5035A8260D
1,2-dichlorobenzene	0.025 U	0.10	0.025	0.015	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	14:36	SW5035A8260D
n-butylbenzene	0.025 U	0.10	0.025	0.016	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	14:36	SW5035A8260D
1,2-dibromo-3-chloropropane (DBCP)	0.050 U	0.10	0.050	0.029	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	14:36	SW5035A8260D
1,3,5-trimethylbenzene	0.025 U	0.10	0.025	0.014	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	14:36	SW5035A8260D
1,2,4-trichlorobenzene	0.025 U	0.10	0.025	0.018	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	14:36	SW5035A8260D
hexachlorobutadiene	0.050 U	0.10	0.050	0.029	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	14:36	SW5035A8260D
naphthalene	0.021 J	0.10	0.025	0.016	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	14:36	SW5035A8260D
1,2,3-trichlorobenzene	0.025 U	0.10	0.025	0.011	ug/g	1	LMM	2/8/23	12:56	15933	2/9/23	14:36	SW5035A8260D
Surrogate Recovery		Limits											
dibromofluoromethane SUR	99	78-114			%	1	LMM	2/8/23	12:56	15933	2/9/23	14:36	SW5035A8260D
toluene-D8 SUR	98	88-110			%	1	LMM	2/8/23	12:56	15933	2/9/23	14:36	SW5035A8260D
4-bromofluorobenzene SUR	95	86-115			%	1	LMM	2/8/23	12:56	15933	2/9/23	14:36	SW5035A8260D
a,a,a-trifluorotoluene SUR	95	70-130			%	1	LMM	2/8/23	12:56	15933	2/9/23	14:36	SW5035A8260D

 # = The percent recovery for the LCS/D was below the acceptance criteria. The reported result is an estimate.

Project ID: Dow 18001468
Job ID: 64446

Sample#: 64446-001
Sample ID: SY-SB4R-1
Matrix: Solid Percent Dry: 86.8% Results expressed on a dry weight basis.
Samples prepared in methanol within a 1:1 ratio +/- 25% mL MeOH/g soil
Received on ice at 0˚C, in satisfactory condition.
Sampled: 2/1/23 11:45

						Instr		Prep			Analysis		
Parameter	Result	LOQ	LOD	DL	Units	Dil'n	Analyst	Date	Time	Batch	Date	Time	Reference
Unadjusted C5-C8 Aliphatics	5.3 J	5.4	5.2	4.3	ug/g	1	LMM	2/8/23	12:56	15934	2/9/23	0:46	MA VPH
Unadjusted C9-C12 Aliphatics	5.2 U	5.4	5.2	5.0	ug/g	1	LMM	2/8/23	12:56	15934	2/9/23	0:46	MA VPH
methyl t-butyl ether (MTBE)	0.043 U	0.11	0.043	0.038	ug/g	1	LMM	2/8/23	12:56	15934	2/9/23	0:46	MA VPH
benzene	0.036 J	0.11	0.043	0.018	ug/g	1	LMM	2/8/23	12:56	15934	2/9/23	0:46	MA VPH
toluene	0.11 J	0.11	0.043	0.027	ug/g	1	LMM	2/8/23	12:56	15934	2/9/23	0:46	MA VPH
ethylbenzene	0.043 U	0.11	0.043	0.024	ug/g	1	LMM	2/8/23	12:56	15934	2/9/23	0:46	MA VPH
m&p-xylenes	0.10 J	0.11	0.087	0.023	ug/g	1	LMM	2/8/23	12:56	15934	2/9/23	0:46	MA VPH
o-xylene	0.061 J	0.11	0.043	0.0025	ug/g	1	LMM	2/8/23	12:56	15934	2/9/23	0:46	MA VPH
naphthalene	0.079 J	0.27	0.043	0.024	ug/g	1	LMM	2/8/23	12:56	15934	2/9/23	0:46	MA VPH
C5-C8 Aliphatics	5.1 J	5.4	5.2	4.3	ug/g	1	LMM	2/8/23	12:56	15934	2/9/23	0:46	MA VPH
C9-C12 Aliphatics	5.2 U	5.4	5.2	5.0	ug/g	1	LMM	2/8/23	12:56	15934	2/9/23	0:46	MA VPH
C9-C10 Aromatics	1.6 U	5.4	1.6	1.4	ug/g	1	LMM	2/8/23	12:56	15934	2/9/23	0:46	MA VPH
Surrogate Recovery		Limits											
2,5-dibromotoluene as Aromatic SUR	112	70-130			%	1	LMM	2/8/23	12:56	15934	2/9/23	0:46	MA VPH
2,5-dibromotoluene as Aliphatic SUR	110	70-130			%	1	LMM	2/8/23	12:56	15934	2/9/23	0:46	MA VPH
a,a,a-trifluorotoluene SUR	100	70-130			%	1	LMM	2/8/23	12:56	15934	2/9/23	0:46	MA VPH

Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range.
C5-C8 Aliphatic Hydrocarbons exclude the concentration of target analytes eluting in that range.
C9-C12 Aliphatic Hydrocarbons exclude concentration of target analytes eluting in that range AND C9-C10 Aromatics.

Project ID: Dow 18001468
Job ID: 64446

Sample#: 64446-002
Sample ID: SY-SB4R-10
Matrix: Solid Percent Dry: 87.6% Results expressed on a dry weight basis.
Samples prepared in methanol within a 1:1 ratio +/- 25% mL MeOH/g soil
Received on ice at 0˚C, in satisfactory condition.
Sampled: 2/1/23 11:50

						Instr		Prep			Analysis		
Parameter	Result	LOQ	LOD	DL	Units	Dil'n	Analyst	Date	Time	Batch	Date	Time	Reference
Unadjusted C5-C8 Aliphatics	4.2 J	5.1	4.9	4.0	ug/g	1	LMM	2/8/23	12:56	15934	2/9/23	1:20	MA VPH
Unadjusted C9-C12 Aliphatics	4.9 U	5.1	4.9	4.7	ug/g	1	LMM	2/8/23	12:56	15934	2/9/23	1:20	MA VPH
methyl t-butyl ether (MTBE)	0.041 U	0.10	0.041	0.036	ug/g	1	LMM	2/8/23	12:56	15934	2/9/23	1:20	MA VPH
benzene	0.041 U	0.10	0.041	0.017	ug/g	1	LMM	2/8/23	12:56	15934	2/9/23	1:20	MA VPH
toluene	0.034 J	0.10	0.041	0.026	ug/g	1	LMM	2/8/23	12:56	15934	2/9/23	1:20	MA VPH
ethylbenzene	0.041 U	0.10	0.041	0.022	ug/g	1	LMM	2/8/23	12:56	15934	2/9/23	1:20	MA VPH
m&p-xylenes	0.050 J	0.10	0.082	0.022	ug/g	1	LMM	2/8/23	12:56	15934	2/9/23	1:20	MA VPH
o-xylene	0.023 J	0.10	0.041	0.0024	ug/g	1	LMM	2/8/23	12:56	15934	2/9/23	1:20	MA VPH
naphthalene	0.028 J	0.26	0.041	0.023	ug/g	1	LMM	2/8/23	12:56	15934	2/9/23	1:20	MA VPH
C5-C8 Aliphatics	4.2 J	5.1	4.9	4.0	ug/g	1	LMM	2/8/23	12:56	15934	2/9/23	1:20	MA VPH
C9-C12 Aliphatics	4.9 U	5.1	4.9	4.7	ug/g	1	LMM	2/8/23	12:56	15934	2/9/23	1:20	MA VPH
C9-C10 Aromatics	1.5 U	5.1	1.5	1.3	ug/g	1	LMM	2/8/23	12:56	15934	2/9/23	1:20	MA VPH
Surrogate Recovery		Limits											
2,5-dibromotoluene as Aromatic SUR	102	70-130			%	1	LMM	2/8/23	12:56	15934	2/9/23	1:20	MA VPH
2,5-dibromotoluene as Aliphatic SUR	99	70-130			%	1	LMM	2/8/23	12:56	15934	2/9/23	1:20	MA VPH
a,a,a-trifluorotoluene SUR	97	70-130			%	1	LMM	2/8/23	12:56	15934	2/9/23	1:20	MA VPH

Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range.
C5-C8 Aliphatic Hydrocarbons exclude the concentration of target analytes eluting in that range.
C9-C12 Aliphatic Hydrocarbons exclude concentration of target analytes eluting in that range AND C9-C10 Aromatics.

Project ID: Dow 18001468
Job ID: 64446

Sample#: 64446-003
Sample ID: SY-SB4R-2
Matrix: Solid Percent Dry: 80.2% Results expressed on a dry weight basis.
Samples prepared in methanol at a ratio of 0.62 mL MeOH/g soil.
Received on ice at 0˚C, in satisfactory condition.
Sampled: 2/1/23 11:55

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
Unadjusted C5-C8 Aliphatics	4.9 U	5.1	4.9	4.0	ug/g	1	LMM	2/8/23	12:56	15934	2/9/23	1:53	MA VPH
Unadjusted C9-C12 Aliphatics	4.9 U	5.1	4.9	4.7	ug/g	1	LMM	2/8/23	12:56	15934	2/9/23	1:53	MA VPH
methyl t-butyl ether (MTBE)	0.041 U	0.10	0.041	0.036	ug/g	1	LMM	2/8/23	12:56	15934	2/9/23	1:53	MA VPH
benzene	0.041 U	0.10	0.041	0.017	ug/g	1	LMM	2/8/23	12:56	15934	2/9/23	1:53	MA VPH
toluene	0.041 U	0.10	0.041	0.025	ug/g	1	LMM	2/8/23	12:56	15934	2/9/23	1:53	MA VPH
ethylbenzene	0.041 U	0.10	0.041	0.022	ug/g	1	LMM	2/8/23	12:56	15934	2/9/23	1:53	MA VPH
m&p-xylenes	0.082 U	0.10	0.082	0.022	ug/g	1	LMM	2/8/23	12:56	15934	2/9/23	1:53	MA VPH
o-xylene	0.0069 J	0.10	0.041	0.0024	ug/g	1	LMM	2/8/23	12:56	15934	2/9/23	1:53	MA VPH
naphthalene	0.041 U	0.25	0.041	0.022	ug/g	1	LMM	2/8/23	12:56	15934	2/9/23	1:53	MA VPH
C5-C8 Aliphatics	4.9 U	5.1	4.9	4.0	ug/g	1	LMM	2/8/23	12:56	15934	2/9/23	1:53	MA VPH
C9-C12 Aliphatics	4.9 U	5.1	4.9	4.7	ug/g	1	LMM	2/8/23	12:56	15934	2/9/23	1:53	MA VPH
C9-C10 Aromatics	1.5 U	5.1	1.5	1.3	ug/g	1	LMM	2/8/23	12:56	15934	2/9/23	1:53	MA VPH
Surrogate Recovery		Limits											
2,5-dibromotoluene as Aromatic SUR	98	70-130			%	1	LMM	2/8/23	12:56	15934	2/9/23	1:53	MA VPH
2,5-dibromotoluene as Aliphatic SUR	95	70-130			%	1	LMM	2/8/23	12:56	15934	2/9/23	1:53	MA VPH
a,a,a-trifluorotoluene SUR	103	70-130			%	1	LMM	2/8/23	12:56	15934	2/9/23	1:53	MA VPH

Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range.
C5-C8 Aliphatic Hydrocarbons exclude the concentration of target analytes eluting in that range.
C9-C12 Aliphatic Hydrocarbons exclude concentration of target analytes eluting in that range AND C9-C10 Aromatics.

Project ID: Dow 18001468
Job ID: 64446
Sample#: 64446-001
Sample ID: SY-SB4R-1
Matrix: Solid Percent Dry: 86.8% Results expressed on a dry weight basis.
Sampled: 2/1/23 11:45

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
N-nitrosodimethylamine	0.11 U	0.21	0.11	0.019	ug/g	1	CL	2/7/23	14:30	15930	2/13/23	12:10	SW3546/8270E
pyridine	0.11 U	0.21	0.11	0.053	ug/g	1	CL	2/7/23	14:30	15930	2/13/23	12:10	SW3546/8270E
aniline	0.11 UM	0.21	0.11	0.016	ug/g	1	CL	2/7/23	14:30	15930	2/13/23	12:10	SW3546/8270E
phenol	0.11 U	0.21	0.11	0.031	ug/g	1	CL	2/7/23	14:30	15930	2/13/23	12:10	SW3546/8270E
2-chlorophenol	0.21 U	0.53	0.21	0.053	ug/g	1	CL	2/7/23	14:30	15930	2/13/23	12:10	SW3546/8270E
bis(2-chloroethyl)ether	0.11 U	0.21	0.11	0.033	ug/g	1	CL	2/7/23	14:30	15930	2/13/23	12:10	SW3546/8270E
1,3-dichlorobenzene	0.11 U	0.21	0.11	0.028	ug/g	1	CL	2/7/23	14:30	15930	2/13/23	12:10	SW3546/8270E
1,4-dichlorobenzene	0.11 U	0.21	0.11	0.092	ug/g	1	CL	2/7/23	14:30	15930	2/13/23	12:10	SW3546/8270E
1,2-dichlorobenzene	0.11 U	0.21	0.11	0.038	ug/g	1	CL	2/7/23	14:30	15930	2/13/23	12:10	SW3546/8270E
benzyl alcohol	0.11 U	0.21	0.11	0.031	ug/g	1	CL	2/7/23	14:30	15930	2/13/23	12:10	SW3546/8270E
2-methylphenol	0.11 U	0.21	0.11	0.031	ug/g	1	CL	2/7/23	14:30	15930	2/13/23	12:10	SW3546/8270E
2,2'-oxybis(1-chloropropane)	0.11 U	0.21	0.11	0.020	ug/g	1	CL	2/7/23	14:30	15930	2/13/23	12:10	SW3546/8270E
hexachloroethane	0.11 U	0.21	0.11	0.028	ug/g	1	CL	2/7/23	14:30	15930	2/13/23	12:10	SW3546/8270E
N-nitroso-di-N-propylamine	0.11 U	0.21	0.11	0.017	ug/g	1	CL	2/7/23	14:30	15930	2/13/23	12:10	SW3546/8270E
4-methylphenol	0.11 U	0.21	0.11	0.038	ug/g	1	CL	2/7/23	14:30	15930	2/13/23	12:10	SW3546/8270E
nitrobenzene	0.11 U	0.21	0.11	0.030	ug/g	1	CL	2/7/23	14:30	15930	2/13/23	12:10	SW3546/8270E
isophorone	0.21 U	0.53	0.21	0.029	ug/g	1	CL	2/7/23	14:30	15930	2/13/23	12:10	SW3546/8270E
2-nitrophenol	0.11 U	0.21	0.11	0.060	ug/g	1	CL	2/7/23	14:30	15930	2/13/23	12:10	SW3546/8270E
2,4-dimethylphenol	0.11 U	0.21	0.11	0.039	ug/g	1	CL	2/7/23	14:30	15930	2/13/23	12:10	SW3546/8270E
bis(2-chloroethoxy)methane	0.21 U	0.21	0.21	0.045	ug/g	1	CL	2/7/23	14:30	15930	2/13/23	12:10	SW3546/8270E
2,4-dichlorophenol	0.21 U	0.53	0.21	0.038	ug/g	1	CL	2/7/23	14:30	15930	2/13/23	12:10	SW3546/8270E
1,2,4-trichlorobenzene	0.21 U	0.53	0.21	0.028	ug/g	1	CL	2/7/23	14:30	15930	2/13/23	12:10	SW3546/8270E
benzoic acid	4.7 U#	5.3	4.7	2.1	ug/g	1	CL	2/7/23	14:30	15930	2/13/23	12:10	SW3546/8270E
4-chloroaniline	0.11 U	0.21	0.11	0.077	ug/g	1	CL	2/7/23	14:30	15930	2/13/23	12:10	SW3546/8270E
hexachlorobutadiene	0.11 U	0.21	0.11	0.053	ug/g	1	CL	2/7/23	14:30	15930	2/13/23	12:10	SW3546/8270E
4-chloro-3-methylphenol	0.11 U	0.21	0.11	0.020	ug/g	1	CL	2/7/23	14:30	15930	2/13/23	12:10	SW3546/8270E
hexachlorocyclopentadiene	0.42 U	1.1	0.42	0.072	ug/g	1	CL	2/7/23	14:30	15930	2/13/23	12:10	SW3546/8270E
2,4,6-trichlorophenol	0.11 U	0.21	0.11	0.038	ug/g	1	CL	2/7/23	14:30	15930	2/13/23	12:10	SW3546/8270E
2,4,5-trichlorophenol	0.11 U	0.21	0.11	0.036	ug/g	1	CL	2/7/23	14:30	15930	2/13/23	12:10	SW3546/8270E
2-chloronaphthalene	0.21 U	0.53	0.21	0.024	ug/g	1	CL	2/7/23	14:30	15930	2/13/23	12:10	SW3546/8270E
2-nitroaniline	0.11 U	0.21	0.11	0.037	ug/g	1	CL	2/7/23	14:30	15930	2/13/23	12:10	SW3546/8270E
dimethylphthalate	0.21 U	0.53	0.21	0.030	ug/g	1	CL	2/7/23	14:30	15930	2/13/23	12:10	SW3546/8270E
2,6-dinitrotoluene	0.11 U	0.21	0.11	0.027	ug/g	1	CL	2/7/23	14:30	15930	2/13/23	12:10	SW3546/8270E
2,4-dinitrotoluene	0.11 U	0.21	0.11	0.062	ug/g	1	CL	2/7/23	14:30	15930	2/13/23	12:10	SW3546/8270E
3-nitroaniline	0.11 U	0.21	0.11	0.030	ug/g	1	CL	2/7/23	14:30	15930	2/13/23	12:10	SW3546/8270E
2,4-dinitrophenol	2.1 UM#	5.3	2.1	0.14	ug/g	1	CL	2/7/23	14:30	15930	2/13/23	12:10	SW3546/8270E
dibenzofuran	0.053 U	0.053	0.053	0.047	ug/g	1	CL	2/7/23	14:30	15930	2/13/23	12:10	SW3546/8270E
4-nitrophenol	0.53 U	1.1	0.53	0.042	ug/g	1	CL	2/7/23	14:30	15930	2/13/23	12:10	SW3546/8270E
diethyl phthalate	0.21 U	0.53	0.21	0.041	ug/g	1	CL	2/7/23	14:30	15930	2/13/23	12:10	SW3546/8270E
4-chlorophenyl phenyl ether	0.21 U	0.53	0.21	0.033	ug/g	1	CL	2/7/23	14:30	15930	2/13/23	12:10	SW3546/8270E
4-nitroaniline	0.21 U	0.53	0.21	0.060	ug/g	1	CL	2/7/23	14:30	15930	2/13/23	12:10	SW3546/8270E
4,6-dinitro-2-methylphenol	1.1 U#	2.1	1.1	0.24	ug/g	1	CL	2/7/23	14:30	15930	2/13/23	12:10	SW3546/8270E

Project ID: Dow 18001468
Job ID: 64446
Sample#: 64446-001
Sample ID: SY-SB4R-1
Matrix: Solid Percent Dry: 86.8% Results expressed on a dry weight basis.
Sampled: 2/1/23 11:45

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
azobenzene	0.11 U	0.21	0.11	0.028	ug/g	1	CL	2/7/23	14:30	15930	2/13/23	12:10	SW3546/8270E
N-nitrosodiphenylamine	0.11 U	0.21	0.11	0.036	ug/g	1	CL	2/7/23	14:30	15930	2/13/23	12:10	SW3546/8270E
4-bromophenyl phenyl ether	0.11 U	0.21	0.11	0.038	ug/g	1	CL	2/7/23	14:30	15930	2/13/23	12:10	SW3546/8270E
hexachlorobenzene	0.1054 U	0.2108	0.1054	0.1049	ug/g	1	CL	2/7/23	14:30	15930	2/13/23	12:10	SW3546/8270E
pentachlorophenol	0.53 U	1.1	0.53	0.058	ug/g	1	CL	2/7/23	14:30	15930	2/13/23	12:10	SW3546/8270E
carbazole	0.11 U	0.21	0.11	0.031	ug/g	1	CL	2/7/23	14:30	15930	2/13/23	12:10	SW3546/8270E
di-n-butylphthalate	0.21 U	0.53	0.21	0.037	ug/g	1	CL	2/7/23	14:30	15930	2/13/23	12:10	SW3546/8270E
benzidine	2.6 UM#	3.2	2.6	2.1	ug/g	1	CL	2/7/23	14:30	15930	2/13/23	12:10	SW3546/8270E
butyl benzyl phthalate	0.21 U	0.53	0.21	0.042	ug/g	1	CL	2/7/23	14:30	15930	2/13/23	12:10	SW3546/8270E
3,3'-dichlorobenzidine	2.6 U	3.2	2.6	2.1	ug/g	1	CL	2/7/23	14:30	15930	2/13/23	12:10	SW3546/8270E
bis(2-ethylhexyl)phthalate	0.26 U	0.53	0.26	0.21	ug/g	1	CL	2/7/23	14:30	15930	2/13/23	12:10	SW3546/8270E
di-n-octyl phthalate	0.21 U	0.53	0.21	0.15	ug/g	1	CL	2/7/23	14:30	15930	2/13/23	12:10	SW3546/8270E
Surrogate Recovery		Limits											
2-fluorophenol SUR	57	21-100			%	1	CL	2/7/23	14:30	15930	2/13/23	12:10	SW3546/8270E
phenol-D5 SUR	57	10-102			%	1	CL	2/7/23	14:30	15930	2/13/23	12:10	SW3546/8270E
2,4,6-tribromophenol SUR	74	10-123			%	1	CL	2/7/23	14:30	15930	2/13/23	12:10	SW3546/8270E
nitrobenzene-D5 SUR	59	35-114			%	1	CL	2/7/23	14:30	15930	2/13/23	12:10	SW3546/8270E
2-fluorobiphenyl SUR	69	43-116			%	1	CL	2/7/23	14:30	15930	2/13/23	12:10	SW3546/8270E
p-terphenyl-D14 SUR	78	33-141			%	1	CL	2/7/23	14:30	15930	2/13/23	12:10	SW3546/8270E

M = The percent recovery and/or RPD for the MS/D was outside acceptance criteria.
 # = The percent recovery for the LCS/D was below the acceptance criteria. The reported result is an estimate.

Project ID: Dow 18001468
Job ID: 64446
Sample#: 64446-002
Sample ID: SY-SB4R-10
Matrix: Solid Percent Dry: 87.6% Results expressed on a dry weight basis.
Sampled: 2/1/23 11:50

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
N-nitrosodimethylamine	0.10 U	0.21	0.10	0.018	ug/g	1	CL	2/7/23	14:30	15930	2/13/23	12:41	SW3546/8270E
pyridine	0.10 U	0.21	0.10	0.052	ug/g	1	CL	2/7/23	14:30	15930	2/13/23	12:41	SW3546/8270E
aniline	0.10 U	0.21	0.10	0.016	ug/g	1	CL	2/7/23	14:30	15930	2/13/23	12:41	SW3546/8270E
phenol	0.10 U	0.21	0.10	0.031	ug/g	1	CL	2/7/23	14:30	15930	2/13/23	12:41	SW3546/8270E
2-chlorophenol	0.21 U	0.52	0.21	0.053	ug/g	1	CL	2/7/23	14:30	15930	2/13/23	12:41	SW3546/8270E
bis(2-chloroethyl)ether	0.10 U	0.21	0.10	0.033	ug/g	1	CL	2/7/23	14:30	15930	2/13/23	12:41	SW3546/8270E
1,3-dichlorobenzene	0.10 U	0.21	0.10	0.028	ug/g	1	CL	2/7/23	14:30	15930	2/13/23	12:41	SW3546/8270E
1,4-dichlorobenzene	0.10 U	0.21	0.10	0.092	ug/g	1	CL	2/7/23	14:30	15930	2/13/23	12:41	SW3546/8270E
1,2-dichlorobenzene	0.10 U	0.21	0.10	0.038	ug/g	1	CL	2/7/23	14:30	15930	2/13/23	12:41	SW3546/8270E
benzyl alcohol	0.10 U	0.21	0.10	0.030	ug/g	1	CL	2/7/23	14:30	15930	2/13/23	12:41	SW3546/8270E
2-methylphenol	0.10 U	0.21	0.10	0.031	ug/g	1	CL	2/7/23	14:30	15930	2/13/23	12:41	SW3546/8270E
2,2'-oxybis(1-chloropropane)	0.10 U	0.21	0.10	0.019	ug/g	1	CL	2/7/23	14:30	15930	2/13/23	12:41	SW3546/8270E
hexachloroethane	0.10 U	0.21	0.10	0.028	ug/g	1	CL	2/7/23	14:30	15930	2/13/23	12:41	SW3546/8270E
N-nitroso-di-N-propylamine	0.10 U	0.21	0.10	0.017	ug/g	1	CL	2/7/23	14:30	15930	2/13/23	12:41	SW3546/8270E
4-methylphenol	0.10 U	0.21	0.10	0.038	ug/g	1	CL	2/7/23	14:30	15930	2/13/23	12:41	SW3546/8270E
nitrobenzene	0.10 U	0.21	0.10	0.030	ug/g	1	CL	2/7/23	14:30	15930	2/13/23	12:41	SW3546/8270E
isophorone	0.21 U	0.52	0.21	0.029	ug/g	1	CL	2/7/23	14:30	15930	2/13/23	12:41	SW3546/8270E
2-nitrophenol	0.10 U	0.21	0.10	0.059	ug/g	1	CL	2/7/23	14:30	15930	2/13/23	12:41	SW3546/8270E
2,4-dimethylphenol	0.10 U	0.21	0.10	0.039	ug/g	1	CL	2/7/23	14:30	15930	2/13/23	12:41	SW3546/8270E
bis(2-chloroethoxy)methane	0.21 U	0.21	0.21	0.045	ug/g	1	CL	2/7/23	14:30	15930	2/13/23	12:41	SW3546/8270E
2,4-dichlorophenol	0.21 U	0.52	0.21	0.038	ug/g	1	CL	2/7/23	14:30	15930	2/13/23	12:41	SW3546/8270E
1,2,4-trichlorobenzene	0.21 U	0.52	0.21	0.027	ug/g	1	CL	2/7/23	14:30	15930	2/13/23	12:41	SW3546/8270E
benzoic acid	4.7 U#	5.2	4.7	2.1	ug/g	1	CL	2/7/23	14:30	15930	2/13/23	12:41	SW3546/8270E
4-chloroaniline	0.10 U	0.21	0.10	0.076	ug/g	1	CL	2/7/23	14:30	15930	2/13/23	12:41	SW3546/8270E
hexachlorobutadiene	0.10 U	0.21	0.10	0.052	ug/g	1	CL	2/7/23	14:30	15930	2/13/23	12:41	SW3546/8270E
4-chloro-3-methylphenol	0.10 U	0.21	0.10	0.020	ug/g	1	CL	2/7/23	14:30	15930	2/13/23	12:41	SW3546/8270E
hexachlorocyclopentadiene	0.42 U	1.0	0.42	0.071	ug/g	1	CL	2/7/23	14:30	15930	2/13/23	12:41	SW3546/8270E
2,4,6-trichlorophenol	0.10 U	0.21	0.10	0.038	ug/g	1	CL	2/7/23	14:30	15930	2/13/23	12:41	SW3546/8270E
2,4,5-trichlorophenol	0.10 U	0.21	0.10	0.036	ug/g	1	CL	2/7/23	14:30	15930	2/13/23	12:41	SW3546/8270E
2-chloronaphthalene	0.21 U	0.52	0.21	0.024	ug/g	1	CL	2/7/23	14:30	15930	2/13/23	12:41	SW3546/8270E
2-nitroaniline	0.10 U	0.21	0.10	0.037	ug/g	1	CL	2/7/23	14:30	15930	2/13/23	12:41	SW3546/8270E
dimethylphthalate	0.21 U	0.52	0.21	0.030	ug/g	1	CL	2/7/23	14:30	15930	2/13/23	12:41	SW3546/8270E
2,6-dinitrotoluene	0.10 U	0.21	0.10	0.027	ug/g	1	CL	2/7/23	14:30	15930	2/13/23	12:41	SW3546/8270E
2,4-dinitrotoluene	0.10 U	0.21	0.10	0.062	ug/g	1	CL	2/7/23	14:30	15930	2/13/23	12:41	SW3546/8270E
3-nitroaniline	0.10 U	0.21	0.10	0.030	ug/g	1	CL	2/7/23	14:30	15930	2/13/23	12:41	SW3546/8270E
2,4-dinitrophenol	2.1 U#	5.2	2.1	0.14	ug/g	1	CL	2/7/23	14:30	15930	2/13/23	12:41	SW3546/8270E
dibenzofuran	0.052 U	0.052	0.052	0.047	ug/g	1	CL	2/7/23	14:30	15930	2/13/23	12:41	SW3546/8270E
4-nitrophenol	0.52 U	1.0	0.52	0.042	ug/g	1	CL	2/7/23	14:30	15930	2/13/23	12:41	SW3546/8270E
diethyl phthalate	0.21 U	0.52	0.21	0.041	ug/g	1	CL	2/7/23	14:30	15930	2/13/23	12:41	SW3546/8270E
4-chlorophenyl phenyl ether	0.21 U	0.52	0.21	0.033	ug/g	1	CL	2/7/23	14:30	15930	2/13/23	12:41	SW3546/8270E
4-nitroaniline	0.21 U	0.52	0.21	0.059	ug/g	1	CL	2/7/23	14:30	15930	2/13/23	12:41	SW3546/8270E
4,6-dinitro-2-methylphenol	1.0 U#	2.1	1.0	0.24	ug/g	1	CL	2/7/23	14:30	15930	2/13/23	12:41	SW3546/8270E

Project ID: Dow 18001468
Job ID: 64446
Sample#: 64446-002
Sample ID: SY-SB4R-10
Matrix: Solid Percent Dry: 87.6% Results expressed on a dry weight basis.
Sampled: 2/1/23 11:50

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
azobenzene	0.10 U	0.21	0.10	0.028	ug/g	1	CL	2/7/23	14:30	15930	2/13/23	12:41	SW3546/8270E
N-nitrosodiphenylamine	0.10 U	0.21	0.10	0.036	ug/g	1	CL	2/7/23	14:30	15930	2/13/23	12:41	SW3546/8270E
4-bromophenyl phenyl ether	0.10 U	0.21	0.10	0.038	ug/g	1	CL	2/7/23	14:30	15930	2/13/23	12:41	SW3546/8270E
hexachlorobenzene	0.1047 U	0.2093	0.1047	0.1041	ug/g	1	CL	2/7/23	14:30	15930	2/13/23	12:41	SW3546/8270E
pentachlorophenol	0.52 U	1.0	0.52	0.058	ug/g	1	CL	2/7/23	14:30	15930	2/13/23	12:41	SW3546/8270E
carbazole	0.10 U	0.21	0.10	0.030	ug/g	1	CL	2/7/23	14:30	15930	2/13/23	12:41	SW3546/8270E
di-n-butylphthalate	0.21 U	0.52	0.21	0.037	ug/g	1	CL	2/7/23	14:30	15930	2/13/23	12:41	SW3546/8270E
benzidine	2.6 U#	3.1	2.6	2.1	ug/g	1	CL	2/7/23	14:30	15930	2/13/23	12:41	SW3546/8270E
butyl benzyl phthalate	0.21 U	0.52	0.21	0.042	ug/g	1	CL	2/7/23	14:30	15930	2/13/23	12:41	SW3546/8270E
3,3'-dichlorobenzidine	2.6 U	3.1	2.6	2.1	ug/g	1	CL	2/7/23	14:30	15930	2/13/23	12:41	SW3546/8270E
bis(2-ethylhexyl)phthalate	0.26 U	0.52	0.26	0.21	ug/g	1	CL	2/7/23	14:30	15930	2/13/23	12:41	SW3546/8270E
di-n-octyl phthalate	0.21 U	0.52	0.21	0.14	ug/g	1	CL	2/7/23	14:30	15930	2/13/23	12:41	SW3546/8270E
Surrogate Recovery		Limits											
2-fluorophenol SUR	59	21-100			%	1	CL	2/7/23	14:30	15930	2/13/23	12:41	SW3546/8270E
phenol-D5 SUR	62	10-102			%	1	CL	2/7/23	14:30	15930	2/13/23	12:41	SW3546/8270E
2,4,6-tribromophenol SUR	75	10-123			%	1	CL	2/7/23	14:30	15930	2/13/23	12:41	SW3546/8270E
nitrobenzene-D5 SUR	55	35-114			%	1	CL	2/7/23	14:30	15930	2/13/23	12:41	SW3546/8270E
2-fluorobiphenyl SUR	65	43-116			%	1	CL	2/7/23	14:30	15930	2/13/23	12:41	SW3546/8270E
p-terphenyl-D14 SUR	75	33-141			%	1	CL	2/7/23	14:30	15930	2/13/23	12:41	SW3546/8270E

 # = The percent recovery for the LCS/D was below the acceptance criteria. The reported result is an estimate.

Project ID: Dow 18001468
Job ID: 64446
Sample#: 64446-003
Sample ID: SY-SB4R-2
Matrix: Solid Percent Dry: 80.2% Results expressed on a dry weight basis.
Sampled: 2/1/23 11:55

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
N-nitrosodimethylamine	0.11 U	0.23	0.11	0.020	ug/g	1	CL	2/7/23	14:30	15930	2/13/23	13:12	SW3546/8270E
pyridine	0.11 U	0.23	0.11	0.057	ug/g	1	CL	2/7/23	14:30	15930	2/13/23	13:12	SW3546/8270E
aniline	0.11 U	0.23	0.11	0.017	ug/g	1	CL	2/7/23	14:30	15930	2/13/23	13:12	SW3546/8270E
phenol	0.11 U	0.23	0.11	0.034	ug/g	1	CL	2/7/23	14:30	15930	2/13/23	13:12	SW3546/8270E
2-chlorophenol	0.23 U	0.57	0.23	0.057	ug/g	1	CL	2/7/23	14:30	15930	2/13/23	13:12	SW3546/8270E
bis(2-chloroethyl)ether	0.11 U	0.23	0.11	0.036	ug/g	1	CL	2/7/23	14:30	15930	2/13/23	13:12	SW3546/8270E
1,3-dichlorobenzene	0.11 U	0.23	0.11	0.030	ug/g	1	CL	2/7/23	14:30	15930	2/13/23	13:12	SW3546/8270E
1,4-dichlorobenzene	0.11 U	0.23	0.11	0.10	ug/g	1	CL	2/7/23	14:30	15930	2/13/23	13:12	SW3546/8270E
1,2-dichlorobenzene	0.11 U	0.23	0.11	0.042	ug/g	1	CL	2/7/23	14:30	15930	2/13/23	13:12	SW3546/8270E
benzyl alcohol	0.11 U	0.23	0.11	0.033	ug/g	1	CL	2/7/23	14:30	15930	2/13/23	13:12	SW3546/8270E
2-methylphenol	0.11 U	0.23	0.11	0.034	ug/g	1	CL	2/7/23	14:30	15930	2/13/23	13:12	SW3546/8270E
2,2'-oxybis(1-chloropropane)	0.11 U	0.23	0.11	0.021	ug/g	1	CL	2/7/23	14:30	15930	2/13/23	13:12	SW3546/8270E
hexachloroethane	0.11 U	0.23	0.11	0.030	ug/g	1	CL	2/7/23	14:30	15930	2/13/23	13:12	SW3546/8270E
N-nitroso-di-N-propylamine	0.11 U	0.23	0.11	0.019	ug/g	1	CL	2/7/23	14:30	15930	2/13/23	13:12	SW3546/8270E
4-methylphenol	0.11 U	0.23	0.11	0.042	ug/g	1	CL	2/7/23	14:30	15930	2/13/23	13:12	SW3546/8270E
nitrobenzene	0.11 U	0.23	0.11	0.033	ug/g	1	CL	2/7/23	14:30	15930	2/13/23	13:12	SW3546/8270E
isophorone	0.23 U	0.57	0.23	0.032	ug/g	1	CL	2/7/23	14:30	15930	2/13/23	13:12	SW3546/8270E
2-nitrophenol	0.11 U	0.23	0.11	0.065	ug/g	1	CL	2/7/23	14:30	15930	2/13/23	13:12	SW3546/8270E
2,4-dimethylphenol	0.11 U	0.23	0.11	0.043	ug/g	1	CL	2/7/23	14:30	15930	2/13/23	13:12	SW3546/8270E
bis(2-chloroethoxy)methane	0.23 U	0.23	0.23	0.049	ug/g	1	CL	2/7/23	14:30	15930	2/13/23	13:12	SW3546/8270E
2,4-dichlorophenol	0.23 U	0.57	0.23	0.042	ug/g	1	CL	2/7/23	14:30	15930	2/13/23	13:12	SW3546/8270E
1,2,4-trichlorobenzene	0.23 U	0.57	0.23	0.030	ug/g	1	CL	2/7/23	14:30	15930	2/13/23	13:12	SW3546/8270E
benzoic acid	5.2 U#	5.7	5.2	2.3	ug/g	1	CL	2/7/23	14:30	15930	2/13/23	13:12	SW3546/8270E
4-chloroaniline	0.11 U	0.23	0.11	0.083	ug/g	1	CL	2/7/23	14:30	15930	2/13/23	13:12	SW3546/8270E
hexachlorobutadiene	0.11 U	0.23	0.11	0.057	ug/g	1	CL	2/7/23	14:30	15930	2/13/23	13:12	SW3546/8270E
4-chloro-3-methylphenol	0.11 U	0.23	0.11	0.022	ug/g	1	CL	2/7/23	14:30	15930	2/13/23	13:12	SW3546/8270E
hexachlorocyclopentadiene	0.46 U	1.1	0.46	0.078	ug/g	1	CL	2/7/23	14:30	15930	2/13/23	13:12	SW3546/8270E
2,4,6-trichlorophenol	0.11 U	0.23	0.11	0.041	ug/g	1	CL	2/7/23	14:30	15930	2/13/23	13:12	SW3546/8270E
2,4,5-trichlorophenol	0.11 U	0.23	0.11	0.039	ug/g	1	CL	2/7/23	14:30	15930	2/13/23	13:12	SW3546/8270E
2-chloronaphthalene	0.23 U	0.57	0.23	0.026	ug/g	1	CL	2/7/23	14:30	15930	2/13/23	13:12	SW3546/8270E
2-nitroaniline	0.11 U	0.23	0.11	0.040	ug/g	1	CL	2/7/23	14:30	15930	2/13/23	13:12	SW3546/8270E
dimethylphthalate	0.23 U	0.57	0.23	0.032	ug/g	1	CL	2/7/23	14:30	15930	2/13/23	13:12	SW3546/8270E
2,6-dinitrotoluene	0.11 U	0.23	0.11	0.030	ug/g	1	CL	2/7/23	14:30	15930	2/13/23	13:12	SW3546/8270E
2,4-dinitrotoluene	0.11 U	0.23	0.11	0.068	ug/g	1	CL	2/7/23	14:30	15930	2/13/23	13:12	SW3546/8270E
3-nitroaniline	0.11 U	0.23	0.11	0.033	ug/g	1	CL	2/7/23	14:30	15930	2/13/23	13:12	SW3546/8270E
2,4-dinitrophenol	2.3 U#	5.7	2.3	0.15	ug/g	1	CL	2/7/23	14:30	15930	2/13/23	13:12	SW3546/8270E
dibenzofuran	0.057 U	0.057	0.057	0.051	ug/g	1	CL	2/7/23	14:30	15930	2/13/23	13:12	SW3546/8270E
4-nitrophenol	0.57 U	1.1	0.57	0.046	ug/g	1	CL	2/7/23	14:30	15930	2/13/23	13:12	SW3546/8270E
diethyl phthalate	0.23 U	0.57	0.23	0.045	ug/g	1	CL	2/7/23	14:30	15930	2/13/23	13:12	SW3546/8270E
4-chlorophenyl phenyl ether	0.23 U	0.57	0.23	0.036	ug/g	1	CL	2/7/23	14:30	15930	2/13/23	13:12	SW3546/8270E
4-nitroaniline	0.23 U	0.57	0.23	0.065	ug/g	1	CL	2/7/23	14:30	15930	2/13/23	13:12	SW3546/8270E
4,6-dinitro-2-methylphenol	1.1 U#	2.3	1.1	0.26	ug/g	1	CL	2/7/23	14:30	15930	2/13/23	13:12	SW3546/8270E

Project ID: Dow 18001468
Job ID: 64446
Sample#: 64446-003
Sample ID: SY-SB4R-2
Matrix: Solid Percent Dry: 80.2% Results expressed on a dry weight basis.
Sampled: 2/1/23 11:55

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
azobenzene	0.11 U	0.23	0.11	0.030	ug/g	1	CL	2/7/23	14:30	15930	2/13/23	13:12	SW3546/8270E
N-nitrosodiphenylamine	0.11 U	0.23	0.11	0.039	ug/g	1	CL	2/7/23	14:30	15930	2/13/23	13:12	SW3546/8270E
4-bromophenyl phenyl ether	0.11 U	0.23	0.11	0.042	ug/g	1	CL	2/7/23	14:30	15930	2/13/23	13:12	SW3546/8270E
hexachlorobenzene	0.1145 U	0.2291	0.1145	0.1140	ug/g	1	CL	2/7/23	14:30	15930	2/13/23	13:12	SW3546/8270E
pentachlorophenol	0.57 U	1.1	0.57	0.063	ug/g	1	CL	2/7/23	14:30	15930	2/13/23	13:12	SW3546/8270E
carbazole	0.11 U	0.23	0.11	0.033	ug/g	1	CL	2/7/23	14:30	15930	2/13/23	13:12	SW3546/8270E
di-n-butylphthalate	0.23 U	0.57	0.23	0.041	ug/g	1	CL	2/7/23	14:30	15930	2/13/23	13:12	SW3546/8270E
benzidine	2.9 U#	3.4	2.9	2.3	ug/g	1	CL	2/7/23	14:30	15930	2/13/23	13:12	SW3546/8270E
butyl benzyl phthalate	0.23 U	0.57	0.23	0.045	ug/g	1	CL	2/7/23	14:30	15930	2/13/23	13:12	SW3546/8270E
3,3'-dichlorobenzidine	2.9 U	3.4	2.9	2.3	ug/g	1	CL	2/7/23	14:30	15930	2/13/23	13:12	SW3546/8270E
bis(2-ethylhexyl)phthalate	0.29 U	0.57	0.29	0.23	ug/g	1	CL	2/7/23	14:30	15930	2/13/23	13:12	SW3546/8270E
di-n-octyl phthalate	0.23 U	0.57	0.23	0.16	ug/g	1	CL	2/7/23	14:30	15930	2/13/23	13:12	SW3546/8270E
Surrogate Recovery		Limits											
2-fluorophenol SUR	49	21-100			%	1	CL	2/7/23	14:30	15930	2/13/23	13:12	SW3546/8270E
phenol-D5 SUR	52	10-102			%	1	CL	2/7/23	14:30	15930	2/13/23	13:12	SW3546/8270E
2,4,6-tribromophenol SUR	61	10-123			%	1	CL	2/7/23	14:30	15930	2/13/23	13:12	SW3546/8270E
nitrobenzene-D5 SUR	49	35-114			%	1	CL	2/7/23	14:30	15930	2/13/23	13:12	SW3546/8270E
2-fluorobiphenyl SUR	57	43-116			%	1	CL	2/7/23	14:30	15930	2/13/23	13:12	SW3546/8270E
p-terphenyl-D14 SUR	78	33-141			%	1	CL	2/7/23	14:30	15930	2/13/23	13:12	SW3546/8270E

 # = The percent recovery for the LCS/D was below the acceptance criteria. The reported result is an estimate.

Project ID: Dow 18001468
Job ID: 64446

Sample#: 64446-001
Sample ID: SY-SB4R-1
Matrix: Solid Percent Dry: 86.8% Results expressed on a dry weight basis.
Sampled: 2/1/23 11:45

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
PCB-1016	0.083 U	0.10	0.083	0.051	ug/g	1	DBV	3/22/23	17:40	16081	3/23/23	19:58	SW3540C8082A
PCB-1221	0.083 U	0.10	0.083	0.051	ug/g	1	DBV	3/22/23	17:40	16081	3/23/23	19:58	SW3540C8082A
PCB-1232	0.083 U	0.10	0.083	0.051	ug/g	1	DBV	3/22/23	17:40	16081	3/23/23	19:58	SW3540C8082A
PCB-1242	0.083 U	0.10	0.083	0.051	ug/g	1	DBV	3/22/23	17:40	16081	3/23/23	19:58	SW3540C8082A
PCB-1248	0.083 U	0.10	0.083	0.051	ug/g	1	DBV	3/22/23	17:40	16081	3/23/23	19:58	SW3540C8082A
PCB-1254	0.083 U	0.10	0.083	0.051	ug/g	1	DBV	3/22/23	17:40	16081	3/23/23	19:58	SW3540C8082A
PCB-1260	0.083 U	0.10	0.083	0.051	ug/g	1	DBV	3/22/23	17:40	16081	3/23/23	19:58	SW3540C8082A
Surrogate Recovery		Limits											
tetrachloro-m-xylene SUR	78	30-150			%	1	DBV	3/22/23	17:40	16081	3/23/23	19:58	SW3540C8082A
decachlorobiphenyl SUR	85	30-150			%	1	DBV	3/22/23	17:40	16081	3/23/23	19:58	SW3540C8082A

Sample#: 64446-002
Sample ID: SY-SB4R-10
Matrix: Solid Percent Dry: 87.6% Results expressed on a dry weight basis.
Sampled: 2/1/23 11:50

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
PCB-1016	0.090 U	0.11	0.090	0.055	ug/g	1	DBV	3/22/23	17:40	16081	3/23/23	20:11	SW3540C8082A
PCB-1221	0.090 U	0.11	0.090	0.055	ug/g	1	DBV	3/22/23	17:40	16081	3/23/23	20:11	SW3540C8082A
PCB-1232	0.090 U	0.11	0.090	0.055	ug/g	1	DBV	3/22/23	17:40	16081	3/23/23	20:11	SW3540C8082A
PCB-1242	0.090 U	0.11	0.090	0.055	ug/g	1	DBV	3/22/23	17:40	16081	3/23/23	20:11	SW3540C8082A
PCB-1248	0.090 U	0.11	0.090	0.055	ug/g	1	DBV	3/22/23	17:40	16081	3/23/23	20:11	SW3540C8082A
PCB-1254	0.090 U	0.11	0.090	0.055	ug/g	1	DBV	3/22/23	17:40	16081	3/23/23	20:11	SW3540C8082A
PCB-1260	0.090 U	0.11	0.090	0.055	ug/g	1	DBV	3/22/23	17:40	16081	3/23/23	20:11	SW3540C8082A
Surrogate Recovery		Limits											
tetrachloro-m-xylene SUR	79	30-150			%	1	DBV	3/22/23	17:40	16081	3/23/23	20:11	SW3540C8082A
decachlorobiphenyl SUR	77	30-150			%	1	DBV	3/22/23	17:40	16081	3/23/23	20:11	SW3540C8082A

Project ID: Dow 18001468
Job ID: 64446
Sample#: 64446-003
Sample ID: SY-SB4R-2
Matrix: Solid Percent Dry: 80.2% Results expressed on a dry weight basis.
Sampled: 2/1/23 11:55

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
PCB-1016	0.095 U	0.12	0.095	0.059	ug/g	1	DBV	3/22/23	17:40	16081	3/23/23	20:24	SW3540C8082A
PCB-1221	0.095 U	0.12	0.095	0.059	ug/g	1	DBV	3/22/23	17:40	16081	3/23/23	20:24	SW3540C8082A
PCB-1232	0.095 U	0.12	0.095	0.059	ug/g	1	DBV	3/22/23	17:40	16081	3/23/23	20:24	SW3540C8082A
PCB-1242	0.095 U	0.12	0.095	0.059	ug/g	1	DBV	3/22/23	17:40	16081	3/23/23	20:24	SW3540C8082A
PCB-1248	0.095 U	0.12	0.095	0.059	ug/g	1	DBV	3/22/23	17:40	16081	3/23/23	20:24	SW3540C8082A
PCB-1254	0.095 U	0.12	0.095	0.059	ug/g	1	DBV	3/22/23	17:40	16081	3/23/23	20:24	SW3540C8082A
PCB-1260	0.095 U	0.12	0.095	0.059	ug/g	1	DBV	3/22/23	17:40	16081	3/23/23	20:24	SW3540C8082A
Surrogate Recovery		Limits											
tetrachloro-m-xylene SUR	82	30-150			%	1	DBV	3/22/23	17:40	16081	3/23/23	20:24	SW3540C8082A
decachlorobiphenyl SUR	104	30-150			%	1	DBV	3/22/23	17:40	16081	3/23/23	20:24	SW3540C8082A

Project ID: Dow 18001468
Job ID: 64446
Sample#: 64446-001
Sample ID: SY-SB4R-1
Matrix: Solid Percent Dry: 86.8% Results expressed on a dry weight basis.
Sampled: 2/1/23 11:45

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
naphthalene	0.11 U	0.23	0.11	0.089	ug/g	1	CL	2/7/23	14:08	15928	2/13/23	18:50	MA EPH
2-methylnaphthalene	0.056 J	0.23	0.11	0.023	ug/g	1	CL	2/7/23	14:08	15928	2/13/23	18:50	MA EPH
phenanthrene	0.11 U	0.23	0.11	0.050	ug/g	1	CL	2/7/23	14:08	15928	2/13/23	18:50	MA EPH
acenaphthene	0.11 U	0.23	0.11	0.060	ug/g	1	CL	2/7/23	14:08	15928	2/13/23	18:50	MA EPH
acenaphthylene	0.11 U	0.23	0.11	0.052	ug/g	1	CL	2/7/23	14:08	15928	2/13/23	18:50	MA EPH
fluorene	0.11 U	0.23	0.11	0.064	ug/g	1	CL	2/7/23	14:08	15928	2/13/23	18:50	MA EPH
anthracene	0.11 U	0.23	0.11	0.053	ug/g	1	CL	2/7/23	14:08	15928	2/13/23	18:50	MA EPH
fluoranthene	0.115 U	0.229	0.115	0.112	ug/g	1	CL	2/7/23	14:08	15928	2/13/23	18:50	MA EPH
pyrene	0.11 U	0.23	0.11	0.085	ug/g	1	CL	2/7/23	14:08	15928	2/13/23	18:50	MA EPH
benzo(a)anthracene	0.11 U	0.23	0.11	0.062	ug/g	1	CL	2/7/23	14:08	15928	2/13/23	18:50	MA EPH
chrysene	0.11 U	0.23	0.11	0.069	ug/g	1	CL	2/7/23	14:08	15928	2/13/23	18:50	MA EPH
benzo(b)fluoranthene	0.11 U	0.23	0.11	0.023	ug/g	1	CL	2/7/23	14:08	15928	2/13/23	18:50	MA EPH
benzo(k)fluoranthene	0.11 U	0.23	0.11	0.066	ug/g	1	CL	2/7/23	14:08	15928	2/13/23	18:50	MA EPH
benzo(a)pyrene	0.11 U	0.23	0.11	0.062	ug/g	1	CL	2/7/23	14:08	15928	2/13/23	18:50	MA EPH
indeno(1,2,3-cd)pyrene	0.11 U	0.23	0.11	0.089	ug/g	1	CL	2/7/23	14:08	15928	2/13/23	18:50	MA EPH
dibenzo(a,h)anthracene	0.11 U	0.23	0.11	0.062	ug/g	1	CL	2/7/23	14:08	15928	2/13/23	18:50	MA EPH
benzo(g,h,i)perylene	0.11 U	0.23	0.11	0.023	ug/g	1	CL	2/7/23	14:08	15928	2/13/23	18:50	MA EPH
Unadjusted C11-C22 Aromatics	7.5 J	23	5.8	4.6	ug/g	1	DBV	2/7/23	14:08	15928	2/13/23	15:50	MA EPH
C9-C18 Aliphatics	1.4 J	23	5.8	0.89	ug/g	1	DBV	2/7/23	14:08	15928	2/13/23	15:50	MA EPH
C19-C36 Aliphatics	5.3 J	23	7.8	2.5	ug/g	1	DBV	2/7/23	14:08	15928	2/13/23	15:50	MA EPH
C11-C22 Aromatics	7.2 J	23	5.8	4.6	ug/g	1	DBV	2/7/23	14:08	15928	2/13/23	15:50	MA EPH
Surrogate Recovery		Limits											
1-chloro-octadecane SUR	45	40-140			%	1	DBV	2/7/23	14:08	15928	2/13/23	15:50	MA EPH
o-terphenyl SUR	62	40-140			%	1	DBV	2/7/23	14:08	15928	2/13/23	15:50	MA EPH
2-fluorobiphenyl SUR	81	40-140			%	1	DBV	2/7/23	14:08	15928	2/13/23	15:50	MA EPH
2-bromonaphthalene SUR	81	40-140			%	1	DBV	2/7/23	14:08	15928	2/13/23	15:50	MA EPH

Project ID: Dow 18001468
Job ID: 64446
Sample#: 64446-002
Sample ID: SY-SB4R-10
Matrix: Solid Percent Dry: 87.6% Results expressed on a dry weight basis.
Sampled: 2/1/23 11:50

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
naphthalene	0.37	0.22	0.11	0.086	ug/g	1	CL	2/7/23	14:08	15928	2/13/23	19:21	MA EPH
2-methylnaphthalene	0.49	0.22	0.11	0.022	ug/g	1	CL	2/7/23	14:08	15928	2/13/23	19:21	MA EPH
phenanthrene	0.27	0.22	0.11	0.048	ug/g	1	CL	2/7/23	14:08	15928	2/13/23	19:21	MA EPH
acenaphthene	0.11 U	0.22	0.11	0.057	ug/g	1	CL	2/7/23	14:08	15928	2/13/23	19:21	MA EPH
acenaphthylene	0.11 U	0.22	0.11	0.050	ug/g	1	CL	2/7/23	14:08	15928	2/13/23	19:21	MA EPH
fluorene	0.11 U	0.22	0.11	0.062	ug/g	1	CL	2/7/23	14:08	15928	2/13/23	19:21	MA EPH
anthracene	0.11 U	0.22	0.11	0.051	ug/g	1	CL	2/7/23	14:08	15928	2/13/23	19:21	MA EPH
fluoranthene	0.195 J	0.220	0.110	0.108	ug/g	1	CL	2/7/23	14:08	15928	2/13/23	19:21	MA EPH
pyrene	0.15 J	0.22	0.11	0.081	ug/g	1	CL	2/7/23	14:08	15928	2/13/23	19:21	MA EPH
benzo(a)anthracene	0.091 J	0.22	0.11	0.059	ug/g	1	CL	2/7/23	14:08	15928	2/13/23	19:21	MA EPH
chrysene	0.15 J	0.22	0.11	0.066	ug/g	1	CL	2/7/23	14:08	15928	2/13/23	19:21	MA EPH
benzo(b)fluoranthene	0.098 J	0.22	0.11	0.022	ug/g	1	CL	2/7/23	14:08	15928	2/13/23	19:21	MA EPH
benzo(k)fluoranthene	0.084 J	0.22	0.11	0.064	ug/g	1	CL	2/7/23	14:08	15928	2/13/23	19:21	MA EPH
benzo(a)pyrene	0.085 J	0.22	0.11	0.059	ug/g	1	CL	2/7/23	14:08	15928	2/13/23	19:21	MA EPH
indeno(1,2,3-cd)pyrene	0.11 U	0.22	0.11	0.086	ug/g	1	CL	2/7/23	14:08	15928	2/13/23	19:21	MA EPH
dibenzo(a,h)anthracene	0.11 U	0.22	0.11	0.059	ug/g	1	CL	2/7/23	14:08	15928	2/13/23	19:21	MA EPH
benzo(g,h,i)perylene	0.077 J	0.22	0.11	0.022	ug/g	1	CL	2/7/23	14:08	15928	2/13/23	19:21	MA EPH
Unadjusted C11-C22 Aromatics	34	22	5.6	4.4	ug/g	1	DBV	2/7/23	14:08	15928	2/13/23	17:32	MA EPH
C9-C18 Aliphatics	6.0 J	22	5.6	0.86	ug/g	1	DBV	2/7/23	14:08	15928	2/13/23	17:32	MA EPH
C19-C36 Aliphatics	14 J	22	7.5	2.4	ug/g	1	DBV	2/7/23	14:08	15928	2/13/23	17:32	MA EPH
C11-C22 Aromatics	31	22	5.6	4.4	ug/g	1	DBV	2/7/23	14:08	15928	2/13/23	17:32	MA EPH
Surrogate Recovery		Limits											
1-chloro-octadecane SUR	50	40-140			%	1	DBV	2/7/23	14:08	15928	2/13/23	17:32	MA EPH
o-terphenyl SUR	66	40-140			%	1	DBV	2/7/23	14:08	15928	2/13/23	17:32	MA EPH
2-fluorobiphenyl SUR	85	40-140			%	1	DBV	2/7/23	14:08	15928	2/13/23	17:32	MA EPH
2-bromonaphthalene SUR	88	40-140			%	1	DBV	2/7/23	14:08	15928	2/13/23	17:32	MA EPH

Project ID: Dow 18001468
Job ID: 64446
Sample#: 64446-003
Sample ID: SY-SB4R-2
Matrix: Solid Percent Dry: 80.2% Results expressed on a dry weight basis.
Sampled: 2/1/23 11:55

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
naphthalene	0.12 U	0.23	0.12	0.090	ug/g	1	CL	2/7/23	14:08	15928	2/13/23	19:51	MA EPH
2-methylnaphthalene	0.031 J	0.23	0.12	0.023	ug/g	1	CL	2/7/23	14:08	15928	2/13/23	19:51	MA EPH
phenanthrene	0.12 U	0.23	0.12	0.051	ug/g	1	CL	2/7/23	14:08	15928	2/13/23	19:51	MA EPH
acenaphthene	0.12 U	0.23	0.12	0.060	ug/g	1	CL	2/7/23	14:08	15928	2/13/23	19:51	MA EPH
acenaphthylene	0.12 U	0.23	0.12	0.053	ug/g	1	CL	2/7/23	14:08	15928	2/13/23	19:51	MA EPH
fluorene	0.12 U	0.23	0.12	0.064	ug/g	1	CL	2/7/23	14:08	15928	2/13/23	19:51	MA EPH
anthracene	0.12 U	0.23	0.12	0.053	ug/g	1	CL	2/7/23	14:08	15928	2/13/23	19:51	MA EPH
fluoranthene	0.115 U	0.230	0.115	0.113	ug/g	1	CL	2/7/23	14:08	15928	2/13/23	19:51	MA EPH
pyrene	0.12 U	0.23	0.12	0.085	ug/g	1	CL	2/7/23	14:08	15928	2/13/23	19:51	MA EPH
benzo(a)anthracene	0.12 U	0.23	0.12	0.062	ug/g	1	CL	2/7/23	14:08	15928	2/13/23	19:51	MA EPH
chrysene	0.12 U	0.23	0.12	0.069	ug/g	1	CL	2/7/23	14:08	15928	2/13/23	19:51	MA EPH
benzo(b)fluoranthene	0.12 U	0.23	0.12	0.023	ug/g	1	CL	2/7/23	14:08	15928	2/13/23	19:51	MA EPH
benzo(k)fluoranthene	0.12 U	0.23	0.12	0.067	ug/g	1	CL	2/7/23	14:08	15928	2/13/23	19:51	MA EPH
benzo(a)pyrene	0.12 U	0.23	0.12	0.062	ug/g	1	CL	2/7/23	14:08	15928	2/13/23	19:51	MA EPH
indeno(1,2,3-cd)pyrene	0.12 U	0.23	0.12	0.090	ug/g	1	CL	2/7/23	14:08	15928	2/13/23	19:51	MA EPH
dibenzo(a,h)anthracene	0.12 U	0.23	0.12	0.062	ug/g	1	CL	2/7/23	14:08	15928	2/13/23	19:51	MA EPH
benzo(g,h,i)perylene	0.12 U	0.23	0.12	0.023	ug/g	1	CL	2/7/23	14:08	15928	2/13/23	19:51	MA EPH
Unadjusted C11-C22 Aromatics	6.4 J	23	5.9	4.6	ug/g	1	DBV	2/7/23	14:08	15928	2/13/23	18:06	MA EPH
C9-C18 Aliphatics	1.8 J	23	5.9	0.90	ug/g	1	DBV	2/7/23	14:08	15928	2/13/23	18:06	MA EPH
C19-C36 Aliphatics	4.8 J	23	7.8	2.5	ug/g	1	DBV	2/7/23	14:08	15928	2/13/23	18:06	MA EPH
C11-C22 Aromatics	6.3 J	23	5.9	4.6	ug/g	1	DBV	2/7/23	14:08	15928	2/13/23	18:06	MA EPH
Surrogate Recovery		Limits											
1-chloro-octadecane SUR	43	40-140			%	1	DBV	2/7/23	14:08	15928	2/13/23	18:06	MA EPH
o-terphenyl SUR	60	40-140			%	1	DBV	2/7/23	14:08	15928	2/13/23	18:06	MA EPH
2-fluorobiphenyl SUR	88	40-140			%	1	DBV	2/7/23	14:08	15928	2/13/23	18:06	MA EPH
2-bromonaphthalene SUR	87	40-140			%	1	DBV	2/7/23	14:08	15928	2/13/23	18:06	MA EPH

Project ID: Dow 18001468
Job ID: 64446
Sample#: 64446-001
Sample ID: SY-SB4R-1
Matrix: Solid Percent Dry: 86.8% Results expressed on a dry weight basis.
Sampled: 2/1/23 11:45

Parameter	Result		LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
Aluminum	19000	D	26	5.2	1.3	ug/g	5	AGN	2/15/23	11:07	15957	2/17/23	23:18	SW3051A6020A
D = The RPD for the CRM/CRMD was outside the acceptance range. The recovery for each was acceptable.														
Antimony	0.44	J	0.52	0.052	0.049	ug/g	5	AGN	2/15/23	11:07	15957	2/17/23	23:18	SW3051A6020A
Arsenic	12		2.6	0.52	0.10	ug/g	5	AGN	2/15/23	11:07	15957	2/17/23	23:18	SW3051A6020A
Barium	44		5.2	0.52	0.13	ug/g	5	AGN	2/15/23	11:07	15957	2/16/23	23:41	SW3051A6020A
Beryllium	0.76	#	0.52	0.052	0.0096	ug/g	5	AGN	2/15/23	11:07	15957	2/20/23	21:53	SW3051A6020A
# = The associated CCV showed recovery above the acceptance criteria. The CRM/D were acceptable. The reported result is an estimate.														
Cadmium	0.098	J	0.52	0.052	0.0067	ug/g	5	AGN	2/15/23	11:07	15957	2/16/23	23:41	SW3051A6020A
Chromium	33		5.2	0.52	0.021	ug/g	5	AGN	2/15/23	11:07	15957	2/17/23	23:18	SW3051A6020A
Cobalt	15		5.2	0.052	0.012	ug/g	5	AGN	2/15/23	11:07	15957	2/17/23	23:18	SW3051A6020A
Copper	15		5.2	0.52	0.052	ug/g	5	AGN	2/15/23	11:07	15957	2/17/23	23:18	SW3051A6020A
Iron	29000	D	26	10	7.4	ug/g	5	AGN	2/15/23	11:07	15957	2/17/23	23:18	SW3051A6020A
D = The RPD for the CRM/CRMD was outside the acceptance range. The recovery for each was acceptable.														
Lead	13		2.6	0.52	0.28	ug/g	5	AGN	2/15/23	11:07	15957	2/16/23	23:41	SW3051A6020A
Magnesium	6100		52	5.2	0.74	ug/g	5	AGN	2/15/23	11:07	15957	2/17/23	23:18	SW3051A6020A
Manganese	400	M	5.2	0.26	0.083	ug/g	5	AGN	2/15/23	11:07	15957	2/17/23	23:18	SW3051A6020A
M = The percent recovery in the matrix spike was outside acceptance criteria. The recovery for the PDS was 96%.														
Mercury	0.077	U	0.14	0.077	0.032	ug/g	1	EEB	2/9/23	15:40	15941	2/13/23	12:35	SW7471B
Nickel	33		5.2	0.52	0.070	ug/g	5	AGN	2/15/23	11:07	15957	2/17/23	23:18	SW3051A6020A
Potassium	1600	M	52	26	14	ug/g	5	AGN	2/15/23	11:07	15957	2/17/23	23:18	SW3051A6020A
M = The percent recovery in the matrix spike was outside acceptance criteria. The recovery for the PDS was 93%.														
Selenium	3.5	JM	5.2	0.52	0.18	ug/g	5	AGN	2/15/23	11:07	15957	2/17/23	23:18	SW3051A6020A
M = The percent recovery in the matrix spike was outside acceptance criteria. The recovery for the PDS was 83%.														
Silver	0.11	J	2.6	0.26	0.0058	ug/g	5	AGN	2/15/23	11:07	15957	2/16/23	23:41	SW3051A6020A
Sodium	380	J#	520	26	11	ug/g	5	AGN	2/15/23	11:07	15957	2/17/23	23:18	SW3051A6020A
# = The associated CCV showed recovery above the acceptance criteria. The CRM/D were acceptable. The reported result is an estimate.														
Thallium	0.49	J	0.52	0.26	0.037	ug/g	5	AGN	2/15/23	11:07	15957	2/17/23	23:18	SW3051A6020A
Vanadium	32		5.2	0.52	0.17	ug/g	5	AGN	2/15/23	11:07	15957	2/17/23	23:18	SW3051A6020A
Zinc	47	M	5.2	0.52	0.48	ug/g	5	AGN	2/15/23	11:07	15957	2/17/23	23:18	SW3051A6020A
M = The percent recovery in the matrix spike was outside acceptance criteria. The recovery for the PDS was 82%.														

Project ID: Dow 18001468
Job ID: 64446
Sample#: 64446-002
Sample ID: SY-SB4R-10
Matrix: Solid Percent Dry: 87.6% Results expressed on a dry weight basis.
Sampled: 2/1/23 11:50

Parameter	Result		LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
Aluminum	17000	D	27	5.5	1.4	ug/g	5	AGN	2/15/23	11:07	15957	2/17/23	23:45	SW3051A6020A
D = The RPD for the CRM/CRMD was outside the acceptance range. The recovery for each was acceptable.														
Antimony	0.56		0.55	0.055	0.052	ug/g	5	AGN	2/15/23	11:07	15957	2/20/23	22:19	SW3051A6020A
Arsenic	12		2.7	0.55	0.11	ug/g	5	AGN	2/15/23	11:07	15957	2/17/23	23:45	SW3051A6020A
Barium	44		5.5	0.55	0.14	ug/g	5	AGN	2/15/23	11:07	15957	2/20/23	22:19	SW3051A6020A
Beryllium	0.75	#	0.55	0.055	0.010	ug/g	5	AGN	2/15/23	11:07	15957	2/20/23	22:19	SW3051A6020A
# = The associated CCV showed recovery above the acceptance criteria. The CRM/D were acceptable. The reported result is an estimate.														
Cadmium	0.14	J	0.55	0.055	0.0070	ug/g	5	AGN	2/15/23	11:07	15957	2/17/23	0:40	SW3051A6020A
Chromium	32		5.5	0.55	0.022	ug/g	5	AGN	2/15/23	11:07	15957	2/17/23	23:45	SW3051A6020A
Cobalt	14		5.5	0.055	0.013	ug/g	5	AGN	2/15/23	11:07	15957	2/17/23	23:45	SW3051A6020A
Copper	16		5.5	0.55	0.055	ug/g	5	AGN	2/15/23	11:07	15957	2/17/23	23:45	SW3051A6020A
Iron	28000	D	27	11	7.7	ug/g	5	AGN	2/15/23	11:07	15957	2/17/23	23:45	SW3051A6020A
D = The RPD for the CRM/CRMD was outside the acceptance range. The recovery for each was acceptable.														
Lead	12		2.7	0.55	0.29	ug/g	5	AGN	2/15/23	11:07	15957	2/17/23	0:40	SW3051A6020A
Magnesium	6400		55	5.5	0.77	ug/g	5	AGN	2/15/23	11:07	15957	2/17/23	23:45	SW3051A6020A
Manganese	530		5.5	0.27	0.087	ug/g	5	AGN	2/15/23	11:07	15957	2/17/23	23:45	SW3051A6020A
Mercury	0.091	U	0.16	0.091	0.038	ug/g	1	EEB	2/9/23	15:40	15941	2/13/23	12:47	SW7471B
Nickel	33		5.5	0.55	0.073	ug/g	5	AGN	2/15/23	11:07	15957	2/17/23	23:45	SW3051A6020A
Potassium	1700		55	27	14	ug/g	5	AGN	2/15/23	11:07	15957	2/17/23	23:45	SW3051A6020A
Selenium	3.9	J	5.5	0.55	0.19	ug/g	5	AGN	2/15/23	11:07	15957	2/17/23	23:45	SW3051A6020A
Silver	0.16	J	2.7	0.27	0.0061	ug/g	5	AGN	2/15/23	11:07	15957	2/17/23	0:40	SW3051A6020A
Sodium	500	J#	550	27	11	ug/g	5	AGN	2/15/23	11:07	15957	2/17/23	23:45	SW3051A6020A
# = The associated CCV showed recovery above the acceptance criteria. The CRM/D were acceptable. The reported result is an estimate.														
Thallium	0.52	J	0.55	0.27	0.039	ug/g	5	AGN	2/15/23	11:07	15957	2/17/23	0:40	SW3051A6020A
Vanadium	28		5.5	0.55	0.18	ug/g	5	AGN	2/15/23	11:07	15957	2/17/23	23:45	SW3051A6020A
Zinc	45		5.5	0.55	0.50	ug/g	5	AGN	2/15/23	11:07	15957	2/17/23	23:45	SW3051A6020A

Project ID: Dow 18001468
Job ID: 64446
Sample#: 64446-003
Sample ID: SY-SB4R-2
Matrix: Solid Percent Dry: 80.2% Results expressed on a dry weight basis.
Sampled: 2/1/23 11:55

Parameter	Result		LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
Aluminum	18000	D	27	5.4	1.3	ug/g	5	AGN	2/15/23	11:07	15957	2/17/23	23:53	SW3051A6020A
D = The RPD for the CRM/CRMD was outside the acceptance range. The recovery for each was acceptable.														
Antimony	0.51	J	0.54	0.054	0.051	ug/g	5	AGN	2/15/23	11:07	15957	2/17/23	0:49	SW3051A6020A
Arsenic	13		2.7	0.54	0.10	ug/g	5	AGN	2/15/23	11:07	15957	2/17/23	23:53	SW3051A6020A
Barium	38		5.4	0.54	0.14	ug/g	5	AGN	2/15/23	11:07	15957	2/20/23	22:28	SW3051A6020A
Beryllium	0.68	#	0.54	0.054	0.0099	ug/g	5	AGN	2/15/23	11:07	15957	2/20/23	22:28	SW3051A6020A
# = The associated CCV showed recovery above the acceptance criteria. The CRM/D were acceptable. The reported result is an estimate.														
Cadmium	0.094	J	0.54	0.054	0.0069	ug/g	5	AGN	2/15/23	11:07	15957	2/17/23	0:49	SW3051A6020A
Chromium	34		5.4	0.54	0.022	ug/g	5	AGN	2/15/23	11:07	15957	2/17/23	23:53	SW3051A6020A
Cobalt	14		5.4	0.054	0.013	ug/g	5	AGN	2/15/23	11:07	15957	2/17/23	23:53	SW3051A6020A
Copper	19		5.4	0.54	0.054	ug/g	5	AGN	2/15/23	11:07	15957	2/17/23	23:53	SW3051A6020A
Iron	29000	D	27	11	7.6	ug/g	5	AGN	2/15/23	11:07	15957	2/17/23	23:53	SW3051A6020A
D = The RPD for the CRM/CRMD was outside the acceptance range. The recovery for each was acceptable.														
Lead	12		2.7	0.54	0.29	ug/g	5	AGN	2/15/23	11:07	15957	2/17/23	0:49	SW3051A6020A
Magnesium	7500		54	5.4	0.75	ug/g	5	AGN	2/15/23	11:07	15957	2/17/23	23:53	SW3051A6020A
Manganese	520		5.4	0.27	0.085	ug/g	5	AGN	2/15/23	11:07	15957	2/17/23	23:53	SW3051A6020A
Mercury	0.083	U	0.15	0.083	0.034	ug/g	1	EEB	2/9/23	15:40	15941	2/13/23	12:49	SW7471B
Nickel	39		5.4	0.54	0.072	ug/g	5	AGN	2/15/23	11:07	15957	2/17/23	23:53	SW3051A6020A
Potassium	2600		54	27	14	ug/g	5	AGN	2/15/23	11:07	15957	2/17/23	23:53	SW3051A6020A
Selenium	4.3	J	5.4	0.54	0.19	ug/g	5	AGN	2/15/23	11:07	15957	2/17/23	23:53	SW3051A6020A
Silver	0.14	J	2.7	0.27	0.0060	ug/g	5	AGN	2/15/23	11:07	15957	2/17/23	0:49	SW3051A6020A
Sodium	2300	#	540	27	11	ug/g	5	AGN	2/15/23	11:07	15957	2/17/23	23:53	SW3051A6020A
# = The associated CCV showed recovery above the acceptance criteria. The CRM/D were acceptable. The reported result is an estimate.														
Thallium	0.24	J	0.54	0.27	0.038	ug/g	5	AGN	2/15/23	11:07	15957	2/17/23	0:49	SW3051A6020A
Vanadium	31		5.4	0.54	0.18	ug/g	5	AGN	2/15/23	11:07	15957	2/17/23	23:53	SW3051A6020A
Zinc	52		5.4	0.54	0.49	ug/g	5	AGN	2/15/23	11:07	15957	2/17/23	23:53	SW3051A6020A

Quality Control Report



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Portsmouth, NH 03801
www.absoluteresourceassociates.com

Case Narrative
Lab # 64446

Sample Receiving and Chain of Custody Discrepancies

Samples were received in acceptable condition, between 0 and 6 degrees C, on ice, and in accordance with sample handling, preservation and integrity guidelines.
The analyses performed met the requirements of Absolute Resource Associates' Quality Assurance Plan and the requirements set forth by the associated Sampling and Analysis Plan dated December 2022 (final).
Absolute Resource Associates is an ISO/IEC 17025:2017 DoD accredited "Testing Laboratory" through PJLA with an accreditation # 78237. The analyses performed met the requirements of Absolute Resource Associates' Quality Assurance Plan. Parameters included in the ARA current DoD certification also met the requirements set forth by the current DoD Quality Systems Manual, except as noted below.
The reported results are calculated on a "dry weight" basis.

Calibration

Metals: A CCV for Beryllium and Sodium associated with sample 64446-001, -002, and -003 was above acceptance criteria. Data has been qualified accordingly.

Method Blank

No exceptions noted.

Surrogate Recoveries

No exceptions noted.

Laboratory Control Sample Results

VOC: MLCS15933 did not meet the acceptance criteria for diethyl ether. This compound showed low recovery. MLCSD15933 did not meet the acceptance criteria for diethyl ether, methyl t-butyl ether (MTBE), and t-amyl-methyl ether (TAME). These compounds showed low recovery. No additional samples were available for re-analysis. The results have been qualified accordingly.
SVOC: LCS15930 did not meet the acceptance criteria for benzoic acid, 2,4-dinitrophenol, 4,6-dinitro-2-methylphenol, and benzidine. These compounds showed low recovery. The results have been qualified accordingly. There is no impact to the data suspected as these analytes were not identified as contaminants of concern.
Metals: The relative percent difference between the CRM and CRMD15957 was outside the acceptance criteria for Aluminum and Iron. The percent recovery for these elements in each QC parameter was within the acceptance criteria. The results have been qualified accordingly.

Matrix Spike/Matrix Spike Duplicate/Duplicate Results

SVOC: MS/D15930 (64446-001) did not meet the acceptance criteria for several compounds. Compounds that exhibited recoveries outside the acceptance criteria have been qualified with an "M." There is no impact to the data suspected as these analytes were not identified as contaminants of concern.

Metals: MS15957 (64446-001) did not meet the acceptance criteria for manganese, potassium, selenium, and zinc. The percent recovery was acceptable in the associated CRM/D. The recovery for the PDS for each is provided with the results. Matrix interference suspected. Sample results have been qualified accordingly.

Other

Reporting Limits: Dilutions performed during the analysis are noted on the result pages.

No other exceptions noted.

Data Qualifiers

U = This compound was analyzed for, but not detected above the associated limit of detection.
J = The analytical result was below the instrument calibration range, but above the method detection limit. The reported concentration is an estimate.
m = An "m" next to the "Response" value reported on the raw data sheets indicates a manual integration was performed.

Abbreviations for Manual Integrations

BC = Baseline Correction: The software integration of the baseline was inappropriate for the chromatogram
MI = Mis-Identification: The software integrated the incorrect peak
PS = Peak Separation: Two peaks exist in the chromatogram but the software integrated them as one
RI = Range Integration: Software does not perform range integrations, must be performed manually
NB = Noisy Baseline: Software mis-integrated due to a noisy baseline
PM = Peak Missed: Software did not integrate the target peak

Absolute Resource Associates does not hold DoD Certification for the following analytes:

Waters	Analyte	CAS	Reference
	1,3,5-trichlorobenzene	108-70-3	SW5030C8260D
	1,4-dioxane	123-91-1	SW5030C8260D
	diethyl ether	60-29-7	SW5030C8260D
	tetrahydrofuran (THF)	109-99-9	SW5030C8260D
	azobenzene	103-33-3	SW3510C8270E

GLOSSARY

%R	Percent Recovery
BLK	Blank (Method Blank, Preparation Blank)
CCB	Continuing Calibration Blank
CCV	Continuing Calibration Verification
CRM	Certified Reference Material (associated with solid Metals samples)
CRMD	Certified Reference Material Duplicate (associated with solid Metals samples)
Dil'n	Dilution
DL	Detection Limit
DUP	Duplicate
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
LOD	Limit of Detection
LOQ	Limit of Quantitation
MB	Methanol Blank (associated with solid VOC samples)
MLCS	Methanol Laboratory Control Sample (associated with solid VOC samples)
MLCSD	Methanol Laboratory Control Sample Duplicate (associated with solid VOC samples)
MS	Matrix Spike
MSD	Matrix Spike Duplicate
PB	Preparation Blank
QC	Quality Control
RL	Reporting Limit
RPD	Relative Percent Difference
SUR	Surrogate

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R	Limits		RPD	RPD Limit
MA VPH	MB15934	Unadjusted C5-C8 Aliphatics		4.3 J	5.0	4.8	3.9	ug/g						
		Unadjusted C9-C12 Aliphatics		4.8 U	5.0	4.8	4.6	ug/g						
		methyl t-butyl ether (MTBE)		0.040 U	0.10	0.040	0.035	ug/g						
		benzene		0.040 U	0.10	0.040	0.016	ug/g						
		toluene		0.040 U	0.10	0.040	0.025	ug/g						
		ethylbenzene		0.040 U	0.10	0.040	0.022	ug/g						
		m&p-xylenes		0.080 U	0.10	0.080	0.021	ug/g						
		o-xylene		0.0089 J	0.10	0.040	0.0023	ug/g						
		naphthalene		0.040 U	0.25	0.040	0.022	ug/g						
		C5-C8 Aliphatics		4.3 J	5.0	4.8	3.9	ug/g						
		C9-C12 Aliphatics		4.8 U	5.0	4.8	4.6	ug/g						
		C9-C10 Aromatics		1.5 U	5.0	1.5	1.3	ug/g						
		2,5-dibromotoluene as Aromatic		92				%			70	130		
		2,5-dibromotoluene as Aliphatic		91				%			70	130		
		a,a,a-trifluorotoluene SUR		89				%			70	130		
MA VPH	MLCS15934	Unadjusted C5-C8 Aliphatics		13	5.0	4.8	3.9	ug/g	15	89	70	130		
		Unadjusted C9-C12 Aliphatics		13	5.0	4.8	4.6	ug/g	15	86	70	130		
		methyl t-butyl ether (MTBE)		4.5	0.10	0.040	0.035	ug/g	5	91	70	130		
		benzene		4.6	0.10	0.040	0.016	ug/g	5	93	70	130		
		toluene		4.6	0.10	0.040	0.025	ug/g	5	91	70	130		
		ethylbenzene		4.6	0.10	0.040	0.022	ug/g	5	92	70	130		
		m&p-xylenes		9.1	0.10	0.080	0.021	ug/g	10	91	70	130		
		o-xylene		4.5	0.10	0.040	0.0023	ug/g	5	90	70	130		
		naphthalene		4.6	0.25	0.040	0.022	ug/g	5	93	70	130		
		C5-C8 Aliphatics		4.8 U	5.0	4.8	3.9	ug/g			70	130		
		C9-C12 Aliphatics		4.8 U	5.0	4.8	4.6	ug/g			70	130		
		C9-C10 Aromatics		4.4 J	5.0	1.5	1.3	ug/g	5	88	70	130		
		2,5-dibromotoluene as Aromatic		108				%			70	130		
		2,5-dibromotoluene as Aliphatic		105				%			70	130		
		a,a,a-trifluorotoluene SUR		92				%			70	130		
MA VPH	MLCSD15934	Unadjusted C5-C8 Aliphatics		13	5.0	4.8	3.9	ug/g	15	88	70	130	1	25
		Unadjusted C9-C12 Aliphatics		13	5.0	4.8	4.6	ug/g	15	88	70	130	3	25
		methyl t-butyl ether (MTBE)		4.6	0.10	0.040	0.035	ug/g	5	92	70	130	1	25
		benzene		4.7	0.10	0.040	0.016	ug/g	5	94	70	130	1	25
		toluene		4.6	0.10	0.040	0.025	ug/g	5	92	70	130	1	25
		ethylbenzene		4.6	0.10	0.040	0.022	ug/g	5	93	70	130	1	25
		m&p-xylenes		9.1	0.10	0.080	0.021	ug/g	10	91	70	130	1	25
		o-xylene		4.5	0.10	0.040	0.0023	ug/g	5	91	70	130	1	25
		naphthalene		4.6	0.25	0.040	0.022	ug/g	5	93	70	130	0	25
		C5-C8 Aliphatics		4.8 U	5.0	4.8	3.9	ug/g			70	130		25
		C9-C12 Aliphatics		4.8 U	5.0	4.8	4.6	ug/g			70	130		25
		C9-C10 Aromatics		4.4 J	5.0	1.5	1.3	ug/g	5	89	70	130	1	25
		2,5-dibromotoluene as Aromatic		105				%			70	130		
		2,5-dibromotoluene as Aliphatic		104				%			70	130		
		a,a,a-trifluorotoluene SUR		93				%			70	130		

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R	Limits	RPD	RPD Limit
SW5035A8260D	MB15933	dichlorodifluoromethane		0.025 U	0.10	0.025	0.013	ug/g					
		chloromethane		0.025 U	0.10	0.025	0.020	ug/g					
		vinyl chloride		0.025 U	0.10	0.025	0.014	ug/g					
		bromomethane		0.10 U	0.25	0.10	0.050	ug/g					
		chloroethane		0.025 U	0.10	0.025	0.010	ug/g					
		trichlorofluoromethane		0.025 U	0.10	0.025	0.014	ug/g					
		diethyl ether		0.025 U	0.10	0.025	0.011	ug/g					
		acetone		0.20 U	2.5	0.20	0.033	ug/g					
		1,1-dichloroethene		0.025 U	0.10	0.025	0.020	ug/g					
		methylene chloride		0.025 U	0.10	0.025	0.023	ug/g					
		carbon disulfide		0.025 U	0.10	0.025	0.017	ug/g					
		methyl t-butyl ether (MTBE)		0.025 U	0.10	0.025	0.015	ug/g					
		trans-1,2-dichloroethene		0.025 U	0.10	0.025	0.014	ug/g					
		ethyl t-butyl ether (ETBE)		0.025 U	0.10	0.025	0.014	ug/g					
		1,1-dichloroethane		0.025 U	0.10	0.025	0.0096	ug/g					
		t-butanol (TBA)		0.25 U	2.5	0.25	0.13	ug/g					
		2-butanone (MEK)		0.20 U	0.30	0.20	0.056	ug/g					
		2,2-dichloropropane		0.025 U	0.10	0.025	0.013	ug/g					
		cis-1,2-dichloroethene		0.025 U	0.10	0.025	0.010	ug/g					
		chloroform		0.025 U	0.10	0.025	0.015	ug/g					
		bromochloromethane		0.025 U	0.10	0.025	0.0074	ug/g					
		tetrahydrofuran (THF)		0.20 U	0.50	0.20	0.085	ug/g					
		1,1,1-trichloroethane		0.025 U	0.10	0.025	0.015	ug/g					
		1,1-dichloropropene		0.025 U	0.10	0.025	0.014	ug/g					
		t-amyl-methyl ether (TAME)		0.025 U	0.10	0.025	0.018	ug/g					
		carbon tetrachloride		0.025 U	0.10	0.025	0.0061	ug/g					
		1,2-dichloroethane		0.025 U	0.10	0.025	0.012	ug/g					
		benzene		0.025 U	0.10	0.025	0.010	ug/g					
		trichloroethene		0.025 U	0.10	0.025	0.010	ug/g					
		1,2-dichloropropane		0.025 U	0.10	0.025	0.011	ug/g					
		bromodichloromethane		0.025 U	0.10	0.025	0.013	ug/g					
		1,4-dioxane		2.0 U	2.5	2.0	0.59	ug/g					
		dibromomethane		0.025 U	0.10	0.025	0.013	ug/g					
		4-methyl-2-pentanone (MIBK)		0.025 U	0.45	0.025	0.012	ug/g					
		cis-1,3-dichloropropene		0.025 U	0.10	0.025	0.013	ug/g					
		toluene		0.025 U	0.10	0.025	0.010	ug/g					
		trans-1,3-dichloropropene		0.025 U	0.10	0.025	0.013	ug/g					
		2-hexanone		0.050 U	0.50	0.050	0.026	ug/g					
		1,1,2-trichloroethane		0.025 U	0.10	0.025	0.014	ug/g					
		1,3-dichloropropane		0.025 U	0.10	0.025	0.013	ug/g					
		tetrachloroethene		0.025 U	0.10	0.025	0.013	ug/g					
		dibromochloromethane		0.025 U	0.10	0.025	0.013	ug/g					
		1,2-dibromoethane (EDB)		0.025 U	0.10	0.025	0.012	ug/g					
		chlorobenzene		0.025 U	0.10	0.025	0.013	ug/g					
		1,1,1,2-tetrachloroethane		0.025 U	0.10	0.025	0.021	ug/g					
		ethylbenzene		0.025 U	0.10	0.025	0.012	ug/g					
		m&p-xylenes		0.050 U	0.10	0.050	0.025	ug/g					
		o-xylene		0.025 U	0.10	0.025	0.017	ug/g					
		styrene		0.025 U	0.10	0.025	0.011	ug/g					
		bromoform		0.025 U	0.10	0.025	0.014	ug/g					
		isopropylbenzene		0.025 U	0.10	0.025	0.015	ug/g					
		1,1,2,2-tetrachloroethane		0.025 U	0.10	0.025	0.016	ug/g					
		1,2,3-trichloropropane		0.025 U	0.10	0.025	0.012	ug/g					
		n-propylbenzene		0.025 U	0.10	0.025	0.015	ug/g					

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R	Limits	RPD	RPD Limit
SW5035A8260D	MB15933	bromobenzene		0.025 U	0.10	0.025	0.015	ug/g					
		2-chlorotoluene		0.025 U	0.10	0.025	0.020	ug/g					
		4-chlorotoluene		0.025 U	0.10	0.025	0.013	ug/g					
		tert-butylbenzene		0.025 U	0.10	0.025	0.018	ug/g					
		1,2,4-trimethylbenzene		0.025 U	0.10	0.025	0.017	ug/g					
		sec-butylbenzene		0.025 U	0.10	0.025	0.014	ug/g					
		1,3-dichlorobenzene		0.025 U	0.10	0.025	0.019	ug/g					
		4-isopropyltoluene		0.025 U	0.10	0.025	0.016	ug/g					
		1,4-dichlorobenzene		0.025 U	0.10	0.025	0.016	ug/g					
		1,2-dichlorobenzene		0.025 U	0.10	0.025	0.015	ug/g					
		n-butylbenzene		0.025 U	0.10	0.025	0.016	ug/g					
		1,2-dibromo-3-chloropropane		0.050 U	0.10	0.050	0.029	ug/g					
		1,3,5-trimethylbenzene		0.025 U	0.10	0.025	0.014	ug/g					
		1,2,4-trichlorobenzene		0.025 U	0.10	0.025	0.018	ug/g					
		hexachlorobutadiene		0.050 U	0.10	0.050	0.029	ug/g					
		naphthalene		0.026 J	0.10	0.025	0.016	ug/g					
		1,2,3-trichlorobenzene		0.025 U	0.10	0.025	0.011	ug/g					
		dibromofluoromethane SUR		99				%			78	114	
		toluene-D8 SUR		94				%			88	110	
		4-bromofluorobenzene SUR		92				%			86	115	
		a,a,a-trifluorotoluene SUR		93				%			70	130	

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R		Limits	RPD	RPD Limit
SW5035A8260D	MLCS15933	dichlorodifluoromethane		0.65	0.10	0.025	0.013	ug/g	1	65		29	149	
		chloromethane		0.82	0.10	0.025	0.020	ug/g	1	82		50	136	
		vinyl chloride		1.1	0.10	0.025	0.014	ug/g	1	105		56	135	
		bromomethane		1.0	0.25	0.10	0.050	ug/g	1	101		53	143	
		chloroethane		0.98	0.10	0.025	0.010	ug/g	1	98		59	139	
		trichlorofluoromethane		1.00	0.10	0.025	0.014	ug/g	1	100		62	140	
		diethyl ether		0.69	0.10	0.025	0.011	ug/g	1	69	*	71	129	
		acetone		1.0 J	2.5	0.20	0.033	ug/g	1	102		36	164	
		1,1-dichloroethene		0.92	0.10	0.025	0.020	ug/g	1	92		70	131	
		methylene chloride		0.93	0.10	0.025	0.023	ug/g	1	93		70	128	
		carbon disulfide		0.83	0.10	0.025	0.017	ug/g	1	83		63	132	
		methyl t-butyl ether (MTBE)		0.82	0.10	0.025	0.015	ug/g	1	82		73	125	
		trans-1,2-dichloroethene		0.95	0.10	0.025	0.014	ug/g	1	95		74	125	
		ethyl t-butyl ether (ETBE)		0.79	0.10	0.025	0.014	ug/g	1	79		72	126	
		1,1-dichloroethane		0.90	0.10	0.025	0.0096	ug/g	1	90		76	125	
		t-butanol (TBA)		4.5	2.5	0.25	0.13	ug/g	5	91		68	133	
		2-butanone (MEK)		0.77	0.30	0.20	0.056	ug/g	1	77		51	148	
		2,2-dichloropropane		0.82	0.10	0.025	0.013	ug/g	1	82		67	133	
		cis-1,2-dichloroethene		0.96	0.10	0.025	0.010	ug/g	1	96		77	123	
		chloroform		0.94	0.10	0.025	0.015	ug/g	1	94		78	123	
		bromochloromethane		0.88	0.10	0.025	0.0074	ug/g	1	88		78	125	
		tetrahydrofuran (THF)		0.70	0.50	0.20	0.085	ug/g	1	70		61	135	
		1,1,1-trichloroethane		0.88	0.10	0.025	0.015	ug/g	1	88		73	130	
		1,1-dichloropropene		0.89	0.10	0.025	0.014	ug/g	1	89		76	125	
		t-amyl-methyl ether (TAME)		0.76	0.10	0.025	0.018	ug/g	1	76		73	126	
		carbon tetrachloride		0.86	0.10	0.025	0.0061	ug/g	1	86		70	135	
		1,2-dichloroethane		0.89	0.10	0.025	0.012	ug/g	1	89		73	128	
		benzene		0.92	0.10	0.025	0.010	ug/g	1	92		77	121	
		trichloroethene		1.0	0.10	0.025	0.010	ug/g	1	103		77	123	
		1,2-dichloropropane		0.86	0.10	0.025	0.011	ug/g	1	86		76	123	
		bromodichloromethane		0.86	0.10	0.025	0.013	ug/g	1	86		75	127	
		1,4-dioxane		2.2 J	2.5	2.0	0.59	ug/g	2	108		55	138	
		dibromomethane		0.94	0.10	0.025	0.013	ug/g	1	94		78	125	
		4-methyl-2-pentanone (MIBK)		0.75	0.45	0.025	0.012	ug/g	1	75		65	135	
		cis-1,3-dichloropropene		0.83	0.10	0.025	0.013	ug/g	1	83		74	126	
		toluene		0.89	0.10	0.025	0.010	ug/g	1	89		77	121	
		trans-1,3-dichloropropene		0.76	0.10	0.025	0.013	ug/g	1	76		71	130	
		2-hexanone		0.76	0.50	0.050	0.026	ug/g	1	76		53	145	
		1,1,2-trichloroethane		0.85	0.10	0.025	0.014	ug/g	1	85		78	121	
		1,3-dichloropropane		0.90	0.10	0.025	0.013	ug/g	1	90		77	121	
		tetrachloroethene		1.0	0.10	0.025	0.013	ug/g	1	102		73	128	
		dibromochloromethane		0.87	0.10	0.025	0.013	ug/g	1	87		74	126	
		1,2-dibromoethane (EDB)		0.89	0.10	0.025	0.012	ug/g	1	89		78	122	
		chlorobenzene		0.93	0.10	0.025	0.013	ug/g	1	93		79	120	
		1,1,1,2-tetrachloroethane		0.86	0.10	0.025	0.021	ug/g	1	86		78	125	
		ethylbenzene		0.94	0.10	0.025	0.012	ug/g	1	94		76	122	
		m&p-xylenes		2.0	0.10	0.050	0.025	ug/g	2	98		77	124	
		o-xylene		0.93	0.10	0.025	0.017	ug/g	1	93		77	123	
		styrene		0.96	0.10	0.025	0.011	ug/g	1	96		76	124	
		bromoform		0.91	0.10	0.025	0.014	ug/g	1	91		67	132	
		isopropylbenzene		0.96	0.10	0.025	0.015	ug/g	1	96		68	134	
		1,1,2,2-tetrachloroethane		1.0	0.10	0.025	0.016	ug/g	1	102		70	124	
		1,2,3-trichloropropane		1.1	0.10	0.025	0.012	ug/g	1	106		73	125	
		n-propylbenzene		1.0	0.10	0.025	0.015	ug/g	1	104		73	125	

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R	Limits		RPD	RPD Limit
SW5035A8260D	MLCS15933	bromobenzene		1.1	0.10	0.025	0.015	ug/g	1	105	78	121		
		2-chlorotoluene		1.1	0.10	0.025	0.020	ug/g	1	106	75	122		
		4-chlorotoluene		1.0	0.10	0.025	0.013	ug/g	1	101	72	124		
		tert-butylbenzene		1.0	0.10	0.025	0.018	ug/g	1	100	73	125		
		1,2,4-trimethylbenzene		1.1	0.10	0.025	0.017	ug/g	1	105	75	123		
		sec-butylbenzene		1.1	0.10	0.025	0.014	ug/g	1	107	73	126		
		1,3-dichlorobenzene		1.1	0.10	0.025	0.019	ug/g	1	111	77	121		
		4-isopropyltoluene		1.1	0.10	0.025	0.016	ug/g	1	107	73	127		
		1,4-dichlorobenzene		1.1	0.10	0.025	0.016	ug/g	1	109	75	120		
		1,2-dichlorobenzene		1.1	0.10	0.025	0.015	ug/g	1	112	78	121		
		n-butylbenzene		1.1	0.10	0.025	0.016	ug/g	1	108	70	128		
		1,2-dibromo-3-chloropropane		0.87	0.10	0.050	0.029	ug/g	1	87	61	132		
		1,3,5-trimethylbenzene		1.1	0.10	0.025	0.014	ug/g	1	108	73	124		
		1,2,4-trichlorobenzene		1.1	0.10	0.025	0.018	ug/g	1	112	67	129		
		hexachlorobutadiene		1.3	0.10	0.050	0.029	ug/g	1	126	61	135		
		naphthalene		1.0	0.10	0.025	0.016	ug/g	1	101	62	129		
		1,2,3-trichlorobenzene		1.1	0.10	0.025	0.011	ug/g	1	115	66	130		
		dibromofluoromethane SUR		101				%			78	114		
		toluene-D8 SUR		96				%			88	110		
		4-bromofluorobenzene SUR		96				%			86	115		
		a,a,a-trifluorotoluene SUR		101				%			70	130		

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R		Limits		RPD	RPD Limit
SW5035A8260D	MLCSD15933	dichlorodifluoromethane		0.64	0.10	0.025	0.013	ug/g	1	64		29	149	1	30
		chloromethane		0.83	0.10	0.025	0.020	ug/g	1	83		50	136	1	30
		vinyl chloride		1.0	0.10	0.025	0.014	ug/g	1	104		56	135	1	30
		bromomethane		0.91	0.25	0.10	0.050	ug/g	1	91		53	143	11	30
		chloroethane		0.99	0.10	0.025	0.010	ug/g	1	99		59	139	1	30
		trichlorofluoromethane		0.99	0.10	0.025	0.014	ug/g	1	99		62	140	1	30
		diethyl ether		0.64	0.10	0.025	0.011	ug/g	1	64	*	71	129	7	30
		acetone		0.92 J	2.5	0.20	0.033	ug/g	1	92		36	164	11	30
		1,1-dichloroethene		0.91	0.10	0.025	0.020	ug/g	1	91		70	131	1	30
		methylene chloride		0.92	0.10	0.025	0.023	ug/g	1	92		70	128	1	30
		carbon disulfide		0.81	0.10	0.025	0.017	ug/g	1	81		63	132	2	30
		methyl t-butyl ether (MTBE)		0.72	0.10	0.025	0.015	ug/g	1	72	*	73	125	13	30
		trans-1,2-dichloroethene		0.93	0.10	0.025	0.014	ug/g	1	93		74	125	3	30
		ethyl t-butyl ether (ETBE)		0.72	0.10	0.025	0.014	ug/g	1	72		72	126	9	30
		1,1-dichloroethane		0.89	0.10	0.025	0.0096	ug/g	1	89		76	125	1	30
		t-butanol (TBA)		4.1	2.5	0.25	0.13	ug/g	5	81		68	133	11	30
		2-butanone (MEK)		0.70	0.30	0.20	0.056	ug/g	1	70		51	148	9	30
		2,2-dichloropropane		0.81	0.10	0.025	0.013	ug/g	1	81		67	133	2	30
		cis-1,2-dichloroethene		0.92	0.10	0.025	0.010	ug/g	1	92		77	123	4	30
		chloroform		0.94	0.10	0.025	0.015	ug/g	1	94		78	123	0	30
		bromochloromethane		0.89	0.10	0.025	0.0074	ug/g	1	89		78	125	1	30
		tetrahydrofuran (THF)		0.70	0.50	0.20	0.085	ug/g	1	70		61	135	1	30
		1,1,1-trichloroethane		0.84	0.10	0.025	0.015	ug/g	1	84		73	130	4	30
		1,1-dichloropropene		0.88	0.10	0.025	0.014	ug/g	1	88		76	125	1	30
		t-amyl-methyl ether (TAME)		0.71	0.10	0.025	0.018	ug/g	1	71	*	73	126	6	30
		carbon tetrachloride		0.84	0.10	0.025	0.0061	ug/g	1	84		70	135	2	30
		1,2-dichloroethane		0.86	0.10	0.025	0.012	ug/g	1	86		73	128	3	30
		benzene		0.90	0.10	0.025	0.010	ug/g	1	90		77	121	2	30
		trichloroethene		1.0	0.10	0.025	0.010	ug/g	1	102		77	123	1	30
		1,2-dichloropropane		0.88	0.10	0.025	0.011	ug/g	1	88		76	123	2	30
		bromodichloromethane		0.84	0.10	0.025	0.013	ug/g	1	84		75	127	3	30
		1,4-dioxane		1.7 J	2.5	2.0	0.59	ug/g	2	86		55	138	22	30
		dibromomethane		0.90	0.10	0.025	0.013	ug/g	1	90		78	125	5	30
		4-methyl-2-pentanone (MIBK)		0.69	0.45	0.025	0.012	ug/g	1	69		65	135	8	30
		cis-1,3-dichloropropene		0.82	0.10	0.025	0.013	ug/g	1	82		74	126	2	30
		toluene		0.90	0.10	0.025	0.010	ug/g	1	90		77	121	0	30
		trans-1,3-dichloropropene		0.75	0.10	0.025	0.013	ug/g	1	75		71	130	1	30
		2-hexanone		0.71	0.50	0.050	0.026	ug/g	1	71		53	145	6	30
		1,1,2-trichloroethane		0.84	0.10	0.025	0.014	ug/g	1	84		78	121	2	30
		1,3-dichloropropane		0.88	0.10	0.025	0.013	ug/g	1	88		77	121	3	30
		tetrachloroethene		1.0	0.10	0.025	0.013	ug/g	1	101		73	128	2	30
		dibromochloromethane		0.84	0.10	0.025	0.013	ug/g	1	84		74	126	3	30
		1,2-dibromoethane (EDB)		0.87	0.10	0.025	0.012	ug/g	1	87		78	122	2	30
		chlorobenzene		0.93	0.10	0.025	0.013	ug/g	1	93		79	120	0	30
		1,1,1,2-tetrachloroethane		0.85	0.10	0.025	0.021	ug/g	1	85		78	125	2	30
		ethylbenzene		0.94	0.10	0.025	0.012	ug/g	1	94		76	122	0	30
		m&p-xylenes		2.0	0.10	0.050	0.025	ug/g	2	98		77	124	0	30
		o-xylene		0.93	0.10	0.025	0.017	ug/g	1	93		77	123	0	30
		styrene		0.95	0.10	0.025	0.011	ug/g	1	95		76	124	1	30
		bromoform		0.89	0.10	0.025	0.014	ug/g	1	89		67	132	3	30
		isopropylbenzene		0.97	0.10	0.025	0.015	ug/g	1	97		68	134	1	30
		1,1,2,2-tetrachloroethane		0.95	0.10	0.025	0.016	ug/g	1	95		70	124	8	30
		1,2,3-trichloropropane		0.96	0.10	0.025	0.012	ug/g	1	96		73	125	10	30
		n-propylbenzene		1.0	0.10	0.025	0.015	ug/g	1	101		73	125	4	30

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R	Limits		RPD	RPD Limit
SW5035A8260D	MLCSD15933	bromobenzene		1.0	0.10	0.025	0.015	ug/g	1	101	78	121	4	30
		2-chlorotoluene		0.88	0.10	0.025	0.020	ug/g	1	88	75	122	18	30
		4-chlorotoluene		1.2	0.10	0.025	0.013	ug/g	1	115	72	124	13	30
		tert-butylbenzene		1.1	0.10	0.025	0.018	ug/g	1	106	73	125	5	30
		1,2,4-trimethylbenzene		1.0	0.10	0.025	0.017	ug/g	1	104	75	123	2	30
		sec-butylbenzene		1.1	0.10	0.025	0.014	ug/g	1	107	73	126	0	30
		1,3-dichlorobenzene		1.1	0.10	0.025	0.019	ug/g	1	107	77	121	3	30
		4-isopropyltoluene		1.1	0.10	0.025	0.016	ug/g	1	107	73	127	0	30
		1,4-dichlorobenzene		1.1	0.10	0.025	0.016	ug/g	1	107	75	120	2	30
		1,2-dichlorobenzene		1.1	0.10	0.025	0.015	ug/g	1	106	78	121	6	30
		n-butylbenzene		1.1	0.10	0.025	0.016	ug/g	1	106	70	128	2	30
		1,2-dibromo-3-chloropropane		0.68	0.10	0.050	0.029	ug/g	1	68	61	132	24	30
		1,3,5-trimethylbenzene		1.1	0.10	0.025	0.014	ug/g	1	105	73	124	3	30
		1,2,4-trichlorobenzene		1.1	0.10	0.025	0.018	ug/g	1	107	67	129	4	30
		hexachlorobutadiene		1.1	0.10	0.050	0.029	ug/g	1	114	61	135	10	30
		naphthalene		0.93	0.10	0.025	0.016	ug/g	1	93	62	129	8	30
		1,2,3-trichlorobenzene		1.1	0.10	0.025	0.011	ug/g	1	111	66	130	4	30
		dibromofluoromethane SUR		98				%			78	114		
		toluene-D8 SUR		97				%			88	110		
		4-bromofluorobenzene SUR		101				%			86	115		
		a,a,a-trifluorotoluene SUR		99				%			70	130		

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R	Limits		RPD	RPD Limit
MA EPH	BLK15928	naphthalene		0.10 U	0.20	0.10	0.078	ug/g						
		2-methylnaphthalene		0.10 U	0.20	0.10	0.020	ug/g						
		phenanthrene		0.10 U	0.20	0.10	0.044	ug/g						
		acenaphthene		0.10 U	0.20	0.10	0.052	ug/g						
		acenaphthylene		0.10 U	0.20	0.10	0.046	ug/g						
		fluorene		0.10 U	0.20	0.10	0.056	ug/g						
		anthracene		0.10 U	0.20	0.10	0.046	ug/g						
		fluoranthene		0.100 U	0.200	0.100	0.0980	ug/g						
		pyrene		0.10 U	0.20	0.10	0.074	ug/g						
		benzo(a)anthracene		0.10 U	0.20	0.10	0.054	ug/g						
		chrysene		0.10 U	0.20	0.10	0.060	ug/g						
		benzo(b)fluoranthene		0.10 U	0.20	0.10	0.020	ug/g						
		benzo(k)fluoranthene		0.10 U	0.20	0.10	0.058	ug/g						
		benzo(a)pyrene		0.10 U	0.20	0.10	0.054	ug/g						
		indeno(1,2,3-cd)pyrene		0.10 U	0.20	0.10	0.078	ug/g						
		dibenzo(a,h)anthracene		0.10 U	0.20	0.10	0.054	ug/g						
		benzo(g,h,i)perylene		0.10 U	0.20	0.10	0.020	ug/g						
		Unadjusted C11-C22 Aromatics		4.9 J	20	5.1	4.0	ug/g						
		C9-C18 Aliphatics		5.1 U	20	5.1	0.78	ug/g						
		C19-C36 Aliphatics		3.8 J	20	6.8	2.1	ug/g						
		C11-C22 Aromatics		4.9 J	20	5.1	4.0	ug/g						
		1-chloro-octadecane SUR		55				%			40	140		
		o-terphenyl SUR		71				%			40	140		
		2-fluorobiphenyl SUR		91				%			40	140		
		2-bromonaphthalene SUR		89				%			40	140		
MA EPH	LCS15928	naphthalene		3.2	0.20	0.10	0.078	ug/g	6	54	40	140		
		2-methylnaphthalene		3.3	0.20	0.10	0.020	ug/g	6	56	40	140		
		phenanthrene		3.6	0.20	0.10	0.044	ug/g	6	59	40	140		
		acenaphthene		3.1	0.20	0.10	0.052	ug/g	6	51	40	140		
		acenaphthylene		3.2	0.20	0.10	0.046	ug/g	6	53	40	140		
		fluorene		3.7	0.20	0.10	0.056	ug/g	6	61	40	140		
		anthracene		3.4	0.20	0.10	0.046	ug/g	6	56	40	140		
		fluoranthene		3.81	0.200	0.100	0.0980	ug/g	6	64	40	140		
		pyrene		3.0	0.20	0.10	0.074	ug/g	6	50	40	140		
		benzo(a)anthracene		3.5	0.20	0.10	0.054	ug/g	6	58	40	140		
		chrysene		3.7	0.20	0.10	0.060	ug/g	6	61	40	140		
		benzo(b)fluoranthene		3.4	0.20	0.10	0.020	ug/g	6	57	40	140		
		benzo(k)fluoranthene		3.5	0.20	0.10	0.058	ug/g	6	59	40	140		
		benzo(a)pyrene		2.9	0.20	0.10	0.054	ug/g	6	48	40	140		
		indeno(1,2,3-cd)pyrene		4.1	0.20	0.10	0.078	ug/g	6	69	40	140		
		dibenzo(a,h)anthracene		4.1	0.20	0.10	0.054	ug/g	6	68	40	140		
		benzo(g,h,i)perylene		3.8	0.20	0.10	0.020	ug/g	6	63	40	140		
		Unadjusted C11-C22 Aromatics		72	20	5.1	4.0	ug/g	102	70	40	140		
		C9-C18 Aliphatics		17 J	20	5.1	0.78	ug/g	36	48	40	140		
		C19-C36 Aliphatics		32	20	6.8	2.1	ug/g	48	67	40	140		
		C11-C22 Aromatics		13 J	20	5.1	4.0	ug/g			40	140		
		1-chloro-octadecane SUR		52				%			40	140		
		o-terphenyl SUR		65				%			40	140		
		2-fluorobiphenyl SUR		82				%			40	140		
		2-bromonaphthalene SUR		82				%			40	140		

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R	Limits		RPD	RPD Limit
MA EPH	LCSD15928	naphthalene		3.2	0.20	0.10	0.078	ug/g	6	53	40	140	1	25
		2-methylnaphthalene		3.3	0.20	0.10	0.020	ug/g	6	55	40	140	1	25
		phenanthrene		3.5	0.20	0.10	0.044	ug/g	6	59	40	140	1	25
		acenaphthene		3.0	0.20	0.10	0.052	ug/g	6	51	40	140	1	25
		acenaphthylene		3.2	0.20	0.10	0.046	ug/g	6	53	40	140	1	25
		fluorene		3.6	0.20	0.10	0.056	ug/g	6	61	40	140	1	25
		anthracene		3.4	0.20	0.10	0.046	ug/g	6	56	40	140	0	25
		fluoranthene		3.81	0.200	0.100	0.0980	ug/g	6	63	40	140	0	25
		pyrene		3.0	0.20	0.10	0.074	ug/g	6	50	40	140	0	25
		benzo(a)anthracene		3.4	0.20	0.10	0.054	ug/g	6	57	40	140	1	25
		chrysene		3.6	0.20	0.10	0.060	ug/g	6	60	40	140	2	25
		benzo(b)fluoranthene		3.9	0.20	0.10	0.020	ug/g	6	66	40	140	14	25
		benzo(k)fluoranthene		3.3	0.20	0.10	0.058	ug/g	6	55	40	140	7	25
		benzo(a)pyrene		2.8	0.20	0.10	0.054	ug/g	6	47	40	140	4	25
		indeno(1,2,3-cd)pyrene		3.9	0.20	0.10	0.078	ug/g	6	65	40	140	5	25
		dibenzo(a,h)anthracene		3.9	0.20	0.10	0.054	ug/g	6	65	40	140	5	25
		benzo(g,h,i)perylene		3.5	0.20	0.10	0.020	ug/g	6	59	40	140	7	25
		Unadjusted C11-C22 Aromatics		79	20	5.1	4.0	ug/g	102	78	40	140	10	25
		C9-C18 Aliphatics		16 J	20	5.1	0.78	ug/g	36	45	40	140	7	25
		C19-C36 Aliphatics		31	20	6.8	2.1	ug/g	48	64	40	140	5	25
		C11-C22 Aromatics		21	20	5.1	4.0	ug/g			40	140		25
		1-chloro-octadecane SUR		48				%			40	140		
		o-terphenyl SUR		69				%			40	140		
		2-fluorobiphenyl SUR		88				%			40	140		
		2-bromonaphthalene SUR		90				%			40	140		
MA EPH	MS15928	naphthalene	64446-001	3.8	0.22	0.11	0.086	ug/g	6.65	58	40	140		
		2-methylnaphthalene	64446-001	4.0	0.22	0.11	0.022	ug/g	6.65	60	40	140		
		phenanthrene	64446-001	4.1	0.22	0.11	0.049	ug/g	6.65	62	40	140		
		acenaphthene	64446-001	3.5	0.22	0.11	0.058	ug/g	6.65	53	40	140		
		acenaphthylene	64446-001	3.8	0.22	0.11	0.051	ug/g	6.65	57	40	140		
		fluorene	64446-001	4.2	0.22	0.11	0.062	ug/g	6.65	64	40	140		
		anthracene	64446-001	3.9	0.22	0.11	0.051	ug/g	6.65	58	40	140		
		fluoranthene	64446-001	4.26	0.222	0.111	0.109	ug/g	6.653	64	40	140		
		pyrene	64446-001	3.6	0.22	0.11	0.082	ug/g	6.65	54	40	140		
		benzo(a)anthracene	64446-001	3.9	0.22	0.11	0.060	ug/g	6.65	59	40	140		
		chrysene	64446-001	4.1	0.22	0.11	0.067	ug/g	6.65	61	40	140		
		benzo(b)fluoranthene	64446-001	4.3	0.22	0.11	0.022	ug/g	6.65	65	40	140		
		benzo(k)fluoranthene	64446-001	3.9	0.22	0.11	0.064	ug/g	6.65	59	40	140		
		benzo(a)pyrene	64446-001	3.8	0.22	0.11	0.060	ug/g	6.65	57	40	140		
		indeno(1,2,3-cd)pyrene	64446-001	3.9	0.22	0.11	0.086	ug/g	6.65	58	40	140		
		dibenzo(a,h)anthracene	64446-001	3.8	0.22	0.11	0.060	ug/g	6.65	58	40	140		
		benzo(g,h,i)perylene	64446-001	3.4	0.22	0.11	0.022	ug/g	6.65	52	40	140		
		Unadjusted C11-C22 Aromatics	64446-001	95	22	5.7	4.5	ug/g	113	84	40	140		
		C9-C18 Aliphatics	64446-001	23	22	5.7	0.86	ug/g	39	59	40	140		
		C19-C36 Aliphatics	64446-001	41	22	7.5	2.4	ug/g	53	77	40	140		
		C11-C22 Aromatics	64446-001	25	19	5.7	3.9	ug/g			40	140		
		1-chloro-octadecane SUR	64446-001	57				%			40	140		
		o-terphenyl SUR	64446-001	70				%			40	140		
		2-fluorobiphenyl SUR	64446-001	84				%			40	140		
		2-bromonaphthalene SUR	64446-001	85				%			40	140		

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R	Limits		RPD	RPD Limit
MA EPH	MSD15928	naphthalene	64446-001	3.8	0.23	0.11	0.088	ug/g	6.80	56	40	140	1	50
		2-methylnaphthalene	64446-001	4.0	0.23	0.11	0.023	ug/g	6.80	58	40	140	0	50
		phenanthrene	64446-001	4.2	0.23	0.11	0.050	ug/g	6.80	62	40	140	4	50
		acenaphthene	64446-001	3.5	0.23	0.11	0.059	ug/g	6.80	52	40	140	0	50
		acenaphthylene	64446-001	3.7	0.23	0.11	0.052	ug/g	6.80	54	40	140	4	50
		fluorene	64446-001	4.2	0.23	0.11	0.064	ug/g	6.80	61	40	140	1	50
		anthracene	64446-001	3.9	0.23	0.11	0.052	ug/g	6.80	57	40	140	1	50
		fluoranthene	64446-001	4.47	0.227	0.113	0.111	ug/g	6.804	66	40	140	5	50
		pyrene	64446-001	3.6	0.23	0.11	0.084	ug/g	6.80	54	40	140	2	50
		benzo(a)anthracene	64446-001	3.9	0.23	0.11	0.061	ug/g	6.80	57	40	140	1	50
		chrysene	64446-001	4.0	0.23	0.11	0.068	ug/g	6.80	59	40	140	0	50
		benzo(b)fluoranthene	64446-001	3.8	0.23	0.11	0.023	ug/g	6.80	56	40	140	12	50
		benzo(k)fluoranthene	64446-001	3.6	0.23	0.11	0.066	ug/g	6.80	53	40	140	8	50
		benzo(a)pyrene	64446-001	3.8	0.23	0.11	0.061	ug/g	6.80	55	40	140	1	50
		indeno(1,2,3-cd)pyrene	64446-001	3.9	0.23	0.11	0.088	ug/g	6.80	58	40	140	2	50
		dibenzo(a,h)anthracene	64446-001	3.9	0.23	0.11	0.061	ug/g	6.80	58	40	140	2	50
		benzo(g,h,i)perylene	64446-001	3.6	0.23	0.11	0.023	ug/g	6.80	53	40	140	4	50
		Unadjusted C11-C22 Aromatics	64446-001	100	23	5.8	4.6	ug/g	115	90	40	140	8	50
		C9-C18 Aliphatics	64446-001	26	23	5.8	0.88	ug/g	40	63	40	140	9	50
		C19-C36 Aliphatics	64446-001	46	23	7.7	2.4	ug/g	54	85	40	140	11	50
		C11-C22 Aromatics	64446-001	38	23	5.8	4.6	ug/g		58	40	140	39	50
		1-chloro-octadecane SUR	64446-001	60				%			40	140		
		o-terphenyl SUR	64446-001	68				%			40	140		
		2-fluorobiphenyl SUR	64446-001	84				%			40	140		
		2-bromonaphthalene SUR	64446-001	87				%			40	140		

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R	Limits		RPD	RPD Limit
SW3540C8082A	BLK16081	PCB-1016		0.080 U	0.10	0.080	0.049	ug/g						
		PCB-1221		0.080 U	0.10	0.080	0.049	ug/g						
		PCB-1232		0.080 U	0.10	0.080	0.049	ug/g						
		PCB-1242		0.080 U	0.10	0.080	0.049	ug/g						
		PCB-1248		0.080 U	0.10	0.080	0.049	ug/g						
		PCB-1254		0.080 U	0.10	0.080	0.049	ug/g						
		PCB-1260		0.080 U	0.10	0.080	0.049	ug/g						
		tetrachloro-m-xylene SUR		76				%			30	150		
		decachlorobiphenyl SUR		93				%			30	150		
SW3540C8082A	LCS16081	PCB-1016		1.6	0.10	0.080	0.049	ug/g	2	81	47	134		
		PCB-1221		0.080 U	0.10	0.080	0.049	ug/g						
		PCB-1232		0.080 U	0.10	0.080	0.049	ug/g						
		PCB-1242		0.080 U	0.10	0.080	0.049	ug/g						
		PCB-1248		0.080 U	0.10	0.080	0.049	ug/g						
		PCB-1254		0.080 U	0.10	0.080	0.049	ug/g						
		PCB-1260		1.6	0.10	0.080	0.049	ug/g	2	81	53	140		
		tetrachloro-m-xylene SUR		72				%			30	150		
		decachlorobiphenyl SUR		79				%			30	150		
SW3540C8082A	LCSD16081	PCB-1016		1.8	0.10	0.080	0.049	ug/g	2	92	47	134	13	30
		PCB-1221		0.080 U	0.10	0.080	0.049	ug/g						30
		PCB-1232		0.080 U	0.10	0.080	0.049	ug/g						30
		PCB-1242		0.080 U	0.10	0.080	0.049	ug/g						30
		PCB-1248		0.080 U	0.10	0.080	0.049	ug/g						30
		PCB-1254		0.080 U	0.10	0.080	0.049	ug/g						30
		PCB-1260		1.9	0.10	0.080	0.049	ug/g	2	95	53	140	16	30
		tetrachloro-m-xylene SUR		78				%			30	150		
		decachlorobiphenyl SUR		93				%			30	150		
SW3540C8082A	MS16081	PCB-1016	64446-003	2.1	0.11	0.091	0.056	ug/g	2.27	93	47	134		
		PCB-1221	64446-003	0.091 U	0.11	0.091	0.056	ug/g						
		PCB-1232	64446-003	0.091 U	0.11	0.091	0.056	ug/g						
		PCB-1242	64446-003	0.091 U	0.11	0.091	0.056	ug/g						
		PCB-1248	64446-003	0.091 U	0.11	0.091	0.056	ug/g						
		PCB-1254	64446-003	0.091 U	0.11	0.091	0.056	ug/g						
		PCB-1260	64446-003	2.0	0.11	0.091	0.056	ug/g	2.27	86				
		tetrachloro-m-xylene SUR	64446-003	83				%			30	150		
		decachlorobiphenyl SUR	64446-003	78				%			30	150		
SW3540C8082A	MSD16081	PCB-1016	64446-003	2.1	0.11	0.087	0.054	ug/g	2.17	96	47	134	2	50
		PCB-1221	64446-003	0.087 U	0.11	0.087	0.054	ug/g						
		PCB-1232	64446-003	0.087 U	0.11	0.087	0.054	ug/g						
		PCB-1242	64446-003	0.087 U	0.11	0.087	0.054	ug/g						
		PCB-1248	64446-003	0.087 U	0.11	0.087	0.054	ug/g						
		PCB-1254	64446-003	0.087 U	0.11	0.087	0.054	ug/g						
		PCB-1260	64446-003	2.1	0.11	0.087	0.054	ug/g	2.17	94			4	50
		tetrachloro-m-xylene SUR	64446-003	83				%			30	150		
		decachlorobiphenyl SUR	64446-003	90				%			30	150		

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R	Limits	RPD	RPD Limit
SW3546/8270E	BLK15930	N-nitrosodimethylamine		0.10 U	0.20	0.10	0.018	ug/g					
		pyridine		0.10 U	0.20	0.10	0.050	ug/g					
		aniline		0.10 U	0.20	0.10	0.015	ug/g					
		phenol		0.10 U	0.20	0.10	0.030	ug/g					
		2-chlorophenol		0.20 U	0.50	0.20	0.050	ug/g					
		bis(2-chloroethyl)ether		0.10 U	0.20	0.10	0.031	ug/g					
		1,3-dichlorobenzene		0.10 U	0.20	0.10	0.026	ug/g					
		1,4-dichlorobenzene		0.10 U	0.20	0.10	0.088	ug/g					
		1,2-dichlorobenzene		0.10 U	0.20	0.10	0.036	ug/g					
		benzyl alcohol		0.10 U	0.20	0.10	0.029	ug/g					
		2-methylphenol		0.10 U	0.20	0.10	0.029	ug/g					
		2,2'-oxybis(1-chloropropane)		0.10 U	0.20	0.10	0.019	ug/g					
		hexachloroethane		0.10 U	0.20	0.10	0.027	ug/g					
		N-nitroso-di-N-propylamine		0.10 U	0.20	0.10	0.016	ug/g					
		4-methylphenol		0.10 U	0.20	0.10	0.036	ug/g					
		nitrobenzene		0.10 U	0.20	0.10	0.028	ug/g					
		isophorone		0.20 U	0.50	0.20	0.028	ug/g					
		2-nitrophenol		0.10 U	0.20	0.10	0.057	ug/g					
		2,4-dimethylphenol		0.10 U	0.20	0.10	0.037	ug/g					
		bis(2-chloroethoxy)methane		0.20 U	0.20	0.20	0.043	ug/g					
		2,4-dichlorophenol		0.20 U	0.50	0.20	0.036	ug/g					
		1,2,4-trichlorobenzene		0.20 U	0.50	0.20	0.026	ug/g					
		benzoic acid		4.5 U	5.0	4.5	2.0	ug/g					
		4-chloroaniline		0.10 U	0.20	0.10	0.073	ug/g					
		hexachlorobutadiene		0.10 U	0.20	0.10	0.050	ug/g					
		4-chloro-3-methylphenol		0.10 U	0.20	0.10	0.019	ug/g					
		hexachlorocyclopentadiene		0.40 U	1.0	0.40	0.068	ug/g					
		2,4,6-trichlorophenol		0.10 U	0.20	0.10	0.036	ug/g					
		2,4,5-trichlorophenol		0.10 U	0.20	0.10	0.034	ug/g					
		2-chloronaphthalene		0.20 U	0.50	0.20	0.023	ug/g					
		2-nitroaniline		0.10 U	0.20	0.10	0.035	ug/g					
		dimethylphthalate		0.20 U	0.50	0.20	0.028	ug/g					
		2,6-dinitrotoluene		0.10 U	0.20	0.10	0.026	ug/g					
		2,4-dinitrotoluene		0.10 U	0.20	0.10	0.059	ug/g					
		3-nitroaniline		0.10 U	0.20	0.10	0.028	ug/g					
		2,4-dinitrophenol		2.0 U	5.0	2.0	0.13	ug/g					
		dibenzofuran		0.050 U	0.050	0.050	0.045	ug/g					
		4-nitrophenol		0.50 U	1.0	0.50	0.040	ug/g					
		diethyl phthalate		0.20 U	0.50	0.20	0.039	ug/g					
		4-chlorophenyl phenyl ether		0.20 U	0.50	0.20	0.031	ug/g					
		4-nitroaniline		0.20 U	0.50	0.20	0.057	ug/g					
		4,6-dinitro-2-methylphenol		1.0 U	2.0	1.0	0.23	ug/g					
		azobenzene		0.10 U	0.20	0.10	0.027	ug/g					
		N-nitrosodiphenylamine		0.10 U	0.20	0.10	0.034	ug/g					
		4-bromophenyl phenyl ether		0.10 U	0.20	0.10	0.037	ug/g					
		hexachlorobenzene		0.1000 U	0.2000	0.1000	0.09949	ug/g					
		pentachlorophenol		0.50 U	1.0	0.50	0.055	ug/g					
		carbazole		0.10 U	0.20	0.10	0.029	ug/g					
		di-n-butylphthalate		0.20 U	0.50	0.20	0.035	ug/g					
		benzidine		2.5 U	3.0	2.5	2.0	ug/g					
		butyl benzyl phthalate		0.20 U	0.50	0.20	0.040	ug/g					
		3,3'-dichlorobenzidine		2.5 U	3.0	2.5	2.0	ug/g					
		bis(2-ethylhexyl)phthalate		0.25 U	0.50	0.25	0.20	ug/g					
		di-n-octyl phthalate		0.20 U	0.50	0.20	0.14	ug/g					

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R	Limits	RPD	RPD Limit
SW3546/8270E	BLK15930	2-fluorophenol SUR		56				%			21	100	
		phenol-D5 SUR		60				%			10	102	
		2,4,6-tribromophenol SUR		44				%			10	123	
		nitrobenzene-D5 SUR		54				%			35	114	
		2-fluorobiphenyl SUR		61				%			43	116	
		p-terphenyl-D14 SUR		67				%			33	141	

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R		Limits	RPD	RPD Limit
SW3546/8270E	LCS15930	N-nitrosodimethylamine		2.1	0.20	0.10	0.018	ug/g	4	52		23 120		
		pyridine		1.5	0.20	0.10	0.050	ug/g	4	37		30 130		
		aniline		1.6	0.20	0.10	0.015	ug/g	4	40		40 140		
		phenol		2.0	0.20	0.10	0.030	ug/g	4	50		34 121		
		2-chlorophenol		2.0	0.50	0.20	0.050	ug/g	4	50		34 121		
		bis(2-chloroethyl)ether		2.3	0.20	0.10	0.031	ug/g	4	57		31 120		
		1,3-dichlorobenzene		2.1	0.20	0.10	0.026	ug/g	4	53		30 115		
		1,4-dichlorobenzene		2.1	0.20	0.10	0.088	ug/g	4	54		31 115		
		1,2-dichlorobenzene		2.2	0.20	0.10	0.036	ug/g	4	54		33 117		
		benzyl alcohol		2.3	0.20	0.10	0.029	ug/g	4	58		29 122		
		2-methylphenol		2.1	0.20	0.10	0.029	ug/g	4	52		32 122		
		2,2'-oxybis(1-chloropropane)		2.9	0.20	0.10	0.019	ug/g	4	74		20 115		
		hexachloroethane		2.2	0.20	0.10	0.027	ug/g	4	55		28 117		
		N-nitroso-di-N-propylamine		2.2	0.20	0.10	0.016	ug/g	4	55		36 120		
		4-methylphenol		4.2	0.20	0.10	0.036	ug/g	8	52		42 126		
		nitrobenzene		2.2	0.20	0.10	0.028	ug/g	4	54		34 122		
		isophorone		2.3	0.50	0.20	0.028	ug/g	4	57		30 122		
		2-nitrophenol		1.9	0.20	0.10	0.057	ug/g	4	47		36 123		
		2,4-dimethylphenol		1.6	0.20	0.10	0.037	ug/g	4	40		30 127		
		bis(2-chloroethoxy)methane		2.2	0.20	0.20	0.043	ug/g	4	54		36 121		
		2,4-dichlorophenol		1.9	0.50	0.20	0.036	ug/g	4	47		40 122		
		1,2,4-trichlorobenzene		2.2	0.50	0.20	0.026	ug/g	4	56		34 118		
		benzoic acid		4.5 U	5.0	4.5	2.0	ug/g	4	10	*	47 132		
		4-chloroaniline		1.7	0.20	0.10	0.073	ug/g	4	42		17 106		
		hexachlorobutadiene		2.4	0.20	0.10	0.050	ug/g	4	60		32 123		
		4-chloro-3-methylphenol		2.1	0.20	0.10	0.019	ug/g	4	53		45 122		
		hexachlorocyclopentadiene		2.5	1.0	0.40	0.068	ug/g	4	62		40 140		
		2,4,6-trichlorophenol		1.9	0.20	0.10	0.036	ug/g	4	48		39 126		
		2,4,5-trichlorophenol		2.0	0.20	0.10	0.034	ug/g	4	49		41 124		
		2-chloronaphthalene		2.2	0.50	0.20	0.023	ug/g	4	56		41 114		
		2-nitroaniline		2.2	0.20	0.10	0.035	ug/g	4	56		44 127		
		dimethylphthalate		2.5	0.50	0.20	0.028	ug/g	4	63		48 124		
		2,6-dinitrotoluene		2.4	0.20	0.10	0.026	ug/g	4	59		46 124		
		2,4-dinitrotoluene		2.3	0.20	0.10	0.059	ug/g	4	57		48 126		
		3-nitroaniline		2.3	0.20	0.10	0.028	ug/g	4	58		33 119		
		2,4-dinitrophenol		0.35 J	5.0	2.0	0.13	ug/g	4	9	*	48 126		
		dibenzofuran		2.3	0.050	0.050	0.045	ug/g	4	58		44 120		
		4-nitrophenol		1.8	1.0	0.50	0.040	ug/g	4	45		30 132		
		diethyl phthalate		2.4	0.50	0.20	0.039	ug/g	4	60		50 124		
		4-chlorophenyl phenyl ether		2.3	0.50	0.20	0.031	ug/g	4	56		45 121		
		4-nitroaniline		2.4	0.50	0.20	0.057	ug/g	4	61		35 115		
		4,6-dinitro-2-methylphenol		0.95 J	2.0	1.0	0.23	ug/g	4	24	*	29 132		
		azobenzene		2.4	0.20	0.10	0.027	ug/g	4	59		39 125		
		N-nitrosodiphenylamine		2.5	0.20	0.10	0.034	ug/g	4	63		38 127		
		4-bromophenyl phenyl ether		2.4	0.20	0.10	0.037	ug/g	4	61		46 124		
		hexachlorobenzene		2.279	0.2000	0.1000	0.09949	ug/g	4	57		45 122		
		pentachlorophenol		1.2	1.0	0.50	0.055	ug/g	4	30		25 133		
		carbazole		2.5	0.20	0.10	0.029	ug/g	4	62		50 123		
		di-n-butylphthalate		2.5	0.50	0.20	0.035	ug/g	4	64		55 110		
		benzidine		2.5 U	3.0	2.5	2.0	ug/g	4	40	*	43 134		
		butyl benzyl phthalate		2.5	0.50	0.20	0.040	ug/g	4	63		48 132		
		3,3'-dichlorobenzidine		2.3 J	3.0	2.5	2.0	ug/g	4	57		22 121		
		bis(2-ethylhexyl)phthalate		2.6	0.50	0.25	0.20	ug/g	4	65		51 133		
		di-n-octyl phthalate		2.6	0.50	0.20	0.14	ug/g	4	64		45 140		

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R	Limits	RPD	RPD Limit
SW3546/8270E	LCS15930	2-fluorophenol SUR		53				%			21	100	
		phenol-D5 SUR		52				%			10	102	
		2,4,6-tribromophenol SUR		65				%			10	123	
		nitrobenzene-D5 SUR		56				%			35	114	
		2-fluorobiphenyl SUR		61				%			43	116	
		p-terphenyl-D14 SUR		69				%			33	141	

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R		Limits	RPD	RPD Limit
SW3546/8270E	MS15930	N-nitrosodimethylamine	64446-001	2.3	0.21	0.11	0.019	ug/g	4.24	54		23	120	
		pyridine	64446-001	1.7	0.21	0.11	0.053	ug/g	4.24	41		30	130	
		aniline	64446-001	1.7	0.21	0.11	0.016	ug/g	4.24	40		40	140	
		phenol	64446-001	2.5	0.21	0.11	0.032	ug/g	4.24	60		34	121	
		2-chlorophenol	64446-001	2.4	0.53	0.21	0.053	ug/g	4.24	57		34	121	
		bis(2-chloroethyl)ether	64446-001	2.6	0.21	0.11	0.033	ug/g	4.24	61		31	120	
		1,3-dichlorobenzene	64446-001	2.3	0.21	0.11	0.028	ug/g	4.24	54		30	115	
		1,4-dichlorobenzene	64446-001	2.4	0.21	0.11	0.093	ug/g	4.24	55		31	115	
		1,2-dichlorobenzene	64446-001	2.4	0.21	0.11	0.039	ug/g	4.24	56		33	117	
		benzyl alcohol	64446-001	3.0	0.21	0.11	0.031	ug/g	4.24	70		29	122	
		2-methylphenol	64446-001	2.7	0.21	0.11	0.031	ug/g	4.24	63		32	122	
		2,2'-oxybis(1-chloropropane)	64446-001	3.4	0.21	0.11	0.020	ug/g	4.24	79		20	115	
		hexachloroethane	64446-001	2.4	0.21	0.11	0.028	ug/g	4.24	57		28	117	
		N-nitroso-di-N-propylamine	64446-001	2.7	0.21	0.11	0.017	ug/g	4.24	64		36	120	
		4-methylphenol	64446-001	5.5	0.21	0.11	0.039	ug/g	8.49	65		42	126	
		nitrobenzene	64446-001	2.5	0.21	0.11	0.030	ug/g	4.24	58		34	122	
		isophorone	64446-001	2.9	0.53	0.21	0.029	ug/g	4.24	69		30	122	
		2-nitrophenol	64446-001	2.2	0.21	0.11	0.060	ug/g	4.24	52		36	123	
		2,4-dimethylphenol	64446-001	2.2	0.21	0.11	0.040	ug/g	4.24	51		30	127	
		bis(2-chloroethoxy)methane	64446-001	2.5	0.21	0.21	0.046	ug/g	4.24	60		36	121	
		2,4-dichlorophenol	64446-001	2.5	0.53	0.21	0.039	ug/g	4.24	59		40	122	
		1,2,4-trichlorobenzene	64446-001	2.4	0.53	0.21	0.028	ug/g	4.24	57		34	118	
		benzoic acid	64446-001	4.4 J	5.3	4.8	2.1	ug/g	4.24	103		47	132	
		4-chloroaniline	64446-001	2.2	0.21	0.11	0.077	ug/g	4.24	51		17	106	
		hexachlorobutadiene	64446-001	2.5	0.21	0.11	0.053	ug/g	4.24	60		32	123	
		4-chloro-3-methylphenol	64446-001	2.6	0.21	0.11	0.020	ug/g	4.24	62		45	122	
		hexachlorocyclopentadiene	64446-001	2.2	1.1	0.42	0.072	ug/g	4.24	52		40	140	
		2,4,6-trichlorophenol	64446-001	2.5	0.21	0.11	0.038	ug/g	4.24	60		39	126	
		2,4,5-trichlorophenol	64446-001	2.8	0.21	0.11	0.037	ug/g	4.24	65		41	124	
		2-chloronaphthalene	64446-001	2.6	0.53	0.21	0.024	ug/g	4.24	60		41	114	
		2-nitroaniline	64446-001	2.8	0.21	0.11	0.037	ug/g	4.24	66		44	127	
		dimethylphthalate	64446-001	2.8	0.53	0.21	0.030	ug/g	4.24	65		48	124	
		2,6-dinitrotoluene	64446-001	2.9	0.21	0.11	0.028	ug/g	4.24	68		46	124	
		2,4-dinitrotoluene	64446-001	2.8	0.21	0.11	0.063	ug/g	4.24	66		48	126	
		3-nitroaniline	64446-001	2.6	0.21	0.11	0.030	ug/g	4.24	62		33	119	
		2,4-dinitrophenol	64446-001	1.7 J	5.3	2.1	0.14	ug/g	4.24	39	*	48	126	
		dibenzofuran	64446-001	2.8	0.053	0.053	0.047	ug/g	4.24	67		44	120	
		4-nitrophenol	64446-001	2.6	1.1	0.53	0.042	ug/g	4.24	61		30	132	
		diethyl phthalate	64446-001	2.7	0.53	0.21	0.042	ug/g	4.24	63		50	124	
		4-chlorophenyl phenyl ether	64446-001	2.7	0.53	0.21	0.033	ug/g	4.24	64		45	121	
		4-nitroaniline	64446-001	2.8	0.53	0.21	0.060	ug/g	4.24	66		35	115	
		4,6-dinitro-2-methylphenol	64446-001	2.3	2.1	1.1	0.24	ug/g	4.24	54		29	132	
		azobenzene	64446-001	2.8	0.21	0.11	0.028	ug/g	4.24	67		39	125	
		N-nitrosodiphenylamine	64446-001	2.9	0.21	0.11	0.036	ug/g	4.24	69		38	127	
		4-bromophenyl phenyl ether	64446-001	2.8	0.21	0.11	0.039	ug/g	4.24	67		46	124	
		hexachlorobenzene	64446-001	2.606	0.2124	0.1062	0.1056	ug/g	4.247	61		45	122	
		pentachlorophenol	64446-001	2.2	1.1	0.53	0.058	ug/g	4.24	53		25	133	
		carbazole	64446-001	2.8	0.21	0.11	0.031	ug/g	4.24	65		50	123	
		di-n-butylphthalate	64446-001	3.1	0.53	0.21	0.038	ug/g	4.24	72		55	110	
		benzidine	64446-001	2.7 U	3.2	2.7	2.1	ug/g	4.24	6	*	43	134	
		butyl benzyl phthalate	64446-001	3.1	0.53	0.21	0.042	ug/g	4.24	72		48	132	
		3,3'-dichlorobenzidine	64446-001	2.6 J	3.2	2.7	2.1	ug/g	4.24	60		22	121	
		bis(2-ethylhexyl)phthalate	64446-001	3.1	0.53	0.27	0.21	ug/g	4.24	73		51	133	
		di-n-octyl phthalate	64446-001	3.3	0.53	0.21	0.15	ug/g	4.24	78		45	140	

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R	Limits	RPD	RPD Limit
SW3546/8270E	MS15930	2-fluorophenol SUR	64446-001	60				%			21	100	
		phenol-D5 SUR	64446-001	62				%			10	102	
		2,4,6-tribromophenol SUR	64446-001	75				%			10	123	
		nitrobenzene-D5 SUR	64446-001	60				%			35	114	
		2-fluorobiphenyl SUR	64446-001	65				%			43	116	
		p-terphenyl-D14 SUR	64446-001	75				%			33	141	

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R		Limits		RPD	RPD Limit
SW3546/8270E	MSD15930	N-nitrosodimethylamine	64446-001	2.1	0.21	0.11	0.019	ug/g	4.25	49		23	120	9	30
		pyridine	64446-001	1.6	0.21	0.11	0.053	ug/g	4.25	37		30	130	8	30
		aniline	64446-001	1.7	0.21	0.11	0.016	ug/g	4.25	39	*	40	140	2	30
		phenol	64446-001	2.5	0.21	0.11	0.032	ug/g	4.25	58		34	121	4	30
		2-chlorophenol	64446-001	2.3	0.53	0.21	0.053	ug/g	4.25	54		34	121	6	30
		bis(2-chloroethyl)ether	64446-001	2.4	0.21	0.11	0.033	ug/g	4.25	57		31	120	7	30
		1,3-dichlorobenzene	64446-001	2.1	0.21	0.11	0.028	ug/g	4.25	49		30	115	9	30
		1,4-dichlorobenzene	64446-001	2.2	0.21	0.11	0.093	ug/g	4.25	51		31	115	9	30
		1,2-dichlorobenzene	64446-001	2.2	0.21	0.11	0.039	ug/g	4.25	52		33	117	8	30
		benzyl alcohol	64446-001	2.8	0.21	0.11	0.031	ug/g	4.25	66		29	122	5	30
		2-methylphenol	64446-001	2.5	0.21	0.11	0.031	ug/g	4.25	60		32	122	4	30
		2,2'-oxybis(1-chloropropane)	64446-001	3.1	0.21	0.11	0.020	ug/g	4.25	74		20	115	7	30
		hexachloroethane	64446-001	2.2	0.21	0.11	0.028	ug/g	4.25	52		28	117	8	30
		N-nitroso-di-N-propylamine	64446-001	2.6	0.21	0.11	0.017	ug/g	4.25	62		36	120	4	30
		4-methylphenol	64446-001	5.2	0.21	0.11	0.039	ug/g	8.50	62		42	126	5	30
		nitrobenzene	64446-001	2.3	0.21	0.11	0.030	ug/g	4.25	54		34	122	7	30
		isophorone	64446-001	2.7	0.53	0.21	0.029	ug/g	4.25	63		30	122	9	30
		2-nitrophenol	64446-001	2.1	0.21	0.11	0.060	ug/g	4.25	49		36	123	6	30
		2,4-dimethylphenol	64446-001	2.1	0.21	0.11	0.040	ug/g	4.25	49		30	127	4	30
		bis(2-chloroethoxy)methane	64446-001	2.4	0.21	0.21	0.046	ug/g	4.25	57		36	121	5	30
		2,4-dichlorophenol	64446-001	2.4	0.53	0.21	0.039	ug/g	4.25	55		40	122	7	30
		1,2,4-trichlorobenzene	64446-001	2.3	0.53	0.21	0.028	ug/g	4.25	53		34	118	8	30
		benzoic acid	64446-001	4.0 J	5.3	4.8	2.1	ug/g	4.25	94		47	132	9	30
		4-chloroaniline	64446-001	2.1	0.21	0.11	0.077	ug/g	4.25	50		17	106	2	30
		hexachlorobutadiene	64446-001	2.3	0.21	0.11	0.053	ug/g	4.25	54		32	123	10	30
		4-chloro-3-methylphenol	64446-001	2.6	0.21	0.11	0.020	ug/g	4.25	60		45	122	3	30
		hexachlorocyclopentadiene	64446-001	2.1	1.1	0.43	0.073	ug/g	4.25	48		40	140	8	30
		2,4,6-trichlorophenol	64446-001	2.4	0.21	0.11	0.038	ug/g	4.25	56		39	126	6	30
		2,4,5-trichlorophenol	64446-001	2.6	0.21	0.11	0.037	ug/g	4.25	62		41	124	4	30
		2-chloronaphthalene	64446-001	2.4	0.53	0.21	0.024	ug/g	4.25	57		41	114	6	30
		2-nitroaniline	64446-001	2.7	0.21	0.11	0.037	ug/g	4.25	64		44	127	3	30
		dimethylphthalate	64446-001	3.0	0.53	0.21	0.030	ug/g	4.25	71		48	124	9	30
		2,6-dinitrotoluene	64446-001	2.8	0.21	0.11	0.028	ug/g	4.25	66		46	124	2	30
		2,4-dinitrotoluene	64446-001	2.8	0.21	0.11	0.063	ug/g	4.25	65		48	126	1	30
		3-nitroaniline	64446-001	2.8	0.21	0.11	0.030	ug/g	4.25	65		33	119	6	30
		2,4-dinitrophenol	64446-001	1.4 J	5.3	2.1	0.14	ug/g	4.25	33	*	48	126	18	30
		dibenzofuran	64446-001	2.7	0.053	0.053	0.047	ug/g	4.25	64		44	120	5	30
		4-nitrophenol	64446-001	2.7	1.1	0.53	0.042	ug/g	4.25	63		30	132	3	30
		diethyl phthalate	64446-001	2.9	0.53	0.21	0.042	ug/g	4.25	69		50	124	8	30
		4-chlorophenyl phenyl ether	64446-001	2.6	0.53	0.21	0.033	ug/g	4.25	61		45	121	4	30
		4-nitroaniline	64446-001	3.0	0.53	0.21	0.060	ug/g	4.25	70		35	115	6	30
		4,6-dinitro-2-methylphenol	64446-001	2.0 J	2.1	1.1	0.24	ug/g	4.25	48		29	132	12	30
		azobenzene	64446-001	2.7	0.21	0.11	0.028	ug/g	4.25	64		39	125	5	30
		N-nitrosodiphenylamine	64446-001	2.9	0.21	0.11	0.036	ug/g	4.25	67		38	127	3	30
		4-bromophenyl phenyl ether	64446-001	2.7	0.21	0.11	0.039	ug/g	4.25	63		46	124	5	30
		hexachlorobenzene	64446-001	2.547	0.2126	0.1063	0.1057	ug/g	4.251	60		45	122	2	30
		pentachlorophenol	64446-001	2.0	1.1	0.53	0.058	ug/g	4.25	47		25	133	12	30
		carbazole	64446-001	2.8	0.21	0.11	0.031	ug/g	4.25	67		50	123	3	30
		di-n-butylphthalate	64446-001	3.1	0.53	0.21	0.038	ug/g	4.25	73		55	110	1	30
		benzidine	64446-001	2.7 U	3.2	2.7	2.1	ug/g	4.25	10	*	43	134	46	30
		butyl benzyl phthalate	64446-001	3.1	0.53	0.21	0.042	ug/g	4.25	74		48	132	2	30
		3,3'-dichlorobenzidine	64446-001	2.7 J	3.2	2.7	2.1	ug/g	4.25	64		22	121	6	30
		bis(2-ethylhexyl)phthalate	64446-001	3.2	0.53	0.27	0.21	ug/g	4.25	74		51	133	2	30
		di-n-octyl phthalate	64446-001	3.3	0.53	0.21	0.15	ug/g	4.25	79		45	140	1	30

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R	Limits	RPD	RPD Limit
SW3546/8270E	MSD15930	2-fluorophenol SUR	64446-001	56				%			21	100	
		phenol-D5 SUR	64446-001	59				%			10	102	
		2,4,6-tribromophenol SUR	64446-001	73				%			10	123	
		nitrobenzene-D5 SUR	64446-001	56				%			35	114	
		2-fluorobiphenyl SUR	64446-001	60				%			43	116	
		p-terphenyl-D14 SUR	64446-001	75				%			33	141	

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R	Limits	RPD	RPD Limit
SW3051A6020A	BLK15957	Silver		0.038 J	2.5	0.25	0.0055	ug/g					
		Aluminum		4.9 J	25	5.0	1.3	ug/g					
		Arsenic		0.50 U	2.5	0.50	0.097	ug/g					
		Barium		0.17 J	5.0	0.50	0.13	ug/g					
		Beryllium		0.17 J	0.50	0.050	0.0092	ug/g					
		Cadmium		0.061 J	0.50	0.050	0.0064	ug/g					
		Cobalt		0.019 J	5.0	0.050	0.012	ug/g					
		Chromium		0.25 J	5.0	0.50	0.020	ug/g					
		Copper		0.053 J	5.0	0.50	0.050	ug/g					
		Iron		10 U	25	10	7.0	ug/g					
		Potassium		25 U	50	25	13	ug/g					
		Magnesium		11 J	50	5.0	0.70	ug/g					
		Manganese		1.3 J	5.0	0.25	0.080	ug/g					
		Sodium		36 J	500	25	10	ug/g					
		Nickel		0.50 U	5.0	0.50	0.067	ug/g					
		Lead		0.50 U	2.5	0.50	0.27	ug/g					
		Antimony		0.077 J	0.50	0.050	0.047	ug/g					
		Selenium		0.50 U	5.0	0.50	0.17	ug/g					
		Thallium		0.25 U	0.50	0.25	0.036	ug/g					
		Vanadium		0.50 U	5.0	0.50	0.17	ug/g					
		Zinc		0.51 J	5.0	0.50	0.46	ug/g					
SW3051A6020A	CRM15957	Silver		27.6	5.00	0.500	0.0111	ug/g	28.8		18.2	35.6	
		Aluminum		8550	50.0	10.0	2.51	ug/g	9510		5150	14700	
		Arsenic		93.4	5.00	1.00	0.194	ug/g	99.4		63.5	118	
		Barium		246	10.0	1.00	0.254	ug/g	249		180	300	
		Beryllium		136	1.00	0.100	0.0184	ug/g	135		93.2	155	
		Cadmium		73.6	1.00	0.100	0.0128	ug/g	75.9		52.9	88.2	
		Cobalt		58.6	10.0	0.100	0.0239	ug/g	59.9		42.2	70.3	
		Chromium		52.0	10.0	1.00	0.0401	ug/g	53.8		37	68.7	
		Copper		155	10.0	1.00	0.100	ug/g	160		112	186	
		Iron		16800	50.0	20.0	14.1	ug/g	16800		7600	28600	
		Potassium		2110	100	50.0	26.2	ug/g	2260		1380	3160	
		Magnesium		3270	100	10.0	1.41	ug/g	3040		2130	4240	
		Manganese		489	10.0	0.500	0.159	ug/g	494		369	591	
		Sodium		3620	1000	50.0	20.6	ug/g	3420		2180	4290	
		Nickel		138	10.0	1.00	0.134	ug/g	143		92.6	172	
		Lead		73.3	5.00	1.00	0.534	ug/g	80.9		51.2	98.2	
		Antimony		111	1.00	0.100	0.0944	ug/g	138		13.8	182	
		Selenium		126	10.0	1.00	0.346	ug/g	143		84.5	170	
		Thallium		78.2	1.00	0.500	0.0715	ug/g	86.1		51	106	
		Vanadium		86.9	10.0	1.00	0.330	ug/g	92.8		58.6	120	
		Zinc		217	10.0	1.00	0.912	ug/g	244		162	300	

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R		Limits		RPD	RPD	Limit
SW3051A6020A	CRMD15957	Silver		27.3	5.00	0.500	0.0111	ug/g	28.8			18.2	35.6	1		20
		Aluminum		6390	50.0	10.0	2.51	ug/g	9510			5150	14700	29	*	20
		Arsenic		89.1	5.00	1.00	0.194	ug/g	99.4			63.5	118	5		20
		Barium		243	10.0	1.00	0.254	ug/g	249			180	300	1		20
		Beryllium		129	1.00	0.100	0.0184	ug/g	135			93.2	155	6		20
		Cadmium		71.6	1.00	0.100	0.0128	ug/g	75.9			52.9	88.2	3		20
		Cobalt		56.0	10.0	0.100	0.0239	ug/g	59.9			42.2	70.3	5		20
		Chromium		45.2	10.0	1.00	0.0401	ug/g	53.8			37	68.7	14		20
		Copper		148	10.0	1.00	0.100	ug/g	160			112	186	4		20
		Iron		12500	50.0	20.0	14.1	ug/g	16800			7600	28600	29	*	20
		Potassium		1720	100	50.0	26.2	ug/g	2260			1380	3160	20		20
		Magnesium		2790	100	10.0	1.41	ug/g	3040			2130	4240	16		20
		Manganese		444	10.0	0.500	0.159	ug/g	494			369	591	10		20
		Nickel		130	10.0	1.00	0.134	ug/g	143			92.6	172	6		20
		Lead		72.4	5.00	1.00	0.534	ug/g	80.9			51.2	98.2	1		20
		Antimony		103	1.00	0.100	0.0944	ug/g	138			13.8	182	7		20
		Selenium		114	10.0	1.00	0.346	ug/g	143			84.5	170	10		20
		Thallium		78.2	1.00	0.500	0.0715	ug/g	86.1			51	106	0		20
		Vanadium		75.4	10.0	1.00	0.330	ug/g	92.8			58.6	120	14		20
		Zinc		200	10.0	1.00	0.912	ug/g	244			162	300	8		20
SW3051A6020A	MS15957	Silver	64446-001	120	2.6	0.26	0.0058	ug/g	130	88		83	118			
		Aluminum	64446-001	19000	26	5.2	1.3	ug/g	261.83	-82		78	124			
		Arsenic	64446-001	240	2.6	0.52	0.10	ug/g	261	87		82	118			
		Barium	64446-001	280	5.2	0.52	0.13	ug/g	261	92		86	116			
		Cadmium	64446-001	230	0.52	0.052	0.0067	ug/g	261	87		84	116			
		Cobalt	64446-001	260	5.2	0.052	0.012	ug/g	261	93		84	115			
		Chromium	64446-001	280	5.2	0.52	0.021	ug/g	261	94		83	119			
		Copper	64446-001	240	5.2	0.52	0.052	ug/g	261	87		84	119			
		Iron	64446-001	28000	26	10	7.4	ug/g	261.83	-268		81	124			
		Potassium	64446-001	3700	52	26	14	ug/g	2618	82	*	85	119			
		Magnesium	64446-001	5700	52	5.2	0.74	ug/g	261.8	-172		80	123			
		Manganese	64446-001	710	5.2	0.26	0.083	ug/g	261	117	*	85	116			
		Sodium	64446-001	3000	520	26	11	ug/g	2618	115		79	125			
		Nickel	64446-001	260	5.2	0.52	0.070	ug/g	261	88		84	119			
		Lead	64446-001	260	2.6	0.52	0.28	ug/g	261	93		84	118			
		Antimony	64446-001	250	0.52	0.052	0.049	ug/g	261	94		72	124			
		CCV high %														
		Selenium	64446-001	200	5.2	0.52	0.18	ug/g	261	75	*	80	119			
		Thallium	64446-001	130	0.52	0.26	0.037	ug/g	130	99		83	118			
		Vanadium	64446-001	280	5.2	0.52	0.17	ug/g	261	95		82	116			
		Zinc	64446-001	250	5.2	0.52	0.48	ug/g	261	76	*	82	119			

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R		Limits		RPD	RPD Limit
SW3051A6020A	MSD15957	Silver	64446-001	120	2.6	0.26	0.0058	ug/g	130	90		83	118	2	20
		Aluminum	64446-001	19000	26	5.2	1.3	ug/g	261.83	5	*	78	124	1	20
		Arsenic	64446-001	230	2.6	0.52	0.10	ug/g	261	85		82	118	3	20
		Barium	64446-001	280	5.2	0.52	0.13	ug/g	261	92		86	116	0	20
		Beryllium	64446-001	250	0.52	0.052	0.0096	ug/g	261	95		80	120	200	20
		Cadmium	64446-001	240	0.52	0.052	0.0067	ug/g	261	90		84	116	3	20
		Cobalt	64446-001	240	5.2	0.052	0.012	ug/g	261	88		84	115	5	20
		Chromium	64446-001	290	5.2	0.52	0.021	ug/g	261	98		83	119	4	20
		Copper	64446-001	240	5.2	0.52	0.052	ug/g	261	85		84	119	2	20
		Iron	64446-001	26000	26	10	7.4	ug/g	261.83	-	*	81	124	8	20
		Potassium	64446-001	3800	52	26	14	ug/g	2618	87		85	119	4	20
		Magnesium	64446-001	6300	52	5.2	0.74	ug/g	261.8	71		80	123	11	20
		Manganese	64446-001	700	5.2	0.26	0.083	ug/g	261	114		85	116	1	20
		Sodium	64446-001	3000	520	26	11	ug/g	2618	115		79	125	0	20
		Nickel	64446-001	260	5.2	0.52	0.070	ug/g	261	86		84	119	3	20
		Lead	64446-001	260	2.6	0.52	0.28	ug/g	261	94		84	118	1	20
		Antimony	64446-001	200	0.52	0.052	0.049	ug/g	261	76		72	124	21	* 20
		Selenium	64446-001	210	5.2	0.52	0.18	ug/g	261	80		80	119	6	20
		Thallium	64446-001	130	0.52	0.26	0.037	ug/g	130	100		83	118	2	20
		Vanadium	64446-001	290	5.2	0.52	0.17	ug/g	261	98		82	116	3	20
		Zinc	64446-001	250	5.2	0.52	0.48	ug/g	261	77	*	82	119	0	20
SW7471B	BLK15941	Mercury		0.080 U	0.14	0.080	0.033	ug/g							
SW7471B	CRM15941	Mercury		0.153	0.148	0.0825	0.0339	ug/g	0.221			0.091	0.351		
SW7471B	CRMD15941	Mercury		0.153	0.148	0.0825	0.0339	ug/g	0.221			0.091	0.351	0	20
SW7471B	MS15941	Mercury	64446-001	0.31	0.14	0.077	0.032	ug/g	0.307	102		80	124		
SW7471B	MSD15941	Mercury	64446-001	0.33	0.14	0.077	0.032	ug/g	0.307	109		80	124	7	20

Supporting Documentation & Chromatograms

Absolute Resource associates
124 Heritage Avenue Unit 16
Portsmouth, NH 03801
www.absoluteresourceassociates.com

This File:	L:\VOA\Excel Reports\2023\V3020918
Analysis Group:	8260/8021/624
Field ID:	SY-SB4-1 1.8E+07
Sample:	64446-01 100uLMeOH/5mL Dow
Misc:	100 CRE
Import File Name	v3 15933 DoD
TestGroupID	V8260DoD_S
Aqueous or Soil? (A or S)	S
Solid amount (g)	12.36
Methanol volume (mL)	10
Percent Solid (%)	86.8
Soil Prep Date	2/8/2023
Weight:	247.2
Volume:	11.63152
Lab#:	64446-001
AnalysisDate:	2/9/2023
AnalysisTime:	9 Feb 2023 6:43 pm
Dilution:	1
AnalyzedBy:	LMM V3020918.D
QC_Code:	
Prep#:	15933

Reviewer Checks:

- Quant Report: Reviewed, Analyst Initials & Date
- Chromatogram Checked, Major peaks identified
- Soil prep data checked: weight, volume, %solid, Prep date
- Field ID consistent with data and any field replicates
- Results consistent with any re-runs, LL results & internal QC
- Substitute dilution data checked
- Correct dilution and reason clear or noted
- Reason for reanalysis documented
- Surrogates pass or flagged & noted
- Flags checked (Expiration, F+, Over Cal)
- Other QC failures, estimates or interferences documented
- Spot checked Reported Result with Quant Report
- Checked Audit flagged data in LIMS

Notes:

Reviewer Initials & Date: ci 2/13/23

#	Surrogate Standards	Import Value (as ug/L)	Recovery	Flag	QC Limits	Surrogate True Values
32	SS 1,2-dichloroethane-D4	9.46	**95%**		60-140	10
36	SS dibromofluoromethane	9.95	**99%**		78-114	10
51	SS toluene-D8	9.59	**96%**		88-110	10
67	SS 4-bromofluorobenzene	9.23	**92%**		86-115	10
41	SS a,a,a-trifluorotoluene	18.64	**108%**		70-130*	20

	AnalyteName	Concentration (ug/L)
2	dichlorodifluoromethane	0.070495416
3	chloromethane	0.304009508
4	vinyl chloride	-0.135640627
5	bromomethane	0.039169154
6	chloroethane	-0.346186741
7	trichlorofluoromethane	-0.229589481
8	diethylether	-0.057696987
9	acetone	-1
11	1,1-dichloroethene	-0.13045553
13	t-butanol (TBA)	-1.304511592
15	methylene chloride	-0.655690373
16	carbon disulfide	0.02218622
18	methyl-t-butyl ether (MTBE)	-0.050649633
19	trans-1,2-dichloroethene	-0.019375345
20	isopropyl ether (DIPE)	-0.032536388
22	1,1-dichloroethane	-0.105850913
23	2-butanone (MEK)	-0.046611302
24	ethyl-t-butyl ether (ETBE)	0
25	2,2-dichloropropane	-0.174256511
26	cis-1,2-dichloroethene	-0.061109979
27	bromochloromethane	-0.049105564
28	chloroform	-0.166951945
29	tetrahydrofuran (THF)	-0.190733463
30	1,1,1-trichloroethane	0.020884571
33	carbon tetrachloride	0.041004584
34	1,1-dichloropropene	-0.033505557
35	benzene	0.602056343
37	1,2-dichloroethane	-0.128880605
38	t-amyl-methyl ether (TAME)	0.007832203
39	trichloroethene	0
42	1,2-dichloropropane	-0.114680083
43	dibromomethane	0
44	bromodichloromethane	0
45	1,4-dioxane	0
47	4-methyl-2-pentanone (MIBK)	0.031634055
48	2-hexanone	0.079093929
49	cis-1,3-dichloropropene	0.014400451
50	toluene	**2.005647706**
52	trans-1,3-dichloropropene	0.135087525
53	1,1,2-trichloroethane	-0.030184861
55	tetrachloroethene	0.098297207

	AnalyteName	Concentration (ug/L)
56	1,3-dichloropropane	0
57	dibromochloromethane	0
58	1,2-dibromoethane (EDB)	0
59	chlorobenzene	0.011785244
60	1,1,1,2-tetrachloroethane	0
61	ethylbenzene	0.390405127
62	m&p-xylenes	**1.901633891**
63	o-xylene	0.970505884
64	styrene	0.010316497
65	bromoform	0
66	isopropylbenzene	0.163739707
69	bromobenzene	-0.277488446
70	1,1,2,2-tetrachloroethane	-0.287683533
71	1,2,3-trichloropropane	-0.324541406
72	n-propylbenzene	0.047168761
73	2-chlorotoluene	-0.22881617
74	4-chlorotoluene	-0.215418324
75	1,3,5-trimethylbenzene	0.158947671
76	tert-butylbenzene	0
77	1,2,4-trimethylbenzene	0.753699962
79	sec-butylbenzene	-0.087531564
80	1,3-dichlorobenzene	-0.177118284
81	4-isopropyltoluene	-0.018539667
82	1,4-dichlorobenzene	-0.098896523
84	1,2-dichlorobenzene	-0.125704418
85	n-butylbenzene	0
86	1,2-dibromo-3-chloropropane (DBCP)	0
88	1,2,4-trichlorobenzene	0.033527689
89	hexachlorobutadiene	-0.20924039
90	naphthalene	**1.475063193**
91	1,2,3-trichlorobenzene	0.086643383
87	1,3,5-trichlorobenzene	-0.061713359
12	1,1,2-trichloro-1,2,2-trifluoroethane	-0.315435505
14	methyl acetate	0
21	vinyl acetate	-0.048914456
31	cyclohexane	0.861616135
40	methylcyclohexane	2.48005589
10	acrolein	-0.55030941
17	acrylonitrile	-0.431770845
46	2-chloroethylvinylether (2-CEVE)	0.139725042
	Total Xylenes	0

Quantitation Report (QT Reviewed)

Data Path : X:\V3\2023\Feb23\020923\
Data File : V3020918.D
Acq On : 9 Feb 2023 6:43 pm
Operator : lmm
Sample : 64446-01 100uLMeOH/5mL
Misc : 100
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Feb 09 19:14:20 2023
Quant Method : X:\V3\methods\V38260JAN1122.M
Quant Title : V3 8260
QLast Update : Tue Jan 17 13:15:30 2023
Response via : Initial Calibration

prep: 2-8-23
12.369
10mL MeOH

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) IS fluorobenzene	8.641	96	186533	10.00	ug/L	0.00
54) IS chlorobenzene-D5	12.273	119	45523	10.00	ug/L	0.00
68) IS 1,4-dichlorobenzene-D4	15.017	152	79191	10.00	ug/L	0.00
System Monitoring Compounds						
32) SS 1,2-dichloroethane-D4	8.252	65	62896	9.46	ug/L	0.00
Spiked Amount 10.000	Range 60 - 140		Recovery = 94.60%			
36) SS dibromofluoromethane	7.619	111	49091	9.95	ug/L	0.00
Spiked Amount 10.000	Range 78 - 114		Recovery = 99.50%			
41) SS a,a,a-trifluorotoluene	9.176	146	119274	18.64	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 93.20%			
51) SS toluene-D8	10.521	98	189389	9.59	ug/L	0.00
Spiked Amount 10.000	Range 88 - 110		Recovery = 95.90%			
67) SS 4-bromofluorobenzene	13.654	174	58498	9.23	ug/L	0.00
Spiked Amount 10.000	Range 86 - 115		Recovery = 92.30%			
83) NA 1,2-dichlorobenzene-D4	15.017	152	79191	0.00	ug/L	0.00
Spiked Amount 25.000	Range 15 - 25		Recovery = 0.00%#			
Target Compounds						Qvalue
31) cyclohexane	7.868	84	5115	0.862	ug/L	94
35) benzene	8.391	78	11127	0.602	ug/L	97
40) methylcyclohexane	9.195	83	17500	2.480	ug/L #	72
50) toluene	10.618	92	21676	2.006	ug/L	98
62) m&p-xylenes	12.443	106	13796	1.902	ug/L #	76
63) o-xylene	12.942	106	7049	0.971	ug/L	97
77) 1,2,4-trimethylbenzene	14.439	105	13045	0.754	ug/L	91
90) naphthalene	17.876	128	12953	1.475	ug/L	97

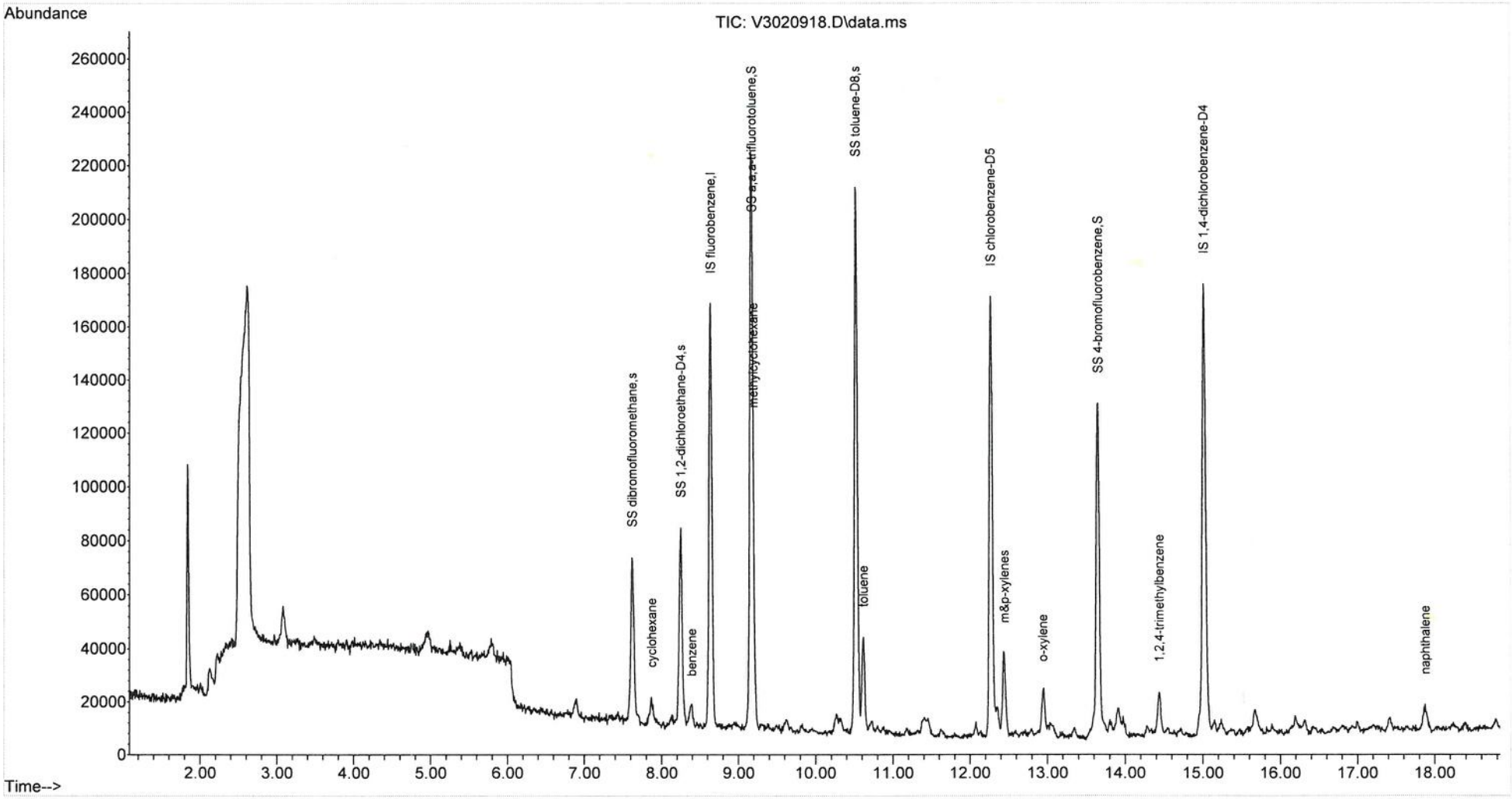
(#) = qualifier out of range (m) = manual integration (+) = signals summed

FEB 09 2023

Quantitation Report (QT Reviewed)

Data Path : X:\V3\2023\Feb23\020923\
Data File : V3020918.D
Acq On : 9 Feb 2023 6:43 pm
Operator : lmm
Sample : 64446-01 100uLMeOH/5mL
Misc : 100
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Feb 09 19:14:20 2023
Quant Method : X:\V3\methods\V38260JAN1122.M
Quant Title : V3 8260
QLast Update : Tue Jan 17 13:15:30 2023
Response via : Initial Calibration



This File:	L:\VOA\Excel Reports\2023\V3020919
Analysis Group:	8260/8021/624
Field ID:	SY-SB4-10 1.8E+07
Sample:	64446-02 100uLMeOH/5mL Dow
Misc:	100 CRE
Import File Name	v3 15933 DoD
TestGroupID	V8260DoD_S
Aqueous or Soil? (A or S)	S
Solid amount (g)	12.92
Methanol volume (mL)	10
Percent Solid (%)	87.65
Soil Prep Date	2/8/2023
Weight:	258.4
Volume:	11.59562
Lab#:	64446-002
AnalysisDate:	2/9/2023
AnalysisTime:	9 Feb 2023 7:14 pm
Dilution:	1
AnalyzedBy:	LMM V3020919.D
QC_Code:	
Prep#:	15933

Reviewer Checks:

- Quant Report: Reviewed, Analyst Initials & Date
- Chromatogram Checked, Major peaks identified
- Soil prep data checked: weight, volume, %solid, Prep date
- Field ID consistent with data and any field replicates
- Results consistent with any re-runs, LL results & internal QC
- Substitute dilution data checked
- Correct dilution and reason clear or noted
- Reason for reanalysis documented
- Surrogates pass or flagged & noted
- Flags checked (Expiration, F+, Over Cal)
- Other QC failures, estimates or interferences documented
- Spot checked Reported Result with Quant Report
- Checked Audit flagged data in LIMS

Notes:

Reviewer Initials & Date: CL 2/13/23

#	Surrogate Standards	Import Value (as ug/L)	Recovery	Flag	QC Limits	Surrogate True Values
32	SS 1,2-dichloroethane-D4	9.26	93%		60-140	10
36	SS dibromofluoromethane	10.03	100%		78-114	10
51	SS toluene-D8	9.75	97%		88-110	10
67	SS 4-bromofluorobenzene	9.29	93%		86-115	10
41	SS a,a,a-trifluorotoluene	17.43	101%		70-130*	20

	AnalyteName	Concentration (ug/L)
2	dichlorodifluoromethane	0.087332455
3	chloromethane	0.005798384
4	vinyl chloride	-0.12235566
5	bromomethane	0.085197443
6	chloroethane	-0.320419652
7	trichlorofluoromethane	-0.24467044
8	diethylether	-0.107652644
9	acetone	-1
11	1,1-dichloroethene	-0.12522296
13	t-butanol (TBA)	-1.016965114
15	methylene chloride	-0.024276051
16	carbon disulfide	0.03223547
18	methyl-t-butyl ether (MTBE)	-0.110796434
19	trans-1,2-dichloroethene	-0.063209107
20	isopropyl ether (DIPE)	-0.051989344
22	1,1-dichloroethane	-0.090523028
23	2-butanone (MEK)	-0.127074409
24	ethyl-t-butyl ether (ETBE)	-0.013689232
25	2,2-dichloropropane	-0.136891865
26	cis-1,2-dichloroethene	-0.025468868
27	bromochloromethane	0
28	chloroform	0.064720615
29	tetrahydrofuran (THF)	-0.192897772
30	1,1,1-trichloroethane	0.021023588
33	carbon tetrachloride	0.043791794
34	1,1-dichloropropene	-0.019950563
35	benzene	0.098118722
37	1,2-dichloroethane	-0.09563384
38	t-amyl-methyl ether (TAME)	0.00554648
39	trichloroethene	-0.107912684
42	1,2-dichloropropane	-0.097537404
43	dibromomethane	0
44	bromodichloromethane	0.041592654
45	1,4-dioxane	0
47	4-methyl-2-pentanone (MIBK)	0.043851026
48	2-hexanone	0.081643266
49	cis-1,3-dichloropropene	0.019606515
50	toluene	0.666480339
52	trans-1,3-dichloropropene	0
53	1,1,2-trichloroethane	-0.03422959
55	tetrachloroethene	0.109826362

	AnalyteName	Concentration (ug/L)
56	1,3-dichloropropane	0.015824407
57	dibromochloromethane	0
58	1,2-dibromoethane (EDB)	0
59	chlorobenzene	0
60	1,1,1,2-tetrachloroethane	0.131659821
61	ethylbenzene	0.208381077
62	m&p-xylenes	0.977419473
63	o-xylene	0.401912069
64	styrene	0.009883847
65	bromoform	0.085205918
66	isopropylbenzene	0.076819125
69	bromobenzene	0
70	1,1,2,2-tetrachloroethane	-0.372949036
71	1,2,3-trichloropropane	-0.320267997
72	n-propylbenzene	-0.06060883
73	2-chlorotoluene	-0.224918222
74	4-chlorotoluene	-0.211171099
75	1,3,5-trimethylbenzene	-0.200530646
76	tert-butylbenzene	-0.215242706
77	1,2,4-trimethylbenzene	0.401081349
79	sec-butylbenzene	-0.119416502
80	1,3-dichlorobenzene	-0.187835398
81	4-isopropyltoluene	0.041167903
82	1,4-dichlorobenzene	-0.175475799
84	1,2-dichlorobenzene	-0.1268054
85	n-butylbenzene	-0.090101883
86	1,2-dibromo-3-chloropropane (DBCP)	0.042419564
88	1,2,4-trichlorobenzene	0
89	hexachlorobutadiene	0
90	naphthalene	0.998939992
91	1,2,3-trichlorobenzene	0.031275748
87	1,3,5-trichlorobenzene	-0.054265389
12	1,1,2-trichloro-1,2,2-trifluoroethane	-0.229698833
14	methyl acetate	0
21	vinyl acetate	-0.039113134
31	cyclohexane	0.356824676
40	methylcyclohexane	0.791242039
10	acrolein	-0.75510749
17	acrylonitrile	-0.553320972
46	2-chloroethylvinylether (2-CEVE)	0.166795725
	Total Xylenes	0

Quantitation Report (QT Reviewed)

Data Path : X:\V3\2023\Feb23\020923\
Data File : V3020919.D
Acq On : 9 Feb 2023 7:14 pm
Operator : lmm
Sample : 64446-02 100uLMeOH/5mL
Misc : 100
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Feb 10 06:30:40 2023
Quant Method : X:\V3\methods\V38260JAN1122.M
Quant Title : V3 8260
QLast Update : Tue Jan 17 13:15:30 2023
Response via : Initial Calibration

lmh
2-10-23

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) IS fluorobenzene	8.641	96	183976	10.00 ug/L	0.00
54) IS chlorobenzene-D5	12.279	119	45645	10.00 ug/L	0.00
68) IS 1,4-dichlorobenzene-D4	15.022	152	77601	10.00 ug/L	0.00
System Monitoring Compounds					
32) SS 1,2-dichloroethane-D4	8.251	65	60737	9.26 ug/L	0.00
Spiked Amount 10.000	Range 60 - 140		Recovery = 92.60%		
36) SS dibromofluoromethane	7.619	111	48837	10.03 ug/L	0.00
Spiked Amount 10.000	Range 78 - 114		Recovery = 100.30%		
41) SS a,a,a-trifluorotoluene	9.170	146	110023	17.43 ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 87.15%		
51) SS toluene-D8	10.521	98	189945	9.75 ug/L	0.00
Spiked Amount 10.000	Range 88 - 110		Recovery = 97.50%		
67) SS 4-bromofluorobenzene	13.654	174	59020	9.29 ug/L	0.00
Spiked Amount 10.000	Range 86 - 115		Recovery = 92.90%		
83) NA 1,2-dichlorobenzene-D4	15.022	152	77601	0.00 ug/L	0.00
Spiked Amount 25.000	Range 15 - 25		Recovery = 0.00%#		
Target Compounds					Qvalue
40) methylcyclohexane	9.188	83	5410	0.791 ug/L #	12
50) toluene	10.618	92	7222	0.666 ug/L	99
62) m&p-xylenes	12.443	106	7110	0.977 ug/L	88
63) o-xylene	12.948	106	2927	0.402 ug/L #	85
77) 1,2,4-trimethylbenzene	14.438	105	8026	0.401 ug/L	97
90) naphthalene	17.876	128	7129	0.999 ug/L	94

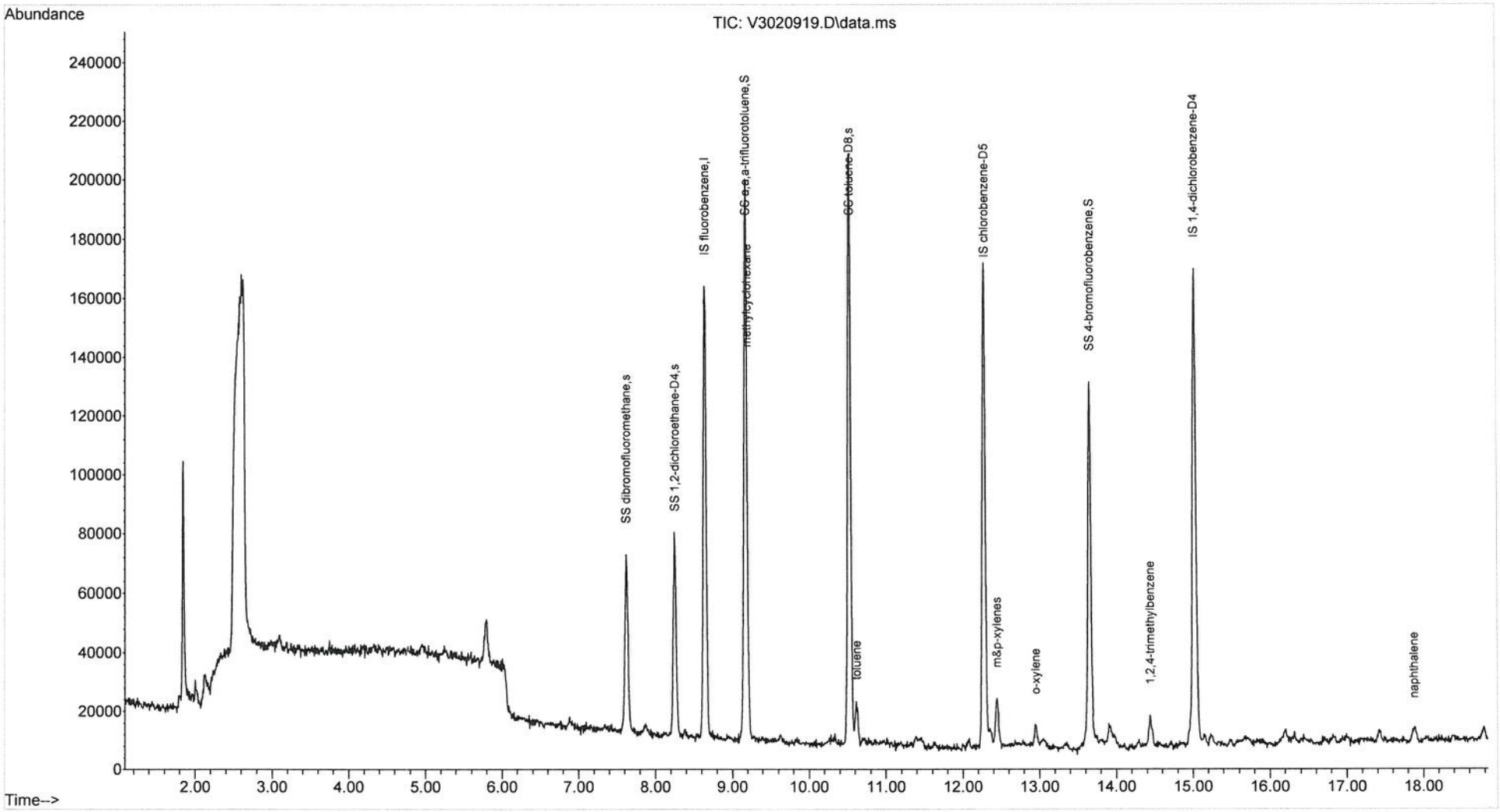
2/8
12-92→510

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : X:\V3\2023\Feb23\020923\
Data File : V3020919.D
Acq On : 9 Feb 2023 7:14 pm
Operator : lmm
Sample : 64446-02 100uLMeOH/5mL
Misc : 100
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Feb 10 06:30:40 2023
Quant Method : X:\V3\methods\V38260JAN1122.M
Quant Title : V3 8260
QLast Update : Tue Jan 17 13:15:30 2023
Response via : Initial Calibration



This File:	L:\VOA\Excel Reports\2023\V3020920
Analysis Group:	8260/8021/624
Field ID:	SY-SB4-2 1.8E+07
Sample:	64446-03 100uLMeOH/5mL Dow
Misc:	100 CRE
Import File Name	v3 15933 DoD
TestGroupID	V8260DoD_S
Aqueous or Soil? (A or S)	S
Solid amount (g)	16.11
Methanol volume (mL)	10
Percent Solid (%)	80.25
Soil Prep Date	2/8/2023
Weight:	322.2
Volume:	13.181725
Lab#:	64446-003
AnalysisDate:	2/9/2023
AnalysisTime:	9 Feb 2023 7:44 pm
Dilution:	1
AnalyzedBy:	LMM V3020920.D
QC_Code:	
Prep#:	15933

Reviewer Checks:

- Quant Report: Reviewed, Analyst Initials & Date
- Chromatogram Checked, Major peaks identified
- Soil prep data checked: weight, volume, %solid, Prep date
- Field ID consistent with data and any field replicates
- Results consistent with any re-runs, LL results & internal QC
- Substitute dilution data checked
- Correct dilution and reason clear or noted
- Reason for reanalysis documented
- Surrogates pass or flagged & noted
- Flags checked (Expiration, F+, Over Cal)
- Other QC failures, estimates or interferences documented
- Spot checked Reported Result with Quant Report
- Checked Audit flagged data in LIMS

Notes:

Reviewer Initials & Date: CL 2/13/23

#	Surrogate Standards	Import Value (as ug/L)	Recovery	Flag	QC Limits	Surrogate True Values
32	SS 1,2-dichloroethane-D4	9.42	94%		60-140	10
36	SS dibromofluoromethane	9.98	100%		78-114	10
51	SS toluene-D8	9.63	96%		88-110	10
67	SS 4-bromofluorobenzene	9.43	94%		86-115	10
41	SS a,a,a-trifluorotoluene	16.32	108%		70-130*	20

	AnalyteName	Concentration (ug/L)
2	dichlorodifluoromethane	0.077598253
3	chloromethane	0.003506248
4	vinyl chloride	-0.071234134
5	bromomethane	0.213452623
6	chloroethane	-0.323673876
7	trichlorofluoromethane	-0.243134614
8	diethylether	0.090126282
9	acetone	-1
11	1,1-dichloroethene	-0.113641691
13	t-butanol (TBA)	-1.118595801
15	methylene chloride	-0.075081788
16	carbon disulfide	0.111765379
18	methyl-t-butyl ether (MTBE)	-0.064641995
19	trans-1,2-dichloroethene	-0.039370959
20	isopropyl ether (DIPE)	-0.025630012
22	1,1-dichloroethane	-0.086675128
23	2-butanone (MEK)	-0.226997225
24	ethyl-t-butyl ether (ETBE)	0
25	2,2-dichloropropane	-0.183459181
26	cis-1,2-dichloroethene	-0.068995307
27	bromochloromethane	-0.076960519
28	chloroform	0.009229196
29	tetrahydrofuran (THF)	-0.105001616
30	1,1,1-trichloroethane	0
33	carbon tetrachloride	0
34	1,1-dichloropropene	-0.032874187
35	benzene	-0.077178414
37	1,2-dichloroethane	-0.098005346
38	t-amyl-methyl ether (TAME)	0.011508805
39	trichloroethene	0
42	1,2-dichloropropane	-0.061729074
43	dibromomethane	-0.07220735
44	bromodichloromethane	0.043723867
45	1,4-dioxane	0
47	4-methyl-2-pentanone (MIBK)	0.058927426
48	2-hexanone	0.086285074
49	cis-1,3-dichloropropene	0
50	toluene	0.212722558
52	trans-1,3-dichloropropene	0
53	1,1,2-trichloroethane	0
55	tetrachloroethene	0.078347324

	AnalyteName	Concentration (ug/L)
56	1,3-dichloropropane	0
57	dibromochloromethane	0
58	1,2-dibromoethane (EDB)	0
59	chlorobenzene	0.015139804
60	1,1,1,2-tetrachloroethane	0
61	ethylbenzene	0.036366762
62	m&p-xylenes	0.205240997
63	o-xylene	0.062639927
64	styrene	0.011882301
65	bromoform	0
66	isopropylbenzene	0.03457132
69	bromobenzene	0
70	1,1,2,2-tetrachloroethane	-0.352939904
71	1,2,3-trichloropropane	0.152899772
72	n-propylbenzene	-0.22583112
73	2-chlorotoluene	-0.23450274
74	4-chlorotoluene	-0.209899474
75	1,3,5-trimethylbenzene	-0.175273079
76	tert-butylbenzene	-0.225886962
77	1,2,4-trimethylbenzene	-0.158214618
79	sec-butylbenzene	-0.167566548
80	1,3-dichlorobenzene	-0.185676262
81	4-isopropyltoluene	-0.095529682
82	1,4-dichlorobenzene	-0.145946641
84	1,2-dichlorobenzene	-0.164870981
85	n-butylbenzene	-0.06271089
86	1,2-dibromo-3-chloropropane (DBCP)	0
88	1,2,4-trichlorobenzene	0
89	hexachlorobutadiene	0
90	naphthalene	0
91	1,2,3-trichlorobenzene	0
87	1,3,5-trichlorobenzene	-0.054729548
12	1,1,2-trichloro-1,2,2-trifluoroethane	-0.298745499
14	methyl acetate	0.241134971
21	vinyl acetate	-0.062229075
31	cyclohexane	0.114820309
40	methylcyclohexane	0.235525399
10	acrolein	-0.727254066
17	acrylonitrile	-0.558094347
46	2-chloroethylvinylether (2-CEVE)	0.157209593
	Total Xylenes	0

Quantitation Report (QT Reviewed)

Data Path : X:\V3\2023\Feb23\020923\
Data File : V3020920.D
Acq On : 9 Feb 2023 7:44 pm
Operator : lmm
Sample : 64446-03 100uLMeOH/5mL
Misc : 100
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Feb 10 06:30:46 2023
Quant Method : X:\V3\methods\V38260JAN1122.M
Quant Title : V3 8260
QLast Update : Tue Jan 17 13:15:30 2023
Response via : Initial Calibration

WS 2-10-23

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) IS fluorobenzene	8.641	96	185482	10.00	ug/L	0.00
54) IS chlorobenzene-D5	12.279	119	45126	10.00	ug/L	0.00
68) IS 1,4-dichlorobenzene-D4	15.016	152	76521	10.00	ug/L	0.00
System Monitoring Compounds						
32) SS 1,2-dichloroethane-D4	8.245	65	62267	9.42	ug/L	0.00
Spiked Amount 10.000	Range 60 - 140		Recovery = 94.20%			
36) SS dibromofluoromethane	7.619	111	48967	9.98	ug/L	0.00
Spiked Amount 10.000	Range 78 - 114		Recovery = 99.80%			
41) SS a,a,a-trifluorotoluene	9.170	146	103824	16.32	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 81.60%			
51) SS toluene-D8	10.521	98	189191	9.63	ug/L	0.00
Spiked Amount 10.000	Range 88 - 110		Recovery = 96.30%			
67) SS 4-bromofluorobenzene	13.660	174	59187	9.43	ug/L	0.01
Spiked Amount 10.000	Range 86 - 115		Recovery = 94.30%			
83) NA 1,2-dichlorobenzene-D4	15.016	152	76521	0.00	ug/L	0.00
Spiked Amount 25.000	Range 15 - 25		Recovery = 0.00%#			
Target Compounds						Qvalue

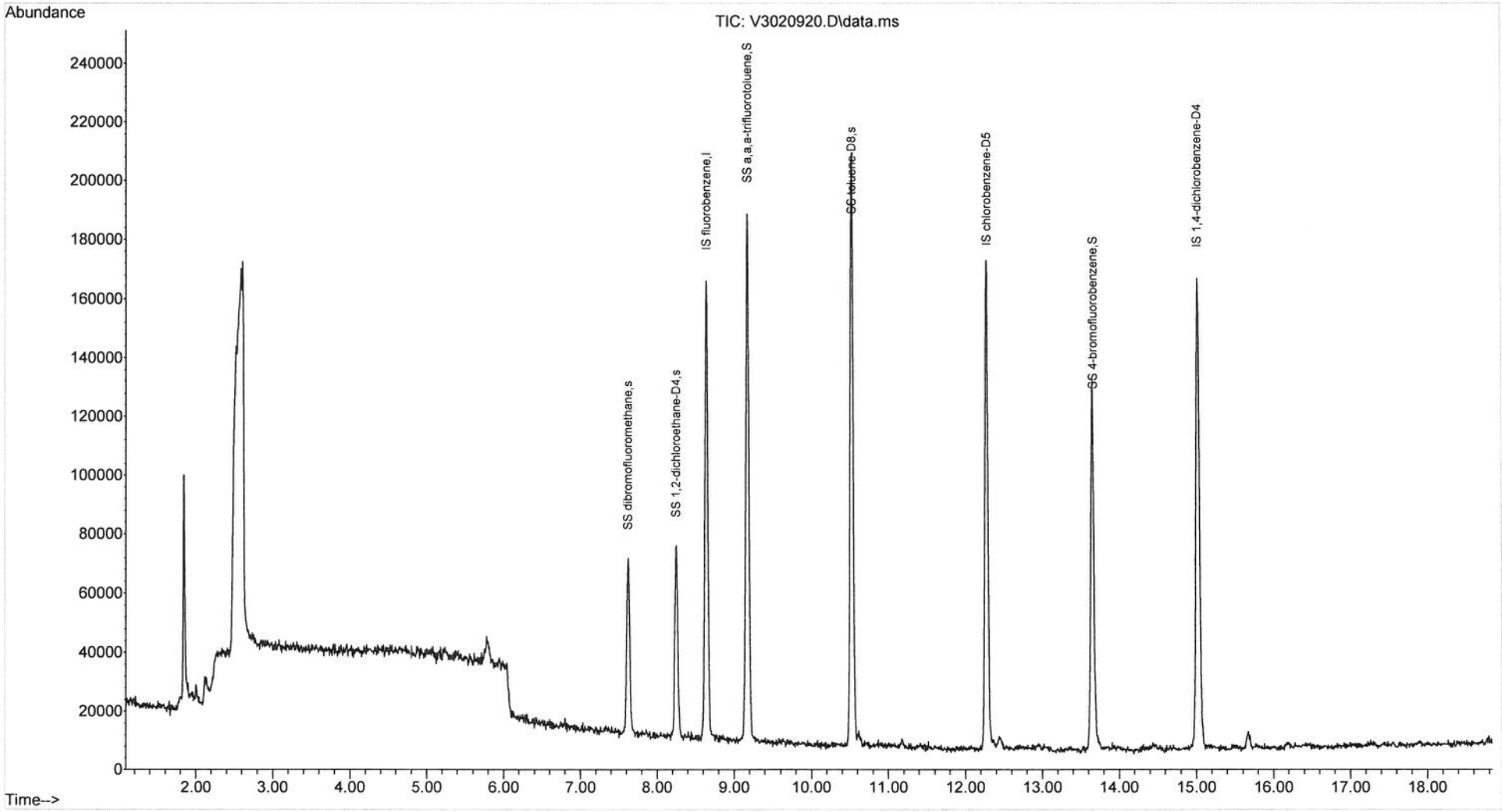
2/8
16-11->10

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : X:\V3\2023\Feb23\020923\
Data File : V3020920.D
Acq On : 9 Feb 2023 7:44 pm
Operator : lmm
Sample : 64446-03 100uLMeOH/5mL
Misc : 100
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Feb 10 06:30:46 2023
Quant Method : X:\V3\methods\V38260JAN1122.M
Quant Title : V3 8260
QLast Update : Tue Jan 17 13:15:30 2023
Response via : Initial Calibration



This File:	L:\VOA\Excel Reports\2023\V3020910
Analysis Group:	8260/8021/624
Field ID:	Trip Blank 1.8E+07
Sample:	64446-04 100uLMeOH/5mL Dow
Misc:	100 CRE
Import File Name	v3 15933 DoD
TestGroupID	V8260DoD_S
Aqueous or Soil? (A or S)	S
Solid amount (g)	10
Methanol volume (mL)	10
Percent Solid (%)	100
Soil Prep Date	2/8/2023
Weight:	200
Volume:	10
Lab#:	64446-004
AnalysisDate:	2/9/2023
AnalysisTime:	9 Feb 2023 2:36 pm
Dilution:	1
AnalyzedBy:	LMM V3020910.D
QC_Code:	
Prep#:	15933

Reviewer Checks:

- Quant Report: Reviewed, Analyst Initials & Date
- Chromatogram Checked, Major peaks identified
- Soil prep data checked: weight, volume, %solid, Prep date
- Field ID consistent with data and any field replicates
- Results consistent with any re-runs, LL results & internal QC
- Substitute dilution data checked
- Correct dilution and reason clear or noted
- Reason for reanalysis documented
- Surrogates pass or flagged & noted
- Flags checked (Expiration, F+, Over Cal)
- Other QC failures, estimates or interferences documented
- Spot checked Reported Result with Quant Report
- Checked Audit flagged data in LIMS

Notes:

Reviewer Initials & Date: CL 2/13/23

#	Surrogate Standards	Import Value (as ug/L)	Recovery	Flag	QC Limits	Surrogate True Values
32	SS 1,2-dichloroethane-D4	9.33	93%		60-140	10
36	SS dibromofluoromethane	9.93	99%		78-114	10
51	SS toluene-D8	9.77	98%		88-110	10
67	SS 4-bromofluorobenzene	9.54	95%		86-115	10
41	SS a,a,a-trifluorotoluene	19.02	95%		70-130*	20

	AnalyteName	Concentration (ug/L)
2	dichlorodifluoromethane	0.073922118
3	chloromethane	0.018375983
4	vinyl chloride	-0.082487032
5	bromomethane	0.035684392
6	chloroethane	-0.321507407
7	trichlorofluoromethane	-0.243977072
8	diethylether	-0.143878655
9	acetone	-1
11	1,1-dichloroethene	-0.146933524
13	t-butanol (TBA)	-1.374952527
15	methylene chloride	-0.328625711
16	carbon disulfide	0.00570408
18	methyl-t-butyl ether (MTBE)	-0.086087146
19	trans-1,2-dichloroethene	-0.052712484
20	isopropyl ether (DIPE)	-0.055284102
22	1,1-dichloroethane	-0.105074305
23	2-butanone (MEK)	-0.187579875
24	ethyl-t-butyl ether (ETBE)	-0.021252081
25	2,2-dichloropropane	-0.140650217
26	cis-1,2-dichloroethene	-0.022506397
27	bromochloromethane	-0.070365052
28	chloroform	-0.027390608
29	tetrahydrofuran (THF)	-0.164310992
30	1,1,1-trichloroethane	0.029701393
33	carbon tetrachloride	0
34	1,1-dichloropropene	-0.017276626
35	benzene	-0.072700895
37	1,2-dichloroethane	-0.089905243
38	t-amyl-methyl ether (TAME)	0.011266379
39	trichloroethene	0
42	1,2-dichloropropane	0
43	dibromomethane	0
44	bromodichloromethane	0
45	1,4-dioxane	0
47	4-methyl-2-pentanone (MIBK)	0.023024092
48	2-hexanone	0.093706021
49	cis-1,3-dichloropropene	0
50	toluene	0.038011934
52	trans-1,3-dichloropropene	0
53	1,1,2-trichloroethane	0
55	tetrachloroethene	0.032539546
56	1,3-dichloropropane	0
57	dibromochloromethane	0
58	1,2-dibromoethane (EDB)	0
59	chlorobenzene	0.012923043
60	1,1,1,2-tetrachloroethane	0
61	ethylbenzene	0.03553937
62	m&p-xylenes	0.019752711
63	o-xylene	0
64	styrene	0.016743566
65	bromoform	0
66	isopropylbenzene	0.014937658
69	bromobenzene	-0.258471591
70	1,1,2,2-tetrachloroethane	-0.347937937
71	1,2,3-trichloropropane	-0.34235049
72	n-propylbenzene	-0.213009467
73	2-chlorotoluene	-0.225915216
74	4-chlorotoluene	-0.212257429
75	1,3,5-trimethylbenzene	-0.202250493
76	tert-butylbenzene	-0.230957246
77	1,2,4-trimethylbenzene	-0.174062711
79	sec-butylbenzene	-0.161145214
80	1,3-dichlorobenzene	-0.193831007
81	4-isopropyltoluene	-0.079090698
82	1,4-dichlorobenzene	-0.195939197
84	1,2-dichlorobenzene	-0.108416503
85	n-butylbenzene	-0.048815027
86	1,2-dibromo-3-chloropropane (DBCP)	0
88	1,2,4-trichlorobenzene	0.041154541
89	hexachlorobutadiene	-0.188541249
90	naphthalene	0.424274695
91	1,2,3-trichlorobenzene	0
87	1,3,5-trichlorobenzene	-0.057822607
12	1,1,2-trichloro-1,2,2-trifluoroethane	-0.266910469
14	methyl acetate	0.57232892
21	vinyl acetate	0
31	cyclohexane	0.085898286
40	methylcyclohexane	0.043277102
10	acrolein	-0.840715575
17	acrylonitrile	-0.467465721
46	2-chloroethylvinylether (2-CEVE)	0.142485057
	Total Xylenes	0

Absolute Resource Associates

Quantitation Report (QT Reviewed)

Data Path : X:\V3\2023\Feb23\020923\
Data File : V3020910.D
Acq On : 9 Feb 2023 2:36 pm
Operator : lmm
Sample : 64446-04 100uLMeOH/5mL
Misc : 100
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Feb 09 19:13:48 2023
Quant Method : X:\V3\methods\V38260JAN1122.M
Quant Title : V3 8260
QLast Update : Tue Jan 17 13:15:30 2023
Response via : Initial Calibration

prep: 2-8-23
10 mL MeOH
Trip Blank

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) IS fluorobenzene	8.641	96	185499	10.00	ug/L	0.00
54) IS chlorobenzene-D5	12.273	119	46380	10.00	ug/L	0.00
68) IS 1,4-dichlorobenzene-D4	15.022	152	73563	10.00	ug/L	0.00
System Monitoring Compounds						
32) SS 1,2-dichloroethane-D4	8.251	65	61720	9.33	ug/L	0.00
Spiked Amount 10.000	Range 60 - 140		Recovery = 93.30%			
36) SS dibromofluoromethane	7.619	111	48735	9.93	ug/L	0.00
Spiked Amount 10.000	Range 78 - 114		Recovery = 99.30%			
41) SS a,a,a-trifluorotoluene	9.170	146	121034	19.02	ug/L	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 95.10%			
51) SS toluene-D8	10.527	98	191858	9.77	ug/L	0.00
Spiked Amount 10.000	Range 88 - 110		Recovery = 97.70%			
67) SS 4-bromofluorobenzene	13.654	174	61569	9.54	ug/L	0.00
Spiked Amount 10.000	Range 86 - 115		Recovery = 95.40%			
83) NA 1,2-dichlorobenzene-D4	15.022	152	73563	0.00	ug/L	0.00
Spiked Amount 25.000	Range 15 - 25		Recovery = 0.00%#			
Target Compounds						Qvalue
14) methyl acetate	5.027	43	4111	0.572	ug/L #	90
90) naphthalene	17.888	128	392	0.424	ug/L	72

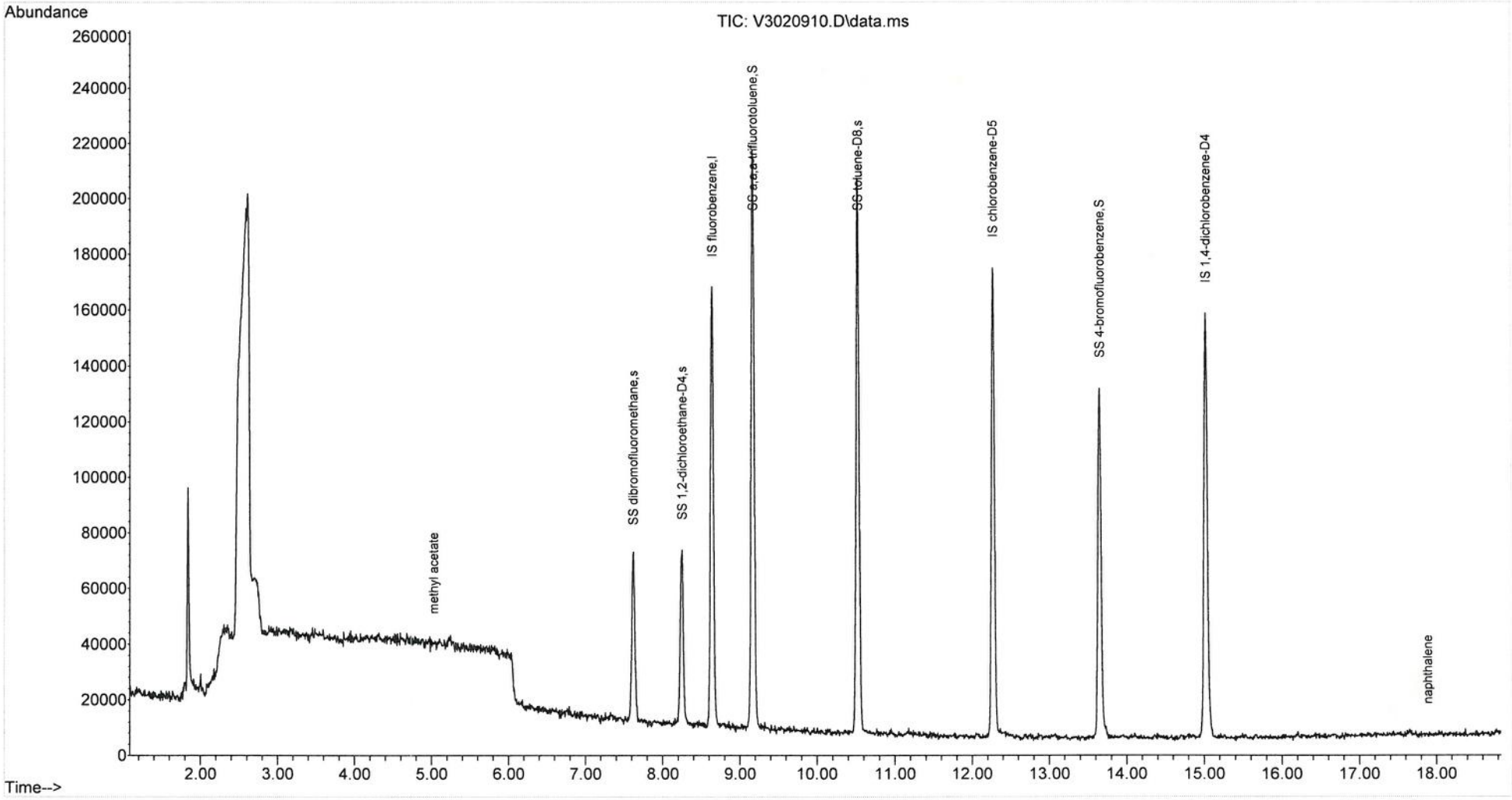
FEB 09 2023

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : X:\V3\2023\Feb23\020923\
Data File : V3020910.D
Acq On : 9 Feb 2023 2:36 pm
Operator : lmm
Sample : 64446-04 100uLMeOH/5mL
Misc : 100
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Feb 09 19:13:48 2023
Quant Method : X:\V3\methods\V38260JAN1122.M
Quant Title : V3 8260
QLast Update : Tue Jan 17 13:15:30 2023
Response via : Initial Calibration



This File:	L:\VOA\Excel Reports\2023\V6020827
Analysis Group:	8260/8021/624
Field ID:	SY-SB4-1 18001468
Sample:	64446-01 100uLMeOH/5mL Dow
Misc:	100 CRE
Import File Name	V6 15934
TestGroupID	VMA_VPH_PresCert_S
Aqueous or Soil? (A or S)	S
Solid amount (g)	12.36
Methanol volume (mL)	10
Percent Solid (%)	86.8
Soil Prep Date	2/8/2023
Weight:	247.2
Volume:	11.63152 ✓
Lab#:	64446-001
AnalysisDate:	2/9/2023
AnalysisTime:	0:46
Dilution:	1
AnalyzedBy:	LMM V6020827.D
QC_Code:	
Prep#:	15934

Reviewer Checks:

Quant Report: Reviewed? Ranges integrated, Analyst Initials & Date
Chromatogram Checked, Major peaks identified
Soil prep data checked: weight, volume, %solid, Prep date
Field ID consistent with data and any field replicates
Results consistent with any re-runs, LL results & internal QC
Substitute dilution data checked
Correct dilution and reason clear or noted
Reason for reanalysis documented
Surrogates pass or flagged & noted
Flags checked (Expiration, F+, Over Cal)
Other QC failures, estimates or interferences documented
Spot checked Reported Result with Quant Report
Checked Audit flagged data in LIMS

Notes: Calibration based on sum of discrete peak areas

Initials & Date: WMS 2-10-23

#	Surrogate Standards	Import Value (as ug/L)	Recovery	Flag	QC Limits	Surrogate True Values
11	SS 2,5-dibromotoluene	44.74	**112%** ✓		70-130	40
22	SS 2,5-dibromotoluene #2	44.12	**110%** ✓		70-130	40
4	SS a,a,a-trifluorotoluene	17.25	**100%** ✓		70-130*	20

#	AnalyteName	Concentration (ug/L)	
	C5-C8 Aliphatics #2	**97.355** ✓	97.355
	C9-C12 Aliphatics #2	**44.926**	44.926
1	Methyl-t-butyl ether (MTBE)	0.000	0
2	benzene	0.658	0.658
3	toluene	**1.991**	1.9913
5	ethylbenzene	0.421	0.4213
6	m&p-xylenes	**1.918**	1.9176
7	o-xylene	**1.125**	1.1252
10	naphthalene	**1.455**	1.4545
	C5-C8 Aliphatics Adj	**94.706**	94.706
	C9-C12 Aliphatics Adj	**26.513**	26.513
	C9-C10 Aromatics	**14.948**	14.948
	Total Xylenes	0.000	

Quantitation Report (QT Reviewed)

Data Path : X:\V6\2023\Feb23\020823\
Data File : V6020827.D
Signal(s) : Signal #1: CPDET1B.ch Signal #2: FID2A.ch
Acq On : 9 Feb 2023 12:46 am
Operator : lmm
Sample : 64446-01 100uLMeOH/5mL
Misc : 100
ALS Vial : 27 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 09 10:08:19 2023
Quant Method : X:\V6\methods\V6VPH011323.M
Quant Title : VOA06 MA VPH
QLast Update : Fri Jan 13 17:20:09 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	R.T.	Response	Conc Units
	System Monitoring Compounds			
4)	S SS a,a,a-trifluorotol...	11.967	9985044	17.250 ug/L m BC
Spiked Amount	20.000		Recovery =	86.25%
11)	S SS 2,5-dibromotoluene	26.431	47982430	44.744 ug/L
Spiked Amount	40.000 Range	70 - 130	Recovery =	111.86%
17)	S SS a,a,a-trifluorotol...	11.968	17953193	17.861 ug/L
Spiked Amount	20.000		Recovery =	89.31%
22)	S SS 2,5-dibromotoluene #2	26.431	19923515	44.117 ug/L
Spiked Amount	40.000 Range	70 - 130	Recovery =	110.29%
	Target Compounds			
1)	methyl-t-butyl ether ...	0.000	0	N.D. ug/L
2)	benzene	11.377	1202674	0.658 ug/L m PM
3)	toluene	13.487	3377585	1.991 ug/L m PM
5)	ethylbenzene	15.511	610898	0.421 ug/L m PM
6)	m&p-xylenes	15.613	3339112	1.918 ug/L m PM
7)	o-xylene	16.325	1676440	1.125 ug/L m PM
8)	1,2,4-trimethylbenzene	18.616	1437120	0.977 ug/L m PM
9)	H C9-C10 Aromatics	18.612	23593962	14.948 ug/L m RI
10)	naphthalene	23.751	2191528	1.455 ug/L m PM
13)	pentane #2	7.014	580371	N.D. ug/L m PM
14)	2-methylpentane #2	8.406	1354582	0.910 ug/L m PM
15)	2,2,4-trimethylpentan...	10.944	1512504	0.995 ug/L m PM
16)	H C5-C8 Aliphatics #2	11.378	120307134	97.355 ug/L m RI
18)	nonane #2	15.021	734425	1.029 ug/L m PM
19)	decane #2	17.148	1021014	6.559 ug/L m PM
20)	n-butylcyclohexane #2	18.615	1633984	1.651 ug/L
21)	H C9-C12 Aliphatics #2	15.611	39601233	44.926 ug/L m RI

(f)=RT Delta > 1/2 Window (m)=manual int.

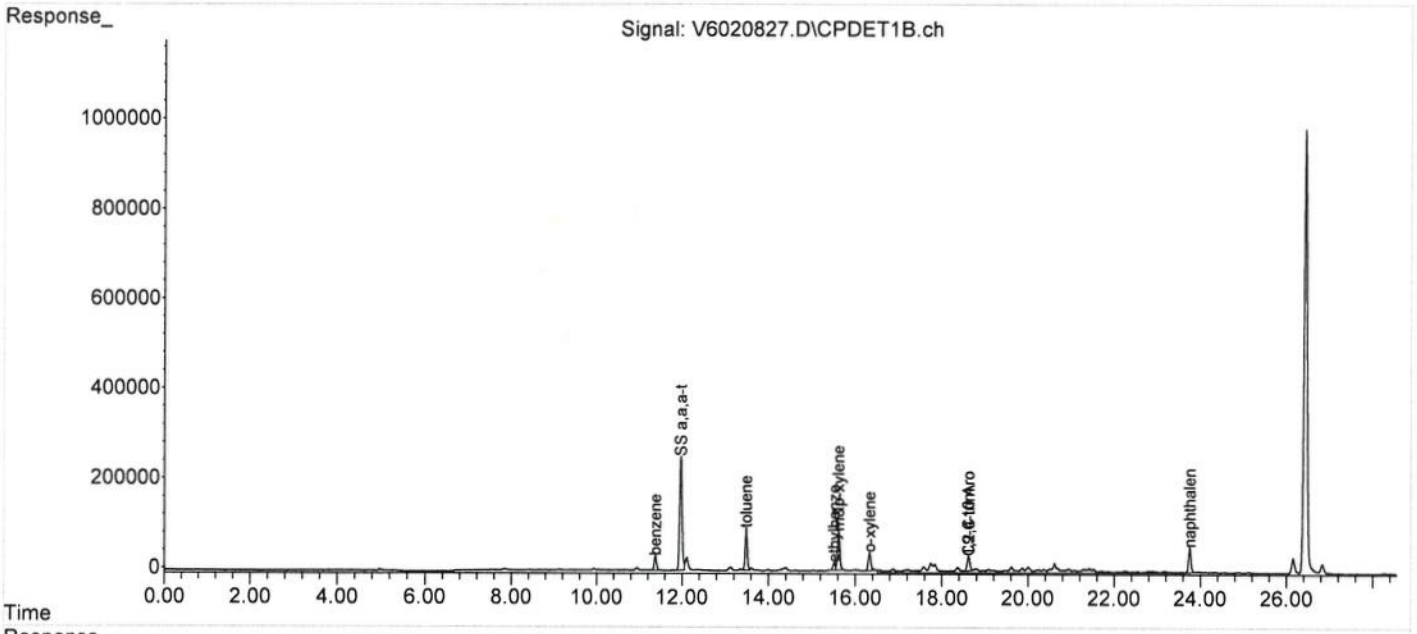
pmp 2.8.23 12.36g 10mL MeOH

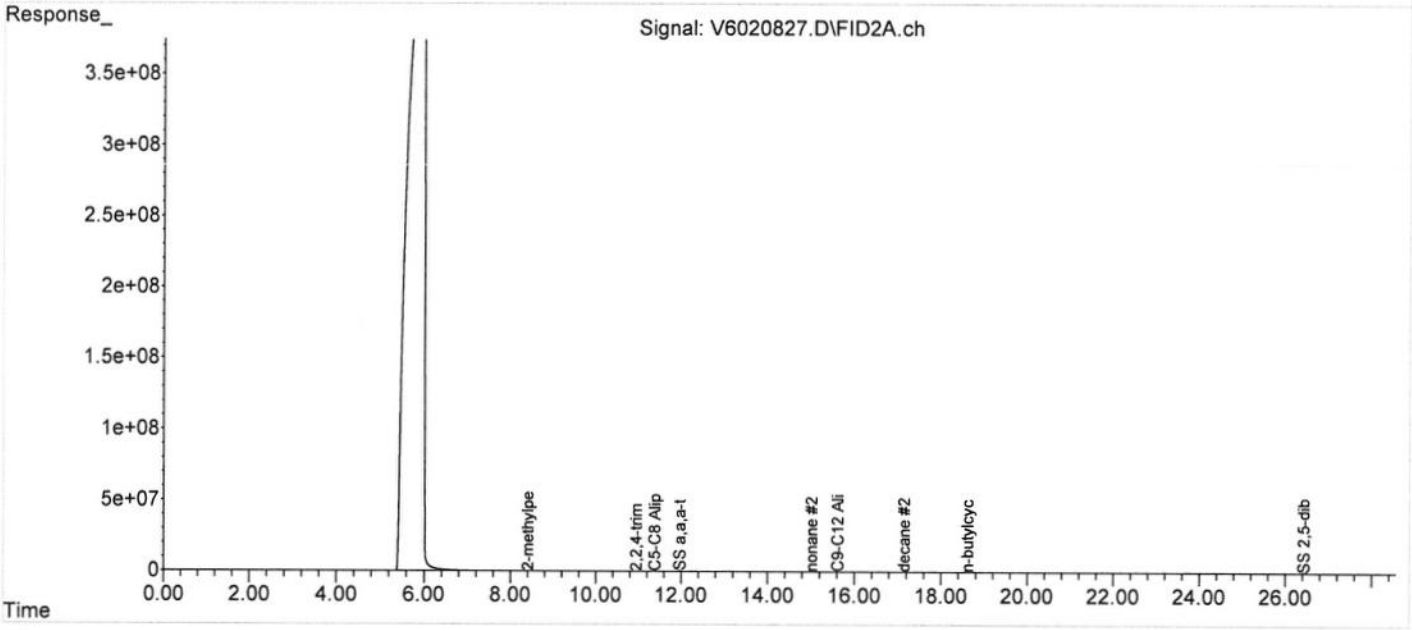
FEB 09 2023 LM

Data Path : X:\V6\2023\Feb23\020823\
Data File : V6020827.D
Signal(s) : Signal #1: CPDET1B.ch Signal #2: FID2A.ch
Acq On : 9 Feb 2023 12:46 am
Operator : lmm
Sample : 64446-01 100uLMeOH/5mL
Misc : 100
ALS Vial : 27 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 09 10:08:19 2023
Quant Method : X:\V6\methods\V6VPH011323.M
Quant Title : VOA06 MA VPH
QLast Update : Fri Jan 13 17:20:09 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





This File:	L:\VOA\Excel Reports\2023\V6020828
Analysis Group:	8260/8021/624
Field ID:	SY-SB4-10 18001468
Sample:	64446-02 100uLMeOH/5mL Dow
Misc:	100 CRE
Import File Name	V6 15934
TestGroupID	VMA_VPH_PresCert_S
Aqueous or Soil? (A or S)	S
Solid amount (g)	12.92
Methanol volume (mL)	10
Percent Solid (%)	87.65
Soil Prep Date	2/8/2023
Weight:	258.4
Volume:	11.59562 ✓
Lab#:	64446-002
AnalysisDate:	2/9/2023
AnalysisTime:	1:20
Dilution:	1
AnalyzedBy:	LMM V6020828.D
QC_Code:	
Prep#:	15934

Reviewer Checks:

- Quant Report: Reviewed? Ranges integrated, Analyst Initials & Date
- Chromatogram Checked, Major peaks identified
- Soil prep data checked: weight, volume, %solid, Prep date
- Field ID consistent with data and any field replicates
- Results consistent with any re-runs, LL results & internal QC
- Substitute dilution data checked
- Correct dilution and reason clear or noted
- Reason for reanalysis documented
- Surrogates pass or flagged & noted
- Flags checked (Expiration, F+, Over Cal)
- Other QC failures, estimates or interferences documented
- Spot checked Reported Result with Quant Report
- Checked Audit flagged data in LIMS

Notes: Calibration based on sum of discrete peak areas

Initials & Date: LM 2-10-23

#	Surrogate Standards	Import Value (as ug/L)	Recovery	Flag	QC Limits	Surrogate True Values
11	SS 2,5-dibromotoluene	40.71	**102%**		70-130	40
22	SS 2,5-dibromotoluene #2	39.69	**99%**		70-130	40
4	SS a,a,a-trifluorotoluene	16.77	**97%**		70-130*	20

#	AnalyteName	Concentration (ug/L)	
	C5-C8 Aliphatics #2	**82.395**	82.395
	C9-C12 Aliphatics #2	**36.502**	36.502
1	Methyl-t-butyl ether (MTBE)	0.000	0
2	benzene	0.141	0.1406
3	toluene	0.671	0.6713
5	ethylbenzene	0.231	0.231
6	m&p-xylenes	0.982	0.9822
7	o-xylene	0.446	0.4458
10	naphthalene	0.556	0.5562
	C5-C8 Aliphatics Adj	**81.583**	81.583
	C9-C12 Aliphatics Adj	**24.012**	24.012
	C9-C10 Aromatics	**10.831**	10.831
	Total Xylenes	0.000	

Quantitation Report (QT Reviewed)

Data Path : X:\V6\2023\Feb23\020823\
Data File : V6020828.D
Signal(s) : Signal #1: CPDET1B.ch Signal #2: FID2A.ch
Acq On : 9 Feb 2023 1:20 am
Operator : lmm
Sample : 64446-02 100uLMeOH/5mL
Misc : 100
ALS Vial : 28 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 09 10:08:22 2023
Quant Method : X:\V6\methods\V6VPH011323.M
Quant Title : VOA06 MA VPH
QLast Update : Fri Jan 13 17:20:09 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	R.T.	Response	Conc Units
	System Monitoring Compounds			
4) S	SS a,a,a-trifluorotol...	11.969	9707182	16.770 ug/L m BC
Spiked Amount	20.000		Recovery =	83.85%
11) S	SS 2,5-dibromotoluene	26.430	44158167	40.715 ug/L
Spiked Amount	40.000 Range	70 - 130	Recovery =	101.79%
17) S	SS a,a,a-trifluorotol...	11.968	17111820	17.007 ug/L
Spiked Amount	20.000		Recovery =	85.04%
22) S	SS 2,5-dibromotoluene #2	26.431	18151028	39.692 ug/L
Spiked Amount	40.000 Range	70 - 130	Recovery =	99.23%
	Target Compounds			
1)	methyl-t-butyl ether ...	0.000	0	N.D. ug/L
2)	benzene	11.379	257041	0.141 ug/L m PM
3)	toluene	13.486	1138706	0.671 ug/L m PM
5)	ethylbenzene	15.512	335007	0.231 ug/L m PM
6)	m&p-xylenes	15.615	1710308	0.982 ug/L m PM
7)	o-xylene	16.328	664263	0.446 ug/L m PM
8)	1,2,4-trimethylbenzene	18.614	836346	0.569 ug/L m PM
9) H	C9-C10 Aromatics	18.612	18476609	10.831 ug/L m RI
10)	naphthalene	23.754	1072352	0.556 ug/L m PM
13)	pentane #2	7.008	481388	N.D. ug/L m PM
14)	2-methylpentane #2	0.000	0	N.D. ug/L
15)	2,2,4-trimethylpentan...	0.000	0	N.D. ug/L
16) H	C5-C8 Aliphatics #2	11.378	102287398	82.395 ug/L m RI
18)	nonane #2	0.000	0	N.D. ug/L
19)	decane #2	0.000	0	N.D. ug/L
20)	n-butylcyclohexane #2	18.619	1017406	1.112 ug/L
21) H	C9-C12 Aliphatics #2	15.611	29047126	36.502 ug/L m RI

(f)=RT Delta > 1/2 Window (m)=manual int.

prep: 2-8-23
12.929
(10 mL MeOH

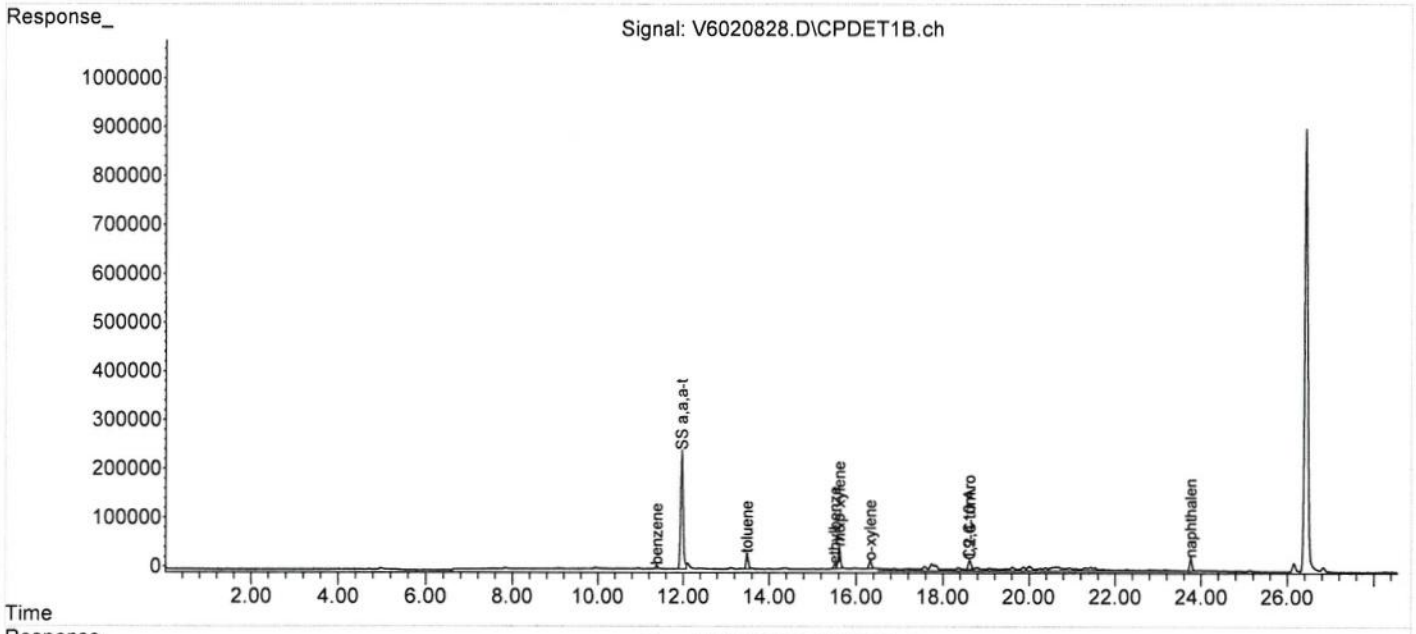
FEB 09 2023

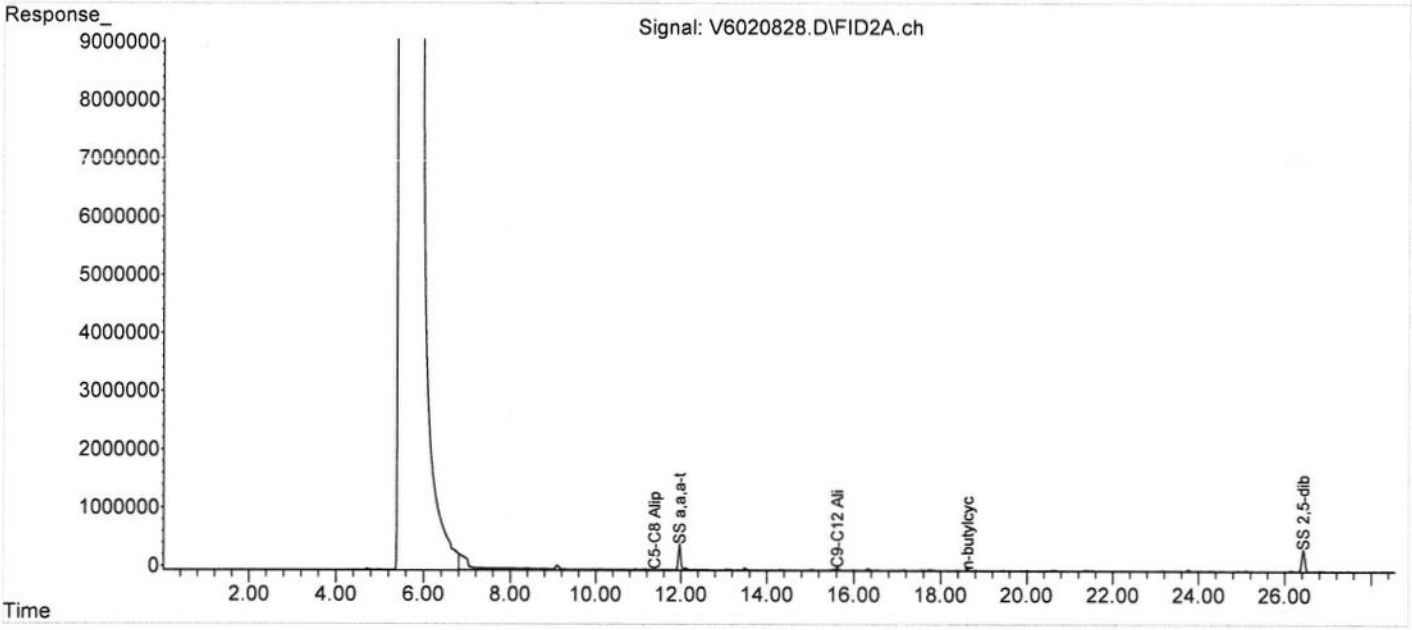
Quantitation Report / (QT Reviewed)

Data Path : X:\V6\2023\Feb23\020823\
Data File : V6020828.D
Signal(s) : Signal #1: CPDET1B.ch Signal #2: FID2A.ch
Acq On : 9 Feb 2023 1:20 am
Operator : lmm
Sample : 64446-02 100uLMeOH/5mL
Misc : 100
ALS Vial : 28 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 09 10:08:22 2023
Quant Method : X:\V6\methods\V6VPH011323.M
Quant Title : VOA06 MA VPH
QLast Update : Fri Jan 13 17:20:09 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





This File:	L:\VOA\Excel Reports\2023\V6020829
Analysis Group:	8260/8021/624
Field ID:	SY-SB4-2 18001468
Sample:	64446-03 100uLMeOH/5mL Dow
Misc:	100 CRE
Import File Name	V6 15934
TestGroupID	VMA_VPH_PresCert_S
Aqueous or Soil? (A or S)	S
Solid amount (g)	16.11
Methanol volume (mL)	10
Percent Solid (%)	80.25
Soil Prep Date	2/8/2023
Weight:	322.2
Volume:	13.181725 ✓
Lab#:	64446-003
AnalysisDate:	2/9/2023
AnalysisTime:	1:53
Dilution:	1
AnalyzedBy:	LMM V6020829.D
QC_Code:	
Prep#:	15934

Reviewer Checks:

Quant Report: Reviewed? Ranges integrated, Analyst Initials & Date
Chromatogram Checked, Major peaks identified
Soil prep data checked: weight, volume, %solid, Prep date
Field ID consistent with data and any field replicates
Results consistent with any re-runs, LL results & internal QC
Substitute dilution data checked
Correct dilution and reason clear or noted
Reason for reanalysis documented
Surrogates pass or flagged & noted
Flags checked (Expiration, F+, Over Cal)
Other QC failures, estimates or interferences documented
Spot checked Reported Result with Quant Report
Checked Audit flagged data in LIMS

Notes: Calibration based on sum of discrete peak areas

Initials & Date: LMM 2-10-23

#	Surrogate Standards	Import Value (as ug/L)	Recovery	Flag	QC Limits	Surrogate True Values
11	SS 2,5-dibromotoluene	39.19	**98%**		70-130	40
22	SS 2,5-dibromotoluene #2	38.07	**95%**		70-130	40
4	SS a,a,a-trifluorotoluene	15.67	**103%**		70-130*	20

#	AnalyteName	Concentration (ug/L)	
	C5-C8 Aliphatics #2	**71.007**	71.007
	C9-C12 Aliphatics #2	**26.349**	26.349
1	Methyl-t-butyl ether (MTBE)	0.000	0
2	benzene	0.083	0.0831
3	toluene	0.231	0.2313
5	ethylbenzene	0.093	0.0929
6	m&p-xylenes	0.272	0.2717
7	o-xylene	0.136	0.1357
10	naphthalene	0.000	0
	C5-C8 Aliphatics Adj	**70.693**	70.693
	C9-C12 Aliphatics Adj	**18.690**	18.69
	C9-C10 Aromatics	**7.159**	7.1587
	Total Xylenes	0.000	

Quantitation Report (QT Reviewed)

Data Path : X:\V6\2023\Feb23\020823\
Data File : V6020829.D
Signal(s) : Signal #1: CPDET1B.ch Signal #2: FID2A.ch
Acq On : 9 Feb 2023 1:53 am
Operator : lmm
Sample : 64446-03 100uLMeOH/5mL
Misc : 100
ALS Vial : 29 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 09 10:08:25 2023
Quant Method : X:\V6\methods\V6VPH011323.M
Quant Title : VOA06 MA VPH
QLast Update : Fri Jan 13 17:20:09 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	R.T.	Response	Conc	Units	
	System Monitoring Compounds					
4) S	SS a,a,a-trifluorotol...	11.968	9071911	15.673	ug/L	
Spiked Amount	20.000		Recovery =	78.36%		
11) S	SS 2,5-dibromotoluene	26.430	42713966	39.193	ug/L	
Spiked Amount	40.000 Range 70 - 130		Recovery =	97.98%		
17) S	SS a,a,a-trifluorotol...	11.968	16600270	16.487	ug/L	m PS
Spiked Amount	20.000		Recovery =	82.43%		
22) S	SS 2,5-dibromotoluene #2	26.430	17499568	38.066	ug/L	
Spiked Amount	40.000 Range 70 - 130		Recovery =	95.17%		
	Target Compounds					
1)	methyl-t-butyl ether ...	0.000	0	N.D.	ug/L	
2)	benzene	11.382	151851	0.083	ug/L	m PM
3)	toluene	13.486	392334	0.231	ug/L	m PM
5)	ethylbenzene	15.509	134674	0.093	ug/L	m PM
6)	m&p-xylenes	15.617	473147	0.272	ug/L	m PM
7)	o-xylene	16.326	202184	0.136	ug/L	m PM
8)	1,2,4-trimethylbenzene	18.611	213161	0.145	ug/L	m PM
9) H	C9-C10 Aromatics	18.612	13912562	7.159	ug/L	m RI
10)	naphthalene	23.756	314423	N.D.	ug/L	m PM
13)	pentane #2	7.004	519967	N.D.	ug/L	m PM
14)	2-methylpentane #2	0.000	0	N.D.	ug/L	
15)	2,2,4-trimethylpentan...	0.000	0	N.D.	ug/L	
16) H	C5-C8 Aliphatics #2	11.378	88571876	71.007	ug/L	m RI
18)	nonane #2	0.000	0	N.D.	ug/L	
19)	decane #2	0.000	0	N.D.	ug/L	
20)	n-butylcyclohexane #2	0.000	0	N.D.	ug/L	
21) H	C9-C12 Aliphatics #2	15.611	16325472	26.349	ug/L	m RI

(f)=RT Delta > 1/2 Window (m)=manual int.

prep: 2-8-23 16.119 10mL MeOH

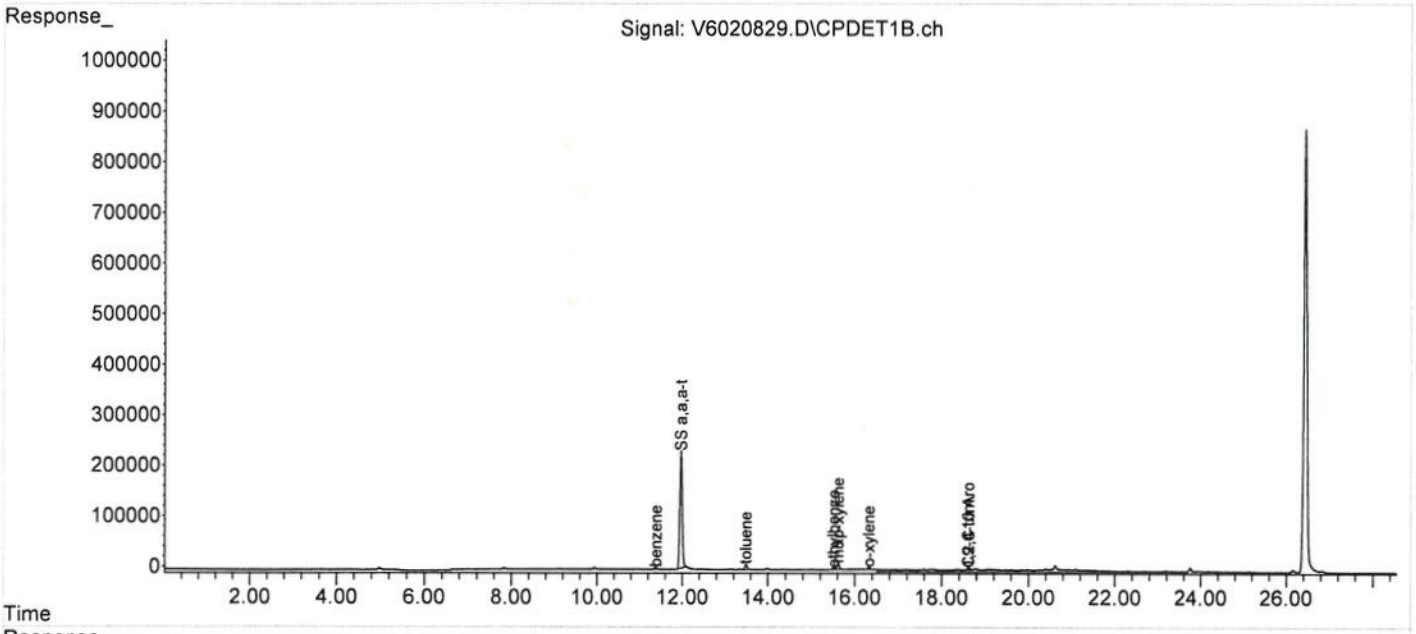
FEB 09 2023

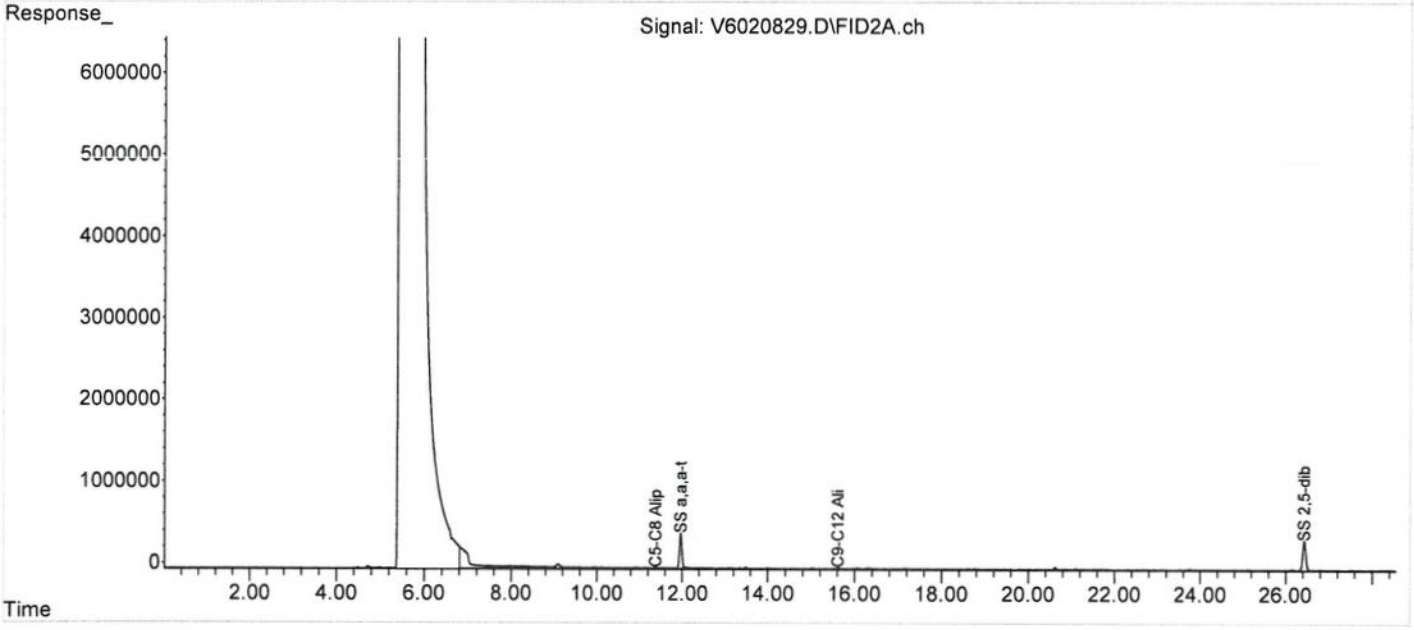
Quantitation Report / (QT Reviewed)

Data Path : X:\V6\2023\Feb23\020823\
Data File : V6020829.D
Signal(s) : Signal #1: CPDET1B.ch Signal #2: FID2A.ch
Acq On : 9 Feb 2023 1:53 am
Operator : lmm
Sample : 64446-03 100uLMeOH/5mL
Misc : 100
ALS Vial : 29 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 09 10:08:25 2023
Quant Method : X:\V6\methods\V6VPH011323.M
Quant Title : VOA06 MA VPH
QLast Update : Fri Jan 13 17:20:09 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





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Misc:
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Import File Name: S4 ABN 15930 DoD
TestGroupID: E8270DoD_S
Aqueous or Soil? (A or S): S
Prep Date: 2/7/2023
Lab#: 64446-001
QC_Code:
Prep#: 15930

Reviewer Checks:

Quant Reports: Reviewed, Analyst Initials & Date
Chromatogram Checked, Major peaks identified
Prep data checked: weight, volume, %solid, Prep date
Field ID consistent with data and any field replicates
Results consistent with any re-runs & internal QC
Substitute dilution data checked
Correct dilution and reason clear or noted
Reason for reanalysis documented
Surrogates pass or flagged & noted
Flags checked (Expiration, F+, Over Cal)
Other QC failures, estimates or interferences documented
Spot checked Reported Result with Quant Report
Checked Audit flagged data in LIMS

Notes:
Reviewer Initials & Date: WA 2-16-23

#	Surrogate Standards	Conc. (ug/mL)	AnalysisDate	AnalyzedBy	Dil'n	Weight	Volume	Surr	Recovery	Flag	QC Limits
4	2-fluorophenol	57.44	02/13/2023	CL s4021307.D	1	1	1	100	**57%**		21-100
7	phenol-d6	57.42	02/13/2023	CL s4021307.D	1	1	1	100	**57%**		10-102
59	2,4,6-tribromophenol	73.71	02/13/2023	CL s4021307.D	1	1	1	100	**74%**		10-123
22	nitrobenzene-d5	29.37	02/13/2023	CL s4021307.D	1	1	1	50	**59%**		35-114
38	2-fluorobiphenyl	34.72	02/13/2023	CL s4021307.D	1	1	1	50	**69%**		43-116
75	terphenyl-d14	38.94	02/13/2023	CL s4021307.D	1	1	1	50	**78%**		33-141
6	phenol	0.00	02/13/2023	CL s4021307.D	1	10.93	1				
8	2-chlorophenol	0.00	02/13/2023	CL s4021307.D	1	10.93	1				
15	2-methylphenol	0.01	02/13/2023	CL s4021307.D	1	10.93	1				
15	2-methylphenol	0.01	02/13/2023	CL s4021307.D	1	10.93	1				
20	4-methylphenol	0.03	02/13/2023	CL s4021307.D	1	10.93	1				
25	2-nitrophenol	0.00	02/13/2023	CL s4021307.D	1	10.93	1				
26	2,4-dimethylphenol	0.00	02/13/2023	CL s4021307.D	1	10.93	1				
28	2,4-dichlorophenol	0.00	02/13/2023	CL s4021307.D	1	10.93	1				
29	2,6-dichlorophenol	0.00	02/13/2023	CL s4021307.D	1	10.93	1				
32	benzoic acid	**1.94**	02/13/2023	CL s4021307.D	1	10.93	1				
35	4-chloro-3-methylphenol	0.00	02/13/2023	CL s4021307.D	1	10.93	1				
40	2,4,6-trichlorophenol	0.00	02/13/2023	CL s4021307.D	1	10.93	1				
41	2,4,5-trichlorophenol	0.00	02/13/2023	CL s4021307.D	1	10.93	1				
51	2,4-dinitrophenol	0.00	02/13/2023	CL s4021307.D	1	10.93	1				
53	4-nitrophenol	0.00	02/13/2023	CL s4021307.D	1	10.93	1				
60	4,6-dinitro-2-methylphenol	0.00	02/13/2023	CL s4021307.D	1	10.93	1				
66	pentachlorophenol	0.00	02/13/2023	CL s4021307.D	1	10.93	1				
2	N-nitroso-dimethylamine	0.00	02/13/2023	CL s4021307.D	1	10.93	1				
3	pyridine	0.00	02/13/2023	CL s4021307.D	1	10.93	1				
5	aniline	0.00	02/13/2023	CL s4021307.D	1	10.93	1				
9	n-decane	0.18	02/13/2023	CL s4021307.D	1	10.93	1				
10	bis-(2-choroethyl)ether	0.00	02/13/2023	CL s4021307.D	1	10.93	1				
11	1,3-dichlorobenzene	0.00	02/13/2023	CL s4021307.D	1	10.93	1				
12	1,4-diclorobenzene	0.00	02/13/2023	CL s4021307.D	1	10.93	1				
13	1,2-dichlorobenzene	0.00	02/13/2023	CL s4021307.D	1	10.93	1				
14	benzyl alcohol	0.00	02/13/2023	CL s4021307.D	1	10.93	1				
16	2,2'-oxybis(1-chloropropane)	0.00	02/13/2023	CL s4021307.D	1	10.93	1				
##	acetephenone	#N/A	02/13/2023	CL s4021307.D	1	10.93	1			#N/A	
18	hexachloroethane	0.00	02/13/2023	CL s4021307.D	1	10.93	1				
19	N-nitroso-di-n-propylamine	0.00	02/13/2023	CL s4021307.D	1	10.93	1				
23	nitrobenzene	0.00	02/13/2023	CL s4021307.D	1	10.93	1				
24	isophorone	0.00	02/13/2023	CL s4021307.D	1	10.93	1				
27	bis(2-chloroethoxy)methane	0.00	02/13/2023	CL s4021307.D	1	10.93	1				
30	1,2,4-trichlorobenzene	0.03	02/13/2023	CL s4021307.D	1	10.93	1				
31	naphthalene	0.98	02/13/2023	CL s4021307.D	1	10.93	1				
33	4-chloroanaline	0.00	02/13/2023	CL s4021307.D	1	10.93	1				
34	hexachloro-1,3-butadiene	0.00	02/13/2023	CL s4021307.D	1	10.93	1				
36	2-methylnaphthalene	**1.17**	02/13/2023	CL s4021307.D	1	10.93	1				
39	hexachlorocyclopentadiene	0.00	02/13/2023	CL s4021307.D	1	10.93	1				
43	2-chloronaphthalene	0.00	02/13/2023	CL s4021307.D	1	10.93	1				
44	2-nitroanaline	0.00	02/13/2023	CL s4021307.D	1	10.93	1				
45	acenaphthylene	0.07	02/13/2023	CL s4021307.D	1	10.93	1				
46	dimethyl phthalate	0.00	02/13/2023	CL s4021307.D	1	10.93	1				
47	2,6-dinitrotoluene	0.00	02/13/2023	CL s4021307.D	1	10.93	1				
48	2,4-dinitrotoluene	0.00	02/13/2023	CL s4021307.D	1	10.93	1				
49	acenaphthene	0.00	02/13/2023	CL s4021307.D	1	10.93	1				
50	3-nitroanaline	0.00	02/13/2023	CL s4021307.D	1	10.93	1				
52	dibenzofuran	0.31	02/13/2023	CL s4021307.D	1	10.93	1				
54	fluorene	0.04	02/13/2023	CL s4021307.D	1	10.93	1				
55	diethyl phthalate	0.00	02/13/2023	CL s4021307.D	1	10.93	1				
56	4-chlorophenyl phenyl ether	0.00	02/13/2023	CL s4021307.D	1	10.93	1				
57	4-nitroanaline	0.00	02/13/2023	CL s4021307.D	1	10.93	1				
61	azobenzene	0.00	02/13/2023	CL s4021307.D	1	10.93	1				
62	N-nitrosodiphenylamine	0.00	02/13/2023	CL s4021307.D	1	10.93	1				
63	4-bromophenyl phenyl ether	0.00	02/13/2023	CL s4021307.D	1	10.93	1				
64	hexachlorobenzene	0.00	02/13/2023	CL s4021307.D	1	10.93	1				
65	n-octadecane	0.29	02/13/2023	CL s4021307.D	1	10.93	1				
67	phenanthrene	0.95	02/13/2023	CL s4021307.D	1	10.93	1				
68	anthracene	0.11	02/13/2023	CL s4021307.D	1	10.93	1				
70	carbazole	0.05	02/13/2023	CL s4021307.D	1	10.93	1				
71	di-n-butyl phthalate	0.06	02/13/2023	CL s4021307.D	1	10.93	1				
73	fluoranthene	0.80	02/13/2023	CL s4021307.D	1	10.93	1				
76	benzidine	0.00	02/13/2023	CL s4021307.D	1	10.93	1				
77	pyrene	0.91	02/13/2023	CL s4021307.D	1	10.93	1				
78	butyl benzyl phthalate	0.00	02/13/2023	CL s4021307.D	1	10.93	1				
79	benzo(a)anthracene	0.46	02/13/2023	CL s4021307.D	1	10.93	1				
80	chrysene	0.77	02/13/2023	CL s4021307.D	1	10.93	1				
81	3,3'-dichlorobenzidine	0.00	02/13/2023	CL s4021307.D	1	10.93	1				
82	bis-2-ethylhexyl phthalate	0.57	02/13/2023	CL s4021307.D	1	10.93	1				
84	di-n-octyl phthalate	0.00	02/13/2023	CL s4021307.D	1	10.93	1				
85	Benzo(b)fluoranthene	0.52	02/13/2023	CL s4021307.D	1	10.93	1				
86	benzo(k)fluoranthene	0.58	02/13/2023	CL s4021307.D	1	10.93	1				
87	benzo(a)pyrene	0.53	02/13/2023	CL s4021307.D	1	10.93	1				
88	indeno(1,2,3-cd)pyrene	0.29	02/13/2023	CL s4021307.D	1	10.93	1				
89	dibenzo(a,h)anthracene	0.13	02/13/2023	CL s4021307.D	1	10.93	1				
90	benzo(g,h,i)perylene	0.40	02/13/2023	CL s4021307.D	1	10.93	1				

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Feb23\021323\
Data File : s4021307.D
Acq On : 13 Feb 2023 12:10 pm
Operator : cl
Sample : 64446-01 abn x1
Misc :
ALS Vial : 7 Sample Multiplier: 1

CL
2/16/23 @ 10:13
CharlesL

10.93g -> 1mL
2/7/23

Quant Time: Feb 15 16:16:00 2023
Quant Method : X:\S4\methods\S4ABN020723A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Wed Feb 15 16:14:20 2023
Response via : Initial Calibration

Internal Standard QC attached

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	7.125	152	387048	10.00	ug/mL	0.00
21) naphthalene-d8	9.103	136	1281696	10.00	ug/mL	0.00
37) acenaphthene-d10	12.005	164	701931	10.00	ug/mL	0.00
58) phenanthrene-d10	14.440	188	1146208	10.00	ug/mL	0.00
74) chrysene-D12	18.046	240	579820	10.00	ug/mL	0.00
83) perylene-d12	20.372	264	393866	10.00	ug/mL	0.00
System Monitoring Compounds						
4) 2-fluorophenol	5.367	112	2725874	57.44	ug/mL	0.00
Spiked Amount 200.000			Recovery =	28.72%		
7) phenol-d6	6.548	99	3213296	57.42	ug/mL	0.00
Spiked Amount 200.000			Recovery =	28.71%		
22) nitrobenzene-d5	7.978	82	1377594	29.37	ug/mL	0.00
Spiked Amount 100.000			Recovery =	29.37%		
38) 2-fluorobiphenyl	10.857	172	3844490	34.72	ug/mL	0.00
Spiked Amount 100.000			Recovery =	34.72%		
59) 2,4,6-tribromophenol	13.310	330	1123528	73.71	ug/mL	0.00
Spiked Amount 200.000			Recovery =	36.85%		
69) o-terphenyl	0.000	230	0	0.00	ug/mL	
Spiked Amount 100.000			Recovery =	0.00%		
72) 1-Chloro-octadecane	16.871	57	9009	0.00	ug/mL	-0.07
Spiked Amount 100.000			Recovery =	0.00%		
75) terphenyl-d14	16.671	244	3003200	38.94	ug/mL	0.00
Spiked Amount 100.000			Recovery =	38.94%		
Target Compounds						Qvalue
9) n-decane	6.858	57	9101	0.183	ug/mL#	83
15) 2-methylphenol	7.452	108	869	0.014	ug/mL#	19
20) 4-methylphenol	7.660	108	1258	0.031	ug/mL#	87
30) 1,2,4-trichlorobenzene	9.026	180	2172	0.025	ug/mL#	96
31) naphthalene	9.134	128	133976	0.982	ug/mL	98
32) benzoic acid	8.536	122	3237	1.939	ug/mL#	67
36) 2-methylnaphthalene	10.246	142	116216	1.171	ug/mL	97
42) 1,1'-Biphenyl	11.011	154	25525	0.180	ug/mL	95
45) acenaphthylene	11.759	152	10249	0.070	ug/mL#	81
52) dibenzofuran	12.312	168	43428	0.305	ug/mL#	90
54) fluorene	12.889	166	7200	0.035	ug/mL#	84
65) n-octadecane	14.153	57	12661	0.290	ug/mL	97
67) phenanthrene	14.481	178	127148	0.952	ug/mL	96
68) anthracene	14.547	178	16030m BC	0.107	ug/mL	
70) carbazole	14.779	167	5814	0.053	ug/mL#	90
71) di-n-butyl phthalate	15.313	149	3982	0.063	ug/mL#	72
73) fluoranthene	16.210	202	103762	0.795	ug/mL#	89
77) pyrene	16.513	202	106529	0.908	ug/mL#	84
79) benzo(a)anthracene	18.021	228	42046	0.465	ug/mL	95
80) chrysene	18.082	228	61097	0.767	ug/mL	97
82) bis-2-ethylhexyl phtha...	17.974	149	19481	0.567	ug/mL#	89
85) Benzo(b)fluoranthene	19.660	252	32246	0.517	ug/mL#	81
86) benzo(k)fluoranthene	19.690	252	32926	0.578	ug/mL#	91
87) benzo(a)pyrene	20.265	252	27211	0.525	ug/mL	88
88) indeno(1,2,3-cd)pyrene	22.834	276	14006	0.289	ug/mL#	60
89) dibenzo(a,h)anthracene	22.816	278	5755m BC	0.134	ug/mL	

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Feb23\021323\
Data File : s4021307.D
Acq On : 13 Feb 2023 12:10 pm
Operator : cl
Sample : 64446-01 abn x1
Misc :
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Feb 15 16:16:00 2023
Quant Method : X:\S4\methods\S4ABN020723A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Wed Feb 15 16:14:20 2023
Response via : Initial Calibration

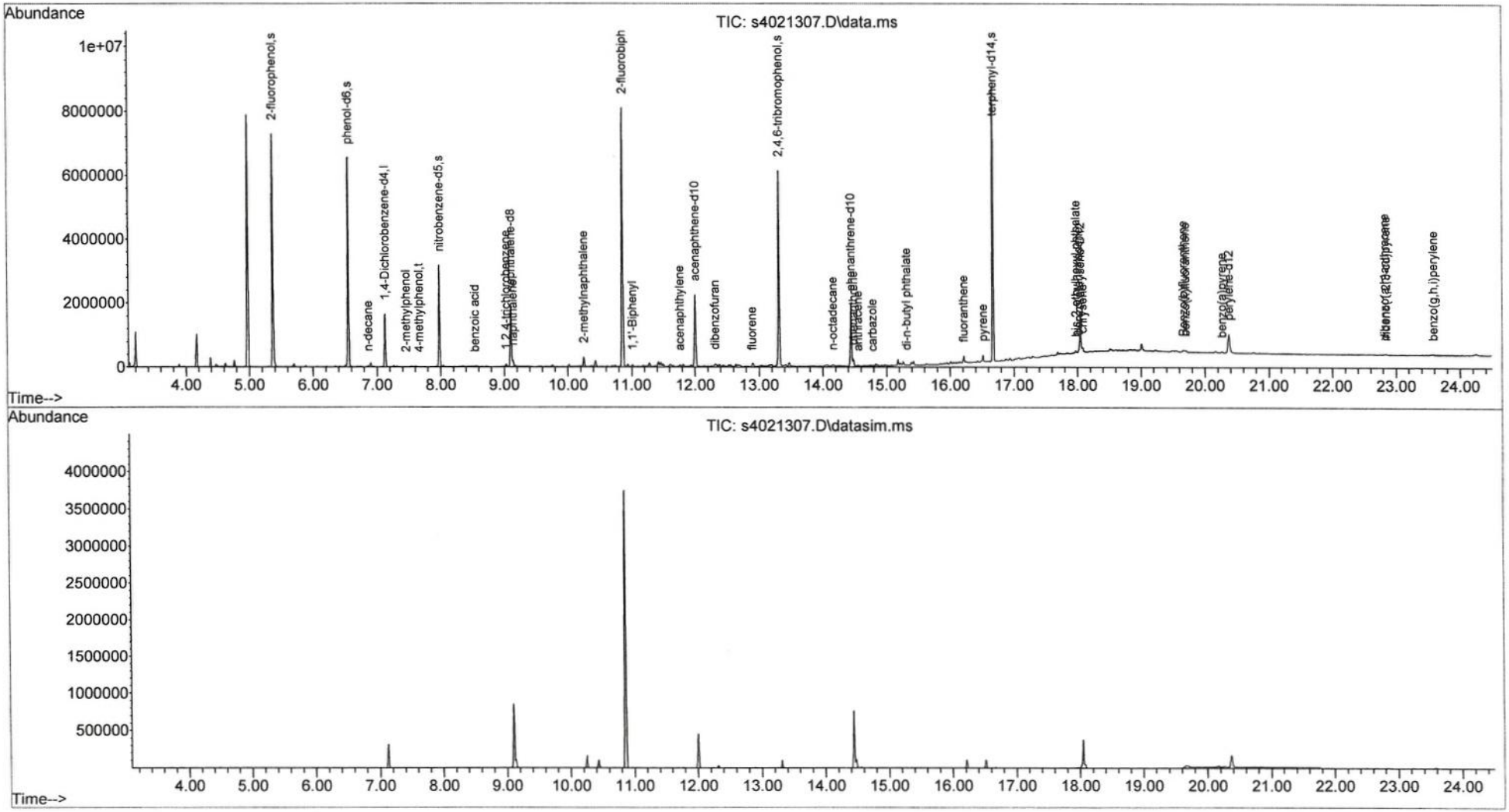
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
90) benzo(g,h,i)perylene	23.577	276	15891m	0.400	ug/mL	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Feb23\021323\
Data File : s4021307.D
Acq On : 13 Feb 2023 12:10 pm
Operator : cl
Sample : 64446-01 abn x1
Misc :
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Feb 15 16:16:00 2023
Quant Method : X:\S4\methods\S4ABN020723A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Wed Feb 15 16:14:20 2023
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Feb23\021323\
Data File : s4021325.D
Acq On : 13 Feb 2023 09:24 pm
Operator : cl
Sample : 64446-01ms abn x1
Misc :
ALS Vial : 25 Sample Multiplier: 1

CL
2/16/23 @ 10:14
CharlesL

10.85g -> 1mL
2/7/23

Quant Time: Feb 15 16:16:13 2023
Quant Method : X:\S4\methods\S4ABN020723A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Wed Feb 15 16:14:20 2023
Response via : Initial Calibration

868

M= outside acceptance criteria.

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	7.125	152	346558	10.00	ug/mL	0.00
21) naphthalene-d8	9.103	136	1169248	10.00	ug/mL	0.00
37) acenaphthene-d10	12.005	164	673963	10.00	ug/mL	0.00
58) phenanthrene-d10	14.440	188	1125058	10.00	ug/mL	0.00
74) chrysene-D12	18.046	240	578124	10.00	ug/mL	0.00
83) perylene-d12	20.367	264	381608	10.00	ug/mL	0.00
System Monitoring Compounds						
4) 2-fluorophenol	5.367	112	2538773	59.75	ug/mL	0.00
Spiked Amount 200.000			Recovery =	29.88%		
7) phenol-d6	6.551	99	3089626	61.66	ug/mL	0.00
Spiked Amount 200.000			Recovery =	30.83%		
22) nitrobenzene-d5	7.978	82	1289044	30.12	ug/mL	0.00
Spiked Amount 100.000			Recovery =	30.12%		
38) 2-fluorobiphenyl	10.858	172	3470930	32.65	ug/mL	0.00
Spiked Amount 100.000			Recovery =	32.65%		
59) 2,4,6-tribromophenol	13.315	330	1126975	75.32	ug/mL	0.00
Spiked Amount 200.000			Recovery =	37.66%		
69) o-terphenyl	0.000	230	0	0.00	ug/mL	
Spiked Amount 100.000			Recovery =	0.00%		
72) 1-Chloro-octadecane	16.871	57	14278	0.00	ug/mL	-0.07
Spiked Amount 100.000			Recovery =	0.00%		
75) terphenyl-d14	16.671	244	2882732	37.49	ug/mL	0.00
Spiked Amount 100.000			Recovery =	37.49%		
Target Compounds						Qvalue
2) N-nitroso-dimethylamine	3.811	74	497477	21.461	ug/mL	99
3) pyridine	3.855	79	659432	16.234	ug/mL	94
5) aniline	6.674	93	913580	15.912	ug/mL	97
6) phenol	6.568	94	1204898	23.976	ug/mL	86
8) 2-chlorophenol	6.855	128	1071107	22.921	ug/mL	99
9) n-decane	6.862	57	731688	19.560	ug/mL	99
10) bis-(2-choroethyl)ether	6.725	93	898298	24.592	ug/mL	99
11) 1,3-dichlorobenzene	7.077	146	1208724	21.437	ug/mL	99
12) 1,4-diclorobenzene	7.149	146	1239414	22.198	ug/mL	99
13) 1,2-dichlorobenzene	7.432	148	776328	22.437	ug/mL	99
14) benzyl alcohol	7.299	108	677112	27.954	ug/mL	98
15) 2-methylphenol	7.456	108	915075	25.085	ug/mL	99
16) 2,2'-oxybis(1-chloropr...	7.538	121	291513	31.664	ug/mL	96
17) acetophenone	7.729	120	333851	25.061	ug/mL	98
18) hexachloroethane	7.913	117	421111	22.645	ug/mL	95
19) N-nitroso-di-n-propyla...	7.742	70	636401	25.624	ug/mL	100
20) 4-methylphenol	7.671	108	2009143	51.770	ug/mL	91
23) nitrobenzene	8.005	77	1006801	23.322	ug/mL	100
24) isophorone	8.353	82	2161917	27.479	ug/mL	93
25) 2-nitrophenol	8.506	139	551880	20.918	ug/mL	85
26) 2,4-dimethylphenol	8.506	122	836079	20.285	ug/mL	99
27) bis(2-chloroethoxy)met...	8.664	93	1123289	23.943	ug/mL	100
28) 2,4-dichlorophenol	8.863	162	1044127	23.713	ug/mL	99
30) 1,2,4-trichlorobenzene	9.026	180	1141975	22.876	ug/mL	100
31) naphthalene	9.139	128	3125703	26.230	ug/mL	98
32) benzoic acid	8.623	122	1085411	41.322	ug/mL	98

Data Path : X:\S4\2023\Feb23\021323\
Data File : s4021325.D
Acq On : 13 Feb 2023 09:24 pm
Operator : cl
Sample : 64446-01ms abn x1
Misc :
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Feb 15 16:16:13 2023
Quant Method : X:\S4\methods\S4ABN020723A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Wed Feb 15 16:14:20 2023
Response via : Initial Calibration

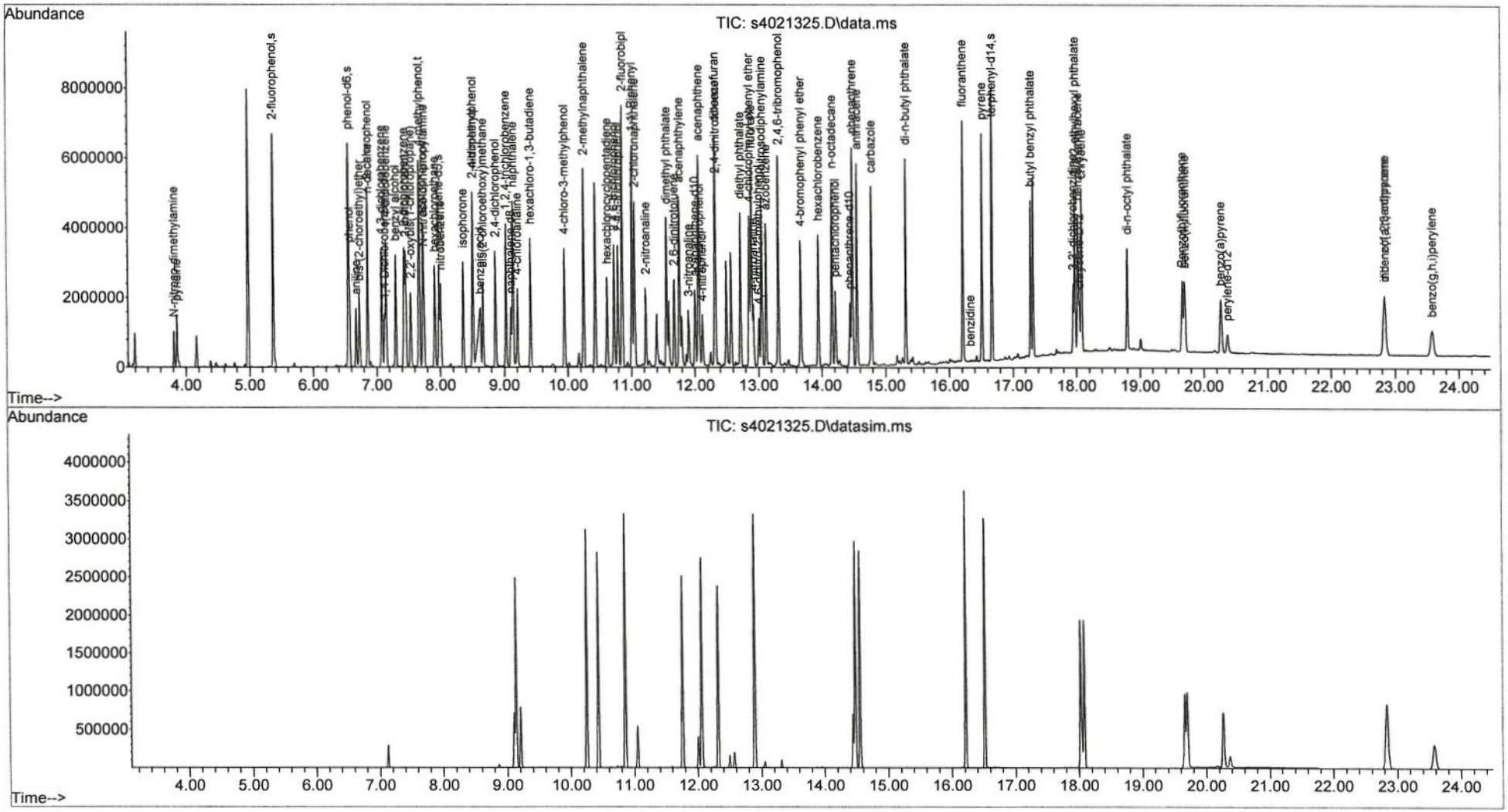
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
33) 4-chloroanaline	9.205	127	950320	20.593 ug/mL	99
34) hexachloro-1,3-butadiene	9.409	225	619599	23.948 ug/mL	98
35) 4-chloro-3-methylphenol	9.945	107	886127	24.868 ug/mL	92
36) 2-methylnaphthalene	10.250	142	2372441	26.903 ug/mL	97
39) hexachlorocyclopentadiene	10.617	237	575708	20.891 ug/mL	99
40) 2,4,6-trichlorophenol	10.730	196	765413	23.943 ug/mL	98
41) 2,4,5-trichlorophenol	10.791	196	835473	26.085 ug/mL	99
42) 1,1'-Biphenyl	11.011	154	2934006	25.870 ug/mL	97
43) 2-chloronaphthalene	11.052	162	2158965	24.128 ug/mL	96
44) 2-nitroanaline	11.226	138	649681	26.432 ug/mL	96
45) acenaphthylene	11.755	152	3234252	25.943 ug/mL	97
46) dimethyl phthalate	11.554	163	2645446	25.901 ug/mL	99
47) 2,6-dinitrotoluene	11.674	165	566670	27.115 ug/mL#	87
48) 2,4-dinitrotoluene	12.325	165	711076	26.367 ug/mL#	88
49) acenaphthene	12.056	154	2076914	24.114 ug/mL	98
50) 3-nitroanaline	11.899	138	325003	24.701 ug/mL	99
51) 2,4-dinitrophenol	12.071	184	199408	15.624 ug/mL# M	1
52) dibenzofuran	12.316	168	3310294	26.735 ug/mL	100
53) 4-nitrophenol	12.117	65	338585	24.403 ug/mL	98
54) fluorene	12.889	166	2437533	26.038 ug/mL	98
55) diethyl phthalate	12.714	149	2460742	25.312 ug/mL	98
56) 4-chlorophenyl phenyl ...	12.854	204	1235758	25.442 ug/mL	97
57) 4-nitroanaline	12.918	138	465431	26.506 ug/mL	95
60) 4,6-dinitro-2-methylph...	13.004	198	318984	21.494 ug/mL	99
61) azobenzene	13.119	77	2104627	26.639 ug/mL	97
62) N-nitrosodiphenylamine	13.046	169	1800848	27.739 ug/mL	99
63) 4-bromophenyl phenyl e...	13.664	248	687510	26.608 ug/mL	100
64) hexachlorobenzene	13.946	284	759635	24.539 ug/mL	100
65) n-octadecane	14.159	57	1274797	27.058 ug/mL	93
66) pentachlorophenol	14.215	266	374569	21.089 ug/mL	98
67) phenanthrene	14.481	178	3527272	27.904 ug/mL	95
68) anthracene	14.552	178	3394042	26.422 ug/mL	94
70) carbazole	14.779	167	3000226	25.929 ug/mL	94
71) di-n-butyl phthalate	15.318	149	3768240	28.730 ug/mL#	93
73) fluoranthene	16.210	202	3412728	27.287 ug/mL#	87
76) benzidine	16.329	184	20786	2.471 ug/mL# M	96
77) pyrene	16.513	202	3344855	29.317 ug/mL#	82
78) butyl benzyl phthalate	17.277	149	1212800	28.877 ug/mL	98
79) benzo(a)anthracene	18.026	228	2151409	26.020 ug/mL	93
80) chrysene	18.082	228	2087360	27.355 ug/mL	95
81) 3,3'-dichlorobenzidine	17.949	252	544172	24.101 ug/mL	97
82) bis-2-ethylhexyl phtha...	17.975	149	1659854	29.080 ug/mL	93
84) di-n-octyl phthalate	18.799	149	2168956	31.066 ug/mL#	98
85) Benzo(b)fluoranthene	19.660	252	1499528	25.946 ug/mL	97
86) benzo(k)fluoranthene	19.701	252	1408923	26.957 ug/mL	98
87) benzo(a)pyrene	20.265	252	1261043	25.185 ug/mL	97
88) indeno(1,2,3-cd)pyrene	22.834	276	1205887	25.350 ug/mL#	98
89) dibenzo(a,h)anthracene	22.834	278	1005075	25.479 ug/mL	100
90) benzo(g,h,i)perylene	23.578	276	921307	24.483 ug/mL#	95

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Feb23\021323\
Data File : s4021325.D
Acq On : 13 Feb 2023 09:24 pm
Operator : cl
Sample : 64446-01ms abn x1
Misc :
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Feb 15 16:16:13 2023
Quant Method : X:\S4\methods\S4ABN020723A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Wed Feb 15 16:14:20 2023
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Feb23\021323\
Data File : s4021326.D
Acq On : 13 Feb 2023 09:54 pm
Operator : cl
Sample : 64446-01msd abn x1
Misc :
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Feb 15 16:16:18 2023
Quant Method : X:\S4\methods\S4ABN020723A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Wed Feb 15 16:14:20 2023
Response via : Initial Calibration

CL
2/16/23 @ 10:15
CharlesL

10.84g -> 1mL
2/7/23

M = outside acceptance criteria

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	7.125	152	283109	10.00	ug/mL	0.00
21) naphthalene-d8	9.103	136	961836	10.00	ug/mL	0.00
37) acenaphthene-d10	12.005	164	562565	10.00	ug/mL	0.00
58) phenanthrene-d10	14.445	188	961487	10.00	ug/mL	0.00
74) chrysene-D12	18.045	240	503154	10.00	ug/mL	0.00
83) perylene-d12	20.366	264	343646	10.00	ug/mL	0.00
System Monitoring Compounds						
4) 2-fluorophenol	5.367	112	1926472	55.50	ug/mL	0.00
Spiked Amount 200.000			Recovery = 27.75%			
7) phenol-d6	6.551	99	2397257	58.56	ug/mL	0.00
Spiked Amount 200.000			Recovery = 29.28%			
22) nitrobenzene-d5	7.978	82	991315	28.16	ug/mL	0.00
Spiked Amount 100.000			Recovery = 28.16%			
38) 2-fluorobiphenyl	10.857	172	2682932	30.23	ug/mL	0.00
Spiked Amount 100.000			Recovery = 30.23%			
59) 2,4,6-tribromophenol	13.314	330	927595	72.54	ug/mL	0.00
Spiked Amount 200.000			Recovery = 36.27%			
69) o-terphenyl	0.000	230	0	0.00	ug/mL	
Spiked Amount 100.000			Recovery = 0.00%			
72) 1-Chloro-octadecane	16.871	57	9372	0.00	ug/mL	-0.07
Spiked Amount 100.000			Recovery = 0.00%			
75) terphenyl-d14	16.670	244	2508582	37.48	ug/mL	0.00
Spiked Amount 100.000			Recovery = 37.48%			
Target Compounds						Qvalue
2) N-nitroso-dimethylamine	3.804	74	372100	19.649	ug/mL	99
3) pyridine	3.852	79	496937	14.976	ug/mL	94
5) aniline	6.674	93	732349	15.615	ug/mL M	96
6) phenol	6.568	94	947603	23.082	ug/mL	87
8) 2-chlorophenol	6.855	128	821725	21.526	ug/mL	99
9) n-decane	6.859	57	534893	17.500	ug/mL	98
10) bis-(2-choroethyl)ether	6.725	93	684402	22.933	ug/mL	99
11) 1,3-dichlorobenzene	7.080	146	905536	19.658	ug/mL	99
12) 1,4-diclorobenzene	7.149	146	929093	20.368	ug/mL	99
13) 1,2-dichlorobenzene	7.432	148	585270	20.704	ug/mL	98
14) benzyl alcohol	7.299	108	523375	26.449	ug/mL	98
15) 2-methylphenol	7.456	108	714601	23.979	ug/mL	99
16) 2,2'-oxybis(1-chloropr...	7.538	121	222387	29.567	ug/mL	94
17) acetophenone	7.729	120	251682	23.126	ug/mL	98
18) hexachloroethane	7.913	117	315825	20.788	ug/mL	94
19) N-nitroso-di-n-propyla...	7.742	70	499742	24.632	ug/mL	99
20) 4-methylphenol	7.671	108	1563570	49.318	ug/mL	91
23) nitrobenzene	8.005	77	770483	21.698	ug/mL	99
24) isophorone	8.353	82	1631715	25.213	ug/mL	95
25) 2-nitrophenol	8.506	139	425125	19.601	ug/mL	82
26) 2,4-dimethylphenol	8.506	122	661662	19.516	ug/mL	99
27) bis(2-chloroethoxy)met...	8.664	93	877511	22.737	ug/mL	100
28) 2,4-dichlorophenol	8.863	162	801218	22.122	ug/mL	99
30) 1,2,4-trichlorobenzene	9.026	180	869452	21.171	ug/mL	99
31) naphthalene	9.139	128	2401652	24.497	ug/mL	98
32) benzoic acid	8.608	122	811524	37.724	ug/mL	99

Data Path : X:\S4\2023\Feb23\021323\
Data File : s4021326.D
Acq On : 13 Feb 2023 09:54 pm
Operator : cl
Sample : 64446-01msd abn x1
Misc :
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Feb 15 16:16:18 2023
Quant Method : X:\S4\methods\S4ABN020723A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Wed Feb 15 16:14:20 2023
Response via : Initial Calibration

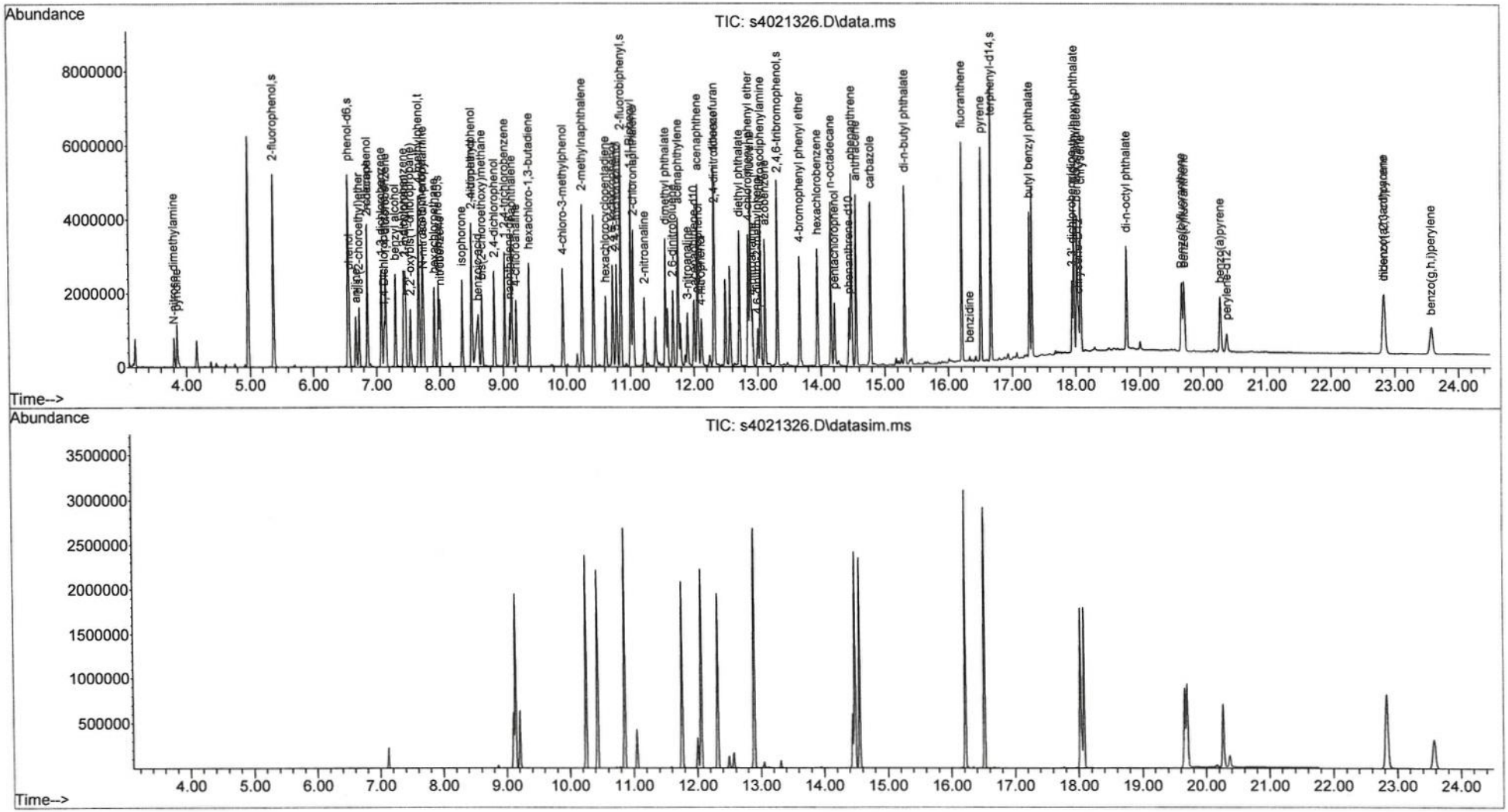
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
33) 4-chloroanaline	9.205	127	765806	20.173 ug/mL	98
34) hexachloro-1,3-butadiene	9.409	225	459570	21.592 ug/mL	99
35) 4-chloro-3-methylphenol	9.945	107	708097	24.158 ug/mL	94
36) 2-methylnaphthalene	10.249	142	1816063	25.032 ug/mL	98
39) hexachlorocyclopentadiene	10.617	237	442588	19.356 ug/mL	99
40) 2,4,6-trichlorophenol	10.729	196	602276	22.572 ug/mL	96
41) 2,4,5-trichlorophenol	10.786	196	666488	24.930 ug/mL	99
42) 1,1'-Biphenyl	11.010	154	2286631	24.152 ug/mL	97
43) 2-chloronaphthalene	11.051	162	1700332	22.763 ug/mL	97
44) 2-nitroanaline	11.225	138	524661	25.574 ug/mL	96
45) acenaphthylene	11.754	152	2588863	24.878 ug/mL	97
46) dimethyl phthalate	11.554	163	2409793	28.267 ug/mL	99
47) 2,6-dinitrotoluene	11.669	165	462100	26.490 ug/mL#	86
48) 2,4-dinitrotoluene	12.324	165	586896	26.072 ug/mL#	89
49) acenaphthene	12.056	154	1629059	22.658 ug/mL	98
50) 3-nitroanaline	11.899	138	286953	26.192 ug/mL	99
51) 2,4-dinitrophenol	12.071	184	135092	13.040 ug/mL# M	1
52) dibenzofuran	12.316	168	2630684	25.452 ug/mL	100
53) 4-nitrophenol	12.117	65	289731	25.004 ug/mL	99
54) fluorene	12.888	166	1997533	25.563 ug/mL	98
55) diethyl phthalate	12.713	149	2224981	27.419 ug/mL	98
56) 4-chlorophenyl phenyl ...	12.854	204	988411	24.377 ug/mL	97
57) 4-nitroanaline	12.918	138	411713	28.081 ug/mL	92
60) 4,6-dinitro-2-methylph...	13.003	198	240947	19.035 ug/mL	99
61) azobenzene	13.118	77	1715614	25.412 ug/mL	97
62) N-nitrosodiphenylamine	13.046	169	1491413	26.881 ug/mL	98
63) 4-bromophenyl phenyl e...	13.664	248	557306	25.238 ug/mL	99
64) hexachlorobenzene	13.945	284	634113	23.969 ug/mL	100
65) n-octadecane	14.153	57	1143120	28.389 ug/mL	95
66) pentachlorophenol	14.214	266	282090	18.741 ug/mL	98
67) phenanthrene	14.480	178	2907075	26.909 ug/mL	95
68) anthracene	14.552	178	2829803	25.777 ug/mL	94
70) carbazole	14.779	167	2631248	26.609 ug/mL	94
71) di-n-butyl phthalate	15.317	149	3252177	29.013 ug/mL#	93
73) fluoranthene	16.209	202	3004066	28.107 ug/mL#	87
76) benzidine	16.333	184	61514	3.956 ug/mL M	98
77) pyrene	16.512	202	3009148	30.305 ug/mL#	82
78) butyl benzyl phthalate	17.276	149	1080726	29.561 ug/mL	98
79) benzo(a)anthracene	18.025	228	1964003	27.295 ug/mL	93
80) chrysene	18.081	228	1903137	28.659 ug/mL	95
81) 3,3'-dichlorobenzidine	17.948	252	501249	25.504 ug/mL	98
82) bis-2-ethylhexyl phtha...	17.974	149	1475518	29.697 ug/mL	94
84) di-n-octyl phthalate	18.793	149	1977018	31.416 ug/mL#	97
85) Benzo(b)fluoranthene	19.659	252	1386992	26.651 ug/mL	95
86) benzo(k)fluoranthene	19.700	252	1285022	27.303 ug/mL	98
87) benzo(a)pyrene	20.264	252	1181539	26.204 ug/mL	98
88) indeno(1,2,3-cd)pyrene	22.833	276	1149375	26.754 ug/mL#	100
89) dibenzo(a,h)anthracene	22.827	278	973534	27.291 ug/mL	100
90) benzo(g,h,i)perylene	23.571	276	902420	26.631 ug/mL#	96

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Feb23\021323\
Data File : s4021326.D
Acq On : 13 Feb 2023 09:54 pm
Operator : cl
Sample : 64446-01msd abn x1
Misc :
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Feb 15 16:16:18 2023
Quant Method : X:\S4\methods\S4ABN020723A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Wed Feb 15 16:14:20 2023
Response via : Initial Calibration



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Analysis Group: ABN Dow
Field ID: SY-SB4-10 CRE
Sample: 64446-02 abn x1 64446-02 abn x1
Misc:
DataFile: 308.D\S4ABN020723A.XLS 4ABN020723A.XLS
Import File Name: S4 ABN 15930 DoD
TestGroupID: E8270DoD_S
Aqueous or Soil? (A or S): S
Prep Date: 2/7/2023
Lab#: 64446-002
QC_Code:
Prep#: 15930

Charles Leahy L:\SVOA\ABN\ABN 8270DoD ImportFileBuilde
2/16/23 10:31 AM
L:\SVOA\ABN\
L:\SVOA\Excel Reports\ABN\230216\

Reviewer Checks:

Quant Reports: Reviewed, Analyst Initials & Date
Chromatogram Checked, Major peaks identified
Prep data checked: weight, volume, %solid, Prep date
Field ID consistent with data and any field replicates
Results consistent with any re-runs & internal QC
Substitute dilution data checked
Correct dilution and reason clear or noted
Reason for reanalysis documented
Surrogates pass or flagged & noted
Flags checked (Expiration, F+, Over Cal)
Other QC failures, estimates or interferences documented
Spot checked Reported Result with Quant Report
Checked Audit flagged data in LIMS

Notes:
Reviewer Initials & Date: WA 2-16-23

#	Surrogate Standards	Conc. (ug/mL)	AnalysisDate	AnalyzedBy	Dil'n	Weight	Volume	Surr	Recovery	Flag	QC Limits
4	2-fluorophenol	59.46	02/13/2023	CL s4021308.D	1	1	1	100	**59%**		21-100
7	phenol-d6	61.89	02/13/2023	CL s4021308.D	1	1	1	100	**62%**		10-102
59	2,4,6-tribromophenol	75.38	02/13/2023	CL s4021308.D	1	1	1	100	**75%**		10-123
22	nitrobenzene-d5	27.25	02/13/2023	CL s4021308.D	1	1	1	50	**55%**		35-114
38	2-fluorobiphenyl	32.72	02/13/2023	CL s4021308.D	1	1	1	50	**65%**		43-116
75	terphenyl-d14	37.34	02/13/2023	CL s4021308.D	1	1	1	50	**75%**		33-141
6	phenol	0.00	02/13/2023	CL s4021308.D	1	10.9	1				
8	2-chlorophenol	0.00	02/13/2023	CL s4021308.D	1	10.9	1				
15	2-methylphenol	0.00	02/13/2023	CL s4021308.D	1	10.9	1				
15	2-methylphenol	0.00	02/13/2023	CL s4021308.D	1	10.9	1				
20	4-methylphenol	0.06	02/13/2023	CL s4021308.D	1	10.9	1				
25	2-nitrophenol	0.00	02/13/2023	CL s4021308.D	1	10.9	1				
26	2,4-dimethylphenol	0.05	02/13/2023	CL s4021308.D	1	10.9	1				
28	2,4-dichlorophenol	0.00	02/13/2023	CL s4021308.D	1	10.9	1				
29	2,6-dichlorophenol	0.00	02/13/2023	CL s4021308.D	1	10.9	1				
32	benzoic acid	**1.96**	02/13/2023	CL s4021308.D	1	10.9	1				
35	4-chloro-3-methylphenol	0.00	02/13/2023	CL s4021308.D	1	10.9	1				
40	2,4,6-trichlorophenol	0.00	02/13/2023	CL s4021308.D	1	10.9	1				
41	2,4,5-trichlorophenol	0.00	02/13/2023	CL s4021308.D	1	10.9	1				
51	2,4-dinitrophenol	0.00	02/13/2023	CL s4021308.D	1	10.9	1				
53	4-nitrophenol	0.00	02/13/2023	CL s4021308.D	1	10.9	1				
60	4,6-dinitro-2-methylphenol	0.00	02/13/2023	CL s4021308.D	1	10.9	1				
66	pentachlorophenol	0.00	02/13/2023	CL s4021308.D	1	10.9	1				
2	N-nitroso-dimethylamine	0.00	02/13/2023	CL s4021308.D	1	10.9	1				
3	pyridine	0.00	02/13/2023	CL s4021308.D	1	10.9	1				
5	aniline	0.00	02/13/2023	CL s4021308.D	1	10.9	1				
9	n-decane	0.21	02/13/2023	CL s4021308.D	1	10.9	1				
10	bis-(2-choroethyl)ether	0.00	02/13/2023	CL s4021308.D	1	10.9	1				
11	1,3-dichlorobenzene	0.00	02/13/2023	CL s4021308.D	1	10.9	1				
12	1,4-diclorobenzene	0.00	02/13/2023	CL s4021308.D	1	10.9	1				
13	1,2-dichlorobenzene	0.00	02/13/2023	CL s4021308.D	1	10.9	1				
14	benzyl alcohol	0.00	02/13/2023	CL s4021308.D	1	10.9	1				
16	2,2'-oxybis(1-chloropropane)	0.00	02/13/2023	CL s4021308.D	1	10.9	1				
##	acetephenone	#N/A	02/13/2023	CL s4021308.D	1	10.9	1			#N/A	
18	hexachloroethane	0.00	02/13/2023	CL s4021308.D	1	10.9	1				
19	N-nitroso-di-n-propylamine	0.00	02/13/2023	CL s4021308.D	1	10.9	1				
23	nitrobenzene	0.00	02/13/2023	CL s4021308.D	1	10.9	1				
24	isophorone	0.00	02/13/2023	CL s4021308.D	1	10.9	1				
27	bis(2-chloroethoxy)methane	0.00	02/13/2023	CL s4021308.D	1	10.9	1				
30	1,2,4-trichlorobenzene	0.00	02/13/2023	CL s4021308.D	1	10.9	1				
31	naphthalene	0.83	02/13/2023	CL s4021308.D	1	10.9	1				
33	4-chloroanaline	0.00	02/13/2023	CL s4021308.D	1	10.9	1				
34	hexachloro-1,3-butadiene	0.00	02/13/2023	CL s4021308.D	1	10.9	1				
36	2-methylnaphthalene	1.00	02/13/2023	CL s4021308.D	1	10.9	1				
39	hexachlorocyclopentadiene	0.00	02/13/2023	CL s4021308.D	1	10.9	1				
43	2-chloronaphthalene	0.00	02/13/2023	CL s4021308.D	1	10.9	1				
44	2-nitroanaline	0.00	02/13/2023	CL s4021308.D	1	10.9	1				
45	acenaphthylene	0.05	02/13/2023	CL s4021308.D	1	10.9	1				
46	dimethyl phthalate	0.00	02/13/2023	CL s4021308.D	1	10.9	1				
47	2,6-dinitrotoluene	0.00	02/13/2023	CL s4021308.D	1	10.9	1				
48	2,4-dinitrotoluene	0.00	02/13/2023	CL s4021308.D	1	10.9	1				
49	acenaphthene	0.00	02/13/2023	CL s4021308.D	1	10.9	1				
50	3-nitroanaline	0.00	02/13/2023	CL s4021308.D	1	10.9	1				
52	dibenzofuran	0.22	02/13/2023	CL s4021308.D	1	10.9	1				
54	fluorene	0.03	02/13/2023	CL s4021308.D	1	10.9	1				
55	diethyl phthalate	0.00	02/13/2023	CL s4021308.D	1	10.9	1				
56	4-chlorophenyl phenyl ether	0.00	02/13/2023	CL s4021308.D	1	10.9	1				
57	4-nitroanaline	0.00	02/13/2023	CL s4021308.D	1	10.9	1				
61	azobenzene	0.00	02/13/2023	CL s4021308.D	1	10.9	1				
62	N-nitrosodiphenylamine	0.00	02/13/2023	CL s4021308.D	1	10.9	1				
63	4-bromophenyl phenyl ether	0.00	02/13/2023	CL s4021308.D	1	10.9	1				
64	hexachlorobenzene	0.00	02/13/2023	CL s4021308.D	1	10.9	1				
65	n-octadecane	0.23	02/13/2023	CL s4021308.D	1	10.9	1				
67	phenanthrene	0.70	02/13/2023	CL s4021308.D	1	10.9	1				
68	anthracene	0.08	02/13/2023	CL s4021308.D	1	10.9	1				
70	carbazole	0.04	02/13/2023	CL s4021308.D	1	10.9	1				
71	di-n-butyl phthalate	0.07	02/13/2023	CL s4021308.D	1	10.9	1				
73	fluoranthene	0.58	02/13/2023	CL s4021308.D	1	10.9	1				
76	benzidine	0.00	02/13/2023	CL s4021308.D	1	10.9	1				
77	pyrene	0.64	02/13/2023	CL s4021308.D	1	10.9	1				
78	butyl benzyl phthalate	0.00	02/13/2023	CL s4021308.D	1	10.9	1				
79	benzo(a)anthracene	0.35	02/13/2023	CL s4021308.D	1	10.9	1				
80	chrysene	0.50	02/13/2023	CL s4021308.D	1	10.9	1				
81	3,3'-dichlorobenzidine	0.00	02/13/2023	CL s4021308.D	1	10.9	1				
82	bis-2-ethylhexyl phthalate	0.56	02/13/2023	CL s4021308.D	1	10.9	1				
84	di-n-octyl phthalate	0.00	02/13/2023	CL s4021308.D	1	10.9	1				
85	Benzo(b)fluoranthene	0.39	02/13/2023	CL s4021308.D	1	10.9	1				
86	benzo(k)fluoranthene	0.29	02/13/2023	CL s4021308.D	1	10.9	1				
87	benzo(a)pyrene	0.33	02/13/2023	CL s4021308.D	1	10.9	1				
88	indeno(1,2,3-cd)pyrene	0.18	02/13/2023	CL s4021308.D	1	10.9	1				
89	dibenzo(a,h)anthracene	0.08	02/13/2023	CL s4021308.D	1	10.9	1				
90	benzo(g,h,i)perylene	0.23	02/13/2023	CL s4021308.D	1	10.9	1				

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Feb23\021323\
Data File : s4021308.D
Acq On : 13 Feb 2023 12:41 pm
Operator : cl
Sample : 64446-02 abn x1
Misc :
ALS Vial : 8 Sample Multiplier: 1

CL
2/16/23 @ 10:17
CharlesL

10.9g -> 1mL
2/7/23

Quant Time: Feb 15 16:16:04 2023
Quant Method : X:\S4\methods\S4ABN020723A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Wed Feb 15 16:14:20 2023
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	7.125	152	377294	10.00	ug/mL	0.00
21) naphthalene-d8	9.103	136	1337215	10.00	ug/mL	0.00
37) acenaphthene-d10	12.004	164	777593	10.00	ug/mL	0.00
58) phenanthrene-d10	14.444	188	1341272	10.00	ug/mL	0.00
74) chrysene-D12	18.044	240	699023	10.00	ug/mL	0.00
83) perylene-d12	20.370	264	466361	10.00	ug/mL	0.00
System Monitoring Compounds						
4) 2-fluorophenol	5.367	112	2750406	59.46	ug/mL	0.00
Spiked Amount 200.000			Recovery =	29.73%		
7) phenol-d6	6.551	99	3376110	61.89	ug/mL	0.00
Spiked Amount 200.000			Recovery =	30.95%		
22) nitrobenzene-d5	7.978	82	1333777	27.25	ug/mL	0.00
Spiked Amount 100.000			Recovery =	27.25%		
38) 2-fluorobiphenyl	10.857	172	4014042	32.72	ug/mL	0.00
Spiked Amount 100.000			Recovery =	32.72%		
59) 2,4,6-tribromophenol	13.314	330	1344610	75.38	ug/mL	0.00
Spiked Amount 200.000			Recovery =	37.69%		
69) o-terphenyl	0.000	230	0	0.00	ug/mL	
Spiked Amount 100.000			Recovery =	0.00%		
72) 1-Chloro-octadecane	16.870	57	12442	0.00	ug/mL	-0.07
Spiked Amount 100.000			Recovery =	0.00%		
75) terphenyl-d14	16.670	244	3471804	37.34	ug/mL	0.00
Spiked Amount 100.000			Recovery =	37.34%		
Target Compounds						Qvalue
9) n-decane	6.862	57	10012	0.211	ug/mL	97
20) 4-methylphenol	7.660	108	2602	0.063	ug/mL#	84
26) 2,4-dimethylphenol	8.506	122	1090	0.045	ug/mL#	24
31) naphthalene	9.134	128	118750	0.828	ug/mL	99
32) benzoic acid	8.541	122	3919	1.957	ug/mL#	78
36) 2-methylnaphthalene	10.250	142	103843	0.998	ug/mL	97
42) 1,1'-Biphenyl	11.010	154	24183	0.149	ug/mL	98
45) acenaphthylene	11.754	152	8072	0.048	ug/mL#	85
49) acenaphthene	12.055	154	2380	Below Cal	#	73
52) dibenzofuran	12.311	168	36254	0.222	ug/mL#	96
54) fluorene	12.888	166	7697	0.033	ug/mL#	77
65) n-octadecane	14.157	57	11469	0.231	ug/mL	93
67) phenanthrene	14.479	178	110868	0.700	ug/mL	97
68) anthracene	14.551	178	14086m BC	0.077	ug/mL	
70) carbazole	14.778	167	5389	0.042	ug/mL#	87
71) di-n-butyl phthalate	15.316	149	6167	0.073	ug/mL#	91
73) fluoranthene	16.213	202	89674	0.582	ug/mL#	89
77) pyrene	16.512	202	91465	0.640	ug/mL#	82
79) benzo(a)anthracene	18.023	228	39353m BC	0.351	ug/mL	
80) chrysene	18.080	228	48850	0.498	ug/mL	96
82) bis-2-ethylhexyl phtha...	17.977	149	23281	0.564	ug/mL	98
85) Benzo(b)fluoranthene	19.662	252	29473	0.394	ug/mL#	83
86) benzo(k)fluoranthene	19.698	252	20893	0.295	ug/mL#	81
87) benzo(a)pyrene	20.267	252	19975	0.325	ug/mL#	80
88) indeno(1,2,3-cd)pyrene	22.838	276	10649	0.182	ug/mL#	47
89) dibenzo(a,h)anthracene	22.826	278	4373m BC	0.080	ug/mL	

Data Path : X:\S4\2023\Feb23\021323\
Data File : s4021308.D
Acq On : 13 Feb 2023 12:41 pm
Operator : cl
Sample : 64446-02 abn x1
Misc :
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Feb 15 16:16:04 2023
Quant Method : X:\S4\methods\S4ABN020723A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Wed Feb 15 16:14:20 2023
Response via : Initial Calibration

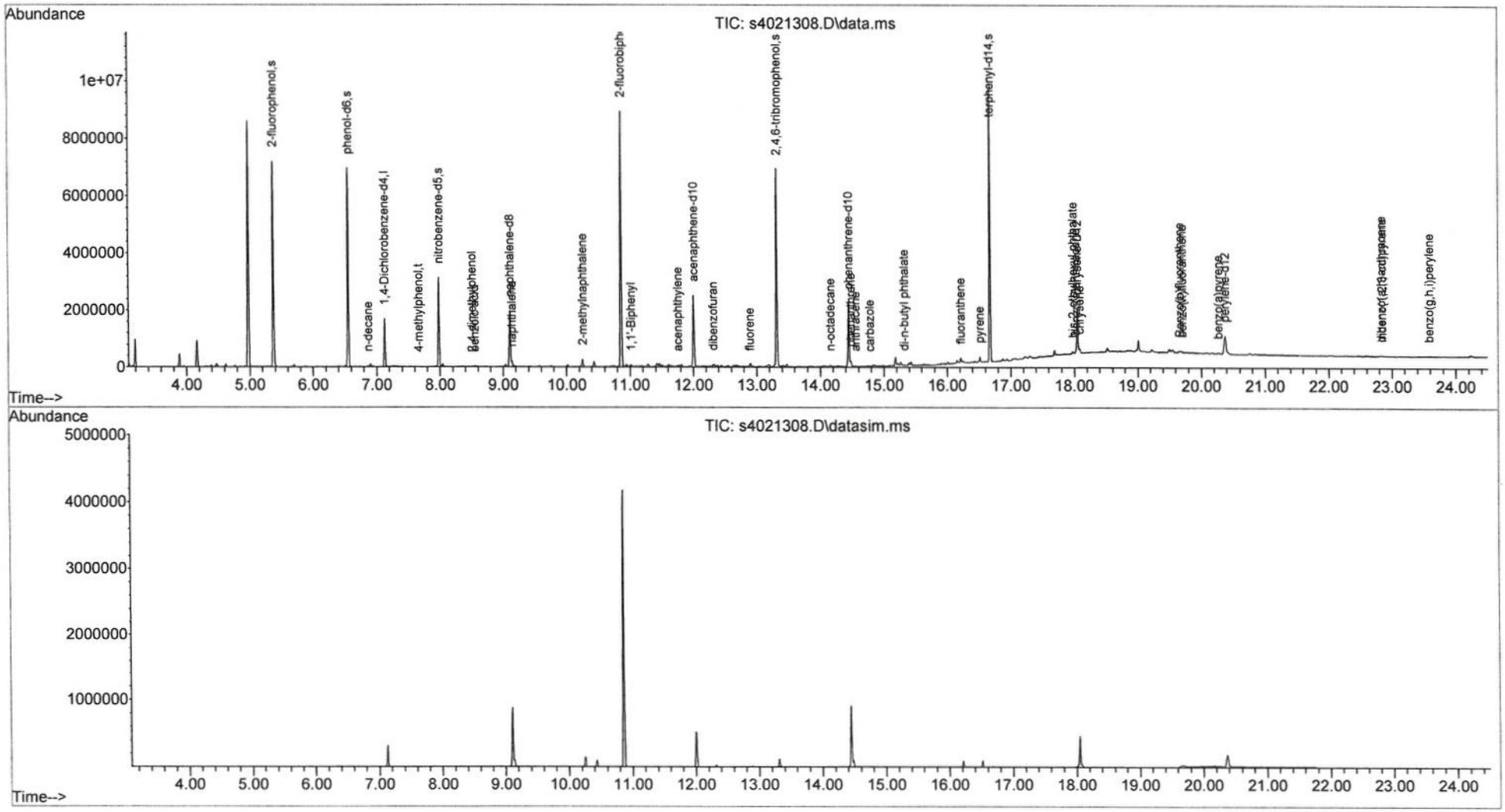
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
90) benzo(g,h,i)perylene	23.581	276	10938m	0.229	ug/mL	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report ___(QT Reviewed)

Data Path : X:\S4\2023\Feb23\021323\
Data File : s4021308.D
Acq On : 13 Feb 2023 12:41 pm
Operator : cl
Sample : 64446-02 abn x1
Misc :
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Feb 15 16:16:04 2023
Quant Method : X:\S4\methods\S4ABN020723A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Wed Feb 15 16:14:20 2023
Response via : Initial Calibration



This File: L:\SVOA\Excel Reports\ABN\230216\64446-003 Charles Leahy L:\SVOA\ABN\ABN 8270DoD ImportFileBuilde
Analysis Group: ABN Dow 2/16/23 10:32 AM
Field ID: SY-SB4-2 CRE L:\SVOA\ABN\
Sample: 64446-03 abn x1 64446-03 abn x1 L:\SVOA\Excel Reports\ABN\230216\
Misc:
DataFile: 309.D\S4ABN020723A.XLS 4ABN020723A.XLS
Import File Name: S4 ABN 15930 DoD
TestGroupID: E8270DoD_S
Aqueous or Soil? (A or S): S
Prep Date: 2/7/2023
Lab#: 64446-003
QC_Code:
Prep#: 15930

Reviewer Checks:

Quant Reports: Reviewed, Analyst Initials & Date
Chromatogram Checked, Major peaks identified
Prep data checked: weight, volume, %solid, Prep date
Field ID consistent with data and any field replicates
Results consistent with any re-runs & internal QC
Substitute dilution data checked
Correct dilution and reason clear or noted
Reason for reanalysis documented
Surrogates pass or flagged & noted
Flags checked (Expiration, F+, Over Cal)
Other QC failures, estimates or interferences documented
Spot checked Reported Result with Quant Report
Checked Audit flagged data in LIMS

Notes:
Reviewer Initials & Date: WS 2-16-23

#	Surrogate Standards	Conc. (ug/mL)	AnalysisDate	AnalyzedBy	Dil'n	Weight	Volume	Surr	Recovery	Flag	QC Limits
4	2-fluorophenol	48.88	02/13/2023	CL s4021309.D	1	1	1	100	**49%**		21-100
7	phenol-d6	52.06	02/13/2023	CL s4021309.D	1	1	1	100	**52%**		10-102
59	2,4,6-tribromophenol	60.92	02/13/2023	CL s4021309.D	1	1	1	100	**61%**		10-123
22	nitrobenzene-d5	24.42	02/13/2023	CL s4021309.D	1	1	1	50	**49%**		35-114
38	2-fluorobiphenyl	28.37	02/13/2023	CL s4021309.D	1	1	1	50	**57%**		43-116
75	terphenyl-d14	39.14	02/13/2023	CL s4021309.D	1	1	1	50	**78%**		33-141
6	phenol	0.00	02/13/2023	CL s4021309.D	1	10.88	1				
8	2-chlorophenol	0.00	02/13/2023	CL s4021309.D	1	10.88	1				
15	2-methylphenol	0.00	02/13/2023	CL s4021309.D	1	10.88	1				
15	2-methylphenol	0.00	02/13/2023	CL s4021309.D	1	10.88	1				
20	4-methylphenol	0.00	02/13/2023	CL s4021309.D	1	10.88	1				
25	2-nitrophenol	0.00	02/13/2023	CL s4021309.D	1	10.88	1				
26	2,4-dimethylphenol	0.00	02/13/2023	CL s4021309.D	1	10.88	1				
28	2,4-dichlorophenol	0.00	02/13/2023	CL s4021309.D	1	10.88	1				
29	2,6-dichlorophenol	0.00	02/13/2023	CL s4021309.D	1	10.88	1				
32	benzoic acid	**1.87**	02/13/2023	CL s4021309.D	1	10.88	1				
35	4-chloro-3-methylphenol	0.00	02/13/2023	CL s4021309.D	1	10.88	1				
40	2,4,6-trichlorophenol	0.00	02/13/2023	CL s4021309.D	1	10.88	1				
41	2,4,5-trichlorophenol	0.00	02/13/2023	CL s4021309.D	1	10.88	1				
51	2,4-dinitrophenol	0.00	02/13/2023	CL s4021309.D	1	10.88	1				
53	4-nitrophenol	0.00	02/13/2023	CL s4021309.D	1	10.88	1				
60	4,6-dinitro-2-methylphenol	0.00	02/13/2023	CL s4021309.D	1	10.88	1				
66	pentachlorophenol	0.00	02/13/2023	CL s4021309.D	1	10.88	1				
2	N-nitroso-dimethylamine	0.00	02/13/2023	CL s4021309.D	1	10.88	1				
3	pyridine	0.00	02/13/2023	CL s4021309.D	1	10.88	1				
5	aniline	0.00	02/13/2023	CL s4021309.D	1	10.88	1				
9	n-decane	0.05	02/13/2023	CL s4021309.D	1	10.88	1				
10	bis-(2-choroethyl)ether	0.00	02/13/2023	CL s4021309.D	1	10.88	1				
11	1,3-dichlorobenzene	0.00	02/13/2023	CL s4021309.D	1	10.88	1				
12	1,4-diclorobenzene	0.00	02/13/2023	CL s4021309.D	1	10.88	1				
13	1,2-dichlorobenzene	0.00	02/13/2023	CL s4021309.D	1	10.88	1				
14	benzyl alcohol	0.00	02/13/2023	CL s4021309.D	1	10.88	1				
16	2,2'-oxybis(1-chloropropane)	0.00	02/13/2023	CL s4021309.D	1	10.88	1				
##	acetephenone	#N/A	02/13/2023	CL s4021309.D	1	10.88	1			#N/A	
18	hexachloroethane	0.00	02/13/2023	CL s4021309.D	1	10.88	1				
19	N-nitroso-di-n-propylamine	0.00	02/13/2023	CL s4021309.D	1	10.88	1				
23	nitrobenzene	0.00	02/13/2023	CL s4021309.D	1	10.88	1				
24	isophorone	0.07	02/13/2023	CL s4021309.D	1	10.88	1				
27	bis(2-chloroethoxy)methane	0.00	02/13/2023	CL s4021309.D	1	10.88	1				
30	1,2,4-trichlorobenzene	0.02	02/13/2023	CL s4021309.D	1	10.88	1				
31	naphthalene	0.03	02/13/2023	CL s4021309.D	1	10.88	1				
33	4-chloroanaline	0.00	02/13/2023	CL s4021309.D	1	10.88	1				
34	hexachloro-1,3-butadiene	0.00	02/13/2023	CL s4021309.D	1	10.88	1				
36	2-methylnaphthalene	0.07	02/13/2023	CL s4021309.D	1	10.88	1				
39	hexachlorocyclopentadiene	0.00	02/13/2023	CL s4021309.D	1	10.88	1				
43	2-chloronaphthalene	0.00	02/13/2023	CL s4021309.D	1	10.88	1				
44	2-nitroanaline	0.00	02/13/2023	CL s4021309.D	1	10.88	1				
45	acenaphthylene	0.00	02/13/2023	CL s4021309.D	1	10.88	1				
46	dimethyl phthalate	0.00	02/13/2023	CL s4021309.D	1	10.88	1				
47	2,6-dinitrotoluene	0.00	02/13/2023	CL s4021309.D	1	10.88	1				
48	2,4-dinitrotoluene	0.00	02/13/2023	CL s4021309.D	1	10.88	1				
49	acenaphthene	0.00	02/13/2023	CL s4021309.D	1	10.88	1				
50	3-nitroanaline	0.00	02/13/2023	CL s4021309.D	1	10.88	1				
52	dibenzofuran	0.00	02/13/2023	CL s4021309.D	1	10.88	1				
54	fluorene	0.00	02/13/2023	CL s4021309.D	1	10.88	1				
55	diethyl phthalate	0.00	02/13/2023	CL s4021309.D	1	10.88	1				
56	4-chlorophenyl phenyl ether	0.00	02/13/2023	CL s4021309.D	1	10.88	1				
57	4-nitroanaline	0.00	02/13/2023	CL s4021309.D	1	10.88	1				
61	azobenzene	0.00	02/13/2023	CL s4021309.D	1	10.88	1				
62	N-nitrosodiphenylamine	0.00	02/13/2023	CL s4021309.D	1	10.88	1				
63	4-bromophenyl phenyl ether	0.00	02/13/2023	CL s4021309.D	1	10.88	1				
64	hexachlorobenzene	0.00	02/13/2023	CL s4021309.D	1	10.88	1				
65	n-octadecane	0.09	02/13/2023	CL s4021309.D	1	10.88	1				
67	phenanthrene	0.05	02/13/2023	CL s4021309.D	1	10.88	1				
68	anthracene	0.00	02/13/2023	CL s4021309.D	1	10.88	1				
70	carbazole	0.01	02/13/2023	CL s4021309.D	1	10.88	1				
71	di-n-butyl phthalate	0.07	02/13/2023	CL s4021309.D	1	10.88	1				
73	fluoranthene	0.05	02/13/2023	CL s4021309.D	1	10.88	1				
76	benzidine	0.00	02/13/2023	CL s4021309.D	1	10.88	1				
77	pyrene	0.05	02/13/2023	CL s4021309.D	1	10.88	1				
78	butyl benzyl phthalate	0.00	02/13/2023	CL s4021309.D	1	10.88	1				
79	benzo(a)anthracene	0.01	02/13/2023	CL s4021309.D	1	10.88	1				
80	chrysene	0.04	02/13/2023	CL s4021309.D	1	10.88	1				
81	3,3'-dichlorobenzidine	0.00	02/13/2023	CL s4021309.D	1	10.88	1				
82	bis-2-ethylhexyl phthalate	0.51	02/13/2023	CL s4021309.D	1	10.88	1				
84	di-n-octyl phthalate	0.00	02/13/2023	CL s4021309.D	1	10.88	1				
85	Benzo(b)fluoranthene	0.00	02/13/2023	CL s4021309.D	1	10.88	1				
86	benzo(k)fluoranthene	0.00	02/13/2023	CL s4021309.D	1	10.88	1				
87	benzo(a)pyrene	0.00	02/13/2023	CL s4021309.D	1	10.88	1				
88	indeno(1,2,3-cd)pyrene	0.01	02/13/2023	CL s4021309.D	1	10.88	1				
89	dibenzo(a,h)anthracene	0.00	02/13/2023	CL s4021309.D	1	10.88	1				
90	benzo(g,h,i)perylene	0.00	02/13/2023	CL s4021309.D	1	10.88	1				

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Feb23\021323\
Data File : s4021309.D
Acq On : 13 Feb 2023 01:12 pm
Operator : cl
Sample : 64446-03 abn x1
Misc :
ALS Vial : 9 Sample Multiplier: 1

CL
2/16/23 @ 10:18
CharlesL

10.88g -> 1mL
2/7/23

Quant Time: Feb 15 16:16:09 2023
Quant Method : X:\S4\methods\S4ABN020723A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Wed Feb 15 16:14:20 2023
Response via : Initial Calibration

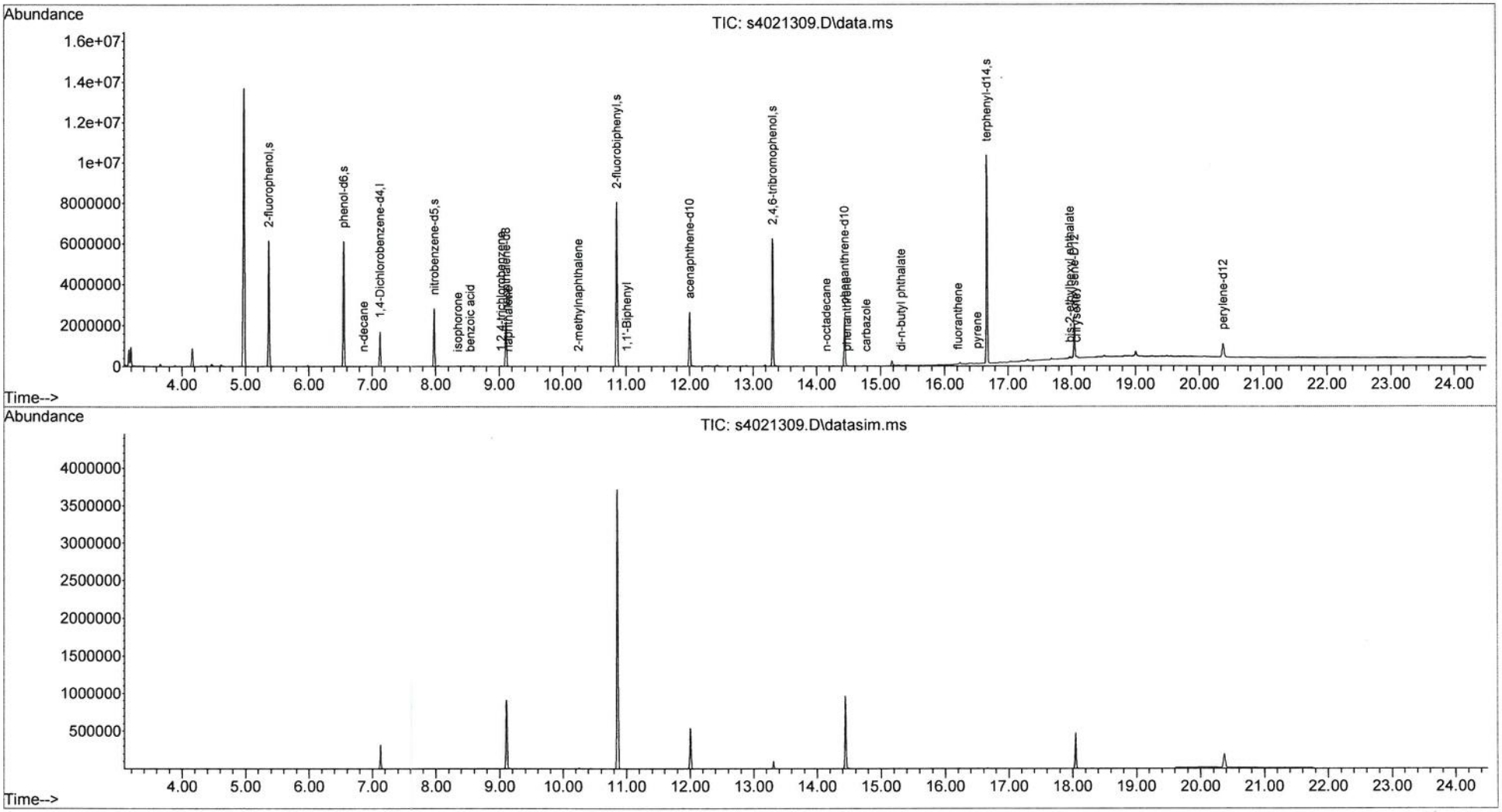
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	7.125	152	388317	10.00	ug/mL	0.00
21) naphthalene-d8	9.103	136	1389043	10.00	ug/mL	0.00
37) acenaphthene-d10	12.005	164	825321	10.00	ug/mL	0.00
58) phenanthrene-d10	14.440	188	1433985	10.00	ug/mL	0.00
74) chrysene-D12	18.045	240	735596	10.00	ug/mL	0.00
83) perylene-d12	20.365	264	463692	10.00	ug/mL	0.00
System Monitoring Compounds						
4) 2-fluorophenol	5.367	112	2327125	48.88	ug/mL	0.00
Spiked Amount 200.000			Recovery =	24.44%		
7) phenol-d6	6.548	99	2922898	52.06	ug/mL	0.00
Spiked Amount 200.000			Recovery =	26.03%		
22) nitrobenzene-d5	7.978	82	1241360	24.42	ug/mL	0.00
Spiked Amount 100.000			Recovery =	24.42%		
38) 2-fluorobiphenyl	10.857	172	3693866	28.37	ug/mL	0.00
Spiked Amount 100.000			Recovery =	28.37%		
59) 2,4,6-tribromophenol	13.310	330	1161560	60.92	ug/mL	0.00
Spiked Amount 200.000			Recovery =	30.46%		
69) o-terphenyl	0.000	230	0	0.00	ug/mL	
Spiked Amount 100.000			Recovery =	0.00%		
72) 1-Chloro-octadecane	16.871	57	7230	0.00	ug/mL	-0.07
Spiked Amount 100.000			Recovery =	0.00%		
75) terphenyl-d14	16.670	244	3829914	39.14	ug/mL	0.00
Spiked Amount 100.000			Recovery =	39.14%		
Target Compounds						Qvalue
9) n-decane	6.862	57	3458	0.048	ug/mL	95
24) isophorone	8.350	82	5796	0.069	ug/mL#	62
30) 1,2,4-trichlorobenzene	9.027	180	1893	0.018	ug/mL#	88
31) naphthalene	9.139	128	11257	0.035	ug/mL	94
32) benzoic acid	8.541	122	1292	1.872	ug/mL#	47
36) 2-methylnaphthalene	10.250	142	10609	0.069	ug/mL	97
42) 1,1'-Biphenyl	11.011	154	10097	0.036	ug/mL	97
45) acenaphthylene	11.750	152	840	Below Cal	#	57
52) dibenzofuran	12.316	168	3690	Below Cal	#	85
54) fluorene	12.884	166	1405	Below Cal	#	81
65) n-octadecane	14.153	57	4034	0.094	ug/mL#	72
67) phenanthrene	14.475	178	14022	0.051	ug/mL	94
68) anthracene	14.547	178	1576m	BC	Below Cal	
70) carbazole	14.779	167	1066	0.011	ug/mL#	56
71) di-n-butyl phthalate	15.317	149	5632	0.067	ug/mL#	89
73) fluoranthene	16.214	202	11371	0.052	ug/mL#	85
77) pyrene	16.513	202	10052	0.046	ug/mL#	87
80) chrysene	18.075	228	6999m	BC	0.040	ug/mL
82) bis-2-ethylhexyl phtha...	17.973	149	20196	0.505	ug/mL	93
86) benzo(k)fluoranthene	19.704	252	1959	Below Cal	#	1

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report / (QT Reviewed)

Data Path : X:\S4\2023\Feb23\021323\
Data File : s4021309.D
Acq On : 13 Feb 2023 01:12 pm
Operator : cl
Sample : 64446-03 abn x1
Misc :
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Feb 15 16:16:09 2023
Quant Method : X:\S4\methods\S4ABN020723A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Wed Feb 15 16:14:20 2023
Response via : Initial Calibration



0421

This File:	L:\SVOA\Excel Reports\EPH\230215\64446-001		Donna Valley L:\SVOA\EPH\EPH ImportFileBuilder2.0.xls
Analysis Group:	EPH	Dow	2/15/23 1:02 PM
Field ID:	SY-SB4-1	CRE	L:\SVOA\EPH\
Sample:	64446-01 targets x1	64446-01 aro x1	64446-01 all x1 L:\SVOA\Excel Reports\EPH\2302
Misc:	aro frac		
Method Name:	SVOA04 Method 8270E (t	S6 EPH Aromatics	S6 EPH Aliphatics
Import File Name:	s6 EPHs QC15928S		
TestGroupID:	EMA_EPH_PresCert_S		
Aqueous or Soil? (A or S)	S		
Fractionated? (Y/N)	y	y	
Prep Date:	2/7/2023		
Lab#:	64446-001		
QC_Code:			
Prep#	15928		

Reviewer Checks:

- Quant Report: Reviewed? Ranges integrated? Analyst Initials & Date?
- Chromatogram Checked? Major peaks identified?
- Soil prep data checked: weight, volume, %solid, Prep date
- Field ID consistent with data and any field replicates
- Results consistent with any re-runs & internal QC
- Substitute dilution data checked
- Correct dilution and reason clear or noted
- Reason for reanalysis documented
- Surrogates pass or flagged & noted
- Flags checked (Expiration, F+, Over Cal)
- Other QC failures, estimates or interferences documented
- Spot checked Reported Result with Quant Report
- Checked Audit flagged data in LIMS

Notes:

Initials & Date: WA 2.16.23

X:\S4\2023\Feb23\021323\s4021320.D\S4PAH020723A.XLS PAH targets filename
X:\S6\2023\Feb23\021323\s6021322.D\S6ARO041322L.XLS aromatics filename
X:\S6\2023\Feb23\021323.SEC\s6021321.D\S6ALI041322F.XLS aliphatics filename

#	Surrogate Standards	Concentration (ug/mL)	AnalysisDate	AnalysisTime	AnalyzedBy	Dilution	Weight	Volume	Surr	Recovery	Flag	QC Limits
12	SS 1-chloro-octadecane (COD)	22.74152611	2/13/2023	03:50:00 PM	DBV s6021321.D	1	1	2	100	45%		40-140
16	SS ortho-terphenyl (OTP)	30.79536389	2/13/2023	03:50:00 PM	DBV s6021322.D	1	1	2	100	62%		40-140
3	SS 2-fluorobiphenyl (2FBP)	16.14408432	2/13/2023	03:50:00 PM	DBV s6021322.D	1	1	2	40	81%		40-140
5	SS 2-bromonaphthalene (2BN)	16.22485662	2/13/2023	03:50:00 PM	DBV s6021322.D	1	1	2	40	81%		40-140

#	AnalyteName	Concentration (ug/mL)	AnalysisDate	AnalysisTime	AnalyzedBy	Dilution	Weight	Volume
3	naphthalene	0.205441959	02/13/2023	06:50:00 PM	CL s4021320.D	1	10.06	2
4	2-methylnaphthalene	0.242511443	02/13/2023	06:50:00 PM	CL s4021320.D	1	10.06	2
12	phenanthrene	0.139147784	02/13/2023	06:50:00 PM	CL s4021320.D	1	10.06	2
6	acenaphthene	0	02/13/2023	06:50:00 PM	CL s4021320.D	1	10.06	2
7	acenaphthylene	0.008389612	02/13/2023	06:50:00 PM	CL s4021320.D	1	10.06	2
10	fluorene	0	02/13/2023	06:50:00 PM	CL s4021320.D	1	10.06	2
13	anthracene	0.010912827	02/13/2023	06:50:00 PM	CL s4021320.D	1	10.06	2
15	fluoranthene	0.116104665	02/13/2023	06:50:00 PM	CL s4021320.D	1	10.06	2
17	pyrene	0.088556538	02/13/2023	06:50:00 PM	CL s4021320.D	1	10.06	2
18	benzo(a)anthracene	0.060911925	02/13/2023	06:50:00 PM	CL s4021320.D	1	10.06	2
19	chrysene	0.092896335	02/13/2023	06:50:00 PM	CL s4021320.D	1	10.06	2
21	benzo(b)fluoranthene	0.053948719	02/13/2023	06:50:00 PM	CL s4021320.D	1	10.06	2
22	benzo(k)fluoranthene	0.050934062	02/13/2023	06:50:00 PM	CL s4021320.D	1	10.06	2
23	benzo(a)pyrene	0.0726195	02/13/2023	06:50:00 PM	CL s4021320.D	1	10.06	2
24	indeno(1,2,3-cd)pyrene	0.037721824	02/13/2023	06:50:00 PM	CL s4021320.D	1	10.06	2
25	dibenzo(a,h)anthracene	0.009487445	02/13/2023	06:50:00 PM	CL s4021320.D	1	10.06	2
26	benzo(g,h,i)perylene	0.049282051	02/13/2023	06:50:00 PM	CL s4021320.D	1	10.06	2
20	C11-C22 Aromatics	32.77128028	2/13/2023	03:50:00 PM	DBV s6021322.D	1	10.06	2
9	C9-C18 Aliphatics	6.071795129	2/13/2023	03:50:00 PM	DBV s6021321.D	1	10.06	2
20	C19-C36 Aliphatics	22.95147609	2/13/2023	03:50:00 PM	DBV s6021321.D	1	10.06	2
	Adjusted C11-C22 Aromatics	31.53241359	2/13/2023	03:50:00 PM	DBV s6021322.D	1	10.06	2

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Feb23\021323\
Data File : s4021320.D
Acq On : 13 Feb 2023 06:50 pm
Operator : cl
Sample : 64446-01 targets x1
Misc : aro frac
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Feb 14 13:16:01 2023
Quant Method : X:\S4\methods\S4PAH020723A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Wed Feb 08 14:08:43 2023
Response via : Initial Calibration

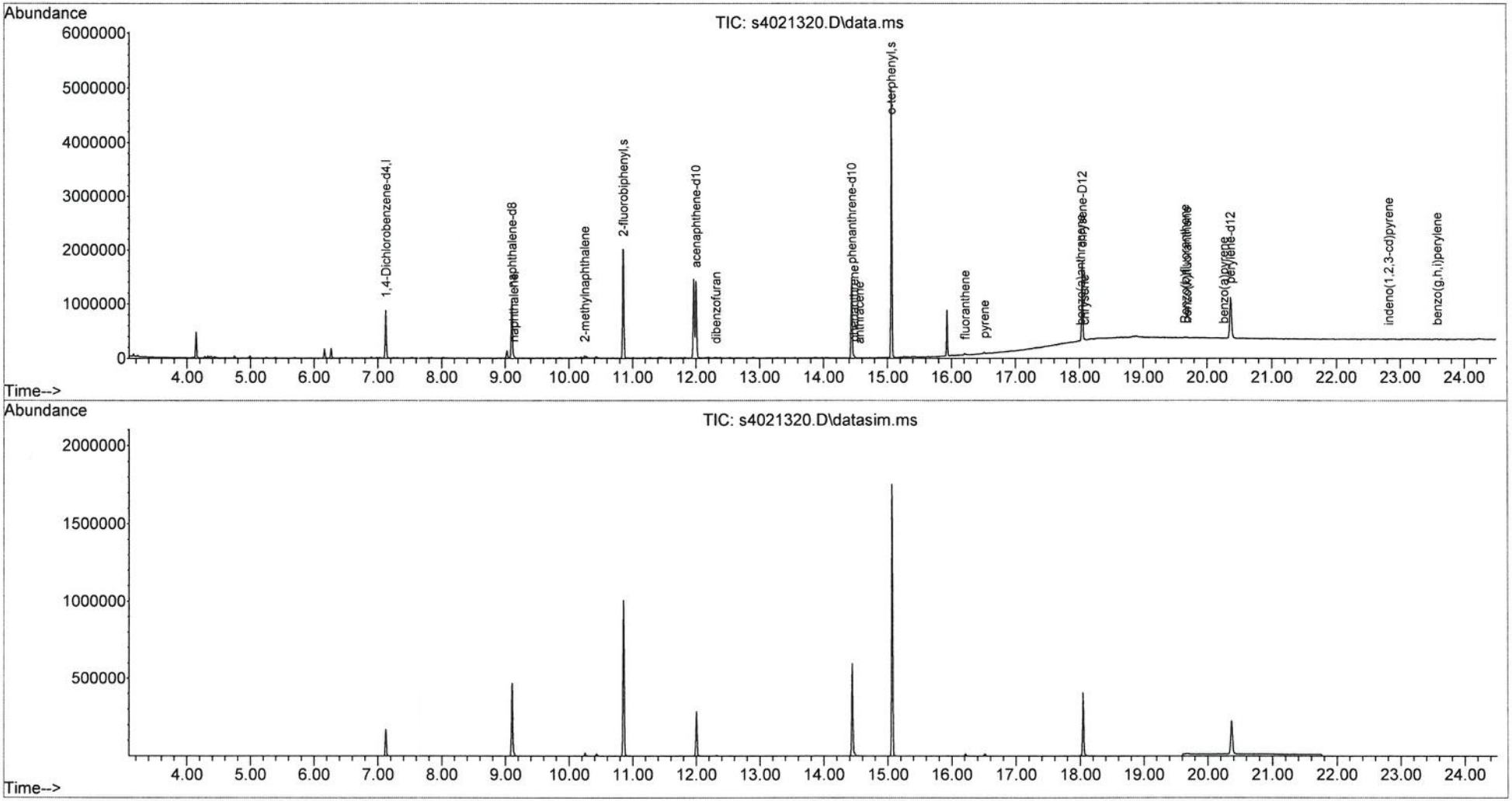
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	7.125	152	205677	10.00	ug/mL	0.00
2) naphthalene-d8	9.103	136	740882	10.00	ug/mL	0.00
5) acenaphthene-d10	12.000	164	452075	10.00	ug/mL	0.00
11) phenanthrene-d10	14.440	188	874909	10.00	ug/mL	0.00
16) chrysene-D12	18.045	240	641941	10.00	ug/mL	0.00
20) perylene-d12	20.366	264	542832	10.00	ug/mL	0.00
System Monitoring Compounds						
6) 2-fluorobiphenyl	10.857	172	974823	13.66	ug/mL	0.00
Spiked Amount 100.000			Recovery = 13.66%			
14) o-terphenyl	15.065	230	1257602	25.76	ug/mL	0.00
Spiked Amount 100.000			Recovery = 25.76%			
Target Compounds						Qvalue
3) naphthalene	9.134	128	18875	0.205	ug/mL	97
4) 2-methylnaphthalene	10.250	142	15361	0.243	ug/mL	96
8) acenaphthene	12.056	154	1370m	Below Cal		
9) dibenzofuran	12.316	168	5224	0.031	ug/mL#	85
10) fluorene	12.888	166	1699	Below Cal	#	51
12) phenanthrene	14.475	178	17247	0.139	ug/mL	97
13) anthracene	14.557	178	2632m	0.011	ug/mL	
15) fluoranthene	16.214	202	13201	0.116	ug/mL#	93
17) pyrene	16.512	202	14154	0.089	ug/mL#	88
18) benzo(a)anthracene	18.020	228	9532m	0.061	ug/mL	
19) chrysene	18.076	228	10564m	0.093	ug/mL	
21) Benzo(b)fluoranthene	19.659	252	6380m	0.054	ug/mL	
22) benzo(k)fluoranthene	19.690	252	6232m	0.051	ug/mL	
23) benzo(a)pyrene	20.259	252	5255m	0.073	ug/mL	
24) indeno(1,2,3-cd)pyrene	22.821	276	3165m	0.038	ug/mL	
26) benzo(g,h,i)perylene	23.577	276	3114m	0.049	ug/mL	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Feb23\021323\
Data File : s4021320.D
Acq On : 13 Feb 2023 06:50 pm
Operator : cl
Sample : 64446-01 targets x1
Misc : aro frac
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Feb 14 13:16:01 2023
Quant Method : X:\S4\methods\S4PAH020723A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Wed Feb 08 14:08:43 2023
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : X:\S6\2023\Feb23\021323\
Data File : s6021322.D
Signal(s) : FID1A.ch
Acq On : 13 Feb 2023 03:50 pm
Operator : dbv
Sample : 64446-01 aro x1
Misc :
ALS Vial : 11 Sample Multiplier: 1

2/14/23 @ 14:45
DonnaV

Integration File: rteint.p
Quant Time: Feb 14 14:11:13 2023
Quant Method : X:\S6\methods\S6ARO041322L.M
Quant Title : S6 EPH Aromatics
QLast Update : Thu Apr 14 11:03:30 2022
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc Units
	System Monitoring Compounds			
3) S	SS 2-fluorobiphenyl (...	8.573	2362176	16.144 ug/mL
Spiked Amount	20.000		Recovery =	80.72%
5) S	SS 2-bromonaphthalene...	9.602	1604396	16.225 ug/mL
Spiked Amount	20.000		Recovery =	81.13%
10) S	SS ortho-terphenyl (OTP)	12.716	4937502	30.795 ug/mL
Spiked Amount	50.000		Recovery =	61.59%
11) S	SS 1-chloro-otadecane...	13.810	910359	6.707 ug/mL
Spiked Amount	50.000		Recovery =	13.41%
	Target Compounds			
1)	naphthalene	0.000	0	N.D. ug/mLd
2)	2-methylnaphthalene	0.000	0	N.D. ug/mLd
4)	acenaphthylene	0.000	0	N.D. ug/mLd
6)	acenaphthene	0.000	0	N.D. ug/mLd
7)	fluorene	0.000	0	N.D. ug/mLd
8)	phenanthrene	0.000	0	N.D. ug/mLd
9)	anthracene	0.000	0	N.D. ug/mLd
12)	fluoranthene	0.000	0	N.D. ug/mLd
13)	pyrene	0.000	0	N.D. ug/mLd
14)	benzo(a)anthracene	0.000	0	N.D. ug/mLd
15)	chrysene	0.000	0	N.D. ug/mLd
16)	benzo(b&k)fluoranthenes	0.000	0	N.D. ug/mLd
17)	benzo(a)pyrene	0.000	0	N.D. ug/mLd
18)	indeno&dibenzo	0.000	0	N.D. ug/mLd
19)	benzo(g,h,i)perylene	0.000	0	N.D. ug/mLd
20) H	C11-C22 Aromatics	12.905	6200306	32.771 ug/mLm

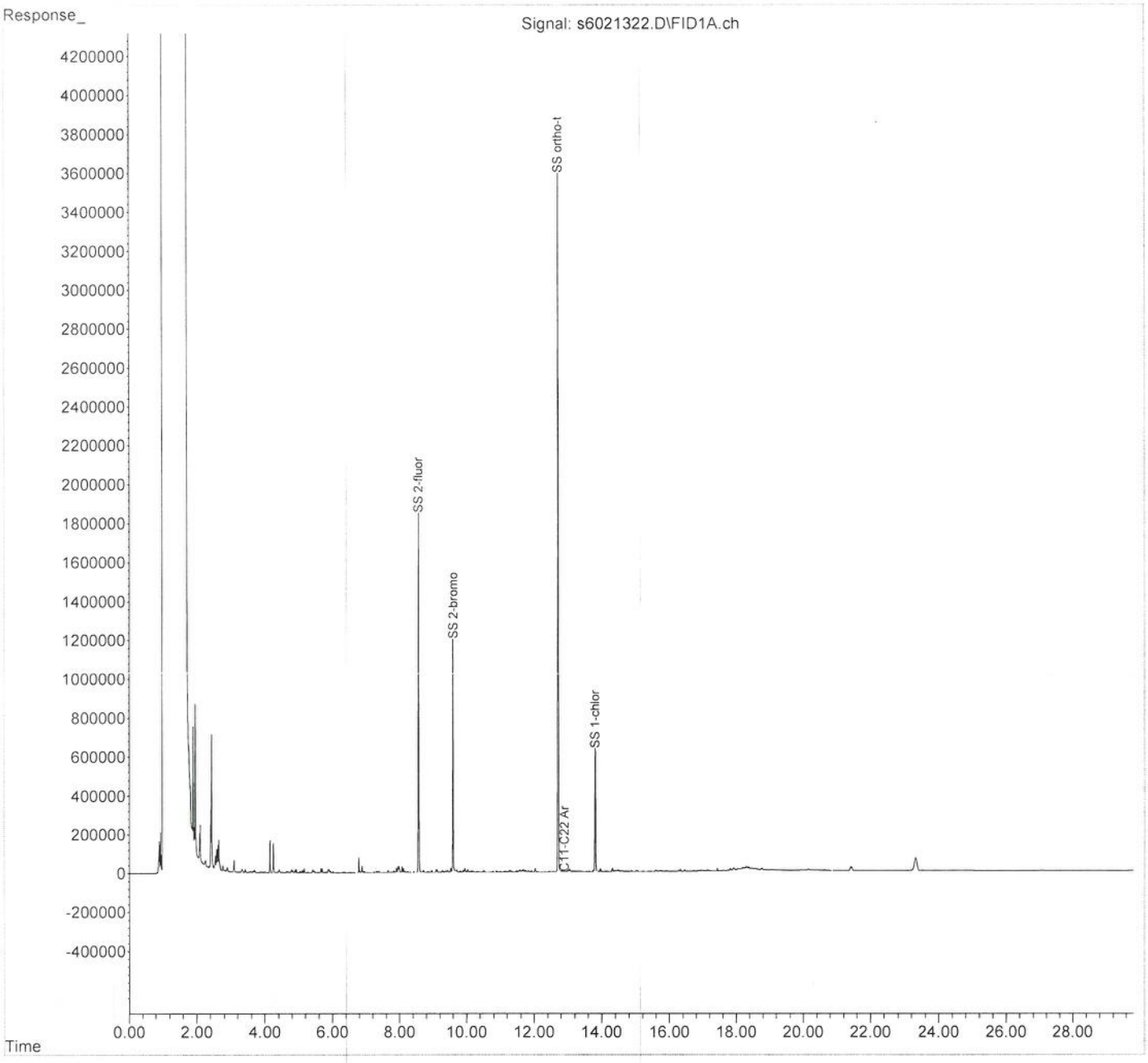
RI = Range Integration

(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : X:\S6\2023\Feb23\021323\
Data File : s6021322.D
Signal(s) : FID1A.ch
Acq On : 13 Feb 2023 03:50 pm
Operator : dbv
Sample : 64446-01 aro x1
Misc :
ALS Vial : 11 Sample Multiplier: 1

Integration File: rteint.p
Quant Time: Feb 14 14:11:13 2023
Quant Method : X:\S6\methods\S6ARO041322L.M
Quant Title : S6 EPH Aromatics
QLast Update : Thu Apr 14 11:03:30 2022
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

2/14/23 @ 13:34
DonnaV

Data Path : X:\S6\2023\Feb23\021323.SEC\
Data File : s6021321.D
Signal(s) : FID2B.ch
Acq On : 13 Feb 2023 03:50 pm
Operator : dbv
Sample : 64446-01 ali x1
Misc :
ALS Vial : 86 Sample Multiplier: 1

Integration File: rteint.p
Quant Time: Feb 14 10:13:50 2023
Quant Method : X:\S6\methods\S6ALI041322F.M
Quant Title : S6 EPH Aliphatics
QLast Update : Thu Apr 14 09:42:50 2022
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc Units	
	System Monitoring Compounds				
4) S	SS 2-fluorobiphenyl (...	0.000	0	N.D. ug/mLd	
Spiked Amount	20.000		Recovery =	0.00%	
6) S	SS 2-bromonaphthalene...	0.000	0	N.D. ug/mLd	
Spiked Amount	20.000		Recovery =	0.00%	
11) S	SS ortho-terphenyl (OTP)	0.000	0	N.D. ug/mLd	
Spiked Amount	50.000		Recovery =	0.00%	
13) S	SS 1-chloro-octadecan...	14.203	2855001	22.742 ug/mL	
Spiked Amount	50.000		Recovery =	45.48%	
	Target Compounds				
1)	C9 n-Nonane	0.000	0	N.D. ug/mLd	
2)	C10 n-Decane	0.000	0	N.D. ug/mLd	
3)	C12 n-Dodecane	0.000	0	N.D. ug/mLd	
5)	C14 n-Tetradecane	0.000	0	N.D. ug/mLd	
7)	C16 n-Hexadecane	0.000	0	N.D. ug/mLd	
8)	C18 n-Octadecane	0.000	0	N.D. ug/mLd	
9) H	C9-C18 Aliphatics	7.237	1066590	6.072 ug/mLm	RI = Range Integration
10)	C19 n-Nonadecane	0.000	0	N.D. ug/mLd	
12)	C20 n-Eicosane	0.000	0	N.D. ug/mLd	
14)	C22 n-Docosane	0.000	0	N.D. ug/mLd	
15)	C24 n-Tetracosane	0.000	0	N.D. ug/mLd	
16)	C26 n-Hexacosane	0.000	0	N.D. ug/mLd	
17)	C28 n-Octacosane	0.000	0	N.D. ug/mLd	
18)	C30 n-Triacontane	0.000	0	N.D. ug/mLd	
19)	C36 n-Hexatriacontane	0.000	0	N.D. ug/mLd	
20) H	C19-C36 Aliphatics	16.000	3494297	22.951 ug/mLm	RI = Range Integration

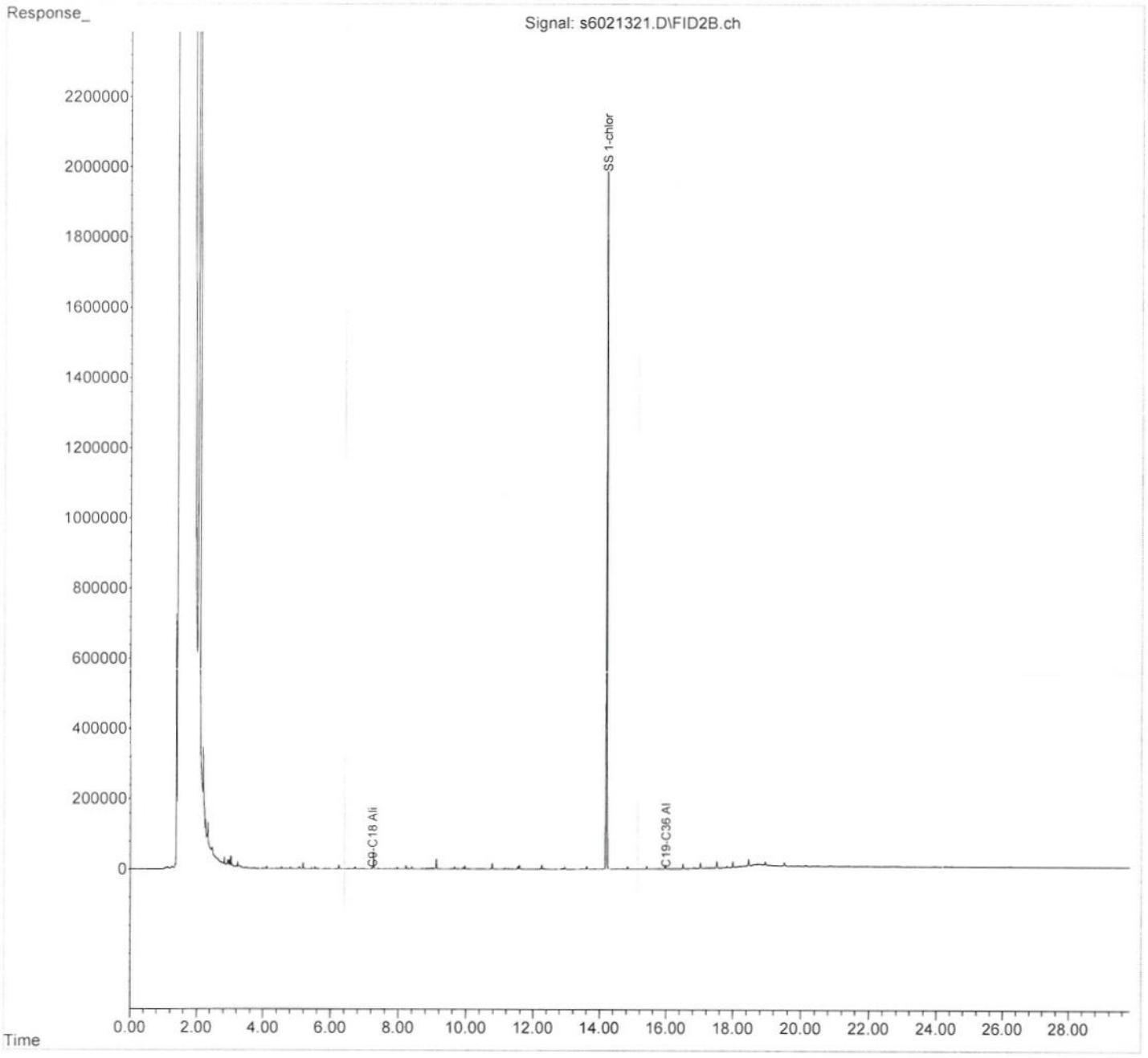
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : X:\S6\2023\Feb23\021323.SEC\
Data File : s6021321.D
Signal(s) : FID2B.ch
Acq On : 13 Feb 2023 03:50 pm
Operator : dbv
Sample : 64446-01 ali x1
Misc :
ALS Vial : 86 Sample Multiplier: 1

Integration File: rteint.p
Quant Time: Feb 14 10:13:50 2023
Quant Method : X:\S6\methods\S6ALI041322F.M
Quant Title : S6 EPH Aliphatics
QLast Update : Thu Apr 14 09:42:50 2022
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Feb23\021323\
Data File : s4021327.D
Acq On : 13 Feb 2023 10:25 pm
Operator : cl
Sample : 64446-01ms targets x1
Misc : aro frac
ALS Vial : 27 Sample Multiplier: 1

CL 2/15/23

10.39/L

2/7/23 /

Quant Time: Feb 14 13:16:14 2023
Quant Method : X:\S4\methods\S4PAH020723A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Wed Feb 08 14:08:43 2023
Response via : Initial Calibration

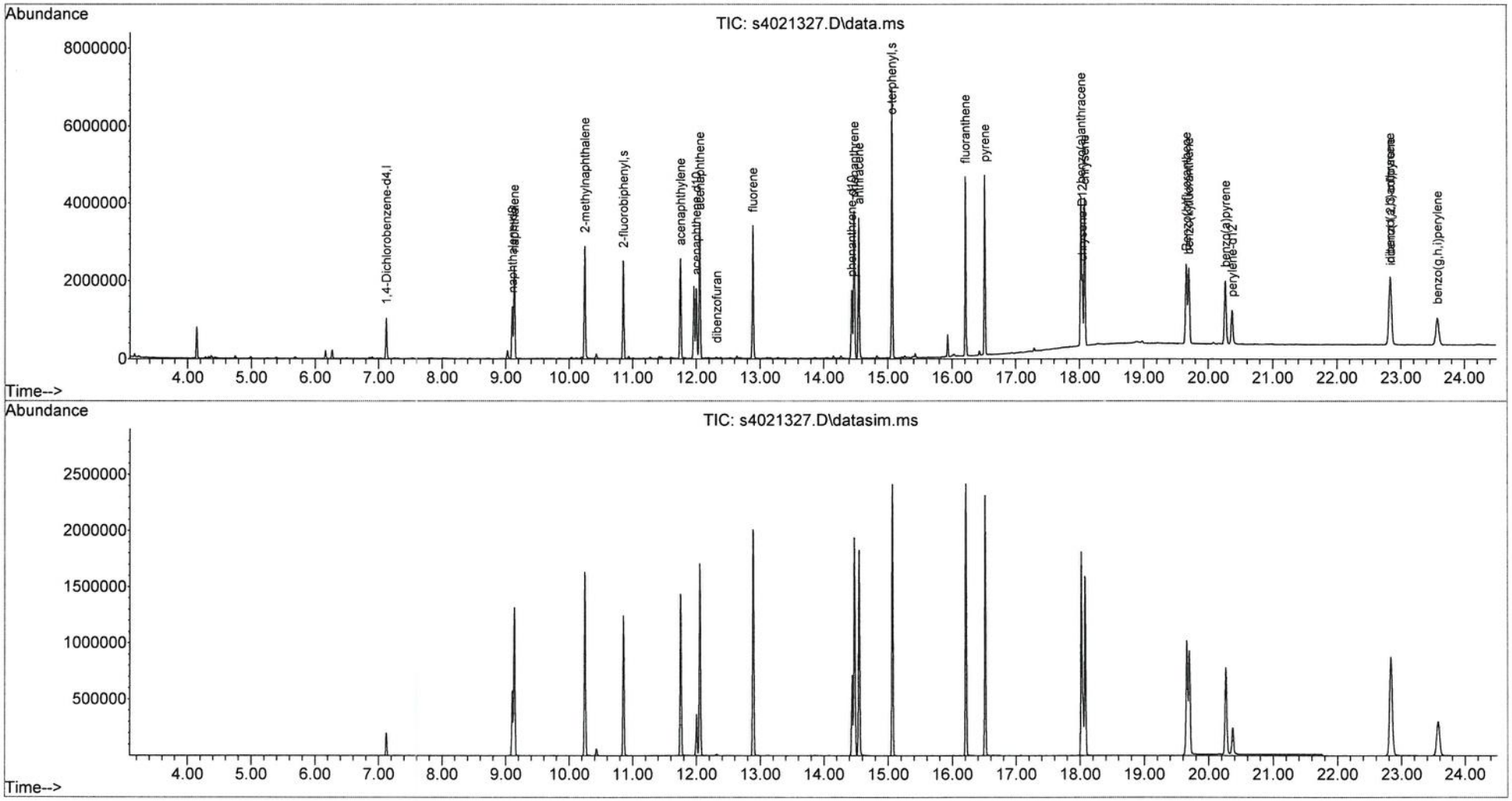
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	7.121	152	240823	10.00	ug/mL	0.00
2) naphthalene-d8	9.103	136	891719	10.00	ug/mL	0.00
5) acenaphthene-d10	11.999	164	542441	10.00	ug/mL	0.00
11) phenanthrene-d10	14.439	188	1061492	10.00	ug/mL	0.00
16) chrysene-D12	18.044	240	732918	10.00	ug/mL	0.00
20) perylene-d12	20.370	264	577807	10.00	ug/mL	0.00
System Monitoring Compounds						
6) 2-fluorobiphenyl	10.857	172	1221664	14.27	ug/mL	0.00
Spiked Amount 100.000			Recovery = 14.27%			
14) o-terphenyl	15.065	230	1736590	29.32	ug/mL	0.00
Spiked Amount 100.000			Recovery = 29.32%			
Target Compounds						Qvalue
3) naphthalene	9.134	128	1575656	17.323	ug/mL	98
4) 2-methylnaphthalene	10.249	142	1202580	17.870	ug/mL	97
7) acenaphthylene	11.754	152	1714823	17.088	ug/mL	97
8) acenaphthene	12.056	154	1100990	15.874	ug/mL	97
9) dibenzofuran	12.316	168	16065	0.129	ug/mL#	85
10) fluorene	12.888	166	1441479	19.121	ug/mL	98
12) phenanthrene	14.480	178	2202077	18.451	ug/mL	95
13) anthracene	14.552	178	2119534	17.483	ug/mL	94
15) fluoranthene	16.209	202	2265099	19.190	ug/mL#	87
17) pyrene	16.512	202	2336523	16.143	ug/mL#	82
18) benzo(a)anthracene	18.024	228	1855830	17.691	ug/mL	93
19) chrysene	18.080	228	1772322	18.310	ug/mL	95
21) Benzo(b)fluoranthene	19.663	252	1694904	19.363	ug/mL	94
22) benzo(k)fluoranthene	19.699	252	1404971	17.743	ug/mL	98
23) benzo(a)pyrene	20.268	252	1294798	17.078	ug/mL	97
24) indeno(1,2,3-cd)pyrene	22.838	276	1237696	17.466	ug/mL#	99
25) dibenzo(a,h)anthracene	22.832	278	1013516	17.296	ug/mL	99
26) benzo(g,h,i)perylene	23.576	276	885129	15.532	ug/mL#	96

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Feb23\021323\
Data File : s4021327.D
Acq On : 13 Feb 2023 10:25 pm
Operator : cl
Sample : 64446-01ms targets x1
Misc : aro frac
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Feb 14 13:16:14 2023
Quant Method : X:\S4\methods\S4PAH020723A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Wed Feb 08 14:08:43 2023
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

2/14/23 @ 14:45
DonnaV

Data Path : X:\S6\2023\Feb23\021323\
Data File : s6021324.D
Signal(s) : FID1A.ch
Acq On : 13 Feb 2023 04:25 pm
Operator : dbv
Sample : 64446-01ms aro x1
Misc :
ALS Vial : 12 Sample Multiplier: 1

Integration File: rteint.p
Quant Time: Feb 14 14:11:15 2023
Quant Method : X:\S6\methods\S6ARO041322L.M
Quant Title : S6 EPH Aromatics
QLast Update : Thu Apr 14 11:03:30 2022
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :

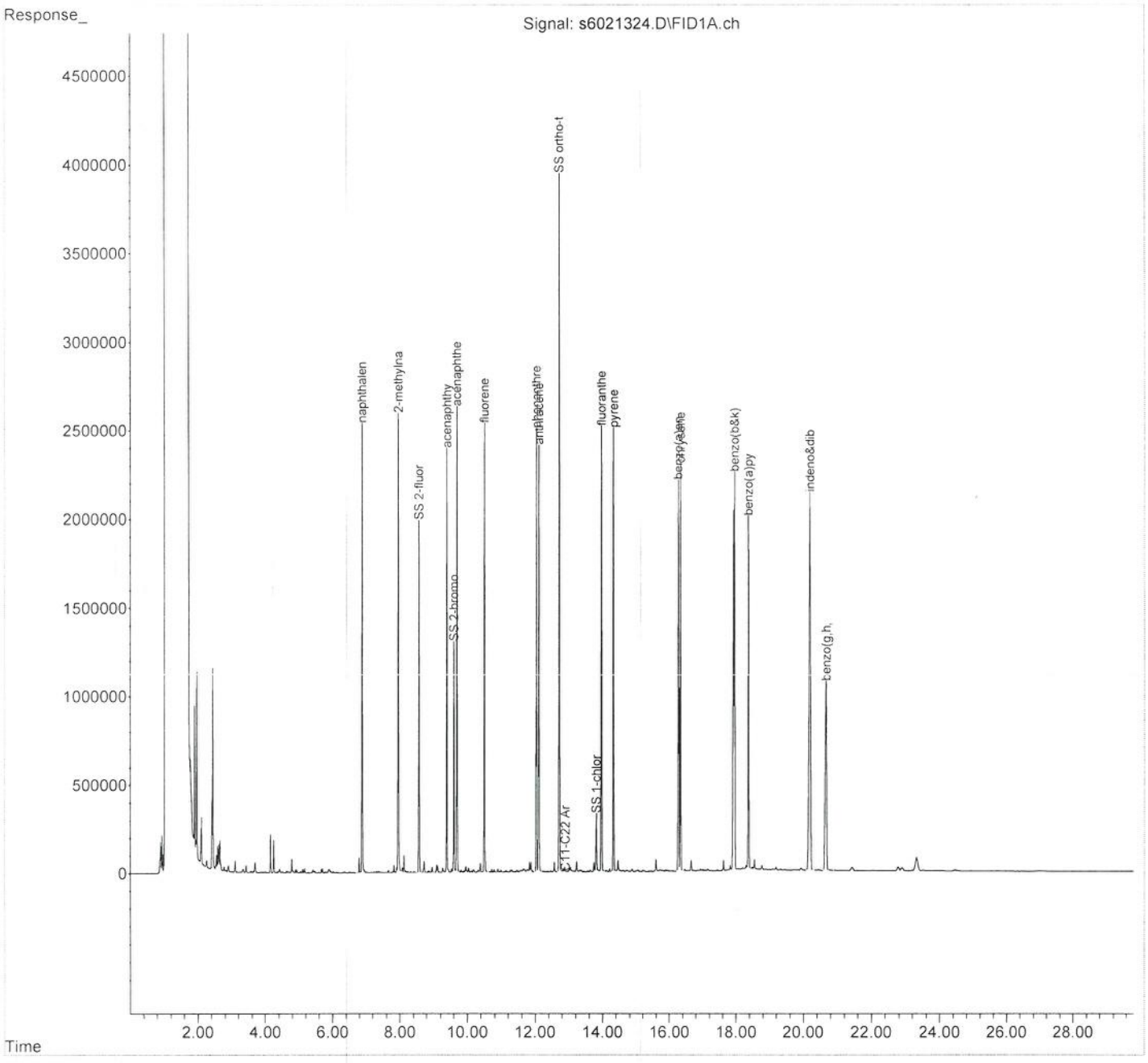
	Compound	R.T.	Response	Conc	Units	
	System Monitoring Compounds					
3) S	SS 2-fluorobiphenyl (...	8.573	2457963	16.803	ug/mL	
Spiked Amount	20.000		Recovery =	84.02%		
5) S	SS 2-bromonaphthalene...	9.602	1675733	16.949	ug/mL	
Spiked Amount	20.000		Recovery =	84.75%		
10) S	SS ortho-terphenyl (OTP)	12.718	5570545	34.782	ug/mL	
Spiked Amount	50.000		Recovery =	69.56%		
11) S	SS 1-chloro-otadecane...	13.813	503511	3.572	ug/mLm	BC = Baseline Correction
Spiked Amount	50.000		Recovery =	7.14%		
	Target Compounds					
1)	naphthalene	6.882	3140528	20.359	ug/mL	
2)	2-methylnaphthalene	7.959	3273081	21.960	ug/mL	
4)	acenaphthylene	9.396	2982613	20.821	ug/mL	
6)	acenaphthene	9.693	3302727	21.334	ug/mL	
7)	fluorene	10.503	3381982	22.046	ug/mL	
8)	phenanthrene	12.038	3409013	22.179	ug/mL	
9)	anthracene	12.113	3193930	21.035	ug/mL	
12)	fluoranthene	13.971	3401191	21.846	ug/mL	
13)	pyrene	14.328	3537793	22.658	ug/mL	
14)	benzo(a)anthracene	16.274	3326217	21.811	ug/mL	
15)	chrysene	16.341	3393367	22.104	ug/mL	
16)	benzo(b&k)fluoranthenes	17.960f	6423309	41.133	ug/mLm	BC = Baseline Correction
17)	benzo(a)pyrene	18.373f	3096667	22.117	ug/mL	
18)	indeno&dibenzo	20.193f	6359611	42.476	ug/mL	
19)	benzo(g,h,i)perylene	20.669	3053899	19.457	ug/mL	
20) H	C11-C22 Aromatics	12.905	65217631	430.236	ug/mLm	RI = Range Integration

(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : X:\S6\2023\Feb23\021323\
Data File : s6021324.D
Signal(s) : FID1A.ch
Acq On : 13 Feb 2023 04:25 pm
Operator : dbv
Sample : 64446-01ms aro x1
Misc :
ALS Vial : 12 Sample Multiplier: 1

Integration File: rteint.p
Quant Time: Feb 14 14:11:15 2023
Quant Method : X:\S6\methods\S6ARO041322L.M
Quant Title : S6 EPH Aromatics
QLast Update : Thu Apr 14 11:03:30 2022
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : X:\S6\2023\Feb23\021323.SEC\
Data File : s6021323.D
Signal(s) : FID2B.ch
Acq On : 13 Feb 2023 04:25 pm
Operator : dbv
Sample : 64446-01ms ali x1
Misc :
ALS Vial : 87 Sample Multiplier: 1

2/14/23 @ 13:34
DonnaV

Integration File: rteint.p
Quant Time: Feb 14 10:13:53 2023
Quant Method : X:\S6\methods\S6ALI041322F.M
Quant Title : S6 EPH Aliphatics
QLast Update : Thu Apr 14 09:42:50 2022
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc Units	
	System Monitoring Compounds				
4) S	SS 2-fluorobiphenyl (...	0.000	0	N.D. ug/mLd	
Spiked Amount	20.000		Recovery =	0.00%	
6) S	SS 2-bromonaphthalene...	10.045	6283	0.028 ug/mLm	
Spiked Amount	20.000		Recovery =	0.14%	
11) S	SS ortho-terphenyl (OTP)	0.000	0	N.D. ug/mLd	
Spiked Amount	50.000		Recovery =	0.00%	
13) S	SS 1-chloro-octadecan...	14.203	3564267	28.431 ug/mL	
Spiked Amount	50.000		Recovery =	56.86%	
	Target Compounds				
1)	C9 n-Nonane	4.107	1398272	10.224 ug/mL	
2)	C10 n-Decane	5.192	1733356	12.580 ug/mL	
3)	C12 n-Dodecane	7.268	2091192	15.233 ug/mL	
5)	C14 n-Tetradecane	9.124f	2245818	16.328 ug/mL	
7)	C16 n-Hexadecane	10.778f	2368112	17.232 ug/mL	
8)	C18 n-Octadecane	12.265f	2498337	17.830 ug/mL	
9) H	C9-C18 Aliphatics	7.237	14498057	105.614 ug/mLm	RI = Range Integration
10)	C19 n-Nonadecane	12.954f	2518817	17.973 ug/mL	
12)	C20 n-Eicosane	13.613f	2569980	18.435 ug/mL	
14)	C22 n-Docosane	14.846f	2643180	18.940 ug/mL	
15)	C24 n-Tetracosane	15.978f	2710762	19.243 ug/mL	
16)	C26 n-Hexacosane	17.028f	2757930	19.542 ug/mL	
17)	C28 n-Octacosane	17.998f	2764943	19.453 ug/mL	
18)	C30 n-Triacontane	18.961f	2810792	19.788 ug/mL	
19)	C36 n-Hexatriacontane	23.947f	2673827	19.358 ug/mLm	BC = Baseline Correction
20) H	C19-C36 Aliphatics	16.000	25994026	185.600 ug/mLm	RI = Range Integration

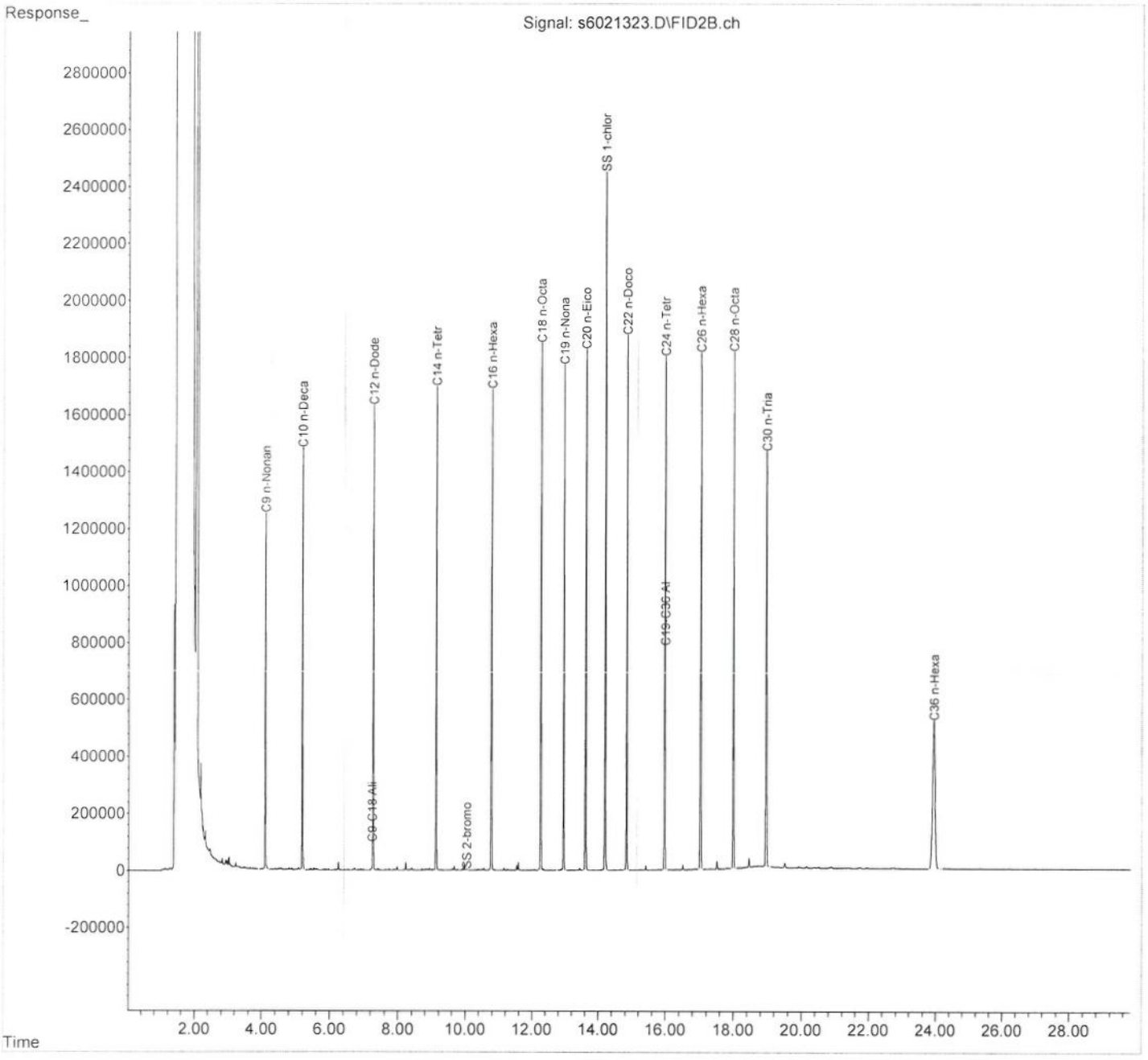
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : X:\S6\2023\Feb23\021323.SEC\
Data File : s6021323.D
Signal(s) : FID2B.ch
Acq On : 13 Feb 2023 04:25 pm
Operator : dbv
Sample : 64446-01ms ali x1
Misc :
ALS Vial : 87 Sample Multiplier: 1

Integration File: rteint.p
Quant Time: Feb 14 10:13:53 2023
Quant Method : X:\S6\methods\S6ALI041322F.M
Quant Title : S6 EPH Aliphatics
QLast Update : Thu Apr 14 09:42:50 2022
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Feb23\021323\
Data File : s4021328.D
Acq On : 13 Feb 2023 10:56 pm
Operator : cl
Sample : 64446-01msd targets x1
Misc : aro frac
ALS Vial : 28 Sample Multiplier: 1

cc 2/15/23
10.16/2
2/7/23

Quant Time: Feb 14 13:16:17 2023
Quant Method : X:\S4\methods\S4PAH020723A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Wed Feb 08 14:08:43 2023
Response via : Initial Calibration

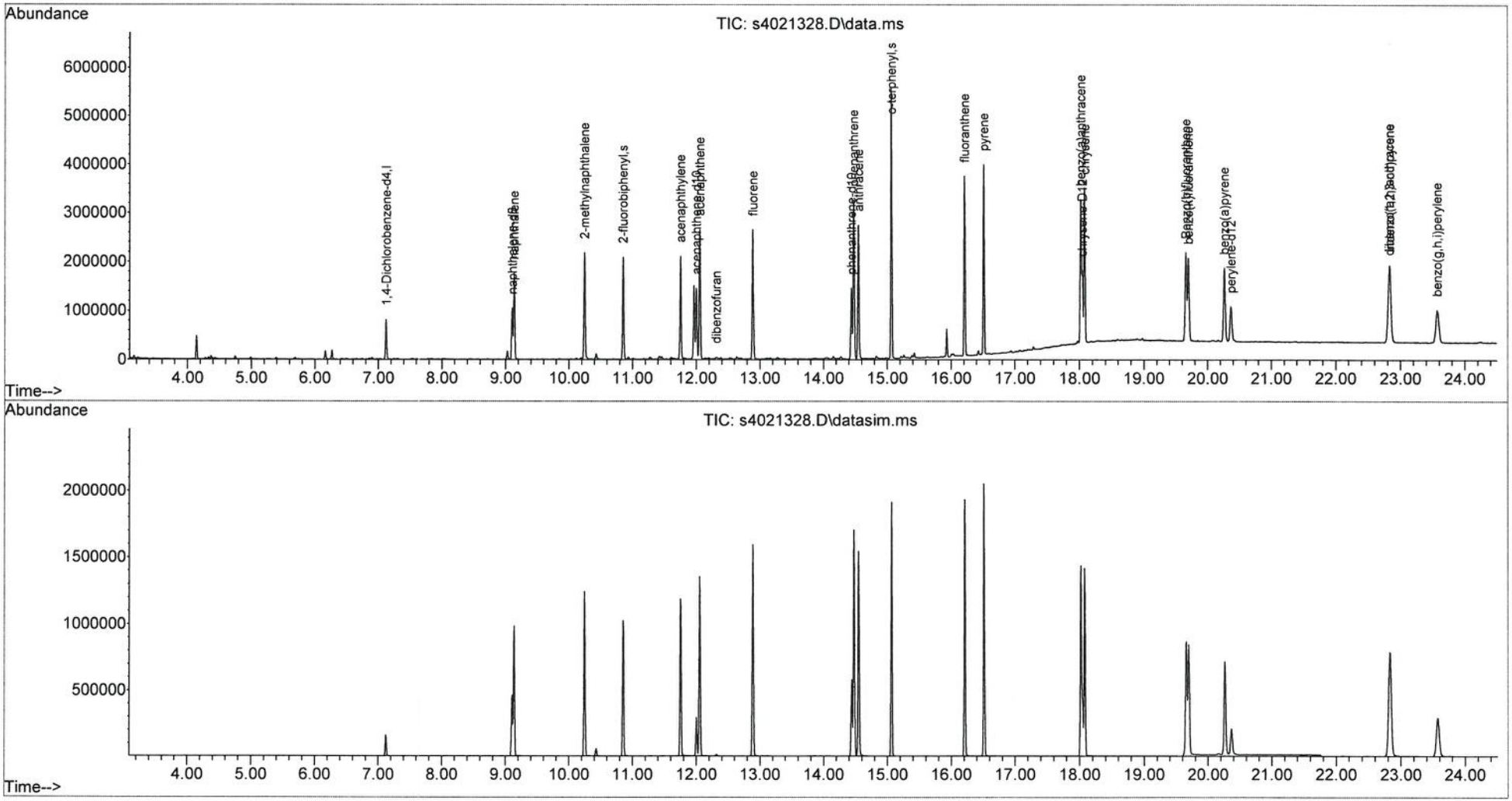
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	7.125	152	191048	10.00	ug/mL	0.00
2) naphthalene-d8	9.103	136	703583	10.00	ug/mL	0.00
5) acenaphthene-d10	12.000	164	442618	10.00	ug/mL	0.00
11) phenanthrene-d10	14.440	188	873280	10.00	ug/mL	0.00
16) chrysene-D12	18.045	240	632601	10.00	ug/mL	0.00
20) perylene-d12	20.366	264	529106	10.00	ug/mL	0.00
System Monitoring Compounds						
6) 2-fluorobiphenyl	10.852	172	975716	13.96	ug/mL	0.00
Spiked Amount 100.000			Recovery = 13.96%			
14) o-terphenyl	15.065	230	1356112	27.83	ug/mL	0.00
Spiked Amount 100.000			Recovery = 27.83%			
Target Compounds						Qvalue
3) naphthalene	9.133	128	1200085	16.720	ug/mL	98
4) 2-methylnaphthalene	10.246	142	926790	17.454	ug/mL	98
7) acenaphthylene	11.754	152	1319974	16.119	ug/mL	96
8) acenaphthene	12.056	154	877189	15.499	ug/mL	97
9) dibenzofuran	12.312	168	16519	0.171	ug/mL#	85
10) fluorene	12.888	166	1134885	18.448	ug/mL	97
12) phenanthrene	14.476	178	1838352	18.724	ug/mL	95
13) anthracene	14.552	178	1720326	17.248	ug/mL	94
15) fluoranthene	16.210	202	1912192	19.692	ug/mL#	87
17) pyrene	16.513	202	2006092	16.058	ug/mL#	82
18) benzo(a)anthracene	18.019	228	1555072	17.173	ug/mL	92
19) chrysene	18.081	228	1489204	17.824	ug/mL	95
21) Benzo(b)fluoranthene	19.658	252	1347638	16.809	ug/mL	96
22) benzo(k)fluoranthene	19.699	252	1158060	15.967	ug/mL	98
23) benzo(a)pyrene	20.263	252	1149392	16.555	ug/mL	99
24) indeno(1,2,3-cd)pyrene	22.833	276	1129730	17.412	ug/mL#	100
25) dibenzo(a,h)anthracene	22.827	278	927773	17.290	ug/mL	100
26) benzo(g,h,i)perylene	23.570	276	822196	15.755	ug/mL#	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Feb23\021323\
Data File : s4021328.D
Acq On : 13 Feb 2023 10:56 pm
Operator : cl
Sample : 64446-01msd targets x1
Misc : aro frac
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Feb 14 13:16:17 2023
Quant Method : X:\S4\methods\S4PAH020723A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Wed Feb 08 14:08:43 2023
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : X:\S6\2023\Feb23\021323\
Data File : s6021326.D
Signal(s) : FID1A.ch
Acq On : 13 Feb 2023 04:58 pm
Operator : dbv
Sample : 64446-01msd aro x1
Misc :
ALS Vial : 13 Sample Multiplier: 1

2/14/23 @ 14:45
DonnaV

Integration File: rteint.p
Quant Time: Feb 14 14:11:17 2023
Quant Method : X:\S6\methods\S6ARO041322L.M
Quant Title : S6 EPH Aromatics
QLast Update : Thu Apr 14 11:03:30 2022
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc Units
	System Monitoring Compounds			
3)	S SS 2-fluorobiphenyl (...	8.573	2471690	16.897 ug/mL
	Spiked Amount 20.000		Recovery =	84.48%
5)	S SS 2-bromonaphthalene...	9.601	1711437	17.311 ug/mL
	Spiked Amount 20.000		Recovery =	86.56%
10)	S SS ortho-terphenyl (OTP)	12.717	5416540	33.812 ug/mL
	Spiked Amount 50.000		Recovery =	67.62%
11)	S SS 1-chloro-otadecane...	13.812	615944	4.438 ug/mL
	Spiked Amount 50.000		Recovery =	8.88%
	Target Compounds			
1)	naphthalene	6.882	3059323	19.818 ug/mL
2)	2-methylnaphthalene	7.959	3200985	21.464 ug/mL
4)	acenaphthylene	9.395	2991183	20.883 ug/mL
6)	acenaphthene	9.693	3300474	21.319 ug/mL
7)	fluorene	10.504	3417066	22.280 ug/mL
8)	phenanthrene	12.038	3485119	22.686 ug/mL
9)	anthracene	12.113	3227769	21.263 ug/mL
12)	fluoranthene	13.972	3468777	22.291 ug/mL
13)	pyrene	14.330	3648276	23.382 ug/mL
14)	benzo(a)anthracene	16.273	3272211	21.449 ug/mL
15)	chrysene	16.340f	3347244	21.796 ug/mL
16)	benzo(b&k)fluoranthenes	17.958f	6252807	40.013 ug/mLm BC = Baseline Correction
17)	benzo(a)pyrene	18.375f	3075613	21.963 ug/mL
18)	indeno&dibenzo	20.190f	6200559	41.389 ug/mL
19)	benzo(g,h,i)perylene	20.671	3011548	19.178 ug/mL
20)	H C11-C22 Aromatics	12.905	69153147	456.740 ug/mLm RI = Range Integration

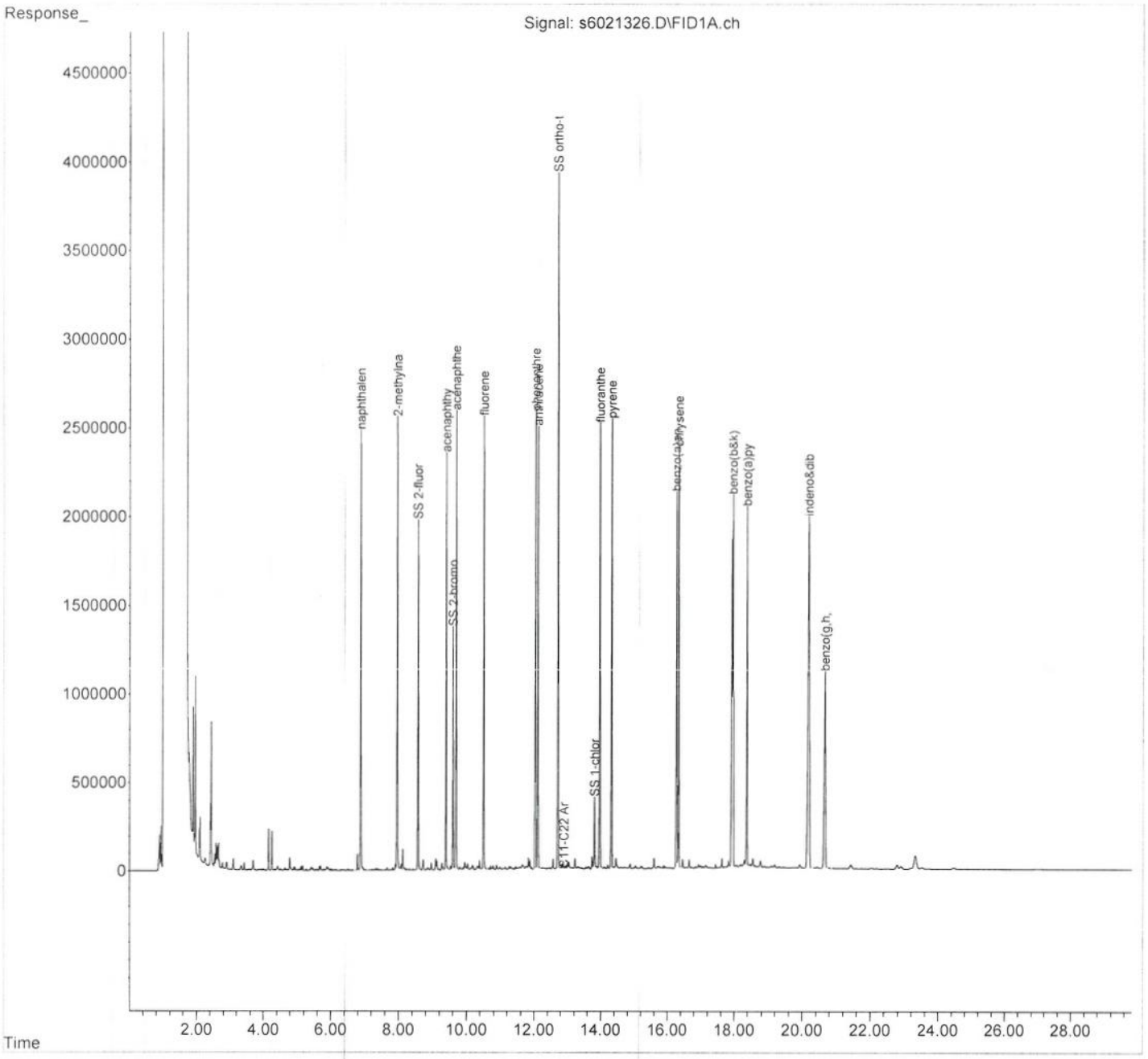
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : X:\S6\2023\Feb23\021323\
Data File : s6021326.D
Signal(s) : FID1A.ch
Acq On : 13 Feb 2023 04:58 pm
Operator : dbv
Sample : 64446-01msd aro x1
Misc :
ALS Vial : 13 Sample Multiplier: 1

Integration File: rteint.p
Quant Time: Feb 14 14:11:17 2023
Quant Method : X:\S6\methods\S6ARO041322L.M
Quant Title : S6 EPH Aromatics
QLast Update : Thu Apr 14 11:03:30 2022
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

2/14/23 @ 13:34
DonnaV

Data Path : X:\S6\2023\Feb23\021323.SEC\
Data File : s6021325.D
Signal(s) : FID2B.ch
Acq On : 13 Feb 2023 04:58 pm
Operator : dbv
Sample : 64446-01msd ali x1
Misc :
ALS Vial : 88 Sample Multiplier: 1

Integration File: rteint.p
Quant Time: Feb 14 10:13:56 2023
Quant Method : X:\S6\methods\S6ALI041322F.M
Quant Title : S6 EPH Aliphatics
QLast Update : Thu Apr 14 09:42:50 2022
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc Units	
	System Monitoring Compounds				
4) S	SS 2-fluorobiphenyl (...	0.000	0	N.D. ug/mLd	
Spiked Amount	20.000	Recovery	=	0.00%	
6) S	SS 2-bromonaphthalene...	0.000	0	N.D. ug/mLd	
Spiked Amount	20.000	Recovery	=	0.00%	
11) S	SS ortho-terphenyl (OTP)	0.000	0	N.D. ug/mLd	
Spiked Amount	50.000	Recovery	=	0.00%	
13) S	SS 1-chloro-octadecan...	14.203	3771435	30.093 ug/mL	
Spiked Amount	50.000	Recovery	=	60.19%	
	Target Compounds				
1)	C9 n-Nonane	4.107	1408941	10.304 ug/mL	
2)	C10 n-Decane	5.191	1773204	12.877 ug/mL	
3)	C12 n-Dodecane	7.268	2123215	15.471 ug/mL	
5)	C14 n-Tetradecane	9.124f	2371687	17.260 ug/mL	
7)	C16 n-Hexadecane	10.778f	2558990	18.645 ug/mL	
8)	C18 n-Octadecane	12.264f	2702401	19.310 ug/mL	
9) H	C9-C18 Aliphatics	7.237	15455017	112.706 ug/mLm	RI = Range Integration
10)	C19 n-Nonadecane	12.955f	2722659	19.451 ug/mL	
12)	C20 n-Eicosane	13.613f	2773907	19.921 ug/mL	
14)	C22 n-Docosane	14.845f	2855976	20.488 ug/mL	
15)	C24 n-Tetracosane	15.978f	2909808	20.678 ug/mL	
16)	C26 n-Hexacosane	17.027f	2943712	20.879 ug/mL	
17)	C28 n-Octacosane	18.000f	2930576	20.636 ug/mL	
18)	C30 n-Triacontane	18.962f	2985005	21.033 ug/mL	
19)	C36 n-Hexatriacontane	23.944f	2829415	20.498 ug/mLm	BC = Baseline Correction
20) H	C19-C36 Aliphatics	16.000	28418034	203.123 ug/mLm	RI = Range Integration

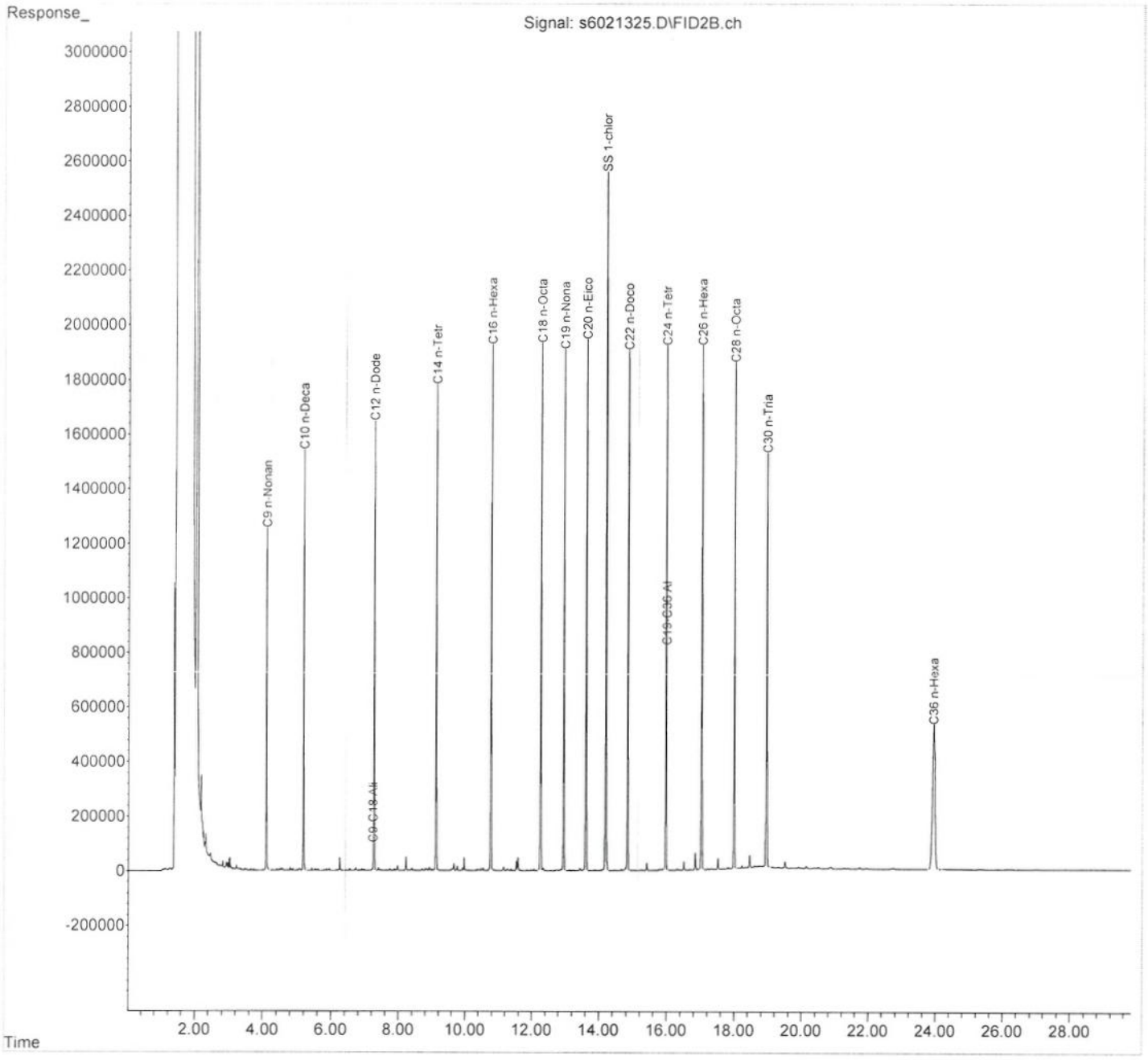
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : X:\S6\2023\Feb23\021323.SEC\
Data File : s6021325.D
Signal(s) : FID2B.ch
Acq On : 13 Feb 2023 04:58 pm
Operator : dbv
Sample : 64446-01msd ali x1
Misc :
ALS Vial : 88 Sample Multiplier: 1

Integration File: rteint.p
Quant Time: Feb 14 10:13:56 2023
Quant Method : X:\S6\methods\S6ALI041322F.M
Quant Title : S6 EPH Aliphatics
QLast Update : Thu Apr 14 09:42:50 2022
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :



This File:	L:\SVOA\Excel Reports\EPH\230215\64446-002		
Analysis Group:	EPH	Dow	
Field ID:	SY-SB4-10	CRE	
Sample:	64446-02 targets x1	64446-02 aro x1	64446-02 all x1
Misc:	aro frac		
Method Name:	SVOA04 Method 8270E (t	S6 EPH Aromatics	S6 EPH Aliphatics
Import File Name:	s6 EPHs QC15928S		
TestGroupID:	EMA_EPH_PresCert_S		
Aqueous or Soil? (A or S)	S		
Fractionated? (Y/N)	Y	Y	
Prep Date:	2/7/2023		
Lab#:	64446-002		
QC_Code:			
Prep#	15928		

Donna Valley L:\SVOA\EPH\EPH ImportFileBuilder2.0.xls
2/15/23 1:05 PM
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L:\SVOA\Excel Reports\EPH\2302

Reviewer Checks:

Quant Report: Reviewed? Ranges integrated? Analyst Initials & Date?	1
Chromatogram Checked? Major peaks identified?	2
Soil prep data checked: weight, volume, %solid, Prep date	5
Field ID consistent with data and any field replicates	11
Results consistent with any re-runs & internal QC	16
Substitute dilution data checked	20
Correct dilution and reason clear or noted	
Reason for reanalysis documented	
Surrogates pass or flagged & noted	
Flags checked (Expiration, F+, Over Cal)	
Other QC failures, estimates or interferences documented	
Spot checked Reported Result with Quant Report	
Checked Audit flagged data in LIMS	

Notes:

Initials & Date: WA 2.16.23

X:\S4\2023\Feb23\021323\s4021321.D\S4PAH020723A.XLS PAH targets filename
X:\S6\2023\Feb23\021323\s6021328.D\S6ARO041322L.XLS aromatics filename
X:\S6\2023\Feb23\021323.SEC\s6021327.D\S6ALI041322F.XLS aliphatics filename

#	Surrogate Standards	Concentration (ug/mL)	AnalysisDate	AnalysisTime	AnalyzedBy	Dilution	Weight	Volume	Surr	Recovery	Flag	QC Limits
13	SS 1-chloro-octadecane (COD)	25.02175624	2/13/2023	05:32:00 PM	DBV s6021327.D	1	1	2	100	50%		40-140
10	SS ortho-terphenyl (OTP)	33.02915886	2/13/2023	05:32:00 PM	DBV s6021328.D	1	1	2	100	66%		40-140
3	SS 2-fluorobiphenyl (2FBP)	17.0615333	2/13/2023	05:32:00 PM	DBV s6021328.D	1	1	2	40	85%		40-140
5	SS 2-bromonaphthalene (2BN)	17.66810564	2/13/2023	05:32:00 PM	DBV s6021328.D	1	1	2	40	88%		40-140

#	AnalyteName	Concentration (ug/mL)	AnalysisDate	AnalysisTime	AnalyzedBy	Dilution	Weight	Volume
3	naphthalene	1.69796913	02/13/2023	07:21:00 PM	CL s4021321.D	1	10.38	2
4	2-methylnaphthalene	2.250992827	02/13/2023	07:21:00 PM	CL s4021321.D	1	10.38	2
12	phenanthrene	1.223520458	02/13/2023	07:21:00 PM	CL s4021321.D	1	10.38	2
8	acenaphthene	0.009164509	02/13/2023	07:21:00 PM	CL s4021321.D	1	10.38	2
7	acenaphthylene	0.076383064	02/13/2023	07:21:00 PM	CL s4021321.D	1	10.38	2
9	fluorene	0.078505172	02/13/2023	07:21:00 PM	CL s4021321.D	1	10.38	2
13	anthracene	0.096692191	02/13/2023	07:21:00 PM	CL s4021321.D	1	10.38	2
15	fluoranthene	0.887548724	02/13/2023	07:21:00 PM	CL s4021321.D	1	10.38	2
17	pyrene	0.677985761	02/13/2023	07:21:00 PM	CL s4021321.D	1	10.38	2
18	benzo(a)anthracene	0.411857082	02/13/2023	07:21:00 PM	CL s4021321.D	1	10.38	2
19	chrysene	0.688286425	02/13/2023	07:21:00 PM	CL s4021321.D	1	10.38	2
21	benzo(b)fluoranthene	0.447445359	02/13/2023	07:21:00 PM	CL s4021321.D	1	10.38	2
22	benzo(k)fluoranthene	0.381821251	02/13/2023	07:21:00 PM	CL s4021321.D	1	10.38	2
23	benzo(a)pyrene	0.384690366	02/13/2023	07:21:00 PM	CL s4021321.D	1	10.38	2
24	indeno(1,2,3-cd)pyrene	0.231694743	02/13/2023	07:21:00 PM	CL s4021321.D	1	10.38	2
25	dibenzo(a,h)anthracene	0.114502293	02/13/2023	07:21:00 PM	CL s4021321.D	1	10.38	2
26	benzo(g,h,i)perylene	0.348331195	02/13/2023	07:21:00 PM	CL s4021321.D	1	10.38	2
30	C11-C22 Aromatics	152.5976383	2/13/2023	05:32:00 PM	DBV s6021328.D	1	10.38	2
9	C9-C18 Aliphatics	27.19974813	2/13/2023	05:32:00 PM	DBV s6021327.D	1	10.38	2
20	C19-C36 Aliphatics	64.9547342	2/13/2023	05:32:00 PM	DBV s6021327.D	1	10.38	2
	Adjusted C11-C22 Aromatics	142.5902477	2/13/2023	05:32:00 PM	DBV s6021328.D	1	10.38	2

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Feb23\021323\
Data File : s4021321.D
Acq On : 13 Feb 2023 07:21 pm
Operator : cl
Sample : 64446-02 targets x1
Misc : aro frac
ALS Vial : 21 Sample Multiplier: 1

CE 2/15/23

10.38/L ✓

2/7/23

Quant Time: Feb 14 13:16:04 2023
Quant Method : X:\S4\methods\S4PAH020723A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Wed Feb 08 14:08:43 2023
Response via : Initial Calibration

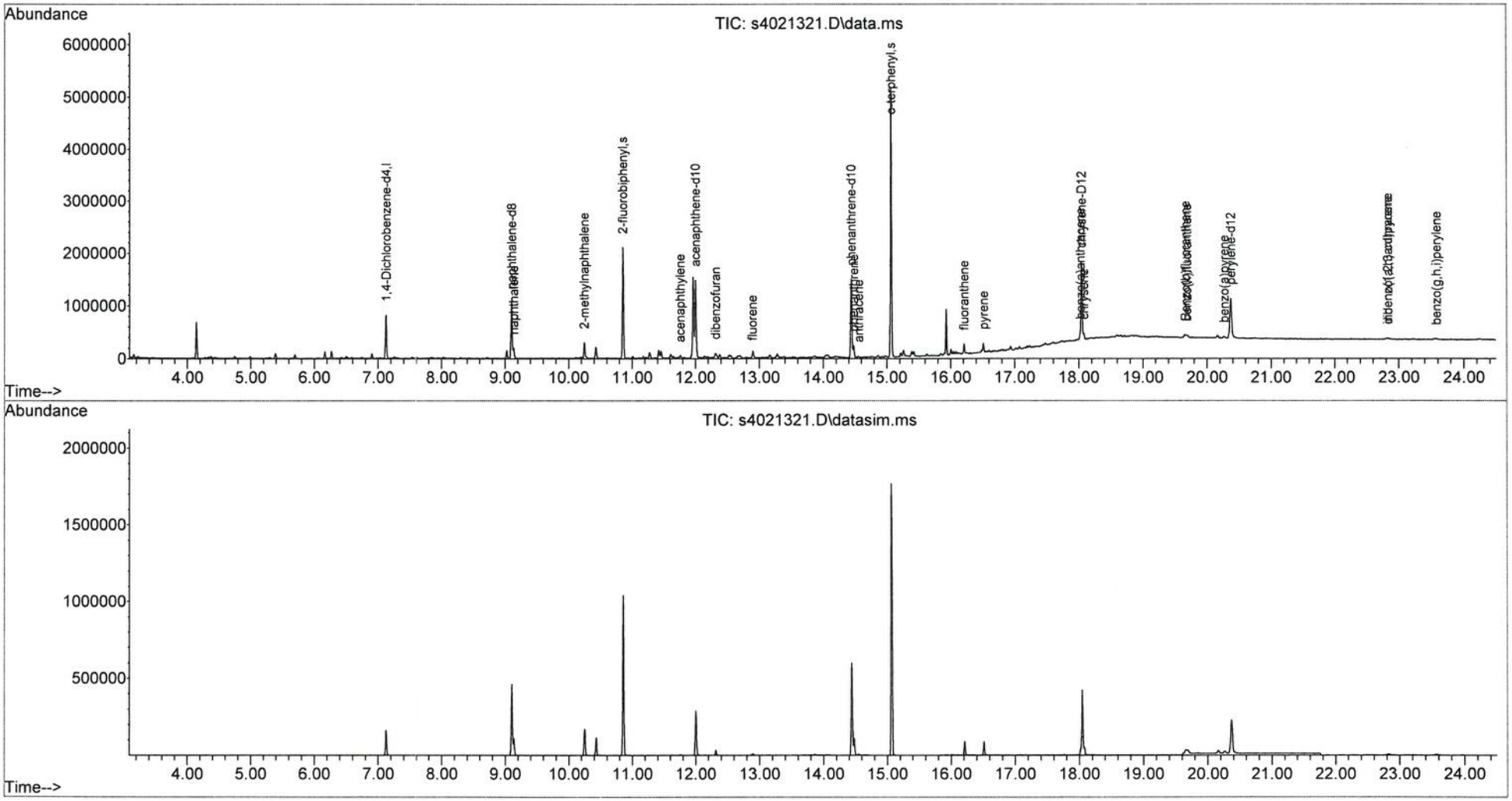
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	7.125	152	194873	10.00	ug/mL	0.00
2) naphthalene-d8	9.103	136	709229	10.00	ug/mL	0.00
5) acenaphthene-d10	12.000	164	447047	10.00	ug/mL	0.00
11) phenanthrene-d10	14.440	188	877189	10.00	ug/mL	0.00
16) chrysene-D12	18.041	240	645973	10.00	ug/mL	0.00
20) perylene-d12	20.367	264	562887	10.00	ug/mL	0.00
System Monitoring Compounds						
6) 2-fluorobiphenyl	10.852	172	981770	13.91	ug/mL	0.00
Spiked Amount 100.000			Recovery = 13.91%			
14) o-terphenyl	15.065	230	1323262	27.04	ug/mL	0.00
Spiked Amount 100.000			Recovery = 27.04%			
Target Compounds						Qvalue
3) naphthalene	9.133	128	125766	1.698	ug/mL	98
4) 2-methylnaphthalene	10.246	142	122008	2.251	ug/mL	97
7) acenaphthylene	11.755	152	7015	0.076	ug/mL#	72
9) dibenzofuran	12.312	168	42626	0.488	ug/mL#	91
10) fluorene	12.889	166	7266	0.079	ug/mL#	69
12) phenanthrene	14.476	178	124025	1.224	ug/mL	97
13) anthracene	14.552	178	11225m BC	0.097	ug/mL	
15) fluoranthene	16.210	202	88406	0.888	ug/mL#	88
17) pyrene	16.513	202	89326	0.678	ug/mL#	83
18) benzo(a)anthracene	18.021	228	41961	0.412	ug/mL	93
19) chrysene	18.077	228	61335	0.688	ug/mL	98
21) Benzo(b)fluoranthene	19.660	252	40130	0.447	ug/mL	94
22) benzo(k)fluoranthene	19.685	252	31940m BC	0.382	ug/mL	
23) benzo(a)pyrene	20.264	252	28497m BC	0.385	ug/mL	
24) indeno(1,2,3-cd)pyrene	22.828	276	16179	0.232	ug/mL#	68
25) dibenzo(a,h)anthracene	22.828	278	7172m BC	0.115	ug/mL	
26) benzo(g,h,i)perylene	23.577	276	19822m BC	0.348	ug/mL	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Feb23\021323\
Data File : s4021321.D
Acq On : 13 Feb 2023 07:21 pm
Operator : cl
Sample : 64446-02 targets x1
Misc : aro frac
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Feb 14 13:16:04 2023
Quant Method : X:\S4\methods\S4PAH020723A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Wed Feb 08 14:08:43 2023
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : X:\S6\2023\Feb23\021323\
Data File : s6021328.D
Signal(s) : FID1A.ch
Acq On : 13 Feb 2023 05:32 pm
Operator : dbv
Sample : 64446-02 aro x1
Misc :
ALS Vial : 14 Sample Multiplier: 1

Integration File: rteint.p
Quant Time: Feb 14 14:11:19 2023
Quant Method : X:\S6\methods\S6ARO041322L.M
Quant Title : S6 EPH Aromatics
QLast Update : Thu Apr 14 11:03:30 2022
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc Units
	System Monitoring Compounds			
3)	S SS 2-fluorobiphenyl (...	8.574	2495580	17.062 ug/mL
	Spiked Amount 20.000		Recovery =	85.31%
5)	S SS 2-bromonaphthalene...	9.601	1746621	17.668 ug/mL
	Spiked Amount 20.000		Recovery =	88.34%
10)	S SS ortho-terphenyl (OTP)	12.717	5292180	33.029 ug/mL
	Spiked Amount 50.000		Recovery =	66.06%
11)	S SS 1-chloro-otadecane...	13.811	987420	7.300 ug/mLm
	Spiked Amount 50.000		Recovery =	14.60%
	Target Compounds			
1)	naphthalene	0.000	0	N.D. ug/mLd
2)	2-methylnaphthalene	0.000	0	N.D. ug/mLd
4)	acenaphthylene	0.000	0	N.D. ug/mLd
6)	acenaphthene	0.000	0	N.D. ug/mLd
7)	fluorene	0.000	0	N.D. ug/mLd
8)	phenanthrene	0.000	0	N.D. ug/mLd
9)	anthracene	0.000	0	N.D. ug/mLd
12)	fluoranthene	0.000	0	N.D. ug/mLd
13)	pyrene	0.000	0	N.D. ug/mLd
14)	benzo(a)anthracene	0.000	0	N.D. ug/mLd
15)	chrysene	0.000	0	N.D. ug/mLd
16)	benzo(b&k)fluoranthenes	0.000	0	N.D. ug/mLd
17)	benzo(a)pyrene	0.000	0	N.D. ug/mLd
18)	indeno&dibenzo	0.000	0	N.D. ug/mLd
19)	benzo(g,h,i)perylene	0.000	0	N.D. ug/mLd
20)	H C11-C22 Aromatics	12.905	23992662	152.598 ug/mLm

BC = Baseline Correction

RI = Range Integration

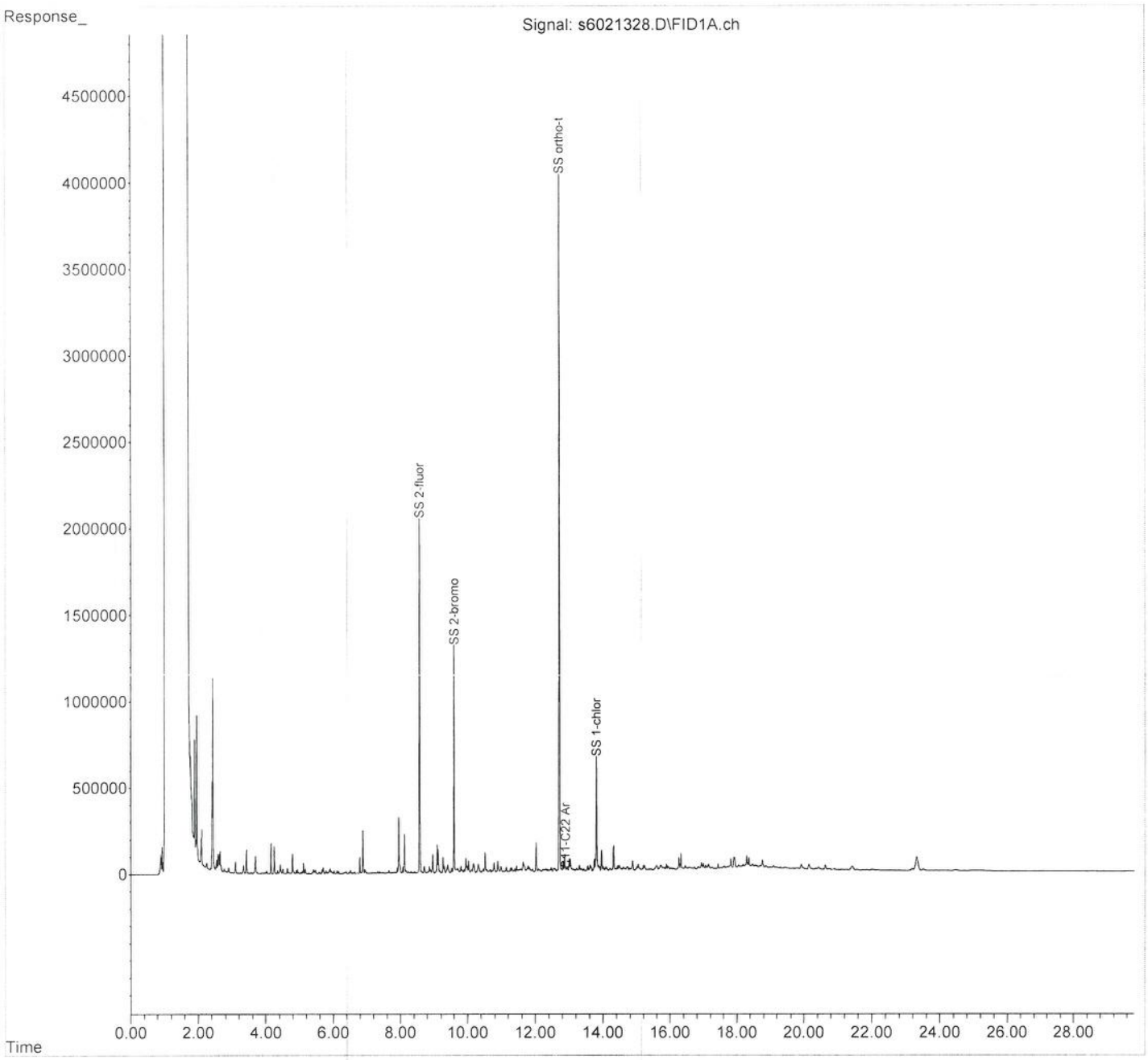
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report ((QT Reviewed)

Data Path : X:\S6\2023\Feb23\021323\
Data File : s6021328.D
Signal(s) : FID1A.ch
Acq On : 13 Feb 2023 05:32 pm
Operator : dbv
Sample : 64446-02 aro x1
Misc :
ALS Vial : 14 Sample Multiplier: 1

Integration File: rteint.p
Quant Time: Feb 14 14:11:19 2023
Quant Method : X:\S6\methods\S6ARO041322L.M
Quant Title : S6 EPH Aromatics
QLast Update : Thu Apr 14 11:03:30 2022
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : X:\S6\2023\Feb23\021323.SEC\
Data File : s6021327.D
Signal(s) : FID2B.ch
Acq On : 13 Feb 2023 05:32 pm
Operator : dbv
Sample : 64446-02 ali x1
Misc :
ALS Vial : 89 Sample Multiplier: 1

2/14/23 @ 13:34
DonnaV

Integration File: rteint.p
Quant Time: Feb 14 10:13:59 2023
Quant Method : X:\S6\methods\S6ALI041322F.M
Quant Title : S6 EPH Aliphatics
QLast Update : Thu Apr 14 09:42:50 2022
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :

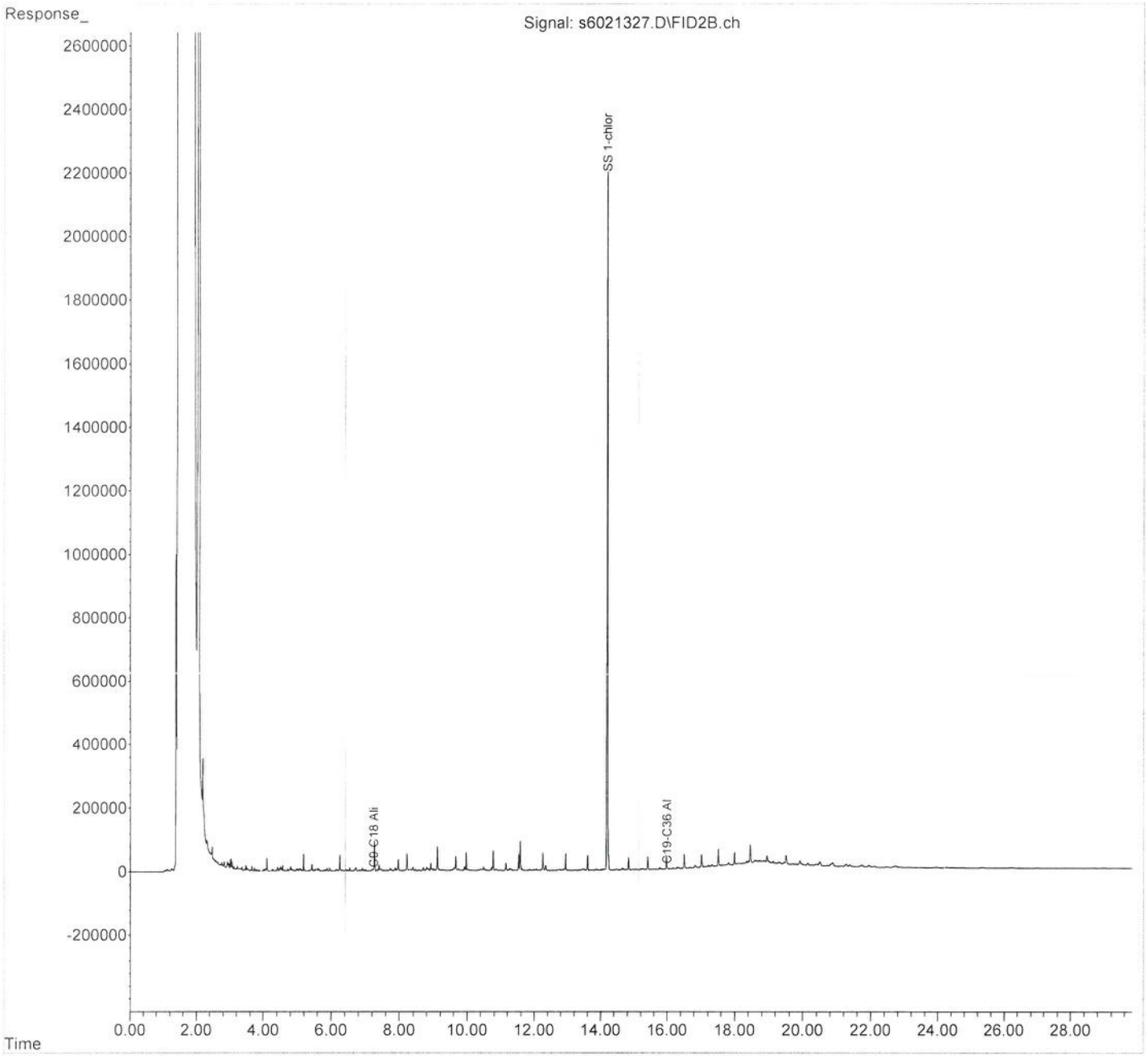
	Compound	R.T.	Response	Conc	Units	
	System Monitoring Compounds					
4)	S SS 2-fluorobiphenyl (...	0.000	0	N.D.	ug/mLd	
	Spiked Amount 20.000		Recovery =	0.00%		
6)	S SS 2-bromonaphthalene...	0.000	0	N.D.	ug/mLd	
	Spiked Amount 20.000		Recovery =	0.00%		
11)	S SS ortho-terphenyl (OTP)	0.000	0	N.D.	ug/mLd	
	Spiked Amount 50.000		Recovery =	0.00%		
13)	S SS 1-chloro-octadecan...	14.202f	3139267	25.022	ug/mL	
	Spiked Amount 50.000		Recovery =	50.04%		
	Target Compounds					
1)	C9 n-Nonane	0.000	0	N.D.	ug/mLd	
2)	C10 n-Decane	0.000	0	N.D.	ug/mLd	
3)	C12 n-Dodecane	0.000	0	N.D.	ug/mLd	
5)	C14 n-Tetradecane	0.000	0	N.D.	ug/mLd	
7)	C16 n-Hexadecane	0.000	0	N.D.	ug/mLd	
8)	C18 n-Octadecane	0.000	0	N.D.	ug/mLd	
9)	H C9-C18 Aliphatics	7.237	3917426	27.200	ug/mLm	RI = Range Integration
10)	C19 n-Nonadecane	0.000	0	N.D.	ug/mLd	
12)	C20 n-Eicosane	0.000	0	N.D.	ug/mLd	
14)	C22 n-Docosane	0.000	0	N.D.	ug/mLd	
15)	C24 n-Tetracosane	0.000	0	N.D.	ug/mLd	
16)	C26 n-Hexacosane	0.000	0	N.D.	ug/mLd	
17)	C28 n-Octacosane	0.000	0	N.D.	ug/mLd	
18)	C30 n-Triacontane	0.000	0	N.D.	ug/mLd	
19)	C36 n-Hexatriacontane	0.000	0	N.D.	ug/mLd	
20)	H C19-C36 Aliphatics	16.000	9304752	64.955	ug/mLm	RI = Range Integration

(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : X:\S6\2023\Feb23\021323.SEC\
Data File : s6021327.D
Signal(s) : FID2B.ch
Acq On : 13 Feb 2023 05:32 pm
Operator : dbv
Sample : 64446-02 ali x1
Misc :
ALS Vial : 89 Sample Multiplier: 1

Integration File: rteint.p
Quant Time: Feb 14 10:13:59 2023
Quant Method : X:\S6\methods\S6ALI041322F.M
Quant Title : S6 EPH Aliphatics
QLast Update : Thu Apr 14 09:42:50 2022
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :



This File:	L:\SVOA\Excel Reports\EPH\230215\64446-003			Donna Valley L:\SVOA\EPH\EPH ImportFileBuilder2.0.xls
Analysis Group:	EPH	Dow		2/15/23 1:06 PM
Field ID:	SY-SB4-2	CRE		L:\SVOA\EPH\
Sample:	64446-03 targets x1	64446-03 aro x1	64446-03 ali x1	L:\SVOA\Excel Reports\EPH\2302
Misc:	aro frac			
Method Name:	SVOA04 Method 8270E (E	S6 EPH Aromatics	S6 EPH Aliphatics	
Import File Name:	s6 EPHs QC15928S			
TestGroupID:	EMA_EPH_PresCert_S			
Aqueous or Soil? (A or S)	S			
Fractionated? (Y/N)	Y	Y		
Prep Date:	2/7/2023			
Lab#:	64446-003			
QC_Code:				
Prep#	15928			

Reviewer Checks:

- Quant Report: Reviewed? Ranges integrated? Analyst Initials & Date?
- Chromatogram Checked? Major peaks identified?
- Soil prep data checked: weight, volume, %solid, Prep date
- Field ID consistent with data and any field replicates
- Results consistent with any re-runs & internal QC
- Substitute dilution data checked
- Correct dilution and reason clear or noted
- Reason for reanalysis documented
- Surrogates pass or flagged & noted
- Flags checked (Expiration, F+, Over Cal)
- Other QC failures, estimates or interferences documented
- Spot checked Reported Result with Quant Report
- Checked Audit flagged data in LIMS

Notes:

Initials & Date: WA 2-16-23

X:\S4\2023\Feb23\021323\s4021322.D\S4PAH020723A.XLS PAH targets filename
X:\S6\2023\Feb23\021323\s6021330.D\S6ARO041322L.XLS aromatics filename
X:\S6\2023\Feb23\021323.SEC\s6021329.D\S6ALI041322F.XLS aliphatics filename

#	Surrogate Standards	Concentration (ug/mL)	AnalysisDate	AnalysisTime	AnalyzedBy	Dilution	Weight	Volume	Surr	Recovery	Flag	QC Limits
13	SS 1-chloro-octadecane (COD)	21.56310053	2/13/2023	06:06:00 PM	DBV s6021329.D	1	1	2	100	43%		40-140
10	SS ortho-terphenyl (OTP)	29.89394305	2/13/2023	06:06:00 PM	DBV s6021330.D	1	1	2	100	60%		40-140
3	SS 2-fluorobiphenyl (2FBP)	17.54808991	2/13/2023	06:06:00 PM	DBV s6021330.D	1	1	2	40	88%		40-140
5	SS 2-bromonaphthalene (2BN)	17.46376248	2/13/2023	06:06:00 PM	DBV s6021330.D	1	1	2	40	87%		40-140

#	AnalyteName	Concentration (ug/mL)	AnalysisDate	AnalysisTime	AnalyzedBy	Dilution	Weight	Volume
3	naphthalene	0.10667242	02/13/2023	07:51:00 PM	CL s4021322.D	1	10.83	2
4	2-methylnaphthalene	0.13572356	02/13/2023	07:51:00 PM	CL s4021322.D	1	10.83	2
12	phenanthrene	0.066621837	02/13/2023	07:51:00 PM	CL s4021322.D	1	10.83	2
8	acenaphthene	0	02/13/2023	07:51:00 PM	CL s4021322.D	1	10.83	2
7	acenaphthylene	0	02/13/2023	07:51:00 PM	CL s4021322.D	1	10.83	2
10	fluorene	0	02/13/2023	07:51:00 PM	CL s4021322.D	1	10.83	2
13	anthracene	0	02/13/2023	07:51:00 PM	CL s4021322.D	1	10.83	2
15	fluoranthene	0.045598517	02/13/2023	07:51:00 PM	CL s4021322.D	1	10.83	2
17	pyrene	0.028385538	02/13/2023	07:51:00 PM	CL s4021322.D	1	10.83	2
16	benzo(a)anthracene	0.01284455	02/13/2023	07:51:00 PM	CL s4021322.D	1	10.83	2
19	chrysene	0.02314087	02/13/2023	07:51:00 PM	CL s4021322.D	1	10.83	2
21	benzo(b)fluoranthene	0	02/13/2023	07:51:00 PM	CL s4021322.D	1	10.83	2
22	benzo(k)fluoranthene	0	02/13/2023	07:51:00 PM	CL s4021322.D	1	10.83	2
23	benzo(a)pyrene	0.011733475	02/13/2023	07:51:00 PM	CL s4021322.D	1	10.83	2
24	indeno(1,2,3-cd)pyrene	0	02/13/2023	07:51:00 PM	CL s4021322.D	1	10.83	2
25	dibenzo(a,h)anthracene	0	02/13/2023	07:51:00 PM	CL s4021322.D	1	10.83	2
26	benzo(g,h,i)perylene	0	02/13/2023	07:51:00 PM	CL s4021322.D	1	10.83	2
28	C11-C22 Aromatics	27.62633898	2/13/2023	06:06:00 PM	DBV s6021330.D	1	10.83	2
9	C9-C18 Aliphatics	7.940544458	2/13/2023	06:06:00 PM	DBV s6021329.D	1	10.83	2
20	C19-C36 Aliphatics	20.8460415	2/13/2023	06:06:00 PM	DBV s6021329.D	1	10.83	2
	Adjusted C11-C22 Aromatics	27.19561822	2/13/2023	06:06:00 PM	DBV s6021330.D	1	10.83	2

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Feb23\021323\
Data File : s4021322.D
Acq On : 13 Feb 2023 07:51 pm
Operator : cl
Sample : 64446-03 targets x1
Misc : aro frac
ALS Vial : 22 Sample Multiplier: 1

CC 2/15/23
10.83/2
2/7/22 /

Quant Time: Feb 14 13:16:07 2023
Quant Method : X:\S4\methods\S4PAH020723A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Wed Feb 08 14:08:43 2023
Response via : Initial Calibration

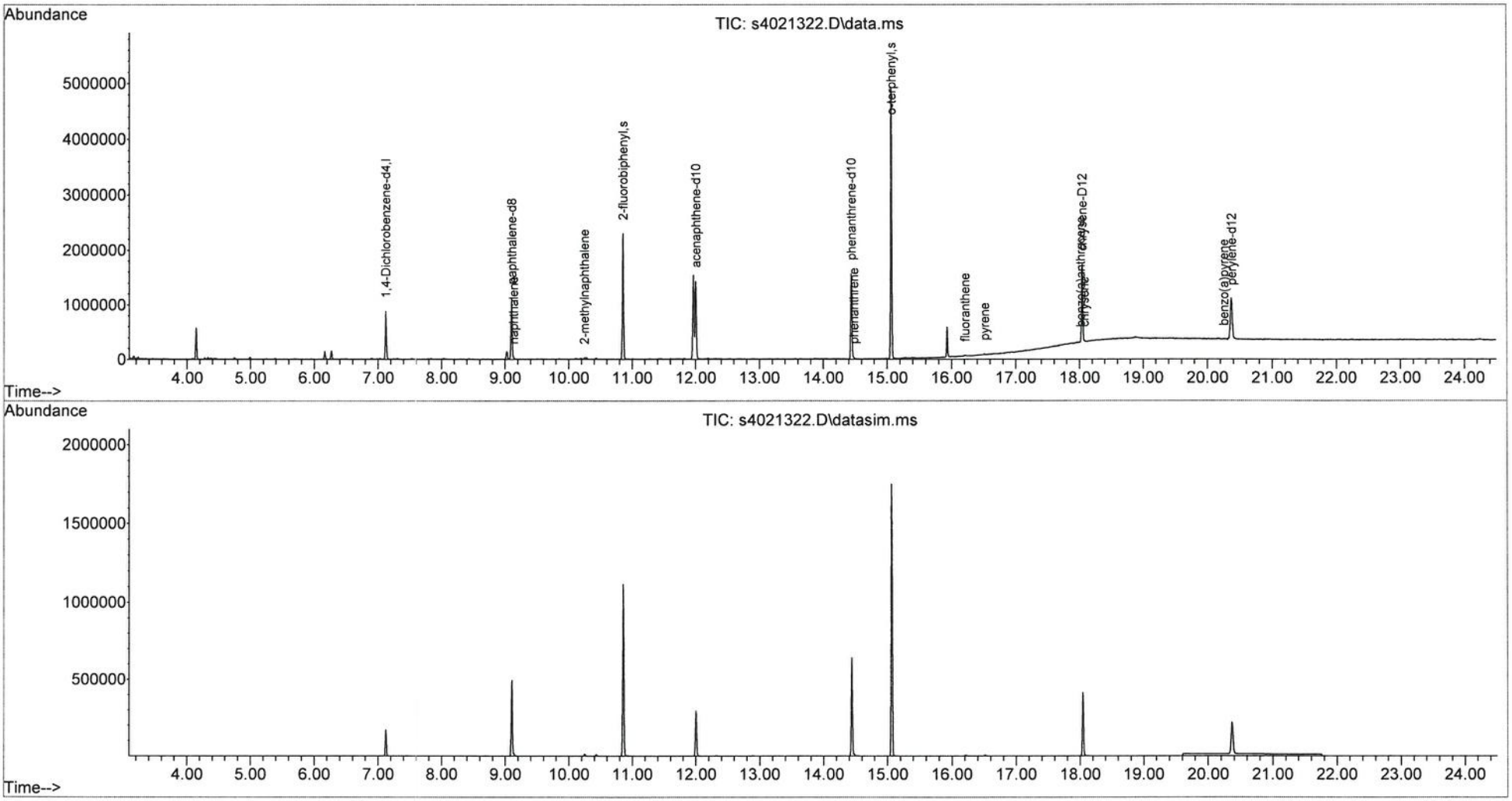
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	7.121	152	208333	10.00	ug/mL	0.00
2) naphthalene-d8	9.103	136	762536	10.00	ug/mL	0.00
5) acenaphthene-d10	12.005	164	462186	10.00	ug/mL	0.00
11) phenanthrene-d10	14.439	188	901005	10.00	ug/mL	0.00
16) chrysene-D12	18.045	240	646547	10.00	ug/mL	0.00
20) perylene-d12	20.371	264	547263	10.00	ug/mL	0.00
System Monitoring Compounds						
6) 2-fluorobiphenyl	10.857	172	1065026	14.60	ug/mL	0.00
Spiked Amount 100.000			Recovery = 14.60%			
14) o-terphenyl	15.069	230	1234268	24.55	ug/mL	0.00
Spiked Amount 100.000			Recovery = 24.55%			
Target Compounds						Qvalue
3) naphthalene	9.134	128	11764	0.107	ug/mL	98
4) 2-methylnaphthalene	10.245	142	9676	0.136	ug/mL	94
8) acenaphthene	12.040	154	649m	BC	Below Cal	
12) phenanthrene	14.480	178	10429	0.067	ug/mL	97
13) anthracene	14.552	178	1128m	BC	Below Cal	
15) fluoranthene	16.209	202	6538	0.046	ug/mL#	91
17) pyrene	16.512	202	6584	0.028	ug/mL#	86
18) benzo(a)anthracene	18.020	228	5163m	BC	0.013 ug/mL	
19) chrysene	18.076	228	4694	0.023	ug/mL	98
21) Benzo(b)fluoranthene	19.654	252	1277	Below Cal	#	1
22) benzo(k)fluoranthene	19.685	252	1802	Below Cal	#	56
23) benzo(a)pyrene	20.253	252	926	0.012	ug/mL#	1

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Feb23\021323\
Data File : s4021322.D
Acq On : 13 Feb 2023 07:51 pm
Operator : cl
Sample : 64446-03 targets x1
Misc : aro frac
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Feb 14 13:16:07 2023
Quant Method : X:\S4\methods\S4PAH020723A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Wed Feb 08 14:08:43 2023
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : X:\S6\2023\Feb23\021323\
Data File : s6021330.D
Signal(s) : FID1A.ch
Acq On : 13 Feb 2023 06:06 pm
Operator : dbv
Sample : 64446-03 aro x1
Misc :
ALS Vial : 15 Sample Multiplier: 1

Integration File: rteint.p
Quant Time: Feb 14 14:11:22 2023
Quant Method : X:\S6\methods\S6ARO041322L.M
Quant Title : S6 EPH Aromatics
QLast Update : Thu Apr 14 11:03:30 2022
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc Units
	System Monitoring Compounds			
3) S	SS 2-fluorobiphenyl (...	8.573	2566329	17.548 ug/mL
Spiked Amount	20.000		Recovery =	87.74%
5) S	SS 2-bromonaphthalene...	9.602	1726484	17.464 ug/mL
Spiked Amount	20.000		Recovery =	87.32%
10) S	SS ortho-terphenyl (OTP)	12.716	4794376	29.894 ug/mL
Spiked Amount	50.000		Recovery =	59.79%
11) S	SS 1-chloro-otadecane...	13.811	603549	4.343 ug/mL
Spiked Amount	50.000		Recovery =	8.69%
	Target Compounds			
1)	naphthalene	0.000	0	N.D. ug/mLd
2)	2-methylnaphthalene	0.000	0	N.D. ug/mLd
4)	acenaphthylene	0.000	0	N.D. ug/mLd
6)	acenaphthene	0.000	0	N.D. ug/mLd
7)	fluorene	0.000	0	N.D. ug/mLd
8)	phenanthrene	0.000	0	N.D. ug/mLd
9)	anthracene	0.000	0	N.D. ug/mLd
12)	fluoranthene	0.000	0	N.D. ug/mLd
13)	pyrene	0.000	0	N.D. ug/mLd
14)	benzo(a)anthracene	0.000	0	N.D. ug/mLd
15)	chrysene	0.000	0	N.D. ug/mLd
16)	benzo(b&k)fluoranthenes	0.000	0	N.D. ug/mLd
17)	benzo(a)pyrene	0.000	0	N.D. ug/mLd
18)	indeno&dibenzo	0.000	0	N.D. ug/mLd
19)	benzo(g,h,i)perylene	0.000	0	N.D. ug/mLd
20) H	C11-C22 Aromatics	12.905	5436362	27.626 ug/mLm

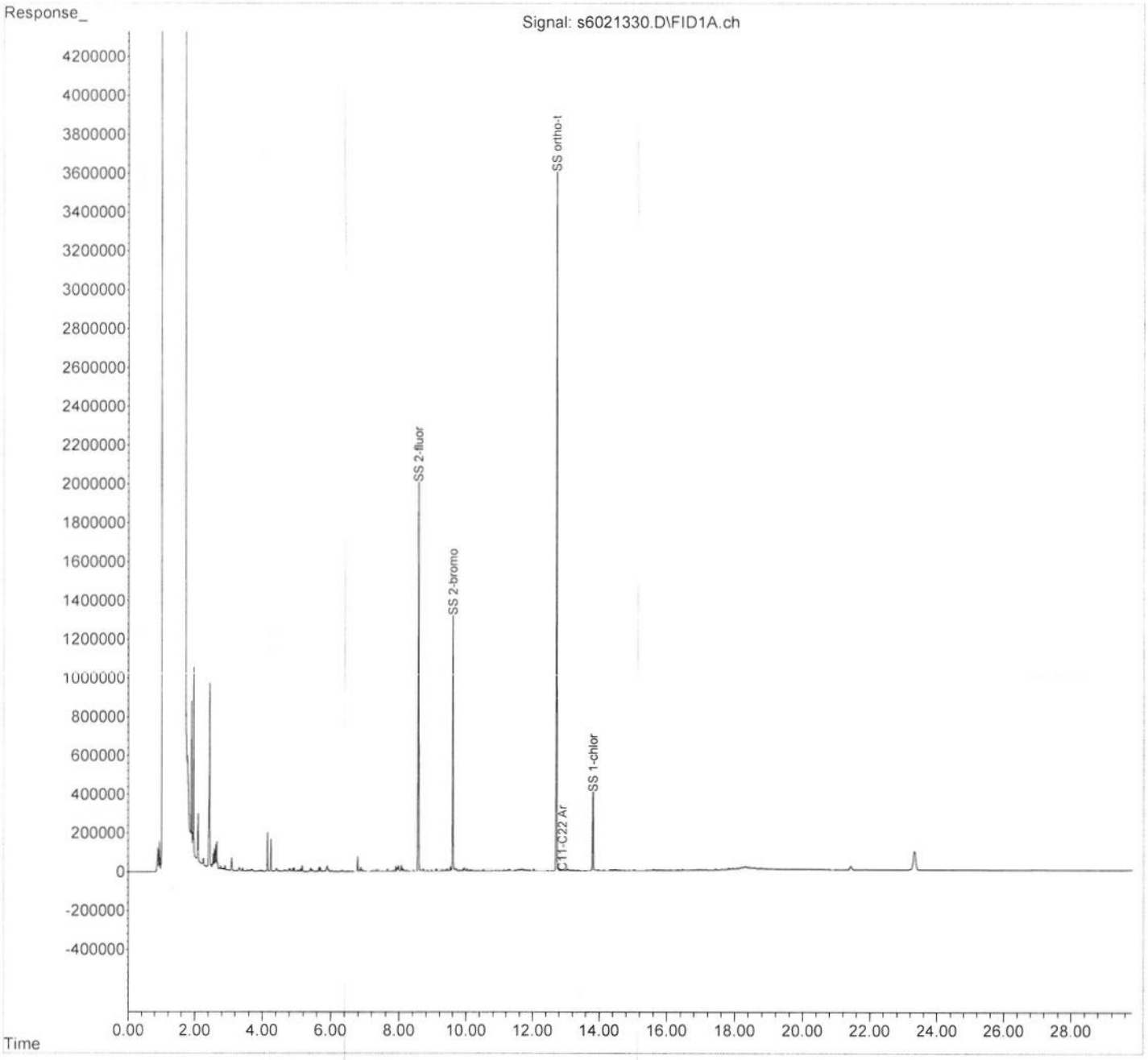
RI = Range Integration

(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : X:\S6\2023\Feb23\021323\
Data File : s6021330.D
Signal(s) : FID1A.ch
Acq On : 13 Feb 2023 06:06 pm
Operator : dbv
Sample : 64446-03 aro x1
Misc :
ALS Vial : 15 Sample Multiplier: 1

Integration File: rteint.p
Quant Time: Feb 14 14:11:22 2023
Quant Method : X:\S6\methods\S6ARO041322L.M
Quant Title : S6 EPH Aromatics
QLast Update : Thu Apr 14 11:03:30 2022
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

2/14/23 @ 13:34
DonnaV

Data Path : X:\S6\2023\Feb23\021323.SEC\
Data File : s6021329.D
Signal(s) : FID2B.ch
Acq On : 13 Feb 2023 06:06 pm
Operator : dbv
Sample : 64446-03 ali x1
Misc :
ALS Vial : 90 Sample Multiplier: 1

Integration File: rteint.p
Quant Time: Feb 14 10:14:02 2023
Quant Method : X:\S6\methods\S6ALI041322F.M
Quant Title : S6 EPH Aliphatics
QLast Update : Thu Apr 14 09:42:50 2022
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :

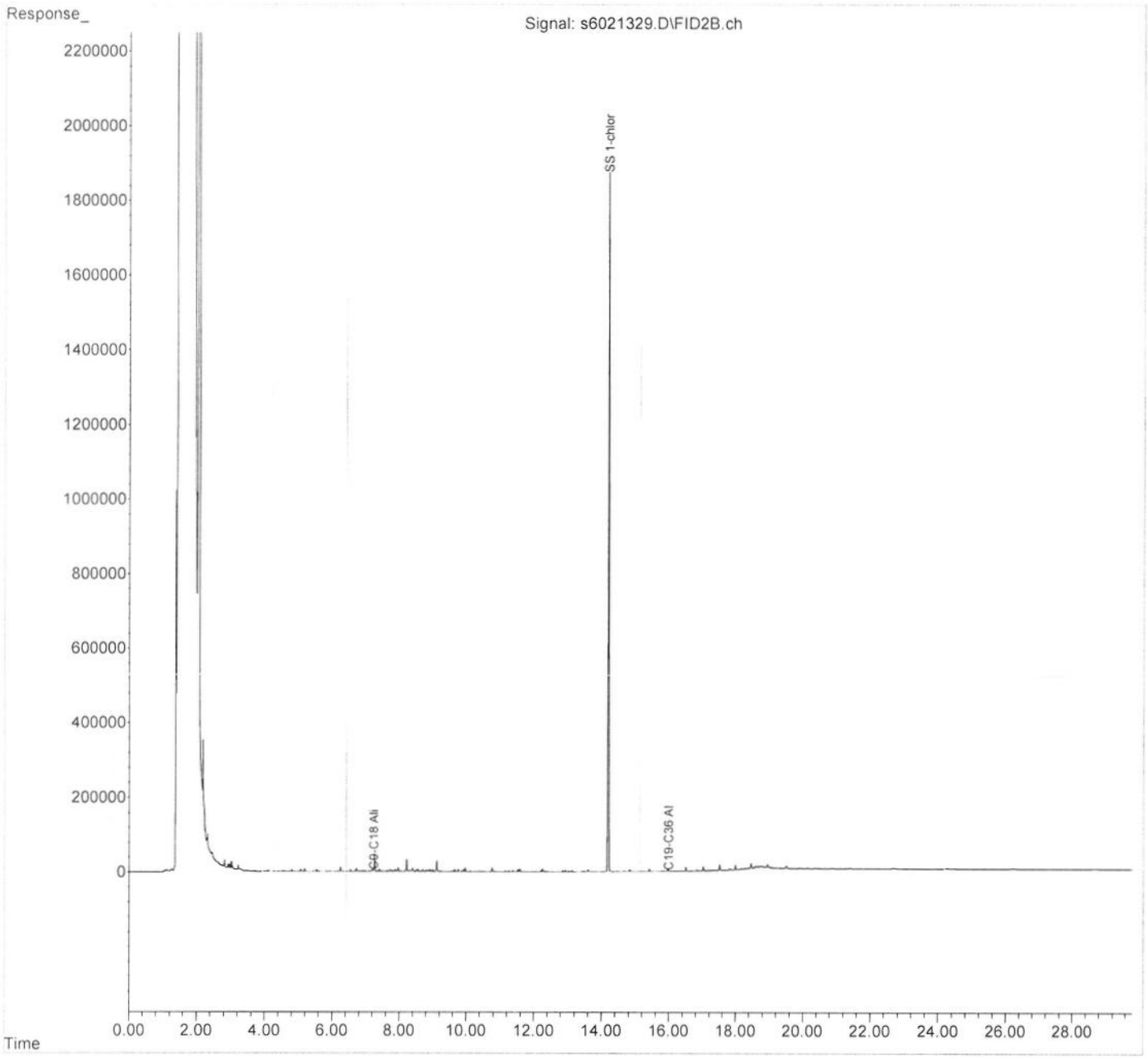
	Compound	R.T.	Response	Conc	Units	
	System Monitoring Compounds					
4) S	SS 2-fluorobiphenyl (...	0.000	0	N.D.	ug/mLd	
Spiked Amount	20.000		Recovery =	0.00%		
6) S	SS 2-bromonaphthalene...	0.000	0	N.D.	ug/mLd	
Spiked Amount	20.000		Recovery =	0.00%		
11) S	SS ortho-terphenyl (OTP)	0.000	0	N.D.	ug/mLd	
Spiked Amount	50.000		Recovery =	0.00%		
13) S	SS 1-chloro-octadecan...	14.201f	2708092	21.563	ug/mL	
Spiked Amount	50.000		Recovery =	43.13%		
	Target Compounds					
1)	C9 n-Nonane	0.000	0	N.D.	ug/mLd	
2)	C10 n-Decane	0.000	0	N.D.	ug/mLd	
3)	C12 n-Dodecane	0.000	0	N.D.	ug/mLd	
5)	C14 n-Tetradecane	0.000	0	N.D.	ug/mLd	
7)	C16 n-Hexadecane	0.000	0	N.D.	ug/mLd	
8)	C18 n-Octadecane	0.000	0	N.D.	ug/mLd	
9) H	C9-C18 Aliphatics	7.237	1318744	7.941	ug/mLm	RI = Range Integration
10)	C19 n-Nonadecane	0.000	0	N.D.	ug/mLd	
12)	C20 n-Eicosane	0.000	0	N.D.	ug/mLd	
14)	C22 n-Docosane	0.000	0	N.D.	ug/mLd	
15)	C24 n-Tetracosane	0.000	0	N.D.	ug/mLd	
16)	C26 n-Hexacosane	0.000	0	N.D.	ug/mLd	
17)	C28 n-Octacosane	0.000	0	N.D.	ug/mLd	
18)	C30 n-Triacontane	0.000	0	N.D.	ug/mLd	
19)	C36 n-Hexatriacontane	0.000	0	N.D.	ug/mLd	
20) H	C19-C36 Aliphatics	16.000	3203045	20.846	ug/mLm	RI = Range Integration

(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : X:\S6\2023\Feb23\021323.SEC\
Data File : s6021329.D
Signal(s) : FID2B.ch
Acq On : 13 Feb 2023 06:06 pm
Operator : dbv
Sample : 64446-03 ali x1
Misc :
ALS Vial : 90 Sample Multiplier: 1

Integration File: rteint.p
Quant Time: Feb 14 10:14:02 2023
Quant Method : X:\S6\methods\S6ALI041322F.M
Quant Title : S6 EPH Aliphatics
QLast Update : Thu Apr 14 09:42:50 2022
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :



wkst 0809

This File:	L:\SVOA\Excel Reports\PCB\101719\S3101710
Analysis Group:	PCB
Field ID:	SY-SB4R-1 18001468
Sample:	64446-01 pcb x1 Dow
Misc:	CRE
Import File Name	s5 PCBs QC16081S Sox DOD
TestGroupID	E8082PCBsox_S
Aqueous or Soil? (A or S)	S
Percent Solid (%)	86.8
Prep Date	Wednesday, March 22, 2023
Initial Weight/Volume	5.54
Volume	5
Lab#:	64446-001
AnalysisDate:	Thursday, March 23, 2023
AnalysisTime:	19:58
Dilution:	1
AnalyzedBy:	DBV s5032339.D
QC_Code:	
Prep#	16081

Reviewer Checks:

- Quant Report: Reviewed, Analyst Initials & Date
- Chromatogram Checked, Major peaks identified
- Prep data checked: weight, volume, %solid, Prep date
- Field ID consistent with data and any field replicates
- Results consistent with any re-runs & internal QC
- Correct dilution and reason clear or noted
- Reason for reanalysis documented
- Surrogates pass or flagged & noted
- Flags checked (Expiration, Over Cal)
- Other QC failures, estimates or interferences documented
- Spot checked Reported Result with Quant Report
- Checked Audit flagged data in LIMS
- Correct values averaged
- Column RPD is OK or both results included
- Correct column reported

Notes:

Reviewer Initials & Date: gl 3/24/23

#	Surrogate Standards	Concentration (ug/mL)	Recovery	Flag	QC Limits	Report Column
1	SS Tetrachloro-m-xylene	1.55	78%		30-150	1
47	SS Decachlorobiphenyl	1.71	85%		30-150	1

#	AnalyteName	Concentration (ug/mL)	Flag	Report Column
2	Ar-1016	0.00		
7	Ar-1221	0.00		
12	Ar-1232	0.00		
17	Ar-1242	0.00		
22	Ar-1248	0.00		
27	Ar-1254	0.00		
32	Ar-1260	0.00		
37	Ar-1262	0.00		
42	Ar-1268	0.00		

Aroclor	Column #1 average	Column #2 average	Column RPD limit 40%	%rsd	Column #1 1	2	3	4	5
Ar-1016	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1221	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1232	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1242	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1248	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1254	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1260	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1262	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1268	0.00	0.00			0.00	0.00	0.00	0.00	0.00
SS Tetrac	1.55	1.36							
SS Decac	1.71	1.60							

	%rsd	Column #2 1	2	3	4	5
Ar-1016		0.00	0.00	0.00	0.00	0.00
Ar-1221		0.00	0.00	0.00	0.00	0.00
Ar-1232		0.00	0.00	0.00	0.00	0.00
Ar-1242		0.00	0.00	0.00	0.00	0.00
Ar-1248		0.00	0.00	0.00	0.00	0.00
Ar-1254		0.00	0.00	0.00	0.00	0.00
Ar-1260		0.00	0.00	0.00	0.00	0.00
Ar-1262		0.00	0.00	0.00	0.00	0.00
Ar-1268		0.00	0.00	0.00	0.00	0.00

Absolute Resource Associates

Quantitation Report (QT Reviewed)

Data Path : X:\S5\2023\March23\032323\
Data File : s5032339.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 23 Mar 2023 07:58 pm
Operator : dbv
Sample : 64446-01 pcb x1
Misc :
ALS Vial : 39 Sample Multiplier: 1

Prep: 03/22/23
5.54g→5mL

3/24/23 @ 19:14
DonnaV

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Mar 24 13:18:42 2023
Quant Method : X:\S5\methods\S5PCB030623F.M
Quant Title : SVOA03 Method 8082A
QLast Update : Fri Mar 24 13:03:52 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
	System Monitoring Compounds							
1)	S SS Tetrac...	2.744	2.616	578.8E6	580.9E6	1.554m	1.360m	BC = Baseline Correction
	Spiked Amount	5.000 Range	30 - 150	Recovery	=	31.08%	27.20%#	
47)	S SS Decach...	7.450	7.590	416.4E6	418.6E6	1.707m	1.598m	BC = Baseline Correction
	Spiked Amount	5.000 Range	30 - 150	Recovery	=	34.14%	31.96%	
	Target Compounds							
2)	L1 Ar-1016	0.000	0.000	0	0	N.D. d	N.D. d	
3)	L1 Ar-1016 {2}	0.000	0.000	0	0	N.D. d	N.D. d	
4)	L1 Ar-1016 {3}	0.000	0.000	0	0	N.D. d	N.D. d	
5)	L1 Ar-1016 {4}	0.000	0.000	0	0	N.D. d	N.D. d	
6)	L1 Ar-1016 {5}	0.000	0.000	0	0	N.D. d	N.D. d	
7)	L2 Ar-1221	0.000	0.000	0	0	N.D. d	N.D. d	
8)	L2 Ar-1221 {2}	0.000	0.000	0	0	N.D. d	N.D. d	
9)	L2 Ar-1221 {3}	0.000	0.000	0	0	N.D. d	N.D. d	
10)	L2 Ar-1221 {4}	0.000	0.000	0	0	N.D. d	N.D. d	
11)	L2 Ar-1221 {5}	0.000	0.000	0	0	N.D. d	N.D. d	
12)	L3 Ar-1232	0.000	0.000	0	0	N.D. d	N.D. d	
13)	L3 Ar-1232 {2}	0.000	0.000	0	0	N.D. d	N.D. d	
14)	L3 Ar-1232 {3}	0.000	0.000	0	0	N.D. d	N.D. d	
15)	L3 Ar-1232 {4}	0.000	0.000	0	0	N.D. d	N.D. d	
16)	L3 Ar-1232 {5}	0.000	0.000	0	0	N.D. d	N.D. d	
17)	L4 Ar-1242	0.000	0.000	0	0	N.D. d	N.D. d	
18)	L4 Ar-1242 {2}	0.000	0.000	0	0	N.D. d	N.D. d	
19)	L4 Ar-1242 {3}	0.000	0.000	0	0	N.D. d	N.D. d	
20)	L4 Ar-1242 {4}	0.000	0.000	0	0	N.D. d	N.D. d	
21)	L4 Ar-1242 {5}	0.000	0.000	0	0	N.D. d	N.D. d	
22)	L5 Ar-1248	0.000	0.000	0	0	N.D. d	N.D. d	
23)	L5 Ar-1248 {2}	0.000	0.000	0	0	N.D. d	N.D. d	
24)	L5 Ar-1248 {3}	0.000	0.000	0	0	N.D. d	N.D. d	
25)	L5 Ar-1248 {4}	0.000	0.000	0	0	N.D. d	N.D. d	
26)	L5 Ar-1248 {5}	0.000	0.000	0	0	N.D. d	N.D. d	
27)	L6 Ar-1254	0.000	0.000	0	0	N.D. d	N.D. d	
28)	L6 Ar-1254 {2}	0.000	0.000	0	0	N.D. d	N.D. d	
29)	L6 Ar-1254 {3}	0.000	0.000	0	0	N.D. d	N.D. d	
30)	L6 Ar-1254 {4}	0.000	0.000	0	0	N.D. d	N.D. d	
31)	L6 Ar-1254 {5}	0.000	0.000	0	0	N.D. d	N.D. d	
32)	L7 Ar-1260	0.000	0.000	0	0	N.D. d	N.D. d	
33)	L7 Ar-1260 {2}	0.000	0.000	0	0	N.D. d	N.D. d	
34)	L7 Ar-1260 {3}	0.000	0.000	0	0	N.D. d	N.D. d	
35)	L7 Ar-1260 {4}	0.000	0.000	0	0	N.D. d	N.D. d	
36)	L7 Ar-1260 {5}	0.000	0.000	0	0	N.D. d	N.D. d	
37)	L8 Ar-1262	0.000	0.000	0	0	N.D. d	N.D. d	
38)	L8 Ar-1262 {2}	0.000	0.000	0	0	N.D. d	N.D. d	

Data Path : X:\S5\2023\March23\032323\
Data File : s5032339.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 23 Mar 2023 07:58 pm
Operator : dbv
Sample : 64446-01 pcb x1
Misc :
ALS Vial : 39 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Mar 24 13:18:42 2023
Quant Method : X:\S5\methods\S5PCB030623F.M
Quant Title : SVOA03 Method 8082A
QLast Update : Fri Mar 24 13:03:52 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL
39)	L8 Ar-1262 {3}	0.000	0.000	0	0	N.D. d	N.D. d
40)	L8 Ar-1262 {4}	0.000	0.000	0	0	N.D. d	N.D. d
41)	L8 Ar-1262 {5}	0.000	0.000	0	0	N.D. d	N.D. d
42)	L9 Ar-1268	0.000	0.000	0	0	N.D. d	N.D. d
43)	L9 Ar-1268 {2}	0.000	0.000	0	0	N.D. d	N.D. d
44)	L9 Ar-1268 {3}	0.000	0.000	0	0	N.D. d	N.D. d
45)	L9 Ar-1268 {4}	0.000	0.000	0	0	N.D. d	N.D. d
46)	L9 Ar-1268 {5}	0.000	0.000	0	0	N.D. d	N.D. d

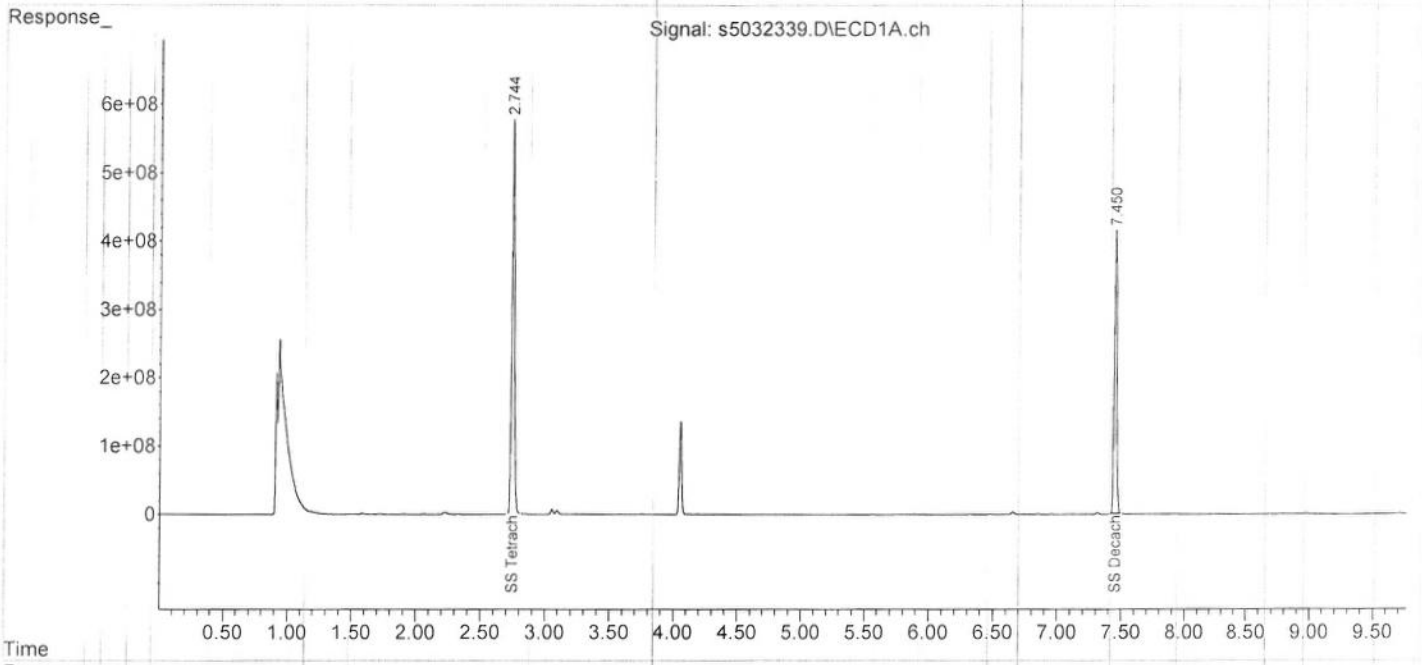
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

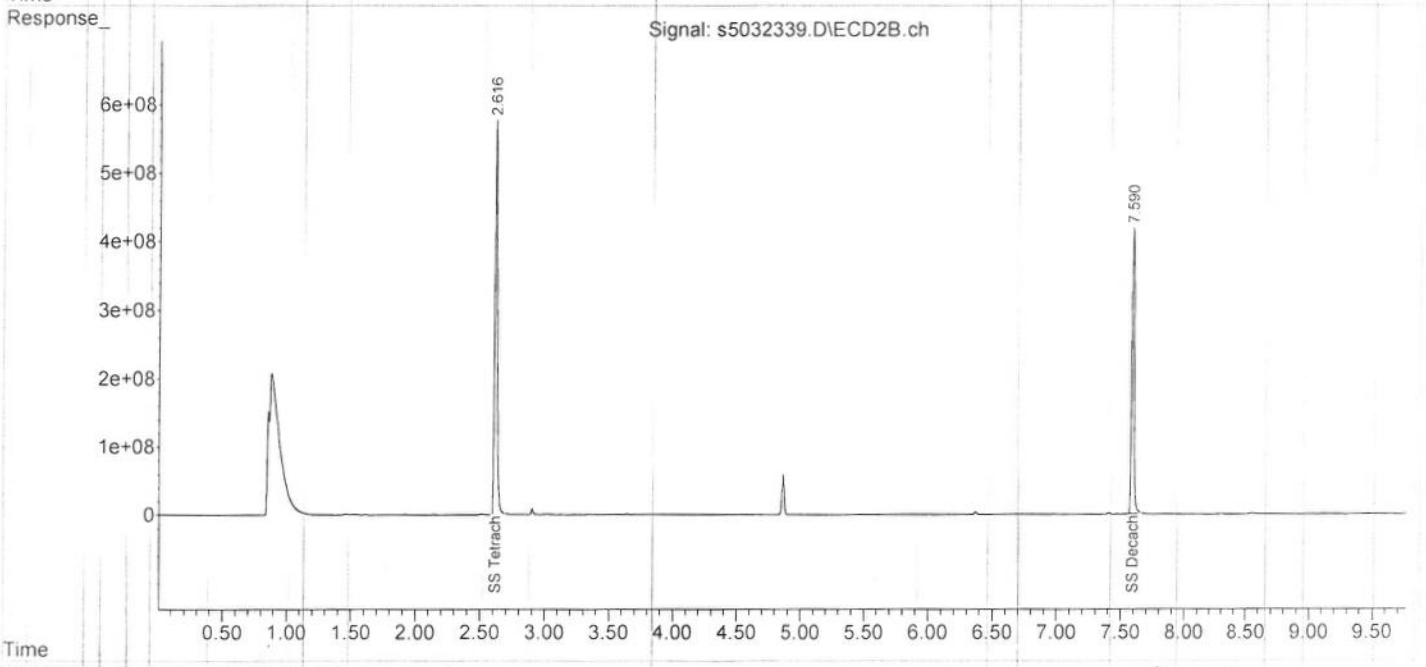
Quantitation Report (QT Reviewed)

Data Path : X:\S5\2023\March23\032323\
Data File : s5032339.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 23 Mar 2023 07:58 pm
Operator : dbv
Sample : 64446-01 pcb x1
Misc :
ALS Vial : 39 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Mar 24 13:18:42 2023
Quant Method : X:\S5\methods\S5PCB030623F.M
Quant Title : SVOA03 Method 8082A
QLast Update : Fri Mar 24 13:03:52 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





This File:	L:\SVOA\Excel Reports\PCB\032323\s5032340
Analysis Group:	PCB
Field ID:	SY-SB4R-10 18001468
Sample:	64446-02 pcb x1 Dow
Misc:	CRE
Import File Name	s5 PCBs QC16081S Sox DOD
TestGroupID	E8082PCBsox_S
Aqueous or Soil? (A or S)	S
Percent Solid (%)	87.65
Prep Date	Wednesday, March 22, 2023
Initial Weight/Volume	5.07
Volume	5
Lab#:	64446-002
AnalysisDate:	Thursday, March 23, 2023
AnalysisTime:	20:11
Dilution:	1
AnalyzedBy:	DBV s5032340.D
QC_Code:	
Prep#	16081

Reviewer Checks:

- Quant Report: Reviewed, Analyst Initials & Date
- Chromatogram Checked, Major peaks identified
- Prep data checked: weight, volume, %solid, Prep date
- Field ID consistent with data and any field replicates
- Results consistent with any re-runs & internal QC
- Correct dilution and reason clear or noted
- Reason for reanalysis documented
- Surrogates pass or flagged & noted
- Flags checked (Expiration, Over Cal)
- Other QC failures, estimates or interferences documented
- Spot checked Reported Result with Quant Report
- Checked Audit flagged data in LIMS
- Correct values averaged
- Column RPD is OK or both results included
- Correct column reported

Notes:

Reviewer Initials & Date: gj 3/30/23

#	Surrogate Standards	Concentration (ug/mL)	Recovery	Flag	QC Limits	Report Column
1	SS Tetrachloro-m-xylene	1.59	79%		30-150	1
47	SS Decachlorobiphenyl	1.53	77%		30-150	1

#	AnalyteName	Concentration (ug/mL)	Flag	Report Column
2	Ar-1016	0.00		
7	Ar-1221	0.00		
12	Ar-1232	0.00		
17	Ar-1242	0.00		
22	Ar-1248	0.00		
27	Ar-1254	0.00		
32	Ar-1260	0.00		
37	Ar-1262	0.00		
42	Ar-1268	0.00		

Aroclor	Column #1 average	Column #2 average	Column RPD limit 40%	%rsd	Column #1 1	2	3	4	5
Ar-1016	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1221	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1232	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1242	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1248	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1254	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1260	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1262	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1268	0.00	0.00			0.00	0.00	0.00	0.00	0.00
SS Tetra	1.59	1.42							
SS Deca	1.53	1.45							

	%rsd	Column #2 1	2	3	4	5
Ar-1016		0.00	0.00	0.00	0.00	0.00
Ar-1221		0.00	0.00	0.00	0.00	0.00
Ar-1232		0.00	0.00	0.00	0.00	0.00
Ar-1242		0.00	0.00	0.00	0.00	0.00
Ar-1248		0.00	0.00	0.00	0.00	0.00
Ar-1254		0.00	0.00	0.00	0.00	0.00
Ar-1260		0.00	0.00	0.00	0.00	0.00
Ar-1262		0.00	0.00	0.00	0.00	0.00
Ar-1268		0.00	0.00	0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : X:\S5\2023\March23\032323\
Data File : s5032340.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 23 Mar 2023 08:11 pm
Operator : dbv
Sample : 64446-02 pcb x1
Misc :
ALS Vial : 40 Sample Multiplier: 1

3/24/23 @ 19:14
DonnaV

Prep: 03/22/23
5.07g→5mL

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Mar 24 13:18:46 2023
Quant Method : X:\S5\methods\S5PCB030623F.M
Quant Title : SVOA03 Method 8082A
QLast Update : Fri Mar 24 13:03:52 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
	System Monitoring Compounds							
1)	S SS Tetrac...	2.744	2.615	589.2E6	600.2E6	1.588m	1.415m	BC = Baseline Correction
	Spiked Amount	5.000 Range	30 - 150	Recovery =		31.76%	28.30%#	
47)	S SS Decach...	7.450	7.589	381.2E6	387.0E6	1.533m	1.453m	BC = Baseline Correction
	Spiked Amount	5.000 Range	30 - 150	Recovery =		30.66%	29.06%#	
	Target Compounds							
2)	L1 Ar-1016	0.000	0.000	0	0	N.D. d	N.D. d	
3)	L1 Ar-1016 {2}	0.000	0.000	0	0	N.D. d	N.D. d	
4)	L1 Ar-1016 {3}	0.000	0.000	0	0	N.D. d	N.D. d	
5)	L1 Ar-1016 {4}	0.000	0.000	0	0	N.D. d	N.D. d	
6)	L1 Ar-1016 {5}	0.000	0.000	0	0	N.D. d	N.D. d	
7)	L2 Ar-1221	0.000	0.000	0	0	N.D. d	N.D. d	
8)	L2 Ar-1221 {2}	0.000	0.000	0	0	N.D. d	N.D. d	
9)	L2 Ar-1221 {3}	0.000	0.000	0	0	N.D. d	N.D. d	
10)	L2 Ar-1221 {4}	0.000	0.000	0	0	N.D. d	N.D. d	
11)	L2 Ar-1221 {5}	0.000	0.000	0	0	N.D. d	N.D. d	
12)	L3 Ar-1232	0.000	0.000	0	0	N.D. d	N.D. d	
13)	L3 Ar-1232 {2}	0.000	0.000	0	0	N.D. d	N.D. d	
14)	L3 Ar-1232 {3}	0.000	0.000	0	0	N.D. d	N.D. d	
15)	L3 Ar-1232 {4}	0.000	0.000	0	0	N.D. d	N.D. d	
16)	L3 Ar-1232 {5}	0.000	0.000	0	0	N.D. d	N.D. d	
17)	L4 Ar-1242	0.000	0.000	0	0	N.D. d	N.D. d	
18)	L4 Ar-1242 {2}	0.000	0.000	0	0	N.D. d	N.D. d	
19)	L4 Ar-1242 {3}	0.000	0.000	0	0	N.D. d	N.D. d	
20)	L4 Ar-1242 {4}	0.000	0.000	0	0	N.D. d	N.D. d	
21)	L4 Ar-1242 {5}	0.000	0.000	0	0	N.D. d	N.D. d	
22)	L5 Ar-1248	0.000	0.000	0	0	N.D. d	N.D. d	
23)	L5 Ar-1248 {2}	0.000	0.000	0	0	N.D. d	N.D. d	
24)	L5 Ar-1248 {3}	0.000	0.000	0	0	N.D. d	N.D. d	
25)	L5 Ar-1248 {4}	0.000	0.000	0	0	N.D. d	N.D. d	
26)	L5 Ar-1248 {5}	0.000	0.000	0	0	N.D. d	N.D. d	
27)	L6 Ar-1254	0.000	0.000	0	0	N.D. d	N.D. d	
28)	L6 Ar-1254 {2}	0.000	0.000	0	0	N.D. d	N.D. d	
29)	L6 Ar-1254 {3}	0.000	0.000	0	0	N.D. d	N.D. d	
30)	L6 Ar-1254 {4}	0.000	0.000	0	0	N.D. d	N.D. d	
31)	L6 Ar-1254 {5}	0.000	0.000	0	0	N.D. d	N.D. d	
32)	L7 Ar-1260	0.000	0.000	0	0	N.D. d	N.D. d	
33)	L7 Ar-1260 {2}	0.000	0.000	0	0	N.D. d	N.D. d	
34)	L7 Ar-1260 {3}	0.000	0.000	0	0	N.D. d	N.D. d	
35)	L7 Ar-1260 {4}	0.000	0.000	0	0	N.D. d	N.D. d	
36)	L7 Ar-1260 {5}	0.000	0.000	0	0	N.D. d	N.D. d	
37)	L8 Ar-1262	0.000	0.000	0	0	N.D. d	N.D. d	
38)	L8 Ar-1262 {2}	0.000	0.000	0	0	N.D. d	N.D. d	

Quantitation Report (QT Reviewed)

Data Path : X:\S5\2023\March23\032323\
Data File : s5032340.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 23 Mar 2023 08:11 pm
Operator : dbv
Sample : 64446-02 pcb x1
Misc :
ALS Vial : 40 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Mar 24 13:18:46 2023
Quant Method : X:\S5\methods\S5PCB030623F.M
Quant Title : SVOA03 Method 8082A
QLast Update : Fri Mar 24 13:03:52 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL
39)	L8 Ar-1262 {3}	0.000	0.000	0	0	N.D. d	N.D. d
40)	L8 Ar-1262 {4}	0.000	0.000	0	0	N.D. d	N.D. d
41)	L8 Ar-1262 {5}	0.000	0.000	0	0	N.D. d	N.D. d
42)	L9 Ar-1268	0.000	0.000	0	0	N.D. d	N.D. d
43)	L9 Ar-1268 {2}	0.000	0.000	0	0	N.D. d	N.D. d
44)	L9 Ar-1268 {3}	0.000	0.000	0	0	N.D. d	N.D. d
45)	L9 Ar-1268 {4}	0.000	0.000	0	0	N.D. d	N.D. d
46)	L9 Ar-1268 {5}	0.000	0.000	0	0	N.D. d	N.D. d

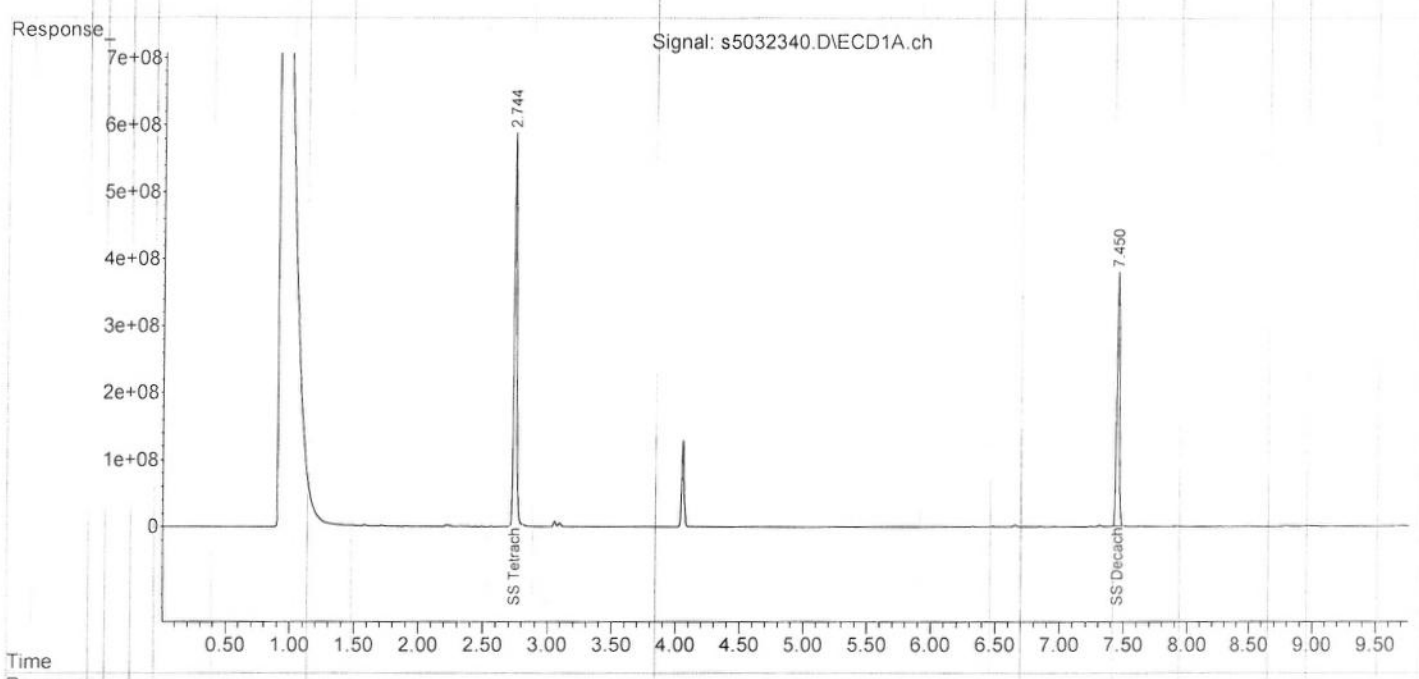
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

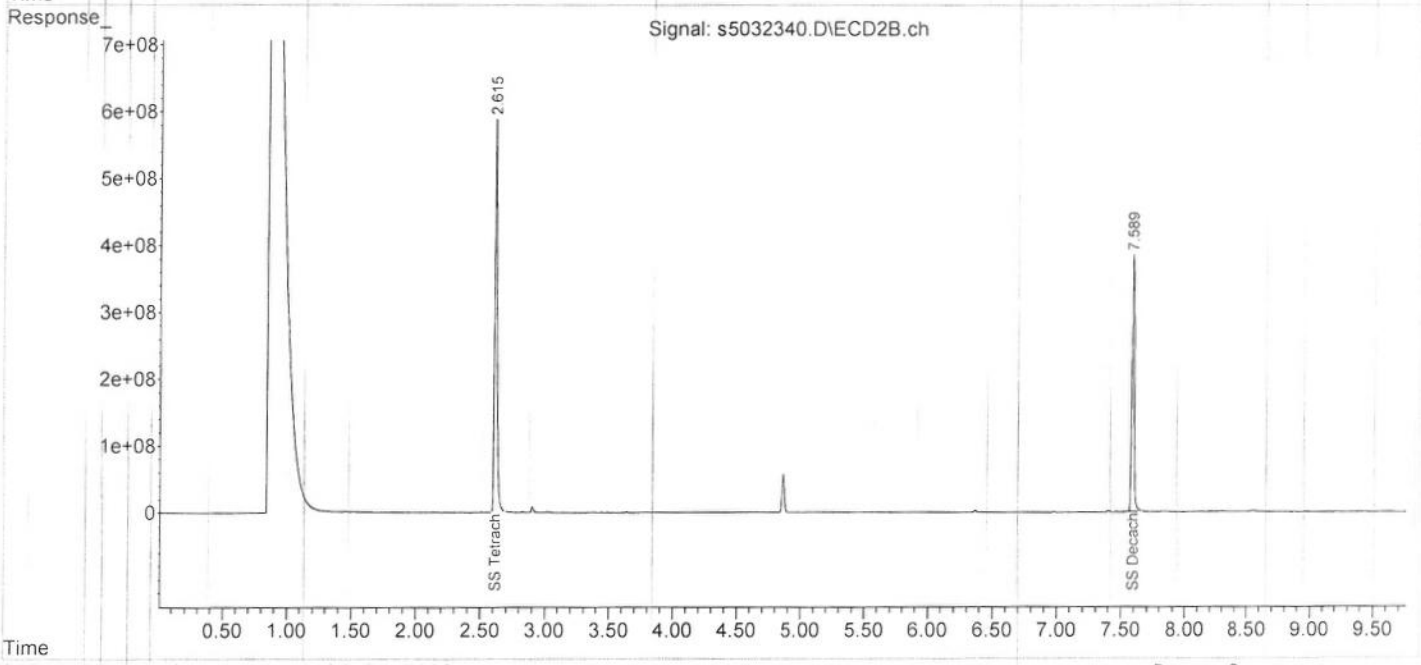
Quantitation Report (QT Reviewed)

Data Path : X:\S5\2023\March23\032323\
Data File : s5032340.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 23 Mar 2023 08:11 pm
Operator : dbv
Sample : 64446-02 pcb x1
Misc :
ALS Vial : 40 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Mar 24 13:18:46 2023
Quant Method : X:\S5\methods\S5PCB030623F.M
Quant Title : SVOA03 Method 8082A
QLast Update : Fri Mar 24 13:03:52 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





This File:	L:\SVOA\Excel Reports\PCB\032323\s5032341
Analysis Group:	PCB
Field ID:	SY-SB4R-2 18001468
Sample:	64446-03 pcb x1 Dow
Misc:	CRE
Import File Name	s5 PCBs QC16081S Sox DOD
TestGroupID	E8082PCBsox_S
Aqueous or Soil? (A or S)	S
Percent Solid (%)	80.25
Prep Date	Wednesday, March 22, 2023
Initial Weight/Volume	5.23
Volume	5
Lab#:	64446-003
AnalysisDate:	Thursday, March 23, 2023
AnalysisTime:	20:24
Dilution:	1
AnalyzedBy:	DBV s5032341.D
QC_Code:	
Prep#	16081

Reviewer Checks:

- Quant Report: Reviewed, Analyst Initials & Date
- Chromatogram Checked, Major peaks identified
- Prep data checked: weight, volume, %solid, Prep date
- Field ID consistent with data and any field replicates
- Results consistent with any re-runs & internal QC
- Correct dilution and reason clear or noted
- Reason for reanalysis documented
- Surrogates pass or flagged & noted
- Flags checked (Expiration, Over Cal)
- Other QC failures, estimates or interferences documented
- Spot checked Reported Result with Quant Report
- Checked Audit flagged data in LIMS
- Correct values averaged
- Column RPD is OK or both results included
- Correct column reported

Notes:

Reviewer Initials & Date: gil 3/30/23

#	Surrogate Standards	Concentration (ug/mL)	Recovery	Flag	QC Limits	Report Column
1	SS Tetrachloro-m-xylene	1.64	82%		30-150	1
47	SS Decachlorobiphenyl	2.08	104%		30-150	1

#	AnalyteName	Concentration (ug/mL)	Flag	Report Column
2	Ar-1016	0.00		
7	Ar-1221	0.00		
12	Ar-1232	0.00		
17	Ar-1242	0.00		
22	Ar-1248	0.00		
27	Ar-1254	0.00		
32	Ar-1260	0.00		
37	Ar-1262	0.00		
42	Ar-1268	0.00		

Aroclor	Column #1 average	Column #2 average	Column RPD limit 40%	%rsd	Column #1 1	2	3	4	5
Ar-1016	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1221	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1232	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1242	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1248	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1254	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1260	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1262	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1268	0.00	0.00			0.00	0.00	0.00	0.00	0.00
SS Tetra	1.64	1.46							
SS Deca	2.08	1.95							

	%rsd	Column #2 1	2	3	4	5
Ar-1016		0.00	0.00	0.00	0.00	0.00
Ar-1221		0.00	0.00	0.00	0.00	0.00
Ar-1232		0.00	0.00	0.00	0.00	0.00
Ar-1242		0.00	0.00	0.00	0.00	0.00
Ar-1248		0.00	0.00	0.00	0.00	0.00
Ar-1254		0.00	0.00	0.00	0.00	0.00
Ar-1260		0.00	0.00	0.00	0.00	0.00
Ar-1262		0.00	0.00	0.00	0.00	0.00
Ar-1268		0.00	0.00	0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : X:\S5\2023\March23\032323\
Data File : s5032341.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 23 Mar 2023 08:24 pm
Operator : dbv
Sample : 64446-03 pcb x1
Misc :
ALS Vial : 41 Sample Multiplier: 1

dbv 3/24/23 @ 19:14 DonnaV

Prep: 03/22/23
5.23g→5mL

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Mar 24 13:18:50 2023
Quant Method : X:\S5\methods\S5PCB030623F.M
Quant Title : SVOA03 Method 8082A
QLast Update : Fri Mar 24 13:03:52 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
	System Monitoring Compounds							
1)	S SS Tetrac...	2.745	2.616	605.9E6	615.3E6	1.643m	1.459m	BC = Baseline Correction
	Spiked Amount	5.000 Range	30 - 150	Recovery	=	32.86%	29.18%#	
47)	S SS Decach...	7.450	7.589	486.9E6	491.1E6	2.079m	1.952m	BC = Baseline Correction
	Spiked Amount	5.000 Range	30 - 150	Recovery	=	41.58%	39.04%	
	Target Compounds							
2)	L1 Ar-1016	0.000	0.000	0	0	N.D. d	N.D. d	
3)	L1 Ar-1016 {2}	0.000	0.000	0	0	N.D. d	N.D. d	
4)	L1 Ar-1016 {3}	0.000	0.000	0	0	N.D. d	N.D. d	
5)	L1 Ar-1016 {4}	0.000	0.000	0	0	N.D. d	N.D. d	
6)	L1 Ar-1016 {5}	0.000	0.000	0	0	N.D. d	N.D. d	
7)	L2 Ar-1221	0.000	0.000	0	0	N.D. d	N.D. d	
8)	L2 Ar-1221 {2}	0.000	0.000	0	0	N.D. d	N.D. d	
9)	L2 Ar-1221 {3}	0.000	0.000	0	0	N.D. d	N.D. d	
10)	L2 Ar-1221 {4}	0.000	0.000	0	0	N.D. d	N.D. d	
11)	L2 Ar-1221 {5}	0.000	0.000	0	0	N.D. d	N.D. d	
12)	L3 Ar-1232	0.000	0.000	0	0	N.D. d	N.D. d	
13)	L3 Ar-1232 {2}	0.000	0.000	0	0	N.D. d	N.D. d	
14)	L3 Ar-1232 {3}	0.000	0.000	0	0	N.D. d	N.D. d	
15)	L3 Ar-1232 {4}	0.000	0.000	0	0	N.D. d	N.D. d	
16)	L3 Ar-1232 {5}	0.000	0.000	0	0	N.D. d	N.D. d	
17)	L4 Ar-1242	0.000	0.000	0	0	N.D. d	N.D. d	
18)	L4 Ar-1242 {2}	0.000	0.000	0	0	N.D. d	N.D. d	
19)	L4 Ar-1242 {3}	0.000	0.000	0	0	N.D. d	N.D. d	
20)	L4 Ar-1242 {4}	0.000	0.000	0	0	N.D. d	N.D. d	
21)	L4 Ar-1242 {5}	0.000	0.000	0	0	N.D. d	N.D. d	
22)	L5 Ar-1248	0.000	0.000	0	0	N.D. d	N.D. d	
23)	L5 Ar-1248 {2}	0.000	0.000	0	0	N.D. d	N.D. d	
24)	L5 Ar-1248 {3}	0.000	0.000	0	0	N.D. d	N.D. d	
25)	L5 Ar-1248 {4}	0.000	0.000	0	0	N.D. d	N.D. d	
26)	L5 Ar-1248 {5}	0.000	0.000	0	0	N.D. d	N.D. d	
27)	L6 Ar-1254	0.000	0.000	0	0	N.D. d	N.D. d	
28)	L6 Ar-1254 {2}	0.000	0.000	0	0	N.D. d	N.D. d	
29)	L6 Ar-1254 {3}	0.000	0.000	0	0	N.D. d	N.D. d	
30)	L6 Ar-1254 {4}	0.000	0.000	0	0	N.D. d	N.D. d	
31)	L6 Ar-1254 {5}	0.000	0.000	0	0	N.D. d	N.D. d	
32)	L7 Ar-1260	0.000	0.000	0	0	N.D. d	N.D. d	
33)	L7 Ar-1260 {2}	0.000	0.000	0	0	N.D. d	N.D. d	
34)	L7 Ar-1260 {3}	0.000	0.000	0	0	N.D. d	N.D. d	
35)	L7 Ar-1260 {4}	0.000	0.000	0	0	N.D. d	N.D. d	
36)	L7 Ar-1260 {5}	0.000	0.000	0	0	N.D. d	N.D. d	
37)	L8 Ar-1262	0.000	0.000	0	0	N.D. d	N.D. d	
38)	L8 Ar-1262 {2}	0.000	0.000	0	0	N.D. d	N.D. d	

Data Path : X:\S5\2023\March23\032323\
Data File : s5032341.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 23 Mar 2023 08:24 pm
Operator : dbv
Sample : 64446-03 pcb x1
Misc :
ALS Vial : 41 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Mar 24 13:18:50 2023
Quant Method : X:\S5\methods\S5PCB030623F.M
Quant Title : SVOA03 Method 8082A
QLast Update : Fri Mar 24 13:03:52 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL
39)	L8 Ar-1262 {3}	0.000	0.000	0	0	N.D. d	N.D. d
40)	L8 Ar-1262 {4}	0.000	0.000	0	0	N.D. d	N.D. d
41)	L8 Ar-1262 {5}	0.000	0.000	0	0	N.D. d	N.D. d
42)	L9 Ar-1268	0.000	0.000	0	0	N.D. d	N.D. d
43)	L9 Ar-1268 {2}	0.000	0.000	0	0	N.D. d	N.D. d
44)	L9 Ar-1268 {3}	0.000	0.000	0	0	N.D. d	N.D. d
45)	L9 Ar-1268 {4}	0.000	0.000	0	0	N.D. d	N.D. d
46)	L9 Ar-1268 {5}	0.000	0.000	0	0	N.D. d	N.D. d

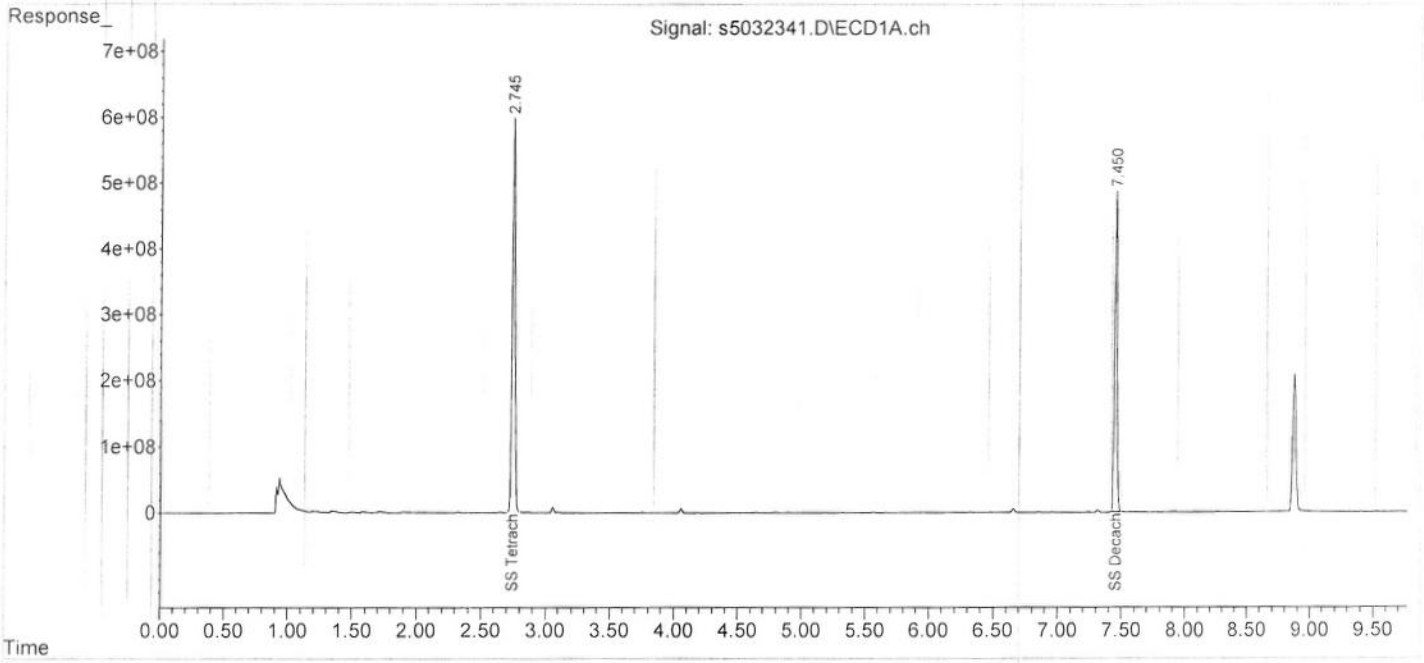
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

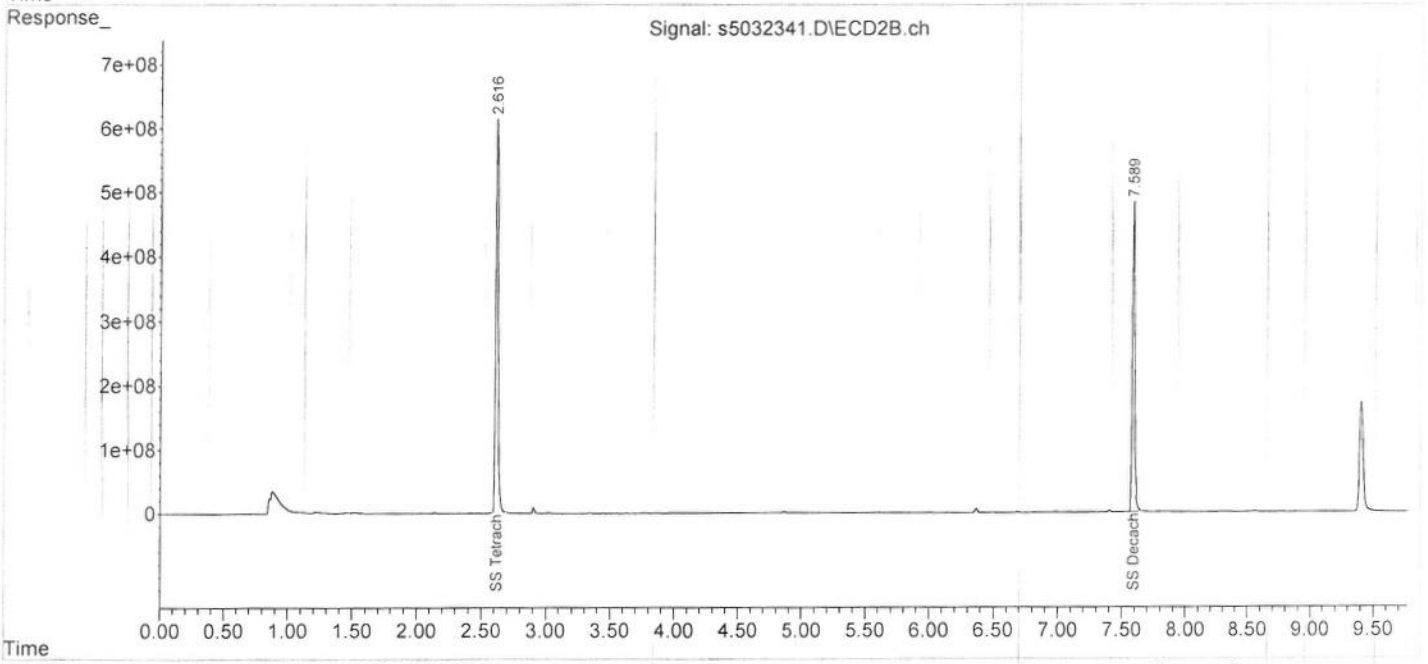
Quantitation Report (QT Reviewed)

Data Path : X:\S5\2023\March23\032323\
Data File : s5032341.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 23 Mar 2023 08:24 pm
Operator : dbv
Sample : 64446-03 pcb x1
Misc :
ALS Vial : 41 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Mar 24 13:18:50 2023
Quant Method : X:\S5\methods\S5PCB030623F.M
Quant Title : SVOA03 Method 8082A
QLast Update : Fri Mar 24 13:03:52 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : X:\S5\2023\March23\032323\
Data File : s5032342.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 23 Mar 2023 08:37 pm
Operator : dbv
Sample : 64446-03ms pcb x1
Misc :
ALS Vial : 42 Sample Multiplier: 1

3/24/23 @ 19:14
DonnaV

Prep: 03/22/23
5.48g→5mL

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Mar 24 13:18:54 2023
Quant Method : X:\S5\methods\S5PCB030623F.M
Quant Title : SVOA03 Method 8082A
QLast Update : Fri Mar 24 13:03:52 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
	System Monitoring Compounds							
1)	S SS Tetrac...	2.744	2.616	613.2E6	627.1E6	1.667m	1.493m	BC = Baseline Correction
	Spiked Amount	5.000 Range	30 - 150	Recovery	=	33.34%	29.86%#	
47)	S SS Decach...	7.449	7.589	386.1E6	392.8E6	1.557m	1.479m	BC = Baseline Correction
	Spiked Amount	5.000 Range	30 - 150	Recovery	=	31.14%	29.58%#	
	Target Compounds							
2)	L1 Ar-1016	3.311	3.314	25593529	20941141	1.828	1.680	
3)	L1 Ar-1016 {2}	3.701	3.689	39953664	34271251	1.929	1.565	
4)	L1 Ar-1016 {3}	3.824	3.814	21972441	21970585	1.869	1.725	
5)	L1 Ar-1016 {4}	3.981	4.022	15315802	14069517	1.891m	1.683m	BC = Baseline Correction
6)	L1 Ar-1016 {5}	4.191	4.237	19145819	19588981	1.771	1.653	
7)	L2 Ar-1221	0.000	0.000	0	0	N.D. d	N.D. d	
8)	L2 Ar-1221 {2}	0.000	0.000	0	0	N.D. d	N.D. d	
9)	L2 Ar-1221 {3}	0.000	0.000	0	0	N.D. d	N.D. d	
10)	L2 Ar-1221 {4}	0.000	0.000	0	0	N.D. d	N.D. d	
11)	L2 Ar-1221 {5}	0.000	0.000	0	0	N.D. d	N.D. d	
12)	L3 Ar-1232	0.000	0.000	0	0	N.D. d	N.D. d	
13)	L3 Ar-1232 {2}	0.000	0.000	0	0	N.D. d	N.D. d	
14)	L3 Ar-1232 {3}	0.000	0.000	0	0	N.D. d	N.D. d	
15)	L3 Ar-1232 {4}	0.000	0.000	0	0	N.D. d	N.D. d	
16)	L3 Ar-1232 {5}	0.000	0.000	0	0	N.D. d	N.D. d	
17)	L4 Ar-1242	0.000	0.000	0	0	N.D. d	N.D. d	
18)	L4 Ar-1242 {2}	0.000	0.000	0	0	N.D. d	N.D. d	
19)	L4 Ar-1242 {3}	0.000	0.000	0	0	N.D. d	N.D. d	
20)	L4 Ar-1242 {4}	0.000	0.000	0	0	N.D. d	N.D. d	
21)	L4 Ar-1242 {5}	0.000	0.000	0	0	N.D. d	N.D. d	
22)	L5 Ar-1248	0.000	0.000	0	0	N.D. d	N.D. d	
23)	L5 Ar-1248 {2}	0.000	0.000	0	0	N.D. d	N.D. d	
24)	L5 Ar-1248 {3}	0.000	0.000	0	0	N.D. d	N.D. d	
25)	L5 Ar-1248 {4}	0.000	0.000	0	0	N.D. d	N.D. d	
26)	L5 Ar-1248 {5}	0.000	0.000	0	0	N.D. d	N.D. d	
27)	L6 Ar-1254	0.000	0.000	0	0	N.D. d	N.D. d	
28)	L6 Ar-1254 {2}	0.000	0.000	0	0	N.D. d	N.D. d	
29)	L6 Ar-1254 {3}	0.000	0.000	0	0	N.D. d	N.D. d	
30)	L6 Ar-1254 {4}	0.000	0.000	0	0	N.D. d	N.D. d	
31)	L6 Ar-1254 {5}	0.000	0.000	0	0	N.D. d	N.D. d	
32)	L7 Ar-1260	5.618	5.461	43982435	34040865	1.774	1.691	
33)	L7 Ar-1260 {2}	5.870	5.642	44158058	42158952	2.046	1.729	
34)	L7 Ar-1260 {3}	6.174	6.284	27890369	29880718	1.451	1.385	
35)	L7 Ar-1260 {4}	6.422	6.474	63092563	61591668	1.558	1.465	
36)	L7 Ar-1260 {5}	6.650	6.760	34634210	32400283	1.816	1.430	
37)	L8 Ar-1262	0.000	0.000	0	0	N.D. d	N.D. d	
38)	L8 Ar-1262 {2}	0.000	0.000	0	0	N.D. d	N.D. d	

Quantitation Report (QT Reviewed)

Data Path : X:\S5\2023\March23\032323\
Data File : s5032342.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 23 Mar 2023 08:37 pm
Operator : dbv
Sample : 64446-03ms pcb x1
Misc :
ALS Vial : 42 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Mar 24 13:18:54 2023
Quant Method : X:\S5\methods\S5PCB030623F.M
Quant Title : SVOA03 Method 8082A
QLast Update : Fri Mar 24 13:03:52 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL
39)	L8 Ar-1262 {3}	0.000	0.000	0	0	N.D. d	N.D. d
40)	L8 Ar-1262 {4}	0.000	0.000	0	0	N.D. d	N.D. d
41)	L8 Ar-1262 {5}	0.000	0.000	0	0	N.D. d	N.D. d
42)	L9 Ar-1268	0.000	0.000	0	0	N.D. d	N.D. d
43)	L9 Ar-1268 {2}	0.000	0.000	0	0	N.D. d	N.D. d
44)	L9 Ar-1268 {3}	0.000	0.000	0	0	N.D. d	N.D. d
45)	L9 Ar-1268 {4}	0.000	0.000	0	0	N.D. d	N.D. d
46)	L9 Ar-1268 {5}	0.000	0.000	0	0	N.D. d	N.D. d

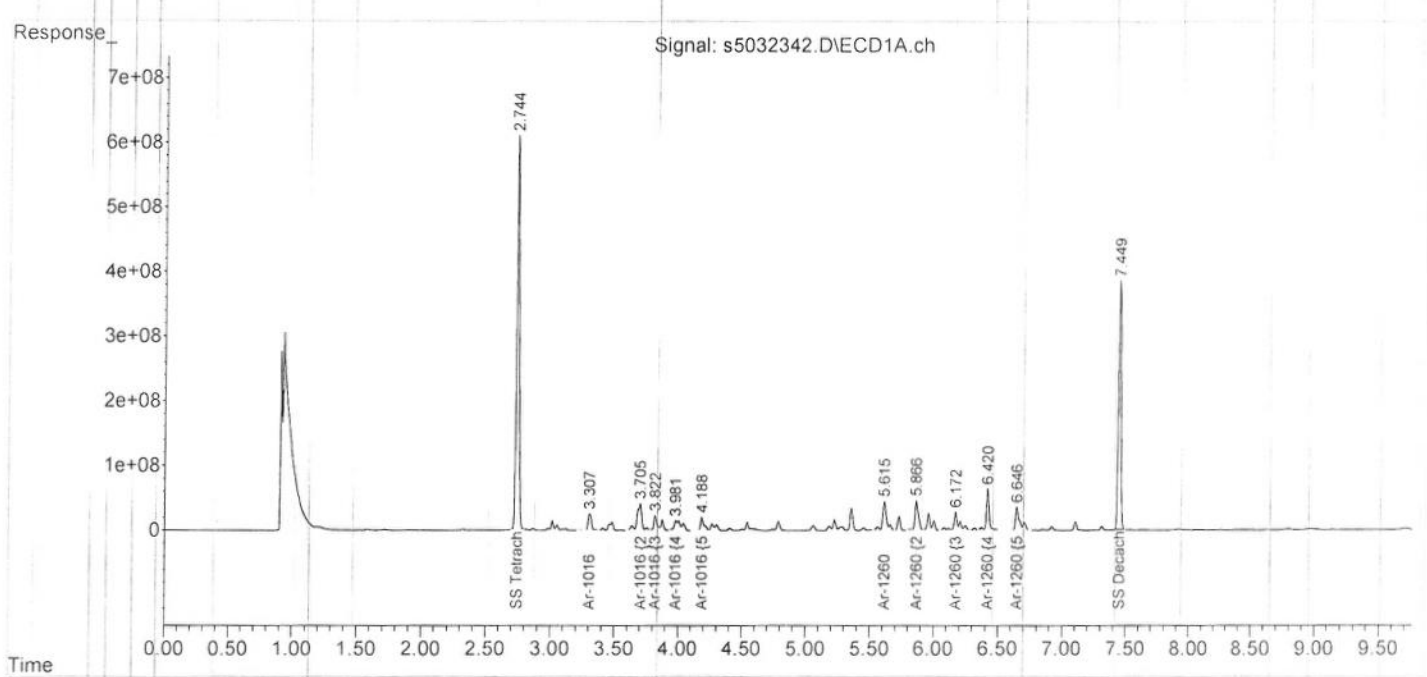
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

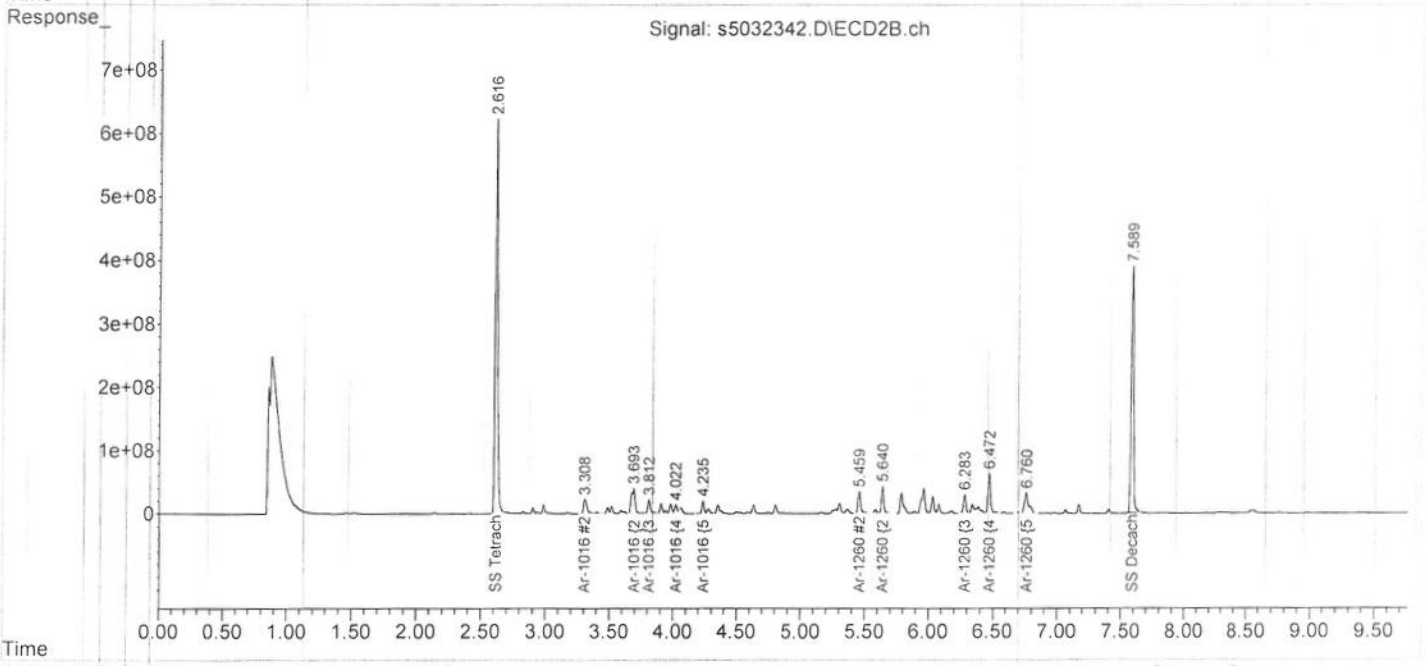
Quantitation Report (QT Reviewed)

Data Path : X:\S5\2023\March23\032323\
Data File : s5032342.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 23 Mar 2023 08:37 pm
Operator : dbv
Sample : 64446-03ms pcb x1
Misc :
ALS Vial : 42 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Mar 24 13:18:54 2023
Quant Method : X:\S5\methods\S5PCB030623F.M
Quant Title : SVOA03 Method 8082A
QLast Update : Fri Mar 24 13:03:52 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : X:\S5\2023\March23\032323\
Data File : s5032343.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 23 Mar 2023 08:50 pm
Operator : dbv
Sample : 64446-03msd pcb x1
Misc :
ALS Vial : 43 Sample Multiplier: 1

Prep: 03/22/23
5.74g→5mL

3/24/23 @ 19:14
DonnaV

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Mar 24 13:18:58 2023
Quant Method : X:\S5\methods\S5PCB030623F.M
Quant Title : SVOA03 Method 8082A
QLast Update : Fri Mar 24 13:03:52 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
	System Monitoring Compounds							
1)	S SS Tetrac...	2.744	2.615	608.0E6	627.5E6	1.650m	1.495m	BC = Baseline Correction
	Spiked Amount	5.000 Range	30 - 150	Recovery	=	33.00%	29.90%#	
47)	S SS Decach...	7.450	7.589	433.0E6	443.3E6	1.791m	1.715m	BC = Baseline Correction
	Spiked Amount	5.000 Range	30 - 150	Recovery	=	35.82%	34.30%	
	Target Compounds							
2)	L1 Ar-1016	3.310	3.313	25244055	22316243	1.802	1.794	
3)	L1 Ar-1016 {2}	3.700	3.688	39030048	39150468	1.883	1.793	
4)	L1 Ar-1016 {3}	3.824	3.813	23185177	23265332	1.975	1.829	
5)	L1 Ar-1016 {4}	3.981	4.022	16100745	14540000	1.990m	1.741m	BC = Baseline Correction
6)	L1 Ar-1016 {5}	4.191	4.237	20603956	20543482	1.909	1.735	
7)	L2 Ar-1221	0.000	0.000	0	0	N.D. d	N.D. d	
8)	L2 Ar-1221 {2}	0.000	0.000	0	0	N.D. d	N.D. d	
9)	L2 Ar-1221 {3}	0.000	0.000	0	0	N.D. d	N.D. d	
10)	L2 Ar-1221 {4}	0.000	0.000	0	0	N.D. d	N.D. d	
11)	L2 Ar-1221 {5}	0.000	0.000	0	0	N.D. d	N.D. d	
12)	L3 Ar-1232	0.000	0.000	0	0	N.D. d	N.D. d	
13)	L3 Ar-1232 {2}	0.000	0.000	0	0	N.D. d	N.D. d	
14)	L3 Ar-1232 {3}	0.000	0.000	0	0	N.D. d	N.D. d	
15)	L3 Ar-1232 {4}	0.000	0.000	0	0	N.D. d	N.D. d	
16)	L3 Ar-1232 {5}	0.000	0.000	0	0	N.D. d	N.D. d	
17)	L4 Ar-1242	0.000	0.000	0	0	N.D. d	N.D. d	
18)	L4 Ar-1242 {2}	0.000	0.000	0	0	N.D. d	N.D. d	
19)	L4 Ar-1242 {3}	0.000	0.000	0	0	N.D. d	N.D. d	
20)	L4 Ar-1242 {4}	0.000	0.000	0	0	N.D. d	N.D. d	
21)	L4 Ar-1242 {5}	0.000	0.000	0	0	N.D. d	N.D. d	
22)	L5 Ar-1248	0.000	0.000	0	0	N.D. d	N.D. d	
23)	L5 Ar-1248 {2}	0.000	0.000	0	0	N.D. d	N.D. d	
24)	L5 Ar-1248 {3}	0.000	0.000	0	0	N.D. d	N.D. d	
25)	L5 Ar-1248 {4}	0.000	0.000	0	0	N.D. d	N.D. d	
26)	L5 Ar-1248 {5}	0.000	0.000	0	0	N.D. d	N.D. d	
27)	L6 Ar-1254	0.000	0.000	0	0	N.D. d	N.D. d	
28)	L6 Ar-1254 {2}	0.000	0.000	0	0	N.D. d	N.D. d	
29)	L6 Ar-1254 {3}	0.000	0.000	0	0	N.D. d	N.D. d	
30)	L6 Ar-1254 {4}	0.000	0.000	0	0	N.D. d	N.D. d	
31)	L6 Ar-1254 {5}	0.000	0.000	0	0	N.D. d	N.D. d	
32)	L7 Ar-1260	5.617	5.461	48500174	37680253	1.959	1.875	
33)	L7 Ar-1260 {2}	5.869	5.641	46757149	44581894	2.167	1.830	
34)	L7 Ar-1260 {3}	6.174	6.284	31347688	33991270	1.634	1.580	
35)	L7 Ar-1260 {4}	6.422	6.474	70482199	71154415	1.743	1.696	
36)	L7 Ar-1260 {5}	6.650	6.760	37107312	38826903	1.947	1.719	
37)	L8 Ar-1262	0.000	0.000	0	0	N.D. d	N.D. d	
38)	L8 Ar-1262 {2}	0.000	0.000	0	0	N.D. d	N.D. d	

Data Path : X:\S5\2023\March23\032323\
Data File : s5032343.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 23 Mar 2023 08:50 pm
Operator : dbv
Sample : 64446-03msd pcb x1
Misc :
ALS Vial : 43 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Mar 24 13:18:58 2023
Quant Method : X:\S5\methods\S5PCB030623F.M
Quant Title : SVOA03 Method 8082A
QLast Update : Fri Mar 24 13:03:52 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL
39)	L8 Ar-1262 {3}	0.000	0.000	0	0	N.D. d	N.D. d
40)	L8 Ar-1262 {4}	0.000	0.000	0	0	N.D. d	N.D. d
41)	L8 Ar-1262 {5}	0.000	0.000	0	0	N.D. d	N.D. d
42)	L9 Ar-1268	0.000	0.000	0	0	N.D. d	N.D. d
43)	L9 Ar-1268 {2}	0.000	0.000	0	0	N.D. d	N.D. d
44)	L9 Ar-1268 {3}	0.000	0.000	0	0	N.D. d	N.D. d
45)	L9 Ar-1268 {4}	0.000	0.000	0	0	N.D. d	N.D. d
46)	L9 Ar-1268 {5}	0.000	0.000	0	0	N.D. d	N.D. d

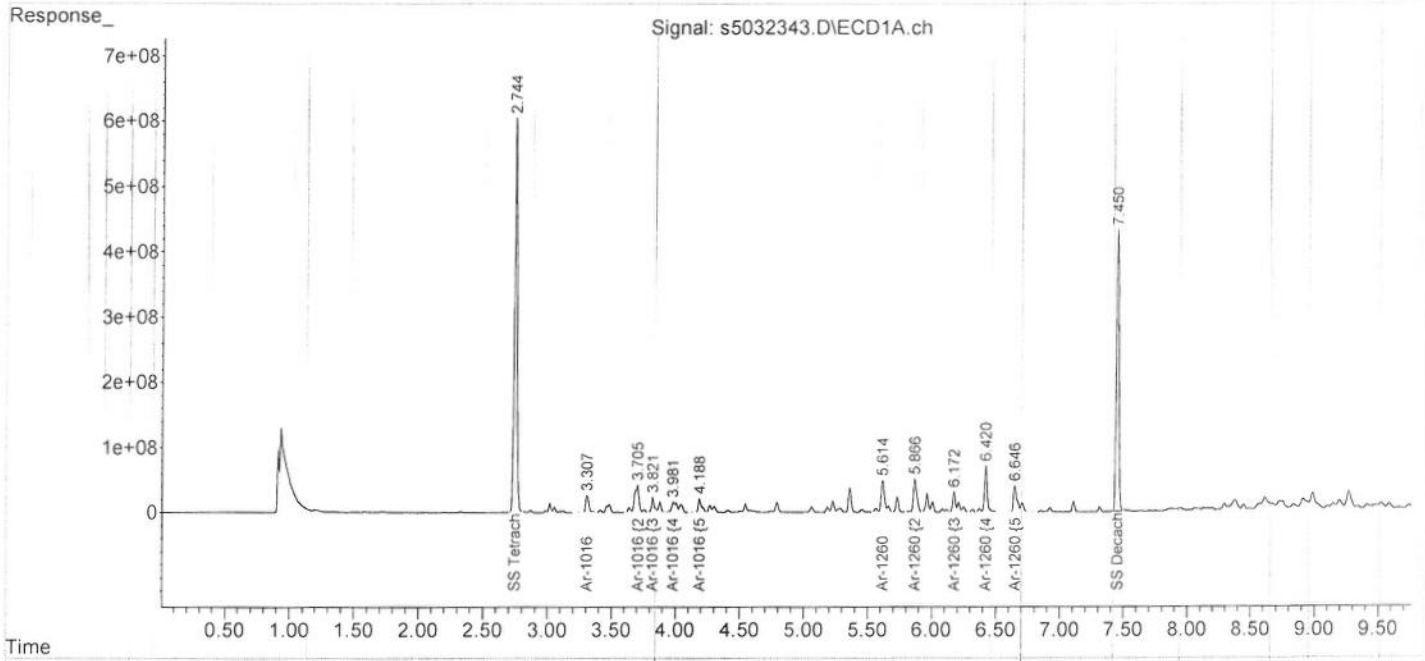
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

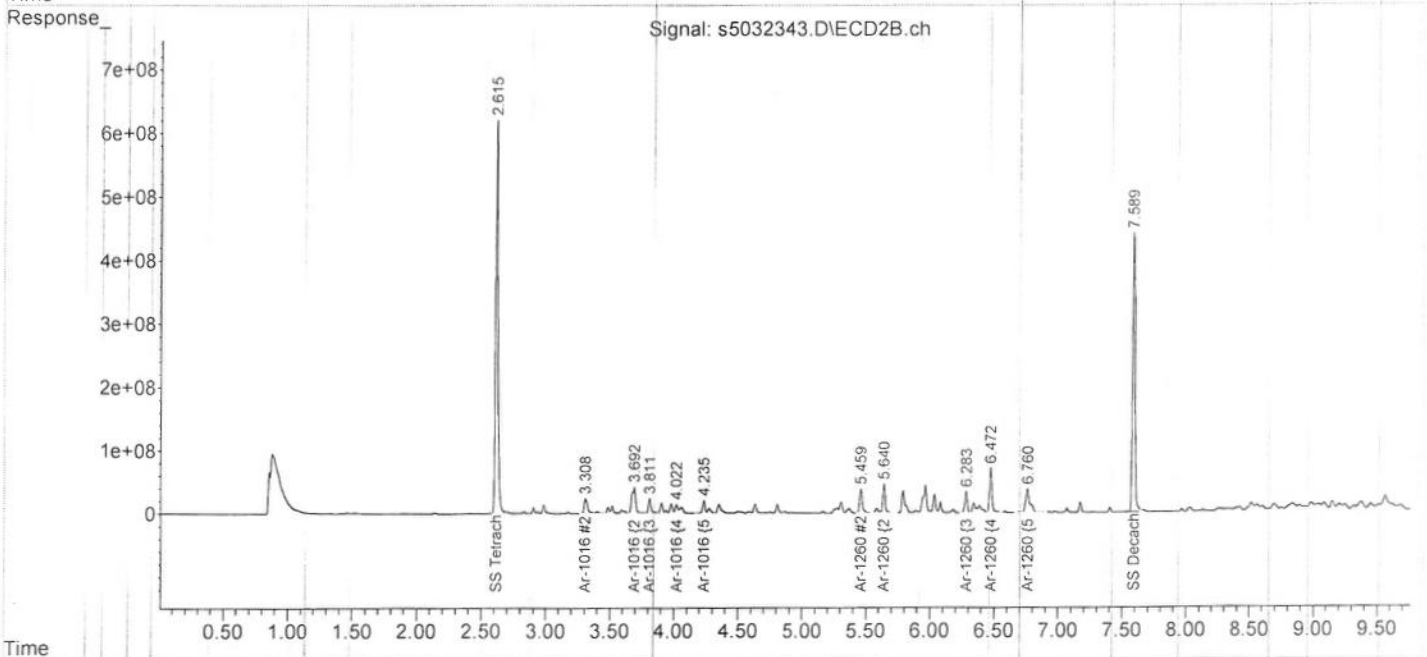
Quantitation Report (QT Reviewed)

Data Path : X:\S5\2023\March23\032323\
Data File : s5032343.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 23 Mar 2023 08:50 pm
Operator : dbv
Sample : 64446-03msd pcb x1
Misc :
ALS Vial : 43 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Mar 24 13:18:58 2023
Quant Method : X:\S5\methods\S5PCB030623F.M
Quant Title : SVOA03 Method 8082A
QLast Update : Fri Mar 24 13:03:52 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





AROMATIC HYDROCARBON BREAKTHROUGH CALCULATION

Method: MADEP EPH 2019 Rev 2.1

	lcs15928 Aliphatic Breakthrough (%)	Acceptance Criteria	Date of Analysis
naphthalene	0.0%	<5.0%	2/13/2023
2-methylnaphthalene	0.3%	<5.0%	2/13/2023

	lcsd15928 Aliphatic Breakthrough (%)	Acceptance Criteria	Date of Analysis
naphthalene	0.0%	<5.0%	2/13/2023
2-methylnaphthalene	0.3%	<5.0%	2/13/2023

Absolute Resource associates

Sample Receipt Condition Report

64446

Absolute Resource Associates **Job Number:**

Samples Received from: ☐-UPS ☐-FedEx ☐-USPS ☒-Lab Courier ☐-Client Drop-off ☐-_____

Custody Seals - present & intact: ☐-Yes ☐-No ☒-N/A CoC signed: ☒-Yes ☐-No

Receipt Temp: 0 °C Samples on ice? ☒-Yes ☐-No ☐-N/A Sampled < 24 hrs ago? ☐-Yes ☒-No

PFAS-only real ice? ☐-Yes ☐-No ☒-N/A Any signs of freezing? ☐-Yes ☒-No

Comments:_____

Preservation / Analysis	Bottle Size/Type & Quantity										Check pH for ALL applicable* samples and document:
HCl	40mL(G)		250mL(P)		500mL(P)		1L(G)				
HNO_3	125mL(P)		250mL(P)		500mL(P)						
H_2SO_4	40mL(G)		60mL(P)		125mL(P)		250mL(P)		500mL(P)		
NaOH	125mL(P)		250mL(P)								
$(NH_4)_2SO_4$	60mL(P)		125mL(P)		250mL(P)						
ZnAc-NaOH	125mL(P)		250mL(P)								
Trizma	125mL(P)		250mL (P)								*pH ✓by analyst:VOC, PFAS, TOC,O&G
NH_4Ac	125mL(P)		250mL (P)								Residual Cl not present:
NaS_2O_3	40mL(G)		120mL(P)								ABN625____Pest608____
MeOH	20mL(G)		40mL(G)	4							Bacteria ResCl ✓by analyst
None (solid)	2oz(G)		4oz(G)	6	8oz(G)		Syringe				PC Dry applicable? (Y) N
None (water)	40ml (G)		60mL(P)		125mL(P)		250mL(P)		500mL(P)		1L(G) 1L (P)
Mold	Cassette		Bulk		Plate		Tape Lift				
Asbestos	Cassette		Bulk								
Lead	Cassette		Bulk		Wipe						

Login Review	Yes	No	NA	Comments
Proper lab sample containers/enough volume/correct preservative?	X			
Analyses marked on COC match bottles received?	X			
VOC &TOC Water-no headspace? VOC Solid-MeOH covers solid, no leaks, Prep Expiration OK?	X			
PFAS: ARA bottles & samples/FRB same Lot#? QC rec'd, if req'd?			X	Lot ID#:_____
Bacteria bottles provided by ARA?			X	
Samples within holding time?	X			
Immediate tests communicated in writing: NO_3, NO_2,o-PO_4, pH, BOD, Coliform/*E. coli* (P/A or MPN), Enterococci, Color Surfactants, Turbidity, Odor, CrVI, Ferrous Iron, Dissolved Oxygen, Unpres 624			X	
Date, time & ID on samples match CoC?	X			
Rushes communicated to analyst in writing?			X	
Subcontracted samples sent to sub lab?			X	Date Prep'd:_____ Date sent:_____
Pesticides EPA 608 pH5-9?			X	
Compliance samples have no discrepancies/require no flags?			X	(Or must be rejected)
Log-in Supervisor notified immediately of following items:			X	Discrepancies, compliance samples (NHDES, MADEP, DoD etc.) or uncommon requests.

Inspected and Received By: ORL Date/Time: 2/6/23 15:26

Peer Review Checklist

- ☑ Client ID/Project Manager
- ☑ Project Name
- ☐ TAT/rushes communicated
- ☑ Received Date/Time
- ☑ On Ice, Temperature OK?
- ☑ PO# (if provided)
- ☐ Sub samples sent? Shipping Charge?
- ☐ Issues noted above communicated?
- ☑ Sample IDs
- ☑ Matrix
- ☑ Date/Time collected
- ☐ Short HTs communicated
- ☑ Analyses in Correctly -references -wastewater methods
- ☐ Notes from CoC in LIMS

Reviewed By: WA Date: 2-8-23

Notes: (continue on back as needed)

	Initials	Date	What was sent?
Uploaded / PDF	_____	_____	Report / Data / EDD / Invoice
Uploaded / PDF	_____	_____	Report / Data / EDD / Invoice
Uploaded / PDF	_____	_____	Report / Data / EDD / Invoice

Absolute Resource associates
124 Heritage Avenue #16
Portsmouth, NH 03801
603-436-2001
absoluteresourceassociates.com

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

64446

Company Name: Credere

Company Address: 776 Main St, Westbrook, ME

Report To: adrouin@credere llc.com

Phone #: 207-749-1141

Project Name: Dow

Project #: 18001468

Project Location: NH MA ME VT _____

Accreditation Required? N/Y: DOD ELAP

See absoluteresourceassociates.com for sample acceptance policy and current accreditation lists.

Protocol: RCRA SDWA NPDES MCP NHDES DOD

Notify ARA if your samples require specific methods, certifications or compliance protocol.

Reporting Limits: QAPP GW-1 S-1 EPA DW Other_____

ANALYSIS REQUEST

Lab Sample ID (Lab Use Only)	Field ID	# CONTAINERS	Matrix: WATER	Matrix: SOLID	Matrix: OTHER	Preservation Method: HCl	Preservation Method: HNO_3	Preservation Method: H_2SO_4	Preservation Method: NaOH	Preservation Method: MeOH	Sampling: DATE	Sampling: TIME	Sampling: SAMPLER	☒ VOC 8260	☐ VOC 624.1	☒ VPH MADEP	☐ VOC 524.2	☐ TPH 8100	☐ 8270PAH	☒ 8082 PCB	☐ PFAS 537.1	☐ O&G 1664	☐ pH	☐ TSS	☒ RCRA Metals	☐ Total Metals-list:	☐ Dissolved Metals-list:	☐ Ammonia	☐ T-Phosphorus	☐ Cyanide	☐ Nitrate	☐ Corrosivity	☐ TCLP Metals	Subcontract:	☐ Asbestos	Grab (G) or Composite (C)
64446-01	~~SY-SB4-1~~ SY-SB4R-1	3		X						X	2/1	1145	SG	X		X		X	X	X				X											G
-02	SY-SB4R-10	3		↓						↓	↓	1150	↓	1		1		1	1	1					1											1
-03	SY-SB4R-2	3		↓						↓	↓	1155	↓	1		1		1	1	1					1											1
-04	Trip Blank	1	X							X	—	—	-	X																					

TAT REQUESTED
Priority (24 hr)* ☐
Expedited (48 hr)* ☐
Standard (10 Business Days) ☒
*Date Needed_____

Invoice To: Jenn Taiani
Email: invoices@credere llc.com
PO #: 18001468
Quote #: _____
☐ NH Reimbursement Pricing

SPECIAL INSTRUCTIONS See Dow QAPP

Reporting Instructions:
☐ EDD:_____ Report To (email): adrouin@credere llc.com

RECEIVED ON ICE ☒YES ☐NO
TEMPERATURE 0 °C

CUSTODY RECORD
QSD-01 Revision 07/27/2022

	Date	Time		Date	Time
Relinquished by Sampler: Jenn Taiani	2/4/23	12:20	Received by:	2/6/23	12:20
Relinquished by:			Received by:		
Relinquished by:	2/4/23	1800	Received by Laboratory:	2/6/23	13:25

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Darrian Lewry
Katahdin Analytical Services
600 Technology Way
Scarborough ME 04074

Generated 2/16/2023 10:56 AM

JOB DESCRIPTION

DOW

JOB NUMBER

410-114770-1

Eurofins Lancaster Laboratories Environment Testing, LLC
2425 New Holland Pike
Lancaster PA 17601

See page two for job notes and contact information.

my EOL

Eurofins Lancaster Laboratories Environment Testing, LLC

Job Notes

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

Authorization



Generated
2/16/2023 10:56 AM

Authorized for release by
Stephen J Gordon, Senior Project Manager
Stephen.Gordon@et.eurofinsus.com
412 525-0071

Eurofins Lancaster Laboratories Environment Testing, LLC

Compliance Statement

Analytical test results meet all requirements of the associated regulatory program (e.g., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis. Data qualifiers are applied to note exceptions. Noncompliant quality control (QC) is further explained in narrative comments.
· QC results that exceed the upper limits and are associated with non-detect samples are qualified but further narration is not required since the bias is high and does not change a non-detect result. Further narration is also not required with QC blank detection when the associated sample concentration is non-detect or more than ten times the level in the blank.
· Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD is performed, unless otherwise specified in the method.
· Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.
Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Measurement uncertainty values, as applicable, are available upon request.

Test results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. Times are local to the area of activity. Parameters listed in the 40 CFR Part 136 Table II as "analyze immediately" and tested in the laboratory are not performed within 15 minutes of collection.

This report shall not be reproduced except in full, without the written approval of the laboratory.

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Definitions/Glossary

Client: Katahdin Analytical Services
Job ID: 410-114770-1
Project/Site: DOW

Qualifiers

General Chemistry

Qualifier	Qualifier Description
U	Undetected at the Limit of Detection.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job Narrative
410-114770-1

Receipt
The samples were received on 2/8/2023 10:04 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 6.2°C

Receipt Exceptions
The following samples were received at the laboratory outside the required temperature criteria: SY-SB4R-1 (410-114770-1), SY-SB4R-10 (410-114770-2) and SY-SB4R-2 (410-114770-3). This does not meet regulatory requirements. The client was contacted regarding this issue, and the laboratory was instructed to proceed with analysis.

General Chemistry
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Detection Summary

Client: Katahdin Analytical Services
Project/Site: DOW

Job ID: 410-114770-1

Client Sample ID: SY-SB4R-1 — Lab Sample ID: 410-114770-1

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Total Organic Carbon	35000		350	230	120	mg/Kg	1	☼	Lloyd Kahn	Total/NA

Client Sample ID: SY-SB4R-10 — Lab Sample ID: 410-114770-2

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Total Organic Carbon	810		350	230	120	mg/Kg	1	☼	Lloyd Kahn	Total/NA

Client Sample ID: SY-SB4R-2 — Lab Sample ID: 410-114770-3

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Total Organic Carbon	1700		370	250	120	mg/Kg	1	☼	Lloyd Kahn	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SY-SB4R-1
Date Collected: 02/01/23 11:45
Date Received: 02/08/23 10:04

Lab Sample ID: 410-114770-1
Matrix: Solid

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Percent Moisture (EPA Moisture)	13.3		1.0		1.0	%		02/09/23 18:54	1

Client Sample ID: SY-SB4R-1
Date Collected: 02/01/23 11:45
Date Received: 02/08/23 10:04

Lab Sample ID: 410-114770-1
Matrix: Solid
Percent Solids: 86.7

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Total Organic Carbon (EPA Lloyd Kahn)	35000		350	230	120	mg/Kg	☼	02/14/23 12:14	1

Client Sample ID: SY-SB4R-10
Date Collected: 02/01/23 11:50
Date Received: 02/08/23 10:04

Lab Sample ID: 410-114770-2
Matrix: Solid

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Percent Moisture (EPA Moisture)	14.6		1.0		1.0	%		02/09/23 18:54	1

Client Sample ID: SY-SB4R-10
Date Collected: 02/01/23 11:50
Date Received: 02/08/23 10:04

Lab Sample ID: 410-114770-2
Matrix: Solid
Percent Solids: 85.4

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Total Organic Carbon (EPA Lloyd Kahn)	810		350	230	120	mg/Kg	☼	02/14/23 11:38	1

Client Sample ID: SY-SB4R-2
Date Collected: 02/01/23 11:55
Date Received: 02/08/23 10:04

Lab Sample ID: 410-114770-3
Matrix: Solid

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Percent Moisture (EPA Moisture)	19.5		1.0		1.0	%		02/09/23 18:54	1

Client Sample ID: SY-SB4R-2
Date Collected: 02/01/23 11:55
Date Received: 02/08/23 10:04

Lab Sample ID: 410-114770-3
Matrix: Solid
Percent Solids: 80.5

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Total Organic Carbon (EPA Lloyd Kahn)	1700		370	250	120	mg/Kg	☼	02/14/23 12:34	1

Default Detection Limits

Client: Katahdin Analytical Services
Job ID: 410-114770-1
Project/Site: DOW

General Chemistry

Analyte	LOQ	DL	Units
Total Organic Carbon	300	100	mg/Kg
Percent Moisture	1.0	1.0	%

Method: Lloyd Kahn - Organic Carbon, Total (TOC)

Lab Sample ID: MB 410-344728/4
Matrix: Solid
Analysis Batch: 344728

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Total Organic Carbon	200	U	300	200	100	mg/Kg		02/14/23 10:50	1

Lab Sample ID: LCS 410-344728/3
Matrix: Solid
Analysis Batch: 344728

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Total Organic Carbon			4690	5720		mg/Kg		122	36 - 163		

QC Association Summary

Client: Katahdin Analytical Services
Project/Site: DOW

Job ID: 410-114770-1

General Chemistry

Analysis Batch: 343285

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-114770-1	SY-SB4R-1	Total/NA	Solid	Moisture	
410-114770-2	SY-SB4R-10	Total/NA	Solid	Moisture	
410-114770-3	SY-SB4R-2	Total/NA	Solid	Moisture	

Analysis Batch: 344728

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-114770-1	SY-SB4R-1	Total/NA	Solid	Lloyd Kahn	
410-114770-2	SY-SB4R-10	Total/NA	Solid	Lloyd Kahn	
410-114770-3	SY-SB4R-2	Total/NA	Solid	Lloyd Kahn	
MB 410-344728/4	Method Blank	Total/NA	Solid	Lloyd Kahn	
LCS 410-344728/3	Lab Control Sample	Total/NA	Solid	Lloyd Kahn	

Lab Chronicle

Client: Katahdin Analytical Services
Project/Site: DOW

Job ID: 410-114770-1

Client Sample ID: SY-SB4R-1
Date Collected: 02/01/23 11:45
Date Received: 02/08/23 10:04

Lab Sample ID: 410-114770-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	343285	USWF	ELLE	02/09/23 18:54

Client Sample ID: SY-SB4R-1
Date Collected: 02/01/23 11:45
Date Received: 02/08/23 10:04

Lab Sample ID: 410-114770-1
Matrix: Solid
Percent Solids: 86.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Lloyd Kahn		1	344728	P684	ELLE	02/14/23 12:14

Client Sample ID: SY-SB4R-10
Date Collected: 02/01/23 11:50
Date Received: 02/08/23 10:04

Lab Sample ID: 410-114770-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	343285	USWF	ELLE	02/09/23 18:54

Client Sample ID: SY-SB4R-10
Date Collected: 02/01/23 11:50
Date Received: 02/08/23 10:04

Lab Sample ID: 410-114770-2
Matrix: Solid
Percent Solids: 85.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Lloyd Kahn		1	344728	P684	ELLE	02/14/23 11:38

Client Sample ID: SY-SB4R-2
Date Collected: 02/01/23 11:55
Date Received: 02/08/23 10:04

Lab Sample ID: 410-114770-3
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	343285	USWF	ELLE	02/09/23 18:54

Client Sample ID: SY-SB4R-2
Date Collected: 02/01/23 11:55
Date Received: 02/08/23 10:04

Lab Sample ID: 410-114770-3
Matrix: Solid
Percent Solids: 80.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Lloyd Kahn		1	344728	P684	ELLE	02/14/23 12:34

Laboratory References:

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Accreditation/Certification Summary

Client: Katahdin Analytical Services
Job ID: 410-114770-1
Project/Site: DOW

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
A2LA	Dept. of Defense ELAP	0001.01	11-30-24

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
Lloyd Kahn		Solid	Total Organic Carbon
Moisture		Solid	Percent Moisture

Massachusetts	State	M-PA009	06-30-23

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
Lloyd Kahn		Solid	Total Organic Carbon
Moisture		Solid	Percent Moisture

Method Summary

Client: Katahdin Analytical Services
Job ID: 410-114770-1
Project/Site: DOW

Method	Method Description	Protocol	Laboratory
Lloyd Kahn	Organic Carbon, Total (TOC)	EPA	ELLE
Moisture	Percent Moisture	EPA	ELLE

Protocol References:

EPA = US Environmental Protection Agency

Laboratory References:

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Sample Summary

Client: Katahdin Analytical Services
Project/Site: DOW

Job ID: 410-114770-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
410-114770-1	SY-SB4R-1	Solid	02/01/23 11:45	02/08/23 10:04
410-114770-2	SY-SB4R-10	Solid	02/01/23 11:50	02/08/23 10:04
410-114770-3	SY-SB4R-2	Solid	02/01/23 11:55	02/08/23 10:04

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-114770-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
WC_TOC_SLCSCC_00007	10/13/24		ERA, Lot d113-542		(Purchased Reagent)		Total Organic Carbon	4690 mg/Kg

Reagent

WC_TOC_SLCSCC_00007

1. The **Certified Values** are the actual "made-to" concentrations confirmed by ERA analytical verification. The certified values are monitored and purchasers will be notified of any significant changes resulting in recertification or withdrawal of this certified reference material during the period of validity of this certificate.

2. The **Uncertainty** represents an expanded uncertainty and approximates a 95% confidence interval. The uncertainty is based on the characterization, homogeneity and stability characteristics of the product, multiplied by a coverage factor (k=2). The uncertainty applies to the product as supplied and does not take into account any required or optional dilution and/or preparations the laboratory may perform while using this product. The formula used to calculate the expanded uncertainty is:
$U_{expanded} = k * SQRT((U_{char}^2) + (U_{homogen}^2) + (U_{LTS}^2) + (U_{STS}^2) + (U_{RSS}^2))$

Where:

$U_{expanded}$ = Expanded uncertainty.
k = Coverage factor.
U_{char} = Combined standard uncertainty of the manufacturing and/or analytical verification assessment.
$U_{homogen}$ = Standard uncertainty of the homogeneity assessment.
U_{LTS} = Standard uncertainty associated with long-term stability.
U_{STS} = Standard uncertainty associated with short-term (transport) stability.
U_{RSS} = Standard uncertainty associated with repeated sampling of the product (where permitted by product use instructions).

3. The **QC Performance Acceptance Limits (QC PALs™)** are based on actual historical data collected in ERA's Proficiency Testing program. The QC PALs™ reflect any inherent biases in the methods used to establish the limits and closely approximate a 95% confidence interval of the performance that experienced laboratories should achieve using accepted environmental methods. Use the QC PALs™ to realistically evaluate your performance against your peers.

4. The **PT Performance Acceptance Limits (PT PALs™)** are calculated using the regression equations and fixed acceptance criteria specified in the NELAC proficiency testing requirements. Use the PT PALs™ when analyzing this certified reference material alongside USEPA and NELAC compliant PT study materials. Please note that many PT study acceptance limits are concentration dependent (some non-linearly) and therefore, the acceptance limits of this certified reference material and any PT study material may differ relative to their difference in concentrations.

5. The **PT Performance Data** include the mean value, percent recovery and number of data points reported by laboratories in our Proficiency Testing study compared to the Certified Values. In the event this lot was not used in a proficiency testing scheme, the data displayed was generated internally by ERA.

6. Where NIST Standard Reference Materials (SRMs) are available, each analyte has been analytically traced to the NIST SRM listed. **Analytical Traceability Recovery (%)** = [(% recovery ERA certified reference material)/(% recovery NIST SRM)]*100
The traceability data shown were compiled by analyzing this ERA certified reference material and/or it's associated stock solution(s) against the applicable NIST SRMs.

7. The **Reference Values** are equal to the mean recoveries for the parameters as determined in an interlaboratory round robin study. The **Reference Values** represent the expected performance for the analytes in this standard. ERA recommends using the **Reference Values** when assessing or evaluating your results.

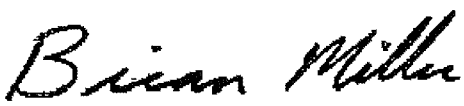
8. **Metrological Traceability**. This certified reference material is metrologically traceable to NIST mass reference materials through an unbroken chain of comparisons.

9. For additional information on this product such as intended use, storage information, instructions for use, minimum sample size, and safety information, please refer to the Product Use Instructions provided.

If you have any questions or need technical assistance, please call ERA technical assistance at 1-800-372-0122 or send an email to info@eraqc.com.

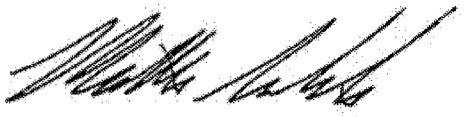
Certifying Officer

Brian Miller



Quality Officer

Matthew Seebeck



16341 Table Mountain Pkwy ▪ Golden, CO 80403 ▪ T: 800.372.0122 ▪ 303.431.8454 ▪ www.eraqc.com

ERA
A Waters Company

Certified Reference Material

▪ Certificate of Analysis ▪

Product: Nutrients in Soil
Catalog Number: 542
Lot No. D113-542
Certificate Issue Date: March 23, 2021
Expiration Date: October 13, 2024
Revision Number: Original

Product use instructions are included as part of the certification packet and are paginated separately from this Certificate of Analysis. Please reference the product use instructions for catalog #542 revision 090119.

CERTIFICATION

Parameter	Certified Value[1]	Reference Value[7]	Uncertainty[2]	QC Performance Acceptance Limits[3]	PT Performance Acceptance Limits[4]
	mg/kg	mg/kg	%	mg/kg	mg/kg
Ammonia as N	1210	1090	6.25	698 - 1470	665 - 1510
Total Kjeldahl Nitrogen	1720	1700	12.5	1100 - 2300	944 - 2460
Total Organic Carbon (TOC)	5000	4690	9.55	1690 - 7680	1610 - 7770
Total Phosphorus	1710	1570	20.5	828 - 2300	439 - 2690

ANALYTICAL VERIFICATION

Parameter	Certified Value[1]	Proficiency Testing Study			NIST Traceability	
		Mean	Recovery[5]	n	SRM Number[6]	Recovery
	mg/kg	mg/kg	%			%
Ammonia as N	1210	1090	89.7	48	-	-
Total Kjeldahl Nitrogen	1720	1700	99.0	44	-	-
Total Organic Carbon (TOC)	5000	4690	93.8	29	-	-
Total Phosphorus	1710	1570	91.6	77	-	-

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GENERAL CHEMISTRY

COVER PAGE
GENERAL CHEMISTRY

Lab Name: Eurofins Lancaster Laboratories Job Number: 410-114770-1

SDG No.:

Project: DOW

Client Sample ID	Lab Sample ID
SY-SB4R-1	410-114770-1
SY-SB4R-10	410-114770-2
SY-SB4R-2	410-114770-3

Comments:

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: SY-SB4R-1 Lab Sample ID: 410-114770-1

Lab Name: Eurofins Lancaster Laboratories Environment T Job No.: 410-114770-1

SDG ID.:

Matrix: Solid Date Sampled: 02/01/2023 11:45

Reporting Basis: DRY Date Received: 02/08/2023 10:04

% Solids: 86.7

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Total Organic Carbon	35000	350	230	120	mg/Kg			1	Lloyd Kahn

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: SY-SB4R-10 Lab Sample ID: 410-114770-2

Lab Name: Eurofins Lancaster Laboratories Environment T Job No.: 410-114770-1

SDG ID.:

Matrix: Solid Date Sampled: 02/01/2023 11:50

Reporting Basis: DRY Date Received: 02/08/2023 10:04

% Solids: 85.4

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Total Organic Carbon	810	350	230	120	mg/Kg			1	Lloyd Kahn

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: SY-SB4R-2 Lab Sample ID: 410-114770-3

Lab Name: Eurofins Lancaster Laboratories Environment T Job No.: 410-114770-1

SDG ID.:

Matrix: Solid Date Sampled: 02/01/2023 11:55

Reporting Basis: DRY Date Received: 02/08/2023 10:04

% Solids: 80.5

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Total Organic Carbon	1700	370	250	120	mg/Kg			1	Lloyd Kahn

2-IN
CALIBRATION QUALITY CONTROL
GENERAL CHEMISTRY

Lab Name: Eurofins Lancaster Laboratories En Job No.: 410-114770-1

SDG No.:

Analyst: P684 Batch Start Date: 02/14/2023

Reporting Units: mg/Kg Analytical Batch No.: 344728

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
1	CCV	10:36	Total Organic Carbon	5570	4690	119	50-153		WC_TOC_SLCSCC_00007
2	CCB	10:42	Total Organic Carbon	200				U	
13	CCV	12:03	Total Organic Carbon	5070	4690	108	50-153		WC_TOC_SLCSCC_00007
14	CCB	12:06	Total Organic Carbon	200				U	
20	CCV	12:39	Total Organic Carbon	5320	4690	113	50-153		WC_TOC_SLCSCC_00007
21	CCB	12:43	Total Organic Carbon	200				U	

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM II-IN

3-IN
METHOD BLANK
GENERAL CHEMISTRY

Lab Name: Eurofins Lancaster Laboratories Job No.: 410-114770-1

SDG No.:

Method	Lab Sample ID	Analyte	Result	Qual	Units	LOQ	Dil
Batch ID: 344728	Date: 02/14/2023 10:50						
Lloyd Kahn	MB 410-344728/4	Total Organic Carbon	200	U	mg/Kg	300	1

FORM III-IN

7A-IN
LAB CONTROL SAMPLE
GENERAL CHEMISTRY

Lab Name: Eurofins Lancaster Laboratories En Job No.: 410-114770-1

SDG No.:

Matrix: Solid

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 344728 Date: 02/14/2023 10:45											
						LCS Source: WC_TOC_SLCSCC_00007					
Lloyd Kahn	LCS 410-344728/3	Total Organic Carbon	5720		mg/Kg	4690	122	36-163			

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA-IN

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: Eurofins Lancaster Laboratories Job Number: 410-114770-1

SDG Number:

Matrix: Solid Instrument ID: 11082

Method: Lloyd Kahn DL Date: 11/28/2018 08:55

Analyte	Wavelength/ Mass	LOQ (mg/Kg)	DL (mg/Kg)
Total Organic Carbon		300	100

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: Eurofins Lancaster Laboratories Job Number: 410-114770-1

SDG Number:

Matrix: Solid Instrument ID: 11082

Method: Lloyd Kahn XMDL Date: 07/14/2018 12:52

Analyte	Wavelength/ Mass	XRL (mg/Kg)	XMDL (mg/Kg)
Total Organic Carbon		300	100

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: Eurofins Lancaster Laboratories Job Number: 410-114770-1

SDG Number:

Matrix: Solid Instrument ID: NOEQUIP

Method: Moisture DL Date: 10/16/2018 12:54

Analyte	Wavelength/ Mass	LOQ (%)	DL (%)
Percent Moisture		1	0.1

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: Eurofins Lancaster Laboratories Job Number: 410-114770-1

SDG Number:

Matrix: Solid Instrument ID: NOEQUIP

Method: Moisture XMDL Date: 10/16/2018 09:12

Analyte	Wavelength/ Mass	XRL (%)	XMDL (%)
Percent Moisture		1	0.1

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Lancaster Laboratories Envi Job No.: 410-114770-1

SDG No.:

Instrument ID: 11082 Analysis Method: Lloyd Kahn

Start Date: 02/14/2023 10:36 End Date: 02/15/2023 08:10

Lab Sample Id	D/F	Type	Time	Analytes																								
				TOC																								
CCV 410-344728/1	1		10:36	X																								
CCB 410-344728/2	1		10:42	X																								
LCS 410-344728/3	1	T	10:45	X																								
MB 410-344728/4	1	T	10:50	X																								
ZZZZZZ			11:11																									
ZZZZZZ			11:17																									
ZZZZZZ			11:25																									
ZZZZZZ			11:32																									
410-114770-2	1	T	11:38	X																								
ZZZZZZ			11:44																									
ZZZZZZ			11:53																									
ZZZZZZ			12:00																									
CCV 410-344728/13	1		12:03	X																								
CCB 410-344728/14	1		12:06	X																								
410-114770-1	1	T	12:14	X																								
ZZZZZZ			12:20																									
ZZZZZZ			12:25																									
ZZZZZZ			12:30																									
410-114770-3	1	T	12:34	X																								
CCV 410-344728/20	1		12:39	X																								
CCB 410-344728/21	1		12:43	X																								
ZZZZZZ			12:47																									
ZZZZZZ			12:53																									
ZZZZZZ			13:00																									
ZZZZZZ			13:04																									
ZZZZZZ			13:08																									
ZZZZZZ			13:12																									
CCV 410-344728/28			06:15																									
CCB 410-344728/29			06:22																									
ZZZZZZ			06:27																									
ZZZZZZ			06:33																									
ZZZZZZ			06:51																									
ZZZZZZ			06:58																									
CCV 410-344728/34			07:05																									
CCB 410-344728/35			07:09																									
ZZZZZZ			07:11																									
ZZZZZZ			07:15																									
ZZZZZZ			07:20																									
CCV 410-344728/39			07:25																									
CCB 410-344728/40			07:33																									
ZZZZZZ			07:36																									

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Lancaster Laboratories Envi Job No.: 410-114770-1

SDG No.:

Instrument ID: 11082 Analysis Method: Lloyd Kahn

Start Date: 02/14/2023 10:36 End Date: 02/15/2023 08:10

Lab Sample Id	D/F	Type	Time	Analytes																								
				TOC																								
ZZZZZZ			07:40																									
ZZZZZZ			07:45																									
ZZZZZZ			07:49																									
ZZZZZZ			07:54																									
ZZZZZZ			08:00																									
CCV 410-344728/47			08:05																									
CCB 410-344728/48			08:10																									

Prep Types:
T = Total/NA

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Lancaster Laboratories Envi Job No.: 410-114770-1

SDG No.:

Instrument ID: NOEQUIP Analysis Method: Moisture

Start Date: 02/09/2023 18:54 End Date: 02/09/2023 18:54

Lab Sample Id	D/F	Type	Time	Analytes																								
				Moist																								
ZZZZZZ			18:54																									
ZZZZZZ			18:54																									
ZZZZZZ			18:54																									
ZZZZZZ			18:54																									
ZZZZZZ			18:54																									
ZZZZZZ			18:54																									
ZZZZZZ			18:54																									
410-114770-1	1	T	18:54	X																								
410-114770-2	1	T	18:54	X																								
410-114770-3	1	T	18:54	X																								
ZZZZZZ			18:54																									
ZZZZZZ			18:54																									
ZZZZZZ			18:54																									
ZZZZZZ			18:54																									
ZZZZZZ			18:54																									
ZZZZZZ			18:54																									
ZZZZZZ			18:54																									
ZZZZZZ			18:54																									

Prep Types:
T = Total/NA

FORM XIII-IN

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-114770-1

SDG No.:

Batch Number: 344728 Batch Start Date: 02/14/23 10:36 Batch Analyst: Cornelius, Ashlynn M

Batch Method: Lloyd Kahn Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	WC_TOC_SLCSCC 00007				
CCV 410-344728/1		Lloyd Kahn		106.7 mg	# mg				
CCB 410-344728/2		Lloyd Kahn		1000 mg					
LCS 410-344728/3		Lloyd Kahn		106.5 mg	# mg				
MB 410-344728/4		Lloyd Kahn		1000 mg					
410-114770-A-2	SY-SB4R-10	Lloyd Kahn	T	192.5 mg					
CCV 410-344728/13		Lloyd Kahn		107.5 mg	# mg				
CCB 410-344728/14		Lloyd Kahn		1000 mg					
410-114770-A-1	SY-SB4R-1	Lloyd Kahn	T	45.3 mg					
410-114770-A-1	SY-SB4R-1	Lloyd Kahn	T	41.1 mg					
410-114770-A-1	SY-SB4R-1	Lloyd Kahn	T	33.6 mg					
410-114770-A-1	SY-SB4R-1	Lloyd Kahn	T	35.7 mg					
410-114770-A-3	SY-SB4R-2	Lloyd Kahn	T	213.6 mg					
CCV 410-344728/20		Lloyd Kahn		105.5 mg	# mg				
CCB 410-344728/21		Lloyd Kahn		1000 mg					

Batch Notes	
Phosphoric Acid ID	WC_TOC_1:1PA_00006
Pipette/Syringe/Dispenser ID	TOC

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-114770-1

SDG No.:

Batch Number: 343285 Batch Start Date: 02/09/23 18:54 Batch Analyst: Freisher, Scott W

Batch Method: Moisture Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	DISH#	DishWeight	SampleMassWet	SampleMassDry	%_Moisture	%_Solid
410-114770-A-1	SY-SB4R-1	Moisture	T	285-8	0.81 g	8.35 g	7.35 g	13.262599469496 %	86.737400530504 %
410-114770-A-2	SY-SB4R-10	Moisture	T	285-9	0.80 g	7.85 g	6.82 g	14.609929078014 2 %	85.390070921985 8 %
410-114770-A-3	SY-SB4R-2	Moisture	T	285-10	0.79 g	7.44 g	6.14 g	19.548872180451 1 %	80.451127819548 9 %

Lab Sample ID	Client Sample ID	Method Chain	Basis	AnalysisComment					
410-114770-A-1	SY-SB4R-1	Moisture	T	soil					
410-114770-A-2	SY-SB4R-10	Moisture	T	soil					
410-114770-A-3	SY-SB4R-2	Moisture	T	clay					

Batch Notes	
Balance ID	B4462
Oven ID	8948
Thermometer ID	1262
Date samples were placed in the oven	02/09/2023
Time samples were place in the oven	20:18
Oven Temp In	105 Degrees C
Date samples were removed from oven	02/10/2023
Time Samples were removed from oven	06:34
Oven Temp Out	105 Degrees C
Batch Comment	2/4/2023

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

Date:	2/15/2023	**Balance ID:**	12591	**Oven ID:**	974
Analyst:	AMC26520	**Sucrose:**	2053856	**Oven Temperature (°C):**	75
Run:		**CCV/LCS:**	2332813	**Time In:**	
		H3PO4:	3144436	**Time Out:**	

Tray #	Tray Position	Sample #	Sample Weight (mg)	Factor	LOQ	MDL	Comments
1	*A1*	CCV	106.7	9.37	2812	937	
	A2	CCB	1000.0	1.00	300	100	
	A3	LCS	106.5	9.39	2817	939	
	A4	MB	1000.0	1.00	300	100	
	A5	410-114770-A-1	200.1	5.00	1499	500	
	A6	410-114770-A-1	205.5	4.87	1460	487	
	A7	410-114770-A-1	211.3	4.73	1420	473	
	A8	410-114770-A-1	217.7	4.59	1378	459	
	B1	410-114770-A-2	192.5	5.19	1558	519	
	B2	410-114770-A-3	220.8	4.53	1359	453	
	B3	410-114506-A-1	180.9	5.53	1658	553	
	B4	410-114506-A-2	466.9	2.14	643	214	
	B5	CCV	107.5	9.30	2791	930	
	B6	CCB	1000.0	1.00	300	100	
	B7	410-114770-A-1	45.3	22.08	6623	2208	
	B8	410-114770-A-1	41.1	24.33	7299	2433	
	C1	410-114770-A-1	33.6	29.76	8929	2976	
	C2	410-114770-A-1	35.7	28.01	8403	2801	
	C3	410-114770-A-3	213.6	4.68	1404	468	
	C4	CCV	105.5	9.48	2844	948	
	C5	CCB	1000.0	1.00	300	100	
	C6	410-113495-B-1	299.0	3.34	1003	334	
	C7	410-113495-B-1 MS	153.8	6.50	1951	650	
	C8	410-113495-B-1 MSD	93.1	10.74	3222	1074	

Date:	2/15/2023	**Balance ID:**	12591	**Oven ID:**	974
Analyst:	AMC26520	**Sucrose:**	2053856	**Oven Temperature (°C):**	75
Run:		**CCV/LCS:**	2332813	**Time In:**	
		H3PO4:	3144436	**Time Out:**	

Tray #	Tray Position	Sample #	Sample Weight (mg)	Factor	LOQ	MDL	Comments
2	*A1*	410-113495-B-2	140.7	7.11	2132	711	
	A2	410-114858-A-1	120.5	8.30	2490	830	
	A3	410-114858-A-2	99.2	10.08	3024	1008	
	A4	CCV	101.0	9.90	2970	990	
	A5	CCB	1000.0	1.00	300	100	
	A6	410-113513-A-1	211.4	4.73	1419	473	
	A7	410-113513-A-2	87.4	11.44	3432	1144	
	A8	410-114858-A-2	141.6	7.06	2119	706	
	B1	410-113513-A-1	106.3	9.41	2822	941	
	B2	CCV	104.3	9.59	2876	959	
	B3	CCB	1000.0	1.00	300	100	
	B4	410-113495-B-1	44.9	22.27	6682	2227	
	B5	410-113495-B-1 MS	37.3	26.81	8043	2681	
	B6	410-113495-B-1 MSD	37.8	26.46	7937	2646	
	B7	CCV	102.8	9.73	2918	973	
	B8	CCB	1000.0	1.00	300	100	
	C1	410-112993-B-1	131.6	7.60	2280	760	
	C2	410-112994-B-1	158.1	6.33	1898	633	
	C3	410-112994-B-2	147.3	6.79	2037	679	
	C4	410-112994-B-3	155.7	6.42	1927	642	
	C5	410-112994-B-4	141.6	7.06	2119	706	
	C6	410-112995-B-1	148.9	6.72	2015	672	
	C7	CCV	103.8	9.63	2890	963	
	C8	CCB	1000.0	1.00	300	100	

General Chemistry Raw Data Report

Job ID: 410-114770-1

Batch: 343285 **Analyst Initials: USWF**

Method: Moisture **Instrument: NONE**

Lab Sample ID: 410-114770-A-1 **Analysis Date: Feb 09, 2023 18:54**

Analyte	Detector	Dilution	Raw Result	Unit
Percent Moisture	None	1	13.262599469496	%

Lab Sample ID: 410-114770-A-2 **Analysis Date: Feb 09, 2023 18:54**

Analyte	Detector	Dilution	Raw Result	Unit
Percent Moisture	None	1	14.6099290780142	%

Lab Sample ID: 410-114770-A-3 **Analysis Date: Feb 09, 2023 18:54**

Analyte	Detector	Dilution	Raw Result	Unit
Percent Moisture	None	1	19.5488721804511	%

Shipping and Receiving Documents

Eurofins Lancaster

Katahdin ANALYTICAL SERVICES

Sub-contract Laboratory Chain of Custody

revised COC rec 114770 02/16/23 sjg

Client:	Contact:	Email:		Phone #:
Katahdin Analytical Services	Heather Manz	hmanz@katahdinlab.com		(207) 874-2400
Address:	**City:**	**State:**	**Zip:**	**Project Name:**
600 Technology Way	Scarborough	Maine	04074	DOW
KAS WO #:	**Quote #:**	**Purchase Order #:**		**TAT:** Standard
SQ0595		SQ0595		**Verbal TAT:** N/A
RPT Level: 4	**Reporting Format:** DOD	**EDD:** FUDSCHEM		**Analysis:** TOC Lloydkahn

Sample ID:	Collect Date/Time:	Matrix:	No. of Containers	Pres.	MS/MSD Dup.	Filtered? Y / N	~~Analysis:~~ Filtered? Y / N	~~Analysis:~~ Filtered? Y / N
~~SY-SB4-1~~ SY-SB4R-1	01-FEB-23 11:45	SL	1	cold	NO	✓		
~~SY-SB4-10~~ SY-SB4R-10	01-FEB-23 11:50	SL				✓		
~~SY-SB4-2~~ SY-SB4R-2	01-FEB-23 11:55	SL				✓		

Relinquished By:	Date/Time:	Received By:
[signature]	2/07/23	[signature] 2/8/23 1004

Comments:

410-114770 Chain of Custody

mB

CB

Eurofins Lancaster

Katahdin ANALYTICAL SERVICES

Sub-contract Laboratory Chain of Custody

Client:	Contact:	Email:	Phone #:
Katahdin Analytical Services	Heather Manz	hmanz@katahdinlab.com	(207) 874-2400
Address:	**City:**	**State:** / **Zip:**	**Project Name:**
600 Technology Way	Scarborough	Maine / 04074	DOW
KAS WO #:	**Quote #:**	**Purchase Order #:**	**TAT:** Standard
SQ0595		SQ0595	**Verbal TAT:** N/A
RPT Level: 4	**Reporting Format:** DOD	**EDD:** FUDSCHEM	**Analysis:** TOC Lloyd Kahn / ~~Analysis:~~ / ~~Analysis:~~

Sample ID:	Collect Date/Time:	Matrix:	No. of Containers	Pres.	MS/MSD Dup.	Filtered? Y / N	Filtered? Y / N	Filtered? Y / N
SY-SB4-1	01-FEB-23 11:45	SL	1	cold	NO	✓		
SY-SB4-10	01-FEB-23 11:50	SL	↓	↓	↓	✓		
SY-SB4-2	01-FEB-23 11:55	SL	↓	↓	↓	✓		

Relinquished By:	Date/Time:	Received By:
[signature]	2/07/23	[signature] 2/8/23 1004

Comments:

410-114770 Chain of Custody

mB

CB

Login Sample Receipt Checklist

Client: Katahdin Analytical Services

Job Number: 410-114770-1

Login Number: 114770
List Number: 1
Creator: Ballard, Megan

List Source: Eurofins Lancaster Laboratories Environment Testing, LLC

Question	Answer	Comment
The cooler's custody seal is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable (</=6C, not frozen).	False	Cooler temperature outside required temperature criteria.
Cooler Temperature is recorded.	True	
WV: Container Temperature is acceptable (</=6C, not frozen).	N/A	
WV: Container Temperature is recorded.	N/A	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the containers received and the COC.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses.	True	
Is the Field Sampler's name present on COC?	False	Received project as a subcontract.
Sample custody seals are intact.	N/A	
VOA sample vials do not have headspace >6mm in diameter (none, if from WV)?	N/A	

CREDERE ASSOCIATES

DOW MILITARY AIRFIELD
SALVAGE YARD

SQ0595

Ms. Leslie Dimond
207-874-2400

KATAHDIN ANALYTICAL SERVICES
600 TECHNOLOGY WAY
SCARBOROUGH, ME 04074

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SAMPLE DATA PACKAGE

NARRATIVE
KATAHDIN ANALYTICAL SERVICES
CREDERE ASSOCIATES
DOW MILITARY AIRFIELD SALVAGE YARD
SQ0595

Sample Receipt

The following samples were received on February 01, 2023 and were logged in under Katahdin Analytical Services work order number SQ0595 for a hardcopy due date of February 27, 2023.

KATAHDIN Sample No.	CREDERE Sample Identification
SQ0595-1	SY-SB4R-1
SQ0595-2	SY-SB4R-10
SQ0595-3	SY-SB4R-2

The samples were logged in for the analyses specified on the chain of custody form. All problems encountered and resolved during sample receipt have been documented on the applicable chain of custody forms.

We certify that the test results provided in this report meet all the requirements of the NELAP standards unless otherwise noted in this narrative or in the Report of Analysis.

We certify that the test results provided in this report are accredited under the laboratory's ISO/IEC 17025:2017 and DoD-ELAP accreditation issued by the ANSI-ASQ National Accreditation Board. Refer to certificate and scope of accreditation L2223.

Analytes which are reported but not listed on our ANAB scope of accreditation will be "^" flagged and the following language will be included in the case narrative for all DoD compliant work: "^" Indicates this analyte is not included on Katahdin Analytical Services DoD-ELAP Scope of Accreditation.

Sample analyses have been performed by the methods as noted herein.

Should you have any questions or comments concerning this Report of Analysis, please do not hesitate to contact your Katahdin Analytical Services Project Manager, **Heather Manz**. This narrative is an integral part of the Report of Analysis.

Organics Analysis

The samples of Work Order SQ0595 were analyzed in accordance with Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, EPA publication SW-846, Third Edition, Final Updates I (1993), II (1995), IIA (1994), IIB (1995), III (1997), IIIA (1999), IIIB (2005), IV (2008), V (2015) and VI (2019) and/or for the specific methods listed below or on the Report of Analysis.

8270D SIM PAH Analysis

Every sample was manually integrated for the target analytes benzo(b)fluoranthene and/or benzo(k)fluoranthene. The specific reasons for the manual integrations are indicated on the raw data by the manual integration codes (M1-M11). These codes are further explained in the attachment following this narrative.

Note: The Form VII has a column for %D that is set to 20%. The DoD QSM criterion for an opening CV is 20%D and a closing CV is 50%D. All of the compounds in the CV's were evaluated to either 20% criteria for opening CV's or 50% criteria for closing CV's.

There were no other protocol deviations or observations noted by the organics laboratory staff.

Wet Chemistry Analysis

The samples of Work Order SQ0595 were analyzed in accordance with the specific methods listed on the Report of Analysis.

Analyses for total solids and hexavalent chromium were performed according to "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", EPA publication SW-846, Third Edition, Final Updates I (1993), II (1995), IIA (1994), IIB (1995), III (1997), IIIA (1999), IIIB (2005), IV (2008), and V (2015).

All Wet Chemistry results were evaluated to Katahdin Analytical Services' Method Detection Limits (MDL). Measured concentrations that fall between the MDL and Katahdin's Limit of Quantitation (LOQ) are flagged "J". Measured concentrations that are below the MDL are flagged "U" and reported as "U LOD", where "LOD" is the numerical value of the Limit of Detection.

All quality control criteria were met. All analyses were performed within analytical holding times, with the following exception:

Due to fume hood issues, the hexavalent chromium analysis was performed on day 42 of the 30-day method-specified analytical holding time. The client was contacted.

Subcontracted Data

Analyses for Total Organic Carbon (TOC) by Method Lloyd Kahn were performed by a subcontract laboratory. Please refer to the section of the data package titled Subcontracted Data.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package has been authorized by the Quality Assurance Officer, or their designee, as verified by the following signature.

Leslie Dimond ***Mar 23, 2023***

Leslie Dimond
Quality Assurance Officer

Katahdin Analytical Services, Inc.

Manual Integration Codes For GC/MS, GC, HPLC and/or IC

M1	Peak splitting.
M2	Well defined peaks on the shoulders of the other peaks.
M3	There is additional area due to a coeluting interferant.
M4	There are negative spikes in the baseline.
M5	There are rising or falling baselines.
M6	The software has failed to detect a peak or misidentified a peak.
M7	Excessive peak tailing.
M8	Analysis such as GRO, DRO and TPH require a baseline hold.
M9	Peak was not completely integrated as in GC/MS.
M10	Primary ion was correctly integrated, but secondary or tertiary ion needed manual integration as in GC/MS.
M11	For GC analysis, when a sample is diluted by 1:10 or more, the surrogate is set to undetected and then the area under the surrogate is manually integrated.
M12	Manual integration saved in method due to TurboChrom floating point error.

Katahdin Analytical Services, LLC. — Sample Receipt Condition Report

Client: Credere	KAS PM: HHM	Sampled By: Client
Project:	KIMS Entry By: RD	Delivered By: KAS
KAS Work Order#: SQ 0595	KIMS Review By: HHM	Received By: GP
	Labeled By: GP	
SDG #:	Cooler: 1 of 1	Date/Time Rec.: 2/6/23 1535

Receipt Criteria	Y	N	EX*	NA	Comments and/or Resolution
1. Custody seals present / intact?		/			
2. Chain of Custody present in cooler?	/				
3. Chain of Custody signed by client?	/				
4. Chain of Custody matches samples?	/				
5. Temperature Blanks present? If not, take temperature of any sample w/ IR gun.	/				Temp (°C): 2.8 — Thermometer ID: IR-1
Samples received at <6 °C w/o freezing?	/				Note: Not required for metals (except Hg soil) analysis.
Ice packs or ice present?	/				The lack of ice or ice packs (i.e. no attempt to begin cooling process) or insufficient ice may not meet certain regulatory requirements and may invalidate certain data.
If yes, was there sufficient ice to meet temperature requirements?	/				
If temp. out, has the cooling process begun (i.e. ice or packs present) and sample collection times <6hrs., but samples are not yet cool?				/	Note: No cooling process required for metals (except Hg soil) analysis.
6. Volatiles: **Aqueous:** No bubble larger than a pea?				/	
Soil/Sediment: Received in airtight container?				/	
Received in methanol?				/	
Methanol covering soil?				/	
D.I. Water - Received within 48 hour HT?				/	
7. Trip Blank present in cooler?				/	
8. Proper sample containers and volume?	/				
9. Samples within hold time upon receipt?	/				
10. Aqueous samples properly preserved? Metals, COD, NH3, TKN, O/G, phenol, TPO4, N+N, TOC, DRO, TPH – pH <2				/	
Sulfide - >9				/	
Cyanide – pH >12				/	
11. Bottleware Prepped on:				/	

* Log-In Notes to Exceptions: document any problems with samples or discrepancies or pH adjustments.

Katahdin ANALYTICAL SERVICES
600 Technology Way
P.O. Box 540
Scarborough, ME 04070
Tel: (207) 874-2400
Fax: (207) 775-4029

Chain of Custody

Client: Credere	Contact: Sean Gannon	Phone #: (860) 7332510	Fax #: ( ) Sgannon@Credere11C.com
Address: 776 Main St	City: Westbrook	State: ME	Zip Code: 04092
Purchase Order #:	Proj. Name/No.: Dow		Katahdin Quote #:
Bill (if different than above):	Address: Invoices@Credere11C.com		
Sampler (Print/Sign): Sean Gannon			Copies To: adrouin@Credere11C.com

LAB USE ONLY

Work Order #: SQ 0595
Katahdin Project Number

Remarks:

Shipping Info: FEDEX UPS CLIENT
Airbill No:
Temp C Temp Blank Intact Not Intact

Analysis and Container Type Preservatives

*	Sample Description	Date/Time Collected	Matrix	No. of Containers	Filt. Y/N BNASIM	Filt. Y/N Hex. Chrom	Filt. Y/N TOC	Filt. Y/N	Filt. Y/N	Filt. Y/N	Filt. Y/N	Filt. Y/N	Filt. Y/N	Filt. Y/N
	SY-SB4-1	2/1/1145	Soil	1	X	X	X							
	SY-SB4-10	2/1/1150	↓	1	↓	↓	↓							
	SY-SB4-2	2/1/1155	↓	1	↓	↓	↓							

COMMENTS: See Dow QAPP SVOC by SIM

Relinquished By:	Date/Time	Received By:	Relinquished By:	Date/Time	Received By:
[signature]	2/6/23 1500	[signature]	[signature]	2/6/23 1535	[signature]
Relinquished By:	Date/Time	Received By:	Relinquished By:	Date/Time	Received By:

The terms and conditions on the following page hereof shall govern services, except when a signed contractual agreement exists.

Katahdin ANALYTICAL SERVICES
600 Technology Way
P.O. Box 540
Scarborough, ME 04070
Tel: (207) 874-2400
Fax: (207) 775-4029

Chain of Custody

Client: Credere	Contact: Sean Gannon	Phone #: (860) 7332513	Fax #: ( ) Sgannon@CredereLLC.com
Address: 776 Main St	City: Westbrook	State: ME	Zip Code: 04092
Purchase Order #:	Proj. Name/No.: Dow		Katahdin Quote #:
Bill (if different than above):	Address:		Invoices@CredereLLC.com
Sampler (Print/Sign): Sean Gannon			Copies To: adrouin@CredereLLC.com

LAB USE ONLY
Work Order #: SQ 0595
Katahdin Project Number
Remarks:
Shipping Info: FEDEX UPS CLIENT
Airbill No:
Temp C Temp Blank Intact Not Intact

*	Sample Description	Date/Time Collected	Matrix	No. of Containers	Analysis and Container Type / Preservatives: Filt. Y/N 8270 SIM	Filt. Y/N Hex. Chrom	Filt. Y/N TOC	Filt. Y/N	Filt. Y/N	Filt. Y/N	Filt. Y/N	Filt. Y/N	Filt. Y/N	Filt. Y/N
	SY-SB4R-1													
	~~SY-SB4-1~~	2/1/1145	Soil	1	X	X	X							
	SY-SB4R10	2/1/1150	↓	1	↓	↓	↓							
	~~SY-SB4-2~~	2/1/1155	↓	1	↓	↓	↓							
	SY-SB4R-2													

COMMENTS: See Dow QAPP SVOC by SIM

Relinquished By:	Date/Time	Received By:	Relinquished By:	Date/Time	Received By:
	2/6/23 1500			2/6/23 1535	
Relinquished By:	Date/Time	Received By:	Relinquished By:	Date/Time	Received By:

The terms and conditions on the following page hereof shall govern services, except when a signed contractual agreement exists.

Katahdin
ANALYTICAL SERVICES

Katahdin Analytical Services

Login Chain of Custody (ln01)

Feb. 16, 2023
10:02 AM

Login Number: SQ0595

Account: CREDERE01
Credere Associates

Project: CREDERE-DOW

Primary Report Address:

Allison Drouin
Credere Associates, LLC
776 Main Street

Westbrook, ME 04092

adrouin@crederellc.com

Primary Invoice Address:

Accounts Payable
Credere Associates, LLC
776 main Street

Westbrook,ME 04092

jenn@crederellc.com (also, cc PM)

Report CC Addresses:
Invoice CC Addresses:

Quote/Incoming: CREDERE-DOW

Login Information

ANALYSIS INSTRUCTIONS	:	DOD 5.1. ND to LOD with J-flags. SVOA use 3550C/8270D mg/kg. When hex Cr MS/MSD fail, perform pH & ORP, include this data in the case narrative. Need to include copies of standard receipt and standard prep logbooks in final report.
CHECK NO.	:	
CLIENT PO#	:	18001468
CLIENT PROJECT MANAGE	:	Peter Thompson
CONTRACT	:	W912WJ-18-C-0019
COOLER TEMPERATURE	:	2.8
DELIVERY SERVICES	:	KAS
EDD FORMAT	:	FUDSCHEM
ISM INSTRUCTIONS	:	
LOGIN INITIALS	:	RD
PM	:	HHM
PROJECT NAME	:	Dow Military Airfield Salvage Yard
QC LEVEL	:	IV
REPORT INSTRUCTIONS	:	Upload to FUDSChem. Report to adrouin@crederellc.com and apollom@crederellc.com. Invoices to pthompson@crederellc.com and jenn@crederellc.com.
SDG ID	:	
SDG STATUS	:	
VERBAL TAT	:	

10:11 am, Feb 16, 2023

Run Reports: Logindetail

Login Number: SQ0595

Account: CREDERE01
Credere Associates

Project: CREDERE-DOW

Quote/Incoming: CREDERE-DOW

Laboratory Sample ID	Client Sample Number	Collect Date/Time	Receive Date	PR	Due Date	Verbal Due Date	Mailed
SQ0595-1	SY-SB4R-1	01-FEB-23 11:45	06-FEB-23		27-FEB-23		

Sample Comments:

Matrix		Product	Hold Date (shortest)	Notes	Bottle Type
Solid	S	SW7196A-CRVI	01-MAR-23		50g Glass
Solid	S	SW8270SIMPAH-S	15-FEB-23		4oz Glass
Solid	S	TOC-SUB	15-FEB-23		2oz Glass
Solid	S	TS-ME	08-FEB-23		2oz Glass
Service	S	WASTE-DISPOSAL			

SQ0595-2	SY-SB4R-10	01-FEB-23 11:50	06-FEB-23		27-FEB-23		

Sample Comments:

Matrix		Product	Hold Date (shortest)	Notes	Bottle Type
Solid	S	SW7196A-CRVI	01-MAR-23		50g Glass
Solid	S	SW8270SIMPAH-S	15-FEB-23		4oz Glass
Solid	S	TOC-SUB	15-FEB-23		2oz Glass
Solid	S	TS-ME	08-FEB-23		2oz Glass
Service	S	WASTE-DISPOSAL			

SQ0595-3	SY-SB4R-2	01-FEB-23 11:55	06-FEB-23		27-FEB-23		

Sample Comments:

Matrix		Product	Hold Date (shortest)	Notes	Bottle Type
Solid	S	SW7196A-CRVI	01-MAR-23		50g Glass
Solid	S	SW8270SIMPAH-S	15-FEB-23		4oz Glass
Solid	S	TOC-SUB	15-FEB-23		2oz Glass
Solid	S	TS-ME	08-FEB-23		2oz Glass
Service	S	WASTE-DISPOSAL			

Total Samples: 3 ***Total Analyses: 15***



10:11 am, Feb 16, 2023

Run Reports: Logindetail

SAMPLE DATA SUMMARY PACKAGE

KATAHDIN ANALYTICAL SERVICES - ORGANIC DATA QUALIFIERS

U Indicates the compound was analyzed for but not detected above the specified level. This level may be the Practical Quantitation Level (PQL) (also called Limit of Quantitation (LOQ)), the Limit of Detection (LOD) or Method Detection Limit (MDL) as required by the client.

Note: All results reported as "U" MDL have a 50% rate for false negatives compared to those results reported as "U" PQL, "U" LOQ or "U" LOD, where the rate of false negatives is <1%.

* Compound recovery or percent RPD (relative percent difference) was outside of quality control limits.

D Indicates the result was obtained from analysis of a diluted sample. Surrogate recoveries may not be calculable.

E Estimated value. This flag identifies compounds whose concentrations exceed the upper level of the calibration range of the instrument for that specific analysis.

J Estimated value. The analyte was detected in the sample at a concentration less than the laboratory Practical Quantitation Level (PQL) (also called Limit of Quantitation (LOQ)), but above the Method Detection Limit (MDL).

And/or

J Used for Dual Column analytes when there is a greater than 40% difference for detected concentrations between the two GC/HPLC columns.

B Indicates the analyte was detected in the laboratory method blank analyzed concurrently with the sample.

I Indicates that the flagged compound did not meet DoD criteria in the corresponding Initial Calibration (ICAL).

D Indicates that the flagged compound did not meet DoD criteria in the corresponding Initial Calibration Verification (ICV).

C Indicates that the flagged compound did not meet DoD criteria in the corresponding opening Calibration Verification (CV).

V Indicates that the flagged compound did not meet DoD criteria in the corresponding closing Calibration Verification (CV).

L/LL Indicates that the flagged compound did not meet DoD criteria in the corresponding Laboratory Control Sample (LCS) and/or Laboratory Control Sample Duplicate (LCSD) prepared and/or analyzed concurrently with the sample.

M/MM Indicates that the flagged compound did not meet DoD criteria in the Matrix Spike (MS) and/or Matrix Spike Duplicate MSD) prepared and/or analyzed concurrently with the native sample.

H Indicates the flagged compound was detected on the primary column but was not detected on the confirmation column therefore the compound is not reported as a positive detection. (SW846 8330A/B only)

KATAHDIN ANALYTICAL SERVICES – INORGANIC DATA QUALIFIERS

The sampled date indicated on the attached Report(s) of Analysis (ROA) is the date for which a grab sample was collected or the date for which a composite sample was completed. Beginning and start times for composite samples can be found on the Chain-of-Custody.

U Indicates the compound was analyzed for but not detected above the specified level. This level may be the Practical Quantitation Level (PQL) (also called Limit of Quantitation (LOQ)), the Limit of Detection (LOD) or Method Detection Limit (MDL) as required by the client.

Note: All results reported as "U" MDL have a 50% rate for false negatives compared to those results reported as "U" PQL "U" LOQ or "U" LOD, where the rate of false negatives is <1%.

E Estimated value. This flag identifies compounds whose concentrations exceed the upper level of the calibration range of the instrument for that specific analysis.

J Estimated value. The analyte was detected in the sample at a concentration less than the laboratory Practical Quantitation Level (PQL) (also called Limit of Quantitation (LOQ)), but above the Method Detection Limit (MDL).

I-7 The laboratory's Practical Quantitation Level (PQL) or LOQ could not be achieved for this parameter due to sample composition, matrix effects, sample volume, or quantity used for analysis.

A-4 Please refer to cover letter or narrative for further information.

H_ Please note that the regulatory holding time for _____ is "analyze immediately". Ideally, this analysis must be performed in the field at the time of sample collection. _____ for this sample was not performed at the time of sample collection. The analysis was performed as soon as possible after receipt by the laboratory.

H1 - pH H2 - DO H3 - sulfite H4 - residual chlorine

T1 The client did not provide the full volume of at least one liter for analysis of TSS. Therefore, the PQL of 2.5 mg/L could not be achieved.

T2 The client provided the required volume of at least one liter for analysis of TSS, but the laboratory could not filter the full one liter volume due to the sample matrix. Therefore, the PQL of 2.5 mg/L could not be achieved.

M1 The matrix spike and/or matrix spike duplicate recovery performed on this sample was outside of the laboratory acceptance criteria. Sample matrix is suspected. The laboratory criteria was met for the Laboratory Control Sample (LCS) analyzed concurrently with this sample.

M2 The matrix spike and/or matrix spike duplicate recovery was outside of the laboratory acceptance criteria. The native sample concentration is greater than four times the spike added concentration so the spike added could not be distinguished from the native sample concentration.

R1 The relative percent difference (RPD) between the duplicate analyses performed on this sample was outside of the laboratory acceptance criteria (when both values are greater than ten times the PQL).

MCL	Maximum Contaminant Level	NL	No limit
NFL	No Free Liquid Present	FLP	Free Liquid Present
NOD	No Odor Detected	TON	Threshold Odor Number

D-1 As required by Method 5210B, APHA Standard Methods for the Examination of Water and Wastewater (21st edition), the BOD value reported for this sample is 'qualified' because the check standard run concurrently with the sample analysis did not meet the criteria specified in the method (198 +/- 30.5 mg/L). These results may not be reportable for compliance purposes.

D-2 The measured final dissolved oxygen concentrations of all dilutions were less than the method-specified limit of 1 mg/L. The reported BOD result was calculated assuming a final oxygen concentration equal to 1 mg/L. The reported value should be considered a minimum value.

D-3 The dilution water used to prepare this sample did not meet the method and/or regulatory criteria of less than 0.2 or 0.4 mg/L dissolved oxygen (DO) uptake over the five day period of incubation. These results may not be reportable for compliance purposes.

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Report of Analytical Results

SDG: SQ0595
Lab ID: SQ0595-1
Client ID: SY-SB4R-1
Matrix: SL
Lab File ID: N7597.D

Sample Date: 01-FEB-23
Extract Date: 08-FEB-23
Extracted By: SR
Extraction Method: SW846 3550C
Lab Prep Batch: WG332122

Report Date: 22-MAR-23
Analysis Date: 03-MAR-23
Analyst: DT/CO
Analysis Method: SW846 8270D SIM
% Solids: 87.

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene		0.072	mg/Kgdrywt	1	.02	0.022	0.0029	0.011
2-Methylnaphthalene		0.095	mg/Kgdrywt	1	.02	0.022	0.0024	0.011
Acenaphthylene	J	0.016	mg/Kgdrywt	1	.02	0.022	0.0013	0.011
Acenaphthene	J	0.0041	mg/Kgdrywt	1	.02	0.022	0.0017	0.011
Fluorene	J	0.016	mg/Kgdrywt	1	.02	0.022	0.0036	0.011
Phenanthrene		0.23	mg/Kgdrywt	1	.02	0.022	0.0020	0.011
Anthracene		0.026	mg/Kgdrywt	1	.02	0.022	0.0013	0.011
Fluoranthene		0.39	mg/Kgdrywt	1	.02	0.022	0.0020	0.011
Pyrene		0.44	mg/Kgdrywt	1	.02	0.022	0.0023	0.011
Benzo(a)anthracene		0.28	mg/Kgdrywt	1	.02	0.022	0.0021	0.011
Chrysene		0.32	mg/Kgdrywt	1	.02	0.022	0.0019	0.011
Benzo(b)Fluoranthene		0.34	mg/Kgdrywt	1	.02	0.022	0.0027	0.011
Benzo(k)fluoranthene		0.10	mg/Kgdrywt	1	.02	0.022	0.0038	0.011
Benzo(a)pyrene		0.22	mg/Kgdrywt	1	.02	0.022	0.0037	0.011
Indeno(1,2,3-cd)pyrene		0.11	mg/Kgdrywt	1	.02	0.022	0.0021	0.011
Dibenzo(a,h)anthracene		0.028	mg/Kgdrywt	1	.02	0.022	0.0020	0.011
Benzo(g,h,i)perylene		0.13	mg/Kgdrywt	1	.02	0.022	0.0022	0.011
2-Methylnaphthalene-D10		57.1	mg/Kgdrywt					
Fluorene-D10		64.9	mg/Kgdrywt					
Pyrene-D10		86.0	mg/Kgdrywt					

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Report of Analytical Results

SDG: SQ0595
Lab ID: SQ0595-2
Client ID: SY-SB4R-10
Matrix: SL
Lab File ID: N7598.D

Sample Date: 01-FEB-23
Extract Date: 08-FEB-23
Extracted By: SR
Extraction Method: SW846 3550C
Lab Prep Batch: WG332122

Report Date: 22-MAR-23
Analysis Date: 03-MAR-23
Analyst: DT/CO
Analysis Method: SW846 8270D SIM
% Solids: 87.

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene		0.084	mg/Kgdrywt	1	.02	0.021	0.0028	0.011
2-Methylnaphthalene		0.11	mg/Kgdrywt	1	.02	0.021	0.0024	0.011
Acenaphthylene		0.024	mg/Kgdrywt	1	.02	0.021	0.0013	0.011
Acenaphthene	J	0.0043	mg/Kgdrywt	1	.02	0.021	0.0016	0.011
Fluorene	J	0.018	mg/Kgdrywt	1	.02	0.021	0.0034	0.011
Phenanthrene		0.26	mg/Kgdrywt	1	.02	0.021	0.0019	0.011
Anthracene		0.031	mg/Kgdrywt	1	.02	0.021	0.0013	0.011
Fluoranthene		0.50	mg/Kgdrywt	1	.02	0.021	0.0019	0.011
Pyrene	E	0.57	mg/Kgdrywt	1	.02	0.021	0.0022	0.011
Benzo(a)anthracene		0.38	mg/Kgdrywt	1	.02	0.021	0.0020	0.011
Chrysene		0.43	mg/Kgdrywt	1	.02	0.021	0.0018	0.011
Benzo(b)Fluoranthene		0.40	mg/Kgdrywt	1	.02	0.021	0.0026	0.011
Benzo(k)fluoranthene		0.13	mg/Kgdrywt	1	.02	0.021	0.0036	0.011
Benzo(a)pyrene		0.26	mg/Kgdrywt	1	.02	0.021	0.0035	0.011
Indeno(1,2,3-cd)pyrene		0.14	mg/Kgdrywt	1	.02	0.021	0.0020	0.011
Dibenzo(a,h)anthracene		0.053	mg/Kgdrywt	1	.02	0.021	0.0019	0.011
Benzo(g,h,i)perylene		0.15	mg/Kgdrywt	1	.02	0.021	0.0021	0.011
2-Methylnaphthalene-D10		57.4	mg/Kgdrywt					
Fluorene-D10		65.9	mg/Kgdrywt					
Pyrene-D10		80.2	mg/Kgdrywt					

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Report of Analytical Results

SDG: SQ0595
Lab ID: SQ0595-2DL
Client ID: SY-SB4R-10
Matrix: SL
Lab File ID: N7762.D

Sample Date: 01-FEB-23
Extract Date: 08-FEB-23
Extracted By: SR
Extraction Method: SW846 3550C
Lab Prep Batch: WG332122

Report Date: 23-MAR-23
Analysis Date: 20-MAR-23
Analyst: DT/EP
Analysis Method: SW846 8270D SIM
% Solids: 87.

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene		0.083	mg/Kgdrywt	2	.02	0.043	0.0056	0.021
2-Methylnaphthalene		0.12	mg/Kgdrywt	2	.02	0.043	0.0047	0.021
Acenaphthylene	J	0.024	mg/Kgdrywt	2	.02	0.043	0.0026	0.021
Acenaphthene	J	0.0050	mg/Kgdrywt	2	.02	0.043	0.0032	0.021
Fluorene	J	0.017	mg/Kgdrywt	2	.02	0.043	0.0068	0.021
Phenanthrene		0.24	mg/Kgdrywt	2	.02	0.043	0.0038	0.021
Anthracene	J	0.032	mg/Kgdrywt	2	.02	0.043	0.0026	0.021
Fluoranthene		0.46	mg/Kgdrywt	2	.02	0.043	0.0038	0.021
Pyrene		0.49	mg/Kgdrywt	2	.02	0.043	0.0045	0.021
Benzo(a)anthracene		0.32	mg/Kgdrywt	2	.02	0.043	0.0040	0.021
Chrysene		0.40	mg/Kgdrywt	2	.02	0.043	0.0036	0.021
Benzo(b)Fluoranthene		0.44	mg/Kgdrywt	2	.02	0.043	0.0051	0.021
Benzo(k)fluoranthene		0.043	mg/Kgdrywt	2	.02	0.043	0.0073	0.021
Benzo(a)pyrene		0.24	mg/Kgdrywt	2	.02	0.043	0.0070	0.021
Indeno(1,2,3-cd)pyrene		0.18	mg/Kgdrywt	2	.02	0.043	0.0040	0.021
Dibenzo(a,h)anthracene	J	0.039	mg/Kgdrywt	2	.02	0.043	0.0038	0.021
Benzo(g,h,i)perylene		0.14	mg/Kgdrywt	2	.02	0.043	0.0043	0.021
2-Methylnaphthalene-D10		57.0	mg/Kgdrywt					
Fluorene-D10		56.6	mg/Kgdrywt					
Pyrene-D10		70.4	mg/Kgdrywt					

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Report of Analytical Results

SDG: SQ0595
Lab ID: SQ0595-3RA
Client ID: SY-SB4R-2
Matrix: SL
Lab File ID: N7619.D

Sample Date: 01-FEB-23
Extract Date: 08-FEB-23
Extracted By: SR
Extraction Method: SW846 3550C
Lab Prep Batch: WG332122

Report Date: 22-MAR-23
Analysis Date: 07-MAR-23
Analyst: DT/CO
Analysis Method: SW846 8270D SIM
% Solids: 80.

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	0.012	mg/Kgdrywt	1	.02	0.024	0.0032	0.012
2-Methylnaphthalene	U	0.012	mg/Kgdrywt	1	.02	0.024	0.0027	0.012
Acenaphthylene	U	0.012	mg/Kgdrywt	1	.02	0.024	0.0015	0.012
Acenaphthene	U	0.012	mg/Kgdrywt	1	.02	0.024	0.0018	0.012
Fluorene	U	0.012	mg/Kgdrywt	1	.02	0.024	0.0039	0.012
Phenanthrene	J	0.0039	mg/Kgdrywt	1	.02	0.024	0.0022	0.012
Anthracene	U	0.012	mg/Kgdrywt	1	.02	0.024	0.0015	0.012
Fluoranthene	J	0.0047	mg/Kgdrywt	1	.02	0.024	0.0022	0.012
Pyrene	J	0.0047	mg/Kgdrywt	1	.02	0.024	0.0026	0.012
Benzo(a)anthracene	J	0.0026	mg/Kgdrywt	1	.02	0.024	0.0023	0.012
Chrysene	J	0.0041	mg/Kgdrywt	1	.02	0.024	0.0021	0.012
Benzo(b)Fluoranthene	J	0.0036	mg/Kgdrywt	1	.02	0.024	0.0029	0.012
Benzo(k)fluoranthene	U	0.012	mg/Kgdrywt	1	.02	0.024	0.0042	0.012
Benzo(a)pyrene	U	0.012	mg/Kgdrywt	1	.02	0.024	0.0040	0.012
Indeno(1,2,3-cd)pyrene	U	0.012	mg/Kgdrywt	1	.02	0.024	0.0023	0.012
Dibenzo(a,h)anthracene	U	0.012	mg/Kgdrywt	1	.02	0.024	0.0022	0.012
Benzo(g,h,i)perylene	U	0.012	mg/Kgdrywt	1	.02	0.024	0.0024	0.012
2-Methylnaphthalene-D10		45.5	mg/Kgdrywt					
Fluorene-D10		55.0	mg/Kgdrywt					
Pyrene-D10		74.3	mg/Kgdrywt					

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Report of Analytical Results

Lab Sample ID: SQ0595-1
Client ID: SY-SB4R-1
SDG: SQ0595
Report Date: 17-MAR-23

Matrix	Date Sampled	Date Received
SL	01-FEB-23 11:45	06-FEB-23

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Chromium, Hexavalent	J0.26 mg/Kgdrywt	0.56	0.17	0.33	SW846 7196A	WG333949	15-MAR-23 16:13	SW846 3060A	15-MAR-23	
Total Solids	87. %	1.0	1.0	1.0	SM2540G	WG332528	16-FEB-23 13:45	SM2540G	15-FEB-23	

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Report of Analytical Results

Lab Sample ID: SQ0595-2
Client ID: SY-SB4R-10
SDG: SQ0595
Report Date: 17-MAR-23

Matrix	Date Sampled	Date Received
SL	01-FEB-23 11:50	06-FEB-23

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Chromium, Hexavalent	U0.33 mg/Kgdrywt	0.55	0.16	0.33	SW846 7196A	WG333949	15-MAR-23 16:13	SW846 3060A	15-MAR-23	
Total Solids	87. %	1.0	1.0	1.0	SM2540G	WG332528	16-FEB-23 13:46	SM2540G	15-FEB-23	

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Report of Analytical Results

Lab Sample ID: SQ0595-3
Client ID: SY-SB4R-2
SDG: SQ0595
Report Date: 17-MAR-23

Matrix	Date Sampled	Date Received
SL	01-FEB-23 11:55	06-FEB-23

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Chromium, Hexavalent	J0.32 mg/Kgdrywt	0.57	0.17	0.34	SW846 7196A	WG333949	15-MAR-23 16:13	SW846 3060A	15-MAR-23	
Total Solids	80. %	1.0	1.0	1.0	SM2540G	WG332528	16-FEB-23 13:46	SM2540G	15-FEB-23	

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8270 SIM
POLYNUCLEAR AROMATIC HYDROCARBONS DATA

QC Summary Section

Form 2
System Monitoring Compound Recovery

Lab Name: Katahdin Analytical Services **SDG:** SQ0595 **Matrix:** SL

Client Sample ID	Lab Sample ID	Col. ID	2MN	#	FLO	#	PYR	#
SY-SB4R-1	SQ0595-1		57.1		64.9		86.0	
SY-SB4R-10	SQ0595-2		57.4		65.9		80.2	
SY-SB4R-10	SQ0595-2DL		57.0		56.6		70.4	
SY-SB4R-2	SQ0595-3RA		45.5		55.0		74.3	
Method Blank	WG332122-1		72.0		75.8		82.7	
Laboratory Control S	WG332122-2RA		59.2		63.8		71.8	
Laboratory Control S	WG332122-3RA		60.6		64.7		71.2	

Abbr.	Surrogate Compound	QC Limits
2MN	2-Methylnaphthalene-D10	19-94
FLO	Fluorene-D10	20-96
PYR	Pyrene-D10	31-128

= Column to be used to flag recovery limits.
* = Values outside of contract required QC limits.
D= System Monitoring Compound diluted out.

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Method Blank Summary

Lab Name : Katahdin Analytical Services
SDG : SQ0595
Lab File ID : N7594.D
Lab Sample ID : WG332122-1
Instrument ID : GCMS-N
Date Extracted : 08-FEB-23
Matrix : SL
Date Analyzed : 03-MAR-23
Extraction method : SW846 3550C
Time Analyzed : 20:57

This Method Blank applies to the following samples and QC samples:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
SY-SB4R-1	SQ0595-1	N7597.D	03/03/23	22:53
SY-SB4R-10	SQ0595-2	N7598.D	03/03/23	23:32
Laboratory Control S	WG332122-2RA	N7617.D	03/06/23	22:52
Laboratory Control S	WG332122-3RA	N7618.D	03/06/23	23:31
SY-SB4R-2	SQ0595-3RA	N7619.D	03/07/23	00:10
SY-SB4R-10	SQ0595-2DL	N7762.D	03/20/23	19:31

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Form 5
Semivolatile Organic Instrument Performance Check

Lab Name : Katahdin Analytical Services
SDG : SQ0595
Lab File ID : ND383.D
Date Analyzed : 03-MAR-23
Instrument ID : GCMS-N
Time Analyzed : 13:22

m/e	Ion Abundance Criteria	% Relative Abundance		
51	10.0 - 80.0% of mass 198	26.0		
68	Less than 2.0% of mass 69	0.6	1.42	1
69	Less than 100.0% of mass 198	44.8		
70	Less than 2.0% of mass 69	0.2	0.55	1
127	10.0 - 80.0% of mass 198	62.3		
197	Less than 2.0% of mass 198	0.4		
198	Base Peak, 100% relative abundance	100		
199	5.0 - 9.0% of mass 198	6.8		
275	10.0 - 60.0% of mass 198	22.1		
365	1.0 - 100.0% of mass 198	2.4		
441	0.1 - 100.0% of mass 443	11.4	73.56	2
442	50.0 - 100.0% of mass 198	79.5		
443	15.0 - 24.0% of mass 442	15.5	19.47	3

1-Value is % mass 69
2-Value is % mass 443
3-Value is % mass 442

This check applies to the following samples, LCS, MS, MSD and standards:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Initial Calibration	WG333362-4	N7582.D	03/03/23	13:41
Initial Calibration	WG333362-3	N7583.D	03/03/23	14:14
Initial Calibration	WG333362-2	N7584.D	03/03/23	14:47
Initial Calibration	WG333362-5	N7585.D	03/03/23	15:21
Initial Calibration	WG333362-6	N7586.D	03/03/23	15:55
Initial Calibration	WG333362-7	N7587.D	03/03/23	16:29
Independent Source	WG333362-8	N7588.D	03/03/23	17:03
Method Blank	WG332122-1	N7594.D	03/03/23	20:57
SY-SB4R-1	SQ0595-1	N7597.D	03/03/23	22:53
SY-SB4R-10	SQ0595-2	N7598.D	03/03/23	23:32
Continuing Calibrati	WG333362-9	N7600.D	03/04/23	00:40

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Form 5
Semivolatile Organic Instrument Performance Check

Lab Name : Katahdin Analytical Services
SDG : SQ0595
Lab File ID : ND383.D
Date Analyzed : 06-MAR-23
Instrument ID : GCMS-N
Time Analyzed : 13:48

m/e	Ion Abundance Criteria	% Relative Abundance		
51	10.0 - 80.0% of mass 198	23.7		
68	Less than 2.0% of mass 69	0.6	1.44	1
69	Less than 100.0% of mass 198	39.9		
70	Less than 2.0% of mass 69	0.2	0.56	1
127	10.0 - 80.0% of mass 198	57.4		
197	Less than 2.0% of mass 198	0.2		
198	Base Peak, 100% relative abundance	100		
199	5.0 - 9.0% of mass 198	6.6		
275	10.0 - 60.0% of mass 198	22.4		
365	1.0 - 100.0% of mass 198	2.4		
441	0.1 - 100.0% of mass 443	11.8	75.43	2
442	50.0 - 100.0% of mass 198	82.1		
443	15.0 - 24.0% of mass 442	15.6	19.04	3

1-Value is % mass 69
2-Value is % mass 443
3-Value is % mass 442

This check applies to the following samples, LCS, MS, MSD and standards:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Initial Calibration	WG333437-4	N7603.D	03/06/23	14:08
Initial Calibration	WG333437-3	N7604.D	03/06/23	14:42
Initial Calibration	WG333437-2	N7605.D	03/06/23	15:16
Initial Calibration	WG333437-5	N7606.D	03/06/23	15:49
Initial Calibration	WG333437-6	N7607.D	03/06/23	16:22
Initial Calibration	WG333437-7	N7608.D	03/06/23	16:55
Independent Source	WG333437-8	N7609.D	03/06/23	17:35
Laboratory Control S	WG332122-2RA	N7617.D	03/06/23	22:52
Laboratory Control S	WG332122-3RA	N7618.D	03/06/23	23:31
SY-SB4R-2	SQ0595-3RA	N7619.D	03/07/23	00:10
Continuing Calibrati	WG333437-9	N7620.D	03/07/23	00:50

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Form 5
Semivolatile Organic Instrument Performance Check

Lab Name : Katahdin Analytical Services
SDG : SQ0595
Lab File ID : ND391.D
Date Analyzed : 20-MAR-23
Instrument ID : GCMS-N
Time Analyzed : 14:56

m/e	Ion Abundance Criteria	% Relative Abundance		
51	10.0 - 80.0% of mass 198	18.1		
68	Less than 2.0% of mass 69	0.6	1.49	1
69	Less than 100.0% of mass 198	39.4		
70	Less than 2.0% of mass 69	0.2	0.63	1
127	10.0 - 80.0% of mass 198	64.9		
197	Less than 2.0% of mass 198	0.4		
198	Base Peak, 100% relative abundance	100		
199	5.0 - 9.0% of mass 198	6.7		
275	10.0 - 60.0% of mass 198	22.4		
365	1.0 - 100.0% of mass 198	2.8		
441	0.1 - 100.0% of mass 443	13.6	74.94	2
442	50.0 - 100.0% of mass 198	92.8		
443	15.0 - 24.0% of mass 442	18.1	19.54	3

1-Value is % mass 69
2-Value is % mass 443
3-Value is % mass 442

This check applies to the following samples, LCS, MS, MSD and standards:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Initial Calibration	WG334091-4	N7755.D	03/20/23	15:15
Initial Calibration	WG334091-3	N7756.D	03/20/23	15:48
Initial Calibration	WG334091-2	N7757.D	03/20/23	16:25
Initial Calibration	WG334091-5	N7758.D	03/20/23	17:02
Initial Calibration	WG334091-6	N7759.D	03/20/23	17:39
Initial Calibration	WG334091-7	N7760.D	03/20/23	18:16
Independent Source	WG334091-8	N7761.D	03/20/23	18:53
SY-SB4R-10	SQ0595-2DL	N7762.D	03/20/23	19:31
Continuing Calibrati	WG334091-9	N7770.D	03/21/23	00:35

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Form 8
Internal Standard Area and RT Summary

Lab Name : Katahdin Analytical Services
Lab ID : WG333362-4
Lab File ID : N7582.D

SDG: SQ0595
Analytical Date: 03/03/23 13:41
Instrument ID: GCMS-N

		1,4-DICHLOROBENZENE-D4			NAPHTHALENE-D8			ACENAPHTHENE-D10		
		Area	#	RT	#	Area	#	RT	#	Area	#	RT	#
	Std .	55095		7.20		179856		8.86		81123		11.20	
	Upper Limit	110190		7.37		359712		9.02		162246		11.37	
	Lower Limit	27547.5		7.03		89928		8.69		40561.5		11.03	
Client Sample ID	Lab Sample ID												
Method Blank	WG332122-1	53199		7.21		190838		8.87		96018		11.19	
SY-SB4R-1	SQ0595-1	47783		7.21		178609		8.86		99464		11.19	
SY-SB4R-10	SQ0595-2	47289		7.21		178318		8.86		95698		11.19	
Continuing Calibrati	WG333362-9	59492		7.20		206201		8.86		104856		11.19	

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area
RT Upper Limit = + 10 seconds of internal standard RT
RT Lower Limit = - 10 seconds of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

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Form 8
Internal Standard Area and RT Summary

Lab Name : Katahdin Analytical Services
SDG: SQ0595
Lab ID : WG333362-4
Analytical Date: 03/03/23 13:41
Lab File ID : N7582.D
Instrument ID: GCMS-N

		PHENANTHRENE-D10			CHRYSENE-D12			PERYLENE-D12		
		Area	#	RT	#	Area	#	RT	#	Area	#	RT	#
	Std .	98064		13.19		34869		16.93		23631		19.92	
	Upper Limit	196128		13.35		69738		17.09		47262		20.09	
	Lower Limit	49032		13.02		17434.5		16.76		11815.5		19.75	
Client Sample ID	Lab Sample ID												
Method Blank	WG332122-1	140343		13.19		67060		16.94		38190		19.91	
SY-SB4R-1	SQ0595-1	147314		13.18		52962		16.92		30789		19.89	
SY-SB4R-10	SQ0595-2	138551		13.19		53236		16.93		34112		19.90	
Continuing Calibrati	WG333362-9	146739		13.19		60433		16.93		34119		19.92	

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area
RT Upper Limit = + 10 seconds of internal standard RT
RT Lower Limit = - 10 seconds of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

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Form 8
Internal Standard Area and RT Summary

Lab Name : Katahdin Analytical Services
Lab ID : WG333437-4
Lab File ID : N7603.D

SDG: SQ0595
Analytical Date: 03/06/23 14:08
Instrument ID: GCMS-N

		1,4-DICHLOROBENZENE-D4			NAPHTHALENE-D8			ACENAPHTHENE-D10		
		Area	#	RT	#	Area	#	RT	#	Area	#	RT	#
	Std .	71620		7.19		231184		8.84		110255		11.18	
	Upper Limit	143240		7.36		462368		9.01		220510		11.35	
	Lower Limit	35810		7.02		115592		8.68		55127.5		11.02	
Client Sample ID	Lab Sample ID												
Laboratory Control S	WG332122-2RA	66954		7.19		242229		8.84		126817		11.18	
Laboratory Control S	WG332122-3RA	67038		7.19		241358		8.84		134533		11.18	
SY-SB4R-2	SQ0595-3RA	58109		7.19		221500		8.84		114064		11.18	
Continuing Calibrati	WG333437-9	73386		7.19		250762		8.83		125903		11.18	

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area
RT Upper Limit = + 10 seconds of internal standard RT
RT Lower Limit = - 10 seconds of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

Form 8
Internal Standard Area and RT Summary

Lab Name : Katahdin Analytical Services
Lab ID : WG333437-4
Lab File ID : N7603.D

SDG: SQ0595
Analytical Date: 03/06/23 14:08
Instrument ID: GCMS-N

		PHENANTHRENE-D10			CHRYSENE-D12			PERYLENE-D12		
		Area	#	RT	#	Area	#	RT	#	Area	#	RT	#
	Std .	137723		13.18		50017		16.92		31851		19.90	
	Upper Limit	275446		13.35		100034		17.09		63702		20.07	
	Lower Limit	68861.5		13.01		25008.5		16.75		15925.5		19.73	
Client Sample ID	Lab Sample ID												
Laboratory Control S	WG332122-2RA	177235		13.17		83058		16.91		42509		19.88	
Laboratory Control S	WG332122-3RA	197114		13.17		91349		16.91		50658		19.87	
SY-SB4R-2	SQ0595-3RA	162563		13.18		65134		16.92		31327		19.89	
Continuing Calibrati	WG333437-9	173174		13.17		77747		16.91		40976		19.89	

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area
RT Upper Limit = + 10 seconds of internal standard RT
RT Lower Limit = - 10 seconds of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

Form 8
Internal Standard Area and RT Summary

Lab Name : Katahdin Analytical Services
Lab ID : WG334091-4
Lab File ID : N7755.D

SDG: SQ0595
Analytical Date: 03/20/23 15:15
Instrument ID: GCMS-N

		1,4-DICHLOROBENZENE-D4			NAPHTHALENE-D8			ACENAPHTHENE-D10		
		Area	#	RT	#	Area	#	RT	#	Area	#	RT	#
	Std .	60565		7.47		209681		9.11		100652		11.45	
	Upper Limit	121130		7.64		419362		9.27		201304		11.62	
	Lower Limit	30282.5		7.31		104840.5		8.94		50326		11.28	
Client Sample ID	Lab Sample ID												
SY-SB4R-10	SQ0595-2DL	60095		7.47		217600		9.11		105328		11.45	
Continuing Calibrati	WG334091-9	58310		7.46		207049		9.10		102666		11.44	

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area
RT Upper Limit = + 10 seconds of internal standard RT
RT Lower Limit = - 10 seconds of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

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Form 8
Internal Standard Area and RT Summary

Lab Name : Katahdin Analytical Services
SDG: SQ0595
Lab ID : WG334091-4
Analytical Date: 03/20/23 15:15
Lab File ID : N7755.D
Instrument ID: GCMS-N

		PHENANTHRENE-D10				CHRYSENE-D12				PERYLENE-D12			
		Area	#	RT	#	Area	#	RT	#	Area	#	RT	#
	Std .	143294		13.45		69348		17.28		52958		20.31	
	Upper Limit	286588		13.61		138696		17.45		105916		20.48	
	Lower Limit	71647		13.28		34674		17.12		26479		20.14	
Client Sample ID	Lab Sample ID												
SY-SB4R-10	SQ0595-2DL	158899		13.44		73767		17.27		50970		20.31	
Continuing Calibrati	WG334091-9	148183		13.44		71222		17.26		51329		20.29	

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area
RT Upper Limit = + 10 seconds of internal standard RT
RT Lower Limit = - 10 seconds of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

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Sample Data Section

KATAHDIN ANALYTICAL SERVICES - ORGANIC DATA QUALIFIERS

U Indicates the compound was analyzed for but not detected above the specified level. This level may be the Practical Quantitation Level (PQL) (also called Limit of Quantitation (LOQ)), the Limit of Detection (LOD) or Method Detection Limit (MDL) as required by the client.

Note: All results reported as "U" MDL have a 50% rate for false negatives compared to those results reported as "U" PQL, "U" LOQ or "U" LOD, where the rate of false negatives is <1%.

* Compound recovery or percent RPD (relative percent difference) was outside of quality control limits.

D Indicates the result was obtained from analysis of a diluted sample. Surrogate recoveries may not be calculable.

E Estimated value. This flag identifies compounds whose concentrations exceed the upper level of the calibration range of the instrument for that specific analysis.

J Estimated value. The analyte was detected in the sample at a concentration less than the laboratory Practical Quantitation Level (PQL) (also called Limit of Quantitation (LOQ)), but above the Method Detection Limit (MDL).

And/or

J Used for Dual Column analytes when there is a greater than 40% difference for detected concentrations between the two GC/HPLC columns.

B Indicates the analyte was detected in the laboratory method blank analyzed concurrently with the sample.

I Indicates that the flagged compound did not meet DoD criteria in the corresponding Initial Calibration (ICAL).

D Indicates that the flagged compound did not meet DoD criteria in the corresponding Initial Calibration Verification (ICV).

C Indicates that the flagged compound did not meet DoD criteria in the corresponding opening Calibration Verification (CV).

V Indicates that the flagged compound did not meet DoD criteria in the corresponding closing Calibration Verification (CV).

L/LL Indicates that the flagged compound did not meet DoD criteria in the corresponding Laboratory Control Sample (LCS) and/or Laboratory Control Sample Duplicate (LCSD) prepared and/or analyzed concurrently with the sample.

M/MM Indicates that the flagged compound did not meet DoD criteria in the Matrix Spike (MS) and/or Matrix Spike Duplicate MSD) prepared and/or analyzed concurrently with the native sample.

H Indicates the flagged compound was detected on the primary column but was not detected on the confirmation column therefore the compound is not reported as a positive detection. (SW846 8330A/B only)

Katahdin Analytical Services, Inc.

Manual Integration Codes For GC/MS, GC, HPLC and/or IC

M1	Peak splitting.
M2	Well defined peaks on the shoulders of the other peaks.
M3	There is additional area due to a coeluting interferant.
M4	There are negative spikes in the baseline.
M5	There are rising or falling baselines.
M6	The software has failed to detect a peak or misidentified a peak.
M7	Excessive peak tailing.
M8	Analysis such as GRO, DRO and TPH require a baseline hold.
M9	Peak was not completely integrated as in GC/MS.
M10	Primary ion was correctly integrated, but secondary or tertiary ion needed manual integration as in GC/MS.
M11	For GC analysis, when a sample is diluted by 1:10 or more, the surrogate is set to undetected and then the area under the surrogate is manually integrated.
M12	Manual integration saved in method due to TurboChrom floating point error.

Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

SDG: SQ0595
Lab ID: SQ0595-1
Client ID: SY-SB4R-1
Matrix: SL
Lab File ID: N7597.D

Sample Date: 01-FEB-23
Extract Date: 08-FEB-23
Extracted By: SR
Extraction Method: SW846 3550C
Lab Prep Batch: WG332122

Report Date: 22-MAR-23
Analysis Date: 03-MAR-23
Analyst: DT/CO
Analysis Method: SW846 8270D SIM
% Solids: 87.

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene		0.072	mg/Kgdrywt	1	.02	0.022	0.0029	0.011
2-Methylnaphthalene		0.095	mg/Kgdrywt	1	.02	0.022	0.0024	0.011
Acenaphthylene	J	0.016	mg/Kgdrywt	1	.02	0.022	0.0013	0.011
Acenaphthene	J	0.0041	mg/Kgdrywt	1	.02	0.022	0.0017	0.011
Fluorene	J	0.016	mg/Kgdrywt	1	.02	0.022	0.0036	0.011
Phenanthrene		0.23	mg/Kgdrywt	1	.02	0.022	0.0020	0.011
Anthracene		0.026	mg/Kgdrywt	1	.02	0.022	0.0013	0.011
Fluoranthene		0.39	mg/Kgdrywt	1	.02	0.022	0.0020	0.011
Pyrene		0.44	mg/Kgdrywt	1	.02	0.022	0.0023	0.011
Benzo(a)anthracene		0.28	mg/Kgdrywt	1	.02	0.022	0.0021	0.011
Chrysene		0.32	mg/Kgdrywt	1	.02	0.022	0.0019	0.011
Benzo(b)Fluoranthene		0.34	mg/Kgdrywt	1	.02	0.022	0.0027	0.011
Benzo(k)fluoranthene		0.10	mg/Kgdrywt	1	.02	0.022	0.0038	0.011
Benzo(a)pyrene		0.22	mg/Kgdrywt	1	.02	0.022	0.0037	0.011
Indeno(1,2,3-cd)pyrene		0.11	mg/Kgdrywt	1	.02	0.022	0.0021	0.011
Dibenzo(a,h)anthracene		0.028	mg/Kgdrywt	1	.02	0.022	0.0020	0.011
Benzo(g,h,i)perylene		0.13	mg/Kgdrywt	1	.02	0.022	0.0022	0.011
2-Methylnaphthalene-D10		57.1	mg/Kgdrywt					
Fluorene-D10		64.9	mg/Kgdrywt					
Pyrene-D10		86.0	mg/Kgdrywt					

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Data File: \\target_server\gg\chem\gcms-n.i\N030323.b\N7597.D
Report Date: 16-Mar-2023 07:44

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-n.i\N030323.b\N7597.D
Lab Smp Id: SQ0595-1 Client Smp ID: SY-SB4R-1
Inj Date : 03-MAR-2023 22:53
Operator : DT/CO Inst ID: gcms-n.i
Smp Info : SQ0595-1
Misc Info : WG333362,WG332122,WG333362-4
Comment :
Method : \\target_server\gg\chem\gcms-n.i\N030323.b\NSPSIM18.m
Meth Date : 06-Mar-2023 11:06 coneill Quant Type: ISTD
Cal Date : 03-MAR-2023 16:29 Cal File: N7587.D
Als bottle: 17
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.12
Processing Host: V200T4

Concentration Formula: Amt * DF * (Vt/Ws*Vi)*(100/(100-M))*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.00100	Final Volume (L)
Ws	0.03110	Weight of Sample (Kg)
Vi	1.000	Volume injected (uL)
M	13.367	% Moisture
Cpnd Variable		Local Compound Variable

		Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/Kgdrywt)	REVIEW COD
$	1	1,4-Dioxane-d8	96	3.062	2.988	(0.425)	14641	0.51639	19.2(R)	
	5	Benzaldehyde	77	6.659	6.650	(0.924)	21163	0.54184	20.1(aQH)	
*	10	1,4-Dichlorobenzene-D4	152	7.211	7.211	(1.000)	47783	0.80000	(Q)	
	14	2,2'-Oxybis(1-chloropropane)	45	7.554	7.586	(1.048)	13859	0.29214	10.8(aQH)	
	15	Acetophenone	105	7.752	7.752	(0.875)	58556	0.56848	21.1(a)	
*	27	Naphthalene-D8	136	8.855	8.867	(1.000)	178609	0.80000		
	28	Naphthalene	128	8.889	8.890	(1.004)	467742	1.93717	71.9	
	31	Caprolactam	113	9.512	9.490	(1.074)	7480	0.29062	10.8(aQ)	
$	33	2-Methylnaphthalene-D10	152	9.768	9.769	(1.103)	138509	1.14221	42.4	
	34	2-Methylnaphthalene	142	9.809	9.810	(1.108)	436768	2.55932	95.0	
	35	1-Methylnaphthalene	142	9.931	9.945	(1.121)	297442	1.96888	73.1	
$	38	2,4-Dibromophenol	252	10.228	10.215	(0.914)	85132	2.19315	81.4	
	41	1,1'-Biphenyl	154	10.444	10.445	(0.933)	64784	0.33486	12.4(a)	
	46	Acenaphthylene	152	11.005	11.006	(0.983)	106120	0.44303	16.4(a)	
*	48	Acenaphthene-D10	164	11.192	11.204	(1.000)	99464	0.80000		
	49	Acenaphthene	153	11.236	11.237	(1.004)	17077	0.10970	4.07(aQ)	
	52	Dibenzofuran	168	11.479	11.479	(1.026)	177569	0.87742	32.6	
$	56	Fluorene-D10	174	11.897	11.897	(1.063)	148215	1.29888	48.2	
	57	Fluorene	166	11.930	11.941	(1.066)	65965	0.41991	15.6(a)	
*	66	Phenanthrene-D10	188	13.179	13.190	(1.000)	147314	0.80000		

Data File: \\target_server\gg\chem\gcms-n.i\N030323.b\N7597.D
Report Date: 16-Mar-2023 07:44

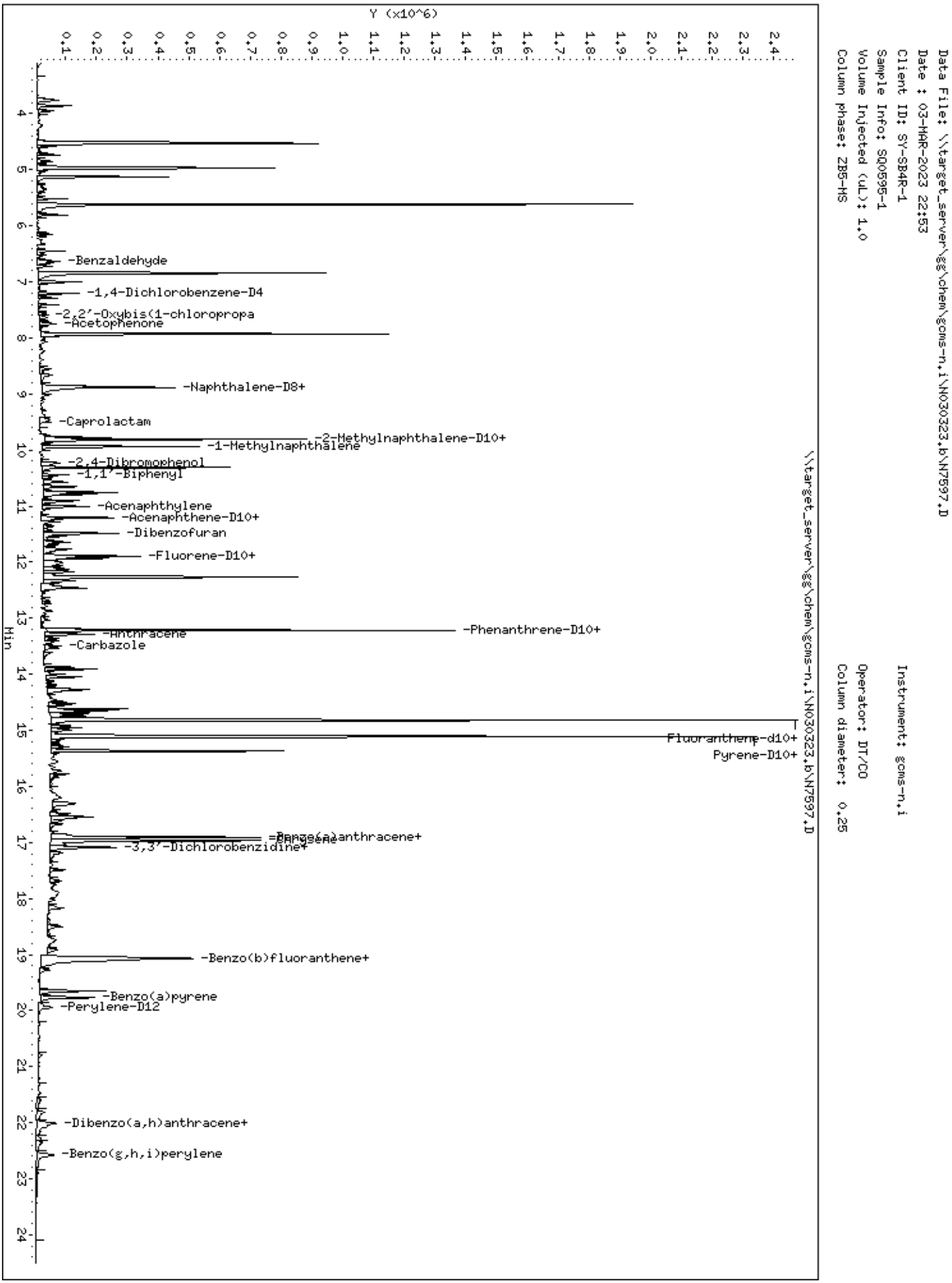
DL

9:27 am, Mar 22, 2023

		Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/Kgdrywt)	REVIEW COD
	67	Phenanthrene	178	13.210	13.221	(1.002)	1307913	6.13789	228	
	68	Anthracene	178	13.281	13.292	(1.008)	166490	0.71331	26.5	
	69	Carbazole	167	13.538	13.528	(1.027)	38547	0.24425	9.06(aQ)	
$	71	Fluoranthene-d10	212	14.798	14.798	(1.123)	191185	1.52781	56.7	
	72	Fluoranthene	202	14.820	14.820	(1.124)	1809402	10.3939	386	
$	73	Pyrene-D10	212	15.086	15.098	(0.892)	221582	1.71904	63.8	
	74	Pyrene	202	15.109	15.120	(0.893)	1877674	11.8033	438	
	76	3,3'-Dichlorobenzidine	252	17.030	16.931	(1.007)	7544	0.34280	12.7(aQ)	
	77	Benzo(a)anthracene	228	16.908	16.908	(0.999)	623861	7.63900	284	
*	78	Chrysene-D12	240	16.919	16.920	(1.000)	52962	0.80000		
	79	Chrysene	228	16.964	16.975	(1.003)	876972	8.65706	321	
	80	bis(2-Ethylhexyl)phthalate	149	17.086	17.087	(1.010)	193448	1.50962	56.0(a)	
	82	Benzo(b)fluoranthene	252	19.063	19.053	(0.958)	512665	9.02260	335	
	83	Benzo(k)fluoranthene	252	19.108	19.119	(0.961)	232010	2.73947	102(M)	M6
	84	Benzo(a)pyrene	252	19.765	19.776	(0.994)	277374	5.80286	215	
*	85	Perylene-D12	264	19.891	19.912	(1.000)	30789	0.80000		
	86	Indeno(1,2,3-cd)pyrene	276	22.014	22.014	(1.107)	122157	3.03041	112(H)	
	87	Dibenzo(a,h)anthracene	278	22.066	22.077	(1.109)	17933	0.75637	28.1	
	88	Benzo(g,h,i)perylene	276	22.581	22.582	(1.135)	129955	3.57904	133	
M	89	Total PAHs	100				9345520	77.7132	2880	

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.


Data File: \\target_server\gg\chem\gcms-n,i\N030323,b\N7597.D
Date : 03-MAR-2023 22:53
Client ID: SY-SB4R-1
Sample Info: SQ0595-1
Volume Injected (uL): 1.0
Column phase: ZB5-MS
Instrument: gcms-n,i
Operator: DT/CO
Column diameter: 0.25
\\target_server\gg\chem\gcms-n,i\N030323,b\N7597.D
Y (x10^6)
Min
-Benzaldehyde
-1,4-Dichlorobenzene-D4
-2,2'-Oxybis(1-chloropropa
-Acetophenone
-Naphthalene-D8+
-Caprolactam
-2-Methylnaphthalene-D10+
-1-Methylnaphthalene
-2,4-Dibromophenol
-1,1'-Biphenyl
-Acenaphthylene
-Acenaphthene-D10+
-Dibenzofuran
-Fluorene-D10+
-Phenanthrene-D10+
-Carbazole
Fluoranthene-d10+
Pyrene-D10+
-3,3'-Dichlorobenzidine+
-Benzo(b)fluoranthene+
-Benzo(a)pyrene
-Perylene-D12
-Dibenzo(a,h)anthracene+
-Benzo(g,h,i)perylene

Data File: \\target_server\gg\chem\gcms-n.i\N030323.b\N7597.D

Date : 03-MAR-2023 22:53

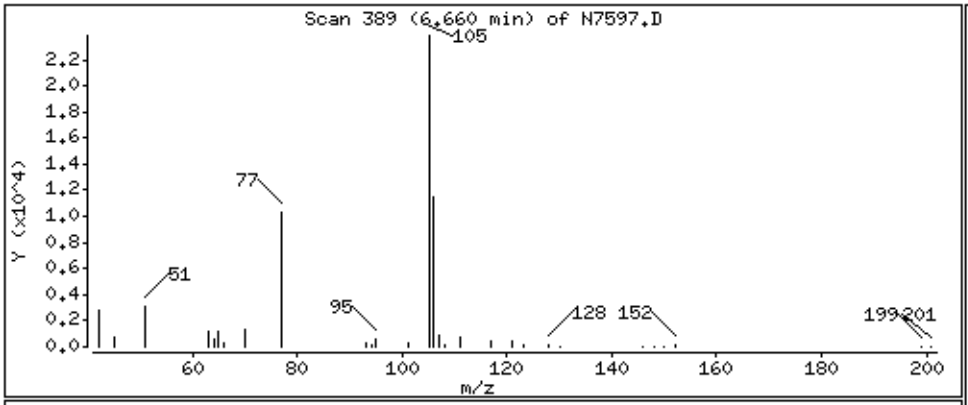
Client ID: SY-SB4R-1 Instrument: gcms-n.i

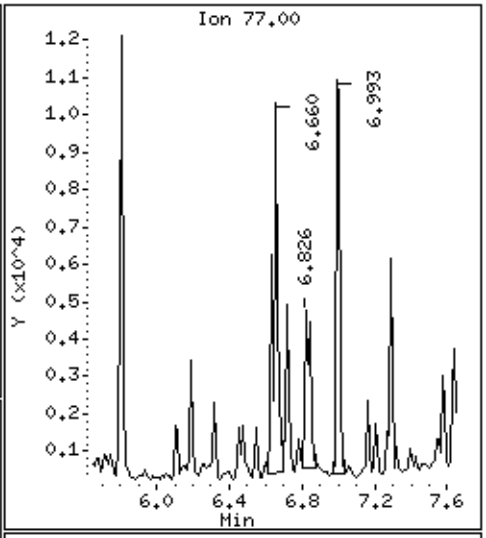
Sample Info: SQ0595-1

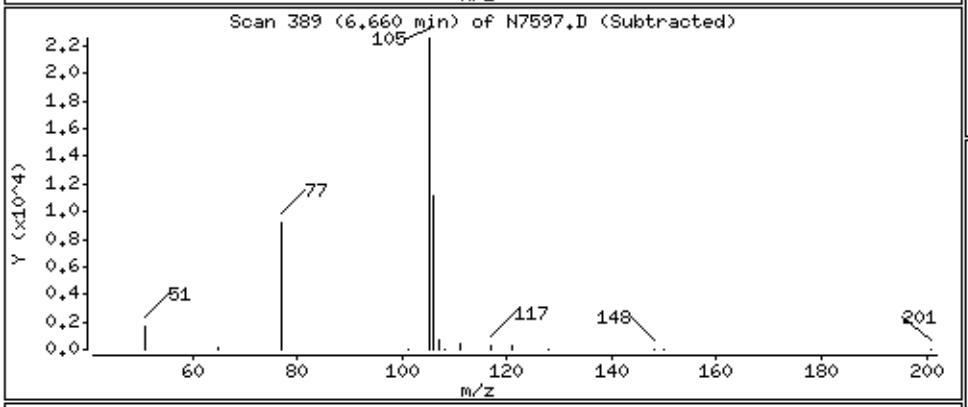
Volume Injected (uL): 1.0 Operator: DT/CO

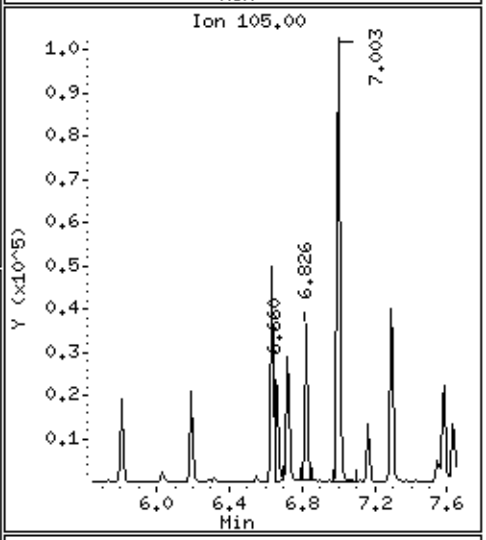
Column phase: ZB5-MS Column diameter: 0.25

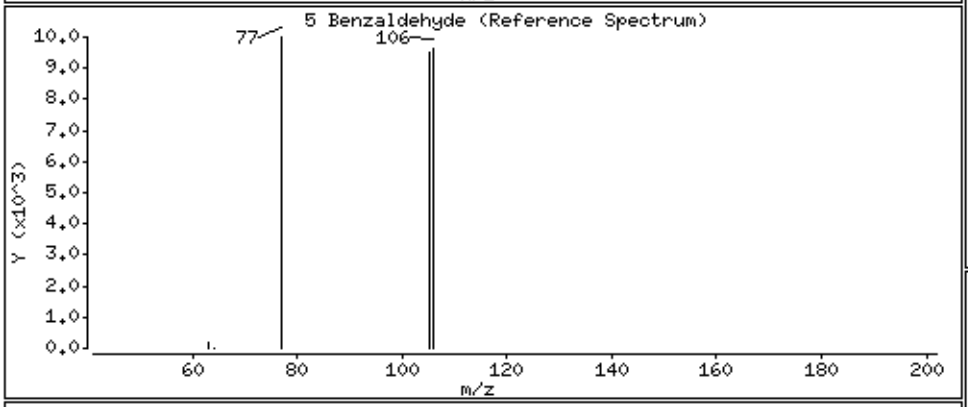
5 Benzaldehyde Concentration: 20.1 ug/Kgdrywt

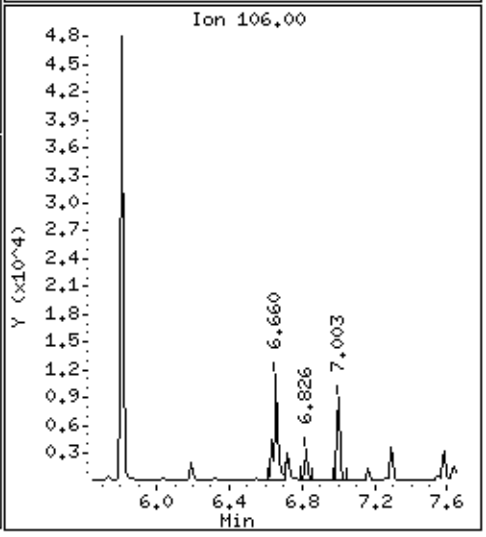


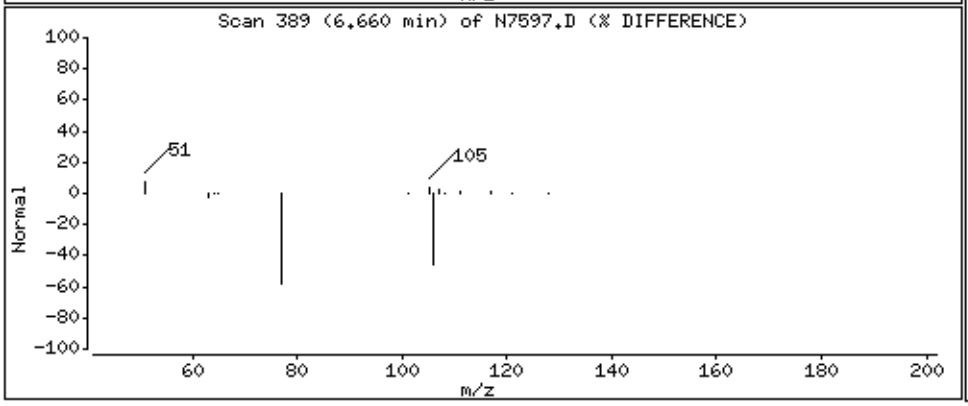












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Date : 03-MAR-2023 22:53

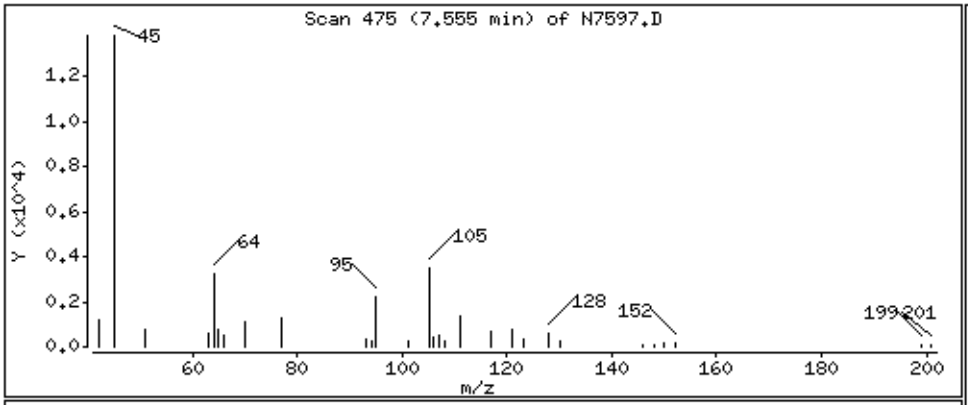
Client ID: SY-SB4R-1 Instrument: gcms-n.i

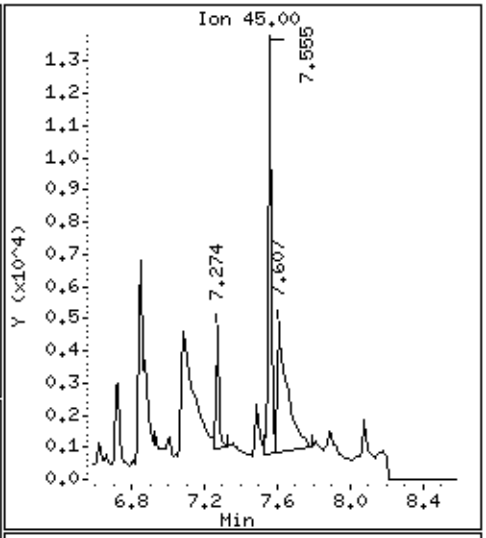
Sample Info: SQ0595-1

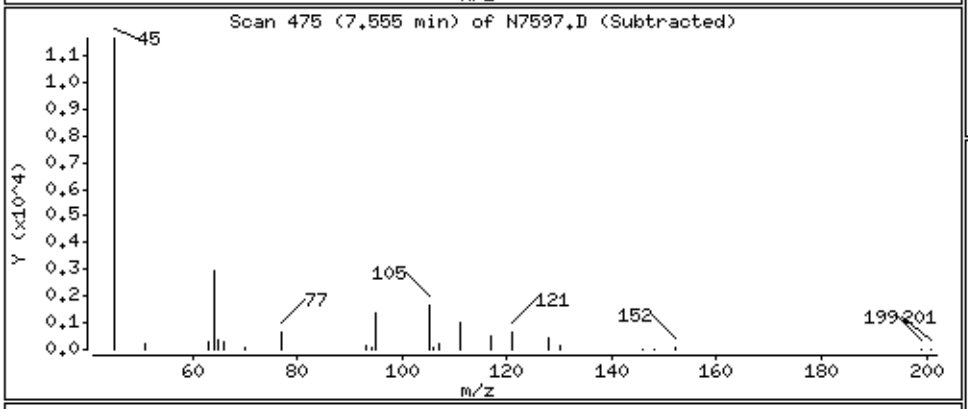
Volume Injected (uL): 1.0 Operator: DT/CO

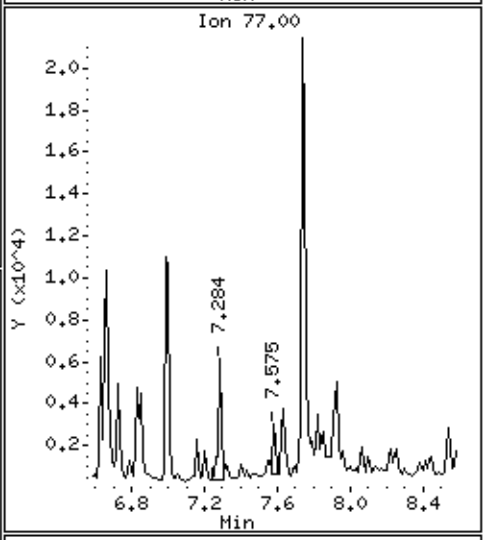
Column phase: ZB5-MS Column diameter: 0.25

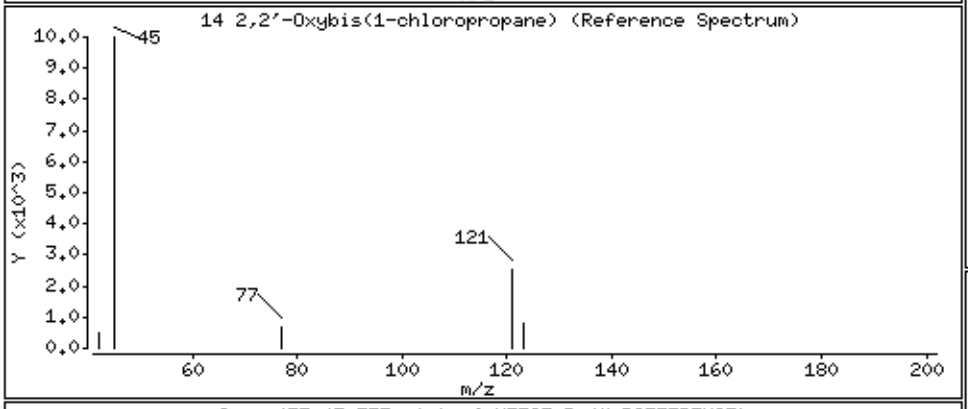
14 2,2'-Oxybis(1-chloropropane) Concentration: 10.8 ug/Kgdrywt

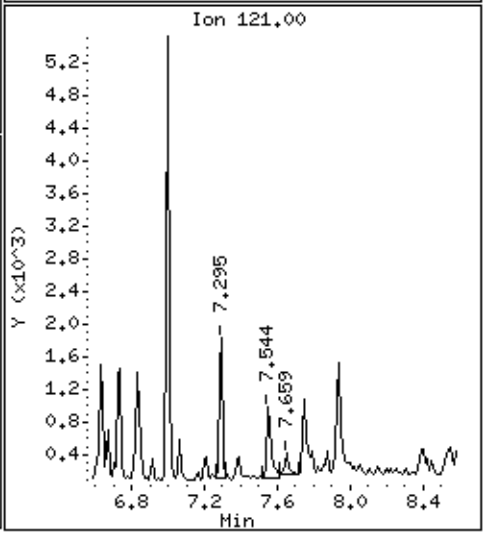


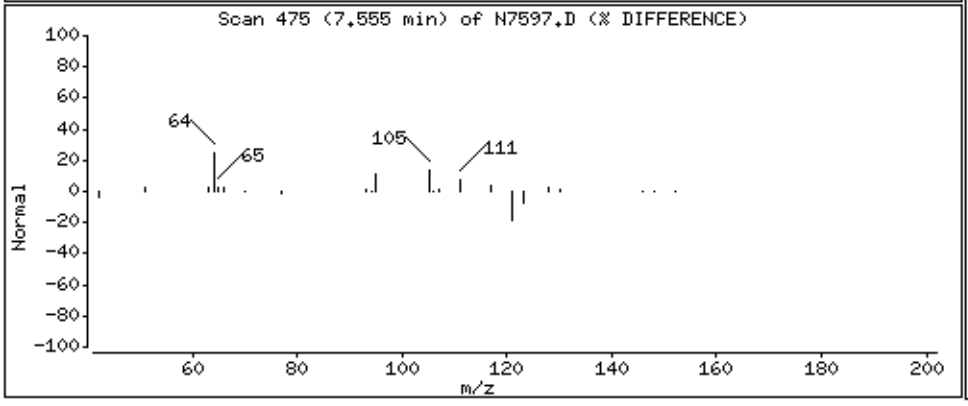












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Date : 03-MAR-2023 22:53

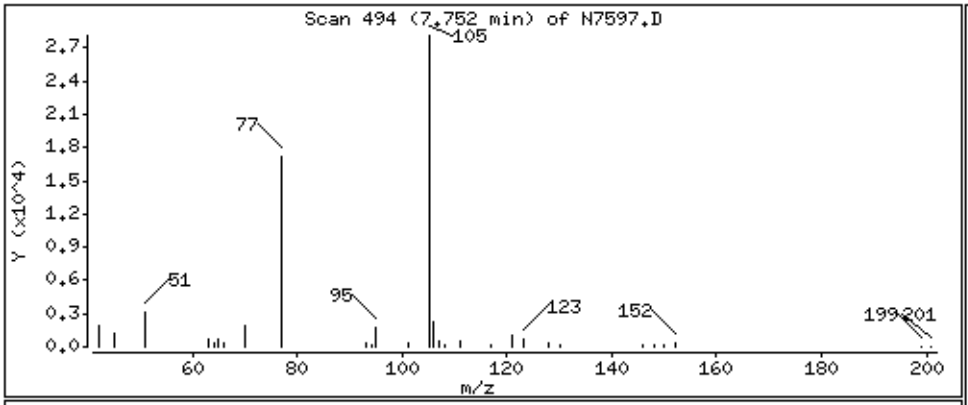
Client ID: SY-SB4R-1 Instrument: gcms-n.i

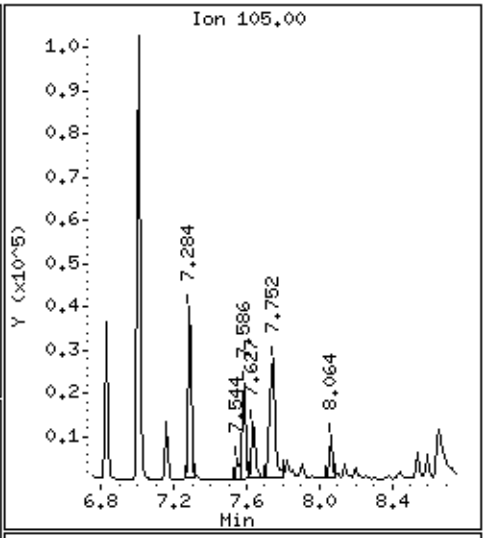
Sample Info: SQ0595-1

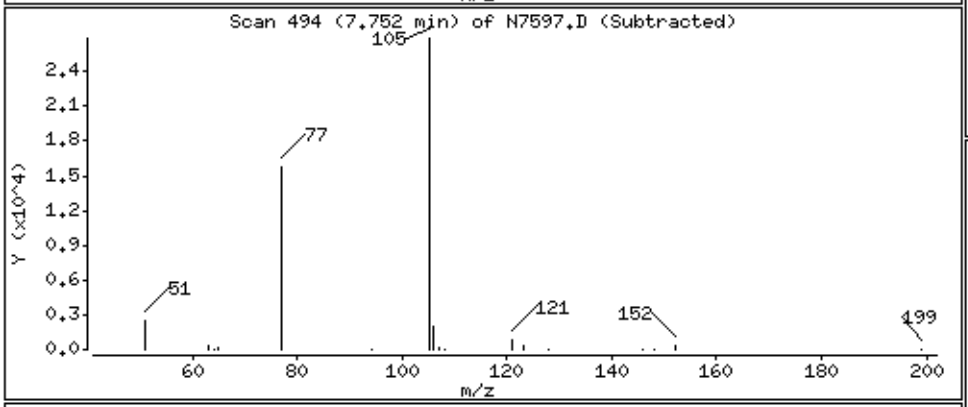
Volume Injected (uL): 1.0 Operator: DT/CO

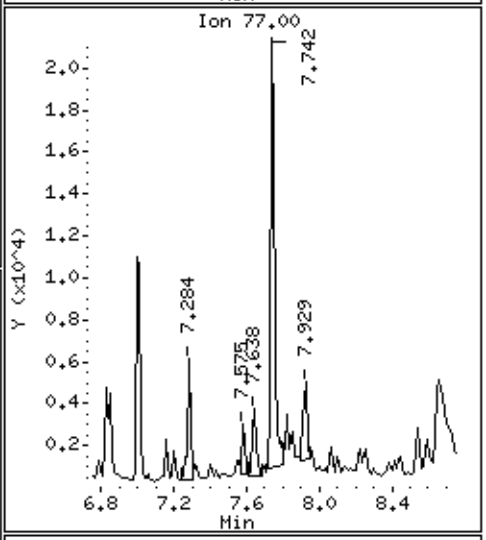
Column phase: ZB5-MS Column diameter: 0.25

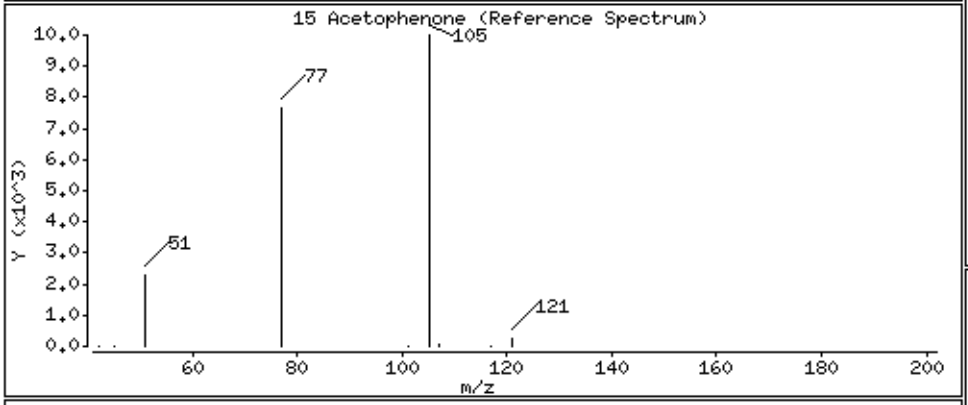
15 Acetophenone Concentration: 21.1 ug/Kgdrywt

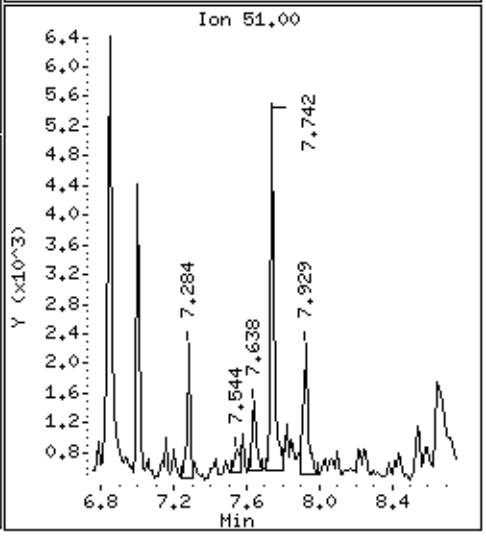


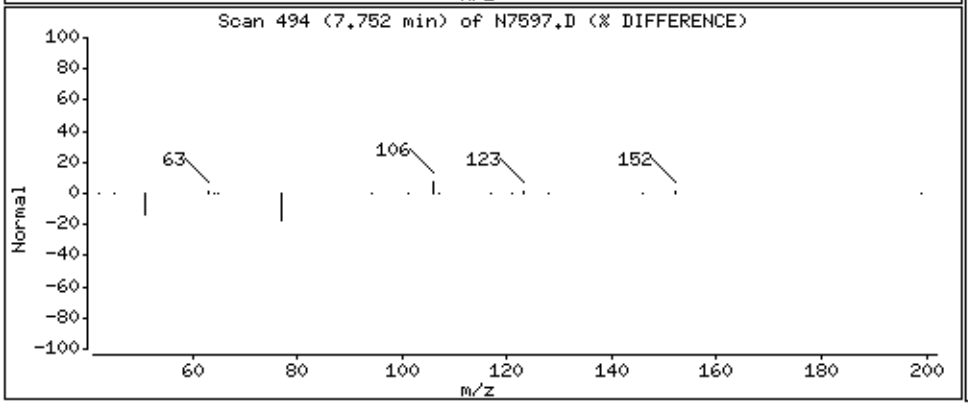












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Date : 03-MAR-2023 22:53

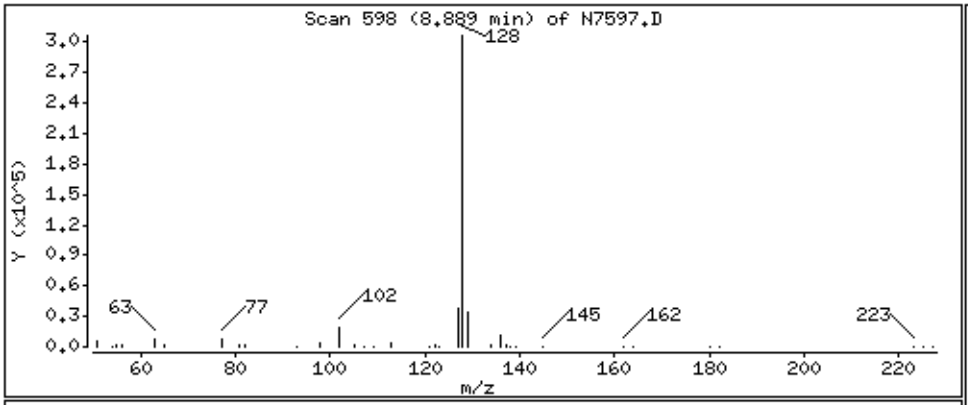
Client ID: SY-SB4R-1 Instrument: gcms-n.i

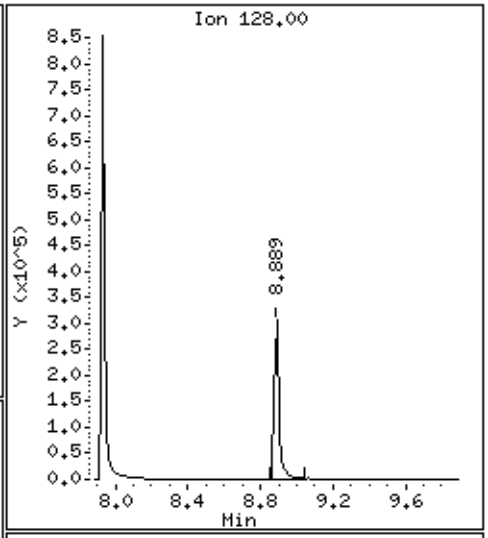
Sample Info: SQ0595-1

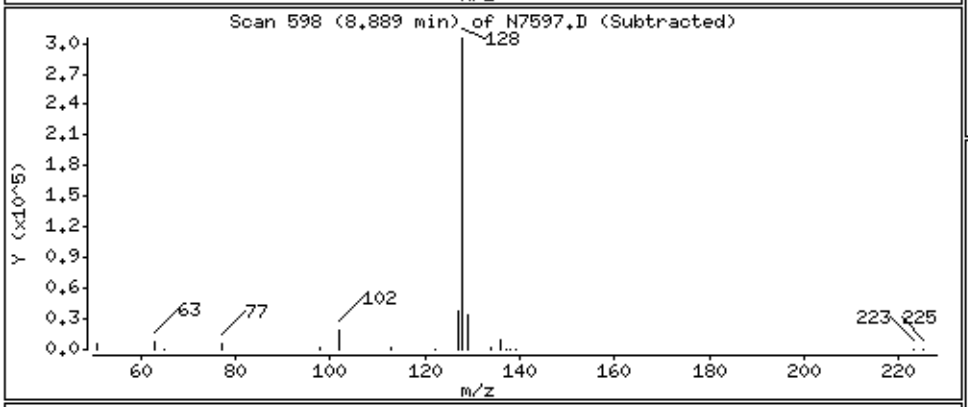
Volume Injected (uL): 1.0 Operator: DT/CO

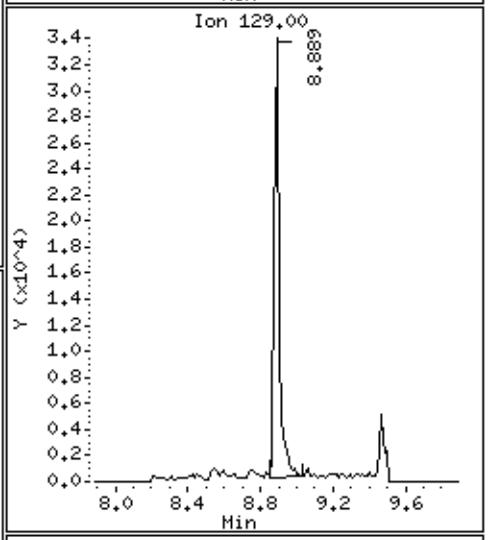
Column phase: ZB5-MS Column diameter: 0.25

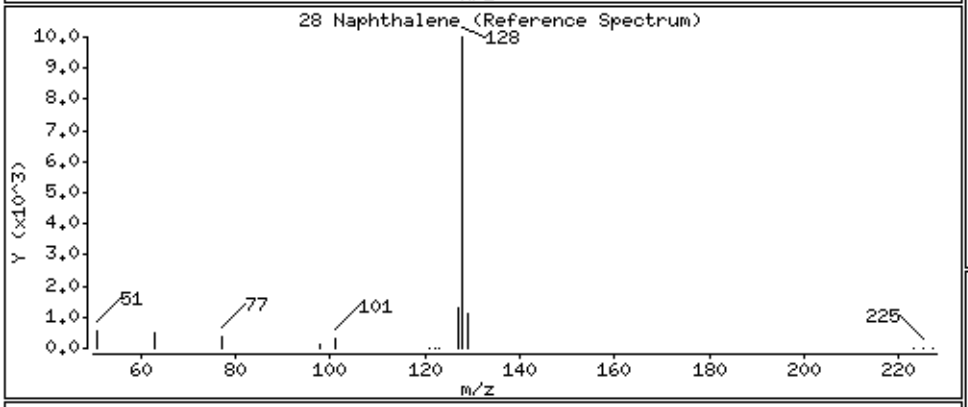
28 Naphthalene Concentration: 71.9 ug/Kgdrywt

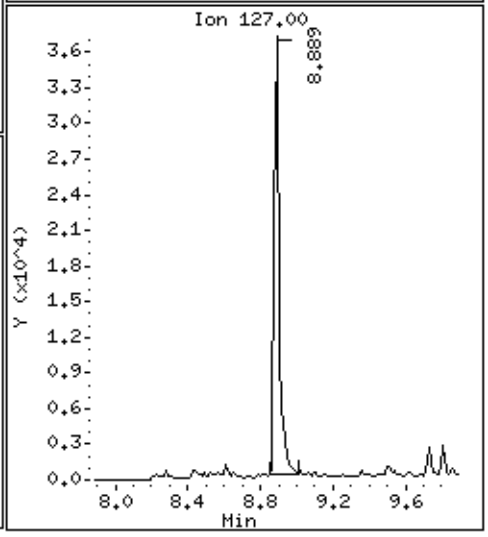


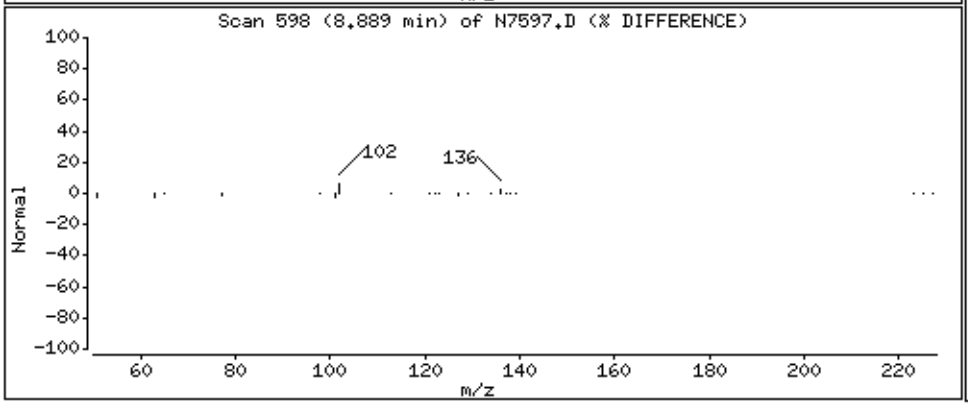












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Date : 03-MAR-2023 22:53

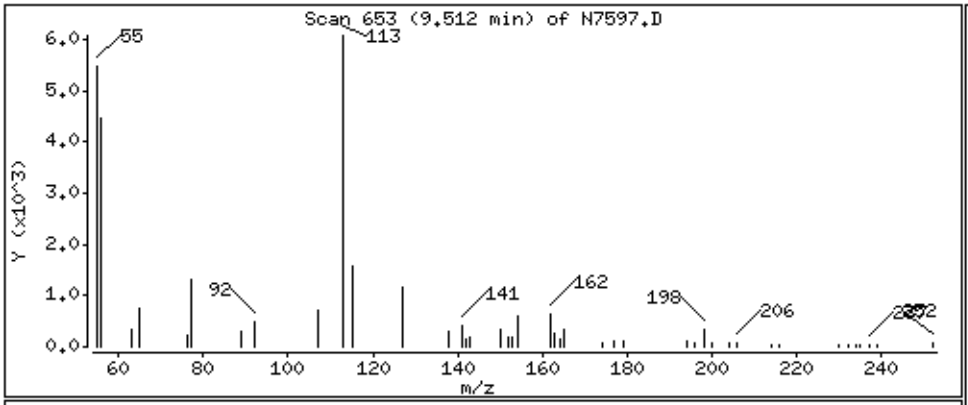
Client ID: SY-SB4R-1 Instrument: gcms-n.i

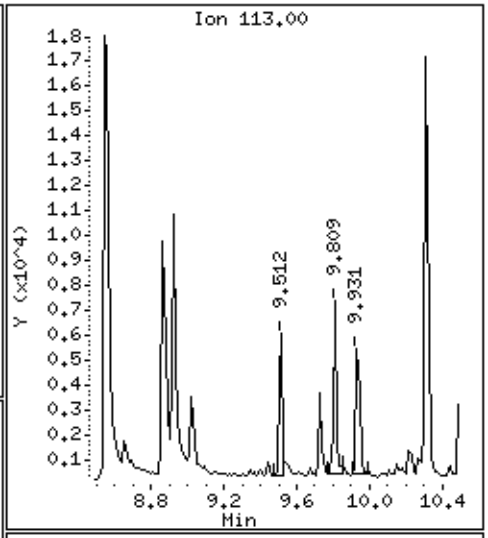
Sample Info: SQ0595-1

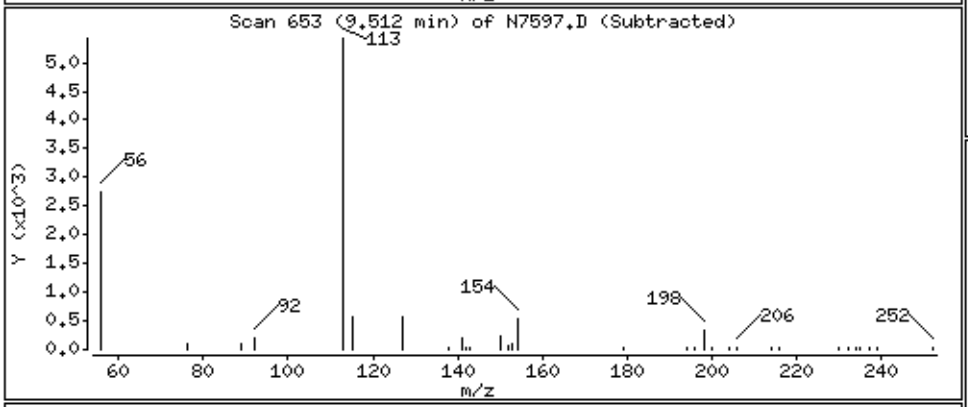
Volume Injected (uL): 1.0 Operator: DT/CO

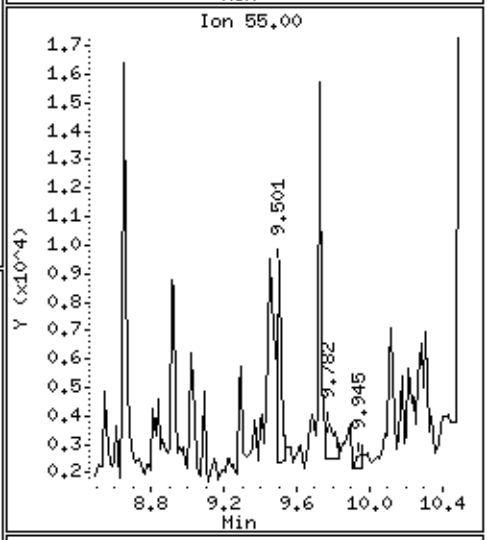
Column phase: ZB5-MS Column diameter: 0.25

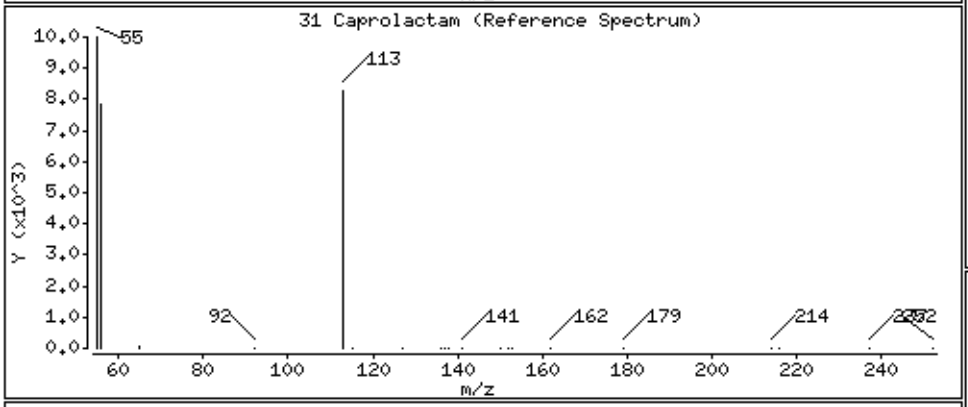
31 Caprolactam Concentration: 10.8 ug/Kgdrywt

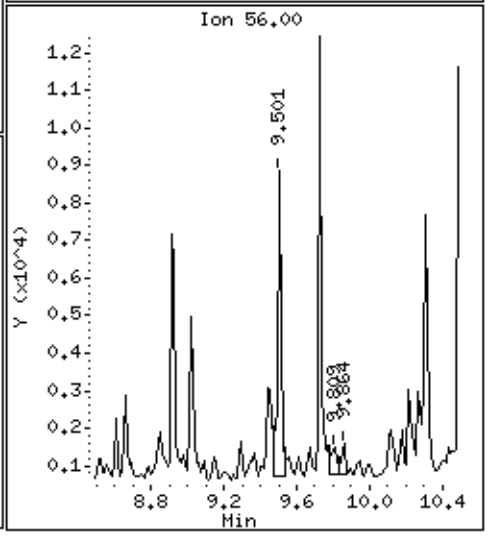


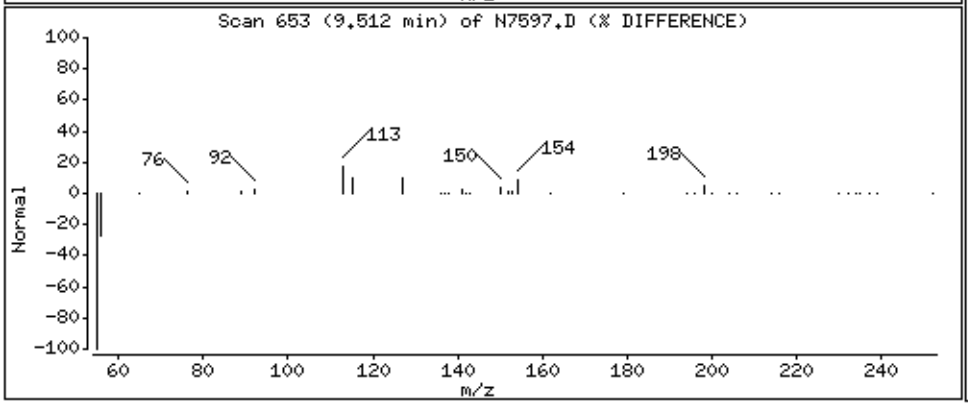












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Date : 03-MAR-2023 22:53

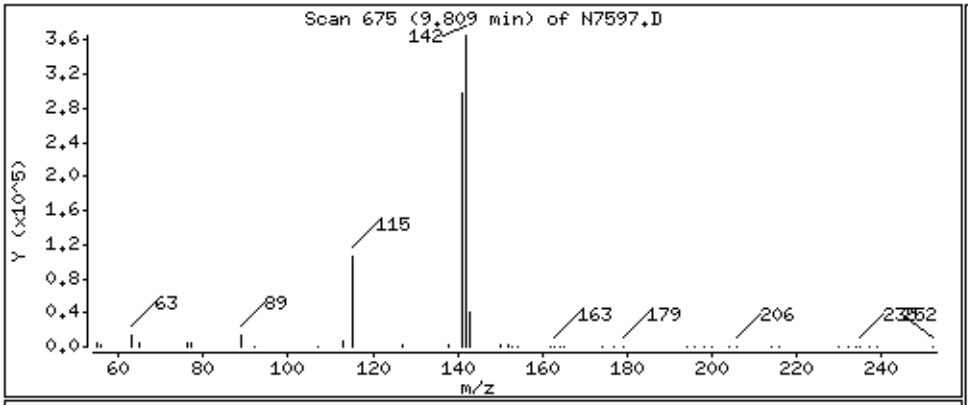
Client ID: SY-SB4R-1 Instrument: gcms-n.i

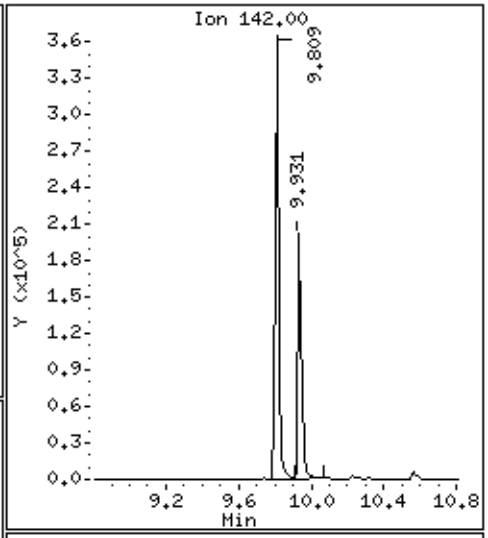
Sample Info: SQ0595-1

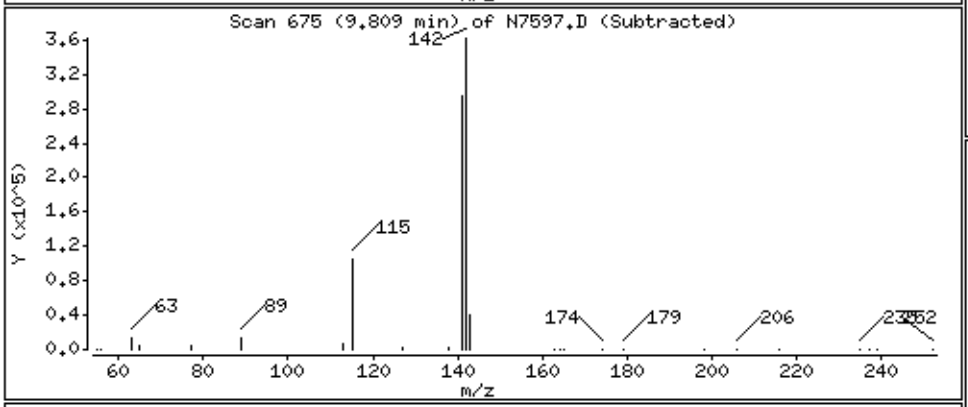
Volume Injected (uL): 1.0 Operator: DT/CO

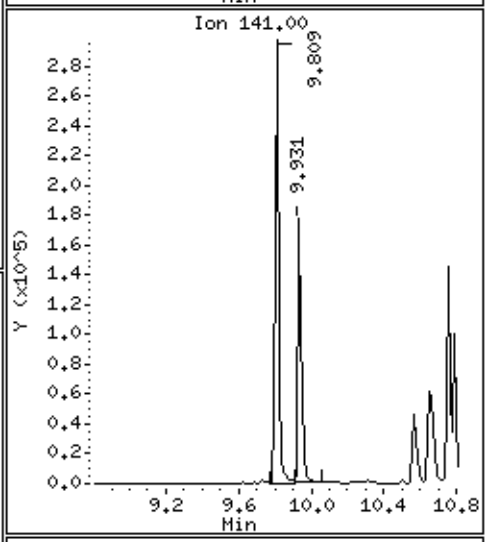
Column phase: ZB5-MS Column diameter: 0.25

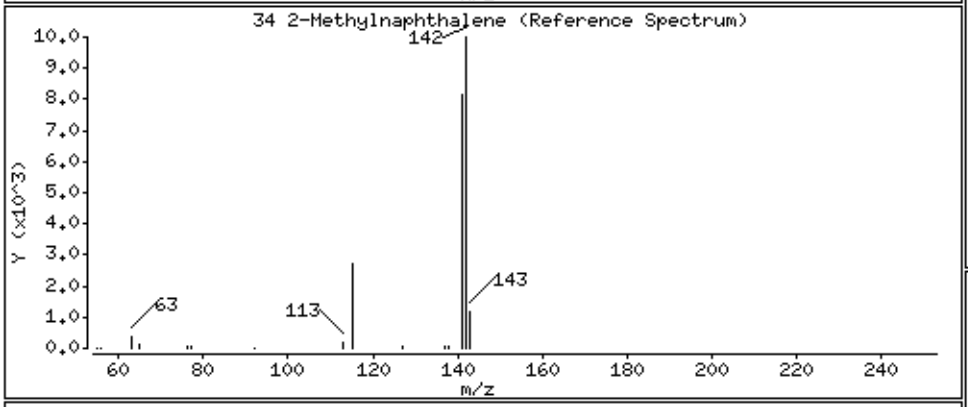
34 2-Methylnaphthalene Concentration: 95.0 ug/Kgdrywt

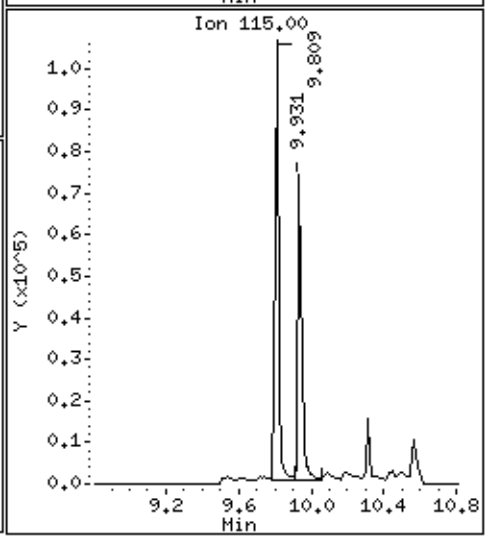


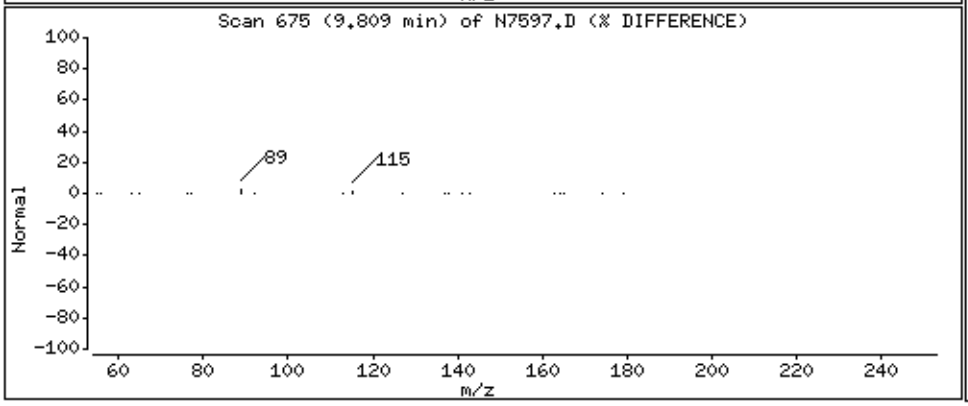












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Date : 03-MAR-2023 22:53

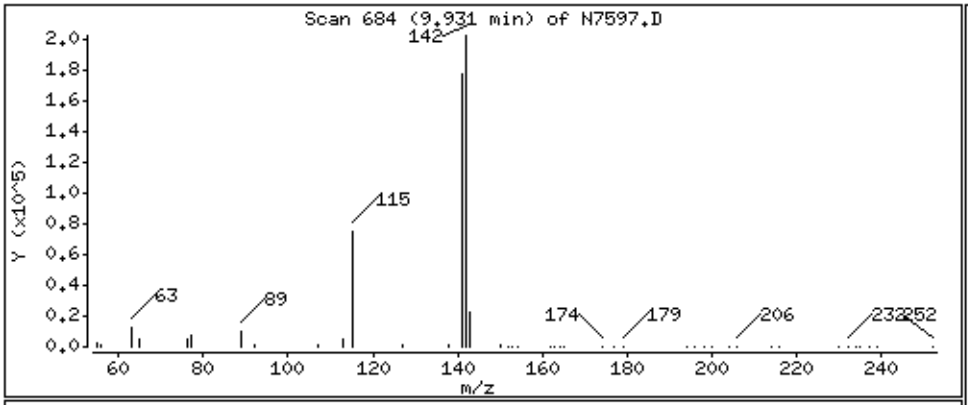
Client ID: SY-SB4R-1 Instrument: gcms-n.i

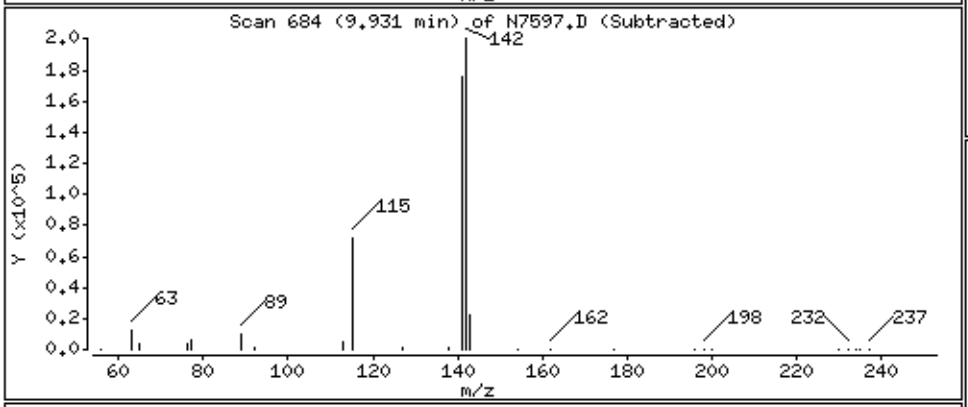
Sample Info: SQ0595-1

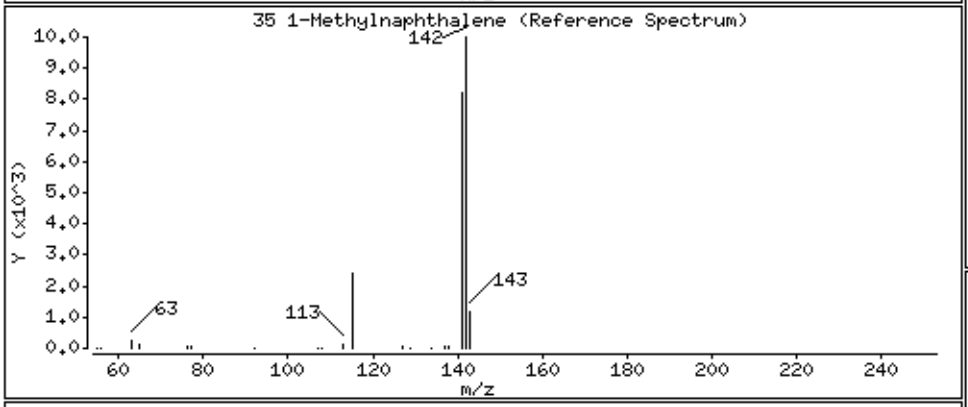
Volume Injected (uL): 1.0 Operator: DT/CO

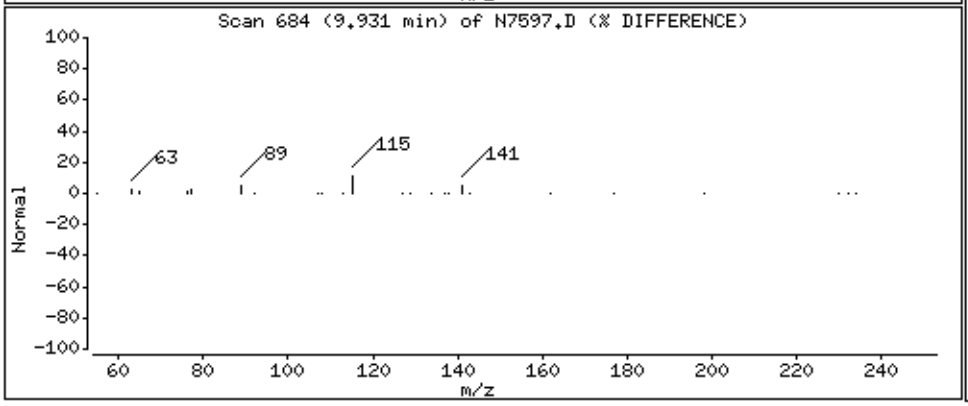
Column phase: ZB5-MS Column diameter: 0.25

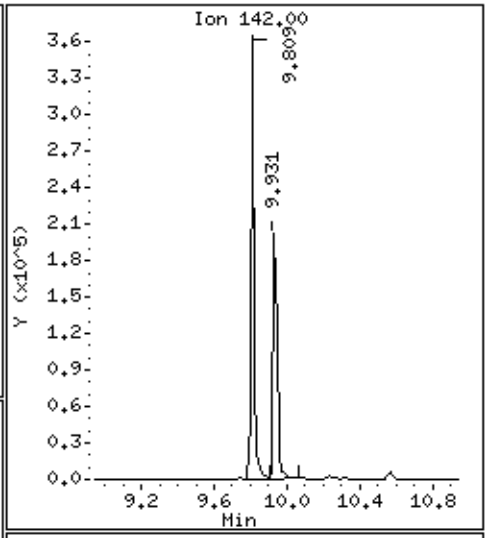
35 1-Methylnaphthalene Concentration: 73.1 ug/Kgdrywt

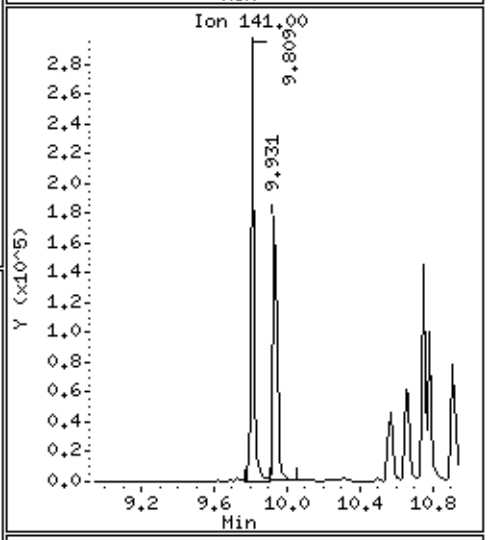


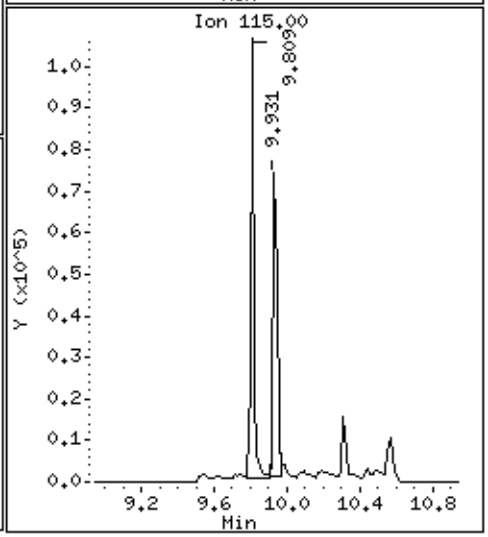












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Date : 03-MAR-2023 22:53

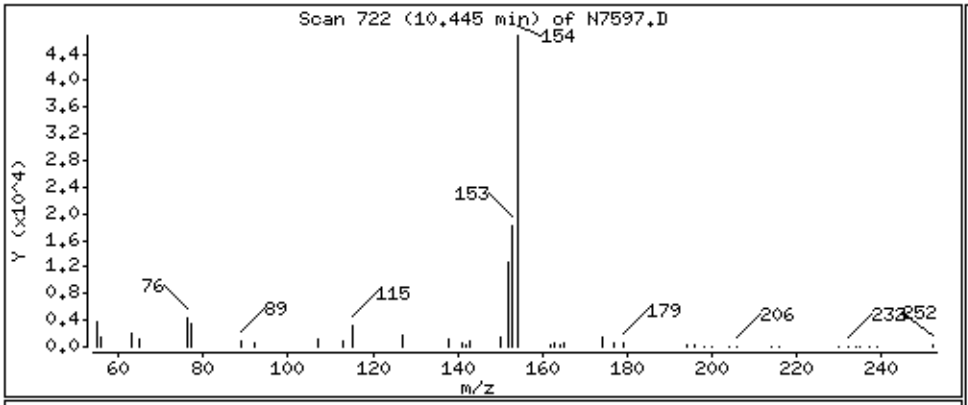
Client ID: SY-SB4R-1 Instrument: gcms-n.i

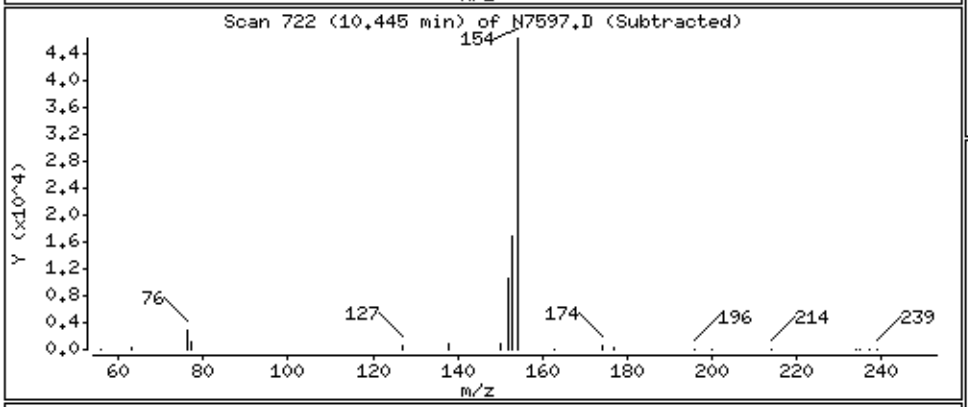
Sample Info: SQ0595-1

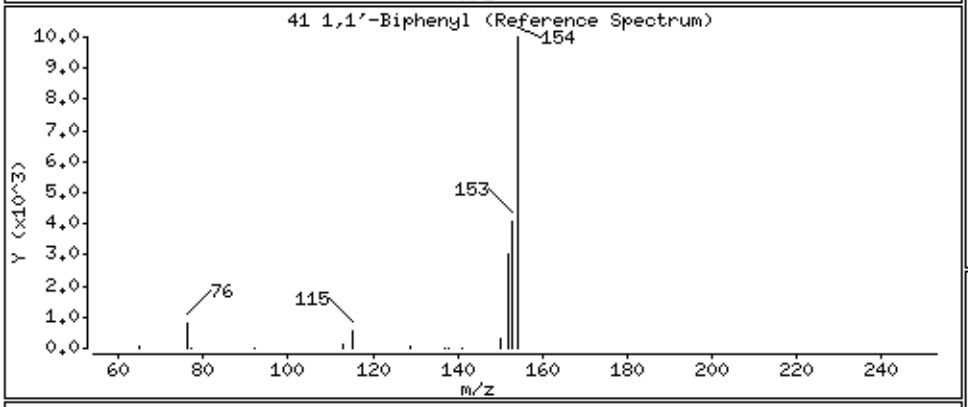
Volume Injected (uL): 1.0 Operator: DT/CO

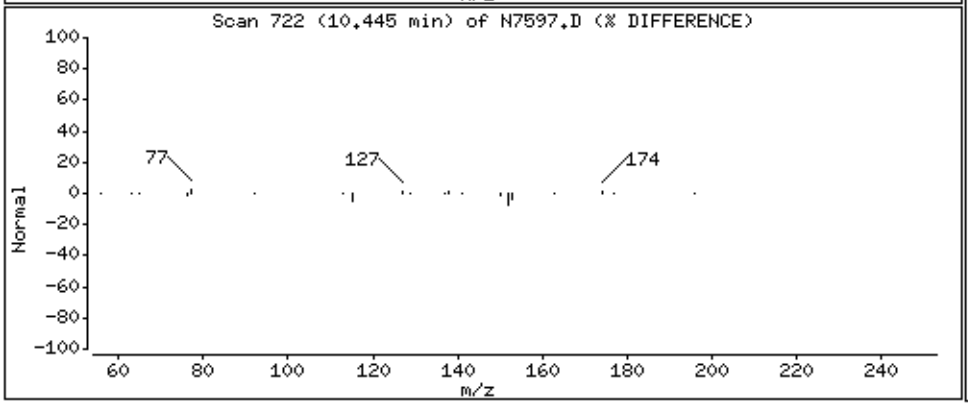
Column phase: ZB5-MS Column diameter: 0.25

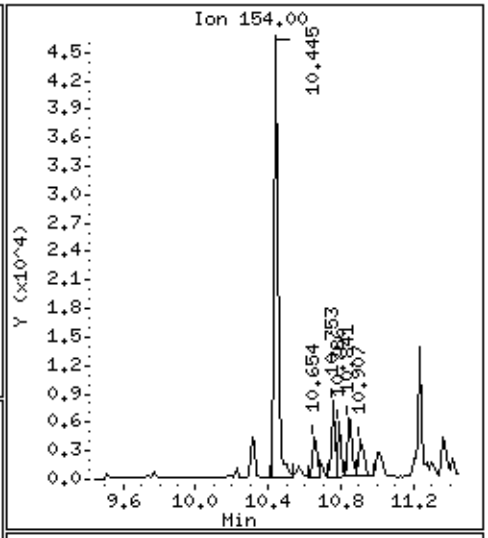
41 1,1'-Biphenyl Concentration: 12.4 ug/Kgdrywt

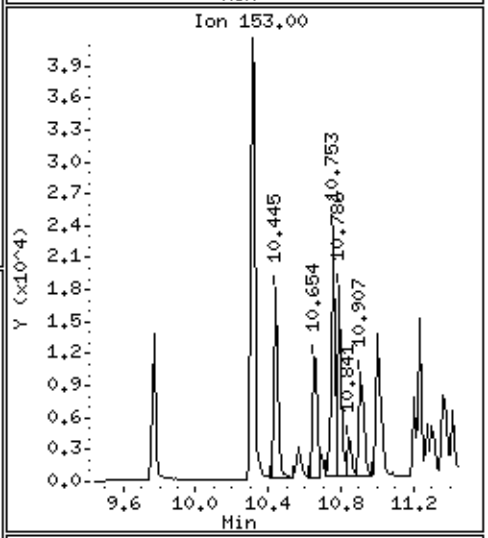


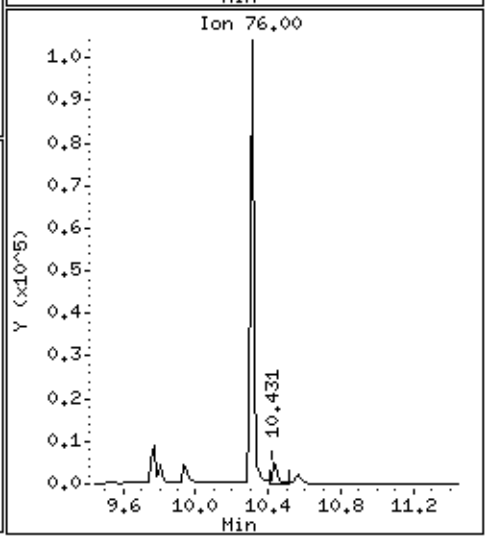












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Date : 03-MAR-2023 22:53

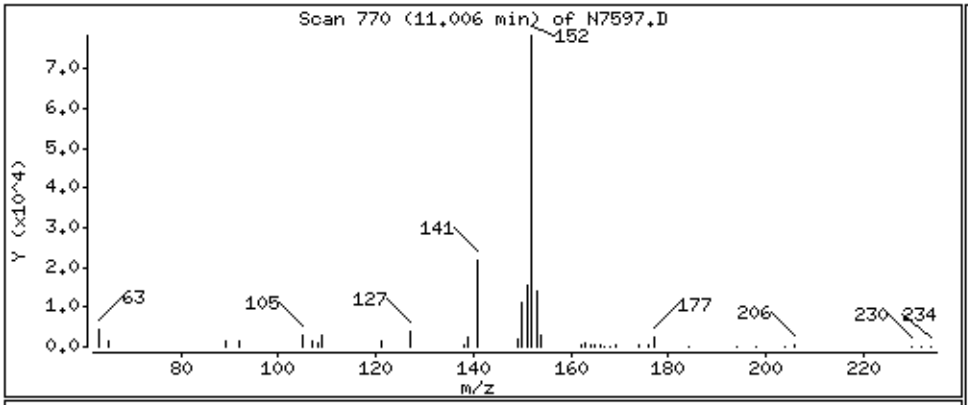
Client ID: SY-SB4R-1 Instrument: gcms-n.i

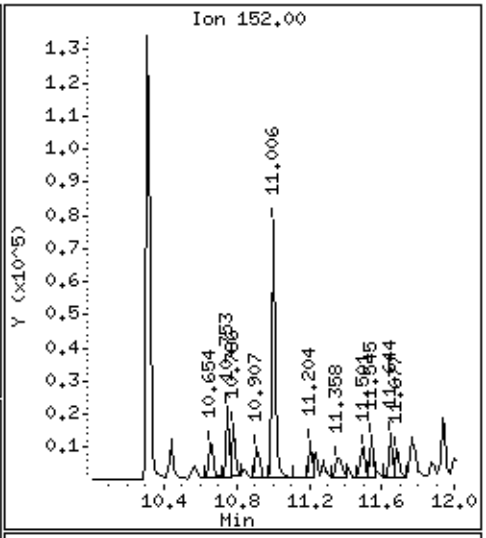
Sample Info: SQ0595-1

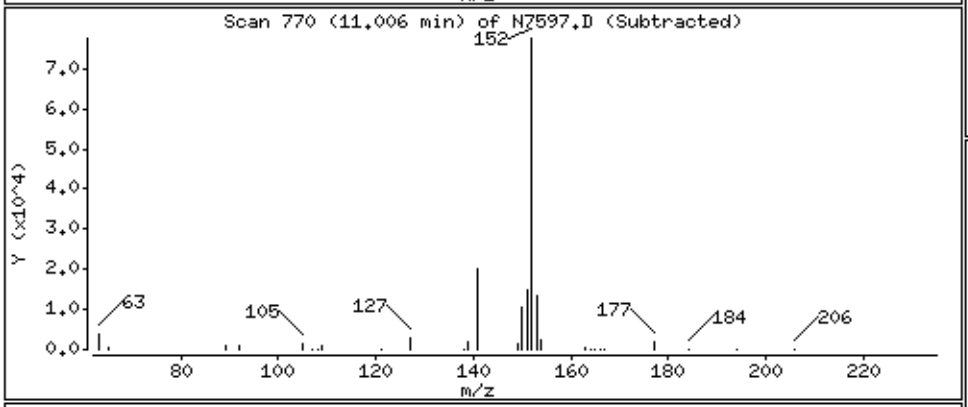
Volume Injected (uL): 1.0 Operator: DT/CO

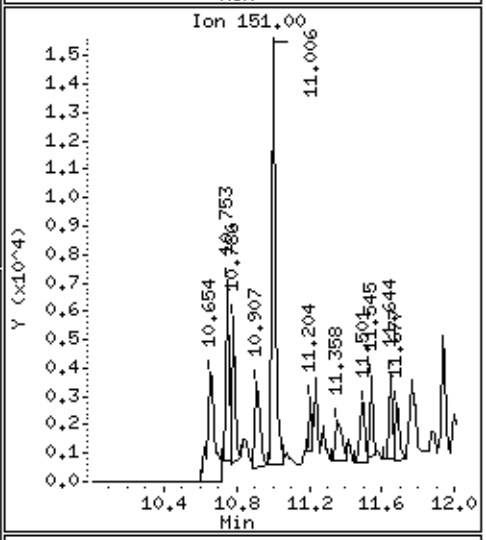
Column phase: ZB5-MS Column diameter: 0.25

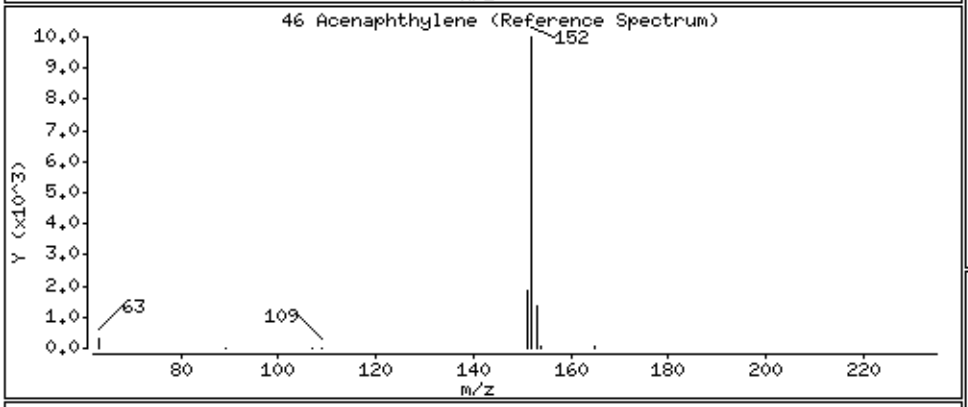
46 Acenaphthylene Concentration: 16.4 ug/Kgdrywt

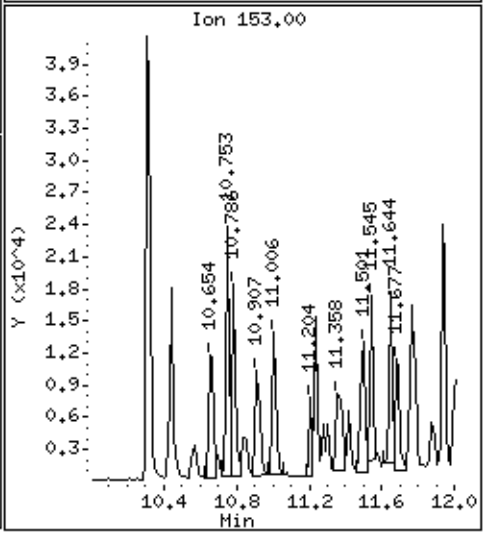


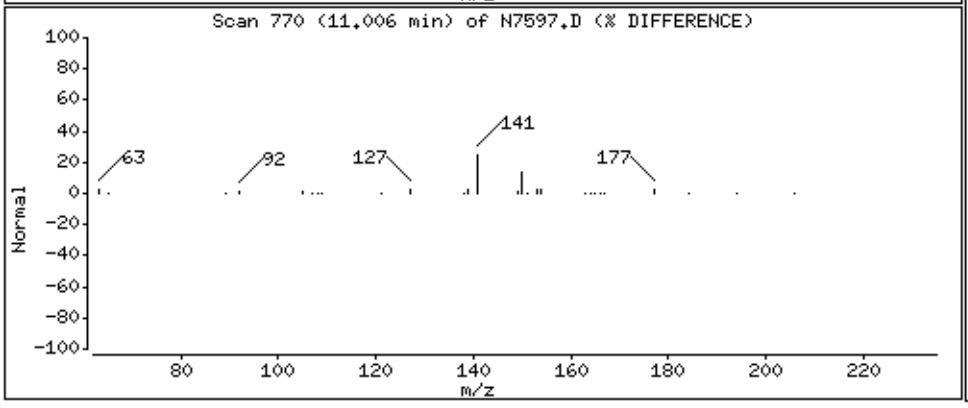












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Date : 03-MAR-2023 22:53

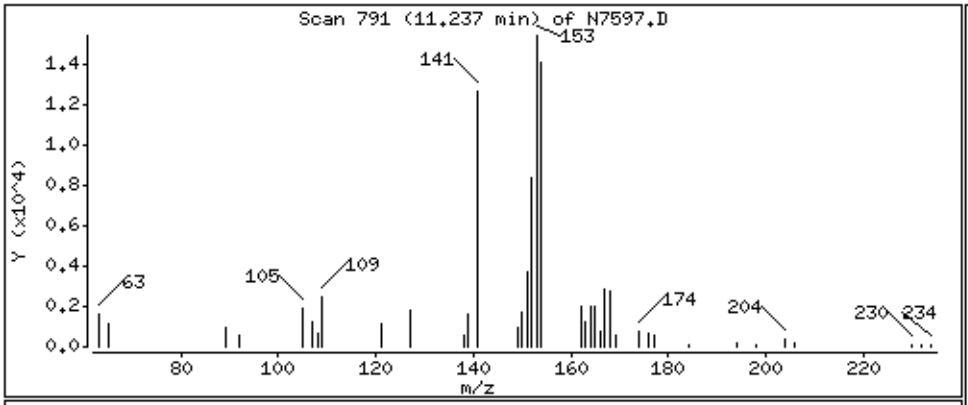
Client ID: SY-SB4R-1 Instrument: gcms-n.i

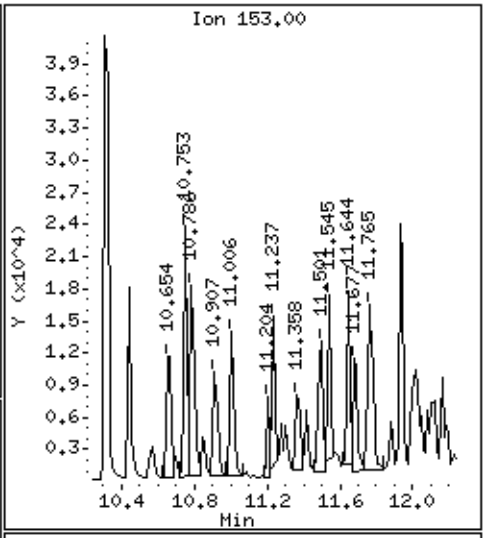
Sample Info: SQ0595-1

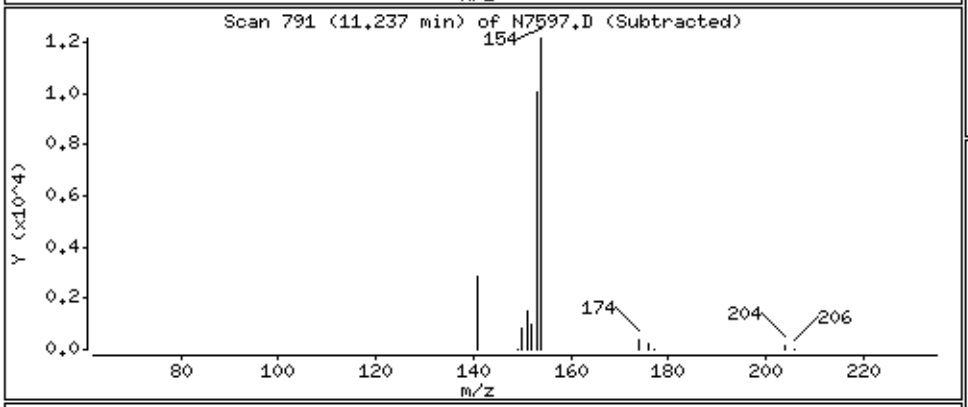
Volume Injected (uL): 1.0 Operator: DT/CO

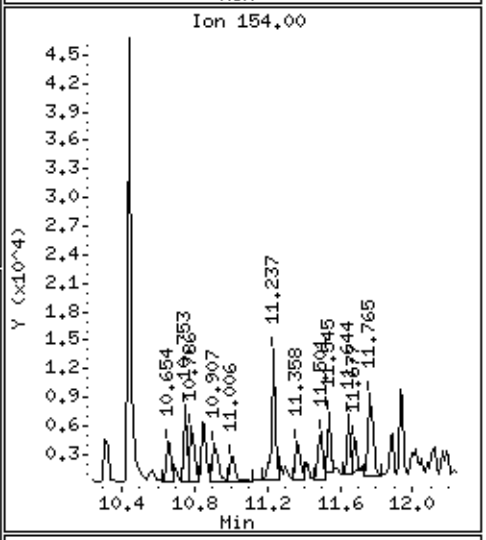
Column phase: ZB5-MS Column diameter: 0.25

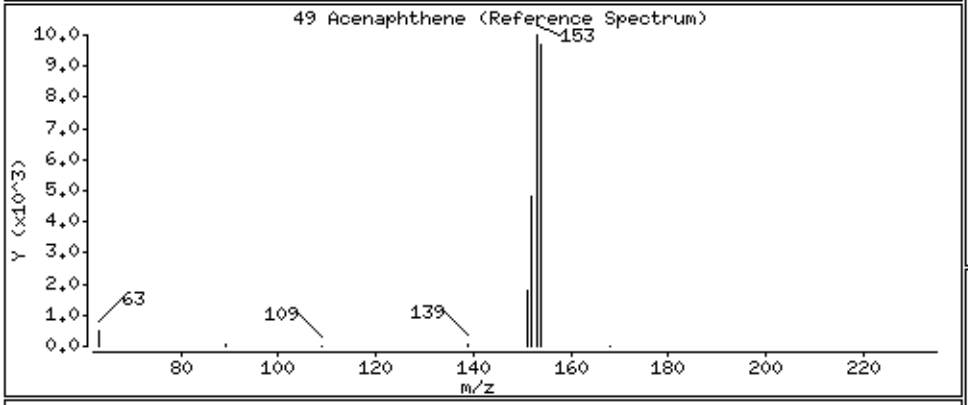
49 Acenaphthene Concentration: 4.07 ug/Kgdrywt

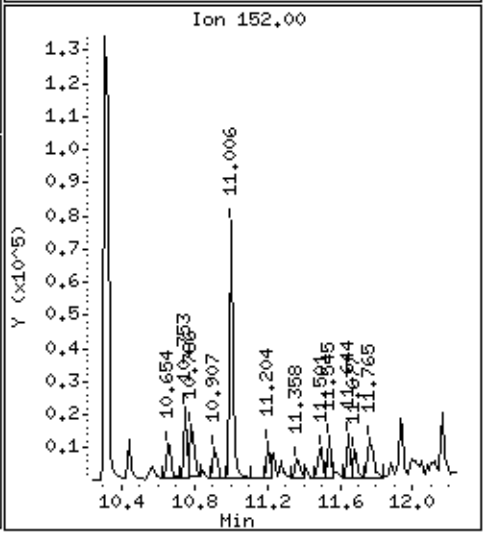


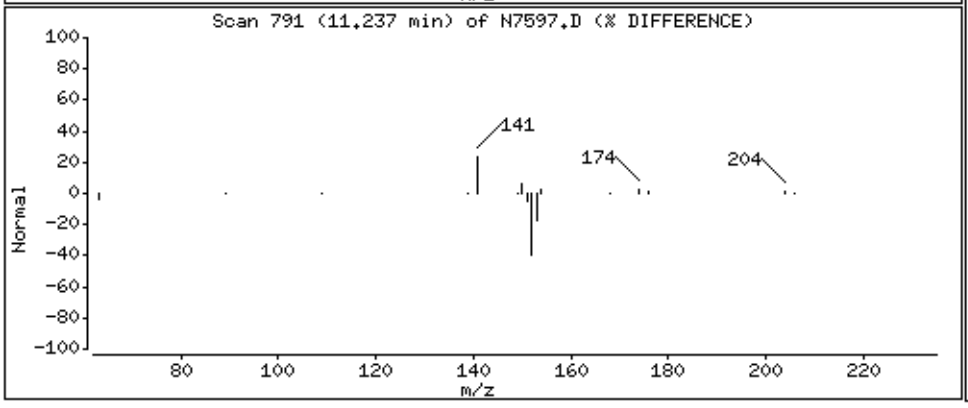












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Date : 03-MAR-2023 22:53

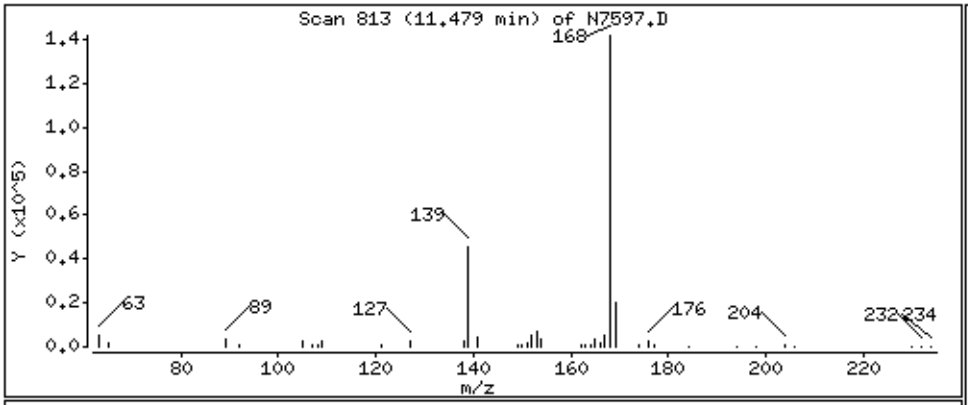
Client ID: SY-SB4R-1 Instrument: gcms-n.i

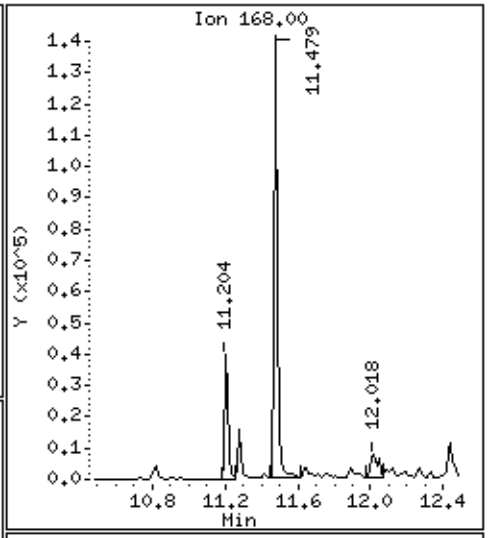
Sample Info: SQ0595-1

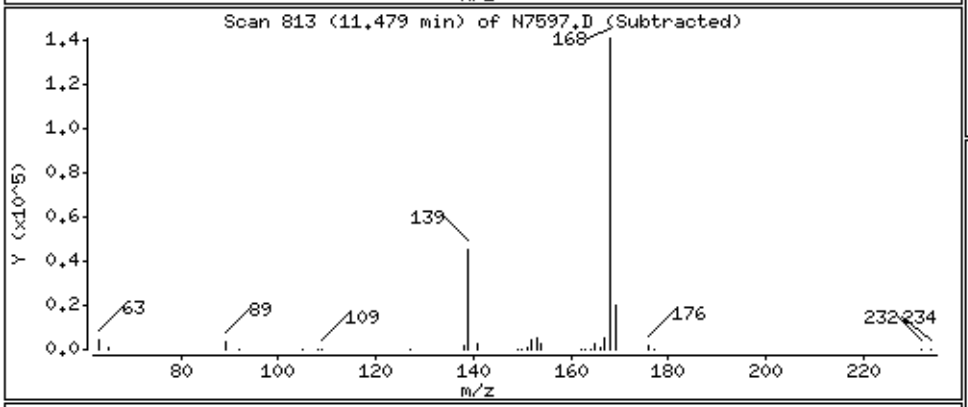
Volume Injected (uL): 1.0 Operator: DT/CO

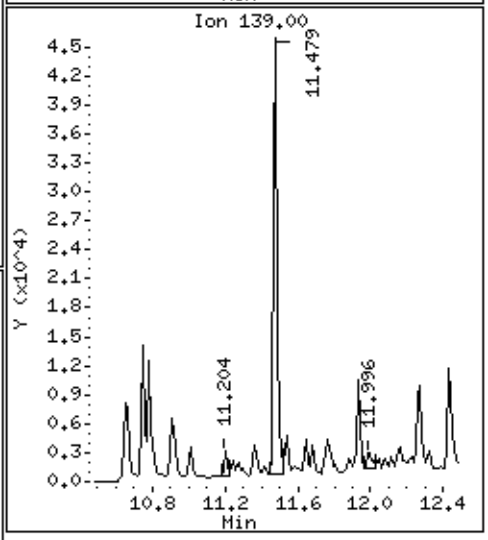
Column phase: ZB5-MS Column diameter: 0.25

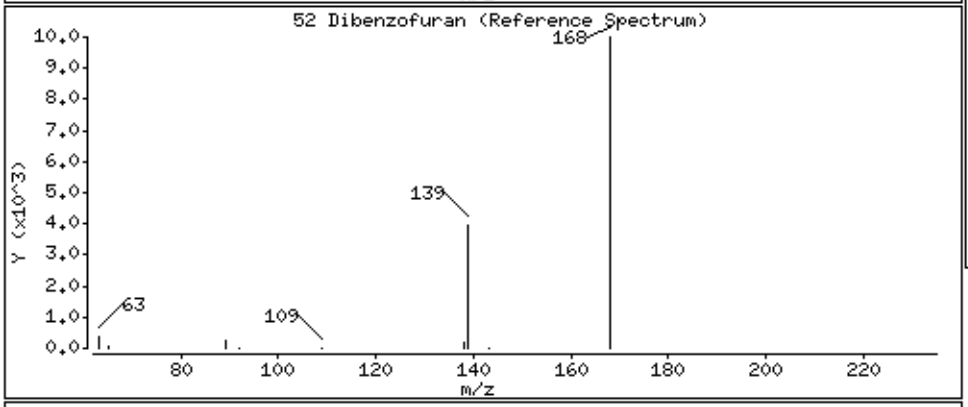
52 Dibenzofuran Concentration: 32.6 ug/Kgdrywt

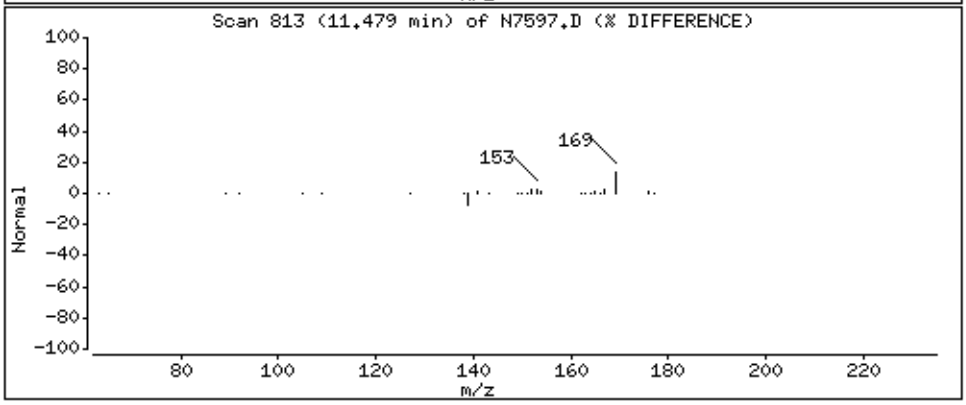












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Date : 03-MAR-2023 22:53

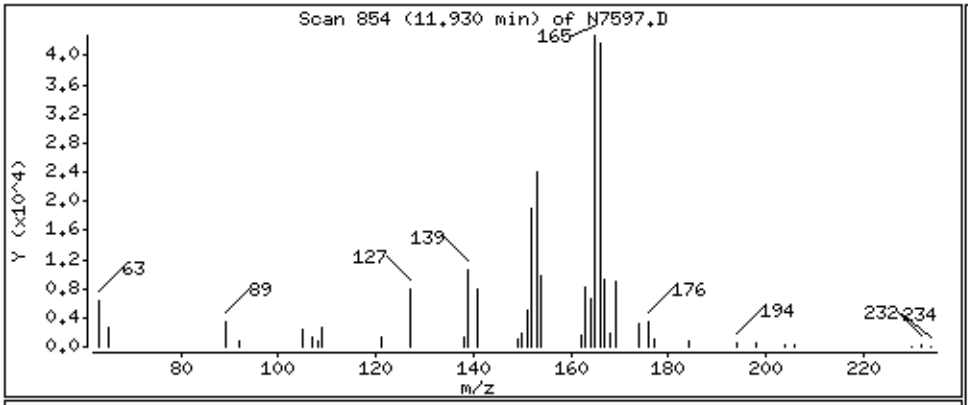
Client ID: SY-SB4R-1 Instrument: gcms-n.i

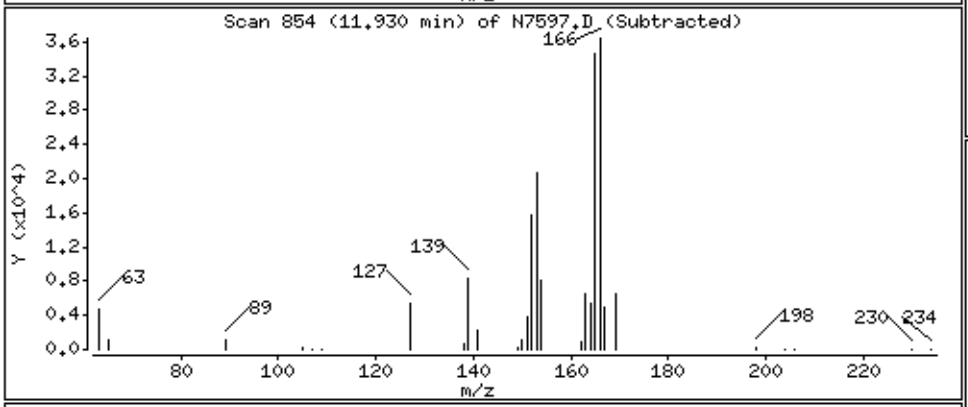
Sample Info: SQ0595-1

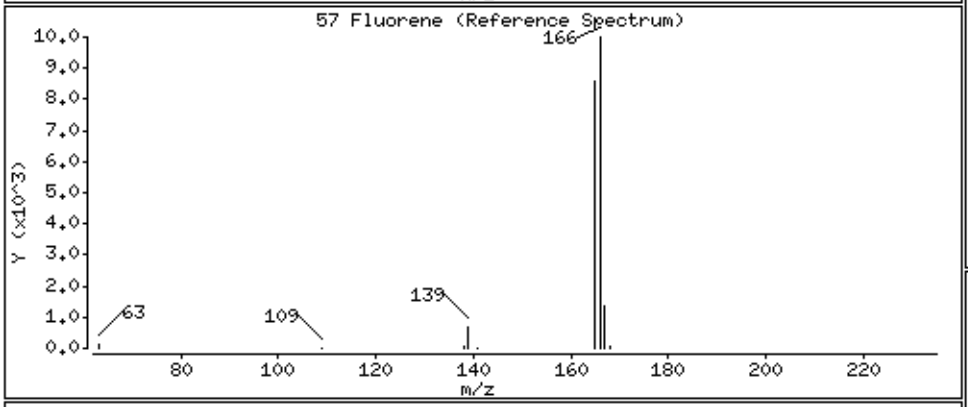
Volume Injected (uL): 1.0 Operator: DT/CO

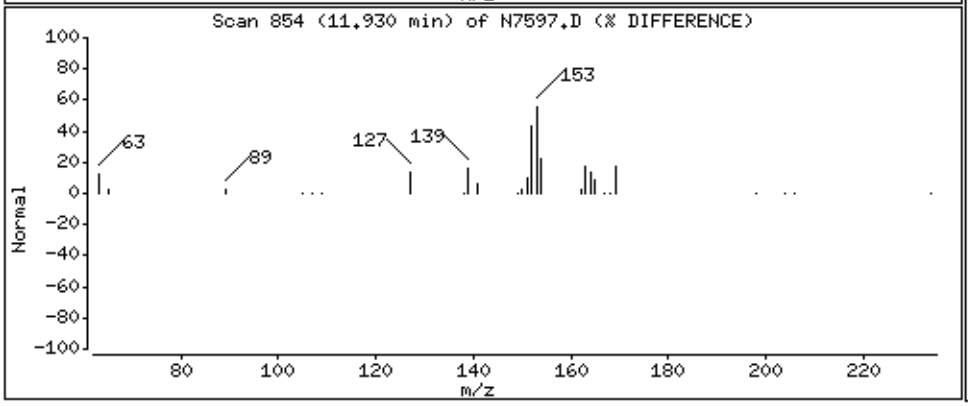
Column phase: ZB5-MS Column diameter: 0.25

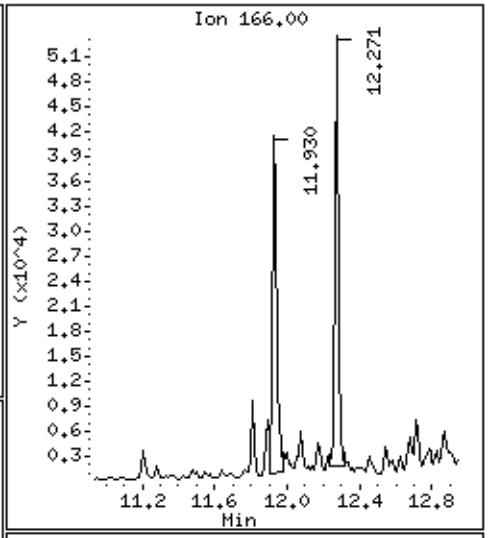
57 Fluorene Concentration: 15.6 ug/Kgdrywt

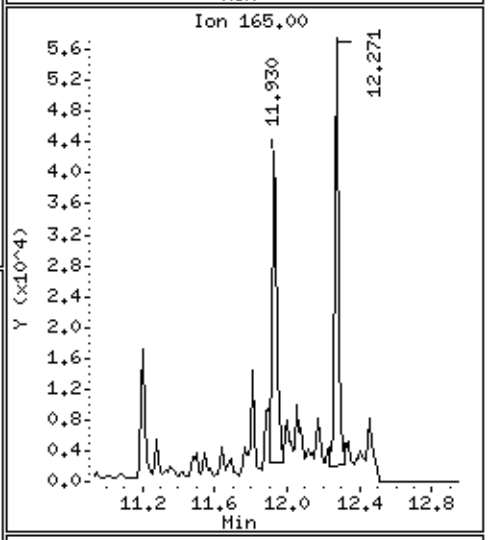


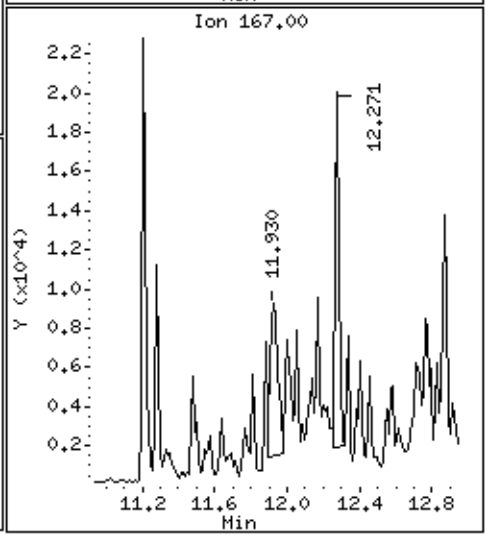












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Date : 03-MAR-2023 22:53

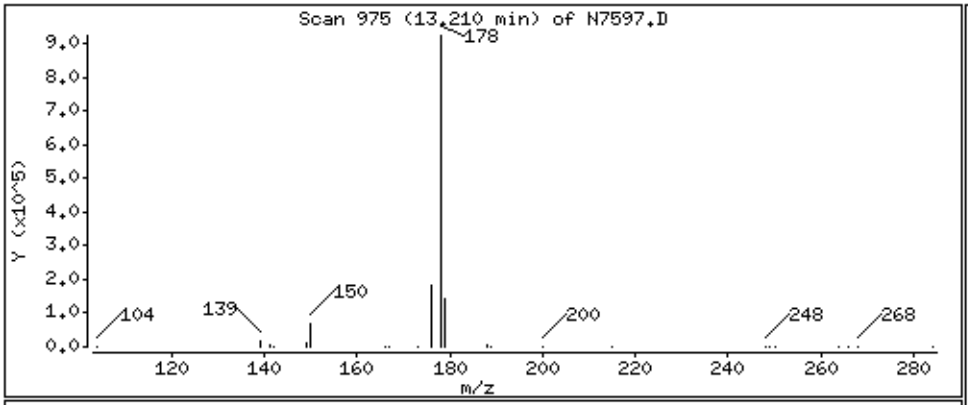
Client ID: SY-SB4R-1 Instrument: gcms-n.i

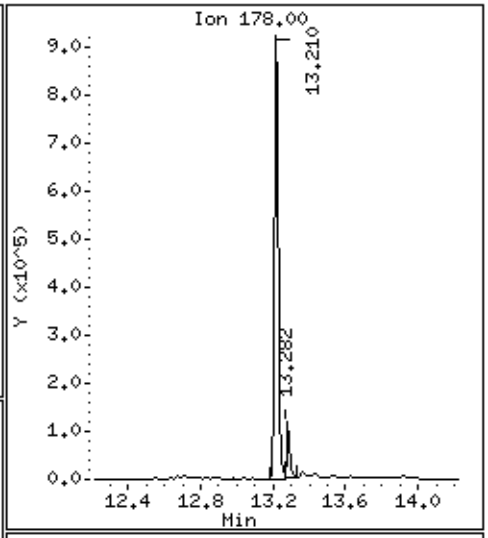
Sample Info: SQ0595-1

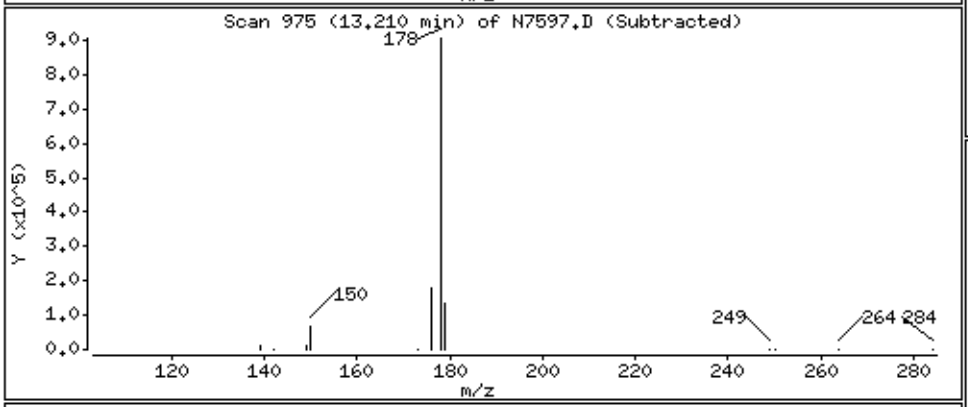
Volume Injected (uL): 1.0 Operator: DT/CO

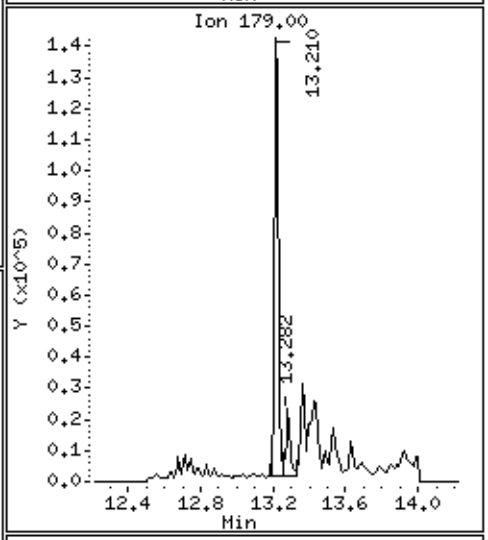
Column phase: ZB5-MS Column diameter: 0.25

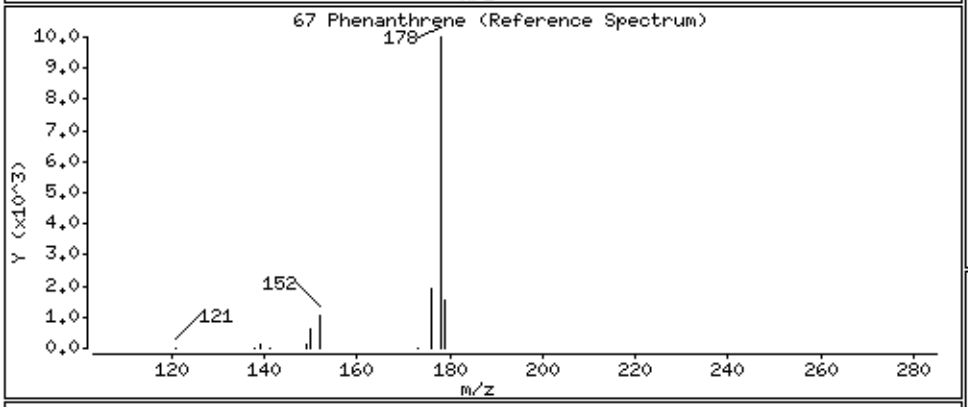
67 Phenanthrene Concentration: 228 ug/Kgdrywt

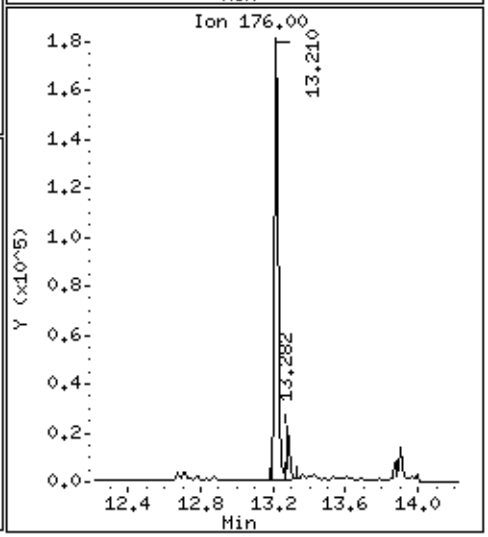


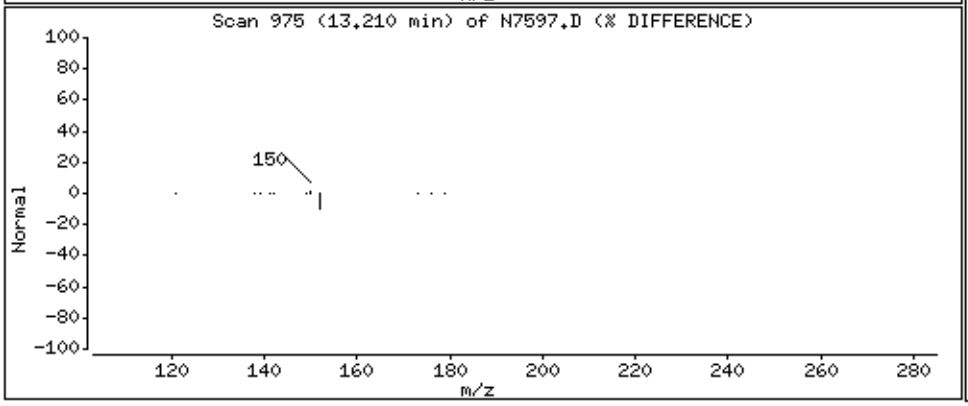












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Date : 03-MAR-2023 22:53

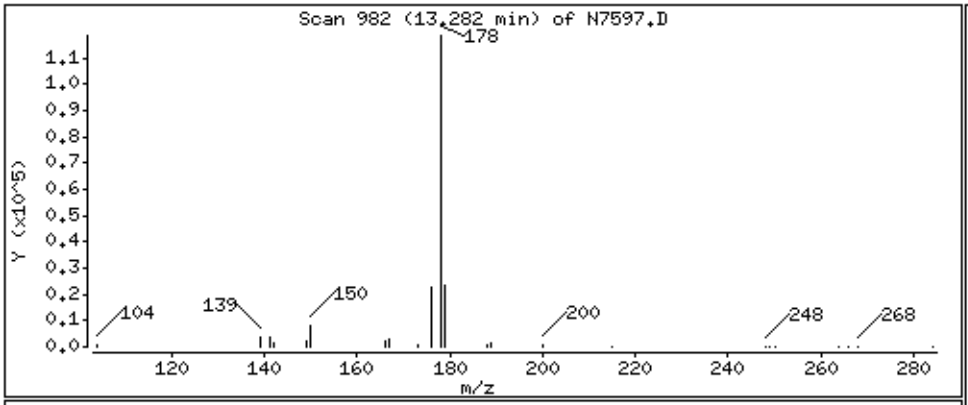
Client ID: SY-SB4R-1 Instrument: gcms-n.i

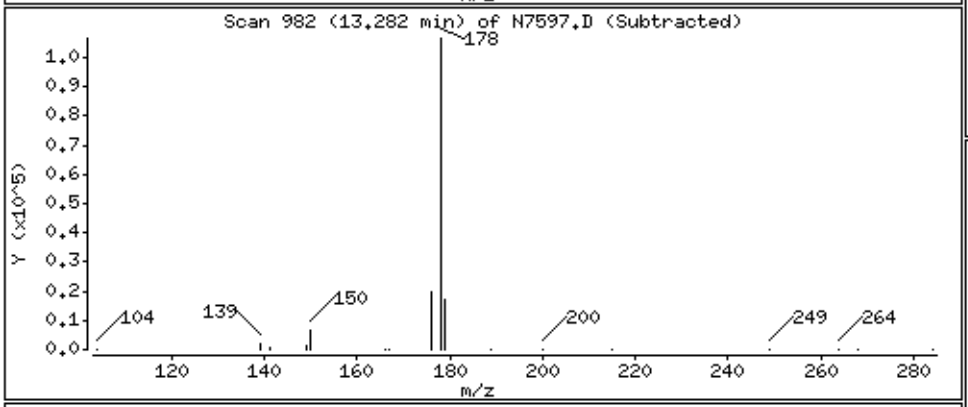
Sample Info: SQ0595-1

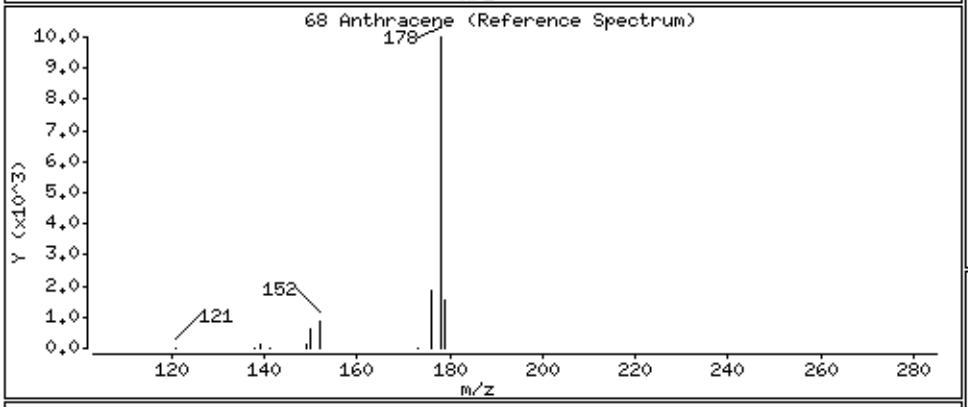
Volume Injected (uL): 1.0 Operator: DT/CO

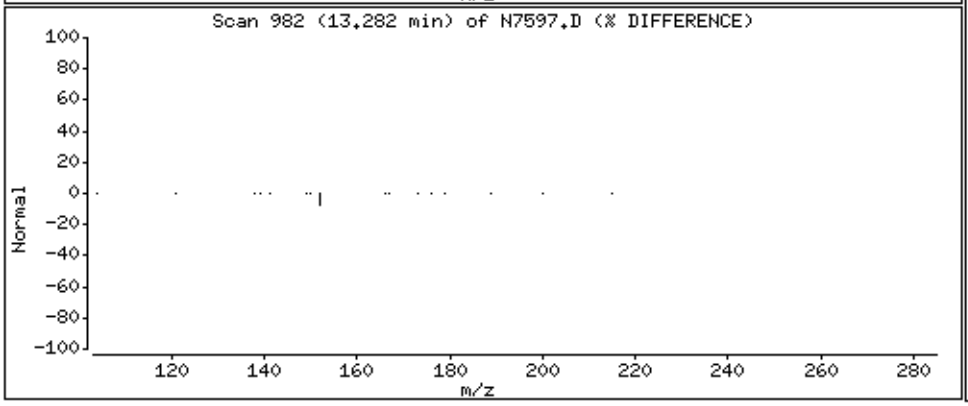
Column phase: ZB5-MS Column diameter: 0.25

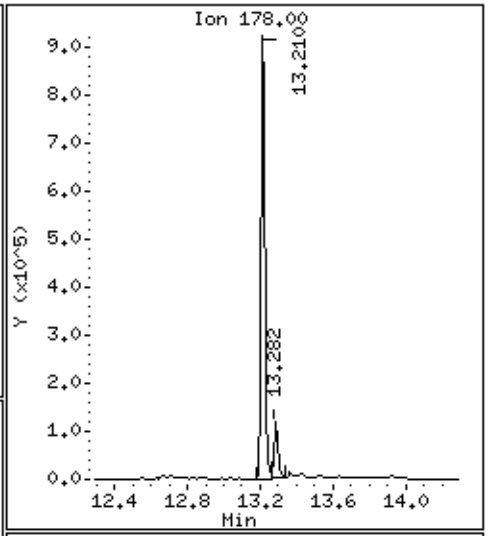
68 Anthracene Concentration: 26.5 ug/Kgdrywt

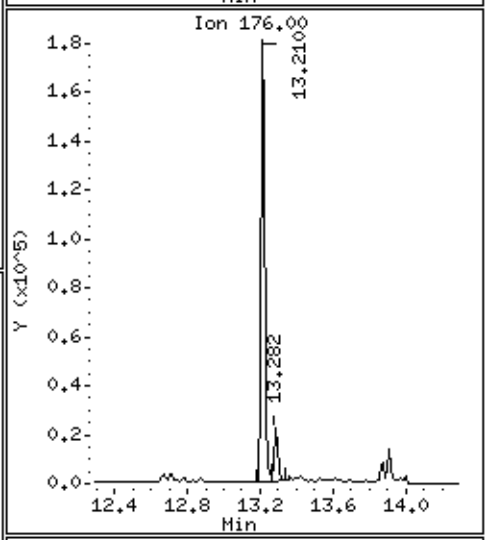


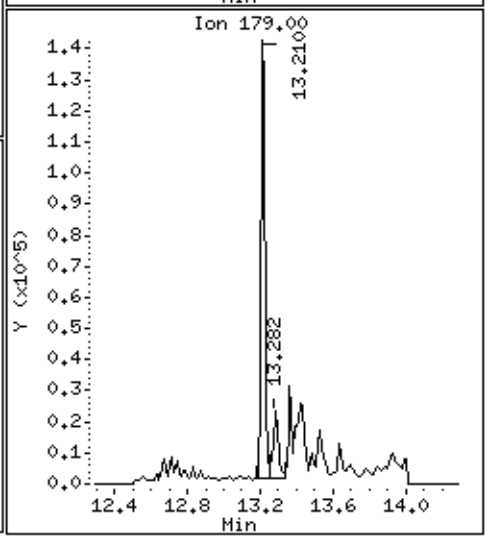












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Date : 03-MAR-2023 22:53

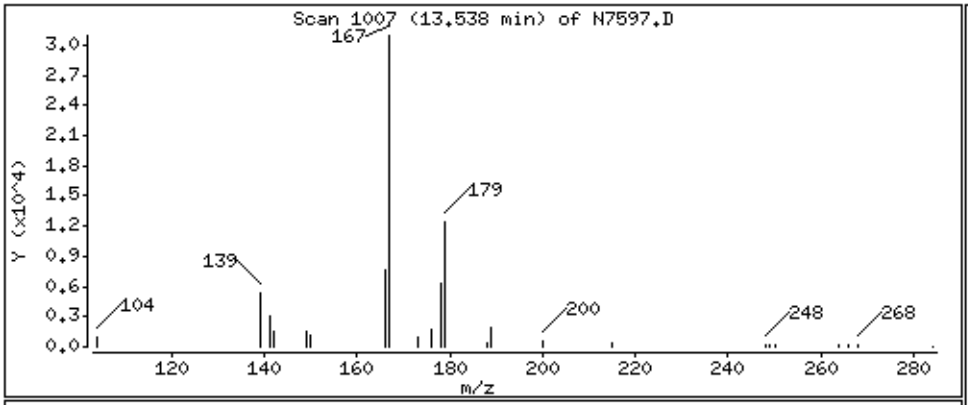
Client ID: SY-SB4R-1 Instrument: gcms-n.i

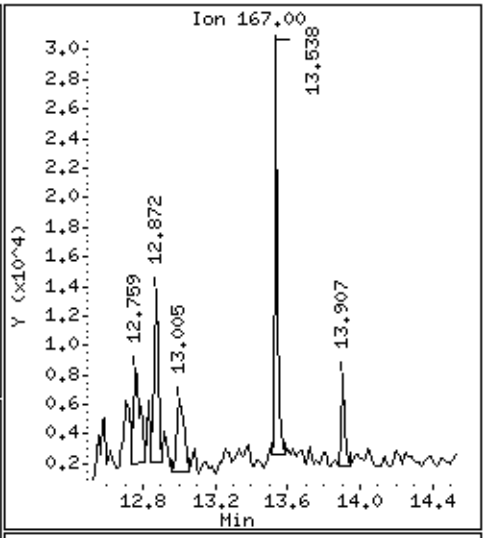
Sample Info: SQ0595-1

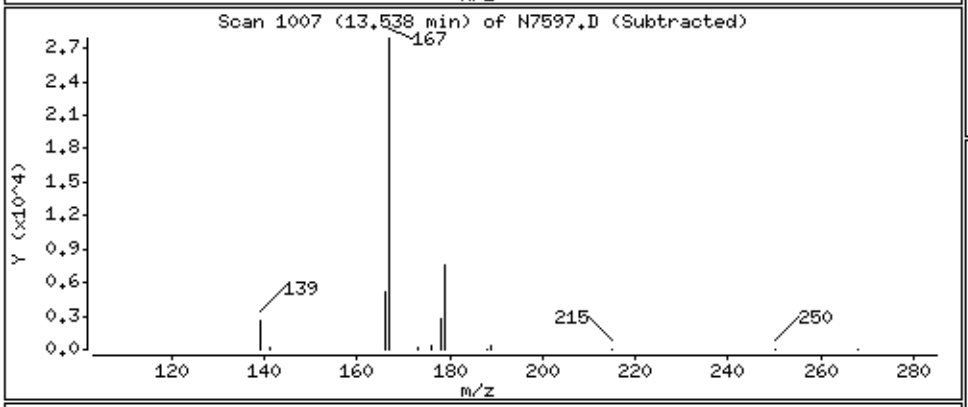
Volume Injected (uL): 1.0 Operator: DT/CO

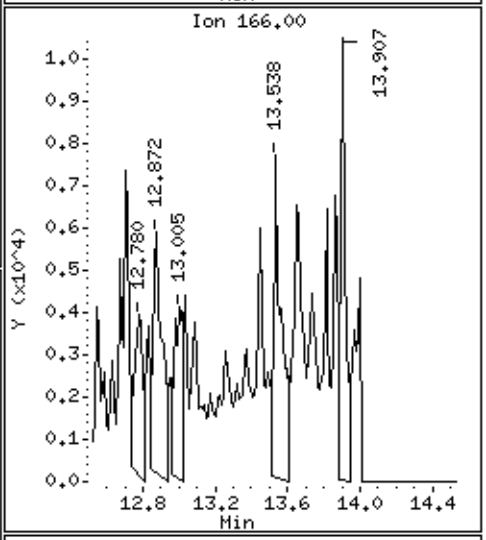
Column phase: ZB5-MS Column diameter: 0.25

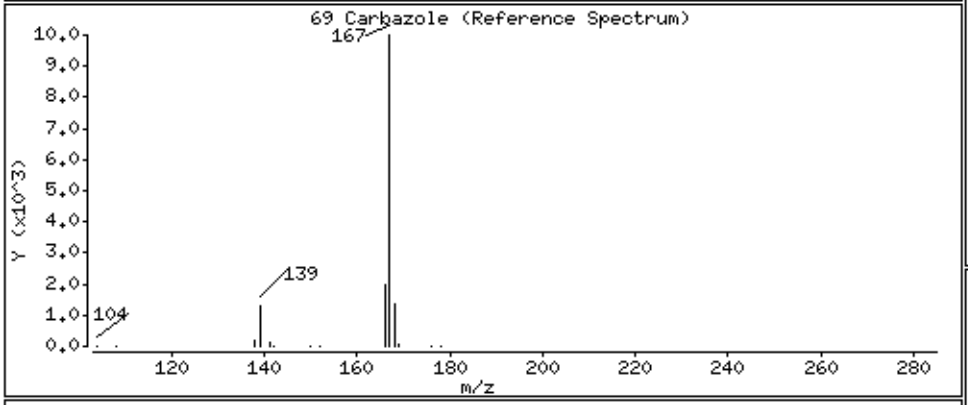
69 Carbazole Concentration: 9.06 ug/Kgdrywt

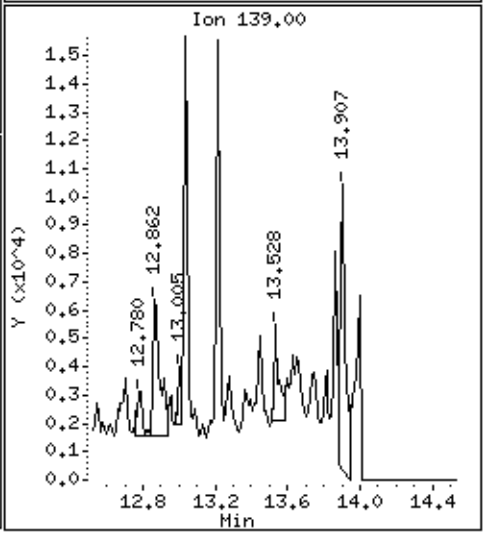


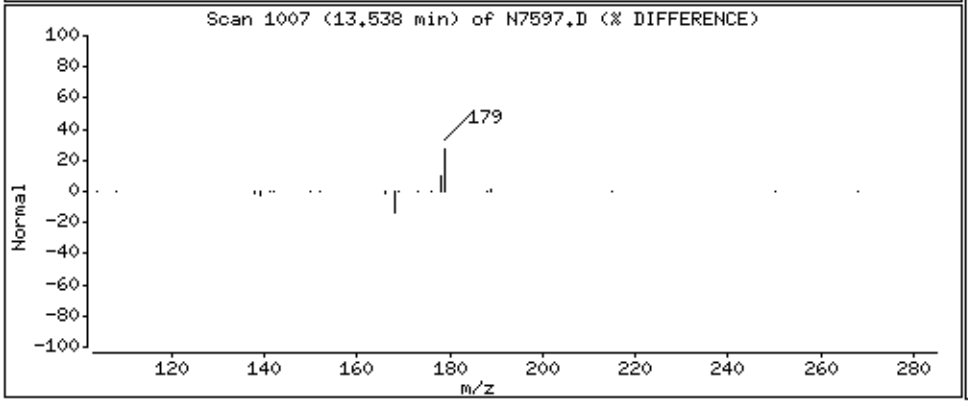












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Date : 03-MAR-2023 22:53

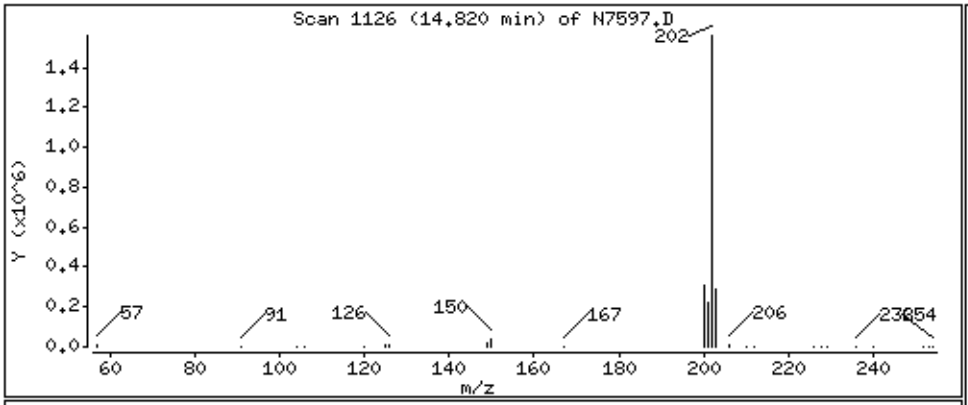
Client ID: SY-SB4R-1 Instrument: gcms-n.i

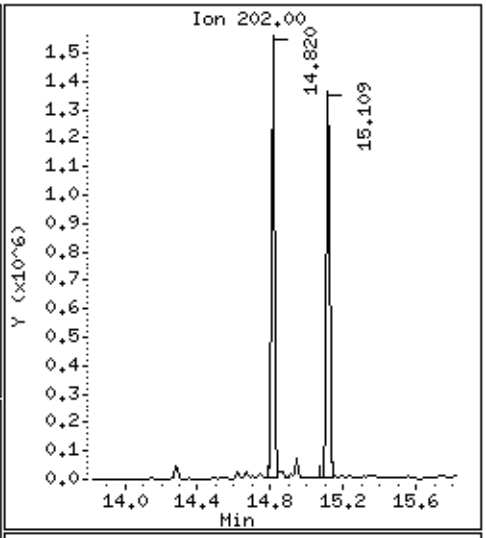
Sample Info: SQ0595-1

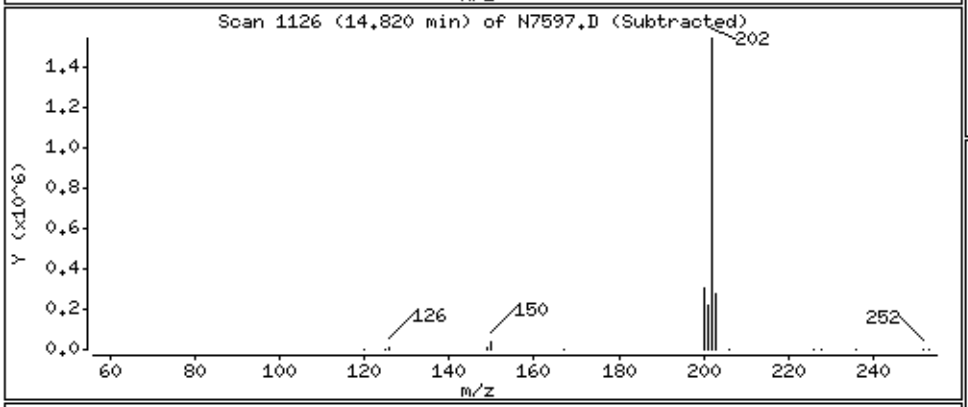
Volume Injected (uL): 1.0 Operator: DT/CO

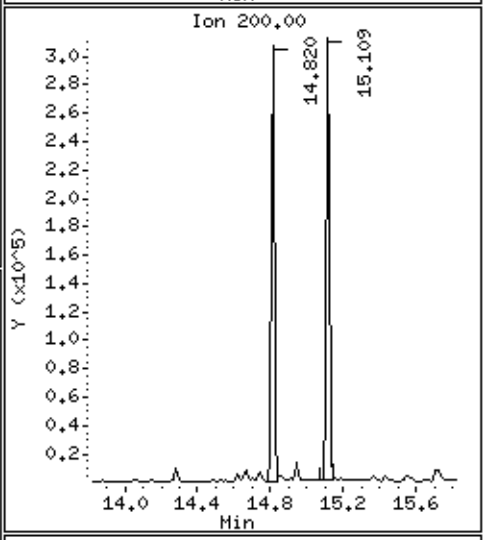
Column phase: ZB5-MS Column diameter: 0.25

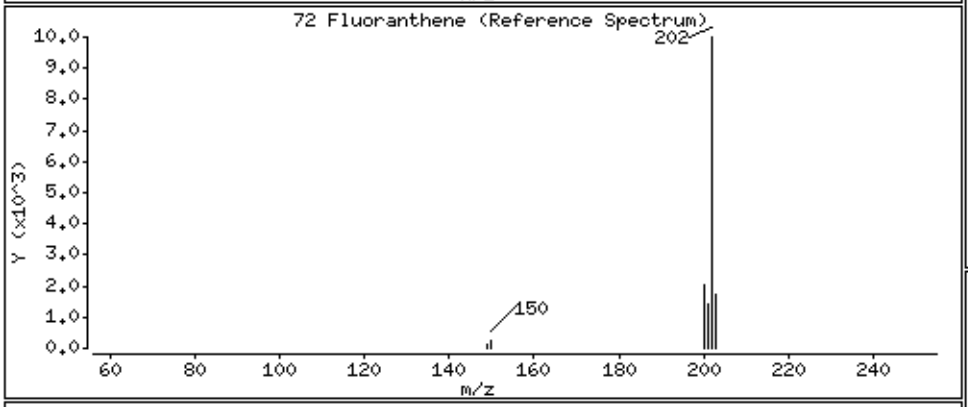
72 Fluoranthene Concentration: 386 ug/Kgdrywt

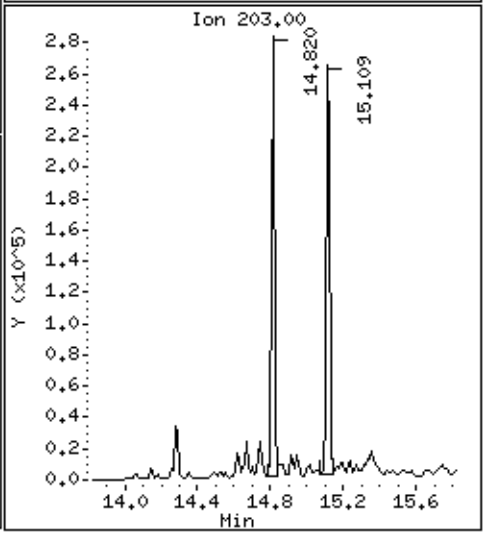


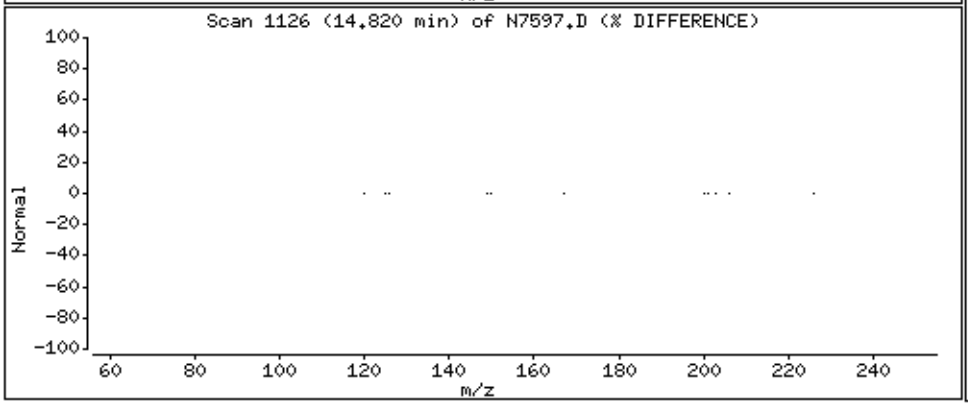












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Date : 03-MAR-2023 22:53

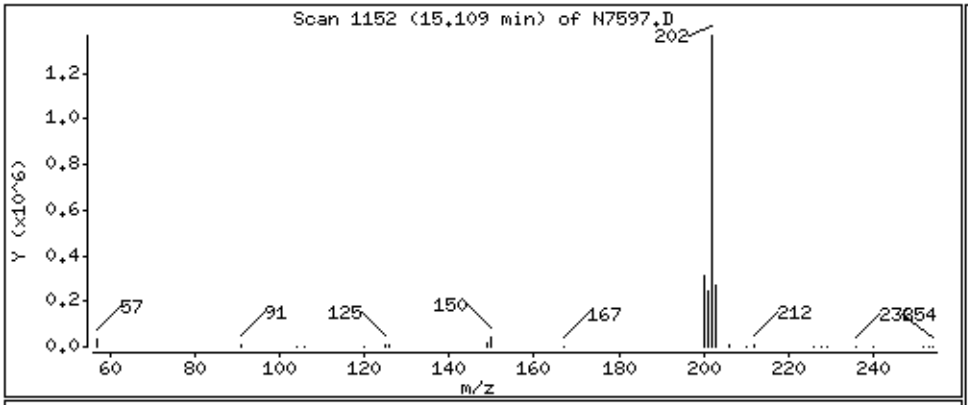
Client ID: SY-SB4R-1 Instrument: gcms-n.i

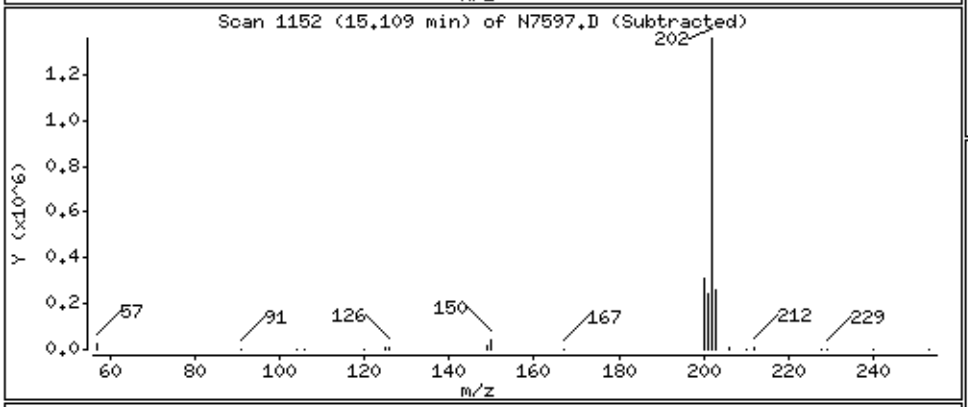
Sample Info: SQ0595-1

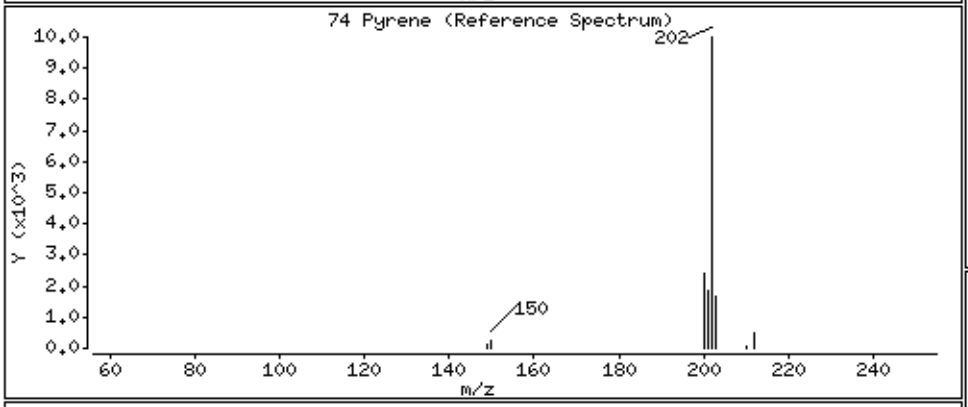
Volume Injected (uL): 1.0 Operator: DT/CO

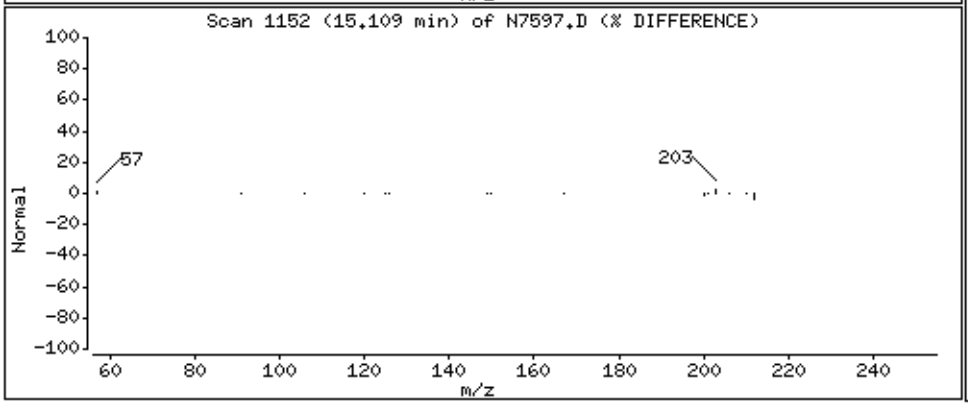
Column phase: ZB5-MS Column diameter: 0.25

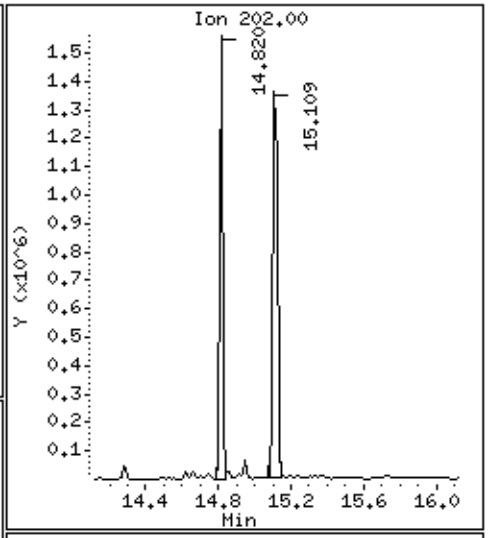
74 Pyrene Concentration: 438 ug/Kgdrywt

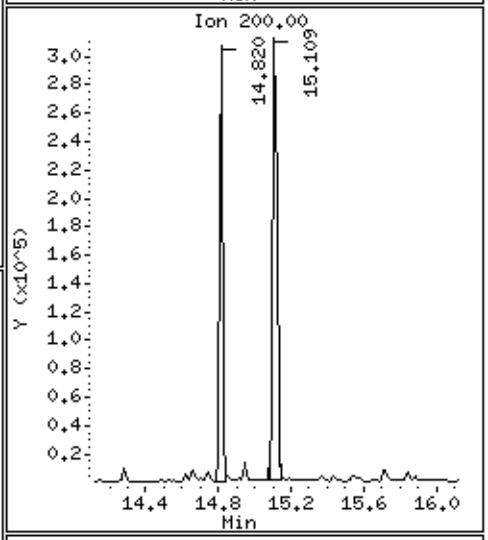


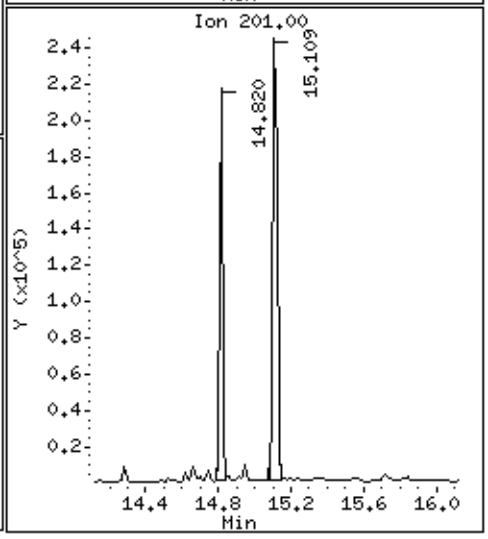












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Date : 03-MAR-2023 22:53

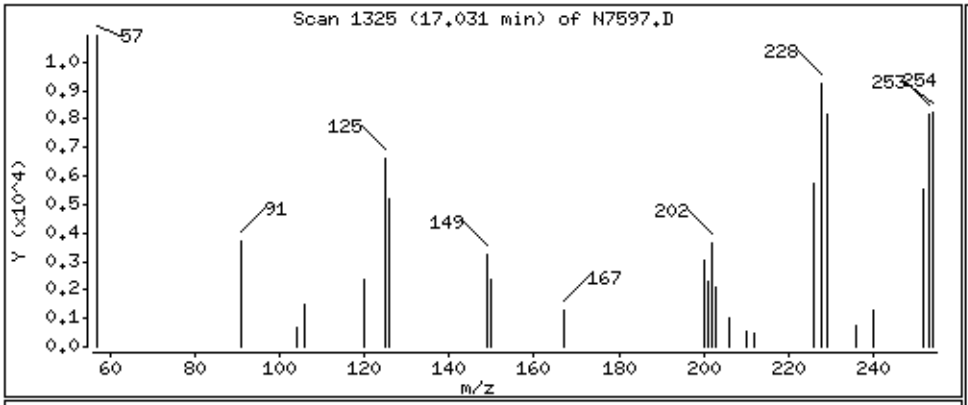
Client ID: SY-SB4R-1 Instrument: gcms-n.i

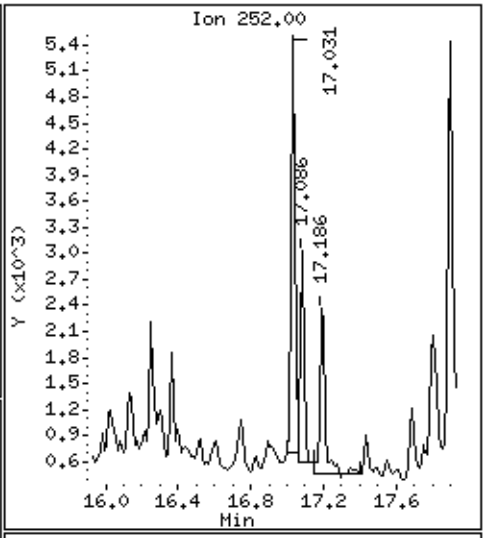
Sample Info: SQ0595-1

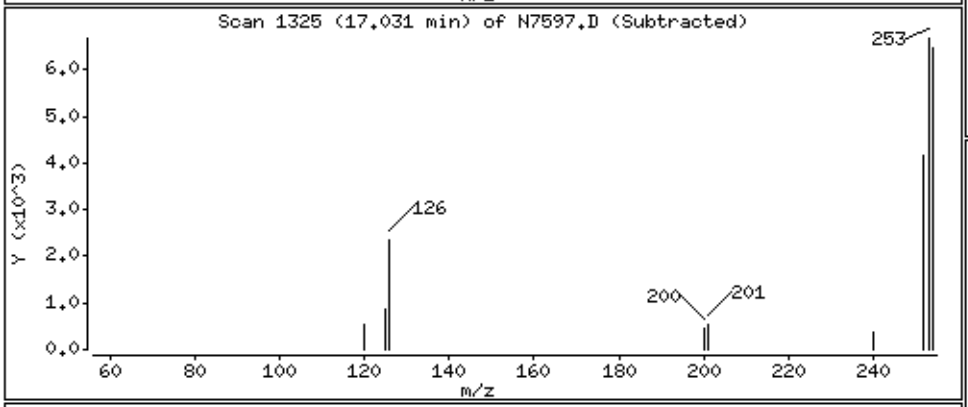
Volume Injected (uL): 1.0 Operator: DT/CO

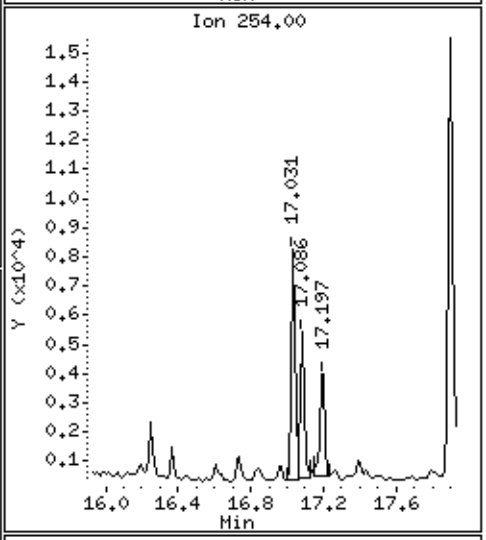
Column phase: ZB5-MS Column diameter: 0.25

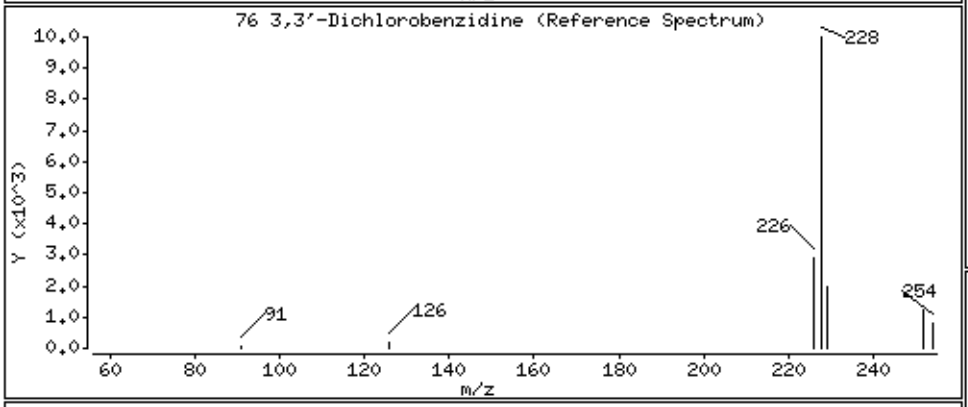
76 3,3'-Dichlorobenzidine Concentration: 12.7 ug/Kgdrywt

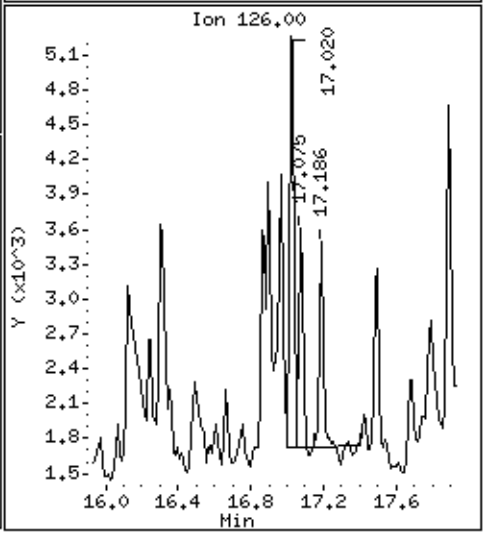


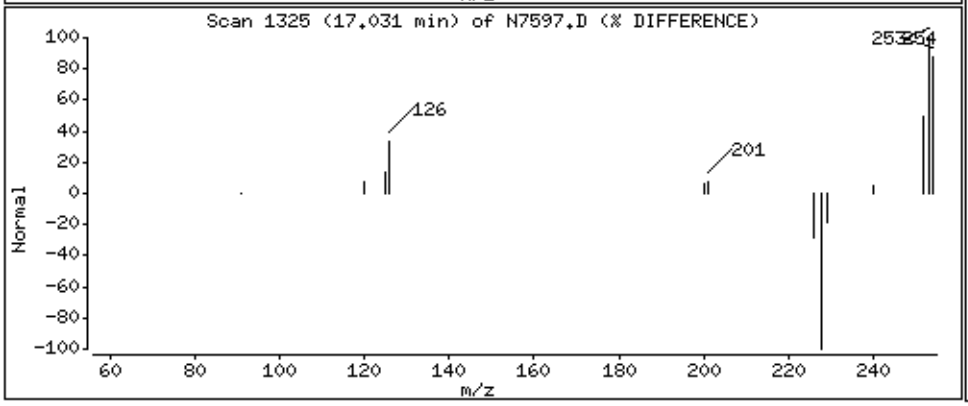












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Date : 03-MAR-2023 22:53

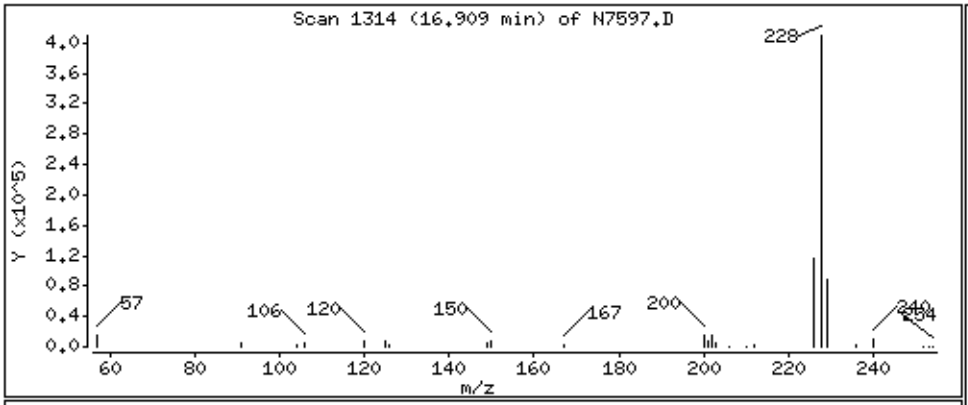
Client ID: SY-SB4R-1 Instrument: gcms-n.i

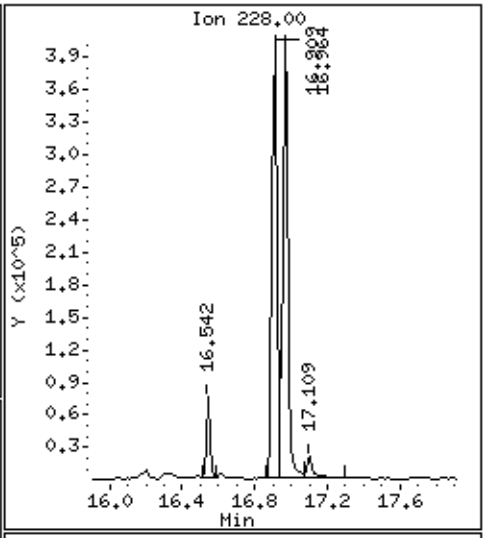
Sample Info: SQ0595-1

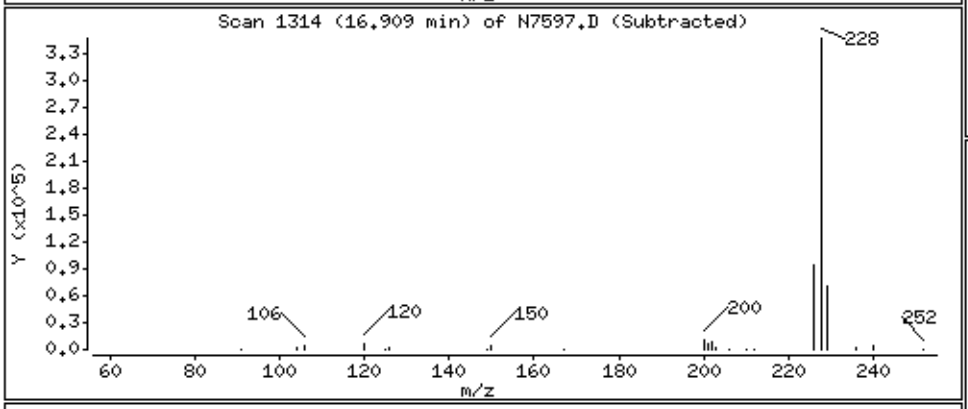
Volume Injected (uL): 1.0 Operator: DT/CO

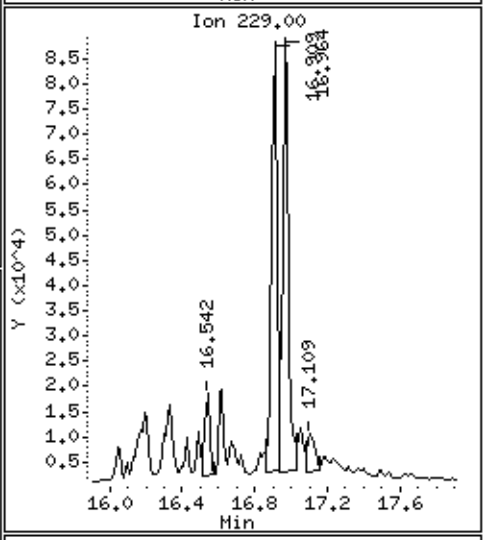
Column phase: ZB5-MS Column diameter: 0.25

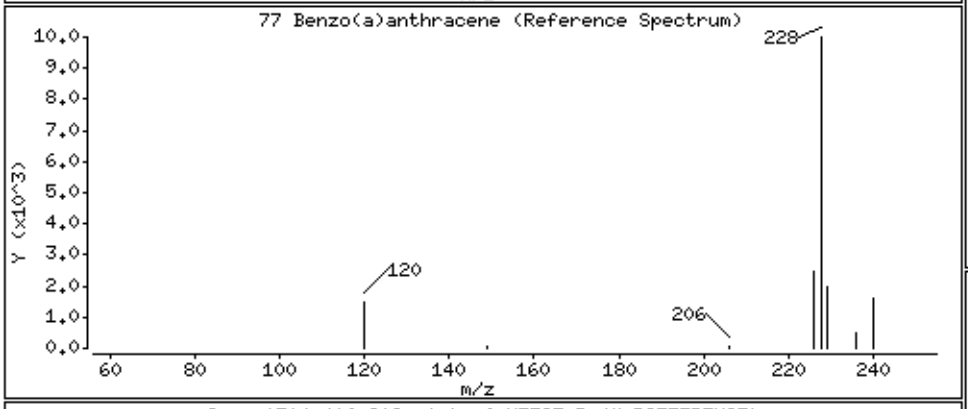
77 Benzo(a)anthracene Concentration: 284 ug/Kgdrywt

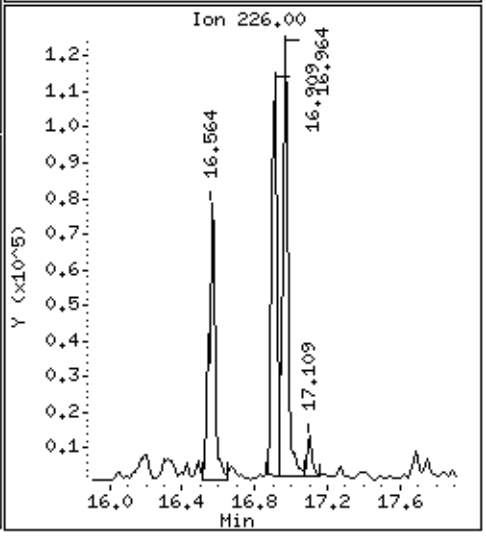


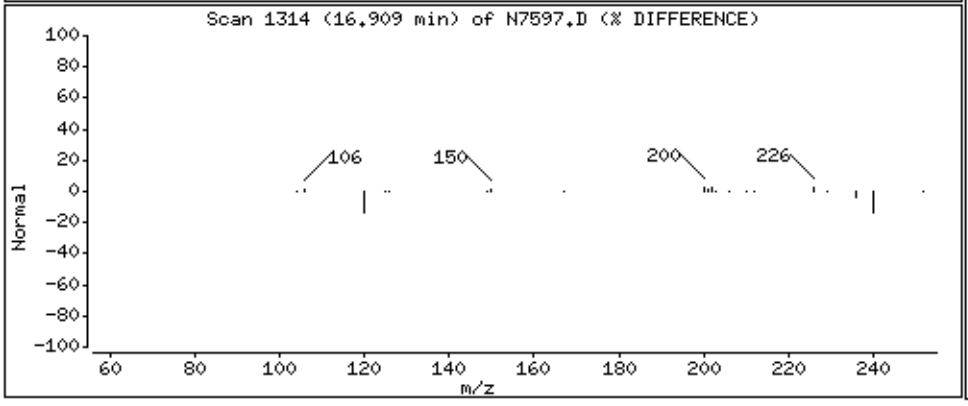












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Date : 03-MAR-2023 22:53

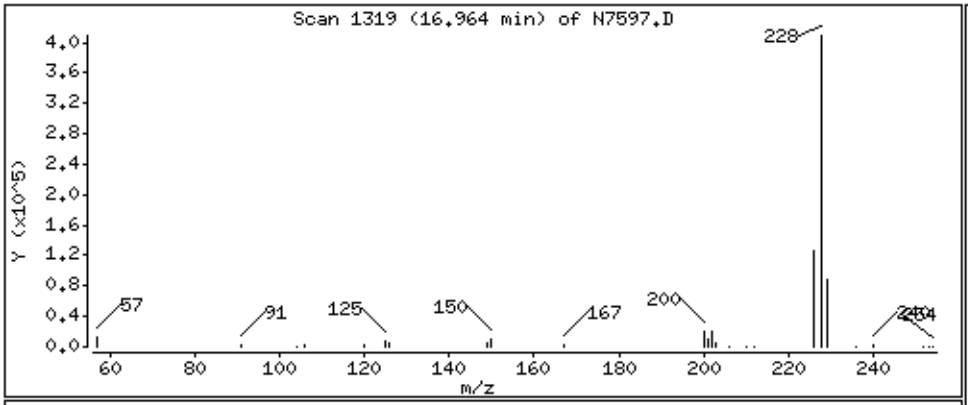
Client ID: SY-SB4R-1 Instrument: gcms-n.i

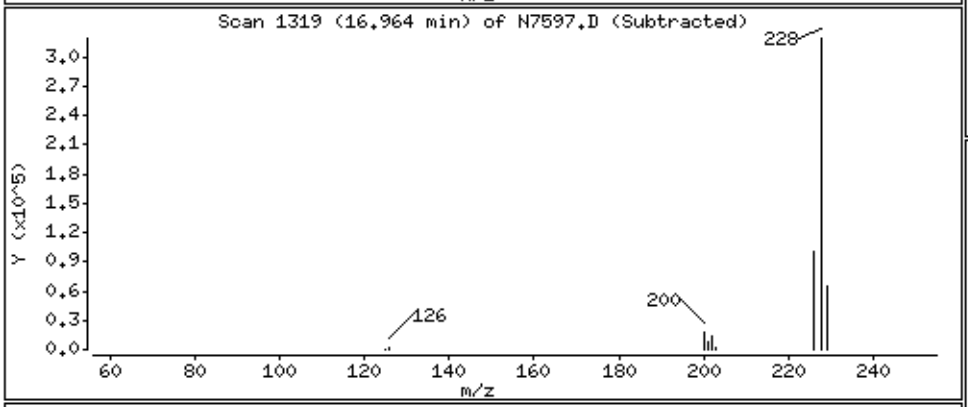
Sample Info: SQ0595-1

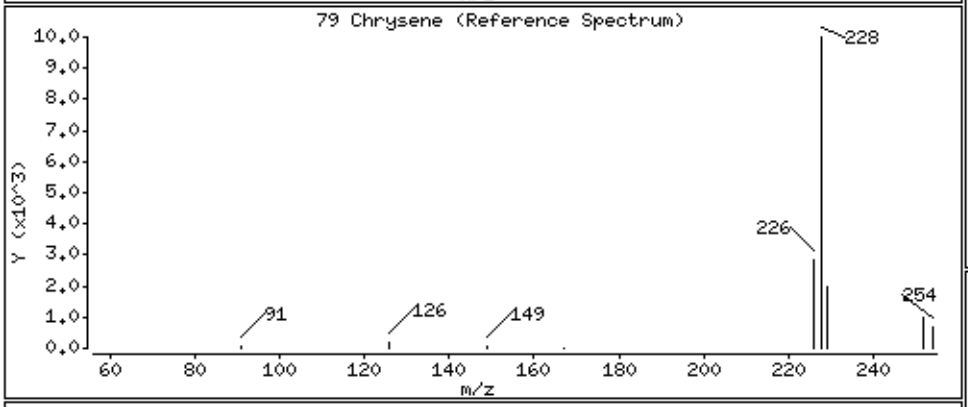
Volume Injected (uL): 1.0 Operator: DT/CO

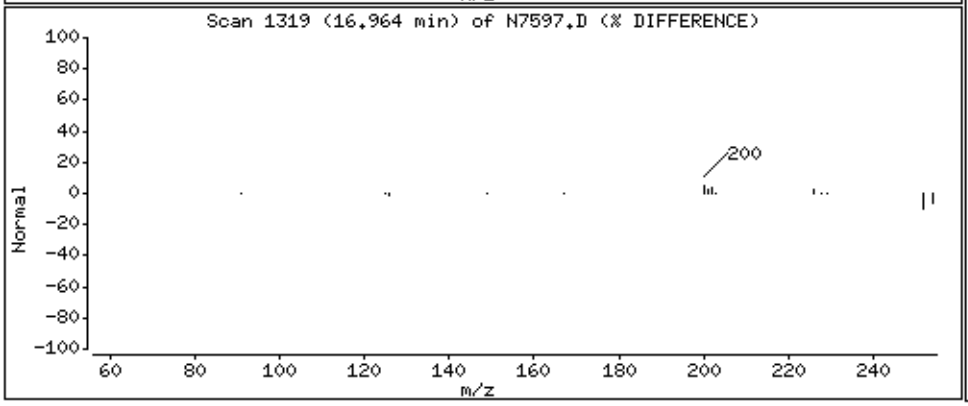
Column phase: ZB5-MS Column diameter: 0.25

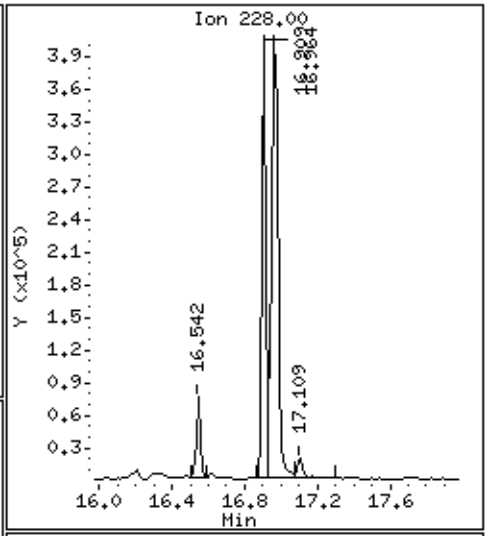
79 Chrysene Concentration: 321 ug/Kgdrywt

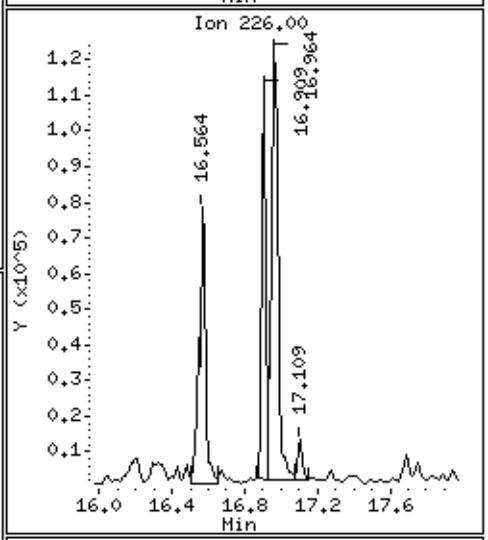


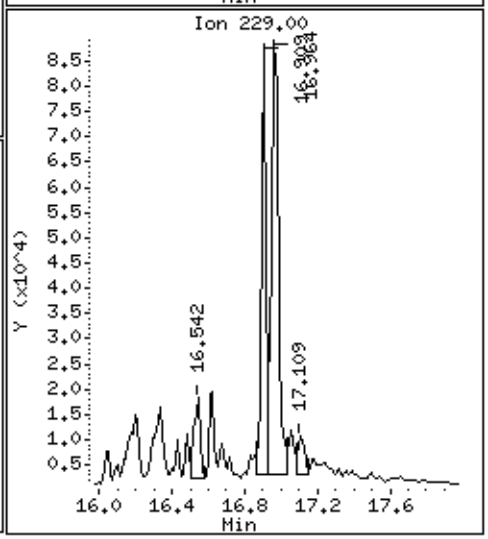












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Date : 03-MAR-2023 22:53

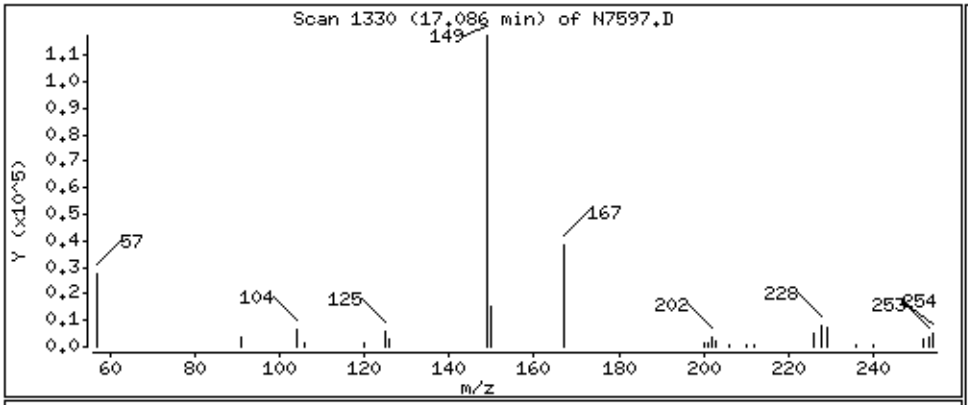
Client ID: SY-SB4R-1 Instrument: gcms-n.i

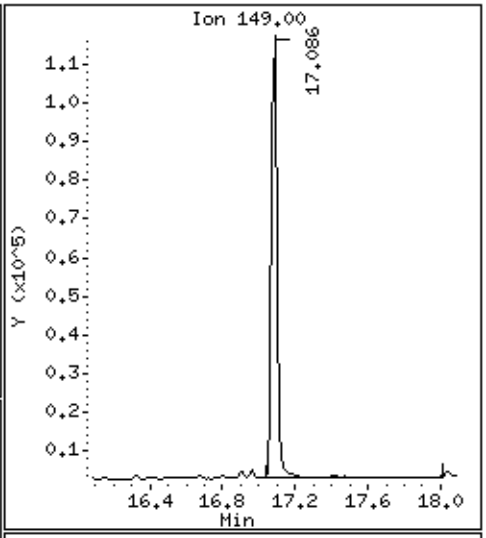
Sample Info: SQ0595-1

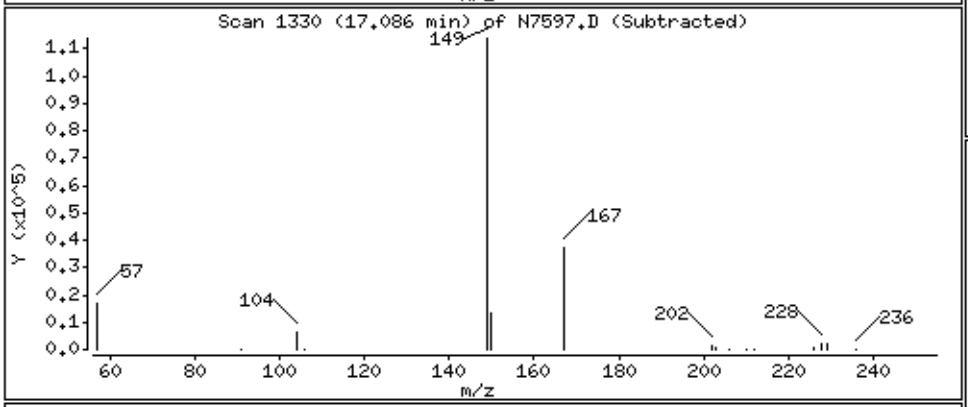
Volume Injected (uL): 1.0 Operator: DT/CO

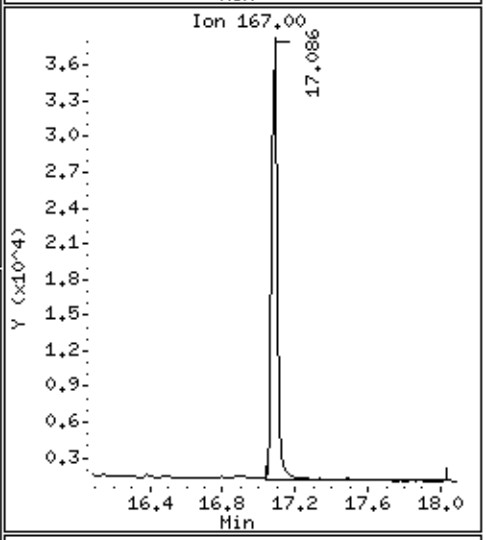
Column phase: ZB5-MS Column diameter: 0.25

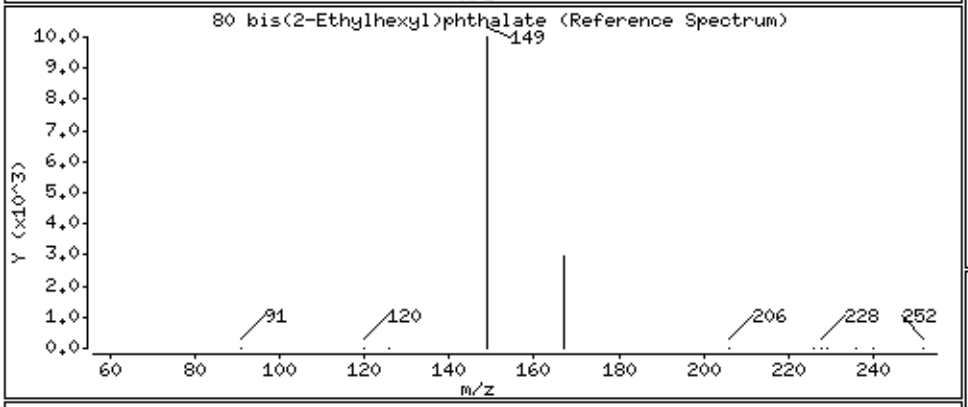
80 bis(2-Ethylhexyl)phthalate Concentration: 56.0 ug/Kgdrywt

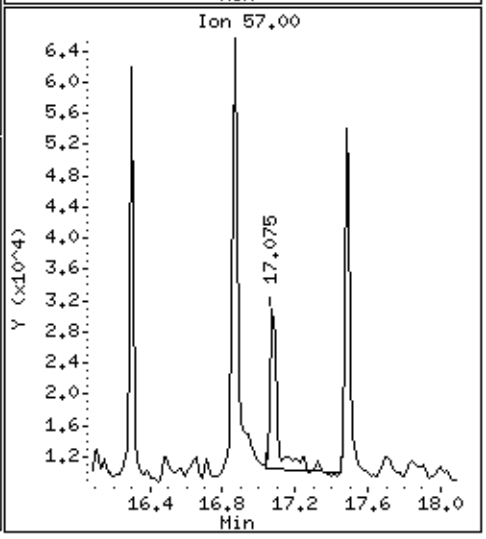


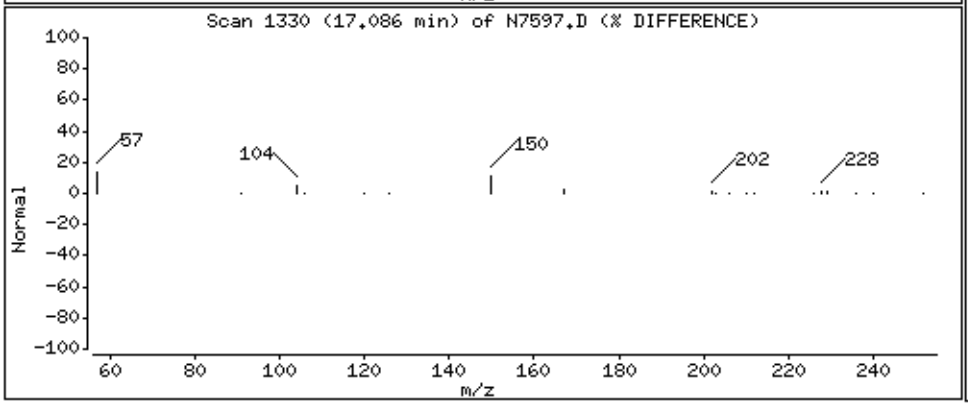












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Date : 03-MAR-2023 22:53

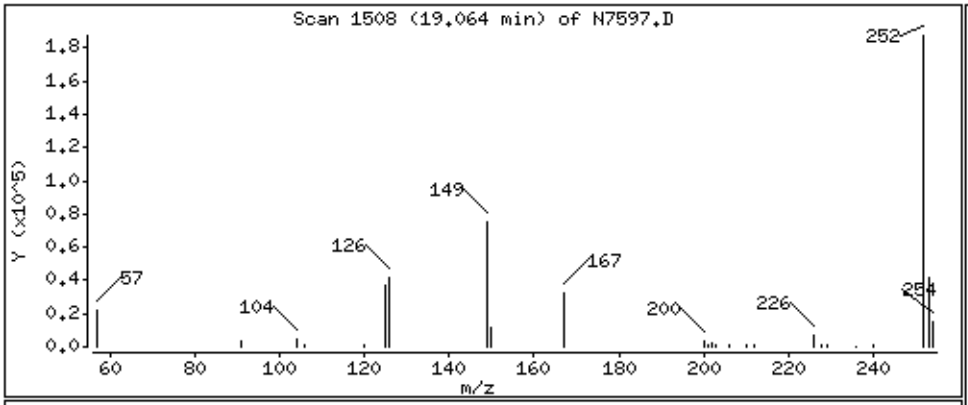
Client ID: SY-SB4R-1 Instrument: gcms-n.i

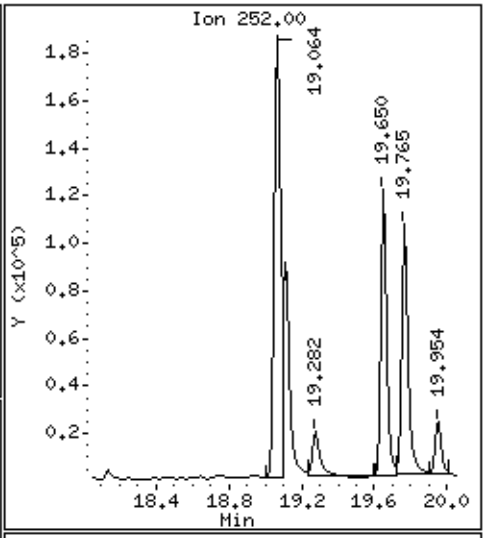
Sample Info: SQ0595-1

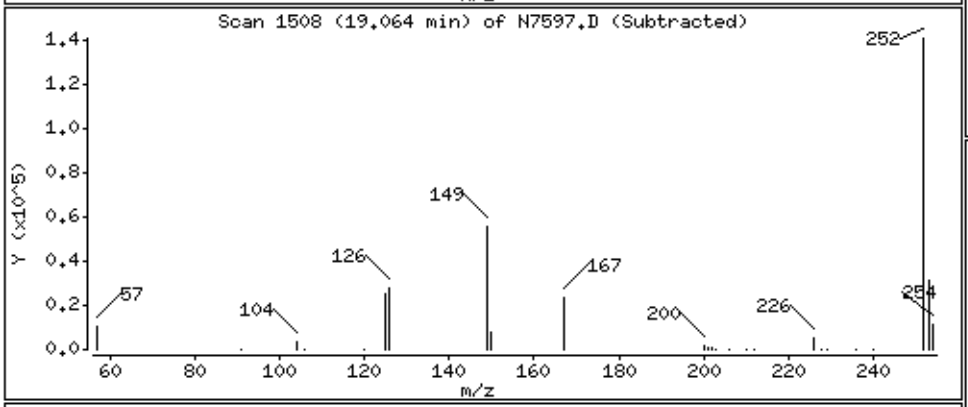
Volume Injected (uL): 1.0 Operator: DT/CO

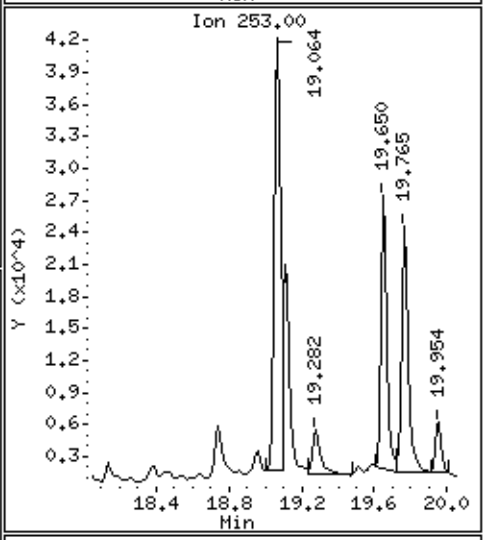
Column phase: ZB5-MS Column diameter: 0.25

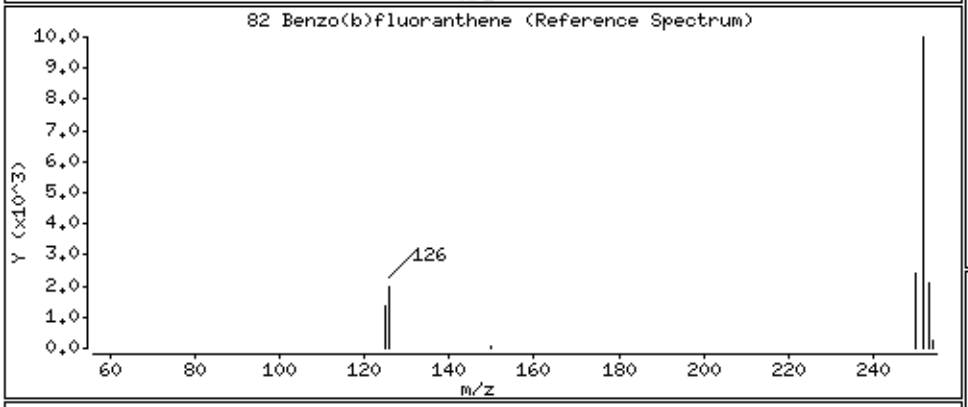
82 Benzo(b)fluoranthene Concentration: 335 ug/Kgdrywt

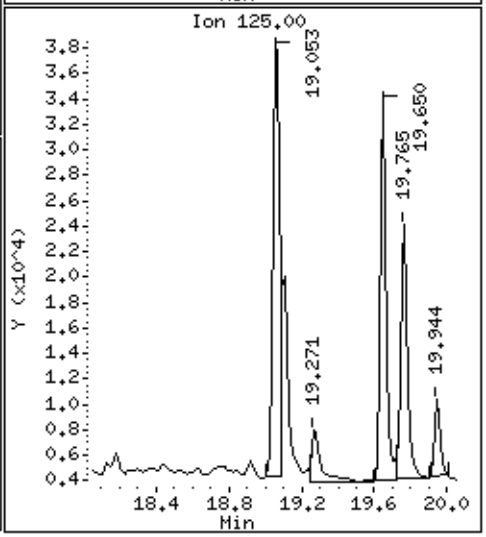


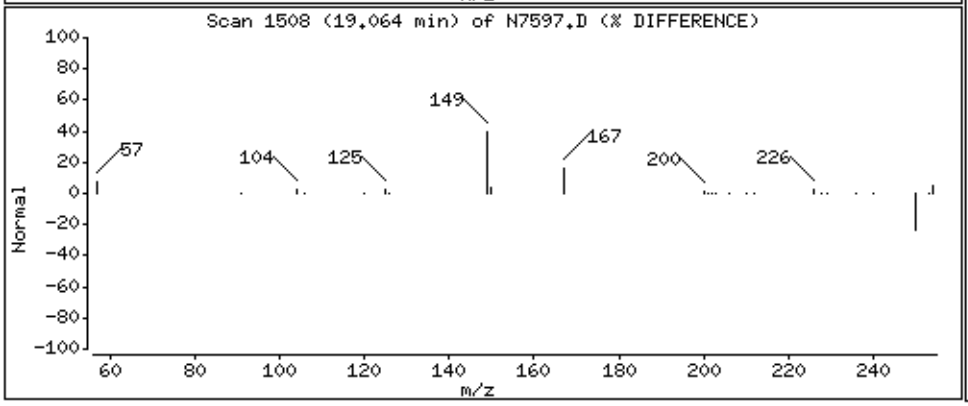












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Date : 03-MAR-2023 22:53

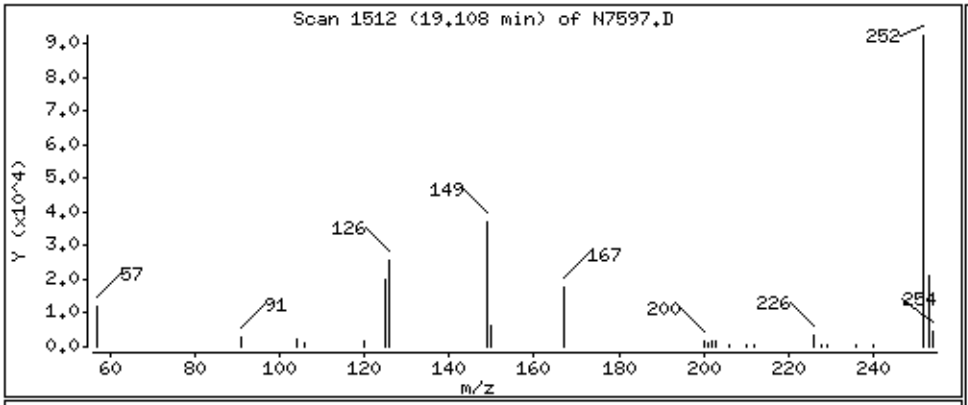
Client ID: SY-SB4R-1 Instrument: gcms-n.i

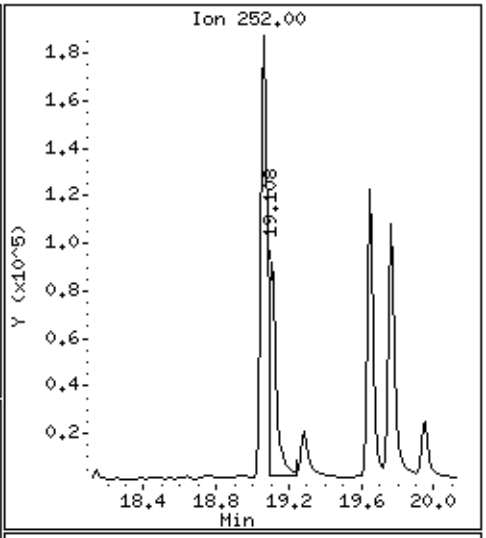
Sample Info: SQ0595-1

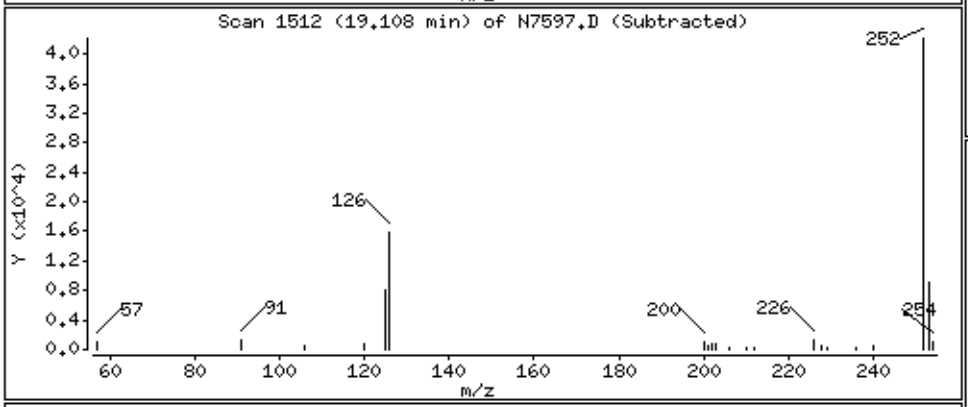
Volume Injected (uL): 1.0 Operator: DT/CO

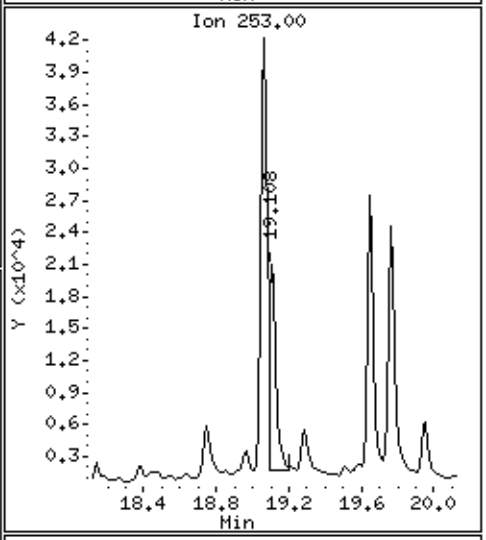
Column phase: ZB5-MS Column diameter: 0.25

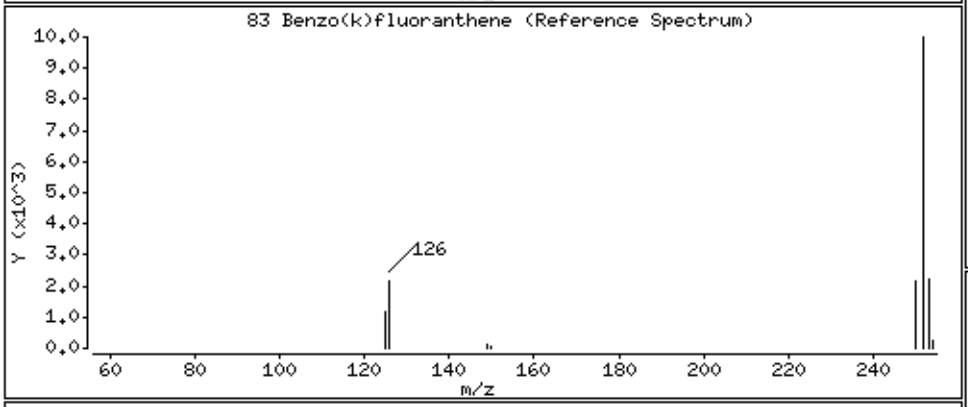
83 Benzo(k)fluoranthene Concentration: 102 ug/Kgdrywt

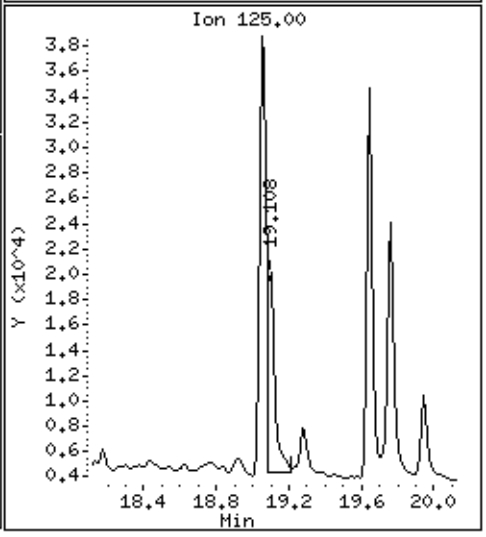


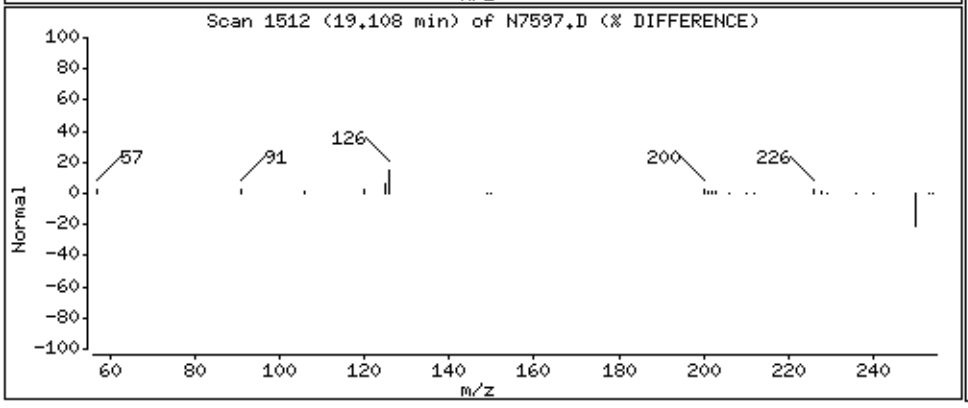












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Date : 03-MAR-2023 22:53

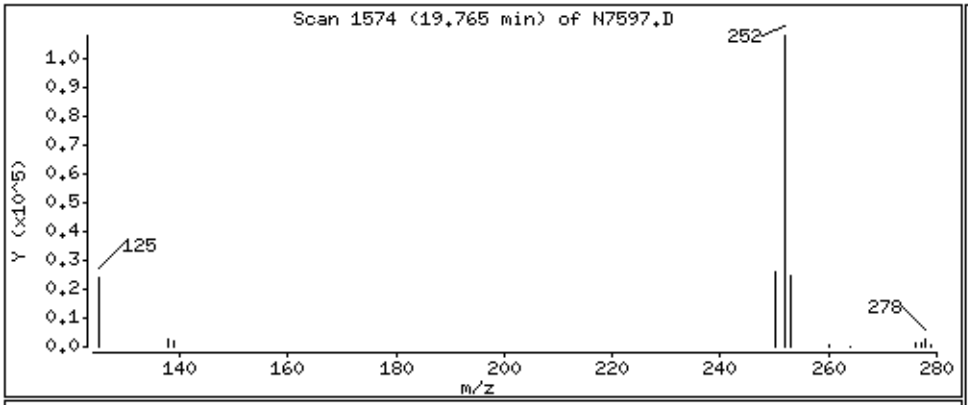
Client ID: SY-SB4R-1 Instrument: gcms-n.i

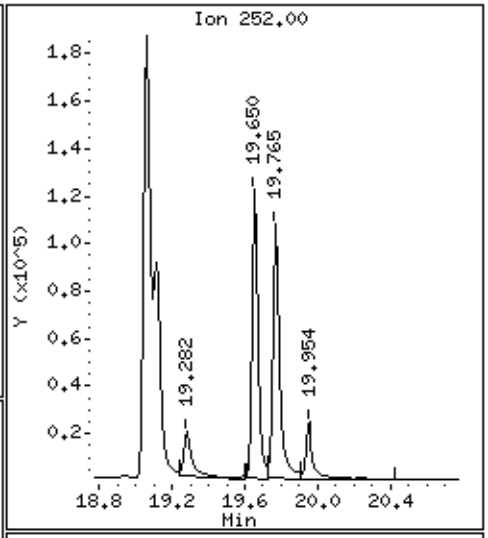
Sample Info: SQ0595-1

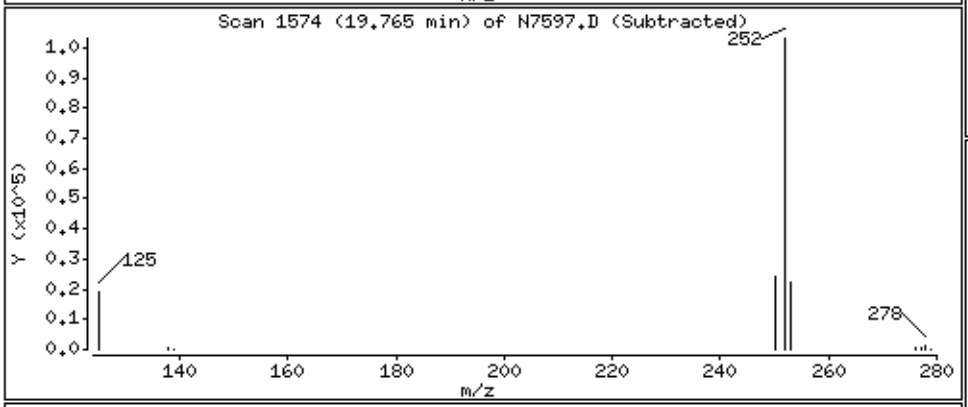
Volume Injected (uL): 1.0 Operator: DT/CO

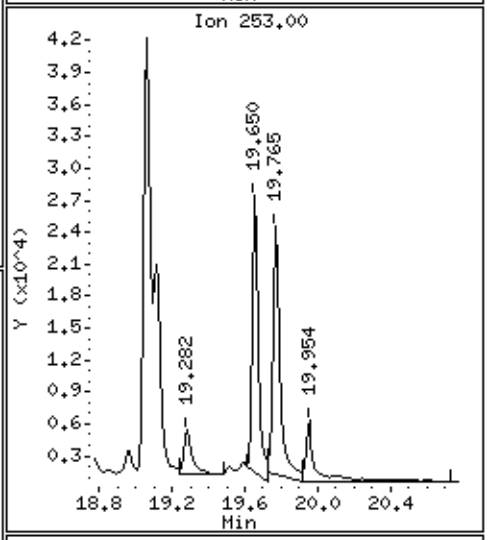
Column phase: ZB5-MS Column diameter: 0.25

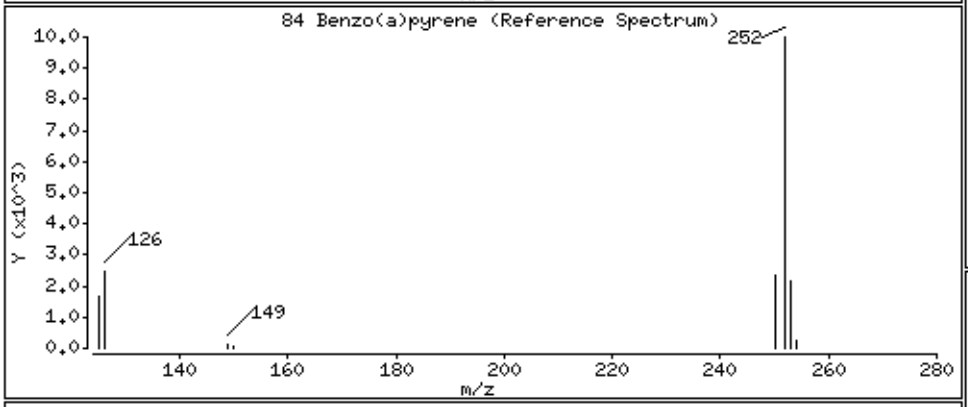
84 Benzo(a)pyrene Concentration: 215 ug/Kgdrywt

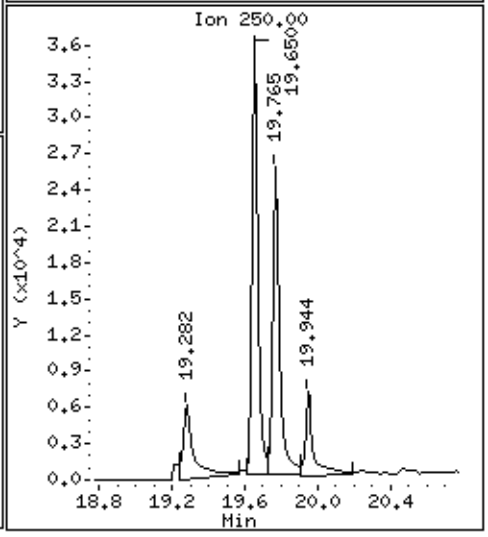


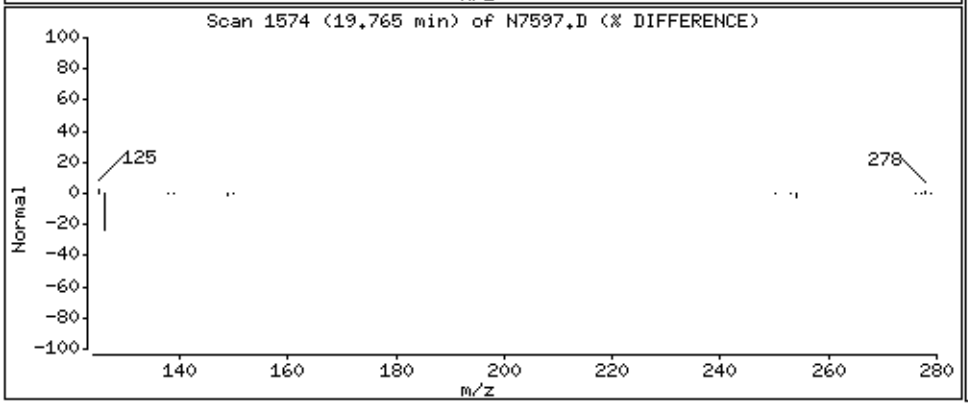












Data File: \\target_server\gg\chem\gcms-n.i\N030323.b\N7597.D

Date : 03-MAR-2023 22:53

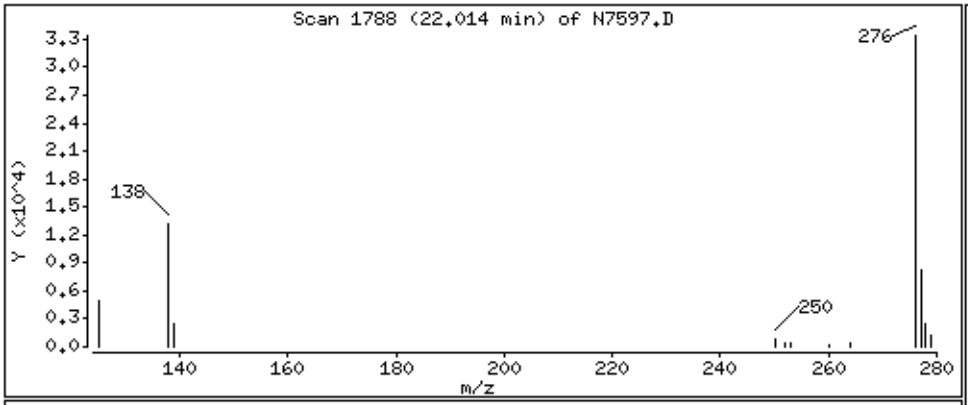
Client ID: SY-SB4R-1 Instrument: gcms-n.i

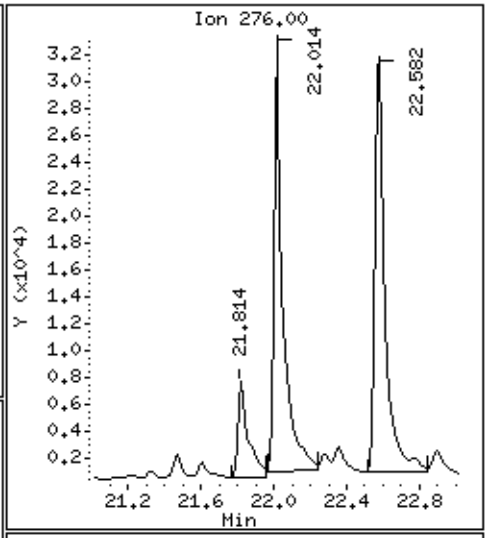
Sample Info: SQ0595-1

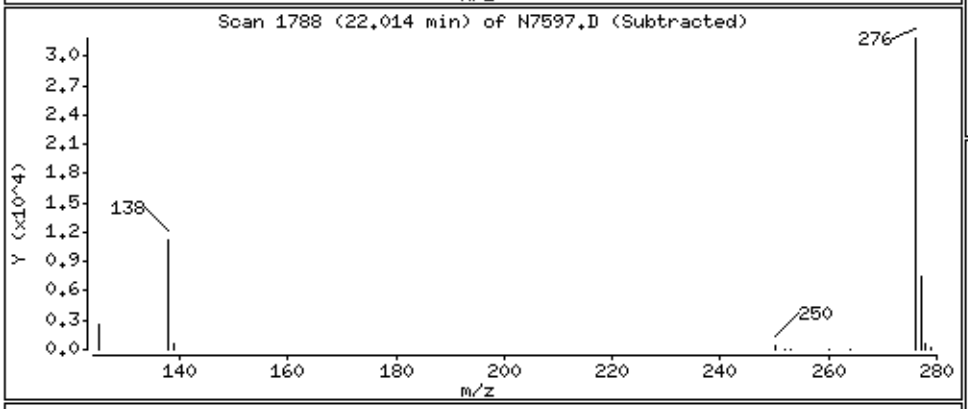
Volume Injected (uL): 1.0 Operator: DT/CO

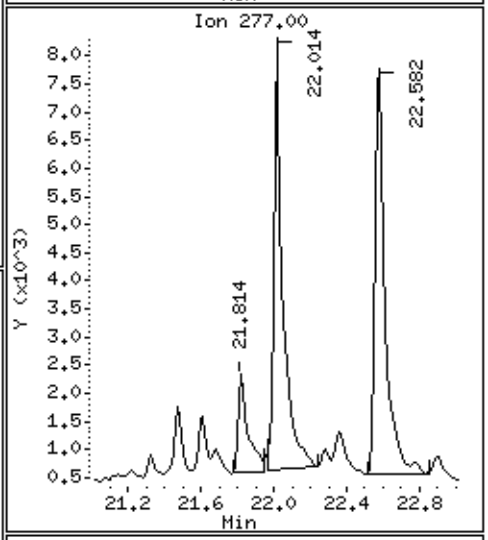
Column phase: ZB5-MS Column diameter: 0.25

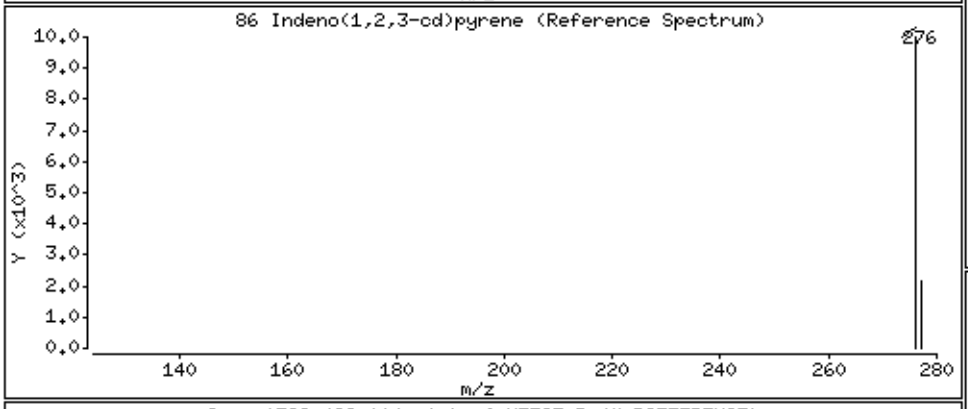
86 Indeno(1,2,3-cd)pyrene Concentration: 112 ug/Kgdrywt

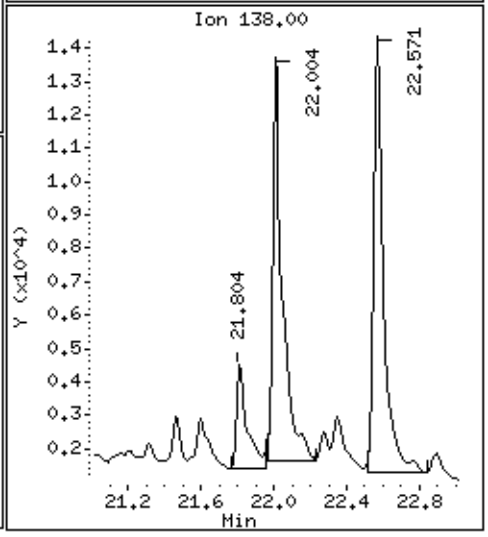


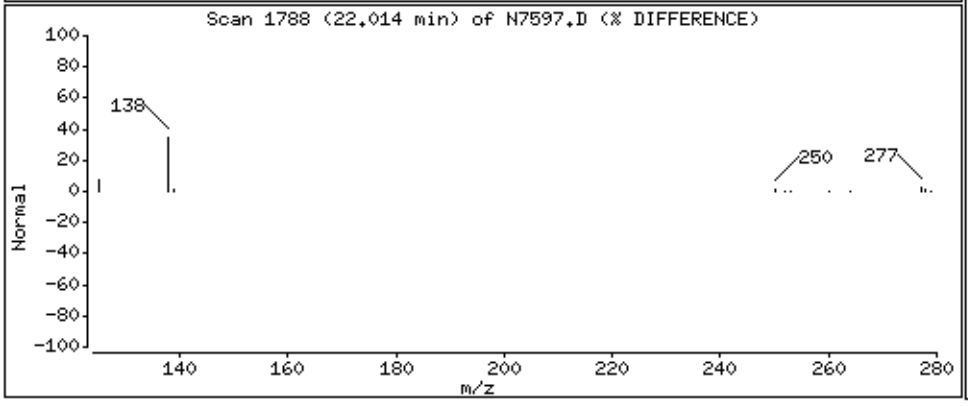












Data File: \\target_server\gg\chem\gcms-n.i\N030323.b\N7597.D

Date : 03-MAR-2023 22:53

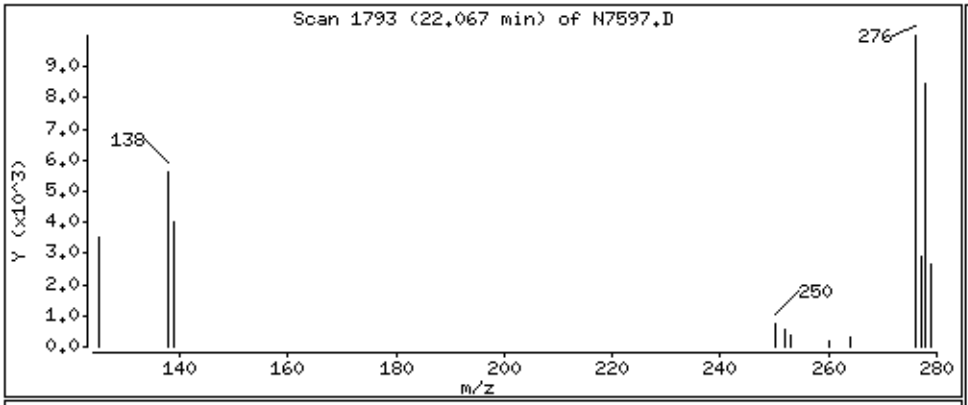
Client ID: SY-SB4R-1 Instrument: gcms-n.i

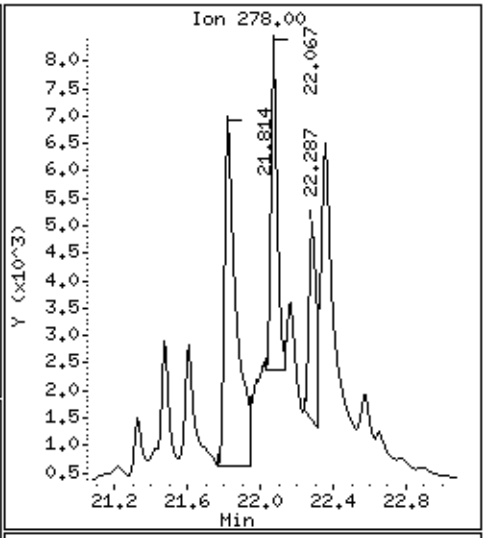
Sample Info: SQ0595-1

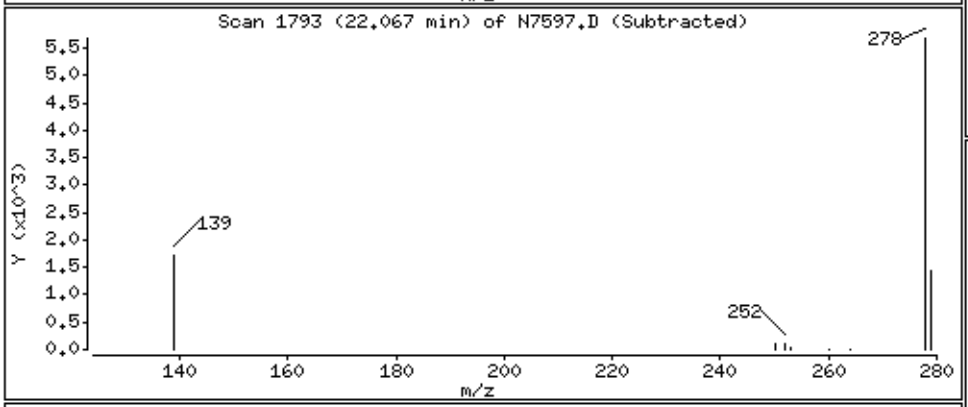
Volume Injected (uL): 1.0 Operator: DT/CO

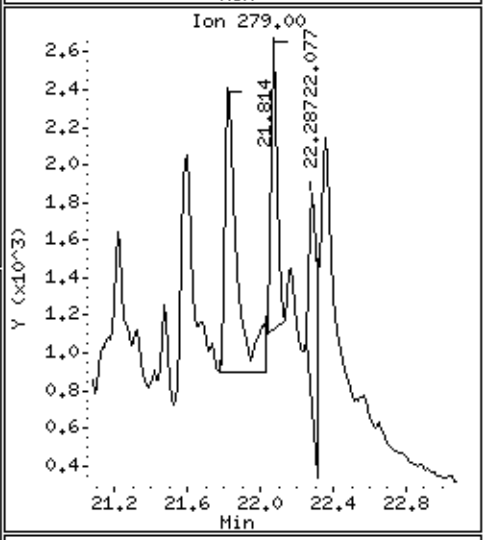
Column phase: ZB5-MS Column diameter: 0.25

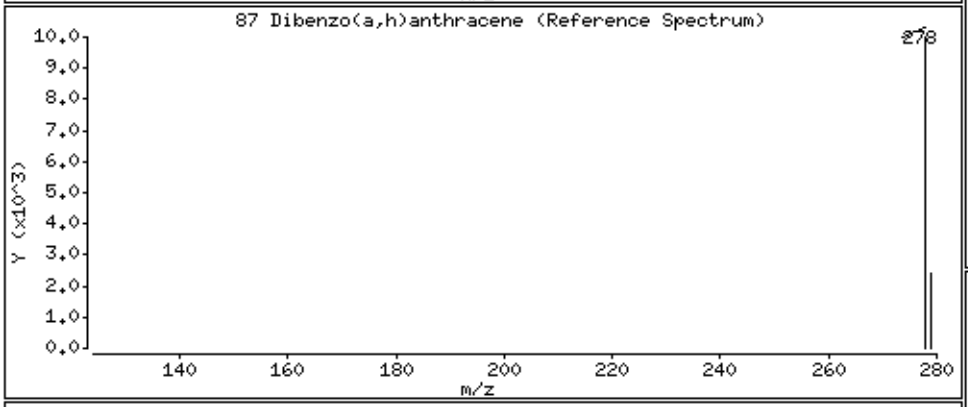
87 Dibenzo(a,h)anthracene Concentration: 28.1 ug/Kgdrywt

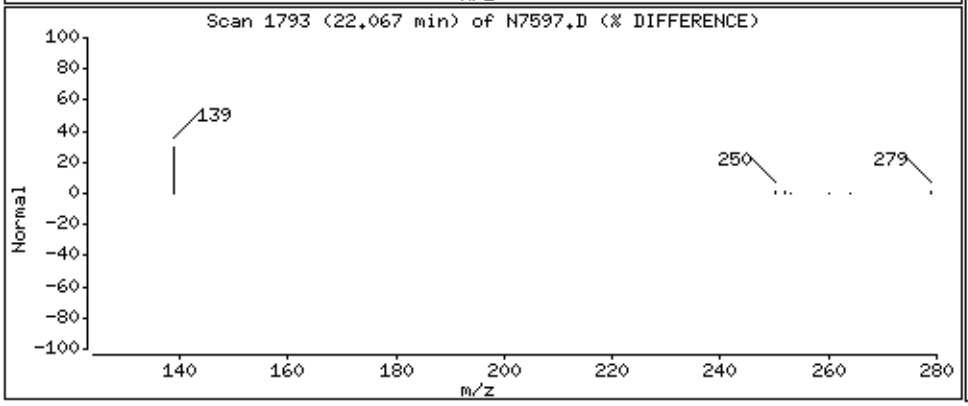


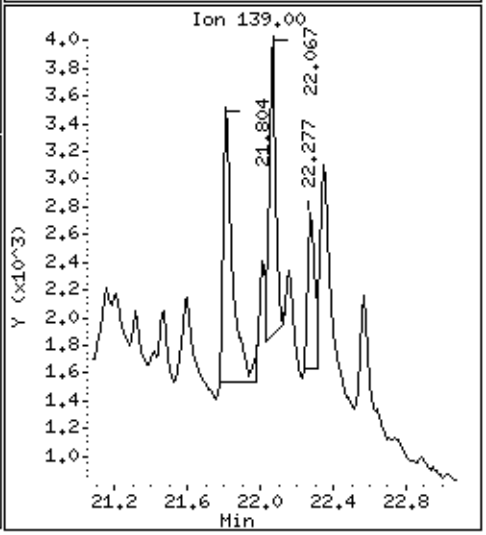












Data File: \\target_server\gg\chem\gcms-n.i\N030323.b\N7597.D

Date : 03-MAR-2023 22:53

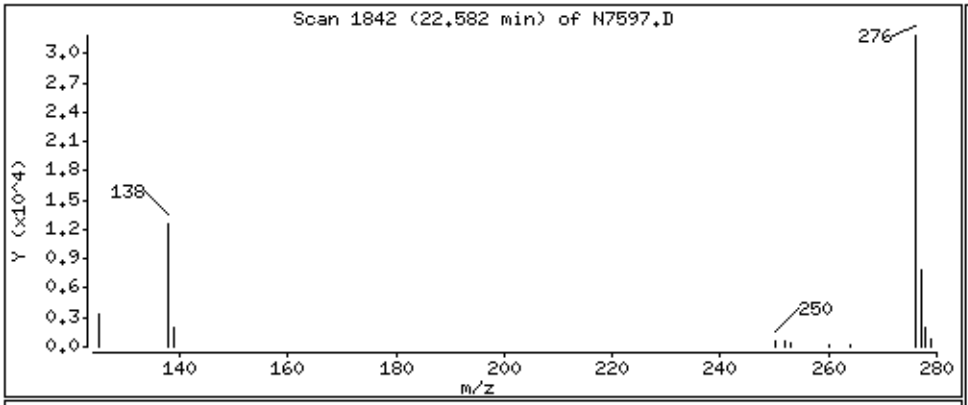
Client ID: SY-SB4R-1 Instrument: gcms-n.i

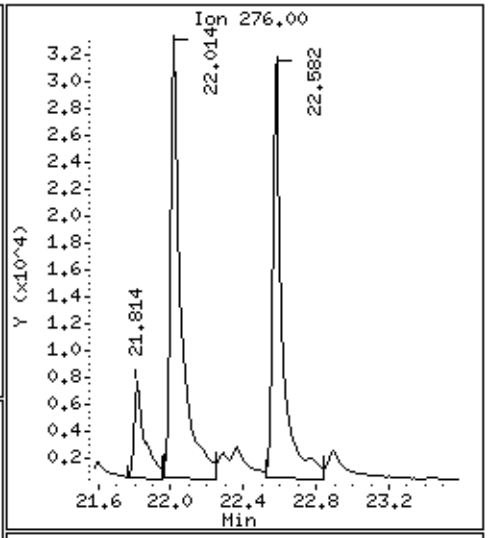
Sample Info: SQ0595-1

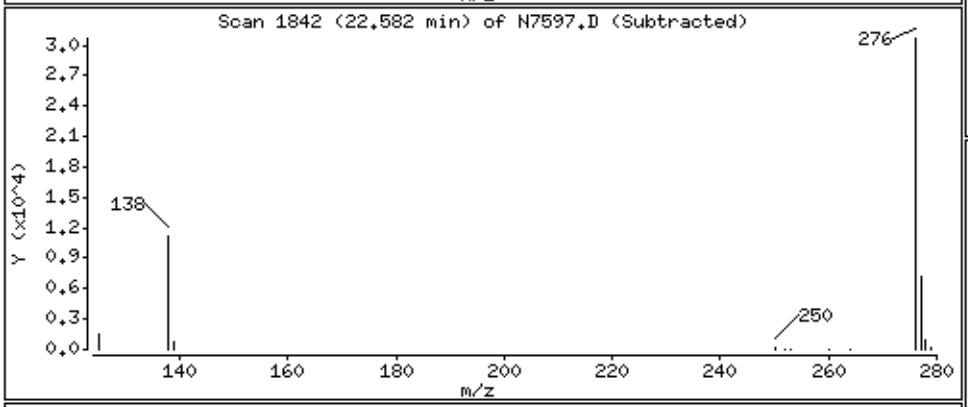
Volume Injected (uL): 1.0 Operator: DT/CO

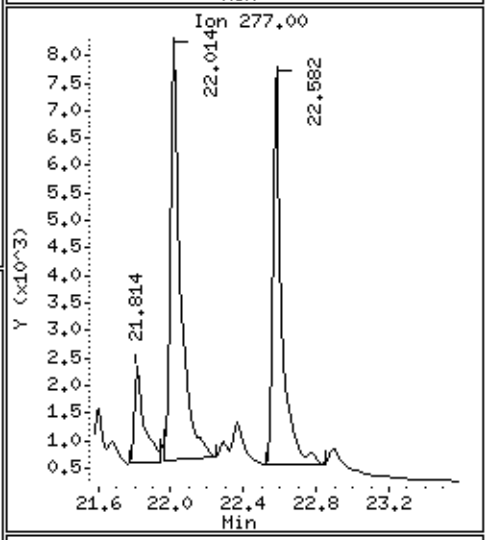
Column phase: ZB5-MS Column diameter: 0.25

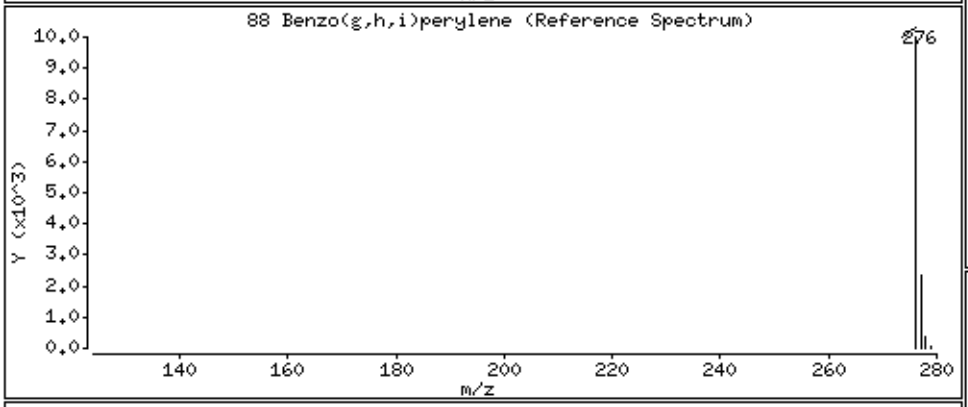
88 Benzo(g,h,i)perylene Concentration: 133 ug/Kgdrywt

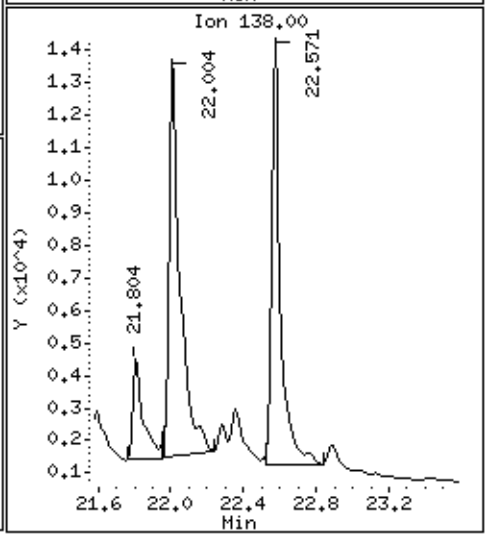


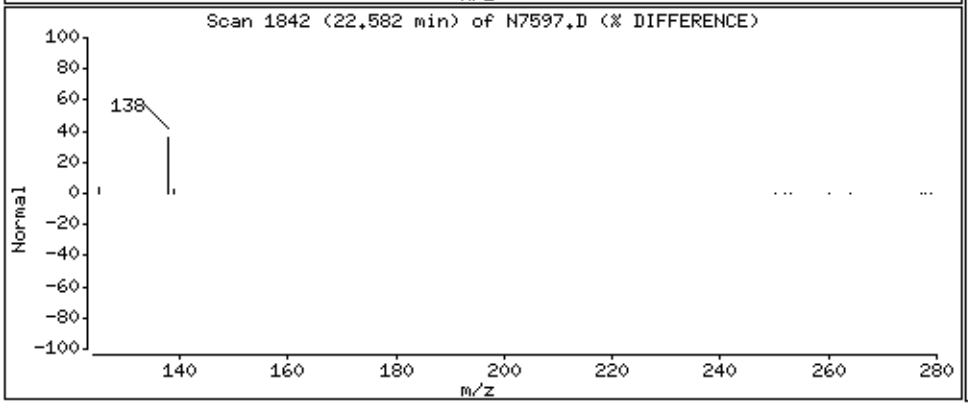












Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

SDG: SQ0595
Lab ID: SQ0595-2
Client ID: SY-SB4R-10
Matrix: SL
Lab File ID: N7598.D

Sample Date: 01-FEB-23
Extract Date: 08-FEB-23
Extracted By: SR
Extraction Method: SW846 3550C
Lab Prep Batch: WG332122

Report Date: 22-MAR-23
Analysis Date: 03-MAR-23
Analyst: DT/CO
Analysis Method: SW846 8270D SIM
% Solids: 87.

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene		0.084	mg/Kgdrywt	1	.02	0.021	0.0028	0.011
2-Methylnaphthalene		0.11	mg/Kgdrywt	1	.02	0.021	0.0024	0.011
Acenaphthylene		0.024	mg/Kgdrywt	1	.02	0.021	0.0013	0.011
Acenaphthene	J	0.0043	mg/Kgdrywt	1	.02	0.021	0.0016	0.011
Fluorene	J	0.018	mg/Kgdrywt	1	.02	0.021	0.0034	0.011
Phenanthrene		0.26	mg/Kgdrywt	1	.02	0.021	0.0019	0.011
Anthracene		0.031	mg/Kgdrywt	1	.02	0.021	0.0013	0.011
Fluoranthene		0.50	mg/Kgdrywt	1	.02	0.021	0.0019	0.011
Pyrene	E	0.57	mg/Kgdrywt	1	.02	0.021	0.0022	0.011
Benzo(a)anthracene		0.38	mg/Kgdrywt	1	.02	0.021	0.0020	0.011
Chrysene		0.43	mg/Kgdrywt	1	.02	0.021	0.0018	0.011
Benzo(b)Fluoranthene		0.40	mg/Kgdrywt	1	.02	0.021	0.0026	0.011
Benzo(k)fluoranthene		0.13	mg/Kgdrywt	1	.02	0.021	0.0036	0.011
Benzo(a)pyrene		0.26	mg/Kgdrywt	1	.02	0.021	0.0035	0.011
Indeno(1,2,3-cd)pyrene		0.14	mg/Kgdrywt	1	.02	0.021	0.0020	0.011
Dibenzo(a,h)anthracene		0.053	mg/Kgdrywt	1	.02	0.021	0.0019	0.011
Benzo(g,h,i)perylene		0.15	mg/Kgdrywt	1	.02	0.021	0.0021	0.011
2-Methylnaphthalene-D10		57.4	mg/Kgdrywt					
Fluorene-D10		65.9	mg/Kgdrywt					
Pyrene-D10		80.2	mg/Kgdrywt					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029
http://www.katahdinlab.com

Data File: \\target_server\gg\chem\gcms-n.i\N030323.b\N7598.D
Report Date: 16-Mar-2023 07:45

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-n.i\N030323.b\N7598.D
Lab Smp Id: SQ0595-2 Client Smp ID: SY-SB4R-10
Inj Date : 03-MAR-2023 23:32
Operator : DT/CO Inst ID: gcms-n.i
Smp Info : SQ0595-2
Misc Info : WG333362,WG332122,WG333362-4
Comment :
Method : \\target_server\gg\chem\gcms-n.i\N030323.b\NSPSIM18.m
Meth Date : 06-Mar-2023 11:06 coneill Quant Type: ISTD
Cal Date : 03-MAR-2023 16:29 Cal File: N7587.D
Als bottle: 18
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.12
Processing Host: V200T4

Concentration Formula: Amt * DF * (Vt/Ws*Vi)*(100/(100-M))*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.00100	Final Volume (L)
Ws	0.03220	Weight of Sample (Kg)
Vi	1.000	Volume injected (uL)
M	12.797	% Moisture
Cpnd Variable		Local Compound Variable

		Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/Kgdrywt)	REVIEW COD
$	1	1,4-Dioxane-d8	96	3.083	2.988	(0.428)	14612	0.52075	18.5(R)	
	2	1,4-Dioxane	88	3.199	3.031	(0.444)	1206	0.04022	1.43(aQ)	
*	10	1,4-Dichlorobenzene-D4	152	7.211	7.211	(1.000)	47289	0.80000	(Q)	
	14	2,2'-Oxybis(1-chloropropane)	45	7.554	7.586	(1.048)	15664	0.33364	11.9(aQH)	
	15	Acetophenone	105	7.742	7.752	(0.874)	56040	0.54494	19.4(a)	
*	27	Naphthalene-D8	136	8.855	8.867	(1.000)	178318	0.80000		
	28	Naphthalene	128	8.889	8.890	(1.004)	570433	2.36633	84.3	
	29	4-Chloroaniline	127	8.889	9.003	(1.004)	72629	0.87855	31.3(aQ)	
	31	Caprolactam	113	9.512	9.490	(1.074)	9227	0.35908	12.8(aQ)	
$	33	2-Methylnaphthalene-D10	152	9.769	9.769	(1.103)	138886	1.14718	40.8	
	34	2-Methylnaphthalene	142	9.809	9.810	(1.108)	533428	3.13082	111	
	35	1-Methylnaphthalene	142	9.931	9.945	(1.121)	357408	2.36968	84.4	
$	38	2,4-Dibromophenol	252	10.228	10.215	(0.914)	85116	2.27902	81.2	
	41	1,1'-Biphenyl	154	10.445	10.445	(0.933)	80720	0.43364	15.4(a)	
	46	Acenaphthylene	152	11.003	11.006	(0.983)	152022	0.65964	23.5	
*	48	Acenaphthene-D10	164	11.190	11.204	(1.000)	95698	0.80000		
	49	Acenaphthene	153	11.234	11.237	(1.004)	18264	0.12194	4.34(aQ)	
	52	Dibenzofuran	168	11.476	11.479	(1.026)	215336	1.10591	39.4	
$	56	Fluorene-D10	174	11.894	11.897	(1.063)	144717	1.31814	46.9	
	57	Fluorene	166	11.938	11.941	(1.067)	74585	0.49346	17.6(a)	

Data File: \\target_server\gg\chem\gcms-n.i\N030323.b\N7598.D
Report Date: 16-Mar-2023 07:45

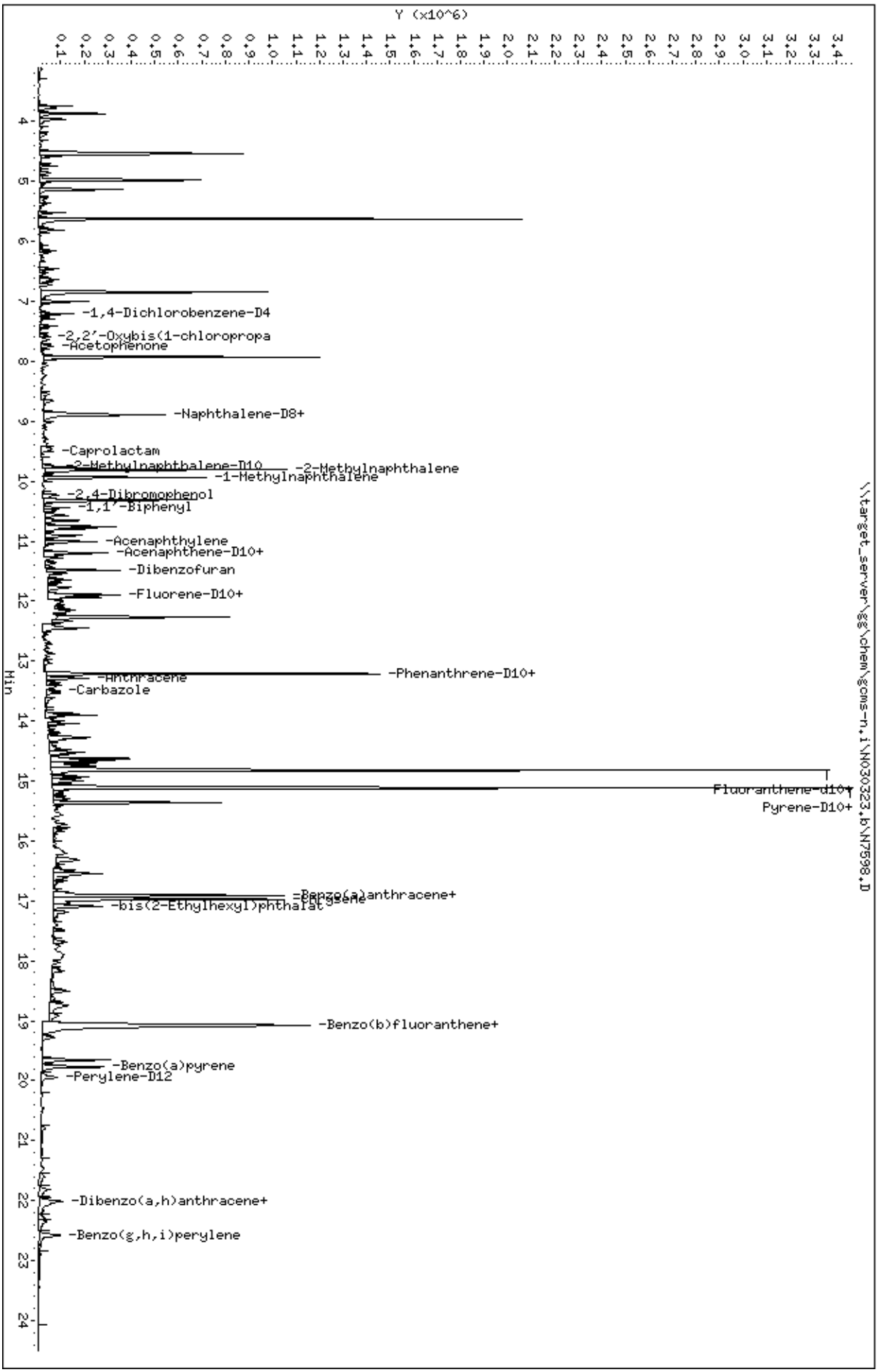
DL

9:28 am, Mar 22, 2023

			QUANT SIG					CONCENTRATIONS ON-COLUMN	FINAL	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/ml)	(ug/Kgdrywt)	REVIEW COD
*	66	Phenanthrene-D10	188	13.187	13.190	(1.000)	138551	0.80000		
	67	Phenanthrene	178	13.218	13.221	(1.002)	1435292	7.16168	255	
	68	Anthracene	178	13.279	13.292	(1.007)	192323	0.87610	31.2	
	69	Carbazole	167	13.535	13.528	(1.026)	57450	0.38705	13.8(aQ)	
$	71	Fluoranthene-d10	212	14.795	14.798	(1.122)	182297	1.54892	55.2	
	72	Fluoranthene	202	14.817	14.820	(1.124)	2281176	13.9327	496	
$	73	Pyrene-D10	212	15.084	15.098	(0.891)	207869	1.60435	57.1	
	74	Pyrene	202	15.117	15.120	(0.893)	2569152	16.0669	572(A)	
	77	Benzo(a)anthracene	228	16.906	16.908	(0.999)	871974	10.6221	378	
*	78	Chrysene-D12	240	16.928	16.920	(1.000)	53236	0.80000		
	79	Chrysene	228	16.972	16.975	(1.003)	1226582	12.0459	429	
	80	bis(2-Ethylhexyl)phthalate	149	17.084	17.087	(1.009)	166889	1.29566	46.1(a)	
	82	Benzo(b)fluoranthene	252	19.061	19.053	(0.958)	711090	11.2956	402	
	83	Benzo(k)fluoranthene	252	19.116	19.119	(0.961)	332945	3.54830	126(M)	M6
	84	Benzo(a)pyrene	252	19.762	19.776	(0.993)	388797	7.34155	261	
*	85	Perylene-D12	264	19.899	19.912	(1.000)	34112	0.80000		
	86	Indeno(1,2,3-cd)pyrene	276	22.011	22.014	(1.106)	180274	4.03650	144(H)	
	87	Dibenzo(a,h)anthracene	278	22.074	22.077	(1.109)	39140	1.47615	52.6	
	88	Benzo(g,h,i)perylene	276	22.579	22.582	(1.135)	169655	4.21725	150	
M	89	Total PAHs	100				12104540	101.763	3620	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
A - Target compound detected but, quantitated amount
exceeded maximum amount.
Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.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Date : 03-MAR-2023 23:32
Client ID: SY-SB4R-10
Sample Info: SQ0595-2
Volume Injected (uL): 1.0
Column phase: ZB5-MS
Instrument: gcms-n,i
Operator: DT/CO
Column diameter: 0.25
\\target_server\gg\chem\gcms-n,i\N030323,b\N7598,D
Y (x10^6)
Min
-1,4-Dichlorobenzene-D4
-2,2'-Oxybis(1-chloropropa
-Acetophenone
-Naphthalene-D8+
-Caprolactam
-2-Methylnaphthalene-D10
-2-Methylnaphthalene
-1-Methylnaphthalene
-2,4-Dibromophenol
-1,1'-Biphenyl
-Acenaphthylene
-Acenaphthene-D10+
-Dibenzofuran
-Fluorene-D10+
-Anthracene
-Phenanthrene-D10+
-Carbazole
Fluoranthene-d10+
Pyrene-D10+
-Benzo(a)anthracene+
-bis(2-Ethylhexyl)phthalate
-Benzo(b)fluoranthene+
-Benzo(a)pyrene
-Perylene-D12
-Dibenzo(a,h)anthracene+
-Benzo(g,h,i)perylene

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Date : 03-MAR-2023 23:32

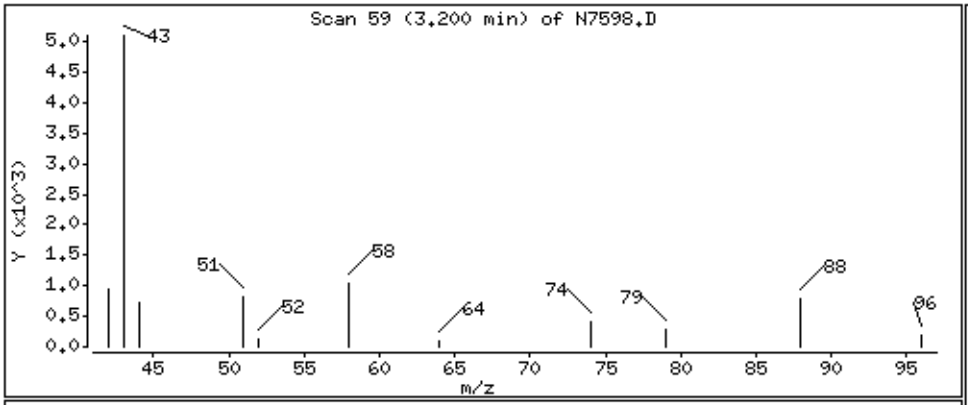
Client ID: SY-SB4R-10 Instrument: gcms-n.i

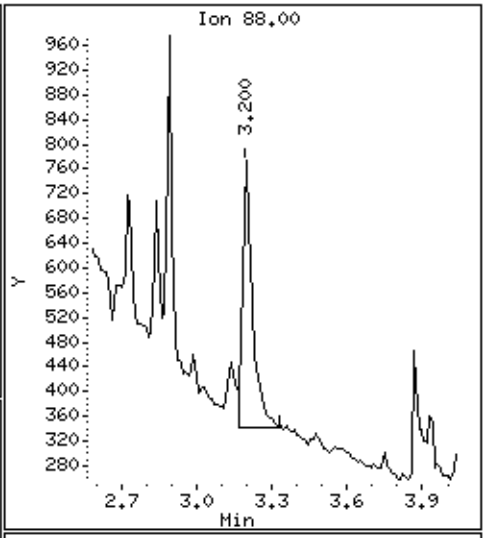
Sample Info: SQ0595-2

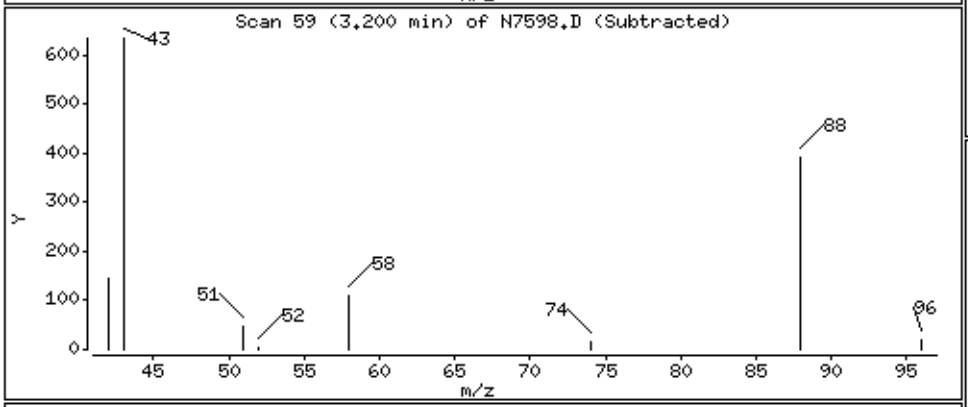
Volume Injected (uL): 1.0 Operator: DT/CO

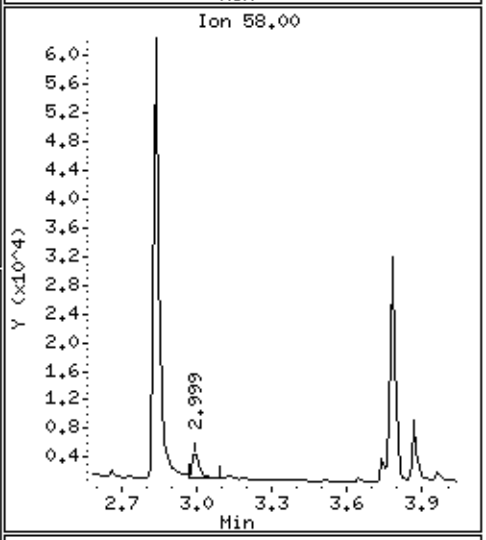
Column phase: ZB5-MS Column diameter: 0.25

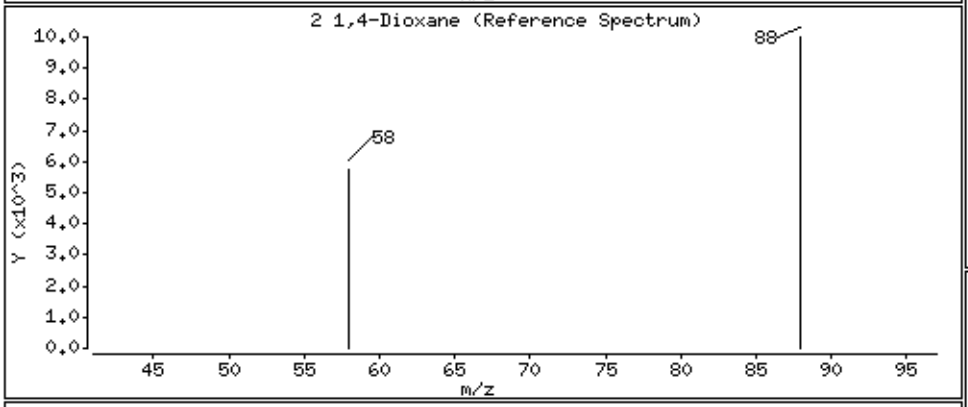
2 1,4-Dioxane Concentration: 1.43 ug/Kgdrywt

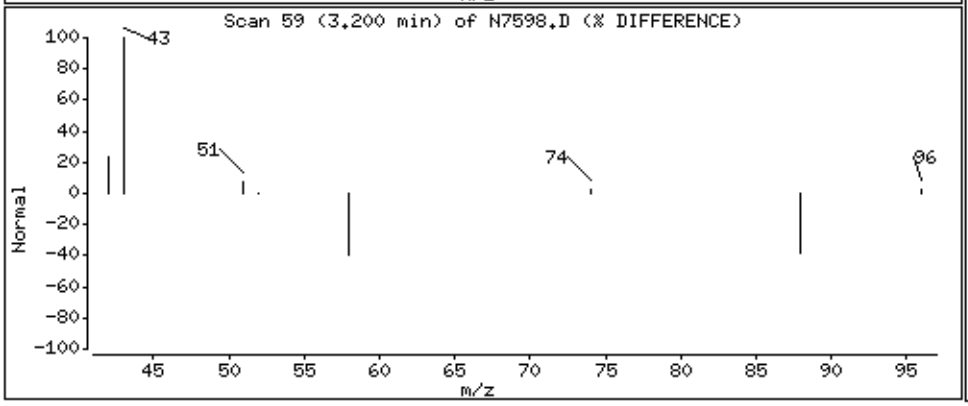


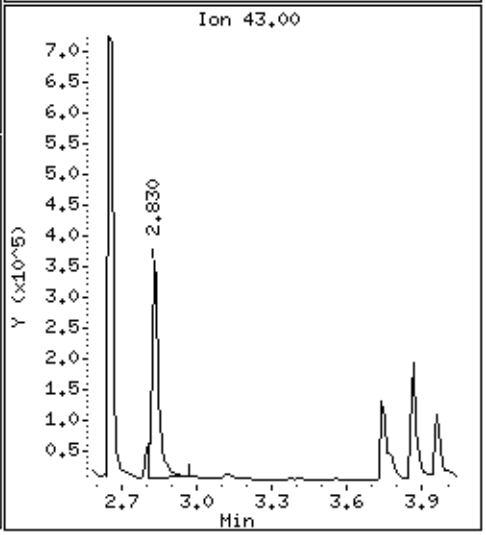












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Date : 03-MAR-2023 23:32

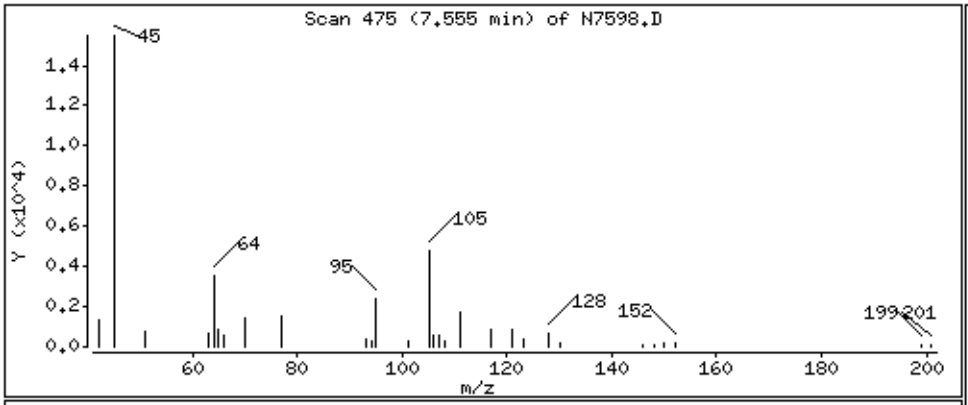
Client ID: SY-SB4R-10 Instrument: gcms-n.i

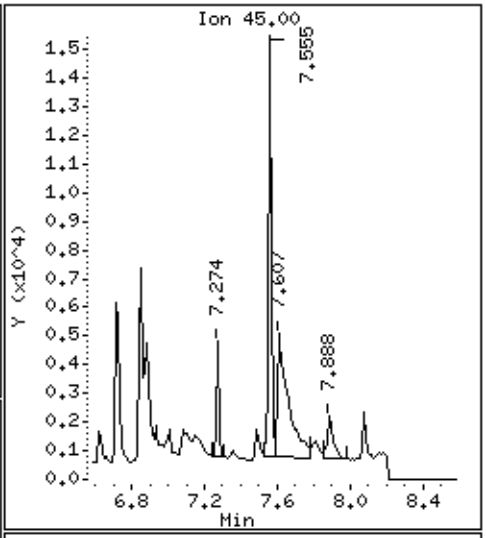
Sample Info: SQ0595-2

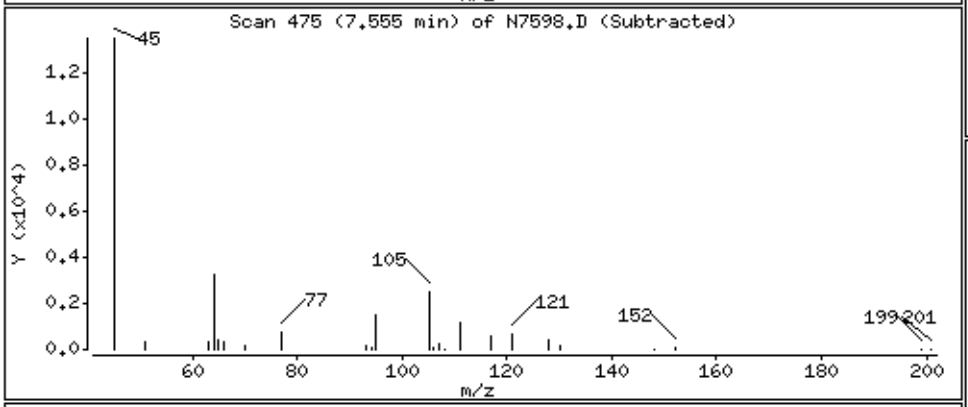
Volume Injected (uL): 1.0 Operator: DT/CO

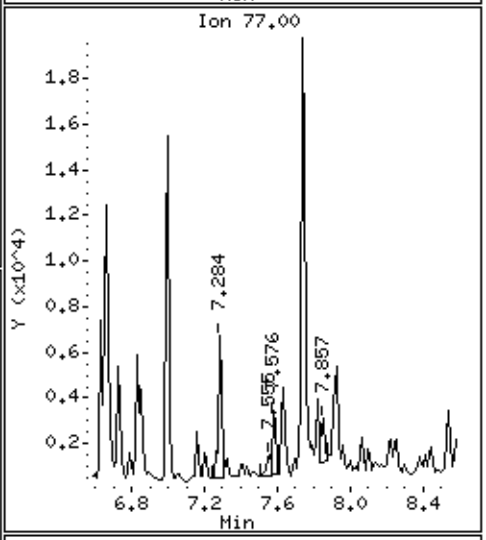
Column phase: ZB5-MS Column diameter: 0.25

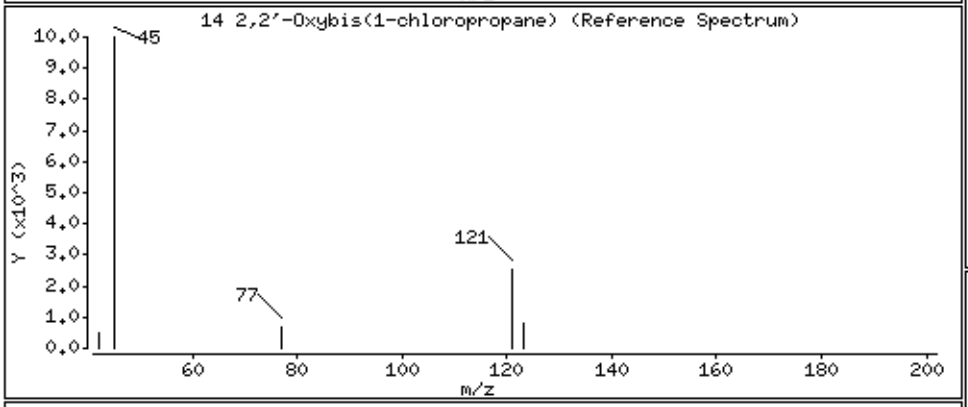
14 2,2'-Oxybis(1-chloropropane) Concentration: 11.9 ug/Kgdrywt

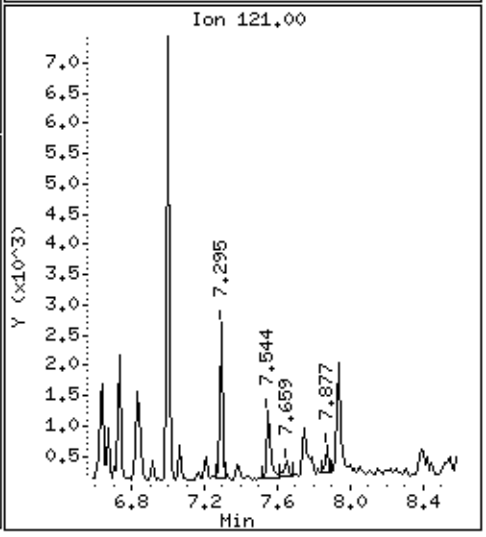


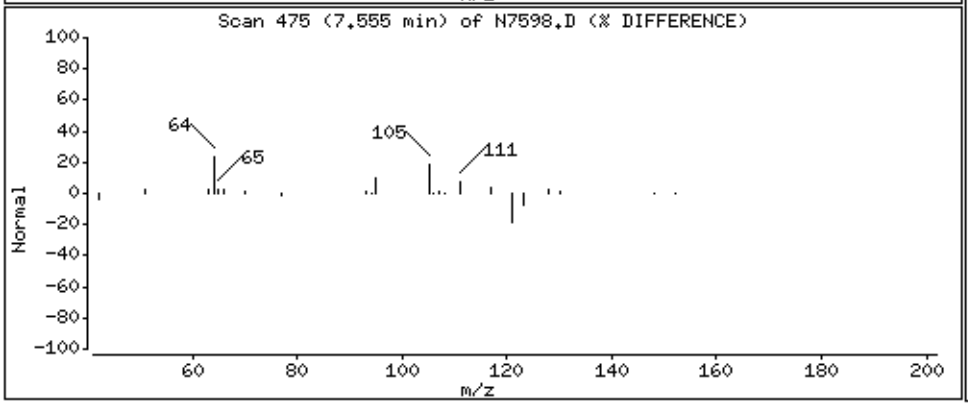












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Date : 03-MAR-2023 23:32

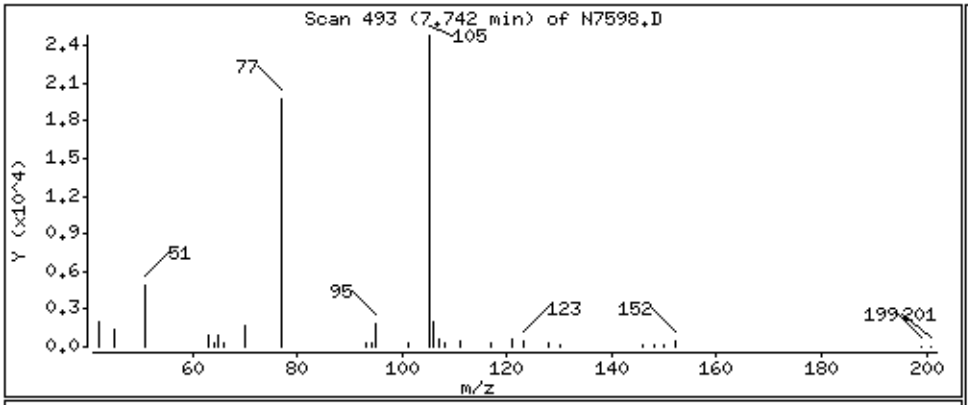
Client ID: SY-SB4R-10 Instrument: gcms-n.i

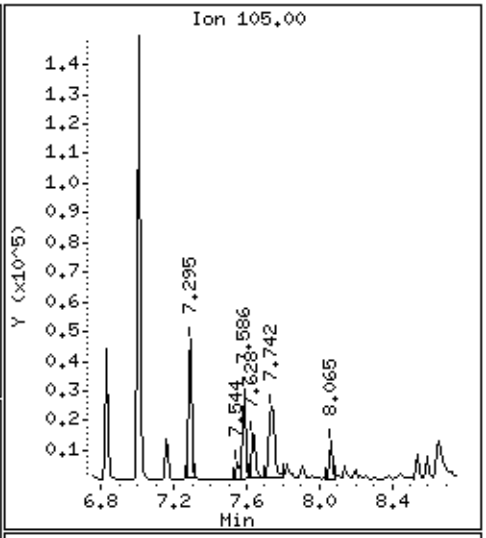
Sample Info: SQ0595-2

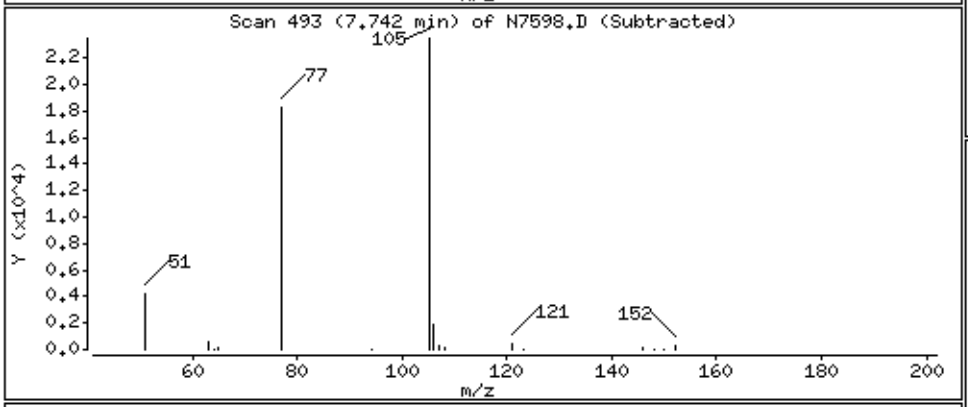
Volume Injected (uL): 1.0 Operator: DT/CO

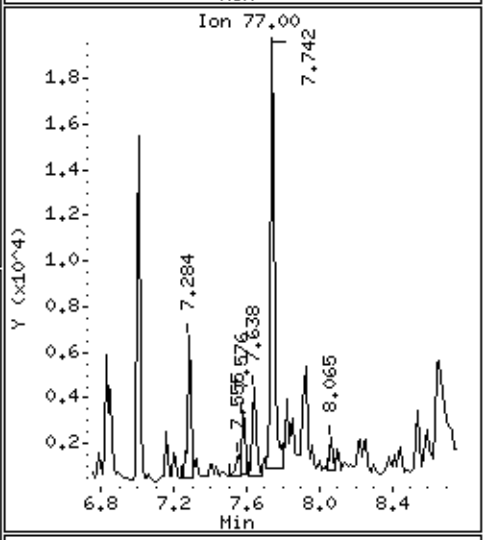
Column phase: ZB5-MS Column diameter: 0.25

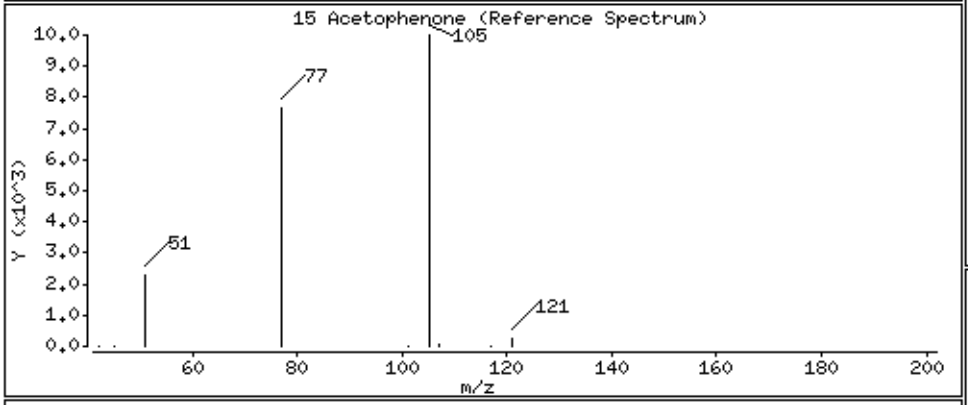
15 Acetophenone Concentration: 19.4 ug/Kgdrywt

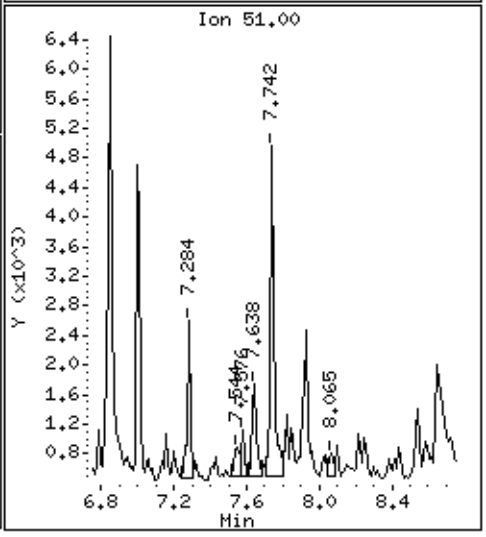


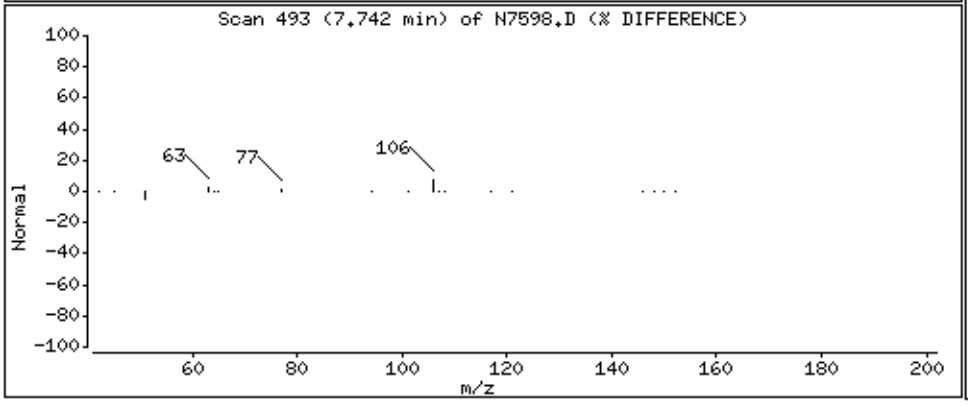












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Date : 03-MAR-2023 23:32

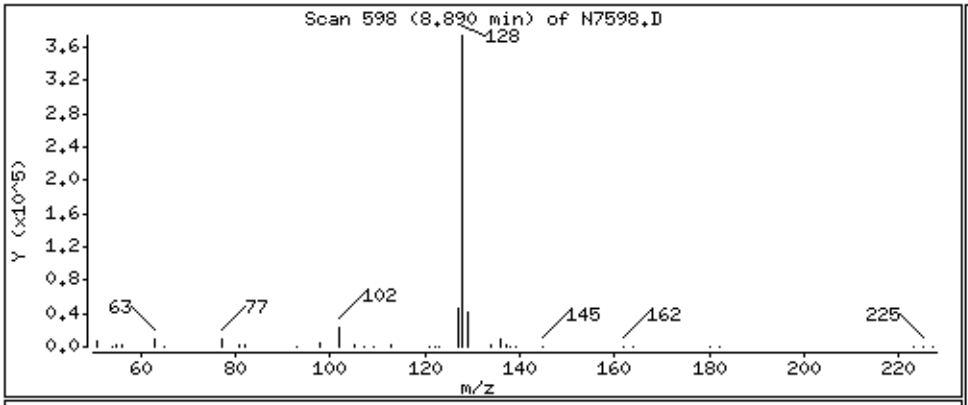
Client ID: SY-SB4R-10 Instrument: gcms-n.i

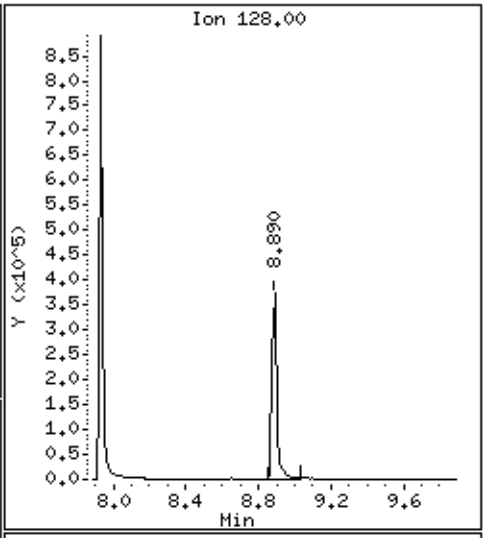
Sample Info: SQ0595-2

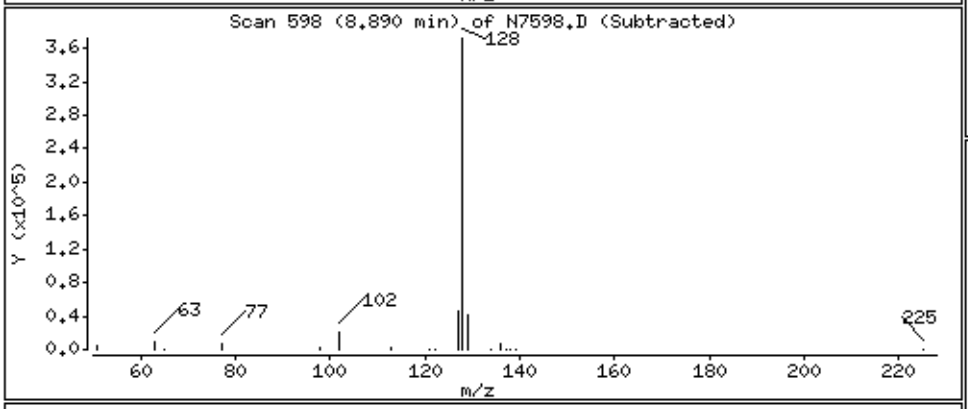
Volume Injected (uL): 1.0 Operator: DT/CO

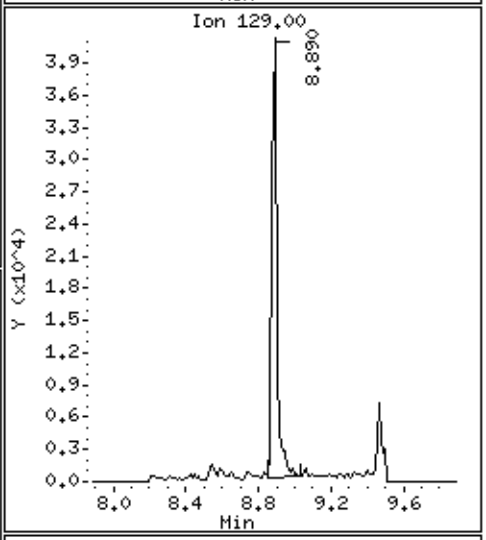
Column phase: ZB5-MS Column diameter: 0.25

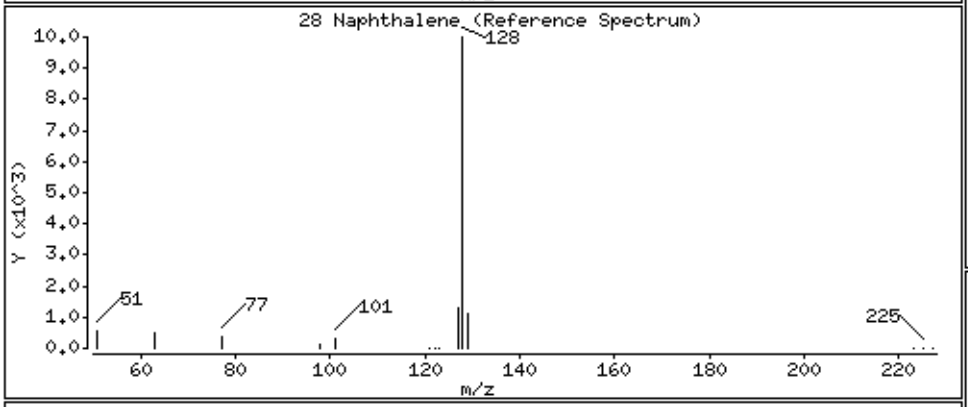
28 Naphthalene Concentration: 84.3 ug/Kgdrywt

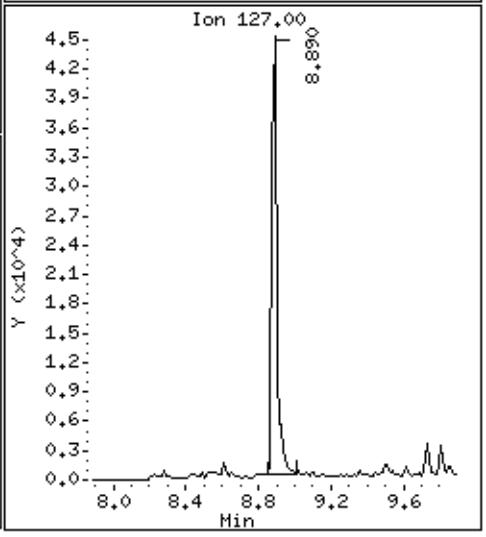


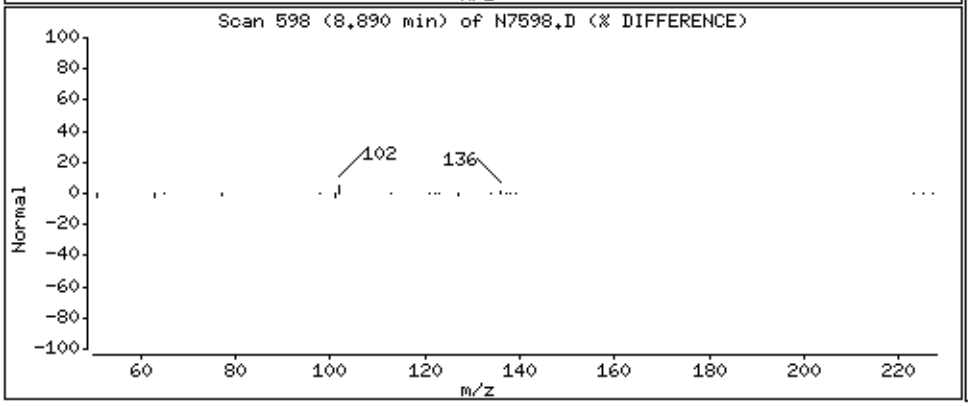












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Date : 03-MAR-2023 23:32

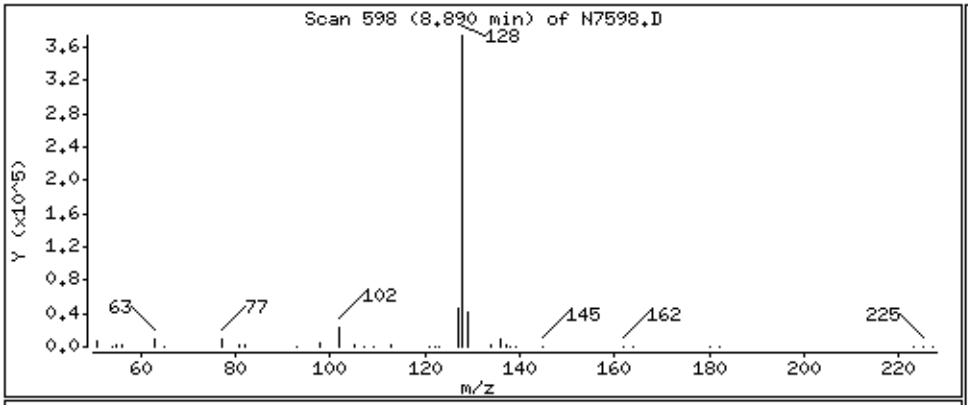
Client ID: SY-SB4R-10 Instrument: gcms-n.i

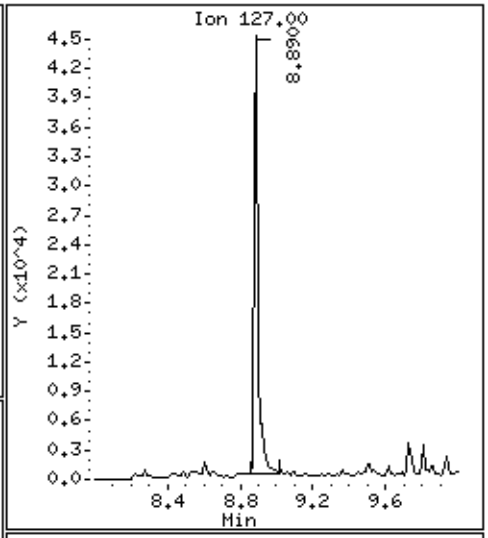
Sample Info: SQ0595-2

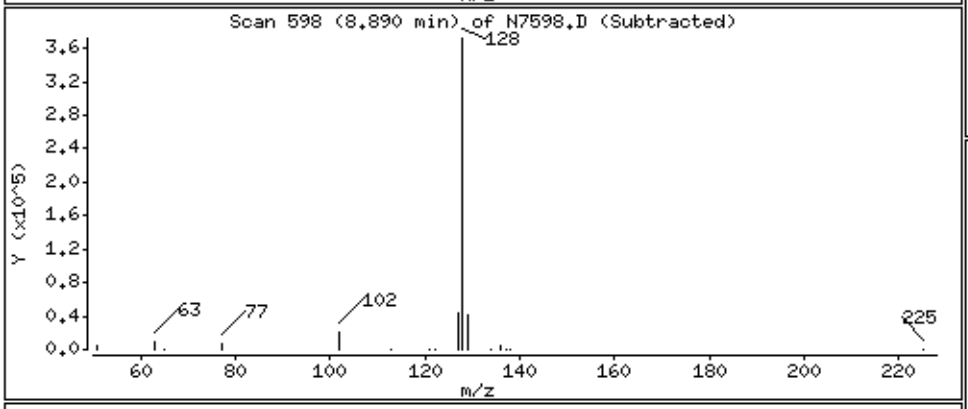
Volume Injected (uL): 1.0 Operator: DT/CO

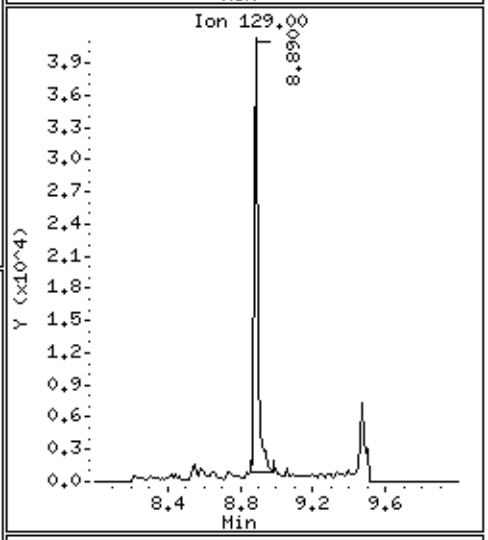
Column phase: ZB5-MS Column diameter: 0.25

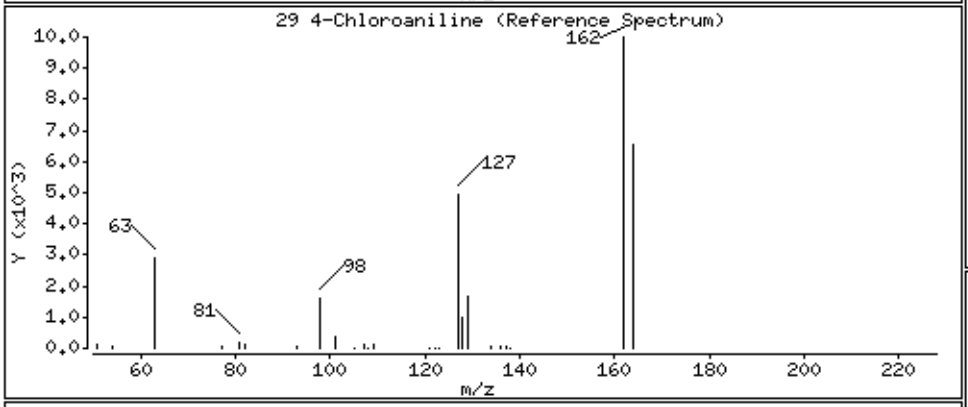
29 4-Chloroaniline Concentration: 31.3 ug/Kgdrywt

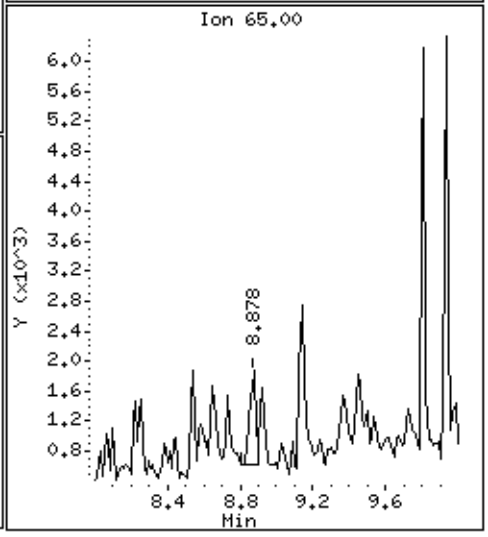


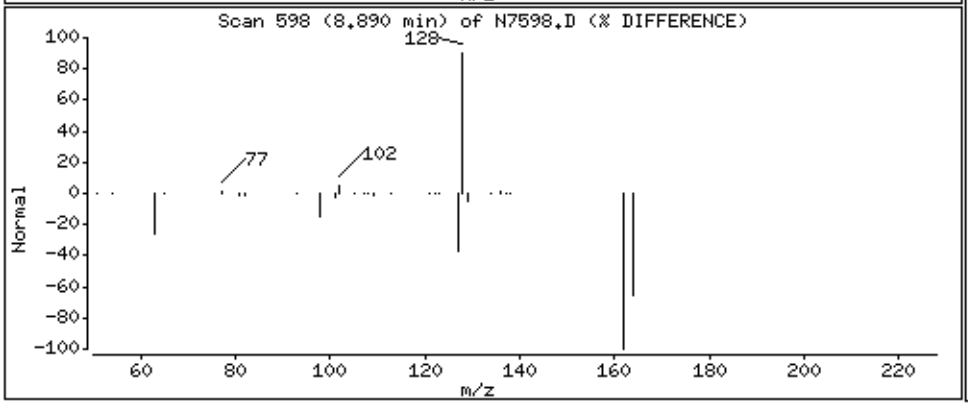












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Date : 03-MAR-2023 23:32

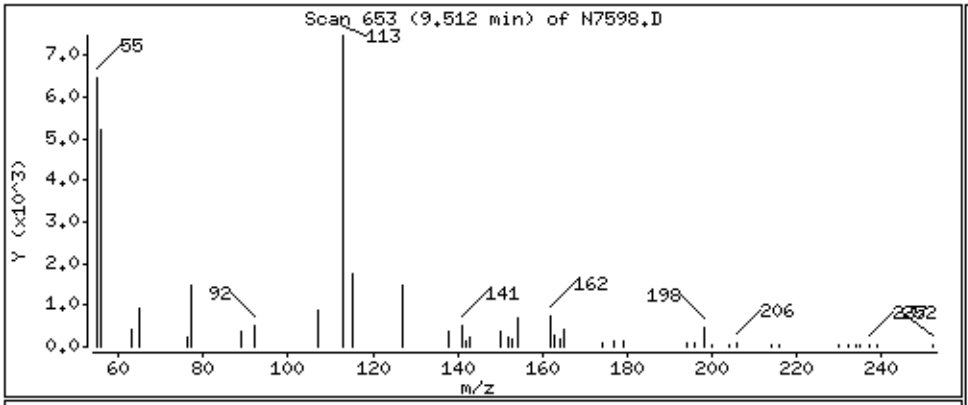
Client ID: SY-SB4R-10 Instrument: gcms-n.i

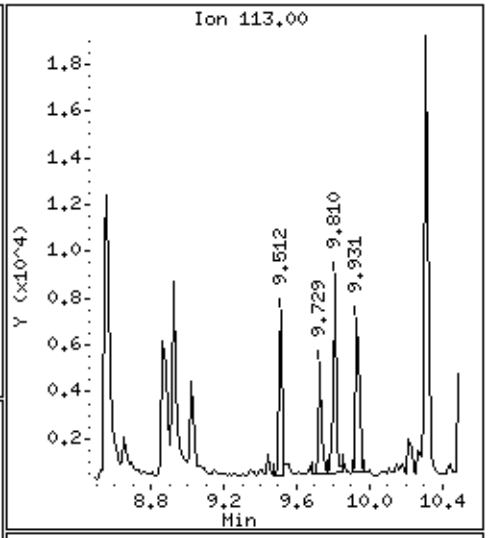
Sample Info: SQ0595-2

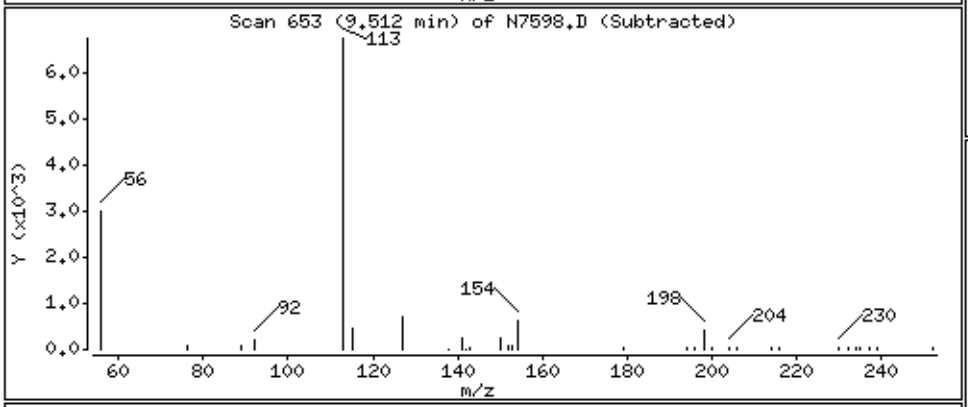
Volume Injected (uL): 1.0 Operator: DT/CO

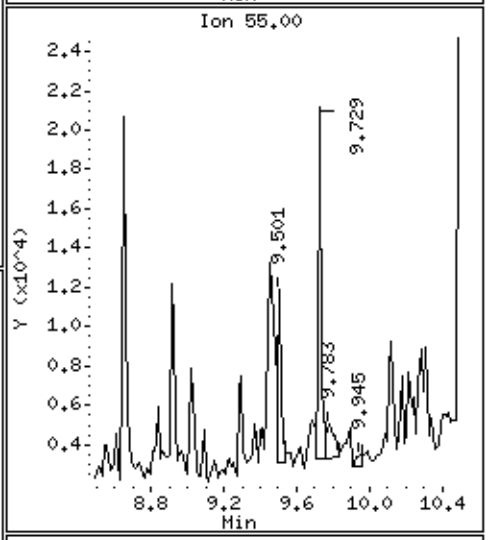
Column phase: ZB5-MS Column diameter: 0.25

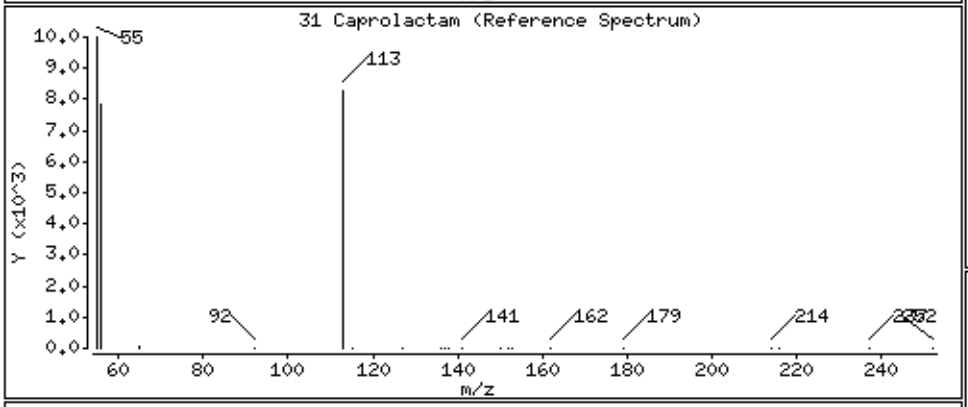
31 Caprolactam Concentration: 12.8 ug/Kgdrywt

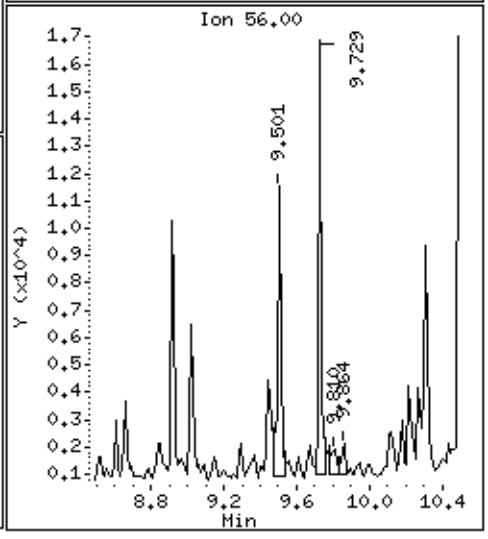


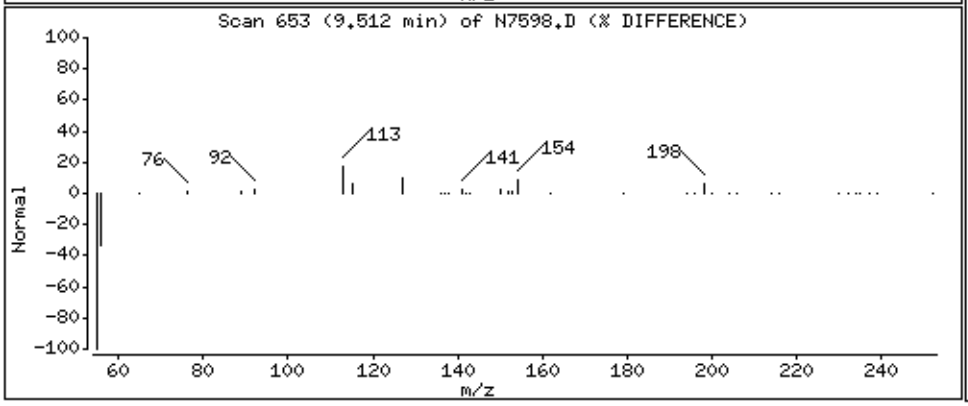












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Date : 03-MAR-2023 23:32

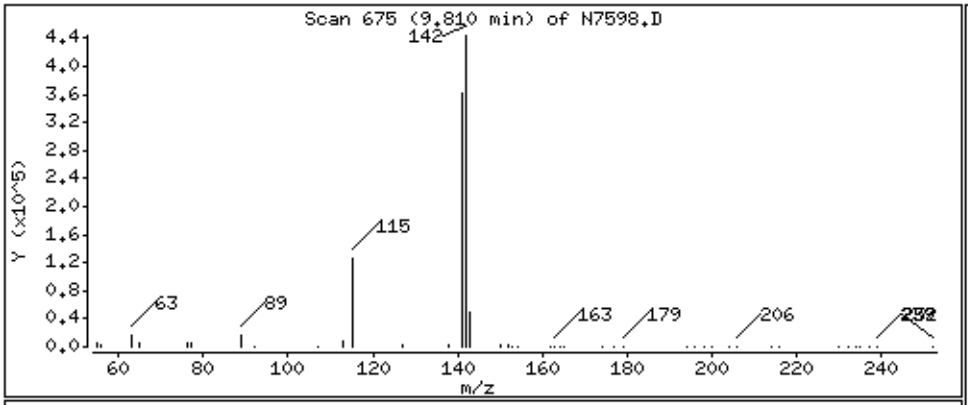
Client ID: SY-SB4R-10 Instrument: gcms-n.i

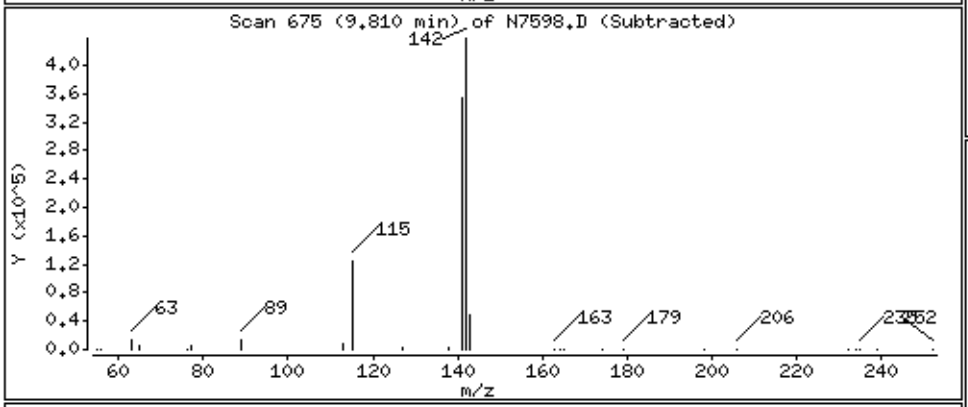
Sample Info: SQ0595-2

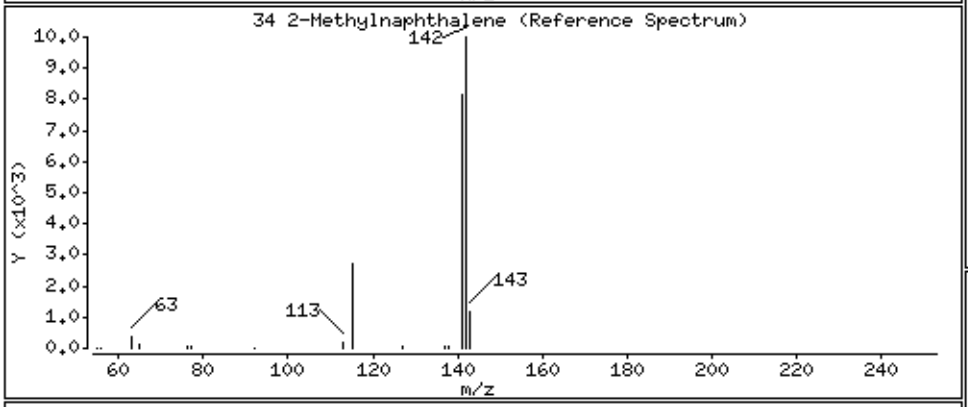
Volume Injected (uL): 1.0 Operator: DT/CO

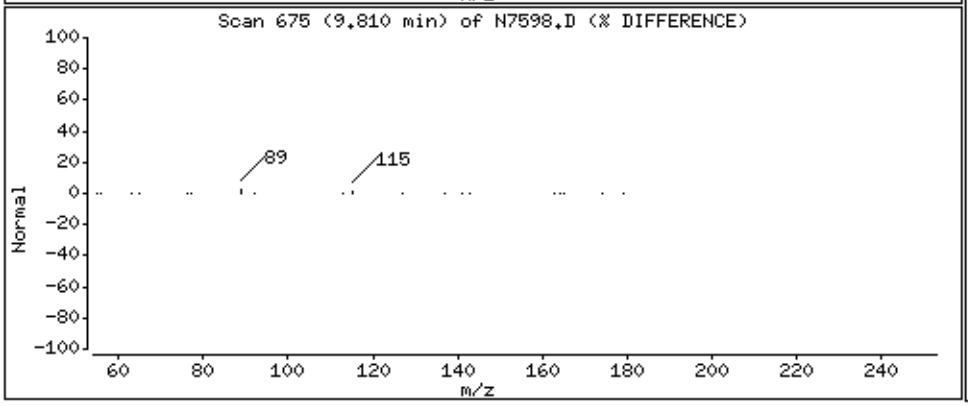
Column phase: ZB5-MS Column diameter: 0.25

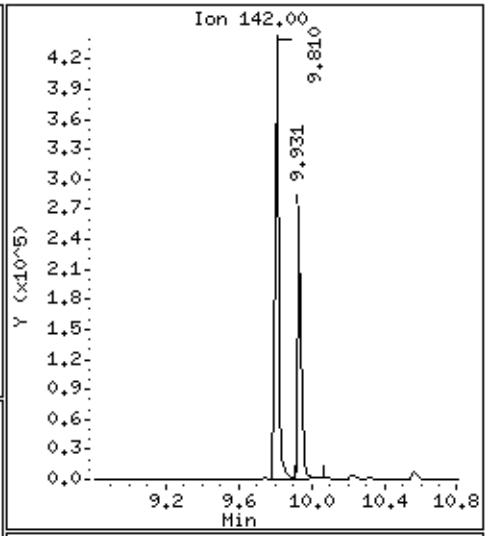
34 2-Methylnaphthalene Concentration: 111 ug/Kgdrywt

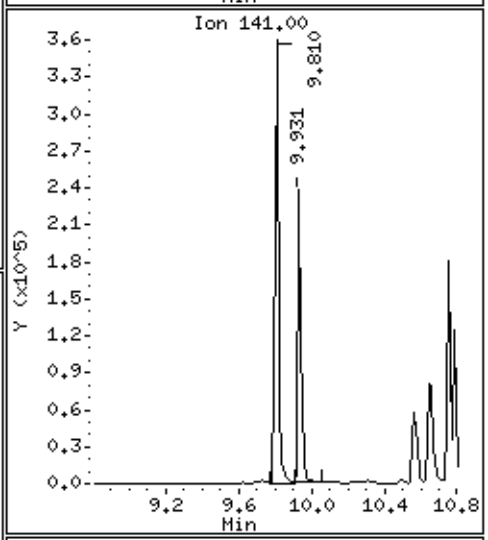


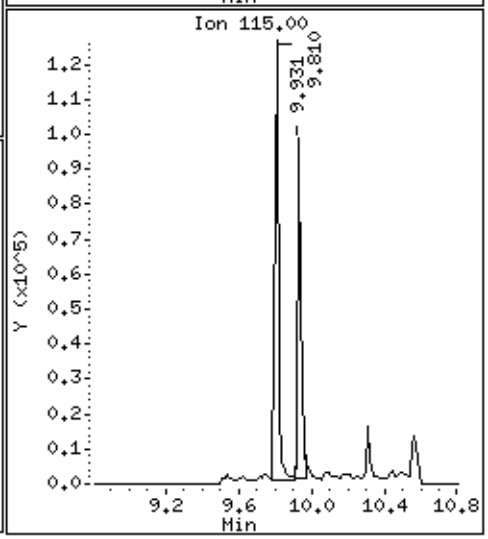












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Date : 03-MAR-2023 23:32

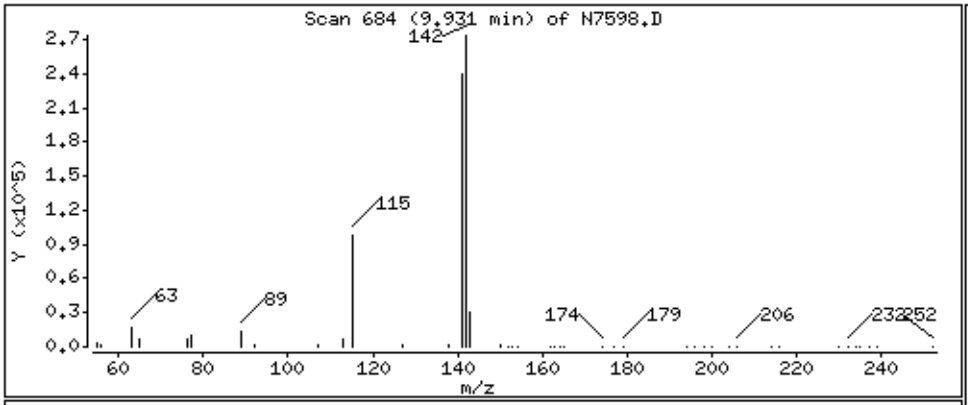
Client ID: SY-SB4R-10 Instrument: gcms-n.i

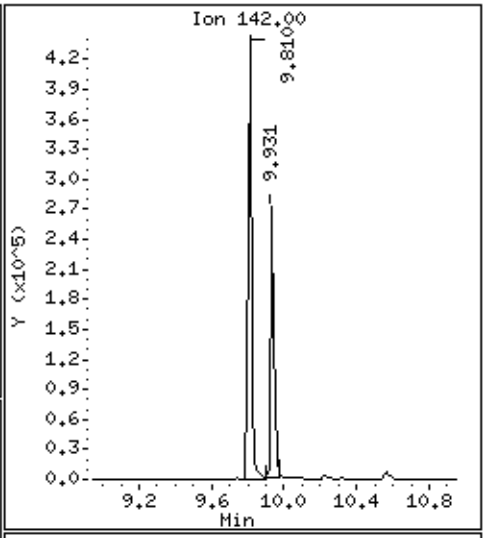
Sample Info: SQ0595-2

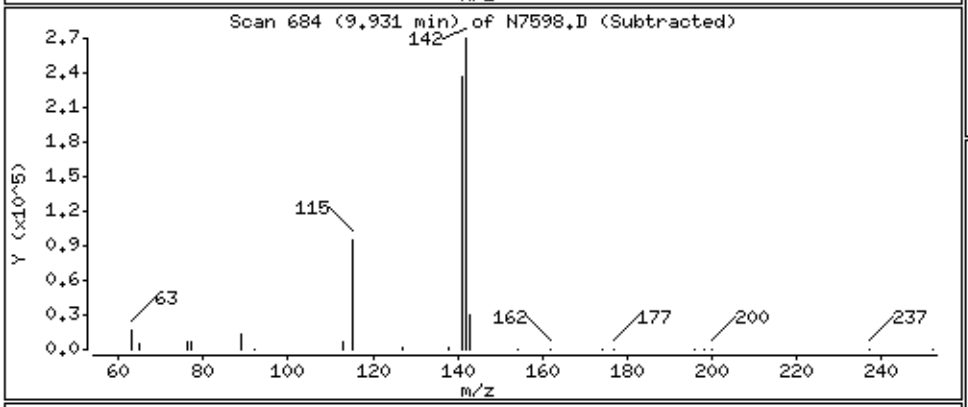
Volume Injected (uL): 1.0 Operator: DT/CO

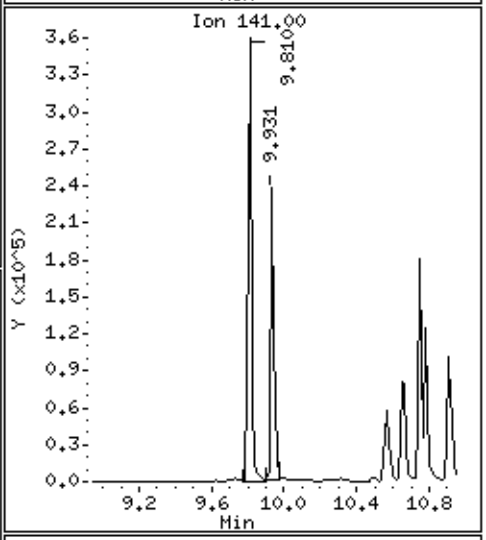
Column phase: ZB5-MS Column diameter: 0.25

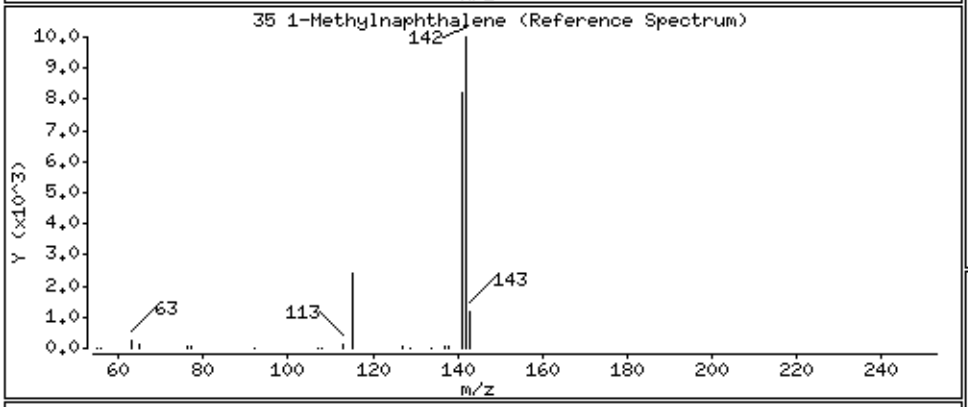
35 1-Methylnaphthalene Concentration: 84.4 ug/Kgdrywt

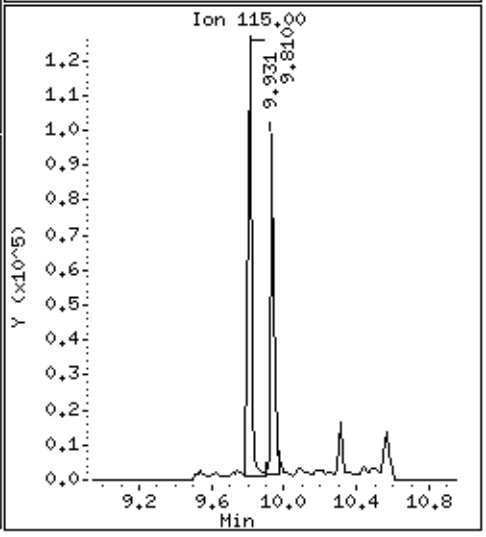


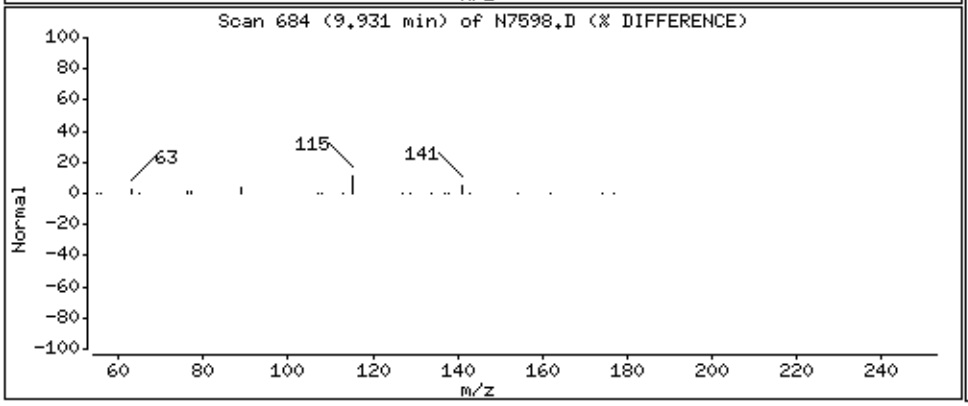












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Date : 03-MAR-2023 23:32

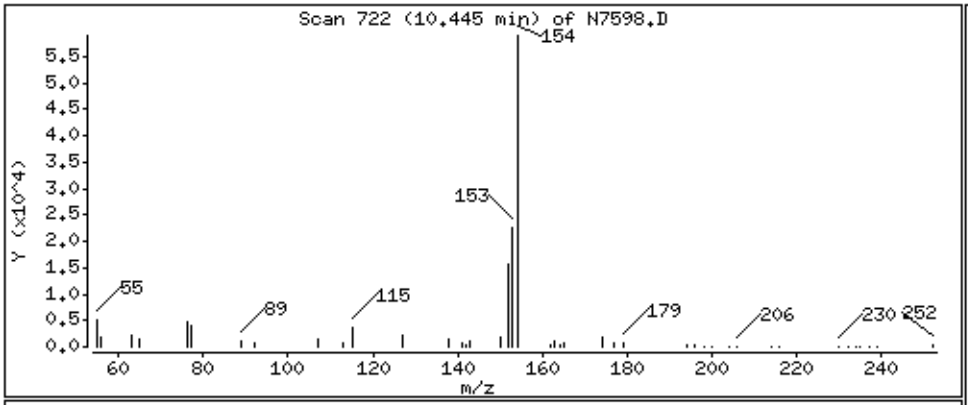
Client ID: SY-SB4R-10 Instrument: gcms-n.i

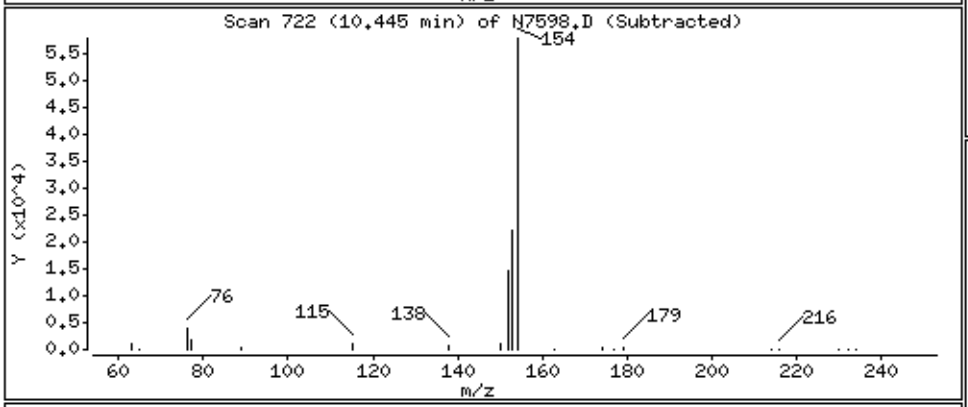
Sample Info: SQ0595-2

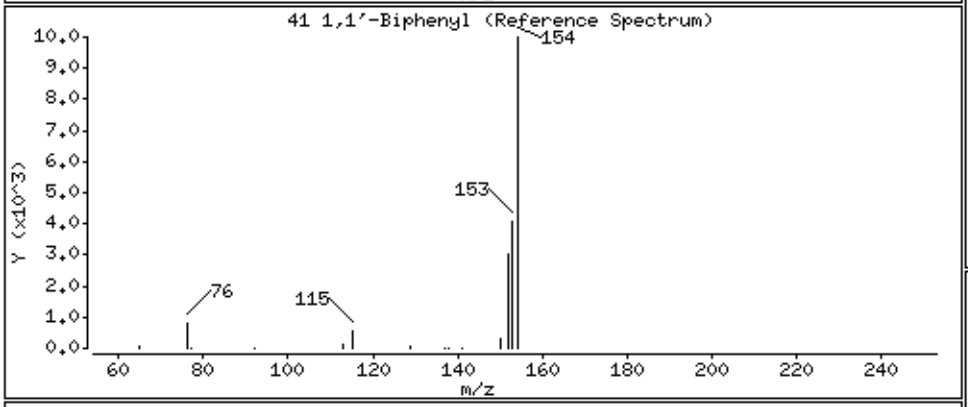
Volume Injected (uL): 1.0 Operator: DT/CO

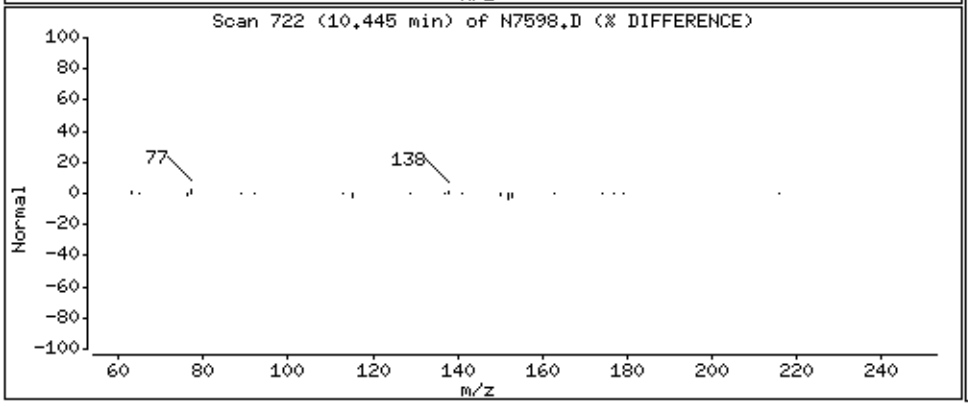
Column phase: ZB5-MS Column diameter: 0.25

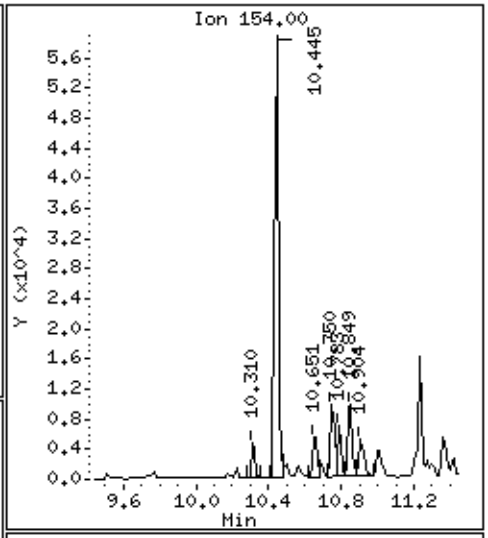
41 1,1'-Biphenyl Concentration: 15.4 ug/Kgdrywt

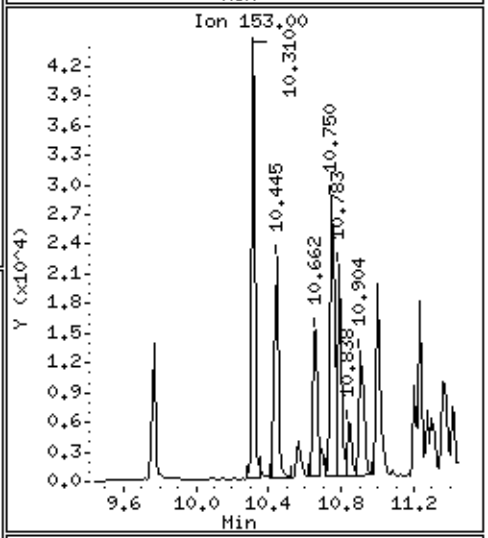


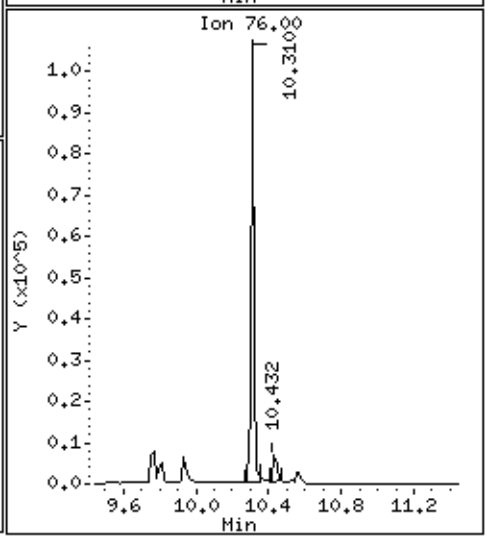












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Date : 03-MAR-2023 23:32

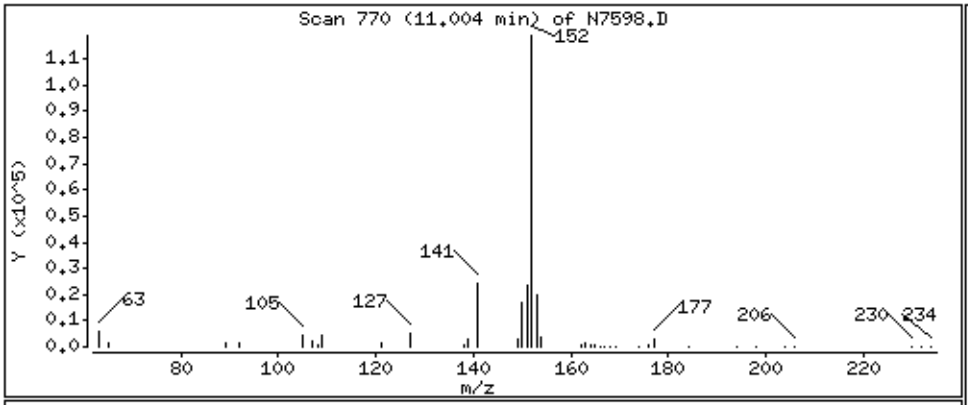
Client ID: SY-SB4R-10 Instrument: gcms-n.i

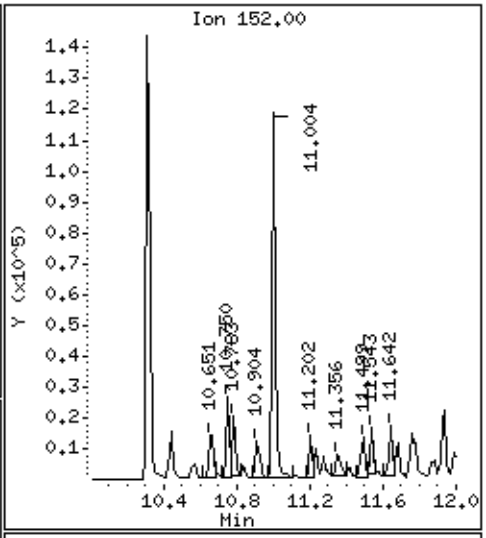
Sample Info: SQ0595-2

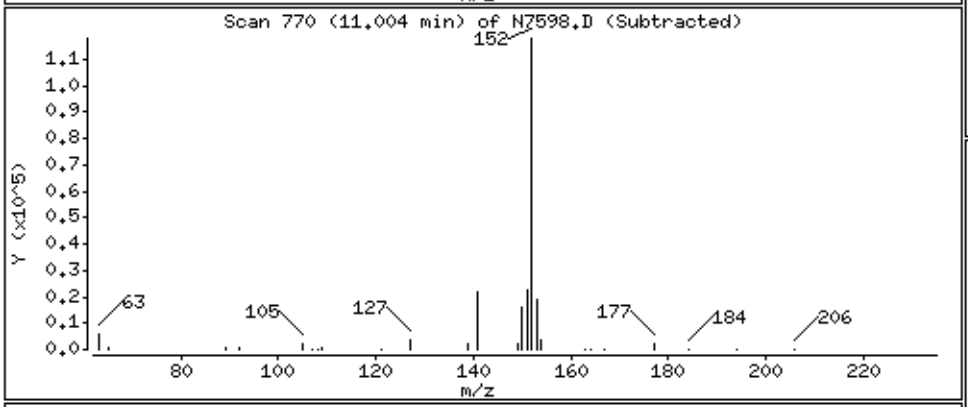
Volume Injected (uL): 1.0 Operator: DT/CO

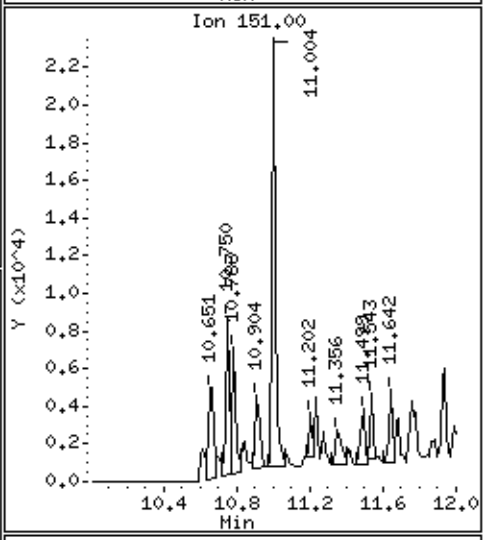
Column phase: ZB5-MS Column diameter: 0.25

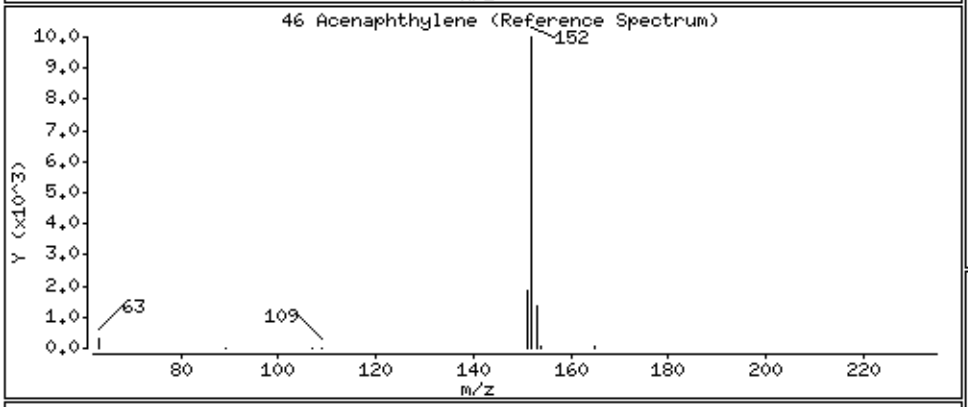
46 Acenaphthylene Concentration: 23.5 ug/Kgdrywt

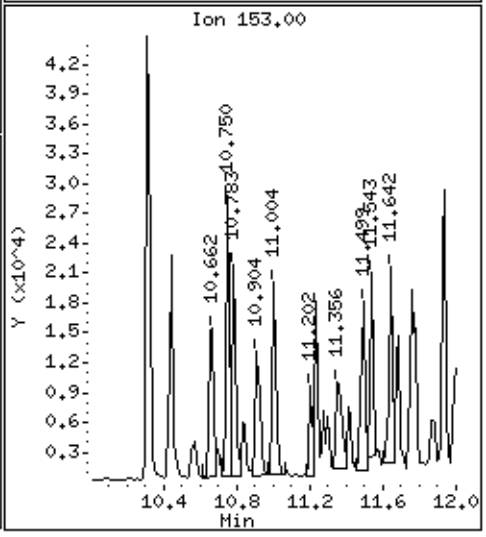


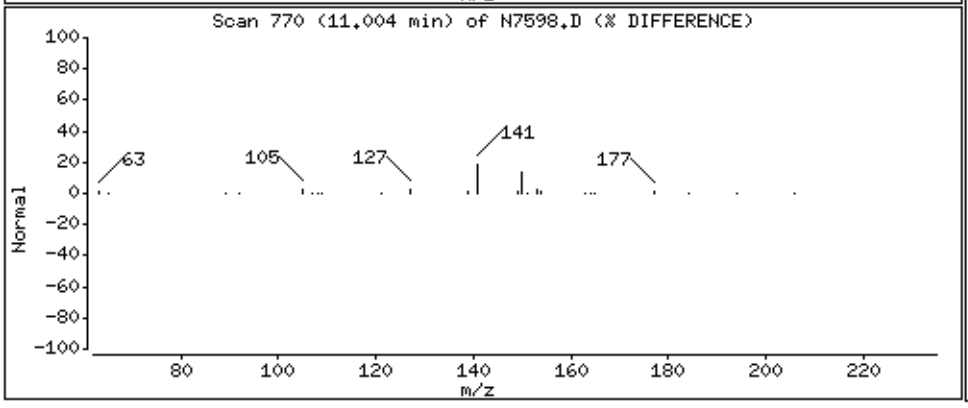












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Date : 03-MAR-2023 23:32

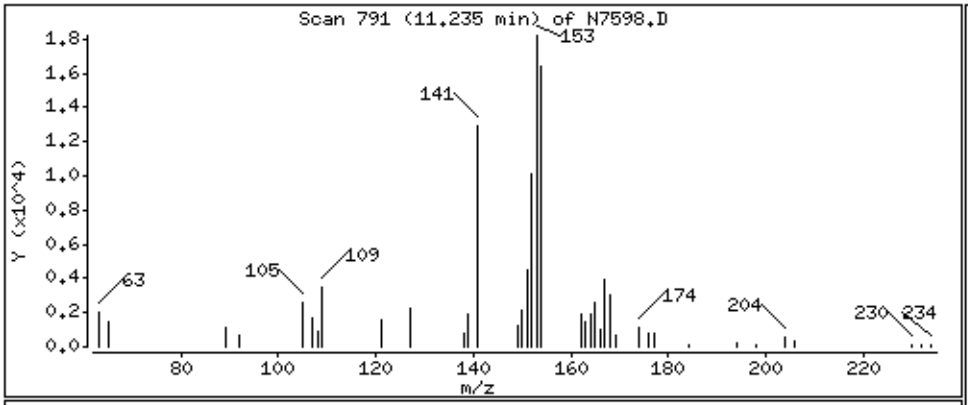
Client ID: SY-SB4R-10 Instrument: gcms-n.i

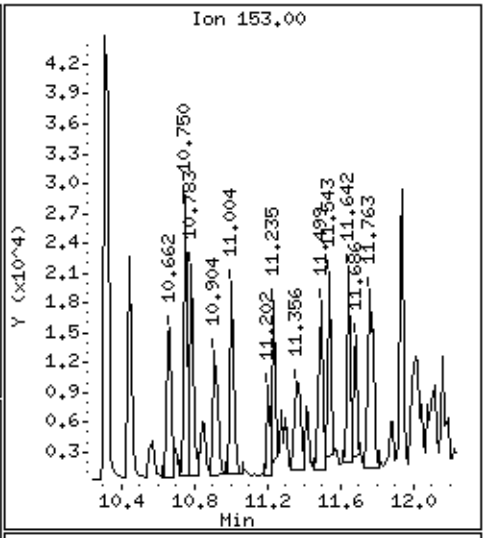
Sample Info: SQ0595-2

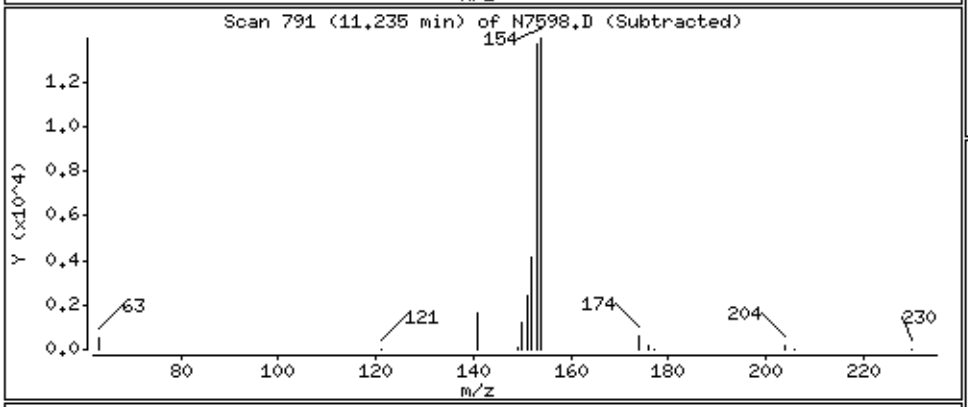
Volume Injected (uL): 1.0 Operator: DT/CO

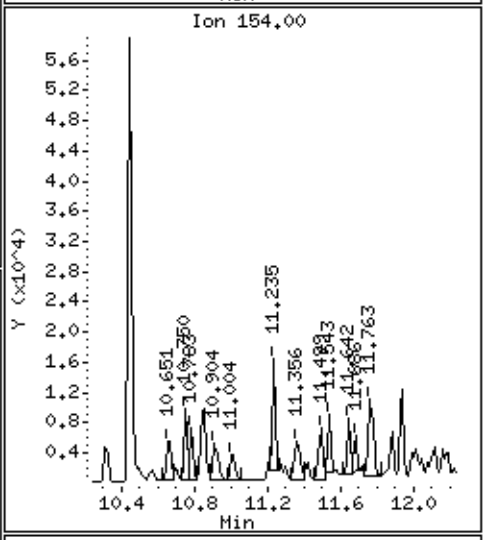
Column phase: ZB5-MS Column diameter: 0.25

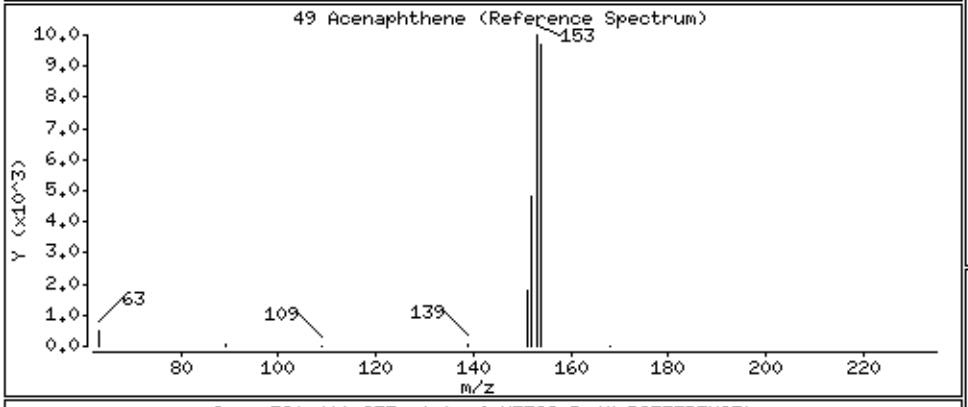
49 Acenaphthene Concentration: 4.34 ug/Kgdrywt

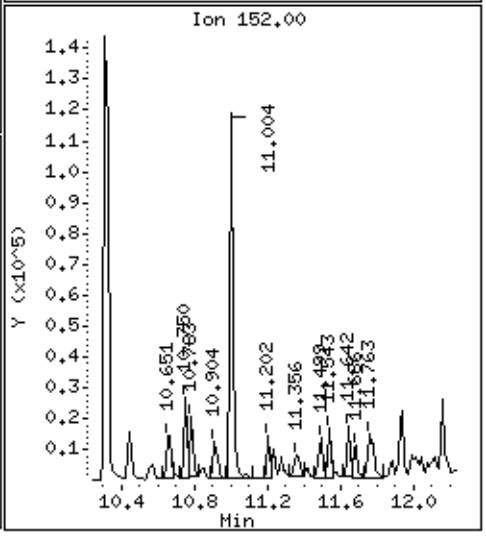


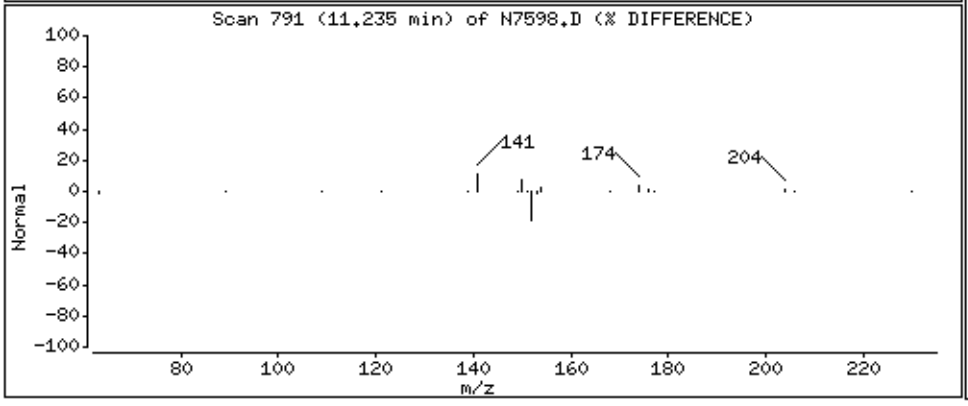












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Date : 03-MAR-2023 23:32

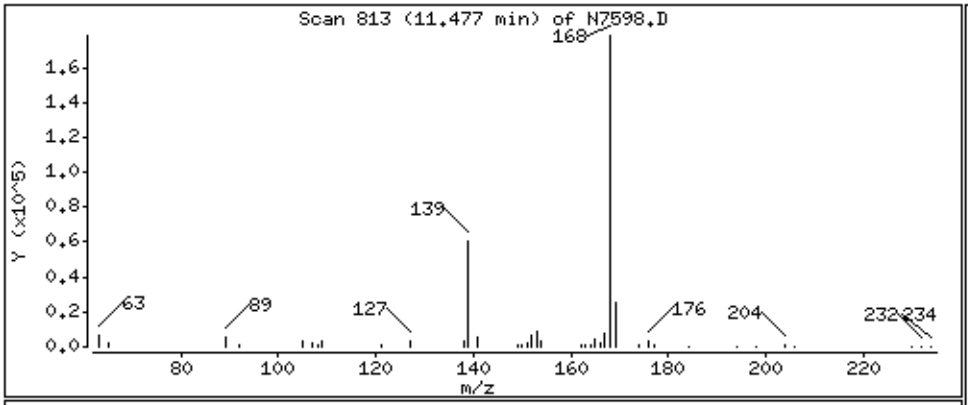
Client ID: SY-SB4R-10 Instrument: gcms-n.i

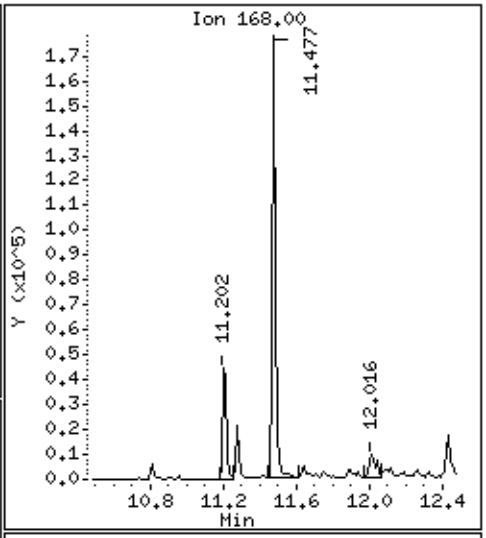
Sample Info: SQ0595-2

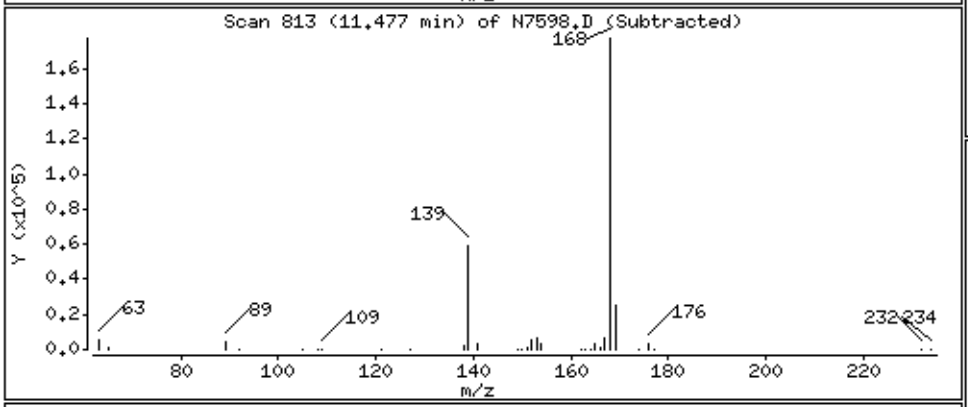
Volume Injected (uL): 1.0 Operator: DT/CO

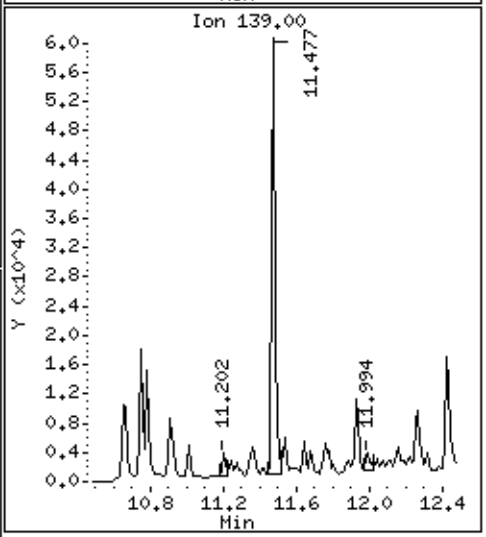
Column phase: ZB5-MS Column diameter: 0.25

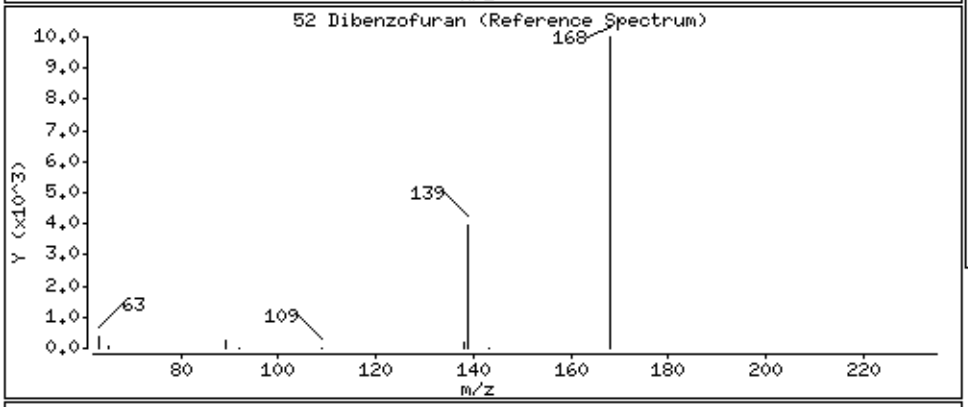
52 Dibenzofuran Concentration: 39.4 ug/Kgdrywt

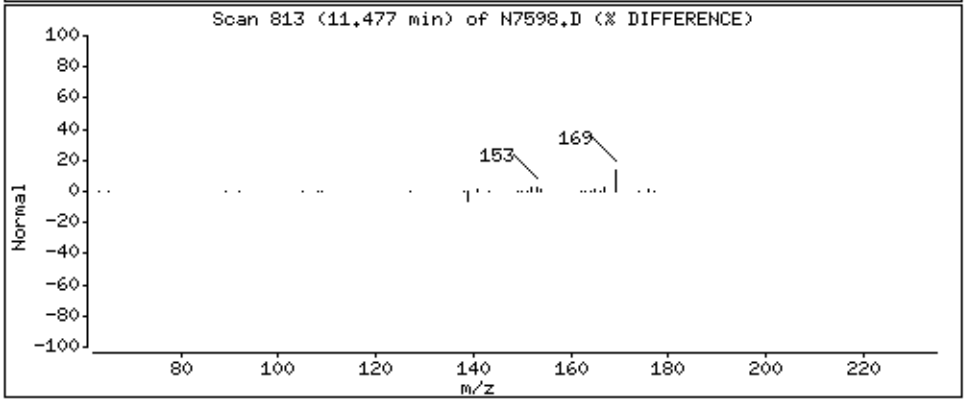












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Date : 03-MAR-2023 23:32

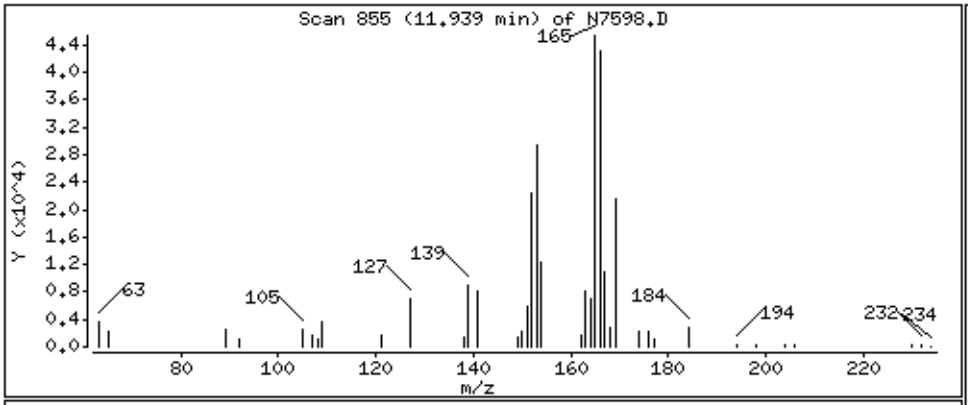
Client ID: SY-SB4R-10 Instrument: gcms-n.i

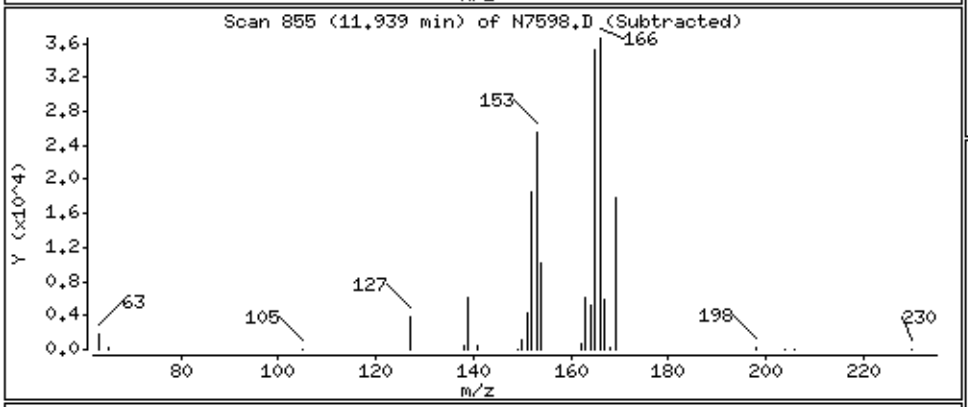
Sample Info: SQ0595-2

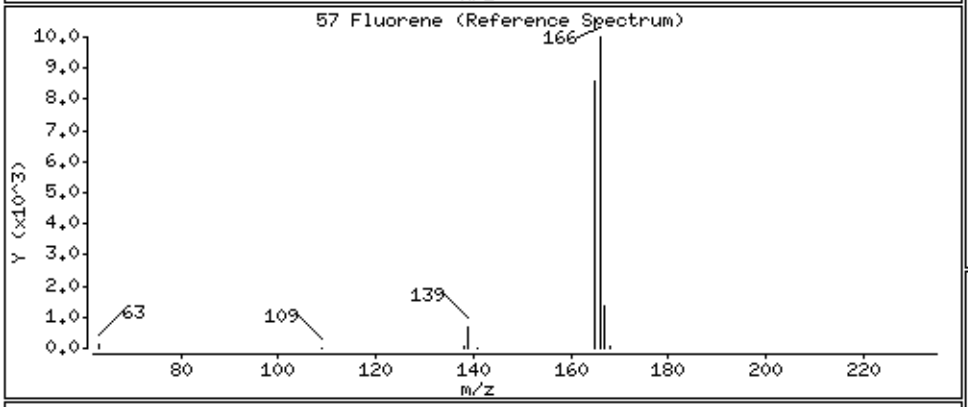
Volume Injected (uL): 1.0 Operator: DT/CO

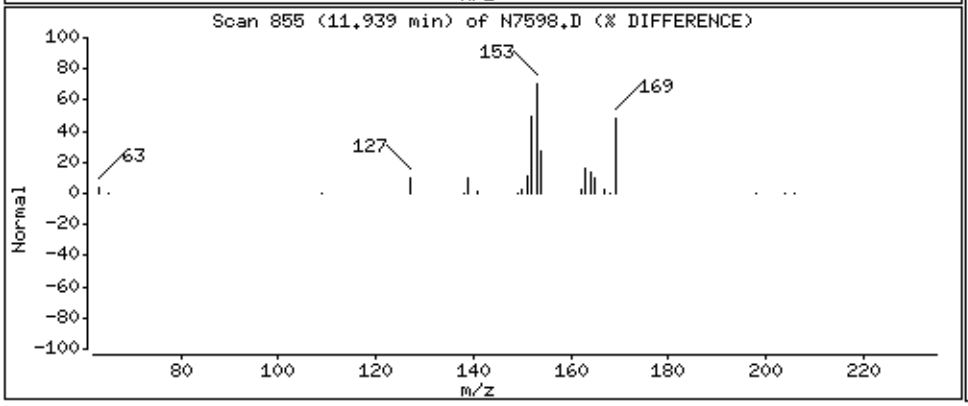
Column phase: ZB5-MS Column diameter: 0.25

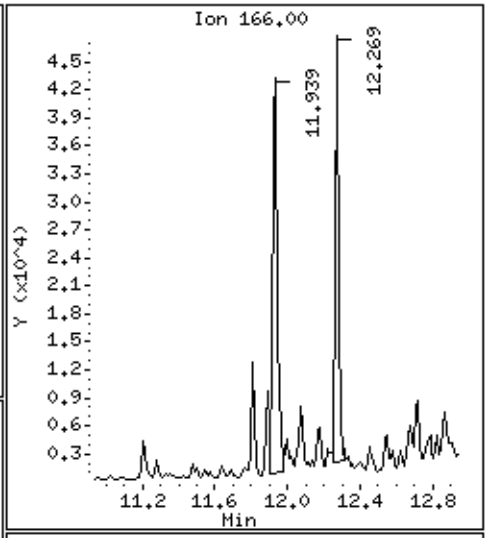
57 Fluorene Concentration: 17.6 ug/Kgdrywt

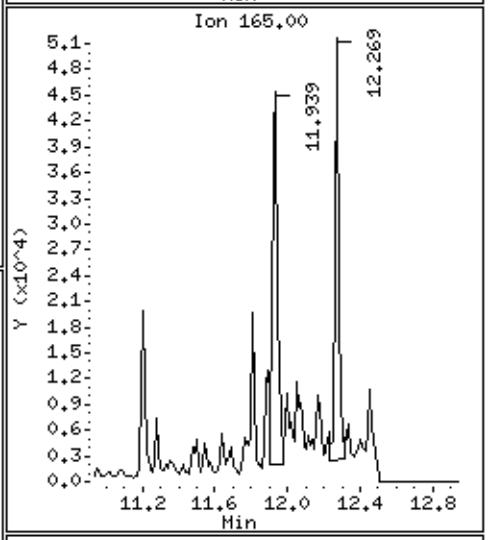


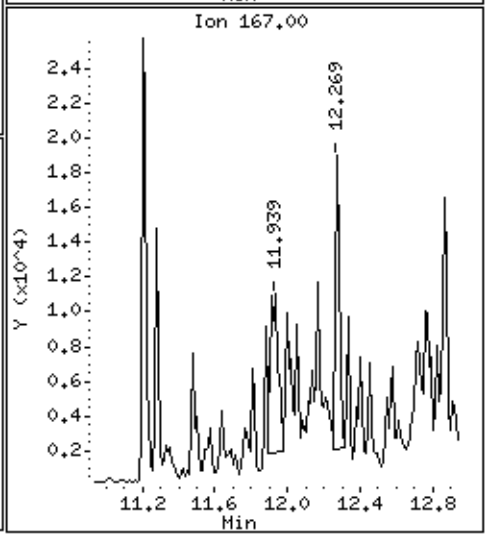












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Date : 03-MAR-2023 23:32

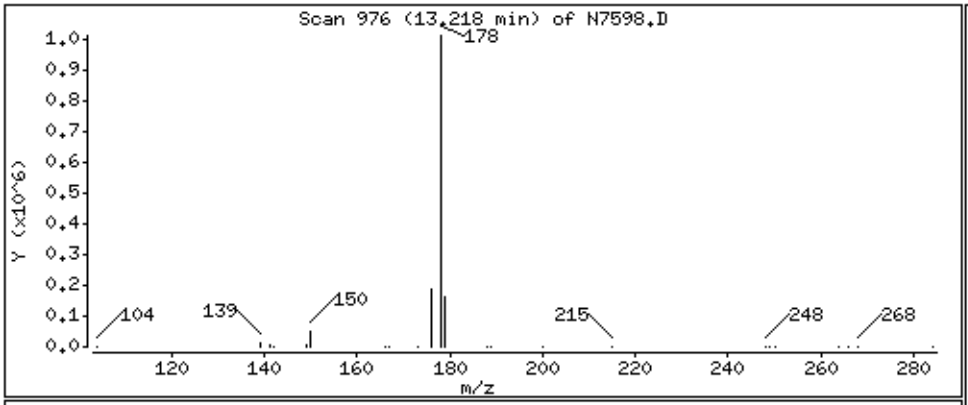
Client ID: SY-SB4R-10 Instrument: gcms-n.i

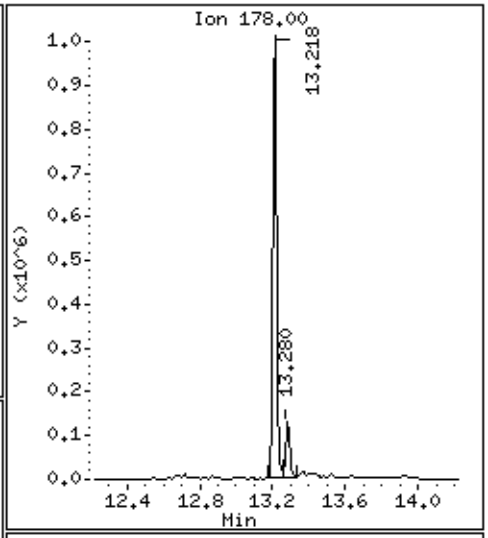
Sample Info: SQ0595-2

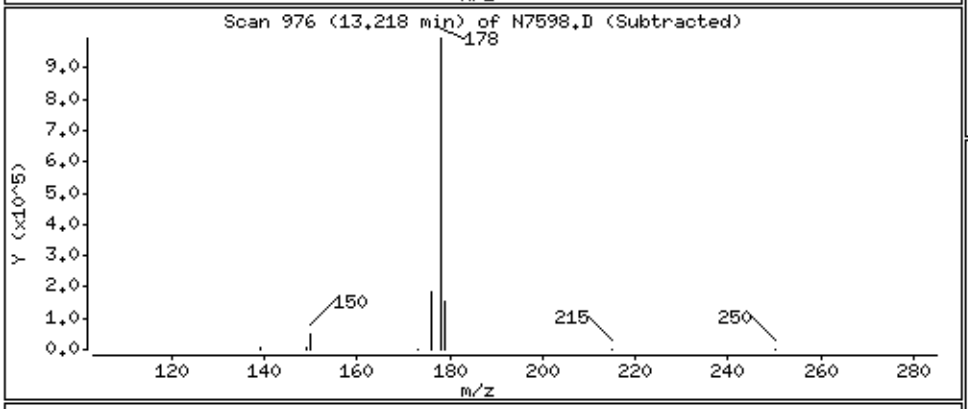
Volume Injected (uL): 1.0 Operator: DT/CO

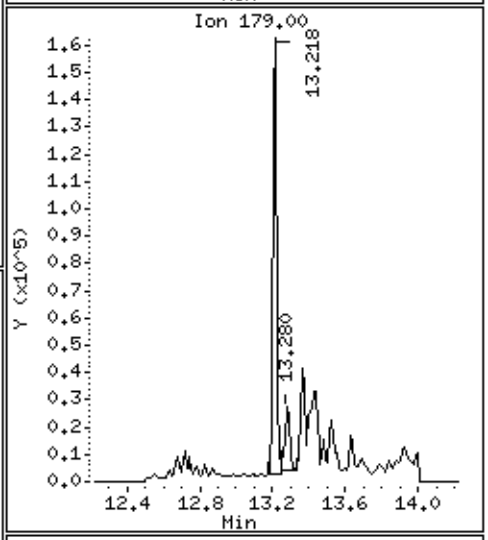
Column phase: ZB5-MS Column diameter: 0.25

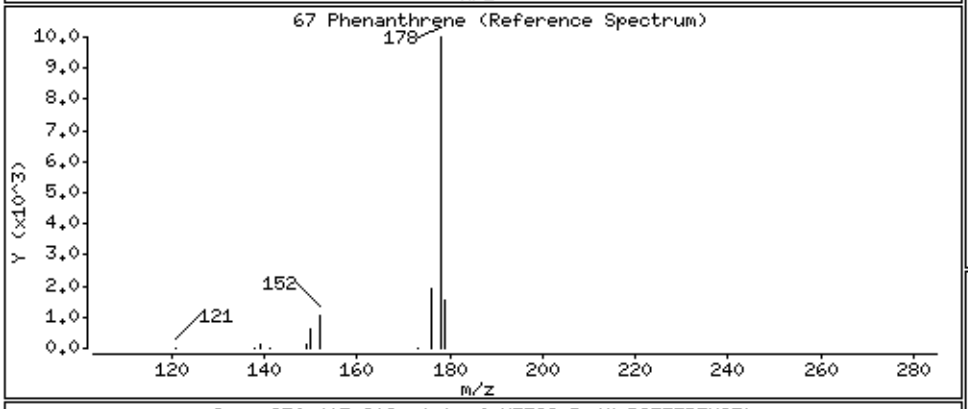
67 Phenanthrene Concentration: 255 ug/Kgdrywt

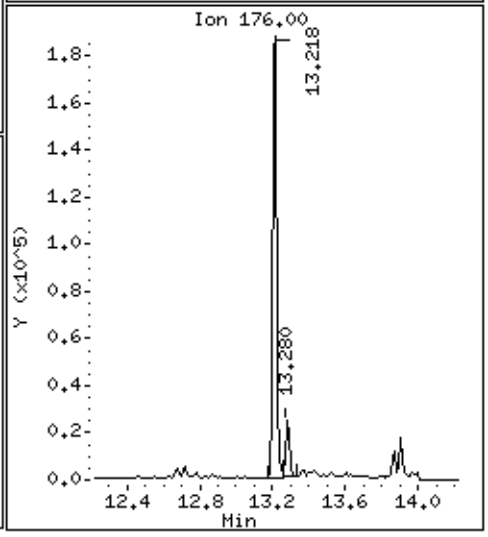


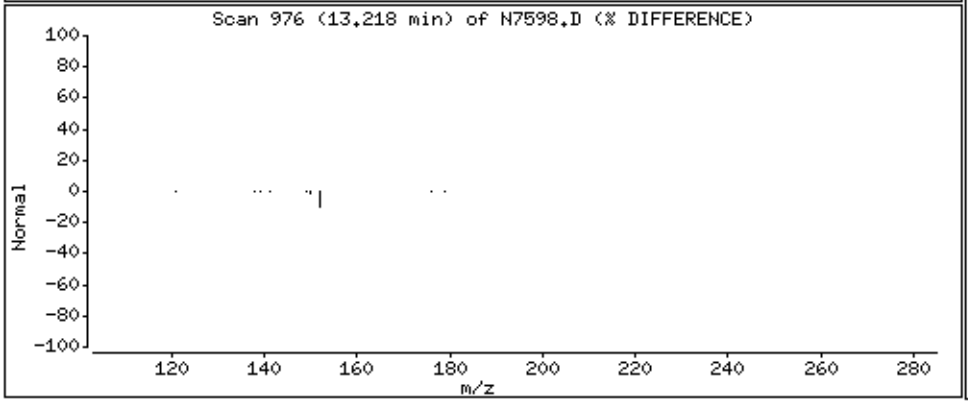












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Date : 03-MAR-2023 23:32

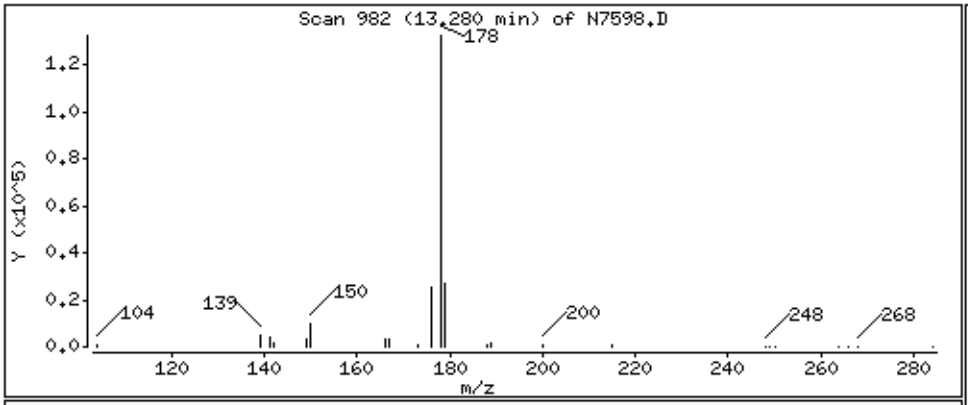
Client ID: SY-SB4R-10 Instrument: gcms-n.i

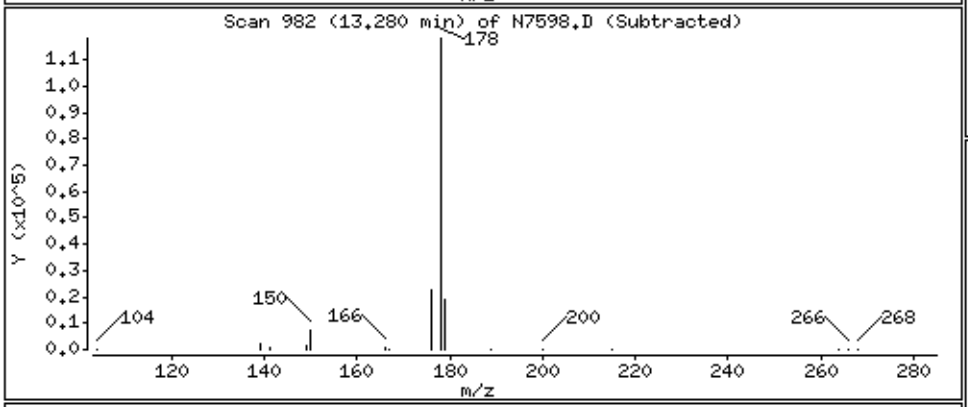
Sample Info: SQ0595-2

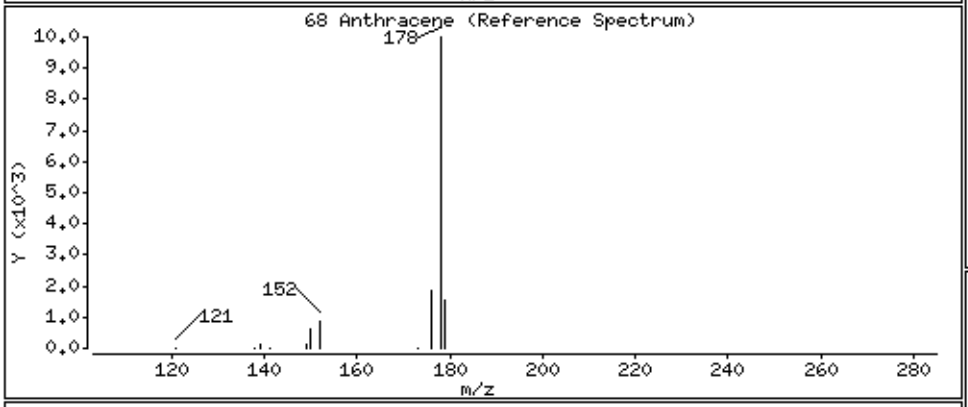
Volume Injected (uL): 1.0 Operator: DT/CO

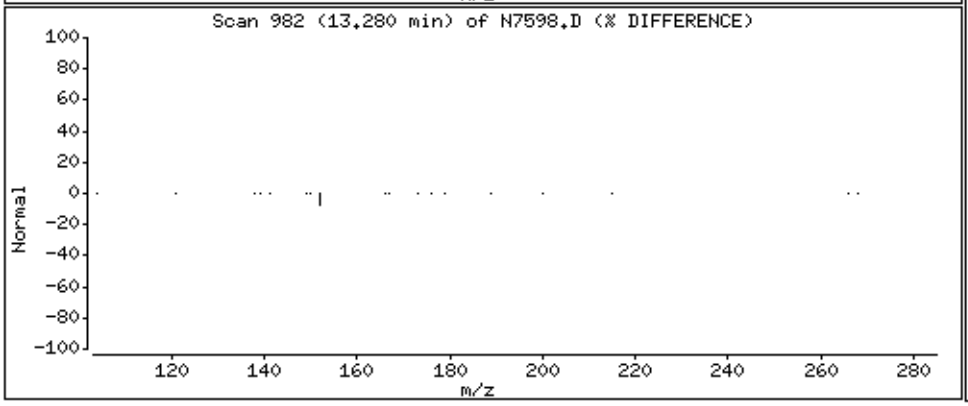
Column phase: ZB5-MS Column diameter: 0.25

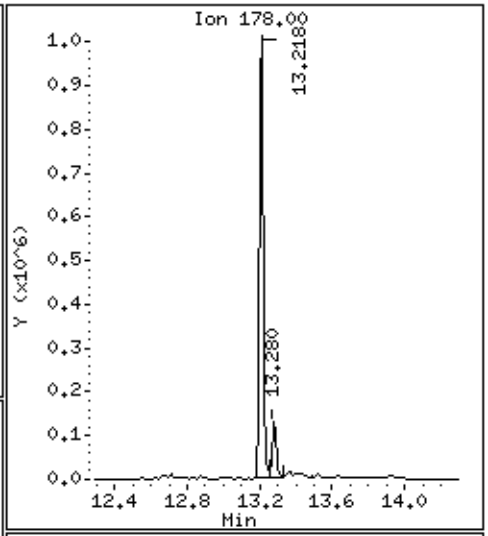
68 Anthracene Concentration: 31.2 ug/Kgdrywt

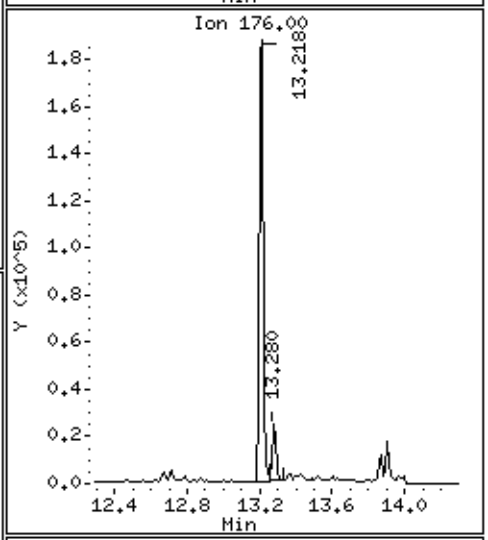


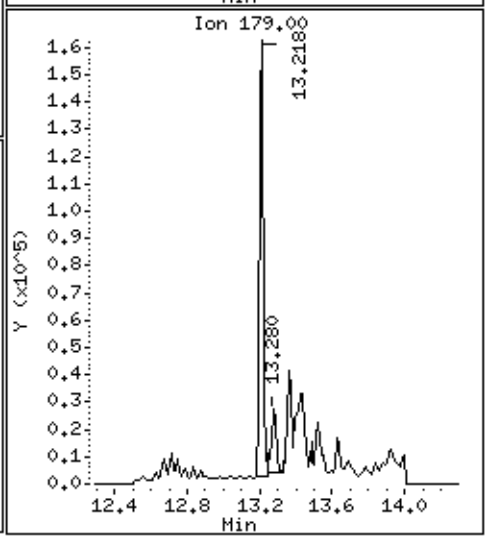












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Date : 03-MAR-2023 23:32

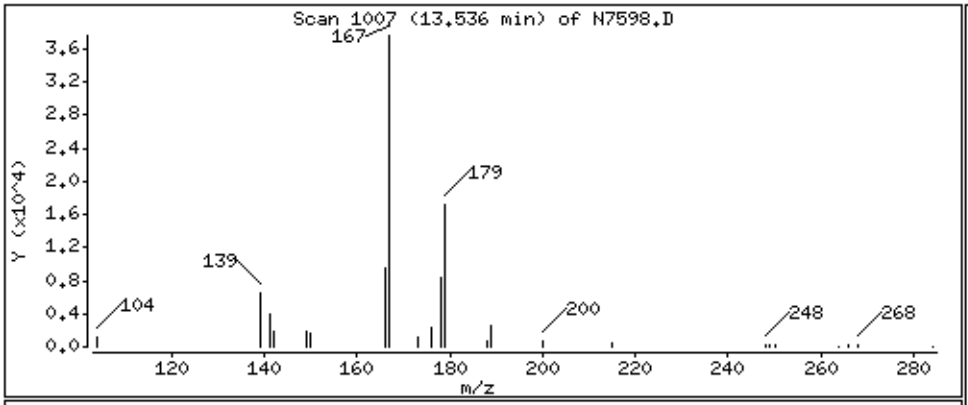
Client ID: SY-SB4R-10 Instrument: gcms-n.i

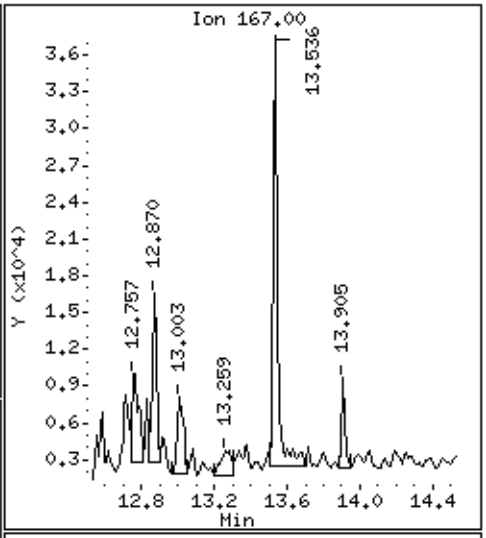
Sample Info: SQ0595-2

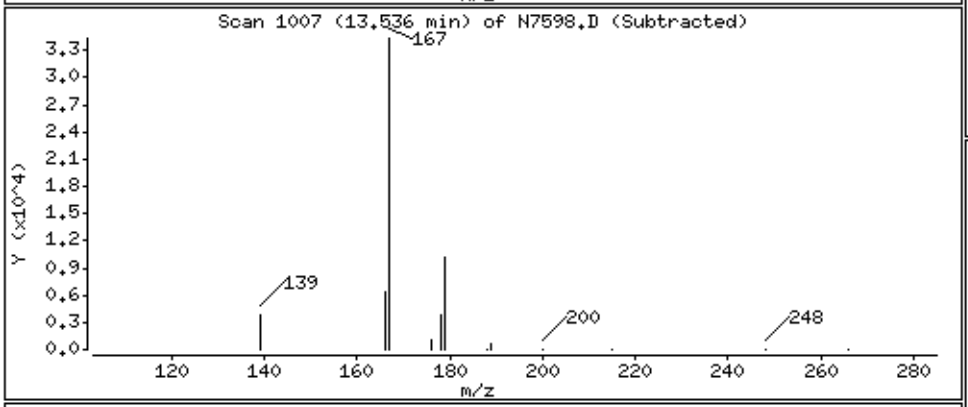
Volume Injected (uL): 1.0 Operator: DT/CO

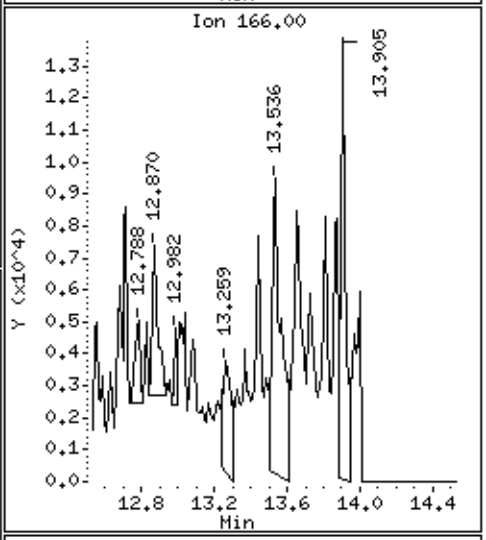
Column phase: ZB5-MS Column diameter: 0.25

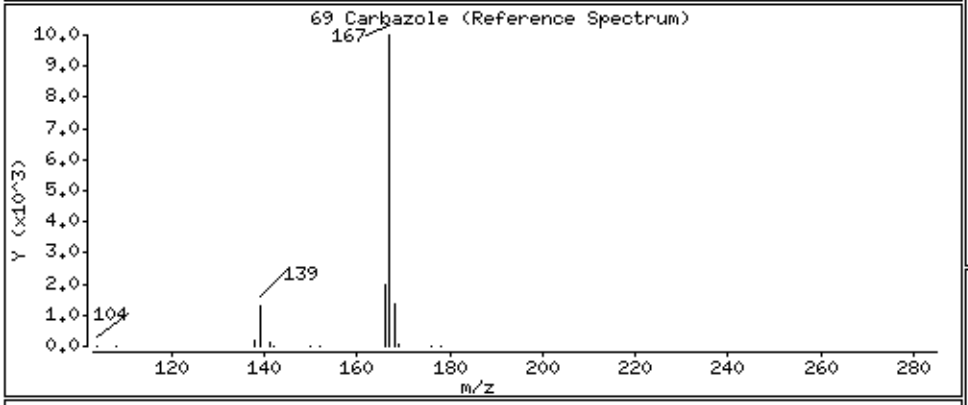
69 Carbazole Concentration: 13.8 ug/Kgdrywt

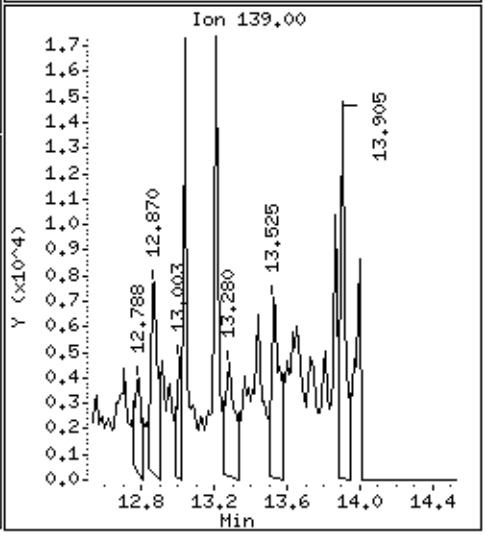


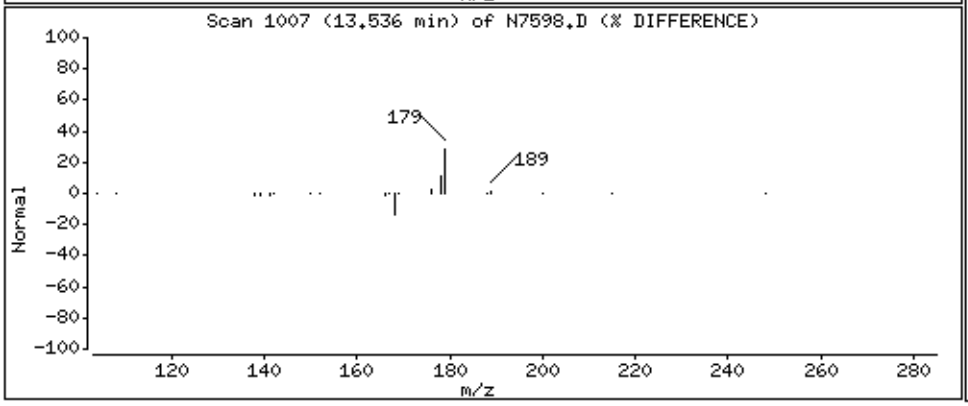












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Date : 03-MAR-2023 23:32

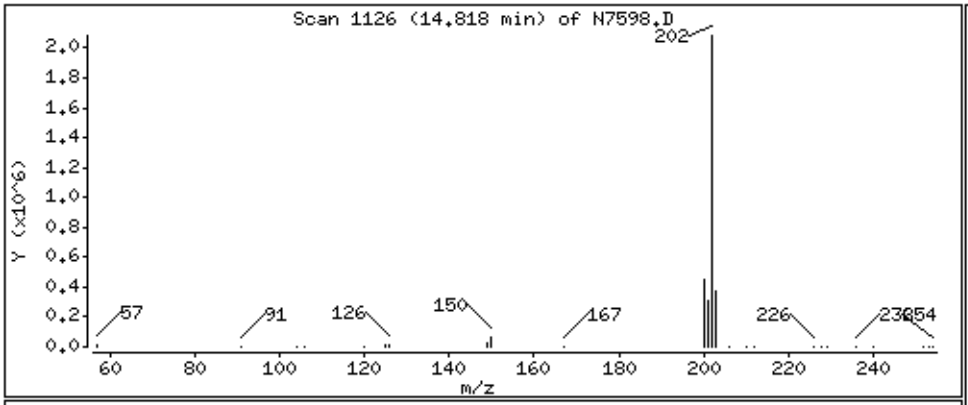
Client ID: SY-SB4R-10 Instrument: gcms-n.i

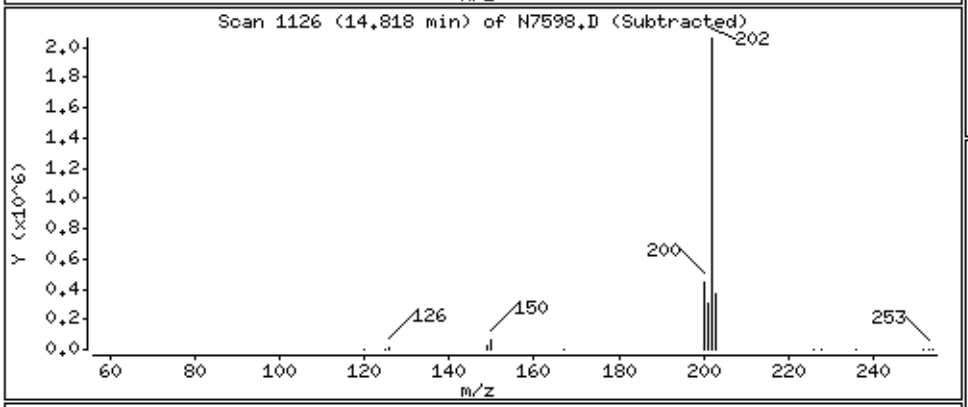
Sample Info: SQ0595-2

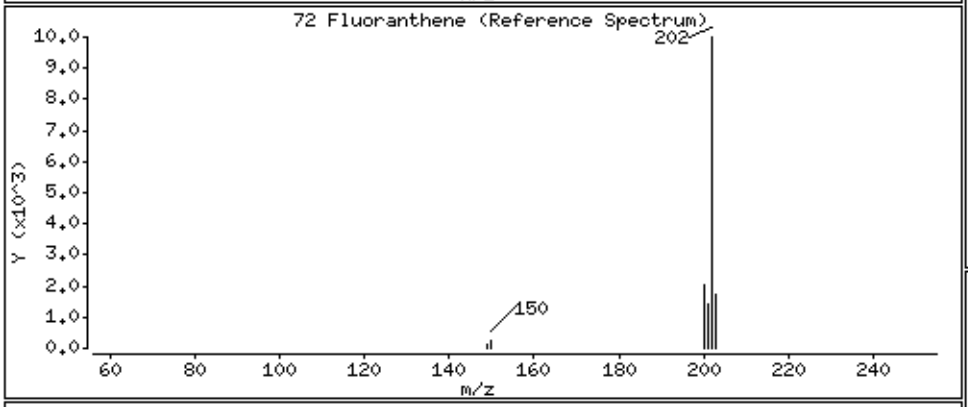
Volume Injected (uL): 1.0 Operator: DT/CO

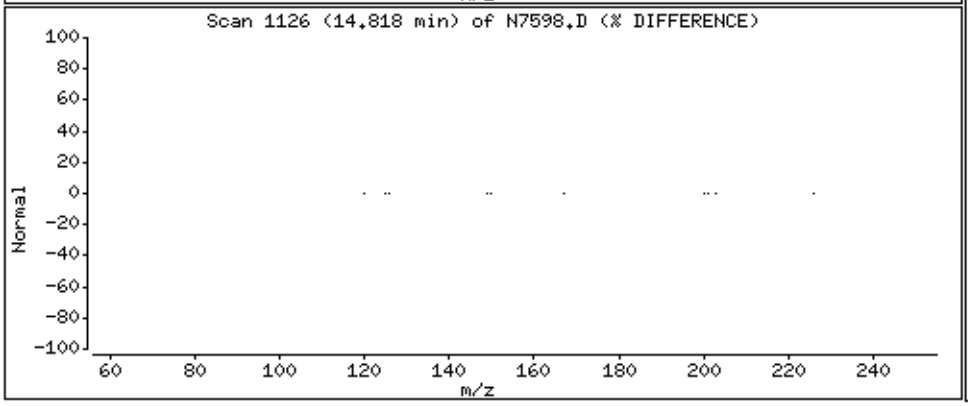
Column phase: ZB5-MS Column diameter: 0.25

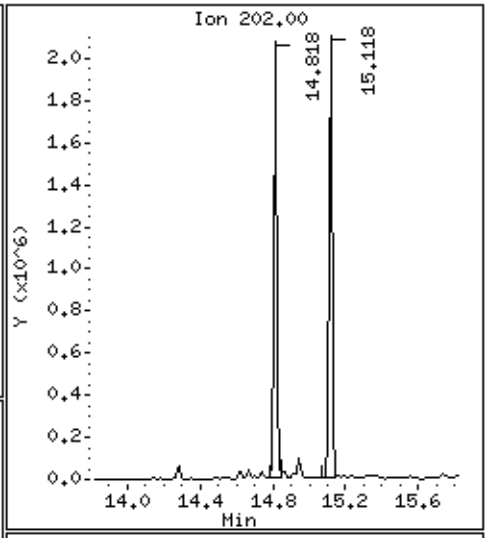
72 Fluoranthene Concentration: 496 ug/Kgdrywt

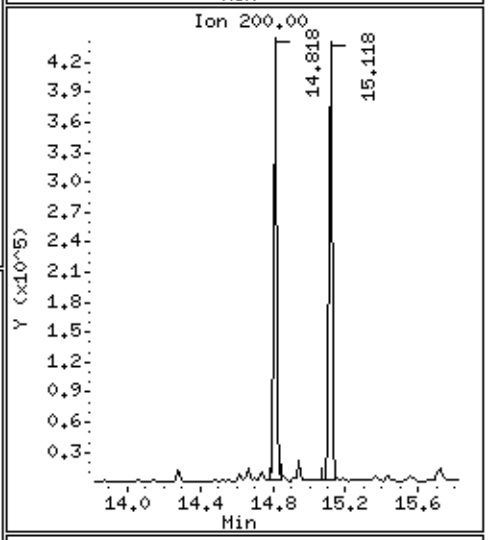


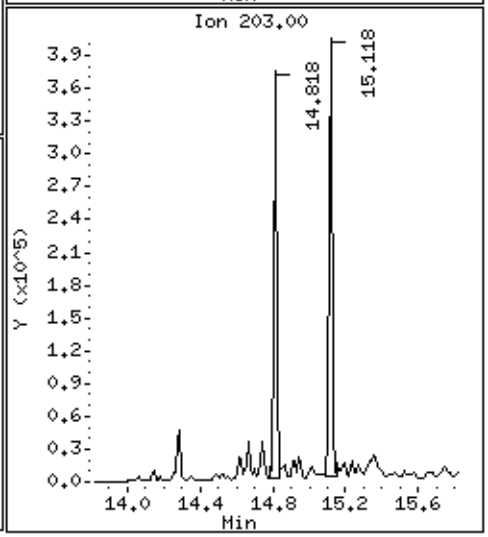












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Date : 03-MAR-2023 23:32

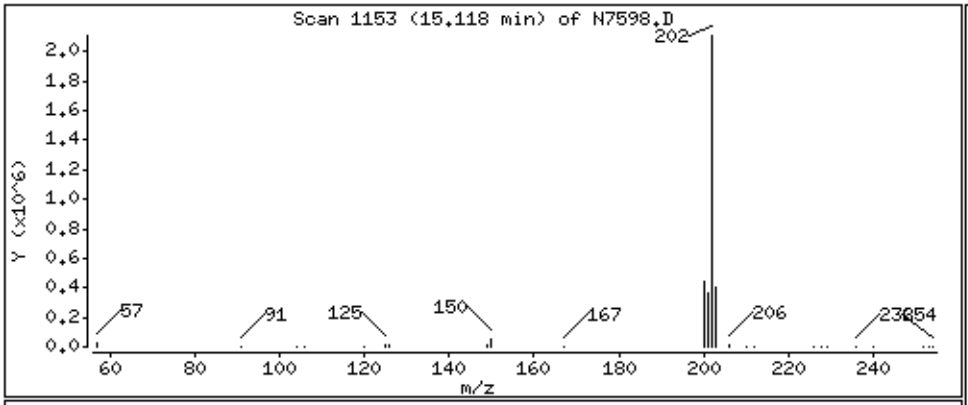
Client ID: SY-SB4R-10 Instrument: gcms-n.i

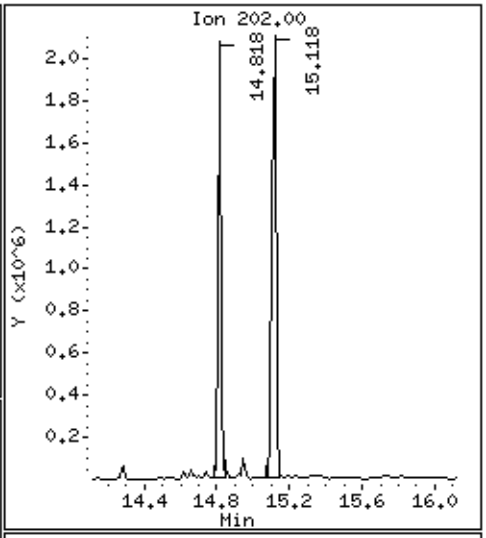
Sample Info: SQ0595-2

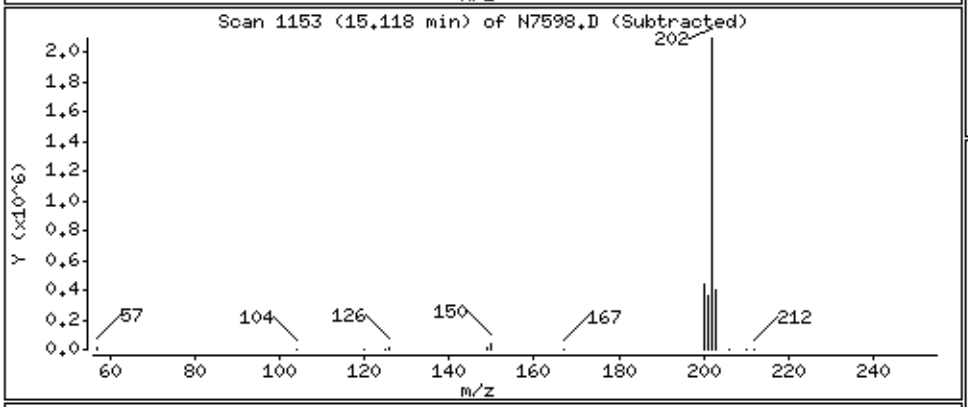
Volume Injected (uL): 1.0 Operator: DT/CO

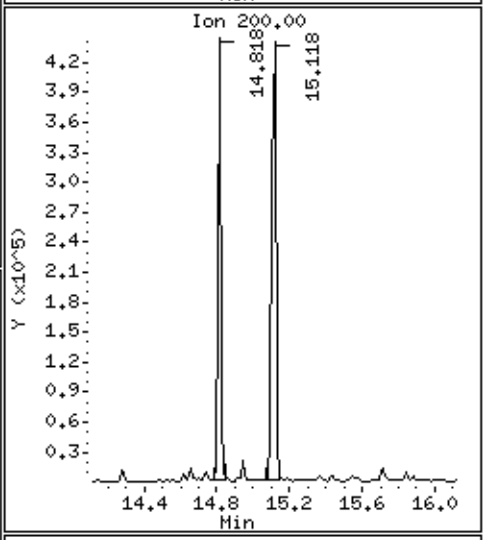
Column phase: ZB5-MS Column diameter: 0.25

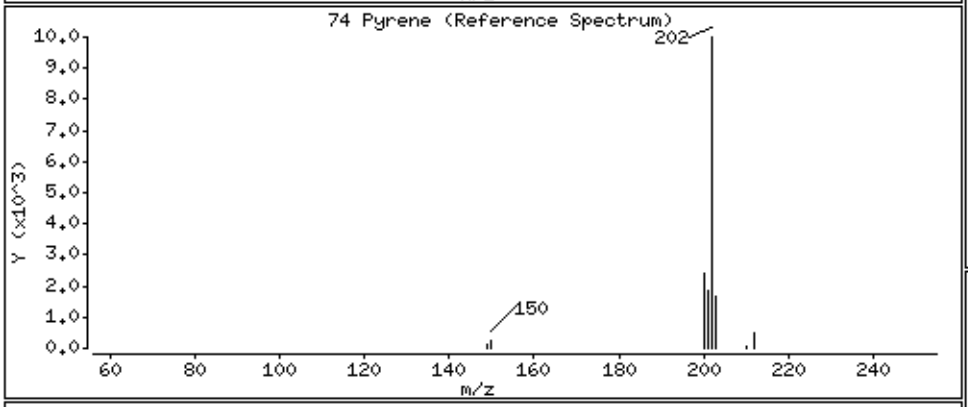
74 Pyrene Concentration: 572 ug/Kgdrywt

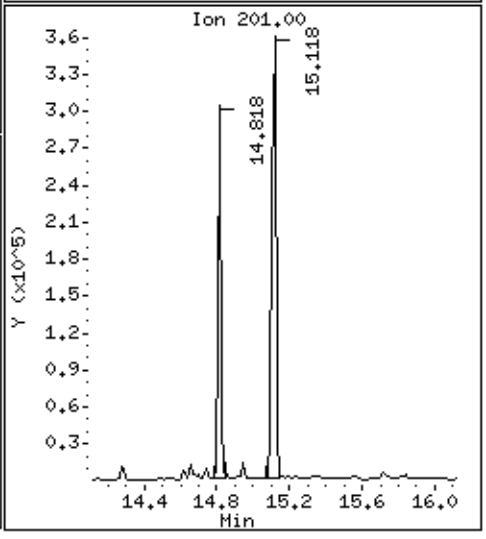


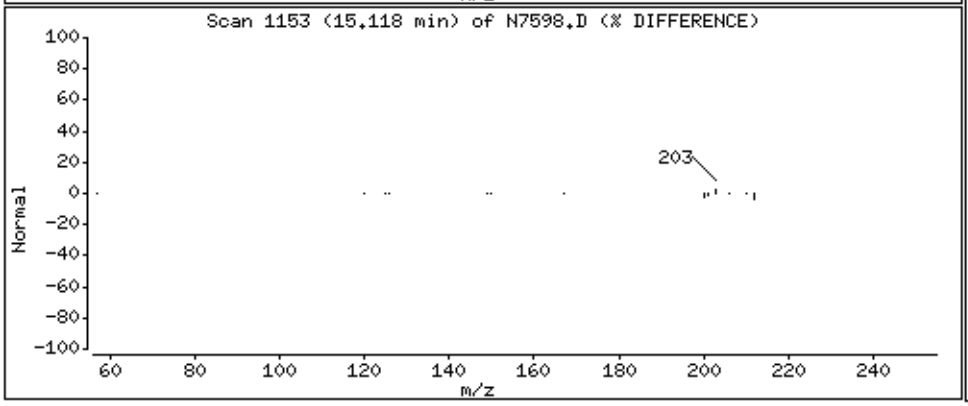












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Date : 03-MAR-2023 23:32

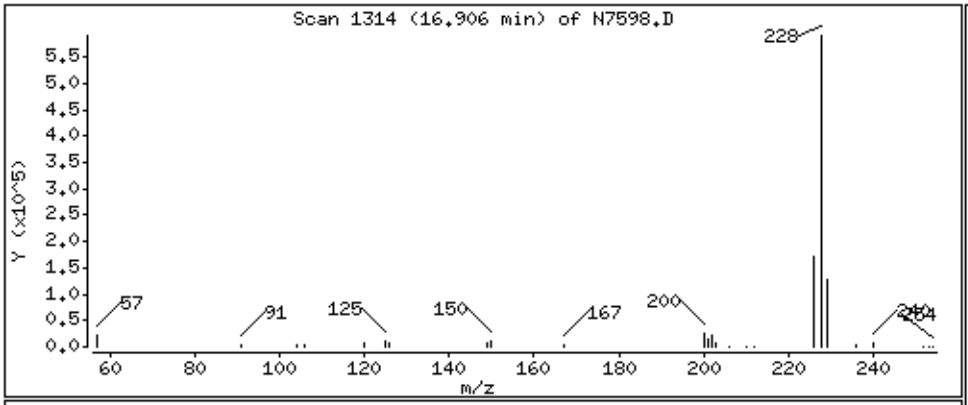
Client ID: SY-SB4R-10 Instrument: gcms-n.i

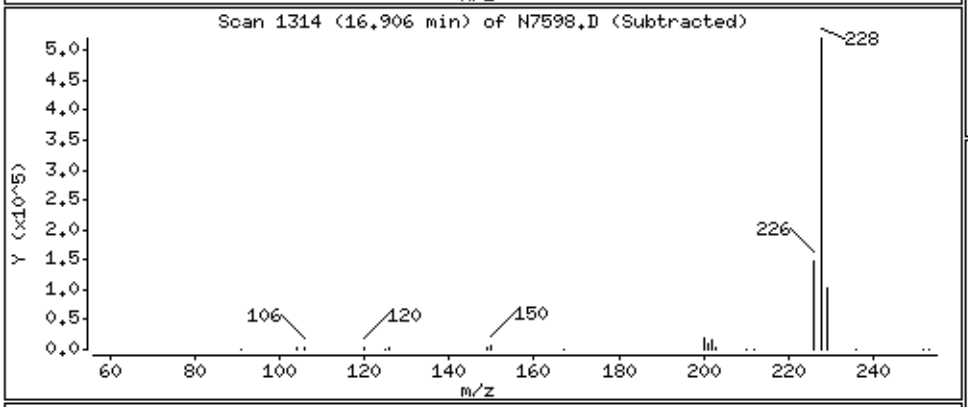
Sample Info: SQ0595-2

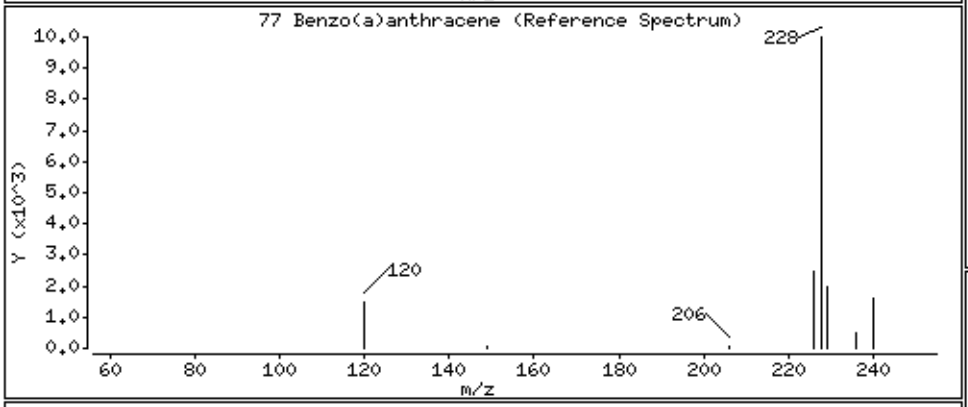
Volume Injected (uL): 1.0 Operator: DT/CO

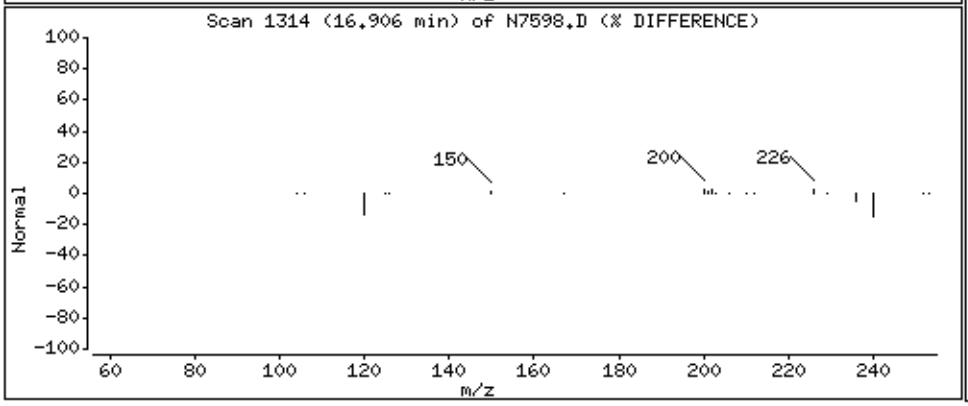
Column phase: ZB5-MS Column diameter: 0.25

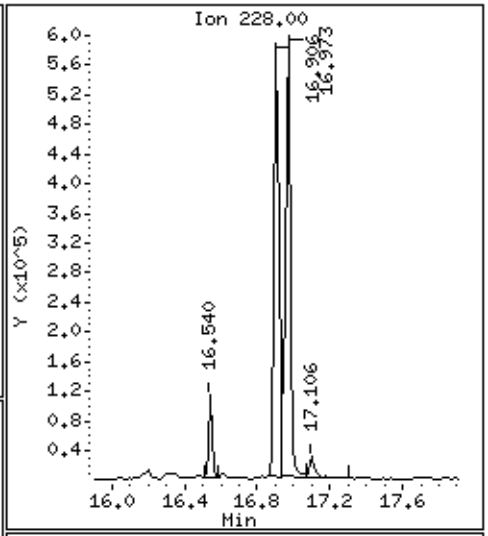
77 Benzo(a)anthracene Concentration: 378 ug/Kgdrywt

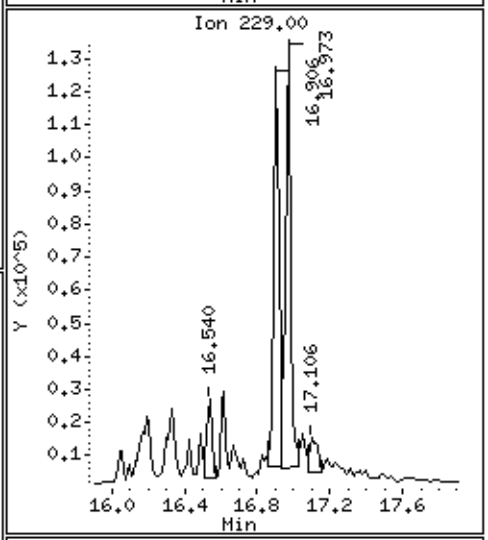


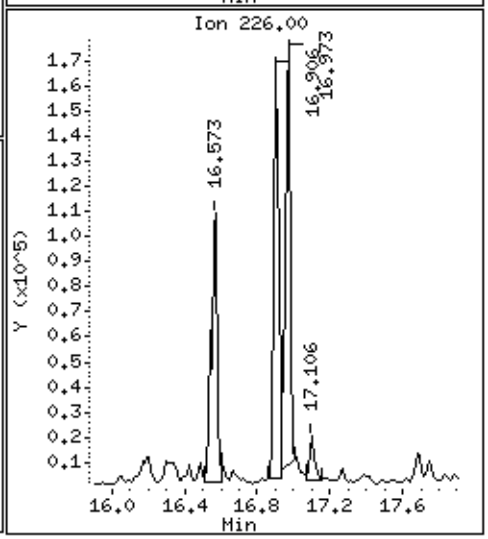












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Date : 03-MAR-2023 23:32

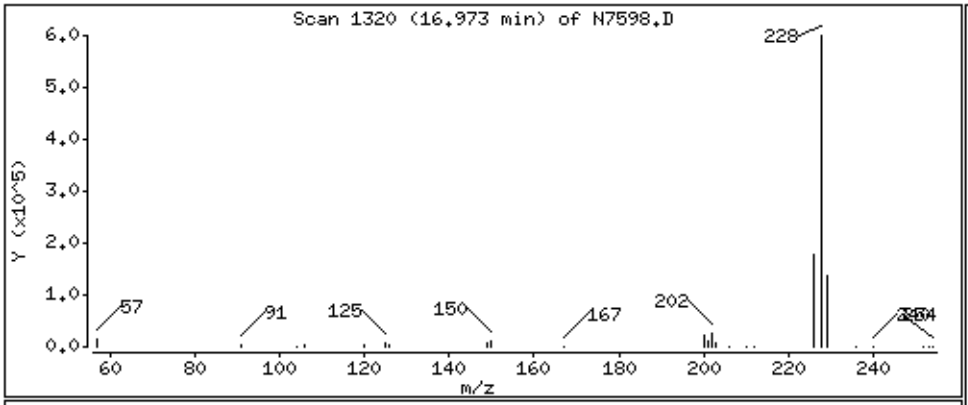
Client ID: SY-SB4R-10 Instrument: gcms-n.i

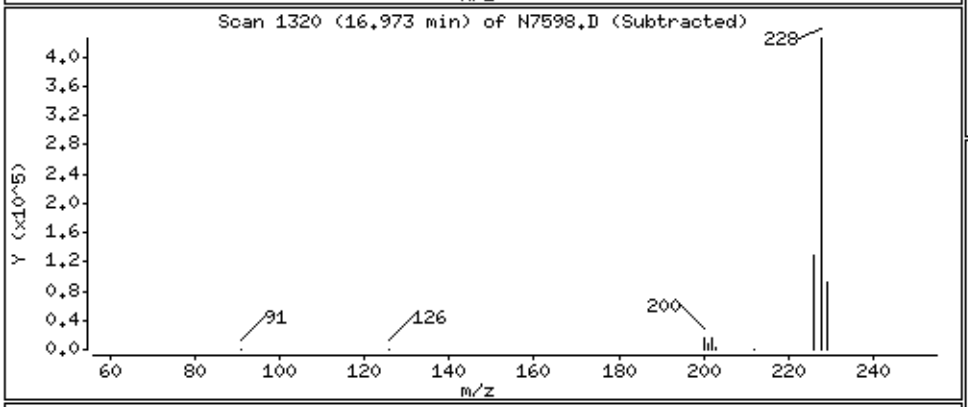
Sample Info: SQ0595-2

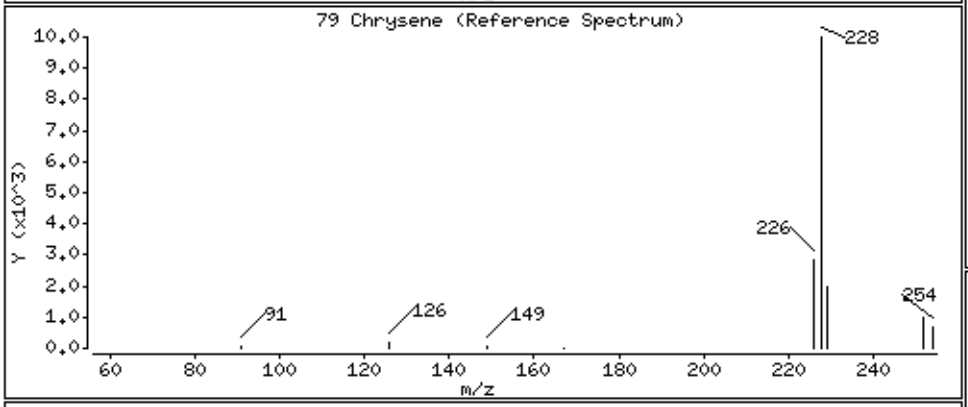
Volume Injected (uL): 1.0 Operator: DT/CO

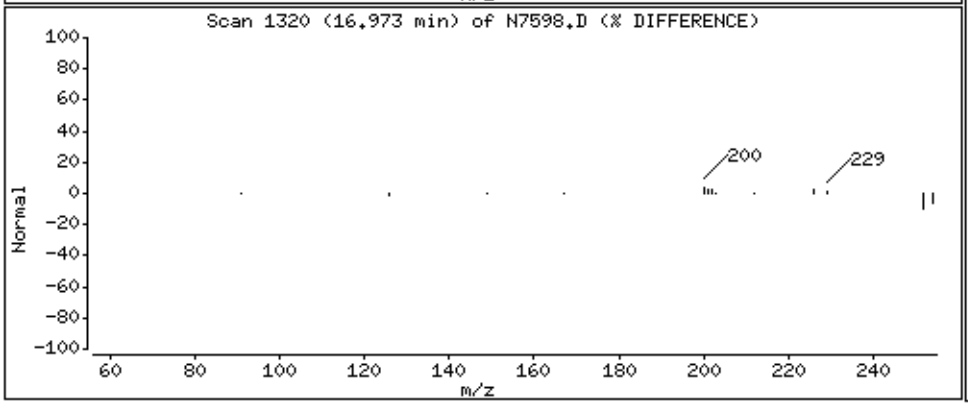
Column phase: ZB5-MS Column diameter: 0.25

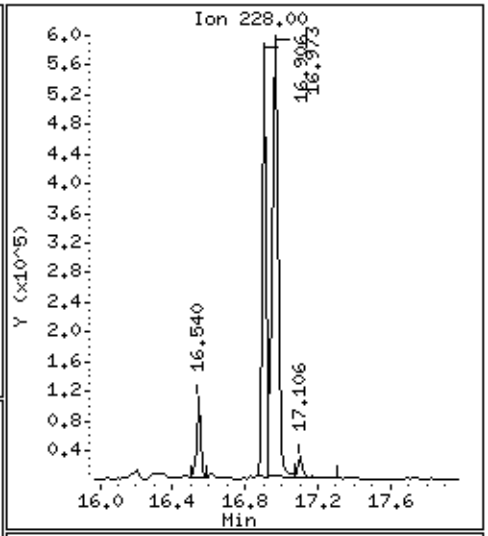
79 Chrysene Concentration: 429 ug/Kgdrywt

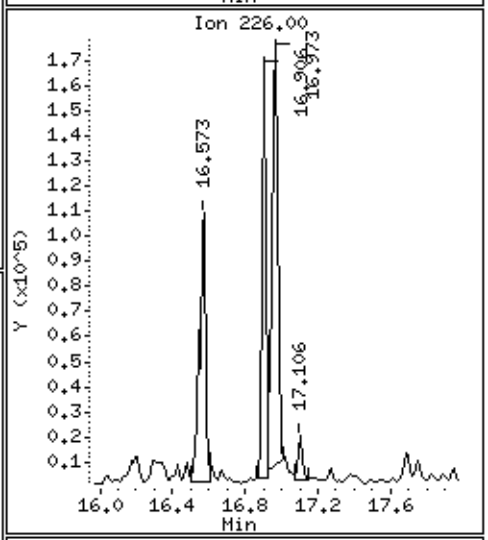


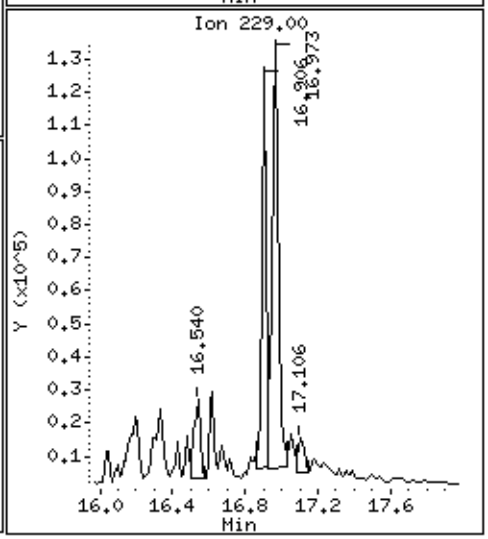












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Date : 03-MAR-2023 23:32

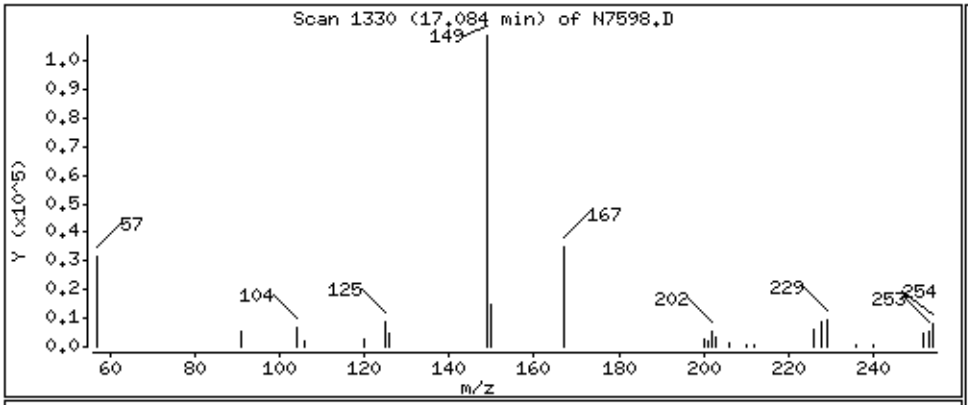
Client ID: SY-SB4R-10 Instrument: gcms-n.i

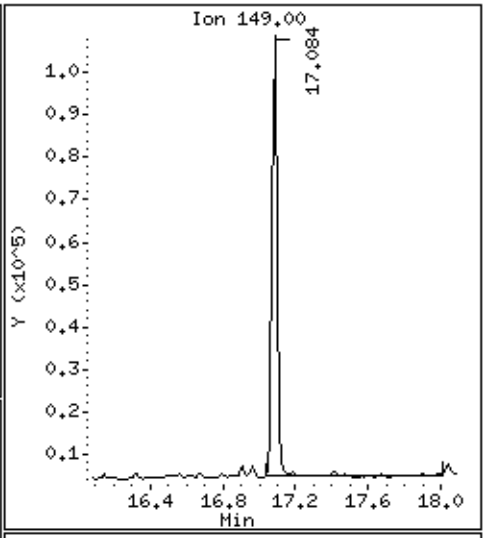
Sample Info: SQ0595-2

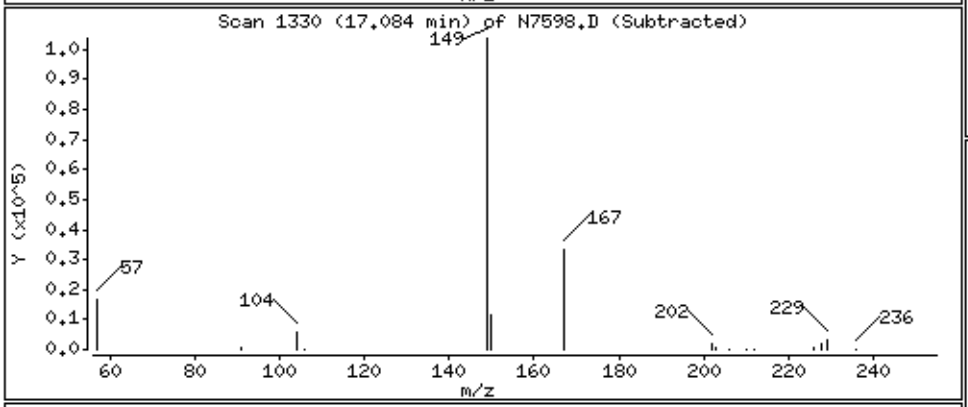
Volume Injected (uL): 1.0 Operator: DT/CO

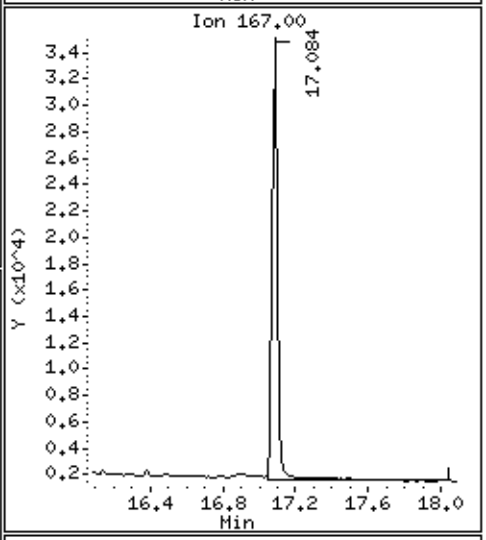
Column phase: ZB5-MS Column diameter: 0.25

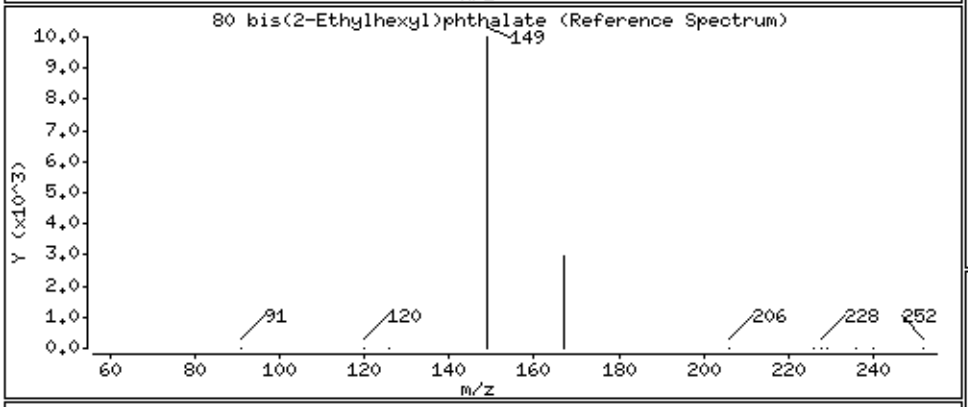
80 bis(2-Ethylhexyl)phthalate Concentration: 46.1 ug/Kgdrywt

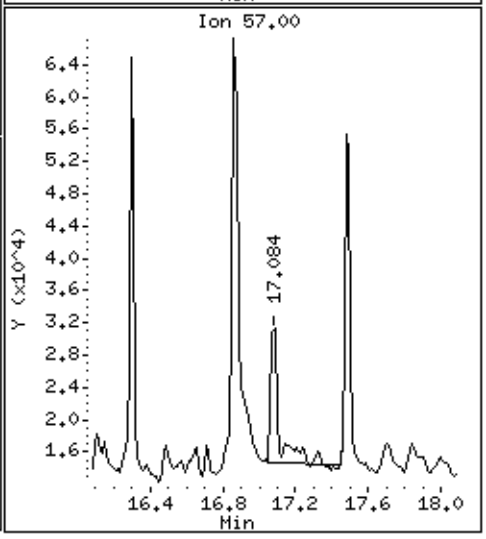


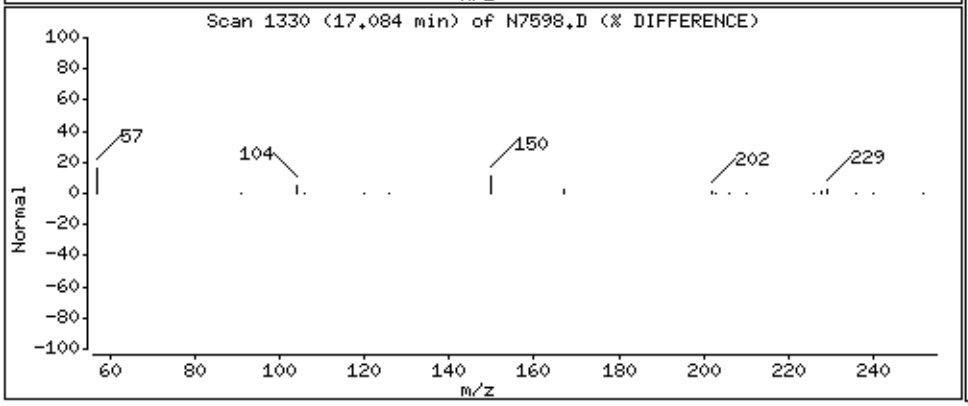












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Date : 03-MAR-2023 23:32

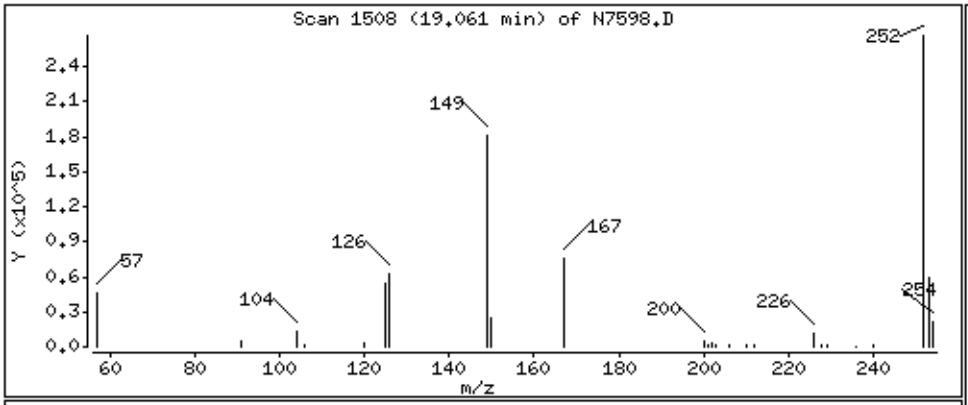
Client ID: SY-SB4R-10 Instrument: gcms-n.i

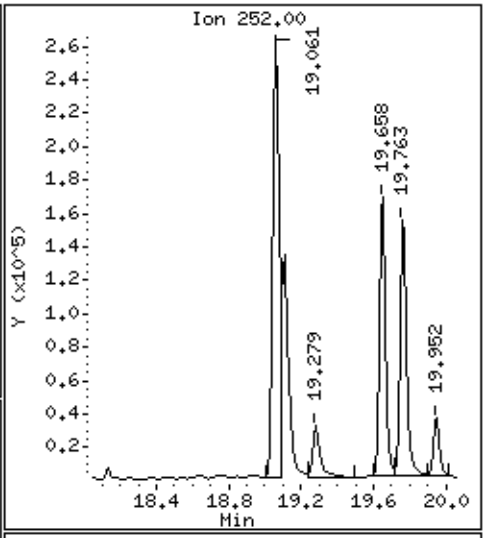
Sample Info: SQ0595-2

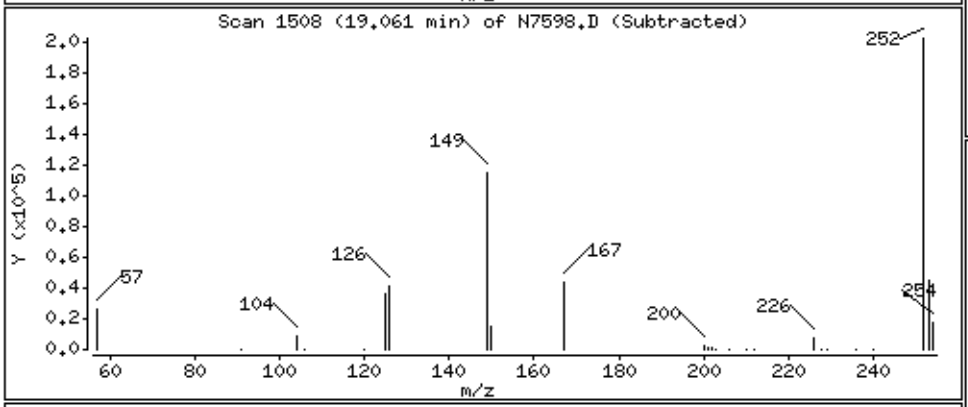
Volume Injected (uL): 1.0 Operator: DT/CO

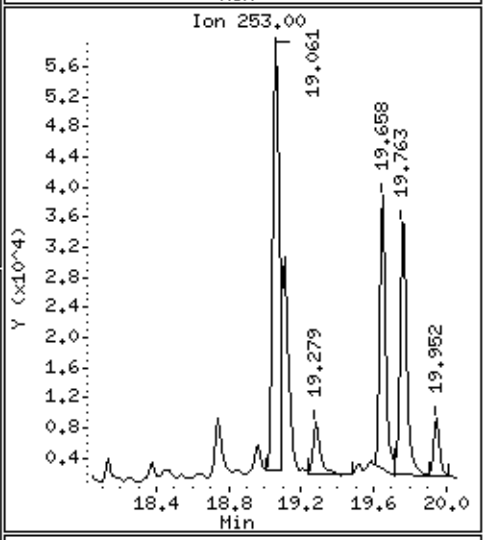
Column phase: ZB5-MS Column diameter: 0.25

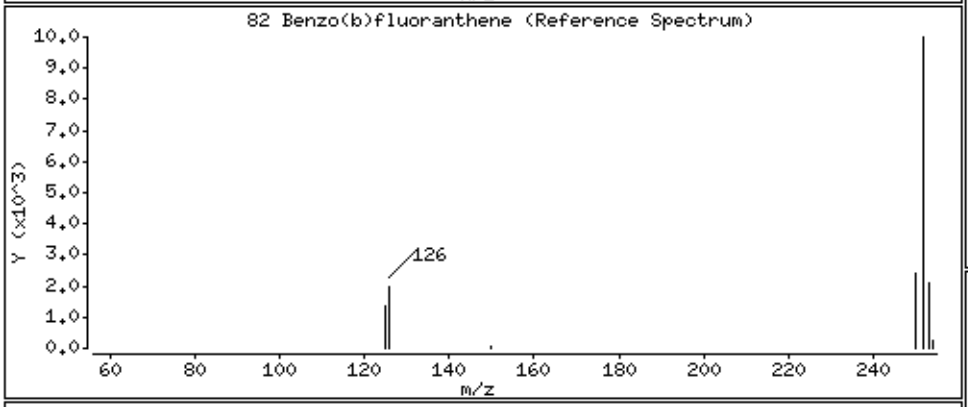
82 Benzo(b)fluoranthene Concentration: 402 ug/Kgdrywt

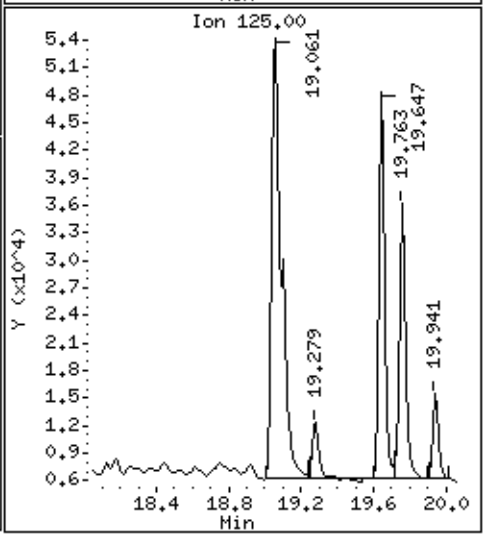


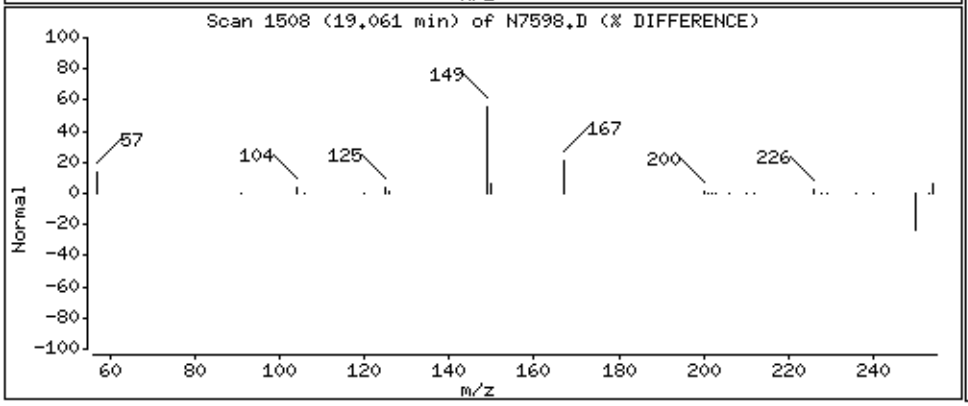












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Date : 03-MAR-2023 23:32

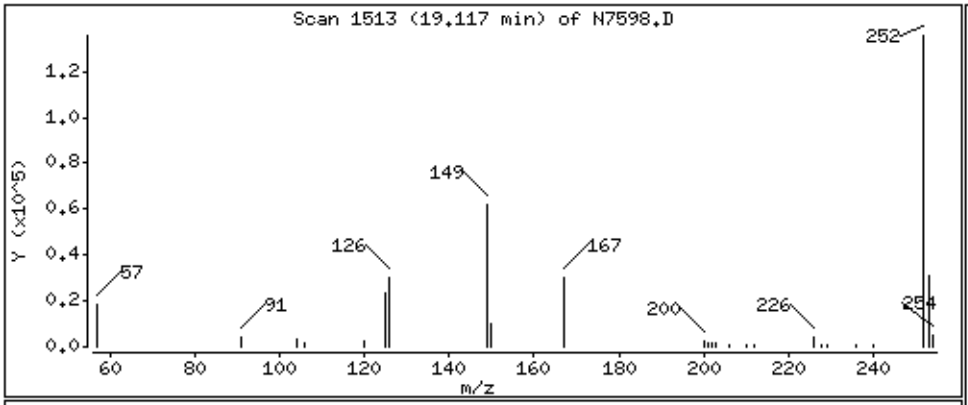
Client ID: SY-SB4R-10 Instrument: gcms-n.i

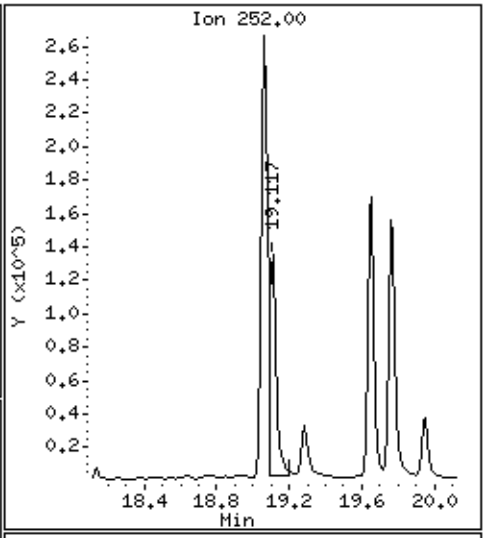
Sample Info: SQ0595-2

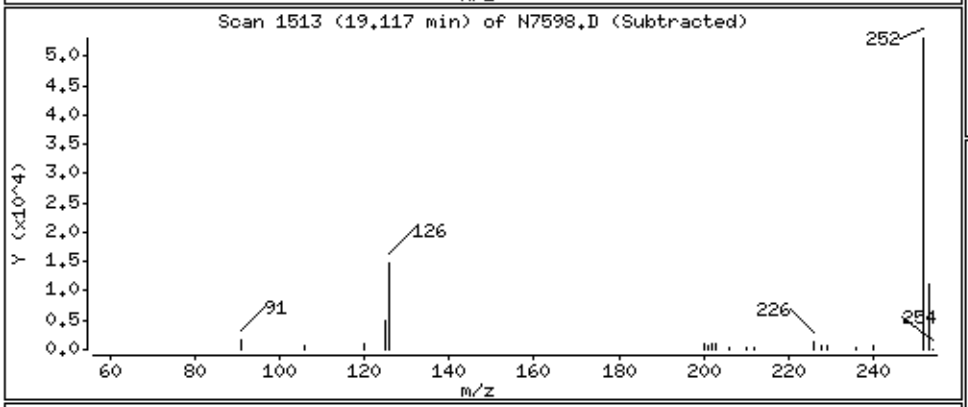
Volume Injected (uL): 1.0 Operator: DT/CO

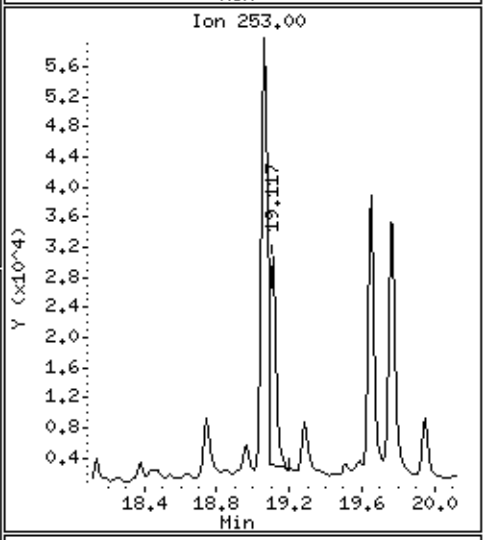
Column phase: ZB5-MS Column diameter: 0.25

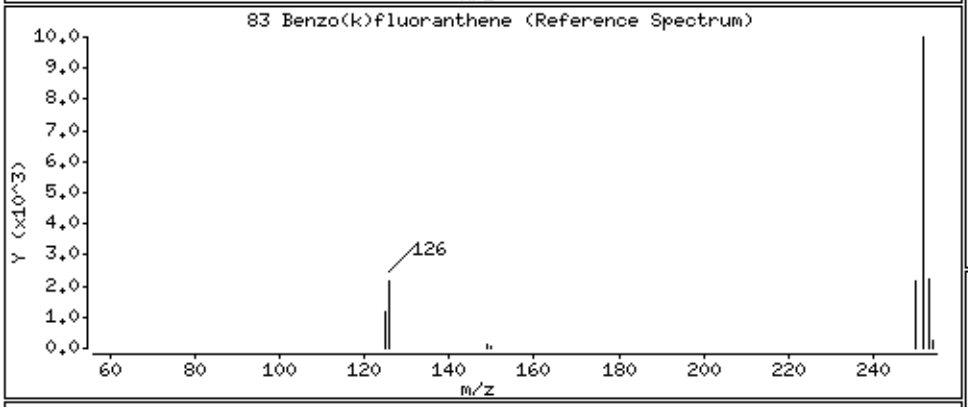
83 Benzo(k)fluoranthene Concentration: 126 ug/Kgdrywt

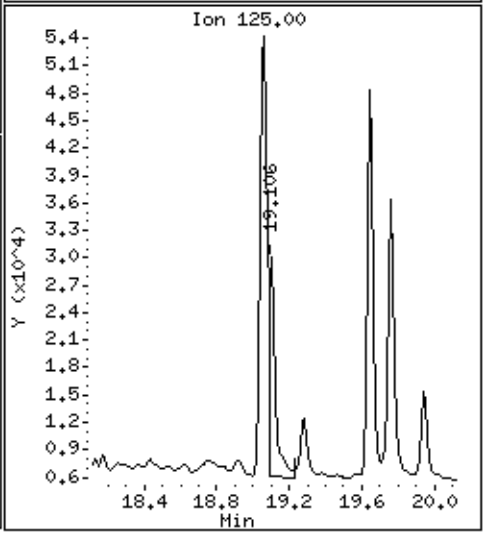


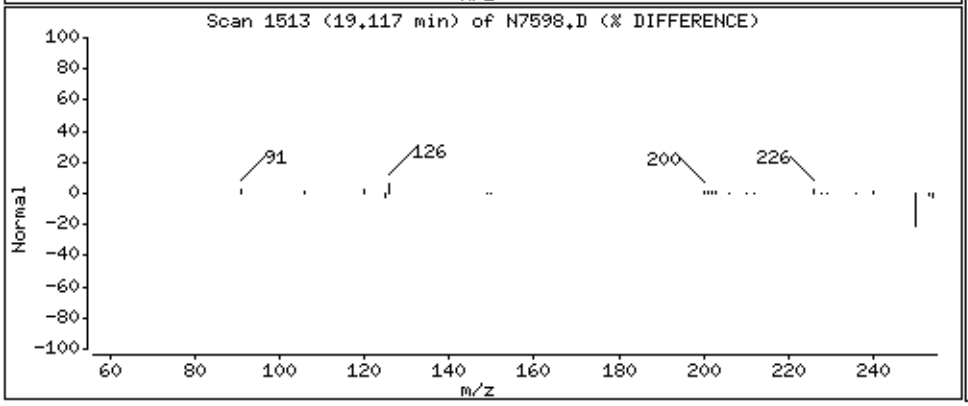












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Date : 03-MAR-2023 23:32

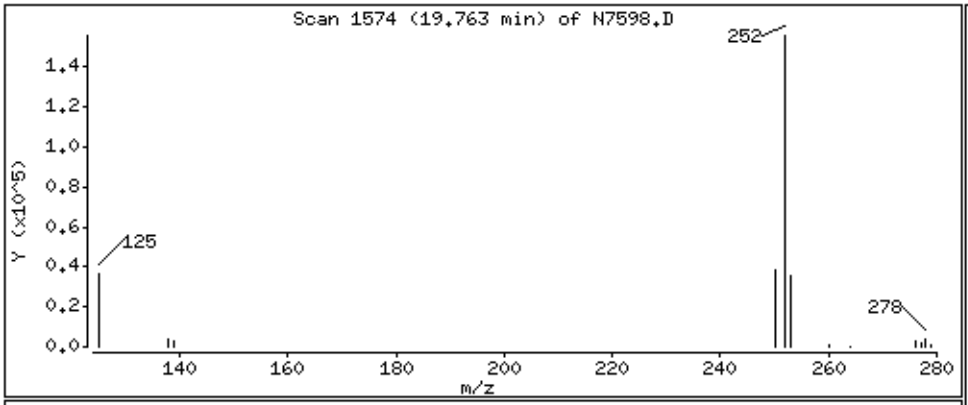
Client ID: SY-SB4R-10 Instrument: gcms-n.i

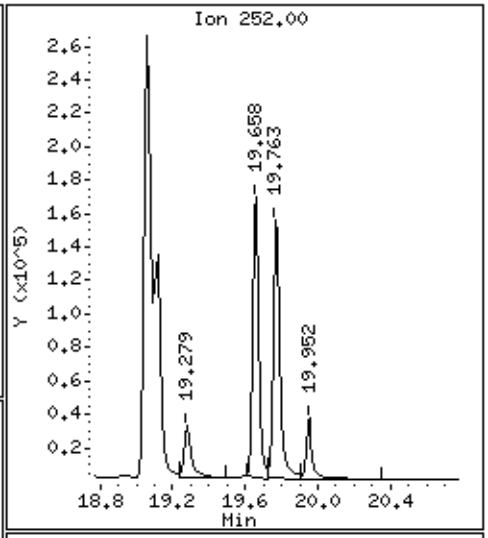
Sample Info: SQ0595-2

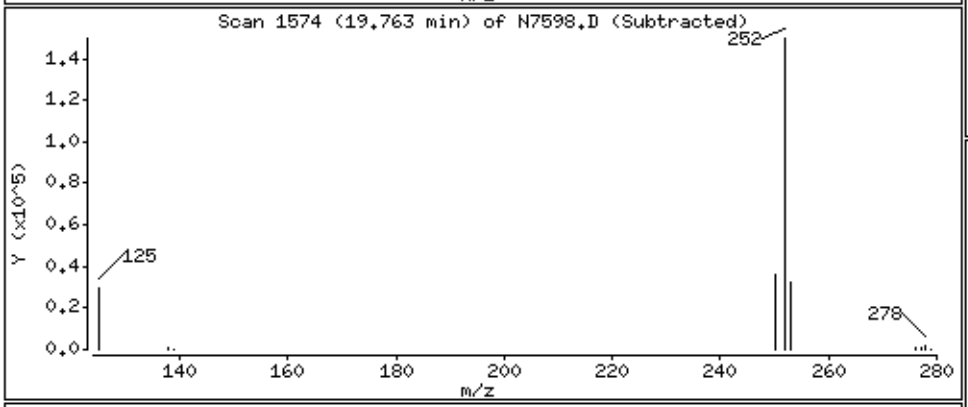
Volume Injected (uL): 1.0 Operator: DT/CO

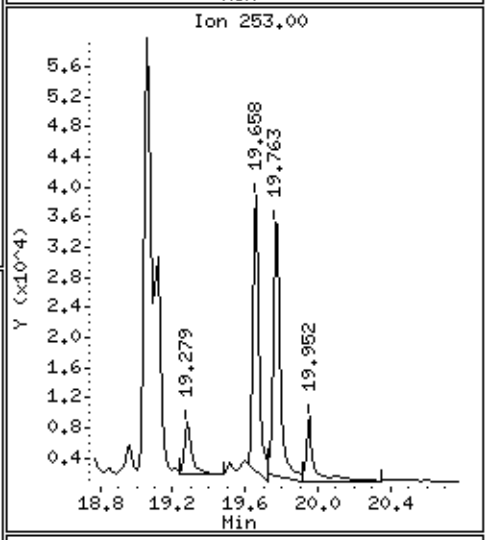
Column phase: ZB5-MS Column diameter: 0.25

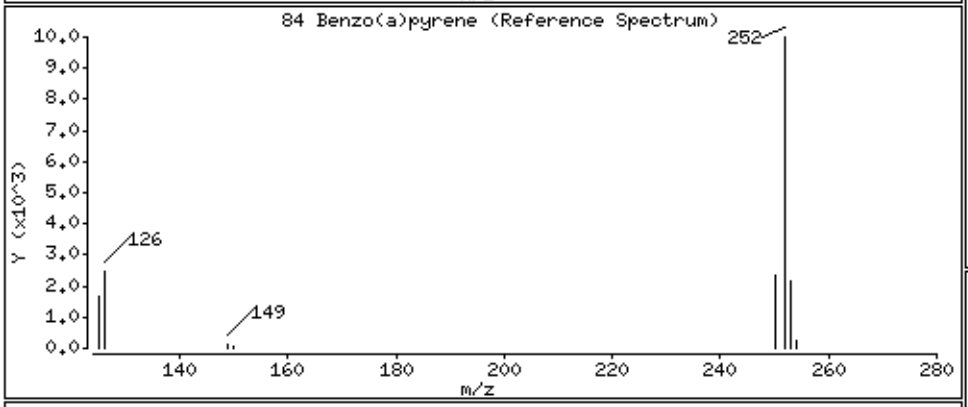
84 Benzo(a)pyrene Concentration: 261 ug/Kgdrywt

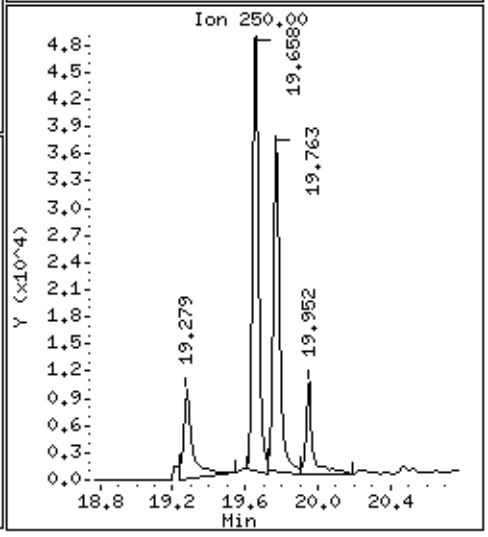


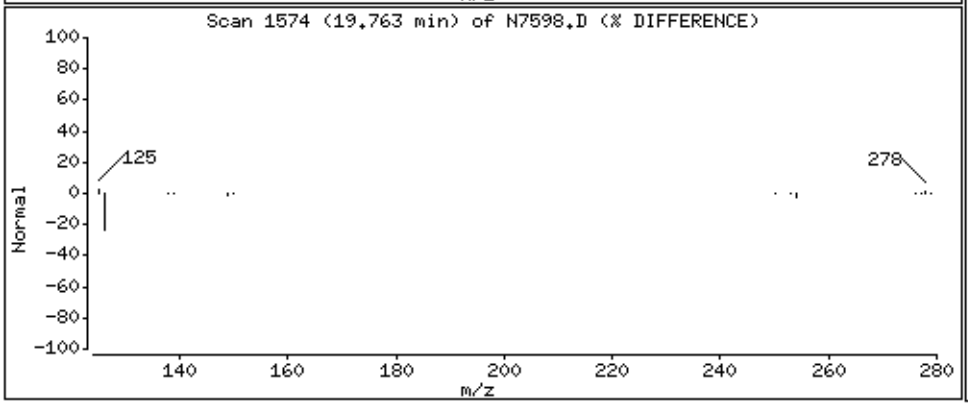












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Date : 03-MAR-2023 23:32

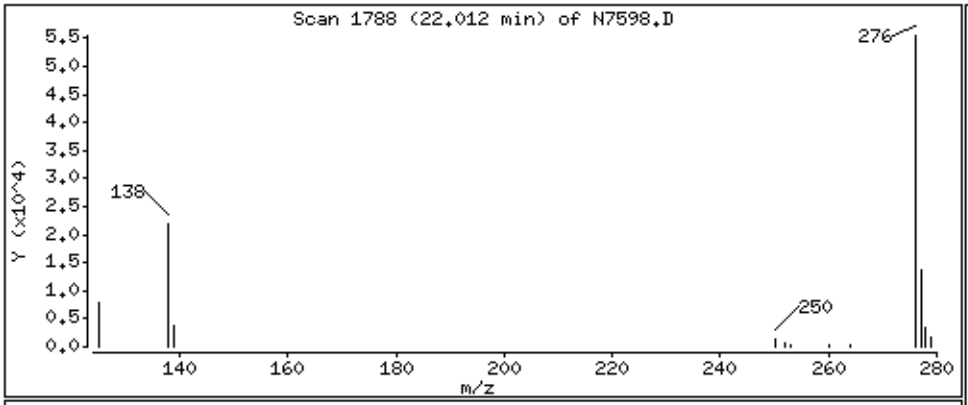
Client ID: SY-SB4R-10 Instrument: gcms-n.i

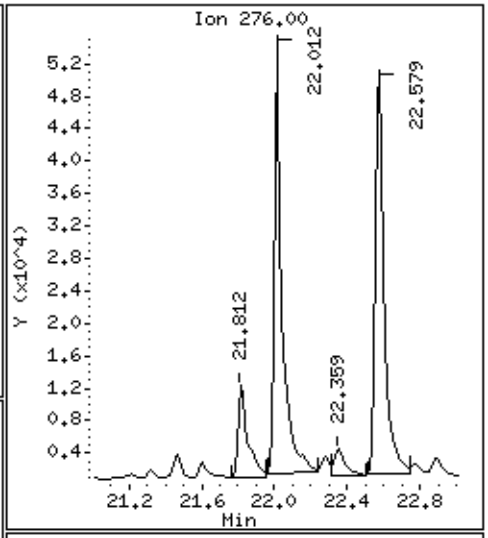
Sample Info: SQ0595-2

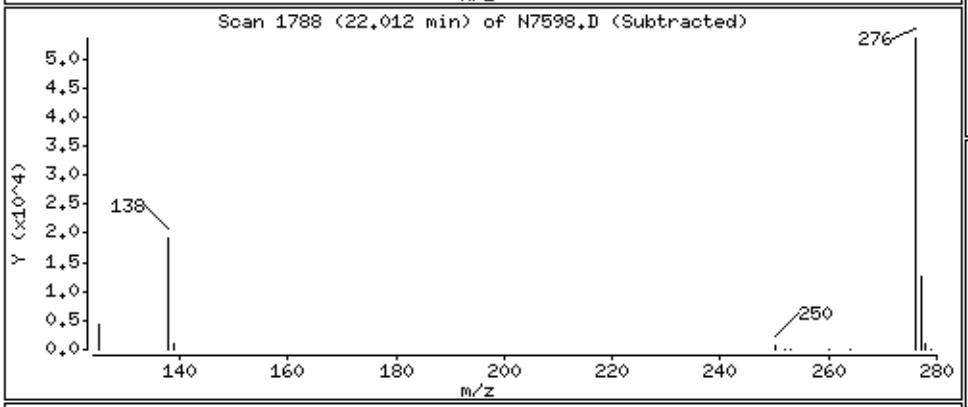
Volume Injected (uL): 1.0 Operator: DT/CO

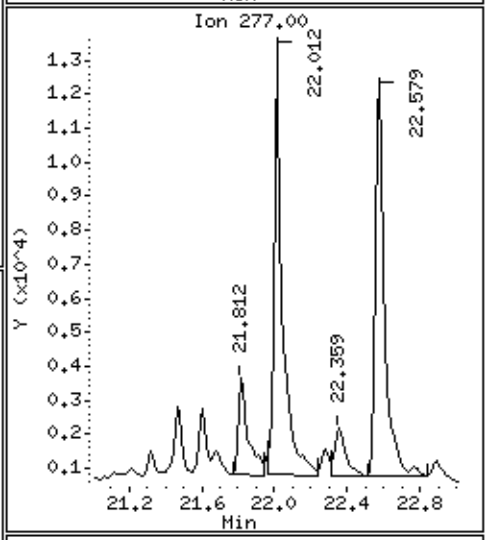
Column phase: ZB5-MS Column diameter: 0.25

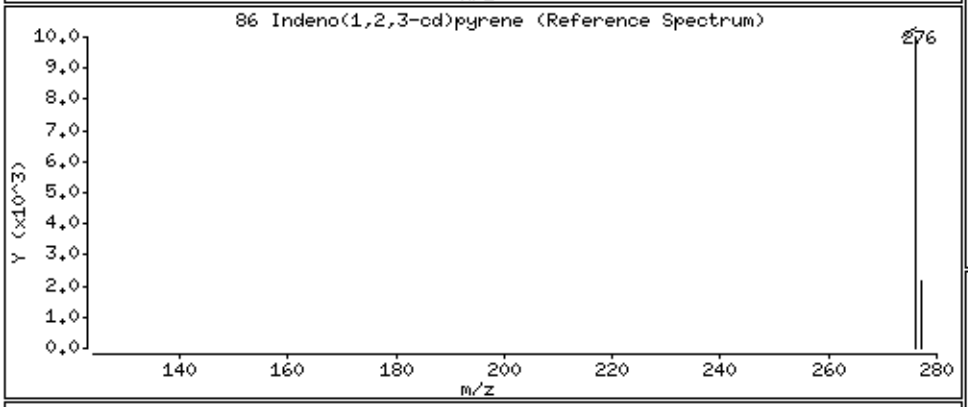
86 Indeno(1,2,3-cd)pyrene Concentration: 144 ug/Kgdrywt

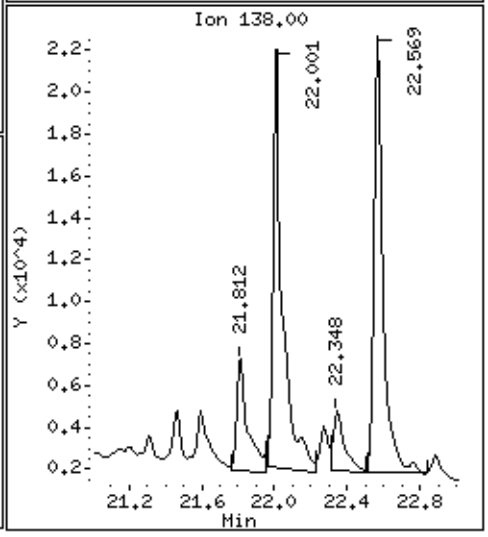


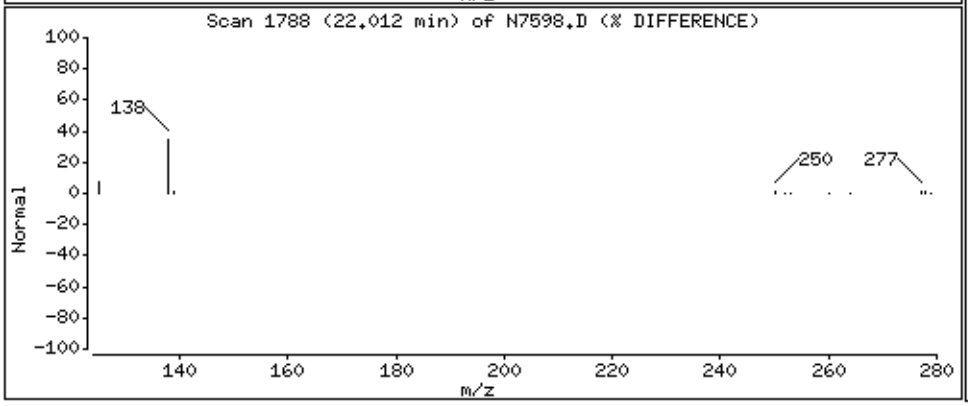












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Date : 03-MAR-2023 23:32

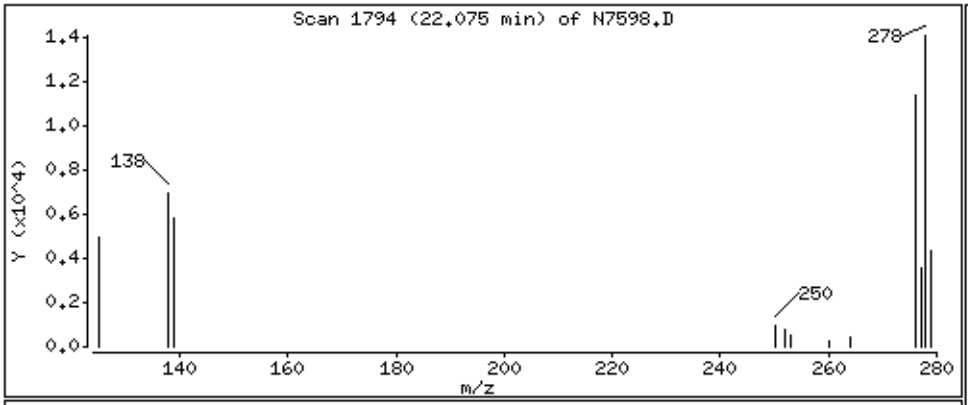
Client ID: SY-SB4R-10 Instrument: gcms-n.i

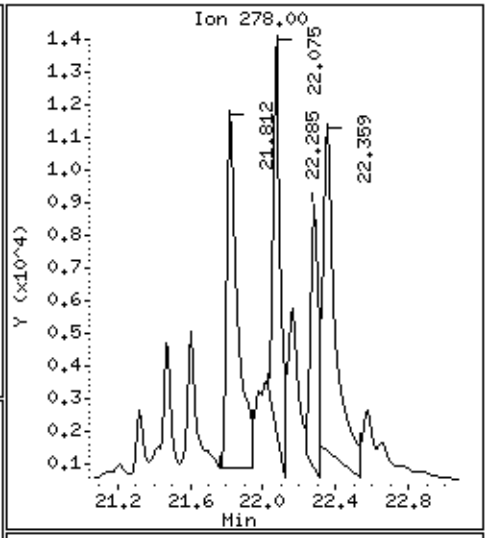
Sample Info: SQ0595-2

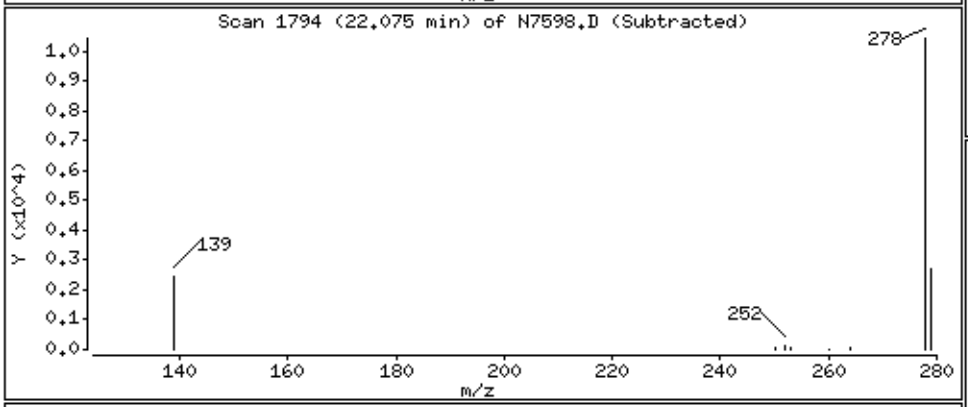
Volume Injected (uL): 1.0 Operator: DT/CO

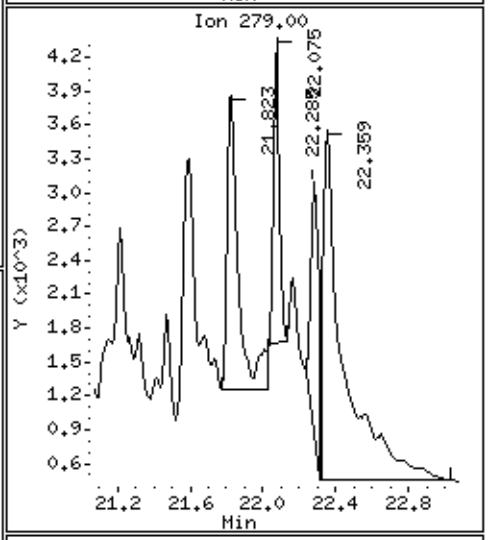
Column phase: ZB5-MS Column diameter: 0.25

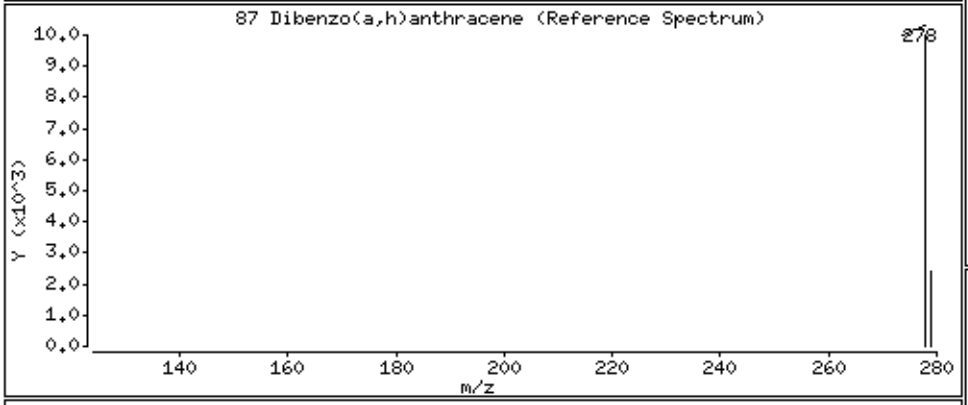
87 Dibenzo(a,h)anthracene Concentration: 52.6 ug/Kgdrywt

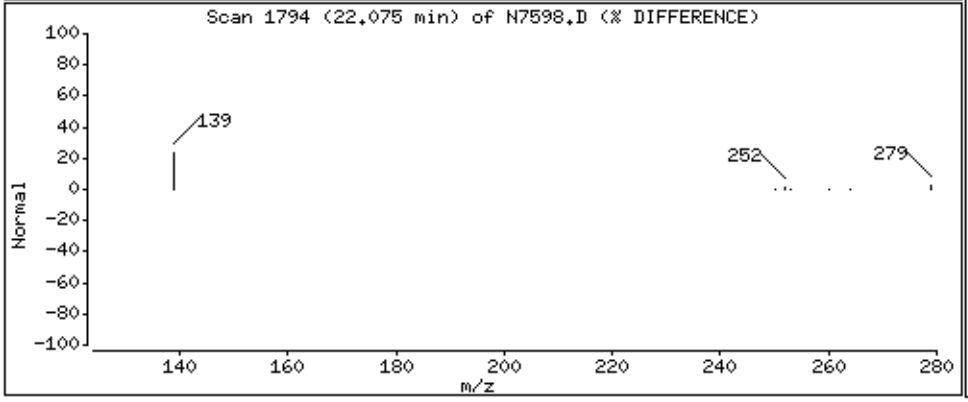


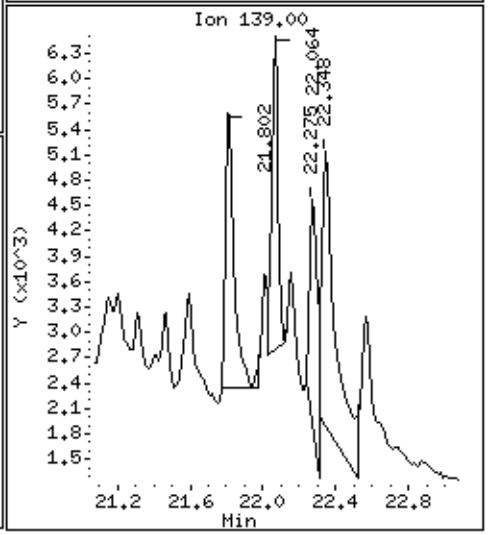












Data File: \\target_server\gg\chem\gcms-n.i\N030323.b\N7598.D

Date : 03-MAR-2023 23:32

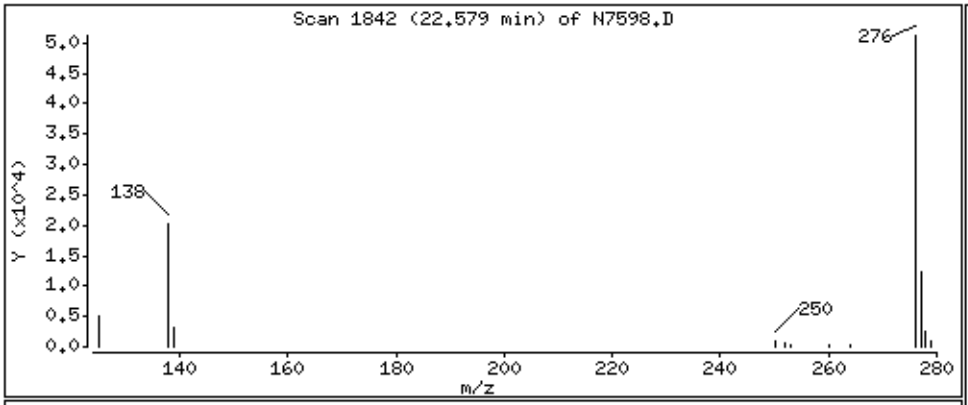
Client ID: SY-SB4R-10 Instrument: gcms-n.i

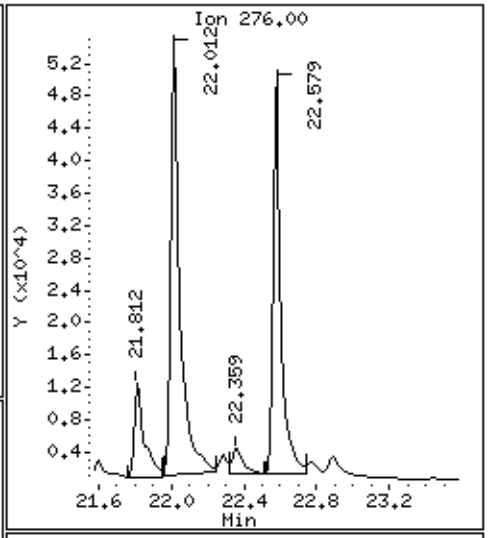
Sample Info: SQ0595-2

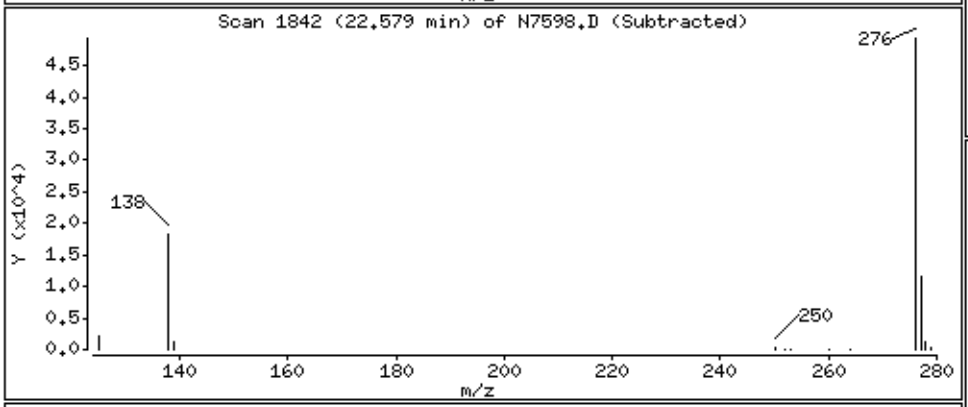
Volume Injected (uL): 1.0 Operator: DT/CO

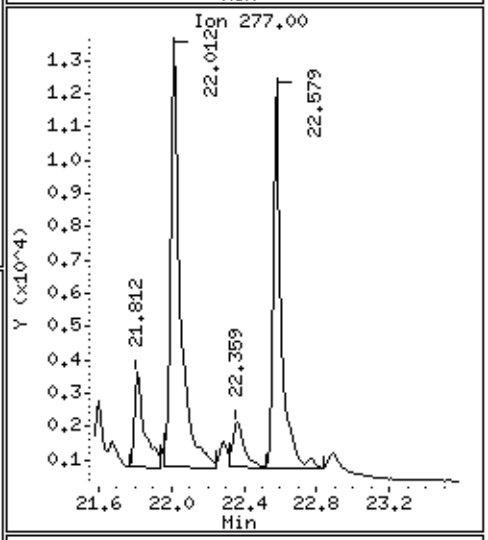
Column phase: ZB5-MS Column diameter: 0.25

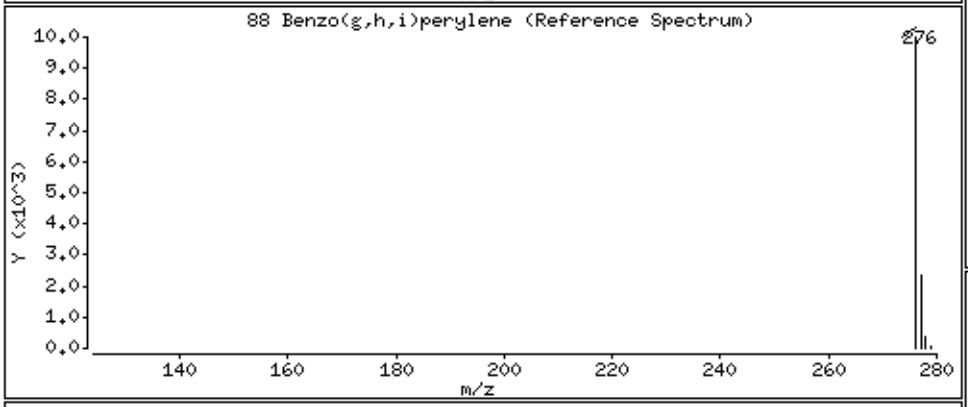
88 Benzo(g,h,i)perylene Concentration: 150 ug/Kgdrywt

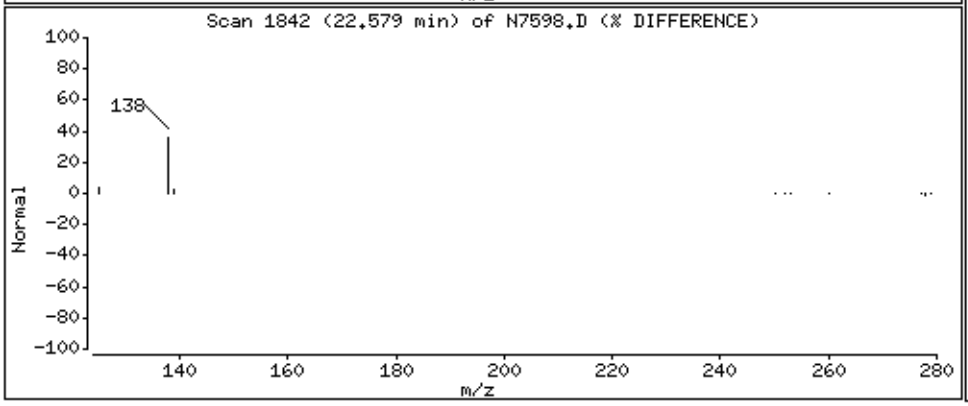


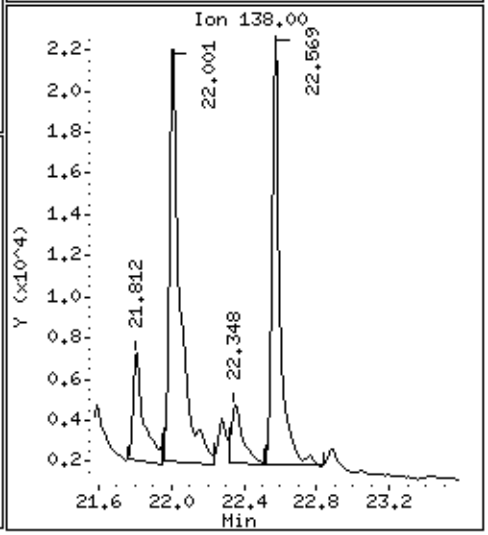












Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

SDG: SQ0595
Lab ID: SQ0595-2DL
Client ID: SY-SB4R-10
Matrix: SL
Lab File ID: N7762.D

Sample Date: 01-FEB-23
Extract Date: 08-FEB-23
Extracted By: SR
Extraction Method: SW846 3550C
Lab Prep Batch: WG332122

Report Date: 23-MAR-23
Analysis Date: 20-MAR-23
Analyst: DT/EP
Analysis Method: SW846 8270D SIM
% Solids: 87.

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene		0.083	mg/Kgdrywt	2	.02	0.043	0.0056	0.021
2-Methylnaphthalene		0.12	mg/Kgdrywt	2	.02	0.043	0.0047	0.021
Acenaphthylene	J	0.024	mg/Kgdrywt	2	.02	0.043	0.0026	0.021
Acenaphthene	J	0.0050	mg/Kgdrywt	2	.02	0.043	0.0032	0.021
Fluorene	J	0.017	mg/Kgdrywt	2	.02	0.043	0.0068	0.021
Phenanthrene		0.24	mg/Kgdrywt	2	.02	0.043	0.0038	0.021
Anthracene	J	0.032	mg/Kgdrywt	2	.02	0.043	0.0026	0.021
Fluoranthene		0.46	mg/Kgdrywt	2	.02	0.043	0.0038	0.021
Pyrene		0.49	mg/Kgdrywt	2	.02	0.043	0.0045	0.021
Benzo(a)anthracene		0.32	mg/Kgdrywt	2	.02	0.043	0.0040	0.021
Chrysene		0.40	mg/Kgdrywt	2	.02	0.043	0.0036	0.021
Benzo(b)Fluoranthene		0.44	mg/Kgdrywt	2	.02	0.043	0.0051	0.021
Benzo(k)fluoranthene		0.043	mg/Kgdrywt	2	.02	0.043	0.0073	0.021
Benzo(a)pyrene		0.24	mg/Kgdrywt	2	.02	0.043	0.0070	0.021
Indeno(1,2,3-cd)pyrene		0.18	mg/Kgdrywt	2	.02	0.043	0.0040	0.021
Dibenzo(a,h)anthracene	J	0.039	mg/Kgdrywt	2	.02	0.043	0.0038	0.021
Benzo(g,h,i)perylene		0.14	mg/Kgdrywt	2	.02	0.043	0.0043	0.021
2-Methylnaphthalene-D10		57.0	mg/Kgdrywt					
Fluorene-D10		56.6	mg/Kgdrywt					
Pyrene-D10		70.4	mg/Kgdrywt					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029
http://www.katahdinlab.com

Data File: \\target_server\gg\chem\gcms-n.i\N032023.b\N7762.D
Report Date: 23-Mar-2023 10:59

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-n.i\N032023.b\N7762.D
Lab Smp Id: SQ0595-2DL Client Smp ID: SY-SB4R-10
Inj Date : 20-MAR-2023 19:31
Operator : DT/EP Inst ID: gcms-n.i
Smp Info : SQ0595-2DL
Misc Info : WG334091,WG332122,WG334091-4
Comment :
Method : \\target_server\gg\chem\gcms-n.i\N032023.b\NSPSIM26.m
Meth Date : 21-Mar-2023 06:46 epelletier Quant Type: ISTD
Cal Date : 20-MAR-2023 18:16 Cal File: N7760.D
Als bottle: 9
Dil Factor: 2.00000
Integrator: HP RTE Compound Sublist: SW8270SIMPAH-S.sub
Target Version: 4.12

Concentration Formula: Amt * DF * (Vt/Ws)*(100/(100-M))*1000 * CpndVariable

Name	Value	Description
DF	2.000	Dilution Factor
Vt	0.00100	Final Volume (L)
Ws	0.03220	Weight of Sample (Kg)
M	12.797	% Moisture
Cpnd Variable		Local Compound Variable

DT
11:01 am, Mar 23, 2023

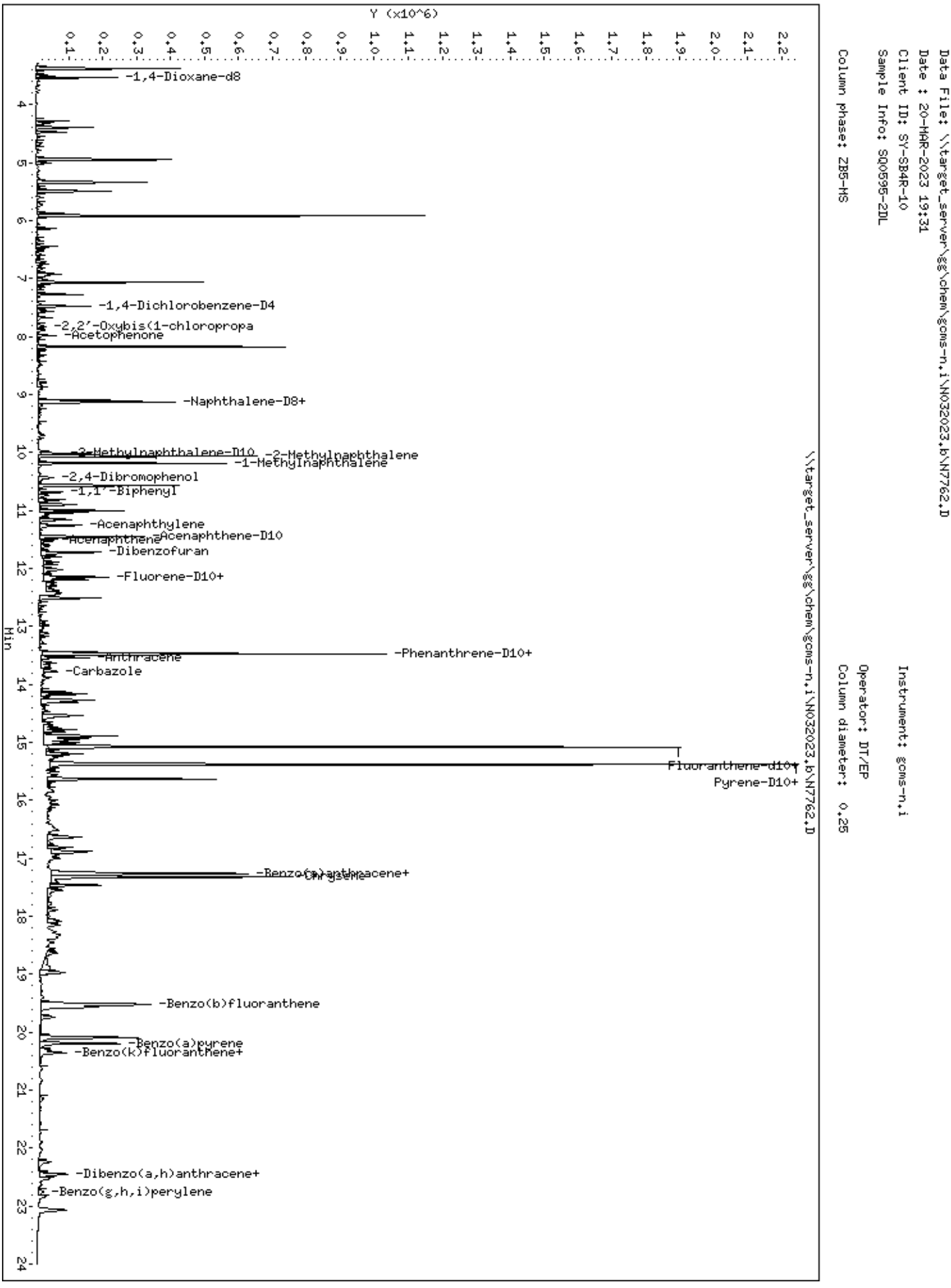
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/Kgdrywt)	REVIEW COD
$	1 1,4-Dioxane-d8	96	3.751	3.667	(0.502)	7681	0.23218	16.5(RH)	
*	10 1,4-Dichlorobenzene-D4	152	7.474	7.474	(1.000)	60095	0.80000	(Q)	
	14 2,2'-Oxybis(1-chloropropane)	45	7.817	7.838	(1.046)	9180	0.22618	16.1(aQ)	
	15 Acetophenone	105	7.984	7.995	(0.877)	31805	0.27955	19.9(a)	
*	27 Naphthalene-D8	136	9.108	9.108	(1.000)	217600	0.80000		
	28 Naphthalene	128	9.128	9.139	(1.002)	318300	1.16880	83.2	
$	33 2-Methylnaphthalene-D10	152	10.016	10.017	(1.100)	75675	0.57057	40.6	
	34 2-Methylnaphthalene	142	10.058	10.059	(1.104)	284854	1.67761	119	
	35 1-Methylnaphthalene	142	10.186	10.186	(1.118)	200691	1.25679	89.5	
$	38 2,4-Dibromophenol	252	10.440	10.440	(0.912)	44318	1.18863	84.7	
	41 1,1'-Biphenyl	154	10.694	10.694	(0.934)	44152	0.21974	15.6(a)	
	46 Acenaphthylene	152	11.252	11.263	(0.983)	83425	0.33723	24.0(aM)	M6
*	48 Acenaphthene-D10	164	11.450	11.451	(1.000)	105328	0.80000		
	49 Acenaphthene	153	11.492	11.493	(1.004)	11389	0.07053	5.02(aQH)	
	52 Dibenzofuran	168	11.722	11.733	(1.024)	116637	0.53694	38.2(a)	
$	56 Fluorene-D10	174	12.150	12.161	(1.061)	77506	0.56639	40.3	
	57 Fluorene	166	12.181	12.192	(1.064)	40903	0.23945	17.0(aQH)	
*	66 Phenanthrene-D10	188	13.437	13.448	(1.000)	158899	0.80000		
	67 Phenanthrene	178	13.468	13.479	(1.002)	802086	3.39897	242	
	68 Anthracene	178	13.540	13.551	(1.008)	101817	0.44206	31.5(a)	
	69 Carbazole	167	13.776	13.776	(1.025)	27856	0.22362	15.9(aQ)	
$	71 Fluoranthene-d10	212	15.053	15.064	(1.120)	97474	0.72768	51.8	

Data File: \\target_server\gg\chem\gcms-n.i\N032023.b\N7762.D
Report Date: 23-Mar-2023 10:59

			QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/Kgdrywt)	REVIEW COD
	72	Fluoranthene	202	15.084	15.094	(1.123)	1326078	6.50891	464	
$	73	Pyrene-D10	212	15.359	15.369	(0.889)	115118	0.70366	50.1	
	74	Pyrene	202	15.379	15.390	(0.890)	1508276	6.90702	492	
	77	Benzo(a)anthracene	228	17.264	17.274	(0.999)	569995	4.51433	322	
*	78	Chrysene-D12	240	17.274	17.295	(1.000)	73767	0.80000		
	79	Chrysene	228	17.325	17.335	(1.003)	792457	5.57217	397	
	82	Benzo(b)fluoranthene	252	19.510	19.521	(0.961)	582174	6.10769	435	
	83	Benzo(k)fluoranthene	252	20.351	19.584	(1.002)	76120	0.60670	43.2	
	84	Benzo(a)pyrene	252	20.193	20.204	(0.994)	295448	3.41407	243	
*	85	Perylene-D12	264	20.309	20.309	(1.000)	50970	0.80000		
	86	Indeno(1,2,3-cd)pyrene	276	22.453	22.474	(1.106)	153071	2.60373	185(H)	
	87	Dibenzo(a,h)anthracene	278	22.526	22.558	(1.109)	33786	0.54980	39.2(a)	
	88	Benzo(g,h,i)perylene	276	23.062	23.094	(1.136)	143409	1.95481	139	
M	89	Total PAHs	100				7324279	47.3307	3370	

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.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Date : 20-MAR-2023 19:31
Client ID: SY-SB4R-10
Sample Info: SQ0595-2DL
Column phase: ZB5-MS
Instrument: gcms-n,i
Operator: DT/EP
Column diameter: 0.25
\\target_server\gg\chem\gcms-n,i\N032023,b\N7762.D
Y (x10^6)
Min
-1,4-Dioxane-d8
-1,4-Dichlorobenzene-D4
-2,2'-Oxybis(1-chloropropa
-Acetophenone
-Naphthalene-D8+
-2-Methylnaphthalene-D10
-2-Methylnaphthalene
-1-Methylnaphthalene
-2,4-Dibromophenol
-1,1'-Biphenyl
-Acenaphthylene
-Acenaphthene
-Acenaphthene-D10
-Dibenzofuran
-Fluorene-D10+
-Phenanthrene-D10+
-Anthracene
-Carbazole
Fluoranthene-d10+
Pyrene-D10+
-Benzo(a)anthracene+
Chrysene
-Benzo(b)fluoranthene
-Benzo(a)pyrene
-Benzo(k)fluoranthene+
-Dibenzo(a,h)anthracene+
-Benzo(g,h,i)perylene

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Date : 20-MAR-2023 19:31

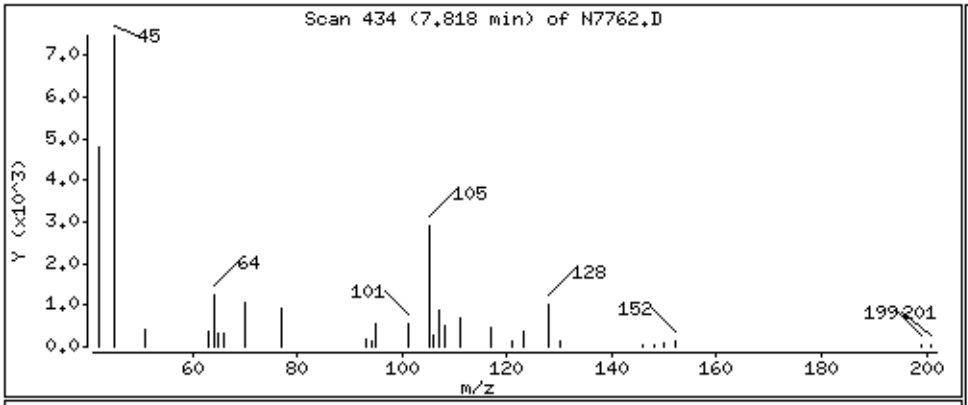
Client ID: SY-SB4R-10 Instrument: gcms-n.i

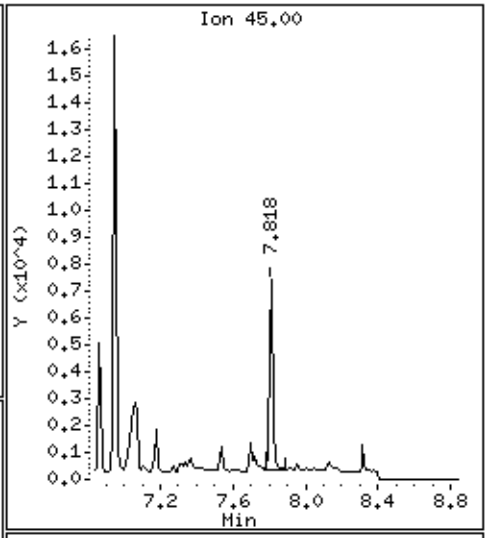
Sample Info: SQ0595-2DL

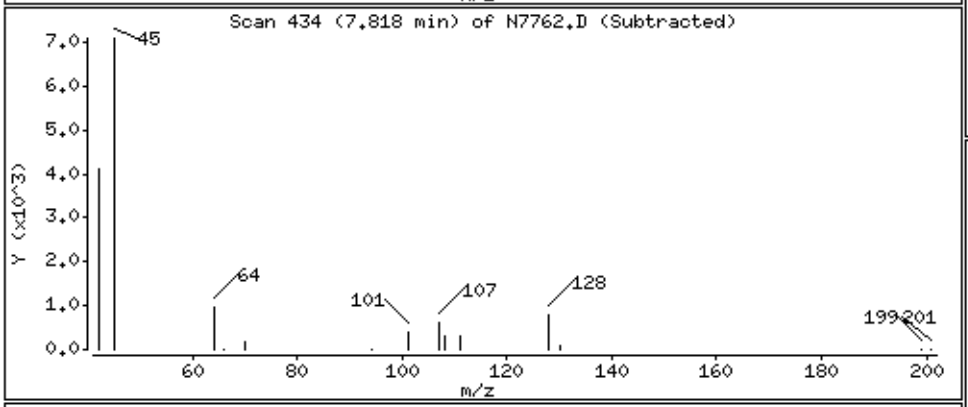
Operator: DT/EP

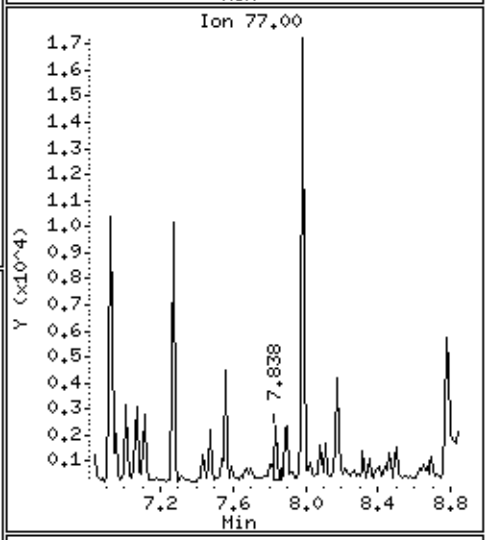
Column phase: ZB5-MS Column diameter: 0.25

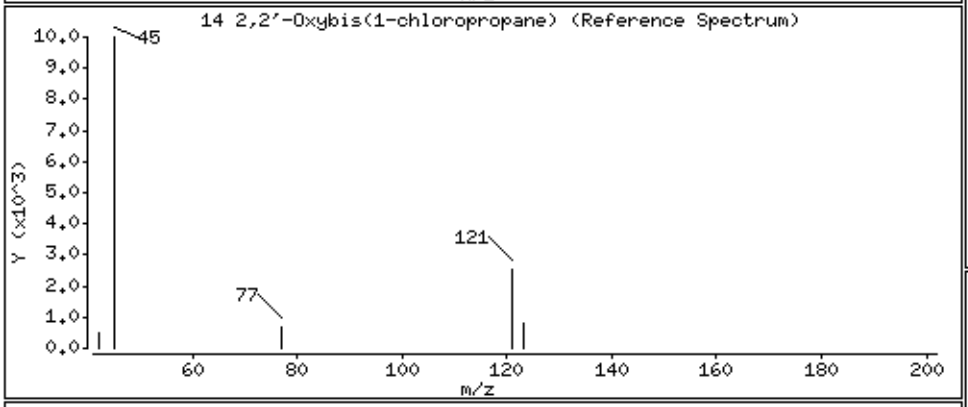
14 2,2'-Oxybis(1-chloropropane) Concentration: 16.1 ug/Kgdrywt

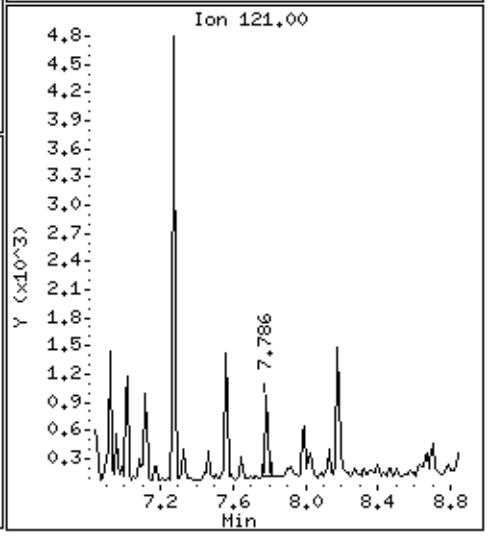


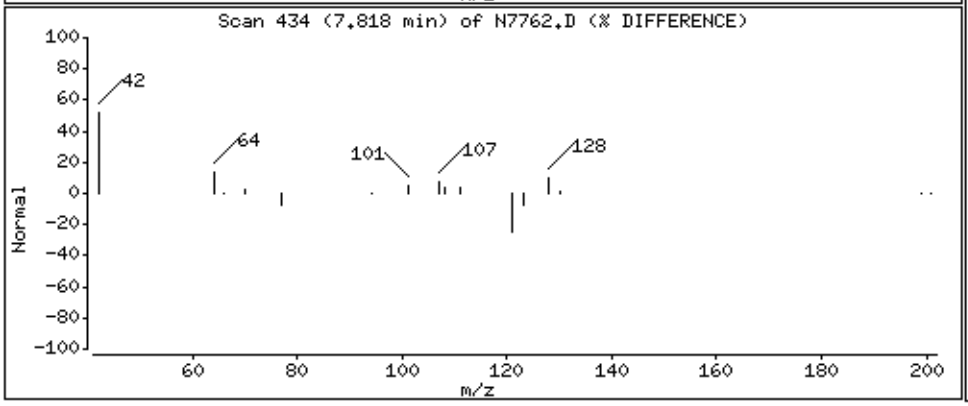












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Date : 20-MAR-2023 19:31

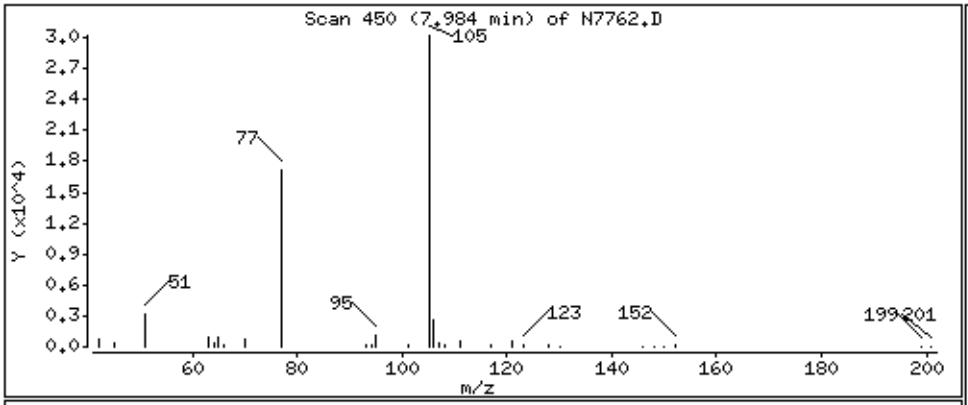
Client ID: SY-SB4R-10 Instrument: gcms-n.i

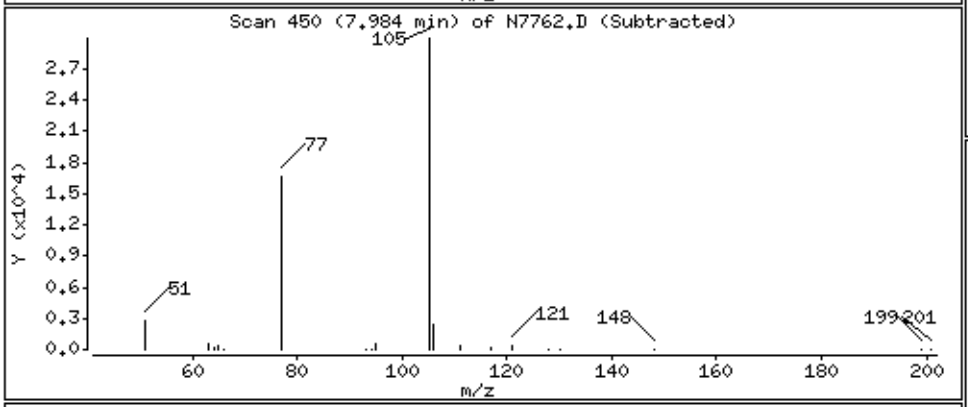
Sample Info: SQ0595-2DL

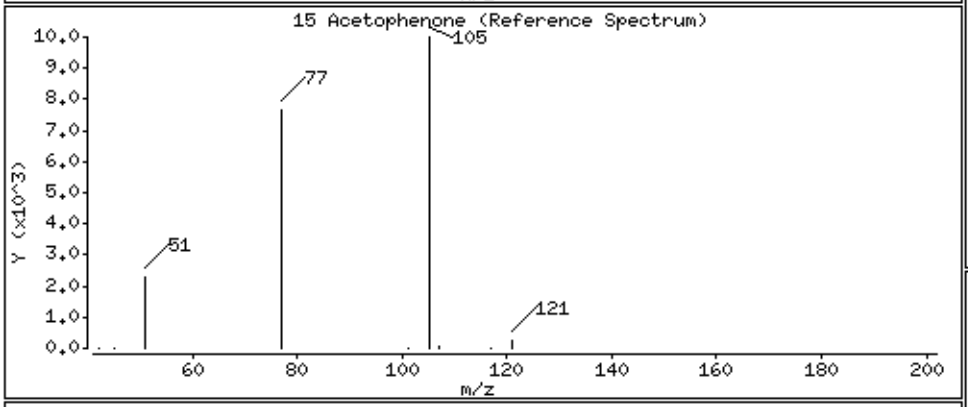
Operator: DT/EP

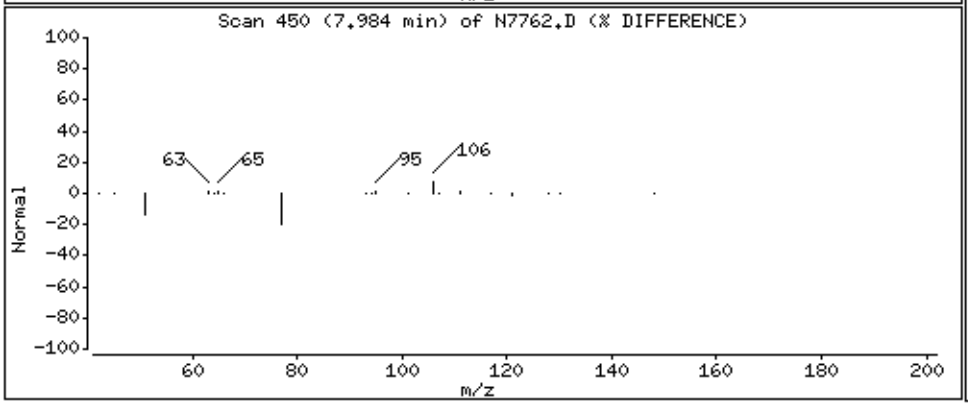
Column phase: ZB5-MS Column diameter: 0.25

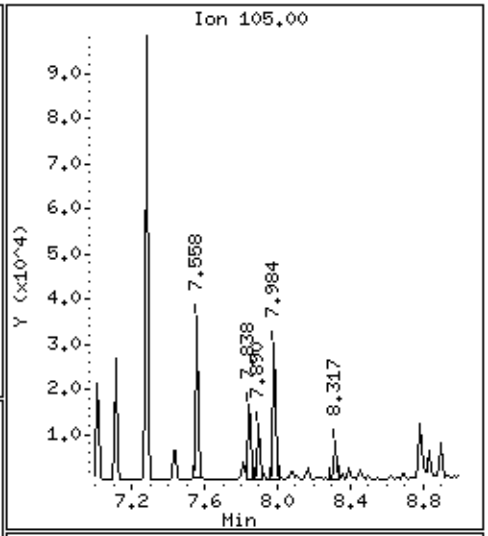
15 Acetophenone Concentration: 19.9 ug/Kgdrywt

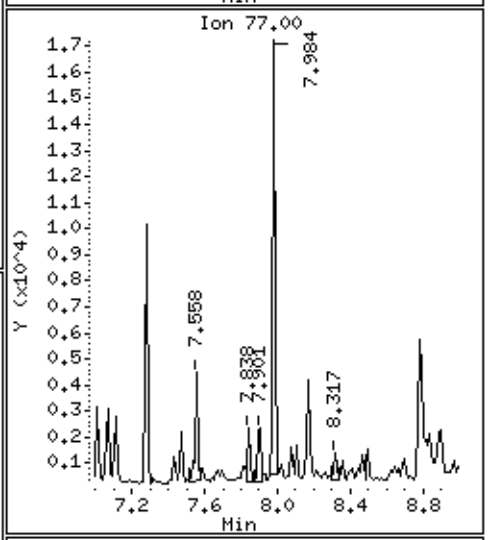


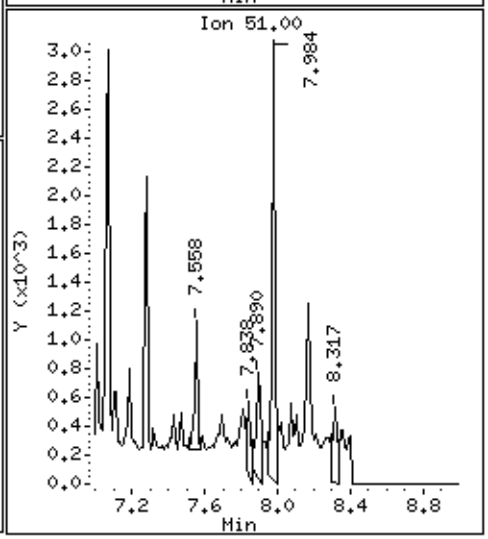












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Date : 20-MAR-2023 19:31

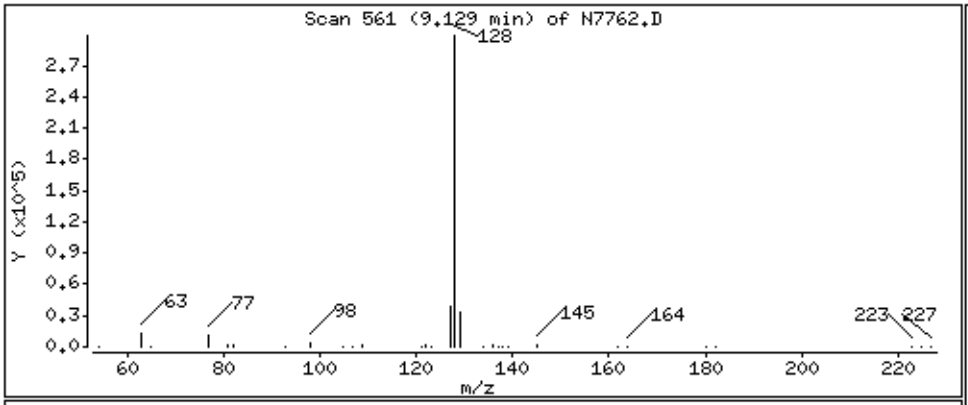
Client ID: SY-SB4R-10 Instrument: gcms-n.i

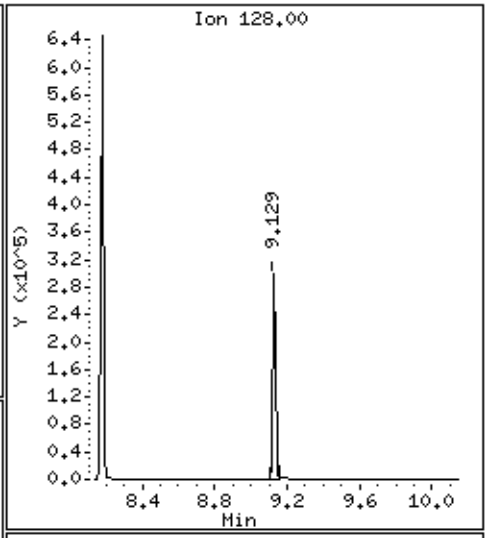
Sample Info: SQ0595-2DL

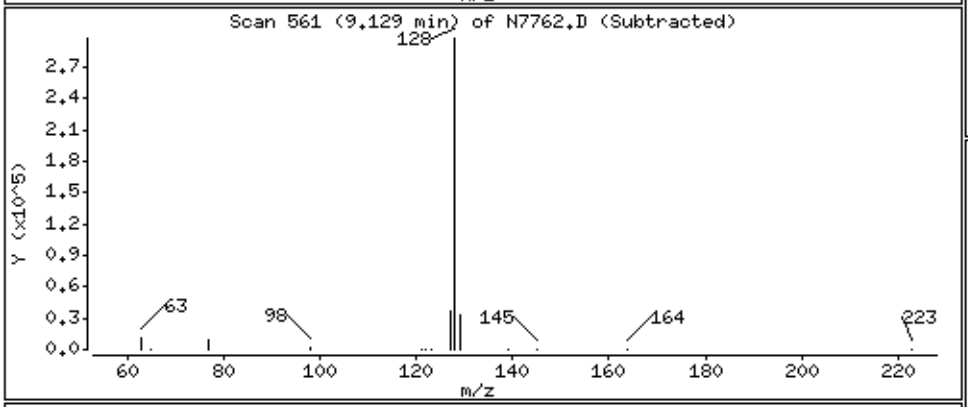
Operator: DT/EP

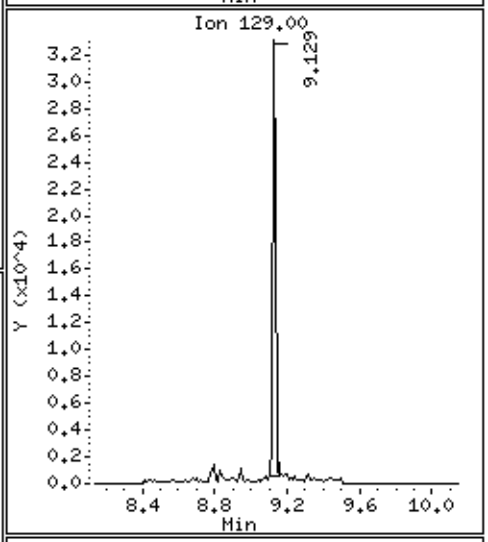
Column phase: ZB5-MS Column diameter: 0.25

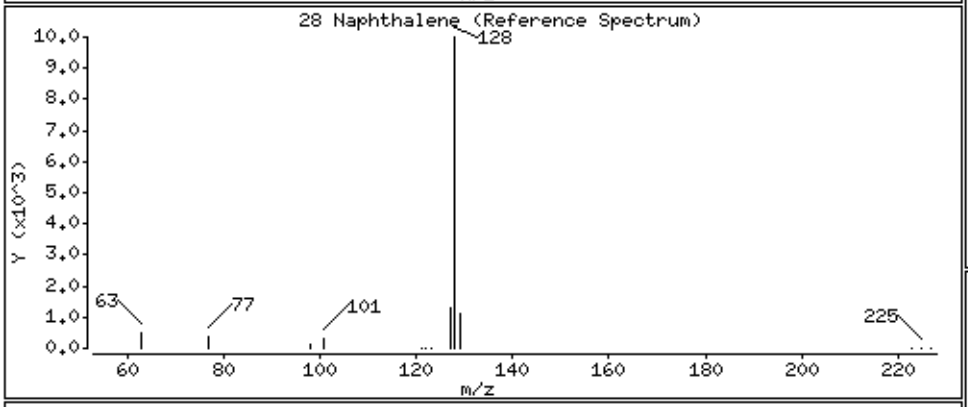
28 Naphthalene Concentration: 83.2 ug/Kgdrywt

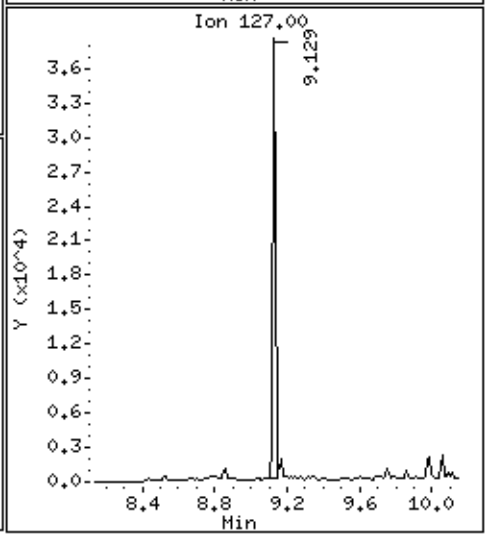


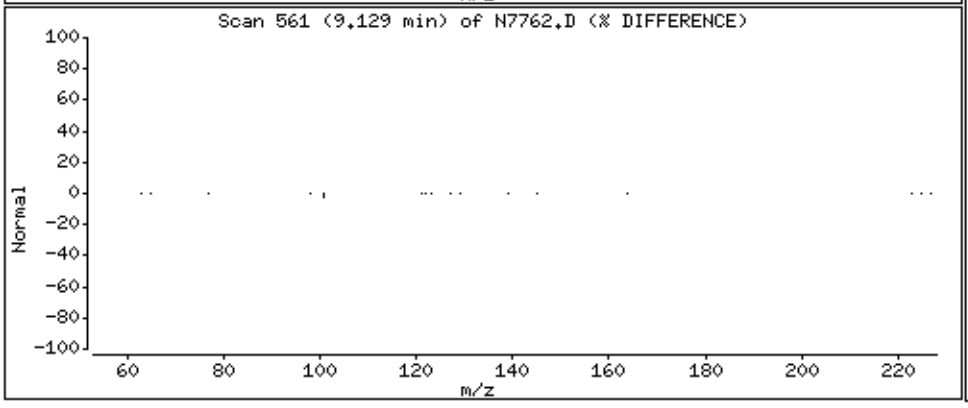












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Date : 20-MAR-2023 19:31

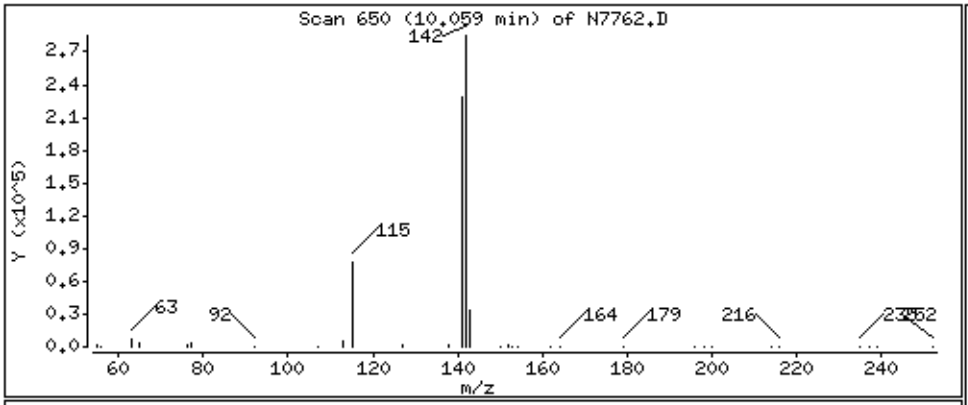
Client ID: SY-SB4R-10 Instrument: gcms-n.i

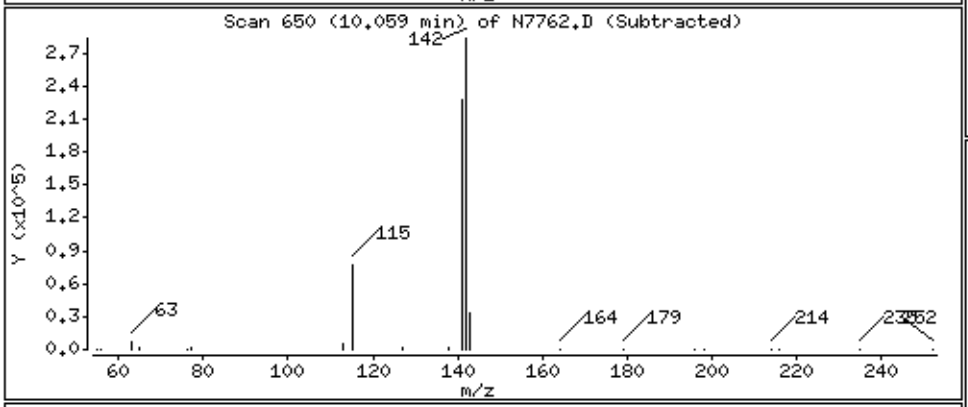
Sample Info: SQ0595-2DL

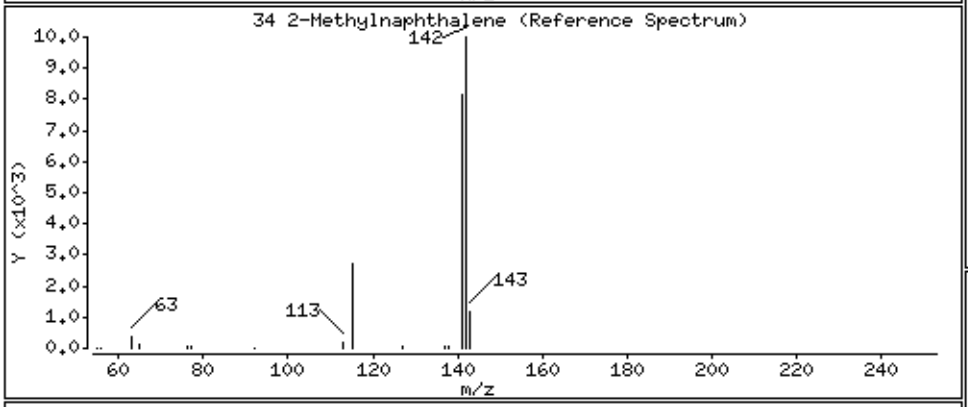
Operator: DT/EP

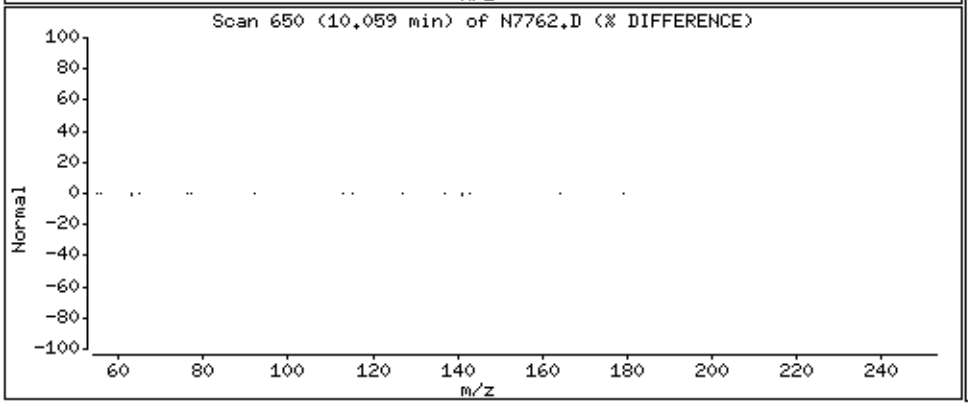
Column phase: ZB5-MS Column diameter: 0.25

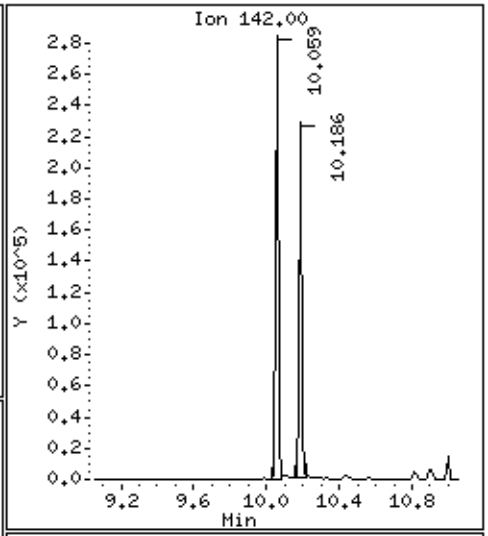
34 2-Methylnaphthalene Concentration: 119 ug/Kgdrywt

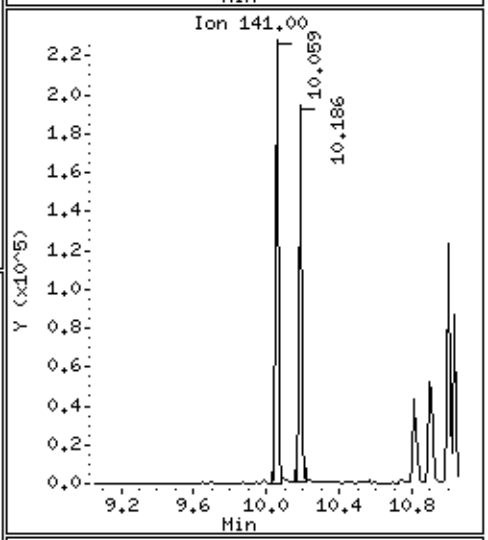


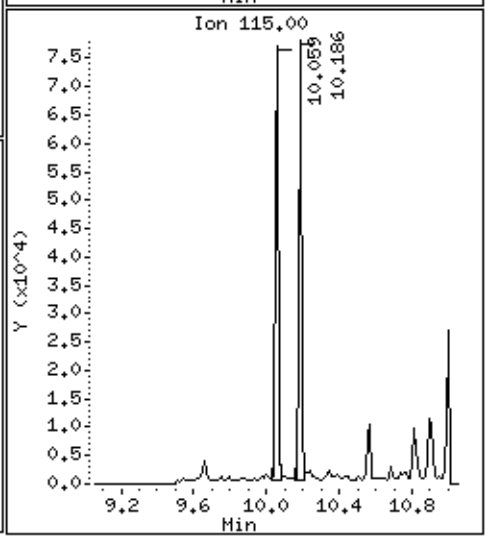












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Date : 20-MAR-2023 19:31

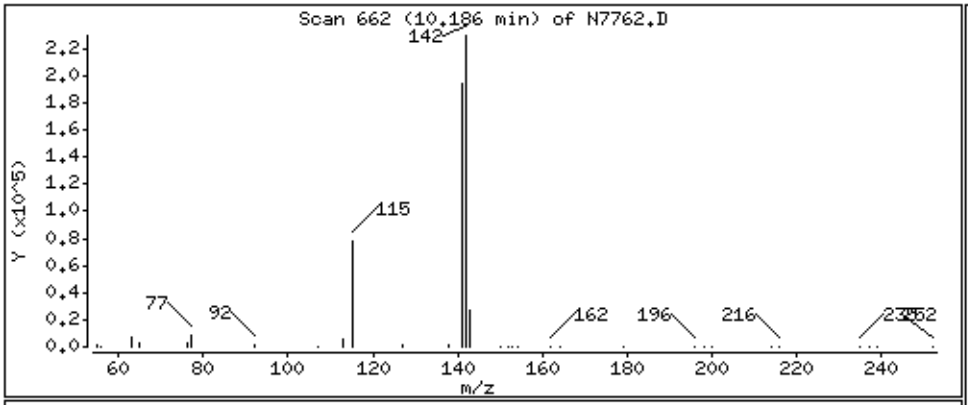
Client ID: SY-SB4R-10 Instrument: gcms-n.i

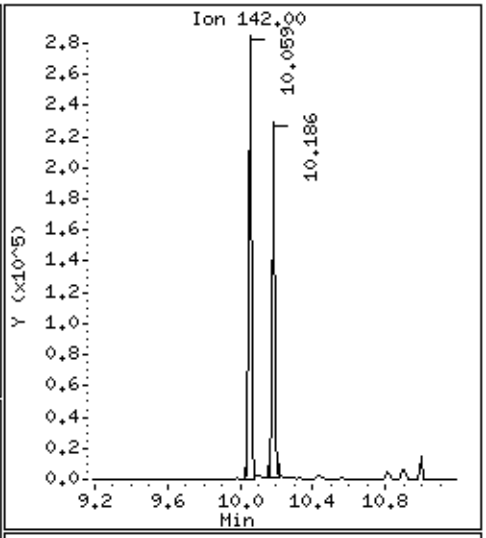
Sample Info: SQ0595-2DL

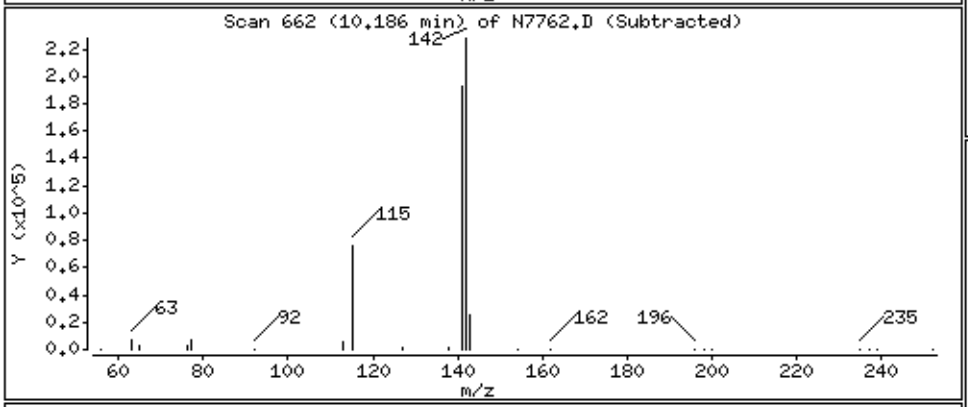
Operator: DT/EP

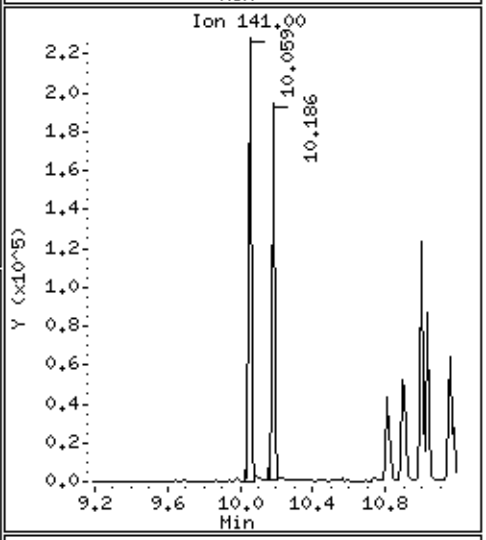
Column phase: ZB5-MS Column diameter: 0.25

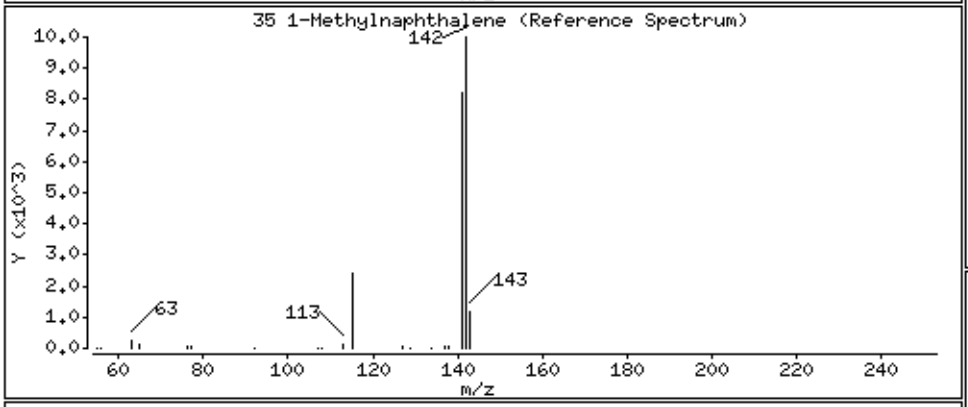
35 1-Methylnaphthalene Concentration: 89.5 ug/Kgdrywt

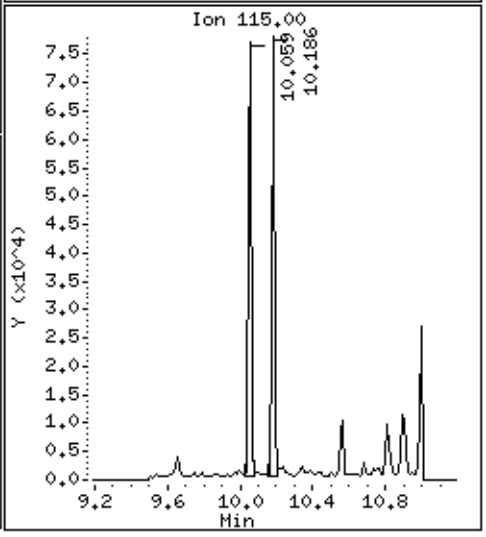


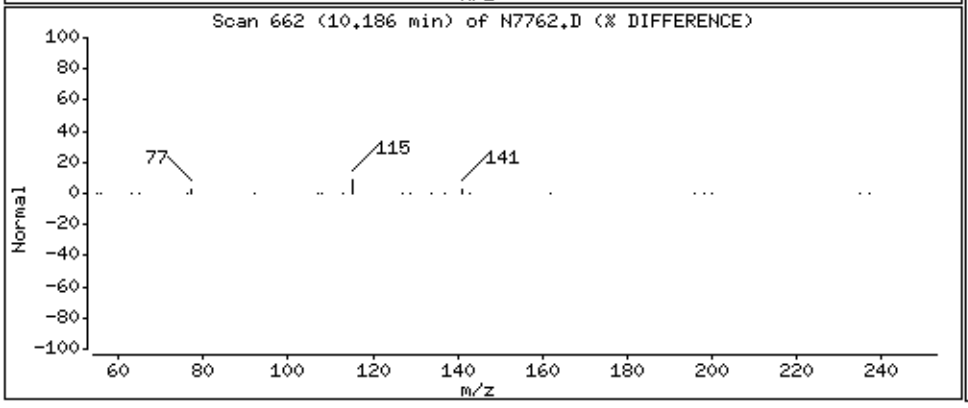












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Date : 20-MAR-2023 19:31

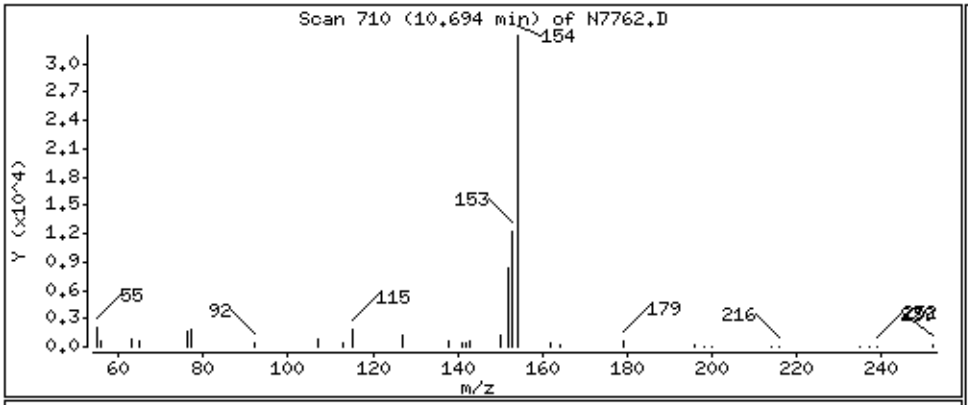
Client ID: SY-SB4R-10 Instrument: gcms-n.i

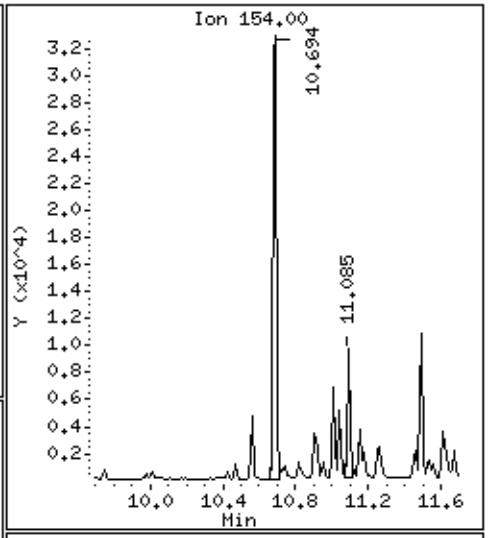
Sample Info: SQ0595-2DL

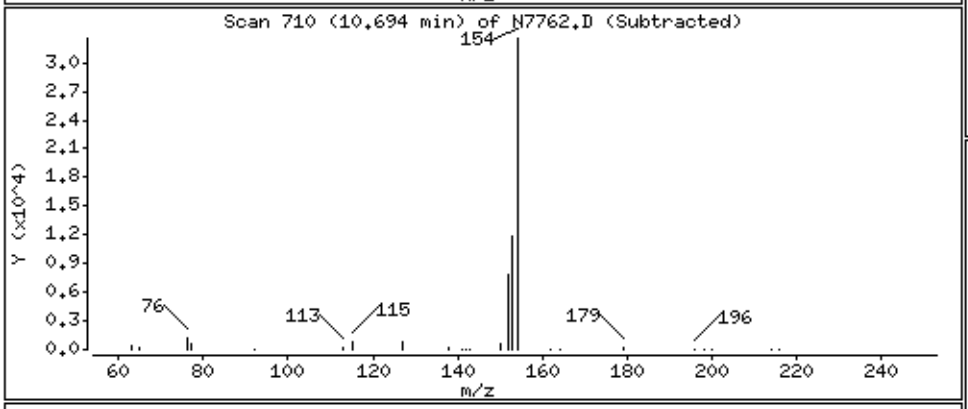
Operator: DT/EP

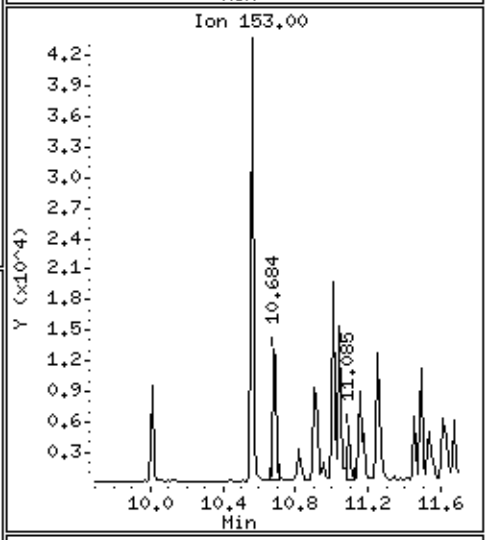
Column phase: ZB5-MS Column diameter: 0.25

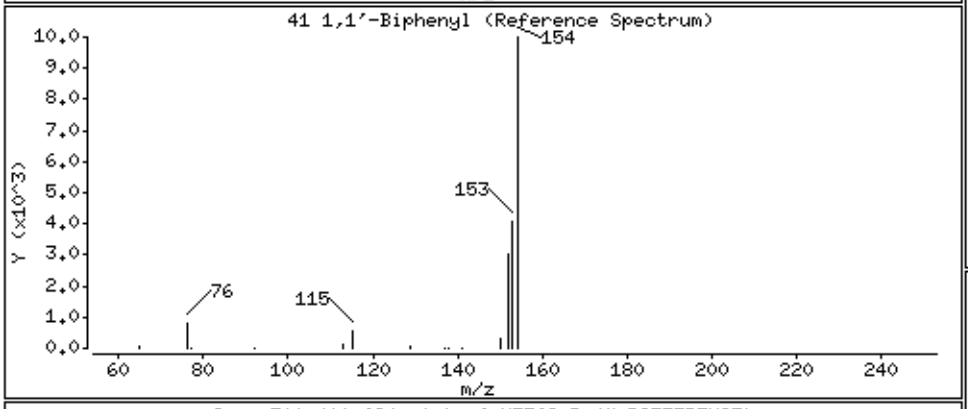
41 1,1'-Biphenyl Concentration: 15.6 ug/Kgdrywt

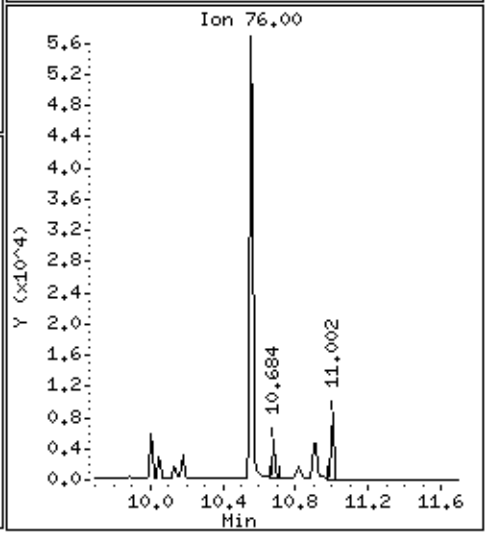


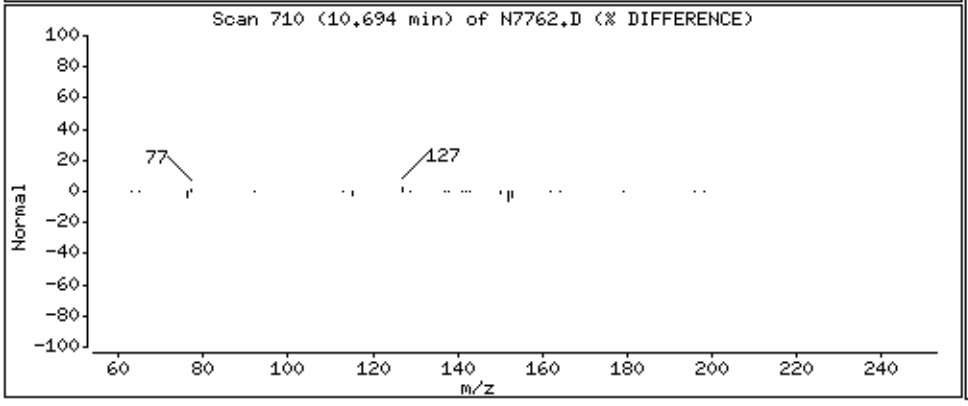












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Date : 20-MAR-2023 19:31

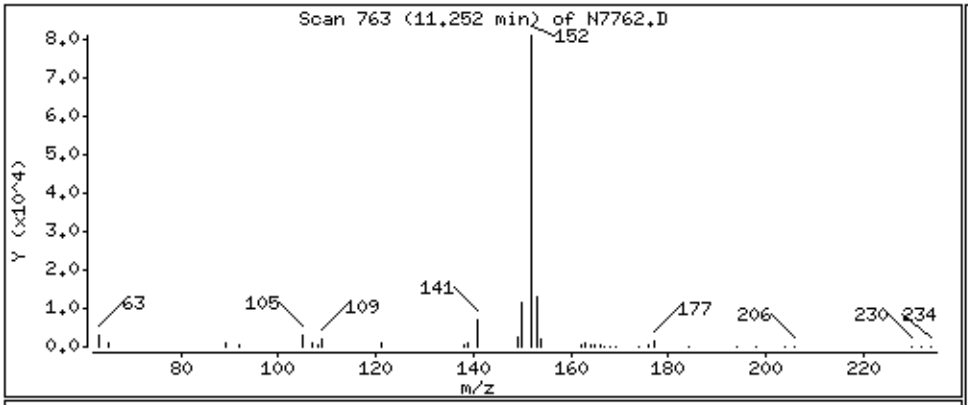
Client ID: SY-SB4R-10 Instrument: gcms-n.i

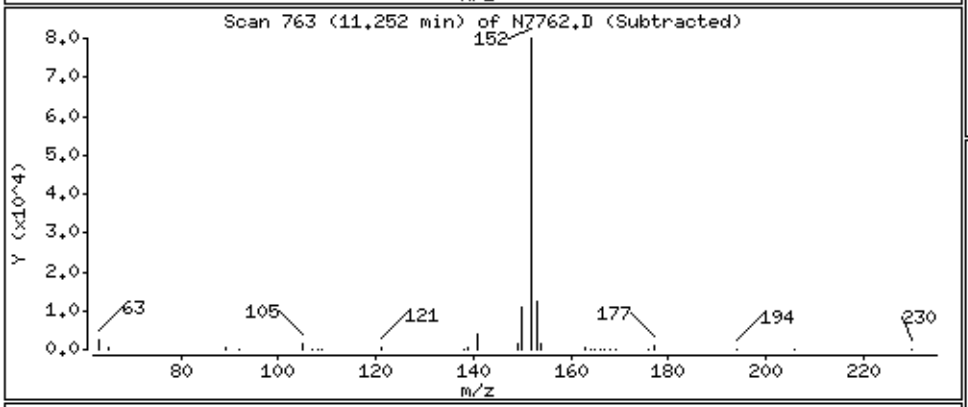
Sample Info: SQ0595-2DL

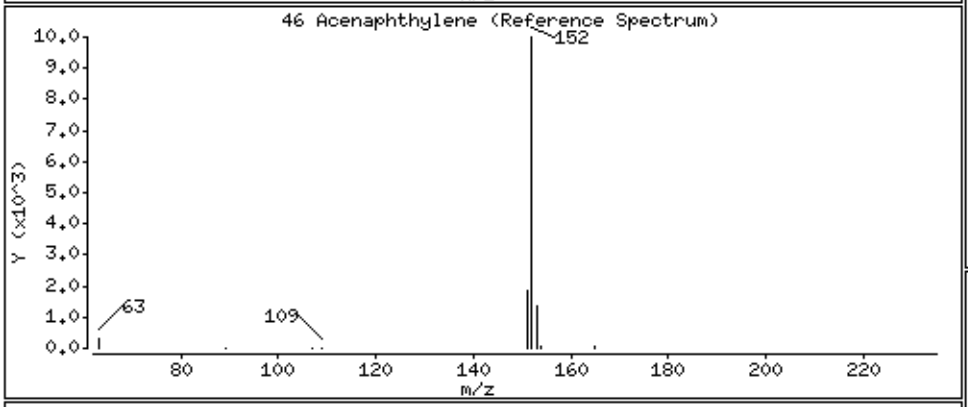
Operator: DT/EP

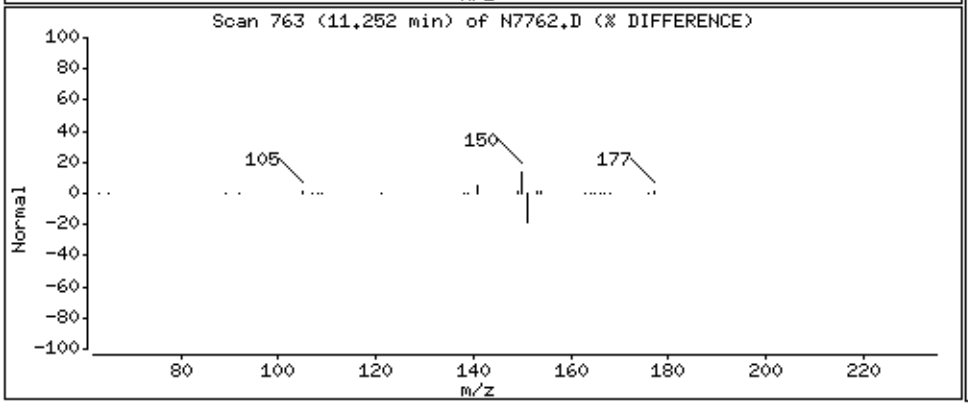
Column phase: ZB5-MS Column diameter: 0.25

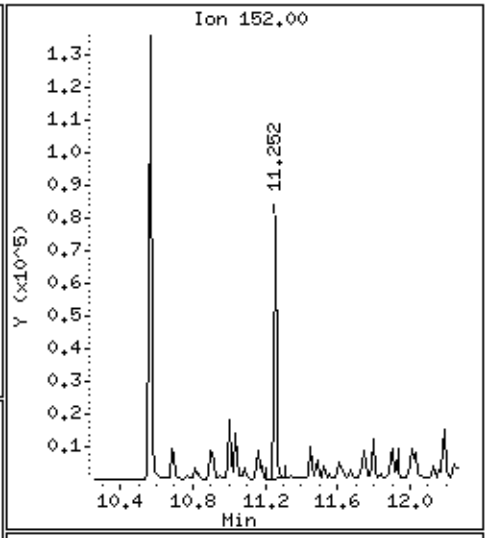
46 Acenaphthylene Concentration: 24.0 ug/Kgdrywt

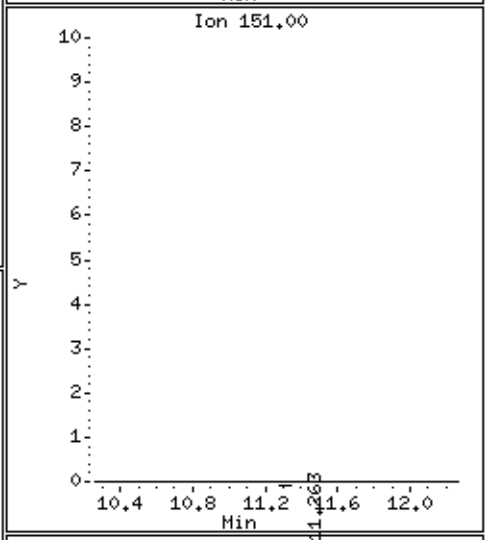


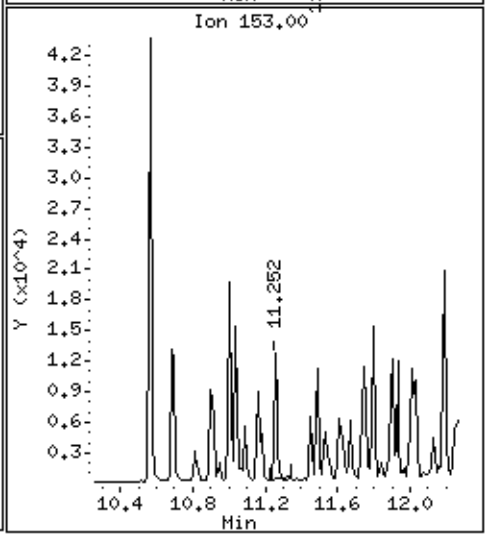












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Date : 20-MAR-2023 19:31

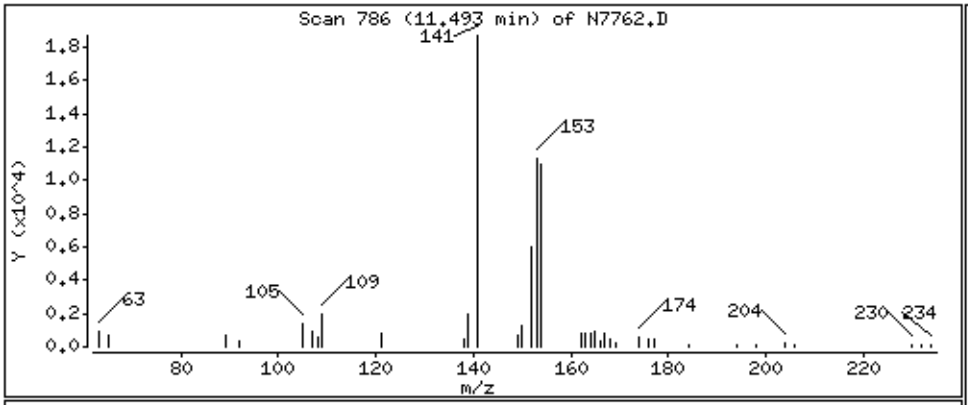
Client ID: SY-SB4R-10 Instrument: gcms-n.i

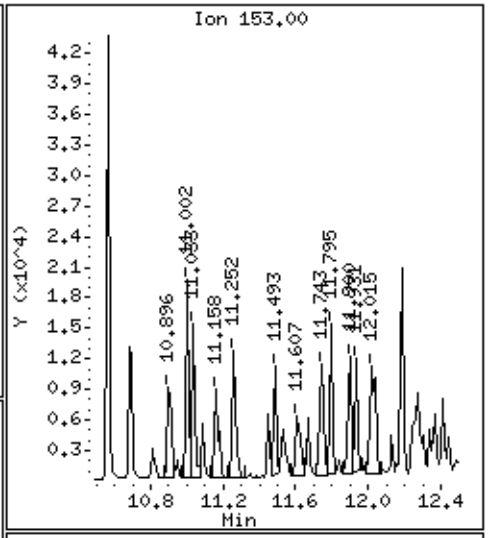
Sample Info: SQ0595-2DL

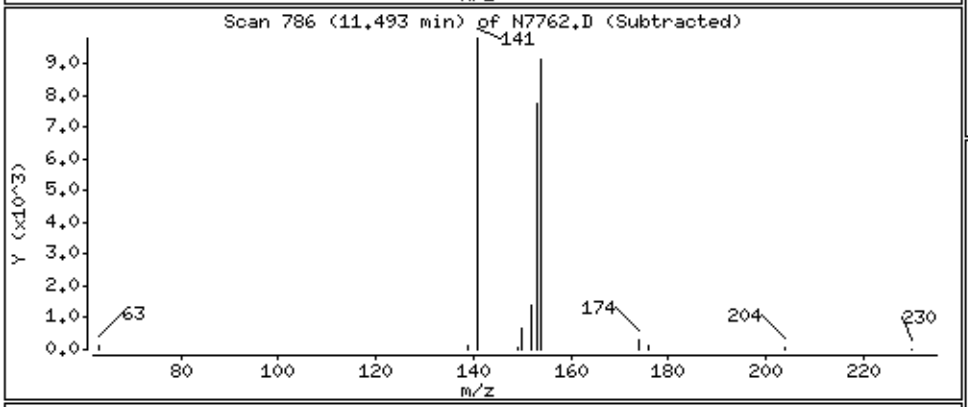
Operator: DT/EP

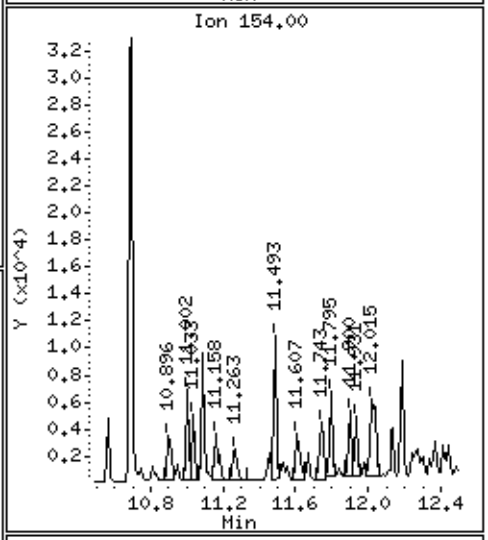
Column phase: ZB5-MS Column diameter: 0.25

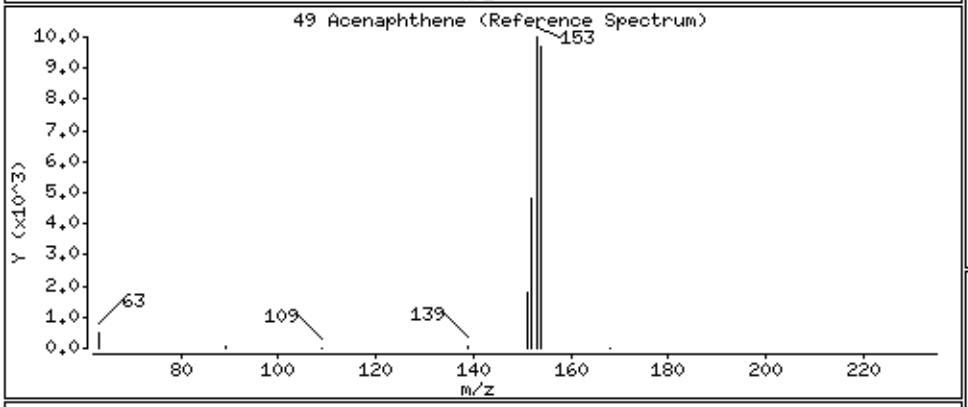
49 Acenaphthene Concentration: 5.02 ug/Kgdrywt

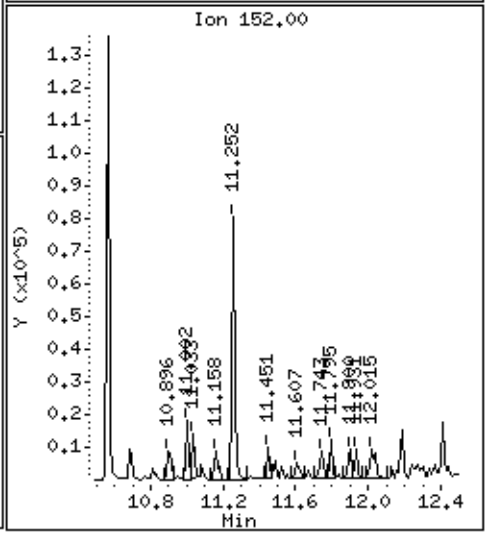


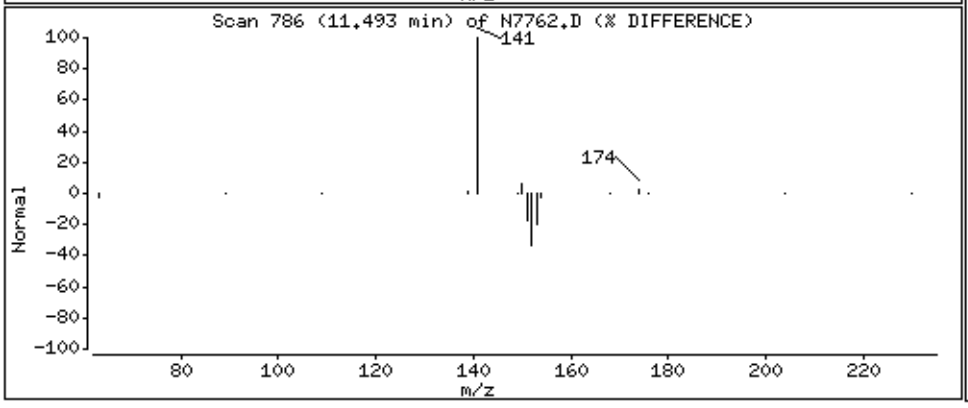












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Date : 20-MAR-2023 19:31

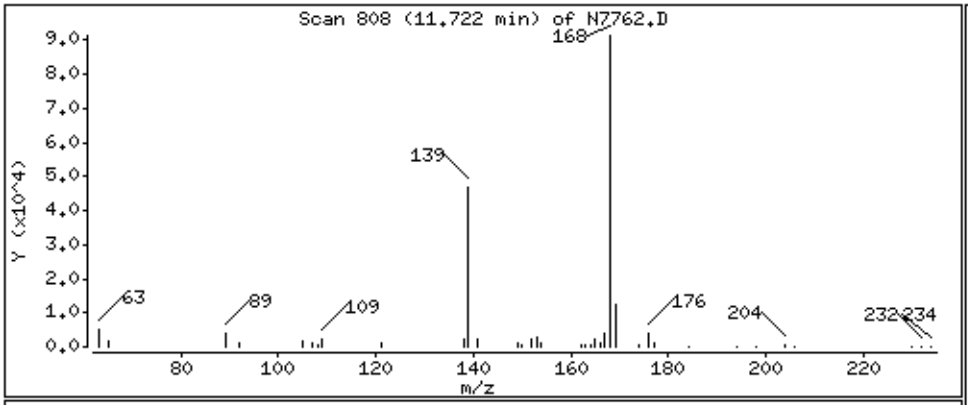
Client ID: SY-SB4R-10 Instrument: gcms-n.i

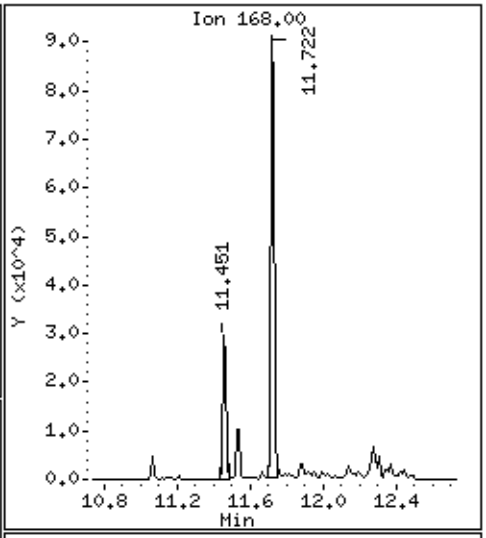
Sample Info: SQ0595-2DL

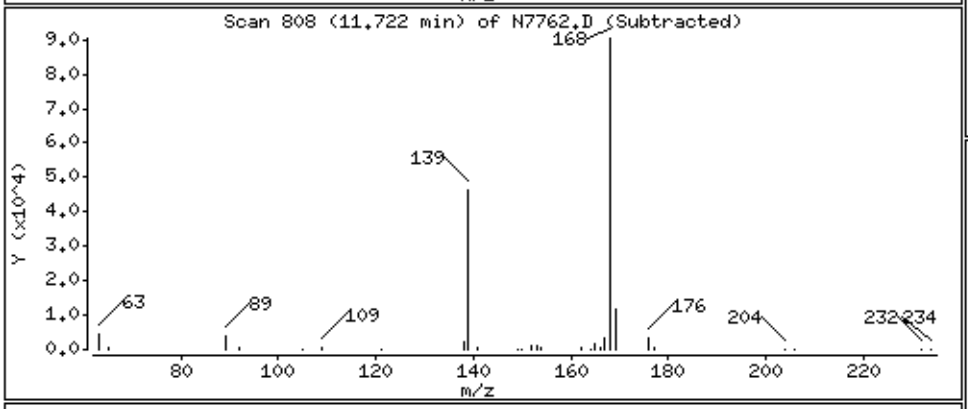
Operator: DT/EP

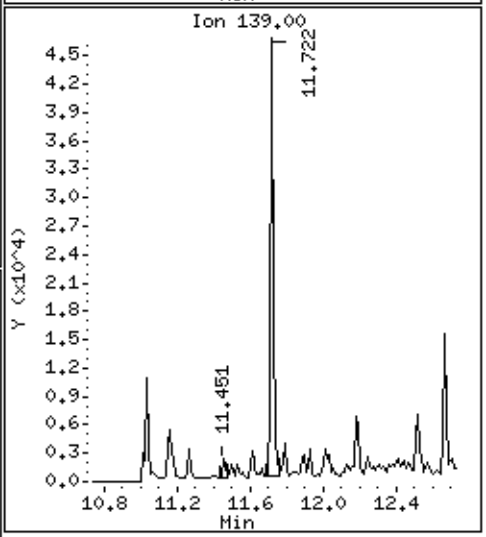
Column phase: ZB5-MS Column diameter: 0.25

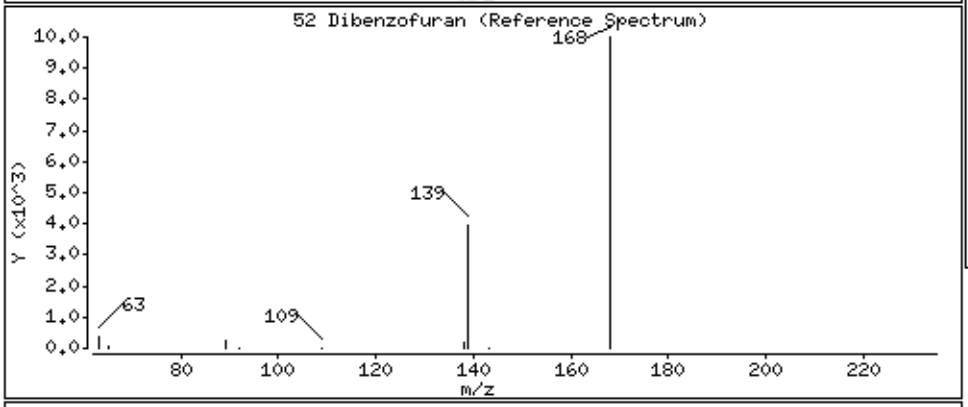
52 Dibenzofuran Concentration: 38.2 ug/Kgdrywt

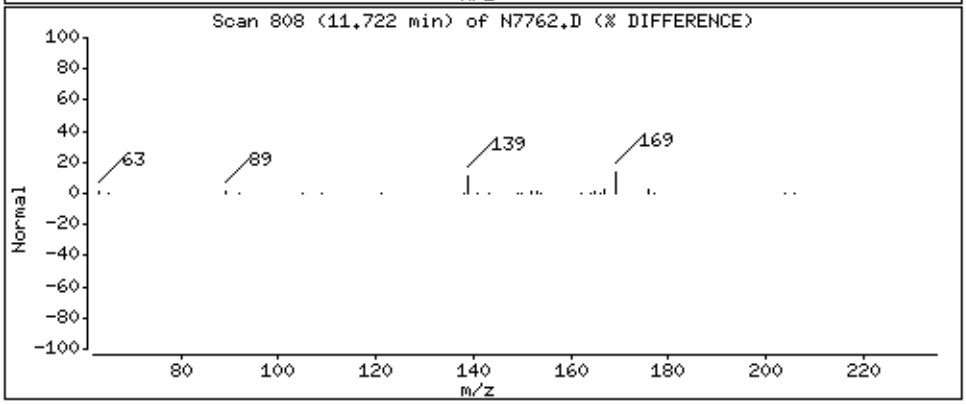












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Date : 20-MAR-2023 19:31

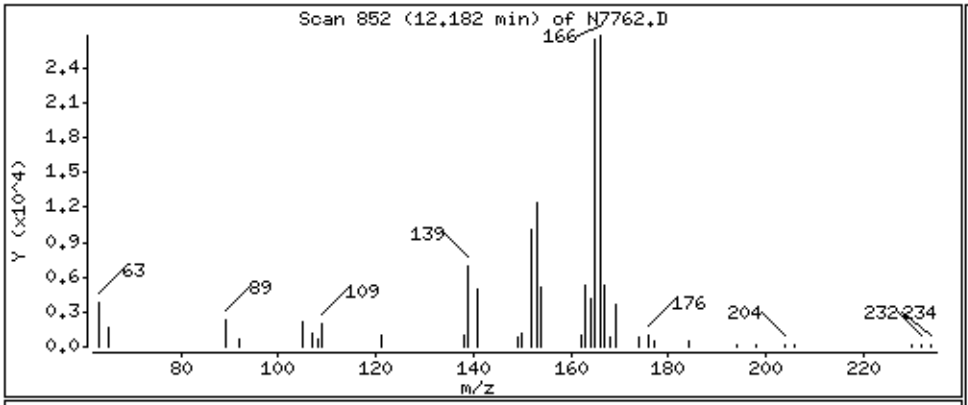
Client ID: SY-SB4R-10 Instrument: gcms-n.i

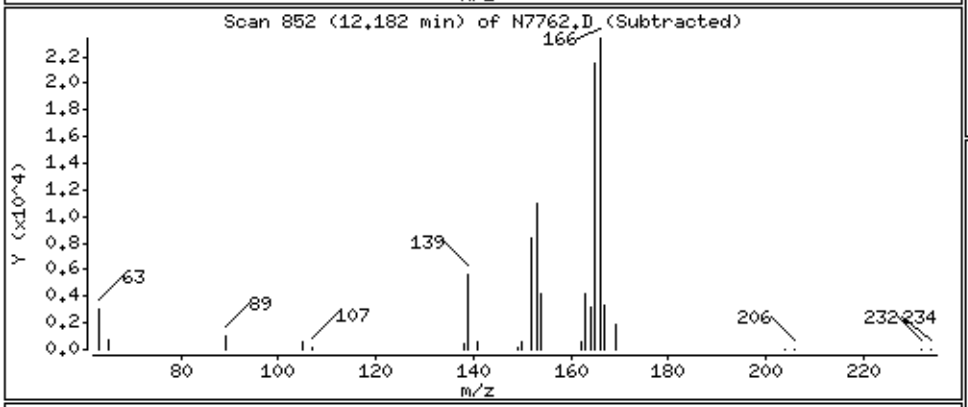
Sample Info: SQ0595-2DL

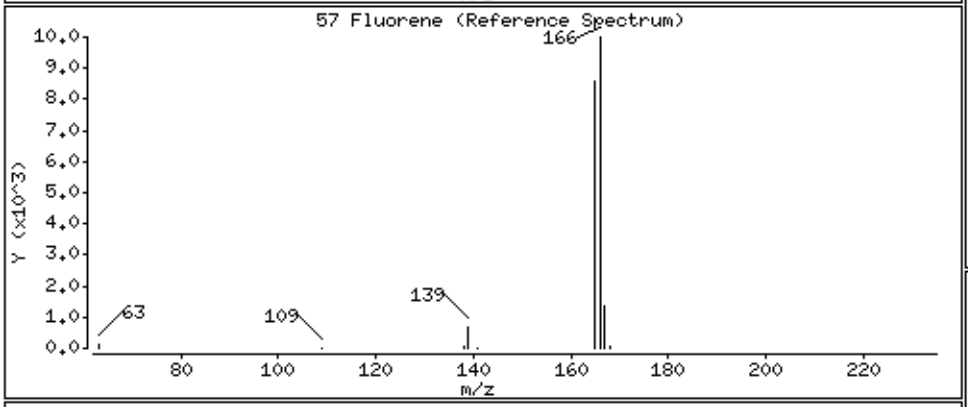
Operator: DT/EP

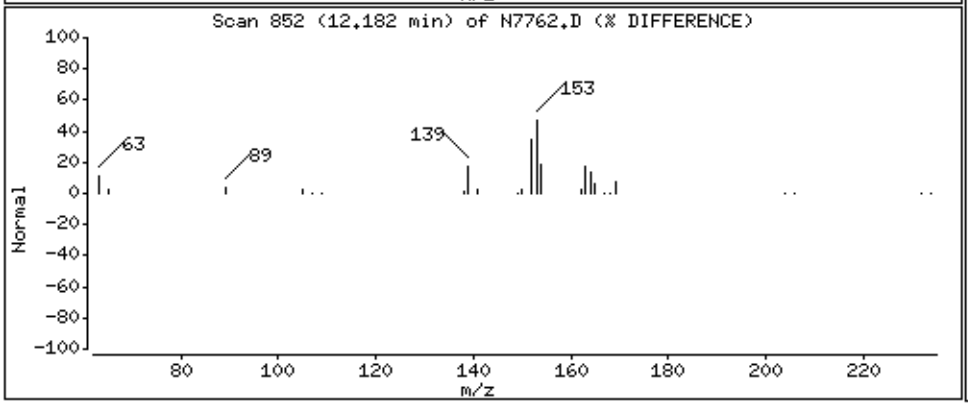
Column phase: ZB5-MS Column diameter: 0.25

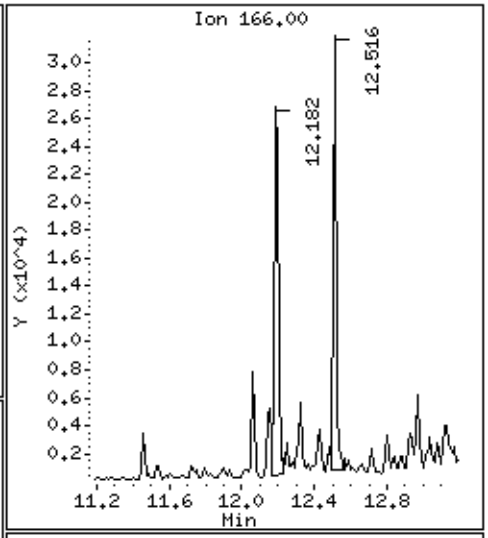
57 Fluorene Concentration: 17.0 ug/Kgdrywt

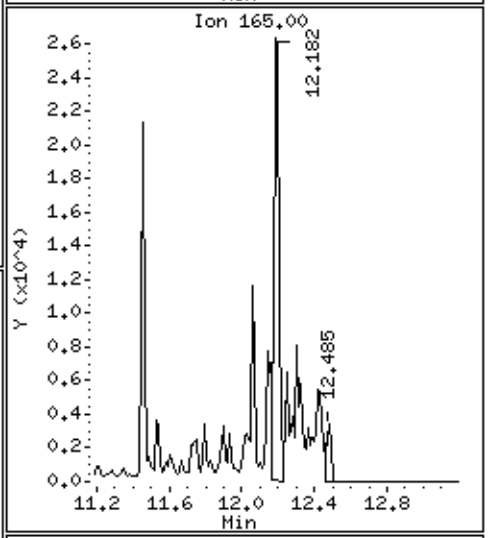


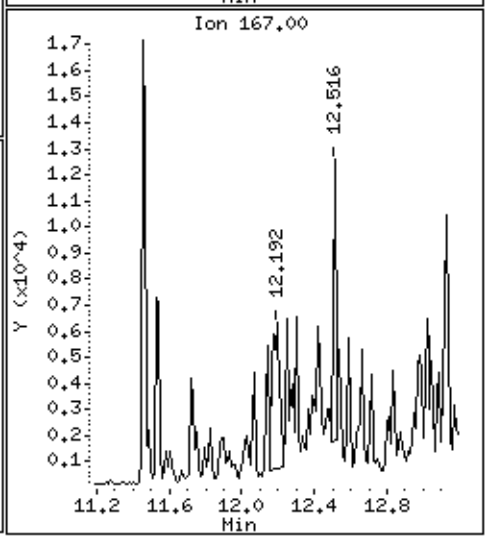












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Date : 20-MAR-2023 19:31

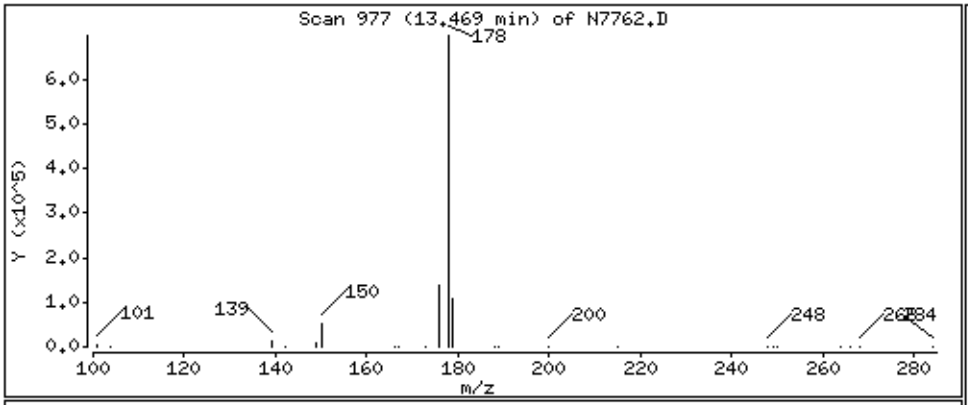
Client ID: SY-SB4R-10 Instrument: gcms-n.i

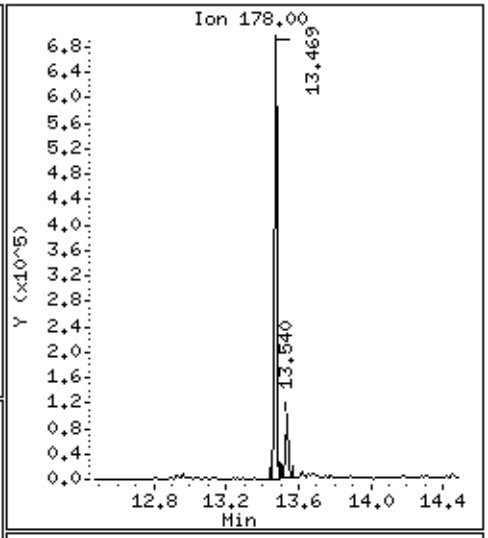
Sample Info: SQ0595-2DL

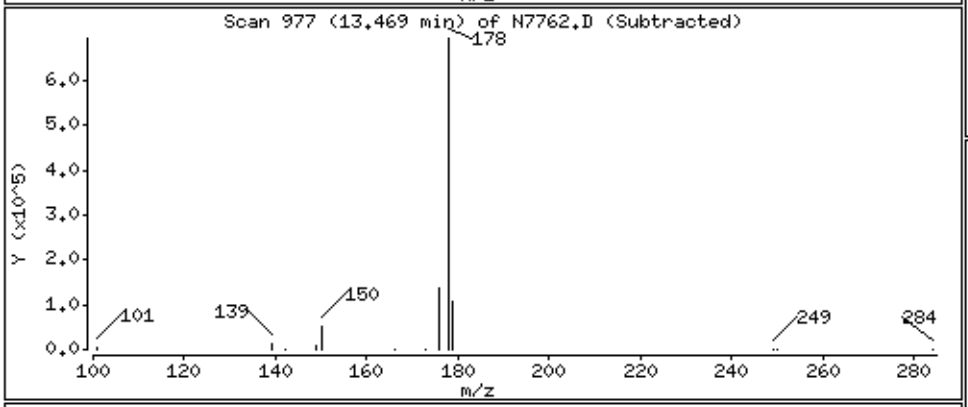
Operator: DT/EP

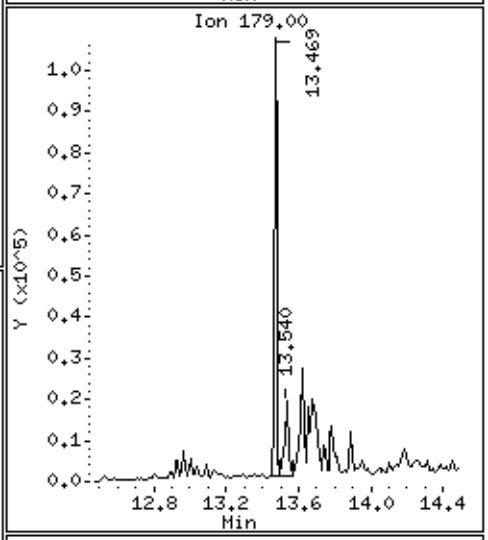
Column phase: ZB5-MS Column diameter: 0.25

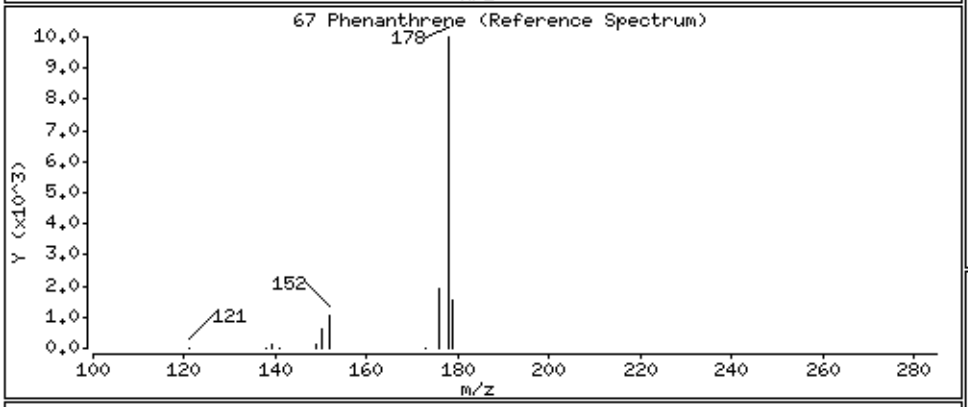
67 Phenanthrene Concentration: 242 ug/Kgdrywt

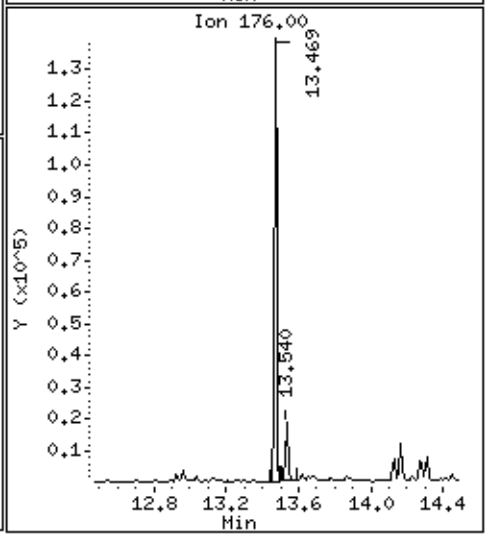


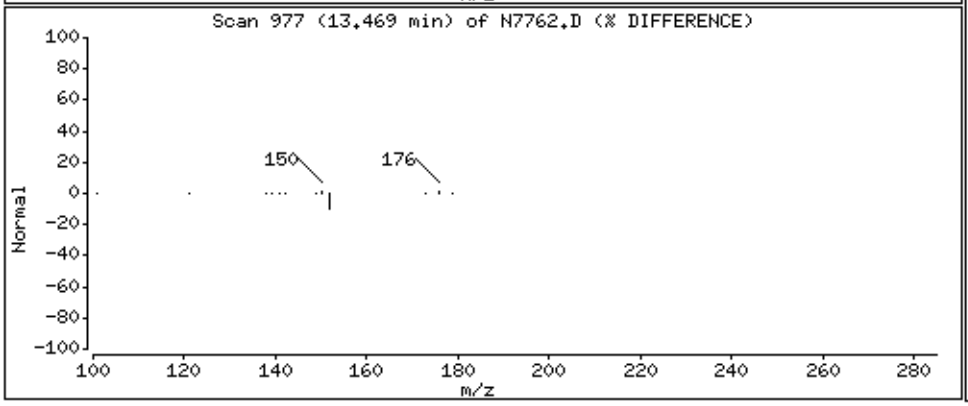












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Date : 20-MAR-2023 19:31

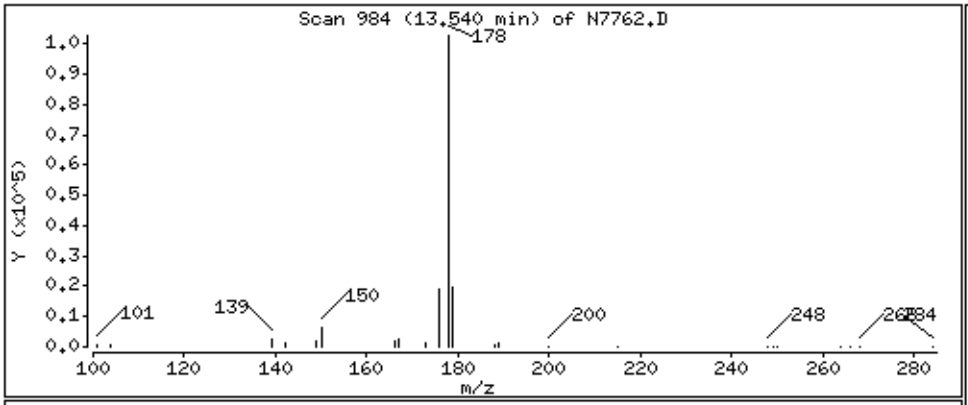
Client ID: SY-SB4R-10 Instrument: gcms-n.i

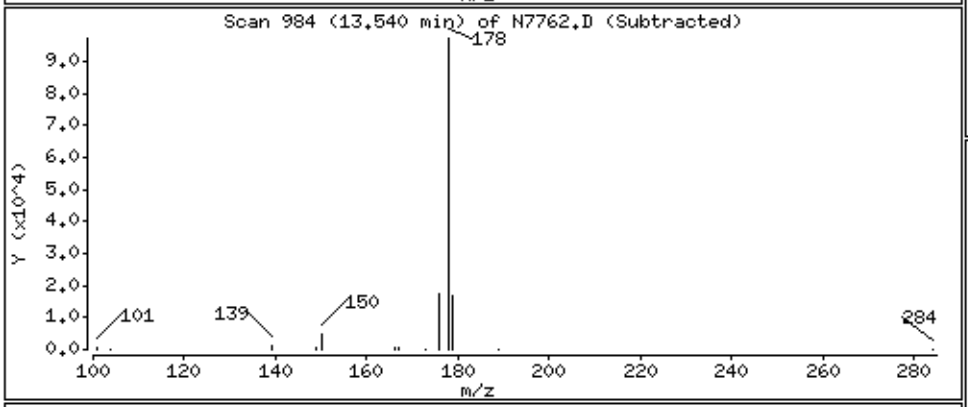
Sample Info: SQ0595-2DL

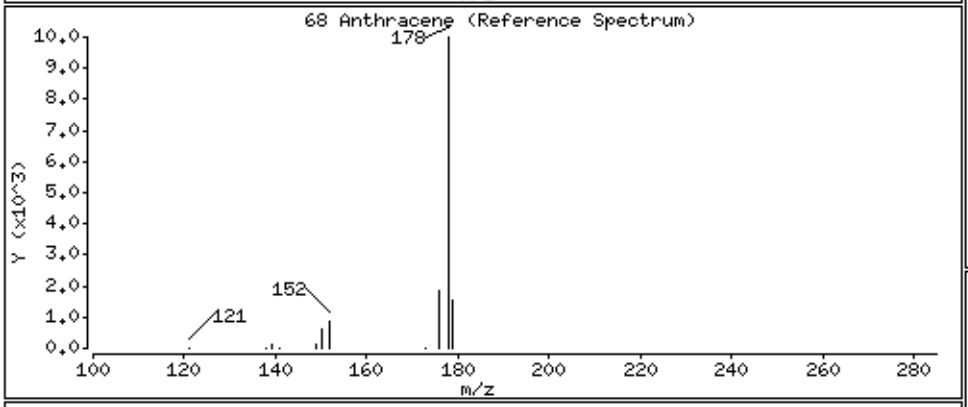
Operator: DT/EP

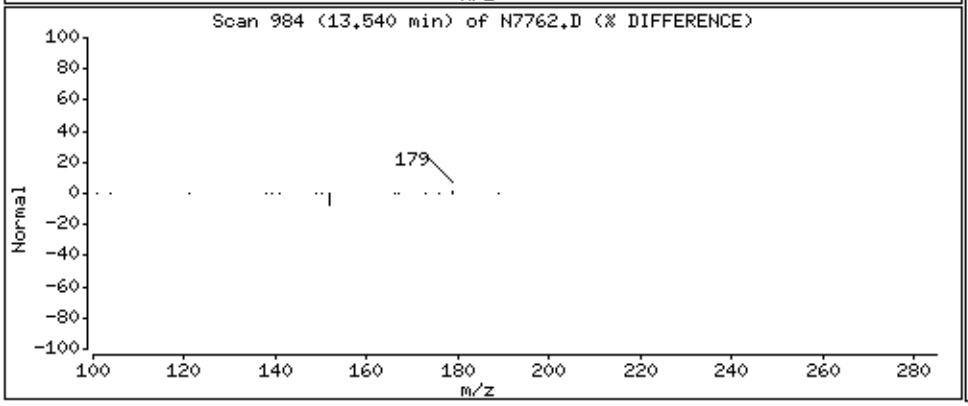
Column phase: ZB5-MS Column diameter: 0.25

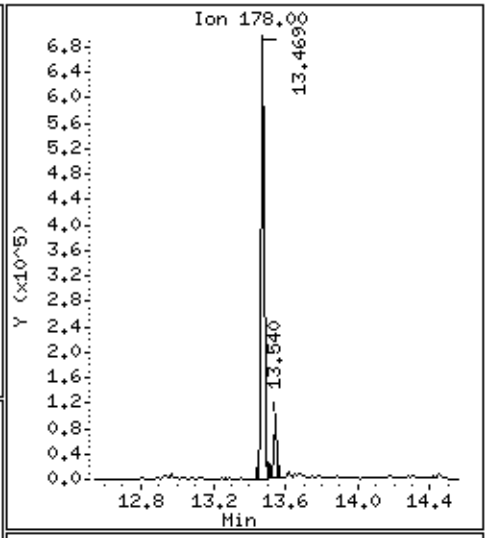
68 Anthracene Concentration: 31.5 ug/Kgdrywt

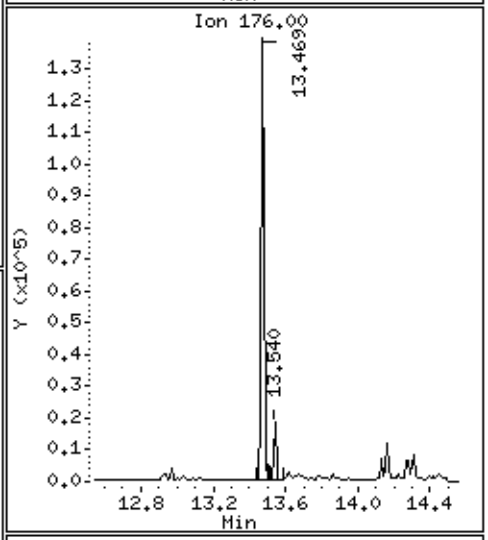


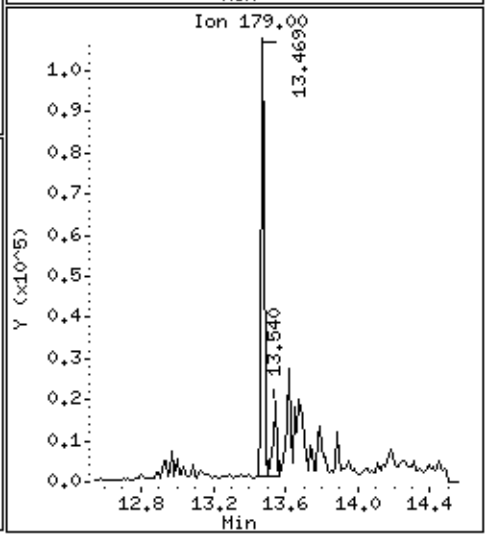












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Date : 20-MAR-2023 19:31

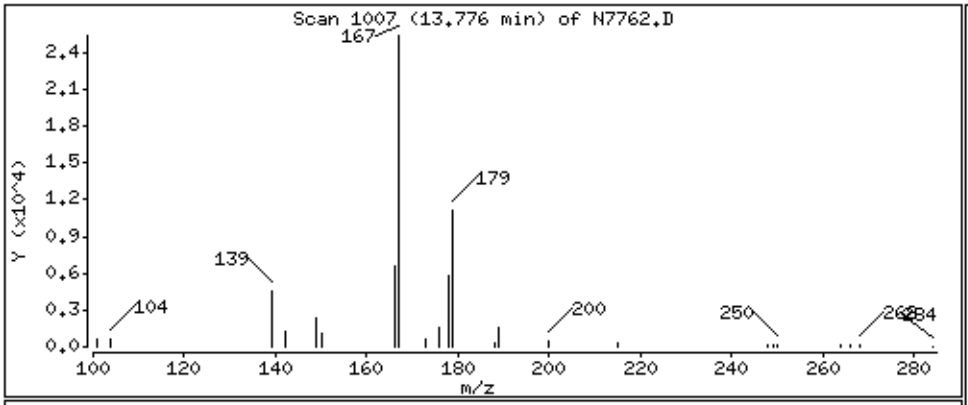
Client ID: SY-SB4R-10 Instrument: gcms-n.i

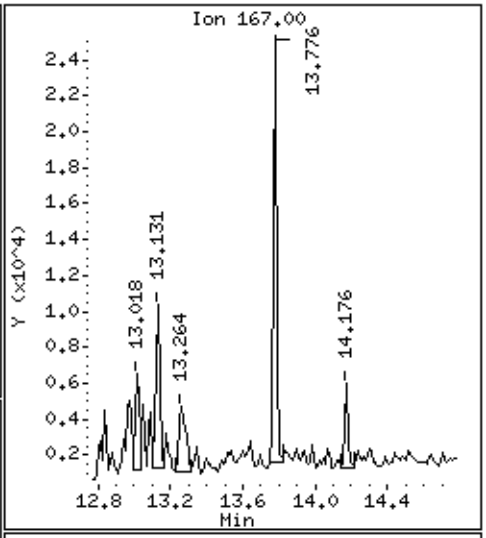
Sample Info: SQ0595-2DL

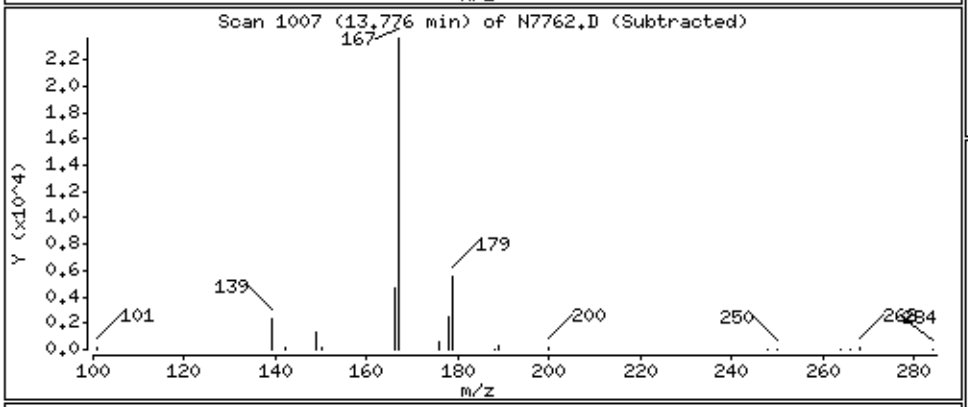
Operator: DT/EP

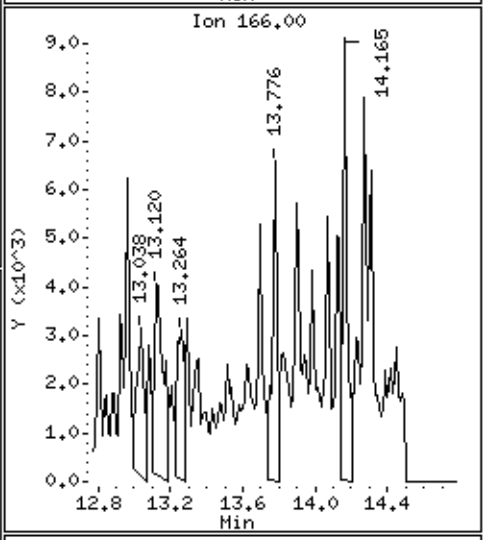
Column phase: ZB5-MS Column diameter: 0.25

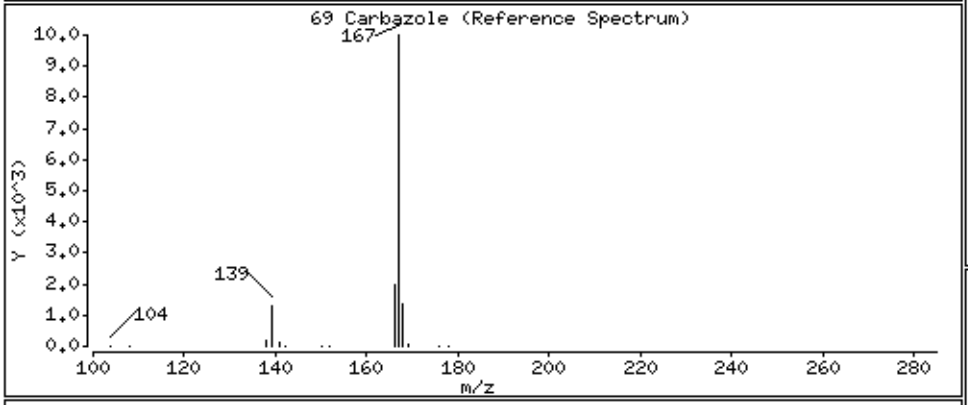
69 Carbazole Concentration: 15.9 ug/Kgdrywt

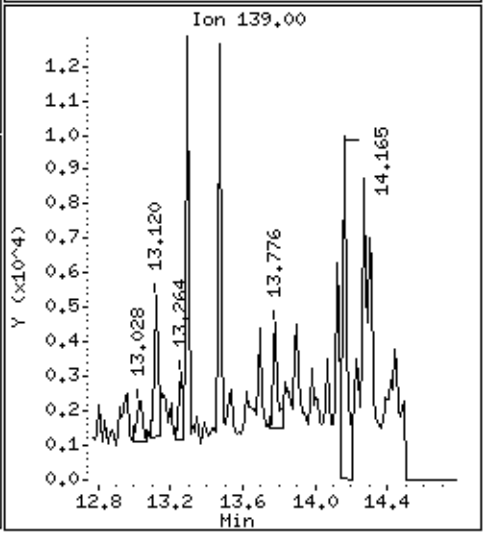


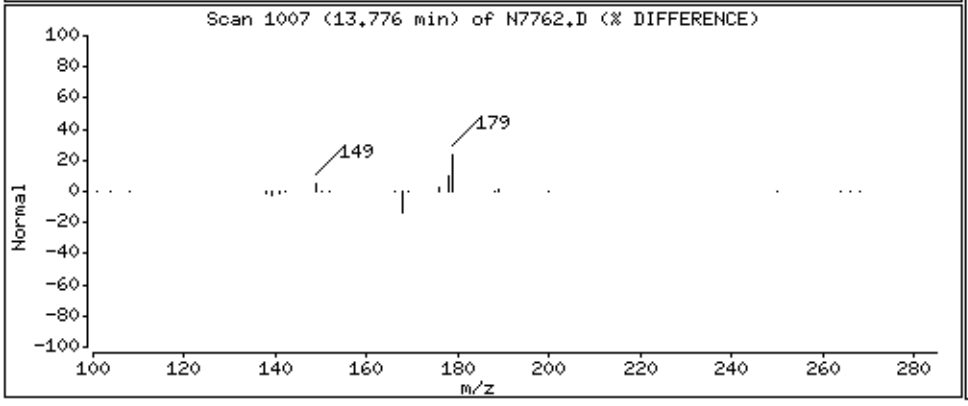












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Date : 20-MAR-2023 19:31

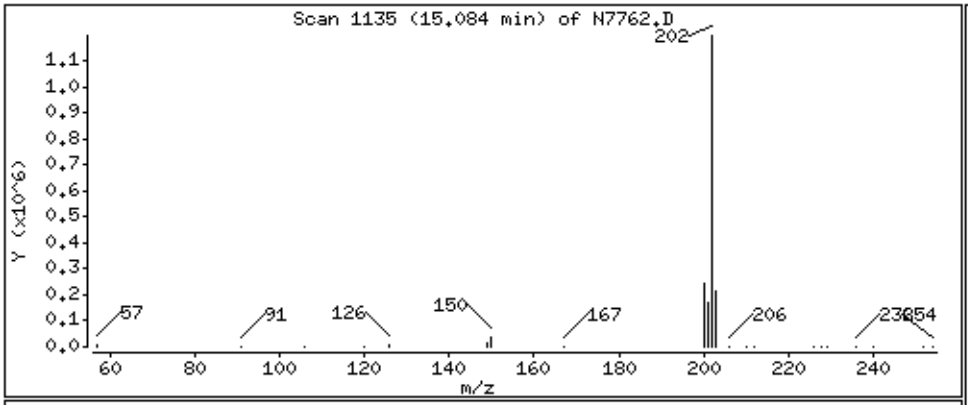
Client ID: SY-SB4R-10 Instrument: gcms-n.i

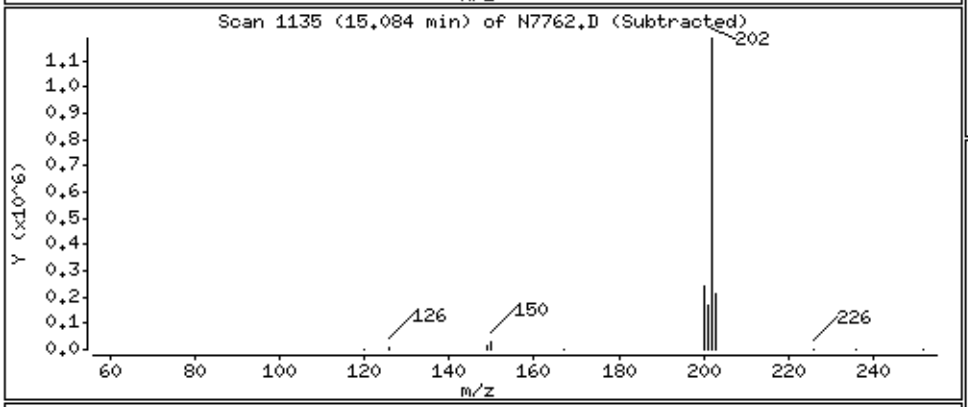
Sample Info: SQ0595-2DL

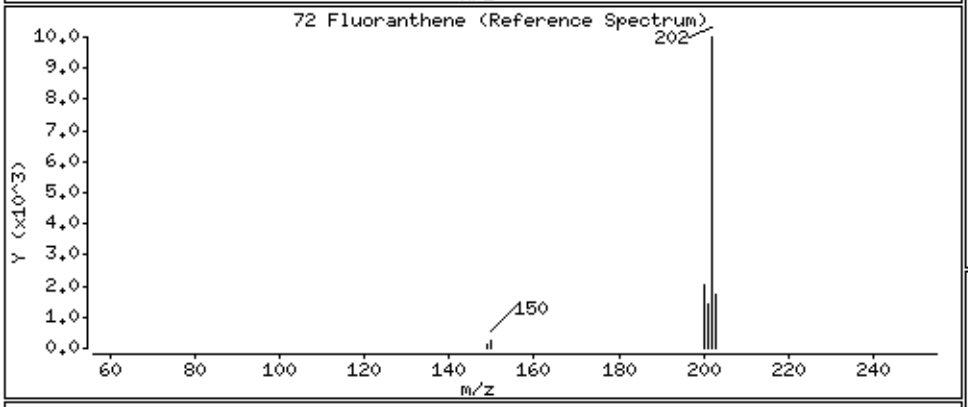
Operator: DT/EP

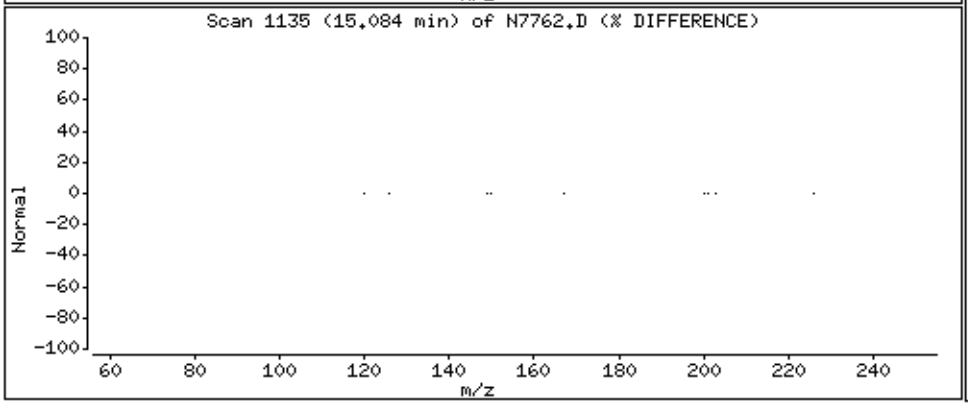
Column phase: ZB5-MS Column diameter: 0.25

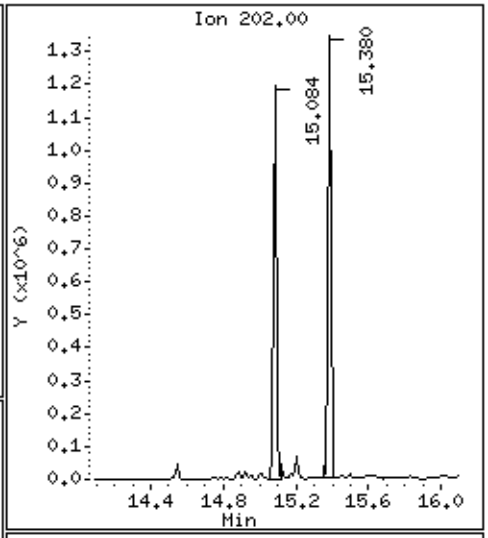
72 Fluoranthene Concentration: 464 ug/Kgdrywt

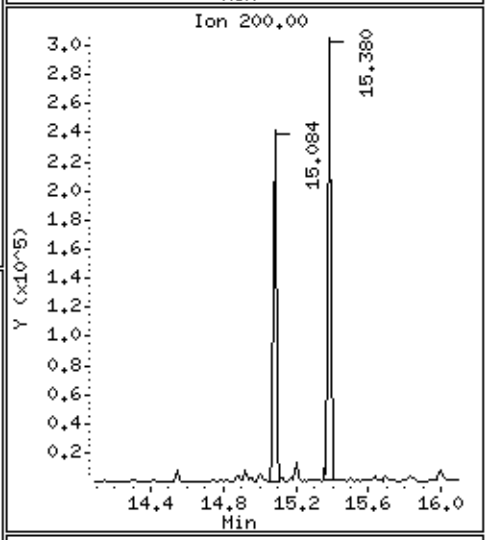


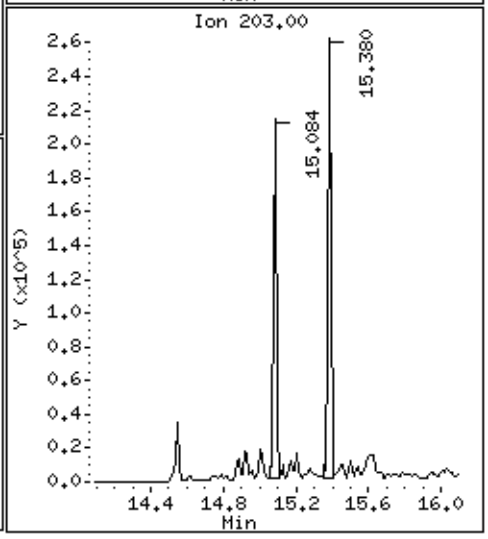












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Date : 20-MAR-2023 19:31

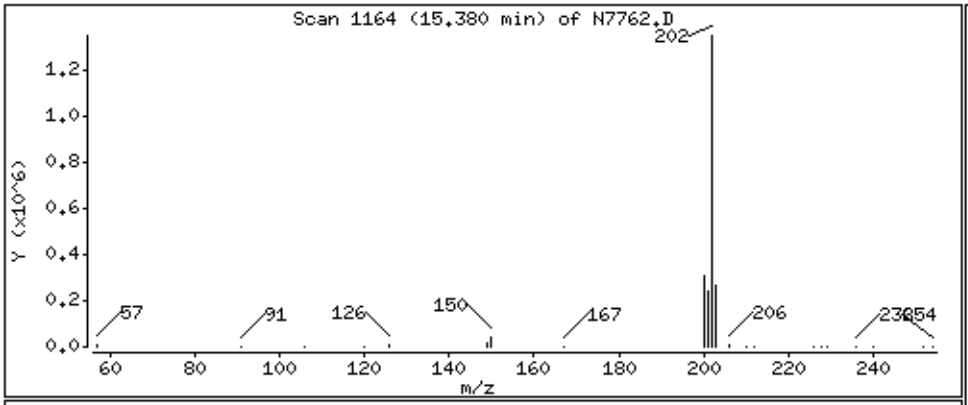
Client ID: SY-SB4R-10 Instrument: gcms-n.i

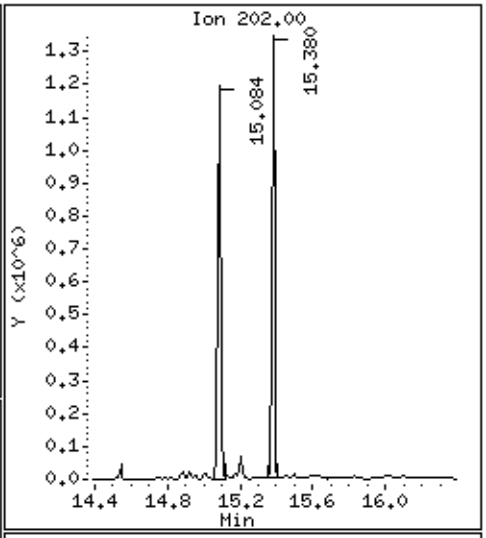
Sample Info: SQ0595-2DL

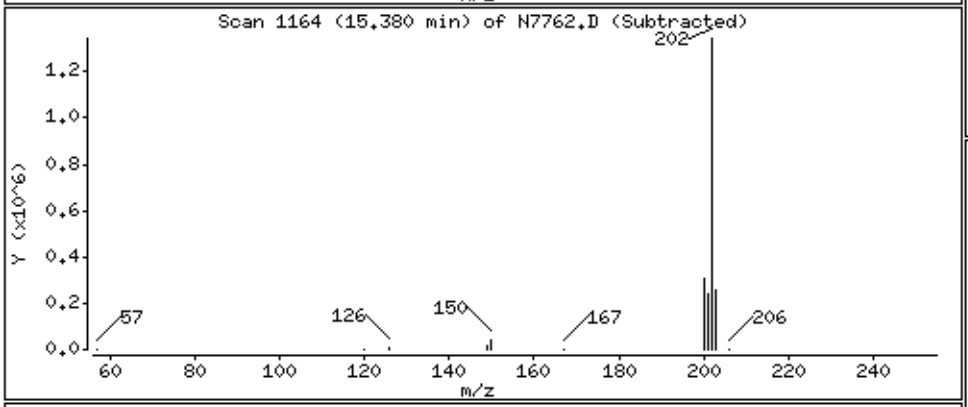
Operator: DT/EP

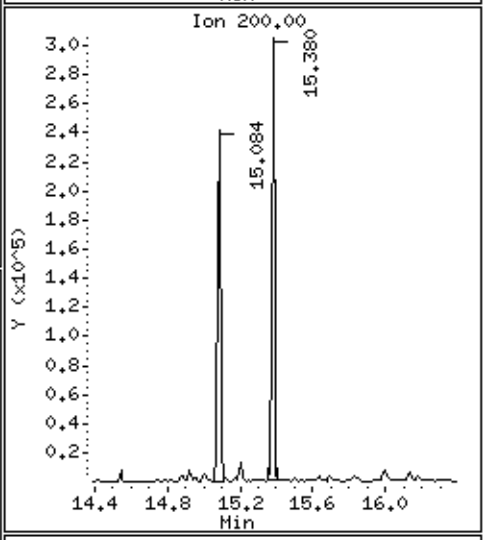
Column phase: ZB5-MS Column diameter: 0.25

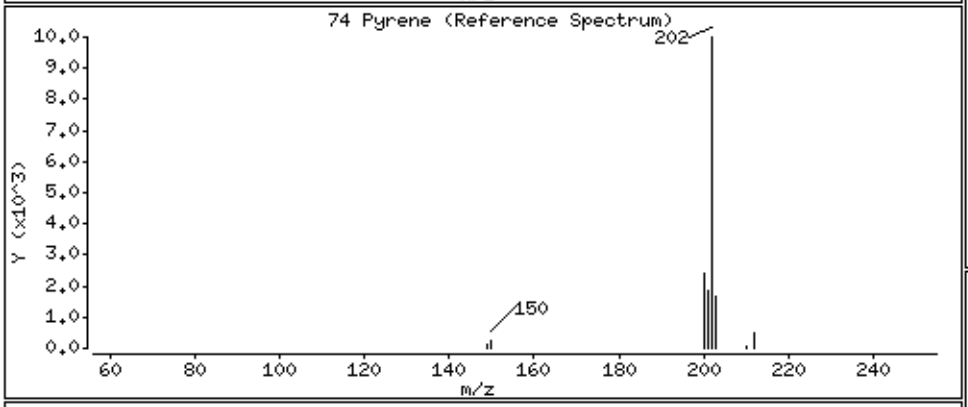
74 Pyrene Concentration: 492 ug/Kgdrywt

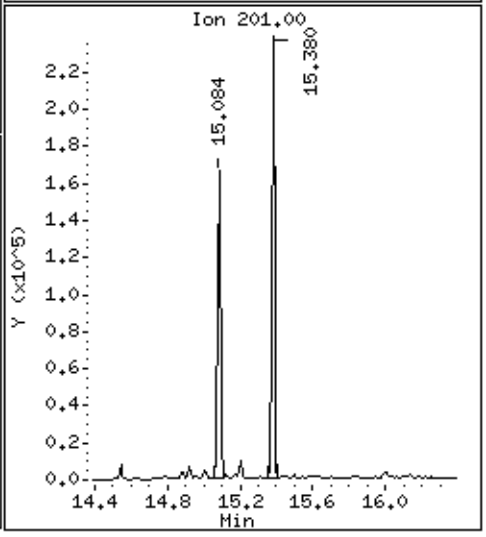


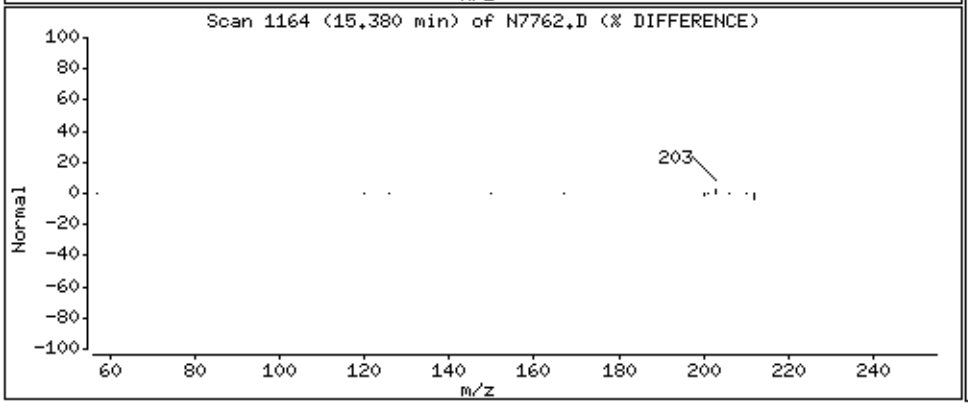












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Date : 20-MAR-2023 19:31

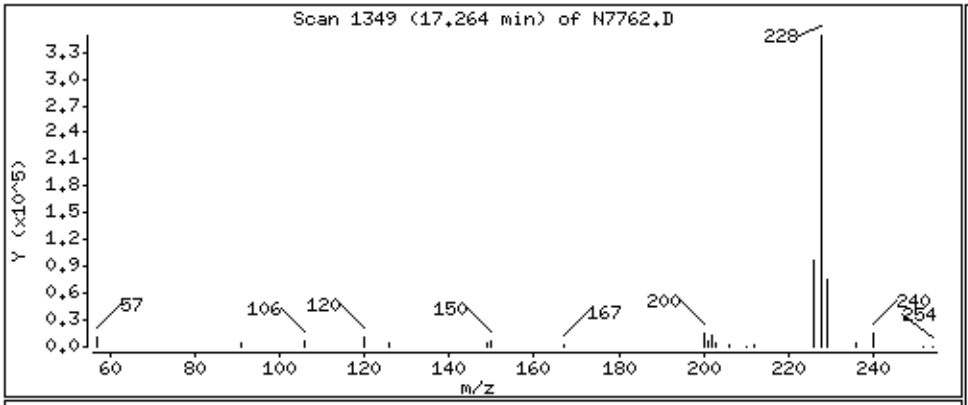
Client ID: SY-SB4R-10 Instrument: gcms-n.i

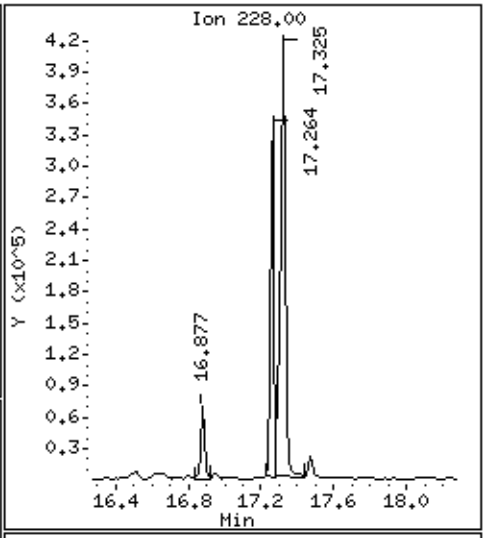
Sample Info: SQ0595-2DL

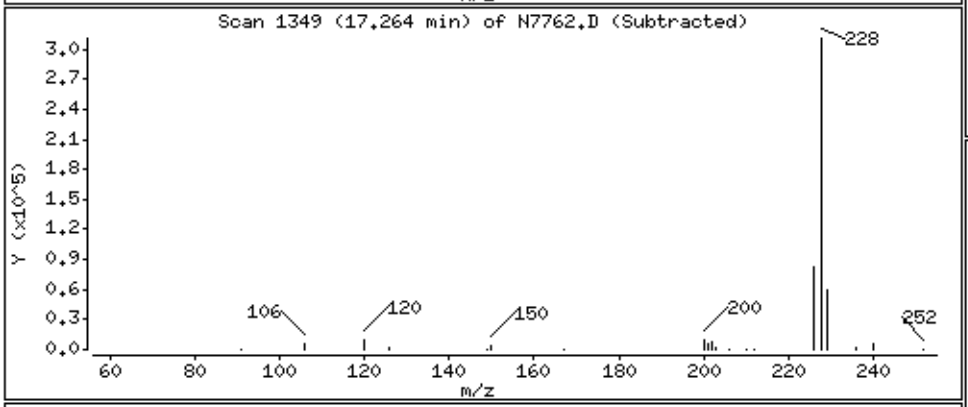
Operator: DT/EP

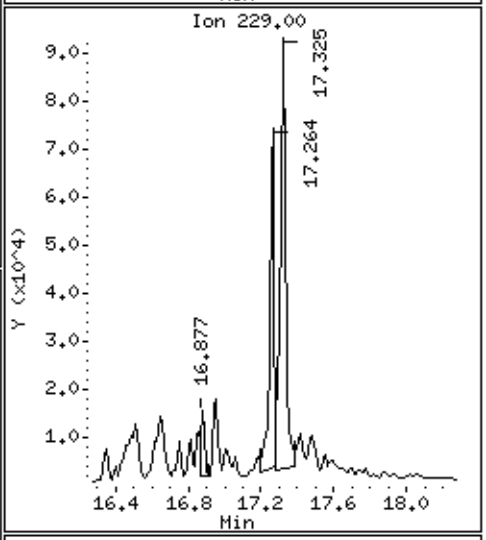
Column phase: ZB5-MS Column diameter: 0.25

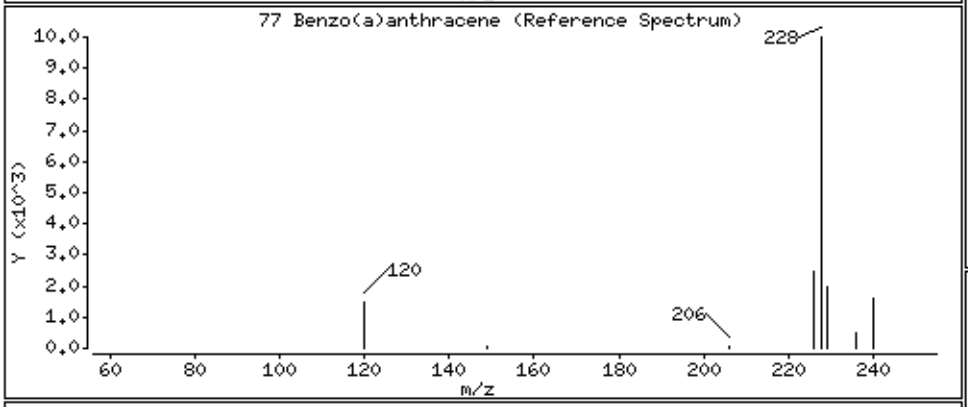
77 Benzo(a)anthracene Concentration: 322 ug/Kgdrywt

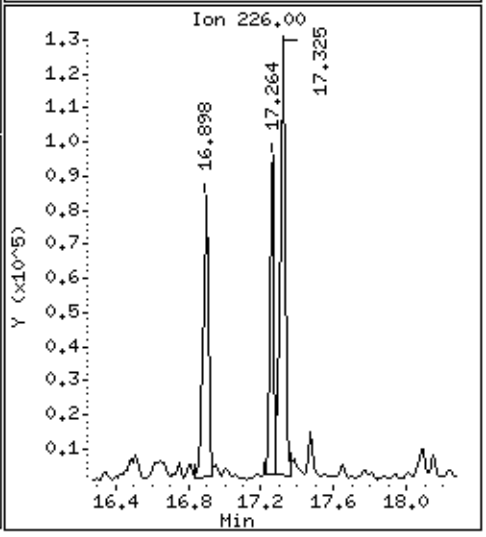


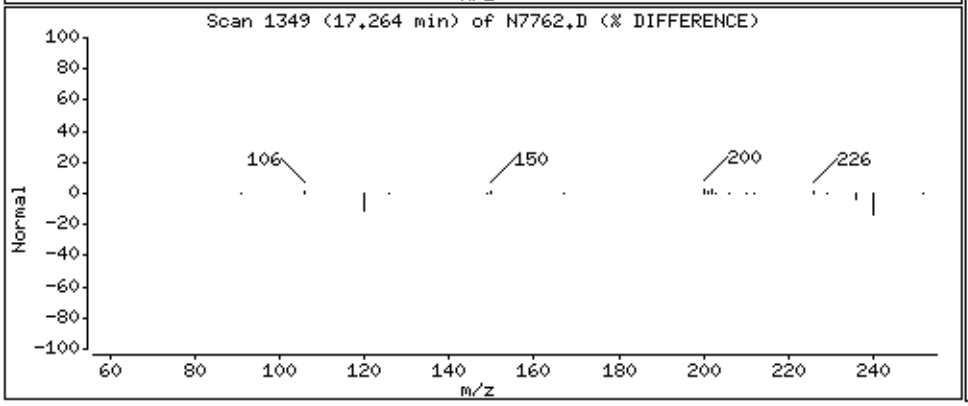












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Date : 20-MAR-2023 19:31

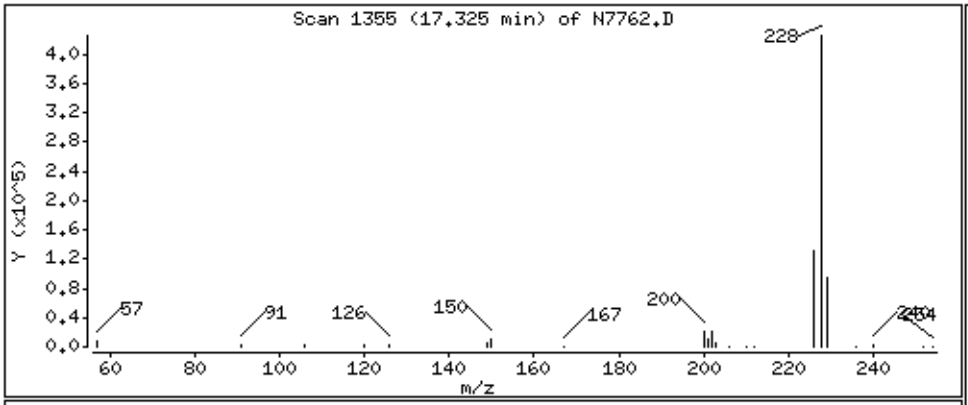
Client ID: SY-SB4R-10 Instrument: gcms-n.i

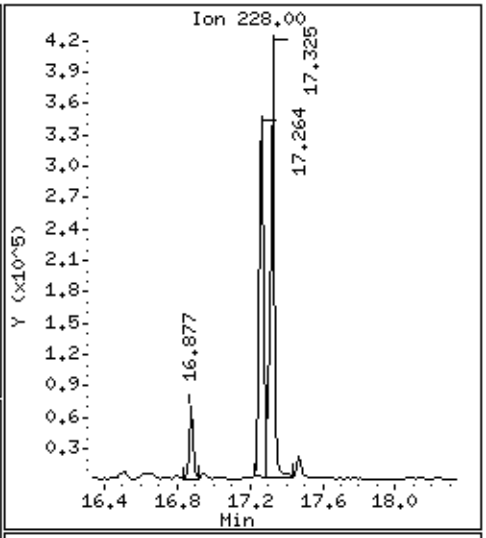
Sample Info: SQ0595-2DL

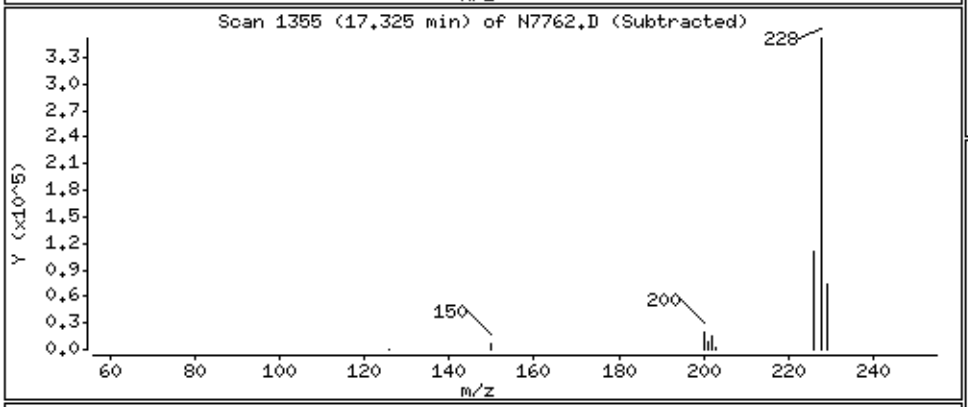
Operator: DT/EP

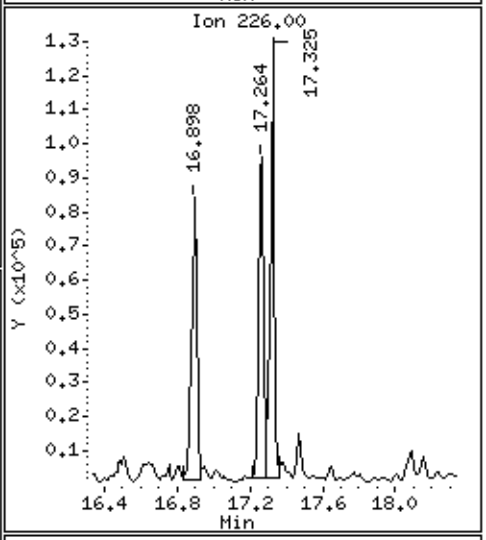
Column phase: ZB5-MS Column diameter: 0.25

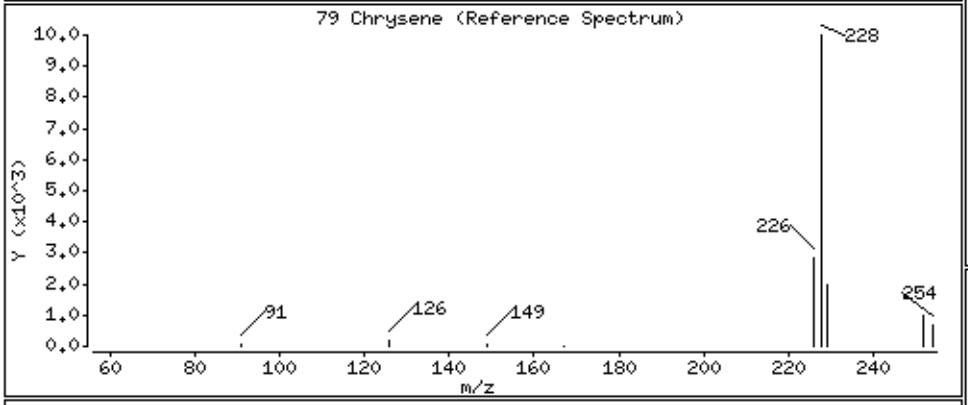
79 Chrysene Concentration: 397 ug/Kgdrywt

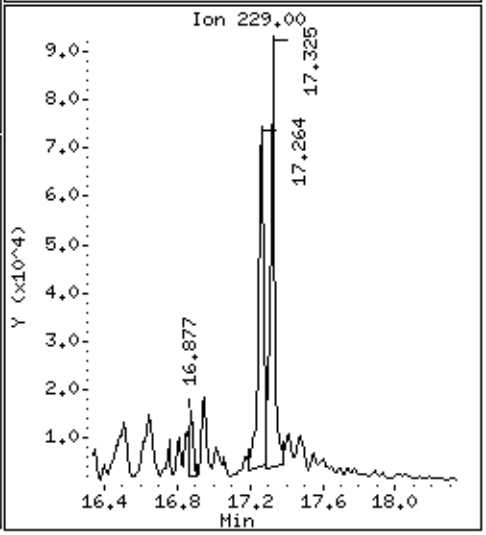


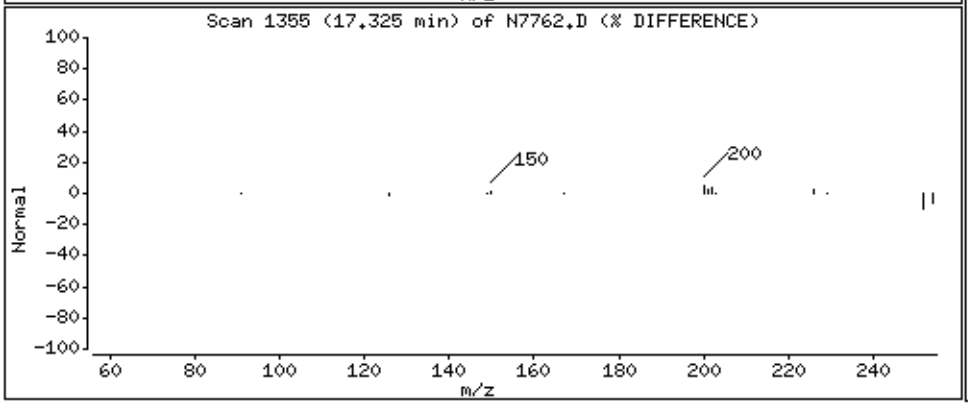












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Date : 20-MAR-2023 19:31

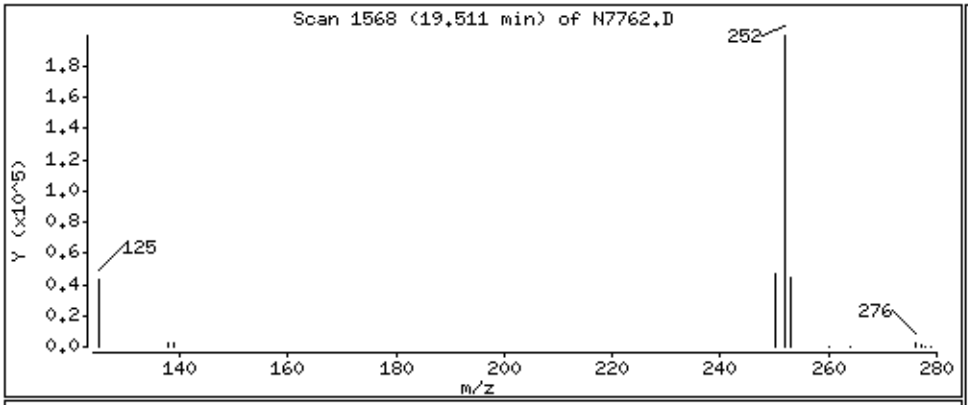
Client ID: SY-SB4R-10 Instrument: gcms-n.i

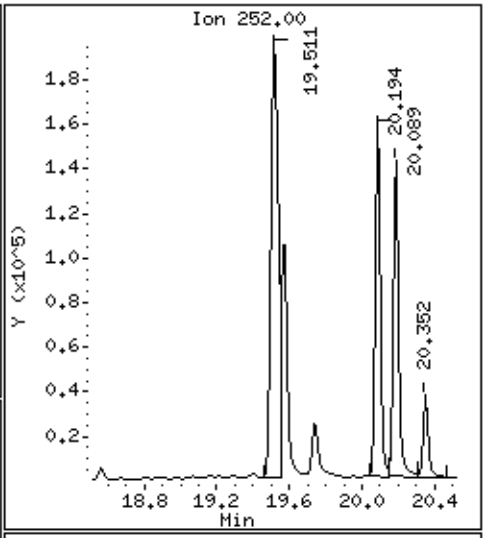
Sample Info: SQ0595-2DL

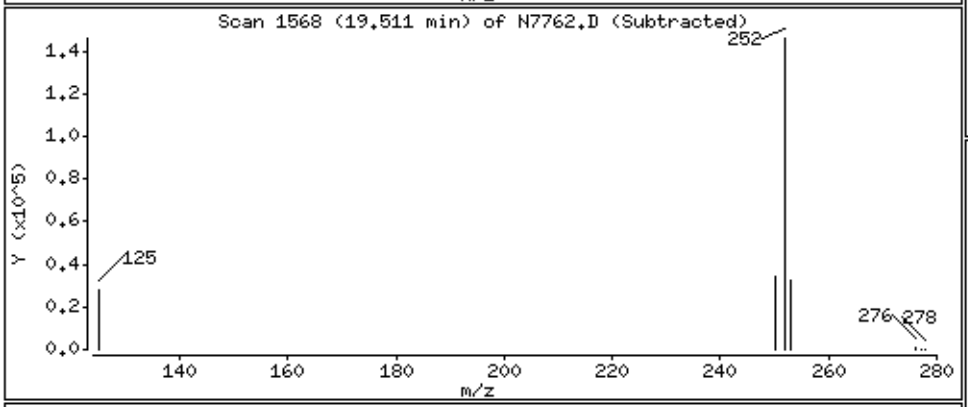
Operator: DT/EP

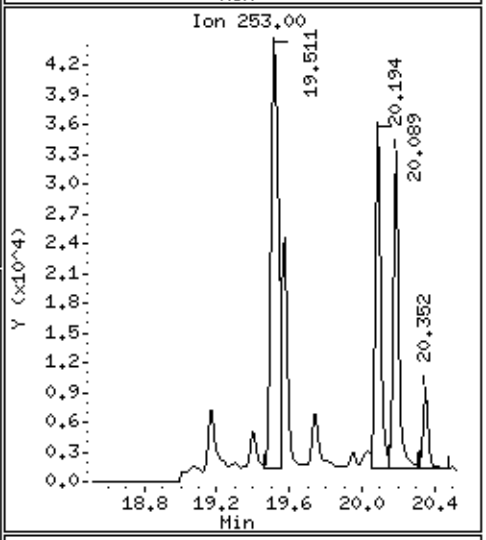
Column phase: ZB5-MS Column diameter: 0.25

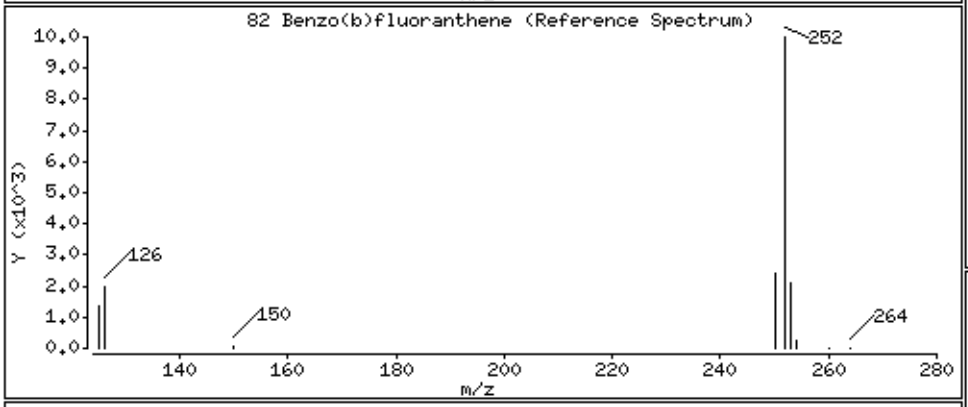
82 Benzo(b)fluoranthene Concentration: 435 ug/Kgdrywt

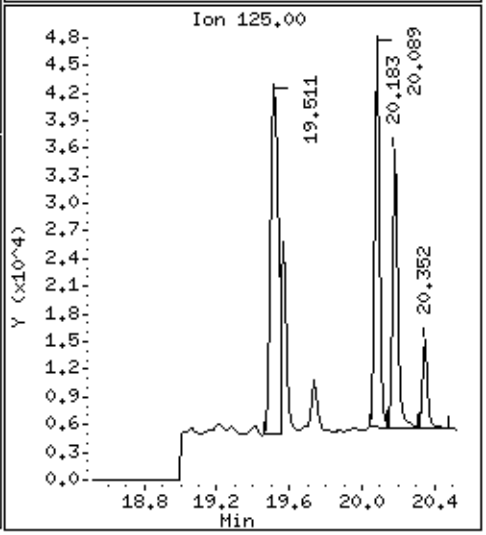


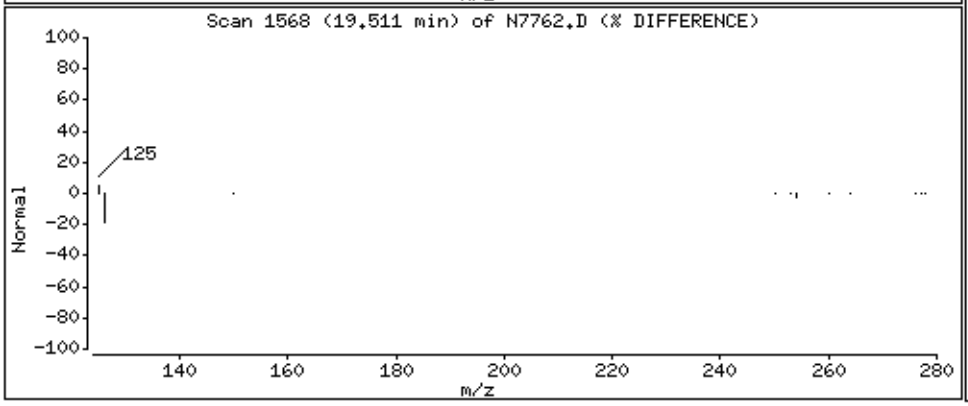












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Date : 20-MAR-2023 19:31

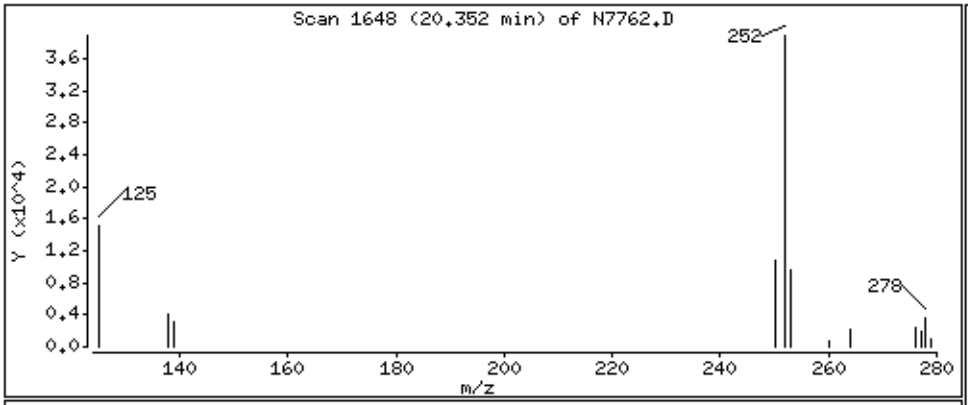
Client ID: SY-SB4R-10 Instrument: gcms-n.i

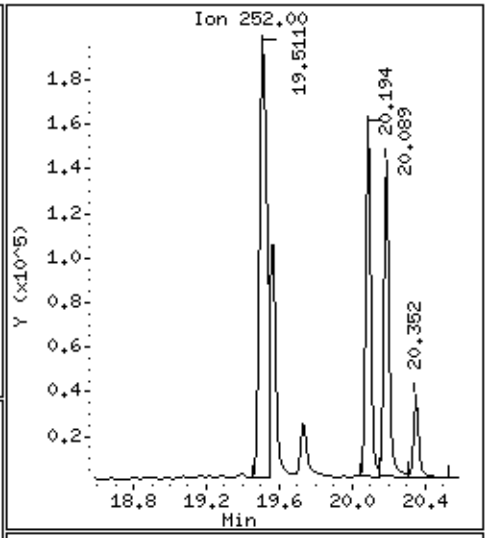
Sample Info: SQ0595-2DL

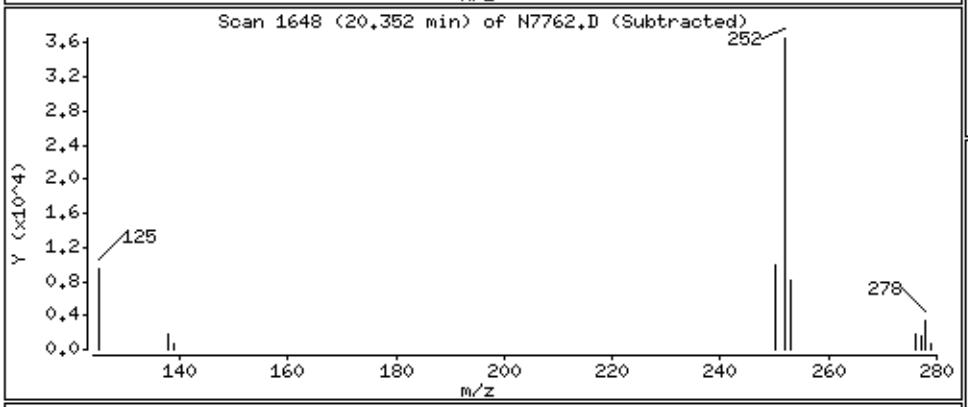
Operator: DT/EP

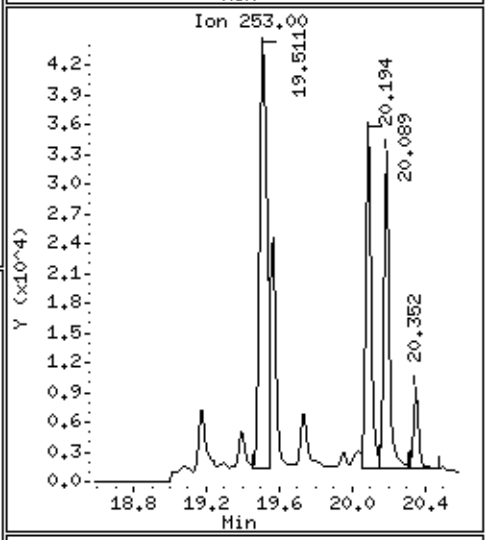
Column phase: ZB5-MS Column diameter: 0.25

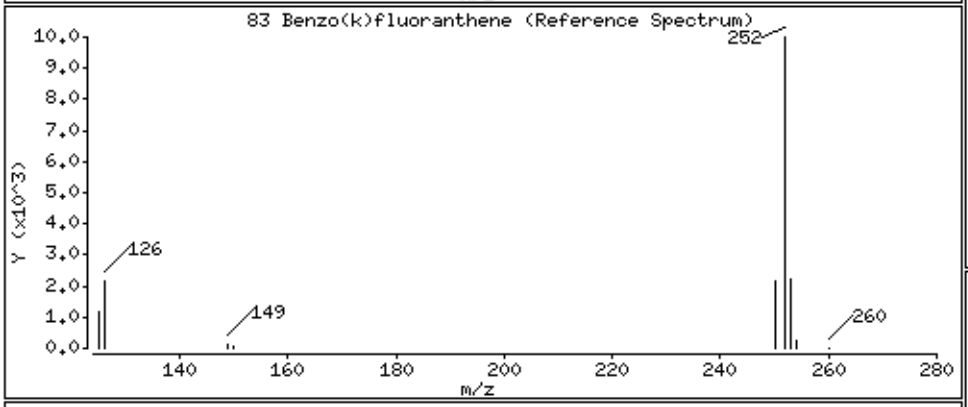
83 Benzo(k)fluoranthene Concentration: 43.2 ug/Kgdrywt

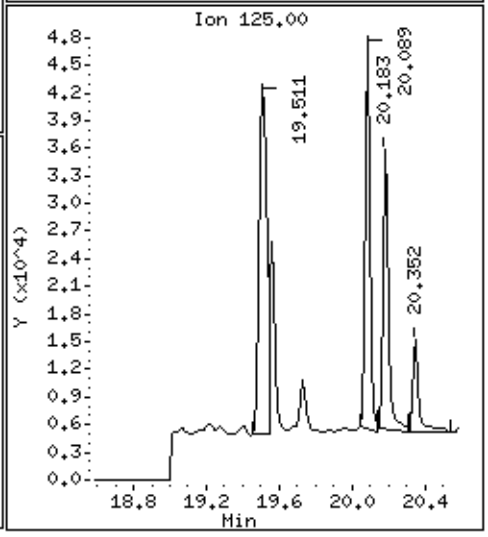


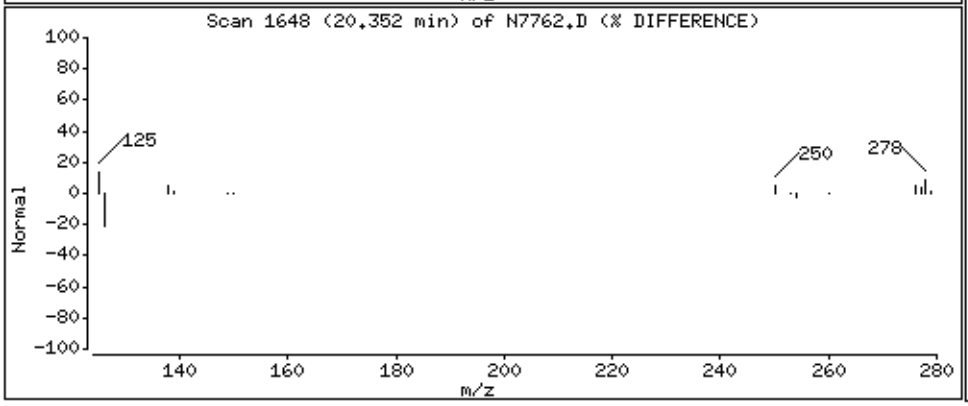












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Date : 20-MAR-2023 19:31

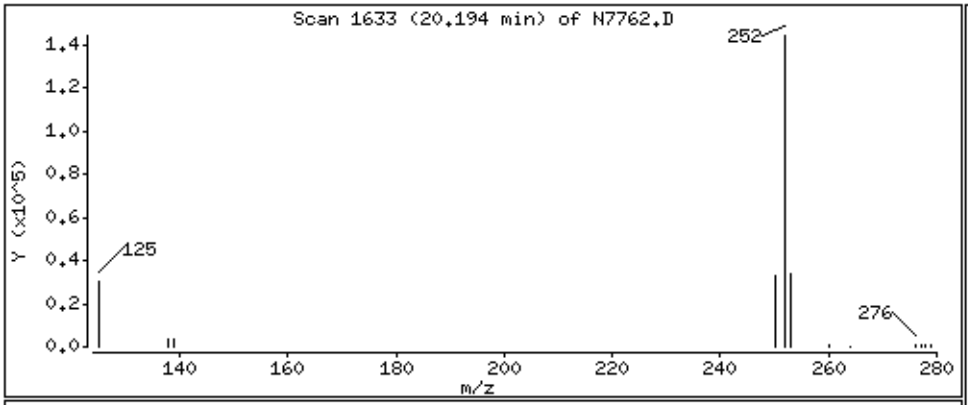
Client ID: SY-SB4R-10 Instrument: gcms-n.i

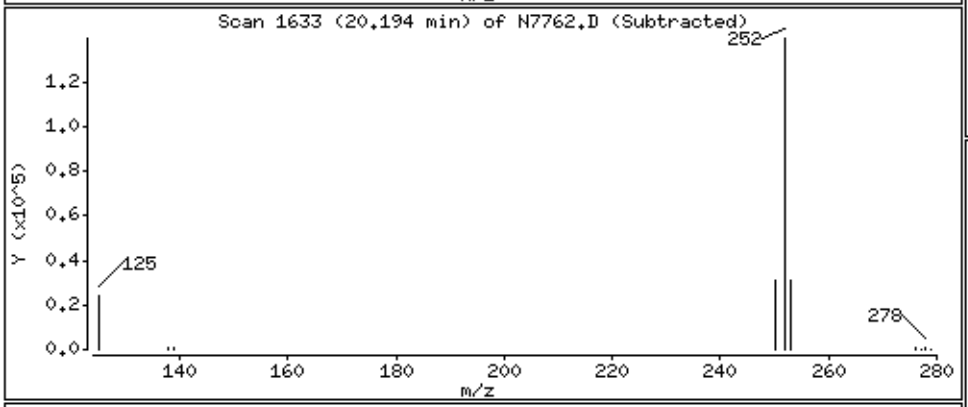
Sample Info: SQ0595-2DL

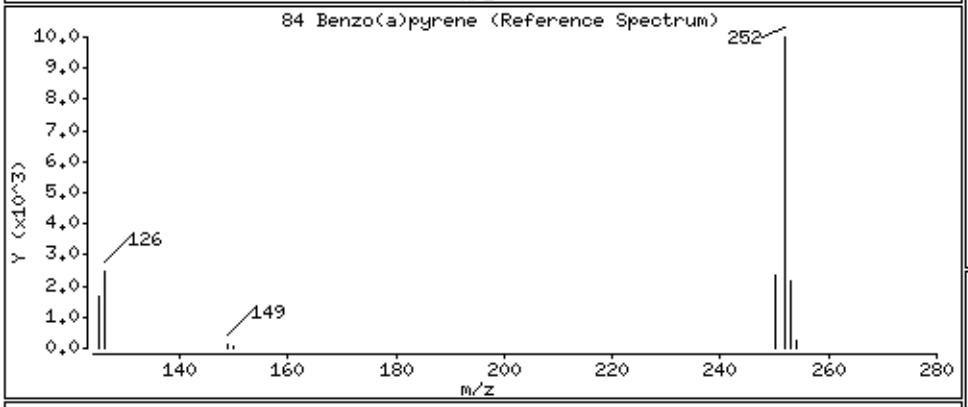
Operator: DT/EP

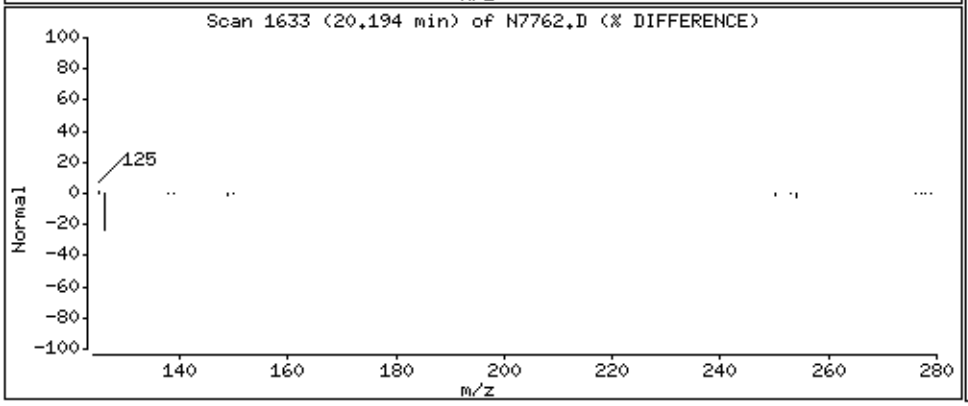
Column phase: ZB5-MS Column diameter: 0.25

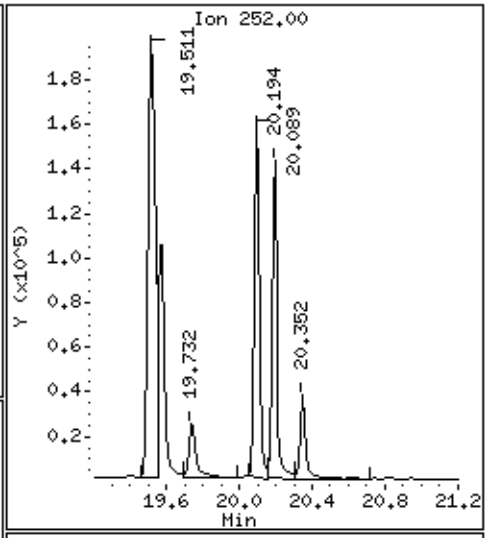
84 Benzo(a)pyrene Concentration: 243 ug/Kgdrywt

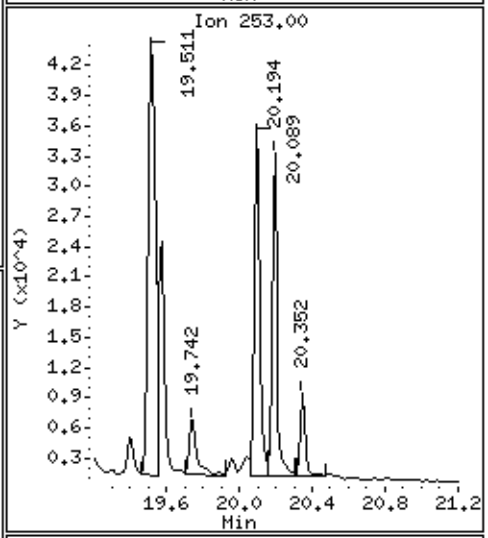


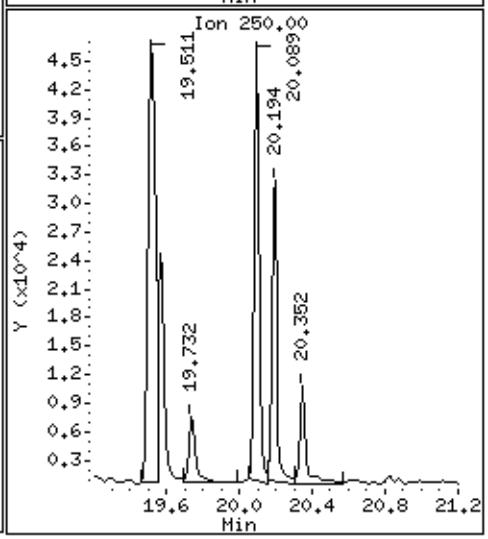












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Date : 20-MAR-2023 19:31

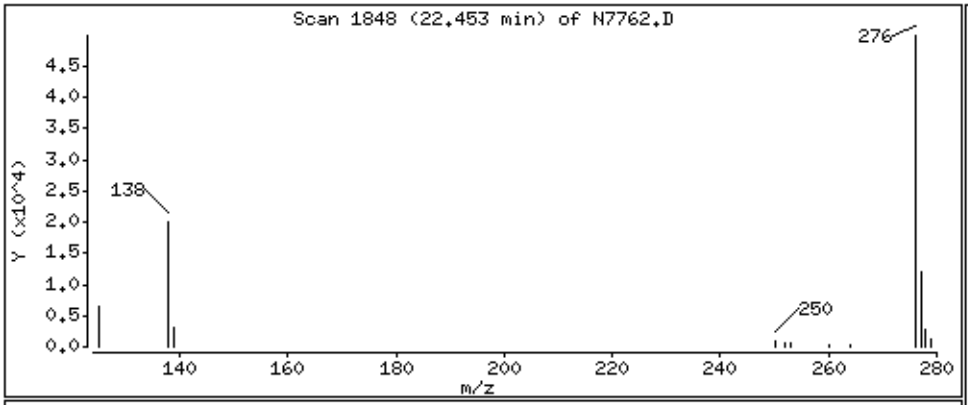
Client ID: SY-SB4R-10 Instrument: gcms-n.i

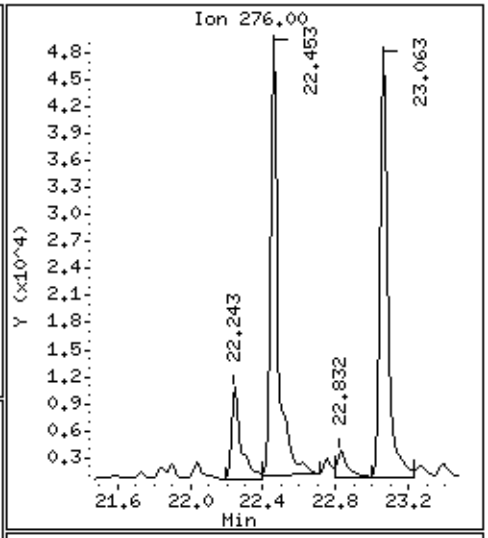
Sample Info: SQ0595-2DL

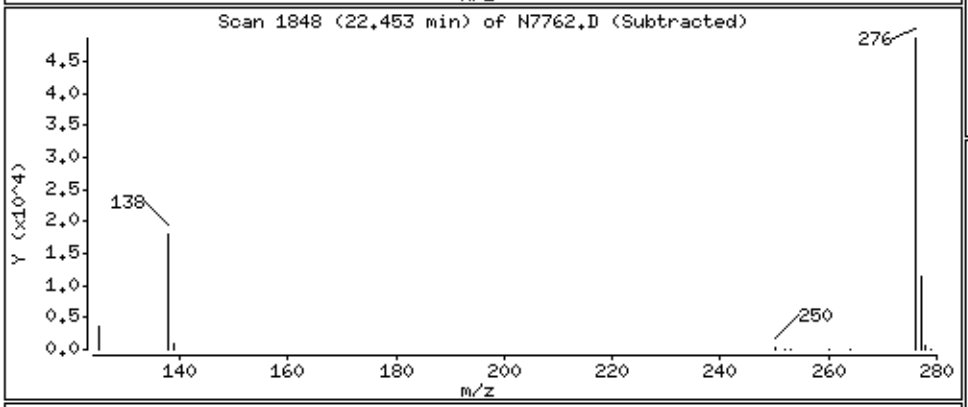
Operator: DT/EP

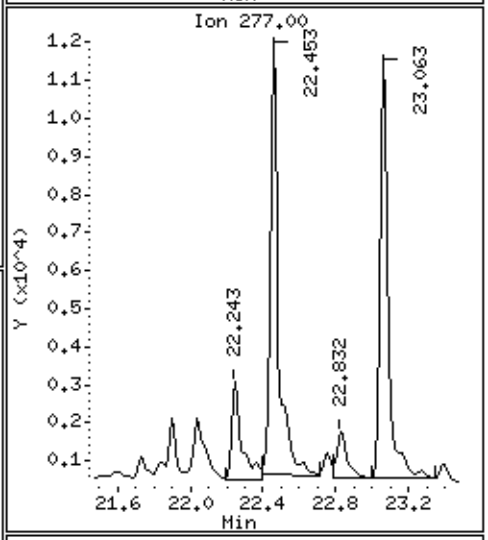
Column phase: ZB5-MS Column diameter: 0.25

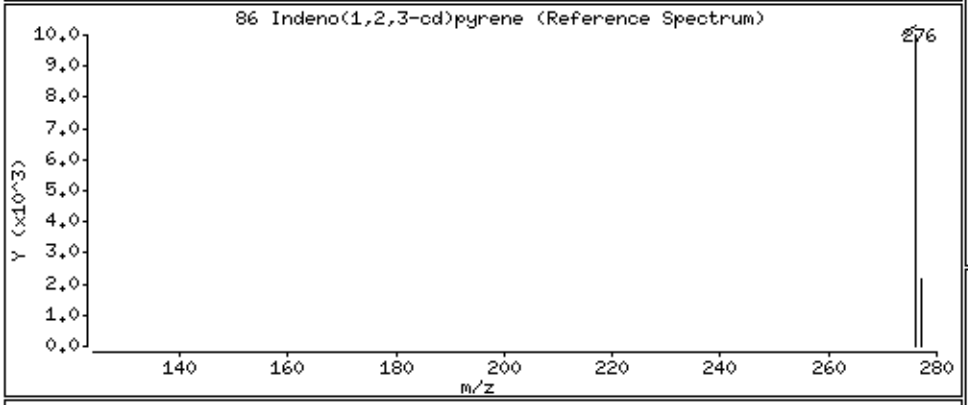
86 Indeno(1,2,3-cd)pyrene Concentration: 185 ug/Kgdrywt

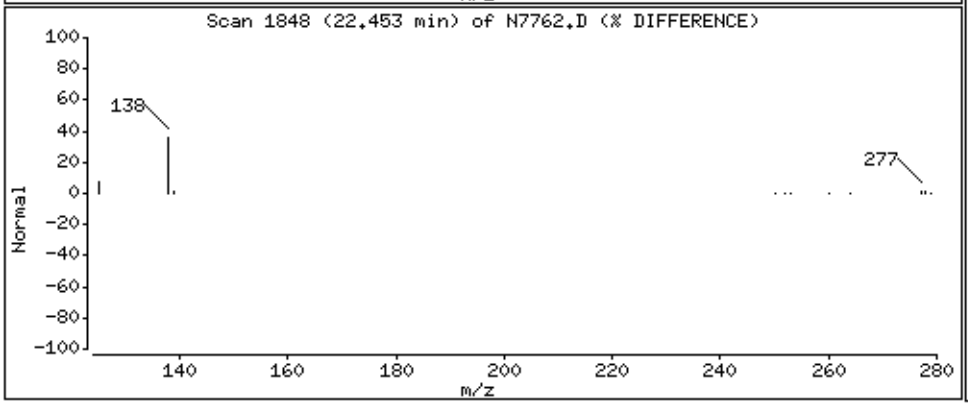


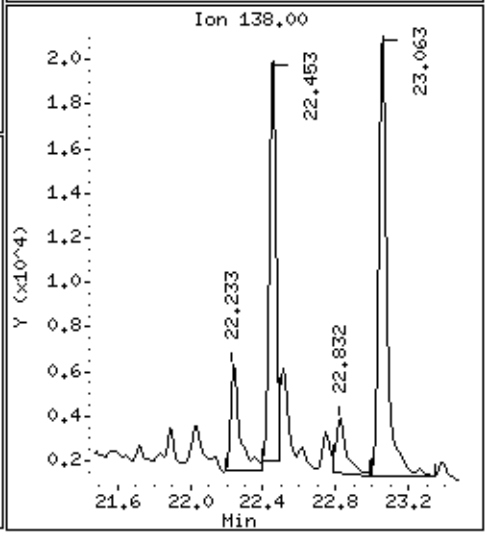












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Date : 20-MAR-2023 19:31

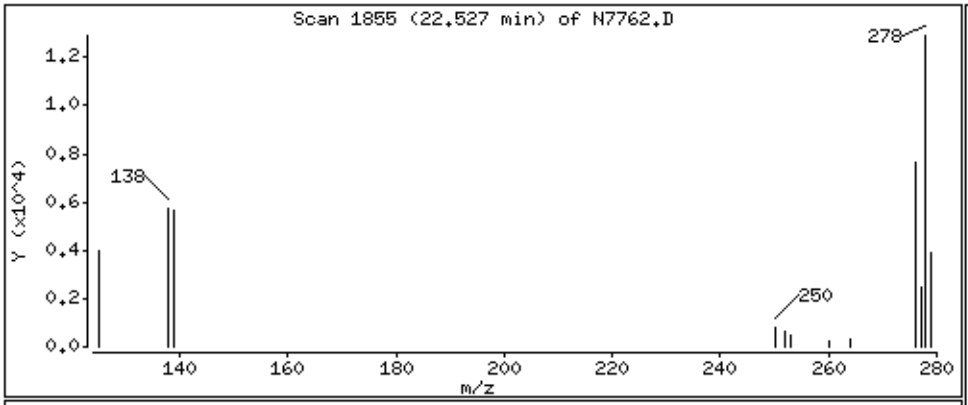
Client ID: SY-SB4R-10 Instrument: gcms-n.i

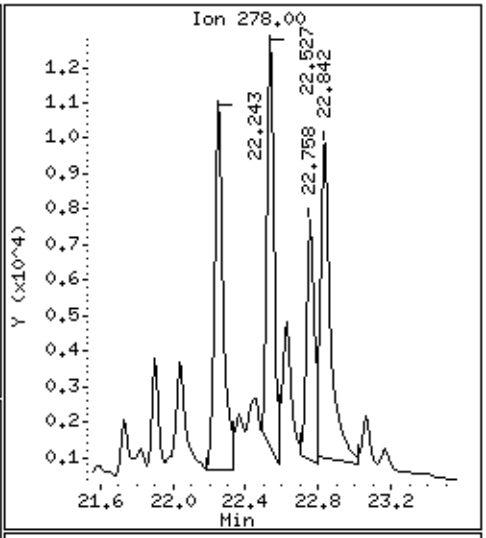
Sample Info: SQ0595-2DL

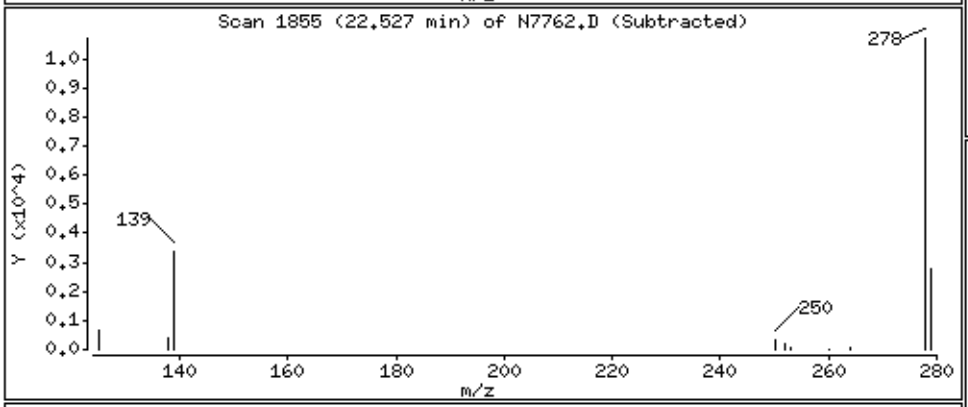
Operator: DT/EP

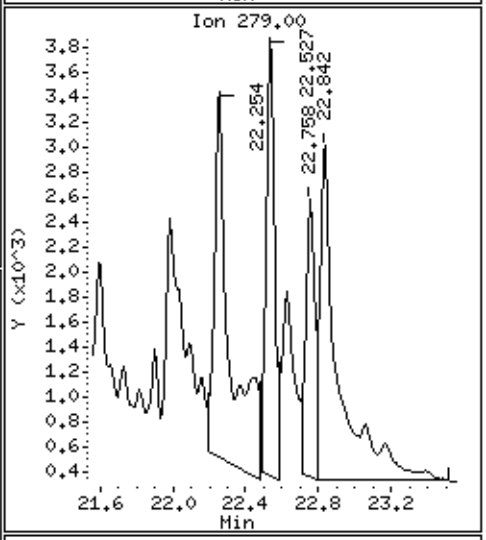
Column phase: ZB5-MS Column diameter: 0.25

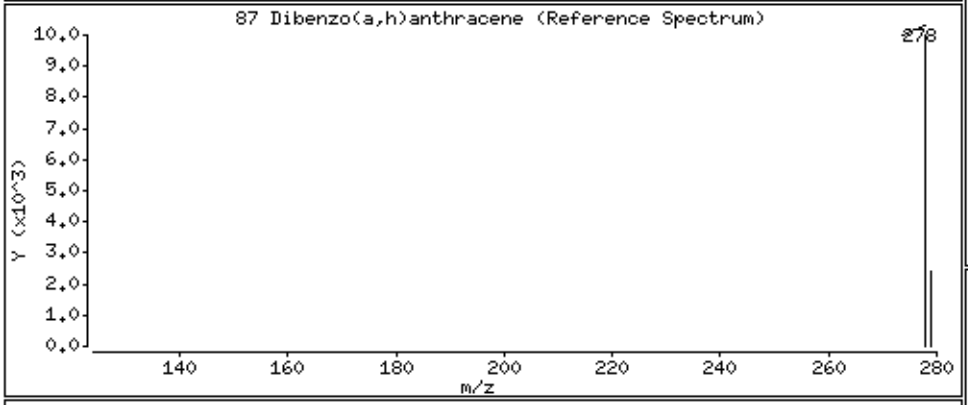
87 Dibenzo(a,h)anthracene Concentration: 39.2 ug/Kgdrywt

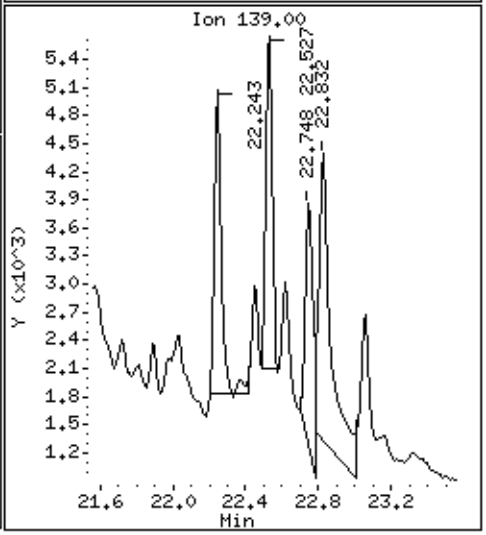


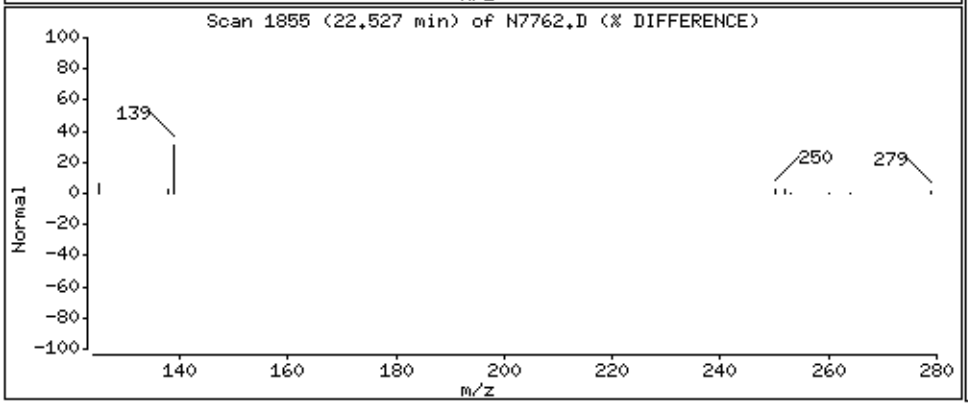












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Date : 20-MAR-2023 19:31

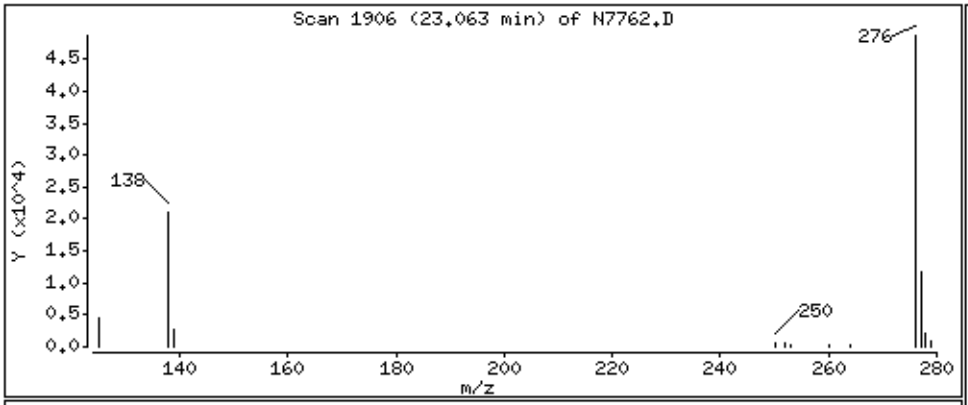
Client ID: SY-SB4R-10 Instrument: gcms-n.i

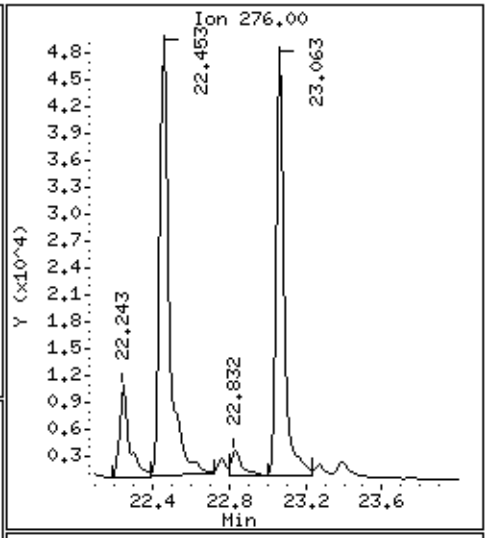
Sample Info: SQ0595-2DL

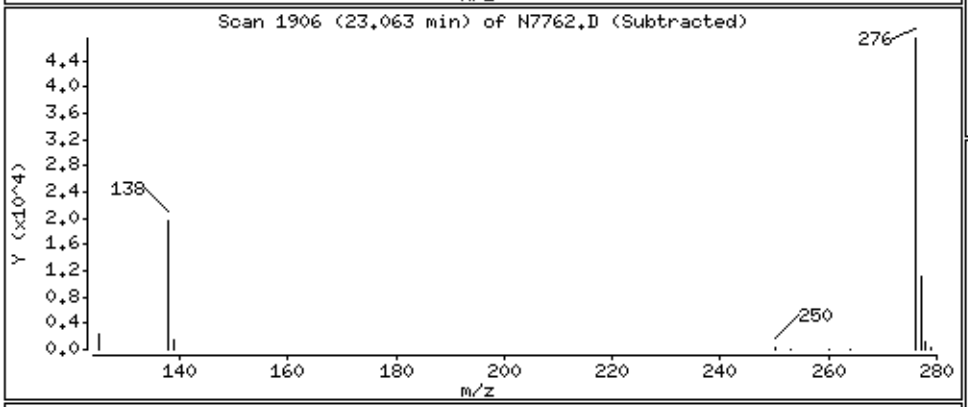
Operator: DT/EP

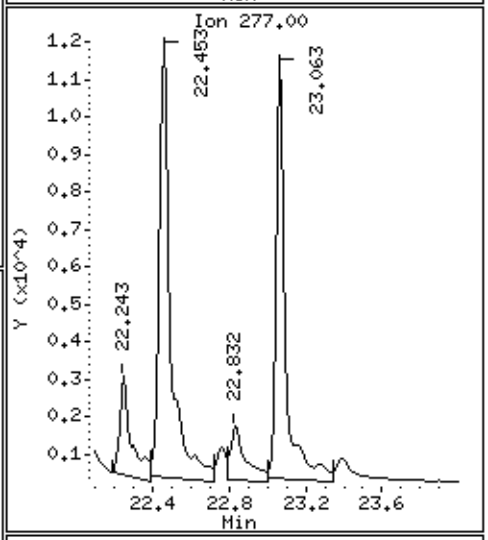
Column phase: ZB5-MS Column diameter: 0.25

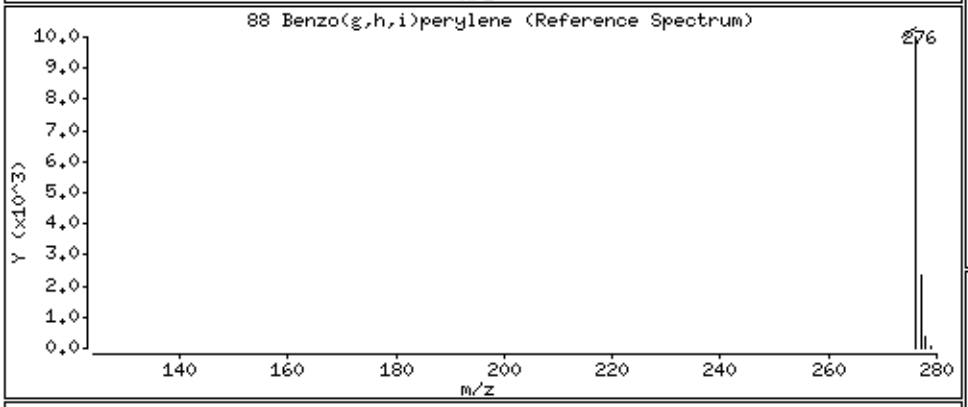
88 Benzo(g,h,i)perylene Concentration: 139 ug/Kgdrywt

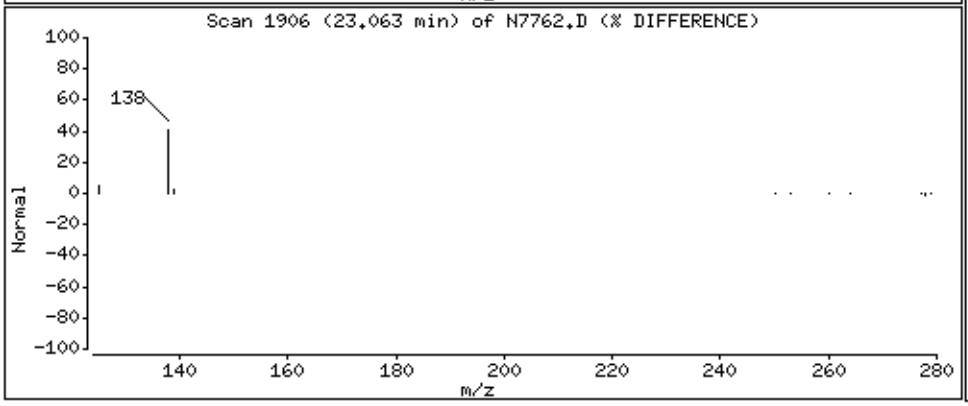


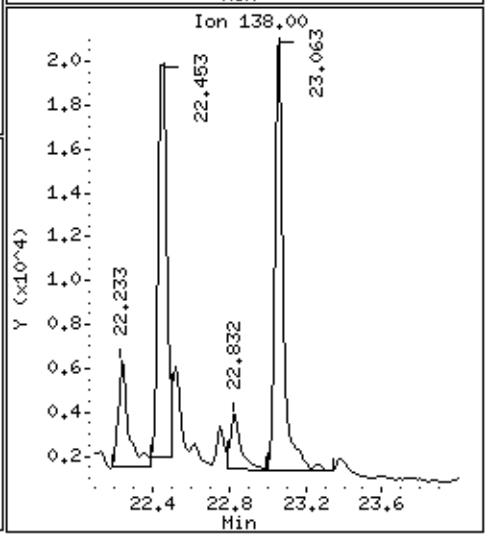












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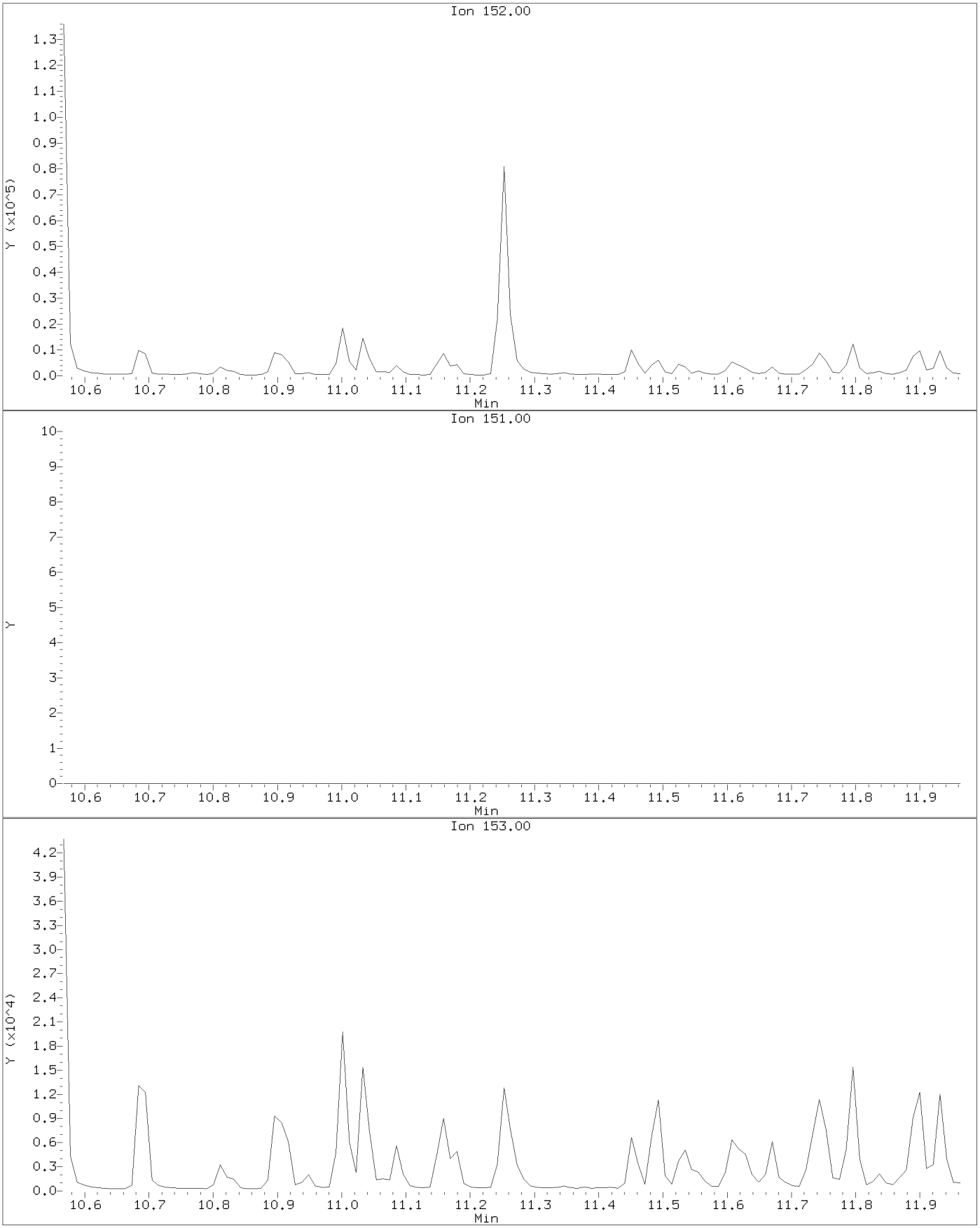
Injection Date: 20-MAR-2023 19:31
Instrument: gcms-n.i
Client Sample ID: SY-SB4R-10

Compound: Acenaphthylene
CAS Number: 208-96-8

BEFORE MANUAL INTEGRATION



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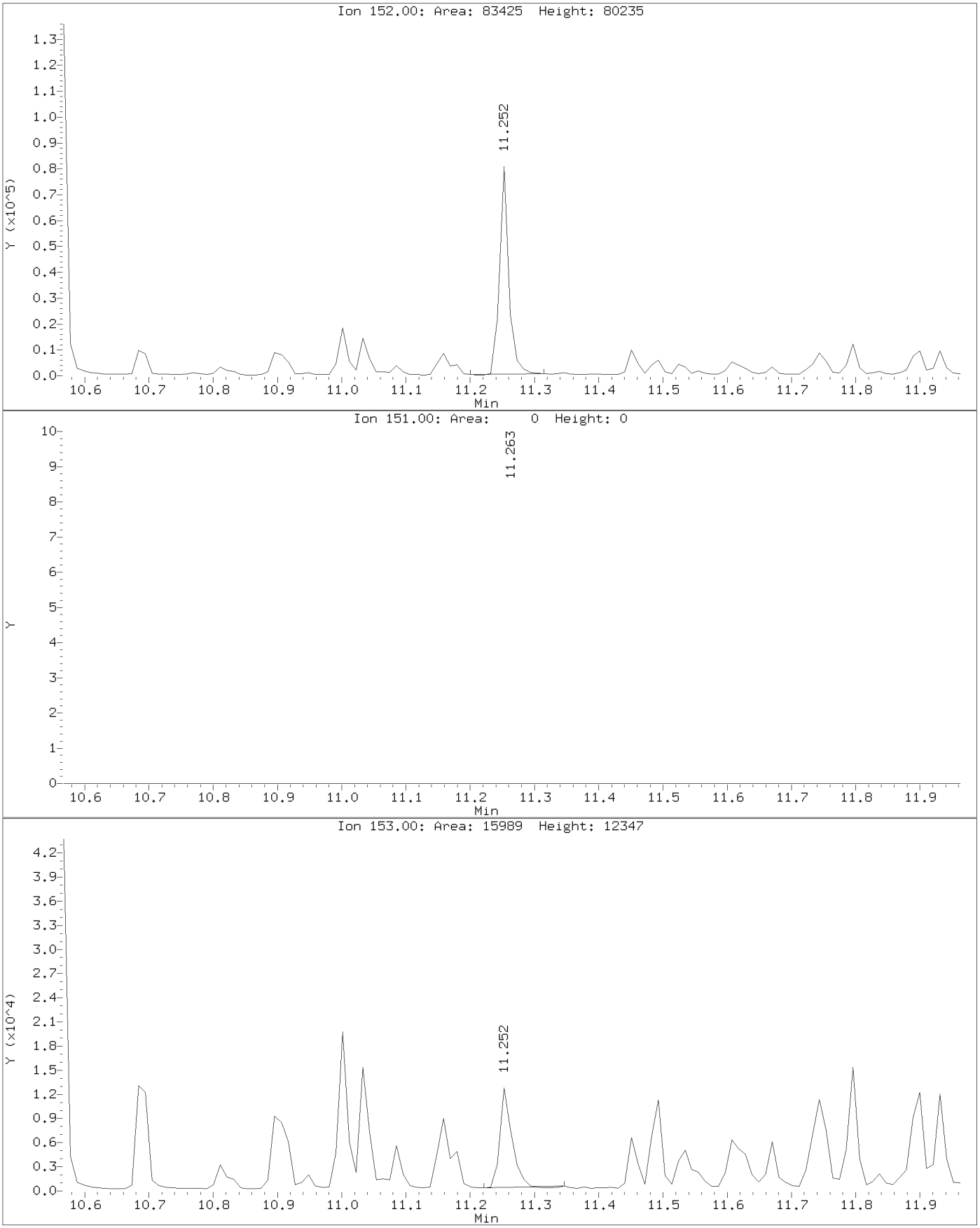
Injection Date: 20-MAR-2023 19:31
Instrument: gcms-n.i
Client Sample ID: SY-SB4R-10

Compound: Acenaphthylene
CAS Number: 208-96-8

AFTER MANUAL INTEGRATION



Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

SDG: SQ0595
Lab ID: SQ0595-3RA
Client ID: SY-SB4R-2
Matrix: SL
Lab File ID: N7619.D

Sample Date: 01-FEB-23
Extract Date: 08-FEB-23
Extracted By: SR
Extraction Method: SW846 3550C
Lab Prep Batch: WG332122

Report Date: 22-MAR-23
Analysis Date: 07-MAR-23
Analyst: DT/CO
Analysis Method: SW846 8270D SIM
% Solids: 80.

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	0.012	mg/Kgdrywt	1	.02	0.024	0.0032	0.012
2-Methylnaphthalene	U	0.012	mg/Kgdrywt	1	.02	0.024	0.0027	0.012
Acenaphthylene	U	0.012	mg/Kgdrywt	1	.02	0.024	0.0015	0.012
Acenaphthene	U	0.012	mg/Kgdrywt	1	.02	0.024	0.0018	0.012
Fluorene	U	0.012	mg/Kgdrywt	1	.02	0.024	0.0039	0.012
Phenanthrene	J	0.0039	mg/Kgdrywt	1	.02	0.024	0.0022	0.012
Anthracene	U	0.012	mg/Kgdrywt	1	.02	0.024	0.0015	0.012
Fluoranthene	J	0.0047	mg/Kgdrywt	1	.02	0.024	0.0022	0.012
Pyrene	J	0.0047	mg/Kgdrywt	1	.02	0.024	0.0026	0.012
Benzo(a)anthracene	J	0.0026	mg/Kgdrywt	1	.02	0.024	0.0023	0.012
Chrysene	J	0.0041	mg/Kgdrywt	1	.02	0.024	0.0021	0.012
Benzo(b)Fluoranthene	J	0.0036	mg/Kgdrywt	1	.02	0.024	0.0029	0.012
Benzo(k)fluoranthene	U	0.012	mg/Kgdrywt	1	.02	0.024	0.0042	0.012
Benzo(a)pyrene	U	0.012	mg/Kgdrywt	1	.02	0.024	0.0040	0.012
Indeno(1,2,3-cd)pyrene	U	0.012	mg/Kgdrywt	1	.02	0.024	0.0023	0.012
Dibenzo(a,h)anthracene	U	0.012	mg/Kgdrywt	1	.02	0.024	0.0022	0.012
Benzo(g,h,i)perylene	U	0.012	mg/Kgdrywt	1	.02	0.024	0.0024	0.012
2-Methylnaphthalene-D10		45.5	mg/Kgdrywt					
Fluorene-D10		55.0	mg/Kgdrywt					
Pyrene-D10		74.3	mg/Kgdrywt					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029
http://www.katahdinlab.com

Data File: \\target_server\gg\chem\gcms-n.i\N030623.b\N7619.D
Report Date: 16-Mar-2023 07:44

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-n.i\N030623.b\N7619.D
Lab Smp Id: SQ0595-3RA Client Smp ID: SY-SB4R-2
Inj Date : 07-MAR-2023 00:10
Operator : DT/CO Inst ID: gcms-n.i
Smp Info : SQ0595-3RA
Misc Info : WG333437,WG332122,WG333437-4
Comment   :
Method   : \\target_server\gg\chem\gcms-n.i\N030623.b\NSPSIM19.m
Meth Date : 07-Mar-2023 11:13 coneill Quant Type: ISTD
Cal Date : 06-MAR-2023 16:55 Cal File: N7608.D
Als bottle: 18
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.12
Processing Host: V200T4

Concentration Formula: Amt * DF * (Vt/Ws*Vi)*(100/(100-M))*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.00100	Final Volume (L)
Ws	0.03040	Weight of Sample (Kg)
Vi	1.000	Volume injected (uL)
M	19.704	% Moisture
Cpnd Variable		Local Compound Variable

DL
9:31 am, Mar 22, 2023

		QUANT SIG					CONCENTRATIONS ON-COLUMN	FINAL	
Compounds		MASS	RT	EXP RT	REL RT	RESPONSE	(ug/ml)	(ug/Kgdrywt)	REVIEW COD
$	1 1,4-Dioxane-d8	96	3.093	2.999	(0.430)	16275	0.47864	19.6(R)	
	4 Pyridine	79	3.843	3.569	(0.535)	17341	0.23552	9.65(a)	
*	10 1,4-Dichlorobenzene-D4	152	7.190	7.191	(1.000)	58109	0.80000	(Q)	
	15 Acetophenone	105	7.731	7.721	(0.874)	23659	0.18575	7.61(a)	
*	27 Naphthalene-D8	136	8.844	8.844	(1.000)	221500	0.80000		
$	33 2-Methylnaphthalene-D10	152	9.755	9.755	(1.103)	137978	0.90943	37.2	
$	38 2,4-Dibromophenol	252	10.228	10.202	(0.915)	84237	1.79149	73.4	
*	48 Acenaphthene-D10	164	11.181	11.182	(1.000)	114064	0.80000		
$	56 Fluorene-D10	174	11.886	11.886	(1.063)	134712	1.09972	45.0	
*	66 Phenanthrene-D10	188	13.179	13.179	(1.000)	162563	0.80000		
	67 Phenanthrene	178	13.210	13.210	(1.002)	21822	0.09602	3.93(a)	
$	71 Fluoranthene-d10	212	14.775	14.787	(1.121)	189271	1.29549	53.1	
	72 Fluoranthene	202	14.798	14.809	(1.123)	23027	0.11461	4.70(a)	
$	73 Pyrene-D10	212	15.075	15.087	(0.891)	227713	1.48626	60.9	
	74 Pyrene	202	15.097	15.109	(0.892)	24641	0.11373	4.66(a)	
	77 Benzo(a)anthracene	228	16.908	16.898	(0.999)	6862	0.06311	2.58(a)	
*	78 Chrysene-D12	240	16.919	16.908	(1.000)	65134	0.80000		
	79 Chrysene	228	16.964	16.963	(1.003)	12004	0.10104	4.14(aM)	M6
	80 bis(2-Ethylhexyl)phthalate	149	17.064	17.075	(1.009)	278504	1.87698	76.9(a)	
	82 Benzo(b)fluoranthene	252	19.074	19.042	(0.959)	4584	0.08887	3.64(aQM)	M7

Data File: \\target_server\gg\chem\gcms-n.i\N030623.b\N7619.D
Report Date: 16-Mar-2023 07:44

DL

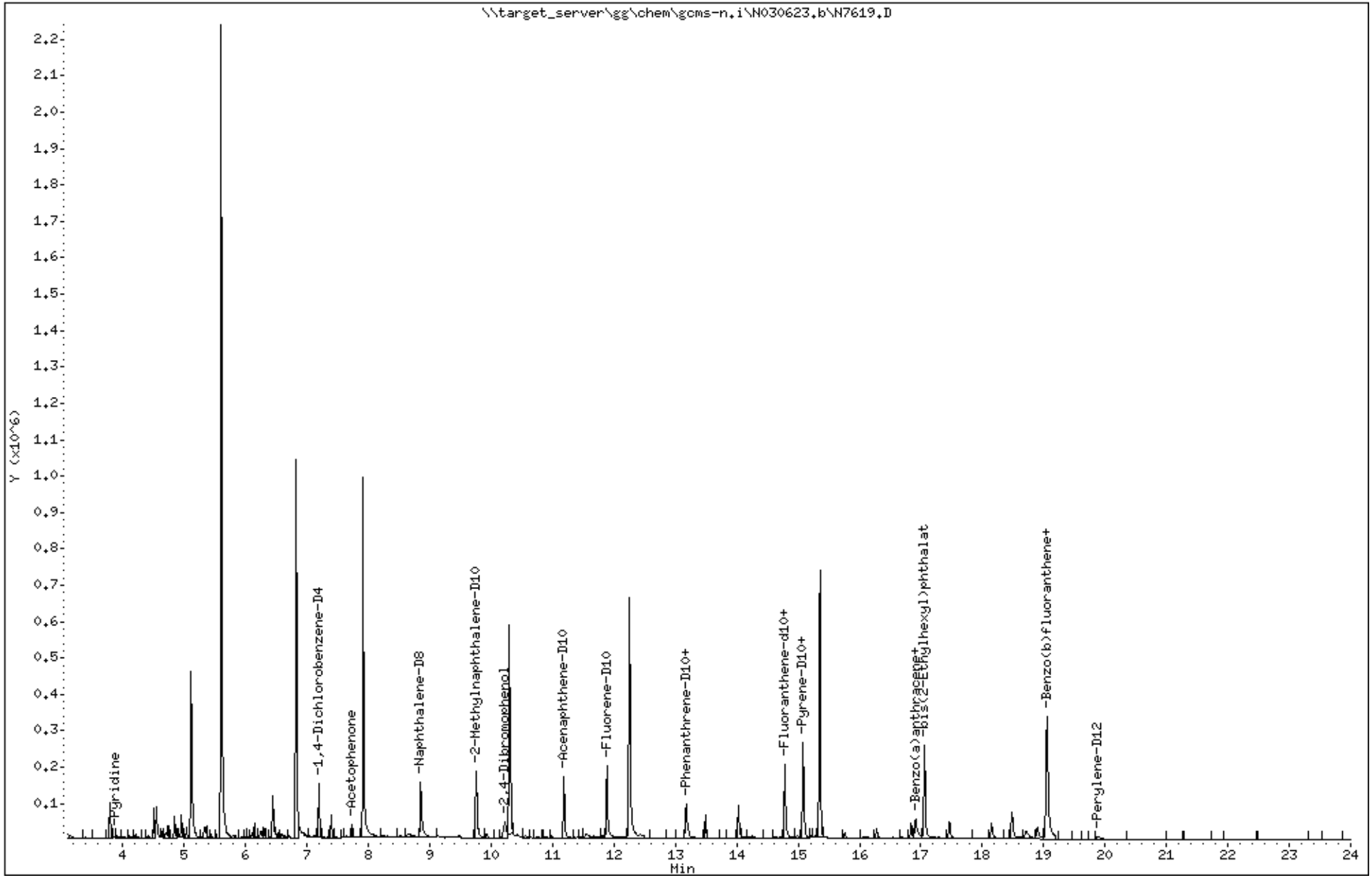
9:30 am, Mar 22, 2023

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/Kgdrywt)	REVIEW COD
	83 Benzo(k)fluoranthene	252	19.119	19.097	(0.961)	3988	0.04694	1.92(aQM)	M6
*	85 Perylene-D12	264	19.891	19.891	(1.000)	31327	0.80000		
M	89 Total PAHs	100				96928	0.62431	25.6	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

Data File: \\target_server\gg\chem\gcms-n.i\N030623.b\N7619.D
Date : 07-MAR-2023 00:10
Client ID: SY-SB4R-2
Instrument: gcms-n.i
Sample Info: SQ0595-3RA
Volume Injected (uL): 1.0
Operator: DT/CO
Column phase: ZB5-MS
Column diameter: 0.25



Data File: \\target_server\gg\chem\gcms-n.i\N030623.b\N7619.D

Date : 07-MAR-2023 00:10

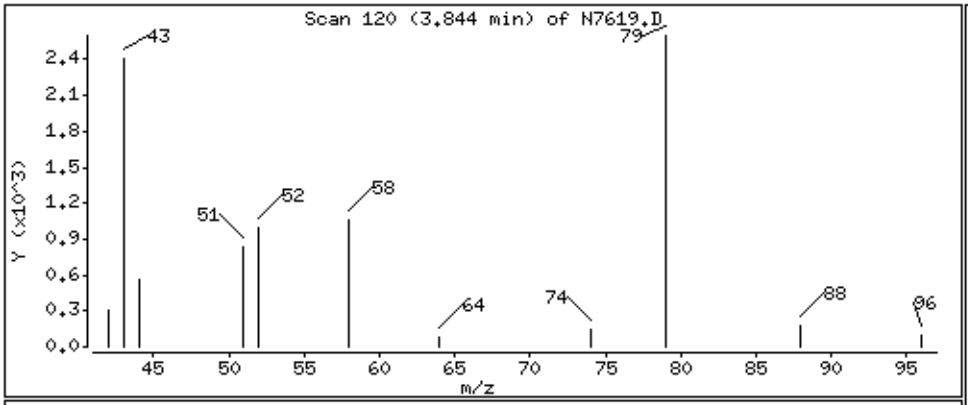
Client ID: SY-SB4R-2 Instrument: gcms-n.i

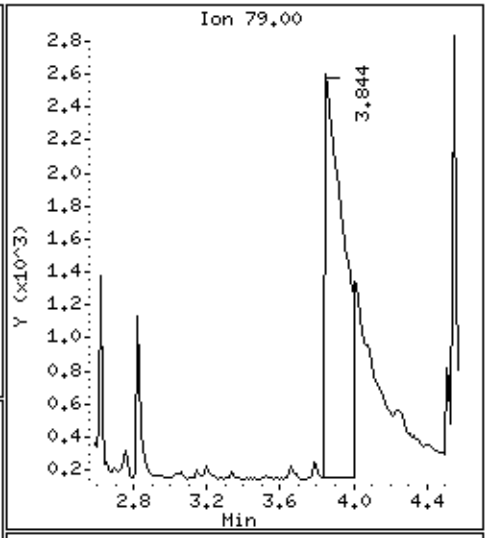
Sample Info: SQ0595-3RA

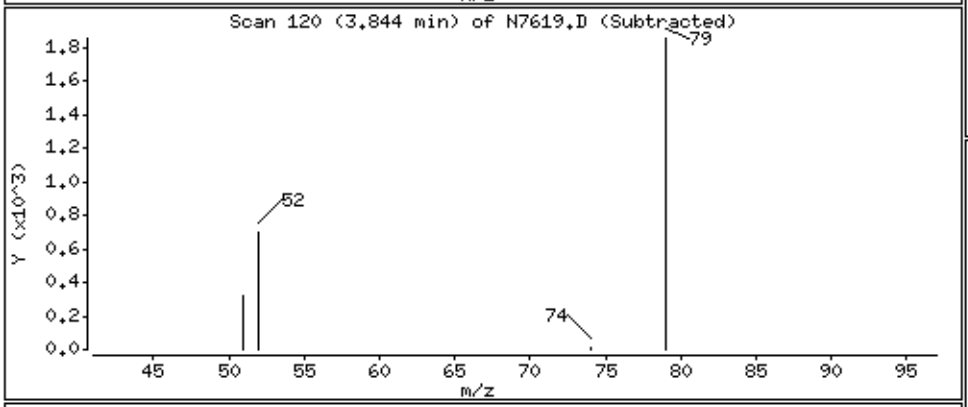
Volume Injected (uL): 1.0 Operator: DT/CO

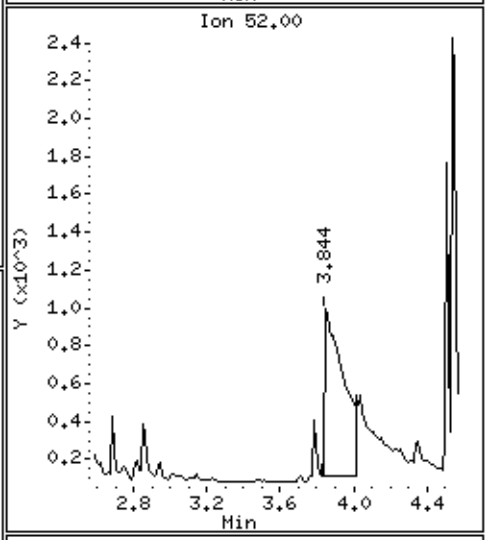
Column phase: ZB5-MS Column diameter: 0.25

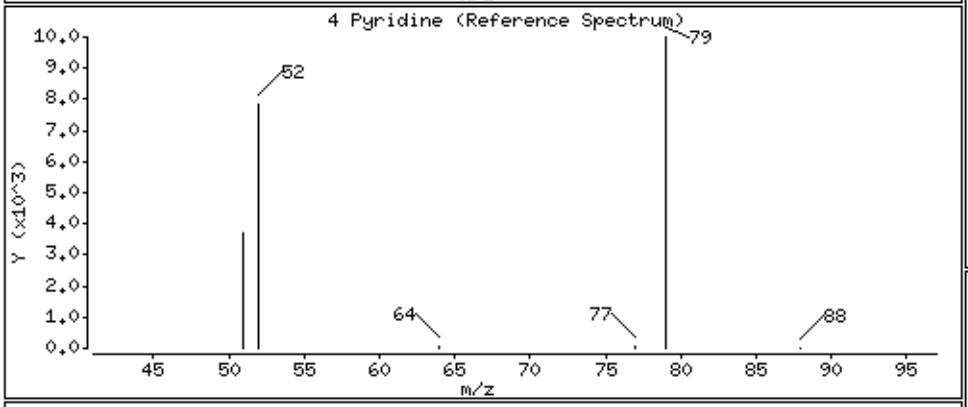
4 Pyridine Concentration: 9.65 ug/Kgdrywt

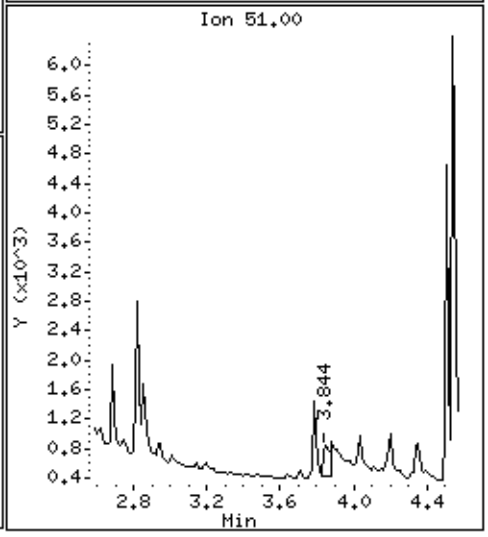


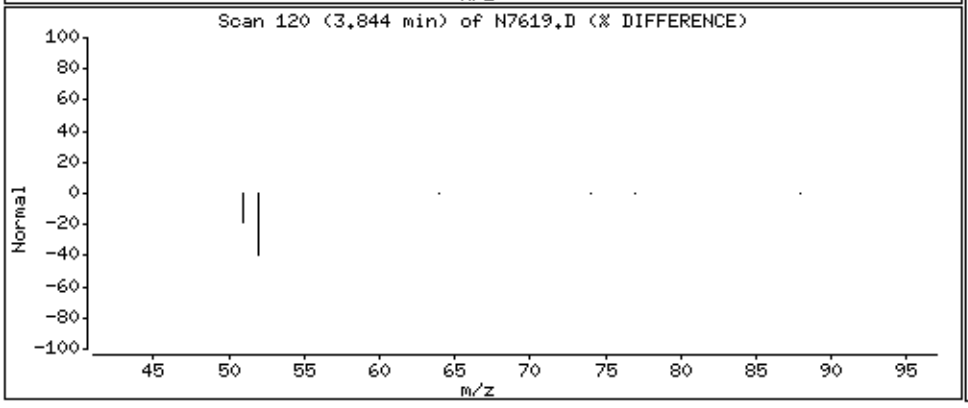












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Date : 07-MAR-2023 00:10

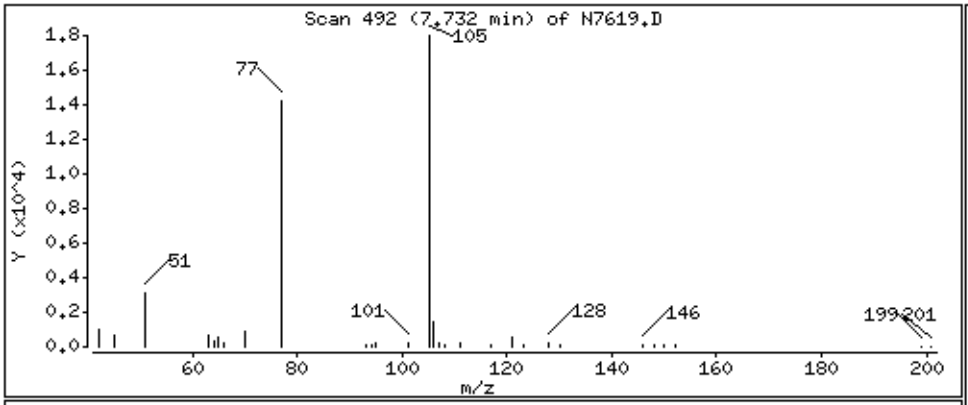
Client ID: SY-SB4R-2 Instrument: gcms-n.i

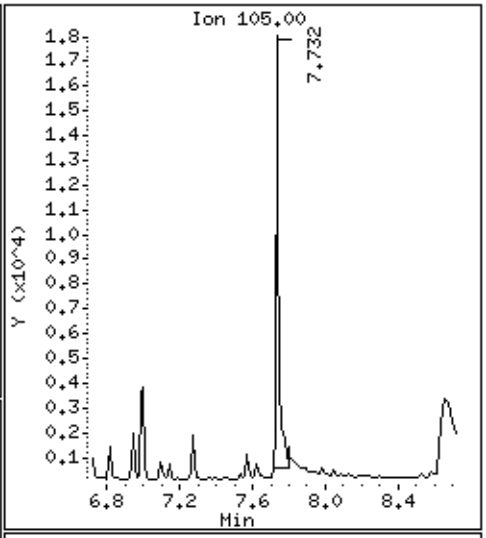
Sample Info: SQ0595-3RA

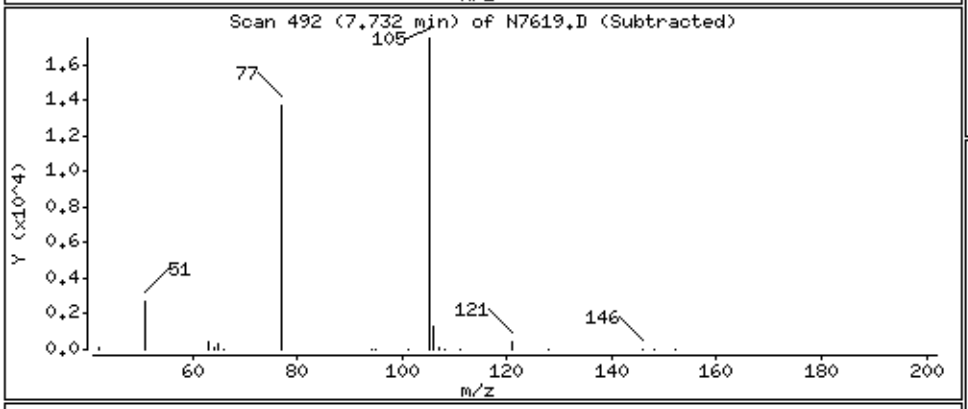
Volume Injected (uL): 1.0 Operator: DT/CO

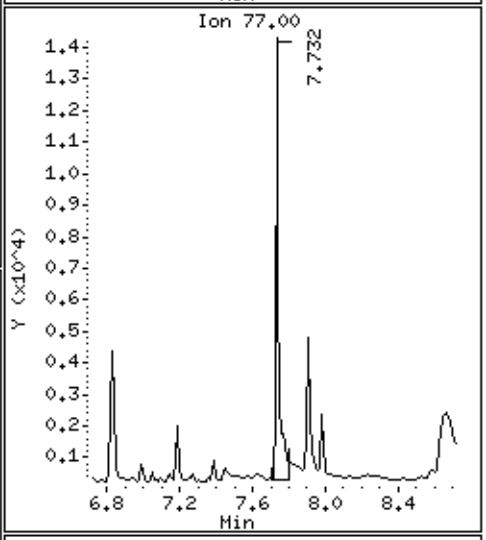
Column phase: ZB5-MS Column diameter: 0.25

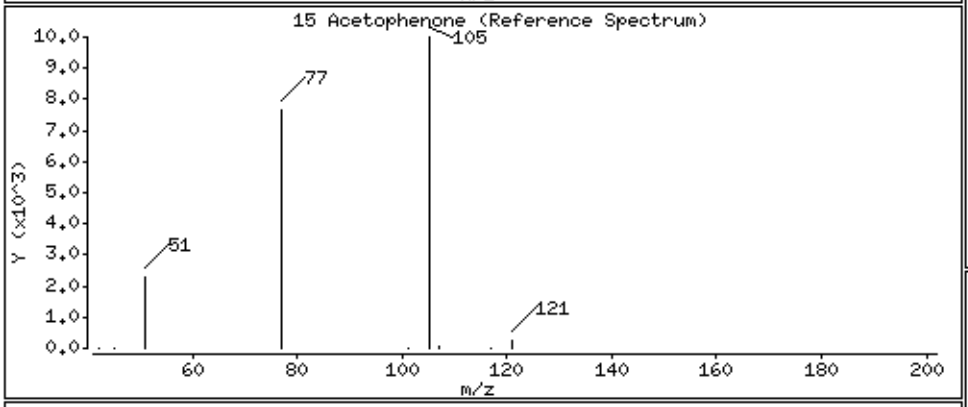
15 Acetophenone Concentration: 7.61 ug/Kgdrywt

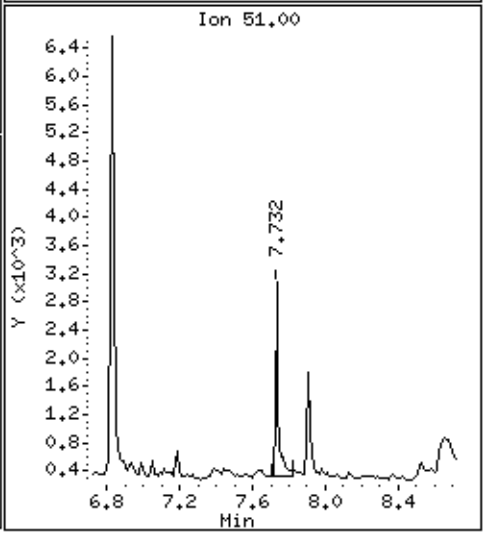


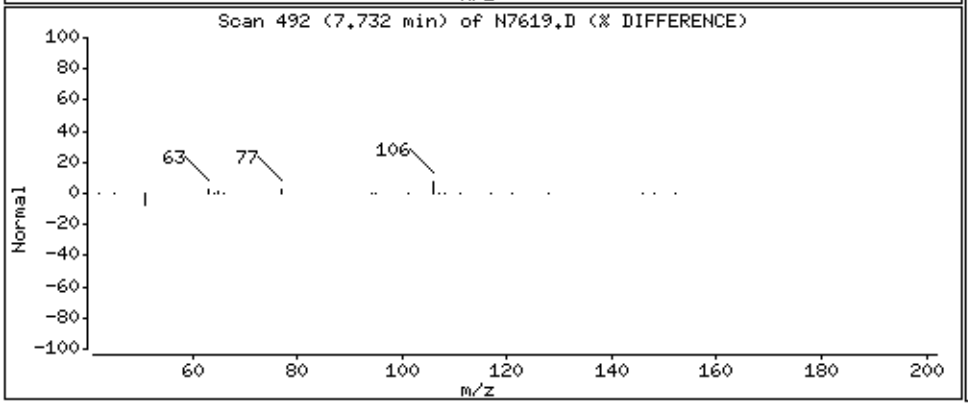












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Date : 07-MAR-2023 00:10

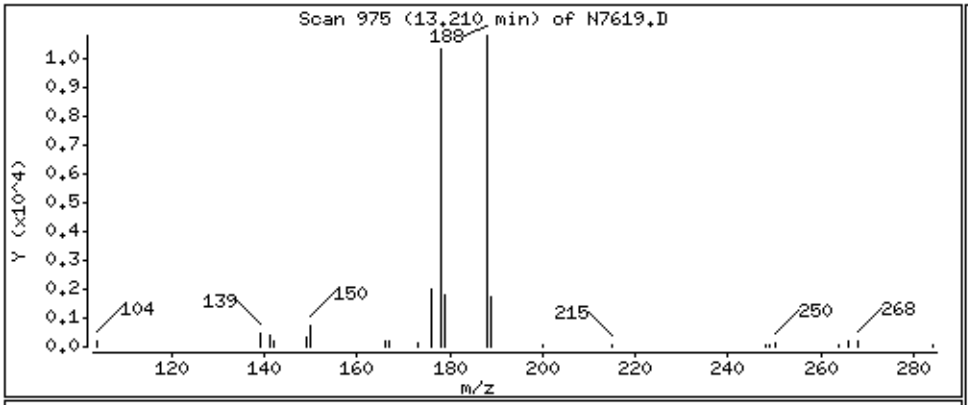
Client ID: SY-SB4R-2 Instrument: gcms-n.i

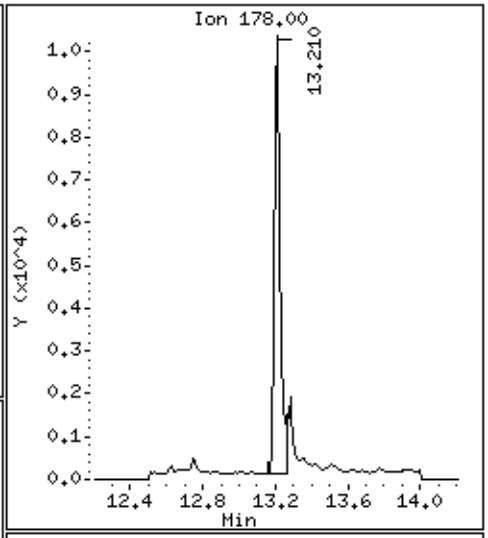
Sample Info: SQ0595-3RA

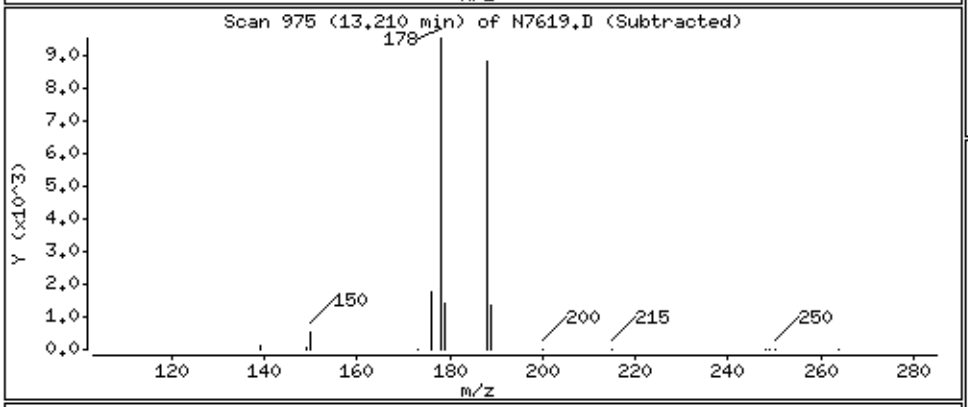
Volume Injected (uL): 1.0 Operator: DT/CO

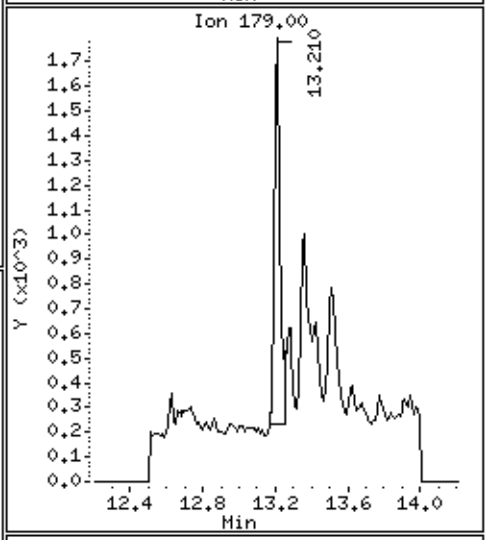
Column phase: ZB5-MS Column diameter: 0.25

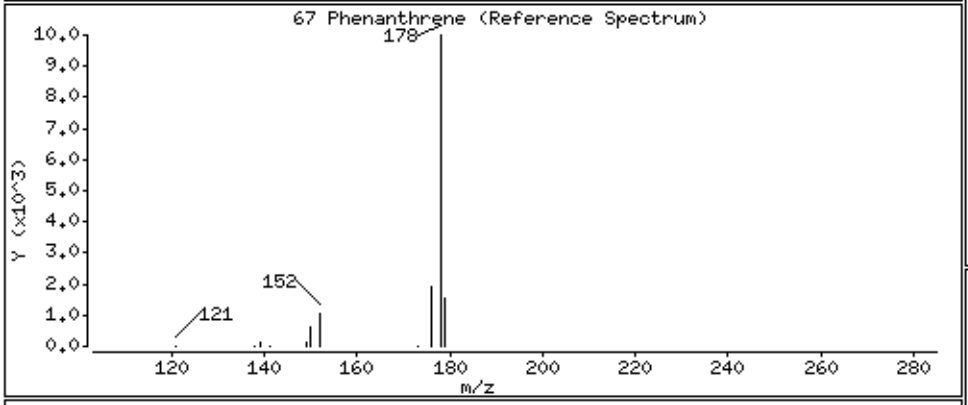
67 Phenanthrene Concentration: 3.93 ug/Kgdrywt

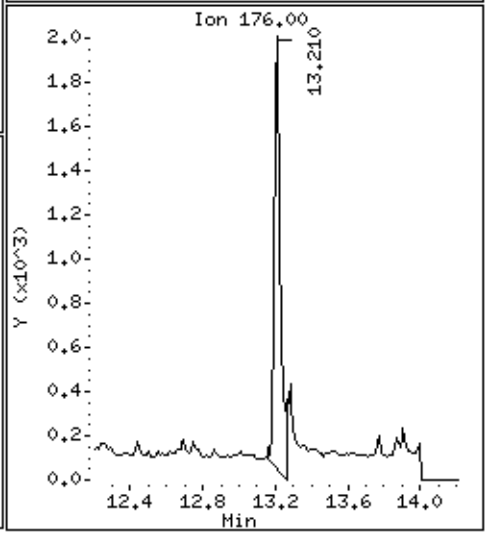


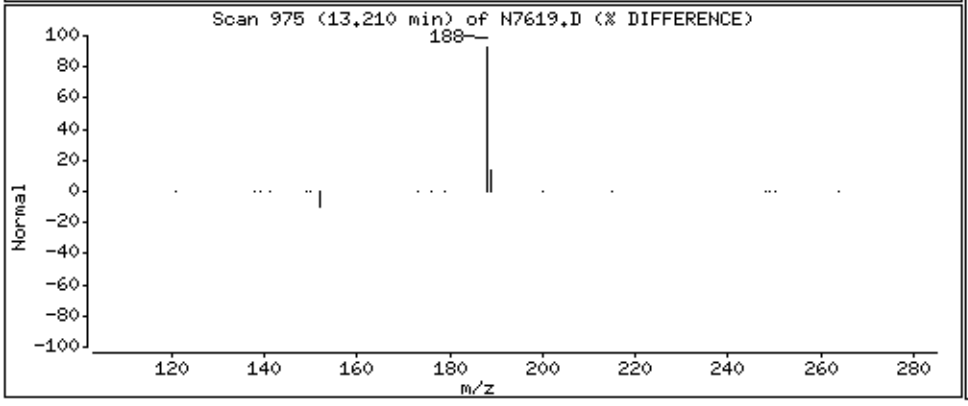












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Date : 07-MAR-2023 00:10

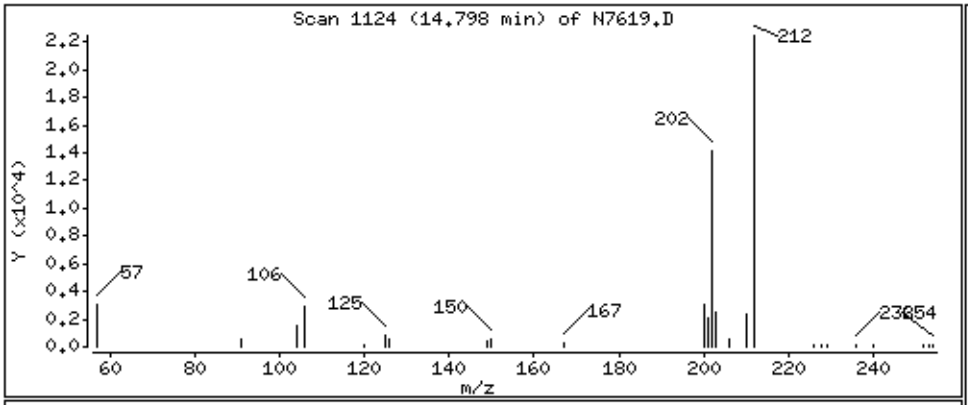
Client ID: SY-SB4R-2 Instrument: gcms-n.i

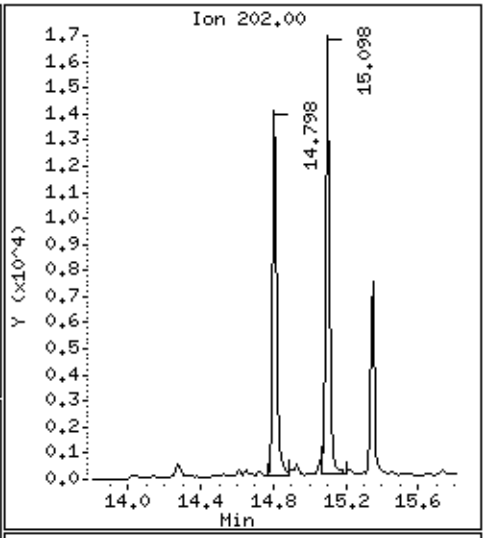
Sample Info: SQ0595-3RA

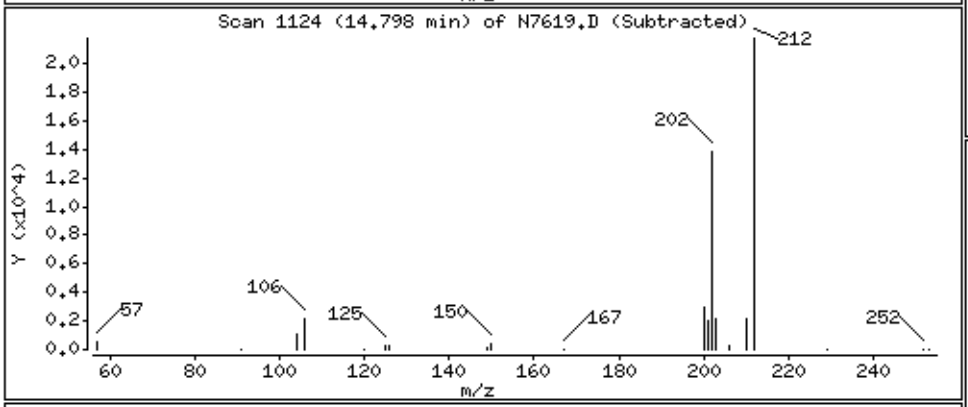
Volume Injected (uL): 1.0 Operator: DT/CO

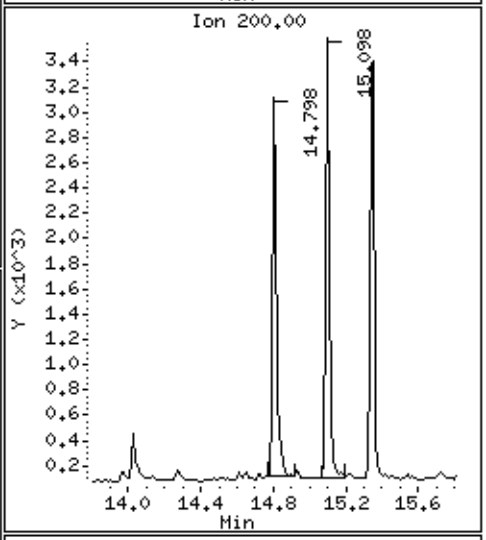
Column phase: ZB5-MS Column diameter: 0.25

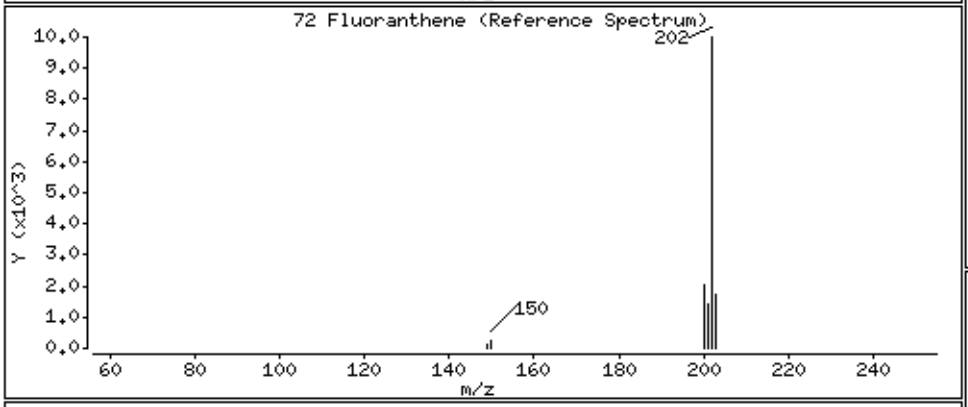
72 Fluoranthene Concentration: 4.70 ug/Kgdrywt

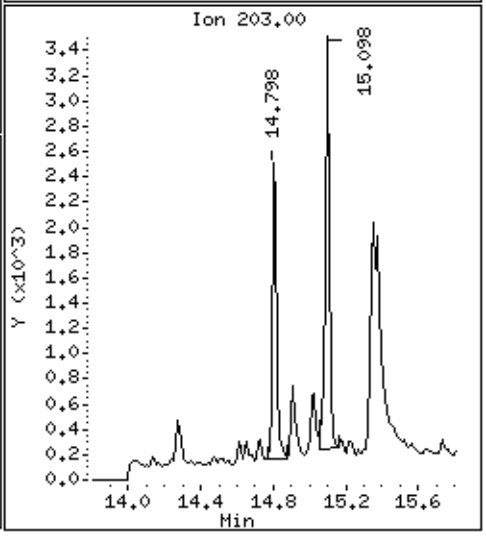


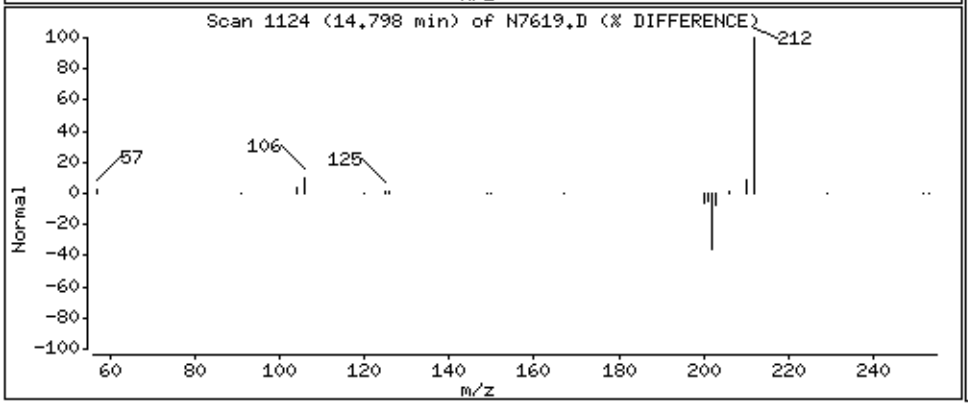












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Date : 07-MAR-2023 00:10

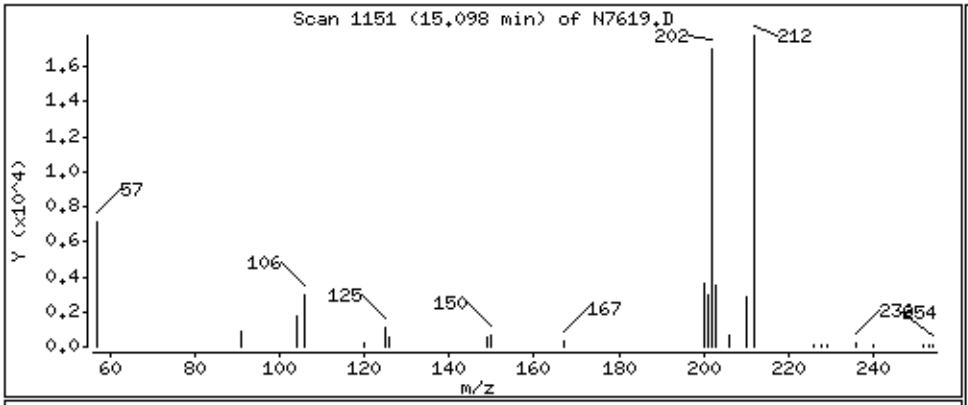
Client ID: SY-SB4R-2 Instrument: gcms-n.i

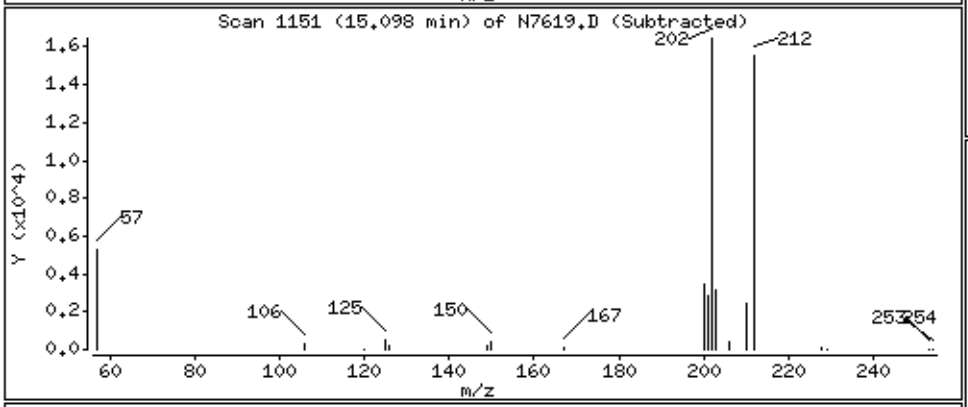
Sample Info: SQ0595-3RA

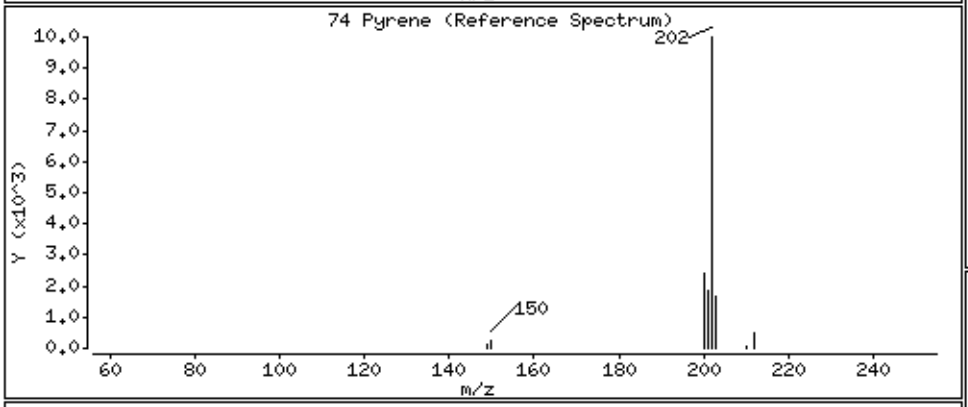
Volume Injected (uL): 1.0 Operator: DT/CO

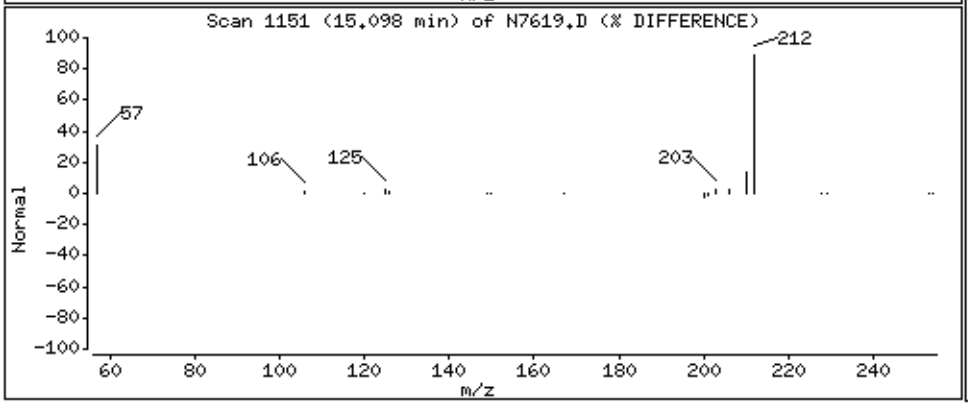
Column phase: ZB5-MS Column diameter: 0.25

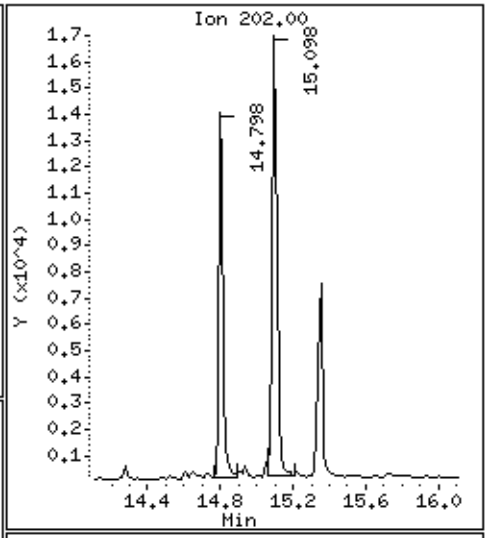
74 Pyrene Concentration: 4.66 ug/Kgdrywt

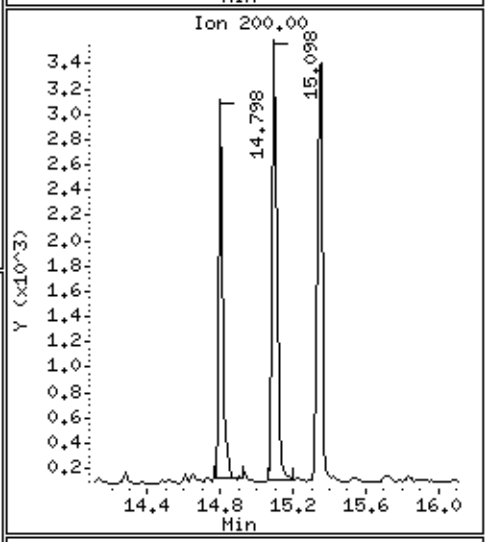


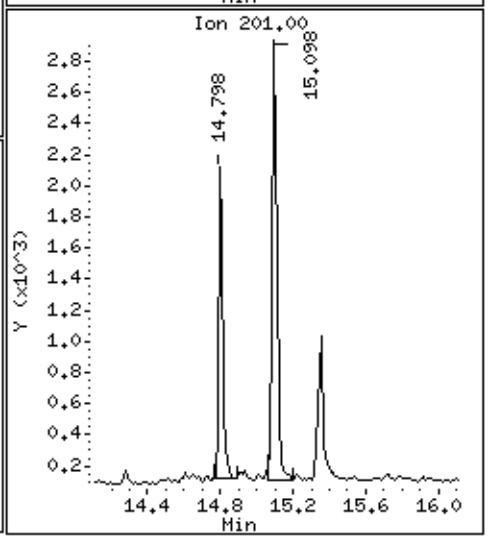












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Date : 07-MAR-2023 00:10

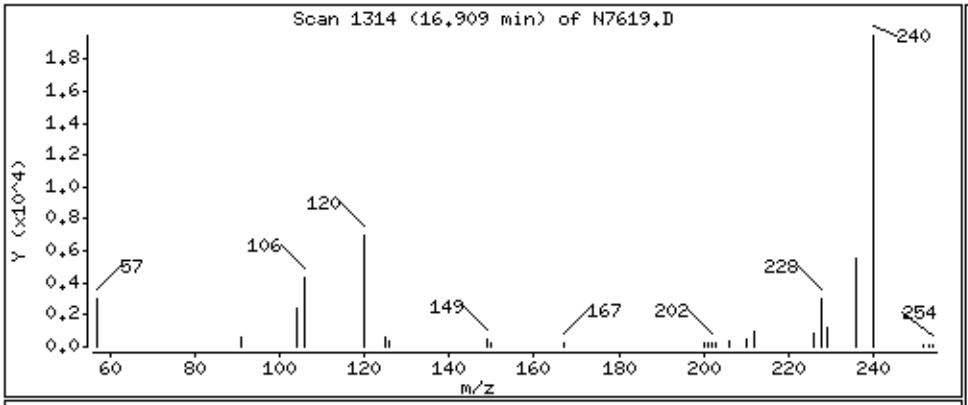
Client ID: SY-SB4R-2 Instrument: gcms-n.i

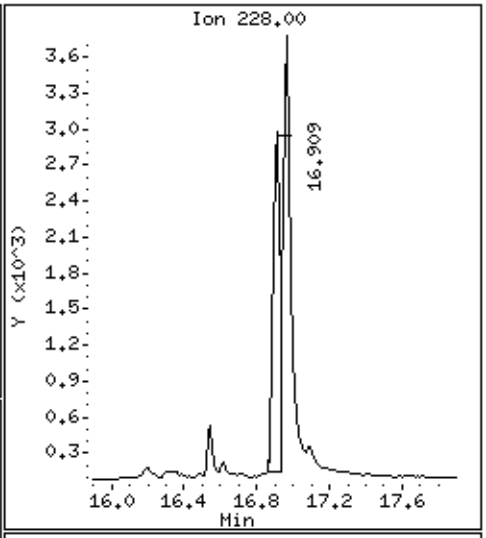
Sample Info: SQ0595-3RA

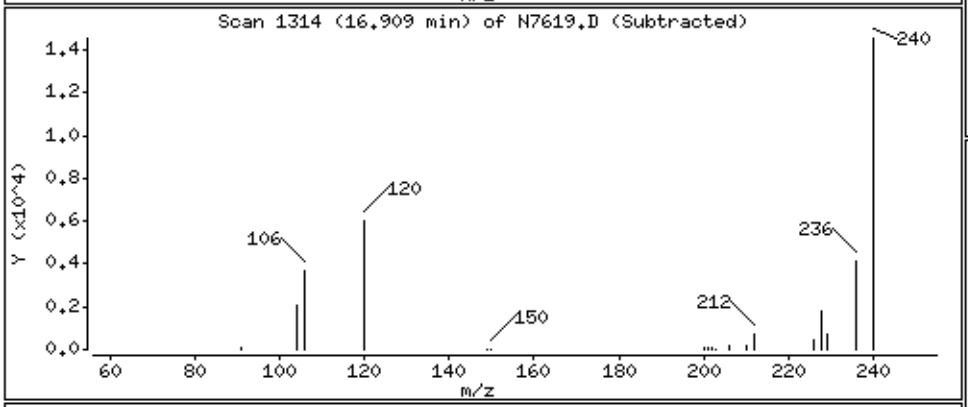
Volume Injected (uL): 1.0 Operator: DT/CO

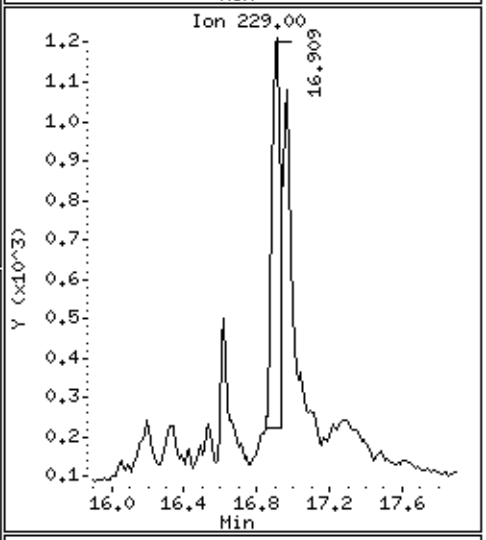
Column phase: ZB5-MS Column diameter: 0.25

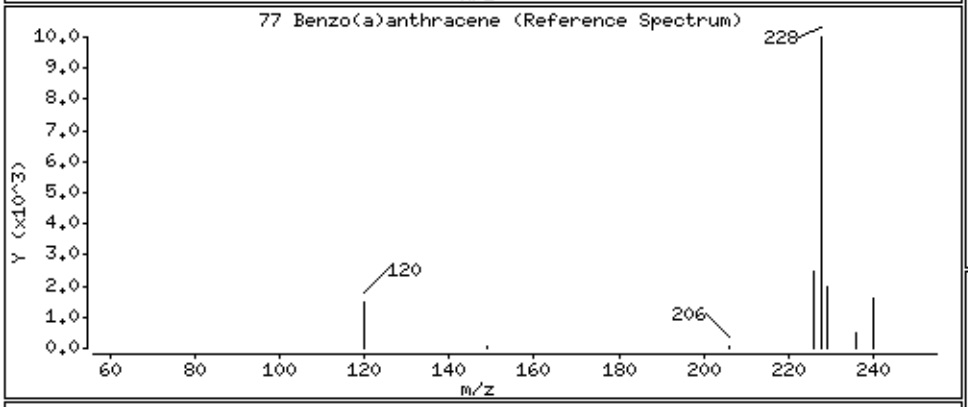
77 Benzo(a)anthracene Concentration: 2.58 ug/Kgdrywt

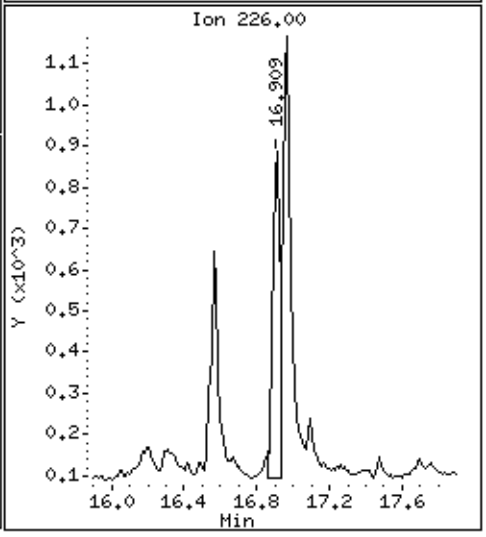


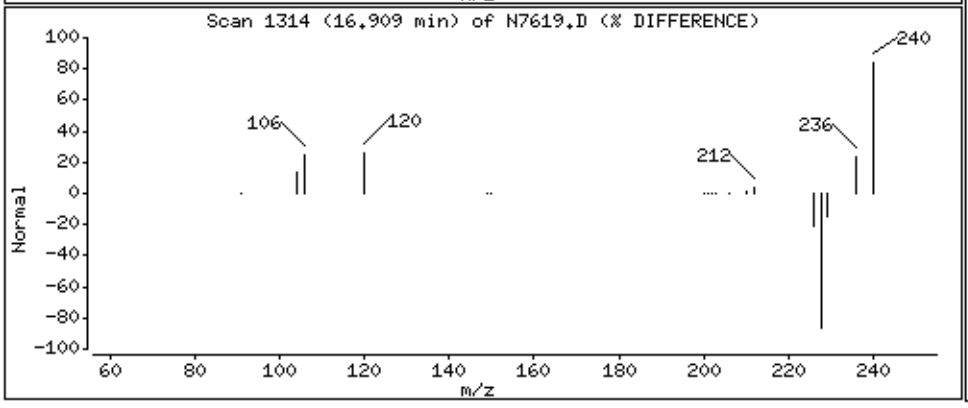












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Date : 07-MAR-2023 00:10

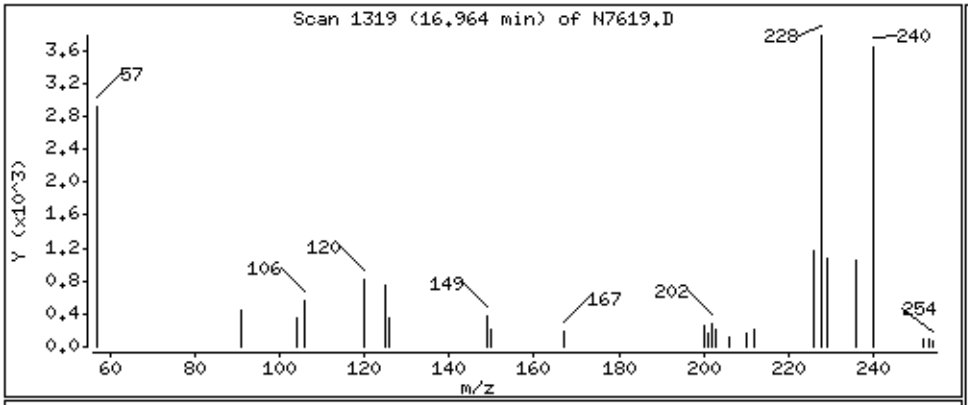
Client ID: SY-SB4R-2 Instrument: gcms-n.i

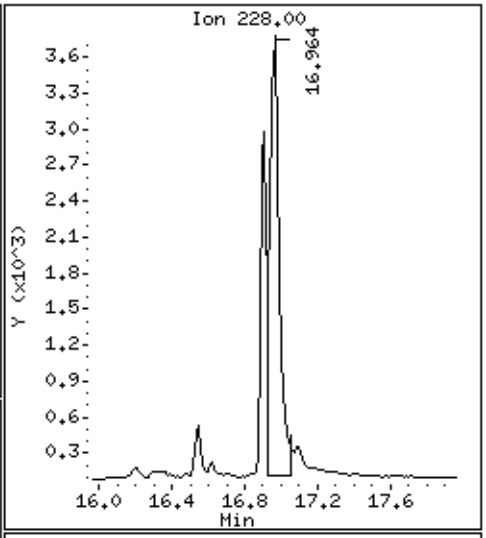
Sample Info: SQ0595-3RA

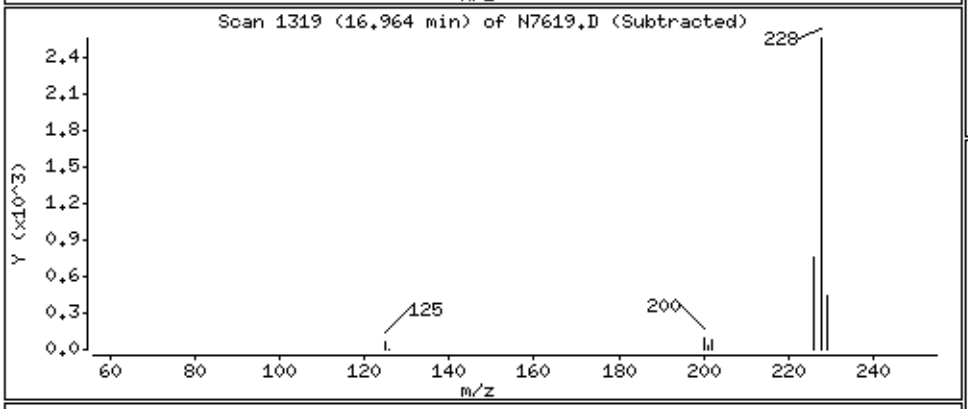
Volume Injected (uL): 1.0 Operator: DT/CO

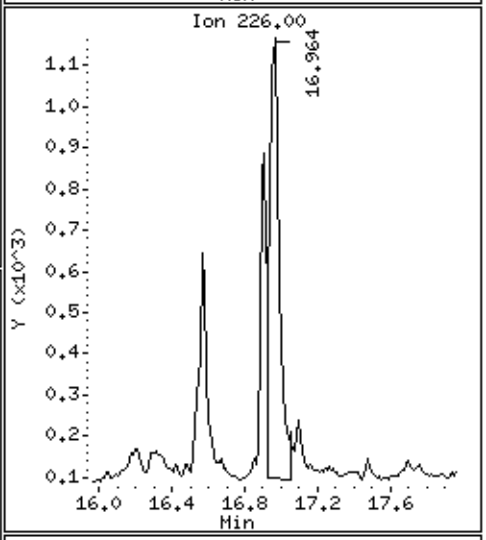
Column phase: ZB5-MS Column diameter: 0.25

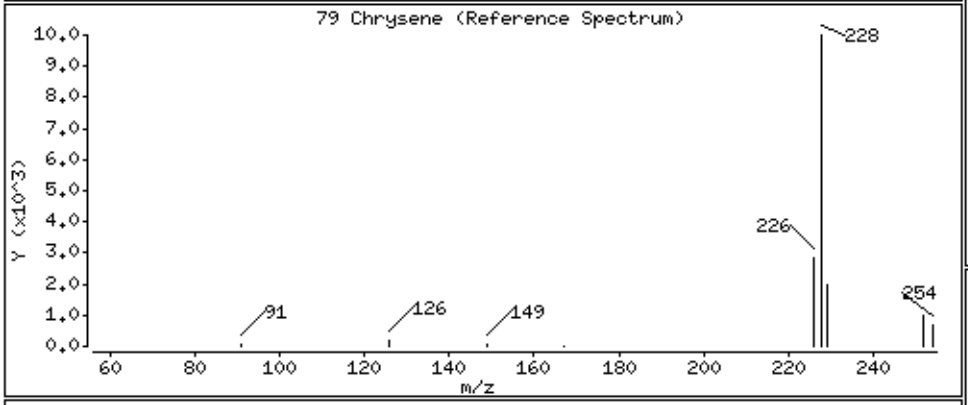
79 Chrysene Concentration: 4.14 ug/Kgdrywt

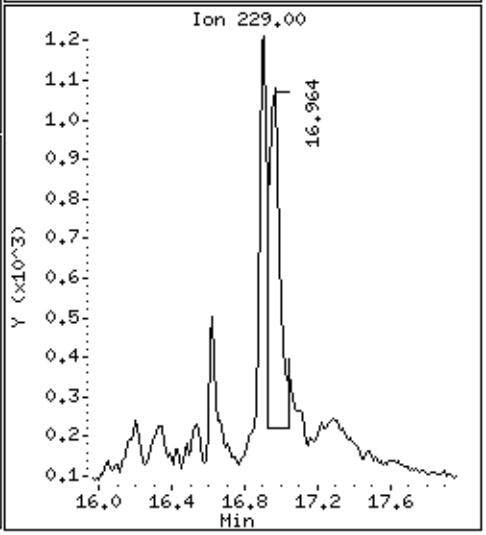


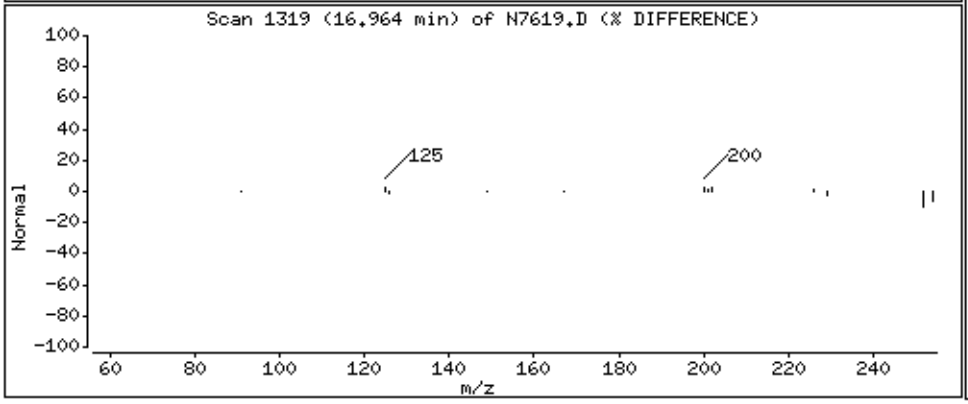












Data File: \\target_server\gg\chem\gcms-n.i\N030623.b\N7619.D

Date : 07-MAR-2023 00:10

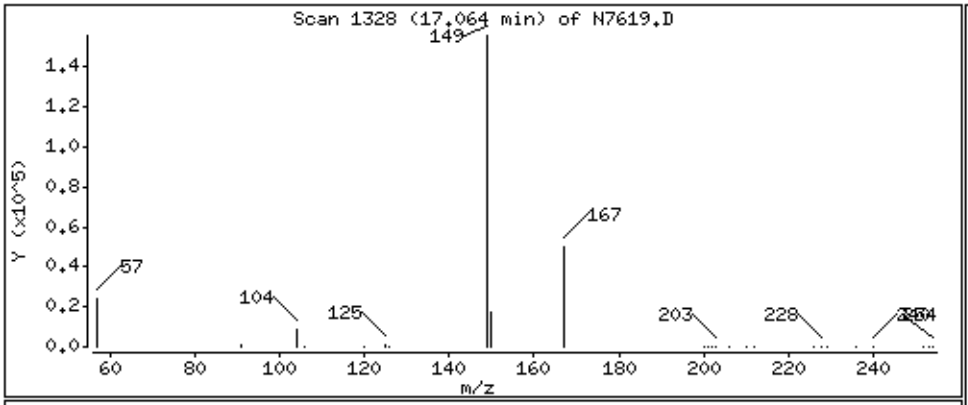
Client ID: SY-SB4R-2 Instrument: gcms-n.i

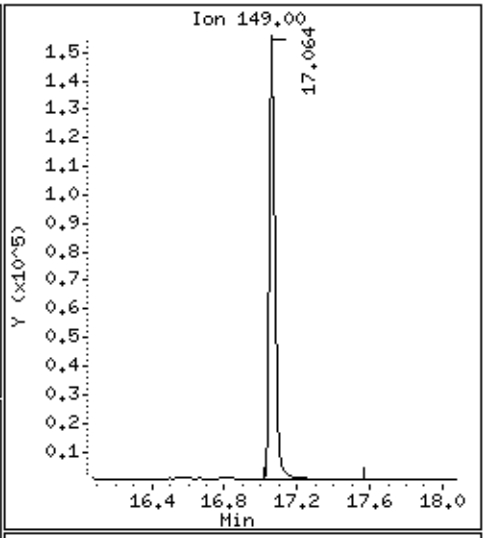
Sample Info: SQ0595-3RA

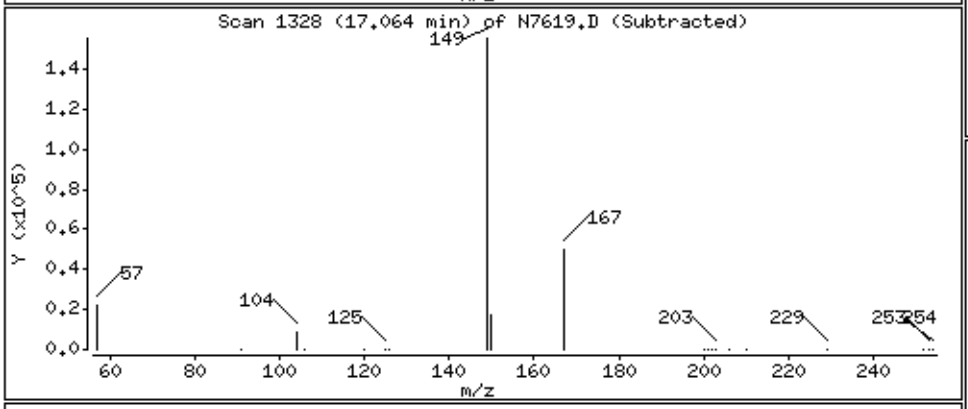
Volume Injected (uL): 1.0 Operator: DT/CO

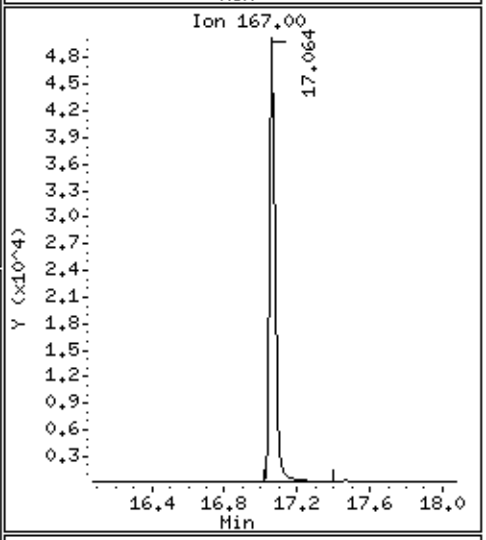
Column phase: ZB5-MS Column diameter: 0.25

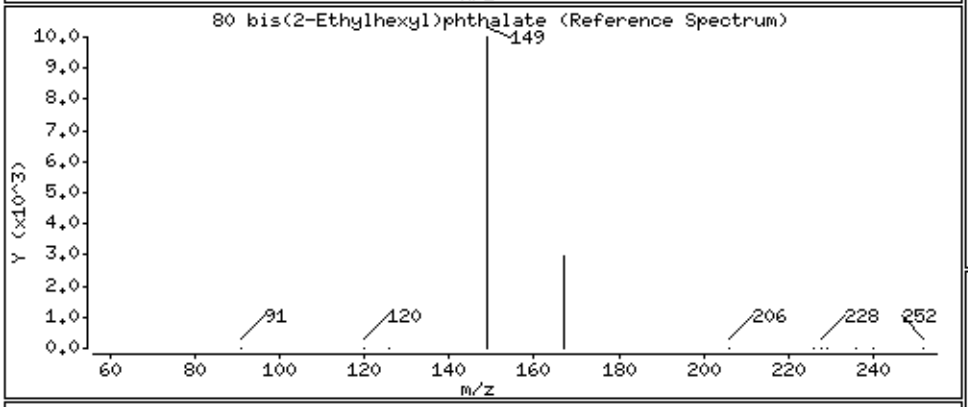
80 bis(2-Ethylhexyl)phthalate Concentration: 76.9 ug/Kgdrywt

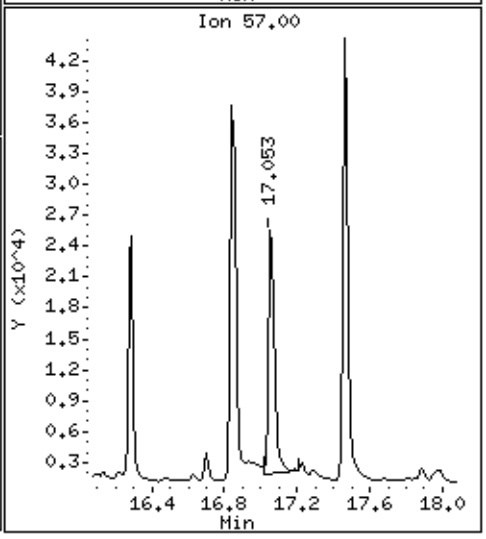


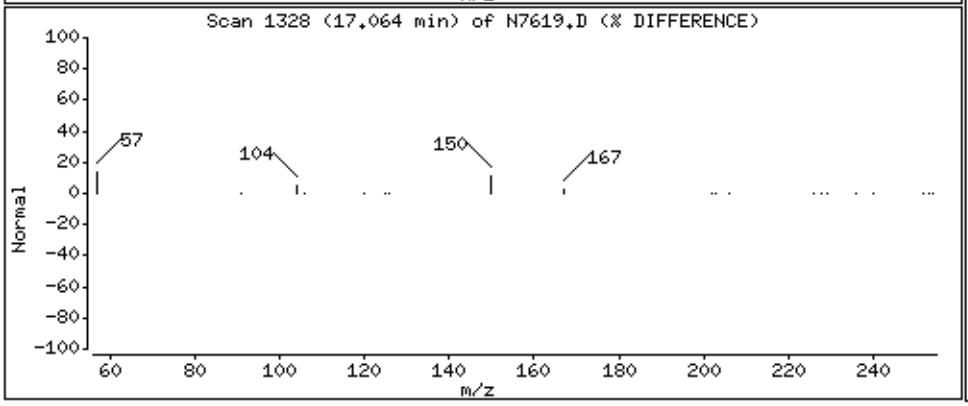












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Date : 07-MAR-2023 00:10

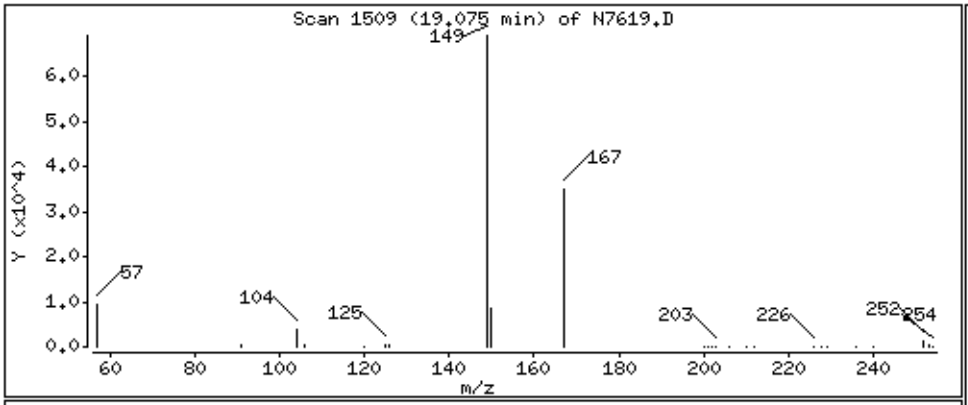
Client ID: SY-SB4R-2 Instrument: gcms-n.i

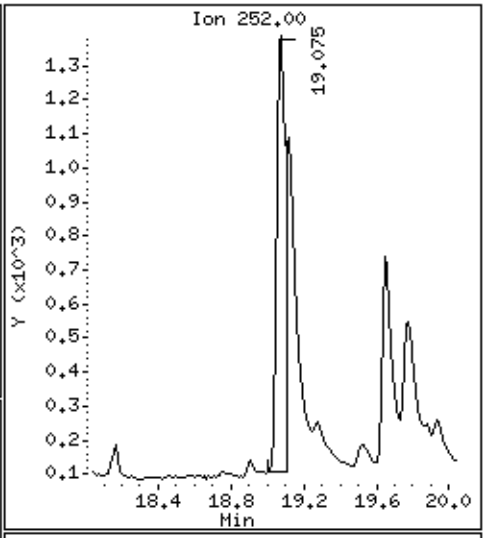
Sample Info: SQ0595-3RA

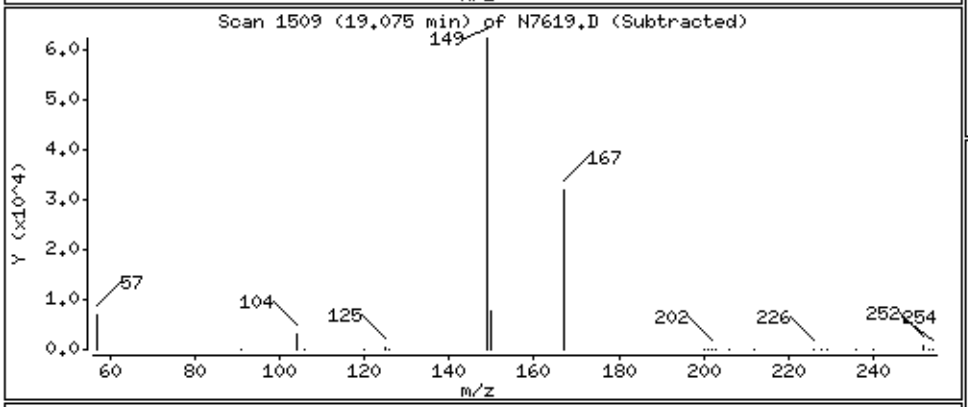
Volume Injected (uL): 1.0 Operator: DT/CO

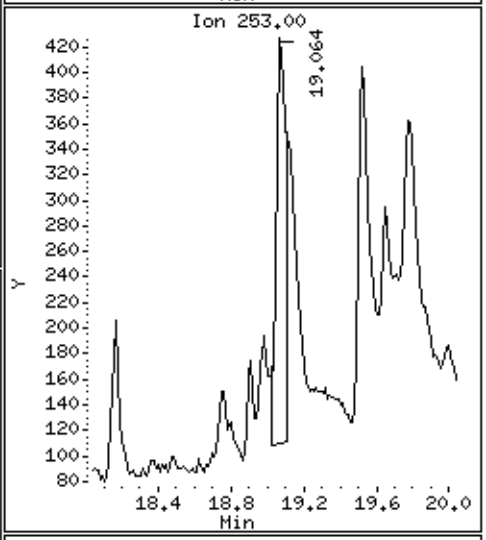
Column phase: ZB5-MS Column diameter: 0.25

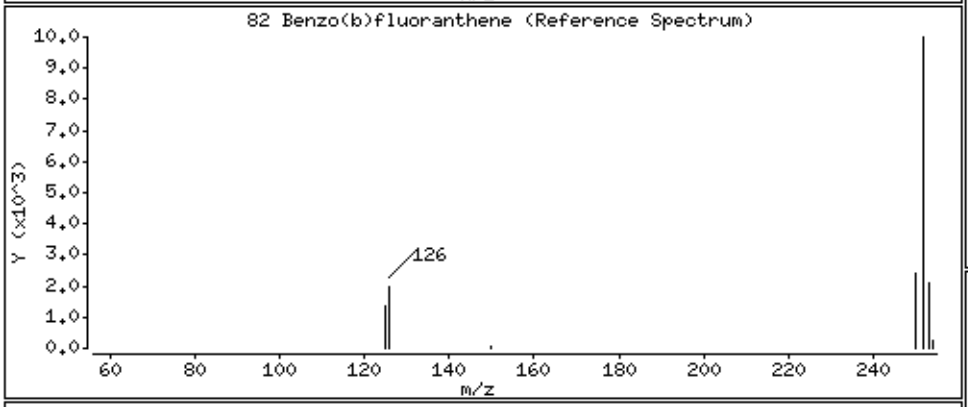
82 Benzo(b)fluoranthene Concentration: 3.64 ug/Kgdrywt

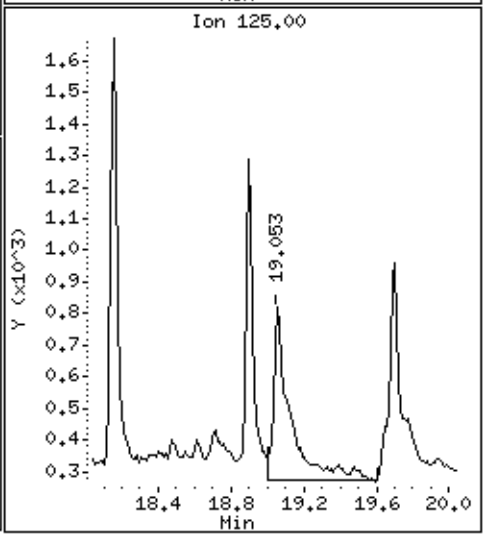


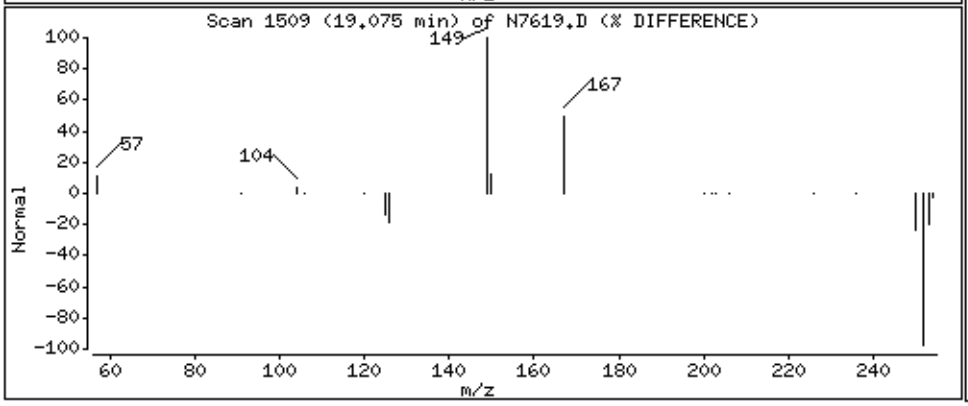












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Date : 07-MAR-2023 00:10

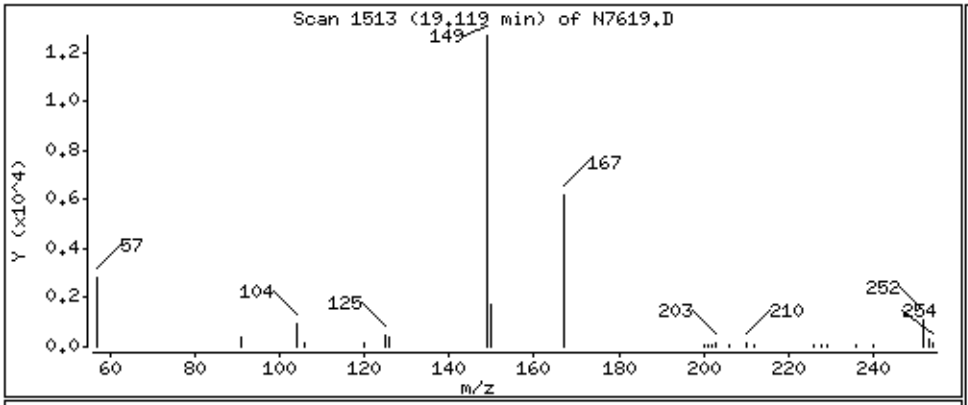
Client ID: SY-SB4R-2 Instrument: gcms-n.i

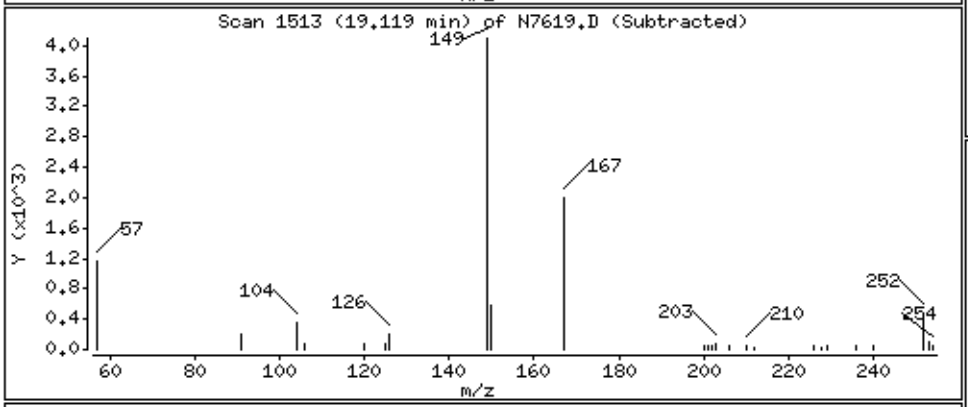
Sample Info: SQ0595-3RA

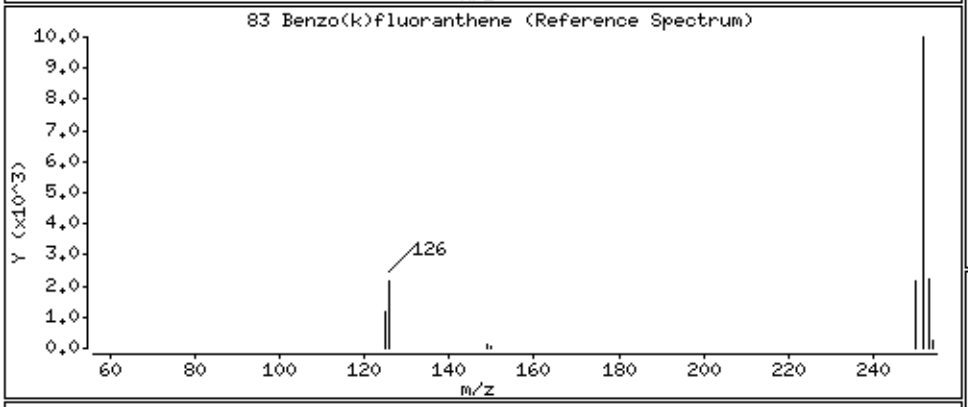
Volume Injected (uL): 1.0 Operator: DT/CO

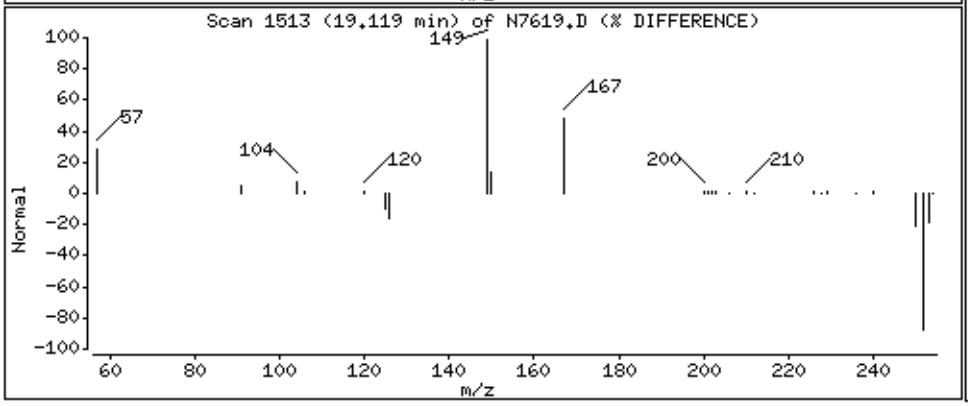
Column phase: ZB5-MS Column diameter: 0.25

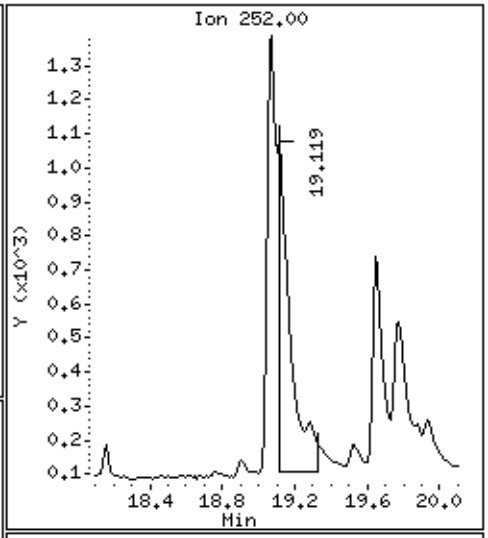
83 Benzo(k)fluoranthene Concentration: 1.92 ug/Kgdrywt

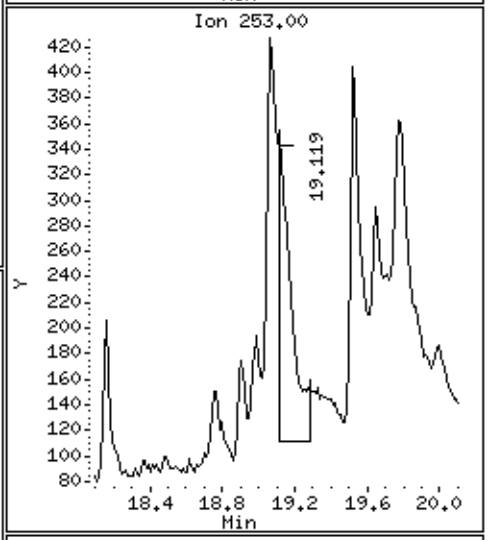


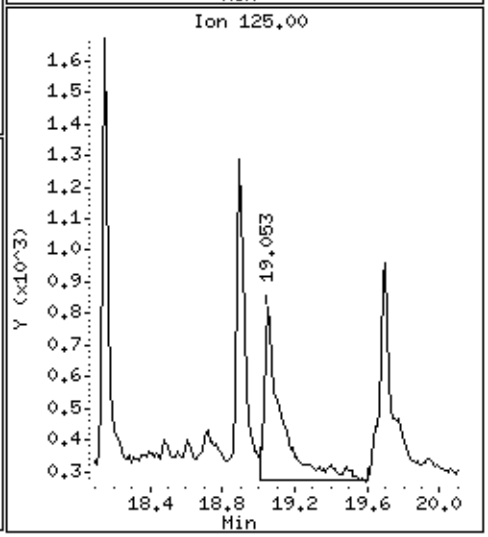












Standards Data Section

Form 6
Initial Calibration Summary

Lab Name : Katahdin Analytical Services **SDG:** SQ0595

Instrument ID: GCMS-N **Column ID:**

Lab File IDs : N7584.D N7583.D N7582.D N7585.D N7586.D N7587.D **Calibration Date(s):** 03-MAR-23 13:41 03-MAR-23 16:29

	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Curve				%RSD or R^2		
	0.200000(	0.500000(	2.0000	7.0000	10.0000	15.0000	Type	b	m1	m2	Result	Limit	
Naphthalene	1.38041	0.96658	1.06227	1.03484	1.02417	1.02070	AVG		1.08149		13.84413	20	O
2-Methylnaphthalene	1.04722	0.77700	0.69783	0.71720	0.70559	0.64148	AVG		0.76438		18.99174	20	O
Acenaphthylene	2.06582	1.84726	2.01966	1.89832	1.90440	1.82400	AVG		1.92658		4.98717	20	O
Acenaphthene	1.40581	1.21959	1.29265	1.21970	1.19404	1.18057	AVG		1.25206		6.76446	20	O
Fluorene	1.29391	1.23405	1.29379	1.26288	1.26627	1.23027	AVG		1.26353		2.18827	20	O
Phenanthrene	1.12330	1.06129	1.23579	1.16635	1.18297	1.17344	AVG		1.15719		5.11777	20	O
Anthracene	1.50536	1.22180	1.29128	1.18943	1.19706	1.20025	AVG		1.26753		9.65022	20	O
Fluoranthene	0.87961	0.86642	1.00544	0.96149	1.01248	0.94679	AVG		0.94537		6.50887	20	O
Pyrene	15803	58946	251918	1139417	1912824	2415503	LNR	0.000e+00	2.40293		0.99790	0.99	O
Benzo(a)anthracene	0.86704	1.08486	1.30686	1.31778	1.38804	1.43707	AVG		1.23361		17.54369	20	O
Chrysene	10357	41965	156170	713370	1233600	1537151	LNR	0.000e+00	1.53017		0.99868	0.99	O
Benzo(b)fluoranthene	1262	8211	60390	360109	727472	1014025	LNR	0.000e+00	1.47637		0.99431	0.99	O
Benzo(k)fluoranthene	2.76798	2.16813	2.18300	2.14334	2.00223	1.93874	AVG		2.20057		13.39566	20	O
Benzo(a)pyrene	1.00341	1.18072	1.25164	1.30790	1.34078	1.36749	AVG		1.24199		10.83941	20	O
Indeno(1,2,3-cd)pyrene	1356	7721	51205	254256	487621	735224	LNR	0.000e+00	1.04740		0.99327	0.99	O
Dibenzo(a,h)anthracene	1140	5653	34781	179089	354006	546144	QUA	0.000e+00	1.63882	-0.02673	0.99973	0.99	O
Benzo(g,h,i)perylene	0.94879	0.84822	0.99786	0.94905	0.93659	0.98021	AVG		0.94345		5.50522	20	O
2-Methylnaphthalene-D10	0.60418	0.50657	0.51752	0.56271	0.55121	0.51672	AVG		0.54315		6.82223	20	
Fluorene-D10	0.99428	0.89025	0.92176	0.90699	0.90848	0.88502	AVG		0.91780		4.33136	20	
Pyrene-D10	15107	52117	202720	940945	1557621	1942922	LNR	0.000e+00	1.94704		0.99703	0.99	

Legend: O = Acceptable; W = Failed %RSD Value; X = Failed R^2 Value; Y = Failed Minimum RF

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Data File: \\target_server\gg\chem\gcms-n.i\N030323.b\N7588.D
Report Date: 22-Mar-2023 08:38

Katahdin Analytical Services

RECOVERY REPORT

Client Name: Client SDG: 021497
Sample Matrix: LIQUID Fraction: SV
Lab Smp Id: WG333362-8
Level: LOW Operator: DT/CO
Data Type: MS DATA SampleType: INDSOURCE
SpikeList File: SIM_IND_CHK5.spk Quant Type: ISTD
Sublist File: all.sub
Method File: \\target_server\gg\chem\gcms-n.i\N030323.b\NSPSIM18.m
Misc Info: WG333362,WG333362,WG333362-4,SQ0333-6

SPIKE	COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
2	1,4-Dioxane	5.00	5.26	105.13	80-120
3	N-Nitrosodimethyla	5.00	5.30	105.92	80-120
4	Pyridine	5.00	6.04	120.86*	80-120
5	Benzaldehyde	5.00	0.857	17.13*	80-120
7	Bis(2-Chloroethyl)	5.00	4.88	97.51	80-120
6	Phenol	5.00	5.84	116.72	80-120
8	2-Chlorophenol	5.00	5.82	116.49	80-120
9	1,3-Dichlorobenzen	5.00	5.72	114.49	80-120
11	1,4-Dichlorobenzen	5.00	5.50	109.91	80-120
12	1,2-Dichlorobenzen	5.00	5.36	107.20	80-120
14	2,2'-Oxybis(1-chlo	5.00	3.98	79.65*	80-120
13	2-Methylphenol	5.00	6.31	126.19*	80-120
15	Acetophenone	5.00	5.53	110.66	80-120
16	N-Nitroso-di-n-pro	5.00	5.16	103.32	80-120
18	Hexachloroethane	5.00	5.40	108.08	80-120
17	3&4-Methylphenol	5.00	5.94	118.86	80-120
19	Nitrobenzene	5.00	4.91	98.23	80-120
20	Isophorone	5.00	5.20	104.10	80-120
21	2-Nitrophenol	5.00	6.13	122.55*	80-120
22	2,4-Dimethylphenol	5.00	5.64	112.81	80-120
23	bis(2-Chloroethoxy	5.00	5.29	105.80	80-120
24	Benzoic acid	5.00	8.17	163.35*	80-120
25	2,4-Dichlorophenol	5.00	5.93	118.65	80-120
26	1,2,4-Trichloroben	5.00	5.39	107.87	80-120
28	Naphthalene	5.00	5.24	104.86	80-120
29	4-Chloroaniline	5.00	5.55	110.94	80-120
30	Hexachlorobutadien	5.00	5.14	102.79	80-120
31	Caprolactam	5.00	5.23	104.67	80-120
34	2-Methylnaphthalen	5.00	5.15	103.01	80-120
32	4-Chloro-3-Methylp	5.00	5.97	119.43	80-120
35	1-Methylnaphthalen	5.00	4.85	96.92	80-120
37	1,2,4,5-Tetrachlor	5.00	5.05	101.04	80-120
36	Hexachlorocyclopen	5.00	4.71	94.14	80-120
39	2,4,6-Trichlorophe	5.00	5.80	115.97	80-120
40	2,4,5-Trichlorophe	5.00	5.46	109.17	80-120
42	2-Chloronaphthalen	5.00	4.86	97.30	80-120
41	1,1'-Biphenyl	5.00	5.11	102.23	80-120
43	2-Nitroaniline	5.00	5.12	102.46	80-120
44	Dimethyl Phthalate	5.00	5.34	106.92	80-120
46	Acenaphthylene	5.00	4.66	93.15	80-120

Data File: \\target_server\gg\chem\gcms-n.i\N030323.b\N7588.D
Report Date: 22-Mar-2023 08:38

	SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
45	2,6-Dinitrotoluene	5.00	4.96	99.12	80-120
49	Acenaphthene	5.00	5.15	103.07	80-120
47	3-Nitroaniline	5.00	5.09	101.84	80-120
50	2,4-Dinitrophenol	5.00	6.94	138.70*	80-120
52	Dibenzofuran	5.00	5.39	107.78	80-120
53	2,4-Dinitrotoluene	5.00	4.96	99.12	80-120
54	2,3,4,6-Tetrachlor	5.00	5.09	101.86	80-120
51	4-Nitrophenol	5.00	8.22	164.46*	80-120
55	Diethylphthalate	5.00	5.52	110.49	80-120
57	Fluorene	5.00	5.48	109.66	80-120
58	4-Chlorophenyl-phe	5.00	5.19	103.83	80-120
60	4,6-Dinitro-2-Meth	5.00	5.96	119.25	80-120
59	4-Nitroaniline	5.00	5.09	101.84	80-120
61	N-Nitrosodiphenyla	5.00	4.05	80.99	80-120
62	4-Bromophenyl-phen	5.00	5.01	100.20	80-120
63	Hexachlorobenzene	5.00	5.17	103.43	80-120
64	Atrazine	5.00	5.62	112.48	80-120
65	Pentachlorophenol	5.00	5.76	115.13	80-120
67	Phenanthrene	5.00	5.20	104.03	80-120
68	Anthracene	5.00	4.86	97.19	80-120
69	Carbazole	5.00	6.02	120.32*	80-120
70	Di-n-butylphthalat	5.00	5.42	108.37	80-120
72	Fluoranthene	5.00	5.71	114.16	80-120
74	Pyrene	5.00	4.96	99.11	80-120
75	Butylbenzylphthala	5.00	4.86	97.22	80-120
77	Benzo(a)anthracene	5.00	5.52	110.31	80-120
79	Chrysene	5.00	5.32	106.34	80-120
76	3,3'-Dichlorobenzi	5.00	3.29	65.87*	80-120
80	bis(2-Ethylhexyl)p	5.00	4.53	90.64	80-120
81	Di-n-octylphthalat	5.00	4.88	97.69	80-120
82	Benzo(b)fluoranthe	5.00	5.36	107.11	80-120
83	Benzo(k)fluoranthe	5.00	5.12	102.51	80-120
84	Benzo(a)pyrene	5.00	5.81	116.30	80-120
86	Indeno(1,2,3-cd)py	5.00	4.86	97.24	80-120
87	Dibenzo(a,h)anthra	5.00	5.51	110.27	80-120
88	Benzo(g,h,i)peryle	5.00	5.13	102.64	80-120

	SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 1	1,4-Dioxane-d8	2.00	0.000	*	26-115
$ 33	2-Methylnaphthale	2.00	0.000	*	43-92
$ 38	2,4-Dibromophenol	4.00	0.000	*	10-130
$ 56	Fluorene-D10	2.00	0.00135	0.07*	29-101
$ 71	Fluoranthene-d10	2.00	0.00844	0.42*	30-150
$ 73	Pyrene-D10	2.00	0.0107	0.53*	53-166

Data File: \\target_server\gg\chem\gcms-n.i\N030323.b\N7582.D
Report Date: 14-Mar-2023 12:21

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-n.i\N030323.b\N7582.D
Lab Smp Id: WG333362-4
Inj Date : 03-MAR-2023 13:41
Operator : DT/CO   Inst ID: gcms-n.i
Smp Info : WG333362-4
Misc Info :
Comment   :
Method   : \\target_server\gg\chem\gcms-n.i\N030323.b\NSPSIM18.m
Meth Date : 06-Mar-2023 11:06 coneill   Quant Type: ISTD
Cal Date : 03-MAR-2023 13:41   Cal File: N7582.D
Als bottle: 2   Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: all.sub
Target Version: 4.12
Processing Host: V200T4

Concentration Formula: Amt * DF * Uf*(Vt/Vo*Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.000	Sample Volume (L)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
$	1 1,4-Dioxane-d8	96	3.020	2.988	(0.419)	68496	2.00000	2.00	
	2 1,4-Dioxane	88	3.072	3.031	(0.427)	70700	2.00000	2.00	
	3 N-Nitrosodimethylamine	74	3.590	3.548	(0.499)	100775	2.00000	2.00	
	4 Pyridine	79	3.643	3.569	(0.506)	146878	2.00000	2.00	
	5 Benzaldehyde	77	6.649	6.650	(0.923)	95907	2.00000	2.00	
	6 Phenol	94	6.857	6.868	(0.952)	450705	4.50000	4.50	
	7 Bis(2-Chloroethyl)ether	93	6.888	6.899	(0.957)	151206	2.00000	2.00	
	8 2-Chlorophenol	128	6.961	6.962	(0.967)	393831	4.50000	4.50	
	9 1,3-Dichlorobenzene	146	7.128	7.139	(0.990)	199429	2.00000	2.00	
*	10 1,4-Dichlorobenzene-D4	152	7.201	7.211	(1.000)	55095	0.80000	(a)	
	11 1,4-Dichlorobenzene	146	7.221	7.232	(1.003)	212086	2.00000	2.00	
	12 1,2-Dichlorobenzene	146	7.419	7.430	(1.030)	201379	2.00000	2.00	
	13 2-Methylphenol	108	7.606	7.617	(1.056)	341196	4.50000	4.50	
	14 2,2'-Oxybis(1-chloropropane)	45	7.586	7.586	(1.053)	109235	2.00000	2.00	
	15 Acetophenone	105	7.742	7.752	(0.874)	222873	2.00000	2.00	
	16 N-Nitroso-di-n-propylamine	70	7.762	7.773	(1.078)	109419	2.00000	2.00	
	17 3&4-Methylphenol	108	7.825	7.825	(1.087)	346130	4.50000	4.50	
	18 Hexachloroethane	117	7.846	7.856	(1.090)	68239	2.00000	2.00	
	19 Nitrobenzene	77	7.950	7.961	(0.898)	165775	2.00000	2.00	
	20 Isophorone	82	8.266	8.278	(0.934)	266498	2.00000	2.00	

Data File: \\target_server\gg\chem\gcms-n.i\N030323.b\N7582.D
Report Date: 14-Mar-2023 12:21

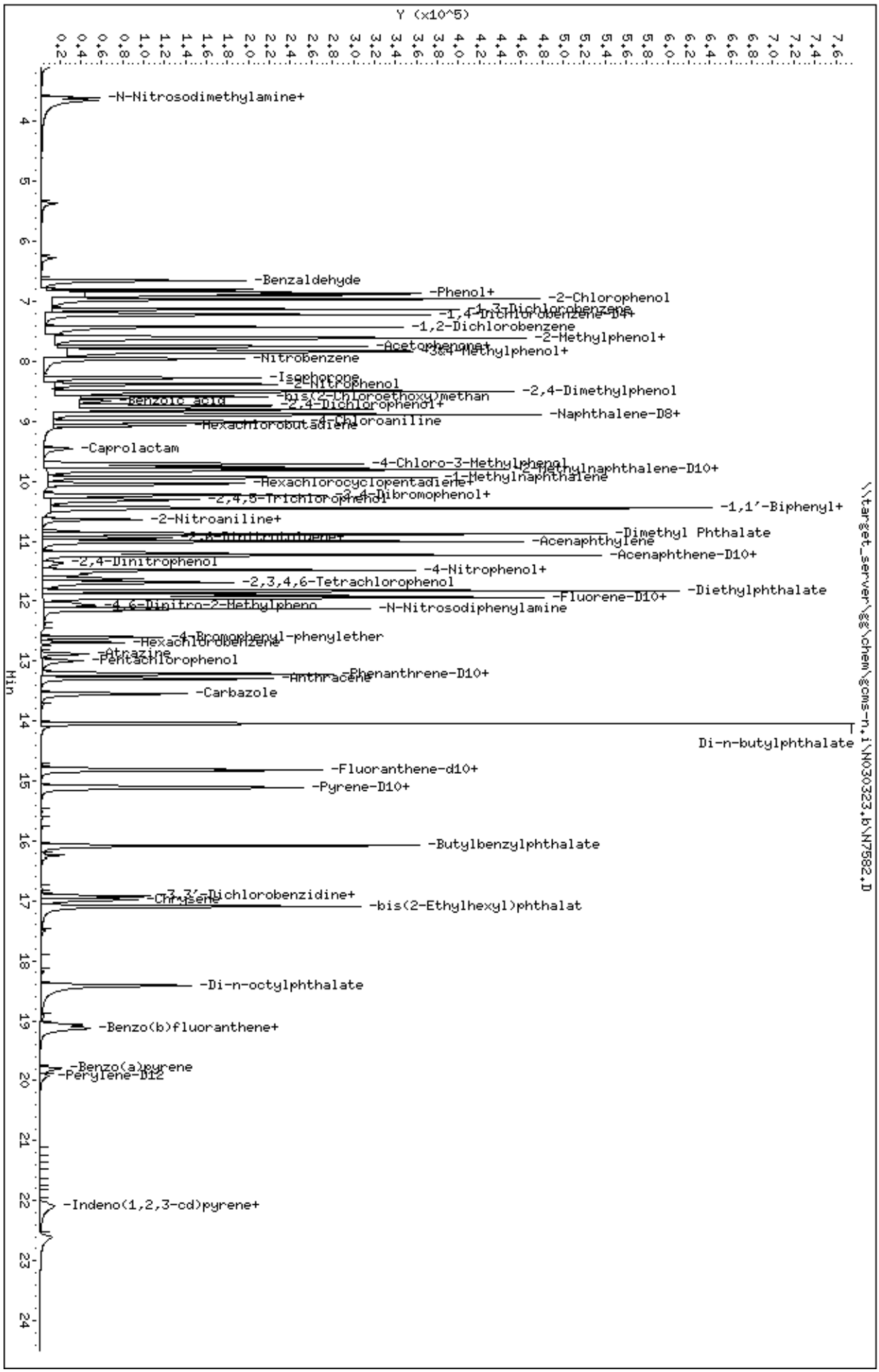
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
	21 2-Nitrophenol	139	8.380	8.380	(0.946)	185163	4.50000	4.50	
	22 2,4-Dimethylphenol	107	8.493	8.493	(0.959)	321091	4.50000	4.50	
	23 bis(2-Chloroethoxy)methane	93	8.583	8.584	(0.969)	190638	2.00000	2.00	
	24 Benzoic acid	105	8.651	8.708	(0.977)	101989	4.50000	4.50	
	25 2,4-Dichlorophenol	162	8.742	8.731	(0.987)	282344	4.50000	4.50	
	26 1,2,4-Trichlorobenzene	180	8.799	8.799	(0.994)	143964	2.00000	2.00	
*	27 Naphthalene-D8	136	8.855	8.867	(1.000)	179856	0.80000	(a)	
	28 Naphthalene	128	8.878	8.890	(1.003)	477639	2.00000	2.00	
	29 4-Chloroaniline	127	9.014	9.003	(1.018)	179606	2.00000	2.00	
	30 Hexachlorobutadiene	225	9.082	9.082	(1.026)	63873	2.00000	2.00	
	31 Caprolactam	113	9.455	9.490	(1.068)	42175	2.00000	2.00	
	32 4-Chloro-3-Methylphenol	107	9.701	9.701	(1.096)	249359	4.50000	4.50	
$	33 2-Methylnaphthalene-D10	152	9.769	9.769	(1.103)	232697	2.00000	2.00	
	34 2-Methylnaphthalene	142	9.809	9.810	(1.108)	313771	2.00000	2.00	
	35 1-Methylnaphthalene	142	9.931	9.945	(1.121)	289416	2.00000	2.00	
	36 Hexachlorocyclopentadiene	237	10.039	10.039	(0.896)	47649	2.00000	2.00	
	37 1,2,4,5-Tetrachlorobenzene	216	10.053	10.053	(0.897)	111923	2.00000	2.00	
$	38 2,4-Dibromophenol	252	10.228	10.215	(0.913)	64489	2.00000	2.00	
	39 2,4,6-Trichlorophenol	196	10.228	10.229	(0.913)	156136	4.50000	4.50	
	40 2,4,5-Trichlorophenol	196	10.309	10.296	(0.920)	186939	4.50000	4.50	
	41 1,1'-Biphenyl	154	10.445	10.445	(0.932)	341826	2.00000	2.00	
	42 2-Chloronaphthalene	164	10.458	10.459	(0.934)	81217	2.00000	2.00	
	43 2-Nitroaniline	65	10.640	10.632	(0.950)	48303	2.00000	2.00	
	44 Dimethyl Phthalate	163	10.882	10.896	(0.972)	605322	4.50000	4.50	
	45 2,6-Dinitrotoluene	165	10.959	10.962	(0.978)	62935	2.00000	2.00	
	46 Acenaphthylene	152	11.003	11.006	(0.982)	409602	2.00000	2.00	
	47 3-Nitroaniline	138	10.640	10.632	(0.950)	70817	2.00000	2.00	
*	48 Acenaphthene-D10	164	11.201	11.204	(1.000)	81123	0.80000	(a)	
	49 Acenaphthene	153	11.234	11.237	(1.003)	262159	2.00000	2.00	
	50 2,4-Dinitrophenol	184	11.366	11.336	(1.015)	28100	4.50000	4.50	
	51 4-Nitrophenol	109	11.553	11.512	(1.031)	34256	4.50000	4.50	
	52 Dibenzofuran	168	11.476	11.479	(1.025)	338505	2.00000	2.00	
	53 2,4-Dinitrotoluene	165	10.959	10.962	(0.978)	62935	2.00000	2.00	
	54 2,3,4,6-Tetrachlorophenol	232	11.685	11.688	(1.043)	108004	4.50000	4.50	
	55 Diethylphthalate	149	11.828	11.842	(1.056)	589456	4.50000	4.50	
$	56 Fluorene-D10	174	11.894	11.897	(1.062)	186939	2.00000	2.00	
	57 Fluorene	166	11.938	11.941	(1.066)	262391	2.00000	2.00	
	58 4-Chlorophenyl-phenylether	204	11.960	11.963	(1.068)	125453	2.00000	2.00	
	59 4-Nitroaniline	138	10.640	10.632	(0.950)	70817	2.00000	2.00	
	60 4,6-Dinitro-2-Methylphenol	198	12.070	12.062	(0.915)	45616	4.50000	4.50	
	61 N-Nitrosodiphenylamine	169	12.125	12.128	(0.920)	216495	2.00000	2.00	
	62 4-Bromophenyl-phenylether	248	12.613	12.606	(0.956)	63614	2.00000	2.00	
	63 Hexachlorobenzene	284	12.685	12.688	(0.962)	66175	2.00000	2.00	
	64 Atrazine	200	12.879	12.882	(0.977)	49930	2.00000	2.00	
	65 Pentachlorophenol	266	12.992	12.985	(0.985)	52708	4.50000	4.50	
*	66 Phenanthrene-D10	188	13.187	13.190	(1.000)	98064	0.80000	(a)	
	67 Phenanthrene	178	13.218	13.221	(1.002)	302967	2.00000	2.00	
	68 Anthracene	178	13.289	13.292	(1.008)	316570	2.00000	2.00	
	69 Carbazole	167	13.545	13.528	(1.027)	230563	2.00000	2.00	
	70 Di-n-butylphthalate	149	14.040	14.043	(1.065)	923661	4.50000	4.50	
$	71 Fluoranthene-d10	212	14.795	14.798	(1.122)	170396	2.00000	2.00	
	72 Fluoranthene	202	14.817	14.820	(1.124)	246494	2.00000	2.00	
$	73 Pyrene-D10	212	15.095	15.098	(0.892)	202720	2.00000	2.00	
	74 Pyrene	202	15.117	15.120	(0.893)	251918	2.00000	2.00	

Data File: \\target_server\gg\chem\gcms-n.i\N030323.b\N7582.D
Report Date: 14-Mar-2023 12:21

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
	75 Butylbenzylphthalate	149	16.073	16.076	(0.949)	286945	4.50000	4.50	
	76 3,3'-Dichlorobenzidine	252	16.939	16.931	(1.001)	21842	2.00000	2.00	
	77 Benzo(a)anthracene	228	16.917	16.908	(0.999)	113922	2.00000	2.00	
*	78 Chrysene-D12	240	16.928	16.920	(1.000)	34869	0.80000	(a)	
	79 Chrysene	228	16.972	16.975	(1.003)	156170	2.00000	2.00	
	80 bis(2-Ethylhexyl)phthalate	149	17.084	17.087	(1.009)	406223	4.50000	4.50	
	81 Di-n-octylphthalate	149	18.406	18.408	(1.087)	503338	4.50000	4.50	
	82 Benzo(b)fluoranthene	252	19.072	19.053	(0.957)	60390	2.00000	2.00	
	83 Benzo(k)fluoranthene	252	19.128	19.119	(0.960)	128966	2.00000	2.00(H)	
	84 Benzo(a)pyrene	252	19.794	19.776	(0.994)	73944	2.00000	2.00	
*	85 Perylene-D12	264	19.920	19.912	(1.000)	23631	0.80000	(a)	
	86 Indeno(1,2,3-cd)pyrene	276	22.053	22.014	(1.107)	51205	2.00000	2.00	
	87 Dibenzo(a,h)anthracene	278	22.106	22.077	(1.110)	34781	2.00000	2.00	
	88 Benzo(g,h,i)perylene	276	22.610	22.582	(1.135)	58951	2.00000	2.00	
M	89 Total PAHs	100				3811256	36.0000	36.0	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
H - Operator selected an alternate compound hit.


Data File: \\target_server\gg\chem\gcms-n,i\N030323,b\N7582,D
Date : 03-MAR-2023 13:41
Client ID:
Sample Info: WG333362-4
Volume Injected (uL): 1.0
Column phase: ZB5-MS
Instrument: gcms-n,i
Operator: DT/CO
Column diameter: 0.25
\\target_server\gg\chem\gcms-n,i\N030323,b\N7582,D
Y (x10^5)
Min
-N-Nitrosodimethylamine+
-Benzaldehyde
-Phenol+
-2-Chlorophenol
-1,3-Dichlorobenzene
-1,4-Dichlorobenzene-D4+
-1,2-Dichlorobenzene
-2-Methylphenol+
-Acetophenone+
-3&4-Methylphenol+
-Nitrobenzene
-Isophorone
-2-Nitrophenol
-2,4-Dimethylphenol
-bis(2-Chloroethoxy)methan
-Benzoic acid
-2,4-Dichlorophenol+
-Naphthalene-D8+
-4-Chloroaniline
-Hexachlorobutadiene
-Caprolactam
-4-Chloro-3-Methylphenol
-2-Methylnaphthalene-D10+
-1-Methylnaphthalene
-Hexachlorocyclopentadiene+
-2,4,6-Trichlorophenol
-2,4,5-Trichlorophenol
-2,4-Dibromophenol+
-1,1'-Biphenyl+
-2-Nitroaniline+
-2,6-Dinitrotoluene+
-Dimethyl Phthalate
-Acenaphthylene
-Acenaphthene-D10+
-2,4-Dinitrophenol
-4-Nitrophenol+
-2,3,4,6-Tetrachlorophenol
-Diethylphthalate
-Fluorene-D10+
-4,6-Dinitro-2-Methylpheno
-N-Nitrosodiphenylamine
-4-Bromophenyl-phenylether
-Hexachlorobenzene
-Atrazine
-Pentachlorophenol
-Phenanthrene-D10+
-Anthracene
-Carbazole
Di-n-butylphthalate
-Fluoranthene-d10+
-Pyrene-D10+
-Butylbenzylphthalate
-3,3'-Dichlorobenzidine+
-Chrysene
-bis(2-Ethylhexyl)phthalat
-Di-n-octylphthalate
-Benzo(b)fluoranthene+
-Benzo(a)pyrene
-Perylene-D12
-Indeno(1,2,3-cd)pyrene+

Data File: \\target_server\gg\chem\gcms-n.i\N030323.b\N7583.D
Report Date: 14-Mar-2023 12:21

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-n.i\N030323.b\N7583.D
Lab Smp Id: WG333362-3
Inj Date : 03-MAR-2023 14:14
Operator : DT/CO   Inst ID: gcms-n.i
Smp Info : WG333362-3
Misc Info :
Comment   :
Method   : \\target_server\gg\chem\gcms-n.i\N030323.b\NSPSIM18.m
Meth Date : 06-Mar-2023 11:06 coneill   Quant Type: ISTD
Cal Date : 03-MAR-2023 14:14   Cal File: N7583.D
Als bottle: 3   Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: all.sub
Target Version: 4.12
Processing Host: V200T4

Concentration Formula: Amt * DF * Uf*(Vt/Vo*Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.000	Sample Volume (L)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

DL

9:32 am, Mar 22, 2023

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)	REVIEW CODE
$	1 1,4-Dioxane-d8	96	3.009	2.988	(0.417)	14316	0.50000	0.438(a)	
	2 1,4-Dioxane	88	3.062	3.031	(0.425)	15100	0.50000	0.433(a)	
	3 N-Nitrosodimethylamine	74	3.632	3.548	(0.504)	18487	0.50000	0.374(M)	M6
	4 Pyridine	79	3.791	3.569	(0.526)	24986	0.50000	0.336	
	5 Benzaldehyde	77	6.670	6.650	(0.925)	19921	0.50000	0.443	
	6 Phenol	94	6.868	6.868	(0.952)	199228	2.00000	1.90	
	7 Bis(2-Chloroethyl)ether	93	6.899	6.899	(0.957)	58823	0.50000	0.582	
	8 2-Chlorophenol	128	6.972	6.962	(0.967)	179045	2.00000	1.94	
	9 1,3-Dichlorobenzene	146	7.138	7.139	(0.990)	42520	0.50000	0.443	
*	10 1,4-Dichlorobenzene-D4	152	7.211	7.211	(1.000)	55010	0.80000	(a)	
	11 1,4-Dichlorobenzene	146	7.232	7.232	(1.003)	49200	0.50000	0.470	
	12 1,2-Dichlorobenzene	146	7.429	7.430	(1.030)	48649	0.50000	0.472	
	13 2-Methylphenol	108	7.617	7.617	(1.056)	145523	2.00000	1.84	
	14 2,2'-Oxybis(1-chloropropane)	45	7.596	7.586	(1.053)	24064	0.50000	0.441	
	15 Acetophenone	105	7.752	7.752	(0.875)	50051	0.50000	0.462	
	16 N-Nitroso-di-n-propylamine	70	7.773	7.773	(1.078)	25529	0.50000	0.466	
	17 3&4-Methylphenol	108	7.835	7.825	(1.087)	150873	2.00000	1.82	
	18 Hexachloroethane	117	7.846	7.856	(1.088)	14731	0.50000	0.404	
	19 Nitrobenzene	77	7.970	7.961	(0.900)	43663	0.50000	0.492	
	20 Isophorone	82	8.278	8.278	(0.935)	52683	0.50000	0.406	

Data File: \\target_server\gg\chem\gcms-n.i\N030323.b\N7583.D
Report Date: 14-Mar-2023 12:21

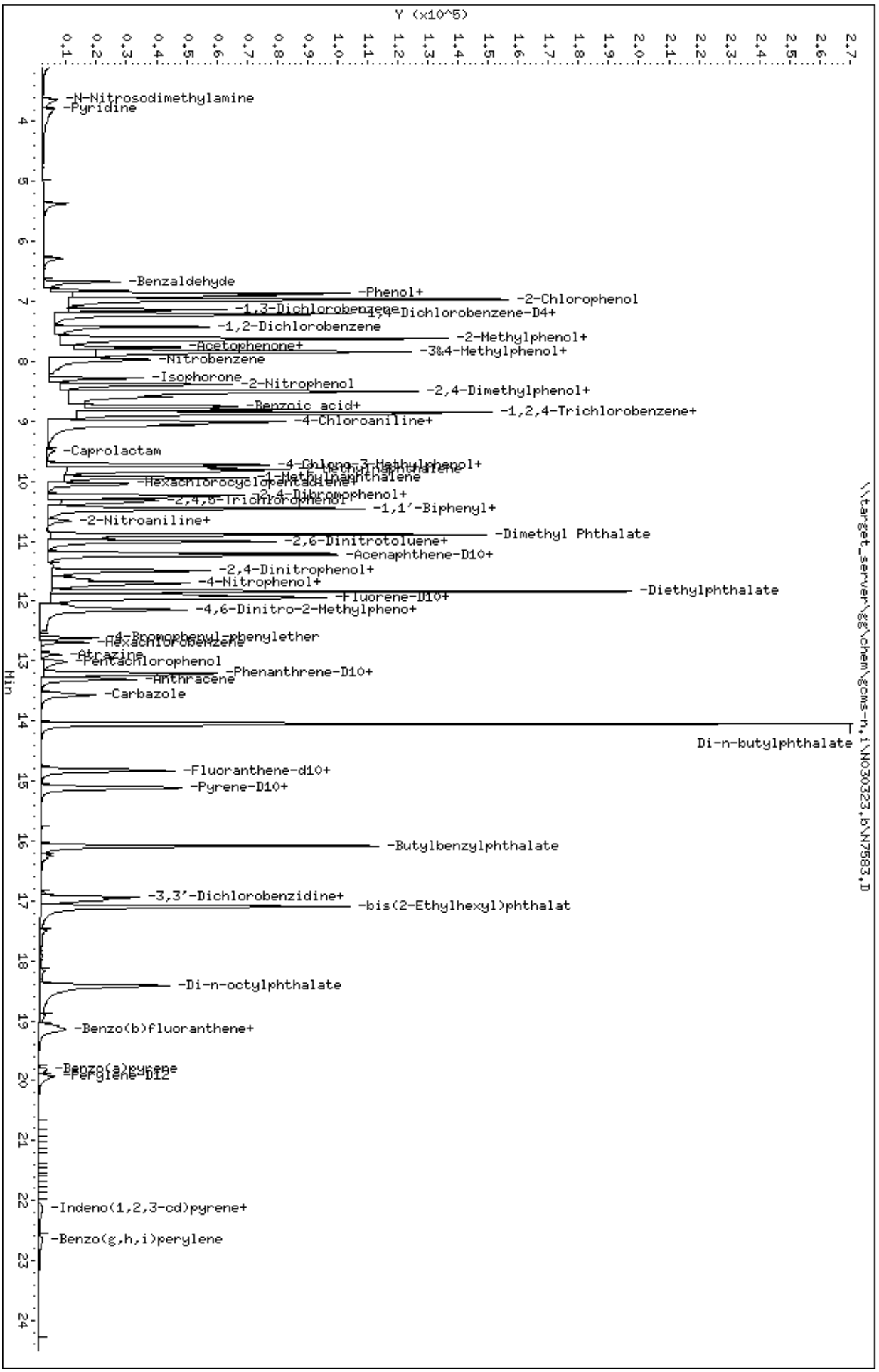
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
	21 2-Nitrophenol	139	8.380	8.380	(0.946)	74103	2.00000	1.75	
	22 2,4-Dimethylphenol	107	8.493	8.493	(0.959)	142773	2.00000	1.88	
	23 bis(2-Chloroethoxy)methane	93	8.583	8.584	(0.969)	44262	0.50000	0.469	
	24 Benzoic acid	105	8.708	8.708	(0.983)	31084	2.00000	1.37	
	25 2,4-Dichlorophenol	162	8.742	8.731	(0.987)	122482	2.00000	1.87	
	26 1,2,4-Trichlorobenzene	180	8.798	8.799	(0.994)	34292	0.50000	0.460	
*	27 Naphthalene-D8	136	8.855	8.867	(1.000)	187914	0.80000	(a)	
	28 Naphthalene	128	8.889	8.890	(1.004)	113521	0.50000	0.447	
	29 4-Chloroaniline	127	9.014	9.003	(1.018)	41062	0.50000	0.471(a)	
	30 Hexachlorobutadiene	225	9.081	9.082	(1.026)	15605	0.50000	0.446	
	31 Caprolactam	113	9.500	9.490	(1.073)	6399	0.50000	0.861	
	32 4-Chloro-3-Methylphenol	107	9.728	9.701	(1.099)	112767	2.00000	1.88	
$	33 2-Methylnaphthalene-D10	152	9.769	9.769	(1.103)	59495	0.50000	0.466(a)	
	34 2-Methylnaphthalene	142	9.809	9.810	(1.108)	91256	0.50000	0.508	
	35 1-Methylnaphthalene	142	9.931	9.945	(1.121)	79334	0.50000	0.499	
	36 Hexachlorocyclopentadiene	237	10.039	10.039	(0.896)	8128	0.50000	0.347	
	37 1,2,4,5-Tetrachlorobenzene	216	10.052	10.053	(0.897)	27363	0.50000	0.472	
$	38 2,4-Dibromophenol	252	10.242	10.215	(0.914)	15745	0.50000	0.465(a)	
	39 2,4,6-Trichlorophenol	196	10.242	10.229	(0.914)	62728	2.00000	1.73	
	40 2,4,5-Trichlorophenol	196	10.323	10.296	(0.921)	90351	2.00000	2.23	
	41 1,1'-Biphenyl	154	10.458	10.445	(0.933)	75563	0.50000	0.443	
	42 2-Chloronaphthalene	164	10.472	10.459	(0.935)	19757	0.50000	0.450	
	43 2-Nitroaniline	65	10.664	10.632	(0.952)	8058	0.50000	0.362	
	44 Dimethyl Phthalate	163	10.895	10.896	(0.972)	294028	2.00000	2.02	
	45 2,6-Dinitrotoluene	165	10.972	10.962	(0.979)	12153	0.50000	0.423	
	46 Acenaphthylene	152	11.005	11.006	(0.982)	99417	0.50000	0.474	
	47 3-Nitroaniline	138	10.664	10.632	(0.952)	11076	0.50000	0.328	
*	48 Acenaphthene-D10	164	11.204	11.204	(1.000)	86110	0.80000	(a)	
	49 Acenaphthene	153	11.237	11.237	(1.003)	65637	0.50000	0.482	
	50 2,4-Dinitrophenol	184	11.435	11.336	(1.021)	6688	2.00000	0.957(a)	
	51 4-Nitrophenol	109	11.644	11.512	(1.039)	5858	2.00000	1.12	
	52 Dibenzofuran	168	11.490	11.479	(1.026)	83552	0.50000	0.472	
	53 2,4-Dinitrotoluene	165	10.972	10.962	(0.979)	12153	0.50000	0.423	
	54 2,3,4,6-Tetrachlorophenol	232	11.699	11.688	(1.044)	46019	2.00000	1.76	
	55 Diethylphthalate	149	11.831	11.842	(1.056)	289801	2.00000	2.04	
$	56 Fluorene-D10	174	11.908	11.897	(1.063)	47912	0.50000	0.482(a)	
	57 Fluorene	166	11.941	11.941	(1.066)	66415	0.50000	0.486	
	58 4-Chlorophenyl-phenylether	204	11.963	11.963	(1.068)	31442	0.50000	0.483	
	59 4-Nitroaniline	138	10.664	10.632	(0.952)	11076	0.50000	0.328	
	60 4,6-Dinitro-2-Methylphenol	198	12.095	12.062	(0.916)	13767	2.00000	1.20	
	61 N-Nitrosodiphenylamine	169	12.139	12.128	(0.920)	50697	0.50000	0.485	
	62 4-Bromophenyl-phenylether	248	12.616	12.606	(0.956)	16237	0.50000	0.473	
	63 Hexachlorobenzene	284	12.697	12.688	(0.962)	18883	0.50000	0.518	
	64 Atrazine	200	12.892	12.882	(0.977)	10467	0.50000	0.428	
	65 Pentachlorophenol	266	13.015	12.985	(0.986)	19274	2.00000	1.57	
*	66 Phenanthrene-D10	188	13.200	13.190	(1.000)	103848	0.80000	(a)	
	67 Phenanthrene	178	13.230	13.221	(1.002)	68883	0.50000	0.458	
	68 Anthracene	178	13.302	13.292	(1.008)	79301	0.50000	0.512	
	69 Carbazole	167	13.568	13.528	(1.028)	52593	0.50000	0.534	
	70 Di-n-butylphthalate	149	14.042	14.043	(1.064)	443672	2.00000	2.09	
$	71 Fluoranthene-d10	212	14.809	14.798	(1.122)	41010	0.50000	0.465	
	72 Fluoranthene	202	14.831	14.820	(1.124)	56235	0.50000	0.458	
$	73 Pyrene-D10	212	15.109	15.098	(0.892)	52117	0.50000	0.492(a)	
	74 Pyrene	202	15.131	15.120	(0.893)	58946	0.50000	0.478	

Data File: \\target_server\gg\chem\gcms-n.i\N030323.b\N7583.D
Report Date: 14-Mar-2023 12:21

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
	75 Butylbenzylphthalate	149	16.086	16.076	(0.950)	123803	2.00000	2.05	
	76 3,3'-Dichlorobenzidine	252	16.964	16.931	(1.001)	2949	0.50000	0.250	
	77 Benzo(a)anthracene	228	16.930	16.908	(0.999)	23511	0.50000	0.413	
*	78 Chrysene-D12	240	16.942	16.920	(1.000)	34675	0.80000	(a)	
	79 Chrysene	228	16.986	16.975	(1.003)	41965	0.50000	0.523	
	80 bis(2-Ethylhexyl)phthalate	149	17.086	17.087	(1.009)	172852	2.00000	2.06	
	81 Di-n-octylphthalate	149	18.408	18.408	(1.087)	184686	2.00000	1.86	
	82 Benzo(b)fluoranthene	252	19.097	19.053	(0.958)	8211	0.50000	0.256	
	83 Benzo(k)fluoranthene	252	19.152	19.119	(0.961)	29206	0.50000	0.648(H)	
	84 Benzo(a)pyrene	252	19.817	19.776	(0.994)	15905	0.50000	0.458	
*	85 Perylene-D12	264	19.933	19.912	(1.000)	21553	0.80000	(a)	
	86 Indeno(1,2,3-cd)pyrene	276	22.129	22.014	(1.110)	7721	0.50000	0.320	
	87 Dibenzo(a,h)anthracene	278	22.150	22.077	(1.111)	5653	0.50000	0.327	
	88 Benzo(g,h,i)perylene	276	22.655	22.582	(1.137)	11426	0.50000	0.450	
M	89 Total PAHs	100				922543	9.00000	8.20	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.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Date : 03-MAR-2023 14:14
Client ID:
Sample Info: WG333362-3
Volume Injected (uL): 1.0
Column phase: ZB5-MS
Instrument: gcms-n,i
Operator: DT/CO
Column diameter: 0.25
\\target_server\gg\chem\gcms-n,i\N030323,b\N7583,D
Y (x10^5)
Min
-N-Nitrosodimethylamine
-Pyridine
-Benzaldehyde
-Phenol+
-2-Chlorophenol
-1,3-Dichlorobenzene
-1,4-Dichlorobenzene-D4+
-1,2-Dichlorobenzene
-2-Methylphenol+
-Acetophenone+
-3&4-Methylphenol+
-Nitrobenzene
-Isophorone
-2-Nitrophenol
-2,4-Dimethylphenol+
-Benzoic acid+
-1,2,4-Trichlorobenzene+
-4-Chloroaniline+
-Caprolactam
-4-Chloro-3-Methylphenol+
-1-Methylnaphthalene
-Hexachlorocyclopentadiene
-2,4-Dibromophenol+
-2,4,5-Trichlorophenol
-1,1'-Biphenyl+
-2-Nitroaniline+
-Dimethyl Phthalate
-2,6-Dinitrotoluene+
-Acenaphthene-D10+
-2,4-Dinitrophenol+
-4-Nitrophenol+
-Diethylphthalate
-Fluorene-D10+
-4,6-Dinitro-2-Methylpheno+
-4-Bromophenyl-phenylether
-Hexachlorobenzene
-Atrazine
-Pentachlorophenol
-Phenanthrene-D10+
-Anthracene
-Carbazole
Di-n-butylphthalate
-Fluoranthene-d10+
-Pyrene-D10+
-Butylbenzylphthalate
-3,3'-Dichlorobenzidine+
-bis(2-Ethylhexyl)phthalat
-Di-n-octylphthalate
-Benzo(b)fluoranthene+
-Benzo(a)pyrene
-Perylene-D12
-Indeno(1,2,3-cd)pyrene+
-Benzo(g,h,i)perylene

Data File: \\target_server\gg\chem\gcms-n.i\N030323.b\N7584.D
Report Date: 14-Mar-2023 12:21

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-n.i\N030323.b\N7584.D
Lab Smp Id: WG333362-2
Inj Date : 03-MAR-2023 14:47
Operator : DT/CO   Inst ID: gcms-n.i
Smp Info : WG333362-2
Misc Info :
Comment   :
Method   : \\target_server\gg\chem\gcms-n.i\N030323.b\NSPSIM18.m
Meth Date : 06-Mar-2023 11:06 coneill   Quant Type: ISTD
Cal Date : 03-MAR-2023 14:47   Cal File: N7584.D
Als bottle: 4   Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: all.sub
Target Version: 4.12
Processing Host: V200T4

Concentration Formula: Amt * DF * Uf*(Vt/Vo*Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.000	Sample Volume (L)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

DL

9:32 am, Mar 22, 2023

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
$	1 1,4-Dioxane-d8	96	3.030	2.988	(0.420)	5360	0.20000	0.200(a)	
	2 1,4-Dioxane	88	3.083	3.031	(0.427)	6357	0.20000	0.222(a)	
	3 N-Nitrosodimethylamine	74	3.706	3.548	(0.513)	6868	0.20000	0.174(aM)	M6
	4 Pyridine	79	4.065	3.569	(0.563)	8348	0.20000	0.145(aM)	M6
	5 Benzaldehyde	77	6.701	6.650	(0.928)	7069	0.20000	0.192(a)	
	6 Phenol	94	6.920	6.868	(0.958)	79001	1.00000	0.920(a)	
	7 Bis(2-Chloroethyl)ether	93	6.930	6.899	(0.960)	24506	0.20000	0.296	
	8 2-Chlorophenol	128	6.992	6.962	(0.968)	72400	1.00000	0.960(a)	
	9 1,3-Dichlorobenzene	146	7.148	7.139	(0.990)	14178	0.20000	0.180(a)	
*	10 1,4-Dichlorobenzene-D4	152	7.221	7.211	(1.000)	45063	0.80000	(a)	
	11 1,4-Dichlorobenzene	146	7.242	7.232	(1.003)	19451	0.20000	0.227	
	12 1,2-Dichlorobenzene	146	7.429	7.430	(1.029)	20488	0.20000	0.242	
	13 2-Methylphenol	108	7.648	7.617	(1.059)	51995	1.00000	0.804(a)	
	14 2,2'-Oxybis(1-chloropropane)	45	7.606	7.586	(1.053)	8245	0.20000	0.184(a)	
	15 Acetophenone	105	7.793	7.752	(0.879)	16248	0.20000	0.190(a)	
	16 N-Nitroso-di-n-propylamine	70	7.793	7.773	(1.079)	9563	0.20000	0.213	
	17 3&4-Methylphenol	108	7.887	7.825	(1.092)	68345	1.00000	1.00	
	18 Hexachloroethane	117	7.845	7.856	(1.086)	7297	0.20000	0.244	
	19 Nitrobenzene	77	8.002	7.961	(0.902)	18210	0.20000	0.260	
	20 Isophorone	82	8.289	8.278	(0.935)	13654	0.20000	0.133(a)	

Data File: \\target_server\gg\chem\gcms-n.i\N030323.b\N7584.D
Report Date: 14-Mar-2023 12:21

DL

9:32 am, Mar 22, 2023

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
	21 2-Nitrophenol	139	8.425	8.380	(0.950)	24182	1.00000	0.723(a)	
	22 2,4-Dimethylphenol	107	8.561	8.493	(0.966)	54044	1.00000	0.903	
	23 bis(2-Chloroethoxy)methane	93	8.662	8.584	(0.977)	14894	0.20000	0.200	
	24 Benzoic acid	105	8.561	8.708	(0.966)	1416	1.00000	0.0792(a)	
	25 2,4-Dichlorophenol	162	8.832	8.731	(0.996)	41394	1.00000	0.801	
	26 1,2,4-Trichlorobenzene	180	8.810	8.799	(0.994)	13092	0.20000	0.222	
*	27 Naphthalene-D8	136	8.866	8.867	(1.000)	148321	0.80000	(a)	
	28 Naphthalene	128	8.889	8.890	(1.003)	51186	0.20000	0.255	
	29 4-Chloroaniline	127	9.093	9.003	(1.026)	11860	0.20000	0.172(a)	
	30 Hexachlorobutadiene	225	9.081	9.082	(1.024)	7210	0.20000	0.261	
	31 Caprolactam	113	9.579	9.490	(1.080)	534	0.20000	0.0911(a)	
	32 4-Chloro-3-Methylphenol	107	9.755	9.701	(1.100)	37220	1.00000	0.787(a)	
$	33 2-Methylnaphthalene-D10	152	9.809	9.769	(1.106)	22403	0.20000	0.222(a)	
	34 2-Methylnaphthalene	142	9.850	9.810	(1.111)	38831	0.20000	0.274	
	35 1-Methylnaphthalene	142	9.958	9.945	(1.123)	31475	0.20000	0.251	
	36 Hexachlorocyclopentadiene	237	10.052	10.039	(0.897)	3269	0.20000	0.197(a)	
	37 1,2,4,5-Tetrachlorobenzene	216	10.079	10.053	(0.900)	9979	0.20000	0.243	
$	38 2,4-Dibromophenol	252	10.296	10.215	(0.919)	5626	0.20000	0.235(a)	
	39 2,4,6-Trichlorophenol	196	10.269	10.229	(0.917)	17260	1.00000	0.671(a)	
	40 2,4,5-Trichlorophenol	196	10.377	10.296	(0.926)	29314	1.00000	0.942(aM)	M6
	41 1,1'-Biphenyl	154	10.472	10.445	(0.935)	26246	0.20000	0.217	
	42 2-Chloronaphthalene	164	10.485	10.459	(0.936)	6819	0.20000	0.219	
	43 2-Nitroaniline	65	10.708	10.632	(0.956)	1808	0.20000	0.115(a)	
	44 Dimethyl Phthalate	163	10.906	10.896	(0.973)	97186	1.00000	0.946(a)	
	45 2,6-Dinitrotoluene	165	10.994	10.962	(0.981)	2392	0.20000	0.117(a)	
	46 Acenaphthylene	152	11.016	11.006	(0.983)	31494	0.20000	0.212	
	47 3-Nitroaniline	138	10.708	10.632	(0.956)	2838	0.20000	0.119(a)	
*	48 Acenaphthene-D10	164	11.203	11.204	(1.000)	60981	0.80000	(a)	
	49 Acenaphthene	153	11.247	11.237	(1.004)	21432	0.20000	0.222	
	50 2,4-Dinitrophenol	184	11.203	11.336	(1.000)	2647	1.00000	0.535(a)	
	51 4-Nitrophenol	109	11.743	11.512	(1.048)	9936	1.00000	2.68	
	52 Dibenzofuran	168	11.512	11.479	(1.028)	26708	0.20000	0.213	
	53 2,4-Dinitrotoluene	165	10.994	10.962	(0.981)	2392	0.20000	0.117(a)	
	54 2,3,4,6-Tetrachlorophenol	232	11.732	11.688	(1.047)	15712	1.00000	0.847(a)	
	55 Diethylphthalate	149	11.842	11.842	(1.057)	93974	1.00000	0.935(a)	
$	56 Fluorene-D10	174	11.919	11.897	(1.064)	15158	0.20000	0.215(a)	
	57 Fluorene	166	11.963	11.941	(1.068)	19726	0.20000	0.204	
	58 4-Chlorophenyl-phenylether	204	11.985	11.963	(1.070)	10038	0.20000	0.218	
	59 4-Nitroaniline	138	10.708	10.632	(0.956)	2838	0.20000	0.119(a)	
	60 4,6-Dinitro-2-Methylphenol	198	12.161	12.062	(0.921)	3460	1.00000	0.465(a)	
	61 N-Nitrosodiphenylamine	169	12.161	12.128	(0.921)	14055	0.20000	0.208	
	62 4-Bromophenyl-phenylether	248	12.636	12.606	(0.957)	6288	0.20000	0.283	
	63 Hexachlorobenzene	284	12.697	12.688	(0.961)	7083	0.20000	0.300	
	64 Atrazine	200	12.913	12.882	(0.978)	2363	0.20000	0.149(a)	
	65 Pentachlorophenol	266	13.056	12.985	(0.988)	5988	1.00000	0.753(a)	
*	66 Phenanthrene-D10	188	13.210	13.190	(1.000)	67184	0.80000	(a)	
	67 Phenanthrene	178	13.240	13.221	(1.002)	18867	0.20000	0.194(a)	
	68 Anthracene	178	13.322	13.292	(1.009)	25284	0.20000	0.240(M)	M6
	69 Carbazole	167	13.599	13.528	(1.029)	11887	0.20000	0.165(aH)	
	70 Di-n-butylphthalate	149	14.053	14.043	(1.064)	123636	1.00000	0.902(a)	
$	71 Fluoranthene-d10	212	14.820	14.798	(1.122)	11255	0.20000	0.197	
	72 Fluoranthene	202	14.842	14.820	(1.124)	14774	0.20000	0.186(a)	
$	73 Pyrene-D10	212	15.120	15.098	(0.891)	15107	0.20000	0.329(a)	
	74 Pyrene	202	15.142	15.120	(0.893)	15803	0.20000	0.295	

Data File: \\target_server\gg\chem\gcms-n.i\N030323.b\N7584.D
Report Date: 14-Mar-2023 12:21

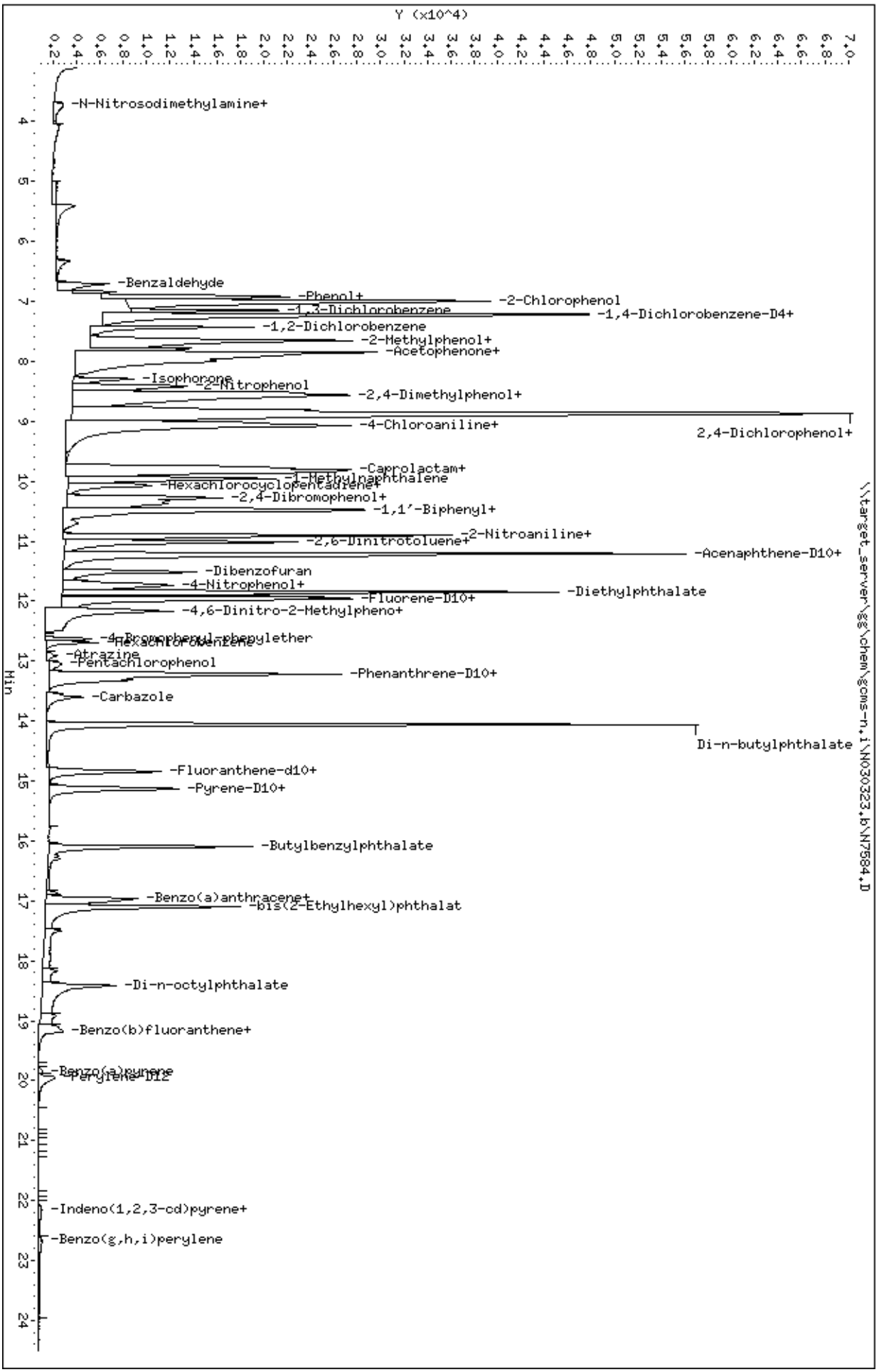
DL

9:32 am, Mar 22, 2023

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
	75 Butylbenzylphthalate	149	16.097	16.076	(0.949)	25854	1.00000	0.986(a)	
	76 3,3'-Dichlorobenzidine	252	16.986	16.931	(1.001)	436	0.20000	0.0942(aM)	M6
	77 Benzo(a)anthracene	228	16.964	16.908	(1.000)	3259	0.20000	0.132(a)	
*	78 Chrysene-D12	240	16.964	16.920	(1.000)	15035	0.80000	(a)	
	79 Chrysene	228	17.008	16.975	(1.003)	10357	0.20000	0.298	
	80 bis(2-Ethylhexyl)phthalate	149	17.086	17.087	(1.007)	35314	1.00000	0.971(a)	
	81 Di-n-octylphthalate	149	18.408	18.408	(1.085)	32349	1.00000	0.752(a)	
	82 Benzo(b)fluoranthene	252	19.141	19.053	(0.959)	1262	0.20000	0.102(aM)	M6
	83 Benzo(k)fluoranthene	252	19.174	19.119	(0.961)	6284	0.20000	0.298(M)	M6
	84 Benzo(a)pyrene	252	19.849	19.776	(0.995)	2278	0.20000	0.162(aM)	M6
*	85 Perylene-D12	264	19.954	19.912	(1.000)	9081	0.80000	(a)	
	86 Indeno(1,2,3-cd)pyrene	276	22.140	22.014	(1.110)	1356	0.20000	0.141(aM)	M6
	87 Dibenzo(a,h)anthracene	278	22.161	22.077	(1.111)	1140	0.20000	0.162(aM)	M6
	88 Benzo(g,h,i)perylene	276	22.665	22.582	(1.136)	2154	0.20000	0.201(M)	M6
M	89 Total PAHs	100				296962	3.60000	3.83	

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.


Data File: \\target_server\gg\chem\gcms-n,i\N030323,b\N7584.D
Date : 03-MAR-2023 14:47
Client ID:
Sample Info: WG333362-2
Volume Injected (uL): 1.0
Column phase: ZB5-MS
Instrument: gcms-n,i
Operator: DT/CO
Column diameter: 0.25
\\target_server\gg\chem\gcms-n,i\N030323,b\N7584.D
Y (x10^4)
Min
-N-Nitrosodimethylamine+
-Benzaldehyde
-Phenol+
-2-Chlorophenol
-1,3-Dichlorobenzene
-1,4-Dichlorobenzene-D4+
-1,2-Dichlorobenzene
-2-Methylphenol+
-Acetophenone+
-Isophorone
-2-Nitrophenol
-2,4-Dimethylphenol+
-4-Chloroaniline+
2,4-Dichlorophenol+
-Caprolactam+
-1-Methylnaphthalene
-Hexachlorocyclopentadiene+
-2,4-Dibromophenol+
-1,1'-Biphenyl+
-2-Nitroaniline+
-2,6-Dinitrotoluene+
-Acenaphthene-D10+
-Dibenzofuran
-4-Nitrophenol+
-Diethylphthalate
-Fluorene-D10+
-4,6-Dinitro-2-Methylpheno+
-4-Bromophenyl-phenylether
-Hexachlorobenzene
-Atrazine
-Pentachlorophenol
-Phenanthrene-D10+
-Carbazole
Di-n-butylphthalate
-Fluoranthene-d10+
-Pyrene-D10+
-Butylbenzylphthalate
-Benzo(a)anthracene+
-bis(2-Ethylhexyl)phthalat
-Di-n-octylphthalate
-Benzo(b)fluoranthene+
-Benzo(a)pyrene
-Perylene-D12
-Indeno(1,2,3-cd)pyrene+
-Benzo(g,h,i)perylene

Data File: \\target_server\gg\chem\gcms-n.i\N030323.b\N7585.D
Report Date: 14-Mar-2023 12:21

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-n.i\N030323.b\N7585.D
Lab Smp Id: WG333362-5
Inj Date : 03-MAR-2023 15:21
Operator : DT/CO   Inst ID: gcms-n.i
Smp Info : WG333362-5
Misc Info :
Comment   :
Method   : \\target_server\gg\chem\gcms-n.i\N030323.b\NSPSIM18.m
Meth Date : 06-Mar-2023 11:06 coneill   Quant Type: ISTD
Cal Date : 03-MAR-2023 15:21   Cal File: N7585.D
Als bottle: 5   Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: all.sub
Target Version: 4.12
Processing Host: V200T4

Concentration Formula: Amt * DF * Uf*(Vt/Vo*Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.000	Sample Volume (L)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
$	1 1,4-Dioxane-d8	96	3.009	2.988	(0.418)	247358	7.00000	7.63	
	2 1,4-Dioxane	88	3.051	3.031	(0.424)	246163	7.00000	7.11	
	3 N-Nitrosodimethylamine	74	3.558	3.548	(0.494)	379821	7.00000	7.94	
	4 Pyridine	79	3.590	3.569	(0.499)	588222	7.00000	8.42	
	5 Benzaldehyde	77	6.639	6.650	(0.922)	356172	7.00000	7.98	
	6 Phenol	94	6.847	6.868	(0.951)	784224	7.00000	7.53	
	7 Bis(2-Chloroethyl)ether	93	6.888	6.899	(0.957)	620820	7.00000	6.19	
	8 2-Chlorophenol	128	6.951	6.962	(0.965)	677080	7.00000	7.41	
	9 1,3-Dichlorobenzene	146	7.128	7.139	(0.990)	710696	7.00000	7.46	
*	10 1,4-Dichlorobenzene-D4	152	7.200	7.211	(1.000)	54629	0.80000	(a)	
	11 1,4-Dichlorobenzene	146	7.221	7.232	(1.003)	714172	7.00000	6.86	
	12 1,2-Dichlorobenzene	146	7.419	7.430	(1.030)	702605	7.00000	6.86	
	13 2-Methylphenol	108	7.606	7.617	(1.056)	613662	7.00000	7.82	
	14 2,2'-Oxybis(1-chloropropane)	45	7.585	7.586	(1.053)	412496	7.00000	7.60	
	15 Acetophenone	105	7.731	7.752	(0.873)	813598	7.00000	7.25	
	16 N-Nitroso-di-n-propylamine	70	7.752	7.773	(1.077)	380236	7.00000	6.98	
	17 3&4-Methylphenol	108	7.825	7.825	(1.087)	614635	7.00000	7.46	
	18 Hexachloroethane	117	7.845	7.856	(1.090)	258152	7.00000	7.12	
	19 Nitrobenzene	77	7.939	7.961	(0.897)	590516	7.00000	6.43	
	20 Isophorone	82	8.266	8.278	(0.934)	1078479	7.00000	8.04	

Data File: \\target_server\gg\chem\gcms-n.i\N030323.b\N7585.D
Report Date: 14-Mar-2023 12:21

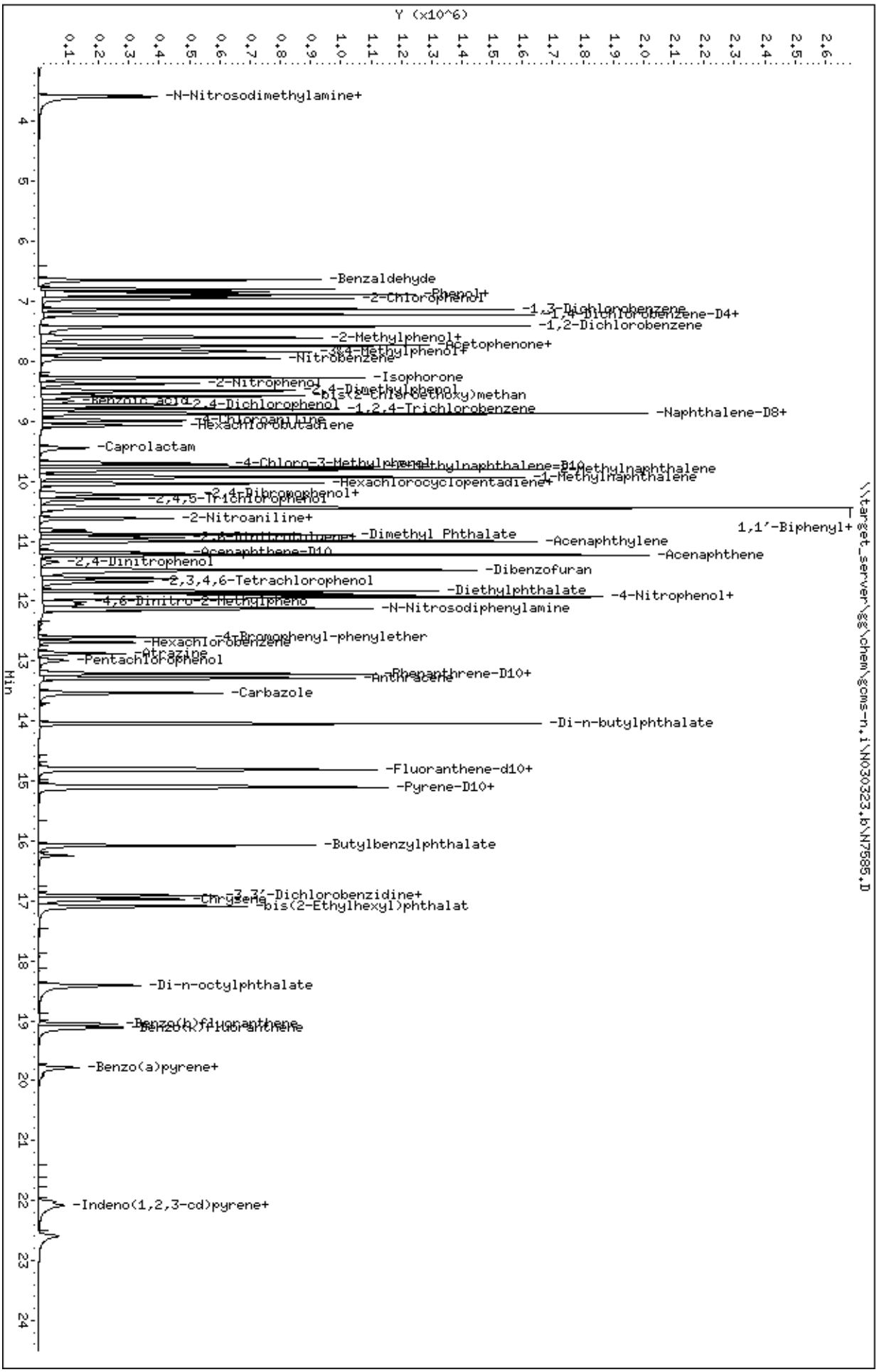
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
	21 2-Nitrophenol	139	8.368	8.380	(0.945)	338970	7.00000	7.73	
	22 2,4-Dimethylphenol	107	8.481	8.493	(0.958)	576693	7.00000	7.35	
	23 bis(2-Chloroethoxy)methane	93	8.572	8.584	(0.968)	693176	7.00000	7.09	
	24 Benzoic acid	105	8.651	8.708	(0.977)	204371	7.00000	8.72	
	25 2,4-Dichlorophenol	162	8.730	8.731	(0.986)	506346	7.00000	7.47	
	26 1,2,4-Trichlorobenzene	180	8.787	8.799	(0.992)	531176	7.00000	6.88	
*	27 Naphthalene-D8	136	8.855	8.867	(1.000)	194528	0.80000	(a)	
	28 Naphthalene	128	8.878	8.890	(1.003)	1761420	7.00000	6.70	
	29 4-Chloroaniline	127	9.002	9.003	(1.017)	699206	7.00000	7.75	
	30 Hexachlorobutadiene	225	9.070	9.082	(1.024)	242869	7.00000	6.70	
	31 Caprolactam	113	9.455	9.490	(1.068)	188092	7.00000	15.9(AH)	
	32 4-Chloro-3-Methylphenol	107	9.701	9.701	(1.096)	468441	7.00000	7.55	
$	33 2-Methylnaphthalene-D10	152	9.768	9.769	(1.103)	957806	7.00000	7.25	
	34 2-Methylnaphthalene	142	9.809	9.810	(1.108)	1220757	7.00000	6.57	
	35 1-Methylnaphthalene	142	9.931	9.945	(1.121)	1056551	7.00000	6.42	
	36 Hexachlorocyclopentadiene	237	10.039	10.039	(0.897)	206379	7.00000	7.55	
	37 1,2,4,5-Tetrachlorobenzene	216	10.039	10.053	(0.897)	426269	7.00000	6.31	
$	38 2,4-Dibromophenol	252	10.215	10.215	(0.913)	256210	7.00000	6.50	
	39 2,4,6-Trichlorophenol	196	10.228	10.229	(0.914)	312121	7.00000	7.62(H)	
	40 2,4,5-Trichlorophenol	196	10.296	10.296	(0.920)	359833	7.00000	7.03	
	41 1,1'-Biphenyl	154	10.444	10.445	(0.933)	1365191	7.00000	6.87	
	42 2-Chloronaphthalene	164	10.458	10.459	(0.934)	357499	7.00000	6.98	
	43 2-Nitroaniline	65	10.620	10.632	(0.949)	222818	7.00000	8.59	
	44 Dimethyl Phthalate	163	10.884	10.896	(0.972)	1221918	7.00000	7.22	
	45 2,6-Dinitrotoluene	165	10.950	10.962	(0.978)	278422	7.00000	8.31	
	46 Acenaphthylene	152	11.005	11.006	(0.983)	1666890	7.00000	6.82	
	47 3-Nitroaniline	138	10.631	10.632	(0.950)	349417	7.00000	8.88	
*	48 Acenaphthene-D10	164	11.192	11.204	(1.000)	100353	0.80000	(a)	
	49 Acenaphthene	153	11.236	11.237	(1.004)	1071001	7.00000	6.74	
	50 2,4-Dinitrophenol	184	11.347	11.336	(1.014)	72600	7.00000	8.91	
	51 4-Nitrophenol	109	11.930	11.512	(1.066)	4590	7.00000	0.751(a)	
	52 Dibenzofuran	168	11.479	11.479	(1.026)	1421093	7.00000	6.88	
	53 2,4-Dinitrotoluene	165	10.950	10.962	(0.978)	278422	7.00000	8.31	
	54 2,3,4,6-Tetrachlorophenol	232	11.688	11.688	(1.044)	243833	7.00000	7.99	
	55 Diethylphthalate	149	11.831	11.842	(1.057)	1202185	7.00000	7.27	
$	56 Fluorene-D10	174	11.897	11.897	(1.063)	796416	7.00000	6.87	
	57 Fluorene	166	11.930	11.941	(1.066)	1108918	7.00000	6.96	
	58 4-Chlorophenyl-phenylether	204	11.952	11.963	(1.068)	512715	7.00000	6.76	
	59 4-Nitroaniline	138	10.631	10.632	(0.950)	349417	7.00000	8.88	
	60 4,6-Dinitro-2-Methylphenol	198	12.062	12.062	(0.915)	116321	7.00000	7.87	
	61 N-Nitrosodiphenylamine	169	12.128	12.128	(0.920)	912955	7.00000	6.81	
	62 4-Bromophenyl-phenylether	248	12.605	12.606	(0.956)	278063	7.00000	6.30	
	63 Hexachlorobenzene	284	12.687	12.688	(0.962)	281741	7.00000	6.02	
	64 Atrazine	200	12.872	12.882	(0.976)	243325	7.00000	7.74	
	65 Pentachlorophenol	266	12.984	12.985	(0.984)	112729	7.00000	7.14	
*	66 Phenanthrene-D10	188	13.189	13.190	(1.000)	133377	0.80000	(a)	
	67 Phenanthrene	178	13.220	13.221	(1.002)	1361187	7.00000	7.06	
	68 Anthracene	178	13.281	13.292	(1.007)	1388126	7.00000	6.60(H)	
	69 Carbazole	167	13.538	13.528	(1.026)	1017043	7.00000	7.12	
	70 Di-n-butylphthalate	149	14.042	14.043	(1.065)	1999984	7.00000	7.35	
$	71 Fluoranthene-d10	212	14.786	14.798	(1.121)	796174	7.00000	7.03	
	72 Fluoranthene	202	14.820	14.820	(1.124)	1122103	7.00000	7.12	
$	73 Pyrene-D10	212	15.086	15.098	(0.891)	940945	7.00000	5.97	
	74 Pyrene	202	15.109	15.120	(0.892)	1139417	7.00000	6.21	

Data File: \\target_server\gg\chem\gcms-n.i\N030323.b\N7585.D
Report Date: 14-Mar-2023 12:21

		QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
Compounds									
	75 Butylbenzylphthalate	149	16.075	16.076	(0.949)	629644	7.00000	7.00	
	76 3,3'-Dichlorobenzidine	252	16.930	16.931	(1.000)	138380	7.00000	8.72	
	77 Benzo(a)anthracene	228	16.908	16.908	(0.999)	594897	7.00000	7.27(H)	
*	78 Chrysene-D12	240	16.930	16.920	(1.000)	51593	0.80000	(a)	
	79 Chrysene	228	16.975	16.975	(1.003)	713370	7.00000	5.98	
	80 bis(2-Ethylhexyl)phthalate	149	17.086	17.087	(1.009)	864549	7.00000	6.92	
	81 Di-n-octylphthalate	149	18.408	18.408	(1.087)	1015242	7.00000	6.88	
	82 Benzo(b)fluoranthene	252	19.063	19.053	(0.957)	360109	7.00000	8.60	
	83 Benzo(k)fluoranthene	252	19.119	19.119	(0.960)	578175	7.00000	7.52(H)	
	84 Benzo(a)pyrene	252	19.775	19.776	(0.993)	352810	7.00000	7.37	
*	85 Perylene-D12	264	19.912	19.912	(1.000)	30829	0.80000	(a)	
	86 Indeno(1,2,3-cd)pyrene	276	22.024	22.014	(1.106)	254256	7.00000	7.81	
	87 Dibenzo(a,h)anthracene	278	22.087	22.077	(1.109)	179089	7.00000	7.51	
	88 Benzo(g,h,i)perylene	276	22.592	22.582	(1.135)	256009	7.00000	7.04	
M	89 Total PAHs	100				16185085	126.000	126	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
A - Target compound detected but, quantitated amount
exceeded maximum amount.
H - Operator selected an alternate compound hit.


Data File: \\target_server\gg\chem\gcms-n,i\N030323,b\N7585.D
Date : 03-MAR-2023 15:21
Client ID:
Sample Info: WG333362-5
Volume Injected (uL): 1.0
Column phase: ZB5-MS
Instrument: gcms-n,i
Operator: DT/CO
Column diameter: 0.25
\\target_server\gg\chem\gcms-n,i\N030323,b\N7585.D
Y (x10^6)
Min
-N-Nitrosodimethylamine+
-Benzaldehyde
-Phenol+
-2-Chlorophenol
-1,3-Dichlorobenzene
-1,4-Dichlorobenzene-D4+
-1,2-Dichlorobenzene
-2-Methylphenol+
-Acetophenone+
-4-Methylphenol+
-Nitrobenzene
-2-Nitrophenol
-Isophorone
-2,4-Dimethylphenol
-bis(2-Chloroethoxy)methan
-Benzoic acid
-2,4-Dichlorophenol
-1,2,4-Trichlorobenzene
-Naphthalene-D8+
-4-Chloroaniline
-Hexachlorobutadiene
-Caprolactam
-4-Chloro-3-Methylphenol
-2-Methylnaphthalene-D10
-2-Methylnaphthalene
-1-Methylnaphthalene
-Hexachlorocyclopentadiene+
-2,4-Dibromophenol+
-2,4,5-Trichlorophenol
-2-Nitroaniline+
1,1'-Biphenyl+
-2,6-Dinitrotoluene+
-Dimethyl Phthalate
-Acenaphthylene
-Acenaphthene-D10
-Acenaphthene
-2,4-Dinitrophenol
-Dibenzofuran
-2,3,4,6-Tetrachlorophenol
-Diethylphthalate
-4-Nitrophenol+
-4,6-Dinitro-2-Methylpheno
-N-Nitrosodiphenylamine
-4-Bromophenyl-phenylether
-Hexachlorobenzene
-Atrazine
-Pentachlorophenol
-Phenanthrene-D10+
-Anthracene
-Carbazole
-Di-n-butylphthalate
-Fluoranthene-d10+
-Pyrene-D10+
-Butylbenzylphthalate
-3,3'-Dichlorobenzidine+
-Chrysene
-bis(2-Ethylhexyl)phthalat
-Di-n-octylphthalate
-Benzo(b)fluoranthene
-Benzo(k)fluoranthene
-Benzo(a)pyrene+
-Indeno(1,2,3-cd)pyrene+

Data File: \\target_server\gg\chem\gcms-n.i\N030323.b\N7586.D
Report Date: 14-Mar-2023 12:21

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-n.i\N030323.b\N7586.D
Lab Smp Id: WG333362-6
Inj Date : 03-MAR-2023 15:55
Operator : DT/CO   Inst ID: gcms-n.i
Smp Info : WG333362-6
Misc Info :
Comment   :
Method   : \\target_server\gg\chem\gcms-n.i\N030323.b\NSPSIM18.m
Meth Date : 06-Mar-2023 11:06 coneill   Quant Type: ISTD
Cal Date : 03-MAR-2023 15:55   Cal File: N7586.D
Als bottle: 6   Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: all.sub
Target Version: 4.12
Processing Host: V200T4

Concentration Formula: Amt * DF * Uf*(Vt/Vo*Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.000	Sample Volume (L)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
$	1 1,4-Dioxane-d8	96	2.988	2.988	(0.415)	345824	10.0000	9.73	
	2 1,4-Dioxane	88	3.041	3.031	(0.422)	379521	10.0000	9.99	
	3 N-Nitrosodimethylamine	74	3.558	3.548	(0.494)	568673	10.0000	10.8	
	4 Pyridine	79	3.579	3.569	(0.497)	921571	10.0000	12.0	
	5 Benzaldehyde	77	6.639	6.650	(0.922)	465056	10.0000	9.50	
	6 Phenol	94	6.847	6.868	(0.951)	1198134	10.0000	10.5	
	7 Bis(2-Chloroethyl)ether	93	6.888	6.899	(0.957)	960590	10.0000	8.73	
	8 2-Chlorophenol	128	6.951	6.962	(0.965)	1026315	10.0000	10.2	
	9 1,3-Dichlorobenzene	146	7.128	7.139	(0.990)	1099873	10.0000	10.5	
*	10 1,4-Dichlorobenzene-D4	152	7.200	7.211	(1.000)	59882	0.80000	(a)	
	11 1,4-Dichlorobenzene	146	7.221	7.232	(1.003)	1101149	10.0000	9.66	
	12 1,2-Dichlorobenzene	146	7.419	7.430	(1.030)	1082899	10.0000	9.64	
	13 2-Methylphenol	108	7.606	7.617	(1.056)	945477	10.0000	11.0	
	14 2,2'-Oxybis(1-chloropropane)	45	7.585	7.586	(1.053)	623779	10.0000	10.5	
	15 Acetophenone	105	7.731	7.752	(0.873)	1231454	10.0000	10.1	
	16 N-Nitroso-di-n-propylamine	70	7.762	7.773	(1.078)	597673	10.0000	10.0	
	17 3&4-Methylphenol	108	7.814	7.825	(1.085)	953180	10.0000	10.5	
	18 Hexachloroethane	117	7.846	7.856	(1.090)	399190	10.0000	10.0	
	19 Nitrobenzene	77	7.950	7.961	(0.898)	900216	10.0000	9.02	
	20 Isophorone	82	8.266	8.278	(0.934)	1683756	10.0000	11.5	

Data File: \\target_server\gg\chem\gcms-n.i\N030323.b\N7586.D
Report Date: 14-Mar-2023 12:21

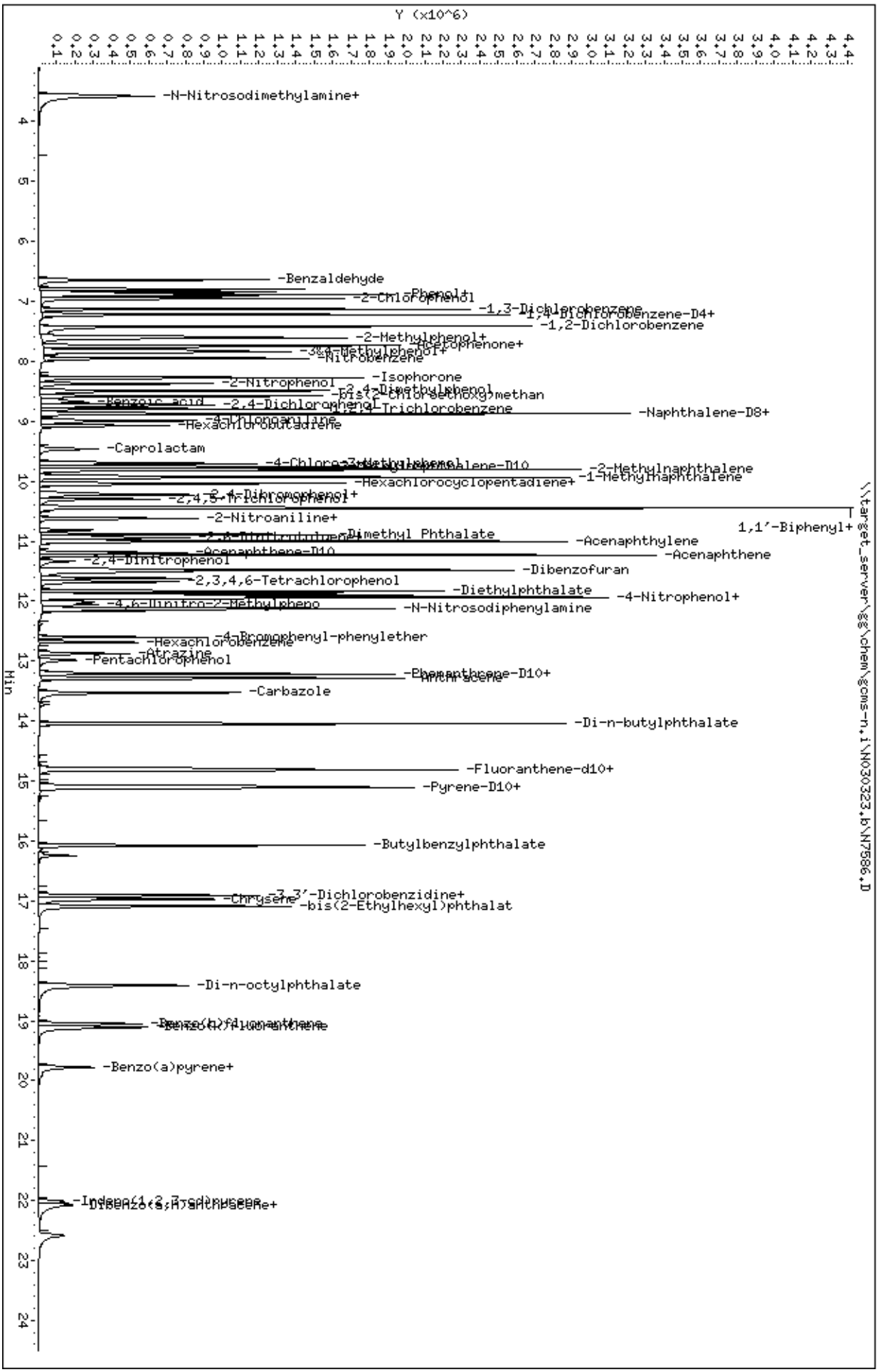
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
	21 2-Nitrophenol	139	8.368	8.380	(0.945)	543679	10.0000	11.4	
	22 2,4-Dimethylphenol	107	8.481	8.493	(0.958)	904641	10.0000	10.6	
	23 bis(2-Chloroethoxy)methane	93	8.572	8.584	(0.968)	1052460	10.0000	9.91	
	24 Benzoic acid	105	8.674	8.708	(0.980)	396836	10.0000	15.6(A)	
	25 2,4-Dichlorophenol	162	8.719	8.731	(0.985)	806108	10.0000	11.0	
	26 1,2,4-Trichlorobenzene	180	8.798	8.799	(0.994)	831581	10.0000	9.91	
*	27 Naphthalene-D8	136	8.855	8.867	(1.000)	211356	0.80000	(a)	
	28 Naphthalene	128	8.878	8.890	(1.003)	2705812	10.0000	9.47	
	29 4-Chloroaniline	127	8.991	9.003	(1.015)	1036337	10.0000	10.6	
	30 Hexachlorobutadiene	225	9.070	9.082	(1.024)	376820	10.0000	9.58	
	31 Caprolactam	113	9.466	9.490	(1.069)	308410	10.0000	17.6(AH)	
	32 4-Chloro-3-Methylphenol	107	9.701	9.701	(1.096)	746904	10.0000	11.1	
$	33 2-Methylnaphthalene-D10	152	9.769	9.769	(1.103)	1456257	10.0000	10.1	
	34 2-Methylnaphthalene	142	9.809	9.810	(1.108)	1864127	10.0000	9.23	
	35 1-Methylnaphthalene	142	9.931	9.945	(1.121)	1648246	10.0000	9.22	
	36 Hexachlorocyclopentadiene	237	10.039	10.039	(0.897)	344549	10.0000	11.6	
	37 1,2,4,5-Tetrachlorobenzene	216	10.039	10.053	(0.897)	670292	10.0000	9.16	
$	38 2,4-Dibromophenol	252	10.201	10.215	(0.911)	407702	10.0000	9.55	
	39 2,4,6-Trichlorophenol	196	10.228	10.229	(0.914)	505224	10.0000	11.7(H)	
	40 2,4,5-Trichlorophenol	196	10.296	10.296	(0.920)	566549	10.0000	10.2	
	41 1,1'-Biphenyl	154	10.445	10.445	(0.933)	2105353	10.0000	9.79	
	42 2-Chloronaphthalene	164	10.458	10.459	(0.934)	568280	10.0000	10.2	
	43 2-Nitroaniline	65	10.620	10.632	(0.949)	371703	10.0000	13.2	
	44 Dimethyl Phthalate	163	10.884	10.896	(0.972)	1878258	10.0000	10.2	
	45 2,6-Dinitrotoluene	165	10.950	10.962	(0.978)	441933	10.0000	12.2	
	46 Acenaphthylene	152	11.005	11.006	(0.983)	2585647	10.0000	9.78	
	47 3-Nitroaniline	138	10.631	10.632	(0.950)	583512	10.0000	13.7	
*	48 Acenaphthene-D10	164	11.192	11.204	(1.000)	108618	0.80000	(a)	
	49 Acenaphthene	153	11.237	11.237	(1.004)	1621176	10.0000	9.43	
	50 2,4-Dinitrophenol	184	11.336	11.336	(1.013)	155735	10.0000	17.6(A)	
	51 4-Nitrophenol	109	11.930	11.512	(1.066)	7732	10.0000	1.17	
	52 Dibenzofuran	168	11.479	11.479	(1.026)	2219286	10.0000	9.93	
	53 2,4-Dinitrotoluene	165	10.950	10.962	(0.978)	441933	10.0000	12.2	
	54 2,3,4,6-Tetrachlorophenol	232	11.677	11.688	(1.043)	383279	10.0000	11.6	
	55 Diethylphthalate	149	11.831	11.842	(1.057)	1837165	10.0000	10.3	
$	56 Fluorene-D10	174	11.897	11.897	(1.063)	1233472	10.0000	9.83	
	57 Fluorene	166	11.930	11.941	(1.066)	1719252	10.0000	9.97	
	58 4-Chlorophenyl-phenylether	204	11.952	11.963	(1.068)	786456	10.0000	9.58	
	59 4-Nitroaniline	138	10.631	10.632	(0.950)	583512	10.0000	13.7	
	60 4,6-Dinitro-2-Methylphenol	198	12.062	12.062	(0.915)	224908	10.0000	13.7	
	61 N-Nitrosodiphenylamine	169	12.128	12.128	(0.920)	1425425	10.0000	9.57	
	62 4-Bromophenyl-phenylether	248	12.605	12.606	(0.956)	427594	10.0000	8.73	
	63 Hexachlorobenzene	284	12.687	12.688	(0.963)	423108	10.0000	8.14	
	64 Atrazine	200	12.872	12.882	(0.977)	381386	10.0000	10.9	
	65 Pentachlorophenol	266	12.984	12.985	(0.985)	204359	10.0000	11.6	
*	66 Phenanthrene-D10	188	13.179	13.190	(1.000)	148169	0.80000	(a)	
	67 Phenanthrene	178	13.220	13.221	(1.003)	2190999	10.0000	10.2	
	68 Anthracene	178	13.281	13.292	(1.008)	2217088	10.0000	9.48(H)	
	69 Carbazole	167	13.527	13.528	(1.026)	1718495	10.0000	10.8	
	70 Di-n-butylphthalate	149	14.042	14.043	(1.065)	3043258	10.0000	10.1	
$	71 Fluoranthene-d10	212	14.798	14.798	(1.123)	1337902	10.0000	10.6	
	72 Fluoranthene	202	14.820	14.820	(1.124)	1875235	10.0000	10.7	
$	73 Pyrene-D10	212	15.086	15.098	(0.892)	1557621	10.0000	7.83	
	74 Pyrene	202	15.120	15.120	(0.894)	1912824	10.0000	8.26	

Data File: \\target_server\gg\chem\gcms-n.i\N030323.b\N7586.D
Report Date: 14-Mar-2023 12:21

		QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
Compounds									
	75 Butylbenzylphthalate	149	16.075	16.076	(0.950)	1109310	10.0000	9.77	
	76 3,3'-Dichlorobenzidine	252	16.930	16.931	(1.001)	265725	10.0000	13.3	
	77 Benzo(a)anthracene	228	16.908	16.908	(0.999)	1129531	10.0000	11.1(H)	
*	78 Chrysene-D12	240	16.919	16.920	(1.000)	65101	0.80000	(a)	
	79 Chrysene	228	16.975	16.975	(1.003)	1233600	10.0000	8.20	
	80 bis(2-Ethylhexyl)phthalate	149	17.086	17.087	(1.010)	1526533	10.0000	9.69	
	81 Di-n-octylphthalate	149	18.408	18.408	(1.088)	2033656	10.0000	10.9	
	82 Benzo(b)fluoranthene	252	19.052	19.053	(0.957)	727472	10.0000	13.8	
	83 Benzo(k)fluoranthene	252	19.108	19.119	(0.960)	973684	10.0000	9.51(H)	
	84 Benzo(a)pyrene	252	19.775	19.776	(0.993)	652019	10.0000	10.8	
*	85 Perylene-D12	264	19.912	19.912	(1.000)	38904	0.80000	(a)	
	86 Indeno(1,2,3-cd)pyrene	276	22.014	22.014	(1.106)	487621	10.0000	11.9	
	87 Dibenzo(a,h)anthracene	278	22.077	22.077	(1.109)	354006	10.0000	11.8	
	88 Benzo(g,h,i)perylene	276	22.581	22.582	(1.134)	455464	10.0000	9.93	
M	89 Total PAHs	100				26353803	180.000	183	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
A - Target compound detected but, quantitated amount
exceeded maximum amount.
H - Operator selected an alternate compound hit.


Y (x10^6)
Min
-N-Nitrosodimethylamine+
-Benzaldehyde
-Phenol+
-2-Chlorophenol
-1,3-Dichlorobenzene
-1,4-Dichlorobenzene-D4+
-1,2-Dichlorobenzene
-2-Methylphenol+
-Acetophenone+
-3&4-Methylphenol+
-Nitrobenzene
-2-Nitrophenol
-Isophorone
-2,4-Dimethylphenol
-bis(2-Chloroethoxy)methan
-Benzoic acid
-2,4-Dichlorophenol
-1,2,4-Trichlorobenzene
-Naphthalene-D8+
-4-Chloroaniline
-Hexachlorobutadiene
-Caprolactam
-4-Chloro-3-methylphenol
-2-Methylnaphthalene-D10
-2-Methylnaphthalene
-1-Methylnaphthalene
-Hexachlorocyclopentadiene+
-2,4-Dichlorophenol+
-2,4,5-Trichlorophenol
-2-Nitroaniline+
1,1'-Biphenyl+
-2,6-Dinitrotoluene
-Dimethyl Phthalate
-Acenaphthylene
-Acenaphthene-D10
-Acenaphthene
-2,4-Dinitrophenol
-Dibenzofuran
-2,3,4,6-Tetrachlorophenol
-Diethylphthalate
-4-Nitrophenol+
-4,6-Dinitro-2-Methylpheno
-N-Nitrosodiphenylamine
-4-Bromophenyl-phenylether
-Hexachlorobenzene
-Atrazine
-Pentachlorophenol
-Phenanthrene-D10+
-Anthracene
-Carbazole
-Di-n-butylphthalate
-Fluoranthene-d10+
-Pyrene-D10+
-Butylbenzylphthalate
-3,3'-Dichlorobenzidine+
-Chrysene
-bis(2-Ethylhexyl)phthalat
-Di-n-octylphthalate
-Benzo(b)fluoranthene
-Benzo(k)fluoranthene
-Benzo(a)pyrene+
-Indeno(1,2,3-cd)Pyrene
-Dibenzo(a,h)anthracene+
Data File: \\target_server\gg\chem\gcms-n,i\N030323,b\N7586.D
Date : 03-MAR-2023 15:55
Client ID:
Sample Info: WG333362-6
Volume Injected (uL): 1.0
Column phase: ZB5-MS
Instrument: gcms-n,i
Operator: DT/CO
Column diameter: 0.25
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Data File: \\target_server\gg\chem\gcms-n.i\N030323.b\N7587.D
Report Date: 14-Mar-2023 12:21

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-n.i\N030323.b\N7587.D
Lab Smp Id: WG333362-7
Inj Date : 03-MAR-2023 16:29
Operator : DT/CO   Inst ID: gcms-n.i
Smp Info : WG333362-7
Misc Info :
Comment   :
Method   : \\target_server\gg\chem\gcms-n.i\N030323.b\NSPSIM18.m
Meth Date : 06-Mar-2023 11:06 coneill   Quant Type: ISTD
Cal Date : 03-MAR-2023 16:29   Cal File: N7587.D
Als bottle: 7   Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: all.sub
Target Version: 4.12
Processing Host: V200T4

Concentration Formula: Amt * DF * Uf*(Vt/Vo*Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.000	Sample Volume (L)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
$ 1	1,4-Dioxane-d8	96	2.988	2.988	(0.414)	489503	15.0000	15.1(A)	
2	1,4-Dioxane	88	3.030	3.031	(0.420)	515866	15.0000	14.9	
3	N-Nitrosodimethylamine	74	3.548	3.548	(0.492)	784569	15.0000	16.4(A)	
4	Pyridine	79	3.569	3.569	(0.495)	1168249	15.0000	16.8(A)	
5	Benzaldehyde	77	6.649	6.650	(0.922)	513717	15.0000	11.5	
6	Phenol	94	6.868	6.868	(0.952)	1634539	15.0000	15.7(A)	
7	Bis(2-Chloroethyl)ether	93	6.899	6.899	(0.957)	1278808	15.0000	12.8	
8	2-Chlorophenol	128	6.961	6.962	(0.965)	1414678	15.0000	15.5(A)	
9	1,3-Dichlorobenzene	146	7.138	7.139	(0.990)	1501100	15.0000	15.8(A)	
* 10	1,4-Dichlorobenzene-D4	152	7.211	7.211	(1.000)	54481	0.80000	(a)	
11	1,4-Dichlorobenzene	146	7.232	7.232	(1.003)	1510831	15.0000	14.6	
12	1,2-Dichlorobenzene	146	7.429	7.430	(1.030)	1420305	15.0000	13.9	
13	2-Methylphenol	108	7.617	7.617	(1.056)	1289974	15.0000	16.5(A)	
14	2,2'-Oxybis(1-chloropropane)	45	7.585	7.586	(1.052)	862513	15.0000	15.9(A)	
15	Acetophenone	105	7.752	7.752	(0.874)	1685151	15.0000	15.1(A)	
16	N-Nitroso-di-n-propylamine	70	7.773	7.773	(1.078)	821678	15.0000	15.1(A)	
17	3&4-Methylphenol	108	7.825	7.825	(1.085)	1284591	15.0000	15.6(A)	
18	Hexachloroethane	117	7.856	7.856	(1.089)	550952	15.0000	15.2(A)	
19	Nitrobenzene	77	7.960	7.961	(0.898)	1260479	15.0000	13.8	
20	Isophorone	82	8.278	8.278	(0.934)	2291206	15.0000	17.1(A)	

Data File: \\target_server\gg\chem\gcms-n.i\N030323.b\N7587.D
Report Date: 14-Mar-2023 12:21

DL

9:32 am, Mar 22, 2023

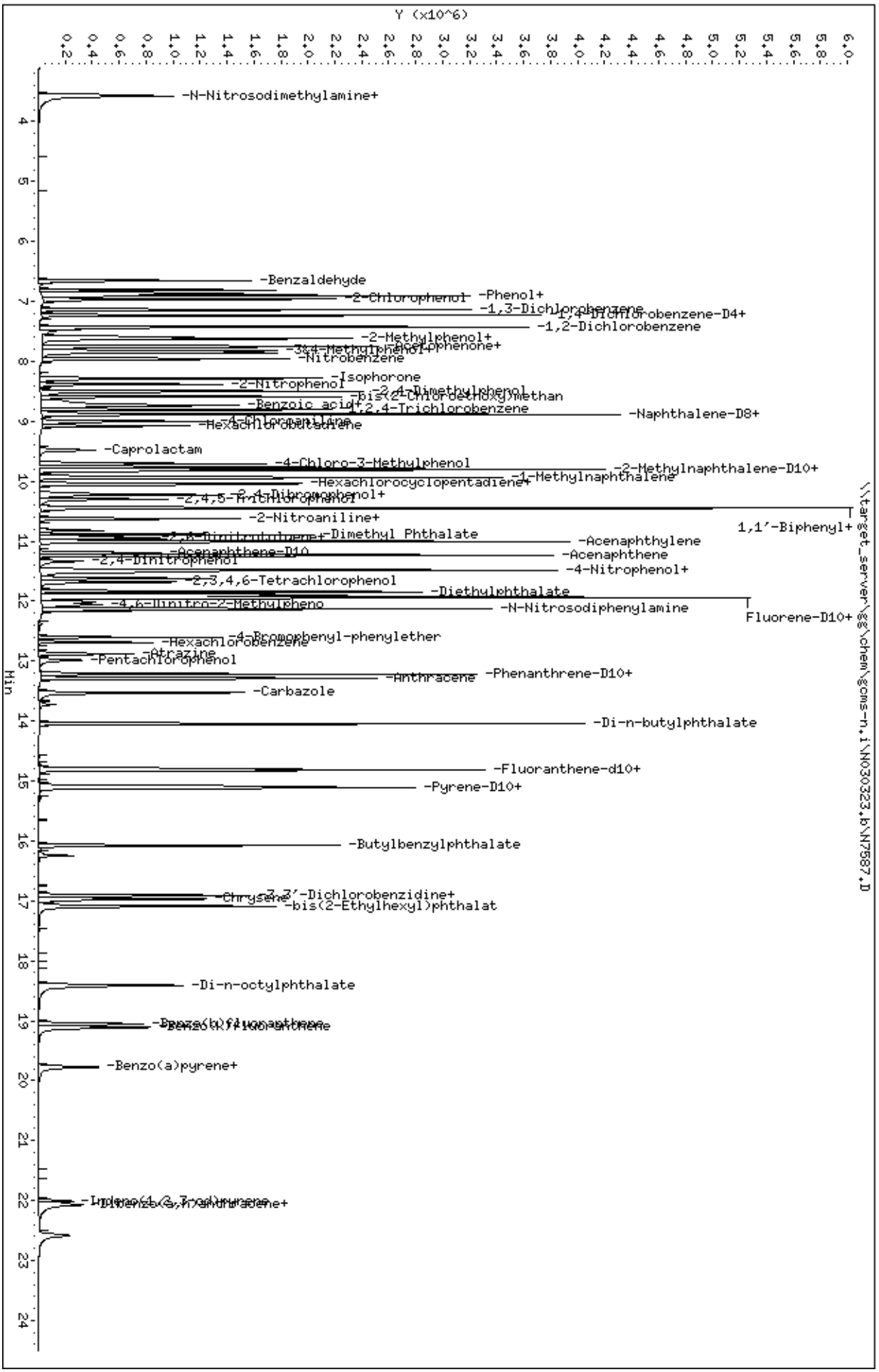
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
	21 2-Nitrophenol	139	8.380	8.380	(0.945)	748554	15.0000	17.1(A)	
	22 2,4-Dimethylphenol	107	8.493	8.493	(0.958)	1243169	15.0000	15.9(A)	
	23 bis(2-Chloroethoxy)methane	93	8.583	8.584	(0.968)	1465610	15.0000	15.1(A)	
	24 Benzoic acid	105	8.708	8.708	(0.982)	484714	15.0000	20.8(A)	
	25 2,4-Dichlorophenol	162	8.731	8.731	(0.985)	1111529	15.0000	16.5(A)	
	26 1,2,4-Trichlorobenzene	180	8.798	8.799	(0.992)	1137438	15.0000	14.8	
*	27 Naphthalene-D8	136	8.866	8.867	(1.000)	193676	0.80000	(a)	
	28 Naphthalene	128	8.889	8.890	(1.003)	3706583	15.0000	14.2	
	29 4-Chloroaniline	127	9.002	9.003	(1.015)	1283103	15.0000	14.3	
	30 Hexachlorobutadiene	225	9.081	9.082	(1.024)	504837	15.0000	14.0	
	31 Caprolactam	113	9.489	9.490	(1.070)	421117	15.0000	20.6(AH)	
	32 4-Chloro-3-Methylphenol	107	9.701	9.701	(1.094)	1035855	15.0000	16.8(A)	
$	33 2-Methylnaphthalene-D10	152	9.769	9.769	(1.102)	1876423	15.0000	14.3	
	34 2-Methylnaphthalene	142	9.809	9.810	(1.106)	2329484	15.0000	12.6	
	35 1-Methylnaphthalene	142	9.944	9.945	(1.122)	2350819	15.0000	14.4	
	36 Hexachlorocyclopentadiene	237	10.039	10.039	(1.000)	488517	15.0000	17.2(A)	
	37 1,2,4,5-Tetrachlorobenzene	216	10.052	10.053	(1.000)	958603	15.0000	14.2	
$	38 2,4-Dibromophenol	252	10.215	10.215	(1.000)	570974	15.0000	14.5	
	39 2,4,6-Trichlorophenol	196	10.228	10.229	(1.000)	721407	15.0000	17.4(AH)	
	40 2,4,5-Trichlorophenol	196	10.296	10.296	(1.000)	783426	15.0000	15.2(A)	
	41 1,1'-Biphenyl	154	10.445	10.445	(1.000)	2688097	15.0000	13.7	
	42 2-Chloronaphthalene	164	10.458	10.459	(1.000)	763749	15.0000	14.8	
	43 2-Nitroaniline	65	10.631	10.632	(1.000)	525927	15.0000	19.1(A)	
	44 Dimethyl Phthalate	163	10.895	10.896	(1.000)	2536797	15.0000	14.9	
	45 2,6-Dinitrotoluene	165	10.961	10.962	(1.000)	618596	15.0000	17.7(A)	
	46 Acenaphthylene	152	11.005	11.006	(1.000)	3452697	15.0000	14.2	
	47 3-Nitroaniline	138	10.631	10.632	(1.000)	819217	15.0000	19.4(A)	
*	48 Acenaphthene-D10	164	11.204	11.204	(1.000)	100956	0.80000	(aM)	M6
	49 Acenaphthene	153	11.237	11.237	(1.000)	2234738	15.0000	14.1	
	50 2,4-Dinitrophenol	184	11.336	11.336	(1.000)	232824	15.0000	24.7(A)	
	51 4-Nitrophenol	109	11.512	11.512	(1.000)	190868	15.0000	26.4(A)	
	52 Dibenzofuran	168	11.479	11.479	(1.000)	2915118	15.0000	14.2	
	53 2,4-Dinitrotoluene	165	10.961	10.962	(1.000)	618596	15.0000	17.7(A)	
	54 2,3,4,6-Tetrachlorophenol	232	11.688	11.688	(1.000)	546368	15.0000	17.2(A)	
	55 Diethylphthalate	149	11.842	11.842	(1.000)	2523034	15.0000	15.1(A)	
$	56 Fluorene-D10	174	11.897	11.897	(1.000)	1675282	15.0000	14.5(A)	
	57 Fluorene	166	11.941	11.941	(1.000)	2328801	15.0000	14.6	
	58 4-Chlorophenyl-phenylether	204	11.963	11.963	(1.000)	1079737	15.0000	14.3	
	59 4-Nitroaniline	138	10.631	10.632	(1.000)	819217	15.0000	19.4(A)	
	60 4,6-Dinitro-2-Methylphenol	198	12.062	12.062	(0.915)	328611	15.0000	22.6(A)	
	61 N-Nitrosodiphenylamine	169	12.128	12.128	(0.920)	1904860	15.0000	14.4	
	62 4-Bromophenyl-phenylether	248	12.605	12.606	(0.956)	575441	15.0000	13.3	
	63 Hexachlorobenzene	284	12.687	12.688	(0.962)	569787	15.0000	12.4	
	64 Atrazine	200	12.882	12.882	(0.977)	520639	15.0000	16.8(A)	
	65 Pentachlorophenol	266	12.984	12.985	(0.984)	295700	15.0000	19.0(A)	
*	66 Phenanthrene-D10	188	13.189	13.190	(1.000)	131222	0.80000	(a)	
	67 Phenanthrene	178	13.220	13.221	(1.002)	2887157	15.0000	15.2(A)	
	68 Anthracene	178	13.292	13.292	(1.008)	2953098	15.0000	14.2(H)	
	69 Carbazole	167	13.527	13.528	(1.026)	2175986	15.0000	15.5(A)	
	70 Di-n-butylphthalate	149	14.042	14.043	(1.065)	3879825	15.0000	14.5	
$	71 Fluoranthene-d10	212	14.798	14.798	(1.122)	1662797	15.0000	14.9	
	72 Fluoranthene	202	14.820	14.820	(1.124)	2329495	15.0000	15.0(A)	
$	73 Pyrene-D10	212	15.098	15.098	(0.892)	1942922	15.0000	11.8(A)	
	74 Pyrene	202	15.120	15.120	(0.894)	2415503	15.0000	12.6	

Data File: \\target_server\gg\chem\gcms-n.i\N030323.b\N7587.D
Report Date: 14-Mar-2023 12:21

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
	75 Butylbenzylphthalate	149	16.075	16.076	(0.950)	1359470	15.0000	14.4	
	76 3,3'-Dichlorobenzidine	252	16.930	16.931	(1.001)	345305	15.0000	20.8(A)	
	77 Benzo(a)anthracene	228	16.908	16.908	(0.999)	1454519	15.0000	17.5(AH)	
*	78 Chrysene-D12	240	16.919	16.920	(1.000)	53981	0.80000	(a)	
	79 Chrysene	228	16.975	16.975	(1.003)	1537151	15.0000	12.3	
	80 bis(2-Ethylhexyl)phthalate	149	17.086	17.087	(1.010)	1901494	15.0000	14.6	
	81 Di-n-octylphthalate	149	18.408	18.408	(1.088)	2588964	15.0000	16.8(A)	
	82 Benzo(b)fluoranthene	252	19.052	19.053	(0.957)	1014025	15.0000	20.7(A)	
	83 Benzo(k)fluoranthene	252	19.119	19.119	(0.960)	1309707	15.0000	13.2(H)	
	84 Benzo(a)pyrene	252	19.775	19.776	(0.993)	923799	15.0000	16.5(A)	
*	85 Perylene-D12	264	19.912	19.912	(1.000)	36029	0.80000	(a)	
	86 Indeno(1,2,3-cd)pyrene	276	22.014	22.014	(1.106)	735224	15.0000	19.3(A)	
	87 Dibenzo(a,h)anthracene	278	22.077	22.077	(1.109)	546144	15.0000	19.6(A)	
	88 Benzo(g,h,i)perylene	276	22.581	22.582	(1.134)	662178	15.0000	15.6(A)	
M	89 Total PAHs	100				35171122	270.000	276	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
A - Target compound detected but, quantitated amount
exceeded maximum amount.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.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Date : 03-MAR-2023 16:29
Client ID:
Sample Info: WG333362-7
Volume Injected (uL): 1.0
Column phase: ZB5-MS
Instrument: gcms-n,i
Operator: DT/CO
Column diameter: 0.25
\\target_server\gg\chem\gcms-n,i\N030323,b\N7587.D
Y (x10^6)
Min
-N-Nitrosodimethylamine+
-Benzaldehyde
-2-Chlorophenol
-Phenol+
-1,3-Dichlorobenzene
-1,4-Dichlorobenzene-D4+
-1,2-Dichlorobenzene
-2-Methylphenol+
-Acetophenone+
-3&4-Methylphenol+
-Nitrobenzene
-Isophorone
-2-Nitrophenol
-2,4-Dimethylphenol
-bis(2-Chloroethoxy)methan
-Benzoic acid+
-1,2,4-Trichlorobenzene
-Naphthalene-D8+
-Hexachlorobutadiene
-Caprolactam
-4-Chloro-3-Methylphenol
-2-Methylnaphthalene-D10+
-1-Methylnaphthalene
-Hexachlorocyclopentadiene+
-2,4-Dibromophenol+
-2,4,5-Trichlorophenol
-2-Nitroaniline+
1,1'-Biphenyl+
-2,6-Dinitrotoluene+
-Dimethyl Phthalate
-Acenaphthylene
-Acenaphthene-D10
-Acenaphthene
-2,4-Dinitrophenol
-4-Nitrophenol+
-2,3,4,6-Tetrachlorophenol
-Diethylphthalate
-4,6-Dinitro-2-Methylpheno
-N-Nitrosodiphenylamine
Fluorene-D10+
-4-Bromophenyl-phenylether
-Hexachlorobenzene
-Atrazine
-Pentachlorophenol
-Anthracene
-Phenanthrene-D10+
-Carbazole
-Di-n-butylphthalate
-Fluoranthene-d10+
-Pyrene-D10+
-Butylbenzylphthalate
-3,3'-Dichlorobenzidine+
-Chrysene
-bis(2-Ethylhexyl)phthalat
-Di-n-octylphthalate
-Benzo(b)fluoranthene
-Benzo(k)fluoranthene
-Benzo(a)pyrene+
-Indeno(1,2,3-cd)pyrene
-Dibenz(a,h)anthracene+

Data File: \\target_server\gg\chem\gcms-n.i\N030323.b\N7588.D
Report Date: 22-Mar-2023 08:38

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-n.i\N030323.b\N7588.D
Lab Smp Id: WG333362-8
Inj Date : 03-MAR-2023 17:03
Operator : DT/CO   Inst ID: gcms-n.i
Smp Info : WG333362-8,SQ0333
Misc Info : WG333362,WG333362,WG333362-4,SQ0333-6
Comment   :
Method   : \\target_server\gg\chem\gcms-n.i\N030323.b\NSPSIM18.m
Meth Date : 06-Mar-2023 11:06 coneill   Quant Type: ISTD
Cal Date : 03-MAR-2023 16:29   Cal File: N7587.D
Als bottle: 8   QC Sample: INDSOURCE
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: all.sub
Target Version: 4.12
Processing Host: V200T4

Concentration Formula: Amt * DF * Uf*(Vt/Vo*Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.000	Sample Volume (L)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	CONCENTRATIONS FINAL (ug/L)	REVIEW CODE
2	1,4-Dioxane	88	3.040	3.031	(0.422)	182240	5.25625	5.26	
3	N-Nitrosodimethylamine	74	3.558	3.548	(0.494)	253462	5.29625	5.30	
4	Pyridine	79	3.579	3.569	(0.497)	486815	6.04309	6.04(R)	
5	Benzaldehyde	77	6.649	6.650	(0.923)	38287	0.85668	0.857(R)	
6	Phenol	94	6.857	6.868	(0.952)	608035	5.83580	5.84	
7	Bis(2-Chloroethyl)ether	93	6.888	6.899	(0.957)	421742	4.87538	4.88	
8	2-Chlorophenol	128	6.951	6.962	(0.965)	532783	5.82443	5.82	
9	1,3-Dichlorobenzene	146	7.128	7.139	(0.990)	545713	5.72462	5.72	
* 10	1,4-Dichlorobenzene-D4	152	7.200	7.211	(1.000)	54676	0.80000	(aQ)	
11	1,4-Dichlorobenzene	146	7.221	7.232	(1.003)	572267	5.49572	5.50	
12	1,2-Dichlorobenzene	146	7.419	7.430	(1.030)	549674	5.36020	5.36	
13	2-Methylphenol	108	7.606	7.617	(1.056)	495338	6.30968	6.31(R)	
14	2,2'-Oxybis(1-chloropropane)	45	7.585	7.586	(1.053)	216177	3.98241	3.98(QR)	
15	Acetophenone	105	7.731	7.752	(0.873)	626798	5.53307	5.53	
16	N-Nitroso-di-n-propylamine	70	7.752	7.773	(1.077)	281507	5.16576	5.16	
17	3&4-Methylphenol	108	7.814	7.825	(1.085)	490370	5.94275	5.94	
18	Hexachloroethane	117	7.845	7.856	(1.090)	196008	5.40384	5.40	
19	Nitrobenzene	77	7.949	7.961	(0.898)	455538	4.91172	4.91	
20	Isophorone	82	8.266	8.278	(0.934)	808383	5.20516	5.20	
21	2-Nitrophenol	139	8.379	8.380	(0.946)	271377	6.12736	6.13(R)	

Data File: \\target_server\gg\chem\gcms-n.i\N030323.b\N7588.D
Report Date: 22-Mar-2023 08:38

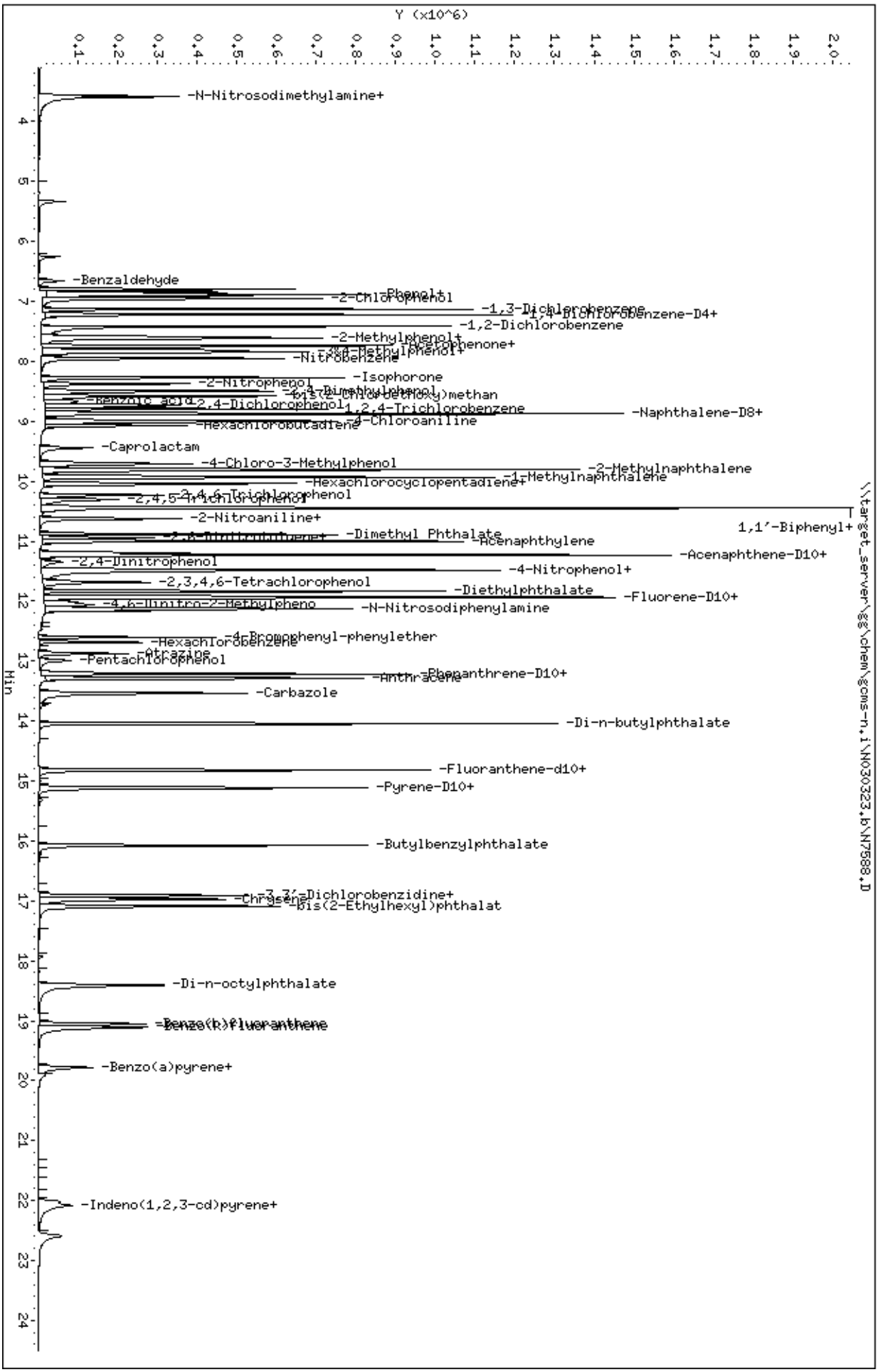
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	CONCENTRATIONS FINAL (ug/L)	REVIEW CODE
	22 2,4-Dimethylphenol	107	8.493	8.493	(0.959)	446966	5.64056	5.64	
	23 bis(2-Chloroethoxy)methane	93	8.572	8.584	(0.968)	522091	5.28994	5.29	
	24 Benzoic acid	105	8.662	8.708	(0.978)	193310	8.16738	8.17(R)	
	25 2,4-Dichlorophenol	162	8.730	8.731	(0.986)	405850	5.93232	5.93	
	26 1,2,4-Trichlorobenzene	180	8.798	8.799	(0.994)	420532	5.39352	5.39	
*	27 Naphthalene-D8	136	8.855	8.867	(1.000)	196431	0.80000	(a)	
	28 Naphthalene	128	8.878	8.890	(1.003)	1392246	5.24290	5.24	
	29 4-Chloroaniline	127	9.002	9.003	(1.017)	505132	5.54688	5.55	
	30 Hexachlorobutadiene	225	9.070	9.082	(1.024)	187966	5.13947	5.14	
	31 Caprolactam	113	9.444	9.490	(1.066)	148136	5.23338	5.23	
	32 4-Chloro-3-Methylphenol	107	9.701	9.701	(1.096)	374011	5.97172	5.97	
	34 2-Methylnaphthalene	142	9.809	9.810	(1.108)	966687	5.15055	5.15	
	35 1-Methylnaphthalene	142	9.931	9.945	(1.121)	805172	4.84618	4.85	
	36 Hexachlorocyclopentadiene	237	10.039	10.039	(0.897)	135434	4.70711	4.71	
	37 1,2,4,5-Tetrachlorobenzene	216	10.052	10.053	(0.898)	345304	5.05218	5.05	
	39 2,4,6-Trichlorophenol	196	10.228	10.229	(0.914)	243774	5.79831	5.80	
	40 2,4,5-Trichlorophenol	196	10.309	10.296	(0.921)	286173	5.45862	5.46	
	41 1,1'-Biphenyl	154	10.444	10.445	(0.933)	1019219	5.11170	5.11	
	42 2-Chloronaphthalene	164	10.458	10.459	(0.934)	253911	4.86476	4.86	
	43 2-Nitroaniline	65	10.631	10.632	(0.950)	179505	5.12323	5.12	
	44 Dimethyl Phthalate	163	10.884	10.896	(0.972)	922720	5.34578	5.34	
	45 2,6-Dinitrotoluene	165	10.961	10.962	(0.979)	206380	4.95583	4.96	
	46 Acenaphthylene	152	11.005	11.006	(0.983)	1149748	4.65746	4.66	
	47 3-Nitroaniline	138	10.631	10.632	(0.950)	278571	5.09195	5.09	
*	48 Acenaphthene-D10	164	11.192	11.204	(1.000)	102508	0.80000	(a)	
	49 Acenaphthene	153	11.236	11.237	(1.004)	826786	5.15347	5.15	
	50 2,4-Dinitrophenol	184	11.346	11.336	(1.014)	66315	6.93518	6.94(R)	
	51 4-Nitrophenol	109	11.545	11.512	(1.031)	60478	8.22311	8.22(R)	
	52 Dibenzofuran	168	11.479	11.479	(1.026)	1123948	5.38883	5.39	
	53 2,4-Dinitrotoluene	165	10.961	10.962	(0.979)	206380	4.95583	4.96	
	54 2,3,4,6-Tetrachlorophenol	232	11.688	11.688	(1.044)	163715	5.09306	5.09	
	55 Diethylphthalate	149	11.831	11.842	(1.057)	935057	5.52426	5.52	
$	56 Fluorene-D10	174	11.952	11.897	(1.068)	159	0.00135	0.00135(aQR)	
	57 Fluorene	166	11.930	11.941	(1.066)	887720	5.48306	5.48	
	58 4-Chlorophenyl-phenylether	204	11.952	11.963	(1.068)	398563	5.19167	5.19	
	59 4-Nitroaniline	138	10.631	10.632	(0.950)	278571	5.09195	5.09	
	60 4,6-Dinitro-2-Methylphenol	198	12.062	12.062	(0.915)	108844	5.96256	5.96	
	61 N-Nitrosodiphenylamine	169	12.128	12.128	(0.920)	595752	4.04964	4.05	
	62 4-Bromophenyl-phenylether	248	12.605	12.606	(0.956)	214377	5.00994	5.01	
	63 Hexachlorobenzene	284	12.687	12.688	(0.962)	220010	5.17167	5.17	
	64 Atrazine	200	12.872	12.882	(0.976)	193966	5.62410	5.62	
	65 Pentachlorophenol	266	12.984	12.985	(0.984)	99688	5.75665	5.76	
*	66 Phenanthrene-D10	188	13.189	13.190	(1.000)	146287	0.80000	(a)	
	67 Phenanthrene	178	13.220	13.221	(1.002)	1100604	5.20128	5.20	
	68 Anthracene	178	13.281	13.292	(1.007)	1126361	4.85964	4.86	
	69 Carbazole	167	13.537	13.528	(1.026)	942794	6.01592	6.02(R)	
	70 Di-n-butylphthalate	149	14.042	14.043	(1.065)	1616642	5.41870	5.42	
$	71 Fluoranthene-d10	212	14.797	14.798	(1.122)	1049	0.00844	0.00844(QR)	
	72 Fluoranthene	202	14.820	14.820	(1.124)	986710	5.70782	5.71	
$	73 Pyrene-D10	212	15.097	15.098	(0.892)	1768	0.01067	0.0107(aQR)	
	74 Pyrene	202	15.120	15.120	(0.893)	1013540	4.95556	4.96	
	75 Butylbenzylphthalate	149	16.075	16.076	(0.949)	577055	4.86123	4.86	
	76 3,3'-Dichlorobenzidine	252	16.930	16.931	(1.000)	93194	3.29375	3.29(R)	
	77 Benzo(a)anthracene	228	16.908	16.908	(0.999)	579103	5.51534	5.52	

Data File: \\target_server\gg\chem\gcms-n.i\N030323.b\N7588.D
Report Date: 22-Mar-2023 08:38

			QUANT SIG					CONCENTRATIONS ON-COLUMN	CONCENTRATIONS FINAL	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/ml)	(ug/L)	REVIEW CODE
*	78	Chrysene-D12	240	16.930	16.920	(1.000)	68092	0.80000	(a)	
	79	Chrysene	228	16.975	16.975	(1.003)	692469	5.31683	5.32	
	80	bis(2-Ethylhexyl)phthalate	149	17.086	17.087	(1.009)	746692	4.53224	4.53	
	81	Di-n-octylphthalate	149	18.408	18.408	(1.087)	950926	4.88445	4.88	
	82	Benzo(b)fluoranthene	252	19.052	19.053	(0.957)	369102	5.35545	5.36	
	83	Benzo(k)fluoranthene	252	19.108	19.119	(0.960)	526541	5.12558	5.12(H)	
	84	Benzo(a)pyrene	252	19.775	19.776	(0.993)	337135	5.81476	5.81	
*	85	Perylene-D12	264	19.912	19.912	(1.000)	37346	0.80000	(a)	
	86	Indeno(1,2,3-cd)pyrene	276	22.024	22.014	(1.106)	237721	4.86186	4.86	
	87	Dibenzo(a,h)anthracene	278	22.087	22.077	(1.109)	169626	5.51363	5.51	
	88	Benzo(g,h,i)perylene	276	22.592	22.582	(1.135)	226033	5.13212	5.13	
M	89	Total PAHs	100				13393304	93.8935	93.9	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.
H - Operator selected an alternate compound hit.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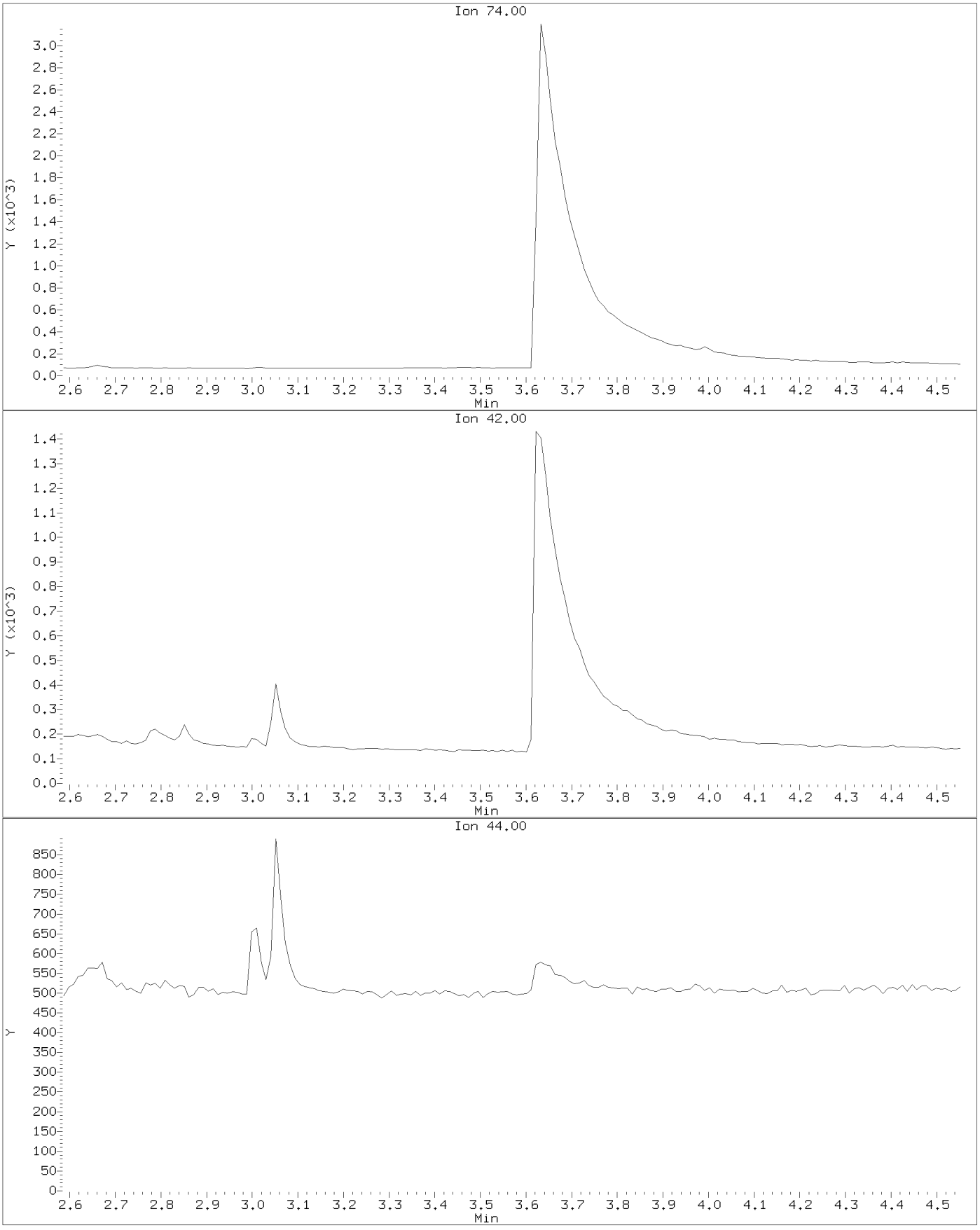
Date : 03-MAR-2023 17:03
Client ID:
Sample Info: WG333362-8,SQ0333
Volume Injected (uL): 1.0
Column phase: ZB5-MS
Instrument: gcms-n,i
Operator: DT/CO
Column diameter: 0.25
\\target_server\gg\chem\gcms-n,i\N030323,b\N7588,D
Y (x10^6)
Min
-N-Nitrosodimethylamine+
-Benzaldehyde
-Phenol+
-2-Chlorophenol
-1,3-Dichlorobenzene
-1,4-Dichlorobenzene-D4+
-1,2-Dichlorobenzene
-2-Methylphenol+
-4-Methylphenol+
-Nitrobenzene
-2-Nitrophenol
-Isophorone
-2,4-Dimethylphenol
-Benzoic acid
-2,4-Dichlorophenol
-1,2,4-Trichlorobenzene
-Naphthalene-D8+
-4-Chloroaniline
-Hexachlorobutadiene
-Caprolactam
-4-Chloro-3-Methylphenol
-2-Methylnaphthalene
-1-Methylnaphthalene
-Hexachlorocyclopentadiene+
-2,4,6-Trichlorophenol
-2,4,5-Trichlorophenol
-2-Nitroaniline+
1,1'-Biphenyl+
-Dimethyl Phthalate
-Acenaphthylene
-Acenaphthene-D10+
-2,4-Dinitrophenol
-4-Nitrophenol+
-2,3,4,6-Tetrachlorophenol
-Diethylphthalate
-Fluorene-D10+
-4,6-Dinitro-2-Methylpheno
-N-Nitrosodiphenylamine
-4-Bromophenyl-phenylether
-Hexachlorobenzene
-Atrazine
-Pentachlorophenol
-Anthracene
-Phenanthrene-D10+
-Carbazole
-Di-n-butylphthalate
-Fluoranthene-d10+
-Pyrene-D10+
-Butylbenzylphthalate
-3,3'-Dichlorobenzidine+
-Chrysene
-bis(2-Ethylhexyl)phthalat
-Di-n-octylphthalate
-Benzo(b)fluoranthene
-Benzo(k)fluoranthene
-Benzo(a)pyrene+
-Indeno(1,2,3-cd)pyrene+

Data File: \\target_server\gg\chem\gcms-n.i\N030323.b\N7583.D
Injection Date: 03-MAR-2023 14:14
Instrument: gcms-n.i
Client Sample ID:

Compound: N-Nitrosodimethylamine
CAS Number: 62-75-9

BEFORE MANUAL INTEGRATION



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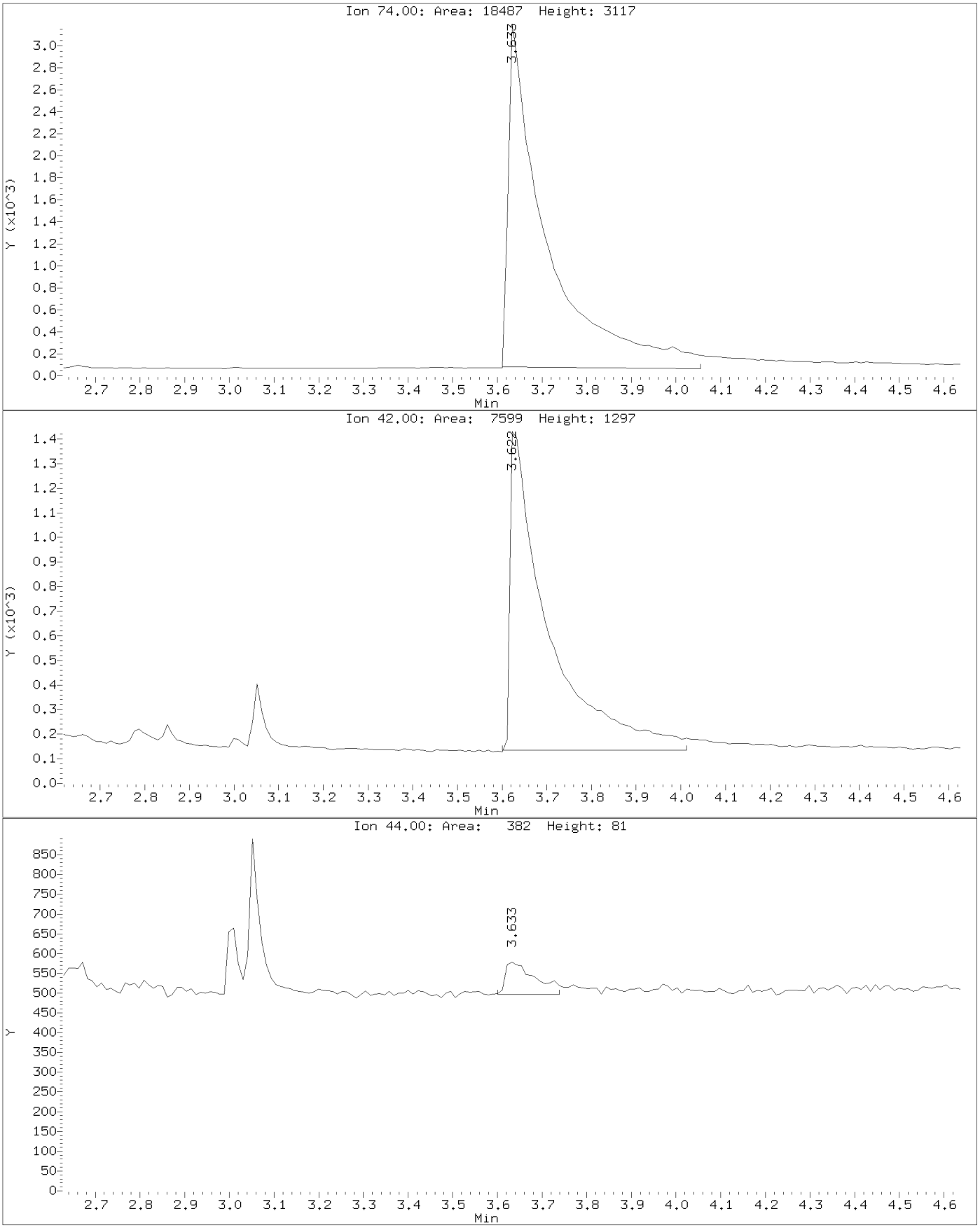
Client Sample ID:

Compound: N-Nitrosodimethylamine
CAS Number: 62-75-9

AFTER MANUAL INTEGRATION



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Instrument: gcms-n.i
Client Sample ID:

Compound: N-Nitrosodimethylamine
CAS Number: 62-75-9

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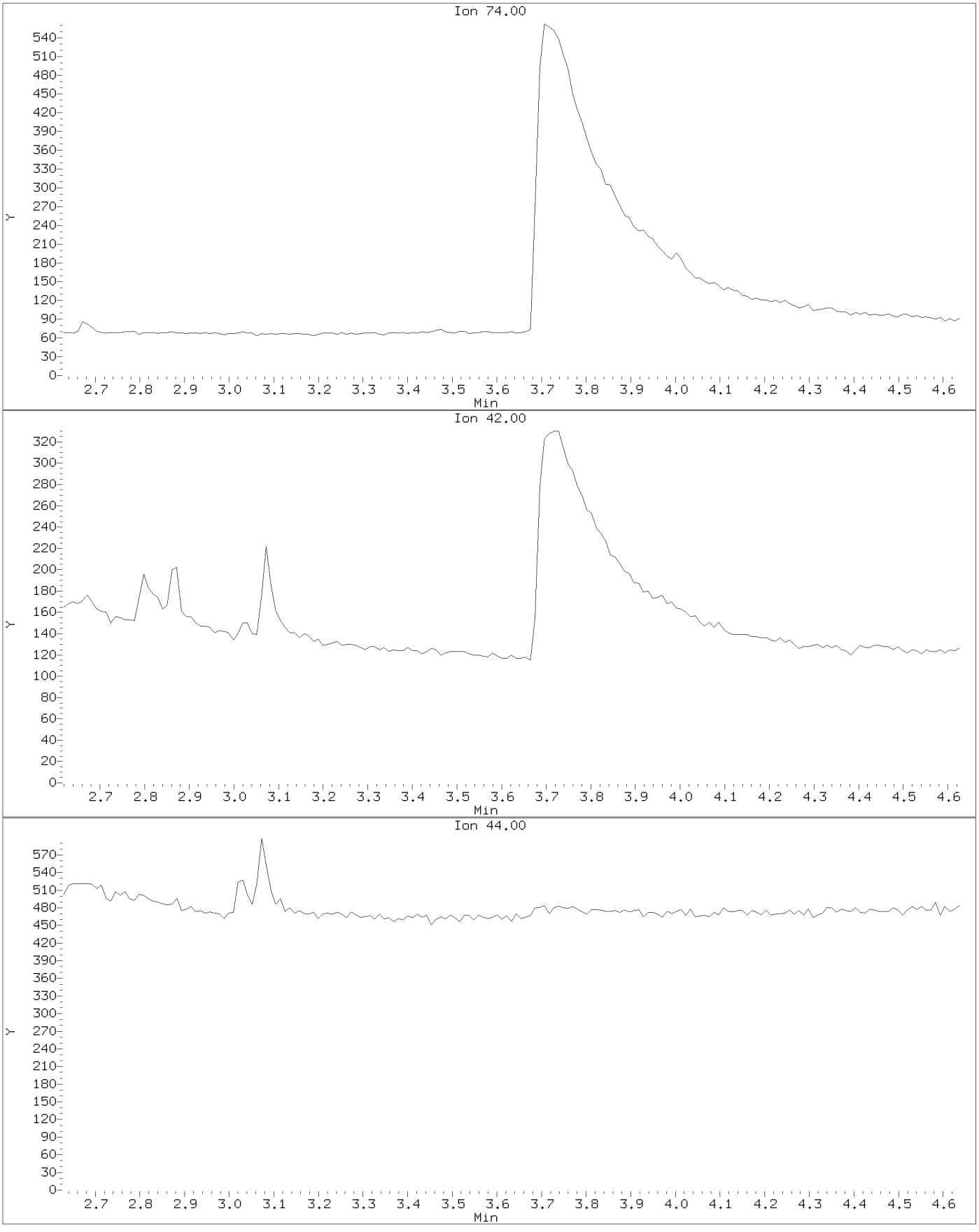

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Client Sample ID:

Compound: N-Nitrosodimethylamine
CAS Number: 62-75-9

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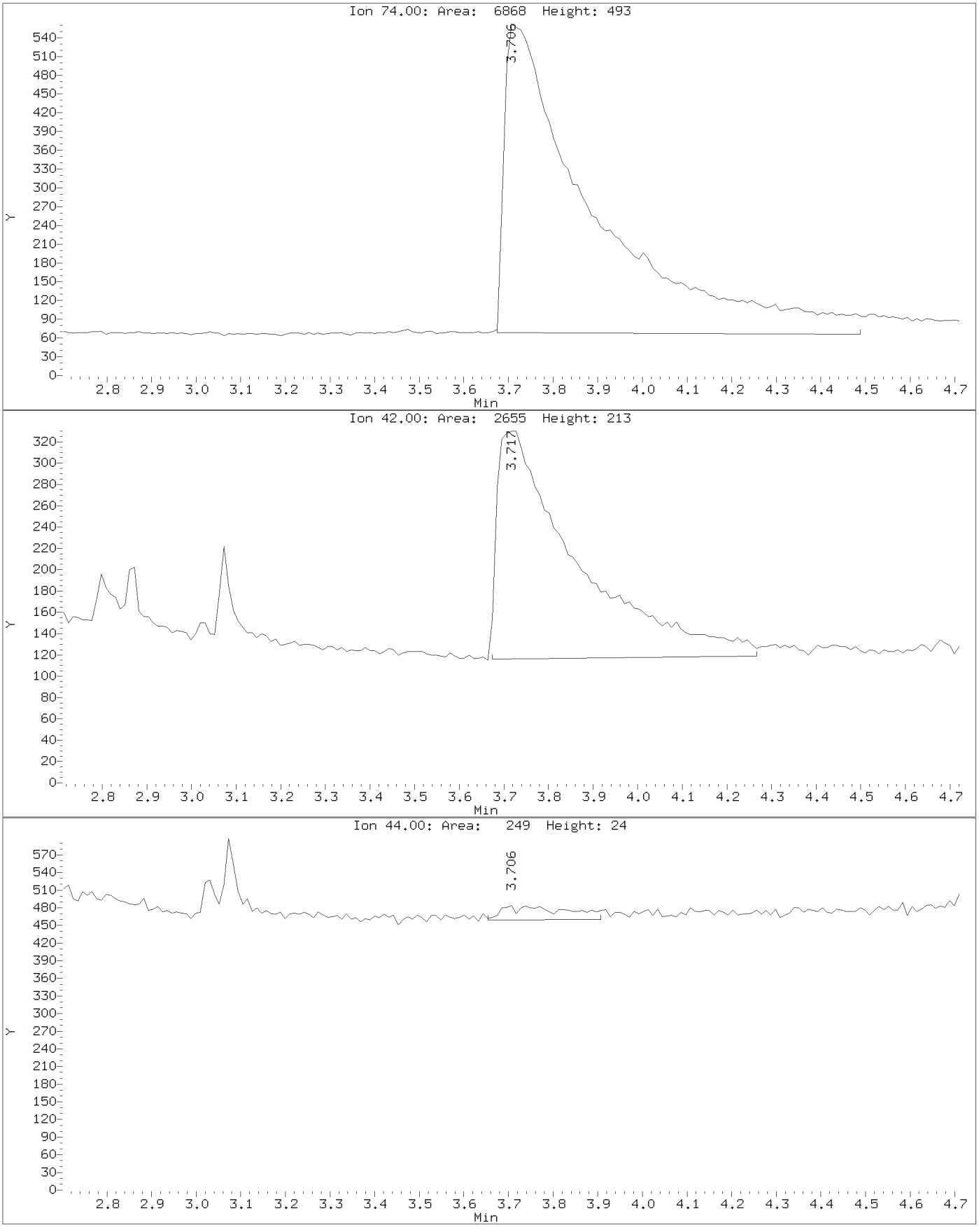

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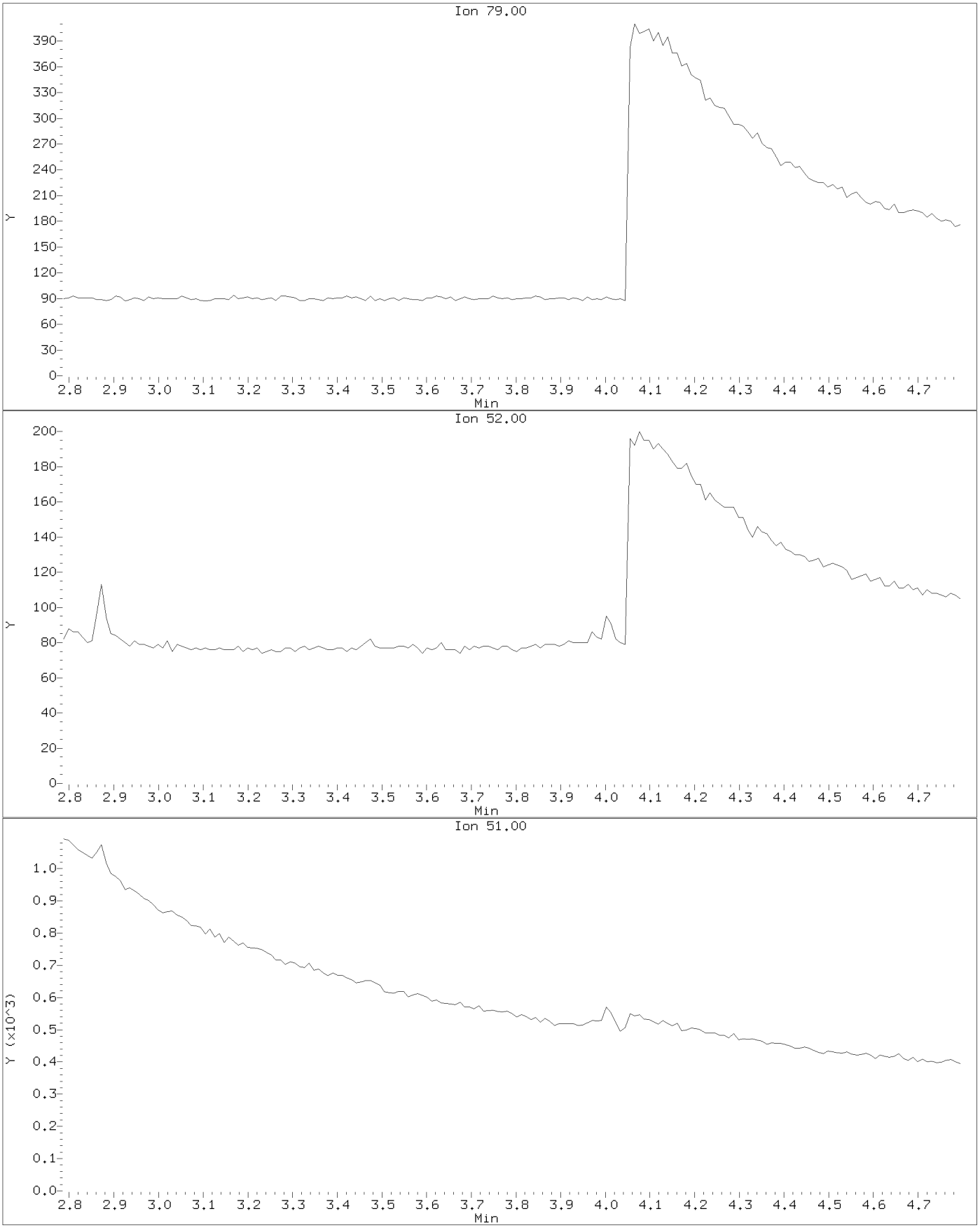
Instrument: gcms-n.i
Client Sample ID:

Compound: Pyridine
CAS Number: 110-86-1

BEFORE MANUAL INTEGRATION



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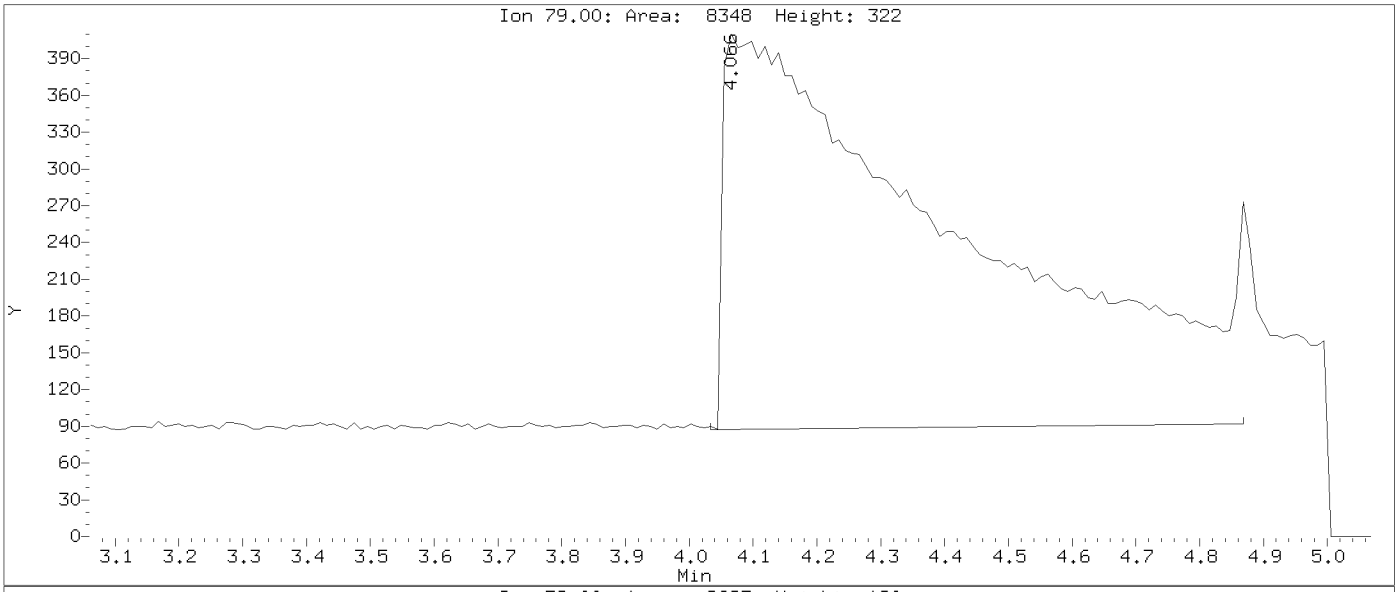
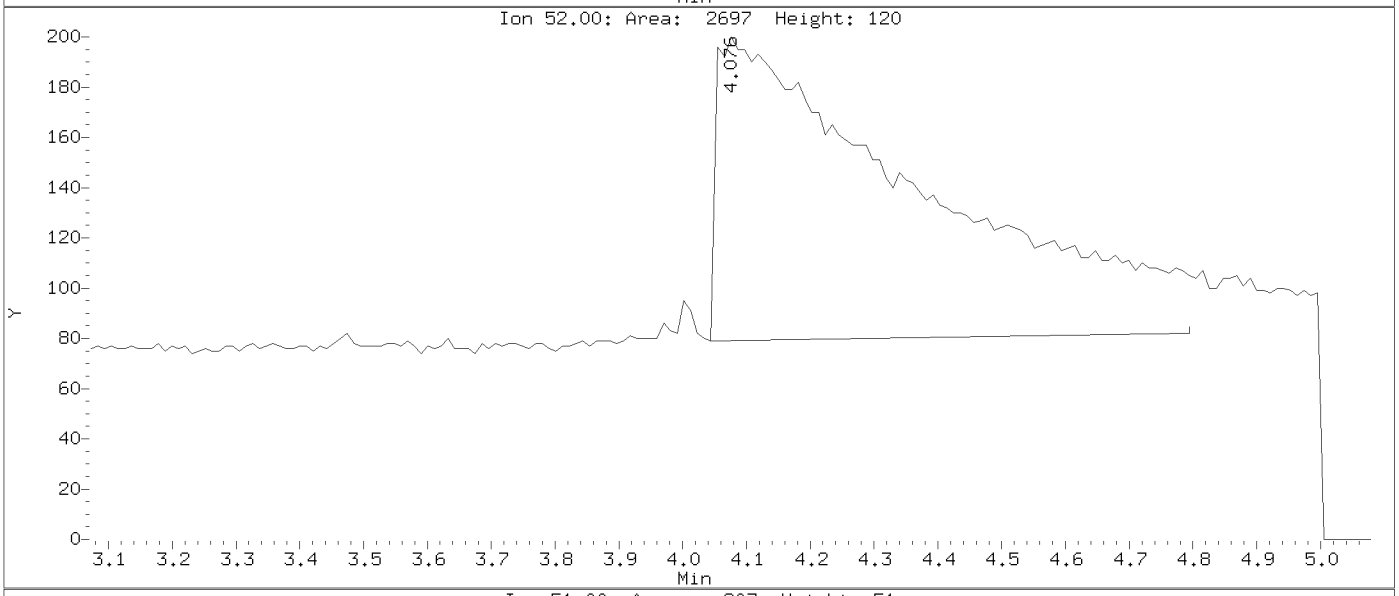
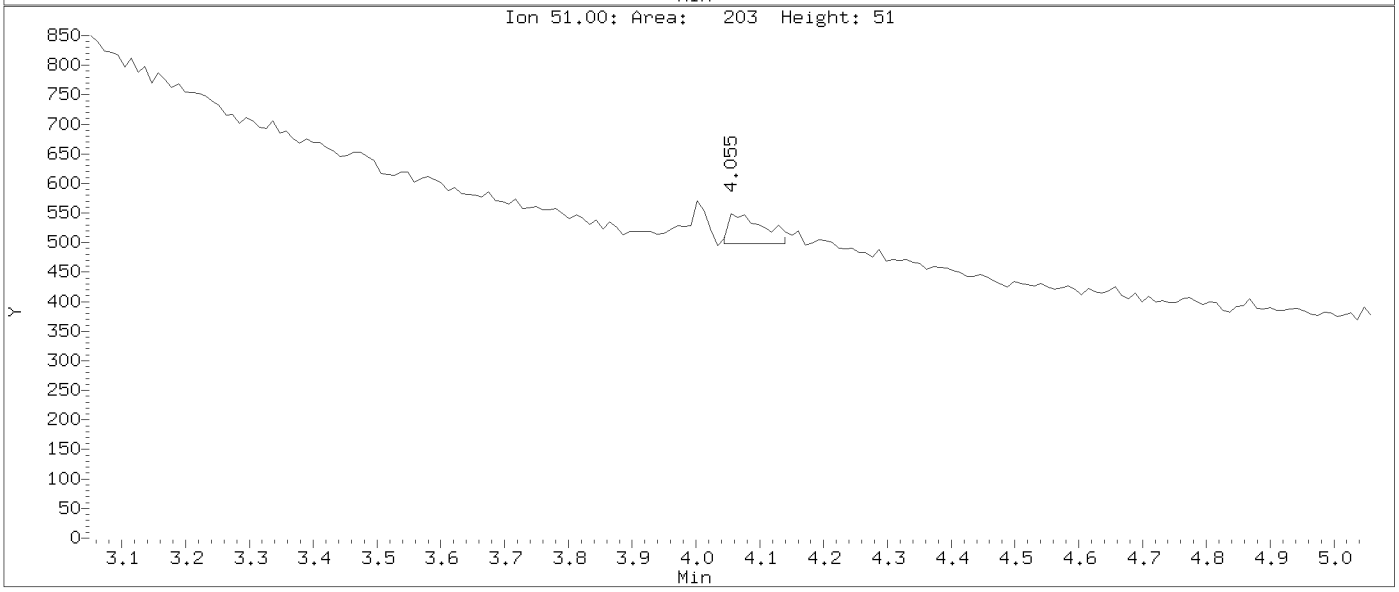
Instrument: gcms-n.i
Client Sample ID:

Compound: Pyridine
CAS Number: 110-86-1

AFTER MANUAL INTEGRATION







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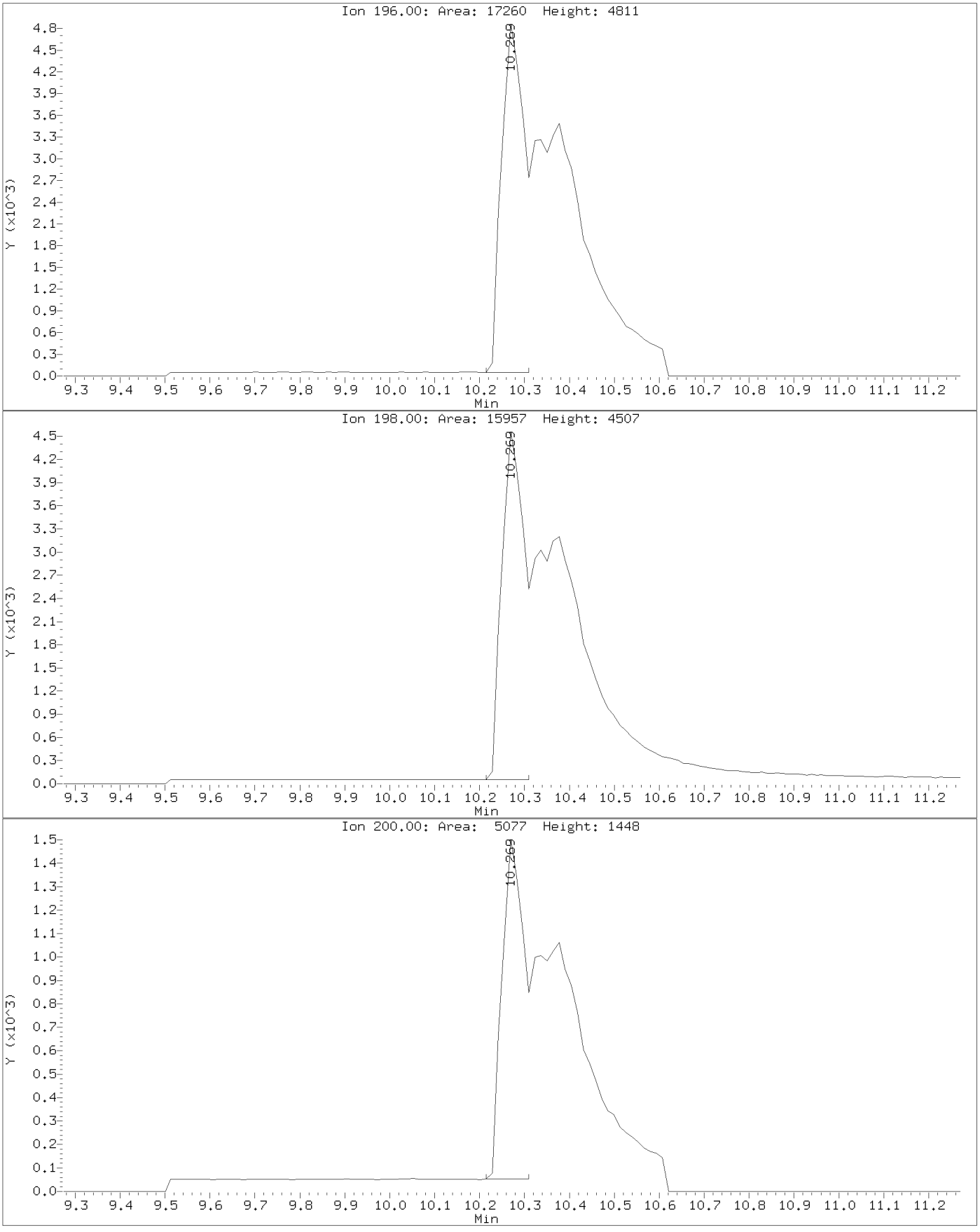
Injection Date: 03-MAR-2023 14:47
Instrument: gcms-n.i
Client Sample ID:

Compound: 2,4,5-Trichlorophenol
CAS Number: 95-95-4

BEFORE MANUAL INTEGRATION



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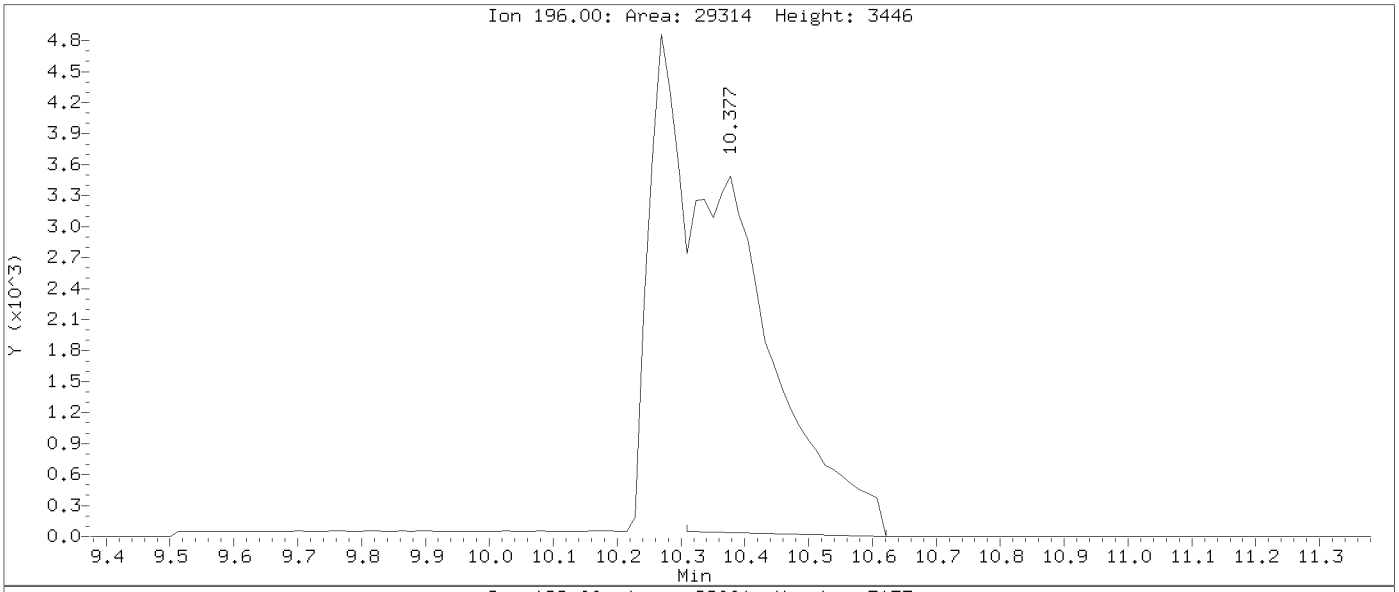
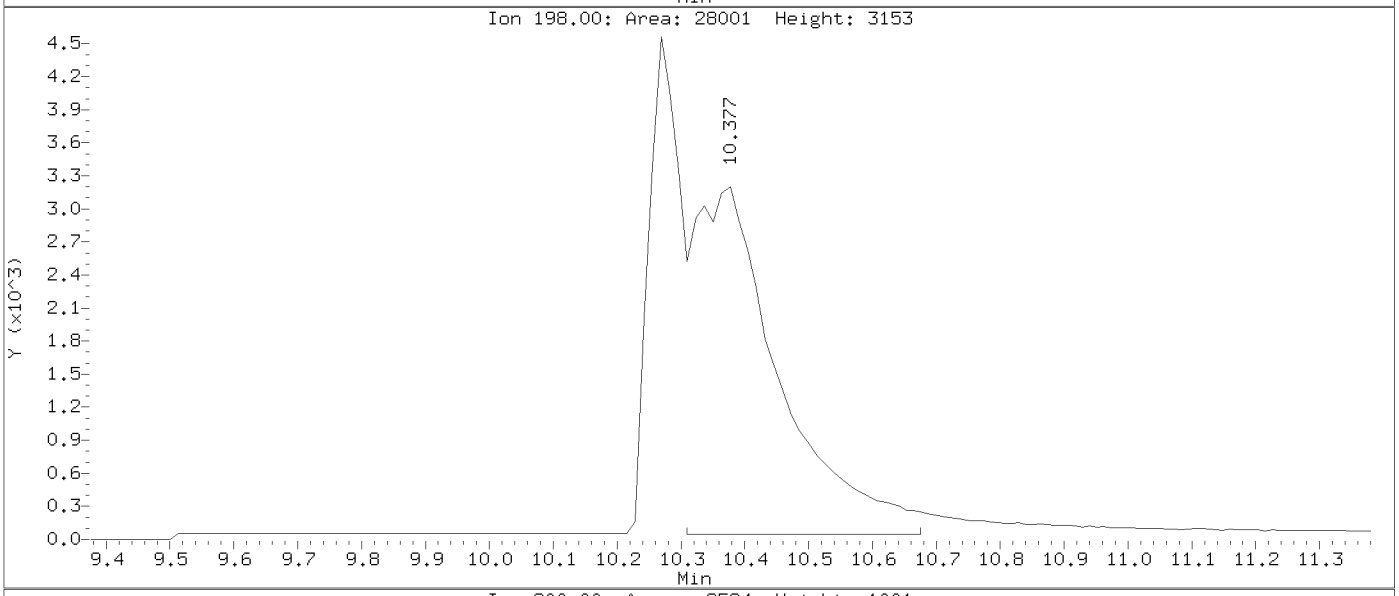
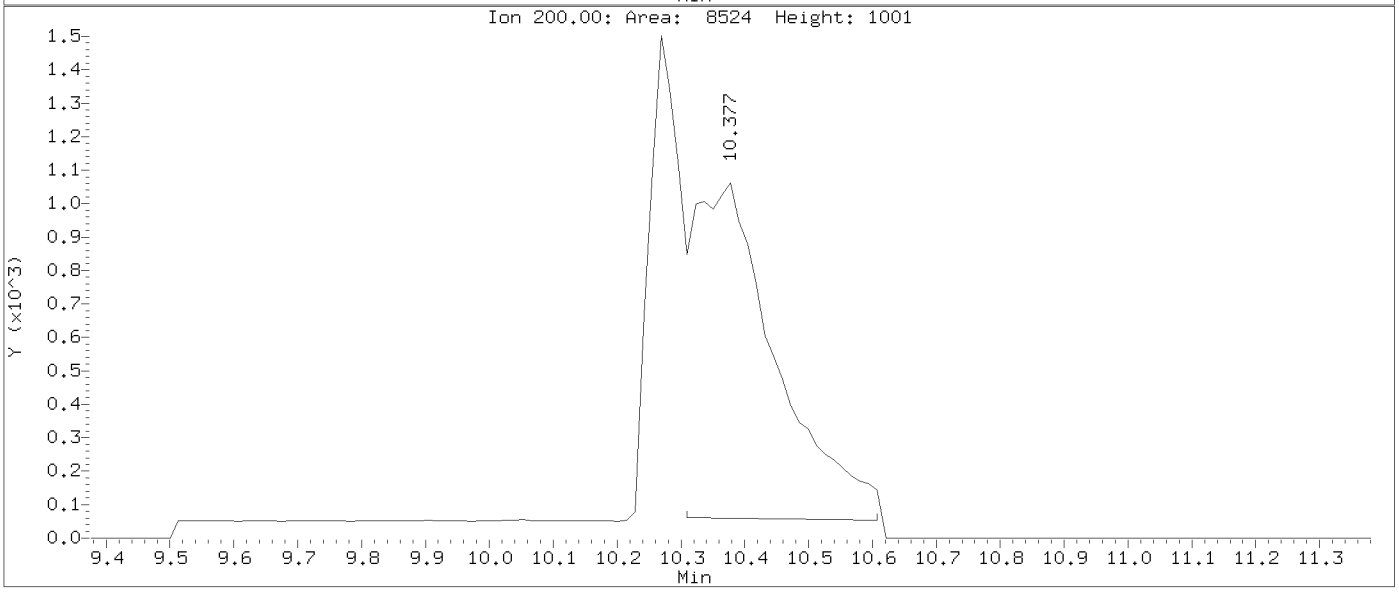
Client Sample ID:

Compound: 2,4,5-Trichlorophenol
CAS Number: 95-95-4

AFTER MANUAL INTEGRATION







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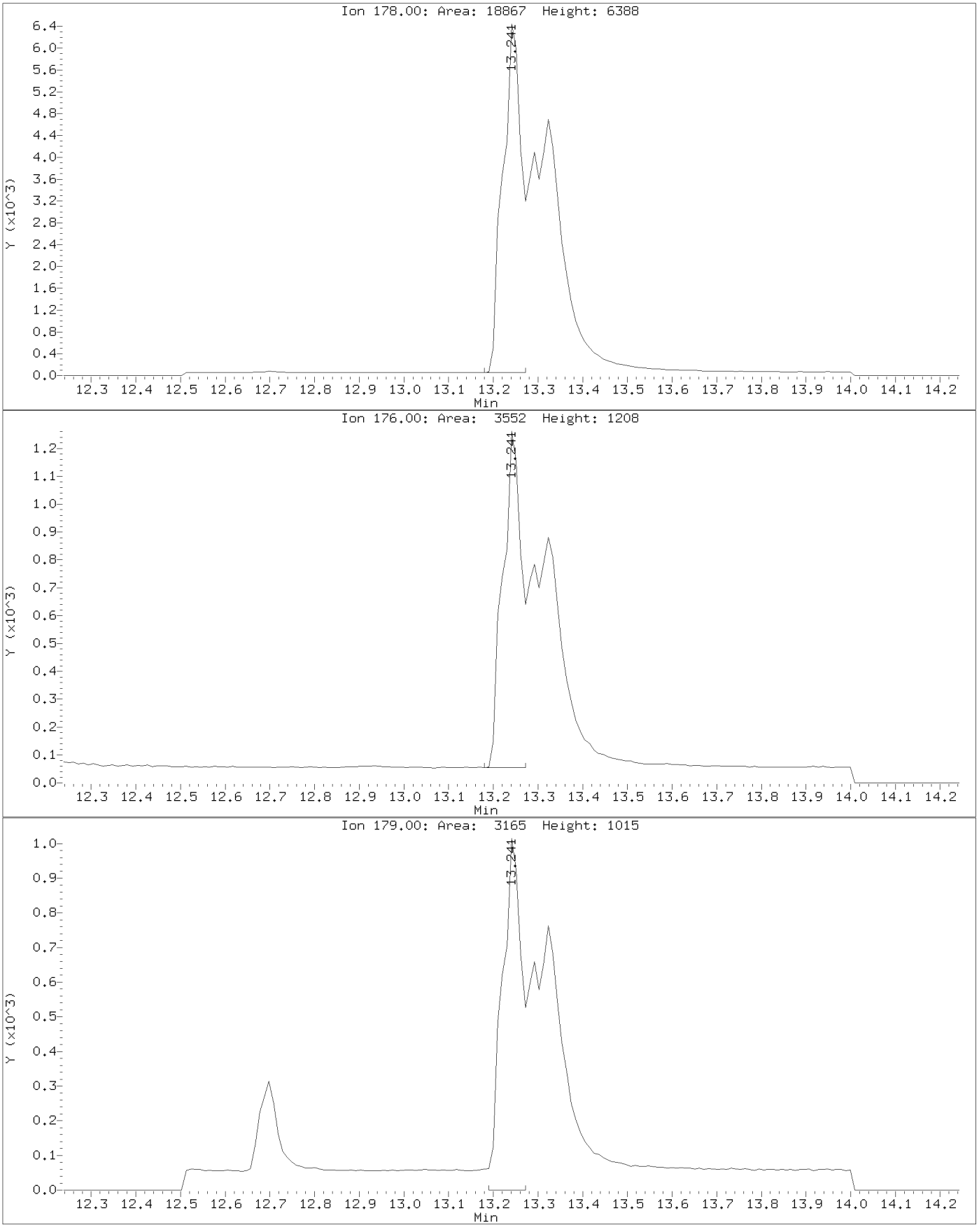
Instrument: gcms-n.i
Client Sample ID:

Compound: Anthracene
CAS Number: 120-12-7

BEFORE MANUAL INTEGRATION



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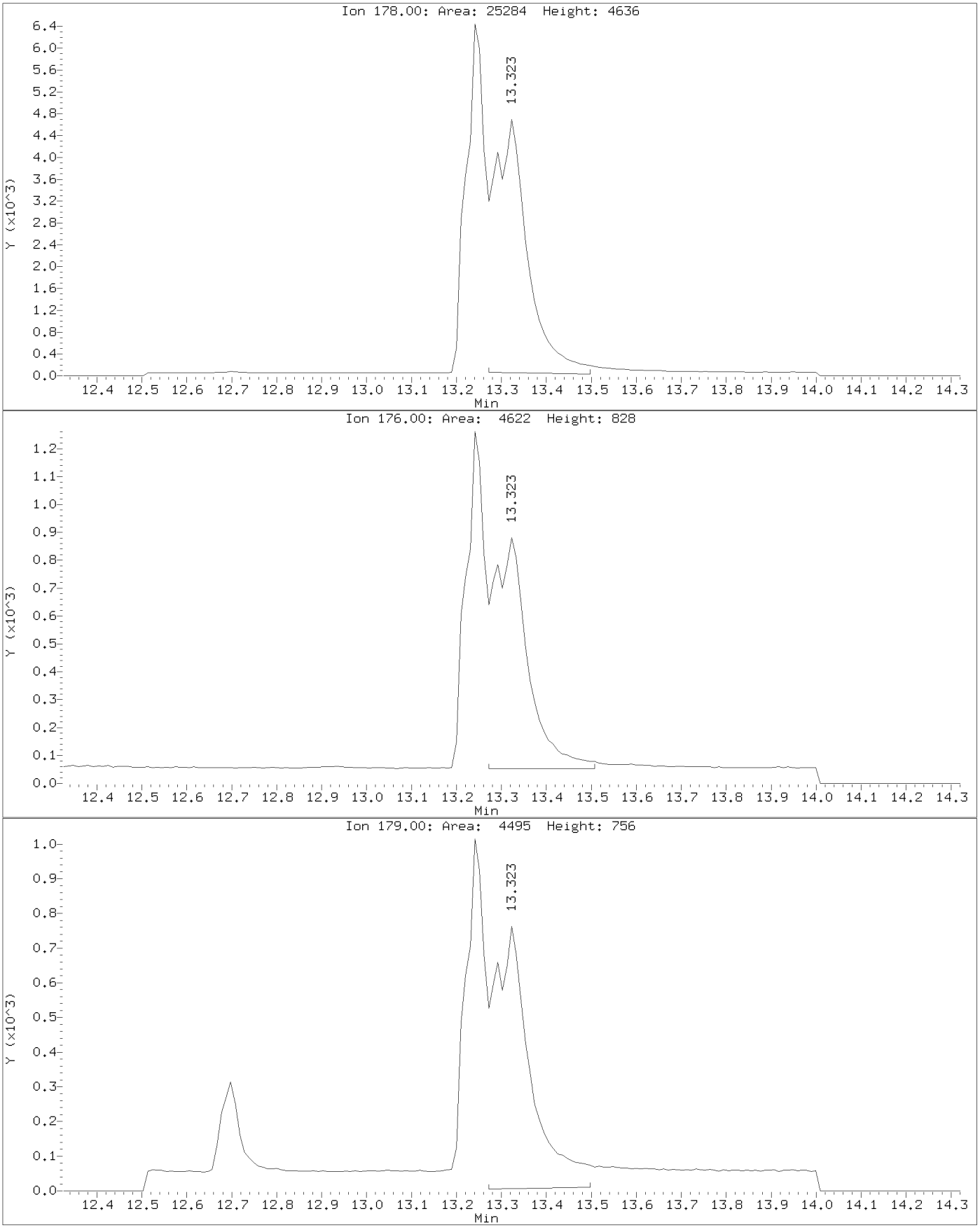
Instrument: gcms-n.i
Client Sample ID:

Compound: Anthracene
CAS Number: 120-12-7

AFTER MANUAL INTEGRATION



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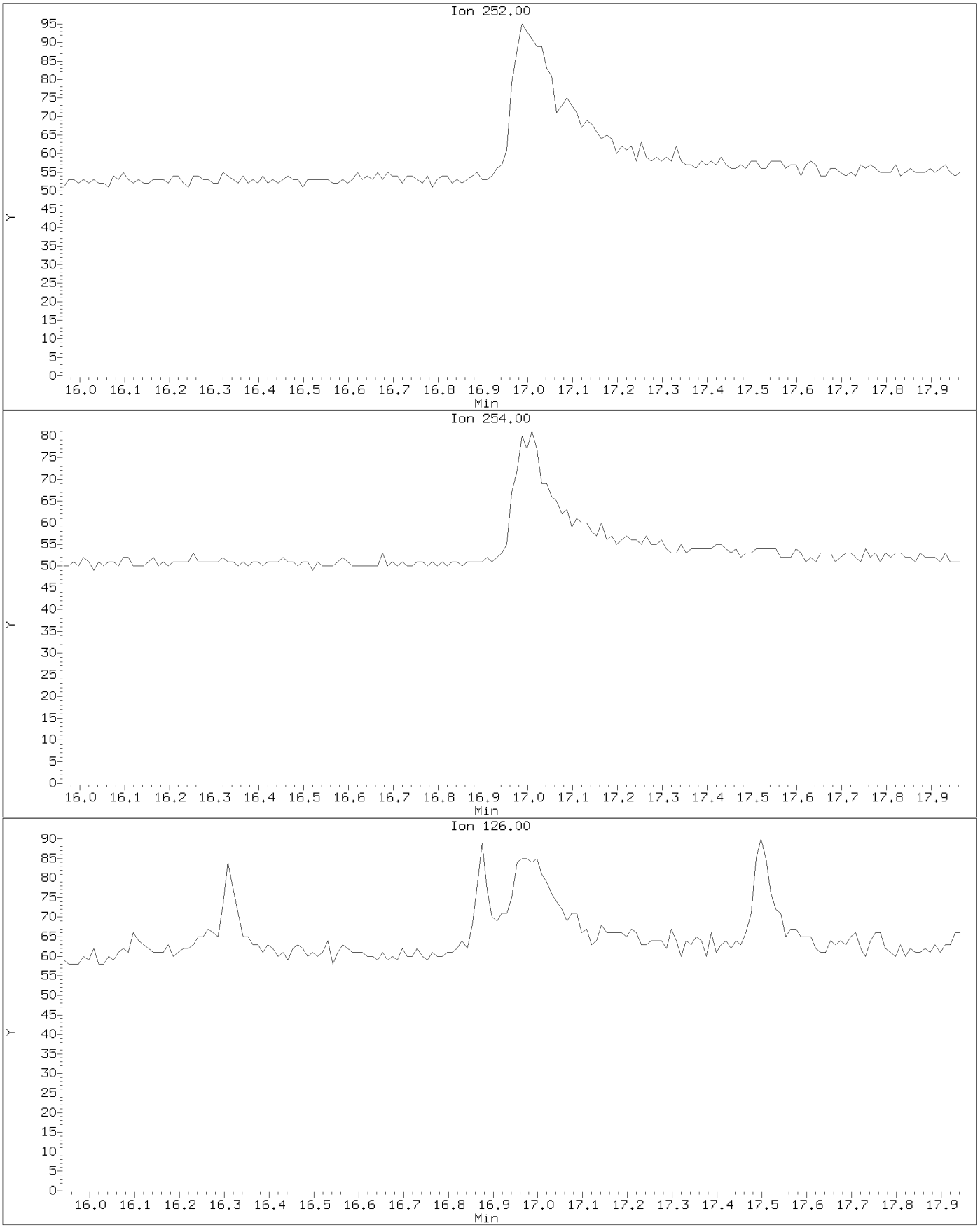
Injection Date: 03-MAR-2023 14:47
Instrument: gcms-n.i
Client Sample ID:

Compound: 3,3'-Dichlorobenzidine
CAS Number: 91-94-1

BEFORE MANUAL INTEGRATION



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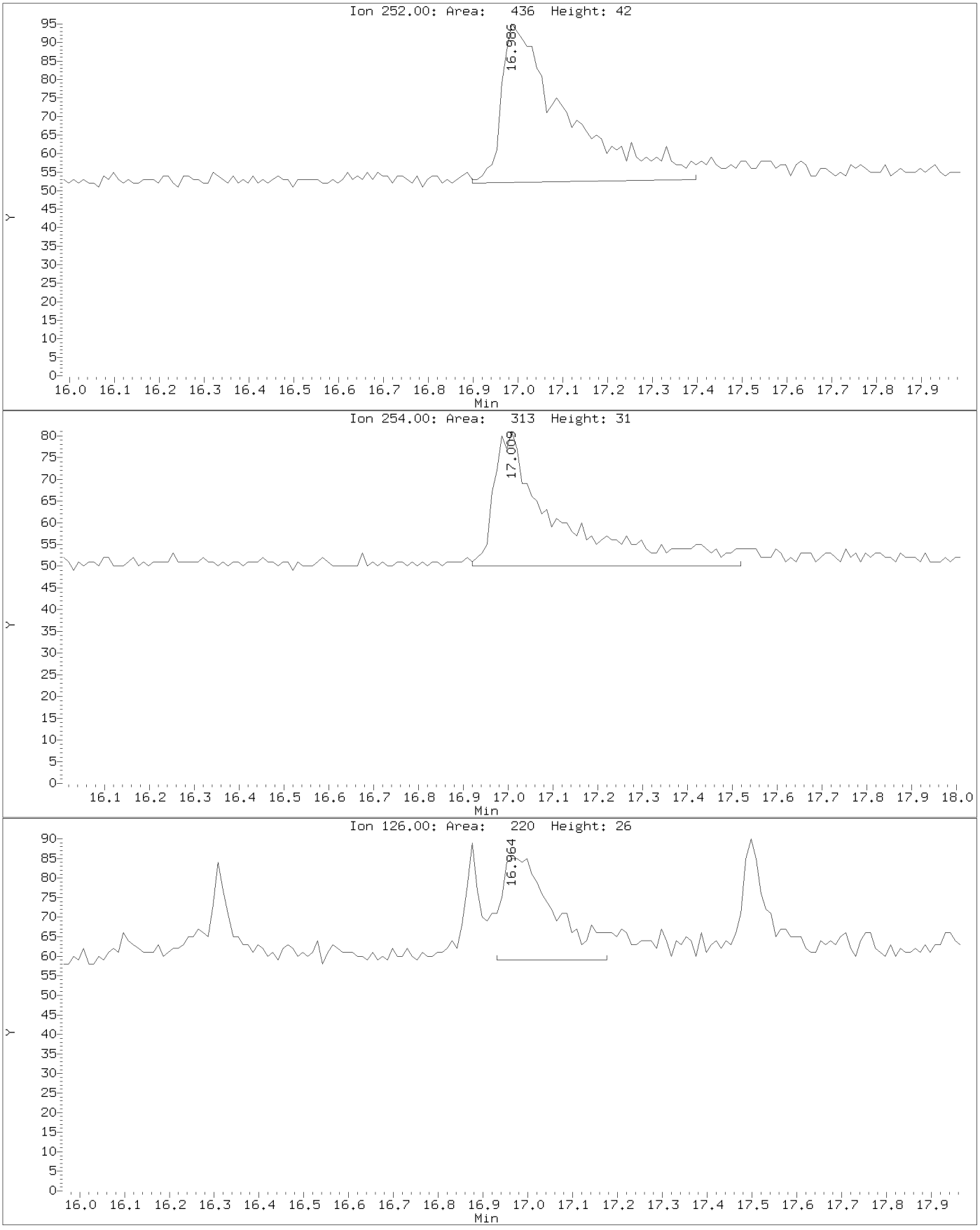
Instrument: gcms-n.i
Client Sample ID:

Compound: 3,3'-Dichlorobenzidine
CAS Number: 91-94-1



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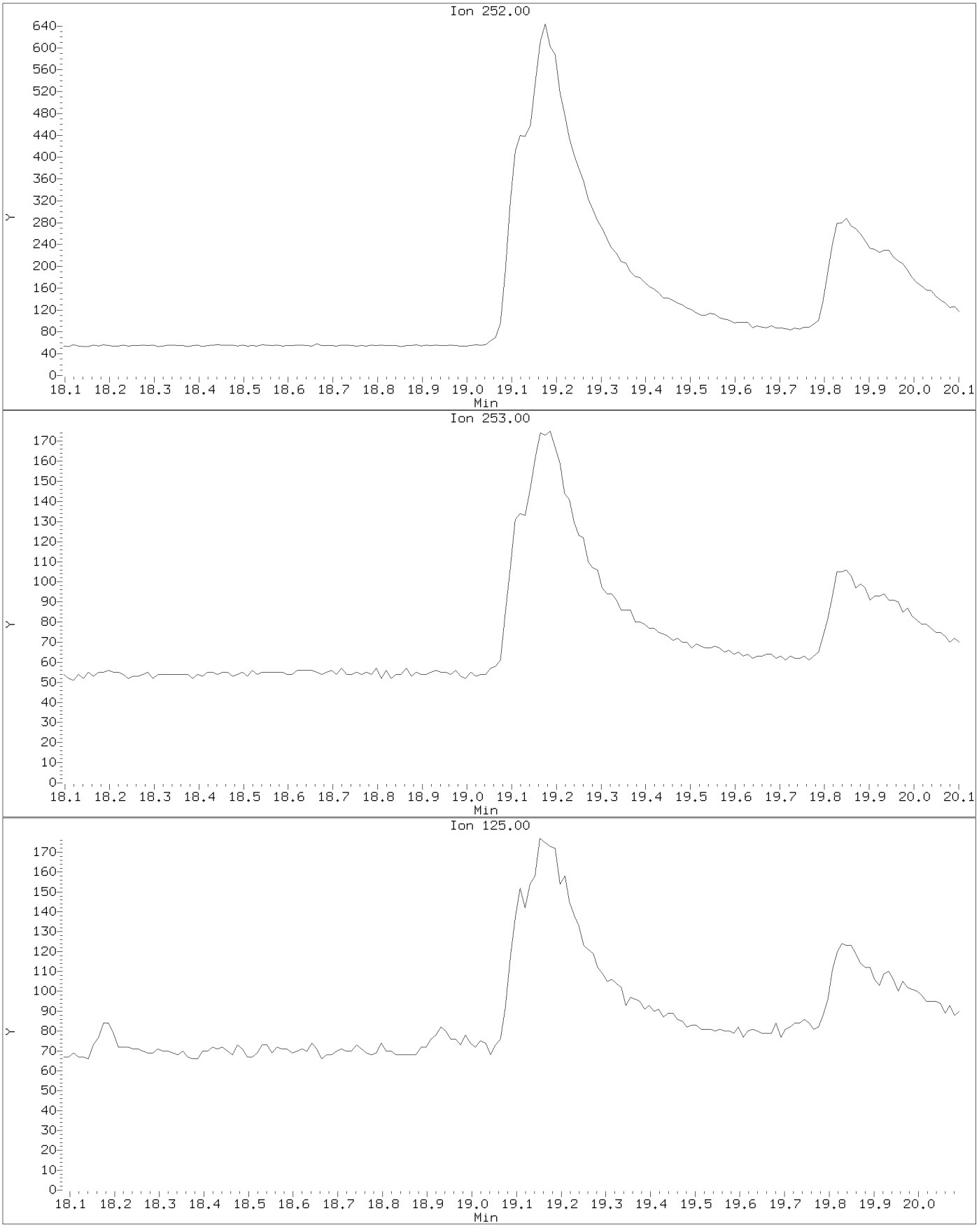
Injection Date: 03-MAR-2023 14:47
Instrument: gcms-n.i
Client Sample ID:

Compound: Benzo(b)fluoranthene
CAS Number: 205-99-2

BEFORE MANUAL INTEGRATION



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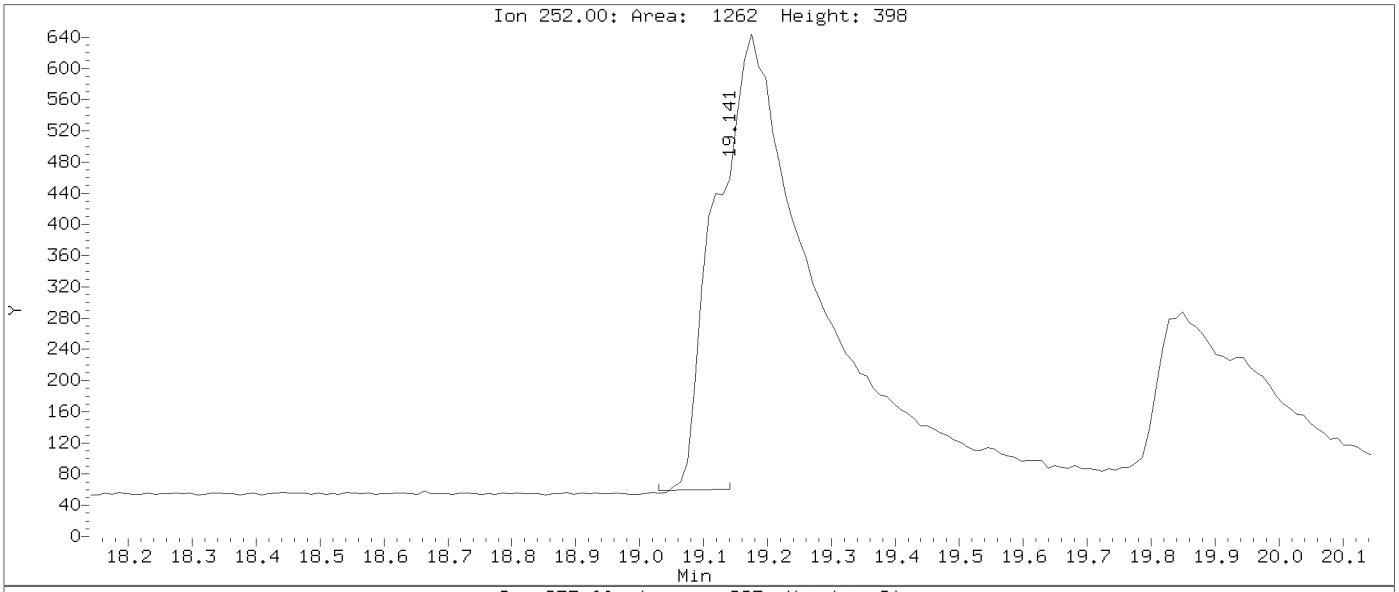
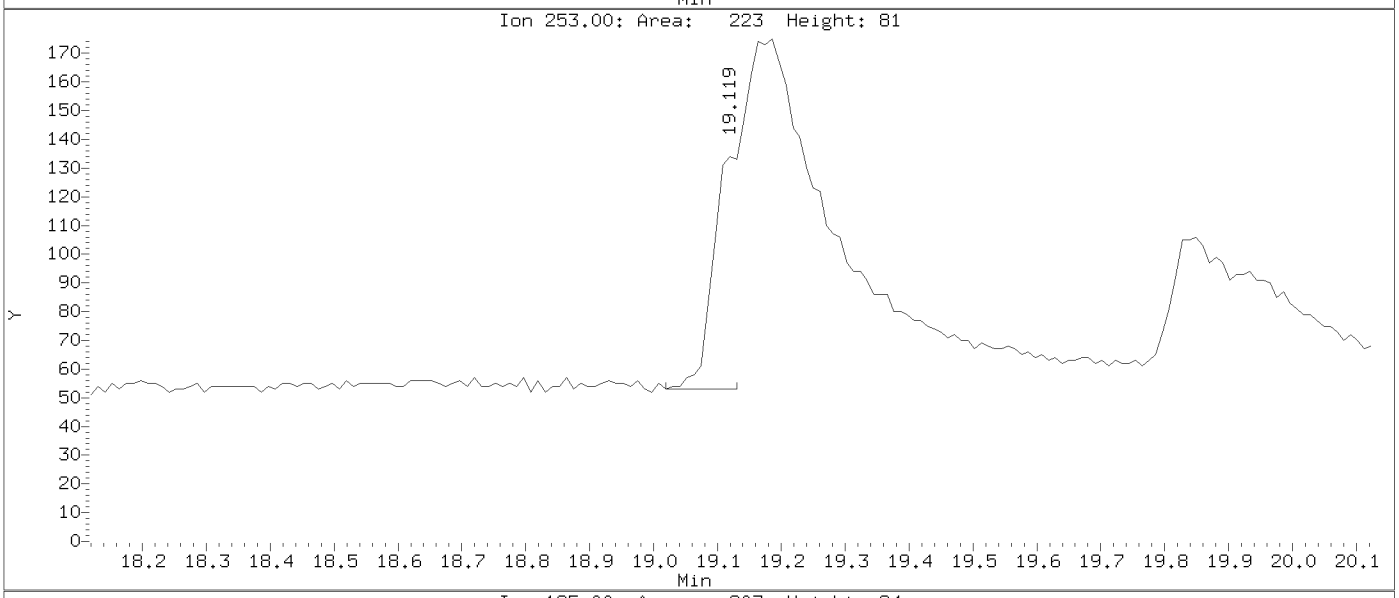
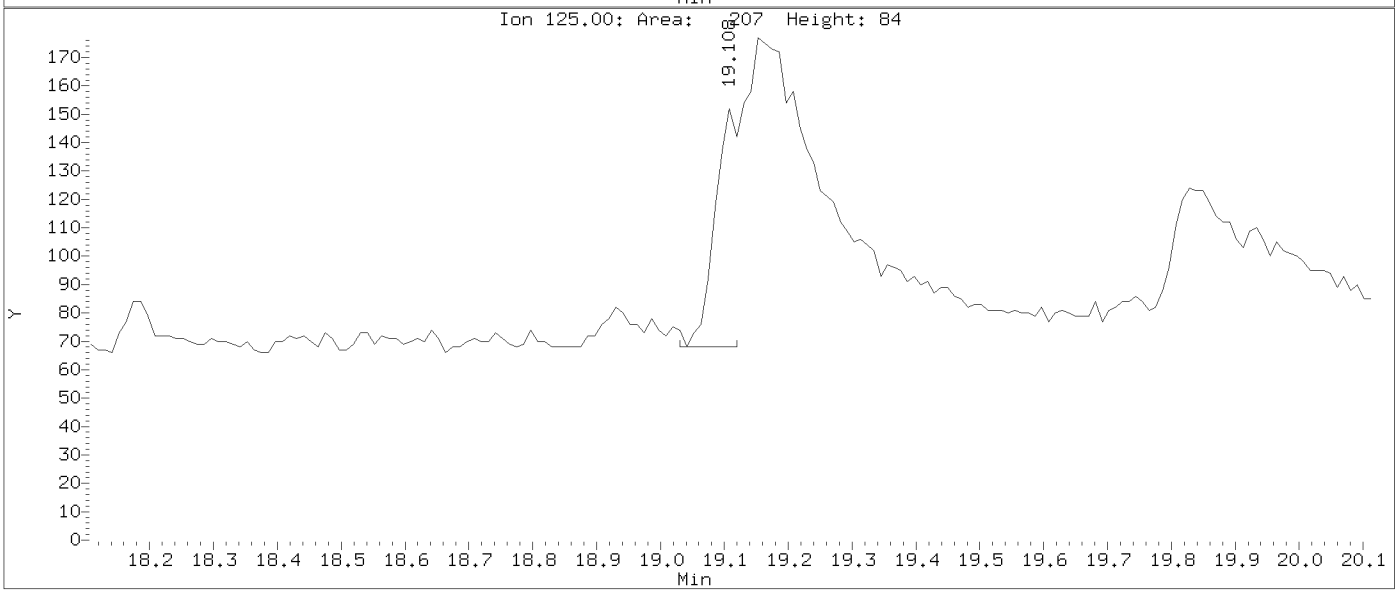
Instrument: gcms-n.i
Client Sample ID:

Compound: Benzo(b)fluoranthene
CAS Number: 205-99-2

AFTER MANUAL INTEGRATION







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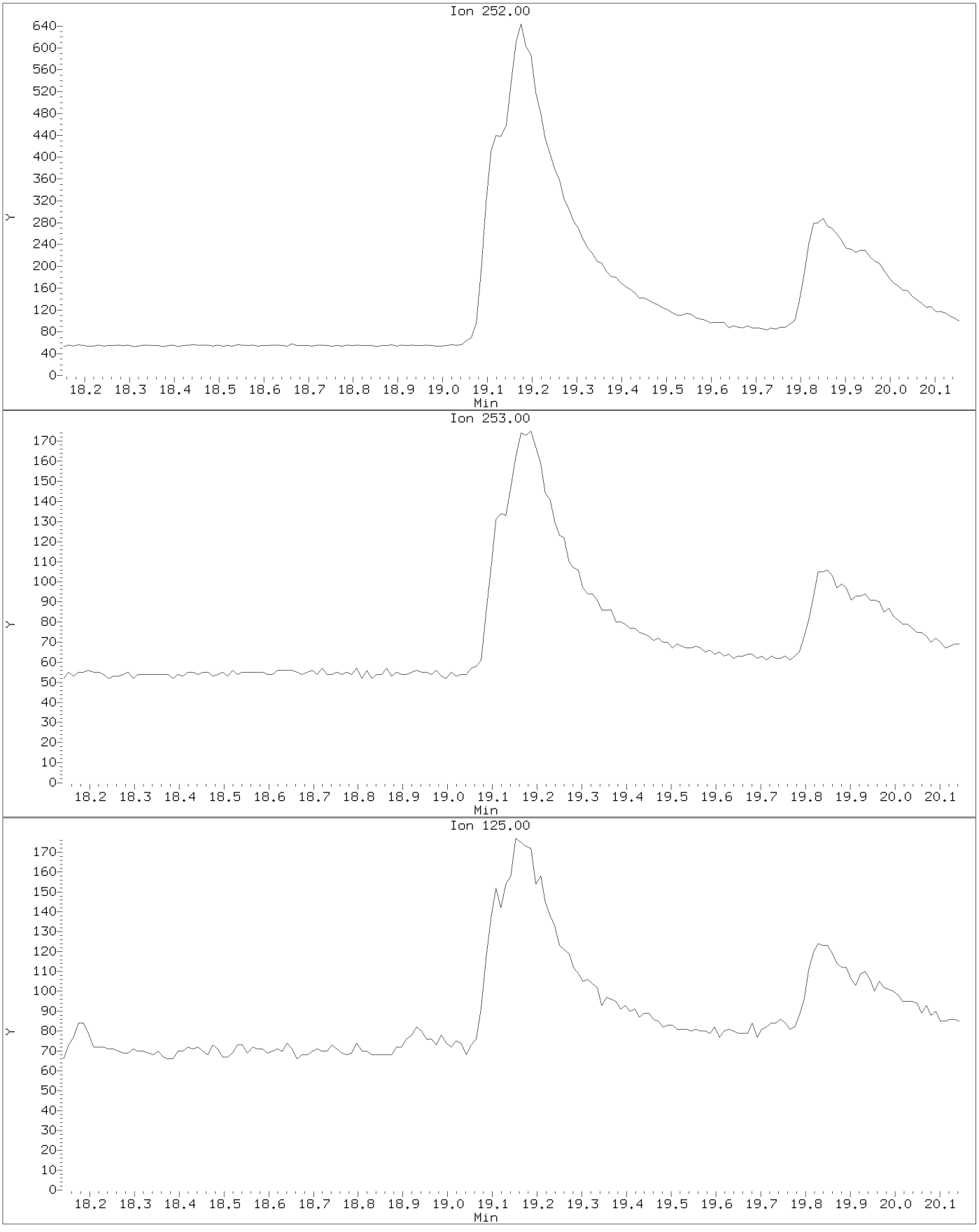
Injection Date: 03-MAR-2023 14:47
Instrument: gcms-n.i
Client Sample ID:

Compound: Benzo(k)fluoranthene
CAS Number: 207-08-9

BEFORE MANUAL INTEGRATION



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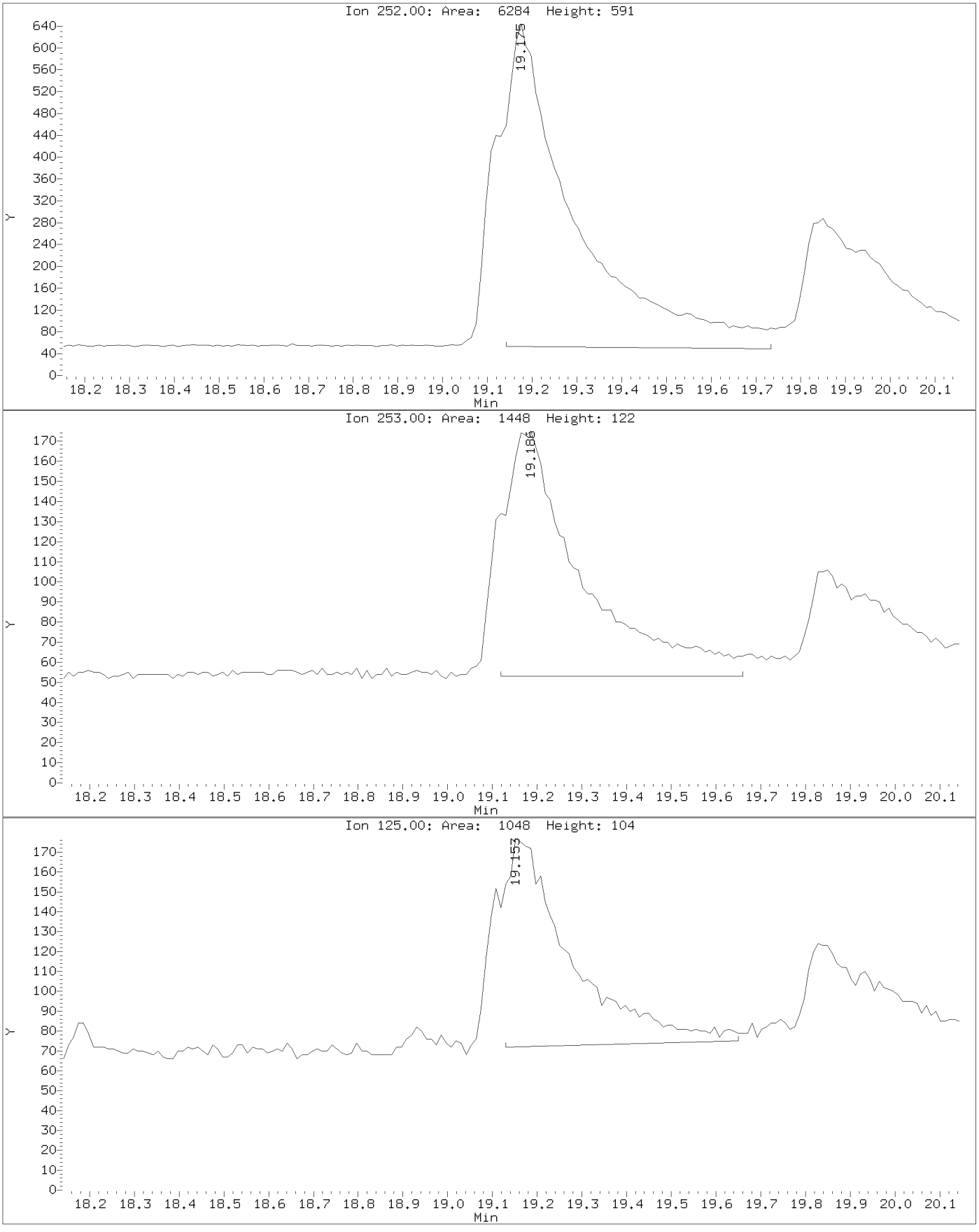
Injection Date: 03-MAR-2023 14:47
Instrument: gcms-n.i
Client Sample ID:

Compound: Benzo(k)fluoranthene
CAS Number: 207-08-9

AFTER MANUAL INTEGRATION



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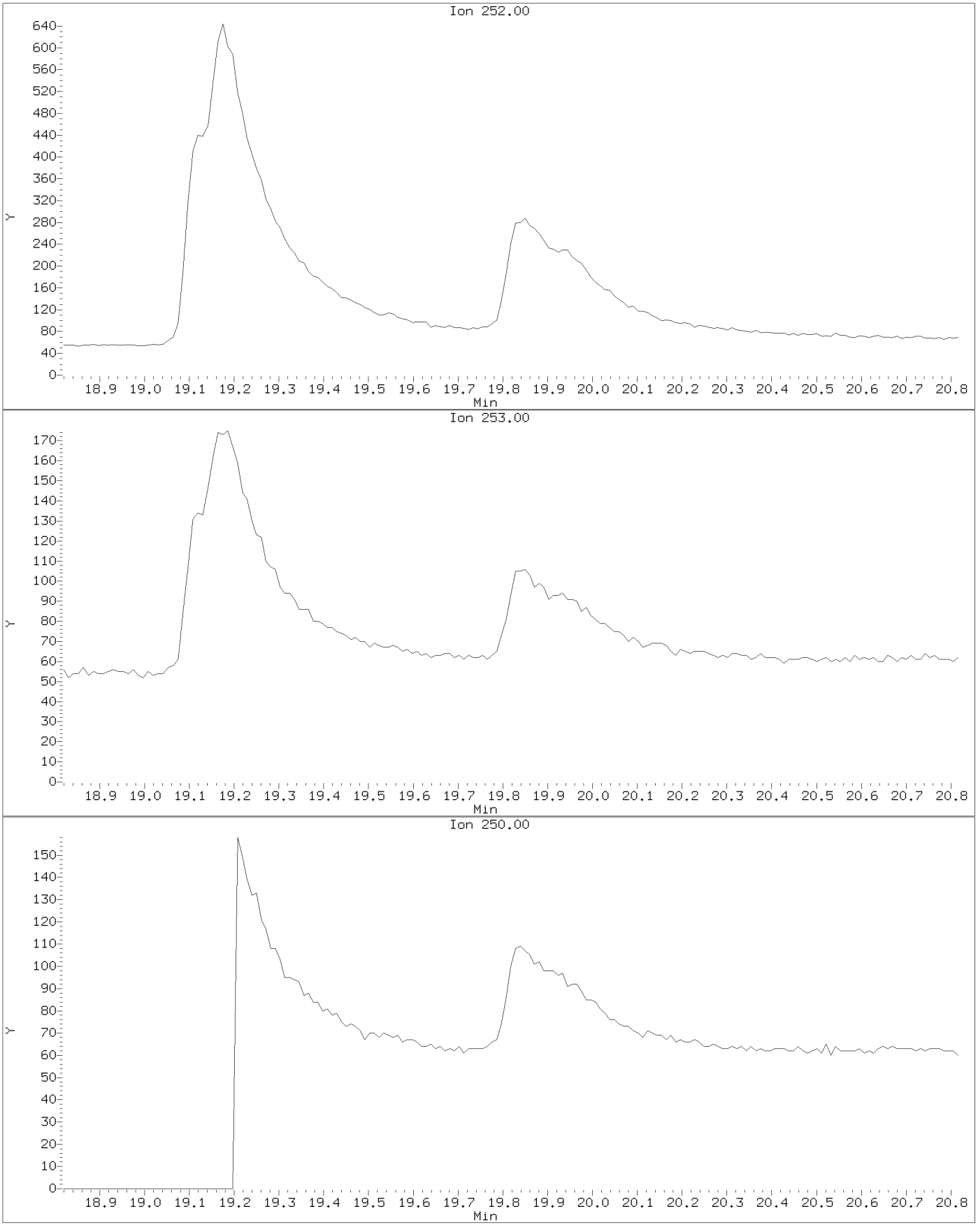
Injection Date: 03-MAR-2023 14:47
Instrument: gcms-n.i
Client Sample ID:

Compound: Benzo(a)pyrene
CAS Number: 50-32-8

BEFORE MANUAL INTEGRATION



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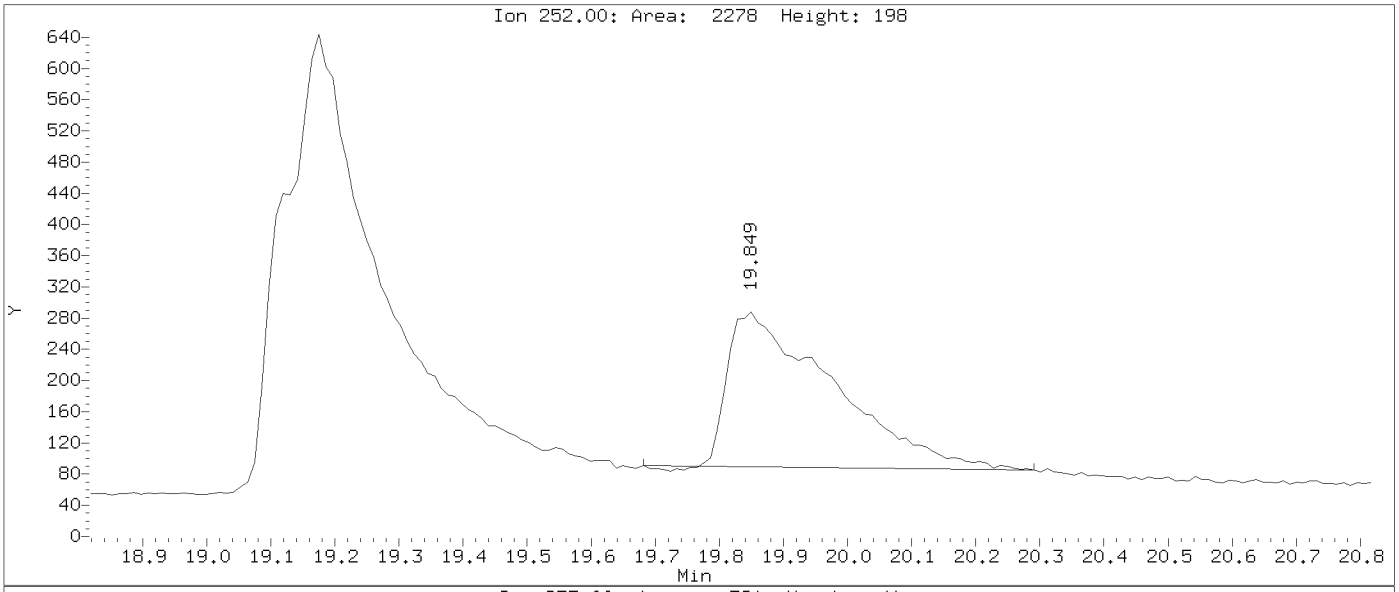
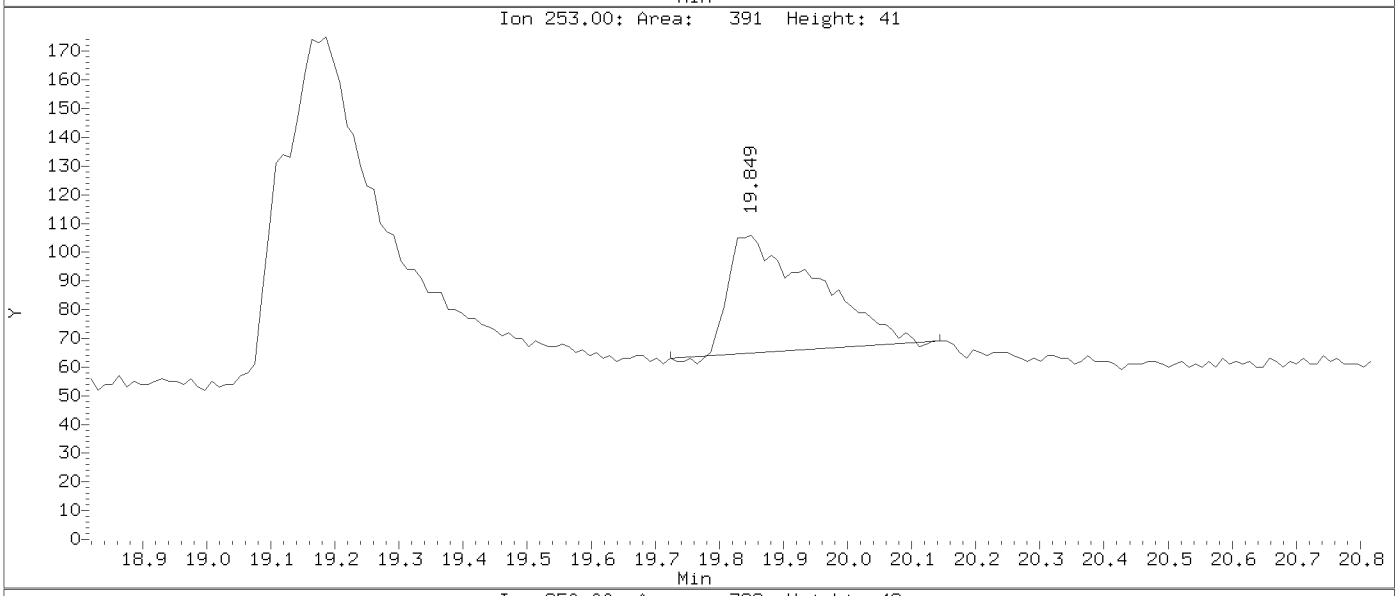
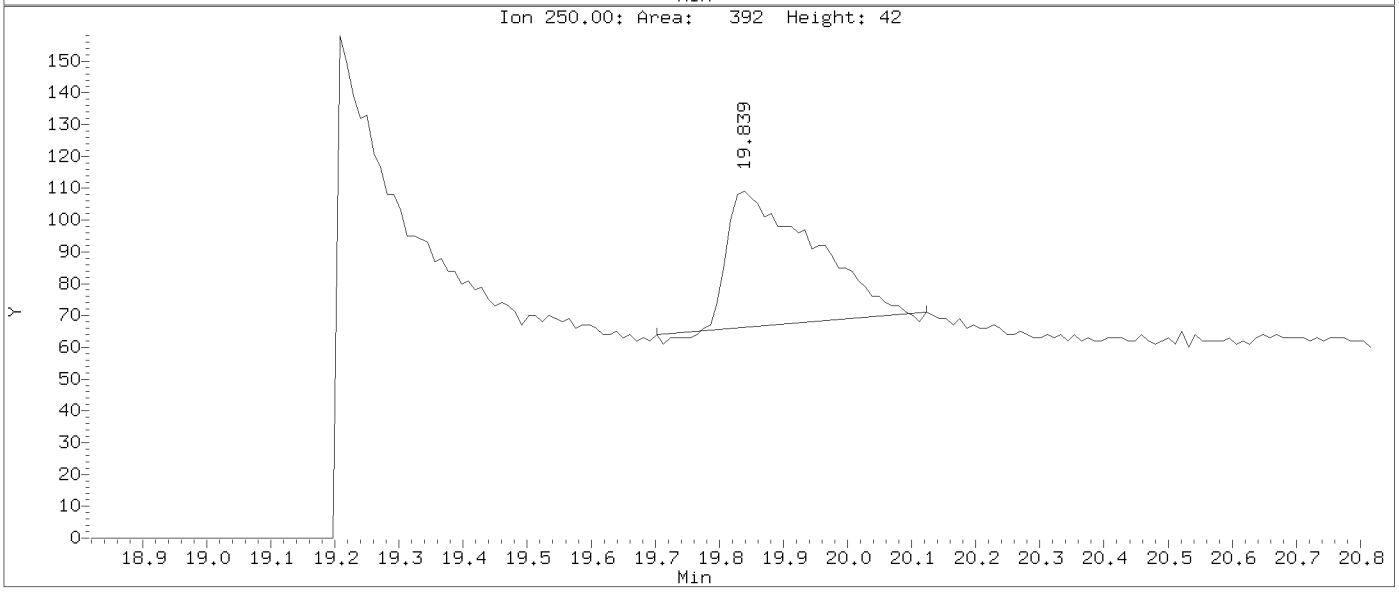
Client Sample ID:

Compound: Benzo(a)pyrene
CAS Number: 50-32-8

AFTER MANUAL INTEGRATION







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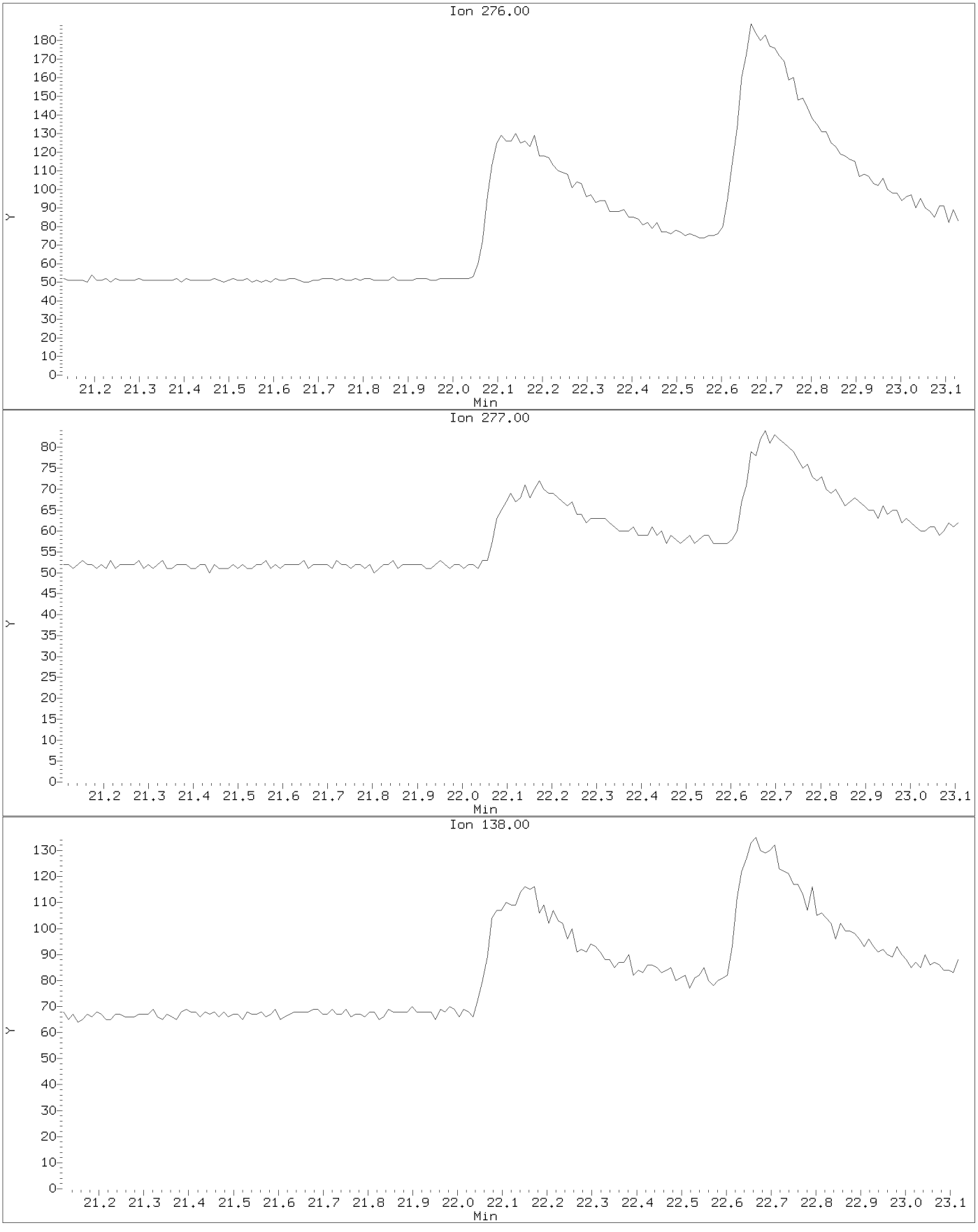
Injection Date: 03-MAR-2023 14:47
Instrument: gcms-n.i
Client Sample ID:

Compound: Indeno(1,2,3-cd)pyrene
CAS Number: 193-39-5

BEFORE MANUAL INTEGRATION



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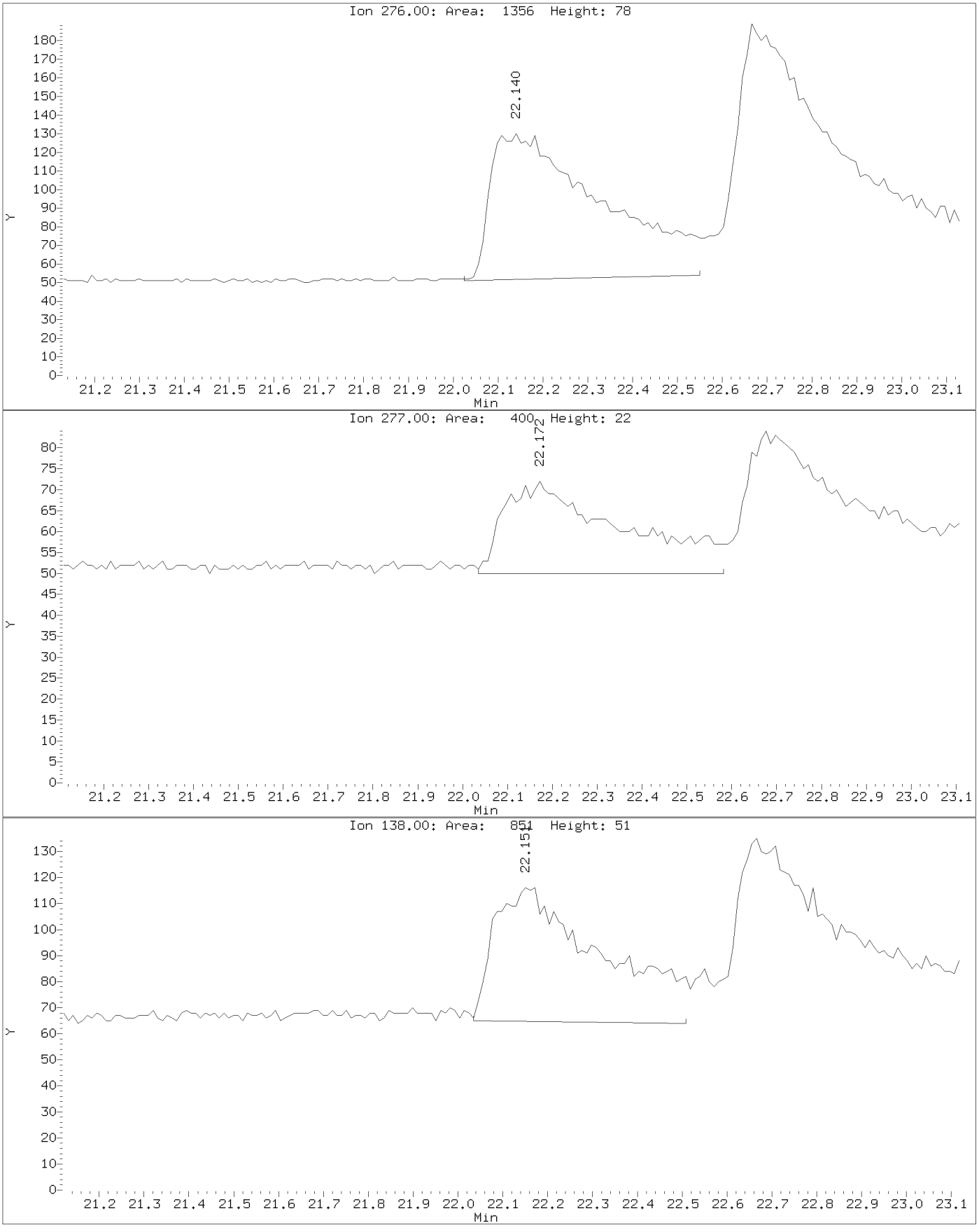
Injection Date: 03-MAR-2023 14:47
Instrument: gcms-n.i
Client Sample ID:

Compound: Indeno(1,2,3-cd)pyrene
CAS Number: 193-39-5

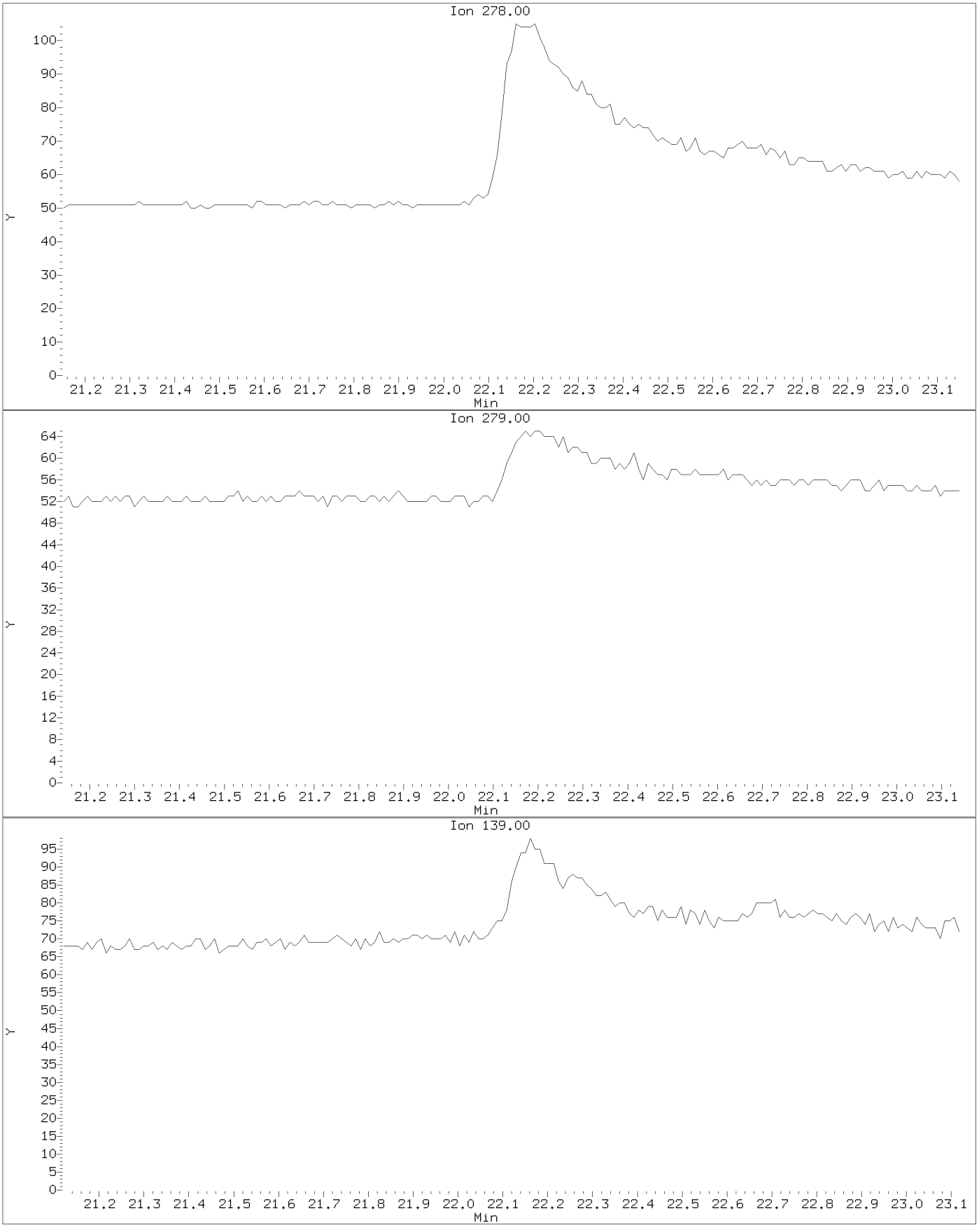
AFTER MANUAL INTEGRATION



Data File: \\target_server\gg\chem\gcms-n.i\N030323.b\N7584.D
Injection Date: 03-MAR-2023 14:47
Instrument: gcms-n.i
Client Sample ID:

Compound: Dibenzo(a,h)anthracene
CAS Number: 53-70-3

BEFORE MANUAL INTEGRATION



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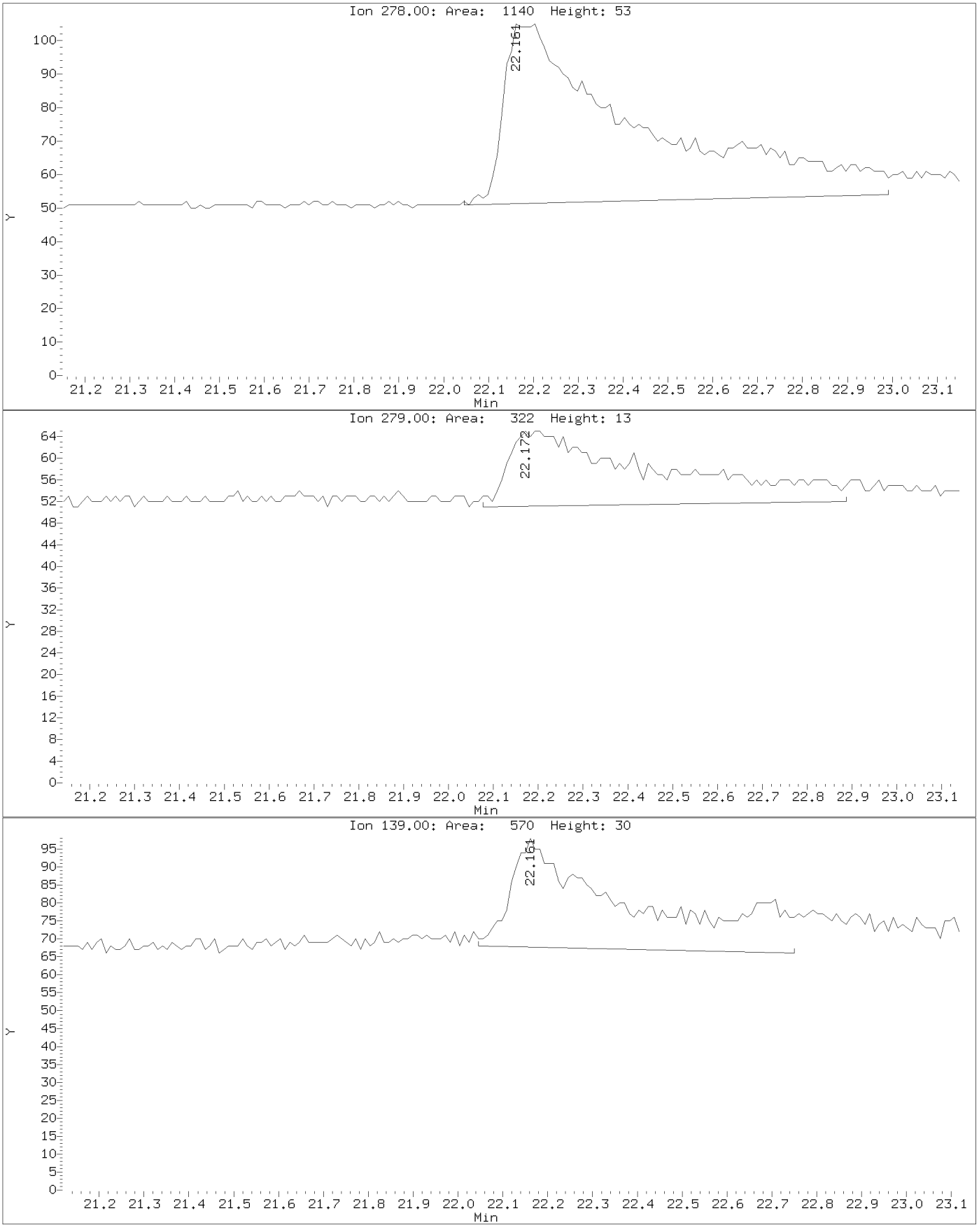
Injection Date: 03-MAR-2023 14:47
Instrument: gcms-n.i
Client Sample ID:

Compound: Dibenzo(a,h)anthracene
CAS Number: 53-70-3

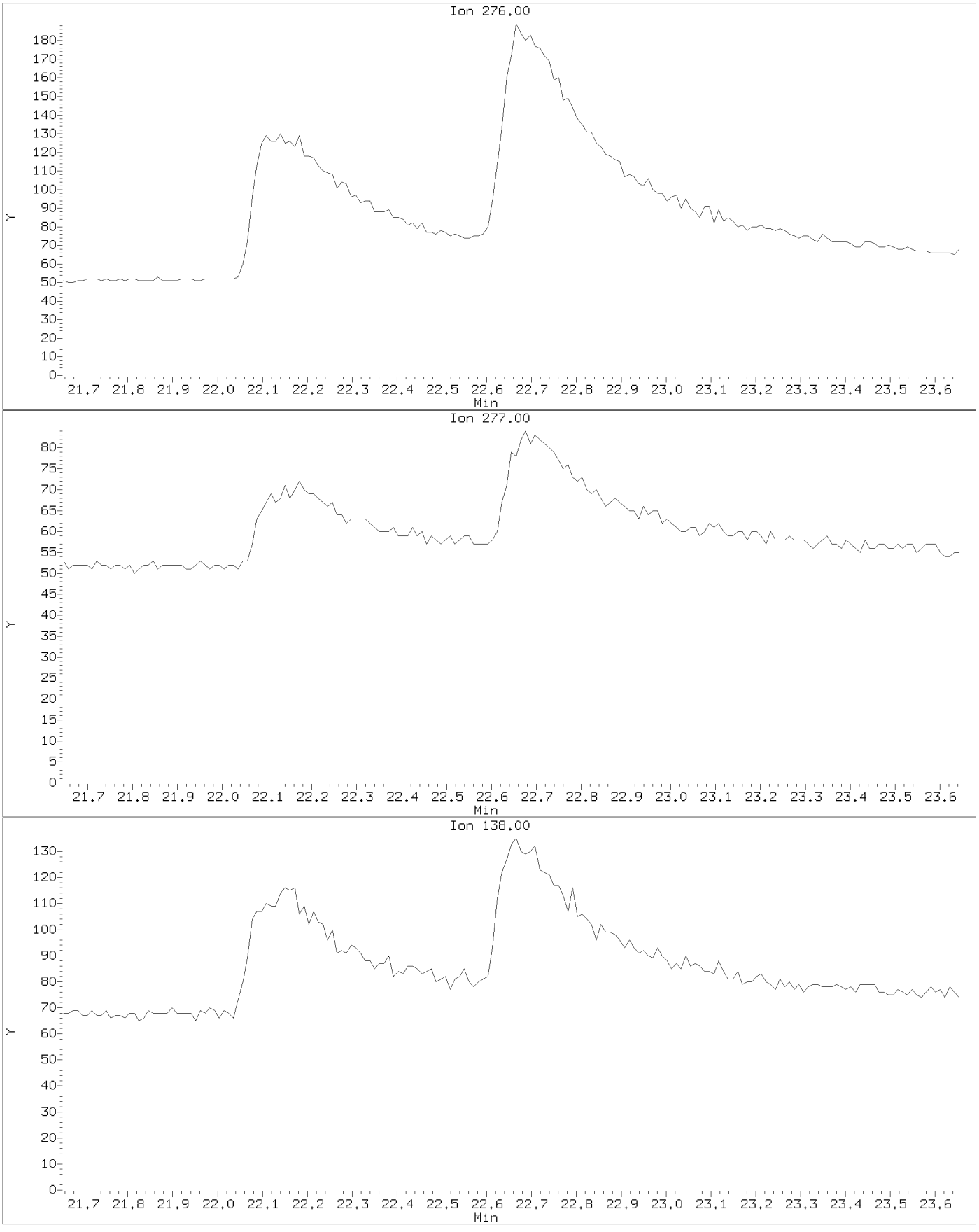
AFTER MANUAL INTEGRATION



Data File: \\target_server\gg\chem\gcms-n.i\N030323.b\N7584.D
Injection Date: 03-MAR-2023 14:47
Instrument: gcms-n.i
Client Sample ID:

Compound: Benzo(g,h,i)perylene
CAS Number: 191-24-2

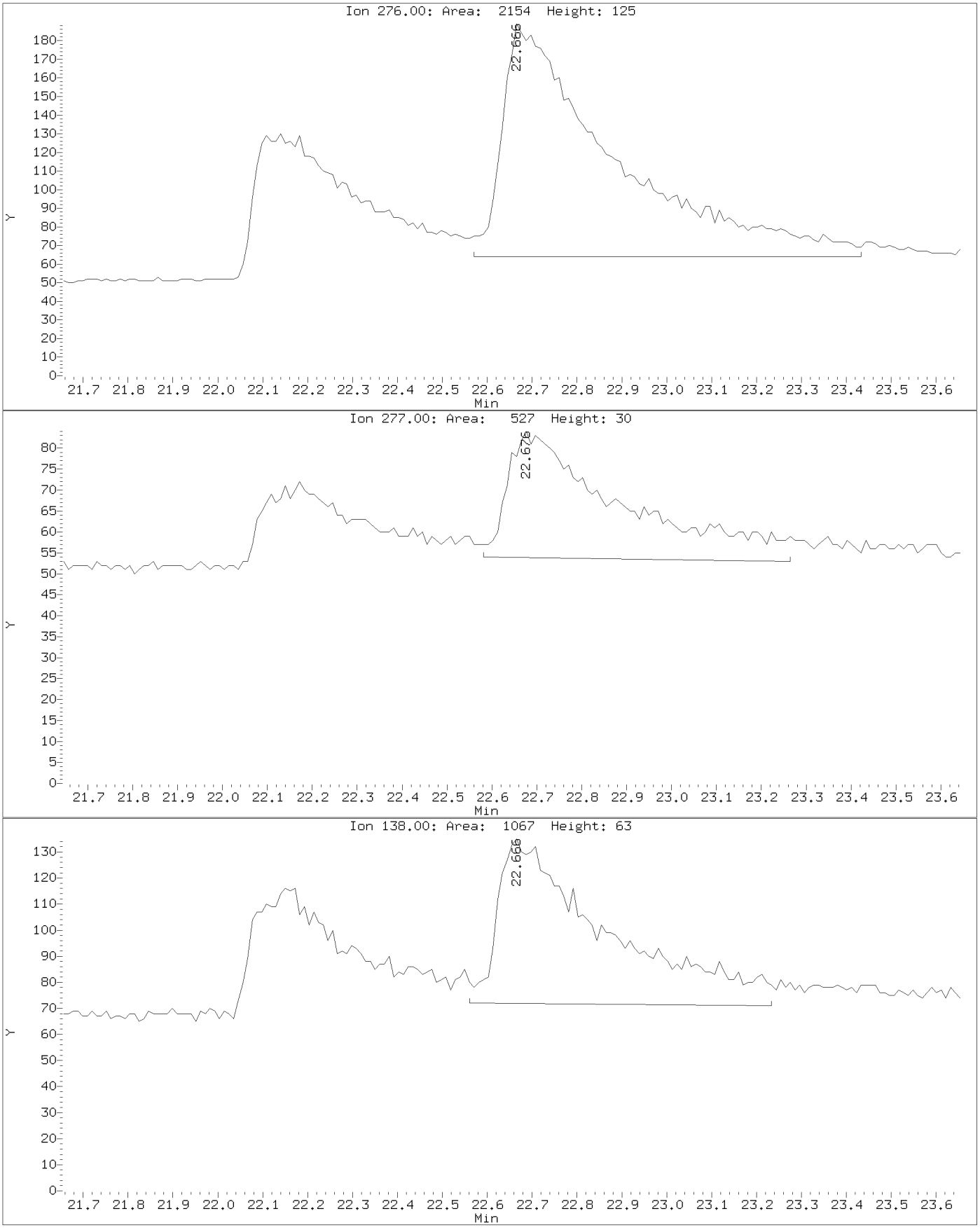
BEFORE MANUAL INTEGRATION



Data File: \\target_server\gg\chem\gcms-n.i\N030323.b\N7584.D
Injection Date: 03-MAR-2023 14:47
Instrument: gcms-n.i
Client Sample ID:

Compound: Benzo(g,h,i)perylene
CAS Number: 191-24-2

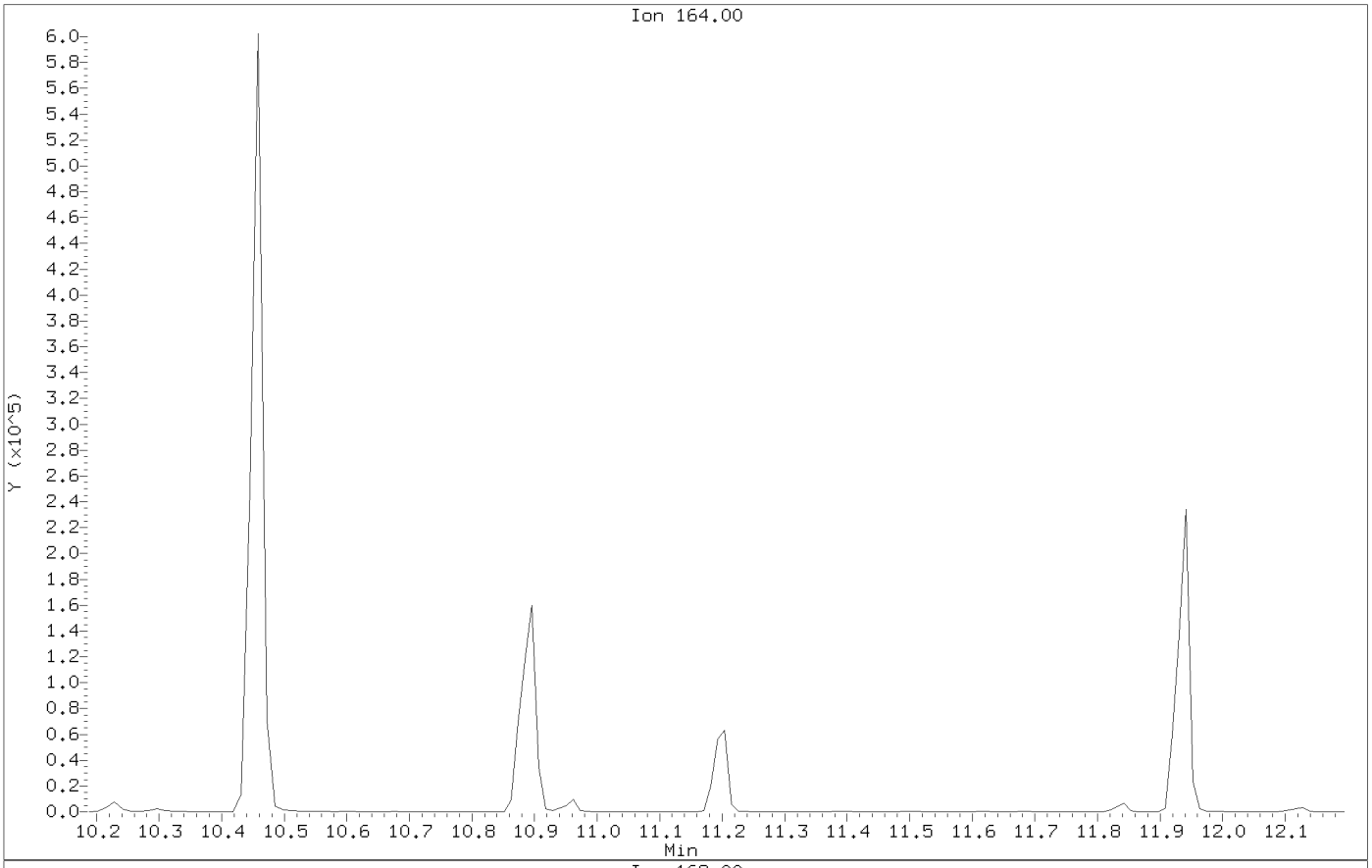
AFTER MANUAL INTEGRATION

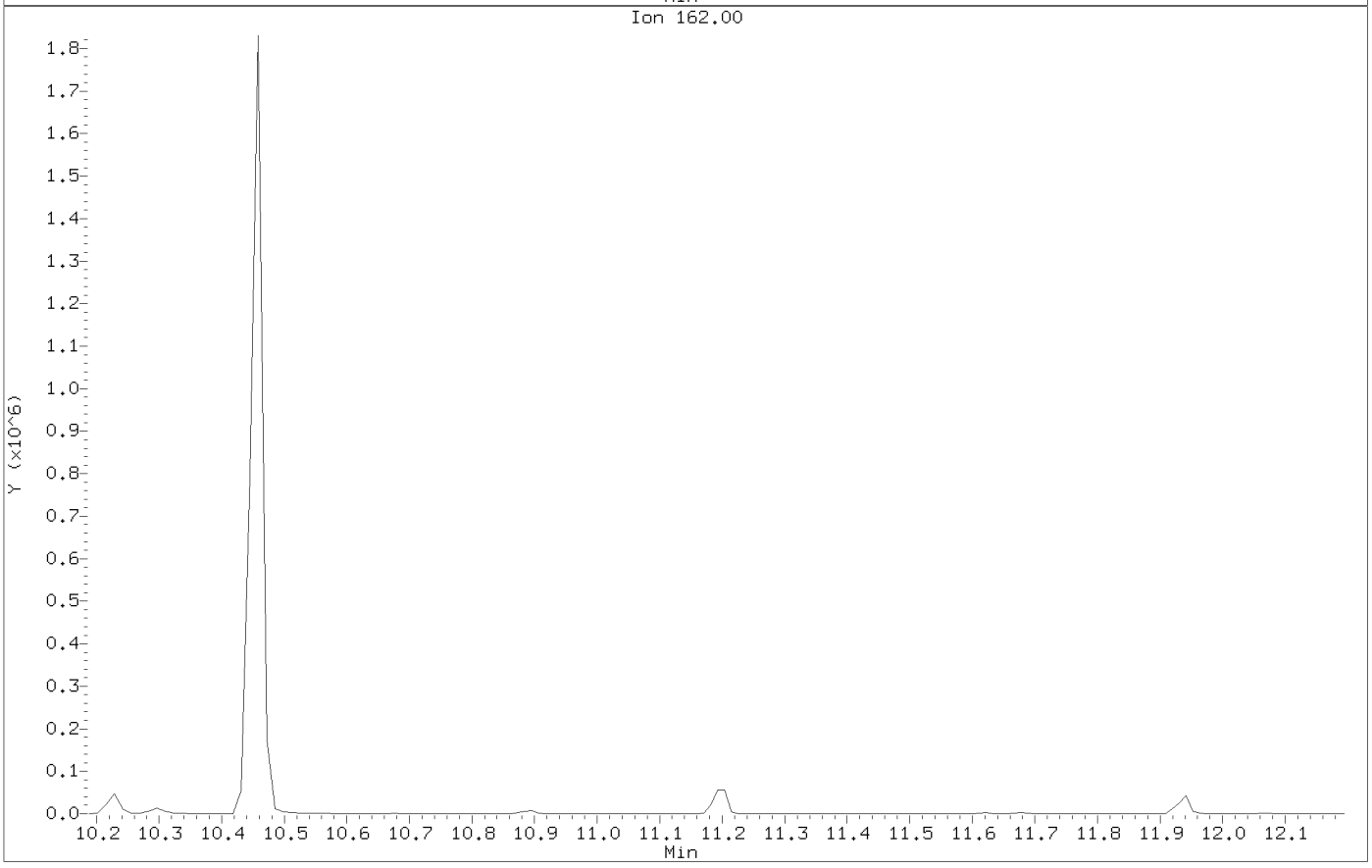


Data File: \\target_server\gg\chem\gcms-n.i\N030323.b\N7587.D
Injection Date: 03-MAR-2023 16:29
Instrument: gcms-n.i
Client Sample ID:

Compound: Acenaphthene-D10
CAS Number: 15067-26-2

BEFORE MANUAL INTEGRATION

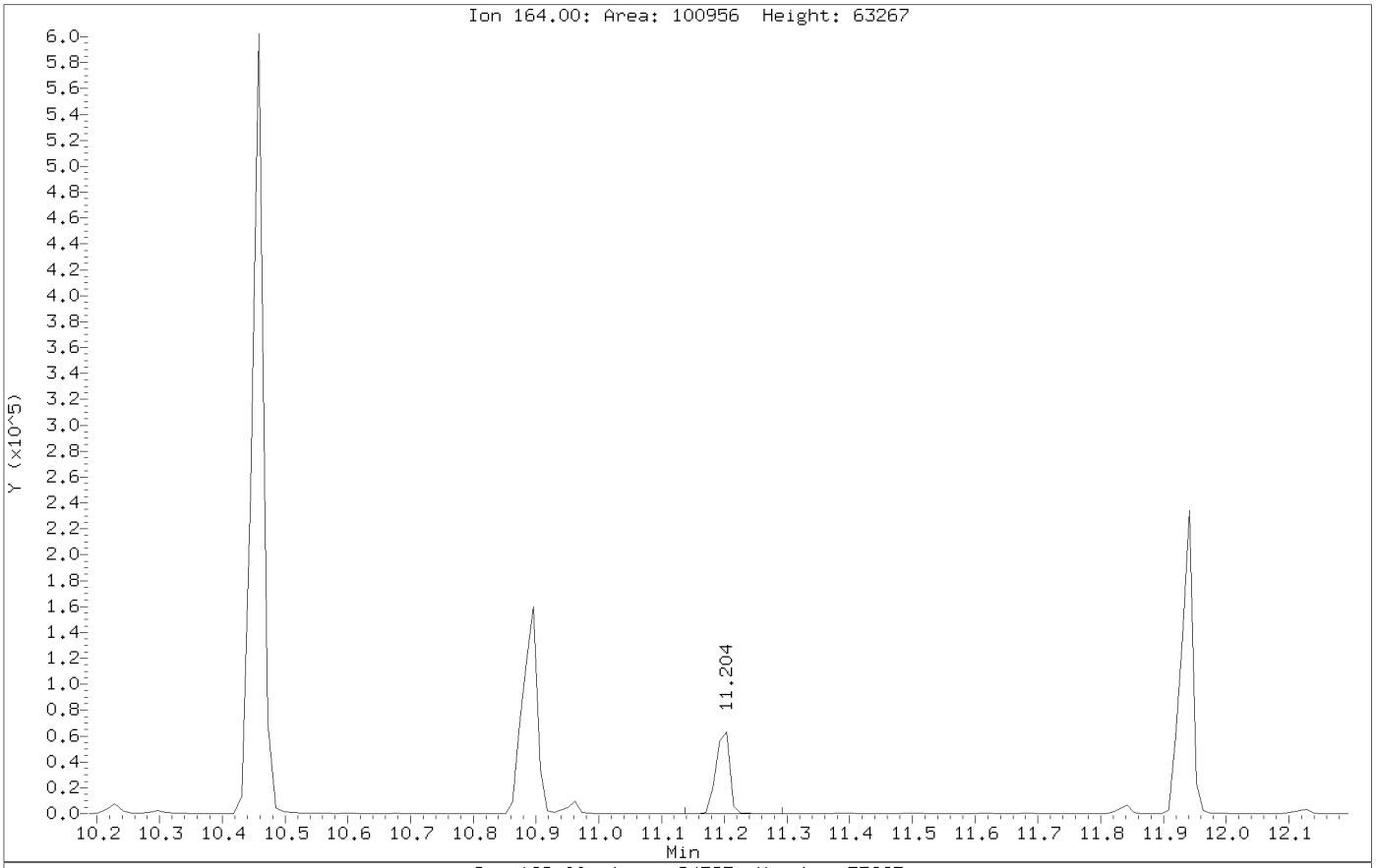


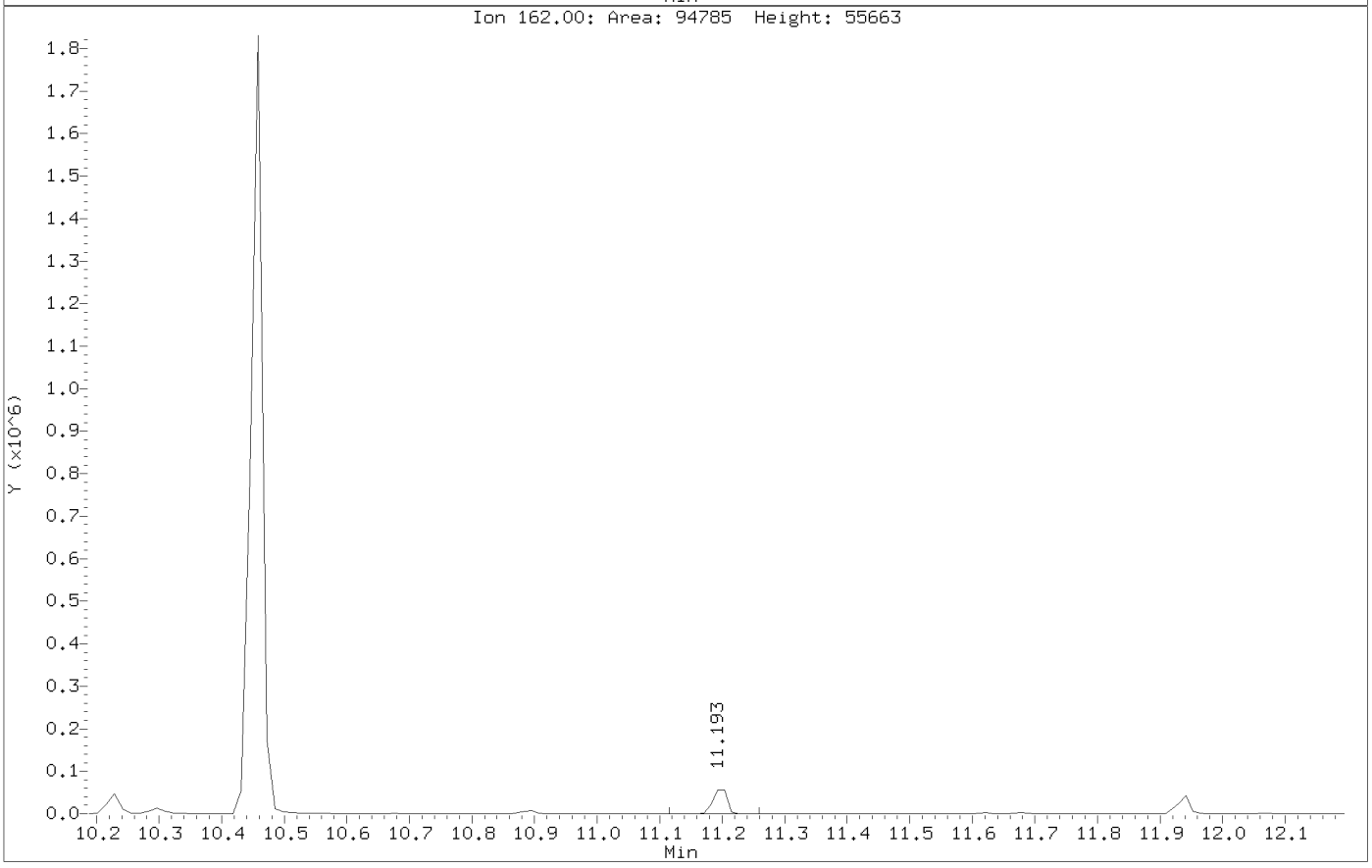


Data File: \\target_server\gg\chem\gcms-n.i\N030323.b\N7587.D
Injection Date: 03-MAR-2023 16:29
Instrument: gcms-n.i
Client Sample ID:

Compound: Acenaphthene-D10
CAS Number: 15067-26-2

AFTER MANUAL INTEGRATION





Form 6
Initial Calibration Summary

Lab Name : Katahdin Analytical Services **SDG:** SQ0595

Instrument ID: GCMS-N **Column ID:**

Lab File IDs : N7605.D N7604.D N7603.D **Calibration Date(s):** 06-MAR-23 14:08
N7606.D N7607.D N7608.D 06-MAR-23 16:55

	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Curve				%RSD or R^2		
	0.200000(	0.500000(	2.0000	7.0000	10.0000	15.0000	Type	b	m1	m2	Result	Limit	
Naphthalene	1.08295	1.01715	1.07324	0.98735	0.99267	0.98816	AVG		1.02359		4.27066	20	O
2-Methylnaphthalene	0.96685	0.79900	0.71170	0.68638	0.65248	0.62838	AVG		0.74080		16.9393(	20	O
Acenaphthylene	2.05427	1.89689	1.96776	1.84091	1.86516	1.73834	AVG		1.89389		5.73650	20	O
Acenaphthene	1.43662	1.27382	1.28613	1.16185	1.20463	1.10177	AVG		1.24414		9.39380	20	O
Fluorene	0.99441	1.33587	1.30415	1.25295	1.23996	1.12833	AVG		1.20928		10.4990(	20	O
Phenanthrene	0.99608	1.17113	1.19371	1.11283	1.14641	1.09056	AVG		1.11845		6.32290	20	O
Anthracene	45778	93903	437690	2106837	2730029	3844704	LNR	0.000e+00	1.15393		0.99885	0.99	O
Fluoranthene	1.12416	1.04278	0.99790	0.98981	0.89597	0.88195	AVG		0.98876		9.19792	20	O
Pyrene	3.58636	2.50025	2.78693	2.37286	2.47929	2.24092	AVG		2.66110		18.3365(	20	O
Benzo(a)anthracene	1.10094	1.29289	1.39137	1.38045	1.43591	1.41087	AVG		1.33541		9.33726	20	O
Chrysene	22122	80413	213856	1140107	1304426	2045645	LNR	0.000e+00	1.45926		0.99780	0.99	O
Benzo(b)fluoranthene	1.00435	1.00810	1.36477	1.52373	1.55831	1.44398	AVG		1.31721		18.9806(	20	O
Benzo(k)fluoranthene	2.78342	2.38846	2.19683	1.88387	1.85480	1.91083	AVG		2.16970		16.9106(	20	O
Benzo(a)pyrene	1.36850	1.21712	1.31274	1.28839	1.32260	1.31044	AVG		1.30330		3.82292	20	O
Indeno(1,2,3-cd)pyrene	0.79668	0.69400	0.96661	1.04781	1.12918	1.05401	AVG		0.94805		17.7622(	20	O
Dibenzo(a,h)anthracene	0.67212	0.54680	0.68992	0.78012	0.84905	0.79795	AVG		0.72266		15.0947(	20	O
Benzo(g,h,i)perylene	1.07668	0.80214	0.98345	0.96546	1.01349	0.91161	AVG		0.95881		9.81827	20	O
2-Methylnaphthalene-D10	0.61635	0.55717	0.54564	0.54146	0.52261	0.50459	AVG		0.54797		6.98877	20	
Fluorene-D10	12636	73098	261222	1105906	1524569	2082586	LNR	0.000e+00	0.85914		0.99645	0.99	
Pyrene-D10	29055	97596	290394	1487808	1752895	2563310	LNR	0.000e+00	1.88180		0.99187	0.99	

Legend: O = Acceptable; W = Failed %RSD Value; X = Failed R^2 Value; Y = Failed Minimum RF

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Data File: \\target_server\gg\chem\gcms-n.i\N030623.b\N7609.D
Report Date: 10-Mar-2023 13:15

Katahdin Analytical Services

RECOVERY REPORT

Client Name: Client SDG: 021497
Sample Matrix: LIQUID Fraction: SV
Lab Smp Id: WG333437-8
Level: LOW Operator: DT/CO
Data Type: MS DATA SampleType: INDSOURCE
SpikeList File: SIM_IND_CHK5.spk Quant Type: ISTD
Sublist File: all.sub
Method File: \\target_server\gg\chem\gcms-n.i\N030623.b\NSPSIM19.m
Misc Info: WG333437,WG333437,WG333437-4,SQ0686-23

SPIKE	COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
2	1,4-Dioxane	5.00	5.65	113.07	80-120
3	N-Nitrosodimethyla	5.00	5.26	105.16	80-120
4	Pyridine	5.00	6.73	134.54*	80-120
5	Benzaldehyde	5.00	1.55	30.98*	80-120
7	Bis(2-Chloroethyl)	5.00	5.25	105.03	80-120
6	Phenol	5.00	6.31	126.13*	80-120
8	2-Chlorophenol	5.00	6.12	122.52*	80-120
9	1,3-Dichlorobenzen	5.00	5.80	115.98	80-120
11	1,4-Dichlorobenzen	5.00	5.72	114.31	80-120
12	1,2-Dichlorobenzen	5.00	5.83	116.59	80-120
14	2,2'-Oxybis(1-chlo	5.00	4.26	85.19	80-120
13	2-Methylphenol	5.00	6.62	132.37*	80-120
15	Acetophenone	5.00	5.55	111.07	80-120
16	N-Nitroso-di-n-pro	5.00	5.18	103.67	80-120
18	Hexachloroethane	5.00	5.80	116.03	80-120
17	3&4-Methylphenol	5.00	6.53	130.53*	80-120
19	Nitrobenzene	5.00	5.01	100.29	80-120
20	Isophorone	5.00	6.02	120.44*	80-120
21	2-Nitrophenol	5.00	5.98	119.61	80-120
22	2,4-Dimethylphenol	5.00	5.44	108.85	80-120
23	bis(2-Chloroethoxy	5.00	5.54	110.82	80-120
24	Benzoic acid	5.00	7.14	142.80*	80-120
25	2,4-Dichlorophenol	5.00	5.54	110.88	80-120
26	1,2,4-Trichloroben	5.00	5.35	107.00	80-120
28	Naphthalene	5.00	5.51	110.28	80-120
29	4-Chloroaniline	5.00	5.31	106.26	80-120
30	Hexachlorobutadien	5.00	5.16	103.12	80-120
31	Caprolactam	5.00	5.29	105.83	80-120
34	2-Methylnaphthalen	5.00	5.03	100.56	80-120
32	4-Chloro-3-Methylp	5.00	5.84	116.87	80-120
35	1-Methylnaphthalen	5.00	4.95	98.99	80-120
37	1,2,4,5-Tetrachlor	5.00	5.16	103.14	80-120
36	Hexachlorocyclopen	5.00	5.10	101.99	80-120
39	2,4,6-Trichlorophe	5.00	5.40	108.06	80-120
40	2,4,5-Trichlorophe	5.00	5.52	110.31	80-120
42	2-Chloronaphthalen	5.00	4.80	96.09	80-120
41	1,1'-Biphenyl	5.00	5.04	100.75	80-120
43	2-Nitroaniline	5.00	4.98	99.54	80-120
44	Dimethyl Phthalate	5.00	5.26	105.11	80-120
46	Acenaphthylene	5.00	4.56	91.21	80-120

Data File: \\target_server\gg\chem\gcms-n.i\N030623.b\N7609.D
Report Date: 10-Mar-2023 13:15

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
45 2,6-Dinitrotoluene	5.00	5.04	100.70	80-120
49 Acenaphthene	5.00	5.06	101.30	80-120
47 3-Nitroaniline	5.00	4.82	96.35	80-120
50 2,4-Dinitrophenol	5.00	5.48	109.60	80-120
52 Dibenzofuran	5.00	5.50	109.95	80-120
53 2,4-Dinitrotoluene	5.00	5.04	100.70	80-120
54 2,3,4,6-Tetrachlor	5.00	4.38	87.54	80-120
51 4-Nitrophenol	5.00	4.93	98.59	80-120
55 Diethylphthalate	5.00	5.44	108.82	80-120
57 Fluorene	5.00	5.37	107.50	80-120
58 4-Chlorophenyl-phe	5.00	5.33	106.53	80-120
60 4,6-Dinitro-2-Meth	5.00	5.36	107.11	80-120
59 4-Nitroaniline	5.00	4.82	96.35	80-120
61 N-Nitrosodiphenyla	5.00	4.16	83.17	80-120
62 4-Bromophenyl-phen	5.00	4.98	99.59	80-120
63 Hexachlorobenzene	5.00	5.52	110.30	80-120
64 Atrazine	5.00	5.64	112.70	80-120
65 Pentachlorophenol	5.00	5.32	106.35	80-120
67 Phenanthrene	5.00	5.22	104.35	80-120
68 Anthracene	5.00	5.27	105.40	80-120
69 Carbazole	5.00	5.34	106.76	80-120
70 Di-n-butylphthalat	5.00	5.55	111.02	80-120
72 Fluoranthene	5.00	5.14	102.72	80-120
74 Pyrene	5.00	4.70	94.03	80-120
75 Butylbenzylphthala	5.00	5.29	105.88	80-120
77 Benzo(a)anthracene	5.00	5.28	105.68	80-120
79 Chrysene	5.00	5.23	104.65	80-120
76 3,3'-Dichlorobenzi	5.00	3.46	69.24*	80-120
80 bis(2-Ethylhexyl)p	5.00	5.09	101.85	80-120
81 Di-n-octylphthalat	5.00	5.05	100.95	80-120
82 Benzo(b)fluoranthe	5.00	5.88	117.55	80-120
83 Benzo(k)fluoranthe	5.00	5.06	101.17	80-120
84 Benzo(a)pyrene	5.00	5.40	108.10	80-120
86 Indeno(1,2,3-cd)py	5.00	5.17	103.41	80-120
87 Dibenzo(a,h)anthra	5.00	5.03	100.53	80-120
88 Benzo(g,h,i)peryle	5.00	4.57	91.35	80-120

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 1 1,4-Dioxane-d8	2.00	0.000	*	26-115
$ 33 2-Methylnaphthale	2.00	0.000	*	43-92
$ 38 2,4-Dibromophenol	4.00	0.0313	0.78*	10-130
$ 56 Fluorene-D10	2.00	0.00265	0.13*	29-101
$ 71 Fluoranthene-d10	2.00	0.00533	0.27*	30-150
$ 73 Pyrene-D10	2.00	0.00736	0.37*	53-166

Data File: \\target_server\gg\chem\gcms-n.i\N030623.b\N7603.D
Report Date: 10-Mar-2023 13:03

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-n.i\N030623.b\N7603.D
Lab Smp Id: WG333437-4
Inj Date : 06-MAR-2023 14:08
Operator : DT/CO   Inst ID: gcms-n.i
Smp Info : WG333437-4
Misc Info :
Comment   :
Method   : \\target_server\gg\chem\gcms-n.i\N030623.b\NSPSIM19.m
Meth Date : 07-Mar-2023 11:13 coneill   Quant Type: ISTD
Cal Date : 06-MAR-2023 14:08   Cal File: N7603.D
Als bottle: 2   Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: all.sub
Target Version: 4.12
Processing Host: V200T4

Concentration Formula: Amt * DF * Uf*(Vt/Vo*Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.000	Sample Volume (L)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
$	1 1,4-Dioxane-d8	96	2.998	2.999	(0.417)	86568	2.00000	2.00	
	2 1,4-Dioxane	88	3.051	3.041	(0.424)	85900	2.00000	2.00	
	3 N-Nitrosodimethylamine	74	3.569	3.559	(0.496)	124092	2.00000	2.00	
	4 Pyridine	79	3.611	3.569	(0.502)	198654	2.00000	2.00	
	5 Benzaldehyde	77	6.628	6.618	(0.922)	123708	2.00000	2.00	
	6 Phenol	94	6.836	6.837	(0.951)	565861	4.50000	4.50	
	7 Bis(2-Chloroethyl)ether	93	6.878	6.878	(0.957)	214270	2.00000	2.00	
	8 2-Chlorophenol	128	6.940	6.941	(0.965)	510379	4.50000	4.50	
	9 1,3-Dichlorobenzene	146	7.117	7.118	(0.990)	258100	2.00000	2.00	
*	10 1,4-Dichlorobenzene-D4	152	7.190	7.191	(1.000)	71620	0.80000	(a)	
	11 1,4-Dichlorobenzene	146	7.211	7.211	(1.003)	265673	2.00000	2.00	
	12 1,2-Dichlorobenzene	146	7.409	7.399	(1.030)	251405	2.00000	2.00	
	13 2-Methylphenol	108	7.596	7.596	(1.056)	439591	4.50000	4.50	
	14 2,2'-Oxybis(1-chloropropane)	45	7.575	7.565	(1.054)	133065	2.00000	2.00	
	15 Acetophenone	105	7.731	7.721	(0.874)	283229	2.00000	2.00	
	16 N-Nitroso-di-n-propylamine	70	7.742	7.752	(1.077)	138166	2.00000	2.00	
	17 3&4-Methylphenol	108	7.814	7.804	(1.087)	432671	4.50000	4.50	
	18 Hexachloroethane	117	7.835	7.825	(1.090)	88557	2.00000	2.00	
	19 Nitrobenzene	77	7.939	7.929	(0.898)	207128	2.00000	2.00	
	20 Isophorone	82	8.255	8.255	(0.933)	326659	2.00000	2.00	

Data File: \\target_server\gg\chem\gcms-n.i\N030623.b\N7603.D
Report Date: 10-Mar-2023 13:03

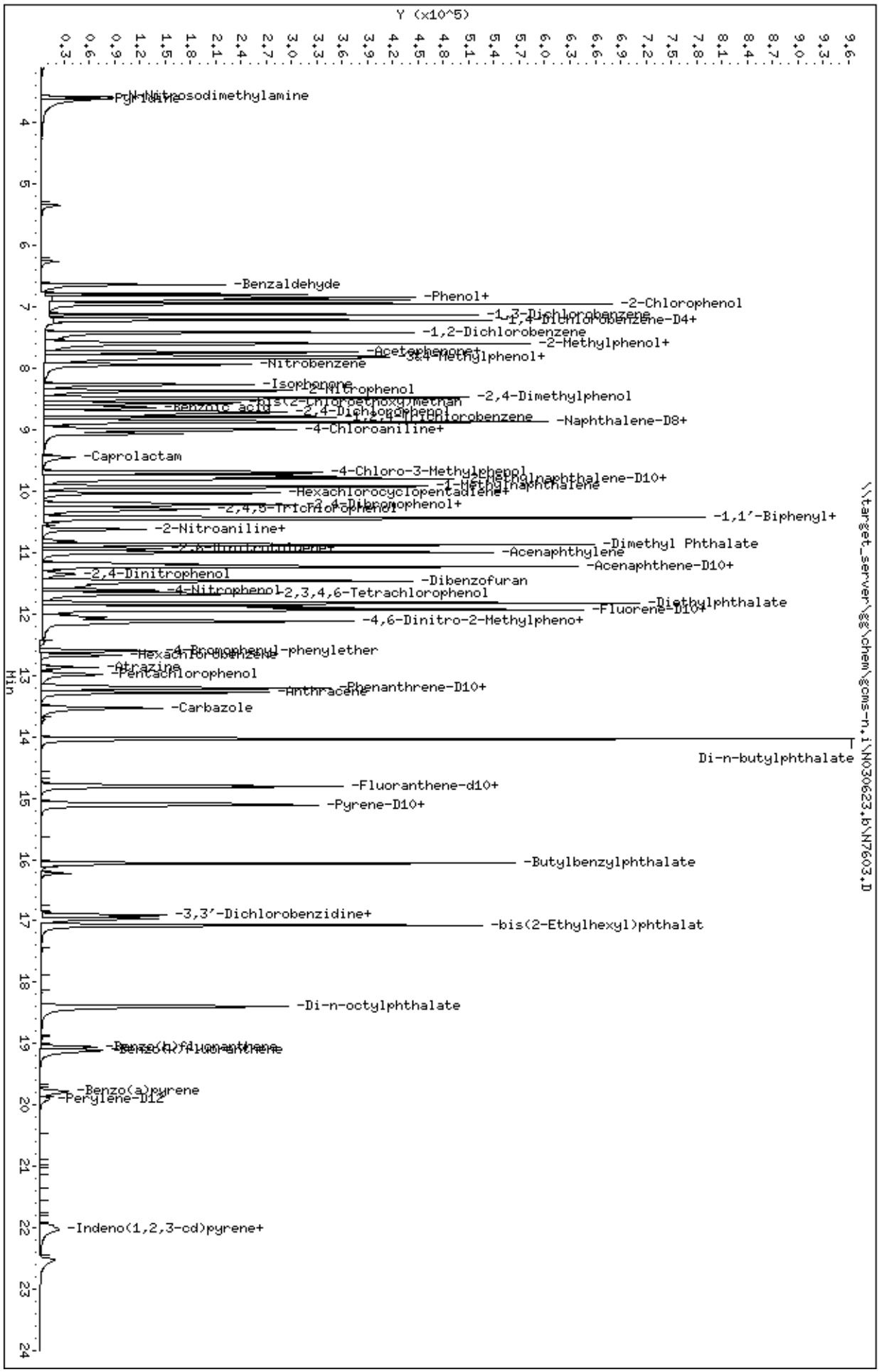
			QUANT SIG					AMOUNTS		
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
	21	2-Nitrophenol	139	8.368	8.356	(0.946)	256721	4.50000	4.50	
	22	2,4-Dimethylphenol	107	8.470	8.471	(0.958)	417957	4.50000	4.50	
	23	bis(2-Chloroethoxy)methane	93	8.561	8.561	(0.968)	238462	2.00000	2.00	
	24	Benzoic acid	105	8.640	8.663	(0.977)	196060	4.50000	4.50	
	25	2,4-Dichlorophenol	162	8.708	8.708	(0.985)	377089	4.50000	4.50	
	26	1,2,4-Trichlorobenzene	180	8.787	8.776	(0.994)	195511	2.00000	2.00	
*	27	Naphthalene-D8	136	8.844	8.844	(1.000)	231184	0.80000	(a)	
	28	Naphthalene	128	8.866	8.867	(1.003)	620290	2.00000	2.00	
	29	4-Chloroaniline	127	8.980	8.980	(1.015)	240183	2.00000	2.00	
	30	Hexachlorobutadiene	225	9.070	9.059	(1.026)	86528	2.00000	2.00	
	31	Caprolactam	113	9.444	9.478	(1.068)	59575	2.00000	2.00	
	32	4-Chloro-3-Methylphenol	107	9.687	9.688	(1.095)	340058	4.50000	4.50	
$	33	2-Methylnaphthalene-D10	152	9.755	9.755	(1.103)	315358	2.00000	2.00	
	34	2-Methylnaphthalene	142	9.796	9.796	(1.108)	411332	2.00000	2.00	
	35	1-Methylnaphthalene	142	9.917	9.931	(1.121)	385500	2.00000	2.00	
	36	Hexachlorocyclopentadiene	237	10.025	10.026	(0.897)	66831	2.00000	2.00	
	37	1,2,4,5-Tetrachlorobenzene	216	10.039	10.039	(0.898)	156119	2.00000	2.00	
$	38	2,4-Dibromophenol	252	10.215	10.202	(0.914)	91883	2.00000	2.00	
	39	2,4,6-Trichlorophenol	196	10.215	10.215	(0.914)	228559	4.50000	4.50	
	40	2,4,5-Trichlorophenol	196	10.296	10.283	(0.921)	270631	4.50000	4.50	
	41	1,1'-Biphenyl	154	10.431	10.431	(0.933)	427372	2.00000	2.00	
	42	2-Chloronaphthalene	164	10.445	10.445	(0.934)	109389	2.00000	2.00	
	43	2-Nitroaniline	65	10.620	10.621	(0.950)	68847	2.00000	2.00	
	44	Dimethyl Phthalate	163	10.873	10.885	(0.972)	818671	4.50000	4.50	
	45	2,6-Dinitrotoluene	165	10.950	10.951	(0.979)	90884	2.00000	2.00	
	46	Acenaphthylene	152	10.994	10.995	(0.983)	542389	2.00000	2.00	
	47	3-Nitroaniline	138	10.620	10.621	(0.950)	109931	2.00000	2.00	
*	48	Acenaphthene-D10	164	11.182	11.182	(1.000)	110255	0.80000	(a)	
	49	Acenaphthene	153	11.226	11.226	(1.004)	354505	2.00000	2.00	
	50	2,4-Dinitrophenol	184	11.347	11.325	(1.015)	52774	4.50000	4.50	
	51	4-Nitrophenol	109	11.545	11.490	(1.032)	45351	4.50000	4.50	
	52	Dibenzofuran	168	11.468	11.468	(1.026)	470089	2.00000	2.00	
	53	2,4-Dinitrotoluene	165	10.950	10.951	(0.979)	90884	2.00000	2.00	
	54	2,3,4,6-Tetrachlorophenol	232	11.677	11.666	(1.044)	176258	4.50000	4.50	
	55	Diethylphthalate	149	11.820	11.831	(1.057)	786055	4.50000	4.50	
$	56	Fluorene-D10	174	11.886	11.886	(1.063)	261222	2.00000	2.00	
	57	Fluorene	166	11.930	11.930	(1.067)	359473	2.00000	2.00	
	58	4-Chlorophenyl-phenylether	204	11.952	11.952	(1.069)	172800	2.00000	2.00	
	59	4-Nitroaniline	138	10.620	10.621	(0.950)	109931	2.00000	2.00	
	60	4,6-Dinitro-2-Methylphenol	198	12.062	12.040	(0.915)	81367	4.50000	4.50	
	61	N-Nitrosodiphenylamine	169	12.117	12.117	(0.919)	296185	2.00000	2.00	
	62	4-Bromophenyl-phenylether	248	12.605	12.595	(0.956)	91623	2.00000	2.00	
	63	Hexachlorobenzene	284	12.677	12.677	(0.962)	86981	2.00000	2.00	
	64	Atrazine	200	12.872	12.872	(0.977)	71475	2.00000	2.00	
	65	Pentachlorophenol	266	12.984	12.964	(0.985)	88379	4.50000	4.50	
*	66	Phenanthrene-D10	188	13.179	13.179	(1.000)	137723	0.80000	(a)	
	67	Phenanthrene	178	13.210	13.210	(1.002)	411005	2.00000	2.00	
	68	Anthracene	178	13.281	13.272	(1.008)	437690	2.00000	2.00	
	69	Carbazole	167	13.538	13.518	(1.027)	311055	2.00000	2.00	
	70	Di-n-butylphthalate	149	14.031	14.032	(1.065)	1181779	4.50000	4.50	
$	71	Fluoranthene-d10	212	14.787	14.787	(1.122)	244602	2.00000	2.00	
	72	Fluoranthene	202	14.809	14.809	(1.124)	343586	2.00000	2.00	
$	73	Pyrene-D10	212	15.086	15.087	(0.892)	290394	2.00000	2.00	
	74	Pyrene	202	15.109	15.109	(0.893)	348485	2.00000	2.00	

Data File: \\target_server\gg\chem\gcms-n.i\N030623.b\N7603.D
Report Date: 10-Mar-2023 13:03

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
	75 Butylbenzylphthalate	149	16.064	16.064	(0.949)	395605	4.50000	4.50	
	76 3,3'-Dichlorobenzidine	252	16.930	16.920	(1.001)	43915	2.00000	2.00	
	77 Benzo(a)anthracene	228	16.908	16.898	(0.999)	173980	2.00000	2.00	
*	78 Chrysene-D12	240	16.919	16.908	(1.000)	50017	0.80000	(a)	
	79 Chrysene	228	16.964	16.963	(1.003)	213856	2.00000	2.00	
	80 bis(2-Ethylhexyl)phthalate	149	17.075	17.075	(1.009)	576923	4.50000	4.50	
	81 Di-n-octylphthalate	149	18.397	18.386	(1.087)	753217	4.50000	4.50	
	82 Benzo(b)fluoranthene	252	19.052	19.042	(0.957)	108673	2.00000	2.00	
	83 Benzo(k)fluoranthene	252	19.108	19.097	(0.960)	174928	2.00000	2.00(H)	
	84 Benzo(a)pyrene	252	19.775	19.755	(0.994)	104530	2.00000	2.00	
*	85 Perylene-D12	264	19.901	19.891	(1.000)	31851	0.80000	(a)	
	86 Indeno(1,2,3-cd)pyrene	276	21.972	21.930	(1.104)	76969	2.00000	2.00	
	87 Dibenzo(a,h)anthracene	278	22.035	21.993	(1.107)	54937	2.00000	2.00	
	88 Benzo(g,h,i)perylene	276	22.529	22.487	(1.132)	78310	2.00000	2.00	
M	89 Total PAHs	100				5200438	36.0000	36.0	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
H - Operator selected an alternate compound hit.


Data File: \\target_server\gg\chem\gcms-n,i\N030623,b\N7603,D
Date : 06-MAR-2023 14:08
Client ID:
Sample Info: WG333437-4
Volume Injected (uL): 1.0
Column phase: ZB5-MS
Instrument: gcms-n,i
Operator: DT/CO
Column diameter: 0.25
Y (x10^5)
Min
\\target_server\gg\chem\gcms-n,i\N030623,b\N7603,D
N-Nitrosodimethylamine
Pyridine
-Benzaldehyde
-Phenol+
-2-Chlorophenol
-1,3-Dichlorobenzene
-1,4-Dichlorobenzene-D4+
-1,2-Dichlorobenzene
-2-Methylphenol+
-Acetophenone+
-3&4-Methylphenol+
-Nitrobenzene
-Isophorone
-2-Nitrophenol
-2,4-Dimethylphenol
-Benzoic acid
-2,4-Dichlorophenol
-1,2,4-Trichlorobenzene
-Naphthalene-D8+
-4-Chloroaniline+
-Caprolactam
-4-Chloro-3-Methylphenol
-2-Methylnaphthalene-D10+
-1-Methylnaphthalene
-Hexachlorocyclopentadiene+
-2,4,6-Trichlorophenol+
-2,4-Dibromophenol+
-1,1'-Biphenyl+
-2-Nitroaniline+
-Dimethyl Phthalate
-2,6-Dinitrotoluene+
-Acenaphthylene
-Acenaphthene-D10+
-2,4-Dinitrophenol
-Dibenzofuran
-4-Nitrophenol
-2,3,4,6-Tetrachlorophenol
-Diethylphthalate
-Fluorene-D10+
-4,6-Dinitro-2-Methylpheno+
-4-Bromophenyl-phenylether
-Hexachlorobenzene
-Atrazine
-Pentachlorophenol
-Phenanthrene-D10+
-Anthracene
-Carbazole
Di-n-butylphthalate
-Fluoranthene-d10+
-Pyrene-D10+
-Butylbenzylphthalate
-3,3'-Dichlorobenzidine+
-bis(2-Ethylhexyl)phthalat
-Di-n-octylphthalate
-Benzo(b)fluoranthene
-Benzo(k)fluoranthene
-Benzo(a)pyrene
-Perylene-D12
-Indeno(1,2,3-cd)pyrene+

Data File: \\target_server\gg\chem\gcms-n.i\N030623.b\N7604.D
Report Date: 10-Mar-2023 13:03

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-n.i\N030623.b\N7604.D
Lab Smp Id: WG333437-3
Inj Date : 06-MAR-2023 14:42
Operator : DT/CO   Inst ID: gcms-n.i
Smp Info : WG333437-3
Misc Info :
Comment   :
Method   : \\target_server\gg\chem\gcms-n.i\N030623.b\NSPSIM19.m
Meth Date : 07-Mar-2023 11:13 coneill   Quant Type: ISTD
Cal Date : 06-MAR-2023 14:42   Cal File: N7604.D
Als bottle: 3   Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: all.sub
Target Version: 4.12
Processing Host: V200T4

Concentration Formula: Amt * DF * Uf*(Vt/Vo*Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.000	Sample Volume (L)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)	REVIEW CODE
$	1 1,4-Dioxane-d8	96	3.020	2.999	(0.420)	19162	0.50000	0.465(a)	
	2 1,4-Dioxane	88	3.072	3.041	(0.427)	20776	0.50000	0.483(a)	
	3 N-Nitrosodimethylamine	74	3.622	3.559	(0.504)	24600	0.50000	0.410	
	4 Pyridine	79	3.780	3.569	(0.526)	36859	0.50000	0.392	
	5 Benzaldehyde	77	6.649	6.618	(0.925)	27054	0.50000	0.477	
	6 Phenol	94	6.847	6.837	(0.952)	250869	2.00000	1.94	
	7 Bis(2-Chloroethyl)ether	93	6.888	6.878	(0.958)	71731	0.50000	0.573	
	8 2-Chlorophenol	128	6.951	6.941	(0.967)	229620	2.00000	1.99	
	9 1,3-Dichlorobenzene	146	7.117	7.118	(0.990)	59367	0.50000	0.481	
*	10 1,4-Dichlorobenzene-D4	152	7.190	7.191	(1.000)	70391	0.80000	(a)	
	11 1,4-Dichlorobenzene	146	7.211	7.211	(1.003)	65474	0.50000	0.498	
	12 1,2-Dichlorobenzene	146	7.409	7.399	(1.030)	62793	0.50000	0.508	
	13 2-Methylphenol	108	7.596	7.596	(1.056)	191381	2.00000	1.89	
	14 2,2'-Oxybis(1-chloropropane)	45	7.575	7.565	(1.054)	29572	0.50000	0.452	
	15 Acetophenone	105	7.742	7.721	(0.875)	66922	0.50000	0.484	
	16 N-Nitroso-di-n-propylamine	70	7.752	7.752	(1.078)	34227	0.50000	0.496	
	17 3&4-Methylphenol	108	7.804	7.804	(1.085)	197962	2.00000	1.94	
	18 Hexachloroethane	117	7.835	7.825	(1.090)	20385	0.50000	0.438	
	19 Nitrobenzene	77	7.950	7.929	(0.899)	56317	0.50000	0.508	
	20 Isophorone	82	8.255	8.255	(0.933)	67349	0.50000	0.414	

Data File: \\target_server\gg\chem\gcms-n.i\N030623.b\N7604.D
Report Date: 10-Mar-2023 13:03

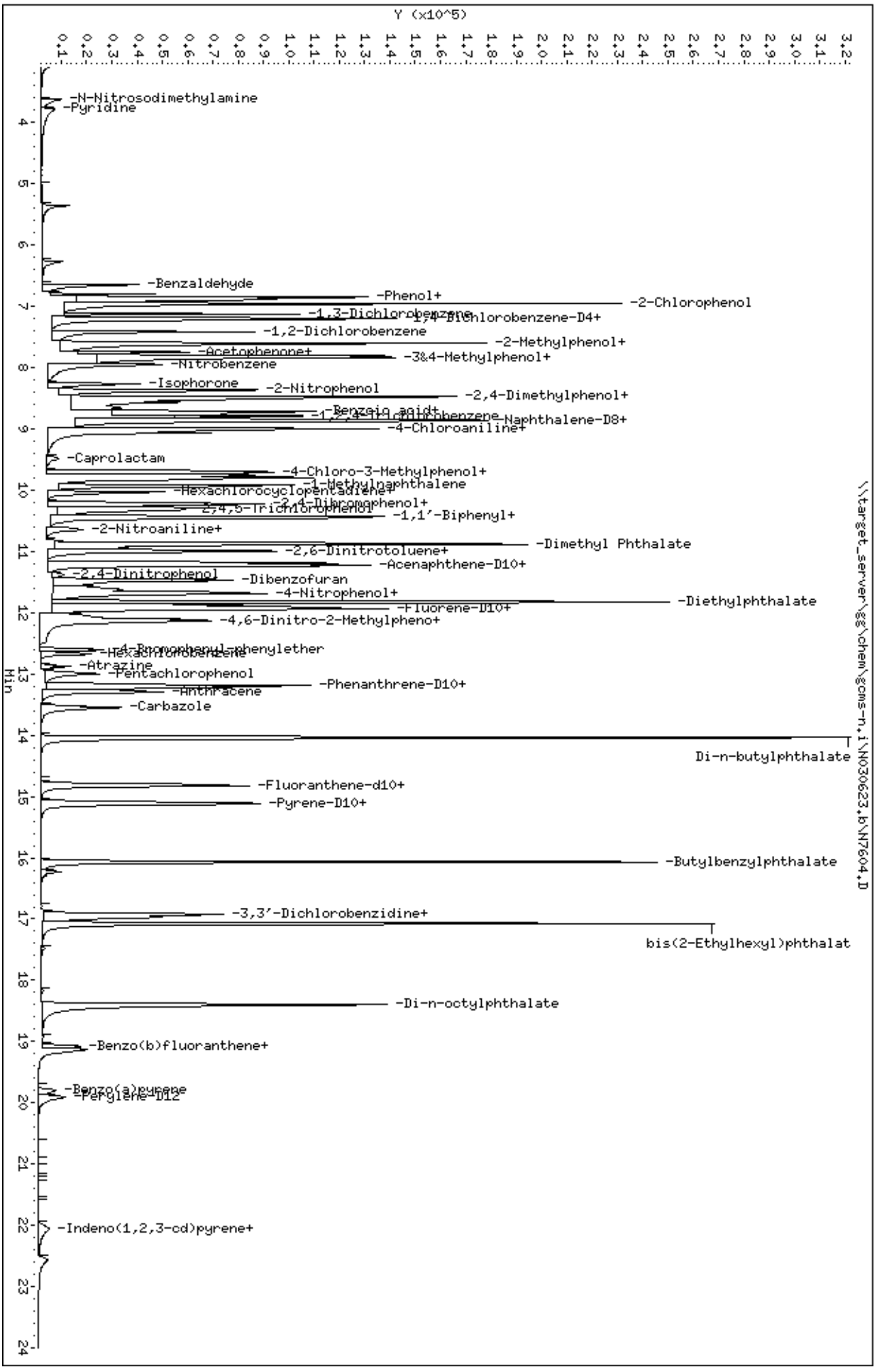
			QUANT SIG					AMOUNTS		
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
	21	2-Nitrophenol	139	8.368	8.356	(0.946)	109836	2.00000	1.88	
	22	2,4-Dimethylphenol	107	8.470	8.471	(0.958)	185032	2.00000	2.09	
	23	bis(2-Chloroethoxy)methane	93	8.572	8.561	(0.969)	56681	0.50000	0.531	
	24	Benzoic acid	105	8.663	8.663	(0.980)	74104	2.00000	2.12	
	25	2,4-Dichlorophenol	162	8.719	8.708	(0.986)	168904	2.00000	2.11	
	26	1,2,4-Trichlorobenzene	180	8.787	8.776	(0.994)	47961	0.50000	0.488	
*	27	Naphthalene-D8	136	8.844	8.844	(1.000)	240311	0.80000	(a)	
	28	Naphthalene	128	8.866	8.867	(1.003)	152770	0.50000	0.497	
	29	4-Chloroaniline	127	8.991	8.980	(1.017)	58524	0.50000	0.517(a)	
	30	Hexachlorobutadiene	225	9.059	9.059	(1.024)	23133	0.50000	0.498	
	31	Caprolactam	113	9.478	9.478	(1.072)	11291	0.50000	0.392	
	32	4-Chloro-3-Methylphenol	107	9.701	9.688	(1.097)	152787	2.00000	1.95	
$	33	2-Methylnaphthalene-D10	152	9.755	9.755	(1.103)	83684	0.50000	0.508(a)	
	34	2-Methylnaphthalene	142	9.796	9.796	(1.108)	120005	0.50000	0.539	
	35	1-Methylnaphthalene	142	9.917	9.931	(1.121)	105454	0.50000	0.518	
	36	Hexachlorocyclopentadiene	237	10.025	10.026	(0.896)	12921	0.50000	0.382	
	37	1,2,4,5-Tetrachlorobenzene	216	10.025	10.039	(0.896)	39162	0.50000	0.494	
$	38	2,4-Dibromophenol	252	10.215	10.202	(0.913)	23546	0.50000	0.488(a)	
	39	2,4,6-Trichlorophenol	196	10.215	10.215	(0.913)	101984	2.00000	1.86	
	40	2,4,5-Trichlorophenol	196	10.282	10.283	(0.919)	134787	2.00000	2.05	
	41	1,1'-Biphenyl	154	10.431	10.431	(0.932)	109335	0.50000	0.487	
	42	2-Chloronaphthalene	164	10.458	10.445	(0.934)	27848	0.50000	0.476	
	43	2-Nitroaniline	65	10.642	10.621	(0.951)	15700	0.50000	0.520	
	44	Dimethyl Phthalate	163	10.884	10.885	(0.972)	398953	2.00000	2.05	
	45	2,6-Dinitrotoluene	165	10.961	10.951	(0.979)	20775	0.50000	0.529	
	46	Acenaphthylene	152	10.994	10.995	(0.982)	136869	0.50000	0.493	
	47	3-Nitroaniline	138	10.653	10.621	(0.952)	23964	0.50000	0.500	
*	48	Acenaphthene-D10	164	11.193	11.182	(1.000)	115447	0.80000	(a)	
	49	Acenaphthene	153	11.215	11.226	(1.002)	91912	0.50000	0.500	
	50	2,4-Dinitrophenol	184	11.391	11.325	(1.018)	17622	2.00000	1.13	
	51	4-Nitrophenol	109	11.600	11.490	(1.036)	17268	2.00000	1.45	
	52	Dibenzofuran	168	11.479	11.468	(1.026)	121231	0.50000	0.575	
	53	2,4-Dinitrotoluene	165	10.961	10.951	(0.979)	20775	0.50000	0.529	
	54	2,3,4,6-Tetrachlorophenol	232	11.688	11.666	(1.044)	85032	2.00000	2.25	
	55	Diethylphthalate	149	11.831	11.831	(1.057)	389911	2.00000	2.09	
$	56	Fluorene-D10	174	11.897	11.886	(1.063)	73098	0.50000	0.600(a)	
	57	Fluorene	166	11.930	11.930	(1.066)	96389	0.50000	0.545	
	58	4-Chlorophenyl-phenylether	204	11.952	11.952	(1.068)	45509	0.50000	0.592	
	59	4-Nitroaniline	138	10.653	10.621	(0.952)	23964	0.50000	0.500	
	60	4,6-Dinitro-2-Methylphenol	198	12.084	12.040	(0.916)	32621	2.00000	1.57	
	61	N-Nitrosodiphenylamine	169	12.128	12.117	(0.920)	77254	0.50000	0.557	
	62	4-Bromophenyl-phenylether	248	12.605	12.595	(0.956)	23879	0.50000	0.555	
	63	Hexachlorobenzene	284	12.687	12.677	(0.962)	24147	0.50000	0.460	
	64	Atrazine	200	12.882	12.872	(0.977)	17730	0.50000	0.476	
	65	Pentachlorophenol	266	12.995	12.964	(0.985)	41083	2.00000	1.78	
*	66	Phenanthrene-D10	188	13.189	13.179	(1.000)	160313	0.80000	(a)	
	67	Phenanthrene	178	13.220	13.210	(1.002)	117342	0.50000	0.524	
	68	Anthracene	178	13.292	13.272	(1.008)	93903	0.50000	0.429	
	69	Carbazole	167	13.548	13.518	(1.027)	86055	0.50000	0.552	
	70	Di-n-butylphthalate	149	14.031	14.032	(1.064)	618592	2.00000	2.06	
$	71	Fluoranthene-d10	212	14.798	14.787	(1.122)	77447	0.50000	0.538	
	72	Fluoranthene	202	14.820	14.809	(1.124)	104482	0.50000	0.527	
$	73	Pyrene-D10	212	15.098	15.087	(0.892)	97596	0.50000	0.486(a)	
	74	Pyrene	202	15.120	15.109	(0.893)	111625	0.50000	0.470	

Data File: \\target_server\gg\chem\gcms-n.i\N030623.b\N7604.D
Report Date: 10-Mar-2023 13:03

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
	75 Butylbenzylphthalate	149	16.075	16.064	(0.949)	229463	2.00000	1.95	
	76 3,3'-Dichlorobenzidine	252	16.942	16.920	(1.001)	14070	0.50000	0.574	
	77 Benzo(a)anthracene	228	16.919	16.898	(0.999)	57722	0.50000	0.473	
*	78 Chrysene-D12	240	16.930	16.908	(1.000)	71433	0.80000	(a)	
	79 Chrysene	228	16.975	16.963	(1.003)	80413	0.50000	0.520	
	80 bis(2-Ethylhexyl)phthalate	149	17.075	17.075	(1.009)	312689	2.00000	1.92	
	81 Di-n-octylphthalate	149	18.397	18.386	(1.087)	402868	2.00000	1.95	
	82 Benzo(b)fluoranthene	252	19.074	19.042	(0.958)	24771	0.50000	0.383	
	83 Benzo(k)fluoranthene	252	19.130	19.097	(0.961)	58689	0.50000	0.726(H)	
	84 Benzo(a)pyrene	252	19.796	19.755	(0.994)	29907	0.50000	0.467	
*	85 Perylene-D12	264	19.912	19.891	(1.000)	39315	0.80000	(a)	
	86 Indeno(1,2,3-cd)pyrene	276	22.014	21.930	(1.106)	17053	0.50000	0.366	
	87 Dibenzo(a,h)anthracene	278	22.077	21.993	(1.109)	13436	0.50000	0.373	
	88 Benzo(g,h,i)perylene	276	22.571	22.487	(1.134)	19710	0.50000	0.418	
M	89 Total PAHs	100				1432452	9.00000	8.77	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
H - Operator selected an alternate compound hit.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Sample Info: WG333437-3
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Instrument: gcms-n,i
Operator: DT/CO
Column diameter: 0.25
\\target_server\gg\chem\gcms-n,i\N030623,b\N7604.D
Y (x10^5)
Min
-N-Nitrosodimethylamine
-Pyridine
-Benzaldehyde
-Phenol+
-2-Chlorophenol
-1,3-Dichlorobenzene
1,4-Dichlorobenzene-D4+
-1,2-Dichlorobenzene
-2-Methylphenol+
-Acetophenone+
-3&4-Methylphenol+
-Nitrobenzene
-Isophorone
-2-Nitrophenol
-2,4-Dimethylphenol+
-Benzoic acid+
-1,2,4-Trichlorobenzene
Naphthalene-D8+
-4-Chloroaniline+
-Caprolactam
-4-Chloro-3-Methylphenol+
-1-Methylnaphthalene
-Hexachlorocyclopentadiene+
-2,4-Dibromophenol+
2,4,5-Trichlorophenol
-1,1'-Biphenyl+
-2-Nitroaniline+
-Dimethyl Phthalate
-2,6-Dinitrotoluene+
-Acenaphthene-D10+
-2,4-Dinitrophenol
-Dibenzofuran
-4-Nitrophenol+
-Fluorene-D10+
-Diethylphthalate
-4,6-Dinitro-2-Methylpheno+
-4-Bromophenyl-phenylether
-Hexachlorobenzene
-Atrazine
-Pentachlorophenol
-Phenanthrene-D10+
-Anthracene
-Carbazole
Di-n-butylphthalate
-Fluoranthene-d10+
-Pyrene-D10+
-Butylbenzylphthalate
-3,3'-Dichlorobenzidine+
bis(2-Ethylhexyl)phthalat
-Di-n-octylphthalate
-Benzo(b)fluoranthene+
-Benzo(a)pyrene
-Perylene-D12
-Indeno(1,2,3-cd)pyrene+

Data File: \\target_server\gg\chem\gcms-n.i\N030623.b\N7605.D
Report Date: 10-Mar-2023 13:03

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-n.i\N030623.b\N7605.D
Lab Smp Id: WG333437-2
Inj Date : 06-MAR-2023 15:16
Operator : DT/CO   Inst ID: gcms-n.i
Smp Info : WG333437-2
Misc Info :
Comment   :
Method   : \\target_server\gg\chem\gcms-n.i\N030623.b\NSPSIM19.m
Meth Date : 07-Mar-2023 11:13 coneill   Quant Type: ISTD
Cal Date : 06-MAR-2023 15:16   Cal File: N7605.D
Als bottle: 4   Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: all.sub
Target Version: 4.12
Processing Host: V200T4

Concentration Formula: Amt * DF * Uf*(Vt/Vo*Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.000	Sample Volume (L)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

DL

9:32 am, Mar 22, 2023

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)	REVIEW CODE
$	1 1,4-Dioxane-d8	96	3.019	2.999	(0.419)	8483	0.20000	0.203(a)	
	2 1,4-Dioxane	88	3.062	3.041	(0.425)	9140	0.20000	0.209(a)	
	3 N-Nitrosodimethylamine	74	3.664	3.559	(0.509)	11518	0.20000	0.190(aM)	M6
	4 Pyridine	79	3.949	3.569	(0.548)	13178	0.20000	0.145(aM)	M6
	5 Benzaldehyde	77	6.670	6.618	(0.926)	12070	0.20000	0.209	
	6 Phenol	94	6.867	6.837	(0.954)	120921	1.00000	0.922(a)	
	7 Bis(2-Chloroethyl)ether	93	6.899	6.878	(0.958)	36807	0.20000	0.289	
	8 2-Chlorophenol	128	6.961	6.941	(0.967)	114153	1.00000	0.972(a)	
	9 1,3-Dichlorobenzene	146	7.128	7.118	(0.990)	24522	0.20000	0.196(a)	
*	10 1,4-Dichlorobenzene-D4	152	7.200	7.191	(1.000)	71524	0.80000	(a)	
	11 1,4-Dichlorobenzene	146	7.221	7.211	(1.003)	28651	0.20000	0.215	
	12 1,2-Dichlorobenzene	146	7.409	7.399	(1.029)	26439	0.20000	0.210	
	13 2-Methylphenol	108	7.606	7.596	(1.056)	90877	1.00000	0.882(a)	
	14 2,2'-Oxybis(1-chloropropane)	45	7.585	7.565	(1.053)	12631	0.20000	0.190(a)	
	15 Acetophenone	105	7.752	7.721	(0.877)	28282	0.20000	0.204	
	16 N-Nitroso-di-n-propylamine	70	7.762	7.752	(1.078)	16413	0.20000	0.234	
	17 3&4-Methylphenol	108	7.825	7.804	(1.087)	94887	1.00000	0.913(a)	
	18 Hexachloroethane	117	7.835	7.825	(1.088)	11583	0.20000	0.245	
	19 Nitrobenzene	77	7.960	7.929	(0.900)	30125	0.20000	0.272	
	20 Isophorone	82	8.266	8.255	(0.935)	25882	0.20000	0.159(a)	

Data File: \\target_server\gg\chem\gcms-n.i\N030623.b\N7605.D
Report Date: 10-Mar-2023 13:03

DL

9:32 am, Mar 22, 2023

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
	21 2-Nitrophenol	139	8.368	8.356	(0.946)	49237	1.00000	0.842(a)	
	22 2,4-Dimethylphenol	107	8.481	8.471	(0.959)	38304	1.00000	0.433	
	23 bis(2-Chloroethoxy)methane	93	8.583	8.561	(0.971)	11448	0.20000	0.107(a)	
	24 Benzoic acid	105	8.764	8.663	(0.991)	20017	1.00000	0.573	
	25 2,4-Dichlorophenol	162	8.742	8.708	(0.988)	31179	1.00000	0.388	
	26 1,2,4-Trichlorobenzene	180	8.787	8.776	(0.994)	21636	0.20000	0.220	
*	27 Naphthalene-D8	136	8.844	8.844	(1.000)	240624	0.80000	(a)	
	28 Naphthalene	128	8.866	8.867	(1.003)	65146	0.20000	0.212	
	29 4-Chloroaniline	127	9.013	8.980	(1.019)	22118	0.20000	0.195(a)	
	30 Hexachlorobutadiene	225	9.059	9.059	(1.024)	11526	0.20000	0.248	
	31 Caprolactam	113	9.525	9.478	(1.077)	3353	0.20000	0.116(a)	
	32 4-Chloro-3-Methylphenol	107	9.728	9.688	(1.100)	68241	1.00000	0.868(a)	
$	33 2-Methylnaphthalene-D10	152	9.755	9.755	(1.103)	37077	0.20000	0.225(a)	
	34 2-Methylnaphthalene	142	9.796	9.796	(1.108)	58162	0.20000	0.261	
	35 1-Methylnaphthalene	142	9.917	9.931	(1.121)	52753	0.20000	0.259	
	36 Hexachlorocyclopentadiene	237	10.025	10.026	(0.896)	5486	0.20000	0.172(a)	
	37 1,2,4,5-Tetrachlorobenzene	216	10.039	10.039	(0.897)	17080	0.20000	0.229	
$	38 2,4-Dibromophenol	252	10.242	10.202	(0.915)	10363	0.20000	0.228(a)	
	39 2,4,6-Trichlorophenol	196	10.255	10.215	(0.916)	39259	1.00000	0.760(a)	
	40 2,4,5-Trichlorophenol	196	10.296	10.283	(0.920)	65811	1.00000	1.06	
	41 1,1'-Biphenyl	154	10.431	10.431	(0.932)	46296	0.20000	0.219	
	42 2-Chloronaphthalene	164	10.444	10.445	(0.933)	11822	0.20000	0.215	
	43 2-Nitroaniline	65	10.642	10.621	(0.951)	1501	0.20000	0.0529(a)	
	44 Dimethyl Phthalate	163	10.895	10.885	(0.973)	182448	1.00000	0.998(a)	
	45 2,6-Dinitrotoluene	165	10.950	10.951	(0.978)	2645	0.20000	0.0717(a)	
	46 Acenaphthylene	152	11.005	10.995	(0.983)	55736	0.20000	0.213	
	47 3-Nitroaniline	138	10.642	10.621	(0.951)	2052	0.20000	0.0456(a)	
*	48 Acenaphthene-D10	164	11.192	11.182	(1.000)	108527	0.80000	(a)	
	49 Acenaphthene	153	11.236	11.226	(1.004)	38978	0.20000	0.226	
	50 2,4-Dinitrophenol	184	11.457	11.325	(1.024)	2765	1.00000	0.225(aM)	M6
	51 4-Nitrophenol	109	11.699	11.490	(1.045)	12353	1.00000	1.10	
	52 Dibenzofuran	168	11.468	11.468	(1.025)	18314	0.20000	0.0924(a)	
	53 2,4-Dinitrotoluene	165	10.950	10.951	(0.978)	2645	0.20000	0.0717(a)	
	54 2,3,4,6-Tetrachlorophenol	232	11.677	11.666	(1.043)	9601	1.00000	0.270(a)	
	55 Diethylphthalate	149	11.842	11.831	(1.058)	173580	1.00000	0.991(a)	
$	56 Fluorene-D10	174	11.886	11.886	(1.062)	12636	0.20000	0.110(a)	
	57 Fluorene	166	11.941	11.930	(1.067)	26980	0.20000	0.162(a)	
	58 4-Chlorophenyl-phenylether	204	11.974	11.952	(1.070)	14697	0.20000	0.183(aH)	
	59 4-Nitroaniline	138	10.642	10.621	(0.951)	2052	0.20000	0.0456(a)	
	60 4,6-Dinitro-2-Methylphenol	198	12.073	12.040	(0.915)	1078	1.00000	0.0777(aH)	
	61 N-Nitrosodiphenylamine	169	12.150	12.117	(0.920)	21769	0.20000	0.210(H)	
	62 4-Bromophenyl-phenylether	248	12.626	12.595	(0.957)	7249	0.20000	0.224(H)	
	63 Hexachlorobenzene	284	12.687	12.677	(0.961)	11549	0.20000	0.329	
	64 Atrazine	200	12.892	12.872	(0.977)	4117	0.20000	0.165(a)	
	65 Pentachlorophenol	266	13.025	12.964	(0.987)	12670	1.00000	0.818(a)	
*	66 Phenanthrene-D10	188	13.199	13.179	(1.000)	107401	0.80000	(a)	
	67 Phenanthrene	178	13.230	13.210	(1.002)	26745	0.20000	0.178(a)	
	68 Anthracene	178	13.312	13.272	(1.009)	45778	0.20000	0.282(M)	M6
	69 Carbazole	167	13.579	13.518	(1.029)	22567	0.20000	0.191(aH)	
	70 Di-n-butylphthalate	149	14.042	14.032	(1.064)	247158	1.00000	1.23	
$	71 Fluoranthene-d10	212	14.809	14.787	(1.122)	22643	0.20000	0.234	
	72 Fluoranthene	202	14.842	14.809	(1.124)	30184	0.20000	0.227	
$	73 Pyrene-D10	212	15.109	15.087	(0.891)	29055	0.20000	0.287(a)	
	74 Pyrene	202	15.131	15.109	(0.893)	32305	0.20000	0.270	

Data File: \\target_server\gg\chem\gcms-n.i\N030623.b\N7605.D
Report Date: 10-Mar-2023 13:03

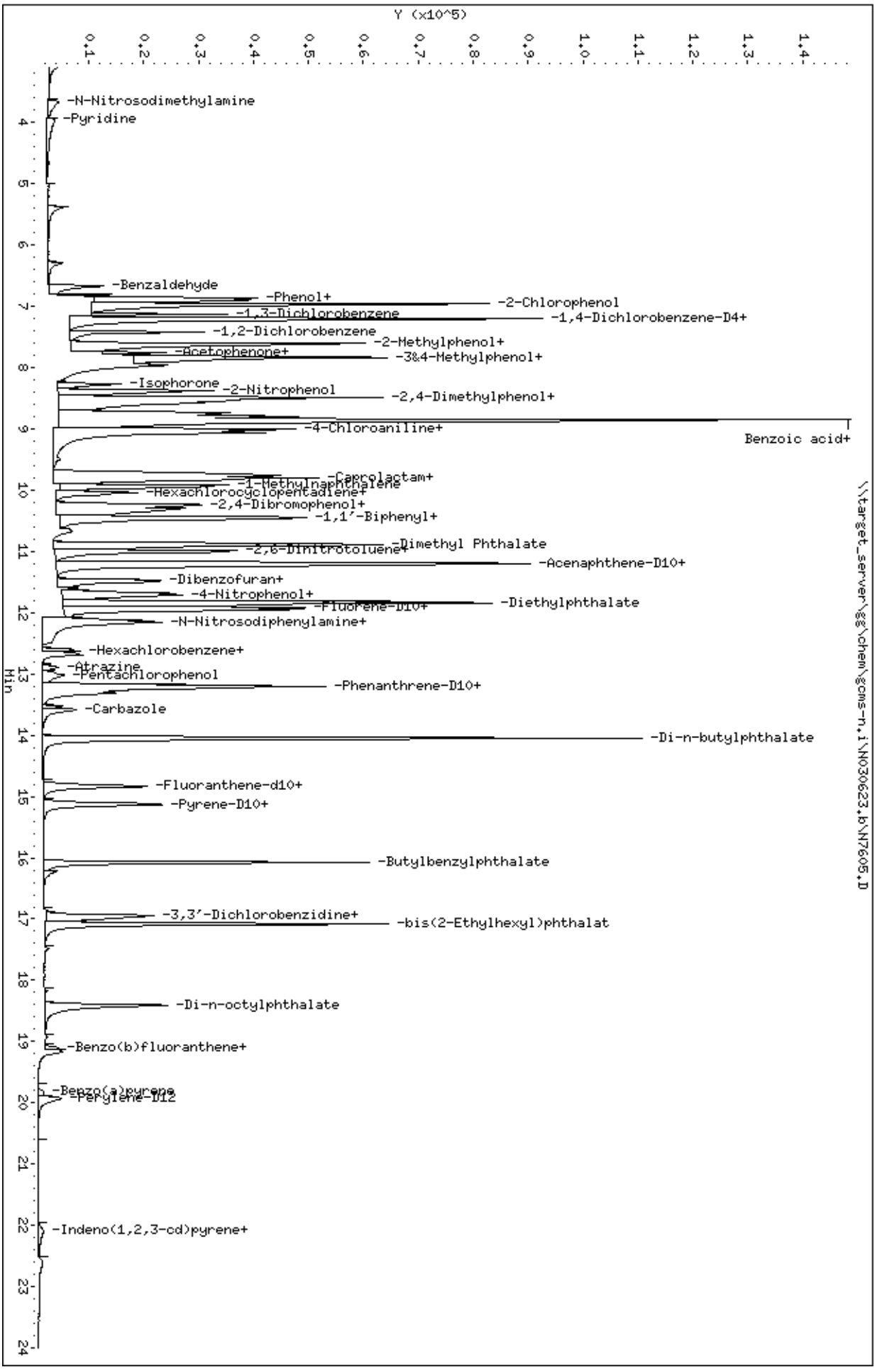
DL

9:32 am, Mar 22, 2023

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
	75 Butylbenzylphthalate	149	16.075	16.064	(0.948)	68166	1.00000	1.15	
	76 3,3'-Dichlorobenzidine	252	16.975	16.920	(1.001)	2411	0.20000	0.195(a)	
	77 Benzo(a)anthracene	228	16.942	16.898	(0.999)	9917	0.20000	0.161(a)	
*	78 Chrysene-D12	240	16.953	16.908	(1.000)	36031	0.80000	(a)	
	79 Chrysene	228	16.986	16.963	(1.002)	22122	0.20000	0.284	
	80 bis(2-Ethylhexyl)phthalate	149	17.086	17.075	(1.008)	96125	1.00000	1.17	
	81 Di-n-octylphthalate	149	18.408	18.386	(1.086)	95895	1.00000	0.919(a)	
	82 Benzo(b)fluoranthene	252	19.108	19.042	(0.959)	4846	0.20000	0.152(a)	
	83 Benzo(k)fluoranthene	252	19.163	19.097	(0.961)	13430	0.20000	0.296(M)	M6
	84 Benzo(a)pyrene	252	19.817	19.755	(0.994)	6603	0.20000	0.210	
*	85 Perylene-D12	264	19.933	19.891	(1.000)	19300	0.80000	(a)	
	86 Indeno(1,2,3-cd)pyrene	276	22.066	21.930	(1.107)	3844	0.20000	0.168(a)	
	87 Dibenzo(a,h)anthracene	278	22.108	21.993	(1.109)	3243	0.20000	0.186(aM)	M6
	88 Benzo(g,h,i)perylene	276	22.602	22.487	(1.134)	5195	0.20000	0.224	
M	89 Total PAHs	100				501967	3.60000	3.97	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.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Date : 06-MAR-2023 15:16
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Sample Info: WG333437-2
Volume Injected (uL): 1.0
Column phase: ZB5-MS
Instrument: gcms-n,i
Operator: DT/CO
Column diameter: 0.25
\\target_server\gg\chem\gcms-n,i\N030623,b\N7605.D
Y (x10^5)
Min
-N-Nitrosodimethylamine
-Pyridine
-Benzaldehyde
-Phenol+
-2-Chlorophenol
-1,3-Dichlorobenzene
-1,4-Dichlorobenzene-D4+
-1,2-Dichlorobenzene
-2-Methylphenol+
-Acetophenone+
-3&4-Methylphenol+
-Isophorone
-2-Nitrophenol
-2,4-Dimethylphenol+
-4-Chloroaniline+
Benzoic acid+
-Caprolactam+
-1-Methylnaphthalene
-Hexachlorocyclopentadiene+
-2,4-Dibromophenol+
-1,1'-Biphenyl+
-Dimethyl Phthalate
-2,6-Dinitrotoluene+
-Acenaphthene-D10+
-Dibenzofuran+
-4-Nitrophenol+
-Fluorene-D10+
-Diethylphthalate
-N-Nitrosodiphenylamine+
-Hexachlorobenzene+
-Atrazine
-Pentachlorophenol
-Phenanthrene-D10+
-Carbazole
-Di-n-butylphthalate
-Fluoranthene-d10+
-Pyrene-D10+
-Butylbenzylphthalate
-3,3'-Dichlorobenzidine+
-bis(2-Ethylhexyl)phthalat
-Di-n-octylphthalate
-Benzo(b)fluoranthene+
-Benzo(a)pyrene
-Perylene-D12
-Indeno(1,2,3-cd)pyrene+

Data File: \\target_server\gg\chem\gcms-n.i\N030623.b\N7606.D
Report Date: 10-Mar-2023 13:03

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-n.i\N030623.b\N7606.D
Lab Smp Id: WG333437-5
Inj Date : 06-MAR-2023 15:49
Operator : DT/CO   Inst ID: gcms-n.i
Smp Info : WG333437-5
Misc Info :
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Meth Date : 07-Mar-2023 11:13 coneill   Quant Type: ISTD
Cal Date : 06-MAR-2023 15:49   Cal File: N7606.D
Als bottle: 5   Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: all.sub
Target Version: 4.12
Processing Host: V200T4

Concentration Formula: Amt * DF * Uf*(Vt/Vo*Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.000	Sample Volume (L)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)	REVIEW CODE
$	1 1,4-Dioxane-d8	96	3.009	2.999	(0.419)	331061	7.00000	7.36	
	2 1,4-Dioxane	88	3.062	3.041	(0.426)	320487	7.00000	6.83	
	3 N-Nitrosodimethylamine	74	3.569	3.559	(0.496)	466445	7.00000	7.18	
	4 Pyridine	79	3.590	3.569	(0.499)	743882	7.00000	7.64	
	5 Benzaldehyde	77	6.628	6.618	(0.922)	431219	7.00000	6.96	
	6 Phenol	94	6.836	6.837	(0.951)	1000885	7.00000	7.10	
	7 Bis(2-Chloroethyl)ether	93	6.868	6.878	(0.955)	798184	7.00000	5.84	
	8 2-Chlorophenol	128	6.940	6.941	(0.965)	892619	7.00000	7.08	
	9 1,3-Dichlorobenzene	146	7.117	7.118	(0.990)	943239	7.00000	7.00	
*	10 1,4-Dichlorobenzene-D4	152	7.190	7.191	(1.000)	76832	0.80000	(a)	
	11 1,4-Dichlorobenzene	146	7.211	7.211	(1.003)	984732	7.00000	6.87	
	12 1,2-Dichlorobenzene	146	7.398	7.399	(1.029)	934185	7.00000	6.92	
	13 2-Methylphenol	108	7.585	7.596	(1.055)	823048	7.00000	7.44	
	14 2,2'-Oxybis(1-chloropropane)	45	7.565	7.565	(1.052)	513083	7.00000	7.19	
	15 Acetophenone	105	7.721	7.721	(0.874)	1066610	7.00000	6.89	
	16 N-Nitroso-di-n-propylamine	70	7.742	7.752	(1.077)	490947	7.00000	6.52	
	17 3&4-Methylphenol	108	7.804	7.804	(1.085)	818453	7.00000	7.33	
	18 Hexachloroethane	117	7.825	7.825	(1.088)	347482	7.00000	6.84	
	19 Nitrobenzene	77	7.929	7.929	(0.898)	762126	7.00000	6.14	
	20 Isophorone	82	8.255	8.255	(0.935)	1406691	7.00000	7.73	

Data File: \\target_server\gg\chem\gcms-n.i\N030623.b\N7606.D
Report Date: 10-Mar-2023 13:03

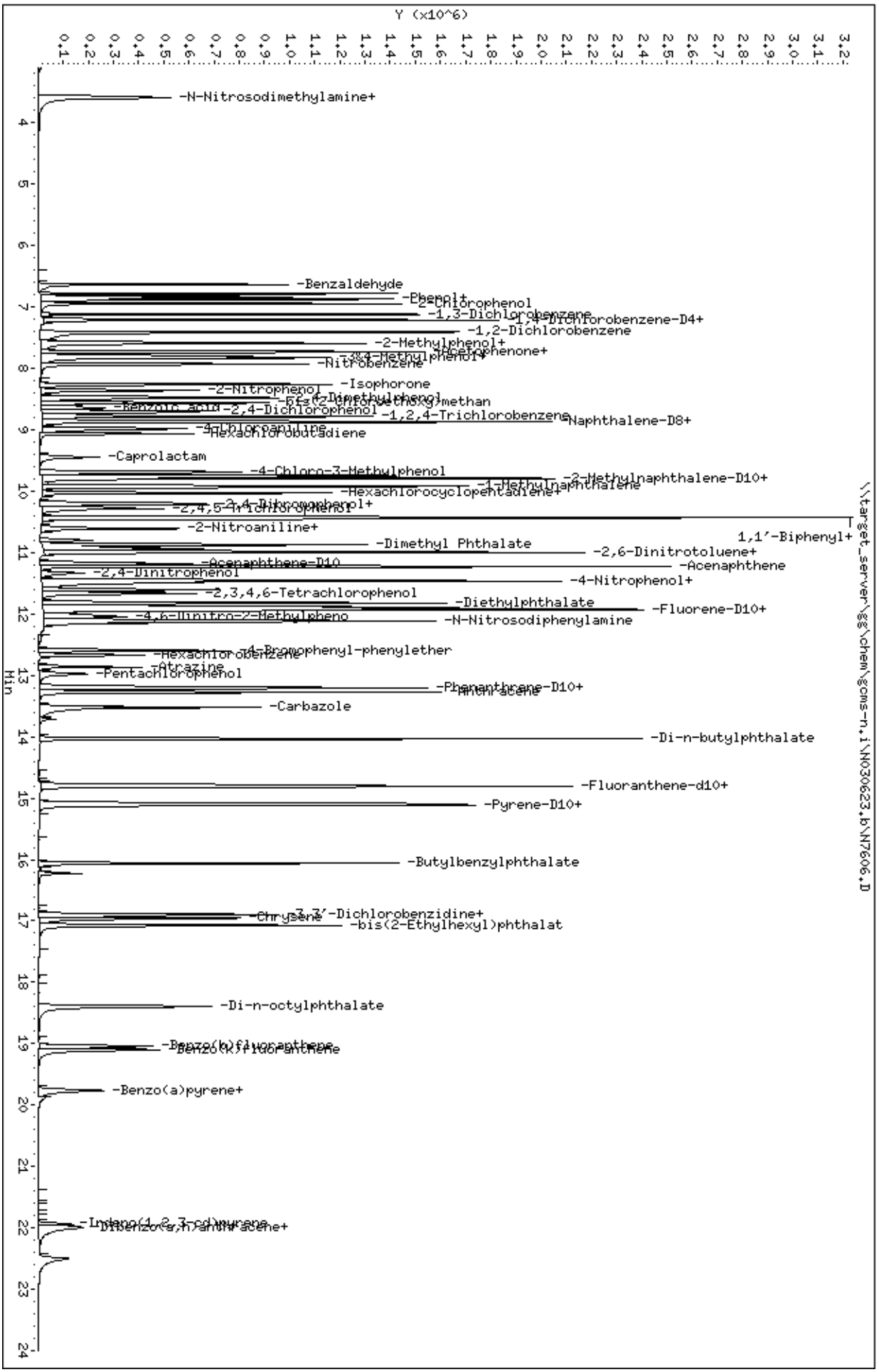
			QUANT SIG					AMOUNTS		
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
	21	2-Nitrophenol	139	8.357	8.356	(0.946)	471755	7.00000	7.21	
	22	2,4-Dimethylphenol	107	8.481	8.471	(0.960)	781093	7.00000	7.90	
	23	bis(2-Chloroethoxy)methane	93	8.561	8.561	(0.969)	897957	7.00000	7.52	
	24	Benzoic acid	105	8.651	8.663	(0.979)	442241	7.00000	11.3	
	25	2,4-Dichlorophenol	162	8.697	8.708	(0.985)	716830	7.00000	7.98	
	26	1,2,4-Trichlorobenzene	180	8.776	8.776	(0.994)	733949	7.00000	6.67	
*	27	Naphthalene-D8	136	8.832	8.844	(1.000)	269103	0.80000	(a)	
	28	Naphthalene	128	8.866	8.867	(1.004)	2324864	7.00000	6.75	
	29	4-Chloroaniline	127	8.968	8.980	(1.015)	889725	7.00000	7.02	
	30	Hexachlorobutadiene	225	9.059	9.059	(1.026)	332799	7.00000	6.40	
	31	Caprolactam	113	9.444	9.478	(1.069)	267848	7.00000	8.30	
	32	4-Chloro-3-Methylphenol	107	9.687	9.688	(1.097)	642204	7.00000	7.31	
$	33	2-Methylnaphthalene-D10	152	9.755	9.755	(1.104)	1274956	7.00000	6.92	
	34	2-Methylnaphthalene	142	9.796	9.796	(1.109)	1616180	7.00000	6.48	
	35	1-Methylnaphthalene	142	9.917	9.931	(1.123)	1428840	7.00000	6.27	
	36	Hexachlorocyclopentadiene	237	10.025	10.026	(0.897)	316029	7.00000	7.68	
	37	1,2,4,5-Tetrachlorobenzene	216	10.039	10.039	(0.898)	603624	7.00000	6.26	
$	38	2,4-Dibromophenol	252	10.201	10.202	(0.912)	377080	7.00000	6.42	
	39	2,4,6-Trichlorophenol	196	10.215	10.215	(0.914)	452944	7.00000	7.02(H)	
	40	2,4,5-Trichlorophenol	196	10.282	10.283	(0.920)	535344	7.00000	6.68	
	41	1,1'-Biphenyl	154	10.431	10.431	(0.933)	1822031	7.00000	6.67	
	42	2-Chloronaphthalene	164	10.445	10.445	(0.934)	488620	7.00000	6.87	
	43	2-Nitroaniline	65	10.607	10.621	(0.949)	306518	7.00000	8.34	
	44	Dimethyl Phthalate	163	10.873	10.885	(0.972)	1624566	7.00000	6.86	
	45	2,6-Dinitrotoluene	165	10.939	10.951	(0.978)	387898	7.00000	8.12	
	46	Acenaphthylene	152	10.994	10.995	(0.983)	2263172	7.00000	6.69	
	47	3-Nitroaniline	138	10.620	10.621	(0.950)	496687	7.00000	8.52	
*	48	Acenaphthene-D10	164	11.182	11.182	(1.000)	140500	0.80000	(a)	
	49	Acenaphthene	153	11.226	11.226	(1.004)	1428349	7.00000	6.39	
	50	2,4-Dinitrophenol	184	11.325	11.325	(1.013)	163266	7.00000	10.3	
	51	4-Nitrophenol	109	11.512	11.490	(1.030)	114386	7.00000	7.90	
	52	Dibenzofuran	168	11.468	11.468	(1.026)	1980756	7.00000	7.72	
	53	2,4-Dinitrotoluene	165	10.939	10.951	(0.978)	387898	7.00000	8.12	
	54	2,3,4,6-Tetrachlorophenol	232	11.666	11.666	(1.043)	399018	7.00000	8.68	
	55	Diethylphthalate	149	11.820	11.831	(1.057)	1562458	7.00000	6.89	
$	56	Fluorene-D10	174	11.886	11.886	(1.063)	1105906	7.00000	7.46	
	57	Fluorene	166	11.919	11.930	(1.066)	1540346	7.00000	7.16	
	58	4-Chlorophenyl-phenylether	204	11.941	11.952	(1.068)	709074	7.00000	6.82	
	59	4-Nitroaniline	138	10.620	10.621	(0.950)	496687	7.00000	8.52	
	60	4,6-Dinitro-2-Methylphenol	198	12.040	12.040	(0.914)	237472	7.00000	9.03	
	61	N-Nitrosodiphenylamine	169	12.117	12.117	(0.919)	1280655	7.00000	6.52	
	62	4-Bromophenyl-phenylether	248	12.595	12.595	(0.956)	390554	7.00000	6.38	
	63	Hexachlorobenzene	284	12.677	12.677	(0.962)	382414	7.00000	5.75	
	64	Atrazine	200	12.861	12.872	(0.976)	341387	7.00000	7.23	
	65	Pentachlorophenol	266	12.974	12.964	(0.984)	212619	7.00000	7.25	
*	66	Phenanthrene-D10	188	13.179	13.179	(1.000)	203473	0.80000	(a)	
	67	Phenanthrene	178	13.210	13.210	(1.002)	1981276	7.00000	6.96	
	68	Anthracene	178	13.271	13.272	(1.007)	2106837	7.00000	6.78(H)	
	69	Carbazole	167	13.527	13.518	(1.026)	1685352	7.00000	7.52	
	70	Di-n-butylphthalate	149	14.031	14.032	(1.065)	2568639	7.00000	6.74	
$	71	Fluoranthene-d10	212	14.787	14.787	(1.122)	1252609	7.00000	6.85	
	72	Fluoranthene	202	14.809	14.809	(1.124)	1762249	7.00000	7.01	
$	73	Pyrene-D10	212	15.086	15.087	(0.892)	1487808	7.00000	6.04	
	74	Pyrene	202	15.109	15.109	(0.894)	1820316	7.00000	6.24	

Data File: \\target_server\gg\chem\gcms-n.i\N030623.b\N7606.D
Report Date: 10-Mar-2023 13:03

		QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
Compounds									
	75 Butylbenzylphthalate	149	16.064	16.064	(0.950)	926927	7.00000	6.42	
	76 3,3'-Dichlorobenzidine	252	16.919	16.920	(1.001)	189358	7.00000	6.29	
	77 Benzo(a)anthracene	228	16.897	16.898	(0.999)	1058995	7.00000	7.16(H)	
*	78 Chrysene-D12	240	16.908	16.908	(1.000)	87673	0.80000	(a)	
	79 Chrysene	228	16.964	16.963	(1.003)	1140107	7.00000	6.01	
	80 bis(2-Ethylhexyl)phthalate	149	17.075	17.075	(1.010)	1244307	7.00000	6.23	
	81 Di-n-octylphthalate	149	18.397	18.386	(1.088)	1619901	7.00000	6.38	
	82 Benzo(b)fluoranthene	252	19.041	19.042	(0.957)	679925	7.00000	8.10	
	83 Benzo(k)fluoranthene	252	19.097	19.097	(0.960)	840628	7.00000	6.66(H)	
	84 Benzo(a)pyrene	252	19.765	19.755	(0.994)	574908	7.00000	6.92	
*	85 Perylene-D12	264	19.891	19.891	(1.000)	50997	0.80000	(a)	
	86 Indeno(1,2,3-cd)pyrene	276	21.940	21.930	(1.103)	467558	7.00000	7.74	
	87 Dibenzo(a,h)anthracene	278	22.003	21.993	(1.106)	348108	7.00000	7.56	
	88 Benzo(g,h,i)perylene	276	22.508	22.487	(1.132)	430813	7.00000	7.05	
M	89 Total PAHs	100				23813471	126.000	124	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
H - Operator selected an alternate compound hit.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Client ID:
Sample Info: WG333437-5
Volume Injected (uL): 1.0
Column phase: ZB5-MS
Instrument: gcms-n,i
Operator: DT/CO
Column diameter: 0.25
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Y (x10^6)
Min
-N-Nitrosodimethylamine+
-Benzaldehyde
-Phenol+
-2-Chlorophenol
-1,3-Dichlorobenzene
-1,4-Dichlorobenzene-D4+
-1,2-Dichlorobenzene
-2-Methylphenol+
-Nitrobenzene
-Isophorone
-2-Nitrophenol
-2,4-Dimethylphenol
-Benzoic acid
-2,4-Dichlorophenol
-1,2,4-Trichlorobenzene
-Naphthalene-D8+
-Hexachlorobutadiene
-Caprolactam
-4-Chloro-3-Methylphenol
-2-Methylnaphthalene-D10+
-Hexachlorocyclopentadiene+
-2,4,5-Trichlorophenol
-2-Nitroaniline+
1,1'-Biphenyl+
-Dimethyl Phthalate
-2,6-Dinitrotoluene+
-Acenaphthene-D10
-Acenaphthene
-2,4-Dinitrophenol
-4-Nitrophenol+
-2,3,4,6-Tetrachlorophenol
-Diethylphthalate
-Fluorene-D10+
-N-Nitrosodiphenylamine
-Hexachlorobenzene
-Atrazine
-Pentachlorophenol
-Phenanthrene-D10+
-Carbazole
-Di-n-butylphthalate
-Fluoranthene-d10+
-Pyrene-D10+
-Butylbenzylphthalate
-3,3'-Dichlorobenzidine+
-Chrysene
-bis(2-Ethylhexyl)phthalat
-Di-n-octylphthalate
-Benzo(b)fluoranthene
-Benzo(a)pyrene+
-Indeno(1,2,3-cd)pyrene
-Dibenzo(a,h)anthracene+

Data File: \\target_server\gg\chem\gcms-n.i\N030623.b\N7607.D
Report Date: 10-Mar-2023 13:03

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-n.i\N030623.b\N7607.D
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Inj Date : 06-MAR-2023 16:22
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Smp Info : WG333437-6
Misc Info :
Comment   :
Method   : \\target_server\gg\chem\gcms-n.i\N030623.b\NSPSIM19.m
Meth Date : 07-Mar-2023 11:13 coneill   Quant Type: ISTD
Cal Date : 06-MAR-2023 16:22   Cal File: N7607.D
Als bottle: 6   Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: all.sub
Target Version: 4.12
Processing Host: V200T4

Concentration Formula: Amt * DF * Uf*(Vt/Vo*Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.000	Sample Volume (L)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
$ 1	1,4-Dioxane-d8	96	3.009	2.999	(0.419)	447660	10.0000	9.81	
2	1,4-Dioxane	88	3.051	3.041	(0.424)	498108	10.0000	10.4	
3	N-Nitrosodimethylamine	74	3.558	3.559	(0.495)	726063	10.0000	11.0	
4	Pyridine	79	3.579	3.569	(0.498)	1057195	10.0000	10.7	
5	Benzaldehyde	77	6.618	6.618	(0.920)	587826	10.0000	9.35	
6	Phenol	94	6.836	6.837	(0.951)	1529202	10.0000	10.7	
7	Bis(2-Chloroethyl)ether	93	6.878	6.878	(0.957)	1208889	10.0000	8.72	
8	2-Chlorophenol	128	6.940	6.941	(0.965)	1337528	10.0000	10.4	
9	1,3-Dichlorobenzene	146	7.117	7.118	(0.990)	1410113	10.0000	10.3	
* 10	1,4-Dichlorobenzene-D4	152	7.190	7.191	(1.000)	77958	0.80000	(a)	
11	1,4-Dichlorobenzene	146	7.211	7.211	(1.003)	1464237	10.0000	10.1	
12	1,2-Dichlorobenzene	146	7.398	7.399	(1.029)	1381504	10.0000	10.1	
13	2-Methylphenol	108	7.596	7.596	(1.056)	1222576	10.0000	10.9	
14	2,2'-Oxybis(1-chloropropane)	45	7.565	7.565	(1.052)	771612	10.0000	10.7	
15	Acetophenone	105	7.721	7.721	(0.874)	1549761	10.0000	9.70	
16	N-Nitroso-di-n-propylamine	70	7.742	7.752	(1.077)	737554	10.0000	9.66	
17	3&4-Methylphenol	108	7.804	7.804	(1.085)	1228751	10.0000	10.8	
18	Hexachloroethane	117	7.825	7.825	(1.088)	519146	10.0000	10.1	
19	Nitrobenzene	77	7.929	7.929	(0.898)	1134546	10.0000	8.86	
20	Isophorone	82	8.255	8.255	(0.935)	2086556	10.0000	11.1	

Data File: \\target_server\gg\chem\gcms-n.i\N030623.b\N7607.D
Report Date: 10-Mar-2023 13:03

			QUANT SIG					AMOUNTS		
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
	21	2-Nitrophenol	139	8.357	8.356	(0.946)	723353	10.0000	10.7	
	22	2,4-Dimethylphenol	107	8.482	8.471	(0.960)	1164193	10.0000	11.4	
	23	bis(2-Chloroethoxy)methane	93	8.561	8.561	(0.969)	1336683	10.0000	10.8	
	24	Benzoic acid	105	8.674	8.663	(0.982)	546737	10.0000	11.9(H)	
	25	2,4-Dichlorophenol	162	8.697	8.708	(0.985)	1067326	10.0000	11.5	
	26	1,2,4-Trichlorobenzene	180	8.776	8.776	(0.994)	1094099	10.0000	9.63	
*	27	Naphthalene-D8	136	8.832	8.844	(1.000)	277826	0.80000	(a)	
	28	Naphthalene	128	8.866	8.867	(1.004)	3447383	10.0000	9.70	
	29	4-Chloroaniline	127	8.980	8.980	(1.017)	1265555	10.0000	9.68	
	30	Hexachlorobutadiene	225	9.059	9.059	(1.026)	503343	10.0000	9.38	
	31	Caprolactam	113	9.455	9.478	(1.070)	389640	10.0000	11.7	
	32	4-Chloro-3-Methylphenol	107	9.688	9.688	(1.097)	947084	10.0000	10.4	
$	33	2-Methylnaphthalene-D10	152	9.755	9.755	(1.104)	1814925	10.0000	9.54	
	34	2-Methylnaphthalene	142	9.796	9.796	(1.109)	2265946	10.0000	8.81	
	35	1-Methylnaphthalene	142	9.917	9.931	(1.123)	2100181	10.0000	8.93	
	36	Hexachlorocyclopentadiene	237	10.026	10.026	(0.896)	494099	10.0000	12.4	
	37	1,2,4,5-Tetrachlorobenzene	216	10.039	10.039	(0.897)	877151	10.0000	9.40	
$	38	2,4-Dibromophenol	252	10.201	10.202	(0.912)	551511	10.0000	9.70	
	39	2,4,6-Trichlorophenol	196	10.215	10.215	(0.913)	664323	10.0000	11.0(H)	
	40	2,4,5-Trichlorophenol	196	10.282	10.283	(0.919)	775459	10.0000	10.0	
	41	1,1'-Biphenyl	154	10.431	10.431	(0.932)	2586432	10.0000	9.78	
	42	2-Chloronaphthalene	164	10.445	10.445	(0.933)	695083	10.0000	10.1	
	43	2-Nitroaniline	65	10.618	10.621	(0.949)	465065	10.0000	13.1	
	44	Dimethyl Phthalate	163	10.882	10.885	(0.972)	2329675	10.0000	10.2	
	45	2,6-Dinitrotoluene	165	10.948	10.951	(0.978)	559419	10.0000	12.1	
	46	Acenaphthylene	152	10.992	10.995	(0.982)	3170103	10.0000	9.69	
	47	3-Nitroaniline	138	10.618	10.621	(0.949)	764301	10.0000	13.5	
*	48	Acenaphthene-D10	164	11.190	11.182	(1.000)	135971	0.80000	(a)	
	49	Acenaphthene	153	11.223	11.226	(1.003)	2047437	10.0000	9.46	
	50	2,4-Dinitrophenol	184	11.322	11.325	(1.012)	260924	10.0000	16.9(A)	
	51	4-Nitrophenol	109	11.498	11.490	(1.028)	161257	10.0000	11.5	
	52	Dibenzofuran	168	11.465	11.468	(1.025)	2769260	10.0000	11.2	
	53	2,4-Dinitrotoluene	165	10.948	10.951	(0.978)	559419	10.0000	12.1	
	54	2,3,4,6-Tetrachlorophenol	232	11.674	11.666	(1.043)	568464	10.0000	12.8	
	55	Diethylphthalate	149	11.828	11.831	(1.057)	2181861	10.0000	9.95	
$	56	Fluorene-D10	174	11.883	11.886	(1.062)	1524569	10.0000	10.6(A)	
	57	Fluorene	166	11.927	11.930	(1.066)	2107476	10.0000	10.1	
	58	4-Chlorophenyl-phenylether	204	11.949	11.952	(1.068)	988946	10.0000	9.84	
	59	4-Nitroaniline	138	10.618	10.621	(0.949)	764301	10.0000	13.5	
	60	4,6-Dinitro-2-Methylphenol	198	12.048	12.040	(0.914)	330055	10.0000	13.8	
	61	N-Nitrosodiphenylamine	169	12.114	12.117	(0.919)	1758650	10.0000	9.83	
	62	4-Bromophenyl-phenylether	248	12.593	12.595	(0.956)	537062	10.0000	9.62	
	63	Hexachlorobenzene	284	12.675	12.677	(0.962)	510829	10.0000	8.43	
	64	Atrazine	200	12.869	12.872	(0.977)	444451	10.0000	10.3	
	65	Pentachlorophenol	266	12.972	12.964	(0.984)	294199	10.0000	11.0	
*	66	Phenanthrene-D10	188	13.177	13.179	(1.000)	185354	0.80000	(a)	
	67	Phenanthrene	178	13.207	13.210	(1.002)	2656150	10.0000	10.2	
	68	Anthracene	178	13.279	13.272	(1.008)	2730029	10.0000	9.60(H)	
	69	Carbazole	167	13.525	13.518	(1.026)	2123707	10.0000	10.4	
	70	Di-n-butylphthalate	149	14.029	14.032	(1.065)	3077704	10.0000	8.87	
$	71	Fluoranthene-d10	212	14.784	14.787	(1.122)	1490240	10.0000	8.94	
	72	Fluoranthene	202	14.806	14.809	(1.124)	2075897	10.0000	9.06	
$	73	Pyrene-D10	212	15.084	15.087	(0.892)	1752895	10.0000	9.00	
	74	Pyrene	202	15.106	15.109	(0.893)	2147843	10.0000	9.32	

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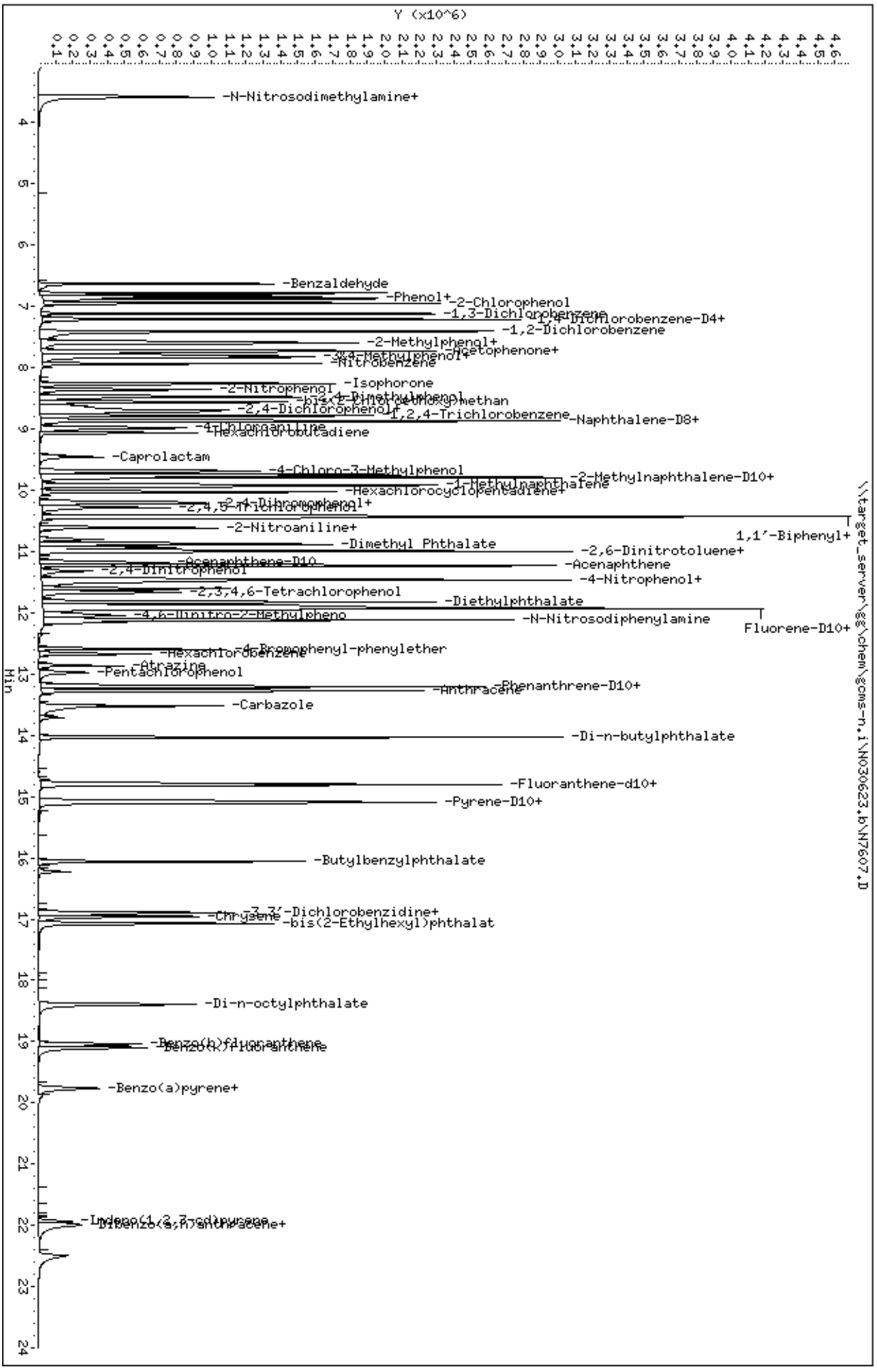
Report Date: 10-Mar-2023 13:03

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
	75 Butylbenzylphthalate	149	16.062	16.064	(0.949)	1066522	10.0000	9.34	
	76 3,3'-Dichlorobenzidine	252	16.917	16.920	(1.000)	192554	10.0000	8.09	
	77 Benzo(a)anthracene	228	16.895	16.898	(0.999)	1243947	10.0000	10.7(H)	
*	78 Chrysene-D12	240	16.917	16.908	(1.000)	69305	0.80000	(a)	
	79 Chrysene	228	16.961	16.963	(1.003)	1304426	10.0000	8.70	
	80 bis(2-Ethylhexyl)phthalate	149	17.072	17.075	(1.009)	1435968	10.0000	9.10	
	81 Di-n-octylphthalate	149	18.394	18.386	(1.087)	2023206	10.0000	10.1	
	82 Benzo(b)fluoranthene	252	19.039	19.042	(0.957)	865075	10.0000	11.8	
	83 Benzo(k)fluoranthene	252	19.094	19.097	(0.960)	1029668	10.0000	8.96(H)	
	84 Benzo(a)pyrene	252	19.762	19.755	(0.994)	734226	10.0000	10.1	
*	85 Perylene-D12	264	19.888	19.891	(1.000)	44411	0.80000	(a)	
	86 Indeno(1,2,3-cd)pyrene	276	21.938	21.930	(1.103)	626852	10.0000	11.9	
	87 Dibenzo(a,h)anthracene	278	22.001	21.993	(1.106)	471342	10.0000	11.7	
	88 Benzo(g,h,i)perylene	276	22.495	22.487	(1.131)	562625	10.0000	10.6	
M	89 Total PAHs	100				31586606	180.000	180	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
A - Target compound detected but, quantitated amount
exceeded maximum amount.
H - Operator selected an alternate compound hit.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Column diameter: 0.25
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Y (x10^6)
Min
-N-Nitrosodimethylamine+
-Benzaldehyde
-Phenol+
-2-Chlorophenol
-1,3-Dichlorobenzene
-1,4-Dichlorobenzene-D4+
-1,2-Dichlorobenzene
-2-Methylphenol+
-Acetophenone+
-3&4-Methylphenol+
-Nitrobenzene
-Isophorone
-2-Nitrophenol
-2,4-Dimethylphenol
-bis(2-Chloroethoxy)methan
-2,4-Dichlorophenol
-1,2,4-Trichlorobenzene
-Naphthalene-D8+
-4-Chloroaniline
-Hexachlorobutadiene
-Caprolactam
-4-Chloro-3-Methylphenol
-2-Methylnaphthalene-D10+
-1-Methylnaphthalene
-Hexachlorocyclopentadiene+
-2,4-Dibromophenol+
-2,4,5-Trichlorophenol
-2-Nitroaniline+
1,1'-Biphenyl+
-Dimethyl Phthalate
-2,6-Dinitrotoluene+
-Acenaphthene-D10
-Acenaphthene
-2,4-Dinitrophenol
-4-Nitrophenol+
-2,3,4,6-Tetrachlorophenol
-Diethylphthalate
-4,6-Dinitro-2-Methylpheno
-N-Nitrosodiphenylamine
Fluorene-D10+
-4-Bromophenyl-phenylether
-Hexachlorobenzene
-Atrazine
-Pentachlorophenol
-Phenanthrene-D10+
-Anthracene
-Carbazole
-Di-n-butylphthalate
-Fluoranthene-d10+
-Pyrene-D10+
-Butylbenzylphthalate
-3,3'-Dichlorobenzidine+
-Chrysene
-bis(2-Ethylhexyl)phthalat
-Di-n-octylphthalate
-Benzo(b)fluoranthene
Benzo(k)fluoranthene
-Benzo(a)pyrene+
-Indeno(1,2,3-cd)pyrene
Dibenzo(a,h)anthracene+

Data File: \\target_server\gg\chem\gcms-n.i\N030623.b\N7608.D
Report Date: 10-Mar-2023 13:03

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-n.i\N030623.b\N7608.D
Lab Smp Id: WG333437-7
Inj Date : 06-MAR-2023 16:55
Operator : DT/CO   Inst ID: gcms-n.i
Smp Info : WG333437-7
Misc Info :
Comment   :
Method   : \\target_server\gg\chem\gcms-n.i\N030623.b\NSPSIM19.m
Meth Date : 07-Mar-2023 11:13 coneill   Quant Type: ISTD
Cal Date : 06-MAR-2023 16:55   Cal File: N7608.D
Als bottle: 7   Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: all.sub
Target Version: 4.12
Processing Host: V200T4

Concentration Formula: Amt * DF * Uf*(Vt/Vo*Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.000	Sample Volume (L)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)	REVIEW CODE
$	1 1,4-Dioxane-d8	96	2.998	2.999	(0.417)	638124	15.0000	14.8	
	2 1,4-Dioxane	88	3.041	3.041	(0.423)	662351	15.0000	14.8	
	3 N-Nitrosodimethylamine	74	3.558	3.559	(0.495)	993898	15.0000	16.0(A)	
	4 Pyridine	79	3.569	3.569	(0.496)	1660812	15.0000	17.8(A)	
	5 Benzaldehyde	77	6.618	6.618	(0.920)	741833	15.0000	12.5	
	6 Phenol	94	6.836	6.837	(0.951)	2152013	15.0000	16.0(A)	
	7 Bis(2-Chloroethyl)ether	93	6.878	6.878	(0.957)	1681032	15.0000	12.9	
	8 2-Chlorophenol	128	6.940	6.941	(0.965)	1828915	15.0000	15.2(A)	
	9 1,3-Dichlorobenzene	146	7.117	7.118	(0.990)	1930719	15.0000	15.0	
*	10 1,4-Dichlorobenzene-D4	152	7.190	7.191	(1.000)	73432	0.80000	(a)	
	11 1,4-Dichlorobenzene	146	7.211	7.211	(1.003)	1950790	15.0000	14.2	
	12 1,2-Dichlorobenzene	146	7.398	7.399	(1.029)	1810631	15.0000	14.0	
	13 2-Methylphenol	108	7.596	7.596	(1.056)	1705794	15.0000	16.1(A)	
	14 2,2'-Oxybis(1-chloropropane)	45	7.565	7.565	(1.052)	1072604	15.0000	15.7(A)	
	15 Acetophenone	105	7.721	7.721	(0.873)	2178908	15.0000	14.8	
	16 N-Nitroso-di-n-propylamine	70	7.752	7.752	(1.078)	1027190	15.0000	14.3	
	17 3&4-Methylphenol	108	7.804	7.804	(1.085)	1701302	15.0000	15.9(A)	
	18 Hexachloroethane	117	7.825	7.825	(1.088)	710906	15.0000	14.6	
	19 Nitrobenzene	77	7.929	7.929	(0.897)	1568049	15.0000	13.3	
	20 Isophorone	82	8.255	8.255	(0.933)	2887226	15.0000	16.7(A)	

Data File: \\target_server\gg\chem\gcms-n.i\N030623.b\N7608.D
Report Date: 10-Mar-2023 13:03

DL

9:33 am, Mar 22, 2023

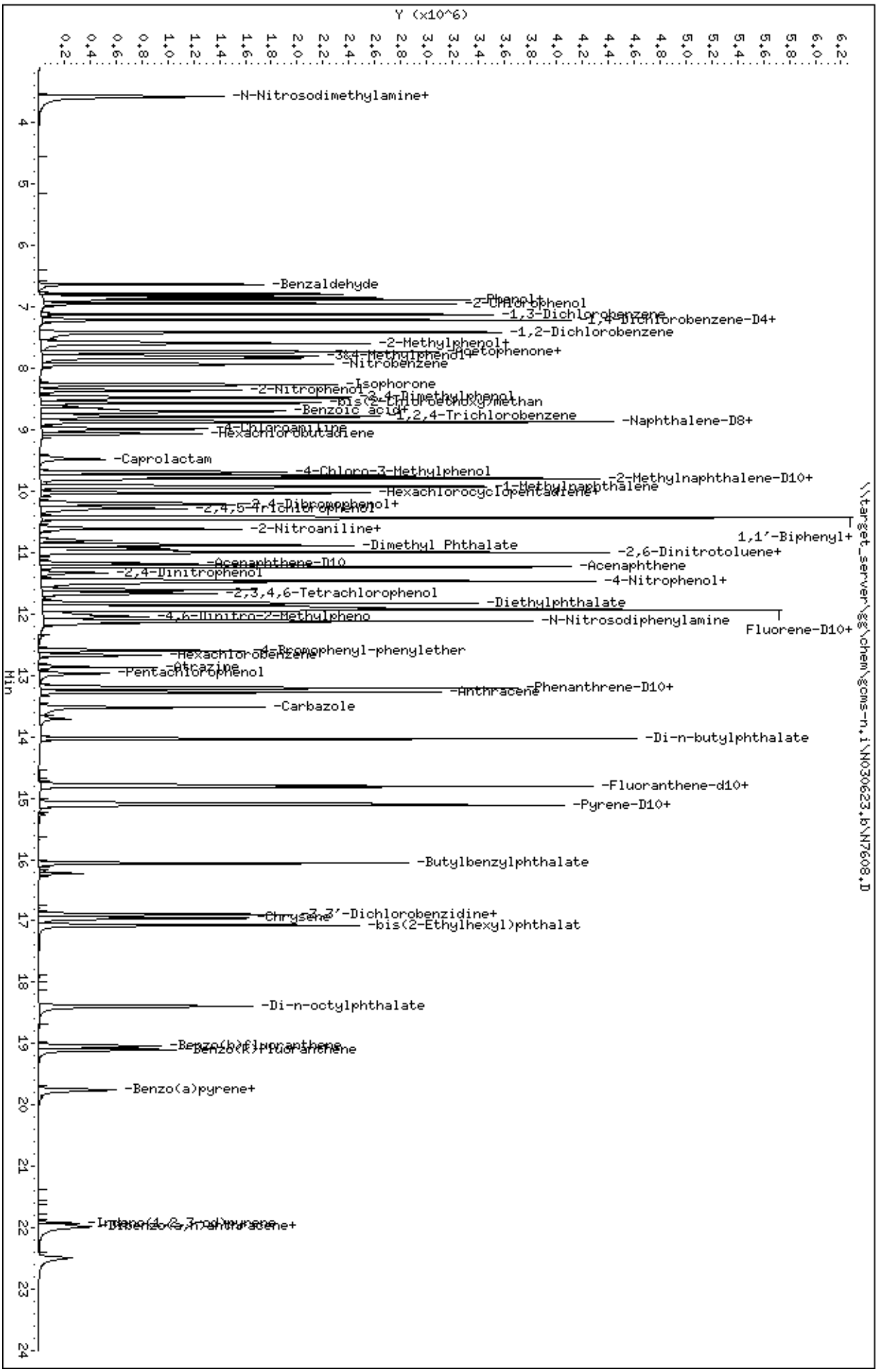
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
	21 2-Nitrophenol	139	8.357	8.356	(0.945)	1025895	15.0000	16.5(A)	
	22 2,4-Dimethylphenol	107	8.470	8.471	(0.958)	1631041	15.0000	17.4(A)	
	23 bis(2-Chloroethoxy)methane	93	8.561	8.561	(0.968)	1839009	15.0000	16.2(A)	
	24 Benzoic acid	105	8.663	8.663	(0.980)	524405	15.0000	12.4	
	25 2,4-Dichlorophenol	162	8.708	8.708	(0.985)	1508691	15.0000	17.7(A)	
	26 1,2,4-Trichlorobenzene	180	8.776	8.776	(0.992)	1528843	15.0000	14.6	
*	27 Naphthalene-D8	136	8.844	8.844	(1.000)	255325	0.80000	(a)	
	28 Naphthalene	128	8.866	8.867	(1.003)	4730680	15.0000	14.5	
	29 4-Chloroaniline	127	8.980	8.980	(1.015)	1647072	15.0000	13.7	
	30 Hexachlorobutadiene	225	9.059	9.059	(1.024)	698496	15.0000	14.2	
	31 Caprolactam	113	9.478	9.478	(1.072)	553991	15.0000	18.1(A)	
	32 4-Chloro-3-Methylphenol	107	9.687	9.688	(1.095)	1337304	15.0000	16.0(A)	
$	33 2-Methylnaphthalene-D10	152	9.755	9.755	(1.103)	2415643	15.0000	13.8	
	34 2-Methylnaphthalene	142	9.796	9.796	(1.108)	3008276	15.0000	12.7	
	35 1-Methylnaphthalene	142	9.931	9.931	(1.123)	2900843	15.0000	13.4	
	36 Hexachlorocyclopentadiene	237	10.025	10.026	(1.000)	686410	15.0000	17.0(A)	
	37 1,2,4,5-Tetrachlorobenzene	216	10.039	10.039	(1.000)	1247500	15.0000	13.8	
$	38 2,4-Dibromophenol	252	10.201	10.202	(1.000)	767976	15.0000	13.9	
	39 2,4,6-Trichlorophenol	196	10.215	10.215	(1.000)	946109	15.0000	15.8(AH)	
	40 2,4,5-Trichlorophenol	196	10.282	10.283	(1.000)	1090147	15.0000	14.4	
	41 1,1'-Biphenyl	154	10.431	10.431	(1.000)	3337960	15.0000	13.1	
	42 2-Chloronaphthalene	164	10.444	10.445	(1.000)	920587	15.0000	13.8	
	43 2-Nitroaniline	65	10.620	10.621	(1.000)	637172	15.0000	17.6(A)	
	44 Dimethyl Phthalate	163	10.884	10.885	(1.000)	3199298	15.0000	14.3	
	45 2,6-Dinitrotoluene	165	10.950	10.951	(1.000)	798761	15.0000	17.1(A)	
	46 Acenaphthylene	152	10.994	10.995	(1.000)	4364707	15.0000	13.8	
	47 3-Nitroaniline	138	10.620	10.621	(1.000)	1055017	15.0000	18.2(A)	
*	48 Acenaphthene-D10	164	11.181	11.182	(1.000)	133912	0.80000	(aM)	M6
	49 Acenaphthene	153	11.225	11.226	(1.000)	2766373	15.0000	13.3	
	50 2,4-Dinitrophenol	184	11.325	11.325	(1.000)	385917	15.0000	22.8(A)	
	51 4-Nitrophenol	109	11.490	11.490	(1.000)	238073	15.0000	16.8(A)	
	52 Dibenzofuran	168	11.468	11.468	(1.000)	3739376	15.0000	15.2(A)	
	53 2,4-Dinitrotoluene	165	10.950	10.951	(1.000)	798761	15.0000	17.1(A)	
	54 2,3,4,6-Tetrachlorophenol	232	11.666	11.666	(1.000)	789500	15.0000	17.4(A)	
	55 Diethylphthalate	149	11.831	11.831	(1.000)	3035193	15.0000	14.2	
$	56 Fluorene-D10	174	11.886	11.886	(1.000)	2082586	15.0000	14.8(A)	
	57 Fluorene	166	11.930	11.930	(1.000)	2833070	15.0000	14.0	
	58 4-Chlorophenyl-phenylether	204	11.952	11.952	(1.000)	1349658	15.0000	13.8	
	59 4-Nitroaniline	138	10.620	10.621	(1.000)	1055017	15.0000	18.2(A)	
	60 4,6-Dinitro-2-Methylphenol	198	12.040	12.040	(0.914)	508573	15.0000	21.8(A)	
	61 N-Nitrosodiphenylamine	169	12.117	12.117	(0.919)	2420193	15.0000	13.9	
	62 4-Bromophenyl-phenylether	248	12.595	12.595	(0.956)	744198	15.0000	13.7	
	63 Hexachlorobenzene	284	12.677	12.677	(0.962)	714921	15.0000	12.1	
	64 Atrazine	200	12.872	12.872	(0.977)	652612	15.0000	15.5(A)	
	65 Pentachlorophenol	266	12.964	12.964	(0.984)	455764	15.0000	17.5(A)	
*	66 Phenanthrene-D10	188	13.179	13.179	(1.000)	180868	0.80000	(a)	
	67 Phenanthrene	178	13.210	13.210	(1.002)	3698379	15.0000	14.6	
	68 Anthracene	178	13.271	13.272	(1.007)	3844704	15.0000	13.8(H)	
	69 Carbazole	167	13.517	13.518	(1.026)	2789562	15.0000	14.0	
	70 Di-n-butylphthalate	149	14.031	14.032	(1.065)	4433795	15.0000	13.1	
$	71 Fluoranthene-d10	212	14.786	14.787	(1.122)	2171971	15.0000	13.4	
	72 Fluoranthene	202	14.809	14.809	(1.124)	2990920	15.0000	13.4	
$	73 Pyrene-D10	212	15.086	15.087	(0.892)	2563310	15.0000	11.9(A)	
	74 Pyrene	202	15.109	15.109	(0.894)	3216507	15.0000	12.6	

Data File: \\target_server\gg\chem\gcms-n.i\N030623.b\N7608.D
Report Date: 10-Mar-2023 13:03

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
	75 Butylbenzylphthalate	149	16.064	16.064	(0.950)	1814321	15.0000	14.4	
	76 3,3'-Dichlorobenzidine	252	16.919	16.920	(1.001)	350792	15.0000	13.4	
	77 Benzo(a)anthracene	228	16.897	16.898	(0.999)	2025099	15.0000	15.8(AH)	
*	78 Chrysene-D12	240	16.908	16.908	(1.000)	76552	0.80000	(a)	
	79 Chrysene	228	16.964	16.963	(1.003)	2045645	15.0000	12.4	
	80 bis(2-Ethylhexyl)phthalate	149	17.075	17.075	(1.010)	2467784	15.0000	14.2	
	81 Di-n-octylphthalate	149	18.386	18.386	(1.087)	3430128	15.0000	15.5(A)	
	82 Benzo(b)fluoranthene	252	19.041	19.042	(0.957)	1235790	15.0000	16.4(A)	
	83 Benzo(k)fluoranthene	252	19.097	19.097	(0.960)	1635336	15.0000	13.2(H)	
	84 Benzo(a)pyrene	252	19.754	19.755	(0.993)	1121506	15.0000	15.1(A)	
*	85 Perylene-D12	264	19.891	19.891	(1.000)	45644	0.80000	(a)	
	86 Indeno(1,2,3-cd)pyrene	276	21.930	21.930	(1.102)	902047	15.0000	16.7(A)	
	87 Dibenzo(a,h)anthracene	278	21.993	21.993	(1.106)	682909	15.0000	16.6(A)	
	88 Benzo(g,h,i)perylene	276	22.487	22.487	(1.130)	780178	15.0000	14.3	
M	89 Total PAHs	100				44782969	270.000	256	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
A - Target compound detected but, quantitated amount
exceeded maximum amount.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.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Date : 06-MAR-2023 16:55
Client ID:
Sample Info: WG333437-7
Volume Injected (uL): 1.0
Column phase: ZB5-MS
Instrument: gcms-n,i
Operator: DT/CO
Column diameter: 0.25
\\target_server\gg\chem\gcms-n,i\N030623,b\N7608.D
Y (x10^6)
Min
-N-Nitrosodimethylamine+
-Benzaldehyde
-Phenol+
-2-Chlorophenol
-1,3-Dichlorobenzene
-1,4-Dichlorobenzene-D4+
-1,2-Dichlorobenzene
-2-Methylphenol+
-Acetophenone+
-3&4-Methylphenol+
-Nitrobenzene
-Isophorone
-2-Nitrophenol
-2,4-Dimethylphenol
-Benzoic acid
-1,2,4-Trichlorobenzene
-Naphthalene-D8+
-4-Chloroaniline
-Hexachlorobutadiene
-Caprolactam
-4-Chloro-3-Methylphenol
-2-Methylnaphthalene-D10+
-1-Methylnaphthalene
-Hexachlorocyclopentadiene
-2,4-Dibromophenol+
-2,4,5-Trichlorophenol
-2-Nitroaniline+
1,1'-Biphenyl+
-Dimethyl Phthalate
-2,6-Dinitrotoluene+
-Acenaphthene-D10
-Acenaphthene
-2,4-Dinitrophenol
-4-Nitrophenol+
-2,3,4,6-Tetrachlorophenol
-Diethylphthalate
-4,6-Dinitro-2-Methylpheno
-N-Nitrosodiphenylamine
Fluorene-D10+
-4-Bromophenyl-phenylether
-Hexachlorobenzene
-Atrazine
-Pentachlorophenol
-Phenanthrene-D10+
-Anthracene
-Carbazole
-Di-n-butylphthalate
-Fluoranthene-d10+
-Pyrene-D10+
-Butylbenzylphthalate
-3,3'-Dichlorobenzidine+
-Chrysene
-bis(2-Ethylhexyl)phthalat
-Di-n-octylphthalate
-Benzo(b)fluoranthene
-Benzo(a)pyrene+

Data File: \\target_server\gg\chem\gcms-n.i\N030623.b\N7609.D
Report Date: 10-Mar-2023 13:15

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-n.i\N030623.b\N7609.D
Lab Smp Id: WG333437-8
Inj Date : 06-MAR-2023 17:35
Operator : DT/CO   Inst ID: gcms-n.i
Smp Info : WG333437-8,SQ0686
Misc Info : WG333437,WG333437,WG333437-4,SQ0686-23
Comment   :
Method   : \\target_server\gg\chem\gcms-n.i\N030623.b\NSPSIM19.m
Meth Date : 07-Mar-2023 11:13 coneill   Quant Type: ISTD
Cal Date : 06-MAR-2023 16:55   Cal File: N7608.D
Als bottle: 8   QC Sample: INDSOURCE
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: all.sub
Target Version: 4.12

Concentration Formula: Amt * DF * Uf*(Vt/Vo*Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.000	Sample Volume (L)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	CONCENTRATIONS FINAL (ug/L)	REVIEW CODE
2	1,4-Dioxane	88	3.062	3.041	(0.426)	238112	5.65326	5.65	
3	N-Nitrosodimethylamine	74	3.569	3.559	(0.496)	306446	5.25810	5.26	
4	Pyridine	79	3.590	3.569	(0.499)	587705	6.72687	6.73(R)	
5	Benzaldehyde	77	6.628	6.618	(0.922)	86122	1.54891	1.55(R)	
6	Phenol	94	6.836	6.837	(0.951)	797551	6.30647	6.31(R)	
7	Bis(2-Chloroethyl)ether	93	6.868	6.878	(0.955)	553207	5.25148	5.25	
8	2-Chlorophenol	128	6.940	6.941	(0.965)	693164	6.12577	6.12(R)	
9	1,3-Dichlorobenzene	146	7.107	7.118	(0.988)	700942	5.79881	5.80	
* 10	1,4-Dichlorobenzene-D4	152	7.190	7.191	(1.000)	68952	0.80000	(aQ)	
11	1,4-Dichlorobenzene	146	7.211	7.211	(1.003)	735537	5.71559	5.72	
12	1,2-Dichlorobenzene	146	7.398	7.399	(1.029)	706142	5.82960	5.83	
13	2-Methylphenol	108	7.585	7.596	(1.055)	657263	6.61867	6.62(R)	
14	2,2'-Oxybis(1-chloropropane)	45	7.565	7.565	(1.052)	272641	4.25952	4.26(Q)	
15	Acetophenone	105	7.721	7.721	(0.874)	802235	5.55352	5.55	
16	N-Nitroso-di-n-propylamine	70	7.742	7.752	(1.077)	350016	5.18342	5.18	
17	3&4-Methylphenol	108	7.794	7.804	(1.084)	653840	6.52632	6.53(R)	
18	Hexachloroethane	117	7.825	7.825	(1.088)	264332	5.80170	5.80	
19	Nitrobenzene	77	7.929	7.929	(0.898)	580498	5.01428	5.01	
20	Isophorone	82	8.244	8.255	(0.933)	1022797	6.02210	6.02(R)	
21	2-Nitrophenol	139	8.357	8.356	(0.946)	365239	5.98070	5.98	
22	2,4-Dimethylphenol	107	8.459	8.471	(0.958)	575595	5.44225	5.44	

Data File: \\target_server\gg\chem\gcms-n.i\N030623.b\N7609.D
Report Date: 10-Mar-2023 13:15

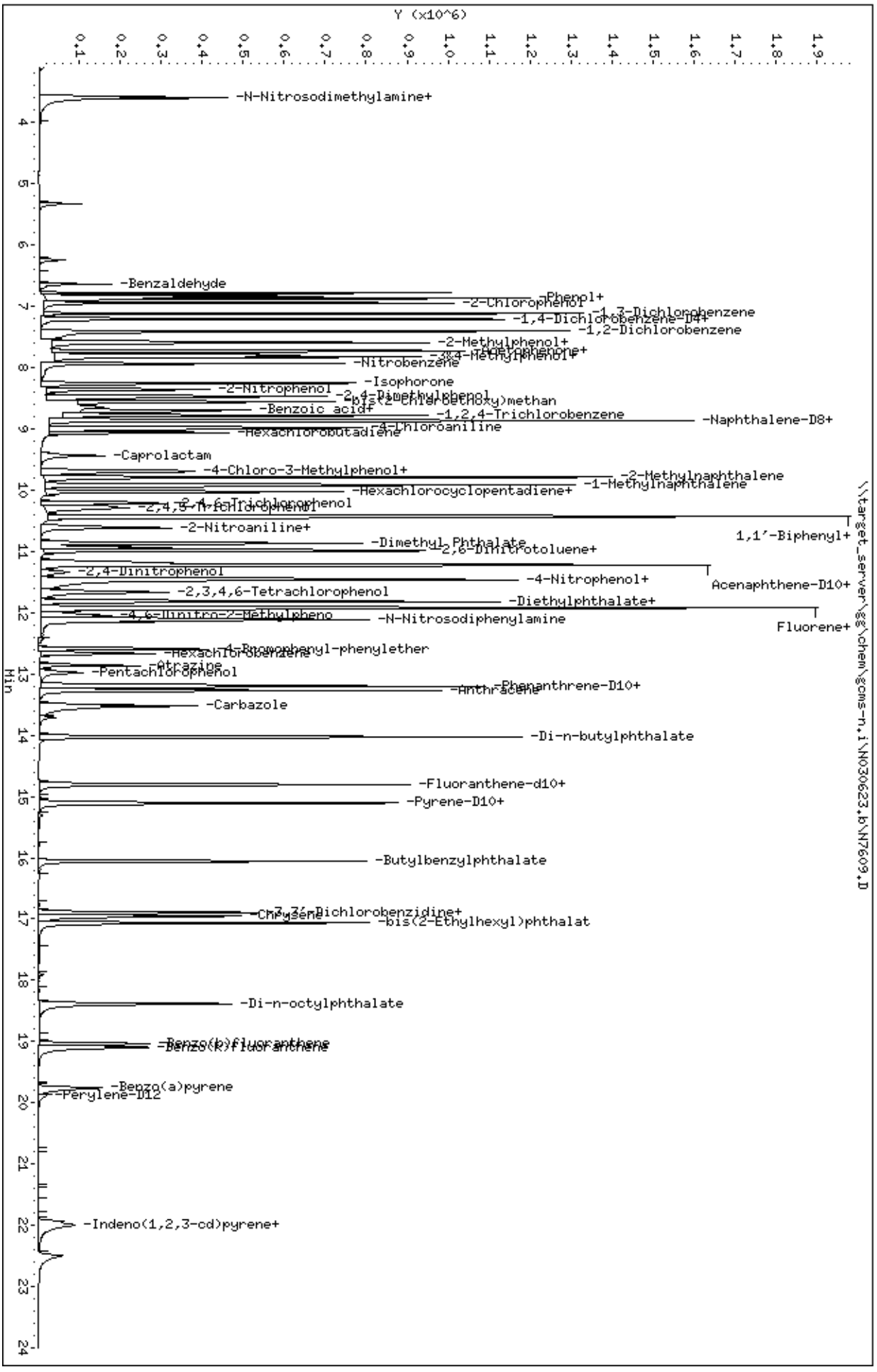
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	CONCENTRATIONS FINAL (ug/L)	REVIEW CODE
	23 bis(2-Chloroethoxy)methane	93	8.549	8.561	(0.968)	668661	5.54105	5.54	
	24 Benzoic acid	105	8.640	8.663	(0.978)	297242	7.13991	7.14(QR)	
	25 2,4-Dichlorophenol	162	8.697	8.708	(0.985)	540064	5.54383	5.54	
	26 1,2,4-Trichlorobenzene	180	8.776	8.776	(0.994)	549721	5.34981	5.35	
*	27 Naphthalene-D8	136	8.832	8.844	(1.000)	251214	0.80000	(a)	
	28 Naphthalene	128	8.855	8.867	(1.003)	1772257	5.51376	5.51	
	29 4-Chloroaniline	127	8.968	8.980	(1.015)	628232	5.31322	5.31	
	30 Hexachlorobutadiene	225	9.059	9.059	(1.026)	250284	5.15596	5.16	
	31 Caprolactam	113	9.432	9.478	(1.068)	190116	5.29169	5.29	
	32 4-Chloro-3-Methylphenol	107	9.687	9.688	(1.097)	479387	5.84358	5.84	
	34 2-Methylnaphthalene	142	9.782	9.796	(1.108)	1169677	5.02820	5.03	
	35 1-Methylnaphthalene	142	9.904	9.931	(1.121)	1052583	4.94934	4.95	
	36 Hexachlorocyclopentadiene	237	10.012	10.026	(0.895)	201987	5.09955	5.10	
	37 1,2,4,5-Tetrachlorobenzene	216	10.025	10.039	(0.897)	458403	5.15699	5.16	
$	38 2,4-Dibromophenol	252	9.701	10.202	(0.868)	1696	0.03127	0.0313(aQR)	
	39 2,4,6-Trichlorophenol	196	10.215	10.215	(0.914)	318068	5.40320	5.40	
	40 2,4,5-Trichlorophenol	196	10.296	10.283	(0.921)	410414	5.51559	5.52	
	41 1,1'-Biphenyl	154	10.431	10.431	(0.933)	1257352	5.03734	5.04	
	42 2-Chloronaphthalene	164	10.445	10.445	(0.934)	314998	4.80466	4.80	
	43 2-Nitroaniline	65	10.607	10.621	(0.949)	211777	4.97692	4.98	
	44 Dimethyl Phthalate	163	10.873	10.885	(0.972)	1154512	5.25550	5.26	
	45 2,6-Dinitrotoluene	165	10.939	10.951	(0.978)	265751	5.03524	5.04	
	46 Acenaphthylene	152	10.994	10.995	(0.983)	1420666	4.56066	4.56	
	47 3-Nitroaniline	138	10.620	10.621	(0.950)	337681	4.81739	4.82	
*	48 Acenaphthene-D10	164	11.182	11.182	(1.000)	131583	0.80000	(a)	
	49 Acenaphthene	153	11.226	11.226	(1.004)	1036506	5.06517	5.06	
	50 2,4-Dinitrophenol	184	11.336	11.325	(1.014)	91123	5.48025	5.48	
	51 4-Nitrophenol	109	11.534	11.490	(1.031)	68477	4.92935	4.93(Q)	
	52 Dibenzofuran	168	11.468	11.468	(1.026)	1399259	5.49763	5.50	
	53 2,4-Dinitrotoluene	165	10.939	10.951	(0.978)	265751	5.03524	5.04	
	54 2,3,4,6-Tetrachlorophenol	232	11.677	11.666	(1.044)	229851	4.37681	4.38	
	55 Diethylphthalate	149	11.820	11.831	(1.057)	1142711	5.44086	5.44	
$	56 Fluorene-D10	174	11.864	11.886	(1.061)	375	0.00265	0.00265(aQR)	
	57 Fluorene	166	11.919	11.930	(1.066)	1069060	5.37485	5.37	
	58 4-Chlorophenyl-phenylether	204	11.941	11.952	(1.068)	510391	5.32645	5.33	
	59 4-Nitroaniline	138	10.620	10.621	(0.950)	337681	4.81739	4.82	
	60 4,6-Dinitro-2-Methylphenol	198	12.051	12.040	(0.915)	153254	5.35562	5.36	
	61 N-Nitrosodiphenylamine	169	12.106	12.117	(0.919)	732847	4.15837	4.16	
	62 4-Bromophenyl-phenylether	248	12.595	12.595	(0.956)	273647	4.97950	4.98	
	63 Hexachlorobenzene	284	12.677	12.677	(0.963)	269991	5.51501	5.52	
	64 Atrazine	200	12.861	12.872	(0.977)	238713	5.63511	5.64	
	65 Pentachlorophenol	266	12.974	12.964	(0.985)	139889	5.31738	5.32	
*	66 Phenanthrene-D10	188	13.169	13.179	(1.000)	182546	0.80000	(a)	
	67 Phenanthrene	178	13.200	13.210	(1.002)	1331562	5.21748	5.22	
	68 Anthracene	178	13.271	13.272	(1.008)	1387641	5.27004	5.27	
	69 Carbazole	167	13.527	13.518	(1.027)	1073638	5.33813	5.34	
	70 Di-n-butylphthalate	149	14.031	14.032	(1.065)	1897524	5.55099	5.55	
$	71 Fluoranthene-d10	212	14.775	14.787	(1.122)	875	0.00533	0.00533(QR)	
	72 Fluoranthene	202	14.809	14.809	(1.125)	1158739	5.13584	5.14	
$	73 Pyrene-D10	212	15.075	15.087	(0.892)	1313	0.00736	0.00736(aQR)	
	74 Pyrene	202	15.098	15.109	(0.893)	1186139	4.70151	4.70	
	75 Butylbenzylphthalate	149	16.064	16.064	(0.950)	661488	5.29386	5.29	
	76 3,3'-Dichlorobenzidine	252	16.919	16.920	(1.001)	90127	3.46212	3.46(R)	
	77 Benzo(a)anthracene	228	16.897	16.898	(0.999)	668959	5.28384	5.28	

Data File: \\target_server\gg\chem\gcms-n.i\N030623.b\N7609.D
Report Date: 10-Mar-2023 13:15

			QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	CONCENTRATIONS FINAL (ug/L)	REVIEW CODE
*	78	Chrysene-D12	240	16.908	16.908	(1.000)	75845	0.80000	(a)	
	79	Chrysene	228	16.953	16.963	(1.003)	723894	5.23245	5.23	
	80	bis(2-Ethylhexyl)phthalate	149	17.064	17.075	(1.009)	879882	5.09252	5.09	
	81	Di-n-octylphthalate	149	18.386	18.386	(1.087)	1108584	5.04774	5.05	
	82	Benzo(b)fluoranthene	252	19.030	19.042	(0.957)	400519	5.87740	5.88	
	83	Benzo(k)fluoranthene	252	19.097	19.097	(0.960)	567798	5.05836	5.06(H)	
	84	Benzo(a)pyrene	252	19.754	19.755	(0.993)	364443	5.40507	5.40	
*	85	Perylene-D12	264	19.891	19.891	(1.000)	41388	0.80000	(a)	
	86	Indeno(1,2,3-cd)pyrene	276	21.940	21.930	(1.103)	253605	5.17061	5.17	
	87	Dibenzo(a,h)anthracene	278	22.003	21.993	(1.106)	187925	5.02648	5.03	
	88	Benzo(g,h,i)perylene	276	22.497	22.487	(1.131)	226569	4.56757	4.57	
M	89	Total PAHs	100				15978542	92.4386	92.4	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.
H - Operator selected an alternate compound hit.


Data File: \\target_server\gg\chem\gcms-n,i\N030623,b\N7609.D
Date : 06-MAR-2023 17:35
Client ID:
Sample Info: WG333437-8,SQ0686
Volume Injected (uL): 1.0
Column phase: ZB5-MS
Instrument: gcms-n,i
Operator: DT/CO
Column diameter: 0.25
\\target_server\gg\chem\gcms-n,i\N030623,b\N7609.D
Y (x10^6)
Min
-N-Nitrosodimethylamine+
-Benzaldehyde
-Phenol+
-2-Chlorophenol
-1,3-Dichlorobenzene
-1,4-Dichlorobenzene-D4+
-1,2-Dichlorobenzene
-2-Methylphenol+
-Acetophenone+
-3&4-Methylphenol+
-Nitrobenzene
-Isophorone
-2-Nitrophenol
-2,4-Dimethylphenol
-bis(2-Chloroethoxy)methan
-Benzoic acid+
-1,2,4-Trichlorobenzene
-Naphthalene-D8+
-4-Chloroaniline
-Hexachlorobutadiene
-Caprolactam
-4-Chloro-3-Methylphenol+
-2-Methylnaphthalene
-1-Methylnaphthalene
-Hexachlorocyclopentadiene+
-2,4,6-Trichlorophenol
-2,4,5-Trichlorophenol
-2-Nitroaniline+
1,1'-Biphenyl+
-Dimethyl Phthalate
-2,6-Dinitrotoluene+
-2,4-Dinitrophenol
-4-Nitrophenol+
Acenaphthene-D10+
-2,3,4,6-Tetrachlorophenol
-Diethylphthalate+
-4,6-Dinitro-2-Methylpheno
-N-Nitrosodiphenylamine
Fluorene+
-4-Bromophenyl-phenylether
-Hexachlorobenzene
-Atrazine
-Pentachlorophenol
-Phenanthrene-D10+
-Anthracene
-Carbazole
-Di-n-butylphthalate
-Fluoranthene-d10+
-Pyrene-D10+
-Butylbenzylphthalate
-3,3'-Dichlorobenzidine+
-Chrysene
-bis(2-Ethylhexyl)phthalat
-Di-n-octylphthalate
-Benzo(b)fluoranthene
-Benzo(k)fluoranthene
-Benzo(a)pyrene
-Perylene-D12
-Indeno(1,2,3-cd)pyrene+

Form 6
Initial Calibration Summary

Lab Name : Katahdin Analytical Services **SDG:** SQ0595

Instrument ID: GCMS-N **Column ID:**

Lab File IDs : N7757.D N7756.D N7755.D **Calibration Date(s):** 20-MAR-23 15:15
N7758.D N7759.D N7760.D 20-MAR-23 18:16

	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Curve				%RSD or R^2		
	0.200000(	0.500000(	2.0000	7.0000	10.0000	15.0000	Type	b	m1	m2	Result	Limit	
Naphthalene	1.03217	1.04455	1.07802	1.02856	0.95480	0.86918	AVG		1.00121		7.61587	20	O
2-Methylnaphthalene	0.63004	0.64412	0.68747	0.65119	0.59696	0.53577	AVG		0.62426		8.39270	20	O
Acenaphthylene	1.82286	1.98410	2.05502	1.92620	1.81309	1.67234	AVG		1.87894		7.31520	20	O
Acenaphthene	1.30639	1.27767	1.33048	1.24321	1.13915	1.06232	AVG		1.22654		8.52579	20	O
Fluorene	1.34104	1.35914	1.43683	1.31959	1.19279	1.13511	AVG		1.29742		8.64689	20	O
Phenanthrene	1.22746	1.25294	1.31968	1.23427	1.08125	1.01282	AVG		1.18807		9.76787	20	O
Anthracene	1.19905	1.23514	1.25798	1.19885	1.09264	0.97400	AVG		1.15961		9.24055	20	O
Fluoranthene	1.02221	1.09376	1.16813	1.07813	0.94024	0.85186	AVG		1.02572		11.13321	20	O
Pyrene	2.76763	2.67663	2.53312	2.24117	2.09939	1.89126	AVG		2.36820		14.5999	20	O
Benzo(a)anthracene	1.19907	1.34204	1.51150	1.48144	1.38860	1.29329	AVG		1.36932		8.55822	20	O
Chrysene	1.79875	1.69656	1.59355	1.49691	1.38327	1.28499	AVG		1.54234		12.4968	20	O
Benzo(b)fluoranthene	1.19954	1.46752	1.59606	1.63182	1.59068	1.49079	AVG		1.49607		10.6171	20	O
Benzo(k)fluoranthene	2.20610	2.11985	2.06045	2.03373	1.72794	1.66751	AVG		1.96926		11.1377	20	O
Benzo(a)pyrene	1.22803	1.34006	1.45239	1.47682	1.35908	1.29320	AVG		1.35826		6.94112	20	O
Indeno(1,2,3-cd)pyrene	4325	17835	116393	429000	638151	975214	LNR	0.000e+00	0.92273		0.99780	0.99	O
Dibenzo(a,h)anthracene	5263	20992	124192	456806	658566	1020417	LNR	0.000e+00	0.96451		0.99769	0.99	O
Benzo(g,h,i)perylene	1.02778	1.19840	1.22480	1.23938	1.14841	1.06998	AVG		1.15146		7.49660	20	O
2-Methylnaphthalene-D10	0.50247	0.52044	0.54123	0.50026	0.45531	0.40598	AVG		0.48762		10.0640	20	
Fluorene-D10	1.09991	1.11673	1.14038	1.04629	0.96590	0.86690	AVG		1.03935		10.0950	20	
Pyrene-D10	2.07477	2.02775	1.90445	1.68897	1.55127	1.39811	AVG		1.77422		15.3323	20	

Legend: O = Acceptable; W = Failed %RSD Value; X = Failed R^2 Value; Y = Failed Minimum RF

Data File: \\target_server\gg\chem\gcms-n.i\N032023.b\N7761.D
Report Date: 21-Mar-2023 06:36

Katahdin Analytical Services

RECOVERY REPORT

Client Name: Client SDG: 021497
Sample Matrix: LIQUID Fraction: SV
Lab Smp Id: WG334091-8
Level: LOW Operator: DT/EP
Data Type: MS DATA SampleType: INDSOURCE
SpikeList File: SIM_IND_CHK5.spk Quant Type: ISTD
Sublist File: all.sub
Method File: \\target_server\gg\chem\gcms-n.i\N032023.b\NSPSIM26.m
Misc Info: WG334091,WG334091,WG334091-4

SPIKE	COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
2	1,4-Dioxane	5.00	5.13	102.60	80-120
3	N-Nitrosodimethyla	5.00	4.67	93.43	80-120
4	Pyridine	5.00	5.58	111.57	80-120
5	Benzaldehyde	5.00	1.53	30.63*	80-120
7	Bis(2-Chloroethyl)	5.00	4.98	99.65	80-120
6	Phenol	5.00	5.24	104.71	80-120
8	2-Chlorophenol	5.00	5.09	101.80	80-120
9	1,3-Dichlorobenzen	5.00	5.00	100.03	80-120
11	1,4-Dichlorobenzen	5.00	5.03	100.55	80-120
12	1,2-Dichlorobenzen	5.00	5.03	100.63	80-120
14	2,2'-Oxybis(1-chlo	5.00	3.69	73.78*	80-120
13	2-Methylphenol	5.00	5.11	102.18	80-120
15	Acetophenone	5.00	5.10	102.07	80-120
16	N-Nitroso-di-n-pro	5.00	4.65	92.96	80-120
18	Hexachloroethane	5.00	5.06	101.20	80-120
17	3&4-Methylphenol	5.00	4.97	99.36	80-120
19	Nitrobenzene	5.00	4.92	98.39	80-120
20	Isophorone	5.00	5.08	101.51	80-120
21	2-Nitrophenol	5.00	5.29	105.73	80-120
22	2,4-Dimethylphenol	5.00	4.68	93.71	80-120
23	bis(2-Chloroethoxy	5.00	4.88	97.50	80-120
24	Benzoic acid	5.00	6.71	134.21*	80-120
25	2,4-Dichlorophenol	5.00	5.11	102.24	80-120
26	1,2,4-Trichloroben	5.00	4.95	98.93	80-120
28	Naphthalene	5.00	5.02	100.35	80-120
29	4-Chloroaniline	5.00	4.83	96.62	80-120
30	Hexachlorobutadien	5.00	5.05	100.98	80-120
31	Caprolactam	5.00	5.83	116.55	80-120
34	2-Methylnaphthalen	5.00	5.20	103.97	80-120
32	4-Chloro-3-Methylp	5.00	4.89	97.85	80-120
35	1-Methylnaphthalen	5.00	5.07	101.38	80-120
37	1,2,4,5-Tetrachlor	5.00	4.82	96.46	80-120
36	Hexachlorocyclopen	5.00	4.61	92.27	80-120
39	2,4,6-Trichlorophe	5.00	4.80	96.11	80-120
40	2,4,5-Trichlorophe	5.00	4.76	95.19	80-120
42	2-Chloronaphthalen	5.00	4.90	98.07	80-120
41	1,1'-Biphenyl	5.00	5.02	100.32	80-120
43	2-Nitroaniline	5.00	5.09	101.79	80-120
44	Dimethyl Phthalate	5.00	4.67	93.44	80-120
46	Acenaphthylene	5.00	4.41	88.13	80-120

Data File: \\target_server\gg\chem\gcms-n.i\N032023.b\N7761.D
Report Date: 21-Mar-2023 06:36

	SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
45	2,6-Dinitrotoluene	5.00	4.78	95.59	80-120
49	Acenaphthene	5.00	4.84	96.90	80-120
47	3-Nitroaniline	5.00	4.74	94.87	80-120
50	2,4-Dinitrophenol	5.00	4.50	89.97	80-120
52	Dibenzofuran	5.00	4.84	96.75	80-120
53	2,4-Dinitrotoluene	5.00	5.24	104.75	80-120
54	2,3,4,6-Tetrachlor	5.00	4.72	94.40	80-120
51	4-Nitrophenol	5.00	4.33	86.69	80-120
55	Diethylphthalate	5.00	4.83	96.65	80-120
57	Fluorene	5.00	4.93	98.61	80-120
58	4-Chlorophenyl-phe	5.00	4.85	97.04	80-120
60	4,6-Dinitro-2-Meth	5.00	4.42	88.48	80-120
59	4-Nitroaniline	5.00	5.11	102.17	80-120
61	N-Nitrosodiphenyla	5.00	4.00	79.92*	80-120
62	4-Bromophenyl-phen	5.00	4.93	98.68	80-120
63	Hexachlorobenzene	5.00	4.80	96.03	80-120
64	Atrazine	5.00	4.40	88.04	80-120
65	Pentachlorophenol	5.00	5.13	102.54	80-120
67	Phenanthrene	5.00	4.85	97.03	80-120
68	Anthracene	5.00	4.70	93.97	80-120
69	Carbazole	5.00	6.43	128.66*	80-120
70	Di-n-butylphthalat	5.00	5.09	101.81	80-120
72	Fluoranthene	5.00	4.95	99.07	80-120
74	Pyrene	5.00	4.56	91.15	80-120
75	Butylbenzylphthala	5.00	4.87	97.45	80-120
77	Benzo(a)anthracene	5.00	4.85	96.99	80-120
79	Chrysene	5.00	4.56	91.20	80-120
76	3,3'-Dichlorobenzi	5.00	3.89	77.90*	80-120
80	bis(2-Ethylhexyl)p	5.00	4.73	94.64	80-120
81	Di-n-octylphthalat	5.00	4.92	98.41	80-120
82	Benzo(b)fluoranthe	5.00	5.26	105.10	80-120
83	Benzo(k)fluoranthe	5.00	4.45	88.93	80-120
84	Benzo(a)pyrene	5.00	4.95	99.08	80-120
86	Indeno(1,2,3-cd)py	5.00	4.87	97.34	80-120
87	Dibenzo(a,h)anthra	5.00	5.11	102.20	80-120
88	Benzo(g,h,i)peryle	5.00	5.05	100.92	80-120

	SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 1	1,4-Dioxane-d8	2.00	0.000	*	26-115
$ 33	2-Methylnaphthale	2.00	0.000	*	43-92
$ 38	2,4-Dibromophenol	4.00	0.000	*	10-130
$ 56	Fluorene-D10	2.00	0.000	*	29-101
$ 71	Fluoranthene-d10	2.00	0.000	*	30-150
$ 73	Pyrene-D10	2.00	0.000	*	53-166

Data File: \\target_server\gg\chem\gcms-n.i\N032023.b\N7755.D
Report Date: 22-Mar-2023 07:59

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-n.i\N032023.b\N7755.D
Lab Smp Id: WG334091-4
Inj Date : 20-MAR-2023 15:15
Operator : DT/EP   Inst ID: gcms-n.i
Smp Info : WG334091-4
Misc Info :
Comment   :
Method   : \\target_server\gg\chem\gcms-n.i\N032023.b\NSPSIM26.m
Meth Date : 21-Mar-2023 06:46 epelletier Quant Type: ISTD
Cal Date : 20-MAR-2023 15:15   Cal File: N7755.D
Als bottle: 2   Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: all.sub
Target Version: 4.12
Processing Host: INSPIRON1

Concentration Formula: Amt * DF * (Vt/Ws)*(100/(100-M))*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.00100	Final Volume (L)
Ws	0.03000	Weight of Sample (Kg)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
$	1 1,4-Dioxane-d8	96	3.677	3.667	(0.492)	67718	2.00000	2.00	
	2 1,4-Dioxane	88	3.719	3.699	(0.498)	64992	2.00000	2.00(a)	
	3 N-Nitrosodimethylamine	74	4.121	4.121	(0.551)	101957	2.00000	2.00(a)	
	4 Pyridine	79	4.152	4.142	(0.556)	153596	2.00000	2.00(a)	
	5 Benzaldehyde	77	6.922	6.912	(0.926)	67193	2.00000	2.00(a)	
	6 Phenol	94	7.068	7.069	(0.946)	504872	4.50000	4.50(a)	
	7 Bis(2-Chloroethyl)ether	93	7.151	7.152	(0.957)	179949	2.00000	2.00(a)	
	8 2-Chlorophenol	128	7.214	7.214	(0.965)	481252	4.50000	4.50(a)	
	9 1,3-Dichlorobenzene	146	7.401	7.401	(0.990)	225635	2.00000	2.00(a)	
*	10 1,4-Dichlorobenzene-D4	152	7.474	7.474	(1.000)	60565	0.80000	(a)	
	11 1,4-Dichlorobenzene	146	7.495	7.495	(1.003)	231052	2.00000	2.00(a)	
	12 1,2-Dichlorobenzene	146	7.682	7.682	(1.028)	213118	2.00000	2.00(a)	
	13 2-Methylphenol	108	7.817	7.828	(1.046)	378906	4.50000	4.50(a)	
	14 2,2'-Oxybis(1-chloropropane)	45	7.838	7.838	(1.049)	86653	2.00000	2.00(a)	
	15 Acetophenone	105	7.984	7.995	(0.877)	234589	2.00000	2.00(a)	
	16 N-Nitroso-di-n-propylamine	70	8.004	8.015	(1.071)	107713	2.00000	2.00(a)	
	17 3&4-Methylphenol	108	8.015	8.026	(1.072)	401798	4.50000	4.50(a)	
	18 Hexachloroethane	117	8.119	8.109	(1.086)	81346	2.00000	2.00(a)	
	19 Nitrobenzene	77	8.192	8.202	(0.899)	155731	2.00000	2.00(a)	
	20 Isophorone	82	8.513	8.523	(0.935)	308554	2.00000	2.00(a)	
	21 2-Nitrophenol	139	8.615	8.616	(0.946)	239233	4.50000	4.50(a)	

Data File: \\target_server\gg\chem\gcms-n.i\N032023.b\N7755.D
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	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
	22 2,4-Dimethylphenol	107	8.708	8.708	(0.956)	394604	4.50000	4.50(a)	
	23 bis(2-Chloroethoxy)methane	93	8.820	8.821	(0.968)	202691	2.00000	2.00(a)	
	24 Benzoic acid	105	8.820	8.883	(0.968)	119342	4.50000	4.50(a)	
	25 2,4-Dichlorophenol	162	8.944	8.944	(0.982)	342806	4.50000	4.50(a)	
	26 1,2,4-Trichlorobenzene	180	9.046	9.047	(0.993)	153562	2.00000	2.00(a)	
*	27 Naphthalene-D8	136	9.108	9.108	(1.000)	209681	0.80000	(a)	
	28 Naphthalene	128	9.128	9.139	(1.002)	565100	2.00000	2.00(a)	
	29 4-Chloroaniline	127	9.231	9.231	(1.014)	184883	2.00000	2.00(a)	
	30 Hexachlorobutadiene	225	9.333	9.334	(1.025)	70347	2.00000	2.00(a)	
	31 Caprolactam	113	9.667	9.709	(1.061)	49893	2.00000	2.00(a)	
	32 4-Chloro-3-Methylphenol	107	9.889	9.900	(1.086)	351567	4.50000	4.50(a)	
$	33 2-Methylnaphthalene-D10	152	10.016	10.017	(1.100)	283714	2.00000	2.00	
	34 2-Methylnaphthalene	142	10.058	10.059	(1.104)	360372	2.00000	2.00(a)	
	35 1-Methylnaphthalene	142	10.186	10.186	(1.118)	332467	2.00000	2.00(a)	
	36 Hexachlorocyclopentadiene	237	10.291	10.292	(0.899)	72772	2.00000	2.00(a)	
	37 1,2,4,5-Tetrachlorobenzene	216	10.291	10.292	(0.899)	124479	2.00000	2.00(a)	
$	38 2,4-Dibromophenol	252	10.429	10.440	(0.911)	76946	2.00000	2.00	
	39 2,4,6-Trichlorophenol	196	10.461	10.461	(0.914)	212547	4.50000	4.50(a)	
	40 2,4,5-Trichlorophenol	196	10.503	10.504	(0.917)	237278	4.50000	4.50(a)	
	41 1,1'-Biphenyl	154	10.694	10.694	(0.934)	414769	2.00000	2.00(a)	
	42 2-Chloronaphthalene	164	10.705	10.705	(0.935)	106537	2.00000	2.00(a)	
	43 2-Nitroaniline	65	10.853	10.864	(0.948)	63706	2.00000	2.00(a)	
	44 Dimethyl Phthalate	163	11.127	11.148	(0.972)	856002	4.50000	4.50(a)	
	45 2,6-Dinitrotoluene	165	11.189	11.200	(0.977)	89503	2.00000	2.00(a)	
	46 Acenaphthylene	152	11.252	11.263	(0.983)	517104	2.00000	2.00(aM)	M6
	47 3-Nitroaniline	138	11.419	11.430	(0.997)	56641	2.00000	2.00(a)	
*	48 Acenaphthene-D10	164	11.450	11.451	(1.000)	100652	0.80000	(a)	
	49 Acenaphthene	153	11.492	11.493	(1.004)	334788	2.00000	2.00(a)	
	50 2,4-Dinitrophenol	184	11.555	11.566	(1.009)	54608	4.50000	4.50(a)	
	51 4-Nitrophenol	109	11.680	11.691	(1.020)	71389	4.50000	4.50(a)	
	52 Dibenzofuran	168	11.732	11.733	(1.025)	456120	2.00000	2.00(a)	
	53 2,4-Dinitrotoluene	165	11.732	11.743	(1.025)	109175	2.00000	2.00(a)	
	54 2,3,4,6-Tetrachlorophenol	232	11.920	11.921	(1.041)	160106	4.50000	4.50(a)	
	55 Diethylphthalate	149	12.087	12.088	(1.056)	892406	4.50000	4.50(a)	
$	56 Fluorene-D10	174	12.150	12.161	(1.061)	286953	2.00000	2.00	
	57 Fluorene	166	12.192	12.192	(1.065)	361549	2.00000	2.00(a)	
	58 4-Chlorophenyl-phenylether	204	12.213	12.213	(1.067)	152365	2.00000	2.00(a)	
	59 4-Nitroaniline	138	12.234	12.255	(1.068)	69105	2.00000	2.00(a)	
	60 4,6-Dinitro-2-Methylphenol	198	12.286	12.286	(0.914)	95247	4.50000	4.50(a)	
	61 N-Nitrosodiphenylamine	169	12.369	12.380	(0.920)	287717	2.00000	2.00(a)	
	62 4-Bromophenyl-phenylether	248	12.864	12.864	(0.957)	81879	2.00000	2.00(aM)	M6
	63 Hexachlorobenzene	284	12.946	12.946	(0.963)	90512	2.00000	2.00(a)	
	64 Atrazine	200	13.120	13.131	(0.976)	86236	2.00000	2.00(a)	
	65 Pentachlorophenol	266	13.222	13.223	(0.983)	104022	4.50000	4.50(a)	
*	66 Phenanthrene-D10	188	13.448	13.448	(1.000)	143294	0.80000	(a)	
	67 Phenanthrene	178	13.478	13.479	(1.002)	472755	2.00000	2.00(a)	
	68 Anthracene	178	13.550	13.551	(1.008)	450652	2.00000	2.00(a)	
	69 Carbazole	167	13.776	13.776	(1.024)	319162	2.00000	2.00(a)	
	70 Di-n-butylphthalate	149	14.308	14.309	(1.064)	1512819	4.50000	4.50(a)	
$	71 Fluoranthene-d10	212	15.063	15.064	(1.120)	274575	2.00000	2.00	
	72 Fluoranthene	202	15.084	15.094	(1.122)	418466	2.00000	2.00(a)	
$	73 Pyrene-D10	212	15.359	15.369	(0.889)	330174	2.00000	2.00	
	74 Pyrene	202	15.379	15.390	(0.890)	439167	2.00000	2.00(a)	
	75 Butylbenzylphthalate	149	16.388	16.398	(0.948)	606614	4.50000	4.50(a)	

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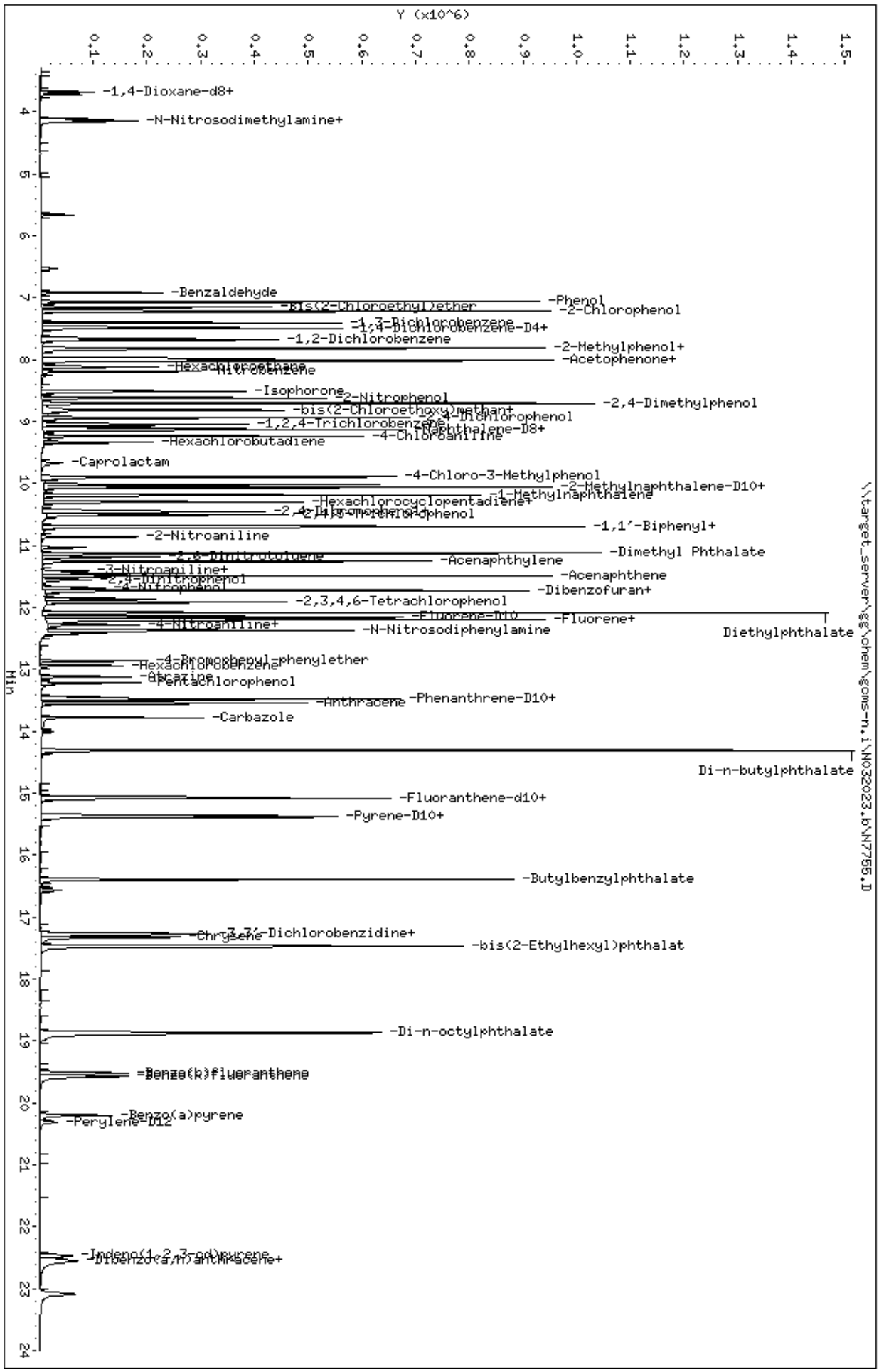
			QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
	76	3,3'-Dichlorobenzidine	252	17.274	17.274	(0.999)	62124	2.00000	2.00(a)	
	77	Benzo(a)anthracene	228	17.264	17.274	(0.999)	262049	2.00000	2.00(a)	
*	78	Chrysene-D12	240	17.284	17.295	(1.000)	69348	0.80000	(a)	
	79	Chrysene	228	17.325	17.335	(1.002)	276273	2.00000	2.00(a)	
	80	bis(2-Ethylhexyl)phthalate	149	17.468	17.468	(1.011)	831007	4.50000	4.50(a)	
	81	Di-n-octylphthalate	149	18.863	18.874	(1.091)	1216920	4.50000	4.50(a)	
	82	Benzo(b)fluoranthene	252	19.510	19.521	(0.961)	211310	2.00000	2.00(a)	
	83	Benzo(k)fluoranthene	252	19.573	19.584	(0.964)	272793	2.00000	2.00(aH)	
	84	Benzo(a)pyrene	252	20.193	20.204	(0.994)	192289	2.00000	2.00(a)	
*	85	Perylene-D12	264	20.309	20.309	(1.000)	52958	0.80000	(a)	
	86	Indeno(1,2,3-cd)pyrene	276	22.474	22.474	(1.107)	116393	2.00000	2.00(aM)	M3
	87	Dibenzo(a,h)anthracene	278	22.558	22.558	(1.111)	124192	2.00000	2.00(a)	
	88	Benzo(g,h,i)perylene	276	23.083	23.094	(1.137)	162157	2.00000	2.00(a)	
M	89	Total PAHs	100				5869876	36.0000	36.0	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.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Date : 20-MAR-2023 15:15
Client ID:
Sample Info: WG334091-4
Column phase: ZB5-MS
Instrument: gcms-n,i
Operator: DT/EP
Column diameter: 0.25
\\target_server\gg\chem\gcms-n,i\N032023,b\N7755.D
Y (x10^6)
Min
-1,4-Dioxane-d8+
-N-Nitrosodimethylamine+
-Benzaldehyde
-Phenol
-Bis(2-Chloroethyl)ether
-2-Chlorophenol
-1,3-Dichlorobenzene
-1,4-Dichlorobenzene-D4+
-1,2-Dichlorobenzene
-2-Methylphenol+
-Acetophenone+
-Hexachloroethane
-Nitrobenzene
-Isophorone
-2-Nitrophenol
-2,4-Dimethylphenol
-bis(2-Chloroethoxy)methane
-2,4-Dichlorophenol
-1,2,4-Trichlorobenzene
-Naphthalene-D8+
-Hexachlorobutadiene
-4-Chloroaniline
-Caprolactam
-4-Chloro-3-Methylphenol
-2-Methylnaphthalene-D10+
-Hexachlorocyclopentadiene+
-1-Methylnaphthalene
-2,4,6-Trichlorophenol
-1,1'-Biphenyl+
-2-Nitroaniline
-Dimethyl Phthalate
-2,6-Dinitrotoluene
-Acenaphthylene
-3-Nitroaniline+
-2,4-Dinitrophenol
-Acenaphthene
-4-Nitrophenol
-Dibenzofuran+
-2,3,4,6-Tetrachlorophenol
-Fluorene-D10
-Fluorene+
-4-Nitroaniline+
-N-Nitrosodiphenylamine
Diethylphthalate
-4-Bromophenyl-phenylether
-Hexachlorobenzene
-Atrazine
-Pentachlorophenol
-Anthracene
-Phenanthrene-D10+
-Carbazole
Di-n-butylphthalate
-Fluoranthene-d10+
-Pyrene-D10+
-Butylbenzylphthalate
-3,3'-Dichlorobenzidine+
-Chrysene
-bis(2-Ethylhexyl)phthalat
-Di-n-octylphthalate
-Benzo(b)fluoranthene
-Benzo(k)fluoranthene
-Benzo(a)pyrene
-Perylene-D12
-Indeno(1,2,3-cd)pyrene
-Dibenz(a,h)anthracene+

Data File: \\target_server\gg\chem\gcms-n.i\N032023.b\N7756.D
Report Date: 22-Mar-2023 07:59

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-n.i\N032023.b\N7756.D
Lab Smp Id: WG334091-3
Inj Date : 20-MAR-2023 15:48
Operator : DT/EP   Inst ID: gcms-n.i
Smp Info : WG334091-3
Misc Info :
Comment   :
Method   : \\target_server\gg\chem\gcms-n.i\N032023.b\NSPSIM26.m
Meth Date : 21-Mar-2023 06:46 epelletier Quant Type: ISTD
Cal Date : 20-MAR-2023 15:48   Cal File: N7756.D
Als bottle: 3   Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: all.sub
Target Version: 4.12
Processing Host: INSPIRON1

Concentration Formula: Amt * DF * (Vt/Ws)*(100/(100-M))*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.00100	Final Volume (L)
Ws	0.03000	Weight of Sample (Kg)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
$	1 1,4-Dioxane-d8	96	3.688	3.667	(0.493)	17128	0.50000	0.520(a)	
	2 1,4-Dioxane	88	3.720	3.699	(0.498)	16635	0.50000	0.525(a)	
	3 N-Nitrosodimethylamine	74	4.132	4.121	(0.553)	24881	0.50000	0.513(a)	
	4 Pyridine	79	4.163	4.142	(0.557)	38349	0.50000	0.513(a)	
	5 Benzaldehyde	77	6.923	6.912	(0.926)	22853	0.50000	0.630(a)	
	6 Phenol	94	7.068	7.069	(0.946)	208255	2.00000	2.01(a)	
	7 Bis(2-Chloroethyl)ether	93	7.162	7.152	(0.958)	42948	0.50000	0.512(a)	
	8 2-Chlorophenol	128	7.214	7.214	(0.965)	203846	2.00000	2.06(a)	
	9 1,3-Dichlorobenzene	146	7.401	7.401	(0.990)	55512	0.50000	0.519(a)	
*	10 1,4-Dichlorobenzene-D4	152	7.474	7.474	(1.000)	59886	0.80000	(a)	
	11 1,4-Dichlorobenzene	146	7.495	7.495	(1.003)	55797	0.50000	0.511(a)	
	12 1,2-Dichlorobenzene	146	7.693	7.682	(1.029)	52217	0.50000	0.516(a)	
	13 2-Methylphenol	108	7.817	7.828	(1.046)	158770	2.00000	2.03(a)	
	14 2,2'-Oxybis(1-chloropropane)	45	7.838	7.838	(1.049)	21332	0.50000	0.527(a)	
	15 Acetophenone	105	7.994	7.995	(0.878)	52961	0.50000	0.516(a)	
	16 N-Nitroso-di-n-propylamine	70	8.005	8.015	(1.071)	23231	0.50000	0.451(a)	
	17 3&4-Methylphenol	108	8.015	8.026	(1.072)	160764	2.00000	1.97(a)	
	18 Hexachloroethane	117	8.119	8.109	(1.086)	19938	0.50000	0.510(a)	
	19 Nitrobenzene	77	8.202	8.202	(0.901)	35684	0.50000	0.521(a)	
	20 Isophorone	82	8.523	8.523	(0.936)	65445	0.50000	0.496(a)	
	21 2-Nitrophenol	139	8.616	8.616	(0.946)	90357	2.00000	1.99(a)	

Data File: \\target_server\gg\chem\gcms-n.i\N032023.b\N7756.D
Report Date: 22-Mar-2023 07:59

DL

9:33 am, Mar 22, 2023

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
	22 2,4-Dimethylphenol	107	8.708	8.708	(0.956)	153624	2.00000	2.06(a)	
	23 bis(2-Chloroethoxy)methane	93	8.821	8.821	(0.968)	45234	0.50000	0.510(a)	
	24 Benzoic acid	105	8.790	8.883	(0.965)	39159	2.00000	1.65(a)	
	25 2,4-Dichlorophenol	162	8.944	8.944	(0.982)	135790	2.00000	2.00(a)	
	26 1,2,4-Trichlorobenzene	180	9.046	9.047	(0.993)	35311	0.50000	0.518(a)	
*	27 Naphthalene-D8	136	9.108	9.108	(1.000)	196472	0.80000	(a)	
	28 Naphthalene	128	9.139	9.139	(1.003)	128265	0.50000	0.522(a)	
	29 4-Chloroaniline	127	9.231	9.231	(1.014)	48613	0.50000	0.562(a)	
	30 Hexachlorobutadiene	225	9.334	9.334	(1.025)	16435	0.50000	0.530(a)	
	31 Caprolactam	113	9.677	9.709	(1.063)	8798	0.50000	0.416(a)	
	32 4-Chloro-3-Methylphenol	107	9.900	9.900	(1.087)	144882	2.00000	2.17(a)	
$	33 2-Methylnaphthalene-D10	152	10.016	10.017	(1.100)	63908	0.50000	0.534(a)	
	34 2-Methylnaphthalene	142	10.059	10.059	(1.104)	79095	0.50000	0.516(a)	
	35 1-Methylnaphthalene	142	10.186	10.186	(1.118)	74430	0.50000	0.516(a)	
	36 Hexachlorocyclopentadiene	237	10.292	10.292	(0.899)	14406	0.50000	0.466(a)	
	37 1,2,4,5-Tetrachlorobenzene	216	10.292	10.292	(0.899)	28591	0.50000	0.519(a)	
$	38 2,4-Dibromophenol	252	10.440	10.440	(0.912)	16866	0.50000	0.500(a)	
	39 2,4,6-Trichlorophenol	196	10.461	10.461	(0.914)	81699	2.00000	2.00(a)	
	40 2,4,5-Trichlorophenol	196	10.504	10.504	(0.917)	100435	2.00000	2.12(a)	
	41 1,1'-Biphenyl	154	10.694	10.694	(0.934)	99210	0.50000	0.530(a)	
	42 2-Chloronaphthalene	164	10.705	10.705	(0.935)	25231	0.50000	0.524(a)	
	43 2-Nitroaniline	65	10.864	10.864	(0.949)	13153	0.50000	0.492(a)	
	44 Dimethyl Phthalate	163	11.127	11.148	(0.972)	345484	2.00000	2.03(a)	
	45 2,6-Dinitrotoluene	165	11.189	11.200	(0.977)	18774	0.50000	0.491(a)	
	46 Acenaphthylene	152	11.252	11.263	(0.983)	117046	0.50000	0.491(aM)	M6
	47 3-Nitroaniline	138	11.419	11.430	(0.997)	15448	0.50000	0.644(a)	
*	48 Acenaphthene-D10	164	11.451	11.451	(1.000)	94387	0.80000	(a)	
	49 Acenaphthene	153	11.492	11.493	(1.004)	75372	0.50000	0.507(a)	
	50 2,4-Dinitrophenol	184	11.565	11.566	(1.010)	13058	2.00000	1.36(a)	
	51 4-Nitrophenol	109	11.691	11.691	(1.021)	21825	2.00000	1.78(a)	
	52 Dibenzofuran	168	11.733	11.733	(1.025)	105673	0.50000	0.525(a)	
	53 2,4-Dinitrotoluene	165	11.733	11.743	(1.025)	21913	0.50000	0.486(a)	
	54 2,3,4,6-Tetrachlorophenol	232	11.920	11.921	(1.041)	60160	2.00000	2.00(a)	
	55 Diethylphthalate	149	12.088	12.088	(1.056)	363135	2.00000	2.06(a)	
$	56 Fluorene-D10	174	12.150	12.161	(1.061)	65878	0.50000	0.520(a)	
	57 Fluorene	166	12.192	12.192	(1.065)	80178	0.50000	0.511(a)	
	58 4-Chlorophenyl-phenylether	204	12.213	12.213	(1.067)	34911	0.50000	0.517(a)	
	59 4-Nitroaniline	138	12.244	12.255	(1.069)	15659	0.50000	0.610(a)	
	60 4,6-Dinitro-2-Methylphenol	198	12.286	12.286	(0.914)	27287	2.00000	1.56(a)	
	61 N-Nitrosodiphenylamine	169	12.380	12.380	(0.921)	66354	0.50000	0.538(a)	
	62 4-Bromophenyl-phenylether	248	12.864	12.864	(0.957)	17840	0.50000	0.484(aM)	M6
	63 Hexachlorobenzene	284	12.946	12.946	(0.963)	20851	0.50000	0.533(a)	
	64 Atrazine	200	13.120	13.131	(0.976)	26240	0.50000	0.594(a)	
	65 Pentachlorophenol	266	13.223	13.223	(0.983)	34933	2.00000	1.83(a)	
*	66 Phenanthrene-D10	188	13.448	13.448	(1.000)	133117	0.80000	(a)	
	67 Phenanthrene	178	13.479	13.479	(1.002)	104242	0.50000	0.527(a)	
	68 Anthracene	178	13.550	13.551	(1.008)	102761	0.50000	0.532(a)	
	69 Carbazole	167	13.776	13.776	(1.024)	81977	0.50000	0.631(a)	
	70 Di-n-butylphthalate	149	14.309	14.309	(1.064)	587314	2.00000	2.08(a)	
$	71 Fluoranthene-d10	212	15.064	15.064	(1.120)	58958	0.50000	0.525	
	72 Fluoranthene	202	15.084	15.094	(1.122)	90999	0.50000	0.533(a)	
$	73 Pyrene-D10	212	15.359	15.369	(0.889)	72994	0.50000	0.571(a)	
	74 Pyrene	202	15.379	15.390	(0.890)	96352	0.50000	0.565(a)	
	75 Butylbenzylphthalate	149	16.388	16.398	(0.948)	214121	2.00000	2.05(a)	

Data File: \\target_server\gg\chem\gcms-n.i\N032023.b\N7756.D
Report Date: 22-Mar-2023 07:59

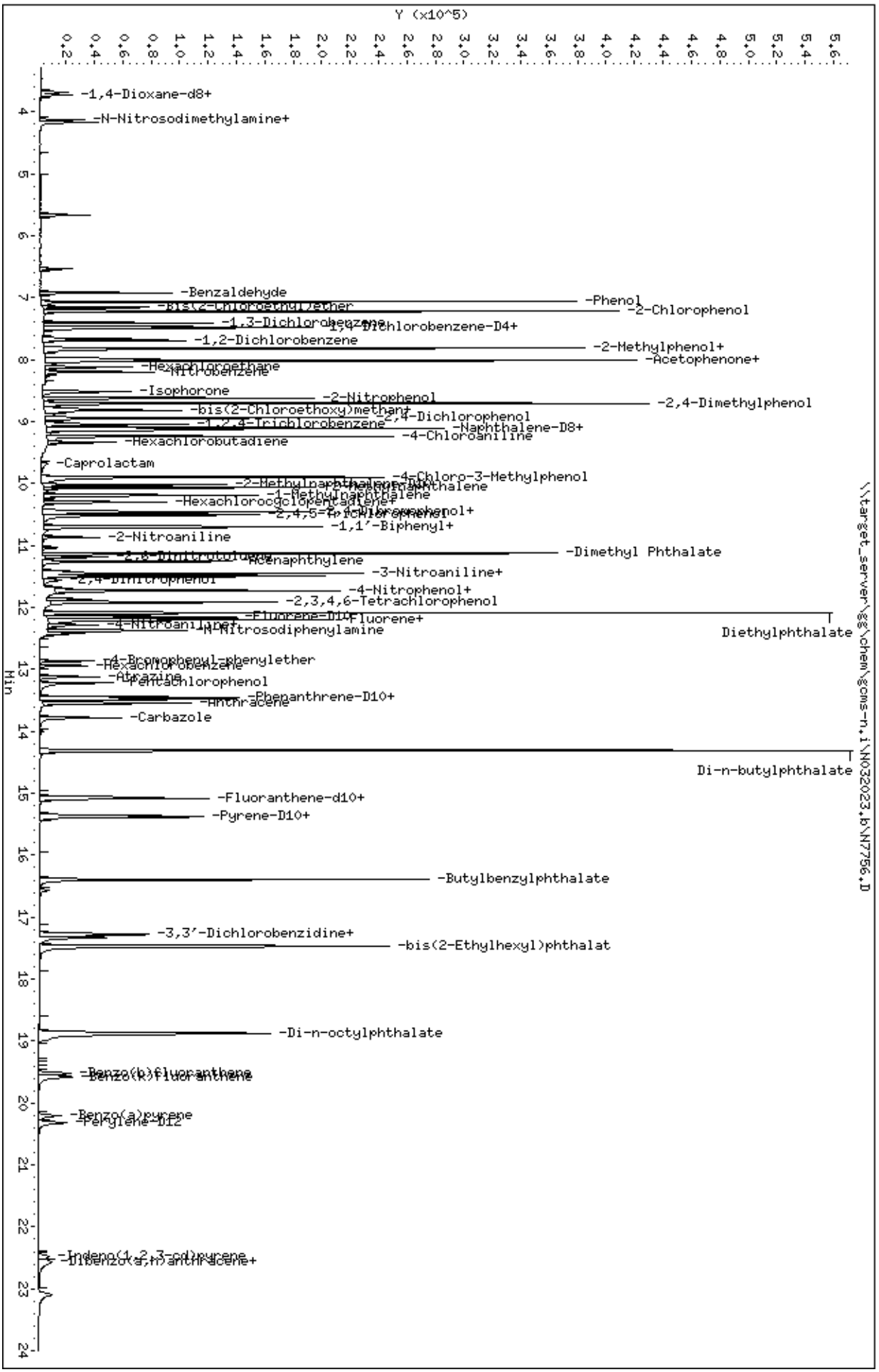
DL

9:33 am, Mar 22, 2023

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
	76 3,3'-Dichlorobenzidine	252	17.284	17.274	(1.000)	10677	0.50000	0.494(a)	
	77 Benzo(a)anthracene	228	17.264	17.274	(0.999)	48310	0.50000	0.490(a)	
*	78 Chrysene-D12	240	17.284	17.295	(1.000)	57596	0.80000	(a)	
	79 Chrysene	228	17.335	17.335	(1.003)	61072	0.50000	0.550(a)	
	80 bis(2-Ethylhexyl)phthalate	149	17.468	17.468	(1.011)	289708	2.00000	2.06(a)	
	81 Di-n-octylphthalate	149	18.874	18.874	(1.092)	374315	2.00000	1.92(a)	
	82 Benzo(b)fluoranthene	252	19.521	19.521	(0.961)	38384	0.50000	0.490(a)	
	83 Benzo(k)fluoranthene	252	19.584	19.584	(0.964)	55446	0.50000	0.667(aH)	
	84 Benzo(a)pyrene	252	20.204	20.204	(0.994)	35050	0.50000	0.493(a)	
*	85 Perylene-D12	264	20.320	20.309	(1.000)	41849	0.80000	(a)	
	86 Indeno(1,2,3-cd)pyrene	276	22.485	22.474	(1.107)	17835	0.50000	0.386(aM)	M3
	87 Dibenzo(a,h)anthracene	278	22.579	22.558	(1.111)	20992	0.50000	0.461(a)	
	88 Benzo(g,h,i)perylene	276	23.094	23.094	(1.137)	31345	0.50000	0.520(a)	
M	89 Total PAHs	100				1257174	9.00000	9.28(a)	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.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Date : 20-MAR-2023 15:48
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Instrument: gcms-n,i
Operator: DT/EP
Column diameter: 0.25
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Y (x10^5)
Min
-1,4-Dioxane-d8+
-N-Nitrosodimethylamine+
-Benzaldehyde
-Phenol
-2-Chlorophenol
-1,3-Dichlorobenzene
-1,4-Dichlorobenzene-D4+
-1,2-Dichlorobenzene
-2-Methylphenol+
-Acetophenone+
-Hexachloroethane
-Nitrobenzene
-Isophorone
-2-Nitrophenol
-2,4-Dimethylphenol
-bis(2-Chloroethoxy)methane
-2,4-Dichlorophenol
-1,2,4-Trichlorobenzene
-Naphthalene-D8+
-4-Chloroaniline
-Hexachlorobutadiene
-Caprolactam
-4-Chloro-3-Methylphenol
-2-Methylnaphthalene-D10
-2-Methylnaphthalene
-1-Methylnaphthalene
-Hexachlorocyclopentadiene+
-2,4,5-Trichlorophenol+
-1,1'-Biphenyl+
-2-Nitroaniline
-Dimethyl Phthalate
-Acenaphthylene
-3-Nitroaniline+
-2,4-Dinitrophenol
-4-Nitrophenol+
-2,3,4,6-Tetrachlorophenol
-Fluorene-D10
-Fluorene+
-4-Nitroaniline
-N-Nitrosodiphenylamine
Diethylphthalate
-4-Bromophenyl-phenylether
-Hexachlorobenzene
-Atrazine
-Pentachlorophenol
-Phenanthrene-D10+
-Anthracene
-Carbazole
Di-n-butylphthalate
-Fluoranthene-d10+
-Pyrene-D10+
-Butylbenzylphthalate
-3,3'-Dichlorobenzidine+
-bis(2-Ethylhexyl)phthalat
-Di-n-octylphthalate
-Benzo(b)fluoranthene
-Benzo(k)fluoranthene
-Benzo(a)pyrene
-Perylene-D12
-Indeno(1,2,3-cd)pyrene
-Dibenz(a,h)anthracene+

Data File: \\target_server\gg\chem\gcms-n.i\N032023.b\N7757.D
Report Date: 22-Mar-2023 07:59

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-n.i\N032023.b\N7757.D
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Inj Date : 20-MAR-2023 16:25
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Smp Info : WG334091-2
Misc Info :
Comment   :
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Meth Date : 21-Mar-2023 06:46 epelletier Quant Type: ISTD
Cal Date : 20-MAR-2023 16:25   Cal File: N7757.D
Als bottle: 4   Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: all.sub
Target Version: 4.12
Processing Host: INSPIRON1

Concentration Formula: Amt * DF * (Vt/Ws)*(100/(100-M))*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.00100	Final Volume (L)
Ws	0.03000	Weight of Sample (Kg)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
$	1 1,4-Dioxane-d8	96	3.688	3.667	(0.493)	6702	0.20000	0.208(a)	
	2 1,4-Dioxane	88	3.730	3.699	(0.499)	6420	0.20000	0.207(a)	
	3 N-Nitrosodimethylamine	74	4.142	4.121	(0.554)	9378	0.20000	0.198(a)	
	4 Pyridine	79	4.184	4.142	(0.560)	13789	0.20000	0.188(a)	
	5 Benzaldehyde	77	6.923	6.912	(0.926)	9423	0.20000	0.265(a)	
	6 Phenol	94	7.068	7.069	(0.946)	91219	1.00000	0.899(a)	
	7 Bis(2-Chloroethyl)ether	93	7.162	7.152	(0.958)	16394	0.20000	0.200(a)	
	8 2-Chlorophenol	128	7.214	7.214	(0.965)	93260	1.00000	0.965(a)	
	9 1,3-Dichlorobenzene	146	7.401	7.401	(0.990)	21438	0.20000	0.204(a)	
*	10 1,4-Dichlorobenzene-D4	152	7.474	7.474	(1.000)	58644	0.80000	(a)	
	11 1,4-Dichlorobenzene	146	7.495	7.495	(1.003)	22040	0.20000	0.206(a)	
	12 1,2-Dichlorobenzene	146	7.692	7.682	(1.029)	20534	0.20000	0.207(a)	
	13 2-Methylphenol	108	7.817	7.828	(1.046)	70422	1.00000	0.920(a)	
	14 2,2'-Oxybis(1-chloropropane)	45	7.849	7.838	(1.050)	8059	0.20000	0.203(a)	
	15 Acetophenone	105	7.994	7.995	(0.878)	19237	0.20000	0.192(a)	
	16 N-Nitroso-di-n-propylamine	70	8.015	8.015	(1.072)	11645	0.20000	0.231(a)	
	17 3&4-Methylphenol	108	8.015	8.026	(1.072)	75939	1.00000	0.950(a)	
	18 Hexachloroethane	117	8.119	8.109	(1.086)	7652	0.20000	0.200(a)	
	19 Nitrobenzene	77	8.202	8.202	(0.901)	12454	0.20000	0.186(a)	
	20 Isophorone	82	8.523	8.523	(0.936)	22908	0.20000	0.178(a)	
	21 2-Nitrophenol	139	8.626	8.616	(0.947)	39780	1.00000	0.897(a)	

Data File: \\target_server\gg\chem\gcms-n.i\N032023.b\N7757.D
Report Date: 22-Mar-2023 07:59

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9:33 am, Mar 22, 2023

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
	22 2,4-Dimethylphenol	107	8.708	8.708	(0.956)	71424	1.00000	0.980(a)	
	23 bis(2-Chloroethoxy)methane	93	8.821	8.821	(0.968)	16533	0.20000	0.191(a)	
	24 Benzoic acid	105	8.810	8.883	(0.967)	11844	1.00000	0.512(a)	
	25 2,4-Dichlorophenol	162	8.944	8.944	(0.982)	72288	1.00000	1.09(a)	
	26 1,2,4-Trichlorobenzene	180	9.046	9.047	(0.993)	13652	0.20000	0.205(a)	
*	27 Naphthalene-D8	136	9.108	9.108	(1.000)	191549	0.80000	(a)	
	28 Naphthalene	128	9.139	9.139	(1.003)	49428	0.20000	0.206(a)	
	29 4-Chloroaniline	127	9.231	9.231	(1.014)	18783	0.20000	0.223(a)	
	30 Hexachlorobutadiene	225	9.334	9.334	(1.025)	6310	0.20000	0.209(a)	
	31 Caprolactam	113	9.699	9.709	(1.065)	2735	0.20000	0.133(a)	
	32 4-Chloro-3-Methylphenol	107	9.900	9.900	(1.087)	69728	1.00000	1.07(a)	
$	33 2-Methylnaphthalene-D10	152	10.016	10.017	(1.100)	24062	0.20000	0.206(a)	
	34 2-Methylnaphthalene	142	10.059	10.059	(1.104)	30171	0.20000	0.202(a)	
	35 1-Methylnaphthalene	142	10.196	10.186	(1.120)	29046	0.20000	0.207(a)	
	36 Hexachlorocyclopentadiene	237	10.302	10.292	(0.900)	5186	0.20000	0.156(a)	
	37 1,2,4,5-Tetrachlorobenzene	216	10.302	10.292	(0.900)	11252	0.20000	0.190(a)	
$	38 2,4-Dibromophenol	252	10.440	10.440	(0.912)	6560	0.20000	0.181(a)	
	39 2,4,6-Trichlorophenol	196	10.461	10.461	(0.914)	41137	1.00000	0.937(a)	
	40 2,4,5-Trichlorophenol	196	10.514	10.504	(0.918)	54160	1.00000	1.06(a)	
	41 1,1'-Biphenyl	154	10.694	10.694	(0.934)	41828	0.20000	0.208(a)	
	42 2-Chloronaphthalene	164	10.705	10.705	(0.935)	10447	0.20000	0.202(a)	
	43 2-Nitroaniline	65	10.864	10.864	(0.949)	4748	0.20000	0.165(a)	
	44 Dimethyl Phthalate	163	11.137	11.148	(0.973)	185079	1.00000	1.01(a)	
	45 2,6-Dinitrotoluene	165	11.200	11.200	(0.978)	7009	0.20000	0.171(a)	
	46 Acenaphthylene	152	11.263	11.263	(0.984)	46190	0.20000	0.186(aM)	M6
	47 3-Nitroaniline	138	11.419	11.430	(0.997)	5550	0.20000	0.215(a)	
*	48 Acenaphthene-D10	164	11.450	11.451	(1.000)	101357	0.80000	(a)	
	49 Acenaphthene	153	11.492	11.493	(1.004)	33103	0.20000	0.207(a)	
	50 2,4-Dinitrophenol	184	11.576	11.566	(1.011)	5284	1.00000	0.514(a)	
	51 4-Nitrophenol	109	11.680	11.691	(1.020)	7907	1.00000	0.602(a)	
	52 Dibenzofuran	168	11.732	11.733	(1.025)	44368	0.20000	0.205(a)	
	53 2,4-Dinitrotoluene	165	11.743	11.743	(1.026)	7548	0.20000	0.156(a)	
	54 2,3,4,6-Tetrachlorophenol	232	11.920	11.921	(1.041)	27874	1.00000	0.864(a)	
	55 Diethylphthalate	149	12.088	12.088	(1.056)	189503	1.00000	0.999(a)	
$	56 Fluorene-D10	174	12.150	12.161	(1.061)	27871	0.20000	0.205(a)	
	57 Fluorene	166	12.192	12.192	(1.065)	33981	0.20000	0.202(a)	
	58 4-Chlorophenyl-phenylether	204	12.213	12.213	(1.067)	14810	0.20000	0.204(a)	
	59 4-Nitroaniline	138	12.234	12.255	(1.068)	6317	0.20000	0.229(a)	
	60 4,6-Dinitro-2-Methylphenol	198	12.286	12.286	(0.914)	9965	1.00000	0.538(a)	
	61 N-Nitrosodiphenylamine	169	12.380	12.380	(0.921)	26433	0.20000	0.202(a)	
	62 4-Bromophenyl-phenylether	248	12.864	12.864	(0.957)	6925	0.20000	0.184(aM)	M6
	63 Hexachlorobenzene	284	12.946	12.946	(0.963)	8886	0.20000	0.214(a)	
	64 Atrazine	200	13.120	13.131	(0.976)	16625	0.20000	0.354(a)	
	65 Pentachlorophenol	266	13.222	13.223	(0.983)	14470	1.00000	0.715(a)	
*	66 Phenanthrene-D10	188	13.448	13.448	(1.000)	141219	0.80000	(a)	
	67 Phenanthrene	178	13.479	13.479	(1.002)	43335	0.20000	0.207(a)	
	68 Anthracene	178	13.550	13.551	(1.008)	42332	0.20000	0.207(a)	
	69 Carbazole	167	13.786	13.776	(1.025)	31960	0.20000	0.232(a)	
	70 Di-n-butylphthalate	149	14.309	14.309	(1.064)	291680	1.00000	0.974(a)	
$	71 Fluoranthene-d10	212	15.064	15.064	(1.120)	23265	0.20000	0.195	
	72 Fluoranthene	202	15.084	15.094	(1.122)	36089	0.20000	0.199(a)	
$	73 Pyrene-D10	212	15.359	15.369	(0.889)	29346	0.20000	0.234(a)	
	74 Pyrene	202	15.390	15.390	(0.890)	39146	0.20000	0.234(a)	
	75 Butylbenzylphthalate	149	16.398	16.398	(0.949)	97017	1.00000	0.946(a)	

Data File: \\target_server\gg\chem\gcms-n.i\N032023.b\N7757.D
Report Date: 22-Mar-2023 07:59

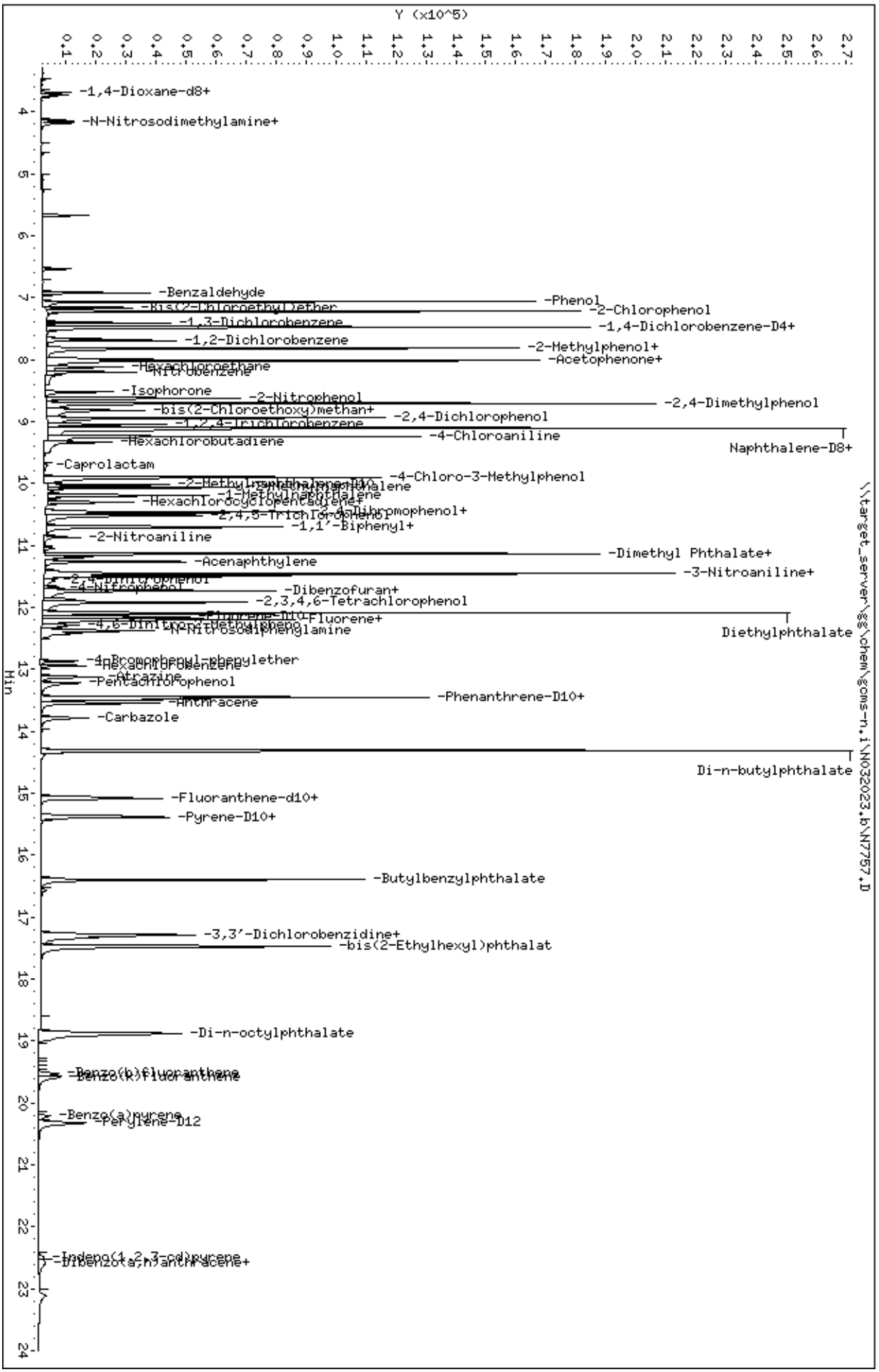
DL

9:33 am, Mar 22, 2023

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
	76 3,3'-Dichlorobenzidine	252	17.295	17.274	(1.001)	2961	0.20000	0.140(a)	
	77 Benzo(a)anthracene	228	17.274	17.274	(0.999)	16960	0.20000	0.175(a)	
*	78 Chrysene-D12	240	17.284	17.295	(1.000)	56577	0.80000	(a)	
	79 Chrysene	228	17.335	17.335	(1.003)	25442	0.20000	0.233(a)	
	80 bis(2-Ethylhexyl)phthalate	149	17.478	17.468	(1.011)	124383	1.00000	0.901(a)	
	81 Di-n-octylphthalate	149	18.874	18.874	(1.092)	138979	1.00000	0.724(a)	
	82 Benzo(b)fluoranthene	252	19.521	19.521	(0.961)	11873	0.20000	0.160(a)	
	83 Benzo(k)fluoranthene	252	19.584	19.584	(0.964)	21836	0.20000	0.252(aH)	
	84 Benzo(a)pyrene	252	20.215	20.204	(0.995)	12155	0.20000	0.181(a)	
*	85 Perylene-D12	264	20.320	20.309	(1.000)	39592	0.80000	(a)	
	86 Indeno(1,2,3-cd)pyrene	276	22.495	22.474	(1.107)	4325	0.20000	0.109(aM)	M3
	87 Dibenzo(a,h)anthracene	278	22.590	22.558	(1.112)	5263	0.20000	0.122(a)	
	88 Benzo(g,h,i)perylene	276	23.105	23.094	(1.137)	10173	0.20000	0.178(a)	
M	89 Total PAHs	100				490848	3.60000	3.47(a)	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.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Instrument: gcms-n,i
Operator: DT/EP
Column diameter: 0.25
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Y (x10^5)
Min
-1,4-Dioxane-d8+
-N-Nitrosodimethylamine+
-Benzaldehyde
-Phenol
-2-Chlorophenol
-1,4-Dichlorobenzene-D4+
-1,3-Dichlorobenzene
-1,2-Dichlorobenzene
-2-Methylphenol+
-Acetophenone+
-Hexachloroethane
-Nitrobenzene
-Isophorone
-2-Nitrophenol
-2,4-Dimethylphenol
-bis(2-Chloroethoxy)methan+
-2,4-Dichlorophenol
-1,2,4-Trichlorobenzene
-4-Chloroaniline
Naphthalene-D8+
-Hexachlorobutadiene
-Caprolactam
-4-Chloro-3-Methylphenol
-1-Methylnaphthalene
-Hexachlorocyclopentadiene+
-1,1'-Biphenyl+
-2-Nitroaniline
-Dimethyl Phthalate+
-Acenaphthylene
-3-Nitroaniline+
-Dibenzofuran+
-2,3,4,6-Tetrachlorophenol
-Fluorene+
Diethylphthalate
-N-Nitrosodiphenylamine
-Atrazine
-Pentachlorophenol
-Phenanthrene-D10+
-Carbazole
Di-n-butylphthalate
-Fluoranthene-d10+
-Pyrene-D10+
-Butylbenzylphthalate
-3,3'-Dichlorobenzidine+
-bis(2-Ethylhexyl)phthalat
-Di-n-octylphthalate
-Benzo(a)pyrene
-Perylene-D12

Data File: \\target_server\gg\chem\gcms-n.i\N032023.b\N7758.D
Report Date: 22-Mar-2023 07:59

Katahdin Analytical Services

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Inj Date : 20-MAR-2023 17:02
Operator : DT/EP   Inst ID: gcms-n.i
Smp Info : WG334091-5
Misc Info :
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Meth Date : 21-Mar-2023 06:46 epelletier Quant Type: ISTD
Cal Date : 20-MAR-2023 17:02   Cal File: N7758.D
Als bottle: 5   Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: all.sub
Target Version: 4.12
Processing Host: INSPIRON1

Concentration Formula: Amt * DF * (Vt/Ws)*(100/(100-M))*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.00100	Final Volume (L)
Ws	0.03000	Weight of Sample (Kg)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
$	1 1,4-Dioxane-d8	96	3.667	3.667	(0.491)	235913	7.00000	7.38	
	2 1,4-Dioxane	88	3.709	3.699	(0.496)	226149	7.00000	7.36(a)	
	3 N-Nitrosodimethylamine	74	4.110	4.121	(0.550)	343830	7.00000	7.32(a)	
	4 Pyridine	79	4.142	4.142	(0.554)	545663	7.00000	7.53(a)	
	5 Benzaldehyde	77	6.912	6.912	(0.925)	206686	7.00000	5.88(a)	
	6 Phenol	94	7.068	7.069	(0.946)	774294	7.00000	7.70(a)	
	7 Bis(2-Chloroethyl)ether	93	7.151	7.152	(0.957)	592350	7.00000	7.29(a)	
	8 2-Chlorophenol	128	7.214	7.214	(0.965)	696367	7.00000	7.28(a)	
	9 1,3-Dichlorobenzene	146	7.401	7.401	(0.990)	752094	7.00000	7.25(a)	
*	10 1,4-Dichlorobenzene-D4	152	7.474	7.474	(1.000)	58062	0.80000	(a)	
	11 1,4-Dichlorobenzene	146	7.495	7.495	(1.003)	757801	7.00000	7.15(a)	
	12 1,2-Dichlorobenzene	146	7.682	7.682	(1.028)	704633	7.00000	7.18(a)	
	13 2-Methylphenol	108	7.817	7.828	(1.046)	551388	7.00000	7.28(a)	
	14 2,2'-Oxybis(1-chloropropane)	45	7.838	7.838	(1.049)	278372	7.00000	7.10(a)	
	15 Acetophenone	105	7.984	7.995	(0.877)	761651	7.00000	7.34(a)	
	16 N-Nitroso-di-n-propylamine	70	8.005	8.015	(1.071)	356857	7.00000	7.14(a)	
	17 3&4-Methylphenol	108	8.025	8.026	(1.074)	575670	7.00000	7.28(a)	
	18 Hexachloroethane	117	8.109	8.109	(1.085)	276737	7.00000	7.30(a)	
	19 Nitrobenzene	77	8.192	8.202	(0.899)	502449	7.00000	7.27(a)	
	20 Isophorone	82	8.513	8.523	(0.935)	992057	7.00000	7.45(a)	
	21 2-Nitrophenol	139	8.615	8.616	(0.946)	338152	7.00000	7.37(a)	

Data File: \\target_server\gg\chem\gcms-n.i\N032023.b\N7758.D
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9:33 am, Mar 22, 2023

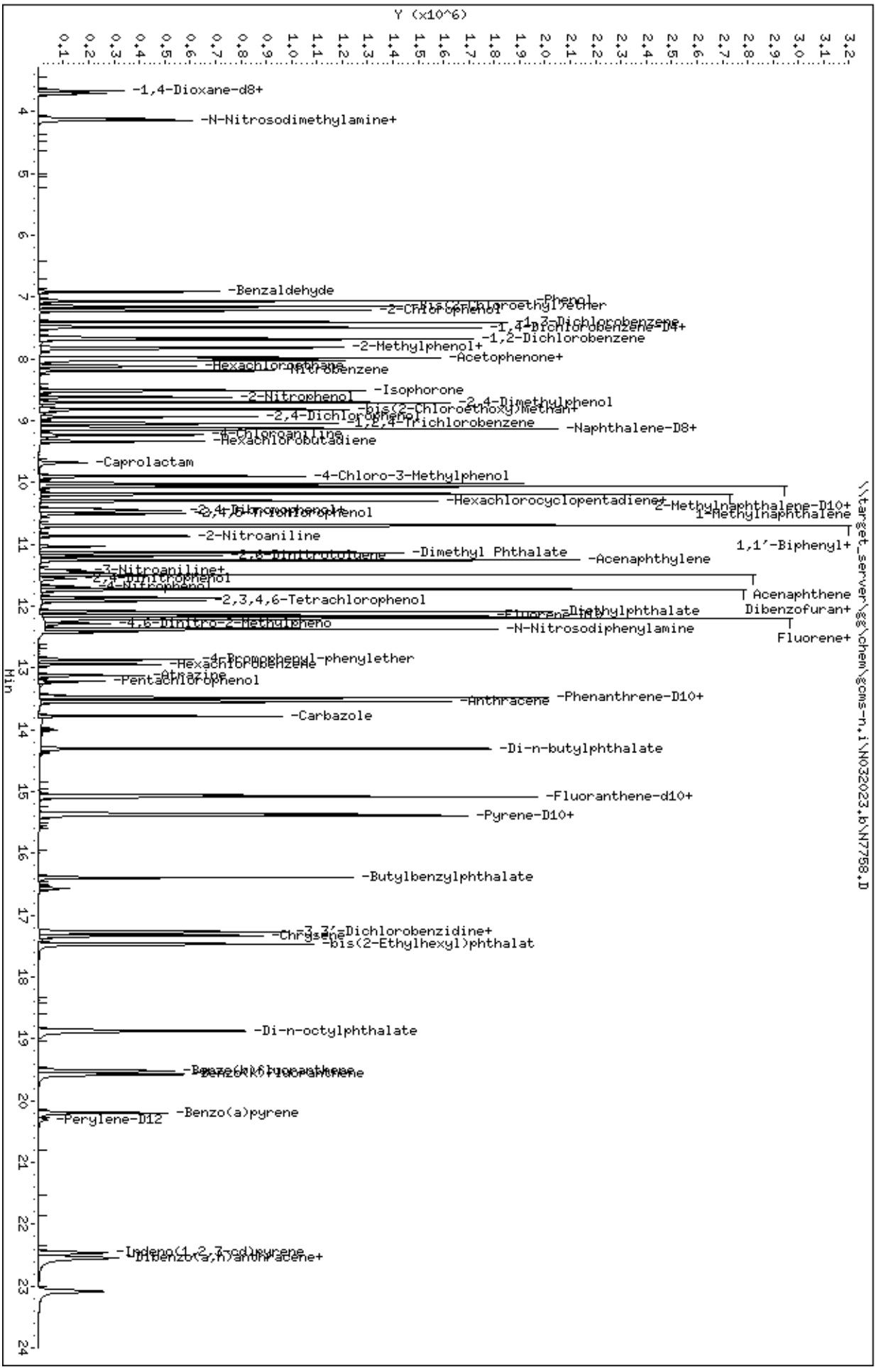
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
	22 2,4-Dimethylphenol	107	8.708	8.708	(0.956)	551760	7.00000	7.31(a)	
	23 bis(2-Chloroethoxy)methane	93	8.821	8.821	(0.968)	668850	7.00000	7.47(a)	
	24 Benzoic acid	105	8.821	8.883	(0.968)	132221	7.00000	5.52(a)	
	25 2,4-Dichlorophenol	162	8.944	8.944	(0.982)	476006	7.00000	6.96(a)	
	26 1,2,4-Trichlorobenzene	180	9.046	9.047	(0.993)	493424	7.00000	7.17(a)	
*	27 Naphthalene-D8	136	9.108	9.108	(1.000)	198325	0.80000	(a)	
	28 Naphthalene	128	9.128	9.139	(1.002)	1784906	7.00000	7.19(a)	
	29 4-Chloroaniline	127	9.221	9.231	(1.012)	670653	7.00000	7.68(a)	
	30 Hexachlorobutadiene	225	9.333	9.334	(1.025)	227178	7.00000	7.25(a)	
	31 Caprolactam	113	9.677	9.709	(1.063)	171209	7.00000	8.02(a)	
	32 4-Chloro-3-Methylphenol	107	9.900	9.900	(1.087)	458670	7.00000	6.80(a)	
$	33 2-Methylnaphthalene-D10	152	10.016	10.017	(1.100)	868131	7.00000	7.18	
	34 2-Methylnaphthalene	142	10.059	10.059	(1.104)	1130031	7.00000	7.30(a)	
	35 1-Methylnaphthalene	142	10.186	10.186	(1.118)	1049887	7.00000	7.21(a)	
	36 Hexachlorocyclopentadiene	237	10.292	10.292	(0.899)	241922	7.00000	7.94(a)	
	37 1,2,4,5-Tetrachlorobenzene	216	10.292	10.292	(0.899)	388906	7.00000	7.17(a)	
$	38 2,4-Dibromophenol	252	10.429	10.440	(0.911)	242285	7.00000	7.29	
	39 2,4,6-Trichlorophenol	196	10.461	10.461	(0.914)	287579	7.00000	7.13(a)	
	40 2,4,5-Trichlorophenol	196	10.503	10.504	(0.917)	309038	7.00000	6.61(a)	
	41 1,1'-Biphenyl	154	10.694	10.694	(0.934)	1250852	7.00000	6.79(a)	
	42 2-Chloronaphthalene	164	10.705	10.705	(0.935)	330562	7.00000	6.96(a)	
	43 2-Nitroaniline	65	10.853	10.864	(0.948)	195528	7.00000	7.42(a)	
	44 Dimethyl Phthalate	163	11.137	11.148	(0.973)	1167642	7.00000	6.96(a)	
	45 2,6-Dinitrotoluene	165	11.189	11.200	(0.977)	274614	7.00000	7.29(a)	
	46 Acenaphthylene	152	11.252	11.263	(0.983)	1568186	7.00000	6.92(aM)	M6
	47 3-Nitroaniline	138	11.419	11.430	(0.997)	136954	7.00000	5.79(a)	
*	48 Acenaphthene-D10	164	11.450	11.451	(1.000)	93044	0.80000	(a)	
	49 Acenaphthene	153	11.492	11.493	(1.004)	1012137	7.00000	6.91(a)	
	50 2,4-Dinitrophenol	184	11.555	11.566	(1.009)	80213	7.00000	8.49(a)	
	51 4-Nitrophenol	109	11.680	11.691	(1.020)	97214	7.00000	8.06(a)	
	52 Dibenzofuran	168	11.732	11.733	(1.025)	1352700	7.00000	6.82(a)	
	53 2,4-Dinitrotoluene	165	11.732	11.743	(1.025)	336352	7.00000	7.58(a)	
	54 2,3,4,6-Tetrachlorophenol	232	11.920	11.921	(1.041)	226210	7.00000	7.63(a)	
	55 Diethylphthalate	149	12.088	12.088	(1.056)	1213857	7.00000	6.97(a)	
$	56 Fluorene-D10	174	12.150	12.161	(1.061)	851819	7.00000	6.82	
	57 Fluorene	166	12.192	12.192	(1.065)	1074327	7.00000	6.94(a)	
	58 4-Chlorophenyl-phenylether	204	12.213	12.213	(1.067)	459341	7.00000	6.90(a)	
	59 4-Nitroaniline	138	12.234	12.255	(1.068)	64421	7.00000	2.55(a)	
	60 4,6-Dinitro-2-Methylphenol	198	12.286	12.286	(0.914)	138490	7.00000	8.08(a)	
	61 N-Nitrosodiphenylamine	169	12.369	12.380	(0.920)	880861	7.00000	7.29(a)	
	62 4-Bromophenyl-phenylether	248	12.864	12.864	(0.957)	249069	7.00000	7.12(aM)	M6
	63 Hexachlorobenzene	284	12.946	12.946	(0.963)	273793	7.00000	7.14(a)	
	64 Atrazine	200	13.120	13.131	(0.976)	233096	7.00000	5.38(a)	
	65 Pentachlorophenol	266	13.222	13.223	(0.983)	141549	7.00000	7.57(a)	
*	66 Phenanthrene-D10	188	13.448	13.448	(1.000)	130483	0.80000	(a)	
	67 Phenanthrene	178	13.479	13.479	(1.002)	1409204	7.00000	7.27(a)	
	68 Anthracene	178	13.550	13.551	(1.008)	1368761	7.00000	7.24(a)	
	69 Carbazole	167	13.776	13.776	(1.024)	789555	7.00000	6.20(a)	
	70 Di-n-butylphthalate	149	14.309	14.309	(1.064)	2040459	7.00000	7.38(a)	
$	71 Fluoranthene-d10	212	15.064	15.064	(1.120)	820861	7.00000	7.46	
	72 Fluoranthene	202	15.084	15.094	(1.122)	1230924	7.00000	7.36(a)	
$	73 Pyrene-D10	212	15.359	15.369	(0.889)	963483	7.00000	6.66	
	74 Pyrene	202	15.390	15.390	(0.890)	1278488	7.00000	6.62(a)	
	75 Butylbenzylphthalate	149	16.388	16.398	(0.948)	829496	7.00000	7.02(a)	

Data File: \\target_server\gg\chem\gcms-n.i\N032023.b\N7758.D
Report Date: 22-Mar-2023 07:59

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
	76 3,3'-Dichlorobenzidine	252	17.274	17.274	(0.999)	183555	7.00000	7.51(a)	
	77 Benzo(a)anthracene	228	17.264	17.274	(0.999)	845096	7.00000	7.57(a)	
*	78 Chrysene-D12	240	17.284	17.295	(1.000)	65195	0.80000	(a)	
	79 Chrysene	228	17.335	17.335	(1.003)	853921	7.00000	6.79(a)	
	80 bis(2-Ethylhexyl)phthalate	149	17.468	17.468	(1.011)	1122390	7.00000	7.06(a)	
	81 Di-n-octylphthalate	149	18.874	18.874	(1.092)	1624513	7.00000	7.35(a)	
	82 Benzo(b)fluoranthene	252	19.510	19.521	(0.961)	723186	7.00000	7.64(a)	
	83 Benzo(k)fluoranthene	252	19.584	19.584	(0.964)	901304	7.00000	7.71(aH)	
	84 Benzo(a)pyrene	252	20.194	20.204	(0.994)	654496	7.00000	7.61(a)	
*	85 Perylene-D12	264	20.309	20.309	(1.000)	50649	0.80000	(a)	
	86 Indeno(1,2,3-cd)pyrene	276	22.464	22.474	(1.106)	429000	7.00000	8.44(a)	
	87 Dibenzo(a,h)anthracene	278	22.548	22.558	(1.110)	456806	7.00000	8.28(a)	
	88 Benzo(g,h,i)perylene	276	23.084	23.094	(1.137)	549266	7.00000	7.53(a)	
M	89 Total PAHs	100				18319926	126.000	132	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.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Date : 20-MAR-2023 17:02
Client ID:
Sample Info: WG334091-5
Column phase: ZB5-MS
Instrument: gcms-n,i
Operator: DT/EP
Column diameter: 0.25
\\target_server\gg\chem\gcms-n,i\N032023,b\N7758.D
Y (x10^6)
Min
-1,4-Dioxane-d8+
-N-Nitrosodimethylamine+
-Benzaldehyde
-Phenol
-bis(2-Chloroethyl)ether
-2-Chlorophenol
-1,3-Dichlorobenzene
-1,4-Dichlorobenzene-D4+
-1,2-Dichlorobenzene
-2-Methylphenol+
-Acetophenone+
-Hexachloroethane
-Nitrobenzene
-Isophorone
-2-Nitrophenol
-2,4-Dimethylphenol
-bis(2-Chloroethoxy)Methan+
-2,4-Dichlorophenol
-1,2,4-Trichlorobenzene
-Naphthalene-D8+
-4-Chloroaniline
-Hexachlorobutadiene
-Caprolactam
-4-Chloro-3-Methylphenol
-Hexachlorocyclopentadiene+
2-Methylnaphthalene-D10+
1-Methylnaphthalene
-2,4,6-Trichlorophenol
-2-Nitroaniline
1,1'-Biphenyl+
-Dimethyl Phthalate
-Acenaphthylene
-3-Nitroaniline+
-2,6-Dinitrotoluene
-2,4-Dinitrophenol
-4-Nitrophenol
Acenaphthene
-2,3,4,6-Tetrachlorophenol
Dibenzofuran+
-Fluorene
-Diethylphthalate
-4,6-Dinitro-2-Methylpheno
-N-Nitrosodiphenylamine
Fluorene+
-4-Bromophenyl-phenylether
-Hexachlorobenzene
-Atrazine
-Pentachlorophenol
-Anthracene
-Phenanthrene-D10+
-Carbazole
-Di-n-butylphthalate
-Fluoranthene-d10+
-Pyrene-D10+
-Butylbenzylphthalate
-3,3'-Dichlorobenzidine+
-Chrysene
-bis(2-Ethylhexyl)phthalat
-Di-n-octylphthalate
-Benzo(b)fluoranthene
-Benzo(k)fluoranthene
-Perylene-D12
-Benzo(a)pyrene
-Indeno(1,2,3-cd)pyrene
-Dibenz(a,h)anthracene+

Data File: \\target_server\gg\chem\gcms-n.i\N032023.b\N7759.D
Report Date: 22-Mar-2023 07:59

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-n.i\N032023.b\N7759.D
Lab Smp Id: WG334091-6
Inj Date : 20-MAR-2023 17:39
Operator : DT/EP   Inst ID: gcms-n.i
Smp Info : WG334091-6
Misc Info :
Comment   :
Method   : \\target_server\gg\chem\gcms-n.i\N032023.b\NSPSIM26.m
Meth Date : 21-Mar-2023 06:46 epelletier Quant Type: ISTD
Cal Date : 20-MAR-2023 17:39   Cal File: N7759.D
Als bottle: 6   Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: all.sub
Target Version: 4.12
Processing Host: INSPIRON1

Concentration Formula: Amt * DF * (Vt/Ws)*(100/(100-M))*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.00100	Final Volume (L)
Ws	0.03000	Weight of Sample (Kg)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
$	1 1,4-Dioxane-d8	96	3.656	3.667	(0.489)	313750	10.0000	9.61	
	2 1,4-Dioxane	88	3.698	3.699	(0.495)	302375	10.0000	9.63(a)	
	3 N-Nitrosodimethylamine	74	4.110	4.121	(0.550)	459550	10.0000	9.57(a)	
	4 Pyridine	79	4.131	4.142	(0.553)	738153	10.0000	9.97(a)	
	5 Benzaldehyde	77	6.912	6.912	(0.925)	235594	10.0000	6.56(a)	
	6 Phenol	94	7.068	7.069	(0.946)	1049998	10.0000	10.2(a)	
	7 Bis(2-Chloroethyl)ether	93	7.151	7.152	(0.957)	805621	10.0000	9.70(a)	
	8 2-Chlorophenol	128	7.214	7.214	(0.965)	952623	10.0000	9.75(a)	
	9 1,3-Dichlorobenzene	146	7.401	7.401	(0.990)	1022394	10.0000	9.65(a)	
*	10 1,4-Dichlorobenzene-D4	152	7.474	7.474	(1.000)	59309	0.80000	(a)	
	11 1,4-Dichlorobenzene	146	7.495	7.495	(1.003)	1047155	10.0000	9.68(a)	
	12 1,2-Dichlorobenzene	146	7.682	7.682	(1.028)	973287	10.0000	9.70(a)	
	13 2-Methylphenol	108	7.828	7.828	(1.047)	782043	10.0000	10.1(a)	
	14 2,2'-Oxybis(1-chloropropane)	45	7.838	7.838	(1.049)	381953	10.0000	9.54(a)	
	15 Acetophenone	105	7.984	7.995	(0.877)	1070324	10.0000	9.74(a)	
	16 N-Nitroso-di-n-propylamine	70	8.004	8.015	(1.071)	478920	10.0000	9.39(a)	
	17 3&4-Methylphenol	108	8.025	8.026	(1.074)	792467	10.0000	9.80(a)	
	18 Hexachloroethane	117	8.109	8.109	(1.085)	376558	10.0000	9.73(a)	
	19 Nitrobenzene	77	8.192	8.202	(0.899)	716992	10.0000	9.79(a)	
	20 Isophorone	82	8.513	8.523	(0.935)	1411861	10.0000	10.0(a)	
	21 2-Nitrophenol	139	8.615	8.616	(0.946)	487178	10.0000	10.0(a)	

Data File: \\target_server\gg\chem\gcms-n.i\N032023.b\N7759.D
Report Date: 22-Mar-2023 07:59

DL

9:33 am, Mar 22, 2023

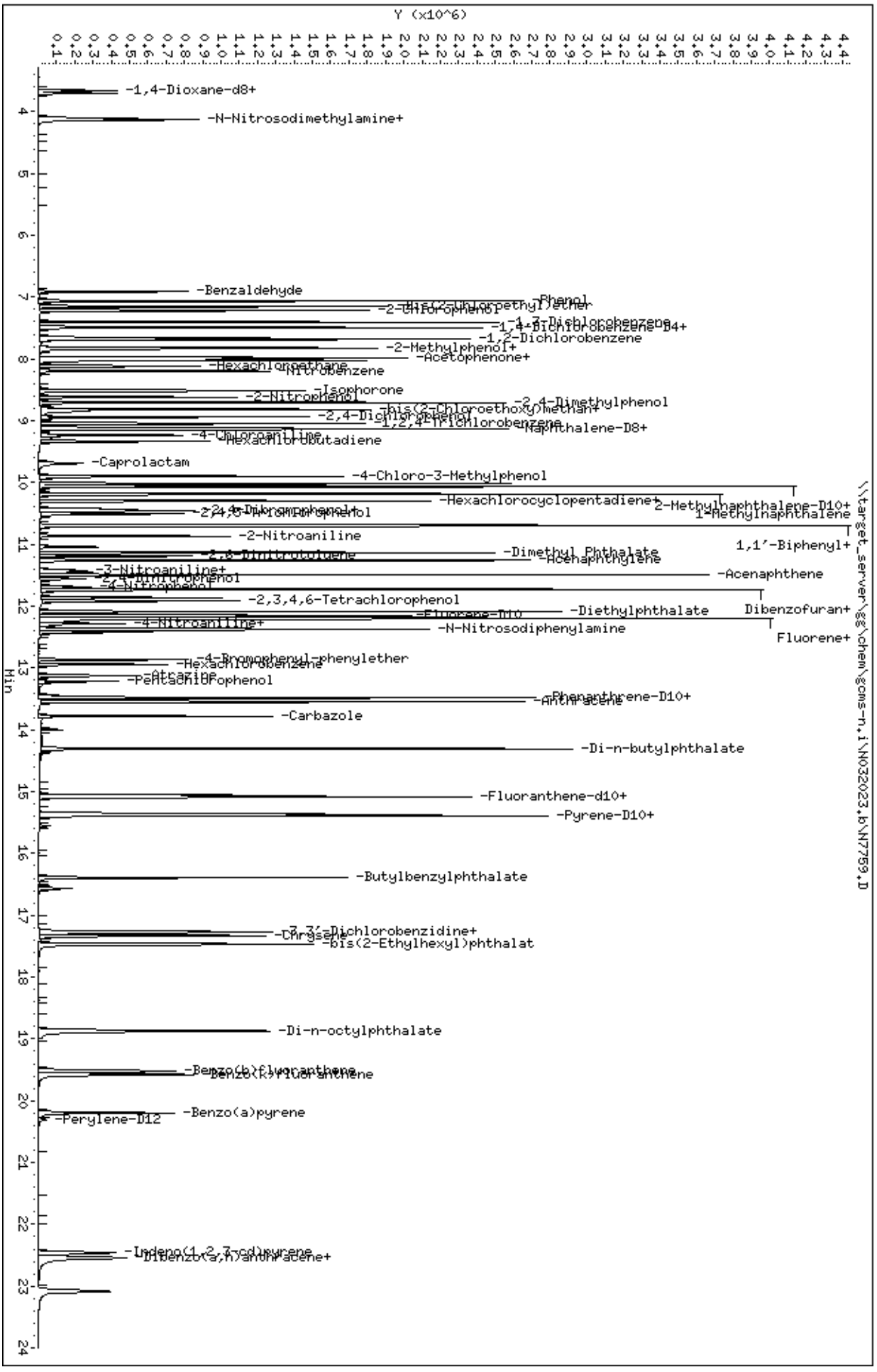
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
	22 2,4-Dimethylphenol	107	8.708	8.708	(0.956)	774155	10.0000	9.68(a)	
	23 bis(2-Chloroethoxy)methane	93	8.821	8.821	(0.968)	937750	10.0000	9.88(a)	
	24 Benzoic acid	105	8.851	8.883	(0.972)	333511	10.0000	13.1(a)	
	25 2,4-Dichlorophenol	162	8.944	8.944	(0.982)	706456	10.0000	9.75(a)	
	26 1,2,4-Trichlorobenzene	180	9.046	9.047	(0.993)	702711	10.0000	9.64(a)	
*	27 Naphthalene-D8	136	9.108	9.108	(1.000)	210117	0.80000	(a)	
	28 Naphthalene	128	9.139	9.139	(1.003)	2507751	10.0000	9.54(a)	
	29 4-Chloroaniline	127	9.231	9.231	(1.014)	778149	10.0000	8.41(a)	
	30 Hexachlorobutadiene	225	9.333	9.334	(1.025)	315633	10.0000	9.51(a)	
	31 Caprolactam	113	9.688	9.709	(1.064)	256398	10.0000	11.3(a)	
	32 4-Chloro-3-Methylphenol	107	9.900	9.900	(1.087)	664226	10.0000	9.30(a)	
$	33 2-Methylnaphthalene-D10	152	10.016	10.017	(1.100)	1195847	10.0000	9.34	
	34 2-Methylnaphthalene	142	10.059	10.059	(1.104)	1567889	10.0000	9.56(a)	
	35 1-Methylnaphthalene	142	10.186	10.186	(1.118)	1460598	10.0000	9.47(a)	
	36 Hexachlorocyclopentadiene	237	10.292	10.292	(0.899)	342705	10.0000	10.5(a)	
	37 1,2,4,5-Tetrachlorobenzene	216	10.292	10.292	(0.899)	538282	10.0000	9.25(a)	
$	38 2,4-Dibromophenol	252	10.429	10.440	(0.911)	350266	10.0000	9.83	
	39 2,4,6-Trichlorophenol	196	10.461	10.461	(0.914)	415585	10.0000	9.62(a)	
	40 2,4,5-Trichlorophenol	196	10.503	10.504	(0.917)	446481	10.0000	8.91(a)	
	41 1,1'-Biphenyl	154	10.694	10.694	(0.934)	1753830	10.0000	8.88(a)	
	42 2-Chloronaphthalene	164	10.705	10.705	(0.935)	463581	10.0000	9.11(a)	
	43 2-Nitroaniline	65	10.863	10.864	(0.949)	286577	10.0000	10.1(a)	
	44 Dimethyl Phthalate	163	11.137	11.148	(0.973)	1670707	10.0000	9.29(a)	
	45 2,6-Dinitrotoluene	165	11.200	11.200	(0.978)	412701	10.0000	10.2(a)	
	46 Acenaphthylene	152	11.252	11.263	(0.983)	2260088	10.0000	9.44(aM)	M6
	47 3-Nitroaniline	138	11.419	11.430	(0.997)	177217	10.0000	6.99(a)	
*	48 Acenaphthene-D10	164	11.450	11.451	(1.000)	99723	0.80000	(a)	
	49 Acenaphthene	153	11.492	11.493	(1.004)	1419993	10.0000	9.04(a)	
	50 2,4-Dinitrophenol	184	11.565	11.566	(1.010)	142161	10.0000	14.0(a)	
	51 4-Nitrophenol	109	11.680	11.691	(1.020)	147515	10.0000	11.4(a)	
	52 Dibenzofuran	168	11.732	11.733	(1.025)	1883287	10.0000	8.86(a)	
	53 2,4-Dinitrotoluene	165	11.743	11.743	(1.026)	488978	10.0000	10.3(a)	
	54 2,3,4,6-Tetrachlorophenol	232	11.920	11.921	(1.041)	296966	10.0000	9.35(a)	
	55 Diethylphthalate	149	12.087	12.088	(1.056)	1721902	10.0000	9.23(a)	
$	56 Fluorene-D10	174	12.150	12.161	(1.061)	1204036	10.0000	8.99	
	57 Fluorene	166	12.192	12.192	(1.065)	1486861	10.0000	8.97(a)	
	58 4-Chlorophenyl-phenylether	204	12.213	12.213	(1.067)	640254	10.0000	8.98(a)	
	59 4-Nitroaniline	138	12.244	12.255	(1.069)	272282	10.0000	10.0(a)	
	60 4,6-Dinitro-2-Methylphenol	198	12.286	12.286	(0.914)	220807	10.0000	11.7(a)	
	61 N-Nitrosodiphenylamine	169	12.380	12.380	(0.921)	1249246	10.0000	9.41(a)	
	62 4-Bromophenyl-phenylether	248	12.864	12.864	(0.957)	350260	10.0000	9.28(aM)	M6
	63 Hexachlorobenzene	284	12.946	12.946	(0.963)	385560	10.0000	9.15(a)	
	64 Atrazine	200	13.130	13.131	(0.976)	346046	10.0000	7.27(a)	
	65 Pentachlorophenol	266	13.222	13.223	(0.983)	220150	10.0000	10.7(a)	
*	66 Phenanthrene-D10	188	13.448	13.448	(1.000)	143385	0.80000	(a)	
	67 Phenanthrene	178	13.479	13.479	(1.002)	1937941	10.0000	9.10(a)	
	68 Anthracene	178	13.550	13.551	(1.008)	1958355	10.0000	9.42(a)	
	69 Carbazole	167	13.776	13.776	(1.024)	1070054	10.0000	7.64(a)	
	70 Di-n-butylphthalate	149	14.308	14.309	(1.064)	2936860	10.0000	9.66(a)	
$	71 Fluoranthene-d10	212	15.063	15.064	(1.120)	1116935	10.0000	9.24	
	72 Fluoranthene	202	15.084	15.094	(1.122)	1685199	10.0000	9.17(a)	
$	73 Pyrene-D10	212	15.369	15.369	(0.889)	1290808	10.0000	8.74	
	74 Pyrene	202	15.389	15.390	(0.890)	1746902	10.0000	8.86(a)	
	75 Butylbenzylphthalate	149	16.388	16.398	(0.948)	1199752	10.0000	9.94(a)	

Data File: \\target_server\gg\chem\gcms-n.i\N032023.b\N7759.D
Report Date: 22-Mar-2023 07:59

			QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
	76	3,3'-Dichlorobenzidine	252	17.274	17.274	(0.999)	243994	10.0000	9.78(a)	
	77	Benzo(a)anthracene	228	17.264	17.274	(0.999)	1155452	10.0000	10.1(a)	
*	78	Chrysene-D12	240	17.284	17.295	(1.000)	66568	0.80000	(a)	
	79	Chrysene	228	17.335	17.335	(1.003)	1151020	10.0000	8.97(a)	
	80	bis(2-Ethylhexyl)phthalate	149	17.468	17.468	(1.011)	1629301	10.0000	10.0(a)	
	81	Di-n-octylphthalate	149	18.873	18.874	(1.092)	2408848	10.0000	10.7(a)	
	82	Benzo(b)fluoranthene	252	19.521	19.521	(0.961)	1067107	10.0000	10.6(a)	
	83	Benzo(k)fluoranthene	252	19.584	19.584	(0.964)	1159191	10.0000	9.06(aH)	
	84	Benzo(a)pyrene	252	20.193	20.204	(0.994)	911740	10.0000	10.0(a)	
*	85	Perylene-D12	264	20.309	20.309	(1.000)	53668	0.80000	(a)	
	86	Indeno(1,2,3-cd)pyrene	276	22.463	22.474	(1.106)	638151	10.0000	11.8(a)	
	87	Dibenzo(a,h)anthracene	278	22.548	22.558	(1.110)	658566	10.0000	11.3(a)	
	88	Benzo(g,h,i)perylene	276	23.084	23.094	(1.137)	770409	10.0000	9.97(a)	
M	89	Total PAHs	100				25543213	180.000	174	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.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Date : 20-MAR-2023 17:39
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Instrument: gcms-n,i
Operator: DT/EP
Column diameter: 0.25
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Y (x10^6)
Min
-1,4-Dioxane-d8+
-N-Nitrosodimethylamine+
-Benzaldehyde
-Phenol
-2-Chlorophenol
-1,3-Dichlorobenzene
-1,4-Dichlorobenzene-D4+
-1,2-Dichlorobenzene
-2-Methylphenol+
-Acetophenone+
-Hexachloroethane
-Nitrobenzene
-Isophorone
-2-Nitrophenol
-2,4-Dimethylphenol
-bis(2-Chloroethoxy)methan+
-2,4-Dichlorophenol
-1,2,4-Trichlorobenzene
-Naphthalene-D8+
-4-Chloroaniline
-Hexachlorobutadiene
-Caprolactam
-4-Chloro-3-Methylphenol
-Hexachlorocyclopentadiene+
-2-Methylnaphthalene-D10+
-1-Methylnaphthalene
-2-Nitroaniline
1,1'-Biphenyl+
-Dimethyl Phthalate
-Acenaphthylene
-2,6-Dinitrotoluene
-3-Nitroaniline+
-Acenaphthene
-2-Nitrophenol
-4-Nitrophenol
-2,3,4,6-Tetrachlorophenol
-Fluorene-D10
-Diethylphthalate
Dibenzofuran+
-4-Nitroaniline+
-N-Nitrosodiphenylamine
Fluorene+
-4-Bromophenyl-phenylether
-Hexachlorobenzene
-Atrazine
-Pentachlorophenol
-Phenanthrene-D10+
-Anthracene
-Carbazole
-Di-n-butylphthalate
-Fluoranthene-d10+
-Pyrene-D10+
-Butylbenzylphthalate
-3,3'-Dichlorobenzidine+
-Chrysene
-bis(2-Ethylhexyl)phthalat
-Di-n-octylphthalate
-Benzo(b)fluoranthene
-Benzo(k)fluoranthene
-Perylene-D12
-Benzo(a)pyrene
-Indeno(1,2,3-cd)pyrene
-Dibenz(a,h)anthracene+

Data File: \\target_server\gg\chem\gcms-n.i\N032023.b\N7760.D
Report Date: 22-Mar-2023 07:59

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-n.i\N032023.b\N7760.D
Lab Smp Id: WG334091-7
Inj Date : 20-MAR-2023 18:16
Operator : DT/EP   Inst ID: gcms-n.i
Smp Info : WG334091-7
Misc Info :
Comment   :
Method   : \\target_server\gg\chem\gcms-n.i\N032023.b\NSPSIM26.m
Meth Date : 21-Mar-2023 06:46 epelletier Quant Type: ISTD
Cal Date : 20-MAR-2023 18:16   Cal File: N7760.D
Als bottle: 7   Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: all.sub
Target Version: 4.12
Processing Host: INSPIRON1

Concentration Formula: Amt * DF * (Vt/Ws)*(100/(100-M))*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.00100	Final Volume (L)
Ws	0.03000	Weight of Sample (Kg)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
$	1 1,4-Dioxane-d8	96	3.667	3.667	(0.491)	459887	15.0000	13.4	
	2 1,4-Dioxane	88	3.698	3.699	(0.495)	440218	15.0000	13.3(a)	
	3 N-Nitrosodimethylamine	74	4.121	4.121	(0.551)	714226	15.0000	14.1(a)	
	4 Pyridine	79	4.142	4.142	(0.554)	1105263	15.0000	14.2(a)	
	5 Benzaldehyde	77	6.912	6.912	(0.925)	338050	15.0000	8.94(a)	
	6 Phenol	94	7.068	7.069	(0.946)	1462332	15.0000	13.5(a)	
	7 Bis(2-Chloroethyl)ether	93	7.151	7.152	(0.957)	1183821	15.0000	13.5(a)	
	8 2-Chlorophenol	128	7.214	7.214	(0.965)	1413314	15.0000	13.7(a)	
	9 1,3-Dichlorobenzene	146	7.401	7.401	(0.990)	1501147	15.0000	13.4(a)	
*	10 1,4-Dichlorobenzene-D4	152	7.474	7.474	(1.000)	62437	0.80000	(a)	
	11 1,4-Dichlorobenzene	146	7.495	7.495	(1.003)	1559443	15.0000	13.7(a)	
	12 1,2-Dichlorobenzene	146	7.682	7.682	(1.028)	1420357	15.0000	13.4(a)	
	13 2-Methylphenol	108	7.828	7.828	(1.047)	1157546	15.0000	14.2(a)	
	14 2,2'-Oxybis(1-chloropropane)	45	7.838	7.838	(1.049)	569900	15.0000	13.5(a)	
	15 Acetophenone	105	7.994	7.995	(0.878)	1668335	15.0000	13.7(a)	
	16 N-Nitroso-di-n-propylamine	70	8.015	8.015	(1.072)	766523	15.0000	14.3(a)	
	17 3&4-Methylphenol	108	8.025	8.026	(1.074)	1229275	15.0000	14.4(a)	
	18 Hexachloroethane	117	8.108	8.109	(1.085)	571289	15.0000	14.0(a)	
	19 Nitrobenzene	77	8.202	8.202	(0.901)	1147629	15.0000	14.2(a)	
	20 Isophorone	82	8.523	8.523	(0.936)	2234761	15.0000	14.3(a)	
	21 2-Nitrophenol	139	8.615	8.616	(0.946)	774407	15.0000	14.4(a)	

Data File: \\target_server\gg\chem\gcms-n.i\N032023.b\N7760.D
Report Date: 22-Mar-2023 07:59

DL

9:33 am, Mar 22, 2023

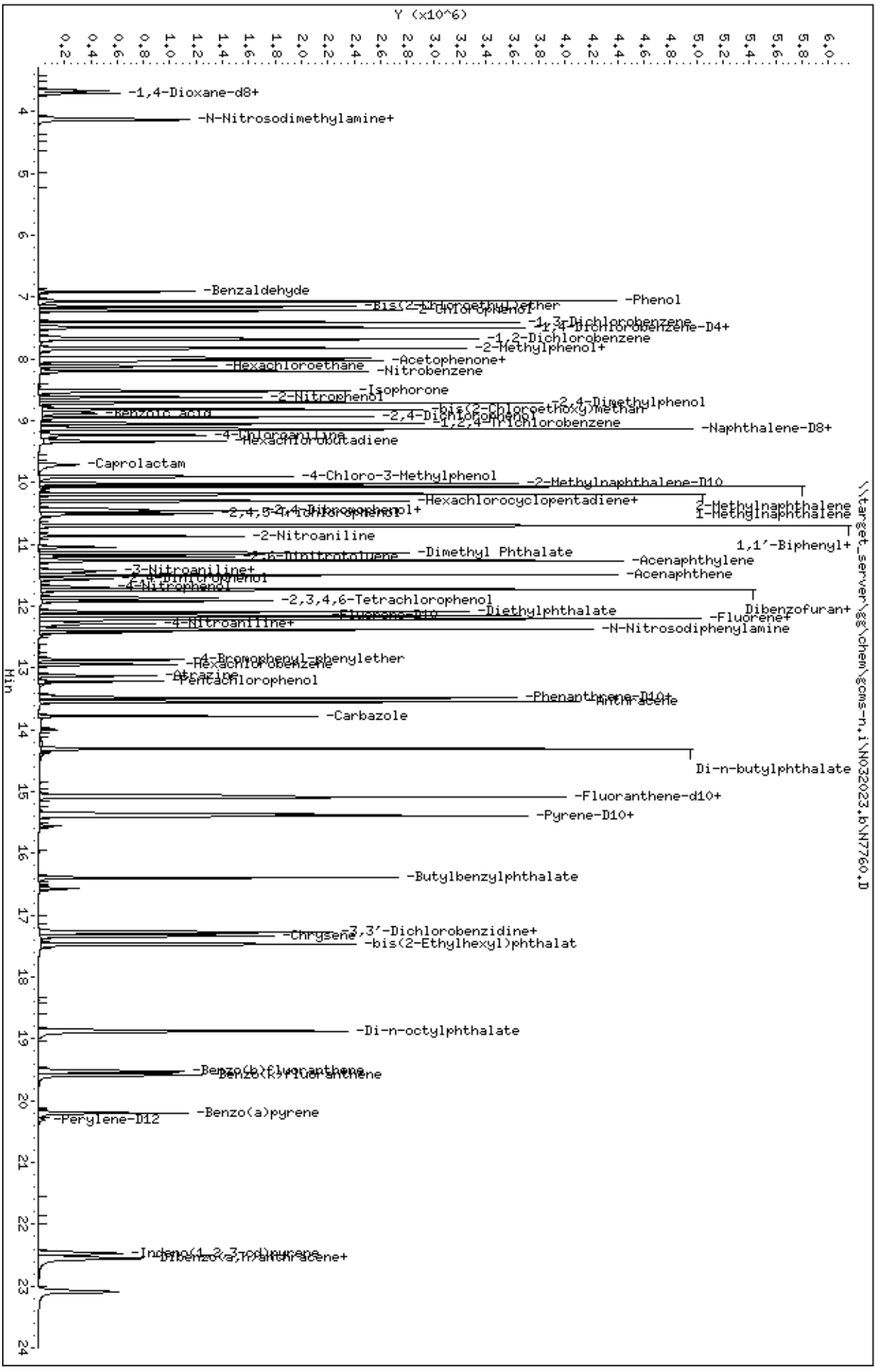
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
	22 2,4-Dimethylphenol	107	8.708	8.708	(0.956)	1166497	15.0000	13.2(a)	
	23 bis(2-Chloroethoxy)methane	93	8.820	8.821	(0.968)	1418618	15.0000	13.5(a)	
	24 Benzoic acid	105	8.882	8.883	(0.975)	638537	15.0000	22.7(A)	
	25 2,4-Dichlorophenol	162	8.944	8.944	(0.982)	1060724	15.0000	13.2(a)	
	26 1,2,4-Trichlorobenzene	180	9.046	9.047	(0.993)	1079010	15.0000	13.4(a)	
*	27 Naphthalene-D8	136	9.108	9.108	(1.000)	232493	0.80000	(a)	
	28 Naphthalene	128	9.138	9.139	(1.003)	3788949	15.0000	13.0(a)	
	29 4-Chloroaniline	127	9.231	9.231	(1.014)	1266802	15.0000	12.4(a)	
	30 Hexachlorobutadiene	225	9.333	9.334	(1.025)	466371	15.0000	12.7(a)	
	31 Caprolactam	113	9.709	9.709	(1.066)	421251	15.0000	16.8(aA)	
	32 4-Chloro-3-Methylphenol	107	9.900	9.900	(1.087)	1004087	15.0000	12.7(a)	
$	33 2-Methylnaphthalene-D10	152	10.016	10.017	(1.100)	1769763	15.0000	12.5	
	34 2-Methylnaphthalene	142	10.058	10.059	(1.104)	2335535	15.0000	12.9(a)	
	35 1-Methylnaphthalene	142	10.186	10.186	(1.118)	2242570	15.0000	13.1(a)	
	36 Hexachlorocyclopentadiene	237	10.291	10.292	(1.000)	534530	15.0000	14.7(a)	
	37 1,2,4,5-Tetrachlorobenzene	216	10.291	10.292	(1.000)	852102	15.0000	13.4(a)	
$	38 2,4-Dibromophenol	252	10.440	10.440	(1.000)	564836	15.0000	14.3	
	39 2,4,6-Trichlorophenol	196	10.461	10.461	(1.000)	680577	15.0000	14.1(a)	
	40 2,4,5-Trichlorophenol	196	10.503	10.504	(1.000)	727611	15.0000	13.3(a)	
	41 1,1'-Biphenyl	154	10.694	10.694	(1.000)	2578241	15.0000	12.1(a)	
	42 2-Chloronaphthalene	164	10.705	10.705	(1.000)	717687	15.0000	12.9(a)	
	43 2-Nitroaniline	65	10.863	10.864	(1.000)	470028	15.0000	14.9(a)	
	44 Dimethyl Phthalate	163	11.147	11.148	(1.000)	2684342	15.0000	13.6(a)	
	45 2,6-Dinitrotoluene	165	11.200	11.200	(1.000)	639061	15.0000	14.3(a)	
	46 Acenaphthylene	152	11.262	11.263	(0.000)	3498871	15.0000	13.4(aM)	M6
	47 3-Nitroaniline	138	11.429	11.430	(1.000)	380958	15.0000	13.7(a)	
*	48 Acenaphthene-D10	164	11.450	11.451	(1.000)	111584	0.80000	(aM)	M6
	49 Acenaphthene	153	11.492	11.493	(1.000)	2222586	15.0000	13.0(a)	
	50 2,4-Dinitrophenol	184	11.565	11.566	(1.000)	278388	15.0000	22.2(aA)	
	51 4-Nitrophenol	109	11.691	11.691	(1.000)	265495	15.0000	17.7(aA)	
	52 Dibenzofuran	168	11.732	11.733	(1.000)	2870776	15.0000	12.5(a)	
	53 2,4-Dinitrotoluene	165	11.743	11.743	(1.000)	792364	15.0000	14.9(a)	
	54 2,3,4,6-Tetrachlorophenol	232	11.920	11.921	(1.000)	486054	15.0000	13.9(a)	
	55 Diethylphthalate	149	12.087	12.088	(1.000)	2753304	15.0000	13.5(a)	
$	56 Fluorene-D10	174	12.160	12.161	(1.000)	1813723	15.0000	12.5(A)	
	57 Fluorene	166	12.192	12.192	(1.000)	2374881	15.0000	13.1(a)	
	58 4-Chlorophenyl-phenylether	204	12.213	12.213	(1.000)	967269	15.0000	12.5(a)	
	59 4-Nitroaniline	138	12.254	12.255	(1.000)	409505	15.0000	13.7(a)	
	60 4,6-Dinitro-2-Methylphenol	198	12.286	12.286	(0.914)	399088	15.0000	18.4(aA)	
	61 N-Nitrosodiphenylamine	169	12.380	12.380	(0.921)	1941554	15.0000	12.7(a)	
	62 4-Bromophenyl-phenylether	248	12.864	12.864	(0.957)	558124	15.0000	13.2(aM)	M6
	63 Hexachlorobenzene	284	12.946	12.946	(0.963)	620991	15.0000	12.8(a)	
	64 Atrazine	200	13.130	13.131	(0.976)	525983	15.0000	9.59(a)	
	65 Pentachlorophenol	266	13.222	13.223	(0.983)	387938	15.0000	16.4(aA)	
*	66 Phenanthrene-D10	188	13.448	13.448	(1.000)	165069	0.80000	(a)	
	67 Phenanthrene	178	13.478	13.479	(1.002)	3134725	15.0000	12.8(a)	
	68 Anthracene	178	13.550	13.551	(1.008)	3014584	15.0000	12.6(a)	
	69 Carbazole	167	13.776	13.776	(1.024)	1909437	15.0000	11.8(a)	
	70 Di-n-butylphthalate	149	14.308	14.309	(1.064)	4501217	15.0000	12.9(a)	
$	71 Fluoranthene-d10	212	15.063	15.064	(1.120)	1764630	15.0000	12.7	
	72 Fluoranthene	202	15.094	15.094	(1.122)	2636552	15.0000	12.4(a)	
$	73 Pyrene-D10	212	15.369	15.369	(0.889)	2001063	15.0000	11.8(A)	
	74 Pyrene	202	15.389	15.390	(0.890)	2706893	15.0000	12.0(a)	
	75 Butylbenzylphthalate	149	16.398	16.398	(0.948)	1987485	15.0000	14.4(a)	

Data File: \\target_server\gg\chem\gcms-n.i\N032023.b\N7760.D
Report Date: 22-Mar-2023 07:59

			QUANT SIG					AMOUNTS		
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
	76	3,3'-Dichlorobenzidine	252	17.274	17.274	(0.999)	457891	15.0000	16.0(aA)	
	77	Benzo(a)anthracene	228	17.274	17.274	(0.999)	1851032	15.0000	14.2(a)	
*	78	Chrysene-D12	240	17.294	17.295	(1.000)	76334	0.80000	(a)	
	79	Chrysene	228	17.335	17.335	(1.002)	1839156	15.0000	12.5(a)	
	80	bis(2-Ethylhexyl)phthalate	149	17.468	17.468	(1.010)	2693071	15.0000	14.5(a)	
	81	Di-n-octylphthalate	149	18.873	18.874	(1.091)	4074469	15.0000	15.7(aA)	
	82	Benzo(b)fluoranthene	252	19.521	19.521	(0.961)	1615898	15.0000	14.9(a)	
	83	Benzo(k)fluoranthene	252	19.584	19.584	(0.964)	1807442	15.0000	12.7(aH)	
	84	Benzo(a)pyrene	252	20.204	20.204	(0.995)	1401728	15.0000	14.3(a)	
*	85	Perylene-D12	264	20.309	20.309	(1.000)	57809	0.80000	(a)	
	86	Indeno(1,2,3-cd)pyrene	276	22.474	22.474	(1.107)	975214	15.0000	16.8(aA)	
	87	Dibenzo(a,h)anthracene	278	22.558	22.558	(1.111)	1020417	15.0000	16.2(aA)	
	88	Benzo(g,h,i)perylene	276	23.094	23.094	(1.137)	1159771	15.0000	13.9(a)	
M	89	Total PAHs	100				39626804	270.000	244	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
A - Target compound detected but, quantitated amount
exceeded maximum amount.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.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Instrument: gcms-n,i
Operator: DT/EP
Column diameter: 0.25
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Y (x10^6)
Min
-1,4-Dioxane-d8+
-N-Nitrosodimethylamine+
-Benzaldehyde
-Phenol
-1,3-Dichlorobenzene
-1,4-Dichlorobenzene-D4+
-1,2-Dichlorobenzene
-2-Methylphenol+
-Acetophenone+
-Hexachloroethane
-Nitrobenzene
-Isophorone
-2-Nitrophenol
-2,4-Dimethylphenol
-Benzoic Acid
-2,4-Dichlorophenol
-1,2,4-Trichlorobenzene
-Naphthalene-D8+
-Hexachlorobutadiene
-Caprolactam
-4-Chloro-3-Methylphenol
-2-Methylnaphthalene-D10
-Hexachlorocyclopentadiene+
2-Methylnaphthalene
1-Methylnaphthalene
-2-Nitroaniline
1,1'-Biphenyl+
-Dimethyl Phthalate
-Acenaphthylene
-3-Nitroaniline+
-Acenaphthene
-2,3,4,6-Tetrachlorophenol
-Diethylphthalate
Dibenzofuran+
-Fluorene+
-4-Nitroaniline+
-N-Nitrosodiphenylamine
-4-Bromophenyl-phenylether
-Hexachlorobenzene
-Atrazine
-Pentachlorophenol
-Phenanthrene-D10+
-Carbazole
Di-n-butylphthalate
-Fluoranthene-d10+
-Pyrene-D10+
-Butylbenzylphthalate
-3,3'-Dichlorobenzidine+
-Chrysene
-bis(2-Ethylhexyl)phthalat
-Di-n-octylphthalate
-Benzo(b)fluoranthene
-Benzo(a)pyrene
-Perylene-D12
-Indeno(1,2,3-cd)pyrene
-Dibenzo(a,h)anthracene+

Data File: \\target_server\gg\chem\gcms-n.i\N032023.b\N7761.D
Report Date: 21-Mar-2023 06:36

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-n.i\N032023.b\N7761.D
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Inj Date : 20-MAR-2023 18:53
Operator : DT/EP   Inst ID: gcms-n.i
Smp Info : WG334091-8
Misc Info : WG334091,WG334091,WG334091-4
Comment   :
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Meth Date : 21-Mar-2023 06:30 epelletier Quant Type: ISTD
Cal Date : 20-MAR-2023 18:16   Cal File: N7760.D
Als bottle: 8   QC Sample: INDSOURCE
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: all.sub
Target Version: 4.12
Processing Host: INSPIRON1

Concentration Formula: Amt * DF * Uf*(Vt/Vo)*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.000	Sample Volume (L)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	CONCENTRATIONS FINAL (ug/L)	REVIEW CODE
2	1,4-Dioxane	88	3.719	3.699	(0.498)	158625	5.12995	5.13	
3	N-Nitrosodimethylamine	74	4.121	4.121	(0.551)	220847	4.67126	4.67	
4	Pyridine	79	4.152	4.142	(0.556)	406905	5.57831	5.58	
5	Benzaldehyde	77	6.912	6.912	(0.925)	61331	1.53147	1.53(R)	
6	Phenol	94	7.068	7.069	(0.946)	529324	5.23558	5.24	
7	Bis(2-Chloroethyl)ether	93	7.151	7.152	(0.957)	407398	4.98265	4.98	
8	2-Chlorophenol	128	7.214	7.214	(0.965)	489980	5.09002	5.09	
9	1,3-Dichlorobenzene	146	7.401	7.401	(0.990)	522113	5.00142	5.00	
* 10	1,4-Dichlorobenzene-D4	152	7.474	7.474	(1.000)	58420	0.80000	(aQ)	
11	1,4-Dichlorobenzene	146	7.495	7.495	(1.003)	535789	5.02757	5.03	
12	1,2-Dichlorobenzene	146	7.682	7.682	(1.028)	497014	5.03143	5.03	
13	2-Methylphenol	108	7.817	7.828	(1.046)	389397	5.10901	5.11	
14	2,2'-Oxybis(1-chloropropane)	45	7.838	7.838	(1.049)	145560	3.68916	3.69(R)	
15	Acetophenone	105	7.984	7.995	(0.877)	547008	5.10353	5.10	
16	N-Nitroso-di-n-propylamine	70	8.004	8.015	(1.071)	233611	4.64808	4.65	
17	3&4-Methylphenol	108	8.015	8.026	(1.072)	395527	4.96817	4.97	
18	Hexachloroethane	117	8.108	8.109	(1.085)	192916	5.06007	5.06	
19	Nitrobenzene	77	8.192	8.202	(0.899)	351596	4.91926	4.92	
20	Isophorone	82	8.513	8.523	(0.935)	698401	5.07568	5.08	
21	2-Nitrophenol	139	8.615	8.616	(0.946)	250815	5.28638	5.29	
22	2,4-Dimethylphenol	107	8.697	8.708	(0.955)	365389	4.68558	4.68	

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Report Date: 21-Mar-2023 06:36

EP
7:38 am, Mar 21, 2023

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	CONCENTRATIONS FINAL (ug/L)	REVIEW CODE
	23 bis(2-Chloroethoxy)methane	93	8.810	8.821	(0.967)	451420	4.87503	4.88	
	24 Benzoic acid	105	8.821	8.883	(0.968)	166233	6.71058	6.71(R)	
	25 2,4-Dichlorophenol	162	8.944	8.944	(0.982)	361444	5.11178	5.11	
	26 1,2,4-Trichlorobenzene	180	9.046	9.047	(0.993)	351732	4.94640	4.95	
*	27 Naphthalene-D8	136	9.108	9.108	(1.000)	204998	0.80000	(a)	
	28 Naphthalene	128	9.128	9.139	(1.002)	1287224	5.01728	5.02	
	29 4-Chloroaniline	127	9.221	9.231	(1.012)	436215	4.83120	4.83	
	30 Hexachlorobutadiene	225	9.333	9.334	(1.025)	163423	5.04900	5.05	
	31 Caprolactam	113	9.667	9.709	(1.061)	128630	5.82727	5.83	
	32 4-Chloro-3-Methylphenol	107	9.900	9.900	(1.087)	340961	4.89247	4.89	
	34 2-Methylnaphthalene	142	10.058	10.059	(1.104)	831586	5.19857	5.20	
	35 1-Methylnaphthalene	142	10.186	10.186	(1.118)	762542	5.06884	5.07	
	36 Hexachlorocyclopentadiene	237	10.292	10.292	(0.899)	150084	4.61363	4.61	
	37 1,2,4,5-Tetrachlorobenzene	216	10.292	10.292	(0.899)	274602	4.82303	4.82	
	39 2,4,6-Trichlorophenol	196	10.450	10.461	(0.913)	207630	4.80528	4.80	
	40 2,4,5-Trichlorophenol	196	10.503	10.504	(0.917)	233164	4.75951	4.76	
	41 1,1'-Biphenyl	154	10.694	10.694	(0.934)	954330	5.01611	5.02	
	42 2-Chloronaphthalene	164	10.705	10.705	(0.935)	242916	4.90329	4.90	
	43 2-Nitroaniline	65	10.853	10.864	(0.948)	143637	5.08966	5.09	
	44 Dimethyl Phthalate	163	11.127	11.148	(0.972)	824568	4.67190	4.67	
	45 2,6-Dinitrotoluene	165	11.189	11.200	(0.977)	191112	4.77964	4.78	
	46 Acenaphthylene	152	11.252	11.263	(0.983)	1032237	4.40671	4.41(M)	M6
	47 3-Nitroaniline	138	11.409	11.430	(0.996)	118124	4.74364	4.74	
*	48 Acenaphthene-D10	164	11.450	11.451	(1.000)	99734	0.80000	(a)	
	49 Acenaphthene	153	11.492	11.493	(1.004)	740882	4.84524	4.84	
	50 2,4-Dinitrophenol	184	11.555	11.566	(1.009)	53912	4.49862	4.50	
	51 4-Nitrophenol	109	11.680	11.691	(1.020)	66776	4.33473	4.33(Q)	
	52 Dibenzofuran	168	11.732	11.733	(1.025)	995013	4.83747	4.84	
	53 2,4-Dinitrotoluene	165	11.732	11.743	(1.025)	248928	5.23771	5.24	
	54 2,3,4,6-Tetrachlorophenol	232	11.920	11.921	(1.041)	147710	4.71998	4.72	
	55 Diethylphthalate	149	12.087	12.088	(1.056)	883549	4.83266	4.83	
	57 Fluorene	166	12.192	12.192	(1.065)	797505	4.93061	4.93	
	58 4-Chlorophenyl-phenylether	204	12.213	12.213	(1.067)	334890	4.85188	4.85	
	59 4-Nitroaniline	138	12.234	12.255	(1.068)	136147	5.10852	5.11	
	60 4,6-Dinitro-2-Methylphenol	198	12.286	12.286	(0.914)	98549	4.42407	4.42	
	61 N-Nitrosodiphenylamine	169	12.369	12.380	(0.920)	524583	3.99609	4.00(R)	
	62 4-Bromophenyl-phenylether	248	12.864	12.864	(0.957)	179667	4.93407	4.93(M)	M6
	63 Hexachlorobenzene	284	12.946	12.946	(0.963)	200013	4.80162	4.80	
	64 Atrazine	200	13.120	13.131	(0.976)	176700	4.40199	4.40	
	65 Pentachlorophenol	266	13.212	13.223	(0.982)	104187	5.12682	5.13	
*	66 Phenanthrene-D10	188	13.448	13.448	(1.000)	141751	0.80000	(a)	
	67 Phenanthrene	178	13.478	13.479	(1.002)	1021318	4.85158	4.85	
	68 Anthracene	178	13.540	13.551	(1.007)	965386	4.69843	4.70	
	69 Carbazole	167	13.776	13.776	(1.024)	714867	6.43290	6.43(R)	
	70 Di-n-butylphthalate	149	14.298	14.309	(1.063)	1529473	5.09049	5.09	
	72 Fluoranthene	202	15.084	15.094	(1.122)	900325	4.95374	4.95	
	74 Pyrene	202	15.379	15.390	(0.890)	917740	4.55726	4.56	
	75 Butylbenzylphthalate	149	16.388	16.398	(0.948)	600668	4.87240	4.87	
	76 3,3'-Dichlorobenzidine	252	17.274	17.274	(0.999)	99314	3.89480	3.89(R)	
	77 Benzo(a)anthracene	228	17.264	17.274	(0.999)	564659	4.84934	4.85	
*	78 Chrysene-D12	240	17.284	17.295	(1.000)	68028	0.80000	(a)	
	79 Chrysene	228	17.325	17.335	(1.002)	598084	4.56021	4.56	
	80 bis(2-Ethylhexyl)phthalate	149	17.468	17.468	(1.011)	785234	4.73215	4.73	
	81 Di-n-octylphthalate	149	18.863	18.874	(1.091)	1134907	4.92067	4.92	

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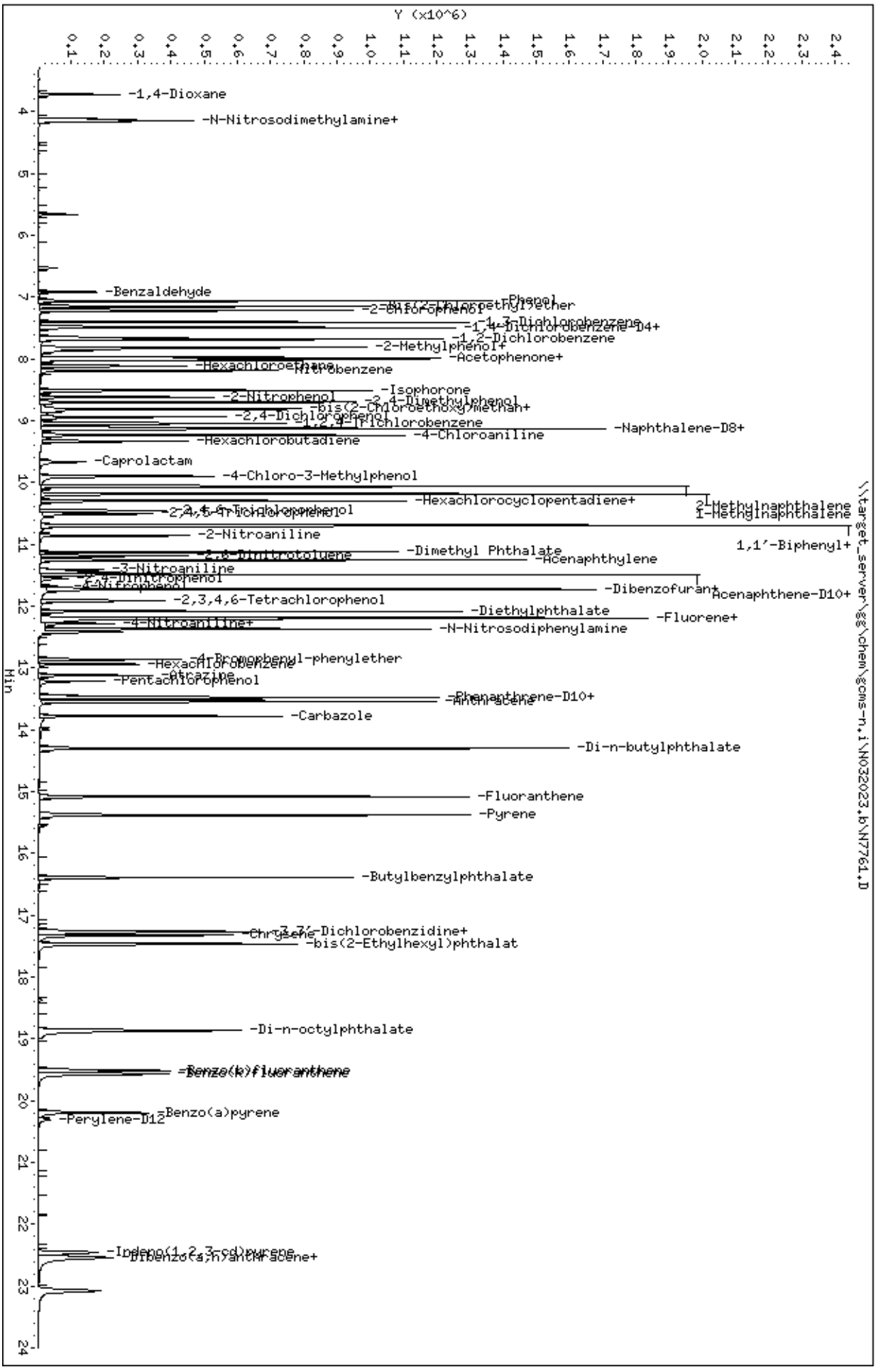
Report Date: 21-Mar-2023 06:36

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/L)	REVIEW CODE
	82 Benzo(b)fluoranthene	252	19.510	19.521	(0.961)	520650	5.25510	5.26	
	83 Benzo(k)fluoranthene	252	19.573	19.584	(0.964)	579863	4.44639	4.45(H)	
	84 Benzo(a)pyrene	252	20.193	20.204	(0.994)	445625	4.95418	4.95	
*	85 Perylene-D12	264	20.309	20.309	(1.000)	52979	0.80000	(a)	
	86 Indeno(1,2,3-cd)pyrene	276	22.463	22.474	(1.106)	297400	4.86692	4.87	
	87 Dibenzo(a,h)anthracene	278	22.548	22.558	(1.110)	326394	5.11002	5.11	
	88 Benzo(g,h,i)perylene	276	23.073	23.094	(1.136)	384781	5.04605	5.05	
M	89 Total PAHs	100				12974201	87.6165	87.6	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.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Volume Injected (uL): 1.0
Column phase: ZB5-MS
Instrument: gcms-n,i
Operator: DT/EP
Column diameter: 0.25
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Y (x10^6)
Min
-1,4-Dioxane
-N-Nitrosodimethylamine+
-Benzaldehyde
-Phenol
-2-Chlorophenol
-1,3-Dichlorobenzene
-1,4-Dichlorobenzene-D4+
-1,2-Dichlorobenzene
-2-Methylphenol+
-Acetophenone+
-Hexachloroethane
-Nitrobenzene
-Isophorone
-2-Nitrophenol
-2,4-Dimethylphenol
-Bis(2-Chloroethoxy)Methan+
-2,4-Dichlorophenol
-1,2,4-Trichlorobenzene
-Naphthalene-D8+
-4-Chloroaniline
-Hexachlorobutadiene
-Caprolactam
-4-Chloro-3-Methylphenol
-Hexachlorocyclopentadiene+
2-Methylnaphthalene
1-Methylnaphthalene
-2,4,6-Trichlorophenol
-2-Nitroaniline
1,1'-Biphenyl+
-Dimethyl Phthalate
-2,6-Dinitrotoluene
-Acenaphthylene
-3-Nitroaniline
-2,4-Dinitrophenol
-4-Nitrophenol
-Dibenzofuran+
Acenaphthene-D10+
-2,3,4,6-Tetrachlorophenol
-Diethylphthalate
-Fluorene+
-4-Nitroaniline+
-N-Nitrosodiphenylamine
-4-Bromophenyl-phenylether
-Hexachlorobenzene
-Atrazine
-Pentachlorophenol
-Phenanthrene-D10+
-Anthracene
-Carbazole
-Di-n-butylphthalate
-Fluoranthene
-Pyrene
-Butylbenzylphthalate
-3,3'-Dichlorobenzidine+
-Chrysene
-bis(2-Ethylhexyl)phthalat
-Di-n-octylphthalate
-Benzo(b)fluoranthene
-Benzo(k)fluoranthene
-Perylene-D12
-Benzo(a)pyrene
-Indeno(1,2,3-cd)pyrene
-Dibenzo(a,h)anthracene+

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Injection Date: 20-MAR-2023 15:15
Instrument: gcms-n.i
Client Sample ID:

Compound: Acenaphthylene
CAS Number: 208-96-8

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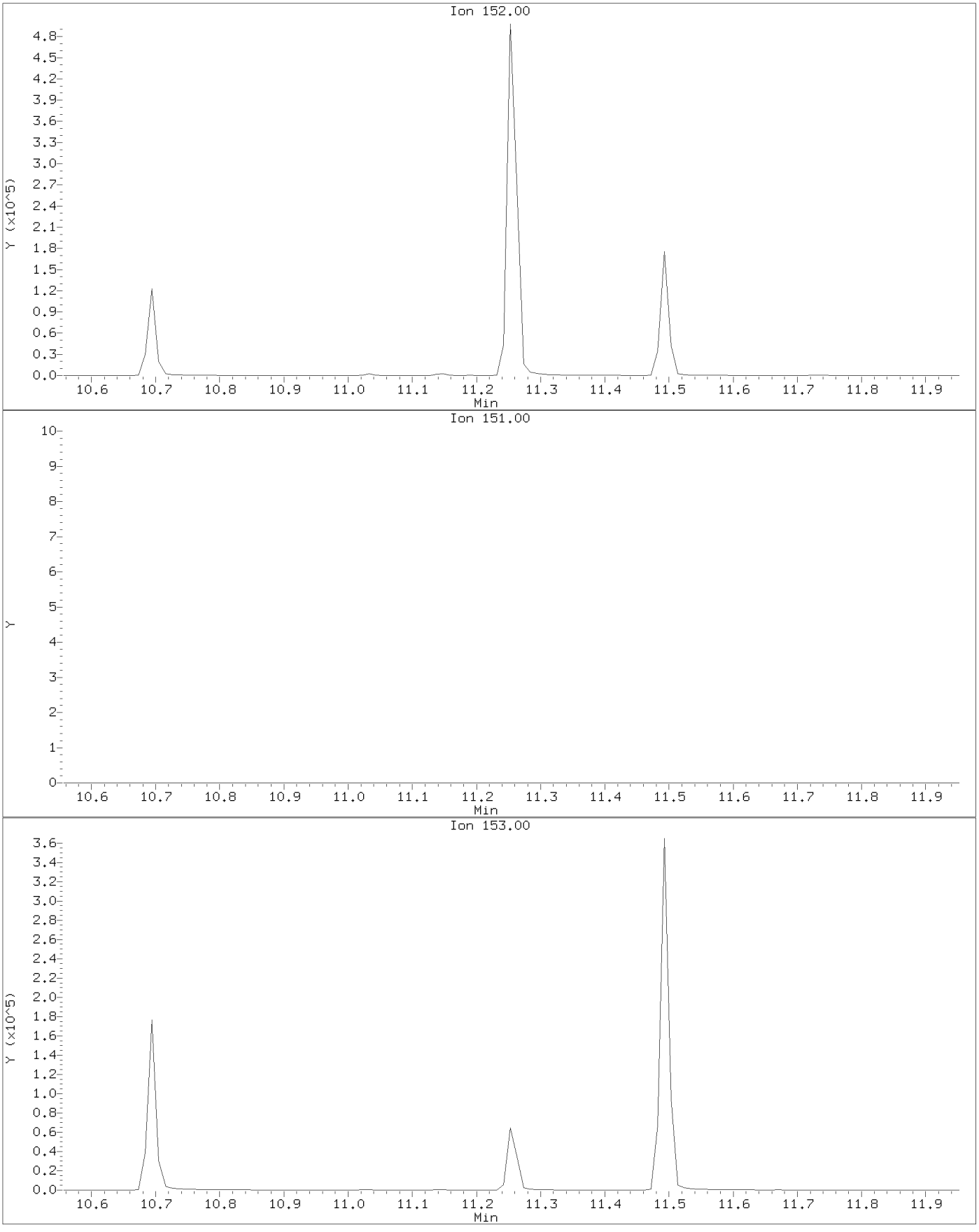

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Compound: Acenaphthylene
CAS Number: 208-96-8

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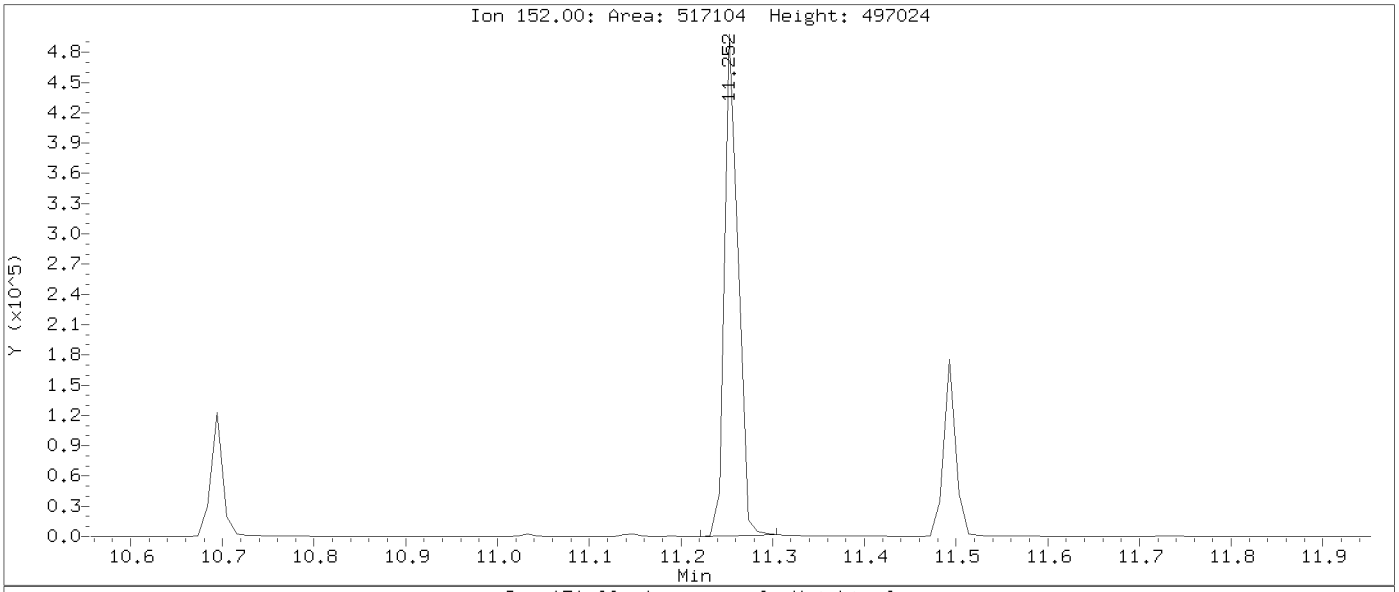

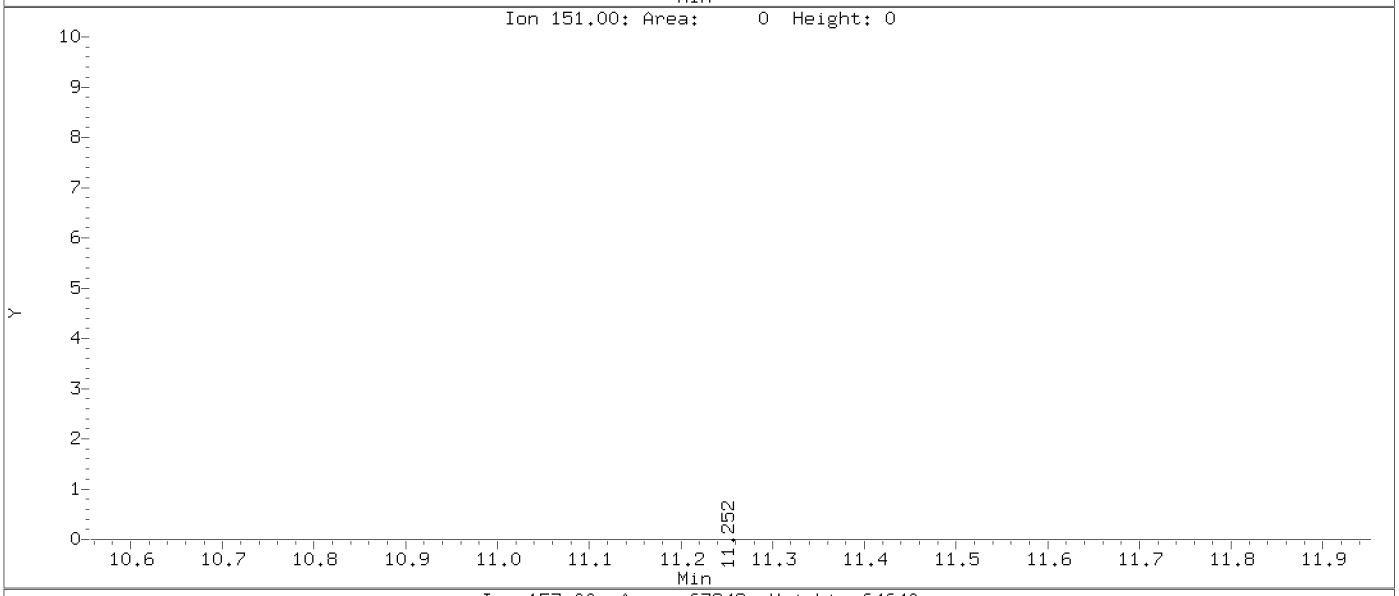

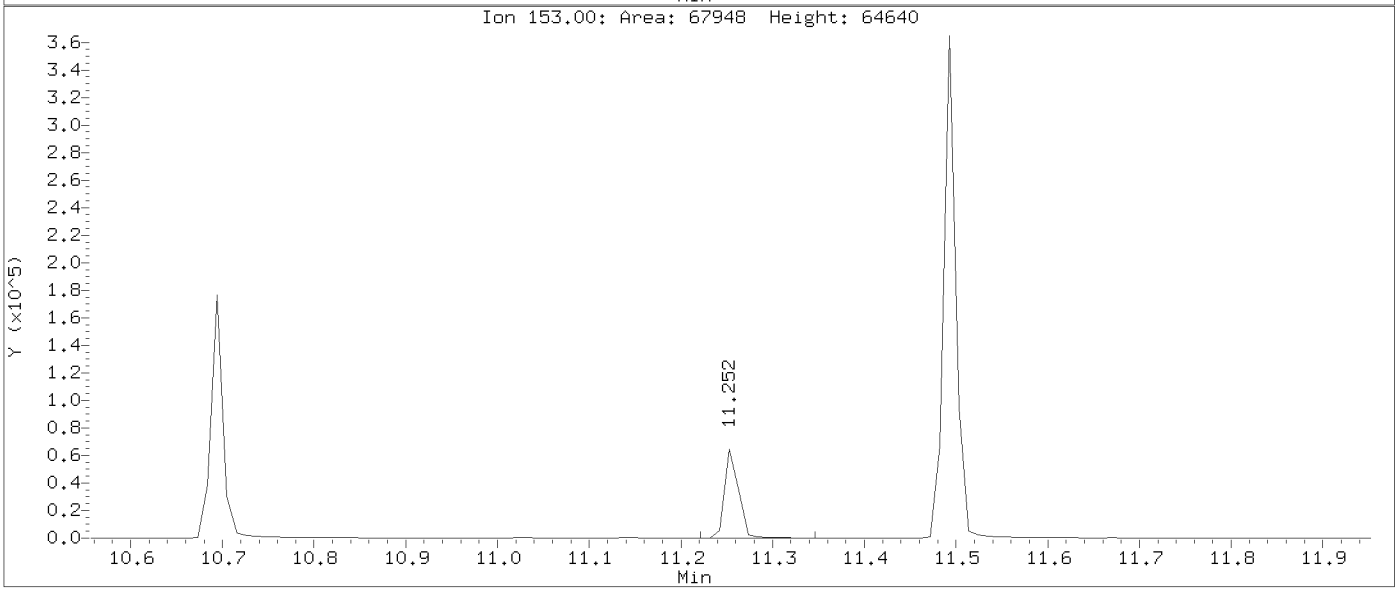

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Client Sample ID:

Compound: 4-Bromophenyl-phenylether
CAS Number: 101-55-3

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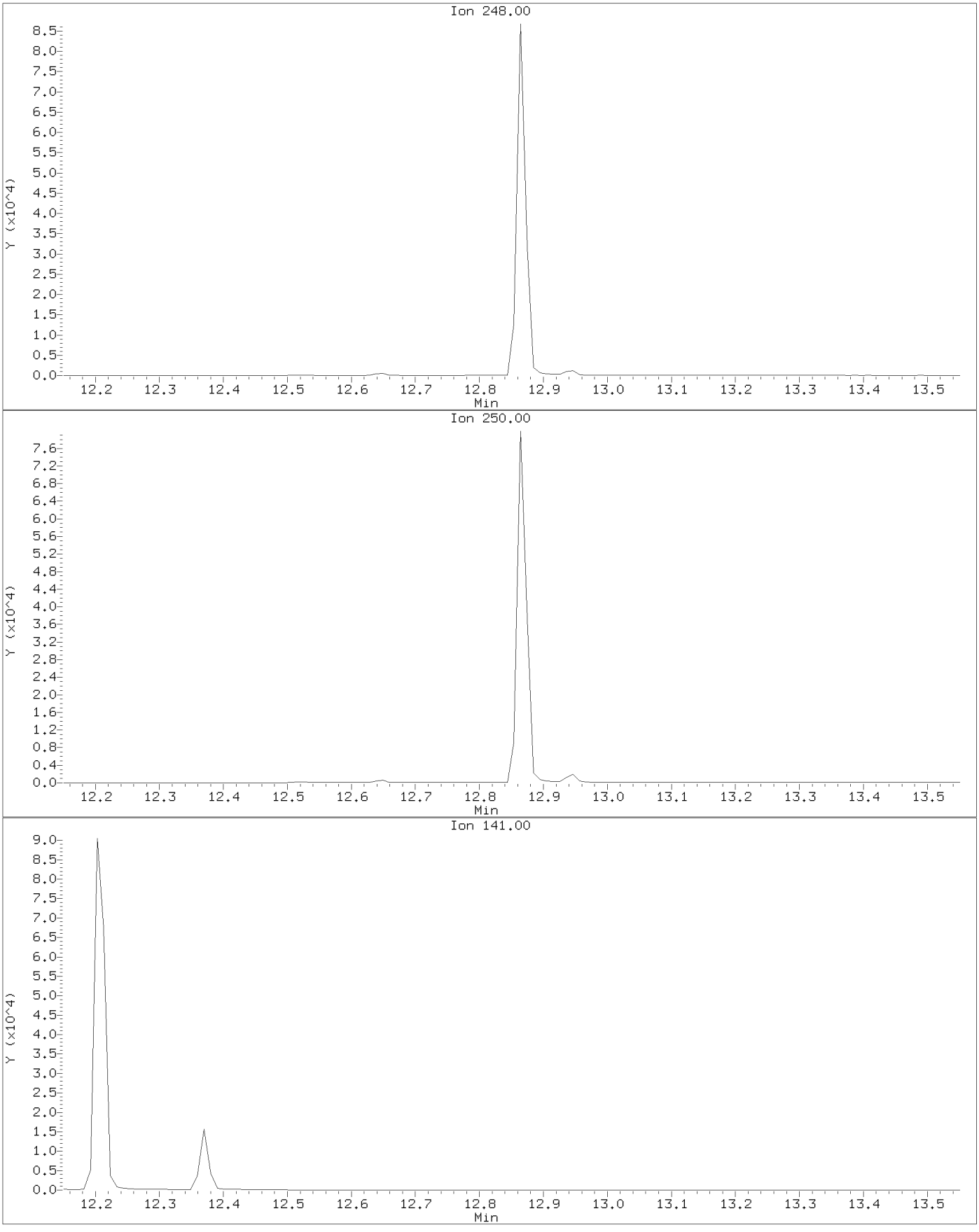

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Compound: 4-Bromophenyl-phenylether
CAS Number: 101-55-3

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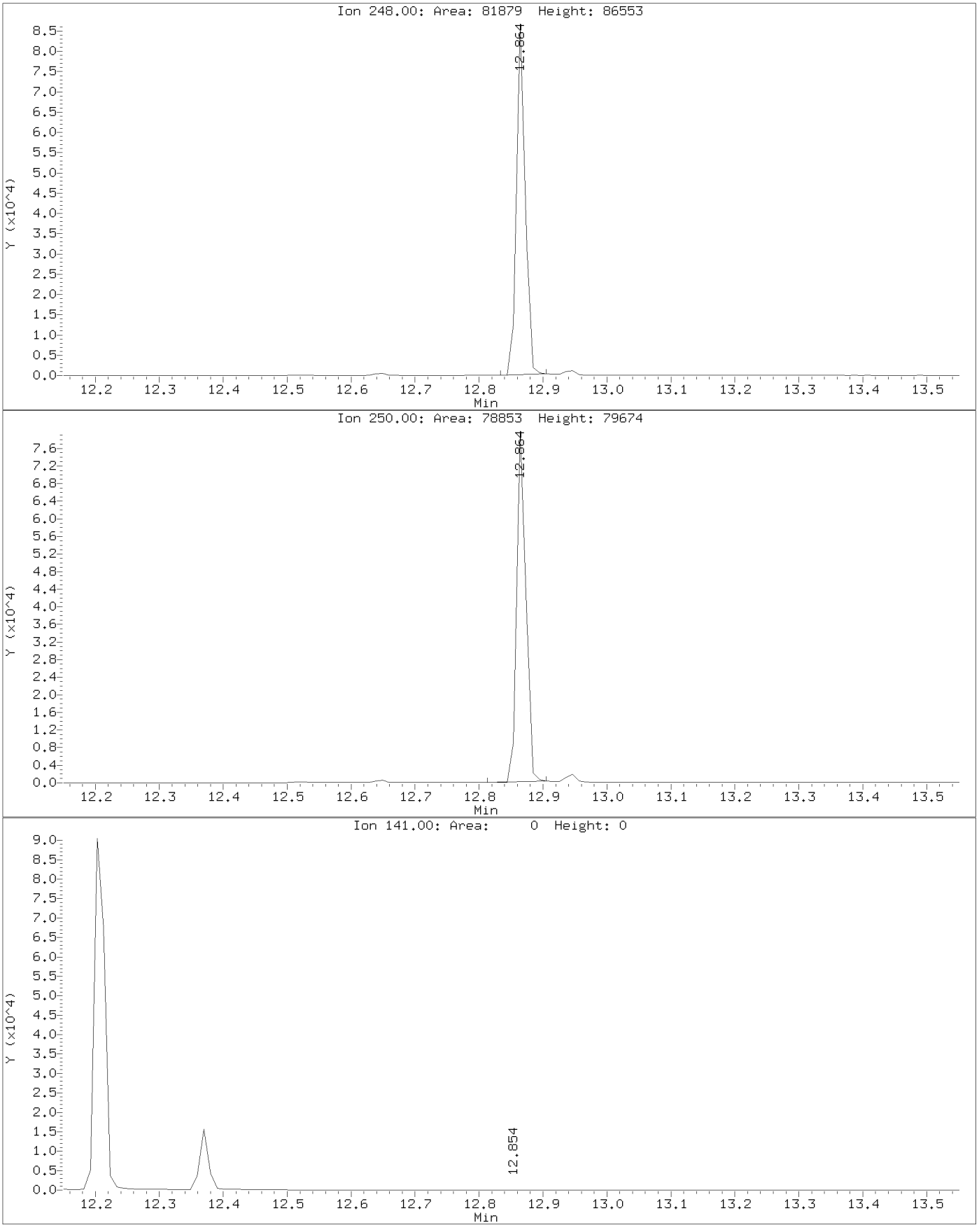

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Injection Date: 20-MAR-2023 15:15
Instrument: gcms-n.i
Client Sample ID:

Compound: Indeno(1,2,3-cd)pyrene
CAS Number: 193-39-5

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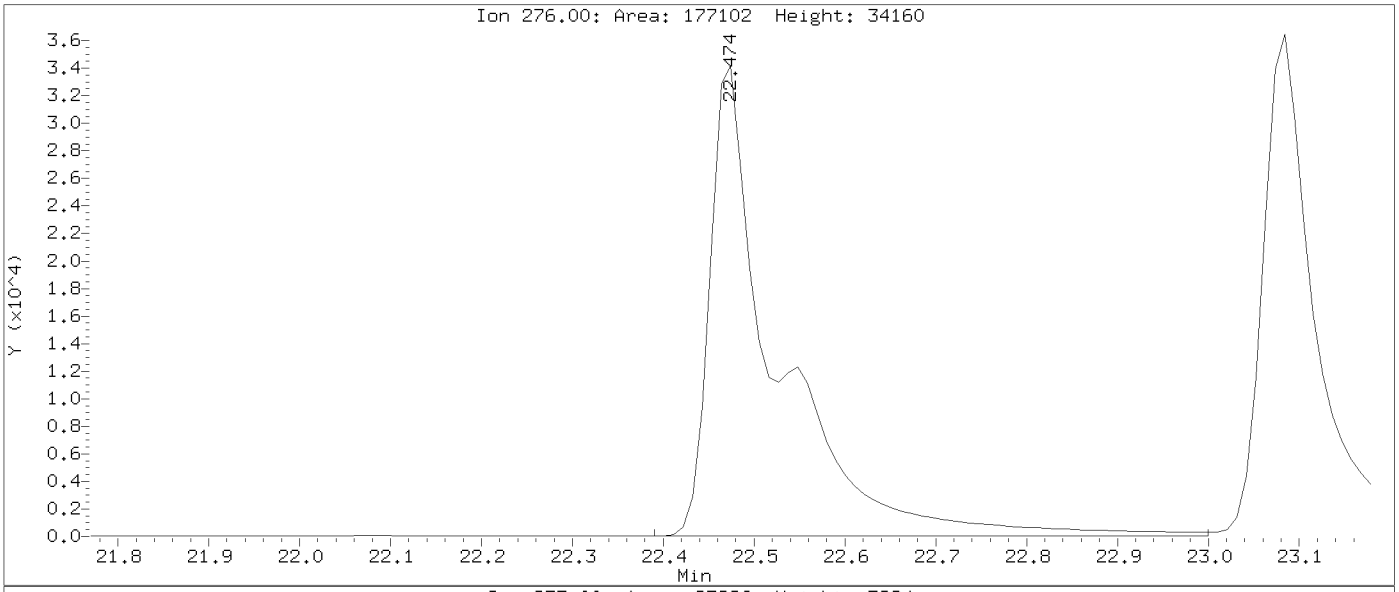

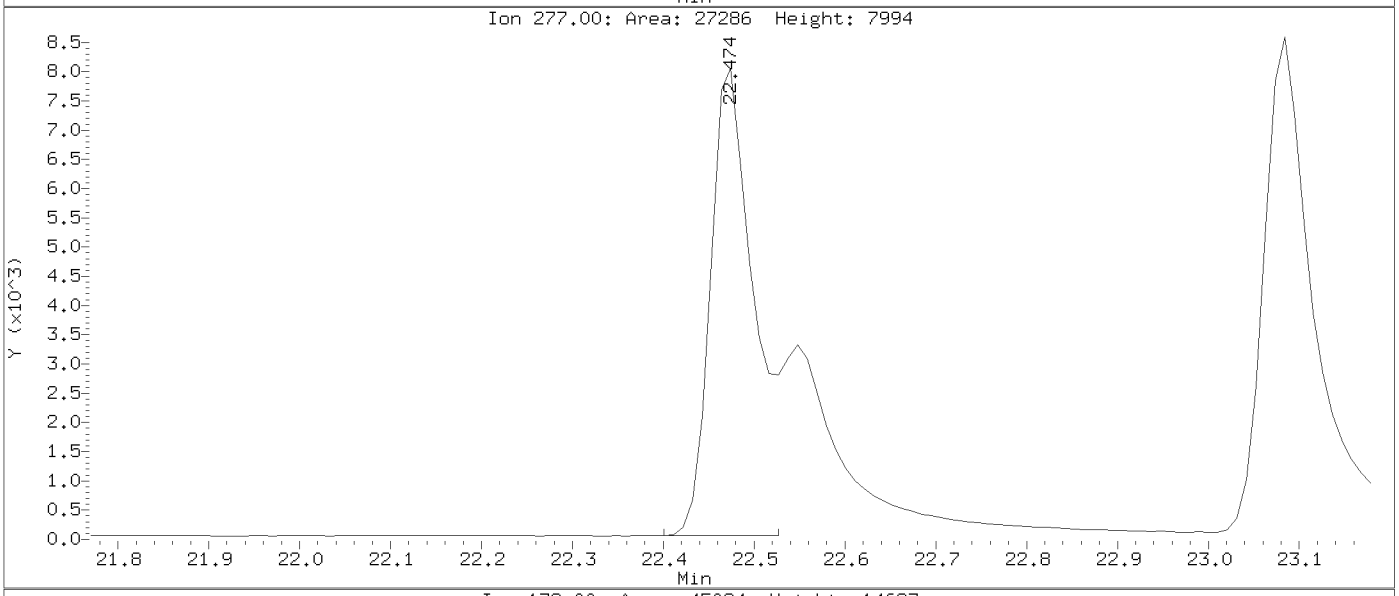

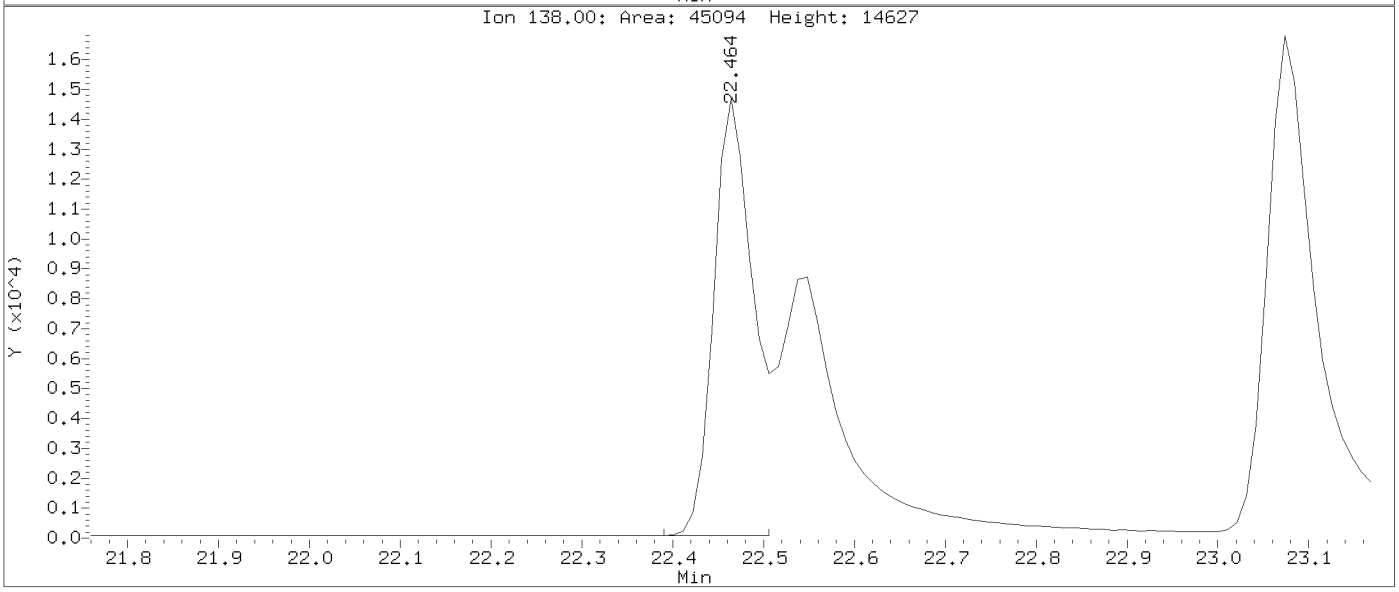

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Client Sample ID:

Compound: Indeno(1,2,3-cd)pyrene
CAS Number: 193-39-5

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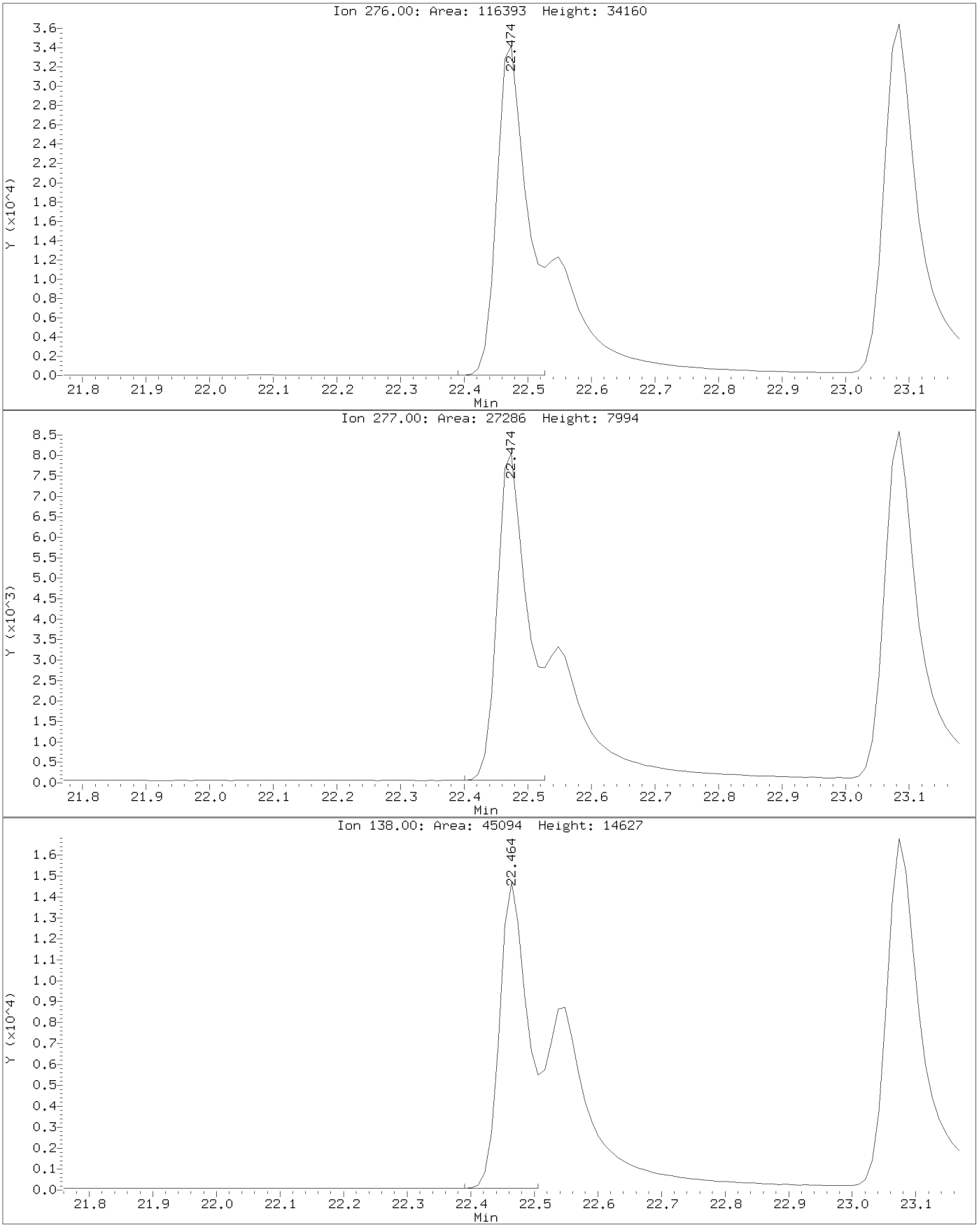

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Instrument: gcms-n.i
Client Sample ID:

Compound: Acenaphthylene
CAS Number: 208-96-8

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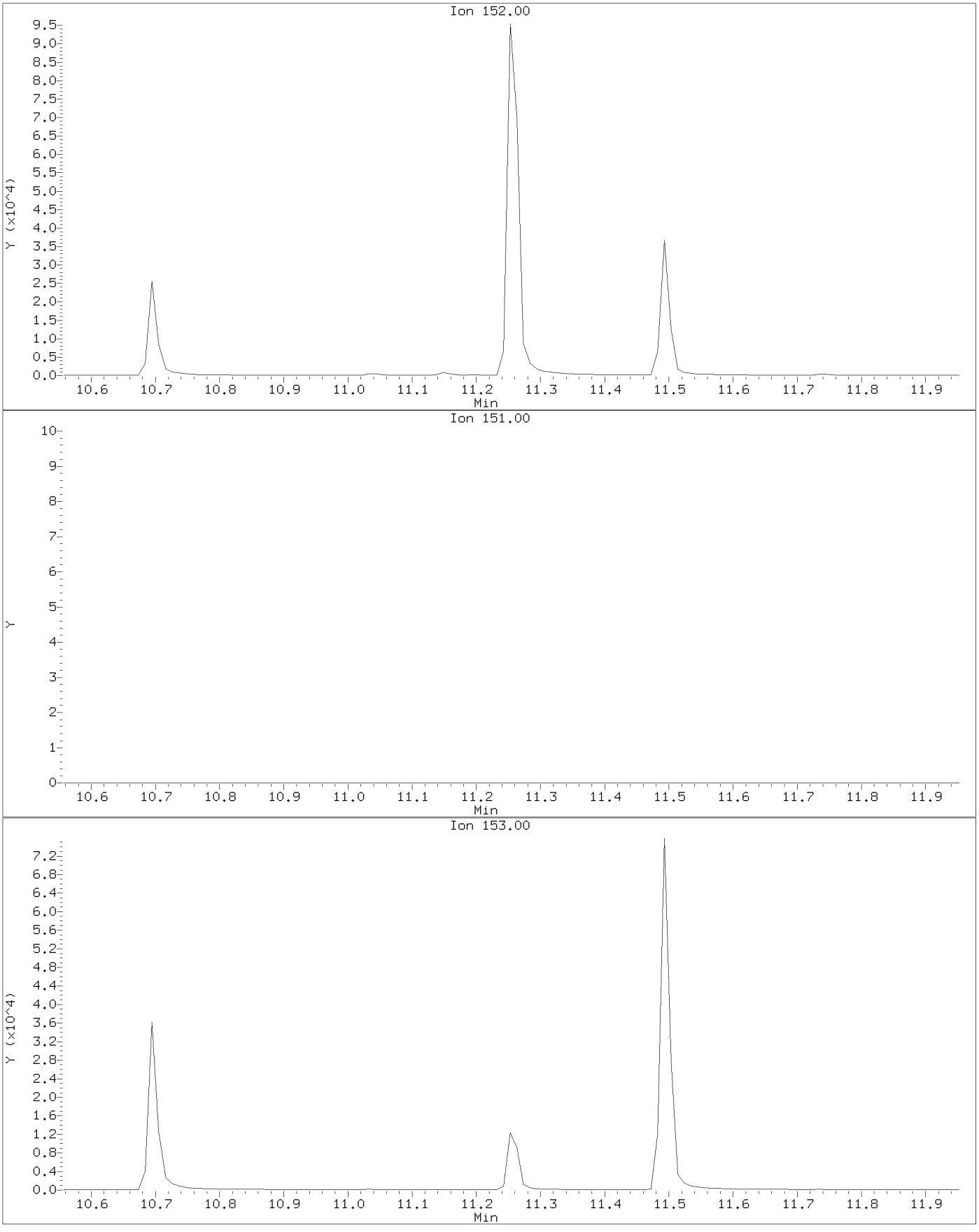

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Client Sample ID:

Compound: Acenaphthylene
CAS Number: 208-96-8

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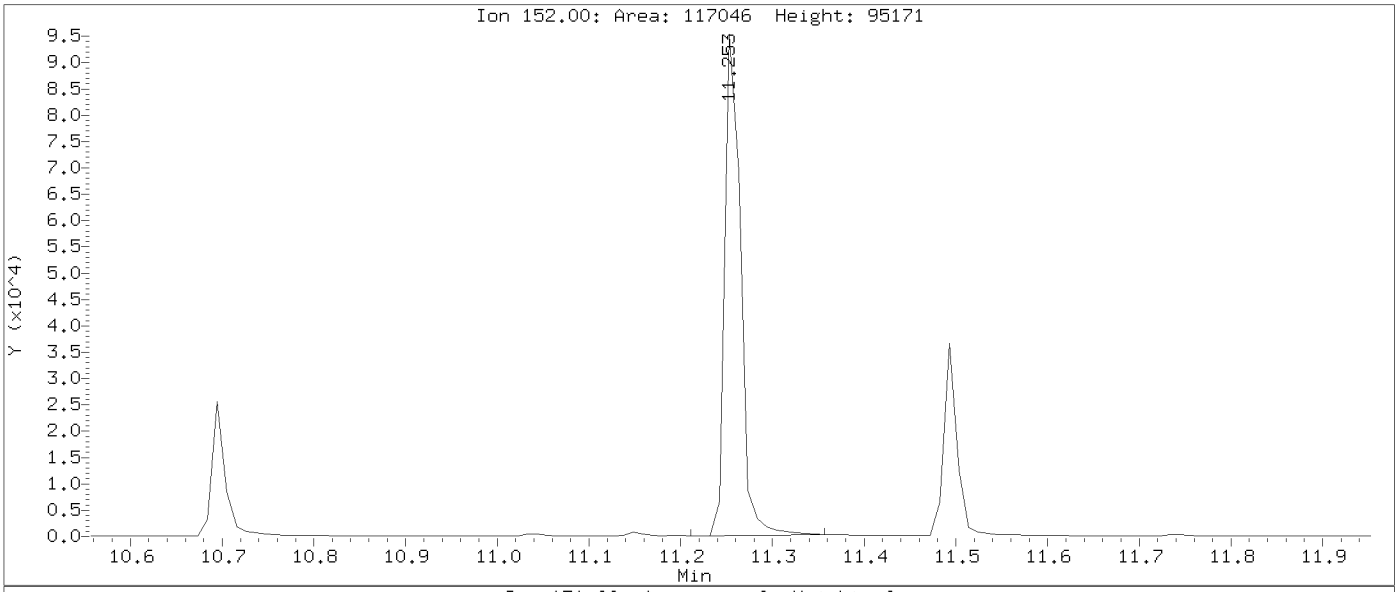

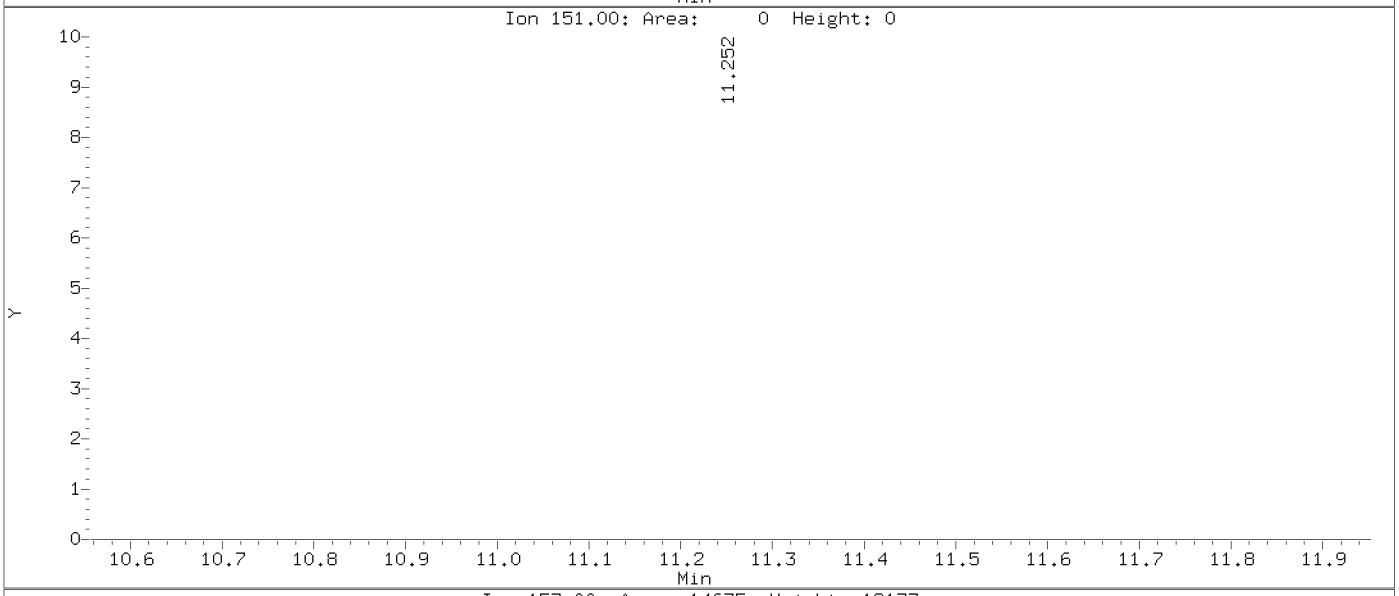

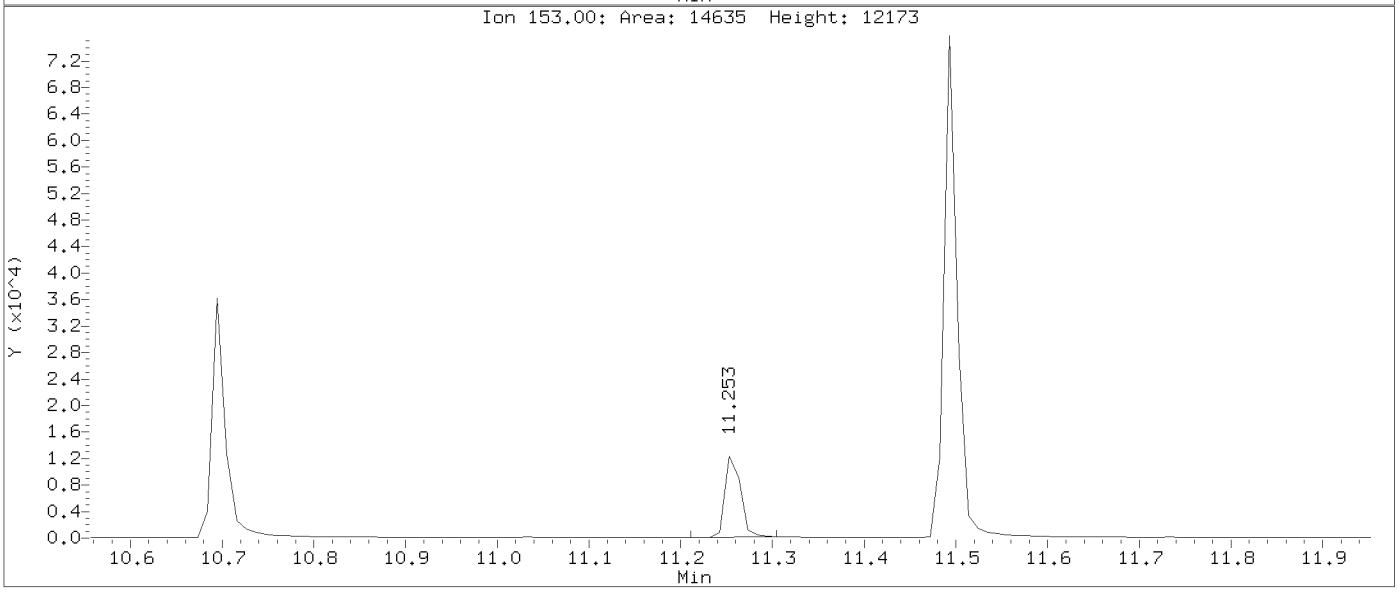

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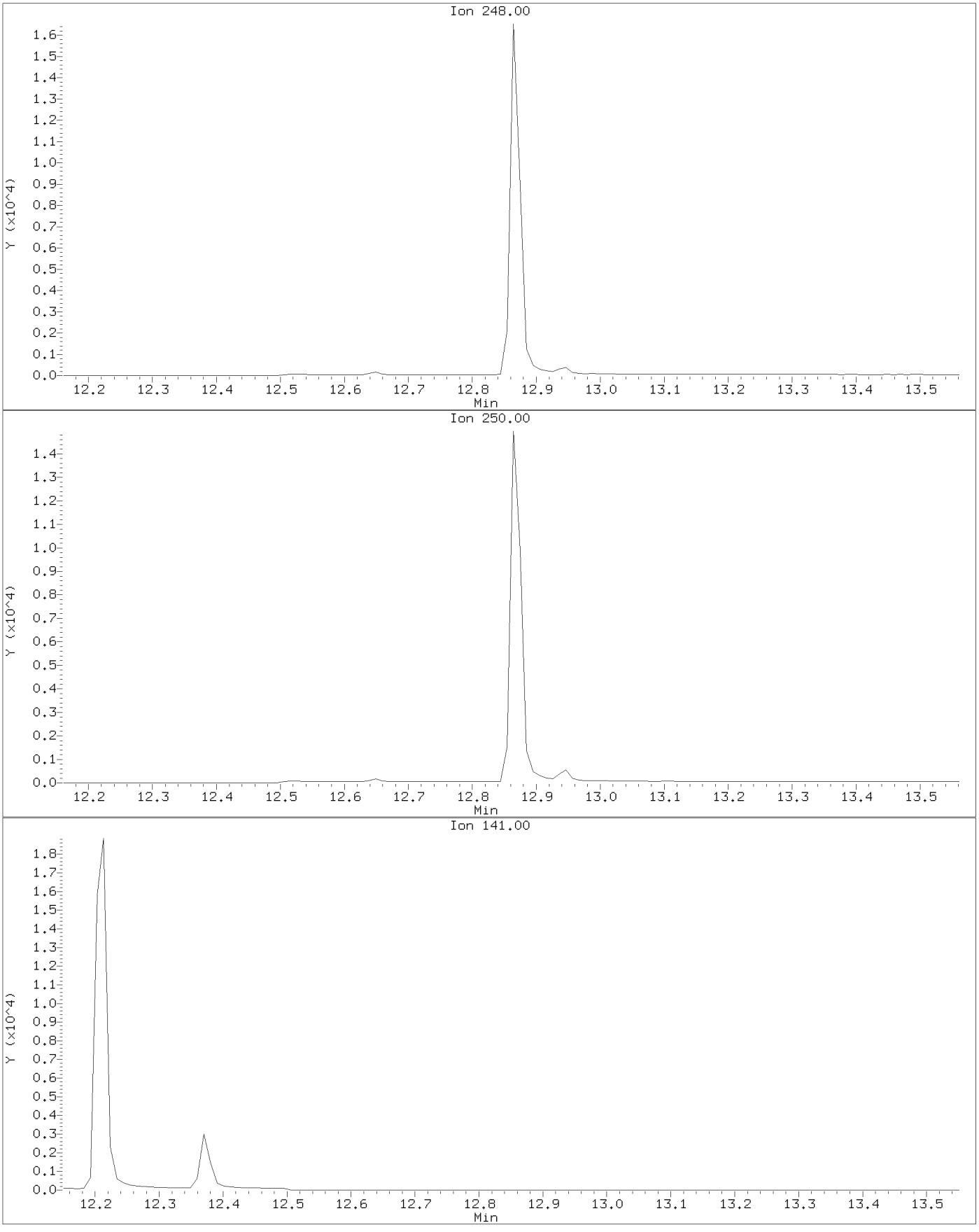
Instrument: gcms-n.i
Client Sample ID:

Compound: 4-Bromophenyl-phenylether
CAS Number: 101-55-3

BEFORE MANUAL INTEGRATION



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Compound: 4-Bromophenyl-phenylether
CAS Number: 101-55-3

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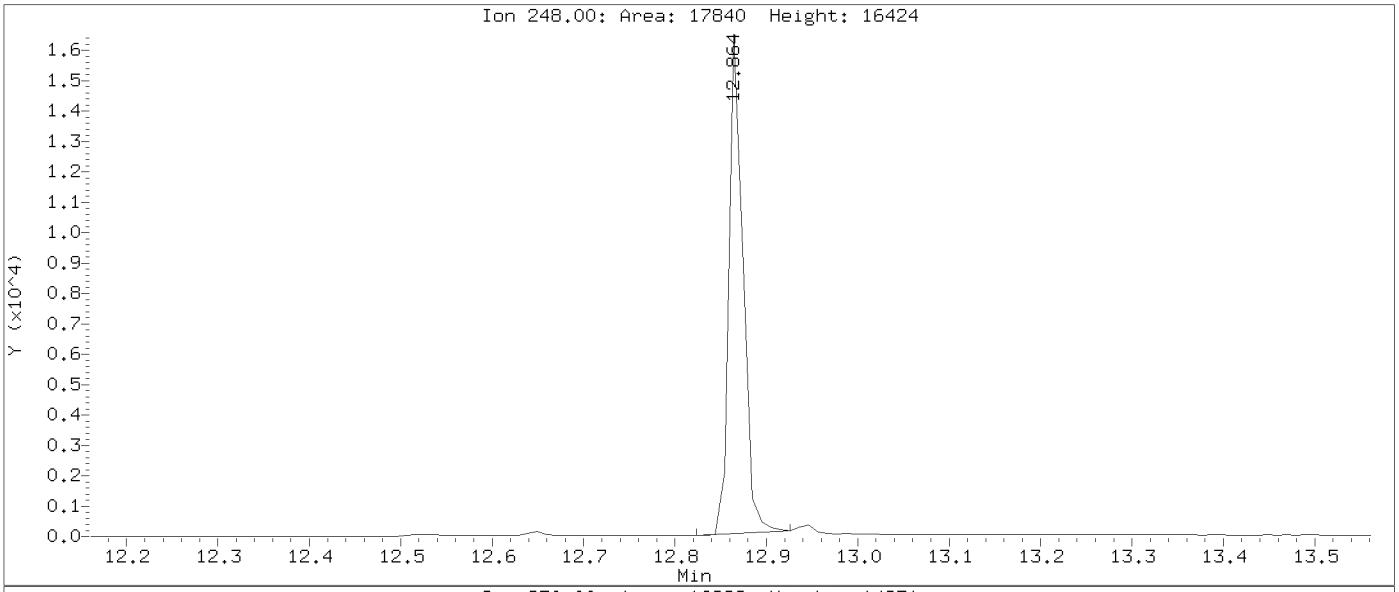

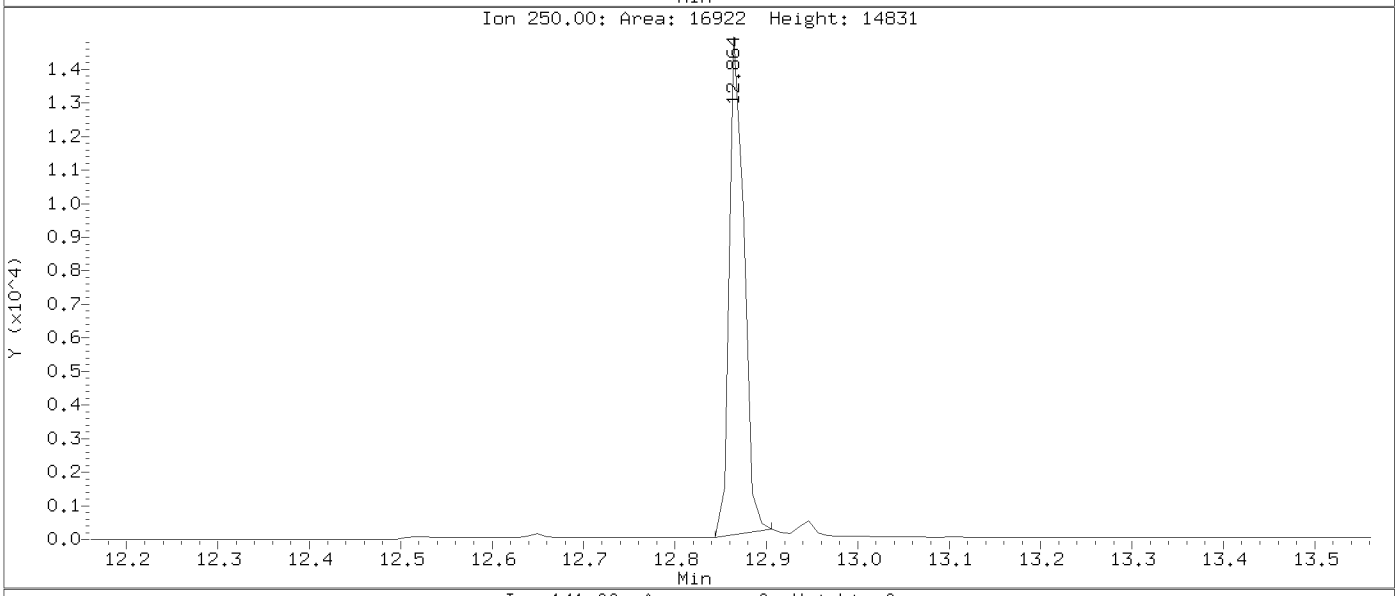

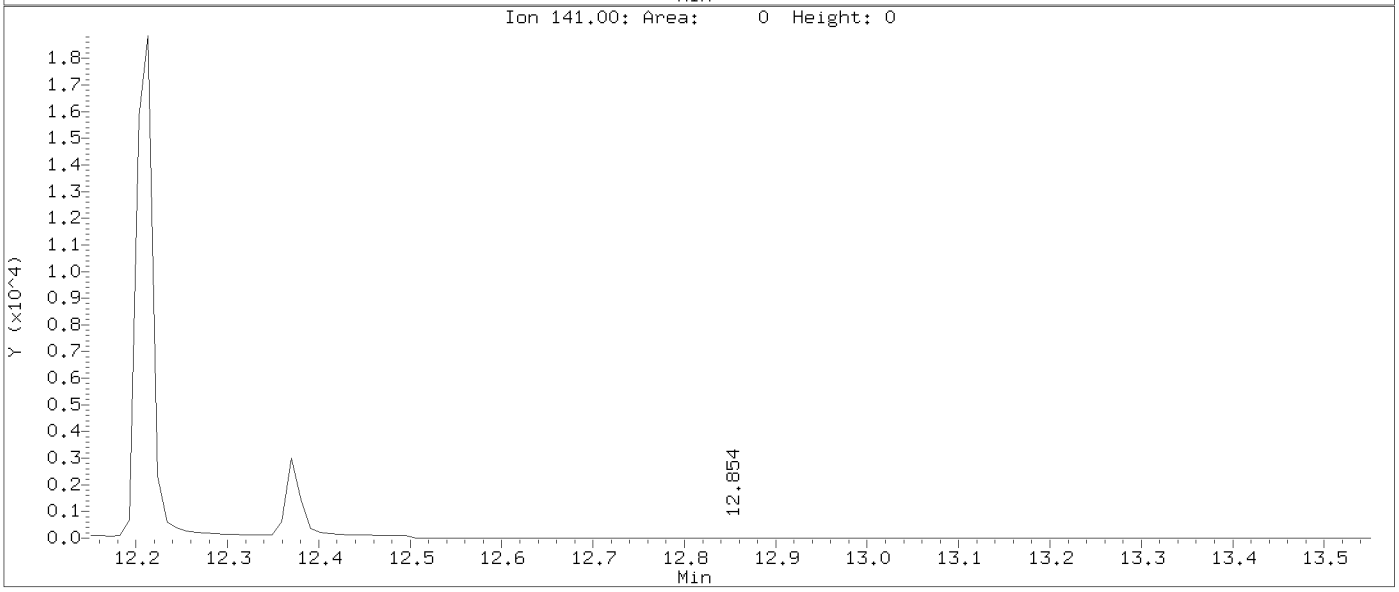

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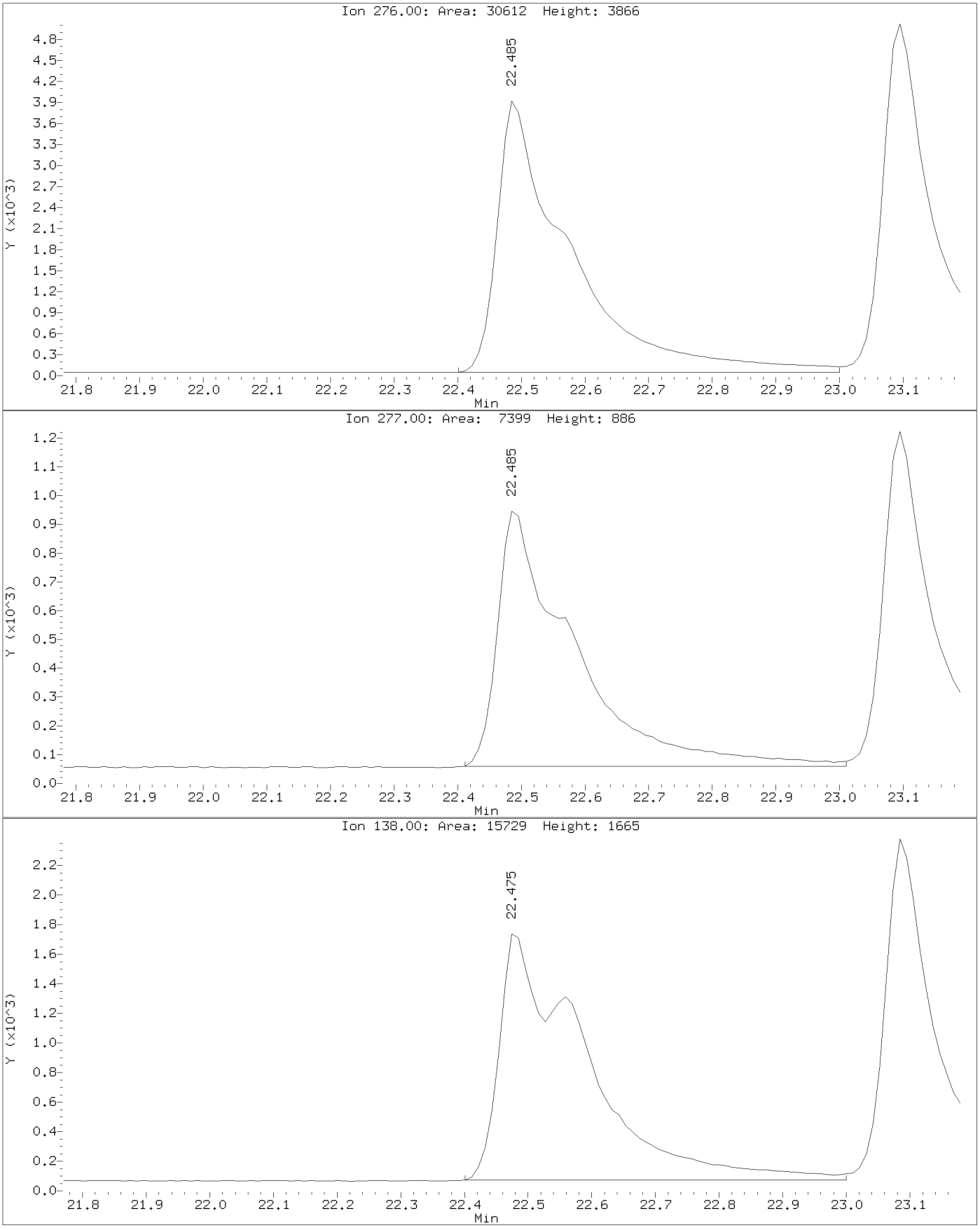
Injection Date: 20-MAR-2023 15:48
Instrument: gcms-n.i
Client Sample ID:

Compound: Indeno(1,2,3-cd)pyrene
CAS Number: 193-39-5

BEFORE MANUAL INTEGRATION



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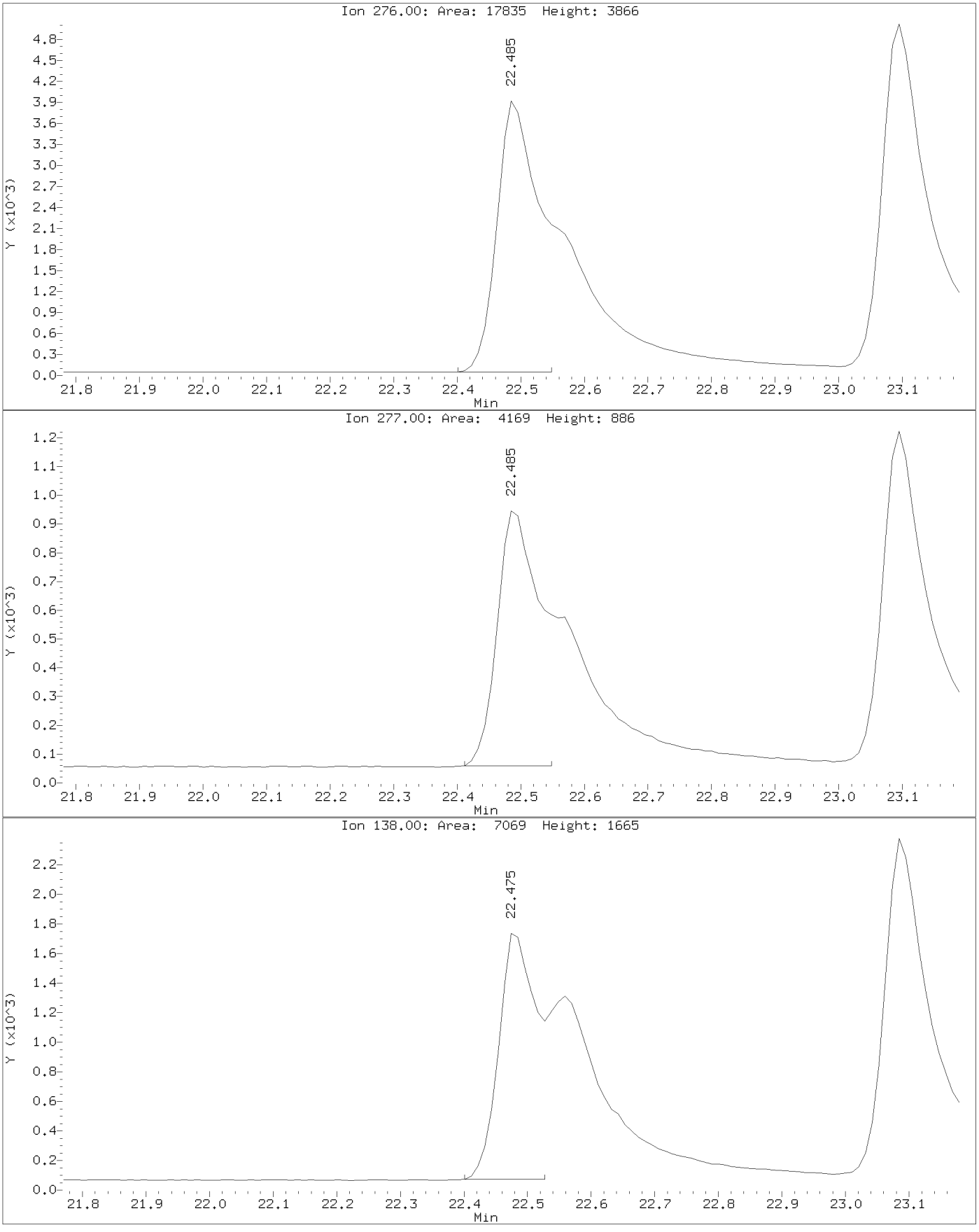
Injection Date: 20-MAR-2023 15:48
Instrument: gcms-n.i
Client Sample ID:

Compound: Indeno(1,2,3-cd)pyrene
CAS Number: 193-39-5

AFTER MANUAL INTEGRATION



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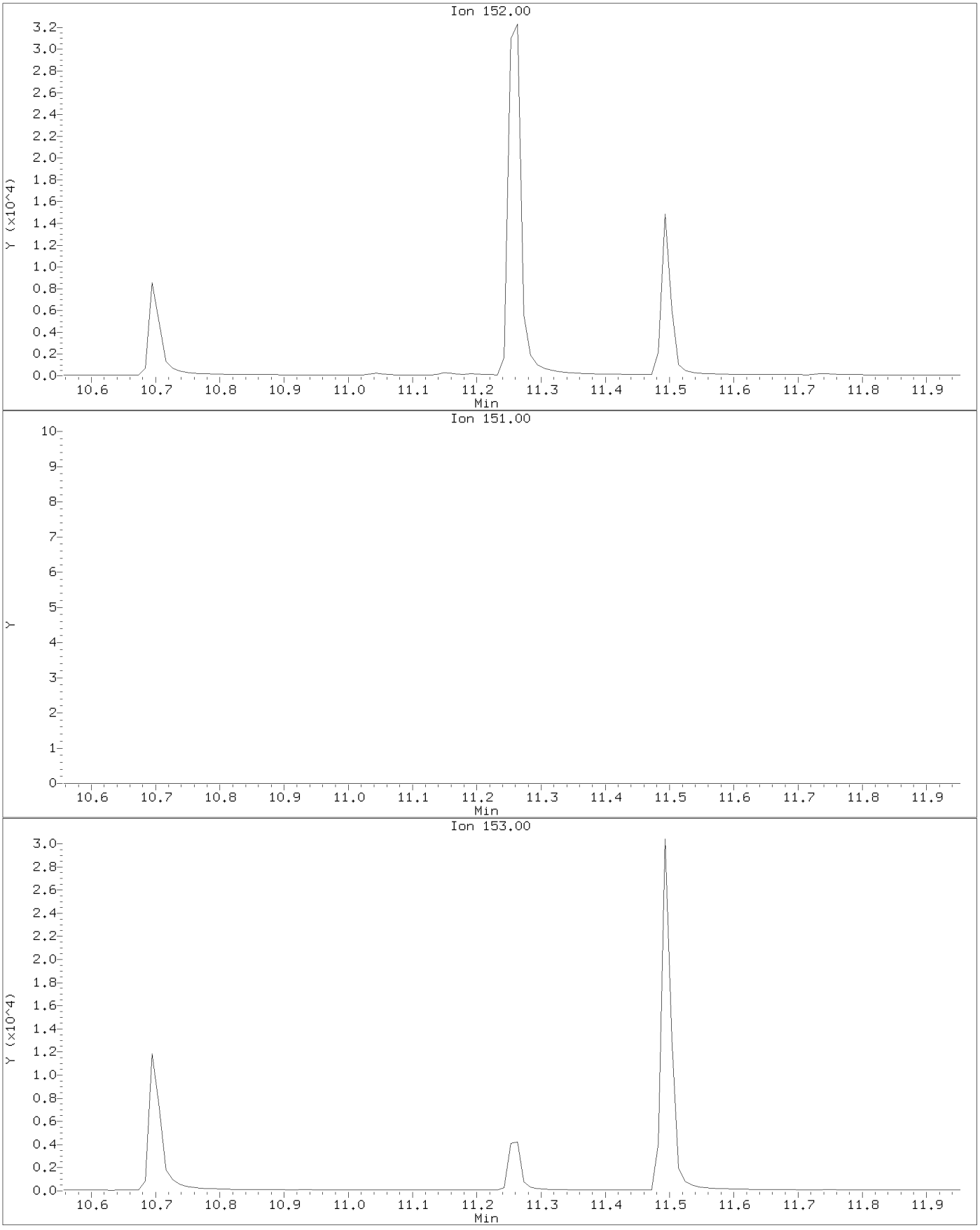
Injection Date: 20-MAR-2023 16:25
Instrument: gcms-n.i
Client Sample ID:

Compound: Acenaphthylene
CAS Number: 208-96-8

BEFORE MANUAL INTEGRATION



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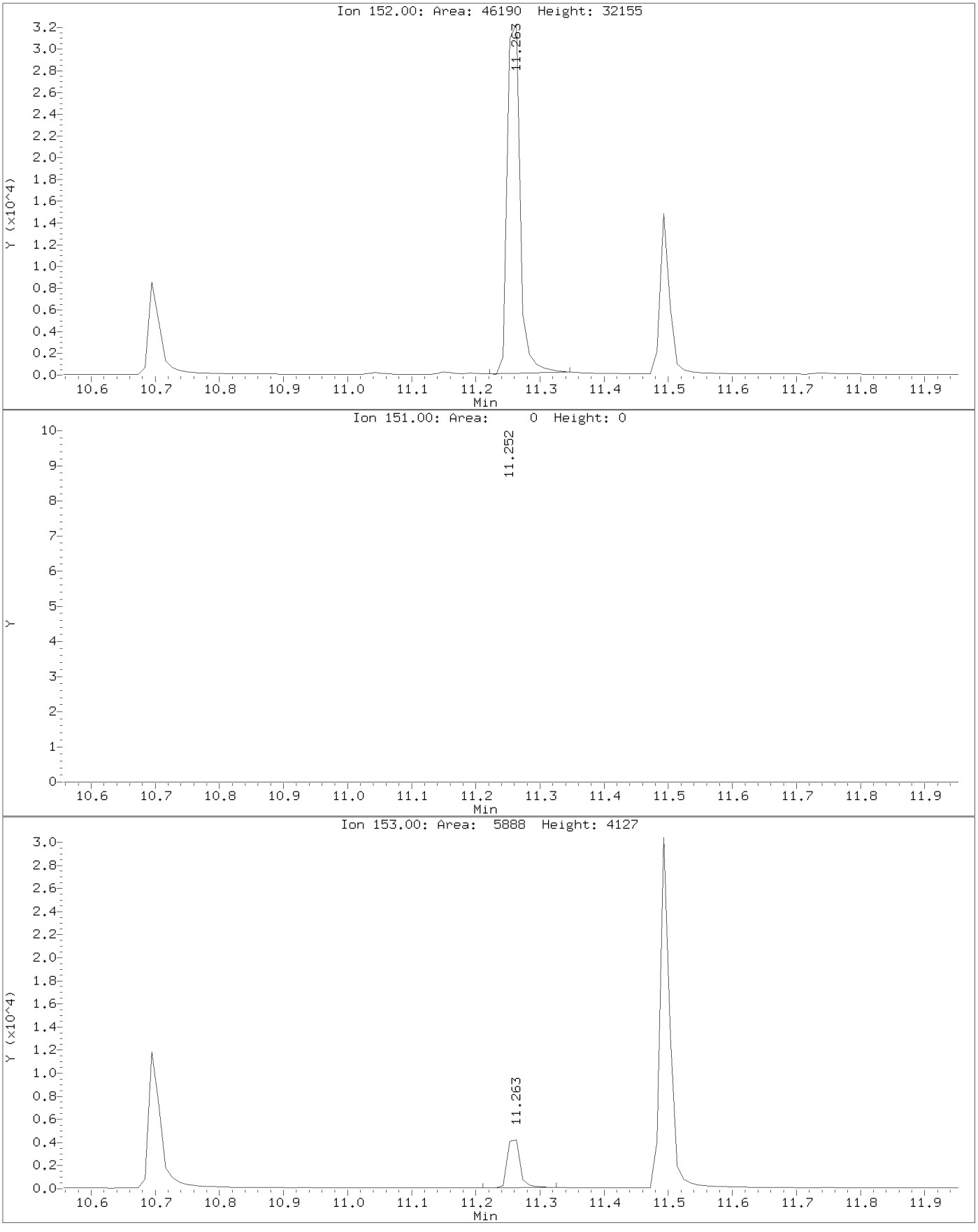
Client Sample ID:

Compound: Acenaphthylene
CAS Number: 208-96-8

AFTER MANUAL INTEGRATION



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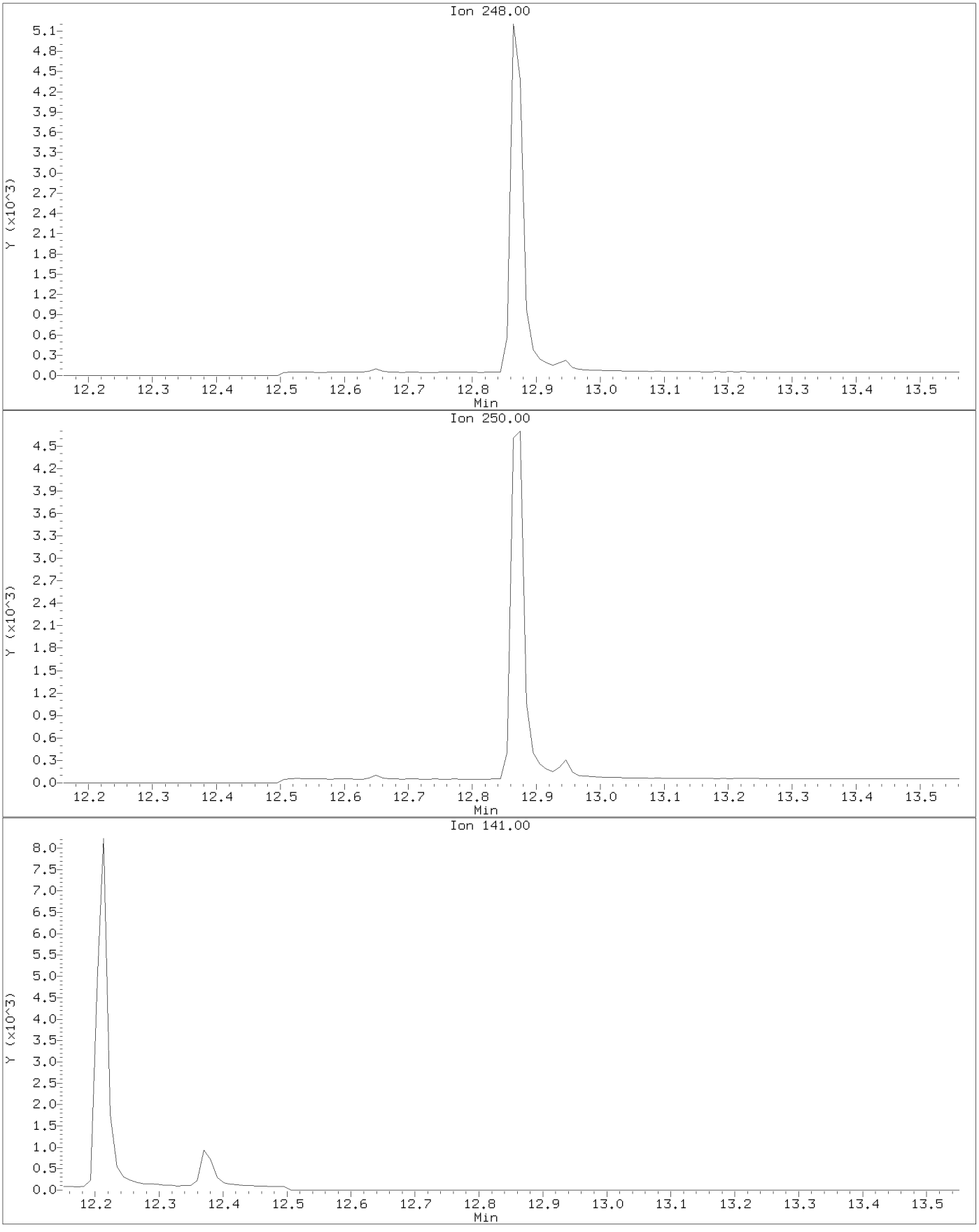
Injection Date: 20-MAR-2023 16:25
Instrument: gcms-n.i
Client Sample ID:

Compound: 4-Bromophenyl-phenylether
CAS Number: 101-55-3

BEFORE MANUAL INTEGRATION



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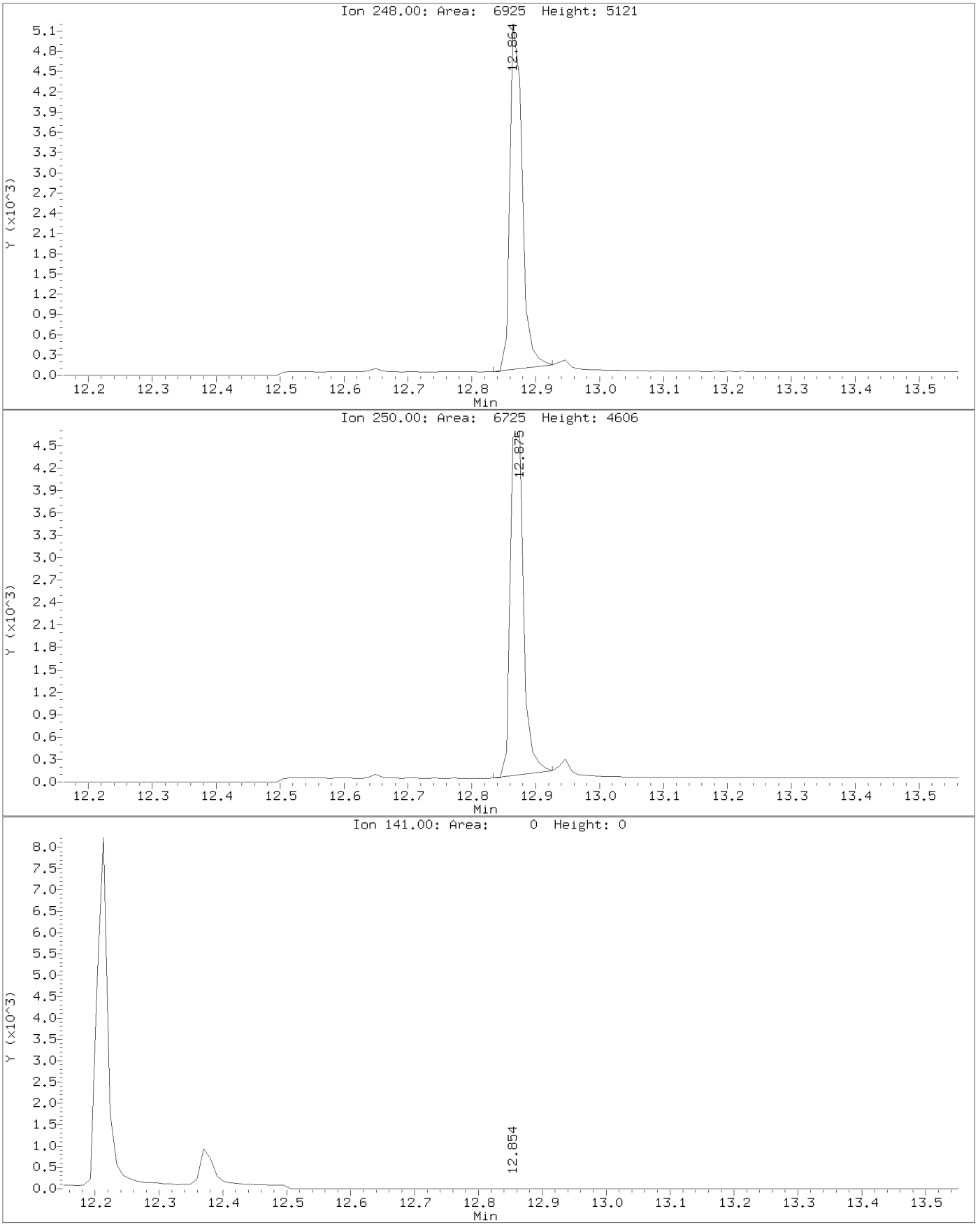
Injection Date: 20-MAR-2023 16:25
Instrument: gcms-n.i
Client Sample ID:

Compound: 4-Bromophenyl-phenylether
CAS Number: 101-55-3

AFTER MANUAL INTEGRATION



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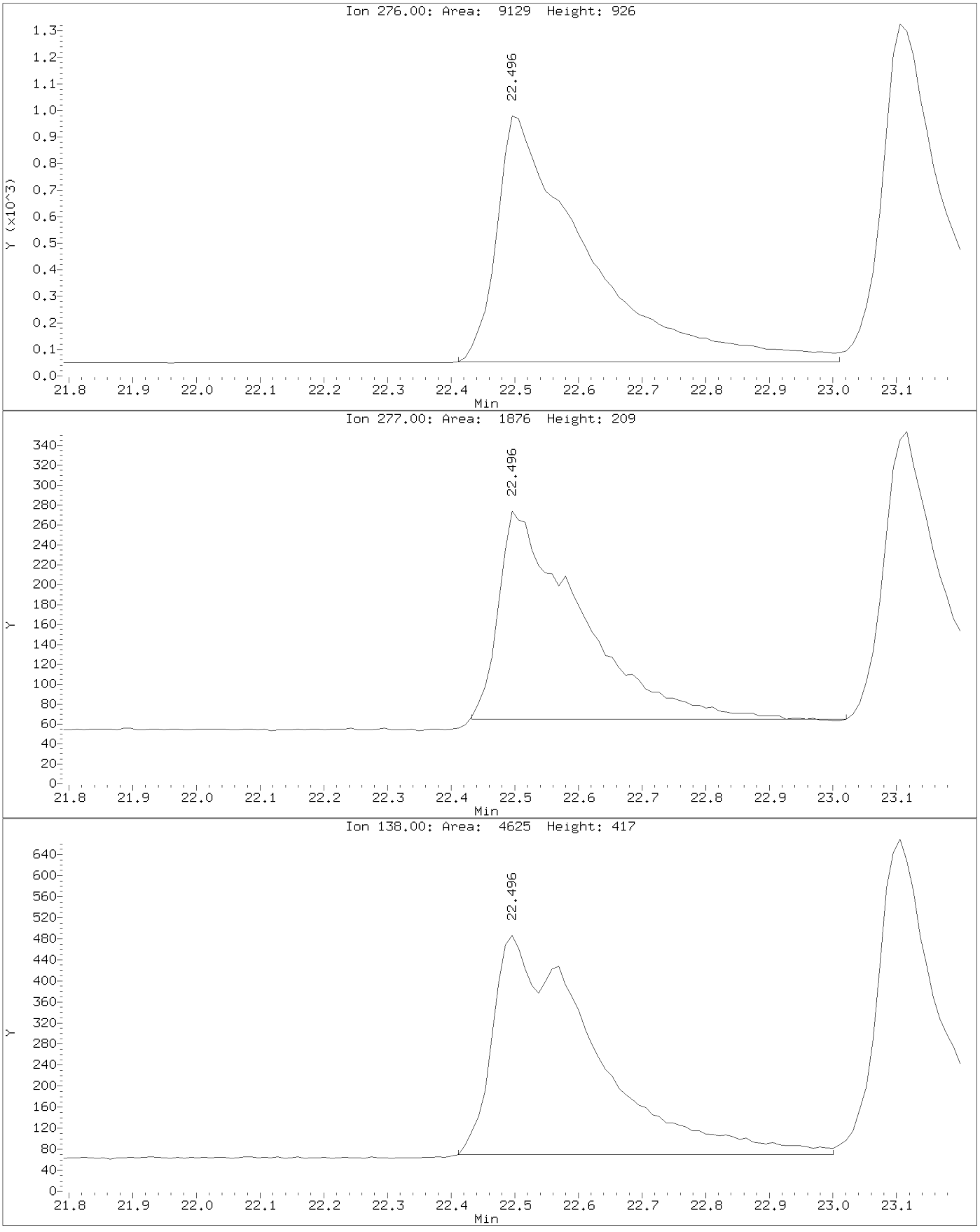
Injection Date: 20-MAR-2023 16:25
Instrument: gcms-n.i
Client Sample ID:

Compound: Indeno(1,2,3-cd)pyrene
CAS Number: 193-39-5

BEFORE MANUAL INTEGRATION



AFTER MANUAL INTEGRATION

Data File: \\target_server\gg\chem\gcms-n.i\N032023.b\N7757.D
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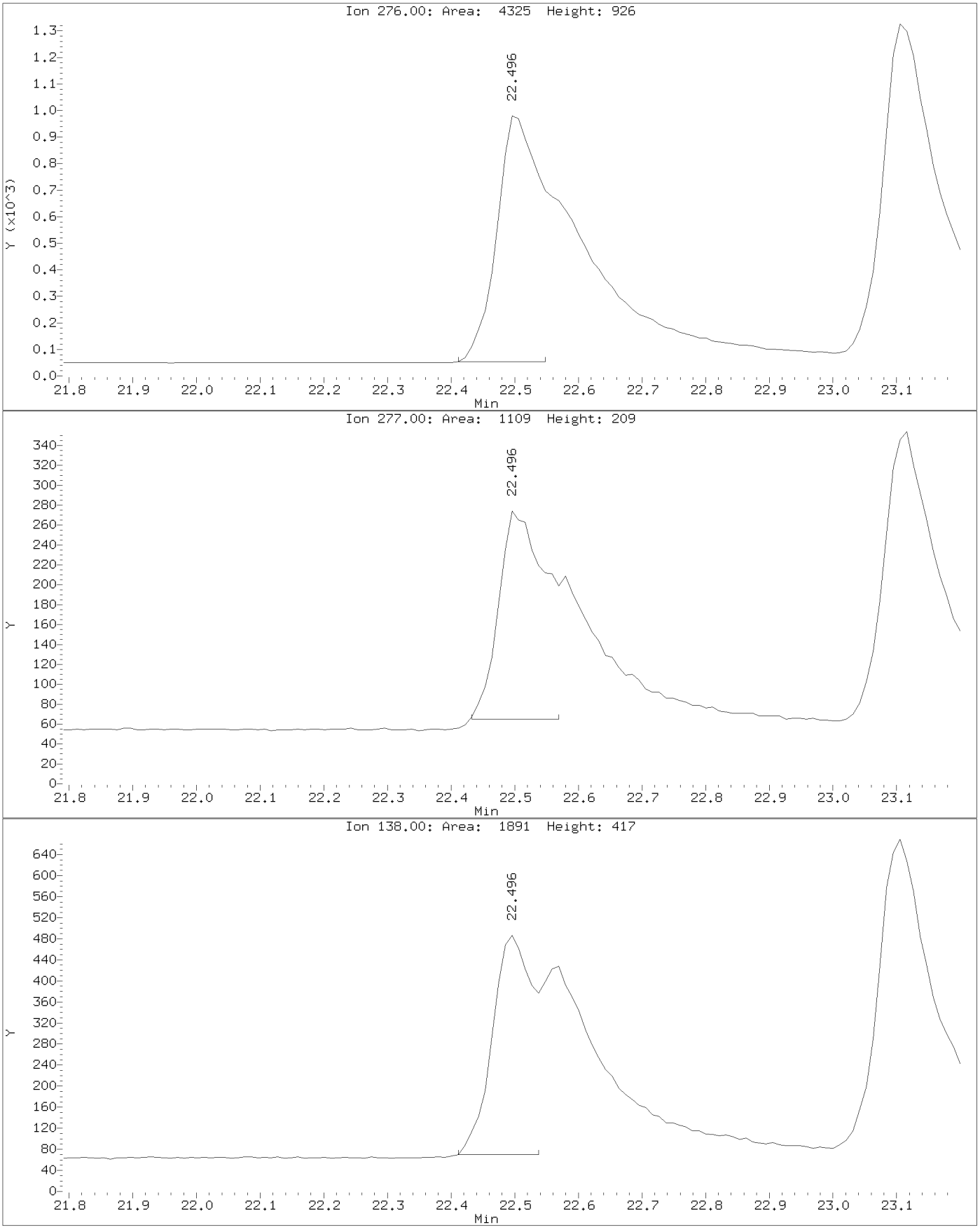
Instrument: gcms-n.i
Client Sample ID:

Compound: Indeno(1,2,3-cd)pyrene
CAS Number: 193-39-5



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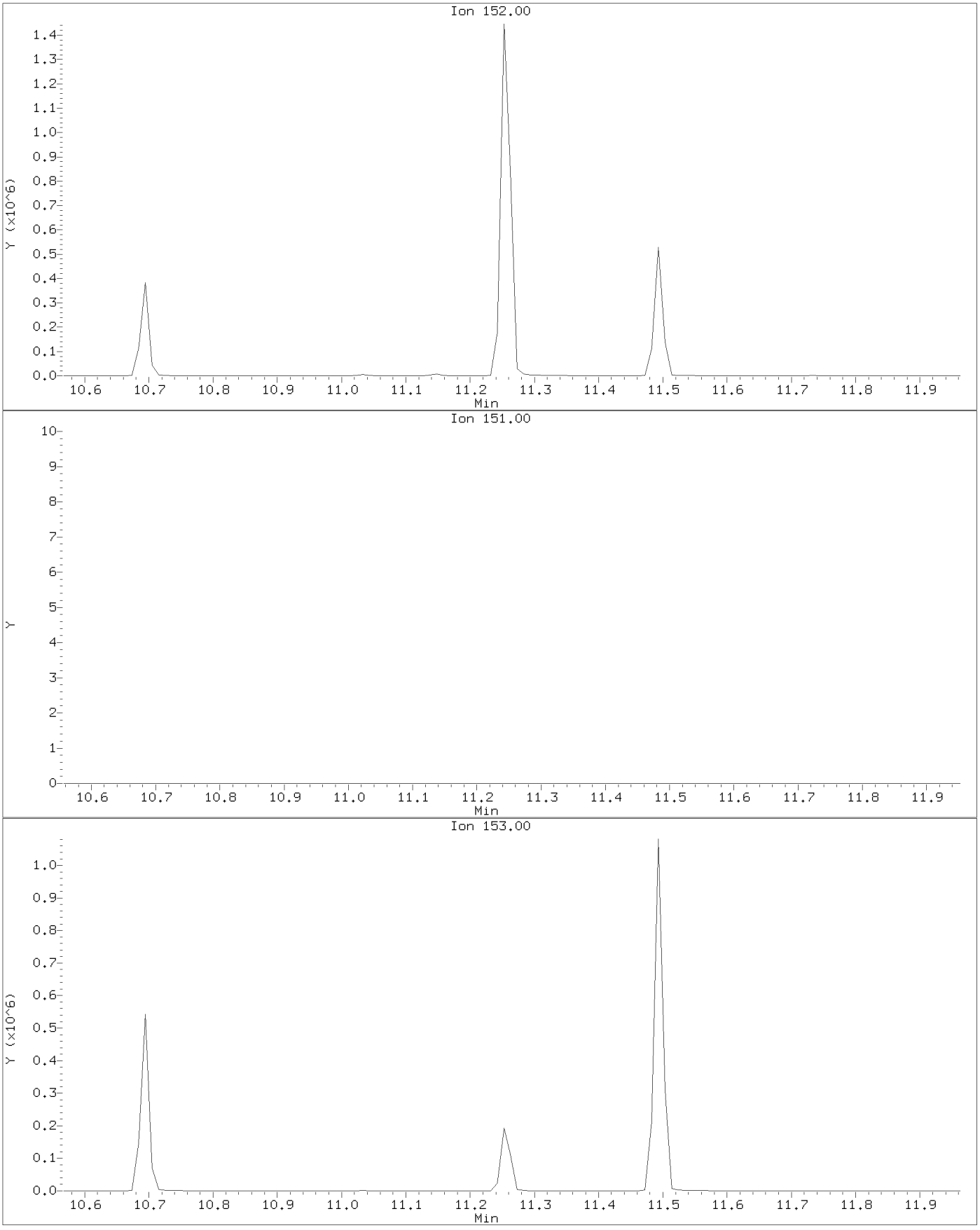
Injection Date: 20-MAR-2023 17:02
Instrument: gcms-n.i
Client Sample ID:

Compound: Acenaphthylene
CAS Number: 208-96-8

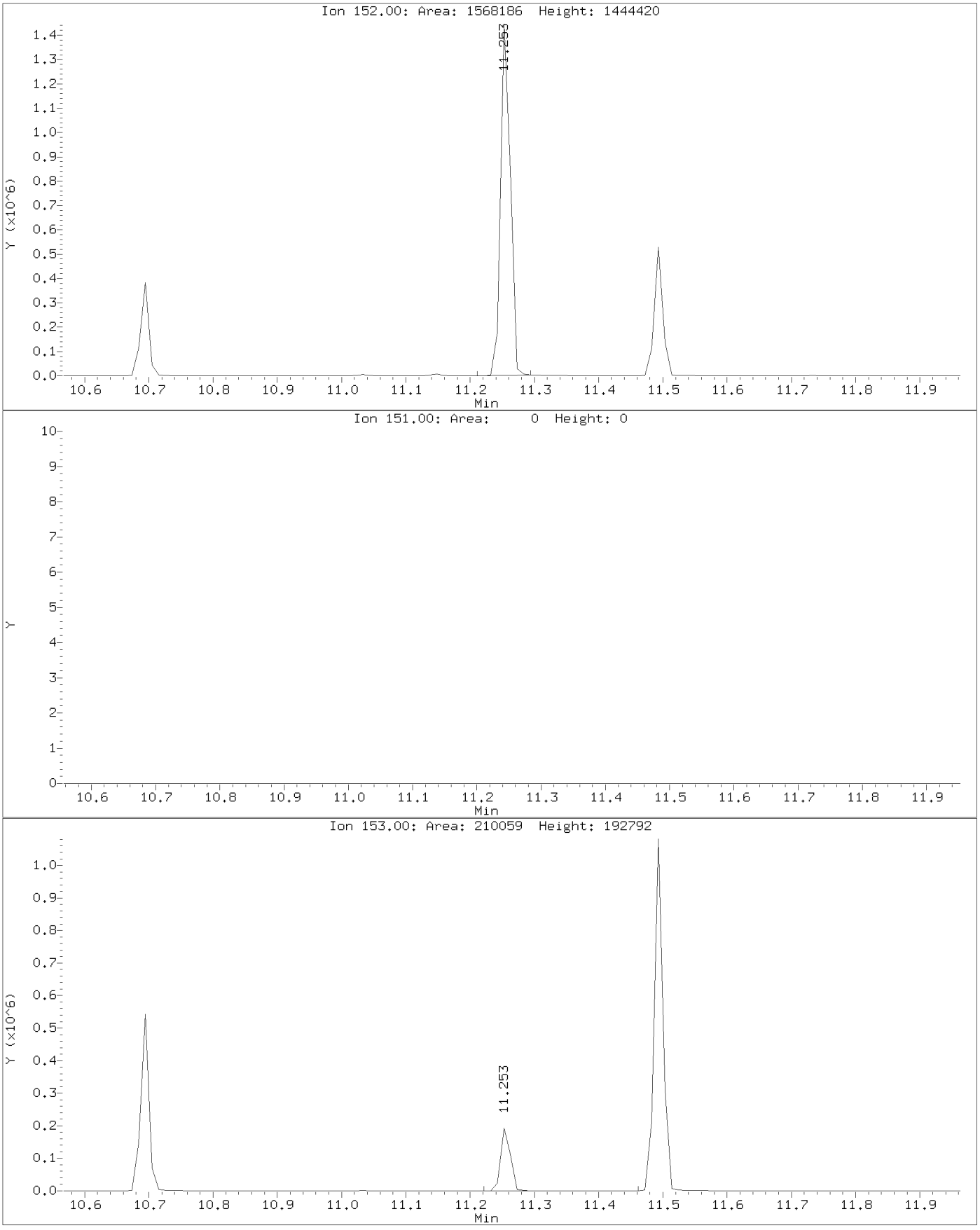
BEFORE MANUAL INTEGRATION



AFTER MANUAL INTEGRATION

Data File: \\target_server\gg\chem\gcms-n.i\N032023.b\N7758.D
Injection Date: 20-MAR-2023 17:02
Instrument: gcms-n.i
Client Sample ID:

Compound: Acenaphthylene
CAS Number: 208-96-8



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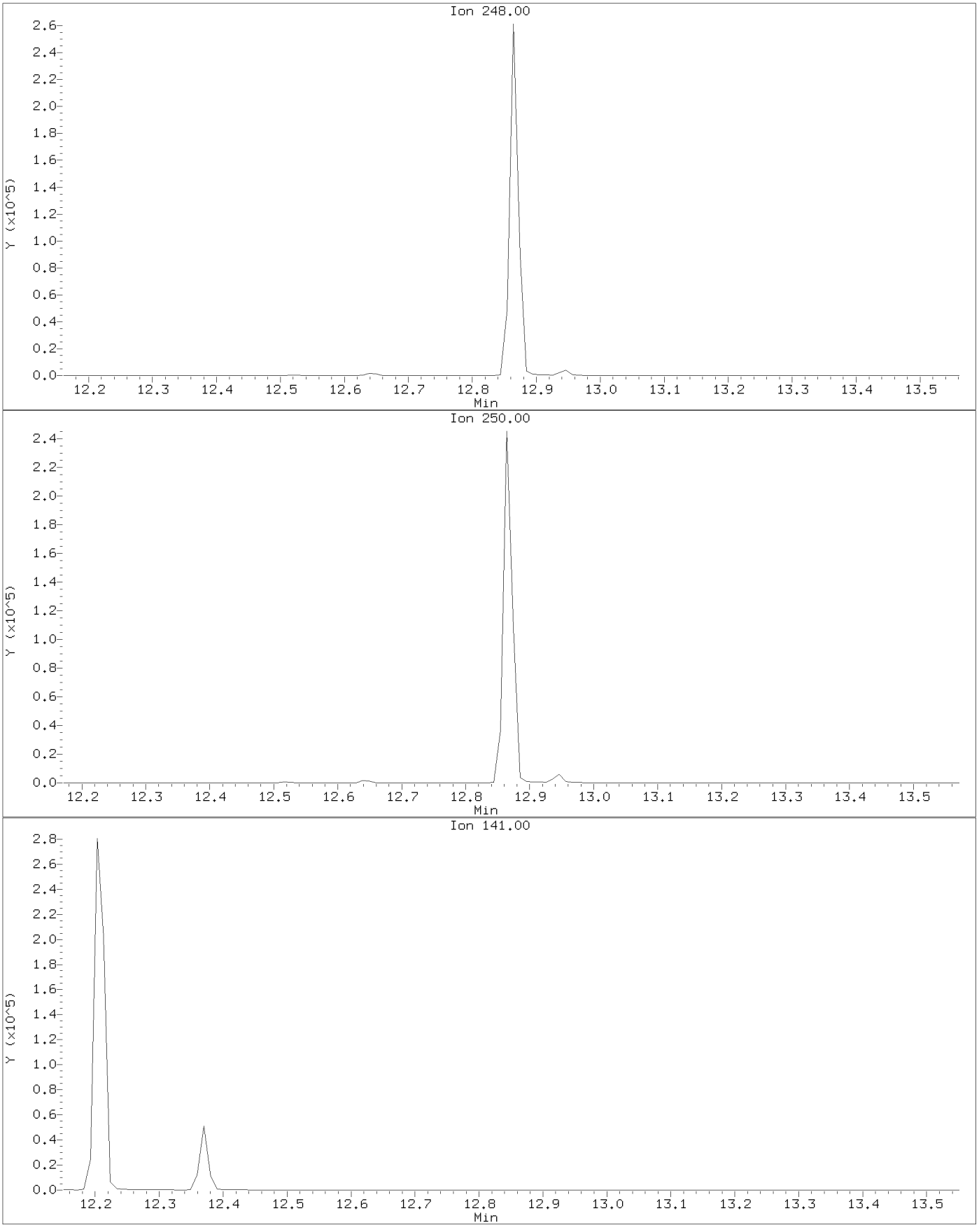
Injection Date: 20-MAR-2023 17:02
Instrument: gcms-n.i
Client Sample ID:

Compound: 4-Bromophenyl-phenylether
CAS Number: 101-55-3

BEFORE MANUAL INTEGRATION



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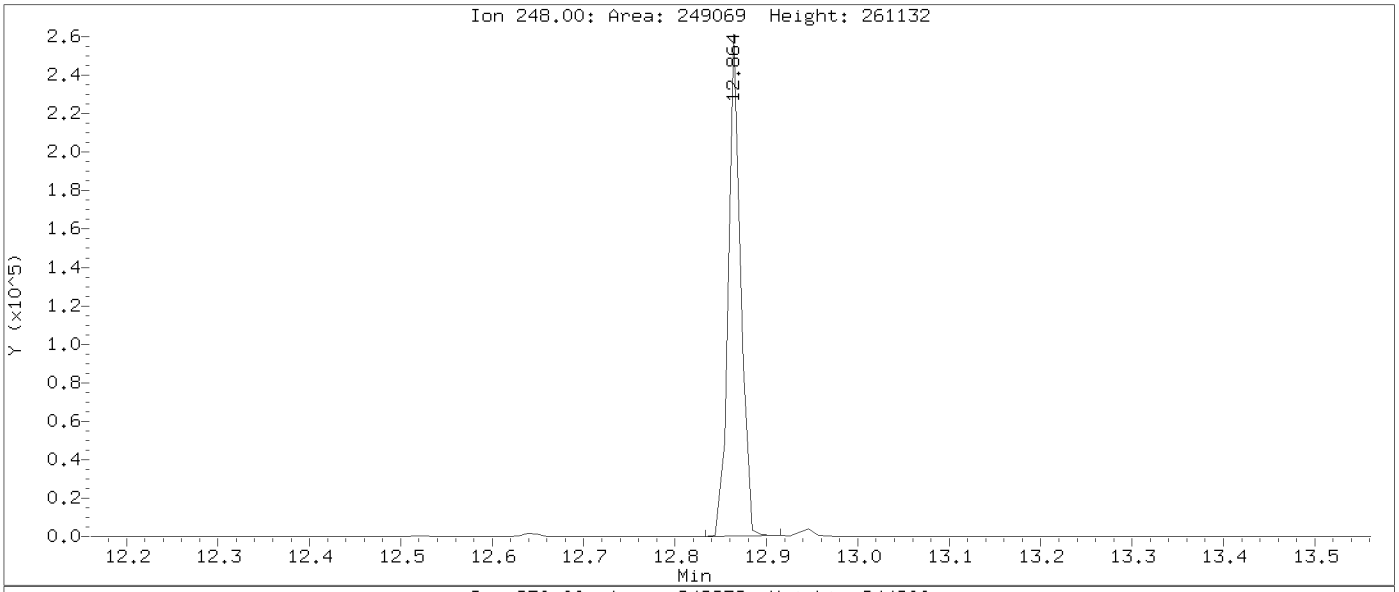
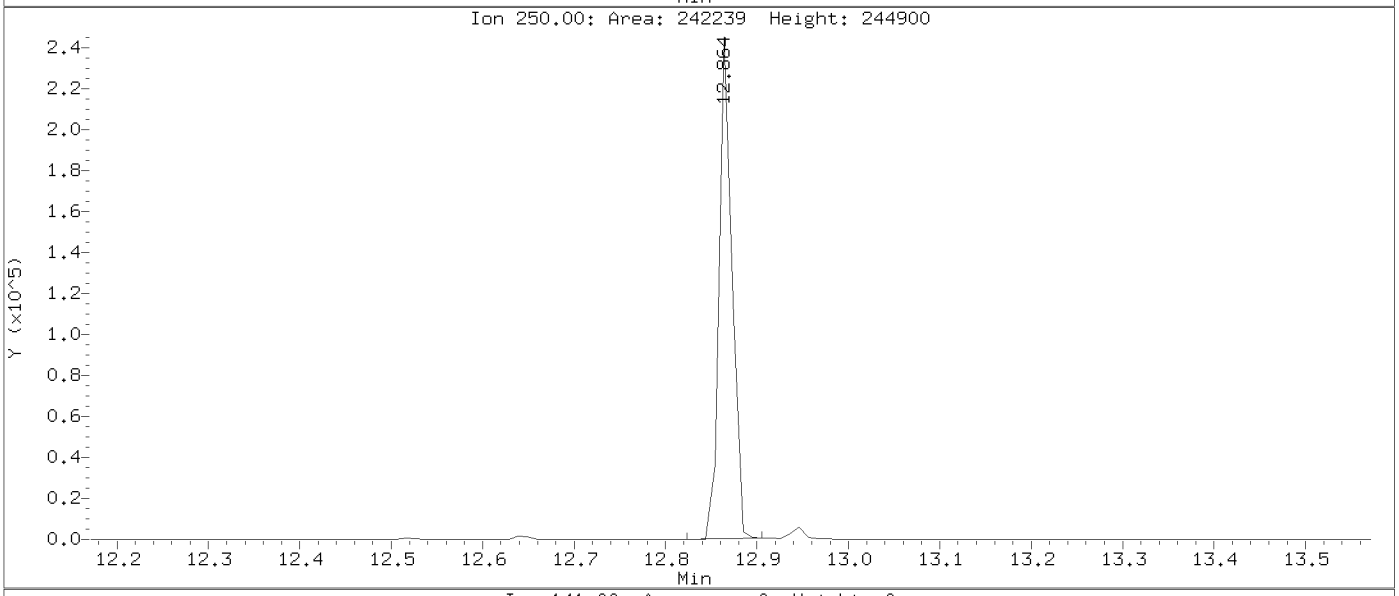
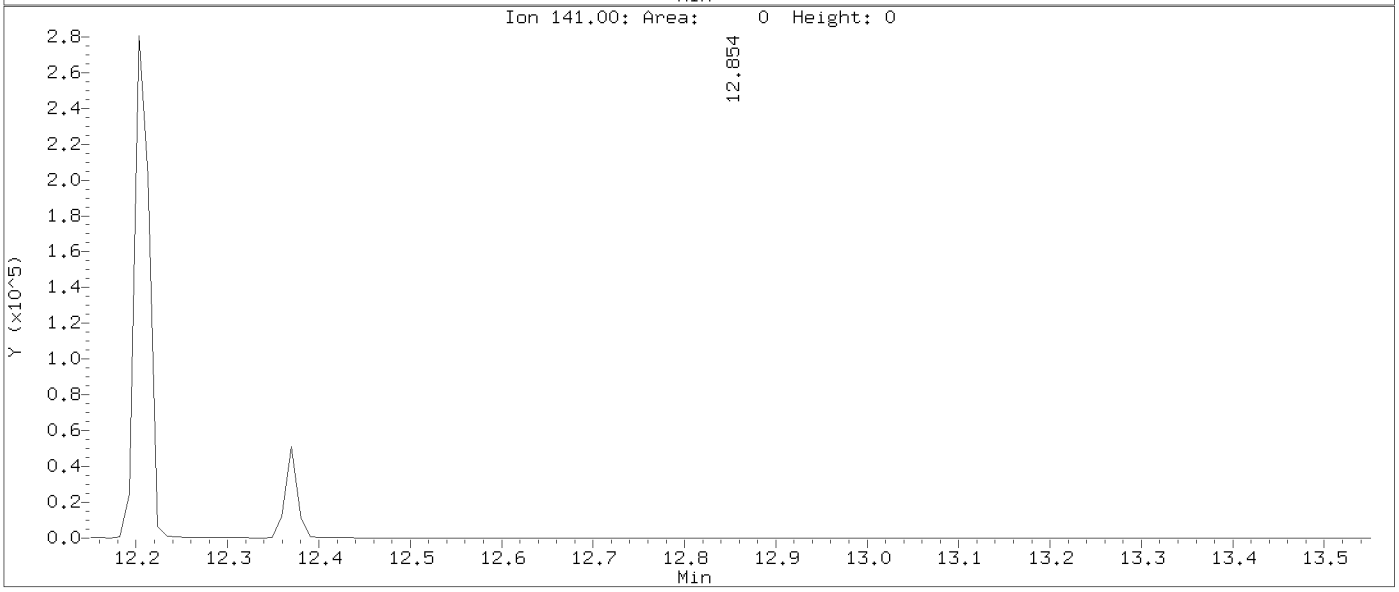
Client Sample ID:

Compound: 4-Bromophenyl-phenylether
CAS Number: 101-55-3

AFTER MANUAL INTEGRATION







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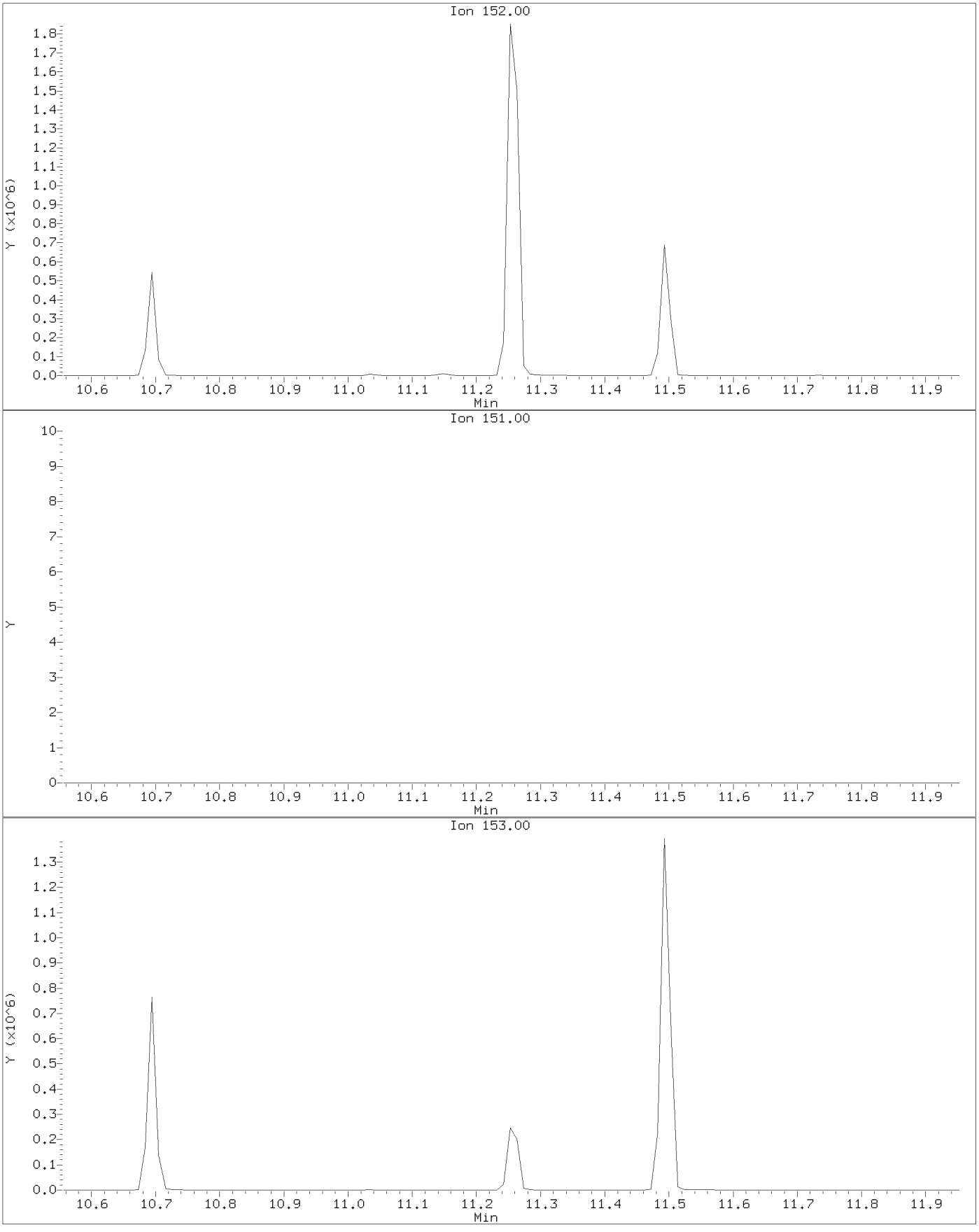
Injection Date: 20-MAR-2023 17:39
Instrument: gcms-n.i
Client Sample ID:

Compound: Acenaphthylene
CAS Number: 208-96-8

BEFORE MANUAL INTEGRATION



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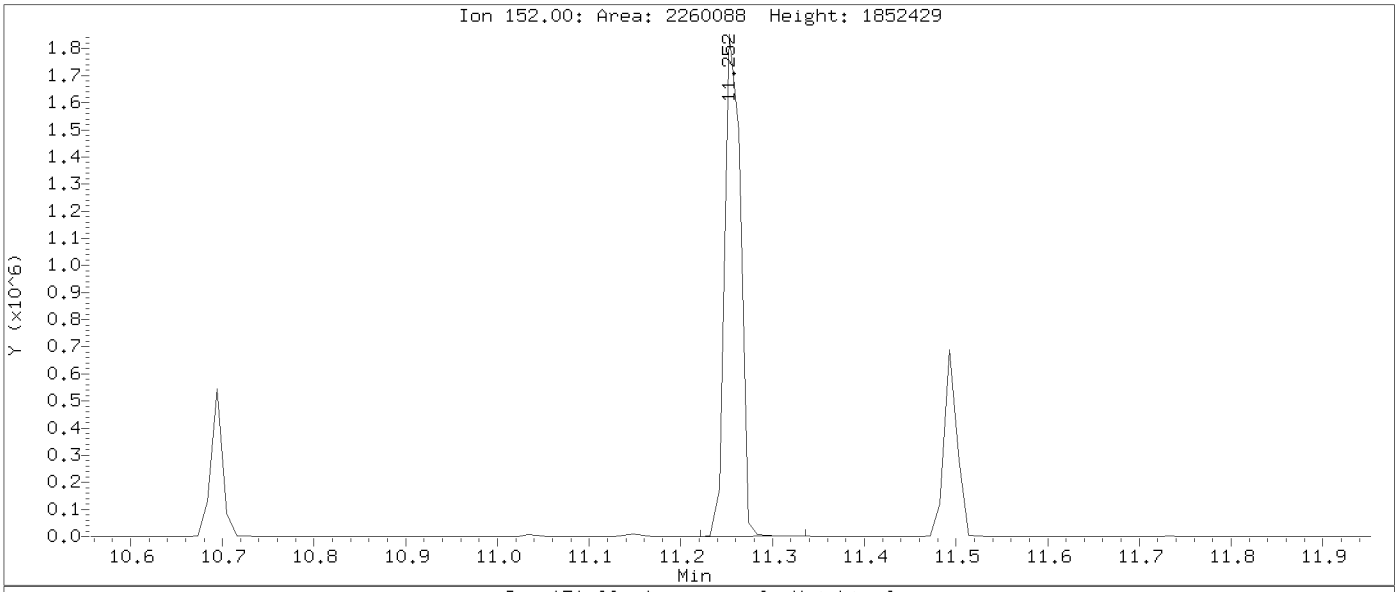
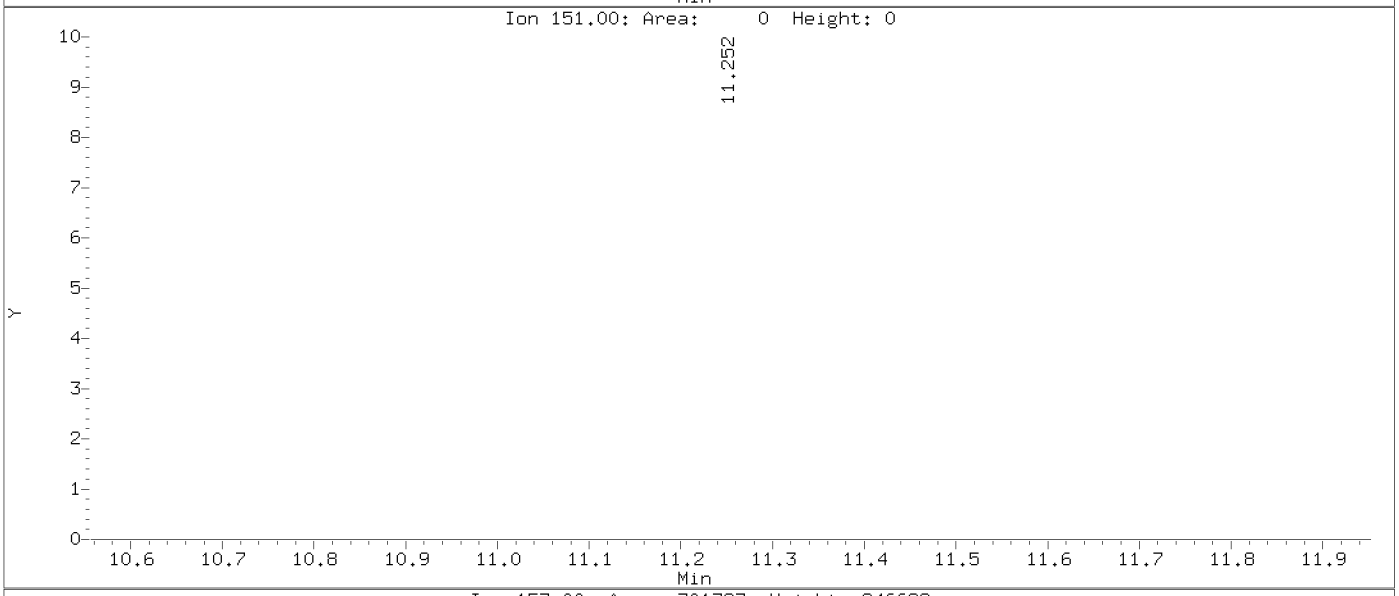
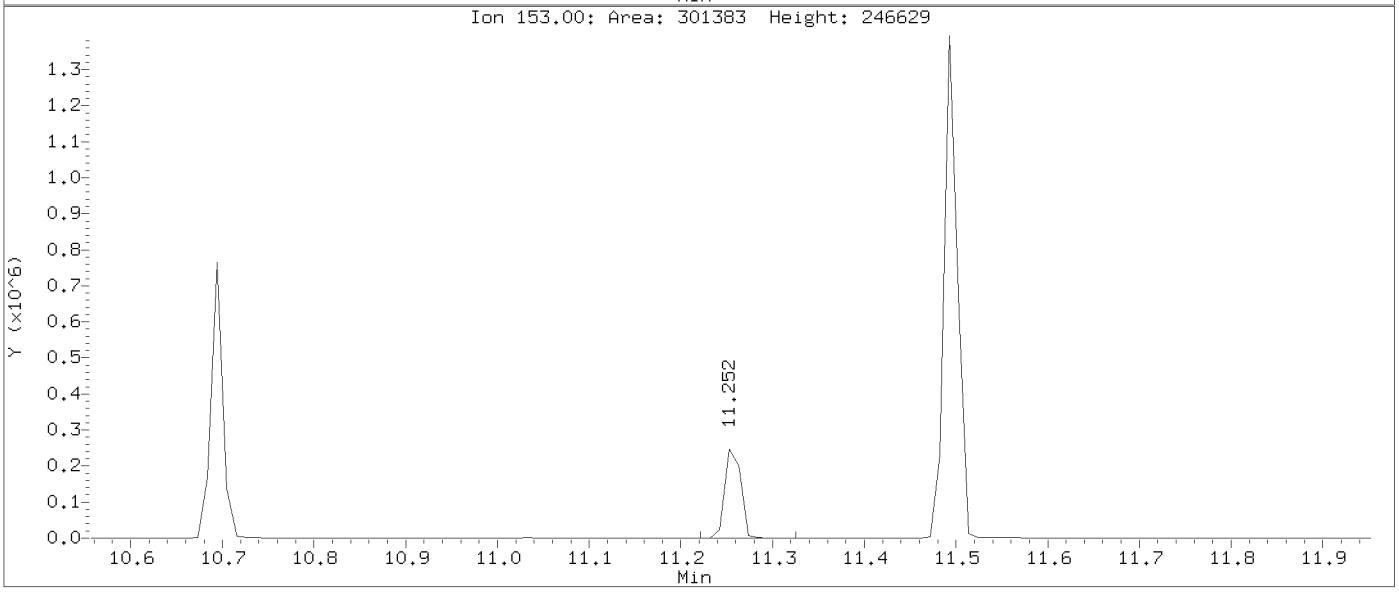
Instrument: gcms-n.i
Client Sample ID:

Compound: Acenaphthylene
CAS Number: 208-96-8

AFTER MANUAL INTEGRATION







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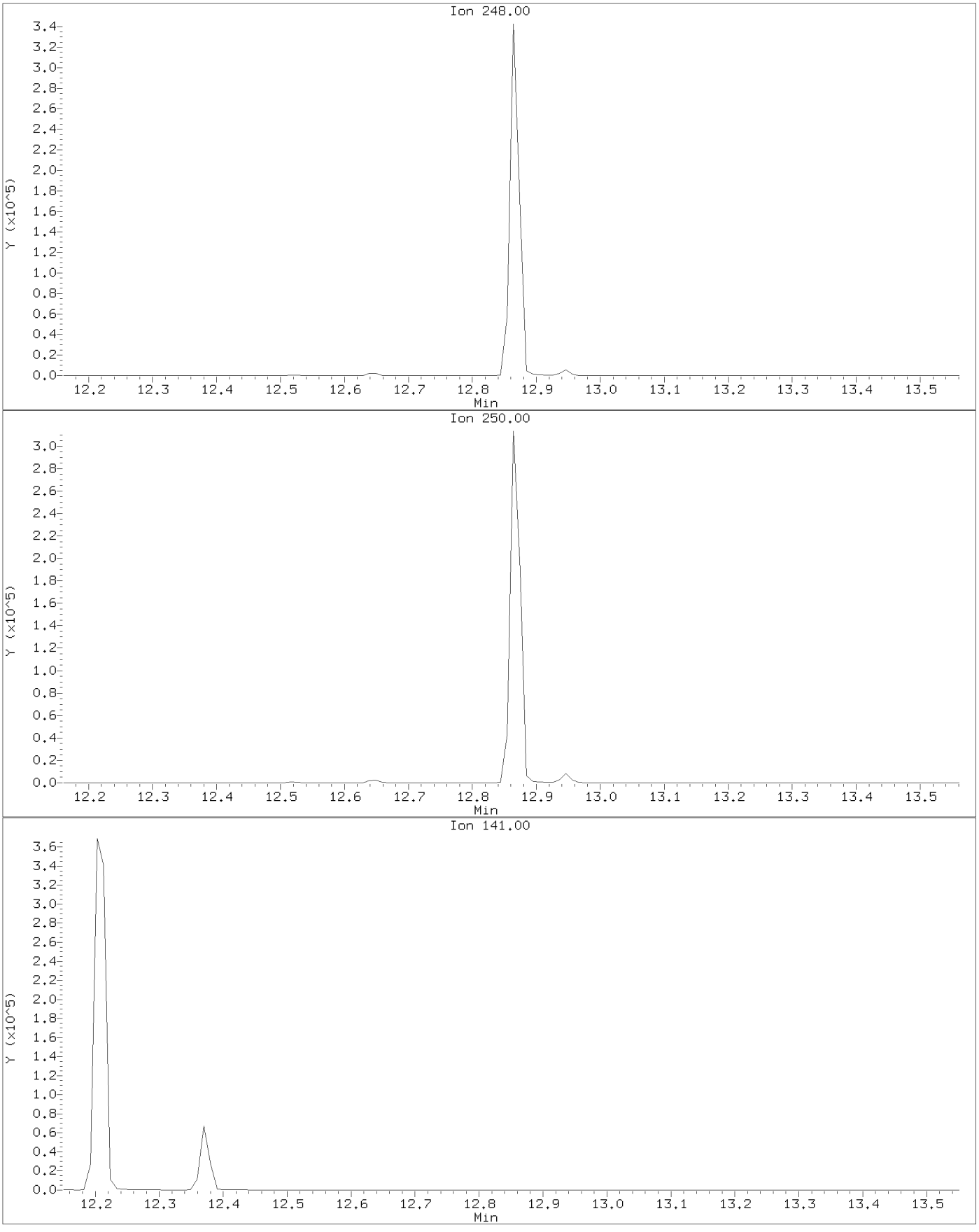
Injection Date: 20-MAR-2023 17:39
Instrument: gcms-n.i
Client Sample ID:

Compound: 4-Bromophenyl-phenylether
CAS Number: 101-55-3

BEFORE MANUAL INTEGRATION



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Injection Date: 20-MAR-2023 17:39
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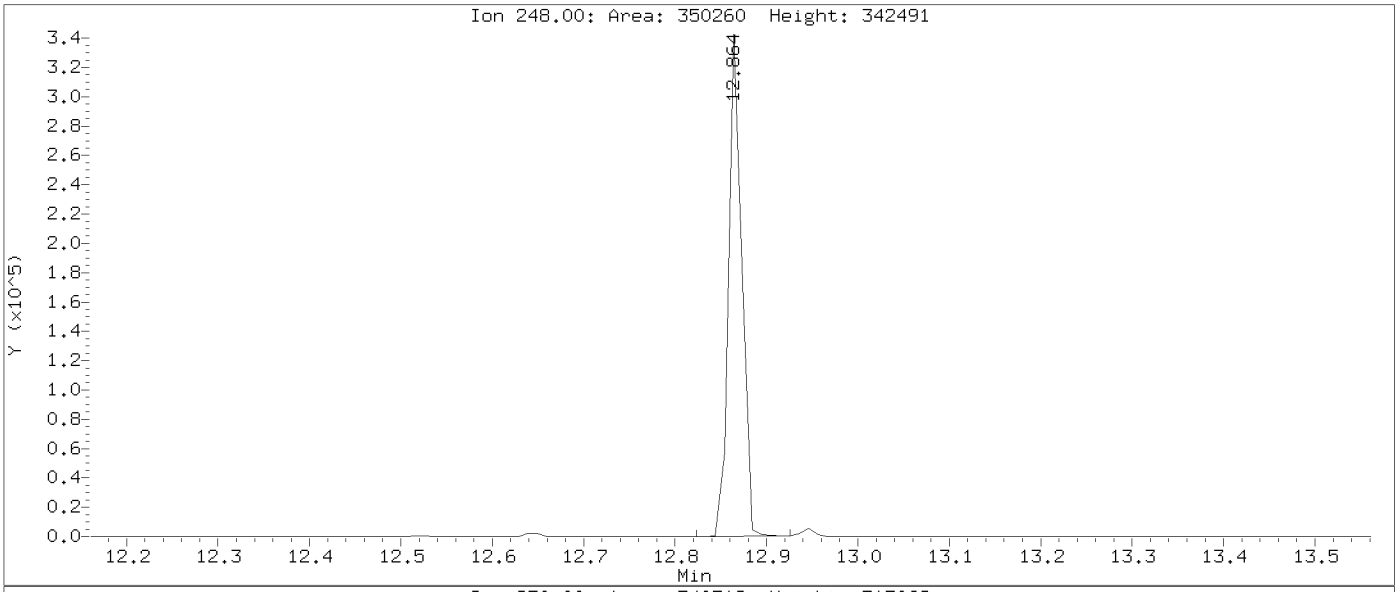
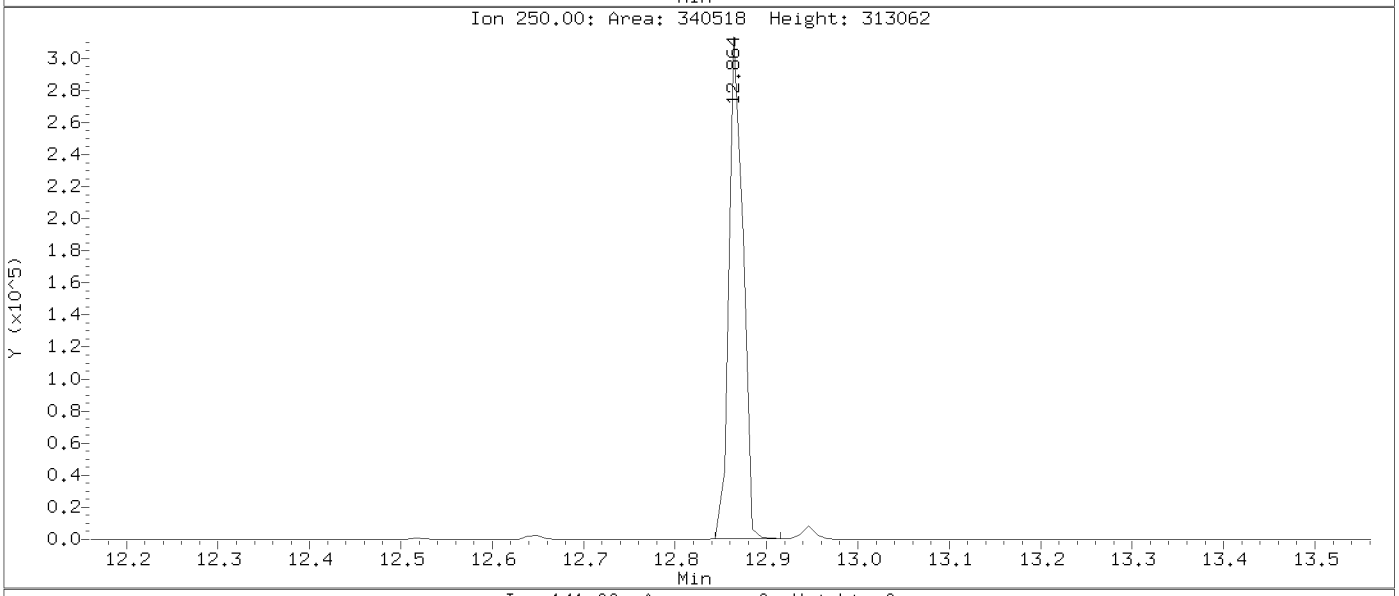
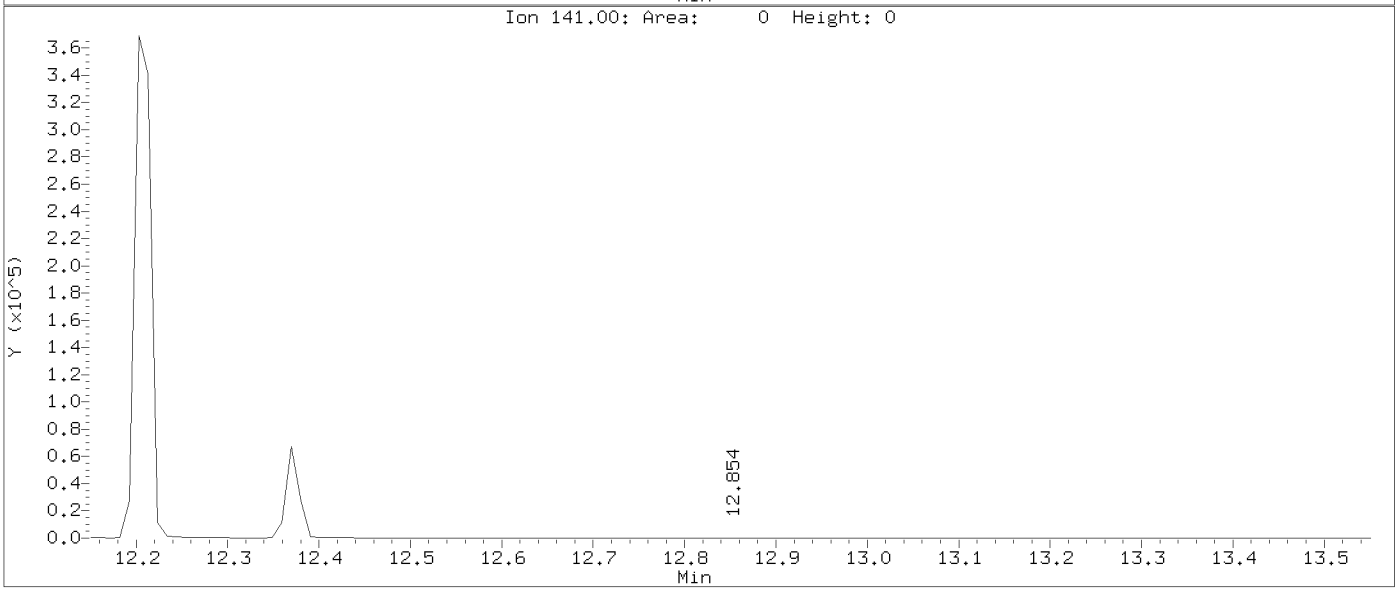
Client Sample ID:

Compound: 4-Bromophenyl-phenylether
CAS Number: 101-55-3

AFTER MANUAL INTEGRATION







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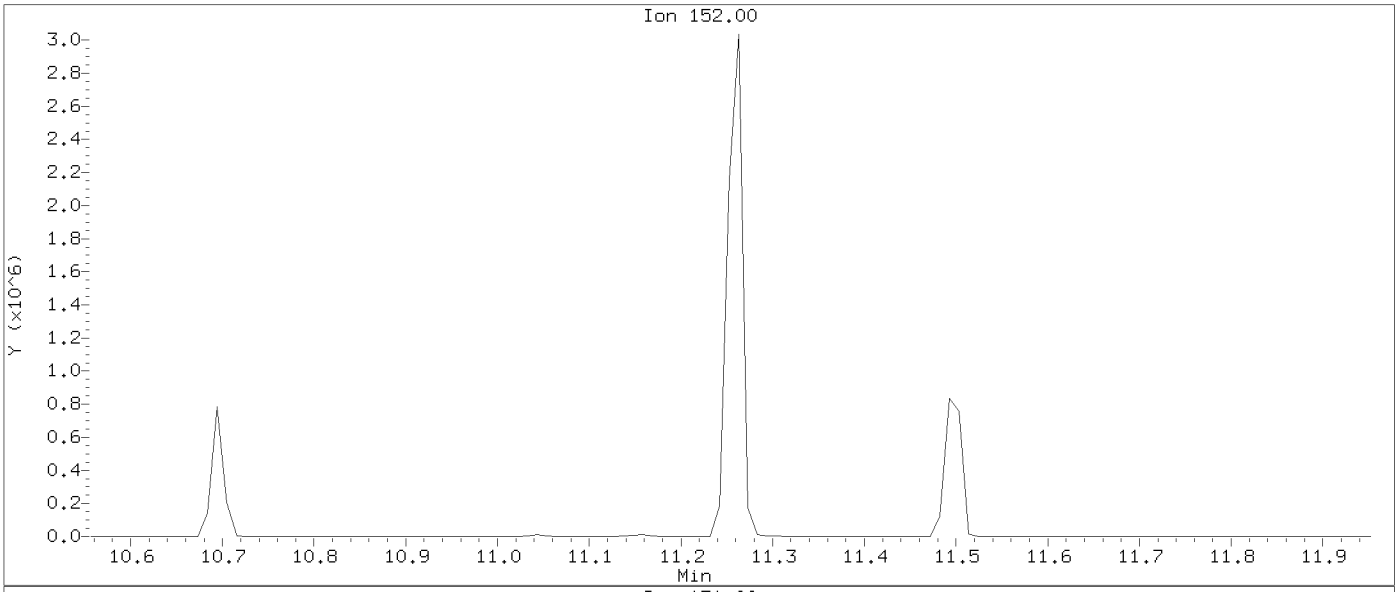
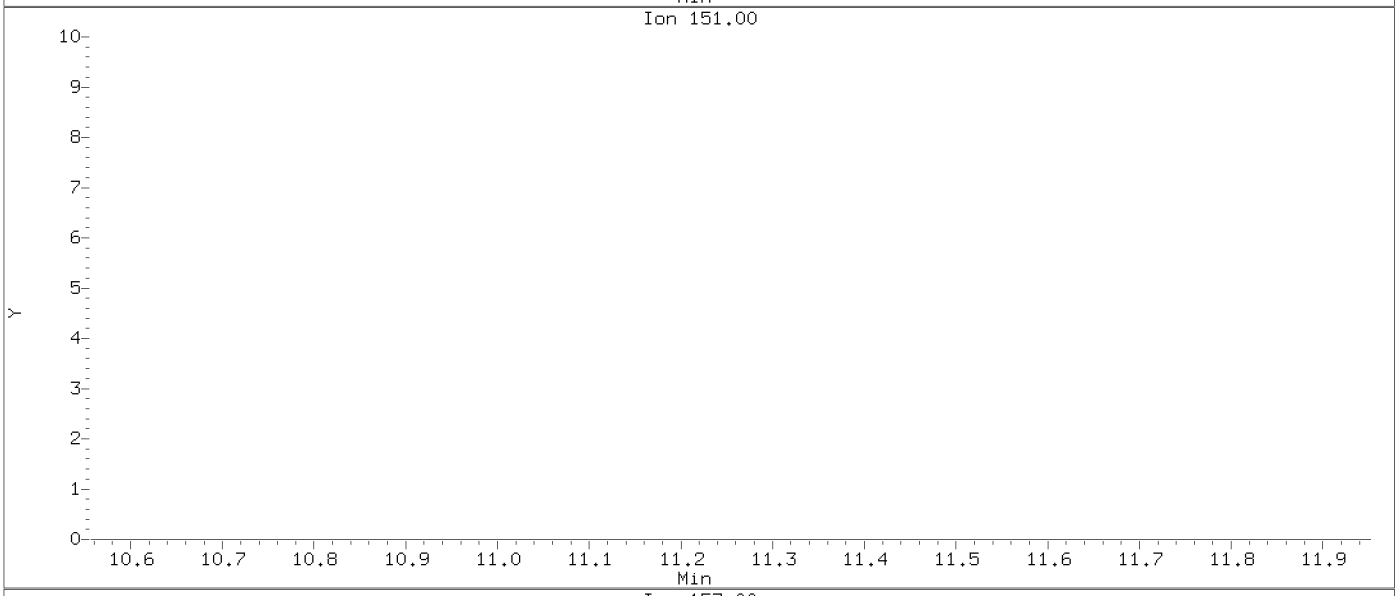
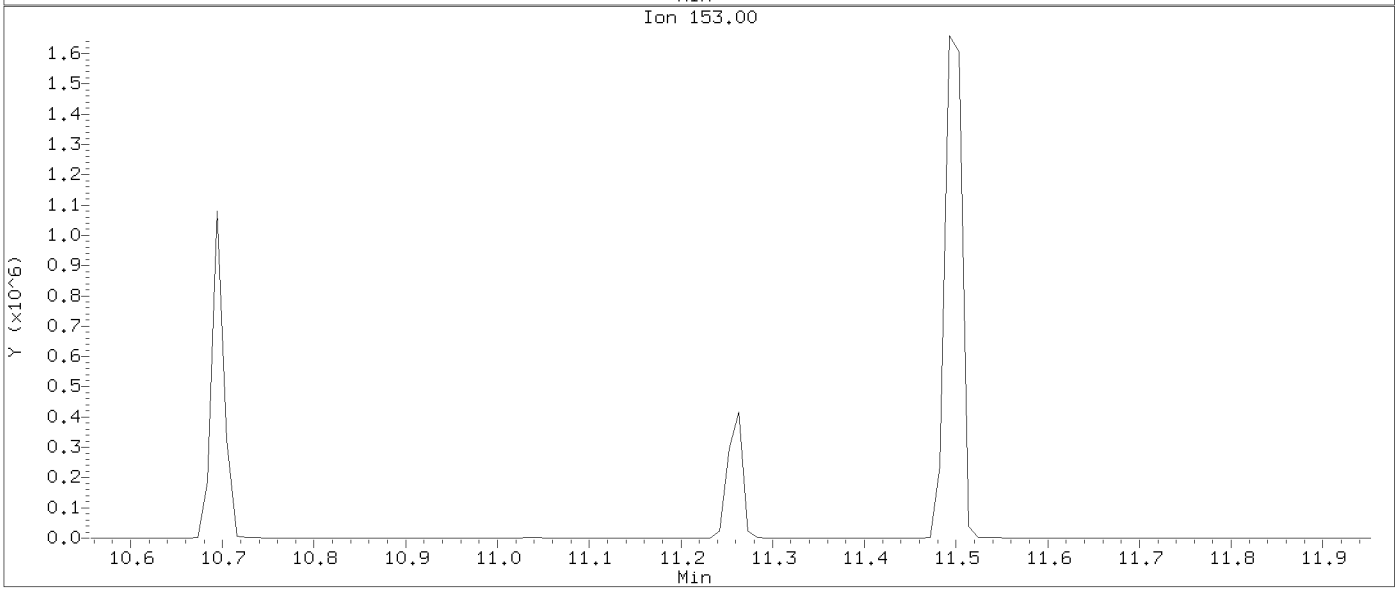
Injection Date: 20-MAR-2023 18:16
Instrument: gcms-n.i
Client Sample ID:

Compound: Acenaphthylene
CAS Number: 208-96-8

BEFORE MANUAL INTEGRATION







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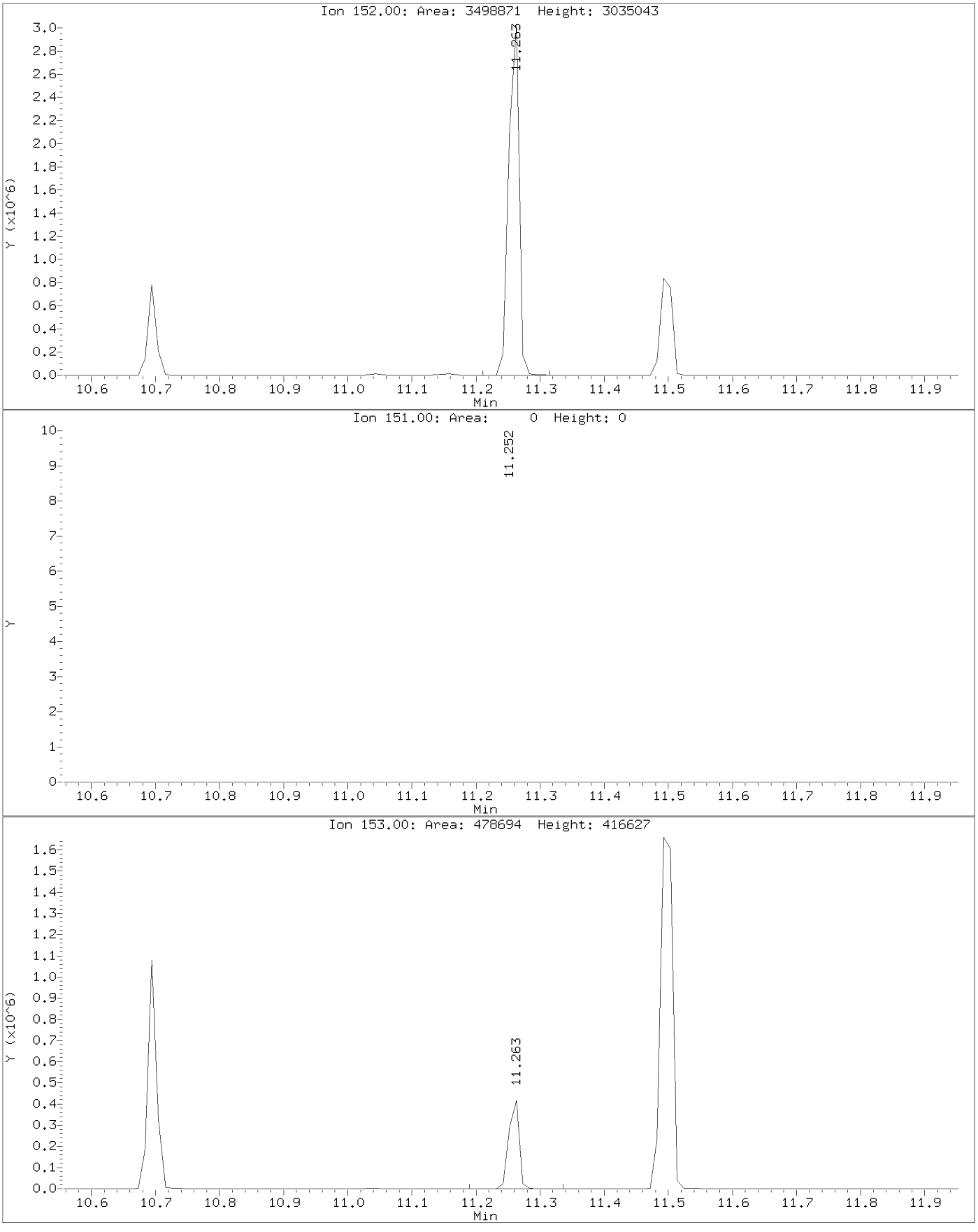
Instrument: gcms-n.i
Client Sample ID:

Compound: Acenaphthylene
CAS Number: 208-96-8

AFTER MANUAL INTEGRATION



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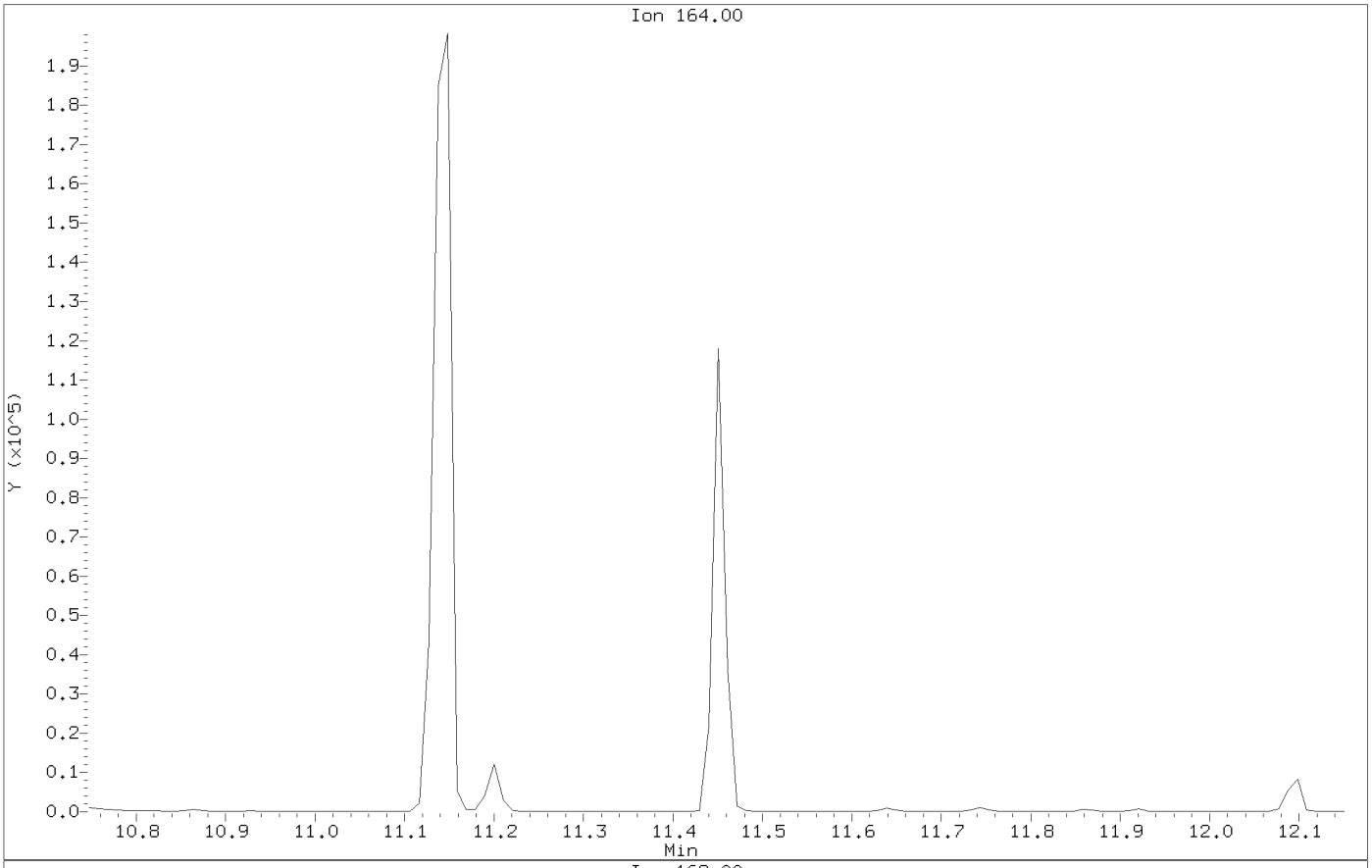
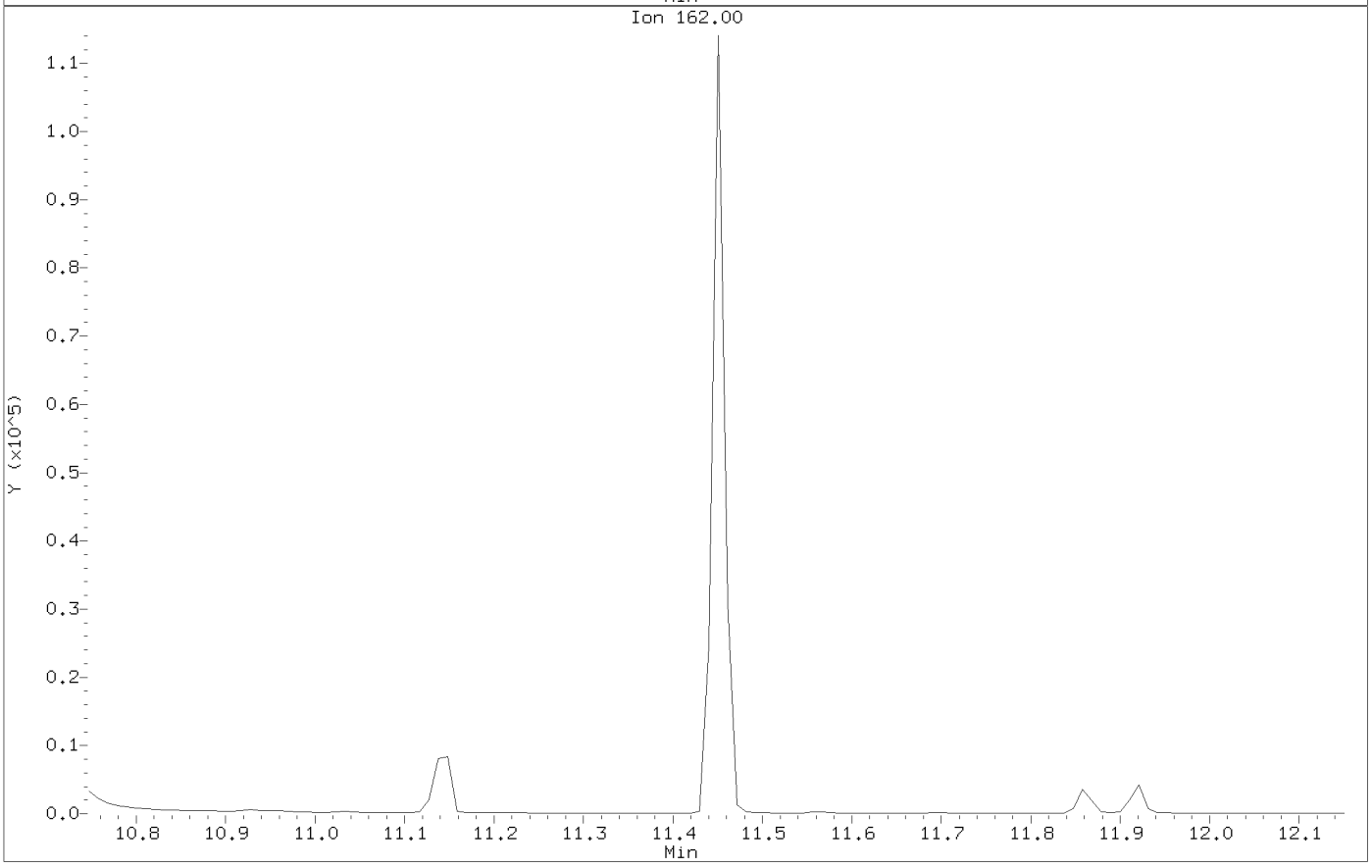
Injection Date: 20-MAR-2023 18:16
Instrument: gcms-n.i
Client Sample ID:

Compound: Acenaphthene-D10
CAS Number: 15067-26-2

BEFORE MANUAL INTEGRATION





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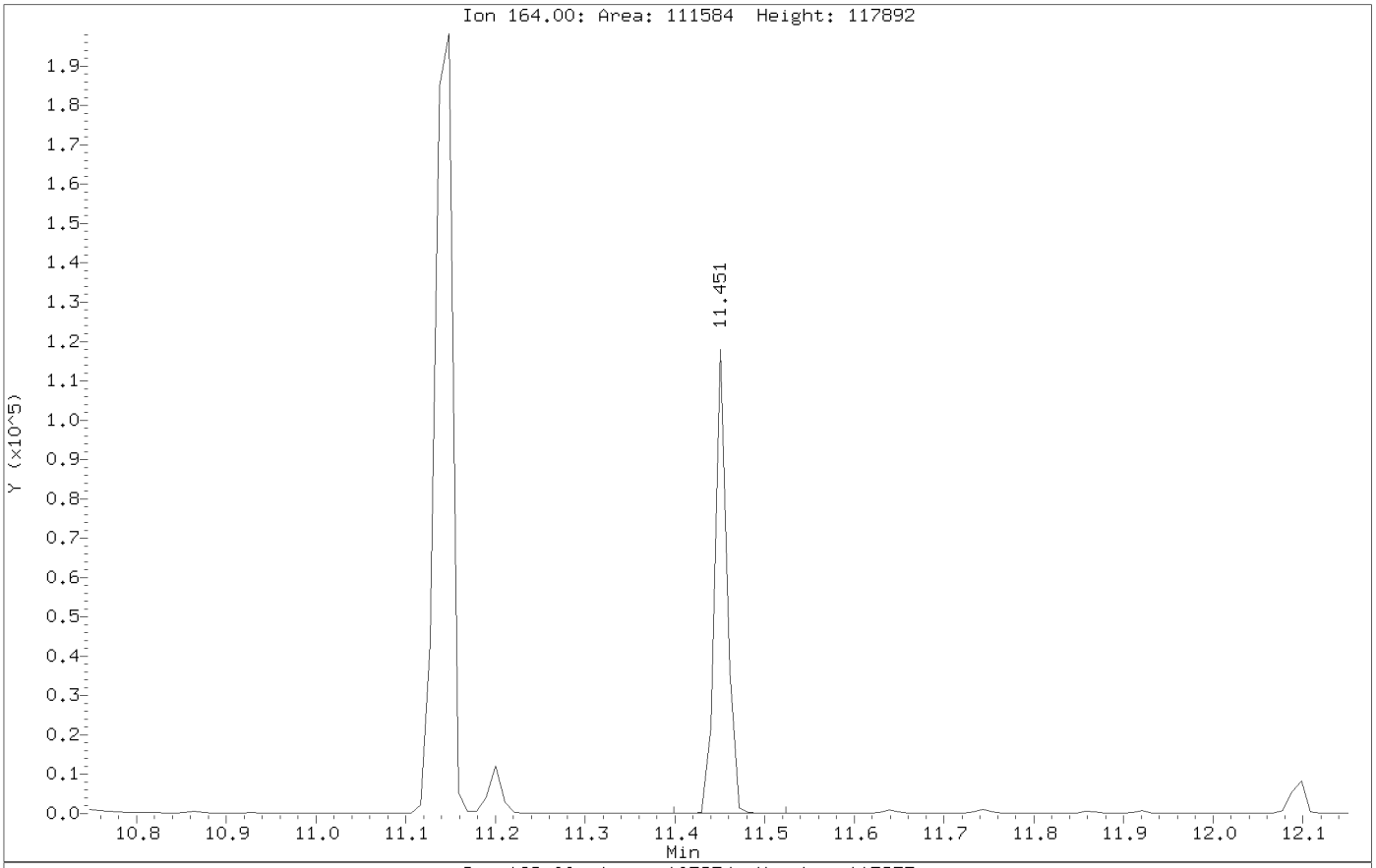
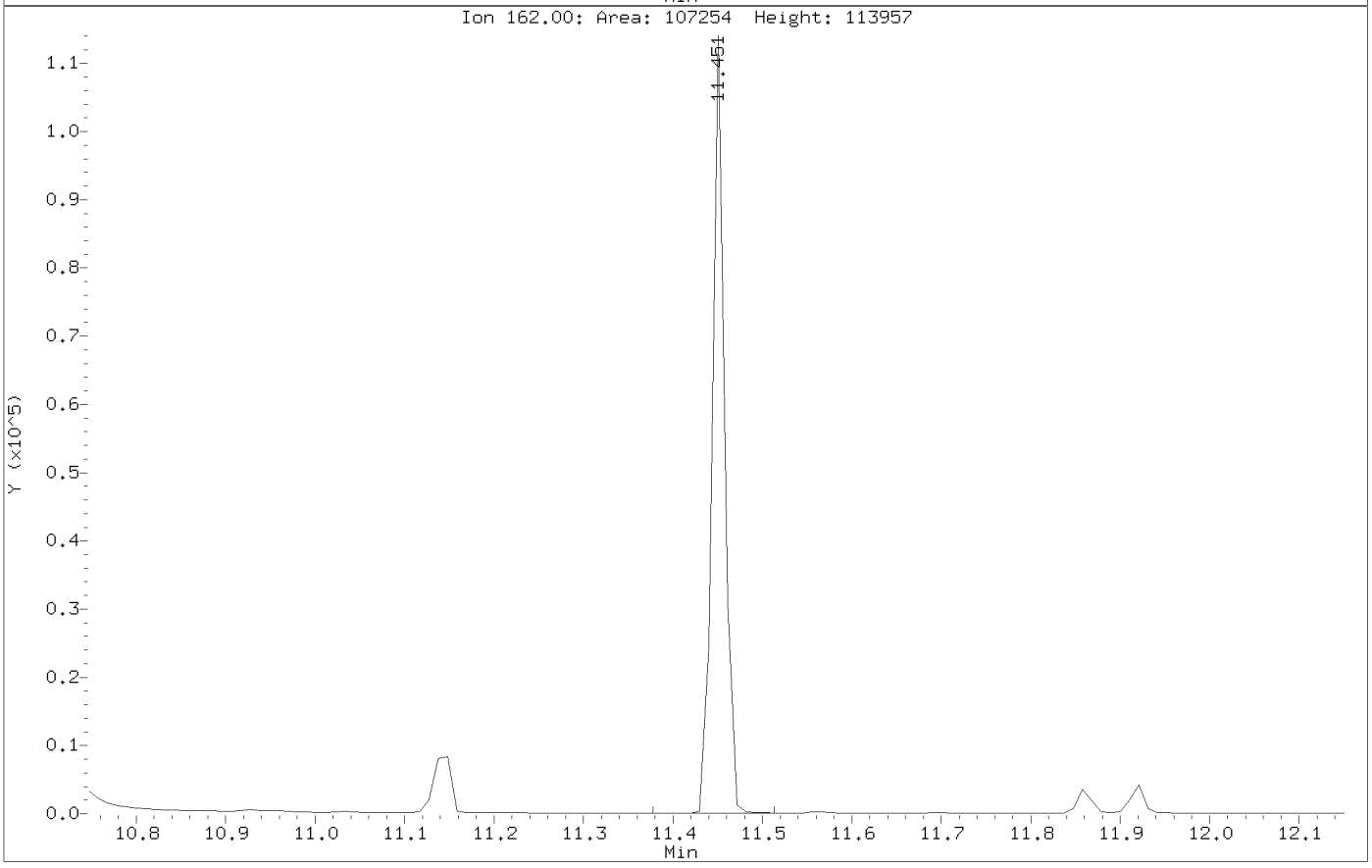
Client Sample ID:

Compound: Acenaphthene-D10
CAS Number: 15067-26-2

AFTER MANUAL INTEGRATION





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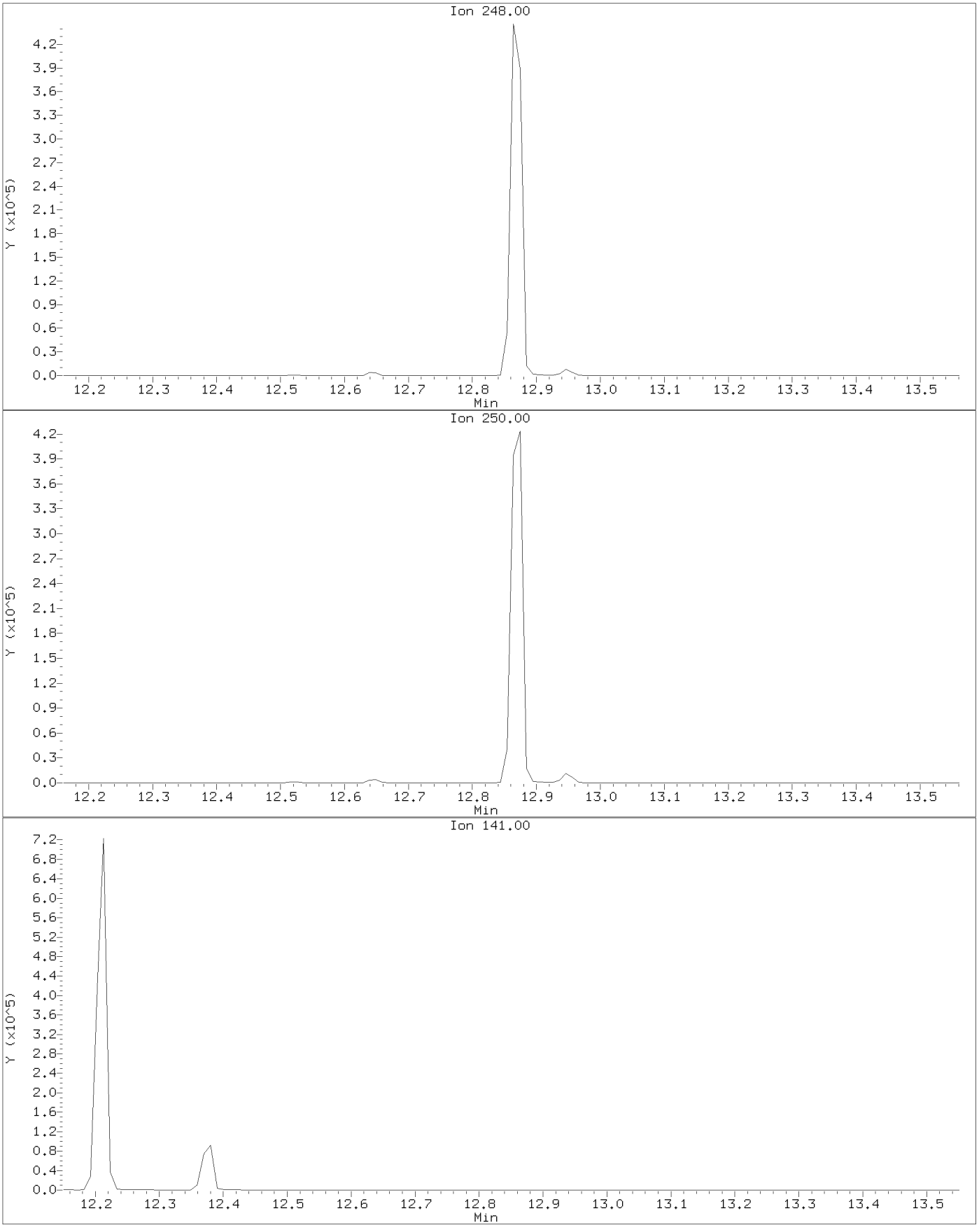
Instrument: gcms-n.i
Client Sample ID:

Compound: 4-Bromophenyl-phenylether
CAS Number: 101-55-3

BEFORE MANUAL INTEGRATION



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Injection Date: 20-MAR-2023 18:16
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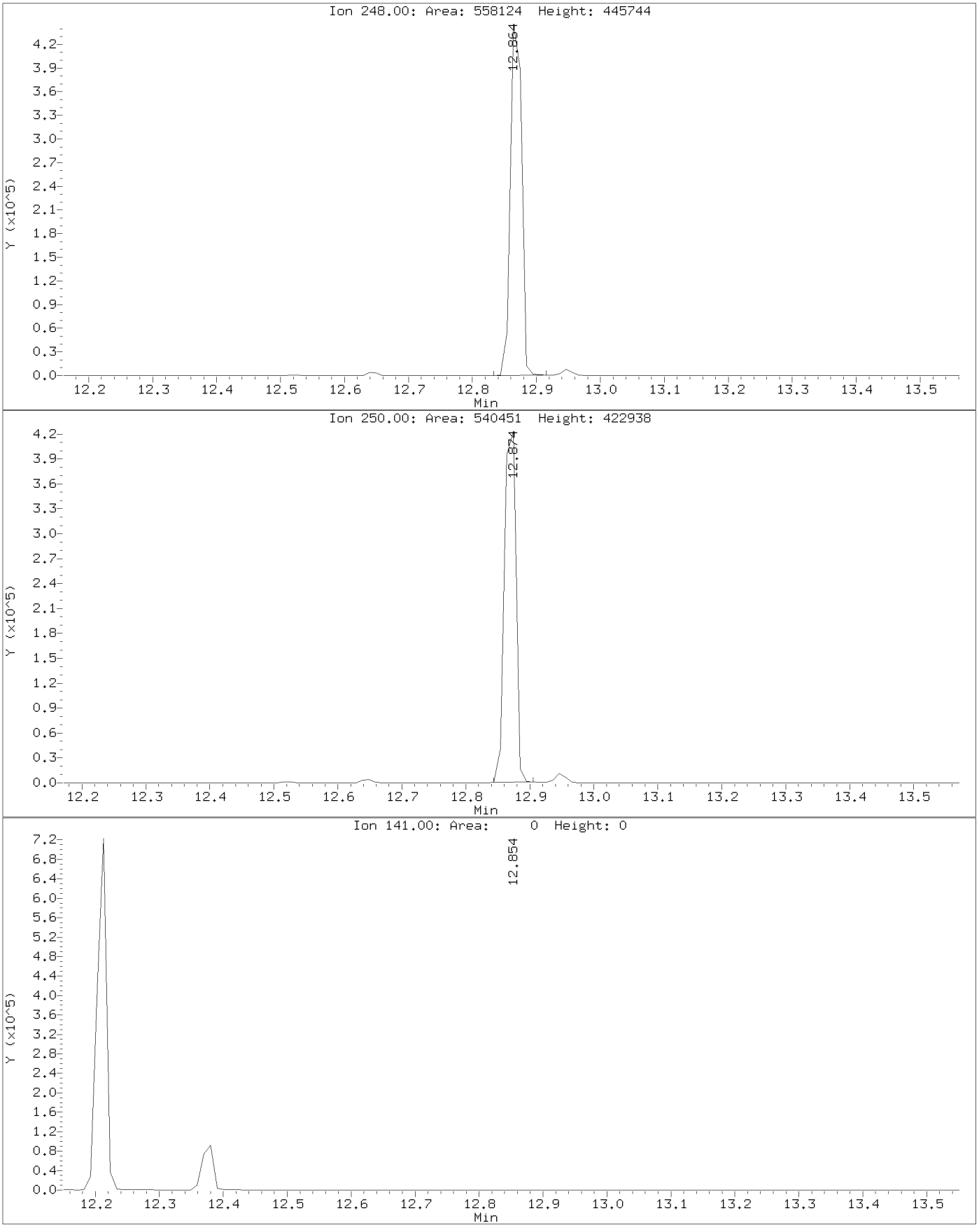
Client Sample ID:

Compound: 4-Bromophenyl-phenylether
CAS Number: 101-55-3

AFTER MANUAL INTEGRATION



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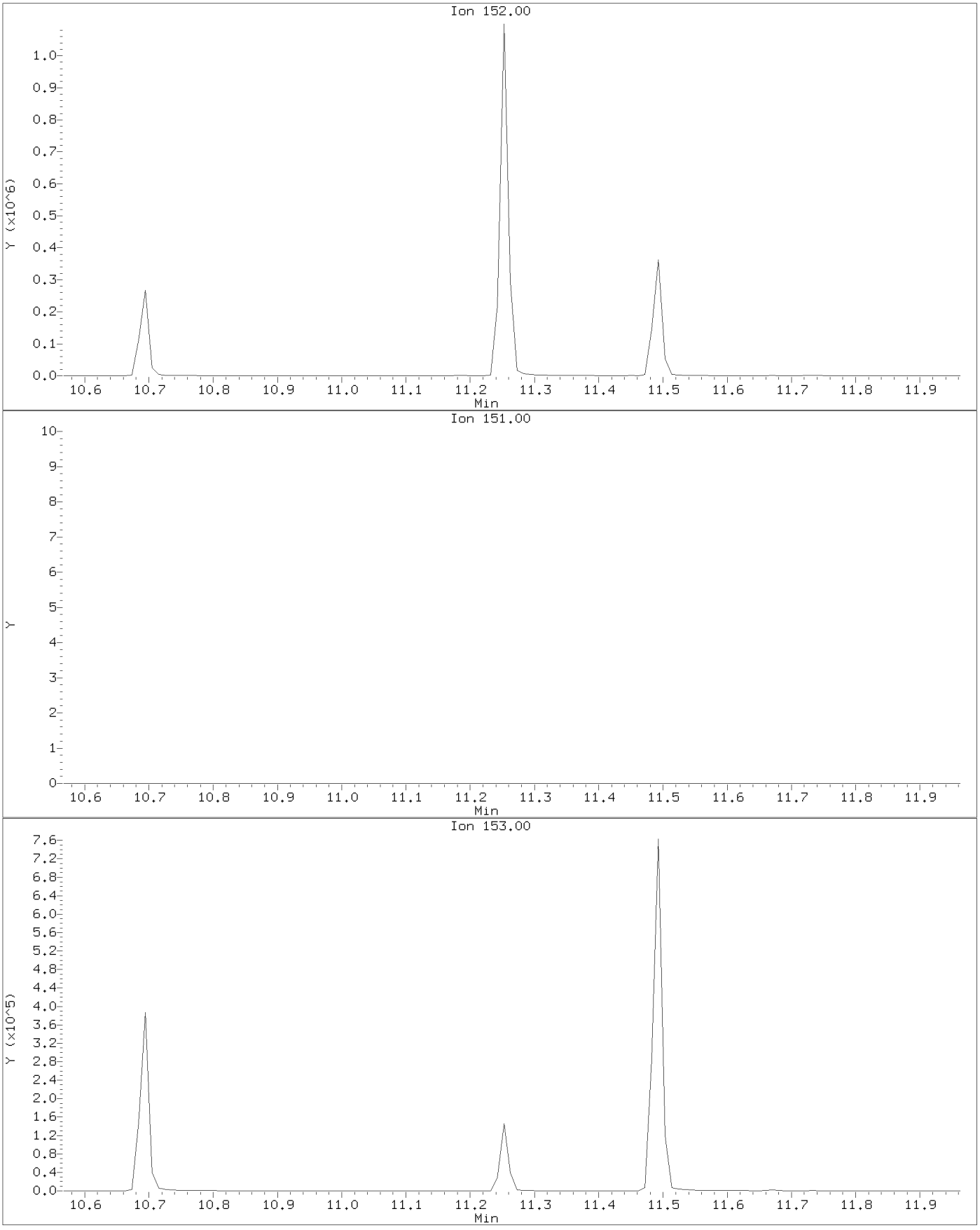
Instrument: gcms-n.i
Client Sample ID:

Compound: Acenaphthylene
CAS Number: 208-96-8

BEFORE MANUAL INTEGRATION



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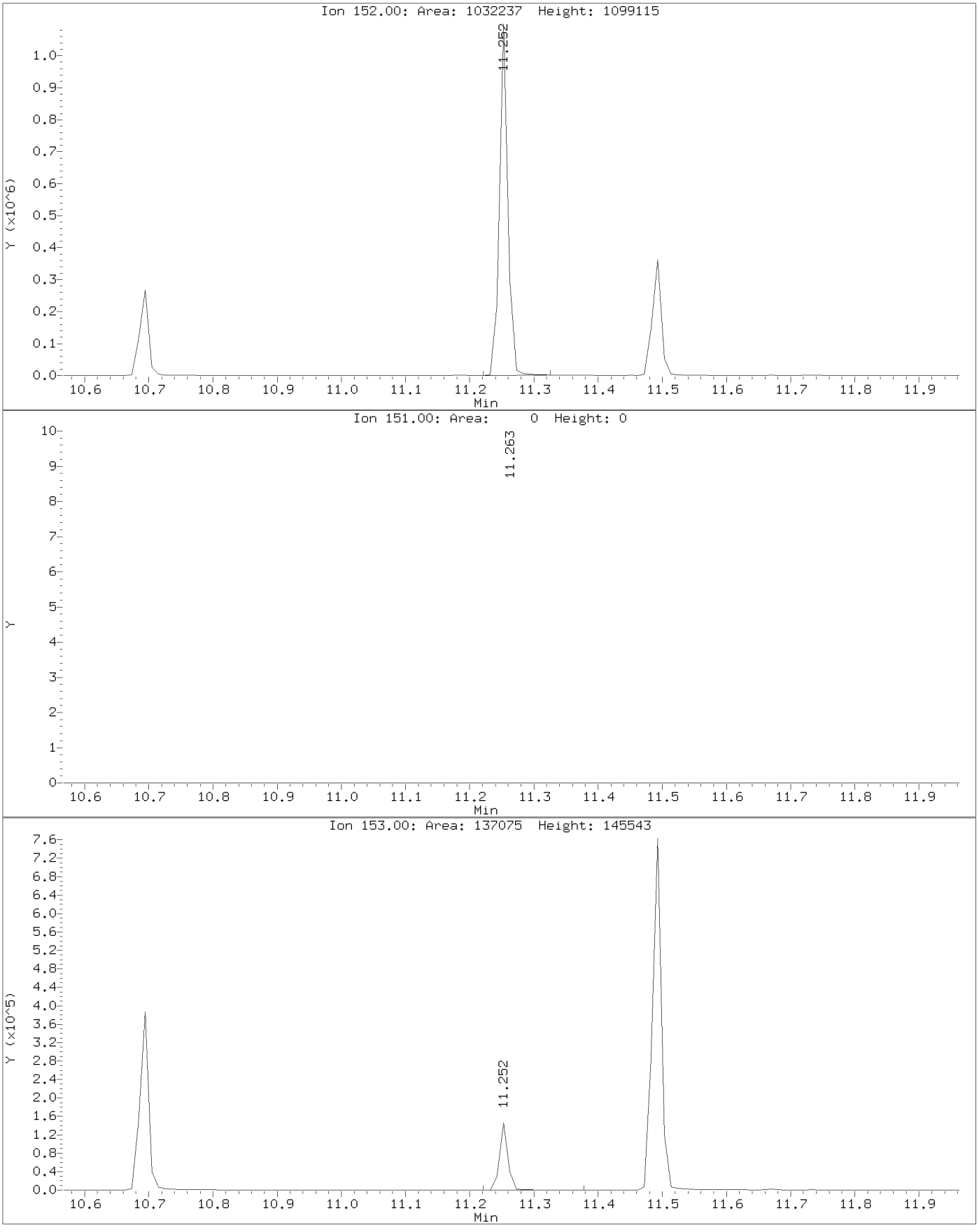
Compound: Acenaphthylene
CAS Number: 208-96-8

AFTER MANUAL INTEGRATION



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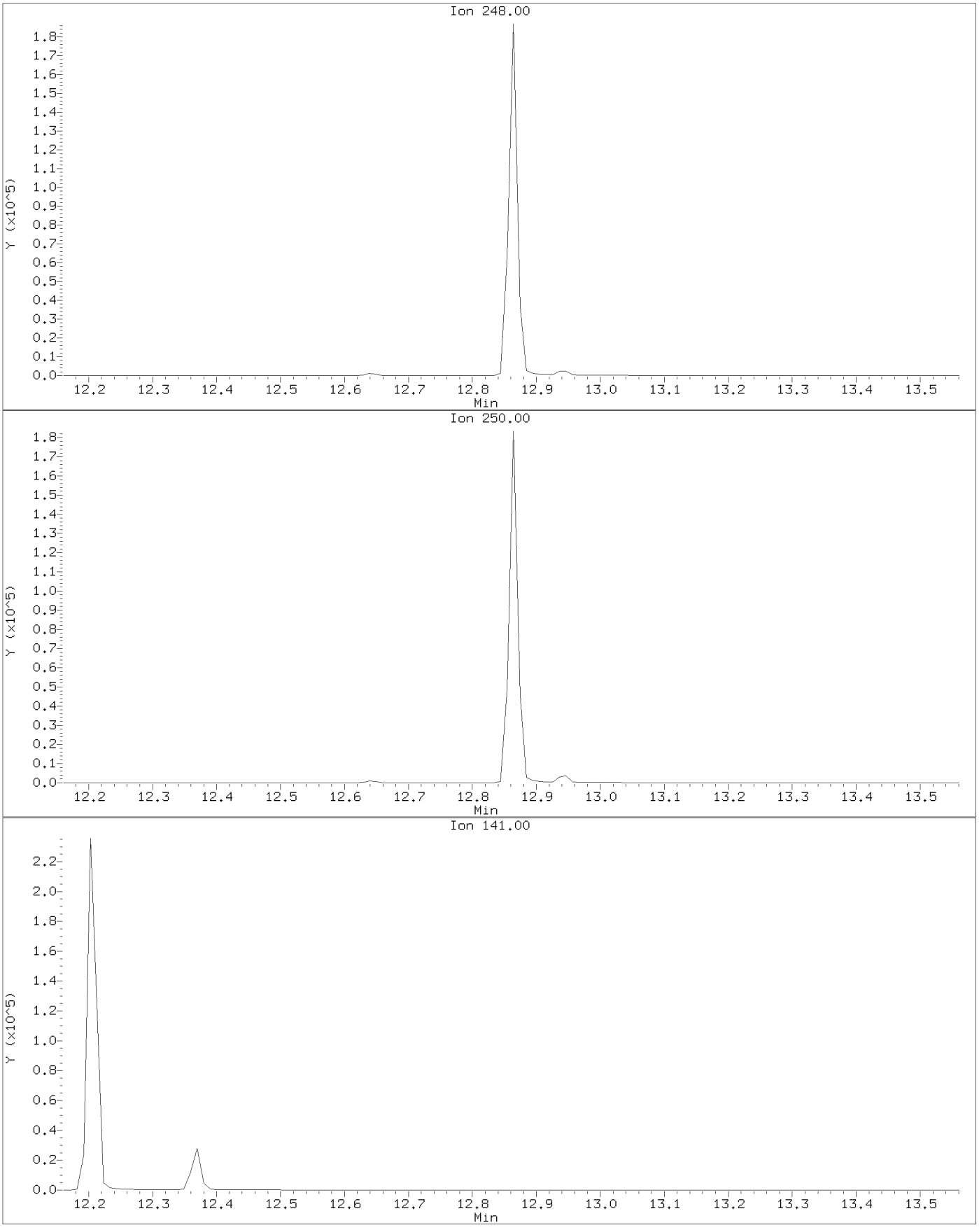
Instrument: gcms-n.i
Client Sample ID:

Compound: 4-Bromophenyl-phenylether
CAS Number: 101-55-3

BEFORE MANUAL INTEGRATION



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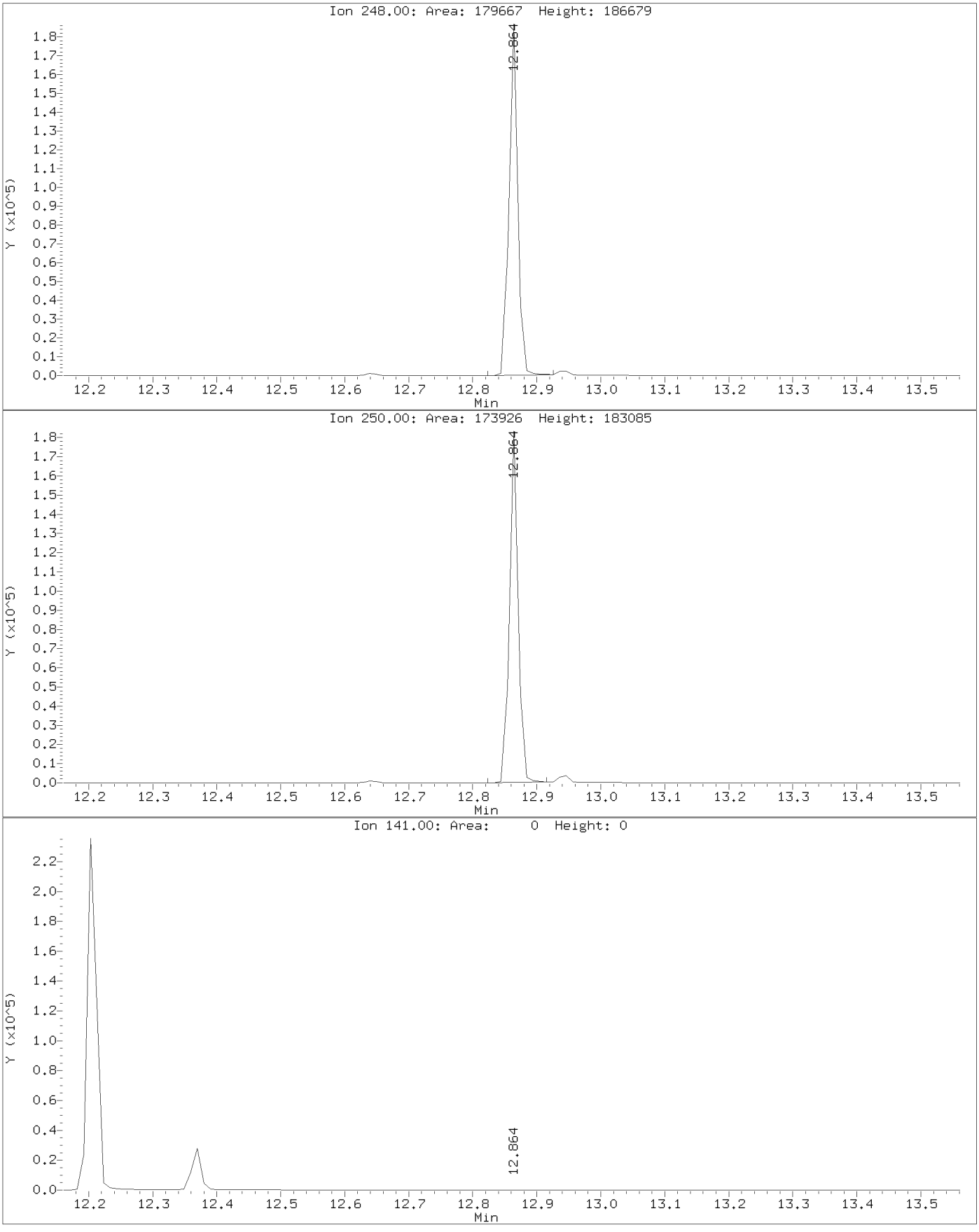
Client Sample ID:

Compound: 4-Bromophenyl-phenylether
CAS Number: 101-55-3

AFTER MANUAL INTEGRATION



Form 7
Calibration Verification Summary

Lab Name: Katahdin Analytical Services
SDG: SQ0595
Lab ID: WG333362-9
Analytical Date: 03/04/23 00:40
Lab File ID: N7600.D
Instrument ID: GCMS-N
Initial Calibration Date(s): 03/03/23 13:41 03/03/23 16:29
Column ID:

Compound	$\overline{RRF}$/Amount	RF2	CCAL RRF2	Min	%D/ %Drift	Max %D/ %Drift	Curve Type
Naphthalene	1.08149	1.06938	1.06938	0.010	-1.12054	20.00000	Averaged
2-Methylnaphthalene	0.76438	0.72724	0.72724	0.010	-4.85946	20.00000	Averaged
Acenaphthylene	1.92658	1.97446	1.97446	0.010	2.48529	20.00000	Averaged
Acenaphthene	1.25206	1.27808	1.27808	0.010	2.07843	20.00000	Averaged
Fluorene	1.26353	1.35008	1.35008	0.010	6.84999	20.00000	Averaged
Phenanthrene	1.15719	1.17242	1.17242	0.010	1.31562	20.00000	Averaged
Anthracene	1.26753	1.30548	1.30548	0.010	2.99427	20.00000	Averaged
Fluoranthene	0.94537	1.07537	1.07537	0.010	13.75092	20.00000	Averaged
Pyrene	2.00000	2.23837	2.68933	0.010	11.91868	20.00000	Linear
Benzo(a)anthracene	1.23361	1.43107	1.43107	0.010	16.00656	20.00000	Averaged
Chrysene	2.00000	2.16223	1.65429	0.010	8.11149	20.00000	Linear
Benzo(b)fluoranthene	2.00000	1.83621	1.35547	0.010	-8.18938	20.00000	Linear
Benzo(k)fluoranthene	2.20057	2.07497	2.07497	0.010	-5.70746	20.00000	Averaged
Benzo(a)pyrene	1.24199	1.24544	1.24544	0.010	0.27790	20.00000	Averaged
Indeno(1,2,3-cd)pyrene	2.00000	1.80920	0.94747	0.010	-9.54017	20.00000	Linear
Dibenzo(a,h)anthracene	2.00000	2.25351	0.70798	0.010	12.67550	20.00000	Quadratic
Benzo(g,h,i)perylene	0.94345	0.84977	0.84977	0.010	-9.93017	20.00000	Averaged
2-Methylnaphthalene-D10	0.54315	0.55627	0.55627	0.010	2.41486	20.00000	Averaged
Fluorene-D10	0.91780	0.97249	0.97249	0.010	5.95906	20.00000	Averaged
Pyrene-D10	2.00000	2.27347	2.21327	0.010	13.67365	20.00000	Linear

*** = Compound out of QC criteria**

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Data File: \\target_server\gg\chem\gcms-n.i\N030323.b\N7600.D
Report Date: 16-Mar-2023 07:13

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-n.i\N030323.b\N7600.D
Lab Smp Id: WG333362-9
Inj Date : 04-MAR-2023 00:40
Operator : DT/CO   Inst ID: gcms-n.i
Smp Info : WG333362-9,SQ0595
Misc Info : WG333362,WG333362,WG333362-4,SQ0595-1
Comment   :
Method   : \\target_server\gg\chem\gcms-n.i\N030323.b\NSPSIM18.m
Meth Date : 06-Mar-2023 11:06 coneill   Quant Type: ISTD
Cal Date : 03-MAR-2023 16:29   Cal File: N7587.D
Als bottle: 2   Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: all.sub
Target Version: 4.12
Processing Host: V200T4

Concentration Formula: Amt * DF * (Vt/Ws*Vi)*(100/(100-M))*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.00100	Final Volume (L)
Ws	0.03000	Weight of Sample (Kg)
Vi	1.000	Volume injected (uL)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)	REVIEW CODE
$ 1	1,4-Dioxane-d8	96	2.977	2.988	(0.414)	69705	2.00000	1.97	
2	1,4-Dioxane	88	3.030	3.031	(0.421)	70512	2.00000	1.87	
3	N-Nitrosodimethylamine	74	3.569	3.548	(0.496)	101562	2.00000	1.95	
4	Pyridine	79	3.622	3.569	(0.503)	150680	2.00000	1.72	
5	Benzaldehyde	77	6.649	6.650	(0.923)	94987	2.00000	1.95	
6	Phenol	94	6.857	6.868	(0.952)	474276	4.50000	4.18	
7	Bis(2-Chloroethyl)ether	93	6.888	6.899	(0.957)	226976	2.00000	2.41	
8	2-Chlorophenol	128	6.961	6.962	(0.967)	429333	4.50000	4.31	
9	1,3-Dichlorobenzene	146	7.128	7.139	(0.990)	213684	2.00000	2.06	
* 10	1,4-Dichlorobenzene-D4	152	7.201	7.211	(1.000)	59492	0.80000	(a)	
11	1,4-Dichlorobenzene	146	7.221	7.232	(1.003)	225654	2.00000	1.99	
12	1,2-Dichlorobenzene	146	7.419	7.430	(1.030)	225428	2.00000	2.02	
13	2-Methylphenol	108	7.606	7.617	(1.056)	377903	4.50000	4.42	
14	2,2'-Oxybis(1-chloropropane)	45	7.585	7.586	(1.053)	116697	2.00000	1.98	
15	Acetophenone	105	7.742	7.752	(0.874)	244365	2.00000	2.05	
16	N-Nitroso-di-n-propylamine	70	7.762	7.773	(1.078)	124061	2.00000	2.09	
17	3&4-Methylphenol	108	7.825	7.825	(1.087)	366585	4.50000	4.08	
18	Hexachloroethane	117	7.846	7.856	(1.090)	78826	2.00000	2.00	
19	Nitrobenzene	77	7.950	7.961	(0.898)	184301	2.00000	1.89	
20	Isophorone	82	8.266	8.278	(0.934)	314227	2.00000	1.93	

Data File: \\target_server\gg\chem\gcms-n.i\N030323.b\N7600.D
Report Date: 16-Mar-2023 07:13

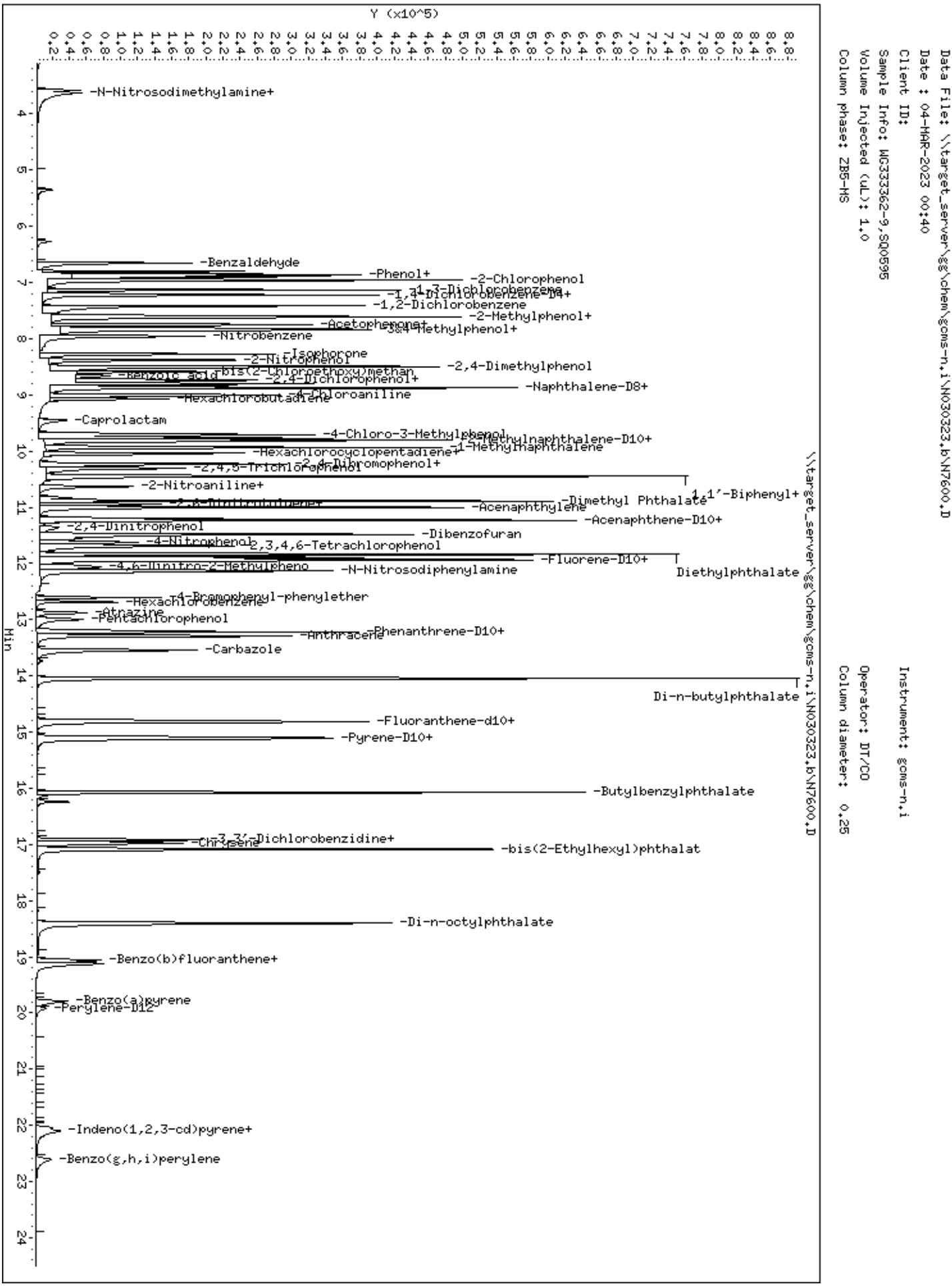
		QUANT SIG					AMOUNTS		
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
	21 2-Nitrophenol	139	8.380	8.380	(0.946)	216556	4.50000	4.66	
	22 2,4-Dimethylphenol	107	8.493	8.493	(0.959)	363885	4.50000	4.37	
	23 bis(2-Chloroethoxy)methane	93	8.583	8.584	(0.969)	212929	2.00000	2.06	
	24 Benzoic acid	105	8.663	8.708	(0.978)	144976	4.50000	5.84	
	25 2,4-Dichlorophenol	162	8.731	8.731	(0.986)	321410	4.50000	4.48	
	26 1,2,4-Trichlorobenzene	180	8.798	8.799	(0.994)	165365	2.00000	2.02	
*	27 Naphthalene-D8	136	8.855	8.867	(1.000)	206201	0.80000	(a)	
	28 Naphthalene	128	8.878	8.890	(1.003)	551266	2.00000	1.98	
	29 4-Chloroaniline	127	9.002	9.003	(1.017)	198742	2.00000	2.08	
	30 Hexachlorobutadiene	225	9.082	9.082	(1.026)	74313	2.00000	1.94	
	31 Caprolactam	113	9.455	9.490	(1.068)	53862	2.00000	1.81	
	32 4-Chloro-3-Methylphenol	107	9.701	9.701	(1.096)	299236	4.50000	4.55	
$	33 2-Methylnaphthalene-D10	152	9.769	9.769	(1.103)	286757	2.00000	2.05	
	34 2-Methylnaphthalene	142	9.809	9.810	(1.108)	374894	2.00000	1.90	
	35 1-Methylnaphthalene	142	9.931	9.945	(1.121)	350535	2.00000	2.01	
	36 Hexachlorocyclopentadiene	237	10.039	10.039	(0.897)	50292	2.00000	1.71	
	37 1,2,4,5-Tetrachlorobenzene	216	10.053	10.053	(0.898)	136784	2.00000	1.96	
$	38 2,4-Dibromophenol	252	10.228	10.215	(0.914)	79537	2.00000	1.94	
	39 2,4,6-Trichlorophenol	196	10.228	10.229	(0.914)	195030	4.50000	4.54	
	40 2,4,5-Trichlorophenol	196	10.309	10.296	(0.921)	238274	4.50000	4.44	
	41 1,1'-Biphenyl	154	10.445	10.445	(0.933)	385920	2.00000	1.89	
	42 2-Chloronaphthalene	164	10.458	10.459	(0.934)	101277	2.00000	1.90	
	43 2-Nitroaniline	65	10.631	10.632	(0.950)	66792	2.00000	1.86	
	44 Dimethyl Phthalate	163	10.884	10.896	(0.972)	773483	4.50000	4.38	
	45 2,6-Dinitrotoluene	165	10.961	10.962	(0.979)	83946	2.00000	1.97	
	46 Acenaphthylene	152	11.005	11.006	(0.983)	517584	2.00000	2.05	
	47 3-Nitroaniline	138	10.642	10.632	(0.951)	103713	2.00000	1.85	
*	48 Acenaphthene-D10	164	11.193	11.204	(1.000)	104856	0.80000	(a)	
	49 Acenaphthene	153	11.237	11.237	(1.004)	335037	2.00000	2.04	
	50 2,4-Dinitrophenol	184	11.369	11.336	(1.016)	39339	4.50000	4.02	
	51 4-Nitrophenol	109	11.567	11.512	(1.033)	38401	4.50000	5.10	
	52 Dibenzofuran	168	11.479	11.479	(1.026)	445279	2.00000	2.09	
	53 2,4-Dinitrotoluene	165	10.961	10.962	(0.979)	83946	2.00000	1.97	
	54 2,3,4,6-Tetrachlorophenol	232	11.688	11.688	(1.044)	154251	4.50000	4.69	
	55 Diethylphthalate	149	11.831	11.842	(1.057)	761207	4.50000	4.40	
$	56 Fluorene-D10	174	11.897	11.897	(1.063)	254928	2.00000	2.12	
	57 Fluorene	166	11.930	11.941	(1.066)	353910	2.00000	2.14	
	58 4-Chlorophenyl-phenylether	204	11.952	11.963	(1.068)	163504	2.00000	2.08	
	59 4-Nitroaniline	138	10.642	10.632	(0.951)	103713	2.00000	1.85	
	60 4,6-Dinitro-2-Methylphenol	198	12.073	12.062	(0.915)	69116	4.50000	3.93	
	61 N-Nitrosodiphenylamine	169	12.128	12.128	(0.920)	287301	2.00000	1.95	
	62 4-Bromophenyl-phenylether	248	12.605	12.606	(0.956)	88106	2.00000	2.05	
	63 Hexachlorobenzene	284	12.687	12.688	(0.962)	85151	2.00000	2.00	
	64 Atrazine	200	12.872	12.882	(0.976)	73564	2.00000	2.13	
	65 Pentachlorophenol	266	12.995	12.985	(0.985)	72123	4.50000	4.15	
*	66 Phenanthrene-D10	188	13.189	13.190	(1.000)	146739	0.80000	(a)	
	67 Phenanthrene	178	13.220	13.221	(1.002)	430098	2.00000	2.03	
	68 Anthracene	178	13.292	13.292	(1.008)	478913	2.00000	2.06	
	69 Carbazole	167	13.548	13.528	(1.027)	369038	2.00000	2.35	
	70 Di-n-butylphthalate	149	14.042	14.043	(1.065)	1267230	4.50000	4.23	
$	71 Fluoranthene-d10	212	14.798	14.798	(1.122)	281264	2.00000	2.26	
	72 Fluoranthene	202	14.820	14.820	(1.124)	394497	2.00000	2.28	
$	73 Pyrene-D10	212	15.098	15.098	(0.892)	334386	2.00000	2.27	
	74 Pyrene	202	15.120	15.120	(0.893)	406311	2.00000	2.24	

Data File: \\target_server\gg\chem\gcms-n.i\N030323.b\N7600.D
Report Date: 16-Mar-2023 07:13

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
	75 Butylbenzylphthalate	149	16.075	16.076	(0.949)	458778	4.50000	4.35	
	76 3,3'-Dichlorobenzidine	252	16.942	16.931	(1.001)	63163	2.00000	2.52	
	77 Benzo(a)anthracene	228	16.919	16.908	(0.999)	216209	2.00000	2.32	
*	78 Chrysene-D12	240	16.931	16.920	(1.000)	60433	0.80000	(a)	
	79 Chrysene	228	16.975	16.975	(1.003)	249935	2.00000	2.16	
	80 bis(2-Ethylhexyl)phthalate	149	17.086	17.087	(1.009)	646480	4.50000	4.42	
	81 Di-n-octylphthalate	149	18.397	18.408	(1.087)	893697	4.50000	5.17	
	82 Benzo(b)fluoranthene	252	19.063	19.053	(0.957)	115618	2.00000	1.84	
	83 Benzo(k)fluoranthene	252	19.119	19.119	(0.960)	176990	2.00000	1.88(H)	
	84 Benzo(a)pyrene	252	19.796	19.776	(0.994)	106233	2.00000	2.00	
*	85 Perylene-D12	264	19.922	19.912	(1.000)	34119	0.80000	(a)	
	86 Indeno(1,2,3-cd)pyrene	276	22.045	22.014	(1.107)	80817	2.00000	1.81	
	87 Dibenzo(a,h)anthracene	278	22.108	22.077	(1.110)	60389	2.00000	2.25	
	88 Benzo(g,h,i)perylene	276	22.613	22.582	(1.135)	72483	2.00000	1.80	
M	89 Total PAHs	100				5271719	36.0000	36.8	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
H - Operator selected an alternate compound hit.


Data File: \\target_server\gg\chem\gcms-n,i\N030323,b\N7600.D
Date : 04-MAR-2023 00:40
Client ID:
Sample Info: WG333362-9,SQ0595
Volume Injected (uL): 1.0
Column phase: ZB5-MS
Instrument: gcms-n,i
Operator: DT/CO
Column diameter: 0.25
\\target_server\gg\chem\gcms-n,i\N030323,b\N7600.D
Y (x10^5)
Min
-N-Nitrosodimethylamine+
-Benzaldehyde
-Phenol+
-2-Chlorophenol
-1,3-Dichlorobenzene
-1,4-Dichlorobenzene-D4+
-1,2-Dichlorobenzene
-2-Methylphenol+
-Acetophenone+
3&4-Methylphenol+
-Nitrobenzene
-Isophorone
-2-Nitrophenol
-2,4-Dimethylphenol
-Benzoic acid
bis(2-Chloroethoxy)methan
-2,4-Dichlorophenol+
-Naphthalene-D8+
-4-Chloroaniline
-Hexachlorobutadiene
-Caprolactam
-4-Chloro-3-Methylphenol
2-Methylnaphthalene-D10+
1-Methylnaphthalene
-Hexachlorocyclopentadiene+
-2,4,6-Trichlorophenol
-2,4-Dibromophenol+
-2-Nitroaniline+
-Dimethyl Phthalate
1,1'-Biphenyl+
-2,6-Dinitrotoluene+
-Acenaphthylene
-Acenaphthene-D10+
-2,4-Dinitrophenol
-Dibenzofuran
-4-Nitrophenol
2,3,4,6-Tetrachlorophenol
-Fluorene-D10+
-4,6-Dinitro-2-Methylpheno
-N-Nitrosodiphenylamine
Diethylphthalate
-4-Bromophenyl-phenylether
-Hexachlorobenzene
-Atrazine
-Pentachlorophenol
-Phenanthrene-D10+
-Anthracene
-Carbazole
Di-n-butylphthalate
-Fluoranthene-d10+
-Pyrene-D10+
-Butylbenzylphthalate
-3,3'-Dichlorobenzidine+
-Chrysene
-bis(2-Ethylhexyl)phthalat
-Di-n-octylphthalate
-Benzo(b)fluoranthene+
-Benzo(a)pyrene
-Perylene-D12
-Indeno(1,2,3-cd)pyrene+
-Benzo(g,h,i)perylene

Form 7
Calibration Verification Summary

Lab Name: Katahdin Analytical Services
SDG: SQ0595
Lab ID: WG333437-9
Analytical Date: 03/07/23 00:50
Lab File ID: N7620.D
Instrument ID: GCMS-N
Initial Calibration Date(s): 03/06/23 14:08 03/06/23 16:55
Column ID:

Compound	$\overline{RRF}$/Amount	RF2	CCAL RRF2	Min	%D/ %Drift	Max %D/ %Drift	Curve Type
Naphthalene	1.02359	1.08932	1.08932	0.010	6.42140	20.00000	Averaged
2-Methylnaphthalene	0.74080	0.73905	0.73905	0.010	-0.23593	20.00000	Averaged
Acenaphthylene	1.89389	1.99677	1.99677	0.010	5.43214	20.00000	Averaged
Acenaphthene	1.24414	1.27677	1.27677	0.010	2.62273	20.00000	Averaged
Fluorene	1.20928	1.34975	1.34975	0.010	11.61647	20.00000	Averaged
Phenanthrene	1.11845	1.17766	1.17766	0.010	5.29389	20.00000	Averaged
Anthracene	2.00000	2.28264	1.31701	0.010	14.13184	20.00000	Linear
Fluoranthene	0.98876	1.07152	1.07152	0.010	8.36949	20.00000	Averaged
Pyrene	2.66110	2.46417	2.46417	0.010	-7.40032	20.00000	Averaged
Benzo(a)anthracene	1.33541	1.38772	1.38772	0.010	3.91724	20.00000	Averaged
Chrysene	2.00000	2.33740	1.70544	0.010	16.87017	20.00000	Linear
Benzo(b)fluoranthene	1.31721	1.27155	1.27155	0.010	-3.46583	20.00000	Averaged
Benzo(k)fluoranthene	2.16970	2.56698	2.56698	0.010	18.31008	20.00000	Averaged
Benzo(a)pyrene	1.30330	1.35765	1.35765	0.010	4.17065	20.00000	Averaged
Indeno(1,2,3-cd)pyrene	0.94805	0.86493	0.86493	0.010	-8.76799	20.00000	Averaged
Dibenzo(a,h)anthracene	0.72266	0.61950	0.61950	0.010	-14.27490	20.00000	Averaged
Benzo(g,h,i)perylene	0.95881	0.84662	0.84662	0.010	-11.70034	20.00000	Averaged
2-Methylnaphthalene-D10	0.54797	0.56199	0.56199	0.010	2.55819	20.00000	Averaged
Fluorene-D10	2.00000	2.27379	0.97676	0.010	13.68966	20.00000	Linear
Pyrene-D10	2.00000	2.17206	2.04369	0.010	8.60275	20.00000	Linear

*** = Compound out of QC criteria**

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Data File: \\target_server\gg\chem\gcms-n.i\N030623.b\N7620.D
Report Date: 16-Mar-2023 07:14

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-n.i\N030623.b\N7620.D
Lab Smp Id: WG333437-9
Inj Date : 07-MAR-2023 00:50
Operator : DT/CO   Inst ID: gcms-n.i
Smp Info : WG333437-9,SQ0595
Misc Info : WG333437,WG333437,WG333437-4,SQ0595-3
Comment   :
Method   : \\target_server\gg\chem\gcms-n.i\N030623.b\NSPSIM19.m
Meth Date : 07-Mar-2023 11:13 coneill   Quant Type: ISTD
Cal Date : 06-MAR-2023 16:55   Cal File: N7608.D
Als bottle: 2   Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: all.sub
Target Version: 4.12
Processing Host: V200T4

Concentration Formula: Amt * DF * (Vt/Ws*Vi)*(100/(100-M))*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.00100	Final Volume (L)
Ws	0.03000	Weight of Sample (Kg)
Vi	1.000	Volume injected (uL)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)	REVIEW CODE
$ 1	1,4-Dioxane-d8	96	2.998	2.999	(0.417)	86627	2.00000	2.02	
2	1,4-Dioxane	88	3.051	3.041	(0.424)	87800	2.00000	1.96	
3	N-Nitrosodimethylamine	74	3.579	3.559	(0.498)	124538	2.00000	2.01	
4	Pyridine	79	3.621	3.569	(0.504)	187578	2.00000	2.02	
5	Benzaldehyde	77	6.628	6.618	(0.922)	110470	2.00000	1.87	
6	Phenol	94	6.836	6.837	(0.951)	588611	4.50000	4.37	
7	Bis(2-Chloroethyl)ether	93	6.868	6.878	(0.955)	191059	2.00000	1.70	
8	2-Chlorophenol	128	6.940	6.941	(0.965)	530585	4.50000	4.40	
9	1,3-Dichlorobenzene	146	7.107	7.118	(0.988)	264004	2.00000	2.05	
* 10	1,4-Dichlorobenzene-D4	152	7.190	7.191	(1.000)	73386	0.80000	(a)	
11	1,4-Dichlorobenzene	146	7.211	7.211	(1.003)	280419	2.00000	2.05	
12	1,2-Dichlorobenzene	146	7.398	7.399	(1.029)	274406	2.00000	2.13	
13	2-Methylphenol	108	7.585	7.596	(1.055)	468691	4.50000	4.43	
14	2,2'-Oxybis(1-chloropropane)	45	7.565	7.565	(1.052)	146205	2.00000	2.15	
15	Acetophenone	105	7.721	7.721	(0.874)	301476	2.00000	2.09	
16	N-Nitroso-di-n-propylamine	70	7.741	7.752	(1.077)	152197	2.00000	2.12	
17	3&4-Methylphenol	108	7.793	7.804	(1.084)	476361	4.50000	4.47	
18	Hexachloroethane	117	7.825	7.825	(1.088)	98245	2.00000	2.03	
19	Nitrobenzene	77	7.929	7.929	(0.898)	223261	2.00000	1.93	
20	Isophorone	82	8.244	8.255	(0.933)	397014	2.00000	2.34	

Data File: \\target_server\gg\chem\gcms-n.i\N030623.b\N7620.D
Report Date: 16-Mar-2023 07:14

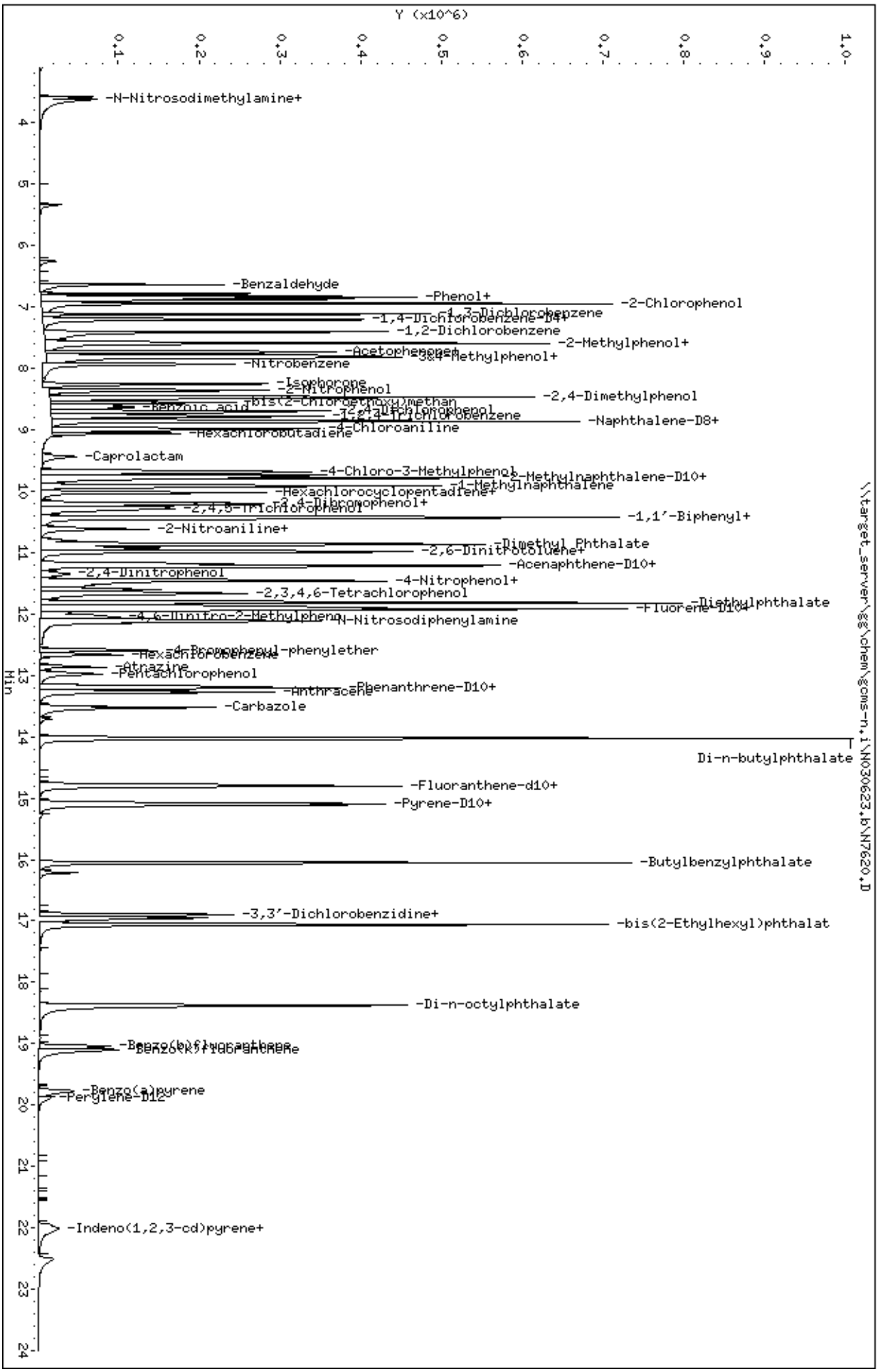
		Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)	REVIEW CODE
	21	2-Nitrophenol	139	8.357	8.356	(0.946)	273842	4.50000	4.49	
	22	2,4-Dimethylphenol	107	8.459	8.471	(0.958)	451986	4.50000	4.28	
	23	bis(2-Chloroethoxy)methane	93	8.549	8.561	(0.968)	256020	2.00000	2.12	
	24	Benzoic acid	105	8.640	8.663	(0.978)	220880	4.50000	5.32	
	25	2,4-Dichlorophenol	162	8.696	8.708	(0.985)	404097	4.50000	4.16	
	26	1,2,4-Trichlorobenzene	180	8.776	8.776	(0.994)	205821	2.00000	2.01	
*	27	Naphthalene-D8	136	8.832	8.844	(1.000)	250762	0.80000	(a)	
	28	Naphthalene	128	8.855	8.867	(1.003)	682898	2.00000	2.13	
	29	4-Chloroaniline	127	8.968	8.980	(1.015)	244048	2.00000	2.07	
	30	Hexachlorobutadiene	225	9.059	9.059	(1.026)	90373	2.00000	1.86	
	31	Caprolactam	113	9.432	9.478	(1.068)	69669	2.00000	1.94	
	32	4-Chloro-3-Methylphenol	107	9.687	9.688	(1.097)	382347	4.50000	4.67	
$	33	2-Methylnaphthalene-D10	152	9.741	9.755	(1.103)	352313	2.00000	2.05	
	34	2-Methylnaphthalene	142	9.782	9.796	(1.108)	463314	2.00000	2.00	
	35	1-Methylnaphthalene	142	9.904	9.931	(1.121)	430225	2.00000	2.03	
	36	Hexachlorocyclopentadiene	237	10.012	10.026	(0.895)	77170	2.00000	2.04	
	37	1,2,4,5-Tetrachlorobenzene	216	10.025	10.039	(0.897)	166305	2.00000	1.96	
$	38	2,4-Dibromophenol	252	10.201	10.202	(0.912)	99867	2.00000	1.92	
	39	2,4,6-Trichlorophenol	196	10.215	10.215	(0.914)	246810	4.50000	4.38	
	40	2,4,5-Trichlorophenol	196	10.282	10.283	(0.920)	310312	4.50000	4.36	
	41	1,1'-Biphenyl	154	10.431	10.431	(0.933)	480917	2.00000	2.01	
	42	2-Chloronaphthalene	164	10.444	10.445	(0.934)	123328	2.00000	1.96	
	43	2-Nitroaniline	65	10.620	10.621	(0.950)	81039	2.00000	1.99	
	44	Dimethyl Phthalate	163	10.873	10.885	(0.972)	937662	4.50000	4.46	
	45	2,6-Dinitrotoluene	165	10.939	10.951	(0.978)	105413	2.00000	2.09	
	46	Acenaphthylene	152	10.972	10.995	(0.981)	628498	2.00000	2.11	
	47	3-Nitroaniline	138	10.620	10.621	(0.950)	129373	2.00000	1.93	
*	48	Acenaphthene-D10	164	11.181	11.182	(1.000)	125903	0.80000	(a)	
	49	Acenaphthene	153	11.225	11.226	(1.004)	401872	2.00000	2.05	
	50	2,4-Dinitrophenol	184	11.347	11.325	(1.015)	57795	4.50000	3.63	
	51	4-Nitrophenol	109	11.534	11.490	(1.031)	53119	4.50000	4.00	
	52	Dibenzofuran	168	11.468	11.468	(1.026)	543519	2.00000	2.23	
	53	2,4-Dinitrotoluene	165	10.939	10.951	(0.978)	105413	2.00000	2.09	
	54	2,3,4,6-Tetrachlorophenol	232	11.666	11.666	(1.043)	205327	4.50000	4.09	
	55	Diethylphthalate	149	11.820	11.831	(1.057)	936599	4.50000	4.66	
$	56	Fluorene-D10	174	11.886	11.886	(1.063)	307442	2.00000	2.27	
	57	Fluorene	166	11.919	11.930	(1.066)	424845	2.00000	2.23	
	58	4-Chlorophenyl-phenylether	204	11.941	11.952	(1.068)	200844	2.00000	2.19	
	59	4-Nitroaniline	138	10.620	10.621	(0.950)	129373	2.00000	1.93	
	60	4,6-Dinitro-2-Methylphenol	198	12.051	12.040	(0.915)	102305	4.50000	3.85	
	61	N-Nitrosodiphenylamine	169	12.117	12.117	(0.920)	353930	2.00000	2.12	
	62	4-Bromophenyl-phenylether	248	12.595	12.595	(0.956)	106360	2.00000	2.04	
	63	Hexachlorobenzene	284	12.667	12.677	(0.962)	102624	2.00000	2.21	
	64	Atrazine	200	12.861	12.872	(0.977)	86798	2.00000	2.16	
	65	Pentachlorophenol	266	12.974	12.964	(0.985)	96233	4.50000	3.86	
*	66	Phenanthrene-D10	188	13.169	13.179	(1.000)	173174	0.80000	(a)	
	67	Phenanthrene	178	13.199	13.210	(1.002)	509852	2.00000	2.10	
	68	Anthracene	178	13.271	13.272	(1.008)	570178	2.00000	2.28	
	69	Carbazole	167	13.527	13.518	(1.027)	440472	2.00000	2.31	
	70	Di-n-butylphthalate	149	14.020	14.032	(1.065)	1500425	4.50000	4.63	
$	71	Fluoranthene-d10	212	14.775	14.787	(1.122)	331994	2.00000	2.13	
	72	Fluoranthene	202	14.798	14.809	(1.124)	463897	2.00000	2.17	
$	73	Pyrene-D10	212	15.075	15.087	(0.892)	397227	2.00000	2.17	
	74	Pyrene	202	15.098	15.109	(0.893)	478955	2.00000	1.85	

Data File: \\target_server\gg\chem\gcms-n.i\N030623.b\N7620.D
Report Date: 16-Mar-2023 07:14

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
	75 Butylbenzylphthalate	149	16.053	16.064	(0.949)	547417	4.50000	4.27	
	76 3,3'-Dichlorobenzidine	252	16.919	16.920	(1.001)	79792	2.00000	2.99	
	77 Benzo(a)anthracene	228	16.897	16.898	(0.999)	269727	2.00000	2.08	
*	78 Chrysene-D12	240	16.908	16.908	(1.000)	77747	0.80000	(a)	
	79 Chrysene	228	16.953	16.963	(1.003)	331482	2.00000	2.34	
	80 bis(2-Ethylhexyl)phthalate	149	17.064	17.075	(1.009)	786942	4.50000	4.44	
	81 Di-n-octylphthalate	149	18.375	18.386	(1.087)	1064507	4.50000	4.73	
	82 Benzo(b)fluoranthene	252	19.041	19.042	(0.957)	130258	2.00000	1.93	
	83 Benzo(k)fluoranthene	252	19.097	19.097	(0.960)	262961	2.00000	2.37(H)	
	84 Benzo(a)pyrene	252	19.765	19.755	(0.994)	139078	2.00000	2.08	
*	85 Perylene-D12	264	19.891	19.891	(1.000)	40976	0.80000	(a)	
	86 Indeno(1,2,3-cd)pyrene	276	21.961	21.930	(1.104)	88603	2.00000	1.82	
	87 Dibenzo(a,h)anthracene	278	22.024	21.993	(1.107)	63462	2.00000	1.71	
	88 Benzo(g,h,i)perylene	276	22.518	22.487	(1.132)	86728	2.00000	1.76	
M	89 Total PAHs	100				6426833	36.0000	37.0	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
H - Operator selected an alternate compound hit.


Data File: \\target_server\gg\chem\gcms-n,i\N030623,b\N7620.D
Date : 07-MAR-2023 00:50
Client ID:
Sample Info: WG333437-9,SQ0595
Volume Injected (uL): 1.0
Column phase: ZB5-MS
Instrument: gcms-n,i
Operator: DT/CO
Column diameter: 0.25
\\target_server\gg\chem\gcms-n,i\N030623,b\N7620.D
Y (x10^6)
Min
-N-Nitrosodimethylamine+
-Benzaldehyde
-Phenol+
-2-Chlorophenol
-1,4-Dichlorobenzene-D4+
-1,2-Dichlorobenzene
-2-Methylphenol+
-Nitrobenzene
-Isophorone
-2-Nitrophenol
-2,4-Dimethylphenol
-Naphthalene-D8+
-4-Chloroaniline
-Hexachlorobutadiene
-Caprolactam
-4-Chloro-3-Methylphenol
-2-Methylnaphthalene-D10+
-1-Methylnaphthalene
-Hexachlorocyclopentadiene+
-2,4-Dibromophenol+
-1,1'-Biphenyl+
-2-Nitroaniline+
-Dimethyl Phthalate
-2,6-Dinitrotoluene+
-Acenaphthene-D10+
-2,4-Dinitrophenol
-4-Nitrophenol+
-2,3,4,6-Tetrachlorophenol
-Diethylphthalate
-Fluorene-D10+
-N-Nitrosodiphenylamine
-Atrazine
-Pentachlorophenol
-Phenanthrene-D10+
-Anthracene
-Carbazole
Di-n-butylphthalate
-Fluoranthene-d10+
-Pyrene-D10+
-Butylbenzylphthalate
-3,3'-Dichlorobenzidine+
-bis(2-Ethylhexyl)phthalat
-Di-n-octylphthalate
-Perylene-D12
-Indeno(1,2,3-cd)pyrene+

Form 7
Calibration Verification Summary

Lab Name: Katahdin Analytical Services
SDG: SQ0595
Lab ID: WG334091-9
Analytical Date: 03/21/23 00:35
Lab File ID: N7770.D
Instrument ID: GCMS-N
Initial Calibration Date(s): 03/20/23 15:15 03/20/23 18:16
Column ID:

Compound	$\overline{RRF}$/Amount	RF2	CCAL RRF2	Min	%D/ %Drift	Max %D/ %Drift	Curve Type
Naphthalene	1.00121	1.08865	1.08865	0.010	8.73337	20.00000	Averaged
2-Methylnaphthalene	0.62426	0.68375	0.68375	0.010	9.53070	20.00000	Averaged
Acenaphthylene	1.87894	2.00218	2.00218	0.010	6.55933	20.00000	Averaged
Acenaphthene	1.22654	1.30050	1.30050	0.010	6.03010	20.00000	Averaged
Fluorene	1.29742	1.42612	1.42612	0.010	9.92018	20.00000	Averaged
Phenanthrene	1.18807	1.28149	1.28149	0.010	7.86330	20.00000	Averaged
Anthracene	1.15961	1.22113	1.22113	0.010	5.30486	20.00000	Averaged
Fluoranthene	1.02572	1.14573	1.14573	0.010	11.70001	20.00000	Averaged
Pyrene	2.36820	2.47859	2.47859	0.010	4.66129	20.00000	Averaged
Benzo(a)anthracene	1.36932	1.47754	1.47754	0.010	7.90324	20.00000	Averaged
Chrysene	1.54234	1.64736	1.64736	0.010	6.80938	20.00000	Averaged
Benzo(b)fluoranthene	1.49607	1.65938	1.65938	0.010	10.91625	20.00000	Averaged
Benzo(k)fluoranthene	1.96926	2.10085	2.10085	0.010	6.68193	20.00000	Averaged
Benzo(a)pyrene	1.35826	1.45906	1.45906	0.010	7.42089	20.00000	Averaged
Indeno(1,2,3-cd)pyrene	2.00000	1.67634	0.77340	0.010	-16.18282	20.00000	Linear
Dibenzo(a,h)anthracene	2.00000	1.79788	0.86703	0.010	-10.10597	20.00000	Linear
Benzo(g,h,i)perylene	1.15146	1.05237	1.05237	0.010	-8.60528	20.00000	Averaged
2-Methylnaphthalene-D10	0.48762	0.54504	0.54504	0.010	11.77644	20.00000	Averaged
Fluorene-D10	1.03935	1.15383	1.15383	0.010	11.01448	20.00000	Averaged
Pyrene-D10	1.77422	1.96177	1.96177	0.010	10.57096	20.00000	Averaged

*** = Compound out of QC criteria**

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http://katahdinlab.com
sales@katahdinlab.com

Data File: \\target_server\gg\chem\gcms-n.i\N032023.b\N7770.D
Report Date: 22-Mar-2023 08:07

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-n.i\N032023.b\N7770.D
Lab Smp Id: WG334091-9
Inj Date : 21-MAR-2023 00:35
Operator : DT/EP   Inst ID: gcms-n.i
Smp Info : WG334091-9,SQ0595
Misc Info : WG334091,WG334091,WG334091-4,SQ0595-2
Comment   :
Method   : \\target_server\gg\chem\gcms-n.i\N032023.b\NSPSIM26.m
Meth Date : 21-Mar-2023 06:46 epelletier Quant Type: ISTD
Cal Date : 20-MAR-2023 18:16   Cal File: N7760.D
Als bottle: 2   Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: all.sub
Target Version: 4.12
Processing Host: INSPIRON1

Concentration Formula: Amt * DF * (Vt/Ws)*(100/(100-M))*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.00100	Final Volume (L)
Ws	0.03000	Weight of Sample (Kg)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
$	1 1,4-Dioxane-d8	96	3.677	3.667	(0.493)	68317	2.00000	2.13	
	2 1,4-Dioxane	88	3.709	3.699	(0.497)	65102	2.00000	2.11	
	3 N-Nitrosodimethylamine	74	4.121	4.121	(0.552)	99867	2.00000	2.12	
	4 Pyridine	79	4.153	4.142	(0.556)	150168	2.00000	2.06	
	5 Benzaldehyde	77	6.912	6.912	(0.926)	69277	2.00000	1.78	
	6 Phenol	94	7.058	7.069	(0.946)	480029	4.50000	4.76	
	7 Bis(2-Chloroethyl)ether	93	7.151	7.152	(0.958)	175944	2.00000	2.16	
	8 2-Chlorophenol	128	7.214	7.214	(0.967)	462132	4.50000	4.81	
	9 1,3-Dichlorobenzene	146	7.401	7.401	(0.992)	223073	2.00000	2.14	
*	10 1,4-Dichlorobenzene-D4	152	7.464	7.474	(1.000)	58310	0.80000	(a)	
	11 1,4-Dichlorobenzene	146	7.484	7.495	(1.003)	220971	2.00000	2.08	
	12 1,2-Dichlorobenzene	146	7.682	7.682	(1.029)	212199	2.00000	2.15	
	13 2-Methylphenol	108	7.817	7.828	(1.047)	383318	4.50000	5.04	
	14 2,2'-Oxybis(1-chloropropane)	45	7.838	7.838	(1.050)	88063	2.00000	2.24	
	15 Acetophenone	105	7.984	7.995	(0.878)	233423	2.00000	2.16	
	16 N-Nitroso-di-n-propylamine	70	7.994	8.015	(1.071)	104811	2.00000	2.09	
	17 3&4-Methylphenol	108	8.015	8.026	(1.074)	394272	4.50000	4.96	
	18 Hexachloroethane	117	8.109	8.109	(1.086)	81035	2.00000	2.13	
	19 Nitrobenzene	77	8.192	8.202	(0.900)	150521	2.00000	2.08	
	20 Isophorone	82	8.513	8.523	(0.936)	303608	2.00000	2.18	
	21 2-Nitrophenol	139	8.616	8.616	(0.947)	237104	4.50000	4.95	

Data File: \\target_server\gg\chem\gcms-n.i\N032023.b\N7770.D
Report Date: 22-Mar-2023 08:07

DL

9:27 am, Mar 22, 2023

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
	22 2,4-Dimethylphenol	107	8.698	8.708	(0.956)	393759	4.50000	5.00	
	23 bis(2-Chloroethoxy)methane	93	8.810	8.821	(0.968)	201503	2.00000	2.15	
	24 Benzoic acid	105	8.821	8.883	(0.970)	156852	4.50000	6.27	
	25 2,4-Dichlorophenol	162	8.934	8.944	(0.982)	341850	4.50000	4.79	
	26 1,2,4-Trichlorobenzene	180	9.036	9.047	(0.993)	151031	2.00000	2.10	
*	27 Naphthalene-D8	136	9.098	9.108	(1.000)	207049	0.80000	(a)	
	28 Naphthalene	128	9.128	9.139	(1.003)	563511	2.00000	2.17	
	29 4-Chloroaniline	127	9.221	9.231	(1.014)	198962	2.00000	2.18	
	30 Hexachlorobutadiene	225	9.323	9.334	(1.025)	69190	2.00000	2.12	
	31 Caprolactam	113	9.667	9.709	(1.063)	50091	2.00000	2.25	
	32 4-Chloro-3-Methylphenol	107	9.889	9.900	(1.087)	349490	4.50000	4.96	
$	33 2-Methylnaphthalene-D10	152	10.006	10.017	(1.100)	282125	2.00000	2.24	
	34 2-Methylnaphthalene	142	10.048	10.059	(1.104)	353926	2.00000	2.19	
	35 1-Methylnaphthalene	142	10.175	10.186	(1.118)	333879	2.00000	2.20	
	36 Hexachlorocyclopentadiene	237	10.281	10.292	(0.899)	72821	2.00000	2.17	
	37 1,2,4,5-Tetrachlorobenzene	216	10.281	10.292	(0.899)	125454	2.00000	2.14	
$	38 2,4-Dibromophenol	252	10.429	10.440	(0.912)	80032	2.00000	2.20	
	39 2,4,6-Trichlorophenol	196	10.451	10.461	(0.914)	215109	4.50000	4.84	
	40 2,4,5-Trichlorophenol	196	10.493	10.504	(0.917)	243538	4.50000	4.83	
	41 1,1'-Biphenyl	154	10.684	10.694	(0.934)	409747	2.00000	2.09	
	42 2-Chloronaphthalene	164	10.694	10.705	(0.935)	106001	2.00000	2.08	
	43 2-Nitroaniline	65	10.853	10.864	(0.949)	63295	2.00000	2.18	
	44 Dimethyl Phthalate	163	11.116	11.148	(0.972)	851036	4.50000	4.68	
	45 2,6-Dinitrotoluene	165	11.179	11.200	(0.977)	88668	2.00000	2.15	
	46 Acenaphthylene	152	11.242	11.263	(0.983)	513890	2.00000	2.13(M)	M6
	47 3-Nitroaniline	138	11.409	11.430	(0.997)	52535	2.00000	2.05	
*	48 Acenaphthene-D10	164	11.440	11.451	(1.000)	102666	0.80000	(a)	
	49 Acenaphthene	153	11.482	11.493	(1.004)	333792	2.00000	2.12	
	50 2,4-Dinitrophenol	184	11.555	11.566	(1.010)	61918	4.50000	4.97	
	51 4-Nitrophenol	109	11.680	11.691	(1.021)	66629	4.50000	4.20	
	52 Dibenzofuran	168	11.722	11.733	(1.025)	451119	2.00000	2.13	
	53 2,4-Dinitrotoluene	165	11.722	11.743	(1.025)	110132	2.00000	2.25	
	54 2,3,4,6-Tetrachlorophenol	232	11.910	11.921	(1.041)	167637	4.50000	5.20	
	55 Diethylphthalate	149	12.077	12.088	(1.056)	897337	4.50000	4.77	
$	56 Fluorene-D10	174	12.140	12.161	(1.061)	296148	2.00000	2.22	
	57 Fluorene	166	12.182	12.192	(1.065)	366036	2.00000	2.20	
	58 4-Chlorophenyl-phenylether	204	12.202	12.213	(1.067)	154772	2.00000	2.18	
	59 4-Nitroaniline	138	12.234	12.255	(1.069)	22475	2.00000	0.819	
	60 4,6-Dinitro-2-Methylphenol	198	12.276	12.286	(0.914)	105692	4.50000	4.54	
	61 N-Nitrosodiphenylamine	169	12.359	12.380	(0.920)	292529	2.00000	2.13	
	62 4-Bromophenyl-phenylether	248	12.854	12.864	(0.957)	82171	2.00000	2.16(M)	M6
	63 Hexachlorobenzene	284	12.936	12.946	(0.963)	89632	2.00000	2.06	
	64 Atrazine	200	13.110	13.131	(0.976)	90025	2.00000	1.91	
	65 Pentachlorophenol	266	13.202	13.223	(0.982)	114002	4.50000	5.37	
*	66 Phenanthrene-D10	188	13.438	13.448	(1.000)	148183	0.80000	(a)	
	67 Phenanthrene	178	13.468	13.479	(1.002)	474738	2.00000	2.16	
	68 Anthracene	178	13.530	13.551	(1.007)	452375	2.00000	2.11	
	69 Carbazole	167	13.766	13.776	(1.024)	348045	2.00000	3.00	
	70 Di-n-butylphthalate	149	14.288	14.309	(1.063)	1498229	4.50000	4.77	
$	71 Fluoranthene-d10	212	15.043	15.064	(1.119)	286694	2.00000	2.30	
	72 Fluoranthene	202	15.064	15.094	(1.121)	424445	2.00000	2.23	
$	73 Pyrene-D10	212	15.349	15.369	(0.889)	349303	2.00000	2.21	
	74 Pyrene	202	15.369	15.390	(0.890)	441325	2.00000	2.09	
	75 Butylbenzylphthalate	149	16.368	16.398	(0.948)	620908	4.50000	4.81	

Data File: \\target_server\gg\chem\gcms-n.i\N032023.b\N7770.D
Report Date: 22-Mar-2023 08:07

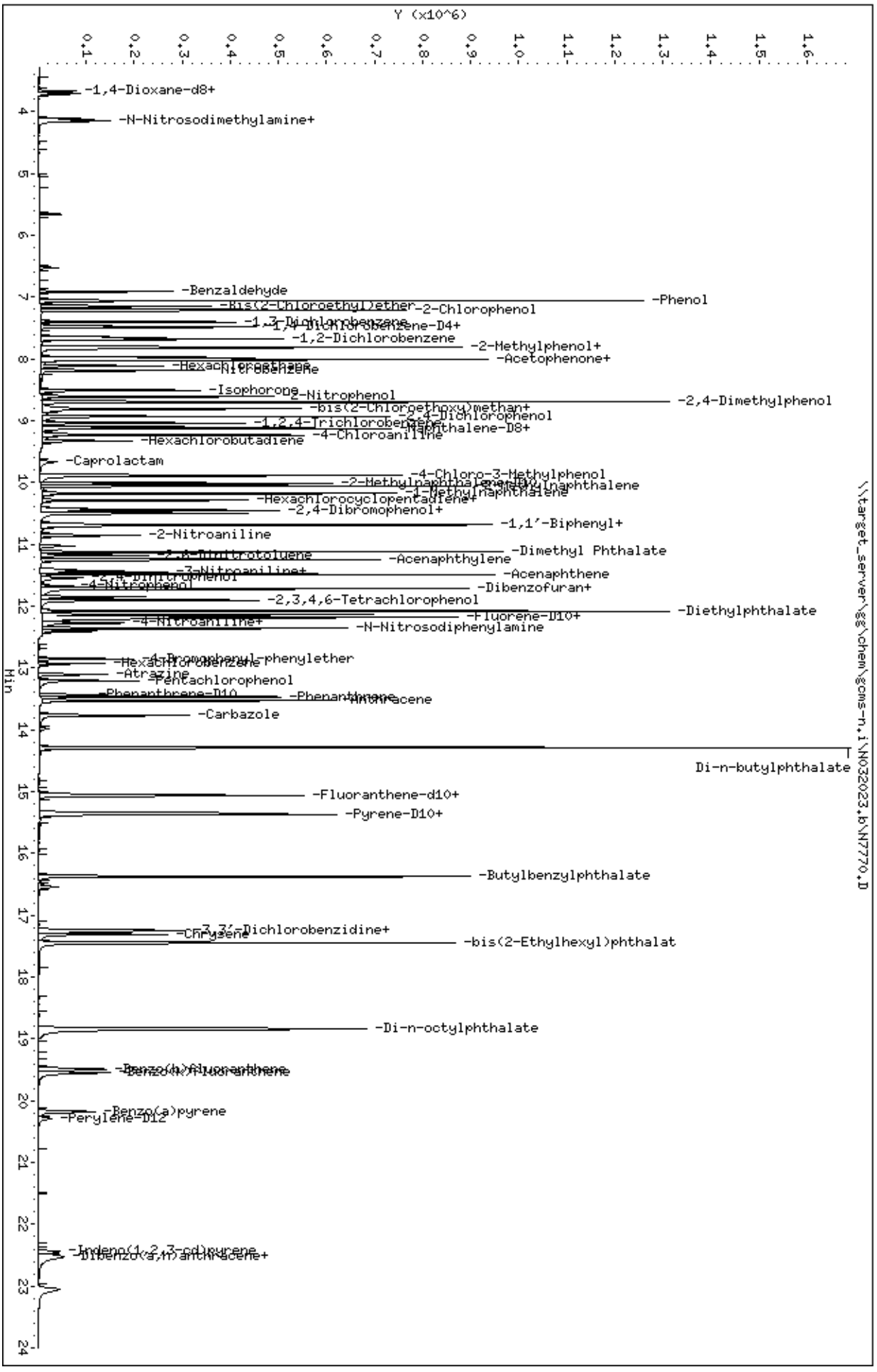
DL

9:27 am, Mar 22, 2023

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
	76 3,3'-Dichlorobenzidine	252	17.254	17.274	(0.999)	64668	2.00000	2.42	
	77 Benzo(a)anthracene	228	17.244	17.274	(0.999)	263084	2.00000	2.16(H)	
*	78 Chrysene-D12	240	17.264	17.295	(1.000)	71222	0.80000	(a)	
	79 Chrysene	228	17.305	17.335	(1.002)	293321	2.00000	2.14	
	80 bis(2-Ethylhexyl)phthalate	149	17.447	17.468	(1.011)	870691	4.50000	5.01	
	81 Di-n-octylphthalate	149	18.843	18.874	(1.091)	1320268	4.50000	5.47	
	82 Benzo(b)fluoranthene	252	19.489	19.521	(0.961)	212936	2.00000	2.22	
	83 Benzo(k)fluoranthene	252	19.553	19.584	(0.964)	269586	2.00000	2.13(H)	
	84 Benzo(a)pyrene	252	20.173	20.204	(0.994)	187230	2.00000	2.15	
*	85 Perylene-D12	264	20.288	20.309	(1.000)	51329	0.80000	(a)	
	86 Indeno(1,2,3-cd)pyrene	276	22.443	22.474	(1.106)	99245	2.00000	1.68(M)	M3
	87 Dibenzo(a,h)anthracene	278	22.527	22.558	(1.110)	111260	2.00000	1.80	
	88 Benzo(g,h,i)perylene	276	23.052	23.094	(1.136)	135043	2.00000	1.83	
M	89 Total PAHs	100				5829622	36.0000	37.7	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.


Data File: \\target_server\gg\chem\gcms-n,i\N032023,b\N7770.D
Date : 21-MAR-2023 00:35
Client ID:
Sample Info: WG334091-9,SQ0595
Column phase: ZB5-MS
Instrument: gcms-n,i
Operator: DT/EP
Column diameter: 0.25
\\target_server\gg\chem\gcms-n,i\N032023,b\N7770.D
Y (x10^6)
Min
-1,4-Dioxane-d8+
-N-Nitrosodimethylamine+
-Benzaldehyde
-Phenol
-Bis(2-Chloroethyl)ether
-2-Chlorophenol
-1,3-Dichlorobenzene
-1,4-Dichlorobenzene-D4+
-1,2-Dichlorobenzene
-2-Methylphenol+
-Acetophenone+
-Hexachloroethane
-Nitrobenzene
-Isophorone
-2-Nitrophenol
-2,4-Dimethylphenol
-bis(2-Chloroethoxy)methan+
-2,4-Dichlorophenol
-1,2,4-Trichlorobenzene
-Naphthalene-D8+
-4-Chloroaniline
-Hexachlorobutadiene
-Caprolactam
-4-Chloro-3-Methylphenol
-2-Methylnaphthalene-D10+
-2-Methylnaphthalene
-1-Methylnaphthalene
-Hexachlorocyclopentadiene+
-2,4-Dibromophenol+
-1,1'-Biphenyl+
-2-Nitroaniline
-Dimethyl Phthalate
-2,6-Dinitrotoluene
-Acenaphthylene
-3-Nitroaniline+
-Acenaphthene
-2,4-Dinitrophenol
-4-Nitrophenol
-Dibenzofuran+
-2,3,4,6-Tetrachlorophenol
-Diethylphthalate
-Fluorene-D10+
-4-Nitroaniline+
-N-Nitrosodiphenylamine
-4-Bromophenyl-phenylether
-Hexachlorobenzene
-Atrazine
-Pentachlorophenol
-Phenanthrene-D10
-Phenanthrene
-Anthracene
-Carbazole
Di-n-butylphthalate
-Fluoranthene-d10+
-Pyrene-D10+
-Butylbenzylphthalate
-3,3'-Dichlorobenzidine+
-Chrysene
-bis(2-Ethylhexyl)phthalat
-Di-n-octylphthalate
-Benzo(b)fluoranthene
-Benzo(k)fluoranthene
-Benzo(a)pyrene
-Perylene-D12
-Indeno(1,2,3-cd)pyrene
-Dibenzo(a,h)anthracene+

Data File: \\target_server\gg\chem\gcms-n.i\N030323.b\ND383.D
Report Date: 16-Mar-2023 07:13

RT	EXP RT	REL RT	MASS	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
	4 Benzidine (continued)							
8.951	9.100	(1.000)	92	86467			0.00- 0.00	9.84
	5 4,4'-DDD					CAS #: 72-54-8		
10.298	10.000	(1.000)	235	717929			0.00- 0.00	100.00(Q)
10.298	10.000	(1.000)	237	461788			0.00- 0.00	64.32
10.298	10.000	(1.000)	165	386587			0.00- 0.00	53.85
	6 4,4'-DDT					CAS #: 50-29-3		
10.298	10.500	(1.000)	235	717929			0.00- 0.00	100.00(Q)
10.298	10.500	(1.000)	237	461788			0.00- 0.00	64.32
10.298	10.500	(1.000)	165	386587			0.00- 0.00	53.85

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\target_server\gg\chem\gcms-n.i\N030323.b\ND383.D

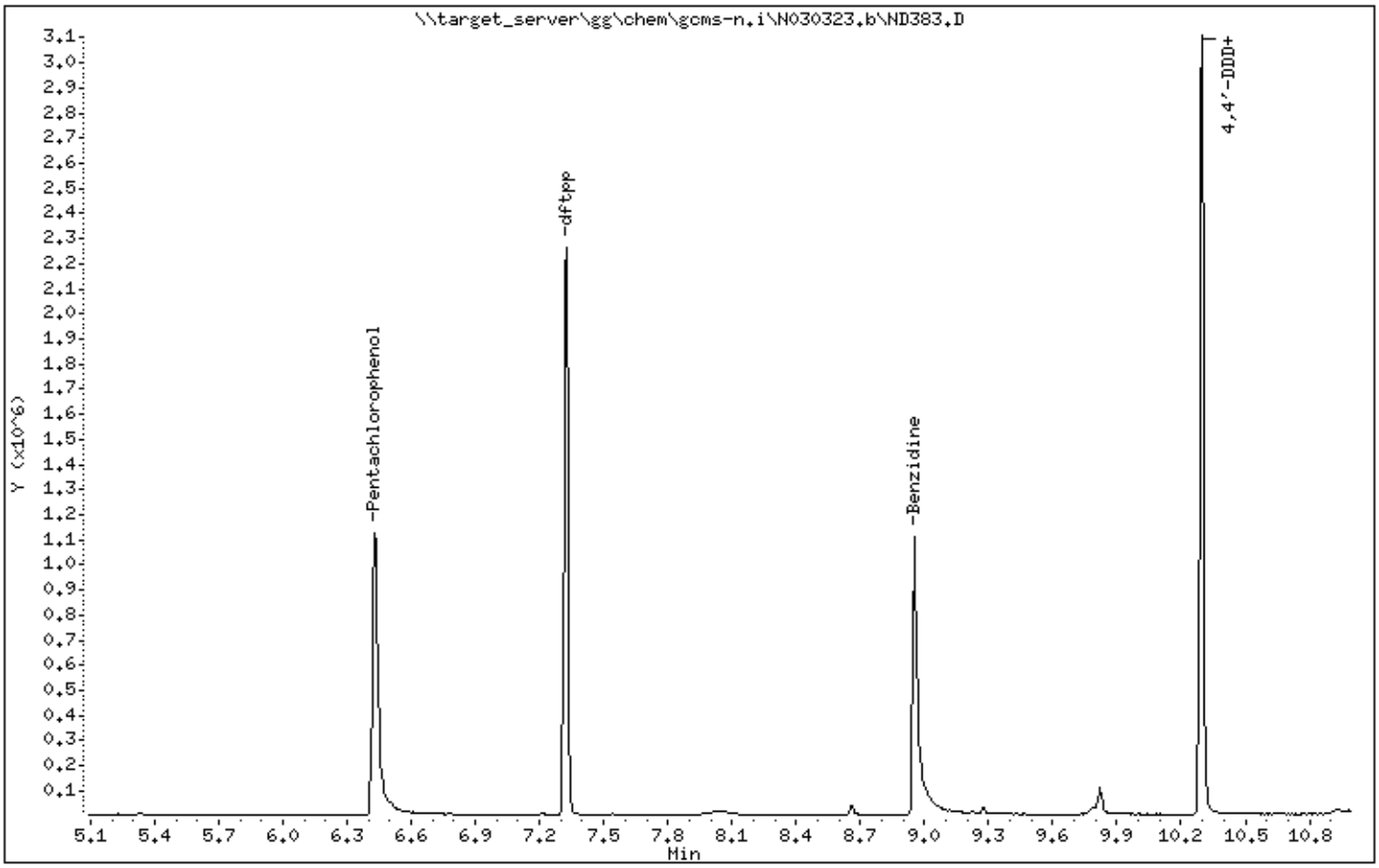
Date : 03-MAR-2023 13:22

Client ID: DFTPP02 Instrument: gcms-n.i

Sample Info: WG333362-1,SQ0595

Operator: DT/CO

Column phase: RTX-5SILMS Column diameter: 0.25



Data File: \\target_server\gg\chem\gcms-n.i\N030323.b\ND383.D

Date : 03-MAR-2023 13:22

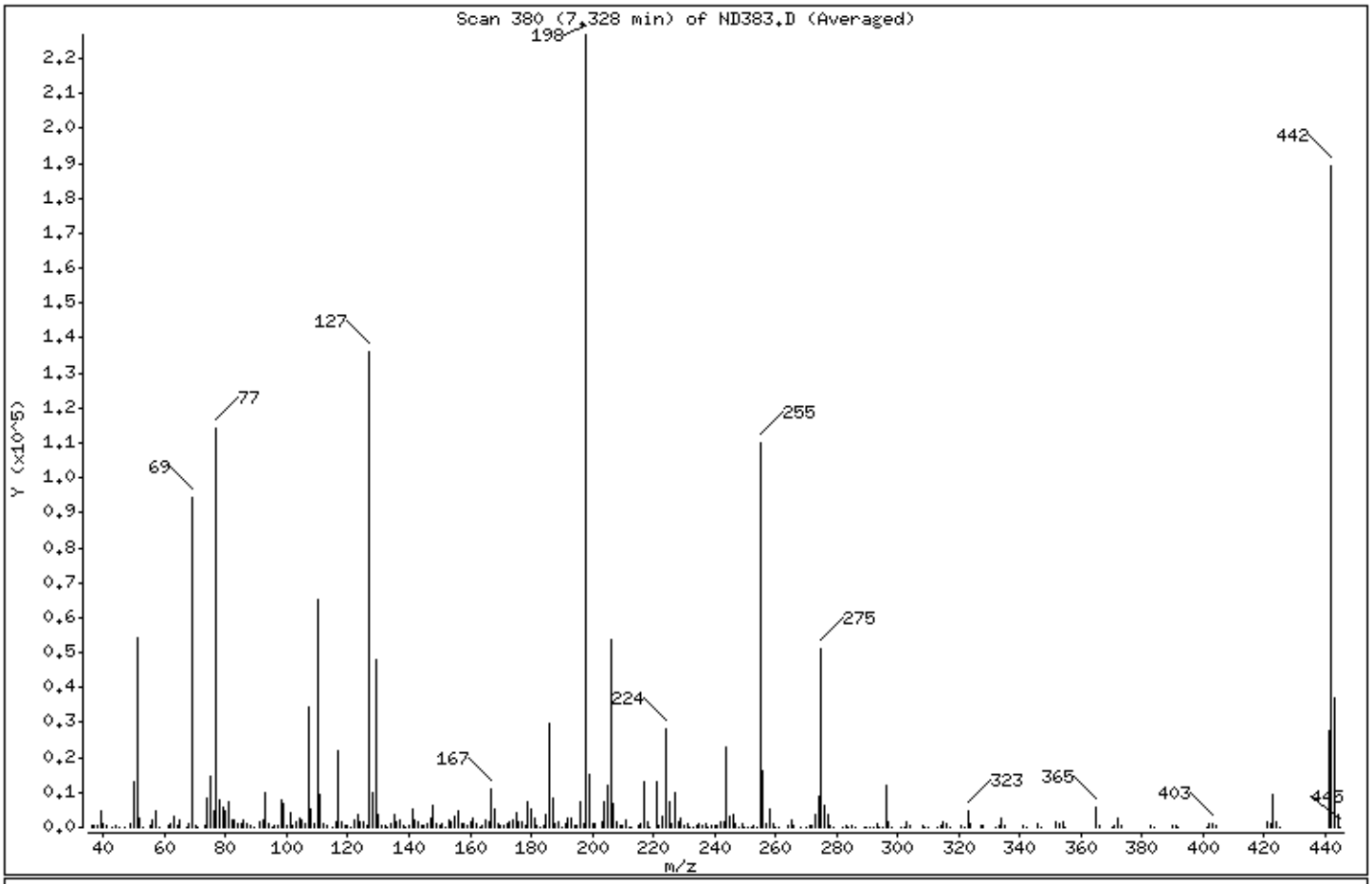
Client ID: DFTPP02 Instrument: gcms-n.i

Sample Info: WG333362-1,SQ0595

Operator: DT/CO

Column phase: RTX-5SILMS Column diameter: 0.25

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	10.00 - 80.00% of mass 198	26.03
68	Less than 2.00% of mass 69	0.63 (1.42)
69	Less than 100.00% of mass 198	44.77
70	Less than 2.00% of mass 69	0.25 (0.55)
127	10.00 - 80.00% of mass 198	62.28
197	Less than 2.00% of mass 198	0.36
199	5.00 - 9.00% of mass 198	6.78
275	10.00 - 60.00% of mass 198	22.11
365	1.00 - 100.00% of mass 198	2.36
441	0.01 - 100.00% of mass 443	11.38 (73.56)
442	50.00 - 100.00% of mass 198	79.47
443	15.00 - 24.00% of mass 442	15.48 (19.47)

Data File: \\target_server\gg\chem\gcms-n.i\N030323.b\ND383.D

Date : 03-MAR-2023 13:22

Client ID: DFTPP02 Instrument: gcms-n.i

Sample Info: WG333362-1,SQ0595

Operator: DT/CO

Column phase: RTX-5SILMS Column diameter: 0.25

Data File: ND383.D
Spectrum: Scans 380-382 (7.328 min), Subtraction Scan 373
Location of Maximum: 198.00
Number of points: 295

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	115	122.00	2005	196.00	7118	277.00	3694
37.00	287	123.00	3406	197.00	1161	278.00	614
38.00	643	124.00	1386	198.00	226773	279.00	54
39.00	4694	125.00	1612	199.00	14971	282.00	104
40.00	209	126.00	423	200.00	1076	283.00	482
41.00	268	127.00	136202	201.00	1269	284.00	260
43.00	173	128.00	9872	203.00	1355	285.00	752
44.00	36	129.00	47933	204.00	7506	286.00	112
45.00	60	130.00	3844	205.00	12033	289.00	55
49.00	248	131.00	762	206.00	53896	290.00	143
50.00	13032	132.00	458	207.00	6627	291.00	127
51.00	54188	133.00	144	208.00	1550	292.00	160
52.00	2791	134.00	1225	209.00	439	293.00	1077
53.00	123	135.00	3623	210.00	515	294.00	219
55.00	155	136.00	1451	211.00	1829	295.00	229
56.00	1888	137.00	1954	212.00	80	296.00	12212
57.00	4751	138.00	384	213.00	64	297.00	1784
58.00	251	139.00	245	215.00	441	298.00	131
61.00	734	140.00	567	216.00	1029	301.00	189
62.00	980	141.00	5454	217.00	12789	302.00	197
63.00	3061	142.00	1910	218.00	1663	303.00	1479
64.00	403	143.00	1380	219.00	54	304.00	439
65.00	1845	144.00	406	221.00	12997	308.00	263
67.00	137	145.00	426	222.00	403	309.00	67
68.00	1258	146.00	846	223.00	3053	310.00	206
69.00	94173	147.00	2777	224.00	28242	313.00	56
70.00	544	148.00	6020	225.00	7107	314.00	670
73.00	583	149.00	1275	226.00	866	315.00	1471
74.00	8595	150.00	346	227.00	9999	316.00	784
75.00	14679	151.00	1128	228.00	1486	317.00	182
76.00	4808	152.00	99	229.00	2467	321.00	429
77.00	114341	153.00	1839	230.00	300	322.00	252
78.00	7738	154.00	1306	231.00	947	323.00	4607
79.00	5970	155.00	3279	232.00	62	324.00	833
80.00	4627	156.00	4726	233.00	215	327.00	765

Data File: \\target_server\gg\chem\gcms-n.i\N030323.b\ND383.D

Date : 03-MAR-2023 13:22

Client ID: DFTPP02 Instrument: gcms-n.i

Sample Info: WG333362-1,SQ0595

Operator: DT/CO

Column phase: RTX-5SILMS Column diameter: 0.25

Data File: ND383.D
Spectrum: Scans 380-382 (7.328 min), Subtraction Scan 373
Location of Maximum: 198.00
Number of points: 295

m/z	Y	m/z	Y	m/z	Y	m/z	Y
78.00	491	136.00	36898	195.00	430	288.00	316
79.00	336	137.00	12536	196.00	572	316.00	847
80.00	849	138.00	16336	197.00	1479	317.00	4249
82.00	27481	139.00	8937	198.00	1693	318.00	2002
84.00	4532	140.00	1973	199.00	69485	319.00	5245
85.00	8189	141.00	2348	200.00	28429	320.00	1477
86.00	8423	142.00	1664	201.00	24808	321.00	2547
87.00	18712	143.00	573	202.00	9461	322.00	617
88.00	27854	144.00	326	203.00	1314	323.00	548
89.00	6452	145.00	501	204.00	248	352.00	3847
90.00	430	146.00	3661	205.00	624	353.00	640
91.00	455	147.00	2091	206.00	6930	354.00	6258
92.00	2211	148.00	3385	207.00	1345	355.00	978
93.00	4966	149.00	8595	208.00	7256	356.00	4277
94.00	1671	150.00	12001	209.00	1469	357.00	594
95.00	358	151.00	9360	210.00	11392	358.00	1264
96.00	751	152.00	3495	211.00	4598	359.00	194
97.00	3919	153.00	434	212.00	47314	360.00	208
98.00	8521	157.00	351	213.00	7987		

Data File: \\target_server\gg\chem\gcms-n.i\N030623.b\ND383.D
Report Date: 16-Mar-2023 07:14

RT	EXP RT	REL RT	MASS	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
				4 Benzidine (continued)				
8.933	9.100	(1.000)	92	106131			0.00- 0.00	8.43
				5 4,4'-DDD		CAS #: 72-54-8		
10.280	10.000	(1.000)	235	781498			0.00- 0.00	100.00(Q)
10.280	10.000	(1.000)	237	498742			0.00- 0.00	63.82
10.280	10.000	(1.000)	165	399397			0.00- 0.00	51.11
				6 4,4'-DDT		CAS #: 50-29-3		
10.280	10.500	(1.000)	235	781498			0.00- 0.00	100.00(Q)
10.280	10.500	(1.000)	237	498742			0.00- 0.00	63.82
10.280	10.500	(1.000)	165	399397			0.00- 0.00	51.11

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\target_server\gg\chem\gcms-n.i\N030623.b\ND383.D

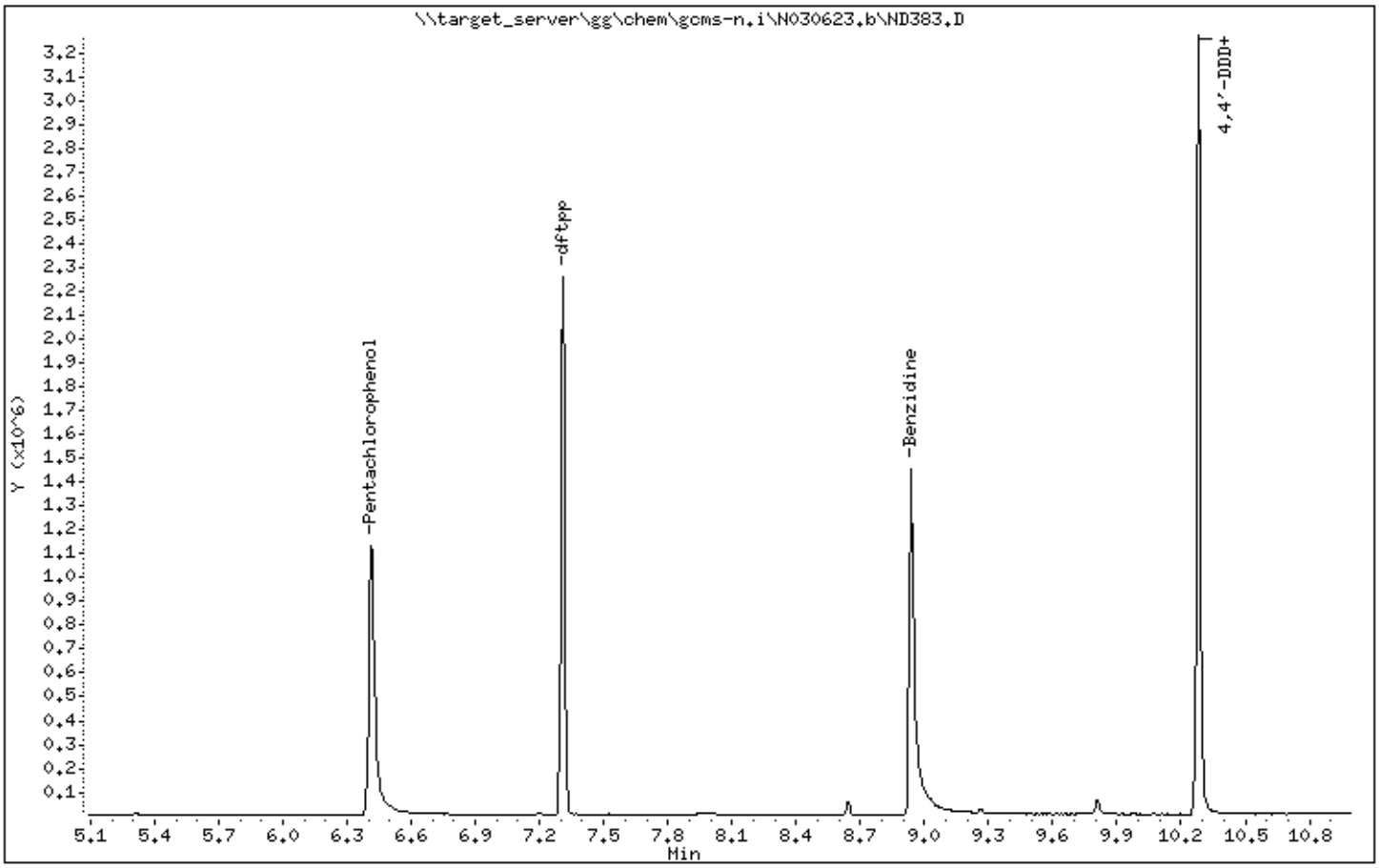
Date : 06-MAR-2023 13:48

Client ID: DFTPP02 Instrument: gcms-n.i

Sample Info: WG333437-1,SQ0595

Operator: DT/CO

Column phase: RTX-5SILMS Column diameter: 0.25



Data File: \\target_server\gg\chem\gcms-n.i\N030623.b\ND383.D

Date : 06-MAR-2023 13:48

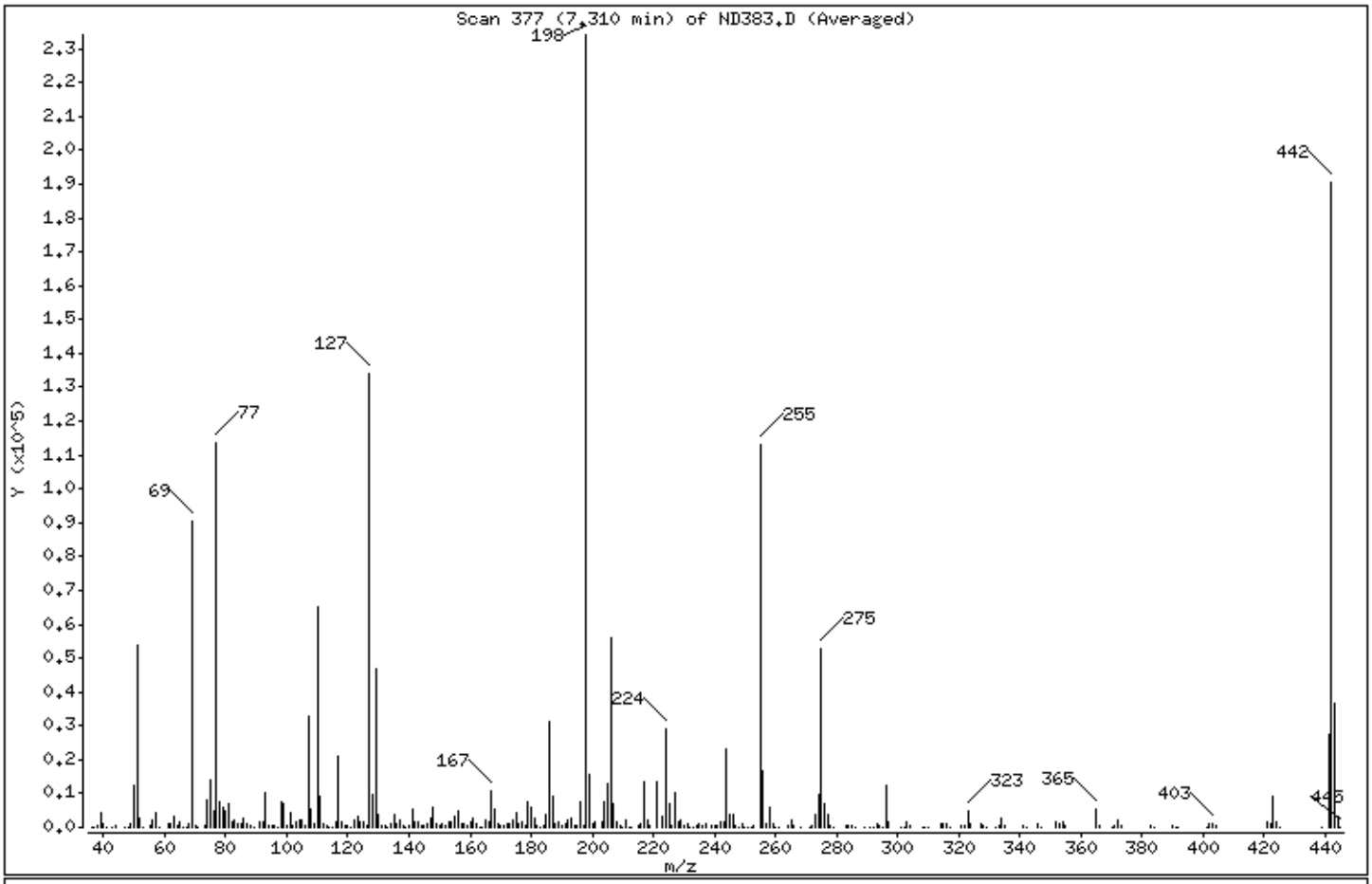
Client ID: DFTPP02 Instrument: gcms-n.i

Sample Info: WG333437-1,SQ0595

Operator: DT/CO

Column phase: RTX-5SILMS Column diameter: 0.25

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	10.00 - 80.00% of mass 198	23.69
68	Less than 2.00% of mass 69	0.57 (1.44)
69	Less than 100.00% of mass 198	39.85
70	Less than 2.00% of mass 69	0.22 (0.56)
127	10.00 - 80.00% of mass 198	57.42
197	Less than 2.00% of mass 198	0.17
199	5.00 - 9.00% of mass 198	6.60
275	10.00 - 60.00% of mass 198	22.43
365	1.00 - 100.00% of mass 198	2.40
441	0.01 - 100.00% of mass 443	11.79 (75.43)
442	50.00 - 100.00% of mass 198	82.07
443	15.00 - 24.00% of mass 442	15.62 (19.04)

Data File: \\target_server\gg\chem\gcms-n.i\N030623.b\ND383.D

Date : 06-MAR-2023 13:48

Client ID: DFTPP02 Instrument: gcms-n.i

Sample Info: WG333437-1,SQ0595

Operator: DT/CO

Column phase: RTX-5SILMS Column diameter: 0.25

Data File: ND383.D
Spectrum: Scans 377-379 (7.310 min), Subtraction Scan 371
Location of Maximum: 198.00
Number of points: 288

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	24	121.00	69	194.00	592	279.00	109
37.00	163	122.00	2246	195.00	390	283.00	437
38.00	703	123.00	3100	196.00	7396	284.00	309
39.00	4137	124.00	1468	197.00	356	285.00	706
41.00	79	125.00	1453	198.00	234133	286.00	66
48.00	64	126.00	428	199.00	15371	289.00	69
49.00	230	127.00	133890	200.00	1271	291.00	57
50.00	12622	128.00	9466	201.00	1378	292.00	201
51.00	53805	129.00	47069	203.00	1434	293.00	922
52.00	2751	130.00	3965	204.00	7594	294.00	271
53.00	137	131.00	724	205.00	12885	295.00	263
55.00	396	132.00	441	206.00	55898	296.00	12564
56.00	1901	133.00	165	207.00	7098	297.00	1649
57.00	4533	134.00	1223	208.00	1633	301.00	157
58.00	242	135.00	3851	209.00	515	302.00	263
61.00	949	136.00	1312	210.00	259	303.00	1578
62.00	926	137.00	1923	211.00	2060	304.00	327
63.00	3038	138.00	478	212.00	237	308.00	104
64.00	422	139.00	205	213.00	115	309.00	54
65.00	1630	140.00	488	215.00	504	310.00	167
66.00	194	141.00	5415	216.00	1173	314.00	825
67.00	174	142.00	1746	217.00	13237	315.00	1315
68.00	1276	143.00	1454	218.00	1891	316.00	883
69.00	90525	144.00	362	219.00	304	317.00	70
70.00	472	145.00	360	221.00	13573	321.00	414
71.00	50	146.00	854	223.00	3233	322.00	275
73.00	627	147.00	2743	224.00	28842	323.00	4611
74.00	8150	148.00	5680	225.00	7103	324.00	861
75.00	14044	149.00	1290	226.00	732	327.00	822
76.00	5030	150.00	376	227.00	10253	328.00	517
77.00	113402	151.00	955	228.00	1505	329.00	53
78.00	7541	152.00	535	229.00	2271	332.00	251
79.00	5870	153.00	1564	230.00	378	333.00	456
80.00	4725	154.00	1374	231.00	1053	334.00	2911
81.00	7192	155.00	3243	232.00	92	335.00	748

Data File: \\target_server\gg\chem\gcms-n.i\N030623.b\ND383.D

Date : 06-MAR-2023 13:48

Client ID: DFTPP02 Instrument: gcms-n.i

Sample Info: WG333437-1,SQ0595

Operator: DT/CO

Column phase: RTX-5SILMS Column diameter: 0.25

Data File: ND383.D
Spectrum: Scans 377-379 (7.310 min), Subtraction Scan 371
Location of Maximum: 198.00
Number of points: 288

m/z	Y	m/z	Y	m/z	Y	m/z	Y
78.00	467	135.00	12048	196.00	618	287.00	509
79.00	333	136.00	36141	197.00	1506	288.00	328
80.00	656	137.00	12415	198.00	1905	316.00	1004
82.00	26776	138.00	16425	199.00	73501	317.00	4198
84.00	3946	139.00	9650	200.00	31048	318.00	2074
85.00	7995	140.00	1916	201.00	27914	319.00	5598
86.00	8256	141.00	2330	202.00	10151	320.00	1752
87.00	17731	142.00	1792	203.00	1653	321.00	2615
88.00	28388	143.00	701	204.00	184	322.00	593
89.00	6011	144.00	364	205.00	579	323.00	614
90.00	681	145.00	598	206.00	7508	352.00	4396
91.00	433	146.00	3795	207.00	1408	353.00	624
92.00	2271	147.00	2042	208.00	7555	354.00	6456
93.00	5088	148.00	3365	209.00	1733	355.00	1178
94.00	1599	149.00	8647	210.00	11769	356.00	4137
95.00	277	150.00	11570	211.00	5234	357.00	577
96.00	928	151.00	9931	212.00	51133	358.00	1427
97.00	3885	152.00	3442	213.00	9023	359.00	251
98.00	8504	153.00	386	214.00	16134	360.00	246
99.00	23122	156.00	63	215.00	2510		

Data File: \\target_server\gg\chem\gcms-n.i\N032023.b\ND391.D

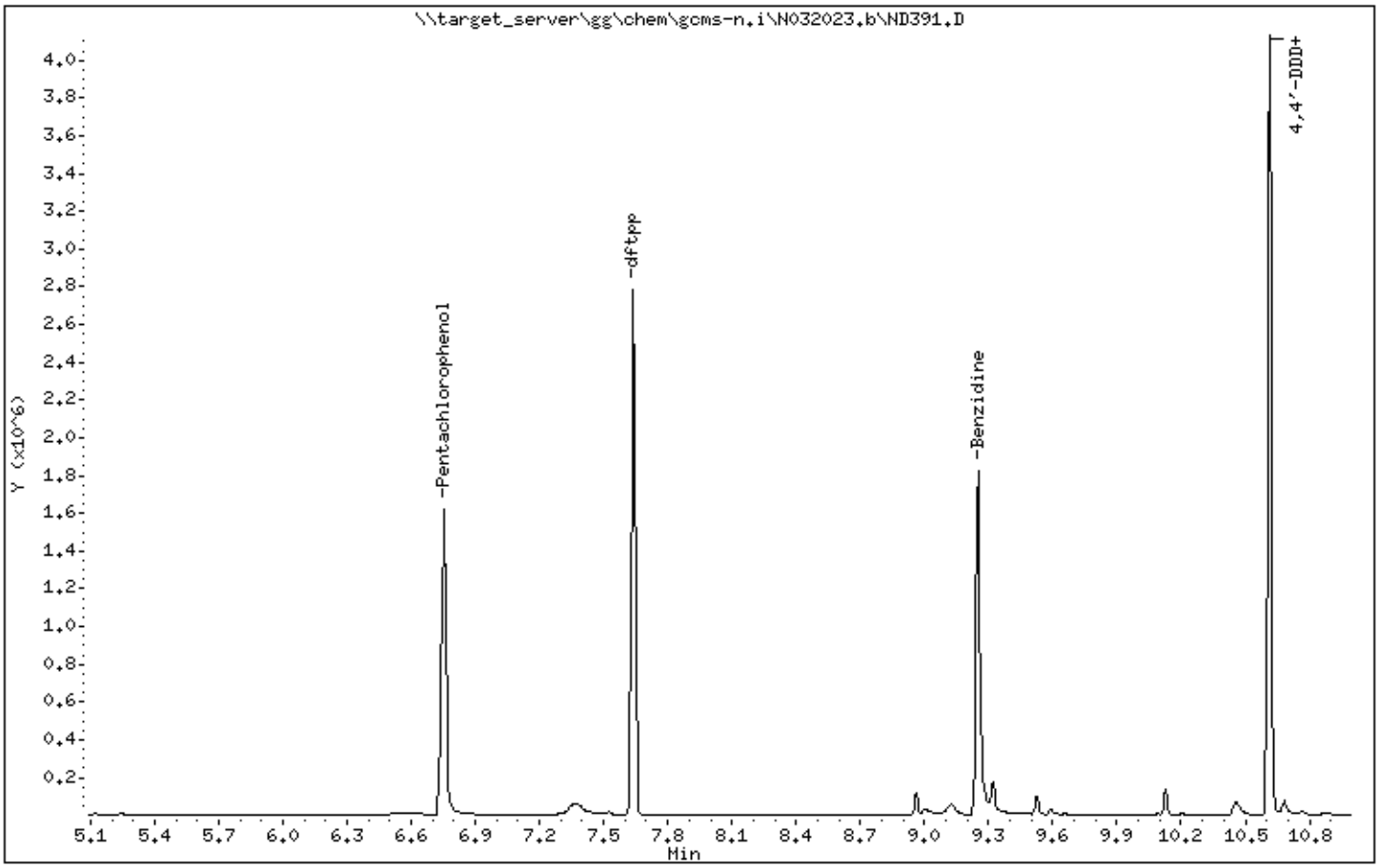
Date : 20-MAR-2023 14:56

Client ID: DFTPP02 Instrument: gcms-n.i

Sample Info: WG334091-1,SQ0595

Operator: DT/EP

Column phase: RTX-5SILMS Column diameter: 0.25



Data File: \\target_server\gg\chem\gcms-n.i\N032023.b\ND391.D

Date : 20-MAR-2023 14:56

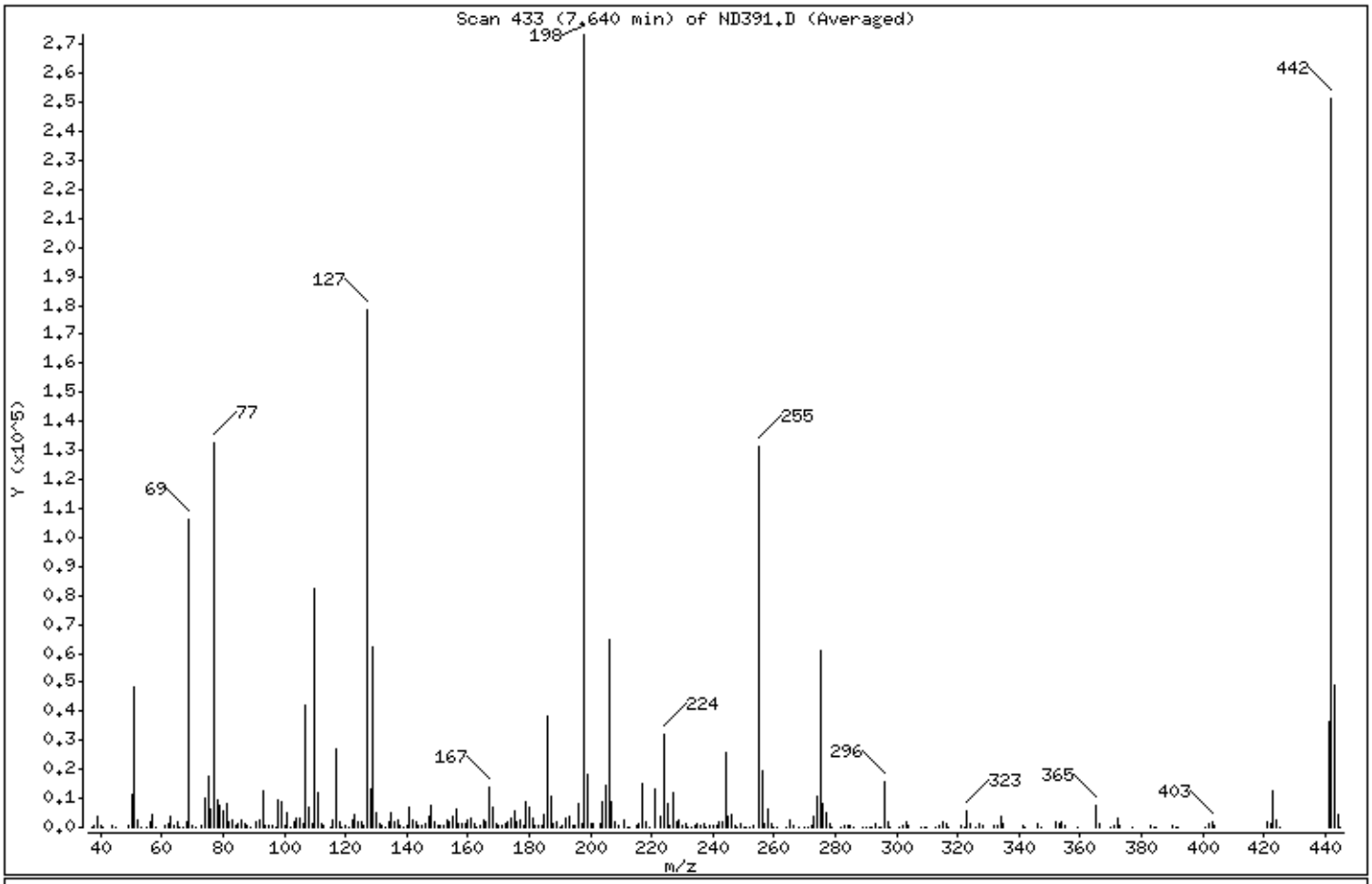
Client ID: DFTPP02 Instrument: gcms-n.i

Sample Info: WG334091-1,SQ0595

Operator: DT/EP

Column phase: RTX-5SILMS Column diameter: 0.25

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	10.00 - 80.00% of mass 198	18.06
68	Less than 2.00% of mass 69	0.59 (1.49)
69	Less than 100.00% of mass 198	39.41
70	Less than 2.00% of mass 69	0.25 (0.63)
127	10.00 - 80.00% of mass 198	64.89
197	Less than 2.00% of mass 198	0.42
199	5.00 - 9.00% of mass 198	6.70
275	10.00 - 60.00% of mass 198	22.43
365	1.00 - 100.00% of mass 198	2.84
441	0.01 - 100.00% of mass 443	13.59 (74.94)
442	50.00 - 100.00% of mass 198	92.77
443	15.00 - 24.00% of mass 442	18.13 (19.54)

Data File: \\target_server\gg\chem\gcms-n.i\N032023.b\ND391.D

Date : 20-MAR-2023 14:56

Client ID: DFTPP02 Instrument: gcms-n.i

Sample Info: WG334091-1,SQ0595

Operator: DT/EP

Column phase: RTX-5SILMS Column diameter: 0.25

Data File: ND391.D
Spectrum: Scans 433-435 (7.640 min), Subtraction Scan 427
Location of Maximum: 198.00
Number of points: 295

m/z	Y	m/z	Y	m/z	Y	m/z	Y
37.00	253	123.00	4429	197.00	1180	283.00	519
38.00	629	124.00	1842	198.00	273322	284.00	319
39.00	3990	125.00	2036	199.00	18290	285.00	936
40.00	156	126.00	539	200.00	1520	286.00	195
41.00	213	127.00	178389	201.00	966	289.00	167
45.00	109	128.00	13224	203.00	1485	290.00	106
49.00	257	129.00	62186	204.00	8878	291.00	56
50.00	11421	130.00	5224	205.00	14617	292.00	201
51.00	48323	131.00	1018	206.00	64538	293.00	1091
52.00	2503	132.00	595	207.00	8488	294.00	313
53.00	166	133.00	270	208.00	1760	295.00	210
55.00	310	134.00	1600	209.00	642	296.00	15417
56.00	1887	135.00	4932	211.00	2347	297.00	2143
57.00	4402	136.00	1868	212.00	200	298.00	57
58.00	181	137.00	2425	213.00	59	301.00	147
61.00	937	138.00	528	215.00	628	302.00	321
62.00	1127	139.00	292	216.00	1178	303.00	2050
63.00	3510	140.00	676	217.00	14868	304.00	517
64.00	479	141.00	6898	218.00	1999	308.00	267
65.00	2072	142.00	2679	219.00	136	309.00	56
66.00	117	143.00	1716	221.00	13395	310.00	216
67.00	110	144.00	473	223.00	3474	313.00	91
68.00	1590	145.00	479	224.00	31765	314.00	751
69.00	106362	146.00	1246	225.00	8024	315.00	1674
70.00	668	147.00	3485	226.00	884	316.00	1094
71.00	130	148.00	7320	227.00	12039	317.00	177
73.00	719	149.00	2072	228.00	1781	321.00	583
74.00	10312	150.00	502	229.00	2622	322.00	299
75.00	17340	151.00	929	230.00	446	323.00	5803
76.00	6059	152.00	652	231.00	1302	324.00	1101
77.00	132075	153.00	2233	232.00	200	326.00	111
78.00	9133	154.00	1867	233.00	285	327.00	1030
79.00	7235	155.00	3875	234.00	715	328.00	612
80.00	5670	156.00	6413	235.00	953	332.00	427
81.00	8348	157.00	1413	236.00	573	333.00	521

Data File: \\target_server\gg\chem\gcms-n.i\N032023.b\ND391.D

Date : 20-MAR-2023 14:56

Client ID: DFTPP02 Instrument: gcms-n.i

Sample Info: WG334091-1,SQ0595

Operator: DT/EP

Column phase: RTX-5SILMS Column diameter: 0.25

Data File: ND391.D
Spectrum: Scans 433-435 (7.640 min), Subtraction Scan 427
Location of Maximum: 198.00
Number of points: 295

m/z	Y	m/z	Y	m/z	Y	m/z	Y
79.00	363	136.00	51632	197.00	1820	288.00	374
80.00	930	137.00	17676	198.00	2443	316.00	843
82.00	33954	138.00	23770	199.00	94226	317.00	5742
84.00	5351	139.00	13149	200.00	40410	318.00	1979
85.00	10385	140.00	2822	201.00	35754	319.00	7752
86.00	10591	141.00	3039	202.00	12869	320.00	1943
87.00	23634	142.00	2224	203.00	1796	321.00	3573
88.00	36842	143.00	847	204.00	315	322.00	740
89.00	8206	144.00	448	205.00	709	323.00	801
90.00	804	145.00	748	206.00	9738	352.00	5203
91.00	557	146.00	5351	207.00	1760	353.00	856
92.00	2936	147.00	2681	208.00	9910	354.00	8882
93.00	6572	148.00	4719	209.00	2112	355.00	1372
94.00	2158	149.00	12250	210.00	14932	356.00	5554
95.00	363	150.00	16508	211.00	6168	357.00	802
96.00	1203	151.00	13672	212.00	63541	358.00	1677
97.00	5510	152.00	4648	213.00	11319	359.00	290
98.00	11423	153.00	488	214.00	19864	360.00	219
99.00	30728	157.00	392	215.00	2904		

Raw QC Data Section

Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

SDG: SQ0595
Lab ID: WG332122-1
Client ID: Method Blank
Matrix: SL
Lab File ID: N7594.D

Sample Date: N/A
Extract Date: 08-FEB-23
Extracted By: SR
Extraction Method: SW846 3550C
Lab Prep Batch: WG332122

Report Date: 22-MAR-23
Analysis Date: 03-MAR-23
Analyst: DT/CO
Analysis Method: SW846 8270D SIM
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	0.010	mg/Kgdrywt	1	.02	0.020	0.0026	0.010
2-Methylnaphthalene	U	0.010	mg/Kgdrywt	1	.02	0.020	0.0022	0.010
Acenaphthylene	U	0.010	mg/Kgdrywt	1	.02	0.020	0.0012	0.010
Acenaphthene	U	0.010	mg/Kgdrywt	1	.02	0.020	0.0015	0.010
Fluorene	U	0.010	mg/Kgdrywt	1	.02	0.020	0.0032	0.010
Phenanthrene	U	0.010	mg/Kgdrywt	1	.02	0.020	0.0018	0.010
Anthracene	U	0.010	mg/Kgdrywt	1	.02	0.020	0.0012	0.010
Fluoranthene	U	0.010	mg/Kgdrywt	1	.02	0.020	0.0018	0.010
Pyrene	U	0.010	mg/Kgdrywt	1	.02	0.020	0.0021	0.010
Benzo(a)anthracene	U	0.010	mg/Kgdrywt	1	.02	0.020	0.0019	0.010
Chrysene	U	0.010	mg/Kgdrywt	1	.02	0.020	0.0017	0.010
Benzo(b)Fluoranthene	U	0.010	mg/Kgdrywt	1	.02	0.020	0.0024	0.010
Benzo(k)fluoranthene	U	0.010	mg/Kgdrywt	1	.02	0.020	0.0034	0.010
Benzo(a)pyrene	U	0.010	mg/Kgdrywt	1	.02	0.020	0.0033	0.010
Indeno(1,2,3-cd)pyrene	U	0.010	mg/Kgdrywt	1	.02	0.020	0.0019	0.010
Dibenzo(a,h)anthracene	U	0.010	mg/Kgdrywt	1	.02	0.020	0.0018	0.010
Benzo(g,h,i)perylene	U	0.010	mg/Kgdrywt	1	.02	0.020	0.0020	0.010
2-Methylnaphthalene-D10		72.0	mg/Kgdrywt					
Fluorene-D10		75.8	mg/Kgdrywt					
Pyrene-D10		82.7	mg/Kgdrywt					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
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Data File: \\target_server\gg\chem\gcms-n.i\N030323.b\N7594.D
Report Date: 16-Mar-2023 07:44

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-n.i\N030323.b\N7594.D
Lab Smp Id: WG332122-1 Client Smp ID: WG332122-Blank
Inj Date : 03-MAR-2023 20:57
Operator : DT/CO Inst ID: gcms-n.i
Smp Info : WG332122-1,SQ0595
Misc Info : WG333362,WG332122,WG333362-4,SQ0595-1
Comment :
Method : \\target_server\gg\chem\gcms-n.i\N030323.b\NSPSIM18.m
Meth Date : 06-Mar-2023 11:06 coneill Quant Type: ISTD
Cal Date : 03-MAR-2023 16:29 Cal File: N7587.D
Als bottle: 14 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.12
Processing Host: V200T4

Concentration Formula: Amt * DF * (Vt/Ws*Vi)*(100/(100-M))*1000 * CpndVariable

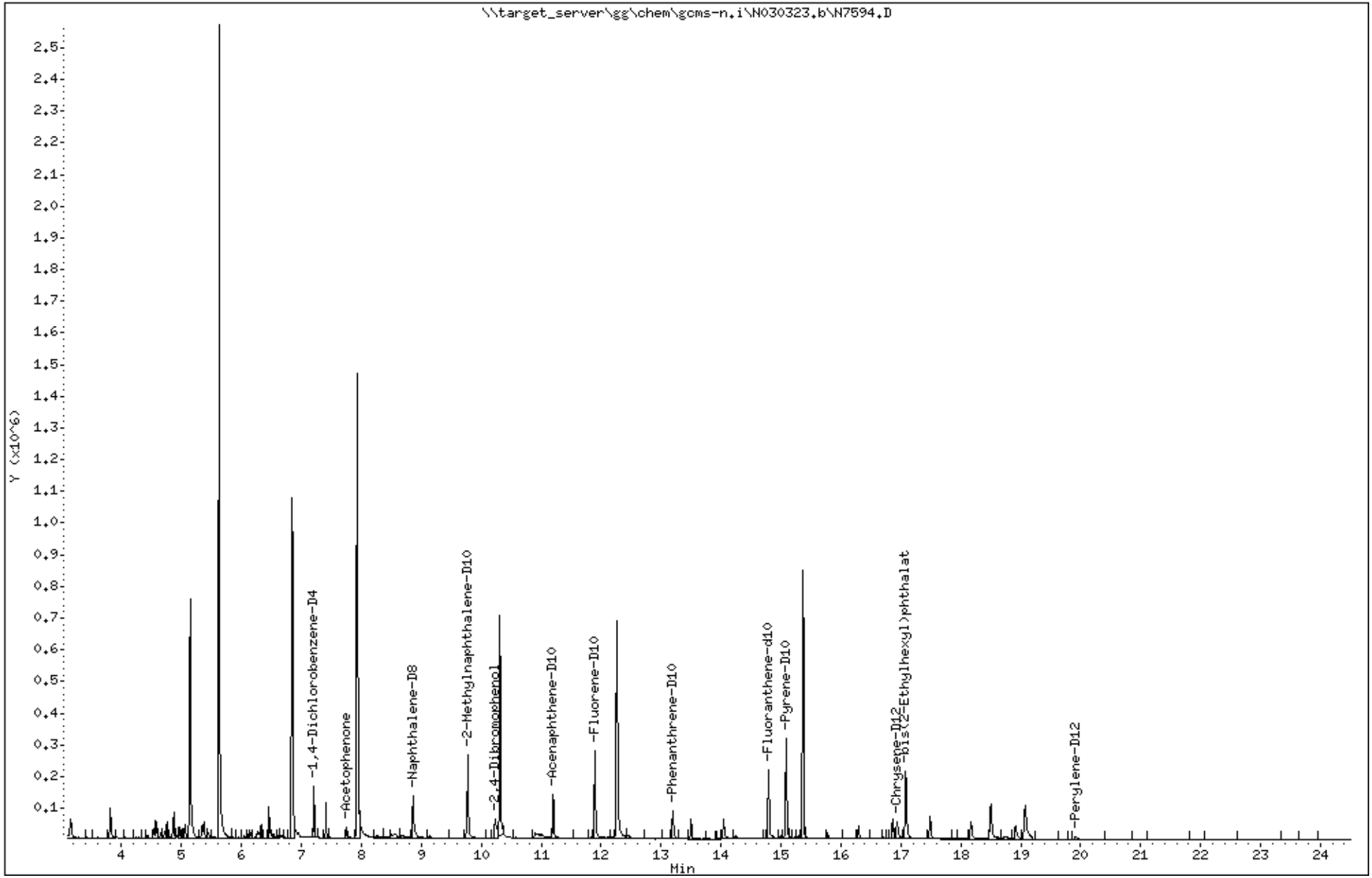
Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.00100	Final Volume (L)
Ws	0.03000	Weight of Sample (Kg)
Vi	1.000	Volume injected (uL)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

			QUANT SIG					CONCENTRATIONS ON-COLUMN	FINAL	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/ml)	(ug/Kgdrywt)	REVIEW COD
$	1	1,4-Dioxane-d8	96	3.146	2.988	(0.436)	76469	2.42249	80.7(Q)	
*	10	1,4-Dichlorobenzene-D4	152	7.211	7.211	(1.000)	53199	0.80000	(Q)	
	15	Acetophenone	105	7.752	7.752	(0.874)	27143	0.24663	8.22(a)	
*	27	Naphthalene-D8	136	8.866	8.867	(1.000)	190838	0.80000		
$	33	2-Methylnaphthalene-D10	152	9.768	9.769	(1.102)	186662	1.44066	48.0	
$	38	2,4-Dibromophenol	252	10.242	10.215	(0.915)	101624	2.71197	90.4	
*	48	Acenaphthene-D10	164	11.192	11.204	(1.000)	96018	0.80000		
$	56	Fluorene-D10	174	11.897	11.897	(1.063)	166891	1.51504	50.5	
*	66	Phenanthrene-D10	188	13.189	13.190	(1.000)	140343	0.80000		
$	71	Fluoranthene-d10	212	14.797	14.798	(1.122)	226837	1.90275	63.4	
$	73	Pyrene-D10	212	15.086	15.098	(0.891)	269972	1.65414	55.1	
*	78	Chrysene-D12	240	16.941	16.920	(1.000)	67060	0.80000		
	80	bis(2-Ethylhexyl)phthalate	149	17.075	17.087	(1.008)	242606	1.49522	49.8(a)	
*	85	Perylene-D12	264	19.912	19.912	(1.000)	38190	0.80000		

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.

Data File: \\target_server\gg\chem\gcms-n.i\N030323.b\N7594.D
Date : 03-MAR-2023 20:57
Client ID: WG332122-Blank
Instrument: gcms-n.i
Sample Info: WG332122-1,SQ0595
Volume Injected (uL): 1.0
Operator: DT/CO
Column phase: ZB5-MS
Column diameter: 0.25



Data File: \\target_server\gg\chem\gcms-n.i\N030323.b\N7594.D

Date : 03-MAR-2023 20:57

Client ID: WG332122-Blank

Instrument: gcms-n.i

Sample Info: WG332122-1,SQ0595

Volume Injected (uL): 1.0

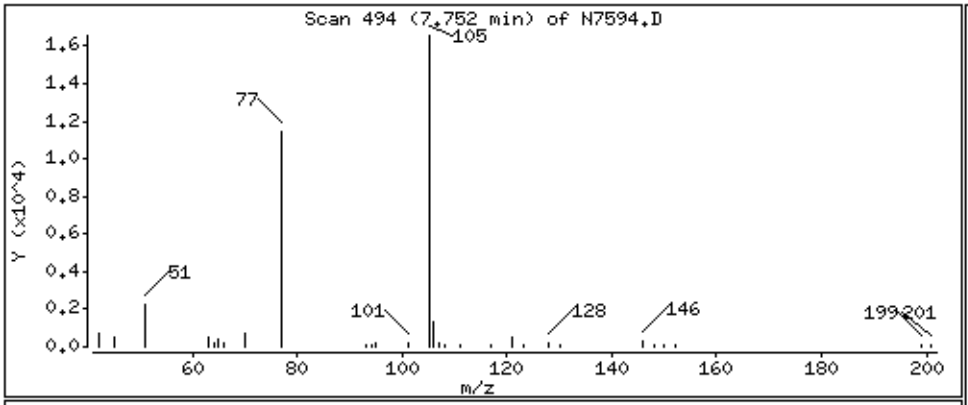
Operator: DT/CO

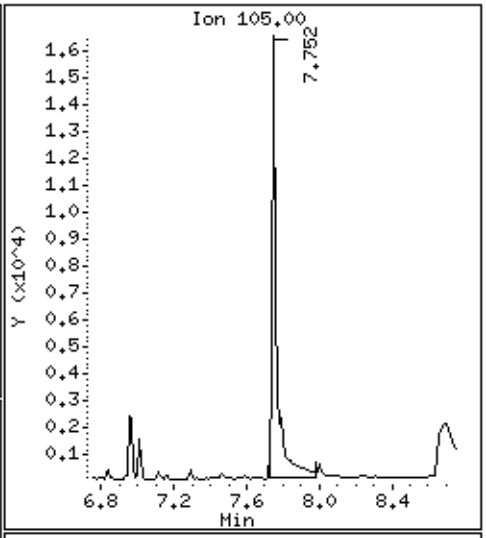
Column phase: ZB5-MS

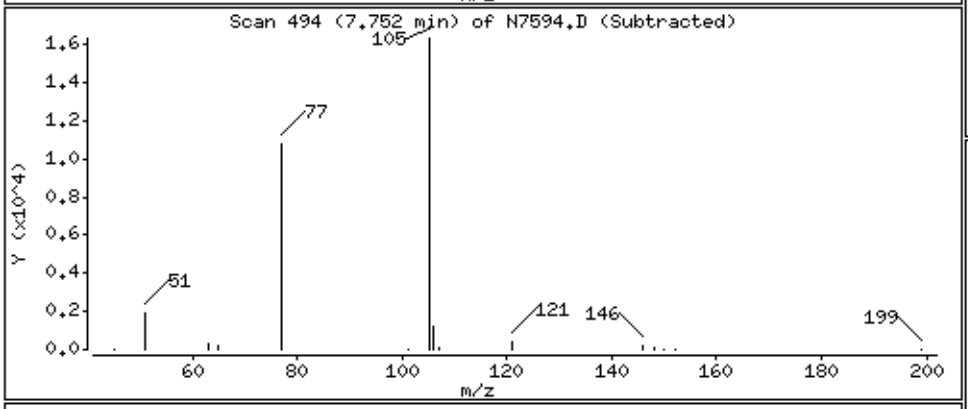
Column diameter: 0.25

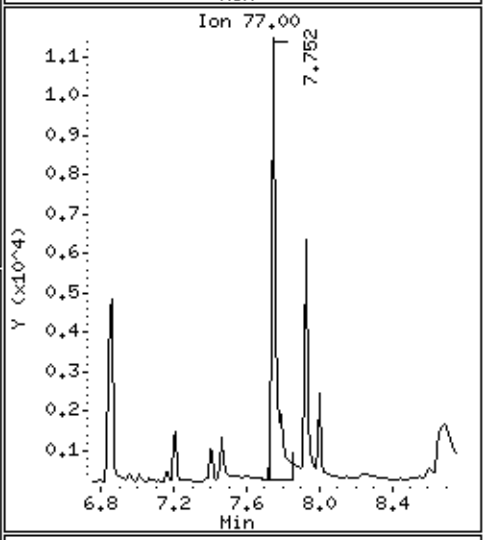
15 Acetophenone

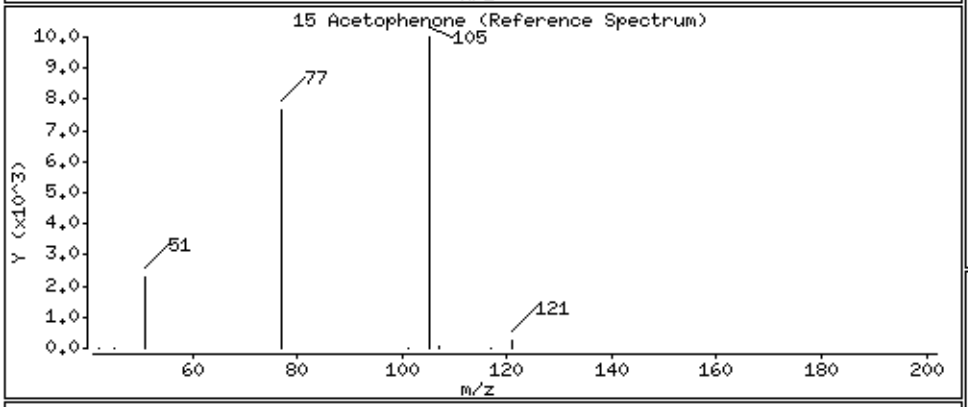
Concentration: 8.22 ug/Kgdrywt

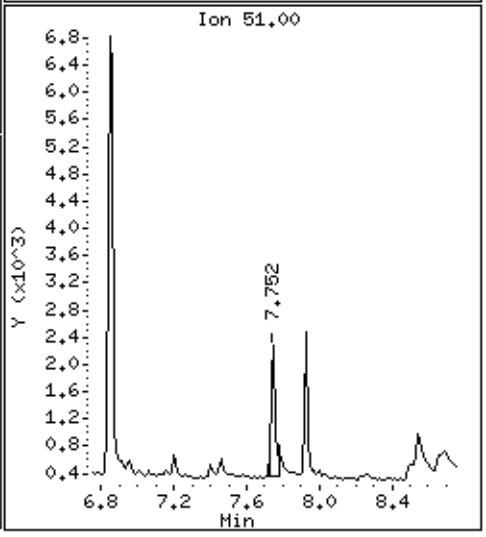


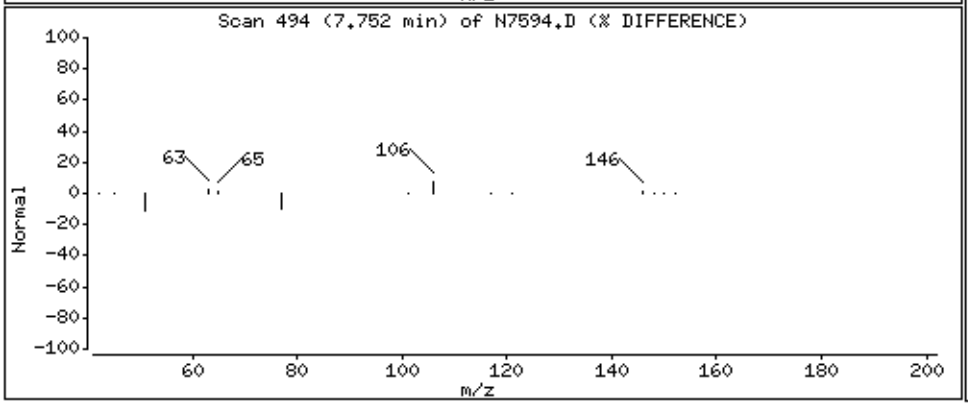












Data File: \\target_server\gg\chem\gcms-n.i\N030323.b\N7594.D

Date : 03-MAR-2023 20:57

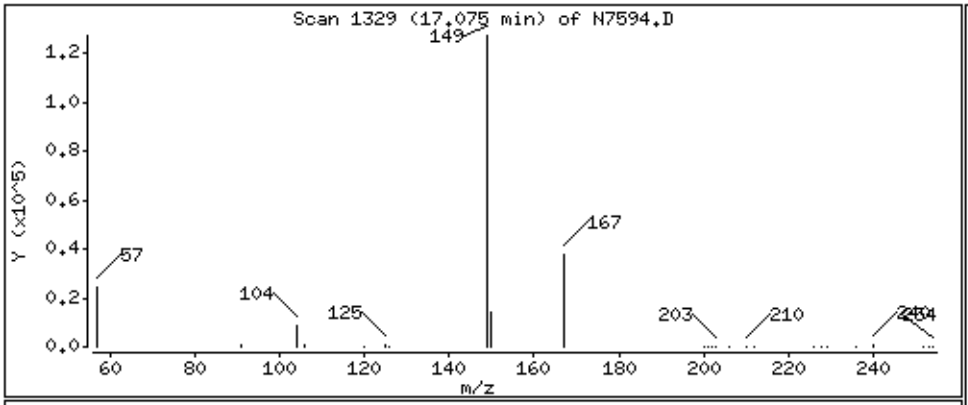
Client ID: WG332122-Blank | Instrument: gcms-n.i

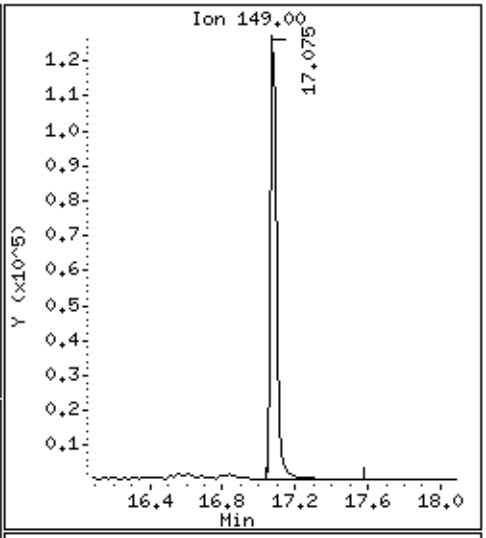
Sample Info: WG332122-1,SQ0595

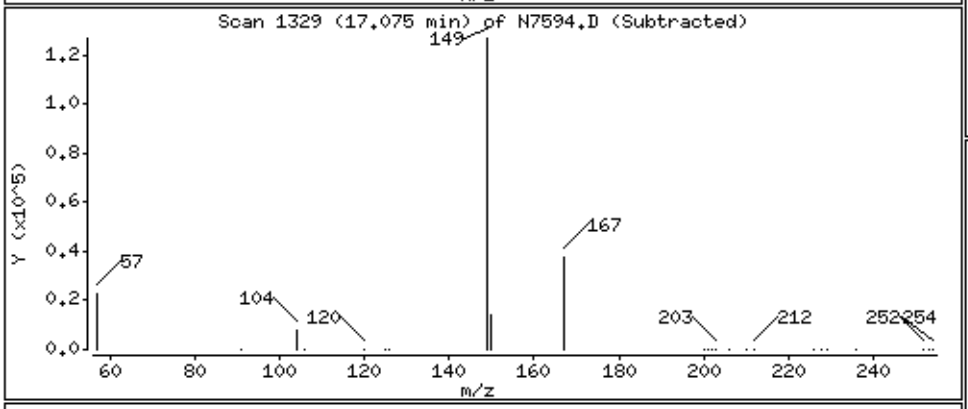
Volume Injected (uL): 1.0 | Operator: DT/CO

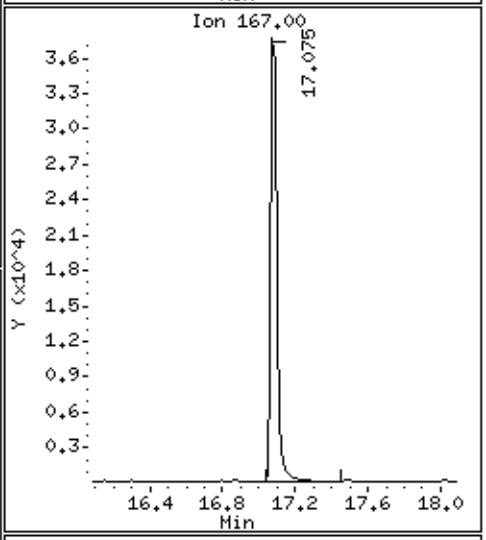
Column phase: ZB5-MS | Column diameter: 0.25

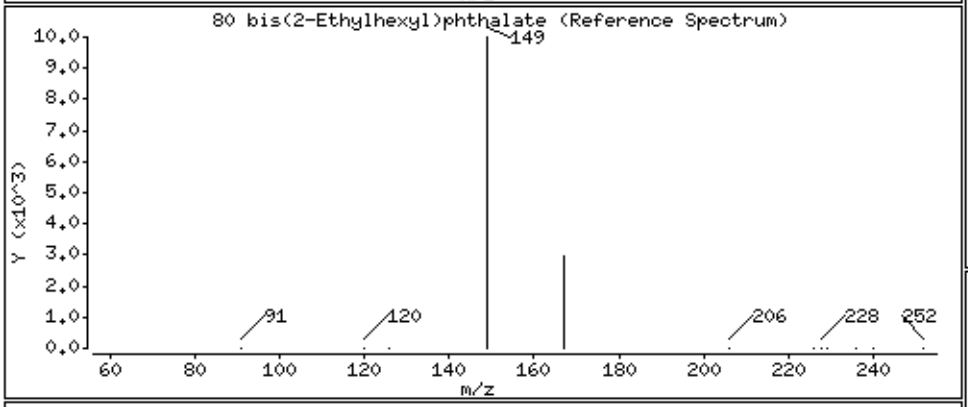
80 bis(2-Ethylhexyl)phthalate | Concentration: 49.8 ug/Kgdrywt

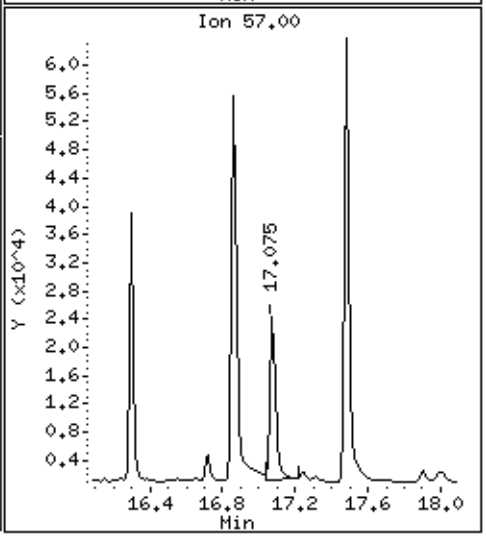


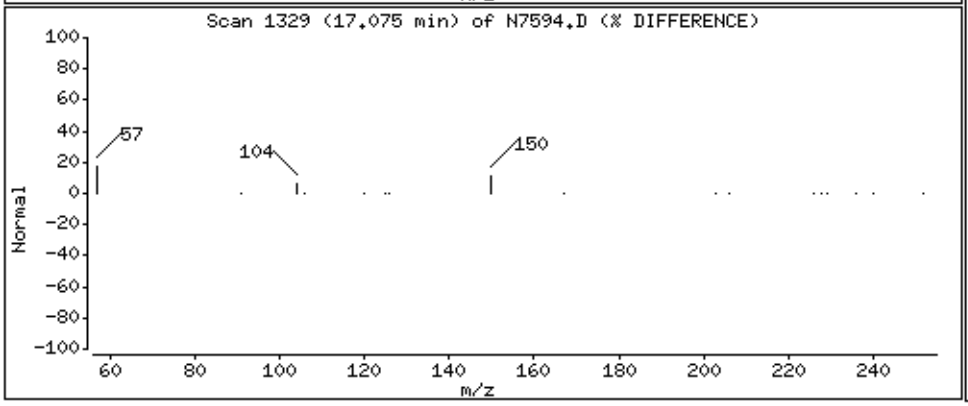












Katahdin
ANALYTICAL SERVICES

LCS/LCSD Recovery Report

LCS ID: WG332122-2RA
LCSD ID: WG332122-3RA
SDG: SQ0595
LCS File ID: N7617.D

Extract Date: 08-FEB-23
Extracted By: SR
Extraction Method: SW846 3550C
Lab Prep Batch: WG332122
LCSD File ID: N7618.D

Analysis Date: 06-MAR-23
Analyst: DT/CO
Analysis Method: SW846 8270D SIM
Matrix: SL
Report Date: 22-MAR-23

Compound	Spike Amt	LCS Conc	LCS Rec (%)	LCSD Conc	LCSD Rec (%)	Conc Units	RPD (%)	RPD Limit	Limits
Naphthalene	0.167	0.0944	56.5	0.0996	59.6	mg/Kgdrywt	5	20	38-111
2-Methylnaphthalene	0.167	0.0930	55.7	0.0987	59.1	mg/Kgdrywt	6	20	39-114
Acenaphthylene	0.167	0.0765	45.8	0.0783	46.9	mg/Kgdrywt	2	20	39-116
Acenaphthene	0.167	0.0901	54.0	0.0935	56.0	mg/Kgdrywt	4	20	44-111
Fluorene	0.167	0.106	63.5	0.109	65.3	mg/Kgdrywt	3	20	47-114
Phenanthrene	0.167	0.112	67.1	0.111	66.5	mg/Kgdrywt	1	20	49-113
Anthracene	0.167	0.104	62.3	0.106	63.5	mg/Kgdrywt	2	20	50-114
Fluoranthene	0.167	0.123	73.6	0.124	74.2	mg/Kgdrywt	1	20	55-119
Pyrene	0.167	0.0994	59.5	0.102	61.1	mg/Kgdrywt	2	20	55-117
Benzo(a)anthracene	0.167	0.114	68.3	0.115	68.9	mg/Kgdrywt	1	20	54-122
Chrysene	0.167	0.124	74.2	0.123	73.6	mg/Kgdrywt	1	20	57-118
Benzo(b)Fluoranthene	0.167	0.136	81.4	0.135	80.8	mg/Kgdrywt	1	20	53-128
Benzo(k)fluoranthene	0.167	0.109	65.3	0.0991	59.3	mg/Kgdrywt	10	20	56-123
Benzo(a)pyrene	0.167	0.105	62.9	0.101	60.5	mg/Kgdrywt	4	20	50-125
Indeno(1,2,3-cd)pyrene	0.167	0.102	61.1	0.109	65.3	mg/Kgdrywt	7	20	49-130
Dibenzo(a,h)anthracene	0.167	0.0992	59.4	0.107	64.1	mg/Kgdrywt	8	20	50-129
Benzo(g,h,i)perylene	0.167	0.0876	52.4	0.0925	55.4	mg/Kgdrywt	5	20	49-127
2-Methylnaphthalene-D10			59.2		60.6				19-94
Fluorene-D10			63.8		64.7				20-96
Pyrene-D10			71.8		71.2				31-128

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Data File: \\target_server\gg\chem\gcms-n.i\N030623.b\N7617.D
Report Date: 16-Mar-2023 07:44

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-n.i\N030623.b\N7617.D
Lab Smp Id: WG332122-2RA Client Smp ID: WG332122-LCS
Inj Date : 06-MAR-2023 22:52
Operator : DT/CO Inst ID: gcms-n.i
Smp Info : WG332122-2RA,SQ0595
Misc Info : WG333437,WG332122,WG333437-4,SQ0595-3
Comment   :
Method   : \\target_server\gg\chem\gcms-n.i\N030623.b\NSPSIM19.m
Meth Date : 07-Mar-2023 11:13 coneill Quant Type: ISTD
Cal Date : 06-MAR-2023 16:55 Cal File: N7608.D
Als bottle: 16 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.12

Concentration Formula: Amt * DF * (Vt/Ws*Vi)*(100/(100-M))*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.00100	Final Volume (L)
Ws	0.03000	Weight of Sample (Kg)
Vi	1.000	Volume injected (uL)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

			QUANT SIG					CONCENTRATIONS		
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/ml)	FINAL (ug/Kgdrywt)	REVIEW COD
$	1	1,4-Dioxane-d8	96	3.125	2.999	(0.435)	21047	0.53721	17.9(R)	
	2	1,4-Dioxane	88	3.157	3.041	(0.439)	54119	1.32324	44.1(R)	
	3	N-Nitrosodimethylamine	74	3.664	3.559	(0.510)	149248	2.63726	87.9	
	4	Pyridine	79	3.706	3.569	(0.515)	346231	4.08122	136	
	5	Benzaldehyde	77	6.639	6.618	(0.923)	157811	2.92294	97.4	
	6	Phenol	94	6.847	6.837	(0.952)	759199	6.18235	206(Q)	
	7	Bis(2-Chloroethyl)ether	93	6.878	6.878	(0.957)	279246	2.72993	91.0	
	8	2-Chlorophenol	128	6.951	6.941	(0.967)	654894	5.96027	199	
	9	1,3-Dichlorobenzene	146	7.117	7.118	(0.990)	325618	2.77418	92.5	
*	10	1,4-Dichlorobenzene-D4	152	7.190	7.191	(1.000)	66954	0.80000	(Q)	
	11	1,4-Dichlorobenzene	146	7.211	7.211	(1.003)	329248	2.63482	87.8	
	12	1,2-Dichlorobenzene	146	7.409	7.399	(1.030)	323803	2.75295	91.8	
	13	2-Methylphenol	108	7.596	7.596	(1.056)	490736	5.08920	170	
	14	2,2'-Oxybis(1-chloropropane)	45	7.575	7.565	(1.054)	141551	2.27747	75.9(Q)	
	15	Acetophenone	105	7.721	7.721	(0.873)	466801	3.35132	112	
	16	N-Nitroso-di-n-propylamine	70	7.752	7.752	(1.078)	168014	2.56238	85.4	
	17	3&4-Methylphenol	108	7.804	7.804	(1.085)	513145	5.27482	176	
	18	Hexachloroethane	117	7.835	7.825	(1.090)	118038	2.66807	88.9	
	19	Nitrobenzene	77	7.929	7.929	(0.897)	264109	2.36597	78.9	
	20	Isophorone	82	8.255	8.255	(0.933)	511471	3.12318	104	
	21	2-Nitrophenol	139	8.357	8.356	(0.945)	356402	6.05248	202	

Data File: \\target_server\gg\chem\gcms-n.i\N030623.b\N7617.D
Report Date: 16-Mar-2023 07:44

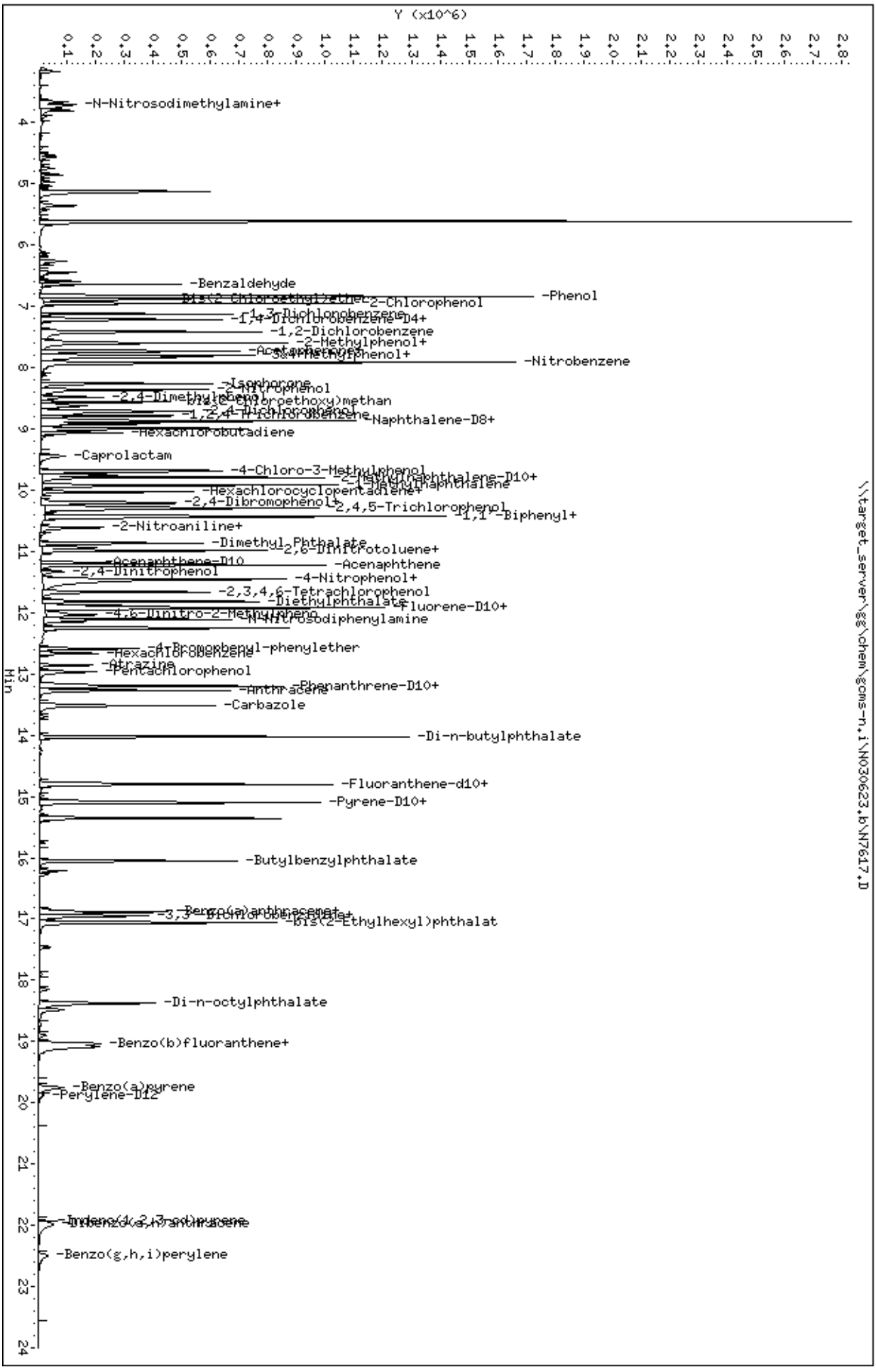
							CONCENTRATIONS		
		QUANT SIG					ON-COLUMN	FINAL	
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/ml)	(ug/Kgdrywt)	REVIEW COD
	22 2,4-Dimethylphenol	107	8.481	8.471	(0.959)	112207	1.10027	36.7	
	23 bis(2-Chloroethoxy)methane	93	8.561	8.561	(0.968)	332424	2.85691	95.2	
	25 2,4-Dichlorophenol	162	8.719	8.708	(0.986)	519507	5.53062	184	
	26 1,2,4-Trichlorobenzene	180	8.787	8.776	(0.994)	264529	2.66985	89.0	
*	27 Naphthalene-D8	136	8.844	8.844	(1.000)	242229	0.80000		
	28 Naphthalene	128	8.866	8.867	(1.003)	877970	2.83282	94.4	
	29 4-Chloroaniline	127	8.866	8.980	(1.003)	108850	0.95474	31.8(aQ)	
	30 Hexachlorobutadiene	225	9.059	9.059	(1.024)	117283	2.50570	83.5	
	31 Caprolactam	113	9.444	9.478	(1.068)	119483	3.44905	115	
	32 4-Chloro-3-Methylphenol	107	9.687	9.688	(1.095)	511797	6.47006	216	
$	33 2-Methylnaphthalene-D10	152	9.755	9.755	(1.103)	196549	1.18462	39.5	
	34 2-Methylnaphthalene	142	9.796	9.796	(1.108)	625514	2.78870	93.0	
	35 1-Methylnaphthalene	142	9.917	9.931	(1.121)	530545	2.58721	86.2	
	36 Hexachlorocyclopentadiene	237	10.025	10.026	(0.897)	78591	2.05875	68.6	
	37 1,2,4,5-Tetrachlorobenzene	216	10.025	10.039	(0.897)	225169	2.62833	87.6	
$	38 2,4-Dibromophenol	252	10.201	10.202	(0.912)	117585	2.24924	75.0	
	39 2,4,6-Trichlorophenol	196	10.215	10.215	(0.914)	336517	5.93144	198	
	40 2,4,5-Trichlorophenol	196	10.282	10.283	(0.920)	400011	5.57781	186	
	41 1,1'-Biphenyl	154	10.417	10.431	(0.932)	706520	2.93691	97.9	
	42 2-Chloronaphthalene	164	10.431	10.445	(0.933)	170485	2.69813	89.9	
	43 2-Nitroaniline	65	10.607	10.621	(0.949)	125111	3.05070	102	
	44 Dimethyl Phthalate	163	10.862	10.885	(0.971)	662355	3.12844	104(R)	
	45 2,6-Dinitrotoluene	165	10.939	10.951	(0.978)	144922	2.84906	95.0	
	46 Acenaphthylene	152	10.983	10.995	(0.982)	688967	2.29486	76.5	
	47 3-Nitroaniline	138	10.607	10.621	(0.949)	199406	2.95166	98.4	
*	48 Acenaphthene-D10	164	11.181	11.182	(1.000)	126817	0.80000		
	49 Acenaphthene	153	11.214	11.226	(1.003)	532926	2.70216	90.1	
	50 2,4-Dinitrophenol	184	11.325	11.325	(1.013)	78401	4.89233	163	
	51 4-Nitrophenol	109	11.501	11.490	(1.029)	117192	8.75316	292(Q)	
	52 Dibenzofuran	168	11.457	11.468	(1.025)	781363	3.18532	106	
	53 2,4-Dinitrotoluene	165	10.939	10.951	(0.978)	144922	2.84906	95.0	
	54 2,3,4,6-Tetrachlorophenol	232	11.666	11.666	(1.043)	255958	5.05711	168	
	55 Diethylphthalate	149	11.820	11.831	(1.057)	685438	3.38627	113	
$	56 Fluorene-D10	174	11.875	11.886	(1.062)	173876	1.27669	42.6	
	57 Fluorene	166	11.919	11.930	(1.066)	607370	3.16840	106	
	58 4-Chlorophenyl-phenylether	204	11.941	11.952	(1.068)	275964	2.98820	99.6	
	59 4-Nitroaniline	138	10.607	10.621	(0.949)	199406	2.95166	98.4	
	60 4,6-Dinitro-2-Methylphenol	198	12.040	12.040	(0.914)	166396	5.93679	198	
	61 N-Nitrosodiphenylamine	169	12.106	12.117	(0.919)	377536	2.20644	73.5(R)	
	62 4-Bromophenyl-phenylether	248	12.585	12.595	(0.956)	154394	2.89367	96.4	
	63 Hexachlorobenzene	284	12.667	12.677	(0.962)	154632	3.25326	108	
	64 Atrazine	200	12.851	12.872	(0.976)	152491	3.70760	124	
	65 Pentachlorophenol	266	12.964	12.964	(0.984)	147195	5.76275	192	
*	66 Phenanthrene-D10	188	13.169	13.179	(1.000)	177235	0.80000		
	67 Phenanthrene	178	13.199	13.210	(1.002)	833706	3.36461	112	
	68 Anthracene	178	13.271	13.272	(1.008)	795783	3.11282	104	
	69 Carbazole	167	13.517	13.518	(1.026)	784648	4.01817	134	
	70 Di-n-butylphthalate	149	14.020	14.032	(1.065)	1250562	3.76801	126	
$	71 Fluoranthene-d10	212	14.775	14.787	(1.122)	233944	1.46870	49.0	
	72 Fluoranthene	202	14.798	14.809	(1.124)	810329	3.69922	123	
$	73 Pyrene-D10	212	15.075	15.087	(0.892)	280628	1.43637	47.9	
	74 Pyrene	202	15.098	15.109	(0.893)	824162	2.98304	99.4	
	75 Butylbenzylphthalate	149	16.053	16.064	(0.949)	475625	3.47585	116(R)	
	76 3,3'-Dichlorobenzidine	252	16.919	16.920	(1.001)	10624	0.37267	12.4(aQR)	

Data File: \\target_server\gg\chem\gcms-n.i\N030623.b\N7617.D
Report Date: 16-Mar-2023 07:44

		Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	CONCENTRATIONS FINAL (ug/Kgdrywt)	REVIEW COD
	77	Benzo(a)anthracene	228	16.886	16.898	(0.999)	472811	3.41022	114	
*	78	Chrysene-D12	240	16.908	16.908	(1.000)	83058	0.80000		
	79	Chrysene	228	16.953	16.963	(1.003)	566071	3.73634	124	
	80	bis(2-Ethylhexyl)phthalate	149	17.064	17.075	(1.009)	866397	4.57900	153	
	81	Di-n-octylphthalate	149	18.375	18.386	(1.087)	785559	3.26628	109	
	82	Benzo(b)fluoranthene	252	19.030	19.042	(0.957)	285731	4.08237	136	
	83	Benzo(k)fluoranthene	252	19.085	19.097	(0.960)	377344	3.27300	109(H)	
	84	Benzo(a)pyrene	252	19.754	19.755	(0.994)	217599	3.14212	105	
*	85	Perylene-D12	264	19.880	19.891	(1.000)	42509	0.80000		
	86	Indeno(1,2,3-cd)pyrene	276	21.930	21.930	(1.103)	153518	3.04745	102	
	87	Dibenzo(a,h)anthracene	278	21.993	21.993	(1.106)	114277	2.97599	99.2	
	88	Benzo(g,h,i)perylene	276	22.497	22.487	(1.132)	133958	2.62934	87.6	
M	89	Total PAHs	100				9448581	55.8307	1860	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.
H - Operator selected an alternate compound hit.


Data File: \\target_server\gg\chem\gcms-n,i\N030623,b\N7617.D
Date : 06-MAR-2023 22:52
Client ID: WG332122-LCS
Sample Info: WG332122-2RA,SQ0595
Volume Injected (uL): 1.0
Column phase: ZB5-MS
Instrument: gcms-n,i
Operator: DT/CO
Column diameter: 0.25
\\target_server\gg\chem\gcms-n,i\N030623,b\N7617.D
Y (x10^6)
Min
-N-Nitrosodimethylamine+
-Benzaldehyde
-Phenol
-2-Chlorophenol
-1,3-Dichlorobenzene
-1,4-Dichlorobenzene-D4+
-1,2-Dichlorobenzene
-2-Methylphenol+
-Nitrobenzene
-Isophorone
-2-Nitrophenol
-2,4-Dimethylphenol
-Naphthalene-D8+
-Hexachlorobutadiene
-Caprolactam
-4-Chloro-3-Methylphenol
-2-Methylnaphthalene-D10+
-Hexachlorocyclopentadiene+
-2,4-Dibromophenol+
-2,4,5-Trichlorophenol
-1,1'-Biphenyl+
-2-Nitroaniline+
-Dimethyl Phthalate
-2,6-Dinitrotoluene+
-Acenaphthene-D10
-Acenaphthene
-2,4-Dinitrophenol
-4-Nitrophenol+
-2,3,4,6-Tetrachlorophenol
-Diethylphthalate
-Fluorene-D10+
-4,6-Dinitro-2-Methylphenol
-N-Nitrosodiphenylamine
-4-Bromophenyl-phenylether
-Hexachlorobenzene
-Atrazine
-Pentachlorophenol
-Phenanthrene-D10+
-Anthracene
-Carbazole
-Di-n-butylphthalate
-Fluoranthene-d10+
-Pyrene-D10+
-Butylbenzylphthalate
-3,3'-Dichlorobenzidine
-bis(2-Ethylhexyl)phthalat
-Di-n-octylphthalate
-Benzo(b)fluoranthene+
-Benzo(a)pyrene
-Perylene-D12
-Benzo(g,h,i)perylene

Data File: \\target_server\gg\chem\gcms-n.i\N030623.b\N7618.D
Report Date: 16-Mar-2023 07:44

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-n.i\N030623.b\N7618.D
Lab Smp Id: WG332122-3RA Client Smp ID: WG332122-LCSD
Inj Date : 06-MAR-2023 23:31
Operator : DT/CO Inst ID: gcms-n.i
Smp Info : WG332122-3RA,SQ0595
Misc Info : WG333437,WG332122,WG333437-4,SQ0595-3
Comment :
Method : \\target_server\gg\chem\gcms-n.i\N030623.b\NSPSIM19.m
Meth Date : 07-Mar-2023 11:13 coneill Quant Type: ISTD
Cal Date : 06-MAR-2023 16:55 Cal File: N7608.D
Als bottle: 17 QC Sample: LCSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.12

Concentration Formula: Amt * DF * (Vt/Ws*Vi)*(100/(100-M))*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.00100	Final Volume (L)
Ws	0.03000	Weight of Sample (Kg)
Vi	1.000	Volume injected (uL)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/Kgdrywt)	REVIEW COD
$	1 1,4-Dioxane-d8	96	3.146	2.999	(0.438)	24945	0.63590	21.2	
	2 1,4-Dioxane	88	3.188	3.041	(0.443)	52355	1.27850	42.6(R)	
	3 N-Nitrosodimethylamine	74	3.674	3.559	(0.511)	153913	2.71629	90.5	
	4 Pyridine	79	3.738	3.569	(0.520)	239582	2.82055	94.0	
	5 Benzaldehyde	77	6.639	6.618	(0.923)	165386	3.05941	102	
	6 Phenol	94	6.847	6.837	(0.952)	746342	6.07004	202(Q)	
	7 Bis(2-Chloroethyl)ether	93	6.878	6.878	(0.957)	287765	2.80969	93.6	
	8 2-Chlorophenol	128	6.951	6.941	(0.967)	680204	6.18286	206	
	9 1,3-Dichlorobenzene	146	7.117	7.118	(0.990)	323188	2.75003	91.7	
*	10 1,4-Dichlorobenzene-D4	152	7.190	7.191	(1.000)	67038	0.80000	(Q)	
	11 1,4-Dichlorobenzene	146	7.211	7.211	(1.003)	331873	2.65249	88.4	
	12 1,2-Dichlorobenzene	146	7.408	7.399	(1.030)	324280	2.75355	91.8	
	13 2-Methylphenol	108	7.596	7.596	(1.056)	525391	5.44177	181	
	14 2,2'-Oxybis(1-chloropropane)	45	7.575	7.565	(1.054)	141643	2.27610	75.9(Q)	
	15 Acetophenone	105	7.721	7.721	(0.873)	493890	3.55860	119	
	16 N-Nitroso-di-n-propylamine	70	7.752	7.752	(1.078)	178271	2.71541	90.5	
	17 3&4-Methylphenol	108	7.804	7.804	(1.085)	548539	5.63158	188	
	18 Hexachloroethane	117	7.835	7.825	(1.090)	118529	2.67582	89.2	
	19 Nitrobenzene	77	7.929	7.929	(0.897)	279980	2.51720	83.9	
	20 Isophorone	82	8.255	8.255	(0.933)	539853	3.30838	110	
	21 2-Nitrophenol	139	8.357	8.356	(0.945)	373187	6.36039	212	

Data File: \\target_server\gg\chem\gcms-n.i\N030623.b\N7618.D
Report Date: 16-Mar-2023 07:44

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	CONCENTRATIONS FINAL (ug/Kgdrywt)	REVIEW COD
	22 2,4-Dimethylphenol	107	8.481	8.471	(0.959)	150395	1.48005	49.3	
	23 bis(2-Chloroethoxy)methane	93	8.561	8.561	(0.968)	348481	3.00571	100	
	25 2,4-Dichlorophenol	162	8.708	8.708	(0.985)	544881	5.82168	194	
	26 1,2,4-Trichlorobenzene	180	8.776	8.776	(0.992)	269868	2.73356	91.1	
*	27 Naphthalene-D8	136	8.844	8.844	(1.000)	241358	0.80000		
	28 Naphthalene	128	8.866	8.867	(1.003)	923172	2.98941	99.6	
	29 4-Chloroaniline	127	8.866	8.980	(1.003)	114858	1.01107	33.7(aQ)	
	30 Hexachlorobutadiene	225	9.059	9.059	(1.024)	115854	2.48411	82.8	
	31 Caprolactam	113	9.444	9.478	(1.068)	125537	3.63689	121	
	32 4-Chloro-3-Methylphenol	107	9.674	9.688	(1.094)	551001	6.99081	233	
$	33 2-Methylnaphthalene-D10	152	9.755	9.755	(1.103)	200370	1.21200	40.4	
	34 2-Methylnaphthalene	142	9.796	9.796	(1.108)	661680	2.96058	98.7	
	35 1-Methylnaphthalene	142	9.917	9.931	(1.121)	566282	2.77144	92.4	
	36 Hexachlorocyclopentadiene	237	10.025	10.026	(0.897)	82377	2.03416	67.8	
	37 1,2,4,5-Tetrachlorobenzene	216	10.025	10.039	(0.897)	231816	2.55072	85.0	
$	38 2,4-Dibromophenol	252	10.201	10.202	(0.912)	119456	2.15397	71.8	
	39 2,4,6-Trichlorophenol	196	10.215	10.215	(0.914)	347960	5.78138	193	
	40 2,4,5-Trichlorophenol	196	10.282	10.283	(0.920)	428322	5.63003	188	
	41 1,1'-Biphenyl	154	10.417	10.431	(0.932)	746641	2.92568	97.5	
	42 2-Chloronaphthalene	164	10.431	10.445	(0.933)	183794	2.74193	91.4	
	43 2-Nitroaniline	65	10.607	10.621	(0.949)	135971	3.12536	104	
	44 Dimethyl Phthalate	163	10.862	10.885	(0.971)	707811	3.15140	105(R)	
	45 2,6-Dinitrotoluene	165	10.939	10.951	(0.978)	157224	2.91363	97.1	
	46 Acenaphthylene	152	10.983	10.995	(0.982)	747905	2.34830	78.3	
	47 3-Nitroaniline	138	10.607	10.621	(0.949)	214390	2.99144	99.7	
*	48 Acenaphthene-D10	164	11.181	11.182	(1.000)	134533	0.80000		
	49 Acenaphthene	153	11.214	11.226	(1.003)	586862	2.80498	93.5	
	50 2,4-Dinitrophenol	184	11.324	11.325	(1.013)	80991	4.76409	159	
	51 4-Nitrophenol	109	11.501	11.490	(1.029)	130797	9.20902	307(Q)	
	52 Dibenzofuran	168	11.457	11.468	(1.025)	843900	3.24294	108	
	53 2,4-Dinitrotoluene	165	10.939	10.951	(0.978)	157224	2.91363	97.1	
	54 2,3,4,6-Tetrachlorophenol	232	11.666	11.666	(1.043)	277555	5.16930	172	
	55 Diethylphthalate	149	11.820	11.831	(1.057)	762622	3.55150	118	
$	56 Fluorene-D10	174	11.875	11.886	(1.062)	187083	1.29488	43.2	
	57 Fluorene	166	11.919	11.930	(1.066)	663554	3.26296	109	
	58 4-Chlorophenyl-phenylether	204	11.941	11.952	(1.068)	298947	3.05140	102	
	59 4-Nitroaniline	138	10.607	10.621	(0.949)	214390	2.99144	99.7	
	60 4,6-Dinitro-2-Methylphenol	198	12.040	12.040	(0.914)	181034	5.81818	194	
	61 N-Nitrosodiphenylamine	169	12.106	12.117	(0.919)	420302	2.20865	73.6(R)	
	62 4-Bromophenyl-phenylether	248	12.585	12.595	(0.956)	166610	2.80770	93.6	
	63 Hexachlorobenzene	284	12.667	12.677	(0.962)	165674	3.13405	104	
	64 Atrazine	200	12.851	12.872	(0.976)	174623	3.81753	127	
	65 Pentachlorophenol	266	12.964	12.964	(0.984)	169849	5.97905	199	
*	66 Phenanthrene-D10	188	13.169	13.179	(1.000)	197114	0.80000		
	67 Phenanthrene	178	13.199	13.210	(1.002)	919138	3.33530	111	
	68 Anthracene	178	13.271	13.272	(1.008)	905677	3.18541	106	
	69 Carbazole	167	13.517	13.518	(1.026)	871939	4.01488	134	
	70 Di-n-butylphthalate	149	14.020	14.032	(1.065)	1399009	3.79017	126	
$	71 Fluoranthene-d10	212	14.775	14.787	(1.122)	258812	1.46096	48.7	
	72 Fluoranthene	202	14.798	14.809	(1.124)	906701	3.72173	124	
$	73 Pyrene-D10	212	15.075	15.087	(0.892)	306046	1.42429	47.5	
	74 Pyrene	202	15.097	15.109	(0.893)	926148	3.04793	102	
	75 Butylbenzylphthalate	149	16.053	16.064	(0.949)	564338	3.74984	125	
	76 3,3'-Dichlorobenzidine	252	16.908	16.920	(1.000)	16205	0.51684	17.2(aR)	

Data File: \\target_server\gg\chem\gcms-n.i\N030623.b\N7618.D
Report Date: 16-Mar-2023 07:44

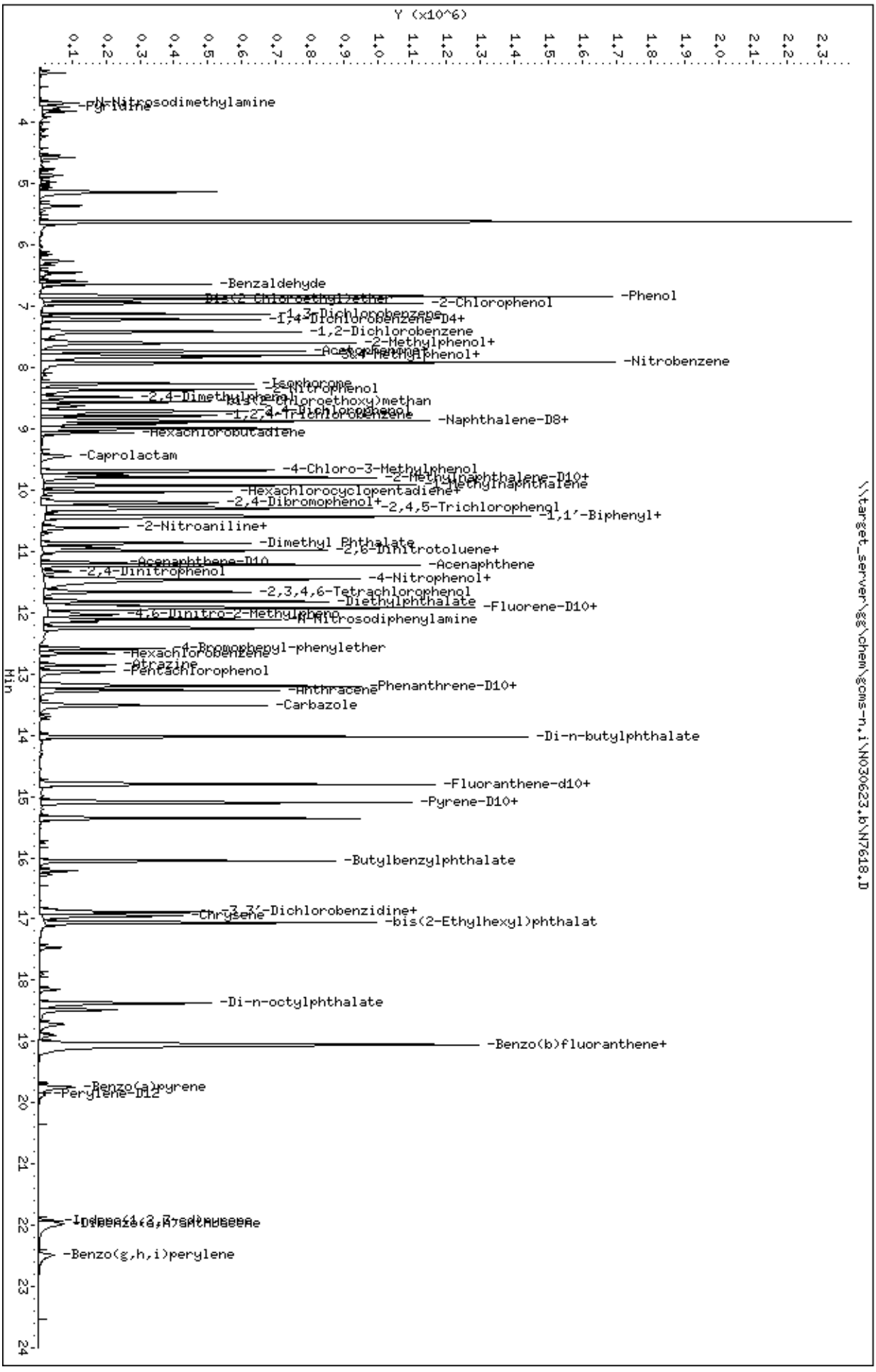
DL

9:31 am, Mar 22, 2023

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/Kgdrywt)	REVIEW COD
	77 Benzo(a)anthracene	228	16.886	16.898	(0.999)	524305	3.43840	115	
*	78 Chrysene-D12	240	16.908	16.908	(1.000)	91349	0.80000		
	79 Chrysene	228	16.953	16.963	(1.003)	613206	3.68010	123	
	80 bis(2-Ethylhexyl)phthalate	149	17.064	17.075	(1.009)	989677	4.75582	158	
	81 Di-n-octylphthalate	149	18.374	18.386	(1.127)	958551	3.62382	121(MH)	M6
	82 Benzo(b)fluoranthene	252	19.030	19.042	(0.958)	337374	4.04483	135	
	83 Benzo(k)fluoranthene	252	19.085	19.097	(0.961)	408371	2.97233	99.1(H)	
	84 Benzo(a)pyrene	252	19.744	19.755	(0.994)	249358	3.02149	101	
*	85 Perylene-D12	264	19.870	19.891	(1.000)	50658	0.80000		
	86 Indeno(1,2,3-cd)pyrene	276	21.930	21.930	(1.104)	196158	3.26751	109	
	87 Dibenzo(a,h)anthracene	278	21.993	21.993	(1.107)	147210	3.21694	107	
	88 Benzo(g,h,i)perylene	276	22.487	22.487	(1.132)	168542	2.77600	92.5	
M	89 Total PAHs	100				10451643	56.8456	1890	

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.


Data File: \\target_server\gg\chem\gcms-n,i\N030623,b\N7618.D
Date : 06-MAR-2023 23:31
Client ID: WG332122-LCSD
Sample Info: WG332122-3RA,SQ0595
Volume Injected (uL): 1.0
Column phase: ZB5-MS
Instrument: gcms-n,i
Operator: DT/CO
Column diameter: 0.25
\\target_server\gg\chem\gcms-n,i\N030623,b\N7618.D
Y (x10^6)
Min
N-Nitrosodimethylamine
Pyridine
Benzaldehyde
Phenol
2-Chlorophenol
1,3-Dichlorobenzene
1,4-Dichlorobenzene-D4+
1,2-Dichlorobenzene
2-Methylphenol+
Nitrobenzene
Isophorone
2-Nitrophenol
2,4-Dimethylphenol
Naphthalene-D8+
Hexachlorobutadiene
Caprolactam
4-Chloro-3-Methylphenol
2-Methylnaphthalene-D10+
1-Methylnaphthalene
Hexachlorocyclopentadiene+
2,4-Dibromophenol+
2,4,5-Trichlorophenol
1,1'-Biphenyl+
2-Nitroaniline+
Dimethyl Phthalate
2,6-Dinitrotoluene+
Acenaphthene-D10
Acenaphthene
2,4-Dinitrophenol
4-Nitrophenol+
2,3,4,6-Tetrachlorophenol
Diethylphthalate
Fluorene-D10+
4,6-Dinitro-2-Methylphenol
N-Nitrosodiphenylamine
4-Bromophenyl-phenylether
Hexachlorobenzene
Atrazine
Pentachlorophenol
Anthracene
Phenanthrene-D10+
Carbazole
Di-n-butylphthalate
Fluoranthene-d10+
Pyrene-D10+
Butylbenzylphthalate
3,3'-Dichlorobenzidine+
Chrysene
bis(2-Ethylhexyl)phthalat
Di-n-octylphthalate
Benzo(b)fluoranthene+
Benzo(a)pyrene
Perylene-D12
Indeno(1,2,3-cd)pyrene
Dibenz(a,h)anthracene
Benzo(g,h,i)perylene

Logbooks and Supporting Documents

sb SON

KATAHDIN ANALYTICAL SERVICES, LLC

ORGANIC EXTRACTIONS LOG - SOIL SEMIVOLATILE

Extraction Method:	SW846 3550: ✓	SW846 3540:	SW846 3545:	SW846 3546:	SW846 3580:
Analytical Method:	SW846 8270: ✓	OTHER:			
Standards	Surrogate ID (1): SV3129		Spike ID (1): SV3130	Spike ID (3): —	
	Surrogate ID (2): —		Spike ID (2): SV3131		
Solvents / Chemicals / Consumables	Solvent Lot # (MeCl2): EF820-US		Solvent Lot # (Acetone): 224052	Sodium Sulfate (granular) Lot #: 27962003	
	Filter Paper Lot # (SON): 1758275		Filter Paper Lot # (KD): CX0100	Sodium Sulfate (powder) Lot #: 27972001	
Misc.	Nitrogen Bath Temperature: 36°C	Sonicator Horns Tuned: 40%	Balance ID: BAL 1D	Vial Lot ID: CX0104	
Prep Start Time: 11:00	Prep Stop Time: 11:50	Sox Start Time: —	Sox End Date: —	Sox End Time: —	

Ext. Date	Ext. Init.	Sample ID	Initial Weight (g)	Surr. Vol. (mL)	Spk. Vol. (mL)	Fraction SCAN	Fraction BNA	Pre-GPC Date Conc.	Pre-GPC Conc. Init.	Pre-GPC Final Vol. (mL)	Post-GPC Date Conc.	Post-GPC Conc. Init.	Post-GPC Final Vol. (mL)	Post-GPC Tray Loc.	Comments
2/8/23	SR	WG332121-1 WG332122-1	30.05	1.00	NR	✓	✓	~~2/9/23~~ 2/9/23	AR	5.0	2/10/23	AR	1.0	D7	R609056 R609057
		WG332121-2	30.02		1.00	✓								8	
		-3	29.99			✓								9	LCSD
		WG332122-2	30.01				✓							10	
		-3	30.03				✓							61	LCSD

AR 2/10/23

EX-008 – Revision 3 – 01/25/2016

Ext. Date	Ext. Init.	Sample ID	Initial Weight (g)	Surr. Vol. (mL)	Spk. Vol. (mL)	Fraction SCAN	Fraction BNA	Pre-GPC Date Conc.	Pre-GPC Conc. Init.	Pre-GPC Final Vol. (mL)	Post-GPC Date Conc.	Post-GPC Conc. Init.	Post-GPC Final Vol. (mL)	Post-GPC Tray Loc.	Comments
2/8/23	SR	SQ0595-1	31.14	1.00	NR		✓	2/9/23	AR	5.0	2/10/23	AR	1.0	62	Large grain size
		-2	32.17				✓							3	↓
		-3	30.44				✓							4	Clay
		SQ0598-1	30.63			✓								5	very dark, tool lines hard to blow down KD ring @ 2/7/23
		SQ0618-1	30.84											6	
		-2	31.21											7	

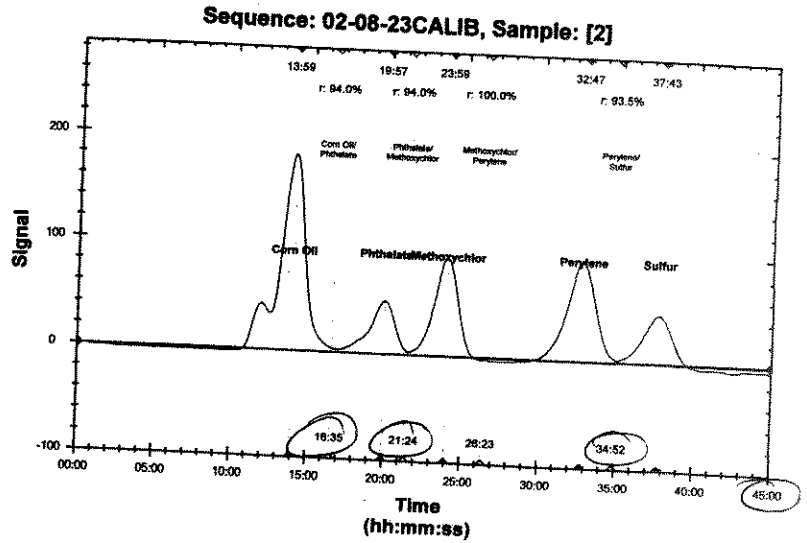
Katahdin Analytical Services
GPC02 Logbook
Logbook Photocopied?

Analytical Method: (check one)	SW846 8081 ✓	SW846 8082 ✓		SW846 8270 ✓	
MeCl2 Lot #: EP820-US	Filter Lot #: —	Room Temperature (beginning):	23.9	Room Temperature (ending):	23.8
Flow Rate: 5.0 mL/min	Flow Rate Set at: 4.80 mL/min	GPC Dump Time:	—	GPC Collect Time:	—
Time to fill 50 mL: 9.22	Column Pressure: 0				

Tray Pos. No.	Sample Identification	Date Extracted	Extract Volume	GPC Analyst	Date GPC Started	GPC Initial Volume	S V	P P	Comments
1	Dry Run	—	—	AP	2/8/23	5.0	✓	✓	
2	column calib	—	—	↓	↓	↓	↓	↓	
3	↳ 0.25 mL SDO211 in MeCl								
4									
5									
6									
7									
8									
9									
10									
11									
12									
13									
14									
15									
16						AP 2/8/23			
17									
18									
19									
20									
21									
22									

Katahdin Analytical Services
GPC02 Logbook
Logbook Photocopied?

Tray Pos. No.	
23	
24	
25	
26	
27	
2	
2	
3	
3	
3	
3	
3	
3	
3	
3	
3	
4	
41	
42	S15
43	Dump: 14.58
44	Collect: 28.42
45	



PIP
Dump: 21.40
Collect: 13.47

Katahdin Analytical Services SQ0595 Page 344 of 412

Katahdin Analytical Services
GPC02 Logbook
Logbook Photocopied?

Analytical Method: (check one)	SW846 8081 —	SW846 8082 —	SW846 8270 ✓
MeCl2 Lot #: EP820-US	Filter Lot #: 122810	Room Temperature (beginning): 24.5	Room Temperature (ending): 23.9
Flow Rate: 5.0 mL/min	Flow Rate Set at: 4.8 mL/min	GPC Dump Time: 16.4	GPC Collect Time: 28.4
Time to fill 50 mL: 9.22	Column Pressure: 0		

AP 2/9/23

Tray Pos. No.	Sample Identification	Date Extracted	Extract Volume	GPC Analyst	Date GPC Started	GPC Initial Volume	S V	P P	Comments
1	S/S Rinse	—	—	AP	2/9/23	6.0	✓		
2	WG332122-1 (121-1)	2/8/23	5.0						
3	WG332121-2								
4	↓ -3								
5	WG332122-2								
6	↓ -3								
7	SQ0595-1								
8	↓ -2								
9	↓ -3								
10	SQ0618-1								
11	↓ -2								
12	SQ0598-2								
13	Rinse	—	—				✓		
14									
15									
16									
17									
18									
19						AP 2/9/23			
20									
21									
22									

Katahdin Analytical Services
GPC02 Logbook
Logbook Photocopied?

Tray Pos. No.	Sample Identification	Date Extracted	Extract Volume	GPC Analyst	Date GPC Started	GPC Initial Volume	S V	P P	Comments
23									
24									
25									
26									
27									
28									
29									
30									
31									
32									
33									
34									
35									
36									
37									
38									
39						AP 2/9/23			
40									
41									
42									
43									
44									
45									

EX-006 – Revision 4 – 08/16/2019 QAEX492 - 000455 000001

KATAHDIN ANALYTICAL SERVICES
GC/MS SVOA INJ LOG INSTRUMENT: 5975B - N

DATE OF DFTPP INJECTION: 3/3/23

JOB	SAMPLE	DATAFILE	DF	VIAL #	METHOD	UL INJ	CHEMIST	COMMENTS
WG33 3362-1	50ng DFTPP	ND383	1.0	1	DFTPPSIM	2.0	CoDT	✓
-4	SSTD 2.0	N7582		2	NSPSIM18	1.0		✓
-3	.5	83		3				✓
-2	.2	84		4				✓
-5	7	85		5				✓
-6	10	86		6				✓
-7	15	87		7				✓
-8	IND	88		8				✓
	SQ0333-5	89		9				ISS↑
	-6	90		10				Ok
	-7	91		11				ISS↑
	-8	92		12				Ok
	-9	93		13				Ok
	WG332122-1	94		14				Ok
	-2	95 X		15				ISS↑ SST↓
	-3	96 X		16				ISS,6↑ SST↓
	SQ0595-1	97		17				SST↓
	-2	98		18				SST↓ 70%
	-3	94 X		19				ISS↑ SST↓
-9	SSTD 2.0	N7600		2				Ok
-10		01						Lot 40328
-11		02						↓

STANDARD	CODE
DFTPP	53913
CAL. STD.	53919 53907
ICV. STD.	53918
IS MIX	53863

Mecl
EF80-US

REVIEWED AND APPROVED BY: _____
DATE: _____

KATAHDIN ANALYTICAL SERVICES
GC/MS SVOA INJ LOG INSTRUMENT: 5975B - N

DATE OF DFTPP INJECTION: 3/6/23

JOB	SAMPLE	DATAFILE	DF	VIAL #	METHOD	UL INJ	CHEMIST	COMMENTS
WG333437-1	50ng DFTPP	ND383	1.0	1	DFTPPSIM	2.0	CP/DT	ok
-4	SS TO 2.0	N2603	1	2	N8PSIM.M	1.0		ok
-3	.5	04		3				ok
-2	.2	05		4				ok
-5	7	06		5				ok
-6	10	07		6				ok
-7	15	08		7				ok
-8	IND	09		8				ok
	WG332555-1	10		9				ok
	-2	11		10				ok
	-3	12		11				ok
	SQ0686-23	13		12				ok
	-23 DL	14	5.0	13				not using
	SQ0333-5 RA	15	1.0	14				ok
	-7RA	16		15				ok
	WG332122-2RA	17		16				ok
	-3RA	18		17				ok
	SQ0595-3RA	19		18				~~55~~ ok
		20		19				
-9	SS TO 2.6	~~CCV~~ 20		2				ok
-10		~~22~~ 21		1				not using
-11		~~23~~ 22						

STANDARD	CODE
DFTPP	S3913
CAL. STD.	S3907 S3914
ICV. STD.	S3918
IS MIX	S3883

MeCl
EF826-15

REVIEWED AND APPROVED BY: _____
DATE: _____

KATAHDIN ANALYTICAL SERVICES
GC/MS SVOA INJ LOG INSTRUMENT: 5975B - N

DATE OF DFTPP INJECTION: 20Mar23

JOB	SAMPLE	DATAFILE	DF	VIAL #	METHOD	UL INJ	CHEMIST	COMMENTS
W6334091-1	50ng DFTPP	ND391	1	1	DFTPPSIM	2.0	EP/JT/CO	ok
-4	SSTD 2.0 N320	N7755		2	NSPSIM26			✓
-3	0.5	56		3				✓
-2	1.2	57		4				✓
-5	7.0	58		5				✓
-6	10	59		6				✓
-7	15	60		7				✓
-8	IND	61		8				ok
	SQ0595-2DLRA	62	2	9				50/100 surr11
	W6333602-1RA2	63	1	10				ok
	1 -2RA2	64		11				surr11 1 out↑
	SQ1074-2RA2	65		12				surr11
	SQ1134-16RA2	66		13				surr11
	W6333498-1RA	67		14				ok
	1 -2RA	68		15				surr11 20 out - mostly1
	SQ0940-1RA	69		16				surr11
W6334091-9	SSTD 2.0 N320	70		2				4-nitroaniline out usingall ISok
-10		71						
-11		72						
								EP 21Mar23

STANDARD	CODE
DFTPP	53923
CAL. STD.	53921 53938
ICV. STD.	53923
IS MIX	53927

MeCl2 Lot #
EG330-45

REVIEWED AND APPROVED BY: _____
DATE: _____

SVOA EXTRACTION SPIKE STANDARD PREPARATION

PREP INFO	STOCK NAME	AMT ADDED	STOCK CONC.	STOCK#
ID#: SV3116	SIM SPIKE			
Prep Date: 10/25/22	SVOA SPIKE SV3111	SV 5.0 mL	"	
Initials: AP	Diluted to 50 mL in MeOH	Solv #6189		
Exp. Date: 04/25/23	F.C 5.0/10 ug/mL			
ID#: SV3117	SIM SURR MIX			
Prep Date: 11/2/22	SOM1.0 SIM	2.0 mL	2000 ug/mL	STK6235, STK6237
Initials: DT	Pyrene-D10	1.9 mL	2100 ug/mL	S3826
Exp. Date: 5/2/23	Fluorene-D10	1.97 mL	2010 ug/mL	S3683
	Diluted to 10 mL	MeOH LOT#	Solv0189	
	F.C. 400ng/mL ea			
ID#:				
Prep Date:				
Initials:				
Exp. Date:			11/18/22	

SVOA EXTRACTION SPIKE STANDARD PREPARATION

PREP INFO	STOCK NAME	AMT ADDED	STOCK CONC.	STOCK#
ID#: SV3129	**S/S SURR**			
Prep Date: 1/13/23	SIM SURR Stock	2.5 mL	400 ug/mL	SV3117
Initials: AP	B/N Surr mix	5.0 mL	5000 ug/mL	STD00161, STD00215
Exp. Date: ~~1/13/24~~	Acid Surr mix	5.0 mL	10,000 ug/mL	STD00158, STD00151
AP 1/13/23 1e/13/23	1,4-dioxane-D8	0.5 mL	2000 ug/mL	STD9170
	2,4-dibromphenol	2.0 mL	1000 ug/mL	STD9828, STD9829, STD9830
	Diluted to 500mL in acetone# SOLV0245		**F.C.: Various**	
				SV
ID#: SV3130	**SVOA SPIKE**			
Prep Date: 1/16/23	CLP-HC-BN-R-PAK	2.5 mL	2000 ug/mL	STD9990, 9991, 0120
Initials: SR	Z-014E	2.5 mL	2000 ug/mL	STD0117, 0118, 0119
Exp. Date: 7/16/23	CLP-HC-A-R-PAK	5.0 mL	2000 ug/mL	STD0116, 0112, 0113, 0114, 0171
	S-7226	1.0 mL	5000 ug/mL	STD0126
	H-001S-D40X	2.5 mL	2000 ug/mL	STD0157, 0104, 0105
	APP-9-096-20X	2.5 mL	2000 ug/mL	STD9942, 9943, 9944
	P-233S-10X	5.0 mL	1000 ug/mL	STD0129, 0130, 0131, 0132, 0133
~~ID#:~~	APP-9-191-10X	5.0 mL	1000 ug/mL	STD0107 – 0111
Prep Date:	Z-014F-PAK	5.0 mL	2000 ug/mL	STD9992 – 9996
Initials:	α- TERP	2.5 mL	2000 ug/mL	STD9104, 9105
Exp. Date:	**Diluted to 100 mL in MeOH#** EDL01-1S		**F.C.: 50/100 ug/mL**	

SVOA EXTRACTION SPIKE STANDARD PREPARATION

PREP INFO	STOCK NAME	AMT ADDED	STOCK CONC.	STOCK#
ID#: SV3131				
Prep Date: 1/16/23				
Initials: SR				
Exp. Date: 7/16/23				

SIM SPIKE			
SVOA SPIKE	5.0 mL	50/100 ug/mL	SV3130
Diluted to 50 mL in MeOH# ED601-US		F.C.: 5/10 ug/mL	

PREP INFO	STOCK NAME	AMT ADDED	STOCK CONC.	STOCK#
ID#: SV3132				
Prep Date: 1/24/23				
Initials: AP				
Exp. Date: 7/24/23				

** 1/2 the usual amount due to inventory

*AP 1/24/23

APP IX SPIKE			
CLP-HC-X1-R1	* ~~0.25~~ mL 0.125	2000 ug/mL	STD9780
M-8270-07-R1	* ~~0.25~~ mL	2000 ug/mL	STD9777
M-8270-08-R1	* ~~0.25~~ mL	2000 ug/mL	STD9071
M-8270-09-R1	* ~~0.25~~ mL	2000 ug/mL	~~STD9637~~ * STD9545
M-8270-10-R1	* ~~0.25~~ mL	2000 ug/mL	STD9073
APP-9-014-D10X	* ~~0.25~~ mL	2000 ug/mL	STD0062, STD9548
Diluted to ~~10~~ mL in MeOH# S01V0212 * 5.0		F.C.: 50 ug/mL	

PREP INFO	STOCK NAME	AMT ADDED	STOCK CONC.	STOCK#
ID#: SV3133				
Prep Date: 2/3/23				
Initials: SR				
Exp. Date: 8/3/23				

APP IX SPIKE			
CLP-HC-X1-R1	0.25 mL	2000 ug/mL	STD9780
M-8270-07-R1	0.25 mL	2000 ug/mL	STK6332
M-8270-08-R1	0.25 mL	2000 ug/mL	STD9071
M-8270-09-R1	0.25 mL	2000 ug/mL	STD9072
M-8270-10-R1	0.25 mL	2000 ug/mL	STD9073
APP-9-014-D10X	0.25 mL	2000 ug/mL	STD0062
Diluted to 10mL in MeOH# ED601-US		F.C.: 50 ug/mL	

SVOA EXTRACTION SPIKE STANDARD PREPARATION

PREP INFO	STOCK NAME	AMT ADDED	STOCK CONC.	STOCK#
ID#: SV3139	SIM SURRMIX			1/28/23 DT
Prep Date: 1/28/23	SGM 1.0 SIM	7.0 ML	2000 ug/ML	STK6340, STK636236
Initials: DT	PYRENE-D10	1.9 ML	2100 ug/ML	S3826
Exp. Date: 8/28/23	FLUORENE-D10	2.05 ML	1950 ug/ML	S3916
	DILUTED TO 10ML METHANOL	LOT# ED852-US		
	F.C. 400 ug/ML ea.			

ID#: SV3140
Prep Date: 3/9/23
Initials: AP
Exp. Date: 9/9/23

SIM SPIKE		
SVOA SPIKE	5.0 mL	50/100 ug/mL
Diluted to 50 mL in MeOH# SQ\V0277		F.C.: 5/10 ug/mL

SV 3130

ID#: ~~SV3141~~
Prep Date: 3/17/23
Initials: AP
Exp. Date: 9/17/23

~~S/S SURR~~			
SIM SURR Stock	1.25 ~~2.5~~ mL		400 ug/mL
B/N Surr mix	2.5 ~~5.0~~ mL		5000 ug/mL
Acid Surr mix	2.5 ~~5.0~~ mL		10,000 ug/mL
1,4-dioxane-D8	~~0.25~~ 0.8 mL		2000 ug/mL
2,4-dibromphenol	0.84 ~~2.0~~ mL		1000 ug/mL
Diluted to ~~500~~ 250mL in acetone#			F.C.: Various

SV 3139

AP 3/17/23

S3779

EX-019 - Revision 2 - 08/30/2022

GC/MS SVOA STANDARD PREP LOGBOOK

Standard #	Standard Name	Prep Date	Exp Date	Initials	Stock #	Stock Name	Amt Added	Stock Exp Date	Total Vol	Final Conc
S3679	Chlorendic Acid	1-10-22	7-10-22	JLh	S3677	Chlorendic Acid	180	1-10-23	1.8 ml	200 µg/ml
	Working STD				S3678	TCTPA Stock	180	↓		
					EC849	MeCl2	1440			
S3680	1,4-Dioxane Stock	1-11-22	7-16-22	JLh	S3617	1,4-Dioxane Pre Stock	180	7-16-22	1.8 ml	20 µg/ml
					EC849	MeCl2	1620			
S3681	Chlorendic Acid	1-14-22	1-14-23	JLh	STK 4404	Chlorendic Acid	43.3 mg	—	20 ml	2160 µg/ml
	Pre Stock for Ext.				EB001	Ethyl Ether	To 20 ml			
S3682	Tetrachloroethylene phthalate	1-14-22	1-14-23	JLh	STK 5628	Tetrachloroethylene phthalate Acid	22.2 mg	—	20 ml	1110 µg/ml
	Acid Pre Stock for Ext				EB001	Ethyl Ether	To 20 ml			
S3683	Fluorene-d10	1-14-22	1-14-23	JLh	STK 5475	Fluorene-d10	20.1 mg	—	10 ml	2010 µg/ml
	Stock				EC849	MeCl2	To 10 ml			
S3684	pyrene-d10 Stock	1-14-22	1-14-23	JLh	STK 5497	Pyrene-d10	9.3 mg	—	10 ml	930 µg/ml
					EC849	MeCl2	To 10 ml			
S3685	2,4-Dibromophenol	1-14-22	1-14-23	JLh	STK 3868	2,4-Dibromophenol	JLh ~~[illegible]~~ 118.6 mg	—	10 ml	11,860 µg/ml
				JLh	~~STK~~ EC849	MeCl2	To 10 ml			

Reviewed by/Date:

GC/MS SVOA STANDARD PREP LOGBOOK

S3777	1,4-Dioxane Stock	7-5-22	1-5-23	JLK	S3776	1,4-Dioxane Pre Stock	180	7.5-23	1.8mL	20 µg/mL
~~S3778~~	~~SIM Stock B~~	~~7-7-22~~	~~12-3-22~~		~~EE922~~ EE922	MeCl2	1620			
S3778	SIM Stock B	7-7-22	12-3-22	EP	S3732	SIM Pre Stock B	1620 180	7-12-3-22	1.8mL	20ng/mL EP 25-Jul-23
~~S3779~~					EE922	MeCl2	1301620			
S3779	SIM IND	7-11-22	8-14-22	EP	S3671	SIM Pre-Stock IND	1710	8-14-22	1.8mL	5 ~~20~~ mg/mL 7-11-22 EP
⊥	⊥	⊥	⊥	⊥	EE922	MeCl2	90	1	⊥	⊥
S3779 20	2,4-Dibromophenol	7-12-22	1-12-23	JLK	S3685	2,4-Dibromophenol	1.0mL	1-14-23	10mL	1190 µg/mL
					EE922	MeCl2	To 10mL			
S3780 81	Surr for SIM	7-12-22	1-12-23	JLK	STK ~~6251~~ 6252	2,MN/Fluorene-d10	0.5mL	3-7-23	~~10~~ 5mL	200 µg/mL
					S3683	Fluorene-d10	0.498	1-14-23		
					S3779	2,4-Dibromophenol	0.840	1-12-23		
					S3684	Pyrene-d10	1.08mL	6-14-23		
					S6254	1,4-Dioxane-d8	0.5mL	3-31-23		
					EE922	MeCl2	To 5mL			
S3781	SIM Stock A	7-12-22	11-12-22	JLK	STK6304	8270 mega mix	200	7-12-23	10mL	20 µg/mL
					83748	OLM Cmpds	↓	11-23-22		
					STK6153	1,2,4,5-TCB	↓	11-12-22		
					STD9938	Benzoic Acid	100	6-17-23		
					STK7196	Benzidine mix	↓	4-4-23		
					STK6253	1,4-Dioxane	↓	5-23-23		
					S3780	SIM Surr Stock	1.0mL	1-12-23		
					EE922	MeCl2	To 10mL			

Reviewed by/Date:

GC/MS SVOA STANDARD PREP LOGBOOK

S3885	SIM 1,4-dioxane IND	10/12/22	11/7/22	EP	S3736	1,4-dioxane IND prestock	90 mL	11/12/22	1.8mL	5 ug/mL
1	1	1	1	1	EF037	MeCl2	1710mL	—	1	
S3826	Pyrene -D10	10/12/22	10/12/23	DT	STK6343	Pyrene-D10	.021g	—	10mL	2100 ug/mL
					EF037	MeCl2	10mL	—		
S3827	SIM Surr Mix (6)	10/12/22	1/12/23	DT	S3826	Pyrene-D10	950mL	10/12/23	10mL	200 ug/mL
					S3779	2,4-Dibromophenol	1.68mL	1/12/23		
					S3683	Fluorene-D10	1 mL	1/14/23		
					STK6255	1,4-Dioxane-D8	1 mL	11/24		
					STK6341	SOM1.0 SIM	1 mL	5/28		
					EF037	MeCl2	10mL	—		
S3828	SIM IS	10/13/22	10/13/23	DT	STK6327	Internal STD Mix	36	10/13/23	1.8mL	80 ug/mL
					EF037	MeCl2	1764	—		
S3829	SIM. IS	10/13/22	10/13/23	DT	STK6327	Internal STD Mix	36	10/13/23	1.8mL	80 ug/mL
					EF037	MeCl2	1764	—		
S3830	1,4-dioxane stock	10/14/22	~~11/14/23~~ 11/7/23	EP	S3776	1,4-dioxane Pre-stock	180	~~11/14/23~~ 11/7/23	1.8mL	20 ug/mL
1	1	1	1	1	EF037	MeCl2	1620	—	1	1
S3831	SIM IND	10/17/22	2/17/23	CO	S3800	SIM IND Pre-stock	90	2/17/23	1.8mL	5 ug/mL
					EE875	MeCl2	1710			

Reviewed by/Date:

GC/MS SVOA STANDARD PREP LOGBOOK

S3851	SIM Stock A	12/2/22	3-2-23	EP	STK6356	8270 MegaMix	200 mL	09NOV23	10mL	20 mg/mL
					S3748	OLM Compounds	↓	11-23-22		
					STD9959	1,2,4,5 TCB	↓	8-15-23		
					STK6346	Benzoic Acid	100 mL	6-17-23		
					STK6375	Benzidine	↓	11-7-23		
					STK6753	1,4-dioxane	↓	5-23-23		
					SU3117	SIM Surr Mix	1 mL	5-2-23		
					EF243	$MeCl_2$	to 10mL	—		
S3852	OLM Compounds	12-2-22	6-2-23	EP	STD0125	S-7226	360mL	12-2-23	1.8mL	1000 mg/mL
↓	↓	↓	↓	↓	EF243	$MeCl_2$	1440mL	—	2	↓
S3853	SIM Stock A	12-2-22	6-17-23	EP	STK6356	8270 MegaMix	200mL	11-9-23	10mL	20 mg/mL
					S3852	OLM Compounds	↓	12-2-23		
					STD9959	1,2,4,5-TCB	↓	8-15-23		
					STK6346	Benzoic Acid	100 mL	6-17-23		
					STK6375	Benzidine	↓	11-7-23		
					STK6753	1-4 dioxane	↓	5-23-23		
					S3827	SIM Surr Mix	1mL	5-2-23		
					EF243	$MeCl_2$	to 10mL	—		

Reviewed by/Date:

GC/MS SVOA STANDARD PREP LOGBOOK

S3870	DFTPP	12/31/22	7/1/23	DT	STK6383	GC/MS TUNING MIX	250	12/9/23	10 mL	25 µg/mL
					EF564-US	$MeCl_2$	→10mL	—		
~~S3871~~	~~SIM Pre-Stock B~~	~~1/03/23~~		EP		~~Acids Mix~~	~~180mL~~		~~1.8mL~~	~~200 mg/mL~~
↓	↓	↓	↓	↓		606 Phthalates	180mL		↓	↓
						$MeCl_2$	1440mL	—		EP 03Jan23
S3871	SIM StockB	1/03/23	~~9/7/23~~ 7/03/23 EP 1/4/23	EP	S3821	SIM Prestock B	90mL	9/7/23	900mL	20 mg/mL
↓	↓	↓	↓	↓	EF564-US	$MeCl_2$	810mL	—	↓	↓
S3872	8270 Stock	1/05/23	7/05/23	EP	STK6391	8270 Mega Mix	220	12/21/23	1.8mL	125 mg/mL
↓	↓	↓	↓	↓	STK6363	APP IX Mix #2	↓	12/2/23	↓	↓
					STK6305	Dinoseb		8/9/23		
					STK6348	Surrogate Mix	55	10/14/23		
					STK6332	Methapyrilene	110	11/7/23		
					STK6389	Benzoic Acid Mix	↓	12/21/23		
					STK6375	Benzidine Mix		11/7/23		
					STK6374	Org Phos Pest		12/2/23		
					STK6377	APP IX Mix #1		11/15/23		
					STD9661	α-terpineol	↓	11/2/23		
				↓	EF564-US	$MeCl_2$	355	—	↓	↓
S3872	SIM Pre-Stock B	1/06/23	7-6-23	EP	~~STD9889~~ EF00115	Acids Mix	180mL	~~1-06-24~~ ~~12-13-23~~	1.8mL	200mg/mL
↓	↓	↓	↓	↓	STK6393	606 Phthalates	180mL	1-06-24	↓	↓
					EF679-US	$MeCl_2$	1440mL	—		

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(*) EP 06Jan23

GC/MS SVOA STANDARD PREP LOGBOOK

S3878	8270 Stock	1/11/23	7/11/23	CO	STK6391	8270 Mega Mix	220	12/21/23	1.8mL	125 ug/mL
					STK6363	App IX Mix #2	⊥	12/2/23		
					STK6348	Surrogate Mix	55	CO 1/13/22 10/14/23 ~~8/9/23~~		
					STK6332	Methapyrilene	110	CO 1/13/22 ~~10/14/~~ 11/7/23		
					STK6389	Benzoic		12/21/23		
					STK6375	Benzylate		11/7/23		
					STK6374	Org Phos Pest		12/2/23		
					STK6377	App IX #1		11/15/23		
					STD9661	α-terpinol	⊥	11/2/23		
					EF679	$MeCl_2$	575	—	⊥	⊥
S3879	SIM STOCK B	1/12/23	7/6/23	DT	S3872	SIM PRE-STOCK B	180	7/6/23	1.8mL	20ug/mL
					EF679	$MeCl_2$	1620	—		
S3880	DFTPP	1/16/23	8/16/23	DT	STK6383	GC/MS TUNING MIX	250	1/16/23 DT ~~7/~~ 12/9/23	10mL	25 ug/mL
					EF679	$MeCl_2$	→ 10mL	—		
S3881	SIM IND	1/17/23	2/17/23	EP	S3800	SIM IND Prestock	90mL	2/17/23	1.8mL	5 ug/mL
⊥	⊥	⊥	⊥	⊥	EF679	$MeCl_2$	1710mL	—	⊥	
S3882	SIM Stock B	1/17/23 ~~11/2/23~~	7/6/23	EP	S3872	SIM Pre-Stock B	180mL	7/6/23	1.8mL	20ug/mL
⊥	⊥	⊥	⊥	⊥	EF679	$MeCl_2$	1620mL	—	⊥	⊥
S3883	SIM IS	1/18/23	1/18/23 DT ~~8/~~ 7/18/23	DT	STK6384	SVOA internal STD MIX	144mL	1/18/24	7.2mL	80 ug/mL
					EF679	$MeCl_2$	7056mL			

Reviewed by/Date: EP 17-Jan-23

GC/MS SVOA STANDARD PREP LOGBOOK

S3887	SIM Prestock IND	1/26/23	5/7/23	CO	STD0171	Acid Composite Mix	90µL	7/6/23	1.8mL	100µg/mL
					STD0120	Base/Neutral Composite Mix	↓	7/16/23		
					STD0099	Benzidine Mix		5/7/23		
					STD0105	1-Methylnaphalene		7/16/23		
					STD0119	Composite Mix 3		↓		
					STD9944	1,4-Dioxane	↓			
					STD0127	OLM	36µL	7/26/23		
					STD0067	1,2,4,5-TCB	189µL	↓		
					EF679-US	$MeCl_2$	1044µL			
S3888	SIM IND	1/26/23	5/7/23	CO	S3887	SIM Prestock IND	90µL	5/7/23	1.8mL	5µg/mL
					EF629-US	$MeCl_2$	1710µL			
S3889	8270 Stock	1/27/23	7/27/23	EP	STK6401	8270 MegaMix	220µL	11/2023	1.8mL	125mg/mL
					STK6363	APP IX Mix #2	↓	12/7/23		
					STK6348	Surrogate Mix	55µL	10/14/23		
					STK6332	Methapyrilene	110µL	9/2023		
					STK6399	Benzoic Acid		12/21/23		
					STK6392	~~Benzaldehyde~~ Benzidine Mix		1/24/24		
					STK6374	Org Phos Pest		9/2023		
					STK6377	APP IX Mix*1		11/15/23		
					STD9961	α-terpinol	↓	11/2023		
					EF679-US	MeCl2	575mL	—	↓	↓

Reviewed by/Date:

EP 27 Jan-23

GC/MS SVOA STANDARD PREP LOGBOOK

S3907	SIM Stock A	2/9/23	6/2/23	CO	STK6901	8270 Mega Mix	200 uL	1/27/24	~~1.8~~ 10mL	20 mg/mL
					S3852	5 OLM Compounds		6/2/23		
					STD0166	1,2,4,5-TCB		12/21/23		
					STK6389	Benzoic Acid	100 uL	12/21/23		
					STK6392	Benzidine Mix		1/24/24		
					STK6397	1,4-dioxane		1/24/24		
					S3827	SIM Surr Mix	1mL	10/12/23		
					EF820-US	$MeCl_2$	to 10mL	—		
S3908	CHLORENDIC ACID ICAL MIX	2/13/23	8/13/23	DT	S3901	CHLORENDIC ACID	121 uL	2/8/24	1.8mL	200mg/mL
					S3902	TCTPA	319 uL	2/8/24		
					S3903	DIMETHYL PHTHALATE	194 uL	2/8/24		
					EF820-US	$MeCl_2$	1,116 uL	—		
S3910	8270 STOCK	2/17/23	8/17/23	DT	STK6402	8270 Mega MIX	220	2/17/24	1.8mL	125 mg/mL
					STK6465	APPIX MIX #2	220	2/17/24		
					STK6395	DINOSEB	220	2/17/24		
					STK6348	8270 SURR MIX	55	10/14/23		
					STK6332	Methapyrilene	110	11/7/23		
					STK6390	Benzoic Acid MIX	↓	2/17/24		
					STK6392	BENZidie MIX		1/24/24		
					STK6374	ORG PHOS PEST		10/2/24		
					STK6377	APPIX MIX #1		11/15/23		
					STD9661	α-Terpineol		11/2/23		
					EF820-US	$MeCl_2$	355	—		

Reviewed by/Date:

GC/MS SVOA STANDARD PREP LOGBOOK

S3911	SIM IND	2/17/23	5/7/23	CO	S3887	SIM IND Prestock	90mL	5/7/23	1.8mL	5mg/mL
					EF820-US	MeCl	1710mL			
S3912	SIM STOCK B	2/20/23	7/6/23	DT	S3872	SIM PRE-STOCK B	180ml	x7/6/23	1.8mL	20mg/mL
					EF820-US	$MeCl_2$	1620µL			
	2/21/23 DT									
S3913	GC DFTPP	2/21/23	8/21/23	DT	STK6403	GC/MS TUNING MIX	250µL	2/21/24	10mL	25 mg/mL
					EF820-US	$MeCl_2$	→10mL			
S3914	8270 IND	2/22/23		CO	STD0171	Acids	90	~~2/22/24 S3914 1/16/24 STK6403~~	1.8mL	100µg/mL
					STD0120	B/N	|	~~2/16/24~~ 1/16/24		
					STD0099	Benz Mix	|	11/7/23		
					STD0210	1-Methylnaphthalene	|	2/22/24		
					STD0119	Composite Mix 3	|	1/16/24		
					STD0144	p-Dioxane	|	1/16/24		
					STD0154	α-Terpineol	→	2/22/24		
					STD0127	OLM	36	1/26/24		
					STD0133	BEH-A	180	1/16/24		
					STD0167	1,2,4,5 TCB	1	1/26/24		
					EF820-US	$MeCl_2$	774			

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GC/MS SVOA STANDARD PREP LOGBOOK

S3915	8270 Stock	2/28/23	8/28/23	EP	STK6402	8270 MegaMix	220mL	2/17/24	1.8mL	125 ug/mL
					STK6405	APPIX Mix #2	↓	2/17/24	↓	↓
					STK6395	Dinoseb	↓	2/17/24		
					STK6348	8270 Surr Mix	55mL	10/14/23		
					STK6332	Methapyrilene	110mL	11/7/23		
					STK6390	Benzoic Acid Mix	↓	2/17/24		
					STK6392	Benzidine Mix		1/24/24		
					STK6374	Org Phos Pest		12/2/23		
					STK6377	APPIX Mix #1		11/15/23		
					STD0966	α-terpineol	↓	11/2/23		
↓	↓	↓	↓	↓	EF820-US	MeCl2	355mL	—	↓	↓
S3916	Fluorene-D10 Stock	2/23/23	2/23/24	DT	STK6344	Fluorene-D10	19.5 mg	—	10mL	1950 ug/mL
					EF820-US	MeCl2	→ 10mL	—		
S3917	1,4-Dioxane	3/1/23	3/31/23	EP	S3899	1,4-dioxane Pre-stock	180mL	3/31/23	1.8mL	20 ug/mL
↓	↓	↓	↓	↓	EF820-US	MeCl2	1620mL	—	↓	
S3918	SIM IND	3/2/23	5/7/23	CO	S3887	SIM IND Prestock	90mL	5/7/23	1.8mL	5ug/mL
					EF820-US	MeCl	1710mL			
S3919	SIM Stock B	3/3/23	7/6/23	CO	S3872	SIM Prestock B	18mL	~~5/7~~ 7/6/23	1.8mL	10ug/mL
					EF820-US	MeCl2	1620mL			

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GC/MS SVOA STANDARD PREP LOGBOOK

S3920	8270 Stock	3/7/23	9/17/23	EP	STK6407	8270 Mega Mix	220mL	2/17/24	1.8mL	125 mg/mL
					STK6405	APPIX Mix #2		2/17/24		
					STK6395	Dinoseb		2/17/24		
					STK6348	8270 Surr Mix	55mL	10/14/23		
					STK6332	Methapyrilene	110mL	11/7/23		
					STK6390	Benzoic Acid Mix		2/17/24		
					STK6397	Benzidine Mix		1/24/24		
					STK6374	Org Phos Pest		12/2/23		
					STK6377	APPIX Mix #1		11/15/23		
					STD9661	α-terpineol		11/2/23		
					EF820-US	MeCl2	355mL	—		
S3921	SIM Stock A	3/8/23	6/2/23	CO	STK6402	8270 Mega Mix	200mL	~~8/17/22~~ 11/24	10mL	20 mg/mL
					93852	CLM Compounds		6/2/23		
					STD0167	1,2,4,5-TCB		1/26/24		
					STK6389	Benzoic	100mL	12/21/23		
					STK6392	Benzidine		1/24/24		
					STK6393	4,4-dioxane		1/24/24		
					SV3139	SIM Surr Mix (4)	500mL	9/25/23		
					93779	2,4-Dibromophenol	1.68mL	1/12/23		
					STD9528	1,4-dioxane-d8	100mL	11/15/23		
					EF820-US	MeCl2	to 10mL			

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GC/MS SVOA STANDARD PREP LOGBOOK

S3922	DFTPP	3/10/23	9/10/23	CO	STK6403	GC/MS Tuning Mix	250 uL	2/21/24	10 mL	25 ug/mL
					EF820-US	$MeCl_2$	to 10 mL			
S3923	SIM IND	3/10/23	5/7/23	CO	~~S3667~~ ~~S3670~~	SIM IND Prestock	90 uL	5/7/23	1.8 mL	5 ug/mL
					EF820-US	MeCl	1710 uL			
S3924	SIM PRE-STOCK B	3/11/23	9/11/23	DT	STD0115	ACIDS MIX	180 uL	1/06/24	1.8 mL	200 ug/mL
					STK6393	606 PHTHALATES	180 uL	1/06/24		
					EF820-US	$MeCl_2$	1440 uL	—		
S3925	SIM STOCK B	3/11/23	9/11/23	DT	S3924	SIM PRE-STOCK B	180 uL	9/11/23	1.8 mL	20 ug/mL
					EF820-US	$MeCl_2$	1620 uL	—		
S3926	8270 STOCK	3/13/23	9/13/23	DT	STK6402	8270 Megamix	220 uL	2/17/24	1.8 mL	125 ug/mL
					STK6405	APPIX MIX #2	↓	2/17/24		
					STK6395	DINOSEB	↓	2/17/24		
					STK6348	SURR MIX	55 uL	10/14/23		
					STK6332	Methapyrilene	110 uL	11/7/23		
					STK6390	Benzoic Acid MIX	↓	2/17/24		
					STK6392	Benzidine MIX	↓	1/24/24		
					STK6374	ORG PHOS PEST	↓	12/2/24		
					STK6377	APPIX MIX #1	↓	11/15/24		
					STD0156	α-Terpineol	↓	X3/13/24		
					EF390-US	$MeCl_2$	355 uL	—		

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GC/MS SVOA STANDARD PREP LOGBOOK

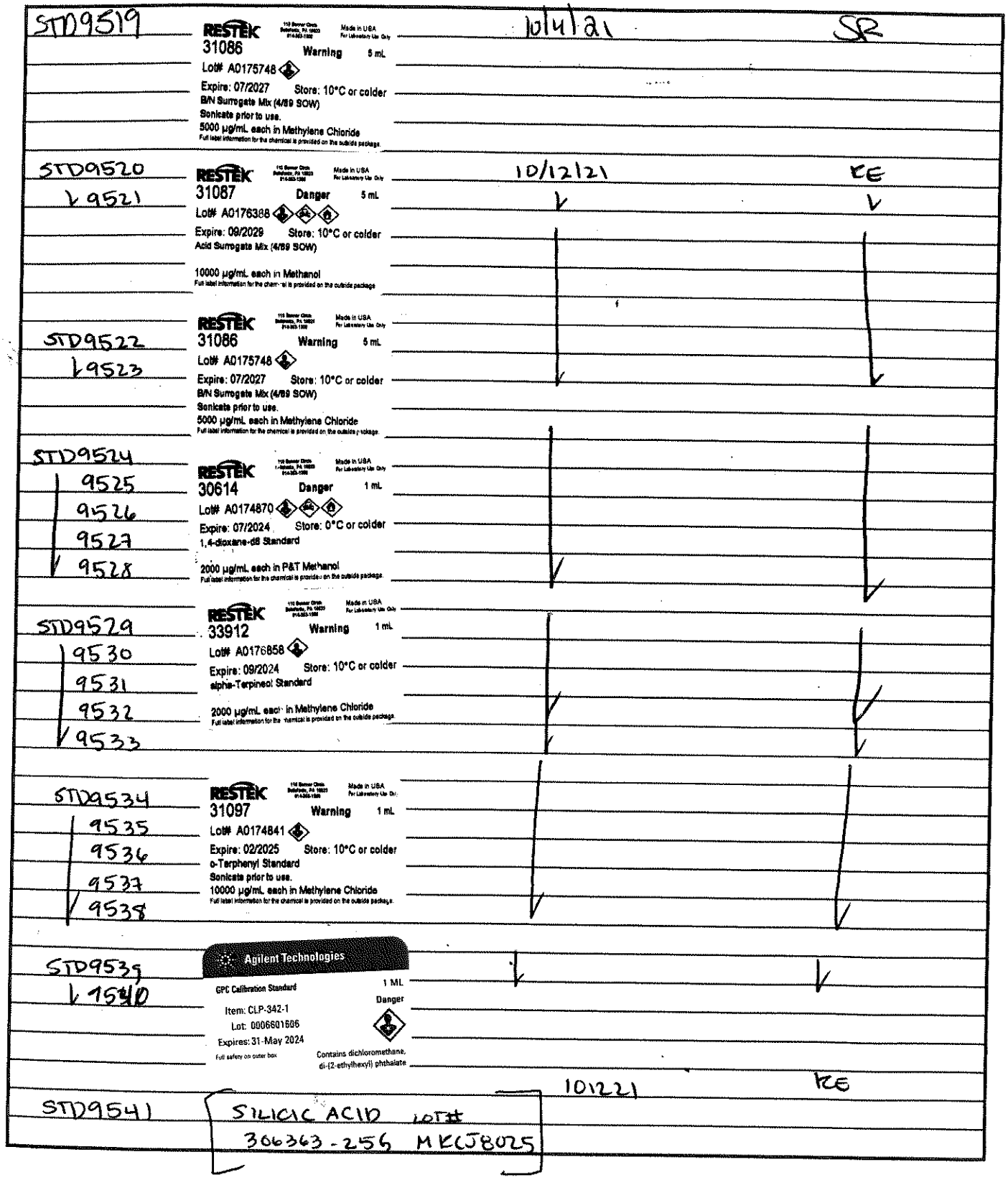
S3927	SIM INTERNAL STD	3/13/23	9/13/23	DT	STK6386	8270 INTERNAL STD MIX	200mL	3/13/24	10mL	80 mg/mL
					EF390-05	MeCl2	->10mL	—		
S3928	SIM STOCK B	3/20/23	9/11/23	EP	S3924	SIM RESTOCK B	180mL	9/11/23	1.8mL	20 mg/mL
1	1	1	1	1	EB390-05	MeCl2	1620mL	—	1	1
S3929	8270 Stock	3/20/23	9/20/23	CO	STK6402	8270 Megamix	110mL	2/17/24	.9mL	125 mg/mL
					STK6405	APPIX Mix #2	1	1		
					STK6395	Diesob	1	1		
					STK6348	Surr Mix	27.5mL	10/4/23		
					STK6390	Benzoic	55mL	~~11/7/23~~ 2/17/24		
					STK6392	Benzidine	1	1/24/24		
					STK6374	Org Phos Pest	1	12/2/24		
					STK6377	APPIX Mix #1	1	11/15/24		
					STDC156	α-Terpineol	1	3/13/24		
					EF390-05	MeCl2	232.5mL			
S3930	SIM IND	3/20/23	5/7/23	CO	S3887	SIM IND Prestock	90mL	5/7/23	1.8mL	5 mg/mL
					EF390-05	MeCl2	1710mL			

Reviewed by/Date:

KATAHDIN ANALYTICAL SERVICES

STOCK STANDARDS RECEIVED

Extractions Laboratory



STD9519 — RESTEK 31086 — Warning — 5 mL — Lot# A0175748 — Expire: 07/2027 — Store: 10°C or colder — B/N Surrogate Mix (4/89 SOW) — Sonicate prior to use. — 5000 µg/mL each in Methylene Chloride — Full label information for the chemical is provided on the outside package. — 10/4/21 — SR

STD9520 / 9521 — RESTEK 31087 — Danger — 5 mL — Lot# A0176388 — Expire: 09/2029 — Store: 10°C or colder — Acid Surrogate Mix (4/89 SOW) — 10000 µg/mL each in Methanol — Full label information for the chemical is provided on the outside package — 10/12/21 — KE

STD9522 / 9523 — RESTEK 31086 — Warning — 5 mL — Lot# A0175748 — Expire: 07/2027 — Store: 10°C or colder — B/N Surrogate Mix (4/89 SOW) — Sonicate prior to use. — 5000 µg/mL each in Methylene Chloride — Full label information for the chemical is provided on the outside package.

STD9524 / 9525 / 9526 / 9527 / 9528 — RESTEK 30614 — Danger — 1 mL — Lot# A0174870 — Expire: 07/2024 — Store: 0°C or colder — 1,4-dioxane-d8 Standard — 2000 µg/mL each in P&T Methanol — Full label information for the chemical is provided on the outside package.

STD9529 / 9530 / 9531 / 9532 / 9533 — RESTEK 33912 — Warning — 1 mL — Lot# A0176858 — Expire: 09/2024 — Store: 10°C or colder — alpha-Terpineol Standard — 2000 µg/mL each in Methylene Chloride — Full label information for the chemical is provided on the outside package.

STD9534 / 9535 / 9536 / 9537 / 9538 — RESTEK 31097 — Warning — 1 mL — Lot# A0174841 — Expire: 02/2025 — Store: 10°C or colder — o-Terphenyl Standard — Sonicate prior to use. — 10000 µg/mL each in Methylene Chloride — Full label information for the chemical is provided on the outside package.

STD9539 / 9540 — Agilent Technologies — GPC Calibration Standard — 1 mL — Item: CLP-342-1 — Lot: 0006601606 — Expires: 31-May 2024 — Danger — Contains dichloromethane, di-(2-ethylhexyl) phthalate — Full safety on outer box

STD9541 — SILICIC ACID lot# 306363-256 MKCJ8025 — 10/22/21 — KE

KATAHDIN ANALYTICAL SERVICES

STOCK STANDARDS RECEIVED

Extractions Laboratory

STD 9823
9824
9825
9826
9827
9828
9829
9830
9831
9832
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9834
9835
9836
9837

CHEM SERVICE INC.
www.chemservice.com

S-10624K4-1ML
2,4-Dibromophenol Solution

1000ug/mL in Isooctane

Lot Number: 13128100 Expires: 04/30/27

SR 4/19/22

STD 9838
39
40
41
4-21-22

31480
MA Fractionation Surrogate Spike Mix
Lot# A0179976
Expire: 11/2027 Store: 10°C or colder
4000 µg/mL each in Hexane
1 mL
RESTEK

STD 2 R.'s 4-21-22

STD 9840
41

RESTEK
31458
Danger 1 mL
Lot# A0181478
Expire: 01/2028 Store: 25°C nominal
MA EPH Aromatic Hydrocarbon Standard
Sonication required. Mix is photosensitive.
1000 µg/mL each in Methylene chloride
Full label information for the chemical is provided on the outside package

R.'s 4-21-22

STD 9841
9842

AccuStandard® 125 Market St. New Haven, CT 06513 www.AccuStandard.com

GRH-IS-10X 1 mL
5-alpha Androstane
10.0 mg/mL in CH2Cl2
Lot: 220111195 1 comp(s)
Exp: Nov 19, 2030 Storage: Ambient (>5 °C)

FOR LABORATORY USE ONLY
H315 H335
H332 H302
H351 H360
P338 P360
P331 P233
P262 P202
Refer to SDS
Signal Word **Warning**

SR 4/29/22

STD 9843
9844

RESTEK
33905
Danger 1 mL
Lot# A0165612
Expire: 05/2024 Store: 10°C or colder
8330 Calibration Standard

1000 µg/mL each in Acetonitrile
Full label information for the chemical is provided on the outside package

SR 5/3/22

KATAHDIN ANALYTICAL SERVICES

STOCK STANDARDS RECEIVED

Extractions Laboratory

STD 9896 - 97 GPC Calibration Standard CLP-342-1 Lot 0006675261 AP 5/13/22

STD9898 9899 9900 9901 9902

RESTEK 31459 Danger 1 mL
Lot# A0180427
Expire: 02/2029 Store: 25°C nominal
MA EPH Aliphatic Hydrocarbon Standard
1000 µg/mL each in Hexane
Full label information for the chemical is provided on the outside package.

SR 5/17/22

STD9903

RESTEK 31086 Warning 5 mL
Lot# A0180763
Expire: 12/2027 Store: 10°C or colder
B/N Surrogate Mix (4/89 SOW)
Sonicate prior to use.
5000 µg/mL each in Methylene Chloride
Full label information for the chemical is provided on the outside package.

SR 5/17/22

STD9904 9905

RESTEK 31087 Danger 5 mL
Lot# A0184853
Expire: 05/2030 Store: 10°C or colder
Acid Surrogate Mix (4/89 SOW)
10000 µg/mL each in Methanol
Full label information for the chemical is provided on the outside package.

SR 5/17/22

STD9906 9907 9908

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com
M-8151A 1 mL
Underivatized Chlorinated Herbicides
Varied conc. in Acetone
Lot: 220081406-03 18 comp(s)
Exp: Dec 22, 2022 Storage: Freeze (<-10 °C)
FOR LABORATORY USE ONLY
H225 H336 H335 H319 H315 P338 P360 P331 P233 P260 P262 P202
Refer to SDS
Signal Word Danger

SR 5/17/22

STD9909

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com
C-254S-H-10X 1 mL
Aroclor 1254
1000 µg/mL in Hexane
Lot: 221081272 1 comp(s)
Exp: Aug 23, 2031 Storage: Ambient (>5 °C)
FOR LABORATORY USE ONLY
H304 H225 H336 H361 H315 H335 H332 H302 H350 H360, H350 P338
Refer to SDS
Signal Word Danger

SR 5/17/22

STD9910 9911 9912 9913 N-Methyl-N-Nitroso-P-toluenesulfonamide 99.41% Lot #235297

SR 5/17/22

KATAHDIN ANALYTICAL SERVICES

STOCK STANDARDS RECEIVED

Extractions Laboratory

STD 9932
STD 9933
STD 9934
STD 9935
STD 9936
STD 9937

TRPH standard CMW 6/8/22

RESTEK 31266 Danger 1 mL
Lot# A0184585
Expire: 05/2029 Store: 25°C nominal
Florida TRPH Standard
Sonicate prior to use.
500 µg/mL each in Hexane
Full label information for the chemical is provided on the outside package

STD9938

SR 6/8/22

STD9938
STD9939
STD9940

CMW 6/10/22

RESTEK 31879 Warning 1 mL
Lot# A0176303
Expire: 09/2025 Store: 10°C or colder
Benzoic Acid Mix
2000 µg/mL each in Methylene Chloride
Full label information for the chemical is provided on the outside package

RESTEK 31806 Danger 1 mL
Lot# A0179147
Expire: 08/2023 Store: 0°C or colder
Appendix IX Mix #2
Sonication required. Mix is photosensitive.
1000 µg/mL each in Methylene chloride
Full label information for the chemical is provided on the outside package.

RESTEK 31811 Warning 1 mL
Lot# A0184500
Expire: 04/2024 Store: 10°C or colder
Hexachlorophane Standard
2000 µg/mL each in Methylene Chloride
Full label information for the chemical is provided on the outside package.

STD9941
9942
9943
9944
9945

AccuStandard® 125 Market St. New Haven, CT 06513 www.AccuStandard.com
APP-9-096-20X 1 mL
p-Dioxane Standard
2.0 mg/mL in MeOH
Lot: 219011122 1 comp(s)
Exp: Jan 10, 2029 Storage: Ambient (>5 °C)
FOR LABORATORY USE ONLY
H225 H336
H370 H320
H315 H311
H332 H301
H351 H360,
H350 P338
Refer to SDS
Signal Word Danger

CMW 6/9/22

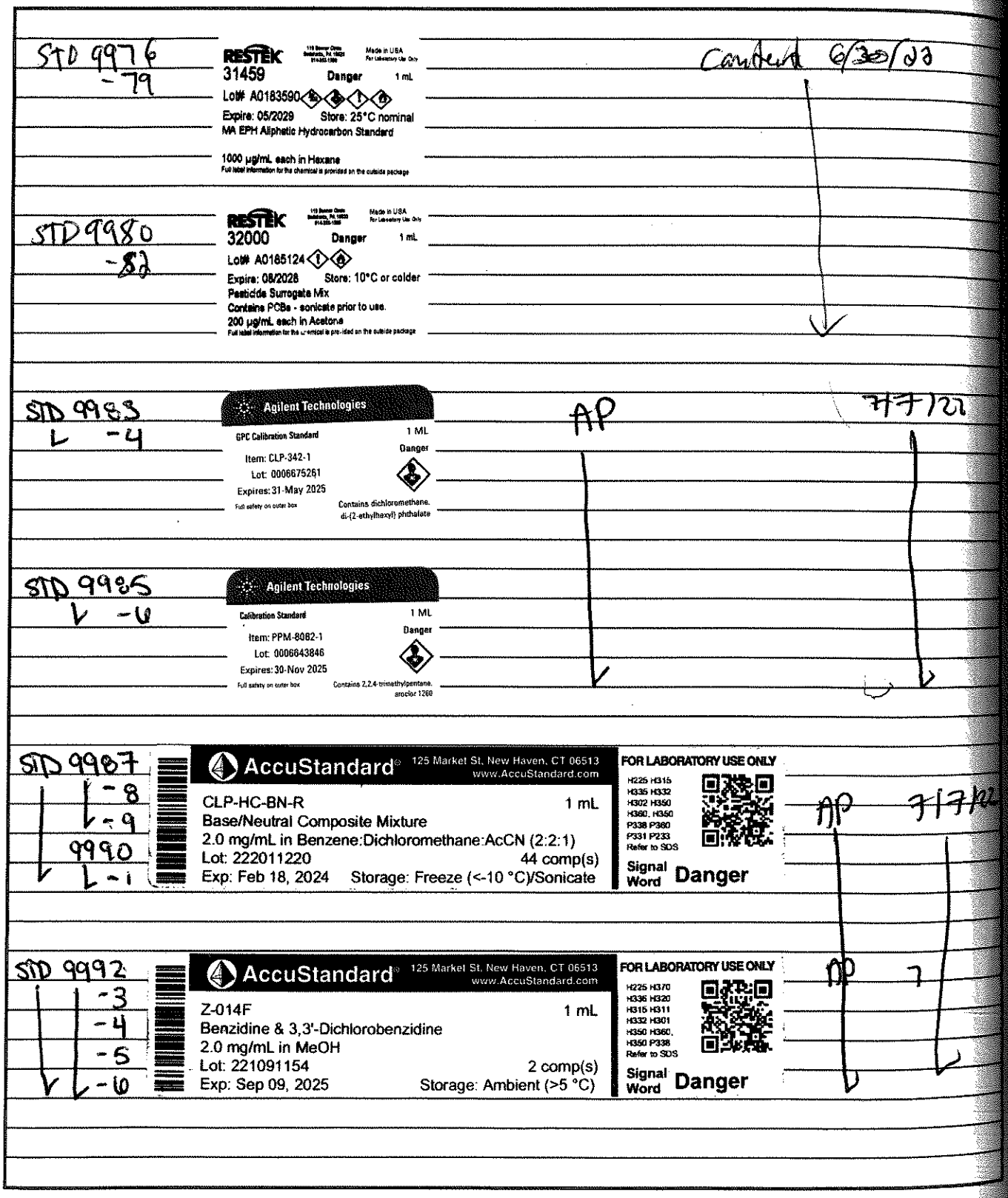
STD9946
9947

AccuStandard® 125 Market St. New Haven, CT 06513 www.AccuStandard.com
Z-014E-R3 1 mL
Composite Mix #3
2.0 mg/mL in CH2Cl2
Lot: 221111178 10 comp(s)
Exp: Dec 10, 2023 Storage: Freeze (<-10 °C)/Sonicate
FOR LABORATORY USE ONLY
H315 H335
H332 H302
H351 H350
P338 P360
P331 P233
P262 P202
Refer to SDS
Signal Word Warning

KATAHDIN ANALYTICAL SERVICES

STOCK STANDARDS RECEIVED

Extractions Laboratory



STD 9976 -79

RESTEK 31459 Danger 1 mL
Lot# A0183590
Expire: 05/2029 Store: 25°C nominal
MA EPH Aliphatic Hydrocarbon Standard
1000 µg/mL each in Hexane
Full label information for the chemical is provided on the outside package

Confirmed 6/30/22

STD 9980 -82

RESTEK 32000 Danger 1 mL
Lot# A0185124
Expire: 08/2028 Store: 10°C or colder
Pesticide Surrogate Mix
Contains PCBs - sonicate prior to use.
200 µg/mL each in Acetone
Full label information for the chemical is provided on the outside package

STD 9983 L -4

Agilent Technologies
GPC Calibration Standard 1 ML
Item: CLP-342-1
Lot: 0006675261
Expires: 31-May 2025
Danger
Full safety on outer box
Contains dichloromethane, di-(2-ethylhexyl) phthalate

AP 7/7/22

STD 9985 L -6

Agilent Technologies
Calibration Standard 1 ML
Item: PPM-8082-1
Lot: 0006643846
Expires: 30-Nov 2025
Danger
Full safety on outer box
Contains 2,2,4-trimethylpentane, aroclor 1260

STD 9987 L -8 L -9 9990 L -1

AccuStandard® 125 Market St. New Haven, CT 06513 www.AccuStandard.com
CLP-HC-BN-R 1 mL
Base/Neutral Composite Mixture
2.0 mg/mL in Benzene:Dichloromethane:AcCN (2:2:1)
Lot: 222011220 44 comp(s)
Exp: Feb 18, 2024 Storage: Freeze (<-10 °C)/Sonicate
FOR LABORATORY USE ONLY
H225 H315 H335 H332 H302 H350 H360, H350 P338 P360 P331 P233 Refer to SDS
Signal Word Danger

AP 7/7/22

STD 9992 L -3 -4 -5 L -10

AccuStandard® 125 Market St. New Haven, CT 06513 www.AccuStandard.com
Z-014F 1 mL
Benzidine & 3,3'-Dichlorobenzidine
2.0 mg/mL in MeOH
Lot: 221091154 2 comp(s)
Exp: Sep 09, 2025 Storage: Ambient (>5 °C)
FOR LABORATORY USE ONLY
H225 H370 H336 H320 H315 H311 H332 H301 H350 H360, H350 P338 Refer to SDS
Signal Word Danger

AP 7

KATAHDIN ANALYTICAL SERVICES

STOCK STANDARDS RECEIVED

Extractions Laboratory

CMW 8/10

STD0025
26
27
28
29

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com

P-233S-10X 1 mL
bis(2-Ethylhexyl)adipate
1000 µg/mL in MeOH
Lot: 222011504 1 comp(s)
Exp: Jan 25, 2032 Storage: Ambient (>5 °C)

FOR LABORATORY USE ONLY
H336 H225
H370 H320
H315 H311
H332 H301
H360 P338
P360 P331
Refer to SDS
Signal Word **Danger**

STD0030
31
32
33
34

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com

Z-014E-R3 1 mL
Composite Mix #3
2.0 mg/mL in CH2Cl2
Lot: 221111178 10 comp(s)
Exp: Dec 10, 2023 Storage: Freeze (<-10 °C)/Sonicate

FOR LABORATORY USE ONLY
H315 H335
H332 H302
H351 H350
P338 P360
P331 P233
P262 P202
Refer to SDS
Signal Word **Warning**

8/10

STD0035
36
37
38
39

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com

CLP-HC-A-R 1 mL
Acid Composite Mixture
2.0 mg/mL in CH2Cl2
Lot: 222041590 19 comp(s)
Exp: May 03, 2025 Storage: Ambient (>5 °C)

FOR LABORATORY USE ONLY
H315 H335
H332 H302
H350 H350
P338 P360
P331 P233
P262 P202
Refer to SDS
Signal Word **Danger**

STD0040
41
42
43
44

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com

APP-9-191-10X 1 mL
1,2,4,5-Tetrachlorobenzene
1000 µg/mL in MeOH
Lot: 219041253 1 comp(s)
Exp: Apr 09, 2029 Storage: Ambient (>5 °C)

FOR LABORATORY USE ONLY
H336 H225
H370 H320
H315 H311
H332 H301
H360 P338
P360 P331
Refer to SDS
Signal Word **Danger**

STD0045
46
47

Agilent Technologies
Calibration Standard 1 ML
Item: PPM-8082-1 Danger
Lot: 0006643846
Expires: 30-Nov 2025
Full safety on outer box
Contains 2,2,4-trimethylpentane, aroclor 1260

CMW 8/18

STD0048

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com

APP-9-191-10X 1 mL
1,2,4,5-Tetrachlorobenzene
1000 µg/mL in MeOH
Lot: 219041253 1 comp(s)
Exp: Apr 09, 2029 Storage: Ambient (>5 °C)

FOR LABORATORY USE ONLY
H336 H225
H370 H320
H315 H311
H332 H301
H360 P338
P360 P331
Refer to SDS
Signal Word **Danger**

CMW 8/22

STD0049
50
51

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com

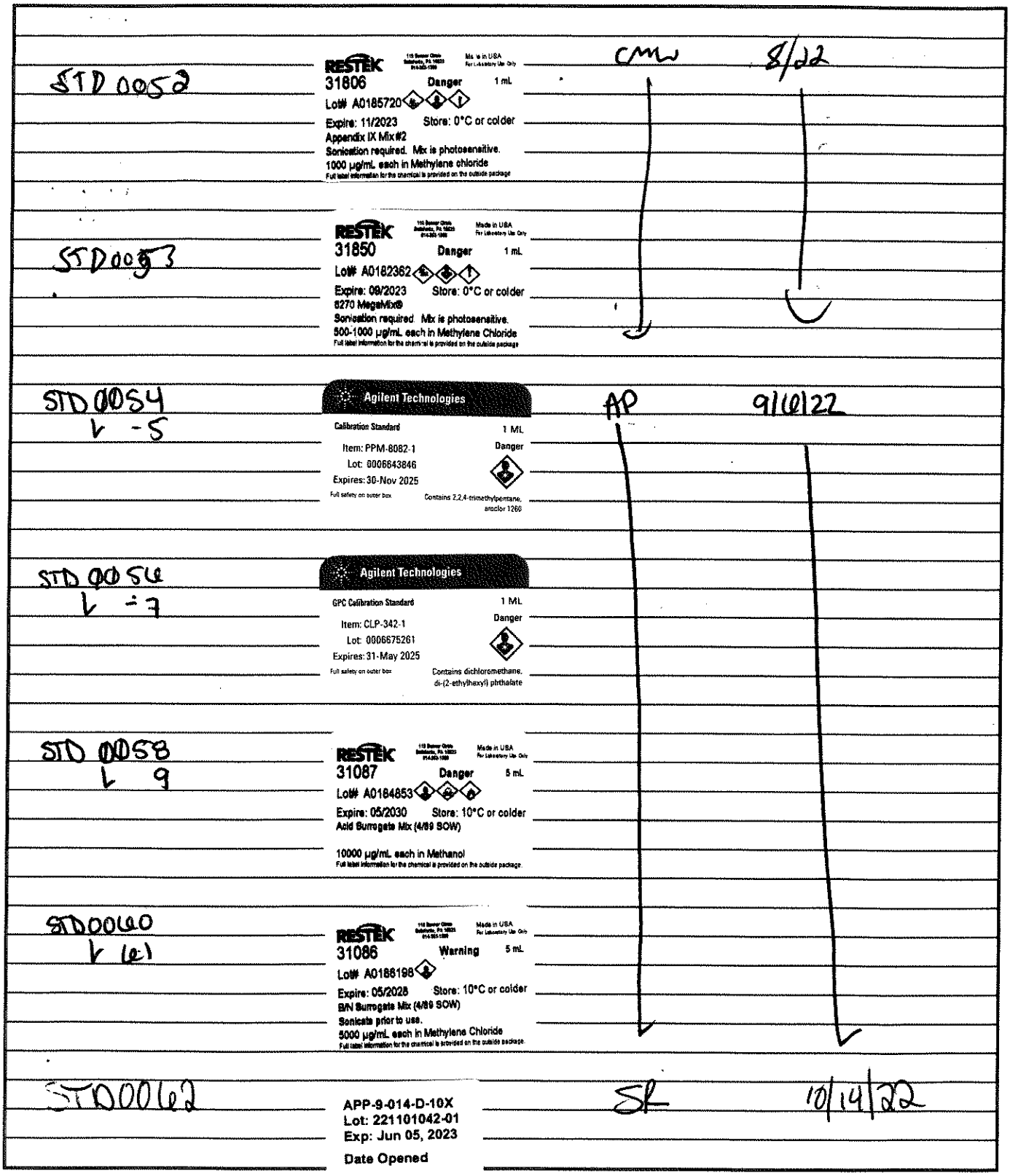
M-8330-SS 1 mL
1,2-Dinitrobenzene
1000 µg/mL in MeOH
Lot: 219051500 1 comp(s)
Exp: May 22, 2029 Storage: Ambient (>5 °C)

FOR LABORATORY USE ONLY
H336 H225
H370 H320
H315 H311
H332 H301
H360 P338
P360 P331
Refer to SDS
Signal Word **Danger**

KATAHDIN ANALYTICAL SERVICES

STOCK STANDARDS RECEIVED

Extractions Laboratory



STD 0052

RESTEK 110 Benner Circle Bellefonte, PA 16823 814-353-1300 Made in USA For Laboratory Use Only
31806 Danger 1 mL
Lot# A0185720
Expire: 11/2023 Store: 0°C or colder
Appendix IX Mix#2
Sonication required. Mix is photosensitive.
1000 µg/mL each in Methylene chloride
Full label information for the chemical is provided on the outside package

CMW 8/22

STD 0053

RESTEK 110 Benner Circle Bellefonte, PA 16823 814-353-1300 Made in USA For Laboratory Use Only
31850 Danger 1 mL
Lot# A0182362
Expire: 09/2023 Store: 0°C or colder
8270 MegaMix®
Sonication required. Mix is photosensitive.
500-1000 µg/mL each in Methylene Chloride
Full label information for the chemical is provided on the outside package

STD 0054
L-5

Agilent Technologies
Calibration Standard 1 ML
Item: PPM-8082-1 Danger
Lot: 0006643846
Expires: 30-Nov 2025
Full safety on outer box
Contains 2,2,4-trimethylpentane, aroclor 1260

AP 9/16/22

STD 0056
L-7

Agilent Technologies
GPC Calibration Standard 1 ML
Item: CLP-342-1 Danger
Lot: 0006675261
Expires: 31-May 2025
Full safety on outer box
Contains dichloromethane, di-(2-ethylhexyl) phthalate

STD 0058
L 9

RESTEK 110 Benner Circle Bellefonte, PA 16823 814-353-1300 Made in USA For Laboratory Use Only
31087 Danger 5 mL
Lot# A0184853
Expire: 05/2030 Store: 10°C or colder
Acid Surrogate Mix (4/99 SOW)
10000 µg/mL each in Methanol
Full label information for the chemical is provided on the outside package

STD 0060
L 61

RESTEK 110 Benner Circle Bellefonte, PA 16823 814-353-1300 Made in USA For Laboratory Use Only
31086 Warning 5 mL
Lot# A0186198
Expire: 05/2028 Store: 10°C or colder
B/N Surrogate Mix (4/99 SOW)
Sonicate prior to use.
5000 µg/mL each in Methylene Chloride
Full label information for the chemical is provided on the outside package

STD 0062

APP-9-014-D-10X
Lot: 221101042-01
Exp: Jun 05, 2023
Date Opened

SK 10/14/22

KATAHDIN ANALYTICAL SERVICES

STOCK STANDARDS RECEIVED

Extractions Laboratory

STD9062 3 4 5

RESTEK 31458 Danger 1 mL
Lot# A0186555
Expire: 04/2026 Store: 25°C nominal
MA EPH Aromatic Hydrocarbon Standard
Sonication required. Mix is photosensitive.
1000 µg/mL each in Methylene chloride
Full label information for the chemical is provided on the outside package

AP 9/6/22

STD 9060 6 7 8 9

RESTEK 31459 Danger 1 mL
Lot# A0186105
Expire: 07/2029 Store: 25°C nominal
MA EPH Aliphatic Hydrocarbon Standard
1000 µg/mL each in Hexane
Full label information for the chemical is provided on the outside package

STD9070

RESTEK 30614 Danger 1 mL
Lot# A0189253
Expire: 09/2025 Store: 0°C or colder
1,4-dioxane-d8 Standard
2000 µg/mL each in P&T Methanol
Full label information for the chemical is provided on the outside package

SR 9/12/22

STD9071

AccuStandard® 125 Market St. New Haven, CT 06513 www.AccuStandard.com
M-8270-08 1 mL
Appendix IX Semi-Volatiles Mix
2.0 mg/mL in CH2Cl2
Lot: 221021147-01 9 comp(s)
Exp: Apr 04, 2024 Storage: Freeze (<-10 °C)
FOR LABORATORY USE ONLY
H315 H335 H332 H302 H350 H350 P338 P360 P331 P233 P262 P202 Refer to SDS
Signal Word Danger

SR 9/27/22

STD9072

AccuStandard® 125 Market St. New Haven, CT 06513 www.AccuStandard.com
M-8270-09 1 mL
Appendix IX Semi-Volatiles Mix
2.0 mg/mL in CH2Cl2
Lot: 222081230 10 comp(s)
Exp: Sep 15, 2024 Storage: Refrig (0-5 °C)
FOR LABORATORY USE ONLY
H315 H335 H332 H302 H351 H360, H350 P338 P360 P331 P233 P262 Refer to SDS
Signal Word Warning

STD9073

AccuStandard® 125 Market St. New Haven, CT 06513 www.AccuStandard.com
M-8270-10 1 mL
1,3,5-Trinitrobenzene
2.0 mg/mL in MeOH
Lot: 220101355 1 comp(s)
Exp; Oct 22, 2030 Storage: Ambient (>5 °C)
FOR LABORATORY USE ONLY
H336 H225 H370 H320 H315 H311 H332 H301 H360 P338 P360 P331 Refer to SDS
Signal Word Danger

STD9074

AccuStandard® 125 Market St. New Haven, CT 06513 www.AccuStandard.com
APP-9-014-D-10X 1 mL
Aramite
2000 µg/mL in Dichloromethane
Lot: 221101042-01 1 comp(s)
Exp: Jun 05, 2023 Storage: Freeze (<-10 °C)
FOR LABORATORY USE ONLY
H315 H335 H332 H302 H351 H350 P338 P360 P331 P233 P262 P202 Refer to SDS
Signal Word Warning

KATAHDIN ANALYTICAL SERVICES

STOCK STANDARDS RECEIVED

Extractions Laboratory

STD9099
9100

RESTEK 110 Benner Circle Bellefonte, PA 16823 814-353-1300 Made in USA For Laboratory Use Only
31498 Danger 1 mL
Lot# A0187280
Expire: 07/2027 Store: 10°C or colder
Nitroglycerin Standard
1000 µg/mL each in Methanol
Full label information for the chemical is provided on the outside package

SR 9/28/22

STD9101
9102
9103
9104
9105

RESTEK 110 Benner Circle Bellefonte, PA 16823 814-353-1300 Made in USA For Laboratory Use Only
33912 Warning 1 mL
Lot# AC180139
Expire: 12/2024 Store: 10°C or colder
alpha-Terpineol Standard
2000 µg/mL each in Methylene Chloride
Full label information for the chemical is provided on the outside package

STD9106
9107
9108

RESTEK 110 Benner Circle Bellefonte, PA 16823 814-353-1300 Made in USA For Laboratory Use Only
31480 Danger 1 mL
Lot# A0187886
Expire: 06/2028 Store: 10°C or colder
MA Fractionation Surrogate Spike Mix
Sonication required. Mix is photosensitive.
4000 µg/mL each in Hexane
Full label information for the chemical is provided on the outside package

STD9109

AccuStandard® 125 Market St. New Haven, CT 06513 www.AccuStandard.com
M-8151A 1 mL
Underivatized Chlorinated Herbicides
Varied conc. in Acetone
Lot: 221121297-01 18 comp(s)
Exp: Sep 11, 2023 Storage: Freeze (<-10 °C)
FOR LABORATORY USE ONLY
H225 H336 H335 H319 H315 P338 P360 P331 P233 P260 P262 P202 Refer to SDS
Signal Word Danger

AP 9/24/22

STD9110
L-11
L-12

AccuStandard® 125 Market St. New Haven, CT 06513 www.AccuStandard.com
GRH-IS-10X 1 mL
5-alpha Androstane
10.0 mg/mL in CH2Cl2
Lot: 220111195 1 comp(s)
Exp: Nov 19, 2030 Storage: Ambient (>5 °C)
FOR LABORATORY USE ONLY
H315 H335 H332 H302 H351 H350 P338 P360 P331 P233 P262 P202 Refer to SDS
Signal Word Warning

STD9113
L-14
L-15

AccuStandard® 125 Market St. New Haven, CT 06513 www.AccuStandard.com
P-233S-10X 1 mL
bis(2-Ethylhexyl)adipate
1000 µg/mL in MeOH
Lot: 222011504 1 comp(s)
Exp: Jan 25, 2032 Storage: Ambient (>5 °C)
FOR LABORATORY USE ONLY
H336 H225 H370 H320 H315 H311 H332 H301 H360 P338 P360 P331 Refer to SDS
Signal Word Danger

STD 9/# 0070
-71
-72

RESTEK 110 Benner Circle Bellefonte, PA 16823 814-353-1300 Made in USA For Laboratory Use Only
31097 Warning 1 mL
Lot# A0188827
Expire: 03/2026 Store: 10°C or colder
o-Terphenyl Standard
Sonicate prior to use.
10000 µg/mL each in Methylene Chloride
Full label information for the chemical is provided on the outside package

CMW 10/4/22

KATAHDIN ANALYTICAL SERVICES

STOCK STANDARDS RECEIVED

Extractions Laboratory

STD00089
90
91

RESTEK
30614 Danger 1 mL
Lot# A0189253
Expire: 09/2025 Store: 0°C or colder
1,4-dioxane-d8 Standard
2000 µg/mL each in P&T Methanol
Full label information for the chemical is provided on the outside package

AP 10/21/22

STD 0092

RESTEK
32200 Danger 1 mL
Lot# A0190445
Expire: 02/2027 Store: 10°C or colder
2,4'-DDT Standard
1000 µg/mL each in Methanol
Full label information for the chemical is provided on the outside package

STD0093
94
95
96

RESTEK
32000 Danger 1 mL
Lot# A0188903
Expire: 11/2026 Store: 10°C or colder
Pesticide Surrogate Mix
Contains PCBs - sonicate prior to use.
200 µg/mL each in Acetone
Full label information for the chemical is provided on the outside package

STD0097

RESTEK
32098 Danger 1 mL
Lot# A0190447
Expire: 02/2027 Store: 10°C or colder
2,4'-DDD Standard
1000 µg/mL each in Methanol
Full label information for the chemical is provided on the outside package

AccuStandard® 125 Market St. New Haven, CT 06513 www.AccuStandard.com
Z-014F 1 mL
Benzidine & 3,3'-Dichlorobenzidine
2.0 mg/mL in MeOH
Lot: 221091154
Exp: Sep 09, 2025
PRODUCT OF THE USA
2 comp(s)
Storage: Ambient (>5 °C)
FOR LABORATORY USE ONLY
H225 H370 H336 H320 H315 H311 H332 H301 H350 H360 H350 P308
Refer to SDS
Signal Word: Danger

STD 0098
99
100
101
102

DC 11/3/22

STD0103

RESTEK
32099 Danger 1 mL
Lot# A0190873
Expire: 02/2027 Store: 10°C or colder
2,4'-DDE Standard
1000 µg/mL each in Methanol
Full label information for the chemical is provided on the outside package

SR 11/3/22

STD0104
105
106

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com
H-001S-D-40X 1 mL
1-Methylnaphthalene
2.0 mg/mL in Dichloromethane
Lot: 221121197
Exp: Dec 15, 2031
PRODUCT OF THE USA
1 comp(s)
Storage: Ambient (>5 °C)
FOR LABORATORY USE ONLY
H315 H335 H332 H302 H351 H350 P338 P360 P331 P233 P262 P202
Refer to SDS
Signal Word: Warning

KATAHDIN ANALYTICAL SERVICES

STOCK STANDARDS RECEIVED

Extractions Laboratory

STD0107

108
109
110
111

AccuStandard® 125 Market St. New Haven, CT 06513 www.AccuStandard.com

APP-9-191-10X 1 mL
1,2,4,5-Tetrachlorobenzene
1000 µg/mL in MeOH
Lot: 219041253
Exp: Apr 09, 2029
PRODUCT OF THE USA

1 comp(s)
Storage: Ambient (>5 °C)
FOR LABORATORY USE ONLY

H036 H225 H370 H320 H315 H311 H332 H301 H360 P338 P360 P331 Refer to SDS

Signal Word: Danger

SR 11/3/22

STD0112

113
114
115
116

AccuStandard® 125 Market St. New Haven, CT 06513 www.AccuStandard.com

CLP-HC-A-R 1 mL
Acid Composite Mixture
2.0 mg/mL in CH2Cl2
Lot: 222041590
Exp: May 03, 2025
PRODUCT OF THE USA

19 comp(s)
Storage: Ambient (>5 °C)
FOR LABORATORY USE ONLY

H315 H335 H332 H302 H350 H350 P338 P360 P331 P233 P262 P202 Refer to SDS

Signal Word: Danger

SR 11/3/22

STD0117

118
119

AccuStandard® 125 Market St. New Haven, CT 06513 www.AccuStandard.com

Z-014E-R3 1 mL
Composite Mix #3
2.0 mg/mL in CH2Cl2
Lot: 221111178
Exp: Dec 10, 2023 Storage: Freeze (<-10 °C)/Sonicate
PRODUCT OF THE USA

10 comp(s)
FOR LABORATORY USE ONLY

H315 H335 H332 H302 H351 H350 P338 P360 P331 P233 P262 P202 Refer to SDS

Signal Word: Warning

SR 11/3/22

STD0120

121
122
123
124

AccuStandard® 125 Market St. New Haven, CT 06513 www.AccuStandard.com

CLP-HC-BN-R 1 mL
Base/Neutral Composite Mixture
2.0 mg/mL in Benzene:Dichloromethane:AcCN (2:2:1)
Lot: 222011220
Exp: Feb 18, 2024 Storage: Freeze (<-10 °C)/Sonicate
PRODUCT OF THE USA

44 comp(s)
FOR LABORATORY USE ONLY

H225 H315 H335 H332 H302 H350 H360 H350 P338 P360 P331 P233 Refer to SDS

Signal Word: Danger

SR 11/3/22

STD0125

126
127
128
129

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com

S-7226 1 ml
Custom Standard
5000 µg/mL in CH2Cl2
Lot: 222111144
Exp: Dec 14, 2024
PRODUCT OF THE USA

5 comp(s)
Storage: Freeze (<-10 °C)
FOR LABORATORY USE ONLY

H315 H335 H332 H302 H351 H360 H350 P338 P360 P331 P233 P262 Refer to SDS

Signal Word: Warning

SR 11/21/22

STD0130

131
132
133
134

AccuStandard® 125 Market St. New Haven, CT 06513 www.AccuStandard.com

P-233S-A-10X 1 mL
bis(2-Ethylhexyl)adipate
1000 µg/mL in Acetone
Lot: 219071483-01
Exp: Nov 21, 2024
PRODUCT OF THE USA

1 comp(s)
Storage: Refrig (0-5 °C)
FOR LABORATORY USE ONLY

H225 H336 H335 H319 H315 P338 P360 P331 P233 P260 P262 P202 Refer to SDS

Signal Word: Danger

SR 11/21/22

~~STD0135~~
134

CMW 1/26/23

KATAHDIN ANALYTICAL SERVICES

STOCK STANDARDS RECEIVED

Extractions Laboratory

STD0135 -16	Diazald Batch # SHBP7300	11/22/22	AP
STD0137 -8	Carbitol Lot # A0442237	11/22/22	AP
STD0139 140 41 -2 -3	RESTEK 31458 Danger 1 mL Lot# A0189351 Expire: 08/2028 Store: 25°C nominal MA EPH Aromatic Hydrocarbon Standard Sonication required. Mix is photosensitive. 1000 µg/mL each in Methylene chloride Full label information for the chemical is provided on the outside package	11/28/22	AP
STD0144 -5 -6 -7 -8	RESTEK 31459 Danger 1 mL Lot# A0189400 Expire: 10/2029 Store: 25°C nominal MA EPH Aliphatic Hydrocarbon Standard 1000 µg/mL each in Hexane Full label information for the chemical is provided on the outside package		
STD0149 150	RESTEK 31097 Warning 1 mL Lot# A0188827 Expire: 03/2026 Store: 10°C or colder o-Terphenyl Standard Sonicate prior to use. 10000 µg/mL each in Methylene Chloride Full label information for the chemical is provided on the outside package		
STD0151	RESTEK 31087 Danger 5 mL Lot# A0188108 Expire: 08/2030 Store: 10°C or colder Acid Surrogate Mix (4/89 SOW) 10000 µg/mL each in Methanol Full label information for the chemical is provided on the outside package		
STD0152 -3 -4 -5 -6	RESTEK 33912 Warning 1 mL Lot# A0180139 Expire: 12/2024 Store: 10°C or colder alpha-Terpineol Standard 2000 µg/mL each in Methylene Chloride Full label information for the chemical is provided on the outside package.		

KATAHDIN ANALYTICAL SERVICES

STOCK STANDARDS RECEIVED

Extractions Laboratory

STD 0157

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com

H-001S-D-40X 1 mL
1-Methylnaphthalene
2.0 mg/mL in Dichloromethane
Lot: 221121197 1 comp(s)
Exp: Dec 15, 2031 Storage: Ambient (>5 °C)
PRODUCT OF THE USA **FOR LABORATORY USE ONLY**

H315 H335 H332 H302 H351 H350 P338 P360 P331 P233 P262 P202 Refer to SDS
Signal Word: Warning

11/30 AP

STD 0158 9 60

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com

Z-014E-R3 1 mL
Composite Mix #3
2.0 mg/mL in CH2Cl2
Lot: 221111178 10 comp(s)
Exp: Dec 10, 2023 Storage: Freeze (<-10 °C)/Sonicate
PRODUCT OF THE USA **FOR LABORATORY USE ONLY**

H315 H335 H332 H302 H351 H350 P338 P360 P331 P233 P262 P202 Refer to SDS
Signal Word: Warning

STD 1161 62 3 4 5

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com

S-7226 1 ml
Custom Standard
5000 µg/mL in CH2Cl2
Lot: 222111144 5 comp(s)
Exp: Dec 14, 2024 Storage: Freeze (<-10 °C)
PRODUCT OF THE USA **FOR LABORATORY USE ONLY**

H315 H335 H332 H302 H351 H360 H350 P338 P360 P331 P233 P262 Refer to SDS
Signal Word: Warning

STD 1169 7 8 9 70

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com

APP-9-191-10X 1 mL
1,2,4,5-Tetrachlorobenzene
1000 µg/mL in MeOH
Lot: 219041253 1 comp(s)
Exp: Apr 09, 2029 Storage: Ambient (>5 °C)
PRODUCT OF THE USA **FOR LABORATORY USE ONLY**

H336 H225 H370 H320 H315 H311 H332 H301 H360 P338 P360 P331 Refer to SDS
Signal Word: Danger

STD 1171 2 3 4 5

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com

CLP-HC-A-R 1 mL
Acid Composite Mixture
2.0 mg/mL in CH2Cl2
Lot: 222041590 19 comp(s)
Exp: May 03, 2025 Storage: Ambient (>5 °C)
PRODUCT OF THE USA **FOR LABORATORY USE ONLY**

H315 H335 H332 H302 H350 H350 P338 P360 P331 P233 P262 P202 Refer to SDS
Signal Word: Danger

KATAHDIN ANALYTICAL SERVICES

STOCK STANDARDS RECEIVED

Extractions Laboratory

STD 211
212

Agilent Technologies
GPC Calibration Standard 1 ML
Item: CLP-342-1
Lot: 0006675261
Expires: 31-May 2025
Full safety on outer box
Danger
Contains dichloromethane, di-(2-ethylhexyl) phthalate

STD 0213
0214

RESTEK 110 Benner Circle Bellefonte, PA 16823 814-353-1300 Made in USA For Laboratory Use Only
31087 Danger 5 mL
Lot# A0188108
Expire: 08/2030 Store: 10°C or colder
Acid Surrogate Mix (4/89 SOW)
10000 µg/mL each in Methanol
Full label information for the chemical is provided on the outside package

JAN 0 4 2023 SL

STD 0215
0216

RESTEK 110 Benner Circle Bellefonte, PA 16823 814-353-1300 Made in USA For Laboratory Use Only
31086 Warning 5 mL
Lot# A0189416
Expire: 08/2028 Store: 10°C or colder
B/N Surrogate Mix (4/89 SOW)
Sonicate prior to use.
5000 µg/mL each in Methylene Chloride
Full label information for the chemical is provided on the outside package

STD 0217
0218
0219

RESTEK 110 Benner Circle Bellefonte, PA 16823 814-353-1300 Made in USA For Laboratory Use Only
31480 Danger 1 mL
Lot# A0187866
Expire: 08/2028 Store: 10°C or colder
MA Fractionation Surrogate Spike Mix
Sonication required. Mix is photosensitive.
4000 µg/mL each in Hexane
Full label information for the chemical is provided on the outside package

STD 0220
221
222

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com
GRH-IS-10X 1 mL
5-alpha Androstane
10.0 mg/mL in CH2Cl2
Lot: 220111195
Exp: Nov 19, 2030 1 comp(s)
Storage: Ambient (>5 °C)
PRODUCT OF THE USA FOR LABORATORY USE ONLY
H315 H335 H332 H302 H351 H350 P336 P360 P331 P233 P262 P202 Refer to SDS
Signal Word: Warning

JAN 0 6 2023 SL

STD 0223
224
225
226
227

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com
DRH-FTRPH 1 mL
FTRPH Calibration/ Window Defining Standard
500 µg/mL in Hexane
Lot: 222101257 17 comp(s)
Exp: Nov 01, 2032 Storage: Ambient (>5 °C)/Sonicate
PRODUCT OF THE USA FOR LABORATORY USE ONLY
H304 H225 H336 H361 H315 H335 H332 H302 H360 P338 P352 P331 Refer to SDS
Signal Word: Danger

STD 0228
229
230
231
232

RESTEK 110 Benner Circle Bellefonte, PA 16823 814-353-1300 Made in USA For Laboratory Use Only
31097 Warning 1 mL
Lot# A0188827
Expire: 03/2026 Store: 10°C or colder
o-Terphenyl Standard
Sonicate prior to use.
10000 µg/mL each in Methylene Chloride
Full label information for the chemical is provided on the outside package

KATAHDIN ANALYTICAL SERVICES

STOCK STANDARDS RECEIVED

GC and Semivolatile Extractables Laboratory

STK 6233
6234

RESTEK 110 Benner Circle Bellefonte, PA 16823 814-353-1300 Made in USA For Laboratory Use Only
31097 Warning 1 mL
Lot# A0174841
Expire: 02/2025 Store: 10°C or colder
o-Terphenyl Standard
Sonicate prior to use.
10000 µg/mL each in Methylene Chloride
Full label information for the chemical is provided on the outside package.

11/22/21 ✓ SR ✓

STK 6235
6236
6237

RESTEK 110 Benner Circle Bellefonte, PA 16823 814-353-1300 Made in USA For Laboratory Use Only
33913 Warning 1 mL
Lot# A0175442
Expire: 07/2027 Store: 10°C or colder
SOM01.0 SIM Analysis Standard
Sonication required. Mix is photosensitive.
2000 µg/mL each in Methylene Chloride
Full label information for the chemical is provided on the outside package.

11/22/21 ✓ SR ✓

STK 6238
35
40
41
42

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com
Z-014J 1 mL
Internal Standard Mix
4.0 mg/mL in CH2Cl2
Lot: 221011388 6 comp(s)
Exp: Jan 26, 2031 Storage: Ambient (>5 °C)/Sonicate
FOR LABORATORY USE ONLY
H315 H335
H332 H302
H351 H350
P338 P360
P331 P233
P262 P202
Refer to SDS
Signal Word Warning

Rec'd 12/22/21 JLS

STK 6243

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com
M-515-SS 1 mL
2,4-Dichlorophenylacetic methyl ester
0.1 mg/mL in MtBE
Lot: 220071258-01 1 comp(s)
Exp: Oct 09, 2023 Storage: Ambient (>5 °C)
FOR LABORATORY USE ONLY
H225 H315
H335 P338
P352 P331
P233 P260
P262 P202
P264 P284
Refer to SDS
Signal Word Danger

12/10/21 JLP

STK 6244

RESTEK 110 Benner Circle Bellefonte, PA 16823 814-353-1300 Made in USA For Laboratory Use Only
33912 Warning 1 mL
Lot# A0176858
Expire: 09/2024 Store: 10°C or colder
alpha-Terpineol Standard
2000 µg/mL each in Methylene Chloride
Full label information for the chemical is provided on the outside package.

12·14·21 KE

STK 6245

RESTEK 110 Benner Circle Bellefonte, PA 16823 814-353-1300 Made in USA For Laboratory Use Only
31850 Danger 1 mL
Lot# A0170978
Expire: 10/2022 Store: 0°C or colder
8270 MegaMix®
Sonication required. Mix is photosensitive.
500-1000 µg/mL each in Methylene Chloride
Full label information for the chemical is provided on the outside package.

12·14·21 KE

STK 6246

RESTEK 110 Benner Circle Bellefonte, PA 16823 814-353-1300 Made in USA For Laboratory Use Only
32417 Danger 1 mL
Lot# A0173671
Expire: 02/2025 Store: 10°C or colder
Degradation Calibration Mixture
100-200 µg/mL each in MTBE (methyl-tert-butyl-ether)
Full label information for the chemical is provided on the outside package.

1·3·22 DT/SM

KATAHDIN ANALYTICAL SERVICES

STOCK STANDARDS RECEIVED

GC and Semivolatile Extractables Laboratory

STK6254
STK6255

30614
1,4-dioxane-d8 Standard
Lot# A0178063
Expire: 11/2024 Store: 0°C or colder
2000 µg/mL each in P&T Methanol
1 mL
RESTEK

Recd
1-25-22
JLS

STK6256
57

CHEM SERVICE INC.
www.chemservice.com
N-13535-100MG
Tetrachloroterephthalic acid
Purity: 99.5%
Lot Number: 12612300 Expires: 09/30/23

1/31/22 DT

STK6258

6-MA ALDRICH
CHLOREN DIC ACID 99% purity
Lot # 08816HF
CAS 115-28-6

Rec'd
2/1/22 DT

STK 6259

AccuStandard 125 Market St. New Haven, CT 06513 www.AccuStandard.com
C-254S-H 1 mL
Aroclor 1254
100 µg/mL in Hexane
Lot: 220031182 1 comp(s)
Exp: Mar 13, 2030 Storage: Ambient (>5 °C)
FOR LABORATORY USE ONLY
H304 H225 H336 H361 H315 H335 H332 H302 H360 P338 P352 P331 Refer to SDS
Signal Word Danger

2/2/22
SM

STK 6260

AccuStandard 125 Market St. New Haven, CT 06513 www.AccuStandard.com
C-262S-H-10X 1 mL
Aroclor 1262
1000 µg/mL in Hexane
Lot: 219081448 1 comp(s)
Exp: Aug 27, 2029 Storage: Ambient (>5 °C)
FOR LABORATORY USE ONLY
H304 H225 H336 H361 H315 H335 H332 H302 H360, H350 P338 Refer to SDS
Signal Word Danger

STK 6261

AccuStandard 125 Market St. New Haven, CT 06513 www.AccuStandard.com
C-268S-H-10X 1 mL
Aroclor 1268
1000 µg/mL in Hexane
Lot: 219101478 1 comp(s)
Exp: Oct 30, 2029 Storage: Ambient (>5 °C)/Sonicate
FOR LABORATORY USE ONLY
H304 H225 H336 H361 H315 H335 H332 H302 H360, H350 P338 Refer to SDS
Signal Word Danger

STK 6262

AccuStandard 125 Market St. New Haven, CT 06513 www.AccuStandard.com
C-242S-H 1 mL
Aroclor 1242
100 µg/mL in Hexane
Lot: 220071061 1 comp(s)
Exp: Jul 09, 2030 Storage: Ambient (>5 °C)
FOR LABORATORY USE ONLY
H304 H225 H336 H361 H315 H335 H332 H302 H360 P338 P352 P331 Refer to SDS
Signal Word Danger

KATAHDIN ANALYTICAL SERVICES

STOCK STANDARDS RECEIVED

GC and Semivolatile Extractables Laboratory

STK6340

33913 US/EN
SOM01.0 SIM Analysis Standard
Lot# A0186160
Expire: 05/2028 Store: 10°C or colder 1 mL
2000 µg/mL each in Methylene Chloride
RESTEK

STK6341
STK6342

33913 US/EN
SOM01.0 SIM Analysis Standard
Lot# A0186160
Expire: 05/2028 Store: 10°C or colder 1 mL
2000 µg/mL each in Methylene Chloride
RESTEK

STK6343 DLM-165-0 CAS 1718-52-1 Rec'd 9/6/22 DT
Pyrene-D10 Lot# PR-30304
CAMBRIDGE ISOTOPE

STK6344 DLM-1123-0 CAS 81103-79-9 Rec'd 9/6/22 DT
Fluorene-D10 Lot# PR-24453
CAMBRIDGE ISOTOPE

CHEM SERVICE INC.
PO Box 599, West Chester, PA 19381 800-452-9994

STK6345 N-10624-1G 2,4-Dibromophenol Rec'd 9/6 DT
Purity: 99.4%
DANGER
Lot Number: 13602300
Expires: 08/31/25
www.chemservice.com

31879 US/EN
Benzoic Acid Mix
Lot# A0180473
Expire: 01/2026 Store: 10°C or colder 1 mL
2000 µg/mL each in Methylene Chloride
RESTEK

STK6346 9/14

AccuStandard® 125 Market St. New Haven, CT 06513 www.AccuStandard.com

STK6347 AS-E0455 1 mL
Dinoseb
1000 µg/mL in AcCN
Lot: 221071576-01 1 comp(s)
Exp: Sep 12, 2026 Storage: Ambient (>5 °C)

FOR LABORATORY USE ONLY
H225 H315 H332 H319 H360 P338 P352 P340 P233 P260 P262 P202 Refer to SDS
Signal Word Danger

9/14

KATAHDIN ANALYTICAL SERVICES

STOCK STANDARDS RECEIVED

GC and Semivolatile Extractables Laboratory

STK6384
85
86
87
88

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com

Z-014J
Internal Standard Mix
4.0 mg/mL in CH2Cl2
Lot: 222091463
Exp: Oct 03, 2032 Storage: Ambient (>5 °C)/Sonicate
PRODUCT OF THE USA FOR LABORATORY USE ONLY
1 mL
6 comp(s)
H315 H335 H332 H307 H351 H350 P338 P360 P331 P233 P262 P202 Refer to SDS
Signal Word: Warning

11/29 DT

STK6389
1 90

31879 US/EN
Benzoic Acid Mix
Lot# A0183914
Expire: 04/2026 Store: 10°C or colder 1 mL
2000 µg/mL each in Methylene Chloride
RESTEK

R: 12/8/22 EP

STK6391

31850 US/EN
8270 MegaMix®
Lot# A0185274
Expire: 11/2023 Store: 0°C or colder 1 mL
500-1000 µg/mL each in Methylene Chloride
RESTEK

R: 12/21/22 EP

STK6392

31834 US/EN
Benzidine Mix
Lot# A0187252
Expire: 02/2027 Store: 10°C or colder 1 mL
2000 µg/mL each in Methylene Chloride
RESTEK

1/3/23 DT

STK6393

31031 US/EN
606 Phthalate Esters Calibration Mix
Lot# A0190160
Expire: 02/2027 Store: 10°C or colder 1 mL
2000 µg/mL each in Methanol
RESTEK

R: 1/16/23 EP

STK6394

32007 US/EN
Aroclor® 1221 Standard
Lot# A0187032
Expire: 10/2028 Store: 25°C nominal 1 mL
1000 µg/mL each in Hexane
RESTEK

This product contains PCBs

R: 4/12/23 MG

KATAHDIN ANALYTICAL SERVICES

STOCK STANDARDS RECEIVED

GC and Semivolatile Extractables Laboratory

STK 6395

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com

AS-E0455 1 mL
Dinoseb
1000 µg/mL in AcCN
Lot: 221071576-01
Exp: Sep 12, 2026
1 comp(s)
Storage: Ambient (>5 °C)
PRODUCT OF THE USA
FOR LABORATORY USE ONLY

H225 H315 H332 H319 H360 P336 P352 P340 P233 P260 P262 P202 Refer to SDS
Signal Word: Danger

1/13/23 CO

STK6396

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com

M-515-SS 1 mL
2,4-Dichlorophenylacetic methyl ester
0.1 mg/mL in MtBE
Lot: 22011517
Exp: Feb 25, 2024
1 comp(s)
Storage: Ambient (>5 °C)
PRODUCT OF THE USA
FOR LABORATORY USE ONLY

H225 H315 H335 P308 P352 P331 P233 P260 P262 P202 P264 P284 Refer to SDS
Signal Word: Danger

1/13/23 DT

STK6397

31853 US/EN
1,4-dioxane
Lot# A0187043
Expire: 07/2027 Store: 0°C or colder 1 mL
2000 µg/mL each in Methylene Chloride
RESTEK

1/16/23 DT

STK 63998

RESTEK 110 Benner Circle Bellefonte, PA 16823 814-353-1300 Made in USA For Laboratory Use Only
32291 **Danger** 1 mL
Lot# A0183550
Expire: 03/2026 Store: 10°C or colder
Organochlorine Pesticide Mix AB #1
200 µg/mL each in Hexane/Toluene (50:50)
Full label information for the chemical is provided on the outside package

1/20/23 AP

STK 63999

RESTEK 110 Benner Circle Bellefonte, PA 16823 814-353-1300 Made in USA For Laboratory Use Only
32021 **Danger** 1 mL
Lot# A0188505
Expire: 11/2026 Store: 10°C or colder
Chlordane Standard
1000 µg/mL each in Hexane
Full label information for the chemical is provided on the outside package

STK 64000

RESTEK 110 Benner Circle Bellefonte, PA 16823 814-353-1300 Made in USA For Laboratory Use Only
32005 **Danger** 1 mL
Lot# A0180908
Expire: 04/2026 Store: 10°C or colder
Toxaphene Standard
1000 µg/mL each in Hexane
Full label information for the chemical is provided on the outside package

STK 64001
402

RESTEK 110 Benner Circle Bellefonte, PA 16823 814-353-1300 Made in USA For Laboratory Use Only
31850 **Danger** 1 mL
Lot# A0185274
Expire: 11/2023 Store: 0°C or colder
8270 MegaMix®
Sonication required. Mix is photosensitive.
500-1000 µg/mL each in Methylene Chloride
Full label information for the chemical is provided on the outside package

KATAHDIN ANALYTICAL SERVICES

STOCK STANDARDS RECEIVED

GC and Semivolatile Extractables Laboratory

STK6403 6404 — 1/31/23 SR

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com

M-625-TS-20X 1 mL
GC/MS Tuning Std for EPA Method 624/625
1000 µg/mL in CH2Cl2
Lot: 222031198
Exp: Apr 16, 2024 4 comp(s)
Storage: Ambient (>5 °C)
PRODUCT OF THE USA **FOR LABORATORY USE ONLY**

H315 H335 H332 H302 H350 H360 H350 P308 P360 P331 P233 P262 Refer to SDS
Signal Word: Warning

STK6405 — 2/9/23 SR

RESTEK 31806 Danger 1 mL
Lot# A0185720
Expire: 11/2023 Store: 0°C or colder
Appendix IX Mix #2
Sonication required. Mix is photosensitive.
1000 µg/mL each in Methylene chloride
Full label information for the chemical is provided on the outside package

STK6406 — 2/23/23 SR

Agilent Technologies
Calibration Standard 1 mL
Item: DWM-514-1
Lot: 0006697532
Expires: 30-Sep 2025
Full safety on outer box
Danger
Contains methanol

STK6407 08 09 10 — 3/17/23 EP

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com

M-8330-SS 1 mL
1,2-Dinitrobenzene
1000 µg/mL in MeOH
Lot: 223031204
Exp: Mar 14, 2033 1 comp(s)
Storage: Ambient (>5 °C)
PRODUCT OF THE USA **FOR LABORATORY USE ONLY**

H336 H225 H370 H020 H315 H311 H332 H301 H360 P338 P360 P331 Refer to SDS
Signal Word: Danger

STK6411 L 12

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com

M-8330-ADD-1-10X 1 mL
Nitroglycerin
1000 µg/mL in Ethanol:Methanol (97:3)
Lot: 220041110-02
Exp: Jul 03, 2024 1 comp(s)
Storage: Refrig (0-5 °C)
PRODUCT OF THE USA **FOR LABORATORY USE ONLY**

H225 H320 H315 H312 H335 H332 H302 H360 P338 P360 P340 P233 Refer to SDS
Signal Word: Danger

STK6413 L 14

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com

M-8330-ADD-2-10X 1 mL
PETN
1000 µg/mL in Methanol
Lot: 222011465-01
Exp: Mar 23, 2025 1 comp(s)
Storage: Refrig (0-5 °C)
PRODUCT OF THE USA **FOR LABORATORY USE ONLY**

H225 H370 H336 H320 H315 H311 H332 H301 H360 P338 P360 P331 Refer to SDS
Signal Word: Danger

CONVENTIONAL AND PHYSICAL ANALYTICAL DATA

QC Summary Section

Katahdin
ANALYTICAL SERVICES

Quality Control Report

Blank Sample Summary Report

Chromium, Hexavalent

QC Batch	Anal. Method	Anal. Date	Prep. Date	Result	Units	LOQ	MDL	LOD
WG333949	SW846 7196A	15-MAR-23	15-MAR-23	U0.29	mg/Kgdry wt	0.48	0.14	0.29

Total Solids

QC Batch	Anal. Method	Anal. Date	Prep. Date	Result	Units	LOQ	MDL	LOD
WG332528	SM2540G	16-FEB-23	15-FEB-23	100	%	1.0	1.0	1.0

Quality Control Report

Laboratory Control Sample Summary Report

Chromium, Hexavalent

Laboratory Sample ID	Sample Type	QC Batch	Analysis Date	Prep Date	Units	Spike Amount	Result	Recovery (%)	Acceptance Range	RPD
WG333949-2	LCS	WG333949	15-MAR-23	15-MAR-23	mg/Kgdrywt	40	37.	92	80-120	
WG333949-3	LCSD	WG333949	15-MAR-23	15-MAR-23	mg/Kgdrywt	40	36.	91	80-120	1

Total Solids

Laboratory Sample ID	Sample Type	QC Batch	Analysis Date	Prep Date	Units	Spike Amount	Result	Recovery (%)	Acceptance Range	RPD
WG332528-2	LCS	WG332528	16-FEB-23	15-FEB-23	%	90	90.	99	90-110	
WG332528-3	LCSD	WG332528	16-FEB-23	15-FEB-23	%	90	89.	99	90-110	0

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Quality Control Report

Matrix Spike Sample Summary Report

Chromium, Hexavalent

Matrix Spike Sample ID	Sample Type	Original Sample ID	QC Batch	Analysis Date	Units	Spike Amount	Sample Result	MS Result	Recovery (%)	Acceptance Range	RPD
WG333949-4	MS	SQ0595-3	WG333949	15-MAR-23	mg/Kgdrywt	2130.16	J 0.32	1800	86	75 - 125	
WG333949-5	MS	SQ0595-3	WG333949	15-MAR-23	mg/Kgdrywt	51.29	J 0.32	46.	90	75 - 125	

Sample Data Section

KATAHDIN ANALYTICAL SERVICES – INORGANIC DATA QUALIFIERS

The sampled date indicated on the attached Report(s) of Analysis (ROA) is the date for which a grab sample was collected or the date for which a composite sample was completed. Beginning and start times for composite samples can be found on the Chain-of-Custody.

U Indicates the compound was analyzed for but not detected above the specified level. This level may be the Practical Quantitation Level (PQL) (also called Limit of Quantitation (LOQ)), the Limit of Detection (LOD) or Method Detection Limit (MDL) as required by the client.

Note: All results reported as "U" MDL have a 50% rate for false negatives compared to those results reported as "U" PQL "U" LOQ or "U" LOD, where the rate of false negatives is <1%.

E Estimated value. This flag identifies compounds whose concentrations exceed the upper level of the calibration range of the instrument for that specific analysis.

J Estimated value. The analyte was detected in the sample at a concentration less than the laboratory Practical Quantitation Level (PQL) (also called Limit of Quantitation (LOQ)), but above the Method Detection Limit (MDL).

I-7 The laboratory's Practical Quantitation Level (PQL) or LOQ could not be achieved for this parameter due to sample composition, matrix effects, sample volume, or quantity used for analysis.

A-4 Please refer to cover letter or narrative for further information.

H_ Please note that the regulatory holding time for _____ is "analyze immediately". Ideally, this analysis must be performed in the field at the time of sample collection. _____ for this sample was not performed at the time of sample collection. The analysis was performed as soon as possible after receipt by the laboratory.

H1 - pH H2 - DO H3 - sulfite H4 - residual chlorine

T1 The client did not provide the full volume of at least one liter for analysis of TSS. Therefore, the PQL of 2.5 mg/L could not be achieved.

T2 The client provided the required volume of at least one liter for analysis of TSS, but the laboratory could not filter the full one liter volume due to the sample matrix. Therefore, the PQL of 2.5 mg/L could not be achieved.

M1 The matrix spike and/or matrix spike duplicate recovery performed on this sample was outside of the laboratory acceptance criteria. Sample matrix is suspected. The laboratory criteria was met for the Laboratory Control Sample (LCS) analyzed concurrently with this sample.

M2 The matrix spike and/or matrix spike duplicate recovery was outside of the laboratory acceptance criteria. The native sample concentration is greater than four times the spike added concentration so the spike added could not be distinguished from the native sample concentration.

R1 The relative percent difference (RPD) between the duplicate analyses performed on this sample was outside of the laboratory acceptance criteria (when both values are greater than ten times the PQL).

MCL	Maximum Contaminant Level	NL	No limit
NFL	No Free Liquid Present	FLP	Free Liquid Present
NOD	No Odor Detected	TON	Threshold Odor Number

D-1 As required by Method 5210B, APHA Standard Methods for the Examination of Water and Wastewater (21st edition), the BOD value reported for this sample is 'qualified' because the check standard run concurrently with the sample analysis did not meet the criteria specified in the method (198 +/- 30.5 mg/L). These results may not be reportable for compliance purposes.

D-2 The measured final dissolved oxygen concentrations of all dilutions were less than the method-specified limit of 1 mg/L. The reported BOD result was calculated assuming a final oxygen concentration equal to 1 mg/L. The reported value should be considered a minimum value.

D-3 The dilution water used to prepare this sample did not meet the method and/or regulatory criteria of less than 0.2 or 0.4 mg/L dissolved oxygen (DO) uptake over the five day period of incubation. These results may not be reportable for compliance purposes.

Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

Lab Sample ID: SQ0595-1
Client ID: SY-SB4R-1
SDG: SQ0595
Report Date: 17-MAR-23

Matrix	Date Sampled	Date Received
SL	01-FEB-23 11:45	06-FEB-23

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Chromium, Hexavalent	J0.26 mg/Kgdrywt	0.56	0.17	0.33	SW846 7196A	WG333949	15-MAR-23 16:13	SW846 3060A	15-MAR-23	
Total Solids	87. %	1.0	1.0	1.0	SM2540G	WG332528	16-FEB-23 13:45	SM2540G	15-FEB-23	

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029
http://www.katahdinlab.com

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ANALYTICAL SERVICES

Report of Analytical Results

Lab Sample ID: SQ0595-2
Client ID: SY-SB4R-10
SDG: SQ0595
Report Date: 17-MAR-23

Matrix	Date Sampled	Date Received
SL	01-FEB-23 11:50	06-FEB-23

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Chromium, Hexavalent	U0.33 mg/Kgdrywt	0.55	0.16	0.33	SW846 7196A	WG333949	15-MAR-23 16:13	SW846 3060A	15-MAR-23	
Total Solids	87. %	1.0	1.0	1.0	SM2540G	WG332528	16-FEB-23 13:46	SM2540G	15-FEB-23	

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Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

Lab Sample ID: SQ0595-3
Client ID: SY-SB4R-2
SDG: SQ0595
Report Date: 17-MAR-23

Matrix	Date Sampled	Date Received
SL	01-FEB-23 11:55	06-FEB-23

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Chromium, Hexavalent	J0.32 mg/Kgdrywt	0.57	0.17	0.34	SW846 7196A	WG333949	15-MAR-23 16:13	SW846 3060A	15-MAR-23	
Total Solids	80. %	1.0	1.0	1.0	SM2540G	WG332528	16-FEB-23 13:46	SM2540G	15-FEB-23	

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029
http://www.katahdinlab.com

Raw Data Section

WET CHEMISTRY BATCH REPORT
Mar 16 2023, 11:05 am
Batch: WG333949 Run ID 1: R611412 Run ID 2: NONE

Parameter: Chromium, Hexavalent

Prep Date: 15-MAR-23

Date Analyzed: 15-MAR-23

Prep Method: SW846 3060A

Analyst Initials: RAD

Prep Chemist: RAD

Sample	Samp Type	Method	Initial Amt.	Final Amt.	Rpt. DF	Result	Rpt Result	TS(%)	PQL	MDL	Adj PQL	RPD	%Rec
SQ0015-32	SAMP	SW846 7196A	20.000mL	25.000mL	1.2	.09	U0.48 mg/Kgdrywt	NA	.4	0.14	0.48		
SQ0015-33	SAMP	SW846 7196A	20.000mL	25.000mL	1.2	.36	U0.48 mg/Kgdrywt	NA	.4	0.14	0.48		
SQ0595-1	SAMP	SW846 7196A	20.000mL	25.000mL	1.2	.26	J0.26 mg/Kgdrywt	87.	.4	0.17	0.56		
SQ0595-2	SAMP	SW846 7196A	20.000mL	25.000mL	1.2	.05	U0.33 mg/Kgdrywt	87.	.4	0.16	0.55		
SQ0595-3	SAMP	SW846 7196A	20.000mL	25.000mL	1.2	.32	J0.32 mg/Kgdrywt	80.	.4	0.17	0.57		
SQ0686-3	SAMP	SW846 7196A	20.000mL	25.000mL	1.2	45.84	46. mg/Kgdrywt	100	.4	0.14	0.48		
WG333949-1	MBLANK	SW846 7196A	20.000mL	25.000mL	1.2	-.13	U0.29 mg/Kgdrywt	NA	.4	0.14	0.48		
WG333949-2	LCS	SW846 7196A	20.000mL	25.000mL	1.2	36.86	37. mg/Kgdrywt	NA	.4	0.14	0.48		92
WG333949-3	LCSD	SW846 7196A	20.000mL	25.000mL	1.2	36.5	36. mg/Kgdrywt	NA	.4	0.14	0.48	1	91
WG333949-4	MS	SW846 7196A	0.50000mL	25.000mL	50	1838.46	1800 mg/Kgdrywt	NA	.4	7.7	26.		86
WG333949-5	MS	SW846 7196A	5.0000mL	25.000mL	5	46.52	46. mg/Kgdrywt	NA	.4	0.75	2.5		90

Comments:

WG333949-1	SQ0015-32
WG333949-2	SQ0015-32
WG333949-3	SQ0015-32
WG333949-4	SQ0595-3
WG333949-5	SQ0595-3

Entered by: RAD Date: 3/16/23 Accepted by: 33 Date: 3/16/23

Katahdin Analytical Services SQ0595 Page 397 of 412

HEXAVALENT CHROMIUM IN SOILS

Preparation Method: 3060A (Alkaline Digestion) Analysis Method: 7196A (Colorimetric)

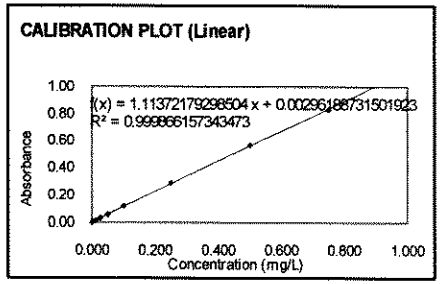
CALIBRATION INFORMATION

Calibration Analysis Date:	3/15/2023
Calibration Analyst:	RAD

KCrO4 Stock Standard ID:	W21354
KCrO4 Stock Standard Conc (mg/L):	25

Standard Name	Vol. Of Stock Std. Added (ml)	Final Volume (mL)	Std. Conc. (mg/L)	Meas. Abs.	Response Factor
Calib. Blank	0.000	25	0.000	0.000	
Std. 1	0.010	25	0.010	0.011	0.909
Std. 2	0.025	25	0.025	0.030	0.833
Std. 3	0.050	25	0.050	0.057	0.877
Std. 4	0.100	25	0.100	0.117	0.855
Std. 5	0.250	25	0.250	0.288	0.868
Std. 6	0.500	25	0.500	0.566	0.883
Std. 7	0.750	25	0.750	0.830	0.904
Std. 8	1.000	25	1.000	1.118	0.894

No. of data points:	9
Corr. Coeff. (R):	0.999933076
Slope (m):	1.113721793
Intercept (b):	0.002961887



SAMPLE ANALYSIS

CCV Source Standard ID:	W21355	**Spreadsheet File Name:**	
CCV Source Std. Conc. (mg/L):	25	**Sample Anal. Date:**	3/15/2023
		Sample Analyst:	RAD

ANALYSIS INFORMATION									DIGESTION INFORMATION				CALCULATIONS		
Katahdin Sample No.	Initial Volume, IV (mL)	Final Volume, FV (mL)	Dil. Fctr.	Sample Absorbance	Matrix Blk. Absorbance	Corrected Absorbance	Calc. Cr+6 in FV (mg/L)	Calc. Cr+6 in IV (mg/L)	Digested Wet Wt. (g)	Digestate Final Vol. (L)	Total Solids (%)	Cr+6 Spike Added (mg)	Calc. Cr+6 in Sample (mg/kgdrywt)	Calc. Cr+6 Spike Added (mg/kgdrywt)	CCV / Spike Recovery
ICV	25.0	25.0	1.000	0.579		0.579	0.517	0.517							
CCV	25.0	25.0	1.000	0.575		0.575	0.514	0.514							102.7%
CCB	25.0	25.0	1.000	0.002		0.002	-0.001	-0.001							
Blank	20.0	25.0	1.250	0.000		0.000	-0.003	-0.003	2.5000	0.100	100.000%		-0.13		
LCS	20.0	25.0	1.250	0.824		0.824	0.737	0.922	2.5000	0.100	100.000%	0.100	36.86	40.00	92.2%
LCSD	20.0	25.0	1.250	0.816		0.816	0.730	0.913	2.5000	0.100	100.000%	0.100	36.50	40.00	91.3%
SQ0015-32	20.0	25.0	1.250	0.005		0.005	0.002	0.002	2.5000	0.100	100.000%		0.09		
SQ0015-33	20.0	25.0	1.250	0.011		0.011	0.007	0.009	2.5000	0.100	100.000%		0.36		
SQ0686-3	20.0	25.0	1.250	1.043	0.025	1.018	0.911	1.139	2.4850	0.100	100.000%		45.84		
CCV	25.0	25.0	1.000	0.570		0.570	0.509	0.509							101.8%
CCB	25.0	25.0	1.000	0.002		0.002	-0.001	-0.001							
SQ0595-1	20.0	25.0	1.250	0.041	0.033	0.008	0.005	0.006	2.4940	0.100	86.633%		0.26		
SQ0595-2	20.0	25.0	1.250	0.033	0.029	0.004	0.001	0.001	2.5050	0.100	87.2%		0.05		
SQ0595-3	20.0	25.0	1.250	0.015	0.006	0.009	0.005	0.007	2.6020	0.100	80.296%		0.32		
SQ0595-3 PDS	20.0	25.0	1.250	0.602	0.005	0.597	0.533	0.667	2.6020	0.100	80.296%		31.91		
SQ0595-3 INSOL	0.5	25.0	50.000	0.805	0.004	0.801	0.717	35.828	2.4270	0.100	80.296%	4.151	1838.46	2130.16	86.3%
SQ0595-3 SOL	5.0	25.0	5.000	0.209	0.004	0.205	0.181	0.907	2.4280	0.100	80.296%	0.100	46.52	51.29	90.7%
CCV	25.0	25.0	1.000	0.570		0.570	0.509	0.509							101.8%
CCB	25.0	25.0	1.000	0.003		0.003	0.000	0.000							

KATAHDIN ANALYTICAL SERVICES

METHOD SW846 7196A

MATRIX: SOIL / SEDIMENT / SOLID **PQL: 0.5mg/Kg (assumes 2.5g dry weight to 100 mL)**

Calibration / Quality Control Checks:	
Cal Std. Source ID ($K_2Cr_2O_7$): SWL4731 ug/mL	**CCV ID:** W21354 ug/mL
LCS Stock ID: ~~W21355~~ SWL5048 1000 ug/mL	**ICV ID:** W21355 ug/mL
Reagents:	**Phosphate Buffer ID:** W21296
Diphenylcarbazide Solution ID: W21750	**10% H_2SO_4 ID:** 031523
Alkaline Digestion Reagent ID: W21699	**Alkaline Digestion Reagent pH:** 13.27
SW 3060A Leachate Generation Date: 3/15/23	**Filtration End Time:** 15:20 3/15/23

RAD 3/16/23

Sample ID	Analysis Time	Dilution	pH adj'd 7.5 +/- 0.5	pH adj'd 2.0 +/- 0.5	Sample to Color Vol. (mL)	Final Color Vol. (mL)	Sample Color/Turb Abs @ 540 nm	Developed Sample Abs @ 540 nm
ICV	16:13		✓	✓	~~20~~25	25		0.579
CCV					1			0.575
CCB					1			0.002
Blank					20			0.000
LCS								0.824
LCSD								0.816
SQ 0015-32								0.005
-33								0.011
0686-3					1		0.025	1.043
CCV					25			0.570
CCB					25			0.002
0595-1					20		0.033	0.041
-2							0.029	0.033
-3							0.006	0.015
-3 PDS					1		0.005	0.602
-3 insol					0.5		0.004	0.805
-3 sol					5		0.004	0.209
CCV					20~~25~~			0.570
CCB					1			0.003

SS 3/15/23

Notes: WG333949 → R611412

RAD 3/15/23

Analyst: RAD	**Date:** 3/15/23
Checked By: SS	**Date:** 5/16/23

KATAHDIN ANALYTICAL SERVICES

HEXAVALENT CHROMIUM DIGESTION

METHOD: EPA 3060A

		Insol. Spike ID: SWL 3761
Hot Plate ID: PC-600D	Thermometer ID: LP1	Insoluble Spike Added: 0.0258
Start Time: 11:00	Start Temp.: 93.5	Sol/MS Spike ID: SWL5048
End Time: 12:01	End Temp.: 92.1	Sol/MS Spike Added 0.1 mL

KAS Sample ID	Initial Weight (g)	Final Volume (L)	Comments
Blank	2.5	0.1	
LCS	"	"	
LCSD	"	"	
SQ ~~1332~~ 0015-32	"	"	LOD
" -33	"	"	LOQ
SQ0595 -1	2.494	"	
-2	2.505	"	
-3	2.602	"	
-3 insol	2.427	"	
-3 sol	2.428	"	
SQ0686-3	2.485	"	
			RAD 3/15/23
ANALYST: RAD		Date: 3/15/23	
CHECKED BY: SS		Date: 3/16/23	

WL-081 – Revision 1 – 10/14/2019

TOTAL SOLIDS BATCH REPORT
Feb 16 2023, 02:09 pm
Batch: WG332528 Run ID: R609518

Sample	Matrix	Type	Prep Date	Tare	Initial	Final1	Final	by	Date	Raw TS	Rep TS	Recovery	RPD
SQ0595-1	N/A	SAMP	15-FEB-23	1.443956 g	29.4165 g	25.6714 g	25.6774 g	JRS	16-FEB-23	86.6330	87. %		
SQ0595-2	N/A	SAMP	15-FEB-23	1.443956 g	26.0532 g	22.9008 g	22.9039 g	JRS	16-FEB-23	87.2030	87. %		
SQ0595-3	N/A	SAMP	15-FEB-23	1.443956 g	28.5915 g	23.2405 g	23.2425 g	JRS	16-FEB-23	80.2960	80. %		
SQ0654-2	N/A	SAMP	15-FEB-23	1.443956 g	30.0152 g	6.4189 g	6.4186 g	JRS	16-FEB-23	17.4110	17. %		
WG332528-1	N/A	MBLANK	15-FEB-23	1.443956 g	5.7913 g	5.7914 g	5.7913 g	JRS	16-FEB-23	100.0000	100 %		
WG332528-2	N/A	LCS	15-FEB-23	1.443956 g	6.2906 g	5.7844 g	5.7839 g	JRS	16-FEB-23	89.5450	90. %	99	
WG332528-3	N/A	LCSD	15-FEB-23	1.443956 g	6.2478 g	5.7404 g	5.7401 g	JRS	16-FEB-23	89.4310	89. %	99	0
WG332528-4	N/A	DUP	15-FEB-23	1.443956 g	26.0913 g	5.7667 g	5.7675 g	JRS	16-FEB-23	17.5420	18. %		1

Comments:

WG332528-1	SQ0595-1
WG332528-2	SQ0595-1
WG332528-3	SQ0595-1
WG332528-4	SQ0654-2

Entered by: JRS Date: 2/16/23 Accepted by: JLP Date: 2/17/23

Katahdin ANALYTICAL SERVICES

Analytical Balance Workgroup (ts01)

15-FEB-23 03:14 PM

Work Group: WG332528 **Run ID:** R 609518 **Department:** 100 Wetlab Prep **Created:** 15-FEB-23

Dish	Sample	Volume (mL)	Sample Type	Product	Method	Matrix	PQL	Status
1	SQ0595-1		SAMPLE	TS-ME	STDM 2540G	Solid	0.1%	WIP
2	SQ0595-2		SAMPLE	TS-ME	STDM 2540G	Solid	0.1%	WIP
3	SQ0595-3		SAMPLE	TS-ME	STDM 2540G	Solid	0.1%	WIP
4	SQ0654-2*		SAMPLE	TS-ME	STDM 2540G	Solid	0.1%	WIP
5	WG332528-1*		MBLANK	TS-ME	STDM 2540G	Solid	0.1%	WIP
6	WG332528-2		LCS	TS-ME	STDM 2540G	Solid	0.1%	WIP
7	WG332528-3		LCSD	TS-ME	STDM 2540G	Solid	0.1%	WIP
8	WG332528-4		DUP: SQ0654-2	TS-ME	STDM 2540G	Solid	0.1%	WIP

Comments:

SQ0654-2 * Sample also needed for TVS - PLEASE SAVE THE DRIED SAMPLE TIN

WG332528-1 * Blank also needed for TVS - PLEASE SAVE THE DRIED BLANK TIN

Workorder Notes::

SQ0595 DOD 5.1. ND to LOD with J-flags. SVOA use 3550C/8270D mg/kg. When hex Cr MS/MSD fail, perform pH & ORP, include this data in the case narrative. Need to include copies of standard receipt and standard prep logbooks in final report.

SQ0654 None

Notes:

Oven Temp (C): TS/TSS: 103-105, TDS 178-182

Sand ID/Lot #: 0929	Filter Lot #: —		Pipette ID: W18		Prep Start Time: 15:10
Event:	**In 1**	**Out 1**	**In 2**	**Out 2**	**Final Weight**
Analyst Initials:	JRS	JRS	JRS	JRS	JRS
Balance Calibrated? (Y/N)	Y	Y	Y	Y	Y
Date:	2/15/23	2/16/23	2/16/23	2/16/23	2/16/23
Time:	15:23	09:06	10:54	12:17	**Balance ID: 1124016031**
Oven Temperature:	104°	104°	104°	103°	**Oven ID:** 02

Katahdin Analytical Services - Wet Chemistry Lab

REAGENT, INTERMEDIATE AND WORKING STANDARDS PREPARATION LOGBOOK

(Use more than one line for a single standard or reagent if necessary.) All preparations are diluted in DI unless otherwise noted.

Standard ID	Reagent Name	Prep. Date	Prep. Inits.	Exp. Date:	Component	I.D. or Lot Number	Amount Added	Units	Bal./Pipette ID	Final Vol. (mL)	Prep Notes
W21699	Crlot Digestion Soln	3/15/23	RAD	4/15/23	NaOH	SWL 4928	39.9884	g	bal 01	2000	
〃	〃	〃	〃	〃	Na_2CO_3	SWL 4945	60.0249	〃	〃	〃	
W21700	Crlot Diphenylcarbazide	3/15/23	RAD	9/15/23	1,5 diphenyl-carbazide	SWL 4724	0.250	g	bal 20	50	acetone
W21701	HCl 6N (De-Air)	3/16/23	JRS	3/16/24	concentrated HCl	MSR 303	500	mL	—	1000	De-air H_2O

Katahdin Analytical Services - Wet Chemistry Lab

REAGENT PREPARATION LOGBOOK

(Use more than one line for a single standard or reagent if necessary.)

Reagent ID	Reagent Name	Prep. Date	Prep. Inits.	Exp. Date:	Component	I.D. or Lot Number	Amount Added	Units	Bal./Pipette ID	Final Volume (mL	Prep Notes
W21275	TDS Reagent	9-23-22	NM	9-28-22	KCl	SWL1705	0.7507	g	B21 01	1000	DI
W21277	Cr6+ Alk digestion soln	9/28/22	RAD	10/28/22	Sodium Carbonate	SWL4445 4638	60.0183	g	bal 01	2000	DI
					NaOH	SWL4928	40.0159	1	1		
W21276	Cr6+ Phosphate Buffer	1	1	9/28/23	K_2HPO_4	SWL3887	87.0922	g	bal 01	1000	1
					KH_2PO_4	SWL4695	68.0459	1	1		
W21280	TKN Salicylate nitroprusside	10/5/22	RAD	11/5/22	Sodium salicylate	SWL4934	150.0021	g	bal 01	1000	DI
					Sodium ferricyanide	SWL4723	1.0146	1	1		
W21287	CN Buffer	10/11/22	STM	11/11/22	$NaPO_3$ mono mono	SWL4762	~~13.400~~ 13.439	g	BAL 20	100	DI
W21291 SWL3043	TPO_4 Ascorbic Acid Solution	10/11/22	CJB	10/12/22	Ascorbic Acid	SWL4970	~~15.0492~~ 15.0685	g	bal 01	250	DI
					Na dodecyl sulfate	SWL3043	~~0.2514~~ 0.2521	1	1		
W21292	0.01 M_2SO_4	10/12/22	NM	10/12/23	0.1DN H_2SO_4	WR11212	200	ml	grad cyl	2000	DI

CJB 10/11

Katahdin Analytical Services - Wet Chemistry Lab

INTERMEDIATE AND WORKING STANDARDS PREPARATION LOGBOOK

(Use more than one line for a single standard or reagent if necessary.)

Standard ID	Reagent Name	Prep. Date	Prep. Inits.	Exp. Date:	Component	I.D. or Lot Number	Amount Added	Units	Bal./Pipette ID	Final Volume (mL	Prep Notes
W21348	NH_3 1.5ppm LCS working Std.	11/1/22	STM	12/1/22	NH_3 LCS Stock (100ppm)	W20654	3	mL	W4	200	.2% H_2SO_4
W21352	CN 200ppb LCS	11/3/22	STM	3/3/23	CN 50ppm LCS Std.	W20908	.8	mL	W28	200	.25 NaOH
W21353	IC CCV	11/3/22	SS	11/17/22	Cl SO4 NO2 F NO3 PO4 Br	SWL4982 4926 4985 4983 4986 4984 4903	2.0 40 0.8 1.0 0.8 1.0 4.8	ml l	W10 / W28	100	DI
W21354	CrVI CCV Stock	11/4/22	STM	5/4/23	CrVI	SWL4731	2.5	mL	W10	100	DI
W21355	CrVI LCS Stock	11/4/22	STM	5/4/23	CrVI	SWL4725	2.5	mL	W10	100	DI
W21358	TPO_4 cal/ccv	11/04/22	LSB	5/04/23	PPO_4 1000 ppm	SWL4984	10	mL		200	DI
W21359	TSS LCS	11/04/22	SS	11/04/23	Celite	SWL4564	1.0507	g	Bal 1	1000	DI

Katahdin Analytical Services, Inc. - Wet Chemistry Lab
Reagent Receipt Logbook

Katahdin Reagent. ID.	Reagent Name	Manu-facturer	Mfr. Lot Number	Receipt Initials	Receipt Date	Expiration Date
SWL4921	Nitrification inhibitor.	Loviband	W04A	SL	2/8/22	3/23
SWL4922	2.0 pH Buffer Solution	Fisher	216469	SS	2/11/22	9/23
SWL4923	Potassium sulfate	Acros	A0425707	MH	2/8/22	2/8/27
SWL4924	Chloroform C606-4	Fisher	211169	SS	2/15/22	2/15/27
SWL4927	Sodium Hydroxide Pellets	Macron	7708-06	SS	2/22/22	02/14/24
SWL4928	〃	〃	〃	〃	〃	〃
SWL4930	Color LCS (UN3264) (2230-V	Ricca	1202844	SS	3/18/22	1/24
SWL4931	TISAB II	orion	ZT1	ZF	4/5/22	4/5/27
SWL4932	Ammonium Hydroxide	Fishr	213419	ZF	4/5/22	4/5/27
SWL4939	STS 0.0375N	Ricca	2202H23	ZF	4/5/22	8/31/23
SWL4940	HL COD Vials	Env. Express	13638	ZF	4/5/22	2/28/27
SWL4941	LL COD vials	〃	13630	〃	〃	11/31/27
SWL4942	Barbituric Acid	Fisher	211278	ZF	4/4/22	4/4/27
SWL4943	Sodium Hydroxide 10N	Avantor	22A1962001	SS	4/7/22	11/26/23
SWL4945	Sodium Carbonate Anhydrous	Fisher	211583	SS	4/22/22	4/22/27
SWL4946	Sodium L-(+)-Tartrate	Fisher	213839	SS	4/22/22	4/22/27
SWL4950	ProWeigh Filters	Env. Express	600029-2101-R2	MH	4/26/22	–

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Katahdin Analytical Services, Inc. - Wet Chemistry Lab
Reagent Receipt Logbook

Katahdin Reagent. ID.	Reagent Name	Manu-facturer	Mfr. Lot Number	Receipt Initials	Receipt Date	Expiration Date
SWL3881	Ammonium Hydroxide	Acros	B0530489	ZS	8.6.15	8.6.20
SWL3882	L(+)-Ascorbic Acid	"	A0339362	"	"	"
SWL3883	Sodium Carbonate Anhydrous	"	A0335643	"	"	"
SWL3885	Sodium Carbonate 1N Solution	Fisher	152782	ZS	8.19.15	8.31.17
SWL3886	TISAB II w/CDTA	Thermo	940909	ZS	8.20.15	8.20.17
SWL3887	Potassium Phosphate Dibasic	Fisher	151173	ZS	8.21.15	8.21.20
SWL3890	Phosphate Buffer Solution	"	151641	"	9.3.15	10.31.15
SWL3891	Pyridine	"	153090	"	"	9.3.20
SWL3892	Potassium Sulfate, 99%	Acros	A0341281	ZS	9.4.15	9.4.20
SWL3894	Sulfuric Acid	J.T. Baker	102197	DW	9.8.15	9.8.20
SWL3896	Barbituric Acid	Fisher	146067	ZS	9.10.15	9.10.25
SWL3897	Cyanide	Inorganic Ventures	J2-CN01047MCA	JS	9.14.15	~~9.14.16~~ Exp 5/18/17
SWL3898	Chromium 6 Reagent (Color)	Thermo	1071201	DW	9-23-15	8-13-16
SWL3899	Ferroin Indicator 0.025M	Ricca	2508573	DW	9-29-15	7-31-17
SWL3900	Ferrous Sulfate Heptahydrate	Fisher	1146-500	DW	9-29-15	9-29-20
SWL3903	Sodium Thiosulfate (0.0375N)	Ricca	2505455	DW	10-5-15	11-30-16
SWL3904	Magnesium Chloride Hexahydrate		152538	DW	"	10-5-20

Katahdin Analytical Services, Inc. - Wet Chemistry Lab
Reagent Receipt Logbook

Katahdin Reagent. ID.	Reagent Name	Manu-facturer	Mfr. Lot Number	Receipt Initials	Receipt Date	Expiration Date
SWL4629	Pot. Sodium Tartrate (44722500)	Acros	A0410777	ZF	5/14/20	5/14/25
SWL4630	Pot. Sulfate	Acros	A0413825	ZF	5/14/20	5/14/25
SWL4631	Sodium Thiosulfate	RICCA	2410C67	AL	5/15/20	5/15/21
SWL4632	Phos. Acid A242212	Fisher	195412	ZF	6/1/20	6/1/25
SWL4638	Sodium Carbonate S2631	Fisher	188393	ZF	6/1/20	6/1/25
SWL4639	Chloroform C6065K-4	Fisher	200790	ZF	6/1/20	6/1/25
SWL4640	Ammonium Hydroxide	Acros	A0414602C	JF	6/5/20	6/5/25
SWL4641	TISAB II	Fisher orion	orion 940909	ES	6/11/20	12/11/20
6/19/20 ES SWL ~~4644~~ 4692	phenol crystals (A92-500)	fisher	193139	ES	6/15/20	6/15/25
SWL4658	STS	RICCA	2910C67	ZF	8/13/20	~~8/4/30/20~~ ZF 8/13/20
SWL4659	10N NaOH (5674-02)	J.T Baker	0000258875	ZF	1	4/15/22
SWL4664	NaOH (7708-06)	Macron	0000238968	ZF	1	10/31/21
SWL4665	LL COD vials	Env. Expres	13273	ZF	8/13/20	4/30/25
SWL4666	HL COD vials	1	13247	1	1	3/31/25
SWL4667	Sodium salicylate 99% (A17656)	Alfa Aesar	Z09F082	SS	8/19/20	8/19/25
SWL4691	Sodium Phos dibasic (S373-500)	fisher	196220	ZF	10/12/20	Unclear
SWL4692	Amm. hydroxide (A669-212)	Fisher	195945	ZF	1	1

Katahdin Analytical Services, Inc. - Wet Chemistry Lab
Reagent Receipt Logbook

Katahdin Reagent. ID.	Reagent Name	Manu-facturer	Mfr. Lot Number	Receipt Initials	Receipt Date	Expiration Date
SWL4694	Iodine	Acros	B0142579	ZF	10/24/20	10/25/25
SWL4695	Potassium Phosphate Monobasic	Fisher	198948	ZF	1	1
SWL4696	Potassium ~~Ph~~ Sulfate	Acros	A0419612	ZF		
SWL4697	Chloride #1 Reagent	Thermo	T374	es	10/27/20	~~10/27~~ 3/31/2022 es
SWL4699	Cadmium Column	Lachat	0268A	SS	10/29/20	03/21
SWL4702	Sodium Thiosulfate	Ricca	2011853	JG	11/6/20	04/2022
SWL4703	Ammonium Acetate	Fisher	188404	[signature]	11/11/20	11/11/25
SWL4712	Sulfanilamide	Acros	B0150193	ZF	12/11/20	12/11/25
SWL4714	Potassium Sulfate	ACROS	A0421415	SS	12/29/20	12/29/25
SWL4715	Ascorbic Acid	Acros	A0414993	SS	12/29/20	12/29/25
SWL4716	Magnesium Chloride Hexahydrate	Fisher	201274	SS	12/29/20	12/29/25
SWL4719	Sodium Salicylate	Alfa Aesar	Z09F082	SS	1/4/21	1/4/26
SWL4720	Sodium Thiosulfate	RICCA	2011D61	es	1/4/21	1/4/26
SWL4726	High - Low COD Vials	Env. Express	13299	JG	1/14/21	6/30/25
SWL4727	Potassium Iodide	Acros	A0413762	JG	1/22/21	1/22/26
SWL4733	Linear Alkylbenzene Sulfonate	Ricca	1102E65	ZF	3/12/21	2/28/22
SWL4734	TISAB II	ORION	9H0909	es	3/16/21	3/16/22

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Katahdin Analytical Services, Inc. - Wet Chemistry Lab
Stock Standards Receipt Logbook

Katahdin STD. ID.	Standard Name	Manu-facturer	Mfr. Lot Number	Receipt Initials	Receipt Date	Expiration Date	
SWL3722	Buffer Solution pH 7.00	Fisher	143994	DV	9-15-14	6-31-16	
~~SWL3592~~	S						CB 9-2
SWL3732	Nutrients in Soil	ERA	D085-542	ZS	10.9.14	10.31.17	
SWL3733	Color Standard 500 units	Ricca	~~2210-4~~ 2408006	DW	10-17-14	8-31-16	
SWL3734	StablCal standard 1000 NTU (turbidity)	HACH	~~2960649~~ A4262	↓	↓	9-30-16	
SWL3735	Stabl Cal Standard 400 NTU (turbidity)	↓	~~2960649~~ A4273	↓	↓	9-30-15	
SWL3750	IC Fluoride 1000 µg/mL	High Purity Standards	1430311	ZS	11.21.14	5.18.16	
SWL3755	Conductivity Standard 999 µS	Fisher	CC130666	ZS	12.10.14	8.15.15	
SWL3756	Conductivity Standard 99.7 µS	Fisher	CC130671	ZS	12.10.14	8.18.15	
~~SWL3761~~	~~Sodium Sulfide LCS~~	Fisher	138248	AZ	12-11-14	6-11-15	AB 12
SWL3761	Chromate Powder	Baker	620635	DV	12-18-14	12-18-19	
SWL3764	Buffer Solution pH 7.00	Fisher	147065	ZS	12.23.14	11.23.16	
SWL3765	Buffer Solution pH 10.00	↓	146934	↓	↓	10.23.16	
SWL3766	COD 1000ppm Std.	Thermo	RP1	ZS	12.24.14	12.24.16	
SWL3776	Linear Alkylbenzene Sulfonate	Ricca	2412479	ZS	1.16.15	11.16.15	
SWL3778	Total Cyanide 1000µg/mL	AccuStandard	A14125008	ZS	↓	5.16.16	
SWL3779	Cyanide 1021±20µg/mL	Inorganic	H2-CN01041	↓	↓	12.9.16	

Katahdin Analytical Services, Inc. - Wet Chemistry Lab
Stock Standards Receipt Logbook

Katahdin STD. ID.	Standard Name	Manu-facturer	Mfr. Lot Number	Receipt Initials	Receipt Date	Expiration Date
SWL 4724	sym-diphenylcarbazide	ACROS	A0411427	es	1/13/21	1/13/26
✓ SWL 4725	CrVI +6 LCS STD 1000 ug/mL	ENV EXPRESS	2031584-100	es	1/15/21	1/31/22
SWL 4728	TISAB II	ORION	940909	es	12/18/21	2/10/25
SWL 4729	Color Std	RICCA	401 1J97	es	2/17/21	2/17/23
✓ SWL 4730	sulfate	inorganic ventures	P2-SO4X689601	es	↓	↓
✓ SWL 4731	Chromium +6	↓	P2-CR6839607	es	↓	↓
SWL 4732	Buffer 12 pH	Specpure	N10H006	es	↓	↓
✓ SWL4733	Buffer 7 PH	Fisher	212 739	ZL	6/8/21	03/23
✓ SWL 4766	F Std.	Inorg. Ventures	P2-F686382	ZF	6/9/21	6/9/23
SWL4769	Alk $CaCO_3$ 1000mg/L	Sigma-Aldrich	LRAC8778	ZF	6/9/21	1/31/21
✓ SWL4770	Ferric chloride solution	fisher	206707	JL/KD	6/29/21	01/23
SWL4771	COD Standard	Labchem	L089-23	JL/KD	6/29/21	4/9/23
✓ SWL4772	COD Vials High level	Env. Express	13479	JL/KD	6/30/21	5/26
✓ SWL4773	Colors LCS standard	Ricca	2105C44	JJ/KD	6/30/21	5/2023
✓ SWL 4774	Colors CCV standard	Ricca	2105C44	JJ/KD	6/30/21	5/2023
✓ SWL4775	Buffer 7 pH yellow	Fisher	212239	ZL	7/2/21	03/2023
SWL4784	Spec. Con. LCS 1	Ricca	1106752	JJ/KD	7/13/21	05/2023

Katahdin Analytical Services, Inc. - Wet Chemistry Lab
Stock Standards Receipt Logbook

Katahdin STD. ID.	Standard Name	Manu-facturer	Mfr. Lot Number	Receipt Initials	Receipt Date	Expiration Date
SWL SQ0446 ~~W21524~~	P-Xylene 99%	thermo scientific	10241202	ER	12/30/22	12/30/27
SWL SQ0447 ~~W21525~~	Sulfate	inorganic Ventures	S2-SO4X712629	ER	12/30/22	12/30/23
SWL SQ0448 ~~W21526~~	Chromium +6	ENV Express	2212933-250	ER	12/30/22	12/31/23
					SS	2/13/25

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SUBCONTRACTED DATA
TOC

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Darrian Lewry
Katahdin Analytical Services
600 Technology Way
Scarborough ME 04074

Generated 2/16/2023 10:56 AM

JOB DESCRIPTION

DOW

JOB NUMBER

410-114770-1

Eurofins Lancaster Laboratories Environment Testing, LLC
2425 New Holland Pike
Lancaster PA 17601

See page two for job notes and contact information.

my EOL

Eurofins Lancaster Laboratories Environment Testing, LLC

Job Notes

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

Authorization



Generated
2/16/2023 10:56 AM

Authorized for release by
Stephen J Gordon, Senior Project Manager
Stephen.Gordon@et.eurofinsus.com
412 525-0071

Eurofins Lancaster Laboratories Environment Testing, LLC

Compliance Statement

Analytical test results meet all requirements of the associated regulatory program (e.g., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis. Data qualifiers are applied to note exceptions. Noncompliant quality control (QC) is further explained in narrative comments.
· QC results that exceed the upper limits and are associated with non-detect samples are qualified but further narration is not required since the bias is high and does not change a non-detect result. Further narration is also not required with QC blank detection when the associated sample concentration is non-detect or more than ten times the level in the blank.
· Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD is performed, unless otherwise specified in the method.
· Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.
Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Measurement uncertainty values, as applicable, are available upon request.

Test results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. Times are local to the area of activity. Parameters listed in the 40 CFR Part 136 Table II as "analyze immediately" and tested in the laboratory are not performed within 15 minutes of collection.

This report shall not be reproduced except in full, without the written approval of the laboratory.

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Definitions/Glossary

Client: Katahdin Analytical Services
Job ID: 410-114770-1
Project/Site: DOW

Qualifiers

General Chemistry

Qualifier	Qualifier Description
U	Undetected at the Limit of Detection.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job Narrative
410-114770-1

Receipt
The samples were received on 2/8/2023 10:04 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 6.2°C

Receipt Exceptions
The following samples were received at the laboratory outside the required temperature criteria: SY-SB4R-1 (410-114770-1), SY-SB4R-10 (410-114770-2) and SY-SB4R-2 (410-114770-3). This does not meet regulatory requirements. The client was contacted regarding this issue, and the laboratory was instructed to proceed with analysis.

General Chemistry
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Detection Summary

Client: Katahdin Analytical Services
Project/Site: DOW

Job ID: 410-114770-1

Client Sample ID: SY-SB4R-1 — Lab Sample ID: 410-114770-1

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Total Organic Carbon	35000		350	230	120	mg/Kg	1	☼	Lloyd Kahn	Total/NA

Client Sample ID: SY-SB4R-10 — Lab Sample ID: 410-114770-2

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Total Organic Carbon	810		350	230	120	mg/Kg	1	☼	Lloyd Kahn	Total/NA

Client Sample ID: SY-SB4R-2 — Lab Sample ID: 410-114770-3

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Total Organic Carbon	1700		370	250	120	mg/Kg	1	☼	Lloyd Kahn	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SY-SB4R-1
Date Collected: 02/01/23 11:45
Date Received: 02/08/23 10:04

Lab Sample ID: 410-114770-1
Matrix: Solid

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Percent Moisture (EPA Moisture)	13.3		1.0		1.0	%		02/09/23 18:54	1

Client Sample ID: SY-SB4R-1
Date Collected: 02/01/23 11:45
Date Received: 02/08/23 10:04

Lab Sample ID: 410-114770-1
Matrix: Solid
Percent Solids: 86.7

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Total Organic Carbon (EPA Lloyd Kahn)	35000		350	230	120	mg/Kg	☼	02/14/23 12:14	1

Client Sample ID: SY-SB4R-10
Date Collected: 02/01/23 11:50
Date Received: 02/08/23 10:04

Lab Sample ID: 410-114770-2
Matrix: Solid

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Percent Moisture (EPA Moisture)	14.6		1.0		1.0	%		02/09/23 18:54	1

Client Sample ID: SY-SB4R-10
Date Collected: 02/01/23 11:50
Date Received: 02/08/23 10:04

Lab Sample ID: 410-114770-2
Matrix: Solid
Percent Solids: 85.4

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Total Organic Carbon (EPA Lloyd Kahn)	810		350	230	120	mg/Kg	☼	02/14/23 11:38	1

Client Sample ID: SY-SB4R-2
Date Collected: 02/01/23 11:55
Date Received: 02/08/23 10:04

Lab Sample ID: 410-114770-3
Matrix: Solid

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Percent Moisture (EPA Moisture)	19.5		1.0		1.0	%		02/09/23 18:54	1

Client Sample ID: SY-SB4R-2
Date Collected: 02/01/23 11:55
Date Received: 02/08/23 10:04

Lab Sample ID: 410-114770-3
Matrix: Solid
Percent Solids: 80.5

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Total Organic Carbon (EPA Lloyd Kahn)	1700		370	250	120	mg/Kg	☼	02/14/23 12:34	1

Default Detection Limits

Client: Katahdin Analytical Services
Job ID: 410-114770-1
Project/Site: DOW

General Chemistry

Analyte	LOQ	DL	Units
Total Organic Carbon	300	100	mg/Kg
Percent Moisture	1.0	1.0	%

Method: Lloyd Kahn - Organic Carbon, Total (TOC)

Lab Sample ID: MB 410-344728/4
Matrix: Solid
Analysis Batch: 344728

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Total Organic Carbon	200	U	300	200	100	mg/Kg		02/14/23 10:50	1

Lab Sample ID: LCS 410-344728/3
Matrix: Solid
Analysis Batch: 344728

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Total Organic Carbon			4690	5720		mg/Kg		122	36 - 163		

QC Association Summary

Client: Katahdin Analytical Services
Project/Site: DOW

Job ID: 410-114770-1

General Chemistry

Analysis Batch: 343285

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-114770-1	SY-SB4R-1	Total/NA	Solid	Moisture	
410-114770-2	SY-SB4R-10	Total/NA	Solid	Moisture	
410-114770-3	SY-SB4R-2	Total/NA	Solid	Moisture	

Analysis Batch: 344728

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-114770-1	SY-SB4R-1	Total/NA	Solid	Lloyd Kahn	
410-114770-2	SY-SB4R-10	Total/NA	Solid	Lloyd Kahn	
410-114770-3	SY-SB4R-2	Total/NA	Solid	Lloyd Kahn	
MB 410-344728/4	Method Blank	Total/NA	Solid	Lloyd Kahn	
LCS 410-344728/3	Lab Control Sample	Total/NA	Solid	Lloyd Kahn	

Lab Chronicle

Client: Katahdin Analytical Services
Project/Site: DOW

Job ID: 410-114770-1

Client Sample ID: SY-SB4R-1
Date Collected: 02/01/23 11:45
Date Received: 02/08/23 10:04

Lab Sample ID: 410-114770-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	343285	USWF	ELLE	02/09/23 18:54

Client Sample ID: SY-SB4R-1
Date Collected: 02/01/23 11:45
Date Received: 02/08/23 10:04

Lab Sample ID: 410-114770-1
Matrix: Solid
Percent Solids: 86.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Lloyd Kahn		1	344728	P684	ELLE	02/14/23 12:14

Client Sample ID: SY-SB4R-10
Date Collected: 02/01/23 11:50
Date Received: 02/08/23 10:04

Lab Sample ID: 410-114770-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	343285	USWF	ELLE	02/09/23 18:54

Client Sample ID: SY-SB4R-10
Date Collected: 02/01/23 11:50
Date Received: 02/08/23 10:04

Lab Sample ID: 410-114770-2
Matrix: Solid
Percent Solids: 85.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Lloyd Kahn		1	344728	P684	ELLE	02/14/23 11:38

Client Sample ID: SY-SB4R-2
Date Collected: 02/01/23 11:55
Date Received: 02/08/23 10:04

Lab Sample ID: 410-114770-3
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	343285	USWF	ELLE	02/09/23 18:54

Client Sample ID: SY-SB4R-2
Date Collected: 02/01/23 11:55
Date Received: 02/08/23 10:04

Lab Sample ID: 410-114770-3
Matrix: Solid
Percent Solids: 80.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Lloyd Kahn		1	344728	P684	ELLE	02/14/23 12:34

Laboratory References:

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Accreditation/Certification Summary

Client: Katahdin Analytical Services
Job ID: 410-114770-1
Project/Site: DOW

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
A2LA	Dept. of Defense ELAP	0001.01	11-30-24

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
Lloyd Kahn		Solid	Total Organic Carbon
Moisture		Solid	Percent Moisture

Massachusetts	State	M-PA009	06-30-23

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
Lloyd Kahn		Solid	Total Organic Carbon
Moisture		Solid	Percent Moisture

Method Summary

Client: Katahdin Analytical Services
Job ID: 410-114770-1
Project/Site: DOW

Method	Method Description	Protocol	Laboratory
Lloyd Kahn	Organic Carbon, Total (TOC)	EPA	ELLE
Moisture	Percent Moisture	EPA	ELLE

Protocol References:

EPA = US Environmental Protection Agency

Laboratory References:

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Sample Summary

Client: Katahdin Analytical Services
Project/Site: DOW

Job ID: 410-114770-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
410-114770-1	SY-SB4R-1	Solid	02/01/23 11:45	02/08/23 10:04
410-114770-2	SY-SB4R-10	Solid	02/01/23 11:50	02/08/23 10:04
410-114770-3	SY-SB4R-2	Solid	02/01/23 11:55	02/08/23 10:04

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-114770-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
WC_TOC_SLCSCC_00007	10/13/24		ERA, Lot d113-542		(Purchased Reagent)		Total Organic Carbon	4690 mg/Kg

Reagent

WC_TOC_SLCSCC_00007

1. The **Certified Values** are the actual "made-to" concentrations confirmed by ERA analytical verification. The certified values are monitored and purchasers will be notified of any significant changes resulting in recertification or withdrawal of this certified reference material during the period of validity of this certificate.

2. The **Uncertainty** represents an expanded uncertainty and approximates a 95% confidence interval. The uncertainty is based on the characterization, homogeneity and stability characteristics of the product, multiplied by a coverage factor (k=2). The uncertainty applies to the product as supplied and does not take into account any required or optional dilution and/or preparations the laboratory may perform while using this product. The formula used to calculate the expanded uncertainty is:
$U_{expanded} = k * SQRT((U_{char}^2) + (U_{homogen}^2) + (U_{LTS}^2) + (U_{STS}^2) + (U_{RSS}^2))$

Where:

$U_{expanded}$ = Expanded uncertainty.
k = Coverage factor.
U_{char} = Combined standard uncertainty of the manufacturing and/or analytical verification assessment.
$U_{homogen}$ = Standard uncertainty of the homogeneity assessment.
U_{LTS} = Standard uncertainty associated with long-term stability.
U_{STS} = Standard uncertainty associated with short-term (transport) stability.
U_{RSS} = Standard uncertainty associated with repeated sampling of the product (where permitted by product use instructions).

3. The **QC Performance Acceptance Limits (QC PALs™)** are based on actual historical data collected in ERA's Proficiency Testing program. The QC PALs™ reflect any inherent biases in the methods used to establish the limits and closely approximate a 95% confidence interval of the performance that experienced laboratories should achieve using accepted environmental methods. Use the QC PALs™ to realistically evaluate your performance against your peers.

4. The **PT Performance Acceptance Limits (PT PALs™)** are calculated using the regression equations and fixed acceptance criteria specified in the NELAC proficiency testing requirements. Use the PT PALs™ when analyzing this certified reference material alongside USEPA and NELAC compliant PT study materials. Please note that many PT study acceptance limits are concentration dependent (some non-linearly) and therefore, the acceptance limits of this certified reference material and any PT study material may differ relative to their difference in concentrations.

5. The **PT Performance Data** include the mean value, percent recovery and number of data points reported by laboratories in our Proficiency Testing study compared to the Certified Values. In the event this lot was not used in a proficiency testing scheme, the data displayed was generated internally by ERA.

6. Where NIST Standard Reference Materials (SRMs) are available, each analyte has been analytically traced to the NIST SRM listed. **Analytical Traceability Recovery (%)** = [(% recovery ERA certified reference material)/(% recovery NIST SRM)]*100
The traceability data shown were compiled by analyzing this ERA certified reference material and/or it's associated stock solution(s) against the applicable NIST SRMs.

7. The **Reference Values** are equal to the mean recoveries for the parameters as determined in an interlaboratory round robin study. The **Reference Values** represent the expected performance for the analytes in this standard. ERA recommends using the **Reference Values** when assessing or evaluating your results.

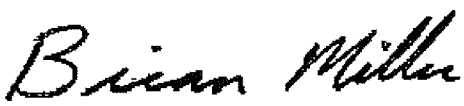
8. **Metrological Traceability**. This certified reference material is metrologically traceable to NIST mass reference materials through an unbroken chain of comparisons.

9. For additional information on this product such as intended use, storage information, instructions for use, minimum sample size, and safety information, please refer to the Product Use Instructions provided.

If you have any questions or need technical assistance, please call ERA technical assistance at 1-800-372-0122 or send an email to info@eraqc.com.

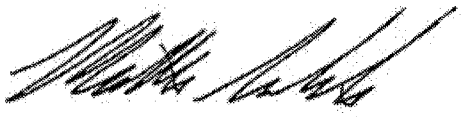
Certifying Officer

Brian Miller



Quality Officer

Matthew Seebeck



16341 Table Mountain Pkwy ▪ Golden, CO 80403 ▪ T: 800.372.0122 ▪ 303.431.8454 ▪ www.eraqc.com

ERA
A Waters Company

Certified Reference Material

▪ Certificate of Analysis ▪

Product: Nutrients in Soil
Catalog Number: 542
Lot No. D113-542
Certificate Issue Date: March 23, 2021
Expiration Date: October 13, 2024
Revision Number: Original

Product use instructions are included as part of the certification packet and are paginated separately from this Certificate of Analysis. Please reference the product use instructions for catalog #542 revision 090119.

CERTIFICATION

Parameter	Certified Value[1]	Reference Value[7]	Uncertainty[2]	QC Performance Acceptance Limits[3]	PT Performance Acceptance Limits[4]
	mg/kg	mg/kg	%	mg/kg	mg/kg
Ammonia as N	1210	1090	6.25	698 - 1470	665 - 1510
Total Kjeldahl Nitrogen	1720	1700	12.5	1100 - 2300	944 - 2460
Total Organic Carbon (TOC)	5000	4690	9.55	1690 - 7680	1610 - 7770
Total Phosphorus	1710	1570	20.5	828 - 2300	439 - 2690

ANALYTICAL VERIFICATION

Parameter	Certified Value[1]	Proficiency Testing Study			NIST Traceability	
		Mean	Recovery[5]	n	SRM Number[6]	Recovery
	mg/kg	mg/kg	%			%
Ammonia as N	1210	1090	89.7	48	-	-
Total Kjeldahl Nitrogen	1720	1700	99.0	44	-	-
Total Organic Carbon (TOC)	5000	4690	93.8	29	-	-
Total Phosphorus	1710	1570	91.6	77	-	-

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GENERAL CHEMISTRY

COVER PAGE
GENERAL CHEMISTRY

Lab Name: Eurofins Lancaster Laboratories Job Number: 410-114770-1

SDG No.:

Project: DOW

Client Sample ID	Lab Sample ID
SY-SB4R-1	410-114770-1
SY-SB4R-10	410-114770-2
SY-SB4R-2	410-114770-3

Comments:

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: SY-SB4R-1 Lab Sample ID: 410-114770-1

Lab Name: Eurofins Lancaster Laboratories Environment T Job No.: 410-114770-1

SDG ID.:

Matrix: Solid Date Sampled: 02/01/2023 11:45

Reporting Basis: DRY Date Received: 02/08/2023 10:04

% Solids: 86.7

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Total Organic Carbon	35000	350	230	120	mg/Kg			1	Lloyd Kahn

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: SY-SB4R-10 Lab Sample ID: 410-114770-2

Lab Name: Eurofins Lancaster Laboratories Environment T Job No.: 410-114770-1

SDG ID.:

Matrix: Solid Date Sampled: 02/01/2023 11:50

Reporting Basis: DRY Date Received: 02/08/2023 10:04

% Solids: 85.4

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Total Organic Carbon	810	350	230	120	mg/Kg			1	Lloyd Kahn

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: SY-SB4R-2 Lab Sample ID: 410-114770-3

Lab Name: Eurofins Lancaster Laboratories Environment T Job No.: 410-114770-1

SDG ID.:

Matrix: Solid Date Sampled: 02/01/2023 11:55

Reporting Basis: DRY Date Received: 02/08/2023 10:04

% Solids: 80.5

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Total Organic Carbon	1700	370	250	120	mg/Kg			1	Lloyd Kahn

2-IN
CALIBRATION QUALITY CONTROL
GENERAL CHEMISTRY

Lab Name: Eurofins Lancaster Laboratories En Job No.: 410-114770-1

SDG No.:

Analyst: P684 Batch Start Date: 02/14/2023

Reporting Units: mg/Kg Analytical Batch No.: 344728

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
1	CCV	10:36	Total Organic Carbon	5570	4690	119	50-153		WC_TOC_SLCSCC_00007
2	CCB	10:42	Total Organic Carbon	200				U	
13	CCV	12:03	Total Organic Carbon	5070	4690	108	50-153		WC_TOC_SLCSCC_00007
14	CCB	12:06	Total Organic Carbon	200				U	
20	CCV	12:39	Total Organic Carbon	5320	4690	113	50-153		WC_TOC_SLCSCC_00007
21	CCB	12:43	Total Organic Carbon	200				U	

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM II-IN

3-IN
METHOD BLANK
GENERAL CHEMISTRY

Lab Name: Eurofins Lancaster Laboratories Job No.: 410-114770-1

SDG No.:

Method	Lab Sample ID	Analyte	Result	Qual	Units	LOQ	Dil
Batch ID: 344728	Date: 02/14/2023 10:50						
Lloyd Kahn	MB 410-344728/4	Total Organic Carbon	200	U	mg/Kg	300	1

FORM III-IN

7A-IN
LAB CONTROL SAMPLE
GENERAL CHEMISTRY

Lab Name: Eurofins Lancaster Laboratories En Job No.: 410-114770-1

SDG No.:

Matrix: Solid

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 344728 Date: 02/14/2023 10:45											
						LCS Source: WC_TOC_SLCSCC_00007					
Lloyd Kahn	LCS 410-344728/3	Total Organic Carbon	5720		mg/Kg	4690	122	36-163			

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA-IN

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: Eurofins Lancaster Laboratories Job Number: 410-114770-1

SDG Number:

Matrix: Solid Instrument ID: 11082

Method: Lloyd Kahn DL Date: 11/28/2018 08:55

Analyte	Wavelength/ Mass	LOQ (mg/Kg)	DL (mg/Kg)
Total Organic Carbon		300	100

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: Eurofins Lancaster Laboratories Job Number: 410-114770-1

SDG Number:

Matrix: Solid Instrument ID: 11082

Method: Lloyd Kahn XMDL Date: 07/14/2018 12:52

Analyte	Wavelength/ Mass	XRL (mg/Kg)	XMDL (mg/Kg)
Total Organic Carbon		300	100

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: Eurofins Lancaster Laboratories Job Number: 410-114770-1

SDG Number:

Matrix: Solid Instrument ID: NOEQUIP

Method: Moisture DL Date: 10/16/2018 12:54

Analyte	Wavelength/ Mass	LOQ (%)	DL (%)
Percent Moisture		1	0.1

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: Eurofins Lancaster Laboratories Job Number: 410-114770-1

SDG Number:

Matrix: Solid Instrument ID: NOEQUIP

Method: Moisture XMDL Date: 10/16/2018 09:12

Analyte	Wavelength/ Mass	XRL (%)	XMDL (%)
Percent Moisture		1	0.1

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Lancaster Laboratories Envi Job No.: 410-114770-1

SDG No.:

Instrument ID: 11082 Analysis Method: Lloyd Kahn

Start Date: 02/14/2023 10:36 End Date: 02/15/2023 08:10

Lab Sample Id	D/F	Type	Time	Analytes																								
				TOC																								
CCV 410-344728/1	1		10:36	X																								
CCB 410-344728/2	1		10:42	X																								
LCS 410-344728/3	1	T	10:45	X																								
MB 410-344728/4	1	T	10:50	X																								
ZZZZZZ			11:11																									
ZZZZZZ			11:17																									
ZZZZZZ			11:25																									
ZZZZZZ			11:32																									
410-114770-2	1	T	11:38	X																								
ZZZZZZ			11:44																									
ZZZZZZ			11:53																									
ZZZZZZ			12:00																									
CCV 410-344728/13	1		12:03	X																								
CCB 410-344728/14	1		12:06	X																								
410-114770-1	1	T	12:14	X																								
ZZZZZZ			12:20																									
ZZZZZZ			12:25																									
ZZZZZZ			12:30																									
410-114770-3	1	T	12:34	X																								
CCV 410-344728/20	1		12:39	X																								
CCB 410-344728/21	1		12:43	X																								
ZZZZZZ			12:47																									
ZZZZZZ			12:53																									
ZZZZZZ			13:00																									
ZZZZZZ			13:04																									
ZZZZZZ			13:08																									
ZZZZZZ			13:12																									
CCV 410-344728/28			06:15																									
CCB 410-344728/29			06:22																									
ZZZZZZ			06:27																									
ZZZZZZ			06:33																									
ZZZZZZ			06:51																									
ZZZZZZ			06:58																									
CCV 410-344728/34			07:05																									
CCB 410-344728/35			07:09																									
ZZZZZZ			07:11																									
ZZZZZZ			07:15																									
ZZZZZZ			07:20																									
CCV 410-344728/39			07:25																									
CCB 410-344728/40			07:33																									
ZZZZZZ			07:36																									

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Lancaster Laboratories Envi Job No.: 410-114770-1

SDG No.:

Instrument ID: 11082 Analysis Method: Lloyd Kahn

Start Date: 02/14/2023 10:36 End Date: 02/15/2023 08:10

Lab Sample Id	D/F	Type	Time	Analytes																								
				TOC																								
ZZZZZZ			07:40																									
ZZZZZZ			07:45																									
ZZZZZZ			07:49																									
ZZZZZZ			07:54																									
ZZZZZZ			08:00																									
CCV 410-344728/47			08:05																									
CCB 410-344728/48			08:10																									

Prep Types:
T = Total/NA

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Lancaster Laboratories Envi Job No.: 410-114770-1

SDG No.:

Instrument ID: NOEQUIP Analysis Method: Moisture

Start Date: 02/09/2023 18:54 End Date: 02/09/2023 18:54

Lab Sample Id	D/F	Type	Time	Analytes																								
				Moist																								
ZZZZZZ			18:54																									
ZZZZZZ			18:54																									
ZZZZZZ			18:54																									
ZZZZZZ			18:54																									
ZZZZZZ			18:54																									
ZZZZZZ			18:54																									
ZZZZZZ			18:54																									
410-114770-1	1	T	18:54	X																								
410-114770-2	1	T	18:54	X																								
410-114770-3	1	T	18:54	X																								
ZZZZZZ			18:54																									
ZZZZZZ			18:54																									
ZZZZZZ			18:54																									
ZZZZZZ			18:54																									
ZZZZZZ			18:54																									
ZZZZZZ			18:54																									
ZZZZZZ			18:54																									
ZZZZZZ			18:54																									

Prep Types:
T = Total/NA

FORM XIII-IN

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-114770-1

SDG No.:

Batch Number: 344728 Batch Start Date: 02/14/23 10:36 Batch Analyst: Cornelius, Ashlynn M

Batch Method: Lloyd Kahn Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	WC_TOC_SLCSCC 00007				
CCV 410-344728/1		Lloyd Kahn		106.7 mg	# mg				
CCB 410-344728/2		Lloyd Kahn		1000 mg					
LCS 410-344728/3		Lloyd Kahn		106.5 mg	# mg				
MB 410-344728/4		Lloyd Kahn		1000 mg					
410-114770-A-2	SY-SB4R-10	Lloyd Kahn	T	192.5 mg					
CCV 410-344728/13		Lloyd Kahn		107.5 mg	# mg				
CCB 410-344728/14		Lloyd Kahn		1000 mg					
410-114770-A-1	SY-SB4R-1	Lloyd Kahn	T	45.3 mg					
410-114770-A-1	SY-SB4R-1	Lloyd Kahn	T	41.1 mg					
410-114770-A-1	SY-SB4R-1	Lloyd Kahn	T	33.6 mg					
410-114770-A-1	SY-SB4R-1	Lloyd Kahn	T	35.7 mg					
410-114770-A-3	SY-SB4R-2	Lloyd Kahn	T	213.6 mg					
CCV 410-344728/20		Lloyd Kahn		105.5 mg	# mg				
CCB 410-344728/21		Lloyd Kahn		1000 mg					

Batch Notes	
Phosphoric Acid ID	WC_TOC_1:1PA_00006
Pipette/Syringe/Dispenser ID	TOC

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-114770-1

SDG No.:

Batch Number: 343285 Batch Start Date: 02/09/23 18:54 Batch Analyst: Freisher, Scott W

Batch Method: Moisture Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	DISH#	DishWeight	SampleMassWet	SampleMassDry	%_Moisture	%_Solid
410-114770-A-1	SY-SB4R-1	Moisture	T	285-8	0.81 g	8.35 g	7.35 g	13.262599469496 %	86.737400530504 %
410-114770-A-2	SY-SB4R-10	Moisture	T	285-9	0.80 g	7.85 g	6.82 g	14.609929078014 2 %	85.390070921985 8 %
410-114770-A-3	SY-SB4R-2	Moisture	T	285-10	0.79 g	7.44 g	6.14 g	19.548872180451 1 %	80.451127819548 9 %

Lab Sample ID	Client Sample ID	Method Chain	Basis	AnalysisComment					
410-114770-A-1	SY-SB4R-1	Moisture	T	soil					
410-114770-A-2	SY-SB4R-10	Moisture	T	soil					
410-114770-A-3	SY-SB4R-2	Moisture	T	clay					

Batch Notes	
Balance ID	B4462
Oven ID	8948
Thermometer ID	1262
Date samples were placed in the oven	02/09/2023
Time samples were place in the oven	20:18
Oven Temp In	105 Degrees C
Date samples were removed from oven	02/10/2023
Time Samples were removed from oven	06:34
Oven Temp Out	105 Degrees C
Batch Comment	2/4/2023

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

Date:	2/15/2023	**Balance ID:**	12591	**Oven ID:**	974
Analyst:	AMC26520	**Sucrose:**	2053856	**Oven Temperature (°C):**	75
Run:		**CCV/LCS:**	2332813	**Time In:**	
		H3PO4:	3144436	**Time Out:**	

Tray #	Tray Position	Sample #	Sample Weight (mg)	Factor	LOQ	MDL	Comments
1	*A1*	CCV	106.7	9.37	2812	937	
	A2	CCB	1000.0	1.00	300	100	
	A3	LCS	106.5	9.39	2817	939	
	A4	MB	1000.0	1.00	300	100	
	A5	410-114770-A-1	200.1	5.00	1499	500	
	A6	410-114770-A-1	205.5	4.87	1460	487	
	A7	410-114770-A-1	211.3	4.73	1420	473	
	A8	410-114770-A-1	217.7	4.59	1378	459	
	B1	410-114770-A-2	192.5	5.19	1558	519	
	B2	410-114770-A-3	220.8	4.53	1359	453	
	B3	410-114506-A-1	180.9	5.53	1658	553	
	B4	410-114506-A-2	466.9	2.14	643	214	
	B5	CCV	107.5	9.30	2791	930	
	B6	CCB	1000.0	1.00	300	100	
	B7	410-114770-A-1	45.3	22.08	6623	2208	
	B8	410-114770-A-1	41.1	24.33	7299	2433	
	C1	410-114770-A-1	33.6	29.76	8929	2976	
	C2	410-114770-A-1	35.7	28.01	8403	2801	
	C3	410-114770-A-3	213.6	4.68	1404	468	
	C4	CCV	105.5	9.48	2844	948	
	C5	CCB	1000.0	1.00	300	100	
	C6	410-113495-B-1	299.0	3.34	1003	334	
	C7	410-113495-B-1 MS	153.8	6.50	1951	650	
	C8	410-113495-B-1 MSD	93.1	10.74	3222	1074	

Date:	2/15/2023	**Balance ID:**	12591	**Oven ID:**	974
Analyst:	AMC26520	**Sucrose:**	2053856	**Oven Temperature (°C):**	75
Run:		**CCV/LCS:**	2332813	**Time In:**	
		H3PO4:	3144436	**Time Out:**	

Tray #	Tray Position	Sample #	Sample Weight (mg)	Factor	LOQ	MDL	Comments
2	*A1*	410-113495-B-2	140.7	7.11	2132	711	
	A2	410-114858-A-1	120.5	8.30	2490	830	
	A3	410-114858-A-2	99.2	10.08	3024	1008	
	A4	CCV	101.0	9.90	2970	990	
	A5	CCB	1000.0	1.00	300	100	
	A6	410-113513-A-1	211.4	4.73	1419	473	
	A7	410-113513-A-2	87.4	11.44	3432	1144	
	A8	410-114858-A-2	141.6	7.06	2119	706	
	B1	410-113513-A-1	106.3	9.41	2822	941	
	B2	CCV	104.3	9.59	2876	959	
	B3	CCB	1000.0	1.00	300	100	
	B4	410-113495-B-1	44.9	22.27	6682	2227	
	B5	410-113495-B-1 MS	37.3	26.81	8043	2681	
	B6	410-113495-B-1 MSD	37.8	26.46	7937	2646	
	B7	CCV	102.8	9.73	2918	973	
	B8	CCB	1000.0	1.00	300	100	
	C1	410-112993-B-1	131.6	7.60	2280	760	
	C2	410-112994-B-1	158.1	6.33	1898	633	
	C3	410-112994-B-2	147.3	6.79	2037	679	
	C4	410-112994-B-3	155.7	6.42	1927	642	
	C5	410-112994-B-4	141.6	7.06	2119	706	
	C6	410-112995-B-1	148.9	6.72	2015	672	
	C7	CCV	103.8	9.63	2890	963	
	C8	CCB	1000.0	1.00	300	100	

General Chemistry Raw Data Report

Job ID: 410-114770-1

Batch: 343285 **Analyst Initials: USWF**

Method: Moisture **Instrument: NONE**

Lab Sample ID: 410-114770-A-1 **Analysis Date: Feb 09, 2023 18:54**

Analyte	Detector	Dilution	Raw Result	Unit
Percent Moisture	None	1	13.262599469496	%

Lab Sample ID: 410-114770-A-2 **Analysis Date: Feb 09, 2023 18:54**

Analyte	Detector	Dilution	Raw Result	Unit
Percent Moisture	None	1	14.6099290780142	%

Lab Sample ID: 410-114770-A-3 **Analysis Date: Feb 09, 2023 18:54**

Analyte	Detector	Dilution	Raw Result	Unit
Percent Moisture	None	1	19.5488721804511	%

Shipping and Receiving Documents

Eurofins Lancaster

Katahdin ANALYTICAL SERVICES

Sub-contract Laboratory Chain of Custody

revised COC rec 114770 02/16/23 sjg

Client:	Contact:	Email:		Phone #:
Katahdin Analytical Services	Heather Manz	hmanz@katahdinlab.com		(207) 874-2400
Address:	**City:**	**State:**	**Zip:**	**Project Name:**
600 Technology Way	Scarborough	Maine	04074	DOW
KAS WO #:	**Quote #:**	**Purchase Order #:**		**TAT:** Standard
SQ0595		SQ0595		**Verbal TAT:** N/A
RPT Level: 4	**Reporting Format:** DOD	**EDD:** FUDSCHEM		**Analysis:** TOC Lloydkahn

Sample ID:	Collect Date/Time:	Matrix:	No. of Containers	Pres.	MS/MSD Dup.	Filtered? Y / N	~~Analysis:~~ Filtered? Y / N	~~Analysis:~~ Filtered? Y / N
~~SY-SB4-1~~ SY-SB4R-1	01-FEB-23 11:45	SL	1	cold	NO	✓		
~~SY-SB4-10~~ SY-SB4R-10	01-FEB-23 11:50	SL				✓		
~~SY-SB4-2~~ SY-SB4R-2	01-FEB-23 11:55	SL				✓		

Relinquished By:	Date/Time:	Received By:
[signature]	2/07/23	[signature] 2/8/23 1004

Comments:

410-114770 Chain of Custody

mB

CB

Eurofins Lancaster

Katahdin ANALYTICAL SERVICES

Sub-contract Laboratory Chain of Custody

Client:	Contact:	Email:	Phone #:
Katahdin Analytical Services	Heather Manz	hmanz@katahdinlab.com	(207) 874-2400
Address:	**City:**	**State:** / **Zip:**	**Project Name:**
600 Technology Way	Scarborough	Maine / 04074	DOW
KAS WO #:	**Quote #:**	**Purchase Order #:**	**TAT:** Standard
SQ0595		SQ0595	**Verbal TAT:** N/A
RPT Level: 4	**Reporting Format:** DOD	**EDD:** FUDSCHEM	**Analysis:** TOC Lloyd Kahn / ~~Analysis:~~ / ~~Analysis:~~

Sample ID:	Collect Date/Time:	Matrix:	No. of Containers	Pres.	MS/MSD Dup.	Filtered? Y / N	Filtered? Y / N	Filtered? Y / N
SY-SB4-1	01-FEB-23 11:45	SL	1	cold	NO	✓		
SY-SB4-10	01-FEB-23 11:50	SL	↓	↓	↓	✓		
SY-SB4-2	01-FEB-23 11:55	SL	↓	↓	↓	✓		

Relinquished By:	Date/Time:	Received By:
[signature]	2/07/23	[signature] 2/8/23 1004

Comments:

410-114770 Chain of Custody

mB

CB

Login Sample Receipt Checklist

Client: Katahdin Analytical Services

Job Number: 410-114770-1

Login Number: 114770
List Number: 1
Creator: Ballard, Megan

List Source: Eurofins Lancaster Laboratories Environment Testing, LLC

Question	Answer	Comment
The cooler's custody seal is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable (</=6C, not frozen).	False	Cooler temperature outside required temperature criteria.
Cooler Temperature is recorded.	True	
WV: Container Temperature is acceptable (</=6C, not frozen).	N/A	
WV: Container Temperature is recorded.	N/A	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the containers received and the COC.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses.	True	
Is the Field Sampler's name present on COC?	False	Received project as a subcontract.
Sample custody seals are intact.	N/A	
VOA sample vials do not have headspace >6mm in diameter (none, if from WV)?	N/A	

Laboratory Report

Absolute Resource associates
124 Heritage Avenue Portsmouth NH 03801

Allison Drouin
CREDERE Associates
776 Main Street
Westbrook, ME 04092

PO Number: None
Job ID: 67797
Date Received: 11/8/23

Project: Dow Salvage Yard 18001468

Attached please find results for the analysis of the samples received on the date referenced above.

Unless otherwise noted in the attached report, the analyses performed met the requirements of Absolute Resource Associates' Quality Assurance Plan. The Standard Operating Procedures are based upon USEPA SW-846, USEPA Methods for Chemical Analysis of Water and Wastewater, Standard Methods for the Examination of Water and Wastewater and other recognized methodologies. The results contained in this report pertain only to the samples as indicated on the chain of custody.

Absolute Resource Associates maintains certification with the agencies listed below. The reported results apply to the sample(s) in the condition as received at the time the laboratory took custody. This report shall not be reproduced except in full, without written approval of the laboratory. The liability of ARA is limited to the cost of the requested analyses, unless otherwise agreed upon in writing.

We appreciate the opportunity to provide laboratory services. If you have any questions regarding the enclosed report, please contact the laboratory and we will be glad to assist you.

Sincerely,
Absolute Resource Associates

Aaron DeWees
Chief Operating Officer

Date of Approval: 1/3/2024
Total number of pages: 118

Absolute Resource Associates Certifications

New Hampshire	1732	Massachusetts	M-NH902
Maine	NH902		

Absolute Resource associates

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Project ID: Dow Salvage Yard 18001468

Sample Association Table

Field ID	Matrix	Date-Time Sampled	Lab#	Analysis
SY-OBMW7-110623	Water	11/6/2023 16:10	67797-001	
				Acid & Base/Neutral Extractables in water by 8270
				Aluminum in water by 6020
				Antimony in water by 6020
				Arsenic in water by 6020
				Barium in water by 6020
				Beryllium in water by 6020
				Cadmium in water by 6020
				Chromium in water by 6020
				Cobalt in water by 6020
				Combo: TAL 23 Metals
				Copper in water by 6020
				EPH in water by MADEP Method
				Iron in water by 6020
				Lead in water by 6020
				Magnesium in water by 6020
				Manganese in water by 6020
				Mercury in water by 7470
				Nickel in water by 6020
				Potassium in water by 6020
				SEDD Generation
				Selenium in water by 6020
				Silver in water by 6020
				Sodium in water by 6020
				Thallium in water by 6020
				Vanadium in water by 6020
				VOCs in water by 8260 DoD
				VPH in water by MA DEP Method
				Water Digestion for ICPMS Analysis
				Zinc in water by 6020

Project ID: Dow Salvage Yard 18001468

Sample Association Table

Field ID	Matrix	Date-Time Sampled	Lab#	Analysis
SY-OBMW10-110623	Water	11/6/2023 16:20	67797-002	
				Acid & Base/Neutral Extractables in water by 8270
				Aluminum in water by 6020
				Antimony in water by 6020
				Arsenic in water by 6020
				Barium in water by 6020
				Beryllium in water by 6020
				Cadmium in water by 6020
				Chromium in water by 6020
				Cobalt in water by 6020
				Combo: TAL 23 Metals
				Copper in water by 6020
				EPH in water by MADEP Method
				Iron in water by 6020
				Lead in water by 6020
				Magnesium in water by 6020
				Manganese in water by 6020
				Mercury in water by 7470
				Nickel in water by 6020
				PCBs in water by 8082 DoD
				Potassium in water by 6020
				Selenium in water by 6020
				Silver in water by 6020
				Sodium in water by 6020
				Thallium in water by 6020
				Vanadium in water by 6020
				VOCs in water by 8260 DoD
				VPH in water by MA DEP Method
				Water Digestion for ICPMS Analysis
				Zinc in water by 6020
TB30-110623	Water	11/6/2023 16:00	67797-003	
				VOCs in water by 8260 DoD
				VPH in water by MA DEP Method

Project ID: Dow Salvage Yard 18001468

Sample Association Table

Field ID	Matrix	Date-Time Sampled	Lab#	Analysis
SY-OBMW7-110623-DISS	Water	11/6/2023 16:10	67797-004	
				Aluminum in water by 6020
				Antimony in water by 6020
				Arsenic in water by 6020
				Barium in water by 6020
				Beryllium in water by 6020
				Cadmium in water by 6020
				Chromium in water by 6020
				Cobalt in water by 6020
				Combo: TAL 23 Metals
				Copper in water by 6020
				Dissolved Prep for ICPMS Analysis
				Iron in water by 6020
				Lead in water by 6020
				Magnesium in water by 6020
				Manganese in water by 6020
				Mercury in water by 7470
				Nickel in water by 6020
				Potassium in water by 6020
				Selenium in water by 6020
				Silver in water by 6020
				Sodium in water by 6020
				Thallium in water by 6020
				Vanadium in water by 6020
				Zinc in water by 6020

Project ID: Dow Salvage Yard 18001468

Sample Association Table

Field ID	Matrix	Date-Time Sampled	Lab#	Analysis
SY-OBMW10-110623-DISS	Water	11/6/2023 16:20	67797-005	
				Aluminum in water by 6020
				Antimony in water by 6020
				Arsenic in water by 6020
				Barium in water by 6020
				Beryllium in water by 6020
				Cadmium in water by 6020
				Chromium in water by 6020
				Cobalt in water by 6020
				Combo: TAL 23 Metals
				Copper in water by 6020
				Dissolved Prep for ICPMS Analysis
				Iron in water by 6020
				Lead in water by 6020
				Magnesium in water by 6020
				Manganese in water by 6020
				Mercury in water by 7470
				Nickel in water by 6020
				Potassium in water by 6020
				Selenium in water by 6020
				Silver in water by 6020
				Sodium in water by 6020
				Thallium in water by 6020
				Vanadium in water by 6020
				Zinc in water by 6020

Project ID: Dow Salvage Yard 18001468
Job ID: 67797
Sample#: 67797-001
Sample ID: SY-OBMW7-110623
Matrix: Water
Sampled: 11/6/23 16:10

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
dichlorodifluoromethane	1.0 U	2.0	1.0	0.28	ug/L	1	LMM			2303694	11/13/23	14:26	SW5030C8260D
chloromethane	1.0 U	2.0	1.0	0.59	ug/L	1	LMM			2303694	11/13/23	14:26	SW5030C8260D
vinyl chloride	1.0 U	2.0	1.0	0.49	ug/L	1	LMM			2303694	11/13/23	14:26	SW5030C8260D
bromomethane	1.5 U	2.0	1.5	1.1	ug/L	1	LMM			2303694	11/13/23	14:26	SW5030C8260D
chloroethane	1.0 U	2.0	1.0	0.33	ug/L	1	LMM			2303694	11/13/23	14:26	SW5030C8260D
trichlorofluoromethane	1.0 U	2.0	1.0	0.34	ug/L	1	LMM			2303694	11/13/23	14:26	SW5030C8260D
diethyl ether	1.0 U	2.0	1.0	0.41	ug/L	1	LMM			2303694	11/13/23	14:26	SW5030C8260D
acetone	5.0 U	50	5.0	1.9	ug/L	1	LMM			2303694	11/13/23	14:26	SW5030C8260D
1,1-dichloroethene	0.50 U	1.0	0.50	0.35	ug/L	1	LMM			2303694	11/13/23	14:26	SW5030C8260D
methylene chloride	1.0 U	2.0	1.0	0.59	ug/L	1	LMM			2303694	11/13/23	14:26	SW5030C8260D
carbon disulfide	1.0 U	2.0	1.0	0.33	ug/L	1	LMM			2303694	11/13/23	14:26	SW5030C8260D
methyl t-butyl ether (MTBE)	1.0 U	2.0	1.0	0.30	ug/L	1	LMM			2303694	11/13/23	14:26	SW5030C8260D
trans-1,2-dichloroethene	1.0 U	2.0	1.0	0.46	ug/L	1	LMM			2303694	11/13/23	14:26	SW5030C8260D
ethyl t-butyl ether (ETBE)	1.0 U	2.0	1.0	0.24	ug/L	1	LMM			2303694	11/13/23	14:26	SW5030C8260D
1,1-dichloroethane	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303694	11/13/23	14:26	SW5030C8260D
t-butanol (TBA)	10 U	30	10	2.5	ug/L	1	LMM			2303694	11/13/23	14:26	SW5030C8260D
2-butanone (MEK)	5.0 U	10	5.0	0.67	ug/L	1	LMM			2303694	11/13/23	14:26	SW5030C8260D
2,2-dichloropropane	1.0 U	2.0	1.0	0.21	ug/L	1	LMM			2303694	11/13/23	14:26	SW5030C8260D
cis-1,2-dichloroethene	1.5 U	2.0	1.5	1.2	ug/L	1	LMM			2303694	11/13/23	14:26	SW5030C8260D
chloroform	1.5 U	2.0	1.5	1.4	ug/L	1	LMM			2303694	11/13/23	14:26	SW5030C8260D
bromochloromethane	1.0 U	2.0	1.0	0.22	ug/L	1	LMM			2303694	11/13/23	14:26	SW5030C8260D
tetrahydrofuran (THF)	1.5 U	2.0	1.5	0.75	ug/L	1	LMM			2303694	11/13/23	14:26	SW5030C8260D
1,1,1-trichloroethane	1.0 U	2.0	1.0	0.55	ug/L	1	LMM			2303694	11/13/23	14:26	SW5030C8260D
1,1-dichloropropene	1.0 U	2.0	1.0	0.26	ug/L	1	LMM			2303694	11/13/23	14:26	SW5030C8260D
t-amyl-methyl ether (TAME)	1.0 U	2.0	1.0	0.57	ug/L	1	LMM			2303694	11/13/23	14:26	SW5030C8260D
carbon tetrachloride	0.34 J	2.0	1.0	0.27	ug/L	1	LMM			2303694	11/13/23	14:26	SW5030C8260D
1,2-dichloroethane	1.0 U	2.0	1.0	0.20	ug/L	1	LMM			2303694	11/13/23	14:26	SW5030C8260D
benzene	1.0 U	2.0	1.0	0.40	ug/L	1	LMM			2303694	11/13/23	14:26	SW5030C8260D
trichloroethene	1.0 U	2.0	1.0	0.53	ug/L	1	LMM			2303694	11/13/23	14:26	SW5030C8260D
1,2-dichloropropane	1.0 U	2.0	1.0	0.22	ug/L	1	LMM			2303694	11/13/23	14:26	SW5030C8260D
bromodichloromethane	0.50 U	0.60	0.50	0.38	ug/L	1	LMM			2303694	11/13/23	14:26	SW5030C8260D
1,4-dioxane	10 U	50	10	8.7	ug/L	1	LMM			2303694	11/13/23	14:26	SW5030C8260D
dibromomethane	1.0 U	2.0	1.0	0.23	ug/L	1	LMM			2303694	11/13/23	14:26	SW5030C8260D
4-methyl-2-pentanone (MIBK)	1.0 U	10	1.0	0.56	ug/L	1	LMM			2303694	11/13/23	14:26	SW5030C8260D
cis-1,3-dichloropropene	1.0 U	2.0	1.0	0.30	ug/L	1	LMM			2303694	11/13/23	14:26	SW5030C8260D
toluene	1.0 U	2.0	1.0	0.45	ug/L	1	LMM			2303694	11/13/23	14:26	SW5030C8260D
trans-1,3-dichloropropene	1.0 U	2.0	1.0	0.34	ug/L	1	LMM			2303694	11/13/23	14:26	SW5030C8260D
2-hexanone	1.0 U	10	1.0	0.72	ug/L	1	LMM			2303694	11/13/23	14:26	SW5030C8260D
1,1,2-trichloroethane	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303694	11/13/23	14:26	SW5030C8260D
1,3-dichloropropane	1.0 U	2.0	1.0	0.25	ug/L	1	LMM			2303694	11/13/23	14:26	SW5030C8260D
tetrachloroethene	1.0 U	2.0	1.0	0.76	ug/L	1	LMM			2303694	11/13/23	14:26	SW5030C8260D
dibromochloromethane	1.0 U	2.0	1.0	0.21	ug/L	1	LMM			2303694	11/13/23	14:26	SW5030C8260D

Project ID: Dow Salvage Yard 18001468
Job ID: 67797
Sample#: 67797-001
Sample ID: SY-OBMW7-110623
Matrix: Water
Sampled: 11/6/23 16:10

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
1,2-dibromoethane (EDB)	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303694	11/13/23	14:26	SW5030C8260D
chlorobenzene	1.0 U	2.0	1.0	0.25	ug/L	1	LMM			2303694	11/13/23	14:26	SW5030C8260D
1,1,1,2-tetrachloroethane	1.0 U	2.0	1.0	0.21	ug/L	1	LMM			2303694	11/13/23	14:26	SW5030C8260D
ethylbenzene	1.0 U	2.0	1.0	0.65	ug/L	1	LMM			2303694	11/13/23	14:26	SW5030C8260D
m&p-xylenes	1.5 U	2.0	1.5	1.4	ug/L	1	LMM			2303694	11/13/23	14:26	SW5030C8260D
o-xylene	1.0 U	2.0	1.0	0.55	ug/L	1	LMM			2303694	11/13/23	14:26	SW5030C8260D
styrene	1.0 U	2.0	1.0	0.57	ug/L	1	LMM			2303694	11/13/23	14:26	SW5030C8260D
bromoform	1.0 U	2.0	1.0	0.24	ug/L	1	LMM			2303694	11/13/23	14:26	SW5030C8260D
isopropylbenzene	1.0 U	2.0	1.0	0.65	ug/L	1	LMM			2303694	11/13/23	14:26	SW5030C8260D
1,1,2,2-tetrachloroethane	1.0 U	2.0	1.0	0.29	ug/L	1	LMM			2303694	11/13/23	14:26	SW5030C8260D
1,2,3-trichloropropane	1.0 U	2.0	1.0	0.55	ug/L	1	LMM			2303694	11/13/23	14:26	SW5030C8260D
n-propylbenzene	1.0 U	2.0	1.0	0.44	ug/L	1	LMM			2303694	11/13/23	14:26	SW5030C8260D
bromobenzene	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303694	11/13/23	14:26	SW5030C8260D
2-chlorotoluene	1.0 U	2.0	1.0	0.23	ug/L	1	LMM			2303694	11/13/23	14:26	SW5030C8260D
4-chlorotoluene	1.0 U	2.0	1.0	0.33	ug/L	1	LMM			2303694	11/13/23	14:26	SW5030C8260D
tert-butylbenzene	1.0 U	2.0	1.0	0.39	ug/L	1	LMM			2303694	11/13/23	14:26	SW5030C8260D
1,2,4-trimethylbenzene	1.0 U	2.0	1.0	0.58	ug/L	1	LMM			2303694	11/13/23	14:26	SW5030C8260D
sec-butylbenzene	1.0 U	2.0	1.0	0.44	ug/L	1	LMM			2303694	11/13/23	14:26	SW5030C8260D
1,3-dichlorobenzene	1.0 U	2.0	1.0	0.45	ug/L	1	LMM			2303694	11/13/23	14:26	SW5030C8260D
4-isopropyltoluene	1.0 U	2.0	1.0	0.47	ug/L	1	LMM			2303694	11/13/23	14:26	SW5030C8260D
1,4-dichlorobenzene	1.0 U	2.0	1.0	0.26	ug/L	1	LMM			2303694	11/13/23	14:26	SW5030C8260D
1,2-dichlorobenzene	1.0 U	2.0	1.0	0.39	ug/L	1	LMM			2303694	11/13/23	14:26	SW5030C8260D
n-butylbenzene	1.0 U	2.0	1.0	0.54	ug/L	1	LMM			2303694	11/13/23	14:26	SW5030C8260D
1,2-dibromo-3-chloropropane (DBCP)	1.5 U	2.0	1.5	0.91	ug/L	1	LMM			2303694	11/13/23	14:26	SW5030C8260D
1,3,5-trimethylbenzene	1.0 U	2.0	1.0	0.46	ug/L	1	LMM			2303694	11/13/23	14:26	SW5030C8260D
1,2,4-trichlorobenzene	1.0 U	2.0	1.0	0.79	ug/L	1	LMM			2303694	11/13/23	14:26	SW5030C8260D
hexachlorobutadiene	0.50 U	0.50	0.50	0.19	ug/L	1	LMM			2303694	11/13/23	14:26	SW5030C8260D
naphthalene	1.5 U	2.0	1.5	1.2	ug/L	1	LMM			2303694	11/13/23	14:26	SW5030C8260D
1,2,3-trichlorobenzene	1.0 U	2.0	1.0	0.93	ug/L	1	LMM			2303694	11/13/23	14:26	SW5030C8260D
Surrogate Recovery		Limits											
dibromofluoromethane SUR	94	78-114			%	1	LMM			2303694	11/13/23	14:26	SW5030C8260D
toluene-D8 SUR	102	88-110			%	1	LMM			2303694	11/13/23	14:26	SW5030C8260D
4-bromofluorobenzene SUR	99	86-115			%	1	LMM			2303694	11/13/23	14:26	SW5030C8260D

Project ID: Dow Salvage Yard 18001468
Job ID: 67797
Sample#: 67797-002
Sample ID: SY-OBMW10-110623
Matrix: Water
Sampled: 11/6/23 16:20

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
dichlorodifluoromethane	1.0 U	2.0	1.0	0.28	ug/L	1	LMM			2303694	11/13/23	14:55	SW5030C8260D
chloromethane	1.0 U	2.0	1.0	0.59	ug/L	1	LMM			2303694	11/13/23	14:55	SW5030C8260D
vinyl chloride	1.0 U	2.0	1.0	0.49	ug/L	1	LMM			2303694	11/13/23	14:55	SW5030C8260D
bromomethane	1.5 U	2.0	1.5	1.1	ug/L	1	LMM			2303694	11/13/23	14:55	SW5030C8260D
chloroethane	1.0 U	2.0	1.0	0.33	ug/L	1	LMM			2303694	11/13/23	14:55	SW5030C8260D
trichlorofluoromethane	1.0 U	2.0	1.0	0.34	ug/L	1	LMM			2303694	11/13/23	14:55	SW5030C8260D
diethyl ether	1.0 U	2.0	1.0	0.41	ug/L	1	LMM			2303694	11/13/23	14:55	SW5030C8260D
acetone	5.0 U	50	5.0	1.9	ug/L	1	LMM			2303694	11/13/23	14:55	SW5030C8260D
1,1-dichloroethene	0.50 U	1.0	0.50	0.35	ug/L	1	LMM			2303694	11/13/23	14:55	SW5030C8260D
methylene chloride	1.0 U	2.0	1.0	0.59	ug/L	1	LMM			2303694	11/13/23	14:55	SW5030C8260D
carbon disulfide	1.0 U	2.0	1.0	0.33	ug/L	1	LMM			2303694	11/13/23	14:55	SW5030C8260D
methyl t-butyl ether (MTBE)	1.0 U	2.0	1.0	0.30	ug/L	1	LMM			2303694	11/13/23	14:55	SW5030C8260D
trans-1,2-dichloroethene	1.0 U	2.0	1.0	0.46	ug/L	1	LMM			2303694	11/13/23	14:55	SW5030C8260D
ethyl t-butyl ether (ETBE)	1.0 U	2.0	1.0	0.24	ug/L	1	LMM			2303694	11/13/23	14:55	SW5030C8260D
1,1-dichloroethane	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303694	11/13/23	14:55	SW5030C8260D
t-butanol (TBA)	10 U	30	10	2.5	ug/L	1	LMM			2303694	11/13/23	14:55	SW5030C8260D
2-butanone (MEK)	5.0 U	10	5.0	0.67	ug/L	1	LMM			2303694	11/13/23	14:55	SW5030C8260D
2,2-dichloropropane	1.0 U	2.0	1.0	0.21	ug/L	1	LMM			2303694	11/13/23	14:55	SW5030C8260D
cis-1,2-dichloroethene	1.5 U	2.0	1.5	1.2	ug/L	1	LMM			2303694	11/13/23	14:55	SW5030C8260D
chloroform	1.5 U	2.0	1.5	1.4	ug/L	1	LMM			2303694	11/13/23	14:55	SW5030C8260D
bromochloromethane	1.0 U	2.0	1.0	0.22	ug/L	1	LMM			2303694	11/13/23	14:55	SW5030C8260D
tetrahydrofuran (THF)	1.5 U	2.0	1.5	0.75	ug/L	1	LMM			2303694	11/13/23	14:55	SW5030C8260D
1,1,1-trichloroethane	1.0 U	2.0	1.0	0.55	ug/L	1	LMM			2303694	11/13/23	14:55	SW5030C8260D
1,1-dichloropropene	1.0 U	2.0	1.0	0.26	ug/L	1	LMM			2303694	11/13/23	14:55	SW5030C8260D
t-amyl-methyl ether (TAME)	1.0 U	2.0	1.0	0.57	ug/L	1	LMM			2303694	11/13/23	14:55	SW5030C8260D
carbon tetrachloride	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303694	11/13/23	14:55	SW5030C8260D
1,2-dichloroethane	1.0 U	2.0	1.0	0.20	ug/L	1	LMM			2303694	11/13/23	14:55	SW5030C8260D
benzene	1.0 U	2.0	1.0	0.40	ug/L	1	LMM			2303694	11/13/23	14:55	SW5030C8260D
trichloroethene	1.0 U	2.0	1.0	0.53	ug/L	1	LMM			2303694	11/13/23	14:55	SW5030C8260D
1,2-dichloropropane	1.0 U	2.0	1.0	0.22	ug/L	1	LMM			2303694	11/13/23	14:55	SW5030C8260D
bromodichloromethane	0.50 U	0.60	0.50	0.38	ug/L	1	LMM			2303694	11/13/23	14:55	SW5030C8260D
1,4-dioxane	10 U	50	10	8.7	ug/L	1	LMM			2303694	11/13/23	14:55	SW5030C8260D
dibromomethane	1.0 U	2.0	1.0	0.23	ug/L	1	LMM			2303694	11/13/23	14:55	SW5030C8260D
4-methyl-2-pentanone (MIBK)	1.0 U	10	1.0	0.56	ug/L	1	LMM			2303694	11/13/23	14:55	SW5030C8260D
cis-1,3-dichloropropene	1.0 U	2.0	1.0	0.30	ug/L	1	LMM			2303694	11/13/23	14:55	SW5030C8260D
toluene	1.0 U	2.0	1.0	0.45	ug/L	1	LMM			2303694	11/13/23	14:55	SW5030C8260D
trans-1,3-dichloropropene	1.0 U	2.0	1.0	0.34	ug/L	1	LMM			2303694	11/13/23	14:55	SW5030C8260D
2-hexanone	1.0 U	10	1.0	0.72	ug/L	1	LMM			2303694	11/13/23	14:55	SW5030C8260D
1,1,2-trichloroethane	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303694	11/13/23	14:55	SW5030C8260D
1,3-dichloropropane	1.0 U	2.0	1.0	0.25	ug/L	1	LMM			2303694	11/13/23	14:55	SW5030C8260D
tetrachloroethene	1.0 U	2.0	1.0	0.76	ug/L	1	LMM			2303694	11/13/23	14:55	SW5030C8260D
dibromochloromethane	1.0 U	2.0	1.0	0.21	ug/L	1	LMM			2303694	11/13/23	14:55	SW5030C8260D

Project ID: Dow Salvage Yard 18001468
Job ID: 67797
Sample#: 67797-002
Sample ID: SY-OBMW10-110623
Matrix: Water
Sampled: 11/6/23 16:20

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
1,2-dibromoethane (EDB)	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303694	11/13/23	14:55	SW5030C8260D
chlorobenzene	1.0 U	2.0	1.0	0.25	ug/L	1	LMM			2303694	11/13/23	14:55	SW5030C8260D
1,1,1,2-tetrachloroethane	1.0 U	2.0	1.0	0.21	ug/L	1	LMM			2303694	11/13/23	14:55	SW5030C8260D
ethylbenzene	1.0 U	2.0	1.0	0.65	ug/L	1	LMM			2303694	11/13/23	14:55	SW5030C8260D
m&p-xylenes	1.5 U	2.0	1.5	1.4	ug/L	1	LMM			2303694	11/13/23	14:55	SW5030C8260D
o-xylene	1.0 U	2.0	1.0	0.55	ug/L	1	LMM			2303694	11/13/23	14:55	SW5030C8260D
styrene	1.0 U	2.0	1.0	0.57	ug/L	1	LMM			2303694	11/13/23	14:55	SW5030C8260D
bromoform	1.0 U	2.0	1.0	0.24	ug/L	1	LMM			2303694	11/13/23	14:55	SW5030C8260D
isopropylbenzene	1.0 U	2.0	1.0	0.65	ug/L	1	LMM			2303694	11/13/23	14:55	SW5030C8260D
1,1,2,2-tetrachloroethane	1.0 U	2.0	1.0	0.29	ug/L	1	LMM			2303694	11/13/23	14:55	SW5030C8260D
1,2,3-trichloropropane	1.0 U	2.0	1.0	0.55	ug/L	1	LMM			2303694	11/13/23	14:55	SW5030C8260D
n-propylbenzene	1.0 U	2.0	1.0	0.44	ug/L	1	LMM			2303694	11/13/23	14:55	SW5030C8260D
bromobenzene	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303694	11/13/23	14:55	SW5030C8260D
2-chlorotoluene	1.0 U	2.0	1.0	0.23	ug/L	1	LMM			2303694	11/13/23	14:55	SW5030C8260D
4-chlorotoluene	1.0 U	2.0	1.0	0.33	ug/L	1	LMM			2303694	11/13/23	14:55	SW5030C8260D
tert-butylbenzene	1.0 U	2.0	1.0	0.39	ug/L	1	LMM			2303694	11/13/23	14:55	SW5030C8260D
1,2,4-trimethylbenzene	1.0 U	2.0	1.0	0.58	ug/L	1	LMM			2303694	11/13/23	14:55	SW5030C8260D
sec-butylbenzene	1.0 U	2.0	1.0	0.44	ug/L	1	LMM			2303694	11/13/23	14:55	SW5030C8260D
1,3-dichlorobenzene	1.0 U	2.0	1.0	0.45	ug/L	1	LMM			2303694	11/13/23	14:55	SW5030C8260D
4-isopropyltoluene	1.0 U	2.0	1.0	0.47	ug/L	1	LMM			2303694	11/13/23	14:55	SW5030C8260D
1,4-dichlorobenzene	1.0 U	2.0	1.0	0.26	ug/L	1	LMM			2303694	11/13/23	14:55	SW5030C8260D
1,2-dichlorobenzene	1.0 U	2.0	1.0	0.39	ug/L	1	LMM			2303694	11/13/23	14:55	SW5030C8260D
n-butylbenzene	1.0 U	2.0	1.0	0.54	ug/L	1	LMM			2303694	11/13/23	14:55	SW5030C8260D
1,2-dibromo-3-chloropropane (DBCP)	1.5 U	2.0	1.5	0.91	ug/L	1	LMM			2303694	11/13/23	14:55	SW5030C8260D
1,3,5-trimethylbenzene	1.0 U	2.0	1.0	0.46	ug/L	1	LMM			2303694	11/13/23	14:55	SW5030C8260D
1,2,4-trichlorobenzene	1.0 U	2.0	1.0	0.79	ug/L	1	LMM			2303694	11/13/23	14:55	SW5030C8260D
hexachlorobutadiene	0.50 U	0.50	0.50	0.19	ug/L	1	LMM			2303694	11/13/23	14:55	SW5030C8260D
naphthalene	1.5 U	2.0	1.5	1.2	ug/L	1	LMM			2303694	11/13/23	14:55	SW5030C8260D
1,2,3-trichlorobenzene	1.0 U	2.0	1.0	0.93	ug/L	1	LMM			2303694	11/13/23	14:55	SW5030C8260D
Surrogate Recovery		Limits											
dibromofluoromethane SUR	90	78-114			%	1	LMM			2303694	11/13/23	14:55	SW5030C8260D
toluene-D8 SUR	100	88-110			%	1	LMM			2303694	11/13/23	14:55	SW5030C8260D
4-bromofluorobenzene SUR	99	86-115			%	1	LMM			2303694	11/13/23	14:55	SW5030C8260D

Project ID: Dow Salvage Yard 18001468
Job ID: 67797
Sample#: 67797-003
Sample ID: TB30-110623
Matrix: Water
Sampled: 11/6/23 16:00

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
dichlorodifluoromethane	1.0 U	2.0	1.0	0.28	ug/L	1	LMM			2303694	11/13/23	12:15	SW5030C8260D
chloromethane	1.0 U	2.0	1.0	0.59	ug/L	1	LMM			2303694	11/13/23	12:15	SW5030C8260D
vinyl chloride	1.0 U	2.0	1.0	0.49	ug/L	1	LMM			2303694	11/13/23	12:15	SW5030C8260D
bromomethane	1.5 U	2.0	1.5	1.1	ug/L	1	LMM			2303694	11/13/23	12:15	SW5030C8260D
chloroethane	1.0 U	2.0	1.0	0.33	ug/L	1	LMM			2303694	11/13/23	12:15	SW5030C8260D
trichlorofluoromethane	1.0 U	2.0	1.0	0.34	ug/L	1	LMM			2303694	11/13/23	12:15	SW5030C8260D
diethyl ether	1.0 U	2.0	1.0	0.41	ug/L	1	LMM			2303694	11/13/23	12:15	SW5030C8260D
acetone	7.1 J	50	5.0	1.9	ug/L	1	LMM			2303694	11/13/23	12:15	SW5030C8260D
1,1-dichloroethene	0.50 U	1.0	0.50	0.35	ug/L	1	LMM			2303694	11/13/23	12:15	SW5030C8260D
methylene chloride	1.0 U	2.0	1.0	0.59	ug/L	1	LMM			2303694	11/13/23	12:15	SW5030C8260D
carbon disulfide	1.0 U	2.0	1.0	0.33	ug/L	1	LMM			2303694	11/13/23	12:15	SW5030C8260D
methyl t-butyl ether (MTBE)	1.0 U	2.0	1.0	0.30	ug/L	1	LMM			2303694	11/13/23	12:15	SW5030C8260D
trans-1,2-dichloroethene	1.0 U	2.0	1.0	0.46	ug/L	1	LMM			2303694	11/13/23	12:15	SW5030C8260D
ethyl t-butyl ether (ETBE)	1.0 U	2.0	1.0	0.24	ug/L	1	LMM			2303694	11/13/23	12:15	SW5030C8260D
1,1-dichloroethane	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303694	11/13/23	12:15	SW5030C8260D
t-butanol (TBA)	10 U	30	10	2.5	ug/L	1	LMM			2303694	11/13/23	12:15	SW5030C8260D
2-butanone (MEK)	9.4 J	10	5.0	0.67	ug/L	1	LMM			2303694	11/13/23	12:15	SW5030C8260D
2,2-dichloropropane	1.0 U	2.0	1.0	0.21	ug/L	1	LMM			2303694	11/13/23	12:15	SW5030C8260D
cis-1,2-dichloroethene	1.5 U	2.0	1.5	1.2	ug/L	1	LMM			2303694	11/13/23	12:15	SW5030C8260D
chloroform	1.5 U	2.0	1.5	1.4	ug/L	1	LMM			2303694	11/13/23	12:15	SW5030C8260D
bromochloromethane	1.0 U	2.0	1.0	0.22	ug/L	1	LMM			2303694	11/13/23	12:15	SW5030C8260D
tetrahydrofuran (THF)	1.5 U	2.0	1.5	0.75	ug/L	1	LMM			2303694	11/13/23	12:15	SW5030C8260D
1,1,1-trichloroethane	1.0 U	2.0	1.0	0.55	ug/L	1	LMM			2303694	11/13/23	12:15	SW5030C8260D
1,1-dichloropropene	1.0 U	2.0	1.0	0.26	ug/L	1	LMM			2303694	11/13/23	12:15	SW5030C8260D
t-amyl-methyl ether (TAME)	1.0 U	2.0	1.0	0.57	ug/L	1	LMM			2303694	11/13/23	12:15	SW5030C8260D
carbon tetrachloride	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303694	11/13/23	12:15	SW5030C8260D
1,2-dichloroethane	1.0 U	2.0	1.0	0.20	ug/L	1	LMM			2303694	11/13/23	12:15	SW5030C8260D
benzene	1.0 U	2.0	1.0	0.40	ug/L	1	LMM			2303694	11/13/23	12:15	SW5030C8260D
trichloroethene	1.0 U	2.0	1.0	0.53	ug/L	1	LMM			2303694	11/13/23	12:15	SW5030C8260D
1,2-dichloropropane	1.0 U	2.0	1.0	0.22	ug/L	1	LMM			2303694	11/13/23	12:15	SW5030C8260D
bromodichloromethane	0.50 U	0.60	0.50	0.38	ug/L	1	LMM			2303694	11/13/23	12:15	SW5030C8260D
1,4-dioxane	10 U	50	10	8.7	ug/L	1	LMM			2303694	11/13/23	12:15	SW5030C8260D
dibromomethane	1.0 U	2.0	1.0	0.23	ug/L	1	LMM			2303694	11/13/23	12:15	SW5030C8260D
4-methyl-2-pentanone (MIBK)	1.0 U	10	1.0	0.56	ug/L	1	LMM			2303694	11/13/23	12:15	SW5030C8260D
cis-1,3-dichloropropene	1.0 U	2.0	1.0	0.30	ug/L	1	LMM			2303694	11/13/23	12:15	SW5030C8260D
toluene	1.0 U	2.0	1.0	0.45	ug/L	1	LMM			2303694	11/13/23	12:15	SW5030C8260D
trans-1,3-dichloropropene	1.0 U	2.0	1.0	0.34	ug/L	1	LMM			2303694	11/13/23	12:15	SW5030C8260D
2-hexanone	0.91 J	10	1.0	0.72	ug/L	1	LMM			2303694	11/13/23	12:15	SW5030C8260D
1,1,2-trichloroethane	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303694	11/13/23	12:15	SW5030C8260D
1,3-dichloropropane	1.0 U	2.0	1.0	0.25	ug/L	1	LMM			2303694	11/13/23	12:15	SW5030C8260D
tetrachloroethene	1.0 U	2.0	1.0	0.76	ug/L	1	LMM			2303694	11/13/23	12:15	SW5030C8260D
dibromochloromethane	1.0 U	2.0	1.0	0.21	ug/L	1	LMM			2303694	11/13/23	12:15	SW5030C8260D

Project ID: Dow Salvage Yard 18001468
Job ID: 67797
Sample#: 67797-003
Sample ID: TB30-110623
Matrix: Water
Sampled: 11/6/23 16:00

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
1,2-dibromoethane (EDB)	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303694	11/13/23	12:15	SW5030C8260D
chlorobenzene	1.0 U	2.0	1.0	0.25	ug/L	1	LMM			2303694	11/13/23	12:15	SW5030C8260D
1,1,1,2-tetrachloroethane	1.0 U	2.0	1.0	0.21	ug/L	1	LMM			2303694	11/13/23	12:15	SW5030C8260D
ethylbenzene	1.0 U	2.0	1.0	0.65	ug/L	1	LMM			2303694	11/13/23	12:15	SW5030C8260D
m&p-xylenes	1.5 U	2.0	1.5	1.4	ug/L	1	LMM			2303694	11/13/23	12:15	SW5030C8260D
o-xylene	1.0 U	2.0	1.0	0.55	ug/L	1	LMM			2303694	11/13/23	12:15	SW5030C8260D
styrene	1.0 U	2.0	1.0	0.57	ug/L	1	LMM			2303694	11/13/23	12:15	SW5030C8260D
bromoform	1.0 U	2.0	1.0	0.24	ug/L	1	LMM			2303694	11/13/23	12:15	SW5030C8260D
isopropylbenzene	1.0 U	2.0	1.0	0.65	ug/L	1	LMM			2303694	11/13/23	12:15	SW5030C8260D
1,1,2,2-tetrachloroethane	1.0 U	2.0	1.0	0.29	ug/L	1	LMM			2303694	11/13/23	12:15	SW5030C8260D
1,2,3-trichloropropane	1.0 U	2.0	1.0	0.55	ug/L	1	LMM			2303694	11/13/23	12:15	SW5030C8260D
n-propylbenzene	1.0 U	2.0	1.0	0.44	ug/L	1	LMM			2303694	11/13/23	12:15	SW5030C8260D
bromobenzene	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303694	11/13/23	12:15	SW5030C8260D
2-chlorotoluene	1.0 U	2.0	1.0	0.23	ug/L	1	LMM			2303694	11/13/23	12:15	SW5030C8260D
4-chlorotoluene	1.0 U	2.0	1.0	0.33	ug/L	1	LMM			2303694	11/13/23	12:15	SW5030C8260D
tert-butylbenzene	1.0 U	2.0	1.0	0.39	ug/L	1	LMM			2303694	11/13/23	12:15	SW5030C8260D
1,2,4-trimethylbenzene	1.0 U	2.0	1.0	0.58	ug/L	1	LMM			2303694	11/13/23	12:15	SW5030C8260D
sec-butylbenzene	1.0 U	2.0	1.0	0.44	ug/L	1	LMM			2303694	11/13/23	12:15	SW5030C8260D
1,3-dichlorobenzene	1.0 U	2.0	1.0	0.45	ug/L	1	LMM			2303694	11/13/23	12:15	SW5030C8260D
4-isopropyltoluene	1.0 U	2.0	1.0	0.47	ug/L	1	LMM			2303694	11/13/23	12:15	SW5030C8260D
1,4-dichlorobenzene	1.0 U	2.0	1.0	0.26	ug/L	1	LMM			2303694	11/13/23	12:15	SW5030C8260D
1,2-dichlorobenzene	1.0 U	2.0	1.0	0.39	ug/L	1	LMM			2303694	11/13/23	12:15	SW5030C8260D
n-butylbenzene	1.0 U	2.0	1.0	0.54	ug/L	1	LMM			2303694	11/13/23	12:15	SW5030C8260D
1,2-dibromo-3-chloropropane (DBCP)	1.5 U	2.0	1.5	0.91	ug/L	1	LMM			2303694	11/13/23	12:15	SW5030C8260D
1,3,5-trimethylbenzene	1.0 U	2.0	1.0	0.46	ug/L	1	LMM			2303694	11/13/23	12:15	SW5030C8260D
1,2,4-trichlorobenzene	1.0 U	2.0	1.0	0.79	ug/L	1	LMM			2303694	11/13/23	12:15	SW5030C8260D
hexachlorobutadiene	0.50 U	0.50	0.50	0.19	ug/L	1	LMM			2303694	11/13/23	12:15	SW5030C8260D
naphthalene	1.5 U	2.0	1.5	1.2	ug/L	1	LMM			2303694	11/13/23	12:15	SW5030C8260D
1,2,3-trichlorobenzene	1.0 U	2.0	1.0	0.93	ug/L	1	LMM			2303694	11/13/23	12:15	SW5030C8260D
Surrogate Recovery		Limits											
dibromofluoromethane SUR	93	78-114			%	1	LMM			2303694	11/13/23	12:15	SW5030C8260D
toluene-D8 SUR	103	88-110			%	1	LMM			2303694	11/13/23	12:15	SW5030C8260D
4-bromofluorobenzene SUR	97	86-115			%	1	LMM			2303694	11/13/23	12:15	SW5030C8260D

Project ID: Dow Salvage Yard 18001468
Job ID: 67797
Sample#: 67797-001
Sample ID: SY-OBMW7-110623
Matrix: Water
Received on ice at 0˚C, in satisfactory condition.
Sampled: 11/6/23 16:10

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
Unadjusted C5-C8 Aliphatics	50 U	100	50	50	ug/L	1	SFP			2303773	11/16/23	13:40	MA VPH
Unadjusted C9-C12 Aliphatics	50 U	100	50	40	ug/L	1	SFP			2303773	11/16/23	13:40	MA VPH
methyl t-butyl ether (MTBE)	1.0 U	2	1.0	0.73	ug/L	1	SFP			2303773	11/16/23	13:40	MA VPH
benzene	1.0 U	1	1.0	0.76	ug/L	1	SFP			2303773	11/16/23	13:40	MA VPH
toluene	1.0 U	2	1.0	0.58	ug/L	1	SFP			2303773	11/16/23	13:40	MA VPH
ethylbenzene	1.0 U	2	1.0	0.40	ug/L	1	SFP			2303773	11/16/23	13:40	MA VPH
m&p-xylenes	2.0 U	2	2.0	1.1	ug/L	1	SFP			2303773	11/16/23	13:40	MA VPH
o-xylene	1.0 U	2	1.0	0.45	ug/L	1	SFP			2303773	11/16/23	13:40	MA VPH
naphthalene	4.0 U	5	4.0	3.5	ug/L	1	SFP			2303773	11/16/23	13:40	MA VPH
C5-C8 Aliphatics	50 U	100	50	50	ug/L	1	SFP			2303773	11/16/23	13:40	MA VPH
C9-C12 Aliphatics	50 U	100	50	40	ug/L	1	SFP			2303773	11/16/23	13:40	MA VPH
C9-C10 Aromatics	50 U	100	50	33	ug/L	1	SFP			2303773	11/16/23	13:40	MA VPH
Surrogate Recovery		Limits											
2,5-dibromotoluene as Aromatic SUR	97	70-130			%	1	SFP			2303773	11/16/23	13:40	MA VPH
2,5-dibromotoluene as Aliphatic SUR	99	70-130			%	1	SFP			2303773	11/16/23	13:40	MA VPH

Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range.
C5-C8 Aliphatic Hydrocarbons exclude the concentration of target analytes eluting in that range.
C9-C12 Aliphatic Hydrocarbons exclude concentration of target analytes eluting in that range AND C9-C10 Aromatics.

Project ID: Dow Salvage Yard 18001468
Job ID: 67797
Sample#: 67797-002
Sample ID: SY-OBMW10-110623
Matrix: Water
Received on ice at 0˚C, in satisfactory condition.
Sampled: 11/6/23 16:20

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
Unadjusted C5-C8 Aliphatics	50 U	100	50	50	ug/L	1	SFP			2303773	11/16/23	14:13	MA VPH
Unadjusted C9-C12 Aliphatics	50 U	100	50	40	ug/L	1	SFP			2303773	11/16/23	14:13	MA VPH
methyl t-butyl ether (MTBE)	1.0 U	2	1.0	0.73	ug/L	1	SFP			2303773	11/16/23	14:13	MA VPH
benzene	1.0 U	1	1.0	0.76	ug/L	1	SFP			2303773	11/16/23	14:13	MA VPH
toluene	1.0 U	2	1.0	0.58	ug/L	1	SFP			2303773	11/16/23	14:13	MA VPH
ethylbenzene	1.0 U	2	1.0	0.40	ug/L	1	SFP			2303773	11/16/23	14:13	MA VPH
m&p-xylenes	2.0 U	2	2.0	1.1	ug/L	1	SFP			2303773	11/16/23	14:13	MA VPH
o-xylene	1.0 U	2	1.0	0.45	ug/L	1	SFP			2303773	11/16/23	14:13	MA VPH
naphthalene	4.0 U	5	4.0	3.5	ug/L	1	SFP			2303773	11/16/23	14:13	MA VPH
C5-C8 Aliphatics	50 U	100	50	50	ug/L	1	SFP			2303773	11/16/23	14:13	MA VPH
C9-C12 Aliphatics	50 U	100	50	40	ug/L	1	SFP			2303773	11/16/23	14:13	MA VPH
C9-C10 Aromatics	50 U	100	50	33	ug/L	1	SFP			2303773	11/16/23	14:13	MA VPH
Surrogate Recovery		Limits											
2,5-dibromotoluene as Aromatic SUR	95	70-130			%	1	SFP			2303773	11/16/23	14:13	MA VPH
2,5-dibromotoluene as Aliphatic SUR	95	70-130			%	1	SFP			2303773	11/16/23	14:13	MA VPH

Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range.
C5-C8 Aliphatic Hydrocarbons exclude the concentration of target analytes eluting in that range.
C9-C12 Aliphatic Hydrocarbons exclude concentration of target analytes eluting in that range AND C9-C10 Aromatics.

Project ID: Dow Salvage Yard 18001468
Job ID: 67797
Sample#: 67797-003
Sample ID: TB30-110623
Matrix: Water
Received on ice at 0˚C, in satisfactory condition.
Sampled: 11/6/23 16:00

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
Unadjusted C5-C8 Aliphatics	50 U	100	50	50	ug/L	1	SFP			2303773	11/16/23	12:32	MA VPH
Unadjusted C9-C12 Aliphatics	50 U	100	50	40	ug/L	1	SFP			2303773	11/16/23	12:32	MA VPH
methyl t-butyl ether (MTBE)	1.0 U	2	1.0	0.73	ug/L	1	SFP			2303773	11/16/23	12:32	MA VPH
benzene	1.0 U	1	1.0	0.76	ug/L	1	SFP			2303773	11/16/23	12:32	MA VPH
toluene	1.0 U	2	1.0	0.58	ug/L	1	SFP			2303773	11/16/23	12:32	MA VPH
ethylbenzene	1.0 U	2	1.0	0.40	ug/L	1	SFP			2303773	11/16/23	12:32	MA VPH
m&p-xylenes	2.0 U	2	2.0	1.1	ug/L	1	SFP			2303773	11/16/23	12:32	MA VPH
o-xylene	1.0 U	2	1.0	0.45	ug/L	1	SFP			2303773	11/16/23	12:32	MA VPH
naphthalene	4.0 U	5	4.0	3.5	ug/L	1	SFP			2303773	11/16/23	12:32	MA VPH
C5-C8 Aliphatics	50 U	100	50	50	ug/L	1	SFP			2303773	11/16/23	12:32	MA VPH
C9-C12 Aliphatics	50 U	100	50	40	ug/L	1	SFP			2303773	11/16/23	12:32	MA VPH
C9-C10 Aromatics	50 U	100	50	33	ug/L	1	SFP			2303773	11/16/23	12:32	MA VPH
Surrogate Recovery		Limits											
2,5-dibromotoluene as Aromatic SUR	107	70-130			%	1	SFP			2303773	11/16/23	12:32	MA VPH
2,5-dibromotoluene as Aliphatic SUR	107	70-130			%	1	SFP			2303773	11/16/23	12:32	MA VPH

Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range.
C5-C8 Aliphatic Hydrocarbons exclude the concentration of target analytes eluting in that range.
C9-C12 Aliphatic Hydrocarbons exclude concentration of target analytes eluting in that range AND C9-C10 Aromatics.

Project ID: Dow Salvage Yard 18001468
Job ID: 67797
Sample#: 67797-001
Sample ID: SY-OBMW7-110623
Matrix: Water
Sampled: 11/6/23 16:10

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
N-nitrosodimethylamine	1.0 U#	2.0	1.0	0.21	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	13:18	SW3510C8270E
pyridine	1.0 U#	2.0	1.0	0.60	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	13:18	SW3510C8270E
aniline	1.0 U	2.0	1.0	0.39	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	13:18	SW3510C8270E
phenol	1.0 U#	2.0	1.0	0.34	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	12:48	SW3510C8270E
2-chlorophenol	1.0 U#	5.0	1.0	0.29	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	12:48	SW3510C8270E
bis(2-chloroethyl)ether	1.0 U	2.0	1.0	0.35	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	13:18	SW3510C8270E
1,3-dichlorobenzene	1.0 U#	2.0	1.0	0.41	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	13:18	SW3510C8270E
1,4-dichlorobenzene	1.0 U#	2.0	1.0	0.37	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	13:18	SW3510C8270E
1,2-dichlorobenzene	1.0 U#	2.0	1.0	0.36	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	13:18	SW3510C8270E
benzyl alcohol	1.0 U	2.0	1.0	0.84	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	13:18	SW3510C8270E
2-methylphenol	1.0 U#	5.0	1.0	0.39	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	12:48	SW3510C8270E
2,2'-oxybis(1-chloropropane)	1.0 U	2.0	1.0	0.44	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	13:18	SW3510C8270E
hexachloroethane	1.0 U#	2.0	1.0	0.53	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	13:18	SW3510C8270E
N-nitroso-di-N-propylamine	1.0 U	2.0	1.0	0.30	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	13:18	SW3510C8270E
4-methylphenol	1.5 U#	2.0	1.5	1.3	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	12:48	SW3510C8270E
nitrobenzene	1.0 U	2.0	1.0	0.41	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	13:18	SW3510C8270E
isophorone	1.0 U	5.0	1.0	0.32	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	13:18	SW3510C8270E
2-nitrophenol	1.0 U#	2.0	1.0	0.21	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	12:48	SW3510C8270E
2,4-dimethylphenol	1.0 U	5.0	1.0	0.44	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	12:48	SW3510C8270E
bis(2-chloroethoxy)methane	1.0 U	5.0	1.0	0.26	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	13:18	SW3510C8270E
2,4-dichlorophenol	1.0 U#	5.0	1.0	0.19	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	12:48	SW3510C8270E
1,2,4-trichlorobenzene	1.0 U	5.0	1.0	0.34	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	13:18	SW3510C8270E
benzoic acid	45 U#	50	45	20	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	12:48	SW3510C8270E
4-chloroaniline	1.0 U	2.0	1.0	0.41	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	13:18	SW3510C8270E
hexachlorobutadiene	1.0 U#	2.0	1.0	0.57	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	13:18	SW3510C8270E
4-chloro-3-methylphenol	1.0 U#	2.0	1.0	0.42	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	12:48	SW3510C8270E
hexachlorocyclopentadiene	4.0 U#	10	4.0	1.6	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	13:18	SW3510C8270E
2,4,6-trichlorophenol	1.0 U#	2.0	1.0	0.33	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	12:48	SW3510C8270E
2,4,5-trichlorophenol	1.0 U#	2.0	1.0	0.28	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	12:48	SW3510C8270E
2-chloronaphthalene	1.0 U	5.0	1.0	0.34	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	13:18	SW3510C8270E
2-nitroaniline	1.0 U	2.0	1.0	0.72	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	13:18	SW3510C8270E
dimethylphthalate	1.0 U#	5.0	1.0	0.41	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	13:18	SW3510C8270E
2,6-dinitrotoluene	1.0 U	5.0	1.0	0.42	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	13:18	SW3510C8270E
2,4-dinitrotoluene	1.0 U	5.0	1.0	0.52	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	13:18	SW3510C8270E
3-nitroaniline	1.5 U	2.0	1.5	1.0	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	13:18	SW3510C8270E
2,4-dinitrophenol	45 U#	50	45	3.5	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	12:48	SW3510C8270E
dibenzofuran	0.40 U	0.50	0.40	0.37	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	13:18	SW3510C8270E
4-nitrophenol	5.0 U#	10	5.0	1.6	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	12:48	SW3510C8270E
diethyl phthalate	1.0 U#	5.0	1.0	0.30	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	13:18	SW3510C8270E
4-chlorophenyl phenyl ether	1.0 U	5.0	1.0	0.35	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	13:18	SW3510C8270E
4-nitroaniline	3.0 U	5.0	3.0	1.0	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	13:18	SW3510C8270E
4,6-dinitro-2-methylphenol	10 U	20	10	1.7	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	12:48	SW3510C8270E

Project ID: Dow Salvage Yard 18001468
Job ID: 67797
Sample#: 67797-001
Sample ID: SY-OBMW7-110623
Matrix: Water
Sampled: 11/6/23 16:10

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
azobenzene	1.0 U	2.0	1.0	0.25	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	13:18	SW3510C8270E
N-nitrosodiphenylamine	1.0 U	2.0	1.0	0.26	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	13:18	SW3510C8270E
4-bromophenyl phenyl ether	1.0 U	2.0	1.0	0.23	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	13:18	SW3510C8270E
hexachlorobenzene	1.0 U	2.0	1.0	0.25	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	13:18	SW3510C8270E
pentachlorophenol	5.0 U	10	5.0	2.6	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	12:48	SW3510C8270E
carbazole	1.0 U	2.0	1.0	0.32	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	13:18	SW3510C8270E
di-n-butylphthalate	1.0 U	5.0	1.0	0.54	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	13:18	SW3510C8270E
benzidine	25 U	30	25	20	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	13:18	SW3510C8270E
butyl benzyl phthalate	3.0 U	5.0	3.0	2.1	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	13:18	SW3510C8270E
3,3'-dichlorobenzidine	25 U	30	25	20	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	13:18	SW3510C8270E
bis(2-ethylhexyl)phthalate	3.0 U	5.0	3.0	2.4	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	13:18	SW3510C8270E
di-n-octyl phthalate	3.0 U	5.0	3.0	2.1	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	13:18	SW3510C8270E
Surrogate Recovery		Limits											
2-fluorophenol SUR	27	21-100			%	1	CL	11/9/23	8:50	17096	11/15/23	12:48	SW3510C8270E
phenol-D5 SUR	14	10-102			%	1	CL	11/9/23	8:50	17096	11/15/23	12:48	SW3510C8270E
2,4,6-tribromophenol SUR	42	10-123			%	1	CL	11/9/23	8:50	17096	11/15/23	12:48	SW3510C8270E
nitrobenzene-D5 SUR	68	35-114			%	1	CL	11/9/23	8:50	17096	11/15/23	13:18	SW3510C8270E
2-fluorobiphenyl SUR	68	43-116			%	1	CL	11/9/23	8:50	17096	11/15/23	13:18	SW3510C8270E
p-terphenyl-D14 SUR	85	33-141			%	1	CL	11/9/23	8:50	17096	11/15/23	13:18	SW3510C8270E

 # The percent recovery and/or RPD for the LCS/D was outside acceptance criteria.

Project ID: Dow Salvage Yard 18001468
Job ID: 67797
Sample#: 67797-002
Sample ID: SY-OBMW10-110623
Matrix: Water
Sampled: 11/6/23 16:20

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
N-nitrosodimethylamine	1.0 U#	2.0	1.0	0.21	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	14:17	SW3510C8270E
pyridine	1.0 U#	2.0	1.0	0.60	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	14:17	SW3510C8270E
aniline	1.0 U	2.0	1.0	0.39	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	14:17	SW3510C8270E
phenol	1.0 U#	2.0	1.0	0.34	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	13:47	SW3510C8270E
2-chlorophenol	1.0 U#	5.0	1.0	0.29	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	13:47	SW3510C8270E
bis(2-chloroethyl)ether	1.0 U	2.0	1.0	0.35	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	14:17	SW3510C8270E
1,3-dichlorobenzene	1.0 U#	2.0	1.0	0.41	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	14:17	SW3510C8270E
1,4-dichlorobenzene	1.0 U#	2.0	1.0	0.37	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	14:17	SW3510C8270E
1,2-dichlorobenzene	1.0 U#	2.0	1.0	0.36	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	14:17	SW3510C8270E
benzyl alcohol	1.0 U	2.0	1.0	0.84	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	14:17	SW3510C8270E
2-methylphenol	1.0 U#	5.0	1.0	0.39	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	13:47	SW3510C8270E
2,2'-oxybis(1-chloropropane)	1.0 U	2.0	1.0	0.44	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	14:17	SW3510C8270E
hexachloroethane	1.0 U#	2.0	1.0	0.53	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	14:17	SW3510C8270E
N-nitroso-di-N-propylamine	1.0 U	2.0	1.0	0.30	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	14:17	SW3510C8270E
4-methylphenol	1.5 U#	2.0	1.5	1.3	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	13:47	SW3510C8270E
nitrobenzene	1.0 U	2.0	1.0	0.41	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	14:17	SW3510C8270E
isophorone	1.0 U	5.0	1.0	0.32	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	14:17	SW3510C8270E
2-nitrophenol	1.0 U#	2.0	1.0	0.21	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	13:47	SW3510C8270E
2,4-dimethylphenol	1.0 U	5.0	1.0	0.44	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	13:47	SW3510C8270E
bis(2-chloroethoxy)methane	1.0 U	5.0	1.0	0.26	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	14:17	SW3510C8270E
2,4-dichlorophenol	1.0 U#	5.0	1.0	0.19	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	13:47	SW3510C8270E
1,2,4-trichlorobenzene	1.0 U	5.0	1.0	0.34	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	14:17	SW3510C8270E
benzoic acid	45 U#	50	45	20	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	13:47	SW3510C8270E
4-chloroaniline	1.0 U	2.0	1.0	0.41	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	14:17	SW3510C8270E
hexachlorobutadiene	1.0 U#	2.0	1.0	0.57	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	14:17	SW3510C8270E
4-chloro-3-methylphenol	1.0 U#	2.0	1.0	0.42	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	13:47	SW3510C8270E
hexachlorocyclopentadiene	4.0 U#	10	4.0	1.6	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	14:17	SW3510C8270E
2,4,6-trichlorophenol	1.0 U#	2.0	1.0	0.33	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	13:47	SW3510C8270E
2,4,5-trichlorophenol	1.0 U#	2.0	1.0	0.28	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	13:47	SW3510C8270E
2-chloronaphthalene	1.0 U	5.0	1.0	0.34	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	14:17	SW3510C8270E
2-nitroaniline	1.0 U	2.0	1.0	0.72	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	14:17	SW3510C8270E
dimethylphthalate	1.0 U#	5.0	1.0	0.41	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	14:17	SW3510C8270E
2,6-dinitrotoluene	1.0 U	5.0	1.0	0.42	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	14:17	SW3510C8270E
2,4-dinitrotoluene	1.0 U	5.0	1.0	0.52	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	14:17	SW3510C8270E
3-nitroaniline	1.5 U	2.0	1.5	1.0	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	14:17	SW3510C8270E
2,4-dinitrophenol	45 U#	50	45	3.5	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	13:47	SW3510C8270E
dibenzofuran	0.40 U	0.50	0.40	0.37	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	14:17	SW3510C8270E
4-nitrophenol	5.0 U#	10	5.0	1.6	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	13:47	SW3510C8270E
diethyl phthalate	1.0 U#	5.0	1.0	0.30	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	14:17	SW3510C8270E
4-chlorophenyl phenyl ether	1.0 U	5.0	1.0	0.35	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	14:17	SW3510C8270E
4-nitroaniline	3.0 U	5.0	3.0	1.0	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	14:17	SW3510C8270E
4,6-dinitro-2-methylphenol	10 U	20	10	1.7	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	13:47	SW3510C8270E

Project ID: Dow Salvage Yard 18001468
Job ID: 67797
Sample#: 67797-002
Sample ID: SY-OBMW10-110623
Matrix: Water
Sampled: 11/6/23 16:20

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
azobenzene	1.0 U	2.0	1.0	0.25	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	14:17	SW3510C8270E
N-nitrosodiphenylamine	1.0 U	2.0	1.0	0.26	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	14:17	SW3510C8270E
4-bromophenyl phenyl ether	1.0 U	2.0	1.0	0.23	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	14:17	SW3510C8270E
hexachlorobenzene	1.0 U	2.0	1.0	0.25	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	14:17	SW3510C8270E
pentachlorophenol	5.0 U	10	5.0	2.6	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	13:47	SW3510C8270E
carbazole	1.0 U	2.0	1.0	0.32	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	14:17	SW3510C8270E
di-n-butylphthalate	1.0 U	5.0	1.0	0.54	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	14:17	SW3510C8270E
benzidine	25 U	30	25	20	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	14:17	SW3510C8270E
butyl benzyl phthalate	3.0 U	5.0	3.0	2.1	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	14:17	SW3510C8270E
3,3'-dichlorobenzidine	25 U	30	25	20	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	14:17	SW3510C8270E
bis(2-ethylhexyl)phthalate	3.0 U	5.0	3.0	2.4	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	14:17	SW3510C8270E
di-n-octyl phthalate	3.0 U	5.0	3.0	2.1	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	14:17	SW3510C8270E
Surrogate Recovery		Limits											
2-fluorophenol SUR	35	21-100			%	1	CL	11/9/23	8:50	17096	11/15/23	13:47	SW3510C8270E
phenol-D5 SUR	21	10-102			%	1	CL	11/9/23	8:50	17096	11/15/23	13:47	SW3510C8270E
2,4,6-tribromophenol SUR	67	10-123			%	1	CL	11/9/23	8:50	17096	11/15/23	13:47	SW3510C8270E
nitrobenzene-D5 SUR	67	35-114			%	1	CL	11/9/23	8:50	17096	11/15/23	14:17	SW3510C8270E
2-fluorobiphenyl SUR	66	43-116			%	1	CL	11/9/23	8:50	17096	11/15/23	14:17	SW3510C8270E
p-terphenyl-D14 SUR	79	33-141			%	1	CL	11/9/23	8:50	17096	11/15/23	14:17	SW3510C8270E

 # The percent recovery and/or RPD for the LCS/D was outside acceptance criteria.

Sample#: 67797-002
Sample ID: SY-OBMW10-110623
Matrix: Water
Sampled: 11/6/23 16:20

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
PCB-1016	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	11/27/23	8:41	17179	11/28/23	13:13	SW3510C8082A
PCB-1221	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	11/27/23	8:41	17179	11/28/23	13:13	SW3510C8082A
PCB-1232	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	11/27/23	8:41	17179	11/28/23	13:13	SW3510C8082A
PCB-1242	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	11/27/23	8:41	17179	11/28/23	13:13	SW3510C8082A
PCB-1248	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	11/27/23	8:41	17179	11/28/23	13:13	SW3510C8082A
PCB-1254	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	11/27/23	8:41	17179	11/28/23	13:13	SW3510C8082A
PCB-1260	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	11/27/23	8:41	17179	11/28/23	13:13	SW3510C8082A
Surrogate Recovery		Limits											
tetrachloro-m-xylene SUR	65	30-150			%	1	DBV	11/27/23	8:41	17179	11/28/23	13:13	SW3510C8082A
decachlorobiphenyl SUR	64	30-150			%	1	DBV	11/27/23	8:41	17179	11/28/23	13:13	SW3510C8082A

Project ID: Dow Salvage Yard 18001468
Job ID: 67797
Sample#: 67797-001
Sample ID: SY-OBMW7-110623
Matrix: Water
Sampled: 11/6/23 16:10

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
naphthalene	0.70 U#	1.0	0.70	0.63	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	17:22	MA EPH
2-methylnaphthalene	0.70 U#	1.0	0.70	0.60	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	17:22	MA EPH
phenanthrene	0.50 U	1.0	0.50	0.15	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	17:22	MA EPH
acenaphthene	0.50 U	1.0	0.50	0.22	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	17:22	MA EPH
acenaphthylene	0.50 U	1.0	0.50	0.18	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	17:22	MA EPH
fluorene	0.50 U	1.0	0.50	0.15	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	17:22	MA EPH
anthracene	0.50 U	1.0	0.50	0.18	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	17:22	MA EPH
fluoranthene	0.50 U	1.0	0.50	0.18	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	17:22	MA EPH
pyrene	0.50 U	1.0	0.50	0.23	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	17:22	MA EPH
benzo(a)anthracene	0.50 U	1.0	0.50	0.20	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	17:22	MA EPH
chrysene	0.50 U	1.0	0.50	0.16	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	17:22	MA EPH
benzo(b)fluoranthene	0.50 U	1.0	0.50	0.35	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	17:22	MA EPH
benzo(k)fluoranthene	0.50 U	1.0	0.50	0.41	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	17:22	MA EPH
benzo(a)pyrene	0.70 U	1.0	0.70	0.52	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	17:22	MA EPH
indeno(1,2,3-cd)pyrene	0.50 U#	1.0	0.50	0.24	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	17:22	MA EPH
dibenzo(a,h)anthracene	0.50 U#	1.0	0.50	0.26	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	17:22	MA EPH
benzo(g,h,i)perylene	0.50 U	1.0	0.50	0.22	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	17:22	MA EPH
Unadjusted C11-C22 Aromatics	68 J	100	85	60	ug/L	1	DBV	11/13/23	7:59	17110	12/7/23	15:59	MA EPH
C9-C18 Aliphatics	95 U#	100	95	94	ug/L	1	DBV	11/13/23	7:59	17110	12/7/23	15:59	MA EPH
C19-C36 Aliphatics	97 U	100	97	96	ug/L	1	DBV	11/13/23	7:59	17110	12/7/23	15:59	MA EPH
C11-C22 Aromatics	68 J	100	85	54	ug/L	1	DBV	11/13/23	7:59	17110	12/7/23	15:59	MA EPH
Surrogate Recovery		Limits											
1-chloro-octadecane SUR	54	40-140			%	1	DBV	11/13/23	7:59	17110	12/7/23	15:59	MA EPH
o-terphenyl SUR	58	40-140			%	1	DBV	11/13/23	7:59	17110	12/7/23	15:59	MA EPH
2-fluorobiphenyl SUR	73	40-140			%	1	DBV	11/13/23	7:59	17110	12/7/23	15:59	MA EPH
2-bromonaphthalene SUR	73	40-140			%	1	DBV	11/13/23	7:59	17110	12/7/23	15:59	MA EPH

 # The percent recovery and/or RPD for the LCS/D was outside acceptance criteria.

Project ID: Dow Salvage Yard 18001468
Job ID: 67797
Sample#: 67797-002
Sample ID: SY-OBMW10-110623
Matrix: Water
Sampled: 11/6/23 16:20

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
naphthalene	0.70 U#	1.0	0.70	0.63	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	17:52	MA EPH
2-methylnaphthalene	0.70 U#	1.0	0.70	0.60	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	17:52	MA EPH
phenanthrene	0.50 U	1.0	0.50	0.15	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	17:52	MA EPH
acenaphthene	0.50 U	1.0	0.50	0.22	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	17:52	MA EPH
acenaphthylene	0.50 U	1.0	0.50	0.18	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	17:52	MA EPH
fluorene	0.50 U	1.0	0.50	0.15	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	17:52	MA EPH
anthracene	0.50 U	1.0	0.50	0.18	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	17:52	MA EPH
fluoranthene	0.50 U	1.0	0.50	0.18	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	17:52	MA EPH
pyrene	0.50 U	1.0	0.50	0.23	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	17:52	MA EPH
benzo(a)anthracene	0.50 U	1.0	0.50	0.20	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	17:52	MA EPH
chrysene	0.50 U	1.0	0.50	0.16	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	17:52	MA EPH
benzo(b)fluoranthene	0.50 U	1.0	0.50	0.35	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	17:52	MA EPH
benzo(k)fluoranthene	0.50 U	1.0	0.50	0.41	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	17:52	MA EPH
benzo(a)pyrene	0.70 U	1.0	0.70	0.52	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	17:52	MA EPH
indeno(1,2,3-cd)pyrene	0.50 U#	1.0	0.50	0.24	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	17:52	MA EPH
dibenzo(a,h)anthracene	0.50 U#	1.0	0.50	0.26	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	17:52	MA EPH
benzo(g,h,i)perylene	0.50 U	1.0	0.50	0.22	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	17:52	MA EPH
Unadjusted C11-C22 Aromatics	87 J	100	85	60	ug/L	1	DBV	11/13/23	7:59	17110	12/7/23	16:33	MA EPH
C9-C18 Aliphatics	95 U#	100	95	94	ug/L	1	DBV	11/13/23	7:59	17110	12/7/23	16:33	MA EPH
C19-C36 Aliphatics	97 U	100	97	96	ug/L	1	DBV	11/13/23	7:59	17110	12/7/23	16:33	MA EPH
C11-C22 Aromatics	87 J	100	85	54	ug/L	1	DBV	11/13/23	7:59	17110	12/7/23	16:33	MA EPH
Surrogate Recovery		Limits											
1-chloro-octadecane SUR	51	40-140			%	1	DBV	11/13/23	7:59	17110	12/7/23	16:33	MA EPH
o-terphenyl SUR	55	40-140			%	1	DBV	11/13/23	7:59	17110	12/7/23	16:33	MA EPH
2-fluorobiphenyl SUR	72	40-140			%	1	DBV	11/13/23	7:59	17110	12/7/23	16:33	MA EPH
2-bromonaphthalene SUR	73	40-140			%	1	DBV	11/13/23	7:59	17110	12/7/23	16:33	MA EPH

 # The percent recovery and/or RPD for the LCS/D was outside acceptance criteria.

Project ID: Dow Salvage Yard 18001468
Job ID: 67797
Sample#: 67797-001
Sample ID: SY-OBMW7-110623
Matrix: Water
Sampled: 11/6/23 16:10

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
Aluminum	0.022 J	0.050	0.025	0.010	mg/L	1	AGN	11/28/23	8:00	17177	11/30/23	21:07	SW3005A6020A
Antimony	0.00050 U	0.0010	0.00050	0.00014	mg/L	1	AGN	11/28/23	8:00	17177	11/30/23	21:07	SW3005A6020A
Arsenic	0.0026	0.0025	0.0010	0.00067	mg/L	1	AGN	11/28/23	8:00	17177	11/30/23	21:07	SW3005A6020A
Barium	0.018	0.010	0.0010	0.00076	mg/L	1	AGN	11/28/23	8:00	17177	11/30/23	21:07	SW3005A6020A
Beryllium	0.00050 U	0.0010	0.00050	0.00010	mg/L	1	AGN	11/28/23	8:00	17177	11/30/23	21:07	SW3005A6020A
Cadmium	0.00050 U	0.0010	0.00050	0.00014	mg/L	1	AGN	11/28/23	8:00	17177	11/30/23	21:07	SW3005A6020A
Chromium	0.025 U	0.050	0.025	0.020	mg/L	1	AGN	11/28/23	8:00	17177	11/30/23	21:07	SW3005A6020A
Cobalt	0.00076 J	0.010	0.00050	0.00028	mg/L	1	AGN	11/28/23	8:00	17177	11/30/23	21:07	SW3005A6020A
Copper	0.0075 U	0.010	0.0075	0.0054	mg/L	1	AGN	11/28/23	8:00	17177	11/30/23	21:07	SW3005A6020A
Iron	0.037 J	0.050	0.030	0.029	mg/L	1	AGN	11/28/23	8:00	17177	11/30/23	21:07	SW3005A6020A
Lead	0.00050 U	0.0050	0.00050	0.00011	mg/L	1	AGN	11/28/23	8:00	17177	11/30/23	21:07	SW3005A6020A
Magnesium	67	0.10	0.020	0.0073	mg/L	1	EEB	11/28/23	8:00	17177	12/1/23	18:35	SW3005A6020A
Manganese	0.48	0.010	0.0050	0.0016	mg/L	1	AGN	11/28/23	8:00	17177	11/30/23	21:07	SW3005A6020A
Mercury	0.00015 U	0.00020	0.00015	0.00012	mg/L	1	EEB	11/20/23	12:15	17146	11/22/23	10:17	SW7470A
Nickel	0.025 U	0.050	0.025	0.013	mg/L	1	AGN	11/28/23	8:00	17177	11/30/23	21:07	SW3005A6020A
Potassium	5.5	0.50	0.10	0.039	mg/L	1	AGN	11/28/23	8:00	17177	11/30/23	21:07	SW3005A6020A
Selenium	0.0050 U	0.010	0.0050	0.0037	mg/L	1	AGN	11/28/23	8:00	17177	11/30/23	21:07	SW3005A6020A
Silver	0.00050 U	0.0050	0.00050	0.00011	mg/L	1	AGN	11/28/23	8:00	17177	11/30/23	21:07	SW3005A6020A
Sodium	100	0.10	0.050	0.034	mg/L	1	EEB	11/28/23	8:00	17177	12/1/23	18:35	SW3005A6020A
Thallium	0.00080 U	0.0010	0.00080	0.00068	mg/L	1	AGN	11/28/23	8:00	17177	11/30/23	21:07	SW3005A6020A
Vanadium	0.0050 U	0.010	0.0050	0.0018	mg/L	1	AGN	11/28/23	8:00	17177	11/30/23	21:07	SW3005A6020A
Zinc	0.0040 U	0.010	0.0040	0.0021	mg/L	1	AGN	11/28/23	8:00	17177	11/30/23	21:07	SW3005A6020A

Project ID: Dow Salvage Yard 18001468
Job ID: 67797
Sample#: 67797-002
Sample ID: SY-OBMW10-110623
Matrix: Water
Sampled: 11/6/23 16:20

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
Aluminum	0.12	0.050	0.025	0.010	mg/L	1	AGN	11/28/23	8:00	17177	11/30/23	21:42	SW3005A6020A
Antimony	0.00050 U	0.0010	0.00050	0.00014	mg/L	1	AGN	11/28/23	8:00	17177	11/30/23	21:42	SW3005A6020A
Arsenic	0.0029	0.0025	0.0010	0.00067	mg/L	1	AGN	11/28/23	8:00	17177	11/30/23	21:42	SW3005A6020A
Barium	0.050	0.010	0.0010	0.00076	mg/L	1	AGN	11/28/23	8:00	17177	11/30/23	21:42	SW3005A6020A
Beryllium	0.00050 U	0.0010	0.00050	0.00010	mg/L	1	AGN	11/28/23	8:00	17177	11/30/23	21:42	SW3005A6020A
Cadmium	0.00050 U	0.0010	0.00050	0.00014	mg/L	1	AGN	11/28/23	8:00	17177	11/30/23	21:42	SW3005A6020A
Chromium	0.025 U	0.050	0.025	0.020	mg/L	1	AGN	11/28/23	8:00	17177	11/30/23	21:42	SW3005A6020A
Cobalt	0.00061 J	0.010	0.00050	0.00028	mg/L	1	AGN	11/28/23	8:00	17177	11/30/23	21:42	SW3005A6020A
Copper	0.0055 J	0.010	0.0075	0.0054	mg/L	1	AGN	11/28/23	8:00	17177	11/30/23	21:42	SW3005A6020A
Iron	0.22	0.050	0.030	0.029	mg/L	1	EEB	11/28/23	8:00	17177	12/1/23	18:45	SW3005A6020A
Lead	0.00023 J	0.0050	0.00050	0.00011	mg/L	1	AGN	11/28/23	8:00	17177	11/30/23	21:42	SW3005A6020A
Magnesium	63	0.10	0.020	0.0073	mg/L	1	EEB	11/28/23	8:00	17177	12/1/23	18:45	SW3005A6020A
Manganese	1.1	0.010	0.0050	0.0016	mg/L	1	AGN	11/28/23	8:00	17177	11/30/23	21:42	SW3005A6020A
Mercury	0.00015 U	0.00020	0.00015	0.00012	mg/L	1	EEB	11/20/23	12:15	17146	11/22/23	10:19	SW7470A
Nickel	0.025 U	0.050	0.025	0.013	mg/L	1	AGN	11/28/23	8:00	17177	11/30/23	21:42	SW3005A6020A
Potassium	4.2	0.50	0.10	0.039	mg/L	1	AGN	11/28/23	8:00	17177	11/30/23	21:42	SW3005A6020A
Selenium	0.0050 U	0.010	0.0050	0.0037	mg/L	1	AGN	11/28/23	8:00	17177	11/30/23	21:42	SW3005A6020A
Silver	0.00050 U	0.0050	0.00050	0.00011	mg/L	1	AGN	11/28/23	8:00	17177	11/30/23	21:42	SW3005A6020A
Sodium	290	0.50	0.25	0.17	mg/L	5	EEB	11/28/23	8:00	17177	12/1/23	18:55	SW3005A6020A
Thallium	0.00080 U	0.0010	0.00080	0.00068	mg/L	1	AGN	11/28/23	8:00	17177	11/30/23	21:42	SW3005A6020A
Vanadium	0.0050 U	0.010	0.0050	0.0018	mg/L	1	AGN	11/28/23	8:00	17177	11/30/23	21:42	SW3005A6020A
Zinc	0.094	0.010	0.0040	0.0021	mg/L	1	EEB	11/28/23	8:00	17177	12/1/23	18:45	SW3005A6020A

Project ID: Dow Salvage Yard 18001468
Job ID: 67797
Sample#: 67797-004
Sample ID: SY-OBMW7-110623-DISS
Matrix: Water
Sampled: 11/6/23 16:10

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
Aluminum	0.027 U	0.054	0.027	0.011	mg/L	1	EEB	11/28/23	10:12	17175	12/2/23	1:15	SW3005A6020A
Antimony	0.00023 J	0.0011	0.00054	0.00015	mg/L	1	EEB	11/28/23	10:12	17175	12/2/23	1:15	SW3005A6020A
Arsenic	0.0028	0.0027	0.0011	0.00072	mg/L	1	EEB	11/28/23	10:12	17175	12/2/23	1:15	SW3005A6020A
Barium	0.018	0.011	0.0011	0.00081	mg/L	1	EEB	11/28/23	10:12	17175	12/2/23	1:15	SW3005A6020A
Beryllium	0.00054 U	0.0011	0.00054	0.00011	mg/L	1	EEB	11/28/23	10:12	17175	12/2/23	1:15	SW3005A6020A
Cadmium	0.00054 U	0.0011	0.00054	0.00015	mg/L	1	EEB	11/28/23	10:12	17175	12/2/23	1:15	SW3005A6020A
Chromium	0.027 U	0.054	0.027	0.022	mg/L	1	EEB	11/28/23	10:12	17175	12/2/23	1:15	SW3005A6020A
Cobalt	0.00066 J	0.011	0.00054	0.00030	mg/L	1	EEB	11/28/23	10:12	17175	12/2/23	1:15	SW3005A6020A
Copper	0.0080 U	0.011	0.0080	0.0057	mg/L	1	EEB	11/28/23	10:12	17175	12/2/23	1:15	SW3005A6020A
Iron	0.032 U	0.054	0.032	0.031	mg/L	1	EEB	11/28/23	10:12	17175	12/2/23	1:15	SW3005A6020A
Lead	0.00054 U	0.0054	0.00054	0.00012	mg/L	1	EEB	11/28/23	10:12	17175	12/2/23	1:15	SW3005A6020A
Magnesium	62	0.11	0.021	0.0078	mg/L	1	EEB	11/28/23	10:12	17175	12/2/23	1:15	SW3005A6020A
Manganese	0.46	0.011	0.0054	0.0017	mg/L	1	EEB	11/28/23	10:12	17175	12/2/23	1:15	SW3005A6020A
Mercury	0.00015 U	0.00020	0.00015	0.00012	mg/L	1	EEB	11/20/23	12:15	17146	11/22/23	10:20	SW7470A
Nickel	0.027 U	0.054	0.027	0.013	mg/L	1	EEB	11/28/23	10:12	17175	12/2/23	1:15	SW3005A6020A
Potassium	5.2	0.54	0.11	0.042	mg/L	1	EEB	11/28/23	10:12	17175	12/2/23	1:15	SW3005A6020A
Selenium	0.0054 U	0.011	0.0054	0.0040	mg/L	1	EEB	11/28/23	10:12	17175	12/2/23	1:15	SW3005A6020A
Silver	0.00054 U	0.0054	0.00054	0.00012	mg/L	1	EEB	11/28/23	10:12	17175	12/2/23	1:15	SW3005A6020A
Sodium	100	0.11	0.054	0.037	mg/L	1	EEB	11/28/23	10:12	17175	12/2/23	1:15	SW3005A6020A
Thallium	0.00086 U	0.0011	0.00086	0.00073	mg/L	1	EEB	11/28/23	10:12	17175	12/2/23	1:15	SW3005A6020A
Vanadium	0.0054 U	0.011	0.0054	0.0019	mg/L	1	EEB	11/28/23	10:12	17175	12/2/23	1:15	SW3005A6020A
Zinc	0.0043 U	0.011	0.0043	0.0022	mg/L	1	EEB	11/28/23	10:12	17175	12/2/23	1:15	SW3005A6020A

Project ID: Dow Salvage Yard 18001468
Job ID: 67797
Sample#: 67797-005
Sample ID: SY-OBMW10-110623-DISS
Matrix: Water
Sampled: 11/6/23 16:20

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
Aluminum	0.027 U	0.054	0.027	0.011	mg/L	1	EEB	11/28/23	10:12	17175	12/2/23	1:25	SW3005A6020A
Antimony	0.00025 J	0.0011	0.00054	0.00015	mg/L	1	EEB	11/28/23	10:12	17175	12/2/23	1:25	SW3005A6020A
Arsenic	0.0026 J	0.0027	0.0011	0.00072	mg/L	1	EEB	11/28/23	10:12	17175	12/2/23	1:25	SW3005A6020A
Barium	0.050	0.011	0.0011	0.00081	mg/L	1	EEB	11/28/23	10:12	17175	12/2/23	1:25	SW3005A6020A
Beryllium	0.00054 U	0.0011	0.00054	0.00011	mg/L	1	EEB	11/28/23	10:12	17175	12/2/23	1:25	SW3005A6020A
Cadmium	0.00054 U	0.0011	0.00054	0.00015	mg/L	1	EEB	11/28/23	10:12	17175	12/2/23	1:25	SW3005A6020A
Chromium	0.027 U	0.054	0.027	0.022	mg/L	1	EEB	11/28/23	10:12	17175	12/2/23	1:25	SW3005A6020A
Cobalt	0.00060 J	0.011	0.00054	0.00030	mg/L	1	EEB	11/28/23	10:12	17175	12/2/23	1:25	SW3005A6020A
Copper	0.0080 U	0.011	0.0080	0.0057	mg/L	1	EEB	11/28/23	10:12	17175	12/2/23	1:25	SW3005A6020A
Iron	0.067	0.054	0.032	0.031	mg/L	1	EEB	11/28/23	10:12	17175	12/2/23	1:25	SW3005A6020A
Lead	0.00054 U	0.0054	0.00054	0.00012	mg/L	1	EEB	11/28/23	10:12	17175	12/2/23	1:25	SW3005A6020A
Magnesium	59	0.11	0.021	0.0078	mg/L	1	EEB	11/28/23	10:12	17175	12/2/23	1:25	SW3005A6020A
Manganese	1.1	0.011	0.0054	0.0017	mg/L	1	EEB	11/28/23	10:12	17175	12/2/23	1:25	SW3005A6020A
Mercury	0.00015 U	0.00020	0.00015	0.00012	mg/L	1	EEB	11/20/23	12:15	17146	11/22/23	10:22	SW7470A
Nickel	0.027 U	0.054	0.027	0.013	mg/L	1	EEB	11/28/23	10:12	17175	12/2/23	1:25	SW3005A6020A
Potassium	4.0	0.54	0.11	0.042	mg/L	1	EEB	11/28/23	10:12	17175	12/2/23	1:25	SW3005A6020A
Selenium	0.0054 U	0.011	0.0054	0.0040	mg/L	1	EEB	11/28/23	10:12	17175	12/2/23	1:25	SW3005A6020A
Silver	0.00054 U	0.0054	0.00054	0.00012	mg/L	1	EEB	11/28/23	10:12	17175	12/2/23	1:25	SW3005A6020A
Sodium	280	1.1	0.54	0.37	mg/L	10	EEB	11/28/23	10:12	17175	12/4/23	18:01	SW3005A6020A
Thallium	0.00086 U	0.0011	0.00086	0.00073	mg/L	1	EEB	11/28/23	10:12	17175	12/2/23	1:25	SW3005A6020A
Vanadium	0.0054 U	0.011	0.0054	0.0019	mg/L	1	EEB	11/28/23	10:12	17175	12/2/23	1:25	SW3005A6020A
Zinc	0.087	0.011	0.0043	0.0022	mg/L	1	EEB	11/28/23	10:12	17175	12/2/23	1:25	SW3005A6020A

Quality Control Report

124 Heritage Avenue Unit 16
Portsmouth, NH 03801
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Case Narrative
Lab # 67797

Sample Receiving and Chain of Custody Discrepancies

Samples were received in acceptable condition, between 0 and 6 degrees C, on ice, and in accordance with sample handling, preservation and integrity guidelines.
The analyses performed met the requirements of Absolute Resource Associates' Quality Assurance Plan and the requirements set forth by the associated Sampling and Analysis Plan dated December 2022 (final), except as noted below.
Absolute Resource Associates is an ISO/IEC 17025:2017 DoD accredited "Testing Laboratory" through PJLA with an accreditation # 78237. The analyses performed met the requirements of Absolute Resource Associates' Quality Assurance Plan. Parameters included in the ARA current DoD certification also met the requirements set forth by the current DoD Quality Systems Manual, except as noted below. See included table for analytes or parameters not included in ARA scope of DoD accreditation, if applicable.
The sample bottle for 67797-001 (SY-OBMW7-110623) PCB analysis was broken in the laboratory. No additional sample volume remains for analysis.

Calibration

No exceptions noted.

Method Blank

No exceptions noted.

Surrogate Recoveries

No exceptions noted.

Laboratory Control Sample Results

VOC: The LCS2303694 did not meet the acceptance criteria for carbon disulfide and t-butanol (TBA). These compounds showed high recoveries. The relative percent difference between the LCS and LCSD2303694 was outside the acceptance criteria for t-butanol (TBA) and 1,1,2-trichloroethane. There is no impact to the data as these analytes were not detected in the associated samples.
SVOC: The LCS/D17096 did not meet the acceptance criteria for several compounds. These compounds showed low recoveries. The relative percent difference between the LCS and LCSD17096 was outside the acceptance criteria for several compounds. No additional sample volume remains for re-analysis. The results have been qualified accordingly.
EPH: The LCS/D17110 did not meet the acceptance criteria for naphthalene, 2-methylnaphthalene, indeno(1,2,3-cd)pyrene, dibenzo(a,h)anthracene, and C9-C18 Aliphatics. These compounds showed low recoveries. The relative percent difference between the LCS and LCSD17110 was outside the acceptance criteria for C19-C36 Aliphatics. No additional sample volume remains for re-analysis. The results have been qualified accordingly.

Matrix Spike/Matrix Spike Duplicate/Duplicate Results

Not requested for this project.

Other

QC: Due to spiking concentrations or expected concentrations being below the LOQ in the LCS/D &/or MS/MSD the following compounds have been reported in these QC samples with lower LOQs to show calculated percent recoveries: benzoic acid, benzidine, and C9-C18 Aliphatics.
Reporting Limits: Dilutions performed during the analysis are noted on the result pages.

No other exceptions noted.

Data Qualifiers

U = This compound was analyzed for, but not detected above the associated limit of detection.
J = The analytical result was below the instrument calibration range, but above the method detection limit. The reported concentration is an estimate.
m = An "m" next to the "Response" value reported on the raw data sheets indicates a manual integration was performed.

Abbreviations for Manual Integrations

BC = Baseline Correction: The software integration of the baseline was inappropriate for the chromatogram
MI = Mis-Identification: The software integrated the incorrect peak
PS = Peak Separation: Two peaks exist in the chromatogram but the software integrated them as one
RI = Range Integration: Software does not perform range integrations, must be performed manually
NB = Noisy Baseline: Software mis-integrated due to a noisy baseline
PM = Peak Missed: Software did not integrate the target peak

Absolute Resource Associates does not hold DoD Certification for the following analytes:

Waters

Analyte	CAS	Reference
1,3,5-trichlorobenzene	108-70-3	SW5030C8260D
1,4-dioxane	123-91-1	SW5030C8260D
diethyl ether	60-29-7	SW5030C8260D
tetrahydrofuran (THF)	109-99-9	SW5030C8260D
azobenzene	103-33-3	SW3510C8270E

GLOSSARY

%R	Percent Recovery
BLK	Blank (Method Blank, Preparation Blank)
CCB	Continuing Calibration Blank
CCV	Continuing Calibration Verification
CRM	Certified Reference Material (associated with solid Metals samples)
CRMD	Certified Reference Material Duplicate (associated with solid Metals samples)
Dil'n	Dilution
DL	Detection Limit
DUP	Duplicate
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
LOD	Limit of Detection
LOQ	Limit of Quantitation
MB	Methanol Blank (associated with solid VOC samples)
MLCS	Methanol Laboratory Control Sample (associated with solid VOC samples)
MLCSD	Methanol Laboratory Control Sample Duplicate (associated with solid VOC samples)
MS	Matrix Spike
MSD	Matrix Spike Duplicate
PB	Preparation Blank
QC	Quality Control
RL	Reporting Limit
RPD	Relative Percent Difference
SUR	Surrogate

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R	Limits		RPD	RPD Limit
MA VPH	BLK2303773	Unadjusted C5-C8 Aliphatics		50 U	100	50	50	ug/L						
		Unadjusted C9-C12 Aliphatics		50 U	100	50	40	ug/L						
		methyl t-butyl ether (MTBE)		1.0 U	2.0	1.0	0.73	ug/L						
		benzene		1.0 U	1.0	1.0	0.76	ug/L						
		toluene		1.0 U	2.0	1.0	0.58	ug/L						
		ethylbenzene		0.41 J	2.0	1.0	0.40	ug/L						
		m&p-xylenes		2.0 U	2.0	2.0	1.1	ug/L						
		o-xylene		1.0 U	2.0	1.0	0.45	ug/L						
		naphthalene		4.0 U	5.0	4.0	3.5	ug/L						
		C5-C8 Aliphatics		50 U	100	50	50	ug/L						
		C9-C12 Aliphatics		50 U	100	50	40	ug/L						
		C9-C10 Aromatics		50 U	100	50	33	ug/L						
		2,5-dibromotoluene as Aromatic		103				%			70	130		
		2,5-dibromotoluene as Aliphatic		101				%			70	130		
MA VPH	LCS2303773	Unadjusted C5-C8 Aliphatics		290	100	50	50	ug/L	300	96	70	130		
		Unadjusted C9-C12 Aliphatics		290	100	50	40	ug/L	300	97	70	130		
		methyl t-butyl ether (MTBE)		100	2.0	1.0	0.73	ug/L	100	104	70	130		
		benzene		100	1.0	1.0	0.76	ug/L	100	101	70	130		
		toluene		100	2.0	1.0	0.58	ug/L	100	100	70	130		
		ethylbenzene		100	2.0	1.0	0.40	ug/L	100	102	70	130		
		m&p-xylenes		200	2.0	2.0	1.1	ug/L	200	101	70	130		
		o-xylene		100	2.0	1.0	0.45	ug/L	100	101	70	130		
		naphthalene		99	5.0	4.0	3.5	ug/L	100	99	70	130		
		C5-C8 Aliphatics		50 U	100	50	50	ug/L			70	130		
		C9-C12 Aliphatics		50 U	100	50	40	ug/L			70	130		
		C9-C10 Aromatics		100	100	50	33	ug/L	100	102	70	130		
		2,5-dibromotoluene as Aromatic		129				%			70	130		
		2,5-dibromotoluene as Aliphatic		125				%			70	130		
MA VPH	LCSD2303773	Unadjusted C5-C8 Aliphatics		280	100	50	50	ug/L	300	95	70	130	2	25
		Unadjusted C9-C12 Aliphatics		270	100	50	40	ug/L	300	90	70	130	8	25
		methyl t-butyl ether (MTBE)		100	2.0	1.0	0.73	ug/L	100	100	70	130	5	25
		benzene		97	1.0	1.0	0.76	ug/L	100	97	70	130	4	25
		toluene		96	2.0	1.0	0.58	ug/L	100	96	70	130	4	25
		ethylbenzene		98	2.0	1.0	0.40	ug/L	100	98	70	130	5	25
		m&p-xylenes		190	2.0	2.0	1.1	ug/L	200	96	70	130	5	25
		o-xylene		96	2.0	1.0	0.45	ug/L	100	96	70	130	5	25
		naphthalene		91	5.0	4.0	3.5	ug/L	100	91	70	130	8	25
		C5-C8 Aliphatics		50 U	100	50	50	ug/L			70	130		25
		C9-C12 Aliphatics		50 U	100	50	40	ug/L			70	130		25
		C9-C10 Aromatics		95 J	100	50	33	ug/L	100	95	70	130	7	25
		2,5-dibromotoluene as Aromatic		111				%			70	130		
		2,5-dibromotoluene as Aliphatic		116				%			70	130		

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R		Limits		RPD	RPD Limit
MA VPH	MS2303773	Unadjusted C5-C8 Aliphatics	67798-001	760	100	50	50	ug/L	600	127		70	130		
		Unadjusted C9-C12 Aliphatics	67798-001	1100	100	50	40	ug/L	800	136	*	70	130		
		methyl t-butyl ether (MTBE)	67798-001	100	2.0	1.0	0.73	ug/L	100	102		70	130		
		benzene	67798-001	100	1.0	1.0	0.76	ug/L	100	102		70	130		
		toluene	67798-001	100	2.0	1.0	0.58	ug/L	100	101		70	130		
		ethylbenzene	67798-001	100	2.0	1.0	0.40	ug/L	100	103		70	130		
		m&p-xylenes	67798-001	200	2.0	2.0	1.1	ug/L	200	101		70	130		
		o-xylene	67798-001	100	2.0	1.0	0.45	ug/L	100	101		70	130		
		naphthalene	67798-001	99	5.0	4.0	3.5	ug/L	100	99		70	130		
		C5-C8 Aliphatics	67798-001	460	100	50	50	ug/L	300	152	*	70	130		
		C9-C12 Aliphatics	67798-001	490	100	50	40	ug/L	300	163	*	70	130		
		C9-C10 Aromatics	67798-001	190	100	50	33	ug/L	100	190	*	70	130		
		2,5-dibromotoluene as Aromatic	67798-001	117				%				70	130		
		2,5-dibromotoluene as Aliphatic	67798-001	119				%				70	130		
MA VPH	MS2303773	Unadjusted C5-C8 Aliphatics	67798-007	740	100	50	50	ug/L	600	123		70	130		
		Unadjusted C9-C12 Aliphatics	67798-007	1000	100	50	40	ug/L	800	131	*	70	130		
		methyl t-butyl ether (MTBE)	67798-007	100	2.0	1.0	0.73	ug/L	100	101		70	130		
		benzene	67798-007	100	1.0	1.0	0.76	ug/L	100	101		70	130		
		toluene	67798-007	100	2.0	1.0	0.58	ug/L	100	100		70	130		
		ethylbenzene	67798-007	100	2.0	1.0	0.40	ug/L	100	102		70	130		
		m&p-xylenes	67798-007	200	2.0	2.0	1.1	ug/L	200	99		70	130		
		o-xylene	67798-007	99	2.0	1.0	0.45	ug/L	100	99		70	130		
		naphthalene	67798-007	95	5.0	4.0	3.5	ug/L	100	95		70	130		
		C5-C8 Aliphatics	67798-007	440	100	50	50	ug/L	300	146	*	70	130		
		C9-C12 Aliphatics	67798-007	470	100	50	40	ug/L	300	157	*	70	130		
		C9-C10 Aromatics	67798-007	170	100	50	33	ug/L	100	174	*	70	130		
		2,5-dibromotoluene as Aromatic	67798-007	104				%				70	130		
		2,5-dibromotoluene as Aliphatic	67798-007	109				%				70	130		

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R		Limits		RPD	RPD Limit
MA VPH	MSD2303773	Unadjusted C5-C8 Aliphatics	67798-001	760	100	50	50	ug/L	600	126		70	130	0	50
		Unadjusted C9-C12 Aliphatics	67798-001	1100	100	50	40	ug/L	800	134	*	70	130	1	50
		methyl t-butyl ether (MTBE)	67798-001	100	2.0	1.0	0.73	ug/L	100	102		70	130	0	50
		benzene	67798-001	100	1.0	1.0	0.76	ug/L	100	102		70	130	0	50
		toluene	67798-001	100	2.0	1.0	0.58	ug/L	100	101		70	130	0	50
		ethylbenzene	67798-001	100	2.0	1.0	0.40	ug/L	100	103		70	130	0	50
		m&p-xylenes	67798-001	200	2.0	2.0	1.1	ug/L	200	101		70	130	0	50
		o-xylene	67798-001	100	2.0	1.0	0.45	ug/L	100	101		70	130	0	50
		naphthalene	67798-001	100	5.0	4.0	3.5	ug/L	100	101		70	130	2	50
		C5-C8 Aliphatics	67798-001	450	100	50	50	ug/L	300	151	*	70	130	0	50
		C9-C12 Aliphatics	67798-001	480	100	50	40	ug/L	300	161	*	70	130	1	50
		C9-C10 Aromatics	67798-001	180	100	50	33	ug/L	100	184	*	70	130	3	50
		2,5-dibromotoluene as Aromatic	67798-001	113				%				70	130		
		2,5-dibromotoluene as Aliphatic	67798-001	116				%				70	130		
MA VPH	MSD2303773	Unadjusted C5-C8 Aliphatics	67798-007	730	100	50	50	ug/L	600	122		70	130	1	50
		Unadjusted C9-C12 Aliphatics	67798-007	1100	100	50	40	ug/L	800	132	*	70	130	1	50
		methyl t-butyl ether (MTBE)	67798-007	100	2.0	1.0	0.73	ug/L	100	102		70	130	1	50
		benzene	67798-007	100	1.0	1.0	0.76	ug/L	100	103		70	130	2	50
		toluene	67798-007	100	2.0	1.0	0.58	ug/L	100	101		70	130	2	50
		ethylbenzene	67798-007	100	2.0	1.0	0.40	ug/L	100	104		70	130	2	50
		m&p-xylenes	67798-007	200	2.0	2.0	1.1	ug/L	200	101		70	130	2	50
		o-xylene	67798-007	100	2.0	1.0	0.45	ug/L	100	101		70	130	2	50
		naphthalene	67798-007	98	5.0	4.0	3.5	ug/L	100	98		70	130	3	50
		C5-C8 Aliphatics	67798-007	430	100	50	50	ug/L	300	142	*	70	130	2	50
		C9-C12 Aliphatics	67798-007	470	100	50	40	ug/L	300	158	*	70	130	1	50
		C9-C10 Aromatics	67798-007	180	100	50	33	ug/L	100	178	*	70	130	2	50
		2,5-dibromotoluene as Aromatic	67798-007	104				%				70	130		
		2,5-dibromotoluene as Aliphatic	67798-007	107				%				70	130		

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R	Limits	RPD	RPD Limit
SW5030C8260D	BLK2303694	dichlorodifluoromethane		1.0 U	2.0	1.0	0.28	ug/L					
		chloromethane		1.0 U	2.0	1.0	0.59	ug/L					
		vinyl chloride		1.0 U	2.0	1.0	0.49	ug/L					
		bromomethane		1.5 U	2.0	1.5	1.1	ug/L					
		chloroethane		1.0 U	2.0	1.0	0.33	ug/L					
		trichlorofluoromethane		1.0 U	2.0	1.0	0.34	ug/L					
		diethyl ether		1.0 U	2.0	1.0	0.41	ug/L					
		acetone		5.0 U	50	5.0	1.9	ug/L					
		1,1-dichloroethene		0.50 U	1.0	0.50	0.35	ug/L					
		methylene chloride		1.0 U	2.0	1.0	0.59	ug/L					
		carbon disulfide		1.0 U	2.0	1.0	0.33	ug/L					
		methyl t-butyl ether (MTBE)		1.0 U	2.0	1.0	0.30	ug/L					
		trans-1,2-dichloroethene		1.0 U	2.0	1.0	0.46	ug/L					
		ethyl t-butyl ether (ETBE)		1.0 U	2.0	1.0	0.24	ug/L					
		1,1-dichloroethane		1.0 U	2.0	1.0	0.27	ug/L					
		t-butanol (TBA)		10 U	30	10	2.5	ug/L					
		2-butanone (MEK)		5.0 U	10	5.0	0.67	ug/L					
		2,2-dichloropropane		1.0 U	2.0	1.0	0.21	ug/L					
		cis-1,2-dichloroethene		1.5 U	2.0	1.5	1.2	ug/L					
		chloroform		1.5 U	2.0	1.5	1.4	ug/L					
		bromochloromethane		1.0 U	2.0	1.0	0.22	ug/L					
		tetrahydrofuran (THF)		1.5 U	2.0	1.5	0.75	ug/L					
		1,1,1-trichloroethane		1.0 U	2.0	1.0	0.55	ug/L					
		1,1-dichloropropene		1.0 U	2.0	1.0	0.26	ug/L					
		t-amyl-methyl ether (TAME)		1.0 U	2.0	1.0	0.57	ug/L					
		carbon tetrachloride		1.0 U	2.0	1.0	0.27	ug/L					
		1,2-dichloroethane		1.0 U	2.0	1.0	0.20	ug/L					
		benzene		1.0 U	2.0	1.0	0.40	ug/L					
		trichloroethene		1.0 U	2.0	1.0	0.53	ug/L					
		1,2-dichloropropane		1.0 U	2.0	1.0	0.22	ug/L					
		bromodichloromethane		0.50 U	0.60	0.50	0.38	ug/L					
		1,4-dioxane		10 U	50	10	8.7	ug/L					
		dibromomethane		1.0 U	2.0	1.0	0.23	ug/L					
		4-methyl-2-pentanone (MIBK)		1.0 U	10	1.0	0.56	ug/L					
		cis-1,3-dichloropropene		1.0 U	2.0	1.0	0.30	ug/L					
		toluene		1.0 U	2.0	1.0	0.45	ug/L					
		trans-1,3-dichloropropene		1.0 U	2.0	1.0	0.34	ug/L					
		2-hexanone		1.0 U	10	1.0	0.72	ug/L					
		1,1,2-trichloroethane		1.0 U	2.0	1.0	0.27	ug/L					
		1,3-dichloropropane		1.0 U	2.0	1.0	0.25	ug/L					
		tetrachloroethene		1.0 U	2.0	1.0	0.76	ug/L					
		dibromochloromethane		1.0 U	2.0	1.0	0.21	ug/L					
		1,2-dibromoethane (EDB)		1.0 U	2.0	1.0	0.27	ug/L					
		chlorobenzene		1.0 U	2.0	1.0	0.25	ug/L					
		1,1,1,2-tetrachloroethane		1.0 U	2.0	1.0	0.21	ug/L					
		ethylbenzene		1.0 U	2.0	1.0	0.65	ug/L					
		m&p-xylenes		1.5 U	2.0	1.5	1.4	ug/L					
		o-xylene		1.0 U	2.0	1.0	0.55	ug/L					
		styrene		1.0 U	2.0	1.0	0.57	ug/L					
		bromoform		1.0 U	2.0	1.0	0.24	ug/L					
		isopropylbenzene		1.0 U	2.0	1.0	0.65	ug/L					
		1,1,2,2-tetrachloroethane		1.0 U	2.0	1.0	0.29	ug/L					
		1,2,3-trichloropropane		1.0 U	2.0	1.0	0.55	ug/L					
		n-propylbenzene		1.0 U	2.0	1.0	0.44	ug/L					

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R	Limits	RPD	RPD Limit
SW5030C8260D	BLK2303694	bromobenzene		1.0 U	2.0	1.0	0.27	ug/L					
		2-chlorotoluene		1.0 U	2.0	1.0	0.23	ug/L					
		4-chlorotoluene		1.0 U	2.0	1.0	0.33	ug/L					
		tert-butylbenzene		1.0 U	2.0	1.0	0.39	ug/L					
		1,2,4-trimethylbenzene		1.0 U	2.0	1.0	0.58	ug/L					
		sec-butylbenzene		1.0 U	2.0	1.0	0.44	ug/L					
		1,3-dichlorobenzene		1.0 U	2.0	1.0	0.45	ug/L					
		4-isopropyltoluene		1.0 U	2.0	1.0	0.47	ug/L					
		1,4-dichlorobenzene		1.0 U	2.0	1.0	0.26	ug/L					
		1,2-dichlorobenzene		1.0 U	2.0	1.0	0.39	ug/L					
		n-butylbenzene		1.0 U	2.0	1.0	0.54	ug/L					
		1,2-dibromo-3-chloropropane		1.5 U	2.0	1.5	0.91	ug/L					
		1,3,5-trimethylbenzene		1.0 U	2.0	1.0	0.46	ug/L					
		1,2,4-trichlorobenzene		1.0 U	2.0	1.0	0.79	ug/L					
		hexachlorobutadiene		0.50 U	0.50	0.50	0.19	ug/L					
		naphthalene		1.5 U	2.0	1.5	1.2	ug/L					
		1,2,3-trichlorobenzene		1.0 U	2.0	1.0	0.93	ug/L					
		dibromofluoromethane SUR		95				%			78	114	
		toluene-D8 SUR		101				%			88	110	
		4-bromofluorobenzene SUR		98				%			86	115	

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R		Limits	RPD	RPD Limit
SW5030C8260D	LCS2303694	dichlorodifluoromethane		21	2.0	1.0	0.28	ug/L	20	104		32	152	
		chloromethane		25	2.0	1.0	0.59	ug/L	20	124		50	139	
		vinyl chloride		19	2.0	1.0	0.49	ug/L	20	95		58	137	
		bromomethane		24	2.0	1.5	1.1	ug/L	20	120		53	141	
		chloroethane		28	2.0	1.0	0.33	ug/L	20	138		60	138	
		trichlorofluoromethane		20	2.0	1.0	0.34	ug/L	20	99		65	141	
		diethyl ether		25	2.0	1.0	0.41	ug/L	20	123		68	129	
		acetone		29 J	50	5.0	1.9	ug/L	20	147		39	160	
		1,1-dichloroethene		21	1.0	0.50	0.35	ug/L	20	105		71	131	
		methylene chloride		21	2.0	1.0	0.59	ug/L	20	104		74	124	
		carbon disulfide		27	2.0	1.0	0.33	ug/L	20	135	*	64	133	
		methyl t-butyl ether (MTBE)		21	2.0	1.0	0.30	ug/L	20	106		71	124	
		trans-1,2-dichloroethene		20	2.0	1.0	0.46	ug/L	20	101		75	124	
		ethyl t-butyl ether (ETBE)		21	2.0	1.0	0.24	ug/L	20	103		70	127	
		1,1-dichloroethane		21	2.0	1.0	0.27	ug/L	20	107		77	125	
		t-butanol (TBA)		130	30	10	2.5	ug/L	100	131	*	68	129	
		2-butanone (MEK)		22	10	5.0	0.67	ug/L	20	111		56	143	
		2,2-dichloropropane		18	2.0	1.0	0.21	ug/L	20	90		60	139	
		cis-1,2-dichloroethene		20	2.0	1.5	1.2	ug/L	20	102		78	123	
		chloroform		19	2.0	1.5	1.4	ug/L	20	97		79	124	
		bromochloromethane		19	2.0	1.0	0.22	ug/L	20	97		78	123	
		tetrahydrofuran (THF)		24	2.0	1.5	0.75	ug/L	20	119		57	133	
		1,1,1-trichloroethane		18	2.0	1.0	0.55	ug/L	20	89		74	131	
		1,1-dichloropropene		19	2.0	1.0	0.26	ug/L	20	97		79	125	
		t-amyl-methyl ether (TAME)		21	2.0	1.0	0.57	ug/L	20	104		68	128	
		carbon tetrachloride		18	2.0	1.0	0.27	ug/L	20	88		72	136	
		1,2-dichloroethane		18	2.0	1.0	0.20	ug/L	20	90		73	128	
		benzene		21	2.0	1.0	0.40	ug/L	20	105		79	120	
		trichloroethene		20	2.0	1.0	0.53	ug/L	20	99		79	123	
		1,2-dichloropropane		22	2.0	1.0	0.22	ug/L	20	112		78	122	
		bromodichloromethane		19	0.60	0.50	0.38	ug/L	20	93		79	125	
		1,4-dioxane		53	50	10	8.7	ug/L	40	133		59	139	
		dibromomethane		20	2.0	1.0	0.23	ug/L	20	101		79	123	
		4-methyl-2-pentanone (MIBK)		25	10	1.0	0.56	ug/L	20	124		67	130	
		cis-1,3-dichloropropene		19	2.0	1.0	0.30	ug/L	20	94		75	124	
		toluene		21	2.0	1.0	0.45	ug/L	20	106		80	121	
		trans-1,3-dichloropropene		19	2.0	1.0	0.34	ug/L	20	95		73	127	
		2-hexanone		27	10	1.0	0.72	ug/L	20	135		57	139	
		1,1,2-trichloroethane		18	2.0	1.0	0.27	ug/L	20	90		80	119	
		1,3-dichloropropane		22	2.0	1.0	0.25	ug/L	20	108		80	119	
		tetrachloroethene		19	2.0	1.0	0.76	ug/L	20	94		74	129	
		dibromochloromethane		17	2.0	1.0	0.21	ug/L	20	85		74	126	
		1,2-dibromoethane (EDB)		20	2.0	1.0	0.27	ug/L	20	102		77	121	
		chlorobenzene		20	2.0	1.0	0.25	ug/L	20	100		82	118	
		1,1,1,2-tetrachloroethane		19	2.0	1.0	0.21	ug/L	20	93		78	124	
		ethylbenzene		22	2.0	1.0	0.65	ug/L	20	108		79	121	
		m&p-xylenes		44	2.0	1.5	1.4	ug/L	40	110		80	121	
		o-xylene		21	2.0	1.0	0.55	ug/L	20	103		78	122	
		styrene		20	2.0	1.0	0.57	ug/L	20	101		78	123	
		bromoform		17	2.0	1.0	0.24	ug/L	20	84		66	130	
		isopropylbenzene		21	2.0	1.0	0.65	ug/L	20	107		72	131	
		1,1,2,2-tetrachloroethane		22	2.0	1.0	0.29	ug/L	20	111		71	121	
		1,2,3-trichloropropane		24	2.0	1.0	0.55	ug/L	20	120		73	122	
		n-propylbenzene		22	2.0	1.0	0.44	ug/L	20	110		76	126	

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R	Limits		RPD	RPD Limit
SW5030C8260D	LCS2303694	bromobenzene		19	2.0	1.0	0.27	ug/L	20	96	80	120		
		2-chlorotoluene		22	2.0	1.0	0.23	ug/L	20	109	79	122		
		4-chlorotoluene		22	2.0	1.0	0.33	ug/L	20	109	78	122		
		tert-butylbenzene		21	2.0	1.0	0.39	ug/L	20	103	78	124		
		1,2,4-trimethylbenzene		21	2.0	1.0	0.58	ug/L	20	104	76	124		
		sec-butylbenzene		21	2.0	1.0	0.44	ug/L	20	106	77	126		
		1,3-dichlorobenzene		20	2.0	1.0	0.45	ug/L	20	102	80	119		
		4-isopropyltoluene		21	2.0	1.0	0.47	ug/L	20	103	77	127		
		1,4-dichlorobenzene		21	2.0	1.0	0.26	ug/L	20	104	79	118		
		1,2-dichlorobenzene		20	2.0	1.0	0.39	ug/L	20	100	80	119		
		n-butylbenzene		21	2.0	1.0	0.54	ug/L	20	105	75	128		
		1,2-dibromo-3-chloropropane		24	2.0	1.5	0.91	ug/L	20	120	62	128		
		1,3,5-trimethylbenzene		22	2.0	1.0	0.46	ug/L	20	109	75	124		
		1,2,4-trichlorobenzene		19	2.0	1.0	0.79	ug/L	20	97	69	130		
		hexachlorobutadiene		20	0.50	0.50	0.19	ug/L	20	101	66	134		
		naphthalene		21	2.0	1.5	1.2	ug/L	20	105	61	128		
		1,2,3-trichlorobenzene		20	2.0	1.0	0.93	ug/L	20	98	69	129		
		dibromofluoromethane SUR		97				%			78	114		
		toluene-D8 SUR		103				%			88	110		
		4-bromofluorobenzene SUR		101				%			86	115		

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R	Limits	RPD	RPD Limit
SW5030C8260D	LCSD2303694	dichlorodifluoromethane		20	2.0	1.0	0.28	ug/L	20	102	32 152	2	20
		chloromethane		23	2.0	1.0	0.59	ug/L	20	114	50 139	9	20
		vinyl chloride		19	2.0	1.0	0.49	ug/L	20	95	58 137	0	20
		bromomethane		23	2.0	1.5	1.1	ug/L	20	114	53 141	5	20
		chloroethane		27	2.0	1.0	0.33	ug/L	20	133	60 138	4	20
		trichlorofluoromethane		19	2.0	1.0	0.34	ug/L	20	96	65 141	3	20
		diethyl ether		25	2.0	1.0	0.41	ug/L	20	124	68 129	1	20
		acetone		25 J	50	5.0	1.9	ug/L	20	127	39 160	15	20
		1,1-dichloroethene		21	1.0	0.50	0.35	ug/L	20	103	71 131	2	20
		methylene chloride		21	2.0	1.0	0.59	ug/L	20	105	74 124	1	20
		carbon disulfide		27	2.0	1.0	0.33	ug/L	20	133	64 133	2	20
		methyl t-butyl ether (MTBE)		21	2.0	1.0	0.30	ug/L	20	104	71 124	2	20
		trans-1,2-dichloroethene		20	2.0	1.0	0.46	ug/L	20	102	75 124	2	20
		ethyl t-butyl ether (ETBE)		20	2.0	1.0	0.24	ug/L	20	101	70 127	2	20
		1,1-dichloroethane		21	2.0	1.0	0.27	ug/L	20	106	77 125	1	20
		t-butanol (TBA)		100	30	10	2.5	ug/L	100	102	68 129	25 *	20
		2-butanone (MEK)		20	10	5.0	0.67	ug/L	20	99	56 143	12	20
		2,2-dichloropropane		17	2.0	1.0	0.21	ug/L	20	87	60 139	3	20
		cis-1,2-dichloroethene		20	2.0	1.5	1.2	ug/L	20	102	78 123	0	20
		chloroform		19	2.0	1.5	1.4	ug/L	20	97	79 124	0	20
		bromochloromethane		20	2.0	1.0	0.22	ug/L	20	101	78 123	3	20
		tetrahydrofuran (THF)		20	2.0	1.5	0.75	ug/L	20	100	57 133	18	20
		1,1,1-trichloroethane		17	2.0	1.0	0.55	ug/L	20	86	74 131	3	20
		1,1-dichloropropene		19	2.0	1.0	0.26	ug/L	20	96	79 125	1	20
		t-amyl-methyl ether (TAME)		20	2.0	1.0	0.57	ug/L	20	99	68 128	4	20
		carbon tetrachloride		17	2.0	1.0	0.27	ug/L	20	87	72 136	1	20
		1,2-dichloroethane		19	2.0	1.0	0.20	ug/L	20	93	73 128	3	20
		benzene		22	2.0	1.0	0.40	ug/L	20	108	79 120	3	20
		trichloroethene		20	2.0	1.0	0.53	ug/L	20	100	79 123	1	20
		1,2-dichloropropane		22	2.0	1.0	0.22	ug/L	20	112	78 122	0	20
		bromodichloromethane		18	0.60	0.50	0.38	ug/L	20	91	79 125	3	20
		1,4-dioxane		44 J	50	10	8.7	ug/L	40	109	59 139	20	20
		dibromomethane		20	2.0	1.0	0.23	ug/L	20	101	79 123	1	20
		4-methyl-2-pentanone (MIBK)		23	10	1.0	0.56	ug/L	20	115	67 130	7	20
		cis-1,3-dichloropropene		19	2.0	1.0	0.30	ug/L	20	95	75 124	1	20
		toluene		21	2.0	1.0	0.45	ug/L	20	105	80 121	0	20
		trans-1,3-dichloropropene		18	2.0	1.0	0.34	ug/L	20	90	73 127	5	20
		2-hexanone		24	10	1.0	0.72	ug/L	20	118	57 139	13	20
		1,1,2-trichloroethane		22	2.0	1.0	0.27	ug/L	20	111	80 119	22 *	20
		1,3-dichloropropane		23	2.0	1.0	0.25	ug/L	20	114	80 119	5	20
		tetrachloroethene		20	2.0	1.0	0.76	ug/L	20	98	74 129	4	20
		dibromochloromethane		18	2.0	1.0	0.21	ug/L	20	89	74 126	5	20
		1,2-dibromoethane (EDB)		21	2.0	1.0	0.27	ug/L	20	105	77 121	3	20
		chlorobenzene		20	2.0	1.0	0.25	ug/L	20	102	82 118	2	20
		1,1,1,2-tetrachloroethane		20	2.0	1.0	0.21	ug/L	20	98	78 124	5	20
		ethylbenzene		22	2.0	1.0	0.65	ug/L	20	109	79 121	1	20
		m&p-xylenes		46	2.0	1.5	1.4	ug/L	40	114	80 121	3	20
		o-xylene		21	2.0	1.0	0.55	ug/L	20	107	78 122	4	20
		styrene		21	2.0	1.0	0.57	ug/L	20	105	78 123	3	20
		bromoform		18	2.0	1.0	0.24	ug/L	20	89	66 130	6	20
		isopropylbenzene		22	2.0	1.0	0.65	ug/L	20	108	72 131	1	20
		1,1,2,2-tetrachloroethane		22	2.0	1.0	0.29	ug/L	20	108	71 121	3	20
		1,2,3-trichloropropane		22	2.0	1.0	0.55	ug/L	20	111	73 122	8	20
		n-propylbenzene		21	2.0	1.0	0.44	ug/L	20	107	76 126	2	20

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R	Limits		RPD	RPD Limit
SW5030C8260D	LCSD2303694	bromobenzene		20	2.0	1.0	0.27	ug/L	20	99	80	120	4	20
		2-chlorotoluene		22	2.0	1.0	0.23	ug/L	20	109	79	122	0	20
		4-chlorotoluene		21	2.0	1.0	0.33	ug/L	20	106	78	122	3	20
		tert-butylbenzene		20	2.0	1.0	0.39	ug/L	20	99	78	124	4	20
		1,2,4-trimethylbenzene		21	2.0	1.0	0.58	ug/L	20	105	76	124	0	20
		sec-butylbenzene		21	2.0	1.0	0.44	ug/L	20	106	77	126	1	20
		1,3-dichlorobenzene		21	2.0	1.0	0.45	ug/L	20	103	80	119	1	20
		4-isopropyltoluene		21	2.0	1.0	0.47	ug/L	20	103	77	127	0	20
		1,4-dichlorobenzene		21	2.0	1.0	0.26	ug/L	20	106	79	118	2	20
		1,2-dichlorobenzene		20	2.0	1.0	0.39	ug/L	20	102	80	119	2	20
		n-butylbenzene		20	2.0	1.0	0.54	ug/L	20	101	75	128	4	20
		1,2-dibromo-3-chloropropane		21	2.0	1.5	0.91	ug/L	20	105	62	128	13	20
		1,3,5-trimethylbenzene		21	2.0	1.0	0.46	ug/L	20	107	75	124	2	20
		1,2,4-trichlorobenzene		19	2.0	1.0	0.79	ug/L	20	95	69	130	2	20
		hexachlorobutadiene		20	0.50	0.50	0.19	ug/L	20	99	66	134	1	20
		naphthalene		20	2.0	1.5	1.2	ug/L	20	98	61	128	7	20
		1,2,3-trichlorobenzene		20	2.0	1.0	0.93	ug/L	20	99	69	129	1	20
		dibromofluoromethane SUR		97				%			78	114		
		toluene-D8 SUR		101				%			88	110		
		4-bromofluorobenzene SUR		100				%			86	115		

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R		Limits		RPD	RPD Limit
MA EPH	BLK17110	naphthalene		0.70 U	1.0	0.70	0.63	ug/L							
		2-methylnaphthalene		0.70 U	1.0	0.70	0.60	ug/L							
		phenanthrene		0.50 U	1.0	0.50	0.15	ug/L							
		acenaphthene		0.50 U	1.0	0.50	0.22	ug/L							
		acenaphthylene		0.50 U	1.0	0.50	0.18	ug/L							
		fluorene		0.50 U	1.0	0.50	0.15	ug/L							
		anthracene		0.50 U	1.0	0.50	0.18	ug/L							
		fluoranthene		0.50 U	1.0	0.50	0.18	ug/L							
		pyrene		0.50 U	1.0	0.50	0.23	ug/L							
		benzo(a)anthracene		0.50 U	1.0	0.50	0.20	ug/L							
		chrysene		0.50 U	1.0	0.50	0.16	ug/L							
		benzo(b)fluoranthene		0.50 U	1.0	0.50	0.35	ug/L							
		benzo(k)fluoranthene		0.50 U	1.0	0.50	0.41	ug/L							
		benzo(a)pyrene		0.70 U	1.0	0.70	0.52	ug/L							
		indeno(1,2,3-cd)pyrene		0.50 U	1.0	0.50	0.24	ug/L							
		dibenzo(a,h)anthracene		0.50 U	1.0	0.50	0.26	ug/L							
		benzo(g,h,i)perylene		0.50 U	1.0	0.50	0.22	ug/L							
		Unadjusted C11-C22 Aromatics		85 U	100	85	60	ug/L							
		C9-C18 Aliphatics		95 U	100	95	94	ug/L							
		C19-C36 Aliphatics		97 U	100	97	96	ug/L							
		C11-C22 Aromatics		85 U	100	85	54	ug/L							
		1-chloro-octadecane SUR		42				%				40	140		
		o-terphenyl SUR		58				%				40	140		
		2-fluorobiphenyl SUR		75				%				40	140		
		2-bromonaphthalene SUR		74				%				40	140		
MA EPH	LCS17110	naphthalene		19	1.0	0.70	0.63	ug/L	60	32	*	40	140		
		2-methylnaphthalene		21	1.0	0.70	0.60	ug/L	60	36	*	40	140		
		phenanthrene		29	1.0	0.50	0.15	ug/L	60	48		40	140		
		acenaphthene		26	1.0	0.50	0.22	ug/L	60	44		40	140		
		acenaphthylene		26	1.0	0.50	0.18	ug/L	60	44		40	140		
		fluorene		25	1.0	0.50	0.15	ug/L	60	42		40	140		
		anthracene		28	1.0	0.50	0.18	ug/L	60	47		40	140		
		fluoranthene		29	1.0	0.50	0.18	ug/L	60	48		40	140		
		pyrene		28	1.0	0.50	0.23	ug/L	60	47		40	140		
		benzo(a)anthracene		26	1.0	0.50	0.20	ug/L	60	44		40	140		
		chrysene		27	1.0	0.50	0.16	ug/L	60	46		40	140		
		benzo(b)fluoranthene		25	1.0	0.50	0.35	ug/L	60	41		40	140		
		benzo(k)fluoranthene		25	1.0	0.50	0.41	ug/L	60	41		40	140		
		benzo(a)pyrene		25	1.0	0.70	0.52	ug/L	60	42		40	140		
		indeno(1,2,3-cd)pyrene		23	1.0	0.50	0.24	ug/L	60	39	*	40	140		
		dibenzo(a,h)anthracene		23	1.0	0.50	0.26	ug/L	60	39	*	40	140		
		benzo(g,h,i)perylene		25	1.0	0.50	0.22	ug/L	60	42		40	140		
		Unadjusted C11-C22 Aromatics		550	100	85	60	ug/L	1020	54		40	140		
		C9-C18 Aliphatics		130	100	95	94	ug/L	360	36	*	40	140		
		C19-C36 Aliphatics		310	100	97	96	ug/L	480	64		40	140		
		C11-C22 Aromatics		120	100	85	54	ug/L				40	140		
		1-chloro-octadecane SUR		42				%				40	140		
		o-terphenyl SUR		44				%				40	140		
		2-fluorobiphenyl SUR		76				%				40	140		
		2-bromonaphthalene SUR		77				%				40	140		

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R		Limits		RPD	RPD	Limit
MA EPH	LCSD17110	naphthalene		21	1.0	0.70	0.63	ug/L	60	34	*	40	140	6		25
		2-methylnaphthalene		22	1.0	0.70	0.60	ug/L	60	36	*	40	140	2		25
		phenanthrene		33	1.0	0.50	0.15	ug/L	60	55		40	140	14		25
		acenaphthene		30	1.0	0.50	0.22	ug/L	60	50		40	140	13		25
		acenaphthylene		29	1.0	0.50	0.18	ug/L	60	49		40	140	11		25
		fluorene		29	1.0	0.50	0.15	ug/L	60	48		40	140	13		25
		anthracene		32	1.0	0.50	0.18	ug/L	60	54		40	140	14		25
		fluoranthene		34	1.0	0.50	0.18	ug/L	60	57		40	140	17		25
		pyrene		32	1.0	0.50	0.23	ug/L	60	53		40	140	12		25
		benzo(a)anthracene		30	1.0	0.50	0.20	ug/L	60	50		40	140	13		25
		chrysene		31	1.0	0.50	0.16	ug/L	60	52		40	140	13		25
		benzo(b)fluoranthene		29	1.0	0.50	0.35	ug/L	60	48		40	140	15		25
		benzo(k)fluoranthene		31	1.0	0.50	0.41	ug/L	60	51		40	140	22		25
		benzo(a)pyrene		29	1.0	0.70	0.52	ug/L	60	49		40	140	16		25
		indeno(1,2,3-cd)pyrene		28	1.0	0.50	0.24	ug/L	60	47		40	140	20		25
		dibenzo(a,h)anthracene		29	1.0	0.50	0.26	ug/L	60	49		40	140	23		25
		benzo(g,h,i)perylene		30	1.0	0.50	0.22	ug/L	60	50		40	140	17		25
		Unadjusted C11-C22 Aromatics		650	100	85	60	ug/L	1020	64		40	140	17		25
		C9-C18 Aliphatics		150	100	95	94	ug/L	360	40		40	140	11		25
		C19-C36 Aliphatics		410	100	97	96	ug/L	480	85		40	140	28	*	25
		C11-C22 Aromatics		150	100	85	54	ug/L				40	140			25
		1-chloro-octadecane SUR		57				%				40	140			
		o-terphenyl SUR		57				%				40	140			
		2-fluorobiphenyl SUR		79				%				40	140			
		2-bromonaphthalene SUR		81				%				40	140			

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R		Limits		RPD	RPD Limit
MA EPH	MS17110	naphthalene	67798-001	16	1.0	0.70	0.63	ug/L	60	26	*	40	140		
		2-methylnaphthalene	67798-001	20	1.0	0.70	0.60	ug/L	60	34	*	40	140		
		phenanthrene	67798-001	36	1.0	0.50	0.15	ug/L	60	61		40	140		
		acenaphthene	67798-001	30	1.0	0.50	0.22	ug/L	60	51		40	140		
		acenaphthylene	67798-001	29	1.0	0.50	0.18	ug/L	60	48		40	140		
		fluorene	67798-001	32	1.0	0.50	0.15	ug/L	60	53		40	140		
		anthracene	67798-001	36	1.0	0.50	0.18	ug/L	60	60		40	140		
		fluoranthene	67798-001	39	1.0	0.50	0.18	ug/L	60	65		40	140		
		pyrene	67798-001	34	1.0	0.50	0.23	ug/L	60	57		40	140		
		benzo(a)anthracene	67798-001	36	1.0	0.50	0.20	ug/L	60	59		40	140		
		chrysene	67798-001	37	1.0	0.50	0.16	ug/L	60	62		40	140		
		benzo(b)fluoranthene	67798-001	35	1.0	0.50	0.35	ug/L	60	59		40	140		
		benzo(k)fluoranthene	67798-001	34	1.0	0.50	0.41	ug/L	60	56		40	140		
		benzo(a)pyrene	67798-001	35	1.0	0.70	0.52	ug/L	60	58		40	140		
		indeno(1,2,3-cd)pyrene	67798-001	35	1.0	0.50	0.24	ug/L	60	59		40	140		
		dibenzo(a,h)anthracene	67798-001	36	1.0	0.50	0.26	ug/L	60	60		40	140		
		benzo(g,h,i)perylene	67798-001	37	1.0	0.50	0.22	ug/L	60	62		40	140		
		Unadjusted C11-C22 Aromatics	67798-001	680	100	85	60	ug/L	1020	67		40	140		
		C9-C18 Aliphatics	67798-001	150	100	95	94	ug/L	360	43		40	140		
		C19-C36 Aliphatics	67798-001	360	100	97	96	ug/L	480	75		40	140		
		C11-C22 Aromatics	67798-001	130	100	85	54	ug/L				40	140		
		1-chloro-octadecane SUR	67798-001	54				%				40	140		
		o-terphenyl SUR	67798-001	61				%				40	140		
		2-fluorobiphenyl SUR	67798-001	76				%				40	140		
		2-bromonaphthalene SUR	67798-001	77				%				40	140		
MA EPH	MS17110	naphthalene	67798-007	17	1.0	0.70	0.63	ug/L	60	28	*	40	140		
		2-methylnaphthalene	67798-007	20	1.0	0.70	0.60	ug/L	60	34	*	40	140		
		phenanthrene	67798-007	36	1.0	0.50	0.15	ug/L	60	59		40	140		
		acenaphthene	67798-007	30	1.0	0.50	0.22	ug/L	60	50		40	140		
		acenaphthylene	67798-007	28	1.0	0.50	0.18	ug/L	60	47		40	140		
		fluorene	67798-007	30	1.0	0.50	0.15	ug/L	60	50		40	140		
		anthracene	67798-007	34	1.0	0.50	0.18	ug/L	60	57		40	140		
		fluoranthene	67798-007	38	1.0	0.50	0.18	ug/L	60	63		40	140		
		pyrene	67798-007	32	1.0	0.50	0.23	ug/L	60	53		40	140		
		benzo(a)anthracene	67798-007	32	1.0	0.50	0.20	ug/L	60	54		40	140		
		chrysene	67798-007	34	1.0	0.50	0.16	ug/L	60	57		40	140		
		benzo(b)fluoranthene	67798-007	31	1.0	0.50	0.35	ug/L	60	52		40	140		
		benzo(k)fluoranthene	67798-007	32	1.0	0.50	0.41	ug/L	60	53		40	140		
		benzo(a)pyrene	67798-007	31	1.0	0.70	0.52	ug/L	60	52		40	140		
		indeno(1,2,3-cd)pyrene	67798-007	32	1.0	0.50	0.24	ug/L	60	53		40	140		
		dibenzo(a,h)anthracene	67798-007	32	1.0	0.50	0.26	ug/L	60	54		40	140		
		benzo(g,h,i)perylene	67798-007	33	1.0	0.50	0.22	ug/L	60	55		40	140		
		Unadjusted C11-C22 Aromatics	67798-007	590	100	85	60	ug/L	1020	58		40	140		
		C9-C18 Aliphatics	67798-007	160	100	95	94	ug/L	360	43		40	140		
		C19-C36 Aliphatics	67798-007	350	100	97	96	ug/L	480	72		40	140		
		C11-C22 Aromatics	67798-007	69 J	100	85	54	ug/L				40	140		
		1-chloro-octadecane SUR	67798-007	47				%				40	140		
		o-terphenyl SUR	67798-007	55				%				40	140		
		2-fluorobiphenyl SUR	67798-007	77				%				40	140		
		2-bromonaphthalene SUR	67798-007	79				%				40	140		

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R		Limits		RPD	RPD Limit
MA EPH	MSD17110	naphthalene	67798-001	16	1.0	0.70	0.63	ug/L	60	26	*	40	140	2	50
		2-methylnaphthalene	67798-001	19	1.0	0.70	0.60	ug/L	60	32	*	40	140	6	50
		phenanthrene	67798-001	34	1.0	0.50	0.15	ug/L	60	57		40	140	7	50
		acenaphthene	67798-001	29	1.0	0.50	0.22	ug/L	60	49		40	140	4	50
		acenaphthylene	67798-001	28	1.0	0.50	0.18	ug/L	60	46		40	140	2	50
		fluorene	67798-001	30	1.0	0.50	0.15	ug/L	60	50		40	140	5	50
		anthracene	67798-001	33	1.0	0.50	0.18	ug/L	60	56		40	140	8	50
		fluoranthene	67798-001	35	1.0	0.50	0.18	ug/L	60	59		40	140	9	50
		pyrene	67798-001	33	1.0	0.50	0.23	ug/L	60	55		40	140	3	50
		benzo(a)anthracene	67798-001	34	1.0	0.50	0.20	ug/L	60	56		40	140	6	50
		chrysene	67798-001	35	1.0	0.50	0.16	ug/L	60	58		40	140	8	50
		benzo(b)fluoranthene	67798-001	32	1.0	0.50	0.35	ug/L	60	53		40	140	11	50
		benzo(k)fluoranthene	67798-001	33	1.0	0.50	0.41	ug/L	60	56		40	140	1	50
		benzo(a)pyrene	67798-001	31	1.0	0.70	0.52	ug/L	60	52		40	140	10	50
		indeno(1,2,3-cd)pyrene	67798-001	30	1.0	0.50	0.24	ug/L	60	50		40	140	16	50
		dibenzo(a,h)anthracene	67798-001	31	1.0	0.50	0.26	ug/L	60	52		40	140	13	50
		benzo(g,h,i)perylene	67798-001	32	1.0	0.50	0.22	ug/L	60	53		40	140	16	50
		Unadjusted C11-C22 Aromatics	67798-001	630	100	85	60	ug/L	1020	62		40	140	8	50
		C9-C18 Aliphatics	67798-001	130	100	95	94	ug/L	360	37	*	40	140	14	50
		C19-C36 Aliphatics	67798-001	350	100	97	96	ug/L	480	74		40	140	2	50
		C11-C22 Aromatics	67798-001	120	100	85	54	ug/L		52		40	140	9	50
		1-chloro-octadecane SUR	67798-001	52				%				40	140		
		o-terphenyl SUR	67798-001	60				%				40	140		
		2-fluorobiphenyl SUR	67798-001	76				%				40	140		
		2-bromonaphthalene SUR	67798-001	77				%				40	140		
MA EPH	MSD17110	naphthalene	67798-007	12	1.0	0.70	0.63	ug/L	60	21	*	40	140	30	50
		2-methylnaphthalene	67798-007	15	1.0	0.70	0.60	ug/L	60	25	*	40	140	28	50
		phenanthrene	67798-007	29	1.0	0.50	0.15	ug/L	60	49		40	140	19	50
		acenaphthene	67798-007	24	1.0	0.50	0.22	ug/L	60	40		40	140	23	50
		acenaphthylene	67798-007	22	1.0	0.50	0.18	ug/L	60	37	*	40	140	23	50
		fluorene	67798-007	26	1.0	0.50	0.15	ug/L	60	43		40	140	15	50
		anthracene	67798-007	29	1.0	0.50	0.18	ug/L	60	48		40	140	17	50
		fluoranthene	67798-007	32	1.0	0.50	0.18	ug/L	60	53		40	140	18	50
		pyrene	67798-007	26	1.0	0.50	0.23	ug/L	60	43		40	140	19	50
		benzo(a)anthracene	67798-007	28	1.0	0.50	0.20	ug/L	60	46		40	140	16	50
		chrysene	67798-007	30	1.0	0.50	0.16	ug/L	60	49		40	140	15	50
		benzo(b)fluoranthene	67798-007	27	1.0	0.50	0.35	ug/L	60	45		40	140	14	50
		benzo(k)fluoranthene	67798-007	26	1.0	0.50	0.41	ug/L	60	44		40	140	19	50
		benzo(a)pyrene	67798-007	27	1.0	0.70	0.52	ug/L	60	45		40	140	15	50
		indeno(1,2,3-cd)pyrene	67798-007	27	1.0	0.50	0.24	ug/L	60	45		40	140	16	50
		dibenzo(a,h)anthracene	67798-007	28	1.0	0.50	0.26	ug/L	60	47		40	140	14	50
		benzo(g,h,i)perylene	67798-007	28	1.0	0.50	0.22	ug/L	60	47		40	140	17	50
		Unadjusted C11-C22 Aromatics	67798-007	570	100	85	60	ug/L	1020	56		40	140	4	50
		C9-C18 Aliphatics	67798-007	130	100	95	94	ug/L	360	36	*	40	140	18	50
		C19-C36 Aliphatics	67798-007	320	100	97	96	ug/L	480	67		40	140	8	50
		C11-C22 Aromatics	67798-007	130	100	85	54	ug/L		47		40	140	64	50
		1-chloro-octadecane SUR	67798-007	50				%				40	140		
		o-terphenyl SUR	67798-007	56				%				40	140		
		2-fluorobiphenyl SUR	67798-007	80				%				40	140		
		2-bromonaphthalene SUR	67798-007	82				%				40	140		

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R	Limits		RPD	RPD Limit
SW3510C8082A	BLK17179	PCB-1016		0.12 U	0.20	0.12	0.10	ug/L						
		PCB-1221		0.12 U	0.20	0.12	0.10	ug/L						
		PCB-1232		0.12 U	0.20	0.12	0.10	ug/L						
		PCB-1242		0.12 U	0.20	0.12	0.10	ug/L						
		PCB-1248		0.12 U	0.20	0.12	0.10	ug/L						
		PCB-1254		0.12 U	0.20	0.12	0.10	ug/L						
		PCB-1260		0.12 U	0.20	0.12	0.10	ug/L						
		tetrachloro-m-xylene SUR		70				%			30	150		
		decachlorobiphenyl SUR		59				%			30	150		
SW3510C8082A	LCS17179	PCB-1016		0.57	0.20	0.12	0.10	ug/L	1	57	46	129		
		PCB-1221		0.12 U	0.20	0.12	0.10	ug/L						
		PCB-1232		0.12 U	0.20	0.12	0.10	ug/L						
		PCB-1242		0.12 U	0.20	0.12	0.10	ug/L						
		PCB-1248		0.12 U	0.20	0.12	0.10	ug/L						
		PCB-1254		0.12 U	0.20	0.12	0.10	ug/L						
		PCB-1260		0.71	0.20	0.12	0.10	ug/L	1	71	45	134		
		tetrachloro-m-xylene SUR		66				%			30	150		
		decachlorobiphenyl SUR		67				%			30	150		
SW3510C8082A	LCSD17179	PCB-1016		0.58	0.20	0.12	0.10	ug/L	1	58	46	129	2	20
		PCB-1221		0.12 U	0.20	0.12	0.10	ug/L						20
		PCB-1232		0.12 U	0.20	0.12	0.10	ug/L						20
		PCB-1242		0.12 U	0.20	0.12	0.10	ug/L						20
		PCB-1248		0.12 U	0.20	0.12	0.10	ug/L						20
		PCB-1254		0.12 U	0.20	0.12	0.10	ug/L						20
		PCB-1260		0.72	0.20	0.12	0.10	ug/L	1	72	45	134	0	20
		tetrachloro-m-xylene SUR		66				%			30	150		
		decachlorobiphenyl SUR		67				%			30	150		
SW3510C8082A	MS17179	PCB-1016	67798-001	0.61	0.20	0.12	0.10	ug/L	1	61	46	129		
		PCB-1221	67798-001	0.12 U	0.20	0.12	0.10	ug/L						
		PCB-1232	67798-001	0.12 U	0.20	0.12	0.10	ug/L						
		PCB-1242	67798-001	0.12 U	0.20	0.12	0.10	ug/L						
		PCB-1248	67798-001	0.12 U	0.20	0.12	0.10	ug/L						
		PCB-1254	67798-001	0.12 U	0.20	0.12	0.10	ug/L						
		PCB-1260	67798-001	0.72	0.20	0.12	0.10	ug/L	1	72	45	134		
		tetrachloro-m-xylene SUR	67798-001	62				%			30	150		
		decachlorobiphenyl SUR	67798-001	66				%			30	150		
SW3510C8082A	MS17179	PCB-1016	67798-007	0.69	0.20	0.12	0.10	ug/L	1	69	46	129		
		PCB-1221	67798-007	0.12 U	0.20	0.12	0.10	ug/L						
		PCB-1232	67798-007	0.12 U	0.20	0.12	0.10	ug/L						
		PCB-1242	67798-007	0.12 U	0.20	0.12	0.10	ug/L						
		PCB-1248	67798-007	0.12 U	0.20	0.12	0.10	ug/L						
		PCB-1254	67798-007	0.12 U	0.20	0.12	0.10	ug/L						
		PCB-1260	67798-007	0.76	0.20	0.12	0.10	ug/L	1	76	45	134		
		tetrachloro-m-xylene SUR	67798-007	73				%			30	150		
		decachlorobiphenyl SUR	67798-007	66				%			30	150		

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R	Limits		RPD	RPD Limit
SW3510C8082A	MSD17179	PCB-1016	67798-001	0.63	0.20	0.12	0.10	ug/L	1	63	46	129	2	50
		PCB-1221	67798-001	0.12 U	0.20	0.12	0.10	ug/L						50
		PCB-1232	67798-001	0.12 U	0.20	0.12	0.10	ug/L						50
		PCB-1242	67798-001	0.12 U	0.20	0.12	0.10	ug/L						50
		PCB-1248	67798-001	0.12 U	0.20	0.12	0.10	ug/L						50
		PCB-1254	67798-001	0.12 U	0.20	0.12	0.10	ug/L						50
		PCB-1260	67798-001	0.68	0.20	0.12	0.10	ug/L	1	68	45	134	5	50
		tetrachloro-m-xylene SUR	67798-001	61				%			30	150		
		decachlorobiphenyl SUR	67798-001	63				%			30	150		
SW3510C8082A	MSD17179	PCB-1016	67798-007	0.47	0.20	0.12	0.10	ug/L	1	47	46	129	38	50
		PCB-1221	67798-007	0.12 U	0.20	0.12	0.10	ug/L						50
		PCB-1232	67798-007	0.12 U	0.20	0.12	0.10	ug/L						50
		PCB-1242	67798-007	0.12 U	0.20	0.12	0.10	ug/L						50
		PCB-1248	67798-007	0.12 U	0.20	0.12	0.10	ug/L						50
		PCB-1254	67798-007	0.12 U	0.20	0.12	0.10	ug/L						50
		PCB-1260	67798-007	0.58	0.20	0.12	0.10	ug/L	1	58	45	134	26	50
		tetrachloro-m-xylene SUR	67798-007	55				%			30	150		
		decachlorobiphenyl SUR	67798-007	48				%			30	150		

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R	Limits	RPD	RPD Limit
SW3510C8270E	BLK17096	N-nitrosodimethylamine		1.0 U	2.0	1.0	0.21	ug/L					
		pyridine		1.0 U	2.0	1.0	0.60	ug/L					
		aniline		1.0 U	2.0	1.0	0.39	ug/L					
		phenol		1.0 U	2.0	1.0	0.34	ug/L					
		2-chlorophenol		1.0 U	5.0	1.0	0.29	ug/L					
		bis(2-chloroethyl)ether		1.0 U	2.0	1.0	0.35	ug/L					
		1,3-dichlorobenzene		1.0 U	2.0	1.0	0.41	ug/L					
		1,4-dichlorobenzene		1.0 U	2.0	1.0	0.37	ug/L					
		1,2-dichlorobenzene		1.0 U	2.0	1.0	0.36	ug/L					
		benzyl alcohol		1.0 U	2.0	1.0	0.84	ug/L					
		2-methylphenol		1.0 U	5.0	1.0	0.39	ug/L					
		2,2'-oxybis(1-chloropropane)		1.0 U	2.0	1.0	0.44	ug/L					
		hexachloroethane		1.0 U	2.0	1.0	0.53	ug/L					
		N-nitroso-di-N-propylamine		1.0 U	2.0	1.0	0.30	ug/L					
		4-methylphenol		1.5 U	2.0	1.5	1.3	ug/L					
		nitrobenzene		1.0 U	2.0	1.0	0.41	ug/L					
		isophorone		1.0 U	5.0	1.0	0.32	ug/L					
		2-nitrophenol		1.0 U	2.0	1.0	0.21	ug/L					
		2,4-dimethylphenol		1.0 U	5.0	1.0	0.44	ug/L					
		bis(2-chloroethoxy)methane		1.0 U	5.0	1.0	0.26	ug/L					
		2,4-dichlorophenol		1.0 U	5.0	1.0	0.19	ug/L					
		1,2,4-trichlorobenzene		1.0 U	5.0	1.0	0.34	ug/L					
		benzoic acid		45 U	50	45	20	ug/L					
		4-chloroaniline		1.0 U	2.0	1.0	0.41	ug/L					
		hexachlorobutadiene		1.0 U	2.0	1.0	0.57	ug/L					
		4-chloro-3-methylphenol		1.0 U	2.0	1.0	0.42	ug/L					
		hexachlorocyclopentadiene		4.0 U	10	4.0	1.6	ug/L					
		2,4,6-trichlorophenol		1.0 U	2.0	1.0	0.33	ug/L					
		2,4,5-trichlorophenol		1.0 U	2.0	1.0	0.28	ug/L					
		2-chloronaphthalene		1.0 U	5.0	1.0	0.34	ug/L					
		2-nitroaniline		1.0 U	2.0	1.0	0.72	ug/L					
		dimethylphthalate		1.0 U	5.0	1.0	0.41	ug/L					
		2,6-dinitrotoluene		1.0 U	5.0	1.0	0.42	ug/L					
		2,4-dinitrotoluene		1.0 U	5.0	1.0	0.52	ug/L					
		3-nitroaniline		1.5 U	2.0	1.5	1.0	ug/L					
		2,4-dinitrophenol		45 U	50	45	3.5	ug/L					
		dibenzofuran		0.40 U	0.50	0.40	0.37	ug/L					
		4-nitrophenol		5.0 U	10	5.0	1.6	ug/L					
		diethyl phthalate		1.0 U	5.0	1.0	0.30	ug/L					
		4-chlorophenyl phenyl ether		1.0 U	5.0	1.0	0.35	ug/L					
		4-nitroaniline		3.0 U	5.0	3.0	1.0	ug/L					
		4,6-dinitro-2-methylphenol		10 U	20	10	1.7	ug/L					
		azobenzene		1.0 U	2.0	1.0	0.25	ug/L					
		N-nitrosodiphenylamine		1.0 U	2.0	1.0	0.26	ug/L					
		4-bromophenyl phenyl ether		1.0 U	2.0	1.0	0.23	ug/L					
		hexachlorobenzene		1.0 U	2.0	1.0	0.25	ug/L					
		pentachlorophenol		5.0 U	10	5.0	2.6	ug/L					
		carbazole		1.0 U	2.0	1.0	0.32	ug/L					
		di-n-butylphthalate		1.0 U	5.0	1.0	0.54	ug/L					
		benzidine		25 U	30	25	20	ug/L					
		butyl benzyl phthalate		3.0 U	5.0	3.0	2.1	ug/L					
		3,3'-dichlorobenzidine		25 U	30	25	20	ug/L					
		bis(2-ethylhexyl)phthalate		3.0 U	5.0	3.0	2.4	ug/L					
		di-n-octyl phthalate		3.0 U	5.0	3.0	2.1	ug/L					

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R	Limits	RPD	RPD Limit
SW3510C8270E	BLK17096	2-fluorophenol SUR		35				%			21	100	
		phenol-D5 SUR		24				%			10	102	
		2,4,6-tribromophenol SUR		71				%			10	123	
		nitrobenzene-D5 SUR		59				%			35	114	
		2-fluorobiphenyl SUR		48				%			43	116	
		p-terphenyl-D14 SUR		76				%			33	141	

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R		Limits		RPD	RPD Limit
SW3510C8270E	LCS17096	N-nitrosodimethylamine		16	2.0	1.0	0.21	ug/L	40	39	*	43	121		
		pyridine		14	2.0	1.0	0.60	ug/L	40	35	*	40	140		
		aniline		20	2.0	1.0	0.39	ug/L	40	50		40	140		
		phenol		8.9	2.0	1.0	0.34	ug/L	40	22	*	72	132		
		2-chlorophenol		16	5.0	1.0	0.29	ug/L	40	41		38	117		
		bis(2-chloroethyl)ether		27	2.0	1.0	0.35	ug/L	40	68		43	118		
		1,3-dichlorobenzene		12	2.0	1.0	0.41	ug/L	40	30		28	110		
		1,4-dichlorobenzene		13	2.0	1.0	0.37	ug/L	40	32		29	112		
		1,2-dichlorobenzene		14	2.0	1.0	0.36	ug/L	40	36		33	111		
		benzyl alcohol		21	2.0	1.0	0.84	ug/L	40	53		31	112		
		2-methylphenol		17	5.0	1.0	0.39	ug/L	40	41		30	117		
		2,2'-oxybis(1-chloropropane)		36	2.0	1.0	0.44	ug/L	40	91		37	130		
		hexachloroethane		8.3	2.0	1.0	0.53	ug/L	40	21		21	115		
		N-nitroso-di-N-propylamine		27	2.0	1.0	0.30	ug/L	40	68		49	119		
		4-methylphenol		29	2.0	1.5	1.3	ug/L	80	36		25	120		
		nitrobenzene		26	2.0	1.0	0.41	ug/L	40	66		45	121		
		isophorone		30	5.0	1.0	0.32	ug/L	40	75		42	124		
		2-nitrophenol		22	2.0	1.0	0.21	ug/L	40	54		47	123		
		2,4-dimethylphenol		18	5.0	1.0	0.44	ug/L	40	46		31	124		
		bis(2-chloroethoxy)methane		29	5.0	1.0	0.26	ug/L	40	73		48	120		
		2,4-dichlorophenol		19	5.0	1.0	0.19	ug/L	40	48		47	121		
		1,2,4-trichlorobenzene		14	5.0	1.0	0.34	ug/L	40	35		29	116		
		benzoic acid		9.0 J	50	45	0.0010	ug/L	40	23	*	57	129		
		4-chloroaniline		26	2.0	1.0	0.41	ug/L	40	64		33	117		
		hexachlorobutadiene		8.7	2.0	1.0	0.57	ug/L	40	22		22	124		
		4-chloro-3-methylphenol		17	2.0	1.0	0.42	ug/L	40	43	*	52	119		
		hexachlorocyclopentadiene		11	10	4.0	1.6	ug/L	40	27	*	53	135		
		2,4,6-trichlorophenol		22	2.0	1.0	0.33	ug/L	40	56		50	125		
		2,4,5-trichlorophenol		22	2.0	1.0	0.28	ug/L	40	55		53	123		
		2-chloronaphthalene		23	5.0	1.0	0.34	ug/L	40	57		40	116		
		2-nitroaniline		27	2.0	1.0	0.72	ug/L	40	67		55	127		
		dimethylphthalate		9.1	5.0	1.0	0.41	ug/L	40	23	*	45	127		
		2,6-dinitrotoluene		29	5.0	1.0	0.42	ug/L	40	72		57	124		
		2,4-dinitrotoluene		28	5.0	1.0	0.52	ug/L	40	69		57	128		
		3-nitroaniline		27	2.0	1.5	1.0	ug/L	40	67		41	128		
		2,4-dinitrophenol		17 J	50	45	3.5	ug/L	40	41		23	143		
		dibenzofuran		28	0.50	0.40	0.37	ug/L	40	70		53	118		
		4-nitrophenol		9.0 J	10	5.0	1.6	ug/L	40	22	*	61	133		
		diethyl phthalate		21	5.0	1.0	0.30	ug/L	40	53	*	56	125		
		4-chlorophenyl phenyl ether		27	5.0	1.0	0.35	ug/L	40	67		53	121		
		4-nitroaniline		25	5.0	3.0	1.0	ug/L	40	62		38	126		
		4,6-dinitro-2-methylphenol		22	20	10	1.7	ug/L	40	55		44	137		
		azobenzene		30	2.0	1.0	0.25	ug/L	40	75		61	116		
		N-nitrosodiphenylamine		28	2.0	1.0	0.26	ug/L	40	69		51	123		
		4-bromophenyl phenyl ether		28	2.0	1.0	0.23	ug/L	40	69		55	124		
		hexachlorobenzene		27	2.0	1.0	0.25	ug/L	40	69		53	125		
		pentachlorophenol		26	10	5.0	2.6	ug/L	40	64		35	138		
		carbazole		30	2.0	1.0	0.32	ug/L	40	76		60	122		
		di-n-butylphthalate		28	5.0	1.0	0.54	ug/L	40	70		59	127		
		benzidine		32	30	25	20	ug/L	40	81		50	134		
		butyl benzyl phthalate		28	5.0	3.0	2.1	ug/L	40	71		53	134		
		3,3'-dichlorobenzidine		32	30	25	20	ug/L	40	80		27	129		
		bis(2-ethylhexyl)phthalate		28	5.0	3.0	2.4	ug/L	40	71		55	135		
		di-n-octyl phthalate		27	5.0	3.0	2.1	ug/L	40	67		51	140		

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R	Limits	RPD	RPD Limit
SW3510C8270E	LCS17096	2-fluorophenol SUR		29				%			21	100	
		phenol-D5 SUR		23				%			10	102	
		2,4,6-tribromophenol SUR		75				%			10	123	
		nitrobenzene-D5 SUR		71				%			35	114	
		2-fluorobiphenyl SUR		70				%			43	116	
		p-terphenyl-D14 SUR		83				%			33	141	

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R		Limits		RPD	RPD	Limit
SW3510C8270E	LCSD17096	N-nitrosodimethylamine		17	2.0	1.0	0.21	ug/L	40	44		43	121	11		20
		pyridine		15	2.0	1.0	0.60	ug/L	40	39	*	40	140	9		20
		aniline		21	2.0	1.0	0.39	ug/L	40	53		40	140	6		20
		phenol		12	2.0	1.0	0.34	ug/L	40	30	*	72	132	29	*	20
		2-chlorophenol		25	5.0	1.0	0.29	ug/L	40	63		38	117	43	*	20
		bis(2-chloroethyl)ether		27	2.0	1.0	0.35	ug/L	40	67		43	118	3		20
		1,3-dichlorobenzene		9.9	2.0	1.0	0.41	ug/L	40	25	*	28	110	18		20
		1,4-dichlorobenzene		11	2.0	1.0	0.37	ug/L	40	26	*	29	112	19		20
		1,2-dichlorobenzene		12	2.0	1.0	0.36	ug/L	40	30	*	32	111	19		20
		benzyl alcohol		22	2.0	1.0	0.84	ug/L	40	55		31	112	4		20
		2-methylphenol		24	5.0	1.0	0.39	ug/L	40	60		30	117	37	*	20
		2,2'-oxybis(1-chloropropane)		34	2.0	1.0	0.44	ug/L	40	86		37	130	6		20
		hexachloroethane		7.4	2.0	1.0	0.53	ug/L	40	18	*	21	115	12		20
		N-nitroso-di-N-propylamine		26	2.0	1.0	0.30	ug/L	40	65		49	119	5		20
		4-methylphenol		44	2.0	1.5	1.3	ug/L	80	55		25	120	41	*	20
		nitrobenzene		26	2.0	1.0	0.41	ug/L	40	64		45	121	3		20
		isophorone		30	5.0	1.0	0.32	ug/L	40	75		42	124	1		20
		2-nitrophenol		27	2.0	1.0	0.21	ug/L	40	68		47	123	23	*	20
		2,4-dimethylphenol		22	5.0	1.0	0.44	ug/L	40	55		31	124	17		20
		bis(2-chloroethoxy)methane		28	5.0	1.0	0.26	ug/L	40	71		48	120	2		20
		2,4-dichlorophenol		28	5.0	1.0	0.19	ug/L	40	70		47	121	36	*	20
		1,2,4-trichlorobenzene		12	5.0	1.0	0.34	ug/L	40	30		29	116	17		20
		benzoic acid		13 J	50	45	0.0010	ug/L	40	33	*	57	129	38	*	20
		4-chloroaniline		26	2.0	1.0	0.41	ug/L	40	65		33	117	1		20
		hexachlorobutadiene		8.1	2.0	1.0	0.57	ug/L	40	20	*	22	124	7		20
		4-chloro-3-methylphenol		27	2.0	1.0	0.42	ug/L	40	66		52	119	42	*	20
		hexachlorocyclopentadiene		8.7 J	10	4.0	1.6	ug/L	40	22	*	53	135	21	*	20
		2,4,6-trichlorophenol		29	2.0	1.0	0.33	ug/L	40	72		50	125	25	*	20
		2,4,5-trichlorophenol		29	2.0	1.0	0.28	ug/L	40	72		53	123	26	*	20
		2-chloronaphthalene		20	5.0	1.0	0.34	ug/L	40	50		40	116	14		20
		2-nitroaniline		28	2.0	1.0	0.72	ug/L	40	70		55	127	4		20
		dimethylphthalate		9.9	5.0	1.0	0.41	ug/L	40	25	*	45	127	9		20
		2,6-dinitrotoluene		29	5.0	1.0	0.42	ug/L	40	72		57	124	0		20
		2,4-dinitrotoluene		27	5.0	1.0	0.52	ug/L	40	68		57	128	1		20
		3-nitroaniline		29	2.0	1.5	1.0	ug/L	40	72		41	128	7		20
		2,4-dinitrophenol		23 J	50	45	3.5	ug/L	40	56		23	143	31	*	20
		dibenzofuran		26	0.50	0.40	0.37	ug/L	40	66		53	118	6		20
		4-nitrophenol		13	10	5.0	1.6	ug/L	40	32	*	61	133	35	*	20
		diethyl phthalate		22	5.0	1.0	0.30	ug/L	40	54	*	56	125	2		20
		4-chlorophenyl phenyl ether		26	5.0	1.0	0.35	ug/L	40	65		53	121	3		20
		4-nitroaniline		27	5.0	3.0	1.0	ug/L	40	67		38	126	9		20
		4,6-dinitro-2-methylphenol		27	20	10	1.7	ug/L	40	66		44	137	18		20
		azobenzene		30	2.0	1.0	0.25	ug/L	40	76		61	116	1		20
		N-nitrosodiphenylamine		28	2.0	1.0	0.26	ug/L	40	71		51	123	3		20
		4-bromophenyl phenyl ether		28	2.0	1.0	0.23	ug/L	40	71		55	124	2		20
		hexachlorobenzene		28	2.0	1.0	0.25	ug/L	40	70		53	125	2		20
		pentachlorophenol		29	10	5.0	2.6	ug/L	40	72		35	138	12		20
		carbazole		30	2.0	1.0	0.32	ug/L	40	76		60	122	0		20
		di-n-butylphthalate		28	5.0	1.0	0.54	ug/L	40	70		59	127	1		20
		benzidine		39	30	25	20	ug/L	40	98		50	134	20		20
		butyl benzyl phthalate		28	5.0	3.0	2.1	ug/L	40	71		53	134	1		20
		3,3'-dichlorobenzidine		32	30	25	20	ug/L	40	80		27	129	1		20
		bis(2-ethylhexyl)phthalate		29	5.0	3.0	2.4	ug/L	40	73		55	135	3		20
		di-n-octyl phthalate		27	5.0	3.0	2.1	ug/L	40	68		51	140	2		20

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R	Limits	RPD	RPD Limit
SW3510C8270E	LCSD17096	2-fluorophenol SUR		44				%			21	100	
		phenol-D5 SUR		29				%			10	102	
		2,4,6-tribromophenol SUR		85				%			10	123	
		nitrobenzene-D5 SUR		68				%			35	114	
		2-fluorobiphenyl SUR		69				%			43	116	
		p-terphenyl-D14 SUR		88				%			33	141	

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R		Limits	RPD	RPD Limit
SW3510C8270E	MS17096	N-nitrosodimethylamine	67798-001	17	2.0	1.0	0.21	ug/L	40	43		43	121	
		pyridine	67798-001	17	2.0	1.0	0.60	ug/L	40	42		40	140	
		aniline	67798-001	21	2.0	1.0	0.39	ug/L	40	52		40	140	
		phenol	67798-001	8.6	2.0	1.0	0.34	ug/L	40	22	*	72	132	
		2-chlorophenol	67798-001	19	5.0	1.0	0.29	ug/L	40	48		38	117	
		bis(2-chloroethyl)ether	67798-001	28	2.0	1.0	0.35	ug/L	40	70		43	118	
		1,3-dichlorobenzene	67798-001	13	2.0	1.0	0.41	ug/L	40	32		28	110	
		1,4-dichlorobenzene	67798-001	14	2.0	1.0	0.37	ug/L	40	34		29	112	
		1,2-dichlorobenzene	67798-001	16	2.0	1.0	0.36	ug/L	40	39		32	111	
		benzyl alcohol	67798-001	22	2.0	1.0	0.84	ug/L	40	55		31	112	
		2-methylphenol	67798-001	21	5.0	1.0	0.39	ug/L	40	52		30	117	
		2,2'-oxybis(1-chloropropane)	67798-001	37	2.0	1.0	0.44	ug/L	40	93		37	130	
		hexachloroethane	67798-001	9.0	2.0	1.0	0.53	ug/L	40	22		21	115	
		N-nitroso-di-N-propylamine	67798-001	27	2.0	1.0	0.30	ug/L	40	67		49	119	
		4-methylphenol	67798-001	35	2.0	1.5	1.3	ug/L	80	44		25	120	
		nitrobenzene	67798-001	28	2.0	1.0	0.41	ug/L	40	69		45	121	
		isophorone	67798-001	31	5.0	1.0	0.32	ug/L	40	77		42	124	
		2-nitrophenol	67798-001	23	2.0	1.0	0.21	ug/L	40	57		47	123	
		2,4-dimethylphenol	67798-001	20	5.0	1.0	0.44	ug/L	40	51		31	124	
		bis(2-chloroethoxy)methane	67798-001	30	5.0	1.0	0.26	ug/L	40	75		48	120	
		2,4-dichlorophenol	67798-001	21	5.0	1.0	0.19	ug/L	40	52		47	121	
		1,2,4-trichlorobenzene	67798-001	20	5.0	1.0	0.34	ug/L	40	49		29	116	
		benzoic acid	67798-001	11 J	50	45	0.0010	ug/L	40	27	*	57	129	
		4-chloroaniline	67798-001	26	2.0	1.0	0.41	ug/L	40	65		33	117	
		hexachlorobutadiene	67798-001	14	2.0	1.0	0.57	ug/L	40	34		22	124	
		4-chloro-3-methylphenol	67798-001	11	2.0	1.0	0.42	ug/L	40	28	*	52	119	
		hexachlorocyclopentadiene	67798-001	17	10	4.0	1.6	ug/L	40	42	*	53	135	
		2,4,6-trichlorophenol	67798-001	22	2.0	1.0	0.33	ug/L	40	55		50	125	
		2,4,5-trichlorophenol	67798-001	22	2.0	1.0	0.28	ug/L	40	56		53	123	
		2-chloronaphthalene	67798-001	25	5.0	1.0	0.34	ug/L	40	63		40	116	
		2-nitroaniline	67798-001	28	2.0	1.0	0.72	ug/L	40	70		55	127	
		dimethylphthalate	67798-001	27	5.0	1.0	0.41	ug/L	40	69		45	127	
		2,6-dinitrotoluene	67798-001	30	5.0	1.0	0.42	ug/L	40	75		57	124	
		2,4-dinitrotoluene	67798-001	29	5.0	1.0	0.52	ug/L	40	71		57	128	
		3-nitroaniline	67798-001	29	2.0	1.5	1.0	ug/L	40	73		41	128	
		2,4-dinitrophenol	67798-001	19 J	50	45	3.5	ug/L	40	49		23	143	
		dibenzofuran	67798-001	29	0.50	0.40	0.37	ug/L	40	72		53	118	
		4-nitrophenol	67798-001	10	10	5.0	1.6	ug/L	40	26	*	61	133	
		diethyl phthalate	67798-001	30	5.0	1.0	0.30	ug/L	40	75		56	125	
		4-chlorophenyl phenyl ether	67798-001	28	5.0	1.0	0.35	ug/L	40	69		53	121	
		4-nitroaniline	67798-001	29	5.0	3.0	1.0	ug/L	40	73		38	126	
		4,6-dinitro-2-methylphenol	67798-001	25	20	10	1.7	ug/L	40	62		44	137	
		azobenzene	67798-001	30	2.0	1.0	0.25	ug/L	40	75		61	116	
		N-nitrosodiphenylamine	67798-001	29	2.0	1.0	0.26	ug/L	40	73		51	123	
		4-bromophenyl phenyl ether	67798-001	29	2.0	1.0	0.23	ug/L	40	71		55	124	
		hexachlorobenzene	67798-001	28	2.0	1.0	0.25	ug/L	40	71		53	125	
		pentachlorophenol	67798-001	22	10	5.0	2.6	ug/L	40	55		35	138	
		carbazole	67798-001	32	2.0	1.0	0.32	ug/L	40	80		60	122	
		di-n-butylphthalate	67798-001	30	5.0	1.0	0.54	ug/L	40	75		59	127	
		benzidine	67798-001	29 J	30	25	20	ug/L	40	71		50	134	
		butyl benzyl phthalate	67798-001	29	5.0	3.0	2.1	ug/L	40	71		53	134	
		3,3'-dichlorobenzidine	67798-001	31	30	25	20	ug/L	40	76		27	129	
		bis(2-ethylhexyl)phthalate	67798-001	28	5.0	3.0	2.4	ug/L	40	71		55	135	
		di-n-octyl phthalate	67798-001	28	5.0	3.0	2.1	ug/L	40	69		51	140	

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R	Limits	RPD	RPD Limit
SW3510C8270E	MS17096	2-fluorophenol SUR	67798-001	32				%			21	100	
		phenol-D5 SUR	67798-001	21				%			10	102	
		2,4,6-tribromophenol SUR	67798-001	69				%			10	123	
		nitrobenzene-D5 SUR	67798-001	74				%			35	114	
		2-fluorobiphenyl SUR	67798-001	69				%			43	116	
		p-terphenyl-D14 SUR	67798-001	89				%			33	141	

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R		Limits		RPD	RPD Limit
SW3510C8270E	MS17096	N-nitrosodimethylamine	67798-007	16	2.0	1.0	0.21	ug/L	40	39	*	43	121		
		pyridine	67798-007	14	2.0	1.0	0.60	ug/L	40	35	*	40	140		
		aniline	67798-007	18	2.0	1.0	0.39	ug/L	40	45		40	140		
		phenol	67798-007	9.3	2.0	1.0	0.34	ug/L	40	23	*	72	132		
		2-chlorophenol	67798-007	18	5.0	1.0	0.29	ug/L	40	45		38	117		
		bis(2-chloroethyl)ether	67798-007	26	2.0	1.0	0.35	ug/L	40	65		43	118		
		1,3-dichlorobenzene	67798-007	9.2	2.0	1.0	0.41	ug/L	40	23	*	28	110		
		1,4-dichlorobenzene	67798-007	9.9	2.0	1.0	0.37	ug/L	40	25	*	29	112		
		1,2-dichlorobenzene	67798-007	11	2.0	1.0	0.36	ug/L	40	29	*	32	111		
		benzyl alcohol	67798-007	20	2.0	1.0	0.84	ug/L	40	49		31	112		
		2-methylphenol	67798-007	18	5.0	1.0	0.39	ug/L	40	45		30	117		
		2,2'-oxybis(1-chloropropane)	67798-007	33	2.0	1.0	0.44	ug/L	40	83		37	130		
		hexachloroethane	67798-007	6.0	2.0	1.0	0.53	ug/L	40	15	*	21	115		
		N-nitroso-di-N-propylamine	67798-007	25	2.0	1.0	0.30	ug/L	40	63		49	119		
		4-methylphenol	67798-007	33	2.0	1.5	1.3	ug/L	80	41		25	120		
		nitrobenzene	67798-007	25	2.0	1.0	0.41	ug/L	40	62		45	121		
		isophorone	67798-007	29	5.0	1.0	0.32	ug/L	40	72		42	124		
		2-nitrophenol	67798-007	23	2.0	1.0	0.21	ug/L	40	58		47	123		
		2,4-dimethylphenol	67798-007	18	5.0	1.0	0.44	ug/L	40	45		31	124		
		bis(2-chloroethoxy)methane	67798-007	28	5.0	1.0	0.26	ug/L	40	69		48	120		
		2,4-dichlorophenol	67798-007	22	5.0	1.0	0.19	ug/L	40	54		47	121		
		1,2,4-trichlorobenzene	67798-007	15	5.0	1.0	0.34	ug/L	40	38		29	116		
		benzoic acid	67798-007	4.8 J	50	45	0.0010	ug/L	40	12	*	57	129		
		4-chloroaniline	67798-007	23	2.0	1.0	0.41	ug/L	40	58		33	117		
		hexachlorobutadiene	67798-007	9.4	2.0	1.0	0.57	ug/L	40	24		22	124		
		4-chloro-3-methylphenol	67798-007	18	2.0	1.0	0.42	ug/L	40	45	*	52	119		
		hexachlorocyclopentadiene	67798-007	14	10	4.0	1.6	ug/L	40	35	*	53	135		
		2,4,6-trichlorophenol	67798-007	24	2.0	1.0	0.33	ug/L	40	60		50	125		
		2,4,5-trichlorophenol	67798-007	24	2.0	1.0	0.28	ug/L	40	61		53	123		
		2-chloronaphthalene	67798-007	23	5.0	1.0	0.34	ug/L	40	57		40	116		
		2-nitroaniline	67798-007	26	2.0	1.0	0.72	ug/L	40	65		55	127		
		dimethylphthalate	67798-007	17	5.0	1.0	0.41	ug/L	40	44	*	45	127		
		2,6-dinitrotoluene	67798-007	27	5.0	1.0	0.42	ug/L	40	68		57	124		
		2,4-dinitrotoluene	67798-007	25	5.0	1.0	0.52	ug/L	40	63		57	128		
		3-nitroaniline	67798-007	25	2.0	1.5	1.0	ug/L	40	62		41	128		
		2,4-dinitrophenol	67798-007	17 J	50	45	3.5	ug/L	40	42		23	143		
		dibenzofuran	67798-007	26	0.50	0.40	0.37	ug/L	40	65		53	118		
		4-nitrophenol	67798-007	8.9 J	10	5.0	1.6	ug/L	40	22	*	61	133		
		diethyl phthalate	67798-007	25	5.0	1.0	0.30	ug/L	40	62		56	125		
		4-chlorophenyl phenyl ether	67798-007	25	5.0	1.0	0.35	ug/L	40	62		53	121		
		4-nitroaniline	67798-007	24	5.0	3.0	1.0	ug/L	40	60		38	126		
		4,6-dinitro-2-methylphenol	67798-007	23	20	10	1.7	ug/L	40	58		44	137		
		azobenzene	67798-007	29	2.0	1.0	0.25	ug/L	40	71		61	116		
		N-nitrosodiphenylamine	67798-007	27	2.0	1.0	0.26	ug/L	40	67		51	123		
		4-bromophenyl phenyl ether	67798-007	26	2.0	1.0	0.23	ug/L	40	66		55	124		
		hexachlorobenzene	67798-007	25	2.0	1.0	0.25	ug/L	40	63		53	125		
		pentachlorophenol	67798-007	20	10	5.0	2.6	ug/L	40	51		35	138		
		carbazole	67798-007	28	2.0	1.0	0.32	ug/L	40	70		60	122		
		di-n-butylphthalate	67798-007	27	5.0	1.0	0.54	ug/L	40	66		59	127		
		benzidine	67798-007	26 J	30	25	20	ug/L	40	66		50	134		
		butyl benzyl phthalate	67798-007	27	5.0	3.0	2.1	ug/L	40	68		53	134		
		3,3'-dichlorobenzidine	67798-007	27 J	30	25	20	ug/L	40	68		27	129		
		bis(2-ethylhexyl)phthalate	67798-007	27	5.0	3.0	2.4	ug/L	40	68		55	135		
		di-n-octyl phthalate	67798-007	27	5.0	3.0	2.1	ug/L	40	68		51	140		

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R	Limits	RPD	RPD Limit
SW3510C8270E	MS17096	2-fluorophenol SUR	67798-007	31				%			21	100	
		phenol-D5 SUR	67798-007	23				%			10	102	
		2,4,6-tribromophenol SUR	67798-007	76				%			10	123	
		nitrobenzene-D5 SUR	67798-007	67				%			35	114	
		2-fluorobiphenyl SUR	67798-007	64				%			43	116	
		p-terphenyl-D14 SUR	67798-007	82				%			33	141	

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R		Limits		RPD	RPD Limit
SW3510C8270E	MSD17096	N-nitrosodimethylamine	67798-001	17	2.0	1.0	0.21	ug/L	40	41	*	43	121	5	20
		pyridine	67798-001	16	2.0	1.0	0.60	ug/L	40	39	*	40	140	8	20
		aniline	67798-001	20	2.0	1.0	0.39	ug/L	40	49		40	140	6	20
		phenol	67798-001	7.7	2.0	1.0	0.34	ug/L	40	19	*	72	132	12	20
		2-chlorophenol	67798-001	19	5.0	1.0	0.29	ug/L	40	48		38	117	1	20
		bis(2-chloroethyl)ether	67798-001	26	2.0	1.0	0.35	ug/L	40	65		43	118	7	20
		1,3-dichlorobenzene	67798-001	14	2.0	1.0	0.41	ug/L	40	36		28	110	12	20
		1,4-dichlorobenzene	67798-001	15	2.0	1.0	0.37	ug/L	40	39		29	112	12	20
		1,2-dichlorobenzene	67798-001	17	2.0	1.0	0.36	ug/L	40	43		32	111	10	20
		benzyl alcohol	67798-001	21	2.0	1.0	0.84	ug/L	40	53		31	112	4	20
		2-methylphenol	67798-001	20	5.0	1.0	0.39	ug/L	40	49		30	117	6	20
		2,2'-oxybis(1-chloropropane)	67798-001	35	2.0	1.0	0.44	ug/L	40	88		37	130	6	20
		hexachloroethane	67798-001	11	2.0	1.0	0.53	ug/L	40	28		21	115	23 *	20
		N-nitroso-di-N-propylamine	67798-001	26	2.0	1.0	0.30	ug/L	40	64		49	119	5	20
		4-methylphenol	67798-001	34	2.0	1.5	1.3	ug/L	80	42		25	120	4	20
		nitrobenzene	67798-001	25	2.0	1.0	0.41	ug/L	40	63		45	121	10	20
		isophorone	67798-001	29	5.0	1.0	0.32	ug/L	40	72		42	124	7	20
		2-nitrophenol	67798-001	23	2.0	1.0	0.21	ug/L	40	58		47	123	2	20
		2,4-dimethylphenol	67798-001	19	5.0	1.0	0.44	ug/L	40	48		31	124	6	20
		bis(2-chloroethoxy)methane	67798-001	28	5.0	1.0	0.26	ug/L	40	69		48	120	8	20
		2,4-dichlorophenol	67798-001	20	5.0	1.0	0.19	ug/L	40	51		47	121	3	20
		1,2,4-trichlorobenzene	67798-001	20	5.0	1.0	0.34	ug/L	40	50		29	116	3	20
		benzoic acid	67798-001	7.5 J	50	45	0.0010	ug/L	40	19	*	57	129	35	20
		4-chloroaniline	67798-001	25	2.0	1.0	0.41	ug/L	40	62		33	117	5	20
		hexachlorobutadiene	67798-001	16	2.0	1.0	0.57	ug/L	40	39		22	124	12	20
		4-chloro-3-methylphenol	67798-001	11	2.0	1.0	0.42	ug/L	40	28	*	52	119	2	20
		hexachlorocyclopentadiene	67798-001	17	10	4.0	1.6	ug/L	40	41	*	53	135	1	20
		2,4,6-trichlorophenol	67798-001	22	2.0	1.0	0.33	ug/L	40	56		50	125	0	20
		2,4,5-trichlorophenol	67798-001	23	2.0	1.0	0.28	ug/L	40	57		53	123	1	20
		2-chloronaphthalene	67798-001	24	5.0	1.0	0.34	ug/L	40	60		40	116	4	20
		2-nitroaniline	67798-001	27	2.0	1.0	0.72	ug/L	40	68		55	127	2	20
		dimethylphthalate	67798-001	27	5.0	1.0	0.41	ug/L	40	67		45	127	2	20
		2,6-dinitrotoluene	67798-001	28	5.0	1.0	0.42	ug/L	40	71		57	124	6	20
		2,4-dinitrotoluene	67798-001	28	5.0	1.0	0.52	ug/L	40	70		57	128	2	20
		3-nitroaniline	67798-001	28	2.0	1.5	1.0	ug/L	40	71		41	128	3	20
		2,4-dinitrophenol	67798-001	22 J	50	45	3.5	ug/L	40	54		23	143	10	20
		dibenzofuran	67798-001	28	0.50	0.40	0.37	ug/L	40	69		53	118	4	20
		4-nitrophenol	67798-001	11	10	5.0	1.6	ug/L	40	26	*	61	133	1	20
		diethyl phthalate	67798-001	29	5.0	1.0	0.30	ug/L	40	73		56	125	4	20
		4-chlorophenyl phenyl ether	67798-001	27	5.0	1.0	0.35	ug/L	40	67		53	121	4	20
		4-nitroaniline	67798-001	28	5.0	3.0	1.0	ug/L	40	71		38	126	3	20
		4,6-dinitro-2-methylphenol	67798-001	26	20	10	1.7	ug/L	40	64		44	137	4	20
		azobenzene	67798-001	29	2.0	1.0	0.25	ug/L	40	72		61	116	4	20
		N-nitrosodiphenylamine	67798-001	28	2.0	1.0	0.26	ug/L	40	69		51	123	5	20
		4-bromophenyl phenyl ether	67798-001	28	2.0	1.0	0.23	ug/L	40	70		55	124	3	20
		hexachlorobenzene	67798-001	28	2.0	1.0	0.25	ug/L	40	70		53	125	2	20
		pentachlorophenol	67798-001	24	10	5.0	2.6	ug/L	40	59		35	138	8	20
		carbazole	67798-001	31	2.0	1.0	0.32	ug/L	40	77		60	122	4	20
		di-n-butylphthalate	67798-001	29	5.0	1.0	0.54	ug/L	40	73		59	127	2	20
		benzidine	67798-001	25 J	30	25	20	ug/L	40	62		50	134	14	20
		butyl benzyl phthalate	67798-001	28	5.0	3.0	2.1	ug/L	40	69		53	134	3	20
		3,3'-dichlorobenzidine	67798-001	30	30	25	20	ug/L	40	76		27	129	1	20
		bis(2-ethylhexyl)phthalate	67798-001	28	5.0	3.0	2.4	ug/L	40	71		55	135	0	20
		di-n-octyl phthalate	67798-001	27	5.0	3.0	2.1	ug/L	40	67		51	140	3	20

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R	Limits	RPD	RPD Limit
SW3510C8270E	MSD17096	2-fluorophenol SUR	67798-001	30				%			21	100	
		phenol-D5 SUR	67798-001	19				%			10	102	
		2,4,6-tribromophenol SUR	67798-001	70				%			10	123	
		nitrobenzene-D5 SUR	67798-001	67				%			35	114	
		2-fluorobiphenyl SUR	67798-001	65				%			43	116	
		p-terphenyl-D14 SUR	67798-001	84				%			33	141	

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R		Limits		RPD	RPD Limit
SW3510C8270E	MSD17096	N-nitrosodimethylamine	67798-007	16	2.0	1.0	0.21	ug/L	40	39	*	43	121	1	20
		pyridine	67798-007	13	2.0	1.0	0.60	ug/L	40	33	*	40	140	6	20
		aniline	67798-007	18	2.0	1.0	0.39	ug/L	40	46		40	140	2	20
		phenol	67798-007	8.8	2.0	1.0	0.34	ug/L	40	22	*	72	132	5	20
		2-chlorophenol	67798-007	15	5.0	1.0	0.29	ug/L	40	38		38	117	17	20
		bis(2-chloroethyl)ether	67798-007	25	2.0	1.0	0.35	ug/L	40	62		43	118	4	20
		1,3-dichlorobenzene	67798-007	11	2.0	1.0	0.41	ug/L	40	28		28	110	18	20
		1,4-dichlorobenzene	67798-007	12	2.0	1.0	0.37	ug/L	40	30		29	112	19	20
		1,2-dichlorobenzene	67798-007	14	2.0	1.0	0.36	ug/L	40	35		32	111	19	20
		benzyl alcohol	67798-007	19	2.0	1.0	0.84	ug/L	40	48		31	112	2	20
		2-methylphenol	67798-007	17	5.0	1.0	0.39	ug/L	40	42		30	117	7	20
		2,2'-oxybis(1-chloropropane)	67798-007	33	2.0	1.0	0.44	ug/L	40	83		37	130	0	20
		hexachloroethane	67798-007	8.0	2.0	1.0	0.53	ug/L	40	20	*	21	115	28	* 20
		N-nitroso-di-N-propylamine	67798-007	25	2.0	1.0	0.30	ug/L	40	63		49	119	0	20
		4-methylphenol	67798-007	31	2.0	1.5	1.3	ug/L	80	38		25	120	8	20
		nitrobenzene	67798-007	24	2.0	1.0	0.41	ug/L	40	61		45	121	2	20
		isophorone	67798-007	28	5.0	1.0	0.32	ug/L	40	70		42	124	3	20
		2-nitrophenol	67798-007	20	2.0	1.0	0.21	ug/L	40	50		47	123	14	20
		2,4-dimethylphenol	67798-007	17	5.0	1.0	0.44	ug/L	40	43		31	124	4	20
		bis(2-chloroethoxy)methane	67798-007	26	5.0	1.0	0.26	ug/L	40	66		48	120	5	20
		2,4-dichlorophenol	67798-007	18	5.0	1.0	0.19	ug/L	40	44	*	47	121	20	20
		1,2,4-trichlorobenzene	67798-007	18	5.0	1.0	0.34	ug/L	40	44		29	116	14	20
		benzoic acid	67798-007	10 J	50	45	0.0010	ug/L	40	26	*	57	129	74	20
		4-chloroaniline	67798-007	24	2.0	1.0	0.41	ug/L	40	59		33	117	2	20
		hexachlorobutadiene	67798-007	12	2.0	1.0	0.57	ug/L	40	30		22	124	23	* 20
		4-chloro-3-methylphenol	67798-007	15	2.0	1.0	0.42	ug/L	40	38	*	52	119	17	20
		hexachlorocyclopentadiene	67798-007	14	10	4.0	1.6	ug/L	40	34	*	53	135	1	20
		2,4,6-trichlorophenol	67798-007	21	2.0	1.0	0.33	ug/L	40	51		50	125	15	20
		2,4,5-trichlorophenol	67798-007	20	2.0	1.0	0.28	ug/L	40	50	*	53	123	20	20
		2-chloronaphthalene	67798-007	24	5.0	1.0	0.34	ug/L	40	59		40	116	2	20
		2-nitroaniline	67798-007	25	2.0	1.0	0.72	ug/L	40	63		55	127	4	20
		dimethylphthalate	67798-007	17	5.0	1.0	0.41	ug/L	40	44	*	45	127	0	20
		2,6-dinitrotoluene	67798-007	28	5.0	1.0	0.42	ug/L	40	69		57	124	2	20
		2,4-dinitrotoluene	67798-007	27	5.0	1.0	0.52	ug/L	40	68		57	128	7	20
		3-nitroaniline	67798-007	25	2.0	1.5	1.0	ug/L	40	62		41	128	1	20
		2,4-dinitrophenol	67798-007	16 J	50	45	3.5	ug/L	40	40		23	143	5	20
		dibenzofuran	67798-007	27	0.50	0.40	0.37	ug/L	40	68		53	118	5	20
		4-nitrophenol	67798-007	9.0 J	10	5.0	1.6	ug/L	40	22	*	61	133	1	20
		diethyl phthalate	67798-007	26	5.0	1.0	0.30	ug/L	40	64		56	125	4	20
		4-chlorophenyl phenyl ether	67798-007	25	5.0	1.0	0.35	ug/L	40	64		53	121	3	20
		4-nitroaniline	67798-007	24	5.0	3.0	1.0	ug/L	40	61		38	126	1	20
		4,6-dinitro-2-methylphenol	67798-007	22	20	10	1.7	ug/L	40	54		44	137	7	20
		azobenzene	67798-007	28	2.0	1.0	0.25	ug/L	40	70		61	116	2	20
		N-nitrosodiphenylamine	67798-007	26	2.0	1.0	0.26	ug/L	40	66		51	123	2	20
		4-bromophenyl phenyl ether	67798-007	25	2.0	1.0	0.23	ug/L	40	64		55	124	3	20
		hexachlorobenzene	67798-007	24	2.0	1.0	0.25	ug/L	40	61		53	125	4	20
		pentachlorophenol	67798-007	27	10	5.0	2.6	ug/L	40	66		35	138	26	* 20
		carbazole	67798-007	29	2.0	1.0	0.32	ug/L	40	74		60	122	5	20
		di-n-butylphthalate	67798-007	27	5.0	1.0	0.54	ug/L	40	68		59	127	2	20
		benzidine	67798-007	32	30	25	20	ug/L	40	80		50	134	20	20
		butyl benzyl phthalate	67798-007	26	5.0	3.0	2.1	ug/L	40	65		53	134	5	20
		3,3'-dichlorobenzidine	67798-007	26 J	30	25	20	ug/L	40	65		27	129	4	20
		bis(2-ethylhexyl)phthalate	67798-007	25	5.0	3.0	2.4	ug/L	40	63		55	135	7	20
		di-n-octyl phthalate	67798-007	27	5.0	3.0	2.1	ug/L	40	66		51	140	3	20

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R	Limits	RPD	RPD Limit
SW3510C8270E	MSD17096	2-fluorophenol SUR	67798-007	28				%			21	100	
		phenol-D5 SUR	67798-007	22				%			10	102	
		2,4,6-tribromophenol SUR	67798-007	71				%			10	123	
		nitrobenzene-D5 SUR	67798-007	65				%			35	114	
		2-fluorobiphenyl SUR	67798-007	64				%			43	116	
		p-terphenyl-D14 SUR	67798-007	77				%			33	141	

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R	Limits	RPD	RPD Limit
SW3005A6020A	BLK17175	Silver		0.00050 U	0.0050	0.00050	0.00011	mg/L					
		Aluminum		0.025 U	0.050	0.025	0.010	mg/L					
		Arsenic		0.0010 U	0.0050	0.0010	0.00067	mg/L					
		Barium		0.0010 U	0.010	0.0010	0.00076	mg/L					
		Beryllium		0.00050 U	0.0010	0.00050	0.00010	mg/L					
		Cadmium		0.00050 U	0.0010	0.00050	0.00014	mg/L					
		Cobalt		0.00010 U	0.010	0.00010	0.000020	mg/L					
		Chromium		0.025 U	0.050	0.025	0.020	mg/L					
		Copper		0.0075 U	0.010	0.0075	0.0054	mg/L					
		Iron		0.030 U	0.050	0.030	0.029	mg/L					
		Potassium		0.10 U	0.50	0.10	0.039	mg/L					
		Magnesium		0.020 U	0.10	0.020	0.0073	mg/L					
		Manganese		0.0050 U	0.010	0.0050	0.0016	mg/L					
		Sodium		0.050 U	0.10	0.050	0.034	mg/L					
		Nickel		0.025 U	0.050	0.025	0.013	mg/L					
		Lead		0.00050 U	0.0050	0.00050	0.00011	mg/L					
		Antimony		0.00050 U	0.0010	0.00050	0.00014	mg/L					
		Selenium		0.0050 U	0.010	0.0050	0.0037	mg/L					
		Thallium		0.00080 U	0.0010	0.00080	0.00068	mg/L					
		Vanadium		0.0050 U	0.010	0.0050	0.0018	mg/L					
		Zinc		0.0040 U	0.010	0.0040	0.0021	mg/L					
SW3005A6020A	LCS17175	Silver		0.26	0.0050	0.00050	0.00011	mg/L	0.25	105	85	116	
		Aluminum		0.50	0.050	0.025	0.010	mg/L	0.5	99	84	117	
		Arsenic		0.47	0.0050	0.0010	0.00067	mg/L	0.5	95	84	116	
		Barium		0.52	0.010	0.0010	0.00076	mg/L	0.5	104	86	114	
		Beryllium		0.49	0.0010	0.00050	0.00010	mg/L	0.5	98	83	121	
		Cadmium		0.52	0.0010	0.00050	0.00014	mg/L	0.5	103	87	115	
		Cobalt		0.50	0.010	0.00050	0.00028	mg/L	0.5	100	86	115	
		Chromium		0.50	0.050	0.025	0.020	mg/L	0.5	99	85	116	
		Copper		0.50	0.010	0.0075	0.0054	mg/L	0.5	101	85	118	
		Iron		0.48	0.050	0.030	0.029	mg/L	0.5	95	87	118	
		Potassium		4.8	0.50	0.10	0.039	mg/L	5	96	87	115	
		Magnesium		0.49	0.10	0.020	0.0073	mg/L	0.5	98	83	118	
		Manganese		0.50	0.010	0.0050	0.0016	mg/L	0.5	101	87	115	
		Sodium		4.8	0.10	0.050	0.034	mg/L	5	95	85	117	
		Nickel		0.50	0.050	0.025	0.013	mg/L	0.5	100	85	117	
		Lead		0.49	0.0050	0.00050	0.00011	mg/L	0.5	98	88	115	
		Antimony		0.50	0.0010	0.00050	0.00014	mg/L	0.5	100	85	117	
		Selenium		0.46	0.010	0.0050	0.0037	mg/L	0.5	91	80	120	
		Thallium		0.25	0.0010	0.00080	0.00068	mg/L	0.25	101	82	116	
		Vanadium		0.50	0.010	0.0050	0.0018	mg/L	0.5	99	86	115	
		Zinc		0.48	0.010	0.0040	0.0021	mg/L	0.5	96	83	119	

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R	Limits		RPD	RPD Limit
SW3005A6020A	LCSD17175	Silver		0.27	0.0050	0.00050	0.00011	mg/L	0.25	107	85	116	2	20
		Aluminum		0.50	0.050	0.025	0.010	mg/L	0.5	99	84	117	0	20
		Arsenic		0.48	0.0050	0.0010	0.00067	mg/L	0.5	95	84	116	0	20
		Barium		0.52	0.010	0.0010	0.00076	mg/L	0.5	105	86	114	1	20
		Beryllium		0.49	0.0010	0.00050	0.00010	mg/L	0.5	99	83	121	1	20
		Cadmium		0.52	0.0010	0.00050	0.00014	mg/L	0.5	104	87	115	1	20
		Cobalt		0.50	0.010	0.00050	0.00028	mg/L	0.5	101	86	115	1	20
		Chromium		0.49	0.050	0.025	0.020	mg/L	0.5	99	85	116	0	20
		Copper		0.51	0.010	0.0075	0.0054	mg/L	0.5	101	85	118	1	20
		Iron		0.48	0.050	0.030	0.029	mg/L	0.5	96	87	118	1	20
		Potassium		4.7	0.50	0.10	0.039	mg/L	5	95	87	115	1	20
		Magnesium		0.50	0.10	0.020	0.0073	mg/L	0.5	100	83	118	2	20
		Manganese		0.51	0.010	0.0050	0.0016	mg/L	0.5	102	87	115	1	20
		Sodium		4.7	0.10	0.050	0.034	mg/L	5	94	85	117	1	20
		Nickel		0.50	0.050	0.025	0.013	mg/L	0.5	100	85	117	0	20
		Lead		0.49	0.0050	0.00050	0.00011	mg/L	0.5	99	88	115	1	20
		Antimony		0.50	0.0010	0.00050	0.00014	mg/L	0.5	101	85	117	1	20
		Selenium		0.45	0.010	0.0050	0.0037	mg/L	0.5	91	80	120	1	20
		Thallium		0.26	0.0010	0.00080	0.00068	mg/L	0.25	102	82	116	2	20
		Vanadium		0.50	0.010	0.0050	0.0018	mg/L	0.5	99	86	115	0	20
		Zinc		0.48	0.010	0.0040	0.0021	mg/L	0.5	96	83	119	0	20
SW3005A6020A	MS17175	Silver	67798-012	0.24	0.0054	0.00054	0.00012	mg/L	0.268	90	85	116		
		Aluminum	67798-012	0.50	0.054	0.027	0.011	mg/L	0.535	93	84	117		
		Arsenic	67798-012	0.50	0.0054	0.0011	0.00072	mg/L	0.535	93	84	116		
		Barium	67798-012	0.51	0.011	0.0011	0.00081	mg/L	0.535	96	86	114		
		Beryllium	67798-012	0.48	0.0011	0.00054	0.00011	mg/L	0.535	90	83	121		
		Cadmium	67798-012	0.49	0.0011	0.00054	0.00015	mg/L	0.535	91	87	115		
		Cobalt	67798-012	0.51	0.011	0.00054	0.00030	mg/L	0.535	96	86	115		
		Chromium	67798-012	0.51	0.054	0.027	0.022	mg/L	0.535	96	85	116		
		Copper	67798-012	0.51	0.011	0.0080	0.0057	mg/L	0.535	95	85	118		
		Iron	67798-012	0.52	0.054	0.032	0.031	mg/L	0.535	97	87	118		
		Potassium	67798-012	7.4	0.54	0.11	0.042	mg/L	5.35	90	87	115		
		Magnesium	67798-012	20	0.11	0.021	0.0078	mg/L	0.5	29	83	118		
		Manganese	67798-012	0.81	0.011	0.0054	0.0017	mg/L	0.535	87	87	115		
		Sodium	67798-012	24	0.11	0.054	0.037	mg/L	5.3	98	85	117		
		Nickel	67798-012	0.50	0.054	0.027	0.013	mg/L	0.535	94	85	117		
		Lead	67798-012	0.48	0.0054	0.00054	0.00012	mg/L	0.535	90	88	115		
		Antimony	67798-012	0.49	0.0011	0.00054	0.00015	mg/L	0.535	92	85	117		
		Selenium	67798-012	0.47	0.011	0.0054	0.0040	mg/L	0.535	88	80	120		
		Thallium	67798-012	0.25	0.0011	0.00086	0.00073	mg/L	0.268	92	82	116		
		Vanadium	67798-012	0.52	0.011	0.0054	0.0019	mg/L	0.535	97	86	115		
		Zinc	67798-012	0.48	0.011	0.0043	0.0022	mg/L	0.535	90	83	119		

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R		Limits		RPD	RPD Limit
SW3005A6020A	MSD17175	Silver	67798-012	0.24	0.0054	0.00054	0.00012	mg/L	0.268	89		85	116	1	20
		Aluminum	67798-012	0.49	0.054	0.027	0.011	mg/L	0.535	91		84	117	3	20
		Arsenic	67798-012	0.48	0.0054	0.0011	0.00072	mg/L	0.535	91		84	116	2	20
		Barium	67798-012	0.52	0.011	0.0011	0.00081	mg/L	0.535	97		86	114	1	20
		Beryllium	67798-012	0.48	0.0011	0.00054	0.00011	mg/L	0.535	90		83	121	1	20
		Cadmium	67798-012	0.49	0.0011	0.00054	0.00015	mg/L	0.535	91		87	115	1	20
		Cobalt	67798-012	0.49	0.011	0.00054	0.00030	mg/L	0.535	92		86	115	4	20
		Chromium	67798-012	0.50	0.054	0.027	0.022	mg/L	0.535	93		85	116	3	20
		Copper	67798-012	0.50	0.011	0.0080	0.0057	mg/L	0.535	93		85	118	2	20
		Iron	67798-012	0.50	0.054	0.032	0.031	mg/L	0.535	93		87	118	4	20
		Potassium	67798-012	7.2	0.54	0.11	0.042	mg/L	5.35	86	*	87	115	3	20
		Magnesium	67798-012	20	0.11	0.021	0.0078	mg/L	0.5	50		83	118	1	20
		Manganese	67798-012	0.81	0.011	0.0054	0.0017	mg/L	0.535	87		87	115	0	20
		Sodium	67798-012	23	0.11	0.054	0.037	mg/L	5.3	89		85	117	2	20
		Nickel	67798-012	0.48	0.054	0.027	0.013	mg/L	0.535	90		85	117	4	20
		Lead	67798-012	0.49	0.0054	0.00054	0.00012	mg/L	0.535	91		88	115	2	20
		Antimony	67798-012	0.50	0.0011	0.00054	0.00015	mg/L	0.535	93		85	117	1	20
		Selenium	67798-012	0.45	0.011	0.0054	0.0040	mg/L	0.535	85		80	120	3	20
		Thallium	67798-012	0.25	0.0011	0.00086	0.00073	mg/L	0.268	94		82	116	2	20
		Vanadium	67798-012	0.51	0.011	0.0054	0.0019	mg/L	0.535	95		86	115	2	20
		Zinc	67798-012	0.47	0.011	0.0043	0.0022	mg/L	0.535	88		83	119	3	20

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R	Limits	RPD	RPD Limit
SW3005A6020A	BLK17177	Silver		0.00050 U	0.0050	0.00050	0.00011	mg/L					
		Aluminum		0.025 U	0.050	0.025	0.010	mg/L					
		Arsenic		0.0010 U	0.0050	0.0010	0.00067	mg/L					
		Barium		0.0010 U	0.010	0.0010	0.00076	mg/L					
		Beryllium		0.00050 U	0.0010	0.00050	0.00010	mg/L					
		Cadmium		0.00050 U	0.0010	0.00050	0.00014	mg/L					
		Cobalt		0.00010 U	0.010	0.00010	0.000020	mg/L					
		Chromium		0.025 U	0.050	0.025	0.020	mg/L					
		Copper		0.0075 U	0.010	0.0075	0.0054	mg/L					
		Iron		0.030 U	0.050	0.030	0.029	mg/L					
		Potassium		0.10 U	0.50	0.10	0.039	mg/L					
		Magnesium		0.020 U	0.10	0.020	0.0073	mg/L					
		Manganese		0.0050 U	0.010	0.0050	0.0016	mg/L					
		Sodium		0.050 U	0.10	0.050	0.034	mg/L					
		Nickel		0.025 U	0.050	0.025	0.013	mg/L					
		Lead		0.00050 U	0.0050	0.00050	0.00011	mg/L					
		Antimony		0.00050 U	0.0010	0.00050	0.00014	mg/L					
		Selenium		0.0050 U	0.010	0.0050	0.0037	mg/L					
		Thallium		0.00080 U	0.0010	0.00080	0.00068	mg/L					
		Vanadium		0.0050 U	0.010	0.0050	0.0018	mg/L					
		Zinc		0.0040 U	0.010	0.0040	0.0021	mg/L					
SW3005A6020A	LCS17177	Silver		0.26	0.0050	0.00050	0.00011	mg/L	0.25	105	85	116	
		Aluminum		0.52	0.050	0.025	0.010	mg/L	0.5	103	84	117	
		Arsenic		0.52	0.0050	0.0010	0.00067	mg/L	0.5	105	84	116	
		Barium		0.50	0.010	0.0010	0.00076	mg/L	0.5	99	86	114	
		Beryllium		0.49	0.0010	0.00050	0.00010	mg/L	0.5	98	83	121	
		Cadmium		0.50	0.0010	0.00050	0.00014	mg/L	0.5	100	87	115	
		Cobalt		0.55	0.010	0.00050	0.00028	mg/L	0.5	109	86	115	
		Chromium		0.55	0.050	0.025	0.020	mg/L	0.5	109	85	116	
		Copper		0.53	0.010	0.0075	0.0054	mg/L	0.5	106	85	118	
		Iron		0.53	0.050	0.030	0.029	mg/L	0.5	106	87	118	
		Potassium		5.0	0.50	0.10	0.039	mg/L	5	100	87	115	
		Magnesium		0.53	0.10	0.020	0.0073	mg/L	0.5	107	83	118	
		Manganese		0.52	0.010	0.0050	0.0016	mg/L	0.5	104	87	115	
		Sodium		4.9	0.10	0.050	0.034	mg/L	5	99	85	117	
		Nickel		0.50	0.050	0.025	0.013	mg/L	0.5	101	85	117	
		Lead		0.49	0.0050	0.00050	0.00011	mg/L	0.5	99	88	115	
		Antimony		0.50	0.0010	0.00050	0.00014	mg/L	0.5	99	85	117	
		Selenium		0.47	0.010	0.0050	0.0037	mg/L	0.5	95	80	120	
		Thallium		0.25	0.0010	0.00080	0.00068	mg/L	0.25	102	82	116	
		Vanadium		0.52	0.010	0.0050	0.0018	mg/L	0.5	105	86	115	
		Zinc		0.52	0.010	0.0040	0.0021	mg/L	0.5	105	83	119	

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R	Limits		RPD	RPD Limit
SW3005A6020A	LCSD17177	Silver		0.26	0.0050	0.00050	0.00011	mg/L	0.25	104	85	116	1	20
		Aluminum		0.50	0.050	0.025	0.010	mg/L	0.5	100	84	117	3	20
		Arsenic		0.52	0.0050	0.0010	0.00067	mg/L	0.5	104	84	116	1	20
		Barium		0.49	0.010	0.0010	0.00076	mg/L	0.5	98	86	114	1	20
		Beryllium		0.48	0.0010	0.00050	0.00010	mg/L	0.5	97	83	121	1	20
		Cadmium		0.49	0.0010	0.00050	0.00014	mg/L	0.5	98	87	115	2	20
		Cobalt		0.55	0.010	0.00050	0.00028	mg/L	0.5	109	86	115	0	20
		Chromium		0.54	0.050	0.025	0.020	mg/L	0.5	108	85	116	1	20
		Copper		0.52	0.010	0.0075	0.0054	mg/L	0.5	104	85	118	2	20
		Iron		0.53	0.050	0.030	0.029	mg/L	0.5	107	87	118	0	20
		Potassium		4.9	0.50	0.10	0.039	mg/L	5	97	87	115	3	20
		Magnesium		0.51	0.10	0.020	0.0073	mg/L	0.5	102	83	118	4	20
		Manganese		0.51	0.010	0.0050	0.0016	mg/L	0.5	101	87	115	3	20
		Sodium		4.8	0.10	0.050	0.034	mg/L	5	95	85	117	4	20
		Nickel		0.49	0.050	0.025	0.013	mg/L	0.5	98	85	117	3	20
		Lead		0.49	0.0050	0.00050	0.00011	mg/L	0.5	98	88	115	1	20
		Antimony		0.49	0.0010	0.00050	0.00014	mg/L	0.5	98	85	117	1	20
		Selenium		0.48	0.010	0.0050	0.0037	mg/L	0.5	96	80	120	1	20
		Thallium		0.25	0.0010	0.00080	0.00068	mg/L	0.25	99	82	116	2	20
		Vanadium		0.52	0.010	0.0050	0.0018	mg/L	0.5	104	86	115	0	20
		Zinc		0.53	0.010	0.0040	0.0021	mg/L	0.5	105	83	119	0	20
SW3005A6020A	MS17177	Silver	67798-001	0.24	0.0050	0.00050	0.00011	mg/L	0.25	98	85	116		
		Aluminum	67798-001	0.52	0.050	0.025	0.010	mg/L	0.5	105	84	117		
		Arsenic	67798-001	0.52	0.0050	0.0010	0.00067	mg/L	0.5	105	84	116		
		Barium	67798-001	0.49	0.010	0.0010	0.00076	mg/L	0.5	98	86	114		
		Beryllium	67798-001	0.48	0.0010	0.00050	0.00010	mg/L	0.5	97	83	121		
		Cadmium	67798-001	0.47	0.0010	0.00050	0.00014	mg/L	0.5	95	87	115		
		Cobalt	67798-001	0.51	0.010	0.00050	0.00028	mg/L	0.5	103	86	115		
		Chromium	67798-001	0.53	0.050	0.025	0.020	mg/L	0.5	105	85	116		
		Copper	67798-001	0.48	0.010	0.0075	0.0054	mg/L	0.5	96	85	118		
		Iron	67798-001	0.56	0.050	0.030	0.029	mg/L	0.5	99	87	118		
		Potassium	67798-001	7.6	0.50	0.10	0.039	mg/L	5	99	87	115		
		Magnesium	67798-001	20	0.10	0.020	0.0073	mg/L	0.5	-95	83	118		
		Manganese	67798-001	0.85	0.010	0.0050	0.0016	mg/L	0.5	92	87	115		
		Sodium	67798-001	24	0.10	0.050	0.034	mg/L	5	114	85	117		
		Nickel	67798-001	0.50	0.050	0.025	0.013	mg/L	0.5	100	85	117		
		Lead	67798-001	0.48	0.0050	0.00050	0.00011	mg/L	0.5	95	88	115		
		Antimony	67798-001	0.48	0.0010	0.00050	0.00014	mg/L	0.5	96	85	117		
		Selenium	67798-001	0.47	0.010	0.0050	0.0037	mg/L	0.5	95	80	120		
		Thallium	67798-001	0.25	0.0010	0.00080	0.00068	mg/L	0.25	101	82	116		
		Vanadium	67798-001	0.53	0.010	0.0050	0.0018	mg/L	0.5	106	86	115		
		Zinc	67798-001	0.50	0.010	0.0040	0.0021	mg/L	0.5	99	83	119		

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R	Limits		RPD	RPD Limit
SW3005A6020A	MSD17177	Silver	67798-001	0.25	0.0050	0.00050	0.00011	mg/L	0.25	100	85	116	2	20
		Aluminum	67798-001	0.52	0.050	0.025	0.010	mg/L	0.5	105	84	117	0	20
		Arsenic	67798-001	0.52	0.0050	0.0010	0.00067	mg/L	0.5	104	84	116	0	20
		Barium	67798-001	0.50	0.010	0.0010	0.00076	mg/L	0.5	100	86	114	2	20
		Beryllium	67798-001	0.48	0.0010	0.00050	0.00010	mg/L	0.5	96	83	121	1	20
		Cadmium	67798-001	0.48	0.0010	0.00050	0.00014	mg/L	0.5	95	87	115	1	20
		Cobalt	67798-001	0.49	0.010	0.00050	0.00028	mg/L	0.5	98	86	115	5	20
		Chromium	67798-001	0.50	0.050	0.025	0.020	mg/L	0.5	99	85	116	6	20
		Copper	67798-001	0.48	0.010	0.0075	0.0054	mg/L	0.5	97	85	118	0	20
		Iron	67798-001	0.56	0.050	0.030	0.029	mg/L	0.5	98	87	118	1	20
		Potassium	67798-001	7.5	0.50	0.10	0.039	mg/L	5	95	87	115	3	20
		Magnesium	67798-001	21	0.10	0.020	0.0073	mg/L	0.5	-6	83	118	2	20
		Manganese	67798-001	0.85	0.010	0.0050	0.0016	mg/L	0.5	92	87	115	0	20
		Sodium	67798-001	24	0.10	0.050	0.034	mg/L	5	111	85	117	1	20
		Nickel	67798-001	0.48	0.050	0.025	0.013	mg/L	0.5	96	85	117	4	20
		Lead	67798-001	0.49	0.0050	0.00050	0.00011	mg/L	0.5	97	88	115	2	20
		Antimony	67798-001	0.49	0.0010	0.00050	0.00014	mg/L	0.5	97	85	117	1	20
		Selenium	67798-001	0.47	0.010	0.0050	0.0037	mg/L	0.5	93	80	120	2	20
		Thallium	67798-001	0.25	0.0010	0.00080	0.00068	mg/L	0.25	102	82	116	1	20
		Vanadium	67798-001	0.51	0.010	0.0050	0.0018	mg/L	0.5	102	86	115	4	20
		Zinc	67798-001	0.47	0.010	0.0040	0.0021	mg/L	0.5	93	83	119	6	20
SW7470A	BLK17146	Mercury		0.00015 U	0.00020	0.00015	0.00012	mg/L						
SW7470A	LCS17146	Mercury		0.0019	0.00020	0.00015	0.00012	mg/L	0.002	95	82	119		
SW7470A	LCSD17146	Mercury		0.0018	0.00020	0.00015	0.00012	mg/L	0.002	89	82	119	6	20
SW7470A	MS17146	Mercury	67798-001	0.0019	0.00020	0.00015	0.00012	mg/L	0.002	95	82	119		
SW7470A	MSD17146	Mercury	67798-001	0.0019	0.00020	0.00015	0.00012	mg/L	0.002	94	82	119	1	20

AROMATIC HYDROCARBON BREAKTHROUGH CALCULATION

Method: MADEP EPH 2019 Rev 2.1

	lcs17110 Aliphatic Breakthrough (%)	Acceptance Criteria	Date of Analysis
naphthalene	0.0%	<5.0%	12/7/2023
2-methylnaphthalene	0.2%	<5.0%	12/7/2023

	lcsd17110 Aliphatic Breakthrough (%)	Acceptance Criteria	Date of Analysis
naphthalene	0.1%	<5.0%	12/7/2023
2-methylnaphthalene	0.1%	<5.0%	12/7/2023

Supporting Documentation & Chromatograms

Absolute Resource associates
124 Heritage Avenue Unit 16
Portsmouth, NH 03801
www.absoluteresourceassociates.com

This File:	L:\VOA\Excel Reports\2023\v8111311
Analysis Group:	8260/8021/624
Field ID:	SY-OBMW7-110623 1.8E+07
Sample:	67797-01 5mL Dow Salvage Yard
Misc:	5 CRE
Import File Name	v8 111323 g DoD
TestGroupID	V8260DoD_A
Aqueous or Soil? (A or S)	A
Solid amount (g)	
Methanol volume (mL)	
Percent Solid (%)	
Soil Prep Date	
Weight:	
Volume:	
Lab#:	67797-001
AnalysisDate:	11/13/2023
AnalysisTime:	14:26
Dilution:	1
AnalyzedBy:	LMM v8111311.D
QC_Code:	
Prep#:	

Reviewer Checks:

- Quant Report: Reviewed, Analyst Initials & Date
- Chromatogram Checked, Major peaks identified
- Results consistent w/ other attached analyses
- Reanalysis reason noted
- Substitute dilution data checked
- Correct dilution and reason clear or noted
- Flags checked (Expiration, F+, Over Cal, Surr, Aspen, QC)
- Other QC failures or issues noted in Aspen
- Correct data file and/or date/time in Aspen

Notes:

Reviewer Initials & Date: 11/14/23

#	Surrogate Standards	Import Value (as ug/L)	Recovery	Flag	QC Limits	Surrogate True Values
32	SS 1,2-dichloroethane-D4	9.45	95%		60-140	10
36	SS dibromofluoromethane	9.37	94%		78-114	10
51	SS toluene-D8	10.21	102%		88-110	10
67	SS 4-bromofluorobenzene	9.89	99%		86-115	10
41	SS a,a,a-trifluorotoluene	0.00	0%		70-130*	20

	AnalyteName	Concentration (ug/L)		AnalyteName	Concentration (ug/L)
2	dichlorodifluoromethane	0	56	1,3-dichloropropane	0
3	chloromethane	0	57	dibromochloromethane	0
4	vinyl chloride	0	58	1,2-dibromoethane (EDB)	0
5	bromomethane	0	59	chlorobenzene	0
6	chloroethane	0	60	1,1,1,2-tetrachloroethane	0
7	trichlorofluoromethane	0	61	ethylbenzene	0
8	diethylether	0	62	m&p-xylenes	0
9	acetone	0.119573879	63	o-xylene	0
11	1,1-dichloroethene	0	64	styrene	0
13	t-butanol (TBA)	0	65	bromoform	0
15	methylene chloride	0	66	isopropylbenzene	0
16	carbon disulfide	0	69	bromobenzene	0
18	methyl-t-butyl ether (MTBE)	0	70	1,1,2,2-tetrachloroethane	0
19	trans-1,2-dichloroethene	0	71	1,2,3-trichloropropane	0
20	isopropyl ether (DIPE)	0	72	n-propylbenzene	0
22	1,1-dichloroethane	0	73	2-chlorotoluene	0
23	2-butanone (MEK)	0	74	4-chlorotoluene	0
24	ethyl-t-butyl ether (ETBE)	0	75	1,3,5-trimethylbenzene	0
25	2,2-dichloropropane	0	76	tert-butylbenzene	0
26	cis-1,2-dichloroethene	0	77	1,2,4-trimethylbenzene	0.03135891
27	bromochloromethane	0	79	sec-butylbenzene	0
28	chloroform	0.217475147	80	1,3-dichlorobenzene	0
29	tetrahydrofuran (THF)	0	81	4-isopropyltoluene	0
30	1,1,1-trichloroethane	0	82	1,4-dichlorobenzene	0
33	carbon tetrachloride	0.342353049	84	1,2-dichlorobenzene	0
34	1,1-dichloropropene	0	85	n-butylbenzene	0
35	benzene	-0.021451318	86	1,2-dibromo-3-chloropropane (DBCP)	0
37	1,2-dichloroethane	0	88	1,2,4-trichlorobenzene	0
38	t-amyl-methyl ether (TAME)	0	89	hexachlorobutadiene	0
39	trichloroethene	0	90	naphthalene	0.014101192
42	1,2-dichloropropane	0	91	1,2,3-trichlorobenzene	0
43	dibromomethane	0	87	1,3,5-trichlorobenzene	0
44	bromodichloromethane	0	12	1,1,2-trichloro-1,2,2-trifluoroethane	0
45	1,4-dioxane	0	14	methyl acetate	0
47	4-methyl-2-pentanone (MIBK)	0	21	vinyl acetate	0
48	2-hexanone	0	31	cyclohexane	0
49	cis-1,3-dichloropropene	0	40	methylcyclohexane	0
50	toluene	-0.154107491	10	acrolein	0
52	trans-1,3-dichloropropene	0	17	acrylonitrile	0
53	1,1,2-trichloroethane	0	46	2-chloroethylvinylether (2-CEVE)	0
55	tetrachloroethene	0		Total Xylenes	0

Absolute Resource Associates

Quantitation Report (QT Reviewed)

Data Path : X:\V8\2023\Nov23\111323\
Data File : v8111311.D
Acq On : 13 Nov 2023 02:26 pm
Operator : lmm
Sample : 67797-01 5mL
Misc : 5
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Nov 13 17:12:37 2023
Quant Method : X:\V8\methods\V88260090823A.M
Quant Title : V5 Method 8260D
QLast Update : Mon Oct 30 11:37:50 2023
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) IS fluorobenzene	8.001	96	130906	10.00	ug/L	0.00
54) IS chlorobenzene-D5	11.218	119	30106	10.00	ug/L	0.00
68) IS 1,4-dichlorobenzene-D4	13.638	152	45410	10.00	ug/L	0.00
92) IS 1,4-Dioxane-d8	8.823	96	1065	10.00	ug/L	0.00
System Monitoring Compounds						
32) SS 1,2-dichloroethane-D4	7.646	65	35374	9.45	ug/L	0.00
Spiked Amount 10.000	Range 60 - 140		Recovery = 94.50%			
36) SS dibromofluoromethane	7.076	111	30055	9.37	ug/L	0.00
Spiked Amount 10.000	Range 78 - 114		Recovery = 93.70%			
41) SS a,a,a-trifluorotoluene	0.000	146	0	0.00	ug/L	
Spiked Amount 20.000	Range 70 - 130		Recovery = 0.00%#			
51) SS toluene-D8	9.679	98	315286	10.21	ug/L	0.00
Spiked Amount 10.000	Range 88 - 110		Recovery = 102.10%			
67) SS 4-bromofluorobenzene	12.435	174	34026	9.89	ug/L	0.00
Spiked Amount 10.000	Range 86 - 115		Recovery = 98.90%			
83) NA 1,2-dichlorobenzene-D4	13.638	152	45410	0.00	ug/L	0.00
Spiked Amount 25.000	Range 15 - 25		Recovery = 0.00%#			
Target Compounds						Qvalue
28) chloroform	6.821	83	993	0.217	ug/L	87
33) carbon tetrachloride	7.568	117	1172	0.342	ug/L	89
93] 1,4-dioxane SIM	8.891	88	106	0.544	ug/L #	100

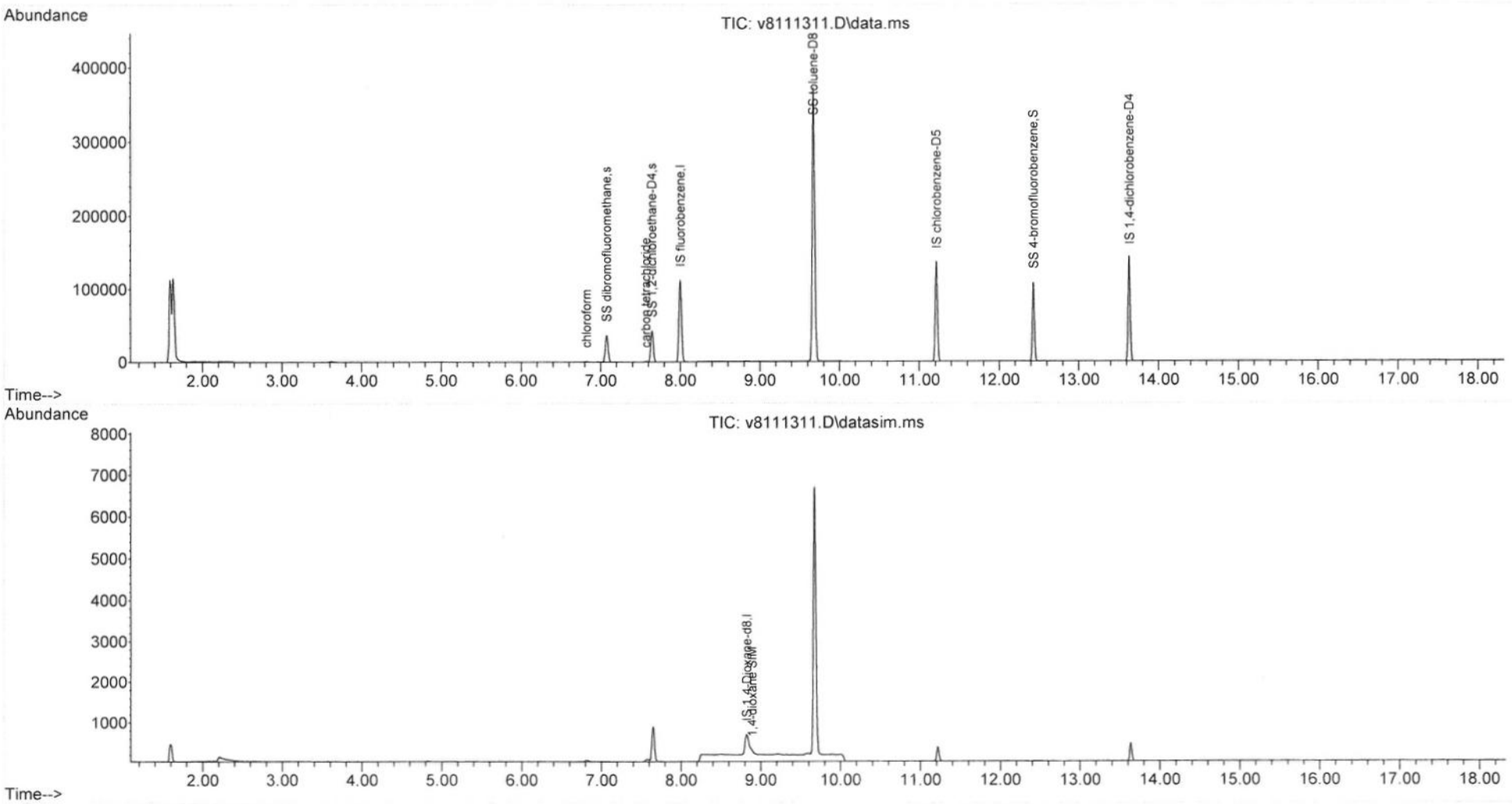
NOV 13 2023

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : X:\V8\2023\Nov23\111323\
Data File : v8111311.D
Acq On : 13 Nov 2023 02:26 pm
Operator : lmm
Sample : 67797-01 5mL
Misc : 5
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Nov 13 17:12:37 2023
Quant Method : X:\V8\methods\V88260090823A.M
Quant Title : V5 Method 8260D
QLast Update : Mon Oct 30 11:37:50 2023
Response via : Initial Calibration



This File:	L:\VOA\Excel Reports\2023\v8111312
Analysis Group:	8260/8021/624
Field ID:	SY-OBMW10-110623 1.8E+07
Sample:	67797-02 5mL Dow Salvage Yard
Misc:	5 CRE
Import File Name	v8 111323 g DoD
TestGroupID	V8260DoD_A
Aqueous or Soil? (A or S)	A
Solid amount (g)	
Methanol volume (mL)	
Percent Solid (%)	
Soil Prep Date	
Weight:	
Volume:	
Lab#:	67797-002
AnalysisDate:	11/13/2023
AnalysisTime:	14:55
Dilution:	1
AnalyzedBy:	LMM v8111312.D
QC_Code:	
Prep#:	

Reviewer Checks:

- Quant Report: Reviewed, Analyst Initials & Date
- Chromatogram Checked, Major peaks identified
- Results consistent w/ other attached analyses
- Reanalysis reason noted
- Substitute dilution data checked
- Correct dilution and reason clear or noted
- Flags checked (Expiration, F+, Over Cal, Surr, Aspen, QC)
- Other QC failures or issues noted in Aspen
- Correct data file and/or date/time in Aspen

Notes:

Reviewer Initials & Date: 11/14/23

#	Surrogate Standards	Import Value (as ug/L)	Recovery	Flag	QC Limits	Surrogate True Values
32	SS 1,2-dichloroethane-D4	9.06	91%		60-140	10
36	SS dibromofluoromethane	9.01	90%		78-114	10
51	SS toluene-D8	9.99	100%		88-110	10
67	SS 4-bromofluorobenzene	9.90	99%		86-115	10
41	SS a,a,a-trifluorotoluene	0.00	0%		70-130*	20

	AnalyteName	Concentration (ug/L)		AnalyteName	Concentration (ug/L)
2	dichlorodifluoromethane	0	56	1,3-dichloropropane	0
3	chloromethane	0	57	dibromochloromethane	0
4	vinyl chloride	0	58	1,2-dibromoethane (EDB)	0
5	bromomethane	0	59	chlorobenzene	0
6	chloroethane	0	60	1,1,1,2-tetrachloroethane	0
7	trichlorofluoromethane	0	61	ethylbenzene	0
8	diethylether	0	62	m&p-xylenes	0
9	acetone	0.483851871	63	o-xylene	0
11	1,1-dichloroethene	0	64	styrene	0
13	t-butanol (TBA)	0	65	bromoform	0
15	methylene chloride	0	66	isopropylbenzene	0
16	carbon disulfide	0	69	bromobenzene	0
18	methyl-t-butyl ether (MTBE)	0	70	1,1,2,2-tetrachloroethane	0
19	trans-1,2-dichloroethene	0	71	1,2,3-trichloropropane	0
20	isopropyl ether (DIPE)	0	72	n-propylbenzene	0
22	1,1-dichloroethane	0	73	2-chlorotoluene	0
23	2-butanone (MEK)	0	74	4-chlorotoluene	0
24	ethyl-t-butyl ether (ETBE)	0	75	1,3,5-trimethylbenzene	0
25	2,2-dichloropropane	0	76	tert-butylbenzene	0
26	cis-1,2-dichloroethene	0	77	1,2,4-trimethylbenzene	0
27	bromochloromethane	0	79	sec-butylbenzene	0
28	chloroform	0	80	1,3-dichlorobenzene	0
29	tetrahydrofuran (THF)	0	81	4-isopropyltoluene	0
30	1,1,1-trichloroethane	0	82	1,4-dichlorobenzene	0
33	carbon tetrachloride	0	84	1,2-dichlorobenzene	0
34	1,1-dichloropropene	0	85	n-butylbenzene	0
35	benzene	0	86	1,2-dibromo-3-chloropropane (DBCP)	0
37	1,2-dichloroethane	0	88	1,2,4-trichlorobenzene	0
38	t-amyl-methyl ether (TAME)	0	89	hexachlorobutadiene	0
39	trichloroethene	0	90	naphthalene	0
42	1,2-dichloropropane	0	91	1,2,3-trichlorobenzene	0
43	dibromomethane	0	87	1,3,5-trichlorobenzene	0
44	bromodichloromethane	0	12	1,1,2-trichloro-1,2,2-trifluoroethane	0
45	1,4-dioxane	0	14	methyl acetate	0
47	4-methyl-2-pentanone (MIBK)	0	21	vinyl acetate	0
48	2-hexanone	0	31	cyclohexane	0
49	cis-1,3-dichloropropene	0	40	methylcyclohexane	0
50	toluene	-0.149041695	10	acrolein	0
52	trans-1,3-dichloropropene	0	17	acrylonitrile	0
53	1,1,2-trichloroethane	0	46	2-chloroethylvinylether (2-CEVE)	0
55	tetrachloroethene	0		Total Xylenes	0

Quantitation Report (QT Reviewed)

Data Path : X:\V8\2023\Nov23\111323\
Data File : v8111312.D
Acq On : 13 Nov 2023 02:55 pm
Operator : lmm
Sample : 67797-02 5mL
Misc : 5
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Nov 13 17:12:41 2023
Quant Method : X:\V8\methods\V88260090823A.M
Quant Title : V5 Method 8260D
QLast Update : Mon Oct 30 11:37:50 2023
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) IS fluorobenzene	8.001	96	140222	10.00	ug/L	0.00
54) IS chlorobenzene-D5	11.217	119	31666	10.00	ug/L	0.00
68) IS 1,4-dichlorobenzene-D4	13.637	152	46116	10.00	ug/L	0.00
92) IS 1,4-Dioxane-d8	8.823	96	1301	10.00	ug/L	0.00
System Monitoring Compounds						
32) SS 1,2-dichloroethane-D4	7.646	65	36325	9.06	ug/L	0.00
Spiked Amount 10.000	Range 60 - 140		Recovery = 90.60%			
36) SS dibromofluoromethane	7.076	111	30952	9.01	ug/L	0.00
Spiked Amount 10.000	Range 78 - 114		Recovery = 90.10%			
41) SS a,a,a-trifluorotoluene	0.000	146	0	0.00	ug/L	
Spiked Amount 20.000	Range 70 - 130		Recovery = 0.00%#			
51) SS toluene-D8	9.679	98	330539	9.99	ug/L	0.00
Spiked Amount 10.000	Range 88 - 110		Recovery = 99.90%			
67) SS 4-bromofluorobenzene	12.434	174	35832	9.90	ug/L	0.00
Spiked Amount 10.000	Range 86 - 115		Recovery = 99.00%			
83) NA 1,2-dichlorobenzene-D4	13.637	152	46116	0.00	ug/L	0.00
Spiked Amount 25.000	Range 15 - 25		Recovery = 0.00%#			
Target Compounds						Qvalue
9) acetone	3.878	43	1518	0.484	ug/L #	56

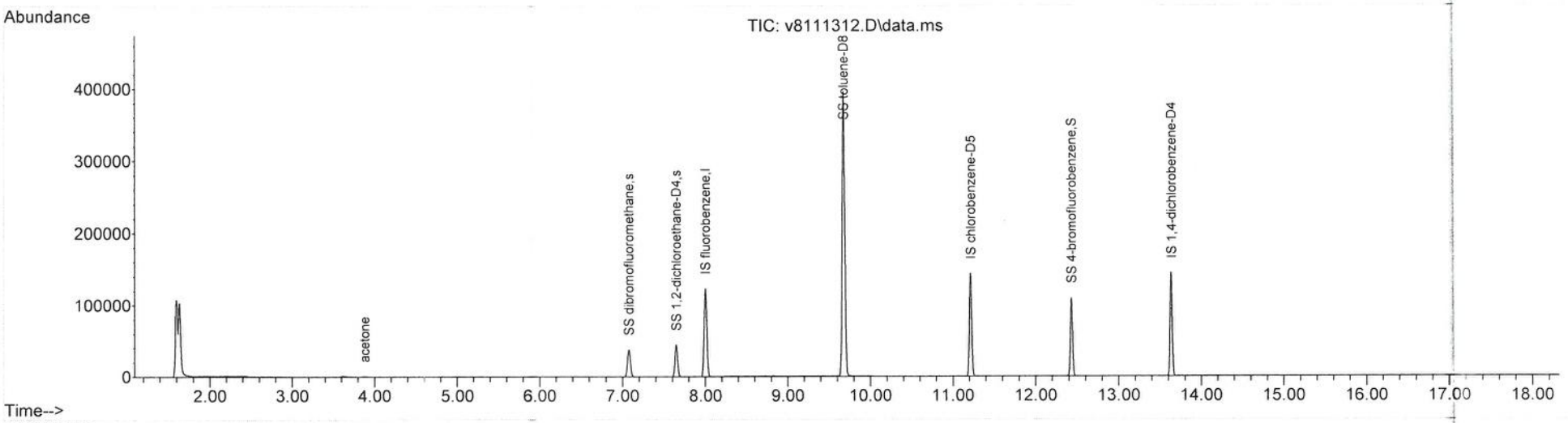
(#) = qualifier out of range (m) = manual integration (+) = signals summed

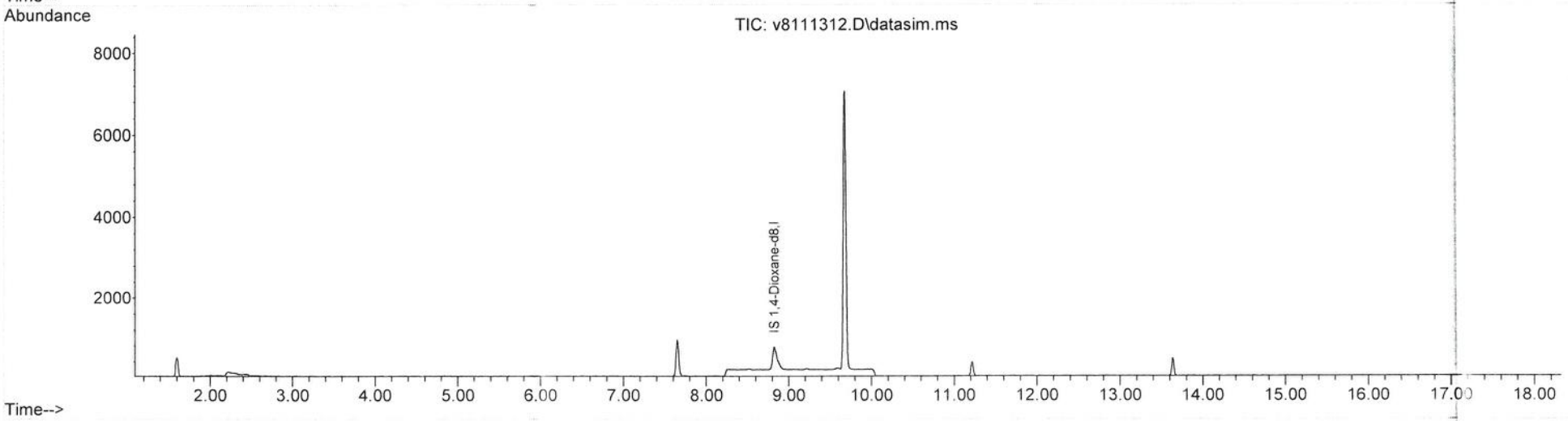
NOV 13 2023

Quantitation Report (QT Reviewed)

Data Path : X:\V8\2023\Nov23\111323\
Data File : v8111312.D
Acq On : 13 Nov 2023 02:55 pm
Operator : lmm
Sample : 67797-02 5mL
Misc : 5
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Nov 13 17:12:41 2023
Quant Method : X:\V8\methods\V88260090823A.M
Quant Title : V5 Method 8260D
QLast Update : Mon Oct 30 11:37:50 2023
Response via : Initial Calibration





nis File:	L:\VOA\Excel Reports\2023\v8111306
Analysis Group:	8260/8021/624
Field ID:	TB30-110623 1.8E+07
Sample:	67797-03 5mL Dow Salvage Yard
Misc:	5 CRE
Import File Name	v8 111323 g DoD
TestGroupID	V8260DoD_A
Aqueous or Soil? (A or S)	A
Solid amount (g)	
Methanol volume (mL)	
Percent Solid (%)	
Soil Prep Date	
Weight:	
Volume:	
Lab#:	67797-003
AnalysisDate:	11/13/2023
AnalysisTime:	12:15
Dilution:	1
AnalyzedBy:	LMM v8111306.D
QC_Code:	
Prep#:	

Reviewer Checks:

- Quant Report: Reviewed, Analyst Initials & Date
- Chromatogram Checked, Major peaks identified
- Results consistent w/ other attached analyses
- Reanalysis reason noted
- Substitute dilution data checked
- Correct dilution and reason clear or noted
- Flags checked (Expiration, F+, Over Cal, Surr, Aspen, QC)
- Other QC failures or issues noted in Aspen
- Correct data file and/or date/time in Aspen

Notes:

Reviewer Initials & Date: 11/14/23

#	Surrogate Standards	Import Value (as ug/L)	Recovery	Flag	QC Limits	Surrogate True Values
32	SS 1,2-dichloroethane-D4	9.07	**91%**		60-140	10
36	SS dibromofluoromethane	9.29	**93%**		78-114	10
51	SS toluene-D8	10.32	**103%**		88-110	10
67	SS 4-bromofluorobenzene	9.75	**97%**		86-115	10
41	SS a,a,a-trifluorotoluene	0.00	**0%**		70-130*	20

	AnalyteName	Concentration (ug/L)		AnalyteName	Concentration (ug/L)
2	dichlorodifluoromethane	0	56	1,3-dichloropropane	0
3	chloromethane	0	57	dibromochloromethane	0
4	vinyl chloride	0	58	1,2-dibromoethane (EDB)	0
5	bromomethane	0	59	chlorobenzene	0
6	chloroethane	0	60	1,1,1,2-tetrachloroethane	0
7	trichlorofluoromethane	0	61	ethylbenzene	0
8	diethylether	0	62	m&p-xylenes	0
9	acetone	7.079273847	63	o-xylene	0
11	1,1-dichloroethene	0	64	styrene	-0.059276101
13	t-butanol (TBA)	0.144535445	65	bromoform	0
15	methylene chloride	0	66	isopropylbenzene	0
16	carbon disulfide	0	69	bromobenzene	0
18	methyl-t-butyl ether (MTBE)	0	70	1,1,2,2-tetrachloroethane	0
19	trans-1,2-dichloroethene	0	71	1,2,3-trichloropropane	0
20	isopropyl ether (DIPE)	0	72	n-propylbenzene	0
22	1,1-dichloroethane	0	73	2-chlorotoluene	0
23	2-butanone (MEK)	**9.436771398**	74	4-chlorotoluene	0
24	ethyl-t-butyl ether (ETBE)	0	75	1,3,5-trimethylbenzene	0
25	2,2-dichloropropane	0	76	tert-butylbenzene	0
26	cis-1,2-dichloroethene	0	77	1,2,4-trimethylbenzene	0.058580756
27	bromochloromethane	0	79	sec-butylbenzene	0
28	chloroform	0	80	1,3-dichlorobenzene	0
29	tetrahydrofuran (THF)	0	81	4-isopropyltoluene	0
30	1,1,1-trichloroethane	0	82	1,4-dichlorobenzene	0
33	carbon tetrachloride	0	84	1,2-dichlorobenzene	0
34	1,1-dichloropropene	0	85	n-butylbenzene	0
35	benzene	0	86	1,2-dibromo-3-chloropropane (DBCP)	0
37	1,2-dichloroethane	0	88	1,2,4-trichlorobenzene	0
38	t-amyl-methyl ether (TAME)	0	89	hexachlorobutadiene	0
39	trichloroethene	0	90	naphthalene	0
42	1,2-dichloropropane	0	91	1,2,3-trichlorobenzene	0
43	dibromomethane	0	87	1,3,5-trichlorobenzene	0
44	bromodichloromethane	0	12	1,1,2-trichloro-1,2,2-trifluoroethane	0
45	1,4-dioxane	0	14	methyl acetate	0
47	4-methyl-2-pentanone (MIBK)	0	21	vinyl acetate	0
48	2-hexanone	0.907205272	31	cyclohexane	0
49	cis-1,3-dichloropropene	0	40	methylcyclohexane	0
50	toluene	-0.090900233	10	acrolein	0
52	trans-1,3-dichloropropene	0	17	acrylonitrile	0
53	1,1,2-trichloroethane	0	46	2-chloroethylvinylether (2-CEVE)	0
55	tetrachloroethene	0		Total Xylenes	0

Quantitation Report (QT Reviewed)

Data Path : X:\V8\2023\Nov23\111323\
Data File : v8111306.D
Acq On : 13 Nov 2023 12:15 pm
Operator : lmm Typo'lm 11-14-23
Sample : 697797-03 5mL
Misc : 5
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Nov 13 12:51:46 2023
Quant Method : X:\V8\methods\V88260090823A.M
Quant Title : V5 Method 8260D
QLast Update : Mon Oct 30 11:37:50 2023
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) IS fluorobenzene	8.001	96	139887	10.00	ug/L	0.00
54) IS chlorobenzene-D5	11.217	119	32751	10.00	ug/L	0.00
68) IS 1,4-dichlorobenzene-D4	13.637	152	50387	10.00	ug/L	0.00
92) IS 1,4-Dioxane-d8	8.823	96	1077	10.00	ug/L	0.00
System Monitoring Compounds						
32) SS 1,2-dichloroethane-D4	7.646	65	36299	9.07	ug/L	0.00
Spiked Amount 10.000	Range 60 - 140		Recovery = 90.70%			
36) SS dibromofluoromethane	7.076	111	31842	9.29	ug/L	0.00
Spiked Amount 10.000	Range 78 - 114		Recovery = 92.90%			
41) SS a,a,a-trifluorotoluene	0.000	146	0	0.00	ug/L	
Spiked Amount 20.000	Range 70 - 130		Recovery = 0.00%#			
51) SS toluene-D8	9.679	98	340628	10.32	ug/L	0.00
Spiked Amount 10.000	Range 88 - 110		Recovery = 103.20%			
67) SS 4-bromofluorobenzene	12.434	174	36494	9.75	ug/L	0.00
Spiked Amount 10.000	Range 86 - 115		Recovery = 97.50%			
83) NA 1,2-dichlorobenzene-D4	13.637	152	50387	0.00	ug/L	0.00
Spiked Amount 25.000	Range 15 - 25		Recovery = 0.00%#			
Target Compounds						Qvalue
9) acetone	3.878	43	7070	7.079	ug/L #	55
23) 2-butanone (MEK)	6.406	43	14857	9.437	ug/L	96
48) 2-hexanone	10.096	58	1313	0.907	ug/L #	72

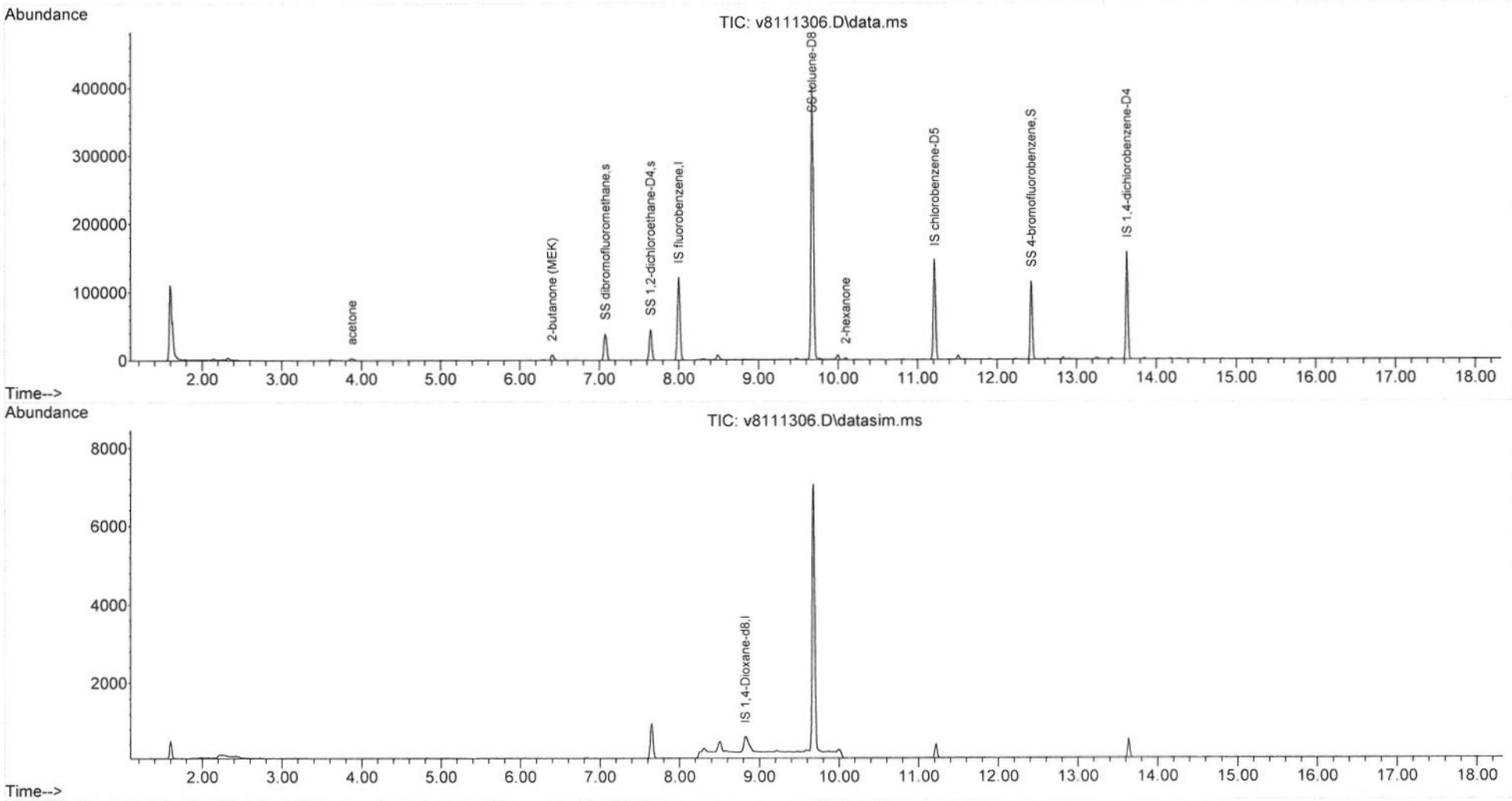
(#) = qualifier out of range (m) = manual integration (+) = signals summed

NOV 13 2023
lmm

Quantitation Report (QT Reviewed)

Data Path : X:\V8\2023\Nov23\111323\
Data File : v8111306.D
Acq On : 13 Nov 2023 12:15 pm
Operator : lmm
Sample : 97797-03 5mL
Misc : 5
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Nov 13 12:51:46 2023
Quant Method : X:\V8\methods\V88260090823A.M
Quant Title : V5 Method 8260D
QLast Update : Mon Oct 30 11:37:50 2023
Response via : Initial Calibration



WS3773

This File:	L:\VOA\Excel Reports\2023\V6111608
Analysis Group:	8260/8021/624
Field ID:	SY-OBMW7-110623 18001468
Sample:	67797-01 5mL Dow Salvage Yard
Misc:	5 CRE
Import File Name	v6 111623
TestGroupID	VMA_VPH_PresCert_A
Aqueous or Soil? (A or S)	A
Solid amount (g)	
Methanol volume (mL)	
Percent Solid (%)	
Soil Prep Date	
Weight:	
Volume:	
Lab#:	67797-001
AnalysisDate:	11/16/2023
AnalysisTime:	13:40
Dilution:	1
AnalyzedBy:	SFP V6111608.D
QC_Code:	
Prep#:	

Reviewer Checks:

Quant Report: Reviewed, Ranges integrated, Analyst Initials & Date
Chromatogram Checked, Major peaks identified
Results consistent w/ other attached analyses
Reanalysis reason noted
Substitute dilution data checked
Correct dilution and reason clear or noted
Flags checked (Expiration, F+, Over Cal, Surr, Aspen, QC)
Other QC failures or issues noted in Aspen
Correct data file and/or date/time in Aspen

Notes: Calibration based on sum of discrete peak areas

Initials & Date: 11/20/23

#	Surrogate Standards	Import Value (as ug/L)	Recovery	Flag	QC Limits	Surrogate True Values
11	SS 2,5-dibromotoluene	38.90	**97%**		70-130	40
22	SS 2,5-dibromotoluene #2	39.75	**99%**		70-130	40
4	SS a,a,a-trifluorotoluene	0.00	**0%**		70-130*	20

#	AnalyteName	Concentration (ug/L)	
	C5-C8 Aliphatics #2	**11.041**	11.041
	C9-C12 Aliphatics #2	**22.060**	22.06
1	Methyl-t-butyl ether (MTBE)	0.000	0
2	benzene	0.065	0.0651
3	toluene	0.049	0.0491
5	ethylbenzene	0.059	0.0591
6	m&p-xylenes	0.178	0.1782
7	o-xylene	0.073	0.0725
10	naphthalene	0.206	0.2064
	C5-C8 Aliphatics Adj	**10.927**	10.927
	C9-C12 Aliphatics Adj	**11.791**	11.791
	C9-C10 Aromatics	**9.959**	9.9593
	Total Xylenes	0.000	

Quantitation Report (QT Reviewed)

Data Path : X:\V6\2023\Nov23\111623\
Data File : V6111608.D
Signal(s) : Signal #1: CPDET1B.ch Signal #2: FID2A.ch
Acq On : 16 Nov 2023 1:40 pm
Operator : sfp
Sample : 67797-01 5mL (Sig #1); (Sig #2)
Misc : 5
ALS Vial : 8 Sample Multiplier: 1

SFP
11/17/23

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 17 11:55:53 2023
Quant Method : X:\V6\methods\V6VPH082423CHe.M
Quant Title : VOA06 MA VPH
QLast Update : Thu Aug 24 11:07:18 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	R.T.	Response	Conc	Units	
	System Monitoring Compounds					
4) S	SS a,a,a-trifluorotol...	0.000	0	N.D.	ug/L	
Spiked Amount	20.000		Recovery =	0.00%		
11) S	SS 2,5-dibromotoluene	26.358	30076819	38.899	ug/L	
Spiked Amount	40.000 Range 70 - 130		Recovery =	97.25%		
17) S	SS a,a,a-trifluorotol...	0.000	0	N.D.	ug/L	
Spiked Amount	20.000		Recovery =	0.00%		
22) S	SS 2,5-dibromotoluene #2	26.359	15273172	39.750	ug/L	
Spiked Amount	40.000 Range 70 - 130		Recovery =	99.38%		
	Target Compounds					
1)	methyl-t-butyl ether ...	0.000	0	N.D.	ug/L	
2)	benzene	11.350	102138	0.065	ug/L	m PM
3)	toluene	13.453	71094	0.049	ug/L	m
5)	ethylbenzene	15.466	70609	0.059	ug/L	m
6)	m&p-xylenes	15.569	253978	0.178	ug/L	m
7)	o-xylene	16.277	88675	0.073	ug/L	m
8)	1,2,4-trimethylbenzene	18.569	148585	0.132	ug/L	m
9) H	C9-C10 Aromatics	18.612	14201151	9.959	ug/L	m RI
10)	naphthalene	23.694	301681	0.206	ug/L	m PM
13)	pentane #2	0.000	0	N.D.	ug/L	
14)	2-methylpentane #2	8.390	322200	0.350	ug/L	m PM
15)	2,2,4-trimethylpentan...	0.000	0	N.D.	ug/L	
16) H	C5-C8 Aliphatics #2	11.378	21659624	11.041	ug/L	m RI
18)	nonane #2	14.986	242337	0.625	ug/L	m PM
19)	decane #2	0.000	0	N.D.	ug/L	
20)	n-butylcyclohexane #2	0.000	0	N.D.	ug/L	
21) H	C9-C12 Aliphatics #2	15.611	16342684	22.060	ug/L	m RI

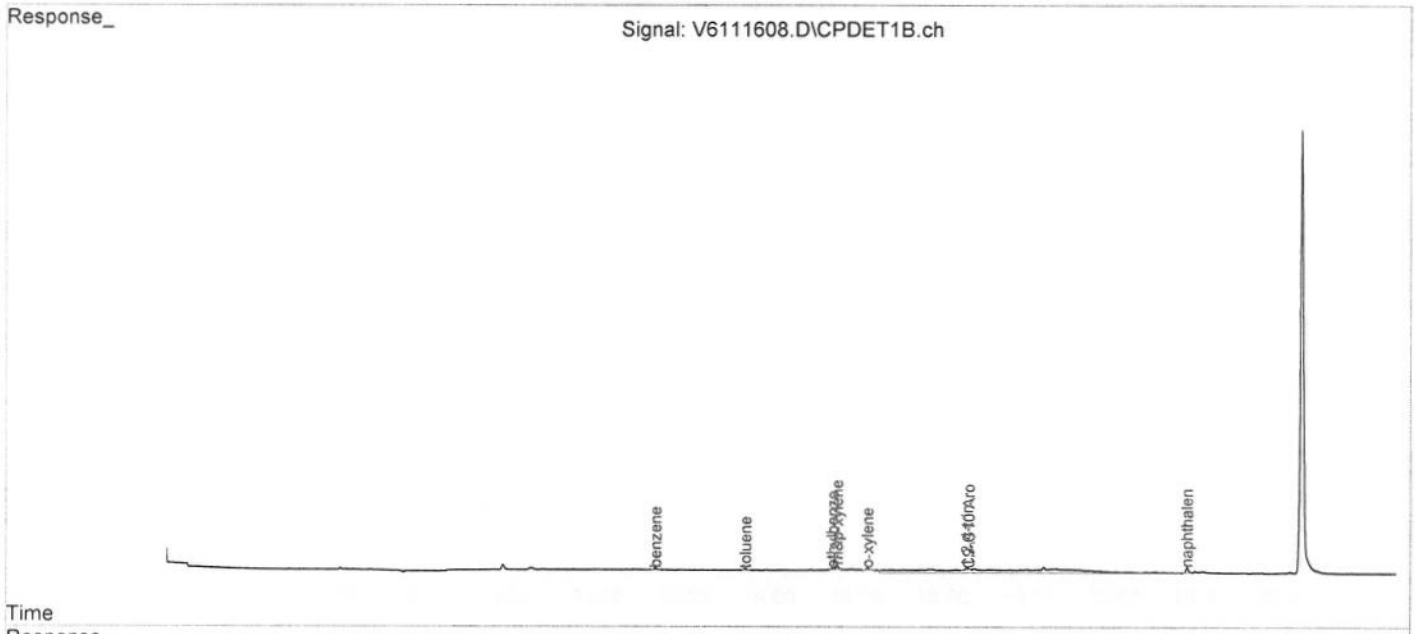
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : X:\V6\2023\Nov23\111623\
Data File : V6111608.D
Signal(s) : Signal #1: CPDET1B.ch Signal #2: FID2A.ch
Acq On : 16 Nov 2023 1:40 pm
Operator : sfp
Sample : 67797-01 5mL (Sig #1); (Sig #2)
Misc : 5
ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 17 11:55:53 2023
Quant Method : X:\V6\methods\V6VPH082423CHe.M
Quant Title : VOA06 MA VPH
QLast Update : Thu Aug 24 11:07:18 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



This File:	L:\VOA\Excel Reports\2023\V6111609
Analysis Group:	8260/8021/624
Field ID:	SY-OBMW10-110623 18001468
Sample:	67797-02 5mL Dow Salvage Yard
Misc:	5 CRE
Import File Name	v6 111623
TestGroupID	VMA_VPH_PresCert_A
Aqueous or Soil? (A or S)	A
Solid amount (g)	
Methanol volume (mL)	
Percent Solid (%)	
Soil Prep Date	
Weight:	
Volume:	
Lab#:	67797-002
AnalysisDate:	11/16/2023
AnalysisTime:	14:13
Dilution:	1
AnalyzedBy:	SFP V6111609.D
QC_Code:	
Prep#:	

Reviewer Checks:

Quant Report: Reviewed, Ranges integrated, Analyst Initials & Date
Chromatogram Checked, Major peaks identified
Results consistent w/ other attached analyses
Reanalysis reason noted
Substitute dilution data checked
Correct dilution and reason clear or noted
Flags checked (Expiration, F+, Over Cal, Surr, Aspen, QC)
Other QC failures or issues noted in Aspen
Correct data file and/or date/time in Aspen

Notes: Calibration based on sum of discrete peak areas

Initials & Date: 11/20/23

#	Surrogate Standards	Import Value (as ug/L)	Recovery	Flag	QC Limits	Surrogate True Values
11	SS 2,5-dibromotoluene	37.91	**95%**		70-130	40
22	SS 2,5-dibromotoluene #2	38.05	**95%**		70-130	40
4	SS a,a,a-trifluorotoluene	0.00	**0%**		70-130*	20

#	AnalyteName	Concentration (ug/L)	
	C5-C8 Aliphatics #2	**9.305**	9.3046
	C9-C12 Aliphatics #2	**27.793**	27.793
1	Methyl-t-butyl ether (MTBE)	0.000	0
2	benzene	0.000	0
3	toluene	0.000	0
5	ethylbenzene	0.049	0.049
6	m&p-xylenes	0.156	0.1555
7	o-xylene	0.049	0.0495
10	naphthalene	0.111	0.1108
	C5-C8 Aliphatics Adj	**9.305**	9.3046
	C9-C12 Aliphatics Adj	**19.773**	19.773
	C9-C10 Aromatics	**7.766**	7.7658
	Total Xylenes	0.000	

Quantitation Report (QT Reviewed)

Data Path : X:\V6\2023\Nov23\111623\
Data File : V6111609.D
Signal(s) : Signal #1: CPDET1B.ch Signal #2: FID2A.ch
Acq On : 16 Nov 2023 2:13 pm
Operator : sfp
Sample : 67797-02 5mL (Sig #1); (Sig #2)
Misc : 5
ALS Vial : 9 Sample Multiplier: 1

SK
SFP
11/17/23

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 17 11:55:56 2023
Quant Method : X:\V6\methods\V6VPH082423CHe.M
Quant Title : VOA06 MA VPH
QLast Update : Thu Aug 24 11:07:18 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

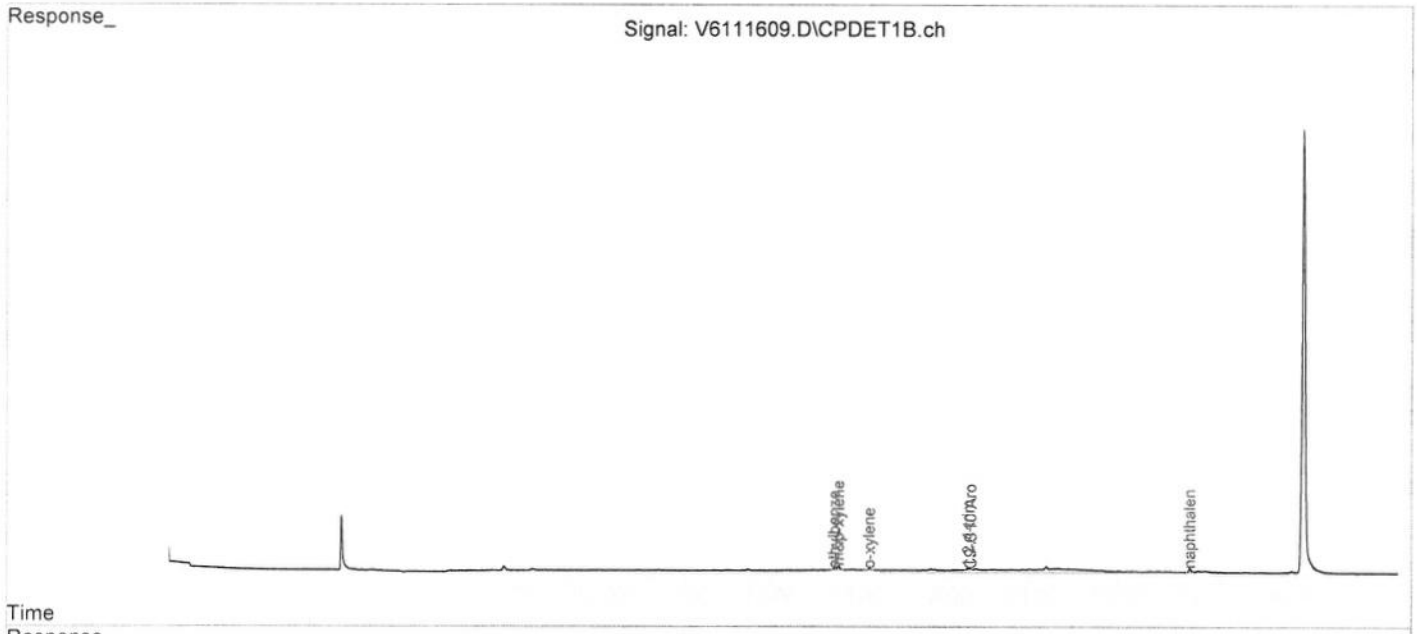
	Compound	R.T.	Response	Conc	Units	
	System Monitoring Compounds					
4) S	SS a,a,a-trifluorotol...	0.000	0	N.D.	ug/L	
Spiked Amount	20.000		Recovery =	0.00%		
11) S	SS 2,5-dibromotoluene	26.358	29391390	37.907	ug/L	
Spiked Amount	40.000 Range 70 - 130		Recovery =	94.77%		
17) S	SS a,a,a-trifluorotol...	0.000	0	N.D.	ug/L	
Spiked Amount	20.000		Recovery =	0.00%		
22) S	SS 2,5-dibromotoluene #2	26.359	14678464	38.049	ug/L	m
Spiked Amount	40.000 Range 70 - 130		Recovery =	95.12%		
	Target Compounds					
1)	methyl-t-butyl ether ...	0.000	0	N.D.	ug/L	
2)	benzene	0.000	0	N.D.	ug/L	
3)	toluene	0.000	0	N.D.	ug/L	
5)	ethylbenzene	15.464	58634	0.049	ug/L	m PM
6)	m&p-xylenes	15.570	221640	0.156	ug/L	m
7)	o-xylene	16.277	60491	0.049	ug/L	m
8)	1,2,4-trimethylbenzene	18.563	148352	0.132	ug/L	m
9) H	C9-C10 Aromatics	18.612	12022389	7.766	ug/L	m RI
10)	naphthalene	23.686	201708	0.111	ug/L	m PM
13)	pentane #2	0.000	0	N.D.	ug/L	
14)	2-methylpentane #2	0.000	0	N.D.	ug/L	
15)	2,2,4-trimethylpentan...	0.000	0	N.D.	ug/L	
16) H	C5-C8 Aliphatics #2	11.378	19519612	9.305	ug/L	m RI
18)	nonane #2	14.980	192794	0.585	ug/L	m PM
19)	decane #2	0.000	0	N.D.	ug/L	
20)	n-butylcyclohexane #2	0.000	0	N.D.	ug/L	
21) H	C9-C12 Aliphatics #2	15.611	23295833	27.793	ug/L	m RI

(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : X:\V6\2023\Nov23\111623\
Data File : V6111609.D
Signal(s) : Signal #1: CPDET1B.ch Signal #2: FID2A.ch
Acq On : 16 Nov 2023 2:13 pm
Operator : sfp
Sample : 67797-02 5mL (Sig #1); (Sig #2)
Misc : 5
ALS Vial : 9 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 17 11:55:56 2023
Quant Method : X:\V6\methods\V6VPH082423CHe.M
Quant Title : VOA06 MA VPH
QLast Update : Thu Aug 24 11:07:18 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



This File:	L:\VOA\Excel Reports\2023\V6111606
Analysis Group:	8260/8021/624
Field ID:	TB30-110623 18001468
Sample:	67797-03 5mL Dow Salvage Yard
Misc:	5 CRE
Import File Name	v6 111623
TestGroupID	VMA_VPH_PresCert_A
Aqueous or Soil? (A or S)	A
Solid amount (g)	
Methanol volume (mL)	
Percent Solid (%)	
Soil Prep Date	
Weight:	
Volume:	
Lab#:	67797-003
AnalysisDate:	11/16/2023
AnalysisTime:	12:32
Dilution:	1
AnalyzedBy:	SFP V6111606.D
QC_Code:	
Prep#:	

Reviewer Checks:

- Quant Report: Reviewed, Ranges integrated, Analyst Initials & Date
- Chromatogram Checked, Major peaks identified
- Results consistent w/ other attached analyses
- Reanalysis reason noted
- Substitute dilution data checked
- Correct dilution and reason clear or noted
- Flags checked (Expiration, F+, Over Cal, Surr, Aspen, QC)
- Other QC failures or issues noted in Aspen
- Correct data file and/or date/time in Aspen

Notes: Calibration based on sum of discrete peak areas

Initials & Date: 11/20/23

#	Surrogate Standards	Import Value (as ug/L)	Recovery	Flag	QC Limits	Surrogate True Values
11	SS 2,5-dibromotoluene	42.85	**107%**		70-130	40
22	SS 2,5-dibromotoluene #2	42.78	**107%**		70-130	40
4	SS a,a,a-trifluorotoluene	1.44	**0%**		70-130*	20

#	AnalyteName	Concentration (ug/L)	
	C5-C8 Aliphatics #2	**18.335**	18.335
	C9-C12 Aliphatics #2	**31.819**	31.819
1	Methyl-t-butyl ether (MTBE)	0.000	0
2	benzene	0.000	0
3	toluene	0.127	0.1272
5	ethylbenzene	0.152	0.1516
6	m&p-xylenes	0.621	0.6206
7	o-xylene	0.290	0.2896
10	naphthalene	0.597	0.597
	C5-C8 Aliphatics Adj	**18.208**	18.208
	C9-C12 Aliphatics Adj	**17.958**	17.958
	C9-C10 Aromatics	**12.798**	12.798
	Total Xylenes	0.000	

Quantitation Report (QT Reviewed)

Data Path : X:\V6\2023\Nov23\111623\
Data File : V6111606.D
Signal(s) : Signal #1: CPDET1B.ch Signal #2: FID2A.ch
Acq On : 16 Nov 2023 12:32 pm
Operator : sfp
Sample : 67797-03 5mL (Sig #1); (Sig #2)
Misc : 5
ALS Vial : 6 Sample Multiplier: 1

SFP
11/17/23

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 17 11:55:47 2023
Quant Method : X:\V6\methods\V6VPH082423CHe.M
Quant Title : VOA06 MA VPH
QLast Update : Thu Aug 24 11:07:18 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	R.T.	Response	Conc	Units		
	System Monitoring Compounds						
4)	S SS a,a,a-trifluorotol...	11.931	640337	1.441	ug/L	m	
Spiked Amount	20.000		Recovery =	7.21%			
11)	S SS 2,5-dibromotoluene	26.359	32803158	42.847	ug/L		
Spiked Amount	40.000 Range 70 - 130		Recovery =	107.12%			
17)	S SS a,a,a-trifluorotol...	11.931	712968	0.679	ug/L		
Spiked Amount	20.000		Recovery =	3.40%			
22)	S SS 2,5-dibromotoluene #2	26.359	16333127	42.781	ug/L		
Spiked Amount	40.000 Range 70 - 130		Recovery =	106.95%			
	Target Compounds						
1)	methyl-t-butyl ether ...	0.000	0	N.D.	ug/L		
2)	benzene	0.000	0	N.D.	ug/L		
3)	toluene	13.453	184247	0.127	ug/L	m	PM
5)	ethylbenzene	15.465	181224	0.152	ug/L	m	
6)	m&p-xylenes	15.638	884316	0.621	ug/L	m	
7)	o-xylene	16.274	354008	0.290	ug/L	m	
8)	1,2,4-trimethylbenzene	18.559	302467	0.269	ug/L	m	↓
9)	H C9-C10 Aromatics	18.612	17021257	12.798	ug/L	m	RI
10)	naphthalene	23.691	710112	0.597	ug/L	m	PM
13)	pentane #2	0.000	0	N.D.	ug/L		
14)	2-methylpentane #2	8.398	418892	0.423	ug/L	m	PM
15)	2,2,4-trimethylpentan...	10.889	388266	0.240	ug/L	m	↓
16)	H C5-C8 Aliphatics #2	11.378	30649908	18.335	ug/L	m	RI
18)	nonane #2	14.984	439410	0.787	ug/L	m	PM
19)	decane #2	17.107	429606	4.619	ug/L	m	↓
20)	n-butylcyclohexane #2	18.725	1003110	1.075	ug/L		
21)	H C9-C12 Aliphatics #2	15.611	28178948	31.819	ug/L	m	RI

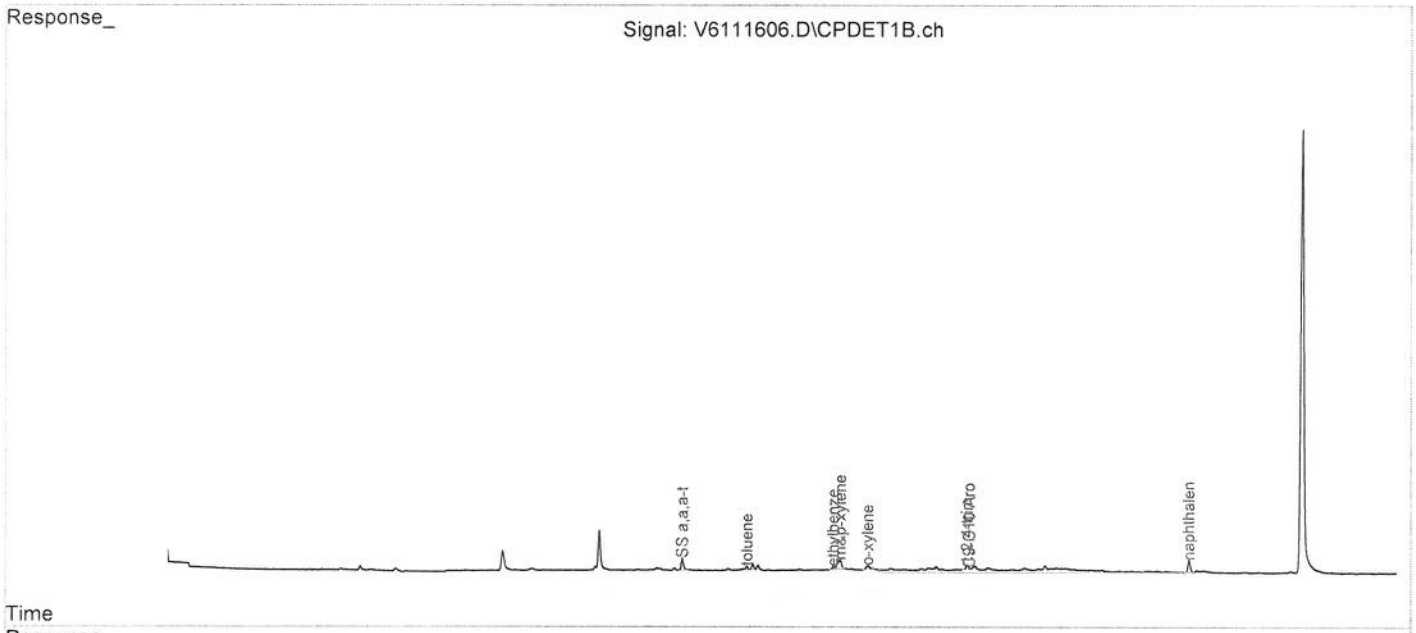
(f)=RT Delta > 1/2 Window (m)=manual int.

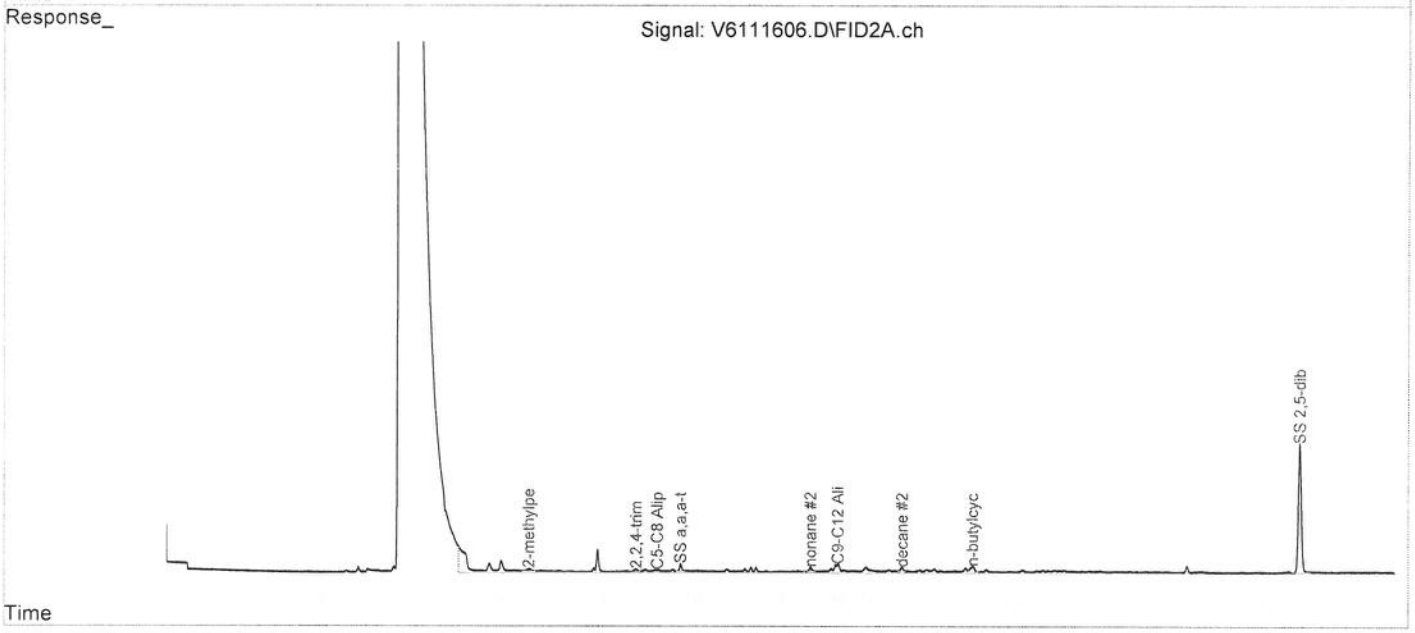
Quantitation Report (QT Reviewed)

Data Path : X:\V6\2023\Nov23\111623\
Data File : V6111606.D
Signal(s) : Signal #1: CPDET1B.ch Signal #2: FID2A.ch
Acq On : 16 Nov 2023 12:32 pm
Operator : sfp
Sample : 67797-03 5mL (Sig #1); (Sig #2)
Misc : 5
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 17 11:55:47 2023
Quant Method : X:\V6\methods\V6VPH082423CHe.M
Quant Title : VOA06 MA VPH
QLast Update : Thu Aug 24 11:07:18 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





This File:	L:\SVOA\Excel Reports\ABN\231122\67797-001		Charles Leahy L:\SVOA\ABN\ABN 8270DoD ImportFileBuilde
Analysis Group:	ABN	Dow Salvage Yard	11/22/23 1:55 PM
Field ID:	SY-OBMW7-110623	CRE	L:\SVOA\ABN\
Sample:	67797-01 acid x1	67797-01 bn x1	L:\SVOA\Excel Reports\ABN\231122\
Misc:			L:\SVOA\PDFReports\
DataFile:	506.D\S4ABN110223A.XLS	4ABN110223A.XLS	
Import File Name	S4 ABN 17096 DoD		
TestGroupID	E8270DoD_A		
Aqueous or Soil? (A or S)	A		
Prep Date	11/9/2023		
Lab#:	67797-001		
QC_Code:			
Prep#	17096		

WS3831

Reviewer Checks:

Quant Report: Reviewed, Analyst Initials & Date
Chromatogram Checked, Major peaks identified ✓
Results consistent w/ other attached analyses
Reanalysis reason noted
Substitute dilution data checked
Correct dilution and reason clear or noted –
Flags checked (Expiration, F+, Over Cal, Surr, Aspen, QC)
Other QC failures or issues noted in Aspen
Correct data file and/or date/time in Aspen .

Addressed in case Narr. - LCSD

Notes:
Reviewer Initials & Date: 11/28/23

#	Surrogate Standards	Conc. (ug/mL)	AnalysisDate	AnalyzedBy		Dil'n	Weight	Volume	Surr	Recovery	Flag	QC Limits
4	2-fluorophenol	26.76	11/15/2023	CL	s4111506.D	1	1	1	100	**27%**		21-100
7	phenol-d6	14.22	11/15/2023	CL	s4111506.D	1	1	1	100	**14%**		10-102
59	2,4,6-tribromophenol	41.87	11/15/2023	CL	s4111506.D	1	1	1	100	**42%**		10-123
22	nitrobenzene-d5	33.86	11/15/2023	CL	s4111507.D	1	1	1	50	**68%**	–	35-114
38	2-fluorobiphenyl	34.24	11/15/2023	CL	s4111507.D	1	1	1	50	**68%**		43-116
75	terphenyl-d14	42.63	11/15/2023	CL	s4111507.D	1	1	1	50	**85%**		33-141
6	phenol	0.00	11/15/2023	CL	s4111506.D	1	1	1				
8	2-chlorophenol	0.00	11/15/2023	CL	s4111506.D	1	1	1				
15	2-methylphenol	0.00	11/15/2023	CL	s4111506.D	1	1	1				
15	2-methylphenol	0.00	11/15/2023	CL	s4111506.D	1	1	1				
20	4-methylphenol	0.00	11/15/2023	CL	s4111506.D	1	1	1				
25	2-nitrophenol	0.00	11/15/2023	CL	s4111506.D	1	1	1				
26	2,4-dimethylphenol	0.00	11/15/2023	CL	s4111506.D	1	1	1				
28	2,4-dichlorophenol	0.00	11/15/2023	CL	s4111506.D	1	1	1				
29	2,6-dichlorophenol	0.00	11/15/2023	CL	s4111506.D	1	1	1				
32	benzoic acid	0.00	11/15/2023	CL	s4111506.D	1	1	1				
35	4-chloro-3-methylphenol	0.00	11/15/2023	CL	s4111506.D	1	1	1				
40	2,4,6-trichlorophenol	0.00	11/15/2023	CL	s4111506.D	1	1	1				
41	2,4,5-trichlorophenol	0.00	11/15/2023	CL	s4111506.D	1	1	1				
51	2,4-dinitrophenol	0.00	11/15/2023	CL	s4111506.D	1	1	1				
53	4-nitrophenol	0.00	11/15/2023	CL	s4111506.D	1	1	1				
60	4,6-dinitro-2-methylphenol	0.00	11/15/2023	CL	s4111506.D	1	1	1				
66	pentachlorophenol	0.00	11/15/2023	CL	s4111506.D	1	1	1				
2	N-nitroso-dimethylamine	0.00	11/15/2023	CL	s4111507.D	1	1	1				
3	pyridine	0.00	11/15/2023	CL	s4111507.D	1	1	1				
5	aniline	0.00	11/15/2023	CL	s4111507.D	1	1	1				
9	n-decane	0.00	11/15/2023	CL	s4111507.D	1	1	1				
10	bis-(2-choroethyl)ether	0.00	11/15/2023	CL	s4111507.D	1	1	1				
11	1,3-dichlorobenzene	0.00	11/15/2023	CL	s4111507.D	1	1	1				
12	1,4-diclorobenzene	0.00	11/15/2023	CL	s4111507.D	1	1	1				
13	1,2-dichlorobenzene	0.00	11/15/2023	CL	s4111507.D	1	1	1				
14	benzyl alcohol	0.00	11/15/2023	CL	s4111507.D	1	1	1				
16	2,2'-oxybis(1-chloropropane)	0.00	11/15/2023	CL	s4111507.D	1	1	1				
##	acetephenone	#N/A	11/15/2023	CL	s4111507.D	1	1	1			#N/A	
18	hexachloroethane	0.00	11/15/2023	CL	s4111507.D	1	1	1				
19	N-nitroso-di-n-propylamine	0.00	11/15/2023	CL	s4111507.D	1	1	1				
23	nitrobenzene	0.00	11/15/2023	CL	s4111507.D	1	1	1				
24	isophorone	0.00	11/15/2023	CL	s4111507.D	1	1	1				
27	bis(2-chloroethoxy)methane	0.00	11/15/2023	CL	s4111507.D	1	1	1				
30	1,2,4-trichlorobenzene	0.00	11/15/2023	CL	s4111507.D	1	1	1				
31	naphthalene	0.00	11/15/2023	CL	s4111507.D	1	1	1				
33	4-chloroanaline	0.00	11/15/2023	CL	s4111507.D	1	1	1				
34	hexachloro-1,3-butadiene	0.00	11/15/2023	CL	s4111507.D	1	1	1				
36	2-methylnaphthalene	0.00	11/15/2023	CL	s4111507.D	1	1	1				
39	hexachlorocyclopentadiene	0.00	11/15/2023	CL	s4111507.D	1	1	1				
43	2-chloronaphthalene	0.00	11/15/2023	CL	s4111507.D	1	1	1				
44	2-nitroanaline	0.00	11/15/2023	CL	s4111507.D	1	1	1				
45	acenaphthylene	0.00	11/15/2023	CL	s4111507.D	1	1	1				
46	dimethyl phthalate	0.00	11/15/2023	CL	s4111507.D	1	1	1				
47	2,6-dinitrotoluene	0.00	11/15/2023	CL	s4111507.D	1	1	1				
48	2,4-dinitrotoluene	0.00	11/15/2023	CL	s4111507.D	1	1	1				
49	acenaphthene	0.00	11/15/2023	CL	s4111507.D	1	1	1				
50	3-nitroanaline	0.00	11/15/2023	CL	s4111507.D	1	1	1				
52	dibenzofuran	0.00	11/15/2023	CL	s4111507.D	1	1	1				
54	fluorene	0.00	11/15/2023	CL	s4111507.D	1	1	1				
55	diethyl phthalate	0.00	11/15/2023	CL	s4111507.D	1	1	1				
56	4-chlorophenyl phenyl ether	0.00	11/15/2023	CL	s4111507.D	1	1	1				
57	4-nitroanaline	0.00	11/15/2023	CL	s4111507.D	1	1	1				
61	azobenzene	0.00	11/15/2023	CL	s4111507.D	1	1	1				
62	N-nitrosodiphenylamine	0.00	11/15/2023	CL	s4111507.D	1	1	1				
63	4-bromophenyl phenyl ether	0.00	11/15/2023	CL	s4111507.D	1	1	1				
64	hexachlorobenzene	0.00	11/15/2023	CL	s4111507.D	1	1	1				
65	n-octadecane	0.00	11/15/2023	CL	s4111507.D	1	1	1				
67	phenanthrene	0.00	11/15/2023	CL	s4111507.D	1	1	1				
68	anthracene	0.00	11/15/2023	CL	s4111507.D	1	1	1				
70	carbazole	0.00	11/15/2023	CL	s4111507.D	1	1	1				
71	di-n-butyl phthalate	0.00	11/15/2023	CL	s4111507.D	1	1	1				
73	fluoranthene	0.00	11/15/2023	CL	s4111507.D	1	1	1				
76	benzidine	0.00	11/15/2023	CL	s4111507.D	1	1	1				
77	pyrene	0.00	11/15/2023	CL	s4111507.D	1	1	1				
78	butyl benzyl phthalate	0.00	11/15/2023	CL	s4111507.D	1	1	1				
79	benzo(a)anthracene	0.00	11/15/2023	CL	s4111507.D	1	1	1				
80	chrysene	0.00	11/15/2023	CL	s4111507.D	1	1	1				
81	3,3'-dichlorobenzidine	0.00	11/15/2023	CL	s4111507.D	1	1	1				
82	bis-2-ethylhexyl phthalate	0.00	11/15/2023	CL	s4111507.D	1	1	1				
84	di-n-octyl phthalate	0.00	11/15/2023	CL	s4111507.D	1	1	1				
85	Benzo(b)fluoranthene	0.00	11/15/2023	CL	s4111507.D	1	1	1				
86	benzo(k)fluoranthene	0.00	11/15/2023	CL	s4111507.D	1	1	1				
87	benzo(a)pyrene	0.00	11/15/2023	CL	s4111507.D	1	1	1				
88	indeno(1,2,3-cd)pyrene	0.00	11/15/2023	CL	s4111507.D	1	1	1				
89	dibenzo(a,h)anthracene	0.00	11/15/2023	CL	s4111507.D	1	1	1				
91	benzo(g,h,i)perylene	0.00	11/15/2023	CL	s4111507.D	1	1	1				

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Nov23\111523\
Data File : s4111506.D
Acq On : 15 Nov 2023 12:48 pm
Operator : cl
Sample : 67797-01 acid x1
Misc :
ALS Vial : 4 Sample Multiplier: 1

CL
11/22/23 @ 11:30
CharlesL

Quant Time: Nov 17 16:12:55 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration

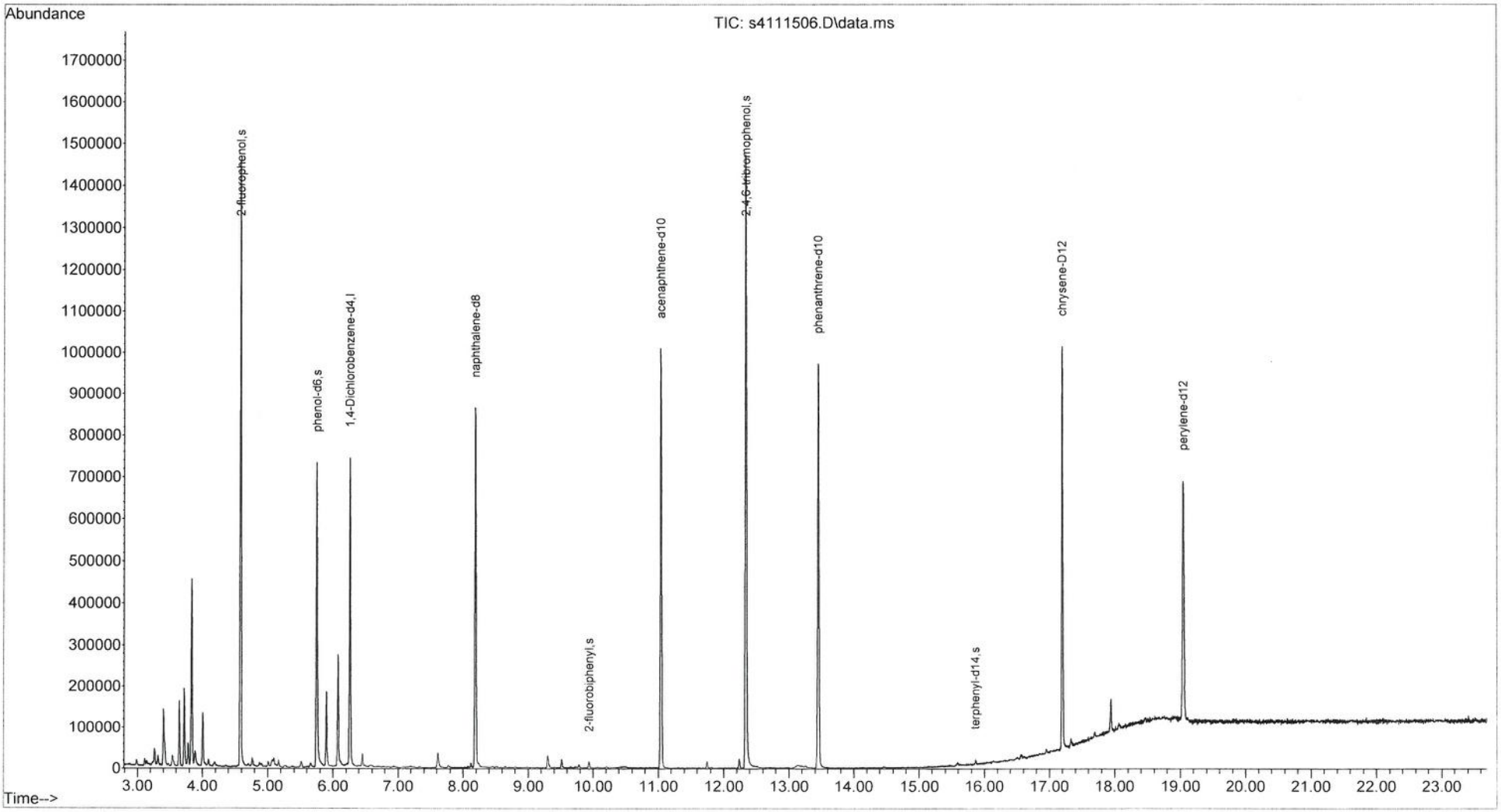
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.255	152	154015	10.00	ug/mL	0.00
21) naphthalene-d8	8.184	136	563497	10.00	ug/mL	-0.01
37) acenaphthene-d10	11.040	164	297268	10.00	ug/mL	0.00
58) phenanthrene-d10	13.448	188	539671	10.00	ug/mL	-0.01
74) chrysene-D12	17.197	240	393086	10.00	ug/mL	0.00
83) perylene-d12	19.042	264	325686	10.00	ug/mL	0.00
System Monitoring Compounds						
4) 2-fluorophenol	4.581	112	511928	26.76	ug/mL	0.00
Spiked Amount 200.000			Recovery =	13.38%		
7) phenol-d6	5.745	99	330496	14.22	ug/mL	-0.01
Spiked Amount 200.000			Recovery =	7.11%		
22) nitrobenzene-d5	0.000	82	0	0.00	ug/mL	
Spiked Amount 100.000			Recovery =	0.00%		
38) 2-fluorobiphenyl	9.937	172	6762	0.11	ug/mL	0.00
Spiked Amount 100.000			Recovery =	0.11%		
59) 2,4,6-tribromophenol	12.337	330	275353	41.87	ug/mL	0.00
Spiked Amount 200.000			Recovery =	20.93%		
69) o-terphenyl	0.000	230	0	0.00	ug/mL	
Spiked Amount 100.000			Recovery =	0.00%		
72) 1-Chloro-octadecane	0.000	57	0	0.00	ug/mL	
Spiked Amount 100.000			Recovery =	0.00%		
75) terphenyl-d14	15.861	244	4900m	0.11	ug/mL	0.00
Spiked Amount 100.000			Recovery =	0.11%		
Target Compounds						Qvalue
93) DDT	16.634	TIC	1317	Below Cal	#	22

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Nov23\111523\
Data File : s4111506.D
Acq On : 15 Nov 2023 12:48 pm
Operator : cl
Sample : 67797-01 acid x1
Misc :
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Nov 17 16:12:55 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Nov23\111523\
Data File : s4111507.D
Acq On : 15 Nov 2023 01:18 pm
Operator : cl
Sample : 67797-01 bn x1
Misc :
ALS Vial : 5 Sample Multiplier: 1

CL
11/22/23 @ 11:30
CharlesL

Quant Time: Nov 17 16:13:00 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration

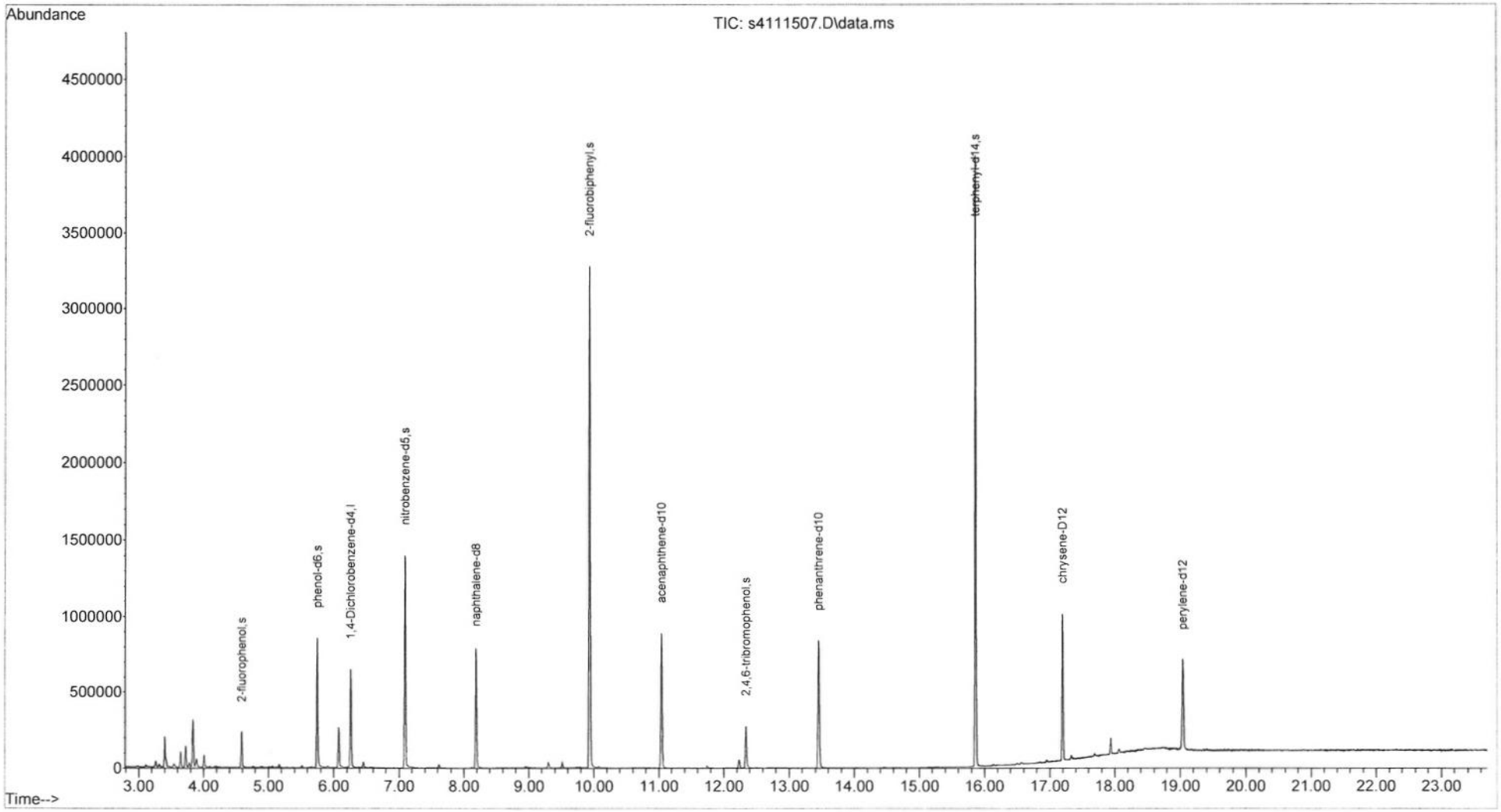
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.255	152	138743	10.00	ug/mL	0.00
21) naphthalene-d8	8.184	136	497027	10.00	ug/mL	0.00
37) acenaphthene-d10	11.041	164	262094	10.00	ug/mL	0.00
58) phenanthrene-d10	13.449	188	482670	10.00	ug/mL	-0.01
74) chrysene-D12	17.194	240	380060	10.00	ug/mL	0.00
83) perylene-d12	19.039	264	329980	10.00	ug/mL	0.00
System Monitoring Compounds						
4) 2-fluorophenol	4.586	112	84305	4.89	ug/mL	0.00
Spiked Amount 200.000			Recovery =	2.44%		
7) phenol-d6	5.746	99	374484	17.89	ug/mL	-0.01
Spiked Amount 200.000			Recovery =	8.95%		
22) nitrobenzene-d5	7.091	82	590680	33.86	ug/mL	-0.01
Spiked Amount 100.000			Recovery =	33.86%		
38) 2-fluorobiphenyl	9.932	172	1411726	34.24	ug/mL	0.00
Spiked Amount 100.000			Recovery =	34.24%		
59) 2,4,6-tribromophenol	12.338	330	48373	8.30	ug/mL	0.00
Spiked Amount 200.000			Recovery =	4.15%		
69) o-terphenyl	0.000	230	0	0.00	ug/mL	
Spiked Amount 100.000			Recovery =	0.00%		
72) 1-Chloro-octadecane	0.000	57	0	0.00	ug/mL	
Spiked Amount 100.000			Recovery =	0.00%		
75) terphenyl-d14	15.864	244	1749017	42.63	ug/mL	0.00
Spiked Amount 100.000			Recovery =	42.63%		
Target Compounds						Qvalue
42) 1,1'-Biphenyl	10.077	154	3298	Below Cal	#	40
71) di-n-butyl phthalate	14.455	149	864	Below Cal	#	78
93) DDT	16.626	TIC	1278	Below Cal	#	22

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Nov23\111523\
Data File : s4111507.D
Acq On : 15 Nov 2023 01:18 pm
Operator : cl
Sample : 67797-01 bn x1
Misc :
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Nov 17 16:13:00 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration



This File: **L:\SVOA\Excel Reports\ABN\231122\67797-002**
Analysis Group: **ABN** **Dow Salvage Yard**
Field ID: **SY-OBMW10-110623** **CRE**
Sample: **67797-02 acid x1** **67797-02 bn x1**
Misc:
DataFile: 508.D\S4ABN110223A.XLS 4ABN110223A.XLS
Import File Name: **S4 ABN 17096 DoD**
TestGroupID: **E8270DoD_A**
Aqueous or Soil? (A or S): **A**
Prep Date: **11/9/2023**
Lab#: **67797-002**
QC_Code:
Prep#: **17096**

Charles Leahy L:\SVOA\ABN\ABN 8270DoD ImportFileBuilde
11/22/23 1:56 PM
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L:\SVOA\PDFReports\

Reviewer Checks:
Quant Report: Reviewed, Analyst Initials & Date
Chromatogram Checked, Major peaks identified
Results consistent w/ other attached analyses
Reanalysis reason noted
Substitute dilution data checked
Correct dilution and reason clear or noted
Flags checked (Expiration, F+, Over Cal, Surr, Aspen, QC)
Other QC failures or issues noted in Aspen
Correct data file and/or date/time in Aspen

TB addressed in case narr. (LCSD)
#Trace hits are in non-Potd portion A-v. BN

Notes:
Reviewer Initials & Date: 11/29/23

#	Surrogate Standards	Conc. (ug/mL)	AnalysisDate	AnalyzedBy	Dil'n	Weight	Volume	Surr	Recovery	Flag	QC Limits
4	2-fluorophenol	35.39	11/15/2023	CL s4111508.D	1	1	1	100	**35%**		21-100
7	phenol-d6	21.12	11/15/2023	CL s4111508.D	1	1	1	100	**21%**		10-102
59	2,4,6-tribromophenol	67.42	11/15/2023	CL s4111508.D	1	1	1	100	**67%**		10-123
22	nitrobenzene-d5	33.44	11/15/2023	CL s4111509.D	1	1	1	50	**67%**		35-114
38	2-fluorobiphenyl	32.91	11/15/2023	CL s4111509.D	1	1	1	50	**66%**		43-116
75	terphenyl-d14	39.62	11/15/2023	CL s4111509.D	1	1	1	50	**79%**		33-141
6	phenol	0.00	11/15/2023	CL s4111508.D	1	1	1				
8	2-chlorophenol	0.00	11/15/2023	CL s4111508.D	1	1	1				
15	2-methylphenol	0.00	11/15/2023	CL s4111508.D	1	1	1				
15	2-methylphenol	0.00	11/15/2023	CL s4111508.D	1	1	1				
20	4-methylphenol	0.00	11/15/2023	CL s4111508.D	1	1	1				
25	2-nitrophenol	0.00	11/15/2023	CL s4111508.D	1	1	1				
26	2,4-dimethylphenol	0.00	11/15/2023	CL s4111508.D	1	1	1				
28	2,4-dichlorophenol	0.00	11/15/2023	CL s4111508.D	1	1	1				
29	2,6-dichlorophenol	0.00	11/15/2023	CL s4111508.D	1	1	1				
32	benzoic acid	0.00	11/15/2023	CL s4111508.D	1	1	1				
35	4-chloro-3-methylphenol	0.00	11/15/2023	CL s4111508.D	1	1	1				
40	2,4,6-trichlorophenol	0.00	11/15/2023	CL s4111508.D	1	1	1				
41	2,4,5-trichlorophenol	0.00	11/15/2023	CL s4111508.D	1	1	1				
51	2,4-dinitrophenol	0.00	11/15/2023	CL s4111508.D	1	1	1				
53	4-nitrophenol	0.00	11/15/2023	CL s4111508.D	1	1	1				
60	4,6-dinitro-2-methylphenol	0.00	11/15/2023	CL s4111508.D	1	1	1				
66	pentachlorophenol	0.00	11/15/2023	CL s4111508.D	1	1	1				
2	N-nitroso-dimethylamine	0.00	11/15/2023	CL s4111509.D	1	1	1				
3	pyridine	0.00	11/15/2023	CL s4111509.D	1	1	1				
5	aniline	0.00	11/15/2023	CL s4111509.D	1	1	1				
9	n-decane	0.00	11/15/2023	CL s4111509.D	1	1	1				
10	bis-(2-choroethyl)ether	0.00	11/15/2023	CL s4111509.D	1	1	1				
11	1,3-dichlorobenzene	0.00	11/15/2023	CL s4111509.D	1	1	1				
12	1,4-diclorobenzene	# 0.00	11/15/2023	CL s4111509.D	1	1	1				
13	1,2-dichlorobenzene	0.00	11/15/2023	CL s4111509.D	1	1	1				
14	benzyl alcohol	0.00	11/15/2023	CL s4111509.D	1	1	1				
16	2,2'-oxybis(1-chloropropane)	0.00	11/15/2023	CL s4111509.D	1	1	1				
##	acetephenone	#N/A	11/15/2023	CL s4111509.D	1	1	1			#N/A	
18	hexachloroethane	0.00	11/15/2023	CL s4111509.D	1	1	1				
19	N-nitroso-di-n-propylamine	0.00	11/15/2023	CL s4111509.D	1	1	1				
23	nitrobenzene	0.00	11/15/2023	CL s4111509.D	1	1	1				
24	isophorone	0.00	11/15/2023	CL s4111509.D	1	1	1				
27	bis(2-chloroethoxy)methane	0.00	11/15/2023	CL s4111509.D	1	1	1				
30	1,2,4-trichlorobenzene	0.00	11/15/2023	CL s4111509.D	1	1	1				
31	naphthalene	0.00	11/15/2023	CL s4111509.D	1	1	1				
33	4-chloroanaline	0.00	11/15/2023	CL s4111509.D	1	1	1				
34	hexachloro-1,3-butadiene	0.00	11/15/2023	CL s4111509.D	1	1	1				
36	2-methylnaphthalene	0.00	11/15/2023	CL s4111509.D	1	1	1				
39	hexachlorocyclopentadiene	0.00	11/15/2023	CL s4111509.D	1	1	1				
43	2-chloronaphthalene	0.00	11/15/2023	CL s4111509.D	1	1	1				
44	2-nitroanaline	0.00	11/15/2023	CL s4111509.D	1	1	1				
45	acenaphthylene	0.00	11/15/2023	CL s4111509.D	1	1	1				
46	dimethyl phthalate	0.00	11/15/2023	CL s4111509.D	1	1	1				
47	2,6-dinitrotoluene	0.00	11/15/2023	CL s4111509.D	1	1	1				
48	2,4-dinitrotoluene	0.00	11/15/2023	CL s4111509.D	1	1	1				
49	acenaphthene	0.00	11/15/2023	CL s4111509.D	1	1	1				
50	3-nitroanaline	0.00	11/15/2023	CL s4111509.D	1	1	1				
52	dibenzofuran	0.00	11/15/2023	CL s4111509.D	1	1	1				
54	fluorene	0.00	11/15/2023	CL s4111509.D	1	1	1				
55	diethyl phthalate	0.00	11/15/2023	CL s4111509.D	1	1	1				
56	4-chlorophenyl phenyl ether	0.00	11/15/2023	CL s4111509.D	1	1	1				
57	4-nitroanaline	0.00	11/15/2023	CL s4111509.D	1	1	1				
61	azobenzene	0.00	11/15/2023	CL s4111509.D	1	1	1				
62	N-nitrosodiphenylamine	0.00	11/15/2023	CL s4111509.D	1	1	1				
63	4-bromophenyl phenyl ether	0.00	11/15/2023	CL s4111509.D	1	1	1				
64	hexachlorobenzene	0.00	11/15/2023	CL s4111509.D	1	1	1				
65	n-octadecane	0.00	11/15/2023	CL s4111509.D	1	1	1				
67	phenanthrene	0.00	11/15/2023	CL s4111509.D	1	1	1				
68	anthracene	0.00	11/15/2023	CL s4111509.D	1	1	1				
70	carbazole	0.00	11/15/2023	CL s4111509.D	1	1	1				
71	di-n-butyl phthalate	0.00	11/15/2023	CL s4111509.D	1	1	1				
73	fluoranthene	0.00	11/15/2023	CL s4111509.D	1	1	1				
76	benzidine	0.00	11/15/2023	CL s4111509.D	1	1	1				
77	pyrene	0.00	11/15/2023	CL s4111509.D	1	1	1				
78	butyl benzyl phthalate	0.00	11/15/2023	CL s4111509.D	1	1	1				
79	benzo(a)anthracene	0.00	11/15/2023	CL s4111509.D	1	1	1				
80	chrysene	0.00	11/15/2023	CL s4111509.D	1	1	1				
81	3,3'-dichlorobenzidine	0.00	11/15/2023	CL s4111509.D	1	1	1				
82	bis-2-ethylhexyl phthalate	0.00	11/15/2023	CL s4111509.D	1	1	1				
84	di-n-octyl phthalate	0.00	11/15/2023	CL s4111509.D	1	1	1				
85	Benzo(b)fluoranthene	0.00	11/15/2023	CL s4111509.D	1	1	1				
86	benzo(k)fluoranthene	0.00	11/15/2023	CL s4111509.D	1	1	1				
87	benzo(a)pyrene	0.00	11/15/2023	CL s4111509.D	1	1	1				
88	indeno(1,2,3-cd)pyrene	0.00	11/15/2023	CL s4111509.D	1	1	1				
89	dibenzo(a,h)anthracene	0.00	11/15/2023	CL s4111509.D	1	1	1				
90	benzo(g,h,i)perylene	0.00	11/15/2023	CL s4111509.D	1	1	1				

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Nov23\111523\
Data File : s4111508.D
Acq On : 15 Nov 2023 01:47 pm
Operator : cl
Sample : 67797-02 acid x1
Misc :
ALS Vial : 6 Sample Multiplier: 1

CL
11/22/23 @ 11:31
CharlesL

Quant Time: Nov 17 16:13:05 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration

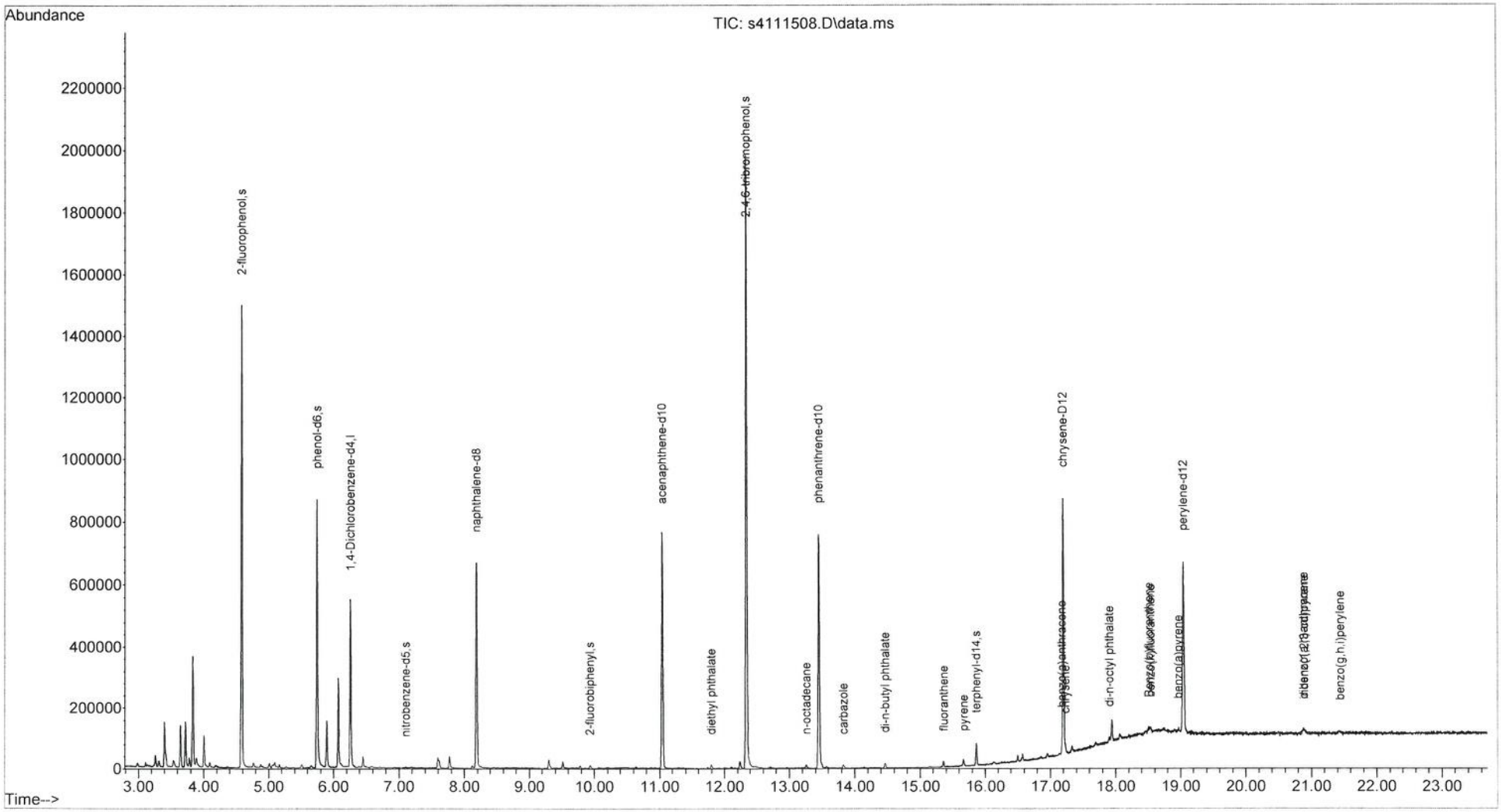
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.258	152	119545	10.00	ug/mL	0.00
21) naphthalene-d8	8.184	136	435010	10.00	ug/mL	0.00
37) acenaphthene-d10	11.041	164	229953	10.00	ug/mL	0.00
58) phenanthrene-d10	13.449	188	433909	10.00	ug/mL	-0.01
74) chrysene-D12	17.194	240	343645	10.00	ug/mL	0.00
83) perylene-d12	19.042	264	307020	10.00	ug/mL	0.00
System Monitoring Compounds						
4) 2-fluorophenol	4.581	112	525593	35.39	ug/mL	0.00
Spiked Amount 200.000			Recovery =	17.70%		
7) phenol-d6	5.745	99	380946	21.12	ug/mL	-0.01
Spiked Amount 200.000			Recovery =	10.56%		
22) nitrobenzene-d5	7.101	82	1157	0.06	ug/mL	0.00
Spiked Amount 100.000			Recovery =	0.06%		
38) 2-fluorobiphenyl	9.932	172	4857m	0.09	ug/mL	0.00
Spiked Amount 100.000			Recovery =	0.09%		
59) 2,4,6-tribromophenol	12.338	330	356764	67.42	ug/mL	0.00
Spiked Amount 200.000			Recovery =	33.71%		
69) o-terphenyl	0.000	230	0	0.00	ug/mL	
Spiked Amount 100.000			Recovery =	0.00%		
72) 1-Chloro-octadecane	0.000	57	0	0.00	ug/mL	
Spiked Amount 100.000			Recovery =	0.00%		
75) terphenyl-d14	15.864	244	29016	0.77	ug/mL	0.00
Spiked Amount 100.000			Recovery =	0.77%		
Target Compounds						Qvalue
55) diethyl phthalate	11.795	149	6323m BC	0.106	ug/mL	
65) n-octadecane	13.255	57	2504	0.098	ug/mL#	56
67) phenanthrene	13.487	178	4440	Below Cal #		60
68) anthracene	13.561	178	3289m BC	Below Cal		
70) carbazole	13.826	167	8374	0.126	ug/mL#	60
71) di-n-butyl phthalate	14.460	149	11833	0.195	ug/mL#	94
73) fluoranthene	15.360	202	9817	0.097	ug/mL#	76
77) pyrene	15.668	202	9255m BC	0.137	ug/mL	
79) benzo(a)anthracene	17.176	228	8264	0.081	ug/mL#	67
80) chrysene	17.227	228	8701	0.085	ug/mL#	84
84) di-n-octyl phthalate	17.903	149	8123	0.222	ug/mL#	79
85) Benzo(b)fluoranthene	18.509	252	9026m BC	0.141	ug/mL	
86) benzo(k)fluoranthene	18.535	252	9051m	0.156	ug/mL	
87) benzo(a)pyrene	18.960	252	5810	0.089	ug/mL#	54
88) indeno(1,2,3-cd)pyrene	20.889	276	8344m	0.141	ug/mL	
89) dibenzo(a,h)anthracene	20.881	278	6895m	0.142	ug/mL	
90) benzo(g,h,i)perylene	21.437	276	6545m	0.130	ug/mL	
93) DDT	16.629	TIC	1560	Below Cal #		22

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Nov23\111523\
Data File : s4111508.D
Acq On : 15 Nov 2023 01:47 pm
Operator : cl
Sample : 67797-02 acid x1
Misc :
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Nov 17 16:13:05 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

CL
11/22/23 @ 11:34
CharlesL

Data Path : X:\S4\2023\Nov23\111523\
Data File : s4111509.D
Acq On : 15 Nov 2023 02:17 pm
Operator : cl
Sample : 67797-02 bn x1
Misc :
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Nov 17 16:13:09 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration

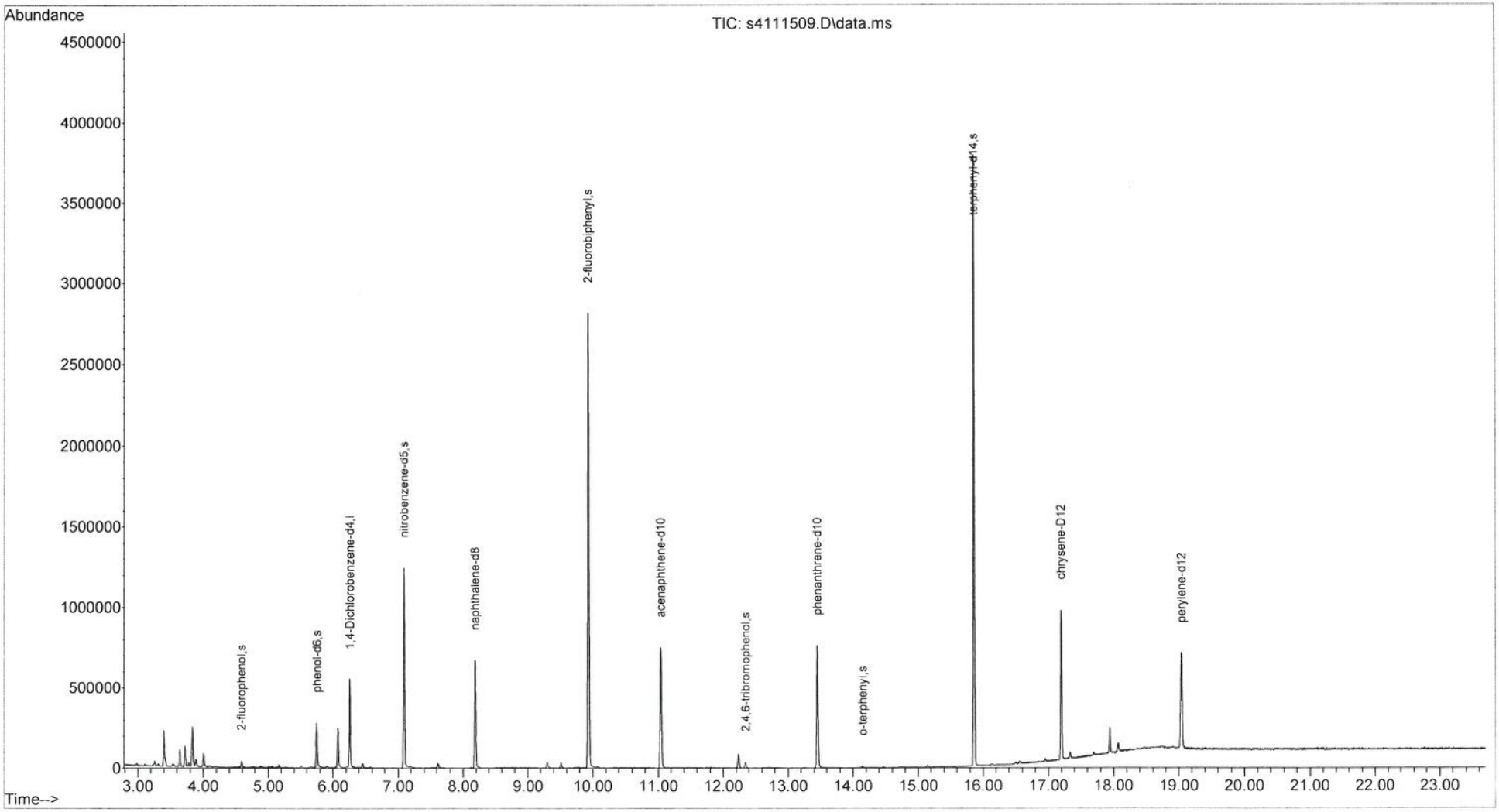
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.258	152	118135	10.00	ug/mL	0.00
21) naphthalene-d8	8.184	136	435768	10.00	ug/mL	-0.01
37) acenaphthene-d10	11.040	164	233534	10.00	ug/mL	0.00
58) phenanthrene-d10	13.451	188	443994	10.00	ug/mL	0.00
74) chrysene-D12	17.197	240	375929	10.00	ug/mL	0.00
83) perylene-d12	19.042	264	334729	10.00	ug/mL	0.00
System Monitoring Compounds						
4) 2-fluorophenol	4.586	112	14025	0.96	ug/mL	0.00
Spiked Amount 200.000			Recovery =	0.48%		
7) phenol-d6	5.748	99	130140	7.30	ug/mL	0.00
Spiked Amount 200.000			Recovery =	3.65%		
22) nitrobenzene-d5	7.091	82	511576	33.44	ug/mL	-0.01
Spiked Amount 100.000			Recovery =	33.44%		
38) 2-fluorobiphenyl	9.932	172	1209144	32.91	ug/mL	-0.01
Spiked Amount 100.000			Recovery =	32.91%		
59) 2,4,6-tribromophenol	12.345	330	6785m	1.34	ug/mL	0.00
Spiked Amount 200.000			Recovery =	0.67%		
69) o-terphenyl	14.147	230	2594m	0.08	ug/mL	0.00
Spiked Amount 100.000			Recovery =	0.08%		
72) 1-Chloro-octadecane	0.000	57	0	0.00	ug/mL	
Spiked Amount 100.000			Recovery =	0.00%		
75) terphenyl-d14	15.864	244	1607933	39.62	ug/mL	0.00
Spiked Amount 100.000			Recovery =	39.62%		
Target Compounds						Qvalue
42) 1,1'-Biphenyl	10.082	154	2688m BV	Below Cal		
79) benzo(a)anthracene	17.197	228	944	Below Cal	#	51
80) chrysene	17.197	228	944	Below Cal	#	49
93) DDT	16.628	TIC	3730	Below Cal	#	22

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Nov23\111523\
Data File : s4111509.D
Acq On : 15 Nov 2023 02:17 pm
Operator : cl
Sample : 67797-02 bn x1
Misc :
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Nov 17 16:13:09 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration



WS4069

This File:	L:\SVOA\Excel Reports\EPH\231213\67797-001			Skyla Marquis L:\SVOA\EPH\EPH ImportFileBuilder2.0.xls
Analysis Group:	EPH	Dow Salvage Yard		12/13/23 2:41 PM
Field ID:	SY-OBMW7-110623 CRE			L:\SVOA\EPH\
Sample:	67797-01 targets x1	67797-01 aro x1	67797-01 ali x1	L:\SVOA\Excel Reports\EPH\2312
Misc:	aro frac			L:\SVOA\PDF Reports\FUELS\
Method Name:	SVOA04 Method 8270E (t	S6 EPH Aromatics	S6 EPH Aliphatics	
Import File Name:	s6 EPHs QC17110			
TestGroupID:	EMA_EPH_PresCert_A			
Aqueous or Soil? (A or S)	A			
Fractionated? (Y/N)	y	y		
Prep Date:	11/13/2023			
Lab#:	67797-001			
QC_Code:				
Prep#	17110			

Reviewer Checks:

Quant Report: Reviewed? Ranges integrated? Analyst Initials & Date?	1
Chromatogram Checked? Major peaks identified?	2
Soil prep data checked: weight, volume, %solid, Prep date	5
Field ID consistent with data and any field replicates	
Results consistent with any re-runs & internal QC	
Substitute dilution data checked	11
Correct dilution and reason clear or noted	
Reason for reanalysis documented	
Surrogates pass or flagged & noted	
Flags checked (Expiration, F+, Over Cal)	
Other QC failures, estimates or interferences documented	
Spot checked Reported Result with Quant Report	
Checked Audit flagged data in LIMS	16

Notes:

Initials & Date: 12/13/23 — 20

X:\S4\2023\Dec23\120723\s4120715.D\S4PAH110223A.XLS PAH targets filename
X:\S6\2023\Dec23\120723\s6120728.D\S6ARO100423F.XLS aromatics filename
X:\S6\2023\Dec23\120723.SEC\s6120727.D\S6ALI100423A.XLS aliphatics filename

#	Surrogate Standards	Concentration (ug/mL)	AnalysisDate	AnalysisTime	AnalyzedBy	Dilution	Weight	Volume	Surr	Recovery	Flag	QC Limits
13	SS 1-chloro-octadecane (COD)	26.8204341	12/7/2023	03:59:00 PM	DBV s6120727.D	1	1	2	100	54%		40-140
10	SS ortho-terphenyl (OTP)	29.07376976	12/7/2023	03:59:00 PM	DBV s6120728.D	1	1	2	100	58%		40-140
3	SS 2-fluorobiphenyl (2FBP)	14.51528046	12/7/2023	03:59:00 PM	DBV s6120728.D	1	1	2	40	73%		40-140
5	SS 2-bromonaphthalene (2BN)	14.68224649	12/7/2023	03:59:00 PM	DBV s6120728.D	1	1	2	40	73%		40-140

#	AnalyteName	Concentration (ug/mL)	AnalysisDate	AnalysisTime	AnalyzedBy	Dilution	Weight	Volume
3	naphthalene	0.020047207	12/07/2023	05:22:00 PM	CL s4120715.D	1	1	2
4	2-methylnaphthalene	0	12/07/2023	05:22:00 PM	CL s4120715.D	1	1	2
12	phenanthrene	0	12/07/2023	05:22:00 PM	CL s4120715.D	1	1	2
8	acenaphthene	0	12/07/2023	05:22:00 PM	CL s4120715.D	1	1	2
7	acenaphthylene	0	12/07/2023	05:22:00 PM	CL s4120715.D	1	1	2
10	fluorene	0	12/07/2023	05:22:00 PM	CL s4120715.D	1	1	2
13	anthracene	0	12/07/2023	05:22:00 PM	CL s4120715.D	1	1	2
15	fluoranthene	0	12/07/2023	05:22:00 PM	CL s4120715.D	1	1	2
17	pyrene	0	12/07/2023	05:22:00 PM	CL s4120715.D	1	1	2
18	benzo(a)anthracene	0	12/07/2023	05:22:00 PM	CL s4120715.D	1	1	2
19	chrysene	0	12/07/2023	05:22:00 PM	CL s4120715.D	1	1	2
21	benzo(b)fluoranthene	0	12/07/2023	05:22:00 PM	CL s4120715.D	1	1	2
22	benzo(k)fluoranthene	0	12/07/2023	05:22:00 PM	CL s4120715.D	1	1	2
23	benzo(a)pyrene	0	12/07/2023	05:22:00 PM	CL s4120715.D	1	1	2
24	indeno(1,2,3-cd)pyrene	0	12/07/2023	05:22:00 PM	CL s4120715.D	1	1	2
25	dibenzo(a,h)anthracene	0	12/07/2023	05:22:00 PM	CL s4120715.D	1	1	2
26	benzo(g,h,i)perylene	0	12/07/2023	05:22:00 PM	CL s4120715.D	1	1	2
20	C11-C22 Aromatics	34.14263102	12/7/2023	03:59:00 PM	DBV s6120728.D	1	1	2
9	C9-C18 Aliphatics	18.26783342	12/7/2023	03:59:00 PM	DBV s6120727.D	1	1	2
20	C19-C36 Aliphatics	19.7376257	12/7/2023	03:59:00 PM	DBV s6120727.D	1	1	2
	Adjusted C11-C22 Aromatics	34.12258381	12/7/2023	03:59:00 PM	DBV s6120728.D	1	1	2

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Dec23\120723\
Data File : s4120715.D
Acq On : 07 Dec 2023 05:22 pm
Operator : cl
Sample : 67797-01 targets x1
Misc : aro frac
ALS Vial : 10 Sample Multiplier: 1

CL
12/8/23 @ 14:40
CharlesL

Quant Time: Dec 08 08:53:59 2023
Quant Method : X:\S4\methods\S4PAH110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration

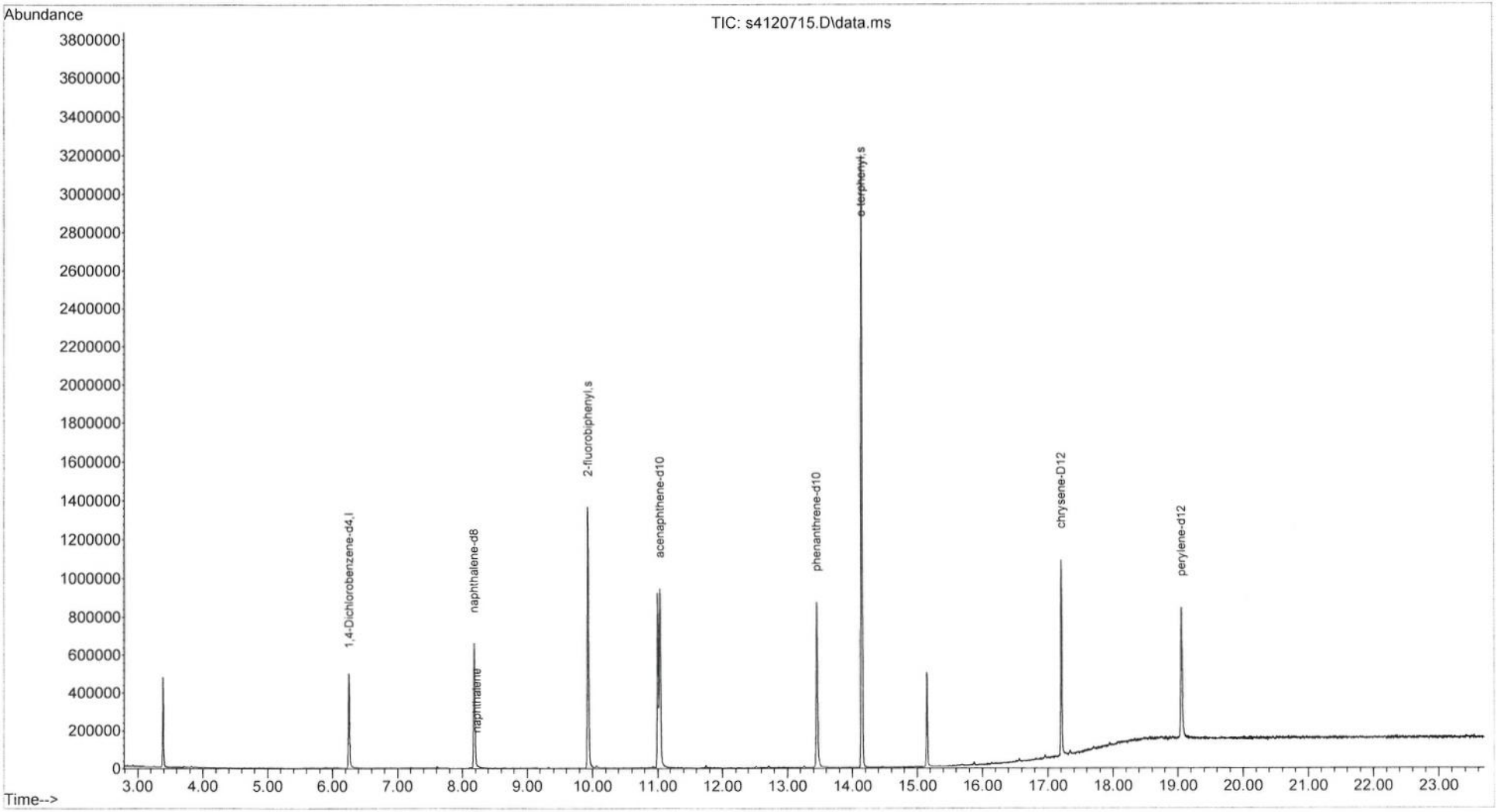
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.253	152	117519	10.00	ug/mL	-0.01
2) naphthalene-d8	8.179	136	458810	10.00	ug/mL	-0.02
5) acenaphthene-d10	11.035	164	271183	10.00	ug/mL	-0.01
11) phenanthrene-d10	13.448	188	521699	10.00	ug/mL	-0.01
16) chrysene-D12	17.204	240	451787	10.00	ug/mL	0.00
20) perylene-d12	19.054	264	410460	10.00	ug/mL	0.02
System Monitoring Compounds						
6) 2-fluorobiphenyl	9.929	172	588572	13.77	ug/mL	-0.01
Spiked Amount 100.000			Recovery = 13.77%			
14) o-terphenyl	14.142	230	904635	30.54	ug/mL	-0.01
Spiked Amount 100.000			Recovery = 30.54%			
Target Compounds						Qvalue
3) naphthalene	8.217	128	3904m	BC 0.020	ug/mL	
8) acenaphthene	11.033	154	961	Below Cal	#	4
12) phenanthrene	13.484	178	1134	Below Cal	#	60
13) anthracene	13.484	178	1134	Below Cal	#	61

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Dec23\120723\
Data File : s4120715.D
Acq On : 07 Dec 2023 05:22 pm
Operator : cl
Sample : 67797-01 targets x1
Misc : aro frac
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Dec 08 08:53:59 2023
Quant Method : X:\S4\methods\S4PAH110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration



SFP
12/12/23 @ 12:24
SkylaM

Data Path : X:\S6\2023\Dec23\120723\
Data File : s6120728.D
Signal(s) : FID1A.ch
Acq On : 07 Dec 2023 03:59 pm
Operator : dbv
Sample : 67797-01 aro x1
Misc :
ALS Vial : 14 Sample Multiplier: 1

Integration File: rteint.p
Quant Time: Dec 08 17:08:21 2023
Quant Method : X:\S6\methods\S6ARO100423F.M
Quant Title : S6 EPH Aromatics
QLast Update : Thu Oct 05 11:16:37 2023
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc	Units	
	System Monitoring Compounds					
3) S	SS 2-fluorobiphenyl (...	9.527	2048439	14.515	ug/mLm	BC = Baseline Correction
Spiked Amount	20.000		Recovery =	72.58%		
5) S	SS 2-bromonaphthalene...	10.604	1400121	14.682	ug/mLm	BC = Baseline Correction
Spiked Amount	20.000		Recovery =	73.41%		
10) S	SS ortho-terphenyl (OTP)	13.726	4349838	29.074	ug/mLm	BC = Baseline Correction
Spiked Amount	50.000		Recovery =	58.15%		
11) S	SS 1-chloro-otadecane...	14.766	726639	5.954	ug/mL	
Spiked Amount	50.000		Recovery =	11.91%		
	Target Compounds					
1)	naphthalene	0.000	0	N.D.	ug/mLd	
2)	2-methylnaphthalene	0.000	0	N.D.	ug/mLd	
4)	acenaphthylene	0.000	0	N.D.	ug/mLd	
6)	acenaphthene	0.000	0	N.D.	ug/mL	
7)	fluorene	0.000	0	N.D.	ug/mLd	
8)	phenanthrene	0.000	0	N.D.	ug/mLd	
9)	anthracene	0.000	0	N.D.	ug/mL	
12)	fluoranthene	0.000	0	N.D.	ug/mL	
13)	pyrene	0.000	0	N.D.	ug/mL	
14)	benzo(a)anthracene	0.000	0	N.D.	ug/mL	
15)	chrysene	0.000	0	N.D.	ug/mL	
16)	benzo(b&k)fluoranthenes	0.000	0	N.D.	ug/mL	
17)	benzo(a)pyrene	0.000	0	N.D.	ug/mL	
18)	indeno&dibenzo	0.000	0	N.D.	ug/mL	
19)	benzo(g,h,i)perylene	0.000	0	N.D.	ug/mL	
20) H	C11-C22 Aromatics	12.000	4901539	34.143	ug/mLm	RI = Range Integration

(f)=RT Delta > 1/2 Window (m)=manual int.

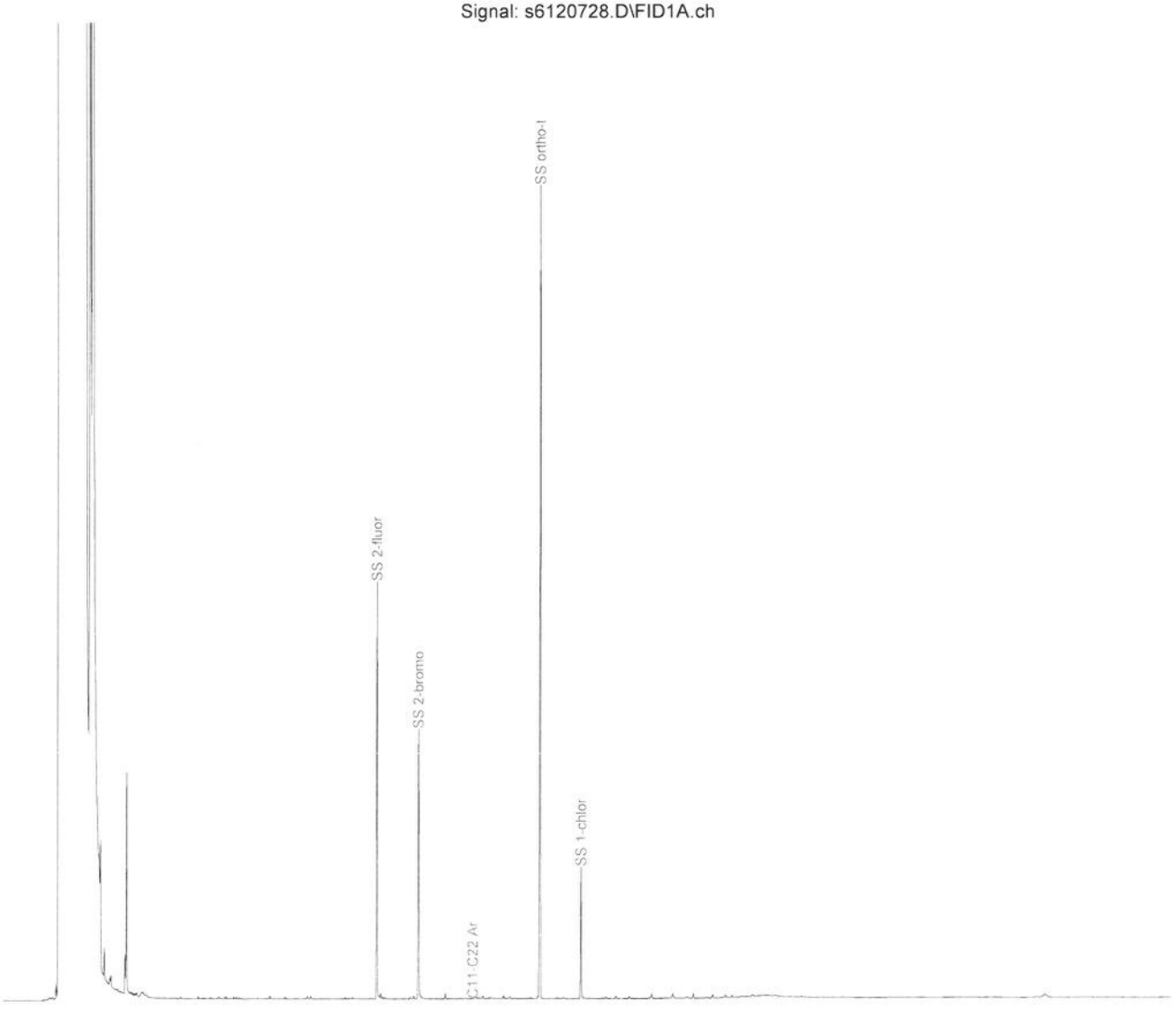
Data Path : X:\S6\2023\Dec23\120723\
Data File : s6120728.D
Signal(s) : FID1A.ch
Acq On : 07 Dec 2023 03:59 pm
Operator : dbv
Sample : 67797-01 aro x1
Misc :
ALS Vial : 14 Sample Multiplier: 1

Integration File: rteint.p
Quant Time: Dec 08 17:08:21 2023
Quant Method : X:\S6\methods\S6ARO100423F.M
Quant Title : S6 EPH Aromatics
QLast Update : Thu Oct 05 11:16:37 2023
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :

Response_

Signal: s6120728.D\FID1A.ch



Time

Quantitation Report (QT Reviewed)

Data Path : X:\S6\2023\Dec23\120723.SEC\
Data File : s6120727.D
Signal(s) : FID2B.ch
Acq On : 07 Dec 2023 03:59 pm
Operator : dbv
Sample : 67797-01 ali x1
Misc :
ALS Vial : 89 Sample Multiplier: 1

12/12/23 @ 08:25
DonnaV

Integration File: rteint.p
Quant Time: Dec 08 17:08:43 2023
Quant Method : X:\S6\methods\S6ALI100423A.M
Quant Title : S6 EPH Aliphatics
QLast Update : Thu Oct 05 13:01:54 2023
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :

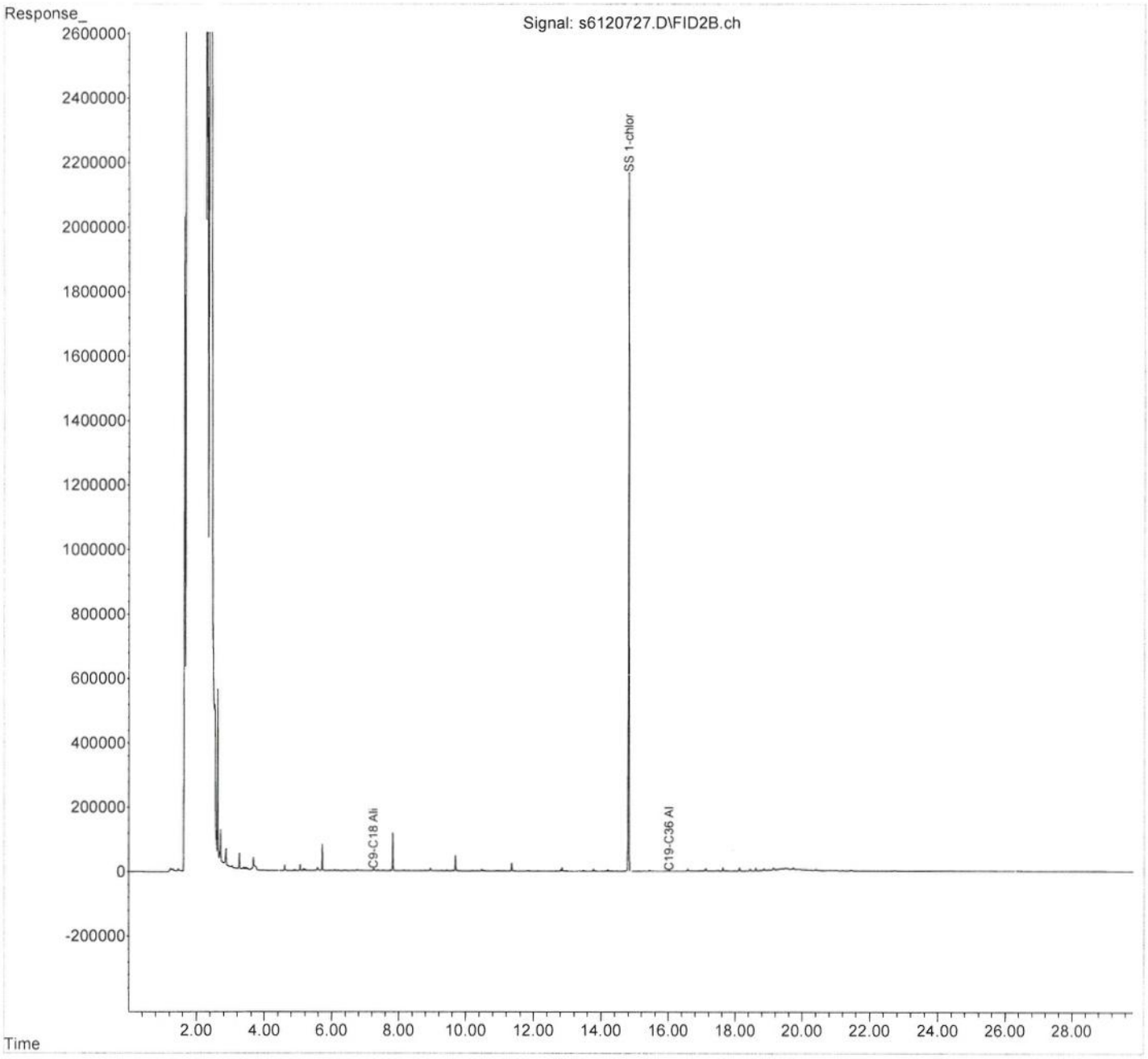
	Compound	R.T.	Response	Conc	Units	
	System Monitoring Compounds					
4)	S SS 2-fluorobiphenyl (...	0.000	0	N.D.	ug/mLd	
	Spiked Amount 20.000		Recovery =	0.00%		
6)	S SS 2-bromonaphthalene...	0.000	0	N.D.	ug/mLd	
	Spiked Amount 20.000		Recovery =	0.00%		
11)	S SS ortho-terphenyl (OTP)	0.000	0	N.D.	ug/mLd	
	Spiked Amount 50.000		Recovery =	0.00%		
13)	S SS 1-chloro-octadecan...	14.809f	3148427	26.820	ug/mL	
	Spiked Amount 50.000		Recovery =	53.64%		
	Target Compounds					
1)	C9 n-Nonane	0.000	0	N.D.	ug/mLd	
2)	C10 n-Decane	0.000	0	N.D.	ug/mLd	
3)	C12 n-Dodecane	0.000	0	N.D.	ug/mLd	
5)	C14 n-Tetradecane	0.000	0	N.D.	ug/mLd	
7)	C16 n-Hexadecane	0.000	0	N.D.	ug/mLd	
8)	C18 n-Octadecane	0.000	0	N.D.	ug/mLd	
9)	H C9-C18 Aliphatics	7.237	2415605	18.268	ug/mLm	RI = Range Integration
10)	C19 n-Nonadecane	0.000	0	N.D.	ug/mLd	
12)	C20 n-Eicosane	0.000	0	N.D.	ug/mLd	
14)	C22 n-Docosane	0.000	0	N.D.	ug/mLd	
15)	C24 n-Tetracosane	0.000	0	N.D.	ug/mLd	
16)	C26 n-Hexacosane	0.000	0	N.D.	ug/mLd	
17)	C28 n-Octacosane	0.000	0	N.D.	ug/mLd	
18)	C30 n-Triacontane	0.000	0	N.D.	ug/mLd	
19)	C36 n-Hexatriacontane	0.000	0	N.D.	ug/mLd	
20)	H C19-C36 Aliphatics	16.000	2754808	19.738	ug/mLm	RI = Range Integration

(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : X:\S6\2023\Dec23\120723.SEC\
Data File : s6120727.D
Signal(s) : FID2B.ch
Acq On : 07 Dec 2023 03:59 pm
Operator : dbv
Sample : 67797-01 ali x1
Misc :
ALS Vial : 89 Sample Multiplier: 1

Integration File: rteint.p
Quant Time: Dec 08 17:08:43 2023
Quant Method : X:\S6\methods\S6ALI100423A.M
Quant Title : S6 EPH Aliphatics
QLast Update : Thu Oct 05 13:01:54 2023
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :



This File:	L:\SVOA\Excel Reports\EPH\231213\67797-002		Skyla Marquis L:\SVOA\EPH\EPH ImportFileBuilder2.0.xls
Analysis Group:	EPH	Dow Salvage Yard	12/13/23 2:42 PM
Field ID:	SY-OBMW10-110623	CRE	L:\SVOA\EPH\
Sample:	67797-02 targets x1	67797-02 aro x1	67797-02 ali x1 L:\SVOA\Excel Reports\EPH\2312
Misc:	aro frac		L:\SVOA\PDF Reports\FUELS\
Method Name:	SVOA04 Method 8270E (t	S6 EPH Aromatics	S6 EPH Aliphatics
Import File Name:	s6 EPHs QC17110		
TestGroupID:	EMA_EPH_PresCert_A		
Aqueous or Soil? (A or S)	A		
Fractionated? (Y/N)	Y	Y	
Prep Date:	11/13/2023		
Lab#:	67797-002		
QC_Code:			
Prep#	17110		

Reviewer Checks:

Quant Report: Reviewed? Ranges integrated? Analyst Initials & Date?
Chromatogram Checked? Major peaks identified?
Soil prep data checked: weight, volume, %solid, Prep date
Field ID consistent with data and any field replicates
Results consistent with any re-runs & internal QC
Substitute dilution data checked
Correct dilution and reason clear or noted
Reason for reanalysis documented
Surrogates pass or flagged & noted
Flags checked (Expiration, F+, Over Cal)
Other QC failures, estimates or interferences documented
Spot checked Reported Result with Quant Report
Checked Audit flagged data in LIMS

Notes:

Initials & Date:

1
2
5
11
16
20

X:\S4\2023\Dec23\120723\s4120716.D\S4PAH110223A.XLS PAH targets filename
X:\S6\2023\Dec23\120723\s6120730.D\S6ARO100423F.XLS aromatics filename
X:\S6\2023\Dec23\120723.SEC\s6120729.D\S6ALI100423A.XLS aliphatics filename

#	Surrogate Standards	Concentration (ug/mL)	AnalysisDate	AnalysisTime	AnalyzedBy	Dilution	Weight	Volume	Surr	Recovery	Flag	QC Limits
13	SS 1-chloro-octadecane (COD)	25.49207185	12/7/2023	04:33:00 PM	DBV s6120729.D	1	1	2	100	**51%**		40-140
10	SS ortho-terphenyl (OTP)	27.68580584	12/7/2023	04:33:00 PM	DBV s6120730.D	1	1	2	100	**55%**		40-140
3	SS 2-fluorobiphenyl (2FBP)	14.40546814	12/7/2023	04:33:00 PM	DBV s6120730.D	1	1	2	40	**72%**		40-140
5	SS 2-bromonaphthalene (2BN)	14.51709027	12/7/2023	04:33:00 PM	DBV s6120730.D	1	1	2	40	**73%**		40-140

#	AnalyteName	Concentration (ug/mL)	AnalysisDate	AnalysisTime	AnalyzedBy	Dilution	Weight	Volume
3	naphthalene	0	12/07/2023	05:52:00 PM	CL s4120716.D	1	1	2
4	2-methylnaphthalene	0	12/07/2023	05:52:00 PM	CL s4120716.D	1	1	2
12	phenanthrene	0	12/07/2023	05:52:00 PM	CL s4120716.D	1	1	2
8	acenaphthene	0	12/07/2023	05:52:00 PM	CL s4120716.D	1	1	2
7	acenaphthylene	0	12/07/2023	05:52:00 PM	CL s4120716.D	1	1	2
10	fluorene	0	12/07/2023	05:52:00 PM	CL s4120716.D	1	1	2
13	anthracene	0	12/07/2023	05:52:00 PM	CL s4120716.D	1	1	2
15	fluoranthene	0	12/07/2023	05:52:00 PM	CL s4120716.D	1	1	2
17	pyrene	0	12/07/2023	05:52:00 PM	CL s4120716.D	1	1	2
18	benzo(a)anthracene	0	12/07/2023	05:52:00 PM	CL s4120716.D	1	1	2
19	chrysene	0	12/07/2023	05:52:00 PM	CL s4120716.D	1	1	2
21	benzo(b)fluoranthene	0	12/07/2023	05:52:00 PM	CL s4120716.D	1	1	2
22	benzo(k)fluoranthene	0	12/07/2023	05:52:00 PM	CL s4120716.D	1	1	2
23	benzo(a)pyrene	0	12/07/2023	05:52:00 PM	CL s4120716.D	1	1	2
24	indeno(1,2,3-cd)pyrene	0	12/07/2023	05:52:00 PM	CL s4120716.D	1	1	2
25	dibenzo(a,h)anthracene	0	12/07/2023	05:52:00 PM	CL s4120716.D	1	1	2
26	benzo(g,h,i)perylene	0	12/07/2023	05:52:00 PM	CL s4120716.D	1	1	2
20	C11-C22 Aromatics	43.50811153	12/7/2023	04:33:00 PM	DBV s6120730.D	1	1	2
9	C9-C18 Aliphatics	8.727255132	12/7/2023	04:33:00 PM	DBV s6120729.D	1	1	2
20	C19-C36 Aliphatics	23.98907146	12/7/2023	04:33:00 PM	DBV s6120729.D	1	1	2
	Adjusted C11-C22 Aromatics	43.50811153	12/7/2023	04:33:00 PM	DBV s6120730.D	1	1	2

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Dec23\120723\
Data File : s4120716.D
Acq On : 07 Dec 2023 05:52 pm
Operator : cl
Sample : 67797-02 targets x1
Misc : aro frac
ALS Vial : 11 Sample Multiplier: 1

CL
12/8/23 @ 14:40
CharlesL

Quant Time: Dec 08 08:54:02 2023
Quant Method : X:\S4\methods\S4PAH110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration

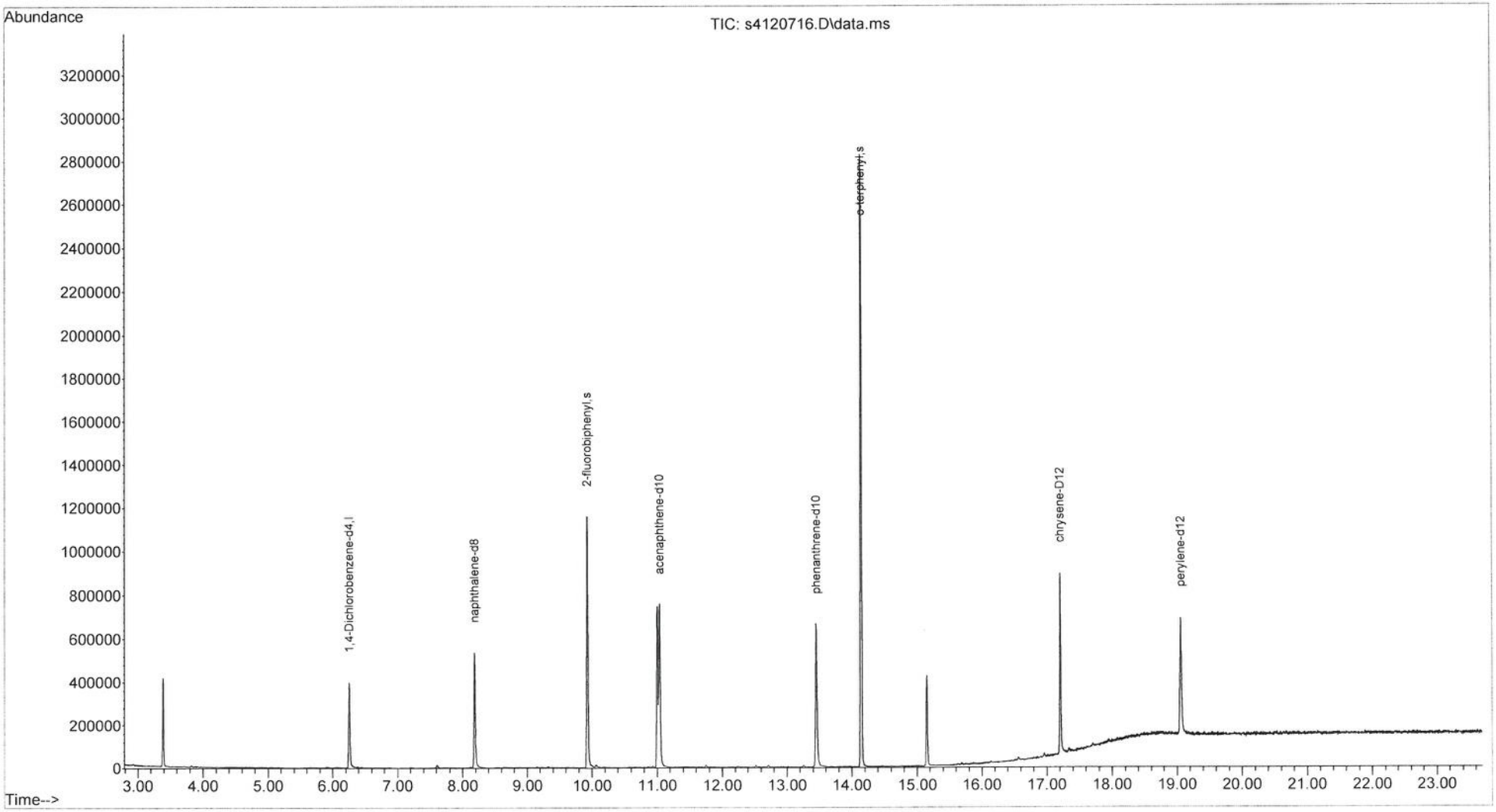
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.250	152	94228	10.00	ug/mL	-0.01
2) naphthalene-d8	8.182	136	377203	10.00	ug/mL	-0.01
5) acenaphthene-d10	11.036	164	214691	10.00	ug/mL	-0.01
11) phenanthrene-d10	13.451	188	415641	10.00	ug/mL	# 0.00
16) chrysene-D12	17.205	240	366470	10.00	ug/mL	# 0.00
20) perylene-d12	19.057	264	345265	10.00	ug/mL	0.02
System Monitoring Compounds						
6) 2-fluorobiphenyl	9.930	172	524074	15.50	ug/mL	-0.01
Spiked Amount 100.000			Recovery = 15.50%			
14) o-terphenyl	14.144	230	762616	32.32	ug/mL	0.00
Spiked Amount 100.000			Recovery = 32.32%			
Target Compounds						Qvalue
3) naphthalene	8.207	128	861	Below Cal	#	68
23) benzo(a)pyrene	19.067	252	968	Below Cal	#	1

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Dec23\120723\
Data File : s4120716.D
Acq On : 07 Dec 2023 05:52 pm
Operator : cl
Sample : 67797-02 targets x1
Misc : aro frac
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Dec 08 08:54:02 2023
Quant Method : X:\S4\methods\S4PAH110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration



SFP
12/12/23 @ 12:24
SkylaM

Data Path : X:\S6\2023\Dec23\120723\
Data File : s6120730.D
Signal(s) : FID1A.ch
Acq On : 07 Dec 2023 04:33 pm
Operator : dbv
Sample : 67797-02 aro x1
Misc :
ALS Vial : 15 Sample Multiplier: 1

Integration File: rteint.p
Quant Time: Dec 08 17:08:23 2023
Quant Method : X:\S6\methods\S6ARO100423F.M
Quant Title : S6 EPH Aromatics
QLast Update : Thu Oct 05 11:16:37 2023
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :

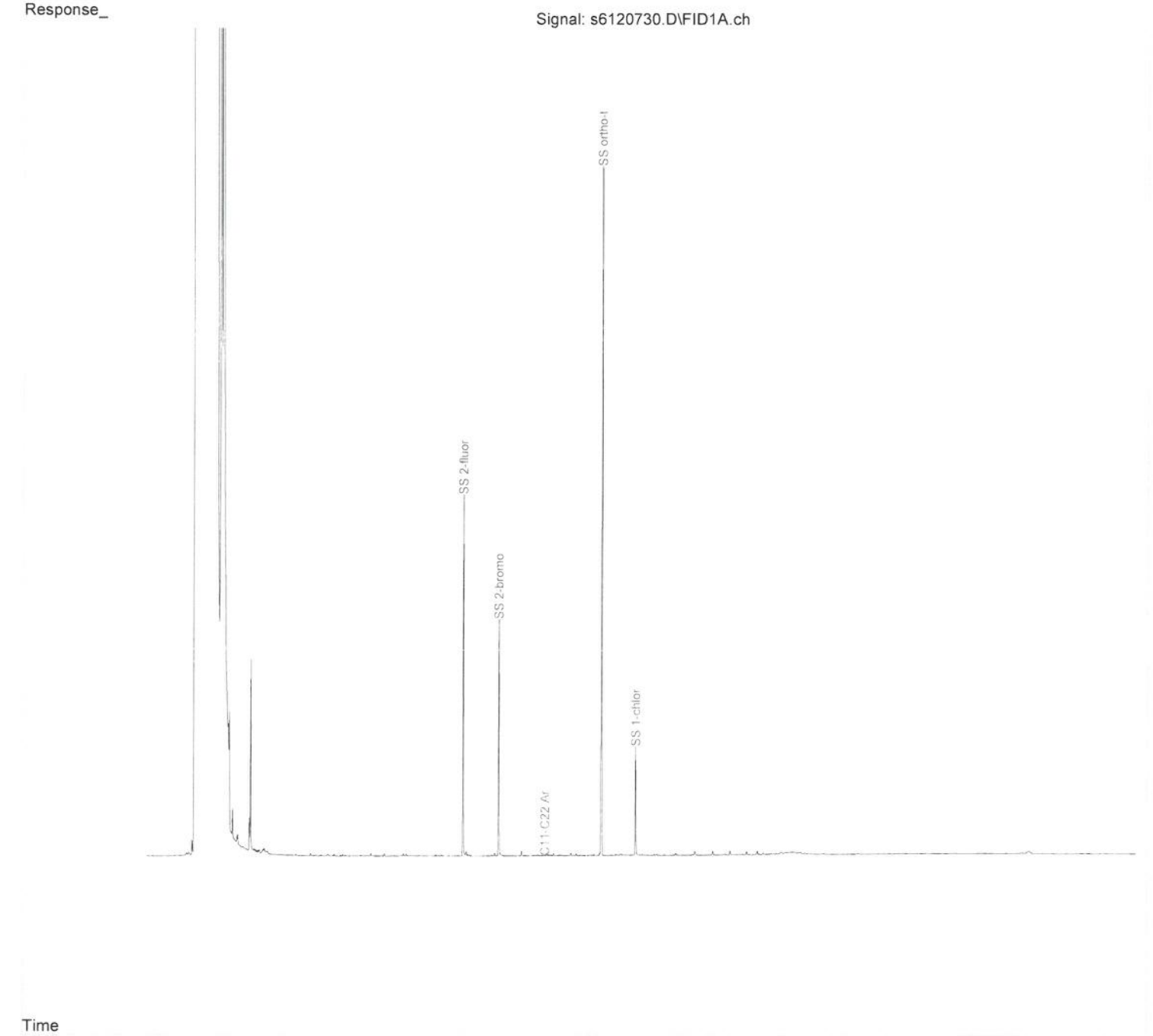
	Compound	R.T.	Response	Conc	Units	
	System Monitoring Compounds					
3) S	SS 2-fluorobiphenyl (...	9.527	2032955	14.405	ug/mLm	BC = Baseline Correction
Spiked Amount	20.000		Recovery =	72.02%		
5) S	SS 2-bromonaphthalene...	10.605	1384363	14.517	ug/mLm	BC = Baseline Correction
Spiked Amount	20.000		Recovery =	72.58%		
10) S	SS ortho-terphenyl (OTP)	13.725	4141965	27.686	ug/mLm	BC = Baseline Correction
Spiked Amount	50.000		Recovery =	55.37%		
11) S	SS 1-chloro-otadecane...	14.765	700838	5.743	ug/mL	
Spiked Amount	50.000		Recovery =	11.49%		
	Target Compounds					
1)	naphthalene	0.000	0	N.D.	ug/mLd	
2)	2-methylnaphthalene	0.000	0	N.D.	ug/mLd	
4)	acenaphthylene	0.000	0	N.D.	ug/mLd	
6)	acenaphthene	0.000	0	N.D.	ug/mL	
7)	fluorene	0.000	0	N.D.	ug/mL	
8)	phenanthrene	0.000	0	N.D.	ug/mLd	
9)	anthracene	0.000	0	N.D.	ug/mL	
12)	fluoranthene	0.000	0	N.D.	ug/mL	
13)	pyrene	0.000	0	N.D.	ug/mL	
14)	benzo(a)anthracene	0.000	0	N.D.	ug/mL	
15)	chrysene	0.000	0	N.D.	ug/mL	
16)	benzo(b&k)fluoranthenes	0.000	0	N.D.	ug/mL	
17)	benzo(a)pyrene	0.000	0	N.D.	ug/mL	
18)	indeno&dibenzo	0.000	0	N.D.	ug/mL	
19)	benzo(g,h,i)perylene	0.000	0	N.D.	ug/mL	
20) H	C11-C22 Aromatics	12.000	6308009	43.508	ug/mLm	RI = Range Integration

(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : X:\S6\2023\Dec23\120723\
Data File : s6120730.D
Signal(s) : FID1A.ch
Acq On : 07 Dec 2023 04:33 pm
Operator : dbv
Sample : 67797-02 aro x1
Misc :
ALS Vial : 15 Sample Multiplier: 1

Integration File: rteint.p
Quant Time: Dec 08 17:08:23 2023
Quant Method : X:\S6\methods\S6ARO100423F.M
Quant Title : S6 EPH Aromatics
QLast Update : Thu Oct 05 11:16:37 2023
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : X:\S6\2023\Dec23\120723.SEC\
Data File : s6120729.D
Signal(s) : FID2B.ch
Acq On : 07 Dec 2023 04:33 pm
Operator : dbv
Sample : 67797-02 ali x1
Misc :
ALS Vial : 90 Sample Multiplier: 1

12/12/23 @ 08:25
DonnaV

Integration File: rteint.p
Quant Time: Dec 08 17:08:45 2023
Quant Method : X:\S6\methods\S6ALI100423A.M
Quant Title : S6 EPH Aliphatics
QLast Update : Thu Oct 05 13:01:54 2023
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :

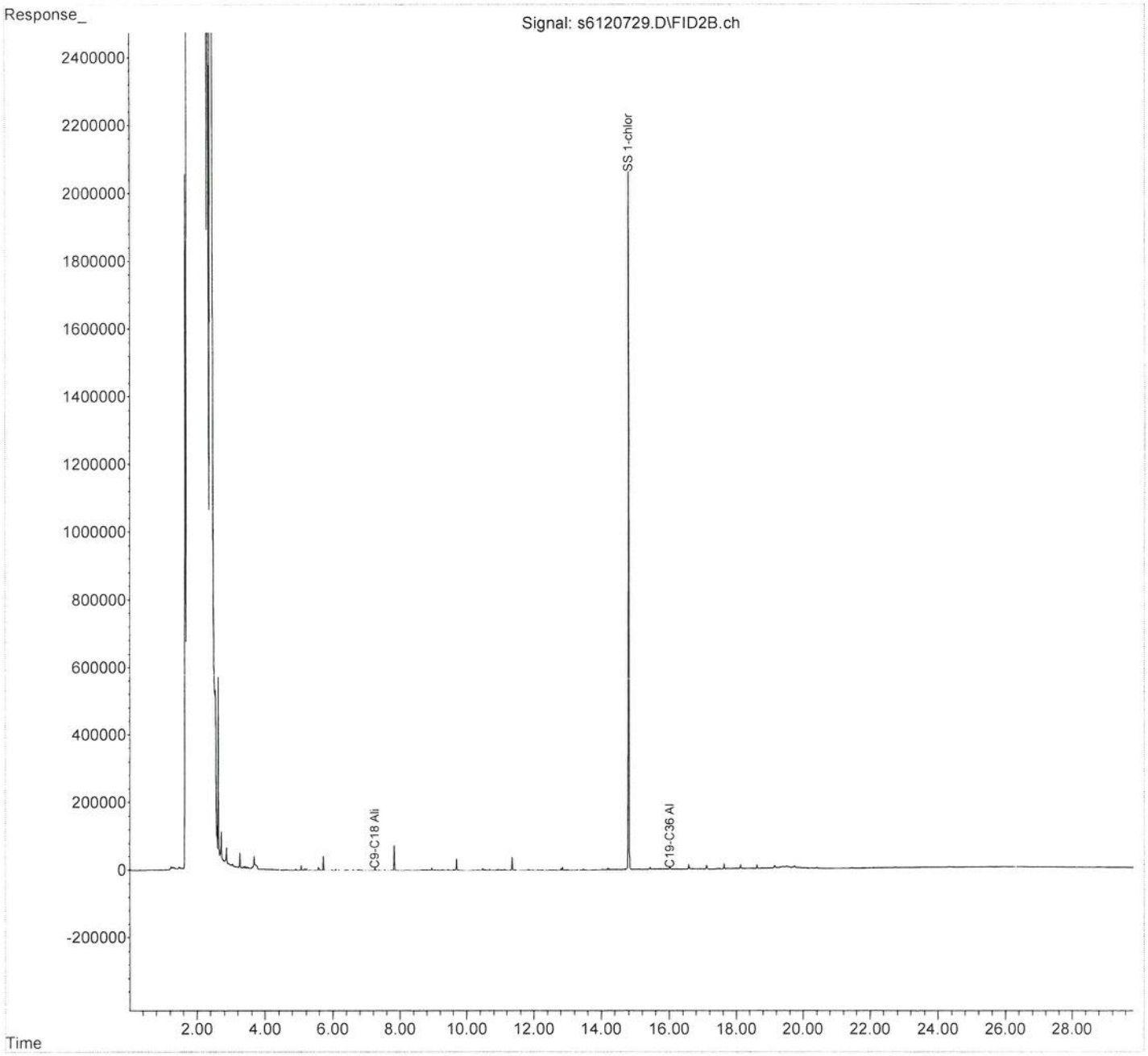
	Compound	R.T.	Response	Conc	Units	
	System Monitoring Compounds					
4)	S SS 2-fluorobiphenyl (...	0.000	0	N.D.	ug/mLd	
	Spiked Amount 20.000		Recovery =	0.00%		
6)	S SS 2-bromonaphthalene...	0.000	0	N.D.	ug/mLd	
	Spiked Amount 20.000		Recovery =	0.00%		
11)	S SS ortho-terphenyl (OTP)	0.000	0	N.D.	ug/mLd	
	Spiked Amount 50.000		Recovery =	0.00%		
13)	S SS 1-chloro-octadecan...	14.807f	2992768	25.492	ug/mLm	BC = Baseline Correction
	Spiked Amount 50.000		Recovery =	50.98%		
	Target Compounds					
1)	C9 n-Nonane	0.000	0	N.D.	ug/mLd	
2)	C10 n-Decane	0.000	0	N.D.	ug/mLd	
3)	C12 n-Dodecane	0.000	0	N.D.	ug/mLd	
5)	C14 n-Tetradecane	0.000	0	N.D.	ug/mLd	
7)	C16 n-Hexadecane	0.000	0	N.D.	ug/mLd	
8)	C18 n-Octadecane	0.000	0	N.D.	ug/mLd	
9)	H C9-C18 Aliphatics	7.237	1195484	8.727	ug/mLm	RI = Range Integration
10)	C19 n-Nonadecane	0.000	0	N.D.	ug/mLd	
12)	C20 n-Eicosane	0.000	0	N.D.	ug/mLd	
14)	C22 n-Docosane	0.000	0	N.D.	ug/mLd	
15)	C24 n-Tetracosane	0.000	0	N.D.	ug/mLd	
16)	C26 n-Hexacosane	0.000	0	N.D.	ug/mLd	
17)	C28 n-Octacosane	0.000	0	N.D.	ug/mLd	
18)	C30 n-Triacontane	0.000	0	N.D.	ug/mLd	
19)	C36 n-Hexatriacontane	0.000	0	N.D.	ug/mLd	
20)	H C19-C36 Aliphatics	16.000	3317758	23.989	ug/mLm	RI = Range Integration

(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : X:\S6\2023\Dec23\120723.SEC\
Data File : s6120729.D
Signal(s) : FID2B.ch
Acq On : 07 Dec 2023 04:33 pm
Operator : dbv
Sample : 67797-02 ali x1
Misc :
ALS Vial : 90 Sample Multiplier: 1

Integration File: rteint.p
Quant Time: Dec 08 17:08:45 2023
Quant Method : X:\S6\methods\S6ALI100423A.M
Quant Title : S6 EPH Aliphatics
QLast Update : Thu Oct 05 13:01:54 2023
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :



This File:	L:\SVOA\Excel Reports\PCB\112823\s5112815
Analysis Group:	PCB
Field ID:	SY-OBMW10-110623 18001468
Sample:	67797-02 pcb x1 Dow Salvage Yard
Misc:	0 CRE
Import File Name	s5 PCBs QC17179W DOD
TestGroupID	E8082DoD_A
Aqueous or Soil? (A or S)	A
Percent Solid (%)	0
Prep Date	Monday, November 27, 2023
Initial Weight/Volume	1
Volume	1
Lab#:	67797-002
AnalysisDate:	Tuesday, November 28, 2023
AnalysisTime:	13:13
Dilution:	1
AnalyzedBy:	DBV s5112815.D
QC_Code:	
Prep#	17179

Reviewer Checks:

- Quant Report: Reviewed, Analyst Initials & Date ✓
- Chromatogram Checked, Major peaks identified ✓
- Prep data checked: weight, volume, %solid, Prep date X
- Field ID consistent with data and any field replicates
- Results consistent with any re-runs & internal QC
- Correct dilution and reason clear or noted ✓
- Reason for reanalysis documented
- Surrogates pass or flagged & noted ✓
- Flags checked (Expiration, Over Cal)
- Other QC failures, estimates or interferences documented ✓
- Spot checked Reported Result with Quant Report ✓
- Checked Audit flagged data in LIMS
- Correct values averaged
- Column RPD is OK or both results included
- Correct column reported

Notes:

Reviewer Initials & Date: JS 121122

#	Surrogate Standards	Concentration (ug/mL)	Recovery	Flag	QC Limits	Report Column
1	SS Tetrachloro-m-xylene	1.31	65%		30-150	1
47	SS Decachlorobiphenyl	1.28	64%		30-150	1

#	AnalyteName	Concentration (ug/mL)	Flag	Report Column
2	Ar-1016	0.00		1
7	Ar-1221	0.00		1
12	Ar-1232	0.00		1
17	Ar-1242	0.00		1
22	Ar-1248	0.00		1
27	Ar-1254	0.00		1
32	Ar-1260	0.00		1
37	Ar-1262	0.00		1
42	Ar-1268	0.00		1

Aroclor	Column #1 average	Column #2 average	Column RPD limit 40%	%rsd	Column #1 1	2	3	4	5
Ar-1016	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1221	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1232	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1242	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1248	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1254	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1260	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1262	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1268	0.00	0.00			0.00	0.00	0.00	0.00	0.00
SS Tetra	1.31	1.34							
SS Deca	1.28	1.41							

	%rsd	Column #2 1	2	3	4	5
Ar-1016		0.00	0.00	0.00	0.00	0.00
Ar-1221		0.00	0.00	0.00	0.00	0.00
Ar-1232		0.00	0.00	0.00	0.00	0.00
Ar-1242		0.00	0.00	0.00	0.00	0.00
Ar-1248		0.00	0.00	0.00	0.00	0.00
Ar-1254		0.00	0.00	0.00	0.00	0.00
Ar-1260		0.00	0.00	0.00	0.00	0.00
Ar-1262		0.00	0.00	0.00	0.00	0.00
Ar-1268		0.00	0.00	0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : X:\S5\2023\Nov23\112823\
Data File : s5112815.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 28 Nov 2023 01:13 pm
Operator : dbv
Sample : 67797-02 pcb x1
Misc :
ALS Vial : 6 Sample Multiplier: 1

DBV
12/1/23 @ 08:42
DonnaV

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Nov 29 06:45:34 2023
Quant Method : X:\S5\methods\S5PCB092123H.M
Quant Title : SVOA03 Method 8082A
QLast Update : Thu Sep 21 17:18:07 2023
Response via : Initial Calibration
Integrator: ChemStation

Take ~~lower of two columns~~ DOD requirement.
Column 1
HE DBV

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
System Monitoring Compounds							
1) S SS Tetrac...	2.403	2.288	619.3E6	614.9E6	1.310m	1.338m	BC = Baseline Correction
Spiked Amount	5.000 Range	30 - 150	Recovery =		26.20%#	26.76%#	
17) S SS Decach...	7.049	7.201	523.0E6	436.1E6	1.277m	1.411m	BC = Baseline Correction
Spiked Amount	5.000 Range	30 - 150	Recovery =		25.54%#	28.22%#	
Target Compounds							

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : X:\S5\2023\Nov23\112823\
Data File : s5112815.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 28 Nov 2023 01:13 pm
Operator : dbv
Sample : 67797-02 pcb x1
Misc :
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
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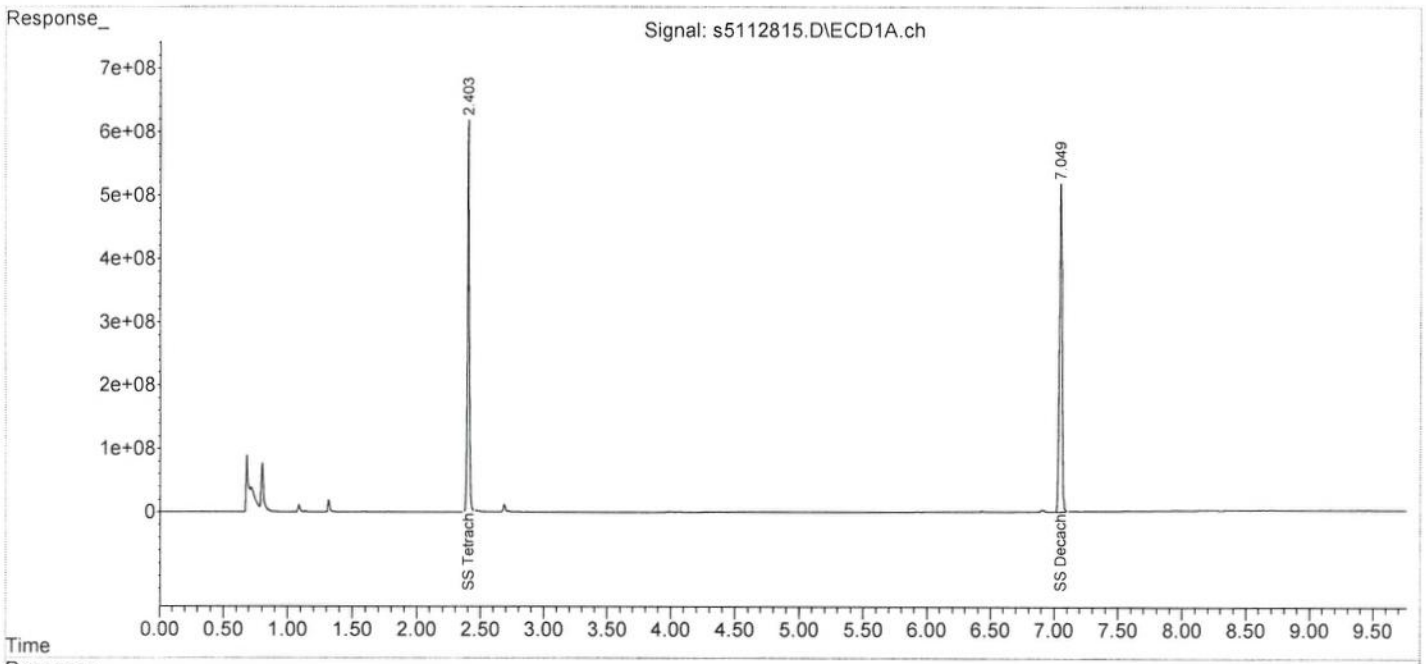
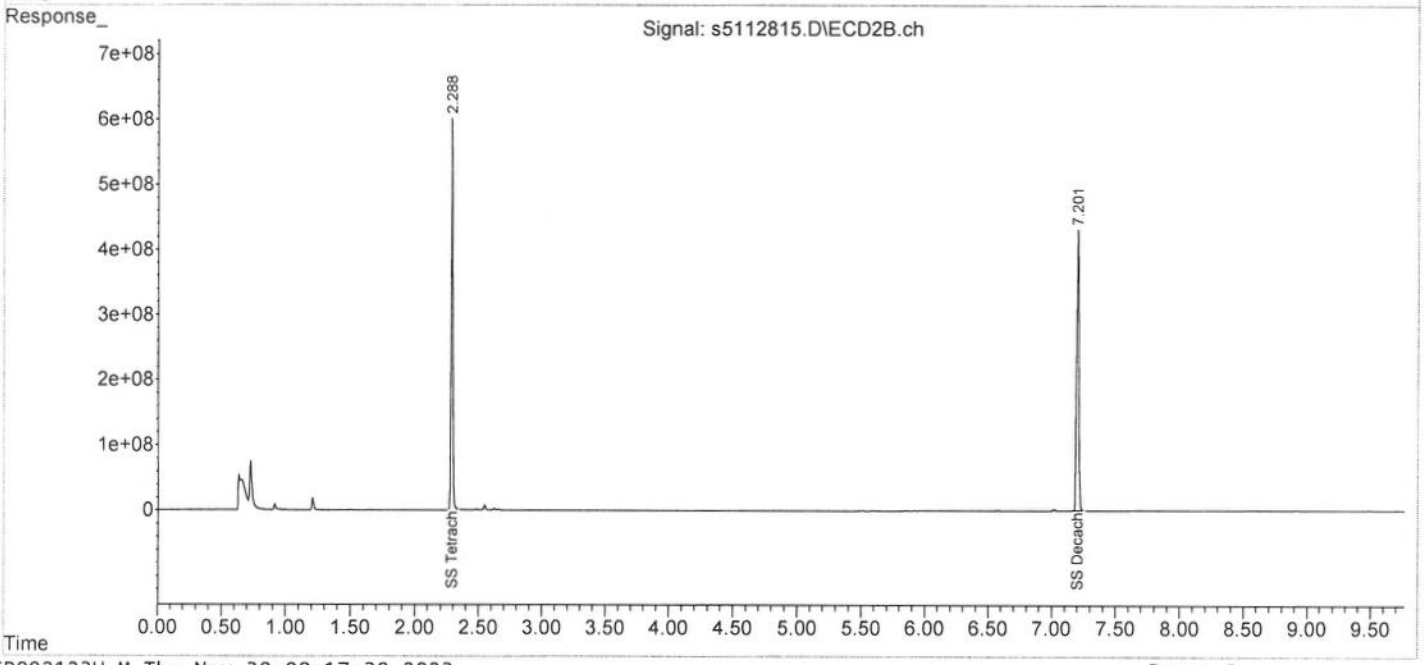
Quant Title : SVOA03 Method 8082A
QLast Update : Thu Sep 21 17:18:07 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





67797 CRE

Sample Receipt Condition Report

Absolute Resource Associates **Job Number:**

Samples Received from: ☐-UPS ☐-FedEx ☐-USPS ☒-Lab Courier ☐-Client Drop-off ☐-_____

Custody Seals - present & intact: ☒-Yes ☐-No ☐-N/A CoC signed: ☒-Yes ☐-No

Receipt Temp: 0 °C Samples on ice? ☒-Yes ☐-No ☐-N/A Sampled < 24 hrs ago? ☐-Yes ☒-No

PFAS-only real ice? ☐-Yes ☐-No ☒-N/A Any signs of freezing? ☐-Yes ☒-No

Comments:_____

Preservation / Analysis	Bottle Size/Type & Quantity									
HCl	40mL(G)	10	250mL(P)		500mL(P)		1L(G)	2		
HNO_3	125mL(P)		250mL(P)	4	500mL(P)					
H_2SO_4	40mL(G)		60mL(P)		125mL(P)		250mL(P)		500mL(P)	
NaOH	125mL(P)		250mL(P)							
$(NH_4)_2SO_4$	60mL(P)		125mL(P)		250mL(P)					
ZnAc-NaOH	125mL(P)		250mL(P)							
Trizma	125mL(P)		250mL (P)							
NH_4Ac	125mL(P)		250mL (P)							
NaS_2O_3	40mL(G)		120mL(P)							
MeOH	20mL(G)		40mL(G)							
None (solid)	2oz(G)		4oz(G)		8oz(G)		Syringe			
None (water)	40ml (G)		60mL(P)		125mL(P)		250mL(P)		500mL(P)	

Check pH for ALL applicable* samples and document:

pHvOK
pHvOK

*pH ✓by analyst:VOC, PFAS, TOC,O&G
Residual Cl not present:
ABN625____Pest608____
Bacteria ResCl ✓by analyst

PC Dry applicable? Y (N)

1L(G) 4 1L (P)

Mold	Cassette	Bulk	Plate	Tape Lift	
Asbestos	Cassette	Bulk			
Lead	Cassette	Bulk	Wipe		

Login Review	Yes	No	NA	Comments
Proper lab sample containers/enough volume/correct preservative?	X			
Analyses marked on COC match bottles received?	X			
VOC &TOC Water-no headspace? VOC Solid-MeOH covers solid, no leaks, Prep Expiration OK?	X			
PFAS: ARA bottles & samples/FRB same Lot#? QC rec'd, if req'd?			X	Lot ID#:_____
Bacteria bottles provided by ARA?			X	
Samples within holding time?	X			
Immediate tests communicated in writing: NO_3, NO_2,o-PO_4, pH, BOD, Coliform/*E. coli* (P/A or MPN), Enterococci, Color Surfactants, Turbidity, Odor, CrVI, Ferrous Iron, Dissolved Oxygen, Unpres 624			X	
Date, time & ID on samples match CoC?	X			
Rushes communicated to analyst in writing?			X	
Subcontracted samples sent to sub lab?			X	Date Prep'd:_____ Date sent:_____
Pesticides EPA 608 pH5-9?			X	
Compliance samples have no discrepancies/require no flags?	X			(Or must be rejected)
Log-in Supervisor notified immediately of following items:			X	Discrepancies, compliance samples (NHDES, MADEP, DoD etc.) or uncommon requests.

Inspected and Received By: AMN Date/Time: 11/09/23 17:10

Peer Review Checklist

- ☑ Client ID/Project Manager
- ☑ Project Name
- ☐ TAT/rushes communicated
- ☑ Received Date/Time
- ☑ On Ice, Temperature OK?
- ☑ PO# (if provided)
- ☑ Sub samples sent? Shipping Charge?
- ☑ Issues noted above communicated?
- ☑ Sample IDs
- ☑ Matrix
- ☑ Date/Time collected
- ☑ Short HTs communicated
- ☑ Analyses in Correctly (metals 23 - Ca per email)
- -references
- -wastewater methods
- ☐ Notes from CoC in LIMS

Reviewed By: _____ Date: 11/13/23

Notes: (continue on back as needed)
67797-01 pH lost when froze in fridge

	Initials	Date	What was sent?
Uploaded / PDF	_____	_____	Report / Data / EDD / Invoice
Uploaded / PDF	_____	_____	Report / Data / EDD / Invoice
Uploaded / PDF	_____	_____	Report / Data / EDD / Invoice

PAGE 1 OF 1

Absolute Resource associates

124 Heritage Avenue #16
Portsmouth, NH 03801
603-436-2001
absoluteresourceassociates.com

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

67797

Company Name: Credere Associates

Company Address: 776 Main St, Westbrook, ME

Report To: Allison Drouin

Phone #: 207-749-1141

Project Name: Dow Salvage Yard
Project #: 18001468
Project Location: NH MA (ME) VT _____

Accreditation Required? N/Y: ELAP
See absoluteresourceassociates.com for sample acceptance policy and current accreditation lists.

Protocol: RCRA SDWA NPDES MCP NHDES (DOD)
Notify ARA if your samples require specific methods, certifications or compliance protocol.

Reporting Limits: (QAPP) GW-1 S-1 EPA DW Other_____

ANALYSIS REQUEST

	Lab Sample ID (Lab Use Only)	Field ID	# CONTAINERS	Matrix: WATER	Matrix: SOLID	Matrix: OTHER	Preservation Method: HCl	Preservation Method: HNO_3	Preservation Method: H_2SO_4	Preservation Method: NaOH	Preservation Method: MeOH	Sampling: DATE	Sampling: TIME	Sampling: SAMPLER	☒ VOC 8260 ☐ VOC 8260 NHDES ☐ VOC 8260 MADEP	☐ VOC 624.1 ☐ VOC BTEX MtBE, only ☐ VOC 8021VT	☒ VPH MADEP ☐ GRO 8015 ☐ 1,4-Dioxane	☐ VOC 524.2 ☐ VOC 524.2 NH List ☐ Gases-List:	☐ TPH 8100 ☐ DRO 8015 ☒ EPH MADEP ☐ TPH Fingerprint	☐ 8270PAH ☒ 8270ABN ☐ 625.1 ☐ EDB	☒ 8082 PCB ☐ 8081 Pesticides ☐ 608.3 Pest/PCB	☐ PFAS 537.1 ☐ PFAS 533 ☐ PFAS isotope dilution	☐ O&G 1664 ☐ Mineral O&G 1664	☐ pH ☐ BOD ☐ Conductivity ☐ Turbidity ☐ Apparent Color	☐ TSS ☐ TDS ☐ TS ☐ TVS ☐ Alkalinity ☐ Acidity	☐ RCRA Metals ☐ Priority Pollutant Metals ☐ TAL Metals ☐ Hardness	☒ Total Metals-list:	☒ Dissolved Metals-list:	☐ Ammonia ☐ COD ☐ TKN ☐ TN ☐ TON ☐ TOC ☐ Ferrous Iron	☐ T-Phosphorus ☐ Bacteria P/A ☐ Bacteria MPN ☐ Enterococci	☐ Cyanide ☐ Sulfide ☐ Nitrate + Nitrite ☐ Ortho P ☐ Phenols	☐ Nitrate ☐ Nitrite ☐ Chloride ☐ Sulfate ☐ Bromide ☐ Fluoride	☐ Corrosivity ☐ Ignitibility/FP	☐ TCLP Metals ☐ TCLP VOC ☐ TCLP SVOC ☐ TCLP Pesticide	Subcontract: ☐ Grain Size ☐ Herbicides ☐ Asbestos			Grab (G) or Composite (C)
-04	67797-01	SY-OBMW7-110623	9	X			X	X				11/6	1610	ICD	X		X		X	X	~~X~~	Sample bottle broken in lab					X	X										
-05	-02	SY-OBMW10-110623	9	X			X	X				11/6	1620	PCH	X		X		X	X	X						X	X										
	-03	TB30-110623	2	X			X					11/6	1600	SG	X		X																						

Dissolved Metals ↑

TAT REQUESTED
Priority (24 hr)* ☐
Expedited (48 hr)* ☐
Standard ☒
(10 Business Days)
*Date Needed_____

Invoice To: Jenn Taiani
Email: jenn@crederellc.com, invoices@crederellc.com
PO #: _____
Quote #: _____
☐ NH Reimbursement Pricing

SPECIAL INSTRUCTIONS

Reporting Instructions:
☐ EDD:_____ Report To (email): adrouin@crederellc.com

RECEIVED ON ICE ☒YES ☐NO
TEMPERATURE 0 °C

CUSTODY RECORD
QSD-01 Revision 07/27/2022

	Date	Time		Date	Time
Relinquished by Sampler: [signature]	11/7	0800	Received by: [signature]	11-7-23	07:40
Relinquished by: [signature]	11/7	1045	Received by: [signature]	11/7	1045
Relinquished by: [signature]	11-8-23	1:30	Received by Laboratory: [signature]	11/8	1:30

Aaron DeWees

From: Allison Drouin <adrouin@crederellc.com>
Sent: Monday, November 13, 2023 10:36 AM
To: Aaron DeWees
Cc: Sean Gannon
Subject: RE: Dow Salvage Yard

CAUTION: [EXTERNAL EMAIL] DO NOT CLICK ON links or attachments unless you were expecting the message, recognize the sender's email address, and know the content is safe.

Hi Aaron,

No it would be the full list per the QAPP. Let me know if you need the QAPP, it has not changed and is still the version dated December 2022.

Lab: ARA
Matrix: Groundwater
Method: Metals by EPA Method 6020A (SOP QA-5605)

Compound	PAL (µg/L)	Basis of Human Health PAL	PQLG (µg/L)	LOQ (µg/L)	LOD (µg/L)	MDL (µg/L)
Aluminum	2,000[a,c]	Non-Cancer	1,000	50	10	2.2
Antimony	0.78[a,c]	Non-Cancer	1	1	0.5	0.42
Arsenic	0.052[a,c]	Cancer	5	5	1	0.35
Barium	380[a,c]	Non-Cancer	190	10	0.5	0.22
Beryllium	2.5[a,c]	Non-Cancer	1.25	1	0.1	0.01
Cadmium	0.18[a,c]	Non-Cancer	1	1	0.5	0.1
Chromium, total	NE	-	50	10	1	0.48
Cobalt	0.6[a,c]	Non-Cancer	10	10	1	0.29
Copper	80[a,c]	Non-Cancer	40	10	1	0.29
Iron	1400[a,c]	Non-Cancer	700	50	10	3.2
Lead	5[a,b,c]	Non-Cancer	7.5	5	0.5	0.1
Magnesium	NE	-	500	100	20	0.66
Manganese	43[a,c]	Non-Cancer	21.5	10	5	1
Nickel	39[a,c]	Non-Cancer	19.5	10	1	0.63
Potassium	NE	-	2500	500	100	88
Selenium	10[a,c]	Non-Cancer	10	10	1	0.45
Silver	9.4[a,c]	Non-Cancer	5	5	0.05	0.02
Sodium	NE	-	500	100	50	21
Thallium	0.02[a,c]	Non-Cancer	1	1	0.5	0.04
Vanadium	8.6[a,c]	Non-Cancer	10	10	10	0.64
Zinc	600[a,c]	Non-Cancer	300	10	10	2.8

Thank you,

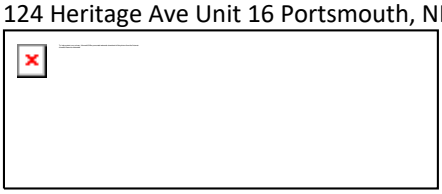
Allison S. Drouin, PG, LG
Senior Geologist/Project Manager
VP of Quality Assurance and Technical Programs

Cell: 207-749-1141
Office: 207-828-1272 ext. 15

From: Aaron DeWees <Aarond@absoluteresourceassociates.com>
Sent: Monday, November 13, 2023 10:34 AM
To: Allison Drouin <adrouin@crederellc.com>
Subject: Dow Salvage Yard

Good morning Allison,
Can you confirm that the metals list for Dow Salvage Yard samples is RCRA8?
One of the CoCs just has “metals” checked and the other has “RCRA” written in by the metals.
Thanks, -Aaron.
P.S. Did you know ARA is your PFAS Resource? Click or call for more information about our PFAS Testing Services.

Aaron DeWees
Chief Operating Officer
Aarond@absoluteresourceassociates.com
603-436-2001 x206
absoluteresourceassociates.com
124 Heritage Ave Unit 16 Portsmouth, NH 03801



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Aaron DeWees

From: Allison Drouin <adrouin@crederellc.com>
Sent: Thursday, December 21, 2023 2:26 PM
To: Aaron DeWees
Subject: RE: Dow Salvage Yard 18001468 ARA # 67797 and 67798

CAUTION: [EXTERNAL EMAIL] DO NOT CLICK ON links or attachments unless you were expecting the message, recognize the sender's email address, and know the content is safe.

Go ahead and report those results. They'll probblay be rejected during validation but I think its better than not reporting.

Thank you,

Allison S. Drouin, PG, LG
Senior Geologist/Project Manager
VP of Quality Assurance and Technical Programs

Cell: 207-749-1141
Office: 207-828-1272 ext. 15



Small Business Prime Contractor
of the Year
2023 – New England Region

From: Aaron DeWees <Aarond@absoluteresourceassociates.com>
Sent: Thursday, December 21, 2023 12:29 PM
To: Allison Drouin <adrouin@crederellc.com>
Subject: Dow Salvage Yard 18001468 ARA # 67797 and 67798

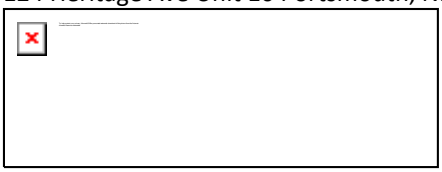
I probably should have communicated these issues awhile back, but they kind of fell through the cracks with everything going on. There are two issues that effected PCB samples for the Dow job.

SY-OBMW7-110623 sample bottle was broken in lab so we had no water remaining to extract. I've noted this on the CoC as well as the case narrative.

SY-OBMW4R-110723 during the final extract concentration step, the vial was dropped and cracked. An unknown portion of the extract was lost, so we continued on, in case not much was lost. However, the surrogate recoveries were 3% which suggests quite a bit was lost. I put these results in the report with an explanation in the case narrative. Let me know if you'd rather we take the results out. The sample was ND.

-Aaron.
P.S. Did you know ARA is your PFAS Resource? Click or call for more information about our PFAS Testing Services.

Aaron DeWees
Chief Operating Officer
Aarond@absoluteresourceassociates.com
603-436-2001 x206
absoluteresourceassociates.com
124 Heritage Ave Unit 16 Portsmouth, NH 03801



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Laboratory Report

Absolute Resource associates
124 Heritage Avenue Portsmouth NH 03801

Allison Drouin
CREDERE Associates
776 Main Street
Westbrook, ME 04092

PO Number: None
Job ID: 67798
Date Received: 11/8/23

Project: Dow Salvage Yard 18001468

Attached please find results for the analysis of the samples received on the date referenced above.

Unless otherwise noted in the attached report, the analyses performed met the requirements of Absolute Resource Associates' Quality Assurance Plan. The Standard Operating Procedures are based upon USEPA SW-846, USEPA Methods for Chemical Analysis of Water and Wastewater, Standard Methods for the Examination of Water and Wastewater and other recognized methodologies. The results contained in this report pertain only to the samples as indicated on the chain of custody.

Absolute Resource Associates maintains certification with the agencies listed below. The reported results apply to the sample(s) in the condition as received at the time the laboratory took custody. This report shall not be reproduced except in full, without written approval of the laboratory. The liability of ARA is limited to the cost of the requested analyses, unless otherwise agreed upon in writing.

We appreciate the opportunity to provide laboratory services. If you have any questions regarding the enclosed report, please contact the laboratory and we will be glad to assist you.

Sincerely,
Absolute Resource Associates

Aaron DeWees
Chief Operating Officer

Date of Approval: 1/3/2024
Total number of pages: 466

Absolute Resource Associates Certifications

New Hampshire	1732	Massachusetts	M-NH902
Maine	NH902		

Absolute Resource associates

Table of Contents
Lab # 67798

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Project ID: Dow Salvage Yard 18001468

Sample Association Table

Field ID	Matrix	Date-Time Sampled	Lab#	Analysis
SY-OBMW12-110723	Water	11/7/2023 10:07	67798-001	
				Acid & Base/Neutral Extractables in water by 8270
				Aluminum in water by 6020
				Antimony in water by 6020
				Arsenic in water by 6020
				Barium in water by 6020
				Beryllium in water by 6020
				Cadmium in water by 6020
				Chromium in water by 6020
				Cobalt in water by 6020
				Combo: TAL 23 Metals
				Copper in water by 6020
				EPH in water by MADEP Method
				Field Specified Laboratory Duplicate
				Field Specified Matrix Spike
				Iron in water by 6020
				Lead in water by 6020
				Magnesium in water by 6020
				Manganese in water by 6020
				Mercury in water by 7470
				Nickel in water by 6020
				PCBs in water by 8082 DoD
				Potassium in water by 6020
				SEDD Generation
				Selenium in water by 6020
				Silver in water by 6020
				Sodium in water by 6020
				Thallium in water by 6020
				Vanadium in water by 6020
				VOCs in water by 8260 DoD
				VPH in water by MA DEP Method
				Water Digestion for ICPMS Analysis
				Zinc in water by 6020

Project ID: Dow Salvage Yard 18001468

Sample Association Table

Field ID	Matrix	Date-Time Sampled	Lab#	Analysis
SY-OBMW6-110723	Water	11/7/2023 10:30	67798-002	
				Acid & Base/Neutral Extractables in water by 8270
				Aluminum in water by 6020
				Antimony in water by 6020
				Arsenic in water by 6020
				Barium in water by 6020
				Beryllium in water by 6020
				Cadmium in water by 6020
				Chromium in water by 6020
				Cobalt in water by 6020
				Combo: TAL 23 Metals
				Copper in water by 6020
				EPH in water by MADEP Method
				Iron in water by 6020
				Lead in water by 6020
				Magnesium in water by 6020
				Manganese in water by 6020
				Mercury in water by 7470
				Nickel in water by 6020
				PCBs in water by 8082 DoD
				Potassium in water by 6020
				Selenium in water by 6020
				Silver in water by 6020
				Sodium in water by 6020
				Thallium in water by 6020
				Vanadium in water by 6020
				VOCs in water by 8260 DoD
				VPH in water by MA DEP Method
				Water Digestion for ICPMS Analysis
				Zinc in water by 6020

Project ID: Dow Salvage Yard 18001468

Sample Association Table

Field ID	Matrix	Date-Time Sampled	Lab#	Analysis
SY-OBMW4R-110723	Water	11/7/2023 11:05	67798-003	
				Acid & Base/Neutral Extractables in water by 8270
				Aluminum in water by 6020
				Antimony in water by 6020
				Arsenic in water by 6020
				Barium in water by 6020
				Beryllium in water by 6020
				Cadmium in water by 6020
				Chromium in water by 6020
				Cobalt in water by 6020
				Combo: TAL 23 Metals
				Copper in water by 6020
				EPH in water by MADEP Method
				Iron in water by 6020
				Lead in water by 6020
				Magnesium in water by 6020
				Manganese in water by 6020
				Mercury in water by 7470
				Nickel in water by 6020
				PCBs in water by 8082 DoD
				Potassium in water by 6020
				Selenium in water by 6020
				Silver in water by 6020
				Sodium in water by 6020
				Thallium in water by 6020
				Vanadium in water by 6020
				VOCs in water by 8260 DoD
				VPH in water by MA DEP Method
				Water Digestion for ICPMS Analysis
				Zinc in water by 6020

Project ID: Dow Salvage Yard 18001468

Sample Association Table

Field ID	Matrix	Date-Time Sampled	Lab#	Analysis
SY-BRMW2-60.5-70.5-110723	Water	11/7/2023 12:25	67798-004	
				Acid & Base/Neutral Extractables in water by 8270
				Aluminum in water by 6020
				Antimony in water by 6020
				Arsenic in water by 6020
				Barium in water by 6020
				Beryllium in water by 6020
				Cadmium in water by 6020
				Chromium in water by 6020
				Cobalt in water by 6020
				Combo: TAL 23 Metals
				Copper in water by 6020
				EPH in water by MADEP Method
				Iron in water by 6020
				Lead in water by 6020
				Magnesium in water by 6020
				Manganese in water by 6020
				Mercury in water by 7470
				Nickel in water by 6020
				PCBs in water by 8082 DoD
				Potassium in water by 6020
				Selenium in water by 6020
				Silver in water by 6020
				Sodium in water by 6020
				Thallium in water by 6020
				Vanadium in water by 6020
				VOCs in water by 8260 DoD
				VPH in water by MA DEP Method
				Water Digestion for ICPMS Analysis
				Zinc in water by 6020

Project ID: Dow Salvage Yard 18001468

Sample Association Table

Field ID	Matrix	Date-Time Sampled	Lab#	Analysis
SY-OBMW15-110723	Water	11/7/2023 12:50	67798-005	
				Acid & Base/Neutral Extractables in water by 8270
				Aluminum in water by 6020
				Antimony in water by 6020
				Arsenic in water by 6020
				Barium in water by 6020
				Beryllium in water by 6020
				Cadmium in water by 6020
				Chromium in water by 6020
				Cobalt in water by 6020
				Combo: TAL 23 Metals
				Copper in water by 6020
				EPH in water by MADEP Method
				Iron in water by 6020
				Lead in water by 6020
				Magnesium in water by 6020
				Manganese in water by 6020
				Mercury in water by 7470
				Nickel in water by 6020
				PCBs in water by 8082 DoD
				Potassium in water by 6020
				Selenium in water by 6020
				Silver in water by 6020
				Sodium in water by 6020
				Thallium in water by 6020
				Vanadium in water by 6020
				VOCs in water by 8260 DoD
				VPH in water by MA DEP Method
				Water Digestion for ICPMS Analysis
				Zinc in water by 6020

Project ID: Dow Salvage Yard 18001468

Sample Association Table

Field ID	Matrix	Date-Time Sampled	Lab#	Analysis
SY-OBMW5-110723	Water	11/7/2023 13:25	67798-006	
				Acid & Base/Neutral Extractables in water by 8270
				Aluminum in water by 6020
				Antimony in water by 6020
				Arsenic in water by 6020
				Barium in water by 6020
				Beryllium in water by 6020
				Cadmium in water by 6020
				Chromium in water by 6020
				Cobalt in water by 6020
				Combo: TAL 23 Metals
				Copper in water by 6020
				EPH in water by MADEP Method
				Iron in water by 6020
				Lead in water by 6020
				Magnesium in water by 6020
				Manganese in water by 6020
				Mercury in water by 7470
				Nickel in water by 6020
				PCBs in water by 8082 DoD
				Potassium in water by 6020
				Selenium in water by 6020
				Silver in water by 6020
				Sodium in water by 6020
				Thallium in water by 6020
				Vanadium in water by 6020
				VOCs in water by 8260 DoD
				VPH in water by MA DEP Method
				Water Digestion for ICPMS Analysis
				Zinc in water by 6020

Project ID: Dow Salvage Yard 18001468

Sample Association Table

Field ID	Matrix	Date-Time Sampled	Lab#	Analysis
SY-BRMW2-80.5-95.5-110723	Water	11/7/2023 13:40	67798-007	
				Acid & Base/Neutral Extractables in water by 8270
				Aluminum in water by 6020
				Antimony in water by 6020
				Arsenic in water by 6020
				Barium in water by 6020
				Beryllium in water by 6020
				Cadmium in water by 6020
				Chromium in water by 6020
				Cobalt in water by 6020
				Combo: TAL 23 Metals
				Copper in water by 6020
				EPH in water by MADEP Method
				Field Specified Laboratory Duplicate
				Field Specified Matrix Spike
				Iron in water by 6020
				Lead in water by 6020
				Magnesium in water by 6020
				Manganese in water by 6020
				Mercury in water by 7470
				Nickel in water by 6020
				PCBs in water by 8082 DoD
				Potassium in water by 6020
				Selenium in water by 6020
				Silver in water by 6020
				Sodium in water by 6020
				Thallium in water by 6020
				Vanadium in water by 6020
				VOCs in water by 8260 DoD
				VPH in water by MA DEP Method
				Water Digestion for ICPMS Analysis
				Zinc in water by 6020

Project ID: Dow Salvage Yard 18001468

Sample Association Table

Field ID	Matrix	Date-Time Sampled	Lab#	Analysis
SY-OBMW13-110723	Water	11/7/2023 14:25	67798-008	
				Acid & Base/Neutral Extractables in water by 8270
				Aluminum in water by 6020
				Antimony in water by 6020
				Arsenic in water by 6020
				Barium in water by 6020
				Beryllium in water by 6020
				Cadmium in water by 6020
				Chromium in water by 6020
				Cobalt in water by 6020
				Combo: TAL 23 Metals
				Copper in water by 6020
				EPH in water by MADEP Method
				Iron in water by 6020
				Lead in water by 6020
				Magnesium in water by 6020
				Manganese in water by 6020
				Mercury in water by 7470
				Nickel in water by 6020
				PCBs in water by 8082 DoD
				Potassium in water by 6020
				Selenium in water by 6020
				Silver in water by 6020
				Sodium in water by 6020
				Thallium in water by 6020
				Vanadium in water by 6020
				VOCs in water by 8260 DoD
				VPH in water by MA DEP Method
				Water Digestion for ICPMS Analysis
				Zinc in water by 6020

Project ID: Dow Salvage Yard 18001468

Sample Association Table

Field ID	Matrix	Date-Time Sampled	Lab#	Analysis
SY-OBMW14-110723	Water	11/7/2023 14:00	67798-009	
				Acid & Base/Neutral Extractables in water by 8270
				Aluminum in water by 6020
				Antimony in water by 6020
				Arsenic in water by 6020
				Barium in water by 6020
				Beryllium in water by 6020
				Cadmium in water by 6020
				Chromium in water by 6020
				Cobalt in water by 6020
				Combo: TAL 23 Metals
				Copper in water by 6020
				EPH in water by MADEP Method
				Iron in water by 6020
				Lead in water by 6020
				Magnesium in water by 6020
				Manganese in water by 6020
				Mercury in water by 7470
				Nickel in water by 6020
				PCBs in water by 8082 DoD
				Potassium in water by 6020
				Selenium in water by 6020
				Silver in water by 6020
				Sodium in water by 6020
				Thallium in water by 6020
				Vanadium in water by 6020
				VOCs in water by 8260 DoD
				VPH in water by MA DEP Method
				Water Digestion for ICPMS Analysis
				Zinc in water by 6020

Project ID: Dow Salvage Yard 18001468

Sample Association Table

Field ID	Matrix	Date-Time Sampled	Lab#	Analysis
SY-BRMW2-252.5-262.5-110723	Water	11/7/2023 15:35	67798-010	
				Acid & Base/Neutral Extractables in water by 8270
				Aluminum in water by 6020
				Antimony in water by 6020
				Arsenic in water by 6020
				Barium in water by 6020
				Beryllium in water by 6020
				Cadmium in water by 6020
				Chromium in water by 6020
				Cobalt in water by 6020
				Combo: TAL 23 Metals
				Copper in water by 6020
				EPH in water by MADEP Method
				Iron in water by 6020
				Lead in water by 6020
				Magnesium in water by 6020
				Manganese in water by 6020
				Mercury in water by 7470
				Nickel in water by 6020
				PCBs in water by 8082 DoD
				Potassium in water by 6020
				Selenium in water by 6020
				Silver in water by 6020
				Sodium in water by 6020
				Thallium in water by 6020
				Vanadium in water by 6020
				VOCs in water by 8260 DoD
				VPH in water by MA DEP Method
				Water Digestion for ICPMS Analysis
				Zinc in water by 6020
TB31-110723	Water	11/7/2023 16:30	67798-011	
				VOCs in water by 8260 DoD
				VPH in water by MA DEP Method

Project ID: Dow Salvage Yard 18001468

Sample Association Table

Field ID	Matrix	Date-Time Sampled	Lab#	Analysis
SY-OBMW12-110723-DISS	Water	11/7/2023 10:07	67798-012	
				Aluminum in water by 6020
				Antimony in water by 6020
				Arsenic in water by 6020
				Barium in water by 6020
				Beryllium in water by 6020
				Cadmium in water by 6020
				Chromium in water by 6020
				Cobalt in water by 6020
				Combo: TAL 23 Metals
				Copper in water by 6020
				Dissolved Prep for ICPMS Analysis
				Iron in water by 6020
				Lead in water by 6020
				Magnesium in water by 6020
				Manganese in water by 6020
				Mercury in water by 7470
				Nickel in water by 6020
				Potassium in water by 6020
				Selenium in water by 6020
				Silver in water by 6020
				Sodium in water by 6020
				Thallium in water by 6020
				Vanadium in water by 6020
				Zinc in water by 6020

Project ID: Dow Salvage Yard 18001468

Sample Association Table

Field ID	Matrix	Date-Time Sampled	Lab#	Analysis
SY-OBMW6-110723-DISS	Water	11/7/2023 10:30	67798-013	
				Aluminum in water by 6020
				Antimony in water by 6020
				Arsenic in water by 6020
				Barium in water by 6020
				Beryllium in water by 6020
				Cadmium in water by 6020
				Chromium in water by 6020
				Cobalt in water by 6020
				Combo: TAL 23 Metals
				Copper in water by 6020
				Dissolved Prep for ICPMS Analysis
				Iron in water by 6020
				Lead in water by 6020
				Magnesium in water by 6020
				Manganese in water by 6020
				Mercury in water by 7470
				Nickel in water by 6020
				Potassium in water by 6020
				Selenium in water by 6020
				Silver in water by 6020
				Sodium in water by 6020
				Thallium in water by 6020
				Vanadium in water by 6020
				Zinc in water by 6020

Project ID: Dow Salvage Yard 18001468

Sample Association Table

Field ID	Matrix	Date-Time Sampled	Lab#	Analysis
SY-OBMW4R-110723-DISS	Water	11/7/2023 11:05	67798-014	
				Aluminum in water by 6020
				Antimony in water by 6020
				Arsenic in water by 6020
				Barium in water by 6020
				Beryllium in water by 6020
				Cadmium in water by 6020
				Chromium in water by 6020
				Cobalt in water by 6020
				Combo: TAL 23 Metals
				Copper in water by 6020
				Dissolved Prep for ICPMS Analysis
				Iron in water by 6020
				Lead in water by 6020
				Magnesium in water by 6020
				Manganese in water by 6020
				Mercury in water by 7470
				Nickel in water by 6020
				Potassium in water by 6020
				Selenium in water by 6020
				Silver in water by 6020
				Sodium in water by 6020
				Thallium in water by 6020
				Vanadium in water by 6020
				Zinc in water by 6020

Project ID: Dow Salvage Yard 18001468

Sample Association Table

Field ID	Matrix	Date-Time Sampled	Lab#	Analysis
SY-BRMW2-60.5-70.5-110723-DISS	Water	11/7/2023 12:25	67798-015	
				Aluminum in water by 6020
				Antimony in water by 6020
				Arsenic in water by 6020
				Barium in water by 6020
				Beryllium in water by 6020
				Cadmium in water by 6020
				Chromium in water by 6020
				Cobalt in water by 6020
				Combo: TAL 23 Metals
				Copper in water by 6020
				Dissolved Prep for ICPMS Analysis
				Iron in water by 6020
				Lead in water by 6020
				Magnesium in water by 6020
				Manganese in water by 6020
				Mercury in water by 7470
				Nickel in water by 6020
				Potassium in water by 6020
				Selenium in water by 6020
				Silver in water by 6020
				Sodium in water by 6020
				Thallium in water by 6020
				Vanadium in water by 6020
				Zinc in water by 6020

Project ID: Dow Salvage Yard 18001468

Sample Association Table

Field ID	Matrix	Date-Time Sampled	Lab#	Analysis
SY-OBMW15-110723-DISS	Water	11/7/2023 12:50	67798-016	
				Aluminum in water by 6020
				Antimony in water by 6020
				Arsenic in water by 6020
				Barium in water by 6020
				Beryllium in water by 6020
				Cadmium in water by 6020
				Chromium in water by 6020
				Cobalt in water by 6020
				Combo: TAL 23 Metals
				Copper in water by 6020
				Dissolved Prep for ICPMS Analysis
				Iron in water by 6020
				Lead in water by 6020
				Magnesium in water by 6020
				Manganese in water by 6020
				Mercury in water by 7470
				Nickel in water by 6020
				Potassium in water by 6020
				Selenium in water by 6020
				Silver in water by 6020
				Sodium in water by 6020
				Thallium in water by 6020
				Vanadium in water by 6020
				Zinc in water by 6020

Project ID: Dow Salvage Yard 18001468

Sample Association Table

Field ID	Matrix	Date-Time Sampled	Lab#	Analysis
SY-OBMW5-110723-DISS	Water	11/7/2023 13:25	67798-017	
				Aluminum in water by 6020
				Antimony in water by 6020
				Arsenic in water by 6020
				Barium in water by 6020
				Beryllium in water by 6020
				Cadmium in water by 6020
				Chromium in water by 6020
				Cobalt in water by 6020
				Combo: TAL 23 Metals
				Copper in water by 6020
				Dissolved Prep for ICPMS Analysis
				Iron in water by 6020
				Lead in water by 6020
				Magnesium in water by 6020
				Manganese in water by 6020
				Mercury in water by 7470
				Nickel in water by 6020
				Potassium in water by 6020
				Selenium in water by 6020
				Silver in water by 6020
				Sodium in water by 6020
				Thallium in water by 6020
				Vanadium in water by 6020
				Zinc in water by 6020

Project ID: Dow Salvage Yard 18001468

Sample Association Table

Field ID	Matrix	Date-Time Sampled	Lab#	Analysis
SY-BRMW2-80.5-95.5-110723-DISS	Water	11/7/2023 13:40	67798-018	
				Aluminum in water by 6020
				Antimony in water by 6020
				Arsenic in water by 6020
				Barium in water by 6020
				Beryllium in water by 6020
				Cadmium in water by 6020
				Chromium in water by 6020
				Cobalt in water by 6020
				Combo: TAL 23 Metals
				Copper in water by 6020
				Dissolved Prep for ICPMS Analysis
				Iron in water by 6020
				Lead in water by 6020
				Magnesium in water by 6020
				Manganese in water by 6020
				Mercury in water by 7470
				Nickel in water by 6020
				Potassium in water by 6020
				Selenium in water by 6020
				Silver in water by 6020
				Sodium in water by 6020
				Thallium in water by 6020
				Vanadium in water by 6020
				Zinc in water by 6020

Project ID: Dow Salvage Yard 18001468

Sample Association Table

Field ID	Matrix	Date-Time Sampled	Lab#	Analysis
SY-OBMW13-110723-DISS	Water	11/7/2023 14:25	67798-019	
				Aluminum in water by 6020
				Antimony in water by 6020
				Arsenic in water by 6020
				Barium in water by 6020
				Beryllium in water by 6020
				Cadmium in water by 6020
				Chromium in water by 6020
				Cobalt in water by 6020
				Combo: TAL 23 Metals
				Copper in water by 6020
				Dissolved Prep for ICPMS Analysis
				Iron in water by 6020
				Lead in water by 6020
				Magnesium in water by 6020
				Manganese in water by 6020
				Mercury in water by 7470
				Nickel in water by 6020
				Potassium in water by 6020
				Selenium in water by 6020
				Silver in water by 6020
				Sodium in water by 6020
				Thallium in water by 6020
				Vanadium in water by 6020
				Zinc in water by 6020

Project ID: Dow Salvage Yard 18001468

Sample Association Table

Field ID	Matrix	Date-Time Sampled	Lab#	Analysis
SY-OBMW14-110723-DISS	Water	11/7/2023 14:00	67798-020	
				Aluminum in water by 6020
				Antimony in water by 6020
				Arsenic in water by 6020
				Barium in water by 6020
				Beryllium in water by 6020
				Cadmium in water by 6020
				Chromium in water by 6020
				Cobalt in water by 6020
				Combo: TAL 23 Metals
				Copper in water by 6020
				Dissolved Prep for ICPMS Analysis
				Iron in water by 6020
				Lead in water by 6020
				Magnesium in water by 6020
				Manganese in water by 6020
				Mercury in water by 7470
				Nickel in water by 6020
				Potassium in water by 6020
				Selenium in water by 6020
				Silver in water by 6020
				Sodium in water by 6020
				Thallium in water by 6020
				Vanadium in water by 6020
				Zinc in water by 6020

Project ID: Dow Salvage Yard 18001468

Sample Association Table

Field ID	Matrix	Date-Time Sampled	Lab#	Analysis
SY-BRMW2-252.5-262.5-110723-DISS	Water	11/7/2023 15:35	67798-021	
				Aluminum in water by 6020
				Antimony in water by 6020
				Arsenic in water by 6020
				Barium in water by 6020
				Beryllium in water by 6020
				Cadmium in water by 6020
				Chromium in water by 6020
				Cobalt in water by 6020
				Combo: TAL 23 Metals
				Copper in water by 6020
				Dissolved Prep for ICPMS Analysis
				Iron in water by 6020
				Lead in water by 6020
				Magnesium in water by 6020
				Manganese in water by 6020
				Mercury in water by 7470
				Nickel in water by 6020
				Potassium in water by 6020
				Selenium in water by 6020
				Silver in water by 6020
				Sodium in water by 6020
				Thallium in water by 6020
				Vanadium in water by 6020
				Zinc in water by 6020

Project ID: Dow Salvage Yard 18001468
Job ID: 67798
Sample#: 67798-001
Sample ID: SY-OBMW12-110723
Matrix: Water
Sampled: 11/7/23 10:07

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
dichlorodifluoromethane	1.0 U	2.0	1.0	0.28	ug/L	1	LMM			2303675	11/10/23	15:32	SW5030C8260D
chloromethane	1.0 U	2.0	1.0	0.59	ug/L	1	LMM			2303675	11/10/23	15:32	SW5030C8260D
vinyl chloride	1.0 U	2.0	1.0	0.49	ug/L	1	LMM			2303675	11/10/23	15:32	SW5030C8260D
bromomethane	1.5 U	2.0	1.5	1.1	ug/L	1	LMM			2303675	11/10/23	15:32	SW5030C8260D
chloroethane	1.0 UM	2.0	1.0	0.33	ug/L	1	LMM			2303675	11/10/23	15:32	SW5030C8260D
trichlorofluoromethane	1.0 U	2.0	1.0	0.34	ug/L	1	LMM			2303675	11/10/23	15:32	SW5030C8260D
diethyl ether	1.0 UM	2.0	1.0	0.41	ug/L	1	LMM			2303675	11/10/23	15:32	SW5030C8260D
acetone	5.0 U	50	5.0	1.9	ug/L	1	LMM			2303675	11/10/23	15:32	SW5030C8260D
1,1-dichloroethene	0.50 U	1.0	0.50	0.35	ug/L	1	LMM			2303675	11/10/23	15:32	SW5030C8260D
methylene chloride	1.0 U	2.0	1.0	0.59	ug/L	1	LMM			2303675	11/10/23	15:32	SW5030C8260D
carbon disulfide	1.0 UM	2.0	1.0	0.33	ug/L	1	LMM			2303675	11/10/23	15:32	SW5030C8260D
methyl t-butyl ether (MTBE)	1.0 U	2.0	1.0	0.30	ug/L	1	LMM			2303675	11/10/23	15:32	SW5030C8260D
trans-1,2-dichloroethene	1.0 U	2.0	1.0	0.46	ug/L	1	LMM			2303675	11/10/23	15:32	SW5030C8260D
ethyl t-butyl ether (ETBE)	1.0 U	2.0	1.0	0.24	ug/L	1	LMM			2303675	11/10/23	15:32	SW5030C8260D
1,1-dichloroethane	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303675	11/10/23	15:32	SW5030C8260D
t-butanol (TBA)	10 UM	30	10	2.5	ug/L	1	LMM			2303675	11/10/23	15:32	SW5030C8260D
2-butanone (MEK)	5.0 U	10	5.0	0.67	ug/L	1	LMM			2303675	11/10/23	15:32	SW5030C8260D
2,2-dichloropropane	1.0 U	2.0	1.0	0.21	ug/L	1	LMM			2303675	11/10/23	15:32	SW5030C8260D
cis-1,2-dichloroethene	1.5 U	2.0	1.5	1.2	ug/L	1	LMM			2303675	11/10/23	15:32	SW5030C8260D
chloroform	1.5 U	2.0	1.5	1.4	ug/L	1	LMM			2303675	11/10/23	15:32	SW5030C8260D
bromochloromethane	1.0 U	2.0	1.0	0.22	ug/L	1	LMM			2303675	11/10/23	15:32	SW5030C8260D
tetrahydrofuran (THF)	1.5 U	2.0	1.5	0.75	ug/L	1	LMM			2303675	11/10/23	15:32	SW5030C8260D
1,1,1-trichloroethane	1.0 U	2.0	1.0	0.55	ug/L	1	LMM			2303675	11/10/23	15:32	SW5030C8260D
1,1-dichloropropene	1.0 U	2.0	1.0	0.26	ug/L	1	LMM			2303675	11/10/23	15:32	SW5030C8260D
t-amyl-methyl ether (TAME)	1.0 U	2.0	1.0	0.57	ug/L	1	LMM			2303675	11/10/23	15:32	SW5030C8260D
carbon tetrachloride	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303675	11/10/23	15:32	SW5030C8260D
1,2-dichloroethane	1.0 U	2.0	1.0	0.20	ug/L	1	LMM			2303675	11/10/23	15:32	SW5030C8260D
benzene	1.0 U	2.0	1.0	0.40	ug/L	1	LMM			2303675	11/10/23	15:32	SW5030C8260D
trichloroethene	1.0 U	2.0	1.0	0.53	ug/L	1	LMM			2303675	11/10/23	15:32	SW5030C8260D
1,2-dichloropropane	1.0 U	2.0	1.0	0.22	ug/L	1	LMM			2303675	11/10/23	15:32	SW5030C8260D
bromodichloromethane	0.50 U	0.60	0.50	0.38	ug/L	1	LMM			2303675	11/10/23	15:32	SW5030C8260D
1,4-dioxane	10 U	50	10	8.7	ug/L	1	LMM			2303675	11/10/23	15:32	SW5030C8260D
dibromomethane	1.0 U	2.0	1.0	0.23	ug/L	1	LMM			2303675	11/10/23	15:32	SW5030C8260D
4-methyl-2-pentanone (MIBK)	1.0 U	10	1.0	0.56	ug/L	1	LMM			2303675	11/10/23	15:32	SW5030C8260D
cis-1,3-dichloropropene	1.0 U	2.0	1.0	0.30	ug/L	1	LMM			2303675	11/10/23	15:32	SW5030C8260D
toluene	1.0 U	2.0	1.0	0.45	ug/L	1	LMM			2303675	11/10/23	15:32	SW5030C8260D
trans-1,3-dichloropropene	1.0 U	2.0	1.0	0.34	ug/L	1	LMM			2303675	11/10/23	15:32	SW5030C8260D
2-hexanone	1.0 U	10	1.0	0.72	ug/L	1	LMM			2303675	11/10/23	15:32	SW5030C8260D
1,1,2-trichloroethane	1.0 UM	2.0	1.0	0.27	ug/L	1	LMM			2303675	11/10/23	15:32	SW5030C8260D
1,3-dichloropropane	1.0 UM	2.0	1.0	0.25	ug/L	1	LMM			2303675	11/10/23	15:32	SW5030C8260D
tetrachloroethene	1.0 U	2.0	1.0	0.76	ug/L	1	LMM			2303675	11/10/23	15:32	SW5030C8260D
dibromochloromethane	1.0 U	2.0	1.0	0.21	ug/L	1	LMM			2303675	11/10/23	15:32	SW5030C8260D

Project ID: Dow Salvage Yard 18001468
Job ID: 67798
Sample#: 67798-001
Sample ID: SY-OBMW12-110723
Matrix: Water
Sampled: 11/7/23 10:07

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
1,2-dibromoethane (EDB)	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303675	11/10/23	15:32	SW5030C8260D
chlorobenzene	1.0 U	2.0	1.0	0.25	ug/L	1	LMM			2303675	11/10/23	15:32	SW5030C8260D
1,1,1,2-tetrachloroethane	1.0 U	2.0	1.0	0.21	ug/L	1	LMM			2303675	11/10/23	15:32	SW5030C8260D
ethylbenzene	1.0 UM	2.0	1.0	0.65	ug/L	1	LMM			2303675	11/10/23	15:32	SW5030C8260D
m&p-xylenes	1.5 UM	2.0	1.5	1.4	ug/L	1	LMM			2303675	11/10/23	15:32	SW5030C8260D
o-xylene	1.0 U	2.0	1.0	0.55	ug/L	1	LMM			2303675	11/10/23	15:32	SW5030C8260D
styrene	1.0 U	2.0	1.0	0.57	ug/L	1	LMM			2303675	11/10/23	15:32	SW5030C8260D
bromoform	1.0 U	2.0	1.0	0.24	ug/L	1	LMM			2303675	11/10/23	15:32	SW5030C8260D
isopropylbenzene	1.0 U	2.0	1.0	0.65	ug/L	1	LMM			2303675	11/10/23	15:32	SW5030C8260D
1,1,2,2-tetrachloroethane	1.0 U	2.0	1.0	0.29	ug/L	1	LMM			2303675	11/10/23	15:32	SW5030C8260D
1,2,3-trichloropropane	1.0 UM	2.0	1.0	0.55	ug/L	1	LMM			2303675	11/10/23	15:32	SW5030C8260D
n-propylbenzene	1.0 U	2.0	1.0	0.44	ug/L	1	LMM			2303675	11/10/23	15:32	SW5030C8260D
bromobenzene	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303675	11/10/23	15:32	SW5030C8260D
2-chlorotoluene	1.0 UM	2.0	1.0	0.23	ug/L	1	LMM			2303675	11/10/23	15:32	SW5030C8260D
4-chlorotoluene	1.0 U	2.0	1.0	0.33	ug/L	1	LMM			2303675	11/10/23	15:32	SW5030C8260D
tert-butylbenzene	1.0 U	2.0	1.0	0.39	ug/L	1	LMM			2303675	11/10/23	15:32	SW5030C8260D
1,2,4-trimethylbenzene	1.0 U	2.0	1.0	0.58	ug/L	1	LMM			2303675	11/10/23	15:32	SW5030C8260D
sec-butylbenzene	1.0 U	2.0	1.0	0.44	ug/L	1	LMM			2303675	11/10/23	15:32	SW5030C8260D
1,3-dichlorobenzene	1.0 U	2.0	1.0	0.45	ug/L	1	LMM			2303675	11/10/23	15:32	SW5030C8260D
4-isopropyltoluene	1.0 U	2.0	1.0	0.47	ug/L	1	LMM			2303675	11/10/23	15:32	SW5030C8260D
1,4-dichlorobenzene	1.0 U	2.0	1.0	0.26	ug/L	1	LMM			2303675	11/10/23	15:32	SW5030C8260D
1,2-dichlorobenzene	1.0 U	2.0	1.0	0.39	ug/L	1	LMM			2303675	11/10/23	15:32	SW5030C8260D
n-butylbenzene	1.0 U	2.0	1.0	0.54	ug/L	1	LMM			2303675	11/10/23	15:32	SW5030C8260D
1,2-dibromo-3-chloropropane (DBCP)	1.5 U	2.0	1.5	0.91	ug/L	1	LMM			2303675	11/10/23	15:32	SW5030C8260D
1,3,5-trimethylbenzene	1.0 U	2.0	1.0	0.46	ug/L	1	LMM			2303675	11/10/23	15:32	SW5030C8260D
1,2,4-trichlorobenzene	1.0 U	2.0	1.0	0.79	ug/L	1	LMM			2303675	11/10/23	15:32	SW5030C8260D
hexachlorobutadiene	0.50 U	0.50	0.50	0.19	ug/L	1	LMM			2303675	11/10/23	15:32	SW5030C8260D
naphthalene	1.5 U	2.0	1.5	1.2	ug/L	1	LMM			2303675	11/10/23	15:32	SW5030C8260D
1,2,3-trichlorobenzene	1.0 U	2.0	1.0	0.93	ug/L	1	LMM			2303675	11/10/23	15:32	SW5030C8260D
Surrogate Recovery		Limits											
dibromofluoromethane SUR	95	78-114			%	1	LMM			2303675	11/10/23	15:32	SW5030C8260D
toluene-D8 SUR	101	88-110			%	1	LMM			2303675	11/10/23	15:32	SW5030C8260D
4-bromofluorobenzene SUR	99	86-115			%	1	LMM			2303675	11/10/23	15:32	SW5030C8260D

M = The percent recovery and/or RPD for the MS/D was outside acceptance criteria.

Project ID: Dow Salvage Yard 18001468
Job ID: 67798
Sample#: 67798-002
Sample ID: SY-OBMW6-110723
Matrix: Water
Sampled: 11/7/23 10:30

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
dichlorodifluoromethane	1.0 U	2.0	1.0	0.28	ug/L	1	LMM			2303675	11/10/23	15:59	SW5030C8260D
chloromethane	1.0 U	2.0	1.0	0.59	ug/L	1	LMM			2303675	11/10/23	15:59	SW5030C8260D
vinyl chloride	1.0 U	2.0	1.0	0.49	ug/L	1	LMM			2303675	11/10/23	15:59	SW5030C8260D
bromomethane	1.5 U	2.0	1.5	1.1	ug/L	1	LMM			2303675	11/10/23	15:59	SW5030C8260D
chloroethane	1.0 U	2.0	1.0	0.33	ug/L	1	LMM			2303675	11/10/23	15:59	SW5030C8260D
trichlorofluoromethane	1.0 U	2.0	1.0	0.34	ug/L	1	LMM			2303675	11/10/23	15:59	SW5030C8260D
diethyl ether	1.0 U	2.0	1.0	0.41	ug/L	1	LMM			2303675	11/10/23	15:59	SW5030C8260D
acetone	5.0 U	50	5.0	1.9	ug/L	1	LMM			2303675	11/10/23	15:59	SW5030C8260D
1,1-dichloroethene	0.50 U	1.0	0.50	0.35	ug/L	1	LMM			2303675	11/10/23	15:59	SW5030C8260D
methylene chloride	1.0 U	2.0	1.0	0.59	ug/L	1	LMM			2303675	11/10/23	15:59	SW5030C8260D
carbon disulfide	1.0 U	2.0	1.0	0.33	ug/L	1	LMM			2303675	11/10/23	15:59	SW5030C8260D
methyl t-butyl ether (MTBE)	1.0 U	2.0	1.0	0.30	ug/L	1	LMM			2303675	11/10/23	15:59	SW5030C8260D
trans-1,2-dichloroethene	1.0 U	2.0	1.0	0.46	ug/L	1	LMM			2303675	11/10/23	15:59	SW5030C8260D
ethyl t-butyl ether (ETBE)	1.0 U	2.0	1.0	0.24	ug/L	1	LMM			2303675	11/10/23	15:59	SW5030C8260D
1,1-dichloroethane	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303675	11/10/23	15:59	SW5030C8260D
t-butanol (TBA)	10 U	30	10	2.5	ug/L	1	LMM			2303675	11/10/23	15:59	SW5030C8260D
2-butanone (MEK)	5.0 U	10	5.0	0.67	ug/L	1	LMM			2303675	11/10/23	15:59	SW5030C8260D
2,2-dichloropropane	1.0 U	2.0	1.0	0.21	ug/L	1	LMM			2303675	11/10/23	15:59	SW5030C8260D
cis-1,2-dichloroethene	1.5 U	2.0	1.5	1.2	ug/L	1	LMM			2303675	11/10/23	15:59	SW5030C8260D
chloroform	1.5 U	2.0	1.5	1.4	ug/L	1	LMM			2303675	11/10/23	15:59	SW5030C8260D
bromochloromethane	1.0 U	2.0	1.0	0.22	ug/L	1	LMM			2303675	11/10/23	15:59	SW5030C8260D
tetrahydrofuran (THF)	1.5 U	2.0	1.5	0.75	ug/L	1	LMM			2303675	11/10/23	15:59	SW5030C8260D
1,1,1-trichloroethane	1.0 U	2.0	1.0	0.55	ug/L	1	LMM			2303675	11/10/23	15:59	SW5030C8260D
1,1-dichloropropene	1.0 U	2.0	1.0	0.26	ug/L	1	LMM			2303675	11/10/23	15:59	SW5030C8260D
t-amyl-methyl ether (TAME)	1.0 U	2.0	1.0	0.57	ug/L	1	LMM			2303675	11/10/23	15:59	SW5030C8260D
carbon tetrachloride	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303675	11/10/23	15:59	SW5030C8260D
1,2-dichloroethane	1.0 U	2.0	1.0	0.20	ug/L	1	LMM			2303675	11/10/23	15:59	SW5030C8260D
benzene	1.0 U	2.0	1.0	0.40	ug/L	1	LMM			2303675	11/10/23	15:59	SW5030C8260D
trichloroethene	1.0 U	2.0	1.0	0.53	ug/L	1	LMM			2303675	11/10/23	15:59	SW5030C8260D
1,2-dichloropropane	1.0 U	2.0	1.0	0.22	ug/L	1	LMM			2303675	11/10/23	15:59	SW5030C8260D
bromodichloromethane	0.50 U	0.60	0.50	0.38	ug/L	1	LMM			2303675	11/10/23	15:59	SW5030C8260D
1,4-dioxane	10 U	50	10	8.7	ug/L	1	LMM			2303675	11/10/23	15:59	SW5030C8260D
dibromomethane	1.0 U	2.0	1.0	0.23	ug/L	1	LMM			2303675	11/10/23	15:59	SW5030C8260D
4-methyl-2-pentanone (MIBK)	1.0 U	10	1.0	0.56	ug/L	1	LMM			2303675	11/10/23	15:59	SW5030C8260D
cis-1,3-dichloropropene	1.0 U	2.0	1.0	0.30	ug/L	1	LMM			2303675	11/10/23	15:59	SW5030C8260D
toluene	1.0 U	2.0	1.0	0.45	ug/L	1	LMM			2303675	11/10/23	15:59	SW5030C8260D
trans-1,3-dichloropropene	1.0 U	2.0	1.0	0.34	ug/L	1	LMM			2303675	11/10/23	15:59	SW5030C8260D
2-hexanone	1.0 U	10	1.0	0.72	ug/L	1	LMM			2303675	11/10/23	15:59	SW5030C8260D
1,1,2-trichloroethane	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303675	11/10/23	15:59	SW5030C8260D
1,3-dichloropropane	1.0 U	2.0	1.0	0.25	ug/L	1	LMM			2303675	11/10/23	15:59	SW5030C8260D
tetrachloroethene	1.0 U	2.0	1.0	0.76	ug/L	1	LMM			2303675	11/10/23	15:59	SW5030C8260D
dibromochloromethane	1.0 U	2.0	1.0	0.21	ug/L	1	LMM			2303675	11/10/23	15:59	SW5030C8260D

Project ID: Dow Salvage Yard 18001468
Job ID: 67798
Sample#: 67798-002
Sample ID: SY-OBMW6-110723
Matrix: Water
Sampled: 11/7/23 10:30

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
1,2-dibromoethane (EDB)	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303675	11/10/23	15:59	SW5030C8260D
chlorobenzene	1.0 U	2.0	1.0	0.25	ug/L	1	LMM			2303675	11/10/23	15:59	SW5030C8260D
1,1,1,2-tetrachloroethane	1.0 U	2.0	1.0	0.21	ug/L	1	LMM			2303675	11/10/23	15:59	SW5030C8260D
ethylbenzene	1.0 U	2.0	1.0	0.65	ug/L	1	LMM			2303675	11/10/23	15:59	SW5030C8260D
m&p-xylenes	1.5 U	2.0	1.5	1.4	ug/L	1	LMM			2303675	11/10/23	15:59	SW5030C8260D
o-xylene	1.0 U	2.0	1.0	0.55	ug/L	1	LMM			2303675	11/10/23	15:59	SW5030C8260D
styrene	1.0 U	2.0	1.0	0.57	ug/L	1	LMM			2303675	11/10/23	15:59	SW5030C8260D
bromoform	1.0 U	2.0	1.0	0.24	ug/L	1	LMM			2303675	11/10/23	15:59	SW5030C8260D
isopropylbenzene	1.0 U	2.0	1.0	0.65	ug/L	1	LMM			2303675	11/10/23	15:59	SW5030C8260D
1,1,2,2-tetrachloroethane	1.0 U	2.0	1.0	0.29	ug/L	1	LMM			2303675	11/10/23	15:59	SW5030C8260D
1,2,3-trichloropropane	1.0 U	2.0	1.0	0.55	ug/L	1	LMM			2303675	11/10/23	15:59	SW5030C8260D
n-propylbenzene	1.0 U	2.0	1.0	0.44	ug/L	1	LMM			2303675	11/10/23	15:59	SW5030C8260D
bromobenzene	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303675	11/10/23	15:59	SW5030C8260D
2-chlorotoluene	1.0 U	2.0	1.0	0.23	ug/L	1	LMM			2303675	11/10/23	15:59	SW5030C8260D
4-chlorotoluene	1.0 U	2.0	1.0	0.33	ug/L	1	LMM			2303675	11/10/23	15:59	SW5030C8260D
tert-butylbenzene	1.0 U	2.0	1.0	0.39	ug/L	1	LMM			2303675	11/10/23	15:59	SW5030C8260D
1,2,4-trimethylbenzene	1.0 U	2.0	1.0	0.58	ug/L	1	LMM			2303675	11/10/23	15:59	SW5030C8260D
sec-butylbenzene	1.0 U	2.0	1.0	0.44	ug/L	1	LMM			2303675	11/10/23	15:59	SW5030C8260D
1,3-dichlorobenzene	1.0 U	2.0	1.0	0.45	ug/L	1	LMM			2303675	11/10/23	15:59	SW5030C8260D
4-isopropyltoluene	1.0 U	2.0	1.0	0.47	ug/L	1	LMM			2303675	11/10/23	15:59	SW5030C8260D
1,4-dichlorobenzene	1.0 U	2.0	1.0	0.26	ug/L	1	LMM			2303675	11/10/23	15:59	SW5030C8260D
1,2-dichlorobenzene	1.0 U	2.0	1.0	0.39	ug/L	1	LMM			2303675	11/10/23	15:59	SW5030C8260D
n-butylbenzene	1.0 U	2.0	1.0	0.54	ug/L	1	LMM			2303675	11/10/23	15:59	SW5030C8260D
1,2-dibromo-3-chloropropane (DBCP)	1.5 U	2.0	1.5	0.91	ug/L	1	LMM			2303675	11/10/23	15:59	SW5030C8260D
1,3,5-trimethylbenzene	1.0 U	2.0	1.0	0.46	ug/L	1	LMM			2303675	11/10/23	15:59	SW5030C8260D
1,2,4-trichlorobenzene	1.0 U	2.0	1.0	0.79	ug/L	1	LMM			2303675	11/10/23	15:59	SW5030C8260D
hexachlorobutadiene	0.50 U	0.50	0.50	0.19	ug/L	1	LMM			2303675	11/10/23	15:59	SW5030C8260D
naphthalene	1.5 U	2.0	1.5	1.2	ug/L	1	LMM			2303675	11/10/23	15:59	SW5030C8260D
1,2,3-trichlorobenzene	1.0 U	2.0	1.0	0.93	ug/L	1	LMM			2303675	11/10/23	15:59	SW5030C8260D
Surrogate Recovery		Limits											
dibromofluoromethane SUR	93	78-114			%	1	LMM			2303675	11/10/23	15:59	SW5030C8260D
toluene-D8 SUR	100	88-110			%	1	LMM			2303675	11/10/23	15:59	SW5030C8260D
4-bromofluorobenzene SUR	95	86-115			%	1	LMM			2303675	11/10/23	15:59	SW5030C8260D

Project ID: Dow Salvage Yard 18001468
Job ID: 67798
Sample#: 67798-003
Sample ID: SY-OBMW4R-110723
Matrix: Water
Sampled: 11/7/23 11:05

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
dichlorodifluoromethane	1.0 U	2.0	1.0	0.28	ug/L	1	LMM			2303675	11/10/23	16:24	SW5030C8260D
chloromethane	1.0 U	2.0	1.0	0.59	ug/L	1	LMM			2303675	11/10/23	16:24	SW5030C8260D
vinyl chloride	1.0 U	2.0	1.0	0.49	ug/L	1	LMM			2303675	11/10/23	16:24	SW5030C8260D
bromomethane	1.5 U	2.0	1.5	1.1	ug/L	1	LMM			2303675	11/10/23	16:24	SW5030C8260D
chloroethane	1.0 U	2.0	1.0	0.33	ug/L	1	LMM			2303675	11/10/23	16:24	SW5030C8260D
trichlorofluoromethane	1.0 U	2.0	1.0	0.34	ug/L	1	LMM			2303675	11/10/23	16:24	SW5030C8260D
diethyl ether	1.0 U	2.0	1.0	0.41	ug/L	1	LMM			2303675	11/10/23	16:24	SW5030C8260D
acetone	5.0 U	50	5.0	1.9	ug/L	1	LMM			2303675	11/10/23	16:24	SW5030C8260D
1,1-dichloroethene	0.50 U	1.0	0.50	0.35	ug/L	1	LMM			2303675	11/10/23	16:24	SW5030C8260D
methylene chloride	1.0 U	2.0	1.0	0.59	ug/L	1	LMM			2303675	11/10/23	16:24	SW5030C8260D
carbon disulfide	1.0 U	2.0	1.0	0.33	ug/L	1	LMM			2303675	11/10/23	16:24	SW5030C8260D
methyl t-butyl ether (MTBE)	1.0 U	2.0	1.0	0.30	ug/L	1	LMM			2303675	11/10/23	16:24	SW5030C8260D
trans-1,2-dichloroethene	1.0 U	2.0	1.0	0.46	ug/L	1	LMM			2303675	11/10/23	16:24	SW5030C8260D
ethyl t-butyl ether (ETBE)	1.0 U	2.0	1.0	0.24	ug/L	1	LMM			2303675	11/10/23	16:24	SW5030C8260D
1,1-dichloroethane	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303675	11/10/23	16:24	SW5030C8260D
t-butanol (TBA)	10 U	30	10	2.5	ug/L	1	LMM			2303675	11/10/23	16:24	SW5030C8260D
2-butanone (MEK)	5.0 U	10	5.0	0.67	ug/L	1	LMM			2303675	11/10/23	16:24	SW5030C8260D
2,2-dichloropropane	1.0 U	2.0	1.0	0.21	ug/L	1	LMM			2303675	11/10/23	16:24	SW5030C8260D
cis-1,2-dichloroethene	1.5 U	2.0	1.5	1.2	ug/L	1	LMM			2303675	11/10/23	16:24	SW5030C8260D
chloroform	1.5 U	2.0	1.5	1.4	ug/L	1	LMM			2303675	11/10/23	16:24	SW5030C8260D
bromochloromethane	1.0 U	2.0	1.0	0.22	ug/L	1	LMM			2303675	11/10/23	16:24	SW5030C8260D
tetrahydrofuran (THF)	1.5 U	2.0	1.5	0.75	ug/L	1	LMM			2303675	11/10/23	16:24	SW5030C8260D
1,1,1-trichloroethane	1.0 U	2.0	1.0	0.55	ug/L	1	LMM			2303675	11/10/23	16:24	SW5030C8260D
1,1-dichloropropene	1.0 U	2.0	1.0	0.26	ug/L	1	LMM			2303675	11/10/23	16:24	SW5030C8260D
t-amyl-methyl ether (TAME)	1.0 U	2.0	1.0	0.57	ug/L	1	LMM			2303675	11/10/23	16:24	SW5030C8260D
carbon tetrachloride	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303675	11/10/23	16:24	SW5030C8260D
1,2-dichloroethane	1.0 U	2.0	1.0	0.20	ug/L	1	LMM			2303675	11/10/23	16:24	SW5030C8260D
benzene	1.0 U	2.0	1.0	0.40	ug/L	1	LMM			2303675	11/10/23	16:24	SW5030C8260D
trichloroethene	1.0 U	2.0	1.0	0.53	ug/L	1	LMM			2303675	11/10/23	16:24	SW5030C8260D
1,2-dichloropropane	1.0 U	2.0	1.0	0.22	ug/L	1	LMM			2303675	11/10/23	16:24	SW5030C8260D
bromodichloromethane	0.50 U	0.60	0.50	0.38	ug/L	1	LMM			2303675	11/10/23	16:24	SW5030C8260D
1,4-dioxane	10 U	50	10	8.7	ug/L	1	LMM			2303675	11/10/23	16:24	SW5030C8260D
dibromomethane	1.0 U	2.0	1.0	0.23	ug/L	1	LMM			2303675	11/10/23	16:24	SW5030C8260D
4-methyl-2-pentanone (MIBK)	1.0 U	10	1.0	0.56	ug/L	1	LMM			2303675	11/10/23	16:24	SW5030C8260D
cis-1,3-dichloropropene	1.0 U	2.0	1.0	0.30	ug/L	1	LMM			2303675	11/10/23	16:24	SW5030C8260D
toluene	1.0 U	2.0	1.0	0.45	ug/L	1	LMM			2303675	11/10/23	16:24	SW5030C8260D
trans-1,3-dichloropropene	1.0 U	2.0	1.0	0.34	ug/L	1	LMM			2303675	11/10/23	16:24	SW5030C8260D
2-hexanone	1.0 U	10	1.0	0.72	ug/L	1	LMM			2303675	11/10/23	16:24	SW5030C8260D
1,1,2-trichloroethane	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303675	11/10/23	16:24	SW5030C8260D
1,3-dichloropropane	1.0 U	2.0	1.0	0.25	ug/L	1	LMM			2303675	11/10/23	16:24	SW5030C8260D
tetrachloroethene	1.0 U	2.0	1.0	0.76	ug/L	1	LMM			2303675	11/10/23	16:24	SW5030C8260D
dibromochloromethane	1.0 U	2.0	1.0	0.21	ug/L	1	LMM			2303675	11/10/23	16:24	SW5030C8260D

Project ID: Dow Salvage Yard 18001468
Job ID: 67798
Sample#: 67798-003
Sample ID: SY-OBMW4R-110723
Matrix: Water
Sampled: 11/7/23 11:05

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
1,2-dibromoethane (EDB)	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303675	11/10/23	16:24	SW5030C8260D
chlorobenzene	1.0 U	2.0	1.0	0.25	ug/L	1	LMM			2303675	11/10/23	16:24	SW5030C8260D
1,1,1,2-tetrachloroethane	1.0 U	2.0	1.0	0.21	ug/L	1	LMM			2303675	11/10/23	16:24	SW5030C8260D
ethylbenzene	1.0 U	2.0	1.0	0.65	ug/L	1	LMM			2303675	11/10/23	16:24	SW5030C8260D
m&p-xylenes	1.5 U	2.0	1.5	1.4	ug/L	1	LMM			2303675	11/10/23	16:24	SW5030C8260D
o-xylene	1.0 U	2.0	1.0	0.55	ug/L	1	LMM			2303675	11/10/23	16:24	SW5030C8260D
styrene	1.0 U	2.0	1.0	0.57	ug/L	1	LMM			2303675	11/10/23	16:24	SW5030C8260D
bromoform	1.0 U	2.0	1.0	0.24	ug/L	1	LMM			2303675	11/10/23	16:24	SW5030C8260D
isopropylbenzene	1.0 U	2.0	1.0	0.65	ug/L	1	LMM			2303675	11/10/23	16:24	SW5030C8260D
1,1,2,2-tetrachloroethane	1.0 U	2.0	1.0	0.29	ug/L	1	LMM			2303675	11/10/23	16:24	SW5030C8260D
1,2,3-trichloropropane	1.0 U	2.0	1.0	0.55	ug/L	1	LMM			2303675	11/10/23	16:24	SW5030C8260D
n-propylbenzene	1.0 U	2.0	1.0	0.44	ug/L	1	LMM			2303675	11/10/23	16:24	SW5030C8260D
bromobenzene	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303675	11/10/23	16:24	SW5030C8260D
2-chlorotoluene	1.0 U	2.0	1.0	0.23	ug/L	1	LMM			2303675	11/10/23	16:24	SW5030C8260D
4-chlorotoluene	1.0 U	2.0	1.0	0.33	ug/L	1	LMM			2303675	11/10/23	16:24	SW5030C8260D
tert-butylbenzene	1.0 U	2.0	1.0	0.39	ug/L	1	LMM			2303675	11/10/23	16:24	SW5030C8260D
1,2,4-trimethylbenzene	1.0 U	2.0	1.0	0.58	ug/L	1	LMM			2303675	11/10/23	16:24	SW5030C8260D
sec-butylbenzene	1.0 U	2.0	1.0	0.44	ug/L	1	LMM			2303675	11/10/23	16:24	SW5030C8260D
1,3-dichlorobenzene	1.0 U	2.0	1.0	0.45	ug/L	1	LMM			2303675	11/10/23	16:24	SW5030C8260D
4-isopropyltoluene	1.0 U	2.0	1.0	0.47	ug/L	1	LMM			2303675	11/10/23	16:24	SW5030C8260D
1,4-dichlorobenzene	1.0 U	2.0	1.0	0.26	ug/L	1	LMM			2303675	11/10/23	16:24	SW5030C8260D
1,2-dichlorobenzene	1.0 U	2.0	1.0	0.39	ug/L	1	LMM			2303675	11/10/23	16:24	SW5030C8260D
n-butylbenzene	1.0 U	2.0	1.0	0.54	ug/L	1	LMM			2303675	11/10/23	16:24	SW5030C8260D
1,2-dibromo-3-chloropropane (DBCP)	1.5 U	2.0	1.5	0.91	ug/L	1	LMM			2303675	11/10/23	16:24	SW5030C8260D
1,3,5-trimethylbenzene	1.0 U	2.0	1.0	0.46	ug/L	1	LMM			2303675	11/10/23	16:24	SW5030C8260D
1,2,4-trichlorobenzene	1.0 U	2.0	1.0	0.79	ug/L	1	LMM			2303675	11/10/23	16:24	SW5030C8260D
hexachlorobutadiene	0.50 U	0.50	0.50	0.19	ug/L	1	LMM			2303675	11/10/23	16:24	SW5030C8260D
naphthalene	1.5 U	2.0	1.5	1.2	ug/L	1	LMM			2303675	11/10/23	16:24	SW5030C8260D
1,2,3-trichlorobenzene	1.0 U	2.0	1.0	0.93	ug/L	1	LMM			2303675	11/10/23	16:24	SW5030C8260D
Surrogate Recovery		Limits											
dibromofluoromethane SUR	94	78-114			%	1	LMM			2303675	11/10/23	16:24	SW5030C8260D
toluene-D8 SUR	100	88-110			%	1	LMM			2303675	11/10/23	16:24	SW5030C8260D
4-bromofluorobenzene SUR	98	86-115			%	1	LMM			2303675	11/10/23	16:24	SW5030C8260D

Project ID: Dow Salvage Yard 18001468
Job ID: 67798
Sample#: 67798-004
Sample ID: SY-BRMW2-60.5-70.5-110723
Matrix: Water
Sampled: 11/7/23 12:25

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
dichlorodifluoromethane	1.0 U	2.0	1.0	0.28	ug/L	1	LMM			2303675	11/10/23	16:50	SW5030C8260D
chloromethane	1.0 U	2.0	1.0	0.59	ug/L	1	LMM			2303675	11/10/23	16:50	SW5030C8260D
vinyl chloride	1.0 U	2.0	1.0	0.49	ug/L	1	LMM			2303675	11/10/23	16:50	SW5030C8260D
bromomethane	1.5 U	2.0	1.5	1.1	ug/L	1	LMM			2303675	11/10/23	16:50	SW5030C8260D
chloroethane	1.0 U	2.0	1.0	0.33	ug/L	1	LMM			2303675	11/10/23	16:50	SW5030C8260D
trichlorofluoromethane	1.0 U	2.0	1.0	0.34	ug/L	1	LMM			2303675	11/10/23	16:50	SW5030C8260D
diethyl ether	1.0 U	2.0	1.0	0.41	ug/L	1	LMM			2303675	11/10/23	16:50	SW5030C8260D
acetone	3.2 J	50	5.0	1.9	ug/L	1	LMM			2303675	11/10/23	16:50	SW5030C8260D
1,1-dichloroethene	0.50 U	1.0	0.50	0.35	ug/L	1	LMM			2303675	11/10/23	16:50	SW5030C8260D
methylene chloride	1.0 U	2.0	1.0	0.59	ug/L	1	LMM			2303675	11/10/23	16:50	SW5030C8260D
carbon disulfide	1.0 U	2.0	1.0	0.33	ug/L	1	LMM			2303675	11/10/23	16:50	SW5030C8260D
methyl t-butyl ether (MTBE)	1.0 U	2.0	1.0	0.30	ug/L	1	LMM			2303675	11/10/23	16:50	SW5030C8260D
trans-1,2-dichloroethene	1.0 U	2.0	1.0	0.46	ug/L	1	LMM			2303675	11/10/23	16:50	SW5030C8260D
ethyl t-butyl ether (ETBE)	1.0 U	2.0	1.0	0.24	ug/L	1	LMM			2303675	11/10/23	16:50	SW5030C8260D
1,1-dichloroethane	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303675	11/10/23	16:50	SW5030C8260D
t-butanol (TBA)	10 U	30	10	2.5	ug/L	1	LMM			2303675	11/10/23	16:50	SW5030C8260D
2-butanone (MEK)	5.0 U	10	5.0	0.67	ug/L	1	LMM			2303675	11/10/23	16:50	SW5030C8260D
2,2-dichloropropane	1.0 U	2.0	1.0	0.21	ug/L	1	LMM			2303675	11/10/23	16:50	SW5030C8260D
cis-1,2-dichloroethene	1.5 U	2.0	1.5	1.2	ug/L	1	LMM			2303675	11/10/23	16:50	SW5030C8260D
chloroform	1.5 U	2.0	1.5	1.4	ug/L	1	LMM			2303675	11/10/23	16:50	SW5030C8260D
bromochloromethane	1.0 U	2.0	1.0	0.22	ug/L	1	LMM			2303675	11/10/23	16:50	SW5030C8260D
tetrahydrofuran (THF)	1.5 U	2.0	1.5	0.75	ug/L	1	LMM			2303675	11/10/23	16:50	SW5030C8260D
1,1,1-trichloroethane	1.0 U	2.0	1.0	0.55	ug/L	1	LMM			2303675	11/10/23	16:50	SW5030C8260D
1,1-dichloropropene	1.0 U	2.0	1.0	0.26	ug/L	1	LMM			2303675	11/10/23	16:50	SW5030C8260D
t-amyl-methyl ether (TAME)	1.0 U	2.0	1.0	0.57	ug/L	1	LMM			2303675	11/10/23	16:50	SW5030C8260D
carbon tetrachloride	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303675	11/10/23	16:50	SW5030C8260D
1,2-dichloroethane	1.0 U	2.0	1.0	0.20	ug/L	1	LMM			2303675	11/10/23	16:50	SW5030C8260D
benzene	1.0 U	2.0	1.0	0.40	ug/L	1	LMM			2303675	11/10/23	16:50	SW5030C8260D
trichloroethene	1.0 U	2.0	1.0	0.53	ug/L	1	LMM			2303675	11/10/23	16:50	SW5030C8260D
1,2-dichloropropane	1.0 U	2.0	1.0	0.22	ug/L	1	LMM			2303675	11/10/23	16:50	SW5030C8260D
bromodichloromethane	0.50 U	0.60	0.50	0.38	ug/L	1	LMM			2303675	11/10/23	16:50	SW5030C8260D
1,4-dioxane	10 U	50	10	8.7	ug/L	1	LMM			2303675	11/10/23	16:50	SW5030C8260D
dibromomethane	1.0 U	2.0	1.0	0.23	ug/L	1	LMM			2303675	11/10/23	16:50	SW5030C8260D
4-methyl-2-pentanone (MIBK)	1.0 U	10	1.0	0.56	ug/L	1	LMM			2303675	11/10/23	16:50	SW5030C8260D
cis-1,3-dichloropropene	1.0 U	2.0	1.0	0.30	ug/L	1	LMM			2303675	11/10/23	16:50	SW5030C8260D
toluene	6.3	2.0	1.0	0.45	ug/L	1	LMM			2303675	11/10/23	16:50	SW5030C8260D
trans-1,3-dichloropropene	1.0 U	2.0	1.0	0.34	ug/L	1	LMM			2303675	11/10/23	16:50	SW5030C8260D
2-hexanone	1.0 U	10	1.0	0.72	ug/L	1	LMM			2303675	11/10/23	16:50	SW5030C8260D
1,1,2-trichloroethane	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303675	11/10/23	16:50	SW5030C8260D
1,3-dichloropropane	1.0 U	2.0	1.0	0.25	ug/L	1	LMM			2303675	11/10/23	16:50	SW5030C8260D
tetrachloroethene	1.0 U	2.0	1.0	0.76	ug/L	1	LMM			2303675	11/10/23	16:50	SW5030C8260D
dibromochloromethane	1.0 U	2.0	1.0	0.21	ug/L	1	LMM			2303675	11/10/23	16:50	SW5030C8260D

Project ID: Dow Salvage Yard 18001468
Job ID: 67798
Sample#: 67798-004
Sample ID: SY-BRMW2-60.5-70.5-110723
Matrix: Water
Sampled: 11/7/23 12:25

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
1,2-dibromoethane (EDB)	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303675	11/10/23	16:50	SW5030C8260D
chlorobenzene	1.0 U	2.0	1.0	0.25	ug/L	1	LMM			2303675	11/10/23	16:50	SW5030C8260D
1,1,1,2-tetrachloroethane	1.0 U	2.0	1.0	0.21	ug/L	1	LMM			2303675	11/10/23	16:50	SW5030C8260D
ethylbenzene	1.0 U	2.0	1.0	0.65	ug/L	1	LMM			2303675	11/10/23	16:50	SW5030C8260D
m&p-xylenes	1.5 U	2.0	1.5	1.4	ug/L	1	LMM			2303675	11/10/23	16:50	SW5030C8260D
o-xylene	1.0 U	2.0	1.0	0.55	ug/L	1	LMM			2303675	11/10/23	16:50	SW5030C8260D
styrene	1.0 U	2.0	1.0	0.57	ug/L	1	LMM			2303675	11/10/23	16:50	SW5030C8260D
bromoform	1.0 U	2.0	1.0	0.24	ug/L	1	LMM			2303675	11/10/23	16:50	SW5030C8260D
isopropylbenzene	1.0 U	2.0	1.0	0.65	ug/L	1	LMM			2303675	11/10/23	16:50	SW5030C8260D
1,1,2,2-tetrachloroethane	1.0 U	2.0	1.0	0.29	ug/L	1	LMM			2303675	11/10/23	16:50	SW5030C8260D
1,2,3-trichloropropane	1.0 U	2.0	1.0	0.55	ug/L	1	LMM			2303675	11/10/23	16:50	SW5030C8260D
n-propylbenzene	1.0 U	2.0	1.0	0.44	ug/L	1	LMM			2303675	11/10/23	16:50	SW5030C8260D
bromobenzene	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303675	11/10/23	16:50	SW5030C8260D
2-chlorotoluene	1.0 U	2.0	1.0	0.23	ug/L	1	LMM			2303675	11/10/23	16:50	SW5030C8260D
4-chlorotoluene	1.0 U	2.0	1.0	0.33	ug/L	1	LMM			2303675	11/10/23	16:50	SW5030C8260D
tert-butylbenzene	1.0 U	2.0	1.0	0.39	ug/L	1	LMM			2303675	11/10/23	16:50	SW5030C8260D
1,2,4-trimethylbenzene	1.0 U	2.0	1.0	0.58	ug/L	1	LMM			2303675	11/10/23	16:50	SW5030C8260D
sec-butylbenzene	1.0 U	2.0	1.0	0.44	ug/L	1	LMM			2303675	11/10/23	16:50	SW5030C8260D
1,3-dichlorobenzene	1.0 U	2.0	1.0	0.45	ug/L	1	LMM			2303675	11/10/23	16:50	SW5030C8260D
4-isopropyltoluene	1.0 U	2.0	1.0	0.47	ug/L	1	LMM			2303675	11/10/23	16:50	SW5030C8260D
1,4-dichlorobenzene	1.0 U	2.0	1.0	0.26	ug/L	1	LMM			2303675	11/10/23	16:50	SW5030C8260D
1,2-dichlorobenzene	1.0 U	2.0	1.0	0.39	ug/L	1	LMM			2303675	11/10/23	16:50	SW5030C8260D
n-butylbenzene	1.0 U	2.0	1.0	0.54	ug/L	1	LMM			2303675	11/10/23	16:50	SW5030C8260D
1,2-dibromo-3-chloropropane (DBCP)	1.5 U	2.0	1.5	0.91	ug/L	1	LMM			2303675	11/10/23	16:50	SW5030C8260D
1,3,5-trimethylbenzene	1.0 U	2.0	1.0	0.46	ug/L	1	LMM			2303675	11/10/23	16:50	SW5030C8260D
1,2,4-trichlorobenzene	1.0 U	2.0	1.0	0.79	ug/L	1	LMM			2303675	11/10/23	16:50	SW5030C8260D
hexachlorobutadiene	0.50 U	0.50	0.50	0.19	ug/L	1	LMM			2303675	11/10/23	16:50	SW5030C8260D
naphthalene	1.5 U	2.0	1.5	1.2	ug/L	1	LMM			2303675	11/10/23	16:50	SW5030C8260D
1,2,3-trichlorobenzene	1.0 U	2.0	1.0	0.93	ug/L	1	LMM			2303675	11/10/23	16:50	SW5030C8260D
Surrogate Recovery		Limits											
dibromofluoromethane SUR	93	78-114			%	1	LMM			2303675	11/10/23	16:50	SW5030C8260D
toluene-D8 SUR	100	88-110			%	1	LMM			2303675	11/10/23	16:50	SW5030C8260D
4-bromofluorobenzene SUR	100	86-115			%	1	LMM			2303675	11/10/23	16:50	SW5030C8260D

Project ID: Dow Salvage Yard 18001468
Job ID: 67798
Sample#: 67798-005
Sample ID: SY-OBMW15-110723
Matrix: Water
Sampled: 11/7/23 12:50

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
dichlorodifluoromethane	1.0 U	2.0	1.0	0.28	ug/L	1	LMM			2303675	11/10/23	17:15	SW5030C8260D
chloromethane	1.0 U	2.0	1.0	0.59	ug/L	1	LMM			2303675	11/10/23	17:15	SW5030C8260D
vinyl chloride	1.0 U	2.0	1.0	0.49	ug/L	1	LMM			2303675	11/10/23	17:15	SW5030C8260D
bromomethane	1.5 U	2.0	1.5	1.1	ug/L	1	LMM			2303675	11/10/23	17:15	SW5030C8260D
chloroethane	1.0 U	2.0	1.0	0.33	ug/L	1	LMM			2303675	11/10/23	17:15	SW5030C8260D
trichlorofluoromethane	1.0 U	2.0	1.0	0.34	ug/L	1	LMM			2303675	11/10/23	17:15	SW5030C8260D
diethyl ether	1.0 U	2.0	1.0	0.41	ug/L	1	LMM			2303675	11/10/23	17:15	SW5030C8260D
acetone	5.0 U	50	5.0	1.9	ug/L	1	LMM			2303675	11/10/23	17:15	SW5030C8260D
1,1-dichloroethene	0.50 U	1.0	0.50	0.35	ug/L	1	LMM			2303675	11/10/23	17:15	SW5030C8260D
methylene chloride	1.0 U	2.0	1.0	0.59	ug/L	1	LMM			2303675	11/10/23	17:15	SW5030C8260D
carbon disulfide	1.0 U	2.0	1.0	0.33	ug/L	1	LMM			2303675	11/10/23	17:15	SW5030C8260D
methyl t-butyl ether (MTBE)	1.0 U	2.0	1.0	0.30	ug/L	1	LMM			2303675	11/10/23	17:15	SW5030C8260D
trans-1,2-dichloroethene	1.0 U	2.0	1.0	0.46	ug/L	1	LMM			2303675	11/10/23	17:15	SW5030C8260D
ethyl t-butyl ether (ETBE)	1.0 U	2.0	1.0	0.24	ug/L	1	LMM			2303675	11/10/23	17:15	SW5030C8260D
1,1-dichloroethane	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303675	11/10/23	17:15	SW5030C8260D
t-butanol (TBA)	10 U	30	10	2.5	ug/L	1	LMM			2303675	11/10/23	17:15	SW5030C8260D
2-butanone (MEK)	5.0 U	10	5.0	0.67	ug/L	1	LMM			2303675	11/10/23	17:15	SW5030C8260D
2,2-dichloropropane	1.0 U	2.0	1.0	0.21	ug/L	1	LMM			2303675	11/10/23	17:15	SW5030C8260D
cis-1,2-dichloroethene	1.5 U	2.0	1.5	1.2	ug/L	1	LMM			2303675	11/10/23	17:15	SW5030C8260D
chloroform	1.5 U	2.0	1.5	1.4	ug/L	1	LMM			2303675	11/10/23	17:15	SW5030C8260D
bromochloromethane	1.0 U	2.0	1.0	0.22	ug/L	1	LMM			2303675	11/10/23	17:15	SW5030C8260D
tetrahydrofuran (THF)	1.5 U	2.0	1.5	0.75	ug/L	1	LMM			2303675	11/10/23	17:15	SW5030C8260D
1,1,1-trichloroethane	1.0 U	2.0	1.0	0.55	ug/L	1	LMM			2303675	11/10/23	17:15	SW5030C8260D
1,1-dichloropropene	1.0 U	2.0	1.0	0.26	ug/L	1	LMM			2303675	11/10/23	17:15	SW5030C8260D
t-amyl-methyl ether (TAME)	1.0 U	2.0	1.0	0.57	ug/L	1	LMM			2303675	11/10/23	17:15	SW5030C8260D
carbon tetrachloride	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303675	11/10/23	17:15	SW5030C8260D
1,2-dichloroethane	1.0 U	2.0	1.0	0.20	ug/L	1	LMM			2303675	11/10/23	17:15	SW5030C8260D
benzene	1.0 U	2.0	1.0	0.40	ug/L	1	LMM			2303675	11/10/23	17:15	SW5030C8260D
trichloroethene	1.0 U	2.0	1.0	0.53	ug/L	1	LMM			2303675	11/10/23	17:15	SW5030C8260D
1,2-dichloropropane	1.0 U	2.0	1.0	0.22	ug/L	1	LMM			2303675	11/10/23	17:15	SW5030C8260D
bromodichloromethane	0.50 U	0.60	0.50	0.38	ug/L	1	LMM			2303675	11/10/23	17:15	SW5030C8260D
1,4-dioxane	10 U	50	10	8.7	ug/L	1	LMM			2303675	11/10/23	17:15	SW5030C8260D
dibromomethane	1.0 U	2.0	1.0	0.23	ug/L	1	LMM			2303675	11/10/23	17:15	SW5030C8260D
4-methyl-2-pentanone (MIBK)	1.0 U	10	1.0	0.56	ug/L	1	LMM			2303675	11/10/23	17:15	SW5030C8260D
cis-1,3-dichloropropene	1.0 U	2.0	1.0	0.30	ug/L	1	LMM			2303675	11/10/23	17:15	SW5030C8260D
toluene	1.0 U	2.0	1.0	0.45	ug/L	1	LMM			2303675	11/10/23	17:15	SW5030C8260D
trans-1,3-dichloropropene	1.0 U	2.0	1.0	0.34	ug/L	1	LMM			2303675	11/10/23	17:15	SW5030C8260D
2-hexanone	1.0 U	10	1.0	0.72	ug/L	1	LMM			2303675	11/10/23	17:15	SW5030C8260D
1,1,2-trichloroethane	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303675	11/10/23	17:15	SW5030C8260D
1,3-dichloropropane	1.0 U	2.0	1.0	0.25	ug/L	1	LMM			2303675	11/10/23	17:15	SW5030C8260D
tetrachloroethene	1.0 U	2.0	1.0	0.76	ug/L	1	LMM			2303675	11/10/23	17:15	SW5030C8260D
dibromochloromethane	1.0 U	2.0	1.0	0.21	ug/L	1	LMM			2303675	11/10/23	17:15	SW5030C8260D

Project ID: Dow Salvage Yard 18001468
Job ID: 67798
Sample#: 67798-005
Sample ID: SY-OBMW15-110723
Matrix: Water
Sampled: 11/7/23 12:50

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
1,2-dibromoethane (EDB)	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303675	11/10/23	17:15	SW5030C8260D
chlorobenzene	1.0 U	2.0	1.0	0.25	ug/L	1	LMM			2303675	11/10/23	17:15	SW5030C8260D
1,1,1,2-tetrachloroethane	1.0 U	2.0	1.0	0.21	ug/L	1	LMM			2303675	11/10/23	17:15	SW5030C8260D
ethylbenzene	1.0 U	2.0	1.0	0.65	ug/L	1	LMM			2303675	11/10/23	17:15	SW5030C8260D
m&p-xylenes	1.5 U	2.0	1.5	1.4	ug/L	1	LMM			2303675	11/10/23	17:15	SW5030C8260D
o-xylene	1.0 U	2.0	1.0	0.55	ug/L	1	LMM			2303675	11/10/23	17:15	SW5030C8260D
styrene	1.0 U	2.0	1.0	0.57	ug/L	1	LMM			2303675	11/10/23	17:15	SW5030C8260D
bromoform	1.0 U	2.0	1.0	0.24	ug/L	1	LMM			2303675	11/10/23	17:15	SW5030C8260D
isopropylbenzene	1.0 U	2.0	1.0	0.65	ug/L	1	LMM			2303675	11/10/23	17:15	SW5030C8260D
1,1,2,2-tetrachloroethane	1.0 U	2.0	1.0	0.29	ug/L	1	LMM			2303675	11/10/23	17:15	SW5030C8260D
1,2,3-trichloropropane	1.0 U	2.0	1.0	0.55	ug/L	1	LMM			2303675	11/10/23	17:15	SW5030C8260D
n-propylbenzene	1.0 U	2.0	1.0	0.44	ug/L	1	LMM			2303675	11/10/23	17:15	SW5030C8260D
bromobenzene	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303675	11/10/23	17:15	SW5030C8260D
2-chlorotoluene	1.0 U	2.0	1.0	0.23	ug/L	1	LMM			2303675	11/10/23	17:15	SW5030C8260D
4-chlorotoluene	1.0 U	2.0	1.0	0.33	ug/L	1	LMM			2303675	11/10/23	17:15	SW5030C8260D
tert-butylbenzene	1.0 U	2.0	1.0	0.39	ug/L	1	LMM			2303675	11/10/23	17:15	SW5030C8260D
1,2,4-trimethylbenzene	1.0 U	2.0	1.0	0.58	ug/L	1	LMM			2303675	11/10/23	17:15	SW5030C8260D
sec-butylbenzene	1.0 U	2.0	1.0	0.44	ug/L	1	LMM			2303675	11/10/23	17:15	SW5030C8260D
1,3-dichlorobenzene	1.0 U	2.0	1.0	0.45	ug/L	1	LMM			2303675	11/10/23	17:15	SW5030C8260D
4-isopropyltoluene	1.0 U	2.0	1.0	0.47	ug/L	1	LMM			2303675	11/10/23	17:15	SW5030C8260D
1,4-dichlorobenzene	1.0 U	2.0	1.0	0.26	ug/L	1	LMM			2303675	11/10/23	17:15	SW5030C8260D
1,2-dichlorobenzene	1.0 U	2.0	1.0	0.39	ug/L	1	LMM			2303675	11/10/23	17:15	SW5030C8260D
n-butylbenzene	1.0 U	2.0	1.0	0.54	ug/L	1	LMM			2303675	11/10/23	17:15	SW5030C8260D
1,2-dibromo-3-chloropropane (DBCP)	1.5 U	2.0	1.5	0.91	ug/L	1	LMM			2303675	11/10/23	17:15	SW5030C8260D
1,3,5-trimethylbenzene	1.0 U	2.0	1.0	0.46	ug/L	1	LMM			2303675	11/10/23	17:15	SW5030C8260D
1,2,4-trichlorobenzene	1.0 U	2.0	1.0	0.79	ug/L	1	LMM			2303675	11/10/23	17:15	SW5030C8260D
hexachlorobutadiene	0.50 U	0.50	0.50	0.19	ug/L	1	LMM			2303675	11/10/23	17:15	SW5030C8260D
naphthalene	1.5 U	2.0	1.5	1.2	ug/L	1	LMM			2303675	11/10/23	17:15	SW5030C8260D
1,2,3-trichlorobenzene	1.0 U	2.0	1.0	0.93	ug/L	1	LMM			2303675	11/10/23	17:15	SW5030C8260D
Surrogate Recovery		Limits											
dibromofluoromethane SUR	94	78-114			%	1	LMM			2303675	11/10/23	17:15	SW5030C8260D
toluene-D8 SUR	99	88-110			%	1	LMM			2303675	11/10/23	17:15	SW5030C8260D
4-bromofluorobenzene SUR	96	86-115			%	1	LMM			2303675	11/10/23	17:15	SW5030C8260D

Project ID: Dow Salvage Yard 18001468
Job ID: 67798
Sample#: 67798-006
Sample ID: SY-OBMW5-110723
Matrix: Water
Sampled: 11/7/23 13:25

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
dichlorodifluoromethane	1.0 U	2.0	1.0	0.28	ug/L	1	LMM			2303675	11/10/23	17:41	SW5030C8260D
chloromethane	1.0 U	2.0	1.0	0.59	ug/L	1	LMM			2303675	11/10/23	17:41	SW5030C8260D
vinyl chloride	1.0 U	2.0	1.0	0.49	ug/L	1	LMM			2303675	11/10/23	17:41	SW5030C8260D
bromomethane	1.5 U	2.0	1.5	1.1	ug/L	1	LMM			2303675	11/10/23	17:41	SW5030C8260D
chloroethane	1.0 U	2.0	1.0	0.33	ug/L	1	LMM			2303675	11/10/23	17:41	SW5030C8260D
trichlorofluoromethane	1.0 U	2.0	1.0	0.34	ug/L	1	LMM			2303675	11/10/23	17:41	SW5030C8260D
diethyl ether	1.0 U	2.0	1.0	0.41	ug/L	1	LMM			2303675	11/10/23	17:41	SW5030C8260D
acetone	5.0 U	50	5.0	1.9	ug/L	1	LMM			2303675	11/10/23	17:41	SW5030C8260D
1,1-dichloroethene	0.50 U	1.0	0.50	0.35	ug/L	1	LMM			2303675	11/10/23	17:41	SW5030C8260D
methylene chloride	1.0 U	2.0	1.0	0.59	ug/L	1	LMM			2303675	11/10/23	17:41	SW5030C8260D
carbon disulfide	0.39 J	2.0	1.0	0.33	ug/L	1	LMM			2303675	11/10/23	17:41	SW5030C8260D
methyl t-butyl ether (MTBE)	1.0 U	2.0	1.0	0.30	ug/L	1	LMM			2303675	11/10/23	17:41	SW5030C8260D
trans-1,2-dichloroethene	1.0 U	2.0	1.0	0.46	ug/L	1	LMM			2303675	11/10/23	17:41	SW5030C8260D
ethyl t-butyl ether (ETBE)	1.0 U	2.0	1.0	0.24	ug/L	1	LMM			2303675	11/10/23	17:41	SW5030C8260D
1,1-dichloroethane	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303675	11/10/23	17:41	SW5030C8260D
t-butanol (TBA)	10 U	30	10	2.5	ug/L	1	LMM			2303675	11/10/23	17:41	SW5030C8260D
2-butanone (MEK)	5.0 U	10	5.0	0.67	ug/L	1	LMM			2303675	11/10/23	17:41	SW5030C8260D
2,2-dichloropropane	1.0 U	2.0	1.0	0.21	ug/L	1	LMM			2303675	11/10/23	17:41	SW5030C8260D
cis-1,2-dichloroethene	1.5 U	2.0	1.5	1.2	ug/L	1	LMM			2303675	11/10/23	17:41	SW5030C8260D
chloroform	1.5 U	2.0	1.5	1.4	ug/L	1	LMM			2303675	11/10/23	17:41	SW5030C8260D
bromochloromethane	1.0 U	2.0	1.0	0.22	ug/L	1	LMM			2303675	11/10/23	17:41	SW5030C8260D
tetrahydrofuran (THF)	1.5 U	2.0	1.5	0.75	ug/L	1	LMM			2303675	11/10/23	17:41	SW5030C8260D
1,1,1-trichloroethane	1.0 U	2.0	1.0	0.55	ug/L	1	LMM			2303675	11/10/23	17:41	SW5030C8260D
1,1-dichloropropene	1.0 U	2.0	1.0	0.26	ug/L	1	LMM			2303675	11/10/23	17:41	SW5030C8260D
t-amyl-methyl ether (TAME)	1.0 U	2.0	1.0	0.57	ug/L	1	LMM			2303675	11/10/23	17:41	SW5030C8260D
carbon tetrachloride	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303675	11/10/23	17:41	SW5030C8260D
1,2-dichloroethane	1.0 U	2.0	1.0	0.20	ug/L	1	LMM			2303675	11/10/23	17:41	SW5030C8260D
benzene	1.0 U	2.0	1.0	0.40	ug/L	1	LMM			2303675	11/10/23	17:41	SW5030C8260D
trichloroethene	1.0 U	2.0	1.0	0.53	ug/L	1	LMM			2303675	11/10/23	17:41	SW5030C8260D
1,2-dichloropropane	1.0 U	2.0	1.0	0.22	ug/L	1	LMM			2303675	11/10/23	17:41	SW5030C8260D
bromodichloromethane	0.50 U	0.60	0.50	0.38	ug/L	1	LMM			2303675	11/10/23	17:41	SW5030C8260D
1,4-dioxane	10 U	50	10	8.7	ug/L	1	LMM			2303675	11/10/23	17:41	SW5030C8260D
dibromomethane	1.0 U	2.0	1.0	0.23	ug/L	1	LMM			2303675	11/10/23	17:41	SW5030C8260D
4-methyl-2-pentanone (MIBK)	1.0 U	10	1.0	0.56	ug/L	1	LMM			2303675	11/10/23	17:41	SW5030C8260D
cis-1,3-dichloropropene	1.0 U	2.0	1.0	0.30	ug/L	1	LMM			2303675	11/10/23	17:41	SW5030C8260D
toluene	1.0 U	2.0	1.0	0.45	ug/L	1	LMM			2303675	11/10/23	17:41	SW5030C8260D
trans-1,3-dichloropropene	1.0 U	2.0	1.0	0.34	ug/L	1	LMM			2303675	11/10/23	17:41	SW5030C8260D
2-hexanone	1.0 U	10	1.0	0.72	ug/L	1	LMM			2303675	11/10/23	17:41	SW5030C8260D
1,1,2-trichloroethane	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303675	11/10/23	17:41	SW5030C8260D
1,3-dichloropropane	1.0 U	2.0	1.0	0.25	ug/L	1	LMM			2303675	11/10/23	17:41	SW5030C8260D
tetrachloroethene	1.0 U	2.0	1.0	0.76	ug/L	1	LMM			2303675	11/10/23	17:41	SW5030C8260D
dibromochloromethane	1.0 U	2.0	1.0	0.21	ug/L	1	LMM			2303675	11/10/23	17:41	SW5030C8260D

Project ID: Dow Salvage Yard 18001468
Job ID: 67798
Sample#: 67798-006
Sample ID: SY-OBMW5-110723
Matrix: Water
Sampled: 11/7/23 13:25

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
1,2-dibromoethane (EDB)	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303675	11/10/23	17:41	SW5030C8260D
chlorobenzene	1.0 U	2.0	1.0	0.25	ug/L	1	LMM			2303675	11/10/23	17:41	SW5030C8260D
1,1,1,2-tetrachloroethane	1.0 U	2.0	1.0	0.21	ug/L	1	LMM			2303675	11/10/23	17:41	SW5030C8260D
ethylbenzene	1.0 U	2.0	1.0	0.65	ug/L	1	LMM			2303675	11/10/23	17:41	SW5030C8260D
m&p-xylenes	1.5 U	2.0	1.5	1.4	ug/L	1	LMM			2303675	11/10/23	17:41	SW5030C8260D
o-xylene	1.0 U	2.0	1.0	0.55	ug/L	1	LMM			2303675	11/10/23	17:41	SW5030C8260D
styrene	1.0 U	2.0	1.0	0.57	ug/L	1	LMM			2303675	11/10/23	17:41	SW5030C8260D
bromoform	1.0 U	2.0	1.0	0.24	ug/L	1	LMM			2303675	11/10/23	17:41	SW5030C8260D
isopropylbenzene	1.0 U	2.0	1.0	0.65	ug/L	1	LMM			2303675	11/10/23	17:41	SW5030C8260D
1,1,2,2-tetrachloroethane	1.0 U	2.0	1.0	0.29	ug/L	1	LMM			2303675	11/10/23	17:41	SW5030C8260D
1,2,3-trichloropropane	1.0 U	2.0	1.0	0.55	ug/L	1	LMM			2303675	11/10/23	17:41	SW5030C8260D
n-propylbenzene	1.0 U	2.0	1.0	0.44	ug/L	1	LMM			2303675	11/10/23	17:41	SW5030C8260D
bromobenzene	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303675	11/10/23	17:41	SW5030C8260D
2-chlorotoluene	1.0 U	2.0	1.0	0.23	ug/L	1	LMM			2303675	11/10/23	17:41	SW5030C8260D
4-chlorotoluene	1.0 U	2.0	1.0	0.33	ug/L	1	LMM			2303675	11/10/23	17:41	SW5030C8260D
tert-butylbenzene	1.0 U	2.0	1.0	0.39	ug/L	1	LMM			2303675	11/10/23	17:41	SW5030C8260D
1,2,4-trimethylbenzene	1.0 U	2.0	1.0	0.58	ug/L	1	LMM			2303675	11/10/23	17:41	SW5030C8260D
sec-butylbenzene	1.0 U	2.0	1.0	0.44	ug/L	1	LMM			2303675	11/10/23	17:41	SW5030C8260D
1,3-dichlorobenzene	1.0 U	2.0	1.0	0.45	ug/L	1	LMM			2303675	11/10/23	17:41	SW5030C8260D
4-isopropyltoluene	1.0 U	2.0	1.0	0.47	ug/L	1	LMM			2303675	11/10/23	17:41	SW5030C8260D
1,4-dichlorobenzene	1.0 U	2.0	1.0	0.26	ug/L	1	LMM			2303675	11/10/23	17:41	SW5030C8260D
1,2-dichlorobenzene	1.0 U	2.0	1.0	0.39	ug/L	1	LMM			2303675	11/10/23	17:41	SW5030C8260D
n-butylbenzene	1.0 U	2.0	1.0	0.54	ug/L	1	LMM			2303675	11/10/23	17:41	SW5030C8260D
1,2-dibromo-3-chloropropane (DBCP)	1.5 U	2.0	1.5	0.91	ug/L	1	LMM			2303675	11/10/23	17:41	SW5030C8260D
1,3,5-trimethylbenzene	1.0 U	2.0	1.0	0.46	ug/L	1	LMM			2303675	11/10/23	17:41	SW5030C8260D
1,2,4-trichlorobenzene	1.0 U	2.0	1.0	0.79	ug/L	1	LMM			2303675	11/10/23	17:41	SW5030C8260D
hexachlorobutadiene	0.50 U	0.50	0.50	0.19	ug/L	1	LMM			2303675	11/10/23	17:41	SW5030C8260D
naphthalene	1.5 U	2.0	1.5	1.2	ug/L	1	LMM			2303675	11/10/23	17:41	SW5030C8260D
1,2,3-trichlorobenzene	1.0 U	2.0	1.0	0.93	ug/L	1	LMM			2303675	11/10/23	17:41	SW5030C8260D
Surrogate Recovery		Limits											
dibromofluoromethane SUR	96	78-114			%	1	LMM			2303675	11/10/23	17:41	SW5030C8260D
toluene-D8 SUR	99	88-110			%	1	LMM			2303675	11/10/23	17:41	SW5030C8260D
4-bromofluorobenzene SUR	96	86-115			%	1	LMM			2303675	11/10/23	17:41	SW5030C8260D

Project ID: Dow Salvage Yard 18001468
Job ID: 67798
Sample#: 67798-007
Sample ID: SY-BRMW2-80.5-95.5-110723
Matrix: Water
Sampled: 11/7/23 13:40

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
dichlorodifluoromethane	1.0 U	2.0	1.0	0.28	ug/L	1	LMM			2303675	11/10/23	18:06	SW5030C8260D
chloromethane	1.0 U	2.0	1.0	0.59	ug/L	1	LMM			2303675	11/10/23	18:06	SW5030C8260D
vinyl chloride	1.0 U	2.0	1.0	0.49	ug/L	1	LMM			2303675	11/10/23	18:06	SW5030C8260D
bromomethane	1.5 U	2.0	1.5	1.1	ug/L	1	LMM			2303675	11/10/23	18:06	SW5030C8260D
chloroethane	1.0 UM	2.0	1.0	0.33	ug/L	1	LMM			2303675	11/10/23	18:06	SW5030C8260D
trichlorofluoromethane	1.0 U	2.0	1.0	0.34	ug/L	1	LMM			2303675	11/10/23	18:06	SW5030C8260D
diethyl ether	1.0 UM	2.0	1.0	0.41	ug/L	1	LMM			2303675	11/10/23	18:06	SW5030C8260D
acetone	5.0 U	50	5.0	1.9	ug/L	1	LMM			2303675	11/10/23	18:06	SW5030C8260D
1,1-dichloroethene	0.50 U	1.0	0.50	0.35	ug/L	1	LMM			2303675	11/10/23	18:06	SW5030C8260D
methylene chloride	1.0 U	2.0	1.0	0.59	ug/L	1	LMM			2303675	11/10/23	18:06	SW5030C8260D
carbon disulfide	1.0 UM	2.0	1.0	0.33	ug/L	1	LMM			2303675	11/10/23	18:06	SW5030C8260D
methyl t-butyl ether (MTBE)	1.0 U	2.0	1.0	0.30	ug/L	1	LMM			2303675	11/10/23	18:06	SW5030C8260D
trans-1,2-dichloroethene	1.0 U	2.0	1.0	0.46	ug/L	1	LMM			2303675	11/10/23	18:06	SW5030C8260D
ethyl t-butyl ether (ETBE)	1.0 U	2.0	1.0	0.24	ug/L	1	LMM			2303675	11/10/23	18:06	SW5030C8260D
1,1-dichloroethane	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303675	11/10/23	18:06	SW5030C8260D
t-butanol (TBA)	10 U	30	10	2.5	ug/L	1	LMM			2303675	11/10/23	18:06	SW5030C8260D
2-butanone (MEK)	5.0 U	10	5.0	0.67	ug/L	1	LMM			2303675	11/10/23	18:06	SW5030C8260D
2,2-dichloropropane	1.0 U	2.0	1.0	0.21	ug/L	1	LMM			2303675	11/10/23	18:06	SW5030C8260D
cis-1,2-dichloroethene	1.5 U	2.0	1.5	1.2	ug/L	1	LMM			2303675	11/10/23	18:06	SW5030C8260D
chloroform	1.5 U	2.0	1.5	1.4	ug/L	1	LMM			2303675	11/10/23	18:06	SW5030C8260D
bromochloromethane	1.0 U	2.0	1.0	0.22	ug/L	1	LMM			2303675	11/10/23	18:06	SW5030C8260D
tetrahydrofuran (THF)	1.5 U	2.0	1.5	0.75	ug/L	1	LMM			2303675	11/10/23	18:06	SW5030C8260D
1,1,1-trichloroethane	1.0 U	2.0	1.0	0.55	ug/L	1	LMM			2303675	11/10/23	18:06	SW5030C8260D
1,1-dichloropropene	1.0 U	2.0	1.0	0.26	ug/L	1	LMM			2303675	11/10/23	18:06	SW5030C8260D
t-amyl-methyl ether (TAME)	1.0 U	2.0	1.0	0.57	ug/L	1	LMM			2303675	11/10/23	18:06	SW5030C8260D
carbon tetrachloride	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303675	11/10/23	18:06	SW5030C8260D
1,2-dichloroethane	1.0 U	2.0	1.0	0.20	ug/L	1	LMM			2303675	11/10/23	18:06	SW5030C8260D
benzene	1.0 U	2.0	1.0	0.40	ug/L	1	LMM			2303675	11/10/23	18:06	SW5030C8260D
trichloroethene	1.0 U	2.0	1.0	0.53	ug/L	1	LMM			2303675	11/10/23	18:06	SW5030C8260D
1,2-dichloropropane	1.0 U	2.0	1.0	0.22	ug/L	1	LMM			2303675	11/10/23	18:06	SW5030C8260D
bromodichloromethane	0.50 U	0.60	0.50	0.38	ug/L	1	LMM			2303675	11/10/23	18:06	SW5030C8260D
1,4-dioxane	10 UM	50	10	8.7	ug/L	1	LMM			2303675	11/10/23	18:06	SW5030C8260D
dibromomethane	1.0 U	2.0	1.0	0.23	ug/L	1	LMM			2303675	11/10/23	18:06	SW5030C8260D
4-methyl-2-pentanone (MIBK)	1.0 U	10	1.0	0.56	ug/L	1	LMM			2303675	11/10/23	18:06	SW5030C8260D
cis-1,3-dichloropropene	1.0 U	2.0	1.0	0.30	ug/L	1	LMM			2303675	11/10/23	18:06	SW5030C8260D
toluene	1.8 J	2.0	1.0	0.45	ug/L	1	LMM			2303675	11/10/23	18:06	SW5030C8260D
trans-1,3-dichloropropene	1.0 U	2.0	1.0	0.34	ug/L	1	LMM			2303675	11/10/23	18:06	SW5030C8260D
2-hexanone	1.0 U	10	1.0	0.72	ug/L	1	LMM			2303675	11/10/23	18:06	SW5030C8260D
1,1,2-trichloroethane	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303675	11/10/23	18:06	SW5030C8260D
1,3-dichloropropane	1.0 UM	2.0	1.0	0.25	ug/L	1	LMM			2303675	11/10/23	18:06	SW5030C8260D
tetrachloroethene	1.0 U	2.0	1.0	0.76	ug/L	1	LMM			2303675	11/10/23	18:06	SW5030C8260D
dibromochloromethane	1.0 U	2.0	1.0	0.21	ug/L	1	LMM			2303675	11/10/23	18:06	SW5030C8260D

Project ID: Dow Salvage Yard 18001468
Job ID: 67798
Sample#: 67798-007
Sample ID: SY-BRMW2-80.5-95.5-110723
Matrix: Water
Sampled: 11/7/23 13:40

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
1,2-dibromoethane (EDB)	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303675	11/10/23	18:06	SW5030C8260D
chlorobenzene	1.0 U	2.0	1.0	0.25	ug/L	1	LMM			2303675	11/10/23	18:06	SW5030C8260D
1,1,1,2-tetrachloroethane	1.0 U	2.0	1.0	0.21	ug/L	1	LMM			2303675	11/10/23	18:06	SW5030C8260D
ethylbenzene	1.0 U	2.0	1.0	0.65	ug/L	1	LMM			2303675	11/10/23	18:06	SW5030C8260D
m&p-xylenes	1.5 UM	2.0	1.5	1.4	ug/L	1	LMM			2303675	11/10/23	18:06	SW5030C8260D
o-xylene	1.0 U	2.0	1.0	0.55	ug/L	1	LMM			2303675	11/10/23	18:06	SW5030C8260D
styrene	1.0 U	2.0	1.0	0.57	ug/L	1	LMM			2303675	11/10/23	18:06	SW5030C8260D
bromoform	1.0 U	2.0	1.0	0.24	ug/L	1	LMM			2303675	11/10/23	18:06	SW5030C8260D
isopropylbenzene	1.0 U	2.0	1.0	0.65	ug/L	1	LMM			2303675	11/10/23	18:06	SW5030C8260D
1,1,2,2-tetrachloroethane	1.0 U	2.0	1.0	0.29	ug/L	1	LMM			2303675	11/10/23	18:06	SW5030C8260D
1,2,3-trichloropropane	1.0 U	2.0	1.0	0.55	ug/L	1	LMM			2303675	11/10/23	18:06	SW5030C8260D
n-propylbenzene	1.0 U	2.0	1.0	0.44	ug/L	1	LMM			2303675	11/10/23	18:06	SW5030C8260D
bromobenzene	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303675	11/10/23	18:06	SW5030C8260D
2-chlorotoluene	1.0 U	2.0	1.0	0.23	ug/L	1	LMM			2303675	11/10/23	18:06	SW5030C8260D
4-chlorotoluene	1.0 U	2.0	1.0	0.33	ug/L	1	LMM			2303675	11/10/23	18:06	SW5030C8260D
tert-butylbenzene	1.0 U	2.0	1.0	0.39	ug/L	1	LMM			2303675	11/10/23	18:06	SW5030C8260D
1,2,4-trimethylbenzene	1.0 U	2.0	1.0	0.58	ug/L	1	LMM			2303675	11/10/23	18:06	SW5030C8260D
sec-butylbenzene	1.0 U	2.0	1.0	0.44	ug/L	1	LMM			2303675	11/10/23	18:06	SW5030C8260D
1,3-dichlorobenzene	1.0 U	2.0	1.0	0.45	ug/L	1	LMM			2303675	11/10/23	18:06	SW5030C8260D
4-isopropyltoluene	1.0 U	2.0	1.0	0.47	ug/L	1	LMM			2303675	11/10/23	18:06	SW5030C8260D
1,4-dichlorobenzene	1.0 U	2.0	1.0	0.26	ug/L	1	LMM			2303675	11/10/23	18:06	SW5030C8260D
1,2-dichlorobenzene	1.0 U	2.0	1.0	0.39	ug/L	1	LMM			2303675	11/10/23	18:06	SW5030C8260D
n-butylbenzene	1.0 U	2.0	1.0	0.54	ug/L	1	LMM			2303675	11/10/23	18:06	SW5030C8260D
1,2-dibromo-3-chloropropane (DBCP)	1.5 U	2.0	1.5	0.91	ug/L	1	LMM			2303675	11/10/23	18:06	SW5030C8260D
1,3,5-trimethylbenzene	1.0 U	2.0	1.0	0.46	ug/L	1	LMM			2303675	11/10/23	18:06	SW5030C8260D
1,2,4-trichlorobenzene	1.0 U	2.0	1.0	0.79	ug/L	1	LMM			2303675	11/10/23	18:06	SW5030C8260D
hexachlorobutadiene	0.50 U	0.50	0.50	0.19	ug/L	1	LMM			2303675	11/10/23	18:06	SW5030C8260D
naphthalene	1.5 U	2.0	1.5	1.2	ug/L	1	LMM			2303675	11/10/23	18:06	SW5030C8260D
1,2,3-trichlorobenzene	1.0 U	2.0	1.0	0.93	ug/L	1	LMM			2303675	11/10/23	18:06	SW5030C8260D
Surrogate Recovery		Limits											
dibromofluoromethane SUR	93	78-114			%	1	LMM			2303675	11/10/23	18:06	SW5030C8260D
toluene-D8 SUR	100	88-110			%	1	LMM			2303675	11/10/23	18:06	SW5030C8260D
4-bromofluorobenzene SUR	96	86-115			%	1	LMM			2303675	11/10/23	18:06	SW5030C8260D

M = The percent recovery and/or RPD for the MS/D was outside acceptance criteria.

Project ID: Dow Salvage Yard 18001468
Job ID: 67798
Sample#: 67798-008
Sample ID: SY-OBMW13-110723
Matrix: Water
Sampled: 11/7/23 14:25

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
dichlorodifluoromethane	1.0 U	2.0	1.0	0.28	ug/L	1	LMM			2303675	11/10/23	18:32	SW5030C8260D
chloromethane	1.0 U	2.0	1.0	0.59	ug/L	1	LMM			2303675	11/10/23	18:32	SW5030C8260D
vinyl chloride	1.0 U	2.0	1.0	0.49	ug/L	1	LMM			2303675	11/10/23	18:32	SW5030C8260D
bromomethane	1.5 U	2.0	1.5	1.1	ug/L	1	LMM			2303675	11/10/23	18:32	SW5030C8260D
chloroethane	1.0 U	2.0	1.0	0.33	ug/L	1	LMM			2303675	11/10/23	18:32	SW5030C8260D
trichlorofluoromethane	1.0 U	2.0	1.0	0.34	ug/L	1	LMM			2303675	11/10/23	18:32	SW5030C8260D
diethyl ether	1.0 U	2.0	1.0	0.41	ug/L	1	LMM			2303675	11/10/23	18:32	SW5030C8260D
acetone	5.0 U	50	5.0	1.9	ug/L	1	LMM			2303675	11/10/23	18:32	SW5030C8260D
1,1-dichloroethene	0.50 U	1.0	0.50	0.35	ug/L	1	LMM			2303675	11/10/23	18:32	SW5030C8260D
methylene chloride	1.0 U	2.0	1.0	0.59	ug/L	1	LMM			2303675	11/10/23	18:32	SW5030C8260D
carbon disulfide	1.0 U	2.0	1.0	0.33	ug/L	1	LMM			2303675	11/10/23	18:32	SW5030C8260D
methyl t-butyl ether (MTBE)	1.0 U	2.0	1.0	0.30	ug/L	1	LMM			2303675	11/10/23	18:32	SW5030C8260D
trans-1,2-dichloroethene	1.0 U	2.0	1.0	0.46	ug/L	1	LMM			2303675	11/10/23	18:32	SW5030C8260D
ethyl t-butyl ether (ETBE)	1.0 U	2.0	1.0	0.24	ug/L	1	LMM			2303675	11/10/23	18:32	SW5030C8260D
1,1-dichloroethane	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303675	11/10/23	18:32	SW5030C8260D
t-butanol (TBA)	10 U	30	10	2.5	ug/L	1	LMM			2303675	11/10/23	18:32	SW5030C8260D
2-butanone (MEK)	5.0 U	10	5.0	0.67	ug/L	1	LMM			2303675	11/10/23	18:32	SW5030C8260D
2,2-dichloropropane	1.0 U	2.0	1.0	0.21	ug/L	1	LMM			2303675	11/10/23	18:32	SW5030C8260D
cis-1,2-dichloroethene	1.5 U	2.0	1.5	1.2	ug/L	1	LMM			2303675	11/10/23	18:32	SW5030C8260D
chloroform	1.5 U	2.0	1.5	1.4	ug/L	1	LMM			2303675	11/10/23	18:32	SW5030C8260D
bromochloromethane	1.0 U	2.0	1.0	0.22	ug/L	1	LMM			2303675	11/10/23	18:32	SW5030C8260D
tetrahydrofuran (THF)	1.5 U	2.0	1.5	0.75	ug/L	1	LMM			2303675	11/10/23	18:32	SW5030C8260D
1,1,1-trichloroethane	1.0 U	2.0	1.0	0.55	ug/L	1	LMM			2303675	11/10/23	18:32	SW5030C8260D
1,1-dichloropropene	1.0 U	2.0	1.0	0.26	ug/L	1	LMM			2303675	11/10/23	18:32	SW5030C8260D
t-amyl-methyl ether (TAME)	1.0 U	2.0	1.0	0.57	ug/L	1	LMM			2303675	11/10/23	18:32	SW5030C8260D
carbon tetrachloride	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303675	11/10/23	18:32	SW5030C8260D
1,2-dichloroethane	1.0 U	2.0	1.0	0.20	ug/L	1	LMM			2303675	11/10/23	18:32	SW5030C8260D
benzene	1.0 U	2.0	1.0	0.40	ug/L	1	LMM			2303675	11/10/23	18:32	SW5030C8260D
trichloroethene	1.0 U	2.0	1.0	0.53	ug/L	1	LMM			2303675	11/10/23	18:32	SW5030C8260D
1,2-dichloropropane	1.0 U	2.0	1.0	0.22	ug/L	1	LMM			2303675	11/10/23	18:32	SW5030C8260D
bromodichloromethane	0.50 U	0.60	0.50	0.38	ug/L	1	LMM			2303675	11/10/23	18:32	SW5030C8260D
1,4-dioxane	10 U	50	10	8.7	ug/L	1	LMM			2303675	11/10/23	18:32	SW5030C8260D
dibromomethane	1.0 U	2.0	1.0	0.23	ug/L	1	LMM			2303675	11/10/23	18:32	SW5030C8260D
4-methyl-2-pentanone (MIBK)	1.0 U	10	1.0	0.56	ug/L	1	LMM			2303675	11/10/23	18:32	SW5030C8260D
cis-1,3-dichloropropene	1.0 U	2.0	1.0	0.30	ug/L	1	LMM			2303675	11/10/23	18:32	SW5030C8260D
toluene	1.0 U	2.0	1.0	0.45	ug/L	1	LMM			2303675	11/10/23	18:32	SW5030C8260D
trans-1,3-dichloropropene	1.0 U	2.0	1.0	0.34	ug/L	1	LMM			2303675	11/10/23	18:32	SW5030C8260D
2-hexanone	1.0 U	10	1.0	0.72	ug/L	1	LMM			2303675	11/10/23	18:32	SW5030C8260D
1,1,2-trichloroethane	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303675	11/10/23	18:32	SW5030C8260D
1,3-dichloropropane	1.0 U	2.0	1.0	0.25	ug/L	1	LMM			2303675	11/10/23	18:32	SW5030C8260D
tetrachloroethene	1.0 U	2.0	1.0	0.76	ug/L	1	LMM			2303675	11/10/23	18:32	SW5030C8260D
dibromochloromethane	1.0 U	2.0	1.0	0.21	ug/L	1	LMM			2303675	11/10/23	18:32	SW5030C8260D

Project ID: Dow Salvage Yard 18001468
Job ID: 67798
Sample#: 67798-008
Sample ID: SY-OBMW13-110723
Matrix: Water
Sampled: 11/7/23 14:25

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
1,2-dibromoethane (EDB)	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303675	11/10/23	18:32	SW5030C8260D
chlorobenzene	1.0 U	2.0	1.0	0.25	ug/L	1	LMM			2303675	11/10/23	18:32	SW5030C8260D
1,1,1,2-tetrachloroethane	1.0 U	2.0	1.0	0.21	ug/L	1	LMM			2303675	11/10/23	18:32	SW5030C8260D
ethylbenzene	1.0 U	2.0	1.0	0.65	ug/L	1	LMM			2303675	11/10/23	18:32	SW5030C8260D
m&p-xylenes	1.5 U	2.0	1.5	1.4	ug/L	1	LMM			2303675	11/10/23	18:32	SW5030C8260D
o-xylene	1.0 U	2.0	1.0	0.55	ug/L	1	LMM			2303675	11/10/23	18:32	SW5030C8260D
styrene	1.0 U	2.0	1.0	0.57	ug/L	1	LMM			2303675	11/10/23	18:32	SW5030C8260D
bromoform	1.0 U	2.0	1.0	0.24	ug/L	1	LMM			2303675	11/10/23	18:32	SW5030C8260D
isopropylbenzene	1.0 U	2.0	1.0	0.65	ug/L	1	LMM			2303675	11/10/23	18:32	SW5030C8260D
1,1,2,2-tetrachloroethane	1.0 U	2.0	1.0	0.29	ug/L	1	LMM			2303675	11/10/23	18:32	SW5030C8260D
1,2,3-trichloropropane	1.0 U	2.0	1.0	0.55	ug/L	1	LMM			2303675	11/10/23	18:32	SW5030C8260D
n-propylbenzene	1.0 U	2.0	1.0	0.44	ug/L	1	LMM			2303675	11/10/23	18:32	SW5030C8260D
bromobenzene	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303675	11/10/23	18:32	SW5030C8260D
2-chlorotoluene	1.0 U	2.0	1.0	0.23	ug/L	1	LMM			2303675	11/10/23	18:32	SW5030C8260D
4-chlorotoluene	1.0 U	2.0	1.0	0.33	ug/L	1	LMM			2303675	11/10/23	18:32	SW5030C8260D
tert-butylbenzene	1.0 U	2.0	1.0	0.39	ug/L	1	LMM			2303675	11/10/23	18:32	SW5030C8260D
1,2,4-trimethylbenzene	1.0 U	2.0	1.0	0.58	ug/L	1	LMM			2303675	11/10/23	18:32	SW5030C8260D
sec-butylbenzene	1.0 U	2.0	1.0	0.44	ug/L	1	LMM			2303675	11/10/23	18:32	SW5030C8260D
1,3-dichlorobenzene	1.0 U	2.0	1.0	0.45	ug/L	1	LMM			2303675	11/10/23	18:32	SW5030C8260D
4-isopropyltoluene	1.0 U	2.0	1.0	0.47	ug/L	1	LMM			2303675	11/10/23	18:32	SW5030C8260D
1,4-dichlorobenzene	1.0 U	2.0	1.0	0.26	ug/L	1	LMM			2303675	11/10/23	18:32	SW5030C8260D
1,2-dichlorobenzene	1.0 U	2.0	1.0	0.39	ug/L	1	LMM			2303675	11/10/23	18:32	SW5030C8260D
n-butylbenzene	1.0 U	2.0	1.0	0.54	ug/L	1	LMM			2303675	11/10/23	18:32	SW5030C8260D
1,2-dibromo-3-chloropropane (DBCP)	1.5 U	2.0	1.5	0.91	ug/L	1	LMM			2303675	11/10/23	18:32	SW5030C8260D
1,3,5-trimethylbenzene	1.0 U	2.0	1.0	0.46	ug/L	1	LMM			2303675	11/10/23	18:32	SW5030C8260D
1,2,4-trichlorobenzene	1.0 U	2.0	1.0	0.79	ug/L	1	LMM			2303675	11/10/23	18:32	SW5030C8260D
hexachlorobutadiene	0.50 U	0.50	0.50	0.19	ug/L	1	LMM			2303675	11/10/23	18:32	SW5030C8260D
naphthalene	1.5 U	2.0	1.5	1.2	ug/L	1	LMM			2303675	11/10/23	18:32	SW5030C8260D
1,2,3-trichlorobenzene	1.0 U	2.0	1.0	0.93	ug/L	1	LMM			2303675	11/10/23	18:32	SW5030C8260D
Surrogate Recovery		Limits											
dibromofluoromethane SUR	94	78-114			%	1	LMM			2303675	11/10/23	18:32	SW5030C8260D
toluene-D8 SUR	99	88-110			%	1	LMM			2303675	11/10/23	18:32	SW5030C8260D
4-bromofluorobenzene SUR	95	86-115			%	1	LMM			2303675	11/10/23	18:32	SW5030C8260D

Project ID: Dow Salvage Yard 18001468
Job ID: 67798
Sample#: 67798-009
Sample ID: SY-OBMW14-110723
Matrix: Water
Sampled: 11/7/23 14:00

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
dichlorodifluoromethane	1.0 U	2.0	1.0	0.28	ug/L	1	LMM			2303675	11/10/23	18:57	SW5030C8260D
chloromethane	1.0 U	2.0	1.0	0.59	ug/L	1	LMM			2303675	11/10/23	18:57	SW5030C8260D
vinyl chloride	1.0 U	2.0	1.0	0.49	ug/L	1	LMM			2303675	11/10/23	18:57	SW5030C8260D
bromomethane	1.5 U	2.0	1.5	1.1	ug/L	1	LMM			2303675	11/10/23	18:57	SW5030C8260D
chloroethane	1.0 U	2.0	1.0	0.33	ug/L	1	LMM			2303675	11/10/23	18:57	SW5030C8260D
trichlorofluoromethane	1.0 U	2.0	1.0	0.34	ug/L	1	LMM			2303675	11/10/23	18:57	SW5030C8260D
diethyl ether	1.0 U	2.0	1.0	0.41	ug/L	1	LMM			2303675	11/10/23	18:57	SW5030C8260D
acetone	5.0 U	50	5.0	1.9	ug/L	1	LMM			2303675	11/10/23	18:57	SW5030C8260D
1,1-dichloroethene	0.50 U	1.0	0.50	0.35	ug/L	1	LMM			2303675	11/10/23	18:57	SW5030C8260D
methylene chloride	1.0 U	2.0	1.0	0.59	ug/L	1	LMM			2303675	11/10/23	18:57	SW5030C8260D
carbon disulfide	1.0 U	2.0	1.0	0.33	ug/L	1	LMM			2303675	11/10/23	18:57	SW5030C8260D
methyl t-butyl ether (MTBE)	1.0 U	2.0	1.0	0.30	ug/L	1	LMM			2303675	11/10/23	18:57	SW5030C8260D
trans-1,2-dichloroethene	1.0 U	2.0	1.0	0.46	ug/L	1	LMM			2303675	11/10/23	18:57	SW5030C8260D
ethyl t-butyl ether (ETBE)	1.0 U	2.0	1.0	0.24	ug/L	1	LMM			2303675	11/10/23	18:57	SW5030C8260D
1,1-dichloroethane	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303675	11/10/23	18:57	SW5030C8260D
t-butanol (TBA)	10 U	30	10	2.5	ug/L	1	LMM			2303675	11/10/23	18:57	SW5030C8260D
2-butanone (MEK)	5.0 U	10	5.0	0.67	ug/L	1	LMM			2303675	11/10/23	18:57	SW5030C8260D
2,2-dichloropropane	1.0 U	2.0	1.0	0.21	ug/L	1	LMM			2303675	11/10/23	18:57	SW5030C8260D
cis-1,2-dichloroethene	1.5 U	2.0	1.5	1.2	ug/L	1	LMM			2303675	11/10/23	18:57	SW5030C8260D
chloroform	1.5 U	2.0	1.5	1.4	ug/L	1	LMM			2303675	11/10/23	18:57	SW5030C8260D
bromochloromethane	1.0 U	2.0	1.0	0.22	ug/L	1	LMM			2303675	11/10/23	18:57	SW5030C8260D
tetrahydrofuran (THF)	1.5 U	2.0	1.5	0.75	ug/L	1	LMM			2303675	11/10/23	18:57	SW5030C8260D
1,1,1-trichloroethane	1.0 U	2.0	1.0	0.55	ug/L	1	LMM			2303675	11/10/23	18:57	SW5030C8260D
1,1-dichloropropene	1.0 U	2.0	1.0	0.26	ug/L	1	LMM			2303675	11/10/23	18:57	SW5030C8260D
t-amyl-methyl ether (TAME)	1.0 U	2.0	1.0	0.57	ug/L	1	LMM			2303675	11/10/23	18:57	SW5030C8260D
carbon tetrachloride	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303675	11/10/23	18:57	SW5030C8260D
1,2-dichloroethane	1.0 U	2.0	1.0	0.20	ug/L	1	LMM			2303675	11/10/23	18:57	SW5030C8260D
benzene	1.0 U	2.0	1.0	0.40	ug/L	1	LMM			2303675	11/10/23	18:57	SW5030C8260D
trichloroethene	1.0 U	2.0	1.0	0.53	ug/L	1	LMM			2303675	11/10/23	18:57	SW5030C8260D
1,2-dichloropropane	1.0 U	2.0	1.0	0.22	ug/L	1	LMM			2303675	11/10/23	18:57	SW5030C8260D
bromodichloromethane	0.50 U	0.60	0.50	0.38	ug/L	1	LMM			2303675	11/10/23	18:57	SW5030C8260D
1,4-dioxane	10 U	50	10	8.7	ug/L	1	LMM			2303675	11/10/23	18:57	SW5030C8260D
dibromomethane	1.0 U	2.0	1.0	0.23	ug/L	1	LMM			2303675	11/10/23	18:57	SW5030C8260D
4-methyl-2-pentanone (MIBK)	1.0 U	10	1.0	0.56	ug/L	1	LMM			2303675	11/10/23	18:57	SW5030C8260D
cis-1,3-dichloropropene	1.0 U	2.0	1.0	0.30	ug/L	1	LMM			2303675	11/10/23	18:57	SW5030C8260D
toluene	1.0 U	2.0	1.0	0.45	ug/L	1	LMM			2303675	11/10/23	18:57	SW5030C8260D
trans-1,3-dichloropropene	1.0 U	2.0	1.0	0.34	ug/L	1	LMM			2303675	11/10/23	18:57	SW5030C8260D
2-hexanone	1.0 U	10	1.0	0.72	ug/L	1	LMM			2303675	11/10/23	18:57	SW5030C8260D
1,1,2-trichloroethane	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303675	11/10/23	18:57	SW5030C8260D
1,3-dichloropropane	1.0 U	2.0	1.0	0.25	ug/L	1	LMM			2303675	11/10/23	18:57	SW5030C8260D
tetrachloroethene	1.0 U	2.0	1.0	0.76	ug/L	1	LMM			2303675	11/10/23	18:57	SW5030C8260D
dibromochloromethane	1.0 U	2.0	1.0	0.21	ug/L	1	LMM			2303675	11/10/23	18:57	SW5030C8260D

Project ID: Dow Salvage Yard 18001468
Job ID: 67798
Sample#: 67798-009
Sample ID: SY-OBMW14-110723
Matrix: Water
Sampled: 11/7/23 14:00

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
1,2-dibromoethane (EDB)	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303675	11/10/23	18:57	SW5030C8260D
chlorobenzene	1.0 U	2.0	1.0	0.25	ug/L	1	LMM			2303675	11/10/23	18:57	SW5030C8260D
1,1,1,2-tetrachloroethane	1.0 U	2.0	1.0	0.21	ug/L	1	LMM			2303675	11/10/23	18:57	SW5030C8260D
ethylbenzene	1.0 U	2.0	1.0	0.65	ug/L	1	LMM			2303675	11/10/23	18:57	SW5030C8260D
m&p-xylenes	1.5 U	2.0	1.5	1.4	ug/L	1	LMM			2303675	11/10/23	18:57	SW5030C8260D
o-xylene	1.0 U	2.0	1.0	0.55	ug/L	1	LMM			2303675	11/10/23	18:57	SW5030C8260D
styrene	1.0 U	2.0	1.0	0.57	ug/L	1	LMM			2303675	11/10/23	18:57	SW5030C8260D
bromoform	1.0 U	2.0	1.0	0.24	ug/L	1	LMM			2303675	11/10/23	18:57	SW5030C8260D
isopropylbenzene	1.0 U	2.0	1.0	0.65	ug/L	1	LMM			2303675	11/10/23	18:57	SW5030C8260D
1,1,2,2-tetrachloroethane	1.0 U	2.0	1.0	0.29	ug/L	1	LMM			2303675	11/10/23	18:57	SW5030C8260D
1,2,3-trichloropropane	1.0 U	2.0	1.0	0.55	ug/L	1	LMM			2303675	11/10/23	18:57	SW5030C8260D
n-propylbenzene	1.0 U	2.0	1.0	0.44	ug/L	1	LMM			2303675	11/10/23	18:57	SW5030C8260D
bromobenzene	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303675	11/10/23	18:57	SW5030C8260D
2-chlorotoluene	1.0 U	2.0	1.0	0.23	ug/L	1	LMM			2303675	11/10/23	18:57	SW5030C8260D
4-chlorotoluene	1.0 U	2.0	1.0	0.33	ug/L	1	LMM			2303675	11/10/23	18:57	SW5030C8260D
tert-butylbenzene	1.0 U	2.0	1.0	0.39	ug/L	1	LMM			2303675	11/10/23	18:57	SW5030C8260D
1,2,4-trimethylbenzene	1.0 U	2.0	1.0	0.58	ug/L	1	LMM			2303675	11/10/23	18:57	SW5030C8260D
sec-butylbenzene	1.0 U	2.0	1.0	0.44	ug/L	1	LMM			2303675	11/10/23	18:57	SW5030C8260D
1,3-dichlorobenzene	1.0 U	2.0	1.0	0.45	ug/L	1	LMM			2303675	11/10/23	18:57	SW5030C8260D
4-isopropyltoluene	1.0 U	2.0	1.0	0.47	ug/L	1	LMM			2303675	11/10/23	18:57	SW5030C8260D
1,4-dichlorobenzene	1.0 U	2.0	1.0	0.26	ug/L	1	LMM			2303675	11/10/23	18:57	SW5030C8260D
1,2-dichlorobenzene	1.0 U	2.0	1.0	0.39	ug/L	1	LMM			2303675	11/10/23	18:57	SW5030C8260D
n-butylbenzene	1.0 U	2.0	1.0	0.54	ug/L	1	LMM			2303675	11/10/23	18:57	SW5030C8260D
1,2-dibromo-3-chloropropane (DBCP)	1.5 U	2.0	1.5	0.91	ug/L	1	LMM			2303675	11/10/23	18:57	SW5030C8260D
1,3,5-trimethylbenzene	1.0 U	2.0	1.0	0.46	ug/L	1	LMM			2303675	11/10/23	18:57	SW5030C8260D
1,2,4-trichlorobenzene	1.0 U	2.0	1.0	0.79	ug/L	1	LMM			2303675	11/10/23	18:57	SW5030C8260D
hexachlorobutadiene	0.50 U	0.50	0.50	0.19	ug/L	1	LMM			2303675	11/10/23	18:57	SW5030C8260D
naphthalene	1.5 U	2.0	1.5	1.2	ug/L	1	LMM			2303675	11/10/23	18:57	SW5030C8260D
1,2,3-trichlorobenzene	1.0 U	2.0	1.0	0.93	ug/L	1	LMM			2303675	11/10/23	18:57	SW5030C8260D
Surrogate Recovery		Limits											
dibromofluoromethane SUR	94	78-114			%	1	LMM			2303675	11/10/23	18:57	SW5030C8260D
toluene-D8 SUR	99	88-110			%	1	LMM			2303675	11/10/23	18:57	SW5030C8260D
4-bromofluorobenzene SUR	99	86-115			%	1	LMM			2303675	11/10/23	18:57	SW5030C8260D

Project ID: Dow Salvage Yard 18001468
Job ID: 67798
Sample#: 67798-010
Sample ID: SY-BRMW2-252.5-262.5-110723
Matrix: Water
Sampled: 11/7/23 15:35

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
dichlorodifluoromethane	1.0 U	2.0	1.0	0.28	ug/L	1	LMM			2303675	11/10/23	19:23	SW5030C8260D
chloromethane	1.0 U	2.0	1.0	0.59	ug/L	1	LMM			2303675	11/10/23	19:23	SW5030C8260D
vinyl chloride	1.0 U	2.0	1.0	0.49	ug/L	1	LMM			2303675	11/10/23	19:23	SW5030C8260D
bromomethane	1.5 U	2.0	1.5	1.1	ug/L	1	LMM			2303675	11/10/23	19:23	SW5030C8260D
chloroethane	1.0 U	2.0	1.0	0.33	ug/L	1	LMM			2303675	11/10/23	19:23	SW5030C8260D
trichlorofluoromethane	1.0 U	2.0	1.0	0.34	ug/L	1	LMM			2303675	11/10/23	19:23	SW5030C8260D
diethyl ether	1.0 U	2.0	1.0	0.41	ug/L	1	LMM			2303675	11/10/23	19:23	SW5030C8260D
acetone	3.7 J	50	5.0	1.9	ug/L	1	LMM			2303675	11/10/23	19:23	SW5030C8260D
1,1-dichloroethene	0.50 U	1.0	0.50	0.35	ug/L	1	LMM			2303675	11/10/23	19:23	SW5030C8260D
methylene chloride	1.0 U	2.0	1.0	0.59	ug/L	1	LMM			2303675	11/10/23	19:23	SW5030C8260D
carbon disulfide	1.0 U	2.0	1.0	0.33	ug/L	1	LMM			2303675	11/10/23	19:23	SW5030C8260D
methyl t-butyl ether (MTBE)	1.0 U	2.0	1.0	0.30	ug/L	1	LMM			2303675	11/10/23	19:23	SW5030C8260D
trans-1,2-dichloroethene	1.0 U	2.0	1.0	0.46	ug/L	1	LMM			2303675	11/10/23	19:23	SW5030C8260D
ethyl t-butyl ether (ETBE)	1.0 U	2.0	1.0	0.24	ug/L	1	LMM			2303675	11/10/23	19:23	SW5030C8260D
1,1-dichloroethane	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303675	11/10/23	19:23	SW5030C8260D
t-butanol (TBA)	10 U	30	10	2.5	ug/L	1	LMM			2303675	11/10/23	19:23	SW5030C8260D
2-butanone (MEK)	5.0 U	10	5.0	0.67	ug/L	1	LMM			2303675	11/10/23	19:23	SW5030C8260D
2,2-dichloropropane	1.0 U	2.0	1.0	0.21	ug/L	1	LMM			2303675	11/10/23	19:23	SW5030C8260D
cis-1,2-dichloroethene	1.5 U	2.0	1.5	1.2	ug/L	1	LMM			2303675	11/10/23	19:23	SW5030C8260D
chloroform	1.6 J	2.0	1.5	1.4	ug/L	1	LMM			2303675	11/10/23	19:23	SW5030C8260D
bromochloromethane	1.0 U	2.0	1.0	0.22	ug/L	1	LMM			2303675	11/10/23	19:23	SW5030C8260D
tetrahydrofuran (THF)	1.5 U	2.0	1.5	0.75	ug/L	1	LMM			2303675	11/10/23	19:23	SW5030C8260D
1,1,1-trichloroethane	1.0 U	2.0	1.0	0.55	ug/L	1	LMM			2303675	11/10/23	19:23	SW5030C8260D
1,1-dichloropropene	1.0 U	2.0	1.0	0.26	ug/L	1	LMM			2303675	11/10/23	19:23	SW5030C8260D
t-amyl-methyl ether (TAME)	1.0 U	2.0	1.0	0.57	ug/L	1	LMM			2303675	11/10/23	19:23	SW5030C8260D
carbon tetrachloride	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303675	11/10/23	19:23	SW5030C8260D
1,2-dichloroethane	1.0 U	2.0	1.0	0.20	ug/L	1	LMM			2303675	11/10/23	19:23	SW5030C8260D
benzene	1.0 U	2.0	1.0	0.40	ug/L	1	LMM			2303675	11/10/23	19:23	SW5030C8260D
trichloroethene	1.0 U	2.0	1.0	0.53	ug/L	1	LMM			2303675	11/10/23	19:23	SW5030C8260D
1,2-dichloropropane	1.0 U	2.0	1.0	0.22	ug/L	1	LMM			2303675	11/10/23	19:23	SW5030C8260D
bromodichloromethane	0.50 U	0.60	0.50	0.38	ug/L	1	LMM			2303675	11/10/23	19:23	SW5030C8260D
1,4-dioxane	10 U	50	10	8.7	ug/L	1	LMM			2303675	11/10/23	19:23	SW5030C8260D
dibromomethane	1.0 U	2.0	1.0	0.23	ug/L	1	LMM			2303675	11/10/23	19:23	SW5030C8260D
4-methyl-2-pentanone (MIBK)	1.0 U	10	1.0	0.56	ug/L	1	LMM			2303675	11/10/23	19:23	SW5030C8260D
cis-1,3-dichloropropene	1.0 U	2.0	1.0	0.30	ug/L	1	LMM			2303675	11/10/23	19:23	SW5030C8260D
toluene	1.3 J	2.0	1.0	0.45	ug/L	1	LMM			2303675	11/10/23	19:23	SW5030C8260D
trans-1,3-dichloropropene	1.0 U	2.0	1.0	0.34	ug/L	1	LMM			2303675	11/10/23	19:23	SW5030C8260D
2-hexanone	1.0 U	10	1.0	0.72	ug/L	1	LMM			2303675	11/10/23	19:23	SW5030C8260D
1,1,2-trichloroethane	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303675	11/10/23	19:23	SW5030C8260D
1,3-dichloropropane	1.0 U	2.0	1.0	0.25	ug/L	1	LMM			2303675	11/10/23	19:23	SW5030C8260D
tetrachloroethene	1.0 U	2.0	1.0	0.76	ug/L	1	LMM			2303675	11/10/23	19:23	SW5030C8260D
dibromochloromethane	1.0 U	2.0	1.0	0.21	ug/L	1	LMM			2303675	11/10/23	19:23	SW5030C8260D

Project ID: Dow Salvage Yard 18001468
Job ID: 67798
Sample#: 67798-010
Sample ID: SY-BRMW2-252.5-262.5-110723
Matrix: Water
Sampled: 11/7/23 15:35

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
1,2-dibromoethane (EDB)	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303675	11/10/23	19:23	SW5030C8260D
chlorobenzene	1.0 U	2.0	1.0	0.25	ug/L	1	LMM			2303675	11/10/23	19:23	SW5030C8260D
1,1,1,2-tetrachloroethane	1.0 U	2.0	1.0	0.21	ug/L	1	LMM			2303675	11/10/23	19:23	SW5030C8260D
ethylbenzene	1.0 U	2.0	1.0	0.65	ug/L	1	LMM			2303675	11/10/23	19:23	SW5030C8260D
m&p-xylenes	1.5 U	2.0	1.5	1.4	ug/L	1	LMM			2303675	11/10/23	19:23	SW5030C8260D
o-xylene	1.0 U	2.0	1.0	0.55	ug/L	1	LMM			2303675	11/10/23	19:23	SW5030C8260D
styrene	1.0 U	2.0	1.0	0.57	ug/L	1	LMM			2303675	11/10/23	19:23	SW5030C8260D
bromoform	1.0 U	2.0	1.0	0.24	ug/L	1	LMM			2303675	11/10/23	19:23	SW5030C8260D
isopropylbenzene	1.0 U	2.0	1.0	0.65	ug/L	1	LMM			2303675	11/10/23	19:23	SW5030C8260D
1,1,2,2-tetrachloroethane	1.0 U	2.0	1.0	0.29	ug/L	1	LMM			2303675	11/10/23	19:23	SW5030C8260D
1,2,3-trichloropropane	1.0 U	2.0	1.0	0.55	ug/L	1	LMM			2303675	11/10/23	19:23	SW5030C8260D
n-propylbenzene	1.0 U	2.0	1.0	0.44	ug/L	1	LMM			2303675	11/10/23	19:23	SW5030C8260D
bromobenzene	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303675	11/10/23	19:23	SW5030C8260D
2-chlorotoluene	1.0 U	2.0	1.0	0.23	ug/L	1	LMM			2303675	11/10/23	19:23	SW5030C8260D
4-chlorotoluene	1.0 U	2.0	1.0	0.33	ug/L	1	LMM			2303675	11/10/23	19:23	SW5030C8260D
tert-butylbenzene	1.0 U	2.0	1.0	0.39	ug/L	1	LMM			2303675	11/10/23	19:23	SW5030C8260D
1,2,4-trimethylbenzene	1.0 U	2.0	1.0	0.58	ug/L	1	LMM			2303675	11/10/23	19:23	SW5030C8260D
sec-butylbenzene	1.0 U	2.0	1.0	0.44	ug/L	1	LMM			2303675	11/10/23	19:23	SW5030C8260D
1,3-dichlorobenzene	1.0 U	2.0	1.0	0.45	ug/L	1	LMM			2303675	11/10/23	19:23	SW5030C8260D
4-isopropyltoluene	1.0 U	2.0	1.0	0.47	ug/L	1	LMM			2303675	11/10/23	19:23	SW5030C8260D
1,4-dichlorobenzene	1.0 U	2.0	1.0	0.26	ug/L	1	LMM			2303675	11/10/23	19:23	SW5030C8260D
1,2-dichlorobenzene	1.0 U	2.0	1.0	0.39	ug/L	1	LMM			2303675	11/10/23	19:23	SW5030C8260D
n-butylbenzene	1.0 U	2.0	1.0	0.54	ug/L	1	LMM			2303675	11/10/23	19:23	SW5030C8260D
1,2-dibromo-3-chloropropane (DBCP)	1.5 U	2.0	1.5	0.91	ug/L	1	LMM			2303675	11/10/23	19:23	SW5030C8260D
1,3,5-trimethylbenzene	1.0 U	2.0	1.0	0.46	ug/L	1	LMM			2303675	11/10/23	19:23	SW5030C8260D
1,2,4-trichlorobenzene	1.0 U	2.0	1.0	0.79	ug/L	1	LMM			2303675	11/10/23	19:23	SW5030C8260D
hexachlorobutadiene	0.50 U	0.50	0.50	0.19	ug/L	1	LMM			2303675	11/10/23	19:23	SW5030C8260D
naphthalene	1.5 U	2.0	1.5	1.2	ug/L	1	LMM			2303675	11/10/23	19:23	SW5030C8260D
1,2,3-trichlorobenzene	1.0 U	2.0	1.0	0.93	ug/L	1	LMM			2303675	11/10/23	19:23	SW5030C8260D
Surrogate Recovery		Limits											
dibromofluoromethane SUR	95	78-114			%	1	LMM			2303675	11/10/23	19:23	SW5030C8260D
toluene-D8 SUR	101	88-110			%	1	LMM			2303675	11/10/23	19:23	SW5030C8260D
4-bromofluorobenzene SUR	97	86-115			%	1	LMM			2303675	11/10/23	19:23	SW5030C8260D

Project ID: Dow Salvage Yard 18001468
Job ID: 67798
Sample#: 67798-011
Sample ID: TB31-110723
Matrix: Water
Sampled: 11/7/23 16:30

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
dichlorodifluoromethane	1.0 U	2.0	1.0	0.28	ug/L	1	LMM			2303675	11/10/23	15:07	SW5030C8260D
chloromethane	1.0 U	2.0	1.0	0.59	ug/L	1	LMM			2303675	11/10/23	15:07	SW5030C8260D
vinyl chloride	1.0 U	2.0	1.0	0.49	ug/L	1	LMM			2303675	11/10/23	15:07	SW5030C8260D
bromomethane	1.5 U	2.0	1.5	1.1	ug/L	1	LMM			2303675	11/10/23	15:07	SW5030C8260D
chloroethane	1.0 U	2.0	1.0	0.33	ug/L	1	LMM			2303675	11/10/23	15:07	SW5030C8260D
trichlorofluoromethane	1.0 U	2.0	1.0	0.34	ug/L	1	LMM			2303675	11/10/23	15:07	SW5030C8260D
diethyl ether	1.0 U	2.0	1.0	0.41	ug/L	1	LMM			2303675	11/10/23	15:07	SW5030C8260D
acetone	5.0 U	50	5.0	1.9	ug/L	1	LMM			2303675	11/10/23	15:07	SW5030C8260D
1,1-dichloroethene	0.50 U	1.0	0.50	0.35	ug/L	1	LMM			2303675	11/10/23	15:07	SW5030C8260D
methylene chloride	1.0 U	2.0	1.0	0.59	ug/L	1	LMM			2303675	11/10/23	15:07	SW5030C8260D
carbon disulfide	1.0 U	2.0	1.0	0.33	ug/L	1	LMM			2303675	11/10/23	15:07	SW5030C8260D
methyl t-butyl ether (MTBE)	1.0 U	2.0	1.0	0.30	ug/L	1	LMM			2303675	11/10/23	15:07	SW5030C8260D
trans-1,2-dichloroethene	1.0 U	2.0	1.0	0.46	ug/L	1	LMM			2303675	11/10/23	15:07	SW5030C8260D
ethyl t-butyl ether (ETBE)	1.0 U	2.0	1.0	0.24	ug/L	1	LMM			2303675	11/10/23	15:07	SW5030C8260D
1,1-dichloroethane	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303675	11/10/23	15:07	SW5030C8260D
t-butanol (TBA)	10 U	30	10	2.5	ug/L	1	LMM			2303675	11/10/23	15:07	SW5030C8260D
2-butanone (MEK)	5.0 U	10	5.0	0.67	ug/L	1	LMM			2303675	11/10/23	15:07	SW5030C8260D
2,2-dichloropropane	1.0 U	2.0	1.0	0.21	ug/L	1	LMM			2303675	11/10/23	15:07	SW5030C8260D
cis-1,2-dichloroethene	1.5 U	2.0	1.5	1.2	ug/L	1	LMM			2303675	11/10/23	15:07	SW5030C8260D
chloroform	1.5 U	2.0	1.5	1.4	ug/L	1	LMM			2303675	11/10/23	15:07	SW5030C8260D
bromochloromethane	1.0 U	2.0	1.0	0.22	ug/L	1	LMM			2303675	11/10/23	15:07	SW5030C8260D
tetrahydrofuran (THF)	1.5 U	2.0	1.5	0.75	ug/L	1	LMM			2303675	11/10/23	15:07	SW5030C8260D
1,1,1-trichloroethane	1.0 U	2.0	1.0	0.55	ug/L	1	LMM			2303675	11/10/23	15:07	SW5030C8260D
1,1-dichloropropene	1.0 U	2.0	1.0	0.26	ug/L	1	LMM			2303675	11/10/23	15:07	SW5030C8260D
t-amyl-methyl ether (TAME)	1.0 U	2.0	1.0	0.57	ug/L	1	LMM			2303675	11/10/23	15:07	SW5030C8260D
carbon tetrachloride	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303675	11/10/23	15:07	SW5030C8260D
1,2-dichloroethane	1.0 U	2.0	1.0	0.20	ug/L	1	LMM			2303675	11/10/23	15:07	SW5030C8260D
benzene	1.0 U	2.0	1.0	0.40	ug/L	1	LMM			2303675	11/10/23	15:07	SW5030C8260D
trichloroethene	1.0 U	2.0	1.0	0.53	ug/L	1	LMM			2303675	11/10/23	15:07	SW5030C8260D
1,2-dichloropropane	1.0 U	2.0	1.0	0.22	ug/L	1	LMM			2303675	11/10/23	15:07	SW5030C8260D
bromodichloromethane	0.50 U	0.60	0.50	0.38	ug/L	1	LMM			2303675	11/10/23	15:07	SW5030C8260D
1,4-dioxane	10 U	50	10	8.7	ug/L	1	LMM			2303675	11/10/23	15:07	SW5030C8260D
dibromomethane	1.0 U	2.0	1.0	0.23	ug/L	1	LMM			2303675	11/10/23	15:07	SW5030C8260D
4-methyl-2-pentanone (MIBK)	1.0 U	10	1.0	0.56	ug/L	1	LMM			2303675	11/10/23	15:07	SW5030C8260D
cis-1,3-dichloropropene	1.0 U	2.0	1.0	0.30	ug/L	1	LMM			2303675	11/10/23	15:07	SW5030C8260D
toluene	1.0 U	2.0	1.0	0.45	ug/L	1	LMM			2303675	11/10/23	15:07	SW5030C8260D
trans-1,3-dichloropropene	1.0 U	2.0	1.0	0.34	ug/L	1	LMM			2303675	11/10/23	15:07	SW5030C8260D
2-hexanone	1.0 U	10	1.0	0.72	ug/L	1	LMM			2303675	11/10/23	15:07	SW5030C8260D
1,1,2-trichloroethane	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303675	11/10/23	15:07	SW5030C8260D
1,3-dichloropropane	1.0 U	2.0	1.0	0.25	ug/L	1	LMM			2303675	11/10/23	15:07	SW5030C8260D
tetrachloroethene	1.0 U	2.0	1.0	0.76	ug/L	1	LMM			2303675	11/10/23	15:07	SW5030C8260D
dibromochloromethane	1.0 U	2.0	1.0	0.21	ug/L	1	LMM			2303675	11/10/23	15:07	SW5030C8260D

Project ID: Dow Salvage Yard 18001468
Job ID: 67798
Sample#: 67798-011
Sample ID: TB31-110723
Matrix: Water
Sampled: 11/7/23 16:30

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
1,2-dibromoethane (EDB)	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303675	11/10/23	15:07	SW5030C8260D
chlorobenzene	1.0 U	2.0	1.0	0.25	ug/L	1	LMM			2303675	11/10/23	15:07	SW5030C8260D
1,1,1,2-tetrachloroethane	1.0 U	2.0	1.0	0.21	ug/L	1	LMM			2303675	11/10/23	15:07	SW5030C8260D
ethylbenzene	1.0 U	2.0	1.0	0.65	ug/L	1	LMM			2303675	11/10/23	15:07	SW5030C8260D
m&p-xylenes	1.5 U	2.0	1.5	1.4	ug/L	1	LMM			2303675	11/10/23	15:07	SW5030C8260D
o-xylene	1.0 U	2.0	1.0	0.55	ug/L	1	LMM			2303675	11/10/23	15:07	SW5030C8260D
styrene	1.0 U	2.0	1.0	0.57	ug/L	1	LMM			2303675	11/10/23	15:07	SW5030C8260D
bromoform	1.0 U	2.0	1.0	0.24	ug/L	1	LMM			2303675	11/10/23	15:07	SW5030C8260D
isopropylbenzene	1.0 U	2.0	1.0	0.65	ug/L	1	LMM			2303675	11/10/23	15:07	SW5030C8260D
1,1,2,2-tetrachloroethane	1.0 U	2.0	1.0	0.29	ug/L	1	LMM			2303675	11/10/23	15:07	SW5030C8260D
1,2,3-trichloropropane	1.0 U	2.0	1.0	0.55	ug/L	1	LMM			2303675	11/10/23	15:07	SW5030C8260D
n-propylbenzene	1.0 U	2.0	1.0	0.44	ug/L	1	LMM			2303675	11/10/23	15:07	SW5030C8260D
bromobenzene	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303675	11/10/23	15:07	SW5030C8260D
2-chlorotoluene	1.0 U	2.0	1.0	0.23	ug/L	1	LMM			2303675	11/10/23	15:07	SW5030C8260D
4-chlorotoluene	1.0 U	2.0	1.0	0.33	ug/L	1	LMM			2303675	11/10/23	15:07	SW5030C8260D
tert-butylbenzene	1.0 U	2.0	1.0	0.39	ug/L	1	LMM			2303675	11/10/23	15:07	SW5030C8260D
1,2,4-trimethylbenzene	1.0 U	2.0	1.0	0.58	ug/L	1	LMM			2303675	11/10/23	15:07	SW5030C8260D
sec-butylbenzene	1.0 U	2.0	1.0	0.44	ug/L	1	LMM			2303675	11/10/23	15:07	SW5030C8260D
1,3-dichlorobenzene	1.0 U	2.0	1.0	0.45	ug/L	1	LMM			2303675	11/10/23	15:07	SW5030C8260D
4-isopropyltoluene	1.0 U	2.0	1.0	0.47	ug/L	1	LMM			2303675	11/10/23	15:07	SW5030C8260D
1,4-dichlorobenzene	1.0 U	2.0	1.0	0.26	ug/L	1	LMM			2303675	11/10/23	15:07	SW5030C8260D
1,2-dichlorobenzene	1.0 U	2.0	1.0	0.39	ug/L	1	LMM			2303675	11/10/23	15:07	SW5030C8260D
n-butylbenzene	1.0 U	2.0	1.0	0.54	ug/L	1	LMM			2303675	11/10/23	15:07	SW5030C8260D
1,2-dibromo-3-chloropropane (DBCP)	1.5 U	2.0	1.5	0.91	ug/L	1	LMM			2303675	11/10/23	15:07	SW5030C8260D
1,3,5-trimethylbenzene	1.0 U	2.0	1.0	0.46	ug/L	1	LMM			2303675	11/10/23	15:07	SW5030C8260D
1,2,4-trichlorobenzene	1.0 U	2.0	1.0	0.79	ug/L	1	LMM			2303675	11/10/23	15:07	SW5030C8260D
hexachlorobutadiene	0.50 U	0.50	0.50	0.19	ug/L	1	LMM			2303675	11/10/23	15:07	SW5030C8260D
naphthalene	1.5 U	2.0	1.5	1.2	ug/L	1	LMM			2303675	11/10/23	15:07	SW5030C8260D
1,2,3-trichlorobenzene	1.0 U	2.0	1.0	0.93	ug/L	1	LMM			2303675	11/10/23	15:07	SW5030C8260D
Surrogate Recovery		Limits											
dibromofluoromethane SUR	90	78-114			%	1	LMM			2303675	11/10/23	15:07	SW5030C8260D
toluene-D8 SUR	100	88-110			%	1	LMM			2303675	11/10/23	15:07	SW5030C8260D
4-bromofluorobenzene SUR	95	86-115			%	1	LMM			2303675	11/10/23	15:07	SW5030C8260D

Project ID: Dow Salvage Yard 18001468
Job ID: 67798
Sample#: 67798-001
Sample ID: SY-OBMW12-110723
Matrix: Water
Received on ice at 0˚C, in satisfactory condition.
Sampled: 11/7/23 10:07

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
Unadjusted C5-C8 Aliphatics	50 UM	100	50	50	ug/L	1	SFP			2303773	11/16/23	14:47	MA VPH
Unadjusted C9-C12 Aliphatics	50 UM	100	50	40	ug/L	1	SFP			2303773	11/16/23	14:47	MA VPH
methyl t-butyl ether (MTBE)	1.0 U	2	1.0	0.73	ug/L	1	SFP			2303773	11/16/23	14:47	MA VPH
benzene	1.0 U	1	1.0	0.76	ug/L	1	SFP			2303773	11/16/23	14:47	MA VPH
toluene	1.0 U	2	1.0	0.58	ug/L	1	SFP			2303773	11/16/23	14:47	MA VPH
ethylbenzene	1.0 U	2	1.0	0.40	ug/L	1	SFP			2303773	11/16/23	14:47	MA VPH
m&p-xylenes	2.0 U	2	2.0	1.1	ug/L	1	SFP			2303773	11/16/23	14:47	MA VPH
o-xylene	1.0 U	2	1.0	0.45	ug/L	1	SFP			2303773	11/16/23	14:47	MA VPH
naphthalene	4.0 U	5	4.0	3.5	ug/L	1	SFP			2303773	11/16/23	14:47	MA VPH
C5-C8 Aliphatics	50 UM	100	50	50	ug/L	1	SFP			2303773	11/16/23	14:47	MA VPH
C9-C12 Aliphatics	50 UM	100	50	40	ug/L	1	SFP			2303773	11/16/23	14:47	MA VPH
C9-C10 Aromatics	50 UM	100	50	33	ug/L	1	SFP			2303773	11/16/23	14:47	MA VPH
Surrogate Recovery		Limits											
2,5-dibromotoluene as Aromatic SUR	90	70-130			%	1	SFP			2303773	11/16/23	14:47	MA VPH
2,5-dibromotoluene as Aliphatic SUR	91	70-130			%	1	SFP			2303773	11/16/23	14:47	MA VPH

M = The percent recovery and/or RPD for the MS/D was outside acceptance criteria.

Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range.

C5-C8 Aliphatic Hydrocarbons exclude the concentration of target analytes eluting in that range.

C9-C12 Aliphatic Hydrocarbons exclude concentration of target analytes eluting in that range AND C9-C10 Aromatics.

Project ID: Dow Salvage Yard 18001468
Job ID: 67798
Sample#: 67798-002
Sample ID: SY-OBMW6-110723
Matrix: Water
Received on ice at 0˚C, in satisfactory condition.
Sampled: 11/7/23 10:30

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
Unadjusted C5-C8 Aliphatics	50 U	100	50	50	ug/L	1	SFP			2303773	11/16/23	16:28	MA VPH
Unadjusted C9-C12 Aliphatics	50 U	100	50	40	ug/L	1	SFP			2303773	11/16/23	16:28	MA VPH
methyl t-butyl ether (MTBE)	1.0 U	2	1.0	0.73	ug/L	1	SFP			2303773	11/16/23	16:28	MA VPH
benzene	1.0 U	1	1.0	0.76	ug/L	1	SFP			2303773	11/16/23	16:28	MA VPH
toluene	1.0 U	2	1.0	0.58	ug/L	1	SFP			2303773	11/16/23	16:28	MA VPH
ethylbenzene	0.46 J	2	1.0	0.40	ug/L	1	SFP			2303773	11/16/23	16:28	MA VPH
m&p-xylenes	2.0 U	2	2.0	1.1	ug/L	1	SFP			2303773	11/16/23	16:28	MA VPH
o-xylene	1.0 U	2	1.0	0.45	ug/L	1	SFP			2303773	11/16/23	16:28	MA VPH
naphthalene	4.0 U	5	4.0	3.5	ug/L	1	SFP			2303773	11/16/23	16:28	MA VPH
C5-C8 Aliphatics	50 U	100	50	50	ug/L	1	SFP			2303773	11/16/23	16:28	MA VPH
C9-C12 Aliphatics	50 U	100	50	40	ug/L	1	SFP			2303773	11/16/23	16:28	MA VPH
C9-C10 Aromatics	50 U	100	50	33	ug/L	1	SFP			2303773	11/16/23	16:28	MA VPH
Surrogate Recovery		Limits											
2,5-dibromotoluene as Aromatic SUR	99	70-130			%	1	SFP			2303773	11/16/23	16:28	MA VPH
2,5-dibromotoluene as Aliphatic SUR	101	70-130			%	1	SFP			2303773	11/16/23	16:28	MA VPH

Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range.
C5-C8 Aliphatic Hydrocarbons exclude the concentration of target analytes eluting in that range.
C9-C12 Aliphatic Hydrocarbons exclude concentration of target analytes eluting in that range AND C9-C10 Aromatics.

Project ID: Dow Salvage Yard 18001468
Job ID: 67798
Sample#: 67798-003
Sample ID: SY-OBMW4R-110723
Matrix: Water
Received on ice at 0˚C, in satisfactory condition.
Sampled: 11/7/23 11:05

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
Unadjusted C5-C8 Aliphatics	50 U	100	50	50	ug/L	1	SFP			2303773	11/16/23	17:02	MA VPH
Unadjusted C9-C12 Aliphatics	50 U	100	50	40	ug/L	1	SFP			2303773	11/16/23	17:02	MA VPH
methyl t-butyl ether (MTBE)	1.0 U	2	1.0	0.73	ug/L	1	SFP			2303773	11/16/23	17:02	MA VPH
benzene	1.0 U	1	1.0	0.76	ug/L	1	SFP			2303773	11/16/23	17:02	MA VPH
toluene	1.0 U	2	1.0	0.58	ug/L	1	SFP			2303773	11/16/23	17:02	MA VPH
ethylbenzene	1.0 U	2	1.0	0.40	ug/L	1	SFP			2303773	11/16/23	17:02	MA VPH
m&p-xylenes	2.0 U	2	2.0	1.1	ug/L	1	SFP			2303773	11/16/23	17:02	MA VPH
o-xylene	1.0 U	2	1.0	0.45	ug/L	1	SFP			2303773	11/16/23	17:02	MA VPH
naphthalene	4.0 U	5	4.0	3.5	ug/L	1	SFP			2303773	11/16/23	17:02	MA VPH
C5-C8 Aliphatics	50 U	100	50	50	ug/L	1	SFP			2303773	11/16/23	17:02	MA VPH
C9-C12 Aliphatics	50 U	100	50	40	ug/L	1	SFP			2303773	11/16/23	17:02	MA VPH
C9-C10 Aromatics	50 U	100	50	33	ug/L	1	SFP			2303773	11/16/23	17:02	MA VPH
Surrogate Recovery		Limits											
2,5-dibromotoluene as Aromatic SUR	89	70-130			%	1	SFP			2303773	11/16/23	17:02	MA VPH
2,5-dibromotoluene as Aliphatic SUR	91	70-130			%	1	SFP			2303773	11/16/23	17:02	MA VPH

Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range.
C5-C8 Aliphatic Hydrocarbons exclude the concentration of target analytes eluting in that range.
C9-C12 Aliphatic Hydrocarbons exclude concentration of target analytes eluting in that range AND C9-C10 Aromatics.

Project ID: Dow Salvage Yard 18001468
Job ID: 67798
Sample#: 67798-004
Sample ID: SY-BRMW2-60.5-70.5-110723
Matrix: Water
Received on ice at 0˚C, in satisfactory condition.
Sampled: 11/7/23 12:25

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
Unadjusted C5-C8 Aliphatics	50 U	100	50	50	ug/L	1	SFP			2303773	11/16/23	17:35	MA VPH
Unadjusted C9-C12 Aliphatics	50 U	100	50	40	ug/L	1	SFP			2303773	11/16/23	17:35	MA VPH
methyl t-butyl ether (MTBE)	1.0 U	2	1.0	0.73	ug/L	1	SFP			2303773	11/16/23	17:35	MA VPH
benzene	1.0 U	1	1.0	0.76	ug/L	1	SFP			2303773	11/16/23	17:35	MA VPH
toluene	6	2	1.0	0.58	ug/L	1	SFP			2303773	11/16/23	17:35	MA VPH
ethylbenzene	1.0 U	2	1.0	0.40	ug/L	1	SFP			2303773	11/16/23	17:35	MA VPH
m&p-xylenes	2.0 U	2	2.0	1.1	ug/L	1	SFP			2303773	11/16/23	17:35	MA VPH
o-xylene	1.0 U	2	1.0	0.45	ug/L	1	SFP			2303773	11/16/23	17:35	MA VPH
naphthalene	4.0 U	5	4.0	3.5	ug/L	1	SFP			2303773	11/16/23	17:35	MA VPH
C5-C8 Aliphatics	50 U	100	50	50	ug/L	1	SFP			2303773	11/16/23	17:35	MA VPH
C9-C12 Aliphatics	50 U	100	50	40	ug/L	1	SFP			2303773	11/16/23	17:35	MA VPH
C9-C10 Aromatics	50 U	100	50	33	ug/L	1	SFP			2303773	11/16/23	17:35	MA VPH
Surrogate Recovery		Limits											
2,5-dibromotoluene as Aromatic SUR	102	70-130			%	1	SFP			2303773	11/16/23	17:35	MA VPH
2,5-dibromotoluene as Aliphatic SUR	105	70-130			%	1	SFP			2303773	11/16/23	17:35	MA VPH

Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range.
C5-C8 Aliphatic Hydrocarbons exclude the concentration of target analytes eluting in that range.
C9-C12 Aliphatic Hydrocarbons exclude concentration of target analytes eluting in that range AND C9-C10 Aromatics.

Project ID: Dow Salvage Yard 18001468
Job ID: 67798
Sample#: 67798-005
Sample ID: SY-OBMW15-110723
Matrix: Water
Received on ice at 0˚C, in satisfactory condition.
Sampled: 11/7/23 12:50

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
Unadjusted C5-C8 Aliphatics	50 U	100	50	50	ug/L	1	SFP			2303773	11/16/23	18:09	MA VPH
Unadjusted C9-C12 Aliphatics	50 U	100	50	40	ug/L	1	SFP			2303773	11/16/23	18:09	MA VPH
methyl t-butyl ether (MTBE)	1.0 U	2	1.0	0.73	ug/L	1	SFP			2303773	11/16/23	18:09	MA VPH
benzene	1.0 U	1	1.0	0.76	ug/L	1	SFP			2303773	11/16/23	18:09	MA VPH
toluene	1.0 U	2	1.0	0.58	ug/L	1	SFP			2303773	11/16/23	18:09	MA VPH
ethylbenzene	1.0 U	2	1.0	0.40	ug/L	1	SFP			2303773	11/16/23	18:09	MA VPH
m&p-xylenes	2.0 U	2	2.0	1.1	ug/L	1	SFP			2303773	11/16/23	18:09	MA VPH
o-xylene	1.0 U	2	1.0	0.45	ug/L	1	SFP			2303773	11/16/23	18:09	MA VPH
naphthalene	4.0 U	5	4.0	3.5	ug/L	1	SFP			2303773	11/16/23	18:09	MA VPH
C5-C8 Aliphatics	50 U	100	50	50	ug/L	1	SFP			2303773	11/16/23	18:09	MA VPH
C9-C12 Aliphatics	50 U	100	50	40	ug/L	1	SFP			2303773	11/16/23	18:09	MA VPH
C9-C10 Aromatics	50 U	100	50	33	ug/L	1	SFP			2303773	11/16/23	18:09	MA VPH
Surrogate Recovery		Limits											
2,5-dibromotoluene as Aromatic SUR	89	70-130			%	1	SFP			2303773	11/16/23	18:09	MA VPH
2,5-dibromotoluene as Aliphatic SUR	93	70-130			%	1	SFP			2303773	11/16/23	18:09	MA VPH

Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range.
C5-C8 Aliphatic Hydrocarbons exclude the concentration of target analytes eluting in that range.
C9-C12 Aliphatic Hydrocarbons exclude concentration of target analytes eluting in that range AND C9-C10 Aromatics.

Project ID: Dow Salvage Yard 18001468
Job ID: 67798
Sample#: 67798-006
Sample ID: SY-OBMW5-110723
Matrix: Water
Received on ice at 0˚C, in satisfactory condition.
Sampled: 11/7/23 13:25

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
Unadjusted C5-C8 Aliphatics	50 U	100	50	50	ug/L	1	SFP			2303773	11/16/23	18:43	MA VPH
Unadjusted C9-C12 Aliphatics	50 U	100	50	40	ug/L	1	SFP			2303773	11/16/23	18:43	MA VPH
methyl t-butyl ether (MTBE)	1.0 U	2	1.0	0.73	ug/L	1	SFP			2303773	11/16/23	18:43	MA VPH
benzene	1.0 U	1	1.0	0.76	ug/L	1	SFP			2303773	11/16/23	18:43	MA VPH
toluene	1.0 U	2	1.0	0.58	ug/L	1	SFP			2303773	11/16/23	18:43	MA VPH
ethylbenzene	1.0 U	2	1.0	0.40	ug/L	1	SFP			2303773	11/16/23	18:43	MA VPH
m&p-xylenes	2.0 U	2	2.0	1.1	ug/L	1	SFP			2303773	11/16/23	18:43	MA VPH
o-xylene	1.0 U	2	1.0	0.45	ug/L	1	SFP			2303773	11/16/23	18:43	MA VPH
naphthalene	4.0 U	5	4.0	3.5	ug/L	1	SFP			2303773	11/16/23	18:43	MA VPH
C5-C8 Aliphatics	50 U	100	50	50	ug/L	1	SFP			2303773	11/16/23	18:43	MA VPH
C9-C12 Aliphatics	50 U	100	50	40	ug/L	1	SFP			2303773	11/16/23	18:43	MA VPH
C9-C10 Aromatics	50 U	100	50	33	ug/L	1	SFP			2303773	11/16/23	18:43	MA VPH
Surrogate Recovery		Limits											
2,5-dibromotoluene as Aromatic SUR	98	70-130			%	1	SFP			2303773	11/16/23	18:43	MA VPH
2,5-dibromotoluene as Aliphatic SUR	101	70-130			%	1	SFP			2303773	11/16/23	18:43	MA VPH

Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range.
C5-C8 Aliphatic Hydrocarbons exclude the concentration of target analytes eluting in that range.
C9-C12 Aliphatic Hydrocarbons exclude concentration of target analytes eluting in that range AND C9-C10 Aromatics.

Project ID: Dow Salvage Yard 18001468
Job ID: 67798
Sample#: 67798-007
Sample ID: SY-BRMW2-80.5-95.5-110723
Matrix: Water
Received on ice at 0˚C, in satisfactory condition.
Sampled: 11/7/23 13:40

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
Unadjusted C5-C8 Aliphatics	50 UM	100	50	50	ug/L	1	SFP			2303773	11/16/23	19:16	MA VPH
Unadjusted C9-C12 Aliphatics	50 UM	100	50	40	ug/L	1	SFP			2303773	11/16/23	19:16	MA VPH
methyl t-butyl ether (MTBE)	1.0 U	2	1.0	0.73	ug/L	1	SFP			2303773	11/16/23	19:16	MA VPH
benzene	1.0 U	1	1.0	0.76	ug/L	1	SFP			2303773	11/16/23	19:16	MA VPH
toluene	1.5 J	2	1.0	0.58	ug/L	1	SFP			2303773	11/16/23	19:16	MA VPH
ethylbenzene	1.0 U	2	1.0	0.40	ug/L	1	SFP			2303773	11/16/23	19:16	MA VPH
m&p-xylenes	2.0 U	2	2.0	1.1	ug/L	1	SFP			2303773	11/16/23	19:16	MA VPH
o-xylene	1.0 U	2	1.0	0.45	ug/L	1	SFP			2303773	11/16/23	19:16	MA VPH
naphthalene	4.0 U	5	4.0	3.5	ug/L	1	SFP			2303773	11/16/23	19:16	MA VPH
C5-C8 Aliphatics	50 UM	100	50	50	ug/L	1	SFP			2303773	11/16/23	19:16	MA VPH
C9-C12 Aliphatics	50 UM	100	50	40	ug/L	1	SFP			2303773	11/16/23	19:16	MA VPH
C9-C10 Aromatics	50 UM	100	50	33	ug/L	1	SFP			2303773	11/16/23	19:16	MA VPH
Surrogate Recovery		Limits											
2,5-dibromotoluene as Aromatic SUR	99	70-130			%	1	SFP			2303773	11/16/23	19:16	MA VPH
2,5-dibromotoluene as Aliphatic SUR	101	70-130			%	1	SFP			2303773	11/16/23	19:16	MA VPH

M = The percent recovery and/or RPD for the MS/D was outside acceptance criteria.

Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range.

C5-C8 Aliphatic Hydrocarbons exclude the concentration of target analytes eluting in that range.

C9-C12 Aliphatic Hydrocarbons exclude concentration of target analytes eluting in that range AND C9-C10 Aromatics.

Project ID: Dow Salvage Yard 18001468
Job ID: 67798
Sample#: 67798-008
Sample ID: SY-OBMW13-110723
Matrix: Water
Received on ice at 0˚C, in satisfactory condition.
Sampled: 11/7/23 14:25

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
Unadjusted C5-C8 Aliphatics	50 U	100	50	50	ug/L	1	SFP			2303773	11/16/23	20:56	MA VPH
Unadjusted C9-C12 Aliphatics	50 U	100	50	40	ug/L	1	SFP			2303773	11/16/23	20:56	MA VPH
methyl t-butyl ether (MTBE)	1.0 U	2	1.0	0.73	ug/L	1	SFP			2303773	11/16/23	20:56	MA VPH
benzene	1.0 U	1	1.0	0.76	ug/L	1	SFP			2303773	11/16/23	20:56	MA VPH
toluene	1.0 U	2	1.0	0.58	ug/L	1	SFP			2303773	11/16/23	20:56	MA VPH
ethylbenzene	0.46 J	2	1.0	0.40	ug/L	1	SFP			2303773	11/16/23	20:56	MA VPH
m&p-xylenes	2.0 U	2	2.0	1.1	ug/L	1	SFP			2303773	11/16/23	20:56	MA VPH
o-xylene	1.0 U	2	1.0	0.45	ug/L	1	SFP			2303773	11/16/23	20:56	MA VPH
naphthalene	4.0 U	5	4.0	3.5	ug/L	1	SFP			2303773	11/16/23	20:56	MA VPH
C5-C8 Aliphatics	50 U	100	50	50	ug/L	1	SFP			2303773	11/16/23	20:56	MA VPH
C9-C12 Aliphatics	50 U	100	50	40	ug/L	1	SFP			2303773	11/16/23	20:56	MA VPH
C9-C10 Aromatics	50 U	100	50	33	ug/L	1	SFP			2303773	11/16/23	20:56	MA VPH
Surrogate Recovery		Limits											
2,5-dibromotoluene as Aromatic SUR	92	70-130			%	1	SFP			2303773	11/16/23	20:56	MA VPH
2,5-dibromotoluene as Aliphatic SUR	95	70-130			%	1	SFP			2303773	11/16/23	20:56	MA VPH

Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range.
C5-C8 Aliphatic Hydrocarbons exclude the concentration of target analytes eluting in that range.
C9-C12 Aliphatic Hydrocarbons exclude concentration of target analytes eluting in that range AND C9-C10 Aromatics.

Project ID: Dow Salvage Yard 18001468
Job ID: 67798
Sample#: 67798-009
Sample ID: SY-OBMW14-110723
Matrix: Water
Received on ice at 0˚C, in satisfactory condition.
Sampled: 11/7/23 14:00

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
Unadjusted C5-C8 Aliphatics	50 U	100	50	50	ug/L	1	SFP			2303773	11/16/23	21:30	MA VPH
Unadjusted C9-C12 Aliphatics	50 U	100	50	40	ug/L	1	SFP			2303773	11/16/23	21:30	MA VPH
methyl t-butyl ether (MTBE)	1.0 U	2	1.0	0.73	ug/L	1	SFP			2303773	11/16/23	21:30	MA VPH
benzene	1.0 U	1	1.0	0.76	ug/L	1	SFP			2303773	11/16/23	21:30	MA VPH
toluene	1.0 U	2	1.0	0.58	ug/L	1	SFP			2303773	11/16/23	21:30	MA VPH
ethylbenzene	1.0 U	2	1.0	0.40	ug/L	1	SFP			2303773	11/16/23	21:30	MA VPH
m&p-xylenes	2.0 U	2	2.0	1.1	ug/L	1	SFP			2303773	11/16/23	21:30	MA VPH
o-xylene	1.0 U	2	1.0	0.45	ug/L	1	SFP			2303773	11/16/23	21:30	MA VPH
naphthalene	4.0 U	5	4.0	3.5	ug/L	1	SFP			2303773	11/16/23	21:30	MA VPH
C5-C8 Aliphatics	50 U	100	50	50	ug/L	1	SFP			2303773	11/16/23	21:30	MA VPH
C9-C12 Aliphatics	50 U	100	50	40	ug/L	1	SFP			2303773	11/16/23	21:30	MA VPH
C9-C10 Aromatics	50 U	100	50	33	ug/L	1	SFP			2303773	11/16/23	21:30	MA VPH
Surrogate Recovery		Limits											
2,5-dibromotoluene as Aromatic SUR	93	70-130			%	1	SFP			2303773	11/16/23	21:30	MA VPH
2,5-dibromotoluene as Aliphatic SUR	96	70-130			%	1	SFP			2303773	11/16/23	21:30	MA VPH

Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range.
C5-C8 Aliphatic Hydrocarbons exclude the concentration of target analytes eluting in that range.
C9-C12 Aliphatic Hydrocarbons exclude concentration of target analytes eluting in that range AND C9-C10 Aromatics.

Project ID: Dow Salvage Yard 18001468
Job ID: 67798
Sample#: 67798-010
Sample ID: SY-BRMW2-252.5-262.5-110723
Matrix: Water
Received on ice at 0˚C, in satisfactory condition.
Sampled: 11/7/23 15:35

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
Unadjusted C5-C8 Aliphatics	50 U	100	50	50	ug/L	1	SFP			2303773	11/16/23	22:03	MA VPH
Unadjusted C9-C12 Aliphatics	50 U	100	50	40	ug/L	1	SFP			2303773	11/16/23	22:03	MA VPH
methyl t-butyl ether (MTBE)	1.0 U	2	1.0	0.73	ug/L	1	SFP			2303773	11/16/23	22:03	MA VPH
benzene	1.0 U	1	1.0	0.76	ug/L	1	SFP			2303773	11/16/23	22:03	MA VPH
toluene	3	2	1.0	0.58	ug/L	1	SFP			2303773	11/16/23	22:03	MA VPH
ethylbenzene	1.0 U	2	1.0	0.40	ug/L	1	SFP			2303773	11/16/23	22:03	MA VPH
m&p-xylenes	2.0 U	2	2.0	1.1	ug/L	1	SFP			2303773	11/16/23	22:03	MA VPH
o-xylene	1.0 U	2	1.0	0.45	ug/L	1	SFP			2303773	11/16/23	22:03	MA VPH
naphthalene	4.0 U	5	4.0	3.5	ug/L	1	SFP			2303773	11/16/23	22:03	MA VPH
C5-C8 Aliphatics	50 U	100	50	50	ug/L	1	SFP			2303773	11/16/23	22:03	MA VPH
C9-C12 Aliphatics	50 U	100	50	40	ug/L	1	SFP			2303773	11/16/23	22:03	MA VPH
C9-C10 Aromatics	50 U	100	50	33	ug/L	1	SFP			2303773	11/16/23	22:03	MA VPH
Surrogate Recovery		Limits											
2,5-dibromotoluene as Aromatic SUR	93	70-130			%	1	SFP			2303773	11/16/23	22:03	MA VPH
2,5-dibromotoluene as Aliphatic SUR	96	70-130			%	1	SFP			2303773	11/16/23	22:03	MA VPH

Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range.
C5-C8 Aliphatic Hydrocarbons exclude the concentration of target analytes eluting in that range.
C9-C12 Aliphatic Hydrocarbons exclude concentration of target analytes eluting in that range AND C9-C10 Aromatics.

Project ID: Dow Salvage Yard 18001468
Job ID: 67798
Sample#: 67798-011
Sample ID: TB31-110723
Matrix: Water
Received on ice at 0˚C, in satisfactory condition.
Sampled: 11/7/23 16:30

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
Unadjusted C5-C8 Aliphatics	50 U	100	50	50	ug/L	1	SFP			2303773	11/16/23	13:06	MA VPH
Unadjusted C9-C12 Aliphatics	50 U	100	50	40	ug/L	1	SFP			2303773	11/16/23	13:06	MA VPH
methyl t-butyl ether (MTBE)	1.0 U	2	1.0	0.73	ug/L	1	SFP			2303773	11/16/23	13:06	MA VPH
benzene	1.0 U	1	1.0	0.76	ug/L	1	SFP			2303773	11/16/23	13:06	MA VPH
toluene	1.0 U	2	1.0	0.58	ug/L	1	SFP			2303773	11/16/23	13:06	MA VPH
ethylbenzene	1.0 U	2	1.0	0.40	ug/L	1	SFP			2303773	11/16/23	13:06	MA VPH
m&p-xylenes	2.0 U	2	2.0	1.1	ug/L	1	SFP			2303773	11/16/23	13:06	MA VPH
o-xylene	1.0 U	2	1.0	0.45	ug/L	1	SFP			2303773	11/16/23	13:06	MA VPH
naphthalene	4.0 U	5	4.0	3.5	ug/L	1	SFP			2303773	11/16/23	13:06	MA VPH
C5-C8 Aliphatics	50 U	100	50	50	ug/L	1	SFP			2303773	11/16/23	13:06	MA VPH
C9-C12 Aliphatics	50 U	100	50	40	ug/L	1	SFP			2303773	11/16/23	13:06	MA VPH
C9-C10 Aromatics	50 U	100	50	33	ug/L	1	SFP			2303773	11/16/23	13:06	MA VPH
Surrogate Recovery		Limits											
2,5-dibromotoluene as Aromatic SUR	99	70-130			%	1	SFP			2303773	11/16/23	13:06	MA VPH
2,5-dibromotoluene as Aliphatic SUR	98	70-130			%	1	SFP			2303773	11/16/23	13:06	MA VPH

Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range.
C5-C8 Aliphatic Hydrocarbons exclude the concentration of target analytes eluting in that range.
C9-C12 Aliphatic Hydrocarbons exclude concentration of target analytes eluting in that range AND C9-C10 Aromatics.

Project ID: Dow Salvage Yard 18001468
Job ID: 67798
Sample#: 67798-001
Sample ID: SY-OBMW12-110723
Matrix: Water
Sampled: 11/7/23 10:07

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
N-nitrosodimethylamine	1.0 U#M	2.0	1.0	0.21	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	15:17	SW3510C8270E
pyridine	1.0 U#M	2.0	1.0	0.60	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	15:17	SW3510C8270E
aniline	1.0 U	2.0	1.0	0.39	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	15:17	SW3510C8270E
phenol	1.0 U#M	2.0	1.0	0.34	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	14:47	SW3510C8270E
2-chlorophenol	1.0 U#	5.0	1.0	0.29	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	14:47	SW3510C8270E
bis(2-chloroethyl)ether	1.0 U	2.0	1.0	0.35	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	15:17	SW3510C8270E
1,3-dichlorobenzene	1.0 U#	2.0	1.0	0.41	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	15:17	SW3510C8270E
1,4-dichlorobenzene	1.0 U#	2.0	1.0	0.37	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	15:17	SW3510C8270E
1,2-dichlorobenzene	1.0 U#	2.0	1.0	0.36	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	15:17	SW3510C8270E
benzyl alcohol	1.0 U	2.0	1.0	0.84	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	15:17	SW3510C8270E
2-methylphenol	1.0 U#	5.0	1.0	0.39	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	14:47	SW3510C8270E
2,2'-oxybis(1-chloropropane)	1.0 U	2.0	1.0	0.44	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	15:17	SW3510C8270E
hexachloroethane	1.0 U#M	2.0	1.0	0.53	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	15:17	SW3510C8270E
N-nitroso-di-N-propylamine	1.0 U	2.0	1.0	0.30	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	15:17	SW3510C8270E
4-methylphenol	1.5 U#	2.0	1.5	1.3	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	14:47	SW3510C8270E
nitrobenzene	1.0 U	2.0	1.0	0.41	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	15:17	SW3510C8270E
isophorone	1.0 U	5.0	1.0	0.32	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	15:17	SW3510C8270E
2-nitrophenol	1.0 U#	2.0	1.0	0.21	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	14:47	SW3510C8270E
2,4-dimethylphenol	1.0 U	5.0	1.0	0.44	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	14:47	SW3510C8270E
bis(2-chloroethoxy)methane	1.0 U	5.0	1.0	0.26	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	15:17	SW3510C8270E
2,4-dichlorophenol	1.0 U#	5.0	1.0	0.19	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	14:47	SW3510C8270E
1,2,4-trichlorobenzene	1.0 U	5.0	1.0	0.34	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	15:17	SW3510C8270E
benzoic acid	45 U#M	50	45	20	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	14:47	SW3510C8270E
4-chloroaniline	1.0 U	2.0	1.0	0.41	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	15:17	SW3510C8270E
hexachlorobutadiene	1.0 U#	2.0	1.0	0.57	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	15:17	SW3510C8270E
4-chloro-3-methylphenol	1.0 U#M	2.0	1.0	0.42	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	14:47	SW3510C8270E
hexachlorocyclopentadiene	4.0 U#M	10	4.0	1.6	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	15:17	SW3510C8270E
2,4,6-trichlorophenol	1.0 U#	2.0	1.0	0.33	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	14:47	SW3510C8270E
2,4,5-trichlorophenol	1.0 U#	2.0	1.0	0.28	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	14:47	SW3510C8270E
2-chloronaphthalene	1.0 U	5.0	1.0	0.34	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	15:17	SW3510C8270E
2-nitroaniline	1.0 U	2.0	1.0	0.72	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	15:17	SW3510C8270E
dimethylphthalate	1.0 U#	5.0	1.0	0.41	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	15:17	SW3510C8270E
2,6-dinitrotoluene	1.0 U	5.0	1.0	0.42	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	15:17	SW3510C8270E
2,4-dinitrotoluene	1.0 U	5.0	1.0	0.52	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	15:17	SW3510C8270E
3-nitroaniline	1.5 U	2.0	1.5	1.0	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	15:17	SW3510C8270E
2,4-dinitrophenol	45 U#	50	45	3.5	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	14:47	SW3510C8270E
dibenzofuran	0.40 U	0.50	0.40	0.37	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	15:17	SW3510C8270E
4-nitrophenol	5.0 U#M	10	5.0	1.6	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	14:47	SW3510C8270E
diethyl phthalate	1.0 U#	5.0	1.0	0.30	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	15:17	SW3510C8270E
4-chlorophenyl phenyl ether	1.0 U	5.0	1.0	0.35	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	15:17	SW3510C8270E
4-nitroaniline	3.0 U	5.0	3.0	1.0	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	15:17	SW3510C8270E
4,6-dinitro-2-methylphenol	10 U	20	10	1.7	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	14:47	SW3510C8270E

Project ID: Dow Salvage Yard 18001468
Job ID: 67798
Sample#: 67798-001
Sample ID: SY-OBMW12-110723
Matrix: Water
Sampled: 11/7/23 10:07

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
azobenzene	1.0 U	2.0	1.0	0.25	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	15:17	SW3510C8270E
N-nitrosodiphenylamine	1.0 U	2.0	1.0	0.26	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	15:17	SW3510C8270E
4-bromophenyl phenyl ether	1.0 U	2.0	1.0	0.23	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	15:17	SW3510C8270E
hexachlorobenzene	1.0 U	2.0	1.0	0.25	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	15:17	SW3510C8270E
pentachlorophenol	5.0 U	10	5.0	2.6	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	14:47	SW3510C8270E
carbazole	1.0 U	2.0	1.0	0.32	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	15:17	SW3510C8270E
di-n-butylphthalate	1.0 U	5.0	1.0	0.54	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	15:17	SW3510C8270E
benzidine	25 U	30	25	20	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	15:17	SW3510C8270E
butyl benzyl phthalate	3.0 U	5.0	3.0	2.1	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	15:17	SW3510C8270E
3,3'-dichlorobenzidine	25 U	30	25	20	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	15:17	SW3510C8270E
bis(2-ethylhexyl)phthalate	3.0 U	5.0	3.0	2.4	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	15:17	SW3510C8270E
di-n-octyl phthalate	3.0 U	5.0	3.0	2.1	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	15:17	SW3510C8270E
Surrogate Recovery		Limits											
2-fluorophenol SUR	32	21-100			%	1	CL	11/9/23	8:50	17096	11/15/23	14:47	SW3510C8270E
phenol-D5 SUR	19	10-102			%	1	CL	11/9/23	8:50	17096	11/15/23	14:47	SW3510C8270E
2,4,6-tribromophenol SUR	62	10-123			%	1	CL	11/9/23	8:50	17096	11/15/23	14:47	SW3510C8270E
nitrobenzene-D5 SUR	65	35-114			%	1	CL	11/9/23	8:50	17096	11/15/23	15:17	SW3510C8270E
2-fluorobiphenyl SUR	64	43-116			%	1	CL	11/9/23	8:50	17096	11/15/23	15:17	SW3510C8270E
p-terphenyl-D14 SUR	83	33-141			%	1	CL	11/9/23	8:50	17096	11/15/23	15:17	SW3510C8270E

 # The percent recovery and/or RPD for the LCS/D was outside acceptance criteria.
M = The percent recovery and/or RPD for the MS/D was outside acceptance criteria.

Project ID: Dow Salvage Yard 18001468
Job ID: 67798
Sample#: 67798-002
Sample ID: SY-OBMW6-110723
Matrix: Water
Sampled: 11/7/23 10:30

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
N-nitrosodimethylamine	1.0 U#	2.0	1.0	0.21	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	21:56	SW3510C8270E
pyridine	1.0 U#	2.0	1.0	0.60	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	21:56	SW3510C8270E
aniline	1.0 U	2.0	1.0	0.39	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	21:56	SW3510C8270E
phenol	1.0 U#	2.0	1.0	0.34	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	14:29	SW3510C8270E
2-chlorophenol	1.0 U#	5.0	1.0	0.29	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	14:29	SW3510C8270E
bis(2-chloroethyl)ether	1.0 U	2.0	1.0	0.35	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	21:56	SW3510C8270E
1,3-dichlorobenzene	1.0 U#	2.0	1.0	0.41	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	21:56	SW3510C8270E
1,4-dichlorobenzene	1.0 U#	2.0	1.0	0.37	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	21:56	SW3510C8270E
1,2-dichlorobenzene	1.0 U#	2.0	1.0	0.36	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	21:56	SW3510C8270E
benzyl alcohol	1.0 U	2.0	1.0	0.84	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	21:56	SW3510C8270E
2-methylphenol	1.0 U#	5.0	1.0	0.39	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	14:29	SW3510C8270E
2,2'-oxybis(1-chloropropane)	1.0 U	2.0	1.0	0.44	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	21:56	SW3510C8270E
hexachloroethane	1.0 U#	2.0	1.0	0.53	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	21:56	SW3510C8270E
N-nitroso-di-N-propylamine	1.0 U	2.0	1.0	0.30	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	21:56	SW3510C8270E
4-methylphenol	1.5 U#	2.0	1.5	1.3	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	14:29	SW3510C8270E
nitrobenzene	1.0 U	2.0	1.0	0.41	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	21:56	SW3510C8270E
isophorone	1.0 U	5.0	1.0	0.32	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	21:56	SW3510C8270E
2-nitrophenol	1.0 U#	2.0	1.0	0.21	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	14:29	SW3510C8270E
2,4-dimethylphenol	1.0 U	5.0	1.0	0.44	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	14:29	SW3510C8270E
bis(2-chloroethoxy)methane	1.0 U	5.0	1.0	0.26	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	21:56	SW3510C8270E
2,4-dichlorophenol	1.0 U#	5.0	1.0	0.19	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	14:29	SW3510C8270E
1,2,4-trichlorobenzene	1.0 U	5.0	1.0	0.34	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	21:56	SW3510C8270E
benzoic acid	45 U#	50	45	20	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	14:29	SW3510C8270E
4-chloroaniline	1.0 U	2.0	1.0	0.41	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	21:56	SW3510C8270E
hexachlorobutadiene	1.0 U#	2.0	1.0	0.57	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	21:56	SW3510C8270E
4-chloro-3-methylphenol	1.0 U#	2.0	1.0	0.42	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	14:29	SW3510C8270E
hexachlorocyclopentadiene	4.0 U#	10	4.0	1.6	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	21:56	SW3510C8270E
2,4,6-trichlorophenol	1.0 U#	2.0	1.0	0.33	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	14:29	SW3510C8270E
2,4,5-trichlorophenol	1.0 U#	2.0	1.0	0.28	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	14:29	SW3510C8270E
2-chloronaphthalene	1.0 U	5.0	1.0	0.34	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	21:56	SW3510C8270E
2-nitroaniline	1.0 U	2.0	1.0	0.72	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	21:56	SW3510C8270E
dimethylphthalate	1.0 U#	5.0	1.0	0.41	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	21:56	SW3510C8270E
2,6-dinitrotoluene	1.0 U	5.0	1.0	0.42	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	21:56	SW3510C8270E
2,4-dinitrotoluene	1.0 U	5.0	1.0	0.52	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	21:56	SW3510C8270E
3-nitroaniline	1.5 U	2.0	1.5	1.0	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	21:56	SW3510C8270E
2,4-dinitrophenol	45 U#	50	45	3.5	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	14:29	SW3510C8270E
dibenzofuran	0.40 U	0.50	0.40	0.37	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	21:56	SW3510C8270E
4-nitrophenol	5.0 U#	10	5.0	1.6	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	14:29	SW3510C8270E
diethyl phthalate	1.0 U#	5.0	1.0	0.30	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	21:56	SW3510C8270E
4-chlorophenyl phenyl ether	1.0 U	5.0	1.0	0.35	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	21:56	SW3510C8270E
4-nitroaniline	3.0 U	5.0	3.0	1.0	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	21:56	SW3510C8270E
4,6-dinitro-2-methylphenol	10 U	20	10	1.7	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	14:29	SW3510C8270E

Project ID: Dow Salvage Yard 18001468
Job ID: 67798
Sample#: 67798-002
Sample ID: SY-OBMW6-110723
Matrix: Water
Sampled: 11/7/23 10:30

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
azobenzene	1.0 U	2.0	1.0	0.25	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	21:56	SW3510C8270E
N-nitrosodiphenylamine	1.0 U	2.0	1.0	0.26	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	21:56	SW3510C8270E
4-bromophenyl phenyl ether	1.0 U	2.0	1.0	0.23	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	21:56	SW3510C8270E
hexachlorobenzene	1.0 U	2.0	1.0	0.25	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	21:56	SW3510C8270E
pentachlorophenol	5.0 U	10	5.0	2.6	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	14:29	SW3510C8270E
carbazole	1.0 U	2.0	1.0	0.32	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	21:56	SW3510C8270E
di-n-butylphthalate	1.0 U	5.0	1.0	0.54	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	21:56	SW3510C8270E
benzidine	25 U	30	25	20	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	21:56	SW3510C8270E
butyl benzyl phthalate	3.0 U	5.0	3.0	2.1	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	21:56	SW3510C8270E
3,3'-dichlorobenzidine	25 U	30	25	20	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	21:56	SW3510C8270E
bis(2-ethylhexyl)phthalate	3.0 U	5.0	3.0	2.4	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	21:56	SW3510C8270E
di-n-octyl phthalate	3.0 U	5.0	3.0	2.1	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	21:56	SW3510C8270E
Surrogate Recovery		Limits											
2-fluorophenol SUR	39	21-100			%	1	CL	11/9/23	8:50	17096	11/13/23	14:29	SW3510C8270E
phenol-D5 SUR	25	10-102			%	1	CL	11/9/23	8:50	17096	11/13/23	14:29	SW3510C8270E
2,4,6-tribromophenol SUR	73	10-123			%	1	CL	11/9/23	8:50	17096	11/13/23	14:29	SW3510C8270E
nitrobenzene-D5 SUR	69	35-114			%	1	CL	11/9/23	8:50	17096	11/13/23	21:56	SW3510C8270E
2-fluorobiphenyl SUR	66	43-116			%	1	CL	11/9/23	8:50	17096	11/13/23	21:56	SW3510C8270E
p-terphenyl-D14 SUR	83	33-141			%	1	CL	11/9/23	8:50	17096	11/13/23	21:56	SW3510C8270E

 # The percent recovery and/or RPD for the LCS/D was outside acceptance criteria.

Project ID: Dow Salvage Yard 18001468
Job ID: 67798
Sample#: 67798-003
Sample ID: SY-OBMW4R-110723
Matrix: Water
Sampled: 11/7/23 11:05

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
N-nitrosodimethylamine	1.0 U#	2.0	1.0	0.21	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	15:47	SW3510C8270E
pyridine	1.0 U#	2.0	1.0	0.60	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	15:47	SW3510C8270E
aniline	1.0 U	2.0	1.0	0.39	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	15:47	SW3510C8270E
phenol	1.0 U#	2.0	1.0	0.34	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	14:59	SW3510C8270E
2-chlorophenol	1.0 U#	5.0	1.0	0.29	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	14:59	SW3510C8270E
bis(2-chloroethyl)ether	1.0 U	2.0	1.0	0.35	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	15:47	SW3510C8270E
1,3-dichlorobenzene	1.0 U#	2.0	1.0	0.41	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	15:47	SW3510C8270E
1,4-dichlorobenzene	1.0 U#	2.0	1.0	0.37	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	15:47	SW3510C8270E
1,2-dichlorobenzene	1.0 U#	2.0	1.0	0.36	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	15:47	SW3510C8270E
benzyl alcohol	1.0 U	2.0	1.0	0.84	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	15:47	SW3510C8270E
2-methylphenol	1.0 U#	5.0	1.0	0.39	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	14:59	SW3510C8270E
2,2'-oxybis(1-chloropropane)	1.0 U	2.0	1.0	0.44	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	15:47	SW3510C8270E
hexachloroethane	1.0 U#	2.0	1.0	0.53	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	15:47	SW3510C8270E
N-nitroso-di-N-propylamine	1.0 U	2.0	1.0	0.30	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	15:47	SW3510C8270E
4-methylphenol	1.5 U#	2.0	1.5	1.3	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	14:59	SW3510C8270E
nitrobenzene	1.0 U	2.0	1.0	0.41	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	15:47	SW3510C8270E
isophorone	1.0 U	5.0	1.0	0.32	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	15:47	SW3510C8270E
2-nitrophenol	1.0 U#	2.0	1.0	0.21	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	14:59	SW3510C8270E
2,4-dimethylphenol	1.0 U	5.0	1.0	0.44	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	14:59	SW3510C8270E
bis(2-chloroethoxy)methane	1.0 U	5.0	1.0	0.26	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	15:47	SW3510C8270E
2,4-dichlorophenol	1.0 U#	5.0	1.0	0.19	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	14:59	SW3510C8270E
1,2,4-trichlorobenzene	1.0 U	5.0	1.0	0.34	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	15:47	SW3510C8270E
benzoic acid	45 U#	50	45	20	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	14:59	SW3510C8270E
4-chloroaniline	1.0 U	2.0	1.0	0.41	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	15:47	SW3510C8270E
hexachlorobutadiene	1.0 U#	2.0	1.0	0.57	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	15:47	SW3510C8270E
4-chloro-3-methylphenol	1.0 U#	2.0	1.0	0.42	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	14:59	SW3510C8270E
hexachlorocyclopentadiene	4.0 U#	10	4.0	1.6	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	15:47	SW3510C8270E
2,4,6-trichlorophenol	1.0 U#	2.0	1.0	0.33	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	14:59	SW3510C8270E
2,4,5-trichlorophenol	1.0 U#	2.0	1.0	0.28	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	14:59	SW3510C8270E
2-chloronaphthalene	1.0 U	5.0	1.0	0.34	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	15:47	SW3510C8270E
2-nitroaniline	1.0 U	2.0	1.0	0.72	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	15:47	SW3510C8270E
dimethylphthalate	1.0 U#	5.0	1.0	0.41	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	15:47	SW3510C8270E
2,6-dinitrotoluene	1.0 U	5.0	1.0	0.42	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	15:47	SW3510C8270E
2,4-dinitrotoluene	1.0 U	5.0	1.0	0.52	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	15:47	SW3510C8270E
3-nitroaniline	1.5 U	2.0	1.5	1.0	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	15:47	SW3510C8270E
2,4-dinitrophenol	45 U#	50	45	3.5	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	14:59	SW3510C8270E
dibenzofuran	0.40 U	0.50	0.40	0.37	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	15:47	SW3510C8270E
4-nitrophenol	5.0 U#	10	5.0	1.6	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	14:59	SW3510C8270E
diethyl phthalate	1.0 U#	5.0	1.0	0.30	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	15:47	SW3510C8270E
4-chlorophenyl phenyl ether	1.0 U	5.0	1.0	0.35	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	15:47	SW3510C8270E
4-nitroaniline	3.0 U	5.0	3.0	1.0	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	15:47	SW3510C8270E
4,6-dinitro-2-methylphenol	10 U	20	10	1.7	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	14:59	SW3510C8270E

Project ID: Dow Salvage Yard 18001468
Job ID: 67798
Sample#: 67798-003
Sample ID: SY-OBMW4R-110723
Matrix: Water
Sampled: 11/7/23 11:05

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
azobenzene	1.0 U	2.0	1.0	0.25	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	15:47	SW3510C8270E
N-nitrosodiphenylamine	1.0 U	2.0	1.0	0.26	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	15:47	SW3510C8270E
4-bromophenyl phenyl ether	1.0 U	2.0	1.0	0.23	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	15:47	SW3510C8270E
hexachlorobenzene	1.0 U	2.0	1.0	0.25	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	15:47	SW3510C8270E
pentachlorophenol	5.0 U	10	5.0	2.6	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	14:59	SW3510C8270E
carbazole	1.0 U	2.0	1.0	0.32	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	15:47	SW3510C8270E
di-n-butylphthalate	1.0 U	5.0	1.0	0.54	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	15:47	SW3510C8270E
benzidine	25 U	30	25	20	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	15:47	SW3510C8270E
butyl benzyl phthalate	3.0 U	5.0	3.0	2.1	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	15:47	SW3510C8270E
3,3'-dichlorobenzidine	25 U	30	25	20	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	15:47	SW3510C8270E
bis(2-ethylhexyl)phthalate	3.0 U	5.0	3.0	2.4	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	15:47	SW3510C8270E
di-n-octyl phthalate	3.0 U	5.0	3.0	2.1	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	15:47	SW3510C8270E
Surrogate Recovery		Limits											
2-fluorophenol SUR	23	21-100			%	1	CL	11/9/23	8:50	17096	11/13/23	14:59	SW3510C8270E
phenol-D5 SUR	26	10-102			%	1	CL	11/9/23	8:50	17096	11/13/23	14:59	SW3510C8270E
2,4,6-tribromophenol SUR	47	10-123			%	1	CL	11/9/23	8:50	17096	11/13/23	14:59	SW3510C8270E
nitrobenzene-D5 SUR	58	35-114			%	1	CL	11/9/23	8:50	17096	11/15/23	15:47	SW3510C8270E
2-fluorobiphenyl SUR	57	43-116			%	1	CL	11/9/23	8:50	17096	11/15/23	15:47	SW3510C8270E
p-terphenyl-D14 SUR	67	33-141			%	1	CL	11/9/23	8:50	17096	11/15/23	15:47	SW3510C8270E

 # The percent recovery and/or RPD for the LCS/D was outside acceptance criteria.

Project ID: Dow Salvage Yard 18001468
Job ID: 67798
Sample#: 67798-004
Sample ID: SY-BRMW2-60.5-70.5-110723
Matrix: Water
Sampled: 11/7/23 12:25

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
N-nitrosodimethylamine	1.0 U#	2.0	1.0	0.21	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	16:16	SW3510C8270E
pyridine	1.0 U#	2.0	1.0	0.60	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	16:16	SW3510C8270E
aniline	1.0 U	2.0	1.0	0.39	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	16:16	SW3510C8270E
phenol	1.0 U#	2.0	1.0	0.34	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	15:29	SW3510C8270E
2-chlorophenol	1.0 U#	5.0	1.0	0.29	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	15:29	SW3510C8270E
bis(2-chloroethyl)ether	1.0 U	2.0	1.0	0.35	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	16:16	SW3510C8270E
1,3-dichlorobenzene	1.0 U#	2.0	1.0	0.41	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	16:16	SW3510C8270E
1,4-dichlorobenzene	1.0 U#	2.0	1.0	0.37	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	16:16	SW3510C8270E
1,2-dichlorobenzene	1.0 U#	2.0	1.0	0.36	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	16:16	SW3510C8270E
benzyl alcohol	1.0 U	2.0	1.0	0.84	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	16:16	SW3510C8270E
2-methylphenol	1.0 U#	5.0	1.0	0.39	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	15:29	SW3510C8270E
2,2'-oxybis(1-chloropropane)	1.0 U	2.0	1.0	0.44	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	16:16	SW3510C8270E
hexachloroethane	1.0 U#	2.0	1.0	0.53	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	16:16	SW3510C8270E
N-nitroso-di-N-propylamine	1.0 U	2.0	1.0	0.30	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	16:16	SW3510C8270E
4-methylphenol	1.5 U#	2.0	1.5	1.3	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	15:29	SW3510C8270E
nitrobenzene	1.0 U	2.0	1.0	0.41	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	16:16	SW3510C8270E
isophorone	1.0 U	5.0	1.0	0.32	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	16:16	SW3510C8270E
2-nitrophenol	1.0 U#	2.0	1.0	0.21	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	15:29	SW3510C8270E
2,4-dimethylphenol	1.0 U	5.0	1.0	0.44	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	15:29	SW3510C8270E
bis(2-chloroethoxy)methane	1.0 U	5.0	1.0	0.26	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	16:16	SW3510C8270E
2,4-dichlorophenol	1.0 U#	5.0	1.0	0.19	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	15:29	SW3510C8270E
1,2,4-trichlorobenzene	1.0 U	5.0	1.0	0.34	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	16:16	SW3510C8270E
benzoic acid	45 U#	50	45	20	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	15:29	SW3510C8270E
4-chloroaniline	1.0 U	2.0	1.0	0.41	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	16:16	SW3510C8270E
hexachlorobutadiene	1.0 U#	2.0	1.0	0.57	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	16:16	SW3510C8270E
4-chloro-3-methylphenol	1.0 U#	2.0	1.0	0.42	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	15:29	SW3510C8270E
hexachlorocyclopentadiene	4.0 U#	10	4.0	1.6	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	16:16	SW3510C8270E
2,4,6-trichlorophenol	1.0 U#	2.0	1.0	0.33	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	15:29	SW3510C8270E
2,4,5-trichlorophenol	1.0 U#	2.0	1.0	0.28	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	15:29	SW3510C8270E
2-chloronaphthalene	1.0 U	5.0	1.0	0.34	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	16:16	SW3510C8270E
2-nitroaniline	1.0 U	2.0	1.0	0.72	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	16:16	SW3510C8270E
dimethylphthalate	1.0 U#	5.0	1.0	0.41	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	16:16	SW3510C8270E
2,6-dinitrotoluene	1.0 U	5.0	1.0	0.42	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	16:16	SW3510C8270E
2,4-dinitrotoluene	1.0 U	5.0	1.0	0.52	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	16:16	SW3510C8270E
3-nitroaniline	1.5 U	2.0	1.5	1.0	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	16:16	SW3510C8270E
2,4-dinitrophenol	45 U#	50	45	3.5	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	15:29	SW3510C8270E
dibenzofuran	0.40 U	0.50	0.40	0.37	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	16:16	SW3510C8270E
4-nitrophenol	5.0 U#	10	5.0	1.6	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	15:29	SW3510C8270E
diethyl phthalate	1.0 U#	5.0	1.0	0.30	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	16:16	SW3510C8270E
4-chlorophenyl phenyl ether	1.0 U	5.0	1.0	0.35	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	16:16	SW3510C8270E
4-nitroaniline	3.0 U	5.0	3.0	1.0	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	16:16	SW3510C8270E
4,6-dinitro-2-methylphenol	10 U	20	10	1.7	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	15:29	SW3510C8270E

Project ID: Dow Salvage Yard 18001468
Job ID: 67798
Sample#: 67798-004
Sample ID: SY-BRMW2-60.5-70.5-110723
Matrix: Water
Sampled: 11/7/23 12:25

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
azobenzene	1.0 U	2.0	1.0	0.25	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	16:16	SW3510C8270E
N-nitrosodiphenylamine	1.0 U	2.0	1.0	0.26	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	16:16	SW3510C8270E
4-bromophenyl phenyl ether	1.0 U	2.0	1.0	0.23	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	16:16	SW3510C8270E
hexachlorobenzene	1.0 U	2.0	1.0	0.25	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	16:16	SW3510C8270E
pentachlorophenol	5.0 U	10	5.0	2.6	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	15:29	SW3510C8270E
carbazole	1.0 U	2.0	1.0	0.32	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	16:16	SW3510C8270E
di-n-butylphthalate	1.0 U	5.0	1.0	0.54	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	16:16	SW3510C8270E
benzidine	25 U	30	25	20	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	16:16	SW3510C8270E
butyl benzyl phthalate	3.0 U	5.0	3.0	2.1	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	16:16	SW3510C8270E
3,3'-dichlorobenzidine	25 U	30	25	20	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	16:16	SW3510C8270E
bis(2-ethylhexyl)phthalate	3.0 U	5.0	3.0	2.4	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	16:16	SW3510C8270E
di-n-octyl phthalate	3.0 U	5.0	3.0	2.1	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	16:16	SW3510C8270E
Surrogate Recovery		Limits											
2-fluorophenol SUR	36	21-100			%	1	CL	11/9/23	8:50	17096	11/13/23	15:29	SW3510C8270E
phenol-D5 SUR	24	10-102			%	1	CL	11/9/23	8:50	17096	11/13/23	15:29	SW3510C8270E
2,4,6-tribromophenol SUR	68	10-123			%	1	CL	11/9/23	8:50	17096	11/13/23	15:29	SW3510C8270E
nitrobenzene-D5 SUR	66	35-114			%	1	CL	11/9/23	8:50	17096	11/15/23	16:16	SW3510C8270E
2-fluorobiphenyl SUR	64	43-116			%	1	CL	11/9/23	8:50	17096	11/15/23	16:16	SW3510C8270E
p-terphenyl-D14 SUR	81	33-141			%	1	CL	11/9/23	8:50	17096	11/15/23	16:16	SW3510C8270E

 # The percent recovery and/or RPD for the LCS/D was outside acceptance criteria.

Project ID: Dow Salvage Yard 18001468
Job ID: 67798
Sample#: 67798-005
Sample ID: SY-OBMW15-110723
Matrix: Water
Sampled: 11/7/23 12:50

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
N-nitrosodimethylamine	1.0 U#	2.0	1.0	0.21	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	16:46	SW3510C8270E
pyridine	1.0 U#	2.0	1.0	0.60	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	16:46	SW3510C8270E
aniline	1.0 U	2.0	1.0	0.39	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	16:46	SW3510C8270E
phenol	1.0 U#	2.0	1.0	0.34	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	15:58	SW3510C8270E
2-chlorophenol	1.0 U#	5.0	1.0	0.29	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	15:58	SW3510C8270E
bis(2-chloroethyl)ether	1.0 U	2.0	1.0	0.35	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	16:46	SW3510C8270E
1,3-dichlorobenzene	1.0 U#	2.0	1.0	0.41	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	16:46	SW3510C8270E
1,4-dichlorobenzene	1.0 U#	2.0	1.0	0.37	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	16:46	SW3510C8270E
1,2-dichlorobenzene	1.0 U#	2.0	1.0	0.36	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	16:46	SW3510C8270E
benzyl alcohol	1.0 U	2.0	1.0	0.84	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	16:46	SW3510C8270E
2-methylphenol	1.0 U#	5.0	1.0	0.39	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	15:58	SW3510C8270E
2,2'-oxybis(1-chloropropane)	1.0 U	2.0	1.0	0.44	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	16:46	SW3510C8270E
hexachloroethane	1.0 U#	2.0	1.0	0.53	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	16:46	SW3510C8270E
N-nitroso-di-N-propylamine	1.0 U	2.0	1.0	0.30	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	16:46	SW3510C8270E
4-methylphenol	1.5 U#	2.0	1.5	1.3	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	15:58	SW3510C8270E
nitrobenzene	1.0 U	2.0	1.0	0.41	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	16:46	SW3510C8270E
isophorone	1.0 U	5.0	1.0	0.32	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	16:46	SW3510C8270E
2-nitrophenol	1.0 U#	2.0	1.0	0.21	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	15:58	SW3510C8270E
2,4-dimethylphenol	1.0 U	5.0	1.0	0.44	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	15:58	SW3510C8270E
bis(2-chloroethoxy)methane	1.0 U	5.0	1.0	0.26	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	16:46	SW3510C8270E
2,4-dichlorophenol	1.0 U#	5.0	1.0	0.19	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	15:58	SW3510C8270E
1,2,4-trichlorobenzene	1.0 U	5.0	1.0	0.34	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	16:46	SW3510C8270E
benzoic acid	45 U#	50	45	20	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	15:58	SW3510C8270E
4-chloroaniline	1.0 U	2.0	1.0	0.41	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	16:46	SW3510C8270E
hexachlorobutadiene	1.0 U#	2.0	1.0	0.57	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	16:46	SW3510C8270E
4-chloro-3-methylphenol	1.0 U#	2.0	1.0	0.42	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	15:58	SW3510C8270E
hexachlorocyclopentadiene	4.0 U#	10	4.0	1.6	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	16:46	SW3510C8270E
2,4,6-trichlorophenol	1.0 U#	2.0	1.0	0.33	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	15:58	SW3510C8270E
2,4,5-trichlorophenol	1.0 U#	2.0	1.0	0.28	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	15:58	SW3510C8270E
2-chloronaphthalene	1.0 U	5.0	1.0	0.34	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	16:46	SW3510C8270E
2-nitroaniline	1.0 U	2.0	1.0	0.72	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	16:46	SW3510C8270E
dimethylphthalate	1.0 U#	5.0	1.0	0.41	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	16:46	SW3510C8270E
2,6-dinitrotoluene	1.0 U	5.0	1.0	0.42	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	16:46	SW3510C8270E
2,4-dinitrotoluene	1.0 U	5.0	1.0	0.52	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	16:46	SW3510C8270E
3-nitroaniline	1.5 U	2.0	1.5	1.0	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	16:46	SW3510C8270E
2,4-dinitrophenol	45 U#	50	45	3.5	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	15:58	SW3510C8270E
dibenzofuran	0.40 U	0.50	0.40	0.37	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	16:46	SW3510C8270E
4-nitrophenol	5.0 U#	10	5.0	1.6	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	15:58	SW3510C8270E
diethyl phthalate	1.0 U#	5.0	1.0	0.30	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	16:46	SW3510C8270E
4-chlorophenyl phenyl ether	1.0 U	5.0	1.0	0.35	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	16:46	SW3510C8270E
4-nitroaniline	3.0 U	5.0	3.0	1.0	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	16:46	SW3510C8270E
4,6-dinitro-2-methylphenol	10 U	20	10	1.7	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	15:58	SW3510C8270E

Project ID: Dow Salvage Yard 18001468
Job ID: 67798
Sample#: 67798-005
Sample ID: SY-OBMW15-110723
Matrix: Water
Sampled: 11/7/23 12:50

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
azobenzene	1.0 U	2.0	1.0	0.25	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	16:46	SW3510C8270E
N-nitrosodiphenylamine	1.0 U	2.0	1.0	0.26	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	16:46	SW3510C8270E
4-bromophenyl phenyl ether	1.0 U	2.0	1.0	0.23	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	16:46	SW3510C8270E
hexachlorobenzene	1.0 U	2.0	1.0	0.25	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	16:46	SW3510C8270E
pentachlorophenol	5.0 U	10	5.0	2.6	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	15:58	SW3510C8270E
carbazole	1.0 U	2.0	1.0	0.32	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	16:46	SW3510C8270E
di-n-butylphthalate	1.0 U	5.0	1.0	0.54	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	16:46	SW3510C8270E
benzidine	25 U	30	25	20	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	16:46	SW3510C8270E
butyl benzyl phthalate	3.0 U	5.0	3.0	2.1	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	16:46	SW3510C8270E
3,3'-dichlorobenzidine	25 U	30	25	20	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	16:46	SW3510C8270E
bis(2-ethylhexyl)phthalate	3.0 U	5.0	3.0	2.4	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	16:46	SW3510C8270E
di-n-octyl phthalate	3.0 U	5.0	3.0	2.1	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	16:46	SW3510C8270E
Surrogate Recovery		Limits											
2-fluorophenol SUR	39	21-100			%	1	CL	11/9/23	8:50	17096	11/13/23	15:58	SW3510C8270E
phenol-D5 SUR	21	10-102			%	1	CL	11/9/23	8:50	17096	11/13/23	15:58	SW3510C8270E
2,4,6-tribromophenol SUR	72	10-123			%	1	CL	11/9/23	8:50	17096	11/13/23	15:58	SW3510C8270E
nitrobenzene-D5 SUR	58	35-114			%	1	CL	11/9/23	8:50	17096	11/15/23	16:46	SW3510C8270E
2-fluorobiphenyl SUR	61	43-116			%	1	CL	11/9/23	8:50	17096	11/15/23	16:46	SW3510C8270E
p-terphenyl-D14 SUR	83	33-141			%	1	CL	11/9/23	8:50	17096	11/15/23	16:46	SW3510C8270E

 # The percent recovery and/or RPD for the LCS/D was outside acceptance criteria.

Project ID: Dow Salvage Yard 18001468
Job ID: 67798
Sample#: 67798-006
Sample ID: SY-OBMW5-110723
Matrix: Water
Sampled: 11/7/23 13:25

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
N-nitrosodimethylamine	1.0 U#	2.0	1.0	0.21	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	17:16	SW3510C8270E
pyridine	1.0 U#	2.0	1.0	0.60	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	17:16	SW3510C8270E
aniline	1.0 U	2.0	1.0	0.39	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	17:16	SW3510C8270E
phenol	1.0 U#	2.0	1.0	0.34	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	16:28	SW3510C8270E
2-chlorophenol	1.0 U#	5.0	1.0	0.29	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	16:28	SW3510C8270E
bis(2-chloroethyl)ether	1.0 U	2.0	1.0	0.35	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	17:16	SW3510C8270E
1,3-dichlorobenzene	1.0 U#	2.0	1.0	0.41	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	17:16	SW3510C8270E
1,4-dichlorobenzene	1.0 U#	2.0	1.0	0.37	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	17:16	SW3510C8270E
1,2-dichlorobenzene	1.0 U#	2.0	1.0	0.36	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	17:16	SW3510C8270E
benzyl alcohol	1.0 U	2.0	1.0	0.84	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	17:16	SW3510C8270E
2-methylphenol	1.0 U#	5.0	1.0	0.39	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	16:28	SW3510C8270E
2,2'-oxybis(1-chloropropane)	1.0 U	2.0	1.0	0.44	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	17:16	SW3510C8270E
hexachloroethane	1.0 U#	2.0	1.0	0.53	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	17:16	SW3510C8270E
N-nitroso-di-N-propylamine	1.0 U	2.0	1.0	0.30	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	17:16	SW3510C8270E
4-methylphenol	1.5 U#	2.0	1.5	1.3	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	16:28	SW3510C8270E
nitrobenzene	1.0 U	2.0	1.0	0.41	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	17:16	SW3510C8270E
isophorone	1.0 U	5.0	1.0	0.32	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	17:16	SW3510C8270E
2-nitrophenol	1.0 U#	2.0	1.0	0.21	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	16:28	SW3510C8270E
2,4-dimethylphenol	1.0 U	5.0	1.0	0.44	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	16:28	SW3510C8270E
bis(2-chloroethoxy)methane	1.0 U	5.0	1.0	0.26	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	17:16	SW3510C8270E
2,4-dichlorophenol	1.0 U#	5.0	1.0	0.19	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	16:28	SW3510C8270E
1,2,4-trichlorobenzene	1.0 U	5.0	1.0	0.34	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	17:16	SW3510C8270E
benzoic acid	45 U#	50	45	20	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	16:28	SW3510C8270E
4-chloroaniline	1.0 U	2.0	1.0	0.41	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	17:16	SW3510C8270E
hexachlorobutadiene	1.0 U#	2.0	1.0	0.57	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	17:16	SW3510C8270E
4-chloro-3-methylphenol	1.0 U#	2.0	1.0	0.42	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	16:28	SW3510C8270E
hexachlorocyclopentadiene	4.0 U#	10	4.0	1.6	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	17:16	SW3510C8270E
2,4,6-trichlorophenol	1.0 U#	2.0	1.0	0.33	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	16:28	SW3510C8270E
2,4,5-trichlorophenol	1.0 U#	2.0	1.0	0.28	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	16:28	SW3510C8270E
2-chloronaphthalene	1.0 U	5.0	1.0	0.34	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	17:16	SW3510C8270E
2-nitroaniline	1.0 U	2.0	1.0	0.72	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	17:16	SW3510C8270E
dimethylphthalate	1.0 U#	5.0	1.0	0.41	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	17:16	SW3510C8270E
2,6-dinitrotoluene	1.0 U	5.0	1.0	0.42	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	17:16	SW3510C8270E
2,4-dinitrotoluene	1.0 U	5.0	1.0	0.52	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	17:16	SW3510C8270E
3-nitroaniline	1.5 U	2.0	1.5	1.0	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	17:16	SW3510C8270E
2,4-dinitrophenol	45 U#	50	45	3.5	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	16:28	SW3510C8270E
dibenzofuran	0.40 U	0.50	0.40	0.37	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	17:16	SW3510C8270E
4-nitrophenol	5.0 U#	10	5.0	1.6	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	16:28	SW3510C8270E
diethyl phthalate	1.0 U#	5.0	1.0	0.30	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	17:16	SW3510C8270E
4-chlorophenyl phenyl ether	1.0 U	5.0	1.0	0.35	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	17:16	SW3510C8270E
4-nitroaniline	3.0 U	5.0	3.0	1.0	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	17:16	SW3510C8270E
4,6-dinitro-2-methylphenol	10 U	20	10	1.7	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	16:28	SW3510C8270E

Project ID: Dow Salvage Yard 18001468
Job ID: 67798
Sample#: 67798-006
Sample ID: SY-OBMW5-110723
Matrix: Water
Sampled: 11/7/23 13:25

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
azobenzene	1.0 U	2.0	1.0	0.25	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	17:16	SW3510C8270E
N-nitrosodiphenylamine	1.0 U	2.0	1.0	0.26	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	17:16	SW3510C8270E
4-bromophenyl phenyl ether	1.0 U	2.0	1.0	0.23	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	17:16	SW3510C8270E
hexachlorobenzene	1.0 U	2.0	1.0	0.25	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	17:16	SW3510C8270E
pentachlorophenol	5.0 U	10	5.0	2.6	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	16:28	SW3510C8270E
carbazole	1.0 U	2.0	1.0	0.32	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	17:16	SW3510C8270E
di-n-butylphthalate	1.0 U	5.0	1.0	0.54	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	17:16	SW3510C8270E
benzidine	25 U	30	25	20	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	17:16	SW3510C8270E
butyl benzyl phthalate	3.0 U	5.0	3.0	2.1	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	17:16	SW3510C8270E
3,3'-dichlorobenzidine	25 U	30	25	20	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	17:16	SW3510C8270E
bis(2-ethylhexyl)phthalate	3.0 U	5.0	3.0	2.4	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	17:16	SW3510C8270E
di-n-octyl phthalate	3.0 U	5.0	3.0	2.1	ug/L	1	CL	11/9/23	8:50	17096	11/15/23	17:16	SW3510C8270E
Surrogate Recovery		Limits											
2-fluorophenol SUR	35	21-100			%	1	CL	11/9/23	8:50	17096	11/13/23	16:28	SW3510C8270E
phenol-D5 SUR	24	10-102			%	1	CL	11/9/23	8:50	17096	11/13/23	16:28	SW3510C8270E
2,4,6-tribromophenol SUR	68	10-123			%	1	CL	11/9/23	8:50	17096	11/13/23	16:28	SW3510C8270E
nitrobenzene-D5 SUR	65	35-114			%	1	CL	11/9/23	8:50	17096	11/15/23	17:16	SW3510C8270E
2-fluorobiphenyl SUR	64	43-116			%	1	CL	11/9/23	8:50	17096	11/15/23	17:16	SW3510C8270E
p-terphenyl-D14 SUR	81	33-141			%	1	CL	11/9/23	8:50	17096	11/15/23	17:16	SW3510C8270E

 # The percent recovery and/or RPD for the LCS/D was outside acceptance criteria.

Project ID: Dow Salvage Yard 18001468
Job ID: 67798
Sample#: 67798-007
Sample ID: SY-BRMW2-80.5-95.5-110723
Matrix: Water
Sampled: 11/7/23 13:40

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
N-nitrosodimethylamine	1.0 U#M	2.0	1.0	0.21	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	17:28	SW3510C8270E
pyridine	1.0 U#M	2.0	1.0	0.60	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	17:28	SW3510C8270E
aniline	1.0 U	2.0	1.0	0.39	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	17:28	SW3510C8270E
phenol	1.0 U#M	2.0	1.0	0.34	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	16:58	SW3510C8270E
2-chlorophenol	1.0 U#	5.0	1.0	0.29	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	16:58	SW3510C8270E
bis(2-chloroethyl)ether	1.0 U	2.0	1.0	0.35	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	17:28	SW3510C8270E
1,3-dichlorobenzene	1.0 UM	2.0	1.0	0.41	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	17:28	SW3510C8270E
1,4-dichlorobenzene	1.0 U#M	2.0	1.0	0.37	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	17:28	SW3510C8270E
1,2-dichlorobenzene	1.0 UM	2.0	1.0	0.36	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	17:28	SW3510C8270E
benzyl alcohol	1.0 U	2.0	1.0	0.84	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	17:28	SW3510C8270E
2-methylphenol	1.0 U#	5.0	1.0	0.39	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	16:58	SW3510C8270E
2,2'-oxybis(1-chloropropane)	1.0 U	2.0	1.0	0.44	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	17:28	SW3510C8270E
hexachloroethane	1.0 U#M	2.0	1.0	0.53	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	17:28	SW3510C8270E
N-nitroso-di-N-propylamine	1.0 U	2.0	1.0	0.30	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	17:28	SW3510C8270E
4-methylphenol	1.5 U#	2.0	1.5	1.3	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	16:58	SW3510C8270E
nitrobenzene	1.0 U	2.0	1.0	0.41	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	17:28	SW3510C8270E
isophorone	1.0 U	5.0	1.0	0.32	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	17:28	SW3510C8270E
2-nitrophenol	1.0 U#	2.0	1.0	0.21	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	16:58	SW3510C8270E
2,4-dimethylphenol	1.0 U	5.0	1.0	0.44	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	16:58	SW3510C8270E
bis(2-chloroethoxy)methane	1.0 U	5.0	1.0	0.26	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	17:28	SW3510C8270E
2,4-dichlorophenol	1.0 U#M	5.0	1.0	0.19	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	16:58	SW3510C8270E
1,2,4-trichlorobenzene	1.0 U	5.0	1.0	0.34	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	17:28	SW3510C8270E
benzoic acid	45 U#M	50	45	20	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	16:58	SW3510C8270E
4-chloroaniline	1.0 U	2.0	1.0	0.41	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	17:28	SW3510C8270E
hexachlorobutadiene	1.0 U#M	2.0	1.0	0.57	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	17:28	SW3510C8270E
4-chloro-3-methylphenol	1.0 U#M	2.0	1.0	0.42	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	16:58	SW3510C8270E
hexachlorocyclopentadiene	4.0 U#M	10	4.0	1.6	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	17:28	SW3510C8270E
2,4,6-trichlorophenol	1.0 U#	2.0	1.0	0.33	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	16:58	SW3510C8270E
2,4,5-trichlorophenol	1.0 U#M	2.0	1.0	0.28	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	16:58	SW3510C8270E
2-chloronaphthalene	1.0 U	5.0	1.0	0.34	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	17:28	SW3510C8270E
2-nitroaniline	1.0 U	2.0	1.0	0.72	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	17:28	SW3510C8270E
dimethylphthalate	1.0 U#M	5.0	1.0	0.41	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	17:28	SW3510C8270E
2,6-dinitrotoluene	1.0 U	5.0	1.0	0.42	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	17:28	SW3510C8270E
2,4-dinitrotoluene	1.0 U	5.0	1.0	0.52	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	17:28	SW3510C8270E
3-nitroaniline	1.5 U	2.0	1.5	1.0	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	17:28	SW3510C8270E
2,4-dinitrophenol	45 U#	50	45	3.5	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	16:58	SW3510C8270E
dibenzofuran	0.40 U	0.50	0.40	0.37	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	17:28	SW3510C8270E
4-nitrophenol	5.0 U#M	10	5.0	1.6	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	16:58	SW3510C8270E
diethyl phthalate	1.0 U#	5.0	1.0	0.30	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	17:28	SW3510C8270E
4-chlorophenyl phenyl ether	1.0 U	5.0	1.0	0.35	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	17:28	SW3510C8270E
4-nitroaniline	3.0 U	5.0	3.0	1.0	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	17:28	SW3510C8270E
4,6-dinitro-2-methylphenol	10 U	20	10	1.7	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	16:58	SW3510C8270E

Project ID: Dow Salvage Yard 18001468
Job ID: 67798
Sample#: 67798-007
Sample ID: SY-BRMW2-80.5-95.5-110723
Matrix: Water
Sampled: 11/7/23 13:40

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
azobenzene	1.0 U	2.0	1.0	0.25	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	17:28	SW3510C8270E
N-nitrosodiphenylamine	1.0 U	2.0	1.0	0.26	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	17:28	SW3510C8270E
4-bromophenyl phenyl ether	1.0 U	2.0	1.0	0.23	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	17:28	SW3510C8270E
hexachlorobenzene	1.0 U	2.0	1.0	0.25	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	17:28	SW3510C8270E
pentachlorophenol	5.0 UM	10	5.0	2.6	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	16:58	SW3510C8270E
carbazole	1.0 U	2.0	1.0	0.32	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	17:28	SW3510C8270E
di-n-butylphthalate	1.0 U	5.0	1.0	0.54	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	17:28	SW3510C8270E
benzidine	25 U	30	25	20	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	17:28	SW3510C8270E
butyl benzyl phthalate	3.0 U	5.0	3.0	2.1	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	17:28	SW3510C8270E
3,3'-dichlorobenzidine	25 U	30	25	20	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	17:28	SW3510C8270E
bis(2-ethylhexyl)phthalate	3.0 U	5.0	3.0	2.4	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	17:28	SW3510C8270E
di-n-octyl phthalate	3.0 U	5.0	3.0	2.1	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	17:28	SW3510C8270E
Surrogate Recovery		Limits											
2-fluorophenol SUR	33	21-100			%	1	CL	11/9/23	8:50	17096	11/13/23	16:58	SW3510C8270E
phenol-D5 SUR	23	10-102			%	1	CL	11/9/23	8:50	17096	11/13/23	16:58	SW3510C8270E
2,4,6-tribromophenol SUR	71	10-123			%	1	CL	11/9/23	8:50	17096	11/13/23	16:58	SW3510C8270E
nitrobenzene-D5 SUR	70	35-114			%	1	CL	11/9/23	8:50	17096	11/13/23	17:28	SW3510C8270E
2-fluorobiphenyl SUR	67	43-116			%	1	CL	11/9/23	8:50	17096	11/13/23	17:28	SW3510C8270E
p-terphenyl-D14 SUR	84	33-141			%	1	CL	11/9/23	8:50	17096	11/13/23	17:28	SW3510C8270E

 # The percent recovery and/or RPD for the LCS/D was outside acceptance criteria.
M = The percent recovery and/or RPD for the MS/D was outside acceptance criteria.

Project ID: Dow Salvage Yard 18001468
Job ID: 67798
Sample#: 67798-008
Sample ID: SY-OBMW13-110723
Matrix: Water
Sampled: 11/7/23 14:25

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
N-nitrosodimethylamine	1.0 U#	2.0	1.0	0.21	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	18:27	SW3510C8270E
pyridine	1.0 U#	2.0	1.0	0.60	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	18:27	SW3510C8270E
aniline	1.0 U	2.0	1.0	0.39	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	18:27	SW3510C8270E
phenol	1.0 U#	2.0	1.0	0.34	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	17:57	SW3510C8270E
2-chlorophenol	1.0 U#	5.0	1.0	0.29	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	17:57	SW3510C8270E
bis(2-chloroethyl)ether	1.0 U	2.0	1.0	0.35	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	18:27	SW3510C8270E
1,3-dichlorobenzene	1.0 U#	2.0	1.0	0.41	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	18:27	SW3510C8270E
1,4-dichlorobenzene	1.0 U#	2.0	1.0	0.37	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	18:27	SW3510C8270E
1,2-dichlorobenzene	1.0 U#	2.0	1.0	0.36	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	18:27	SW3510C8270E
benzyl alcohol	1.0 U	2.0	1.0	0.84	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	18:27	SW3510C8270E
2-methylphenol	1.0 U#	5.0	1.0	0.39	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	17:57	SW3510C8270E
2,2'-oxybis(1-chloropropane)	1.0 U	2.0	1.0	0.44	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	18:27	SW3510C8270E
hexachloroethane	1.0 U#	2.0	1.0	0.53	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	18:27	SW3510C8270E
N-nitroso-di-N-propylamine	1.0 U	2.0	1.0	0.30	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	18:27	SW3510C8270E
4-methylphenol	1.5 U#	2.0	1.5	1.3	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	17:57	SW3510C8270E
nitrobenzene	1.0 U	2.0	1.0	0.41	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	18:27	SW3510C8270E
isophorone	1.0 U	5.0	1.0	0.32	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	18:27	SW3510C8270E
2-nitrophenol	1.0 U#	2.0	1.0	0.21	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	17:57	SW3510C8270E
2,4-dimethylphenol	1.0 U	5.0	1.0	0.44	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	17:57	SW3510C8270E
bis(2-chloroethoxy)methane	1.0 U	5.0	1.0	0.26	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	18:27	SW3510C8270E
2,4-dichlorophenol	1.0 U#	5.0	1.0	0.19	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	17:57	SW3510C8270E
1,2,4-trichlorobenzene	1.0 U	5.0	1.0	0.34	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	18:27	SW3510C8270E
benzoic acid	45 U#	50	45	20	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	17:57	SW3510C8270E
4-chloroaniline	1.0 U	2.0	1.0	0.41	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	18:27	SW3510C8270E
hexachlorobutadiene	1.0 U#	2.0	1.0	0.57	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	18:27	SW3510C8270E
4-chloro-3-methylphenol	1.0 U#	2.0	1.0	0.42	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	17:57	SW3510C8270E
hexachlorocyclopentadiene	4.0 U#	10	4.0	1.6	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	18:27	SW3510C8270E
2,4,6-trichlorophenol	1.0 U#	2.0	1.0	0.33	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	17:57	SW3510C8270E
2,4,5-trichlorophenol	1.0 U#	2.0	1.0	0.28	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	17:57	SW3510C8270E
2-chloronaphthalene	1.0 U	5.0	1.0	0.34	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	18:27	SW3510C8270E
2-nitroaniline	1.0 U	2.0	1.0	0.72	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	18:27	SW3510C8270E
dimethylphthalate	1.0 U#	5.0	1.0	0.41	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	18:27	SW3510C8270E
2,6-dinitrotoluene	1.0 U	5.0	1.0	0.42	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	18:27	SW3510C8270E
2,4-dinitrotoluene	1.0 U	5.0	1.0	0.52	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	18:27	SW3510C8270E
3-nitroaniline	1.5 U	2.0	1.5	1.0	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	18:27	SW3510C8270E
2,4-dinitrophenol	45 U#	50	45	3.5	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	17:57	SW3510C8270E
dibenzofuran	0.40 U	0.50	0.40	0.37	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	18:27	SW3510C8270E
4-nitrophenol	5.0 U#	10	5.0	1.6	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	17:57	SW3510C8270E
diethyl phthalate	1.0 U#	5.0	1.0	0.30	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	18:27	SW3510C8270E
4-chlorophenyl phenyl ether	1.0 U	5.0	1.0	0.35	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	18:27	SW3510C8270E
4-nitroaniline	3.0 U	5.0	3.0	1.0	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	18:27	SW3510C8270E
4,6-dinitro-2-methylphenol	10 U	20	10	1.7	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	17:57	SW3510C8270E

Project ID: Dow Salvage Yard 18001468
Job ID: 67798
Sample#: 67798-008
Sample ID: SY-OBMW13-110723
Matrix: Water
Sampled: 11/7/23 14:25

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
azobenzene	1.0 U	2.0	1.0	0.25	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	18:27	SW3510C8270E
N-nitrosodiphenylamine	1.0 U	2.0	1.0	0.26	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	18:27	SW3510C8270E
4-bromophenyl phenyl ether	1.0 U	2.0	1.0	0.23	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	18:27	SW3510C8270E
hexachlorobenzene	1.0 U	2.0	1.0	0.25	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	18:27	SW3510C8270E
pentachlorophenol	5.0 U	10	5.0	2.6	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	17:57	SW3510C8270E
carbazole	1.0 U	2.0	1.0	0.32	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	18:27	SW3510C8270E
di-n-butylphthalate	1.0 U	5.0	1.0	0.54	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	18:27	SW3510C8270E
benzidine	25 U	30	25	20	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	18:27	SW3510C8270E
butyl benzyl phthalate	3.0 U	5.0	3.0	2.1	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	18:27	SW3510C8270E
3,3'-dichlorobenzidine	25 U	30	25	20	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	18:27	SW3510C8270E
bis(2-ethylhexyl)phthalate	3.0 U	5.0	3.0	2.4	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	18:27	SW3510C8270E
di-n-octyl phthalate	3.0 U	5.0	3.0	2.1	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	18:27	SW3510C8270E
Surrogate Recovery		Limits											
2-fluorophenol SUR	23	21-100			%	1	CL	11/9/23	8:50	17096	11/13/23	17:57	SW3510C8270E
phenol-D5 SUR	16	10-102			%	1	CL	11/9/23	8:50	17096	11/13/23	17:57	SW3510C8270E
2,4,6-tribromophenol SUR	61	10-123			%	1	CL	11/9/23	8:50	17096	11/13/23	17:57	SW3510C8270E
nitrobenzene-D5 SUR	57	35-114			%	1	CL	11/9/23	8:50	17096	11/13/23	18:27	SW3510C8270E
2-fluorobiphenyl SUR	57	43-116			%	1	CL	11/9/23	8:50	17096	11/13/23	18:27	SW3510C8270E
p-terphenyl-D14 SUR	69	33-141			%	1	CL	11/9/23	8:50	17096	11/13/23	18:27	SW3510C8270E

 # The percent recovery and/or RPD for the LCS/D was outside acceptance criteria.

Project ID: Dow Salvage Yard 18001468
Job ID: 67798
Sample#: 67798-009
Sample ID: SY-OBMW14-110723
Matrix: Water
Sampled: 11/7/23 14:00

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
N-nitrosodimethylamine	1.0 U#	2.0	1.0	0.21	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	19:27	SW3510C8270E
pyridine	1.0 U#	2.0	1.0	0.60	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	19:27	SW3510C8270E
aniline	1.0 U	2.0	1.0	0.39	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	19:27	SW3510C8270E
phenol	1.0 U#	2.0	1.0	0.34	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	18:57	SW3510C8270E
2-chlorophenol	1.0 U#	5.0	1.0	0.29	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	18:57	SW3510C8270E
bis(2-chloroethyl)ether	1.0 U	2.0	1.0	0.35	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	19:27	SW3510C8270E
1,3-dichlorobenzene	1.0 U#	2.0	1.0	0.41	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	19:27	SW3510C8270E
1,4-dichlorobenzene	1.0 U#	2.0	1.0	0.37	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	19:27	SW3510C8270E
1,2-dichlorobenzene	1.0 U#	2.0	1.0	0.36	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	19:27	SW3510C8270E
benzyl alcohol	1.0 U	2.0	1.0	0.84	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	19:27	SW3510C8270E
2-methylphenol	1.0 U#	5.0	1.0	0.39	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	18:57	SW3510C8270E
2,2'-oxybis(1-chloropropane)	1.0 U	2.0	1.0	0.44	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	19:27	SW3510C8270E
hexachloroethane	1.0 U#	2.0	1.0	0.53	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	19:27	SW3510C8270E
N-nitroso-di-N-propylamine	1.0 U	2.0	1.0	0.30	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	19:27	SW3510C8270E
4-methylphenol	1.5 U#	2.0	1.5	1.3	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	18:57	SW3510C8270E
nitrobenzene	1.0 U	2.0	1.0	0.41	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	19:27	SW3510C8270E
isophorone	1.0 U	5.0	1.0	0.32	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	19:27	SW3510C8270E
2-nitrophenol	1.0 U#	2.0	1.0	0.21	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	18:57	SW3510C8270E
2,4-dimethylphenol	1.0 U	5.0	1.0	0.44	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	18:57	SW3510C8270E
bis(2-chloroethoxy)methane	1.0 U	5.0	1.0	0.26	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	19:27	SW3510C8270E
2,4-dichlorophenol	1.0 U#	5.0	1.0	0.19	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	18:57	SW3510C8270E
1,2,4-trichlorobenzene	1.0 U	5.0	1.0	0.34	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	19:27	SW3510C8270E
benzoic acid	45 U#	50	45	20	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	18:57	SW3510C8270E
4-chloroaniline	1.0 U	2.0	1.0	0.41	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	19:27	SW3510C8270E
hexachlorobutadiene	1.0 U#	2.0	1.0	0.57	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	19:27	SW3510C8270E
4-chloro-3-methylphenol	1.0 U#	2.0	1.0	0.42	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	18:57	SW3510C8270E
hexachlorocyclopentadiene	4.0 U#	10	4.0	1.6	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	19:27	SW3510C8270E
2,4,6-trichlorophenol	1.0 U#	2.0	1.0	0.33	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	18:57	SW3510C8270E
2,4,5-trichlorophenol	1.0 U#	2.0	1.0	0.28	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	18:57	SW3510C8270E
2-chloronaphthalene	1.0 U	5.0	1.0	0.34	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	19:27	SW3510C8270E
2-nitroaniline	1.0 U	2.0	1.0	0.72	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	19:27	SW3510C8270E
dimethylphthalate	1.0 U#	5.0	1.0	0.41	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	19:27	SW3510C8270E
2,6-dinitrotoluene	1.0 U	5.0	1.0	0.42	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	19:27	SW3510C8270E
2,4-dinitrotoluene	1.0 U	5.0	1.0	0.52	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	19:27	SW3510C8270E
3-nitroaniline	1.5 U	2.0	1.5	1.0	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	19:27	SW3510C8270E
2,4-dinitrophenol	45 U#	50	45	3.5	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	18:57	SW3510C8270E
dibenzofuran	0.40 U	0.50	0.40	0.37	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	19:27	SW3510C8270E
4-nitrophenol	5.0 U#	10	5.0	1.6	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	18:57	SW3510C8270E
diethyl phthalate	1.0 U#	5.0	1.0	0.30	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	19:27	SW3510C8270E
4-chlorophenyl phenyl ether	1.0 U	5.0	1.0	0.35	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	19:27	SW3510C8270E
4-nitroaniline	3.0 U	5.0	3.0	1.0	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	19:27	SW3510C8270E
4,6-dinitro-2-methylphenol	10 U	20	10	1.7	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	18:57	SW3510C8270E

Project ID: Dow Salvage Yard 18001468
Job ID: 67798
Sample#: 67798-009
Sample ID: SY-OBMW14-110723
Matrix: Water
Sampled: 11/7/23 14:00

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
azobenzene	1.0 U	2.0	1.0	0.25	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	19:27	SW3510C8270E
N-nitrosodiphenylamine	1.0 U	2.0	1.0	0.26	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	19:27	SW3510C8270E
4-bromophenyl phenyl ether	1.0 U	2.0	1.0	0.23	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	19:27	SW3510C8270E
hexachlorobenzene	1.0 U	2.0	1.0	0.25	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	19:27	SW3510C8270E
pentachlorophenol	5.0 U	10	5.0	2.6	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	18:57	SW3510C8270E
carbazole	1.0 U	2.0	1.0	0.32	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	19:27	SW3510C8270E
di-n-butylphthalate	1.0 U	5.0	1.0	0.54	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	19:27	SW3510C8270E
benzidine	25 U	30	25	20	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	19:27	SW3510C8270E
butyl benzyl phthalate	3.0 U	5.0	3.0	2.1	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	19:27	SW3510C8270E
3,3'-dichlorobenzidine	25 U	30	25	20	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	19:27	SW3510C8270E
bis(2-ethylhexyl)phthalate	3.0 U	5.0	3.0	2.4	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	19:27	SW3510C8270E
di-n-octyl phthalate	3.0 U	5.0	3.0	2.1	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	19:27	SW3510C8270E
Surrogate Recovery		Limits											
2-fluorophenol SUR	22	21-100			%	1	CL	11/9/23	8:50	17096	11/13/23	18:57	SW3510C8270E
phenol-D5 SUR	16	10-102			%	1	CL	11/9/23	8:50	17096	11/13/23	18:57	SW3510C8270E
2,4,6-tribromophenol SUR	55	10-123			%	1	CL	11/9/23	8:50	17096	11/13/23	18:57	SW3510C8270E
nitrobenzene-D5 SUR	58	35-114			%	1	CL	11/9/23	8:50	17096	11/13/23	19:27	SW3510C8270E
2-fluorobiphenyl SUR	56	43-116			%	1	CL	11/9/23	8:50	17096	11/13/23	19:27	SW3510C8270E
p-terphenyl-D14 SUR	75	33-141			%	1	CL	11/9/23	8:50	17096	11/13/23	19:27	SW3510C8270E

 # The percent recovery and/or RPD for the LCS/D was outside acceptance criteria.

Project ID: Dow Salvage Yard 18001468
Job ID: 67798
Sample#: 67798-010
Sample ID: SY-BRMW2-252.5-262.5-110723
Matrix: Water
Sampled: 11/7/23 15:35

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
N-nitrosodimethylamine	1.0 U#	2.0	1.0	0.21	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	20:26	SW3510C8270E
pyridine	1.0 U#	2.0	1.0	0.60	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	20:26	SW3510C8270E
aniline	1.0 U	2.0	1.0	0.39	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	20:26	SW3510C8270E
phenol	1.0 U#	2.0	1.0	0.34	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	19:56	SW3510C8270E
2-chlorophenol	1.0 U#	5.0	1.0	0.29	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	19:56	SW3510C8270E
bis(2-chloroethyl)ether	1.0 U	2.0	1.0	0.35	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	20:26	SW3510C8270E
1,3-dichlorobenzene	1.0 U#	2.0	1.0	0.41	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	20:26	SW3510C8270E
1,4-dichlorobenzene	1.0 U#	2.0	1.0	0.37	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	20:26	SW3510C8270E
1,2-dichlorobenzene	1.0 U#	2.0	1.0	0.36	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	20:26	SW3510C8270E
benzyl alcohol	1.0 U	2.0	1.0	0.84	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	20:26	SW3510C8270E
2-methylphenol	1.0 U#	5.0	1.0	0.39	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	19:56	SW3510C8270E
2,2'-oxybis(1-chloropropane)	1.0 U	2.0	1.0	0.44	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	20:26	SW3510C8270E
hexachloroethane	1.0 U#	2.0	1.0	0.53	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	20:26	SW3510C8270E
N-nitroso-di-N-propylamine	1.0 U	2.0	1.0	0.30	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	20:26	SW3510C8270E
4-methylphenol	1.5 U#	2.0	1.5	1.3	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	19:56	SW3510C8270E
nitrobenzene	1.0 U	2.0	1.0	0.41	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	20:26	SW3510C8270E
isophorone	1.0 U	5.0	1.0	0.32	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	20:26	SW3510C8270E
2-nitrophenol	1.0 U#	2.0	1.0	0.21	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	19:56	SW3510C8270E
2,4-dimethylphenol	1.0 U	5.0	1.0	0.44	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	19:56	SW3510C8270E
bis(2-chloroethoxy)methane	1.0 U	5.0	1.0	0.26	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	20:26	SW3510C8270E
2,4-dichlorophenol	1.0 U#	5.0	1.0	0.19	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	19:56	SW3510C8270E
1,2,4-trichlorobenzene	1.0 U	5.0	1.0	0.34	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	20:26	SW3510C8270E
benzoic acid	45 U#	50	45	20	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	19:56	SW3510C8270E
4-chloroaniline	1.0 U	2.0	1.0	0.41	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	20:26	SW3510C8270E
hexachlorobutadiene	1.0 U#	2.0	1.0	0.57	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	20:26	SW3510C8270E
4-chloro-3-methylphenol	1.0 U#	2.0	1.0	0.42	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	19:56	SW3510C8270E
hexachlorocyclopentadiene	4.0 U#	10	4.0	1.6	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	20:26	SW3510C8270E
2,4,6-trichlorophenol	1.0 U#	2.0	1.0	0.33	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	19:56	SW3510C8270E
2,4,5-trichlorophenol	1.0 U#	2.0	1.0	0.28	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	19:56	SW3510C8270E
2-chloronaphthalene	1.0 U	5.0	1.0	0.34	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	20:26	SW3510C8270E
2-nitroaniline	1.0 U	2.0	1.0	0.72	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	20:26	SW3510C8270E
dimethylphthalate	1.0 U#	5.0	1.0	0.41	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	20:26	SW3510C8270E
2,6-dinitrotoluene	1.0 U	5.0	1.0	0.42	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	20:26	SW3510C8270E
2,4-dinitrotoluene	1.0 U	5.0	1.0	0.52	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	20:26	SW3510C8270E
3-nitroaniline	1.5 U	2.0	1.5	1.0	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	20:26	SW3510C8270E
2,4-dinitrophenol	45 U#	50	45	3.5	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	19:56	SW3510C8270E
dibenzofuran	0.40 U	0.50	0.40	0.37	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	20:26	SW3510C8270E
4-nitrophenol	5.0 U#	10	5.0	1.6	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	19:56	SW3510C8270E
diethyl phthalate	1.0 U#	5.0	1.0	0.30	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	20:26	SW3510C8270E
4-chlorophenyl phenyl ether	1.0 U	5.0	1.0	0.35	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	20:26	SW3510C8270E
4-nitroaniline	3.0 U	5.0	3.0	1.0	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	20:26	SW3510C8270E
4,6-dinitro-2-methylphenol	10 U	20	10	1.7	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	19:56	SW3510C8270E

Project ID: Dow Salvage Yard 18001468
Job ID: 67798
Sample#: 67798-010
Sample ID: SY-BRMW2-252.5-262.5-110723
Matrix: Water
Sampled: 11/7/23 15:35

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
azobenzene	1.0 U	2.0	1.0	0.25	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	20:26	SW3510C8270E
N-nitrosodiphenylamine	1.0 U	2.0	1.0	0.26	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	20:26	SW3510C8270E
4-bromophenyl phenyl ether	1.0 U	2.0	1.0	0.23	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	20:26	SW3510C8270E
hexachlorobenzene	1.0 U	2.0	1.0	0.25	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	20:26	SW3510C8270E
pentachlorophenol	5.0 U	10	5.0	2.6	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	19:56	SW3510C8270E
carbazole	1.0 U	2.0	1.0	0.32	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	20:26	SW3510C8270E
di-n-butylphthalate	1.0 U	5.0	1.0	0.54	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	20:26	SW3510C8270E
benzidine	25 U	30	25	20	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	20:26	SW3510C8270E
butyl benzyl phthalate	3.0 U	5.0	3.0	2.1	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	20:26	SW3510C8270E
3,3'-dichlorobenzidine	25 U	30	25	20	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	20:26	SW3510C8270E
bis(2-ethylhexyl)phthalate	3.0 U	5.0	3.0	2.4	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	20:26	SW3510C8270E
di-n-octyl phthalate	3.0 U	5.0	3.0	2.1	ug/L	1	CL	11/9/23	8:50	17096	11/13/23	20:26	SW3510C8270E
Surrogate Recovery		Limits											
2-fluorophenol SUR	28	21-100			%	1	CL	11/9/23	8:50	17096	11/13/23	19:56	SW3510C8270E
phenol-D5 SUR	22	10-102			%	1	CL	11/9/23	8:50	17096	11/13/23	19:56	SW3510C8270E
2,4,6-tribromophenol SUR	67	10-123			%	1	CL	11/9/23	8:50	17096	11/13/23	19:56	SW3510C8270E
nitrobenzene-D5 SUR	55	35-114			%	1	CL	11/9/23	8:50	17096	11/13/23	20:26	SW3510C8270E
2-fluorobiphenyl SUR	53	43-116			%	1	CL	11/9/23	8:50	17096	11/13/23	20:26	SW3510C8270E
p-terphenyl-D14 SUR	65	33-141			%	1	CL	11/9/23	8:50	17096	11/13/23	20:26	SW3510C8270E

 # The percent recovery and/or RPD for the LCS/D was outside acceptance criteria.

Project ID: Dow Salvage Yard 18001468
Job ID: 67798

Sample#: 67798-001
Sample ID: SY-OBMW12-110723
Matrix: Water
Sampled: 11/7/23 10:07

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
PCB-1016	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	11/27/23	8:41	17179	11/28/23	13:25	SW3510C8082A
PCB-1221	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	11/27/23	8:41	17179	11/28/23	13:25	SW3510C8082A
PCB-1232	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	11/27/23	8:41	17179	11/28/23	13:25	SW3510C8082A
PCB-1242	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	11/27/23	8:41	17179	11/28/23	13:25	SW3510C8082A
PCB-1248	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	11/27/23	8:41	17179	11/28/23	13:25	SW3510C8082A
PCB-1254	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	11/27/23	8:41	17179	11/28/23	13:25	SW3510C8082A
PCB-1260	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	11/27/23	8:41	17179	11/28/23	13:25	SW3510C8082A
Surrogate Recovery		Limits											
tetrachloro-m-xylene SUR	60	30-150			%	1	DBV	11/27/23	8:41	17179	11/28/23	13:25	SW3510C8082A
decachlorobiphenyl SUR	52	30-150			%	1	DBV	11/27/23	8:41	17179	11/28/23	13:25	SW3510C8082A

Sample#: 67798-002
Sample ID: SY-OBMW6-110723
Matrix: Water
Sampled: 11/7/23 10:30

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
PCB-1016	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	11/27/23	8:41	17179	11/28/23	14:04	SW3510C8082A
PCB-1221	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	11/27/23	8:41	17179	11/28/23	14:04	SW3510C8082A
PCB-1232	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	11/27/23	8:41	17179	11/28/23	14:04	SW3510C8082A
PCB-1242	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	11/27/23	8:41	17179	11/28/23	14:04	SW3510C8082A
PCB-1248	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	11/27/23	8:41	17179	11/28/23	14:04	SW3510C8082A
PCB-1254	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	11/27/23	8:41	17179	11/28/23	14:04	SW3510C8082A
PCB-1260	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	11/27/23	8:41	17179	11/28/23	14:04	SW3510C8082A
Surrogate Recovery		Limits											
tetrachloro-m-xylene SUR	68	30-150			%	1	DBV	11/27/23	8:41	17179	11/28/23	14:04	SW3510C8082A
decachlorobiphenyl SUR	73	30-150			%	1	DBV	11/27/23	8:41	17179	11/28/23	14:04	SW3510C8082A

Project ID: Dow Salvage Yard 18001468
Job ID: 67798

Sample#: 67798-003
Sample ID: SY-OBMW4R-110723
Matrix: Water
Sampled: 11/7/23 11:05

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
PCB-1016	0.062 U	0.10	0.062	0.052	ug/L	1	DBV	11/27/23	8:41	17179	11/28/23	14:17	SW3510C8082A
PCB-1221	0.062 U	0.10	0.062	0.052	ug/L	1	DBV	11/27/23	8:41	17179	11/28/23	14:17	SW3510C8082A
PCB-1232	0.062 U	0.10	0.062	0.052	ug/L	1	DBV	11/27/23	8:41	17179	11/28/23	14:17	SW3510C8082A
PCB-1242	0.062 U	0.10	0.062	0.052	ug/L	1	DBV	11/27/23	8:41	17179	11/28/23	14:17	SW3510C8082A
PCB-1248	0.062 U	0.10	0.062	0.052	ug/L	1	DBV	11/27/23	8:41	17179	11/28/23	14:17	SW3510C8082A
PCB-1254	0.062 U	0.10	0.062	0.052	ug/L	1	DBV	11/27/23	8:41	17179	11/28/23	14:17	SW3510C8082A
PCB-1260	0.062 U	0.10	0.062	0.052	ug/L	1	DBV	11/27/23	8:41	17179	11/28/23	14:17	SW3510C8082A
Surrogate Recovery		Limits											
tetrachloro-m-xylene SUR	3 *	30-150			%	1	DBV	11/27/23	8:41	17179	11/28/23	14:17	SW3510C8082A
decachlorobiphenyl SUR	3 *	30-150			%	1	DBV	11/27/23	8:41	17179	11/28/23	14:17	SW3510C8082A

**** This surrogate showed recovery outside the acceptance limits due to part of sample being lost at extraction. No additional sample remained for re-analysis. Results are an estimate.***

Sample#: 67798-004
Sample ID: SY-BRMW2-60.5-70.5-110723
Matrix: Water
Sampled: 11/7/23 12:25

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
PCB-1016	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	11/27/23	8:41	17179	11/28/23	14:30	SW3510C8082A
PCB-1221	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	11/27/23	8:41	17179	11/28/23	14:30	SW3510C8082A
PCB-1232	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	11/27/23	8:41	17179	11/28/23	14:30	SW3510C8082A
PCB-1242	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	11/27/23	8:41	17179	11/28/23	14:30	SW3510C8082A
PCB-1248	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	11/27/23	8:41	17179	11/28/23	14:30	SW3510C8082A
PCB-1254	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	11/27/23	8:41	17179	11/28/23	14:30	SW3510C8082A
PCB-1260	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	11/27/23	8:41	17179	11/28/23	14:30	SW3510C8082A
Surrogate Recovery		Limits											
tetrachloro-m-xylene SUR	69	30-150			%	1	DBV	11/27/23	8:41	17179	11/28/23	14:30	SW3510C8082A
decachlorobiphenyl SUR	64	30-150			%	1	DBV	11/27/23	8:41	17179	11/28/23	14:30	SW3510C8082A

Project ID: Dow Salvage Yard 18001468
Job ID: 67798

Sample#: 67798-005
Sample ID: SY-OBMW15-110723
Matrix: Water
Sampled: 11/7/23 12:50

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Prep Analyst	Prep Date	Prep Time	Analysis Batch	Analysis Date	Analysis Time	Reference
PCB-1016	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	11/27/23	8:41	17179	11/28/23	14:43	SW3510C8082A
PCB-1221	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	11/27/23	8:41	17179	11/28/23	14:43	SW3510C8082A
PCB-1232	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	11/27/23	8:41	17179	11/28/23	14:43	SW3510C8082A
PCB-1242	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	11/27/23	8:41	17179	11/28/23	14:43	SW3510C8082A
PCB-1248	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	11/27/23	8:41	17179	11/28/23	14:43	SW3510C8082A
PCB-1254	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	11/27/23	8:41	17179	11/28/23	14:43	SW3510C8082A
PCB-1260	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	11/27/23	8:41	17179	11/28/23	14:43	SW3510C8082A
Surrogate Recovery		Limits											
tetrachloro-m-xylene SUR	76	30-150			%	1	DBV	11/27/23	8:41	17179	11/28/23	14:43	SW3510C8082A
decachlorobiphenyl SUR	70	30-150			%	1	DBV	11/27/23	8:41	17179	11/28/23	14:43	SW3510C8082A

Sample#: 67798-006
Sample ID: SY-OBMW5-110723
Matrix: Water
Sampled: 11/7/23 13:25

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Prep Analyst	Prep Date	Prep Time	Analysis Batch	Analysis Date	Analysis Time	Reference
PCB-1016	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	11/27/23	8:41	17179	11/28/23	14:56	SW3510C8082A
PCB-1221	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	11/27/23	8:41	17179	11/28/23	14:56	SW3510C8082A
PCB-1232	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	11/27/23	8:41	17179	11/28/23	14:56	SW3510C8082A
PCB-1242	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	11/27/23	8:41	17179	11/28/23	14:56	SW3510C8082A
PCB-1248	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	11/27/23	8:41	17179	11/28/23	14:56	SW3510C8082A
PCB-1254	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	11/27/23	8:41	17179	11/28/23	14:56	SW3510C8082A
PCB-1260	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	11/27/23	8:41	17179	11/28/23	14:56	SW3510C8082A
Surrogate Recovery		Limits											
tetrachloro-m-xylene SUR	69	30-150			%	1	DBV	11/27/23	8:41	17179	11/28/23	14:56	SW3510C8082A
decachlorobiphenyl SUR	55	30-150			%	1	DBV	11/27/23	8:41	17179	11/28/23	14:56	SW3510C8082A

Project ID: Dow Salvage Yard 18001468
Job ID: 67798

Sample#: 67798-007
Sample ID: SY-BRMW2-80.5-95.5-110723
Matrix: Water
Sampled: 11/7/23 13:40

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
PCB-1016	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	11/27/23	8:41	17179	11/28/23	15:09	SW3510C8082A
PCB-1221	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	11/27/23	8:41	17179	11/28/23	15:09	SW3510C8082A
PCB-1232	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	11/27/23	8:41	17179	11/28/23	15:09	SW3510C8082A
PCB-1242	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	11/27/23	8:41	17179	11/28/23	15:09	SW3510C8082A
PCB-1248	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	11/27/23	8:41	17179	11/28/23	15:09	SW3510C8082A
PCB-1254	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	11/27/23	8:41	17179	11/28/23	15:09	SW3510C8082A
PCB-1260	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	11/27/23	8:41	17179	11/28/23	15:09	SW3510C8082A
Surrogate Recovery		Limits											
tetrachloro-m-xylene SUR	56	30-150			%	1	DBV	11/27/23	8:41	17179	11/28/23	15:09	SW3510C8082A
decachlorobiphenyl SUR	48	30-150			%	1	DBV	11/27/23	8:41	17179	11/28/23	15:09	SW3510C8082A

Sample#: 67798-008
Sample ID: SY-OBMW13-110723
Matrix: Water
Sampled: 11/7/23 14:25

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
PCB-1016	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	11/27/23	8:41	17179	11/28/23	15:48	SW3510C8082A
PCB-1221	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	11/27/23	8:41	17179	11/28/23	15:48	SW3510C8082A
PCB-1232	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	11/27/23	8:41	17179	11/28/23	15:48	SW3510C8082A
PCB-1242	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	11/27/23	8:41	17179	11/28/23	15:48	SW3510C8082A
PCB-1248	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	11/27/23	8:41	17179	11/28/23	15:48	SW3510C8082A
PCB-1254	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	11/27/23	8:41	17179	11/28/23	15:48	SW3510C8082A
PCB-1260	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	11/27/23	8:41	17179	11/28/23	15:48	SW3510C8082A
Surrogate Recovery		Limits											
tetrachloro-m-xylene SUR	48	30-150			%	1	DBV	11/27/23	8:41	17179	11/28/23	15:48	SW3510C8082A
decachlorobiphenyl SUR	43	30-150			%	1	DBV	11/27/23	8:41	17179	11/28/23	15:48	SW3510C8082A

Project ID: Dow Salvage Yard 18001468
Job ID: 67798

Sample#: 67798-009
Sample ID: SY-OBMW14-110723
Matrix: Water
Sampled: 11/7/23 14:00

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Prep Analyst	Prep Date	Prep Time	Analysis Batch	Analysis Date	Analysis Time	Reference
PCB-1016	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	11/27/23	8:41	17179	11/28/23	16:01	SW3510C8082A
PCB-1221	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	11/27/23	8:41	17179	11/28/23	16:01	SW3510C8082A
PCB-1232	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	11/27/23	8:41	17179	11/28/23	16:01	SW3510C8082A
PCB-1242	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	11/27/23	8:41	17179	11/28/23	16:01	SW3510C8082A
PCB-1248	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	11/27/23	8:41	17179	11/28/23	16:01	SW3510C8082A
PCB-1254	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	11/27/23	8:41	17179	11/28/23	16:01	SW3510C8082A
PCB-1260	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	11/27/23	8:41	17179	11/28/23	16:01	SW3510C8082A
Surrogate Recovery		Limits											
tetrachloro-m-xylene SUR	60	30-150			%	1	DBV	11/27/23	8:41	17179	11/28/23	16:01	SW3510C8082A
decachlorobiphenyl SUR	56	30-150			%	1	DBV	11/27/23	8:41	17179	11/28/23	16:01	SW3510C8082A

Sample#: 67798-010
Sample ID: SY-BRMW2-252.5-262.5-110723
Matrix: Water
Sampled: 11/7/23 15:35

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Prep Analyst	Prep Date	Prep Time	Analysis Batch	Analysis Date	Analysis Time	Reference
PCB-1016	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	11/27/23	8:41	17179	11/28/23	16:40	SW3510C8082A
PCB-1221	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	11/27/23	8:41	17179	11/28/23	16:40	SW3510C8082A
PCB-1232	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	11/27/23	8:41	17179	11/28/23	16:40	SW3510C8082A
PCB-1242	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	11/27/23	8:41	17179	11/28/23	16:40	SW3510C8082A
PCB-1248	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	11/27/23	8:41	17179	11/28/23	16:40	SW3510C8082A
PCB-1254	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	11/27/23	8:41	17179	11/28/23	16:40	SW3510C8082A
PCB-1260	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	11/27/23	8:41	17179	11/28/23	16:40	SW3510C8082A
Surrogate Recovery		Limits											
tetrachloro-m-xylene SUR	65	30-150			%	1	DBV	11/27/23	8:41	17179	11/28/23	16:40	SW3510C8082A
decachlorobiphenyl SUR	71	30-150			%	1	DBV	11/27/23	8:41	17179	11/28/23	16:40	SW3510C8082A

Project ID: Dow Salvage Yard 18001468
Job ID: 67798
Sample#: 67798-001
Sample ID: SY-OBMW12-110723
Matrix: Water
Sampled: 11/7/23 10:07

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
naphthalene	0.70 U#M	1.0	0.70	0.63	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	18:22	MA EPH
2-methylnaphthalene	0.70 UJM	1.0	0.70	0.60	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	18:22	MA EPH
phenanthrene	0.50 U	1.0	0.50	0.15	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	18:22	MA EPH
acenaphthene	0.50 U	1.0	0.50	0.22	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	18:22	MA EPH
acenaphthylene	0.50 U	1.0	0.50	0.18	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	18:22	MA EPH
fluorene	0.50 U	1.0	0.50	0.15	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	18:22	MA EPH
anthracene	0.50 U	1.0	0.50	0.18	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	18:22	MA EPH
fluoranthene	0.50 U	1.0	0.50	0.18	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	18:22	MA EPH
pyrene	0.50 U	1.0	0.50	0.23	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	18:22	MA EPH
benzo(a)anthracene	0.50 U	1.0	0.50	0.20	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	18:22	MA EPH
chrysene	0.50 U	1.0	0.50	0.16	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	18:22	MA EPH
benzo(b)fluoranthene	0.50 U	1.0	0.50	0.35	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	18:22	MA EPH
benzo(k)fluoranthene	0.50 U	1.0	0.50	0.41	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	18:22	MA EPH
benzo(a)pyrene	0.70 U	1.0	0.70	0.52	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	18:22	MA EPH
indeno(1,2,3-cd)pyrene	0.50 U#	1.0	0.50	0.24	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	18:22	MA EPH
dibenzo(a,h)anthracene	0.50 U#	1.0	0.50	0.26	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	18:22	MA EPH
benzo(g,h,i)perylene	0.50 U	1.0	0.50	0.22	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	18:22	MA EPH
Unadjusted C11-C22 Aromatics	99 J	100	85	60	ug/L	1	DBV	11/13/23	7:59	17110	12/7/23	17:07	MA EPH
C9-C18 Aliphatics	95 UJM	100	95	94	ug/L	1	DBV	11/13/23	7:59	17110	12/7/23	17:07	MA EPH
C19-C36 Aliphatics	97 U	100	97	96	ug/L	1	DBV	11/13/23	7:59	17110	12/7/23	17:07	MA EPH
C11-C22 Aromatics	99 J	100	85	54	ug/L	1	DBV	11/13/23	7:59	17110	12/7/23	17:07	MA EPH
Surrogate Recovery		Limits											
1-chloro-octadecane SUR	49	40-140			%	1	DBV	11/13/23	7:59	17110	12/7/23	17:07	MA EPH
o-terphenyl SUR	57	40-140			%	1	DBV	11/13/23	7:59	17110	12/7/23	17:07	MA EPH
2-fluorobiphenyl SUR	74	40-140			%	1	DBV	11/13/23	7:59	17110	12/7/23	17:07	MA EPH
2-bromonaphthalene SUR	76	40-140			%	1	DBV	11/13/23	7:59	17110	12/7/23	17:07	MA EPH

 # The percent recovery and/or RPD for the LCS/D was outside acceptance criteria.
M = The percent recovery and/or RPD for the MS/D was outside acceptance criteria.

Project ID: Dow Salvage Yard 18001468
Job ID: 67798
Sample#: 67798-002
Sample ID: SY-OBMW6-110723
Matrix: Water
Sampled: 11/7/23 10:30

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
naphthalene	0.70 U#	1.0	0.70	0.63	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	18:52	MA EPH
2-methylnaphthalene	0.70 U#	1.0	0.70	0.60	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	18:52	MA EPH
phenanthrene	0.50 U	1.0	0.50	0.15	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	18:52	MA EPH
acenaphthene	0.50 U	1.0	0.50	0.22	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	18:52	MA EPH
acenaphthylene	0.50 U	1.0	0.50	0.18	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	18:52	MA EPH
fluorene	0.50 U	1.0	0.50	0.15	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	18:52	MA EPH
anthracene	0.50 U	1.0	0.50	0.18	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	18:52	MA EPH
fluoranthene	0.50 U	1.0	0.50	0.18	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	18:52	MA EPH
pyrene	0.50 U	1.0	0.50	0.23	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	18:52	MA EPH
benzo(a)anthracene	0.50 U	1.0	0.50	0.20	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	18:52	MA EPH
chrysene	0.50 U	1.0	0.50	0.16	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	18:52	MA EPH
benzo(b)fluoranthene	0.50 U	1.0	0.50	0.35	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	18:52	MA EPH
benzo(k)fluoranthene	0.50 U	1.0	0.50	0.41	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	18:52	MA EPH
benzo(a)pyrene	0.70 U	1.0	0.70	0.52	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	18:52	MA EPH
indeno(1,2,3-cd)pyrene	0.50 U#	1.0	0.50	0.24	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	18:52	MA EPH
dibenzo(a,h)anthracene	0.50 U#	1.0	0.50	0.26	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	18:52	MA EPH
benzo(g,h,i)perylene	0.50 U	1.0	0.50	0.22	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	18:52	MA EPH
Unadjusted C11-C22 Aromatics	79 J	100	85	60	ug/L	1	DBV	11/13/23	7:59	17110	12/7/23	18:49	MA EPH
C9-C18 Aliphatics	95 U#	100	95	94	ug/L	1	DBV	11/13/23	7:59	17110	12/7/23	18:49	MA EPH
C19-C36 Aliphatics	97 U	100	97	96	ug/L	1	DBV	11/13/23	7:59	17110	12/7/23	18:49	MA EPH
C11-C22 Aromatics	79 J	100	85	54	ug/L	1	DBV	11/13/23	7:59	17110	12/7/23	18:49	MA EPH
Surrogate Recovery		Limits											
1-chloro-octadecane SUR	55	40-140			%	1	DBV	11/13/23	7:59	17110	12/7/23	18:49	MA EPH
o-terphenyl SUR	55	40-140			%	1	DBV	11/13/23	7:59	17110	12/7/23	18:49	MA EPH
2-fluorobiphenyl SUR	75	40-140			%	1	DBV	11/13/23	7:59	17110	12/7/23	18:49	MA EPH
2-bromonaphthalene SUR	77	40-140			%	1	DBV	11/13/23	7:59	17110	12/7/23	18:49	MA EPH

 # The percent recovery and/or RPD for the LCS/D was outside acceptance criteria.

Project ID: Dow Salvage Yard 18001468
Job ID: 67798
Sample#: 67798-003
Sample ID: SY-OBMW4R-110723
Matrix: Water
Sampled: 11/7/23 11:05

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
naphthalene	0.70 U#	1.0	0.70	0.63	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	19:22	MA EPH
2-methylnaphthalene	0.70 U#	1.0	0.70	0.60	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	19:22	MA EPH
phenanthrene	0.50 U	1.0	0.50	0.15	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	19:22	MA EPH
acenaphthene	0.50 U	1.0	0.50	0.22	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	19:22	MA EPH
acenaphthylene	0.50 U	1.0	0.50	0.18	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	19:22	MA EPH
fluorene	0.50 U	1.0	0.50	0.15	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	19:22	MA EPH
anthracene	0.50 U	1.0	0.50	0.18	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	19:22	MA EPH
fluoranthene	0.50 U	1.0	0.50	0.18	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	19:22	MA EPH
pyrene	0.50 U	1.0	0.50	0.23	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	19:22	MA EPH
benzo(a)anthracene	0.50 U	1.0	0.50	0.20	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	19:22	MA EPH
chrysene	0.50 U	1.0	0.50	0.16	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	19:22	MA EPH
benzo(b)fluoranthene	0.50 U	1.0	0.50	0.35	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	19:22	MA EPH
benzo(k)fluoranthene	0.50 U	1.0	0.50	0.41	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	19:22	MA EPH
benzo(a)pyrene	0.70 U	1.0	0.70	0.52	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	19:22	MA EPH
indeno(1,2,3-cd)pyrene	0.50 U#	1.0	0.50	0.24	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	19:22	MA EPH
dibenzo(a,h)anthracene	0.50 U#	1.0	0.50	0.26	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	19:22	MA EPH
benzo(g,h,i)perylene	0.50 U	1.0	0.50	0.22	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	19:22	MA EPH
Unadjusted C11-C22 Aromatics	71 J	100	85	60	ug/L	1	DBV	11/13/23	7:59	17110	12/7/23	19:22	MA EPH
C9-C18 Aliphatics	95 U#	100	95	94	ug/L	1	DBV	11/13/23	7:59	17110	12/7/23	19:22	MA EPH
C19-C36 Aliphatics	97 U	100	97	96	ug/L	1	DBV	11/13/23	7:59	17110	12/7/23	19:22	MA EPH
C11-C22 Aromatics	71 J	100	85	54	ug/L	1	DBV	11/13/23	7:59	17110	12/7/23	19:22	MA EPH
Surrogate Recovery		Limits											
1-chloro-octadecane SUR	55	40-140			%	1	DBV	11/13/23	7:59	17110	12/7/23	19:22	MA EPH
o-terphenyl SUR	58	40-140			%	1	DBV	11/13/23	7:59	17110	12/7/23	19:22	MA EPH
2-fluorobiphenyl SUR	76	40-140			%	1	DBV	11/13/23	7:59	17110	12/7/23	19:22	MA EPH
2-bromonaphthalene SUR	79	40-140			%	1	DBV	11/13/23	7:59	17110	12/7/23	19:22	MA EPH

 # The percent recovery and/or RPD for the LCS/D was outside acceptance criteria.

Project ID: Dow Salvage Yard 18001468
Job ID: 67798
Sample#: 67798-004
Sample ID: SY-BRMW2-60.5-70.5-110723
Matrix: Water
Sampled: 11/7/23 12:25

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
naphthalene	0.70 U#	1.0	0.70	0.63	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	19:51	MA EPH
2-methylnaphthalene	0.70 U#	1.0	0.70	0.60	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	19:51	MA EPH
phenanthrene	0.50 U	1.0	0.50	0.15	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	19:51	MA EPH
acenaphthene	0.50 U	1.0	0.50	0.22	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	19:51	MA EPH
acenaphthylene	0.50 U	1.0	0.50	0.18	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	19:51	MA EPH
fluorene	0.50 U	1.0	0.50	0.15	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	19:51	MA EPH
anthracene	0.50 U	1.0	0.50	0.18	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	19:51	MA EPH
fluoranthene	0.50 U	1.0	0.50	0.18	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	19:51	MA EPH
pyrene	0.50 U	1.0	0.50	0.23	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	19:51	MA EPH
benzo(a)anthracene	0.50 U	1.0	0.50	0.20	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	19:51	MA EPH
chrysene	0.50 U	1.0	0.50	0.16	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	19:51	MA EPH
benzo(b)fluoranthene	0.50 U	1.0	0.50	0.35	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	19:51	MA EPH
benzo(k)fluoranthene	0.50 U	1.0	0.50	0.41	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	19:51	MA EPH
benzo(a)pyrene	0.70 U	1.0	0.70	0.52	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	19:51	MA EPH
indeno(1,2,3-cd)pyrene	0.50 U#	1.0	0.50	0.24	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	19:51	MA EPH
dibenzo(a,h)anthracene	0.50 U#	1.0	0.50	0.26	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	19:51	MA EPH
benzo(g,h,i)perylene	0.50 U	1.0	0.50	0.22	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	19:51	MA EPH
Unadjusted C11-C22 Aromatics	66 J	100	85	60	ug/L	1	DBV	11/13/23	7:59	17110	12/7/23	19:56	MA EPH
C9-C18 Aliphatics	95 U#	100	95	94	ug/L	1	DBV	11/13/23	7:59	17110	12/7/23	19:56	MA EPH
C19-C36 Aliphatics	97 U	100	97	96	ug/L	1	DBV	11/13/23	7:59	17110	12/7/23	19:56	MA EPH
C11-C22 Aromatics	66 J	100	85	54	ug/L	1	DBV	11/13/23	7:59	17110	12/7/23	19:56	MA EPH
Surrogate Recovery		Limits											
1-chloro-octadecane SUR	49	40-140			%	1	DBV	11/13/23	7:59	17110	12/7/23	19:56	MA EPH
o-terphenyl SUR	57	40-140			%	1	DBV	11/13/23	7:59	17110	12/7/23	19:56	MA EPH
2-fluorobiphenyl SUR	74	40-140			%	1	DBV	11/13/23	7:59	17110	12/7/23	19:56	MA EPH
2-bromonaphthalene SUR	75	40-140			%	1	DBV	11/13/23	7:59	17110	12/7/23	19:56	MA EPH

 # The percent recovery and/or RPD for the LCS/D was outside acceptance criteria.

Project ID: Dow Salvage Yard 18001468
Job ID: 67798
Sample#: 67798-005
Sample ID: SY-OBMW15-110723
Matrix: Water
Sampled: 11/7/23 12:50

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
naphthalene	0.70 U#	1.0	0.70	0.63	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	20:22	MA EPH
2-methylnaphthalene	0.70 U#	1.0	0.70	0.60	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	20:22	MA EPH
phenanthrene	0.50 U	1.0	0.50	0.15	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	20:22	MA EPH
acenaphthene	0.50 U	1.0	0.50	0.22	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	20:22	MA EPH
acenaphthylene	0.50 U	1.0	0.50	0.18	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	20:22	MA EPH
fluorene	0.50 U	1.0	0.50	0.15	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	20:22	MA EPH
anthracene	0.50 U	1.0	0.50	0.18	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	20:22	MA EPH
fluoranthene	0.23 J	1.0	0.50	0.18	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	20:22	MA EPH
pyrene	0.29 J	1.0	0.50	0.23	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	20:22	MA EPH
benzo(a)anthracene	0.50 U	1.0	0.50	0.20	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	20:22	MA EPH
chrysene	0.50 U	1.0	0.50	0.16	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	20:22	MA EPH
benzo(b)fluoranthene	0.50 U	1.0	0.50	0.35	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	20:22	MA EPH
benzo(k)fluoranthene	0.50 U	1.0	0.50	0.41	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	20:22	MA EPH
benzo(a)pyrene	0.70 U	1.0	0.70	0.52	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	20:22	MA EPH
indeno(1,2,3-cd)pyrene	0.50 U#	1.0	0.50	0.24	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	20:22	MA EPH
dibenzo(a,h)anthracene	0.50 U#	1.0	0.50	0.26	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	20:22	MA EPH
benzo(g,h,i)perylene	0.24 J	1.0	0.50	0.22	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	20:22	MA EPH
Unadjusted C11-C22 Aromatics	64 J	100	85	60	ug/L	1	DBV	11/13/23	7:59	17110	12/7/23	20:31	MA EPH
C9-C18 Aliphatics	95 U#	100	95	94	ug/L	1	DBV	11/13/23	7:59	17110	12/7/23	20:31	MA EPH
C19-C36 Aliphatics	97 U	100	97	96	ug/L	1	DBV	11/13/23	7:59	17110	12/7/23	20:31	MA EPH
C11-C22 Aromatics	61 J	100	85	54	ug/L	1	DBV	11/13/23	7:59	17110	12/7/23	20:31	MA EPH
Surrogate Recovery		Limits											
1-chloro-octadecane SUR	48	40-140			%	1	DBV	11/13/23	7:59	17110	12/7/23	20:31	MA EPH
o-terphenyl SUR	51	40-140			%	1	DBV	11/13/23	7:59	17110	12/7/23	20:31	MA EPH
2-fluorobiphenyl SUR	75	40-140			%	1	DBV	11/13/23	7:59	17110	12/7/23	20:31	MA EPH
2-bromonaphthalene SUR	78	40-140			%	1	DBV	11/13/23	7:59	17110	12/7/23	20:31	MA EPH

 # The percent recovery and/or RPD for the LCS/D was outside acceptance criteria.

Project ID: Dow Salvage Yard 18001468
Job ID: 67798
Sample#: 67798-006
Sample ID: SY-OBMW5-110723
Matrix: Water
Sampled: 11/7/23 13:25

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
naphthalene	0.70 U#	1.0	0.70	0.63	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	20:52	MA EPH
2-methylnaphthalene	0.70 U#	1.0	0.70	0.60	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	20:52	MA EPH
phenanthrene	0.50 U	1.0	0.50	0.15	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	20:52	MA EPH
acenaphthene	0.50 U	1.0	0.50	0.22	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	20:52	MA EPH
acenaphthylene	0.50 U	1.0	0.50	0.18	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	20:52	MA EPH
fluorene	0.50 U	1.0	0.50	0.15	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	20:52	MA EPH
anthracene	0.50 U	1.0	0.50	0.18	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	20:52	MA EPH
fluoranthene	0.50 U	1.0	0.50	0.18	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	20:52	MA EPH
pyrene	0.50 U	1.0	0.50	0.23	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	20:52	MA EPH
benzo(a)anthracene	0.50 U	1.0	0.50	0.20	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	20:52	MA EPH
chrysene	0.50 U	1.0	0.50	0.16	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	20:52	MA EPH
benzo(b)fluoranthene	0.50 U	1.0	0.50	0.35	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	20:52	MA EPH
benzo(k)fluoranthene	0.50 U	1.0	0.50	0.41	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	20:52	MA EPH
benzo(a)pyrene	0.70 U	1.0	0.70	0.52	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	20:52	MA EPH
indeno(1,2,3-cd)pyrene	0.50 U#	1.0	0.50	0.24	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	20:52	MA EPH
dibenzo(a,h)anthracene	0.50 U#	1.0	0.50	0.26	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	20:52	MA EPH
benzo(g,h,i)perylene	0.50 U	1.0	0.50	0.22	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	20:52	MA EPH
Unadjusted C11-C22 Aromatics	63 J	100	85	60	ug/L	1	DBV	11/13/23	7:59	17110	12/7/23	21:05	MA EPH
C9-C18 Aliphatics	95 U#	100	95	94	ug/L	1	DBV	11/13/23	7:59	17110	12/7/23	21:05	MA EPH
C19-C36 Aliphatics	97 U	100	97	96	ug/L	1	DBV	11/13/23	7:59	17110	12/7/23	21:05	MA EPH
C11-C22 Aromatics	63 J	100	85	54	ug/L	1	DBV	11/13/23	7:59	17110	12/7/23	21:05	MA EPH
Surrogate Recovery		Limits											
1-chloro-octadecane SUR	43	40-140			%	1	DBV	11/13/23	7:59	17110	12/7/23	21:05	MA EPH
o-terphenyl SUR	53	40-140			%	1	DBV	11/13/23	7:59	17110	12/7/23	21:05	MA EPH
2-fluorobiphenyl SUR	74	40-140			%	1	DBV	11/13/23	7:59	17110	12/7/23	21:05	MA EPH
2-bromonaphthalene SUR	76	40-140			%	1	DBV	11/13/23	7:59	17110	12/7/23	21:05	MA EPH

 # The percent recovery and/or RPD for the LCS/D was outside acceptance criteria.

Project ID: Dow Salvage Yard 18001468
Job ID: 67798
Sample#: 67798-007
Sample ID: SY-BRMW2-80.5-95.5-110723
Matrix: Water
Sampled: 11/7/23 13:40

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
naphthalene	0.70 U#M	1.0	0.70	0.63	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	21:22	MA EPH
2-methylnaphthalene	0.70 UJM	1.0	0.70	0.60	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	21:22	MA EPH
phenanthrene	0.50 U	1.0	0.50	0.15	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	21:22	MA EPH
acenaphthene	0.50 U	1.0	0.50	0.22	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	21:22	MA EPH
acenaphthylene	0.50 UM	1.0	0.50	0.18	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	21:22	MA EPH
fluorene	0.50 U	1.0	0.50	0.15	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	21:22	MA EPH
anthracene	0.50 U	1.0	0.50	0.18	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	21:22	MA EPH
fluoranthene	0.50 U	1.0	0.50	0.18	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	21:22	MA EPH
pyrene	0.50 U	1.0	0.50	0.23	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	21:22	MA EPH
benzo(a)anthracene	0.50 U	1.0	0.50	0.20	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	21:22	MA EPH
chrysene	0.50 U	1.0	0.50	0.16	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	21:22	MA EPH
benzo(b)fluoranthene	0.50 U	1.0	0.50	0.35	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	21:22	MA EPH
benzo(k)fluoranthene	0.50 U	1.0	0.50	0.41	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	21:22	MA EPH
benzo(a)pyrene	0.70 U	1.0	0.70	0.52	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	21:22	MA EPH
indeno(1,2,3-cd)pyrene	0.50 U#	1.0	0.50	0.24	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	21:22	MA EPH
dibenzo(a,h)anthracene	0.50 U#	1.0	0.50	0.26	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	21:22	MA EPH
benzo(g,h,i)perylene	0.50 U	1.0	0.50	0.22	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	21:22	MA EPH
Unadjusted C11-C22 Aromatics	85 U	100	85	60	ug/L	1	DBV	11/13/23	7:59	17110	12/7/23	21:38	MA EPH
C9-C18 Aliphatics	95 UJM	100	95	94	ug/L	1	DBV	11/13/23	7:59	17110	12/7/23	21:38	MA EPH
C19-C36 Aliphatics	97 U	100	97	96	ug/L	1	DBV	11/13/23	7:59	17110	12/7/23	21:38	MA EPH
C11-C22 Aromatics	85 U	100	85	54	ug/L	1	DBV	11/13/23	7:59	17110	12/7/23	21:38	MA EPH
Surrogate Recovery		Limits											
1-chloro-octadecane SUR	39 *	40-140			%	1	DBV	11/13/23	7:59	17110	12/7/23	21:38	MA EPH
* This surrogate showed recovery outside the acceptance limits.													
o-terphenyl SUR	53	40-140			%	1	DBV	11/13/23	7:59	17110	12/7/23	21:38	MA EPH
2-fluorobiphenyl SUR	77	40-140			%	1	DBV	11/13/23	7:59	17110	12/7/23	21:38	MA EPH
2-bromonaphthalene SUR	79	40-140			%	1	DBV	11/13/23	7:59	17110	12/7/23	21:38	MA EPH

 # The percent recovery and/or RPD for the LCS/D was outside acceptance criteria.
M = The percent recovery and/or RPD for the MS/D was outside acceptance criteria.

Project ID: Dow Salvage Yard 18001468
Job ID: 67798
Sample#: 67798-008
Sample ID: SY-OBMW13-110723
Matrix: Water
Sampled: 11/7/23 14:25

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
naphthalene	0.70 U#	1.0	0.70	0.63	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	21:52	MA EPH
2-methylnaphthalene	0.70 U#	1.0	0.70	0.60	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	21:52	MA EPH
phenanthrene	0.50 U	1.0	0.50	0.15	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	21:52	MA EPH
acenaphthene	0.50 U	1.0	0.50	0.22	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	21:52	MA EPH
acenaphthylene	0.50 U	1.0	0.50	0.18	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	21:52	MA EPH
fluorene	0.50 U	1.0	0.50	0.15	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	21:52	MA EPH
anthracene	0.50 U	1.0	0.50	0.18	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	21:52	MA EPH
fluoranthene	0.50 U	1.0	0.50	0.18	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	21:52	MA EPH
pyrene	0.50 U	1.0	0.50	0.23	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	21:52	MA EPH
benzo(a)anthracene	0.50 U	1.0	0.50	0.20	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	21:52	MA EPH
chrysene	0.50 U	1.0	0.50	0.16	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	21:52	MA EPH
benzo(b)fluoranthene	0.50 U	1.0	0.50	0.35	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	21:52	MA EPH
benzo(k)fluoranthene	0.50 U	1.0	0.50	0.41	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	21:52	MA EPH
benzo(a)pyrene	0.70 U	1.0	0.70	0.52	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	21:52	MA EPH
indeno(1,2,3-cd)pyrene	0.50 U#	1.0	0.50	0.24	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	21:52	MA EPH
dibenzo(a,h)anthracene	0.50 U#	1.0	0.50	0.26	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	21:52	MA EPH
benzo(g,h,i)perylene	0.50 U	1.0	0.50	0.22	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	21:52	MA EPH
Unadjusted C11-C22 Aromatics	62 J	100	85	60	ug/L	1	DBV	11/13/23	7:59	17110	12/7/23	23:20	MA EPH
C9-C18 Aliphatics	95 U#	100	95	94	ug/L	1	DBV	11/13/23	7:59	17110	12/7/23	23:20	MA EPH
C19-C36 Aliphatics	97 U	100	97	96	ug/L	1	DBV	11/13/23	7:59	17110	12/7/23	23:20	MA EPH
C11-C22 Aromatics	62 J	100	85	54	ug/L	1	DBV	11/13/23	7:59	17110	12/7/23	23:20	MA EPH
Surrogate Recovery		Limits											
1-chloro-octadecane SUR	25 *	40-140			%	1	DBV	11/13/23	7:59	17110	12/7/23	23:20	MA EPH
* This surrogate showed recovery outside the acceptance limits.													
o-terphenyl SUR	57	40-140			%	1	DBV	11/13/23	7:59	17110	12/7/23	23:20	MA EPH
2-fluorobiphenyl SUR	75	40-140			%	1	DBV	11/13/23	7:59	17110	12/7/23	23:20	MA EPH
2-bromonaphthalene SUR	79	40-140			%	1	DBV	11/13/23	7:59	17110	12/7/23	23:20	MA EPH

 # The percent recovery and/or RPD for the LCS/D was outside acceptance criteria.

Project ID: Dow Salvage Yard 18001468
Job ID: 67798
Sample#: 67798-009
Sample ID: SY-OBMW14-110723
Matrix: Water
Sampled: 11/7/23 14:00

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
naphthalene	0.70 U#	1.0	0.70	0.63	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	22:22	MA EPH
2-methylnaphthalene	0.70 U#	1.0	0.70	0.60	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	22:22	MA EPH
phenanthrene	0.50 U	1.0	0.50	0.15	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	22:22	MA EPH
acenaphthene	0.50 U	1.0	0.50	0.22	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	22:22	MA EPH
acenaphthylene	0.50 U	1.0	0.50	0.18	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	22:22	MA EPH
fluorene	0.50 U	1.0	0.50	0.15	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	22:22	MA EPH
anthracene	0.50 U	1.0	0.50	0.18	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	22:22	MA EPH
fluoranthene	0.50 U	1.0	0.50	0.18	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	22:22	MA EPH
pyrene	0.50 U	1.0	0.50	0.23	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	22:22	MA EPH
benzo(a)anthracene	0.50 U	1.0	0.50	0.20	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	22:22	MA EPH
chrysene	0.50 U	1.0	0.50	0.16	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	22:22	MA EPH
benzo(b)fluoranthene	0.50 U	1.0	0.50	0.35	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	22:22	MA EPH
benzo(k)fluoranthene	0.50 U	1.0	0.50	0.41	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	22:22	MA EPH
benzo(a)pyrene	0.70 U	1.0	0.70	0.52	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	22:22	MA EPH
indeno(1,2,3-cd)pyrene	0.50 U#	1.0	0.50	0.24	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	22:22	MA EPH
dibenzo(a,h)anthracene	0.50 U#	1.0	0.50	0.26	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	22:22	MA EPH
benzo(g,h,i)perylene	0.50 U	1.0	0.50	0.22	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	22:22	MA EPH
Unadjusted C11-C22 Aromatics	60 J	100	85	60	ug/L	1	DBV	11/13/23	7:59	17110	12/8/23	8:22	MA EPH
C9-C18 Aliphatics	95 U#	100	95	94	ug/L	1	DBV	11/13/23	7:59	17110	12/8/23	8:22	MA EPH
C19-C36 Aliphatics	120	100	97	96	ug/L	1	DBV	11/13/23	7:59	17110	12/8/23	8:22	MA EPH
C11-C22 Aromatics	60 J	100	85	54	ug/L	1	DBV	11/13/23	7:59	17110	12/8/23	8:22	MA EPH
Surrogate Recovery		Limits											
1-chloro-octadecane SUR	39 *	40-140			%	1	DBV	11/13/23	7:59	17110	12/8/23	8:22	MA EPH
* This surrogate showed recovery outside the acceptance limits.													
o-terphenyl SUR	54	40-140			%	1	DBV	11/13/23	7:59	17110	12/8/23	8:22	MA EPH
2-fluorobiphenyl SUR	76	40-140			%	1	DBV	11/13/23	7:59	17110	12/8/23	8:22	MA EPH
2-bromonaphthalene SUR	81	40-140			%	1	DBV	11/13/23	7:59	17110	12/8/23	8:22	MA EPH

 # The percent recovery and/or RPD for the LCS/D was outside acceptance criteria.

Project ID: Dow Salvage Yard 18001468
Job ID: 67798
Sample#: 67798-010
Sample ID: SY-BRMW2-252.5-262.5-110723
Matrix: Water
Sampled: 11/7/23 15:35

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
naphthalene	0.70 U#	1.0	0.70	0.63	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	22:52	MA EPH
2-methylnaphthalene	0.70 U#	1.0	0.70	0.60	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	22:52	MA EPH
phenanthrene	0.50 U	1.0	0.50	0.15	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	22:52	MA EPH
acenaphthene	0.50 U	1.0	0.50	0.22	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	22:52	MA EPH
acenaphthylene	0.50 U	1.0	0.50	0.18	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	22:52	MA EPH
fluorene	0.50 U	1.0	0.50	0.15	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	22:52	MA EPH
anthracene	0.50 U	1.0	0.50	0.18	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	22:52	MA EPH
fluoranthene	0.50 U	1.0	0.50	0.18	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	22:52	MA EPH
pyrene	0.50 U	1.0	0.50	0.23	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	22:52	MA EPH
benzo(a)anthracene	0.50 U	1.0	0.50	0.20	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	22:52	MA EPH
chrysene	0.50 U	1.0	0.50	0.16	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	22:52	MA EPH
benzo(b)fluoranthene	0.50 U	1.0	0.50	0.35	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	22:52	MA EPH
benzo(k)fluoranthene	0.50 U	1.0	0.50	0.41	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	22:52	MA EPH
benzo(a)pyrene	0.70 U	1.0	0.70	0.52	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	22:52	MA EPH
indeno(1,2,3-cd)pyrene	0.50 U#	1.0	0.50	0.24	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	22:52	MA EPH
dibenzo(a,h)anthracene	0.50 U#	1.0	0.50	0.26	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	22:52	MA EPH
benzo(g,h,i)perylene	0.50 U	1.0	0.50	0.22	ug/L	1	CL	11/13/23	7:59	17110	12/7/23	22:52	MA EPH
Unadjusted C11-C22 Aromatics	85 U	100	85	60	ug/L	1	DBV	11/13/23	7:59	17110	12/8/23	8:56	MA EPH
C9-C18 Aliphatics	95 U#	100	95	94	ug/L	1	DBV	11/13/23	7:59	17110	12/8/23	8:56	MA EPH
C19-C36 Aliphatics	97 U	100	97	96	ug/L	1	DBV	11/13/23	7:59	17110	12/8/23	8:56	MA EPH
C11-C22 Aromatics	85 U	100	85	54	ug/L	1	DBV	11/13/23	7:59	17110	12/8/23	8:56	MA EPH
Surrogate Recovery		Limits											
1-chloro-octadecane SUR	36 *	40-140			%	1	DBV	11/13/23	7:59	17110	12/8/23	8:56	MA EPH
* This surrogate showed recovery outside the acceptance limits.													
o-terphenyl SUR	56	40-140			%	1	DBV	11/13/23	7:59	17110	12/8/23	8:56	MA EPH
2-fluorobiphenyl SUR	78	40-140			%	1	DBV	11/13/23	7:59	17110	12/8/23	8:56	MA EPH
2-bromonaphthalene SUR	80	40-140			%	1	DBV	11/13/23	7:59	17110	12/8/23	8:56	MA EPH

 # The percent recovery and/or RPD for the LCS/D was outside acceptance criteria.

Project ID: Dow Salvage Yard 18001468
Job ID: 67798
Sample#: 67798-001
Sample ID: SY-OBMW12-110723
Matrix: Water
Sampled: 11/7/23 10:07

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
Aluminum	0.032 J	0.050	0.025	0.010	mg/L	1	AGN	11/28/23	8:00	17177	11/30/23	21:51	SW3005A6020A
Antimony	0.00050 U	0.0010	0.00050	0.00014	mg/L	1	AGN	11/28/23	8:00	17177	11/30/23	21:51	SW3005A6020A
Arsenic	0.0019 J	0.0025	0.0010	0.00067	mg/L	1	AGN	11/28/23	8:00	17177	11/30/23	21:51	SW3005A6020A
Barium	0.0074 J	0.010	0.0010	0.00076	mg/L	1	AGN	11/28/23	8:00	17177	11/30/23	21:51	SW3005A6020A
Beryllium	0.00050 U	0.0010	0.00050	0.00010	mg/L	1	AGN	11/28/23	8:00	17177	11/30/23	21:51	SW3005A6020A
Cadmium	0.00050 U	0.0010	0.00050	0.00014	mg/L	1	AGN	11/28/23	8:00	17177	11/30/23	21:51	SW3005A6020A
Chromium	0.025 U	0.050	0.025	0.020	mg/L	1	AGN	11/28/23	8:00	17177	11/30/23	21:51	SW3005A6020A
Cobalt	0.00050 U	0.010	0.00050	0.00028	mg/L	1	AGN	11/28/23	8:00	17177	11/30/23	21:51	SW3005A6020A
Copper	0.0075 U	0.010	0.0075	0.0054	mg/L	1	AGN	11/28/23	8:00	17177	11/30/23	21:51	SW3005A6020A
Iron	0.067	0.050	0.030	0.029	mg/L	1	EEB	11/28/23	8:00	17177	12/1/23	19:05	SW3005A6020A
Lead	0.00050 U	0.0050	0.00050	0.00011	mg/L	1	AGN	11/28/23	8:00	17177	11/30/23	21:51	SW3005A6020A
Magnesium	21	0.10	0.020	0.0073	mg/L	1	EEB	11/28/23	8:00	17177	12/1/23	19:05	SW3005A6020A
Manganese	0.39	0.010	0.0050	0.0016	mg/L	1	AGN	11/28/23	8:00	17177	11/30/23	21:51	SW3005A6020A
Mercury	0.00015 U	0.00020	0.00015	0.00012	mg/L	1	EEB	11/20/23	12:15	17146	11/22/23	10:24	SW7470A
Nickel	0.025 U	0.050	0.025	0.013	mg/L	1	AGN	11/28/23	8:00	17177	11/30/23	21:51	SW3005A6020A
Potassium	2.7	0.50	0.10	0.039	mg/L	1	AGN	11/28/23	8:00	17177	11/30/23	21:51	SW3005A6020A
Selenium	0.0050 U	0.010	0.0050	0.0037	mg/L	1	AGN	11/28/23	8:00	17177	11/30/23	21:51	SW3005A6020A
Silver	0.00050 U	0.0050	0.00050	0.00011	mg/L	1	AGN	11/28/23	8:00	17177	11/30/23	21:51	SW3005A6020A
Sodium	18	0.10	0.050	0.034	mg/L	1	EEB	11/28/23	8:00	17177	12/1/23	19:05	SW3005A6020A
Thallium	0.00080 U	0.0010	0.00080	0.00068	mg/L	1	AGN	11/28/23	8:00	17177	11/30/23	21:51	SW3005A6020A
Vanadium	0.0050 U	0.010	0.0050	0.0018	mg/L	1	AGN	11/28/23	8:00	17177	11/30/23	21:51	SW3005A6020A
Zinc	0.0040 U	0.010	0.0040	0.0021	mg/L	1	AGN	11/28/23	8:00	17177	11/30/23	21:51	SW3005A6020A

Project ID: Dow Salvage Yard 18001468
Job ID: 67798
Sample#: 67798-002
Sample ID: SY-OBMW6-110723
Matrix: Water
Sampled: 11/7/23 10:30

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
Aluminum	0.025 U	0.050	0.025	0.010	mg/L	1	AGN	11/28/23	8:00	17177	11/30/23	22:17	SW3005A6020A
Antimony	0.00047 J	0.0010	0.00050	0.00014	mg/L	1	AGN	11/28/23	8:00	17177	11/30/23	22:17	SW3005A6020A
Arsenic	0.0028	0.0025	0.0010	0.00067	mg/L	1	AGN	11/28/23	8:00	17177	11/30/23	22:17	SW3005A6020A
Barium	0.0042 J	0.010	0.0010	0.00076	mg/L	1	AGN	11/28/23	8:00	17177	11/30/23	22:17	SW3005A6020A
Beryllium	0.00050 U	0.0010	0.00050	0.00010	mg/L	1	AGN	11/28/23	8:00	17177	11/30/23	22:17	SW3005A6020A
Cadmium	0.00050 U	0.0010	0.00050	0.00014	mg/L	1	AGN	11/28/23	8:00	17177	11/30/23	22:17	SW3005A6020A
Chromium	0.025 U	0.050	0.025	0.020	mg/L	1	AGN	11/28/23	8:00	17177	11/30/23	22:17	SW3005A6020A
Cobalt	0.00050 U	0.010	0.00050	0.00028	mg/L	1	AGN	11/28/23	8:00	17177	11/30/23	22:17	SW3005A6020A
Copper	0.0075 U	0.010	0.0075	0.0054	mg/L	1	AGN	11/28/23	8:00	17177	11/30/23	22:17	SW3005A6020A
Iron	0.030 U	0.050	0.030	0.029	mg/L	1	AGN	11/28/23	8:00	17177	11/30/23	22:17	SW3005A6020A
Lead	0.00050 U	0.0050	0.00050	0.00011	mg/L	1	AGN	11/28/23	8:00	17177	11/30/23	22:17	SW3005A6020A
Magnesium	9.6	0.10	0.020	0.0073	mg/L	1	EEB	11/28/23	8:00	17177	12/1/23	20:03	SW3005A6020A
Manganese	0.0050 U	0.010	0.0050	0.0016	mg/L	1	AGN	11/28/23	8:00	17177	11/30/23	22:17	SW3005A6020A
Mercury	0.00015 U	0.00020	0.00015	0.00012	mg/L	1	EEB	11/20/23	12:15	17146	11/22/23	10:29	SW7470A
Nickel	0.025 U	0.050	0.025	0.013	mg/L	1	AGN	11/28/23	8:00	17177	11/30/23	22:17	SW3005A6020A
Potassium	1.4	0.50	0.10	0.039	mg/L	1	AGN	11/28/23	8:00	17177	11/30/23	22:17	SW3005A6020A
Selenium	0.0050 U	0.010	0.0050	0.0037	mg/L	1	AGN	11/28/23	8:00	17177	11/30/23	22:17	SW3005A6020A
Silver	0.00050 U	0.0050	0.00050	0.00011	mg/L	1	AGN	11/28/23	8:00	17177	11/30/23	22:17	SW3005A6020A
Sodium	6.9	0.10	0.050	0.034	mg/L	1	EEB	11/28/23	8:00	17177	12/1/23	20:03	SW3005A6020A
Thallium	0.00084 J	0.0010	0.00080	0.00068	mg/L	1	AGN	11/28/23	8:00	17177	11/30/23	22:17	SW3005A6020A
Vanadium	0.0050 U	0.010	0.0050	0.0018	mg/L	1	AGN	11/28/23	8:00	17177	11/30/23	22:17	SW3005A6020A
Zinc	0.0040 U	0.010	0.0040	0.0021	mg/L	1	AGN	11/28/23	8:00	17177	11/30/23	22:17	SW3005A6020A

Project ID: Dow Salvage Yard 18001468
Job ID: 67798
Sample#: 67798-003
Sample ID: SY-OBMW4R-110723
Matrix: Water
Sampled: 11/7/23 11:05

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
Aluminum	0.10	0.050	0.025	0.010	mg/L	1	AGN	11/28/23	8:00	17177	11/30/23	22:26	SW3005A6020A
Antimony	0.00050 U	0.0010	0.00050	0.00014	mg/L	1	AGN	11/28/23	8:00	17177	11/30/23	22:26	SW3005A6020A
Arsenic	0.00069 J	0.0025	0.0010	0.00067	mg/L	1	AGN	11/28/23	8:00	17177	11/30/23	22:26	SW3005A6020A
Barium	0.039	0.010	0.0010	0.00076	mg/L	1	AGN	11/28/23	8:00	17177	11/30/23	22:26	SW3005A6020A
Beryllium	0.00050 U	0.0010	0.00050	0.00010	mg/L	1	AGN	11/28/23	8:00	17177	11/30/23	22:26	SW3005A6020A
Cadmium	0.00050 U	0.0010	0.00050	0.00014	mg/L	1	AGN	11/28/23	8:00	17177	11/30/23	22:26	SW3005A6020A
Chromium	0.025 U	0.050	0.025	0.020	mg/L	1	AGN	11/28/23	8:00	17177	11/30/23	22:26	SW3005A6020A
Cobalt	0.0015 J	0.010	0.00050	0.00028	mg/L	1	AGN	11/28/23	8:00	17177	11/30/23	22:26	SW3005A6020A
Copper	0.0068 J	0.010	0.0075	0.0054	mg/L	1	AGN	11/28/23	8:00	17177	11/30/23	22:26	SW3005A6020A
Iron	0.19	0.050	0.030	0.029	mg/L	1	EEB	11/28/23	8:00	17177	12/1/23	20:13	SW3005A6020A
Lead	0.00017 J	0.0050	0.00050	0.00011	mg/L	1	AGN	11/28/23	8:00	17177	11/30/23	22:26	SW3005A6020A
Magnesium	110	0.50	0.10	0.036	mg/L	5	EEB	11/28/23	8:00	17177	12/1/23	20:23	SW3005A6020A
Manganese	1.4	0.010	0.0050	0.0016	mg/L	1	AGN	11/28/23	8:00	17177	11/30/23	22:26	SW3005A6020A
Mercury	0.00015 U	0.00020	0.00015	0.00012	mg/L	1	EEB	11/20/23	12:15	17146	11/22/23	10:31	SW7470A
Nickel	0.025 U	0.050	0.025	0.013	mg/L	1	AGN	11/28/23	8:00	17177	11/30/23	22:26	SW3005A6020A
Potassium	4.8	0.50	0.10	0.039	mg/L	1	AGN	11/28/23	8:00	17177	11/30/23	22:26	SW3005A6020A
Selenium	0.0050 U	0.010	0.0050	0.0037	mg/L	1	AGN	11/28/23	8:00	17177	11/30/23	22:26	SW3005A6020A
Silver	0.00050 U	0.0050	0.00050	0.00011	mg/L	1	AGN	11/28/23	8:00	17177	11/30/23	22:26	SW3005A6020A
Sodium	410	0.50	0.25	0.17	mg/L	5	EEB	11/28/23	8:00	17177	12/1/23	20:23	SW3005A6020A
Thallium	0.00080 U	0.0010	0.00080	0.00068	mg/L	1	AGN	11/28/23	8:00	17177	11/30/23	22:26	SW3005A6020A
Vanadium	0.0050 U	0.010	0.0050	0.0018	mg/L	1	AGN	11/28/23	8:00	17177	11/30/23	22:26	SW3005A6020A
Zinc	0.0040 U	0.010	0.0040	0.0021	mg/L	1	AGN	11/28/23	8:00	17177	11/30/23	22:26	SW3005A6020A

Project ID: Dow Salvage Yard 18001468
Job ID: 67798
Sample#: 67798-004
Sample ID: SY-BRMW2-60.5-70.5-110723
Matrix: Water
Sampled: 11/7/23 12:25

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
Aluminum	0.025 U	0.050	0.025	0.010	mg/L	1	AGN	11/28/23	8:00	17177	11/30/23	22:35	SW3005A6020A
Antimony	0.00062 J	0.0010	0.00050	0.00014	mg/L	1	AGN	11/28/23	8:00	17177	11/30/23	22:35	SW3005A6020A
Arsenic	0.00075 J	0.0025	0.0010	0.00067	mg/L	1	AGN	11/28/23	8:00	17177	11/30/23	22:35	SW3005A6020A
Barium	0.064	0.010	0.0010	0.00076	mg/L	1	AGN	11/28/23	8:00	17177	11/30/23	22:35	SW3005A6020A
Beryllium	0.00050 U	0.0010	0.00050	0.00010	mg/L	1	AGN	11/28/23	8:00	17177	11/30/23	22:35	SW3005A6020A
Cadmium	0.00050 U	0.0010	0.00050	0.00014	mg/L	1	AGN	11/28/23	8:00	17177	11/30/23	22:35	SW3005A6020A
Chromium	0.025 U	0.050	0.025	0.020	mg/L	1	AGN	11/28/23	8:00	17177	11/30/23	22:35	SW3005A6020A
Cobalt	0.00050 U	0.010	0.00050	0.00028	mg/L	1	AGN	11/28/23	8:00	17177	11/30/23	22:35	SW3005A6020A
Copper	0.0075 U	0.010	0.0075	0.0054	mg/L	1	AGN	11/28/23	8:00	17177	11/30/23	22:35	SW3005A6020A
Iron	0.030 U	0.050	0.030	0.029	mg/L	1	AGN	11/28/23	8:00	17177	11/30/23	22:35	SW3005A6020A
Lead	0.0020 J	0.0050	0.00050	0.00011	mg/L	1	AGN	11/28/23	8:00	17177	11/30/23	22:35	SW3005A6020A
Magnesium	11	0.10	0.020	0.0073	mg/L	1	EEB	11/28/23	8:00	17177	12/1/23	20:32	SW3005A6020A
Manganese	0.043	0.010	0.0050	0.0016	mg/L	1	AGN	11/28/23	8:00	17177	11/30/23	22:35	SW3005A6020A
Mercury	0.00015 U	0.00020	0.00015	0.00012	mg/L	1	EEB	11/20/23	12:15	17146	11/22/23	10:33	SW7470A
Nickel	0.025 U	0.050	0.025	0.013	mg/L	1	AGN	11/28/23	8:00	17177	11/30/23	22:35	SW3005A6020A
Potassium	4.4	0.50	0.10	0.039	mg/L	1	AGN	11/28/23	8:00	17177	11/30/23	22:35	SW3005A6020A
Selenium	0.0050 U	0.010	0.0050	0.0037	mg/L	1	AGN	11/28/23	8:00	17177	11/30/23	22:35	SW3005A6020A
Silver	0.00050 U	0.0050	0.00050	0.00011	mg/L	1	AGN	11/28/23	8:00	17177	11/30/23	22:35	SW3005A6020A
Sodium	11	0.10	0.050	0.034	mg/L	1	EEB	11/28/23	8:00	17177	12/1/23	20:32	SW3005A6020A
Thallium	0.00080 U	0.0010	0.00080	0.00068	mg/L	1	AGN	11/28/23	8:00	17177	11/30/23	22:35	SW3005A6020A
Vanadium	0.0050 U	0.010	0.0050	0.0018	mg/L	1	AGN	11/28/23	8:00	17177	11/30/23	22:35	SW3005A6020A
Zinc	0.0055 J	0.010	0.0040	0.0021	mg/L	1	AGN	11/28/23	8:00	17177	11/30/23	22:35	SW3005A6020A

Project ID: Dow Salvage Yard 18001468
Job ID: 67798
Sample#: 67798-005
Sample ID: SY-OBMW15-110723
Matrix: Water
Sampled: 11/7/23 12:50

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
Aluminum	0.013 J	0.050	0.025	0.010	mg/L	1	AGN	11/30/23	7:56	17194	12/5/23	18:04	SW3005A6020A
Antimony	0.00032 J	0.0010	0.00050	0.00014	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	19:55	SW3005A6020A
Arsenic	0.00096 J	0.0025	0.0010	0.00067	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	19:55	SW3005A6020A
Barium	0.0031 J	0.010	0.0010	0.00076	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	19:55	SW3005A6020A
Beryllium	0.00050 U	0.0010	0.00050	0.00010	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	19:55	SW3005A6020A
Cadmium	0.00050 U	0.0010	0.00050	0.00014	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	19:55	SW3005A6020A
Chromium	0.025 U	0.050	0.025	0.020	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	19:55	SW3005A6020A
Cobalt	0.00050 U	0.010	0.00050	0.00028	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	19:55	SW3005A6020A
Copper	0.0075 U	0.010	0.0075	0.0054	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	19:55	SW3005A6020A
Iron	0.030 U	0.050	0.030	0.029	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	19:55	SW3005A6020A
Lead	0.00022 J	0.0050	0.00050	0.00011	mg/L	1	AGN	11/30/23	7:56	17194	12/5/23	18:04	SW3005A6020A
Magnesium	44	0.10	0.020	0.0073	mg/L	1	AGN	11/30/23	7:56	17194	12/5/23	18:04	SW3005A6020A
Manganese	0.037	0.010	0.0050	0.0016	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	19:55	SW3005A6020A
Mercury	0.00015 U	0.00020	0.00015	0.00012	mg/L	1	EEB	11/20/23	12:15	17146	11/22/23	10:38	SW7470A
Nickel	0.025 U	0.050	0.025	0.013	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	19:55	SW3005A6020A
Potassium	1.9	0.50	0.10	0.039	mg/L	1	AGN	11/30/23	7:56	17194	12/5/23	18:04	SW3005A6020A
Selenium	0.0050 U	0.010	0.0050	0.0037	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	19:55	SW3005A6020A
Silver	0.00050 U	0.0050	0.00050	0.00011	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	19:55	SW3005A6020A
Sodium	130	0.10	0.050	0.034	mg/L	1	AGN	11/30/23	7:56	17194	12/5/23	18:04	SW3005A6020A
Thallium	0.00080 U	0.0010	0.00080	0.00068	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	19:55	SW3005A6020A
Vanadium	0.0050 U	0.010	0.0050	0.0018	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	19:55	SW3005A6020A
Zinc	0.0040 U	0.010	0.0040	0.0021	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	19:55	SW3005A6020A

Project ID: Dow Salvage Yard 18001468
Job ID: 67798
Sample#: 67798-006
Sample ID: SY-OBMW5-110723
Matrix: Water
Sampled: 11/7/23 13:25

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
Aluminum	0.058	0.050	0.025	0.010	mg/L	1	AGN	11/30/23	7:56	17194	12/5/23	18:13	SW3005A6020A
Antimony	0.00030 J	0.0010	0.00050	0.00014	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	20:03	SW3005A6020A
Arsenic	0.0036	0.0025	0.0010	0.00067	mg/L	1	AGN	11/30/23	7:56	17194	12/5/23	18:13	SW3005A6020A
Barium	0.0036 J	0.010	0.0010	0.00076	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	20:03	SW3005A6020A
Beryllium	0.00050 U	0.0010	0.00050	0.00010	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	20:03	SW3005A6020A
Cadmium	0.00050 U	0.0010	0.00050	0.00014	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	20:03	SW3005A6020A
Chromium	0.025 U	0.050	0.025	0.020	mg/L	1	AGN	11/30/23	7:56	17194	12/5/23	18:13	SW3005A6020A
Cobalt	0.00050 U	0.010	0.00050	0.00028	mg/L	1	AGN	11/30/23	7:56	17194	12/5/23	18:13	SW3005A6020A
Copper	0.0075 U	0.010	0.0075	0.0054	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	20:03	SW3005A6020A
Iron	0.058	0.050	0.030	0.029	mg/L	1	AGN	11/30/23	7:56	17194	12/5/23	18:13	SW3005A6020A
Lead	0.00021 J	0.0050	0.00050	0.00011	mg/L	1	AGN	11/30/23	7:56	17194	12/5/23	18:13	SW3005A6020A
Magnesium	8.7	0.10	0.020	0.0073	mg/L	1	AGN	11/30/23	7:56	17194	12/5/23	18:13	SW3005A6020A
Manganese	0.089	0.010	0.0050	0.0016	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	20:03	SW3005A6020A
Mercury	0.00015 U	0.00020	0.00015	0.00012	mg/L	1	EEB	11/20/23	12:15	17146	11/22/23	10:40	SW7470A
Nickel	0.025 U	0.050	0.025	0.013	mg/L	1	AGN	11/30/23	7:56	17194	12/5/23	18:13	SW3005A6020A
Potassium	1.2	0.50	0.10	0.039	mg/L	1	AGN	11/30/23	7:56	17194	12/5/23	18:13	SW3005A6020A
Selenium	0.0050 U	0.010	0.0050	0.0037	mg/L	1	AGN	11/30/23	7:56	17194	12/5/23	18:13	SW3005A6020A
Silver	0.00050 U	0.0050	0.00050	0.00011	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	20:03	SW3005A6020A
Sodium	6.7	0.10	0.050	0.034	mg/L	1	AGN	11/30/23	7:56	17194	12/5/23	18:13	SW3005A6020A
Thallium	0.00080 U	0.0010	0.00080	0.00068	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	20:03	SW3005A6020A
Vanadium	0.0050 U	0.010	0.0050	0.0018	mg/L	1	AGN	11/30/23	7:56	17194	12/5/23	18:13	SW3005A6020A
Zinc	0.0040 U	0.010	0.0040	0.0021	mg/L	1	AGN	11/30/23	7:56	17194	12/5/23	18:13	SW3005A6020A

Project ID: Dow Salvage Yard 18001468
Job ID: 67798
Sample#: 67798-007
Sample ID: SY-BRMW2-80.5-95.5-110723
Matrix: Water
Sampled: 11/7/23 13:40

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
Aluminum	0.025 U	0.050	0.025	0.010	mg/L	1	AGN	11/30/23	7:56	17194	12/5/23	18:22	SW3005A6020A
Antimony	0.00023 J	0.0010	0.00050	0.00014	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	20:12	SW3005A6020A
Arsenic	0.0010 U	0.0025	0.0010	0.00067	mg/L	1	AGN	11/30/23	7:56	17194	12/5/23	18:22	SW3005A6020A
Barium	0.062	0.010	0.0010	0.00076	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	20:12	SW3005A6020A
Beryllium	0.00050 U	0.0010	0.00050	0.00010	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	20:12	SW3005A6020A
Cadmium	0.00050 U	0.0010	0.00050	0.00014	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	20:12	SW3005A6020A
Chromium	0.025 U	0.050	0.025	0.020	mg/L	1	AGN	11/30/23	7:56	17194	12/5/23	18:22	SW3005A6020A
Cobalt	0.00050 U	0.010	0.00050	0.00028	mg/L	1	AGN	11/30/23	7:56	17194	12/5/23	18:22	SW3005A6020A
Copper	0.0075 U	0.010	0.0075	0.0054	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	20:12	SW3005A6020A
Iron	0.030 U	0.050	0.030	0.029	mg/L	1	AGN	11/30/23	7:56	17194	12/5/23	18:22	SW3005A6020A
Lead	0.0020 J	0.0050	0.00050	0.00011	mg/L	1	AGN	11/30/23	7:56	17194	12/5/23	18:22	SW3005A6020A
Magnesium	9.5	0.10	0.020	0.0073	mg/L	1	AGN	11/30/23	7:56	17194	12/5/23	18:22	SW3005A6020A
Manganese	0.0047 J	0.010	0.0050	0.0016	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	20:12	SW3005A6020A
Mercury	0.00015 U	0.00020	0.00015	0.00012	mg/L	1	EEB	11/20/23	12:15	17147	11/22/23	11:04	SW7470A
Nickel	0.025 U	0.050	0.025	0.013	mg/L	1	AGN	11/30/23	7:56	17194	12/5/23	18:22	SW3005A6020A
Potassium	1.2 M	0.50	0.10	0.039	mg/L	1	AGN	11/30/23	7:56	17194	12/5/23	18:22	SW3005A6020A
M = The percent recovery in the matrix spike was outside acceptance criteria. The recovery for the PDS was 87%.													
Selenium	0.0050 U	0.010	0.0050	0.0037	mg/L	1	AGN	11/30/23	7:56	17194	12/5/23	18:22	SW3005A6020A
Silver	0.00050 U	0.0050	0.00050	0.00011	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	20:12	SW3005A6020A
Sodium	6.9	0.10	0.050	0.034	mg/L	1	AGN	11/30/23	7:56	17194	12/5/23	18:22	SW3005A6020A
Thallium	0.00080 U	0.0010	0.00080	0.00068	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	20:12	SW3005A6020A
Vanadium	0.0050 U	0.010	0.0050	0.0018	mg/L	1	AGN	11/30/23	7:56	17194	12/5/23	18:22	SW3005A6020A
Zinc	0.0024 J	0.010	0.0040	0.0021	mg/L	1	AGN	11/30/23	7:56	17194	12/5/23	18:22	SW3005A6020A

Project ID: Dow Salvage Yard 18001468
Job ID: 67798
Sample#: 67798-008
Sample ID: SY-OBMW13-110723
Matrix: Water
Sampled: 11/7/23 14:25

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
Aluminum	0.010 J	0.050	0.025	0.010	mg/L	1	AGN	11/30/23	7:56	17194	12/5/23	19:23	SW3005A6020A
Antimony	0.00027 J	0.0010	0.00050	0.00014	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	20:38	SW3005A6020A
Arsenic	0.0010 J	0.0025	0.0010	0.00067	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	20:38	SW3005A6020A
Barium	0.0096 J	0.010	0.0010	0.00076	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	20:38	SW3005A6020A
Beryllium	0.00050 U	0.0010	0.00050	0.00010	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	20:38	SW3005A6020A
Cadmium	0.00050 U	0.0010	0.00050	0.00014	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	20:38	SW3005A6020A
Chromium	0.025 U	0.050	0.025	0.020	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	20:38	SW3005A6020A
Cobalt	0.00078 J	0.010	0.00050	0.00028	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	20:38	SW3005A6020A
Copper	0.0075 U	0.010	0.0075	0.0054	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	20:38	SW3005A6020A
Iron	0.030 U	0.050	0.030	0.029	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	20:38	SW3005A6020A
Lead	0.00013 J	0.0050	0.00050	0.00011	mg/L	1	AGN	11/30/23	7:56	17194	12/5/23	19:23	SW3005A6020A
Magnesium	29	0.10	0.020	0.0073	mg/L	1	AGN	11/30/23	7:56	17194	12/5/23	19:23	SW3005A6020A
Manganese	0.057	0.010	0.0050	0.0016	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	20:38	SW3005A6020A
Mercury	0.00015 U	0.00020	0.00015	0.00012	mg/L	1	EEB	11/20/23	12:15	17146	11/22/23	10:42	SW7470A
Nickel	0.025 U	0.050	0.025	0.013	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	20:38	SW3005A6020A
Potassium	2.4	0.50	0.10	0.039	mg/L	1	AGN	11/30/23	7:56	17194	12/5/23	19:23	SW3005A6020A
Selenium	0.0050 U	0.010	0.0050	0.0037	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	20:38	SW3005A6020A
Silver	0.00050 U	0.0050	0.00050	0.00011	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	20:38	SW3005A6020A
Sodium	39	0.10	0.050	0.034	mg/L	1	AGN	11/30/23	7:56	17194	12/5/23	19:23	SW3005A6020A
Thallium	0.00080 U	0.0010	0.00080	0.00068	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	20:38	SW3005A6020A
Vanadium	0.0050 U	0.010	0.0050	0.0018	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	20:38	SW3005A6020A
Zinc	0.0040 U	0.010	0.0040	0.0021	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	20:38	SW3005A6020A

Project ID: Dow Salvage Yard 18001468
Job ID: 67798
Sample#: 67798-009
Sample ID: SY-OBMW14-110723
Matrix: Water
Sampled: 11/7/23 14:00

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
Aluminum	0.025 U	0.050	0.025	0.010	mg/L	1	AGN	11/30/23	7:56	17194	12/5/23	19:32	SW3005A6020A
Antimony	0.00015 J	0.0010	0.00050	0.00014	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	20:47	SW3005A6020A
Arsenic	0.0016 J	0.0025	0.0010	0.00067	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	20:47	SW3005A6020A
Barium	0.0049 J	0.010	0.0010	0.00076	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	20:47	SW3005A6020A
Beryllium	0.00050 U	0.0010	0.00050	0.00010	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	20:47	SW3005A6020A
Cadmium	0.00050 U	0.0010	0.00050	0.00014	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	20:47	SW3005A6020A
Chromium	0.025 U	0.050	0.025	0.020	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	20:47	SW3005A6020A
Cobalt	0.00050 U	0.010	0.00050	0.00028	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	20:47	SW3005A6020A
Copper	0.0075 U	0.010	0.0075	0.0054	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	20:47	SW3005A6020A
Iron	0.043 J	0.050	0.030	0.029	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	20:47	SW3005A6020A
Lead	0.00050 U	0.0050	0.00050	0.00011	mg/L	1	AGN	11/30/23	7:56	17194	12/5/23	19:32	SW3005A6020A
Magnesium	27	0.10	0.020	0.0073	mg/L	1	AGN	11/30/23	7:56	17194	12/5/23	19:32	SW3005A6020A
Manganese	0.44	0.010	0.0050	0.0016	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	20:47	SW3005A6020A
Mercury	0.00015 U	0.00020	0.00015	0.00012	mg/L	1	EEB	11/20/23	12:15	17146	11/22/23	10:44	SW7470A
Nickel	0.025 U	0.050	0.025	0.013	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	20:47	SW3005A6020A
Potassium	3.1	0.50	0.10	0.039	mg/L	1	AGN	11/30/23	7:56	17194	12/5/23	19:32	SW3005A6020A
Selenium	0.0050 U	0.010	0.0050	0.0037	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	20:47	SW3005A6020A
Silver	0.00050 U	0.0050	0.00050	0.00011	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	20:47	SW3005A6020A
Sodium	37	0.10	0.050	0.034	mg/L	1	AGN	11/30/23	7:56	17194	12/5/23	19:32	SW3005A6020A
Thallium	0.00080 U	0.0010	0.00080	0.00068	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	20:47	SW3005A6020A
Vanadium	0.0050 U	0.010	0.0050	0.0018	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	20:47	SW3005A6020A
Zinc	0.0040 U	0.010	0.0040	0.0021	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	20:47	SW3005A6020A

Project ID: Dow Salvage Yard 18001468
Job ID: 67798
Sample#: 67798-010
Sample ID: SY-BRMW2-252.5-262.5-110723
Matrix: Water
Sampled: 11/7/23 15:35

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
Aluminum	0.025 U	0.050	0.025	0.010	mg/L	1	AGN	11/30/23	7:56	17194	12/5/23	19:41	SW3005A6020A
Antimony	0.0010	0.0010	0.00050	0.00014	mg/L	1	AGN	11/30/23	7:56	17194	12/5/23	19:41	SW3005A6020A
Arsenic	0.0031	0.0025	0.0010	0.00067	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	21:22	SW3005A6020A
Barium	0.063	0.010	0.0010	0.00076	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	21:22	SW3005A6020A
Beryllium	0.00050 U	0.0010	0.00050	0.00010	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	21:22	SW3005A6020A
Cadmium	0.00050 U	0.0010	0.00050	0.00014	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	21:22	SW3005A6020A
Chromium	0.025 U	0.050	0.025	0.020	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	21:22	SW3005A6020A
Cobalt	0.00050 U	0.010	0.00050	0.00028	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	21:22	SW3005A6020A
Copper	0.0075 U	0.010	0.0075	0.0054	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	21:22	SW3005A6020A
Iron	0.030 U	0.050	0.030	0.029	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	21:22	SW3005A6020A
Lead	0.0025 J	0.0050	0.00050	0.00011	mg/L	1	AGN	11/30/23	7:56	17194	12/5/23	19:41	SW3005A6020A
Magnesium	11	0.10	0.020	0.0073	mg/L	1	AGN	11/30/23	7:56	17194	12/5/23	19:41	SW3005A6020A
Manganese	0.011	0.010	0.0050	0.0016	mg/L	1	AGN	11/30/23	7:56	17194	12/5/23	19:41	SW3005A6020A
Mercury	0.00015 U	0.00020	0.00015	0.00012	mg/L	1	EEB	11/20/23	12:15	17146	11/22/23	10:46	SW7470A
Nickel	0.025 U	0.050	0.025	0.013	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	21:22	SW3005A6020A
Potassium	0.68	0.50	0.10	0.039	mg/L	1	AGN	11/30/23	7:56	17194	12/5/23	19:41	SW3005A6020A
Selenium	0.0050 U	0.010	0.0050	0.0037	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	21:22	SW3005A6020A
Silver	0.00050 U	0.0050	0.00050	0.00011	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	21:22	SW3005A6020A
Sodium	11	0.10	0.050	0.034	mg/L	1	AGN	11/30/23	7:56	17194	12/5/23	19:41	SW3005A6020A
Thallium	0.00080 U	0.0010	0.00080	0.00068	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	21:22	SW3005A6020A
Vanadium	0.0050 U	0.010	0.0050	0.0018	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	21:22	SW3005A6020A
Zinc	0.0034 J	0.010	0.0040	0.0021	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	21:22	SW3005A6020A

Project ID: Dow Salvage Yard 18001468
Job ID: 67798
Sample#: 67798-012
Sample ID: SY-OBMW12-110723-DISS
Matrix: Water
Sampled: 11/7/23 10:07

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
Aluminum	0.027 U	0.054	0.027	0.011	mg/L	1	EEB	11/28/23	10:12	17175	12/2/23	1:35	SW3005A6020A
Antimony	0.00054 U	0.0011	0.00054	0.00015	mg/L	1	EEB	11/28/23	10:12	17175	12/2/23	1:35	SW3005A6020A
Arsenic	0.0016 J	0.0027	0.0011	0.00072	mg/L	1	EEB	11/28/23	10:12	17175	12/2/23	1:35	SW3005A6020A
Barium	0.0068 J	0.011	0.0011	0.00081	mg/L	1	EEB	11/28/23	10:12	17175	12/2/23	1:35	SW3005A6020A
Beryllium	0.00054 U	0.0011	0.00054	0.00011	mg/L	1	EEB	11/28/23	10:12	17175	12/2/23	1:35	SW3005A6020A
Cadmium	0.00054 U	0.0011	0.00054	0.00015	mg/L	1	EEB	11/28/23	10:12	17175	12/2/23	1:35	SW3005A6020A
Chromium	0.027 U	0.054	0.027	0.022	mg/L	1	EEB	11/28/23	10:12	17175	12/2/23	1:35	SW3005A6020A
Cobalt	0.00054 U	0.011	0.00054	0.00030	mg/L	1	EEB	11/28/23	10:12	17175	12/2/23	1:35	SW3005A6020A
Copper	0.0080 U	0.011	0.0080	0.0057	mg/L	1	EEB	11/28/23	10:12	17175	12/2/23	1:35	SW3005A6020A
Iron	0.032 U	0.054	0.032	0.031	mg/L	1	EEB	11/28/23	10:12	17175	12/2/23	1:35	SW3005A6020A
Lead	0.00054 U	0.0054	0.00054	0.00012	mg/L	1	EEB	11/28/23	10:12	17175	12/2/23	1:35	SW3005A6020A
Magnesium	20	0.11	0.021	0.0078	mg/L	1	EEB	11/28/23	10:12	17175	12/2/23	1:35	SW3005A6020A
Manganese	0.34	0.011	0.0054	0.0017	mg/L	1	EEB	11/28/23	10:12	17175	12/2/23	1:35	SW3005A6020A
Mercury	0.00015 U	0.00020	0.00015	0.00012	mg/L	1	EEB	11/30/23	12:42	17202	12/1/23	13:01	SW7470A
Nickel	0.027 U	0.054	0.027	0.013	mg/L	1	EEB	11/28/23	10:12	17175	12/2/23	1:35	SW3005A6020A
Potassium	2.6 M	0.54	0.11	0.042	mg/L	1	EEB	11/28/23	10:12	17175	12/2/23	1:35	SW3005A6020A
M = The percent recovery and/or RPD for the MS/D was outside acceptance criteria.													
Selenium	0.0054 U	0.011	0.0054	0.0040	mg/L	1	EEB	11/28/23	10:12	17175	12/2/23	1:35	SW3005A6020A
Silver	0.00054 U	0.0054	0.00054	0.00012	mg/L	1	EEB	11/28/23	10:12	17175	12/2/23	1:35	SW3005A6020A
Sodium	18	0.11	0.054	0.037	mg/L	1	EEB	11/28/23	10:12	17175	12/2/23	1:35	SW3005A6020A
Thallium	0.00086 U	0.0011	0.00086	0.00073	mg/L	1	EEB	11/28/23	10:12	17175	12/2/23	1:35	SW3005A6020A
Vanadium	0.0054 U	0.011	0.0054	0.0019	mg/L	1	EEB	11/28/23	10:12	17175	12/2/23	1:35	SW3005A6020A
Zinc	0.0043 U	0.011	0.0043	0.0022	mg/L	1	EEB	11/28/23	10:12	17175	12/2/23	1:35	SW3005A6020A

Project ID: Dow Salvage Yard 18001468
Job ID: 67798
Sample#: 67798-013
Sample ID: SY-OBMW6-110723-DISS
Matrix: Water
Sampled: 11/7/23 10:30

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Prep Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
Aluminum	0.027 U	0.054	0.027	0.011	mg/L	1	EEB	11/28/23	10:12	17175	12/2/23	2:33	SW3005A6020A
Antimony	0.00042 J	0.0011	0.00054	0.00015	mg/L	1	EEB	11/28/23	10:12	17175	12/2/23	2:33	SW3005A6020A
Arsenic	0.0026 J	0.0027	0.0011	0.00072	mg/L	1	EEB	11/28/23	10:12	17175	12/2/23	2:33	SW3005A6020A
Barium	0.0043 J	0.011	0.0011	0.00081	mg/L	1	EEB	11/28/23	10:12	17175	12/2/23	2:33	SW3005A6020A
Beryllium	0.00054 U	0.0011	0.00054	0.00011	mg/L	1	EEB	11/28/23	10:12	17175	12/2/23	2:33	SW3005A6020A
Cadmium	0.00054 U	0.0011	0.00054	0.00015	mg/L	1	EEB	11/28/23	10:12	17175	12/2/23	2:33	SW3005A6020A
Chromium	0.027 U	0.054	0.027	0.022	mg/L	1	EEB	11/28/23	10:12	17175	12/2/23	2:33	SW3005A6020A
Cobalt	0.00054 U	0.011	0.00054	0.00030	mg/L	1	EEB	11/28/23	10:12	17175	12/2/23	2:33	SW3005A6020A
Copper	0.0080 U	0.011	0.0080	0.0057	mg/L	1	EEB	11/28/23	10:12	17175	12/2/23	2:33	SW3005A6020A
Iron	0.032 U	0.054	0.032	0.031	mg/L	1	EEB	11/28/23	10:12	17175	12/2/23	2:33	SW3005A6020A
Lead	0.00054 U	0.0054	0.00054	0.00012	mg/L	1	EEB	11/28/23	10:12	17175	12/2/23	2:33	SW3005A6020A
Magnesium	9.4	0.11	0.021	0.0078	mg/L	1	EEB	11/28/23	10:12	17175	12/4/23	18:10	SW3005A6020A
Manganese	0.0054 U	0.011	0.0054	0.0017	mg/L	1	EEB	11/28/23	10:12	17175	12/2/23	2:33	SW3005A6020A
Mercury	0.00015 U	0.00020	0.00015	0.00012	mg/L	1	EEB	11/20/23	12:15	17146	11/22/23	10:48	SW7470A
Nickel	0.027 U	0.054	0.027	0.013	mg/L	1	EEB	11/28/23	10:12	17175	12/2/23	2:33	SW3005A6020A
Potassium	1.3	0.54	0.11	0.042	mg/L	1	EEB	11/28/23	10:12	17175	12/2/23	2:33	SW3005A6020A
Selenium	0.0054 U	0.011	0.0054	0.0040	mg/L	1	EEB	11/28/23	10:12	17175	12/2/23	2:33	SW3005A6020A
Silver	0.00054 U	0.0054	0.00054	0.00012	mg/L	1	EEB	11/28/23	10:12	17175	12/2/23	2:33	SW3005A6020A
Sodium	7.0	0.11	0.054	0.037	mg/L	1	EEB	11/28/23	10:12	17175	12/2/23	2:33	SW3005A6020A
Thallium	0.00086 U	0.0011	0.00086	0.00073	mg/L	1	EEB	11/28/23	10:12	17175	12/2/23	2:33	SW3005A6020A
Vanadium	0.0054 U	0.011	0.0054	0.0019	mg/L	1	EEB	11/28/23	10:12	17175	12/2/23	2:33	SW3005A6020A
Zinc	0.0043 U	0.011	0.0043	0.0022	mg/L	1	EEB	11/28/23	10:12	17175	12/2/23	2:33	SW3005A6020A

Project ID: Dow Salvage Yard 18001468
Job ID: 67798
Sample#: 67798-014
Sample ID: SY-OBMW4R-110723-DISS
Matrix: Water
Sampled: 11/7/23 11:05

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
Aluminum	0.027 U	0.054	0.027	0.011	mg/L	1	EEB	11/28/23	10:12	17175	12/2/23	2:43	SW3005A6020A
Antimony	0.00018 J	0.0011	0.00054	0.00015	mg/L	1	EEB	11/28/23	10:12	17175	12/2/23	2:43	SW3005A6020A
Arsenic	0.0011 U	0.0027	0.0011	0.00072	mg/L	1	EEB	11/28/23	10:12	17175	12/2/23	2:43	SW3005A6020A
Barium	0.039	0.011	0.0011	0.00081	mg/L	1	EEB	11/28/23	10:12	17175	12/2/23	2:43	SW3005A6020A
Beryllium	0.00054 U	0.0011	0.00054	0.00011	mg/L	1	EEB	11/28/23	10:12	17175	12/2/23	2:43	SW3005A6020A
Cadmium	0.00054 U	0.0011	0.00054	0.00015	mg/L	1	EEB	11/28/23	10:12	17175	12/2/23	2:43	SW3005A6020A
Chromium	0.027 U	0.054	0.027	0.022	mg/L	1	EEB	11/28/23	10:12	17175	12/2/23	2:43	SW3005A6020A
Cobalt	0.0013 J	0.011	0.00054	0.00030	mg/L	1	EEB	11/28/23	10:12	17175	12/2/23	2:43	SW3005A6020A
Copper	0.0080 U	0.011	0.0080	0.0057	mg/L	1	EEB	11/28/23	10:12	17175	12/2/23	2:43	SW3005A6020A
Iron	0.032 U	0.054	0.032	0.031	mg/L	1	EEB	11/28/23	10:12	17175	12/2/23	2:43	SW3005A6020A
Lead	0.00054 U	0.0054	0.00054	0.00012	mg/L	1	EEB	11/28/23	10:12	17175	12/2/23	2:43	SW3005A6020A
Magnesium	120	1.1	0.21	0.078	mg/L	10	EEB	11/28/23	10:12	17175	12/4/23	18:18	SW3005A6020A
Manganese	1.3	0.011	0.0054	0.0017	mg/L	1	EEB	11/28/23	10:12	17175	12/2/23	2:43	SW3005A6020A
Mercury	0.00015 U	0.00020	0.00015	0.00012	mg/L	1	EEB	11/20/23	12:15	17146	11/22/23	10:49	SW7470A
Nickel	0.027 U	0.054	0.027	0.013	mg/L	1	EEB	11/28/23	10:12	17175	12/2/23	2:43	SW3005A6020A
Potassium	4.6	0.54	0.11	0.042	mg/L	1	EEB	11/28/23	10:12	17175	12/2/23	2:43	SW3005A6020A
Selenium	0.0054 U	0.011	0.0054	0.0040	mg/L	1	EEB	11/28/23	10:12	17175	12/2/23	2:43	SW3005A6020A
Silver	0.00054 U	0.0054	0.00054	0.00012	mg/L	1	EEB	11/28/23	10:12	17175	12/2/23	2:43	SW3005A6020A
Sodium	400	1.1	0.54	0.37	mg/L	10	EEB	11/28/23	10:12	17175	12/4/23	18:18	SW3005A6020A
Thallium	0.00086 U	0.0011	0.00086	0.00073	mg/L	1	EEB	11/28/23	10:12	17175	12/2/23	2:43	SW3005A6020A
Vanadium	0.0054 U	0.011	0.0054	0.0019	mg/L	1	EEB	11/28/23	10:12	17175	12/2/23	2:43	SW3005A6020A
Zinc	0.0043 U	0.011	0.0043	0.0022	mg/L	1	EEB	11/28/23	10:12	17175	12/2/23	2:43	SW3005A6020A

Project ID: Dow Salvage Yard 18001468
Job ID: 67798
Sample#: 67798-015
Sample ID: SY-BRMW2-60.5-70.5-110723-DISS
Matrix: Water
Sampled: 11/7/23 12:25

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
Aluminum	0.027 U	0.054	0.027	0.011	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	4:40	SW3005A6020A
Antimony	0.00088 J	0.0011	0.00054	0.00015	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	4:40	SW3005A6020A
Arsenic	0.00084 J	0.0027	0.0011	0.00072	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	4:40	SW3005A6020A
Barium	0.062	0.011	0.0011	0.00081	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	4:40	SW3005A6020A
Beryllium	0.00054 U	0.0011	0.00054	0.00011	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	4:40	SW3005A6020A
Cadmium	0.00054 U	0.0011	0.00054	0.00015	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	4:40	SW3005A6020A
Chromium	0.027 U	0.054	0.027	0.022	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	4:40	SW3005A6020A
Cobalt	0.00054 U	0.011	0.00054	0.00030	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	4:40	SW3005A6020A
Copper	0.0080 U	0.011	0.0080	0.0057	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	4:40	SW3005A6020A
Iron	0.032 U	0.054	0.032	0.031	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	4:40	SW3005A6020A
Lead	0.0011 J	0.0054	0.00054	0.00012	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	4:40	SW3005A6020A
Magnesium	10	0.11	0.021	0.0078	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	4:40	SW3005A6020A
Manganese	0.042	0.011	0.0054	0.0017	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	4:40	SW3005A6020A
Mercury	0.00015 U	0.00020	0.00015	0.00012	mg/L	1	EEB	11/20/23	12:15	17146	11/22/23	10:51	SW7470A
Nickel	0.027 U	0.054	0.027	0.013	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	4:40	SW3005A6020A
Potassium	4.0	0.54	0.11	0.042	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	4:40	SW3005A6020A
Selenium	0.0054 U	0.011	0.0054	0.0040	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	4:40	SW3005A6020A
Silver	0.00054 U	0.0054	0.00054	0.00012	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	4:40	SW3005A6020A
Sodium	11	0.11	0.054	0.037	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	4:40	SW3005A6020A
Thallium	0.00086 U	0.0011	0.00086	0.00073	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	4:40	SW3005A6020A
Vanadium	0.0054 U	0.011	0.0054	0.0019	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	4:40	SW3005A6020A
Zinc	0.0041 J	0.011	0.0043	0.0022	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	4:40	SW3005A6020A

Project ID: Dow Salvage Yard 18001468
Job ID: 67798
Sample#: 67798-016
Sample ID: SY-OBMW15-110723-DISS
Matrix: Water
Sampled: 11/7/23 12:50

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
Aluminum	0.027 U	0.054	0.027	0.011	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	4:50	SW3005A6020A
Antimony	0.00054 U	0.0011	0.00054	0.00015	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	4:50	SW3005A6020A
Arsenic	0.0011 U	0.0027	0.0011	0.00072	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	4:50	SW3005A6020A
Barium	0.0031 J	0.011	0.0011	0.00081	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	4:50	SW3005A6020A
Beryllium	0.00054 U	0.0011	0.00054	0.00011	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	4:50	SW3005A6020A
Cadmium	0.00054 U	0.0011	0.00054	0.00015	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	4:50	SW3005A6020A
Chromium	0.027 U	0.054	0.027	0.022	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	4:50	SW3005A6020A
Cobalt	0.00054 U	0.011	0.00054	0.00030	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	4:50	SW3005A6020A
Copper	0.0080 U	0.011	0.0080	0.0057	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	4:50	SW3005A6020A
Iron	0.032 U	0.054	0.032	0.031	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	4:50	SW3005A6020A
Lead	0.00054 U	0.0054	0.00054	0.00012	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	4:50	SW3005A6020A
Magnesium	46	0.11	0.021	0.0078	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	4:50	SW3005A6020A
Manganese	0.038	0.011	0.0054	0.0017	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	4:50	SW3005A6020A
Mercury	0.00015 U	0.00020	0.00015	0.00012	mg/L	1	EEB	11/20/23	12:15	17146	11/22/23	10:53	SW7470A
Nickel	0.027 U	0.054	0.027	0.013	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	4:50	SW3005A6020A
Potassium	1.8	0.54	0.11	0.042	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	4:50	SW3005A6020A
Selenium	0.0054 U	0.011	0.0054	0.0040	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	4:50	SW3005A6020A
Silver	0.00054 U	0.0054	0.00054	0.00012	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	4:50	SW3005A6020A
Sodium	130	0.11	0.054	0.037	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	4:50	SW3005A6020A
Thallium	0.00086 U	0.0011	0.00086	0.00073	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	4:50	SW3005A6020A
Vanadium	0.0054 U	0.011	0.0054	0.0019	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	4:50	SW3005A6020A
Zinc	0.0043 U	0.011	0.0043	0.0022	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	4:50	SW3005A6020A

Project ID: Dow Salvage Yard 18001468
Job ID: 67798
Sample#: 67798-017
Sample ID: SY-OBMW5-110723-DISS
Matrix: Water
Sampled: 11/7/23 13:25

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Prep Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
Aluminum	0.015 J	0.054	0.027	0.011	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	5:00	SW3005A6020A
Antimony	0.00025 J	0.0011	0.00054	0.00015	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	5:00	SW3005A6020A
Arsenic	0.0034	0.0027	0.0011	0.00072	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	5:00	SW3005A6020A
Barium	0.0034 J	0.011	0.0011	0.00081	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	5:00	SW3005A6020A
Beryllium	0.00054 U	0.0011	0.00054	0.00011	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	5:00	SW3005A6020A
Cadmium	0.00054 U	0.0011	0.00054	0.00015	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	5:00	SW3005A6020A
Chromium	0.027 U	0.054	0.027	0.022	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	5:00	SW3005A6020A
Cobalt	0.00054 U	0.011	0.00054	0.00030	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	5:00	SW3005A6020A
Copper	0.0080 U	0.011	0.0080	0.0057	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	5:00	SW3005A6020A
Iron	0.032 U	0.054	0.032	0.031	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	5:00	SW3005A6020A
Lead	0.00054 U	0.0054	0.00054	0.00012	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	5:00	SW3005A6020A
Magnesium	8.4	0.11	0.021	0.0078	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	5:00	SW3005A6020A
Manganese	0.060	0.011	0.0054	0.0017	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	5:00	SW3005A6020A
Mercury	0.00015 U	0.00020	0.00015	0.00012	mg/L	1	EEB	11/20/23	12:15	17147	11/22/23	11:09	SW7470A
Nickel	0.027 U	0.054	0.027	0.013	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	5:00	SW3005A6020A
Potassium	1.1	0.54	0.11	0.042	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	5:00	SW3005A6020A
Selenium	0.0054 U	0.011	0.0054	0.0040	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	5:00	SW3005A6020A
Silver	0.00054 U	0.0054	0.00054	0.00012	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	5:00	SW3005A6020A
Sodium	6.4	0.11	0.054	0.037	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	5:00	SW3005A6020A
Thallium	0.00086 U	0.0011	0.00086	0.00073	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	5:00	SW3005A6020A
Vanadium	0.0054 U	0.011	0.0054	0.0019	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	5:00	SW3005A6020A
Zinc	0.0043 U	0.011	0.0043	0.0022	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	5:00	SW3005A6020A

Project ID: Dow Salvage Yard 18001468
Job ID: 67798
Sample#: 67798-018
Sample ID: SY-BRMW2-80.5-95.5-110723-DISS
Matrix: Water
Sampled: 11/7/23 13:40

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
Aluminum	0.027 U	0.054	0.027	0.011	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	5:10	SW3005A6020A
Antimony	0.00024 J	0.0011	0.00054	0.00015	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	5:10	SW3005A6020A
Arsenic	0.0011 U	0.0027	0.0011	0.00072	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	5:10	SW3005A6020A
Barium	0.066	0.011	0.0011	0.00081	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	5:10	SW3005A6020A
Beryllium	0.00054 U	0.0011	0.00054	0.00011	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	5:10	SW3005A6020A
Cadmium	0.00054 U	0.0011	0.00054	0.00015	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	5:10	SW3005A6020A
Chromium	0.027 U	0.054	0.027	0.022	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	5:10	SW3005A6020A
Cobalt	0.00054 U	0.011	0.00054	0.00030	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	5:10	SW3005A6020A
Copper	0.0080 U	0.011	0.0080	0.0057	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	5:10	SW3005A6020A
Iron	0.032 U	0.054	0.032	0.031	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	5:10	SW3005A6020A
Lead	0.0021 J	0.0054	0.00054	0.00012	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	5:10	SW3005A6020A
Magnesium	8.9	0.11	0.021	0.0078	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	5:10	SW3005A6020A
Manganese	0.0044 J	0.011	0.0054	0.0017	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	5:10	SW3005A6020A
Mercury	0.00015 U	0.00020	0.00015	0.00012	mg/L	1	AGN	12/4/23	13:17	17206	12/5/23	11:49	SW7470A
Nickel	0.027 U	0.054	0.027	0.013	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	5:10	SW3005A6020A
Potassium	0.75	0.54	0.11	0.042	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	5:10	SW3005A6020A
Selenium	0.0054 U	0.011	0.0054	0.0040	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	5:10	SW3005A6020A
Silver	0.00054 U	0.0054	0.00054	0.00012	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	5:10	SW3005A6020A
Sodium	6.4	0.11	0.054	0.037	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	5:10	SW3005A6020A
Thallium	0.00086 U	0.0011	0.00086	0.00073	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	5:10	SW3005A6020A
Vanadium	0.0054 U	0.011	0.0054	0.0019	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	5:10	SW3005A6020A
Zinc	0.0060 J	0.011	0.0043	0.0022	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	5:10	SW3005A6020A

Project ID: Dow Salvage Yard 18001468
Job ID: 67798
Sample#: 67798-019
Sample ID: SY-OBMW13-110723-DISS
Matrix: Water
Sampled: 11/7/23 14:25

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
Aluminum	0.027 U	0.054	0.027	0.011	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	5:39	SW3005A6020A
Antimony	0.00027 J	0.0011	0.00054	0.00015	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	5:39	SW3005A6020A
Arsenic	0.00088 J	0.0027	0.0011	0.00072	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	5:39	SW3005A6020A
Barium	0.0094 J	0.011	0.0011	0.00081	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	5:39	SW3005A6020A
Beryllium	0.00054 U	0.0011	0.00054	0.00011	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	5:39	SW3005A6020A
Cadmium	0.00054 U	0.0011	0.00054	0.00015	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	5:39	SW3005A6020A
Chromium	0.027 U	0.054	0.027	0.022	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	5:39	SW3005A6020A
Cobalt	0.00068 J	0.011	0.00054	0.00030	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	5:39	SW3005A6020A
Copper	0.0080 U	0.011	0.0080	0.0057	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	5:39	SW3005A6020A
Iron	0.032 U	0.054	0.032	0.031	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	5:39	SW3005A6020A
Lead	0.00054 U	0.0054	0.00054	0.00012	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	5:39	SW3005A6020A
Magnesium	26	0.11	0.021	0.0078	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	5:39	SW3005A6020A
Manganese	0.048	0.011	0.0054	0.0017	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	5:39	SW3005A6020A
Mercury	0.00015 U	0.00020	0.00015	0.00012	mg/L	1	EEB	11/20/23	12:15	17147	11/22/23	11:11	SW7470A
Nickel	0.027 U	0.054	0.027	0.013	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	5:39	SW3005A6020A
Potassium	2.2	0.54	0.11	0.042	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	5:39	SW3005A6020A
Selenium	0.0054 U	0.011	0.0054	0.0040	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	5:39	SW3005A6020A
Silver	0.00054 U	0.0054	0.00054	0.00012	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	5:39	SW3005A6020A
Sodium	37	0.11	0.054	0.037	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	5:39	SW3005A6020A
Thallium	0.00086 U	0.0011	0.00086	0.00073	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	5:39	SW3005A6020A
Vanadium	0.0054 U	0.011	0.0054	0.0019	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	5:39	SW3005A6020A
Zinc	0.0043 U	0.011	0.0043	0.0022	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	5:39	SW3005A6020A

Project ID: Dow Salvage Yard 18001468
Job ID: 67798
Sample#: 67798-020
Sample ID: SY-OBMW14-110723-DISS
Matrix: Water
Sampled: 11/7/23 14:00

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Prep Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
Aluminum	0.027 U	0.054	0.027	0.011	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	5:49	SW3005A6020A
Antimony	0.00054 U	0.0011	0.00054	0.00015	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	5:49	SW3005A6020A
Arsenic	0.0013 J	0.0027	0.0011	0.00072	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	5:49	SW3005A6020A
Barium	0.0049 J	0.011	0.0011	0.00081	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	5:49	SW3005A6020A
Beryllium	0.00054 U	0.0011	0.00054	0.00011	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	5:49	SW3005A6020A
Cadmium	0.00054 U	0.0011	0.00054	0.00015	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	5:49	SW3005A6020A
Chromium	0.027 U	0.054	0.027	0.022	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	5:49	SW3005A6020A
Cobalt	0.00054 U	0.011	0.00054	0.00030	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	5:49	SW3005A6020A
Copper	0.0080 U	0.011	0.0080	0.0057	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	5:49	SW3005A6020A
Iron	0.032 U	0.054	0.032	0.031	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	5:49	SW3005A6020A
Lead	0.00054 U	0.0054	0.00054	0.00012	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	5:49	SW3005A6020A
Magnesium	25	0.11	0.021	0.0078	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	5:49	SW3005A6020A
Manganese	0.41	0.011	0.0054	0.0017	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	5:49	SW3005A6020A
Mercury	0.00015 U	0.00020	0.00015	0.00012	mg/L	1	EEB	11/20/23	12:15	17147	11/22/23	11:13	SW7470A
Nickel	0.027 U	0.054	0.027	0.013	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	5:49	SW3005A6020A
Potassium	2.8	0.54	0.11	0.042	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	5:49	SW3005A6020A
Selenium	0.0054 U	0.011	0.0054	0.0040	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	5:49	SW3005A6020A
Silver	0.00054 U	0.0054	0.00054	0.00012	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	5:49	SW3005A6020A
Sodium	35	0.11	0.054	0.037	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	5:49	SW3005A6020A
Thallium	0.00086 U	0.0011	0.00086	0.00073	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	5:49	SW3005A6020A
Vanadium	0.0054 U	0.011	0.0054	0.0019	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	5:49	SW3005A6020A
Zinc	0.0043 U	0.011	0.0043	0.0022	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	5:49	SW3005A6020A

Project ID: Dow Salvage Yard 18001468
Job ID: 67798
Sample#: 67798-021
Sample ID: SY-BRMW2-252.5-262.5-110723-DISS
Matrix: Water
Sampled: 11/7/23 15:35

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
Aluminum	0.027 U	0.054	0.027	0.011	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	6:28	SW3005A6020A
Antimony	0.0011	0.0011	0.00054	0.00015	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	6:28	SW3005A6020A
Arsenic	0.0023 J	0.0027	0.0011	0.00072	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	6:28	SW3005A6020A
Barium	0.064	0.011	0.0011	0.00081	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	6:28	SW3005A6020A
Beryllium	0.00054 U	0.0011	0.00054	0.00011	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	6:28	SW3005A6020A
Cadmium	0.00054 U	0.0011	0.00054	0.00015	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	6:28	SW3005A6020A
Chromium	0.027 U	0.054	0.027	0.022	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	6:28	SW3005A6020A
Cobalt	0.00054 U	0.011	0.00054	0.00030	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	6:28	SW3005A6020A
Copper	0.0080 U	0.011	0.0080	0.0057	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	6:28	SW3005A6020A
Iron	0.032 U	0.054	0.032	0.031	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	6:28	SW3005A6020A
Lead	0.0033 J	0.0054	0.00054	0.00012	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	6:28	SW3005A6020A
Magnesium	10.0	0.11	0.021	0.0078	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	6:28	SW3005A6020A
Manganese	0.0099 J	0.011	0.0054	0.0017	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	6:28	SW3005A6020A
Mercury	0.00015 U	0.00020	0.00015	0.00012	mg/L	1	EEB	11/20/23	12:15	17147	11/22/23	11:15	SW7470A
Nickel	0.027 U	0.054	0.027	0.013	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	6:28	SW3005A6020A
Potassium	0.64	0.54	0.11	0.042	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	6:28	SW3005A6020A
Selenium	0.0054 U	0.011	0.0054	0.0040	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	6:28	SW3005A6020A
Silver	0.00054 U	0.0054	0.00054	0.00012	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	6:28	SW3005A6020A
Sodium	9.8	0.11	0.054	0.037	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	6:28	SW3005A6020A
Thallium	0.00086 U	0.0011	0.00086	0.00073	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	6:28	SW3005A6020A
Vanadium	0.0054 U	0.011	0.0054	0.0019	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	6:28	SW3005A6020A
Zinc	0.0052 J	0.011	0.0043	0.0022	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	6:28	SW3005A6020A

Quality Control Report



124 Heritage Avenue Unit 16
Portsmouth, NH 03801
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Case Narrative
Lab # 67798

Sample Receiving and Chain of Custody Discrepancies

Samples were received in acceptable condition, between 0 and 6 degrees C, on ice, and in accordance with sample handling, preservation and integrity guidelines.
The analyses performed met the requirements of Absolute Resource Associates' Quality Assurance Plan and the requirements set forth by the associated Sampling and Analysis Plan dated December 2022 (final), except as noted below.
Absolute Resource Associates is an ISO/IEC 17025:2017 DoD accredited "Testing Laboratory" through PJLA with an accreditation # 78237. The analyses performed met the requirements of Absolute Resource Associates' Quality Assurance Plan. Parameters included in the ARA current DoD certification also met the requirements set forth by the current DoD Quality Systems Manual, except as noted below. See included table for analytes or parameters not included in ARA scope of DoD accreditation, if applicable.

Calibration

No exceptions noted.

Method Blank

No exceptions noted.

Surrogate Recoveries

The sample extract for 67798-003 (SY-OBMW4R-110723) PCB analysis was spilled during the final stages of sample concentration losing an unknown amount. No additional sample volume remains for re-analysis. The results have been reported, but based on the extremely low surrogate recoveries, a significant portion of the extract was lost during the spill.
EPH: Samples 67798-007 through -010 did not meet acceptance criteria for the extraction surrogate 1-chloro-octadecane. No additional sample volume remains for re-analysis. The results have been qualified accordingly.

Laboratory Control Sample Results

VOC: The LCS2303675 did not meet the acceptance criteria for t-butanol (TBA), 1,4-dioxane, and 1,2,3-trichloropropane. The LCS2303675 did not meet the acceptance criteria for chloroethane, diethyl ether, t-butanol (TBA), toluene, 1,3-dichloropropane, and 1,2,3-trichloropropane. These compounds showed high recoveries. There is no impact to the data as these analytes were not detected in the associated samples.
SVOC: The LCS/D17096 did not meet the acceptance criteria for several compounds. These compounds showed low recoveries. The relative percent difference between the LCS and LCSD17096 was outside the acceptance criteria for several compounds. No additional sample volume remains for re-analysis. The results have been qualified accordingly.

EPH: The LCS/D17110 did not meet the acceptance criteria for naphthalene, 2-methylnaphthalene, indeno(1,2,3-cd)pyrene, dibenzo(a,h)anthracene, and C9-C18 Aliphatics. These compounds showed low recoveries. The relative percent difference between the LCS and LCSD17110 was outside the acceptance criteria for C19-C36 Aliphatics. No additional sample volume remains for re-analysis. The results have been qualified accordingly.

Matrix Spike/Matrix Spike Duplicate/Duplicate Results

VOC: The matrix spike/duplicate for 67798-001 and -007 did not meet the acceptance criteria for several compounds. The associated LCS/D met the method acceptance criteria. Compounds that exhibited recoveries outside the acceptance criteria have been qualified with an "M." Matrix interference suspected.

SVOC: The matrix spike/duplicate for 67798-001 and -007 did not meet the acceptance criteria for several compounds. These compounds showed low recoveries. Similar recoveries were observed in the associated LCS/D. No additional sample volume remains for re-analysis. The results have been qualified accordingly.

VPH: The matrix spike/duplicate for 67798-001 and -007 did not meet the acceptance criteria for Unadjusted C9-C12 Aliphatics, C5-C8 Aliphatics, C9-C12 Aliphatics, and C9-C10 Aromatics. The associated LCS/D met the method acceptance criteria. Compounds that exhibited recoveries outside the acceptance criteria have been qualified with an "M." Matrix interference suspected.

EPH: The matrix spike/duplicate for 67798-001 and -007 did not meet the acceptance criteria for naphthalene, 2-methylnaphthalene, acenaphthylene, and C19-C36 Aliphatics. These compounds showed low recoveries. Similar recoveries were observed in the associated LCS/D. No additional sample volume remains for re-analysis. The results have been qualified accordingly.

Metals: The matrix spike for 67798-007 and -012 did not meet the acceptance criteria for Potassium. The percent recovery was acceptable in the associated LCS/D. The recovery for the PDS for is provided with the results. Matrix interference suspected. Sample results have been qualified accordingly. Magnesium was not able to be evaluated as the native sample concentration is greater than 4 times the spike concentration.

Other

QC: Due to spiking concentrations or expected concentrations being below the LOQ in the LCS/D &/or MS/MSD the following compounds have been reported in these QC samples with lower LOQs to show calculated percent recoveries: benzoic acid, benzidine, and C9-C18 Aliphatics.

Reporting Limits: Dilutions performed during the analysis are noted on the result pages.

No other exceptions noted.

Data Qualifiers

U = This compound was analyzed for, but not detected above the associated limit of detection.

J = The analytical result was below the instrument calibration range, but above the method detection limit. The reported concentration is an estimate.

m = An "m" next to the "Response" value reported on the raw data sheets indicates a manual integration was performed.

Abbreviations for Manual Integrations

BC = Baseline Correction: The software integration of the baseline was inappropriate for the chromatogram
MI = Mis-Identification: The software integrated the incorrect peak
PS = Peak Separation: Two peaks exist in the chromatogram but the software integrated them as one
RI = Range Integration: Software does not perform range integrations, must be performed manually
NB = Noisy Baseline: Software mis-integrated due to a noisy baseline
PM = Peak Missed: Software did not integrate the target peak

Absolute Resource Associates does not hold DoD Certification for the following analytes:

Waters

Analyte	CAS	Reference
1,3,5-trichlorobenzene	108-70-3	SW5030C8260D
1,4-dioxane	123-91-1	SW5030C8260D
diethyl ether	60-29-7	SW5030C8260D
tetrahydrofuran (THF)	109-99-9	SW5030C8260D
azobenzene	103-33-3	SW3510C8270E

GLOSSARY

%R	Percent Recovery
BLK	Blank (Method Blank, Preparation Blank)
CCB	Continuing Calibration Blank
CCV	Continuing Calibration Verification
CRM	Certified Reference Material (associated with solid Metals samples)
CRMD	Certified Reference Material Duplicate (associated with solid Metals samples)
Dil'n	Dilution
DL	Detection Limit
DUP	Duplicate
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
LOD	Limit of Detection
LOQ	Limit of Quantitation
MB	Methanol Blank (associated with solid VOC samples)
MLCS	Methanol Laboratory Control Sample (associated with solid VOC samples)
MLCSD	Methanol Laboratory Control Sample Duplicate (associated with solid VOC samples)
MS	Matrix Spike
MSD	Matrix Spike Duplicate
PB	Preparation Blank
QC	Quality Control
RL	Reporting Limit
RPD	Relative Percent Difference
SUR	Surrogate

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R	Limits		RPD	RPD Limit
MA VPH	BLK2303773	Unadjusted C5-C8 Aliphatics		50 U	100	50	50	ug/L						
		Unadjusted C9-C12 Aliphatics		50 U	100	50	40	ug/L						
		methyl t-butyl ether (MTBE)		1.0 U	2.0	1.0	0.73	ug/L						
		benzene		1.0 U	1.0	1.0	0.76	ug/L						
		toluene		1.0 U	2.0	1.0	0.58	ug/L						
		ethylbenzene		0.41 J	2.0	1.0	0.40	ug/L						
		m&p-xylenes		2.0 U	2.0	2.0	1.1	ug/L						
		o-xylene		1.0 U	2.0	1.0	0.45	ug/L						
		naphthalene		4.0 U	5.0	4.0	3.5	ug/L						
		C5-C8 Aliphatics		50 U	100	50	50	ug/L						
		C9-C12 Aliphatics		50 U	100	50	40	ug/L						
		C9-C10 Aromatics		50 U	100	50	33	ug/L						
		2,5-dibromotoluene as Aromatic		103				%			70	130		
		2,5-dibromotoluene as Aliphatic		101				%			70	130		
MA VPH	LCS2303773	Unadjusted C5-C8 Aliphatics		290	100	50	50	ug/L	300	96	70	130		
		Unadjusted C9-C12 Aliphatics		290	100	50	40	ug/L	300	97	70	130		
		methyl t-butyl ether (MTBE)		100	2.0	1.0	0.73	ug/L	100	104	70	130		
		benzene		100	1.0	1.0	0.76	ug/L	100	101	70	130		
		toluene		100	2.0	1.0	0.58	ug/L	100	100	70	130		
		ethylbenzene		100	2.0	1.0	0.40	ug/L	100	102	70	130		
		m&p-xylenes		200	2.0	2.0	1.1	ug/L	200	101	70	130		
		o-xylene		100	2.0	1.0	0.45	ug/L	100	101	70	130		
		naphthalene		99	5.0	4.0	3.5	ug/L	100	99	70	130		
		C5-C8 Aliphatics		50 U	100	50	50	ug/L			70	130		
		C9-C12 Aliphatics		50 U	100	50	40	ug/L			70	130		
		C9-C10 Aromatics		100	100	50	33	ug/L	100	102	70	130		
		2,5-dibromotoluene as Aromatic		129				%			70	130		
		2,5-dibromotoluene as Aliphatic		125				%			70	130		
MA VPH	LCSD2303773	Unadjusted C5-C8 Aliphatics		280	100	50	50	ug/L	300	95	70	130	2	25
		Unadjusted C9-C12 Aliphatics		270	100	50	40	ug/L	300	90	70	130	8	25
		methyl t-butyl ether (MTBE)		100	2.0	1.0	0.73	ug/L	100	100	70	130	5	25
		benzene		97	1.0	1.0	0.76	ug/L	100	97	70	130	4	25
		toluene		96	2.0	1.0	0.58	ug/L	100	96	70	130	4	25
		ethylbenzene		98	2.0	1.0	0.40	ug/L	100	98	70	130	5	25
		m&p-xylenes		190	2.0	2.0	1.1	ug/L	200	96	70	130	5	25
		o-xylene		96	2.0	1.0	0.45	ug/L	100	96	70	130	5	25
		naphthalene		91	5.0	4.0	3.5	ug/L	100	91	70	130	8	25
		C5-C8 Aliphatics		50 U	100	50	50	ug/L			70	130		25
		C9-C12 Aliphatics		50 U	100	50	40	ug/L			70	130		25
		C9-C10 Aromatics		95 J	100	50	33	ug/L	100	95	70	130	7	25
		2,5-dibromotoluene as Aromatic		111				%			70	130		
		2,5-dibromotoluene as Aliphatic		116				%			70	130		

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R		Limits		RPD	RPD Limit
MA VPH	MS2303773	Unadjusted C5-C8 Aliphatics	67798-001	760	100	50	50	ug/L	600	127		70	130		
		Unadjusted C9-C12 Aliphatics	67798-001	1100	100	50	40	ug/L	800	136	*	70	130		
		methyl t-butyl ether (MTBE)	67798-001	100	2.0	1.0	0.73	ug/L	100	102		70	130		
		benzene	67798-001	100	1.0	1.0	0.76	ug/L	100	102		70	130		
		toluene	67798-001	100	2.0	1.0	0.58	ug/L	100	101		70	130		
		ethylbenzene	67798-001	100	2.0	1.0	0.40	ug/L	100	103		70	130		
		m&p-xylenes	67798-001	200	2.0	2.0	1.1	ug/L	200	101		70	130		
		o-xylene	67798-001	100	2.0	1.0	0.45	ug/L	100	101		70	130		
		naphthalene	67798-001	99	5.0	4.0	3.5	ug/L	100	99		70	130		
		C5-C8 Aliphatics	67798-001	460	100	50	50	ug/L	300	152	*	70	130		
		C9-C12 Aliphatics	67798-001	490	100	50	40	ug/L	300	163	*	70	130		
		C9-C10 Aromatics	67798-001	190	100	50	33	ug/L	100	190	*	70	130		
		2,5-dibromotoluene as Aromatic	67798-001	117				%				70	130		
		2,5-dibromotoluene as Aliphatic	67798-001	119				%				70	130		
MA VPH	MS2303773	Unadjusted C5-C8 Aliphatics	67798-007	740	100	50	50	ug/L	600	123		70	130		
		Unadjusted C9-C12 Aliphatics	67798-007	1000	100	50	40	ug/L	800	131	*	70	130		
		methyl t-butyl ether (MTBE)	67798-007	100	2.0	1.0	0.73	ug/L	100	101		70	130		
		benzene	67798-007	100	1.0	1.0	0.76	ug/L	100	101		70	130		
		toluene	67798-007	100	2.0	1.0	0.58	ug/L	100	100		70	130		
		ethylbenzene	67798-007	100	2.0	1.0	0.40	ug/L	100	102		70	130		
		m&p-xylenes	67798-007	200	2.0	2.0	1.1	ug/L	200	99		70	130		
		o-xylene	67798-007	99	2.0	1.0	0.45	ug/L	100	99		70	130		
		naphthalene	67798-007	95	5.0	4.0	3.5	ug/L	100	95		70	130		
		C5-C8 Aliphatics	67798-007	440	100	50	50	ug/L	300	146	*	70	130		
		C9-C12 Aliphatics	67798-007	470	100	50	40	ug/L	300	157	*	70	130		
		C9-C10 Aromatics	67798-007	170	100	50	33	ug/L	100	174	*	70	130		
		2,5-dibromotoluene as Aromatic	67798-007	104				%				70	130		
		2,5-dibromotoluene as Aliphatic	67798-007	109				%				70	130		

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R		Limits		RPD	RPD Limit
MA VPH	MSD2303773	Unadjusted C5-C8 Aliphatics	67798-001	760	100	50	50	ug/L	600	126		70	130	0	50
		Unadjusted C9-C12 Aliphatics	67798-001	1100	100	50	40	ug/L	800	134	*	70	130	1	50
		methyl t-butyl ether (MTBE)	67798-001	100	2.0	1.0	0.73	ug/L	100	102		70	130	0	50
		benzene	67798-001	100	1.0	1.0	0.76	ug/L	100	102		70	130	0	50
		toluene	67798-001	100	2.0	1.0	0.58	ug/L	100	101		70	130	0	50
		ethylbenzene	67798-001	100	2.0	1.0	0.40	ug/L	100	103		70	130	0	50
		m&p-xylenes	67798-001	200	2.0	2.0	1.1	ug/L	200	101		70	130	0	50
		o-xylene	67798-001	100	2.0	1.0	0.45	ug/L	100	101		70	130	0	50
		naphthalene	67798-001	100	5.0	4.0	3.5	ug/L	100	101		70	130	2	50
		C5-C8 Aliphatics	67798-001	450	100	50	50	ug/L	300	151	*	70	130	0	50
		C9-C12 Aliphatics	67798-001	480	100	50	40	ug/L	300	161	*	70	130	1	50
		C9-C10 Aromatics	67798-001	180	100	50	33	ug/L	100	184	*	70	130	3	50
		2,5-dibromotoluene as Aromatic	67798-001	113				%				70	130		
		2,5-dibromotoluene as Aliphatic	67798-001	116				%				70	130		
MA VPH	MSD2303773	Unadjusted C5-C8 Aliphatics	67798-007	730	100	50	50	ug/L	600	122		70	130	1	50
		Unadjusted C9-C12 Aliphatics	67798-007	1100	100	50	40	ug/L	800	132	*	70	130	1	50
		methyl t-butyl ether (MTBE)	67798-007	100	2.0	1.0	0.73	ug/L	100	102		70	130	1	50
		benzene	67798-007	100	1.0	1.0	0.76	ug/L	100	103		70	130	2	50
		toluene	67798-007	100	2.0	1.0	0.58	ug/L	100	101		70	130	2	50
		ethylbenzene	67798-007	100	2.0	1.0	0.40	ug/L	100	104		70	130	2	50
		m&p-xylenes	67798-007	200	2.0	2.0	1.1	ug/L	200	101		70	130	2	50
		o-xylene	67798-007	100	2.0	1.0	0.45	ug/L	100	101		70	130	2	50
		naphthalene	67798-007	98	5.0	4.0	3.5	ug/L	100	98		70	130	3	50
		C5-C8 Aliphatics	67798-007	430	100	50	50	ug/L	300	142	*	70	130	2	50
		C9-C12 Aliphatics	67798-007	470	100	50	40	ug/L	300	158	*	70	130	1	50
		C9-C10 Aromatics	67798-007	180	100	50	33	ug/L	100	178	*	70	130	2	50
		2,5-dibromotoluene as Aromatic	67798-007	104				%				70	130		
		2,5-dibromotoluene as Aliphatic	67798-007	107				%				70	130		

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R	Limits	RPD	RPD Limit
SW5030C8260D	BLK2303675	dichlorodifluoromethane		1.0 U	2.0	1.0	0.28	ug/L					
		chloromethane		1.0 U	2.0	1.0	0.59	ug/L					
		vinyl chloride		1.0 U	2.0	1.0	0.49	ug/L					
		bromomethane		1.5 U	2.0	1.5	1.1	ug/L					
		chloroethane		1.0 U	2.0	1.0	0.33	ug/L					
		trichlorofluoromethane		1.0 U	2.0	1.0	0.34	ug/L					
		diethyl ether		1.0 U	2.0	1.0	0.41	ug/L					
		acetone		5.0 U	50	5.0	1.9	ug/L					
		1,1-dichloroethene		0.50 U	1.0	0.50	0.35	ug/L					
		methylene chloride		1.0 U	2.0	1.0	0.59	ug/L					
		carbon disulfide		0.36 J	2.0	1.0	0.33	ug/L					
		methyl t-butyl ether (MTBE)		1.0 U	2.0	1.0	0.30	ug/L					
		trans-1,2-dichloroethene		1.0 U	2.0	1.0	0.46	ug/L					
		ethyl t-butyl ether (ETBE)		1.0 U	2.0	1.0	0.24	ug/L					
		1,1-dichloroethane		1.0 U	2.0	1.0	0.27	ug/L					
		t-butanol (TBA)		10 U	30	10	2.5	ug/L					
		2-butanone (MEK)		5.0 U	10	5.0	0.67	ug/L					
		2,2-dichloropropane		1.0 U	2.0	1.0	0.21	ug/L					
		cis-1,2-dichloroethene		1.5 U	2.0	1.5	1.2	ug/L					
		chloroform		1.5 U	2.0	1.5	1.4	ug/L					
		bromochloromethane		1.0 U	2.0	1.0	0.22	ug/L					
		tetrahydrofuran (THF)		1.5 U	2.0	1.5	0.75	ug/L					
		1,1,1-trichloroethane		1.0 U	2.0	1.0	0.55	ug/L					
		1,1-dichloropropene		1.0 U	2.0	1.0	0.26	ug/L					
		t-amyl-methyl ether (TAME)		1.0 U	2.0	1.0	0.57	ug/L					
		carbon tetrachloride		1.0 U	2.0	1.0	0.27	ug/L					
		1,2-dichloroethane		1.0 U	2.0	1.0	0.20	ug/L					
		benzene		1.0 U	2.0	1.0	0.40	ug/L					
		trichloroethene		1.0 U	2.0	1.0	0.53	ug/L					
		1,2-dichloropropane		1.0 U	2.0	1.0	0.22	ug/L					
		bromodichloromethane		0.50 U	0.60	0.50	0.38	ug/L					
		1,4-dioxane		10 U	50	10	8.7	ug/L					
		dibromomethane		1.0 U	2.0	1.0	0.23	ug/L					
		4-methyl-2-pentanone (MIBK)		1.0 U	10	1.0	0.56	ug/L					
		cis-1,3-dichloropropene		1.0 U	2.0	1.0	0.30	ug/L					
		toluene		1.0 U	2.0	1.0	0.45	ug/L					
		trans-1,3-dichloropropene		1.0 U	2.0	1.0	0.34	ug/L					
		2-hexanone		1.0 U	10	1.0	0.72	ug/L					
		1,1,2-trichloroethane		1.0 U	2.0	1.0	0.27	ug/L					
		1,3-dichloropropane		1.0 U	2.0	1.0	0.25	ug/L					
		tetrachloroethene		1.0 U	2.0	1.0	0.76	ug/L					
		dibromochloromethane		1.0 U	2.0	1.0	0.21	ug/L					
		1,2-dibromoethane (EDB)		1.0 U	2.0	1.0	0.27	ug/L					
		chlorobenzene		1.0 U	2.0	1.0	0.25	ug/L					
		1,1,1,2-tetrachloroethane		1.0 U	2.0	1.0	0.21	ug/L					
		ethylbenzene		1.0 U	2.0	1.0	0.65	ug/L					
		m&p-xylenes		1.5 U	2.0	1.5	1.4	ug/L					
		o-xylene		1.0 U	2.0	1.0	0.55	ug/L					
		styrene		1.0 U	2.0	1.0	0.57	ug/L					
		bromoform		1.0 U	2.0	1.0	0.24	ug/L					
		isopropylbenzene		1.0 U	2.0	1.0	0.65	ug/L					
		1,1,2,2-tetrachloroethane		1.0 U	2.0	1.0	0.29	ug/L					
		1,2,3-trichloropropane		1.0 U	2.0	1.0	0.55	ug/L					
		n-propylbenzene		1.0 U	2.0	1.0	0.44	ug/L					

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R	Limits	RPD	RPD Limit
SW5030C8260D	BLK2303675	bromobenzene		1.0 U	2.0	1.0	0.27	ug/L					
		2-chlorotoluene		1.0 U	2.0	1.0	0.23	ug/L					
		4-chlorotoluene		1.0 U	2.0	1.0	0.33	ug/L					
		tert-butylbenzene		1.0 U	2.0	1.0	0.39	ug/L					
		1,2,4-trimethylbenzene		1.0 U	2.0	1.0	0.58	ug/L					
		sec-butylbenzene		1.0 U	2.0	1.0	0.44	ug/L					
		1,3-dichlorobenzene		1.0 U	2.0	1.0	0.45	ug/L					
		4-isopropyltoluene		1.0 U	2.0	1.0	0.47	ug/L					
		1,4-dichlorobenzene		1.0 U	2.0	1.0	0.26	ug/L					
		1,2-dichlorobenzene		1.0 U	2.0	1.0	0.39	ug/L					
		n-butylbenzene		1.0 U	2.0	1.0	0.54	ug/L					
		1,2-dibromo-3-chloropropane		1.5 U	2.0	1.5	0.91	ug/L					
		1,3,5-trimethylbenzene		1.0 U	2.0	1.0	0.46	ug/L					
		1,2,4-trichlorobenzene		1.0 U	2.0	1.0	0.79	ug/L					
		hexachlorobutadiene		0.50 U	0.50	0.50	0.19	ug/L					
		naphthalene		1.5 U	2.0	1.5	1.2	ug/L					
		1,2,3-trichlorobenzene		1.0 U	2.0	1.0	0.93	ug/L					
		dibromofluoromethane SUR		94				%			78	114	
		toluene-D8 SUR		100				%			88	110	
		4-bromofluorobenzene SUR		103				%			86	115	

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R		Limits	RPD	RPD Limit
SW5030C8260D	LCS2303675	dichlorodifluoromethane		20	2.0	1.0	0.28	ug/L	20	101		32	152	
		chloromethane		23	2.0	1.0	0.59	ug/L	20	114		50	139	
		vinyl chloride		18	2.0	1.0	0.49	ug/L	20	91		58	137	
		bromomethane		23	2.0	1.5	1.1	ug/L	20	114		53	141	
		chloroethane		27	2.0	1.0	0.33	ug/L	20	134		60	138	
		trichlorofluoromethane		19	2.0	1.0	0.34	ug/L	20	95		65	141	
		diethyl ether		25	2.0	1.0	0.41	ug/L	20	125		68	129	
		acetone		29 J	50	5.0	1.9	ug/L	20	144		39	160	
		1,1-dichloroethene		21	1.0	0.50	0.35	ug/L	20	104		71	131	
		methylene chloride		22	2.0	1.0	0.59	ug/L	20	109		74	124	
		carbon disulfide		26	2.0	1.0	0.33	ug/L	20	131		64	133	
		methyl t-butyl ether (MTBE)		22	2.0	1.0	0.30	ug/L	20	109		71	124	
		trans-1,2-dichloroethene		21	2.0	1.0	0.46	ug/L	20	103		75	124	
		ethyl t-butyl ether (ETBE)		21	2.0	1.0	0.24	ug/L	20	104		70	127	
		1,1-dichloroethane		22	2.0	1.0	0.27	ug/L	20	110		77	125	
		t-butanol (TBA)		130	30	10	2.5	ug/L	100	130	*	68	129	
		2-butanone (MEK)		22	10	5.0	0.67	ug/L	20	110		56	143	
		2,2-dichloropropane		18	2.0	1.0	0.21	ug/L	20	89		60	139	
		cis-1,2-dichloroethene		21	2.0	1.5	1.2	ug/L	20	105		78	123	
		chloroform		20	2.0	1.5	1.4	ug/L	20	99		79	124	
		bromochloromethane		20	2.0	1.0	0.22	ug/L	20	98		78	123	
		tetrahydrofuran (THF)		24	2.0	1.5	0.75	ug/L	20	118		57	133	
		1,1,1-trichloroethane		18	2.0	1.0	0.55	ug/L	20	88		74	131	
		1,1-dichloropropene		20	2.0	1.0	0.26	ug/L	20	98		79	125	
		t-amyl-methyl ether (TAME)		21	2.0	1.0	0.57	ug/L	20	104		68	128	
		carbon tetrachloride		17	2.0	1.0	0.27	ug/L	20	86		72	136	
		1,2-dichloroethane		19	2.0	1.0	0.20	ug/L	20	96		73	128	
		benzene		22	2.0	1.0	0.40	ug/L	20	108		79	120	
		trichloroethene		20	2.0	1.0	0.53	ug/L	20	98		79	123	
		1,2-dichloropropane		23	2.0	1.0	0.22	ug/L	20	116		78	122	
		bromodichloromethane		19	0.60	0.50	0.38	ug/L	20	93		79	125	
		1,4-dioxane		57	50	10	8.7	ug/L	40	144	*	59	139	
		dibromomethane		21	2.0	1.0	0.23	ug/L	20	104		79	123	
		4-methyl-2-pentanone (MIBK)		24	10	1.0	0.56	ug/L	20	121		67	130	
		cis-1,3-dichloropropene		19	2.0	1.0	0.30	ug/L	20	96		75	124	
		toluene		21	2.0	1.0	0.45	ug/L	20	104		80	121	
		trans-1,3-dichloropropene		19	2.0	1.0	0.34	ug/L	20	96		73	127	
		2-hexanone		26	10	1.0	0.72	ug/L	20	128		57	139	
		1,1,2-trichloroethane		22	2.0	1.0	0.27	ug/L	20	110		80	119	
		1,3-dichloropropane		24	2.0	1.0	0.25	ug/L	20	118		80	119	
		tetrachloroethene		20	2.0	1.0	0.76	ug/L	20	98		74	129	
		dibromochloromethane		18	2.0	1.0	0.21	ug/L	20	90		74	126	
		1,2-dibromoethane (EDB)		22	2.0	1.0	0.27	ug/L	20	110		77	121	
		chlorobenzene		21	2.0	1.0	0.25	ug/L	20	104		82	118	
		1,1,1,2-tetrachloroethane		19	2.0	1.0	0.21	ug/L	20	97		78	124	
		ethylbenzene		23	2.0	1.0	0.65	ug/L	20	113		79	121	
		m&p-xylenes		46	2.0	1.5	1.4	ug/L	40	115		80	121	
		o-xylene		22	2.0	1.0	0.55	ug/L	20	108		78	122	
		styrene		21	2.0	1.0	0.57	ug/L	20	105		78	123	
		bromoform		18	2.0	1.0	0.24	ug/L	20	89		66	130	
		isopropylbenzene		22	2.0	1.0	0.65	ug/L	20	110		72	131	
		1,1,2,2-tetrachloroethane		23	2.0	1.0	0.29	ug/L	20	117		71	121	
		1,2,3-trichloropropane		25	2.0	1.0	0.55	ug/L	20	124	*	73	122	
		n-propylbenzene		23	2.0	1.0	0.44	ug/L	20	114		76	126	

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R	Limits		RPD	RPD Limit
SW5030C8260D	LCS2303675	bromobenzene		20	2.0	1.0	0.27	ug/L	20	101	80	120		
		2-chlorotoluene		23	2.0	1.0	0.23	ug/L	20	116	79	122		
		4-chlorotoluene		22	2.0	1.0	0.33	ug/L	20	112	78	122		
		tert-butylbenzene		21	2.0	1.0	0.39	ug/L	20	105	78	124		
		1,2,4-trimethylbenzene		22	2.0	1.0	0.58	ug/L	20	111	76	124		
		sec-butylbenzene		22	2.0	1.0	0.44	ug/L	20	111	77	126		
		1,3-dichlorobenzene		22	2.0	1.0	0.45	ug/L	20	109	80	119		
		4-isopropyltoluene		22	2.0	1.0	0.47	ug/L	20	108	77	127		
		1,4-dichlorobenzene		22	2.0	1.0	0.26	ug/L	20	109	79	118		
		1,2-dichlorobenzene		21	2.0	1.0	0.39	ug/L	20	106	80	119		
		n-butylbenzene		22	2.0	1.0	0.54	ug/L	20	109	75	128		
		1,2-dibromo-3-chloropropane		24	2.0	1.5	0.91	ug/L	20	120	62	128		
		1,3,5-trimethylbenzene		23	2.0	1.0	0.46	ug/L	20	113	75	124		
		1,2,4-trichlorobenzene		20	2.0	1.0	0.79	ug/L	20	100	69	130		
		hexachlorobutadiene		21	0.50	0.50	0.19	ug/L	20	103	66	134		
		naphthalene		21	2.0	1.5	1.2	ug/L	20	105	61	128		
		1,2,3-trichlorobenzene		21	2.0	1.0	0.93	ug/L	20	104	69	129		
		dibromofluoromethane SUR		96				%			78	114		
		toluene-D8 SUR		100				%			88	110		
		4-bromofluorobenzene SUR		99				%			86	115		

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R		Limits		RPD	RPD Limit
SW5030C8260D	LCSD2303675	dichlorodifluoromethane		23	2.0	1.0	0.28	ug/L	20	114		32	152	12	20
		chloromethane		26	2.0	1.0	0.59	ug/L	20	129		50	139	12	20
		vinyl chloride		21	2.0	1.0	0.49	ug/L	20	106		58	137	15	20
		bromomethane		24	2.0	1.5	1.1	ug/L	20	121		53	141	6	20
		chloroethane		30	2.0	1.0	0.33	ug/L	20	150	*	60	138	11	20
		trichlorofluoromethane		22	2.0	1.0	0.34	ug/L	20	108		65	141	13	20
		diethyl ether		26	2.0	1.0	0.41	ug/L	20	131	*	68	129	5	20
		acetone		31 J	50	5.0	1.9	ug/L	20	154		39	160	6	20
		1,1-dichloroethene		23	1.0	0.50	0.35	ug/L	20	115		71	131	10	20
		methylene chloride		22	2.0	1.0	0.59	ug/L	20	111		74	124	1	20
		carbon disulfide		29	2.0	1.0	0.33	ug/L	20	146	*	64	133	11	20
		methyl t-butyl ether (MTBE)		22	2.0	1.0	0.30	ug/L	20	112		71	124	3	20
		trans-1,2-dichloroethene		22	2.0	1.0	0.46	ug/L	20	112		75	124	8	20
		ethyl t-butyl ether (ETBE)		21	2.0	1.0	0.24	ug/L	20	107		70	127	2	20
		1,1-dichloroethane		23	2.0	1.0	0.27	ug/L	20	116		77	125	6	20
		t-butanol (TBA)		130	30	10	2.5	ug/L	100	134	*	68	129	3	20
		2-butanone (MEK)		23	10	5.0	0.67	ug/L	20	116		56	143	5	20
		2,2-dichloropropane		20	2.0	1.0	0.21	ug/L	20	100		60	139	12	20
		cis-1,2-dichloroethene		22	2.0	1.5	1.2	ug/L	20	112		78	123	6	20
		chloroform		21	2.0	1.5	1.4	ug/L	20	105		79	124	6	20
		bromochloromethane		20	2.0	1.0	0.22	ug/L	20	101		78	123	4	20
		tetrahydrofuran (THF)		24	2.0	1.5	0.75	ug/L	20	118		57	133	0	20
		1,1,1-trichloroethane		19	2.0	1.0	0.55	ug/L	20	97		74	131	9	20
		1,1-dichloropropene		21	2.0	1.0	0.26	ug/L	20	104		79	125	7	20
		t-amyl-methyl ether (TAME)		22	2.0	1.0	0.57	ug/L	20	108		68	128	4	20
		carbon tetrachloride		19	2.0	1.0	0.27	ug/L	20	97		72	136	12	20
		1,2-dichloroethane		20	2.0	1.0	0.20	ug/L	20	101		73	128	6	20
		benzene		23	2.0	1.0	0.40	ug/L	20	116		79	120	7	20
		trichloroethene		21	2.0	1.0	0.53	ug/L	20	106		79	123	8	20
		1,2-dichloropropane		24	2.0	1.0	0.22	ug/L	20	121		78	122	5	20
		bromodichloromethane		20	0.60	0.50	0.38	ug/L	20	98		79	125	5	20
		1,4-dioxane		55	50	10	8.7	ug/L	40	137		59	139	5	20
		dibromomethane		22	2.0	1.0	0.23	ug/L	20	108		79	123	4	20
		4-methyl-2-pentanone (MIBK)		25	10	1.0	0.56	ug/L	20	123		67	130	2	20
		cis-1,3-dichloropropene		20	2.0	1.0	0.30	ug/L	20	100		75	124	4	20
		toluene		24	2.0	1.0	0.45	ug/L	20	122	*	80	121	16	20
		trans-1,3-dichloropropene		20	2.0	1.0	0.34	ug/L	20	98		73	127	2	20
		2-hexanone		27	10	1.0	0.72	ug/L	20	137		57	139	6	20
		1,1,2-trichloroethane		23	2.0	1.0	0.27	ug/L	20	113		80	119	3	20
		1,3-dichloropropane		24	2.0	1.0	0.25	ug/L	20	121	*	80	119	3	20
		tetrachloroethene		21	2.0	1.0	0.76	ug/L	20	107		74	129	9	20
		dibromochloromethane		18	2.0	1.0	0.21	ug/L	20	92		74	126	3	20
		1,2-dibromoethane (EDB)		22	2.0	1.0	0.27	ug/L	20	111		77	121	1	20
		chlorobenzene		22	2.0	1.0	0.25	ug/L	20	108		82	118	4	20
		1,1,1,2-tetrachloroethane		21	2.0	1.0	0.21	ug/L	20	103		78	124	6	20
		ethylbenzene		24	2.0	1.0	0.65	ug/L	20	119		79	121	5	20
		m&p-xylenes		48	2.0	1.5	1.4	ug/L	40	121		80	121	5	20
		o-xylene		23	2.0	1.0	0.55	ug/L	20	115		78	122	6	20
		styrene		22	2.0	1.0	0.57	ug/L	20	109		78	123	3	20
		bromoform		18	2.0	1.0	0.24	ug/L	20	88		66	130	1	20
		isopropylbenzene		23	2.0	1.0	0.65	ug/L	20	117		72	131	6	20
		1,1,2,2-tetrachloroethane		23	2.0	1.0	0.29	ug/L	20	117		71	121	0	20
		1,2,3-trichloropropane		26	2.0	1.0	0.55	ug/L	20	129	*	73	122	4	20
		n-propylbenzene		24	2.0	1.0	0.44	ug/L	20	119		76	126	5	20

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R	Limits		RPD	RPD Limit
SW5030C8260D	LCSD2303675	bromobenzene		21	2.0	1.0	0.27	ug/L	20	103	80	120	3	20
		2-chlorotoluene		24	2.0	1.0	0.23	ug/L	20	118	79	122	2	20
		4-chlorotoluene		23	2.0	1.0	0.33	ug/L	20	117	78	122	4	20
		tert-butylbenzene		22	2.0	1.0	0.39	ug/L	20	110	78	124	4	20
		1,2,4-trimethylbenzene		22	2.0	1.0	0.58	ug/L	20	112	76	124	2	20
		sec-butylbenzene		23	2.0	1.0	0.44	ug/L	20	117	77	126	5	20
		1,3-dichlorobenzene		21	2.0	1.0	0.45	ug/L	20	107	80	119	1	20
		4-isopropyltoluene		22	2.0	1.0	0.47	ug/L	20	110	77	127	2	20
		1,4-dichlorobenzene		22	2.0	1.0	0.26	ug/L	20	109	79	118	0	20
		1,2-dichlorobenzene		21	2.0	1.0	0.39	ug/L	20	105	80	119	1	20
		n-butylbenzene		22	2.0	1.0	0.54	ug/L	20	111	75	128	2	20
		1,2-dibromo-3-chloropropane		24	2.0	1.5	0.91	ug/L	20	119	62	128	1	20
		1,3,5-trimethylbenzene		23	2.0	1.0	0.46	ug/L	20	117	75	124	3	20
		1,2,4-trichlorobenzene		19	2.0	1.0	0.79	ug/L	20	97	69	130	3	20
		hexachlorobutadiene		21	0.50	0.50	0.19	ug/L	20	104	66	134	1	20
		naphthalene		21	2.0	1.5	1.2	ug/L	20	106	61	128	1	20
		1,2,3-trichlorobenzene		20	2.0	1.0	0.93	ug/L	20	102	69	129	2	20
		dibromofluoromethane SUR		92				%			78	114		
		toluene-D8 SUR		99				%			88	110		
		4-bromofluorobenzene SUR		102				%			86	115		

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R		Limits	RPD	RPD Limit
SW5030C8260D	MS2303675	dichlorodifluoromethane	67798-001	22	2.0	1.0	0.28	ug/L	20	112		32	152	
		chloromethane	67798-001	25	2.0	1.0	0.59	ug/L	20	124		50	139	
		vinyl chloride	67798-001	21	2.0	1.0	0.49	ug/L	20	104		58	137	
		bromomethane	67798-001	24	2.0	1.5	1.1	ug/L	20	118		53	141	
		chloroethane	67798-001	29	2.0	1.0	0.33	ug/L	20	144	*	60	138	
		trichlorofluoromethane	67798-001	21	2.0	1.0	0.34	ug/L	20	103		65	141	
		diethyl ether	67798-001	27	2.0	1.0	0.41	ug/L	20	137	*	68	129	
		acetone	67798-001	30 J	50	5.0	1.9	ug/L	20	148		39	160	
		1,1-dichloroethene	67798-001	23	1.0	0.50	0.35	ug/L	20	113		71	131	
		methylene chloride	67798-001	23	2.0	1.0	0.59	ug/L	20	115		74	124	
		carbon disulfide	67798-001	28	2.0	1.0	0.33	ug/L	20	140	*	64	133	
		methyl t-butyl ether (MTBE)	67798-001	23	2.0	1.0	0.30	ug/L	20	114		71	124	
		trans-1,2-dichloroethene	67798-001	22	2.0	1.0	0.46	ug/L	20	111		75	124	
		ethyl t-butyl ether (ETBE)	67798-001	22	2.0	1.0	0.24	ug/L	20	108		70	127	
		1,1-dichloroethane	67798-001	23	2.0	1.0	0.27	ug/L	20	115		77	125	
		t-butanol (TBA)	67798-001	130	30	10	2.5	ug/L	100	131	*	68	129	
		2-butanone (MEK)	67798-001	23	10	5.0	0.67	ug/L	20	113		56	143	
		2,2-dichloropropane	67798-001	20	2.0	1.0	0.21	ug/L	20	98		60	139	
		cis-1,2-dichloroethene	67798-001	22	2.0	1.5	1.2	ug/L	20	111		78	123	
		chloroform	67798-001	21	2.0	1.5	1.4	ug/L	20	103		79	124	
		bromochloromethane	67798-001	21	2.0	1.0	0.22	ug/L	20	104		78	123	
		tetrahydrofuran (THF)	67798-001	24	2.0	1.5	0.75	ug/L	20	122		57	133	
		1,1,1-trichloroethane	67798-001	19	2.0	1.0	0.55	ug/L	20	93		74	131	
		1,1-dichloropropene	67798-001	20	2.0	1.0	0.26	ug/L	20	102		79	125	
		t-amyl-methyl ether (TAME)	67798-001	21	2.0	1.0	0.57	ug/L	20	107		68	128	
		carbon tetrachloride	67798-001	18	2.0	1.0	0.27	ug/L	20	90		72	136	
		1,2-dichloroethane	67798-001	20	2.0	1.0	0.20	ug/L	20	98		73	128	
		benzene	67798-001	23	2.0	1.0	0.40	ug/L	20	115		79	120	
		trichloroethene	67798-001	21	2.0	1.0	0.53	ug/L	20	105		79	123	
		1,2-dichloropropane	67798-001	24	2.0	1.0	0.22	ug/L	20	121		78	122	
		bromodichloromethane	67798-001	20	0.60	0.50	0.38	ug/L	20	98		79	125	
		1,4-dioxane	67798-001	54	50	10	8.7	ug/L	40	134		59	139	
		dibromomethane	67798-001	21	2.0	1.0	0.23	ug/L	20	107		79	123	
		4-methyl-2-pentanone (MIBK)	67798-001	25	10	1.0	0.56	ug/L	20	123		67	130	
		cis-1,3-dichloropropene	67798-001	20	2.0	1.0	0.30	ug/L	20	101		75	124	
		toluene	67798-001	22	2.0	1.0	0.45	ug/L	20	112		80	121	
		trans-1,3-dichloropropene	67798-001	20	2.0	1.0	0.34	ug/L	20	98		73	127	
		2-hexanone	67798-001	27	10	1.0	0.72	ug/L	20	135		57	139	
		1,1,2-trichloroethane	67798-001	19	2.0	1.0	0.27	ug/L	20	94		80	119	
		1,3-dichloropropane	67798-001	23	2.0	1.0	0.25	ug/L	20	114		80	119	
		tetrachloroethene	67798-001	20	2.0	1.0	0.76	ug/L	20	99		74	129	
		dibromochloromethane	67798-001	17	2.0	1.0	0.21	ug/L	20	86		74	126	
		1,2-dibromoethane (EDB)	67798-001	21	2.0	1.0	0.27	ug/L	20	105		77	121	
		chlorobenzene	67798-001	21	2.0	1.0	0.25	ug/L	20	104		82	118	
		1,1,1,2-tetrachloroethane	67798-001	19	2.0	1.0	0.21	ug/L	20	96		78	124	
		ethylbenzene	67798-001	23	2.0	1.0	0.65	ug/L	20	114		79	121	
		m&p-xylenes	67798-001	46	2.0	1.5	1.4	ug/L	40	116		80	121	
		o-xylene	67798-001	22	2.0	1.0	0.55	ug/L	20	109		78	122	
		styrene	67798-001	21	2.0	1.0	0.57	ug/L	20	107		78	123	
		bromoform	67798-001	17	2.0	1.0	0.24	ug/L	20	84		66	130	
		isopropylbenzene	67798-001	22	2.0	1.0	0.65	ug/L	20	112		72	131	
		1,1,2,2-tetrachloroethane	67798-001	23	2.0	1.0	0.29	ug/L	20	115		71	121	
		1,2,3-trichloropropane	67798-001	25	2.0	1.0	0.55	ug/L	20	124	*	73	122	
		n-propylbenzene	67798-001	23	2.0	1.0	0.44	ug/L	20	115		76	126	

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R	Limits		RPD	RPD Limit
SW5030C8260D	MS2303675	bromobenzene	67798-001	20	2.0	1.0	0.27	ug/L	20	100	80	120		
		2-chlorotoluene	67798-001	23	2.0	1.0	0.23	ug/L	20	116	79	122		
		4-chlorotoluene	67798-001	23	2.0	1.0	0.33	ug/L	20	116	78	122		
		tert-butylbenzene	67798-001	22	2.0	1.0	0.39	ug/L	20	110	78	124		
		1,2,4-trimethylbenzene	67798-001	22	2.0	1.0	0.58	ug/L	20	110	76	124		
		sec-butylbenzene	67798-001	22	2.0	1.0	0.44	ug/L	20	112	77	126		
		1,3-dichlorobenzene	67798-001	22	2.0	1.0	0.45	ug/L	20	109	80	119		
		4-isopropyltoluene	67798-001	22	2.0	1.0	0.47	ug/L	20	108	77	127		
		1,4-dichlorobenzene	67798-001	22	2.0	1.0	0.26	ug/L	20	109	79	118		
		1,2-dichlorobenzene	67798-001	21	2.0	1.0	0.39	ug/L	20	106	80	119		
		n-butylbenzene	67798-001	22	2.0	1.0	0.54	ug/L	20	109	75	128		
		1,2-dibromo-3-chloropropane	67798-001	23	2.0	1.5	0.91	ug/L	20	114	62	128		
		1,3,5-trimethylbenzene	67798-001	23	2.0	1.0	0.46	ug/L	20	113	75	124		
		1,2,4-trichlorobenzene	67798-001	20	2.0	1.0	0.79	ug/L	20	100	69	130		
		hexachlorobutadiene	67798-001	21	0.50	0.50	0.19	ug/L	20	104	66	134		
		naphthalene	67798-001	22	2.0	1.5	1.2	ug/L	20	110	61	128		
		1,2,3-trichlorobenzene	67798-001	21	2.0	1.0	0.93	ug/L	20	104	69	129		
		dibromofluoromethane SUR	67798-001	94				%			78	114		
		toluene-D8 SUR	67798-001	102				%			88	110		
		4-bromofluorobenzene SUR	67798-001	95				%			86	115		

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R		Limits	RPD	RPD Limit
SW5030C8260D	MS2303675	dichlorodifluoromethane	67798-007	23	2.0	1.0	0.28	ug/L	20	113		32	152	
		chloromethane	67798-007	26	2.0	1.0	0.59	ug/L	20	130		50	139	
		vinyl chloride	67798-007	20	2.0	1.0	0.49	ug/L	20	102		58	137	
		bromomethane	67798-007	23	2.0	1.5	1.1	ug/L	20	116		53	141	
		chloroethane	67798-007	30	2.0	1.0	0.33	ug/L	20	148	*	60	138	
		trichlorofluoromethane	67798-007	21	2.0	1.0	0.34	ug/L	20	105		65	141	
		diethyl ether	67798-007	26	2.0	1.0	0.41	ug/L	20	130	*	68	129	
		acetone	67798-007	28 J	50	5.0	1.9	ug/L	20	140		39	160	
		1,1-dichloroethene	67798-007	23	1.0	0.50	0.35	ug/L	20	116		71	131	
		methylene chloride	67798-007	22	2.0	1.0	0.59	ug/L	20	111		74	124	
		carbon disulfide	67798-007	29	2.0	1.0	0.33	ug/L	20	143	*	64	133	
		methyl t-butyl ether (MTBE)	67798-007	22	2.0	1.0	0.30	ug/L	20	110		71	124	
		trans-1,2-dichloroethene	67798-007	22	2.0	1.0	0.46	ug/L	20	112		75	124	
		ethyl t-butyl ether (ETBE)	67798-007	21	2.0	1.0	0.24	ug/L	20	107		70	127	
		1,1-dichloroethane	67798-007	23	2.0	1.0	0.27	ug/L	20	114		77	125	
		t-butanol (TBA)	67798-007	120	30	10	2.5	ug/L	100	119		68	129	
		2-butanone (MEK)	67798-007	21	10	5.0	0.67	ug/L	20	106		56	143	
		2,2-dichloropropane	67798-007	19	2.0	1.0	0.21	ug/L	20	96		60	139	
		cis-1,2-dichloroethene	67798-007	22	2.0	1.5	1.2	ug/L	20	110		78	123	
		chloroform	67798-007	21	2.0	1.5	1.4	ug/L	20	105		79	124	
		bromochloromethane	67798-007	20	2.0	1.0	0.22	ug/L	20	98		78	123	
		tetrahydrofuran (THF)	67798-007	23	2.0	1.5	0.75	ug/L	20	114		57	133	
		1,1,1-trichloroethane	67798-007	19	2.0	1.0	0.55	ug/L	20	96		74	131	
		1,1-dichloropropene	67798-007	21	2.0	1.0	0.26	ug/L	20	104		79	125	
		t-amyl-methyl ether (TAME)	67798-007	21	2.0	1.0	0.57	ug/L	20	104		68	128	
		carbon tetrachloride	67798-007	19	2.0	1.0	0.27	ug/L	20	94		72	136	
		1,2-dichloroethane	67798-007	19	2.0	1.0	0.20	ug/L	20	97		73	128	
		benzene	67798-007	23	2.0	1.0	0.40	ug/L	20	114		79	120	
		trichloroethene	67798-007	22	2.0	1.0	0.53	ug/L	20	109		79	123	
		1,2-dichloropropane	67798-007	24	2.0	1.0	0.22	ug/L	20	119		78	122	
		bromodichloromethane	67798-007	19	0.60	0.50	0.38	ug/L	20	95		79	125	
		1,4-dioxane	67798-007	56	50	10	8.7	ug/L	40	140	*	59	139	
		dibromomethane	67798-007	21	2.0	1.0	0.23	ug/L	20	103		79	123	
		4-methyl-2-pentanone (MIBK)	67798-007	24	10	1.0	0.56	ug/L	20	118		67	130	
		cis-1,3-dichloropropene	67798-007	20	2.0	1.0	0.30	ug/L	20	99		75	124	
		toluene	67798-007	23	2.0	1.0	0.45	ug/L	20	113		80	121	
		trans-1,3-dichloropropene	67798-007	19	2.0	1.0	0.34	ug/L	20	96		73	127	
		2-hexanone	67798-007	26	10	1.0	0.72	ug/L	20	128		57	139	
		1,1,2-trichloroethane	67798-007	18	2.0	1.0	0.27	ug/L	20	91		80	119	
		1,3-dichloropropane	67798-007	24	2.0	1.0	0.25	ug/L	20	120	*	80	119	
		tetrachloroethene	67798-007	21	2.0	1.0	0.76	ug/L	20	106		74	129	
		dibromochloromethane	67798-007	18	2.0	1.0	0.21	ug/L	20	91		74	126	
		1,2-dibromoethane (EDB)	67798-007	22	2.0	1.0	0.27	ug/L	20	110		77	121	
		chlorobenzene	67798-007	22	2.0	1.0	0.25	ug/L	20	109		82	118	
		1,1,1,2-tetrachloroethane	67798-007	20	2.0	1.0	0.21	ug/L	20	101		78	124	
		ethylbenzene	67798-007	24	2.0	1.0	0.65	ug/L	20	120		79	121	
		m&p-xylenes	67798-007	49	2.0	1.5	1.4	ug/L	40	123	*	80	121	
		o-xylene	67798-007	23	2.0	1.0	0.55	ug/L	20	113		78	122	
		styrene	67798-007	22	2.0	1.0	0.57	ug/L	20	110		78	123	
		bromoform	67798-007	17	2.0	1.0	0.24	ug/L	20	87		66	130	
		isopropylbenzene	67798-007	24	2.0	1.0	0.65	ug/L	20	118		72	131	
		1,1,2,2-tetrachloroethane	67798-007	23	2.0	1.0	0.29	ug/L	20	115		71	121	
		1,2,3-trichloropropane	67798-007	24	2.0	1.0	0.55	ug/L	20	122		73	122	
		n-propylbenzene	67798-007	24	2.0	1.0	0.44	ug/L	20	120		76	126	

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R	Limits		RPD	RPD Limit
SW5030C8260D	MS2303675	bromobenzene	67798-007	20	2.0	1.0	0.27	ug/L	20	102	80	120		
		2-chlorotoluene	67798-007	23	2.0	1.0	0.23	ug/L	20	117	79	122		
		4-chlorotoluene	67798-007	23	2.0	1.0	0.33	ug/L	20	117	78	122		
		tert-butylbenzene	67798-007	22	2.0	1.0	0.39	ug/L	20	111	78	124		
		1,2,4-trimethylbenzene	67798-007	23	2.0	1.0	0.58	ug/L	20	113	76	124		
		sec-butylbenzene	67798-007	23	2.0	1.0	0.44	ug/L	20	116	77	126		
		1,3-dichlorobenzene	67798-007	22	2.0	1.0	0.45	ug/L	20	109	80	119		
		4-isopropyltoluene	67798-007	22	2.0	1.0	0.47	ug/L	20	112	77	127		
		1,4-dichlorobenzene	67798-007	22	2.0	1.0	0.26	ug/L	20	111	79	118		
		1,2-dichlorobenzene	67798-007	21	2.0	1.0	0.39	ug/L	20	106	80	119		
		n-butylbenzene	67798-007	22	2.0	1.0	0.54	ug/L	20	112	75	128		
		1,2-dibromo-3-chloropropane	67798-007	23	2.0	1.5	0.91	ug/L	20	114	62	128		
		1,3,5-trimethylbenzene	67798-007	24	2.0	1.0	0.46	ug/L	20	119	75	124		
		1,2,4-trichlorobenzene	67798-007	20	2.0	1.0	0.79	ug/L	20	101	69	130		
		hexachlorobutadiene	67798-007	21	0.50	0.50	0.19	ug/L	20	107	66	134		
		naphthalene	67798-007	22	2.0	1.5	1.2	ug/L	20	108	61	128		
		1,2,3-trichlorobenzene	67798-007	21	2.0	1.0	0.93	ug/L	20	103	69	129		
		dibromofluoromethane SUR	67798-007	96				%			78	114		
		toluene-D8 SUR	67798-007	101				%			88	110		
		4-bromofluorobenzene SUR	67798-007	101				%			86	115		

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R		Limits		RPD	RPD	Limit
SW5030C8260D	MSD2303675	dichlorodifluoromethane	67798-001	23	2.0	1.0	0.28	ug/L	20	116		32	152	4		20
		chloromethane	67798-001	27	2.0	1.0	0.59	ug/L	20	134		50	139	7		20
		vinyl chloride	67798-001	22	2.0	1.0	0.49	ug/L	20	111		58	137	6		20
		bromomethane	67798-001	24	2.0	1.5	1.1	ug/L	20	122		53	141	3		20
		chloroethane	67798-001	31	2.0	1.0	0.33	ug/L	20	153	*	60	138	6		20
		trichlorofluoromethane	67798-001	22	2.0	1.0	0.34	ug/L	20	109		65	141	6		20
		diethyl ether	67798-001	27	2.0	1.0	0.41	ug/L	20	135	*	68	129	1		20
		acetone	67798-001	31 J	50	5.0	1.9	ug/L	20	153		39	160	4		20
		1,1-dichloroethene	67798-001	24	1.0	0.50	0.35	ug/L	20	119		71	131	5		20
		methylene chloride	67798-001	23	2.0	1.0	0.59	ug/L	20	113		74	124	2		20
		carbon disulfide	67798-001	30	2.0	1.0	0.33	ug/L	20	149	*	64	133	6		20
		methyl t-butyl ether (MTBE)	67798-001	23	2.0	1.0	0.30	ug/L	20	113		71	124	1		20
		trans-1,2-dichloroethene	67798-001	23	2.0	1.0	0.46	ug/L	20	116		75	124	5		20
		ethyl t-butyl ether (ETBE)	67798-001	21	2.0	1.0	0.24	ug/L	20	107		70	127	0		20
		1,1-dichloroethane	67798-001	24	2.0	1.0	0.27	ug/L	20	118		77	125	3		20
		t-butanol (TBA)	67798-001	120	30	10	2.5	ug/L	100	123		68	129	6		20
		2-butanone (MEK)	67798-001	22	10	5.0	0.67	ug/L	20	110		56	143	2		20
		2,2-dichloropropane	67798-001	20	2.0	1.0	0.21	ug/L	20	101		60	139	3		20
		cis-1,2-dichloroethene	67798-001	22	2.0	1.5	1.2	ug/L	20	111		78	123	0		20
		chloroform	67798-001	21	2.0	1.5	1.4	ug/L	20	106		79	124	3		20
		bromochloromethane	67798-001	21	2.0	1.0	0.22	ug/L	20	103		78	123	1		20
		tetrahydrofuran (THF)	67798-001	23	2.0	1.5	0.75	ug/L	20	115		57	133	5		20
		1,1,1-trichloroethane	67798-001	20	2.0	1.0	0.55	ug/L	20	98		74	131	5		20
		1,1-dichloropropene	67798-001	22	2.0	1.0	0.26	ug/L	20	109		79	125	7		20
		t-amyl-methyl ether (TAME)	67798-001	22	2.0	1.0	0.57	ug/L	20	108		68	128	0		20
		carbon tetrachloride	67798-001	19	2.0	1.0	0.27	ug/L	20	97		72	136	8		20
		1,2-dichloroethane	67798-001	20	2.0	1.0	0.20	ug/L	20	99		73	128	1		20
		benzene	67798-001	23	2.0	1.0	0.40	ug/L	20	117		79	120	2		20
		trichloroethene	67798-001	22	2.0	1.0	0.53	ug/L	20	110		79	123	4		20
		1,2-dichloropropane	67798-001	24	2.0	1.0	0.22	ug/L	20	121		78	122	1		20
		bromodichloromethane	67798-001	20	0.60	0.50	0.38	ug/L	20	101		79	125	3		20
		1,4-dioxane	67798-001	54	50	10	8.7	ug/L	40	136		59	139	1		20
		dibromomethane	67798-001	21	2.0	1.0	0.23	ug/L	20	106		79	123	1		20
		4-methyl-2-pentanone (MIBK)	67798-001	25	10	1.0	0.56	ug/L	20	123		67	130	1		20
		cis-1,3-dichloropropene	67798-001	20	2.0	1.0	0.30	ug/L	20	101		75	124	0		20
		toluene	67798-001	23	2.0	1.0	0.45	ug/L	20	114		80	121	1		20
		trans-1,3-dichloropropene	67798-001	20	2.0	1.0	0.34	ug/L	20	99		73	127	1		20
		2-hexanone	67798-001	27	10	1.0	0.72	ug/L	20	134		57	139	1		20
		1,1,2-trichloroethane	67798-001	23	2.0	1.0	0.27	ug/L	20	117		80	119	22	*	20
		1,3-dichloropropane	67798-001	24	2.0	1.0	0.25	ug/L	20	120	*	80	119	5		20
		tetrachloroethene	67798-001	22	2.0	1.0	0.76	ug/L	20	108		74	129	8		20
		dibromochloromethane	67798-001	18	2.0	1.0	0.21	ug/L	20	92		74	126	6		20
		1,2-dibromoethane (EDB)	67798-001	22	2.0	1.0	0.27	ug/L	20	110		77	121	5		20
		chlorobenzene	67798-001	22	2.0	1.0	0.25	ug/L	20	110		82	118	5		20
		1,1,1,2-tetrachloroethane	67798-001	21	2.0	1.0	0.21	ug/L	20	103		78	124	7		20
		ethylbenzene	67798-001	24	2.0	1.0	0.65	ug/L	20	122	*	79	121	6		20
		m&p-xylenes	67798-001	50	2.0	1.5	1.4	ug/L	40	125	*	80	121	8		20
		o-xylene	67798-001	23	2.0	1.0	0.55	ug/L	20	115		78	122	6		20
		styrene	67798-001	22	2.0	1.0	0.57	ug/L	20	112		78	123	5		20
		bromoform	67798-001	18	2.0	1.0	0.24	ug/L	20	89		66	130	7		20
		isopropylbenzene	67798-001	24	2.0	1.0	0.65	ug/L	20	121		72	131	8		20
		1,1,2,2-tetrachloroethane	67798-001	24	2.0	1.0	0.29	ug/L	20	120		71	121	5		20
		1,2,3-trichloropropane	67798-001	26	2.0	1.0	0.55	ug/L	20	128	*	73	122	3		20
		n-propylbenzene	67798-001	25	2.0	1.0	0.44	ug/L	20	125		76	126	9		20

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R		Limits		RPD	RPD Limit
SW5030C8260D	MSD2303675	bromobenzene	67798-001	21	2.0	1.0	0.27	ug/L	20	106		80	120	5	20
		2-chlorotoluene	67798-001	25	2.0	1.0	0.23	ug/L	20	127	*	79	122	9	20
		4-chlorotoluene	67798-001	24	2.0	1.0	0.33	ug/L	20	120		78	122	3	20
		tert-butylbenzene	67798-001	23	2.0	1.0	0.39	ug/L	20	115		78	124	5	20
		1,2,4-trimethylbenzene	67798-001	23	2.0	1.0	0.58	ug/L	20	117		76	124	6	20
		sec-butylbenzene	67798-001	24	2.0	1.0	0.44	ug/L	20	121		77	126	8	20
		1,3-dichlorobenzene	67798-001	23	2.0	1.0	0.45	ug/L	20	115		80	119	5	20
		4-isopropyltoluene	67798-001	23	2.0	1.0	0.47	ug/L	20	116		77	127	7	20
		1,4-dichlorobenzene	67798-001	23	2.0	1.0	0.26	ug/L	20	114		79	118	4	20
		1,2-dichlorobenzene	67798-001	22	2.0	1.0	0.39	ug/L	20	111		80	119	4	20
		n-butylbenzene	67798-001	23	2.0	1.0	0.54	ug/L	20	117		75	128	6	20
		1,2-dibromo-3-chloropropane	67798-001	23	2.0	1.5	0.91	ug/L	20	117		62	128	3	20
		1,3,5-trimethylbenzene	67798-001	24	2.0	1.0	0.46	ug/L	20	121		75	124	7	20
		1,2,4-trichlorobenzene	67798-001	21	2.0	1.0	0.79	ug/L	20	105		69	130	5	20
		hexachlorobutadiene	67798-001	22	0.50	0.50	0.19	ug/L	20	111		66	134	7	20
		naphthalene	67798-001	23	2.0	1.5	1.2	ug/L	20	113		61	128	3	20
		1,2,3-trichlorobenzene	67798-001	21	2.0	1.0	0.93	ug/L	20	107		69	129	3	20
		dibromofluoromethane SUR	67798-001	95				%				78	114		
		toluene-D8 SUR	67798-001	101				%				88	110		
		4-bromofluorobenzene SUR	67798-001	100				%				86	115		

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R		Limits		RPD	RPD Limit
SW5030C8260D	MSD2303675	dichlorodifluoromethane	67798-007	22	2.0	1.0	0.28	ug/L	20	111		32	152	2	20
		chloromethane	67798-007	26	2.0	1.0	0.59	ug/L	20	129		50	139	1	20
		vinyl chloride	67798-007	21	2.0	1.0	0.49	ug/L	20	105		58	137	3	20
		bromomethane	67798-007	24	2.0	1.5	1.1	ug/L	20	121		53	141	5	20
		chloroethane	67798-007	29	2.0	1.0	0.33	ug/L	20	147	*	60	138	1	20
		trichlorofluoromethane	67798-007	21	2.0	1.0	0.34	ug/L	20	107		65	141	2	20
		diethyl ether	67798-007	26	2.0	1.0	0.41	ug/L	20	130	*	68	129	0	20
		acetone	67798-007	28 J	50	5.0	1.9	ug/L	20	139		39	160	1	20
		1,1-dichloroethene	67798-007	23	1.0	0.50	0.35	ug/L	20	115		71	131	0	20
		methylene chloride	67798-007	22	2.0	1.0	0.59	ug/L	20	109		74	124	2	20
		carbon disulfide	67798-007	29	2.0	1.0	0.33	ug/L	20	145	*	64	133	2	20
		methyl t-butyl ether (MTBE)	67798-007	22	2.0	1.0	0.30	ug/L	20	109		71	124	1	20
		trans-1,2-dichloroethene	67798-007	22	2.0	1.0	0.46	ug/L	20	112		75	124	0	20
		ethyl t-butyl ether (ETBE)	67798-007	21	2.0	1.0	0.24	ug/L	20	107		70	127	0	20
		1,1-dichloroethane	67798-007	23	2.0	1.0	0.27	ug/L	20	117		77	125	2	20
		t-butanol (TBA)	67798-007	120	30	10	2.5	ug/L	100	122		68	129	2	20
		2-butanone (MEK)	67798-007	22	10	5.0	0.67	ug/L	20	110		56	143	3	20
		2,2-dichloropropane	67798-007	20	2.0	1.0	0.21	ug/L	20	99		60	139	3	20
		cis-1,2-dichloroethene	67798-007	22	2.0	1.5	1.2	ug/L	20	108		78	123	2	20
		chloroform	67798-007	21	2.0	1.5	1.4	ug/L	20	104		79	124	1	20
		bromochloromethane	67798-007	20	2.0	1.0	0.22	ug/L	20	101		78	123	3	20
		tetrahydrofuran (THF)	67798-007	23	2.0	1.5	0.75	ug/L	20	116		57	133	1	20
		1,1,1-trichloroethane	67798-007	19	2.0	1.0	0.55	ug/L	20	97		74	131	1	20
		1,1-dichloropropene	67798-007	21	2.0	1.0	0.26	ug/L	20	107		79	125	2	20
		t-amyl-methyl ether (TAME)	67798-007	21	2.0	1.0	0.57	ug/L	20	106		68	128	1	20
		carbon tetrachloride	67798-007	19	2.0	1.0	0.27	ug/L	20	95		72	136	1	20
		1,2-dichloroethane	67798-007	20	2.0	1.0	0.20	ug/L	20	98		73	128	2	20
		benzene	67798-007	23	2.0	1.0	0.40	ug/L	20	116		79	120	2	20
		trichloroethene	67798-007	21	2.0	1.0	0.53	ug/L	20	107		79	123	1	20
		1,2-dichloropropane	67798-007	24	2.0	1.0	0.22	ug/L	20	118		78	122	0	20
		bromodichloromethane	67798-007	19	0.60	0.50	0.38	ug/L	20	96		79	125	1	20
		1,4-dioxane	67798-007	54	50	10	8.7	ug/L	40	134		59	139	4	20
		dibromomethane	67798-007	21	2.0	1.0	0.23	ug/L	20	105		79	123	2	20
		4-methyl-2-pentanone (MIBK)	67798-007	23	10	1.0	0.56	ug/L	20	116		67	130	2	20
		cis-1,3-dichloropropene	67798-007	20	2.0	1.0	0.30	ug/L	20	99		75	124	0	20
		toluene	67798-007	24	2.0	1.0	0.45	ug/L	20	121		80	121	7	20
		trans-1,3-dichloropropene	67798-007	19	2.0	1.0	0.34	ug/L	20	97		73	127	1	20
		2-hexanone	67798-007	25	10	1.0	0.72	ug/L	20	127		57	139	1	20
		1,1,2-trichloroethane	67798-007	18	2.0	1.0	0.27	ug/L	20	90		80	119	1	20
		1,3-dichloropropane	67798-007	23	2.0	1.0	0.25	ug/L	20	116		80	119	3	20
		tetrachloroethene	67798-007	21	2.0	1.0	0.76	ug/L	20	104		74	129	2	20
		dibromochloromethane	67798-007	18	2.0	1.0	0.21	ug/L	20	90		74	126	1	20
		1,2-dibromoethane (EDB)	67798-007	21	2.0	1.0	0.27	ug/L	20	106		77	121	4	20
		chlorobenzene	67798-007	21	2.0	1.0	0.25	ug/L	20	105		82	118	4	20
		1,1,1,2-tetrachloroethane	67798-007	20	2.0	1.0	0.21	ug/L	20	99		78	124	2	20
		ethylbenzene	67798-007	24	2.0	1.0	0.65	ug/L	20	118		79	121	2	20
		m&p-xylenes	67798-007	48	2.0	1.5	1.4	ug/L	40	119		80	121	3	20
		o-xylene	67798-007	22	2.0	1.0	0.55	ug/L	20	110		78	122	3	20
		styrene	67798-007	21	2.0	1.0	0.57	ug/L	20	103		78	123	7	20
		bromoform	67798-007	18	2.0	1.0	0.24	ug/L	20	88		66	130	0	20
		isopropylbenzene	67798-007	23	2.0	1.0	0.65	ug/L	20	115		72	131	2	20
		1,1,2,2-tetrachloroethane	67798-007	23	2.0	1.0	0.29	ug/L	20	116		71	121	0	20
		1,2,3-trichloropropane	67798-007	24	2.0	1.0	0.55	ug/L	20	122		73	122	0	20
		n-propylbenzene	67798-007	24	2.0	1.0	0.44	ug/L	20	121		76	126	1	20

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R	Limits		RPD	RPD Limit
SW5030C8260D	MSD2303675	bromobenzene	67798-007	21	2.0	1.0	0.27	ug/L	20	105	80	120	3	20
		2-chlorotoluene	67798-007	24	2.0	1.0	0.23	ug/L	20	120	79	122	2	20
		4-chlorotoluene	67798-007	23	2.0	1.0	0.33	ug/L	20	117	78	122	0	20
		tert-butylbenzene	67798-007	23	2.0	1.0	0.39	ug/L	20	113	78	124	2	20
		1,2,4-trimethylbenzene	67798-007	23	2.0	1.0	0.58	ug/L	20	113	76	124	0	20
		sec-butylbenzene	67798-007	24	2.0	1.0	0.44	ug/L	20	118	77	126	2	20
		1,3-dichlorobenzene	67798-007	22	2.0	1.0	0.45	ug/L	20	109	80	119	0	20
		4-isopropyltoluene	67798-007	22	2.0	1.0	0.47	ug/L	20	112	77	127	1	20
		1,4-dichlorobenzene	67798-007	22	2.0	1.0	0.26	ug/L	20	110	79	118	0	20
		1,2-dichlorobenzene	67798-007	21	2.0	1.0	0.39	ug/L	20	106	80	119	0	20
		n-butylbenzene	67798-007	22	2.0	1.0	0.54	ug/L	20	111	75	128	0	20
		1,2-dibromo-3-chloropropane	67798-007	23	2.0	1.5	0.91	ug/L	20	113	62	128	1	20
		1,3,5-trimethylbenzene	67798-007	24	2.0	1.0	0.46	ug/L	20	119	75	124	0	20
		1,2,4-trichlorobenzene	67798-007	19	2.0	1.0	0.79	ug/L	20	96	69	130	5	20
		hexachlorobutadiene	67798-007	22	0.50	0.50	0.19	ug/L	20	108	66	134	0	20
		naphthalene	67798-007	21	2.0	1.5	1.2	ug/L	20	104	61	128	4	20
		1,2,3-trichlorobenzene	67798-007	21	2.0	1.0	0.93	ug/L	20	103	69	129	0	20
		dibromofluoromethane SUR	67798-007	96				%			78	114		
		toluene-D8 SUR	67798-007	101				%			88	110		
		4-bromofluorobenzene SUR	67798-007	96				%			86	115		

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R		Limits		RPD	RPD Limit
MA EPH	BLK17110	naphthalene		0.70 U	1.0	0.70	0.63	ug/L							
		2-methylnaphthalene		0.70 U	1.0	0.70	0.60	ug/L							
		phenanthrene		0.50 U	1.0	0.50	0.15	ug/L							
		acenaphthene		0.50 U	1.0	0.50	0.22	ug/L							
		acenaphthylene		0.50 U	1.0	0.50	0.18	ug/L							
		fluorene		0.50 U	1.0	0.50	0.15	ug/L							
		anthracene		0.50 U	1.0	0.50	0.18	ug/L							
		fluoranthene		0.50 U	1.0	0.50	0.18	ug/L							
		pyrene		0.50 U	1.0	0.50	0.23	ug/L							
		benzo(a)anthracene		0.50 U	1.0	0.50	0.20	ug/L							
		chrysene		0.50 U	1.0	0.50	0.16	ug/L							
		benzo(b)fluoranthene		0.50 U	1.0	0.50	0.35	ug/L							
		benzo(k)fluoranthene		0.50 U	1.0	0.50	0.41	ug/L							
		benzo(a)pyrene		0.70 U	1.0	0.70	0.52	ug/L							
		indeno(1,2,3-cd)pyrene		0.50 U	1.0	0.50	0.24	ug/L							
		dibenzo(a,h)anthracene		0.50 U	1.0	0.50	0.26	ug/L							
		benzo(g,h,i)perylene		0.50 U	1.0	0.50	0.22	ug/L							
		Unadjusted C11-C22 Aromatics		85 U	100	85	60	ug/L							
		C9-C18 Aliphatics		95 U	100	95	94	ug/L							
		C19-C36 Aliphatics		97 U	100	97	96	ug/L							
		C11-C22 Aromatics		85 U	100	85	54	ug/L							
		1-chloro-octadecane SUR		42				%				40	140		
		o-terphenyl SUR		58				%				40	140		
		2-fluorobiphenyl SUR		75				%				40	140		
		2-bromonaphthalene SUR		74				%				40	140		
MA EPH	LCS17110	naphthalene		19	1.0	0.70	0.63	ug/L	60	32	*	40	140		
		2-methylnaphthalene		21	1.0	0.70	0.60	ug/L	60	36	*	40	140		
		phenanthrene		29	1.0	0.50	0.15	ug/L	60	48		40	140		
		acenaphthene		26	1.0	0.50	0.22	ug/L	60	44		40	140		
		acenaphthylene		26	1.0	0.50	0.18	ug/L	60	44		40	140		
		fluorene		25	1.0	0.50	0.15	ug/L	60	42		40	140		
		anthracene		28	1.0	0.50	0.18	ug/L	60	47		40	140		
		fluoranthene		29	1.0	0.50	0.18	ug/L	60	48		40	140		
		pyrene		28	1.0	0.50	0.23	ug/L	60	47		40	140		
		benzo(a)anthracene		26	1.0	0.50	0.20	ug/L	60	44		40	140		
		chrysene		27	1.0	0.50	0.16	ug/L	60	46		40	140		
		benzo(b)fluoranthene		25	1.0	0.50	0.35	ug/L	60	41		40	140		
		benzo(k)fluoranthene		25	1.0	0.50	0.41	ug/L	60	41		40	140		
		benzo(a)pyrene		25	1.0	0.70	0.52	ug/L	60	42		40	140		
		indeno(1,2,3-cd)pyrene		23	1.0	0.50	0.24	ug/L	60	39	*	40	140		
		dibenzo(a,h)anthracene		23	1.0	0.50	0.26	ug/L	60	39	*	40	140		
		benzo(g,h,i)perylene		25	1.0	0.50	0.22	ug/L	60	42		40	140		
		Unadjusted C11-C22 Aromatics		550	100	85	60	ug/L	1020	54		40	140		
		C9-C18 Aliphatics		130	100	95	94	ug/L	360	36	*	40	140		
		C19-C36 Aliphatics		310	100	97	96	ug/L	480	64		40	140		
		C11-C22 Aromatics		120	100	85	54	ug/L				40	140		
		1-chloro-octadecane SUR		42				%				40	140		
		o-terphenyl SUR		44				%				40	140		
		2-fluorobiphenyl SUR		76				%				40	140		
		2-bromonaphthalene SUR		77				%				40	140		

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R		Limits		RPD	RPD	Limit
MA EPH	LCSD17110	naphthalene		21	1.0	0.70	0.63	ug/L	60	34	*	40	140	6		25
		2-methylnaphthalene		22	1.0	0.70	0.60	ug/L	60	36	*	40	140	2		25
		phenanthrene		33	1.0	0.50	0.15	ug/L	60	55		40	140	14		25
		acenaphthene		30	1.0	0.50	0.22	ug/L	60	50		40	140	13		25
		acenaphthylene		29	1.0	0.50	0.18	ug/L	60	49		40	140	11		25
		fluorene		29	1.0	0.50	0.15	ug/L	60	48		40	140	13		25
		anthracene		32	1.0	0.50	0.18	ug/L	60	54		40	140	14		25
		fluoranthene		34	1.0	0.50	0.18	ug/L	60	57		40	140	17		25
		pyrene		32	1.0	0.50	0.23	ug/L	60	53		40	140	12		25
		benzo(a)anthracene		30	1.0	0.50	0.20	ug/L	60	50		40	140	13		25
		chrysene		31	1.0	0.50	0.16	ug/L	60	52		40	140	13		25
		benzo(b)fluoranthene		29	1.0	0.50	0.35	ug/L	60	48		40	140	15		25
		benzo(k)fluoranthene		31	1.0	0.50	0.41	ug/L	60	51		40	140	22		25
		benzo(a)pyrene		29	1.0	0.70	0.52	ug/L	60	49		40	140	16		25
		indeno(1,2,3-cd)pyrene		28	1.0	0.50	0.24	ug/L	60	47		40	140	20		25
		dibenzo(a,h)anthracene		29	1.0	0.50	0.26	ug/L	60	49		40	140	23		25
		benzo(g,h,i)perylene		30	1.0	0.50	0.22	ug/L	60	50		40	140	17		25
		Unadjusted C11-C22 Aromatics		650	100	85	60	ug/L	1020	64		40	140	17		25
		C9-C18 Aliphatics		150	100	95	94	ug/L	360	40		40	140	11		25
		C19-C36 Aliphatics		410	100	97	96	ug/L	480	85		40	140	28	*	25
		C11-C22 Aromatics		150	100	85	54	ug/L				40	140			25
		1-chloro-octadecane SUR		57				%				40	140			
		o-terphenyl SUR		57				%				40	140			
		2-fluorobiphenyl SUR		79				%				40	140			
		2-bromonaphthalene SUR		81				%				40	140			

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R		Limits		RPD	RPD Limit
MA EPH	MS17110	naphthalene	67798-001	16	1.0	0.70	0.63	ug/L	60	26	*	40	140		
		2-methylnaphthalene	67798-001	20	1.0	0.70	0.60	ug/L	60	34	*	40	140		
		phenanthrene	67798-001	36	1.0	0.50	0.15	ug/L	60	61		40	140		
		acenaphthene	67798-001	30	1.0	0.50	0.22	ug/L	60	51		40	140		
		acenaphthylene	67798-001	29	1.0	0.50	0.18	ug/L	60	48		40	140		
		fluorene	67798-001	32	1.0	0.50	0.15	ug/L	60	53		40	140		
		anthracene	67798-001	36	1.0	0.50	0.18	ug/L	60	60		40	140		
		fluoranthene	67798-001	39	1.0	0.50	0.18	ug/L	60	65		40	140		
		pyrene	67798-001	34	1.0	0.50	0.23	ug/L	60	57		40	140		
		benzo(a)anthracene	67798-001	36	1.0	0.50	0.20	ug/L	60	59		40	140		
		chrysene	67798-001	37	1.0	0.50	0.16	ug/L	60	62		40	140		
		benzo(b)fluoranthene	67798-001	35	1.0	0.50	0.35	ug/L	60	59		40	140		
		benzo(k)fluoranthene	67798-001	34	1.0	0.50	0.41	ug/L	60	56		40	140		
		benzo(a)pyrene	67798-001	35	1.0	0.70	0.52	ug/L	60	58		40	140		
		indeno(1,2,3-cd)pyrene	67798-001	35	1.0	0.50	0.24	ug/L	60	59		40	140		
		dibenzo(a,h)anthracene	67798-001	36	1.0	0.50	0.26	ug/L	60	60		40	140		
		benzo(g,h,i)perylene	67798-001	37	1.0	0.50	0.22	ug/L	60	62		40	140		
		Unadjusted C11-C22 Aromatics	67798-001	680	100	85	60	ug/L	1020	67		40	140		
		C9-C18 Aliphatics	67798-001	150	100	95	94	ug/L	360	43		40	140		
		C19-C36 Aliphatics	67798-001	360	100	97	96	ug/L	480	75		40	140		
		C11-C22 Aromatics	67798-001	130	100	85	54	ug/L				40	140		
		1-chloro-octadecane SUR	67798-001	54				%				40	140		
		o-terphenyl SUR	67798-001	61				%				40	140		
		2-fluorobiphenyl SUR	67798-001	76				%				40	140		
		2-bromonaphthalene SUR	67798-001	77				%				40	140		
MA EPH	MS17110	naphthalene	67798-007	17	1.0	0.70	0.63	ug/L	60	28	*	40	140		
		2-methylnaphthalene	67798-007	20	1.0	0.70	0.60	ug/L	60	34	*	40	140		
		phenanthrene	67798-007	36	1.0	0.50	0.15	ug/L	60	59		40	140		
		acenaphthene	67798-007	30	1.0	0.50	0.22	ug/L	60	50		40	140		
		acenaphthylene	67798-007	28	1.0	0.50	0.18	ug/L	60	47		40	140		
		fluorene	67798-007	30	1.0	0.50	0.15	ug/L	60	50		40	140		
		anthracene	67798-007	34	1.0	0.50	0.18	ug/L	60	57		40	140		
		fluoranthene	67798-007	38	1.0	0.50	0.18	ug/L	60	63		40	140		
		pyrene	67798-007	32	1.0	0.50	0.23	ug/L	60	53		40	140		
		benzo(a)anthracene	67798-007	32	1.0	0.50	0.20	ug/L	60	54		40	140		
		chrysene	67798-007	34	1.0	0.50	0.16	ug/L	60	57		40	140		
		benzo(b)fluoranthene	67798-007	31	1.0	0.50	0.35	ug/L	60	52		40	140		
		benzo(k)fluoranthene	67798-007	32	1.0	0.50	0.41	ug/L	60	53		40	140		
		benzo(a)pyrene	67798-007	31	1.0	0.70	0.52	ug/L	60	52		40	140		
		indeno(1,2,3-cd)pyrene	67798-007	32	1.0	0.50	0.24	ug/L	60	53		40	140		
		dibenzo(a,h)anthracene	67798-007	32	1.0	0.50	0.26	ug/L	60	54		40	140		
		benzo(g,h,i)perylene	67798-007	33	1.0	0.50	0.22	ug/L	60	55		40	140		
		Unadjusted C11-C22 Aromatics	67798-007	590	100	85	60	ug/L	1020	58		40	140		
		C9-C18 Aliphatics	67798-007	160	100	95	94	ug/L	360	43		40	140		
		C19-C36 Aliphatics	67798-007	350	100	97	96	ug/L	480	72		40	140		
		C11-C22 Aromatics	67798-007	69 J	100	85	54	ug/L				40	140		
		1-chloro-octadecane SUR	67798-007	47				%				40	140		
		o-terphenyl SUR	67798-007	55				%				40	140		
		2-fluorobiphenyl SUR	67798-007	77				%				40	140		
		2-bromonaphthalene SUR	67798-007	79				%				40	140		

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R		Limits		RPD	RPD Limit
MA EPH	MSD17110	naphthalene	67798-001	16	1.0	0.70	0.63	ug/L	60	26	*	40	140	2	50
		2-methylnaphthalene	67798-001	19	1.0	0.70	0.60	ug/L	60	32	*	40	140	6	50
		phenanthrene	67798-001	34	1.0	0.50	0.15	ug/L	60	57		40	140	7	50
		acenaphthene	67798-001	29	1.0	0.50	0.22	ug/L	60	49		40	140	4	50
		acenaphthylene	67798-001	28	1.0	0.50	0.18	ug/L	60	46		40	140	2	50
		fluorene	67798-001	30	1.0	0.50	0.15	ug/L	60	50		40	140	5	50
		anthracene	67798-001	33	1.0	0.50	0.18	ug/L	60	56		40	140	8	50
		fluoranthene	67798-001	35	1.0	0.50	0.18	ug/L	60	59		40	140	9	50
		pyrene	67798-001	33	1.0	0.50	0.23	ug/L	60	55		40	140	3	50
		benzo(a)anthracene	67798-001	34	1.0	0.50	0.20	ug/L	60	56		40	140	6	50
		chrysene	67798-001	35	1.0	0.50	0.16	ug/L	60	58		40	140	8	50
		benzo(b)fluoranthene	67798-001	32	1.0	0.50	0.35	ug/L	60	53		40	140	11	50
		benzo(k)fluoranthene	67798-001	33	1.0	0.50	0.41	ug/L	60	56		40	140	1	50
		benzo(a)pyrene	67798-001	31	1.0	0.70	0.52	ug/L	60	52		40	140	10	50
		indeno(1,2,3-cd)pyrene	67798-001	30	1.0	0.50	0.24	ug/L	60	50		40	140	16	50
		dibenzo(a,h)anthracene	67798-001	31	1.0	0.50	0.26	ug/L	60	52		40	140	13	50
		benzo(g,h,i)perylene	67798-001	32	1.0	0.50	0.22	ug/L	60	53		40	140	16	50
		Unadjusted C11-C22 Aromatics	67798-001	630	100	85	60	ug/L	1020	62		40	140	8	50
		C9-C18 Aliphatics	67798-001	130	100	95	94	ug/L	360	37	*	40	140	14	50
		C19-C36 Aliphatics	67798-001	350	100	97	96	ug/L	480	74		40	140	2	50
		C11-C22 Aromatics	67798-001	120	100	85	54	ug/L		52		40	140	9	50
		1-chloro-octadecane SUR	67798-001	52				%				40	140		
		o-terphenyl SUR	67798-001	60				%				40	140		
		2-fluorobiphenyl SUR	67798-001	76				%				40	140		
		2-bromonaphthalene SUR	67798-001	77				%				40	140		
MA EPH	MSD17110	naphthalene	67798-007	12	1.0	0.70	0.63	ug/L	60	21	*	40	140	30	50
		2-methylnaphthalene	67798-007	15	1.0	0.70	0.60	ug/L	60	25	*	40	140	28	50
		phenanthrene	67798-007	29	1.0	0.50	0.15	ug/L	60	49		40	140	19	50
		acenaphthene	67798-007	24	1.0	0.50	0.22	ug/L	60	40		40	140	23	50
		acenaphthylene	67798-007	22	1.0	0.50	0.18	ug/L	60	37	*	40	140	23	50
		fluorene	67798-007	26	1.0	0.50	0.15	ug/L	60	43		40	140	15	50
		anthracene	67798-007	29	1.0	0.50	0.18	ug/L	60	48		40	140	17	50
		fluoranthene	67798-007	32	1.0	0.50	0.18	ug/L	60	53		40	140	18	50
		pyrene	67798-007	26	1.0	0.50	0.23	ug/L	60	43		40	140	19	50
		benzo(a)anthracene	67798-007	28	1.0	0.50	0.20	ug/L	60	46		40	140	16	50
		chrysene	67798-007	30	1.0	0.50	0.16	ug/L	60	49		40	140	15	50
		benzo(b)fluoranthene	67798-007	27	1.0	0.50	0.35	ug/L	60	45		40	140	14	50
		benzo(k)fluoranthene	67798-007	26	1.0	0.50	0.41	ug/L	60	44		40	140	19	50
		benzo(a)pyrene	67798-007	27	1.0	0.70	0.52	ug/L	60	45		40	140	15	50
		indeno(1,2,3-cd)pyrene	67798-007	27	1.0	0.50	0.24	ug/L	60	45		40	140	16	50
		dibenzo(a,h)anthracene	67798-007	28	1.0	0.50	0.26	ug/L	60	47		40	140	14	50
		benzo(g,h,i)perylene	67798-007	28	1.0	0.50	0.22	ug/L	60	47		40	140	17	50
		Unadjusted C11-C22 Aromatics	67798-007	570	100	85	60	ug/L	1020	56		40	140	4	50
		C9-C18 Aliphatics	67798-007	130	100	95	94	ug/L	360	36	*	40	140	18	50
		C19-C36 Aliphatics	67798-007	320	100	97	96	ug/L	480	67		40	140	8	50
		C11-C22 Aromatics	67798-007	130	100	85	54	ug/L		47		40	140	64	50
		1-chloro-octadecane SUR	67798-007	50				%				40	140		
		o-terphenyl SUR	67798-007	56				%				40	140		
		2-fluorobiphenyl SUR	67798-007	80				%				40	140		
		2-bromonaphthalene SUR	67798-007	82				%				40	140		

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R	Limits		RPD	RPD Limit
SW3510C8082A	BLK17179	PCB-1016		0.12 U	0.20	0.12	0.10	ug/L						
		PCB-1221		0.12 U	0.20	0.12	0.10	ug/L						
		PCB-1232		0.12 U	0.20	0.12	0.10	ug/L						
		PCB-1242		0.12 U	0.20	0.12	0.10	ug/L						
		PCB-1248		0.12 U	0.20	0.12	0.10	ug/L						
		PCB-1254		0.12 U	0.20	0.12	0.10	ug/L						
		PCB-1260		0.12 U	0.20	0.12	0.10	ug/L						
		tetrachloro-m-xylene SUR		70				%			30	150		
		decachlorobiphenyl SUR		59				%			30	150		
SW3510C8082A	LCS17179	PCB-1016		0.57	0.20	0.12	0.10	ug/L	1	57	46	129		
		PCB-1221		0.12 U	0.20	0.12	0.10	ug/L						
		PCB-1232		0.12 U	0.20	0.12	0.10	ug/L						
		PCB-1242		0.12 U	0.20	0.12	0.10	ug/L						
		PCB-1248		0.12 U	0.20	0.12	0.10	ug/L						
		PCB-1254		0.12 U	0.20	0.12	0.10	ug/L						
		PCB-1260		0.71	0.20	0.12	0.10	ug/L	1	71	45	134		
		tetrachloro-m-xylene SUR		66				%			30	150		
		decachlorobiphenyl SUR		67				%			30	150		
SW3510C8082A	LCSD17179	PCB-1016		0.58	0.20	0.12	0.10	ug/L	1	58	46	129	2	20
		PCB-1221		0.12 U	0.20	0.12	0.10	ug/L						20
		PCB-1232		0.12 U	0.20	0.12	0.10	ug/L						20
		PCB-1242		0.12 U	0.20	0.12	0.10	ug/L						20
		PCB-1248		0.12 U	0.20	0.12	0.10	ug/L						20
		PCB-1254		0.12 U	0.20	0.12	0.10	ug/L						20
		PCB-1260		0.72	0.20	0.12	0.10	ug/L	1	72	45	134	0	20
		tetrachloro-m-xylene SUR		66				%			30	150		
		decachlorobiphenyl SUR		67				%			30	150		
SW3510C8082A	MS17179	PCB-1016	67798-001	0.61	0.20	0.12	0.10	ug/L	1	61	46	129		
		PCB-1221	67798-001	0.12 U	0.20	0.12	0.10	ug/L						
		PCB-1232	67798-001	0.12 U	0.20	0.12	0.10	ug/L						
		PCB-1242	67798-001	0.12 U	0.20	0.12	0.10	ug/L						
		PCB-1248	67798-001	0.12 U	0.20	0.12	0.10	ug/L						
		PCB-1254	67798-001	0.12 U	0.20	0.12	0.10	ug/L						
		PCB-1260	67798-001	0.72	0.20	0.12	0.10	ug/L	1	72	45	134		
		tetrachloro-m-xylene SUR	67798-001	62				%			30	150		
		decachlorobiphenyl SUR	67798-001	66				%			30	150		
SW3510C8082A	MS17179	PCB-1016	67798-007	0.69	0.20	0.12	0.10	ug/L	1	69	46	129		
		PCB-1221	67798-007	0.12 U	0.20	0.12	0.10	ug/L						
		PCB-1232	67798-007	0.12 U	0.20	0.12	0.10	ug/L						
		PCB-1242	67798-007	0.12 U	0.20	0.12	0.10	ug/L						
		PCB-1248	67798-007	0.12 U	0.20	0.12	0.10	ug/L						
		PCB-1254	67798-007	0.12 U	0.20	0.12	0.10	ug/L						
		PCB-1260	67798-007	0.76	0.20	0.12	0.10	ug/L	1	76	45	134		
		tetrachloro-m-xylene SUR	67798-007	73				%			30	150		
		decachlorobiphenyl SUR	67798-007	66				%			30	150		

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R	Limits		RPD	RPD Limit
SW3510C8082A	MSD17179	PCB-1016	67798-001	0.63	0.20	0.12	0.10	ug/L	1	63	46	129	2	50
		PCB-1221	67798-001	0.12 U	0.20	0.12	0.10	ug/L						50
		PCB-1232	67798-001	0.12 U	0.20	0.12	0.10	ug/L						50
		PCB-1242	67798-001	0.12 U	0.20	0.12	0.10	ug/L						50
		PCB-1248	67798-001	0.12 U	0.20	0.12	0.10	ug/L						50
		PCB-1254	67798-001	0.12 U	0.20	0.12	0.10	ug/L						50
		PCB-1260	67798-001	0.68	0.20	0.12	0.10	ug/L	1	68	45	134	5	50
		tetrachloro-m-xylene SUR	67798-001	61				%			30	150		
		decachlorobiphenyl SUR	67798-001	63				%			30	150		
SW3510C8082A	MSD17179	PCB-1016	67798-007	0.47	0.20	0.12	0.10	ug/L	1	47	46	129	38	50
		PCB-1221	67798-007	0.12 U	0.20	0.12	0.10	ug/L						50
		PCB-1232	67798-007	0.12 U	0.20	0.12	0.10	ug/L						50
		PCB-1242	67798-007	0.12 U	0.20	0.12	0.10	ug/L						50
		PCB-1248	67798-007	0.12 U	0.20	0.12	0.10	ug/L						50
		PCB-1254	67798-007	0.12 U	0.20	0.12	0.10	ug/L						50
		PCB-1260	67798-007	0.58	0.20	0.12	0.10	ug/L	1	58	45	134	26	50
		tetrachloro-m-xylene SUR	67798-007	55				%			30	150		
		decachlorobiphenyl SUR	67798-007	48				%			30	150		

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R	Limits	RPD	RPD Limit
SW3510C8270E	BLK17096	N-nitrosodimethylamine		1.0 U	2.0	1.0	0.21	ug/L					
		pyridine		1.0 U	2.0	1.0	0.60	ug/L					
		aniline		1.0 U	2.0	1.0	0.39	ug/L					
		phenol		1.0 U	2.0	1.0	0.34	ug/L					
		2-chlorophenol		1.0 U	5.0	1.0	0.29	ug/L					
		bis(2-chloroethyl)ether		1.0 U	2.0	1.0	0.35	ug/L					
		1,3-dichlorobenzene		1.0 U	2.0	1.0	0.41	ug/L					
		1,4-dichlorobenzene		1.0 U	2.0	1.0	0.37	ug/L					
		1,2-dichlorobenzene		1.0 U	2.0	1.0	0.36	ug/L					
		benzyl alcohol		1.0 U	2.0	1.0	0.84	ug/L					
		2-methylphenol		1.0 U	5.0	1.0	0.39	ug/L					
		2,2'-oxybis(1-chloropropane)		1.0 U	2.0	1.0	0.44	ug/L					
		hexachloroethane		1.0 U	2.0	1.0	0.53	ug/L					
		N-nitroso-di-N-propylamine		1.0 U	2.0	1.0	0.30	ug/L					
		4-methylphenol		1.5 U	2.0	1.5	1.3	ug/L					
		nitrobenzene		1.0 U	2.0	1.0	0.41	ug/L					
		isophorone		1.0 U	5.0	1.0	0.32	ug/L					
		2-nitrophenol		1.0 U	2.0	1.0	0.21	ug/L					
		2,4-dimethylphenol		1.0 U	5.0	1.0	0.44	ug/L					
		bis(2-chloroethoxy)methane		1.0 U	5.0	1.0	0.26	ug/L					
		2,4-dichlorophenol		1.0 U	5.0	1.0	0.19	ug/L					
		1,2,4-trichlorobenzene		1.0 U	5.0	1.0	0.34	ug/L					
		benzoic acid		45 U	50	45	20	ug/L					
		4-chloroaniline		1.0 U	2.0	1.0	0.41	ug/L					
		hexachlorobutadiene		1.0 U	2.0	1.0	0.57	ug/L					
		4-chloro-3-methylphenol		1.0 U	2.0	1.0	0.42	ug/L					
		hexachlorocyclopentadiene		4.0 U	10	4.0	1.6	ug/L					
		2,4,6-trichlorophenol		1.0 U	2.0	1.0	0.33	ug/L					
		2,4,5-trichlorophenol		1.0 U	2.0	1.0	0.28	ug/L					
		2-chloronaphthalene		1.0 U	5.0	1.0	0.34	ug/L					
		2-nitroaniline		1.0 U	2.0	1.0	0.72	ug/L					
		dimethylphthalate		1.0 U	5.0	1.0	0.41	ug/L					
		2,6-dinitrotoluene		1.0 U	5.0	1.0	0.42	ug/L					
		2,4-dinitrotoluene		1.0 U	5.0	1.0	0.52	ug/L					
		3-nitroaniline		1.5 U	2.0	1.5	1.0	ug/L					
		2,4-dinitrophenol		45 U	50	45	3.5	ug/L					
		dibenzofuran		0.40 U	0.50	0.40	0.37	ug/L					
		4-nitrophenol		5.0 U	10	5.0	1.6	ug/L					
		diethyl phthalate		1.0 U	5.0	1.0	0.30	ug/L					
		4-chlorophenyl phenyl ether		1.0 U	5.0	1.0	0.35	ug/L					
		4-nitroaniline		3.0 U	5.0	3.0	1.0	ug/L					
		4,6-dinitro-2-methylphenol		10 U	20	10	1.7	ug/L					
		azobenzene		1.0 U	2.0	1.0	0.25	ug/L					
		N-nitrosodiphenylamine		1.0 U	2.0	1.0	0.26	ug/L					
		4-bromophenyl phenyl ether		1.0 U	2.0	1.0	0.23	ug/L					
		hexachlorobenzene		1.0 U	2.0	1.0	0.25	ug/L					
		pentachlorophenol		5.0 U	10	5.0	2.6	ug/L					
		carbazole		1.0 U	2.0	1.0	0.32	ug/L					
		di-n-butylphthalate		1.0 U	5.0	1.0	0.54	ug/L					
		benzidine		25 U	30	25	20	ug/L					
		butyl benzyl phthalate		3.0 U	5.0	3.0	2.1	ug/L					
		3,3'-dichlorobenzidine		25 U	30	25	20	ug/L					
		bis(2-ethylhexyl)phthalate		3.0 U	5.0	3.0	2.4	ug/L					
		di-n-octyl phthalate		3.0 U	5.0	3.0	2.1	ug/L					

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R	Limits	RPD	RPD Limit
SW3510C8270E	BLK17096	2-fluorophenol SUR		35				%			21	100	
		phenol-D5 SUR		24				%			10	102	
		2,4,6-tribromophenol SUR		71				%			10	123	
		nitrobenzene-D5 SUR		59				%			35	114	
		2-fluorobiphenyl SUR		48				%			43	116	
		p-terphenyl-D14 SUR		76				%			33	141	

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R		Limits		RPD	RPD Limit
SW3510C8270E	LCS17096	N-nitrosodimethylamine		16	2.0	1.0	0.21	ug/L	40	39	*	43	121		
		pyridine		14	2.0	1.0	0.60	ug/L	40	35	*	40	140		
		aniline		20	2.0	1.0	0.39	ug/L	40	50		40	140		
		phenol		8.9	2.0	1.0	0.34	ug/L	40	22	*	72	132		
		2-chlorophenol		16	5.0	1.0	0.29	ug/L	40	41		38	117		
		bis(2-chloroethyl)ether		27	2.0	1.0	0.35	ug/L	40	68		43	118		
		1,3-dichlorobenzene		12	2.0	1.0	0.41	ug/L	40	30		28	110		
		1,4-dichlorobenzene		13	2.0	1.0	0.37	ug/L	40	32		29	112		
		1,2-dichlorobenzene		14	2.0	1.0	0.36	ug/L	40	36		33	111		
		benzyl alcohol		21	2.0	1.0	0.84	ug/L	40	53		31	112		
		2-methylphenol		17	5.0	1.0	0.39	ug/L	40	41		30	117		
		2,2'-oxybis(1-chloropropane)		36	2.0	1.0	0.44	ug/L	40	91		37	130		
		hexachloroethane		8.3	2.0	1.0	0.53	ug/L	40	21		21	115		
		N-nitroso-di-N-propylamine		27	2.0	1.0	0.30	ug/L	40	68		49	119		
		4-methylphenol		29	2.0	1.5	1.3	ug/L	80	36		25	120		
		nitrobenzene		26	2.0	1.0	0.41	ug/L	40	66		45	121		
		isophorone		30	5.0	1.0	0.32	ug/L	40	75		42	124		
		2-nitrophenol		22	2.0	1.0	0.21	ug/L	40	54		47	123		
		2,4-dimethylphenol		18	5.0	1.0	0.44	ug/L	40	46		31	124		
		bis(2-chloroethoxy)methane		29	5.0	1.0	0.26	ug/L	40	73		48	120		
		2,4-dichlorophenol		19	5.0	1.0	0.19	ug/L	40	48		47	121		
		1,2,4-trichlorobenzene		14	5.0	1.0	0.34	ug/L	40	35		29	116		
		benzoic acid		9.0 J	50	45	0.0010	ug/L	40	23	*	57	129		
		4-chloroaniline		26	2.0	1.0	0.41	ug/L	40	64		33	117		
		hexachlorobutadiene		8.7	2.0	1.0	0.57	ug/L	40	22		22	124		
		4-chloro-3-methylphenol		17	2.0	1.0	0.42	ug/L	40	43	*	52	119		
		hexachlorocyclopentadiene		11	10	4.0	1.6	ug/L	40	27	*	53	135		
		2,4,6-trichlorophenol		22	2.0	1.0	0.33	ug/L	40	56		50	125		
		2,4,5-trichlorophenol		22	2.0	1.0	0.28	ug/L	40	55		53	123		
		2-chloronaphthalene		23	5.0	1.0	0.34	ug/L	40	57		40	116		
		2-nitroaniline		27	2.0	1.0	0.72	ug/L	40	67		55	127		
		dimethylphthalate		9.1	5.0	1.0	0.41	ug/L	40	23	*	45	127		
		2,6-dinitrotoluene		29	5.0	1.0	0.42	ug/L	40	72		57	124		
		2,4-dinitrotoluene		28	5.0	1.0	0.52	ug/L	40	69		57	128		
		3-nitroaniline		27	2.0	1.5	1.0	ug/L	40	67		41	128		
		2,4-dinitrophenol		17 J	50	45	3.5	ug/L	40	41		23	143		
		dibenzofuran		28	0.50	0.40	0.37	ug/L	40	70		53	118		
		4-nitrophenol		9.0 J	10	5.0	1.6	ug/L	40	22	*	61	133		
		diethyl phthalate		21	5.0	1.0	0.30	ug/L	40	53	*	56	125		
		4-chlorophenyl phenyl ether		27	5.0	1.0	0.35	ug/L	40	67		53	121		
		4-nitroaniline		25	5.0	3.0	1.0	ug/L	40	62		38	126		
		4,6-dinitro-2-methylphenol		22	20	10	1.7	ug/L	40	55		44	137		
		azobenzene		30	2.0	1.0	0.25	ug/L	40	75		61	116		
		N-nitrosodiphenylamine		28	2.0	1.0	0.26	ug/L	40	69		51	123		
		4-bromophenyl phenyl ether		28	2.0	1.0	0.23	ug/L	40	69		55	124		
		hexachlorobenzene		27	2.0	1.0	0.25	ug/L	40	69		53	125		
		pentachlorophenol		26	10	5.0	2.6	ug/L	40	64		35	138		
		carbazole		30	2.0	1.0	0.32	ug/L	40	76		60	122		
		di-n-butylphthalate		28	5.0	1.0	0.54	ug/L	40	70		59	127		
		benzidine		32	30	25	20	ug/L	40	81		50	134		
		butyl benzyl phthalate		28	5.0	3.0	2.1	ug/L	40	71		53	134		
		3,3'-dichlorobenzidine		32	30	25	20	ug/L	40	80		27	129		
		bis(2-ethylhexyl)phthalate		28	5.0	3.0	2.4	ug/L	40	71		55	135		
		di-n-octyl phthalate		27	5.0	3.0	2.1	ug/L	40	67		51	140		

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R	Limits	RPD	RPD Limit
SW3510C8270E	LCS17096	2-fluorophenol SUR		29				%			21	100	
		phenol-D5 SUR		23				%			10	102	
		2,4,6-tribromophenol SUR		75				%			10	123	
		nitrobenzene-D5 SUR		71				%			35	114	
		2-fluorobiphenyl SUR		70				%			43	116	
		p-terphenyl-D14 SUR		83				%			33	141	

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R		Limits	RPD	RPD		Limit
SW3510C8270E	LCSD17096	N-nitrosodimethylamine		17	2.0	1.0	0.21	ug/L	40	44		43	121	11		20
		pyridine		15	2.0	1.0	0.60	ug/L	40	39	*	40	140	9		20
		aniline		21	2.0	1.0	0.39	ug/L	40	53		40	140	6		20
		phenol		12	2.0	1.0	0.34	ug/L	40	30	*	72	132	29	*	20
		2-chlorophenol		25	5.0	1.0	0.29	ug/L	40	63		38	117	43	*	20
		bis(2-chloroethyl)ether		27	2.0	1.0	0.35	ug/L	40	67		43	118	3		20
		1,3-dichlorobenzene		9.9	2.0	1.0	0.41	ug/L	40	25	*	28	110	18		20
		1,4-dichlorobenzene		11	2.0	1.0	0.37	ug/L	40	26	*	29	112	19		20
		1,2-dichlorobenzene		12	2.0	1.0	0.36	ug/L	40	30	*	32	111	19		20
		benzyl alcohol		22	2.0	1.0	0.84	ug/L	40	55		31	112	4		20
		2-methylphenol		24	5.0	1.0	0.39	ug/L	40	60		30	117	37	*	20
		2,2'-oxybis(1-chloropropane)		34	2.0	1.0	0.44	ug/L	40	86		37	130	6		20
		hexachloroethane		7.4	2.0	1.0	0.53	ug/L	40	18	*	21	115	12		20
		N-nitroso-di-N-propylamine		26	2.0	1.0	0.30	ug/L	40	65		49	119	5		20
		4-methylphenol		44	2.0	1.5	1.3	ug/L	80	55		25	120	41	*	20
		nitrobenzene		26	2.0	1.0	0.41	ug/L	40	64		45	121	3		20
		isophorone		30	5.0	1.0	0.32	ug/L	40	75		42	124	1		20
		2-nitrophenol		27	2.0	1.0	0.21	ug/L	40	68		47	123	23	*	20
		2,4-dimethylphenol		22	5.0	1.0	0.44	ug/L	40	55		31	124	17		20
		bis(2-chloroethoxy)methane		28	5.0	1.0	0.26	ug/L	40	71		48	120	2		20
		2,4-dichlorophenol		28	5.0	1.0	0.19	ug/L	40	70		47	121	36	*	20
		1,2,4-trichlorobenzene		12	5.0	1.0	0.34	ug/L	40	30		29	116	17		20
		benzoic acid		13 J	50	45	0.0010	ug/L	40	33	*	57	129	38	*	20
		4-chloroaniline		26	2.0	1.0	0.41	ug/L	40	65		33	117	1		20
		hexachlorobutadiene		8.1	2.0	1.0	0.57	ug/L	40	20	*	22	124	7		20
		4-chloro-3-methylphenol		27	2.0	1.0	0.42	ug/L	40	66		52	119	42	*	20
		hexachlorocyclopentadiene		8.7 J	10	4.0	1.6	ug/L	40	22	*	53	135	21	*	20
		2,4,6-trichlorophenol		29	2.0	1.0	0.33	ug/L	40	72		50	125	25	*	20
		2,4,5-trichlorophenol		29	2.0	1.0	0.28	ug/L	40	72		53	123	26	*	20
		2-chloronaphthalene		20	5.0	1.0	0.34	ug/L	40	50		40	116	14		20
		2-nitroaniline		28	2.0	1.0	0.72	ug/L	40	70		55	127	4		20
		dimethylphthalate		9.9	5.0	1.0	0.41	ug/L	40	25	*	45	127	9		20
		2,6-dinitrotoluene		29	5.0	1.0	0.42	ug/L	40	72		57	124	0		20
		2,4-dinitrotoluene		27	5.0	1.0	0.52	ug/L	40	68		57	128	1		20
		3-nitroaniline		29	2.0	1.5	1.0	ug/L	40	72		41	128	7		20
		2,4-dinitrophenol		23 J	50	45	3.5	ug/L	40	56		23	143	31	*	20
		dibenzofuran		26	0.50	0.40	0.37	ug/L	40	66		53	118	6		20
		4-nitrophenol		13	10	5.0	1.6	ug/L	40	32	*	61	133	35	*	20
		diethyl phthalate		22	5.0	1.0	0.30	ug/L	40	54	*	56	125	2		20
		4-chlorophenyl phenyl ether		26	5.0	1.0	0.35	ug/L	40	65		53	121	3		20
		4-nitroaniline		27	5.0	3.0	1.0	ug/L	40	67		38	126	9		20
		4,6-dinitro-2-methylphenol		27	20	10	1.7	ug/L	40	66		44	137	18		20
		azobenzene		30	2.0	1.0	0.25	ug/L	40	76		61	116	1		20
		N-nitrosodiphenylamine		28	2.0	1.0	0.26	ug/L	40	71		51	123	3		20
		4-bromophenyl phenyl ether		28	2.0	1.0	0.23	ug/L	40	71		55	124	2		20
		hexachlorobenzene		28	2.0	1.0	0.25	ug/L	40	70		53	125	2		20
		pentachlorophenol		29	10	5.0	2.6	ug/L	40	72		35	138	12		20
		carbazole		30	2.0	1.0	0.32	ug/L	40	76		60	122	0		20
		di-n-butylphthalate		28	5.0	1.0	0.54	ug/L	40	70		59	127	1		20
		benzidine		39	30	25	20	ug/L	40	98		50	134	20		20
		butyl benzyl phthalate		28	5.0	3.0	2.1	ug/L	40	71		53	134	1		20
		3,3'-dichlorobenzidine		32	30	25	20	ug/L	40	80		27	129	1		20
		bis(2-ethylhexyl)phthalate		29	5.0	3.0	2.4	ug/L	40	73		55	135	3		20
		di-n-octyl phthalate		27	5.0	3.0	2.1	ug/L	40	68		51	140	2		20

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R	Limits	RPD	RPD Limit
SW3510C8270E	LCSD17096	2-fluorophenol SUR		44				%			21	100	
		phenol-D5 SUR		29				%			10	102	
		2,4,6-tribromophenol SUR		85				%			10	123	
		nitrobenzene-D5 SUR		68				%			35	114	
		2-fluorobiphenyl SUR		69				%			43	116	
		p-terphenyl-D14 SUR		88				%			33	141	

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R		Limits		RPD	RPD Limit
SW3510C8270E	MS17096	N-nitrosodimethylamine	67798-001	17	2.0	1.0	0.21	ug/L	40	43		43	121		
		pyridine	67798-001	17	2.0	1.0	0.60	ug/L	40	42		40	140		
		aniline	67798-001	21	2.0	1.0	0.39	ug/L	40	52		40	140		
		phenol	67798-001	8.6	2.0	1.0	0.34	ug/L	40	22	*	72	132		
		2-chlorophenol	67798-001	19	5.0	1.0	0.29	ug/L	40	48		38	117		
		bis(2-chloroethyl)ether	67798-001	28	2.0	1.0	0.35	ug/L	40	70		43	118		
		1,3-dichlorobenzene	67798-001	13	2.0	1.0	0.41	ug/L	40	32		28	110		
		1,4-dichlorobenzene	67798-001	14	2.0	1.0	0.37	ug/L	40	34		29	112		
		1,2-dichlorobenzene	67798-001	16	2.0	1.0	0.36	ug/L	40	39		32	111		
		benzyl alcohol	67798-001	22	2.0	1.0	0.84	ug/L	40	55		31	112		
		2-methylphenol	67798-001	21	5.0	1.0	0.39	ug/L	40	52		30	117		
		2,2'-oxybis(1-chloropropane)	67798-001	37	2.0	1.0	0.44	ug/L	40	93		37	130		
		hexachloroethane	67798-001	9.0	2.0	1.0	0.53	ug/L	40	22		21	115		
		N-nitroso-di-N-propylamine	67798-001	27	2.0	1.0	0.30	ug/L	40	67		49	119		
		4-methylphenol	67798-001	35	2.0	1.5	1.3	ug/L	80	44		25	120		
		nitrobenzene	67798-001	28	2.0	1.0	0.41	ug/L	40	69		45	121		
		isophorone	67798-001	31	5.0	1.0	0.32	ug/L	40	77		42	124		
		2-nitrophenol	67798-001	23	2.0	1.0	0.21	ug/L	40	57		47	123		
		2,4-dimethylphenol	67798-001	20	5.0	1.0	0.44	ug/L	40	51		31	124		
		bis(2-chloroethoxy)methane	67798-001	30	5.0	1.0	0.26	ug/L	40	75		48	120		
		2,4-dichlorophenol	67798-001	21	5.0	1.0	0.19	ug/L	40	52		47	121		
		1,2,4-trichlorobenzene	67798-001	20	5.0	1.0	0.34	ug/L	40	49		29	116		
		benzoic acid	67798-001	11 J	50	45	0.0010	ug/L	40	27	*	57	129		
		4-chloroaniline	67798-001	26	2.0	1.0	0.41	ug/L	40	65		33	117		
		hexachlorobutadiene	67798-001	14	2.0	1.0	0.57	ug/L	40	34		22	124		
		4-chloro-3-methylphenol	67798-001	11	2.0	1.0	0.42	ug/L	40	28	*	52	119		
		hexachlorocyclopentadiene	67798-001	17	10	4.0	1.6	ug/L	40	42	*	53	135		
		2,4,6-trichlorophenol	67798-001	22	2.0	1.0	0.33	ug/L	40	55		50	125		
		2,4,5-trichlorophenol	67798-001	22	2.0	1.0	0.28	ug/L	40	56		53	123		
		2-chloronaphthalene	67798-001	25	5.0	1.0	0.34	ug/L	40	63		40	116		
		2-nitroaniline	67798-001	28	2.0	1.0	0.72	ug/L	40	70		55	127		
		dimethylphthalate	67798-001	27	5.0	1.0	0.41	ug/L	40	69		45	127		
		2,6-dinitrotoluene	67798-001	30	5.0	1.0	0.42	ug/L	40	75		57	124		
		2,4-dinitrotoluene	67798-001	29	5.0	1.0	0.52	ug/L	40	71		57	128		
		3-nitroaniline	67798-001	29	2.0	1.5	1.0	ug/L	40	73		41	128		
		2,4-dinitrophenol	67798-001	19 J	50	45	3.5	ug/L	40	49		23	143		
		dibenzofuran	67798-001	29	0.50	0.40	0.37	ug/L	40	72		53	118		
		4-nitrophenol	67798-001	10	10	5.0	1.6	ug/L	40	26	*	61	133		
		diethyl phthalate	67798-001	30	5.0	1.0	0.30	ug/L	40	75		56	125		
		4-chlorophenyl phenyl ether	67798-001	28	5.0	1.0	0.35	ug/L	40	69		53	121		
		4-nitroaniline	67798-001	29	5.0	3.0	1.0	ug/L	40	73		38	126		
		4,6-dinitro-2-methylphenol	67798-001	25	20	10	1.7	ug/L	40	62		44	137		
		azobenzene	67798-001	30	2.0	1.0	0.25	ug/L	40	75		61	116		
		N-nitrosodiphenylamine	67798-001	29	2.0	1.0	0.26	ug/L	40	73		51	123		
		4-bromophenyl phenyl ether	67798-001	29	2.0	1.0	0.23	ug/L	40	71		55	124		
		hexachlorobenzene	67798-001	28	2.0	1.0	0.25	ug/L	40	71		53	125		
		pentachlorophenol	67798-001	22	10	5.0	2.6	ug/L	40	55		35	138		
		carbazole	67798-001	32	2.0	1.0	0.32	ug/L	40	80		60	122		
		di-n-butylphthalate	67798-001	30	5.0	1.0	0.54	ug/L	40	75		59	127		
		benzidine	67798-001	29 J	30	25	20	ug/L	40	71		50	134		
		butyl benzyl phthalate	67798-001	29	5.0	3.0	2.1	ug/L	40	71		53	134		
		3,3'-dichlorobenzidine	67798-001	31	30	25	20	ug/L	40	76		27	129		
		bis(2-ethylhexyl)phthalate	67798-001	28	5.0	3.0	2.4	ug/L	40	71		55	135		
		di-n-octyl phthalate	67798-001	28	5.0	3.0	2.1	ug/L	40	69		51	140		

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R	Limits	RPD	RPD Limit
SW3510C8270E	MS17096	2-fluorophenol SUR	67798-001	32				%			21	100	
		phenol-D5 SUR	67798-001	21				%			10	102	
		2,4,6-tribromophenol SUR	67798-001	69				%			10	123	
		nitrobenzene-D5 SUR	67798-001	74				%			35	114	
		2-fluorobiphenyl SUR	67798-001	69				%			43	116	
		p-terphenyl-D14 SUR	67798-001	89				%			33	141	

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R		Limits		RPD	RPD Limit
SW3510C8270E	MS17096	N-nitrosodimethylamine	67798-007	16	2.0	1.0	0.21	ug/L	40	39	*	43	121		
		pyridine	67798-007	14	2.0	1.0	0.60	ug/L	40	35	*	40	140		
		aniline	67798-007	18	2.0	1.0	0.39	ug/L	40	45		40	140		
		phenol	67798-007	9.3	2.0	1.0	0.34	ug/L	40	23	*	72	132		
		2-chlorophenol	67798-007	18	5.0	1.0	0.29	ug/L	40	45		38	117		
		bis(2-chloroethyl)ether	67798-007	26	2.0	1.0	0.35	ug/L	40	65		43	118		
		1,3-dichlorobenzene	67798-007	9.2	2.0	1.0	0.41	ug/L	40	23	*	28	110		
		1,4-dichlorobenzene	67798-007	9.9	2.0	1.0	0.37	ug/L	40	25	*	29	112		
		1,2-dichlorobenzene	67798-007	11	2.0	1.0	0.36	ug/L	40	29	*	32	111		
		benzyl alcohol	67798-007	20	2.0	1.0	0.84	ug/L	40	49		31	112		
		2-methylphenol	67798-007	18	5.0	1.0	0.39	ug/L	40	45		30	117		
		2,2'-oxybis(1-chloropropane)	67798-007	33	2.0	1.0	0.44	ug/L	40	83		37	130		
		hexachloroethane	67798-007	6.0	2.0	1.0	0.53	ug/L	40	15	*	21	115		
		N-nitroso-di-N-propylamine	67798-007	25	2.0	1.0	0.30	ug/L	40	63		49	119		
		4-methylphenol	67798-007	33	2.0	1.5	1.3	ug/L	80	41		25	120		
		nitrobenzene	67798-007	25	2.0	1.0	0.41	ug/L	40	62		45	121		
		isophorone	67798-007	29	5.0	1.0	0.32	ug/L	40	72		42	124		
		2-nitrophenol	67798-007	23	2.0	1.0	0.21	ug/L	40	58		47	123		
		2,4-dimethylphenol	67798-007	18	5.0	1.0	0.44	ug/L	40	45		31	124		
		bis(2-chloroethoxy)methane	67798-007	28	5.0	1.0	0.26	ug/L	40	69		48	120		
		2,4-dichlorophenol	67798-007	22	5.0	1.0	0.19	ug/L	40	54		47	121		
		1,2,4-trichlorobenzene	67798-007	15	5.0	1.0	0.34	ug/L	40	38		29	116		
		benzoic acid	67798-007	4.8 J	50	45	0.0010	ug/L	40	12	*	57	129		
		4-chloroaniline	67798-007	23	2.0	1.0	0.41	ug/L	40	58		33	117		
		hexachlorobutadiene	67798-007	9.4	2.0	1.0	0.57	ug/L	40	24		22	124		
		4-chloro-3-methylphenol	67798-007	18	2.0	1.0	0.42	ug/L	40	45	*	52	119		
		hexachlorocyclopentadiene	67798-007	14	10	4.0	1.6	ug/L	40	35	*	53	135		
		2,4,6-trichlorophenol	67798-007	24	2.0	1.0	0.33	ug/L	40	60		50	125		
		2,4,5-trichlorophenol	67798-007	24	2.0	1.0	0.28	ug/L	40	61		53	123		
		2-chloronaphthalene	67798-007	23	5.0	1.0	0.34	ug/L	40	57		40	116		
		2-nitroaniline	67798-007	26	2.0	1.0	0.72	ug/L	40	65		55	127		
		dimethylphthalate	67798-007	17	5.0	1.0	0.41	ug/L	40	44	*	45	127		
		2,6-dinitrotoluene	67798-007	27	5.0	1.0	0.42	ug/L	40	68		57	124		
		2,4-dinitrotoluene	67798-007	25	5.0	1.0	0.52	ug/L	40	63		57	128		
		3-nitroaniline	67798-007	25	2.0	1.5	1.0	ug/L	40	62		41	128		
		2,4-dinitrophenol	67798-007	17 J	50	45	3.5	ug/L	40	42		23	143		
		dibenzofuran	67798-007	26	0.50	0.40	0.37	ug/L	40	65		53	118		
		4-nitrophenol	67798-007	8.9 J	10	5.0	1.6	ug/L	40	22	*	61	133		
		diethyl phthalate	67798-007	25	5.0	1.0	0.30	ug/L	40	62		56	125		
		4-chlorophenyl phenyl ether	67798-007	25	5.0	1.0	0.35	ug/L	40	62		53	121		
		4-nitroaniline	67798-007	24	5.0	3.0	1.0	ug/L	40	60		38	126		
		4,6-dinitro-2-methylphenol	67798-007	23	20	10	1.7	ug/L	40	58		44	137		
		azobenzene	67798-007	29	2.0	1.0	0.25	ug/L	40	71		61	116		
		N-nitrosodiphenylamine	67798-007	27	2.0	1.0	0.26	ug/L	40	67		51	123		
		4-bromophenyl phenyl ether	67798-007	26	2.0	1.0	0.23	ug/L	40	66		55	124		
		hexachlorobenzene	67798-007	25	2.0	1.0	0.25	ug/L	40	63		53	125		
		pentachlorophenol	67798-007	20	10	5.0	2.6	ug/L	40	51		35	138		
		carbazole	67798-007	28	2.0	1.0	0.32	ug/L	40	70		60	122		
		di-n-butylphthalate	67798-007	27	5.0	1.0	0.54	ug/L	40	66		59	127		
		benzidine	67798-007	26 J	30	25	20	ug/L	40	66		50	134		
		butyl benzyl phthalate	67798-007	27	5.0	3.0	2.1	ug/L	40	68		53	134		
		3,3'-dichlorobenzidine	67798-007	27 J	30	25	20	ug/L	40	68		27	129		
		bis(2-ethylhexyl)phthalate	67798-007	27	5.0	3.0	2.4	ug/L	40	68		55	135		
		di-n-octyl phthalate	67798-007	27	5.0	3.0	2.1	ug/L	40	68		51	140		

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R	Limits	RPD	RPD Limit
SW3510C8270E	MS17096	2-fluorophenol SUR	67798-007	31				%			21	100	
		phenol-D5 SUR	67798-007	23				%			10	102	
		2,4,6-tribromophenol SUR	67798-007	76				%			10	123	
		nitrobenzene-D5 SUR	67798-007	67				%			35	114	
		2-fluorobiphenyl SUR	67798-007	64				%			43	116	
		p-terphenyl-D14 SUR	67798-007	82				%			33	141	

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R		Limits		RPD	RPD Limit
SW3510C8270E	MSD17096	N-nitrosodimethylamine	67798-001	17	2.0	1.0	0.21	ug/L	40	41	*	43	121	5	20
		pyridine	67798-001	16	2.0	1.0	0.60	ug/L	40	39	*	40	140	8	20
		aniline	67798-001	20	2.0	1.0	0.39	ug/L	40	49		40	140	6	20
		phenol	67798-001	7.7	2.0	1.0	0.34	ug/L	40	19	*	72	132	12	20
		2-chlorophenol	67798-001	19	5.0	1.0	0.29	ug/L	40	48		38	117	1	20
		bis(2-chloroethyl)ether	67798-001	26	2.0	1.0	0.35	ug/L	40	65		43	118	7	20
		1,3-dichlorobenzene	67798-001	14	2.0	1.0	0.41	ug/L	40	36		28	110	12	20
		1,4-dichlorobenzene	67798-001	15	2.0	1.0	0.37	ug/L	40	39		29	112	12	20
		1,2-dichlorobenzene	67798-001	17	2.0	1.0	0.36	ug/L	40	43		32	111	10	20
		benzyl alcohol	67798-001	21	2.0	1.0	0.84	ug/L	40	53		31	112	4	20
		2-methylphenol	67798-001	20	5.0	1.0	0.39	ug/L	40	49		30	117	6	20
		2,2'-oxybis(1-chloropropane)	67798-001	35	2.0	1.0	0.44	ug/L	40	88		37	130	6	20
		hexachloroethane	67798-001	11	2.0	1.0	0.53	ug/L	40	28		21	115	23 *	20
		N-nitroso-di-N-propylamine	67798-001	26	2.0	1.0	0.30	ug/L	40	64		49	119	5	20
		4-methylphenol	67798-001	34	2.0	1.5	1.3	ug/L	80	42		25	120	4	20
		nitrobenzene	67798-001	25	2.0	1.0	0.41	ug/L	40	63		45	121	10	20
		isophorone	67798-001	29	5.0	1.0	0.32	ug/L	40	72		42	124	7	20
		2-nitrophenol	67798-001	23	2.0	1.0	0.21	ug/L	40	58		47	123	2	20
		2,4-dimethylphenol	67798-001	19	5.0	1.0	0.44	ug/L	40	48		31	124	6	20
		bis(2-chloroethoxy)methane	67798-001	28	5.0	1.0	0.26	ug/L	40	69		48	120	8	20
		2,4-dichlorophenol	67798-001	20	5.0	1.0	0.19	ug/L	40	51		47	121	3	20
		1,2,4-trichlorobenzene	67798-001	20	5.0	1.0	0.34	ug/L	40	50		29	116	3	20
		benzoic acid	67798-001	7.5 J	50	45	0.0010	ug/L	40	19	*	57	129	35	20
		4-chloroaniline	67798-001	25	2.0	1.0	0.41	ug/L	40	62		33	117	5	20
		hexachlorobutadiene	67798-001	16	2.0	1.0	0.57	ug/L	40	39		22	124	12	20
		4-chloro-3-methylphenol	67798-001	11	2.0	1.0	0.42	ug/L	40	28	*	52	119	2	20
		hexachlorocyclopentadiene	67798-001	17	10	4.0	1.6	ug/L	40	41	*	53	135	1	20
		2,4,6-trichlorophenol	67798-001	22	2.0	1.0	0.33	ug/L	40	56		50	125	0	20
		2,4,5-trichlorophenol	67798-001	23	2.0	1.0	0.28	ug/L	40	57		53	123	1	20
		2-chloronaphthalene	67798-001	24	5.0	1.0	0.34	ug/L	40	60		40	116	4	20
		2-nitroaniline	67798-001	27	2.0	1.0	0.72	ug/L	40	68		55	127	2	20
		dimethylphthalate	67798-001	27	5.0	1.0	0.41	ug/L	40	67		45	127	2	20
		2,6-dinitrotoluene	67798-001	28	5.0	1.0	0.42	ug/L	40	71		57	124	6	20
		2,4-dinitrotoluene	67798-001	28	5.0	1.0	0.52	ug/L	40	70		57	128	2	20
		3-nitroaniline	67798-001	28	2.0	1.5	1.0	ug/L	40	71		41	128	3	20
		2,4-dinitrophenol	67798-001	22 J	50	45	3.5	ug/L	40	54		23	143	10	20
		dibenzofuran	67798-001	28	0.50	0.40	0.37	ug/L	40	69		53	118	4	20
		4-nitrophenol	67798-001	11	10	5.0	1.6	ug/L	40	26	*	61	133	1	20
		diethyl phthalate	67798-001	29	5.0	1.0	0.30	ug/L	40	73		56	125	4	20
		4-chlorophenyl phenyl ether	67798-001	27	5.0	1.0	0.35	ug/L	40	67		53	121	4	20
		4-nitroaniline	67798-001	28	5.0	3.0	1.0	ug/L	40	71		38	126	3	20
		4,6-dinitro-2-methylphenol	67798-001	26	20	10	1.7	ug/L	40	64		44	137	4	20
		azobenzene	67798-001	29	2.0	1.0	0.25	ug/L	40	72		61	116	4	20
		N-nitrosodiphenylamine	67798-001	28	2.0	1.0	0.26	ug/L	40	69		51	123	5	20
		4-bromophenyl phenyl ether	67798-001	28	2.0	1.0	0.23	ug/L	40	70		55	124	3	20
		hexachlorobenzene	67798-001	28	2.0	1.0	0.25	ug/L	40	70		53	125	2	20
		pentachlorophenol	67798-001	24	10	5.0	2.6	ug/L	40	59		35	138	8	20
		carbazole	67798-001	31	2.0	1.0	0.32	ug/L	40	77		60	122	4	20
		di-n-butylphthalate	67798-001	29	5.0	1.0	0.54	ug/L	40	73		59	127	2	20
		benzidine	67798-001	25 J	30	25	20	ug/L	40	62		50	134	14	20
		butyl benzyl phthalate	67798-001	28	5.0	3.0	2.1	ug/L	40	69		53	134	3	20
		3,3'-dichlorobenzidine	67798-001	30	30	25	20	ug/L	40	76		27	129	1	20
		bis(2-ethylhexyl)phthalate	67798-001	28	5.0	3.0	2.4	ug/L	40	71		55	135	0	20
		di-n-octyl phthalate	67798-001	27	5.0	3.0	2.1	ug/L	40	67		51	140	3	20

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R	Limits	RPD	RPD Limit
SW3510C8270E	MSD17096	2-fluorophenol SUR	67798-001	30				%			21	100	
		phenol-D5 SUR	67798-001	19				%			10	102	
		2,4,6-tribromophenol SUR	67798-001	70				%			10	123	
		nitrobenzene-D5 SUR	67798-001	67				%			35	114	
		2-fluorobiphenyl SUR	67798-001	65				%			43	116	
		p-terphenyl-D14 SUR	67798-001	84				%			33	141	

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R		Limits		RPD	RPD	Limit
SW3510C8270E	MSD17096	N-nitrosodimethylamine	67798-007	16	2.0	1.0	0.21	ug/L	40	39	*	43	121	1		20
		pyridine	67798-007	13	2.0	1.0	0.60	ug/L	40	33	*	40	140	6		20
		aniline	67798-007	18	2.0	1.0	0.39	ug/L	40	46		40	140	2		20
		phenol	67798-007	8.8	2.0	1.0	0.34	ug/L	40	22	*	72	132	5		20
		2-chlorophenol	67798-007	15	5.0	1.0	0.29	ug/L	40	38		38	117	17		20
		bis(2-chloroethyl)ether	67798-007	25	2.0	1.0	0.35	ug/L	40	62		43	118	4		20
		1,3-dichlorobenzene	67798-007	11	2.0	1.0	0.41	ug/L	40	28		28	110	18		20
		1,4-dichlorobenzene	67798-007	12	2.0	1.0	0.37	ug/L	40	30		29	112	19		20
		1,2-dichlorobenzene	67798-007	14	2.0	1.0	0.36	ug/L	40	35		32	111	19		20
		benzyl alcohol	67798-007	19	2.0	1.0	0.84	ug/L	40	48		31	112	2		20
		2-methylphenol	67798-007	17	5.0	1.0	0.39	ug/L	40	42		30	117	7		20
		2,2'-oxybis(1-chloropropane)	67798-007	33	2.0	1.0	0.44	ug/L	40	83		37	130	0		20
		hexachloroethane	67798-007	8.0	2.0	1.0	0.53	ug/L	40	20	*	21	115	28	*	20
		N-nitroso-di-N-propylamine	67798-007	25	2.0	1.0	0.30	ug/L	40	63		49	119	0		20
		4-methylphenol	67798-007	31	2.0	1.5	1.3	ug/L	80	38		25	120	8		20
		nitrobenzene	67798-007	24	2.0	1.0	0.41	ug/L	40	61		45	121	2		20
		isophorone	67798-007	28	5.0	1.0	0.32	ug/L	40	70		42	124	3		20
		2-nitrophenol	67798-007	20	2.0	1.0	0.21	ug/L	40	50		47	123	14		20
		2,4-dimethylphenol	67798-007	17	5.0	1.0	0.44	ug/L	40	43		31	124	4		20
		bis(2-chloroethoxy)methane	67798-007	26	5.0	1.0	0.26	ug/L	40	66		48	120	5		20
		2,4-dichlorophenol	67798-007	18	5.0	1.0	0.19	ug/L	40	44	*	47	121	20		20
		1,2,4-trichlorobenzene	67798-007	18	5.0	1.0	0.34	ug/L	40	44		29	116	14		20
		benzoic acid	67798-007	10 J	50	45	0.0010	ug/L	40	26	*	57	129	74		20
		4-chloroaniline	67798-007	24	2.0	1.0	0.41	ug/L	40	59		33	117	2		20
		hexachlorobutadiene	67798-007	12	2.0	1.0	0.57	ug/L	40	30		22	124	23	*	20
		4-chloro-3-methylphenol	67798-007	15	2.0	1.0	0.42	ug/L	40	38	*	52	119	17		20
		hexachlorocyclopentadiene	67798-007	14	10	4.0	1.6	ug/L	40	34	*	53	135	1		20
		2,4,6-trichlorophenol	67798-007	21	2.0	1.0	0.33	ug/L	40	51		50	125	15		20
		2,4,5-trichlorophenol	67798-007	20	2.0	1.0	0.28	ug/L	40	50	*	53	123	20		20
		2-chloronaphthalene	67798-007	24	5.0	1.0	0.34	ug/L	40	59		40	116	2		20
		2-nitroaniline	67798-007	25	2.0	1.0	0.72	ug/L	40	63		55	127	4		20
		dimethylphthalate	67798-007	17	5.0	1.0	0.41	ug/L	40	44	*	45	127	0		20
		2,6-dinitrotoluene	67798-007	28	5.0	1.0	0.42	ug/L	40	69		57	124	2		20
		2,4-dinitrotoluene	67798-007	27	5.0	1.0	0.52	ug/L	40	68		57	128	7		20
		3-nitroaniline	67798-007	25	2.0	1.5	1.0	ug/L	40	62		41	128	1		20
		2,4-dinitrophenol	67798-007	16 J	50	45	3.5	ug/L	40	40		23	143	5		20
		dibenzofuran	67798-007	27	0.50	0.40	0.37	ug/L	40	68		53	118	5		20
		4-nitrophenol	67798-007	9.0 J	10	5.0	1.6	ug/L	40	22	*	61	133	1		20
		diethyl phthalate	67798-007	26	5.0	1.0	0.30	ug/L	40	64		56	125	4		20
		4-chlorophenyl phenyl ether	67798-007	25	5.0	1.0	0.35	ug/L	40	64		53	121	3		20
		4-nitroaniline	67798-007	24	5.0	3.0	1.0	ug/L	40	61		38	126	1		20
		4,6-dinitro-2-methylphenol	67798-007	22	20	10	1.7	ug/L	40	54		44	137	7		20
		azobenzene	67798-007	28	2.0	1.0	0.25	ug/L	40	70		61	116	2		20
		N-nitrosodiphenylamine	67798-007	26	2.0	1.0	0.26	ug/L	40	66		51	123	2		20
		4-bromophenyl phenyl ether	67798-007	25	2.0	1.0	0.23	ug/L	40	64		55	124	3		20
		hexachlorobenzene	67798-007	24	2.0	1.0	0.25	ug/L	40	61		53	125	4		20
		pentachlorophenol	67798-007	27	10	5.0	2.6	ug/L	40	66		35	138	26	*	20
		carbazole	67798-007	29	2.0	1.0	0.32	ug/L	40	74		60	122	5		20
		di-n-butylphthalate	67798-007	27	5.0	1.0	0.54	ug/L	40	68		59	127	2		20
		benzidine	67798-007	32	30	25	20	ug/L	40	80		50	134	20		20
		butyl benzyl phthalate	67798-007	26	5.0	3.0	2.1	ug/L	40	65		53	134	5		20
		3,3'-dichlorobenzidine	67798-007	26 J	30	25	20	ug/L	40	65		27	129	4		20
		bis(2-ethylhexyl)phthalate	67798-007	25	5.0	3.0	2.4	ug/L	40	63		55	135	7		20
		di-n-octyl phthalate	67798-007	27	5.0	3.0	2.1	ug/L	40	66		51	140	3		20

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R	Limits	RPD	RPD Limit
SW3510C8270E	MSD17096	2-fluorophenol SUR	67798-007	28				%			21	100	
		phenol-D5 SUR	67798-007	22				%			10	102	
		2,4,6-tribromophenol SUR	67798-007	71				%			10	123	
		nitrobenzene-D5 SUR	67798-007	65				%			35	114	
		2-fluorobiphenyl SUR	67798-007	64				%			43	116	
		p-terphenyl-D14 SUR	67798-007	77				%			33	141	

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R	Limits	RPD	RPD Limit
SW3005A6020A	BLK17175	Silver		0.00050 U	0.0050	0.00050	0.00011	mg/L					
		Aluminum		0.025 U	0.050	0.025	0.010	mg/L					
		Arsenic		0.0010 U	0.0050	0.0010	0.00067	mg/L					
		Barium		0.0010 U	0.010	0.0010	0.00076	mg/L					
		Beryllium		0.00050 U	0.0010	0.00050	0.00010	mg/L					
		Cadmium		0.00050 U	0.0010	0.00050	0.00014	mg/L					
		Cobalt		0.00010 U	0.010	0.00010	0.000020	mg/L					
		Chromium		0.025 U	0.050	0.025	0.020	mg/L					
		Copper		0.0075 U	0.010	0.0075	0.0054	mg/L					
		Iron		0.030 U	0.050	0.030	0.029	mg/L					
		Potassium		0.10 U	0.50	0.10	0.039	mg/L					
		Magnesium		0.020 U	0.10	0.020	0.0073	mg/L					
		Manganese		0.0050 U	0.010	0.0050	0.0016	mg/L					
		Sodium		0.050 U	0.10	0.050	0.034	mg/L					
		Nickel		0.025 U	0.050	0.025	0.013	mg/L					
		Lead		0.00050 U	0.0050	0.00050	0.00011	mg/L					
		Antimony		0.00050 U	0.0010	0.00050	0.00014	mg/L					
		Selenium		0.0050 U	0.010	0.0050	0.0037	mg/L					
		Thallium		0.00080 U	0.0010	0.00080	0.00068	mg/L					
		Vanadium		0.0050 U	0.010	0.0050	0.0018	mg/L					
		Zinc		0.0040 U	0.010	0.0040	0.0021	mg/L					
SW3005A6020A	LCS17175	Silver		0.26	0.0050	0.00050	0.00011	mg/L	0.25	105	85	116	
		Aluminum		0.50	0.050	0.025	0.010	mg/L	0.5	99	84	117	
		Arsenic		0.47	0.0050	0.0010	0.00067	mg/L	0.5	95	84	116	
		Barium		0.52	0.010	0.0010	0.00076	mg/L	0.5	104	86	114	
		Beryllium		0.49	0.0010	0.00050	0.00010	mg/L	0.5	98	83	121	
		Cadmium		0.52	0.0010	0.00050	0.00014	mg/L	0.5	103	87	115	
		Cobalt		0.50	0.010	0.00050	0.00028	mg/L	0.5	100	86	115	
		Chromium		0.50	0.050	0.025	0.020	mg/L	0.5	99	85	116	
		Copper		0.50	0.010	0.0075	0.0054	mg/L	0.5	101	85	118	
		Iron		0.48	0.050	0.030	0.029	mg/L	0.5	95	87	118	
		Potassium		4.8	0.50	0.10	0.039	mg/L	5	96	87	115	
		Magnesium		0.49	0.10	0.020	0.0073	mg/L	0.5	98	83	118	
		Manganese		0.50	0.010	0.0050	0.0016	mg/L	0.5	101	87	115	
		Sodium		4.8	0.10	0.050	0.034	mg/L	5	95	85	117	
		Nickel		0.50	0.050	0.025	0.013	mg/L	0.5	100	85	117	
		Lead		0.49	0.0050	0.00050	0.00011	mg/L	0.5	98	88	115	
		Antimony		0.50	0.0010	0.00050	0.00014	mg/L	0.5	100	85	117	
		Selenium		0.46	0.010	0.0050	0.0037	mg/L	0.5	91	80	120	
		Thallium		0.25	0.0010	0.00080	0.00068	mg/L	0.25	101	82	116	
		Vanadium		0.50	0.010	0.0050	0.0018	mg/L	0.5	99	86	115	
		Zinc		0.48	0.010	0.0040	0.0021	mg/L	0.5	96	83	119	

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R	Limits		RPD	RPD Limit
SW3005A6020A	LCSD17175	Silver		0.27	0.0050	0.00050	0.00011	mg/L	0.25	107	85	116	2	20
		Aluminum		0.50	0.050	0.025	0.010	mg/L	0.5	99	84	117	0	20
		Arsenic		0.48	0.0050	0.0010	0.00067	mg/L	0.5	95	84	116	0	20
		Barium		0.52	0.010	0.0010	0.00076	mg/L	0.5	105	86	114	1	20
		Beryllium		0.49	0.0010	0.00050	0.00010	mg/L	0.5	99	83	121	1	20
		Cadmium		0.52	0.0010	0.00050	0.00014	mg/L	0.5	104	87	115	1	20
		Cobalt		0.50	0.010	0.00050	0.00028	mg/L	0.5	101	86	115	1	20
		Chromium		0.49	0.050	0.025	0.020	mg/L	0.5	99	85	116	0	20
		Copper		0.51	0.010	0.0075	0.0054	mg/L	0.5	101	85	118	1	20
		Iron		0.48	0.050	0.030	0.029	mg/L	0.5	96	87	118	1	20
		Potassium		4.7	0.50	0.10	0.039	mg/L	5	95	87	115	1	20
		Magnesium		0.50	0.10	0.020	0.0073	mg/L	0.5	100	83	118	2	20
		Manganese		0.51	0.010	0.0050	0.0016	mg/L	0.5	102	87	115	1	20
		Sodium		4.7	0.10	0.050	0.034	mg/L	5	94	85	117	1	20
		Nickel		0.50	0.050	0.025	0.013	mg/L	0.5	100	85	117	0	20
		Lead		0.49	0.0050	0.00050	0.00011	mg/L	0.5	99	88	115	1	20
		Antimony		0.50	0.0010	0.00050	0.00014	mg/L	0.5	101	85	117	1	20
		Selenium		0.45	0.010	0.0050	0.0037	mg/L	0.5	91	80	120	1	20
		Thallium		0.26	0.0010	0.00080	0.00068	mg/L	0.25	102	82	116	2	20
		Vanadium		0.50	0.010	0.0050	0.0018	mg/L	0.5	99	86	115	0	20
		Zinc		0.48	0.010	0.0040	0.0021	mg/L	0.5	96	83	119	0	20
SW3005A6020A	MS17175	Silver	67798-012	0.24	0.0054	0.00054	0.00012	mg/L	0.268	90	85	116		
		Aluminum	67798-012	0.50	0.054	0.027	0.011	mg/L	0.535	93	84	117		
		Arsenic	67798-012	0.50	0.0054	0.0011	0.00072	mg/L	0.535	93	84	116		
		Barium	67798-012	0.51	0.011	0.0011	0.00081	mg/L	0.535	96	86	114		
		Beryllium	67798-012	0.48	0.0011	0.00054	0.00011	mg/L	0.535	90	83	121		
		Cadmium	67798-012	0.49	0.0011	0.00054	0.00015	mg/L	0.535	91	87	115		
		Cobalt	67798-012	0.51	0.011	0.00054	0.00030	mg/L	0.535	96	86	115		
		Chromium	67798-012	0.51	0.054	0.027	0.022	mg/L	0.535	96	85	116		
		Copper	67798-012	0.51	0.011	0.0080	0.0057	mg/L	0.535	95	85	118		
		Iron	67798-012	0.52	0.054	0.032	0.031	mg/L	0.535	97	87	118		
		Potassium	67798-012	7.4	0.54	0.11	0.042	mg/L	5.35	90	87	115		
		Magnesium	67798-012	20	0.11	0.021	0.0078	mg/L	0.5	29	83	118		
		Manganese	67798-012	0.81	0.011	0.0054	0.0017	mg/L	0.535	87	87	115		
		Sodium	67798-012	24	0.11	0.054	0.037	mg/L	5.3	98	85	117		
		Nickel	67798-012	0.50	0.054	0.027	0.013	mg/L	0.535	94	85	117		
		Lead	67798-012	0.48	0.0054	0.00054	0.00012	mg/L	0.535	90	88	115		
		Antimony	67798-012	0.49	0.0011	0.00054	0.00015	mg/L	0.535	92	85	117		
		Selenium	67798-012	0.47	0.011	0.0054	0.0040	mg/L	0.535	88	80	120		
		Thallium	67798-012	0.25	0.0011	0.00086	0.00073	mg/L	0.268	92	82	116		
		Vanadium	67798-012	0.52	0.011	0.0054	0.0019	mg/L	0.535	97	86	115		
		Zinc	67798-012	0.48	0.011	0.0043	0.0022	mg/L	0.535	90	83	119		

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R		Limits		RPD	RPD Limit
SW3005A6020A	MSD17175	Silver	67798-012	0.24	0.0054	0.00054	0.00012	mg/L	0.268	89		85	116	1	20
		Aluminum	67798-012	0.49	0.054	0.027	0.011	mg/L	0.535	91		84	117	3	20
		Arsenic	67798-012	0.48	0.0054	0.0011	0.00072	mg/L	0.535	91		84	116	2	20
		Barium	67798-012	0.52	0.011	0.0011	0.00081	mg/L	0.535	97		86	114	1	20
		Beryllium	67798-012	0.48	0.0011	0.00054	0.00011	mg/L	0.535	90		83	121	1	20
		Cadmium	67798-012	0.49	0.0011	0.00054	0.00015	mg/L	0.535	91		87	115	1	20
		Cobalt	67798-012	0.49	0.011	0.00054	0.00030	mg/L	0.535	92		86	115	4	20
		Chromium	67798-012	0.50	0.054	0.027	0.022	mg/L	0.535	93		85	116	3	20
		Copper	67798-012	0.50	0.011	0.0080	0.0057	mg/L	0.535	93		85	118	2	20
		Iron	67798-012	0.50	0.054	0.032	0.031	mg/L	0.535	93		87	118	4	20
		Potassium	67798-012	7.2	0.54	0.11	0.042	mg/L	5.35	86	*	87	115	3	20
		Magnesium	67798-012	20	0.11	0.021	0.0078	mg/L	0.5	50		83	118	1	20
		Manganese	67798-012	0.81	0.011	0.0054	0.0017	mg/L	0.535	87		87	115	0	20
		Sodium	67798-012	23	0.11	0.054	0.037	mg/L	5.3	89		85	117	2	20
		Nickel	67798-012	0.48	0.054	0.027	0.013	mg/L	0.535	90		85	117	4	20
		Lead	67798-012	0.49	0.0054	0.00054	0.00012	mg/L	0.535	91		88	115	2	20
		Antimony	67798-012	0.50	0.0011	0.00054	0.00015	mg/L	0.535	93		85	117	1	20
		Selenium	67798-012	0.45	0.011	0.0054	0.0040	mg/L	0.535	85		80	120	3	20
		Thallium	67798-012	0.25	0.0011	0.00086	0.00073	mg/L	0.268	94		82	116	2	20
		Vanadium	67798-012	0.51	0.011	0.0054	0.0019	mg/L	0.535	95		86	115	2	20
		Zinc	67798-012	0.47	0.011	0.0043	0.0022	mg/L	0.535	88		83	119	3	20

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R	Limits	RPD	RPD Limit
SW3005A6020A	BLK17176	Silver		0.00050 U	0.0050	0.00050	0.00011	mg/L					
		Aluminum		0.025 U	0.050	0.025	0.010	mg/L					
		Arsenic		0.0010 U	0.0050	0.0010	0.00067	mg/L					
		Barium		0.0010 U	0.010	0.0010	0.00076	mg/L					
		Beryllium		0.00050 U	0.0010	0.00050	0.00010	mg/L					
		Cadmium		0.00050 U	0.0010	0.00050	0.00014	mg/L					
		Cobalt		0.00010 U	0.010	0.00010	0.000020	mg/L					
		Chromium		0.025 U	0.050	0.025	0.020	mg/L					
		Copper		0.0075 U	0.010	0.0075	0.0054	mg/L					
		Iron		0.030 U	0.050	0.030	0.029	mg/L					
		Potassium		0.10 U	0.50	0.10	0.039	mg/L					
		Magnesium		0.020 U	0.10	0.020	0.0073	mg/L					
		Manganese		0.0050 U	0.010	0.0050	0.0016	mg/L					
		Sodium		0.050 U	0.10	0.050	0.034	mg/L					
		Nickel		0.025 U	0.050	0.025	0.013	mg/L					
		Lead		0.00050 U	0.0050	0.00050	0.00011	mg/L					
		Antimony		0.00050 U	0.0010	0.00050	0.00014	mg/L					
		Selenium		0.0050 U	0.010	0.0050	0.0037	mg/L					
		Thallium		0.00080 U	0.0010	0.00080	0.00068	mg/L					
		Vanadium		0.0050 U	0.010	0.0050	0.0018	mg/L					
		Zinc		0.0040 U	0.010	0.0040	0.0021	mg/L					
SW3005A6020A	LCS17176	Silver		0.24	0.0050	0.00050	0.00011	mg/L	0.25	98	85	116	
		Aluminum		0.48	0.050	0.025	0.010	mg/L	0.5	97	84	117	
		Arsenic		0.49	0.0050	0.0010	0.00067	mg/L	0.5	98	84	116	
		Barium		0.51	0.010	0.0010	0.00076	mg/L	0.5	102	86	114	
		Beryllium		0.48	0.0010	0.00050	0.00010	mg/L	0.5	96	83	121	
		Cadmium		0.50	0.0010	0.00050	0.00014	mg/L	0.5	100	87	115	
		Cobalt		0.52	0.010	0.00050	0.00028	mg/L	0.5	104	86	115	
		Chromium		0.51	0.050	0.025	0.020	mg/L	0.5	102	85	116	
		Copper		0.53	0.010	0.0075	0.0054	mg/L	0.5	105	85	118	
		Iron		0.48	0.050	0.030	0.029	mg/L	0.5	97	87	118	
		Potassium		4.7	0.50	0.10	0.039	mg/L	5	95	87	115	
		Magnesium		0.48	0.10	0.020	0.0073	mg/L	0.5	96	83	118	
		Manganese		0.49	0.010	0.0050	0.0016	mg/L	0.5	97	87	115	
		Sodium		4.8	0.10	0.050	0.034	mg/L	5	96	85	117	
		Nickel		0.51	0.050	0.025	0.013	mg/L	0.5	103	85	117	
		Lead		0.49	0.0050	0.00050	0.00011	mg/L	0.5	99	88	115	
		Antimony		0.49	0.0010	0.00050	0.00014	mg/L	0.5	99	85	117	
		Selenium		0.46	0.010	0.0050	0.0037	mg/L	0.5	91	80	120	
		Thallium		0.25	0.0010	0.00080	0.00068	mg/L	0.25	101	82	116	
		Vanadium		0.51	0.010	0.0050	0.0018	mg/L	0.5	102	86	115	
		Zinc		0.50	0.010	0.0040	0.0021	mg/L	0.5	100	83	119	

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R	Limits		RPD	RPD Limit
SW3005A6020A	LCSD17176	Silver		0.25	0.0050	0.00050	0.00011	mg/L	0.25	99	85	116	1	20
		Aluminum		0.50	0.050	0.025	0.010	mg/L	0.5	101	84	117	4	20
		Arsenic		0.49	0.0050	0.0010	0.00067	mg/L	0.5	97	84	116	0	20
		Barium		0.52	0.010	0.0010	0.00076	mg/L	0.5	104	86	114	2	20
		Beryllium		0.48	0.0010	0.00050	0.00010	mg/L	0.5	97	83	121	1	20
		Cadmium		0.51	0.0010	0.00050	0.00014	mg/L	0.5	102	87	115	2	20
		Cobalt		0.51	0.010	0.00050	0.00028	mg/L	0.5	102	86	115	2	20
		Chromium		0.51	0.050	0.025	0.020	mg/L	0.5	101	85	116	1	20
		Copper		0.52	0.010	0.0075	0.0054	mg/L	0.5	105	85	118	1	20
		Iron		0.49	0.050	0.030	0.029	mg/L	0.5	99	87	118	2	20
		Potassium		4.8	0.50	0.10	0.039	mg/L	5	96	87	115	1	20
		Magnesium		0.48	0.10	0.020	0.0073	mg/L	0.5	96	83	118	0	20
		Manganese		0.49	0.010	0.0050	0.0016	mg/L	0.5	99	87	115	2	20
		Sodium		4.8	0.10	0.050	0.034	mg/L	5	96	85	117	1	20
		Nickel		0.51	0.050	0.025	0.013	mg/L	0.5	101	85	117	1	20
		Lead		0.50	0.0050	0.00050	0.00011	mg/L	0.5	100	88	115	2	20
		Antimony		0.50	0.0010	0.00050	0.00014	mg/L	0.5	100	85	117	1	20
		Selenium		0.46	0.010	0.0050	0.0037	mg/L	0.5	93	80	120	1	20
		Thallium		0.26	0.0010	0.00080	0.00068	mg/L	0.25	102	82	116	1	20
		Vanadium		0.51	0.010	0.0050	0.0018	mg/L	0.5	102	86	115	0	20
		Zinc		0.49	0.010	0.0040	0.0021	mg/L	0.5	98	83	119	1	20
SW3005A6020A	MS17176	Silver	67798-018	0.24	0.0054	0.00054	0.00012	mg/L	0.268	90	85	116		
		Aluminum	67798-018	0.49	0.054	0.027	0.011	mg/L	0.535	91	84	117		
		Arsenic	67798-018	0.48	0.0054	0.0011	0.00072	mg/L	0.535	90	84	116		
		Barium	67798-018	0.58	0.011	0.0011	0.00081	mg/L	0.535	97	86	114		
		Beryllium	67798-018	0.48	0.0011	0.00054	0.00011	mg/L	0.535	91	83	121		
		Cadmium	67798-018	0.50	0.0011	0.00054	0.00015	mg/L	0.535	94	87	115		
		Cobalt	67798-018	0.49	0.011	0.00054	0.00030	mg/L	0.535	92	86	115		
		Chromium	67798-018	0.50	0.054	0.027	0.022	mg/L	0.535	93	85	116		
		Copper	67798-018	0.50	0.011	0.0080	0.0057	mg/L	0.535	93	85	118		
		Iron	67798-018	0.48	0.054	0.032	0.031	mg/L	0.535	89	87	118		
		Potassium	67798-018	5.5	0.54	0.11	0.042	mg/L	5.35	90	87	115		
		Magnesium	67798-018	9.4	0.11	0.021	0.0078	mg/L	0.53	90	83	118		
		Manganese	67798-018	0.49	0.011	0.0054	0.0017	mg/L	0.535	92	87	115		
		Sodium	67798-018	11	0.11	0.054	0.037	mg/L	5.3	93	85	117		
		Nickel	67798-018	0.49	0.054	0.027	0.013	mg/L	0.535	92	85	117		
		Lead	67798-018	0.50	0.0054	0.00054	0.00012	mg/L	0.535	93	88	115		
		Antimony	67798-018	0.51	0.0011	0.00054	0.00015	mg/L	0.535	96	85	117		
		Selenium	67798-018	0.45	0.011	0.0054	0.0040	mg/L	0.535	84	80	120		
		Thallium	67798-018	0.26	0.0011	0.00086	0.00073	mg/L	0.268	96	82	116		
		Vanadium	67798-018	0.50	0.011	0.0054	0.0019	mg/L	0.535	93	86	115		
		Zinc	67798-018	0.48	0.011	0.0043	0.0022	mg/L	0.535	89	83	119		

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R	Limits		RPD	RPD Limit
SW3005A6020A	MSD17176	Silver	67798-018	0.24	0.0054	0.00054	0.00012	mg/L	0.268	89	85	116	1	20
		Aluminum	67798-018	0.49	0.054	0.027	0.011	mg/L	0.535	91	84	117	0	20
		Arsenic	67798-018	0.48	0.0054	0.0011	0.00072	mg/L	0.535	91	84	116	1	20
		Barium	67798-018	0.58	0.011	0.0011	0.00081	mg/L	0.535	96	86	114	1	20
		Beryllium	67798-018	0.48	0.0011	0.00054	0.00011	mg/L	0.535	91	83	121	0	20
		Cadmium	67798-018	0.49	0.0011	0.00054	0.00015	mg/L	0.535	92	87	115	2	20
		Cobalt	67798-018	0.50	0.011	0.00054	0.00030	mg/L	0.535	93	86	115	1	20
		Chromium	67798-018	0.49	0.054	0.027	0.022	mg/L	0.535	92	85	116	1	20
		Copper	67798-018	0.50	0.011	0.0080	0.0057	mg/L	0.535	94	85	118	0	20
		Iron	67798-018	0.48	0.054	0.032	0.031	mg/L	0.535	91	87	118	1	20
		Potassium	67798-018	5.4	0.54	0.11	0.042	mg/L	5.35	87	87	115	3	20
		Magnesium	67798-018	9.5	0.11	0.021	0.0078	mg/L	0.53	116	83	118	1	20
		Manganese	67798-018	0.48	0.011	0.0054	0.0017	mg/L	0.535	90	87	115	2	20
		Sodium	67798-018	11	0.11	0.054	0.037	mg/L	5.3	91	85	117	1	20
		Nickel	67798-018	0.49	0.054	0.027	0.013	mg/L	0.535	91	85	117	1	20
		Lead	67798-018	0.50	0.0054	0.00054	0.00012	mg/L	0.535	93	88	115	0	20
		Antimony	67798-018	0.50	0.0011	0.00054	0.00015	mg/L	0.535	94	85	117	2	20
		Selenium	67798-018	0.45	0.011	0.0054	0.0040	mg/L	0.535	84	80	120	1	20
		Thallium	67798-018	0.25	0.0011	0.00086	0.00073	mg/L	0.268	95	82	116	2	20
		Vanadium	67798-018	0.50	0.011	0.0054	0.0019	mg/L	0.535	93	86	115	0	20
		Zinc	67798-018	0.48	0.011	0.0043	0.0022	mg/L	0.535	89	83	119	0	20

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R	Limits	RPD	RPD Limit
SW3005A6020A	BLK17177	Silver		0.00050 U	0.0050	0.00050	0.00011	mg/L					
		Aluminum		0.025 U	0.050	0.025	0.010	mg/L					
		Arsenic		0.0010 U	0.0050	0.0010	0.00067	mg/L					
		Barium		0.0010 U	0.010	0.0010	0.00076	mg/L					
		Beryllium		0.00050 U	0.0010	0.00050	0.00010	mg/L					
		Cadmium		0.00050 U	0.0010	0.00050	0.00014	mg/L					
		Cobalt		0.00010 U	0.010	0.00010	0.000020	mg/L					
		Chromium		0.025 U	0.050	0.025	0.020	mg/L					
		Copper		0.0075 U	0.010	0.0075	0.0054	mg/L					
		Iron		0.030 U	0.050	0.030	0.029	mg/L					
		Potassium		0.10 U	0.50	0.10	0.039	mg/L					
		Magnesium		0.020 U	0.10	0.020	0.0073	mg/L					
		Manganese		0.0050 U	0.010	0.0050	0.0016	mg/L					
		Sodium		0.050 U	0.10	0.050	0.034	mg/L					
		Nickel		0.025 U	0.050	0.025	0.013	mg/L					
		Lead		0.00050 U	0.0050	0.00050	0.00011	mg/L					
		Antimony		0.00050 U	0.0010	0.00050	0.00014	mg/L					
		Selenium		0.0050 U	0.010	0.0050	0.0037	mg/L					
		Thallium		0.00080 U	0.0010	0.00080	0.00068	mg/L					
		Vanadium		0.0050 U	0.010	0.0050	0.0018	mg/L					
		Zinc		0.0040 U	0.010	0.0040	0.0021	mg/L					
SW3005A6020A	LCS17177	Silver		0.26	0.0050	0.00050	0.00011	mg/L	0.25	105	85	116	
		Aluminum		0.52	0.050	0.025	0.010	mg/L	0.5	103	84	117	
		Arsenic		0.52	0.0050	0.0010	0.00067	mg/L	0.5	105	84	116	
		Barium		0.50	0.010	0.0010	0.00076	mg/L	0.5	99	86	114	
		Beryllium		0.49	0.0010	0.00050	0.00010	mg/L	0.5	98	83	121	
		Cadmium		0.50	0.0010	0.00050	0.00014	mg/L	0.5	100	87	115	
		Cobalt		0.55	0.010	0.00050	0.00028	mg/L	0.5	109	86	115	
		Chromium		0.55	0.050	0.025	0.020	mg/L	0.5	109	85	116	
		Copper		0.53	0.010	0.0075	0.0054	mg/L	0.5	106	85	118	
		Iron		0.53	0.050	0.030	0.029	mg/L	0.5	106	87	118	
		Potassium		5.0	0.50	0.10	0.039	mg/L	5	100	87	115	
		Magnesium		0.53	0.10	0.020	0.0073	mg/L	0.5	107	83	118	
		Manganese		0.52	0.010	0.0050	0.0016	mg/L	0.5	104	87	115	
		Sodium		4.9	0.10	0.050	0.034	mg/L	5	99	85	117	
		Nickel		0.50	0.050	0.025	0.013	mg/L	0.5	101	85	117	
		Lead		0.49	0.0050	0.00050	0.00011	mg/L	0.5	99	88	115	
		Antimony		0.50	0.0010	0.00050	0.00014	mg/L	0.5	99	85	117	
		Selenium		0.47	0.010	0.0050	0.0037	mg/L	0.5	95	80	120	
		Thallium		0.25	0.0010	0.00080	0.00068	mg/L	0.25	102	82	116	
		Vanadium		0.52	0.010	0.0050	0.0018	mg/L	0.5	105	86	115	
		Zinc		0.52	0.010	0.0040	0.0021	mg/L	0.5	105	83	119	

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R	Limits		RPD	RPD Limit
SW3005A6020A	LCSD17177	Silver		0.26	0.0050	0.00050	0.00011	mg/L	0.25	104	85	116	1	20
		Aluminum		0.50	0.050	0.025	0.010	mg/L	0.5	100	84	117	3	20
		Arsenic		0.52	0.0050	0.0010	0.00067	mg/L	0.5	104	84	116	1	20
		Barium		0.49	0.010	0.0010	0.00076	mg/L	0.5	98	86	114	1	20
		Beryllium		0.48	0.0010	0.00050	0.00010	mg/L	0.5	97	83	121	1	20
		Cadmium		0.49	0.0010	0.00050	0.00014	mg/L	0.5	98	87	115	2	20
		Cobalt		0.55	0.010	0.00050	0.00028	mg/L	0.5	109	86	115	0	20
		Chromium		0.54	0.050	0.025	0.020	mg/L	0.5	108	85	116	1	20
		Copper		0.52	0.010	0.0075	0.0054	mg/L	0.5	104	85	118	2	20
		Iron		0.53	0.050	0.030	0.029	mg/L	0.5	107	87	118	0	20
		Potassium		4.9	0.50	0.10	0.039	mg/L	5	97	87	115	3	20
		Magnesium		0.51	0.10	0.020	0.0073	mg/L	0.5	102	83	118	4	20
		Manganese		0.51	0.010	0.0050	0.0016	mg/L	0.5	101	87	115	3	20
		Sodium		4.8	0.10	0.050	0.034	mg/L	5	95	85	117	4	20
		Nickel		0.49	0.050	0.025	0.013	mg/L	0.5	98	85	117	3	20
		Lead		0.49	0.0050	0.00050	0.00011	mg/L	0.5	98	88	115	1	20
		Antimony		0.49	0.0010	0.00050	0.00014	mg/L	0.5	98	85	117	1	20
		Selenium		0.48	0.010	0.0050	0.0037	mg/L	0.5	96	80	120	1	20
		Thallium		0.25	0.0010	0.00080	0.00068	mg/L	0.25	99	82	116	2	20
		Vanadium		0.52	0.010	0.0050	0.0018	mg/L	0.5	104	86	115	0	20
		Zinc		0.53	0.010	0.0040	0.0021	mg/L	0.5	105	83	119	0	20
SW3005A6020A	MS17177	Silver	67798-001	0.24	0.0050	0.00050	0.00011	mg/L	0.25	98	85	116		
		Aluminum	67798-001	0.52	0.050	0.025	0.010	mg/L	0.5	105	84	117		
		Arsenic	67798-001	0.52	0.0050	0.0010	0.00067	mg/L	0.5	105	84	116		
		Barium	67798-001	0.49	0.010	0.0010	0.00076	mg/L	0.5	98	86	114		
		Beryllium	67798-001	0.48	0.0010	0.00050	0.00010	mg/L	0.5	97	83	121		
		Cadmium	67798-001	0.47	0.0010	0.00050	0.00014	mg/L	0.5	95	87	115		
		Cobalt	67798-001	0.51	0.010	0.00050	0.00028	mg/L	0.5	103	86	115		
		Chromium	67798-001	0.53	0.050	0.025	0.020	mg/L	0.5	105	85	116		
		Copper	67798-001	0.48	0.010	0.0075	0.0054	mg/L	0.5	96	85	118		
		Iron	67798-001	0.56	0.050	0.030	0.029	mg/L	0.5	99	87	118		
		Potassium	67798-001	7.6	0.50	0.10	0.039	mg/L	5	99	87	115		
		Magnesium	67798-001	20	0.10	0.020	0.0073	mg/L	0.5	-95	83	118		
		Manganese	67798-001	0.85	0.010	0.0050	0.0016	mg/L	0.5	92	87	115		
		Sodium	67798-001	24	0.10	0.050	0.034	mg/L	5	114	85	117		
		Nickel	67798-001	0.50	0.050	0.025	0.013	mg/L	0.5	100	85	117		
		Lead	67798-001	0.48	0.0050	0.00050	0.00011	mg/L	0.5	95	88	115		
		Antimony	67798-001	0.48	0.0010	0.00050	0.00014	mg/L	0.5	96	85	117		
		Selenium	67798-001	0.47	0.010	0.0050	0.0037	mg/L	0.5	95	80	120		
		Thallium	67798-001	0.25	0.0010	0.00080	0.00068	mg/L	0.25	101	82	116		
		Vanadium	67798-001	0.53	0.010	0.0050	0.0018	mg/L	0.5	106	86	115		
		Zinc	67798-001	0.50	0.010	0.0040	0.0021	mg/L	0.5	99	83	119		

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R	Limits		RPD	RPD Limit
SW3005A6020A	MSD17177	Silver	67798-001	0.25	0.0050	0.00050	0.00011	mg/L	0.25	100	85	116	2	20
		Aluminum	67798-001	0.52	0.050	0.025	0.010	mg/L	0.5	105	84	117	0	20
		Arsenic	67798-001	0.52	0.0050	0.0010	0.00067	mg/L	0.5	104	84	116	0	20
		Barium	67798-001	0.50	0.010	0.0010	0.00076	mg/L	0.5	100	86	114	2	20
		Beryllium	67798-001	0.48	0.0010	0.00050	0.00010	mg/L	0.5	96	83	121	1	20
		Cadmium	67798-001	0.48	0.0010	0.00050	0.00014	mg/L	0.5	95	87	115	1	20
		Cobalt	67798-001	0.49	0.010	0.00050	0.00028	mg/L	0.5	98	86	115	5	20
		Chromium	67798-001	0.50	0.050	0.025	0.020	mg/L	0.5	99	85	116	6	20
		Copper	67798-001	0.48	0.010	0.0075	0.0054	mg/L	0.5	97	85	118	0	20
		Iron	67798-001	0.56	0.050	0.030	0.029	mg/L	0.5	98	87	118	1	20
		Potassium	67798-001	7.5	0.50	0.10	0.039	mg/L	5	95	87	115	3	20
		Magnesium	67798-001	21	0.10	0.020	0.0073	mg/L	0.5	-6	83	118	2	20
		Manganese	67798-001	0.85	0.010	0.0050	0.0016	mg/L	0.5	92	87	115	0	20
		Sodium	67798-001	24	0.10	0.050	0.034	mg/L	5	111	85	117	1	20
		Nickel	67798-001	0.48	0.050	0.025	0.013	mg/L	0.5	96	85	117	4	20
		Lead	67798-001	0.49	0.0050	0.00050	0.00011	mg/L	0.5	97	88	115	2	20
		Antimony	67798-001	0.49	0.0010	0.00050	0.00014	mg/L	0.5	97	85	117	1	20
		Selenium	67798-001	0.47	0.010	0.0050	0.0037	mg/L	0.5	93	80	120	2	20
		Thallium	67798-001	0.25	0.0010	0.00080	0.00068	mg/L	0.25	102	82	116	1	20
		Vanadium	67798-001	0.51	0.010	0.0050	0.0018	mg/L	0.5	102	86	115	4	20
		Zinc	67798-001	0.47	0.010	0.0040	0.0021	mg/L	0.5	93	83	119	6	20

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R	Limits	RPD	RPD Limit
SW3005A6020A	BLK17194	Silver		0.00050 U	0.0050	0.00050	0.00011	mg/L					
		Aluminum		0.025 U	0.050	0.025	0.010	mg/L					
		Arsenic		0.0010 U	0.0050	0.0010	0.00067	mg/L					
		Barium		0.0010 U	0.010	0.0010	0.00076	mg/L					
		Beryllium		0.00050 U	0.0010	0.00050	0.00010	mg/L					
		Cadmium		0.00050 U	0.0010	0.00050	0.00014	mg/L					
		Cobalt		0.00010 U	0.010	0.00010	0.000020	mg/L					
		Chromium		0.025 U	0.050	0.025	0.020	mg/L					
		Copper		0.0075 U	0.010	0.0075	0.0054	mg/L					
		Iron		0.030 U	0.050	0.030	0.029	mg/L					
		Potassium		0.10 U	0.50	0.10	0.039	mg/L					
		Magnesium		0.020 U	0.10	0.020	0.0073	mg/L					
		Manganese		0.0050 U	0.010	0.0050	0.0016	mg/L					
		Sodium		0.050 U	0.10	0.050	0.034	mg/L					
		Nickel		0.025 U	0.050	0.025	0.013	mg/L					
		Lead		0.00050 U	0.0050	0.00050	0.00011	mg/L					
		Antimony		0.00050 U	0.0010	0.00050	0.00014	mg/L					
		Selenium		0.0050 U	0.010	0.0050	0.0037	mg/L					
		Thallium		0.00080 U	0.0010	0.00080	0.00068	mg/L					
		Vanadium		0.0050 U	0.010	0.0050	0.0018	mg/L					
		Zinc		0.0040 U	0.010	0.0040	0.0021	mg/L					
SW3005A6020A	LCS17194	Silver		0.23	0.0050	0.00050	0.00011	mg/L	0.25	92	85	116	
		Aluminum		0.48	0.050	0.025	0.010	mg/L	0.5	97	84	117	
		Arsenic		0.47	0.0050	0.0010	0.00067	mg/L	0.5	94	84	116	
		Barium		0.48	0.010	0.0010	0.00076	mg/L	0.5	95	86	114	
		Beryllium		0.42	0.0010	0.00050	0.00010	mg/L	0.5	85	83	121	
		Cadmium		0.46	0.0010	0.00050	0.00014	mg/L	0.5	91	87	115	
		Cobalt		0.48	0.010	0.00050	0.00028	mg/L	0.5	96	86	115	
		Chromium		0.47	0.050	0.025	0.020	mg/L	0.5	94	85	116	
		Copper		0.46	0.010	0.0075	0.0054	mg/L	0.5	92	85	118	
		Iron		0.48	0.050	0.030	0.029	mg/L	0.5	97	87	118	
		Potassium		4.7	0.50	0.10	0.039	mg/L	5	94	87	115	
		Magnesium		0.49	0.10	0.020	0.0073	mg/L	0.5	97	83	118	
		Manganese		0.50	0.010	0.0050	0.0016	mg/L	0.5	100	87	115	
		Sodium		4.8	0.10	0.050	0.034	mg/L	5	95	85	117	
		Nickel		0.48	0.050	0.025	0.013	mg/L	0.5	95	85	117	
		Lead		0.47	0.0050	0.00050	0.00011	mg/L	0.5	94	88	115	
		Antimony		0.43	0.0010	0.00050	0.00014	mg/L	0.5	87	85	117	
		Selenium		0.48	0.010	0.0050	0.0037	mg/L	0.5	96	80	120	
		Thallium		0.23	0.0010	0.00080	0.00068	mg/L	0.25	91	82	116	
		Vanadium		0.49	0.010	0.0050	0.0018	mg/L	0.5	98	86	115	
		Zinc		0.48	0.010	0.0040	0.0021	mg/L	0.5	96	83	119	

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R	Limits		RPD	RPD Limit
SW3005A6020A	LCSD17194	Silver		0.23	0.0050	0.00050	0.00011	mg/L	0.25	92	85	116	1	20
		Aluminum		0.49	0.050	0.025	0.010	mg/L	0.5	97	84	117	1	20
		Arsenic		0.48	0.0050	0.0010	0.00067	mg/L	0.5	95	84	116	2	20
		Barium		0.49	0.010	0.0010	0.00076	mg/L	0.5	98	86	114	3	20
		Beryllium		0.43	0.0010	0.00050	0.00010	mg/L	0.5	85	83	121	1	20
		Cadmium		0.46	0.0010	0.00050	0.00014	mg/L	0.5	93	87	115	1	20
		Cobalt		0.49	0.010	0.00050	0.00028	mg/L	0.5	99	86	115	2	20
		Chromium		0.47	0.050	0.025	0.020	mg/L	0.5	94	85	116	0	20
		Copper		0.46	0.010	0.0075	0.0054	mg/L	0.5	93	85	118	0	20
		Iron		0.50	0.050	0.030	0.029	mg/L	0.5	100	87	118	4	20
		Potassium		4.8	0.50	0.10	0.039	mg/L	5	95	87	115	1	20
		Magnesium		0.49	0.10	0.020	0.0073	mg/L	0.5	97	83	118	0	20
		Manganese		0.51	0.010	0.0050	0.0016	mg/L	0.5	101	87	115	1	20
		Sodium		4.8	0.10	0.050	0.034	mg/L	5	97	85	117	2	20
		Nickel		0.47	0.050	0.025	0.013	mg/L	0.5	95	85	117	0	20
		Lead		0.48	0.0050	0.00050	0.00011	mg/L	0.5	96	88	115	3	20
		Antimony		0.44	0.0010	0.00050	0.00014	mg/L	0.5	88	85	117	1	20
		Selenium		0.50	0.010	0.0050	0.0037	mg/L	0.5	100	80	120	4	20
		Thallium		0.23	0.0010	0.00080	0.00068	mg/L	0.25	92	82	116	2	20
		Vanadium		0.48	0.010	0.0050	0.0018	mg/L	0.5	97	86	115	2	20
		Zinc		0.49	0.010	0.0040	0.0021	mg/L	0.5	97	83	119	1	20
SW3005A6020A	MS17194	Silver	67798-007	0.22	0.0050	0.00050	0.00011	mg/L	0.25	90	85	116		
		Aluminum	67798-007	0.49	0.050	0.025	0.010	mg/L	0.5	99	84	117		
		Arsenic	67798-007	0.48	0.0050	0.0010	0.00067	mg/L	0.5	96	84	116		
		Barium	67798-007	0.54	0.010	0.0010	0.00076	mg/L	0.5	97	86	114		
		Beryllium	67798-007	0.44	0.0010	0.00050	0.00010	mg/L	0.5	87	83	121		
		Cadmium	67798-007	0.45	0.0010	0.00050	0.00014	mg/L	0.5	91	87	115		
		Cobalt	67798-007	0.49	0.010	0.00050	0.00028	mg/L	0.5	97	86	115		
		Chromium	67798-007	0.48	0.050	0.025	0.020	mg/L	0.5	95	85	116		
		Copper	67798-007	0.46	0.010	0.0075	0.0054	mg/L	0.5	92	85	118		
		Iron	67798-007	0.50	0.050	0.030	0.029	mg/L	0.5	99	87	118		
		Potassium	67798-007	5.5	0.50	0.10	0.039	mg/L	5	87	87	115		
		Magnesium	67798-007	9.9	0.10	0.020	0.0073	mg/L	0.5	94	83	118		
		Manganese	67798-007	0.50	0.010	0.0050	0.0016	mg/L	0.5	101	87	115		
		Sodium	67798-007	12	0.10	0.050	0.034	mg/L	5	94	85	117		
		Nickel	67798-007	0.47	0.050	0.025	0.013	mg/L	0.5	94	85	117		
		Lead	67798-007	0.48	0.0050	0.00050	0.00011	mg/L	0.5	96	88	115		
		Antimony	67798-007	0.44	0.0010	0.00050	0.00014	mg/L	0.5	87	85	117		
		Selenium	67798-007	0.50	0.010	0.0050	0.0037	mg/L	0.5	100	80	120		
		Thallium	67798-007	0.23	0.0010	0.00080	0.00068	mg/L	0.25	92	82	116		
		Vanadium	67798-007	0.51	0.010	0.0050	0.0018	mg/L	0.5	101	86	115		
		Zinc	67798-007	0.49	0.010	0.0040	0.0021	mg/L	0.5	97	83	119		

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R		Limits		RPD	RPD Limit
SW3005A6020A	MSD17194	Silver	67798-007	0.22	0.0050	0.00050	0.00011	mg/L	0.25	90		85	116	0	20
		Aluminum	67798-007	0.51	0.050	0.025	0.010	mg/L	0.5	102		84	117	3	20
		Arsenic	67798-007	0.48	0.0050	0.0010	0.00067	mg/L	0.5	95		84	116	1	20
		Barium	67798-007	0.53	0.010	0.0010	0.00076	mg/L	0.5	95		86	114	2	20
		Beryllium	67798-007	0.43	0.0010	0.00050	0.00010	mg/L	0.5	86		83	121	1	20
		Cadmium	67798-007	0.45	0.0010	0.00050	0.00014	mg/L	0.5	90		87	115	1	20
		Cobalt	67798-007	0.48	0.010	0.00050	0.00028	mg/L	0.5	96		86	115	1	20
		Chromium	67798-007	0.48	0.050	0.025	0.020	mg/L	0.5	96		85	116	0	20
		Copper	67798-007	0.45	0.010	0.0075	0.0054	mg/L	0.5	91		85	118	1	20
		Iron	67798-007	0.51	0.050	0.030	0.029	mg/L	0.5	101		87	118	2	20
		Potassium	67798-007	5.5	0.50	0.10	0.039	mg/L	5	86	*	87	115	1	20
		Magnesium	67798-007	9.9	0.10	0.020	0.0073	mg/L	0.5	98		83	118	0	20
		Manganese	67798-007	0.51	0.010	0.0050	0.0016	mg/L	0.5	101		87	115	1	20
		Sodium	67798-007	12	0.10	0.050	0.034	mg/L	5	92		85	117	1	20
		Nickel	67798-007	0.47	0.050	0.025	0.013	mg/L	0.5	94		85	117	1	20
		Lead	67798-007	0.49	0.0050	0.00050	0.00011	mg/L	0.5	98		88	115	2	20
		Antimony	67798-007	0.43	0.0010	0.00050	0.00014	mg/L	0.5	87		85	117	1	20
		Selenium	67798-007	0.49	0.010	0.0050	0.0037	mg/L	0.5	97		80	120	3	20
		Thallium	67798-007	0.23	0.0010	0.00080	0.00068	mg/L	0.25	91		82	116	0	20
		Vanadium	67798-007	0.50	0.010	0.0050	0.0018	mg/L	0.5	101		86	115	0	20
		Zinc	67798-007	0.48	0.010	0.0040	0.0021	mg/L	0.5	96		83	119	1	20
SW7470A	BLK17146	Mercury		0.00015 U	0.00020	0.00015	0.00012	mg/L							
SW7470A	LCS17146	Mercury		0.0019	0.00020	0.00015	0.00012	mg/L	0.002	95		82	119		
SW7470A	LCSD17146	Mercury		0.0018	0.00020	0.00015	0.00012	mg/L	0.002	89		82	119	6	20
SW7470A	MS17146	Mercury	67798-001	0.0019	0.00020	0.00015	0.00012	mg/L	0.002	95		82	119		
SW7470A	MSD17146	Mercury	67798-001	0.0019	0.00020	0.00015	0.00012	mg/L	0.002	94		82	119	1	20
SW7470A	BLK17147	Mercury		0.00015 U	0.00020	0.00015	0.00012	mg/L							
SW7470A	LCS17147	Mercury		0.0019	0.00020	0.00015	0.00012	mg/L	0.002	96		82	119		
SW7470A	LCSD17147	Mercury		0.0018	0.00020	0.00015	0.00012	mg/L	0.002	89		82	119	8	20
SW7470A	MS17147	Mercury	67798-007	0.0019	0.00020	0.00015	0.00012	mg/L	0.002	94		82	119		
SW7470A	MSD17147	Mercury	67798-007	0.0018	0.00020	0.00015	0.00012	mg/L	0.002	90		82	119	4	20
SW7470A	BLK17202	Mercury		0.00015 U	0.00020	0.00015	0.00012	mg/L							
SW7470A	LCS17202	Mercury		0.0021	0.00020	0.00015	0.00012	mg/L	0.002	104		82	119		
SW7470A	LCSD17202	Mercury		0.0021	0.00020	0.00015	0.00012	mg/L	0.002	103		82	119	0	20
SW7470A	MS17202	Mercury	67798-012	0.0018	0.00020	0.00015	0.00012	mg/L	0.002	91		82	119		
SW7470A	MSD17202	Mercury	67798-012	0.0017	0.00020	0.00015	0.00012	mg/L	0.002	84		82	119	8	20

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R	Limits		RPD	RPD Limit
SW7470A	BLK17206	Mercury		0.00015 U	0.00020	0.00015	0.00012	mg/L						
SW7470A	LCS17206	Mercury		0.0020	0.00020	0.00015	0.00012	mg/L	0.002	99	82	119		
SW7470A	LCSD17206	Mercury		0.0019	0.00020	0.00015	0.00012	mg/L	0.002	96	82	119	3	20
SW7470A	MS17206	Mercury	67798-018	0.0019	0.00020	0.00015	0.00012	mg/L	0.002	95	82	119		
SW7470A	MSD17206	Mercury	67798-018	0.0020	0.00020	0.00015	0.00012	mg/L	0.002	98	82	119	3	20

AROMATIC HYDROCARBON BREAKTHROUGH CALCULATION

Method: MADEP EPH 2019 Rev 2.1

	lcs17110 Aliphatic Breakthrough (%)	Acceptance Criteria	Date of Analysis
naphthalene	0.0%	<5.0%	12/7/2023
2-methylnaphthalene	0.2%	<5.0%	12/7/2023

	lcsd17110 Aliphatic Breakthrough (%)	Acceptance Criteria	Date of Analysis
naphthalene	0.1%	<5.0%	12/7/2023
2-methylnaphthalene	0.1%	<5.0%	12/7/2023

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Supporting Documentation & Chromatograms

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This File:	L:\VOA\Excel Reports\2023\v8111008
Analysis Group:	8260/8021/624
Field ID:	SY-OBMW12-110723 1.8E+07
Sample:	67798-01 5mL Dow Salvage Yard
Misc:	5 CRE
Import File Name	v8 111023 g DoD
TestGroupID	V8260DoD_A
Aqueous or Soil? (A or S)	A
Solid amount (g)	
Methanol volume (mL)	
Percent Solid (%)	
Soil Prep Date	
Weight:	
Volume:	
Lab#:	67798-001
AnalysisDate:	11/10/2023
AnalysisTime:	15:32
Dilution:	1
AnalyzedBy:	LMM v8111008.D
QC_Code:	
Prep#:	

Reviewer Checks:

- Quant Report: Reviewed, Analyst Initials & Date
- Chromatogram Checked, Major peaks identified
- Results consistent w/ other attached analyses
- Reanalysis reason noted
- Substitute dilution data checked
- Correct dilution and reason clear or noted
- Flags checked (Expiration, F+, Over Cal, Surr, Aspen, QC)
- Other QC failures or issues noted in Aspen
- Correct data file and/or date/time in Aspen

Notes:

Reviewer Initials & Date: 11/13/23

#	Surrogate Standards	Import Value (as ug/L)	Recovery	Flag	QC Limits	Surrogate True Values
32	SS 1,2-dichloroethane-D4	9.49	95%		60-140	10
36	SS dibromofluoromethane	9.52	95%		78-114	10
51	SS toluene-D8	10.07	101%		88-110	10
67	SS 4-bromofluorobenzene	9.95	99%		86-115	10
41	SS a,a,a-trifluorotoluene	0.00	0%		70-130*	20

	AnalyteName	Concentration (ug/L)		AnalyteName	Concentration (ug/L)
2	dichlorodifluoromethane	0	56	1,3-dichloropropane	0
3	chloromethane	0	57	dibromochloromethane	0
4	vinyl chloride	0	58	1,2-dibromoethane (EDB)	0
5	bromomethane	0	59	chlorobenzene	0
6	chloroethane	0	60	1,1,1,2-tetrachloroethane	0
7	trichlorofluoromethane	0	61	ethylbenzene	-0.118845947
8	diethylether	0	62	m&p-xylenes	0
9	acetone	0.170938054	63	o-xylene	0
11	1,1-dichloroethene	0	64	styrene	0
13	t-butanol (TBA)	0	65	bromoform	0
15	methylene chloride	0	66	isopropylbenzene	0
16	carbon disulfide	0	69	bromobenzene	0
18	methyl-t-butyl ether (MTBE)	0	70	1,1,2,2-tetrachloroethane	0
19	trans-1,2-dichloroethene	0	71	1,2,3-trichloropropane	0
20	isopropyl ether (DIPE)	0	72	n-propylbenzene	0
22	1,1-dichloroethane	0	73	2-chlorotoluene	0
23	2-butanone (MEK)	0	74	4-chlorotoluene	0
24	ethyl-t-butyl ether (ETBE)	0	75	1,3,5-trimethylbenzene	0.085244435
25	2,2-dichloropropane	0	76	tert-butylbenzene	0
26	cis-1,2-dichloroethene	0	77	1,2,4-trimethylbenzene	0.09609602
27	bromochloromethane	0	79	sec-butylbenzene	0
28	chloroform	0	80	1,3-dichlorobenzene	0
29	tetrahydrofuran (THF)	0	81	4-isopropyltoluene	0
30	1,1,1-trichloroethane	0	82	1,4-dichlorobenzene	0
33	carbon tetrachloride	0	84	1,2-dichlorobenzene	0
34	1,1-dichloropropene	0	85	n-butylbenzene	0
35	benzene	0	86	1,2-dibromo-3-chloropropane (DBCP)	0
37	1,2-dichloroethane	0	88	1,2,4-trichlorobenzene	0
38	t-amyl-methyl ether (TAME)	0	89	hexachlorobutadiene	0
39	trichloroethene	0.155189222	90	naphthalene	0
42	1,2-dichloropropane	0	91	1,2,3-trichlorobenzene	0
43	dibromomethane	0	87	1,3,5-trichlorobenzene	0
44	bromodichloromethane	0	12	1,1,2-trichloro-1,2,2-trifluoroethane	0
45	1,4-dioxane	0	14	methyl acetate	0
47	4-methyl-2-pentanone (MIBK)	0	21	vinyl acetate	0
48	2-hexanone	0	31	cyclohexane	0
49	cis-1,3-dichloropropene	0	40	methylcyclohexane	0
50	toluene	-0.153098399	10	acrolein	0
52	trans-1,3-dichloropropene	0	17	acrylonitrile	0
53	1,1,2-trichloroethane	0	46	2-chloroethylvinylether (2-CEVE)	0
55	tetrachloroethene	0		Total Xylenes	0

Quantitation Report (QT Reviewed)

Data Path : X:\V8\2023\Nov23\111023\
Data File : v8111008.D
Acq On : 10 Nov 2023 03:32 pm
Operator : lmm
Sample : 67798-01 5mL
Misc : 5
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Nov 10 18:16:40 2023
Quant Method : X:\V8\methods\V88260090823A.M
Quant Title : V5 Method 8260D
QLast Update : Mon Oct 30 11:37:50 2023
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) IS fluorobenzene	8.001	96	133871	10.00	ug/L	0.00
54) IS chlorobenzene-D5	11.217	119	30448	10.00	ug/L	0.00
68) IS 1,4-dichlorobenzene-D4	13.637	152	45031	10.00	ug/L	0.00
92) IS 1,4-Dioxane-d8	8.828	96	979	10.00	ug/L	0.00
System Monitoring Compounds						
32) SS 1,2-dichloroethane-D4	7.646	65	36327	9.49	ug/L	0.00
Spiked Amount 10.000	Range 60 - 140		Recovery = 94.90%			
36) SS dibromofluoromethane	7.076	111	31231	9.52	ug/L	0.00
Spiked Amount 10.000	Range 78 - 114		Recovery = 95.20%			
41) SS a,a,a-trifluorotoluene	0.000	146	0	0.00	ug/L	
Spiked Amount 20.000	Range 70 - 130		Recovery = 0.00%#			
51) SS toluene-D8	9.679	98	317895	10.07	ug/L	0.00
Spiked Amount 10.000	Range 88 - 110		Recovery = 100.70%			
67) SS 4-bromofluorobenzene	12.434	174	34622	9.95	ug/L	0.00
Spiked Amount 10.000	Range 86 - 115		Recovery = 99.50%			
83) NA 1,2-dichlorobenzene-D4	13.637	152	45031	0.00	ug/L	0.00
Spiked Amount 25.000	Range 15 - 25		Recovery = 0.00%#			
Target Compounds						Qvalue
93] 1,4-dioxane SIM	8.896	88	149	0.895	ug/L #	100

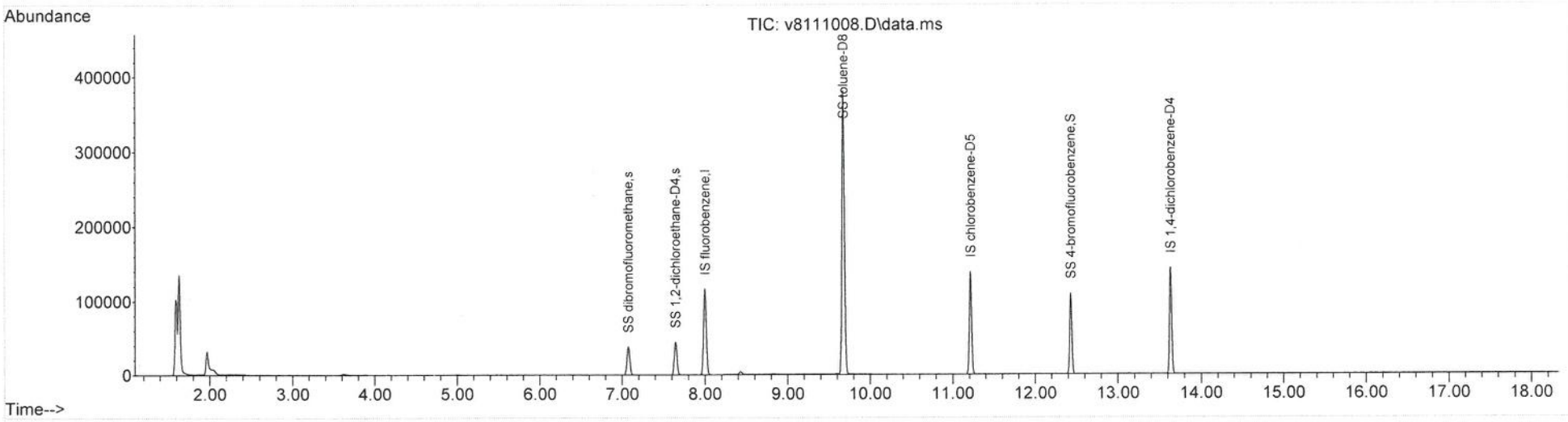
(#) = qualifier out of range (m) = manual integration (+) = signals summed

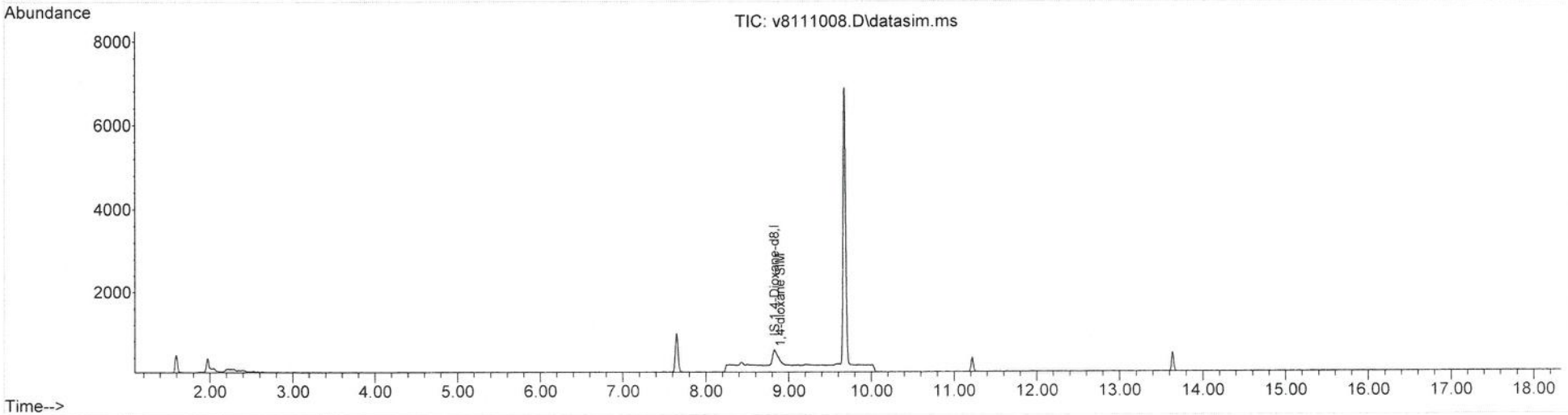
NOV 10 2023

Quantitation Report (QT Reviewed)

Data Path : X:\V8\2023\Nov23\111023\
Data File : v8111008.D
Acq On : 10 Nov 2023 03:32 pm
Operator : lmm
Sample : 67798-01 5mL
Misc : 5
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Nov 10 18:16:40 2023
Quant Method : X:\V8\methods\V88260090823A.M
Quant Title : V5 Method 8260D
QLast Update : Mon Oct 30 11:37:50 2023
Response via : Initial Calibration





Quantitation Report (QT Reviewed)

Data Path : X:\V8\2023\Nov23\111023\
Data File : v8111023.D
Acq On : 10 Nov 2023 10:00 pm
Operator : lmm
Sample : 67798-01MS 5mL
Misc : 5
ALS Vial : 23 Sample Multiplier: 1

11/13/23 @ 10:54
WillieS

Quant Time: Nov 13 10:32:53 2023
Quant Method : X:\V8\methods\V88260090823A.M
Quant Title : V5 Method 8260D
QLast Update : Mon Oct 30 11:37:50 2023
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) IS fluorobenzene	8.003	96	129081	10.00 ug/L	0.00
54) IS chlorobenzene-D5	11.215	119	30434	10.00 ug/L	0.00
68) IS 1,4-dichlorobenzene-D4	13.636	152	44896	10.00 ug/L	0.00
92) IS 1,4-Dioxane-d8	8.825	96	859	10.00 ug/L	0.00
System Monitoring Compounds					
32) SS 1,2-dichloroethane-D4	7.647	65	33930	9.19 ug/L	0.00
Spiked Amount 10.000	Range 60 - 140		Recovery = 91.90%		
36) SS dibromofluoromethane	7.077	111	29721	9.39 ug/L	0.00
Spiked Amount 10.000	Range 78 - 114		Recovery = 93.90%		
41) SS a,a,a-trifluorotoluene	0.000	146	0	0.00 ug/L	
Spiked Amount 20.000	Range 70 - 130		Recovery = 0.00%#		
51) SS toluene-D8	9.681	98	310084	10.18 ug/L	0.00
Spiked Amount 10.000	Range 88 - 110		Recovery = 101.80%		
67) SS 4-bromofluorobenzene	12.432	174	33186	9.54 ug/L	0.00
Spiked Amount 10.000	Range 86 - 115		Recovery = 95.40%		
83) NA 1,2-dichlorobenzene-D4	13.636	152	44896	0.00 ug/L	0.00
Spiked Amount 25.000	Range 15 - 25		Recovery = 0.00%#		
Target Compounds					Qvalue
2) dichlorodifluoromethane	1.813	85	55991m	22.380 ug/L	BC
3) chloromethane	2.100	50	64365	24.826 ug/L	98
4) vinyl chloride	2.196	62	65403	20.899 ug/L	99
5) bromomethane	2.720	96	36813	23.640 ug/L	80
6) chloroethane	2.821	64	41477	28.702 ug/L	95
7) trichlorofluoromethane	3.153	101	81862	20.550 ug/L	95
8) diethylether	3.577	74	32746	27.330 ug/L	68
9) acetone	3.878	43	23953	29.503 ug/L #	59
10) acrolein	3.773	56	52556	166.478 ug/L #	100
11) 1,1-dichloroethene	4.069	96	45872	22.643 ug/L	89
12) 1,1,2-trichloro-1,2,2-...	3.800	151	33367	20.523 ug/L	90
13) t-butanol (TBA)	4.215	59	41468	130.588 ug/L	97
14) methyl acetate	4.621	43	50374	23.545 ug/L #	85
15) methylene chloride	4.830	84	54488	23.073 ug/L #	78
16) carbon disulfide	4.803	76	143203	27.961 ug/L	97
17) acrylonitrile	5.026	53	128134	177.067 ug/L	99
18) methyl-t-butyl ether (...	5.067	73	161233	22.736 ug/L	90
19) trans-1,2-dichloroethene	5.259	96	51342	22.127 ug/L	87
20) isopropyl ether (DIPE)	5.733	87	47245	24.076 ug/L #	35
21) vinyl acetate	5.879	86	14137	24.219 ug/L	18
22) 1,1-dichloroethane	5.856	63	93765	23.006 ug/L	98
23) 2-butanone (MEK)	6.407	43	32008	22.583 ug/L	95
24) ethyl-t-butyl ether (E...	6.266	87	69358	21.581 ug/L #	78
25) 2,2-dichloropropane	6.576	77	78314	19.579 ug/L	100
26) cis-1,2-dichloroethene	6.631	96	59774	22.238 ug/L #	84
27) bromochloromethane	7.013	128	26660	20.778 ug/L #	77
28) chloroform	6.817	83	92497	20.579 ug/L	100
29) tetrahydrofuran (THF)	7.045	42	22615	24.373 ug/L	84
30) 1,1,1-trichloroethane	7.291	97	76836	18.599 ug/L	96
31) cyclohexane	7.301	84	80083	22.328 ug/L #	76
33) carbon tetrachloride	7.574	117	60600	17.952 ug/L	98
34) 1,1-dichloropropene	7.469	75	69875	20.457 ug/L	96

Data Path : X:\V8\2023\Nov23\111023\
Data File : v8111023.D
Acq On : 10 Nov 2023 10:00 pm
Operator : lmm
Sample : 67798-01MS 5mL
Misc : 5
ALS Vial : 23 Sample Multiplier: 1

11/13/23 @ 10:54
WillieS

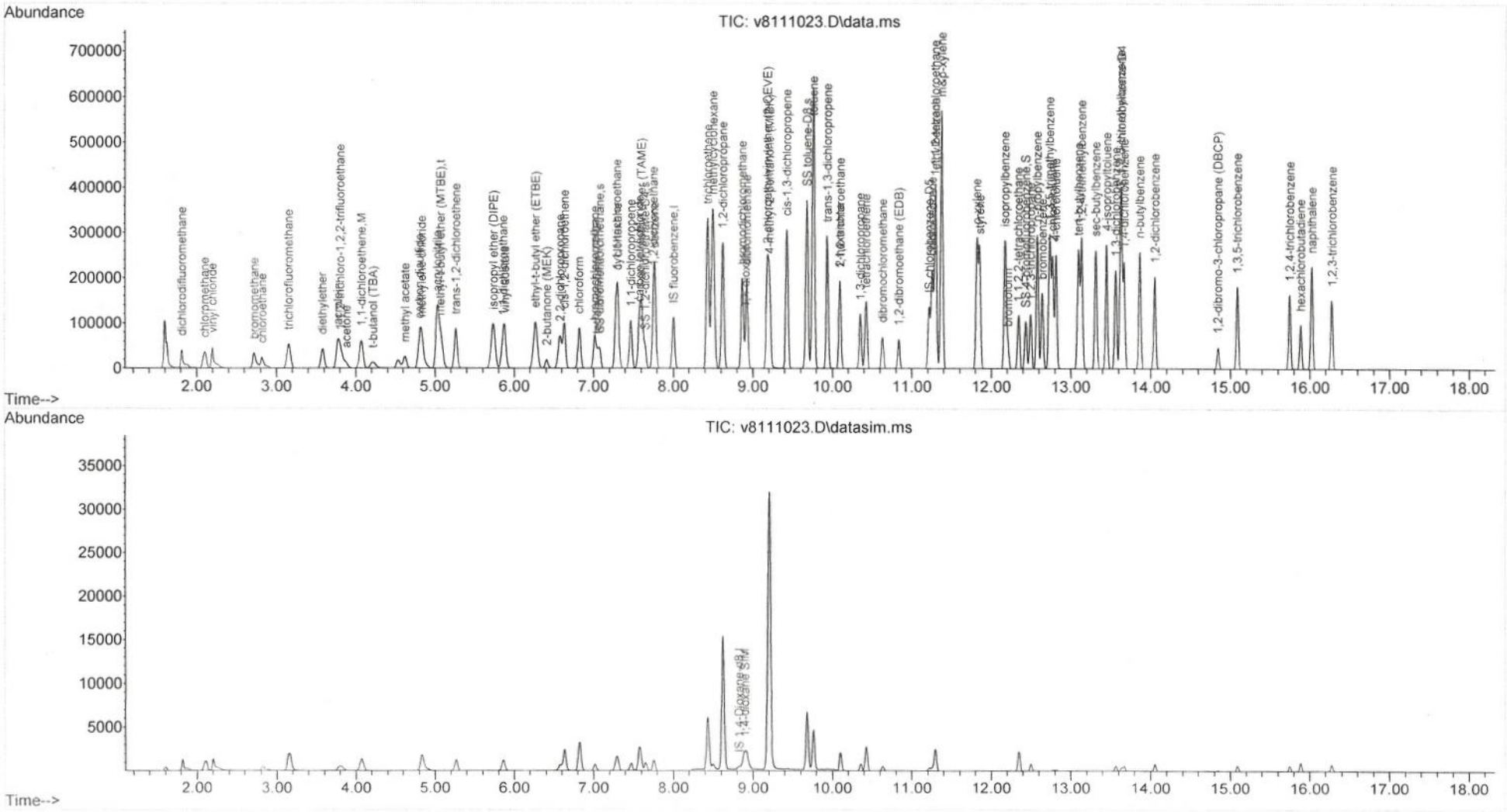
Quant Time: Nov 13 10:32:53 2023
Quant Method : X:\V8\methods\V88260090823A.M
Quant Title : V5 Method 8260D
QLast Update : Mon Oct 30 11:37:50 2023
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
35) benzene	7.766	78	221177	22.945 ug/L	98
37) 1,2-dichloroethane	7.752	62	67574	19.676 ug/L	96
38) t-amyl-methyl ether (T...	7.601	73	154791	21.463 ug/L	93
39) trichloroethene	8.432	95	134654	21.004 ug/L	98
40) methylcyclohexane	8.494	83	217551	22.130 ug/L	93
42) 1,2-dichloropropane	8.619	63	135504	24.163 ug/L	98
43) dibromomethane	8.921	93	84387	21.330 ug/L	93
44) bromodichloromethane	8.864	83	163915	19.541 ug/L	98
45) 1,4-dioxane	8.905	88	5151	53.597 ug/L #	18
46) 2-chloroethylvinylethe...	9.181	63	107819	23.683 ug/L #	77
47) 4-methyl-2-pentanone (...	9.207	58	72722	24.678 ug/L #	87
48) 2-hexanone	10.094	58	36024	26.974 ug/L	92
49) cis-1,3-dichloropropene	9.426	75	213808	20.178 ug/L	97
50) toluene	9.759	92	341593	22.461 ug/L	91
52) trans-1,3-dichloropropene	9.936	75	191070	19.621 ug/L	97
53) 1,1,2-trichloroethane	10.098	83	42418	18.761 ug/L	97
55) tetrachloroethene	10.427	166	54361	19.817 ug/L	97
56) 1,3-dichloropropane	10.354	76	87693	22.827 ug/L	94
57) dibromochloromethane	10.632	129	45610	17.286 ug/L	98
58) 1,2-dibromoethane (EDB)	10.837	107	51261	21.031 ug/L	100
59) chlorobenzene	11.256	112	141065	20.856 ug/L	97
60) 1,1,1,2-tetrachloroethane	11.293	131	45606	19.292 ug/L	96
61) ethylbenzene	11.297	91	257884	22.859 ug/L	98
62) m&p-xylenes	11.375	106	196248	46.202 ug/L	97
63) o-xylene	11.817	106	95371	21.776 ug/L	98
64) styrene	11.853	104	161174	21.310 ug/L	95
65) bromoform	12.209	173	29749	16.701 ug/L	97
66) isopropylbenzene	12.172	105	245627	22.378 ug/L	98
69) bromobenzene	12.642	156	56117	20.087 ug/L #	80
70) 1,1,2,2-tetrachloroethane	12.341	83	74595	22.984 ug/L	95
71) 1,2,3-trichloropropane	12.496	77	20591	24.859 ug/L	96
72) n-propylbenzene	12.578	91	290466	22.983 ug/L	99
73) 2-chlorotoluene	12.770	91	200489	23.153 ug/L	98
74) 4-chlorotoluene	12.811	91	172760	23.130 ug/L	95
75) 1,3,5-trimethylbenzene	12.733	105	201324	22.628 ug/L	94
76) tert-butylbenzene	13.098	91	116896m	21.951 ug/L	PS
77) 1,2,4-trimethylbenzene	13.135	105	203074	22.081 ug/L	97
78) 1,2,3-trimethylbenzene	13.627	105	206867	22.462 ug/L	97
79) sec-butylbenzene	13.312	105	240631	22.497 ug/L	98
80) 1,3-dichlorobenzene	13.563	146	110679	21.797 ug/L	99
81) 4-isopropyltoluene	13.449	119	200881	21.621 ug/L	96
82) 1,4-dichlorobenzene	13.668	146	110050	21.846 ug/L	93
84) 1,2-dichlorobenzene	14.051	146	102829	21.206 ug/L	99
85) n-butylbenzene	13.864	91	178243	21.861 ug/L	98
86) 1,2-dibromo-3-chloropr...	14.844	75	14698	22.847 ug/L #	64
87) 1,3,5-trichlorobenzene	15.085	180	68944	20.061 ug/L	97
88) 1,2,4-trichlorobenzene	15.746	180	61288	20.002 ug/L	93
89) hexachlorobutadiene	15.883	225	23650	20.726 ug/L	90
90) naphthalene	16.024	128	210808	21.947 ug/L	99
91) 1,2,3-trichlorobenzene	16.275	180	57387	20.705 ug/L	96
93] 1,4-dioxane SIM	8.898	88	5425	41.900 ug/L #	100

Quantitation Report (QT Reviewed)

Data Path : X:\V8\2023\Nov23\111023\
Data File : v8111023.D
Acq On : 10 Nov 2023 10:00 pm
Operator : lmm
Sample : 67798-01MS 5mL
Misc : 5
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Nov 13 10:32:53 2023
Quant Method : X:\V8\methods\V88260090823A.M
Quant Title : V5 Method 8260D
QLast Update : Mon Oct 30 11:37:50 2023
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : X:\V8\2023\Nov23\111023\
Data File : v8111024.D
Acq On : 10 Nov 2023 10:25 pm
Operator : lmm
Sample : 67798-01MSD 5mL
Misc : 5
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Nov 13 10:32:57 2023
Quant Method : X:\V8\methods\V88260090823A.M
Quant Title : V5 Method 8260D
QLast Update : Mon Oct 30 11:37:50 2023
Response via : Initial Calibration

11/13/23 @ 10:54
WillieS

Compound	R.T.	QIon	Response	Conc Units		Dev(Min)
Internal Standards						
1) IS fluorobenzene	8.003	96	133088	10.00 ug/L		0.00
54) IS chlorobenzene-D5	11.216	119	29922	10.00 ug/L		0.00
68) IS 1,4-dichlorobenzene-D4	13.637	152	44035	10.00 ug/L		0.00
92) IS 1,4-Dioxane-d8	8.824	96	798	10.00 ug/L		0.00
System Monitoring Compounds						
32) SS 1,2-dichloroethane-D4	7.647	65	34364	9.03 ug/L		0.00
Spiked Amount 10.000	Range 60 - 140		Recovery = 90.30%			
36) SS dibromofluoromethane	7.073	111	31091	9.53 ug/L		0.00
Spiked Amount 10.000	Range 78 - 114		Recovery = 95.30%			
41) SS a,a,a-trifluorotoluene	0.000	146	0	0.00 ug/L		
Spiked Amount 20.000	Range 70 - 130		Recovery = 0.00%#			
51) SS toluene-D8	9.680	98	316175	10.07 ug/L		0.00
Spiked Amount 10.000	Range 88 - 110		Recovery = 100.70%			
67) SS 4-bromofluorobenzene	12.433	174	34038	9.95 ug/L		0.00
Spiked Amount 10.000	Range 86 - 115		Recovery = 99.50%			
83) NA 1,2-dichlorobenzene-D4	13.637	152	44035	0.00 ug/L		0.00
Spiked Amount 25.000	Range 15 - 25		Recovery = 0.00%#			
Target Compounds						Qvalue
2) dichlorodifluoromethane	1.809	85	59987m	23.255 ug/L		BC
3) chloromethane	2.096	50	71335	26.701 ug/L		99
4) vinyl chloride	2.192	62	71561	22.179 ug/L		96
5) bromomethane	2.711	96	39160	24.380 ug/L		82
6) chloroethane	2.816	64	45473	30.520 ug/L		95
7) trichlorofluoromethane	3.149	101	89815	21.863 ug/L		94
8) diethylether	3.573	74	33433	27.064 ug/L	#	58
9) acetone	3.869	43	25655	30.699 ug/L	#	65
11) 1,1-dichloroethene	4.065	96	49817	23.850 ug/L	#	86
12) 1,1,2-trichloro-1,2,2-...	3.796	151	36285	21.613 ug/L		93
13) t-butanol (TBA)	4.206	59	40386	123.353 ug/L		95
14) methyl acetate	4.616	43	49437	22.408 ug/L	#	83
15) methylene chloride	4.826	84	55167	22.652 ug/L	#	76
16) carbon disulfide	4.799	76	157181	29.711 ug/L		96
18) methyl-t-butyl ether (...	5.063	73	164525	22.502 ug/L		89
19) trans-1,2-dichloroethene	5.259	96	55577	23.231 ug/L		87
20) isopropyl ether (DIPE)	5.728	87	48770	24.105 ug/L	#	33
21) vinyl acetate	5.879	86	13027	21.646 ug/L	#	1
22) 1,1-dichloroethane	5.856	63	99507	23.680 ug/L		97
23) 2-butanone (MEK)	6.407	43	32281	22.081 ug/L		93
24) ethyl-t-butyl ether (E...	6.261	87	71225	21.495 ug/L	#	76
25) 2,2-dichloropropane	6.571	77	83170	20.167 ug/L		99
26) cis-1,2-dichloroethene	6.631	96	61642	22.242 ug/L	#	83
27) bromochloromethane	7.013	128	27304	20.639 ug/L	#	78
28) chloroform	6.818	83	98117	21.172 ug/L		97
29) tetrahydrofuran (THF)	7.045	42	22084	23.075 ug/L		87
30) 1,1,1-trichloroethane	7.287	97	83544	19.614 ug/L		98
31) cyclohexane	7.301	84	87741	23.711 ug/L	#	76
33) carbon tetrachloride	7.574	117	67670	19.443 ug/L		100
34) 1,1-dichloropropene	7.465	75	76886	21.832 ug/L		99
35) benzene	7.766	78	233444	23.490 ug/L		100
37) 1,2-dichloroethane	7.752	62	70309	19.856 ug/L		97

Quantitation Report (QT Reviewed)

Data Path : X:\V8\2023\Nov23\111023\
Data File : v8111024.D
Acq On : 10 Nov 2023 10:25 pm
Operator : lmm
Sample : 67798-01MSD 5mL
Misc : 5
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Nov 13 10:32:57 2023
Quant Method : X:\V8\methods\V88260090823A.M
Quant Title : V5 Method 8260D
QLast Update : Mon Oct 30 11:37:50 2023
Response via : Initial Calibration

11/13/23 @ 10:54
WillieS

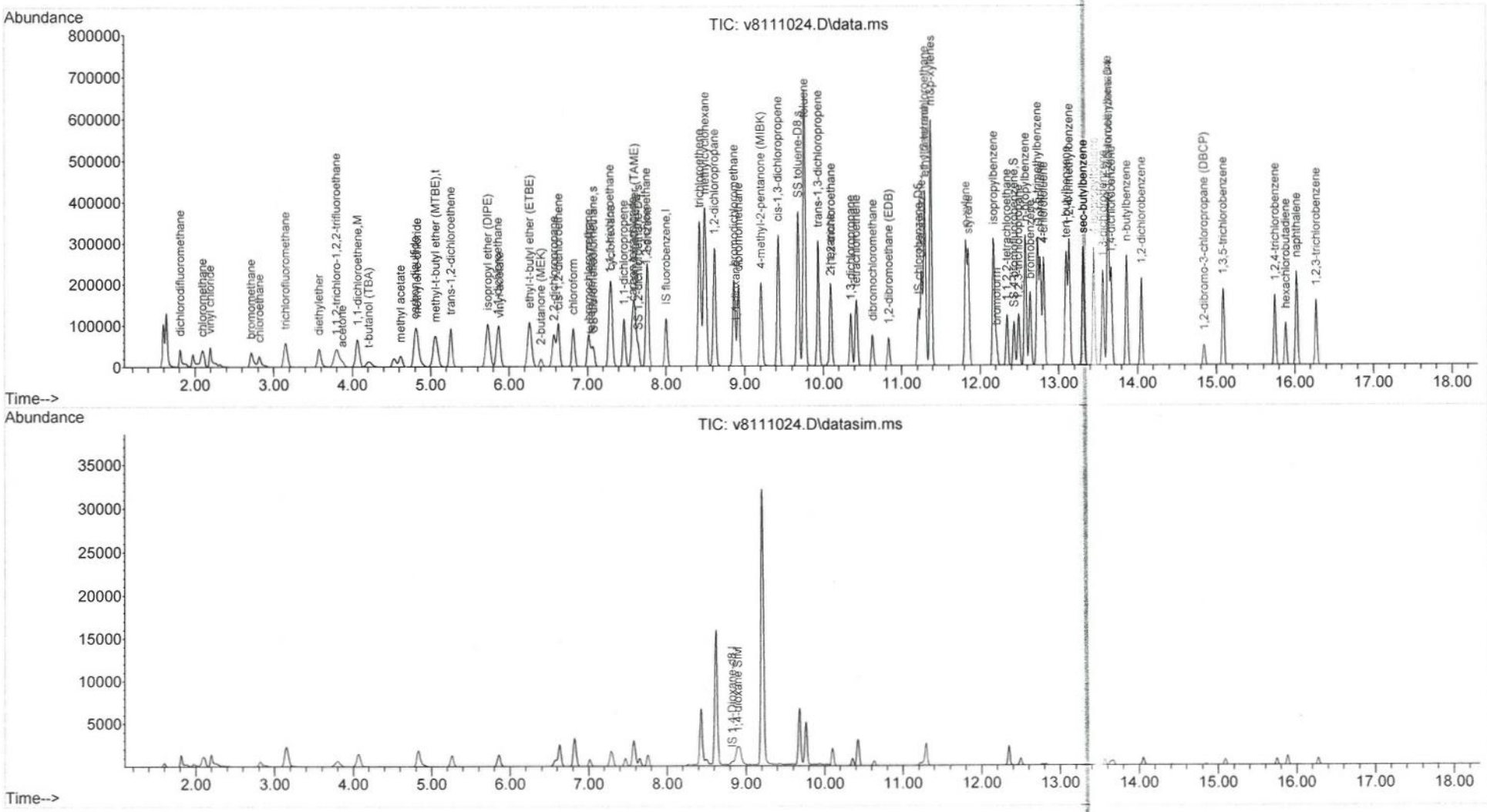
Compound	R.T.	QIon	Response	Conc Units		Dev(Min)	
38) t-amyl-methyl ether (T...	7.602	73	160167	21.540 ug/L		94	
39) trichloroethene	8.431	95	145132	21.963 ug/L		99	
40) methylcyclohexane	8.498	83	233897	23.077 ug/L		95	
42) 1,2-dichloropropane	8.618	63	140466	24.294 ug/L		99	
43) dibromomethane	8.920	93	86551	21.217 ug/L		91	
44) bromodichloromethane	8.863	83	174198	20.141 ug/L		99	
45) 1,4-dioxane	8.889	88	5369	54.214 ug/L	#	12	
47) 4-methyl-2-pentanone (...	9.206	58	74531	24.529 ug/L		97	
48) 2-hexanone	10.090	58	36769	26.703 ug/L		91	
49) cis-1,3-dichloropropene	9.425	75	220838	20.214 ug/L		99	
50) toluene	9.758	92	357299	22.789 ug/L		94	
52) trans-1,3-dichloropropene	9.935	75	199776	19.898 ug/L		95	
53) 1,1,2-trichloroethane	10.099	83	54376	23.326 ug/L		95	
55) tetrachloroethene	10.423	166	58170	21.575 ug/L		98	
56) 1,3-dichloropropane	10.354	76	90619	23.996 ug/L		97	
57) dibromochloromethane	10.632	129	47760	18.402 ug/L		100	
58) 1,2-dibromoethane (EDB)	10.838	107	52916	22.083 ug/L		98	
59) chlorobenzene	11.252	112	146447	22.027 ug/L		98	
60) 1,1,1,2-tetrachloroethane	11.293	131	48111	20.700 ug/L		99	
61) ethylbenzene	11.298	91	270083	24.359 ug/L		100	
62) m&p-xylenes	11.376	106	208069	49.848 ug/L		96	
63) o-xylene	11.818	106	99249	23.055 ug/L		99	
64) styrene	11.850	104	166486	22.392 ug/L		95	
65) bromoform	12.210	173	31367	17.897 ug/L		97	
66) isopropylbenzene	12.173	105	260562	24.156 ug/L		99	
69) bromobenzene	12.643	156	58093	21.198 ug/L	#	84	
70) 1,1,2,2-tetrachloroethane	12.342	83	76545	24.046 ug/L		96	
71) 1,2,3-trichloropropane	12.492	77	20781	25.579 ug/L		88	
72) n-propylbenzene	12.579	91	310836	25.070 ug/L		100	
73) 2-chlorotoluene	12.771	91	215345	25.350 ug/L		97	
74) 4-chlorotoluene	12.812	91	175290	23.928 ug/L		95	
75) 1,3,5-trimethylbenzene	12.734	105	211889	24.278 ug/L		95	
76) tert-butylbenzene	13.099	91	120471m	23.062 ug/L			PS
77) 1,2,4-trimethylbenzene	13.135	105	211362	23.431 ug/L		98	
78) 1,2,3-trimethylbenzene	13.628	105	212773	23.561 ug/L		97	
79) sec-butylbenzene	13.313	105	254548	24.258 ug/L		99	
80) 1,3-dichlorobenzene	13.564	146	114430	22.977 ug/L		99	
81) 4-isopropyltoluene	13.450	119	211279	23.182 ug/L		97	
82) 1,4-dichlorobenzene	13.669	146	112665	22.805 ug/L		94	
84) 1,2-dichlorobenzene	14.052	146	105206	22.122 ug/L		98	
85) n-butylbenzene	13.865	91	186508	23.313 ug/L		97	
86) 1,2-dibromo-3-chloropr...	14.845	75	14810	23.471 ug/L	#	63	
87) 1,3,5-trichlorobenzene	15.086	180	70876	21.029 ug/L		96	
88) 1,2,4-trichlorobenzene	15.747	180	63158	21.015 ug/L		92	
89) hexachlorobutadiene	15.884	225	24847	22.201 ug/L		98	
90) naphthalene	16.021	128	212458	22.551 ug/L		98	
91) 1,2,3-trichlorobenzene	16.271	180	58002	21.337 ug/L		97	
93] 1,4-dioxane SIM	8.897	88	5288	43.970 ug/L	#	100	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : X:\V8\2023\Nov23\111023\
Data File : v8111024.D
Acq On : 10 Nov 2023 10:25 pm
Operator : lmm
Sample : 67798-01MSD 5mL
Misc : 5
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Nov 13 10:32:57 2023
Quant Method : X:\V8\methods\V88260090823A.M
Quant Title : V5 Method 8260D
QLast Update : Mon Oct 30 11:37:50 2023
Response via : Initial Calibration



This File:	L:\VOA\Excel Reports\2023\v8111009
Analysis Group:	8260/8021/624
Field ID:	SY-OBMW6-110723 1.8E+07
Sample:	67798-02 5mL Dow Salvage Yard
Misc:	5 CRE
Import File Name	v8 111023 g DoD
TestGroupID	V8260DoD_A
Aqueous or Soil? (A or S)	A
Solid amount (g)	
Methanol volume (mL)	
Percent Solid (%)	
Soil Prep Date	
Weight:	
Volume:	
Lab#:	67798-002
AnalysisDate:	11/10/2023
AnalysisTime:	15:59
Dilution:	1
AnalyzedBy:	LMM v8111009.D
QC_Code:	
Prep#:	

Reviewer Checks:

- Quant Report: Reviewed, Analyst Initials & Date
- Chromatogram Checked, Major peaks identified
- Results consistent w/ other attached analyses
- Reanalysis reason noted
- Substitute dilution data checked
- Correct dilution and reason clear or noted
- Flags checked (Expiration, F+, Over Cal, Surr, Aspen, QC)
- Other QC failures or issues noted in Aspen
- Correct data file and/or date/time in Aspen

Notes:

Reviewer Initials & Date: 11/13/23

#	Surrogate Standards	Import Value (as ug/L)	Recovery	Flag	QC Limits	Surrogate True Values
32	SS 1,2-dichloroethane-D4	9.26	93%		60-140	10
36	SS dibromofluoromethane	9.32	93%		78-114	10
51	SS toluene-D8	9.95	100%		88-110	10
67	SS 4-bromofluorobenzene	9.54	95%		86-115	10
41	SS a,a,a-trifluorotoluene	0.00	0%		70-130*	20

	AnalyteName	Concentration (ug/L)
2	dichlorodifluoromethane	0
3	chloromethane	0
4	vinyl chloride	0
5	bromomethane	0
6	chloroethane	0
7	trichlorofluoromethane	0
8	diethylether	0
9	acetone	0.281074422
11	1,1-dichloroethene	0
13	t-butanol (TBA)	0
15	methylene chloride	0
16	carbon disulfide	0
18	methyl-t-butyl ether (MTBE)	0
19	trans-1,2-dichloroethene	0
20	isopropyl ether (DIPE)	0
22	1,1-dichloroethane	0
23	2-butanone (MEK)	0
24	ethyl-t-butyl ether (ETBE)	0
25	2,2-dichloropropane	0
26	cis-1,2-dichloroethene	0
27	bromochloromethane	0
28	chloroform	0
29	tetrahydrofuran (THF)	0
30	1,1,1-trichloroethane	0
33	carbon tetrachloride	0
34	1,1-dichloropropene	0
35	benzene	0
37	1,2-dichloroethane	0
38	t-amyl-methyl ether (TAME)	0
39	trichloroethene	0
42	1,2-dichloropropane	0
43	dibromomethane	0
44	bromodichloromethane	0
45	1,4-dioxane	0
47	4-methyl-2-pentanone (MIBK)	0
48	2-hexanone	0
49	cis-1,3-dichloropropene	0
50	toluene	-0.14339293
52	trans-1,3-dichloropropene	0
53	1,1,2-trichloroethane	0
55	tetrachloroethene	0

	AnalyteName	Concentration (ug/L)
56	1,3-dichloropropane	0
57	dibromochloromethane	0
58	1,2-dibromoethane (EDB)	0
59	chlorobenzene	0
60	1,1,1,2-tetrachloroethane	0
61	ethylbenzene	0
62	m&p-xylenes	0
63	o-xylene	0
64	styrene	0
65	bromoform	0
66	isopropylbenzene	0
69	bromobenzene	0
70	1,1,2,2-tetrachloroethane	0
71	1,2,3-trichloropropane	0
72	n-propylbenzene	0
73	2-chlorotoluene	0
74	4-chlorotoluene	0
75	1,3,5-trimethylbenzene	0.069508411
76	tert-butylbenzene	0
77	1,2,4-trimethylbenzene	0.085675775
79	sec-butylbenzene	0
80	1,3-dichlorobenzene	0
81	4-isopropyltoluene	0
82	1,4-dichlorobenzene	0
84	1,2-dichlorobenzene	0
85	n-butylbenzene	0
86	1,2-dibromo-3-chloropropane (DBCP)	0
88	1,2,4-trichlorobenzene	0
89	hexachlorobutadiene	0
90	naphthalene	0
91	1,2,3-trichlorobenzene	0
87	1,3,5-trichlorobenzene	0
12	1,1,2-trichloro-1,2,2-trifluoroethane	0
14	methyl acetate	0
21	vinyl acetate	0
31	cyclohexane	0
40	methylcyclohexane	0
10	acrolein	0
17	acrylonitrile	0
46	2-chloroethylvinylether (2-CEVE)	0
	Total Xylenes	0

Quantitation Report (QT Reviewed)

Data Path : X:\V8\2023\Nov23\111023\
Data File : v8111009.D
Acq On : 10 Nov 2023 03:59 pm
Operator : lmm
Sample : 67798-02 5mL
Misc : 5
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Nov 10 18:16:44 2023
Quant Method : X:\V8\methods\V88260090823A.M
Quant Title : V5 Method 8260D
QLast Update : Mon Oct 30 11:37:50 2023
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) IS fluorobenzene	8.006	96	133373	10.00	ug/L	0.00
54) IS chlorobenzene-D5	11.218	119	30557	10.00	ug/L	0.00
68) IS 1,4-dichlorobenzene-D4	13.637	152	44971	10.00	ug/L	0.00
92) IS 1,4-Dioxane-d8	8.828	96	956	10.00	ug/L	0.00
System Monitoring Compounds						
32) SS 1,2-dichloroethane-D4	7.650	65	35322	9.26	ug/L	0.00
Spiked Amount 10.000	Range 60 - 140		Recovery = 92.60%			
36) SS dibromofluoromethane	7.076	111	30476	9.32	ug/L	0.00
Spiked Amount 10.000	Range 78 - 114		Recovery = 93.20%			
41) SS a,a,a-trifluorotoluene	0.000	146	0	0.00	ug/L	
Spiked Amount 20.000	Range 70 - 130		Recovery = 0.00%#			
51) SS toluene-D8	9.679	98	313092	9.95	ug/L	0.00
Spiked Amount 10.000	Range 88 - 110		Recovery = 99.50%			
67) SS 4-bromofluorobenzene	12.434	174	33341	9.54	ug/L	0.00
Spiked Amount 10.000	Range 86 - 115		Recovery = 95.40%			
83) NA 1,2-dichlorobenzene-D4	13.637	152	44971	0.00	ug/L	0.00
Spiked Amount 25.000	Range 15 - 25		Recovery = 0.00%#			
Target Compounds						Qvalue
9) acetone	3.882	43	1281	0.281	ug/L #	58
93] 1,4-dioxane SIM	8.901	88	132	0.801	ug/L #	100

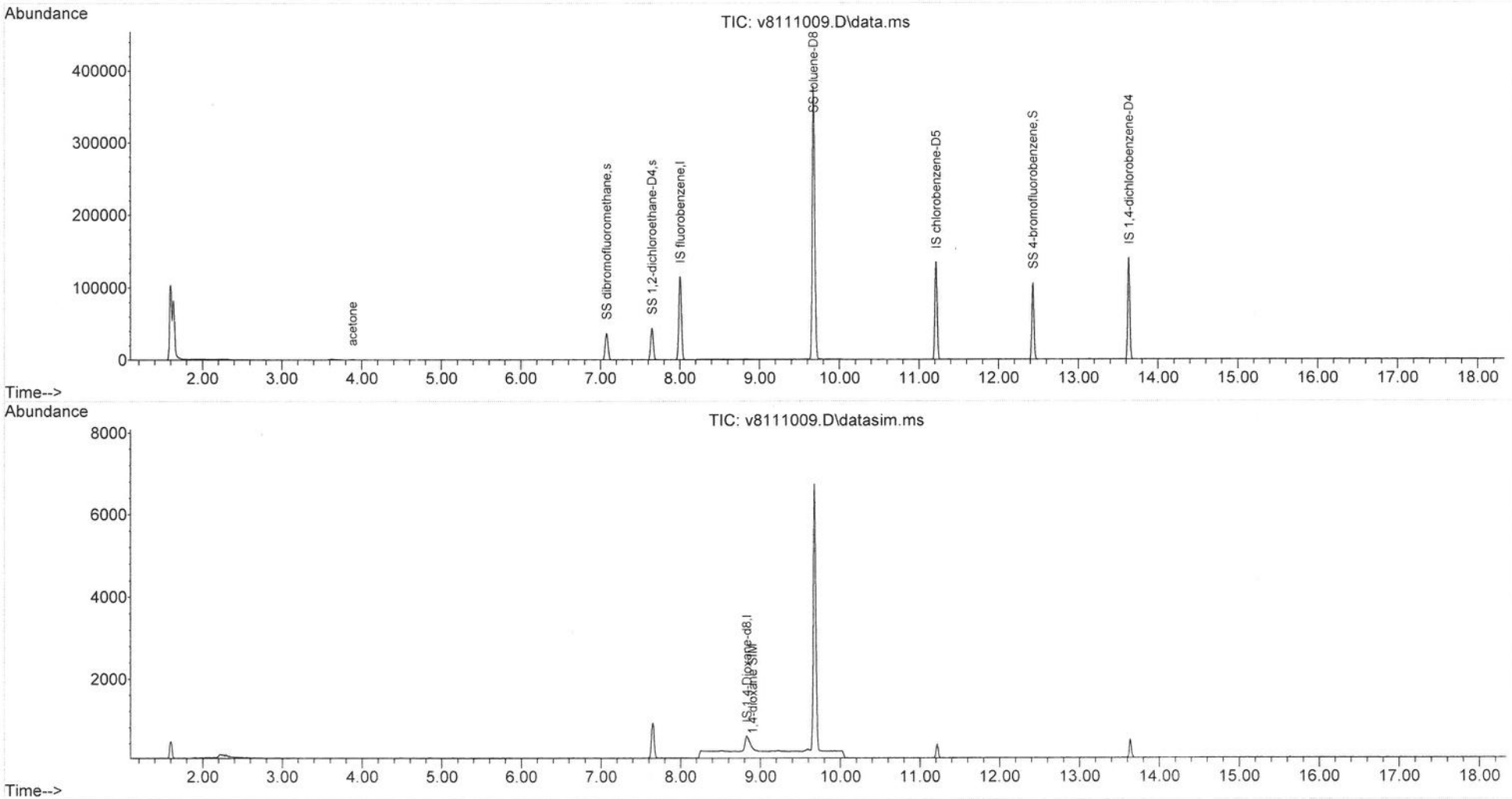
(#) = qualifier out of range (m) = manual integration (+) = signals summed

NOV 10 2023

Quantitation Report (QT Reviewed)

Data Path : X:\V8\2023\Nov23\111023\
Data File : v8111009.D
Acq On : 10 Nov 2023 03:59 pm
Operator : lmm
Sample : 67798-02 5mL
Misc : 5
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Nov 10 18:16:44 2023
Quant Method : X:\V8\methods\V88260090823A.M
Quant Title : V5 Method 8260D
QLast Update : Mon Oct 30 11:37:50 2023
Response via : Initial Calibration



This File:	L:\VOA\Excel Reports\2023\v8111010
Analysis Group:	8260/8021/624
Field ID:	SY-OBMW4R-110723 1.8E+07
Sample:	67798-03 5mL Dow Salvage Yard
Misc:	5 CRE
Import File Name	v8 111023 g DoD
TestGroupID	V8260DoD_A
Aqueous or Soil? (A or S)	A
Solid amount (g)	
Methanol volume (mL)	
Percent Solid (%)	
Soil Prep Date	
Weight:	
Volume:	
Lab#:	67798-003
AnalysisDate:	11/10/2023
AnalysisTime:	16:24
Dilution:	1
AnalyzedBy:	LMM v8111010.D
QC_Code:	
Prep#:	

Reviewer Checks:

- Quant Report: Reviewed, Analyst Initials & Date
- Chromatogram Checked, Major peaks identified
- Results consistent w/ other attached analyses
- Reanalysis reason noted
- Substitute dilution data checked
- Correct dilution and reason clear or noted
- Flags checked (Expiration, F+, Over Cal, Surr, Aspen, QC)
- Other QC failures or issues noted in Aspen
- Correct data file and/or date/time in Aspen

Notes:

Reviewer Initials & Date: 11/13/23

#	Surrogate Standards	Import Value (as ug/L)	Recovery	Flag	QC Limits	Surrogate True Values
32	SS 1,2-dichloroethane-D4	9.34	93%		60-140	10
36	SS dibromofluoromethane	9.35	93%		78-114	10
51	SS toluene-D8	9.95	100%		88-110	10
67	SS 4-bromofluorobenzene	9.82	98%		86-115	10
41	SS a,a,a-trifluorotoluene	0.00	0%		70-130*	20

	AnalyteName	Concentration (ug/L)
2	dichlorodifluoromethane	0
3	chloromethane	0
4	vinyl chloride	0
5	bromomethane	0
6	chloroethane	0
7	trichlorofluoromethane	0
8	diethylether	0
9	acetone	0.942890827
11	1,1-dichloroethene	0
13	t-butanol (TBA)	0
15	methylene chloride	0
16	carbon disulfide	0
18	methyl-t-butyl ether (MTBE)	0
19	trans-1,2-dichloroethene	0
20	isopropyl ether (DIPE)	0
22	1,1-dichloroethane	0
23	2-butanone (MEK)	0
24	ethyl-t-butyl ether (ETBE)	0
25	2,2-dichloropropane	0
26	cis-1,2-dichloroethene	0
27	bromochloromethane	0
28	chloroform	0
29	tetrahydrofuran (THF)	0
30	1,1,1-trichloroethane	0
33	carbon tetrachloride	0
34	1,1-dichloropropene	0
35	benzene	0
37	1,2-dichloroethane	0
38	t-amyl-methyl ether (TAME)	0
39	trichloroethene	0
42	1,2-dichloropropane	0
43	dibromomethane	0
44	bromodichloromethane	0
45	1,4-dioxane	0
47	4-methyl-2-pentanone (MIBK)	0
48	2-hexanone	0
49	cis-1,3-dichloropropene	0
50	toluene	0
52	trans-1,3-dichloropropene	0
53	1,1,2-trichloroethane	0
55	tetrachloroethene	0

	AnalyteName	Concentration (ug/L)
56	1,3-dichloropropane	0
57	dibromochloromethane	0
58	1,2-dibromoethane (EDB)	0
59	chlorobenzene	0
60	1,1,1,2-tetrachloroethane	0
61	ethylbenzene	0
62	m&p-xylenes	0
63	o-xylene	0
64	styrene	0
65	bromoform	0
66	isopropylbenzene	0
69	bromobenzene	0
70	1,1,2,2-tetrachloroethane	0
71	1,2,3-trichloropropane	0
72	n-propylbenzene	0
73	2-chlorotoluene	0
74	4-chlorotoluene	0
75	1,3,5-trimethylbenzene	0.077179882
76	tert-butylbenzene	0
77	1,2,4-trimethylbenzene	0.06555988
79	sec-butylbenzene	0
80	1,3-dichlorobenzene	0
81	4-isopropyltoluene	0
82	1,4-dichlorobenzene	0
84	1,2-dichlorobenzene	0
85	n-butylbenzene	0
86	1,2-dibromo-3-chloropropane (DBCP)	0
88	1,2,4-trichlorobenzene	0
89	hexachlorobutadiene	0
90	naphthalene	0
91	1,2,3-trichlorobenzene	0
87	1,3,5-trichlorobenzene	0
12	1,1,2-trichloro-1,2,2-trifluoroethane	0
14	methyl acetate	0
21	vinyl acetate	0
31	cyclohexane	0
40	methylcyclohexane	0
10	acrolein	0
17	acrylonitrile	0
46	2-chloroethylvinylether (2-CEVE)	0
	Total Xylenes	0

Quantitation Report (QT Reviewed)

Data Path : X:\V8\2023\Nov23\111023\
Data File : v8111010.D
Acq On : 10 Nov 2023 04:24 pm
Operator : lmm
Sample : 67798-03 5mL
Misc : 5
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Nov 10 18:16:48 2023
Quant Method : X:\V8\methods\V88260090823A.M
Quant Title : V5 Method 8260D
QLast Update : Mon Oct 30 11:37:50 2023
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) IS fluorobenzene	8.006	96	133482	10.00	ug/L	0.00
54) IS chlorobenzene-D5	11.218	119	30215	10.00	ug/L	0.00
68) IS 1,4-dichlorobenzene-D4	13.637	152	45360	10.00	ug/L	0.00
92) IS 1,4-Dioxane-d8	8.829	96	1096	10.00	ug/L	0.00
System Monitoring Compounds						
32) SS 1,2-dichloroethane-D4	7.650	65	35667	9.34	ug/L	0.00
Spiked Amount 10.000	Range 60 - 140		Recovery = 93.40%			
36) SS dibromofluoromethane	7.076	111	30587	9.35	ug/L	0.00
Spiked Amount 10.000	Range 78 - 114		Recovery = 93.50%			
41) SS a,a,a-trifluorotoluene	0.000	146	0	0.00	ug/L	
Spiked Amount 20.000	Range 70 - 130		Recovery = 0.00%#			
51) SS toluene-D8	9.679	98	313441	9.95	ug/L	0.00
Spiked Amount 10.000	Range 88 - 110		Recovery = 99.50%			
67) SS 4-bromofluorobenzene	12.434	174	33910	9.82	ug/L	0.00
Spiked Amount 10.000	Range 86 - 115		Recovery = 98.20%			
83) NA 1,2-dichlorobenzene-D4	13.637	152	45360	0.00	ug/L	0.00
Spiked Amount 25.000	Range 15 - 25		Recovery = 0.00%#			
Target Compounds						Qvalue
9) acetone	3.887	43	1814	0.943	ug/L #	51
93] 1,4-dioxane SIM	8.901	88	117	0.592	ug/L #	100

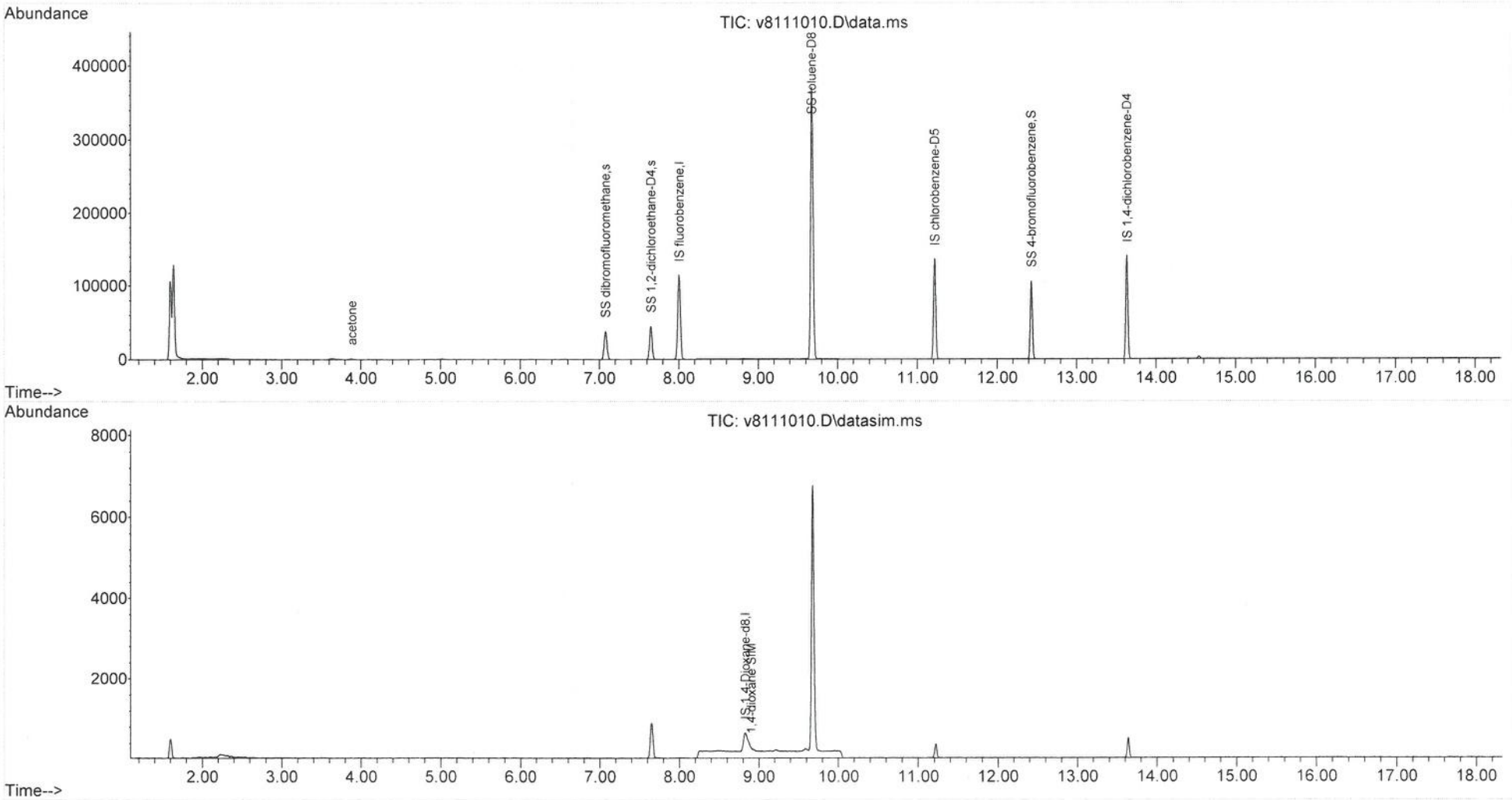
(#) = qualifier out of range (m) = manual integration (+) = signals summed

NOV 10 2023

Quantitation Report (QT Reviewed)

Data Path : X:\V8\2023\Nov23\111023\
Data File : v8111010.D
Acq On : 10 Nov 2023 04:24 pm
Operator : lmm
Sample : 67798-03 5mL
Misc : 5
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Nov 10 18:16:48 2023
Quant Method : X:\V8\methods\V88260090823A.M
Quant Title : V5 Method 8260D
QLast Update : Mon Oct 30 11:37:50 2023
Response via : Initial Calibration



This File:	L:\VOA\Excel Reports\2023\v8111011
Analysis Group:	8260/8021/624
Field ID:	BRMW2-60.5-70.5-110723 1.8E+07
Sample:	67798-04 5mL Dow Salvage Yard
Misc:	5 CRE
Import File Name	v8 111023 g DoD
TestGroupID	V8260DoD_A
Aqueous or Soil? (A or S)	A
Solid amount (g)	
Methanol volume (mL)	
Percent Solid (%)	
Soil Prep Date	
Weight:	
Volume:	
Lab#:	67798-004
AnalysisDate:	11/10/2023
AnalysisTime:	16:50
Dilution:	1
AnalyzedBy:	LMM v8111011.D
QC_Code:	
Prep#:	

Reviewer Checks:

- Quant Report: Reviewed, Analyst Initials & Date
- Chromatogram Checked, Major peaks identified
- Results consistent w/ other attached analyses
- Reanalysis reason noted
- Substitute dilution data checked
- Correct dilution and reason clear or noted
- Flags checked (Expiration, F+, Over Cal, Surr, Aspen, QC)
- Other QC failures or issues noted in Aspen
- Correct data file and/or date/time in Aspen

Notes:

Reviewer Initials & Date: 11/13/23

#	Surrogate Standards	Import Value (as ug/L)	Recovery	Flag	QC Limits	Surrogate True Values
32	SS 1,2-dichloroethane-D4	9.13	**91%**		60-140	10
36	SS dibromofluoromethane	9.34	**93%**		78-114	10
51	SS toluene-D8	9.96	**100%**		88-110	10
67	SS 4-bromofluorobenzene	10.00	**100%**		86-115	10
41	SS a,a,a-trifluorotoluene	0.00	**0%**		70-130*	20

	AnalyteName	Concentration (ug/L)		AnalyteName	Concentration (ug/L)
2	dichlorodifluoromethane	0	56	1,3-dichloropropane	0
3	chloromethane	0	57	dibromochloromethane	0
4	vinyl chloride	0	58	1,2-dibromoethane (EDB)	0
5	bromomethane	0	59	chlorobenzene	0
6	chloroethane	0	60	1,1,1,2-tetrachloroethane	0
7	trichlorofluoromethane	0	61	ethylbenzene	0
8	diethylether	0	62	m&p-xylenes	0
9	acetone	3.202636546	63	o-xylene	0
11	1,1-dichloroethene	0	64	styrene	0
13	t-butanol (TBA)	0	65	bromoform	0
15	methylene chloride	0	66	isopropylbenzene	0
16	carbon disulfide	0	69	bromobenzene	0
18	methyl-t-butyl ether (MTBE)	0	70	1,1,2,2-tetrachloroethane	0
19	trans-1,2-dichloroethene	0	71	1,2,3-trichloropropane	0
20	isopropyl ether (DIPE)	0	72	n-propylbenzene	0
22	1,1-dichloroethane	0	73	2-chlorotoluene	0
23	2-butanone (MEK)	0	74	4-chlorotoluene	0
24	ethyl-t-butyl ether (ETBE)	0	75	1,3,5-trimethylbenzene	0.062354398
25	2,2-dichloropropane	0	76	tert-butylbenzene	0
26	cis-1,2-dichloroethene	0	77	1,2,4-trimethylbenzene	0.066986201
27	bromochloromethane	0	79	sec-butylbenzene	0
28	chloroform	0.453050002	80	1,3-dichlorobenzene	0
29	tetrahydrofuran (THF)	0	81	4-isopropyltoluene	0
30	1,1,1-trichloroethane	0	82	1,4-dichlorobenzene	0
33	carbon tetrachloride	0	84	1,2-dichlorobenzene	0
34	1,1-dichloropropene	0	85	n-butylbenzene	0
35	benzene	0.006538634	86	1,2-dibromo-3-chloropropane (DBCP)	0
37	1,2-dichloroethane	0	88	1,2,4-trichlorobenzene	0
38	t-amyl-methyl ether (TAME)	0	89	hexachlorobutadiene	0
39	trichloroethene	0	90	naphthalene	0
42	1,2-dichloropropane	0	91	1,2,3-trichlorobenzene	0
43	dibromomethane	0	87	1,3,5-trichlorobenzene	0
44	bromodichloromethane	0	12	1,1,2-trichloro-1,2,2-trifluoroethane	0
45	1,4-dioxane	0	14	methyl acetate	0
47	4-methyl-2-pentanone (MIBK)	0	21	vinyl acetate	0
48	2-hexanone	0	31	cyclohexane	0
49	cis-1,3-dichloropropene	0	40	methylcyclohexane	0
50	toluene	**6.318152398**	10	acrolein	0
52	trans-1,3-dichloropropene	0	17	acrylonitrile	0
53	1,1,2-trichloroethane	0	46	2-chloroethylvinylether (2-CEVE)	0
55	tetrachloroethene	0		Total Xylenes	0

Quantitation Report (QT Reviewed)

Data Path : X:\V8\2023\Nov23\111023\
Data File : v8111011.D
Acq On : 10 Nov 2023 04:50 pm
Operator : lmm
Sample : 67798-04 5mL
Misc : 5
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Nov 10 18:16:52 2023
Quant Method : X:\V8\methods\V88260090823A.M
Quant Title : V5 Method 8260D
QLast Update : Mon Oct 30 11:37:50 2023
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) IS fluorobenzene	8.001	96	129462	10.00	ug/L	0.00
54) IS chlorobenzene-D5	11.216	119	28852	10.00	ug/L	0.00
68) IS 1,4-dichlorobenzene-D4	13.636	152	42633	10.00	ug/L	0.00
92) IS 1,4-Dioxane-d8	8.827	96	949	10.00	ug/L	0.00
System Monitoring Compounds						
32) SS 1,2-dichloroethane-D4	7.646	65	33795	9.13	ug/L	0.00
Spiked Amount 10.000	Range 60 - 140		Recovery = 91.30%			
36) SS dibromofluoromethane	7.076	111	29638	9.34	ug/L	0.00
Spiked Amount 10.000	Range 78 - 114		Recovery = 93.40%			
41) SS a,a,a-trifluorotoluene	0.000	146	0	0.00	ug/L	
Spiked Amount 20.000	Range 70 - 130		Recovery = 0.00%#			
51) SS toluene-D8	9.677	98	304237	9.96	ug/L	0.00
Spiked Amount 10.000	Range 88 - 110		Recovery = 99.60%			
67) SS 4-bromofluorobenzene	12.433	174	32979	10.00	ug/L	0.00
Spiked Amount 10.000	Range 86 - 115		Recovery = 100.00%			
83) NA 1,2-dichlorobenzene-D4	13.636	152	42633	0.00	ug/L	0.00
Spiked Amount 25.000	Range 15 - 25		Recovery = 0.00%#			
Target Compounds						Qvalue
9) acetone	3.882	43	3521	3.203	ug/L #	1
28) chloroform	6.821	83	2044	0.453	ug/L	79
50) toluene	9.760	92	98117	6.318	ug/L	89
93] 1,4-dioxane SIM	8.899	88	86	0.485	ug/L #	100

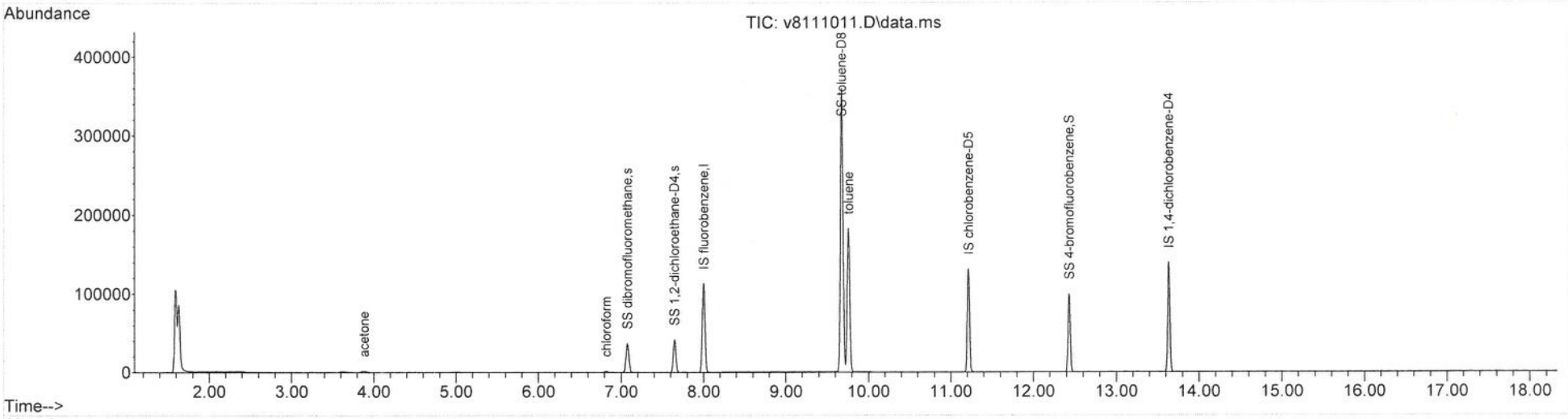
(#) = qualifier out of range (m) = manual integration (+) = signals summed

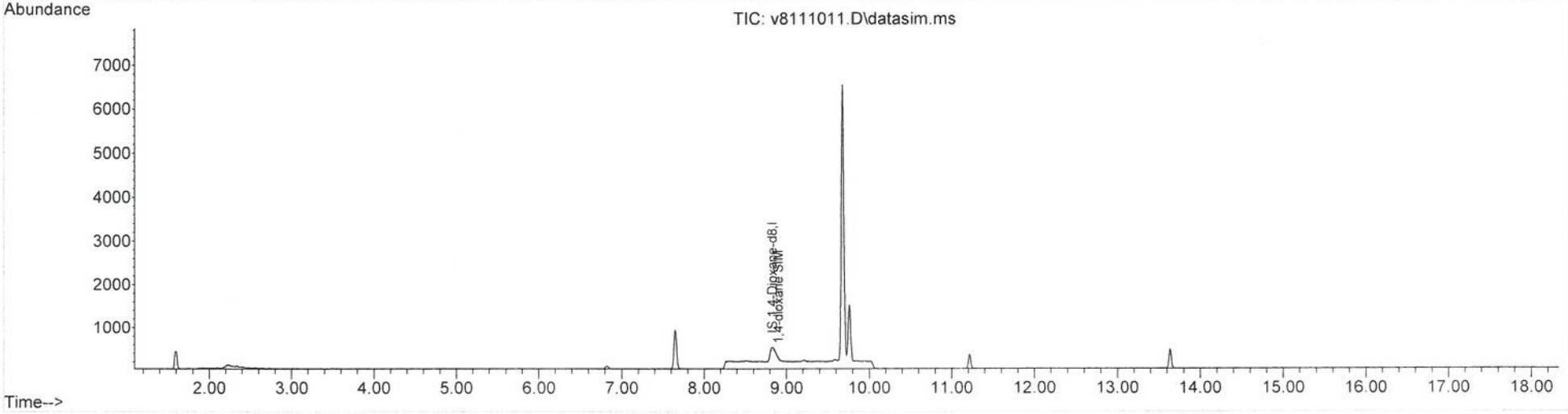
NOV 10 2023

Quantitation Report (QT Reviewed)

Data Path : X:\V8\2023\Nov23\111023\
Data File : v8111011.D
Acq On : 10 Nov 2023 04:50 pm
Operator : lmm
Sample : 67798-04 5mL
Misc : 5
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Nov 10 18:16:52 2023
Quant Method : X:\V8\methods\V88260090823A.M
Quant Title : V5 Method 8260D
QLast Update : Mon Oct 30 11:37:50 2023
Response via : Initial Calibration





This File:	L:\VOA\Excel Reports\2023\v8111012
Analysis Group:	8260/8021/624
Field ID:	SY-OBMW15-110723 1.8E+07
Sample:	67798-05 5mL Dow Salvage Yard
Misc:	5 CRE
Import File Name	v8 111023 g DoD
TestGroupID	V8260DoD_A
Aqueous or Soil? (A or S)	A
Solid amount (g)	
Methanol volume (mL)	
Percent Solid (%)	
Soil Prep Date	
Weight:	
Volume:	
Lab#:	67798-005
AnalysisDate:	11/10/2023
AnalysisTime:	17:15
Dilution:	1
AnalyzedBy:	LMM v8111012.D
QC_Code:	
Prep#:	

Reviewer Checks:

- Quant Report: Reviewed, Analyst Initials & Date
- Chromatogram Checked, Major peaks identified
- Results consistent w/ other attached analyses
- Reanalysis reason noted
- Substitute dilution data checked
- Correct dilution and reason clear or noted
- Flags checked (Expiration, F+, Over Cal, Surr, Aspen, QC)
- Other QC failures or issues noted in Aspen
- Correct data file and/or date/time in Aspen

Notes:

Reviewer Initials & Date: 11/13/23

#	Surrogate Standards	Import Value (as ug/L)	Recovery	Flag	QC Limits	Surrogate True Values
32	SS 1,2-dichloroethane-D4	9.23	92%		60-140	10
36	SS dibromofluoromethane	9.37	94%		78-114	10
51	SS toluene-D8	9.86	99%		88-110	10
67	SS 4-bromofluorobenzene	9.58	96%		86-115	10
41	SS a,a,a-trifluorotoluene	0.00	0%		70-130*	20

	AnalyteName	Concentration (ug/L)		AnalyteName	Concentration (ug/L)
2	dichlorodifluoromethane	0	56	1,3-dichloropropane	0
3	chloromethane	0	57	dibromochloromethane	0
4	vinyl chloride	0	58	1,2-dibromoethane (EDB)	0
5	bromomethane	0	59	chlorobenzene	0
6	chloroethane	0	60	1,1,1,2-tetrachloroethane	0
7	trichlorofluoromethane	0	61	ethylbenzene	-0.107302792
8	diethylether	0	62	m&p-xylenes	0
9	acetone	0.812397827	63	o-xylene	0
11	1,1-dichloroethene	0	64	styrene	0
13	t-butanol (TBA)	0	65	bromoform	0
15	methylene chloride	0	66	isopropylbenzene	0
16	carbon disulfide	0	69	bromobenzene	0
18	methyl-t-butyl ether (MTBE)	0	70	1,1,2,2-tetrachloroethane	0
19	trans-1,2-dichloroethene	0	71	1,2,3-trichloropropane	0
20	isopropyl ether (DIPE)	0	72	n-propylbenzene	0
22	1,1-dichloroethane	0	73	2-chlorotoluene	0
23	2-butanone (MEK)	0	74	4-chlorotoluene	0
24	ethyl-t-butyl ether (ETBE)	0	75	1,3,5-trimethylbenzene	0.066776402
25	2,2-dichloropropane	0	76	tert-butylbenzene	0
26	cis-1,2-dichloroethene	0	77	1,2,4-trimethylbenzene	0.066594686
27	bromochloromethane	0	79	sec-butylbenzene	0
28	chloroform	0	80	1,3-dichlorobenzene	0
29	tetrahydrofuran (THF)	0.125114256	81	4-isopropyltoluene	0
30	1,1,1-trichloroethane	0	82	1,4-dichlorobenzene	0
33	carbon tetrachloride	0	84	1,2-dichlorobenzene	0
34	1,1-dichloropropene	0	85	n-butylbenzene	0
35	benzene	0	86	1,2-dibromo-3-chloropropane (DBCP)	0
37	1,2-dichloroethane	0	88	1,2,4-trichlorobenzene	0
38	t-amyl-methyl ether (TAME)	0	89	hexachlorobutadiene	0
39	trichloroethene	0	90	naphthalene	0
42	1,2-dichloropropane	0	91	1,2,3-trichlorobenzene	0
43	dibromomethane	0	87	1,3,5-trichlorobenzene	0
44	bromodichloromethane	0	12	1,1,2-trichloro-1,2,2-trifluoroethane	0
45	1,4-dioxane	0	14	methyl acetate	0
47	4-methyl-2-pentanone (MIBK)	0	21	vinyl acetate	0
48	2-hexanone	0	31	cyclohexane	0
49	cis-1,3-dichloropropene	0	40	methylcyclohexane	0
50	toluene	-0.139730931	10	acrolein	0
52	trans-1,3-dichloropropene	0	17	acrylonitrile	0
53	1,1,2-trichloroethane	0	46	2-chloroethylvinylether (2-CEVE)	0
55	tetrachloroethene	0		Total Xylenes	0

Quantitation Report (QT Reviewed)

Data Path : X:\V8\2023\Nov23\111023\
Data File : v8111012.D
Acq On : 10 Nov 2023 05:15 pm
Operator : lmm
Sample : 67798-05 5mL
Misc : 5
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Nov 10 18:16:56 2023
Quant Method : X:\V8\methods\V88260090823A.M
Quant Title : V5 Method 8260D
QLast Update : Mon Oct 30 11:37:50 2023
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) IS fluorobenzene	8.001	96	133317	10.00	ug/L	0.00
54) IS chlorobenzene-D5	11.216	119	30012	10.00	ug/L	0.00
68) IS 1,4-dichlorobenzene-D4	13.636	152	45292	10.00	ug/L	0.00
92) IS 1,4-Dioxane-d8	8.826	96	1016	10.00	ug/L	# 0.00
System Monitoring Compounds						
32) SS 1,2-dichloroethane-D4	7.650	65	35198	9.23	ug/L	0.00
Spiked Amount 10.000	Range 60 - 140		Recovery = 92.30%			
36) SS dibromofluoromethane	7.076	111	30617	9.37	ug/L	0.00
Spiked Amount 10.000	Range 78 - 114		Recovery = 93.70%			
41) SS a,a,a-trifluorotoluene	0.000	146	0	0.00	ug/L	
Spiked Amount 20.000	Range 70 - 130		Recovery = 0.00%#			
51) SS toluene-D8	9.677	98	309967	9.86	ug/L	0.00
Spiked Amount 10.000	Range 88 - 110		Recovery = 98.60%			
67) SS 4-bromofluorobenzene	12.433	174	32862	9.58	ug/L	0.00
Spiked Amount 10.000	Range 86 - 115		Recovery = 95.80%			
83) NA 1,2-dichlorobenzene-D4	13.636	152	45292	0.00	ug/L	0.00
Spiked Amount 25.000	Range 15 - 25		Recovery = 0.00%#			
Target Compounds						Qvalue
9) acetone	3.868	43	1707	0.812	ug/L #	49
93] 1,4-dioxane SIM	8.894	88	102	0.550	ug/L #	100

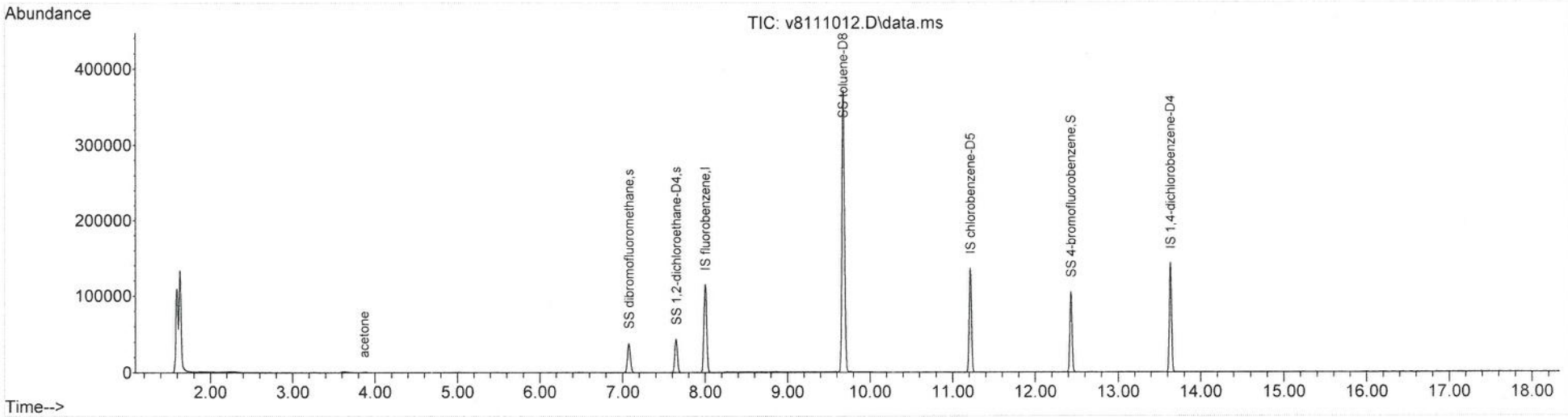
(#) = qualifier out of range (m) = manual integration (+) = signals summed

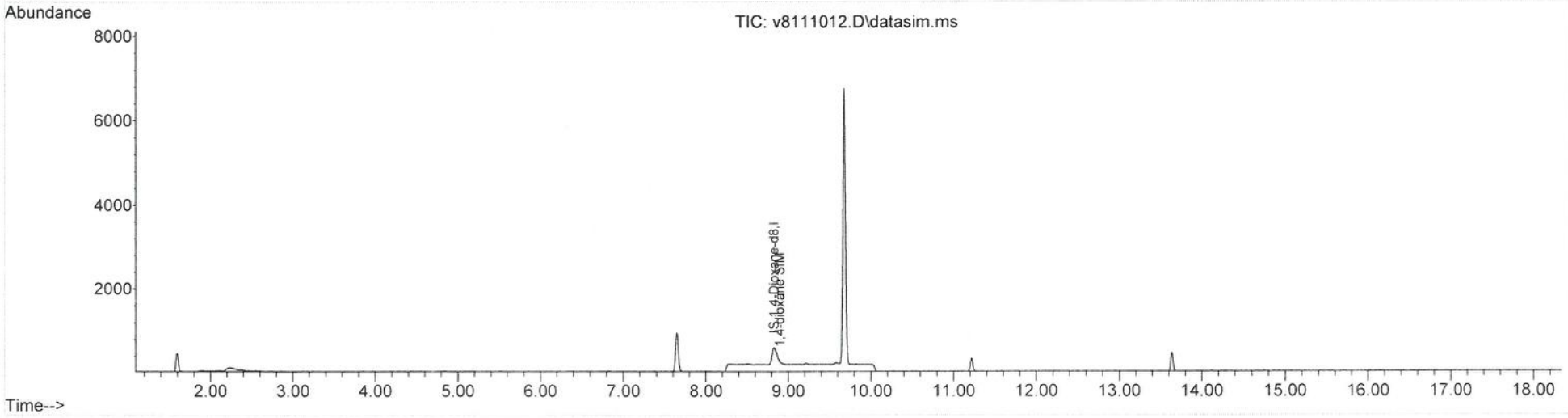
NOV 10 2023

Quantitation Report (QT Reviewed)

Data Path : X:\V8\2023\Nov23\111023\
Data File : v8111012.D
Acq On : 10 Nov 2023 05:15 pm
Operator : lmm
Sample : 67798-05 5mL
Misc : 5
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Nov 10 18:16:56 2023
Quant Method : X:\V8\methods\V88260090823A.M
Quant Title : V5 Method 8260D
QLast Update : Mon Oct 30 11:37:50 2023
Response via : Initial Calibration





This File:	L:\VOA\Excel Reports\2023\v8111013
Analysis Group:	8260/8021/624
Field ID:	SY-OBMW5-110723 1.8E+07
Sample:	67798-06 5mL Dow Salvage Yard
Misc:	5 CRE
Import File Name	v8 111023 g DoD
TestGroupID	V8260DoD_A
Aqueous or Soil? (A or S)	A
Solid amount (g)	
Methanol volume (mL)	
Percent Solid (%)	
Soil Prep Date	
Weight:	
Volume:	
Lab#:	67798-006
AnalysisDate:	11/10/2023
AnalysisTime:	17:41
Dilution:	1
AnalyzedBy:	LMM v8111013.D
QC_Code:	
Prep#:	

Reviewer Checks:

- Quant Report: Reviewed, Analyst Initials & Date
- Chromatogram Checked, Major peaks identified
- Results consistent w/ other attached analyses
- Reanalysis reason noted
- Substitute dilution data checked
- Correct dilution and reason clear or noted
- Flags checked (Expiration, F+, Over Cal, Surr, Aspen, QC)
- Other QC failures or issues noted in Aspen
- Correct data file and/or date/time in Aspen

Notes:

Reviewer Initials & Date: 11/13/23

#	Surrogate Standards	Import Value (as ug/L)	Recovery	Flag	QC Limits	Surrogate True Values
32	SS 1,2-dichloroethane-D4	9.38	94%		60-140	10
36	SS dibromofluoromethane	9.62	96%		78-114	10
51	SS toluene-D8	9.89	99%		88-110	10
67	SS 4-bromofluorobenzene	9.57	96%		86-115	10
41	SS a,a,a-trifluorotoluene	0.00	0%		70-130*	20

	AnalyteName	Concentration (ug/L)		AnalyteName	Concentration (ug/L)
2	dichlorodifluoromethane	0	56	1,3-dichloropropane	0
3	chloromethane	0	57	dibromochloromethane	0
4	vinyl chloride	0	58	1,2-dibromoethane (EDB)	0
5	bromomethane	0	59	chlorobenzene	0
6	chloroethane	0	60	1,1,1,2-tetrachloroethane	0
7	trichlorofluoromethane	0	61	ethylbenzene	0
8	diethylether	0	62	m&p-xylenes	0
9	acetone	0.47228078	63	o-xylene	0
11	1,1-dichloroethene	0	64	styrene	0
13	t-butanol (TBA)	0	65	bromoform	0
15	methylene chloride	0	66	isopropylbenzene	0
16	carbon disulfide	0.390619848	69	bromobenzene	0
18	methyl-t-butyl ether (MTBE)	0	70	1,1,2,2-tetrachloroethane	0
19	trans-1,2-dichloroethene	0	71	1,2,3-trichloropropane	0
20	isopropyl ether (DIPE)	0	72	n-propylbenzene	0
22	1,1-dichloroethane	0	73	2-chlorotoluene	0
23	2-butanone (MEK)	0	74	4-chlorotoluene	0
24	ethyl-t-butyl ether (ETBE)	0	75	1,3,5-trimethylbenzene	0
25	2,2-dichloropropane	0	76	tert-butylbenzene	0
26	cis-1,2-dichloroethene	0	77	1,2,4-trimethylbenzene	0.067281784
27	bromochloromethane	0	79	sec-butylbenzene	0
28	chloroform	0	80	1,3-dichlorobenzene	0
29	tetrahydrofuran (THF)	0	81	4-isopropyltoluene	0
30	1,1,1-trichloroethane	0	82	1,4-dichlorobenzene	0
33	carbon tetrachloride	0	84	1,2-dichlorobenzene	0
34	1,1-dichloropropene	0	85	n-butylbenzene	0
35	benzene	0	86	1,2-dibromo-3-chloropropane (DBCP)	0
37	1,2-dichloroethane	0	88	1,2,4-trichlorobenzene	0
38	t-amyl-methyl ether (TAME)	0	89	hexachlorobutadiene	0
39	trichloroethene	0	90	naphthalene	0
42	1,2-dichloropropane	0	91	1,2,3-trichlorobenzene	0
43	dibromomethane	0	87	1,3,5-trichlorobenzene	0
44	bromodichloromethane	0	12	1,1,2-trichloro-1,2,2-trifluoroethane	0
45	1,4-dioxane	0	14	methyl acetate	0
47	4-methyl-2-pentanone (MIBK)	0	21	vinyl acetate	0
48	2-hexanone	0	31	cyclohexane	0
49	cis-1,3-dichloropropene	0	40	methylcyclohexane	0
50	toluene	-0.14689113	10	acrolein	0
52	trans-1,3-dichloropropene	0	17	acrylonitrile	0
53	1,1,2-trichloroethane	0	46	2-chloroethylvinylether (2-CEVE)	0
55	tetrachloroethene	0		Total Xylenes	0

Quantitation Report (QT Reviewed)

Data Path : X:\V8\2023\Nov23\111023\
Data File : v8111013.D
Acq On : 10 Nov 2023 05:41 pm
Operator : lmm
Sample : 67798-06 5mL
Misc : 5
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Nov 10 18:17:00 2023
Quant Method : X:\V8\methods\V88260090823A.M
Quant Title : V5 Method 8260D
QLast Update : Mon Oct 30 11:37:50 2023
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) IS fluorobenzene	8.001	96	129323	10.00	ug/L	0.00
54) IS chlorobenzene-D5	11.217	119	28696	10.00	ug/L	0.00
68) IS 1,4-dichlorobenzene-D4	13.637	152	43321	10.00	ug/L	0.00
92) IS 1,4-Dioxane-d8	8.821	96	1071	10.00	ug/L	0.00
System Monitoring Compounds						
32) SS 1,2-dichloroethane-D4	7.646	65	34678	9.38	ug/L	0.00
Spiked Amount 10.000	Range 60 - 140		Recovery = 93.80%			
36) SS dibromofluoromethane	7.076	111	30494	9.62	ug/L	0.00
Spiked Amount 10.000	Range 78 - 114		Recovery = 96.20%			
41) SS a,a,a-trifluorotoluene	0.000	146	0	0.00	ug/L	
Spiked Amount 20.000	Range 70 - 130		Recovery = 0.00%#			
51) SS toluene-D8	9.677	98	301786	9.89	ug/L	0.00
Spiked Amount 10.000	Range 88 - 110		Recovery = 98.90%			
67) SS 4-bromofluorobenzene	12.434	174	31407	9.57	ug/L	0.00
Spiked Amount 10.000	Range 86 - 115		Recovery = 95.70%			
83) NA 1,2-dichlorobenzene-D4	13.637	152	43321	0.00	ug/L	0.00
Spiked Amount 25.000	Range 15 - 25		Recovery = 0.00%#			
Target Compounds						Qvalue
9) acetone	3.882	43	1391m	0.472	ug/L	
16) carbon disulfide	4.798	76	581	0.391	ug/L #	78
93] 1,4-dioxane SIM	8.889	88	68	0.305	ug/L #	100

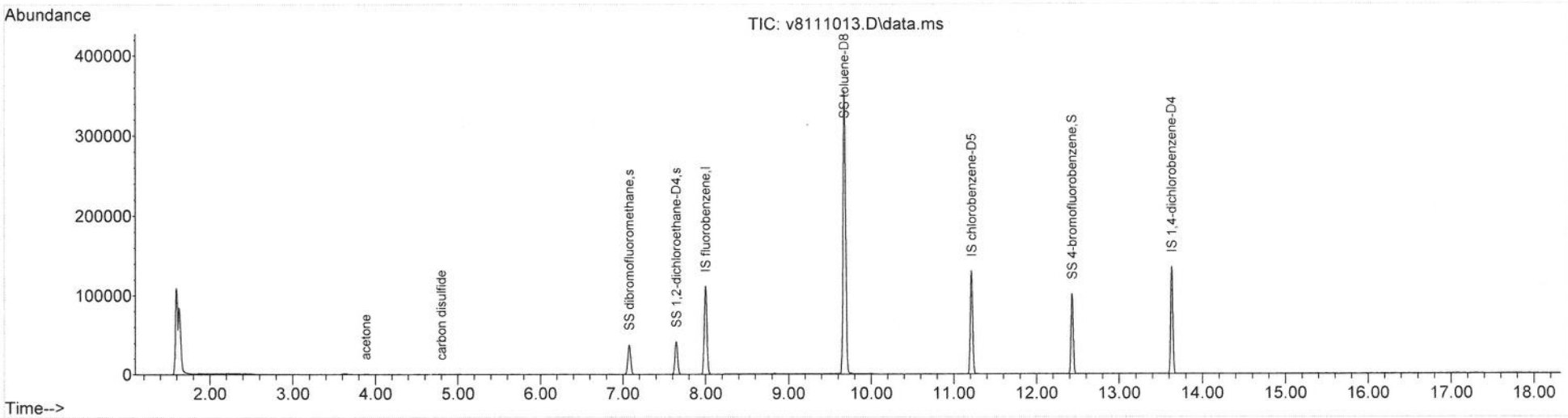
(#) = qualifier out of range (m) = manual integration (+) = signals summed

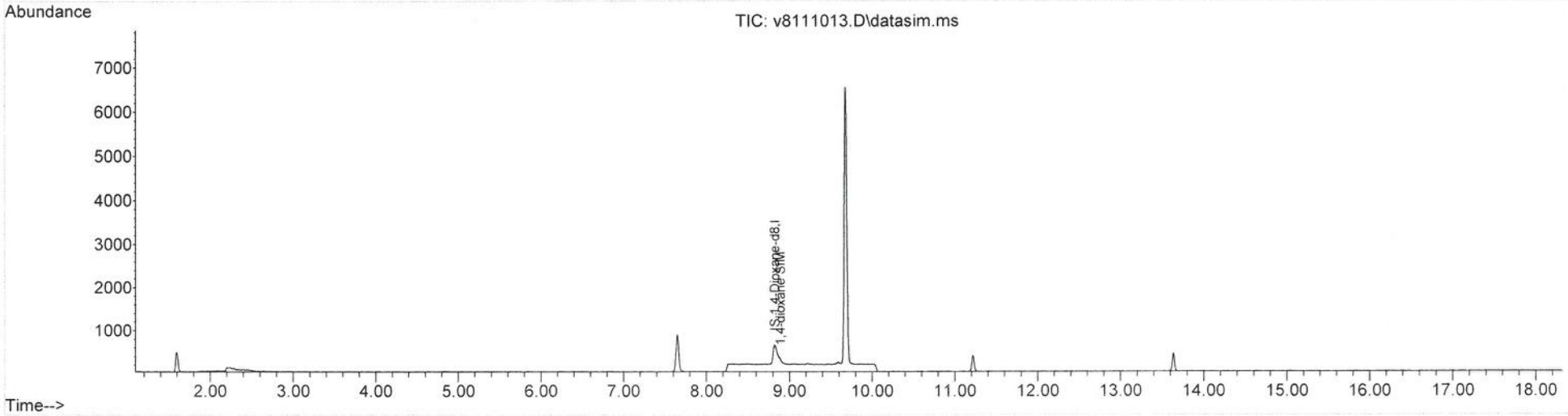
NOV 10 2023

Quantitation Report (QT Reviewed)

Data Path : X:\V8\2023\Nov23\111023\
Data File : v8111013.D
Acq On : 10 Nov 2023 05:41 pm
Operator : lmm
Sample : 67798-06 5mL
Misc : 5
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Nov 10 18:17:00 2023
Quant Method : X:\V8\methods\V88260090823A.M
Quant Title : V5 Method 8260D
QLast Update : Mon Oct 30 11:37:50 2023
Response via : Initial Calibration





This File:	L:\VOA\Excel Reports\2023\v8111014
Analysis Group:	8260/8021/624
Field ID:	BRMW2-80.5-95.5-110723 1.8E+07
Sample:	67798-07 5mL Dow Salvage Yard
Misc:	5 CRE
Import File Name	v8 111023 g DoD
TestGroupID	V8260DoD_A
Aqueous or Soil? (A or S)	A
Solid amount (g)	
Methanol volume (mL)	
Percent Solid (%)	
Soil Prep Date	
Weight:	
Volume:	
Lab#:	67798-007
AnalysisDate:	11/10/2023
AnalysisTime:	18:06
Dilution:	1
AnalyzedBy:	LMM v8111014.D
QC_Code:	
Prep#:	

Reviewer Checks:

- Quant Report: Reviewed, Analyst Initials & Date
- Chromatogram Checked, Major peaks identified
- Results consistent w/ other attached analyses
- Reanalysis reason noted
- Substitute dilution data checked
- Correct dilution and reason clear or noted
- Flags checked (Expiration, F+, Over Cal, Surr, Aspen, QC)
- Other QC failures or issues noted in Aspen
- Correct data file and/or date/time in Aspen

Notes:

Reviewer Initials & Date: 11/13/23

#	Surrogate Standards	Import Value (as ug/L)	Recovery	Flag	QC Limits	Surrogate True Values
32	SS 1,2-dichloroethane-D4	9.50	95%		60-140	10
36	SS dibromofluoromethane	9.33	93%		78-114	10
51	SS toluene-D8	9.98	100%		88-110	10
67	SS 4-bromofluorobenzene	9.59	96%		86-115	10
41	SS a,a,a-trifluorotoluene	0.00	0%		70-130*	20

	AnalyteName	Concentration (ug/L)		AnalyteName	Concentration (ug/L)
2	dichlorodifluoromethane	0	56	1,3-dichloropropane	0
3	chloromethane	0	57	dibromochloromethane	0
4	vinyl chloride	0	58	1,2-dibromoethane (EDB)	0
5	bromomethane	0	59	chlorobenzene	0
6	chloroethane	0	60	1,1,1,2-tetrachloroethane	0
7	trichlorofluoromethane	0	61	ethylbenzene	-0.107417568
8	diethylether	0	62	m&p-xylenes	0
9	acetone	1.036135615	63	o-xylene	0
11	1,1-dichloroethene	0	64	styrene	0
13	t-butanol (TBA)	0	65	bromoform	0
15	methylene chloride	0	66	isopropylbenzene	0
16	carbon disulfide	0	69	bromobenzene	0
18	methyl-t-butyl ether (MTBE)	0	70	1,1,2,2-tetrachloroethane	0
19	trans-1,2-dichloroethene	0	71	1,2,3-trichloropropane	0.183633744
20	isopropyl ether (DIPE)	0	72	n-propylbenzene	0
22	1,1-dichloroethane	0	73	2-chlorotoluene	0
23	2-butanone (MEK)	0	74	4-chlorotoluene	0
24	ethyl-t-butyl ether (ETBE)	0	75	1,3,5-trimethylbenzene	0
25	2,2-dichloropropane	0	76	tert-butylbenzene	0
26	cis-1,2-dichloroethene	0	77	1,2,4-trimethylbenzene	0.062971795
27	bromochloromethane	0	79	sec-butylbenzene	0
28	chloroform	0	80	1,3-dichlorobenzene	0
29	tetrahydrofuran (THF)	0	81	4-isopropyltoluene	0
30	1,1,1-trichloroethane	0	82	1,4-dichlorobenzene	0
33	carbon tetrachloride	0	84	1,2-dichlorobenzene	0
34	1,1-dichloropropene	0	85	n-butylbenzene	0
35	benzene	0	86	1,2-dibromo-3-chloropropane (DBCP)	0
37	1,2-dichloroethane	0	88	1,2,4-trichlorobenzene	0
38	t-amyl-methyl ether (TAME)	0	89	hexachlorobutadiene	0
39	trichloroethene	0	90	naphthalene	0
42	1,2-dichloropropane	0	91	1,2,3-trichlorobenzene	0
43	dibromomethane	0	87	1,3,5-trichlorobenzene	0
44	bromodichloromethane	0	12	1,1,2-trichloro-1,2,2-trifluoroethane	0
45	1,4-dioxane	0	14	methyl acetate	0
47	4-methyl-2-pentanone (MIBK)	0	21	vinyl acetate	0
48	2-hexanone	0	31	cyclohexane	0
49	cis-1,3-dichloropropene	0	40	methylcyclohexane	0
50	toluene	1.759270525	10	acrolein	0
52	trans-1,3-dichloropropene	0	17	acrylonitrile	0
53	1,1,2-trichloroethane	0	46	2-chloroethylvinylether (2-CEVE)	0
55	tetrachloroethene	0		Total Xylenes	0

Quantitation Report (QT Reviewed)

Data Path : X:\V8\2023\Nov23\111023\
Data File : v8111014.D
Acq On : 10 Nov 2023 06:06 pm
Operator : lmm
Sample : 67798-07 5mL
Misc : 5
ALS Vial : 14 Sample Multiplier: 1

11/13/23 @ 10:54
WillieS

Quant Time: Nov 13 10:37:09 2023
Quant Method : X:\V8\methods\V88260090823A.M
Quant Title : V5 Method 8260D
QLast Update : Mon Oct 30 11:37:50 2023
Response via : Initial Calibration

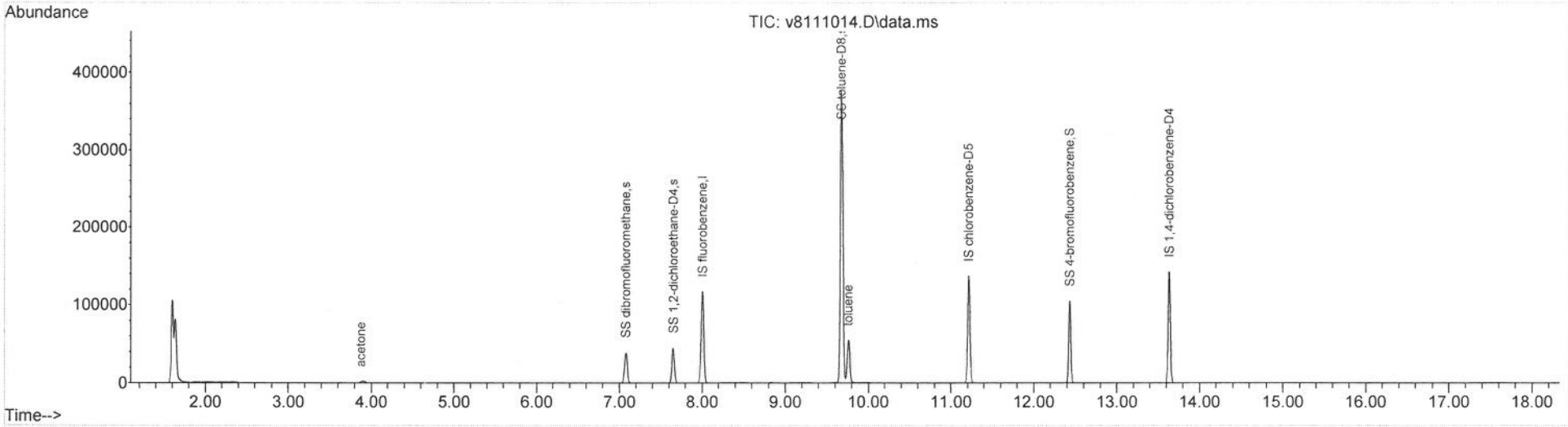
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) IS fluorobenzene	8.006	96	133627	10.00	ug/L	0.00
54) IS chlorobenzene-D5	11.213	119	30135	10.00	ug/L	0.00
68) IS 1,4-dichlorobenzene-D4	13.637	152	45250	10.00	ug/L	0.00
92) IS 1,4-Dioxane-d8	8.829	96	1005	10.00	ug/L	0.00
System Monitoring Compounds						
32) SS 1,2-dichloroethane-D4	7.650	65	36310	9.50	ug/L	0.00
Spiked Amount 10.000	Range 60 - 140		Recovery = 95.00%			
36) SS dibromofluoromethane	7.076	111	30548	9.33	ug/L	0.00
Spiked Amount 10.000	Range 78 - 114		Recovery = 93.30%			
41) SS a,a,a-trifluorotoluene	0.000	146	0	0.00	ug/L	
Spiked Amount 20.000	Range 70 - 130		Recovery = 0.00%#			
51) SS toluene-D8	9.679	98	314538	9.98	ug/L	0.00
Spiked Amount 10.000	Range 88 - 110		Recovery = 99.80%			
67) SS 4-bromofluorobenzene	12.435	174	33051	9.59	ug/L	0.00
Spiked Amount 10.000	Range 86 - 115		Recovery = 95.90%			
83) NA 1,2-dichlorobenzene-D4	13.637	152	45250	0.00	ug/L	0.00
Spiked Amount 25.000	Range 15 - 25		Recovery = 0.00%#			
Target Compounds						Qvalue
9) acetone	3.873	43	1891	1.036	ug/L #	1
50) toluene	9.757	92	30009	1.759	ug/L #	85
93] 1,4-dioxane SIM	8.901	88	168	0.994	ug/L #	100

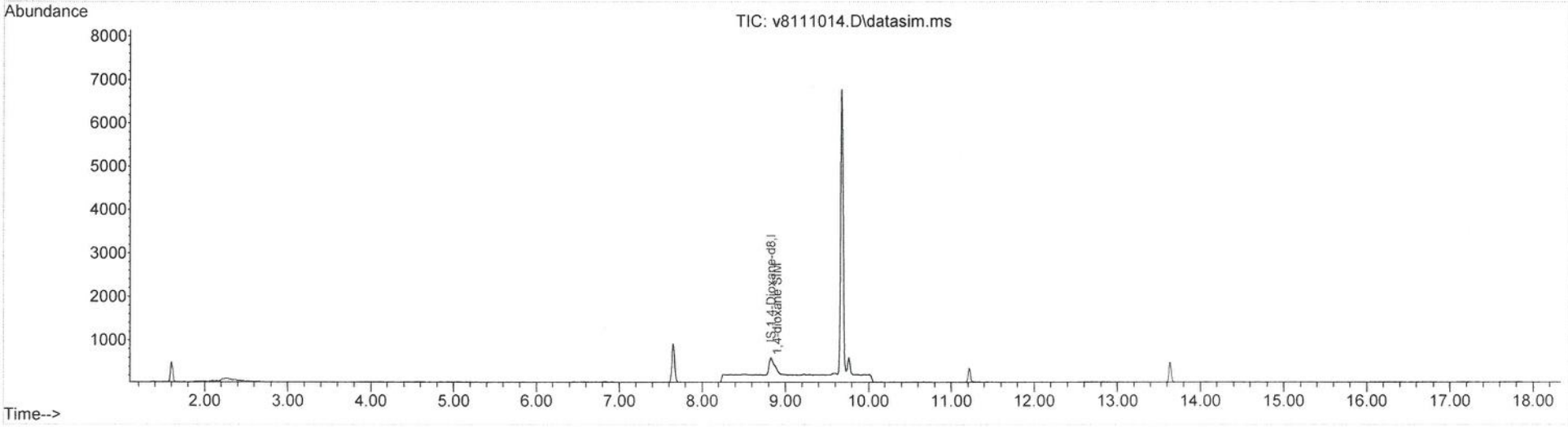
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : X:\V8\2023\Nov23\111023\
Data File : v8111014.D
Acq On : 10 Nov 2023 06:06 pm
Operator : lmm
Sample : 67798-07 5mL
Misc : 5
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Nov 13 10:37:09 2023
Quant Method : X:\V8\methods\V88260090823A.M
Quant Title : V5 Method 8260D
QLast Update : Mon Oct 30 11:37:50 2023
Response via : Initial Calibration





Quantitation Report (QT Reviewed)

Data Path : X:\V8\2023\Nov23\111023\
Data File : v8111025.D
Acq On : 10 Nov 2023 10:52 pm
Operator : lmm
Sample : 67798-07MS 5mL
Misc : 5
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Nov 13 10:33:01 2023
Quant Method : X:\V8\methods\V88260090823A.M
Quant Title : V5 Method 8260D
QLast Update : Mon Oct 30 11:37:50 2023
Response via : Initial Calibration

11/13/23 @ 10:55
WillieS

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) IS fluorobenzene	7.998	96	129622	10.00	ug/L		0.00
54) IS chlorobenzene-D5	11.214	119	29033	10.00	ug/L		0.00
68) IS 1,4-dichlorobenzene-D4	13.635	152	43720	10.00	ug/L		0.00
92) IS 1,4-Dioxane-d8	8.824	96	900	10.00	ug/L		0.00
System Monitoring Compounds							
32) SS 1,2-dichloroethane-D4	7.642	65	34291	9.25	ug/L		0.00
Spiked Amount 10.000	Range 60 - 140		Recovery = 92.50%				
36) SS dibromofluoromethane	7.073	111	30398	9.57	ug/L		0.00
Spiked Amount 10.000	Range 78 - 114		Recovery = 95.70%				
41) SS a,a,a-trifluorotoluene	0.000	146	0	0.00	ug/L		
Spiked Amount 20.000	Range 70 - 130		Recovery = 0.00%#				
51) SS toluene-D8	9.675	98	309390	10.12	ug/L		-0.01
Spiked Amount 10.000	Range 88 - 110		Recovery = 101.20%				
67) SS 4-bromofluorobenzene	12.432	174	33431	10.07	ug/L		0.00
Spiked Amount 10.000	Range 86 - 115		Recovery = 100.70%				
83) NA 1,2-dichlorobenzene-D4	13.635	152	43720	0.00	ug/L		0.00
Spiked Amount 25.000	Range 15 - 25		Recovery = 0.00%#				
Target Compounds							Qvalue
2) dichlorodifluoromethane	1.804	85	56993	22.685	ug/L		99
3) chloromethane	2.073	50	67810	26.056	ug/L		99
4) vinyl chloride	2.182	62	63970	20.356	ug/L		99
5) bromomethane	2.707	96	36112	23.100	ug/L		81
6) chloroethane	2.811	64	43063	29.675	ug/L		96
7) trichlorofluoromethane	3.149	101	84136	21.031	ug/L		92
8) diethylether	3.572	74	31293	26.009	ug/L	#	66
9) acetone	3.864	43	22917m	28.047	ug/L		BC
11) 1,1-dichloroethene	4.055	96	47104	23.154	ug/L		89
12) 1,1,2-trichloro-1,2,2-...	3.796	151	34389	21.048	ug/L		92
13) t-butanol (TBA)	4.197	59	38072	119.396	ug/L		97
14) methyl acetate	4.611	43	44956	20.918	ug/L	#	85
15) methylene chloride	4.826	84	52514	22.133	ug/L	#	75
16) carbon disulfide	4.794	76	147178	28.598	ug/L		96
18) methyl-t-butyl ether (...	5.058	73	157090	22.059	ug/L		90
19) trans-1,2-dichloroethene	5.254	96	52197	22.402	ug/L		86
20) isopropyl ether (DIPE)	5.728	87	45525	23.103	ug/L	#	31
21) vinyl acetate	5.878	86	12853	21.928	ug/L		15
22) 1,1-dichloroethane	5.851	63	93470	22.838	ug/L		98
23) 2-butanone (MEK)	6.402	43	30318	21.279	ug/L		97
24) ethyl-t-butyl ether (E...	6.261	87	69109	21.414	ug/L		82
25) 2,2-dichloropropane	6.571	77	77353	19.258	ug/L		96
26) cis-1,2-dichloroethene	6.626	96	59405	22.008	ug/L	#	85
27) bromochloromethane	7.009	128	25162	19.528	ug/L	#	77
28) chloroform	6.817	83	94459	20.928	ug/L		97
29) tetrahydrofuran (THF)	7.045	42	21342	22.895	ug/L		85
30) 1,1,1-trichloroethane	7.287	97	79675	19.206	ug/L		96
31) cyclohexane	7.300	84	82255	22.832	ug/L	#	75
33) carbon tetrachloride	7.574	117	63712	18.795	ug/L		100
34) 1,1-dichloropropene	7.465	75	71581	20.869	ug/L		97
35) benzene	7.766	78	221041	22.835	ug/L		100
37) 1,2-dichloroethane	7.747	62	66699	19.339	ug/L		99

Data Path : X:\V8\2023\Nov23\111023\
Data File : v8111025.D
Acq On : 10 Nov 2023 10:52 pm
Operator : lmm
Sample : 67798-07MS 5mL
Misc : 5
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Nov 13 10:33:01 2023
Quant Method : X:\V8\methods\V88260090823A.M
Quant Title : V5 Method 8260D
QLast Update : Mon Oct 30 11:37:50 2023
Response via : Initial Calibration

11/13/23 @ 10:55
WillieS

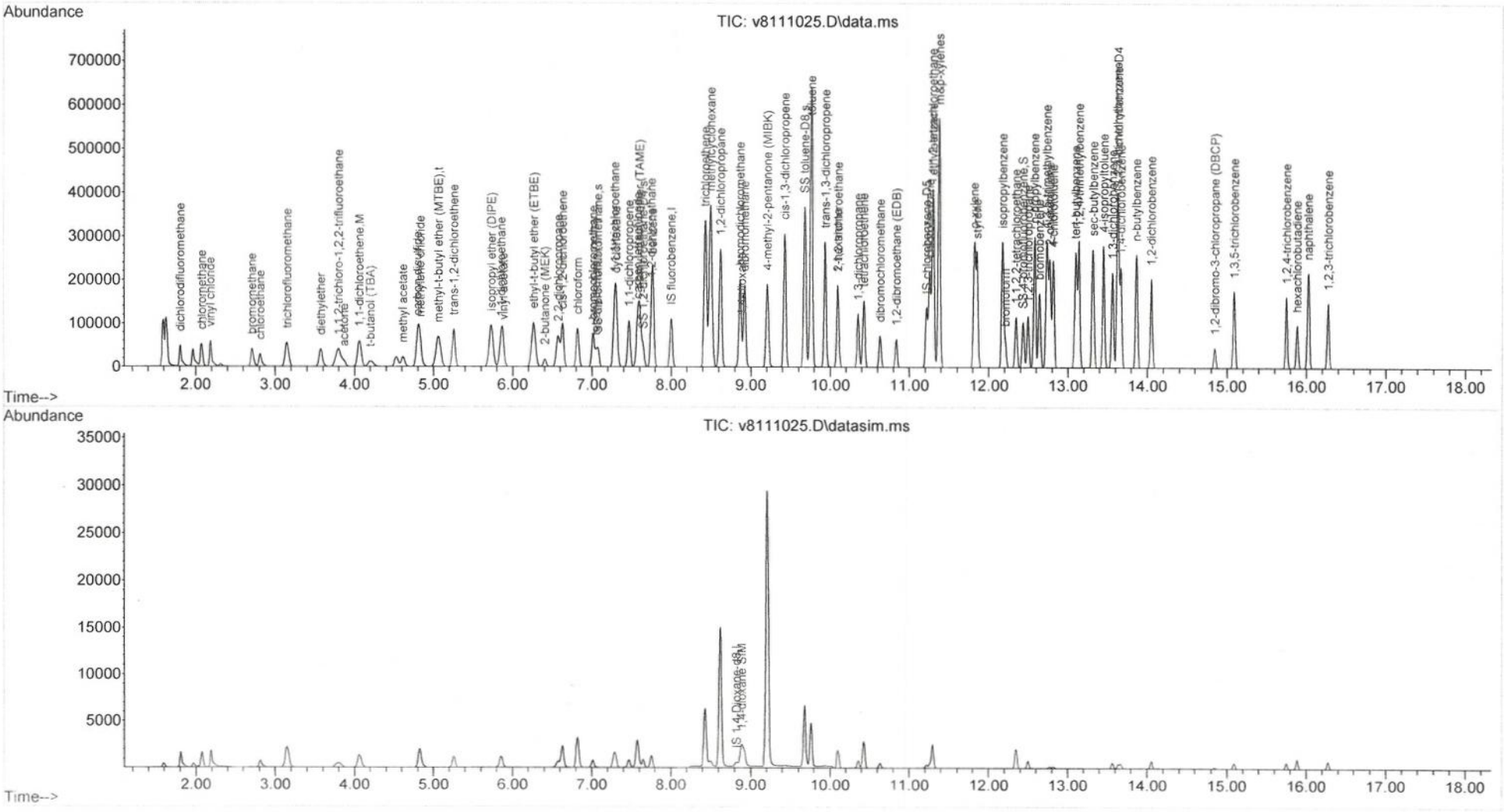
Compound	R.T.	QIon	Response	Conc Units		Dev(Min)	
38) t-amyl-methyl ether (T...	7.597	73	151087	20.861 ug/L		93	
39) trichloroethene	8.426	95	139695	21.704 ug/L		99	
40) methylcyclohexane	8.493	83	227329	23.029 ug/L		93	
42) 1,2-dichloropropane	8.618	63	133483	23.701 ug/L		99	
43) dibromomethane	8.920	93	81569	20.526 ug/L		94	
44) bromodichloromethane	8.863	83	159810	18.972 ug/L		98	
45) 1,4-dioxane	8.884	88	5394	56.012 ug/L	#	13	
47) 4-methyl-2-pentanone (...	9.207	58	69990	23.647 ug/L		98	
48) 2-hexanone	10.093	58	34339	25.605 ug/L		93	
49) cis-1,3-dichloropropene	9.425	75	210623	19.795 ug/L		100	
50) toluene	9.758	92	344410	22.553 ug/L		90	
52) trans-1,3-dichloropropene	9.935	75	187131	19.135 ug/L		94	
53) 1,1,2-trichloroethane	10.098	83	41331	18.204 ug/L		97	
55) tetrachloroethene	10.426	166	55479	21.206 ug/L		98	
56) 1,3-dichloropropane	10.353	76	87858	23.977 ug/L		95	
57) dibromochloromethane	10.631	129	45646	18.128 ug/L		99	
58) 1,2-dibromoethane (EDB)	10.836	107	51061	21.961 ug/L		98	
59) chlorobenzene	11.255	112	141037	21.862 ug/L		95	
60) 1,1,1,2-tetrachloroethane	11.292	131	45704	20.266 ug/L		100	
61) ethylbenzene	11.296	91	258381	24.015 ug/L		99	
62) m&p-xylenes	11.374	106	198607	49.033 ug/L		98	
63) o-xylene	11.816	106	94623	22.652 ug/L		99	
64) styrene	11.853	104	159402	22.095 ug/L		93	
65) bromoform	12.208	173	29681	17.458 ug/L		97	
66) isopropylbenzene	12.172	105	246579	23.556 ug/L		98	
69) bromobenzene	12.641	156	55626	20.446 ug/L	#	81	
70) 1,1,2,2-tetrachloroethane	12.345	83	72976	23.090 ug/L		94	
71) 1,2,3-trichloropropane	12.495	77	19664	24.379 ug/L		89	
72) n-propylbenzene	12.577	91	296012	24.049 ug/L		99	
73) 2-chlorotoluene	12.769	91	198048	23.486 ug/L		96	
74) 4-chlorotoluene	12.815	91	170869	23.492 ug/L		97	
75) 1,3,5-trimethylbenzene	12.732	105	205753	23.745 ug/L		99	
76) tert-butylbenzene	13.097	91	114726m	22.122 ug/L			PS
77) 1,2,4-trimethylbenzene	13.138	105	201539	22.504 ug/L		96	
78) 1,2,3-trimethylbenzene	13.626	105	203193	22.658 ug/L		97	
79) sec-butylbenzene	13.316	105	241363	23.170 ug/L		98	
80) 1,3-dichlorobenzene	13.562	146	107429	21.726 ug/L		97	
81) 4-isopropyltoluene	13.448	119	203098	22.446 ug/L		96	
82) 1,4-dichlorobenzene	13.667	146	108727	22.165 ug/L		94	
84) 1,2-dichlorobenzene	14.050	146	99976	21.172 ug/L		99	
85) n-butylbenzene	13.863	91	177740	22.383 ug/L		97	
86) 1,2-dibromo-3-chloropr...	14.843	75	14263	22.767 ug/L	#	64	
87) 1,3,5-trichlorobenzene	15.089	180	66909	19.992 ug/L		95	
88) 1,2,4-trichlorobenzene	15.745	180	60363	20.230 ug/L		95	
89) hexachlorobutadiene	15.882	225	23849	21.462 ug/L		91	
90) naphthalene	16.024	128	202713	21.671 ug/L		99	
91) 1,2,3-trichlorobenzene	16.274	180	55660	20.623 ug/L		95	
93] 1,4-dioxane SIM	8.887	88	5282	38.929 ug/L	#	100	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : X:\V8\2023\Nov23\111023\
Data File : v8111025.D
Acq On : 10 Nov 2023 10:52 pm
Operator : lmm
Sample : 67798-07MS 5mL
Misc : 5
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Nov 13 10:33:01 2023
Quant Method : X:\V8\methods\V88260090823A.M
Quant Title : V5 Method 8260D
QLast Update : Mon Oct 30 11:37:50 2023
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : X:\V8\2023\Nov23\111023\
Data File : v8111026.D
Acq On : 10 Nov 2023 11:17 pm
Operator : lmm
Sample : 67798-07MSD 5mL
Misc : 5
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Nov 13 10:33:05 2023
Quant Method : X:\V8\methods\V88260090823A.M
Quant Title : V5 Method 8260D
QLast Update : Mon Oct 30 11:37:50 2023
Response via : Initial Calibration

11/13/23 @ 10:55
WillieS

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) IS fluorobenzene	8.003	96	136235	10.00 ug/L	0.00
54) IS chlorobenzene-D5	11.215	119	31210	10.00 ug/L	0.00
68) IS 1,4-dichlorobenzene-D4	13.636	152	44933	10.00 ug/L	0.00
92) IS 1,4-Dioxane-d8	8.825	96	906	10.00 ug/L	0.00
System Monitoring Compounds					
32) SS 1,2-dichloroethane-D4	7.647	65	35102	9.01 ug/L	0.00
Spiked Amount 10.000	Range 60 - 140		Recovery = 90.10%		
36) SS dibromofluoromethane	7.077	111	32024	9.59 ug/L	0.00
Spiked Amount 10.000	Range 78 - 114		Recovery = 95.90%		
41) SS a,a,a-trifluorotoluene	0.000	146	0	0.00 ug/L	
Spiked Amount 20.000	Range 70 - 130		Recovery = 0.00%#		
51) SS toluene-D8	9.676	98	325895	10.14 ug/L	-0.01
Spiked Amount 10.000	Range 88 - 110		Recovery = 101.40%		
67) SS 4-bromofluorobenzene	12.432	174	34266	9.60 ug/L	0.00
Spiked Amount 10.000	Range 86 - 115		Recovery = 96.00%		
83) NA 1,2-dichlorobenzene-D4	13.636	152	44933	0.00 ug/L	0.00
Spiked Amount 25.000	Range 15 - 25		Recovery = 0.00%#		
Target Compounds					Qvalue
2) dichlorodifluoromethane	1.809	85	58765	22.255 ug/L	99
3) chloromethane	2.082	50	70378	25.727 ug/L	99
4) vinyl chloride	2.192	62	69196	20.950 ug/L	99
5) bromomethane	2.716	96	39879	24.255 ug/L	81
6) chloroethane	2.816	64	44695	29.304 ug/L	94
7) trichlorofluoromethane	3.153	101	90390	21.496 ug/L	95
8) diethylether	3.577	74	32870	25.993 ug/L #	60
9) acetone	3.869	43	23889	27.806 ug/L #	65
11) 1,1-dichloroethene	4.065	96	49335	23.074 ug/L #	85
12) 1,1,2-trichloro-1,2,2-...	3.796	151	35979	20.955 ug/L	92
13) t-butanol (TBA)	4.211	59	40948	122.181 ug/L	96
14) methyl acetate	4.616	43	48392	21.425 ug/L #	85
15) methylene chloride	4.826	84	54350	21.790 ug/L #	73
16) carbon disulfide	4.798	76	157313	29.069 ug/L	97
18) methyl-t-butyl ether (...	5.063	73	163567	21.854 ug/L	89
19) trans-1,2-dichloroethene	5.259	96	54965	22.445 ug/L	84
20) isopropyl ether (DIPE)	5.733	87	48780	23.553 ug/L #	31
21) vinyl acetate	5.879	86	13586	22.053 ug/L #	14
22) 1,1-dichloroethane	5.856	63	100321	23.322 ug/L	98
23) 2-butanone (MEK)	6.403	43	32849	21.949 ug/L	94
24) ethyl-t-butyl ether (E...	6.261	87	72656	21.420 ug/L #	79
25) 2,2-dichloropropane	6.576	77	83757	19.840 ug/L	97
26) cis-1,2-dichloroethene	6.631	96	61170	21.562 ug/L #	83
27) bromochloromethane	7.009	128	27326	20.178 ug/L #	74
28) chloroform	6.817	83	98391	20.741 ug/L	95
29) tetrahydrofuran (THF)	7.045	42	22641	23.111 ug/L	85
30) 1,1,1-trichloroethane	7.287	97	84307	19.336 ug/L	98
31) cyclohexane	7.301	84	87690	23.156 ug/L #	75
33) carbon tetrachloride	7.574	117	67662	18.992 ug/L	100
34) 1,1-dichloropropene	7.465	75	76787	21.300 ug/L	99
35) benzene	7.766	78	236534	23.250 ug/L	99
37) 1,2-dichloroethane	7.752	62	71196	19.641 ug/L	98

Data Path : X:\V8\2023\Nov23\111023\
Data File : v8111026.D
Acq On : 10 Nov 2023 11:17 pm
Operator : lmm
Sample : 67798-07MSD 5mL
Misc : 5
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Nov 13 10:33:05 2023
Quant Method : X:\V8\methods\V88260090823A.M
Quant Title : V5 Method 8260D
QLast Update : Mon Oct 30 11:37:50 2023
Response via : Initial Calibration

11/13/23 @ 10:55
WillieS

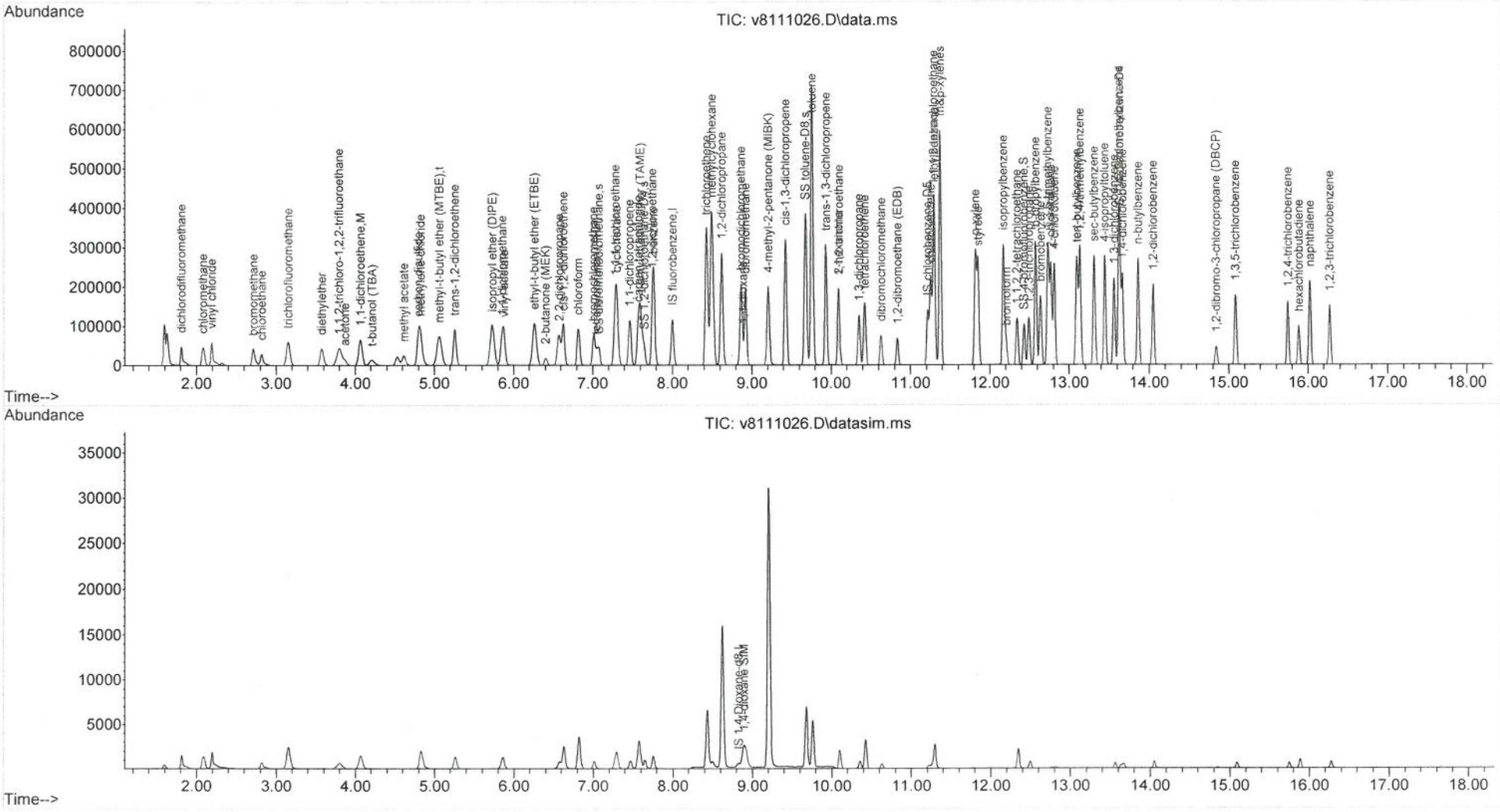
Compound	R.T.	QIon	Response	Conc Units		Dev(Min)
38) t-amyl-methyl ether (T...	7.602	73	160919	21.140 ug/L		94
39) trichloroethene	8.427	95	145428	21.497 ug/L		98
40) methylcyclohexane	8.494	83	235392	22.688 ug/L		96
42) 1,2-dichloropropane	8.619	63	140199	23.685 ug/L		99
43) dibromomethane	8.921	93	87783	21.021 ug/L		93
44) bromodichloromethane	8.864	83	170281	19.234 ug/L		99
45) 1,4-dioxane	8.890	88	5447	53.706 ug/L	#	18
47) 4-methyl-2-pentanone (...	9.207	58	72424	23.280 ug/L		99
48) 2-hexanone	10.094	58	35730	25.349 ug/L		92
49) cis-1,3-dichloropropene	9.426	75	221292	19.788 ug/L		100
50) toluene	9.759	92	387820	24.174 ug/L		89
52) trans-1,3-dichloropropene	9.936	75	198641	19.327 ug/L		97
53) 1,1,2-trichloroethane	10.098	83	43093	18.059 ug/L		98
55) tetrachloroethene	10.427	166	58314	20.733 ug/L		99
56) 1,3-dichloropropane	10.354	76	91355	23.190 ug/L		97
57) dibromochloromethane	10.632	129	48502	17.920 ug/L		99
58) 1,2-dibromoethane (EDB)	10.837	107	52949	21.183 ug/L		98
59) chlorobenzene	11.252	112	145192	20.933 ug/L		95
60) 1,1,1,2-tetrachloroethane	11.293	131	47992	19.796 ug/L		100
61) ethylbenzene	11.297	91	273145	23.614 ug/L		99
62) m&p-xylenes	11.375	106	208165	47.800 ug/L		97
63) o-xylene	11.817	106	98838	22.007 ug/L		99
64) styrene	11.853	104	160170	20.648 ug/L		94
65) bromoform	12.209	173	31999	17.508 ug/L		99
66) isopropylbenzene	12.172	105	259250	23.036 ug/L		98
69) bromobenzene	12.642	156	58924	21.072 ug/L	#	83
70) 1,1,2,2-tetrachloroethane	12.341	83	75089	23.117 ug/L		97
71) 1,2,3-trichloropropane	12.496	77	20256	24.435 ug/L		90
72) n-propylbenzene	12.578	91	306449	24.224 ug/L		100
73) 2-chlorotoluene	12.770	91	208424	24.048 ug/L		97
74) 4-chlorotoluene	12.816	91	175530	23.482 ug/L		96
75) 1,3,5-trimethylbenzene	12.733	105	211801	23.783 ug/L		98
76) tert-butylbenzene	13.098	91	120167m	22.545 ug/L		PS
77) 1,2,4-trimethylbenzene	13.135	105	208057	22.604 ug/L		95
78) 1,2,3-trimethylbenzene	13.627	105	209408	22.721 ug/L		97
79) sec-butylbenzene	13.312	105	252262	23.562 ug/L		100
80) 1,3-dichlorobenzene	13.563	146	110350	21.714 ug/L		98
81) 4-isopropyltoluene	13.445	119	207536	22.317 ug/L		96
82) 1,4-dichlorobenzene	13.668	146	111217	22.060 ug/L		94
84) 1,2-dichlorobenzene	14.051	146	102858	21.195 ug/L		99
85) n-butylbenzene	13.864	91	181896	22.288 ug/L		98
86) 1,2-dibromo-3-chloropr...	14.844	75	14566	22.623 ug/L	#	72
87) 1,3,5-trichlorobenzene	15.086	180	67212	19.539 ug/L		94
88) 1,2,4-trichlorobenzene	15.746	180	58774	19.166 ug/L		90
89) hexachlorobutadiene	15.883	225	24633	21.570 ug/L		98
90) naphthalene	16.024	128	200878	20.896 ug/L		99
91) 1,2,3-trichlorobenzene	16.271	180	57129	20.595 ug/L		95
93] 1,4-dioxane SIM	8.893	88	5728	41.945 ug/L	#	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : X:\V8\2023\Nov23\111023\
Data File : v8111026.D
Acq On : 10 Nov 2023 11:17 pm
Operator : lmm
Sample : 67798-07MSD 5mL
Misc : 5
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Nov 13 10:33:05 2023
Quant Method : X:\V8\methods\V88260090823A.M
Quant Title : V5 Method 8260D
QLast Update : Mon Oct 30 11:37:50 2023
Response via : Initial Calibration



This File:	**L:\VOA\Excel Reports\2023\v8111015**
Analysis Group:	**8260/8021/624**
Field ID:	**SY-OBMW13-110723** **1.8E+07**
Sample:	**67798-08 5mL** Dow Salvage Yard
Misc:	**5** **CRE**
Import File Name	**v8 111023 g DoD**
TestGroupID	**V8260DoD_A**
Aqueous or Soil? (A or S)	**A**
Solid amount (g)	
Methanol volume (mL)	
Percent Solid (%)	
Soil Prep Date	
Weight:	
Volume:	
Lab#:	**67798-008**
AnalysisDate:	**11/10/2023**
AnalysisTime:	**18:32**
Dilution:	**1**
AnalyzedBy:	**LMM v8111015.D**
QC_Code:	
Prep#:	

Reviewer Checks:

- Quant Report: Reviewed, Analyst Initials & Date
- Chromatogram Checked, Major peaks identified
- Results consistent w/ other attached analyses
- Reanalysis reason noted
- Substitute dilution data checked
- Correct dilution and reason clear or noted
- Flags checked (Expiration, F+, Over Cal, Surr, Aspen, QC)
- Other QC failures or issues noted in Aspen
- Correct data file and/or date/time in Aspen

Notes:

Reviewer Initials & Date: 11/13/23

#	Surrogate Standards	Import Value (as ug/L)	Recovery	Flag	QC Limits	Surrogate True Values
32	SS 1,2-dichloroethane-D4	8.97	**90%**		60-140	10
36	SS dibromofluoromethane	9.38	**94%**		78-114	10
51	SS toluene-D8	9.94	**99%**		88-110	10
67	SS 4-bromofluorobenzene	9.51	**95%**		86-115	10
41	SS a,a,a-trifluorotoluene	0.00	**0%**		70-130*	20

	AnalyteName	Concentration (ug/L)		AnalyteName	Concentration (ug/L)
2	dichlorodifluoromethane	0	56	1,3-dichloropropane	0
3	chloromethane	0	57	dibromochloromethane	0
4	vinyl chloride	0	58	1,2-dibromoethane (EDB)	0
5	bromomethane	0	59	chlorobenzene	0
6	chloroethane	0	60	1,1,1,2-tetrachloroethane	0
7	trichlorofluoromethane	0	61	ethylbenzene	-0.127886088
8	diethylether	0	62	m&p-xylenes	0
9	acetone	-0.157482786	63	o-xylene	0
11	1,1-dichloroethene	0	64	styrene	0
13	t-butanol (TBA)	0	65	bromoform	0
15	methylene chloride	0	66	isopropylbenzene	0
16	carbon disulfide	0	69	bromobenzene	0
18	methyl-t-butyl ether (MTBE)	0	70	1,1,2,2-tetrachloroethane	0
19	trans-1,2-dichloroethene	0	71	1,2,3-trichloropropane	0
20	isopropyl ether (DIPE)	0	72	n-propylbenzene	0
22	1,1-dichloroethane	0	73	2-chlorotoluene	0
23	2-butanone (MEK)	0	74	4-chlorotoluene	0
24	ethyl-t-butyl ether (ETBE)	0	75	1,3,5-trimethylbenzene	0
25	2,2-dichloropropane	0	76	tert-butylbenzene	0
26	cis-1,2-dichloroethene	0	77	1,2,4-trimethylbenzene	0.060410763
27	bromochloromethane	0	79	sec-butylbenzene	0
28	chloroform	0	80	1,3-dichlorobenzene	0
29	tetrahydrofuran (THF)	0	81	4-isopropyltoluene	0
30	1,1,1-trichloroethane	0	82	1,4-dichlorobenzene	0
33	carbon tetrachloride	0	84	1,2-dichlorobenzene	0
34	1,1-dichloropropene	0	85	n-butylbenzene	0
35	benzene	0	86	1,2-dibromo-3-chloropropane (DBCP)	0
37	1,2-dichloroethane	0	88	1,2,4-trichlorobenzene	0
38	t-amyl-methyl ether (TAME)	0	89	hexachlorobutadiene	0
39	trichloroethene	0	90	naphthalene	0
42	1,2-dichloropropane	0	91	1,2,3-trichlorobenzene	0
43	dibromomethane	0	87	1,3,5-trichlorobenzene	0
44	bromodichloromethane	0	12	1,1,2-trichloro-1,2,2-trifluoroethane	0
45	1,4-dioxane	0	14	methyl acetate	0
47	4-methyl-2-pentanone (MIBK)	0	21	vinyl acetate	0
48	2-hexanone	0	31	cyclohexane	0
49	cis-1,3-dichloropropene	0	40	methylcyclohexane	0
50	toluene	-0.148991422	10	acrolein	0
52	trans-1,3-dichloropropene	0	17	acrylonitrile	0
53	1,1,2-trichloroethane	0	46	2-chloroethylvinylether (2-CEVE)	0
55	tetrachloroethene	0		Total Xylenes	0

Quantitation Report (QT Reviewed)

Data Path : X:\V8\2023\Nov23\111023\
Data File : v8111015.D
Acq On : 10 Nov 2023 06:32 pm
Operator : lmm
Sample : 67798-08 5mL
Misc : 5
ALS Vial : 15 Sample Multiplier: 1

11/13/23 @ 10:54
WillieS

Quant Time: Nov 13 10:32:21 2023
Quant Method : X:\V8\methods\V88260090823A.M
Quant Title : V5 Method 8260D
QLast Update : Mon Oct 30 11:37:50 2023
Response via : Initial Calibration

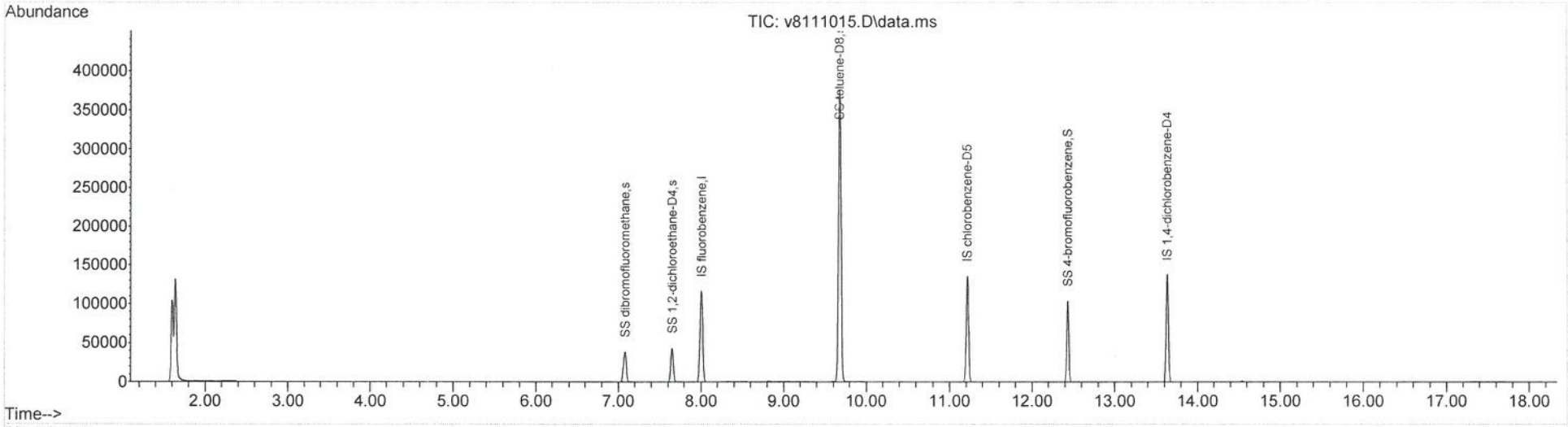
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) IS fluorobenzene	8.006	96	135127	10.00	ug/L	0.00
54) IS chlorobenzene-D5	11.213	119	30244	10.00	ug/L	0.00
68) IS 1,4-dichlorobenzene-D4	13.633	152	44841	10.00	ug/L	0.00
92) IS 1,4-Dioxane-d8	8.829	96	1056	10.00	ug/L	0.00
System Monitoring Compounds						
32) SS 1,2-dichloroethane-D4	7.650	65	34664	8.97	ug/L	0.00
Spiked Amount 10.000	Range 60 - 140		Recovery = 89.70%			
36) SS dibromofluoromethane	7.081	111	31067	9.38	ug/L	0.00
Spiked Amount 10.000	Range 78 - 114		Recovery = 93.80%			
41) SS a,a,a-trifluorotoluene	0.000	146	0	0.00	ug/L	
Spiked Amount 20.000	Range 70 - 130		Recovery = 0.00%#			
51) SS toluene-D8	9.679	98	316915	9.94	ug/L	0.00
Spiked Amount 10.000	Range 88 - 110		Recovery = 99.40%			
67) SS 4-bromofluorobenzene	12.434	174	32894	9.51	ug/L	0.00
Spiked Amount 10.000	Range 86 - 115		Recovery = 95.10%			
83) NA 1,2-dichlorobenzene-D4	13.633	152	44841	0.00	ug/L	0.00
Spiked Amount 25.000	Range 15 - 25		Recovery = 0.00%#			
Target Compounds						Qvalue
93] 1,4-dioxane SIM	8.896	88	120	0.638	ug/L #	100

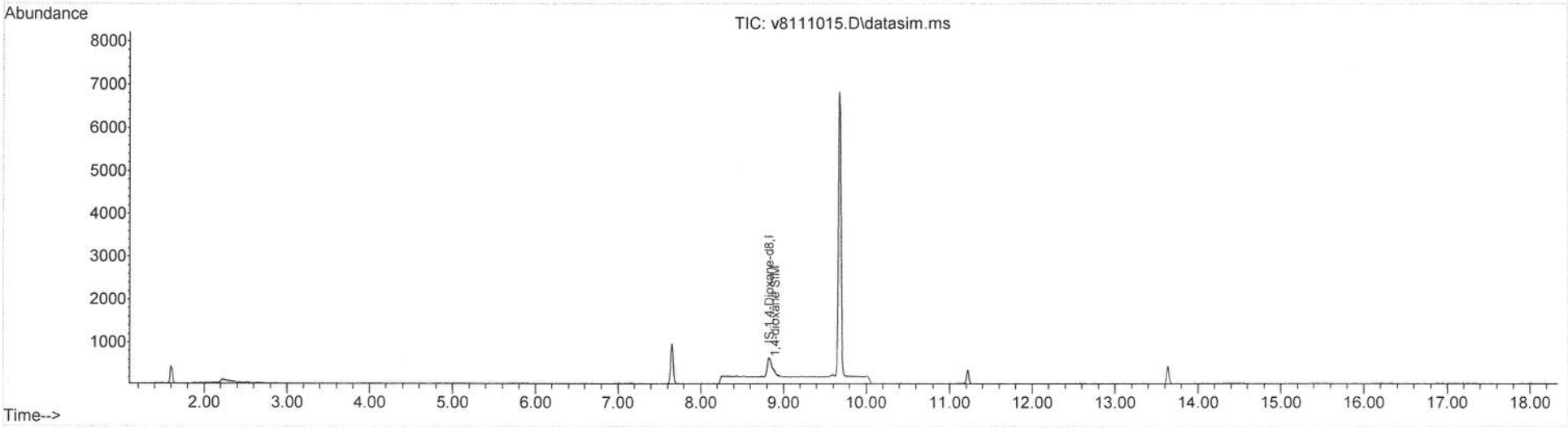
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : X:\V8\2023\Nov23\111023\
Data File : v8111015.D
Acq On : 10 Nov 2023 06:32 pm
Operator : lmm
Sample : 67798-08 5mL
Misc : 5
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Nov 13 10:32:21 2023
Quant Method : X:\V8\methods\V88260090823A.M
Quant Title : V5 Method 8260D
QLast Update : Mon Oct 30 11:37:50 2023
Response via : Initial Calibration





This File:	L:\VOA\Excel Reports\2023\v8111016
Analysis Group:	8260/8021/624
Field ID:	SY-OBMW14-110723 1.8E+07
Sample:	67798-09 5mL Dow Salvage Yard
Misc:	5 CRE
Import File Name	v8 111023 g DoD
TestGroupID	V8260DoD_A
Aqueous or Soil? (A or S)	A
Solid amount (g)	
Methanol volume (mL)	
Percent Solid (%)	
Soil Prep Date	
Weight:	
Volume:	
Lab#:	67798-009
AnalysisDate:	11/10/2023
AnalysisTime:	18:57
Dilution:	1
AnalyzedBy:	LMM v8111016.D
QC_Code:	
Prep#:	

Reviewer Checks:

- Quant Report: Reviewed, Analyst Initials & Date
- Chromatogram Checked, Major peaks identified
- Results consistent w/ other attached analyses
- Reanalysis reason noted
- Substitute dilution data checked
- Correct dilution and reason clear or noted
- Flags checked (Expiration, F+, Over Cal, Surr, Aspen, QC)
- Other QC failures or issues noted in Aspen
- Correct data file and/or date/time in Aspen

Notes:

Reviewer Initials & Date: 11/13/23

#	Surrogate Standards	Import Value (as ug/L)	Recovery	Flag	QC Limits	Surrogate True Values
32	SS 1,2-dichloroethane-D4	9.27	93%		60-140	10
36	SS dibromofluoromethane	9.44	94%		78-114	10
51	SS toluene-D8	9.93	99%		88-110	10
67	SS 4-bromofluorobenzene	9.90	99%		86-115	10
41	SS a,a,a-trifluorotoluene	0.00	0%		70-130*	20

	AnalyteName	Concentration (ug/L)		AnalyteName	Concentration (ug/L)
2	dichlorodifluoromethane	0	56	1,3-dichloropropane	0
3	chloromethane	0	57	dibromochloromethane	0
4	vinyl chloride	0	58	1,2-dibromoethane (EDB)	0
5	bromomethane	0	59	chlorobenzene	0
6	chloroethane	0	60	1,1,1,2-tetrachloroethane	0
7	trichlorofluoromethane	0	61	ethylbenzene	-0.11764699
8	diethylether	0	62	m&p-xylenes	0
9	acetone	1.525729664	63	o-xylene	0
11	1,1-dichloroethene	0	64	styrene	0
13	t-butanol (TBA)	0	65	bromoform	0
15	methylene chloride	0	66	isopropylbenzene	0
16	carbon disulfide	0	69	bromobenzene	0
18	methyl-t-butyl ether (MTBE)	0	70	1,1,2,2-tetrachloroethane	0
19	trans-1,2-dichloroethene	0	71	1,2,3-trichloropropane	0.114541369
20	isopropyl ether (DIPE)	0	72	n-propylbenzene	0
22	1,1-dichloroethane	0	73	2-chlorotoluene	0
23	2-butanone (MEK)	0	74	4-chlorotoluene	0
24	ethyl-t-butyl ether (ETBE)	0	75	1,3,5-trimethylbenzene	0
25	2,2-dichloropropane	0	76	tert-butylbenzene	0
26	cis-1,2-dichloroethene	0	77	1,2,4-trimethylbenzene	0.052734545
27	bromochloromethane	0	79	sec-butylbenzene	0
28	chloroform	0	80	1,3-dichlorobenzene	0
29	tetrahydrofuran (THF)	0	81	4-isopropyltoluene	0
30	1,1,1-trichloroethane	0	82	1,4-dichlorobenzene	0
33	carbon tetrachloride	0	84	1,2-dichlorobenzene	0
34	1,1-dichloropropene	0	85	n-butylbenzene	0
35	benzene	0	86	1,2-dibromo-3-chloropropane (DBCP)	0
37	1,2-dichloroethane	0	88	1,2,4-trichlorobenzene	0
38	t-amyl-methyl ether (TAME)	0	89	hexachlorobutadiene	0
39	trichloroethene	0.335206067	90	naphthalene	0
42	1,2-dichloropropane	0	91	1,2,3-trichlorobenzene	0
43	dibromomethane	0	87	1,3,5-trichlorobenzene	0
44	bromodichloromethane	0	12	1,1,2-trichloro-1,2,2-trifluoroethane	0
45	1,4-dioxane	0	14	methyl acetate	0
47	4-methyl-2-pentanone (MIBK)	0	21	vinyl acetate	0
48	2-hexanone	0	31	cyclohexane	0
49	cis-1,3-dichloropropene	0	40	methylcyclohexane	0
50	toluene	0	10	acrolein	0
52	trans-1,3-dichloropropene	0	17	acrylonitrile	0
53	1,1,2-trichloroethane	0	46	2-chloroethylvinylether (2-CEVE)	0
55	tetrachloroethene	0		Total Xylenes	0

Quantitation Report (QT Reviewed)

Data Path : X:\V8\2023\Nov23\111023\
Data File : v8111016.D
Acq On : 10 Nov 2023 06:57 pm
Operator : lmm
Sample : 67798-09 5mL
Misc : 5
ALS Vial : 16 Sample Multiplier: 1

11/13/23 @ 10:54
WillieS

Quant Time: Nov 13 10:32:25 2023
Quant Method : X:\V8\methods\V88260090823A.M
Quant Title : V5 Method 8260D
QLast Update : Mon Oct 30 11:37:50 2023
Response via : Initial Calibration

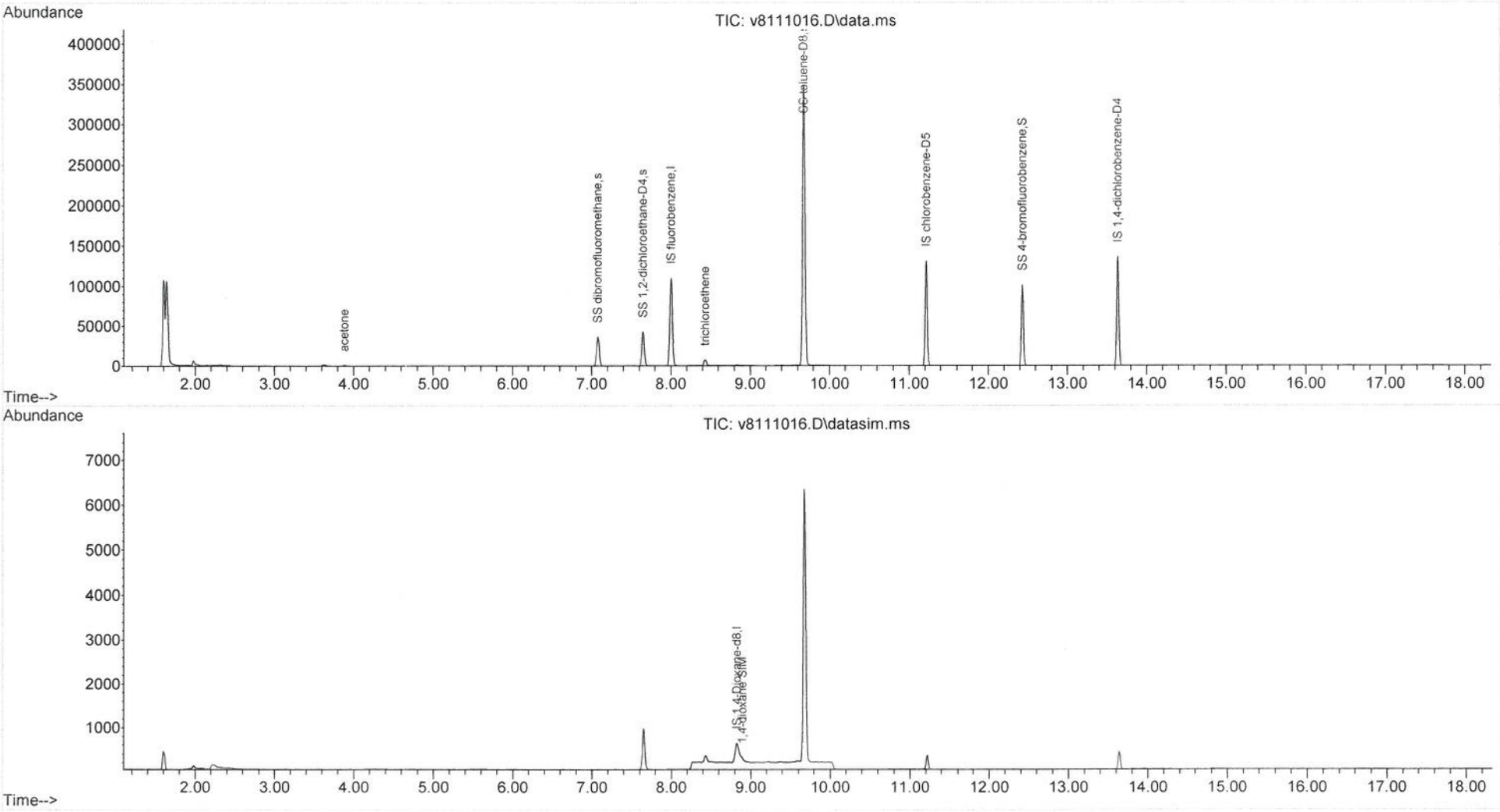
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) IS fluorobenzene	8.001	96	128308	10.00	ug/L	0.00
54) IS chlorobenzene-D5	11.216	119	28547	10.00	ug/L	0.00
68) IS 1,4-dichlorobenzene-D4	13.636	152	42725	10.00	ug/L	0.00
92) IS 1,4-Dioxane-d8	8.827	96	999	10.00	ug/L	0.00
System Monitoring Compounds						
32) SS 1,2-dichloroethane-D4	7.646	65	34014	9.27	ug/L	0.00
Spiked Amount 10.000	Range 60 - 140		Recovery = 92.70%			
36) SS dibromofluoromethane	7.076	111	29676	9.44	ug/L	0.00
Spiked Amount 10.000	Range 78 - 114		Recovery = 94.40%			
41) SS a,a,a-trifluorotoluene	0.000	146	0	0.00	ug/L	
Spiked Amount 20.000	Range 70 - 130		Recovery = 0.00%#			
51) SS toluene-D8	9.677	98	300457	9.93	ug/L	0.00
Spiked Amount 10.000	Range 88 - 110		Recovery = 99.30%			
67) SS 4-bromofluorobenzene	12.433	174	32320	9.90	ug/L	0.00
Spiked Amount 10.000	Range 86 - 115		Recovery = 99.00%			
83) NA 1,2-dichlorobenzene-D4	13.636	152	42725	0.00	ug/L	0.00
Spiked Amount 25.000	Range 15 - 25		Recovery = 0.00%#			
Target Compounds						Qvalue
9) acetone	3.878	43	2194	1.526	ug/L	90
39) trichloroethene	8.428	95	2980	0.335	ug/L	98
93] 1,4-dioxane SIM	8.894	88	92	0.495	ug/L #	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : X:\V8\2023\Nov23\111023\
Data File : v8111016.D
Acq On : 10 Nov 2023 06:57 pm
Operator : lmm
Sample : 67798-09 5mL
Misc : 5
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Nov 13 10:32:25 2023
Quant Method : X:\V8\methods\V88260090823A.M
Quant Title : V5 Method 8260D
QLast Update : Mon Oct 30 11:37:50 2023
Response via : Initial Calibration



This File:	**L:\VOA\Excel Reports\2023\v8111017**
Analysis Group:	**8260/8021/624**
Field ID:	**MW2-252.5-262.5-110723** **1.8E+07**
Sample:	**67798-10 5mL** Dow Salvage Yard
Misc:	**5** **CRE**
Import File Name	**v8 111023 g DoD**
TestGroupID	**V8260DoD_A**
Aqueous or Soil? (A or S)	**A**
Solid amount (g)	
Methanol volume (mL)	
Percent Solid (%)	
Soil Prep Date	
Weight:	
Volume:	
Lab#:	**67798-010**
AnalysisDate:	**11/10/2023**
AnalysisTime:	**19:23**
Dilution:	**1**
AnalyzedBy:	**LMM v8111017.D**
QC_Code:	
Prep#:	

Reviewer Checks:

- Quant Report: Reviewed, Analyst Initials & Date
- Chromatogram Checked, Major peaks identified
- Results consistent w/ other attached analyses
- Reanalysis reason noted
- Substitute dilution data checked
- Correct dilution and reason clear or noted
- Flags checked (Expiration, F+, Over Cal, Surr, Aspen, QC)
- Other QC failures or issues noted in Aspen
- Correct data file and/or date/time in Aspen

Notes:

11/13/23

Reviewer Initials & Date:

#	Surrogate Standards	Import Value (as ug/L)	Recovery	Flag	QC Limits	Surrogate True Values
32	SS 1,2-dichloroethane-D4	9.32	**93%**		60-140	10
36	SS dibromofluoromethane	9.52	**95%**		78-114	10
51	SS toluene-D8	10.12	**101%**		88-110	10
67	SS 4-bromofluorobenzene	9.71	**97%**		86-115	10
41	SS a,a,a-trifluorotoluene	0.00	**0%**		70-130*	20

	AnalyteName	Concentration (ug/L)		AnalyteName	Concentration (ug/L)
2	dichlorodifluoromethane	0	56	1,3-dichloropropane	0
3	chloromethane	0	57	dibromochloromethane	0
4	vinyl chloride	0	58	1,2-dibromoethane (EDB)	0
5	bromomethane	0	59	chlorobenzene	0
6	chloroethane	0	60	1,1,1,2-tetrachloroethane	0
7	trichlorofluoromethane	0	61	ethylbenzene	-0.118391136
8	diethylether	0	62	m&p-xylenes	0
9	acetone	3.738072025	63	o-xylene	0
11	1,1-dichloroethene	0	64	styrene	0
13	t-butanol (TBA)	0	65	bromoform	0
15	methylene chloride	0	66	isopropylbenzene	0
16	carbon disulfide	0	69	bromobenzene	0
18	methyl-t-butyl ether (MTBE)	0	70	1,1,2,2-tetrachloroethane	0
19	trans-1,2-dichloroethene	0	71	1,2,3-trichloropropane	0.133927683
20	isopropyl ether (DIPE)	0	72	n-propylbenzene	0
22	1,1-dichloroethane	0	73	2-chlorotoluene	0
23	2-butanone (MEK)	0	74	4-chlorotoluene	0
24	ethyl-t-butyl ether (ETBE)	0	75	1,3,5-trimethylbenzene	0
25	2,2-dichloropropane	0	76	tert-butylbenzene	0
26	cis-1,2-dichloroethene	0	77	1,2,4-trimethylbenzene	0.059702281
27	bromochloromethane	0	79	sec-butylbenzene	0
28	chloroform	**1.62449055**	80	1,3-dichlorobenzene	0
29	tetrahydrofuran (THF)	0	81	4-isopropyltoluene	0
30	1,1,1-trichloroethane	0	82	1,4-dichlorobenzene	0
33	carbon tetrachloride	0	84	1,2-dichlorobenzene	0
34	1,1-dichloropropene	0	85	n-butylbenzene	0
35	benzene	0	86	1,2-dibromo-3-chloropropane (DBCP)	0
37	1,2-dichloroethane	0	88	1,2,4-trichlorobenzene	0
38	t-amyl-methyl ether (TAME)	0	89	hexachlorobutadiene	0
39	trichloroethene	0	90	naphthalene	0
42	1,2-dichloropropane	0	91	1,2,3-trichlorobenzene	0
43	dibromomethane	0	87	1,3,5-trichlorobenzene	0
44	bromodichloromethane	0.006410945	12	1,1,2-trichloro-1,2,2-trifluoroethane	0
45	1,4-dioxane	0	14	methyl acetate	0
47	4-methyl-2-pentanone (MIBK)	0	21	vinyl acetate	0
48	2-hexanone	0	31	cyclohexane	0
49	cis-1,3-dichloropropene	0	40	methylcyclohexane	0
50	toluene	**1.261455408**	10	acrolein	0
52	trans-1,3-dichloropropene	0	17	acrylonitrile	0
53	1,1,2-trichloroethane	0	46	2-chloroethylvinylether (2-CEVE)	0
55	tetrachloroethene	0		Total Xylenes	0

Quantitation Report (QT Reviewed)

Data Path : X:\V8\2023\Nov23\111023\
Data File : v8111017.D
Acq On : 10 Nov 2023 07:23 pm
Operator : lmm
Sample : 67798-10 5mL
Misc : 5
ALS Vial : 17 Sample Multiplier: 1

11/13/23 @ 10:54
WillieS

Quant Time: Nov 13 10:32:29 2023
Quant Method : X:\V8\methods\V88260090823A.M
Quant Title : V5 Method 8260D
QLast Update : Mon Oct 30 11:37:50 2023
Response via : Initial Calibration

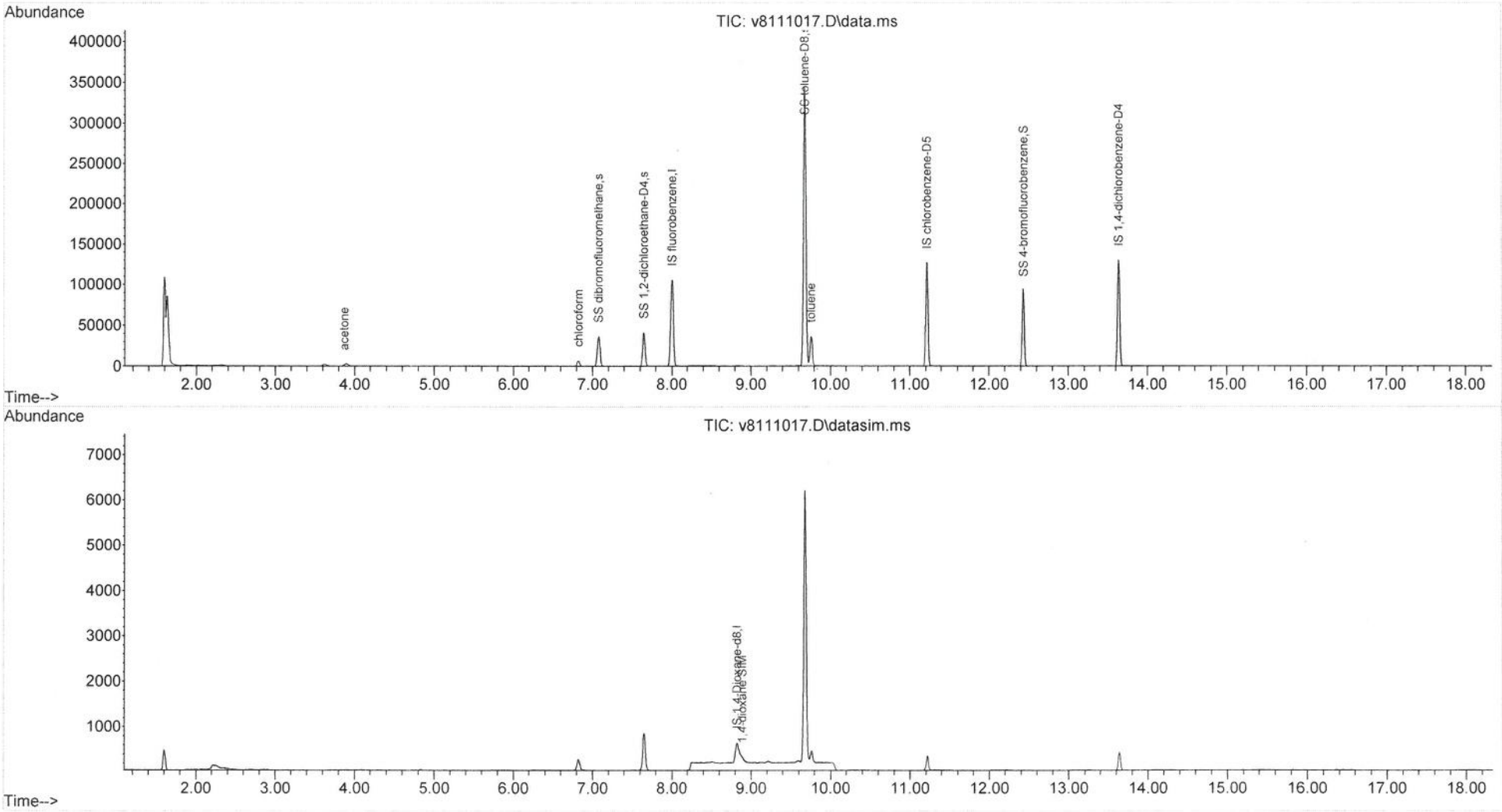
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) IS fluorobenzene	8.001	96	122414	10.00	ug/L	0.00
54) IS chlorobenzene-D5	11.215	119	27723	10.00	ug/L	0.00
68) IS 1,4-dichlorobenzene-D4	13.634	152	42205	10.00	ug/L	0.00
92) IS 1,4-Dioxane-d8	8.823	96	1032	10.00	ug/L	# 0.00
System Monitoring Compounds						
32) SS 1,2-dichloroethane-D4	7.646	65	32638	9.32	ug/L	0.00
Spiked Amount 10.000	Range 60 - 140		Recovery = 93.20%			
36) SS dibromofluoromethane	7.076	111	28553	9.52	ug/L	0.00
Spiked Amount 10.000	Range 78 - 114		Recovery = 95.20%			
41) SS a,a,a-trifluorotoluene	0.000	146	0	0.00	ug/L	
Spiked Amount 20.000	Range 70 - 130		Recovery = 0.00%#			
51) SS toluene-D8	9.679	98	292320	10.12	ug/L	0.00
Spiked Amount 10.000	Range 88 - 110		Recovery = 101.20%			
67) SS 4-bromofluorobenzene	12.436	174	30786	9.71	ug/L	0.00
Spiked Amount 10.000	Range 86 - 115		Recovery = 97.10%			
83) NA 1,2-dichlorobenzene-D4	13.634	152	42205	0.00	ug/L	0.00
Spiked Amount 25.000	Range 15 - 25		Recovery = 0.00%#			
Target Compounds						Qvalue
9) acetone	3.868	43	3724	3.738	ug/L #	7
28) chloroform	6.821	83	6926	1.624	ug/L	97
50) toluene	9.757	92	20362	1.261	ug/L	93
93] 1,4-dioxane SIM	8.891	88	140	0.785	ug/L #	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : X:\V8\2023\Nov23\111023\
Data File : v8111017.D
Acq On : 10 Nov 2023 07:23 pm
Operator : 1mm
Sample : 67798-10 5mL
Misc : 5
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Nov 13 10:32:29 2023
Quant Method : X:\V8\methods\V88260090823A.M
Quant Title : V5 Method 8260D
QLast Update : Mon Oct 30 11:37:50 2023
Response via : Initial Calibration



This File:	L:\VOA\Excel Reports\2023\v8111007
Analysis Group:	8260/8021/624
Field ID:	TB31-110723 1.8E+07
Sample:	67798-11 5mL Dow Salvage Yard
Misc:	5 CRE
Import File Name	v8 111023 g DoD
TestGroupID	V8260DoD_A
Aqueous or Soil? (A or S)	A
Solid amount (g)	
Methanol volume (mL)	
Percent Solid (%)	
Soil Prep Date	
Weight:	
Volume:	
Lab#:	67798-011
AnalysisDate:	11/10/2023
AnalysisTime:	15:07
Dilution:	1
AnalyzedBy:	LMM v8111007.D
QC_Code:	
Prep#:	

Reviewer Checks:

- Quant Report: Reviewed, Analyst Initials & Date
- Chromatogram Checked, Major peaks identified
- Results consistent w/ other attached analyses
- Reanalysis reason noted
- Substitute dilution data checked
- Correct dilution and reason clear or noted
- Flags checked (Expiration, F+, Over Cal, Surr, Aspen, QC)
- Other QC failures or issues noted in Aspen
- Correct data file and/or date/time in Aspen

Notes:

Reviewer Initials & Date: 11/13/23

#	Surrogate Standards	Import Value (as ug/L)	Recovery	Flag	QC Limits	Surrogate True Values
32	SS 1,2-dichloroethane-D4	9.06	**91%**		60-140	10
36	SS dibromofluoromethane	9.02	**90%**		78-114	10
51	SS toluene-D8	10.01	**100%**		88-110	10
67	SS 4-bromofluorobenzene	9.46	**95%**		86-115	10
41	SS a,a,a-trifluorotoluene	0.00	**0%**		70-130*	20

	AnalyteName	Concentration (ug/L)		AnalyteName	Concentration (ug/L)
2	dichlorodifluoromethane	0	56	1,3-dichloropropane	0
3	chloromethane	0	57	dibromochloromethane	0
4	vinyl chloride	0	58	1,2-dibromoethane (EDB)	0
5	bromomethane	0	59	chlorobenzene	0
6	chloroethane	0	60	1,1,1,2-tetrachloroethane	0
7	trichlorofluoromethane	0	61	ethylbenzene	0
8	diethylether	0	62	m&p-xylenes	0
9	acetone	0.009595079	63	o-xylene	0
11	1,1-dichloroethene	0	64	styrene	0
13	t-butanol (TBA)	0	65	bromoform	0
15	methylene chloride	0	66	isopropylbenzene	0
16	carbon disulfide	0	69	bromobenzene	0
18	methyl-t-butyl ether (MTBE)	0	70	1,1,2,2-tetrachloroethane	0
19	trans-1,2-dichloroethene	0	71	1,2,3-trichloropropane	0
20	isopropyl ether (DIPE)	0	72	n-propylbenzene	0.065294724
22	1,1-dichloroethane	0	73	2-chlorotoluene	0
23	2-butanone (MEK)	0	74	4-chlorotoluene	0
24	ethyl-t-butyl ether (ETBE)	0	75	1,3,5-trimethylbenzene	0.092016167
25	2,2-dichloropropane	0	76	tert-butylbenzene	0
26	cis-1,2-dichloroethene	0	77	1,2,4-trimethylbenzene	0.09601691
27	bromochloromethane	0	79	sec-butylbenzene	0
28	chloroform	0	80	1,3-dichlorobenzene	0
29	tetrahydrofuran (THF)	0	81	4-isopropyltoluene	0
30	1,1,1-trichloroethane	0	82	1,4-dichlorobenzene	0
33	carbon tetrachloride	0	84	1,2-dichlorobenzene	0
34	1,1-dichloropropene	0	85	n-butylbenzene	0
35	benzene	0	86	1,2-dibromo-3-chloropropane (DBCP)	0
37	1,2-dichloroethane	0	88	1,2,4-trichlorobenzene	0
38	t-amyl-methyl ether (TAME)	0	89	hexachlorobutadiene	0
39	trichloroethene	0	90	naphthalene	0.013789995
42	1,2-dichloropropane	0	91	1,2,3-trichlorobenzene	0
43	dibromomethane	0	87	1,3,5-trichlorobenzene	0
44	bromodichloromethane	0	12	1,1,2-trichloro-1,2,2-trifluoroethane	0
45	1,4-dioxane	0	14	methyl acetate	0
47	4-methyl-2-pentanone (MIBK)	0	21	vinyl acetate	0
48	2-hexanone	0	31	cyclohexane	0
49	cis-1,3-dichloropropene	0	40	methylcyclohexane	0
50	toluene	0	10	acrolein	0
52	trans-1,3-dichloropropene	0	17	acrylonitrile	0
53	1,1,2-trichloroethane	0	46	2-chloroethylvinylether (2-CEVE)	0
55	tetrachloroethene	0		Total Xylenes	0

Quantitation Report (QT Reviewed)

Data Path : X:\V8\2023\Nov23\111023\
Data File : v8111007.D
Acq On : 10 Nov 2023 03:07 pm
Operator : lmm
Sample : 67798-11 5mL
Misc : 5
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Nov 10 18:16:36 2023
Quant Method : X:\V8\methods\V88260090823A.M
Quant Title : V5 Method 8260D
QLast Update : Mon Oct 30 11:37:50 2023
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) IS fluorobenzene	8.006	96	135008	10.00	ug/L	0.00
54) IS chlorobenzene-D5	11.217	119	30688	10.00	ug/L	0.00
68) IS 1,4-dichlorobenzene-D4	13.637	152	45079	10.00	ug/L	0.00
92) IS 1,4-Dioxane-d8	8.826	96	927	10.00	ug/L	# 0.00
System Monitoring Compounds						
32) SS 1,2-dichloroethane-D4	7.650	65	34966	9.06	ug/L	0.00
Spiked Amount 10.000	Range 60 - 140		Recovery = 90.60%			
36) SS dibromofluoromethane	7.080	111	29841	9.02	ug/L	0.00
Spiked Amount 10.000	Range 78 - 114		Recovery = 90.20%			
41) SS a,a,a-trifluorotoluene	0.000	146	0	0.00	ug/L	
Spiked Amount 20.000	Range 70 - 130		Recovery = 0.00%#			
51) SS toluene-D8	9.677	98	318890	10.01	ug/L	0.00
Spiked Amount 10.000	Range 88 - 110		Recovery = 100.10%			
67) SS 4-bromofluorobenzene	12.434	174	33184	9.46	ug/L	0.00
Spiked Amount 10.000	Range 86 - 115		Recovery = 94.60%			
83) NA 1,2-dichlorobenzene-D4	13.637	152	45079	0.00	ug/L	0.00
Spiked Amount 25.000	Range 15 - 25		Recovery = 0.00%#			
Target Compounds						Qvalue

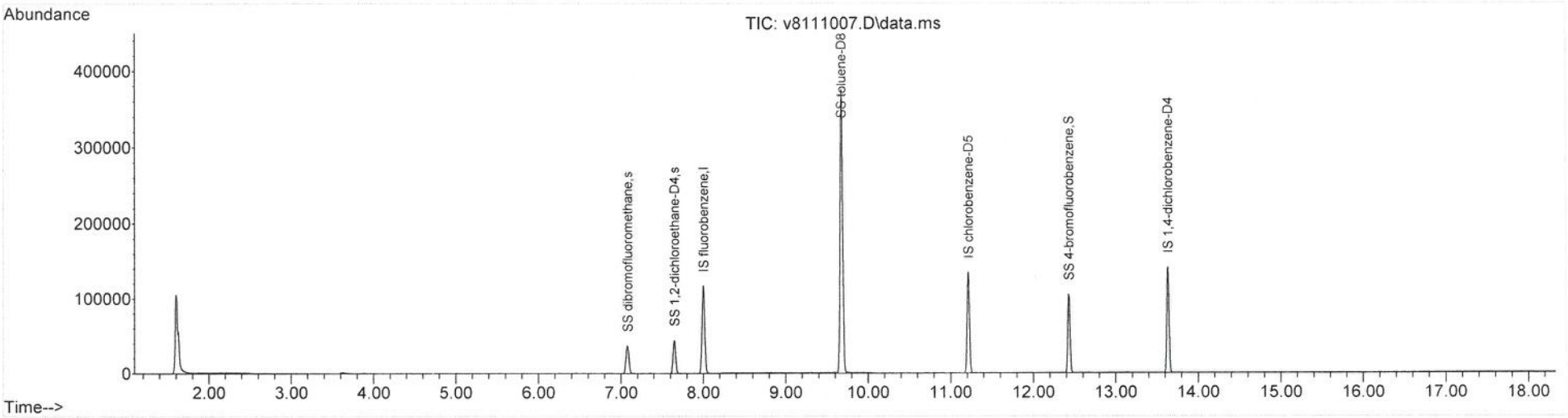
(#) = qualifier out of range (m) = manual integration (+) = signals summed

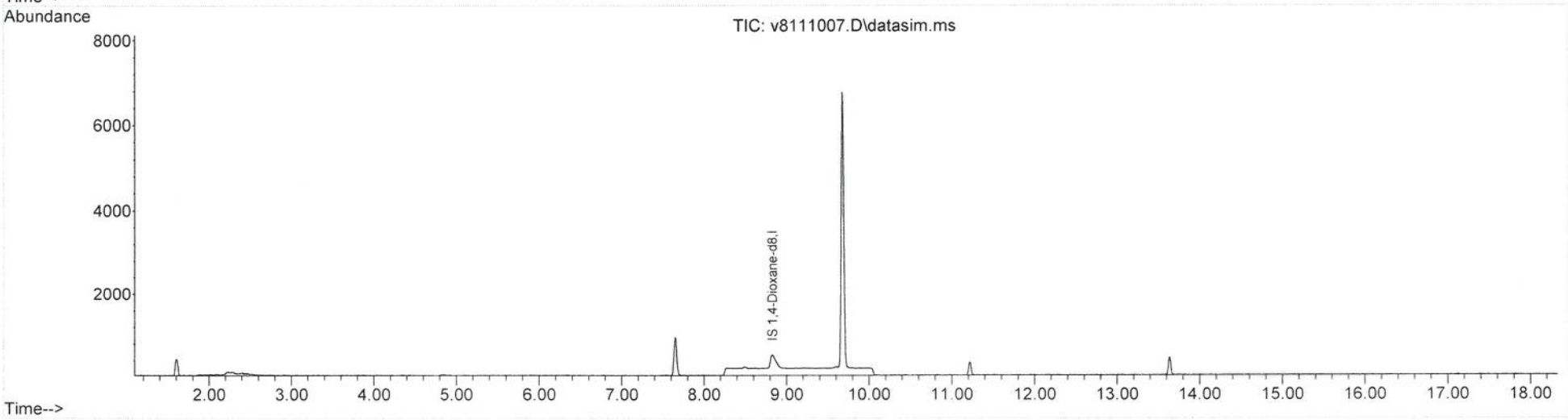
NOV 10 2023

Quantitation Report (QT Reviewed)

Data Path : X:\V8\2023\Nov23\111023\
Data File : v8111007.D
Acq On : 10 Nov 2023 03:07 pm
Operator : lmm
Sample : 67798-11 5mL
Misc : 5
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Nov 10 18:16:36 2023
Quant Method : X:\V8\methods\V88260090823A.M
Quant Title : V5 Method 8260D
QLast Update : Mon Oct 30 11:37:50 2023
Response via : Initial Calibration





This File:	L:\VOA\Excel Reports\2023\V6111610
Analysis Group:	8260/8021/624
Field ID:	SY-OBMW12-110723 18001468
Sample:	67798-01 5mL Dow Salvage Yard
Misc:	5 CRE
Import File Name	v6 111623
TestGroupID	VMA_VPH_PresCert_A
Aqueous or Soil? (A or S)	A
Solid amount (g)	
Methanol volume (mL)	
Percent Solid (%)	
Soil Prep Date	
Weight:	
Volume:	
Lab#:	67798-001
AnalysisDate:	11/16/2023
AnalysisTime:	14:47
Dilution:	1
AnalyzedBy:	SFP V6111610.D
QC_Code:	
Prep#:	

Reviewer Checks:

Quant Report: Reviewed, Ranges integrated, Analyst Initials & Date
Chromatogram Checked, Major peaks identified
Results consistent w/ other attached analyses
Reanalysis reason noted
Substitute dilution data checked
Correct dilution and reason clear or noted
Flags checked (Expiration, F+, Over Cal, Surr, Aspen, QC)
Other QC failures or issues noted in Aspen
Correct data file and/or date/time in Aspen

Notes: Calibration based on sum of discrete peak areas

Initials & Date: 11/20/23

#	Surrogate Standards	Import Value (as ug/L)	Recovery	Flag	QC Limits	Surrogate True Values
11	SS 2,5-dibromotoluene	36.01	**90%**		70-130	40
22	SS 2,5-dibromotoluene #2	36.36	**91%**		70-130	40
4	SS a,a,a-trifluorotoluene	0.00	**0%**		70-130*	20

#	AnalyteName	Concentration (ug/L)	
	C5-C8 Aliphatics #2	**10.428**	10.428
	C9-C12 Aliphatics #2	**20.646**	20.646
1	Methyl-t-butyl ether (MTBE)	0.000	0
2	benzene	0.000	0
3	toluene	0.000	0
5	ethylbenzene	0.051	0.0511
6	m&p-xylenes	0.136	0.1358
7	o-xylene	0.000	0
10	naphthalene	0.085	0.0849
	C5-C8 Aliphatics Adj	**10.428**	10.428
	C9-C12 Aliphatics Adj	**11.162**	11.162
	C9-C10 Aromatics	**9.297**	9.2972
	Total Xylenes	0.000	

Quantitation Report (QT Reviewed)

Data Path : X:\V6\2023\Nov23\111623\
Data File : V6111610.D
Signal(s) : Signal #1: CPDET1B.ch Signal #2: FID2A.ch
Acq On : 16 Nov 2023 2:47 pm
Operator : sfp
Sample : 67798-01 5mL (Sig #1); (Sig #2)
Misc : 5
ALS Vial : 10 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 17 11:55:59 2023
Quant Method : X:\V6\methods\V6VPH082423CHe.M
Quant Title : VOA06 MA VPH
QLast Update : Thu Aug 24 11:07:18 2023
Response via : Initial Calibration
Integrator: ChemStation

SFP
11/17/23

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

MS/MSD fail ↑ in ranges, sample clean

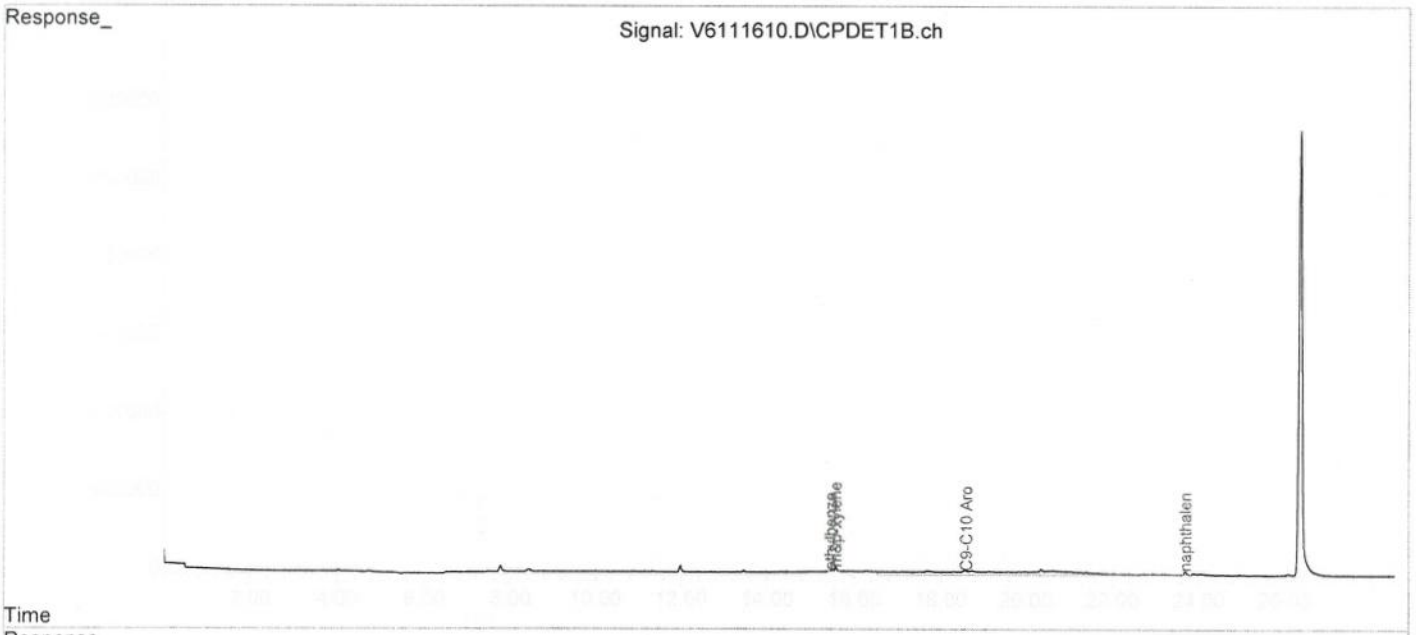
	Compound	R.T.	Response	Conc	Units	
	System Monitoring Compounds					
4)	S SS a,a,a-trifluorotol...	0.000	0	N.D.	ug/L	d
Spiked Amount	20.000		Recovery =	0.00%		
11)	S SS 2,5-dibromotoluene	26.359	28080544	36.009	ug/L	
Spiked Amount	40.000 Range 70 - 130		Recovery =	90.02%		
17)	S SS a,a,a-trifluorotol...	0.000	0	N.D.	ug/L	
Spiked Amount	20.000		Recovery =	0.00%		
22)	S SS 2,5-dibromotoluene #2	26.358	14086635	36.356	ug/L	m
Spiked Amount	40.000 Range 70 - 130		Recovery =	90.89%		
	Target Compounds					
1)	methyl-t-butyl ether ...	0.000	0	N.D.	ug/L	
2)	benzene	0.000	0	N.D.	ug/L	
3)	toluene	0.000	0	N.D.	ug/L	
5)	ethylbenzene	15.455	61087	0.051	ug/L	m PM
6)	m&p-xylenes	15.569	193512	0.136	ug/L	m ↓
7)	o-xylene	0.000	0	N.D.	ug/L	
8)	1,2,4-trimethylbenzene	0.000	0	N.D.	ug/L	
9)	H C9-C10 Aromatics	18.612	13543473	9.297	ug/L	m RI
10)	naphthalene	23.695	174540	0.085	ug/L	m PM
13)	pentane #2	0.000	0	N.D.	ug/L	
14)	2-methylpentane #2	8.395	295517	0.329	ug/L	m PM
15)	2,2,4-trimethylpentan...	0.000	0	N.D.	ug/L	
16)	H C5-C8 Aliphatics #2	11.378	20904277	10.428	ug/L	m RI
18)	nonane #2	0.000	0	N.D.	ug/L	
19)	decane #2	0.000	0	N.D.	ug/L	
20)	n-butylcyclohexane #2	0.000	0	N.D.	ug/L	
21)	H C9-C12 Aliphatics #2	15.611	14628231	20.646	ug/L	m RI

(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : X:\V6\2023\Nov23\111623\
Data File : V6111610.D
Signal(s) : Signal #1: CPDET1B.ch Signal #2: FID2A.ch
Acq On : 16 Nov 2023 2:47 pm
Operator : sfp
Sample : 67798-01 5mL (Sig #1); (Sig #2)
Misc : 5
ALS Vial : 10 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 17 11:55:59 2023
Quant Method : X:\V6\methods\V6VPH082423CHe.M
Quant Title : VOA06 MA VPH
QLast Update : Thu Aug 24 11:07:18 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



Quantitation Report (QT Reviewed)

Data Path : X:\V6\2023\Nov23\111623\
Data File : V6111611.D
Signal(s) : Signal #1: CPDET1B.ch Signal #2: FID2A.ch
Acq On : 16 Nov 2023 3:21 pm
Operator : sfp
Sample : 67798-01ms 100ppb 5mL (Sig #1); (Sig #2)
Misc : 5
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 17 11:56:02 2023
Quant Method : X:\V6\methods\V6VPH082423CHe.M
Quant Title : VOA06 MA VPH
QLast Update : Thu Aug 24 11:07:18 2023
Response via : Initial Calibration
Integrator: ChemStation

SFP
11/17/23

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

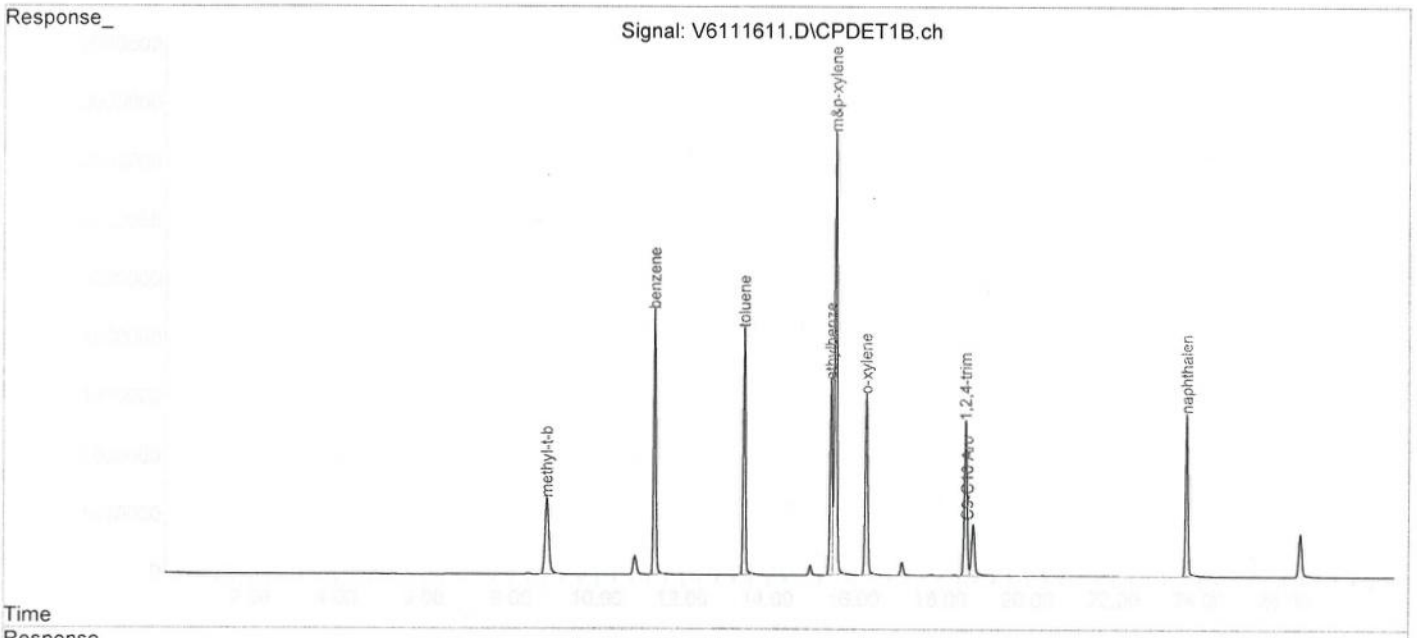
	Compound	R.T.	Response	Conc	Units	
	System Monitoring Compounds					
4)	S SS a,a,a-trifluorotol...	0.000	0	N.D.	ug/L	
Spiked Amount	20.000		Recovery =	0.00%		
11)	S SS 2,5-dibromotoluene	26.359	35604386	46.902	ug/L	
Spiked Amount	40.000 Range 70 - 130		Recovery =	117.26%		
17)	S SS a,a,a-trifluorotol...	0.000	0	N.D.	ug/L	
Spiked Amount	20.000		Recovery =	0.00%		
22)	S SS 2,5-dibromotoluene #2	26.360	18068694	47.745	ug/L	
Spiked Amount	40.000 Range 70 - 130		Recovery =	119.36%		
	Target Compounds					
1)	methyl-t-butyl ether ...	8.826	81311711	101.845	ug/L	
2)	benzene	11.347	160244652	102.112	ug/L	
3)	toluene	13.449	146025777	100.824	ug/L	
5)	ethylbenzene	15.466	123131753	102.997	ug/L	
6)	m&p-xylenes	15.569	288022244	202.123	ug/L	
7)	o-xylene	16.276	123612952	101.115	ug/L	
8)	1,2,4-trimethylbenzene	18.561	113543309	101.057	ug/L	
9)	H C9-C10 Aromatics	18.612	193075891	190.038	ug/L	mRI
10)	naphthalene	23.692	103681190	99.064	ug/L	
13)	pentane #2	6.949	101727550	91.637	ug/L	mBC
14)	2-methylpentane #2	8.388	136062812	103.195	ug/L	
15)	2,2,4-trimethylpentan...	10.884	147282509	107.129	ug/L	
16)	H C5-C8 Aliphatics #2	11.378	945214791	760.385	ug/L	mRI
18)	nonane #2	14.984	119565831	98.781	ug/L	
19)	decane #2	17.100	119868580	100.949	ug/L	
20)	n-butylcyclohexane #2	18.734	115084753	102.441	ug/L	
21)	H C9-C12 Aliphatics #2	15.611	1305968451	1085.342	ug/L	mRI

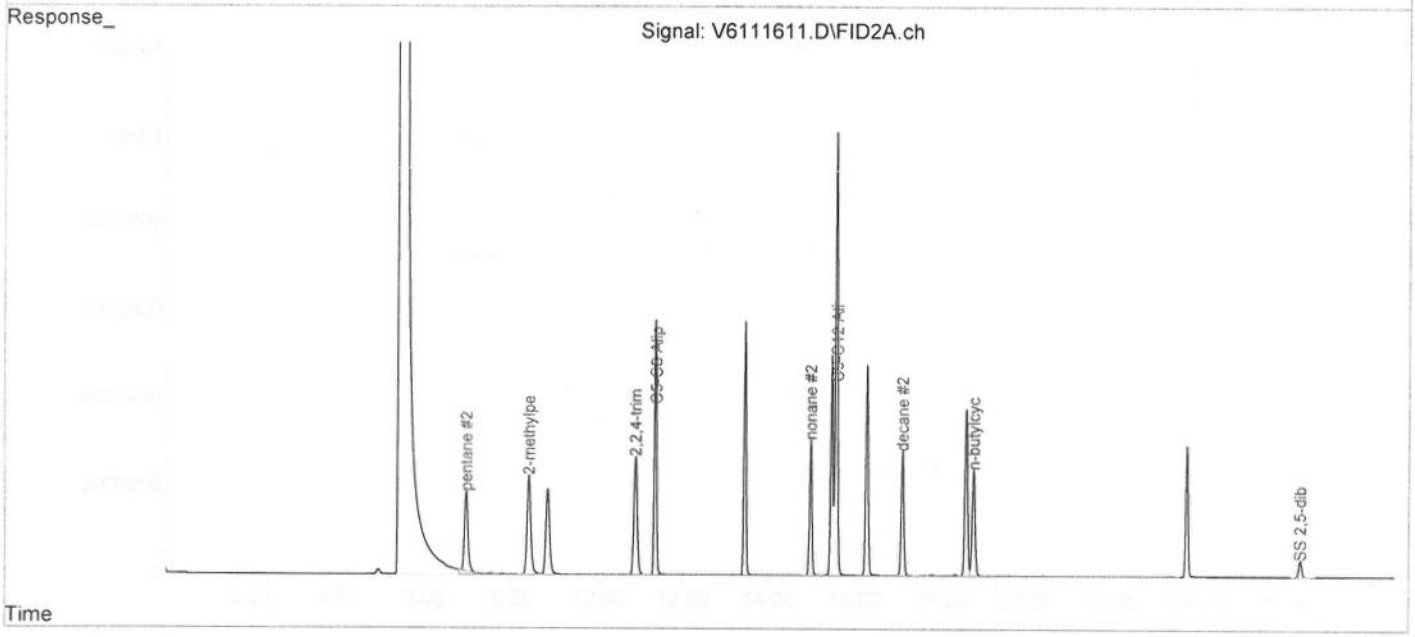
(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : X:\V6\2023\Nov23\111623\
Data File : V6111611.D
Signal(s) : Signal #1: CPDET1B.ch Signal #2: FID2A.ch
Acq On : 16 Nov 2023 3:21 pm
Operator : sfp
Sample : 67798-01ms 100ppb 5mL (Sig #1); (Sig #2)
Misc : 5
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 17 11:56:02 2023
Quant Method : X:\V6\methods\V6VPH082423CHe.M
Quant Title : VOA06 MA VPH
QLast Update : Thu Aug 24 11:07:18 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : X:\V6\2023\Nov23\111623\
Data File : V6111612.D
Signal(s) : Signal #1: CPDET1B.ch Signal #2: FID2A.ch
Acq On : 16 Nov 2023 3:55 pm
Operator : sfp
Sample : 67798-01msd 100ppb 5mL (Sig #1); (Sig #2)
Misc : 5
ALS Vial : 12 Sample Multiplier: 1

SFP 11/17/23

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 17 11:56:05 2023
Quant Method : X:\V6\methods\V6VPH082423CHe.M
Quant Title : VOA06 MA VPH
QLast Update : Thu Aug 24 11:07:18 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

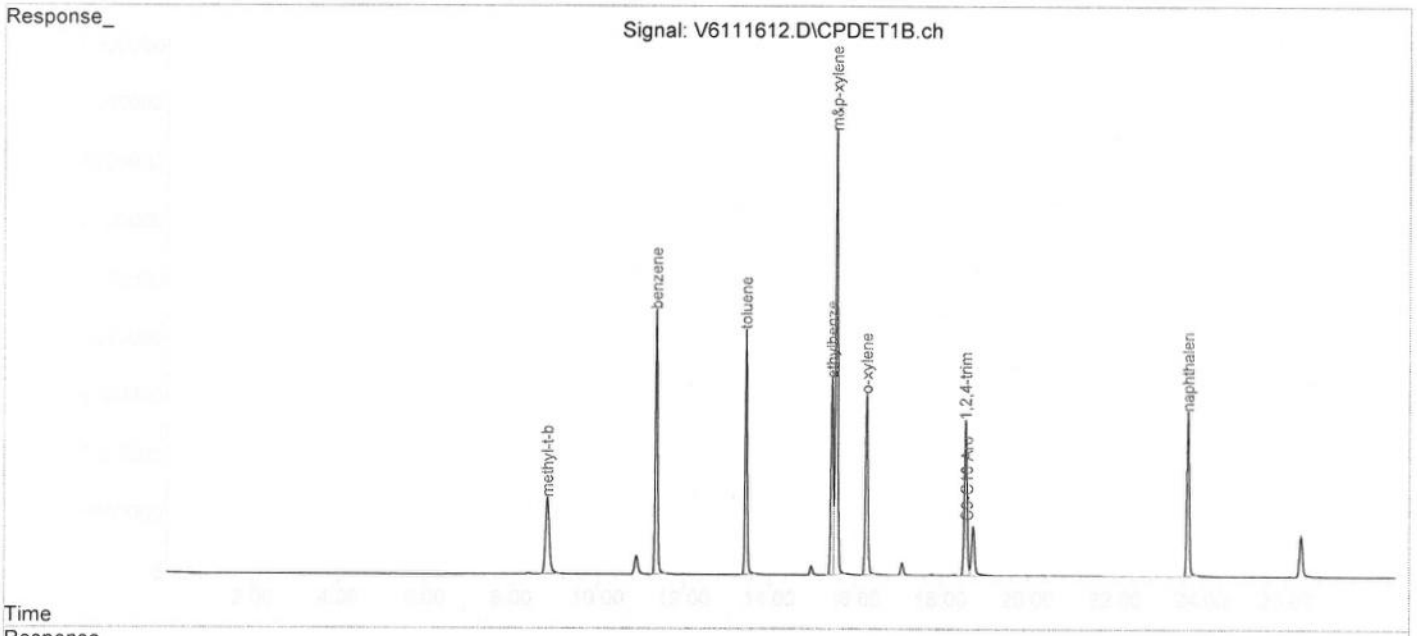
	Compound	R.T.	Response	Conc Units	
	System Monitoring Compounds				
4)	S SS a,a,a-trifluorotol...	0.000	0	N.D. ug/L	
Spiked Amount	20.000		Recovery =	0.00%	
11)	S SS 2,5-dibromotoluene	26.359	34552677	45.380 ug/L	
Spiked Amount	40.000 Range 70 - 130		Recovery =	113.45%	
17)	S SS a,a,a-trifluorotol...	0.000	0	N.D. ug/L	
Spiked Amount	20.000		Recovery =	0.00%	
22)	S SS 2,5-dibromotoluene #2	26.359	17609220	46.431 ug/L	
Spiked Amount	40.000 Range 70 - 130		Recovery =	116.08%	
	Target Compounds				
1)	methyl-t-butyl ether ...	8.827	81548791	102.143 ug/L	
2)	benzene	11.348	159838998	101.854 ug/L	
3)	toluene	13.449	145616834	100.542 ug/L	
5)	ethylbenzene	15.466	123066055	102.942 ug/L	
6)	m&p-xylenes	15.569	287966259	202.084 ug/L	
7)	o-xylene	16.276	123602242	101.107 ug/L	
8)	1,2,4-trimethylbenzene	18.561	113649523	101.151 ug/L	
9)	H C9-C10 Aromatics	18.612	187014729	183.936 ug/L	m RI
10)	naphthalene	23.692	105466107	100.771 ug/L	
13)	pentane #2	6.949	99674291	89.788 ug/L	m BC
14)	2-methylpentane #2	8.389	134451094	101.974 ug/L	
15)	2,2,4-trimethylpentan...	10.884	146208282	106.348 ug/L	
16)	H C5-C8 Aliphatics #2	11.378	943407114	758.918 ug/L	m RI
18)	nonane #2	14.983	113259402	93.593 ug/L	m BC
19)	decane #2	17.100	114339095	96.489 ug/L	
20)	n-butylcyclohexane #2	18.733	111354922	99.127 ug/L	
21)	H C9-C12 Aliphatics #2	15.611	1290776133	1072.816 ug/L	m RI

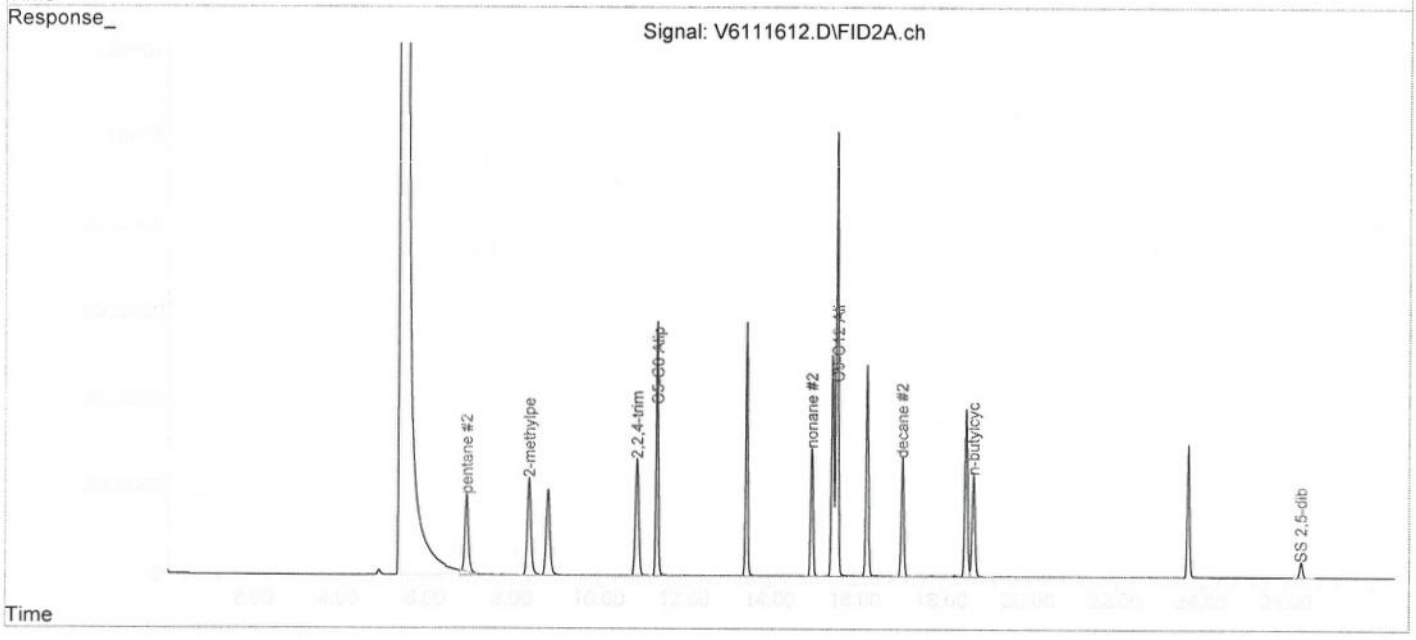
(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : X:\V6\2023\Nov23\111623\
Data File : V6111612.D
Signal(s) : Signal #1: CPDET1B.ch Signal #2: FID2A.ch
Acq On : 16 Nov 2023 3:55 pm
Operator : sfp
Sample : 67798-01msd 100ppb 5mL (Sig #1); (Sig #2)
Misc : 5
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 17 11:56:05 2023
Quant Method : X:\V6\methods\V6VPH082423CHe.M
Quant Title : VOA06 MA VPH
QLast Update : Thu Aug 24 11:07:18 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





This File:	L:\VOA\Excel Reports\2023\V6111613
Analysis Group:	8260/8021/624
Field ID:	SY-OBMW6-110723 18001468
Sample:	67798-02 5mL Dow Salvage Yard
Misc:	5 CRE
Import File Name	v6 111623
TestGroupID	VMA_VPH_PresCert_A
Aqueous or Soil? (A or S)	A
Solid amount (g)	
Methanol volume (mL)	
Percent Solid (%)	
Soil Prep Date	
Weight:	
Volume:	
Lab#:	67798-002
AnalysisDate:	11/16/2023
AnalysisTime:	16:28
Dilution:	1
AnalyzedBy:	SFP V6111613.D
QC_Code:	
Prep#:	

Reviewer Checks:

Quant Report: Reviewed, Ranges integrated, Analyst Initials & Date
Chromatogram Checked, Major peaks identified
Results consistent w/ other attached analyses
Reanalysis reason noted
Substitute dilution data checked
Correct dilution and reason clear or noted
Flags checked (Expiration, F+, Over Cal, Surr, Aspen, QC)
Other QC failures or issues noted in Aspen
Correct data file and/or date/time in Aspen

Notes: Calibration based on sum of discrete peak areas

Initials & Date: 11/20/23

#	Surrogate Standards	Import Value (as ug/L)	Recovery	Flag	QC Limits	Surrogate True Values
11	SS 2,5-dibromotoluene	39.42	**99%**		70-130	40
22	SS 2,5-dibromotoluene #2	40.42	**101%**		70-130	40
4	SS a,a,a-trifluorotoluene	0.00	**0%**		70-130*	20

#	AnalyteName	Concentration (ug/L)	
	C5-C8 Aliphatics #2	**14.977**	14.977
	C9-C12 Aliphatics #2	**31.507**	31.507
1	Methyl-t-butyl ether (MTBE)	0.000	0
2	benzene	0.170	0.1702
3	toluene	0.323	0.3232
5	ethylbenzene	0.462	0.4618
6	m&p-xylenes	**1.089**	1.0891
7	o-xylene	0.350	0.3496
10	naphthalene	**2.731**	2.7308
	C5-C8 Aliphatics Adj	**14.484**	14.484
	C9-C12 Aliphatics Adj	**17.358**	17.358
	C9-C10 Aromatics	**12.248**	12.248
	Total Xylenes	0.000	

Quantitation Report (QT Reviewed)

Data Path : X:\V6\2023\Nov23\111623\
Data File : V6111613.D
Signal(s) : Signal #1: CPDET1B.ch Signal #2: FID2A.ch
Acq On : 16 Nov 2023 4:28 pm
Operator : sfp
Sample : 67798-02 5mL
Misc : 5
ALS Vial : 13 Sample Multiplier: 1

SFP
11/17/23

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 17 11:56:08 2023
Quant Method : X:\V6\methods\V6VPH082423CHe.M
Quant Title : VOA06 MA VPH
QLast Update : Thu Aug 24 11:07:18 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

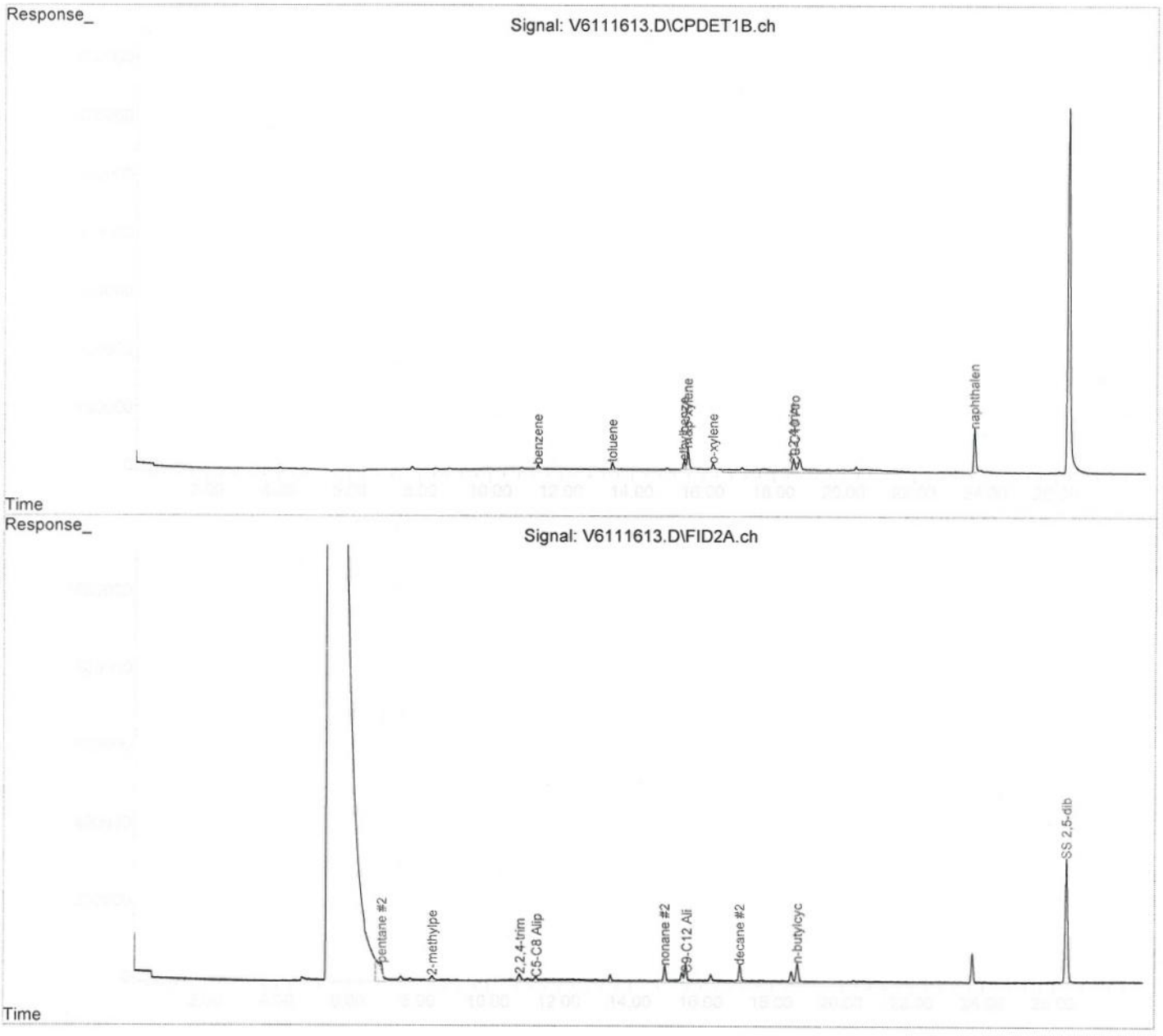
	Compound	R.T.	Response	Conc Units	
	System Monitoring Compounds				
4)	S SS a,a,a-trifluorotol...	0.000	0	N.D. ug/L	
	Spiked Amount 20.000		Recovery =	0.00%	
11)	S SS 2,5-dibromotoluene	26.359	30437066	39.421 ug/L	
	Spiked Amount 40.000 Range 70 - 130		Recovery =	98.55%	
17)	S SS a,a,a-trifluorotol...	0.000	0	N.D. ug/L	
	Spiked Amount 20.000		Recovery =	0.00%	
22)	S SS 2,5-dibromotoluene #2	26.359	15508245	40.422 ug/L m	BC
	Spiked Amount 40.000 Range 70 - 130		Recovery =	101.05%	
	Target Compounds				
1)	methyl-t-butyl ether ...	0.000	0	N.D. ug/L	
2)	benzene	11.347	267133	0.170 ug/L m	PM
3)	toluene	13.452	468140	0.323 ug/L m	
5)	ethylbenzene	15.464	552051	0.462 ug/L m	
6)	m&p-xylenes	15.567	1552004	1.089 ug/L m	
7)	o-xylene	16.280	427389	0.350 ug/L m	
8)	1,2,4-trimethylbenzene	18.562	865970	0.771 ug/L m	
9)	H C9-C10 Aromatics	18.612	16474595	12.248 ug/L m	RI
10)	naphthalene	23.693	2941559	2.731 ug/L m	PM
13)	pentane #2	6.959	723689	0.672 ug/L m	
14)	2-methylpentane #2	8.395	572783	0.539 ug/L m	
15)	2,2,4-trimethylpentan...	10.887	843367	0.571 ug/L	
16)	H C5-C8 Aliphatics #2	11.378	26511016	14.977 ug/L m	RI
18)	nonane #2	14.983	1548308	1.700 ug/L	
19)	decane #2	17.100	1751288	5.685 ug/L	
20)	n-butylcyclohexane #2	18.733	2375420	2.294 ug/L	
21)	H C9-C12 Aliphatics #2	15.611	27800771	31.507 ug/L m	RI

(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : X:\V6\2023\Nov23\111623\
Data File : V6111613.D
Signal(s) : Signal #1: CPDET1B.ch Signal #2: FID2A.ch
Acq On : 16 Nov 2023 4:28 pm
Operator : sfp
Sample : 67798-02 5mL
Misc : 5
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 17 11:56:08 2023
Quant Method : X:\V6\methods\V6VPH082423CHe.M
Quant Title : VOA06 MA VPH
QLast Update : Thu Aug 24 11:07:18 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



This File:	L:\VOA\Excel Reports\2023\V6111614
Analysis Group:	8260/8021/624
Field ID:	SY-OBMW4R-110723 18001468
Sample:	67798-03 5mL Dow Salvage Yard
Misc:	5 CRE
Import File Name	v6 111623
TestGroupID	VMA_VPH_PresCert_A
Aqueous or Soil? (A or S)	A
Solid amount (g)	
Methanol volume (mL)	
Percent Solid (%)	
Soil Prep Date	
Weight:	
Volume:	
Lab#:	67798-003
AnalysisDate:	11/16/2023
AnalysisTime:	17:02
Dilution:	1
AnalyzedBy:	SFP V6111614.D
QC_Code:	
Prep#:	

Reviewer Checks:

Quant Report: Reviewed, Ranges integrated, Analyst Initials & Date
Chromatogram Checked, Major peaks identified
Results consistent w/ other attached analyses
Reanalysis reason noted
Substitute dilution data checked
Correct dilution and reason clear or noted
Flags checked (Expiration, F+, Over Cal, Surr, Aspen, QC)
Other QC failures or issues noted in Aspen
Correct data file and/or date/time in Aspen

Notes: Calibration based on sum of discrete peak areas

Initials & Date: 11/20/23

#	Surrogate Standards	Import Value (as ug/L)	Recovery	Flag	QC Limits	Surrogate True Values
11	SS 2,5-dibromotoluene	35.41	**89%**		70-130	40
22	SS 2,5-dibromotoluene #2	36.27	**91%**		70-130	40
4	SS a,a,a-trifluorotoluene	0.00	**0%**		70-130*	20

#	AnalyteName	Concentration (ug/L)	
	C5-C8 Aliphatics #2	**10.762**	10.762
	C9-C12 Aliphatics #2	**29.575**	29.575
1	Methyl-t-butyl ether (MTBE)	0.000	0
2	benzene	0.062	0.062
3	toluene	0.115	0.1152
5	ethylbenzene	0.160	0.1603
6	m&p-xylenes	0.386	0.3861
7	o-xylene	0.120	0.1203
10	naphthalene	0.802	0.802
	C5-C8 Aliphatics Adj	**10.585**	10.585
	C9-C12 Aliphatics Adj	**19.444**	19.444
	C9-C10 Aromatics	**9.465**	9.4648
	Total Xylenes	0.000	

Quantitation Report (QT Reviewed)

Data Path : X:\V6\2023\Nov23\111623\
Data File : V6111614.D
Signal(s) : Signal #1: CPDET1B.ch Signal #2: FID2A.ch
Acq On : 16 Nov 2023 5:02 pm
Operator : sfp
Sample : 67798-03 5mL
Misc : 5
ALS Vial : 14 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 17 11:56:11 2023
Quant Method : X:\V6\methods\V6VPH082423CHe.M
Quant Title : VOA06 MA VPH
QLast Update : Thu Aug 24 11:07:18 2023
Response via : Initial Calibration
Integrator: ChemStation

SFP
11/17/23

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

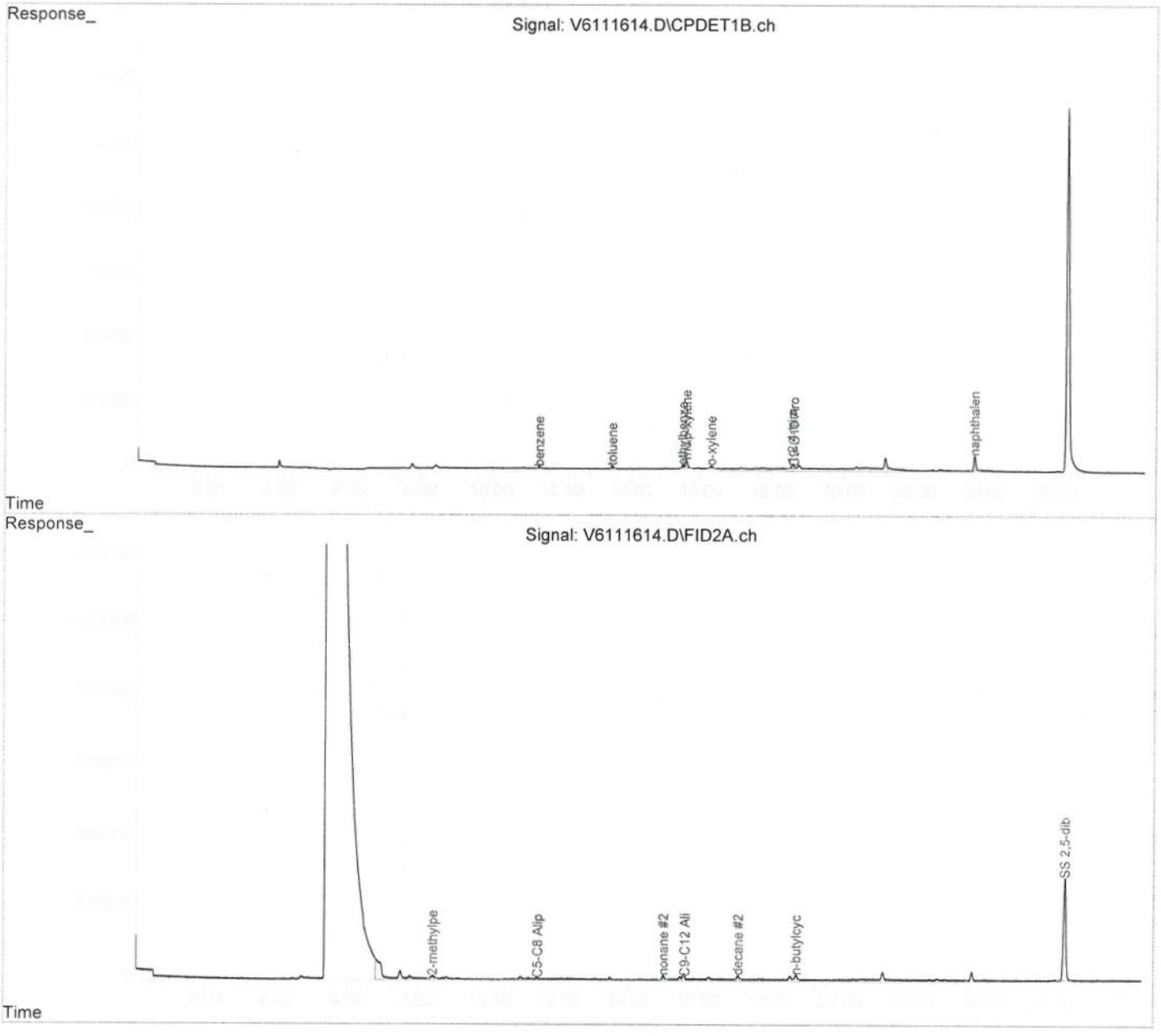
	Compound	R.T.	Response	Conc	Units	
	System Monitoring Compounds					
4)	S SS a,a,a-trifluorotol...	0.000	0	N.D.	ug/L	
Spiked Amount	20.000		Recovery =	0.00%		
11)	S SS 2,5-dibromotoluene	26.359	27666487	35.410	ug/L	
Spiked Amount	40.000 Range 70 - 130		Recovery =	88.52%		
17)	S SS a,a,a-trifluorotol...	0.000	0	N.D.	ug/L	
Spiked Amount	20.000		Recovery =	0.00%		
22)	S SS 2,5-dibromotoluene #2	26.360	14055436	36.267	ug/L	
Spiked Amount	40.000 Range 70 - 130		Recovery =	90.67%		
	Target Compounds					
1)	methyl-t-butyl ether ...	0.000	0	N.D.	ug/L	
2)	benzene	11.349	97350	0.062	ug/L	mPM
3)	toluene	13.448	166851	0.115	ug/L	m
5)	ethylbenzene	15.468	191638	0.160	ug/L	m
6)	m&p-xylenes	15.574	550134	0.386	ug/L	m
7)	o-xylene	16.273	147096	0.120	ug/L	m
8)	1,2,4-trimethylbenzene	18.556	337716	0.301	ug/L	m
9)	H C9-C10 Aromatics	18.612	13709972	9.465	ug/L	m RI
10)	naphthalene	23.693	924523	0.802	ug/L	m PM
13)	pentane #2	0.000	0	N.D.	ug/L	
14)	2-methylpentane #2	8.396	499614	0.484	ug/L	m PM
15)	2,2,4-trimethylpentan...	0.000	0	N.D.	ug/L	
16)	H C5-C8 Aliphatics #2	11.378	21316159	10.762	ug/L	m RI
18)	nonane #2	14.990	473508	0.816	ug/L	m DM
19)	decane #2	17.107	476933	4.657	ug/L	m BC
20)	n-butylcyclohexane #2	18.723	679213	0.787	ug/L	m DM
21)	H C9-C12 Aliphatics #2	15.611	25457812	29.575	ug/L	m RI

(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : X:\V6\2023\Nov23\111623\
Data File : V6111614.D
Signal(s) : Signal #1: CPDET1B.ch Signal #2: FID2A.ch
Acq On : 16 Nov 2023 5:02 pm
Operator : sfp
Sample : 67798-03 5mL
Misc : 5
ALS Vial : 14 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 17 11:56:11 2023
Quant Method : X:\V6\methods\V6VPH082423CHe.M
Quant Title : VOA06 MA VPH
QLast Update : Thu Aug 24 11:07:18 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



This File:	L:\VOA\Excel Reports\2023\V6111615
Analysis Group:	8260/8021/624
Field ID:	BRMW2-60.5-70.5-110723 18001468
Sample:	67798-04 5mL Dow Salvage Yard
Misc:	5 CRE
Import File Name	v6 111623
TestGroupID	VMA_VPH_PresCert_A
Aqueous or Soil? (A or S)	A
Solid amount (g)	
Methanol volume (mL)	
Percent Solid (%)	
Soil Prep Date	
Weight:	
Volume:	
Lab#:	67798-004
AnalysisDate:	11/16/2023
AnalysisTime:	17:35
Dilution:	1
AnalyzedBy:	SFP V6111615.D
QC_Code:	
Prep#:	

Reviewer Checks:

Quant Report: Reviewed, Ranges integrated, Analyst Initials & Date
Chromatogram Checked, Major peaks identified
Results consistent w/ other attached analyses
Reanalysis reason noted
Substitute dilution data checked
Correct dilution and reason clear or noted
Flags checked (Expiration, F+, Over Cal, Surr, Aspen, QC)
Other QC failures or issues noted in Aspen
Correct data file and/or date/time in Aspen

Notes: Calibration based on sum of discrete peak areas

Initials & Date: 11/20/23

#	Surrogate Standards	Import Value (as ug/L)	Recovery	Flag	QC Limits	Surrogate True Values
11	SS 2,5-dibromotoluene	40.76	**102%**		70-130	40
22	SS 2,5-dibromotoluene #2	42.09	**105%**		70-130	40
4	SS a,a,a-trifluorotoluene	0.00	**0%**		70-130*	20

#	AnalyteName	Concentration (ug/L)	
	C5-C8 Aliphatics #2	**22.125**	22.125
	C9-C12 Aliphatics #2	**23.773**	23.773
1	Methyl-t-butyl ether (MTBE)	0.000	0
2	benzene	0.000	0
3	toluene	**6.198**	6.1976
5	ethylbenzene	0.119	0.1192
6	m&p-xylenes	0.255	0.2552
7	o-xylene	0.097	0.0971
10	naphthalene	0.422	0.4218
	C5-C8 Aliphatics Adj	**15.928**	15.928
	C9-C12 Aliphatics Adj	**13.585**	13.585
	C9-C10 Aromatics	**9.717**	9.7165
	Total Xylenes	0.000	

Quantitation Report (QT Reviewed)

Data Path : X:\V6\2023\Nov23\111623\
Data File : V6111615.D
Signal(s) : Signal #1: CPDET1B.ch Signal #2: FID2A.ch
Acq On : 16 Nov 2023 5:35 pm
Operator : sfp
Sample : 67798-04 5mL
Misc : 5
ALS Vial : 15 Sample Multiplier: 1

SFP
11/17/23

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 17 11:56:14 2023
Quant Method : X:\V6\methods\V6VPH082423CHe.M
Quant Title : VOA06 MA VPH
QLast Update : Thu Aug 24 11:07:18 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

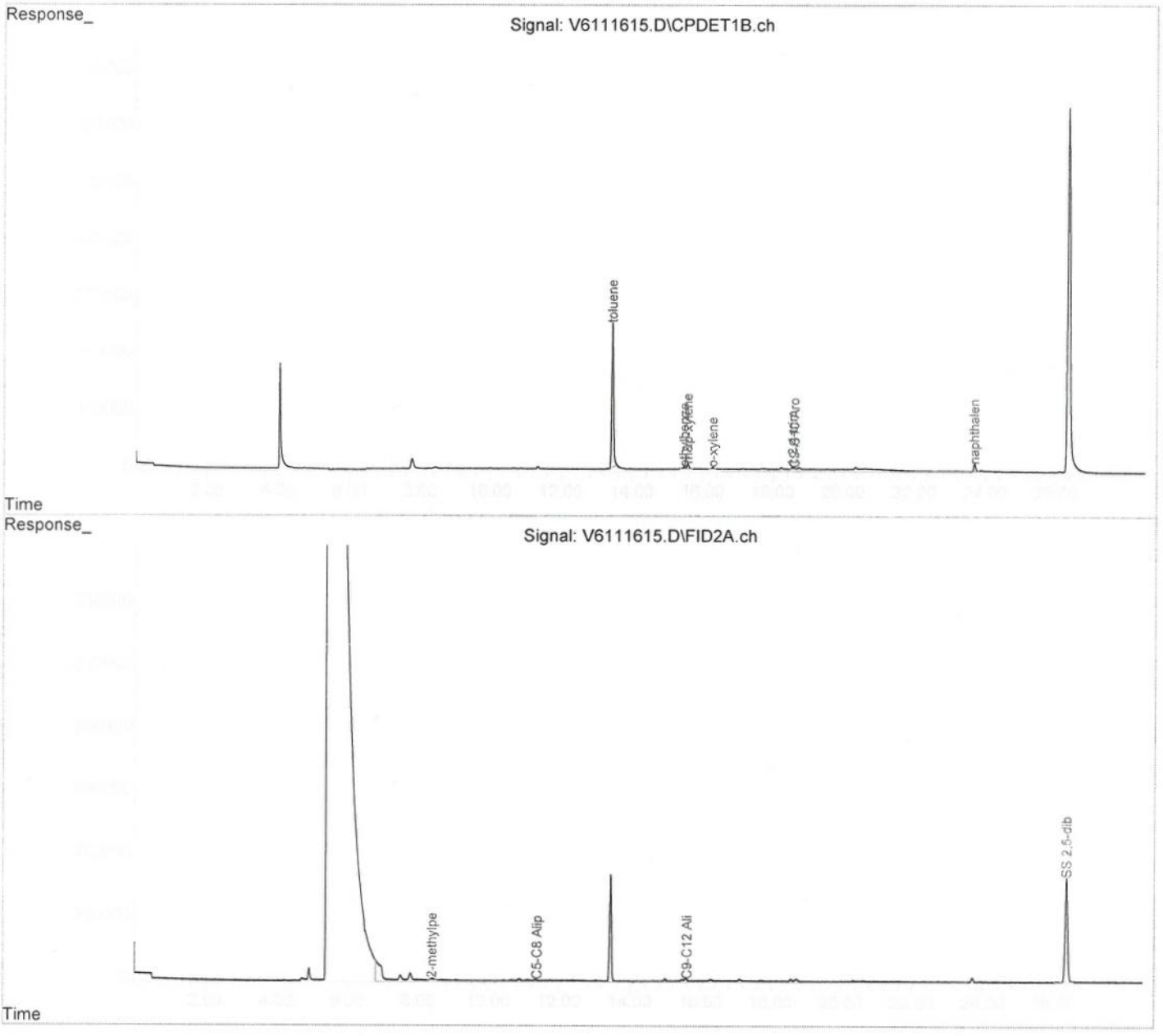
	Compound	R.T.	Response	Conc	Units	
	System Monitoring Compounds					
4)	S SS a,a,a-trifluorotol...	0.000	0	N.D.	ug/L	
Spiked Amount	20.000		Recovery =	0.00%		
11)	S SS 2,5-dibromotoluene	26.360	31358745	40.755	ug/L	
Spiked Amount	40.000 Range 70 - 130		Recovery =	101.89%		
17)	S SS a,a,a-trifluorotol...	0.000	0	N.D.	ug/L	
Spiked Amount	20.000		Recovery =	0.00%		
22)	S SS 2,5-dibromotoluene #2	26.359	16090419	42.087	ug/L	
Spiked Amount	40.000 Range 70 - 130		Recovery =	105.22%		
	Target Compounds					
1)	methyl-t-butyl ether ...	0.000	0	N.D.	ug/L	
2)	benzene	0.000	0	N.D.	ug/L	
3)	toluene	13.449	8976070	6.198	ug/L	
5)	ethylbenzene	15.468	142549	0.119	ug/L m	PM
6)	m&p-xylenes	15.569	363585	0.255	ug/L m	
7)	o-xylene	16.283	118718	0.097	ug/L m	
8)	1,2,4-trimethylbenzene	18.560	170676	0.152	ug/L m	↓
9)	H C9-C10 Aromatics	18.612	13960053	9.717	ug/L m	RI
10)	naphthalene	23.690	526920	0.422	ug/L m	PM
13)	pentane #2	0.000	0	N.D.	ug/L	
14)	2-methylpentane #2	8.386	366083	0.383	ug/L m	PM
15)	2,2,4-trimethylpentan...	0.000	0	N.D.	ug/L	
16)	H C5-C8 Aliphatics #2	11.378	35320958	22.125	ug/L m	RI
18)	nonane #2	0.000	0	N.D.	ug/L	
19)	decane #2	0.000	0	N.D.	ug/L	
20)	n-butylcyclohexane #2	0.000	0	N.D.	ug/L	
21)	H C9-C12 Aliphatics #2	15.611	18421153	23.773	ug/L m	RI

(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : X:\V6\2023\Nov23\111623\
Data File : V6111615.D
Signal(s) : Signal #1: CPDET1B.ch Signal #2: FID2A.ch
Acq On : 16 Nov 2023 5:35 pm
Operator : sfp
Sample : 67798-04 5mL
Misc : 5
ALS Vial : 15 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 17 11:56:14 2023
Quant Method : X:\V6\methods\V6VPH082423CHe.M
Quant Title : VOA06 MA VPH
QLast Update : Thu Aug 24 11:07:18 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



This File:	L:\VOA\Excel Reports\2023\V6111616
Analysis Group:	8260/8021/624
Field ID:	SY-OBMW15-110723 18001468
Sample:	67798-05 5mL Dow Salvage Yard
Misc:	5 CRE
Import File Name	v6 111623
TestGroupID	VMA_VPH_PresCert_A
Aqueous or Soil? (A or S)	A
Solid amount (g)	
Methanol volume (mL)	
Percent Solid (%)	
Soil Prep Date	
Weight:	
Volume:	
Lab#:	67798-005
AnalysisDate:	11/16/2023
AnalysisTime:	18:09
Dilution:	1
AnalyzedBy:	SFP V6111616.D
QC_Code:	
Prep#:	

Reviewer Checks:

Quant Report: Reviewed, Ranges integrated, Analyst Initials & Date
Chromatogram Checked, Major peaks identified
Results consistent w/ other attached analyses
Reanalysis reason noted
Substitute dilution data checked
Correct dilution and reason clear or noted
Flags checked (Expiration, F+, Over Cal, Surr, Aspen, QC)
Other QC failures or issues noted in Aspen
Correct data file and/or date/time in Aspen

Notes: Calibration based on sum of discrete peak areas

Initials & Date: 11/20/23

#	Surrogate Standards	Import Value (as ug/L)	Recovery	Flag	QC Limits	Surrogate True Values
11	SS 2,5-dibromotoluene	35.65	**89%**		70-130	40
22	SS 2,5-dibromotoluene #2	37.16	**93%**		70-130	40
4	SS a,a,a-trifluorotoluene	0.00	**0%**		70-130*	20

#	AnalyteName	Concentration (ug/L)	
	C5-C8 Aliphatics #2	**11.681**	11.681
	C9-C12 Aliphatics #2	**24.348**	24.348
1	Methyl-t-butyl ether (MTBE)	0.000	0
2	benzene	0.033	0.0326
3	toluene	0.066	0.0664
5	ethylbenzene	0.063	0.0634
6	m&p-xylenes	0.185	0.1854
7	o-xylene	0.073	0.073
10	naphthalene	0.277	0.2774
	C5-C8 Aliphatics Adj	**11.582**	11.582
	C9-C12 Aliphatics Adj	**12.946**	12.946
	C9-C10 Aromatics	**11.080**	11.08
	Total Xylenes	0.000	

Quantitation Report (QT Reviewed)

Data Path : X:\V6\2023\Nov23\111623\
Data File : V6111616.D
Signal(s) : Signal #1: CPDET1B.ch Signal #2: FID2A.ch
Acq On : 16 Nov 2023 6:09 pm
Operator : sfp
Sample : 67798-05 5mL
Misc : 5
ALS Vial : 16 Sample Multiplier: 1

SFP
11/17/23

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 17 11:56:17 2023
Quant Method : X:\V6\methods\V6VPH082423CHe.M
Quant Title : VOA06 MA VPH
QLast Update : Thu Aug 24 11:07:18 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	R.T.	Response	Conc	Units	
	System Monitoring Compounds					
4)	S SS a,a,a-trifluorotol...	0.000	0	N.D.	ug/L	
Spiked Amount	20.000		Recovery =	0.00%		
11)	S SS 2,5-dibromotoluene	26.359	27835746	35.655	ug/L	
Spiked Amount	40.000 Range 70 - 130		Recovery =	89.14%		
17)	S SS a,a,a-trifluorotol...	0.000	0	N.D.	ug/L	
Spiked Amount	20.000		Recovery =	0.00%		
22)	S SS 2,5-dibromotoluene #2	26.357	14367972	37.161	ug/L	m BC
Spiked Amount	40.000 Range 70 - 130		Recovery =	92.90%		
	Target Compounds					
1)	methyl-t-butyl ether ...	0.000	0	N.D.	ug/L	
2)	benzene	11.342	51143	0.033	ug/L	m PM
3)	toluene	13.450	96241	0.066	ug/L	m |
5)	ethylbenzene	15.467	75805	0.063	ug/L	m |
6)	m&p-xylenes	15.564	264243	0.185	ug/L	m |
7)	o-xylene	16.270	89245	0.073	ug/L	m |
8)	1,2,4-trimethylbenzene	18.570	165933	0.148	ug/L	m ↓
9)	H C9-C10 Aromatics	18.612	15314888	11.080	ug/L	m RI
10)	naphthalene	23.689	375862	0.277	ug/L	m PM
13)	pentane #2	0.000	0	N.D.	ug/L	
14)	2-methylpentane #2	8.403	416961	0.421	ug/L	m PM
15)	2,2,4-trimethylpentan...	0.000	0	N.D.	ug/L	
16)	H C5-C8 Aliphatics #2	11.378	22448526	11.681	ug/L	m RI
18)	nonane #2	0.000	0	N.D.	ug/L	
19)	decane #2	0.000	0	N.D.	ug/L	
20)	n-butylcyclohexane #2	0.000	0	N.D.	ug/L	
21)	H C9-C12 Aliphatics #2	15.611	19118532	24.348	ug/L	m RI

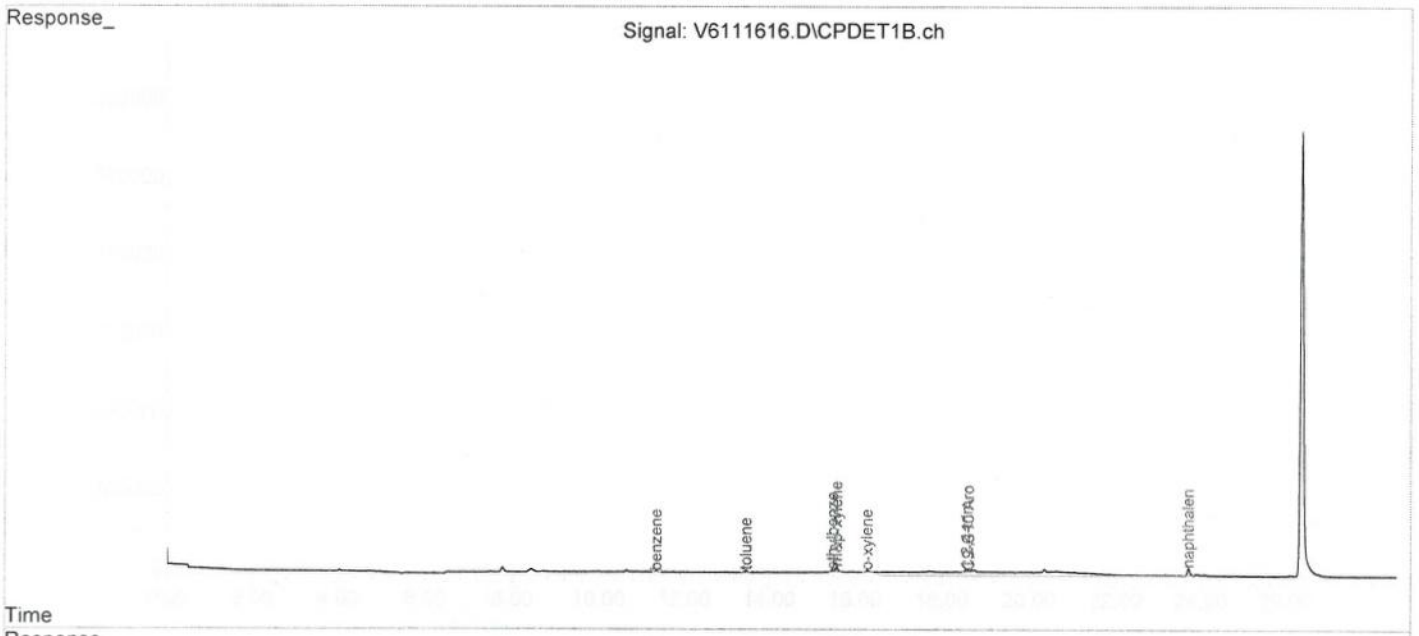
(f)=RT Delta > 1/2 Window (m)=manual int.

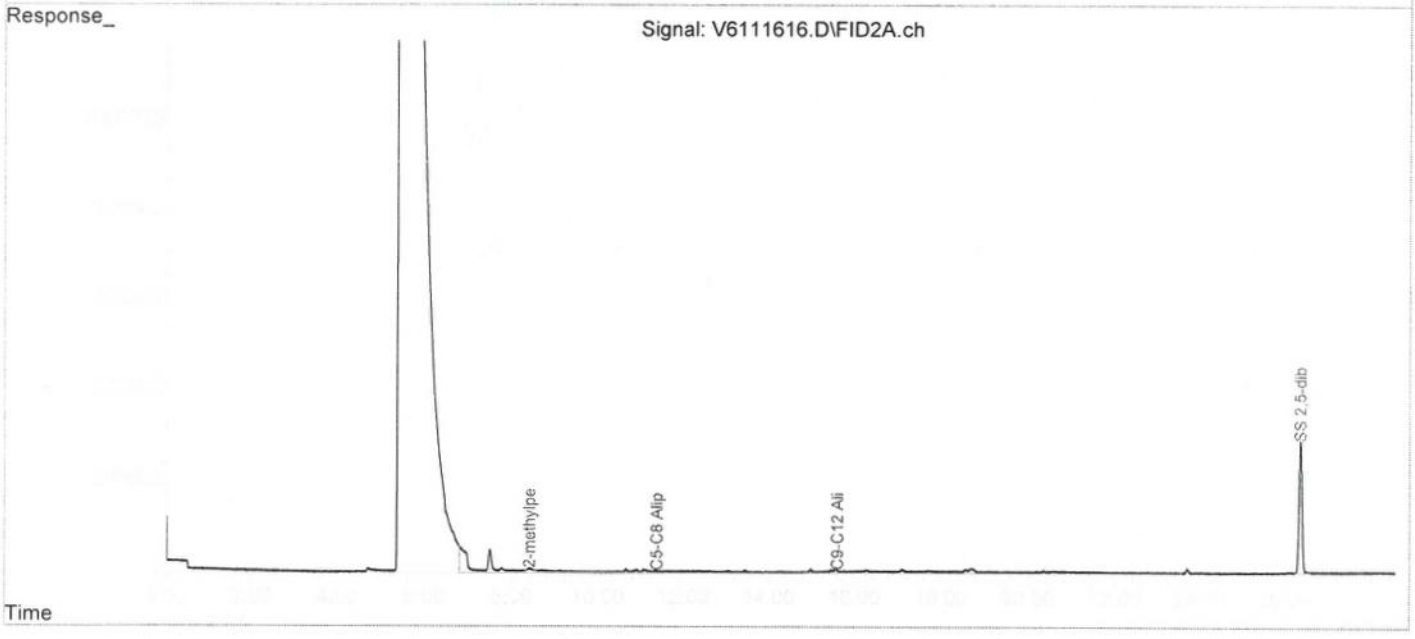
Quantitation Report (QT Reviewed)

Data Path : X:\V6\2023\Nov23\111623\
Data File : V6111616.D
Signal(s) : Signal #1: CPDET1B.ch Signal #2: FID2A.ch
Acq On : 16 Nov 2023 6:09 pm
Operator : sfp
Sample : 67798-05 5mL
Misc : 5
ALS Vial : 16 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 17 11:56:17 2023
Quant Method : X:\V6\methods\V6VPH082423CHe.M
Quant Title : VOA06 MA VPH
QLast Update : Thu Aug 24 11:07:18 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





This File:	L:\VOA\Excel Reports\2023\V6111617
Analysis Group:	8260/8021/624
Field ID:	SY-OBMW5-110723 18001468
Sample:	67798-06 5mL Dow Salvage Yard
Misc:	5 CRE
Import File Name	v6 111623
TestGroupID	VMA_VPH_PresCert_A
Aqueous or Soil? (A or S)	A
Solid amount (g)	
Methanol volume (mL)	
Percent Solid (%)	
Soil Prep Date	
Weight:	
Volume:	
Lab#:	67798-006
AnalysisDate:	11/16/2023
AnalysisTime:	18:43
Dilution:	1
AnalyzedBy:	SFP V6111617.D
QC_Code:	
Prep#:	

Reviewer Checks:

Quant Report: Reviewed, Ranges integrated, Analyst Initials & Date
Chromatogram Checked, Major peaks identified
Results consistent w/ other attached analyses
Reanalysis reason noted
Substitute dilution data checked
Correct dilution and reason clear or noted
Flags checked (Expiration, F+, Over Cal, Surr, Aspen, QC)
Other QC failures or issues noted in Aspen
Correct data file and/or date/time in Aspen

Notes: Calibration based on sum of discrete peak areas

Initials & Date: 11/20/23

#	Surrogate Standards	Import Value (as ug/L)	Recovery	Flag	QC Limits	Surrogate True Values
11	SS 2,5-dibromotoluene	39.01	**98%**		70-130	40
22	SS 2,5-dibromotoluene #2	40.54	**101%**		70-130	40
4	SS a,a,a-trifluorotoluene	0.00	**0%**		70-130*	20

#	AnalyteName	Concentration (ug/L)	
	C5-C8 Aliphatics #2	**9.693**	9.6934
	C9-C12 Aliphatics #2	**22.460**	22.46
1	Methyl-t-butyl ether (MTBE)	0.000	0
2	benzene	0.000	0
3	toluene	0.052	0.0521
5	ethylbenzene	0.070	0.0703
6	m&p-xylenes	0.171	0.1714
7	o-xylene	0.055	0.0547
10	naphthalene	0.161	0.1607
	C5-C8 Aliphatics Adj	**9.641**	9.6413
	C9-C12 Aliphatics Adj	**10.967**	10.967
	C9-C10 Aromatics	**11.197**	11.197
	Total Xylenes	0.000	

Quantitation Report (QT Reviewed)

Data Path : X:\V6\2023\Nov23\111623\
Data File : V6111617.D
Signal(s) : Signal #1: CPDET1B.ch Signal #2: FID2A.ch
Acq On : 16 Nov 2023 6:43 pm
Operator : sfp
Sample : 67798-06 5mL
Misc : 5
ALS Vial : 17 Sample Multiplier: 1

SFP
11/17/23

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 17 11:56:20 2023
Quant Method : X:\V6\methods\V6VPH082423CHe.M
Quant Title : VOA06 MA VPH
QLast Update : Thu Aug 24 11:07:18 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

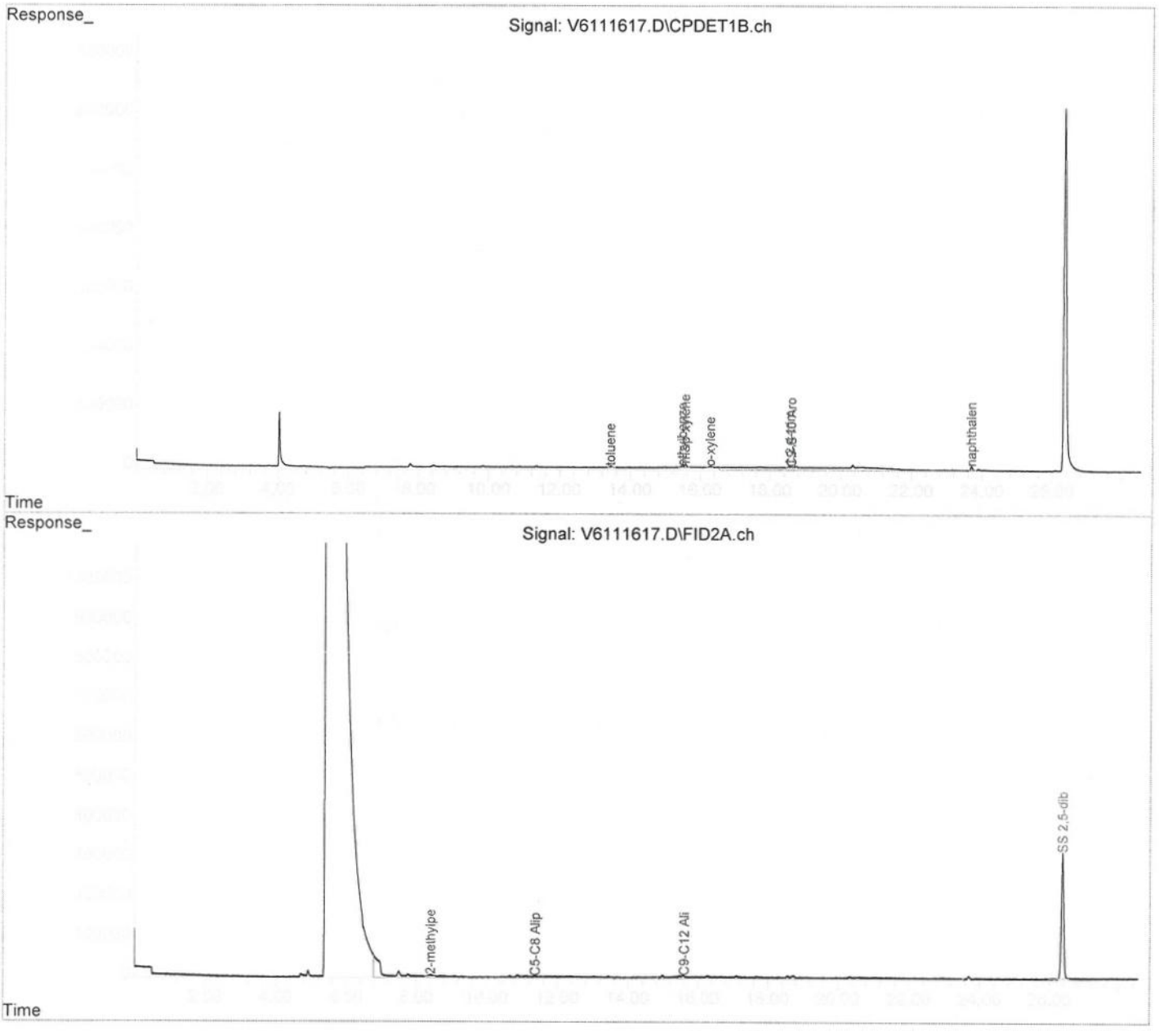
	Compound	R.T.	Response	Conc	Units	
	System Monitoring Compounds					
4)	S SS a,a,a-trifluorotol...	0.000	0	N.D.	ug/L	
Spiked Amount	20.000		Recovery =	0.00%		
11)	S SS 2,5-dibromotoluene	26.358	30150455	39.006	ug/L	
Spiked Amount	40.000 Range 70 - 130		Recovery =	97.52%		
17)	S SS a,a,a-trifluorotol...	0.000	0	N.D.	ug/L	
Spiked Amount	20.000		Recovery =	0.00%		
22)	S SS 2,5-dibromotoluene #2	26.359	15549122	40.539	ug/L	
Spiked Amount	40.000 Range 70 - 130		Recovery =	101.35%		
	Target Compounds					
1)	methyl-t-butyl ether ...	0.000	0	N.D.	ug/L	
2)	benzene	0.000	0	N.D.	ug/L	
3)	toluene	13.445	75408	0.052	ug/L	m PM
5)	ethylbenzene	15.478	84029	0.070	ug/L	m
6)	m&p-xylenes	15.565	244304	0.171	ug/L	m
7)	o-xylene	16.281	66840	0.055	ug/L	m
8)	1,2,4-trimethylbenzene	18.571	165014	0.147	ug/L	m
9)	H C9-C10 Aromatics	18.612	15430549	11.197	ug/L	m RI
10)	naphthalene	23.691	253831	0.161	ug/L	m PM
13)	pentane #2	0.000	0	N.D.	ug/L	
14)	2-methylpentane #2	8.403	276618	0.315	ug/L	m PM
15)	2,2,4-trimethylpentan...	0.000	0	N.D.	ug/L	
16)	H C5-C8 Aliphatics #2	11.378	19998760	9.693	ug/L	m RI
18)	nonane #2	0.000	0	N.D.	ug/L	
19)	decane #2	0.000	0	N.D.	ug/L	
20)	n-butylcyclohexane #2	0.000	0	N.D.	ug/L	
21)	H C9-C12 Aliphatics #2	15.611	16828181	22.460	ug/L	m RI

(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : X:\V6\2023\Nov23\111623\
Data File : V6111617.D
Signal(s) : Signal #1: CPDET1B.ch Signal #2: FID2A.ch
Acq On : 16 Nov 2023 6:43 pm
Operator : sfp
Sample : 67798-06 5mL
Misc : 5
ALS Vial : 17 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 17 11:56:20 2023
Quant Method : X:\V6\methods\V6VPH082423CHe.M
Quant Title : VOA06 MA VPH
QLast Update : Thu Aug 24 11:07:18 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



This File:	L:\VOA\Excel Reports\2023\V6111618
Analysis Group:	8260/8021/624
Field ID:	3RMW2-80.5-95.5-110723 18001468
Sample:	67798-07 5mL Dow Salvage Yard
Misc:	5 CRE
Import File Name	v6 111623
TestGroupID	VMA_VPH_PresCert_A
Aqueous or Soil? (A or S)	A
Solid amount (g)	
Methanol volume (mL)	
Percent Solid (%)	
Soil Prep Date	
Weight:	
Volume:	
Lab#:	67798-007
AnalysisDate:	11/16/2023
AnalysisTime:	19:16
Dilution:	1
AnalyzedBy:	SFP V6111618.D
QC_Code:	
Prep#:	

Reviewer Checks:

Quant Report: Reviewed, Ranges integrated, Analyst Initials & Date
Chromatogram Checked, Major peaks identified
Results consistent w/ other attached analyses
Reanalysis reason noted
Substitute dilution data checked
Correct dilution and reason clear or noted
Flags checked (Expiration, F+, Over Cal, Surr, Aspen, QC)
Other QC failures or issues noted in Aspen
Correct data file and/or date/time in Aspen

Notes: Calibration based on sum of discrete peak areas

Initials & Date: 11/20/23

#	Surrogate Standards	Import Value (as ug/L)	Recovery	Flag	QC Limits	Surrogate True Values
11	SS 2,5-dibromotoluene	39.44	**99%**		70-130	40
22	SS 2,5-dibromotoluene #2	40.43	**101%**		70-130	40
4	SS a,a,a-trifluorotoluene	0.00	**0%**		70-130*	20

#	AnalyteName	Concentration (ug/L)	
	C5-C8 Aliphatics #2	**12.548**	12.548
	C9-C12 Aliphatics #2	**22.038**	22.038
1	Methyl-t-butyl ether (MTBE)	0.000	0
2	benzene	0.000	0
3	toluene	**1.541**	1.5407
5	ethylbenzene	0.073	0.0728
6	m&p-xylenes	0.147	0.147
7	o-xylene	0.063	0.0631
10	naphthalene	0.132	0.1322
	C5-C8 Aliphatics Adj	**11.007**	11.007
	C9-C12 Aliphatics Adj	**10.700**	10.7
	C9-C10 Aromatics	**11.055**	11.055
	Total Xylenes	0.000	

Quantitation Report (QT Reviewed)

Data Path : X:\V6\2023\Nov23\111623\
Data File : V6111618.D
Signal(s) : Signal #1: CPDET1B.ch Signal #2: FID2A.ch
Acq On : 16 Nov 2023 7:16 pm
Operator : sfp
Sample : 67798-07 5mL
Misc : 5
ALS Vial : 18 Sample Multiplier: 1

SFP
11/17/23

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 17 11:56:23 2023
Quant Method : X:\V6\methods\V6VPH082423CHe.M
Quant Title : VOA06 MA VPH
QLast Update : Thu Aug 24 11:07:18 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

MS/D fails ↑ in ranges, sample clean

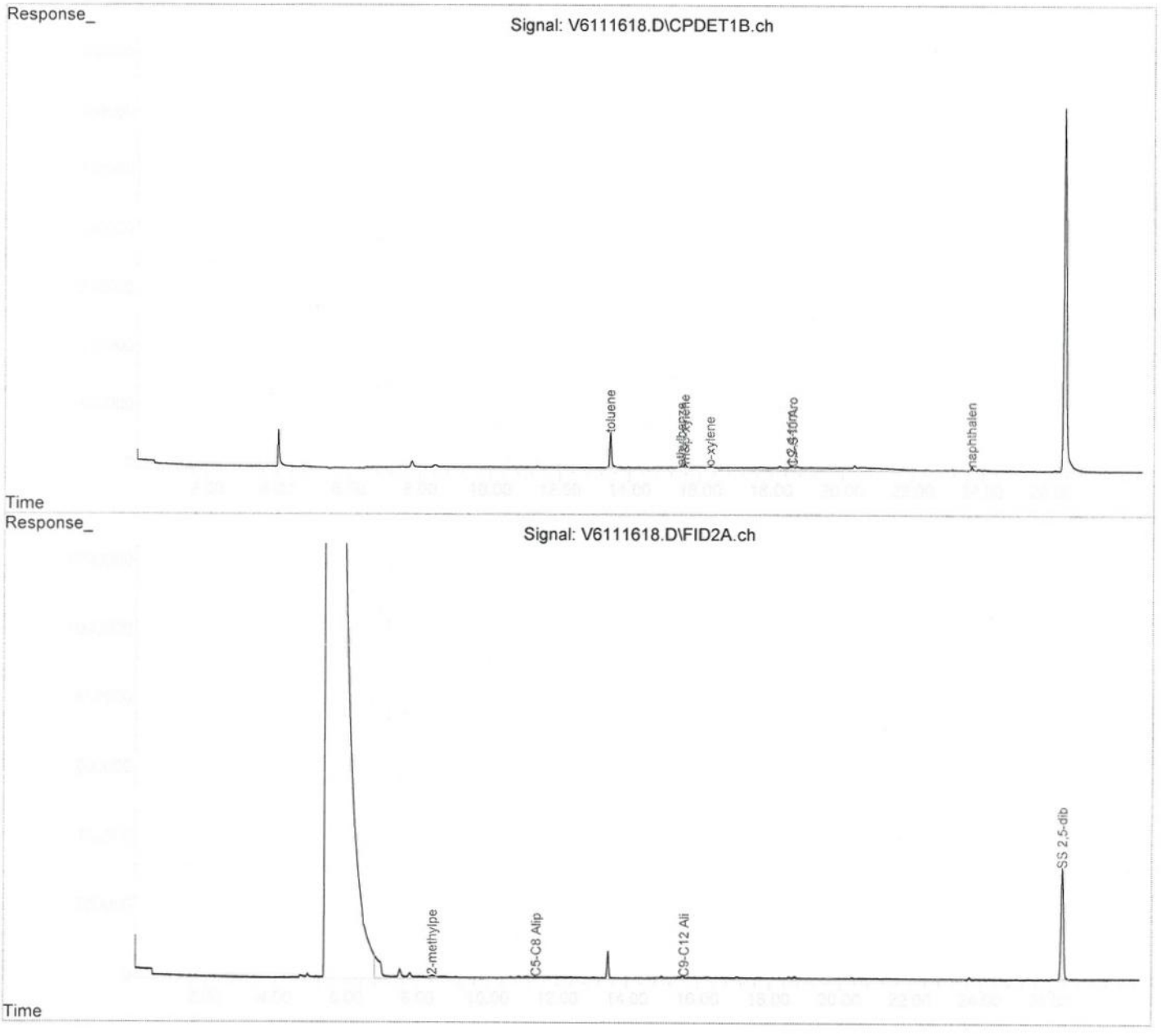
	Compound	R.T.	Response	Conc	Units		
	System Monitoring Compounds						
4)	S SS a,a,a-trifluorotol...	0.000	0	N.D.	ug/L		
Spiked Amount	20.000		Recovery =	0.00%			
11)	S SS 2,5-dibromotoluene	26.358	30447805	39.437	ug/L		
Spiked Amount	40.000 Range 70 - 130		Recovery =	98.59%			
17)	S SS a,a,a-trifluorotol...	0.000	0	N.D.	ug/L		
Spiked Amount	20.000		Recovery =	0.00%			
22)	S SS 2,5-dibromotoluene #2	26.356	15511141	40.430	ug/L	m	BC
Spiked Amount	40.000 Range 70 - 130		Recovery =	101.08%			
	Target Compounds						
1)	methyl-t-butyl ether ...	0.000	0	N.D.	ug/L		
2)	benzene	0.000	0	N.D.	ug/L		
3)	toluene	13.448	2231486	1.541	ug/L	m	PM
5)	ethylbenzene	15.460	87073	0.073	ug/L	m	
6)	m&p-xylenes	15.562	209475	0.147	ug/L	m	
7)	o-xylene	16.274	77098	0.063	ug/L	m	
8)	1,2,4-trimethylbenzene	18.563	104586	0.093	ug/L	m	↓
9)	H C9-C10 Aromatics	18.612	15289409	11.055	ug/L	m	RI
10)	naphthalene	23.687	224085	0.132	ug/L	m	PM
13)	pentane #2	0.000	0	N.D.	ug/L		
14)	2-methylpentane #2	8.396	381593	0.395	ug/L	m	PM
15)	2,2,4-trimethylpentan...	0.000	0	N.D.	ug/L		
16)	H C5-C8 Aliphatics #2	11.378	23517026	12.548	ug/L	m	RI
18)	nonane #2	0.000	0	N.D.	ug/L		
19)	decane #2	0.000	0	N.D.	ug/L		
20)	n-butylcyclohexane #2	0.000	0	N.D.	ug/L		
21)	H C9-C12 Aliphatics #2	15.611	16316550	22.038	ug/L	m	RI

(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : X:\V6\2023\Nov23\111623\
Data File : V6111618.D
Signal(s) : Signal #1: CPDET1B.ch Signal #2: FID2A.ch
Acq On : 16 Nov 2023 7:16 pm
Operator : sfp
Sample : 67798-07 5mL
Misc : 5
ALS Vial : 18 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 17 11:56:23 2023
Quant Method : X:\V6\methods\V6VPH082423CHe.M
Quant Title : VOA06 MA VPH
QLast Update : Thu Aug 24 11:07:18 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



Quantitation Report (QT Reviewed)

Data Path : X:\V6\2023\Nov23\111623\
Data File : V6111619.D
Signal(s) : Signal #1: CPDET1B.ch Signal #2: FID2A.ch
Acq On : 16 Nov 2023 7:50 pm
Operator : sfp
Sample : 67798-07ms 100ppb 5mL
Misc : 5
ALS Vial : 19 Sample Multiplier: 1

SFP
11/17/23

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 17 11:56:26 2023
Quant Method : X:\V6\methods\V6VPH082423CHe.M
Quant Title : VOA06 MA VPH
QLast Update : Thu Aug 24 11:07:18 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

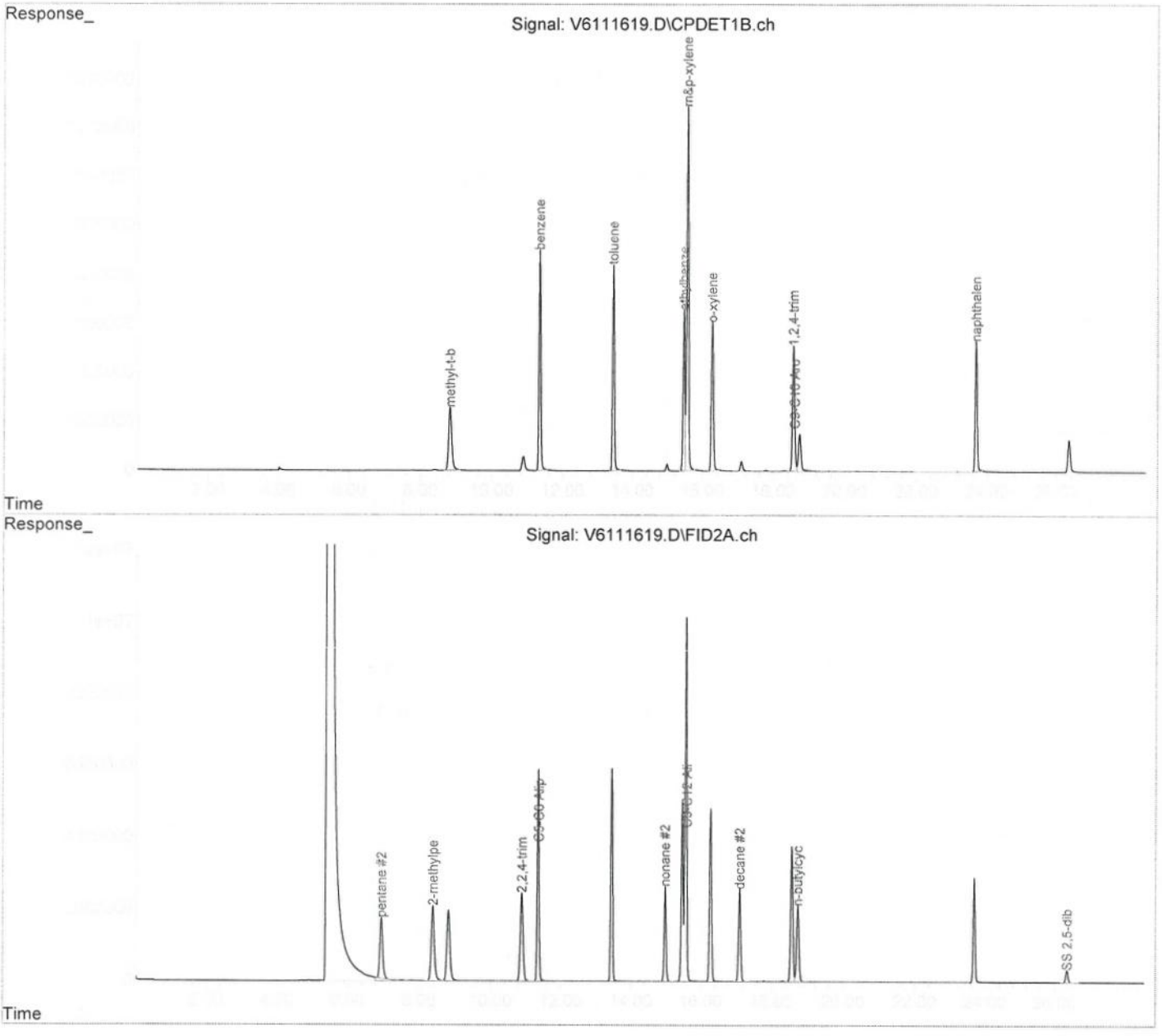
	Compound	R.T.	Response	Conc	Units		
	System Monitoring Compounds						
4) S	SS a,a,a-trifluorotol...	0.000	0	N.D.	ug/L		
Spiked Amount	20.000		Recovery =	0.00%			
11) S	SS 2,5-dibromotoluene	26.358	32063698	41.776	ug/L		
Spiked Amount	40.000 Range 70 - 130		Recovery =	104.44%			
17) S	SS a,a,a-trifluorotol...	0.000	0	N.D.	ug/L		
Spiked Amount	20.000		Recovery =	0.00%			
22) S	SS 2,5-dibromotoluene #2	26.358	16600055	43.545	ug/L		
Spiked Amount	40.000 Range 70 - 130		Recovery =	108.86%			
	Target Compounds						
1)	methyl-t-butyl ether ...	8.826	80498439	100.824	ug/L		
2)	benzene	11.347	159065620	101.361	ug/L		
3)	toluene	13.448	146528044	101.171	ug/L		
5)	ethylbenzene	15.465	121529887	101.657	ug/L		
6)	m&p-xylenes	15.568	283563123	198.994	ug/L		
7)	o-xylene	16.275	121580417	99.453	ug/L		
8)	1,2,4-trimethylbenzene	18.561	110313472	98.182	ug/L		
9) H	C9-C10 Aromatics	18.612	177462922	174.320	ug/L	m	RI
10)	naphthalene	23.691	99188253	94.767	ug/L		
13)	pentane #2	6.948	94033496	84.708	ug/L	m	BC
14)	2-methylpentane #2	8.388	125319956	95.055	ug/L		
15)	2,2,4-trimethylpentan...	10.884	133938611	97.420	ug/L		
16) H	C5-C8 Aliphatics #2	11.378	920082671	739.993	ug/L	m	RI
18)	nonane #2	14.983	102530241	84.767	ug/L		
19)	decane #2	17.099	108533227	91.807	ug/L	m	BC
20)	n-butylcyclohexane #2	18.733	101128801	90.040	ug/L		
21) H	C9-C12 Aliphatics #2	15.611	1255994247	1044.139	ug/L	m	RI

(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : X:\V6\2023\Nov23\111623\
Data File : V6111619.D
Signal(s) : Signal #1: CPDET1B.ch Signal #2: FID2A.ch
Acq On : 16 Nov 2023 7:50 pm
Operator : sfp
Sample : 67798-07ms 100ppb 5mL
Misc : 5
ALS Vial : 19 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 17 11:56:26 2023
Quant Method : X:\V6\methods\V6VPH082423CHe.M
Quant Title : VOA06 MA VPH
QLast Update : Thu Aug 24 11:07:18 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



Quantitation Report (QT Reviewed)

Data Path : X:\V6\2023\Nov23\111623\
Data File : V6111620.D
Signal(s) : Signal #1: CPDET1B.ch Signal #2: FID2A.ch
Acq On : 16 Nov 2023 8:23 pm
Operator : sfp
Sample : 67798-07msd 100ppb 5mL
Misc : 5
ALS Vial : 20 Sample Multiplier: 1

SFP
11/17/23

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 17 11:56:29 2023
Quant Method : X:\V6\methods\V6VPH082423CHe.M
Quant Title : VOA06 MA VPH
QLast Update : Thu Aug 24 11:07:18 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

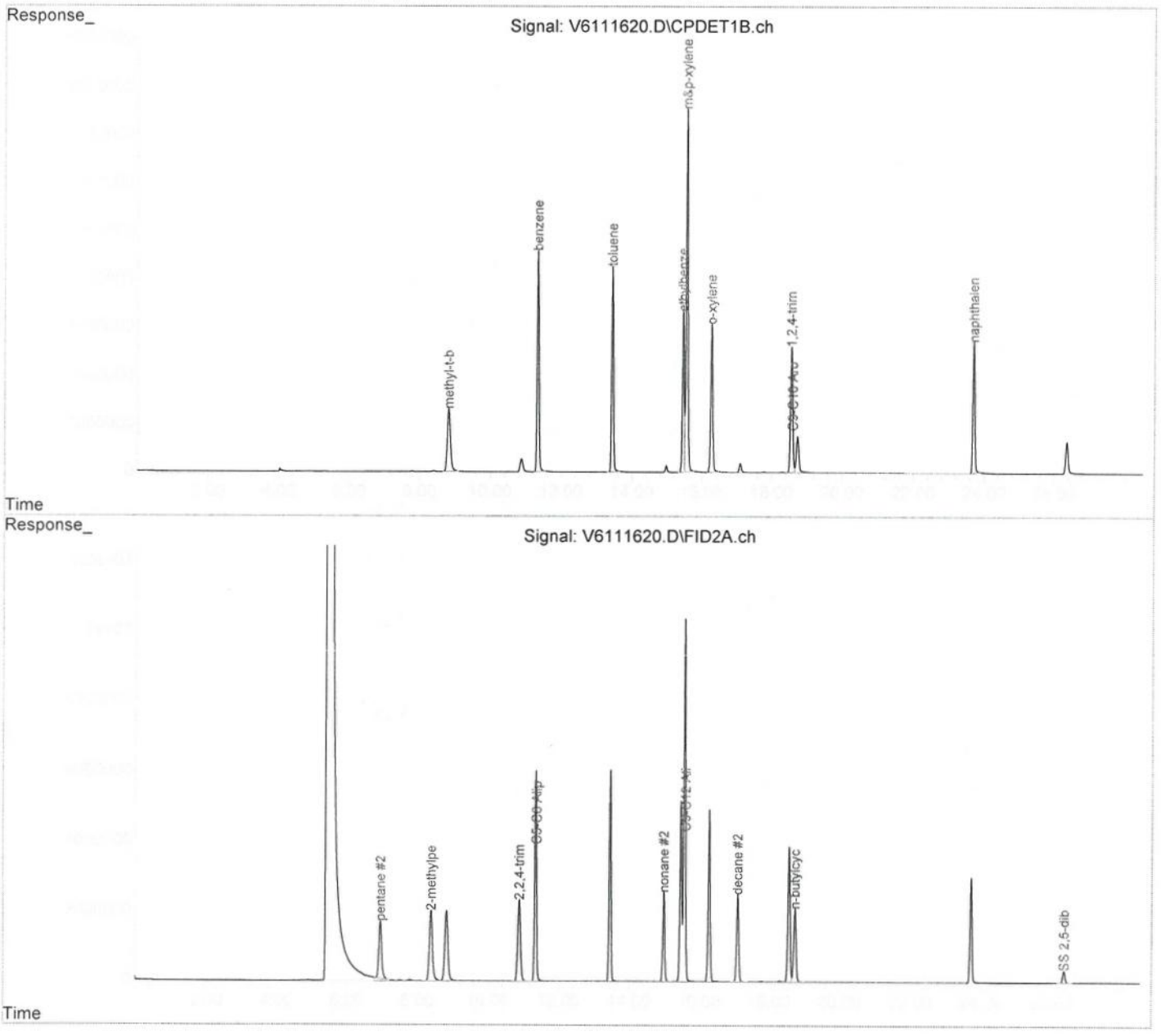
	Compound	R.T.	Response	Conc Units	
	System Monitoring Compounds				
4) S	SS a,a,a-trifluorotol...	0.000	0	N.D. ug/L	
Spiked Amount	20.000		Recovery =	0.00%	
11) S	SS 2,5-dibromotoluene	26.358	31937823	41.594 ug/L	
Spiked Amount	40.000 Range 70 - 130		Recovery =	103.99%	
17) S	SS a,a,a-trifluorotol...	0.000	0	N.D. ug/L	
Spiked Amount	20.000		Recovery =	0.00%	
22) S	SS 2,5-dibromotoluene #2	26.358	16345797	42.818 ug/L	
Spiked Amount	40.000 Range 70 - 130		Recovery =	107.04%	
	Target Compounds				
1)	methyl-t-butyl ether ...	8.826	81468673	102.042 ug/L	
2)	benzene	11.347	161739414	103.065 ug/L	
3)	toluene	13.448	148863610	102.783 ug/L	
5)	ethylbenzene	15.465	123832970	103.583 ug/L	
6)	m&p-xylenes	15.568	288199396	202.247 ug/L	
7)	o-xylene	16.275	123921628	101.368 ug/L	
8)	1,2,4-trimethylbenzene	18.560	112608843	100.225 ug/L	
9) H	C9-C10 Aromatics	18.612	180864567	177.745 ug/L m	RI
10)	naphthalene	23.691	102462648	97.899 ug/L	
13)	pentane #2	6.948	91277032	82.225 ug/L m	BC
14)	2-methylpentane #2	8.388	120297153	91.250 ug/L	
15)	2,2,4-trimethylpentan...	10.883	126665771	92.127 ug/L	
16) H	C5-C8 Aliphatics #2	11.378	913775865	734.876 ug/L m	RI
18)	nonane #2	14.983	98187652	81.195 ug/L	
19)	decane #2	17.099	105173542	89.097 ug/L	
20)	n-butylcyclohexane #2	18.732	99759407	88.824 ug/L	
21) H	C9-C12 Aliphatics #2	15.611	1273936524	1058.932 ug/L m	RI

(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : X:\V6\2023\Nov23\111623\
Data File : V6111620.D
Signal(s) : Signal #1: CPDET1B.ch Signal #2: FID2A.ch
Acq On : 16 Nov 2023 8:23 pm
Operator : sfp
Sample : 67798-07msd 100ppb 5mL
Misc : 5
ALS Vial : 20 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 17 11:56:29 2023
Quant Method : X:\V6\methods\V6VPH082423CHe.M
Quant Title : VOA06 MA VPH
QLast Update : Thu Aug 24 11:07:18 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



This File:	L:\VOA\Excel Reports\2023\V6111621
Analysis Group:	8260/8021/624
Field ID:	SY-OBMW13-110723 18001468
Sample:	67798-08 5mL Dow Salvage Yard
Misc:	5 CRE
Import File Name	v6 111623
TestGroupID	VMA_VPH_PresCert_A
Aqueous or Soil? (A or S)	A
Solid amount (g)	
Methanol volume (mL)	
Percent Solid (%)	
Soil Prep Date	
Weight:	
Volume:	
Lab#:	67798-008
AnalysisDate:	11/16/2023
AnalysisTime:	20:56
Dilution:	1
AnalyzedBy:	SFP V6111621.D
QC_Code:	
Prep#:	

Reviewer Checks:

Quant Report: Reviewed, Ranges integrated, Analyst Initials & Date
Chromatogram Checked, Major peaks identified
Results consistent w/ other attached analyses
Reanalysis reason noted
Substitute dilution data checked
Correct dilution and reason clear or noted
Flags checked (Expiration, F+, Over Cal, Surr, Aspen, QC)
Other QC failures or issues noted in Aspen
Correct data file and/or date/time in Aspen

Notes: Calibration based on sum of discrete peak areas

Initials & Date:

#	Surrogate Standards	Import Value (as ug/L)	Recovery	Flag	QC Limits	Surrogate True Values
11	SS 2,5-dibromotoluene	36.62	**92%**		70-130	40
22	SS 2,5-dibromotoluene #2	38.18	**95%**		70-130	40
4	SS a,a,a-trifluorotoluene	0.00	**0%**		70-130*	20

#	AnalyteName	Concentration (ug/L)	
	C5-C8 Aliphatics #2	**9.610**	9.6104
	C9-C12 Aliphatics #2	**30.458**	30.458
1	Methyl-t-butyl ether (MTBE)	0.000	0
2	benzene	0.181	0.1807
3	toluene	0.325	0.3248
5	ethylbenzene	0.463	0.4628
6	m&p-xylenes	**1.062**	1.0616
7	o-xylene	0.341	0.3412
10	naphthalene	**2.934**	2.9336
	C5-C8 Aliphatics Adj	**9.105**	9.1049
	C9-C12 Aliphatics Adj	**15.698**	15.698
	C9-C10 Aromatics	**12.894**	12.894
	Total Xylenes	0.000	

Quantitation Report (QT Reviewed)

Data Path : X:\V6\2023\Nov23\111623\
Data File : V6111621.D
Signal(s) : Signal #1: CPDET1B.ch Signal #2: FID2A.ch
Acq On : 16 Nov 2023 8:56 pm
Operator : sfp
Sample : 67798-08 5mL
Misc : 5
ALS Vial : 21 Sample Multiplier: 1

SFP
11/17/23

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 17 11:56:33 2023
Quant Method : X:\V6\methods\V6VPH082423CHe.M
Quant Title : VOA06 MA VPH
QLast Update : Thu Aug 24 11:07:18 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	R.T.	Response	Conc	Units	
	System Monitoring Compounds					
4)	S SS a,a,a-trifluorotol...	0.000	0	N.D.	ug/L	
Spiked Amount	20.000		Recovery =	0.00%		
11)	S SS 2,5-dibromotoluene	26.357	28502392	36.620	ug/L	
Spiked Amount	40.000 Range 70 - 130		Recovery =	91.55%		
17)	S SS a,a,a-trifluorotol...	0.000	0	N.D.	ug/L	
Spiked Amount	20.000		Recovery =	0.00%		
22)	S SS 2,5-dibromotoluene #2	26.358	14724240	38.180	ug/L	
Spiked Amount	40.000 Range 70 - 130		Recovery =	95.45%		
	Target Compounds					
1)	methyl-t-butyl ether ...	0.000	0	N.D.	ug/L	
2)	benzene	11.342	283528	0.181	ug/L	mPM
3)	toluene	13.448	470431	0.325	ug/L	m
5)	ethylbenzene	15.466	553223	0.463	ug/L	m
6)	m&p-xylenes	15.570	1512753	1.062	ug/L	m
7)	o-xylene	16.281	417165	0.341	ug/L	m
8)	1,2,4-trimethylbenzene	18.563	898331	0.800	ug/L	m
9)	H C9-C10 Aromatics	18.612	17116101	12.894	ug/L	mRI
10)	naphthalene	23.692	3153578	2.934	ug/L	mPM
13)	pentane #2	0.000	0	N.D.	ug/L	
14)	2-methylpentane #2	8.414	815803	0.724	ug/L	mPM
15)	2,2,4-trimethylpentan...	10.881	721167	0.482	ug/L	
16)	H C5-C8 Aliphatics #2	11.378	19896472	9.610	ug/L	mRI
18)	nonane #2	14.983	1382138	1.563	ug/L	mPM
19)	decane #2	17.100	1597157	5.561	ug/L	mBC
20)	n-butylcyclohexane #2	18.732	2186240	2.126	ug/L	
21)	H C9-C12 Aliphatics #2	15.611	26528599	30.458	ug/L	mRI

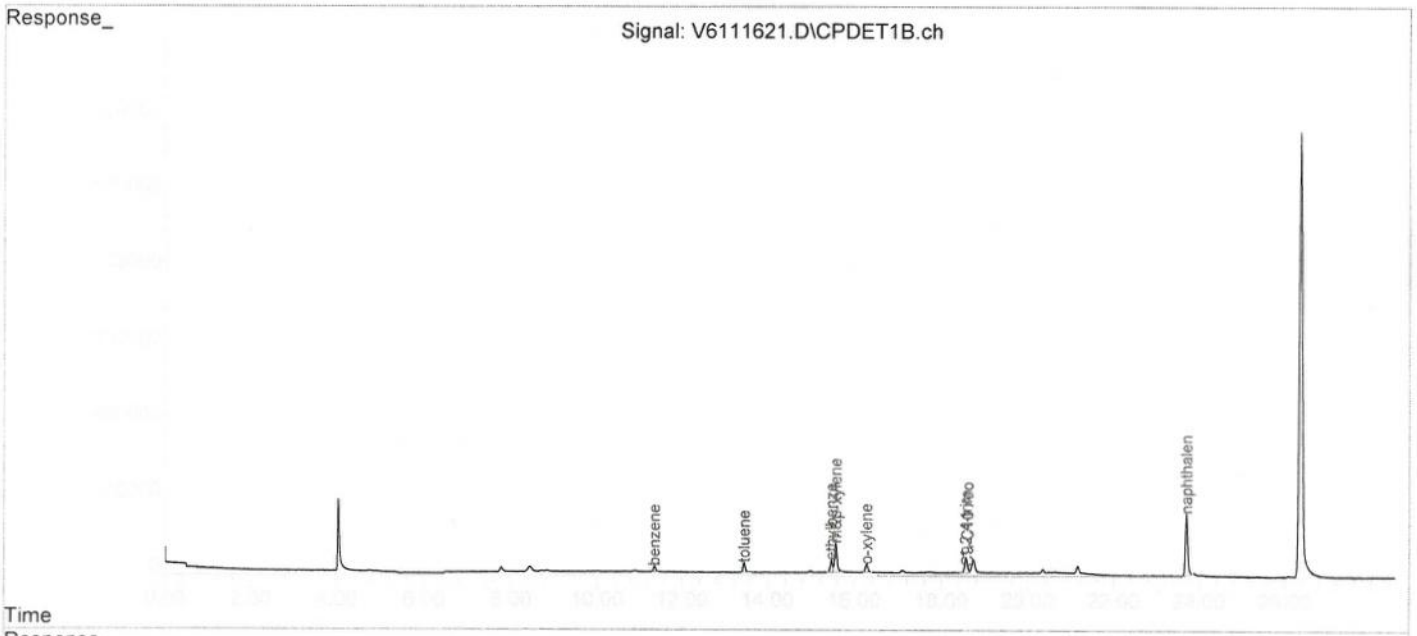
(f)=RT Delta > 1/2 Window (m)=manual int.

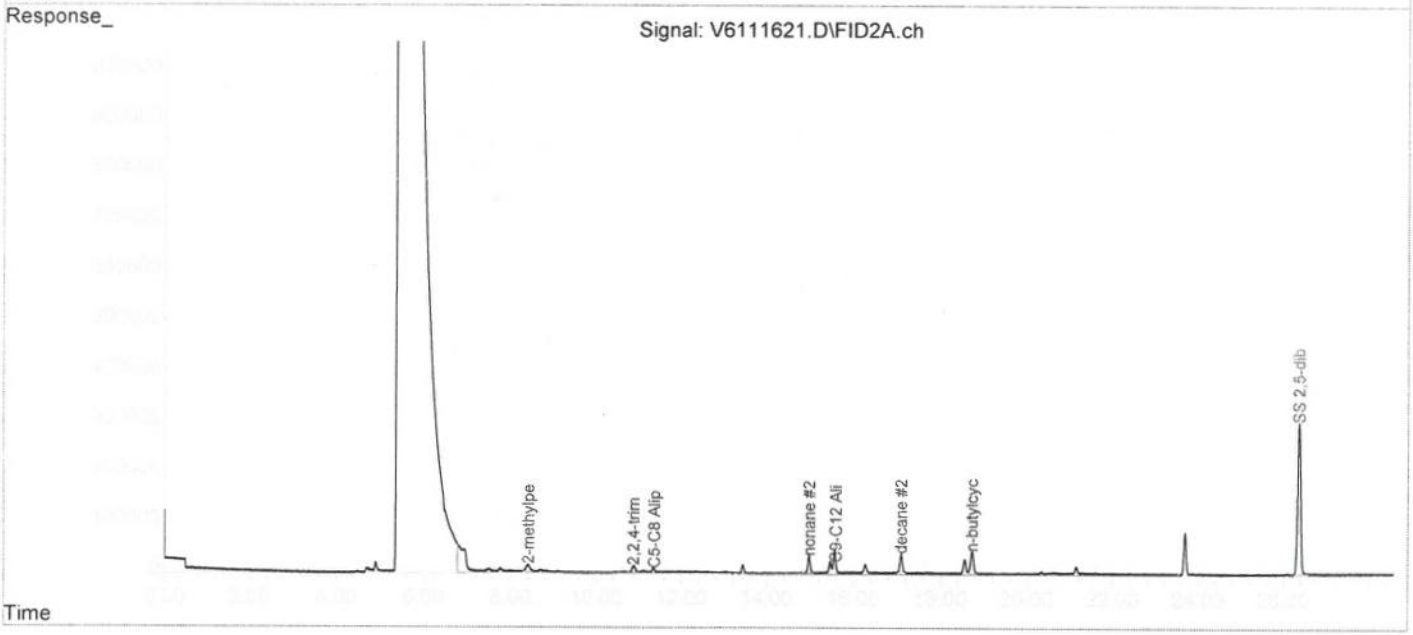
Quantitation Report (QT Reviewed)

Data Path : X:\V6\2023\Nov23\111623\
Data File : V6111621.D
Signal(s) : Signal #1: CPDET1B.ch Signal #2: FID2A.ch
Acq On : 16 Nov 2023 8:56 pm
Operator : sfp
Sample : 67798-08 5mL
Misc : 5
ALS Vial : 21 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 17 11:56:33 2023
Quant Method : X:\V6\methods\V6VPH082423CHe.M
Quant Title : VOA06 MA VPH
QLast Update : Thu Aug 24 11:07:18 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





This File:	L:\VOA\Excel Reports\2023\V6111622
Analysis Group:	8260/8021/624
Field ID:	SY-OBMW14-110723 18001468
Sample:	67798-09 5mL Dow Salvage Yard
Misc:	5 CRE
Import File Name	v6 111623
TestGroupID	VMA_VPH_PresCert_A
Aqueous or Soil? (A or S)	A
Solid amount (g)	
Methanol volume (mL)	
Percent Solid (%)	
Soil Prep Date	
Weight:	
Volume:	
Lab#:	67798-009
AnalysisDate:	11/16/2023
AnalysisTime:	21:30
Dilution:	1
AnalyzedBy:	SFP V6111622.D
QC_Code:	
Prep#:	

Reviewer Checks:

Quant Report: Reviewed, Ranges integrated, Analyst Initials & Date
Chromatogram Checked, Major peaks identified
Results consistent w/ other attached analyses
Reanalysis reason noted
Substitute dilution data checked
Correct dilution and reason clear or noted
Flags checked (Expiration, F+, Over Cal, Surr, Aspen, QC)
Other QC failures or issues noted in Aspen
Correct data file and/or date/time in Aspen

Notes: Calibration based on sum of discrete peak areas

Initials & Date:

#	Surrogate Standards	Import Value (as ug/L)	Recovery	Flag	QC Limits	Surrogate True Values
11	SS 2,5-dibromotoluene	37.10	**93%**		70-130	40
22	SS 2,5-dibromotoluene #2	38.44	**96%**		70-130	40
4	SS a,a,a-trifluorotoluene	0.00	**0%**		70-130*	20

#	AnalyteName	Concentration (ug/L)	
	C5-C8 Aliphatics #2	**12.282**	12.282
	C9-C12 Aliphatics #2	**26.663**	26.663
1	Methyl-t-butyl ether (MTBE)	0.000	0
2	benzene	0.071	0.0711
3	toluene	0.117	0.1169
5	ethylbenzene	0.159	0.159
6	m&p-xylenes	0.341	0.3409
7	o-xylene	0.124	0.1245
10	naphthalene	0.829	0.8286
	C5-C8 Aliphatics Adj	**12.094**	12.094
	C9-C12 Aliphatics Adj	**17.385**	17.385
	C9-C10 Aromatics	**8.654**	8.6535
	Total Xylenes	0.000	

Quantitation Report (QT Reviewed)

Data Path : X:\V6\2023\Nov23\111623\
Data File : V6111622.D
Signal(s) : Signal #1: CPDET1B.ch Signal #2: FID2A.ch
Acq On : 16 Nov 2023 9:30 pm
Operator : sfp
Sample : 67798-09 5mL
Misc : 5
ALS Vial : 22 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 17 11:56:36 2023
Quant Method : X:\V6\methods\V6VPH082423CHe.M
Quant Title : VOA06 MA VPH
QLast Update : Thu Aug 24 11:07:18 2023
Response via : Initial Calibration
Integrator: ChemStation

SFP
11/17/23

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

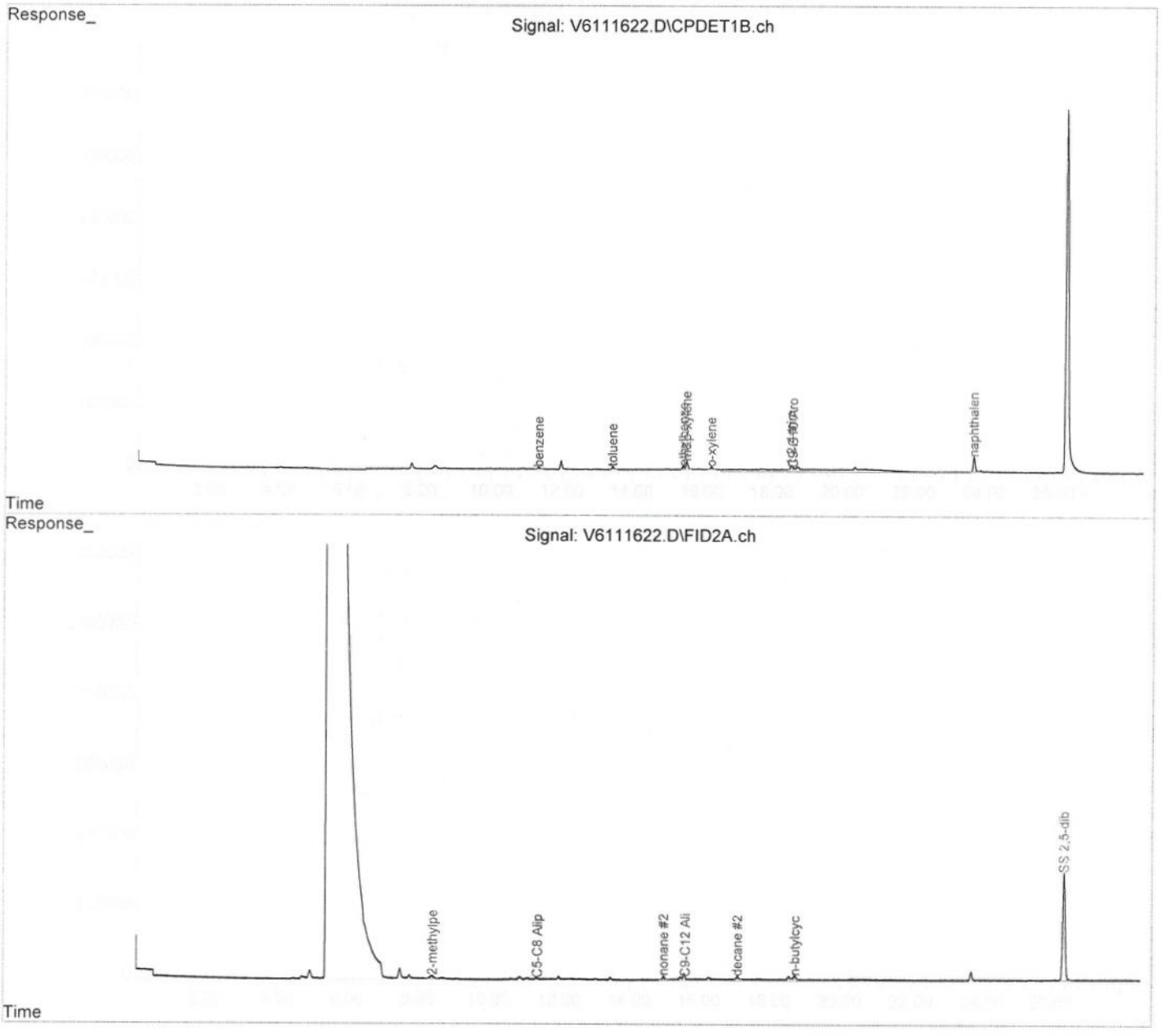
	Compound	R.T.	Response	Conc	Units	
	System Monitoring Compounds					
4)	S SS a,a,a-trifluorotol...	0.000	0	N.D.	ug/L	
Spiked Amount	20.000		Recovery =	0.00%		
11)	S SS 2,5-dibromotoluene	26.358	28833095	37.099	ug/L	
Spiked Amount	40.000 Range 70 - 130		Recovery =	92.75%		
17)	S SS a,a,a-trifluorotol...	0.000	0	N.D.	ug/L	
Spiked Amount	20.000		Recovery =	0.00%		
22)	S SS 2,5-dibromotoluene #2	26.357	14815777	38.442	ug/L	m
Spiked Amount	40.000 Range 70 - 130		Recovery =	96.10%		
	Target Compounds					
1)	methyl-t-butyl ether ...	0.000	0	N.D.	ug/L	
2)	benzene	11.350	111510	0.071	ug/L	m PM
3)	toluene	13.442	169354	0.117	ug/L	m
5)	ethylbenzene	15.474	190079	0.159	ug/L	m
6)	m&p-xylenes	15.567	485780	0.341	ug/L	m
7)	o-xylene	16.277	152149	0.124	ug/L	m
8)	1,2,4-trimethylbenzene	18.563	291882	0.260	ug/L	m
9)	H C9-C10 Aromatics	18.612	12904153	8.654	ug/L	m RI
10)	naphthalene	23.692	952279	0.829	ug/L	m PM
13)	pentane #2	0.000	0	N.D.	ug/L	
14)	2-methylpentane #2	8.418	588938	0.552	ug/L	m PM
15)	2,2,4-trimethylpentan...	0.000	0	N.D.	ug/L	
16)	H C5-C8 Aliphatics #2	11.378	23188648	12.282	ug/L	m RI
18)	nonane #2	14.976	428318	0.778	ug/L	m PM
19)	decane #2	17.099	366038	4.568	ug/L	m BC
20)	n-butylcyclohexane #2	18.731	604132	0.720	ug/L	m PM
21)	H C9-C12 Aliphatics #2	15.611	21925798	26.663	ug/L	m RI

(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : X:\V6\2023\Nov23\111623\
Data File : V6111622.D
Signal(s) : Signal #1: CPDET1B.ch Signal #2: FID2A.ch
Acq On : 16 Nov 2023 9:30 pm
Operator : sfp
Sample : 67798-09 5mL
Misc : 5
ALS Vial : 22 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 17 11:56:36 2023
Quant Method : X:\V6\methods\V6VPH082423CHe.M
Quant Title : VOA06 MA VPH
QLast Update : Thu Aug 24 11:07:18 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



This File:	L:\VOA\Excel Reports\2023\V6111623
Analysis Group:	8260/8021/624
Field ID:	MW2-252.5-262.5-110723 18001468
Sample:	67798-10 5mL Dow Salvage Yard
Misc:	5 CRE
Import File Name	v6 111623
TestGroupID	VMA_VPH_PresCert_A
Aqueous or Soil? (A or S)	A
Solid amount (g)	
Methanol volume (mL)	
Percent Solid (%)	
Soil Prep Date	
Weight:	
Volume:	
Lab#:	67798-010
AnalysisDate:	11/16/2023
AnalysisTime:	22:03
Dilution:	1
AnalyzedBy:	SFP V6111623.D
QC_Code:	
Prep#:	

Reviewer Checks:

Quant Report: Reviewed, Ranges integrated, Analyst Initials & Date
Chromatogram Checked, Major peaks identified
Results consistent w/ other attached analyses
Reanalysis reason noted
Substitute dilution data checked
Correct dilution and reason clear or noted
Flags checked (Expiration, F+, Over Cal, Surr, Aspen, QC)
Other QC failures or issues noted in Aspen
Correct data file and/or date/time in Aspen

Notes: Calibration based on sum of discrete peak areas

Initials & Date:

#	Surrogate Standards	Import Value (as ug/L)	Recovery	Flag	QC Limits	Surrogate True Values
11	SS 2,5-dibromotoluene	37.10	**93%**		70-130	40
22	SS 2,5-dibromotoluene #2	38.58	**96%**		70-130	40
4	SS a,a,a-trifluorotoluene	0.00	**0%**		70-130*	20

#	AnalyteName	Concentration (ug/L)	
	C5-C8 Aliphatics #2	**18.791**	18.791
	C9-C12 Aliphatics #2	**22.301**	22.301
1	Methyl-t-butyl ether (MTBE)	0.000	0
2	benzene	0.000	0
3	toluene	**3.428**	3.4283
5	ethylbenzene	0.000	0
6	m&p-xylenes	0.261	0.2613
7	o-xylene	0.103	0.1028
10	naphthalene	0.465	0.4653
	C5-C8 Aliphatics Adj	**15.363**	15.363
	C9-C12 Aliphatics Adj	**11.578**	11.578
	C9-C10 Aromatics	**10.359**	10.359
	Total Xylenes	0.000	

Quantitation Report (QT Reviewed)

Data Path : X:\V6\2023\Nov23\111623\
Data File : V6111623.D
Signal(s) : Signal #1: CPDET1B.ch Signal #2: FID2A.ch
Acq On : 16 Nov 2023 10:03 pm
Operator : sfp
Sample : 67798-10 5mL
Misc : 5
ALS Vial : 23 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 17 11:56:39 2023
Quant Method : X:\V6\methods\V6VPH082423CHe.M
Quant Title : VOA06 MA VPH
QLast Update : Thu Aug 24 11:07:18 2023
Response via : Initial Calibration
Integrator: ChemStation

SFP
11/17/23

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

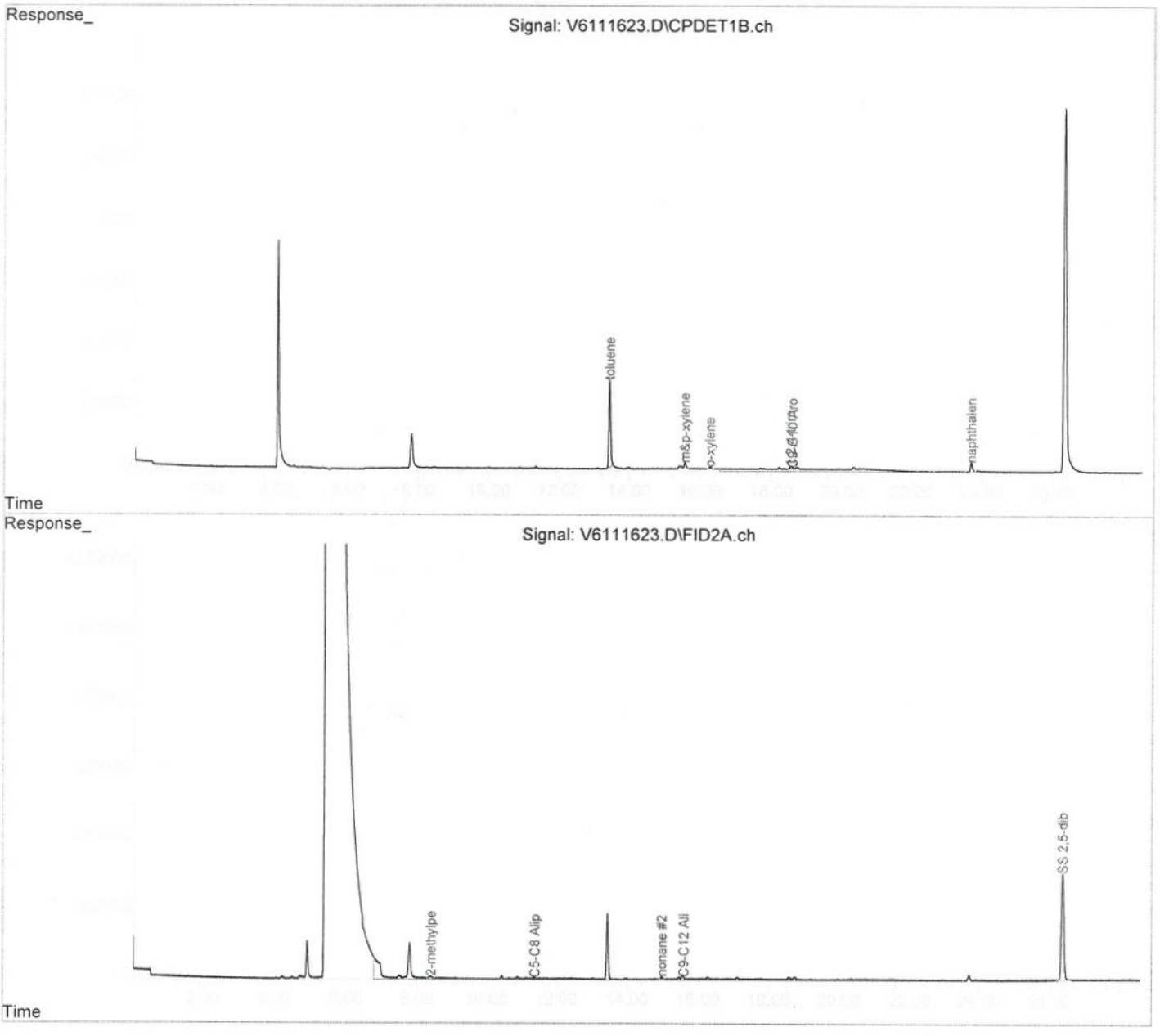
	Compound	R.T.	Response	Conc	Units	
	System Monitoring Compounds					
4) S	SS a,a,a-trifluorotol...	0.000	0	N.D.	ug/L	
Spiked Amount	20.000		Recovery =	0.00%		
11) S	SS 2,5-dibromotoluene	26.358	28834950	37.101	ug/L	
Spiked Amount	40.000 Range 70 - 130		Recovery =	92.75%		
17) S	SS a,a,a-trifluorotol...	0.000	0	N.D.	ug/L	
Spiked Amount	20.000		Recovery =	0.00%		
22) S	SS 2,5-dibromotoluene #2	26.358	14865357	38.583	ug/L	
Spiked Amount	40.000 Range 70 - 130		Recovery =	96.46%		
	Target Compounds					
1)	methyl-t-butyl ether ...	0.000	0	N.D.	ug/L	
2)	benzene	0.000	0	N.D.	ug/L	
3)	toluene	13.449	4965267	3.428	ug/L	
5)	ethylbenzene	0.000	0	N.D.	ug/L	
6)	m&p-xylenes	15.569	372362	0.261	ug/L m	PM
7)	o-xylene	16.276	125672	0.103	ug/L m	
8)	1,2,4-trimethylbenzene	18.556	216578	0.193	ug/L m	↓
9) H	C9-C10 Aromatics	18.612	14598482	10.359	ug/L m	RI
10)	naphthalene	23.693	572383	0.465	ug/L m	PM
13)	pentane #2	0.000	0	N.D.	ug/L	
14)	2-methylpentane #2	8.402	249170	0.294	ug/L m	PM
15)	2,2,4-trimethylpentan...	0.000	0	N.D.	ug/L	
16) H	C5-C8 Aliphatics #2	11.378	31211264	18.791	ug/L m	RI
18)	nonane #2	14.984	250319	0.632	ug/L m	PM
19)	decane #2	0.000	0	N.D.	ug/L	
20)	n-butylcyclohexane #2	0.000	0	N.D.	ug/L	
21) H	C9-C12 Aliphatics #2	15.611	16635767	22.301	ug/L m	RI

(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : X:\V6\2023\Nov23\111623\
Data File : V6111623.D
Signal(s) : Signal #1: CPDET1B.ch Signal #2: FID2A.ch
Acq On : 16 Nov 2023 10:03 pm
Operator : sfp
Sample : 67798-10 5mL
Misc : 5
ALS Vial : 23 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 17 11:56:39 2023
Quant Method : X:\V6\methods\V6VPH082423CHe.M
Quant Title : VOA06 MA VPH
QLast Update : Thu Aug 24 11:07:18 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



This File:	L:\VOA\Excel Reports\2023\V6111607
Analysis Group:	8260/8021/624
Field ID:	TB31-110723 18001468
Sample:	67798-11 5mL Dow Salvage Yard
Misc:	5 CRE
Import File Name	v6 111623
TestGroupID	VMA_VPH_PresCert_A
Aqueous or Soil? (A or S)	A
Solid amount (g)	
Methanol volume (mL)	
Percent Solid (%)	
Soil Prep Date	
Weight:	
Volume:	
Lab#:	67798-011
AnalysisDate:	11/16/2023
AnalysisTime:	13:06
Dilution:	1
AnalyzedBy:	SFP V6111607.D
QC_Code:	
Prep#:	

Reviewer Checks:

Quant Report: Reviewed, Ranges integrated, Analyst Initials & Date
Chromatogram Checked, Major peaks identified
Results consistent w/ other attached analyses
Reanalysis reason noted
Substitute dilution data checked
Correct dilution and reason clear or noted
Flags checked (Expiration, F+, Over Cal, Surr, Aspen, QC)
Other QC failures or issues noted in Aspen
Correct data file and/or date/time in Aspen

Notes: Calibration based on sum of discrete peak areas

Initials & Date:

#	Surrogate Standards	Import Value (as ug/L)	Recovery	Flag	QC Limits	Surrogate True Values
11	SS 2,5-dibromotoluene	39.56	**99%**		70-130	40
22	SS 2,5-dibromotoluene #2	39.28	**98%**		70-130	40
4	SS a,a,a-trifluorotoluene	0.00	**0%**		70-130*	20

#	AnalyteName	Concentration (ug/L)	
	C5-C8 Aliphatics #2	**9.902**	9.9021
	C9-C12 Aliphatics #2	**24.048**	24.048
1	Methyl-t-butyl ether (MTBE)	0.000	0
2	benzene	0.000	0
3	toluene	0.000	0
5	ethylbenzene	0.080	0.0795
6	m&p-xylenes	0.215	0.2146
7	o-xylene	0.082	0.0815
10	naphthalene	0.342	0.3419
	C5-C8 Aliphatics Adj	**9.902**	9.9021
	C9-C12 Aliphatics Adj	**14.885**	14.885
	C9-C10 Aromatics	**8.788**	8.7878
	Total Xylenes	0.000	

Quantitation Report (QT Reviewed)

Data Path : X:\V6\2023\Nov23\111623\
Data File : V6111607.D
Signal(s) : Signal #1: CPDET1B.ch Signal #2: FID2A.ch
Acq On : 16 Nov 2023 1:06 pm
Operator : sfp
Sample : 67798-11 5mL: (Sig #1); (Sig #2)
Misc : 5
ALS Vial : 7 Sample Multiplier: 1

SFP
11/17/23

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 17 11:55:50 2023
Quant Method : X:\V6\methods\V6VPH082423CHe.M
Quant Title : VOA06 MA VPH
QLast Update : Thu Aug 24 11:07:18 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

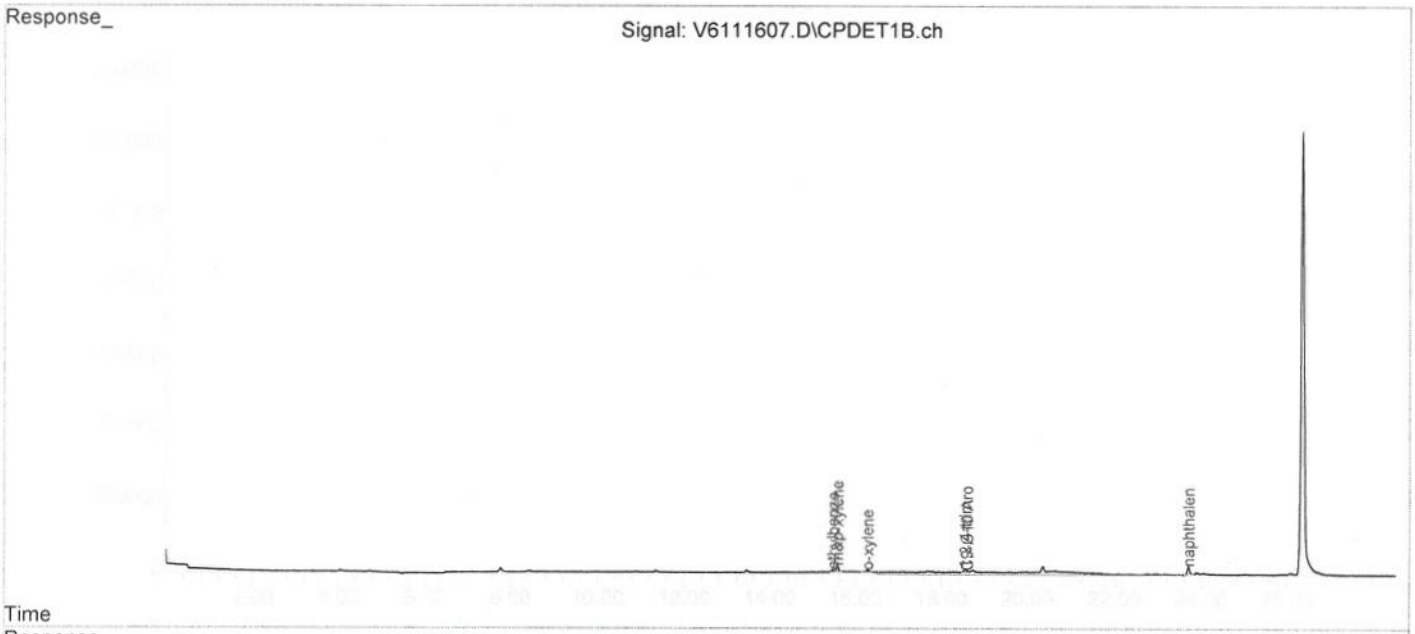
	Compound	R.T.	Response	Conc	Units	
	System Monitoring Compounds					
4) S	SS a,a,a-trifluorotol...	0.000	0	N.D.	ug/L	
Spiked Amount	20.000		Recovery =	0.00%		
11) S	SS 2,5-dibromotoluene	26.358	30534984	39.563	ug/L	
Spiked Amount	40.000 Range 70 - 130		Recovery =	98.91%		
17) S	SS a,a,a-trifluorotol...	0.000	0	N.D.	ug/L	
Spiked Amount	20.000		Recovery =	0.00%		
22) S	SS 2,5-dibromotoluene #2	26.359	15108267	39.278	ug/L	
Spiked Amount	40.000 Range 70 - 130		Recovery =	98.19%		
	Target Compounds					
1)	methyl-t-butyl ether ...	0.000	0	N.D.	ug/L	
2)	benzene	0.000	0	N.D.	ug/L	
3)	toluene	0.000	0	N.D.	ug/L	
5)	ethylbenzene	15.472	95084	0.080	ug/L	m PM
6)	m&p-xylenes	15.573	305808	0.215	ug/L	m
7)	o-xylene	16.289	99658	0.082	ug/L	m
8)	1,2,4-trimethylbenzene	18.575	235783	0.210	ug/L	m
9) H	C9-C10 Aromatics	18.612	13037566	8.788	ug/L	m RI
10)	naphthalene	23.696	443358	0.342	ug/L	m PM
13)	pentane #2	0.000	0	N.D.	ug/L	
14)	2-methylpentane #2	0.000	0	N.D.	ug/L	
15)	2,2,4-trimethylpentan...	0.000	0	N.D.	ug/L	
16) H	C5-C8 Aliphatics #2	11.378	20256039	9.902	ug/L	m RI
18)	nonane #2	14.973	254953	0.636	ug/L	m PM
19)	decane #2	17.100	200457	4.434	ug/L	m BC
20)	n-butylcyclohexane #2	0.000	0	N.D.	ug/L	
21) H	C9-C12 Aliphatics #2	15.611	18754471	24.048	ug/L	m RI

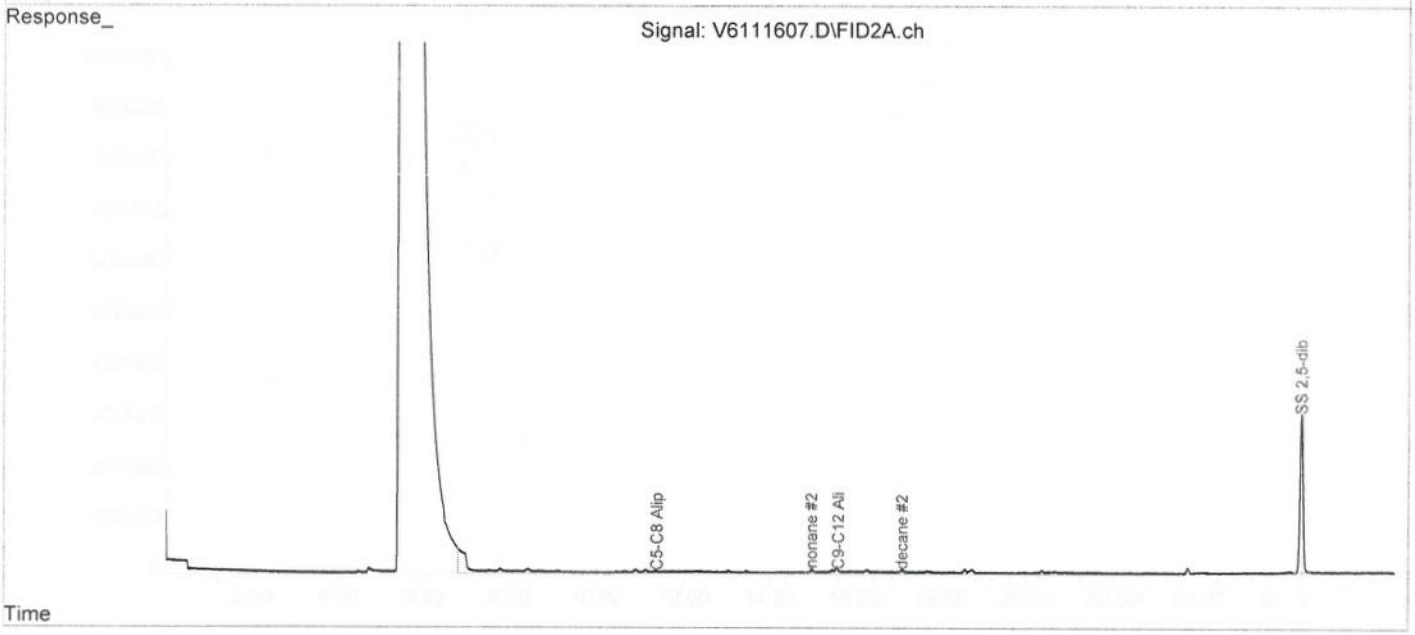
(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : X:\V6\2023\Nov23\111623\
Data File : V6111607.D
Signal(s) : Signal #1: CPDET1B.ch Signal #2: FID2A.ch
Acq On : 16 Nov 2023 1:06 pm
Operator : sfp
Sample : 67798-11 5mL: (Sig #1); (Sig #2)
Misc : 5
ALS Vial : 7 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 17 11:55:50 2023
Quant Method : X:\V6\methods\V6VPH082423CHe.M
Quant Title : VOA06 MA VPH
QLast Update : Thu Aug 24 11:07:18 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





This File: **L:\SVOA\Excel Reports\ABN\231122\67798-001** Charles Leahy L:\SVOA\ABN\ABN 8270DoD ImportFileBuilde
Analysis Group: **ABN** **Dow Salvage Yard** 11/22/23 1:58 PM
Field ID: **SY-OBMW12-110723** **CRE** L:\SVOA\ABN\
Sample: **67798-01 acid x1** **67798-01 bn x1** L:\SVOA\Excel Reports\ABN\231122\
Misc: L:\SVOA\PDFReports\
DataFile: 510.D\S4ABN110223A.XLS 4ABN110223A.XLS
Import File Name **S4 ABN 17096 DoD**
TestGroupID **E8270DoD_A**
Aqueous or Soil? (A or S) **A**
Prep Date **11/9/2023**
Lab#: **67798-001**
QC_Code:
Prep# **17096**

Reviewer Checks:
Quant Report: Reviewed, Analyst Initials & Date ✓
Chromatogram Checked, Major peaks identified ✓
Results consistent w/ other attached analyses ✓ MSD
Reanalysis reason noted
Substitute dilution data checked
Correct dilution and reason clear or noted ✓
Flags checked (Expiration, F+, Over Cal, Surr, Aspen, QC) ✓ MS
Other QC failures or issues noted in Aspen ✓
Correct data file and/or date/time in Aspen ✓

TB addressed in case Narr (LLSD)

Notes:
Reviewer Initials & Date: 11/25/23

#	Surrogate Standards	Conc. (ug/mL)	AnalysisDate	AnalyzedBy	Dil'n	Weight	Volume	Surr	Recovery	Flag	QC Limits
4	2-fluorophenol	31.54	11/15/2023	CL s4111510.D	1	1	1	100	**32%**		21-100
7	phenol-d6	19.38	11/15/2023	CL s4111510.D	1	1	1	100	**19%**		10-102
59	2,4,6-tribromophenol	62.24	11/15/2023	CL s4111510.D	1	1	1	100	**62%**		10-123
22	nitrobenzene-d5	32.27	11/15/2023	CL s4111511.D	1	1	1	50	**65%**		35-114
38	2-fluorobiphenyl	31.76	11/15/2023	CL s4111511.D	1	1	1	50	**64%**		43-116
75	terphenyl-d14	41.27	11/15/2023	CL s4111511.D	1	1	1	50	**83%**		33-141
6	phenol	0.00	11/15/2023	CL s4111510.D	1	1	1				
8	2-chlorophenol	0.00	11/15/2023	CL s4111510.D	1	1	1				
15	2-methylphenol	0.00	11/15/2023	CL s4111510.D	1	1	1				
15	2-methylphenol	0.00	11/15/2023	CL s4111510.D	1	1	1				
20	4-methylphenol	0.00	11/15/2023	CL s4111510.D	1	1	1				
25	2-nitrophenol	0.00	11/15/2023	CL s4111510.D	1	1	1				
26	2,4-dimethylphenol	0.00	11/15/2023	CL s4111510.D	1	1	1				
28	2,4-dichlorophenol	0.00	11/15/2023	CL s4111510.D	1	1	1				
29	2,6-dichlorophenol	0.00	11/15/2023	CL s4111510.D	1	1	1				
32	benzoic acid	0.00	11/15/2023	CL s4111510.D	1	1	1				
35	4-chloro-3-methylphenol	0.00	11/15/2023	CL s4111510.D	1	1	1				
40	2,4,6-trichlorophenol	0.00	11/15/2023	CL s4111510.D	1	1	1				
41	2,4,5-trichlorophenol	0.00	11/15/2023	CL s4111510.D	1	1	1				
51	2,4-dinitrophenol	0.00	11/15/2023	CL s4111510.D	1	1	1				
53	4-nitrophenol	0.00	11/15/2023	CL s4111510.D	1	1	1				
60	4,6-dinitro-2-methylphenol	0.00	11/15/2023	CL s4111510.D	1	1	1				
66	pentachlorophenol	0.00	11/15/2023	CL s4111510.D	1	1	1				
2	N-nitroso-dimethylamine	0.00	11/15/2023	CL s4111511.D	1	1	1				
3	pyridine	0.00	11/15/2023	CL s4111511.D	1	1	1				
5	aniline	0.00	11/15/2023	CL s4111511.D	1	1	1				
9	n-decane	0.00	11/15/2023	CL s4111511.D	1	1	1				
10	bis-(2-choroethyl)ether	0.00	11/15/2023	CL s4111511.D	1	1	1				
11	1,3-dichlorobenzene	0.00	11/15/2023	CL s4111511.D	1	1	1				
12	1,4-diclorobenzene	0.00	11/15/2023	CL s4111511.D	1	1	1				
13	1,2-dichlorobenzene	0.00	11/15/2023	CL s4111511.D	1	1	1				
14	benzyl alcohol	0.00	11/15/2023	CL s4111511.D	1	1	1				
16	2,2'-oxybis(1-chloropropane)	0.00	11/15/2023	CL s4111511.D	1	1	1				
##	acetephenone	#N/A	11/15/2023	CL s4111511.D	1	1	1			#N/A	
18	hexachloroethane	0.00	11/15/2023	CL s4111511.D	1	1	1				
19	N-nitroso-di-n-propylamine	0.00	11/15/2023	CL s4111511.D	1	1	1				
23	nitrobenzene	0.00	11/15/2023	CL s4111511.D	1	1	1				
24	isophorone	0.00	11/15/2023	CL s4111511.D	1	1	1				
27	bis(2-chloroethoxy)methane	0.00	11/15/2023	CL s4111511.D	1	1	1				
30	1,2,4-trichlorobenzene	0.00	11/15/2023	CL s4111511.D	1	1	1				
31	naphthalene	0.00	11/15/2023	CL s4111511.D	1	1	1				
33	4-chloroanaline	0.00	11/15/2023	CL s4111511.D	1	1	1				
34	hexachloro-1,3-butadiene	0.00	11/15/2023	CL s4111511.D	1	1	1				
36	2-methylnaphthalene	0.00	11/15/2023	CL s4111511.D	1	1	1				
39	hexachlorocyclopentadiene	0.00	11/15/2023	CL s4111511.D	1	1	1				
43	2-chloronaphthalene	0.00	11/15/2023	CL s4111511.D	1	1	1				
44	2-nitroanaline	0.00	11/15/2023	CL s4111511.D	1	1	1				
45	acenaphthylene	0.00	11/15/2023	CL s4111511.D	1	1	1				
46	dimethyl phthalate	0.00	11/15/2023	CL s4111511.D	1	1	1				
47	2,6-dinitrotoluene	0.00	11/15/2023	CL s4111511.D	1	1	1				
48	2,4-dinitrotoluene	0.00	11/15/2023	CL s4111511.D	1	1	1				
49	acenaphthene	0.00	11/15/2023	CL s4111511.D	1	1	1				
50	3-nitroanaline	0.00	11/15/2023	CL s4111511.D	1	1	1				
52	dibenzofuran	0.00	11/15/2023	CL s4111511.D	1	1	1				
54	fluorene	0.00	11/15/2023	CL s4111511.D	1	1	1				
55	diethyl phthalate	0.00	11/15/2023	CL s4111511.D	1	1	1				
56	4-chlorophenyl phenyl ether	0.00	11/15/2023	CL s4111511.D	1	1	1				
57	4-nitroanaline	0.00	11/15/2023	CL s4111511.D	1	1	1				
61	azobenzene	0.00	11/15/2023	CL s4111511.D	1	1	1				
62	N-nitrosodiphenylamine	0.00	11/15/2023	CL s4111511.D	1	1	1				
63	4-bromophenyl phenyl ether	0.00	11/15/2023	CL s4111511.D	1	1	1				
64	hexachlorobenzene	0.00	11/15/2023	CL s4111511.D	1	1	1				
65	n-octadecane	0.03	11/15/2023	CL s4111511.D	1	1	1				
67	phenanthrene	0.00	11/15/2023	CL s4111511.D	1	1	1				
68	anthracene	0.00	11/15/2023	CL s4111511.D	1	1	1				
70	carbazole	0.00	11/15/2023	CL s4111511.D	1	1	1				
71	di-n-butyl phthalate	0.00	11/15/2023	CL s4111511.D	1	1	1				
73	fluoranthene	0.00	11/15/2023	CL s4111511.D	1	1	1				
76	benzidine	0.00	11/15/2023	CL s4111511.D	1	1	1				
77	pyrene	0.02	11/15/2023	CL s4111511.D	1	1	1				
78	butyl benzyl phthalate	0.00	11/15/2023	CL s4111511.D	1	1	1				
79	benzo(a)anthracene	0.00	11/15/2023	CL s4111511.D	1	1	1				
80	chrysene	0.00	11/15/2023	CL s4111511.D	1	1	1				
81	3,3'-dichlorobenzidine	0.00	11/15/2023	CL s4111511.D	1	1	1				
82	bis-2-ethylhexyl phthalate	0.00	11/15/2023	CL s4111511.D	1	1	1				
84	di-n-octyl phthalate	0.00	11/15/2023	CL s4111511.D	1	1	1				
85	Benzo(b)fluoranthene	0.01	11/15/2023	CL s4111511.D	1	1	1				
86	benzo(k)fluoranthene	0.00	11/15/2023	CL s4111511.D	1	1	1				
87	benzo(a)pyrene	0.00	11/15/2023	CL s4111511.D	1	1	1				
88	indeno(1,2,3-cd)pyrene	0.00	11/15/2023	CL s4111511.D	1	1	1				
89	dibenzo(a,h)anthracene	0.00	11/15/2023	CL s4111511.D	1	1	1				
90	benzo(g,h,i)perylene	0.00	11/15/2023	CL s4111511.D	1	1	1				

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Nov23\111523\
Data File : s4111510.D
Acq On : 15 Nov 2023 02:47 pm
Operator : cl
Sample : 67798-01 acid x1
Misc :
ALS Vial : 8 Sample Multiplier: 1

CL
11/22/23 @ 11:39
CharlesL

Quant Time: Nov 17 16:13:14 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration

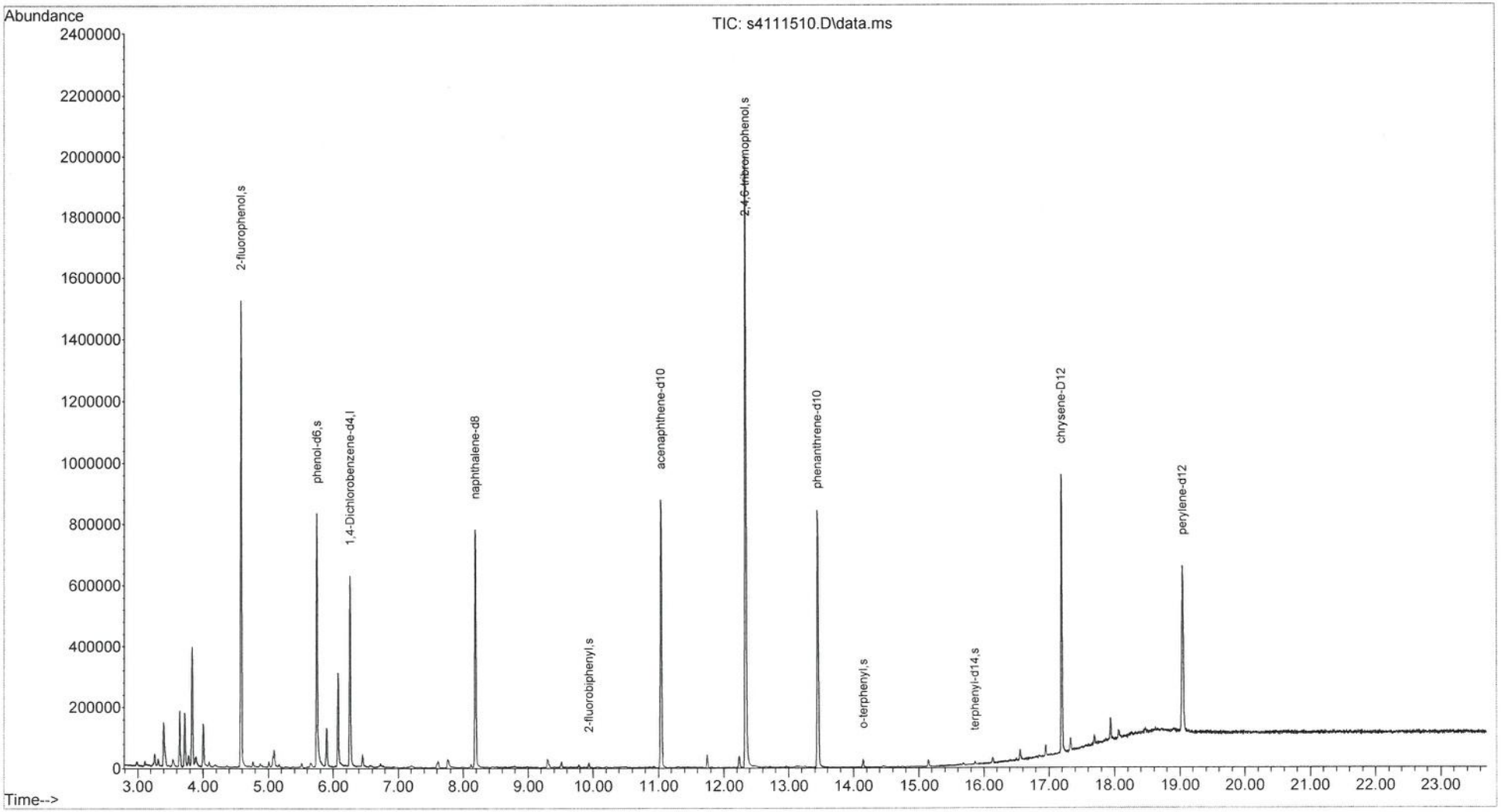
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.258	152	137105	10.00	ug/mL	0.00
21) naphthalene-d8	8.184	136	495932	10.00	ug/mL	0.00
37) acenaphthene-d10	11.041	164	262192	10.00	ug/mL	0.00
58) phenanthrene-d10	13.446	188	478602	10.00	ug/mL	-0.01
74) chrysene-D12	17.194	240	362533	10.00	ug/mL	0.00
83) perylene-d12	19.042	264	309990	10.00	ug/mL	0.00
System Monitoring Compounds						
4) 2-fluorophenol	4.581	112	537197	31.54	ug/mL	0.00
Spiked Amount 200.000			Recovery =	15.77%		
7) phenol-d6	5.746	99	400938	19.38	ug/mL	-0.01
Spiked Amount 200.000			Recovery =	9.69%		
22) nitrobenzene-d5	0.000	82	0	0.00	ug/mL	
Spiked Amount 100.000			Recovery =	0.00%		
38) 2-fluorobiphenyl	9.935	172	6450	0.12	ug/mL	0.00
Spiked Amount 100.000			Recovery =	0.12%		
59) 2,4,6-tribromophenol	12.338	330	363265	62.24	ug/mL	0.00
Spiked Amount 200.000			Recovery =	31.12%		
69) o-terphenyl	14.147	230	4960	0.16	ug/mL	0.00
Spiked Amount 100.000			Recovery =	0.16%		
72) 1-Chloro-octadecane	0.000	57	0	0.00	ug/mL	
Spiked Amount 100.000			Recovery =	0.00%		
75) terphenyl-d14	15.862	244	2772	0.06	ug/mL	0.00
Spiked Amount 100.000			Recovery =	0.06%		
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Nov23\111523\
Data File : s4111510.D
Acq On : 15 Nov 2023 02:47 pm
Operator : cl
Sample : 67798-01 acid x1
Misc :
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Nov 17 16:13:14 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

CL
11/22/23 @ 11:39
CharlesL

Data Path : X:\S4\2023\Nov23\111523\
Data File : s4111511.D
Acq On : 15 Nov 2023 03:17 pm
Operator : cl
Sample : 67798-01 bn x1
Misc :
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Nov 17 16:13:18 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration

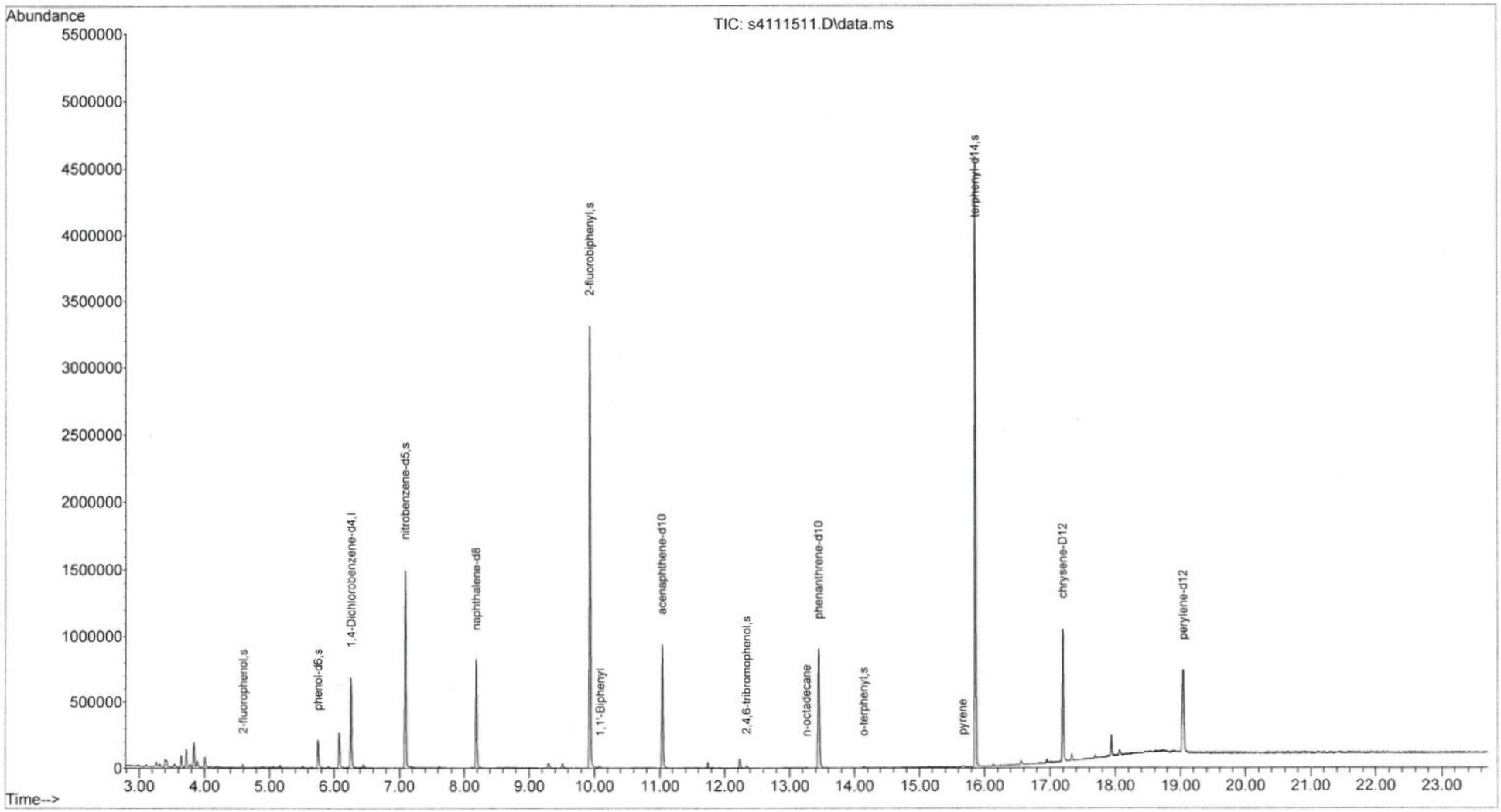
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.258	152	145081	10.00	ug/mL	0.00
21) naphthalene-d8	8.184	136	538732	10.00	ug/mL	0.00
37) acenaphthene-d10	11.038	164	288334	10.00	ug/mL	0.00
58) phenanthrene-d10	13.449	188	542254	10.00	ug/mL	-0.01
74) chrysene-D12	17.194	240	435791	10.00	ug/mL	# 0.00
83) perylene-d12	19.044	264	373478	10.00	ug/mL	0.00
System Monitoring Compounds						
4) 2-fluorophenol	4.591	112	8887	0.49	ug/mL	0.00
Spiked Amount 200.000			Recovery =	0.25%		
7) phenol-d6	5.746	99	94208	4.31	ug/mL	-0.01
Spiked Amount 200.000			Recovery =	2.15%		
22) nitrobenzene-d5	7.091	82	610243	32.27	ug/mL	-0.01
Spiked Amount 100.000			Recovery =	32.27%		
38) 2-fluorobiphenyl	9.932	172	1440632	31.76	ug/mL	0.00
Spiked Amount 100.000			Recovery =	31.76%		
59) 2,4,6-tribromophenol	12.340	330	3294	0.59	ug/mL	0.00
Spiked Amount 200.000			Recovery =	0.29%		
69) o-terphenyl	14.142	230	3034	0.07	ug/mL	-0.01
Spiked Amount 100.000			Recovery =	0.07%		
72) 1-Chloro-octadecane	15.683	57	1727	0.00	ug/mL	-0.15
Spiked Amount 100.000			Recovery =	0.00%		
75) terphenyl-d14	15.864	244	1941683	41.27	ug/mL	0.00
Spiked Amount 100.000			Recovery =	41.27%		
Target Compounds						Qvalue
42) 1,1'-Biphenyl	10.088	154	4948m	0.022	ug/mL	
43) 2-chloronaphthalene	10.105	162	1146	Below Cal	#	40
49) acenaphthene	11.092	154	1407	Below Cal	#	4
54) fluorene	11.922	166	1675m	Below Cal		
65) n-octadecane	13.257	57	1464	0.028	ug/mL#	70
67) phenanthrene	13.484	178	3978m	Below Cal		
68) anthracene	13.568	178	2899m	Below Cal		
73) fluoranthene	15.360	202	3470m	Below Cal		
77) pyrene	15.663	202	3435m	0.020	ug/mL	
79) benzo(a)anthracene	17.179	228	4030m	Below Cal		
80) chrysene	17.225	228	3437	Below Cal	#	49
86) benzo(k)fluoranthene	18.547	252	2799m	Below Cal		
87) benzo(a)pyrene	18.973	252	2636m	Below Cal		
93) DDT	16.639	TIC	2290	Below Cal	#	22

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Nov23\111523\
Data File : s4111511.D
Acq On : 15 Nov 2023 03:17 pm
Operator : cl
Sample : 67798-01 bn x1
Misc :
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Nov 17 16:13:18 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

CL
11/22/23 @ 11:39
CharlesL

Data Path : X:\S4\2023\Nov23\111523\
Data File : s4111528.D
Acq On : 15 Nov 2023 11:42 pm
Operator : cl
Sample : 67798-01ms acid x1
Misc :
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Nov 17 16:14:42 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration

Highlighted MS compounds outside acceptance criteria.

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1,4-Dichlorobenzene-d4	6.255	152	122153	10.00 ug/mL	0.00
21) naphthalene-d8	8.184	136	450775	10.00 ug/mL	0.00
37) acenaphthene-d10	11.041	164	239233	10.00 ug/mL	0.00
58) phenanthrene-d10	13.446	188	429299	10.00 ug/mL	-0.01
74) chrysene-D12	17.197	240	326365	10.00 ug/mL	0.00
83) perylene-d12	19.042	264	267368	10.00 ug/mL	0.00
System Monitoring Compounds					
4) 2-fluorophenol	4.581	112	492310	32.44 ug/mL	0.00
Spiked Amount 200.000			Recovery =	16.22%	
7) phenol-d6	5.745	99	389206	21.12 ug/mL	-0.01
Spiked Amount 200.000			Recovery =	10.56%	
22) nitrobenzene-d5	0.000	82	0	0.00 ug/mL	
Spiked Amount 100.000			Recovery =	0.00%	
38) 2-fluorobiphenyl	9.935	172	11102	0.26 ug/mL	0.00
Spiked Amount 100.000			Recovery =	0.26%	
59) 2,4,6-tribromophenol	12.335	330	361139	68.98 ug/mL	-0.01
Spiked Amount 200.000			Recovery =	34.49%	
69) o-terphenyl	14.147	230	2281	0.07 ug/mL	0.00
Spiked Amount 100.000			Recovery =	0.07%	
72) 1-Chloro-octadecane	15.683	57	1242	0.00 ug/mL	-0.15
Spiked Amount 100.000			Recovery =	0.00%	
75) terphenyl-d14	15.864	244	7844	0.22 ug/mL	0.00
Spiked Amount 100.000			Recovery =	0.22%	
Target Compounds					Qvalue
2) N-nitroso-dimethylamine	3.080	74	50942	6.023 ug/mL	95
6) phenol	5.763	94	166572	8.636 ug/mL	88
8) 2-chlorophenol	5.998	128	340901	19.311 ug/mL	99
9) n-decane	5.896	57	965	Below Cal #	39
10) bis-(2-choroethyl)ether	5.993	93	3098	0.147 ug/mL#	24
14) benzyl alcohol	6.451	108	36583	4.219 ug/mL	94
15) 2-methylphenol	6.620	108	91836	6.531 ug/mL	98
20) 4-methylphenol	6.834	108	241522	15.908 ug/mL	89
24) isophorone	7.611	82	4132	0.109 ug/mL#	42
25) 2-nitrophenol	7.611	139	216909	22.710 ug/mL	97
26) 2,4-dimethylphenol	7.654	122	1479m	0.062 ug/mL	
27) bis(2-chloroethoxy)met...	7.611	93	22721	1.260 ug/mL	64
28) 2,4-dichlorophenol	7.970	162	301818	20.860 ug/mL	99
30) 1,2,4-trichlorobenzene	8.120	180	3160	0.106 ug/mL#	86
31) naphthalene	8.222	128	1594	Below Cal #	68
32) benzoic acid	7.741	122	83090	10.711 ug/mL#	75
35) 4-chloro-3-methylphenol	9.071	107	150625	11.340 ug/mL	98
36) 2-methylnaphthalene	9.315	142	1073	Below Cal #	14
40) 2,4,6-trichlorophenol	9.805	196	242255	22.190 ug/mL	98
41) 2,4,5-trichlorophenol	9.868	196	250348	22.384 ug/mL	99
42) 1,1'-Biphenyl	10.082	154	861	Below Cal #	40
43) 2-chloronaphthalene	9.871	162	6418	0.115 ug/mL#	40
44) 2-nitroanaline	10.207	138	907	0.111 ug/mL#	17
45) acenaphthylene	10.796	152	999	Below Cal #	59
49) acenaphthene	11.091	154	1577	Below Cal #	58
50) 3-nitroanaline	11.148	138	2741	0.366 ug/mL#	1

Data Path : X:\S4\2023\Nov23\111523\
Data File : s4111528.D
Acq On : 15 Nov 2023 11:42 pm
Operator : cl
Sample : 67798-01ms acid x1
Misc :
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Nov 17 16:14:42 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration

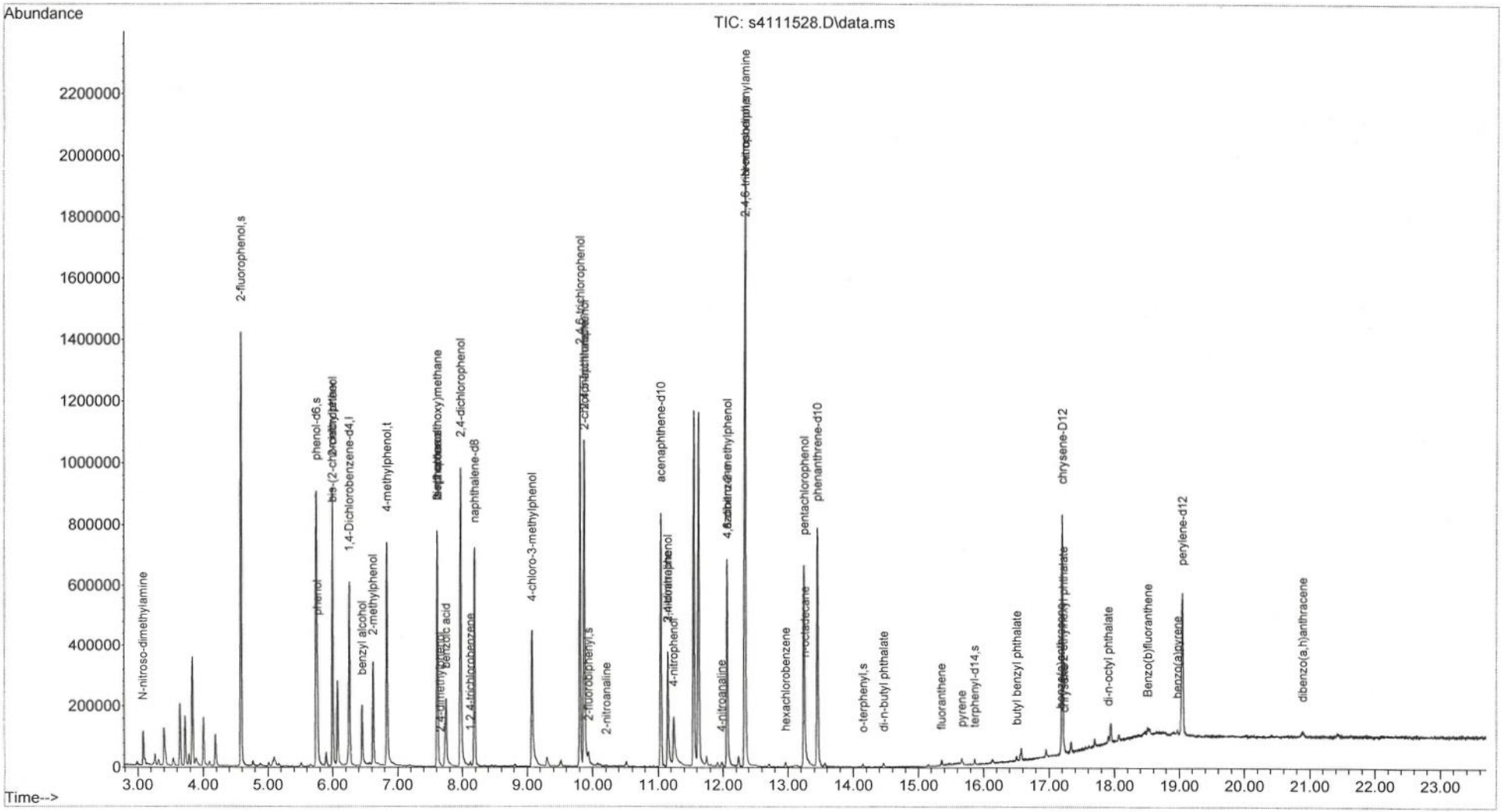
	Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
51)	2,4-dinitrophenol	11.145	184	83579	19.443 ug/mL	87
52)	dibenzofuran	11.351	168	3417	Below Cal #	82
53)	4-nitrophenol	11.237	65	54570m	10.441 ug/mL	
56)	4-chlorophenyl phenyl ...	11.907	204	1117	Below Cal #	31
57)	4-nitroanaline	11.976	138	2224	0.336 ug/mL#	55
60)	4,6-dinitro-2-methylph...	12.065	198	152448	24.634 ug/mL	99
61)	azobenzene	12.062	77	33617	1.099 ug/mL	84
62)	N-nitrosodiphenylamine	12.332	169	5457	0.175 ug/mL#	22
64)	hexachlorobenzene	12.962	284	2284	0.111 ug/mL#	42
65)	n-octadecane	13.255	57	6269	0.301 ug/mL#	60
66)	pentachlorophenol	13.242	266	124902	21.942 ug/mL	98
67)	phenanthrene	13.482	178	4322	Below Cal #	60
71)	di-n-butyl phthalate	14.463	149	7060	0.111 ug/mL#	78
73)	fluoranthene	15.349	202	5855	0.020 ug/mL#	77
77)	pyrene	15.663	202	8882	0.139 ug/mL#	86
78)	butyl benzyl phthalate	16.501	149	4085	0.195 ug/mL#	83
79)	benzo(a)anthracene	17.176	228	9386	0.116 ug/mL#	77
80)	chrysene	17.227	228	7143	0.057 ug/mL#	67
82)	bis-2-ethylhexyl phtha...	17.212	149	5315	0.197 ug/mL#	38
84)	di-n-octyl phthalate	17.903	149	11795	0.314 ug/mL#	79
85)	Benzo(b)fluoranthene	18.512	252	3060	0.018 ug/mL#	59
86)	benzo(k)fluoranthene	18.535	252	1000	Below Cal #	58
87)	benzo(a)pyrene	18.968	252	2576	0.017 ug/mL#	54
88)	indeno(1,2,3-cd)pyrene	20.889	276	1588	Below Cal #	41
89)	dibenzo(a,h)anthracene	20.889	278	3790	0.069 ug/mL#	53
93)	DDT	16.634	TIC	2504	Below Cal #	22

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Nov23\111523\
Data File : s4111528.D
Acq On : 15 Nov 2023 11:42 pm
Operator : cl
Sample : 67798-01ms acid x1
Misc :
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Nov 17 16:14:42 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Nov23\111523\
Data File : s4111529.D
Acq On : 16 Nov 2023 12:11 am
Operator : cl
Sample : 67798-01ms bn x1
Misc :
ALS Vial : 27 Sample Multiplier: 1

CL
11/22/23 @ 11:39
CharlesL

Quant Time: Nov 17 16:14:47 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration

Highlighted MS compounds outside acceptance criteria.

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.255	152	111064	10.00	ug/mL	0.00
21) naphthalene-d8	8.184	136	402284	10.00	ug/mL	0.00
37) acenaphthene-d10	11.041	164	215380	10.00	ug/mL	0.00
58) phenanthrene-d10	13.449	188	386363	10.00	ug/mL	-0.01
74) chrysene-D12	17.197	240	288404	10.00	ug/mL	0.00
83) perylene-d12	19.042	264	228165	10.00	ug/mL	0.00
System Monitoring Compounds						
4) 2-fluorophenol	4.589	112	10816	0.78	ug/mL	0.00
Spiked Amount 200.000			Recovery = 0.39%			
7) phenol-d6	5.746	99	102936	6.14	ug/mL	-0.01
Spiked Amount 200.000			Recovery = 3.07%			
22) nitrobenzene-d5	7.094	82	519414	36.78	ug/mL	0.00
Spiked Amount 100.000			Recovery = 36.78%			
38) 2-fluorobiphenyl	9.932	172	1167132	34.45	ug/mL	0.00
Spiked Amount 100.000			Recovery = 34.45%			
59) 2,4,6-tribromophenol	12.338	330	5415	1.24	ug/mL	0.00
Spiked Amount 200.000			Recovery = 0.62%			
69) o-terphenyl	14.144	230	7129	0.30	ug/mL	0.00
Spiked Amount 100.000			Recovery = 0.30%			
72) 1-Chloro-octadecane	15.686	57	1103	0.00	ug/mL	-0.15
Spiked Amount 100.000			Recovery = 0.00%			
75) terphenyl-d14	15.864	244	1380368	44.33	ug/mL	0.00
Spiked Amount 100.000			Recovery = 44.33%			
Target Compounds						Qvalue
2) N-nitroso-dimethylamine	3.080	74	87277	11.369	ug/mL	99
3) pyridine	3.111	79	221723	16.872	ug/mL	99
5) aniline	5.827	93	408686	20.812	ug/mL	99
6) phenol	5.763	94	43940	2.479	ug/mL	90
8) 2-chlorophenol	6.000	128	17951	1.059	ug/mL	98
9) n-decane	6.034	57	64372	4.918	ug/mL	97
10) bis-(2-choroethyl)ether	5.891	93	350551	28.088	ug/mL	99
11) 1,3-dichlorobenzene	6.209	146	226557	12.839	ug/mL	99
12) 1,4-diclorobenzene	6.281	146	245002	13.724	ug/mL	99
13) 1,2-dichlorobenzene	6.553	148	169573	15.643	ug/mL	98
14) benzyl alcohol	6.449	108	141267	17.698	ug/mL	95
15) 2-methylphenol	6.622	108	182153	14.312	ug/mL	98
16) 2,2'-oxybis(1-chloropr...	6.683	121	117695	37.261	ug/mL	93
17) acetophenone	6.857	120	131341	28.322	ug/mL#	82
18) hexachloroethane	7.015	117	58782	8.982	ug/mL	99
19) N-nitroso-di-n-propyla...	6.879	70	246122	26.875	ug/mL	99
20) 4-methylphenol	6.831	108	265191	19.219	ug/mL	92
23) nitrobenzene	7.119	77	387566	27.795	ug/mL	99
24) isophorone	7.466	82	694821	30.825	ug/mL	99
25) 2-nitrophenol	7.616	139	4057	0.482	ug/mL#	59
26) 2,4-dimethylphenol	7.649	122	247800	20.362	ug/mL	97
27) bis(2-chloroethoxy)met...	7.797	93	453905	29.831	ug/mL	99
28) 2,4-dichlorophenol	7.975	162	11135	0.819	ug/mL#	89
30) 1,2,4-trichlorobenzene	8.120	180	278836	19.604	ug/mL#	98
31) naphthalene	8.217	128	1074322	25.133	ug/mL	100
33) 4-chloroanaline	8.309	127	442793	25.942	ug/mL	100

Data Path : X:\S4\2023\Nov23\111523\
Data File : s4111529.D
Acq On : 16 Nov 2023 12:11 am
Operator : cl
Sample : 67798-01ms bn x1
Misc :
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Nov 17 16:14:47 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration

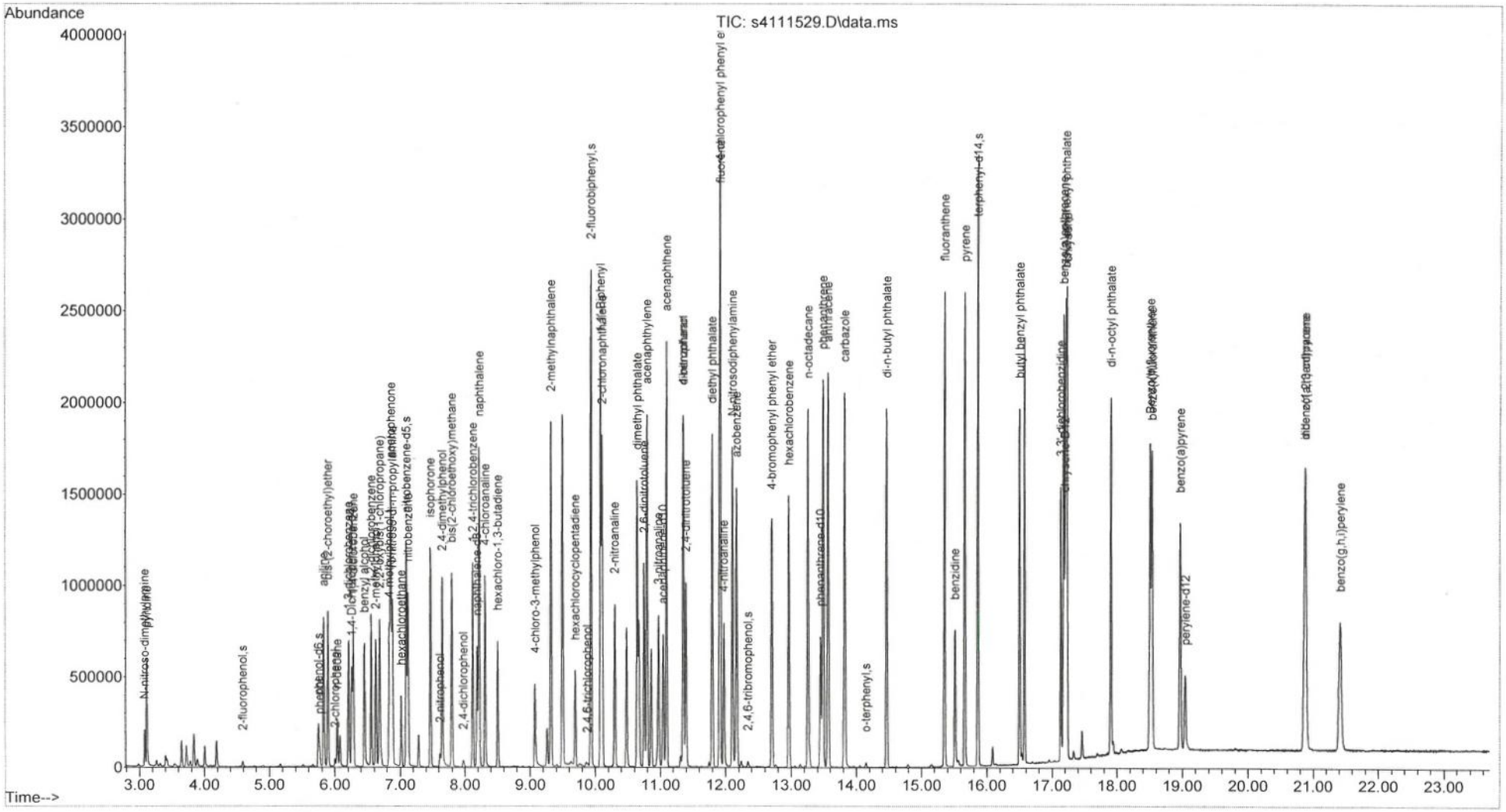
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
34) hexachloro-1,3-butadiene	8.503	225	111254	13.799 ug/mL	99
35) 4-chloro-3-methylphenol	9.073	107	131167	11.064 ug/mL	95
36) 2-methylnaphthalene	9.318	142	746040	25.351 ug/mL	99
39) hexachlorocyclopentadiene	9.688	237	118413	16.643 ug/mL	99
40) 2,4,6-trichlorophenol	9.874	196	3129	0.303 ug/mL#	78
41) 2,4,5-trichlorophenol	9.874	196	3129	0.300 ug/mL#	77
42) 1,1'-Biphenyl	10.077	154	977840	26.911 ug/mL	99
43) 2-chloronaphthalene	10.103	162	723429	25.128 ug/mL	95
44) 2-nitroanaline	10.297	138	260569	27.897 ug/mL	98
45) acenaphthylene	10.791	152	1216146	28.738 ug/mL	99
46) dimethyl phthalate	10.641	163	880948	27.408 ug/mL	100
47) 2,6-dinitrotoluene	10.748	165	219977	29.972 ug/mL	99
48) 2,4-dinitrotoluene	11.392	165	277932	28.525 ug/mL	99
49) acenaphthene	11.092	154	721414	27.461 ug/mL	99
50) 3-nitroanaline	10.969	138	215955	29.302 ug/mL	98
52) dibenzofuran	11.351	168	1144030	28.888 ug/mL	99
53) 4-nitrophenol	11.351	65	3494	0.998 ug/mL#	46
54) fluorene	11.917	166	920144	27.846 ug/mL	99
55) diethyl phthalate	11.795	149	957903	30.091 ug/mL	99
56) 4-chlorophenyl phenyl ...	11.910	204	432241	27.742 ug/mL	97
57) 4-nitroanaline	11.973	138	205877	29.118 ug/mL	95
61) azobenzene	12.164	77	801342	30.091 ug/mL	100
62) N-nitrosodiphenylamine	12.103	169	643071	29.009 ug/mL	99
63) 4-bromophenyl phenyl e...	12.705	248	269322	28.590 ug/mL	98
64) hexachlorobenzene	12.962	284	299638	28.491 ug/mL	99
65) n-octadecane	13.257	57	454946	26.990 ug/mL	95
67) phenanthrene	13.487	178	1260941	28.673 ug/mL	100
68) anthracene	13.561	178	1298918	29.105 ug/mL	100
70) carbazole	13.818	167	1243335	31.845 ug/mL	99
71) di-n-butyl phthalate	14.463	149	1492303	29.966 ug/mL	100
73) fluoranthene	15.355	202	1356735	29.873 ug/mL	99
76) benzidine	15.513	184	367495	28.556 ug/mL	98
77) pyrene	15.663	202	1369152	29.172 ug/mL	99
78) butyl benzyl phthalate	16.499	149	571406	28.550 ug/mL	98
79) benzo(a)anthracene	17.177	228	1094335	28.123 ug/mL	99
80) chrysene	17.227	228	1045893	28.828 ug/mL	98
81) 3,3'-dichlorobenzidine	17.131	252	371615	30.576 ug/mL	100
82) bis-2-ethylhexyl phtha...	17.210	149	815939	28.340 ug/mL	100
84) di-n-octyl phthalate	17.903	149	1230679	27.664 ug/mL	98
85) Benzo(b)fluoranthene	18.507	252	929453	27.779 ug/mL	98
86) benzo(k)fluoranthene	18.535	252	922671m	30.130 ug/mL	
87) benzo(a)pyrene	18.965	252	783625	26.516 ug/mL	99
88) indeno(1,2,3-cd)pyrene	20.874	276	891656	28.511 ug/mL#	97
89) dibenzo(a,h)anthracene	20.874	278	737777	28.158 ug/mL	97
90) benzo(g,h,i)perylene	21.414	276	720052	30.768 ug/mL#	76
93) DDT	16.624	TIC	1912	Below Cal #	22

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Nov23\111523\
Data File : s4111529.D
Acq On : 16 Nov 2023 12:11 am
Operator : cl
Sample : 67798-01ms bn x1
Misc :
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Nov 17 16:14:47 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

CL
11/22/23 @ 11:40
CharlesL

Data Path : X:\S4\2023\Nov23\111523\
Data File : s4111530.D
Acq On : 16 Nov 2023 12:41 am
Operator : cl
Sample : 67798-01msd acid x1
Misc :
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Nov 17 16:14:52 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration

Highlighted MS compounds outside acceptance criteria.

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.255	152	139786	10.00	ug/mL	0.00
21) naphthalene-d8	8.184	136	523725	10.00	ug/mL	0.00
37) acenaphthene-d10	11.038	164	274379	10.00	ug/mL	0.00
58) phenanthrene-d10	13.449	188	503222	10.00	ug/mL	-0.01
74) chrysene-D12	17.197	240	377185	10.00	ug/mL	0.00
83) perylene-d12	19.044	264	310885	10.00	ug/mL	0.00
System Monitoring Compounds						
4) 2-fluorophenol	4.581	112	523701	30.16	ug/mL	0.00
Spiked Amount 200.000			Recovery =	15.08%		
7) phenol-d6	5.746	99	406880	19.29	ug/mL	-0.01
Spiked Amount 200.000			Recovery =	9.64%		
22) nitrobenzene-d5	0.000	82	0	0.00	ug/mL	
Spiked Amount 100.000			Recovery =	0.00%		
38) 2-fluorobiphenyl	9.932	172	1535	-0.00	ug/mL	0.00
Spiked Amount 100.000			Recovery =	-0.00%		
59) 2,4,6-tribromophenol	12.335	330	430293	70.11	ug/mL	0.00
Spiked Amount 200.000			Recovery =	35.06%		
69) o-terphenyl	0.000	230	0	0.00	ug/mL	
Spiked Amount 100.000			Recovery =	0.00%		
72) 1-Chloro-octadecane	0.000	57	0	0.00	ug/mL	
Spiked Amount 100.000			Recovery =	0.00%		
75) terphenyl-d14	15.864	244	5777	0.13	ug/mL	0.00
Spiked Amount 100.000			Recovery =	0.13%		
Target Compounds						Qvalue
2) N-nitroso-dimethylamine	3.083	74	53808	5.558	ug/mL	99
6) phenol	5.763	94	169229	7.663	ug/mL	87
8) 2-chlorophenol	5.998	128	385146	19.064	ug/mL	99
9) n-decane	6.074	57	1079	Below Cal	#	1
10) bis-(2-choroethyl)ether	5.998	93	7777	0.418	ug/mL#	1
14) benzyl alcohol	6.449	108	41195	4.153	ug/mL	94
15) 2-methylphenol	6.622	108	96872	6.016	ug/mL	97
20) 4-methylphenol	6.836	108	260868	15.013	ug/mL	85
24) isophorone	7.611	82	5012	0.116	ug/mL#	63
25) 2-nitrophenol	7.611	139	258209	23.268	ug/mL	98
26) 2,4-dimethylphenol	7.649	122	1361m BL	0.039	ug/mL	
27) bis(2-chloroethoxy)met...	7.611	93	25945	1.237	ug/mL#	50
28) 2,4-dichlorophenol	7.970	162	341960	20.341	ug/mL	98
30) 1,2,4-trichlorobenzene	8.118	180	3072	0.074	ug/mL#	68
31) naphthalene	8.215	128	855	Below Cal	#	68
32) benzoic acid	7.738	122	61034	7.541	ug/mL	96
35) 4-chloro-3-methylphenol	9.071	107	171444	11.108	ug/mL	94
36) 2-methylnaphthalene	9.318	142	1066	Below Cal	#	14
40) 2,4,6-trichlorophenol	9.805	196	278607	22.251	ug/mL	97
41) 2,4,5-trichlorophenol	9.868	196	290606	22.655	ug/mL	99
43) 2-chloronaphthalene	9.868	162	8300	0.141	ug/mL#	40
49) acenaphthene	11.145	154	53591	1.512	ug/mL#	4
50) 3-nitroanaline	10.982	138	839	0.142	ug/mL#	1
51) 2,4-dinitrophenol	11.145	184	108278	21.523	ug/mL	97
52) dibenzofuran	11.545	168	62777	1.150	ug/mL#	18
53) 4-nitrophenol	11.234	65	63420m BL	10.576	ug/mL	

Data Path : X:\S4\2023\Nov23\111523\
Data File : s4111530.D
Acq On : 16 Nov 2023 12:41 am
Operator : cl
Sample : 67798-01msd acid x1
Misc :
ALS Vial : 28 Sample Multiplier: 1

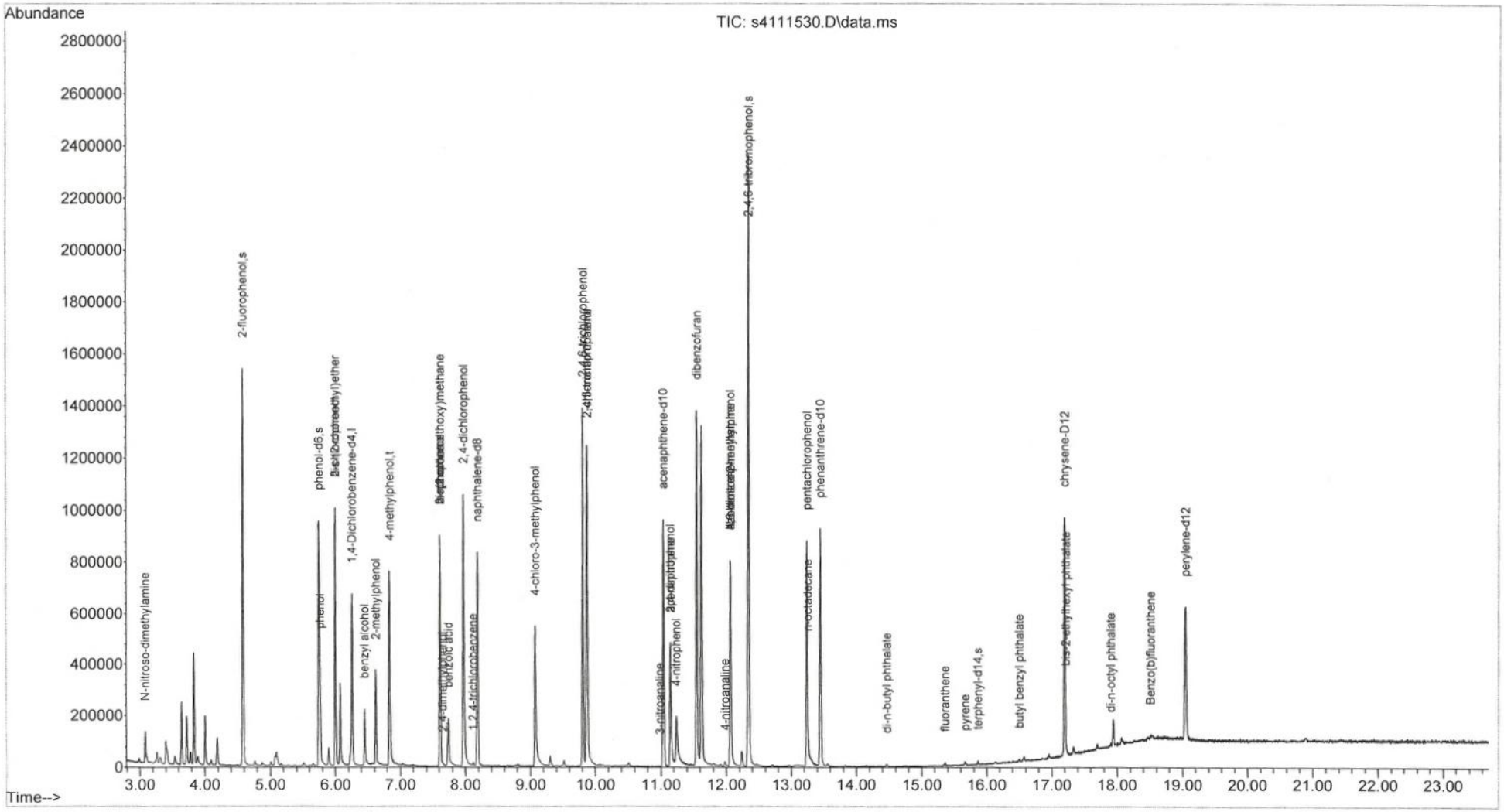
Quant Time: Nov 17 16:14:52 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
55) diethyl phthalate	11.790	149	2025	Below Cal #	59
57) 4-nitroanaline	11.978	138	2800	0.363 ug/mL#	92
60) 4,6-dinitro-2-methylph...	12.062	198	186408	25.644 ug/mL	100
61) azobenzene	12.062	77	41627	1.163 ug/mL#	74
62) N-nitrosodiphenylamine	12.062	169	2860	0.053 ug/mL#	1
64) hexachlorobenzene	12.964	284	854	Below Cal #	42
65) n-octadecane	13.252	57	3872	0.142 ug/mL#	1
66) pentachlorophenol	13.242	266	160469	23.735 ug/mL	99
67) phenanthrene	13.484	178	2493	Below Cal #	60
68) anthracene	13.561	178	1430	Below Cal #	61
70) carbazole	13.823	167	3142	Below Cal #	60
71) di-n-butyl phthalate	14.463	149	5218	0.064 ug/mL#	78
73) fluoranthene	15.355	202	6578	0.015 ug/mL#	64
77) pyrene	15.663	202	7070	0.087 ug/mL#	71
78) butyl benzyl phthalate	16.501	149	2235	0.100 ug/mL#	84
79) benzo(a)anthracene	17.171	228	2125	Below Cal #	69
80) chrysene	17.230	228	5080	Below Cal #	81
82) bis-2-ethylhexyl phtha...	17.212	149	30460	0.842 ug/mL#	83
84) di-n-octyl phthalate	17.903	149	6292	0.190 ug/mL#	79
85) Benzo(b)fluoranthene	18.507	252	4174	0.032 ug/mL#	59
86) benzo(k)fluoranthene	18.537	252	2315	Below Cal #	58
87) benzo(a)pyrene	18.960	252	1229	Below Cal #	54
88) indeno(1,2,3-cd)pyrene	20.884	276	805	Below Cal #	43
89) dibenzo(a,h)anthracene	20.894	278	808	Below Cal #	53
93) DDT	16.629	TIC	4034	Below Cal #	22

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : X:\S4\2023\Nov23\111523\
Data File : s4111530.D
Acq On : 16 Nov 2023 12:41 am
Operator : cl
Sample : 67798-01msd acid x1
Misc :
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Nov 17 16:14:52 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Nov23\111523\
Data File : s4111531.D
Acq On : 16 Nov 2023 01:11 am
Operator : cl
Sample : 67798-01msd bn x1
Misc :
ALS Vial : 29 Sample Multiplier: 1

CL
11/22/23 @ 11:41
CharlesL

Quant Time: Nov 17 16:14:57 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration

Highlighted MS compounds outside acceptance criteria.

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.255	152	109924	10.00	ug/mL	0.00
21) naphthalene-d8	8.184	136	409466	10.00	ug/mL	0.00
37) acenaphthene-d10	11.041	164	220976	10.00	ug/mL	0.00
58) phenanthrene-d10	13.449	188	401971	10.00	ug/mL	-0.01
74) chrysene-D12	17.197	240	306295	10.00	ug/mL	0.00
83) perylene-d12	19.042	264	247826	10.00	ug/mL	0.00
System Monitoring Compounds						
4) 2-fluorophenol	4.589	112	9319	0.68	ug/mL	0.00
Spiked Amount 200.000			Recovery = 0.34%			
7) phenol-d6	5.746	99	94661	5.71	ug/mL	-0.01
Spiked Amount 200.000			Recovery = 2.86%			
22) nitrobenzene-d5	7.091	82	484669	33.72	ug/mL	0.00
Spiked Amount 100.000			Recovery = 33.72%			
38) 2-fluorobiphenyl	9.935	172	1122464	32.29	ug/mL	0.00
Spiked Amount 100.000			Recovery = 32.29%			
59) 2,4,6-tribromophenol	12.338	330	5126	1.13	ug/mL	0.00
Spiked Amount 200.000			Recovery = 0.56%			
69) o-terphenyl	14.144	230	13569	0.57	ug/mL	0.00
Spiked Amount 100.000			Recovery = 0.57%			
72) 1-Chloro-octadecane	0.000	57	0	0.00	ug/mL	
Spiked Amount 100.000			Recovery = 0.00%			
75) terphenyl-d14	15.864	244	1384135	41.86	ug/mL	0.00
Spiked Amount 100.000			Recovery = 41.86%			
Target Compounds						Qvalue
2) N-nitroso-dimethylamine	3.078	74	83400	10.976	ug/mL	99
3) pyridine	3.111	79	202181	15.543	ug/mL	99
5) aniline	5.827	93	381554	19.632	ug/mL	100
6) phenol	5.763	94	39554	2.251	ug/mL	85
8) 2-chlorophenol	6.000	128	16141	0.956	ug/mL	97
9) n-decane	6.034	57	72709	5.624	ug/mL	99
10) bis-(2-choroethyl)ether	5.888	93	323147	26.156	ug/mL	99
11) 1,3-dichlorobenzene	6.209	146	252905	14.491	ug/mL	99
12) 1,4-diclorobenzene	6.278	146	272367	15.425	ug/mL	100
13) 1,2-dichlorobenzene	6.553	148	185242	17.275	ug/mL	99
14) benzyl alcohol	6.449	108	133898	16.952	ug/mL	95
15) 2-methylphenol	6.625	108	171670	13.626	ug/mL	98
16) 2,2'-oxybis(1-chloropr...	6.681	121	109875	35.142	ug/mL	93
17) acetophenone	6.857	120	123783	26.967	ug/mL#	84
18) hexachloroethane	7.017	117	73052	11.290	ug/mL	99
19) N-nitroso-di-n-propyla...	6.880	70	232413	25.638	ug/mL	99
20) 4-methylphenol	6.834	108	253706	18.576	ug/mL	92
23) nitrobenzene	7.119	77	355237	25.025	ug/mL	99
24) isophorone	7.466	82	661685	28.837	ug/mL	99
25) 2-nitrophenol	7.616	139	6119	0.711	ug/mL#	62
26) 2,4-dimethylphenol	7.647	122	238470	19.249	ug/mL	99
27) bis(2-chloroethoxy)met...	7.797	93	427856	27.620	ug/mL	99
28) 2,4-dichlorophenol	7.975	162	10891	0.785	ug/mL#	83
30) 1,2,4-trichlorobenzene	8.118	180	292370	20.198	ug/mL#	100
31) naphthalene	8.217	128	1079312	24.806	ug/mL	99
32) benzoic acid	7.777	122	823	2.186	ug/mL#	1

Data Path : X:\S4\2023\Nov23\111523\
Data File : s4111531.D
Acq On : 16 Nov 2023 01:11 am
Operator : cl
Sample : 67798-01msd bn x1
Misc :
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Nov 17 16:14:57 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration

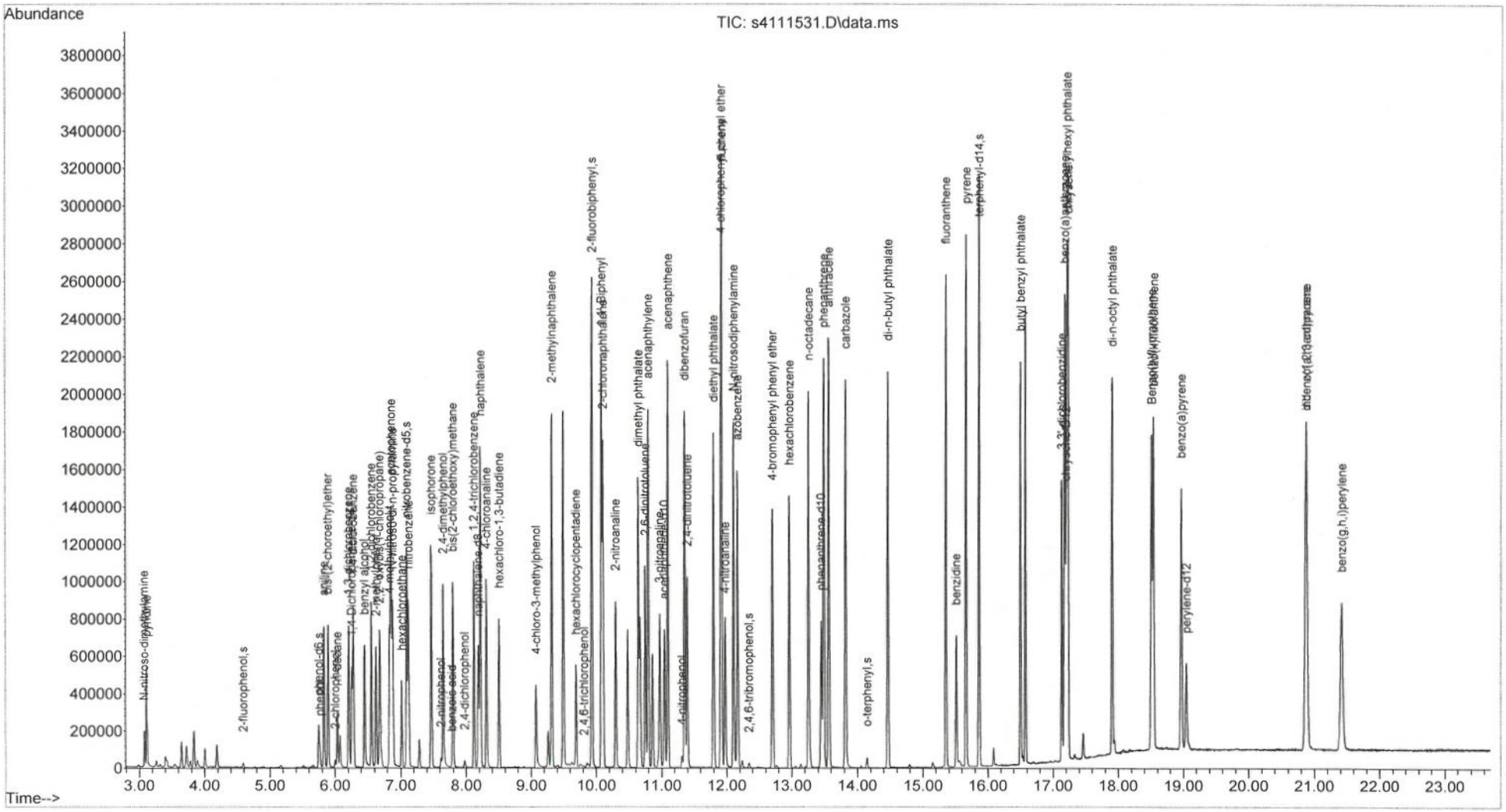
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
33) 4-chloroanaline	8.309	127	427697	24.617 ug/mL	98
34) hexachloro-1,3-butadiene	8.505	225	127845	15.589 ug/mL	100
35) 4-chloro-3-methylphenol	9.074	107	124744	10.335 ug/mL	98
36) 2-methylnaphthalene	9.318	142	728481	24.317 ug/mL	99
39) hexachlorocyclopentadiene	9.688	237	120719	16.558 ug/mL	98
40) 2,4,6-trichlorophenol	9.807	196	1174	0.101 ug/mL#	11
41) 2,4,5-trichlorophenol	9.807	196	1174	0.103 ug/mL#	12
42) 1,1'-Biphenyl	10.078	154	960741	25.767 ug/mL	98
43) 2-chloronaphthalene	10.103	162	711136	24.072 ug/mL	94
44) 2-nitroanaline	10.297	138	261191	27.256 ug/mL	99
45) acenaphthylene	10.791	152	1187426	27.347 ug/mL	99
46) dimethyl phthalate	10.641	163	885227	26.842 ug/mL	100
47) 2,6-dinitrotoluene	10.748	165	213584	28.364 ug/mL	96
48) 2,4-dinitrotoluene	11.395	165	279453	27.955 ug/mL	99
49) acenaphthene	11.094	154	702078	26.044 ug/mL	98
50) 3-nitroanaline	10.969	138	215941	28.487 ug/mL	99
52) dibenzofuran	11.352	168	1125799	27.703 ug/mL	99
53) 4-nitrophenol	11.311	65	927	0.462 ug/mL#	21
54) fluorene	11.917	166	909154	26.814 ug/mL	99
55) diethyl phthalate	11.797	149	947688	29.013 ug/mL	99
56) 4-chlorophenyl phenyl ...	11.907	204	426873	26.700 ug/mL	97
57) 4-nitroanaline	11.976	138	205740	28.363 ug/mL	95
61) azobenzene	12.164	77	799375	28.850 ug/mL	100
62) N-nitrosodiphenylamine	12.103	169	639102	27.708 ug/mL	100
63) 4-bromophenyl phenyl e...	12.705	248	272730	27.826 ug/mL	98
64) hexachlorobenzene	12.962	284	304673	27.843 ug/mL	98
65) n-octadecane	13.255	57	458224	26.128 ug/mL	96
67) phenanthrene	13.487	178	1247766	27.266 ug/mL	99
68) anthracene	13.561	178	1301734	28.033 ug/mL	100
70) carbazole	13.818	167	1243667	30.614 ug/mL	100
71) di-n-butyl phthalate	14.463	149	1515701	29.253 ug/mL	99
73) fluoranthene	15.352	202	1373508	29.065 ug/mL	100
76) benzidine	15.513	184	339737	24.924 ug/mL	99
77) pyrene	15.663	202	1414338	28.374 ug/mL	99
78) butyl benzyl phthalate	16.499	149	590287	27.771 ug/mL	98
79) benzo(a)anthracene	17.177	228	1159348	28.053 ug/mL	98
80) chrysene	17.228	228	1099846	28.543 ug/mL	98
81) 3,3'-dichlorobenzidine	17.131	252	390290	30.220 ug/mL	98
82) bis-2-ethylhexyl phtha...	17.210	149	870876	28.481 ug/mL	100
84) di-n-octyl phthalate	17.903	149	1300782	26.936 ug/mL	98
85) Benzo(b)fluoranthene	18.507	252	952466	26.205 ug/mL	97
86) benzo(k)fluoranthene	18.537	252	1023106m	30.760 ug/mL	
87) benzo(a)pyrene	18.963	252	825049	25.701 ug/mL	98
88) indeno(1,2,3-cd)pyrene	20.874	276	936993	27.582 ug/mL#	94
89) dibenzo(a,h)anthracene	20.874	278	778122	27.340 ug/mL	97
90) benzo(g,h,i)perylene	21.417	276	750951	29.540 ug/mL#	73
93) DDT	16.634	TIC	2964	Below Cal #	22

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Nov23\111523\
Data File : s4111531.D
Acq On : 16 Nov 2023 01:11 am
Operator : cl
Sample : 67798-01msd bn x1
Misc :
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Nov 17 16:14:57 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration



This File:	L:\SVOA\Excel Reports\ABN\231122\67798-002		Charles Leahy L:\SVOA\ABN\ABN 8270DoD ImportFileBuilde
Analysis Group:	ABN	Dow Salvage Yard	11/22/23 2:02 PM
Field ID:	SY-OBMW6-110723 CRE		L:\SVOA\ABN\
Sample:	67798-02 acid x1	67798-02 bn x1	L:\SVOA\Excel Reports\ABN\231122\
Misc:			L:\SVOA\PDFReports\
DataFile:	310.D\S4ABN110223A.XLS 4ABN110223A.XLS		
Import File Name	S4 ABN 17096 DoD		
TestGroupID	E8270DoD_A		
Aqueous or Soil? (A or S)	A		
Prep Date	11/9/2023		
Lab#:	67798-002		
QC_Code:			
Prep#	17096		

Reviewer Checks:

Quant Report: Reviewed, Analyst Initials & Date ✓
Chromatogram Checked, Major peaks identified ✓
Results consistent w/ other attached analyses
Reanalysis reason noted
Substitute dilution data checked
Correct dilution and reason clear or noted ✓
Flags checked (Expiration, F+, Over Cal, Surr, Aspen, QC)
Other QC failures or issues noted in Aspen ✓
Correct data file and/or date/time in Aspen ✓

TB addressed in case narr (LCSD)

Notes:
Reviewer Initials & Date: 11/28/23

#	Surrogate Standards	Conc. (ug/mL)	AnalysisDate	AnalyzedBy	Dil'n	Weight	Volume	Surr	Recovery	Flag	QC Limits
4	2-fluorophenol	38.68	11/13/2023	CL s4111310.D	1	1	1	100	**39%**		21-100
7	phenol-d6	24.88	11/13/2023	CL s4111310.D	1	1	1	100	**25%**		10-102
59	2,4,6-tribromophenol	72.52	11/13/2023	CL s4111310.D	1	1	1	100	**73%**		10-123
22	nitrobenzene-d5	34.28	11/13/2023	CL s4111325.D	1	1	1	50	**69%**		35-114
38	2-fluorobiphenyl	33.18	11/13/2023	CL s4111325.D	1	1	1	50	**66%**		43-116
75	terphenyl-d14	41.41	11/13/2023	CL s4111325.D	1	1	1	50	**83%**		33-141
6	phenol	0.00	11/13/2023	CL s4111310.D	1	1	1				
8	2-chlorophenol	0.00	11/13/2023	CL s4111310.D	1	1	1				
15	2-methylphenol	0.00	11/13/2023	CL s4111310.D	1	1	1				
15	2-methylphenol	0.00	11/13/2023	CL s4111310.D	1	1	1				
20	4-methylphenol	0.00	11/13/2023	CL s4111310.D	1	1	1				
25	2-nitrophenol	0.00	11/13/2023	CL s4111310.D	1	1	1				
26	2,4-dimethylphenol	0.00	11/13/2023	CL s4111310.D	1	1	1				
28	2,4-dichlorophenol	0.00	11/13/2023	CL s4111310.D	1	1	1				
29	2,6-dichlorophenol	0.00	11/13/2023	CL s4111310.D	1	1	1				
32	benzoic acid	0.00	11/13/2023	CL s4111310.D	1	1	1				
35	4-chloro-3-methylphenol	0.00	11/13/2023	CL s4111310.D	1	1	1				
40	2,4,6-trichlorophenol	0.00	11/13/2023	CL s4111310.D	1	1	1				
41	2,4,5-trichlorophenol	0.00	11/13/2023	CL s4111310.D	1	1	1				
51	2,4-dinitrophenol	0.00	11/13/2023	CL s4111310.D	1	1	1				
53	4-nitrophenol	0.00	11/13/2023	CL s4111310.D	1	1	1				
60	4,6-dinitro-2-methylphenol	0.00	11/13/2023	CL s4111310.D	1	1	1				
66	pentachlorophenol	0.00	11/13/2023	CL s4111310.D	1	1	1				
2	N-nitroso-dimethylamine	0.00	11/13/2023	CL s4111325.D	1	1	1				
3	pyridine	0.00	11/13/2023	CL s4111325.D	1	1	1				
5	aniline	0.00	11/13/2023	CL s4111325.D	1	1	1				
9	n-decane	0.00	11/13/2023	CL s4111325.D	1	1	1				
10	bis-(2-choroethyl)ether	0.00	11/13/2023	CL s4111325.D	1	1	1				
11	1,3-dichlorobenzene	0.00	11/13/2023	CL s4111325.D	1	1	1				
12	1,4-diclorobenzene	0.00	11/13/2023	CL s4111325.D	1	1	1				
13	1,2-dichlorobenzene	0.00	11/13/2023	CL s4111325.D	1	1	1				
14	benzyl alcohol	0.00	11/13/2023	CL s4111325.D	1	1	1				
16	2,2'-oxybis(1-chloropropane)	0.00	11/13/2023	CL s4111325.D	1	1	1				
##	acetephenone	#N/A	11/13/2023	CL s4111325.D	1	1	1			#N/A	
18	hexachloroethane	0.00	11/13/2023	CL s4111325.D	1	1	1				
19	N-nitroso-di-n-propylamine	0.00	11/13/2023	CL s4111325.D	1	1	1				
23	nitrobenzene	0.00	11/13/2023	CL s4111325.D	1	1	1				
24	isophorone	0.00	11/13/2023	CL s4111325.D	1	1	1				
27	bis(2-chloroethoxy)methane	0.00	11/13/2023	CL s4111325.D	1	1	1				
30	1,2,4-trichlorobenzene	0.00	11/13/2023	CL s4111325.D	1	1	1				
31	naphthalene	0.00	11/13/2023	CL s4111325.D	1	1	1				
33	4-chloroanaline	0.00	11/13/2023	CL s4111325.D	1	1	1				
34	hexachloro-1,3-butadiene	0.00	11/13/2023	CL s4111325.D	1	1	1				
36	2-methylnaphthalene	0.00	11/13/2023	CL s4111325.D	1	1	1				
39	hexachlorocyclopentadiene	0.00	11/13/2023	CL s4111325.D	1	1	1				
43	2-chloronaphthalene	0.00	11/13/2023	CL s4111325.D	1	1	1				
44	2-nitroanaline	0.00	11/13/2023	CL s4111325.D	1	1	1				
45	acenaphthylene	0.00	11/13/2023	CL s4111325.D	1	1	1				
46	dimethyl phthalate	0.00	11/13/2023	CL s4111325.D	1	1	1				
47	2,6-dinitrotoluene	0.00	11/13/2023	CL s4111325.D	1	1	1				
48	2,4-dinitrotoluene	0.00	11/13/2023	CL s4111325.D	1	1	1				
49	acenaphthene	0.00	11/13/2023	CL s4111325.D	1	1	1				
50	3-nitroanaline	0.00	11/13/2023	CL s4111325.D	1	1	1				
52	dibenzofuran	0.00	11/13/2023	CL s4111325.D	1	1	1				
54	fluorene	0.00	11/13/2023	CL s4111325.D	1	1	1				
55	diethyl phthalate	0.00	11/13/2023	CL s4111325.D	1	1	1				
56	4-chlorophenyl phenyl ether	0.00	11/13/2023	CL s4111325.D	1	1	1				
57	4-nitroanaline	0.00	11/13/2023	CL s4111325.D	1	1	1				
61	azobenzene	0.00	11/13/2023	CL s4111325.D	1	1	1				
62	N-nitrosodiphenylamine	0.00	11/13/2023	CL s4111325.D	1	1	1				
63	4-bromophenyl phenyl ether	0.00	11/13/2023	CL s4111325.D	1	1	1				
64	hexachlorobenzene	0.00	11/13/2023	CL s4111325.D	1	1	1				
65	n-octadecane	0.00	11/13/2023	CL s4111325.D	1	1	1				
67	phenanthrene	0.00	11/13/2023	CL s4111325.D	1	1	1				
68	anthracene	0.00	11/13/2023	CL s4111325.D	1	1	1				
70	carbazole	0.00	11/13/2023	CL s4111325.D	1	1	1				
71	di-n-butyl phthalate	0.00	11/13/2023	CL s4111325.D	1	1	1				
73	fluoranthene	0.00	11/13/2023	CL s4111325.D	1	1	1				
76	benzidine	0.00	11/13/2023	CL s4111325.D	1	1	1				
77	pyrene	0.00	11/13/2023	CL s4111325.D	1	1	1				
78	butyl benzyl phthalate	0.00	11/13/2023	CL s4111325.D	1	1	1				
79	benzo(a)anthracene	0.00	11/13/2023	CL s4111325.D	1	1	1				
80	chrysene	0.00	11/13/2023	CL s4111325.D	1	1	1				
81	3,3'-dichlorobenzidine	0.00	11/13/2023	CL s4111325.D	1	1	1				
82	bis-2-ethylhexyl phthalate	0.00	11/13/2023	CL s4111325.D	1	1	1				
84	di-n-octyl phthalate	0.00	11/13/2023	CL s4111325.D	1	1	1				
85	Benzo(b)fluoranthene	0.00	11/13/2023	CL s4111325.D	1	1	1				
86	benzo(k)fluoranthene	0.00	11/13/2023	CL s4111325.D	1	1	1				
87	benzo(a)pyrene	0.00	11/13/2023	CL s4111325.D	1	1	1				
88	indeno(1,2,3-cd)pyrene	0.00	11/13/2023	CL s4111325.D	1	1	1				
89	dibenzo(a,h)anthracene	0.00	11/13/2023	CL s4111325.D	1	1	1				
90	benzo(g,h,i)perylene	0.00	11/13/2023	CL s4111325.D	1	1	1				

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Nov23\111323\
Data File : s4111310.D
Acq On : 13 Nov 2023 02:29 pm
Operator : cl
Sample : 67798-02 acid x1
Misc :
ALS Vial : 10 Sample Multiplier: 1

CL
11/20/23 @ 10:37
CharlesL

Quant Time: Nov 14 11:18:39 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration

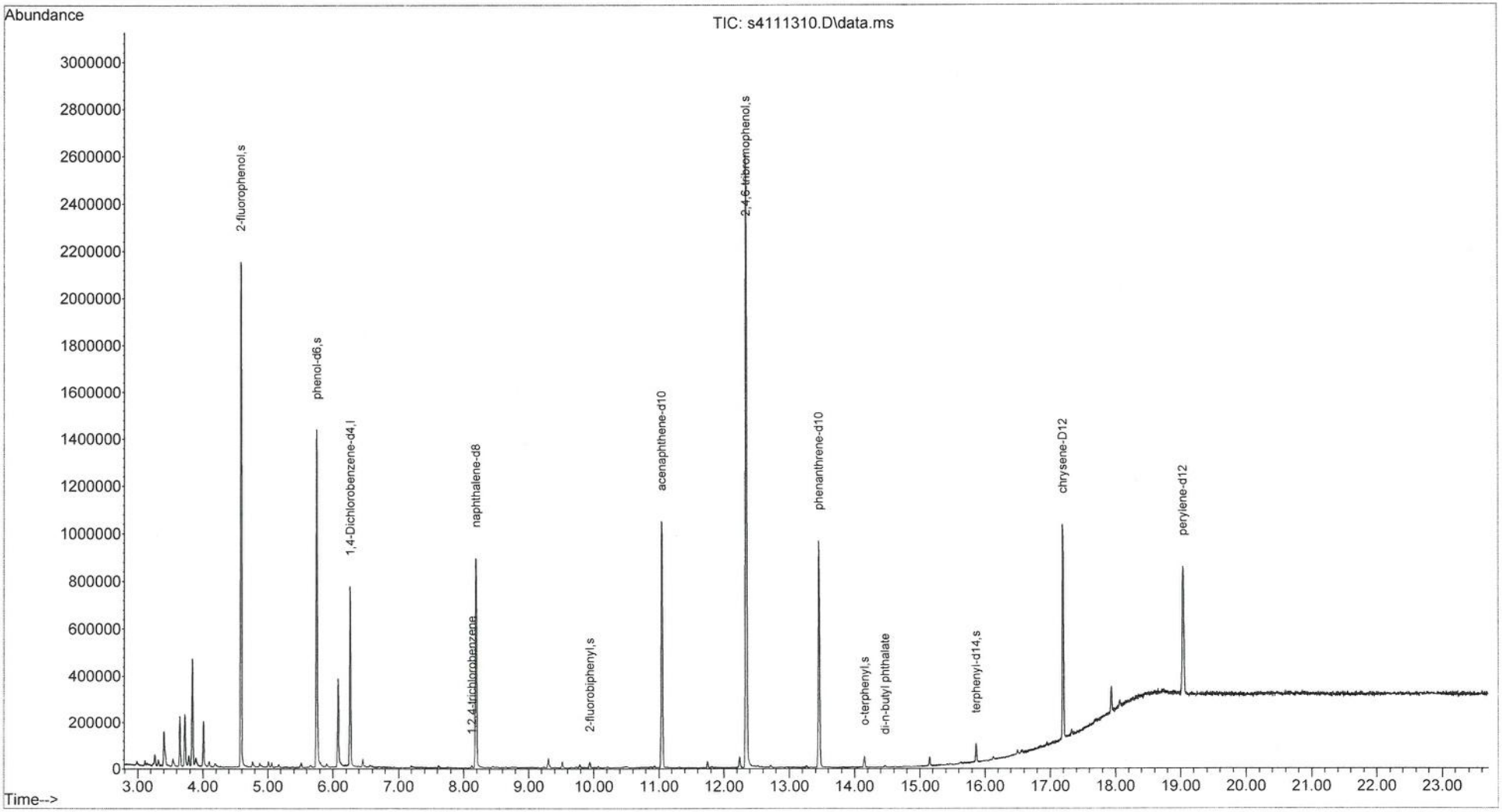
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.260	152	162331	10.00	ug/mL	0.00
21) naphthalene-d8	8.189	136	588993	10.00	ug/mL	0.00
37) acenaphthene-d10	11.043	164	303858	10.00	ug/mL	0.00
58) phenanthrene-d10	13.451	188	540055	10.00	ug/mL	0.00
74) chrysene-D12	17.194	240	380332	10.00	ug/mL	0.00
83) perylene-d12	19.037	264	319612	10.00	ug/mL	0.00
System Monitoring Compounds						
4) 2-fluorophenol	4.584	112	780030	38.68	ug/mL	0.00
Spiked Amount 200.000			Recovery = 19.34%			
7) phenol-d6	5.751	99	609339	24.88	ug/mL	0.00
Spiked Amount 200.000			Recovery = 12.44%			
22) nitrobenzene-d5	0.000	82	0	0.00	ug/mL	
Spiked Amount 100.000			Recovery = 0.00%			
38) 2-fluorobiphenyl	9.940	172	9413	0.16	ug/mL	0.00
Spiked Amount 100.000			Recovery = 0.16%			
59) 2,4,6-tribromophenol	12.343	330	477663	72.52	ug/mL	0.00
Spiked Amount 200.000			Recovery = 36.26%			
69) o-terphenyl	14.149	230	12378	0.38	ug/mL	0.00
Spiked Amount 100.000			Recovery = 0.38%			
72) 1-Chloro-octadecane	0.000	57	0	0.00	ug/mL	
Spiked Amount 100.000			Recovery = 0.00%			
75) terphenyl-d14	15.864	244	32666	0.79	ug/mL	0.00
Spiked Amount 100.000			Recovery = 0.79%			
Target Compounds						Qvalue
30) 1,2,4-trichlorobenzene	8.123	180	3225	0.063	ug/mL#	99
71) di-n-butyl phthalate	14.465	149	5067	0.056	ug/mL#	78
93) DDT	16.636	TIC	2744	Below Cal	#	22

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Nov23\111323\
Data File : s4111310.D
Acq On : 13 Nov 2023 02:29 pm
Operator : cl
Sample : 67798-02 acid x1
Misc :
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Nov 14 11:18:39 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Nov23\111323\
Data File : s4111325.D
Acq On : 13 Nov 2023 09:56 pm
Operator : cl
Sample : 67798-02 bn x1
Misc :
ALS Vial : 25 Sample Multiplier: 1

CL
11/20/23 @ 10:37
CharlesL

Quant Time: Nov 14 11:19:40 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration

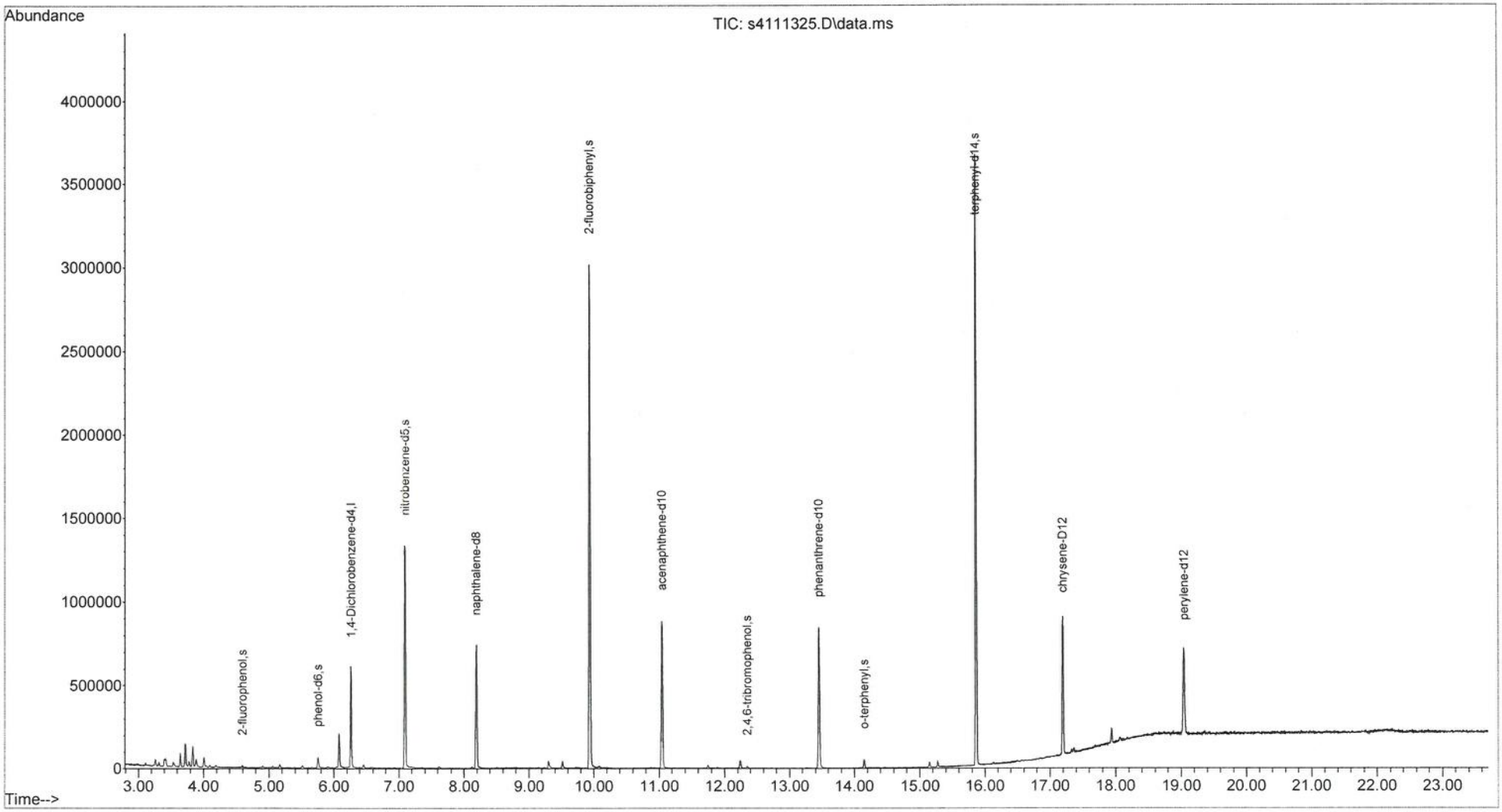
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.260	152	130735	10.00	ug/mL	0.00
21) naphthalene-d8	8.187	136	477185	10.00	ug/mL	0.00
37) acenaphthene-d10	11.043	164	251874	10.00	ug/mL	0.00
58) phenanthrene-d10	13.454	188	462473	10.00	ug/mL	0.00
74) chrysene-D12	17.194	240	346757	10.00	ug/mL	0.00
83) perylene-d12	19.042	264	301236	10.00	ug/mL	0.00
System Monitoring Compounds						
4) 2-fluorophenol	4.594	112	3178	0.20	ug/mL	0.00
Spiked Amount 200.000			Recovery =	0.10%		
7) phenol-d6	5.751	99	31014	1.57	ug/mL	0.00
Spiked Amount 200.000			Recovery =	0.79%		
22) nitrobenzene-d5	7.094	82	574241	34.28	ug/mL	0.00
Spiked Amount 100.000			Recovery =	34.28%		
38) 2-fluorobiphenyl	9.935	172	1314949	33.18	ug/mL	0.00
Spiked Amount 100.000			Recovery =	33.18%		
59) 2,4,6-tribromophenol	12.345	330	1524	0.36	ug/mL	0.00
Spiked Amount 200.000			Recovery =	0.18%		
69) o-terphenyl	14.147	230	13031	0.47	ug/mL	0.00
Spiked Amount 100.000			Recovery =	0.47%		
72) 1-Chloro-octadecane	0.000	57	0	0.00	ug/mL	
Spiked Amount 100.000			Recovery =	0.00%		
75) terphenyl-d14	15.864	244	1550231	41.41	ug/mL	0.00
Spiked Amount 100.000			Recovery =	41.41%		
Target Compounds						Qvalue
93) DDT	16.636	TIC	1299	Below Cal	#	22

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Nov23\111323\
Data File : s4111325.D
Acq On : 13 Nov 2023 09:56 pm
Operator : cl
Sample : 67798-02 bn x1
Misc :
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Nov 14 11:19:40 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration



This File:	L:\SVOA\Excel Reports\ABN\231122\67798-003		Charles Leahy L:\SVOA\ABN\ABN 8270DoD ImportFileBuilde
Analysis Group:	ABN	Dow Salvage Yard	11/22/23 2:05 PM
Field ID:	SY-OBMW4R-110723	CRE	L:\SVOA\ABN\
Sample:	67798-03 acid x1	67798-03 bn x1	L:\SVOA\Excel Reports\ABN\231122\
Misc:			L:\SVOA\PDFReports\
DataFile:	311.D\S4ABN110223A.XLS	4ABN110223A.XLS	
Import File Name	S4 ABN 17096 DoD		
TestGroupID	E8270DoD_A		
Aqueous or Soil? (A or S)	A		
Prep Date	11/9/2023		
Lab#:	67798-003		
QC_Code:			
Prep#	17096		

Reviewer Checks:

Quant Report: Reviewed, Analyst Initials & Date ✓
Chromatogram Checked, Major peaks identified ✓
Results consistent w/ other attached analyses ✓
Reanalysis reason noted
Substitute dilution data checked
Correct dilution and reason clear or noted ✓
Flags checked (Expiration, F+, Over Cal, Surr, Aspen, QC) ✓
Other QC failures or issues noted in Aspen ✓
Correct data file and/or date/time in Aspen ✓

* To Be discussed in Conference (CLESD)

Notes:
Reviewer Initials & Date: 11/28/23

22% 8F 24 47

#	Surrogate Standards	Conc. (ug/mL)	AnalysisDate	AnalyzedBy		Dil'n	Weight	Volume	Surr	Recovery	Flag	QC Limits
4	2-fluorophenol	13.96	11/13/2023	CL	s4111311.D	1 ✓	1	1	100	**14%**	#	21-100
7	phenol-d6	8.66	11/13/2023	CL	s4111311.D	1	1	1	100	**9%**	#	10-102
59	2,4,6-tribromophenol	32.97	11/13/2023	CL	s4111311.D	1	1	1	100	**33%**		10-123
22	nitrobenzene-d5	28.95	11/15/2023	CL	s4111512.D ✓	1	1	1	50	**58%**		35-114
38	2-fluorobiphenyl	28.65	11/15/2023	CL	s4111512.D	1	1	1	50	**57%**		43-116
75	terphenyl-d14	33.68	11/15/2023	CL	s4111512.D	1	1	1	50	**67%**		33-141
6	phenol	0.00	11/13/2023	CL	s4111311.D	1	1	1				
8	2-chlorophenol	0.00	11/13/2023	CL	s4111311.D	1	1	1				
15	2-methylphenol	0.00	11/13/2023	CL	s4111311.D	1	1	1				
15	2-methylphenol	0.00	11/13/2023	CL	s4111311.D	1	1	1				
20	4-methylphenol	0.00	11/13/2023	CL	s4111311.D	1	1	1				
25	2-nitrophenol	0.00	11/13/2023	CL	s4111311.D	1	1	1				
26	2,4-dimethylphenol	0.00	11/13/2023	CL	s4111311.D	1	1	1				
28	2,4-dichlorophenol	0.00	11/13/2023	CL	s4111311.D	1	1	1				
29	2,6-dichlorophenol	0.00	11/13/2023	CL	s4111311.D	1	1	1				
32	benzoic acid	0.00	11/13/2023	CL	s4111311.D	1	1	1				
35	4-chloro-3-methylphenol	0.00	11/13/2023	CL	s4111311.D	1	1	1				
40	2,4,6-trichlorophenol	0.00	11/13/2023	CL	s4111311.D	1	1	1				
41	2,4,5-trichlorophenol	0.00	11/13/2023	CL	s4111311.D	1	1	1				
51	2,4-dinitrophenol	0.00	11/13/2023	CL	s4111311.D	1	1	1				
53	4-nitrophenol	0.00	11/13/2023	CL	s4111311.D	1	1	1				
60	4,6-dinitro-2-methylphenol	0.00	11/13/2023	CL	s4111311.D	1	1	1				
66	pentachlorophenol	0.00	11/13/2023	CL	s4111311.D	1	1	1				
2	N-nitroso-dimethylamine	0.00	11/15/2023	CL	s4111512.D	1	1	1				
3	pyridine	0.00	11/15/2023	CL	s4111512.D	1	1	1				
5	aniline	0.00	11/15/2023	CL	s4111512.D	1	1	1				
9	n-decane	0.00	11/15/2023	CL	s4111512.D	1	1	1				
10	bis-(2-choroethyl)ether	0.00	11/15/2023	CL	s4111512.D	1	1	1				
11	1,3-dichlorobenzene	0.00	11/15/2023	CL	s4111512.D	1	1	1				
12	1,4-diclorobenzene	0.00	11/15/2023	CL	s4111512.D	1	1	1				
13	1,2-dichlorobenzene	0.00	11/15/2023	CL	s4111512.D	1	1	1				
14	benzyl alcohol	0.00	11/15/2023	CL	s4111512.D	1	1	1				
16	2,2'-oxybis(1-chloropropane)	0.00	11/15/2023	CL	s4111512.D	1	1	1				
##	acetephenone	#N/A	11/15/2023	CL	s4111512.D	1	1	1			#N/A	
18	hexachloroethane	0.00	11/15/2023	CL	s4111512.D	1	1	1				
19	N-nitroso-di-n-propylamine	0.00	11/15/2023	CL	s4111512.D	1	1	1				
23	nitrobenzene	0.00	11/15/2023	CL	s4111512.D	1	1	1				
24	isophorone	0.00	11/15/2023	CL	s4111512.D	1	1	1				
27	bis(2-chloroethoxy)methane	0.00	11/15/2023	CL	s4111512.D	1	1	1				
30	1,2,4-trichlorobenzene	0.00	11/15/2023	CL	s4111512.D	1	1	1				
31	naphthalene	0.00	11/15/2023	CL	s4111512.D	1	1	1				
33	4-chloroanaline	0.00	11/15/2023	CL	s4111512.D	1	1	1				
34	hexachloro-1,3-butadiene	0.00	11/15/2023	CL	s4111512.D	1	1	1				
36	2-methylnaphthalene	0.00	11/15/2023	CL	s4111512.D	1	1	1				
39	hexachlorocyclopentadiene	0.00	11/15/2023	CL	s4111512.D	1	1	1				
43	2-chloronaphthalene	0.00	11/15/2023	CL	s4111512.D	1	1	1				
44	2-nitroanaline	0.00	11/15/2023	CL	s4111512.D	1	1	1				
45	acenaphthylene	0.00	11/15/2023	CL	s4111512.D	1	1	1				
46	dimethyl phthalate	0.00	11/15/2023	CL	s4111512.D	1	1	1				
47	2,6-dinitrotoluene	0.00	11/15/2023	CL	s4111512.D	1	1	1				
48	2,4-dinitrotoluene	0.00	11/15/2023	CL	s4111512.D	1	1	1				
49	acenaphthene	0.00	11/15/2023	CL	s4111512.D	1	1	1				
50	3-nitroanaline	0.00	11/15/2023	CL	s4111512.D	1	1	1				
52	dibenzofuran	0.00	11/15/2023	CL	s4111512.D	1	1	1				
54	fluorene	0.00	11/15/2023	CL	s4111512.D	1	1	1				
55	diethyl phthalate	0.00	11/15/2023	CL	s4111512.D	1	1	1				
56	4-chlorophenyl phenyl ether	0.00	11/15/2023	CL	s4111512.D	1	1	1				
57	4-nitroanaline	0.00	11/15/2023	CL	s4111512.D	1	1	1				
61	azobenzene	0.00	11/15/2023	CL	s4111512.D	1	1	1				
62	N-nitrosodiphenylamine	0.00	11/15/2023	CL	s4111512.D	1	1	1				
63	4-bromophenyl phenyl ether	0.00	11/15/2023	CL	s4111512.D	1	1	1				
64	hexachlorobenzene	0.00	11/15/2023	CL	s4111512.D	1	1	1				
65	n-octadecane	0.00	11/15/2023	CL	s4111512.D	1	1	1				
67	phenanthrene	0.00	11/15/2023	CL	s4111512.D	1	1	1				
68	anthracene	0.00	11/15/2023	CL	s4111512.D	1	1	1				
70	carbazole	0.00	11/15/2023	CL	s4111512.D	1	1	1				
71	di-n-butyl phthalate	0.00	11/15/2023	CL	s4111512.D	1	1	1				
73	fluoranthene	0.00	11/15/2023	CL	s4111512.D	1	1	1				
76	benzidine	0.00	11/15/2023	CL	s4111512.D	1	1	1				
77	pyrene	0.00	11/15/2023	CL	s4111512.D	1	1	1				
78	butyl benzyl phthalate	0.00	11/15/2023	CL	s4111512.D	1	1	1				
79	benzo(a)anthracene	0.00	11/15/2023	CL	s4111512.D	1	1	1				
80	chrysene	0.00	11/15/2023	CL	s4111512.D	1	1	1				
81	3,3'-dichlorobenzidine	0.00	11/15/2023	CL	s4111512.D	1	1	1				
82	bis-2-ethylhexyl phthalate	0.00	11/15/2023	CL	s4111512.D	1	1	1				
84	di-n-octyl phthalate	0.00	11/15/2023	CL	s4111512.D	1	1	1				
85	Benzo(b)fluoranthene	0.00	11/15/2023	CL	s4111512.D	1	1	1				
86	benzo(k)fluoranthene	0.00	11/15/2023	CL	s4111512.D	1	1	1				
87	benzo(a)pyrene	0.00	11/15/2023	CL	s4111512.D	1	1	1				
88	indeno(1,2,3-cd)pyrene	0.00	11/15/2023	CL	s4111512.D	1	1	1				
89	dibenzo(a,h)anthracene	0.00	11/15/2023	CL	s4111512.D	1	1	1				
90	benzo(g,h,i)perylene	0.00	11/15/2023	CL	s4111512.D	1	1	1				

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Nov23\111323\
Data File : s4111311.D
Acq On : 13 Nov 2023 02:59 pm
Operator : cl
Sample : 67798-03 acid x1
Misc :
ALS Vial : 11 Sample Multiplier: 1

CL
11/20/23 @ 10:38
CharlesL

Quant Time: Nov 14 11:18:43 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.260	152	163179	10.00	ug/mL	0.00
21) naphthalene-d8	8.189	136	614377	10.00	ug/mL	0.00
37) acenaphthene-d10	11.046	164	323272	10.00	ug/mL	0.00
58) phenanthrene-d10	13.454	188	584886	10.00	ug/mL	0.00
74) chrysene-D12	17.197	240	405873	10.00	ug/mL	0.00
83) perylene-d12	19.039	264	327087	10.00	ug/mL	0.00
System Monitoring Compounds						
4) 2-fluorophenol	4.584	112	283030	13.96	ug/mL	0.00
Spiked Amount 200.000			Recovery =	6.98%		
7) phenol-d6	5.751	99	213261	8.66	ug/mL	0.00
Spiked Amount 200.000			Recovery =	4.33%		
22) nitrobenzene-d5	7.096	82	60672	2.80	ug/mL	0.00
Spiked Amount 100.000			Recovery =	2.80%		
38) 2-fluorobiphenyl	9.937	172	126520	2.45	ug/mL	0.00
Spiked Amount 100.000			Recovery =	2.45%		
59) 2,4,6-tribromophenol	12.340	330	234887	32.97	ug/mL	0.00
Spiked Amount 200.000			Recovery =	16.48%		
69) o-terphenyl	0.000	230	0	0.00	ug/mL	
Spiked Amount 100.000			Recovery =	0.00%		
72) 1-Chloro-octadecane	0.000	57	0	0.00	ug/mL	
Spiked Amount 100.000			Recovery =	0.00%		
75) terphenyl-d14	15.864	244	250107	5.70	ug/mL	0.00
Spiked Amount 100.000			Recovery =	5.70%		
Target Compounds						Qvalue
93) DDT	16.641	TIC	1219	Below Cal	#	22

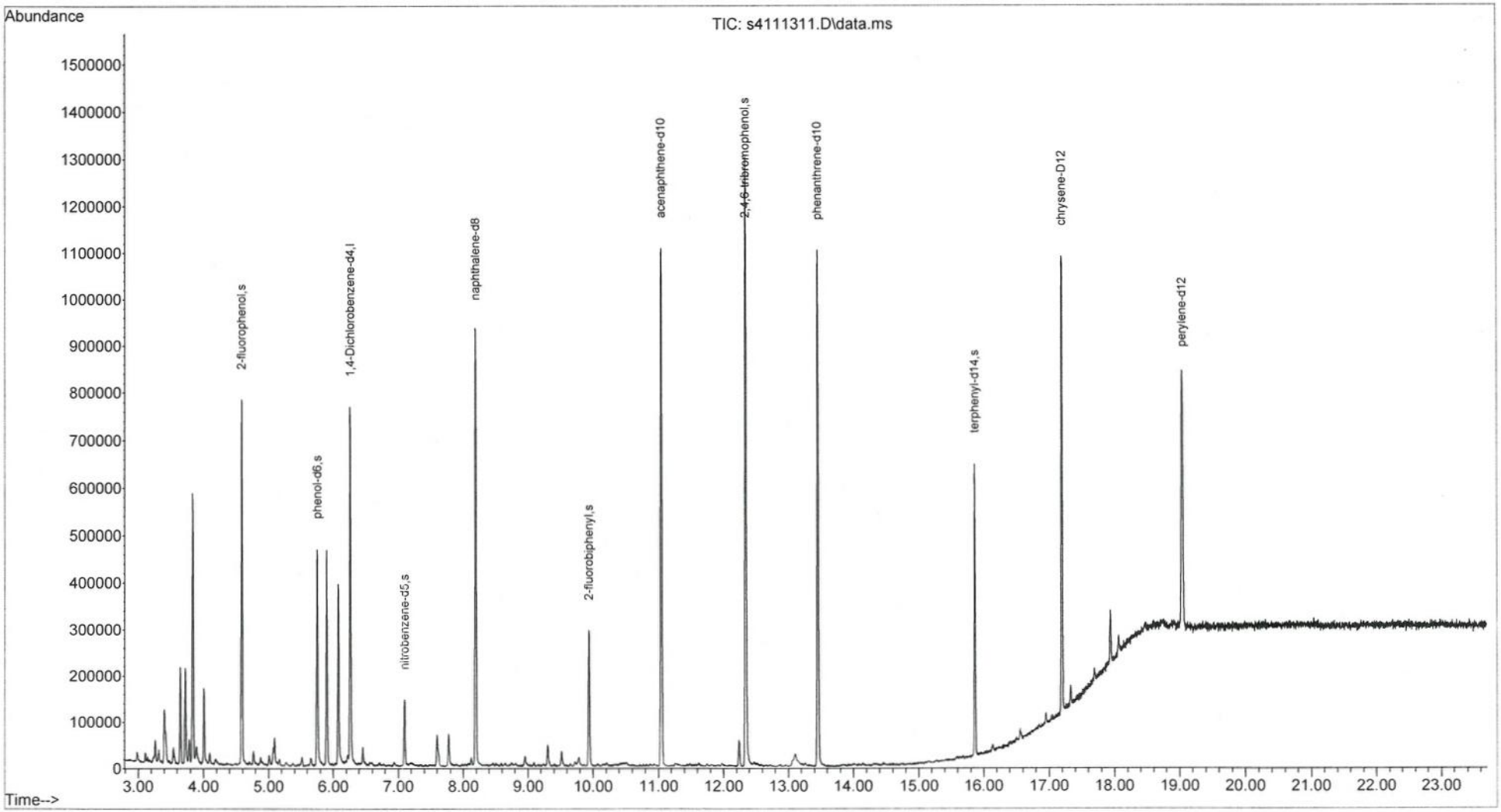
+ 8.82 = 22.78
+ 17.77 = 26.43
+ 14.32 = 47.29

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Nov23\111323\
Data File : s4111311.D
Acq On : 13 Nov 2023 02:59 pm
Operator : cl
Sample : 67798-03 acid x1
Misc :
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Nov 14 11:18:43 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Nov23\111523\
Data File : s4111512.D
Acq On : 15 Nov 2023 03:47 pm
Operator : cl
Sample : 67798-03 bn x1
Misc :
ALS Vial : 10 Sample Multiplier: 1

C L
11/22/23 @ 11:43
CharlesL

Quant Time: Nov 17 16:13:23 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration

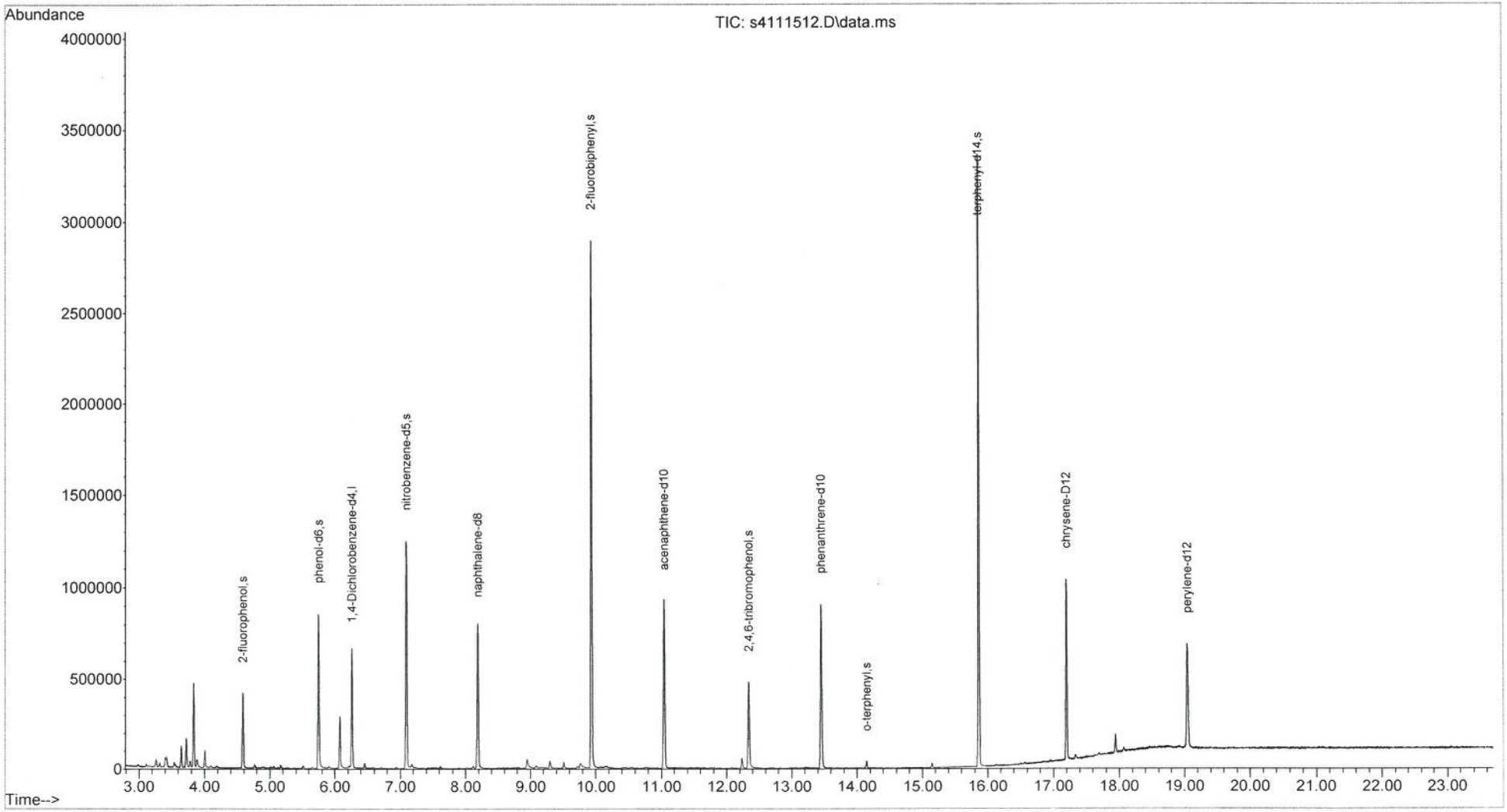
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.258	152	139254	10.00	ug/mL	0.00
21) naphthalene-d8	8.184	136	510245	10.00	ug/mL	0.00
37) acenaphthene-d10	11.041	164	278869	10.00	ug/mL	0.00
58) phenanthrene-d10	13.449	188	516440	10.00	ug/mL	-0.01
74) chrysene-D12	17.197	240	400347	10.00	ug/mL	0.00
83) perylene-d12	19.042	264	340359	10.00	ug/mL	0.00
System Monitoring Compounds						
4) 2-fluorophenol	4.584	112	152527	8.82	ug/mL	0.00
Spiked Amount 200.000			Recovery =	4.41%		
7) phenol-d6	5.746	99	373400	17.77	ug/mL	-0.01
Spiked Amount 200.000			Recovery =	8.88%		
22) nitrobenzene-d5	7.091	82	518566	28.95	ug/mL	0.00
Spiked Amount 100.000			Recovery =	28.95%		
38) 2-fluorobiphenyl	9.932	172	1257091	28.65	ug/mL	0.00
Spiked Amount 100.000			Recovery =	28.65%		
59) 2,4,6-tribromophenol	12.338	330	89768	14.32	ug/mL	0.00
Spiked Amount 200.000			Recovery =	7.16%		
69) o-terphenyl	14.144	230	8975	0.28	ug/mL	0.00
Spiked Amount 100.000			Recovery =	0.28%		
72) 1-Chloro-octadecane	0.000	57	0	0.00	ug/mL	
Spiked Amount 100.000			Recovery =	0.00%		
75) terphenyl-d14	15.862	244	1455657	33.68	ug/mL	0.00
Spiked Amount 100.000			Recovery =	33.68%		
Target Compounds						Qvalue
42) 1,1'-Biphenyl	10.080	154	2987mBV	Below Cal		
93) DDT	16.634	TIC	3298	Below Cal	#	22

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Nov23\111523\
Data File : s4111512.D
Acq On : 15 Nov 2023 03:47 pm
Operator : cl
Sample : 67798-03 bn x1
Misc :
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Nov 17 16:13:23 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration



This File:	L:\SVOA\Excel Reports\ABN\231122\67798-004		Charles Leahy L:\SVOA\ABN\ABN 8270DoD ImportFileBuilde
Analysis Group:	ABN	Dow Salvage Yard	11/22/23 2:07 PM
Field ID:	MW2-60.5-70.5-110723	CRE	L:\SVOA\ABN\
Sample:	67798-04 acid x1	67798-04 bn x1	L:\SVOA\Excel Reports\ABN\231122\
Misc:			L:\SVOA\PDFReports\
DataFile:	312.D\S4ABN110223A.XLS	4ABN110223A.XLS	
Import File Name	S4 ABN 17096 DoD		
TestGroupID	E8270DoD_A		
Aqueous or Soil? (A or S)	A		
Prep Date	11/9/2023		
Lab#:	67798-004		
QC_Code:			
Prep#	17096		

Reviewer Checks:

Quant Report: Reviewed, Analyst Initials & Date ✓
Chromatogram Checked, Major peaks identified ✓
Results consistent w/ other attached analyses
Reanalysis reason noted
Substitute dilution data checked
Correct dilution and reason clear or noted ✓
Flags checked (Expiration, F+, Over Cal, Surr, Aspen, QC)
Other QC failures or issues noted in Aspen ✓
Correct data file and/or date/time in Aspen ✓

Tox discussed in case Narr (LCS ID)

Notes:
Reviewer Initials & Date: 11/28/23

#	Surrogate Standards	Conc. (ug/mL)	AnalysisDate	AnalyzedBy	Dil'n	Weight	Volume	Surr	Recovery	Flag	QC Limits
4	2-fluorophenol	36.44	11/13/2023	CL s4111312.D	1 ✓	1	1	100	**36%**		21-100
7	phenol-d6	23.56	11/13/2023	CL s4111312.D	1	1	1	100	**24%**		10-102
59	2,4,6-tribromophenol	68.25	11/13/2023	CL s4111312.D	1	1	1	100	**68%**		10-123
22	nitrobenzene-d5	32.75	11/15/2023	CL s4111513.D ✓	1	1	1	50	**66%**		35-114
38	2-fluorobiphenyl	31.89	11/15/2023	CL s4111513.D	1	1	1	50	**64%**		43-116
75	terphenyl-d14	40.25	11/15/2023	CL s4111513.D	1	1	1	50	**81%**		33-141
6	phenol	0.00	11/13/2023	CL s4111312.D	1	1	1				
8	2-chlorophenol	0.00	11/13/2023	CL s4111312.D	1	1	1				
15	2-methylphenol	0.06	11/13/2023	CL s4111312.D	1	1	1				
15	2-methylphenol	0.06	11/13/2023	CL s4111312.D	1	1	1				
20	4-methylphenol	0.00	11/13/2023	CL s4111312.D	1	1	1				
25	2-nitrophenol	0.00	11/13/2023	CL s4111312.D	1	1	1				
26	2,4-dimethylphenol	0.00	11/13/2023	CL s4111312.D	1	1	1				
28	2,4-dichlorophenol	0.00	11/13/2023	CL s4111312.D	1	1	1				
29	2,6-dichlorophenol	0.00	11/13/2023	CL s4111312.D	1	1	1				
32	benzoic acid	0.00	11/13/2023	CL s4111312.D	1	1	1				
35	4-chloro-3-methylphenol	0.00	11/13/2023	CL s4111312.D	1	1	1				
40	2,4,6-trichlorophenol	0.00	11/13/2023	CL s4111312.D	1	1	1				
41	2,4,5-trichlorophenol	0.00	11/13/2023	CL s4111312.D	1	1	1				
51	2,4-dinitrophenol	0.00	11/13/2023	CL s4111312.D	1	1	1				
53	4-nitrophenol	0.00	11/13/2023	CL s4111312.D	1	1	1				
60	4,6-dinitro-2-methylphenol	0.00	11/13/2023	CL s4111312.D	1	1	1				
66	pentachlorophenol	0.00	11/13/2023	CL s4111312.D	1	1	1				
2	N-nitroso-dimethylamine	0.00	11/15/2023	CL s4111513.D	1	1	1				
3	pyridine	0.00	11/15/2023	CL s4111513.D	1	1	1				
5	aniline	0.00	11/15/2023	CL s4111513.D ✓	1	1	1				
9	n-decane	0.00	11/15/2023	CL s4111513.D	1	1	1				
10	bis-(2-choroethyl)ether	0.00	11/15/2023	CL s4111513.D	1	1	1				
11	1,3-dichlorobenzene	0.00	11/15/2023	CL s4111513.D	1	1	1				
12	1,4-diclorobenzene	0.00	11/15/2023	CL s4111513.D	1	1	1				
13	1,2-dichlorobenzene	0.00	11/15/2023	CL s4111513.D	1	1	1				
14	benzyl alcohol	0.00	11/15/2023	CL s4111513.D	1	1	1				
16	2,2'-oxybis(1-chloropropane)	0.00	11/15/2023	CL s4111513.D	1	1	1				
##	acetephenone	#N/A	11/15/2023	CL s4111513.D	1	1	1			#N/A	
18	hexachloroethane	0.00	11/15/2023	CL s4111513.D	1	1	1				
19	N-nitroso-di-n-propylamine	0.00	11/15/2023	CL s4111513.D	1	1	1				
23	nitrobenzene	0.00	11/15/2023	CL s4111513.D	1	1	1				
24	isophorone	0.00	11/15/2023	CL s4111513.D	1	1	1				
27	bis(2-chloroethoxy)methane	0.00	11/15/2023	CL s4111513.D	1	1	1				
30	1,2,4-trichlorobenzene	0.00	11/15/2023	CL s4111513.D	1	1	1				
31	naphthalene	0.00	11/15/2023	CL s4111513.D	1	1	1				
33	4-chloroanaline	0.00	11/15/2023	CL s4111513.D	1	1	1				
34	hexachloro-1,3-butadiene	0.00	11/15/2023	CL s4111513.D	1	1	1				
36	2-methylnaphthalene	0.00	11/15/2023	CL s4111513.D	1	1	1				
39	hexachlorocyclopentadiene	0.00	11/15/2023	CL s4111513.D	1	1	1				
43	2-chloronaphthalene	0.00	11/15/2023	CL s4111513.D	1	1	1				
44	2-nitroanaline	0.00	11/15/2023	CL s4111513.D	1	1	1				
45	acenaphthylene	0.00	11/15/2023	CL s4111513.D	1	1	1				
46	dimethyl phthalate	0.00	11/15/2023	CL s4111513.D	1	1	1				
47	2,6-dinitrotoluene	0.00	11/15/2023	CL s4111513.D	1	1	1				
48	2,4-dinitrotoluene	0.00	11/15/2023	CL s4111513.D	1	1	1				
49	acenaphthene	0.00	11/15/2023	CL s4111513.D	1	1	1				
50	3-nitroanaline	0.00	11/15/2023	CL s4111513.D	1	1	1				
52	dibenzofuran	0.00	11/15/2023	CL s4111513.D	1	1	1				
54	fluorene	0.00	11/15/2023	CL s4111513.D	1	1	1				
55	diethyl phthalate	0.10	11/15/2023	CL s4111513.D	1	1	1				
56	4-chlorophenyl phenyl ether	0.00	11/15/2023	CL s4111513.D	1	1	1				
57	4-nitroanaline	0.00	11/15/2023	CL s4111513.D	1	1	1				
61	azobenzene	0.00	11/15/2023	CL s4111513.D	1	1	1				
62	N-nitrosodiphenylamine	0.00	11/15/2023	CL s4111513.D	1	1	1				
63	4-bromophenyl phenyl ether	0.00	11/15/2023	CL s4111513.D	1	1	1				
64	hexachlorobenzene	0.00	11/15/2023	CL s4111513.D	1	1	1				
65	n-octadecane	0.00	11/15/2023	CL s4111513.D	1	1	1				
67	phenanthrene	0.00	11/15/2023	CL s4111513.D	1	1	1				
68	anthracene	0.00	11/15/2023	CL s4111513.D	1	1	1				
70	carbazole	0.00	11/15/2023	CL s4111513.D	1	1	1				
71	di-n-butyl phthalate	0.10	11/15/2023	CL s4111513.D	1	1	1				
73	fluoranthene	0.00	11/15/2023	CL s4111513.D	1	1	1				
76	benzidine	0.00	11/15/2023	CL s4111513.D	1	1	1				
77	pyrene	0.04	11/15/2023	CL s4111513.D	1	1	1				
78	butyl benzyl phthalate	0.00	11/15/2023	CL s4111513.D	1	1	1				
79	benzo(a)anthracene	0.00	11/15/2023	CL s4111513.D	1	1	1				
80	chrysene	0.00	11/15/2023	CL s4111513.D	1	1	1				
81	3,3'-dichlorobenzidine	0.00	11/15/2023	CL s4111513.D	1	1	1				
82	bis-2-ethylhexyl phthalate	0.00	11/15/2023	CL s4111513.D	1	1	1				
84	di-n-octyl phthalate	0.00	11/15/2023	CL s4111513.D	1	1	1				
85	Benzo(b)fluoranthene	0.00	11/15/2023	CL s4111513.D	1	1	1				
86	benzo(k)fluoranthene	0.00	11/15/2023	CL s4111513.D	1	1	1				
87	benzo(a)pyrene	0.00	11/15/2023	CL s4111513.D	1	1	1				
88	indeno(1,2,3-cd)pyrene	0.00	11/15/2023	CL s4111513.D	1	1	1				
89	dibenzo(a,h)anthracene	0.00	11/15/2023	CL s4111513.D	1	1	1				
90	benzo(g,h,i)perylene	0.00	11/15/2023	CL s4111513.D	1	1	1				

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Nov23\111323\
Data File : s4111312.D
Acq On : 13 Nov 2023 03:29 pm
Operator : cl
Sample : 67798-04 acid x1
Misc :
ALS Vial : 12 Sample Multiplier: 1

CL
11/20/23 @ 10:38
CharlesL

Quant Time: Nov 14 11:18:47 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration

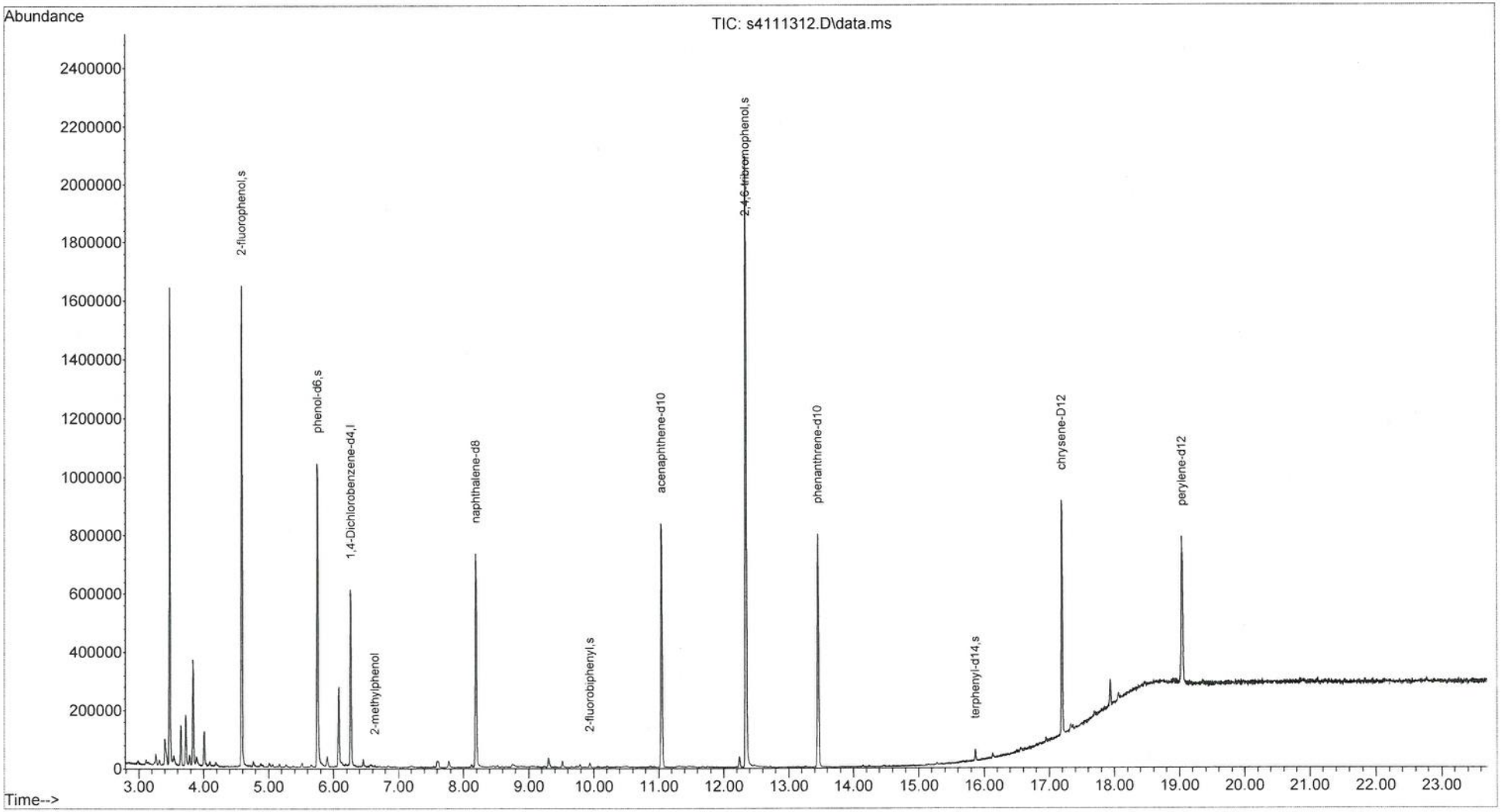
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.260	152	130541	10.00	ug/mL	0.00
21) naphthalene-d8	8.189	136	465431	10.00	ug/mL	0.00
37) acenaphthene-d10	11.043	164	245062	10.00	ug/mL	0.00
58) phenanthrene-d10	13.454	188	443326	10.00	ug/mL	0.00
74) chrysene-D12	17.194	240	330533	10.00	ug/mL	0.00
83) perylene-d12	19.039	264	282748	10.00	ug/mL	0.00
System Monitoring Compounds						
4) 2-fluorophenol	4.586	112	590919	36.44	ug/mL	0.00
Spiked Amount 200.000			Recovery =	18.22%		
7) phenol-d6	5.751	99	464089	23.56	ug/mL	0.00
Spiked Amount 200.000			Recovery =	11.78%		
22) nitrobenzene-d5	0.000	82	0	0.00	ug/mL	
Spiked Amount 100.000			Recovery =	0.00%		
38) 2-fluorobiphenyl	9.937	172	6339	0.13	ug/mL	0.00
Spiked Amount 100.000			Recovery =	0.13%		
59) 2,4,6-tribromophenol	12.343	330	368995	68.25	ug/mL	0.00
Spiked Amount 200.000			Recovery =	34.13%		
69) o-terphenyl	0.000	230	0	0.00	ug/mL	
Spiked Amount 100.000			Recovery =	0.00%		
72) 1-Chloro-octadecane	0.000	57	0	0.00	ug/mL	
Spiked Amount 100.000			Recovery =	0.00%		
75) terphenyl-d14	15.864	244	14892	0.41	ug/mL	0.00
Spiked Amount 100.000			Recovery =	0.41%		
Target Compounds						Qvalue
15) 2-methylphenol	6.635	108	1764m BC	0.064	ug/mL	
93) DDT	16.626	TIC	2781	Below Cal	#	22

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Nov23\111323\
Data File : s4111312.D
Acq On : 13 Nov 2023 03:29 pm
Operator : cl
Sample : 67798-04 acid x1
Misc :
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Nov 14 11:18:47 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Nov23\111523\
Data File : s4111513.D
Acq On : 15 Nov 2023 04:16 pm
Operator : cl
Sample : 67798-04 bn x1
Misc :
ALS Vial : 11 Sample Multiplier: 1

CL
11/22/23 @ 11:43
CharlesL

Quant Time: Nov 17 16:13:28 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.258	152	161917	10.00	ug/mL	0.00
21) naphthalene-d8	8.187	136	602581	10.00	ug/mL	0.00
37) acenaphthene-d10	11.038	164	321174	10.00	ug/mL	-0.01
58) phenanthrene-d10	13.448	188	596637	10.00	ug/mL	-0.01
74) chrysene-D12	17.197	240	449991	10.00	ug/mL	0.00
83) perylene-d12	19.039	264	366878	10.00	ug/mL	0.00
System Monitoring Compounds						
4) 2-fluorophenol	4.591	112	3795	0.19	ug/mL	0.00
Spiked Amount 200.000			Recovery =	0.10%		
7) phenol-d6	5.751	99	37099	1.52	ug/mL	0.00
Spiked Amount 200.000			Recovery =	0.76%		
22) nitrobenzene-d5	7.093	82	692757	32.75	ug/mL	0.00
Spiked Amount 100.000			Recovery =	32.75%		
38) 2-fluorobiphenyl	9.935	172	1611311	31.89	ug/mL	0.00
Spiked Amount 100.000			Recovery =	31.89%		
59) 2,4,6-tribromophenol	12.340	330	4879m	0.76	ug/mL	0.00
Spiked Amount 200.000			Recovery =	0.38%		
69) o-terphenyl	14.144	230	1671	0.02	ug/mL	0.00
Spiked Amount 100.000			Recovery =	0.02%		
72) 1-Chloro-octadecane	0.000	57	0	0.00	ug/mL	
Spiked Amount 100.000			Recovery =	0.00%		
75) terphenyl-d14	15.862	244	1955542	40.25	ug/mL	0.00
Spiked Amount 100.000			Recovery =	40.25%		
Target Compounds						Qvalue
42) 1,1'-Biphenyl	10.080	154	4144	Below Cal	#	93
55) diethyl phthalate	11.795	149	8308	0.095	ug/mL#	76
67) phenanthrene	13.484	178	3790m	Below Cal		
68) anthracene	13.563	178	2676m	Below Cal		
71) di-n-butyl phthalate	14.463	149	8923	0.099	ug/mL#	78
73) fluoranthene	15.357	202	5257	Below Cal	#	64
77) pyrene	15.660	202	5110	0.041	ug/mL#	75
79) benzo(a)anthracene	17.176	228	4157m	Below Cal		
80) chrysene	17.230	228	3081m	Below Cal		
85) Benzo(b)fluoranthene	18.504	252	2563m	Below Cal		
86) benzo(k)fluoranthene	18.540	252	2761m	Below Cal		
87) benzo(a)pyrene	18.965	252	1119	Below Cal	#	54
93) DDT	16.626	TIC	1646	Below Cal	#	22

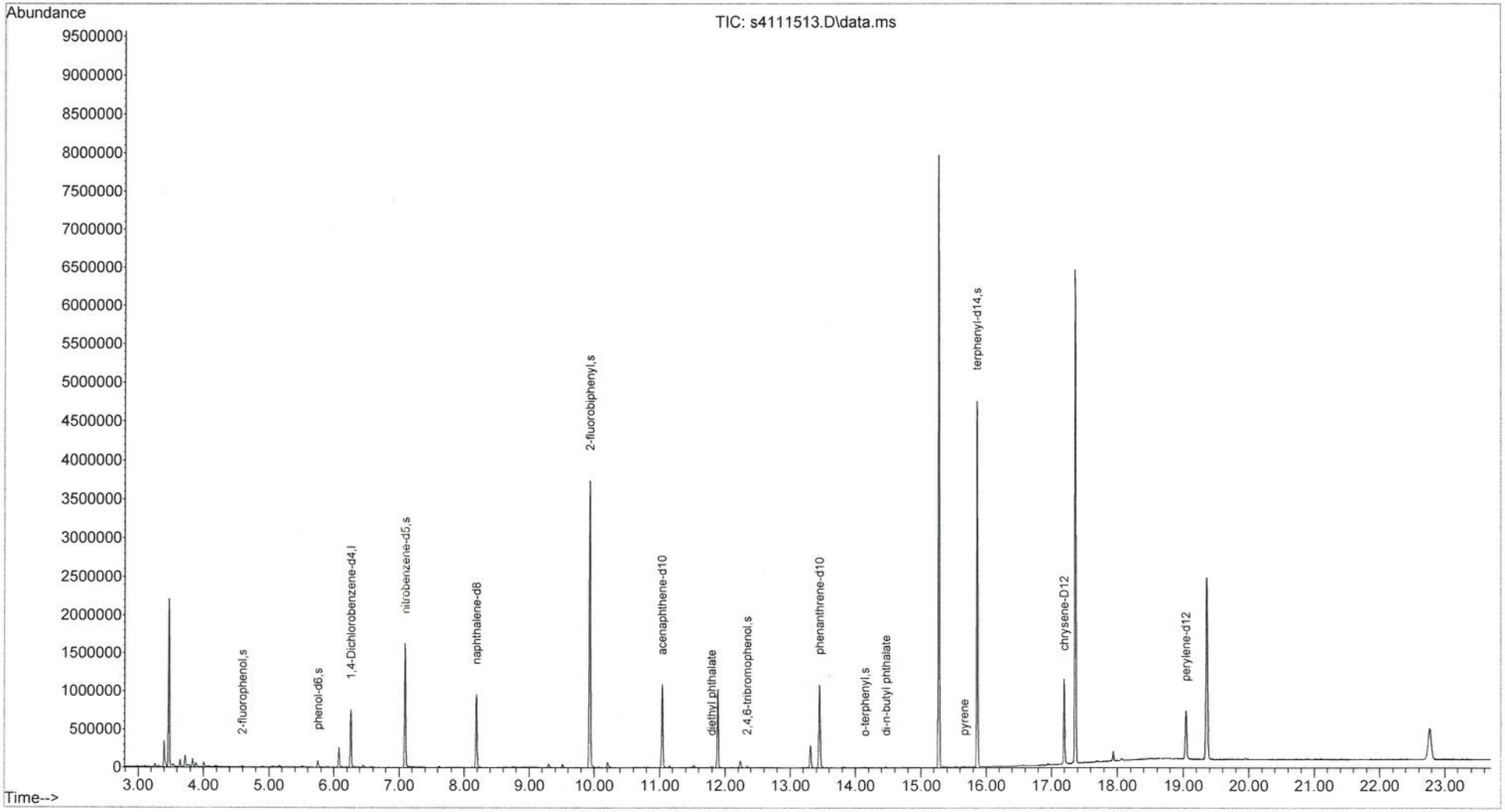
BC

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Nov23\111523\
Data File : s4111513.D
Acq On : 15 Nov 2023 04:16 pm
Operator : cl
Sample : 67798-04 bn x1
Misc :
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Nov 17 16:13:28 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration



This File:	L:\SVOA\Excel Reports\ABN\231122\67798-005		Charles Leahy L:\SVOA\ABN\ABN 8270DoD ImportFileBuilde
Analysis Group:	ABN	Dow Salvage Yard	11/22/23 2:08 PM
Field ID:	SY-OBMW15-110723 CRE		L:\SVOA\ABN\
Sample:	67798-05 acid x1	67798-05 bn x1	L:\SVOA\Excel Reports\ABN\231122\
Misc:			L:\SVOA\PDFReports\
DataFile:	313.D\S4ABN110223A.XLS 4ABN110223A.XLS		
Import File Name	S4 ABN 17096 DoD		
TestGroupID	E8270DoD_A		
Aqueous or Soil? (A or S)	A		
Prep Date	11/9/2023		
Lab#:	67798-005		
QC_Code:			
Prep#	17096		

Reviewer Checks:

Quant Report: Reviewed, Analyst Initials & Date ✓

Chromatogram Checked, Major peaks identified ✓

Results consistent w/ other attached analyses

Reanalysis reason noted

Substitute dilution data checked

Correct dilution and reason clear or noted ✓

Flags checked (Expiration, F+, Over Cal, Surr, Aspen, QC) ✓

Other QC failures or issues noted in Aspen ✓

Correct data file and/or date/time in Aspen ✓

ATD Be discussed in case NCLSD)

Notes:

Reviewer Initials & Date: 11/28/23

#	Surrogate Standards	Conc. (ug/mL)	AnalysisDate	AnalyzedBy	Dil'n	Weight	Volume	Surr	Recovery	Flag	QC Limits
4	2-fluorophenol	38.51	11/13/2023	CL s4111313.D	1	1	1	100	**39%**		21-100
7	phenol-d6	21.31	11/13/2023	CL s4111313.D	1	1	1	100	**21%**		10-102
59	2,4,6-tribromophenol	71.52	11/13/2023	CL s4111313.D	1	1	1	100	**72%**	✓	10-123
22	nitrobenzene-d5	29.06	11/15/2023	CL s4111514.D	1	1	1	50	**58%**		35-114
38	2-fluorobiphenyl	30.25	11/15/2023	CL s4111514.D	1	1	1	50	**61%**		43-116
75	terphenyl-d14	41.54	11/15/2023	CL s4111514.D	1	1	1	50	**83%**		33-141
6	phenol	0.00	11/13/2023	CL s4111313.D	1	1	1				
8	2-chlorophenol	0.00	11/13/2023	CL s4111313.D	1	1	1				
15	2-methylphenol	0.00	11/13/2023	CL s4111313.D	1	1	1				
15	2-methylphenol	0.00	11/13/2023	CL s4111313.D	1	1	1				
20	4-methylphenol	0.00	11/13/2023	CL s4111313.D	1	1	1				
25	2-nitrophenol	0.00	11/13/2023	CL s4111313.D	1	1	1				
26	2,4-dimethylphenol	0.00	11/13/2023	CL s4111313.D	1	1	1				
28	2,4-dichlorophenol	0.00	11/13/2023	CL s4111313.D	1	1	1				
29	2,6-dichlorophenol	0.00	11/13/2023	CL s4111313.D	1	1	1				
32	benzoic acid	0.00	11/13/2023	CL s4111313.D	1	1	1				
35	4-chloro-3-methylphenol	0.00	11/13/2023	CL s4111313.D	1	1	1				
40	2,4,6-trichlorophenol	0.00	11/13/2023	CL s4111313.D	1	1	1				
41	2,4,5-trichlorophenol	0.00	11/13/2023	CL s4111313.D	1	1	1				
51	2,4-dinitrophenol	0.00	11/13/2023	CL s4111313.D	1	1	1				
53	4-nitrophenol	0.00	11/13/2023	CL s4111313.D	1	1	1				
60	4,6-dinitro-2-methylphenol	0.00	11/13/2023	CL s4111313.D	1	1	1				
66	pentachlorophenol	0.00	11/13/2023	CL s4111313.D	1	1	1				
2	N-nitroso-dimethylamine	0.00	11/15/2023	CL s4111514.D	1	1	1				
3	pyridine	0.00	11/15/2023	CL s4111514.D	1	1	1				
5	aniline	0.00	11/15/2023	CL s4111514.D	1	1	1				
9	n-decane	0.00	11/15/2023	CL s4111514.D	1	1	1				
10	bis-(2-choroethyl)ether	0.00	11/15/2023	CL s4111514.D	1	1	1				
11	1,3-dichlorobenzene	0.00	11/15/2023	CL s4111514.D	1	1	1				
12	1,4-diclorobenzene	0.00	11/15/2023	CL s4111514.D	1	1	1				
13	1,2-dichlorobenzene	0.00	11/15/2023	CL s4111514.D	1	1	1				
14	benzyl alcohol	0.00	11/15/2023	CL s4111514.D	1	1	1				
16	2,2'-oxybis(1-chloropropane)	0.00	11/15/2023	CL s4111514.D	1	1	1				
##	acetephenone	#N/A	11/15/2023	CL s4111514.D	1	1	1			#N/A	
18	hexachloroethane	0.00	11/15/2023	CL s4111514.D	1	1	1				
19	N-nitroso-di-n-propylamine	0.00	11/15/2023	CL s4111514.D	1	1	1				
23	nitrobenzene	0.00	11/15/2023	CL s4111514.D	1	1	1				
24	isophorone	0.00	11/15/2023	CL s4111514.D	1	1	1				
27	bis(2-chloroethoxy)methane	0.00	11/15/2023	CL s4111514.D	1	1	1				
30	1,2,4-trichlorobenzene	0.00	11/15/2023	CL s4111514.D	1	1	1				
31	naphthalene	0.00	11/15/2023	CL s4111514.D	1	1	1				
33	4-chloroanaline	0.00	11/15/2023	CL s4111514.D	1	1	1				
34	hexachloro-1,3-butadiene	0.00	11/15/2023	CL s4111514.D	1	1	1				
36	2-methylnaphthalene	0.00	11/15/2023	CL s4111514.D	1	1	1				
39	hexachlorocyclopentadiene	0.00	11/15/2023	CL s4111514.D	1	1	1				
43	2-chloronaphthalene	0.00	11/15/2023	CL s4111514.D	1	1	1				
44	2-nitroanaline	0.00	11/15/2023	CL s4111514.D	1	1	1				
45	acenaphthylene	0.00	11/15/2023	CL s4111514.D	1	1	1				
46	dimethyl phthalate	0.00	11/15/2023	CL s4111514.D	1	1	1				
47	2,6-dinitrotoluene	0.00	11/15/2023	CL s4111514.D	1	1	1				
48	2,4-dinitrotoluene	0.00	11/15/2023	CL s4111514.D	1	1	1				
49	acenaphthene	0.00	11/15/2023	CL s4111514.D	1	1	1				
50	3-nitroanaline	0.00	11/15/2023	CL s4111514.D	1	1	1				
52	dibenzofuran	0.00	11/15/2023	CL s4111514.D	1	1	1				
54	fluorene	0.00	11/15/2023	CL s4111514.D	1	1	1				
55	diethyl phthalate	0.00	11/15/2023	CL s4111514.D	1	1	1				
56	4-chlorophenyl phenyl ether	0.00	11/15/2023	CL s4111514.D	1	1	1				
57	4-nitroanaline	0.00	11/15/2023	CL s4111514.D	1	1	1				
61	azobenzene	0.00	11/15/2023	CL s4111514.D	1	1	1				
62	N-nitrosodiphenylamine	0.00	11/15/2023	CL s4111514.D	1	1	1				
63	4-bromophenyl phenyl ether	0.00	11/15/2023	CL s4111514.D	1	1	1				
64	hexachlorobenzene	0.00	11/15/2023	CL s4111514.D	1	1	1				
65	n-octadecane	0.00	11/15/2023	CL s4111514.D	1	1	1				
67	phenanthrene	0.00	11/15/2023	CL s4111514.D	1	1	1				
68	anthracene	0.00	11/15/2023	CL s4111514.D	1	1	1				
70	carbazole	0.00	11/15/2023	CL s4111514.D	1	1	1				
71	di-n-butyl phthalate	0.00	11/15/2023	CL s4111514.D	1	1	1				
73	fluoranthene	0.00	11/15/2023	CL s4111514.D	1	1	1				
76	benzidine	0.00	11/15/2023	CL s4111514.D	1	1	1				
77	pyrene	0.00	11/15/2023	CL s4111514.D	1	1	1				
78	butyl benzyl phthalate	0.00	11/15/2023	CL s4111514.D	1	1	1				
79	benzo(a)anthracene	0.00	11/15/2023	CL s4111514.D	1	1	1				
80	chrysene	0.00	11/15/2023	CL s4111514.D	1	1	1				
81	3,3'-dichlorobenzidine	0.00	11/15/2023	CL s4111514.D	1	1	1				
82	bis-2-ethylhexyl phthalate	0.00	11/15/2023	CL s4111514.D	1	1	1				
84	di-n-octyl phthalate	0.00	11/15/2023	CL s4111514.D	1	1	1				
85	Benzo(b)fluoranthene	0.00	11/15/2023	CL s4111514.D	1	1	1				
86	benzo(k)fluoranthene	0.00	11/15/2023	CL s4111514.D	1	1	1				
87	benzo(a)pyrene	0.00	11/15/2023	CL s4111514.D	1	1	1				
88	indeno(1,2,3-cd)pyrene	0.00	11/15/2023	CL s4111514.D	1	1	1				
89	dibenzo(a,h)anthracene	0.00	11/15/2023	CL s4111514.D	1	1	1				
90	benzo(g,h,i)perylene	0.00	11/15/2023	CL s4111514.D	1	1	1				

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Nov23\111323\
Data File : s4111313.D
Acq On : 13 Nov 2023 03:58 pm
Operator : cl
Sample : 67798-05 acid x1
Misc :
ALS Vial : 13 Sample Multiplier: 1

CL
11/20/23 @ 10:40
CharlesL

Quant Time: Nov 14 11:18:52 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration

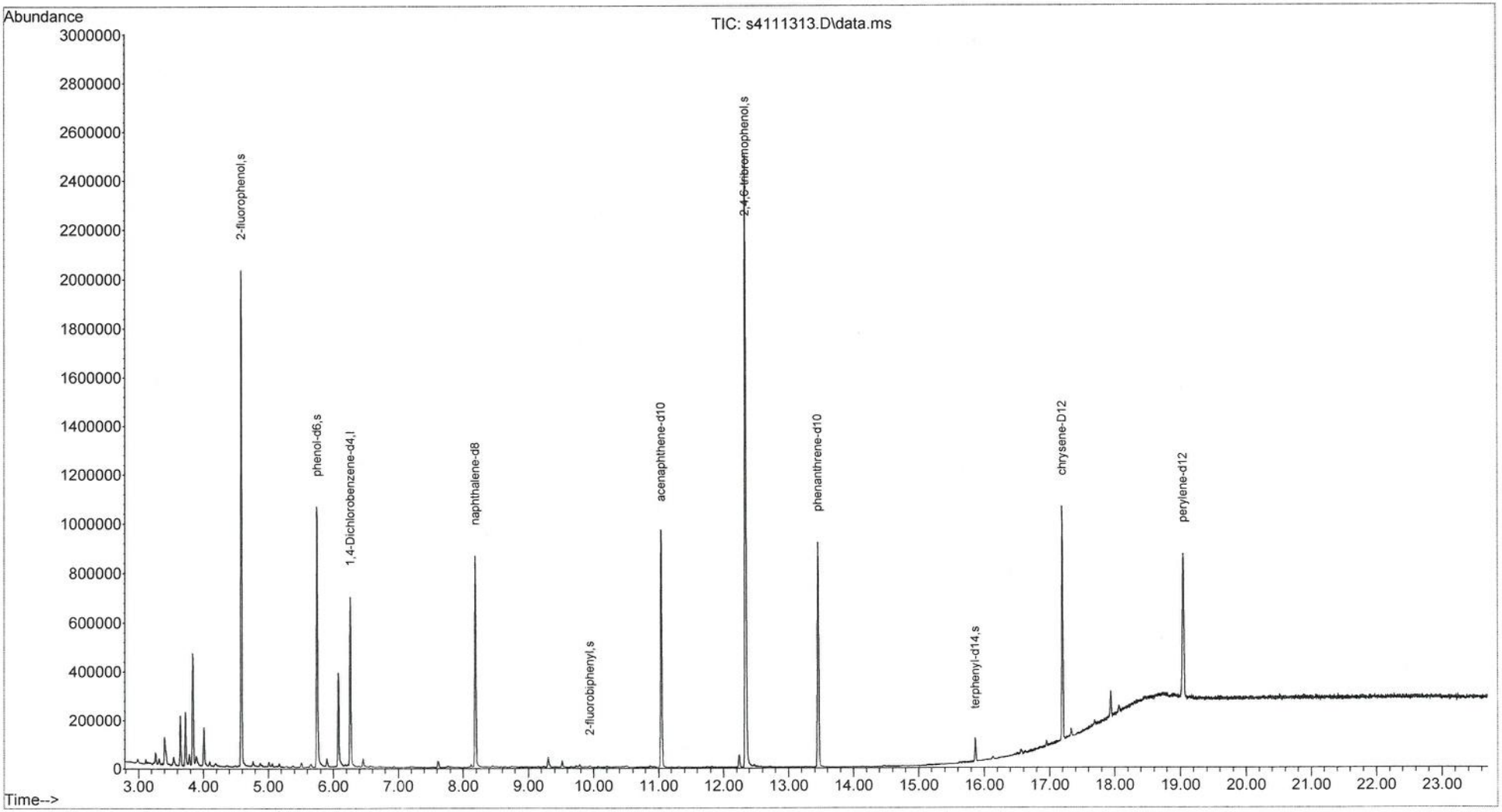
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.260	152	150262	10.00	ug/mL	0.00
21) naphthalene-d8	8.189	136	553426	10.00	ug/mL	0.00
37) acenaphthene-d10	11.046	164	293145	10.00	ug/mL	0.00
58) phenanthrene-d10	13.451	188	522919	10.00	ug/mL	0.00
74) chrysene-D12	17.197	240	392696	10.00	ug/mL	0.00
83) perylene-d12	19.042	264	323717	10.00	ug/mL	0.00
System Monitoring Compounds						
4) 2-fluorophenol	4.584	112	718846	38.51	ug/mL	0.00
Spiked Amount 200.000			Recovery =	19.25%		
7) phenol-d6	5.751	99	483103	21.31	ug/mL	0.00
Spiked Amount 200.000			Recovery =	10.65%		
22) nitrobenzene-d5	0.000	82	0	0.00	ug/mL	
Spiked Amount 100.000			Recovery =	0.00%		
38) 2-fluorobiphenyl	9.937	172	2418	0.01	ug/mL	0.00
Spiked Amount 100.000			Recovery =	0.01%		
59) 2,4,6-tribromophenol	12.343	330	456130	71.52	ug/mL	0.00
Spiked Amount 200.000			Recovery =	35.76%		
69) o-terphenyl	0.000	230	0	0.00	ug/mL	
Spiked Amount 100.000			Recovery =	0.00%		
72) 1-Chloro-octadecane	0.000	57	0	0.00	ug/mL	
Spiked Amount 100.000			Recovery =	0.00%		
75) terphenyl-d14	15.864	244	35341	0.83	ug/mL	0.00
Spiked Amount 100.000			Recovery =	0.83%		
Target Compounds						Qvalue
93) DDT	16.614	TIC	1654	Below Cal	#	22

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Nov23\111323\
Data File : s4111313.D
Acq On : 13 Nov 2023 03:58 pm
Operator : cl
Sample : 67798-05 acid x1
Misc :
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Nov 14 11:18:52 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Nov23\111523\
Data File : s4111514.D
Acq On : 15 Nov 2023 04:46 pm
Operator : cl
Sample : 67798-05 bn x1
Misc :
ALS Vial : 12 Sample Multiplier: 1

CL
11/22/23 @ 11:43
CharlesL

Quant Time: Nov 17 16:13:32 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration

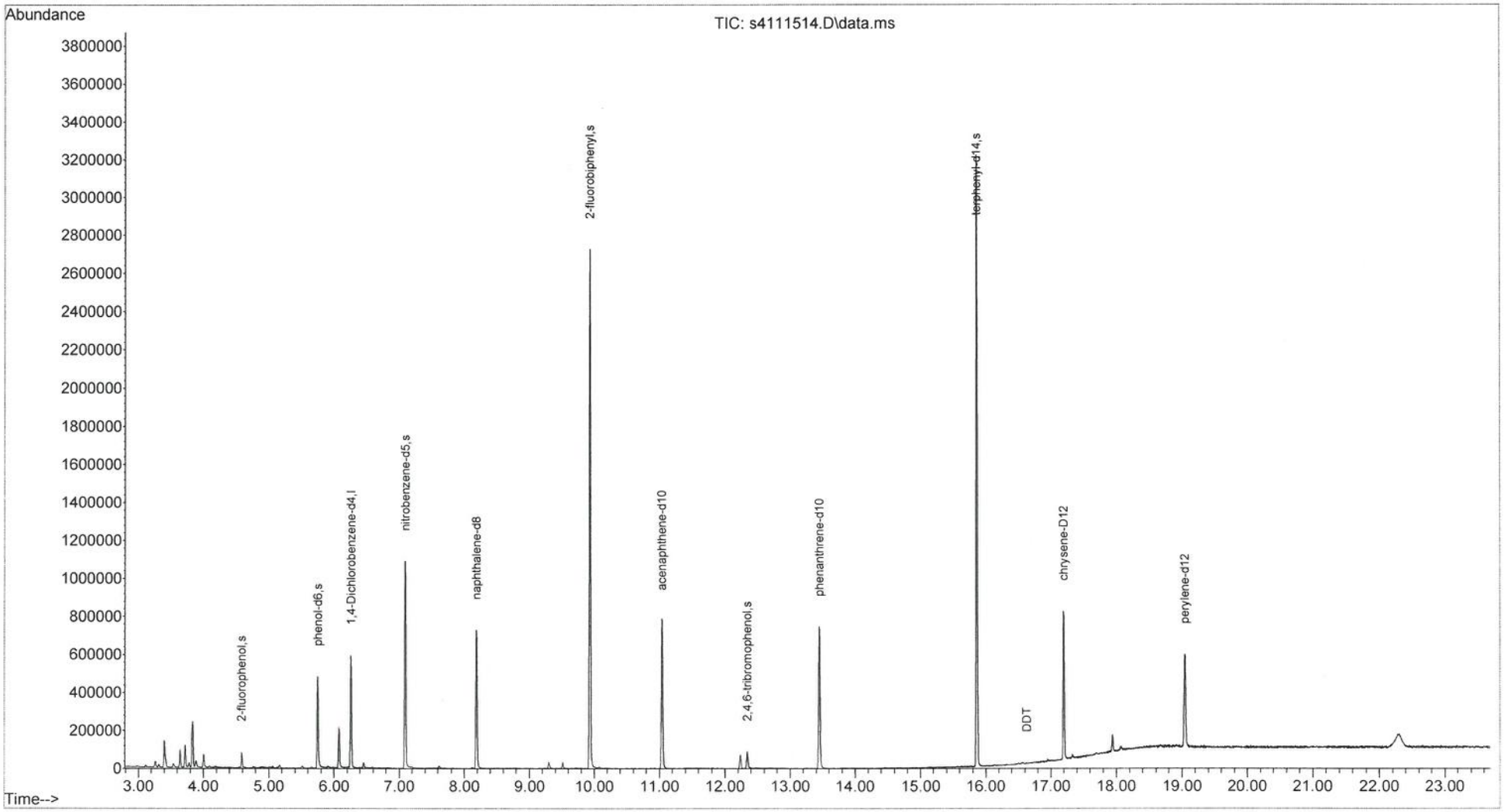
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.258	152	128189	10.00	ug/mL	0.00
21) naphthalene-d8	8.184	136	464823	10.00	ug/mL	0.00
37) acenaphthene-d10	11.038	164	239214	10.00	ug/mL	-0.01
58) phenanthrene-d10	13.449	188	434453	10.00	ug/mL	-0.01
74) chrysene-D12	17.194	240	323107	10.00	ug/mL	0.00
83) perylene-d12	19.042	264	277005	10.00	ug/mL	0.00
System Monitoring Compounds						
4) 2-fluorophenol	4.584	112	30057	1.89	ug/mL	0.00
Spiked Amount 200.000			Recovery =	0.95%		
7) phenol-d6	5.745	99	211286	10.93	ug/mL	-0.01
Spiked Amount 200.000			Recovery =	5.46%		
22) nitrobenzene-d5	7.093	82	474211	29.06	ug/mL	0.00
Spiked Amount 100.000			Recovery =	29.06%		
38) 2-fluorobiphenyl	9.932	172	1138714	30.25	ug/mL	0.00
Spiked Amount 100.000			Recovery =	30.25%		
59) 2,4,6-tribromophenol	12.340	330	14917	2.90	ug/mL	0.00
Spiked Amount 200.000			Recovery =	1.45%		
69) o-terphenyl	0.000	230	0	0.00	ug/mL	
Spiked Amount 100.000			Recovery =	0.00%		
72) 1-Chloro-octadecane	0.000	57	0	0.00	ug/mL	
Spiked Amount 100.000			Recovery =	0.00%		
75) terphenyl-d14	15.862	244	1448881	41.54	ug/mL	0.00
Spiked Amount 100.000			Recovery =	41.54%		
Target Compounds						Qvalue
42) 1,1'-Biphenyl	10.080	154	2850m	Below Cal		
93) DDT	16.629	TIC	829	0.057	ug/mL#	22

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Nov23\111523\
Data File : s4111514.D
Acq On : 15 Nov 2023 04:46 pm
Operator : cl
Sample : 67798-05 bn x1
Misc :
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Nov 17 16:13:32 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration



This File: **L:\SVOA\Excel Reports\ABN\231122\67798-006**
Analysis Group: **ABN** **Dow Salvage Yard**
Field ID: **SY-OBMW5-110723 CRE**
Sample: **67798-06 acid x1** **67798-06 bn x1**
Misc:
DataFile: 314.D\S4ABN110223A.XLS 4ABN110223A.XLS
Import File Name: **S4 ABN 17096 DoD**
TestGroupID: **E8270DoD_A**
Aqueous or Soil? (A or S): **A**
Prep Date: **11/9/2023**
Lab#: **67798-006**
QC_Code:
Prep# **17096**

Charles Leahy L:\SVOA\ABN\ABN 8270DoD ImportFileBuilde
11/22/23 2:14 PM
L:\SVOA\ABN\
L:\SVOA\Excel Reports\ABN\231122\
L:\SVOA\PDFReports\

Reviewer Checks:
Quant Report: Reviewed, Analyst Initials & Date ✓
Chromatogram Checked, Major peaks identified ✓
Results consistent w/ other attached analyses
Reanalysis reason noted
Substitute dilution data checked
Correct dilution and reason clear or noted ✓
Flags checked (Expiration, F+, Over Cal, Surr, Aspen, QC) ✓
Other QC failures or issues noted in Aspen ✓
Correct data file and/or date/time in Aspen ✓

*TO Reduced in case narr (LCSD)

Notes:
Reviewer Initials & Date: 11/28/23

#	Surrogate Standards	Conc. (ug/mL)	AnalysisDate	AnalyzedBy	Dil'n	Weight	Volume	Surr	Recovery	Flag	QC Limits
4	2-fluorophenol	34.79	11/13/2023	CL s4111314.D	1	1	1	100	**35%**		21-100
7	phenol-d6	23.81	11/13/2023	CL s4111314.D	1	1	1	100	**24%**		10-102
59	2,4,6-tribromophenol	68.46	11/13/2023	CL s4111314.D	1	1	1	100	**68%**		10-123
22	nitrobenzene-d5	32.26	11/15/2023	CL s4111515.D	1	1	1	50	**65%**		35-114
38	2-fluorobiphenyl	32.23	11/15/2023	CL s4111515.D	1	1	1	50	**64%**		43-116
75	terphenyl-d14	40.62	11/15/2023	CL s4111515.D	1	1	1	50	**81%**		33-141
6	phenol	0.00	11/13/2023	CL s4111314.D	1	1	1				
8	2-chlorophenol	0.00	11/13/2023	CL s4111314.D	1	1	1				
15	2-methylphenol	0.00	11/13/2023	CL s4111314.D	1	1	1				
15	2-methylphenol	0.00	11/13/2023	CL s4111314.D	1	1	1				
20	4-methylphenol	0.00	11/13/2023	CL s4111314.D	1	1	1				
25	2-nitrophenol	0.00	11/13/2023	CL s4111314.D	1	1	1				
26	2,4-dimethylphenol	0.00	11/13/2023	CL s4111314.D	1	1	1				
28	2,4-dichlorophenol	0.00	11/13/2023	CL s4111314.D	1	1	1				
29	2,6-dichlorophenol	0.00	11/13/2023	CL s4111314.D	1	1	1				
32	benzoic acid	0.00	11/13/2023	CL s4111314.D	1	1	1				
35	4-chloro-3-methylphenol	0.00	11/13/2023	CL s4111314.D	1	1	1				
40	2,4,6-trichlorophenol	0.00	11/13/2023	CL s4111314.D	1	1	1				
41	2,4,5-trichlorophenol	0.00	11/13/2023	CL s4111314.D	1	1	1				
51	2,4-dinitrophenol	0.00	11/13/2023	CL s4111314.D	1	1	1				
53	4-nitrophenol	0.00	11/13/2023	CL s4111314.D	1	1	1				
60	4,6-dinitro-2-methylphenol	0.00	11/13/2023	CL s4111314.D	1	1	1				
66	pentachlorophenol	0.00	11/13/2023	CL s4111314.D	1	1	1				
2	N-nitroso-dimethylamine	0.00	11/15/2023	CL s4111515.D	1	1	1				
3	pyridine	0.00	11/15/2023	CL s4111515.D	1	1	1				
5	aniline	0.00	11/15/2023	CL s4111515.D	1	1	1				
9	n-decane	0.00	11/15/2023	CL s4111515.D	1	1	1				
10	bis-(2-choroethyl)ether	0.00	11/15/2023	CL s4111515.D	1	1	1				
11	1,3-dichlorobenzene	0.00	11/15/2023	CL s4111515.D	1	1	1				
12	1,4-diclorobenzene	0.00	11/15/2023	CL s4111515.D	1	1	1				
13	1,2-dichlorobenzene	0.00	11/15/2023	CL s4111515.D	1	1	1				
14	benzyl alcohol	0.00	11/15/2023	CL s4111515.D	1	1	1				
16	2,2'-oxybis(1-chloropropane)	0.00	11/15/2023	CL s4111515.D	1	1	1				
##	acetephenone	#N/A	11/15/2023	CL s4111515.D	1	1	1			#N/A	
18	hexachloroethane	0.00	11/15/2023	CL s4111515.D	1	1	1				
19	N-nitroso-di-n-propylamine	0.00	11/15/2023	CL s4111515.D	1	1	1				
23	nitrobenzene	0.00	11/15/2023	CL s4111515.D	1	1	1				
24	isophorone	0.00	11/15/2023	CL s4111515.D	1	1	1				
27	bis(2-chloroethoxy)methane	0.00	11/15/2023	CL s4111515.D	1	1	1				
30	1,2,4-trichlorobenzene	0.00	11/15/2023	CL s4111515.D	1	1	1				
31	naphthalene	0.00	11/15/2023	CL s4111515.D	1	1	1				
33	4-chloroanaline	0.00	11/15/2023	CL s4111515.D	1	1	1				
34	hexachloro-1,3-butadiene	0.00	11/15/2023	CL s4111515.D	1	1	1				
36	2-methylnaphthalene	0.00	11/15/2023	CL s4111515.D	1	1	1				
39	hexachlorocyclopentadiene	0.00	11/15/2023	CL s4111515.D	1	1	1				
43	2-chloronaphthalene	0.00	11/15/2023	CL s4111515.D	1	1	1				
44	2-nitroanaline	0.00	11/15/2023	CL s4111515.D	1	1	1				
45	acenaphthylene	0.00	11/15/2023	CL s4111515.D	1	1	1				
46	dimethyl phthalate	0.00	11/15/2023	CL s4111515.D	1	1	1				
47	2,6-dinitrotoluene	0.00	11/15/2023	CL s4111515.D	1	1	1				
48	2,4-dinitrotoluene	0.00	11/15/2023	CL s4111515.D	1	1	1				
49	acenaphthene	0.00	11/15/2023	CL s4111515.D	1	1	1				
50	3-nitroanaline	0.00	11/15/2023	CL s4111515.D	1	1	1				
52	dibenzofuran	0.00	11/15/2023	CL s4111515.D	1	1	1				
54	fluorene	0.00	11/15/2023	CL s4111515.D	1	1	1				
55	diethyl phthalate	0.00	11/15/2023	CL s4111515.D	1	1	1				
56	4-chlorophenyl phenyl ether	0.00	11/15/2023	CL s4111515.D	1	1	1				
57	4-nitroanaline	0.00	11/15/2023	CL s4111515.D	1	1	1				
61	azobenzene	0.00	11/15/2023	CL s4111515.D	1	1	1				
62	N-nitrosodiphenylamine	0.00	11/15/2023	CL s4111515.D	1	1	1				
63	4-bromophenyl phenyl ether	0.00	11/15/2023	CL s4111515.D	1	1	1				
64	hexachlorobenzene	0.00	11/15/2023	CL s4111515.D	1	1	1				
65	n-octadecane	0.00	11/15/2023	CL s4111515.D	1	1	1				
67	phenanthrene	0.00	11/15/2023	CL s4111515.D	1	1	1				
68	anthracene	0.00	11/15/2023	CL s4111515.D	1	1	1				
70	carbazole	0.00	11/15/2023	CL s4111515.D	1	1	1				
71	di-n-butyl phthalate	0.00	11/15/2023	CL s4111515.D	1	1	1				
73	fluoranthene	0.00	11/15/2023	CL s4111515.D	1	1	1				
76	benzidine	0.00	11/15/2023	CL s4111515.D	1	1	1				
77	pyrene	0.00	11/15/2023	CL s4111515.D	1	1	1				
78	butyl benzyl phthalate	0.00	11/15/2023	CL s4111515.D	1	1	1				
79	benzo(a)anthracene	0.00	11/15/2023	CL s4111515.D	1	1	1				
80	chrysene	0.00	11/15/2023	CL s4111515.D	1	1	1				
81	3,3'-dichlorobenzidine	0.00	11/15/2023	CL s4111515.D	1	1	1				
82	bis-2-ethylhexyl phthalate	0.00	11/15/2023	CL s4111515.D	1	1	1				
84	di-n-octyl phthalate	0.00	11/15/2023	CL s4111515.D	1	1	1				
85	Benzo(b)fluoranthene	0.00	11/15/2023	CL s4111515.D	1	1	1				
86	benzo(k)fluoranthene	0.00	11/15/2023	CL s4111515.D	1	1	1				
87	benzo(a)pyrene	0.00	11/15/2023	CL s4111515.D	1	1	1				
88	indeno(1,2,3-cd)pyrene	0.00	11/15/2023	CL s4111515.D	1	1	1				
89	dibenzo(a,h)anthracene	0.00	11/15/2023	CL s4111515.D	1	1	1				
90	benzo(g,h,i)perylene	0.00	11/15/2023	CL s4111515.D	1	1	1				

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Nov23\111323\
Data File : s4111314.D
Acq On : 13 Nov 2023 04:28 pm
Operator : cl
Sample : 67798-06 acid x1
Misc :
ALS Vial : 14 Sample Multiplier: 1

CL
11/20/23 @ 10:40
CharlesL

Quant Time: Nov 14 11:18:56 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration

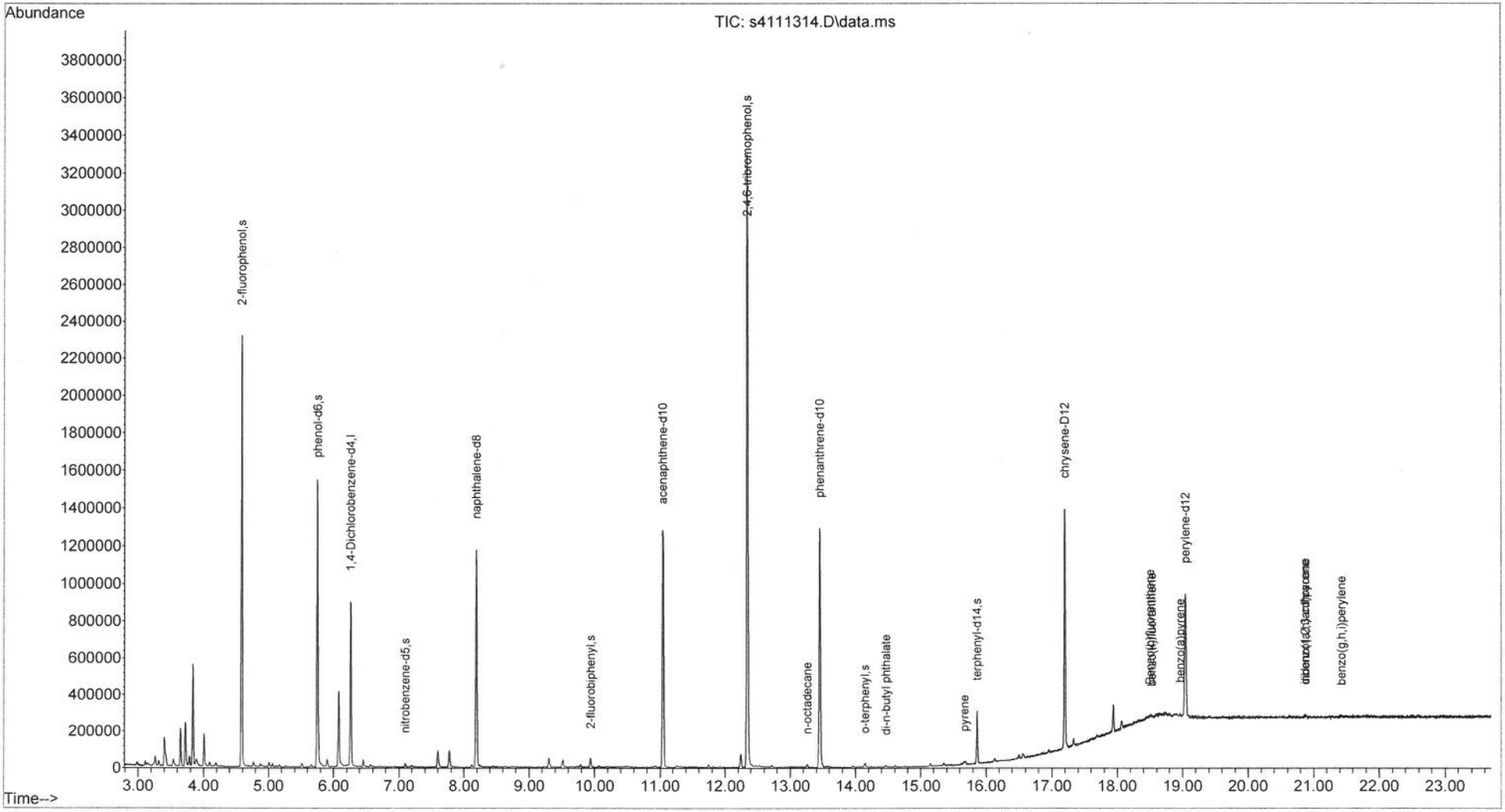
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.258	152	191531	10.00	ug/mL	0.00
21) naphthalene-d8	8.189	136	725818	10.00	ug/mL	0.00
37) acenaphthene-d10	11.041	164	397250	10.00	ug/mL	0.00
58) phenanthrene-d10	13.451	188	717882	10.00	ug/mL	0.00
74) chrysene-D12	17.197	240	509454	10.00	ug/mL	0.00
83) perylene-d12	19.042	264	386966	10.00	ug/mL	0.00
System Monitoring Compounds						
4) 2-fluorophenol	4.584	112	827615	34.79	ug/mL	0.00
Spiked Amount 200.000			Recovery = 17.40%			
7) phenol-d6	5.751	99	688070	23.81	ug/mL	0.00
Spiked Amount 200.000			Recovery = 11.90%			
22) nitrobenzene-d5	7.096	82	8365	0.31	ug/mL	0.00
Spiked Amount 100.000			Recovery = 0.31%			
38) 2-fluorobiphenyl	9.940	172	21694m	0.31	ug/mL	0.00
Spiked Amount 100.000			Recovery = 0.31%			
59) 2,4,6-tribromophenol	12.343	330	599369	68.46	ug/mL	0.00
Spiked Amount 200.000			Recovery = 34.23%			
69) o-terphenyl	14.144	230	4894m	0.09	ug/mL	0.00
Spiked Amount 100.000			Recovery = 0.09%			
72) 1-Chloro-octadecane	0.000	57	0d	0.00	ug/mL	
Spiked Amount 100.000			Recovery = 0.00%			
75) terphenyl-d14	15.864	244	114241	2.07	ug/mL	0.00
Spiked Amount 100.000			Recovery = 2.07%			
Target Compounds						Qvalue
65) n-octadecane	13.260	57	4087m BC	0.096	ug/mL	
67) phenanthrene	13.484	178	6061m BC	Below Cal		
68) anthracene	13.568	178	4521m BC	Below Cal		
71) di-n-butyl phthalate	14.468	149	6107m BC	0.049	ug/mL	
73) fluoranthene	15.352	202	6487	Below Cal	#	64
77) pyrene	15.665	202	6985m BC	0.056	ug/mL	
80) chrysene	17.222	228	6104	Below Cal	#	71
85) Benzo(b)fluoranthene	18.502	252	6375	0.052	ug/mL#	59
86) benzo(k)fluoranthene	18.527	252	4992m BC	0.033	ug/mL	
87) benzo(a)pyrene	18.963	252	5105m BC	0.044	ug/mL	
88) indeno(1,2,3-cd)pyrene	20.874	276	5102m BC	0.038	ug/mL	
89) dibenzo(a,h)anthracene	20.871	278	4440m BC	0.046	ug/mL	
90) benzo(g,h,i)perylene	21.424	276	4581m BC	0.037	ug/mL	
93) DDT	16.641	TIC	1353	Below Cal	#	22

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Nov23\111323\
Data File : s4111314.D
Acq On : 13 Nov 2023 04:28 pm
Operator : cl
Sample : 67798-06 acid x1
Misc :
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Nov 14 11:18:56 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Nov23\111523\
Data File : s4111515.D
Acq On : 15 Nov 2023 05:16 pm
Operator : cl
Sample : 67798-06 bn x1
Misc :
ALS Vial : 13 Sample Multiplier: 1

CL
11/22/23 @ 11:43
CharlesL

Quant Time: Nov 17 16:13:37 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration

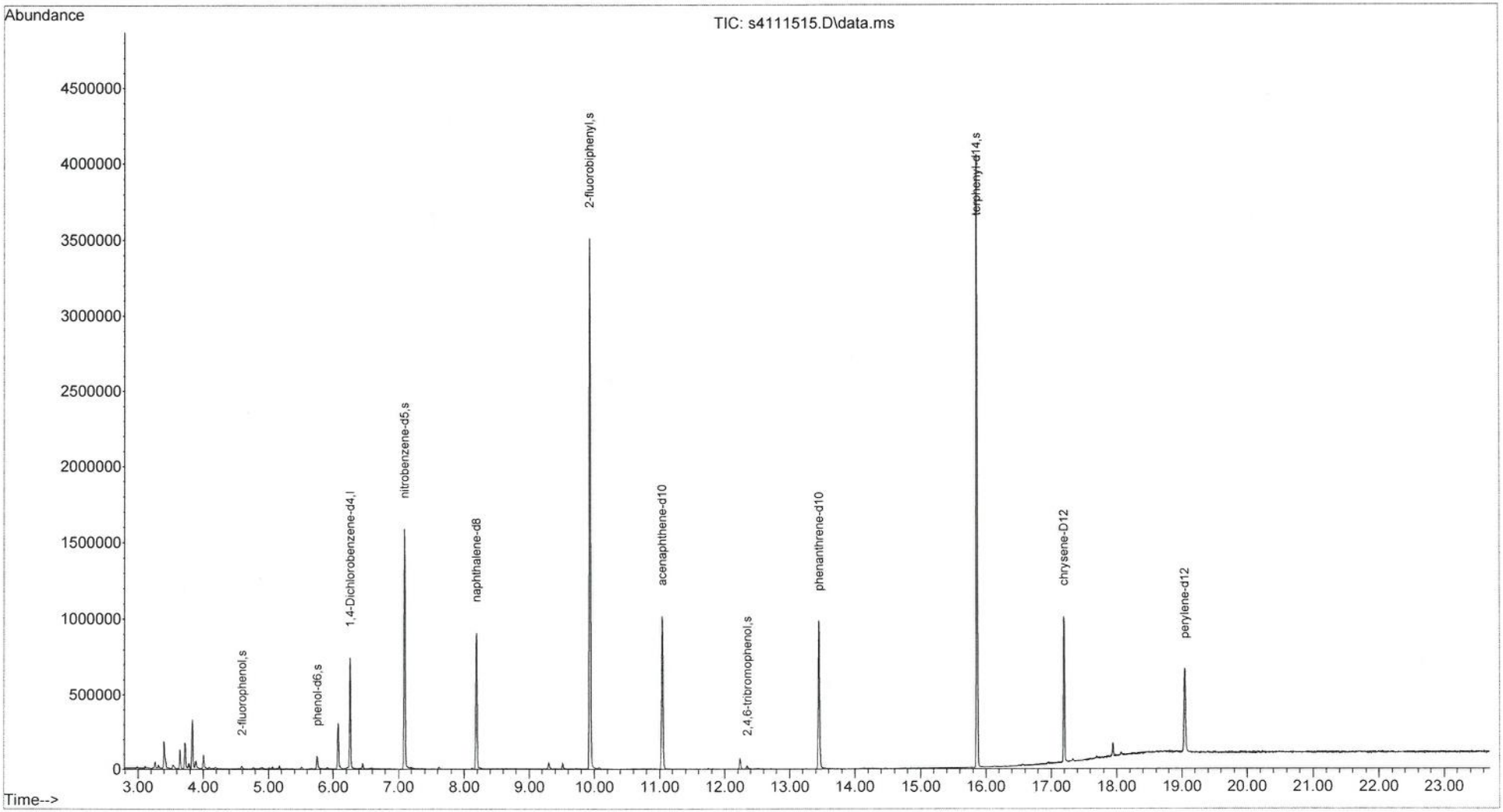
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.258	152	158350	10.00	ug/mL	0.00
21) naphthalene-d8	8.187	136	578862	10.00	ug/mL	0.00
37) acenaphthene-d10	11.041	164	304513	10.00	ug/mL	0.00
58) phenanthrene-d10	13.451	188	555292	10.00	ug/mL	0.00
74) chrysene-D12	17.197	240	401091	10.00	ug/mL	0.00
83) perylene-d12	19.042	264	330839	10.00	ug/mL	0.00
System Monitoring Compounds						
4) 2-fluorophenol	4.591	112	6271	0.32	ug/mL	0.00
Spiked Amount 200.000			Recovery =	0.16%		
7) phenol-d6	5.751	99	38601	1.62	ug/mL	0.00
Spiked Amount 200.000			Recovery =	0.81%		
22) nitrobenzene-d5	7.091	82	655556	32.26	ug/mL	-0.01
Spiked Amount 100.000			Recovery =	32.26%		
38) 2-fluorobiphenyl	9.932	172	1544265	32.23	ug/mL	0.00
Spiked Amount 100.000			Recovery =	32.23%		
59) 2,4,6-tribromophenol	12.348	330	4184m	0.71	ug/mL	0.00
Spiked Amount 200.000			Recovery =	0.35%		
69) o-terphenyl	0.000	230	0	0.00	ug/mL	
Spiked Amount 100.000			Recovery =	0.00%		
72) 1-Chloro-octadecane	0.000	57	0	0.00	ug/mL	
Spiked Amount 100.000			Recovery =	0.00%		
75) terphenyl-d14	15.864	244	1758899	40.62	ug/mL	0.00
Spiked Amount 100.000			Recovery =	40.62%		
Target Compounds						Qvalue
42) 1,1'-Biphenyl	10.077	154	3372	Below Cal	#	40
93) DDT	16.652	TIC	1674	Below Cal	#	22

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Nov23\111523\
Data File : s4111515.D
Acq On : 15 Nov 2023 05:16 pm
Operator : cl
Sample : 67798-06 bn x1
Misc :
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Nov 17 16:13:37 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration



This File: L:\SVOA\Excel Reports\ABN\231122\67798-007 Charles Leahy L:\SVOA\ABN\ABN 8270DoD ImportFileBuilde
Analysis Group: ABN Dow Salvage Yard 11/22/23 2:15 PM
Field ID: MW2-80.5-95.5-110723 CRE L:\SVOA\ABN\
Sample: 67798-07 acid x1 67798-07 bn x1 L:\SVOA\Excel Reports\ABN\231122\
Misc: L:\SVOA\PDFReports\
DataFile: 315.D\S4ABN110223A.XLS 4ABN110223A.XLS
Import File Name: S4 ABN 17096 DoD
TestGroupID: E8270DoD_A
Aqueous or Soil? (A or S): A
Prep Date: 11/9/2023
Lab#: 67798-007
QC_Code:
Prep#: 17096

Reviewer Checks:

Quant Report: Reviewed, Analyst Initials & Date ✓
Chromatogram Checked, Major peaks identified ✓
Results consistent w/ other attached analyses ✓
Reanalysis reason noted
Substitute dilution data checked
Correct dilution and reason clear or noted.
Flags checked (Expiration, F+, Over Cal, Surr, Aspen, QC)
Other QC failures or issues noted in Aspen #
Correct data file and/or date/time in Aspen ✓

TOIz discussed in case narrative (LCSD)

Notes:
Reviewer Initials & Date: 11/28/23

#	Surrogate Standards	Conc. (ug/mL)	AnalysisDate	AnalyzedBy	Dil'n	Weight	Volume	Surr	Recovery	Flag	QC Limits
4	2-fluorophenol	32.63	11/13/2023	CL s4111315.D	1 ✓	1	1	100	**33%**		21-100
7	phenol-d6	22.72	11/13/2023	CL s4111315.D	1	1	1	100	**23%**		10-102
59	2,4,6-tribromophenol	71.02	11/13/2023	CL s4111315.D	1	1	1	100	**71%**	✓	10-123
22	nitrobenzene-d5	34.76	11/13/2023	CL s4111316.D	1	1	1	50	**70%**		35-114
38	2-fluorobiphenyl	33.30	11/13/2023	CL s4111316.D ✓	1	1	1	50	**67%**		43-116
75	terphenyl-d14	41.98	11/13/2023	CL s4111316.D	1	1	1	50	**84%**		33-141
6	phenol	0.00	11/13/2023	CL s4111315.D	1	1	1				
8	2-chlorophenol	0.00	11/13/2023	CL s4111315.D	1	1	1				
15	2-methylphenol	0.00	11/13/2023	CL s4111315.D ✓	1	1	1				
15	2-methylphenol	0.00	11/13/2023	CL s4111315.D	1	1	1				
20	4-methylphenol	0.00	11/13/2023	CL s4111315.D	1	1	1				
25	2-nitrophenol	0.00	11/13/2023	CL s4111315.D	1	1	1				
26	2,4-dimethylphenol	0.00	11/13/2023	CL s4111315.D	1	1	1				
28	2,4-dichlorophenol	0.00	11/13/2023	CL s4111315.D	1	1	1				
29	2,6-dichlorophenol	0.00	11/13/2023	CL s4111315.D	1	1	1				
32	benzoic acid	0.00	11/13/2023	CL s4111315.D	1	1	1				
35	4-chloro-3-methylphenol	0.00	11/13/2023	CL s4111315.D	1	1	1				
40	2,4,6-trichlorophenol	0.00	11/13/2023	CL s4111315.D	1	1	1				
41	2,4,5-trichlorophenol	0.00	11/13/2023	CL s4111315.D	1	1	1				
51	2,4-dinitrophenol	0.00	11/13/2023	CL s4111315.D	1	1	1				
53	4-nitrophenol	0.00	11/13/2023	CL s4111315.D	1	1	1				
60	4,6-dinitro-2-methylphenol	0.00	11/13/2023	CL s4111315.D	1	1	1				
66	pentachlorophenol	0.00	11/13/2023	CL s4111315.D	1	1	1				
2	N-nitroso-dimethylamine	0.00	11/13/2023	CL s4111316.D	1	1	1				
3	pyridine	0.00	11/13/2023	CL s4111316.D	1	1	1				
5	aniline	0.00	11/13/2023	CL s4111316.D	1	1	1				
9	n-decane	0.00	11/13/2023	CL s4111316.D	1	1	1				
10	bis-(2-choroethyl)ether	0.00	11/13/2023	CL s4111316.D	1	1	1				
11	1,3-dichlorobenzene	0.00	11/13/2023	CL s4111316.D	1	1	1				
12	1,4-diclorobenzene	0.00	11/13/2023	CL s4111316.D	1	1	1				
13	1,2-dichlorobenzene	0.00	11/13/2023	CL s4111316.D	1	1	1				
14	benzyl alcohol	0.00	11/13/2023	CL s4111316.D	1	1	1				
16	2,2'-oxybis(1-chloropropane)	0.00	11/13/2023	CL s4111316.D	1	1	1				
##	acetephenone	#N/A	11/13/2023	CL s4111316.D	1	1	1			#N/A	
18	hexachloroethane	0.00	11/13/2023	CL s4111316.D	1	1	1				
19	N-nitroso-di-n-propylamine	0.00	11/13/2023	CL s4111316.D	1	1	1				
23	nitrobenzene	0.00	11/13/2023	CL s4111316.D	1	1	1				
24	isophorone	0.00	11/13/2023	CL s4111316.D	1	1	1				
27	bis(2-chloroethoxy)methane	0.00	11/13/2023	CL s4111316.D	1	1	1				
30	1,2,4-trichlorobenzene	0.00	11/13/2023	CL s4111316.D	1	1	1				
31	naphthalene	0.00	11/13/2023	CL s4111316.D	1	1	1				
33	4-chloroanaline	0.00	11/13/2023	CL s4111316.D	1	1	1				
34	hexachloro-1,3-butadiene	0.00	11/13/2023	CL s4111316.D	1	1	1				
36	2-methylnaphthalene	0.00	11/13/2023	CL s4111316.D	1	1	1				
39	hexachlorocyclopentadiene	0.00	11/13/2023	CL s4111316.D	1	1	1				
43	2-chloronaphthalene	0.00	11/13/2023	CL s4111316.D	1	1	1				
44	2-nitroanaline	0.00	11/13/2023	CL s4111316.D	1	1	1				
45	acenaphthylene	0.00	11/13/2023	CL s4111316.D	1	1	1				
46	dimethyl phthalate	0.00	11/13/2023	CL s4111316.D	1	1	1				
47	2,6-dinitrotoluene	0.00	11/13/2023	CL s4111316.D	1	1	1				
48	2,4-dinitrotoluene	0.00	11/13/2023	CL s4111316.D	1	1	1				
49	acenaphthene	0.00	11/13/2023	CL s4111316.D	1	1	1				
50	3-nitroanaline	0.00	11/13/2023	CL s4111316.D	1	1	1				
52	dibenzofuran	0.00	11/13/2023	CL s4111316.D	1	1	1				
54	fluorene	0.00	11/13/2023	CL s4111316.D	1	1	1				
55	diethyl phthalate	0.00	11/13/2023	CL s4111316.D	1	1	1				
56	4-chlorophenyl phenyl ether	0.00	11/13/2023	CL s4111316.D	1	1	1				
57	4-nitroanaline	0.00	11/13/2023	CL s4111316.D	1	1	1				
61	azobenzene	0.00	11/13/2023	CL s4111316.D	1	1	1				
62	N-nitrosodiphenylamine	0.00	11/13/2023	CL s4111316.D	1	1	1				
63	4-bromophenyl phenyl ether	0.00	11/13/2023	CL s4111316.D	1	1	1				
64	hexachlorobenzene	0.00	11/13/2023	CL s4111316.D	1	1	1				
65	n-octadecane	0.00	11/13/2023	CL s4111316.D	1	1	1				
67	phenanthrene	0.00	11/13/2023	CL s4111316.D	1	1	1				
68	anthracene	0.00	11/13/2023	CL s4111316.D	1	1	1				
70	carbazole	0.00	11/13/2023	CL s4111316.D	1	1	1				
71	di-n-butyl phthalate	0.00	11/13/2023	CL s4111316.D	1	1	1				
73	fluoranthene	0.00	11/13/2023	CL s4111316.D	1	1	1				
76	benzidine	0.00	11/13/2023	CL s4111316.D	1	1	1				
77	pyrene	0.00	11/13/2023	CL s4111316.D	1	1	1				
78	butyl benzyl phthalate	0.00	11/13/2023	CL s4111316.D	1	1	1				
79	benzo(a)anthracene	0.00	11/13/2023	CL s4111316.D	1	1	1				
80	chrysene	0.00	11/13/2023	CL s4111316.D	1	1	1				
81	3,3'-dichlorobenzidine	0.00	11/13/2023	CL s4111316.D	1	1	1				
82	bis-2-ethylhexyl phthalate	0.00	11/13/2023	CL s4111316.D	1	1	1				
84	di-n-octyl phthalate	0.00	11/13/2023	CL s4111316.D	1	1	1				
85	Benzo(b)fluoranthene	0.00	11/13/2023	CL s4111316.D	1	1	1				
86	benzo(k)fluoranthene	0.00	11/13/2023	CL s4111316.D	1	1	1				
87	benzo(a)pyrene	0.00	11/13/2023	CL s4111316.D	1	1	1				
88	indeno(1,2,3-cd)pyrene	0.00	11/13/2023	CL s4111316.D	1	1	1				
89	dibenzo(a,h)anthracene	0.00	11/13/2023	CL s4111316.D	1	1	1				
90	benzo(g,h,i)perylene	0.00	11/13/2023	CL s4111316.D	1	1	1				

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Nov23\111323\
Data File : s4111315.D
Acq On : 13 Nov 2023 04:58 pm
Operator : cl
Sample : 67798-07 acid x1
Misc :
ALS Vial : 15 Sample Multiplier: 1

CL
11/20/23 @ 10:41
CharlesL

Quant Time: Nov 14 11:19:00 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration

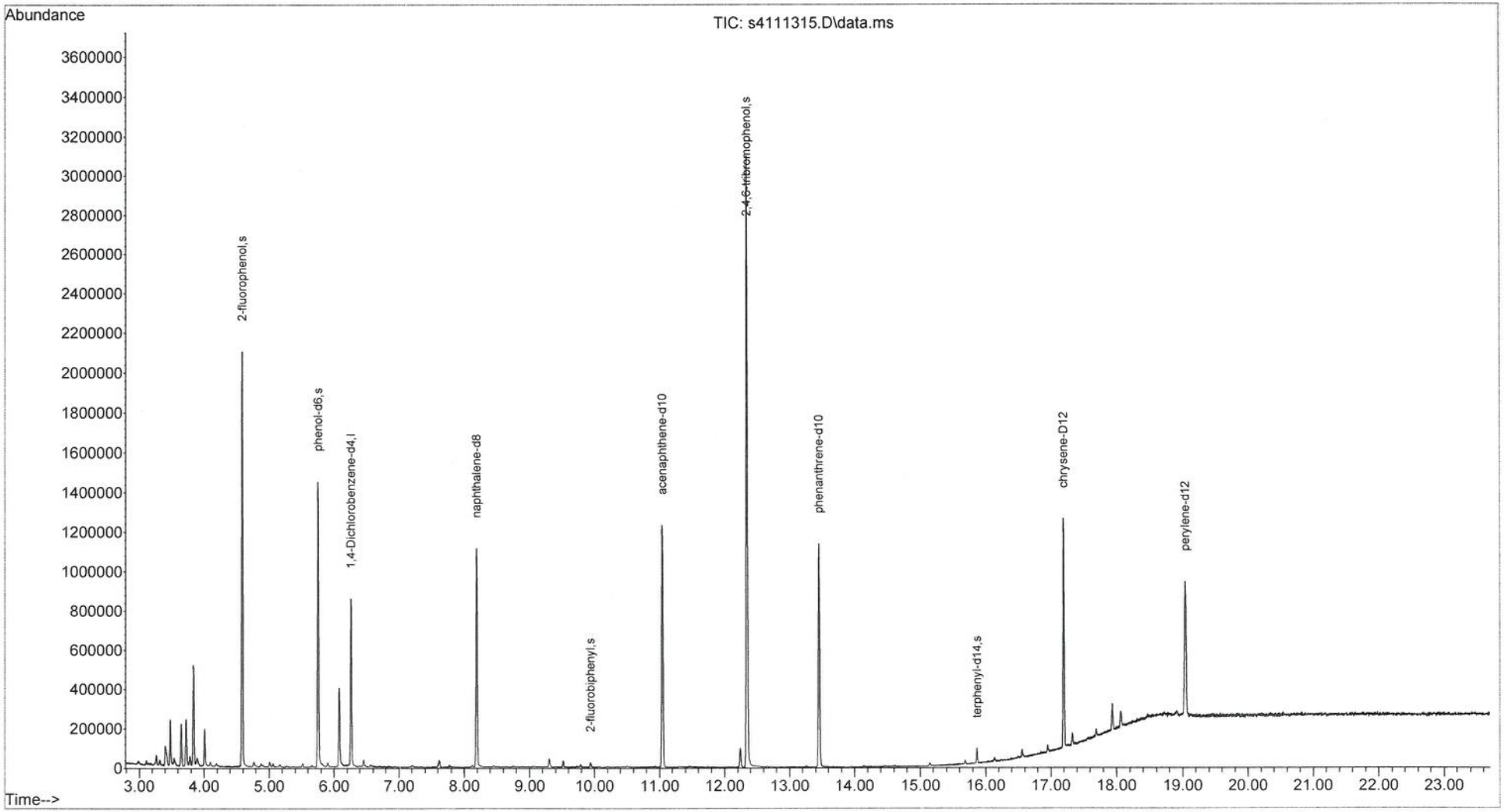
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.258	152	187129	10.00	ug/mL	0.00
21) naphthalene-d8	8.189	136	688826	10.00	ug/mL	0.00
37) acenaphthene-d10	11.043	164	360524	10.00	ug/mL	0.00
58) phenanthrene-d10	13.454	188	644221	10.00	ug/mL	0.00
74) chrysene-D12	17.197	240	465143	10.00	ug/mL	0.00
83) perylene-d12	19.039	264	391943	10.00	ug/mL	0.00
System Monitoring Compounds						
4) 2-fluorophenol	4.586	112	758388	32.63	ug/mL	0.00
Spiked Amount 200.000			Recovery =	16.32%		
7) phenol-d6	5.751	99	641541	22.72	ug/mL	0.00
Spiked Amount 200.000			Recovery =	11.36%		
22) nitrobenzene-d5	0.000	82	0	0.00	ug/mL	
Spiked Amount 100.000			Recovery =	0.00%		
38) 2-fluorobiphenyl	9.937	172	9072	0.12	ug/mL	0.00
Spiked Amount 100.000			Recovery =	0.12%		
59) 2,4,6-tribromophenol	12.343	330	558058	71.02	ug/mL	0.00
Spiked Amount 200.000			Recovery =	35.51%		
69) o-terphenyl	14.149	230	1268	0.01	ug/mL	0.00
Spiked Amount 100.000			Recovery =	0.01%		
72) 1-Chloro-octadecane	15.686	57	2611	0.00	ug/mL	-0.15
Spiked Amount 100.000			Recovery =	0.00%		
75) terphenyl-d14	15.867	244	29948	0.59	ug/mL	0.00
Spiked Amount 100.000			Recovery =	0.59%		
Target Compounds						Qvalue
93) DDT	16.621	TIC	2126	Below Cal	#	22

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Nov23\111323\
Data File : s4111315.D
Acq On : 13 Nov 2023 04:58 pm
Operator : cl
Sample : 67798-07 acid x1
Misc :
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Nov 14 11:19:00 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Nov23\111323\
Data File : s4111316.D
Acq On : 13 Nov 2023 05:28 pm
Operator : cl
Sample : 67798-07 bn x1
Misc :
ALS Vial : 16 Sample Multiplier: 1

CL
11/20/23 @ 10:41
CharlesL

Quant Time: Nov 14 11:19:04 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration

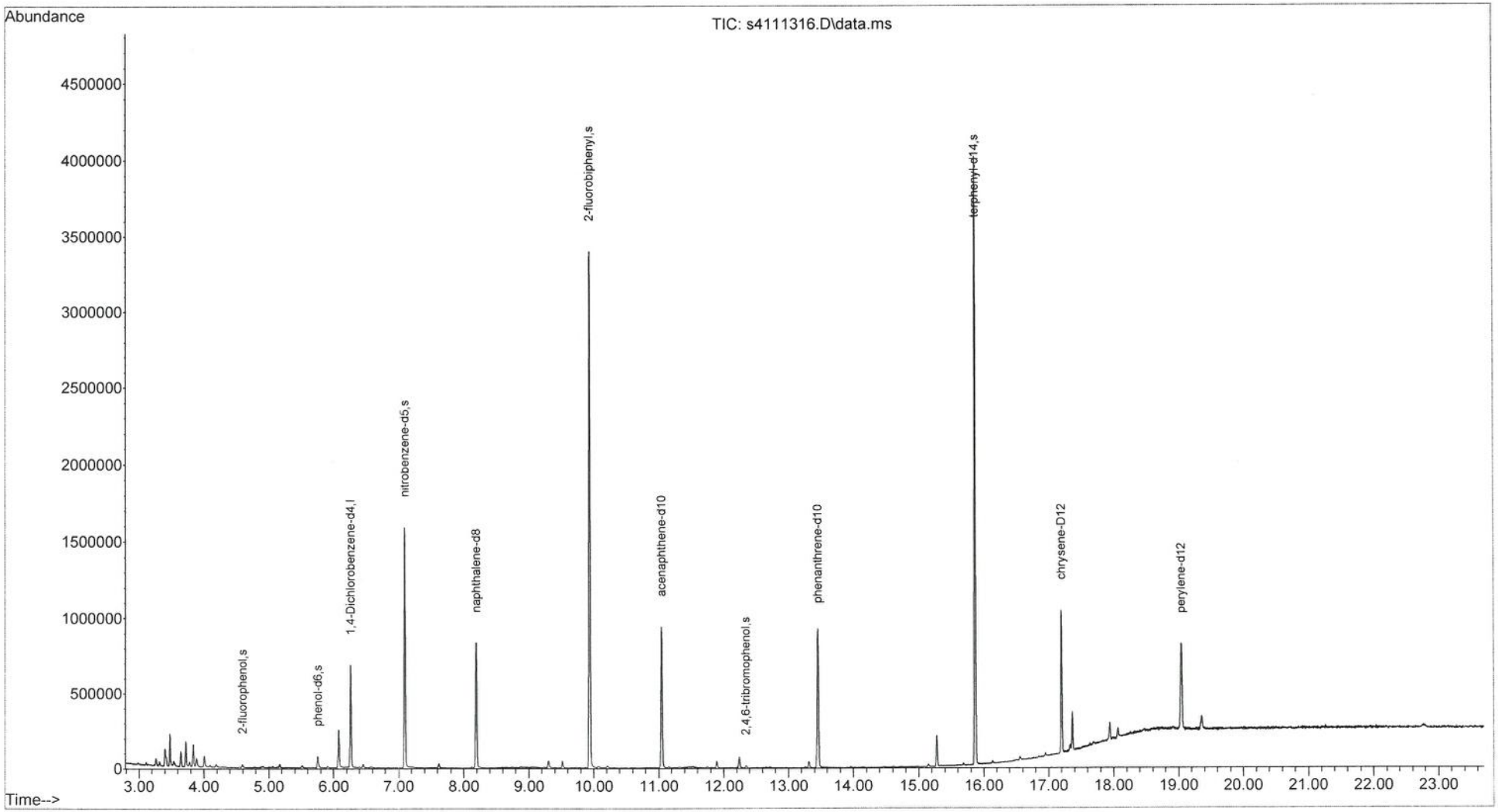
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.258	152	145366	10.00	ug/mL	0.00
21) naphthalene-d8	8.189	136	537147	10.00	ug/mL	0.00
37) acenaphthene-d10	11.043	164	280856	10.00	ug/mL	0.00
58) phenanthrene-d10	13.451	188	519575	10.00	ug/mL	0.00
74) chrysene-D12	17.194	240	381236	10.00	ug/mL	0.00
83) perylene-d12	19.039	264	330776	10.00	ug/mL	0.00
System Monitoring Compounds						
4) 2-fluorophenol	4.594	112	5385	0.30	ug/mL	0.00
Spiked Amount 200.000			Recovery =	0.15%		
7) phenol-d6	5.753	99	37859	1.73	ug/mL	0.00
Spiked Amount 200.000			Recovery =	0.86%		
22) nitrobenzene-d5	7.094	82	655350	34.76	ug/mL	0.00
Spiked Amount 100.000			Recovery =	34.76%		
38) 2-fluorobiphenyl	9.937	172	1471208	33.30	ug/mL	0.00
Spiked Amount 100.000			Recovery =	33.30%		
59) 2,4,6-tribromophenol	12.340	330	3283	0.61	ug/mL	0.00
Spiked Amount 200.000			Recovery =	0.30%		
69) o-terphenyl	0.000	230	0	0.00	ug/mL	
Spiked Amount 100.000			Recovery =	0.00%		
72) 1-Chloro-octadecane	15.686	57	2201	0.00	ug/mL	-0.15
Spiked Amount 100.000			Recovery =	0.00%		
75) terphenyl-d14	15.864	244	1727773	41.98	ug/mL	0.00
Spiked Amount 100.000			Recovery =	41.98%		
Target Compounds						Qvalue
93) DDT	16.621	TIC	1521	Below Cal	#	22

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Nov23\111323\
Data File : s4111316.D
Acq On : 13 Nov 2023 05:28 pm
Operator : cl
Sample : 67798-07 bn x1
Misc :
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Nov 14 11:19:04 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Nov23\111323\
Data File : s4111326.D
Acq On : 13 Nov 2023 10:26 pm
Operator : cl
Sample : 67798-07ms acid x1
Misc :
ALS Vial : 26 Sample Multiplier: 1

CL
11/20/23 @ 10:51
CharlesL

Quant Time: Nov 14 11:19:44 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.260	152	152682	10.00	ug/mL	0.00
21) naphthalene-d8	8.189	136	572900	10.00	ug/mL	0.00
37) acenaphthene-d10	11.043	164	306257	10.00	ug/mL	0.00
58) phenanthrene-d10	13.451	188	565637	10.00	ug/mL	0.00
74) chrysene-D12	17.194	240	413193	10.00	ug/mL	0.00
83) perylene-d12	19.039	264	328563	10.00	ug/mL	0.00
System Monitoring Compounds						
4) 2-fluorophenol	4.584	112	581322	30.65	ug/mL	0.00
Spiked Amount 200.000			Recovery =	15.32%		
7) phenol-d6	5.748	99	536559	23.29	ug/mL	0.00
Spiked Amount 200.000			Recovery =	11.65%		
22) nitrobenzene-d5	7.094	82	3570	0.16	ug/mL	0.00
Spiked Amount 100.000			Recovery =	0.16%		
38) 2-fluorobiphenyl	9.935	172	55880	1.12	ug/mL	0.00
Spiked Amount 100.000			Recovery =	1.12%		
59) 2,4,6-tribromophenol	12.343	330	527596	76.47	ug/mL	0.00
Spiked Amount 200.000			Recovery =	38.23%		
69) o-terphenyl	0.000	230	0	0.00	ug/mL	
Spiked Amount 100.000			Recovery =	0.00%		
72) 1-Chloro-octadecane	0.000	57	0	0.00	ug/mL	
Spiked Amount 100.000			Recovery =	0.00%		
75) terphenyl-d14	15.864	244	120275	2.69	ug/mL	0.00
Spiked Amount 100.000			Recovery =	2.69%		
Target Compounds						Qvalue
2) N-nitroso-dimethylamine	3.080	74	57616	5.448	ug/mL	96
5) aniline	5.893	93	6662	0.245	ug/mL#	40
6) phenol	5.766	94	223142	9.259	ug/mL	88
8) 2-chlorophenol	6.000	128	397528	18.012	ug/mL	100
9) n-decane	6.036	57	6764	0.295	ug/mL	96
10) bis-(2-choroethyl)ether	5.893	93	6631	0.309	ug/mL	80
11) 1,3-dichlorobenzene	6.281	146	3046	0.052	ug/mL#	49
12) 1,4-diclorobenzene	6.281	146	3046	0.045	ug/mL#	50
13) 1,2-dichlorobenzene	6.558	148	1873	0.040	ug/mL#	49
14) benzyl alcohol	6.454	108	43470	4.015	ug/mL	96
15) 2-methylphenol	6.622	108	218878	12.503	ug/mL	99
16) 2,2'-oxybis(1-chloropr...	6.686	121	870	0.124	ug/mL#	26
19) N-nitroso-di-n-propyla...	6.885	70	2877	0.158	ug/mL#	56
20) 4-methylphenol	6.839	108	497335	26.232	ug/mL	89
23) nitrobenzene	7.119	77	3002	0.099	ug/mL#	65
24) isophorone	7.468	82	6699	0.154	ug/mL#	88
25) 2-nitrophenol	7.613	139	281608	23.199	ug/mL	99
26) 2,4-dimethylphenol	7.652	122	83811	4.800	ug/mL	92
27) bis(2-chloroethoxy)met...	7.616	93	28632	1.249	ug/mL	55
28) 2,4-dichlorophenol	7.973	162	398436	21.669	ug/mL	99
30) 1,2,4-trichlorobenzene	8.120	180	10024	0.404	ug/mL#	97
31) naphthalene	8.222	128	22625	0.312	ug/mL#	77
32) benzoic acid	7.733	122	32900m	BC 4.777	ug/mL	
33) 4-chloroanaline	8.314	127	1189	0.037	ug/mL#	49
34) hexachloro-1,3-butadiene	8.503	225	2559	0.143	ug/mL	86
35) 4-chloro-3-methylphenol	9.073	107	301349	17.873	ug/mL	98

Data Path : X:\S4\2023\Nov23\111323\
Data File : s4111326.D
Acq On : 13 Nov 2023 10:26 pm
Operator : cl
Sample : 67798-07ms acid x1
Misc :
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Nov 14 11:19:44 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration

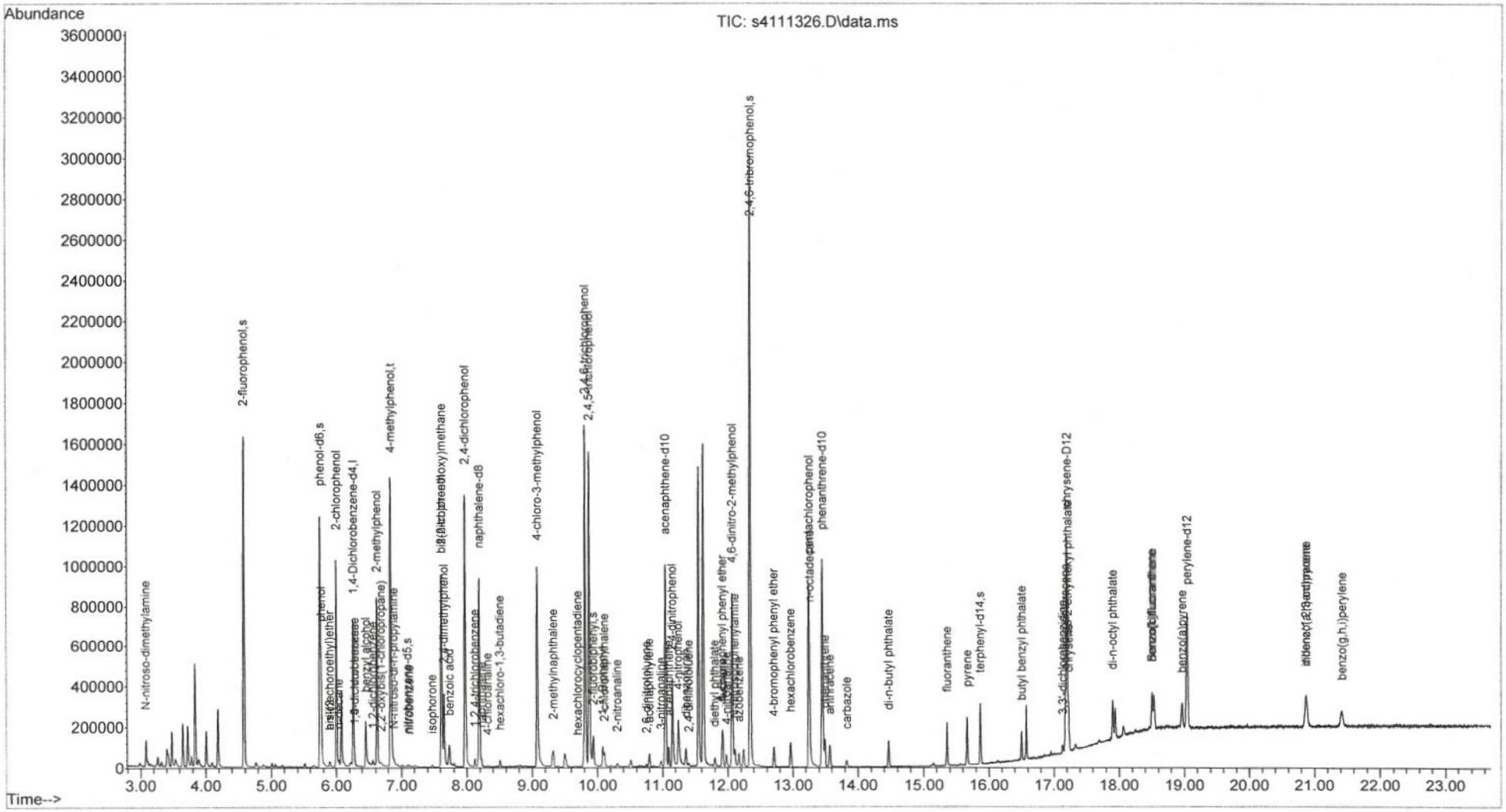
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
36) 2-methylnaphthalene	9.321	142	24478	0.496 ug/mL	97
39) hexachlorocyclopentadiene	9.695	237	931	3.388 ug/mL#	27
40) 2,4,6-trichlorophenol	9.810	196	335589	24.013 ug/mL	100
41) 2,4,5-trichlorophenol	9.871	196	350047	24.450 ug/mL	98
42) 1,1'-Biphenyl	10.080	154	42718	0.749 ug/mL	96
43) 2-chloronaphthalene	10.105	162	27028	0.576 ug/mL	89
44) 2-nitroanaline	10.302	138	4855	0.389 ug/mL	92
45) acenaphthylene	10.796	152	38149	0.595 ug/mL	98
46) dimethyl phthalate	10.646	163	1898	Below Cal #	77
47) 2,6-dinitrotoluene	10.750	165	2208	0.211 ug/mL#	59
48) 2,4-dinitrotoluene	11.397	165	2074	0.151 ug/mL#	25
49) acenaphthene	11.094	154	30321	0.720 ug/mL	96
50) 3-nitroanaline	10.974	138	7348	0.702 ug/mL#	94
51) 2,4-dinitrophenol	11.148	184	90000	16.894 ug/mL	97
52) dibenzofuran	11.357	168	49295	0.780 ug/mL#	93
53) 4-nitrophenol	11.239	65	59287	8.902 ug/mL#	65
54) fluorene	11.920	166	42605	0.825 ug/mL#	96
55) diethyl phthalate	11.797	149	20385	0.371 ug/mL#	92
56) 4-chlorophenyl phenyl ...	11.912	204	26249	1.087 ug/mL	99
57) 4-nitroanaline	11.978	138	14766	1.519 ug/mL	94
60) 4,6-dinitro-2-methylph...	12.068	198	188373	23.179 ug/mL	99
61) azobenzene	12.167	77	33301	0.817 ug/mL	98
62) N-nitrosodiphenylamine	12.103	169	22358	0.643 ug/mL#	92
63) 4-bromophenyl phenyl e...	12.705	248	17034	1.179 ug/mL#	74
64) hexachlorobenzene	12.962	284	24535	1.513 ug/mL#	74
65) n-octadecane	13.255	57	56976	2.277 ug/mL#	82
66) pentachlorophenol	13.245	266	150994	20.403 ug/mL	98
67) phenanthrene	13.492	178	71557	1.006 ug/mL	99
68) anthracene	13.563	178	59467	0.838 ug/mL	99
70) carbazole	13.826	167	21266	0.307 ug/mL#	70
71) di-n-butyl phthalate	14.463	149	91094	1.233 ug/mL	99
73) fluoranthene	15.357	202	104953	1.487 ug/mL	99
77) pyrene	15.663	202	106939	1.563 ug/mL	99
78) butyl benzyl phthalate	16.501	149	38788	1.367 ug/mL	99
79) benzo(a)anthracene	17.174	228	102535	1.747 ug/mL	100
80) chrysene	17.225	228	85379	1.532 ug/mL	99
81) 3,3'-dichlorobenzidine	17.133	252	9835	0.739 ug/mL#	89
82) bis-2-ethylhexyl phtha...	17.210	149	84360	2.077 ug/mL	100
84) di-n-octyl phthalate	17.900	149	117212	1.941 ug/mL#	98
85) Benzo(b)fluoranthene	18.502	252	97217	1.962 ug/mL	97
86) benzo(k)fluoranthene	18.502	252	97217	2.146 ug/mL	97
87) benzo(a)pyrene	18.963	252	76859	1.752 ug/mL#	80
88) indeno(1,2,3-cd)pyrene	20.869	276	84303	1.818 ug/mL#	46
89) dibenzo(a,h)anthracene	20.866	278	32121	0.799 ug/mL#	62
90) benzo(g,h,i)perylene	21.414	276	69241	1.981 ug/mL#	56
93) DDT	16.631	TIC	1064	Below Cal #	22

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Nov23\111323\
Data File : s4111326.D
Acq On : 13 Nov 2023 10:26 pm
Operator : cl
Sample : 67798-07ms acid x1
Misc :
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Nov 14 11:19:44 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Nov23\111323\
Data File : s4111327.D
Acq On : 13 Nov 2023 10:56 pm
Operator : cl
Sample : 67798-07ms bn x1
Misc :
ALS Vial : 27 Sample Multiplier: 1

CL
11/20/23 @ 10:53
CharlesL

Quant Time: Nov 14 11:19:48 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.258	152	177273	10.00	ug/mL	0.00
21) naphthalene-d8	8.187	136	656549	10.00	ug/mL	0.00
37) acenaphthene-d10	11.046	164	338203	10.00	ug/mL	0.00
58) phenanthrene-d10	13.451	188	581903	10.00	ug/mL	0.00
74) chrysene-D12	17.197	240	373143	10.00	ug/mL	0.00
83) perylene-d12	19.039	264	280705	10.00	ug/mL	0.00
System Monitoring Compounds						
4) 2-fluorophenol	4.589	112	9127	0.41	ug/mL	0.00
Spiked Amount 200.000			Recovery =	0.20%		
7) phenol-d6	5.751	99	51039	1.91	ug/mL	0.00
Spiked Amount 200.000			Recovery =	0.95%		
22) nitrobenzene-d5	7.096	82	776913	33.71	ug/mL	0.00
Spiked Amount 100.000			Recovery =	33.71%		
38) 2-fluorobiphenyl	9.937	172	1706626	32.07	ug/mL	0.00
Spiked Amount 100.000			Recovery =	32.07%		
59) 2,4,6-tribromophenol	12.343	330	6103	0.95	ug/mL	0.00
Spiked Amount 200.000			Recovery =	0.47%		
69) o-terphenyl	0.000	230	0	0.00	ug/mL	
Spiked Amount 100.000			Recovery =	0.00%		
72) 1-Chloro-octadecane	0.000	57	0	0.00	ug/mL	
Spiked Amount 100.000			Recovery =	0.00%		
75) terphenyl-d14	15.864	244	1661523	41.25	ug/mL	0.00
Spiked Amount 100.000			Recovery =	41.25%		
Target Compounds						Qvalue
2) N-nitroso-dimethylamine	3.083	74	125809	10.266	ug/mL	94
3) pyridine	3.116	79	293613	13.994	ug/mL	99
5) aniline	5.830	93	566573	18.076	ug/mL	100
6) phenol	5.768	94	22323	0.763	ug/mL	100
8) 2-chlorophenol	6.005	128	9264	0.299	ug/mL	98
9) n-decane	6.039	57	49168	2.308	ug/mL	98
10) bis-(2-choroethyl)ether	5.891	93	514156	25.804	ug/mL	100
11) 1,3-dichlorobenzene	6.212	146	259900	9.207	ug/mL	99
12) 1,4-diclorobenzene	6.281	146	282538	9.893	ug/mL	99
13) 1,2-dichlorobenzene	6.556	148	199162	11.488	ug/mL	99
14) benzyl alcohol	6.451	108	200183	15.720	ug/mL	96
15) 2-methylphenol	6.627	108	116251	5.690	ug/mL	99
16) 2,2'-oxybis(1-chloropr...	6.686	121	166501	33.017	ug/mL	96
17) acetophenone	6.859	120	192441	25.995	ug/mL	91
18) hexachloroethane	7.017	117	63354	6.050	ug/mL	100
19) N-nitroso-di-n-propyla...	6.882	70	369911	25.302	ug/mL	99
20) 4-methylphenol	6.839	108	150929	6.828	ug/mL	94
23) nitrobenzene	7.122	77	565436	24.842	ug/mL	99
24) isophorone	7.468	82	1058804	28.778	ug/mL	100
25) 2-nitrophenol	7.613	139	1538	0.117	ug/mL#	43
26) 2,4-dimethylphenol	7.652	122	260432	13.096	ug/mL	99
27) bis(2-chloroethoxy)met...	7.802	93	686477	27.638	ug/mL	98
28) 2,4-dichlorophenol	7.978	162	6859	0.281	ug/mL#	65
30) 1,2,4-trichlorobenzene	8.123	180	355294	15.285	ug/mL#	99
31) naphthalene	8.220	128	1420376	20.349	ug/mL	100
32) benzoic acid	7.720	122	975	2.161	ug/mL#	1

Data Path : X:\S4\2023\Nov23\111323\
Data File : s4111327.D
Acq On : 13 Nov 2023 10:56 pm
Operator : cl
Sample : 67798-07ms bn x1
Misc :
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Nov 14 11:19:48 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration

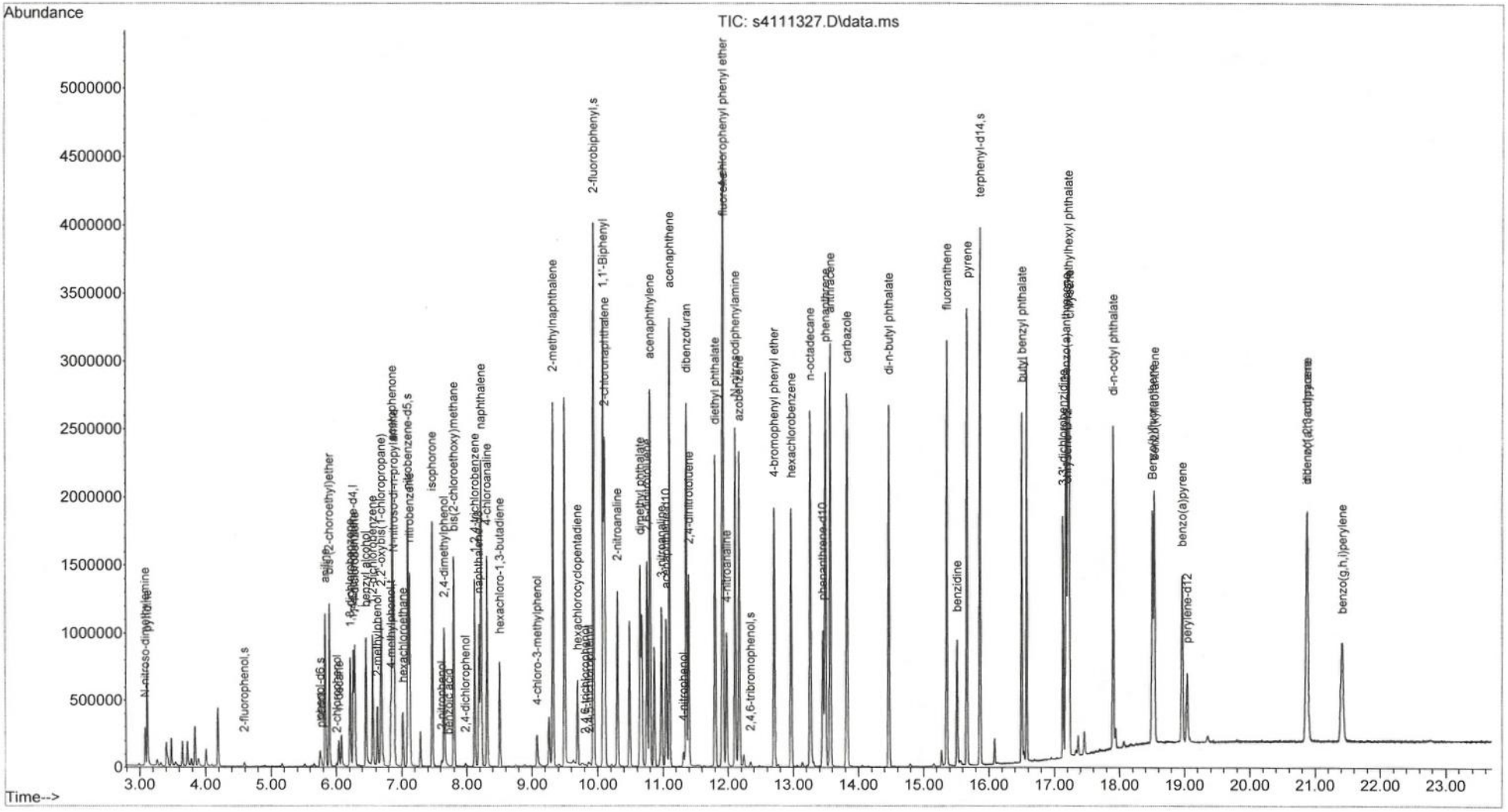
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
33) 4-chloroanaline	8.312	127	641868	23.040 ug/mL	99
34) hexachloro-1,3-butadiene	8.505	225	124363	9.426 ug/mL	99
35) 4-chloro-3-methylphenol	9.079	107	70920	3.639 ug/mL	92
36) 2-methylnaphthalene	9.318	142	1039881	21.638 ug/mL	99
39) hexachlorocyclopentadiene	9.693	237	147923	13.918 ug/mL	99
40) 2,4,6-trichlorophenol	9.810	196	1876	0.106 ug/mL#	11
41) 2,4,5-trichlorophenol	9.871	196	849	0.043 ug/mL#	40
42) 1,1'-Biphenyl	10.080	154	1410734	24.718 ug/mL	99
43) 2-chloronaphthalene	10.105	162	1037537	22.944 ug/mL	95
44) 2-nitroanaline	10.299	138	382445	26.077 ug/mL	99
45) acenaphthylene	10.796	152	1740324	26.186 ug/mL	99
46) dimethyl phthalate	10.646	163	880423	17.415 ug/mL	100
47) 2,6-dinitrotoluene	10.753	165	313808	27.229 ug/mL	99
48) 2,4-dinitrotoluene	11.397	165	387910	25.354 ug/mL	99
49) acenaphthene	11.097	154	1021435	24.752 ug/mL	98
50) 3-nitroanaline	10.974	138	293085	24.994 ug/mL	99
52) dibenzofuran	11.357	168	1626846	26.151 ug/mL	99
53) 4-nitrophenol	11.313	65	1366	0.455 ug/mL#	21
54) fluorene	11.920	166	1297943	25.006 ug/mL	99
55) diethyl phthalate	11.800	149	1234747	24.687 ug/mL	99
56) 4-chlorophenyl phenyl ...	11.912	204	606783	24.791 ug/mL	99
57) 4-nitroanaline	11.978	138	266296	23.994 ug/mL	96
61) azobenzene	12.169	77	1146407	28.581 ug/mL	100
62) N-nitrosodiphenylamine	12.106	169	896317	26.842 ug/mL	99
63) 4-bromophenyl phenyl e...	12.707	248	373759	26.340 ug/mL	99
64) hexachlorobenzene	12.967	284	400866	25.299 ug/mL	98
65) n-octadecane	13.260	57	656597	25.862 ug/mL	97
67) phenanthrene	13.492	178	1674213	25.264 ug/mL	100
68) anthracene	13.566	178	1745664	25.963 ug/mL	100
70) carbazole	13.823	167	1653374	28.109 ug/mL	100
71) di-n-butyl phthalate	14.465	149	1988948	26.516 ug/mL	100
73) fluoranthene	15.355	202	1666873	24.351 ug/mL	100
76) benzidine	15.515	184	436282	26.240 ug/mL	100
77) pyrene	15.665	202	1688523	27.805 ug/mL	100
78) butyl benzyl phthalate	16.501	149	703346	27.162 ug/mL	99
79) benzo(a)anthracene	17.177	228	1249663	24.810 ug/mL	99
80) chrysene	17.227	228	1195866	25.463 ug/mL	99
81) 3,3'-dichlorobenzidine	17.131	252	430581	27.245 ug/mL	99
82) bis-2-ethylhexyl phtha...	17.210	149	1007302	27.043 ug/mL	100
84) di-n-octyl phthalate	17.900	149	1490962	27.251 ug/mL	98
85) Benzo(b)fluoranthene	18.504	252	1017280	24.706 ug/mL	99
86) benzo(k)fluoranthene	18.535	252	969228	25.717 ug/mL	95
87) benzo(a)pyrene	18.963	252	834130	22.935 ug/mL#	77
88) indeno(1,2,3-cd)pyrene	20.874	276	943817	24.522 ug/mL#	74
89) dibenzo(a,h)anthracene	20.871	278	794601	24.644 ug/mL#	89
90) benzo(g,h,i)perylene	21.414	276	771139	26.774 ug/mL#	78
93) DDT	16.631	TIC	3105	Below Cal #	22

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Nov23\111323\
Data File : s4111327.D
Acq On : 13 Nov 2023 10:56 pm
Operator : cl
Sample : 67798-07ms bn x1
Misc :
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Nov 14 11:19:48 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

CL
11/20/23 @ 10:55
CharlesL

Data Path : X:\S4\2023\Nov23\111323\
Data File : s4111328.D
Acq On : 13 Nov 2023 11:26 pm
Operator : cl
Sample : 67798-07msd acid x1
Misc :
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Nov 14 11:19:52 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.258	152	136232	10.00	ug/mL	0.00
21) naphthalene-d8	8.187	136	527302	10.00	ug/mL	0.00
37) acenaphthene-d10	11.043	164	288888	10.00	ug/mL	0.00
58) phenanthrene-d10	13.454	188	537321	10.00	ug/mL	0.00
74) chrysene-D12	17.194	240	404584	10.00	ug/mL	0.00
83) perylene-d12	19.039	264	315870	10.00	ug/mL	0.00
System Monitoring Compounds						
4) 2-fluorophenol	4.584	112	466898	27.59	ug/mL	0.00
Spiked Amount 200.000			Recovery =	13.79%		
7) phenol-d6	5.748	99	453437	22.06	ug/mL	0.00
Spiked Amount 200.000			Recovery =	11.03%		
22) nitrobenzene-d5	7.094	82	31840	1.71	ug/mL	0.00
Spiked Amount 100.000			Recovery =	1.71%		
38) 2-fluorobiphenyl	9.935	172	80680	1.74	ug/mL	0.00
Spiked Amount 100.000			Recovery =	1.74%		
59) 2,4,6-tribromophenol	12.343	330	464045	70.81	ug/mL	0.00
Spiked Amount 200.000			Recovery =	35.41%		
69) o-terphenyl	0.000	230	0	0.00	ug/mL	
Spiked Amount 100.000			Recovery =	0.00%		
72) 1-Chloro-octadecane	0.000	57	0	0.00	ug/mL	
Spiked Amount 100.000			Recovery =	0.00%		
75) terphenyl-d14	15.862	244	229498	5.25	ug/mL	0.00
Spiked Amount 100.000			Recovery =	5.25%		
Target Compounds						Qvalue
2) N-nitroso-dimethylamine	3.080	74	49625	5.259	ug/mL	97
5) aniline	5.893	93	33277	1.380	ug/mL#	40
6) phenol	5.766	94	189585	8.814	ug/mL	88
8) 2-chlorophenol	6.000	128	300451	15.247	ug/mL	99
9) n-decane	6.039	57	9469	0.513	ug/mL	96
10) bis-(2-choroethyl)ether	5.893	93	33376	2.107	ug/mL	97
11) 1,3-dichlorobenzene	6.212	146	7345	0.267	ug/mL	82
12) 1,4-diclorobenzene	6.281	146	9438	0.354	ug/mL	86
13) 1,2-dichlorobenzene	6.556	148	5018	0.293	ug/mL#	62
14) benzyl alcohol	6.451	108	38463	3.982	ug/mL	82
15) 2-methylphenol	6.625	108	174306	11.154	ug/mL	98
16) 2,2'-oxybis(1-chloropr...	6.678	121	3002	0.700	ug/mL#	78
17) acetophenone	6.857	120	9746	1.670	ug/mL#	29
18) hexachloroethane	7.010	117	864	0.062	ug/mL#	43
19) N-nitroso-di-n-propyla...	6.880	70	19261	1.648	ug/mL	99
20) 4-methylphenol	6.836	108	398121	23.531	ug/mL	90
23) nitrobenzene	7.124	77	23159	1.217	ug/mL	99
24) isophorone	7.468	82	53708	1.766	ug/mL	98
25) 2-nitrophenol	7.613	139	224218	20.069	ug/mL	99
26) 2,4-dimethylphenol	7.649	122	83732	5.214	ug/mL	96
27) bis(2-chloroethoxy)met...	7.797	93	40823	1.976	ug/mL	99
28) 2,4-dichlorophenol	7.973	162	300212	17.731	ug/mL	100
30) 1,2,4-trichlorobenzene	8.118	180	16783	0.812	ug/mL#	98
31) naphthalene	8.220	128	53505	0.897	ug/mL	99
32) benzoic acid	7.743	122	93816	10.412	ug/mL	D 93
33) 4-chloroanaline	8.314	127	8422	0.365	ug/mL#	76

Data Path : X:\S4\2023\Nov23\111323\
Data File : s4111328.D
Acq On : 13 Nov 2023 11:26 pm
Operator : cl
Sample : 67798-07msd acid x1
Misc :
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Nov 14 11:19:52 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration

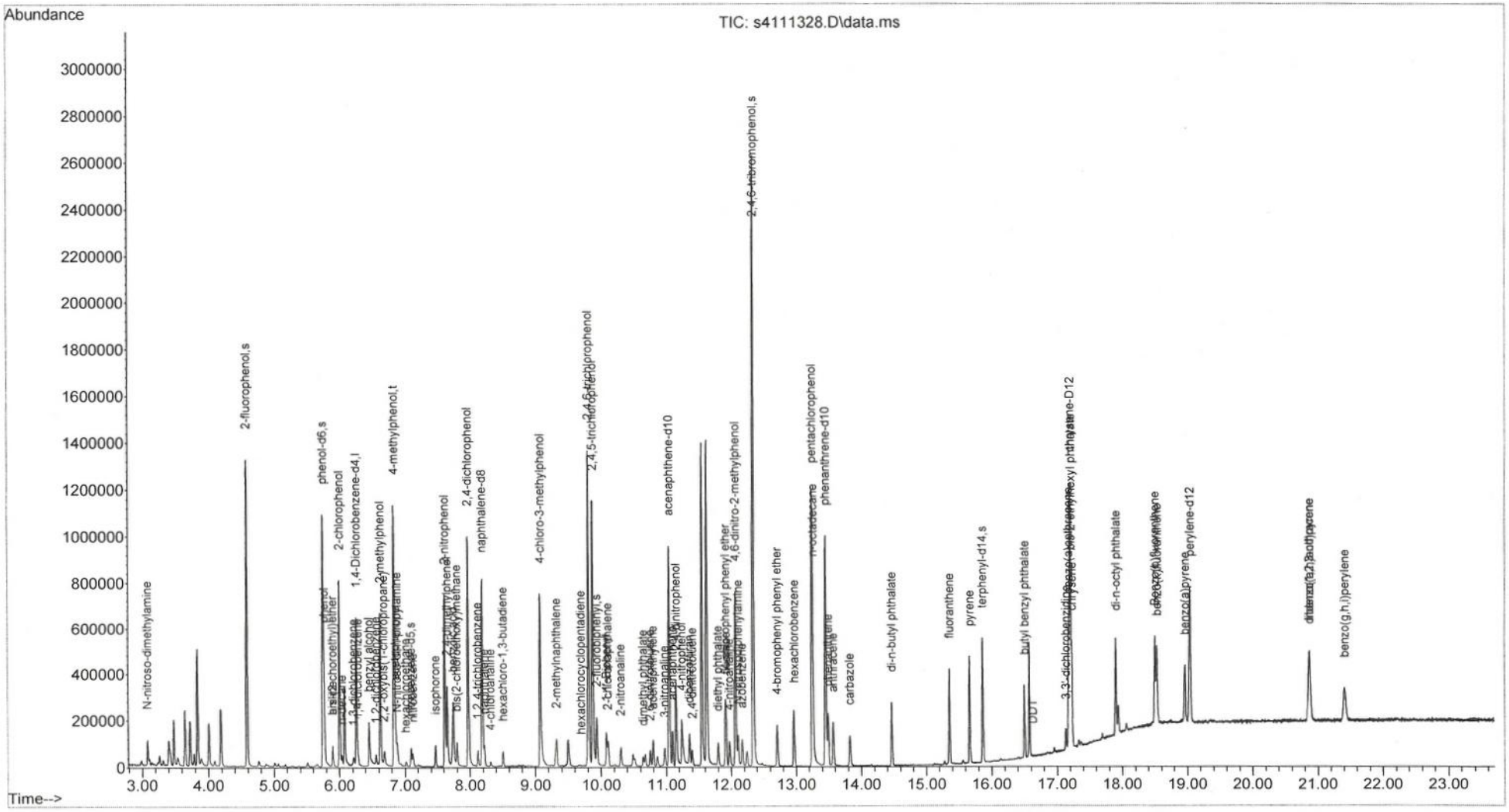
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
34) hexachloro-1,3-butadiene	8.508	225	9706	0.843 ug/mL#	63
35) 4-chloro-3-methylphenol	9.076	107	233786	15.059 ug/mL	98
36) 2-methylnaphthalene	9.321	142	40052	0.952 ug/mL	90
39) hexachlorocyclopentadiene	9.690	237	824	3.383 ug/mL#	27
40) 2,4,6-trichlorophenol	9.810	196	271384	20.584 ug/mL	98
41) 2,4,5-trichlorophenol	9.874	196	269043	19.920 ug/mL	99
42) 1,1'-Biphenyl	10.080	154	62033	1.197 ug/mL#	96
43) 2-chloronaphthalene	10.103	162	42807	1.026 ug/mL	89
44) 2-nitroanaline	10.299	138	23660	1.911 ug/mL	81
45) acenaphthylene	10.794	152	66651	1.136 ug/mL#	84
46) dimethyl phthalate	10.641	163	21999	0.433 ug/mL#	96
47) 2,6-dinitrotoluene	10.745	165	13471	1.368 ug/mL	97
48) 2,4-dinitrotoluene	11.397	165	16890	1.293 ug/mL#	77
49) acenaphthene	11.094	154	46891	1.241 ug/mL	98
50) 3-nitroanaline	10.972	138	20195	1.936 ug/mL	99
51) 2,4-dinitrophenol	11.150	184	79407	16.021 ug/mL	97
52) dibenzofuran	11.354	168	74937	1.317 ug/mL	98
53) 4-nitrophenol	11.239	65	56539m	BC 8.997 ug/mL	
54) fluorene	11.920	166	68020	1.455 ug/mL	97
55) diethyl phthalate	11.797	149	50348	1.102 ug/mL	100
56) 4-chlorophenyl phenyl ...	11.912	204	45075	2.062 ug/mL	98
57) 4-nitroanaline	11.973	138	28101	3.011 ug/mL	94
60) 4,6-dinitro-2-methylph...	12.068	198	165842	21.572 ug/mL	100
61) azobenzene	12.167	77	55672	1.467 ug/mL	97
62) N-nitrosodiphenylamine	12.106	169	41412	1.299 ug/mL	98
63) 4-bromophenyl phenyl e...	12.707	248	31403	2.343 ug/mL	97
64) hexachlorobenzene	12.967	284	48222	3.222 ug/mL	99
65) n-octadecane	13.258	57	93801	3.972 ug/mL	88
66) pentachlorophenol	13.242	266	195112	26.573 ug/mL	99
67) phenanthrene	13.492	178	127961	1.990 ug/mL	99
68) anthracene	13.563	178	108897	1.684 ug/mL	99
70) carbazole	13.821	167	75166	1.321 ug/mL	100
71) di-n-butyl phthalate	14.465	149	182591	2.621 ug/mL	99
73) fluoranthene	15.355	202	214827	3.316 ug/mL	99
77) pyrene	15.663	202	223714	3.373 ug/mL	99
78) butyl benzyl phthalate	16.499	149	82270	2.944 ug/mL	99
79) benzo(a)anthracene	17.174	228	219670	3.940 ug/mL	99
80) chrysene	17.225	228	185228	3.537 ug/mL	98
81) 3,3'-dichlorobenzidine	17.133	252	25852	1.639 ug/mL	99
82) bis-2-ethylhexyl phtha...	17.207	149	175295	4.369 ug/mL	99
84) di-n-octyl phthalate	17.903	149	259727	4.357 ug/mL	98
85) Benzo(b)fluoranthene	18.502	252	206120	4.399 ug/mL	98
86) benzo(k)fluoranthene	18.532	252	175750	4.091 ug/mL	95
87) benzo(a)pyrene	18.963	252	152158	3.669 ug/mL	98
88) indeno(1,2,3-cd)pyrene	20.869	276	168420	3.840 ug/mL#	76
89) dibenzo(a,h)anthracene	20.866	278	126823	3.449 ug/mL#	71
90) benzo(g,h,i)perylene	21.407	276	84764	2.544 ug/mL#	55
93) DDT	16.624	TIC	878	0.122 ug/mL#	22

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Nov23\111323\
Data File : s4111328.D
Acq On : 13 Nov 2023 11:26 pm
Operator : cl
Sample : 67798-07msd acid x1
Misc :
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Nov 14 11:19:52 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

CL
11/20/23 @ 10:56
CharlesL

Data Path : X:\S4\2023\Nov23\111323\
Data File : s4111329.D
Acq On : 13 Nov 2023 11:55 pm
Operator : cl
Sample : 67798-07msd bn x1
Misc :
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Nov 14 11:19:56 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.258	152	148897	10.00	ug/mL	0.00
21) naphthalene-d8	8.189	136	570576	10.00	ug/mL	0.00
37) acenaphthene-d10	11.046	164	310945	10.00	ug/mL	0.00
58) phenanthrene-d10	13.451	188	577373	10.00	ug/mL	0.00
74) chrysene-D12	17.194	240	418933	10.00	ug/mL	0.00
83) perylene-d12	19.039	264	308982	10.00	ug/mL	0.00
System Monitoring Compounds						
4) 2-fluorophenol	4.586	112	7592	0.41	ug/mL	0.00
Spiked Amount 200.000			Recovery =	0.20%		
7) phenol-d6	5.751	99	43920	1.96	ug/mL	0.00
Spiked Amount 200.000			Recovery =	0.98%		
22) nitrobenzene-d5	7.094	82	654831	32.69	ug/mL	0.00
Spiked Amount 100.000			Recovery =	32.69%		
38) 2-fluorobiphenyl	9.935	172	1567832	32.05	ug/mL	0.00
Spiked Amount 100.000			Recovery =	32.05%		
59) 2,4,6-tribromophenol	12.343	330	2288	0.41	ug/mL	0.00
Spiked Amount 200.000			Recovery =	0.20%		
69) o-terphenyl	14.142	230	1517	0.02	ug/mL	-0.01
Spiked Amount 100.000			Recovery =	0.02%		
72) 1-Chloro-octadecane	0.000	57	0	0.00	ug/mL	
Spiked Amount 100.000			Recovery =	0.00%		
75) terphenyl-d14	15.864	244	1735212	38.37	ug/mL	0.00
Spiked Amount 100.000			Recovery =	38.37%		
Target Compounds						Qvalue
2) N-nitroso-dimethylamine	3.080	74	105869	10.285	ug/mL	99
3) pyridine	3.111	79	231759	13.150	ug/mL	99
5) aniline	5.830	93	486843	18.492	ug/mL	100
6) phenol	5.769	94	17935	0.728	ug/mL	99
8) 2-chlorophenol	6.000	128	4054	0.126	ug/mL	66
9) n-decane	6.036	57	36297	2.018	ug/mL	97
10) bis-(2-choroethyl)ether	5.891	93	414620	24.771	ug/mL	99
11) 1,3-dichlorobenzene	6.212	146	261995	11.065	ug/mL	99
12) 1,4-diclorobenzene	6.281	146	287495	12.002	ug/mL	100
13) 1,2-dichlorobenzene	6.556	148	201221	13.836	ug/mL	100
14) benzyl alcohol	6.452	108	163938	15.329	ug/mL	98
15) 2-methylphenol	6.627	108	98897	5.764	ug/mL	99
16) 2,2'-oxybis(1-chloropr...	6.686	121	140360	33.137	ug/mL	93
17) acetophenone	6.859	120	165034	26.542	ug/mL	94
18) hexachloroethane	7.017	117	70461	8.026	ug/mL	99
19) N-nitroso-di-n-propyla...	6.882	70	310865	25.315	ug/mL	100
20) 4-methylphenol	6.836	108	130224	7.015	ug/mL	95
23) nitrobenzene	7.122	77	481250	24.328	ug/mL	100
24) isophorone	7.468	82	895435	28.003	ug/mL	99
25) 2-nitrophenol	7.613	139	1908	0.164	ug/mL#	74
26) 2,4-dimethylphenol	7.652	122	208423	12.056	ug/mL	98
27) bis(2-chloroethoxy)met...	7.799	93	569126	26.362	ug/mL	98
28) 2,4-dichlorophenol	7.978	162	3897	0.168	ug/mL#	68
30) 1,2,4-trichlorobenzene	8.123	180	353760	17.526	ug/mL#	98
31) naphthalene	8.220	128	1355635	22.353	ug/mL	100
33) 4-chloroanaline	8.312	127	569814	23.536	ug/mL	100

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Nov23\111323\
Data File : s4111329.D
Acq On : 13 Nov 2023 11:55 pm
Operator : cl
Sample : 67798-07msd bn x1
Misc :
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Nov 14 11:19:56 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration

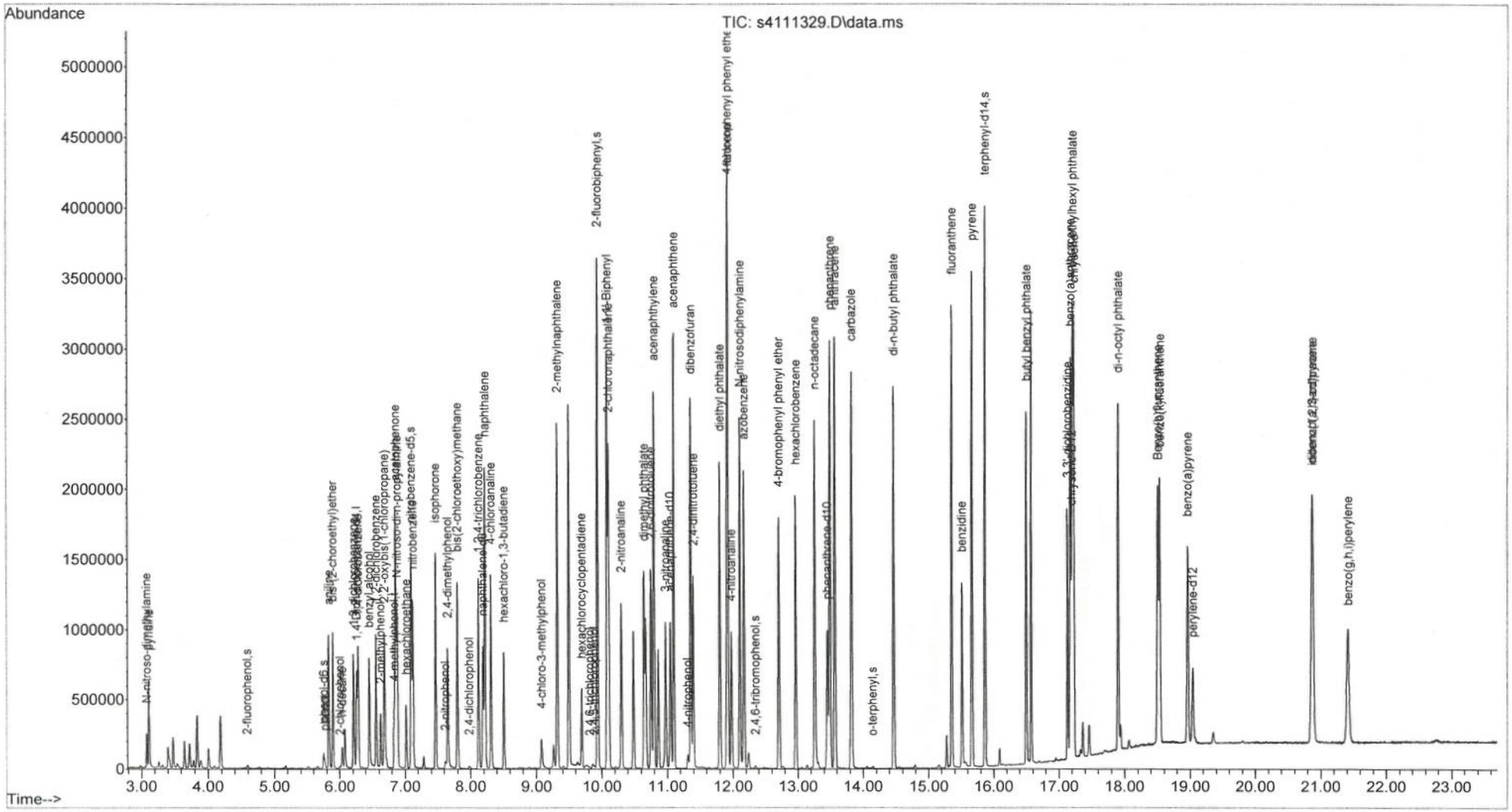
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
34) hexachloro-1,3-butadiene	8.505	225	136393	11.916 ug/mL	98
35) 4-chloro-3-methylphenol	9.079	107	62859	3.712 ug/mL	94
36) 2-methylnaphthalene	9.321	142	980208	23.478 ug/mL	100
39) hexachlorocyclopentadiene	9.690	237	133734	13.741 ug/mL	99
40) 2,4,6-trichlorophenol	9.813	196	1126	0.064 ug/mL#	11
41) 2,4,5-trichlorophenol	9.881	196	1785	0.112 ug/mL#	83
42) 1,1'-Biphenyl	10.080	154	1297732	24.731 ug/mL	98
43) 2-chloronaphthalene	10.106	162	977371	23.510 ug/mL	95
44) 2-nitroanaline	10.299	138	339352	25.168 ug/mL	98
45) acenaphthylene	10.794	152	1654452	27.078 ug/mL	99
46) dimethyl phthalate	10.643	163	811182	17.453 ug/mL	100
47) 2,6-dinitrotoluene	10.750	165	293145	27.666 ug/mL	99
48) 2,4-dinitrotoluene	11.397	165	381579	27.126 ug/mL	99
49) acenaphthene	11.094	154	976812	25.750 ug/mL	99
50) 3-nitroanaline	10.972	138	265862	24.633 ug/mL	99
52) dibenzofuran	11.357	168	1566688	27.397 ug/mL	99
53) 4-nitrophenol	11.306	65	953	0.412 ug/mL#	21
54) fluorene	11.920	166	1245493	26.103 ug/mL	99
55) diethyl phthalate	11.800	149	1179138	25.645 ug/mL	99
56) 4-chlorophenyl phenyl ...	11.912	204	573262	25.477 ug/mL	98
57) 4-nitroanaline	11.976	138	247809	24.285 ug/mL	95
61) azobenzene	12.170	77	1116122	28.044 ug/mL	99
62) N-nitrosodiphenylamine	12.106	169	875941	26.437 ug/mL	99
63) 4-bromophenyl phenyl e...	12.705	248	358460	25.458 ug/mL	99
64) hexachlorobenzene	12.965	284	383062	24.362 ug/mL	100
65) n-octadecane	13.258	57	606217	24.063 ug/mL	98
67) phenanthrene	13.492	178	1693497	25.758 ug/mL	99
68) anthracene	13.563	178	1777512	26.646 ug/mL	100
70) carbazole	13.821	167	1718989	29.457 ug/mL	100
71) di-n-butyl phthalate	14.465	149	2009615	27.002 ug/mL	100
73) fluoranthene	15.355	202	1740981	25.638 ug/mL	100
76) benzidine	15.513	184	601106	32.129 ug/mL	99
77) pyrene	15.663	202	1763222	25.860 ug/mL	100
78) butyl benzyl phthalate	16.499	149	750784	25.826 ug/mL	99
79) benzo(a)anthracene	17.177	228	1336618	23.631 ug/mL	99
80) chrysene	17.228	228	1295919	24.573 ug/mL	99
81) 3,3'-dichlorobenzidine	17.131	252	464044	26.110 ug/mL	99
82) bis-2-ethylhexyl phtha...	17.207	149	1057761	25.296 ug/mL	99
84) di-n-octyl phthalate	17.900	149	1596294	26.522 ug/mL	98
85) Benzo(b)fluoranthene	18.504	252	1140480	25.164 ug/mL	98
86) benzo(k)fluoranthene	18.532	252	1016716	24.505 ug/mL	98
87) benzo(a)pyrene	18.960	252	889431	22.215 ug/mL	99
88) indeno(1,2,3-cd)pyrene	20.871	276	978847	23.101 ug/mL#	99
89) dibenzo(a,h)anthracene	20.869	278	825998	23.270 ug/mL	99
90) benzo(g,h,i)perylene	21.417	276	792390m	BC 24.988 ug/mL	
93) DDT	16.636	TIC	2973	Below Cal #	22

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Nov23\111323\
Data File : s4111329.D
Acq On : 13 Nov 2023 11:55 pm
Operator : cl
Sample : 67798-07msd bn x1
Misc :
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Nov 14 11:19:56 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration



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Import File Name	S4 ABN 17096 DoD		
TestGroupID	E8270DoD_A		
Aqueous or Soil? (A or S)	A		
Prep Date	11/9/2023		
Lab#:	67798-008		
QC_Code:			
Prep#	17096		

Reviewer Checks:

Quant Report: Reviewed, Analyst Initials & Date ✓
Chromatogram Checked, Major peaks identified ✓
Results consistent w/ other attached analyses
Reanalysis reason noted
Substitute dilution data checked
Correct dilution and reason clear or noted ✓
Flags checked (Expiration, F+, Over Cal, Surr, Aspen, QC)
Other QC failures or issues noted in Aspen ✓
Correct data file and/or date/time in Aspen ✓

TPH desumed in comp naph (LCSD)

Notes:
Reviewer Initials & Date: 11/28/23

#	Surrogate Standards	Conc. (ug/mL)	AnalysisDate	AnalyzedBy	Dil'n	Weight	Volume	Surr	Recovery	Flag	QC Limits
4	2-fluorophenol	22.78	11/13/2023	CL s4111317.D	1	1	1	100	**23%**		21-100
7	phenol-d6	16.40	11/13/2023	CL s4111317.D	1	1	1	100	**16%**		10-102
59	2,4,6-tribromophenol	61.35	11/13/2023	CL s4111317.D	1	1	1	100	**61%**		10-123
22	nitrobenzene-d5	28.51	11/13/2023	CL s4111318.D	1	1	1	50	**57%**		35-114
38	2-fluorobiphenyl	28.65	11/13/2023	CL s4111318.D	1	1	1	50	**57%**		43-116
75	terphenyl-d14	34.50	11/13/2023	CL s4111318.D	1	1	1	50	**69%**		33-141
6	phenol	0.00	11/13/2023	CL s4111317.D	1	1	1				
8	2-chlorophenol	0.00	11/13/2023	CL s4111317.D	1	1	1				
15	2-methylphenol	0.00	11/13/2023	CL s4111317.D	1	1	1				
15	2-methylphenol	0.00	11/13/2023	CL s4111317.D	1	1	1				
20	4-methylphenol	0.00	11/13/2023	CL s4111317.D	1	1	1				
25	2-nitrophenol	0.00	11/13/2023	CL s4111317.D	1	1	1				
26	2,4-dimethylphenol	0.00	11/13/2023	CL s4111317.D	1	1	1				
28	2,4-dichlorophenol	0.00	11/13/2023	CL s4111317.D	1	1	1				
29	2,6-dichlorophenol	0.00	11/13/2023	CL s4111317.D	1	1	1				
32	benzoic acid	0.00	11/13/2023	CL s4111317.D	1	1	1				
35	4-chloro-3-methylphenol	0.00	11/13/2023	CL s4111317.D	1	1	1				
40	2,4,6-trichlorophenol	0.00	11/13/2023	CL s4111317.D	1	1	1				
41	2,4,5-trichlorophenol	0.00	11/13/2023	CL s4111317.D	1	1	1				
51	2,4-dinitrophenol	0.00	11/13/2023	CL s4111317.D	1	1	1				
53	4-nitrophenol	0.00	11/13/2023	CL s4111317.D	1	1	1				
60	4,6-dinitro-2-methylphenol	0.00	11/13/2023	CL s4111317.D	1	1	1				
66	pentachlorophenol	0.00	11/13/2023	CL s4111317.D	1	1	1				
2	N-nitroso-dimethylamine	0.00	11/13/2023	CL s4111318.D	1	1	1				
3	pyridine	0.00	11/13/2023	CL s4111318.D	1	1	1				
5	aniline	0.00	11/13/2023	CL s4111318.D	1	1	1				
9	n-decane	0.00	11/13/2023	CL s4111318.D	1	1	1				
10	bis-(2-choroethyl)ether	0.00	11/13/2023	CL s4111318.D	1	1	1				
11	1,3-dichlorobenzene	0.00	11/13/2023	CL s4111318.D	1	1	1				
12	1,4-diclorobenzene	0.00	11/13/2023	CL s4111318.D	1	1	1				
13	1,2-dichlorobenzene	0.00	11/13/2023	CL s4111318.D	1	1	1				
14	benzyl alcohol	0.00	11/13/2023	CL s4111318.D	1	1	1				
16	2,2'-oxybis(1-chloropropane)	0.00	11/13/2023	CL s4111318.D	1	1	1				
##	acetephenone	#N/A	11/13/2023	CL s4111318.D	1	1	1			#N/A	
18	hexachloroethane	0.00	11/13/2023	CL s4111318.D	1	1	1				
19	N-nitroso-di-n-propylamine	0.00	11/13/2023	CL s4111318.D	1	1	1				
23	nitrobenzene	0.00	11/13/2023	CL s4111318.D	1	1	1				
24	isophorone	0.00	11/13/2023	CL s4111318.D	1	1	1				
27	bis(2-chloroethoxy)methane	0.00	11/13/2023	CL s4111318.D	1	1	1				
30	1,2,4-trichlorobenzene	0.00	11/13/2023	CL s4111318.D	1	1	1				
31	naphthalene	0.00	11/13/2023	CL s4111318.D	1	1	1				
33	4-chloroanaline	0.00	11/13/2023	CL s4111318.D	1	1	1				
34	hexachloro-1,3-butadiene	0.00	11/13/2023	CL s4111318.D	1	1	1				
36	2-methylnaphthalene	0.00	11/13/2023	CL s4111318.D	1	1	1				
39	hexachlorocyclopentadiene	0.00	11/13/2023	CL s4111318.D	1	1	1				
43	2-chloronaphthalene	0.00	11/13/2023	CL s4111318.D	1	1	1				
44	2-nitroanaline	0.00	11/13/2023	CL s4111318.D	1	1	1				
45	acenaphthylene	0.00	11/13/2023	CL s4111318.D	1	1	1				
46	dimethyl phthalate	0.00	11/13/2023	CL s4111318.D	1	1	1				
47	2,6-dinitrotoluene	0.00	11/13/2023	CL s4111318.D	1	1	1				
48	2,4-dinitrotoluene	0.00	11/13/2023	CL s4111318.D	1	1	1				
49	acenaphthene	0.00	11/13/2023	CL s4111318.D	1	1	1				
50	3-nitroanaline	0.00	11/13/2023	CL s4111318.D	1	1	1				
52	dibenzofuran	0.00	11/13/2023	CL s4111318.D	1	1	1				
54	fluorene	0.00	11/13/2023	CL s4111318.D	1	1	1				
55	diethyl phthalate	0.00	11/13/2023	CL s4111318.D	1	1	1				
56	4-chlorophenyl phenyl ether	0.00	11/13/2023	CL s4111318.D	1	1	1				
57	4-nitroanaline	0.00	11/13/2023	CL s4111318.D	1	1	1				
61	azobenzene	0.00	11/13/2023	CL s4111318.D	1	1	1				
62	N-nitrosodiphenylamine	0.00	11/13/2023	CL s4111318.D	1	1	1				
63	4-bromophenyl phenyl ether	0.00	11/13/2023	CL s4111318.D	1	1	1				
64	hexachlorobenzene	0.00	11/13/2023	CL s4111318.D	1	1	1				
65	n-octadecane	0.00	11/13/2023	CL s4111318.D	1	1	1				
67	phenanthrene	0.00	11/13/2023	CL s4111318.D	1	1	1				
68	anthracene	0.00	11/13/2023	CL s4111318.D	1	1	1				
70	carbazole	0.00	11/13/2023	CL s4111318.D	1	1	1				
71	di-n-butyl phthalate	0.00	11/13/2023	CL s4111318.D	1	1	1				
73	fluoranthene	0.00	11/13/2023	CL s4111318.D	1	1	1				
76	benzidine	0.00	11/13/2023	CL s4111318.D	1	1	1				
77	pyrene	0.00	11/13/2023	CL s4111318.D	1	1	1				
78	butyl benzyl phthalate	0.00	11/13/2023	CL s4111318.D	1	1	1				
79	benzo(a)anthracene	0.00	11/13/2023	CL s4111318.D	1	1	1				
80	chrysene	0.00	11/13/2023	CL s4111318.D	1	1	1				
81	3,3'-dichlorobenzidine	0.00	11/13/2023	CL s4111318.D	1	1	1				
82	bis-2-ethylhexyl phthalate	0.00	11/13/2023	CL s4111318.D	1	1	1				
84	di-n-octyl phthalate	0.00	11/13/2023	CL s4111318.D	1	1	1				
85	Benzo(b)fluoranthene	0.00	11/13/2023	CL s4111318.D	1	1	1				
86	benzo(k)fluoranthene	0.00	11/13/2023	CL s4111318.D	1	1	1				
87	benzo(a)pyrene	0.00	11/13/2023	CL s4111318.D	1	1	1				
88	indeno(1,2,3-cd)pyrene	0.00	11/13/2023	CL s4111318.D	1	1	1				
89	dibenzo(a,h)anthracene	0.00	11/13/2023	CL s4111318.D	1	1	1				
90	benzo(g,h,i)perylene	0.00	11/13/2023	CL s4111318.D	1	1	1				

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Nov23\111323\
Data File : s4111317.D
Acq On : 13 Nov 2023 05:57 pm
Operator : cl
Sample : 67798-08 acid x1
Misc :
ALS Vial : 17 Sample Multiplier: 1

CL
11/20/23 @ 10:56
CharlesL

Quant Time: Nov 14 11:19:08 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration

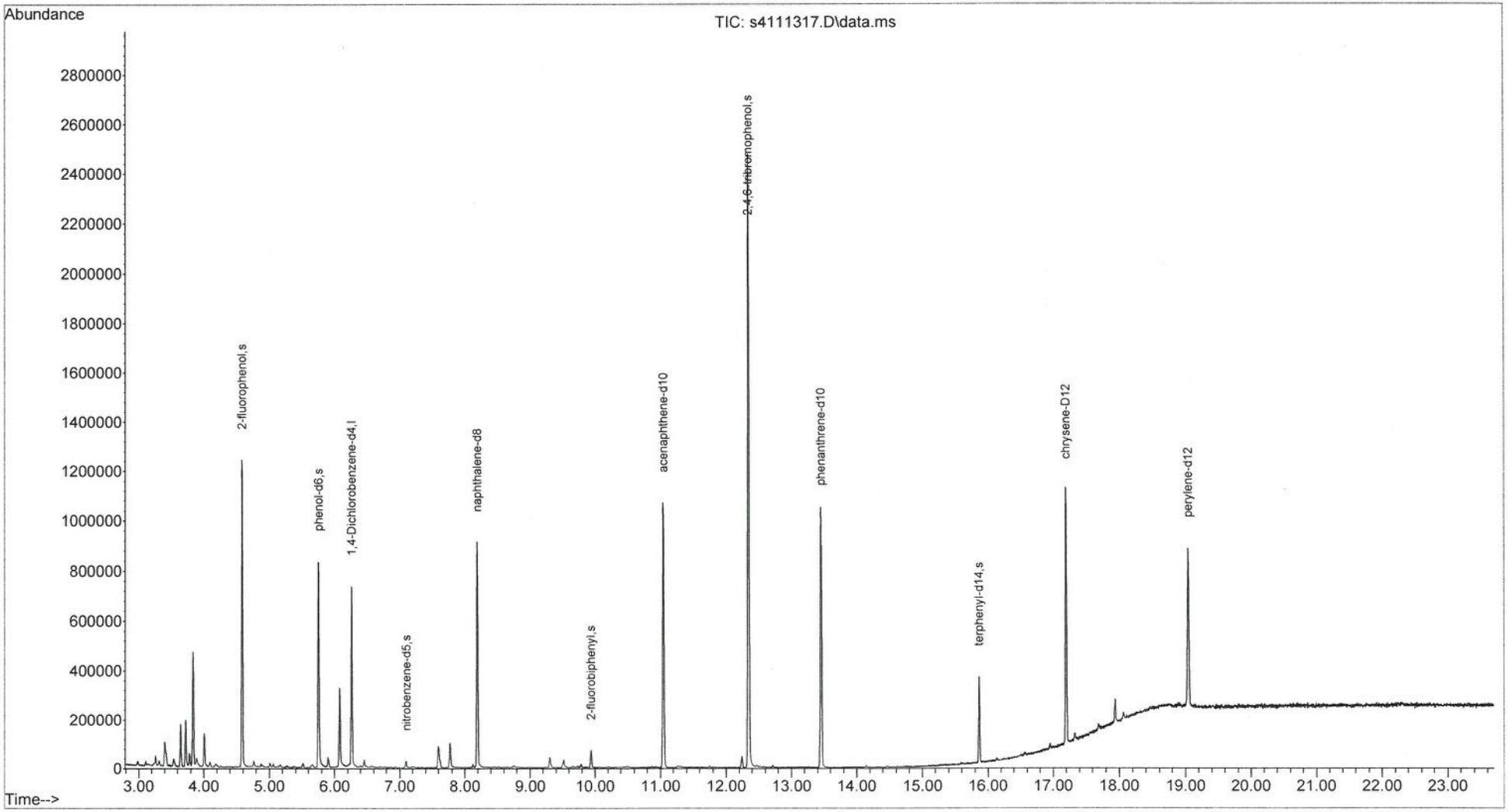
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.258	152	157671	10.00	ug/mL	0.00
21) naphthalene-d8	8.189	136	590221	10.00	ug/mL	0.00
37) acenaphthene-d10	11.043	164	320097	10.00	ug/mL	0.00
58) phenanthrene-d10	13.451	188	582222	10.00	ug/mL	0.00
74) chrysene-D12	17.197	240	430903	10.00	ug/mL	0.00
83) perylene-d12	19.039	264	339827	10.00	ug/mL	0.00
System Monitoring Compounds						
4) 2-fluorophenol	4.584	112	446239	22.78	ug/mL	0.00
Spiked Amount 200.000			Recovery =	11.39%		
7) phenol-d6	5.751	99	390107	16.40	ug/mL	0.00
Spiked Amount 200.000			Recovery =	8.20%		
22) nitrobenzene-d5	7.101	82	12222	0.58	ug/mL	0.00
Spiked Amount 100.000			Recovery =	0.58%		
38) 2-fluorobiphenyl	9.935	172	30295	0.56	ug/mL	0.00
Spiked Amount 100.000			Recovery =	0.56%		
59) 2,4,6-tribromophenol	12.340	330	435551	61.35	ug/mL	0.00
Spiked Amount 200.000			Recovery =	30.68%		
69) o-terphenyl	0.000	230	0	0.00	ug/mL	
Spiked Amount 100.000			Recovery =	0.00%		
72) 1-Chloro-octadecane	0.000	57	0	0.00	ug/mL	
Spiked Amount 100.000			Recovery =	0.00%		
75) terphenyl-d14	15.864	244	147346	3.16	ug/mL	0.00
Spiked Amount 100.000			Recovery =	3.16%		
Target Compounds						Qvalue
9) n-decane	6.074	57	1242	Below Cal	#	1
93) DDT	16.634	TIC	1116	Below Cal	#	22

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Nov23\111323\
Data File : s4111317.D
Acq On : 13 Nov 2023 05:57 pm
Operator : cl
Sample : 67798-08 acid x1
Misc :
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Nov 14 11:19:08 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Nov23\111323\
Data File : s4111318.D
Acq On : 13 Nov 2023 06:27 pm
Operator : cl
Sample : 67798-08 bn x1
Misc :
ALS Vial : 18 Sample Multiplier: 1

CL
11/20/23 @ 10:57
CharlesL

Quant Time: Nov 14 11:19:12 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration

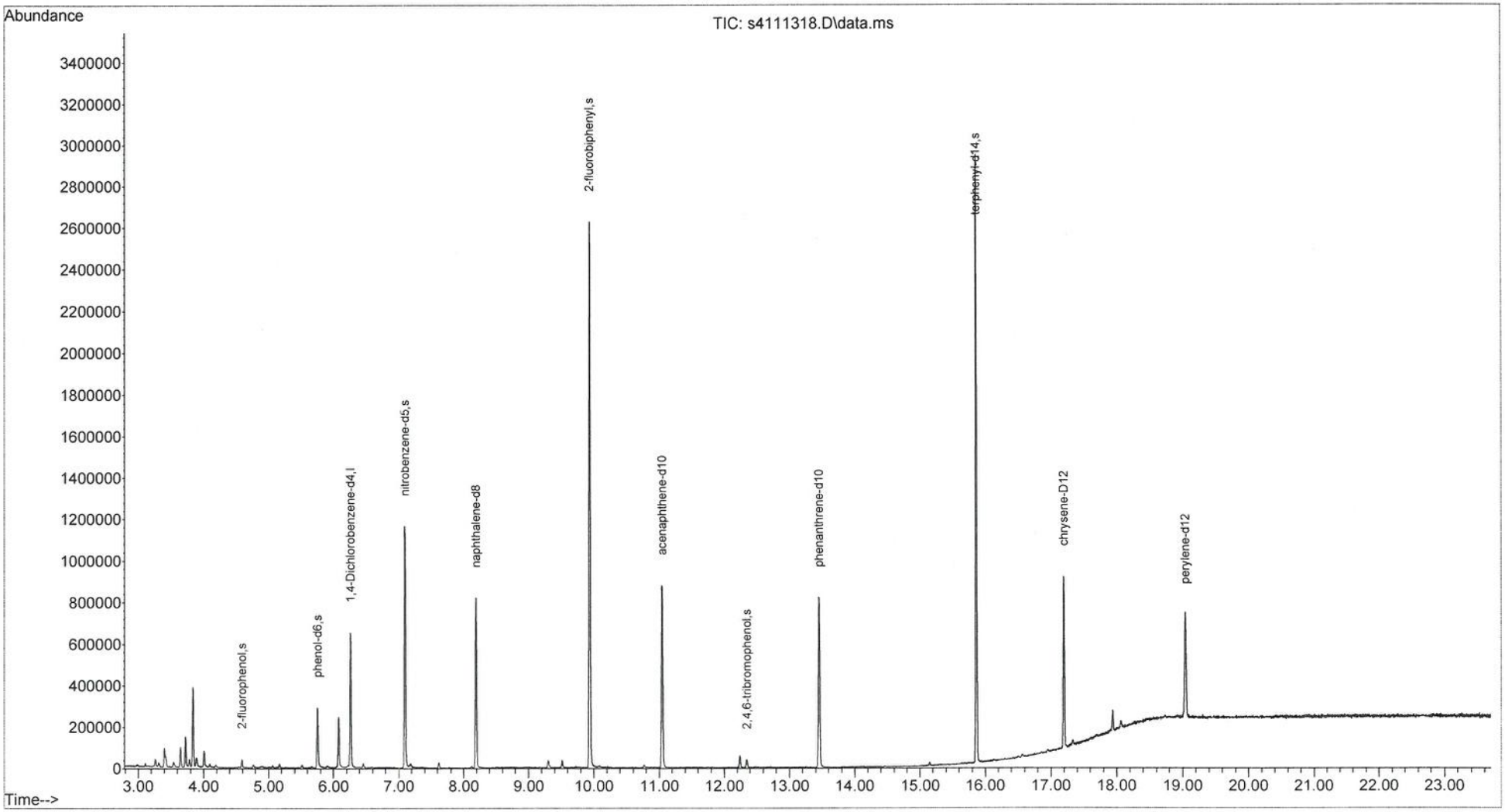
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.258	152	140888	10.00	ug/mL	0.00
21) naphthalene-d8	8.189	136	507013	10.00	ug/mL	0.00
37) acenaphthene-d10	11.043	164	263139	10.00	ug/mL	0.00
58) phenanthrene-d10	13.451	188	467918	10.00	ug/mL	0.00
74) chrysene-D12	17.194	240	332730	10.00	ug/mL	0.00
83) perylene-d12	19.039	264	288128	10.00	ug/mL	0.00
System Monitoring Compounds						
4) 2-fluorophenol	4.589	112	14893	0.85	ug/mL	0.00
Spiked Amount 200.000			Recovery =	0.43%		
7) phenol-d6	5.751	99	133221	6.27	ug/mL	0.00
Spiked Amount 200.000			Recovery =	3.13%		
22) nitrobenzene-d5	7.093	82	507457	28.51	ug/mL	0.00
Spiked Amount 100.000			Recovery =	28.51%		
38) 2-fluorobiphenyl	9.937	172	1186463	28.65	ug/mL	0.00
Spiked Amount 100.000			Recovery =	28.65%		
59) 2,4,6-tribromophenol	12.348	330	7348	1.37	ug/mL	0.00
Spiked Amount 200.000			Recovery =	0.69%		
69) o-terphenyl	0.000	230	0	0.00	ug/mL	
Spiked Amount 100.000			Recovery =	0.00%		
72) 1-Chloro-octadecane	0.000	57	0	0.00	ug/mL	
Spiked Amount 100.000			Recovery =	0.00%		
75) terphenyl-d14	15.864	244	1239406	34.50	ug/mL	0.00
Spiked Amount 100.000			Recovery =	34.50%		
Target Compounds						Qvalue
93) DDT	16.636	TIC	1928	Below Cal	#	22

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Nov23\111323\
Data File : s4111318.D
Acq On : 13 Nov 2023 06:27 pm
Operator : cl
Sample : 67798-08 bn x1
Misc :
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Nov 14 11:19:12 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration



This File: L:\SVOA\Excel Reports\ABN\231122\67798-009
Analysis Group: ABN Dow Salvage Yard
Field ID: SY-OBMW14-110723 CRE
Sample: 67798-09 acid x1 67798-09 bn x1
Misc:
DataFile: 319.D\S4ABN110223A.XLS 4ABN110223A.XLS
Import File Name: S4 ABN 17096 DoD
TestGroupID: E8270DoD_A
Aqueous or Soil? (A or S): A
Prep Date: 11/9/2023
Lab#: 67798-009
QC_Code:
Prep#: 17096

Charles Leahy L:\SVOA\ABN\ABN 8270DoD ImportFileBuilde
11/22/23 2:25 PM
L:\SVOA\ABN\
L:\SVOA\Excel Reports\ABN\231122\
L:\SVOA\PDFReports\

Reviewer Checks:

Quant Report: Reviewed, Analyst Initials & Date ✓
Chromatogram Checked, Major peaks identified ✓
Results consistent w/ other attached analyses
Reanalysis reason noted
Substitute dilution data checked
Correct dilution and reason clear or noted ✓
Flags checked (Expiration, F+, Over Cal, Surr, Aspen, QC)
Other QC failures or issues noted in Aspen ✓
Correct data file and/or date/time in Aspen ✓

To be discussed in case report (LCSD)

Notes:
Reviewer Initials & Date: QX 11/28/23

#	Surrogate Standards	Conc. (ug/mL)	AnalysisDate	AnalyzedBy	Dil'n	Weight	Volume	Surr	Recovery	Flag	QC Limits
4	2-fluorophenol	21.65	11/13/2023	CL s4111319.D	1 ✓	1	1	100	**22%**		21-100
7	phenol-d6	15.86	11/13/2023	CL s4111319.D	1	1	1	100	**16%**		10-102
59	2,4,6-tribromophenol	54.77	11/13/2023	CL s4111319.D	1	1	1	100	**55%**		10-123
22	nitrobenzene-d5	29.22	11/13/2023	CL s4111320.D	1	1	1	50	**58%**	✓	35-114
38	2-fluorobiphenyl	27.75	11/13/2023	CL s4111320.D	1	1	1	50	**56%**		43-116
75	terphenyl-d14	37.52	11/13/2023	CL s4111320.D	1	1	1	50	**75%**		33-141
6	phenol	0.00	11/13/2023	CL s4111319.D	1	1	1				
8	2-chlorophenol	0.00	11/13/2023	CL s4111319.D	1	1	1				
15	2-methylphenol	0.00	11/13/2023	CL s4111319.D	1	1	1				
15	2-methylphenol	0.00	11/13/2023	CL s4111319.D	1	1	1				
20	4-methylphenol	0.00	11/13/2023	CL s4111319.D	1	1	1				
25	2-nitrophenol	0.00	11/13/2023	CL s4111319.D	1	1	1				
26	2,4-dimethylphenol	0.00	11/13/2023	CL s4111319.D	1	1	1				
28	2,4-dichlorophenol	0.00	11/13/2023	CL s4111319.D ✓	1	1	1				
29	2,6-dichlorophenol	0.00	11/13/2023	CL s4111319.D	1	1	1				
32	benzoic acid	0.00	11/13/2023	CL s4111319.D	1	1	1				
35	4-chloro-3-methylphenol	0.00	11/13/2023	CL s4111319.D	1	1	1				
40	2,4,6-trichlorophenol	0.00	11/13/2023	CL s4111319.D	1	1	1				
41	2,4,5-trichlorophenol	0.00	11/13/2023	CL s4111319.D	1	1	1				
51	2,4-dinitrophenol	0.00	11/13/2023	CL s4111319.D	1	1	1				
53	4-nitrophenol	0.00	11/13/2023	CL s4111319.D	1	1	1				
60	4,6-dinitro-2-methylphenol	0.00	11/13/2023	CL s4111319.D	1	1	1				
66	pentachlorophenol	0.00	11/13/2023	CL s4111319.D	1	1	1				
2	N-nitroso-dimethylamine	0.00	11/13/2023	CL s4111320.D	1	1	1				
3	pyridine	0.00	11/13/2023	CL s4111320.D	1	1	1				
5	aniline	0.00	11/13/2023	CL s4111320.D	1	1	1				
9	n-decane	0.00	11/13/2023	CL s4111320.D	1	1	1				
10	bis-(2-choroethyl)ether	0.00	11/13/2023	CL s4111320.D	1	1	1				
11	1,3-dichlorobenzene	0.00	11/13/2023	CL s4111320.D	1	1	1				
12	1,4-diclorobenzene	0.00	11/13/2023	CL s4111320.D	1	1	1				
13	1,2-dichlorobenzene	0.00	11/13/2023	CL s4111320.D	1	1	1				
14	benzyl alcohol	0.00	11/13/2023	CL s4111320.D	1	1	1				
16	2,2'-oxybis(1-chloropropane)	0.00	11/13/2023	CL s4111320.D	1	1	1				
##	acetephenone	#N/A	11/13/2023	CL s4111320.D	1	1	1			#N/A	
18	hexachloroethane	0.00	11/13/2023	CL s4111320.D	1	1	1				
19	N-nitroso-di-n-propylamine	0.00	11/13/2023	CL s4111320.D	1	1	1				
23	nitrobenzene	0.00	11/13/2023	CL s4111320.D	1	1	1				
24	isophorone	0.00	11/13/2023	CL s4111320.D	1	1	1				
27	bis(2-chloroethoxy)methane	0.00	11/13/2023	CL s4111320.D	1	1	1				
30	1,2,4-trichlorobenzene	0.00	11/13/2023	CL s4111320.D	1	1	1				
31	naphthalene	0.00	11/13/2023	CL s4111320.D	1	1	1				
33	4-chloroanaline	0.00	11/13/2023	CL s4111320.D	1	1	1				
34	hexachloro-1,3-butadiene	0.00	11/13/2023	CL s4111320.D	1	1	1				
36	2-methylnaphthalene	0.00	11/13/2023	CL s4111320.D	1	1	1				
39	hexachlorocyclopentadiene	0.00	11/13/2023	CL s4111320.D	1	1	1				
43	2-chloronaphthalene	0.00	11/13/2023	CL s4111320.D	1	1	1				
44	2-nitroanaline	0.00	11/13/2023	CL s4111320.D	1	1	1				
45	acenaphthylene	0.00	11/13/2023	CL s4111320.D	1	1	1				
46	dimethyl phthalate	0.00	11/13/2023	CL s4111320.D	1	1	1				
47	2,6-dinitrotoluene	0.00	11/13/2023	CL s4111320.D	1	1	1				
48	2,4-dinitrotoluene	0.00	11/13/2023	CL s4111320.D	1	1	1				
49	acenaphthene	0.00	11/13/2023	CL s4111320.D	1	1	1				
50	3-nitroanaline	0.00	11/13/2023	CL s4111320.D	1	1	1				
52	dibenzofuran	0.00	11/13/2023	CL s4111320.D	1	1	1				
54	fluorene	0.00	11/13/2023	CL s4111320.D	1	1	1				
55	diethyl phthalate	0.00	11/13/2023	CL s4111320.D	1	1	1				
56	4-chlorophenyl phenyl ether	0.00	11/13/2023	CL s4111320.D	1	1	1				
57	4-nitroanaline	0.00	11/13/2023	CL s4111320.D	1	1	1				
61	azobenzene	0.00	11/13/2023	CL s4111320.D	1	1	1				
62	N-nitrosodiphenylamine	0.00	11/13/2023	CL s4111320.D	1	1	1				
63	4-bromophenyl phenyl ether	0.00	11/13/2023	CL s4111320.D	1	1	1				
64	hexachlorobenzene	0.00	11/13/2023	CL s4111320.D	1	1	1				
65	n-octadecane	0.00	11/13/2023	CL s4111320.D	1	1	1				
67	phenanthrene	0.00	11/13/2023	CL s4111320.D	1	1	1				
68	anthracene	0.00	11/13/2023	CL s4111320.D	1	1	1				
70	carbazole	0.00	11/13/2023	CL s4111320.D	1	1	1				
71	di-n-butyl phthalate	0.00	11/13/2023	CL s4111320.D	1	1	1				
73	fluoranthene	0.00	11/13/2023	CL s4111320.D	1	1	1				
76	benzidine	0.00	11/13/2023	CL s4111320.D	1	1	1				
77	pyrene	0.00	11/13/2023	CL s4111320.D	1	1	1				
78	butyl benzyl phthalate	0.00	11/13/2023	CL s4111320.D	1	1	1				
79	benzo(a)anthracene	0.00	11/13/2023	CL s4111320.D	1	1	1				
80	chrysene	0.00	11/13/2023	CL s4111320.D	1	1	1				
81	3,3'-dichlorobenzidine	0.00	11/13/2023	CL s4111320.D	1	1	1				
82	bis-2-ethylhexyl phthalate	0.00	11/13/2023	CL s4111320.D	1	1	1				
84	di-n-octyl phthalate	0.00	11/13/2023	CL s4111320.D	1	1	1				
85	Benzo(b)fluoranthene	0.00	11/13/2023	CL s4111320.D	1	1	1				
86	benzo(k)fluoranthene	0.00	11/13/2023	CL s4111320.D	1	1	1				
87	benzo(a)pyrene	0.00	11/13/2023	CL s4111320.D	1	1	1				
88	indeno(1,2,3-cd)pyrene	0.00	11/13/2023	CL s4111320.D	1	1	1				
89	dibenzo(a,h)anthracene	0.00	11/13/2023	CL s4111320.D	1	1	1				
90	benzo(g,h,i)perylene	0.00	11/13/2023	CL s4111320.D	1	1	1				

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Nov23\111323\
Data File : s4111319.D
Acq On : 13 Nov 2023 06:57 pm
Operator : cl
Sample : 67798-09 acid x1
Misc :
ALS Vial : 19 Sample Multiplier: 1

CL
11/20/23 @ 10:57
CharlesL

Quant Time: Nov 14 11:19:16 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration

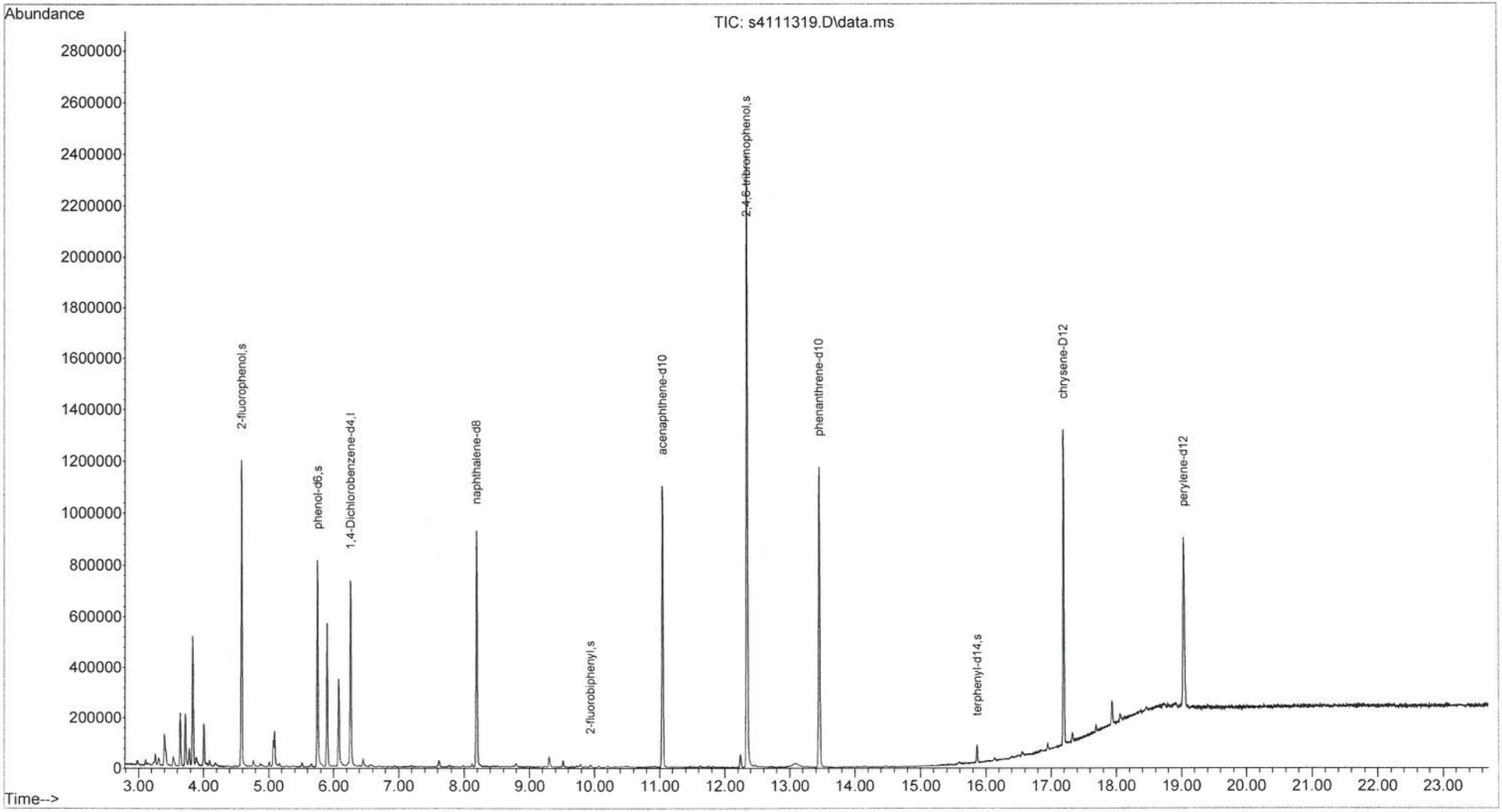
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.258	152	154501	10.00	ug/mL	0.00
21) naphthalene-d8	8.187	136	597653	10.00	ug/mL	0.00
37) acenaphthene-d10	11.043	164	331566	10.00	ug/mL	0.00
58) phenanthrene-d10	13.454	188	631127	10.00	ug/mL	0.00
74) chrysene-D12	17.194	240	486440	10.00	ug/mL	0.00
83) perylene-d12	19.034	264	381157	10.00	ug/mL	0.00
System Monitoring Compounds						
4) 2-fluorophenol	4.584	112	415480	21.65	ug/mL	0.00
Spiked Amount 200.000			Recovery =	10.82%		
7) phenol-d6	5.748	99	369715	15.86	ug/mL	0.00
Spiked Amount 200.000			Recovery =	7.93%		
22) nitrobenzene-d5	0.000	82	0	0.00	ug/mL	
Spiked Amount 100.000			Recovery =	0.00%		
38) 2-fluorobiphenyl	9.937	172	3642	0.03	ug/mL	0.00
Spiked Amount 100.000			Recovery =	0.03%		
59) 2,4,6-tribromophenol	12.340	330	421450	54.77	ug/mL	0.00
Spiked Amount 200.000			Recovery =	27.39%		
69) o-terphenyl	0.000	230	0	0.00	ug/mL	
Spiked Amount 100.000			Recovery =	0.00%		
72) 1-Chloro-octadecane	0.000	57	0	0.00	ug/mL	
Spiked Amount 100.000			Recovery =	0.00%		
75) terphenyl-d14	15.867	244	28787	0.54	ug/mL	0.00
Spiked Amount 100.000			Recovery =	0.54%		
Target Compounds						Qvalue
93) DDT	16.644	TIC	3947	Below Cal	#	22

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Nov23\111323\
Data File : s4111319.D
Acq On : 13 Nov 2023 06:57 pm
Operator : cl
Sample : 67798-09 acid x1
Misc :
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Nov 14 11:19:16 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Nov23\111323\
Data File : s4111320.D
Acq On : 13 Nov 2023 07:27 pm
Operator : cl
Sample : 67798-09 bn x1
Misc :
ALS Vial : 20 Sample Multiplier: 1

CL
11/20/23 @ 10:58
CharlesL

Quant Time: Nov 14 11:19:20 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration

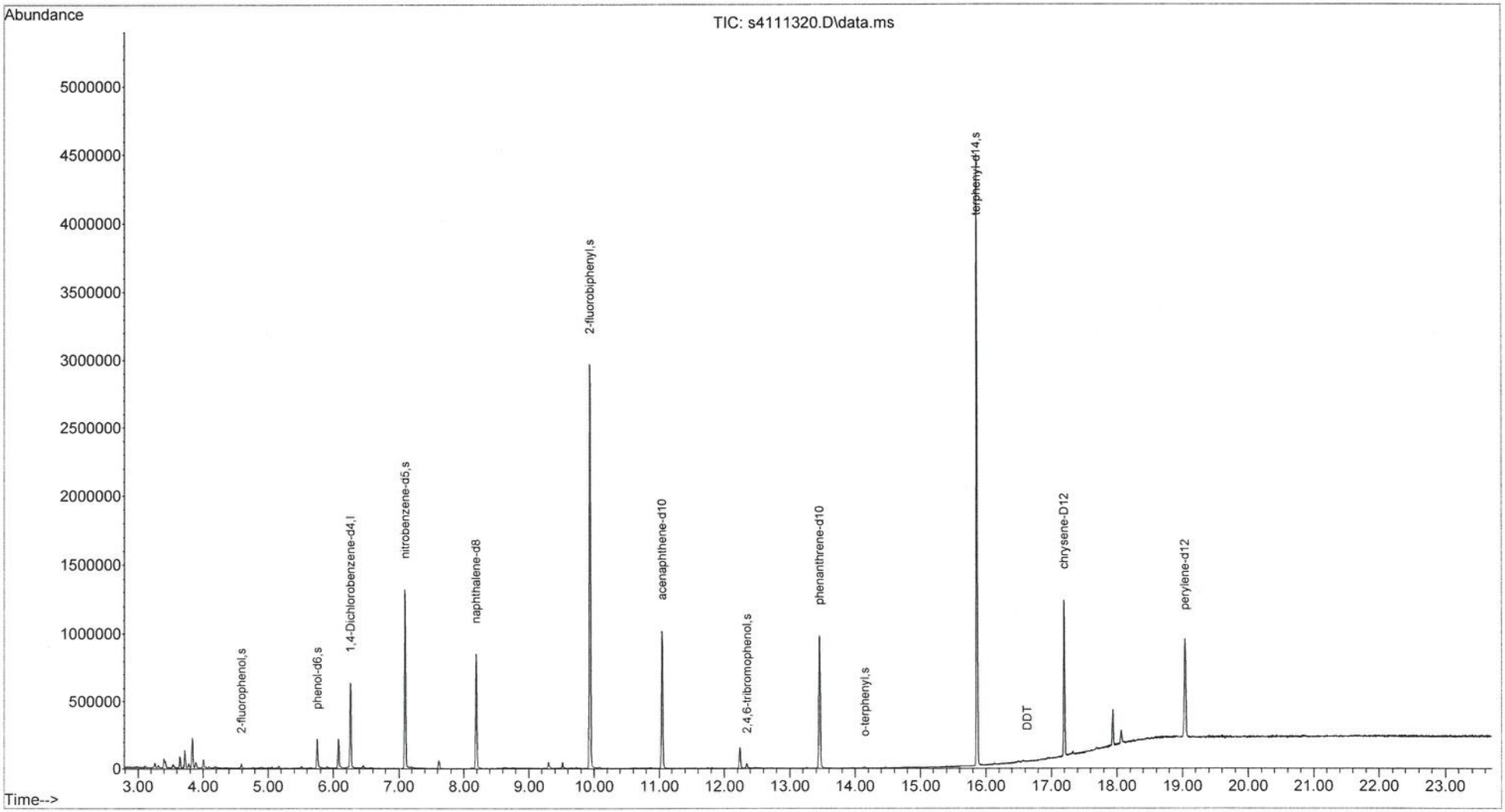
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	6.258	152	140773	10.00	ug/mL		0.00
21) naphthalene-d8	8.187	136	541747	10.00	ug/mL		0.00
37) acenaphthene-d10	11.043	164	298508	10.00	ug/mL		0.00
58) phenanthrene-d10	13.451	188	576782	10.00	ug/mL	#	0.00
74) chrysene-D12	17.194	240	468654	10.00	ug/mL		0.00
83) perylene-d12	19.037	264	392994	10.00	ug/mL		0.00
System Monitoring Compounds							
4) 2-fluorophenol	4.589	112	11192	0.64	ug/mL		0.00
Spiked Amount 200.000			Recovery = 0.32%				
7) phenol-d6	5.748	99	98920	4.66	ug/mL		0.00
Spiked Amount 200.000			Recovery = 2.33%				
22) nitrobenzene-d5	7.094	82	555707	29.22	ug/mL		0.00
Spiked Amount 100.000			Recovery = 29.22%				
38) 2-fluorobiphenyl	9.935	172	1303622	27.75	ug/mL		0.00
Spiked Amount 100.000			Recovery = 27.75%				
59) 2,4,6-tribromophenol	12.345	330	5684	0.90	ug/mL		0.00
Spiked Amount 200.000			Recovery = 0.45%				
69) o-terphenyl	14.147	230	1474	0.02	ug/mL		0.00
Spiked Amount 100.000			Recovery = 0.02%				
72) 1-Chloro-octadecane	0.000	57	0	0.00	ug/mL		
Spiked Amount 100.000			Recovery = 0.00%				
75) terphenyl-d14	15.864	244	1898615	37.52	ug/mL		0.00
Spiked Amount 100.000			Recovery = 37.52%				
Target Compounds							Qvalue
93) DDT	16.631	TIC	865	0.299	ug/mL	#	22

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Nov23\111323\
Data File : s4111320.D
Acq On : 13 Nov 2023 07:27 pm
Operator : cl
Sample : 67798-09 bn x1
Misc :
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Nov 14 11:19:20 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration



This File: **L:\SVOA\Excel Reports\ABN\231122\67798-010**
Analysis Group: **ABN** **Dow Salvage Yard**
Field ID: ***N*2-252.5-262.5-110723** **CRE**
Sample: **67798-10 acid x1** **67798-10 bn x1**
Misc:
DataFile: 321.D\S4ABN110223A.XLS 4ABN110223A.XLS
Import File Name **S4 ABN 17096 DoD**
TestGroupID **E8270DoD_A**
Aqueous or Soil? (A or S) **A**
Prep Date **11/9/2023**
Lab#: **67798-010**
QC_Code:
Prep# **17096**

Charles Leahy L:\SVOA\ABN\ABN 8270DoD ImportFileBuilde
11/22/23 2:26 PM
L:\SVOA\ABN\
L:\SVOA\Excel Reports\ABN\231122\
L:\SVOA\PDFReports\

Reviewer Checks:

Quant Report: Reviewed, Analyst Initials & Date
Chromatogram Checked, Major peaks identified ✓
Results consistent w/ other attached analyses
Reanalysis reason noted
Substitute dilution data checked
Correct dilution and reason clear or noted
Flags checked (Expiration, F+, Over Cal, Surr, Aspen, QC) ✓
Other QC failures or issues noted in Aspen
Correct data file and/or date/time in Aspen ✓

NTD Reduction in concentration (LLSP)

Notes:
Reviewer Initials & Date: 11/28/23

#	Surrogate Standards	Conc. (ug/mL)	AnalysisDate	AnalyzedBy	Dil'n	Weight	Volume	Surr	Recovery	Flag	QC Limits
4	2-fluorophenol	28.12	11/13/2023	CL s4111321.D	1	1	1	100	**28%**		21-100
7	phenol-d6	21.50	11/13/2023	CL s4111321.D	1	1	1	100	**22%**		10-102
59	2,4,6-tribromophenol	66.72	11/13/2023	CL s4111321.D	1	1	1	100	**67%**	✓	10-123
22	nitrobenzene-d5	27.30	11/13/2023	CL s4111322.D	1	1	1	50	**55%**		35-114
38	2-fluorobiphenyl	26.53	11/13/2023	CL s4111322.D	1	1	1	50	**53%**		43-116
75	terphenyl-d14	32.63	11/13/2023	CL s4111322.D	1	1	1	50	**65%**		33-141
6	phenol	0.00	11/13/2023	CL s4111321.D	1	1	1				
8	2-chlorophenol	0.00	11/13/2023	CL s4111321.D	1	1	1				
15	2-methylphenol	0.00	11/13/2023	CL s4111321.D	1	1	1				
15	2-methylphenol	0.00	11/13/2023	CL s4111321.D	1	1	1				
20	4-methylphenol	0.00	11/13/2023	CL s4111321.D	1	1	1				
25	2-nitrophenol	0.00	11/13/2023	CL s4111321.D	1	1	1				
26	2,4-dimethylphenol	0.00	11/13/2023	CL s4111321.D	1	1	1				
28	2,4-dichlorophenol	0.00	11/13/2023	CL s4111321.D	1	1	1				
29	2,6-dichlorophenol	0.00	11/13/2023	CL s4111321.D	1	1	1				
32	benzoic acid	0.00	11/13/2023	CL s4111321.D	1	1	1				
35	4-chloro-3-methylphenol	0.00	11/13/2023	CL s4111321.D	1	1	1				
40	2,4,6-trichlorophenol	0.00	11/13/2023	CL s4111321.D	1	1	1				
41	2,4,5-trichlorophenol	0.00	11/13/2023	CL s4111321.D	1	1	1				
51	2,4-dinitrophenol	0.00	11/13/2023	CL s4111321.D	1	1	1				
53	4-nitrophenol	0.00	11/13/2023	CL s4111321.D	1	1	1				
60	4,6-dinitro-2-methylphenol	0.00	11/13/2023	CL s4111321.D	1	1	1				
66	pentachlorophenol	0.00	11/13/2023	CL s4111321.D	1	1	1				
2	N-nitroso-dimethylamine	0.00	11/13/2023	CL s4111322.D	1	1	1				
3	pyridine	0.00	11/13/2023	CL s4111322.D	1	1	1				
5	aniline	0.00	11/13/2023	CL s4111322.D	1	1	1				
9	n-decane	0.00	11/13/2023	CL s4111322.D	1	1	1				
10	bis-(2-choroethyl)ether	0.00	11/13/2023	CL s4111322.D	1	1	1				
11	1,3-dichlorobenzene	0.00	11/13/2023	CL s4111322.D	1	1	1				
12	1,4-diclorobenzene	0.00	11/13/2023	CL s4111322.D	1	1	1				
13	1,2-dichlorobenzene	0.00	11/13/2023	CL s4111322.D	1	1	1				
14	benzyl alcohol	0.00	11/13/2023	CL s4111322.D	1	1	1				
16	2,2'-oxybis(1-chloropropane)	0.00	11/13/2023	CL s4111322.D	1	1	1				
##	acetephenone	#N/A	11/13/2023	CL s4111322.D	1	1	1			#N/A	
18	hexachloroethane	0.00	11/13/2023	CL s4111322.D	1	1	1				
19	N-nitroso-di-n-propylamine	0.00	11/13/2023	CL s4111322.D	1	1	1				
23	nitrobenzene	0.00	11/13/2023	CL s4111322.D	1	1	1				
24	isophorone	0.00	11/13/2023	CL s4111322.D	1	1	1				
27	bis(2-chloroethoxy)methane	0.00	11/13/2023	CL s4111322.D	1	1	1				
30	1,2,4-trichlorobenzene	0.00	11/13/2023	CL s4111322.D	1	1	1				
31	naphthalene	0.00	11/13/2023	CL s4111322.D	1	1	1				
33	4-chloroanaline	0.00	11/13/2023	CL s4111322.D	1	1	1				
34	hexachloro-1,3-butadiene	0.00	11/13/2023	CL s4111322.D	1	1	1				
36	2-methylnaphthalene	0.00	11/13/2023	CL s4111322.D	1	1	1				
39	hexachlorocyclopentadiene	0.00	11/13/2023	CL s4111322.D	1	1	1				
43	2-chloronaphthalene	0.00	11/13/2023	CL s4111322.D	1	1	1				
44	2-nitroanaline	0.00	11/13/2023	CL s4111322.D	1	1	1				
45	acenaphthylene	0.00	11/13/2023	CL s4111322.D	1	1	1				
46	dimethyl phthalate	0.00	11/13/2023	CL s4111322.D	1	1	1				
47	2,6-dinitrotoluene	0.00	11/13/2023	CL s4111322.D	1	1	1				
48	2,4-dinitrotoluene	0.00	11/13/2023	CL s4111322.D	1	1	1				
49	acenaphthene	0.00	11/13/2023	CL s4111322.D	1	1	1				
50	3-nitroanaline	0.00	11/13/2023	CL s4111322.D	1	1	1				
52	dibenzofuran	0.00	11/13/2023	CL s4111322.D	1	1	1				
54	fluorene	0.00	11/13/2023	CL s4111322.D	1	1	1				
55	diethyl phthalate	0.00	11/13/2023	CL s4111322.D	1	1	1				
56	4-chlorophenyl phenyl ether	0.00	11/13/2023	CL s4111322.D	1	1	1				
57	4-nitroanaline	0.00	11/13/2023	CL s4111322.D	1	1	1				
61	azobenzene	0.00	11/13/2023	CL s4111322.D	1	1	1				
62	N-nitrosodiphenylamine	0.00	11/13/2023	CL s4111322.D	1	1	1				
63	4-bromophenyl phenyl ether	0.00	11/13/2023	CL s4111322.D	1	1	1				
64	hexachlorobenzene	0.00	11/13/2023	CL s4111322.D	1	1	1				
65	n-octadecane	0.00	11/13/2023	CL s4111322.D	1	1	1				
67	phenanthrene	0.00	11/13/2023	CL s4111322.D	1	1	1				
68	anthracene	0.00	11/13/2023	CL s4111322.D	1	1	1				
70	carbazole	0.00	11/13/2023	CL s4111322.D	1	1	1				
71	di-n-butyl phthalate	0.00	11/13/2023	CL s4111322.D	1	1	1				
73	fluoranthene	0.00	11/13/2023	CL s4111322.D	1	1	1				
76	benzidine	0.00	11/13/2023	CL s4111322.D	1	1	1				
77	pyrene	0.00	11/13/2023	CL s4111322.D	1	1	1				
78	butyl benzyl phthalate	0.00	11/13/2023	CL s4111322.D	1	1	1				
79	benzo(a)anthracene	0.00	11/13/2023	CL s4111322.D	1	1	1				
80	chrysene	0.00	11/13/2023	CL s4111322.D	1	1	1				
81	3,3'-dichlorobenzidine	0.00	11/13/2023	CL s4111322.D	1	1	1				
82	bis-2-ethylhexyl phthalate	0.00	11/13/2023	CL s4111322.D	1	1	1				
84	di-n-octyl phthalate	0.00	11/13/2023	CL s4111322.D	1	1	1				
85	Benzo(b)fluoranthene	0.00	11/13/2023	CL s4111322.D	1	1	1				
86	benzo(k)fluoranthene	0.00	11/13/2023	CL s4111322.D	1	1	1				
87	benzo(a)pyrene	0.00	11/13/2023	CL s4111322.D	1	1	1				
88	indeno(1,2,3-cd)pyrene	0.00	11/13/2023	CL s4111322.D	1	1	1				
89	dibenzo(a,h)anthracene	0.00	11/13/2023	CL s4111322.D	1	1	1				
90	benzo(g,h,i)perylene	0.00	11/13/2023	CL s4111322.D	1	1	1				

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Nov23\111323\
Data File : s4111321.D
Acq On : 13 Nov 2023 07:56 pm
Operator : cl
Sample : 67798-10 acid x1
Misc :
ALS Vial : 21 Sample Multiplier: 1

CL
11/20/23 @ 10:58
CharlesL

Quant Time: Nov 14 11:19:24 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration

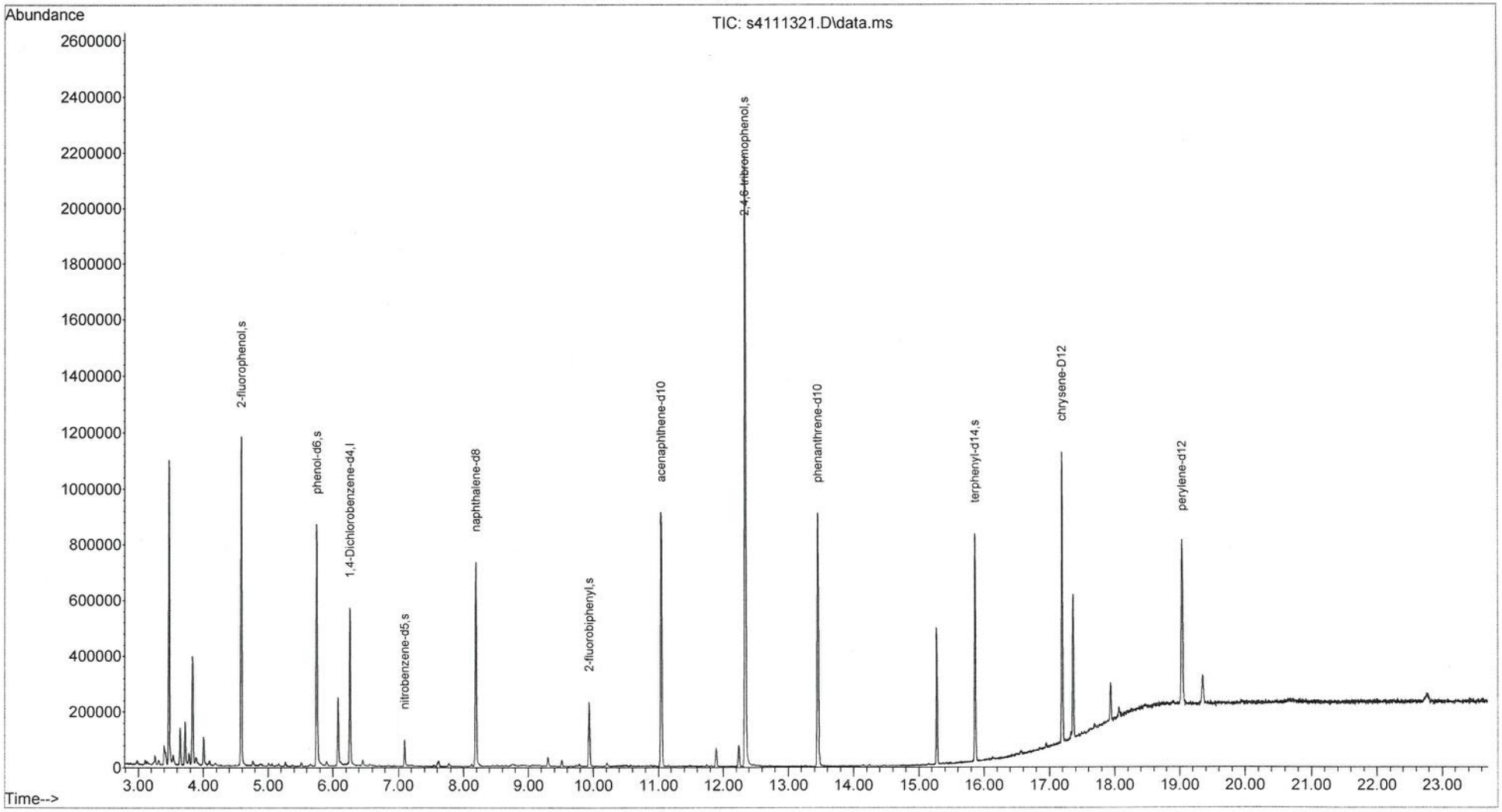
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.258	152	122262	10.00	ug/mL	0.00
21) naphthalene-d8	8.189	136	472337	10.00	ug/mL	0.00
37) acenaphthene-d10	11.043	164	260518	10.00	ug/mL	0.00
58) phenanthrene-d10	13.451	188	501236	10.00	ug/mL	0.00
74) chrysene-D12	17.194	240	395384	10.00	ug/mL	0.00
83) perylene-d12	19.039	264	327245	10.00	ug/mL	0.00
System Monitoring Compounds						
4) 2-fluorophenol	4.586	112	427020	28.12	ug/mL	0.00
Spiked Amount 200.000			Recovery =	14.06%		
7) phenol-d6	5.751	99	396627	21.50	ug/mL	0.00
Spiked Amount 200.000			Recovery =	10.75%		
22) nitrobenzene-d5	7.096	82	41500	2.49	ug/mL	0.00
Spiked Amount 100.000			Recovery =	2.49%		
38) 2-fluorobiphenyl	9.935	172	96628	2.32	ug/mL	0.00
Spiked Amount 100.000			Recovery =	2.32%		
59) 2,4,6-tribromophenol	12.340	330	407841	66.72	ug/mL	0.00
Spiked Amount 200.000			Recovery =	33.36%		
69) o-terphenyl	0.000	230	0	0.00	ug/mL	
Spiked Amount 100.000			Recovery =	0.00%		
72) 1-Chloro-octadecane	0.000	57	0	0.00	ug/mL	
Spiked Amount 100.000			Recovery =	0.00%		
75) terphenyl-d14	15.864	244	348571	8.16	ug/mL	0.00
Spiked Amount 100.000			Recovery =	8.16%		
Target Compounds						Qvalue
93) DDT	16.618	TIC	4607	Below Cal	#	22

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Nov23\111323\
Data File : s4111321.D
Acq On : 13 Nov 2023 07:56 pm
Operator : cl
Sample : 67798-10 acid x1
Misc :
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Nov 14 11:19:24 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Nov23\111323\
Data File : s4111322.D
Acq On : 13 Nov 2023 08:26 pm
Operator : cl
Sample : 67798-10 bn x1
Misc :
ALS Vial : 22 Sample Multiplier: 1

CL
11/20/23 @ 10:58
CharlesL

Quant Time: Nov 14 11:19:28 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration

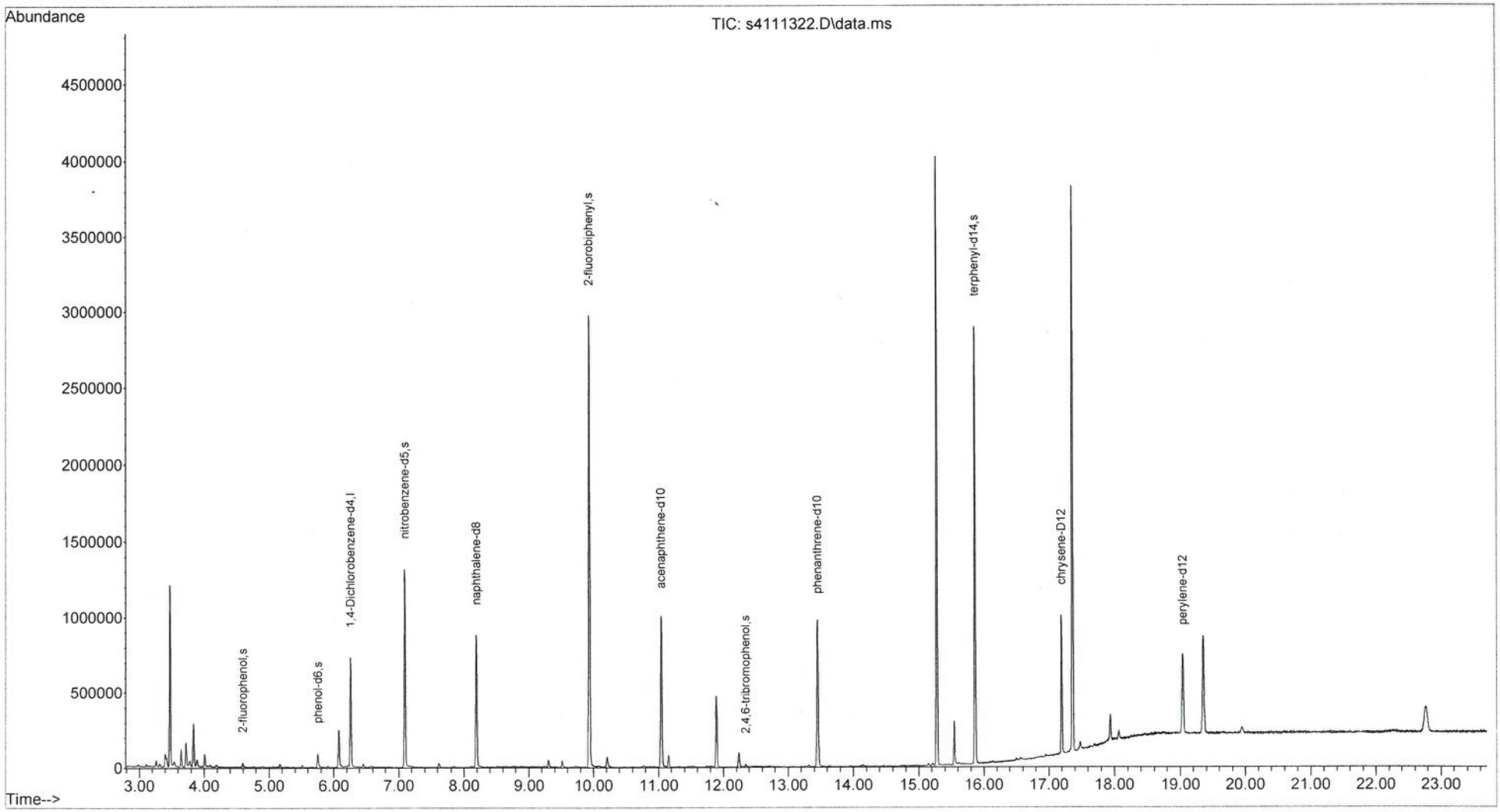
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.258	152	156910	10.00	ug/mL	0.00
21) naphthalene-d8	8.189	136	574463	10.00	ug/mL	0.00
37) acenaphthene-d10	11.041	164	305200	10.00	ug/mL	0.00
58) phenanthrene-d10	13.451	188	539312	10.00	ug/mL	0.00
74) chrysene-D12	17.194	240	363981	10.00	ug/mL	0.00
83) perylene-d12	19.039	264	298478	10.00	ug/mL	0.00
System Monitoring Compounds						
4) 2-fluorophenol	4.591	112	7145	0.37	ug/mL	0.00
Spiked Amount 200.000			Recovery =	0.19%		
7) phenol-d6	5.751	99	45906	1.94	ug/mL	0.00
Spiked Amount 200.000			Recovery =	0.97%		
22) nitrobenzene-d5	7.094	82	550613	27.30	ug/mL	0.00
Spiked Amount 100.000			Recovery =	27.30%		
38) 2-fluorobiphenyl	9.935	172	1274336	26.53	ug/mL	0.00
Spiked Amount 100.000			Recovery =	26.53%		
59) 2,4,6-tribromophenol	12.343	330	3169	0.57	ug/mL	0.00
Spiked Amount 200.000			Recovery =	0.28%		
69) o-terphenyl	14.149	230	960	0.00	ug/mL	0.00
Spiked Amount 100.000			Recovery =	0.00%		
72) 1-Chloro-octadecane	0.000	57	0	0.00	ug/mL	
Spiked Amount 100.000			Recovery =	0.00%		
75) terphenyl-d14	15.864	244	1282339	32.63	ug/mL	0.00
Spiked Amount 100.000			Recovery =	32.63%		
Target Compounds						Qvalue
93) DDT	16.611	TIC	1112	Below Cal	#	22

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Nov23\111323\
Data File : s4111322.D
Acq On : 13 Nov 2023 08:26 pm
Operator : cl
Sample : 67798-10 bn x1
Misc :
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Nov 14 11:19:28 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration



This File:	L:\SVOA\Excel Reports\EPH\231213\67798-001		
Analysis Group:	EPH	Dow Salvage Yard	
Field ID:	SY-OBMW12-110723	CRE	
Sample:	67798-01 targets x1	67798-01 aro x1	67798-01 ali x1
Misc:	aro frac		
Method Name:	SVOA04 Method 8270E (t	S6 EPH Aromatics	S6 EPH Aliphatics
Import File Name:	s6 EPHs QC17110		
TestGroupID:	EMA_EPH_PresCert_A		
Aqueous or Soil? (A or S)	A		
Fractionated? (Y/N)	Y	Y	
Prep Date:	11/13/2023		
Lab#:	67798-001		
QC_Code:			
Prep#	17110		

Skyla Marquis L:\SVOA\EPH\EPH ImportFileBuilder2.0.xls
12/13/23 2:44 PM
L:\SVOA\EPH\
L:\SVOA\Excel Reports\EPH\2312
L:\SVOA\PDF Reports\FUELS\

Reviewer Checks:

- Quant Report: Reviewed? Ranges integrated? Analyst Initials & Date?
- Chromatogram Checked? Major peaks identified?
- Soil prep data checked: weight, volume, %solid, Prep date
- Field ID consistent with data and any field replicates
- Results consistent with any re-runs & internal QC
- Substitute dilution data checked
- Correct dilution and reason clear or noted
- Reason for reanalysis documented
- Surrogates pass or flagged & noted
- Flags checked (Expiration, F+, Over Cal)
- Other QC failures, estimates or interferences documented
- Spot checked Reported Result with Quant Report
- Checked Audit flagged data in LIMS

Notes:

Initials & Date: 12/13/23

1
2
5
11
16
20

X:\S4\2023\Dec23\120723\s4120717.D\S4PAH110223A.XLS PAH targets filename
X:\S6\2023\Dec23\120723\s6120732.D\S6ARO100423F.XLS aromatics filename
X:\S6\2023\Dec23\120723.SEC\s6120731.D\S6ALI100423A.XLS aliphatics filename

#	Surrogate Standards	Concentration (ug/mL)	AnalysisDate	AnalysisTime	AnalyzedBy	Dilution	Weight	Volume	Surr	Recovery	Flag	QC Limits
13	SS 1-chloro-octadecane (COD)	24.30255447	12/7/2023	05:07:00 PM	DBV s6120731.D	1	1	2	100	**49%**		40-140
10	SS ortho-terphenyl (OTP)	28.35405138	12/7/2023	05:07:00 PM	DBV s6120732.D	1	1	2	100	**57%**		40-140
3	SS 2-fluorobiphenyl (2FBP)	14.71541632	12/7/2023	05:07:00 PM	DBV s6120732.D	1	1	2	40	**74%**		40-140
5	SS 2-bromonaphthalene (2BN)	15.20516431	12/7/2023	05:07:00 PM	DBV s6120732.D	1	1	2	40	**76%**		40-140

#	AnalyteName	Concentration (ug/mL)	AnalysisDate	AnalysisTime	AnalyzedBy	Dilution	Weight	Volume
3	naphthalene	0	12/07/2023	06:22:00 PM	CL s4120717.D	1	1	2
4	2-methylnaphthalene	0	12/07/2023	06:22:00 PM	CL s4120717.D	1	1	2
12	phenanthrene	0	12/07/2023	06:22:00 PM	CL s4120717.D	1	1	2
8	acenaphthene	0	12/07/2023	06:22:00 PM	CL s4120717.D	1	1	2
7	acenaphthylene	0	12/07/2023	06:22:00 PM	CL s4120717.D	1	1	2
10	fluorene	0	12/07/2023	06:22:00 PM	CL s4120717.D	1	1	2
13	anthracene	0	12/07/2023	06:22:00 PM	CL s4120717.D	1	1	2
15	fluoranthene	0	12/07/2023	06:22:00 PM	CL s4120717.D	1	1	2
17	pyrene	0	12/07/2023	06:22:00 PM	CL s4120717.D	1	1	2
18	benzo(a)anthracene	0	12/07/2023	06:22:00 PM	CL s4120717.D	1	1	2
19	chrysene	0	12/07/2023	06:22:00 PM	CL s4120717.D	1	1	2
21	benzo(b)fluoranthene	0	12/07/2023	06:22:00 PM	CL s4120717.D	1	1	2
22	benzo(k)fluoranthene	0	12/07/2023	06:22:00 PM	CL s4120717.D	1	1	2
23	benzo(a)pyrene	0	12/07/2023	06:22:00 PM	CL s4120717.D	1	1	2
24	indeno(1,2,3-cd)pyrene	0	12/07/2023	06:22:00 PM	CL s4120717.D	1	1	2
25	dibenzo(a,h)anthracene	0	12/07/2023	06:22:00 PM	CL s4120717.D	1	1	2
26	benzo(g,h,i)perylene	0	12/07/2023	06:22:00 PM	CL s4120717.D	1	1	2
20	C11-C22 Aromatics	49.67656231	12/7/2023	05:07:00 PM	DBV s6120732.D	1	1	2
9	C9-C18 Aliphatics	13.06254878	12/7/2023	05:07:00 PM	DBV s6120731.D	1	1	2
20	C19-C36 Aliphatics	28.58229434	12/7/2023	05:07:00 PM	DBV s6120731.D	1	1	2
	Adjusted C11-C22 Aromatics	49.67656231	12/7/2023	05:07:00 PM	DBV s6120732.D	1	1	2

Data Path : X:\S4\2023\Dec23\120723\
Data File : s4120717.D
Acq On : 07 Dec 2023 06:22 pm
Operator : cl
Sample : 67798-01 targets x1
Misc : aro frac
ALS Vial : 12 Sample Multiplier: 1

CL
12/8/23 @ 14:43
CharlesL

Quant Time: Dec 08 08:54:05 2023
Quant Method : X:\S4\methods\S4PAH110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration

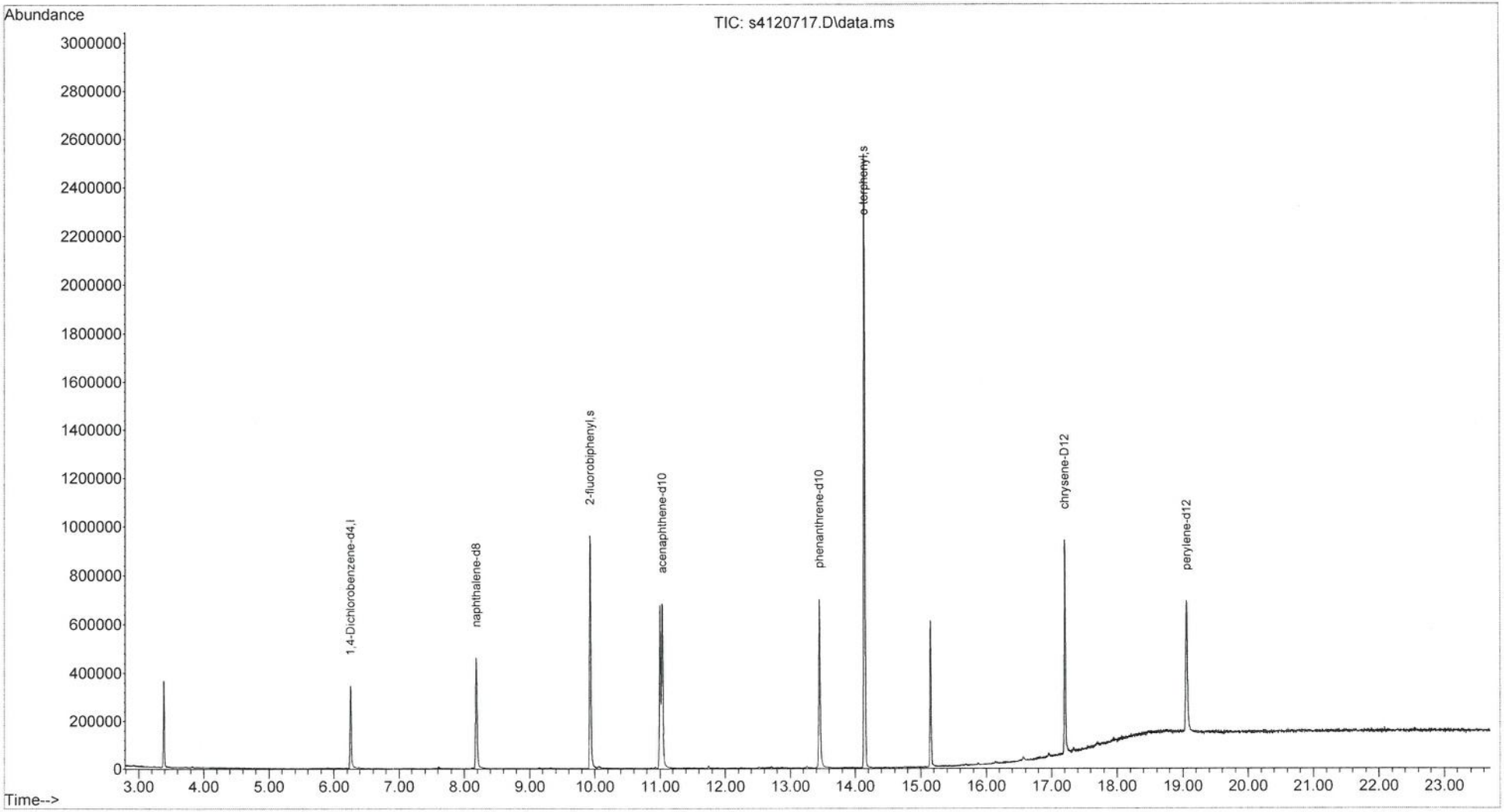
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.250	152	82342	10.00	ug/mL	-0.01
2) naphthalene-d8	8.182	136	336503	10.00	ug/mL	-0.01
5) acenaphthene-d10	11.033	164	201984	10.00	ug/mL	-0.01
11) phenanthrene-d10	13.449	188	396709	10.00	ug/mL	-0.01
16) chrysene-D12	17.205	240	376014	10.00	ug/mL	0.00
20) perylene-d12	19.057	264	354547	10.00	ug/mL	0.02
System Monitoring Compounds						
6) 2-fluorobiphenyl	9.930	172	456792	14.35	ug/mL	-0.01
Spiked Amount 100.000			Recovery = 14.35%			
14) o-terphenyl	14.142	230	694253	30.82	ug/mL	-0.01
Spiked Amount 100.000			Recovery = 30.82%			
Target Compounds						Qvalue
3) naphthalene	8.210	128	1041	Below Cal	#	68

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Dec23\120723\
Data File : s4120717.D
Acq On : 07 Dec 2023 06:22 pm
Operator : cl
Sample : 67798-01 targets x1
Misc : aro frac
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Dec 08 08:54:05 2023
Quant Method : X:\S4\methods\S4PAH110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration



SFP
12/12/23 @ 12:24
SkylaM

Data Path : X:\S6\2023\Dec23\120723\
Data File : s6120732.D
Signal(s) : FID1A.ch
Acq On : 07 Dec 2023 05:07 pm
Operator : dbv
Sample : 67798-01 aro x1
Misc :
ALS Vial : 16 Sample Multiplier: 1

Integration File: rteint.p
Quant Time: Dec 08 17:08:25 2023
Quant Method : X:\S6\methods\S6ARO100423F.M
Quant Title : S6 EPH Aromatics
QLast Update : Thu Oct 05 11:16:37 2023
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :

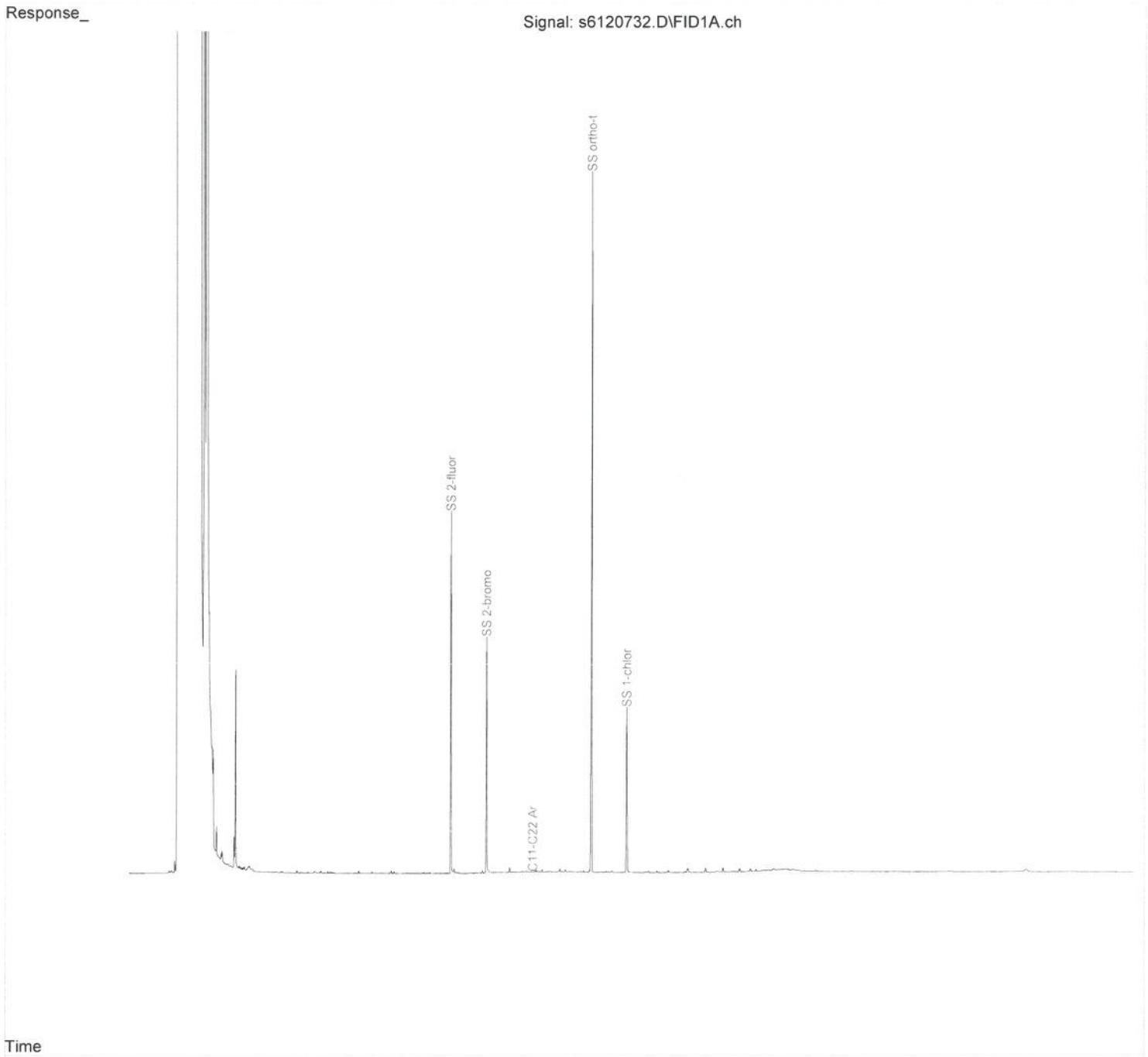
	Compound	R.T.	Response	Conc	Units	
	System Monitoring Compounds					
3) S	SS 2-fluorobiphenyl (...	9.527	2076659	14.715	ug/mLm	BC = Baseline Correction
Spiked Amount	20.000		Recovery =	73.58%		
5) S	SS 2-bromonaphthalene...	10.604	1450014	15.205	ug/mLm	BC = Baseline Correction
Spiked Amount	20.000		Recovery =	76.02%		
10) S	SS ortho-terphenyl (OTP)	13.726	4242047	28.354	ug/mLm	BC = Baseline Correction
Spiked Amount	50.000		Recovery =	56.71%		
11) S	SS 1-chloro-otadecane...	14.765	1109853	9.086	ug/mL	
Spiked Amount	50.000		Recovery =	18.17%		
	Target Compounds					
1)	naphthalene	0.000	0	N.D.	ug/mLd	
2)	2-methylnaphthalene	0.000	0	N.D.	ug/mLd	
4)	acenaphthylene	0.000	0	N.D.	ug/mLd	
6)	acenaphthene	0.000	0	N.D.	ug/mL	
7)	fluorene	0.000	0	N.D.	ug/mL	
8)	phenanthrene	0.000	0	N.D.	ug/mL	
9)	anthracene	0.000	0	N.D.	ug/mL	
12)	fluoranthene	0.000	0	N.D.	ug/mLd	
13)	pyrene	0.000	0	N.D.	ug/mL	
14)	benzo(a)anthracene	0.000	0	N.D.	ug/mL	
15)	chrysene	0.000	0	N.D.	ug/mL	
16)	benzo(b&k)fluoranthenes	0.000	0	N.D.	ug/mL	
17)	benzo(a)pyrene	0.000	0	N.D.	ug/mL	
18)	indeno&dibenzo	0.000	0	N.D.	ug/mL	
19)	benzo(g,h,i)perylene	0.000	0	N.D.	ug/mL	
20) H	C11-C22 Aromatics	12.000	7234362	49.677	ug/mLm	RI = Range Integration

(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : X:\S6\2023\Dec23\120723\
Data File : s6120732.D
Signal(s) : FID1A.ch
Acq On : 07 Dec 2023 05:07 pm
Operator : dbv
Sample : 67798-01 aro x1
Misc :
ALS Vial : 16 Sample Multiplier: 1

Integration File: rteint.p
Quant Time: Dec 08 17:08:25 2023
Quant Method : X:\S6\methods\S6ARO100423F.M
Quant Title : S6 EPH Aromatics
QLast Update : Thu Oct 05 11:16:37 2023
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : X:\S6\2023\Dec23\120723.SEC\
Data File : s6120731.D
Signal(s) : FID2B.ch
Acq On : 07 Dec 2023 05:07 pm
Operator : dbv
Sample : 67798-01 ali x1
Misc :
ALS Vial : 91 Sample Multiplier: 1

12/12/23 @ 08:25
DonnaV

Integration File: rteint.p
Quant Time: Dec 08 17:08:47 2023
Quant Method : X:\S6\methods\S6ALI100423A.M
Quant Title : S6 EPH Aliphatics
QLast Update : Thu Oct 05 13:01:54 2023
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :

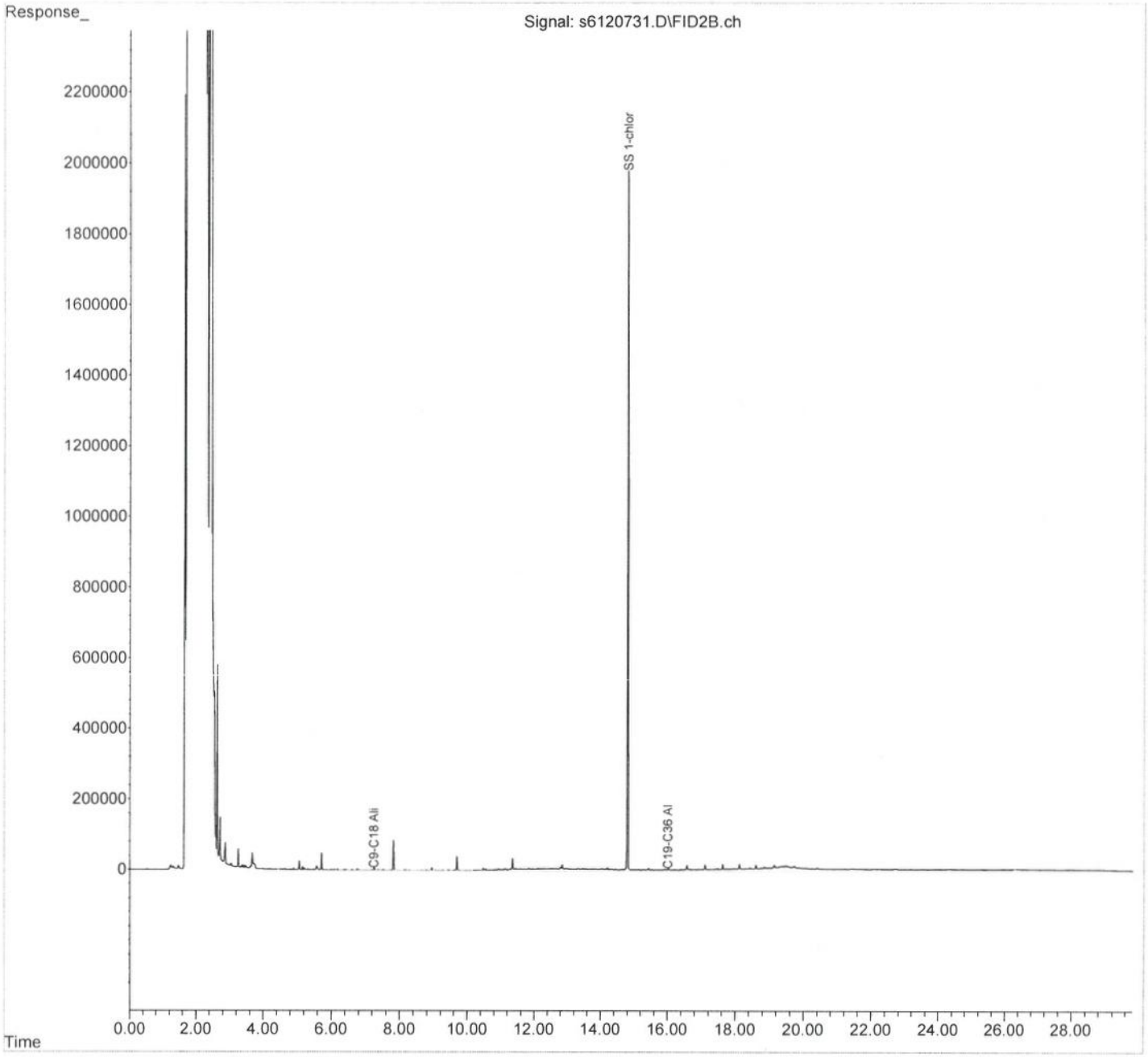
	Compound	R.T.	Response	Conc	Units	
	System Monitoring Compounds					
4) S	SS 2-fluorobiphenyl (...	0.000	0	N.D.	ug/mLd	
Spiked Amount	20.000	Recovery	=	0.00%		
6) S	SS 2-bromonaphthalene...	0.000	0	N.D.	ug/mLd	
Spiked Amount	20.000	Recovery	=	0.00%		
11) S	SS ortho-terphenyl (OTP)	0.000	0	N.D.	ug/mLd	
Spiked Amount	50.000	Recovery	=	0.00%		
13) S	SS 1-chloro-octadecan...	14.809f	2853379	24.303	ug/mLm	BC = Baseline Correction
Spiked Amount	50.000	Recovery	=	48.61%		
	Target Compounds					
1)	C9 n-Nonane	0.000	0	N.D.	ug/mLd	
2)	C10 n-Decane	0.000	0	N.D.	ug/mLd	
3)	C12 n-Dodecane	0.000	0	N.D.	ug/mLd	
5)	C14 n-Tetradecane	0.000	0	N.D.	ug/mLd	
7)	C16 n-Hexadecane	0.000	0	N.D.	ug/mLd	
8)	C18 n-Octadecane	0.000	0	N.D.	ug/mLd	
9) H	C9-C18 Aliphatics	7.237	1749914	13.063	ug/mLm	RI = Range Integration
10)	C19 n-Nonadecane	0.000	0	N.D.	ug/mLd	
12)	C20 n-Eicosane	0.000	0	N.D.	ug/mLd	
14)	C22 n-Docosane	0.000	0	N.D.	ug/mLd	
15)	C24 n-Tetracosane	0.000	0	N.D.	ug/mLd	
16)	C26 n-Hexacosane	0.000	0	N.D.	ug/mLd	
17)	C28 n-Octacosane	0.000	0	N.D.	ug/mLd	
18)	C30 n-Triacontane	0.000	0	N.D.	ug/mLd	
19)	C36 n-Hexatriacontane	0.000	0	N.D.	ug/mLd	
20) H	C19-C36 Aliphatics	16.000	3925964	28.582	ug/mLm	RI = Range Integration

(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : X:\S6\2023\Dec23\120723.SEC\
Data File : s6120731.D
Signal(s) : FID2B.ch
Acq On : 07 Dec 2023 05:07 pm
Operator : dbv
Sample : 67798-01 ali x1
Misc :
ALS Vial : 91 Sample Multiplier: 1

Integration File: rteint.p
Quant Time: Dec 08 17:08:47 2023
Quant Method : X:\S6\methods\S6ALI100423A.M
Quant Title : S6 EPH Aliphatics
QLast Update : Thu Oct 05 13:01:54 2023
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Dec23\120723\
Data File : s4120730.D
Acq On : 08 Dec 2023 12:53 am
Operator : cl
Sample : 67798-01ms targets x1
Misc : aro frac
ALS Vial : 25 Sample Multiplier: 1

CL
12/8/23 @ 14:43
CharlesL

Quant Time: Dec 08 08:54:45 2023
Quant Method : X:\S4\methods\S4PAH110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration

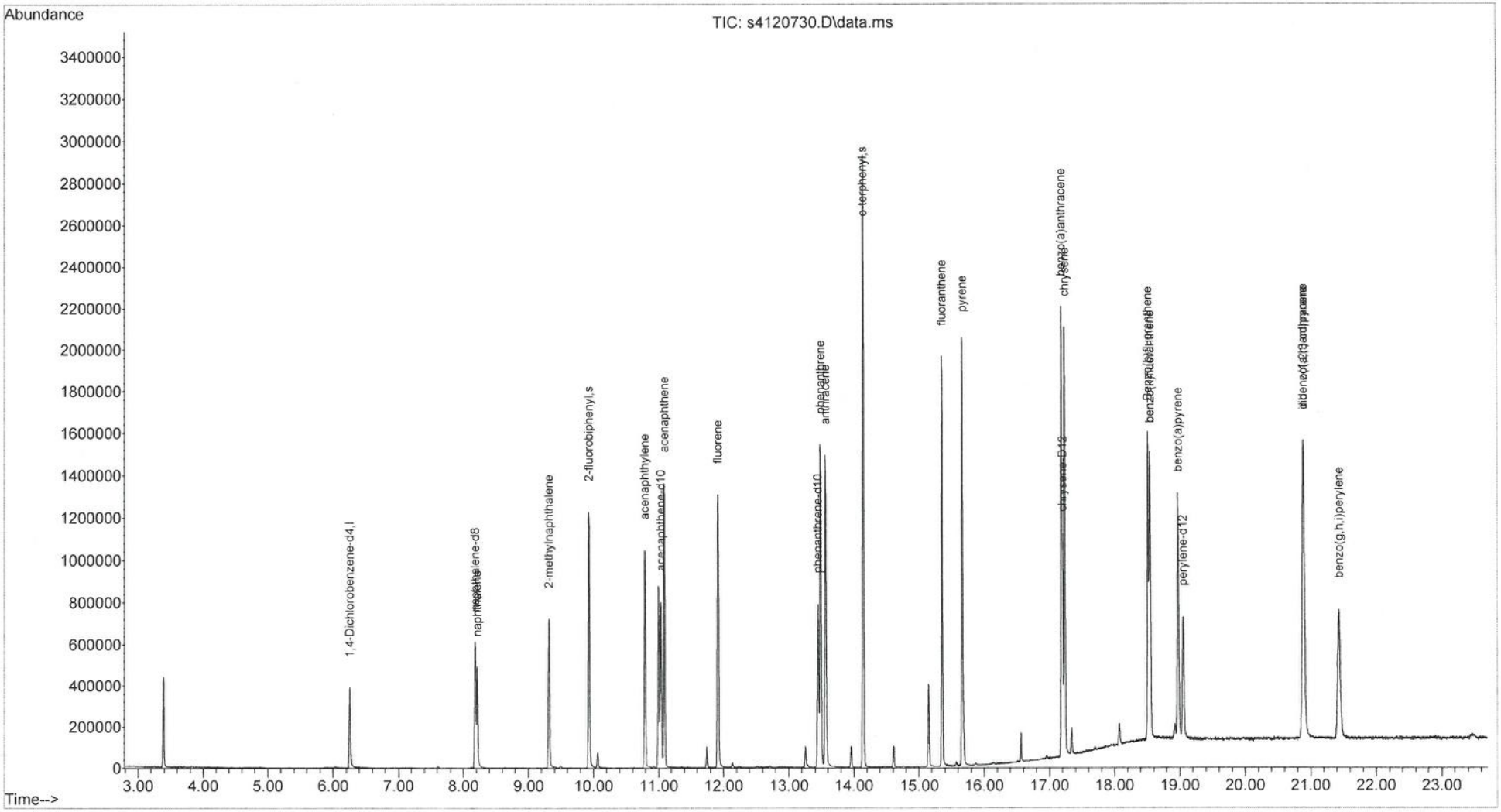
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.253	152	94743	10.00	ug/mL	-0.01
2) naphthalene-d8	8.182	136	387333	10.00	ug/mL	-0.01
5) acenaphthene-d10	11.036	164	229452	10.00	ug/mL	-0.01
11) phenanthrene-d10	13.446	188	433288	10.00	ug/mL	-0.01
16) chrysene-D12	17.202	240	372485	10.00	ug/mL	0.00
20) perylene-d12	19.052	264	331124	10.00	ug/mL	0.01
System Monitoring Compounds						
6) 2-fluorobiphenyl	9.930	172	537298	14.86	ug/mL	-0.01
Spiked Amount 100.000			Recovery = 14.86%			
14) o-terphenyl	14.142	230	794874	32.31	ug/mL	-0.01
Spiked Amount 100.000			Recovery = 32.31%			
Target Compounds						Qvalue
3) naphthalene	8.212	128	327222	7.909	ug/mL	99
4) 2-methylnaphthalene	9.316	142	288452	10.127	ug/mL	98
7) acenaphthylene	10.786	152	643973	14.264	ug/mL	99
8) acenaphthene	11.087	154	425238	15.152	ug/mL	99
10) fluorene	11.915	166	560000	15.872	ug/mL	99
12) phenanthrene	13.484	178	901879	18.247	ug/mL	99
13) anthracene	13.561	178	909125	18.137	ug/mL	99
15) fluoranthene	15.355	202	987853	19.361	ug/mL	99
17) pyrene	15.666	202	1035074	17.064	ug/mL	99
18) benzo(a)anthracene	17.184	228	897258	17.817	ug/mL	99
19) chrysene	17.235	228	879751	18.734	ug/mL	98
21) Benzo(b)fluoranthene	18.517	252	861478	17.720	ug/mL	96
22) benzo(k)fluoranthene	18.548	252	748934	16.824	ug/mL	97
23) benzo(a)pyrene	18.976	252	750905	17.489	ug/mL	100
24) indeno(1,2,3-cd)pyrene	20.889	276	806110	17.739	ug/mL#	70
25) dibenzo(a,h)anthracene	20.889	278	683113	17.946	ug/mL#	89
26) benzo(g,h,i)perylene	21.435	276	629359	18.500	ug/mL#	77

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Dec23\120723\
Data File : s4120730.D
Acq On : 08 Dec 2023 12:53 am
Operator : cl
Sample : 67798-01ms targets x1
Misc : aro frac
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Dec 08 08:54:45 2023
Quant Method : X:\S4\methods\S4PAH110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration



SFP
12/12/23 @ 12:24
SkylaM

Data Path : X:\S6\2023\Dec23\120723\
Data File : s6120734.D
Signal(s) : FID1A.ch
Acq On : 07 Dec 2023 05:41 pm
Operator : dbv
Sample : 67798-01ms aro x1
Misc :
ALS Vial : 17 Sample Multiplier: 1

Integration File: rteint.p
Quant Time: Dec 08 17:08:27 2023
Quant Method : X:\S6\methods\S6ARO100423F.M
Quant Title : S6 EPH Aromatics
QLast Update : Thu Oct 05 11:16:37 2023
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :

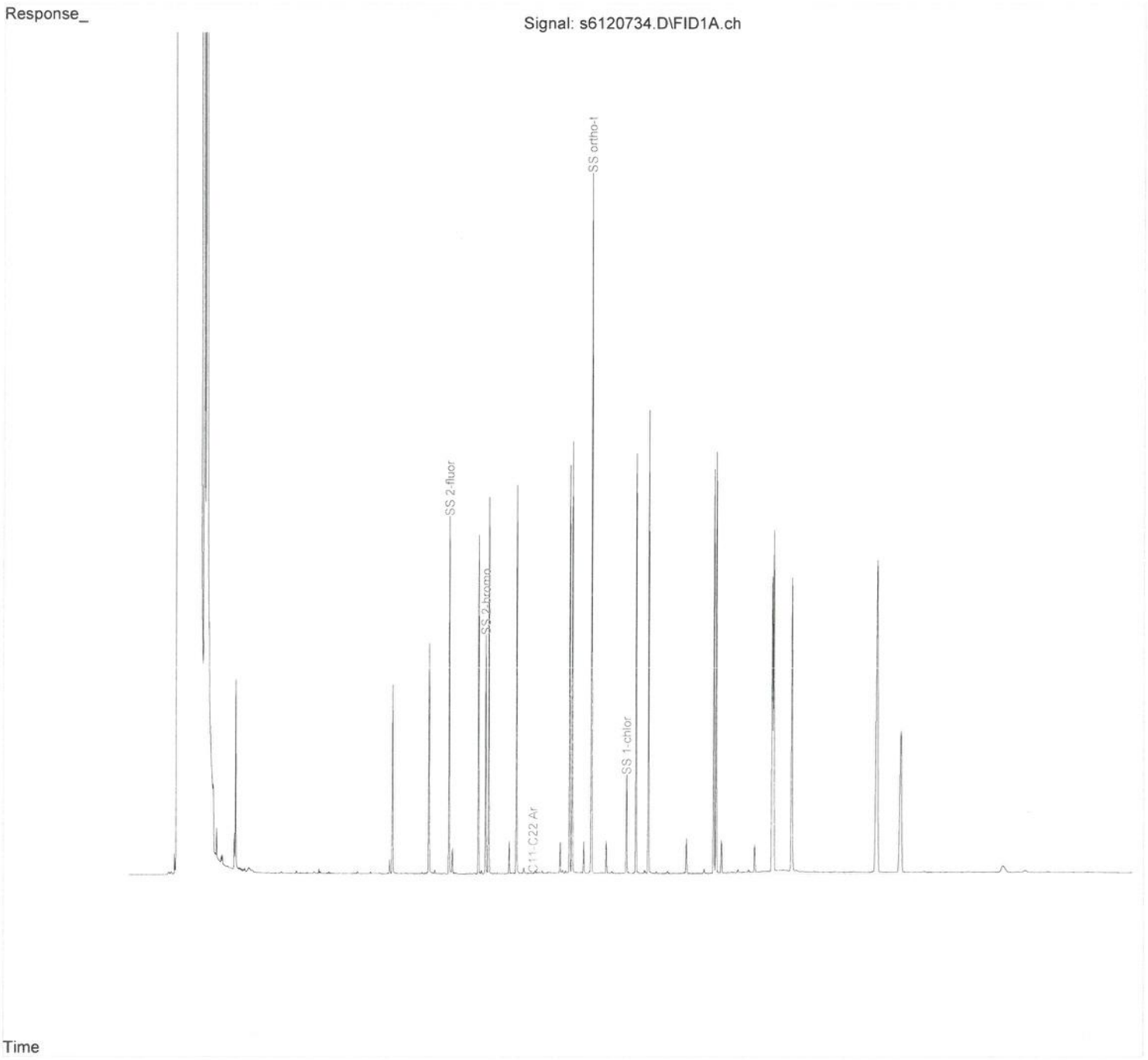
	Compound	R.T.	Response	Conc	Units	
	System Monitoring Compounds					
3)	S SS 2-fluorobiphenyl (...	9.528	2134887	15.128	ug/mLm	BC = Baseline Correction
Spiked Amount	20.000		Recovery =	75.64%		
5)	S SS 2-bromonaphthalene...	10.606	1463084	15.342	ug/mLm	BC = Baseline Correction
Spiked Amount	20.000		Recovery =	76.71%		
10)	S SS ortho-terphenyl (OTP)	13.727	4598928	30.737	ug/mLm	BC = Baseline Correction
Spiked Amount	50.000		Recovery =	61.47%		
11)	S SS 1-chloro-otadecane...	14.767	697770	5.718	ug/mL	
Spiked Amount	50.000		Recovery =	11.44%		
	Target Compounds					
1)	naphthalene	0.000	0	N.D.	ug/mLd	
2)	2-methylnaphthalene	0.000	0	N.D.	ug/mLd	
4)	acenaphthylene	0.000	0	N.D.	ug/mLd	
6)	acenaphthene	0.000	0	N.D.	ug/mLd	
7)	fluorene	0.000	0	N.D.	ug/mLd	
8)	phenanthrene	0.000	0	N.D.	ug/mLd	
9)	anthracene	0.000	0	N.D.	ug/mLd	
12)	fluoranthene	0.000	0	N.D.	ug/mLd	
13)	pyrene	0.000	0	N.D.	ug/mLd	
14)	benzo(a)anthracene	0.000	0	N.D.	ug/mLd	
15)	chrysene	0.000	0	N.D.	ug/mL	
16)	benzo(b&k)fluoranthenes	0.000	0	N.D.	ug/mL	
17)	benzo(a)pyrene	0.000	0	N.D.	ug/mL	
18)	indeno&dibenzo	0.000	0	N.D.	ug/mL	
19)	benzo(g,h,i)perylene	0.000	0	N.D.	ug/mL	
20)	H C11-C22 Aromatics	12.000	51118950	341.898	ug/mLm	RI = Range Integration

(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : X:\S6\2023\Dec23\120723\
Data File : s6120734.D
Signal(s) : FID1A.ch
Acq On : 07 Dec 2023 05:41 pm
Operator : dbv
Sample : 67798-01ms aro x1
Misc :
ALS Vial : 17 Sample Multiplier: 1

Integration File: rteint.p
Quant Time: Dec 08 17:08:27 2023
Quant Method : X:\S6\methods\S6ARO100423F.M
Quant Title : S6 EPH Aromatics
QLast Update : Thu Oct 05 11:16:37 2023
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : X:\S6\2023\Dec23\120723.SEC\
Data File : s6120733.D
Signal(s) : FID2B.ch
Acq On : 07 Dec 2023 05:41 pm
Operator : dbv
Sample : 67798-01ms ali x1
Misc :
ALS Vial : 92 Sample Multiplier: 1

12/12/23 @ 08:25
DonnaV

Integration File: rteint.p
Quant Time: Dec 08 17:08:49 2023
Quant Method : X:\S6\methods\S6ALI100423A.M
Quant Title : S6 EPH Aliphatics
QLast Update : Thu Oct 05 13:01:54 2023
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :

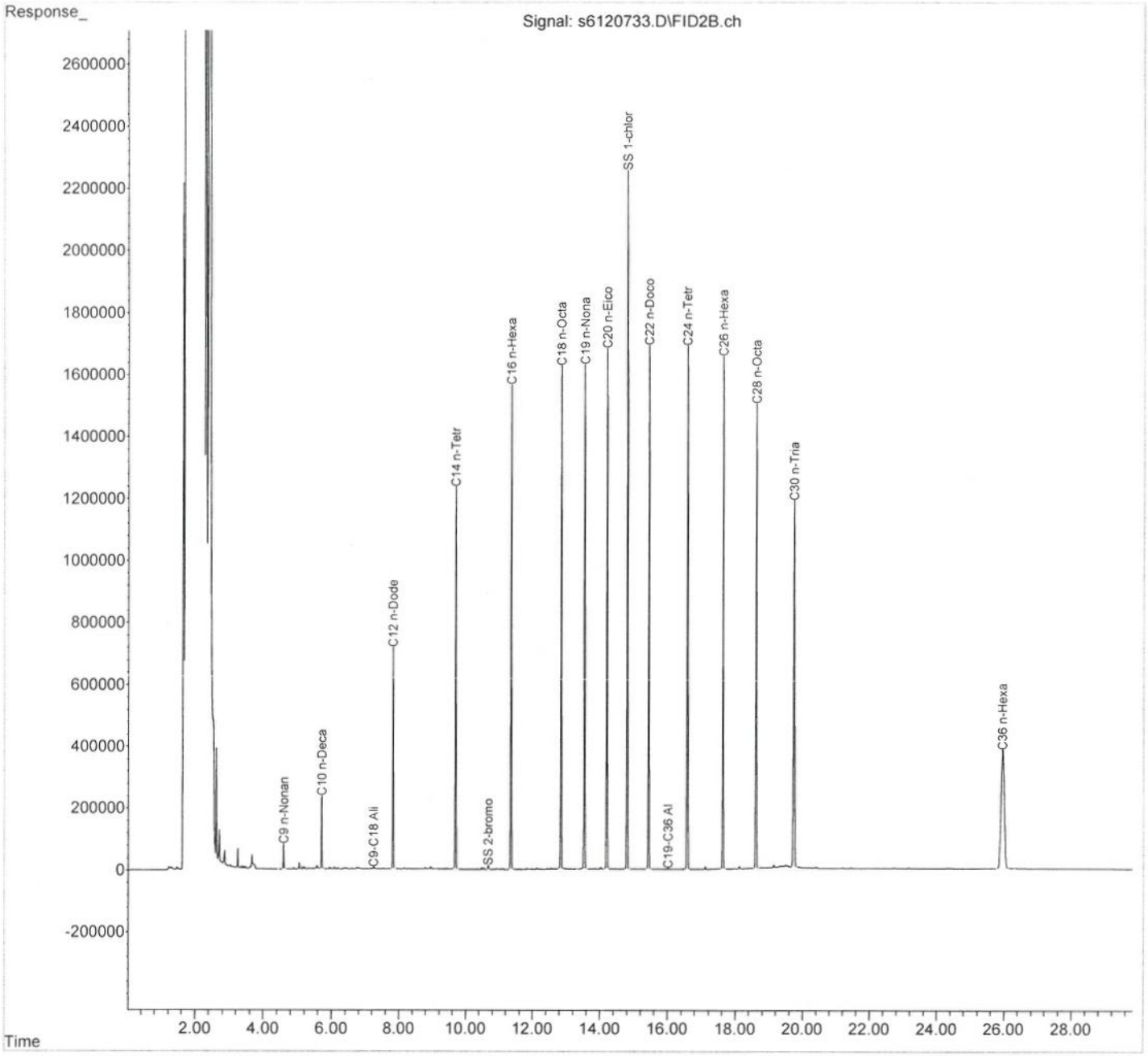
	Compound	R.T.	Response	Conc Units	
	System Monitoring Compounds				
4) S	SS 2-fluorobiphenyl (...	0.000	0	N.D. ug/mLd	
Spiked Amount	20.000		Recovery =	0.00%	
6) S	SS 2-bromonaphthalene...	10.675f	18235	0.188 ug/mLm	BC = Baseline Correction
Spiked Amount	20.000		Recovery =	0.94%	
11) S	SS ortho-terphenyl (OTP)	0.000	0	N.D. ug/mLd	
Spiked Amount	50.000		Recovery =	0.00%	
13) S	SS 1-chloro-octadecan...	14.808f	3193700	27.207 ug/mL	
Spiked Amount	50.000		Recovery =	54.41%	
	Target Compounds				
1)	C9 n-Nonane	4.607	94219	0.642 ug/mL	
2)	C10 n-Decane	5.718f	276717	2.069 ug/mL	
3)	C12 n-Dodecane	7.823f	914326	7.062 ug/mL	
5)	C14 n-Tetradecane	9.693f	1661061	12.988 ug/mL	
7)	C16 n-Hexadecane	11.358f	2138101	16.402 ug/mL	
8)	C18 n-Octadecane	12.852f	2304989	17.412 ug/mL	
9) H	C9-C18 Aliphatics	7.237	9874213	76.589 ug/mLm	RI = Range Integration
10)	C19 n-Nonadecane	13.546f	2361741	17.808 ug/mL	
12)	C20 n-Eicosane	14.208f	2415576	17.755 ug/mL	
14)	C22 n-Docosane	15.445f	2486383	18.729 ug/mL	
15)	C24 n-Tetracosane	16.579f	2525054	18.961 ug/mL	
16)	C26 n-Hexacosane	17.631f	2537184	18.847 ug/mL	
17)	C28 n-Octacosane	18.614f	2535383	18.839 ug/mL	
18)	C30 n-Triacontane	19.746f	2574249	19.080 ug/mLm	BC = Baseline Correction
19)	C36 n-Hexatriacontane	25.953f	2495354	19.473 ug/mLm	BC = Baseline Correction
20) H	C19-C36 Aliphatics	16.000	24047093	180.539 ug/mLm	RI = Range Integration

(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : X:\S6\2023\Dec23\120723.SEC\
Data File : s6120733.D
Signal(s) : FID2B.ch
Acq On : 07 Dec 2023 05:41 pm
Operator : dbv
Sample : 67798-01ms ali x1
Misc :
ALS Vial : 92 Sample Multiplier: 1

Integration File: rteint.p
Quant Time: Dec 08 17:08:49 2023
Quant Method : X:\S6\methods\S6ALI100423A.M
Quant Title : S6 EPH Aliphatics
QLast Update : Thu Oct 05 13:01:54 2023
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :



Data Path : X:\S4\2023\Dec23\120723\
Data File : s4120760.D
Acq On : 08 Dec 2023 03:50 pm
Operator : cl
Sample : 67798-01msd targets x1
Misc : aro frac
ALS Vial : 55 Sample Multiplier: 1

CL
12/8/23 @ 16:25
CharlesL

Quant Time: Dec 08 16:20:00 2023
Quant Method : X:\S4\methods\S4PAH110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration

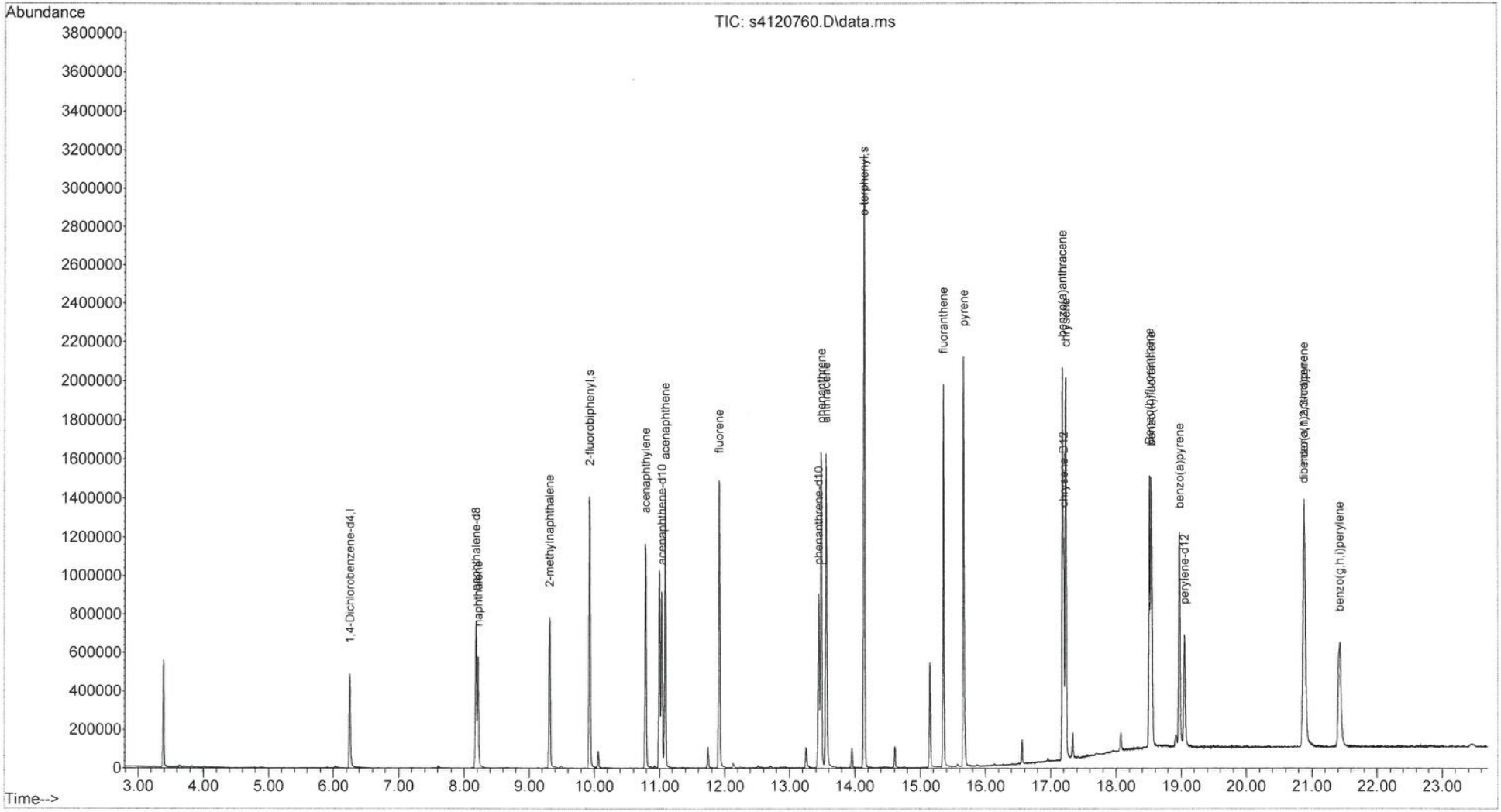
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.250	152	111497	10.00	ug/mL	-0.01
2) naphthalene-d8	8.179	136	467131	10.00	ug/mL	-0.02
5) acenaphthene-d10	11.035	164	262798	10.00	ug/mL	-0.01
11) phenanthrene-d10	13.446	188	491654	10.00	ug/mL	#-0.01
16) chrysene-D12	17.199	240	401183	10.00	ug/mL	0.00
20) perylene-d12	19.049	264	350187	10.00	ug/mL	0.01
System Monitoring Compounds						
6) 2-fluorobiphenyl	9.927	172	624773	15.09	ug/mL	-0.02
Spiked Amount 100.000			Recovery = 15.09%			
14) o-terphenyl	14.142	230	877467	31.43	ug/mL	-0.01
Spiked Amount 100.000			Recovery = 31.43%			
Target Compounds						Qvalue
3) naphthalene	8.212	128	387570	7.767	ug/mL	100
4) 2-methylnaphthalene	9.310	142	328065	9.545	ug/mL	97
7) acenaphthylene	10.786	152	720342	13.930	ug/mL	98
8) acenaphthene	11.084	154	468417	14.569	ug/mL	99
10) fluorene	11.915	166	609194	15.071	ug/mL	99
12) phenanthrene	13.484	178	953069	16.986	ug/mL	100
13) anthracene	13.558	178	951575	16.724	ug/mL	99
15) fluoranthene	15.352	202	1021964	17.644	ug/mL	99
17) pyrene	15.663	202	1077058	16.485	ug/mL	99
18) benzo(a)anthracene	17.179	228	909259	16.758	ug/mL	99
19) chrysene	17.232	228	877437	17.340	ug/mL	99
21) Benzo(b)fluoranthene	18.512	252	815075	15.846	ug/mL	97
22) benzo(k)fluoranthene	18.542	252	785645m BC	16.687	ug/mL	
23) benzo(a)pyrene	18.973	252	715356	15.748	ug/mL	100
24) indeno(1,2,3-cd)pyrene	20.881	276	727091	15.121	ug/mL#	94
25) dibenzo(a,h)anthracene	20.879	278	633425	15.728	ug/mL#	74
26) benzo(g,h,i)perylene	21.427	276	569057	15.805	ug/mL#	70

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Dec23\120723\
Data File : s4120760.D
Acq On : 08 Dec 2023 03:50 pm
Operator : cl
Sample : 67798-01msd targets x1
Misc : aro frac
ALS Vial : 55 Sample Multiplier: 1

Quant Time: Dec 08 16:20:00 2023
Quant Method : X:\S4\methods\S4PAH110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration



SFP
12/12/23 @ 12:24
SkylaM

Data Path : X:\S6\2023\Dec23\120723\
Data File : s6120736.D
Signal(s) : FID1A.ch
Acq On : 07 Dec 2023 06:15 pm
Operator : dbv
Sample : 67798-01msd aro x1
Misc :
ALS Vial : 18 Sample Multiplier: 1

Integration File: rteint.p
Quant Time: Dec 08 17:08:29 2023
Quant Method : X:\S6\methods\S6ARO100423F.M
Quant Title : S6 EPH Aromatics
QLast Update : Thu Oct 05 11:16:37 2023
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :

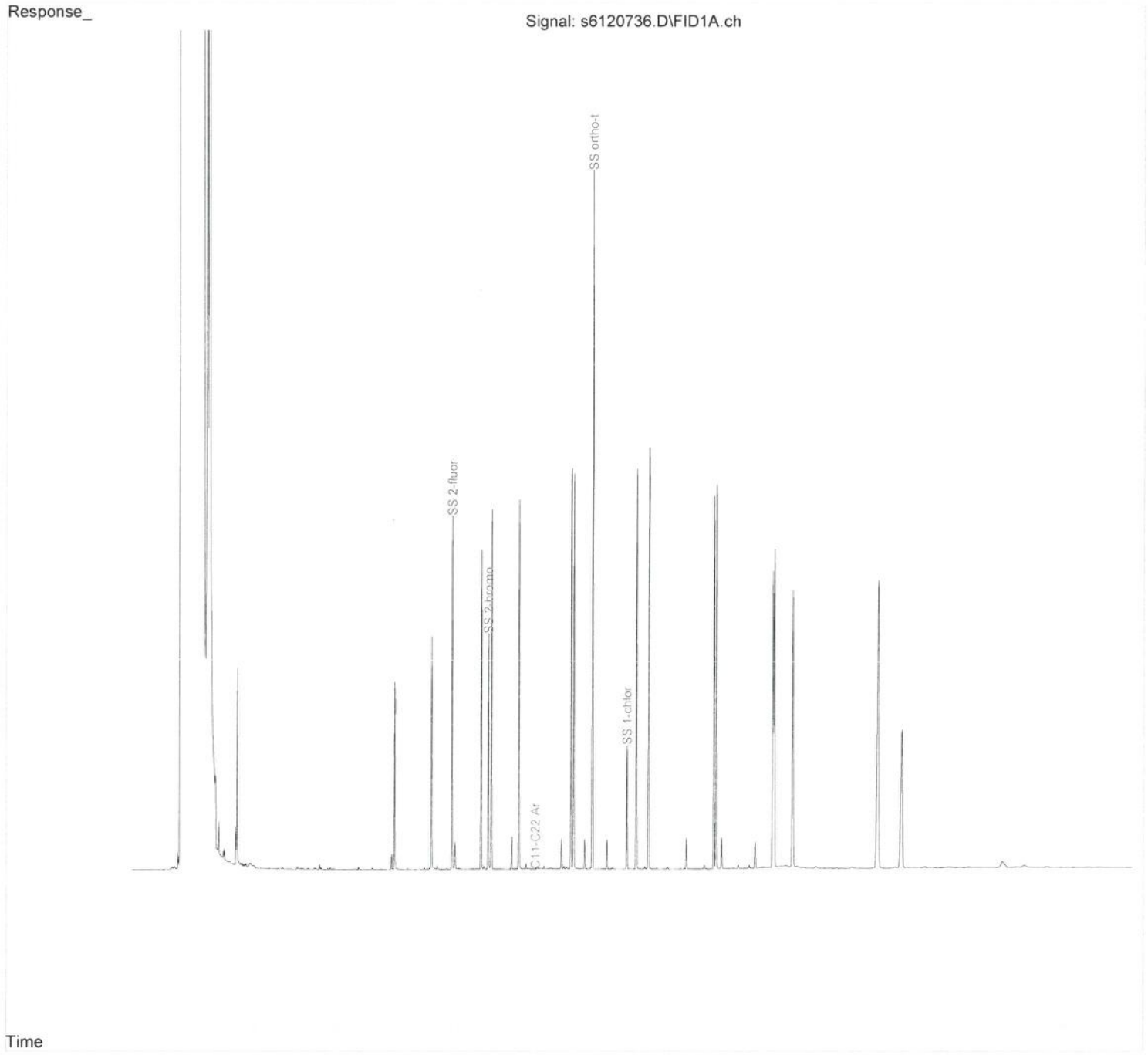
	Compound	R.T.	Response	Conc Units	
	System Monitoring Compounds				
3) S	SS 2-fluorobiphenyl (...	9.528	2147908	15.221 ug/mLm	BC = Baseline Correction
Spiked Amount	20.000		Recovery =	76.11%	
5) S	SS 2-bromonaphthalene...	10.605	1467474	15.388 ug/mLm	BC = Baseline Correction
Spiked Amount	20.000		Recovery =	76.94%	
10) S	SS ortho-terphenyl (OTP)	13.727	4503933	30.103 ug/mLm	BC = Baseline Correction
Spiked Amount	50.000		Recovery =	60.21%	
11) S	SS 1-chloro-otadecane...	14.766	872056	7.142 ug/mL	
Spiked Amount	50.000		Recovery =	14.28%	
	Target Compounds				
1)	naphthalene	0.000	0	N.D. ug/mLd	
2)	2-methylnaphthalene	0.000	0	N.D. ug/mLd	
4)	acenaphthylene	0.000	0	N.D. ug/mLd	
6)	acenaphthene	0.000	0	N.D. ug/mLd	
7)	fluorene	0.000	0	N.D. ug/mLd	
8)	phenanthrene	0.000	0	N.D. ug/mLd	
9)	anthracene	0.000	0	N.D. ug/mLd	
12)	fluoranthene	0.000	0	N.D. ug/mLd	
13)	pyrene	0.000	0	N.D. ug/mLd	
14)	benzo(a)anthracene	0.000	0	N.D. ug/mLd	
15)	chrysene	0.000	0	N.D. ug/mL	
16)	benzo(b&k)fluoranthenes	0.000	0	N.D. ug/mL	
17)	benzo(a)pyrene	0.000	0	N.D. ug/mL	
18)	indeno&dibenzo	0.000	0	N.D. ug/mL	
19)	benzo(g,h,i)perylene	0.000	0	N.D. ug/mL	
20) H	C11-C22 Aromatics	12.000	47153921	315.495 ug/mLm	RI = Range Integration

(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : X:\S6\2023\Dec23\120723\
Data File : s6120736.D
Signal(s) : FID1A.ch
Acq On : 07 Dec 2023 06:15 pm
Operator : dbv
Sample : 67798-01msd aro x1
Misc :
ALS Vial : 18 Sample Multiplier: 1

Integration File: rteint.p
Quant Time: Dec 08 17:08:29 2023
Quant Method : X:\S6\methods\S6ARO100423F.M
Quant Title : S6 EPH Aromatics
QLast Update : Thu Oct 05 11:16:37 2023
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : X:\S6\2023\Dec23\120723.SEC\
Data File : s6120735.D
Signal(s) : FID2B.ch
Acq On : 07 Dec 2023 06:15 pm
Operator : dbv
Sample : 67798-01msd ali x1
Misc :
ALS Vial : 93 Sample Multiplier: 1

12/12/23 @ 08:25
DonnaV

C9-C18 LOW.

Integration File: rteint.p
Quant Time: Dec 08 17:08:51 2023
Quant Method : X:\S6\methods\S6ALI100423A.M
Quant Title : S6 EPH Aliphatics
QLast Update : Thu Oct 05 13:01:54 2023
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :

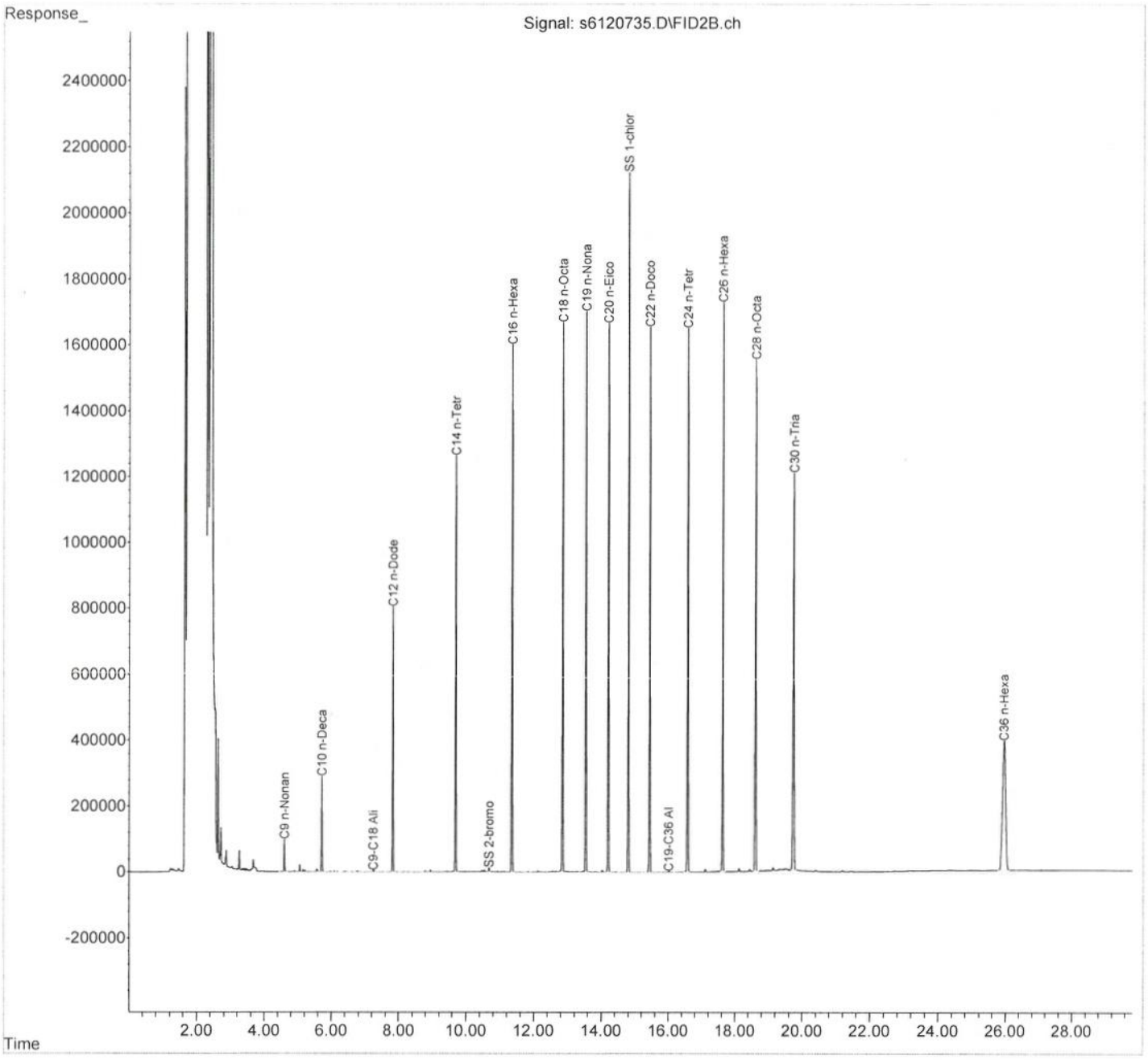
	Compound	R.T.	Response	Conc Units	
	System Monitoring Compounds				
4) S	SS 2-fluorobiphenyl (...	0.000	0	N.D. ug/mLd	
Spiked Amount	20.000	Recovery =	0.00%		
6) S	SS 2-bromonaphthalene...	10.675f	16032	0.164 ug/mLm	BC = Baseline Correction
Spiked Amount	20.000	Recovery =	0.82%		
11) S	SS ortho-terphenyl (OTP)	0.000	0	N.D. ug/mLd	
Spiked Amount	50.000	Recovery =	0.00%		
13) S	SS 1-chloro-octadecan...	14.809f	3025466	25.771 ug/mL	
Spiked Amount	50.000	Recovery =	51.54%		
	Target Compounds				
1)	C9 n-Nonane	4.607	113701	0.798 ug/mL	
2)	C10 n-Decane	5.719f	337799	2.551 ug/mL	
3)	C12 n-Dodecane	7.823f	1027024	7.946 ug/mL	
5)	C14 n-Tetradecane	9.693f	1743974	13.641 ug/mL	
7)	C16 n-Hexadecane	11.357f	2186718	16.777 ug/mL	
8)	C18 n-Octadecane	12.852f	2314686	17.486 ug/mL	
9) H	C9-C18 Aliphatics	7.237	8603149	66.651 ug/mLm	RI = Range Integration
10)	C19 n-Nonadecane	13.545f	2367341	17.850 ug/mLm	BC = Baseline Correction
12)	C20 n-Eicosane	14.205f	2420173	17.789 ug/mL	
14)	C22 n-Docosane	15.444f	2492890	18.778 ug/mL	
15)	C24 n-Tetracosane	16.581f	2530009	18.998 ug/mL	
16)	C26 n-Hexacosane	17.629f	2536951	18.845 ug/mL	
17)	C28 n-Octacosane	18.615f	2535229	18.837 ug/mL	
18)	C30 n-Triacontane	19.744f	2572441	19.066 ug/mLm	BC = Baseline Correction
19)	C36 n-Hexatriacontane	25.958f	2497856	19.493 ug/mLm	BC = Baseline Correction
20) H	C19-C36 Aliphatics	16.000	23573391	176.961 ug/mLm	RI = Range Integration

(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : X:\S6\2023\Dec23\120723.SEC\
Data File : s6120735.D
Signal(s) : FID2B.ch
Acq On : 07 Dec 2023 06:15 pm
Operator : dbv
Sample : 67798-01msd ali x1
Misc :
ALS Vial : 93 Sample Multiplier: 1

Integration File: rteint.p
Quant Time: Dec 08 17:08:51 2023
Quant Method : X:\S6\methods\S6ALI100423A.M
Quant Title : S6 EPH Aliphatics
QLast Update : Thu Oct 05 13:01:54 2023
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :



This File:	L:\SVOA\Excel Reports\EPH\231213\67798-002		
Analysis Group:	EPH	Dow Salvage Yard	
Field ID:	SY-OBMW6-110723 CRE		
Sample:	67798-02 targets x1	67798-02 aro x1	67798-02 ali x1
Misc:	aro frac		
Method Name:	SVOA04 Method 8270E (t	S6 EPH Aromatics	S6 EPH Aliphatics
Import File Name:	s6 EPHs QC17110		
TestGroupID:	EMA_EPH_PresCert_A		
Aqueous or Soil? (A or S)	A		
Fractionated? (Y/N)	y	y	
Prep Date:	11/13/2023		
Lab#:	67798-002		
QC_Code:			
Prep#	17110		

Skyla Marquis L:\SVOA\EPH\EPH ImportFileBuilder2.0.xls
12/13/23 2:47 PM
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L:\SVOA\PDF Reports\FUELS\

Reviewer Checks:

- Quant Report: Reviewed? Ranges integrated? Analyst Initials & Date?
- Chromatogram Checked? Major peaks identified?
- Soil prep data checked: weight, volume, %solid, Prep date
- Field ID consistent with data and any field replicates
- Results consistent with any re-runs & internal QC
- Substitute dilution data checked
- Correct dilution and reason clear or noted
- Reason for reanalysis documented
- Surrogates pass or flagged & noted
- Flags checked (Expiration, F+, Over Cal)
- Other QC failures, estimates or interferences documented
- Spot checked Reported Result with Quant Report
- Checked Audit flagged data in LIMS

Notes:

Initials & Date: SD 12/13/23

1
2
5
11
16
20

X:\S4\2023\Dec23\120723\s4120718.D\S4PAH110223A.XLS PAH targets filename
X:\S6\2023\Dec23\120723\s6120738.D\S6ARO100423F.XLS aromatics filename
X:\S6\2023\Dec23\120723.SEC\s6120737.D\S6ALI100423A.XLS aliphatics filename

#	Surrogate Standards	Concentration (ug/mL)	AnalysisDate	AnalysisTime	AnalyzedBy	Dilution	Weight	Volume	Surr	Recovery	Flag	QC Limits
13	SS 1-chloro-octadecane (COD)	27.32116315	12/7/2023	06:49:00 PM	DBV s6120737.D	1	1	2	100	**55%**		40-140
10	SS ortho-terphenyl (OTP)	27.74711387	12/7/2023	06:49:00 PM	DBV s6120738.D	1	1	2	100	**55%**		40-140
3	SS 2-fluorobiphenyl (2FBP)	14.92599867	12/7/2023	06:49:00 PM	DBV s6120738.D	1	1	2	40	**75%**		40-140
5	SS 2-bromonaphthalene (2BN)	15.35277569	12/7/2023	06:49:00 PM	DBV s6120738.D	1	1	2	40	**77%**		40-140

#	AnalyteName	Concentration (ug/mL)	AnalysisDate	AnalysisTime	AnalyzedBy	Dilution	Weight	Volume
3	naphthalene	0	12/07/2023	06:52:00 PM	CL s4120718.D	1	1	2
4	2-methylnaphthalene	0	12/07/2023	06:52:00 PM	CL s4120718.D	1	1	2
12	phenanthrene	0	12/07/2023	06:52:00 PM	CL s4120718.D	1	1	2
8	acenaphthene	0	12/07/2023	06:52:00 PM	CL s4120718.D	1	1	2
7	acenaphthylene	0	12/07/2023	06:52:00 PM	CL s4120718.D	1	1	2
10	fluorene	0	12/07/2023	06:52:00 PM	CL s4120718.D	1	1	2
13	anthracene	0	12/07/2023	06:52:00 PM	CL s4120718.D	1	1	2
15	fluoranthene	0	12/07/2023	06:52:00 PM	CL s4120718.D	1	1	2
17	pyrene	0	12/07/2023	06:52:00 PM	CL s4120718.D	1	1	2
18	benzo(a)anthracene	0	12/07/2023	06:52:00 PM	CL s4120718.D	1	1	2
19	chrysene	0	12/07/2023	06:52:00 PM	CL s4120718.D	1	1	2
21	benzo(b)fluoranthene	0	12/07/2023	06:52:00 PM	CL s4120718.D	1	1	2
22	benzo(k)fluoranthene	0	12/07/2023	06:52:00 PM	CL s4120718.D	1	1	2
23	benzo(a)pyrene	0	12/07/2023	06:52:00 PM	CL s4120718.D	1	1	2
24	indeno(1,2,3-cd)pyrene	0	12/07/2023	06:52:00 PM	CL s4120718.D	1	1	2
25	dibenzo(a,h)anthracene	0	12/07/2023	06:52:00 PM	CL s4120718.D	1	1	2
26	benzo(g,h,i)perylene	0	12/07/2023	06:52:00 PM	CL s4120718.D	1	1	2
20	C11-C22 Aromatics	39.33223004	12/7/2023	06:49:00 PM	DBV s6120738.D	1	1	2
9	C9-C18 Aliphatics	12.80422805	12/7/2023	06:49:00 PM	DBV s6120737.D	1	1	2
20	C19-C36 Aliphatics	28.16591773	12/7/2023	06:49:00 PM	DBV s6120737.D	1	1	2
	Adjusted C11-C22 Aromatics	39.33223004	12/7/2023	06:49:00 PM	DBV s6120738.D	1	1	2

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Dec23\120723\
Data File : s4120718.D
Acq On : 07 Dec 2023 06:52 pm
Operator : cl
Sample : 67798-02 targets x1
Misc : aro frac
ALS Vial : 13 Sample Multiplier: 1

CL
12/8/23 @ 15:27
CharlesL

Quant Time: Dec 08 08:54:08 2023
Quant Method : X:\S4\methods\S4PAH110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration

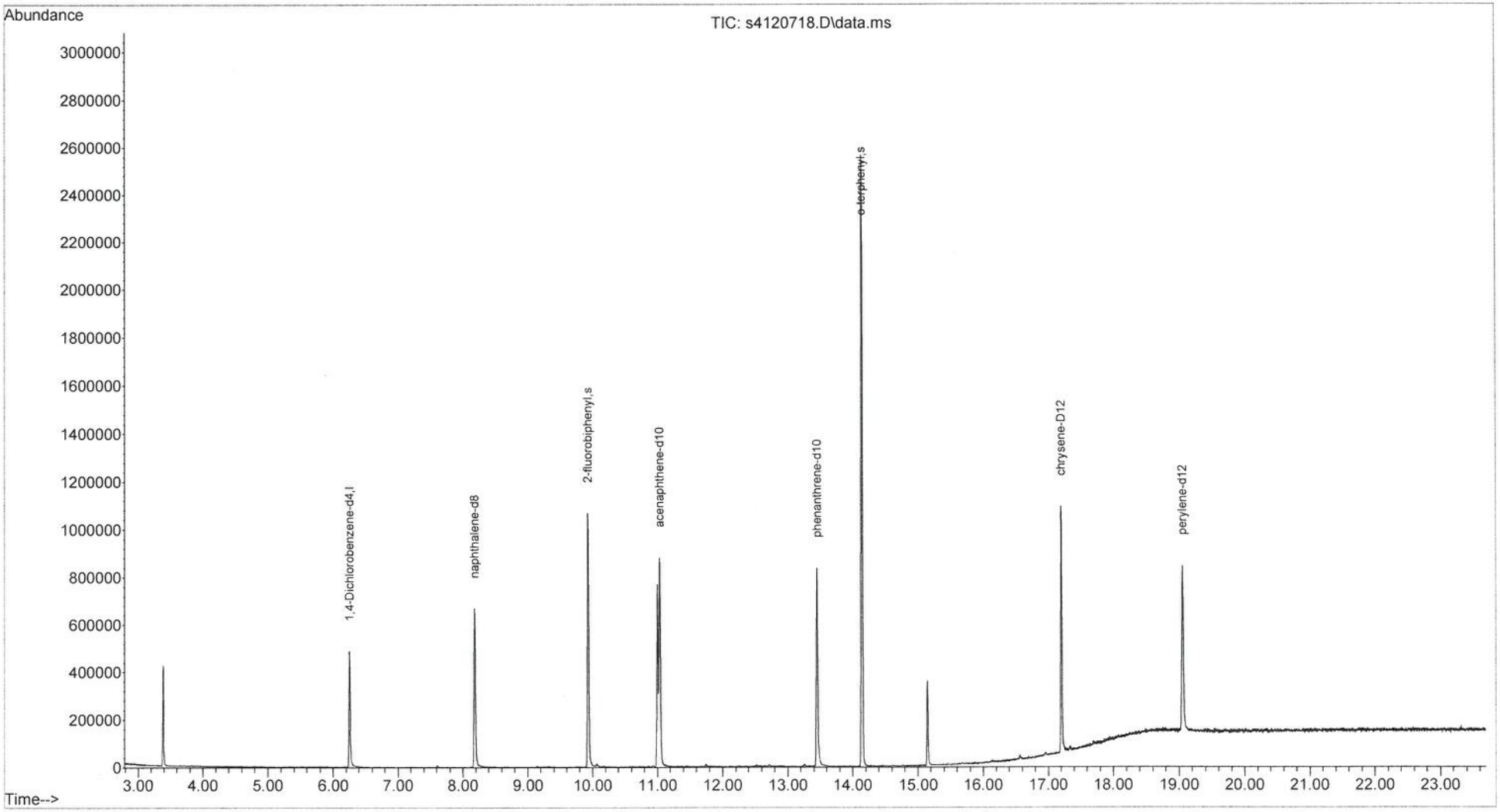
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.250	152	117989	10.00	ug/mL	-0.01
2) naphthalene-d8	8.181	136	463170	10.00	ug/mL	-0.01
5) acenaphthene-d10	11.035	164	269003	10.00	ug/mL	-0.01
11) phenanthrene-d10	13.451	188	513168	10.00	ug/mL	# 0.00
16) chrysene-D12	17.204	240	454631	10.00	ug/mL	0.00
20) perylene-d12	19.054	264	420168	10.00	ug/mL	0.02
System Monitoring Compounds						
6) 2-fluorobiphenyl	9.930	172	495258	11.68	ug/mL	-0.01
Spiked Amount 100.000			Recovery = 11.68%			
14) o-terphenyl	14.142	230	706947	24.26	ug/mL	-0.01
Spiked Amount 100.000			Recovery = 24.26%			
Target Compounds						Qvalue
18) benzo(a)anthracene	17.197	228	1453	Below Cal	#	51
19) chrysene	17.197	228	1453	Below Cal	#	49

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Dec23\120723\
Data File : s4120718.D
Acq On : 07 Dec 2023 06:52 pm
Operator : cl
Sample : 67798-02 targets x1
Misc : aro frac
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Dec 08 08:54:08 2023
Quant Method : X:\S4\methods\S4PAH110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration



SFP
12/12/23 @ 12:2
SkylaM

Data Path : X:\S6\2023\Dec23\120723\
Data File : s6120738.D
Signal(s) : FID1A.ch
Acq On : 07 Dec 2023 06:49 pm
Operator : dbv
Sample : 67798-02 aro x1
Misc :
ALS Vial : 19 Sample Multiplier: 1

Integration File: rteint.p
Quant Time: Dec 08 17:08:31 2023
Quant Method : X:\S6\methods\S6ARO100423F.M
Quant Title : S6 EPH Aromatics
QLast Update : Thu Oct 05 11:16:37 2023
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :

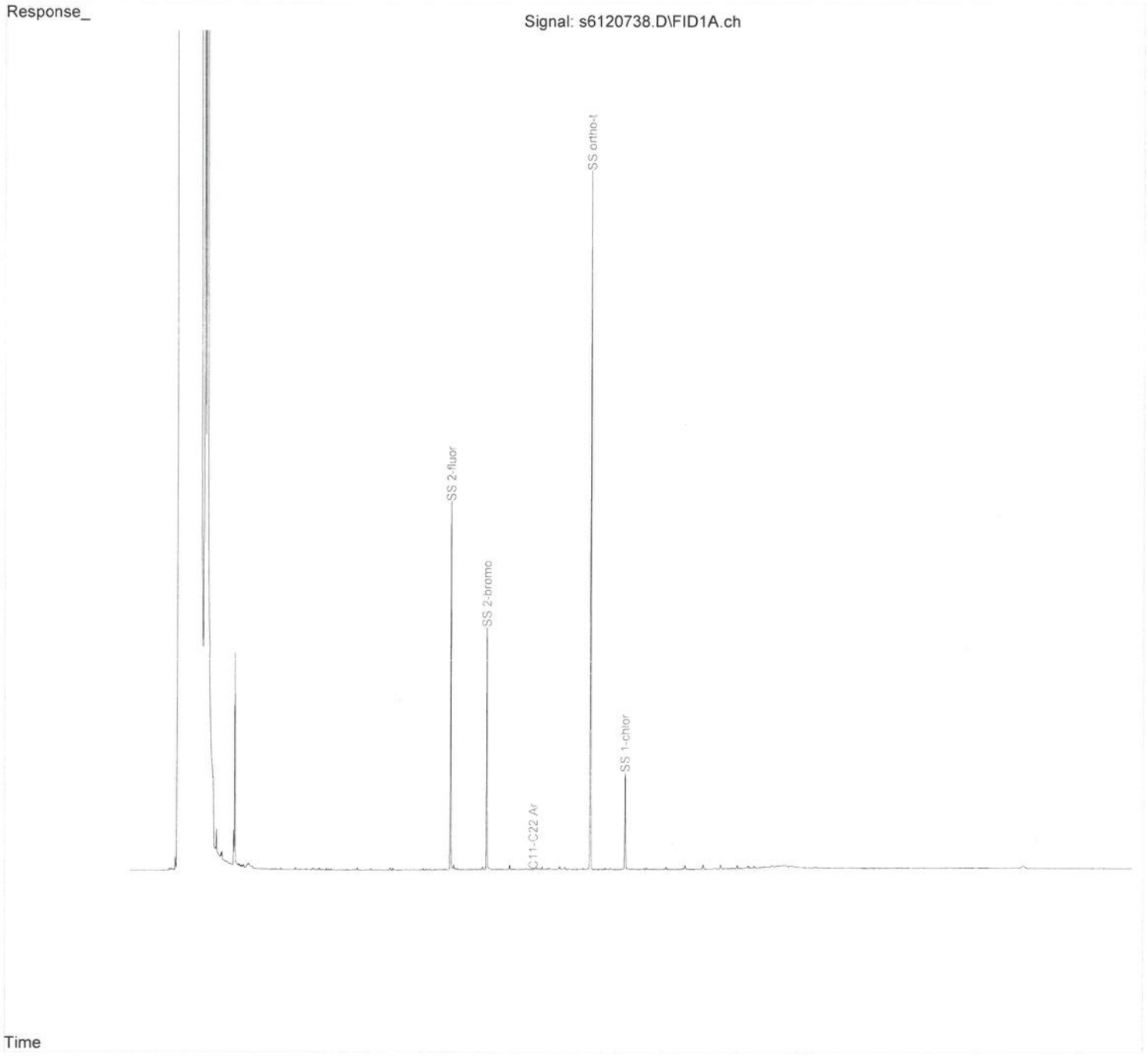
	Compound	R.T.	Response	Conc	Units	
	System Monitoring Compounds					
3) S	SS 2-fluorobiphenyl (...	9.528	2106352	14.926	ug/mLm	BC = Baseline Correction
Spiked Amount	20.000		Recovery =	74.63%		
5) S	SS 2-bromonaphthalene...	10.604	1464098	15.353	ug/mLm	BC = Baseline Correction
Spiked Amount	20.000		Recovery =	76.77%		
10) S	SS ortho-terphenyl (OTP)	13.726	4151147	27.747	ug/mLm	BC = Baseline Correction
Spiked Amount	50.000		Recovery =	55.49%		
11) S	SS 1-chloro-otadecane...	14.764	654188	5.362	ug/mL	
Spiked Amount	50.000		Recovery =	10.72%		
	Target Compounds					
1)	naphthalene	0.000	0	N.D.	ug/mLd	
2)	2-methylnaphthalene	0.000	0	N.D.	ug/mL	
4)	acenaphthylene	0.000	0	N.D.	ug/mLd	
6)	acenaphthene	0.000	0	N.D.	ug/mL	
7)	fluorene	0.000	0	N.D.	ug/mL	
8)	phenanthrene	0.000	0	N.D.	ug/mL	
9)	anthracene	0.000	0	N.D.	ug/mL	
12)	fluoranthene	0.000	0	N.D.	ug/mL	
13)	pyrene	0.000	0	N.D.	ug/mL	
14)	benzo(a)anthracene	0.000	0	N.D.	ug/mL	
15)	chrysene	0.000	0	N.D.	ug/mL	
16)	benzo(b&k)fluoranthenes	0.000	0	N.D.	ug/mL	
17)	benzo(a)pyrene	0.000	0	N.D.	ug/mL	
18)	indeno&dibenzo	0.000	0	N.D.	ug/mL	
19)	benzo(g,h,i)perylene	0.000	0	N.D.	ug/mL	
20) H	C11-C22 Aromatics	12.000	5680892	39.332	ug/mLm	RI = Range Integration

(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : X:\S6\2023\Dec23\120723\
Data File : s6120738.D
Signal(s) : FID1A.ch
Acq On : 07 Dec 2023 06:49 pm
Operator : dbv
Sample : 67798-02 aro x1
Misc :
ALS Vial : 19 Sample Multiplier: 1

Integration File: rteint.p
Quant Time: Dec 08 17:08:31 2023
Quant Method : X:\S6\methods\S6ARO100423F.M
Quant Title : S6 EPH Aromatics
QLast Update : Thu Oct 05 11:16:37 2023
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : X:\S6\2023\Dec23\120723.SEC\
Data File : s6120737.D
Signal(s) : FID2B.ch
Acq On : 07 Dec 2023 06:49 pm
Operator : dbv
Sample : 67798-02 ali x1
Misc :
ALS Vial : 94 Sample Multiplier: 1

12/12/23 @ 08:26
DonnaV

Integration File: rteint.p
Quant Time: Dec 08 17:08:53 2023
Quant Method : X:\S6\methods\S6ALI100423A.M
Quant Title : S6 EPH Aliphatics
QLast Update : Thu Oct 05 13:01:54 2023
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :

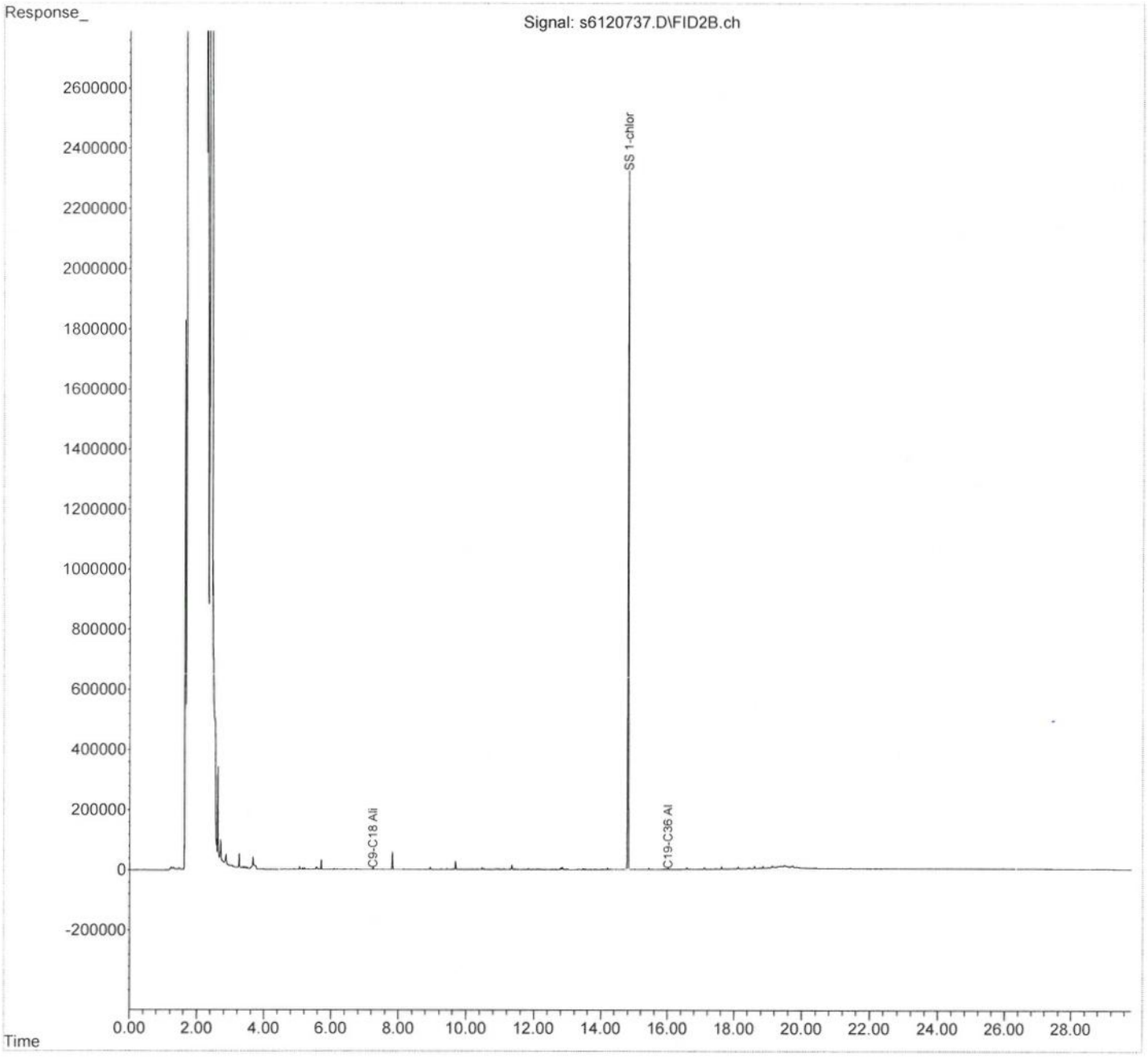
	Compound	R.T.	Response	Conc	Units	
	System Monitoring Compounds					
4) S	SS 2-fluorobiphenyl (...	0.000	0	N.D.	ug/mLd	
Spiked Amount	20.000	Recovery =	0.00%			
6) S	SS 2-bromonaphthalene...	0.000	0	N.D.	ug/mLd	
Spiked Amount	20.000	Recovery =	0.00%			
11) S	SS ortho-terphenyl (OTP)	0.000	0	N.D.	ug/mLd	
Spiked Amount	50.000	Recovery =	0.00%			
13) S	SS 1-chloro-octadecan...	14.808f	3207103	27.321	ug/mLm	BC = Baseline Correction
Spiked Amount	50.000	Recovery =	54.64%			
	Target Compounds					
1)	C9 n-Nonane	0.000	0	N.D.	ug/mLd	
2)	C10 n-Decane	0.000	0	N.D.	ug/mLd	
3)	C12 n-Dodecane	0.000	0	N.D.	ug/mLd	
5)	C14 n-Tetradecane	0.000	0	N.D.	ug/mLd	
7)	C16 n-Hexadecane	0.000	0	N.D.	ug/mLd	
8)	C18 n-Octadecane	0.000	0	N.D.	ug/mLd	
9) H	C9-C18 Aliphatics	7.237	1716878	12.804	ug/mLm	RI = Range Integration
10)	C19 n-Nonadecane	0.000	0	N.D.	ug/mLd	
12)	C20 n-Eicosane	0.000	0	N.D.	ug/mLd	
14)	C22 n-Docosane	0.000	0	N.D.	ug/mLd	
15)	C24 n-Tetracosane	0.000	0	N.D.	ug/mLd	
16)	C26 n-Hexacosane	0.000	0	N.D.	ug/mLd	
17)	C28 n-Octacosane	0.000	0	N.D.	ug/mLd	
18)	C30 n-Triacontane	0.000	0	N.D.	ug/mLd	
19)	C36 n-Hexatriacontane	0.000	0	N.D.	ug/mLd	
20) H	C19-C36 Aliphatics	16.000	3870830	28.166	ug/mLm	RI = Range Integration

(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : X:\S6\2023\Dec23\120723.SEC\
Data File : s6120737.D
Signal(s) : FID2B.ch
Acq On : 07 Dec 2023 06:49 pm
Operator : dbv
Sample : 67798-02 ali x1
Misc :
ALS Vial : 94 Sample Multiplier: 1

Integration File: rteint.p
Quant Time: Dec 08 17:08:53 2023
Quant Method : X:\S6\methods\S6ALI100423A.M
Quant Title : S6 EPH Aliphatics
QLast Update : Thu Oct 05 13:01:54 2023
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :



This File:	L:\SVOA\Excel Reports\EPH\231213\67798-003			Skyla Marquis L:\SVOA\EPH\EPH ImportFileBuilder2.0.xls
Analysis Group:	EPH	Dow Salvage Yard		12/13/23 2:48 PM
Field ID:	SY-OBMW4R-110723 CRE			L:\SVOA\EPH\
Sample:	67798-03 targets x1	67798-03 aro x1	67798-03 ali x1	L:\SVOA\Excel Reports\EPH\2312
Misc:	*aro frac*			L:\SVOA\PDF Reports\FUELS\
Method Name:	*SVOA04 Method 8270E (t*	*S6 EPH Aromatics*	*S6 EPH Aliphatics*	
Import File Name:	s6 EPHs QC17110			
TestGroupID:	EMA_EPH_PresCert_A			
Aqueous or Soil? (A or S)	A			
Fractionated? (Y/N)	y	y		
Prep Date:	11/13/2023			
Lab#:	67798-003			
QC_Code:				
Prep#	17110			

Reviewer Checks:

Quant Report: Reviewed? Ranges integrated? Analyst Initials & Date?	1
Chromatogram Checked? Major peaks identified?	2
Soil prep data checked: weight, volume, %solid, Prep date	5
Field ID consistent with data and any field replicates	11
Results consistent with any re-runs & internal QC	16
Substitute dilution data checked	20
Correct dilution and reason clear or noted	
Reason for reanalysis documented	
Surrogates pass or flagged & noted	
Flags checked (Expiration, F+, Over Cal)	
Other QC failures, estimates or interferences documented	
Spot checked Reported Result with Quant Report	
Checked Audit flagged data in LIMS	

Notes:

Initials & Date: 12/13/23

X:\S4\2023\Dec23\120723\s4120719.D\S4PAH110223A.XLS PAH targets filename
X:\S6\2023\Dec23\120723\s6120740.D\S6ARO100423F.XLS aromatics filename
X:\S6\2023\Dec23\120723.SEC\s6120739.D\S6ALI100423A.XLS aliphatics filename

#	Surrogate Standards	Concentration (ug/mL)	AnalysisDate	AnalysisTime	AnalyzedBy	Dilution	Weight	Volume	Surr	Recovery	Flag	QC Limits
13	SS 1-chloro-octadecane (COD)	27.49110518	12/7/2023	07:22:00 PM	DBV s6120739.D	1	1	2	100	**55%**		40-140
10	SS ortho-terphenyl (OTP)	28.75093776	12/7/2023	07:22:00 PM	DBV s6120740.D	1	1	2	100	**58%**		40-140
3	SS 2-fluorobiphenyl (2FBP)	15.1843881	12/7/2023	07:22:00 PM	DBV s6120740.D	1	1	2	40	**76%**		40-140
5	SS 2-bromonaphthalene (2BN)	15.81287169	12/7/2023	07:22:00 PM	DBV s6120740.D	1	1	2	40	**79%**		40-140

#	AnalyteName	Concentration (ug/mL)	AnalysisDate	AnalysisTime	AnalyzedBy	Dilution	Weight	Volume
3	naphthalene	0	12/07/2023	07:22:00 PM	CL s4120719.D	1	1	2
4	2-methylnaphthalene	0	12/07/2023	07:22:00 PM	CL s4120719.D	1	1	2
12	phenanthrene	0	12/07/2023	07:22:00 PM	CL s4120719.D	1	1	2
8	acenaphthene	0	12/07/2023	07:22:00 PM	CL s4120719.D	1	1	2
7	acenaphthylene	0	12/07/2023	07:22:00 PM	CL s4120719.D	1	1	2
10	fluorene	0	12/07/2023	07:22:00 PM	CL s4120719.D	1	1	2
13	anthracene	0	12/07/2023	07:22:00 PM	CL s4120719.D	1	1	2
15	fluoranthene	0	12/07/2023	07:22:00 PM	CL s4120719.D	1	1	2
17	pyrene	0	12/07/2023	07:22:00 PM	CL s4120719.D	1	1	2
18	benzo(a)anthracene	0	12/07/2023	07:22:00 PM	CL s4120719.D	1	1	2
19	chrysene	0	12/07/2023	07:22:00 PM	CL s4120719.D	1	1	2
21	benzo(b)fluoranthene	0	12/07/2023	07:22:00 PM	CL s4120719.D	1	1	2
22	benzo(k)fluoranthene	0	12/07/2023	07:22:00 PM	CL s4120719.D	1	1	2
23	benzo(a)pyrene	0	12/07/2023	07:22:00 PM	CL s4120719.D	1	1	2
24	indeno(1,2,3-cd)pyrene	0	12/07/2023	07:22:00 PM	CL s4120719.D	1	1	2
25	dibenzo(a,h)anthracene	0	12/07/2023	07:22:00 PM	CL s4120719.D	1	1	2
26	benzo(g,h,i)perylene	0	12/07/2023	07:22:00 PM	CL s4120719.D	1	1	2
20	C11-C22 Aromatics	35.34639228	12/7/2023	07:22:00 PM	DBV s6120740.D	1	1	2
9	C9-C18 Aliphatics	8.023073893	12/7/2023	07:22:00 PM	DBV s6120739.D	1	1	2
20	C19-C36 Aliphatics	22.70178851	12/7/2023	07:22:00 PM	DBV s6120739.D	1	1	2
	Adjusted C11-C22 Aromatics	35.34639228	12/7/2023	07:22:00 PM	DBV s6120740.D	1	1	2

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Dec23\120723\
Data File : s4120719.D
Acq On : 07 Dec 2023 07:22 pm
Operator : cl
Sample : 67798-03 targets x1
Misc : aro frac
ALS Vial : 14 Sample Multiplier: 1

CL
12/8/23 @ 15:28
CharlesL

Quant Time: Dec 08 08:54:11 2023
Quant Method : X:\S4\methods\S4PAH110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration

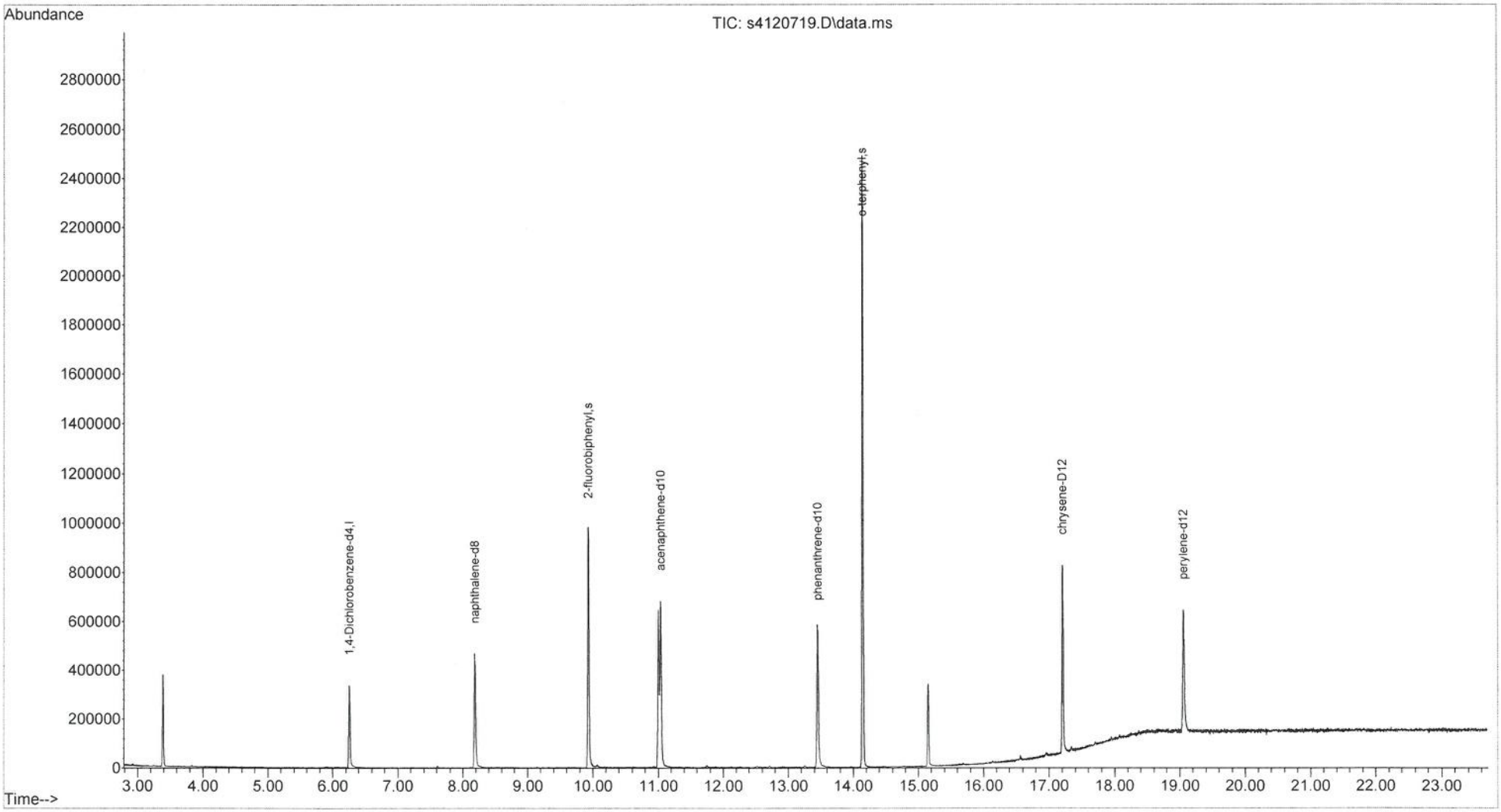
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.250	152	83791m BC	10.00	ug/mL	-0.01
2) naphthalene-d8	8.181	136	331367	10.00	ug/mL	-0.01
5) acenaphthene-d10	11.035	164	196310	10.00	ug/mL	-0.01
11) phenanthrene-d10	13.451	188	379255	10.00	ug/mL	# 0.00
16) chrysene-D12	17.204	240	350409	10.00	ug/mL	0.00
20) perylene-d12	19.054	264	327835	10.00	ug/mL	0.02
System Monitoring Compounds						
6) 2-fluorobiphenyl	9.927	172	451595	14.60	ug/mL	-0.02
Spiked Amount 100.000			Recovery = 14.60%			
14) o-terphenyl	14.144	230	654989	30.42	ug/mL	-0.01
Spiked Amount 100.000			Recovery = 30.42%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Dec23\120723\
Data File : s4120719.D
Acq On : 07 Dec 2023 07:22 pm
Operator : cl
Sample : 67798-03 targets x1
Misc : aro frac
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Dec 08 08:54:11 2023
Quant Method : X:\S4\methods\S4PAH110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration



SFP
12/12/23 @ 12:24
SkylaM

Data Path : X:\S6\2023\Dec23\120723\
Data File : s6120740.D
Signal(s) : FID1A.ch
Acq On : 07 Dec 2023 07:22 pm
Operator : dbv
Sample : 67798-03 aro x1
Misc :
ALS Vial : 20 Sample Multiplier: 1

Integration File: rteint.p
Quant Time: Dec 08 17:08:33 2023
Quant Method : X:\S6\methods\S6ARO100423F.M
Quant Title : S6 EPH Aromatics
QLast Update : Thu Oct 05 11:16:37 2023
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :

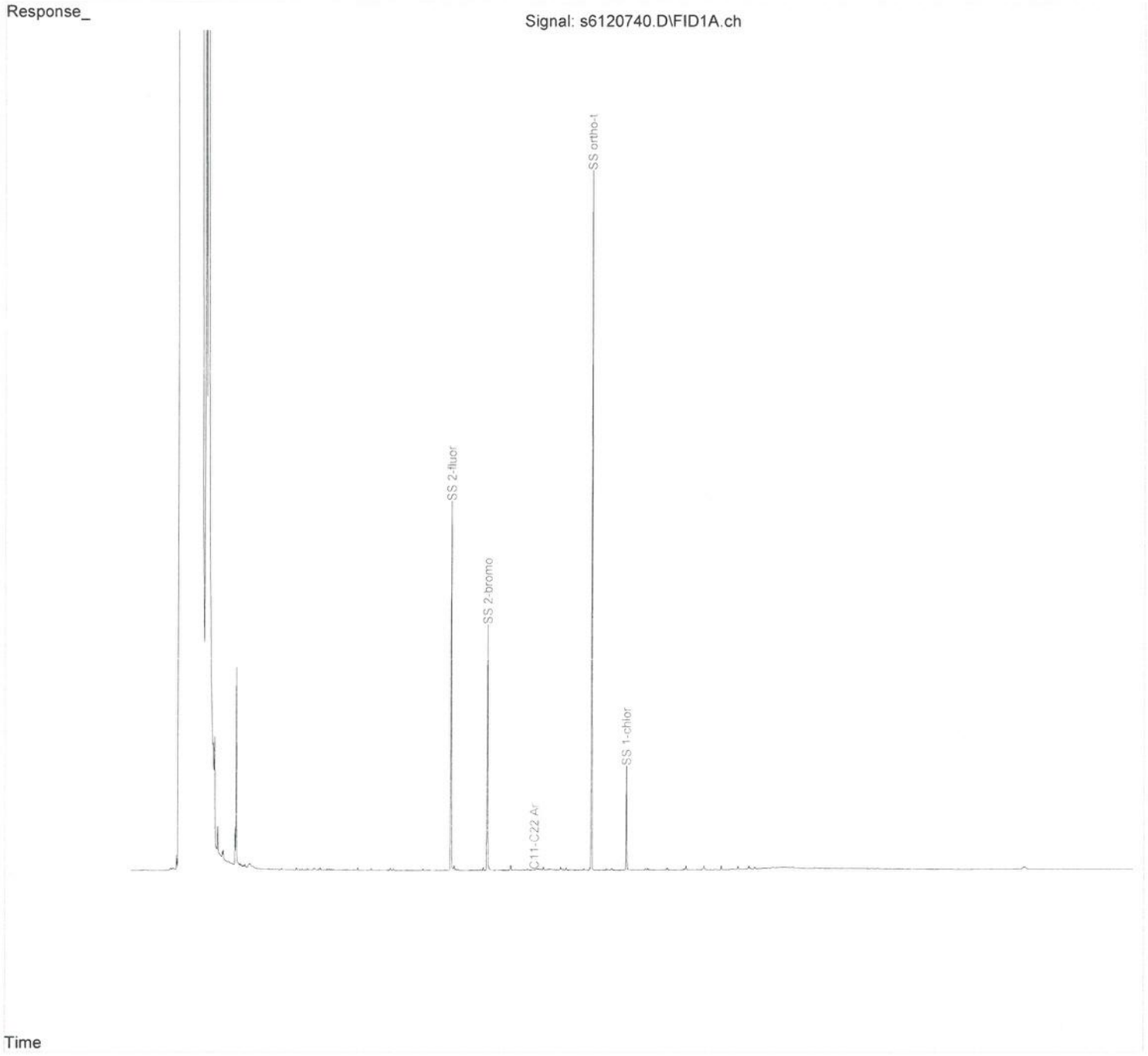
	Compound	R.T.	Response	Conc	Units	
	System Monitoring Compounds					
3) S	SS 2-fluorobiphenyl (...	9.528	2142786	15.184	ug/mLm	BC = Baseline Correction
Spiked Amount	20.000		Recovery =	75.92%		
5) S	SS 2-bromonaphthalene...	10.605	1507997	15.813	ug/mLm	BC = Baseline Correction
Spiked Amount	20.000		Recovery =	79.07%		
10) S	SS ortho-terphenyl (OTP)	13.727	4301488	28.751	ug/mLm	BC = Baseline Correction
Spiked Amount	50.000		Recovery =	57.50%		
11) S	SS 1-chloro-otadecane...	14.766	690266	5.656	ug/mL	
Spiked Amount	50.000		Recovery =	11.31%		
	Target Compounds					
1)	naphthalene	0.000	0	N.D.	ug/mLd	
2)	2-methylnaphthalene	0.000	0	N.D.	ug/mLd	
4)	acenaphthylene	0.000	0	N.D.	ug/mLd	
6)	acenaphthene	0.000	0	N.D.	ug/mL	
7)	fluorene	0.000	0	N.D.	ug/mL	
8)	phenanthrene	0.000	0	N.D.	ug/mLd	
9)	anthracene	0.000	0	N.D.	ug/mL	
12)	fluoranthene	0.000	0	N.D.	ug/mL	
13)	pyrene	0.000	0	N.D.	ug/mL	
14)	benzo(a)anthracene	0.000	0	N.D.	ug/mLd	
15)	chrysene	0.000	0	N.D.	ug/mL	
16)	benzo(b&k)fluoranthenes	0.000	0	N.D.	ug/mL	
17)	benzo(a)pyrene	0.000	0	N.D.	ug/mL	
18)	indeno&dibenzo	0.000	0	N.D.	ug/mL	
19)	benzo(g,h,i)perylene	0.000	0	N.D.	ug/mL	
20) H	C11-C22 Aromatics	12.000	5082315	35.346	ug/mLm	RI = Range Integration

(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : X:\S6\2023\Dec23\120723\
Data File : s6120740.D
Signal(s) : FID1A.ch
Acq On : 07 Dec 2023 07:22 pm
Operator : dbv
Sample : 67798-03 aro x1
Misc :
ALS Vial : 20 Sample Multiplier: 1

Integration File: rteint.p
Quant Time: Dec 08 17:08:33 2023
Quant Method : X:\S6\methods\S6ARO100423F.M
Quant Title : S6 EPH Aromatics
QLast Update : Thu Oct 05 11:16:37 2023
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : X:\S6\2023\Dec23\120723.SEC\
Data File : s6120739.D
Signal(s) : FID2B.ch
Acq On : 07 Dec 2023 07:22 pm
Operator : dbv
Sample : 67798-03 ali x1
Misc :
ALS Vial : 95 Sample Multiplier: 1

12/12/23 @ 08:26
DonnaV

Integration File: rteint.p
Quant Time: Dec 08 17:08:55 2023
Quant Method : X:\S6\methods\S6ALI100423A.M
Quant Title : S6 EPH Aliphatics
QLast Update : Thu Oct 05 13:01:54 2023
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :

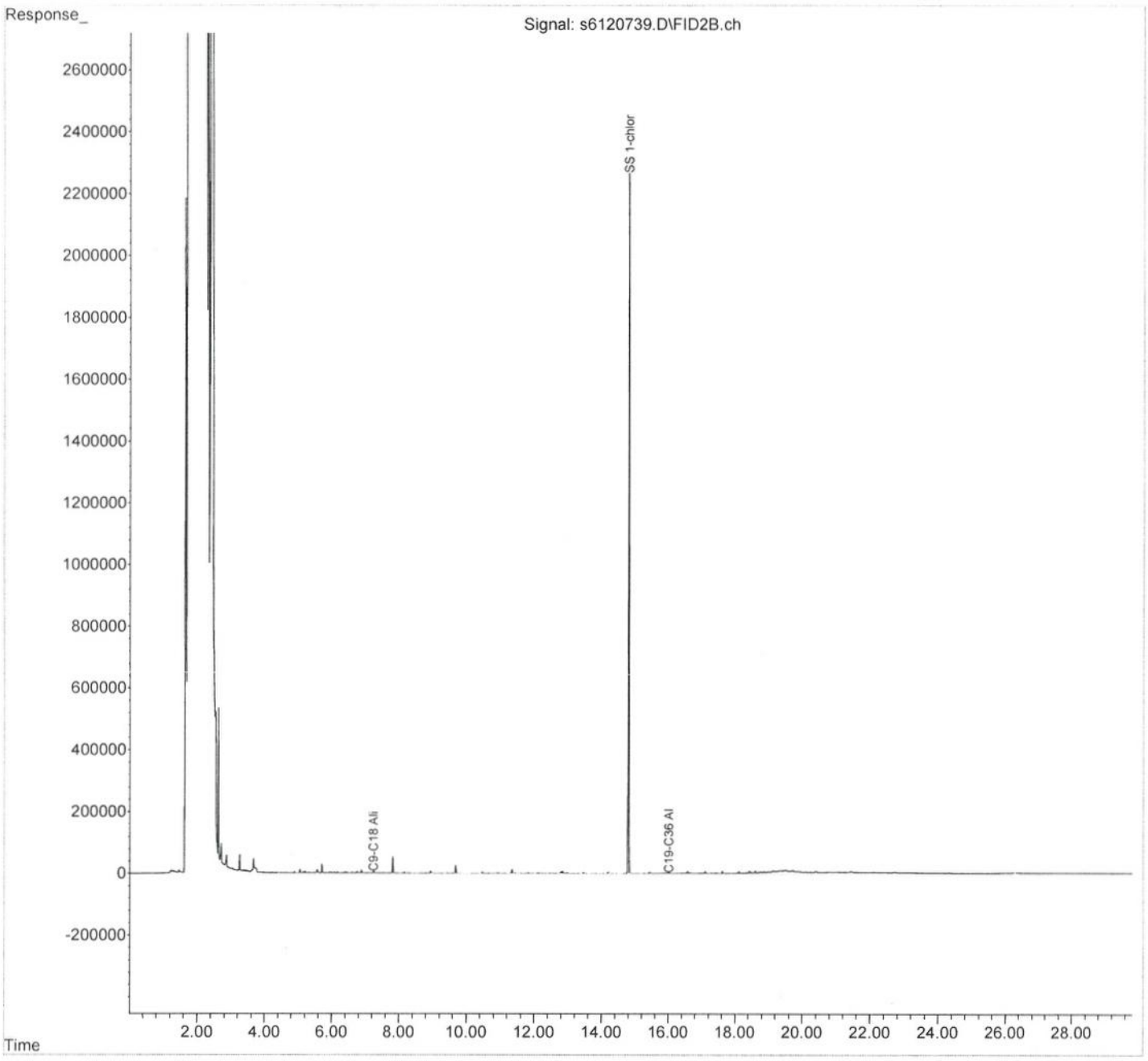
	Compound	R.T.	Response	Conc	Units	
	System Monitoring Compounds					
4)	S SS 2-fluorobiphenyl (...	0.000	0	N.D.	ug/mLd	
	Spiked Amount 20.000		Recovery =	0.00%		
6)	S SS 2-bromonaphthalene...	0.000	0	N.D.	ug/mLd	
	Spiked Amount 20.000		Recovery =	0.00%		
11)	S SS ortho-terphenyl (OTP)	0.000	0	N.D.	ug/mLd	
	Spiked Amount 50.000		Recovery =	0.00%		
13)	S SS 1-chloro-octadecan...	14.807f	3227017	27.491	ug/mLm	BC = Baseline Correction
	Spiked Amount 50.000		Recovery =	54.98%		
	Target Compounds					
1)	C9 n-Nonane	0.000	0	N.D.	ug/mLd	
2)	C10 n-Decane	0.000	0	N.D.	ug/mLd	
3)	C12 n-Dodecane	0.000	0	N.D.	ug/mLd	
5)	C14 n-Tetradecane	0.000	0	N.D.	ug/mLd	
7)	C16 n-Hexadecane	0.000	0	N.D.	ug/mLd	
8)	C18 n-Octadecane	0.000	0	N.D.	ug/mLd	
9)	H C9-C18 Aliphatics	7.237	1105428	8.023	ug/mLm	RI = Range Integration
10)	C19 n-Nonadecane	0.000	0	N.D.	ug/mLd	
12)	C20 n-Eicosane	0.000	0	N.D.	ug/mLd	
14)	C22 n-Docosane	0.000	0	N.D.	ug/mLd	
15)	C24 n-Tetracosane	0.000	0	N.D.	ug/mLd	
16)	C26 n-Hexacosane	0.000	0	N.D.	ug/mLd	
17)	C28 n-Octacosane	0.000	0	N.D.	ug/mLd	
18)	C30 n-Triacontane	0.000	0	N.D.	ug/mLd	
19)	C36 n-Hexatriacontane	0.000	0	N.D.	ug/mLd	
20)	H C19-C36 Aliphatics	16.000	3147304	22.702	ug/mLm	RI = Range Integration

(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : X:\S6\2023\Dec23\120723.SEC\
Data File : s6120739.D
Signal(s) : FID2B.ch
Acq On : 07 Dec 2023 07:22 pm
Operator : dbv
Sample : 67798-03 ali x1
Misc :
ALS Vial : 95 Sample Multiplier: 1

Integration File: rteint.p
Quant Time: Dec 08 17:08:55 2023
Quant Method : X:\S6\methods\S6ALI100423A.M
Quant Title : S6 EPH Aliphatics
QLast Update : Thu Oct 05 13:01:54 2023
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :



This File:	L:\SVOA\Excel Reports\EPH\231213\67798-004		Skyla Marquis L:\SVOA\EPH\EPH ImportFileBuilder2.0.xls
Analysis Group:	EPH	Dow Salvage Yard	12/13/23 2:49 PM
Field ID:	1W2-60.5-70.5-110723	CRE	L:\SVOA\EPH\
Sample:	67798-04 targets x1	67798-04 aro x1	67798-04 ali x1 L:\SVOA\Excel Reports\EPH\2312
Misc:	aro frac		L:\SVOA\PDF Reports\FUELS\
Method Name:	SVOA04 Method 8270E (t	S6 EPH Aromatics	S6 EPH Aliphatics
Import File Name:	s6 EPHs QC17110		
TestGroupID:	EMA_EPH_PresCert_A		
Aqueous or Soil? (A or S)	A		
Fractionated? (Y/N)	Y	Y	
Prep Date:	11/13/2023		
Lab#:	67798-004		
QC_Code:			
Prep#	17110		

Reviewer Checks:

Quant Report: Reviewed? Ranges integrated? Analyst Initials & Date?	1
Chromatogram Checked? Major peaks identified?	2
Soil prep data checked: weight, volume, %solid, Prep date	5
Field ID consistent with data and any field replicates	11
Results consistent with any re-runs & internal QC	16
Substitute dilution data checked	20
Correct dilution and reason clear or noted	
Reason for reanalysis documented	
Surrogates pass or flagged & noted	
Flags checked (Expiration, F+, Over Cal)	
Other QC failures, estimates or interferences documented	
Spot checked Reported Result with Quant Report	
Checked Audit flagged data in LIMS	

Notes:

Initials & Date: SJ 12/13/23

X:\S4\2023\Dec23\120723\s4120720.D\S4PAH110223A.XLS PAH targets filename
X:\S6\2023\Dec23\120723\s6120742.D\S6ARO100423F.XLS aromatics filename
X:\S6\2023\Dec23\120723.SEC\s6120741.D\S6ALI100423A.XLS aliphatics filename

#	Surrogate Standards	Concentration (ug/mL)	AnalysisDate	AnalysisTime	AnalyzedBy	Dilution	Weight	Volume	Surr	Recovery	Flag	QC Limits
13	SS 1-chloro-octadecane (COD)	24.27503297	12/7/2023	07:56:00 PM	DBV s6120741.D	1	1	2	100	**49%**		40-140
10	SS ortho-terphenyl (OTP)	28.365242	12/7/2023	07:56:00 PM	DBV s6120742.D	1	1	2	100	**57%**		40-140
3	SS 2-fluorobiphenyl (2FBP)	14.79336434	12/7/2023	07:56:00 PM	DBV s6120742.D	1	1	2	40	**74%**		40-140
5	SS 2-bromonaphthalene (2BN)	15.09316664	12/7/2023	07:56:00 PM	DBV s6120742.D	1	1	2	40	**75%**		40-140

#	AnalyteName	Concentration (ug/mL)	AnalysisDate	AnalysisTime	AnalyzedBy	Dilution	Weight	Volume
3	naphthalene	0	12/07/2023	07:51:00 PM	CL s4120720.D	1	1	2
4	2-methylnaphthalene	0	12/07/2023	07:51:00 PM	CL s4120720.D	1	1	2
12	phenanthrene	0	12/07/2023	07:51:00 PM	CL s4120720.D	1	1	2
8	acenaphthene	0	12/07/2023	07:51:00 PM	CL s4120720.D	1	1	2
7	acenaphthylene	0	12/07/2023	07:51:00 PM	CL s4120720.D	1	1	2
10	fluorene	0	12/07/2023	07:51:00 PM	CL s4120720.D	1	1	2
13	anthracene	0	12/07/2023	07:51:00 PM	CL s4120720.D	1	1	2
15	fluoranthene	0	12/07/2023	07:51:00 PM	CL s4120720.D	1	1	2
17	pyrene	0.028460687	12/07/2023	07:51:00 PM	CL s4120720.D	1	1	2
18	benzo(a)anthracene	0	12/07/2023	07:51:00 PM	CL s4120720.D	1	1	2
19	chrysene	0	12/07/2023	07:51:00 PM	CL s4120720.D	1	1	2
21	benzo(b)fluoranthene	0	12/07/2023	07:51:00 PM	CL s4120720.D	1	1	2
22	benzo(k)fluoranthene	0	12/07/2023	07:51:00 PM	CL s4120720.D	1	1	2
23	benzo(a)pyrene	0	12/07/2023	07:51:00 PM	CL s4120720.D	1	1	2
24	indeno(1,2,3-cd)pyrene	0	12/07/2023	07:51:00 PM	CL s4120720.D	1	1	2
25	dibenzo(a,h)anthracene	0	12/07/2023	07:51:00 PM	CL s4120720.D	1	1	2
26	benzo(g,h,i)perylene	0	12/07/2023	07:51:00 PM	CL s4120720.D	1	1	2
20	C11-C22 Aromatics	32.87528434	12/7/2023	07:56:00 PM	DBV s6120742.D	1	1	2
9	C9-C18 Aliphatics	16.11443349	12/7/2023	07:56:00 PM	DBV s6120741.D	1	1	2
20	C19-C36 Aliphatics	17.42486035	12/7/2023	07:56:00 PM	DBV s6120741.D	1	1	2
	Adjusted C11-C22 Aromatics	32.84682365	12/7/2023	07:56:00 PM	DBV s6120742.D	1	1	2

Quantitation Report (QT Reviewed)

CL
12/8/23 @ 15:28
CharlesL

Data Path : X:\S4\2023\Dec23\120723\
Data File : s4120720.D
Acq On : 07 Dec 2023 07:51 pm
Operator : cl
Sample : 67798-04 targets x1
Misc : aro frac
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Dec 08 08:54:14 2023
Quant Method : X:\S4\methods\S4PAH110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration

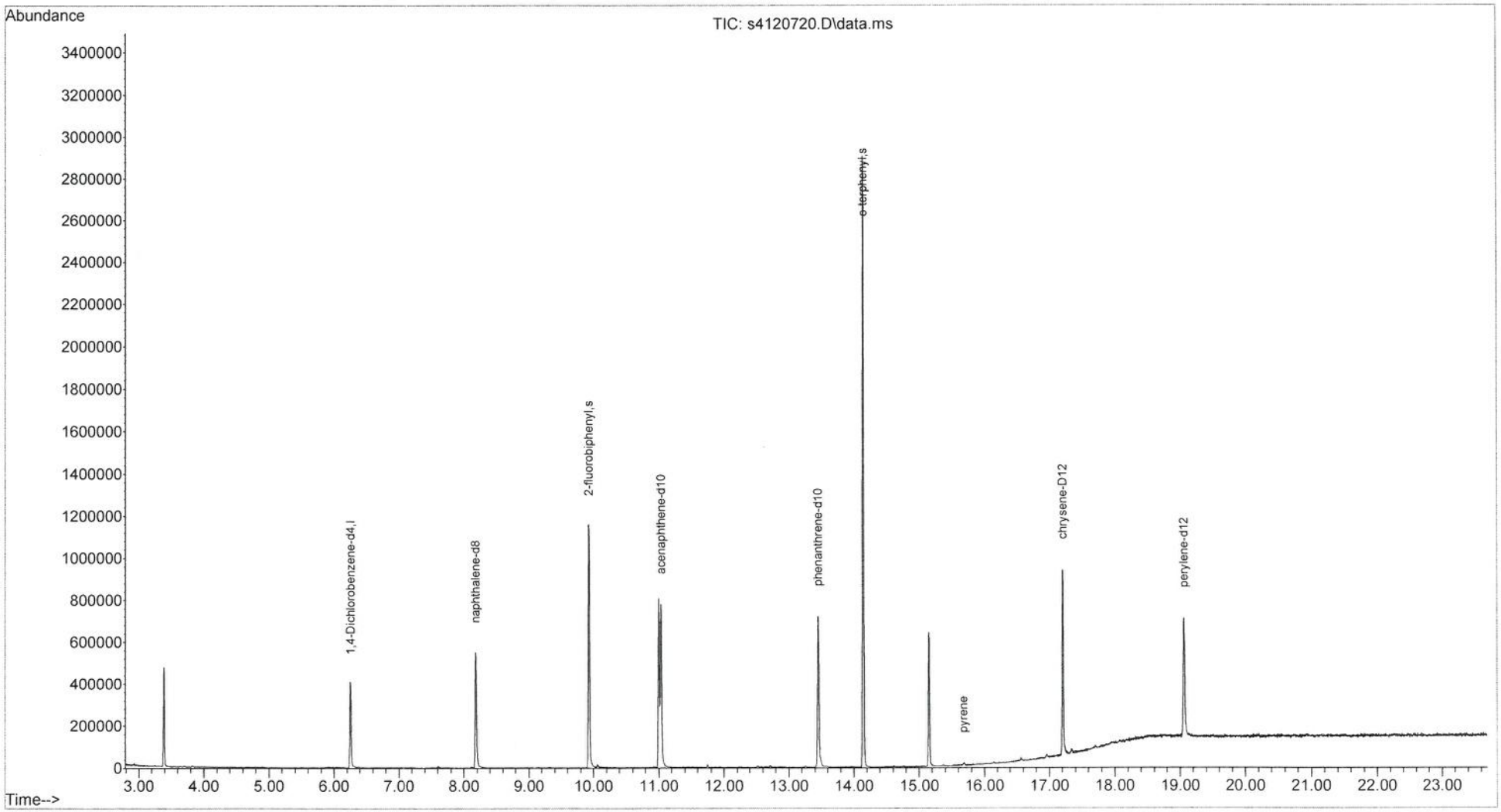
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1,4-Dichlorobenzene-d4	6.253	152	96402	10.00 ug/mL	-0.01
2) naphthalene-d8	8.179	136	385169	10.00 ug/mL	-0.01
5) acenaphthene-d10	11.035	164	217148	10.00 ug/mL	-0.01
11) phenanthrene-d10	13.449	188	426966	10.00 ug/mL	#-0.01
16) chrysene-D12	17.205	240	386580	10.00 ug/mL	0.00
20) perylene-d12	19.057	264	352189	10.00 ug/mL	0.02
System Monitoring Compounds					
6) 2-fluorobiphenyl	9.927	172	535673	15.66 ug/mL	-0.01
Spiked Amount 100.000			Recovery = 15.66%		
14) o-terphenyl	14.142	230	781126	32.22 ug/mL	-0.01
Spiked Amount 100.000			Recovery = 32.22%		
Target Compounds					Qvalue
3) naphthalene	8.215	128	800	Below Cal #	68
12) phenanthrene	13.487	178	2900	Below Cal #	60
13) anthracene	13.571	178	1844	Below Cal #	61
15) fluoranthene	15.367	202	3188m	BC Below Cal	
17) pyrene	15.671	202	3580m	BC 0.028 ug/mL	
18) benzo(a)anthracene	17.189	228	3634m	BC Below Cal	
19) chrysene	17.240	228	1387	Below Cal #	49
21) Benzo(b)fluoranthene	18.524	252	2150	Below Cal #	59
22) benzo(k)fluoranthene	18.524	252	2150	Below Cal #	58
23) benzo(a)pyrene	18.993	252	1029	Below Cal #	54

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Dec23\120723\
Data File : s4120720.D
Acq On : 07 Dec 2023 07:51 pm
Operator : cl
Sample : 67798-04 targets x1
Misc : aro frac
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Dec 08 08:54:14 2023
Quant Method : X:\S4\methods\S4PAH110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration



SFP
12/12/23 @ 12:24
SkylaM

Data Path : X:\S6\2023\Dec23\120723\
Data File : s6120742.D
Signal(s) : FID1A.ch
Acq On : 07 Dec 2023 07:56 pm
Operator : dbv
Sample : 67798-04 aro x1
Misc :
ALS Vial : 21 Sample Multiplier: 1

Integration File: rteint.p
Quant Time: Dec 08 17:08:35 2023
Quant Method : X:\S6\methods\S6ARO100423F.M
Quant Title : S6 EPH Aromatics
QLast Update : Thu Oct 05 11:16:37 2023
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :

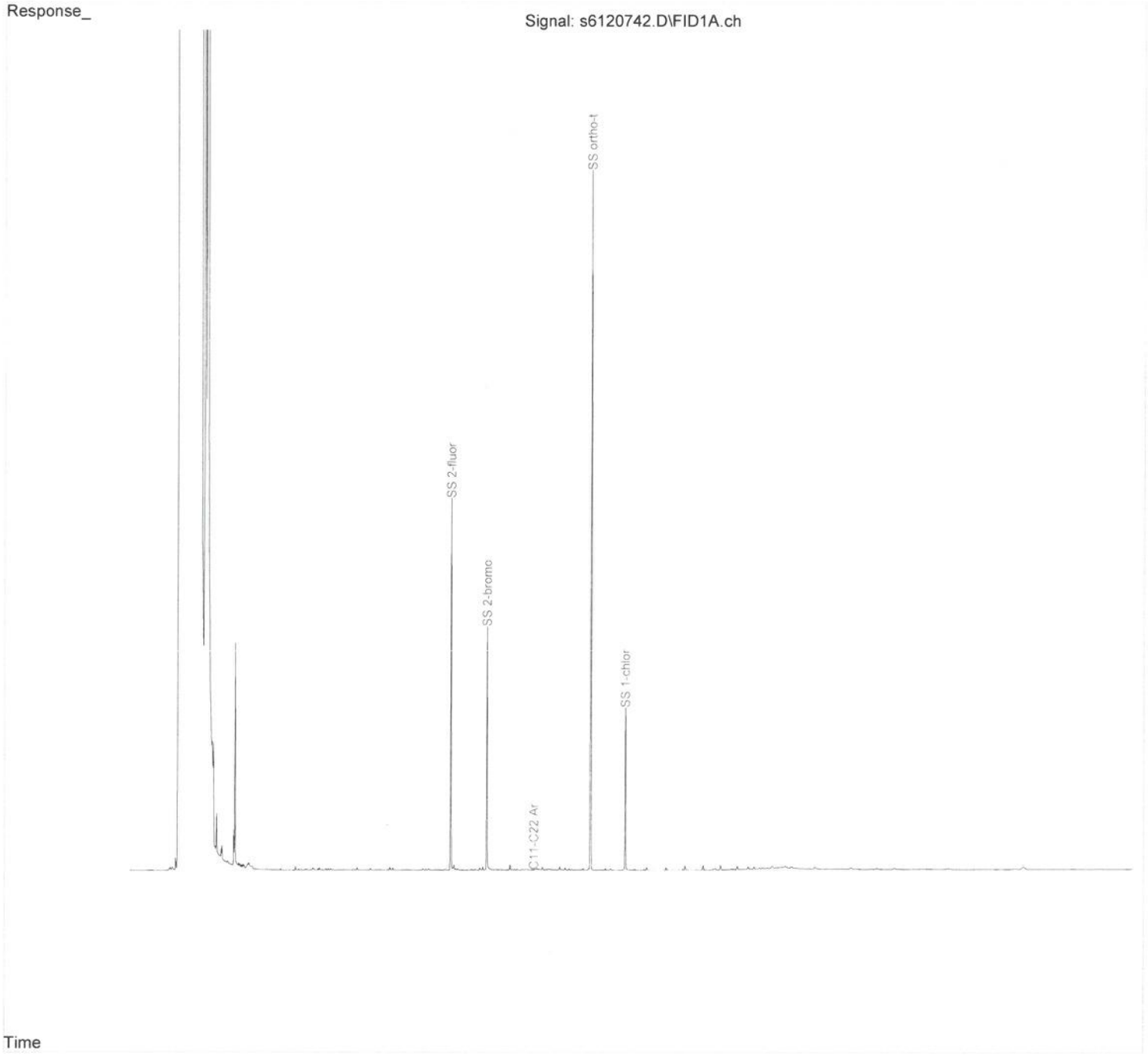
	Compound	R.T.	Response	Conc	Units	
	System Monitoring Compounds					
3) S	SS 2-fluorobiphenyl (...	9.527	2087650	14.793	ug/mLm	BC = Baseline Correction
Spiked Amount	20.000		Recovery =	73.96%		
5) S	SS 2-bromonaphthalene...	10.604	1439328	15.093	ug/mLm	BC = Baseline Correction
Spiked Amount	20.000		Recovery =	75.47%		
10) S	SS ortho-terphenyl (OTP)	13.727	4243723	28.365	ug/mLm	BC = Baseline Correction
Spiked Amount	50.000		Recovery =	56.73%		
11) S	SS 1-chloro-otadecane...	14.765	1033692	8.463	ug/mL	
Spiked Amount	50.000		Recovery =	16.93%		
	Target Compounds					
1)	naphthalene	0.000	0	N.D.	ug/mLd	
2)	2-methylnaphthalene	0.000	0	N.D.	ug/mL	
4)	acenaphthylene	0.000	0	N.D.	ug/mLd	
6)	acenaphthene	0.000	0	N.D.	ug/mL	
7)	fluorene	0.000	0	N.D.	ug/mLd	
8)	phenanthrene	0.000	0	N.D.	ug/mLd	
9)	anthracene	0.000	0	N.D.	ug/mLd	
12)	fluoranthene	0.000	0	N.D.	ug/mLd	
13)	pyrene	0.000	0	N.D.	ug/mL	
14)	benzo(a)anthracene	0.000	0	N.D.	ug/mLd	
15)	chrysene	0.000	0	N.D.	ug/mL	
16)	benzo(b&k)fluoranthenes	0.000	0	N.D.	ug/mL	
17)	benzo(a)pyrene	0.000	0	N.D.	ug/mL	
18)	indeno&dibenzo	0.000	0	N.D.	ug/mL	
19)	benzo(g,h,i)perylene	0.000	0	N.D.	ug/mL	
20) H	C11-C22 Aromatics	12.000	4711214	32.875	ug/mLm	RI = Range Integration

(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : X:\S6\2023\Dec23\120723\
Data File : s6120742.D
Signal(s) : FID1A.ch
Acq On : 07 Dec 2023 07:56 pm
Operator : dbv
Sample : 67798-04 aro x1
Misc :
ALS Vial : 21 Sample Multiplier: 1

Integration File: rteint.p
Quant Time: Dec 08 17:08:35 2023
Quant Method : X:\S6\methods\S6ARO100423F.M
Quant Title : S6 EPH Aromatics
QLast Update : Thu Oct 05 11:16:37 2023
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : X:\S6\2023\Dec23\120723.SEC\
Data File : s6120741.D
Signal(s) : FID2B.ch
Acq On : 07 Dec 2023 07:56 pm
Operator : dbv
Sample : 67798-04 ali x1
Misc :
ALS Vial : 96 Sample Multiplier: 1

12/12/23 @ 08:26
DonnaV

Integration File: rteint.p
Quant Time: Dec 08 17:08:57 2023
Quant Method : X:\S6\methods\S6ALI100423A.M
Quant Title : S6 EPH Aliphatics
QLast Update : Thu Oct 05 13:01:54 2023
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :

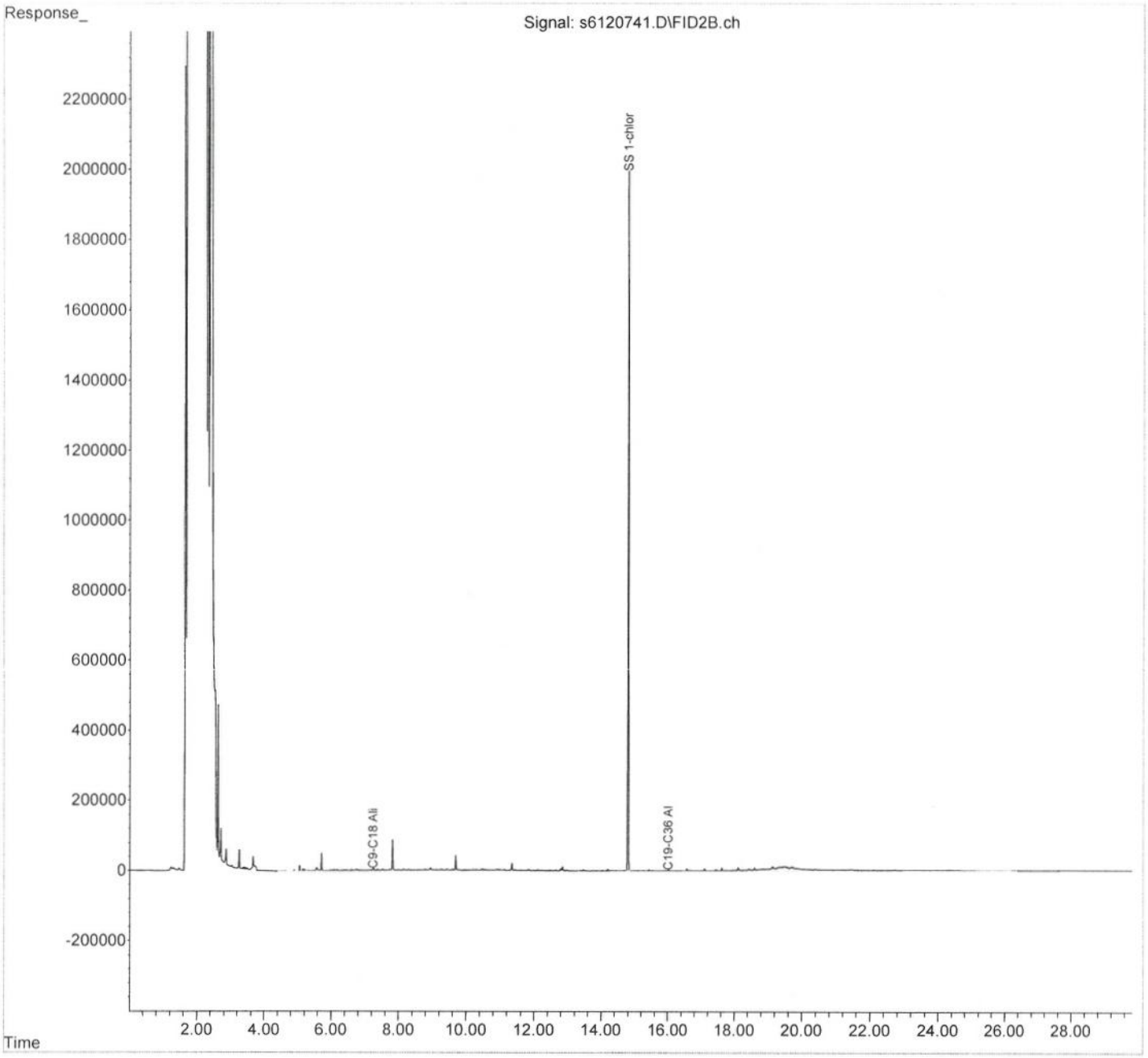
	Compound	R.T.	Response	Conc	Units	
	System Monitoring Compounds					
4) S	SS 2-fluorobiphenyl (...	0.000	0	N.D.	ug/mLd	
Spiked Amount	20.000		Recovery =	0.00%		
6) S	SS 2-bromonaphthalene...	0.000	0	N.D.	ug/mLd	
Spiked Amount	20.000		Recovery =	0.00%		
11) S	SS ortho-terphenyl (OTP)	0.000	0	N.D.	ug/mLd	
Spiked Amount	50.000		Recovery =	0.00%		
13) S	SS 1-chloro-octadecan...	14.807f	2850154	24.275	ug/mLm	BC = Baseline Correction
Spiked Amount	50.000		Recovery =	48.55%		
	Target Compounds					
1)	C9 n-Nonane	0.000	0	N.D.	ug/mLd	
2)	C10 n-Decane	0.000	0	N.D.	ug/mLd	
3)	C12 n-Dodecane	0.000	0	N.D.	ug/mLd	
5)	C14 n-Tetradecane	0.000	0	N.D.	ug/mLd	
7)	C16 n-Hexadecane	0.000	0	N.D.	ug/mLd	
8)	C18 n-Octadecane	0.000	0	N.D.	ug/mLd	
9) H	C9-C18 Aliphatics	7.237	2140212	16.114	ug/mLm	RI = Range Integration
10)	C19 n-Nonadecane	0.000	0	N.D.	ug/mLd	
12)	C20 n-Eicosane	0.000	0	N.D.	ug/mLd	
14)	C22 n-Docosane	0.000	0	N.D.	ug/mLd	
15)	C24 n-Tetracosane	0.000	0	N.D.	ug/mLd	
16)	C26 n-Hexacosane	0.000	0	N.D.	ug/mLd	
17)	C28 n-Octacosane	0.000	0	N.D.	ug/mLd	
18)	C30 n-Triacontane	0.000	0	N.D.	ug/mLd	
19)	C36 n-Hexatriacontane	0.000	0	N.D.	ug/mLd	
20) H	C19-C36 Aliphatics	16.000	2448566	17.425	ug/mLm	RI = Range Integration

(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : X:\S6\2023\Dec23\120723.SEC\
Data File : s6120741.D
Signal(s) : FID2B.ch
Acq On : 07 Dec 2023 07:56 pm
Operator : dbv
Sample : 67798-04 ali x1
Misc :
ALS Vial : 96 Sample Multiplier: 1

Integration File: rteint.p
Quant Time: Dec 08 17:08:57 2023
Quant Method : X:\S6\methods\S6ALI100423A.M
Quant Title : S6 EPH Aliphatics
QLast Update : Thu Oct 05 13:01:54 2023
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :



This File:	L:\SVOA\Excel Reports\EPH\231213\67798-005		
Analysis Group:	EPH	Dow Salvage Yard	
Field ID:	SY-OBMW15-110723	CRE	
Sample:	67798-05 targets x1	67798-05 aro x1	67798-05 ali x1
Misc:	aro frac		
Method Name:	SVOA04 Method 8270E (t	S6 EPH Aromatics	S6 EPH Aliphatics
Import File Name:	s6 EPHs QC17110		
TestGroupID:	EMA_EPH_PresCert_A		
Aqueous or Soil? (A or S)	A		
Fractionated? (Y/N)	y	y	
Prep Date:	11/13/2023		
Lab#:	67798-005		
QC_Code:			
Prep#	17110		

Skyla Marquis L:\SVOA\EPH\EPH ImportFileBuilder2.0.xls
12/13/23 2:51 PM
L:\SVOA\EPH\
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Reviewer Checks:

- Quant Report: Reviewed? Ranges integrated? Analyst Initials & Date?
- Chromatogram Checked? Major peaks identified?
- Soil prep data checked: weight, volume, %solid, Prep date
- Field ID consistent with data and any field replicates
- Results consistent with any re-runs & internal QC
- Substitute dilution data checked
- Correct dilution and reason clear or noted
- Reason for reanalysis documented
- Surrogates pass or flagged & noted
- Flags checked (Expiration, F+, Over Cal)
- Other QC failures, estimates or interferences documented
- Spot checked Reported Result with Quant Report
- Checked Audit flagged data in LIMS

Notes:

Initials & Date: 12/13/23

1
2
5
11
16
20

X:\S4\2023\Dec23\120723\s4120721.D\S4PAH110223A.XLS PAH targets filename
X:\S6\2023\Dec23\120723\s6120744.D\S6ARO100423F.XLS aromatics filename
X:\S6\2023\Dec23\120723.SEC\s6120743.D\S6ALI100423A.XLS aliphatics filename

#	Surrogate Standards	Concentration (ug/mL)	AnalysisDate	AnalysisTime	AnalyzedBy	Dilution	Weight	Volume	Surr	Recovery	Flag	QC Limits
13	SS 1-chloro-octadecane (COD)	23.96835392	12/7/2023	08:31:00 PM	DBV s6120743.D	1	1	2	100	**48%**		40-140
10	SS ortho-terphenyl (OTP)	25.64947375	12/7/2023	08:31:00 PM	DBV s6120744.D	1	1	2	100	**51%**		40-140
3	SS 2-fluorobiphenyl (2FBP)	15.06436333	12/7/2023	08:31:00 PM	DBV s6120744.D	1	1	2	40	**75%**		40-140
5	SS 2-bromonaphthalene (2BN)	15.64434066	12/7/2023	08:31:00 PM	DBV s6120744.D	1	1	2	40	**78%**		40-140

#	AnalyteName	Concentration (ug/mL)	AnalysisDate	AnalysisTime	AnalyzedBy	Dilution	Weight	Volume
3	naphthalene	0	12/07/2023	08:22:00 PM	CL s4120721.D	1	1	2
4	2-methylnaphthalene	0	12/07/2023	08:22:00 PM	CL s4120721.D	1	1	2
12	phenanthrene	0.072702886	12/07/2023	08:22:00 PM	CL s4120721.D	1	1	2
8	acenaphthene	0	12/07/2023	08:22:00 PM	CL s4120721.D	1	1	2
7	acenaphthylene	0	12/07/2023	08:22:00 PM	CL s4120721.D	1	1	2
10	fluorene	0	12/07/2023	08:22:00 PM	CL s4120721.D	1	1	2
13	anthracene	0.053062978	12/07/2023	08:22:00 PM	CL s4120721.D	1	1	2
15	fluoranthene	0.114302943	12/07/2023	08:22:00 PM	CL s4120721.D	1	1	2
17	pyrene	0.142939626	12/07/2023	08:22:00 PM	CL s4120721.D	1	1	2
18	benzo(a)anthracene	0.092715969	12/07/2023	08:22:00 PM	CL s4120721.D	1	1	2
19	chrysene	0.058091546	12/07/2023	08:22:00 PM	CL s4120721.D	1	1	2
21	benzo(b)fluoranthene	0.131581102	12/07/2023	08:22:00 PM	CL s4120721.D	1	1	2
22	benzo(k)fluoranthene	0.121881393	12/07/2023	08:22:00 PM	CL s4120721.D	1	1	2
23	benzo(a)pyrene	0.083599706	12/07/2023	08:22:00 PM	CL s4120721.D	1	1	2
24	indeno(1,2,3-cd)pyrene	0.092407787	12/07/2023	08:22:00 PM	CL s4120721.D	1	1	2
25	dibenzo(a,h)anthracene	0.108310067	12/07/2023	08:22:00 PM	CL s4120721.D	1	1	2
26	benzo(g,h,i)perylene	0.120151692	12/07/2023	08:22:00 PM	CL s4120721.D	1	1	2
20	C11-C22 Aromatics	31.93187767	12/7/2023	08:31:00 PM	DBV s6120744.D	1	1	2
9	C9-C18 Aliphatics	5.988411106	12/7/2023	08:31:00 PM	DBV s6120743.D	1	1	2
20	C19-C36 Aliphatics	21.3716928	12/7/2023	08:31:00 PM	DBV s6120743.D	1	1	2
	Adjusted C11-C22 Aromatics	30.74012997	12/7/2023	08:31:00 PM	DBV s6120744.D	1	1	2

Quantitation Report (QT Reviewed)

CL
12/8/23 @ 15:28
CharlesL

Data Path : X:\S4\2023\Dec23\120723\
Data File : s4120721.D
Acq On : 07 Dec 2023 08:22 pm
Operator : cl
Sample : 67798-05 targets x1
Misc : aro frac
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Dec 08 08:54:17 2023
Quant Method : X:\S4\methods\S4PAH110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration

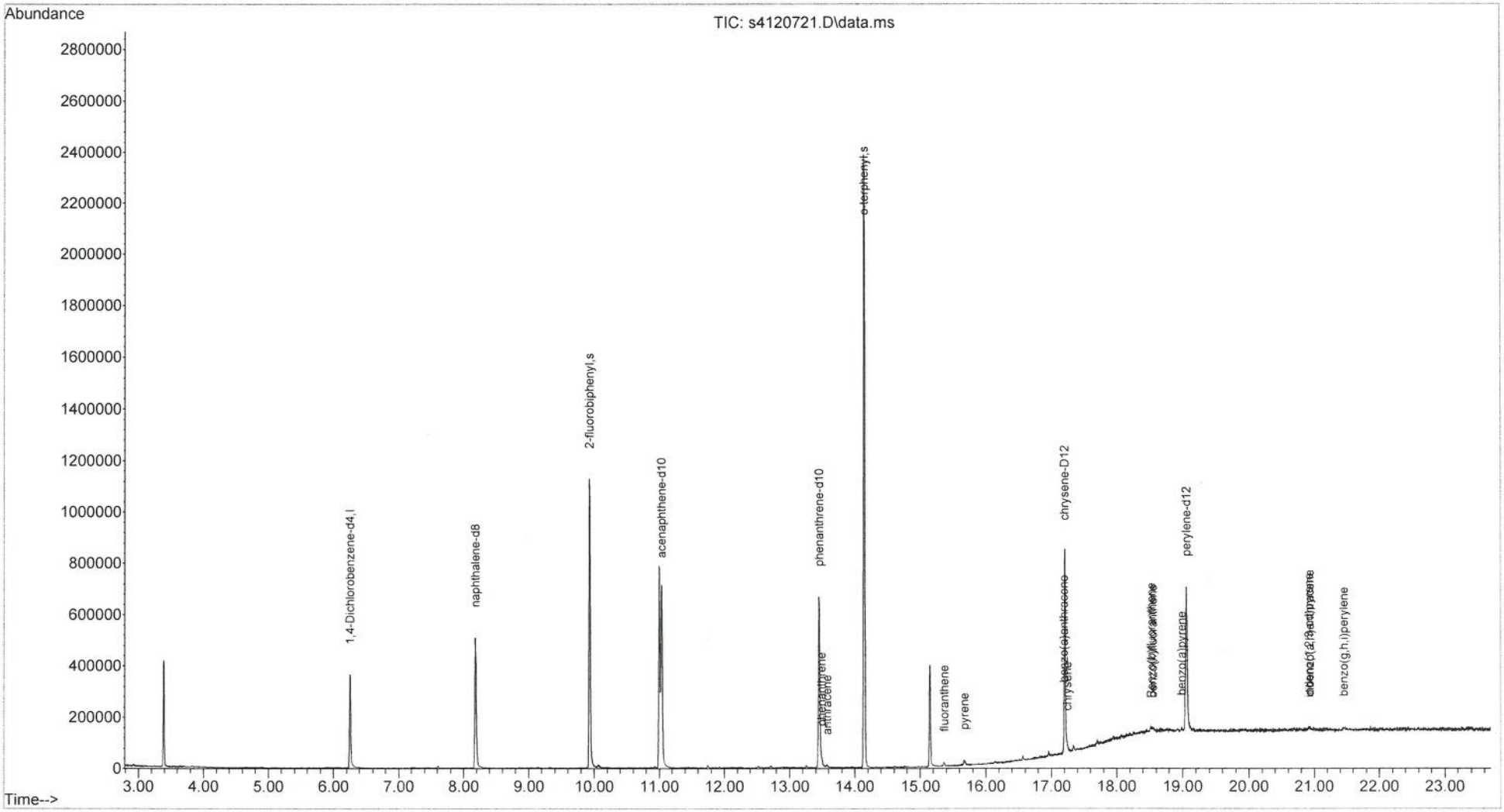
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1,4-Dichlorobenzene-d4	6.250	152	89516	10.00 ug/mL	-0.01
2) naphthalene-d8	8.182	136	361557	10.00 ug/mL	-0.01
5) acenaphthene-d10	11.038	164	214591	10.00 ug/mL	#-0.01
11) phenanthrene-d10	13.451	188	411204	10.00 ug/mL	# 0.00
16) chrysene-D12	17.204	240	372592	10.00 ug/mL	# 0.00
20) perylene-d12	19.057	264	336283	10.00 ug/mL	0.02
System Monitoring Compounds					
6) 2-fluorobiphenyl	9.930	172	511223	15.12 ug/mL	-0.01
Spiked Amount 100.000			Recovery = 15.12%		
14) o-terphenyl	14.144	230	662018	28.35 ug/mL	0.00
Spiked Amount 100.000			Recovery = 28.35%		
Target Compounds					Qvalue
3) naphthalene	8.210	128	1059	Below Cal #	68
12) phenanthrene	13.487	178	8513m	BC 0.073 ug/mL	
13) anthracene	13.571	178	6057m	BC 0.053 ug/mL	
15) fluoranthene	15.367	202	10150m	BC 0.114 ug/mL	
17) pyrene	15.671	202	10385m	BC 0.143 ug/mL	
18) benzo(a)anthracene	17.192	228	9572m	BC 0.093 ug/mL	
19) chrysene	17.243	228	8195	0.058 ug/mL	# 69
21) Benzo(b)fluoranthene	18.527	252	9435m	BC 0.132 ug/mL	
22) benzo(k)fluoranthene	18.550	252	8355m	BC 0.122 ug/mL	
23) benzo(a)pyrene	18.986	252	6145m	BC 0.084 ug/mL	
24) indeno(1,2,3-cd)pyrene	20.920	276	6925m	BC 0.092 ug/mL	
25) dibenzo(a,h)anthracene	20.930	278	6272m	BC 0.108 ug/mL	
26) benzo(g,h,i)perylene	21.452	276	6838m	BC 0.120 ug/mL	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Dec23\120723\
Data File : s4120721.D
Acq On : 07 Dec 2023 08:22 pm
Operator : cl
Sample : 67798-05 targets x1
Misc : aro frac
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Dec 08 08:54:17 2023
Quant Method : X:\S4\methods\S4PAH110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration



SFP
12/12/23 @ 12:24
SkylaM

Data Path : X:\S6\2023\Dec23\120723\
Data File : s6120744.D
Signal(s) : FID1A.ch
Acq On : 07 Dec 2023 08:31 pm
Operator : dbv
Sample : 67798-05 aro x1
Misc :
ALS Vial : 22 Sample Multiplier: 1

Integration File: rteint.p
Quant Time: Dec 08 17:08:37 2023
Quant Method : X:\S6\methods\S6ARO100423F.M
Quant Title : S6 EPH Aromatics
QLast Update : Thu Oct 05 11:16:37 2023
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :

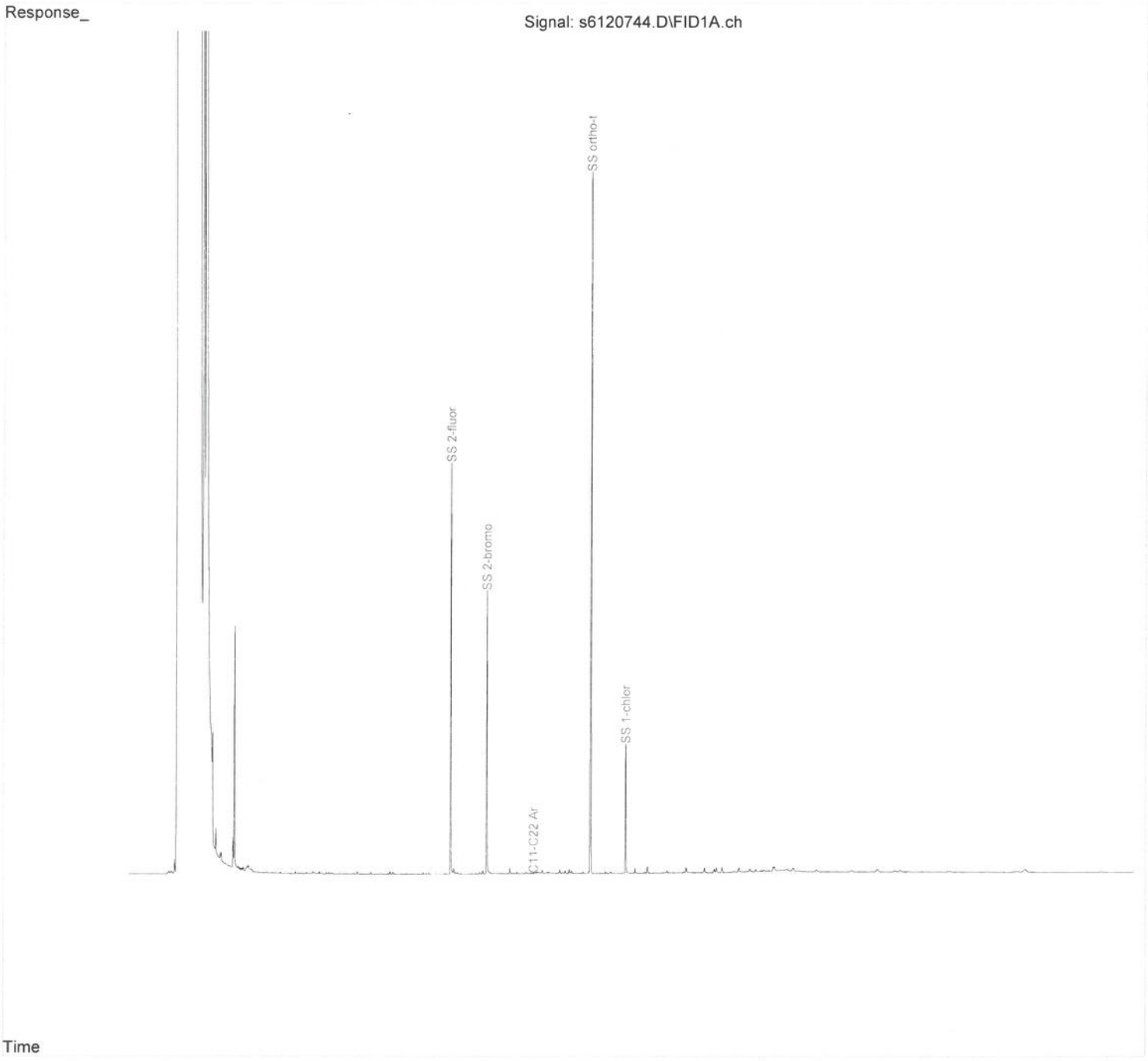
	Compound	R.T.	Response	Conc	Units	
	System Monitoring Compounds					
3) S	SS 2-fluorobiphenyl (...	9.528	2125862	15.064	ug/mLm	BC = Baseline Correction
Spiked Amount	20.000		Recovery =	75.32%		
5) S	SS 2-bromonaphthalene...	10.604	1491917	15.644	ug/mLm	BC = Baseline Correction
Spiked Amount	20.000		Recovery =	78.22%		
10) S	SS ortho-terphenyl (OTP)	13.727	3836987	25.649	ug/mLm	BC = Baseline Correction
Spiked Amount	50.000		Recovery =	51.30%		
11) S	SS 1-chloro-otadecane...	14.766	759281	6.220	ug/mLm	
Spiked Amount	50.000		Recovery =	12.44%		
	Target Compounds					
1)	naphthalene	0.000	0	N.D.	ug/mLd	
2)	2-methylnaphthalene	0.000	0	N.D.	ug/mLd	
4)	acenaphthylene	0.000	0	N.D.	ug/mLd	
6)	acenaphthene	0.000	0	N.D.	ug/mLd	
7)	fluorene	0.000	0	N.D.	ug/mLd	
8)	phenanthrene	0.000	0	N.D.	ug/mLd	
9)	anthracene	0.000	0	N.D.	ug/mLd	
12)	fluoranthene	0.000	0	N.D.	ug/mLd	
13)	pyrene	0.000	0	N.D.	ug/mLd	
14)	benzo(a)anthracene	0.000	0	N.D.	ug/mLd	
15)	chrysene	0.000	0	N.D.	ug/mL	
16)	benzo(b&k)fluoranthenes	0.000	0	N.D.	ug/mL	
17)	benzo(a)pyrene	0.000	0	N.D.	ug/mL	
18)	indeno&dibenzo	0.000	0	N.D.	ug/mL	
19)	benzo(g,h,i)perylene	0.000	0	N.D.	ug/mL	
20) H	C11-C22 Aromatics	12.000	4569537	31.932	ug/mLm	RI = Range Integration

(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : X:\S6\2023\Dec23\120723\
Data File : s6120744.D
Signal(s) : FID1A.ch
Acq On : 07 Dec 2023 08:31 pm
Operator : dbv
Sample : 67798-05 aro x1
Misc :
ALS Vial : 22 Sample Multiplier: 1

Integration File: rteint.p
Quant Time: Dec 08 17:08:37 2023
Quant Method : X:\S6\methods\S6ARO100423F.M
Quant Title : S6 EPH Aromatics
QLast Update : Thu Oct 05 11:16:37 2023
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : X:\S6\2023\Dec23\120723.SEC\
Data File : s6120743.D
Signal(s) : FID2B.ch
Acq On : 07 Dec 2023 08:31 pm
Operator : dbv
Sample : 67798-05 ali x1
Misc :
ALS Vial : 97 Sample Multiplier: 1

12/12/23 @ 08:26
DonnaV

Integration File: rteint.p
Quant Time: Dec 08 17:08:59 2023
Quant Method : X:\S6\methods\S6ALI100423A.M
Quant Title : S6 EPH Aliphatics
QLast Update : Thu Oct 05 13:01:54 2023
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :

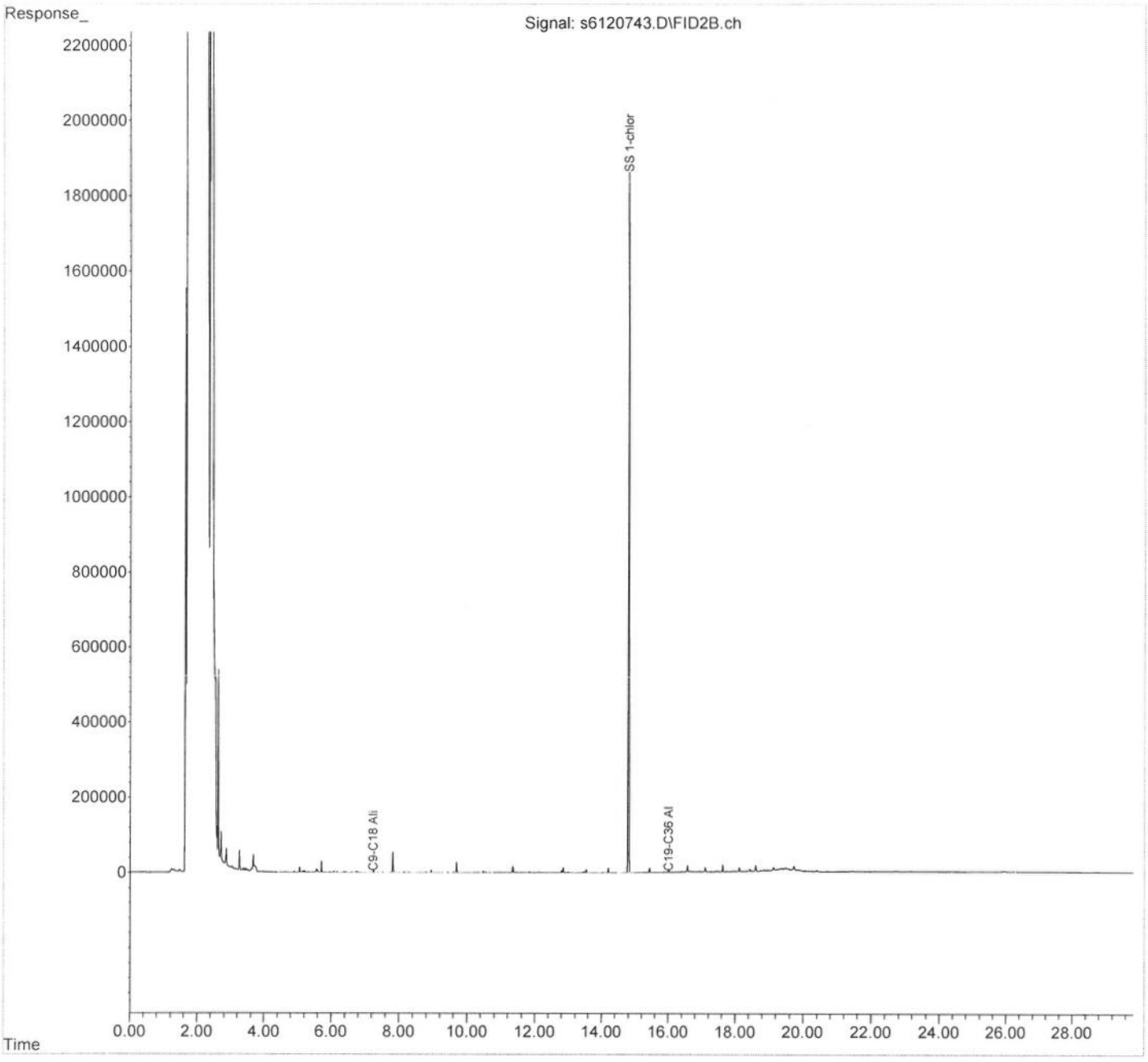
	Compound	R.T.	Response	Conc	Units	
	System Monitoring Compounds					
4) S	SS 2-fluorobiphenyl (...	0.000	0	N.D.	ug/mLd	
Spiked Amount	20.000		Recovery =	0.00%		
6) S	SS 2-bromonaphthalene...	0.000	0	N.D.	ug/mLd	
Spiked Amount	20.000		Recovery =	0.00%		
11) S	SS ortho-terphenyl (OTP)	0.000	0	N.D.	ug/mLd	
Spiked Amount	50.000		Recovery =	0.00%		
13) S	SS 1-chloro-octadecan...	14.808f	2814217	23.968	ug/mLm	BC = Baseline Correction
Spiked Amount	50.000		Recovery =	47.94%		
	Target Compounds					
1)	C9 n-Nonane	0.000	0	N.D.	ug/mLd	
2)	C10 n-Decane	0.000	0	N.D.	ug/mLd	
3)	C12 n-Dodecane	0.000	0	N.D.	ug/mLd	
5)	C14 n-Tetradecane	0.000	0	N.D.	ug/mLd	
7)	C16 n-Hexadecane	0.000	0	N.D.	ug/mLd	
8)	C18 n-Octadecane	0.000	0	N.D.	ug/mLd	
9) H	C9-C18 Aliphatics	7.237	845220	5.988	ug/mLm	RI = Range Integration
10)	C19 n-Nonadecane	0.000	0	N.D.	ug/mLd	
12)	C20 n-Eicosane	0.000	0	N.D.	ug/mLd	
14)	C22 n-Docosane	0.000	0	N.D.	ug/mLd	
15)	C24 n-Tetracosane	0.000	0	N.D.	ug/mLd	
16)	C26 n-Hexacosane	0.000	0	N.D.	ug/mLd	
17)	C28 n-Octacosane	0.000	0	N.D.	ug/mLd	
18)	C30 n-Triacontane	0.000	0	N.D.	ug/mLd	
19)	C36 n-Hexatriacontane	0.000	0	N.D.	ug/mLd	
20) H	C19-C36 Aliphatics	16.000	2971181	21.372	ug/mLm	RI = Range Integration

(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : X:\S6\2023\Dec23\120723.SEC\
Data File : s6120743.D
Signal(s) : FID2B.ch
Acq On : 07 Dec 2023 08:31 pm
Operator : dbv
Sample : 67798-05 ali x1
Misc :
ALS Vial : 97 Sample Multiplier: 1

Integration File: rteint.p
Quant Time: Dec 08 17:08:59 2023
Quant Method : X:\S6\methods\S6ALI100423A.M
Quant Title : S6 EPH Aliphatics
QLast Update : Thu Oct 05 13:01:54 2023
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :



This File:	L:\SVOA\Excel Reports\EPH\231213\67798-006			Skyla Marquis L:\SVOA\EPH\EPH ImportFileBuilder2.0.xls
Analysis Group:	EPH	Dow Salvage Yard		12/13/23 2:55 PM
Field ID:	SY-OBMW5-110723	CRE		L:\SVOA\EPH\
Sample:	67798-06 targets x1	67798-06 aro x1	67798-06 ali x1	L:\SVOA\Excel Reports\EPH\2312
Misc:	aro frac			L:\SVOA\PDF Reports\FUELS\
Method Name:	SVOA04 Method 8270E (t	S6 EPH Aromatics	S6 EPH Aliphatics	
Import File Name:	s6 EPHs QC17110			
TestGroupID:	EMA_EPH_PresCert_A			
Aqueous or Soil? (A or S)	A			
Fractionated? (Y/N)	y	y		
Prep Date:	11/13/2023			
Lab#:	67798-006			
QC_Code:				
Prep#	17110			

Reviewer Checks:

Quant Report: Reviewed? Ranges integrated? Analyst Initials & Date?	1
Chromatogram Checked? Major peaks identified?	2
Soil prep data checked: weight, volume, %solid, Prep date	5
Field ID consistent with data and any field replicates	11
Results consistent with any re-runs & internal QC	16
Substitute dilution data checked	20
Correct dilution and reason clear or noted	
Reason for reanalysis documented	
Surrogates pass or flagged & noted	
Flags checked (Expiration, F+, Over Cal)	
Other QC failures, estimates or interferences documented	
Spot checked Reported Result with Quant Report	
Checked Audit flagged data in LIMS	

Notes:

Initials & Date: SD 12/13/23

X:\S4\2023\Dec23\120723\s4120722.D\S4PAH110223A.XLS PAH targets filename
X:\S6\2023\Dec23\120723\s6120746.D\S6ARO100423F.XLS aromatics filename
X:\S6\2023\Dec23\120723.SEC\s6120745.D\S6ALI100423A.XLS aliphatics filename

#	Surrogate Standards	Concentration (ug/mL)	AnalysisDate	AnalysisTime	AnalyzedBy	Dilution	Weight	Volume	Surr	Recovery	Flag	QC Limits
13	SS 1-chloro-octadecane (COD)	21.68278984	12/7/2023	09:05:00 PM	DBV s6120745.D	1	1	2	100	**43%**		40-140
10	SS ortho-terphenyl (OTP)	26.41087651	12/7/2023	09:05:00 PM	DBV s6120746.D	1	1	2	100	**53%**		40-140
3	SS 2-fluorobiphenyl (2FBP)	14.7136646	12/7/2023	09:05:00 PM	DBV s6120746.D	1	1	2	40	**74%**		40-140
5	SS 2-bromonaphthalene (2BN)	15.2006995	12/7/2023	09:05:00 PM	DBV s6120746.D	1	1	2	40	**76%**		40-140

#	AnalyteName	Concentration (ug/mL)	AnalysisDate	AnalysisTime	AnalyzedBy	Dilution	Weight	Volume
3	naphthalene	0	12/07/2023	08:52:00 PM	CL s4120722.D	1	1	2
4	2-methylnaphthalene	0	12/07/2023	08:52:00 PM	CL s4120722.D	1	1	2
12	phenanthrene	0	12/07/2023	08:52:00 PM	CL s4120722.D	1	1	2
8	acenaphthene	0	12/07/2023	08:52:00 PM	CL s4120722.D	1	1	2
7	acenaphthylene	0	12/07/2023	08:52:00 PM	CL s4120722.D	1	1	2
10	fluorene	0	12/07/2023	08:52:00 PM	CL s4120722.D	1	1	2
13	anthracene	0	12/07/2023	08:52:00 PM	CL s4120722.D	1	1	2
15	fluoranthene	0	12/07/2023	08:52:00 PM	CL s4120722.D	1	1	2
17	pyrene	0	12/07/2023	08:52:00 PM	CL s4120722.D	1	1	2
18	benzo(a)anthracene	0	12/07/2023	08:52:00 PM	CL s4120722.D	1	1	2
19	chrysene	0	12/07/2023	08:52:00 PM	CL s4120722.D	1	1	2
21	benzo(b)fluoranthene	0	12/07/2023	08:52:00 PM	CL s4120722.D	1	1	2
22	benzo(k)fluoranthene	0	12/07/2023	08:52:00 PM	CL s4120722.D	1	1	2
23	benzo(a)pyrene	0	12/07/2023	08:52:00 PM	CL s4120722.D	1	1	2
24	indeno(1,2,3-cd)pyrene	0	12/07/2023	08:52:00 PM	CL s4120722.D	1	1	2
25	dibenzo(a,h)anthracene	0	12/07/2023	08:52:00 PM	CL s4120722.D	1	1	2
26	benzo(g,h,i)perylene	0	12/07/2023	08:52:00 PM	CL s4120722.D	1	1	2
20	C11-C22 Aromatics	31.65461624	12/7/2023	09:05:00 PM	DBV s6120746.D	1	1	2
9	C9-C18 Aliphatics	7.699398866	12/7/2023	09:05:00 PM	DBV s6120745.D	1	1	2
20	C19-C36 Aliphatics	16.60131313	12/7/2023	09:05:00 PM	DBV s6120745.D	1	1	2
	Adjusted C11-C22 Aromatics	31.65461624	12/7/2023	09:05:00 PM	DBV s6120746.D	1	1	2

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Dec23\120723\
Data File : s4120722.D
Acq On : 07 Dec 2023 08:52 pm
Operator : cl
Sample : 67798-06 targets x1
Misc : aro frac
ALS Vial : 17 Sample Multiplier: 1

CL
12/8/23 @ 15:31
CharlesL

Quant Time: Dec 08 08:54:20 2023
Quant Method : X:\S4\methods\S4PAH110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration

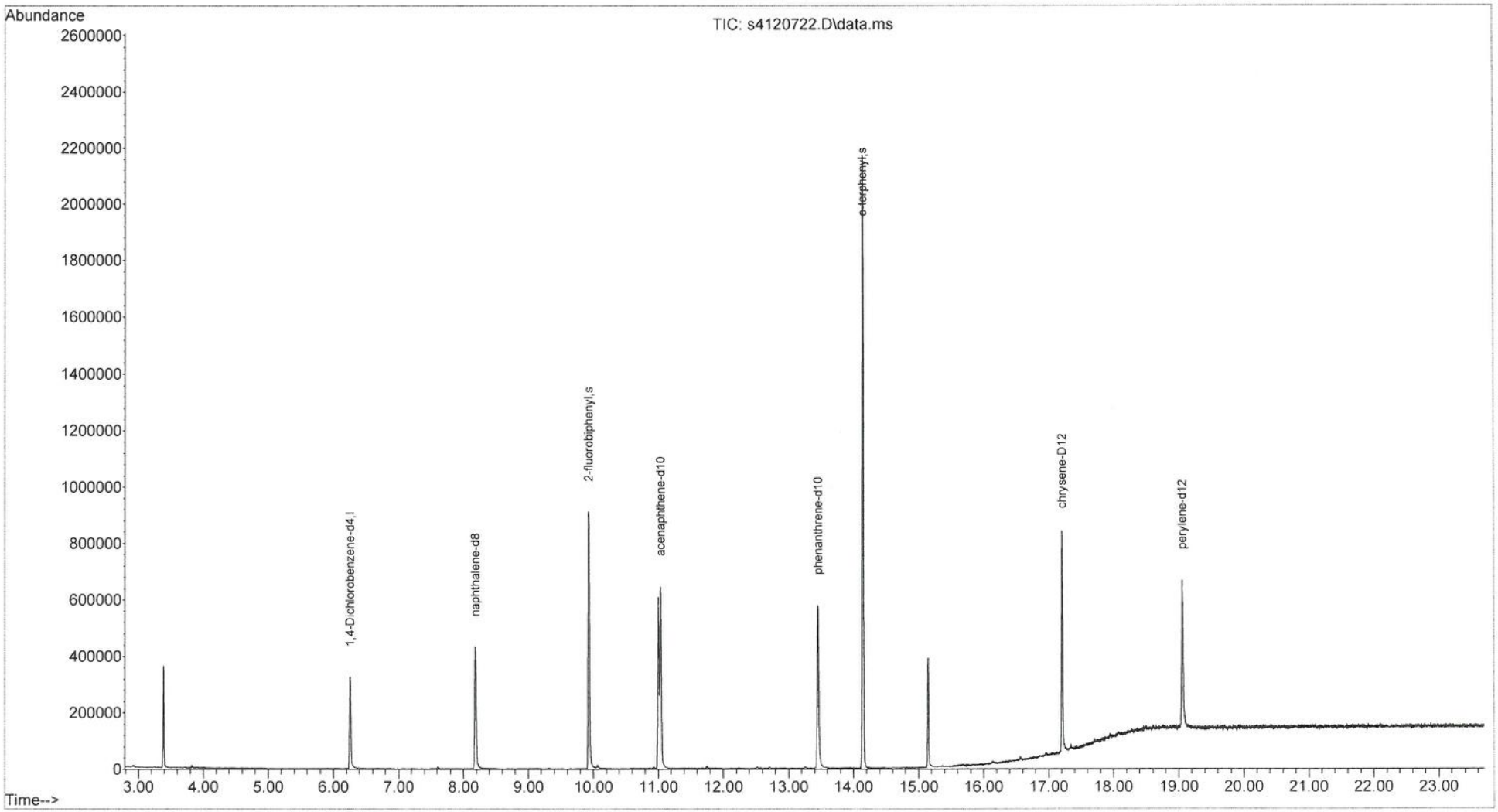
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.250	152	77739	10.00	ug/mL	-0.01
2) naphthalene-d8	8.182	136	308835	10.00	ug/mL	-0.01
5) acenaphthene-d10	11.036	164	184194	10.00	ug/mL	-0.01
11) phenanthrene-d10	13.451	188	363207	10.00	ug/mL	0.00
16) chrysene-D12	17.207	240	333338	10.00	ug/mL	0.00
20) perylene-d12	19.055	264	313281	10.00	ug/mL	0.02
System Monitoring Compounds						
6) 2-fluorobiphenyl	9.930	172	419950	14.47	ug/mL	-0.01
Spiked Amount 100.000			Recovery = 14.47%			
14) o-terphenyl	14.142	230	589794	28.60	ug/mL	-0.01
Spiked Amount 100.000			Recovery = 28.60%			
Target Compounds						Qvalue
23) benzo(a)pyrene	19.057	252	1211	Below Cal	#	1

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Dec23\120723\
Data File : s4120722.D
Acq On : 07 Dec 2023 08:52 pm
Operator : cl
Sample : 67798-06 targets x1
Misc : aro frac
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Dec 08 08:54:20 2023
Quant Method : X:\S4\methods\S4PAH110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration



SFP
12/12/23 @ 12:24
SkylaM

Data Path : X:\S6\2023\Dec23\120723\
Data File : s6120746.D
Signal(s) : FID1A.ch
Acq On : 07 Dec 2023 09:05 pm
Operator : dbv
Sample : 67798-06 aro x1
Misc :
ALS Vial : 23 Sample Multiplier: 1

Integration File: rteint.p
Quant Time: Dec 08 17:08:39 2023
Quant Method : X:\S6\methods\S6ARO100423F.M
Quant Title : S6 EPH Aromatics
QLast Update : Thu Oct 05 11:16:37 2023
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :

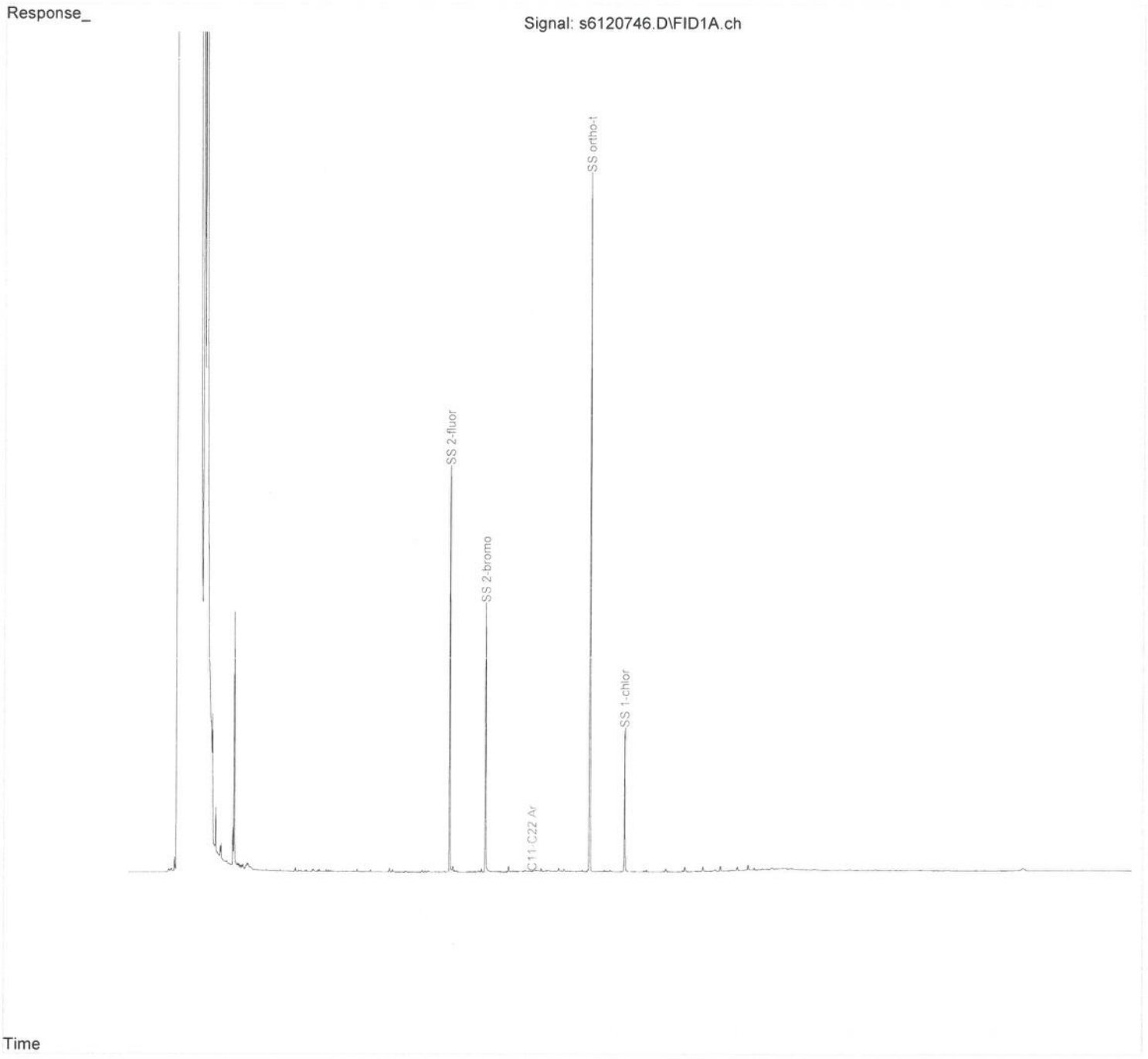
	Compound	R.T.	Response	Conc	Units	
	System Monitoring Compounds					
3) S	SS 2-fluorobiphenyl (...	9.528	2076412	14.714	ug/mLm	BC = Baseline Correction
Spiked Amount	20.000		Recovery =	73.57%		
5) S	SS 2-bromonaphthalene...	10.605	1449588	15.201	ug/mLm	BC = Baseline Correction
Spiked Amount	20.000		Recovery =	76.00%		
10) S	SS ortho-terphenyl (OTP)	13.726	3951021	26.411	ug/mLm	BC = Baseline Correction
Spiked Amount	50.000		Recovery =	52.82%		
11) S	SS 1-chloro-otadecane...	14.765	836972	6.855	ug/mL	
Spiked Amount	50.000		Recovery =	13.71%		
	Target Compounds					
1)	naphthalene	0.000	0	N.D.	ug/mLd	
2)	2-methylnaphthalene	0.000	0	N.D.	ug/mLd	
4)	acenaphthylene	0.000	0	N.D.	ug/mLd	
6)	acenaphthene	0.000	0	N.D.	ug/mL	
7)	fluorene	0.000	0	N.D.	ug/mLd	
8)	phenanthrene	0.000	0	N.D.	ug/mLd	
9)	anthracene	0.000	0	N.D.	ug/mL	
12)	fluoranthene	0.000	0	N.D.	ug/mLd	
13)	pyrene	0.000	0	N.D.	ug/mL	
14)	benzo(a)anthracene	0.000	0	N.D.	ug/mL	
15)	chrysene	0.000	0	N.D.	ug/mL	
16)	benzo(b&k)fluoranthenes	0.000	0	N.D.	ug/mL	
17)	benzo(a)pyrene	0.000	0	N.D.	ug/mL	
18)	indeno&dibenzo	0.000	0	N.D.	ug/mL	
19)	benzo(g,h,i)perylene	0.000	0	N.D.	ug/mL	
20) H	C11-C22 Aromatics	12.000	4527899	31.655	ug/mLm	RI = Range Integration

(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : X:\S6\2023\Dec23\120723\
Data File : s6120746.D
Signal(s) : FID1A.ch
Acq On : 07 Dec 2023 09:05 pm
Operator : dbv
Sample : 67798-06 aro x1
Misc :
ALS Vial : 23 Sample Multiplier: 1

Integration File: rteint.p
Quant Time: Dec 08 17:08:39 2023
Quant Method : X:\S6\methods\S6ARO100423F.M
Quant Title : S6 EPH Aromatics
QLast Update : Thu Oct 05 11:16:37 2023
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : X:\S6\2023\Dec23\120723.SEC\
Data File : s6120745.D
Signal(s) : FID2B.ch
Acq On : 07 Dec 2023 09:05 pm
Operator : dbv
Sample : 67798-06 ali x1
Misc :
ALS Vial : 98 Sample Multiplier: 1

12/12/23 @ 08:26
DonnaV

Integration File: rteint.p
Quant Time: Dec 08 17:09:01 2023
Quant Method : X:\S6\methods\S6ALI100423A.M
Quant Title : S6 EPH Aliphatics
QLast Update : Thu Oct 05 13:01:54 2023
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :

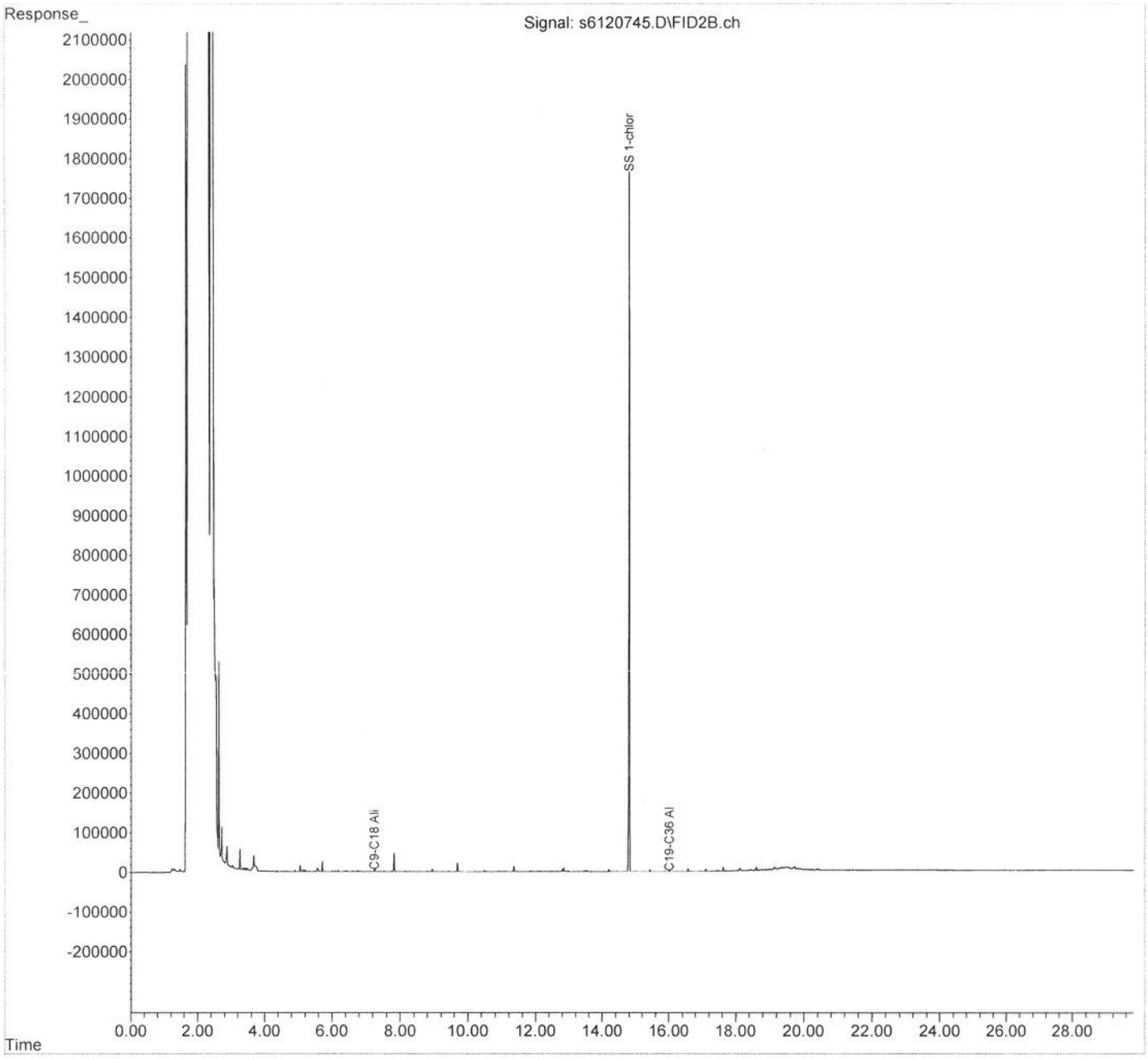
	Compound	R.T.	Response	Conc	Units	
	System Monitoring Compounds					
4) S	SS 2-fluorobiphenyl (...	0.000	0	N.D.	ug/mLd	
Spiked Amount	20.000	Recovery	=	0.00%		
6) S	SS 2-bromonaphthalene...	0.000	0	N.D.	ug/mLd	
Spiked Amount	20.000	Recovery	=	0.00%		
11) S	SS ortho-terphenyl (OTP)	0.000	0	N.D.	ug/mLd	
Spiked Amount	50.000	Recovery	=	0.00%		
13) S	SS 1-chloro-octadecan...	14.808f	2546392	21.683	ug/mLm	BC = Baseline Correction
Spiked Amount	50.000	Recovery	=	43.37%		
	Target Compounds					
1)	C9 n-Nonane	0.000	0	N.D.	ug/mLd	
2)	C10 n-Decane	0.000	0	N.D.	ug/mLd	
3)	C12 n-Dodecane	0.000	0	N.D.	ug/mLd	
5)	C14 n-Tetradecane	0.000	0	N.D.	ug/mLd	
7)	C16 n-Hexadecane	0.000	0	N.D.	ug/mLd	
8)	C18 n-Octadecane	0.000	0	N.D.	ug/mLd	
9) H	C9-C18 Aliphatics	7.237	1064034	7.699	ug/mLm	RI = Range Integration
10)	C19 n-Nonadecane	0.000	0	N.D.	ug/mLd	
12)	C20 n-Eicosane	0.000	0	N.D.	ug/mLd	
14)	C22 n-Docosane	0.000	0	N.D.	ug/mLd	
15)	C24 n-Tetracosane	0.000	0	N.D.	ug/mLd	
16)	C26 n-Hexacosane	0.000	0	N.D.	ug/mLd	
17)	C28 n-Octacosane	0.000	0	N.D.	ug/mLd	
18)	C30 n-Triacontane	0.000	0	N.D.	ug/mLd	
19)	C36 n-Hexatriacontane	0.000	0	N.D.	ug/mLd	
20) H	C19-C36 Aliphatics	16.000	2339517	16.601	ug/mLm	RI = Range Integration

(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : X:\S6\2023\Dec23\120723.SEC\
Data File : s6120745.D
Signal(s) : FID2B.ch
Acq On : 07 Dec 2023 09:05 pm
Operator : dbv
Sample : 67798-06 ali x1
Misc :
ALS Vial : 98 Sample Multiplier: 1

Integration File: rteint.p
Quant Time: Dec 08 17:09:01 2023
Quant Method : X:\S6\methods\S6ALI100423A.M
Quant Title : S6 EPH Aliphatics
QLast Update : Thu Oct 05 13:01:54 2023
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :



This File:	L:\SVOA\Excel Reports\EPH\231213\67798-007		
Analysis Group:	EPH	Dow Salvage Yard	
Field ID:	MW2-80.5-95.5-110723	CRE	
Sample:	67798-07 targets x1	67798-07 aro x1	67798-07 ali x1
Misc:	aro frac		
Method Name:	SVOA04 Method 8270E (t	S6 EPH Aromatics	S6 EPH Aliphatics
Import File Name:	s6 EPHs QC17110		
TestGroupID:	EMA_EPH_PresCert_A		
Aqueous or Soil? (A or S)	A		
Fractionated? (Y/N)	y	y	
Prep Date:	11/13/2023		
Lab#:	67798-007		
QC_Code:			
Prep#	17110		

Skyla Marquis L:\SVOA\EPH\EPH ImportFileBuilder2.0.xls
12/13/23 2:56 PM
L:\SVOA\EPH\
L:\SVOA\Excel Reports\EPH\2312
L:\SVOA\PDF Reports\FUELS\

Reviewer Checks:

- Quant Report: Reviewed? Ranges integrated? Analyst Initials & Date?
- Chromatogram Checked? Major peaks identified?
- Soil prep data checked: weight, volume, %solid, Prep date
- Field ID consistent with data and any field replicates
- Results consistent with any re-runs & internal QC
- Substitute dilution data checked
- Correct dilution and reason clear or noted
- Reason for reanalysis documented
- Surrogates pass or flagged & noted
- Flags checked (Expiration, F+, Over Cal)
- Other QC failures, estimates or interferences documented
- Spot checked Reported Result with Quant Report
- Checked Audit flagged data in LIMS

Notes:

Initials & Date: SJ 12/13/23

1
2
5
11
16
20

X:\S4\2023\Dec23\120723\s4120723.D\S4PAH110223A.XLS PAH targets filename
X:\S6\2023\Dec23\120723\s6120748.D\S6ARO100423F.XLS aromatics filename
X:\S6\2023\Dec23\120723.SEC\s6120747.D\S6ALI100423A.XLS aliphatics filename

#	Surrogate Standards	Concentration (ug/mL)	AnalysisDate	AnalysisTime	AnalyzedBy	Dilution	Weight	Volume	Surr	Recovery	Flag	QC Limits
13	SS 1-chloro-octadecane (COD)	19.30620428	12/7/2023	09:38:00 PM	DBV s6120747.D	1	1	2	100	**39%**	#	40-140
10	SS ortho-terphenyl (OTP)	26.25660489	12/7/2023	09:38:00 PM	DBV s6120748.D	1	1	2	100	**53%**		40-140
3	SS 2-fluorobiphenyl (2FBP)	15.34565278	12/7/2023	09:38:00 PM	DBV s6120748.D	1	1	2	40	**77%**		40-140
5	SS 2-bromonaphthalene (2BN)	15.85327512	12/7/2023	09:38:00 PM	DBV s6120748.D	1	1	2	40	**79%**		40-140

#	AnalyteName	Concentration (ug/mL)	AnalysisDate	AnalysisTime	AnalyzedBy	Dilution	Weight	Volume
3	naphthalene	0	12/07/2023	09:22:00 PM	CL s4120723.D	1	1	2
4	2-methylnaphthalene	0	12/07/2023	09:22:00 PM	CL s4120723.D	1	1	2
12	phenanthrene	0	12/07/2023	09:22:00 PM	CL s4120723.D	1	1	2
8	acenaphthene	0	12/07/2023	09:22:00 PM	CL s4120723.D	1	1	2
7	acenaphthylene	0	12/07/2023	09:22:00 PM	CL s4120723.D	1	1	2
10	fluorene	0	12/07/2023	09:22:00 PM	CL s4120723.D	1	1	2
13	anthracene	0	12/07/2023	09:22:00 PM	CL s4120723.D	1	1	2
15	fluoranthene	0	12/07/2023	09:22:00 PM	CL s4120723.D	1	1	2
17	pyrene	0.005841446	12/07/2023	09:22:00 PM	CL s4120723.D	1	1	2
18	benzo(a)anthracene	0	12/07/2023	09:22:00 PM	CL s4120723.D	1	1	2
19	chrysene	0	12/07/2023	09:22:00 PM	CL s4120723.D	1	1	2
21	benzo(b)fluoranthene	0	12/07/2023	09:22:00 PM	CL s4120723.D	1	1	2
22	benzo(k)fluoranthene	0	12/07/2023	09:22:00 PM	CL s4120723.D	1	1	2
23	benzo(a)pyrene	0	12/07/2023	09:22:00 PM	CL s4120723.D	1	1	2
24	indeno(1,2,3-cd)pyrene	0	12/07/2023	09:22:00 PM	CL s4120723.D	1	1	2
25	dibenzo(a,h)anthracene	0	12/07/2023	09:22:00 PM	CL s4120723.D	1	1	2
26	benzo(g,h,i)perylene	0	12/07/2023	09:22:00 PM	CL s4120723.D	1	1	2
20	C11-C22 Aromatics	26.92606972	12/7/2023	09:38:00 PM	DBV s6120748.D	1	1	2
9	C9-C18 Aliphatics	9.085773275	12/7/2023	09:38:00 PM	DBV s6120747.D	1	1	2
20	C19-C36 Aliphatics	16.65995506	12/7/2023	09:38:00 PM	DBV s6120747.D	1	1	2
	Adjusted C11-C22 Aromatics	26.92022827	12/7/2023	09:38:00 PM	DBV s6120748.D	1	1	2

Quantitation Report (QT Reviewed)

CL
12/8/23 @ 15:31
CharlesL

Data Path : X:\S4\2023\Dec23\120723\
Data File : s4120723.D
Acq On : 07 Dec 2023 09:22 pm
Operator : cl
Sample : 67798-07 targets x1
Misc : aro frac
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Dec 08 08:54:23 2023
Quant Method : X:\S4\methods\S4PAH110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration

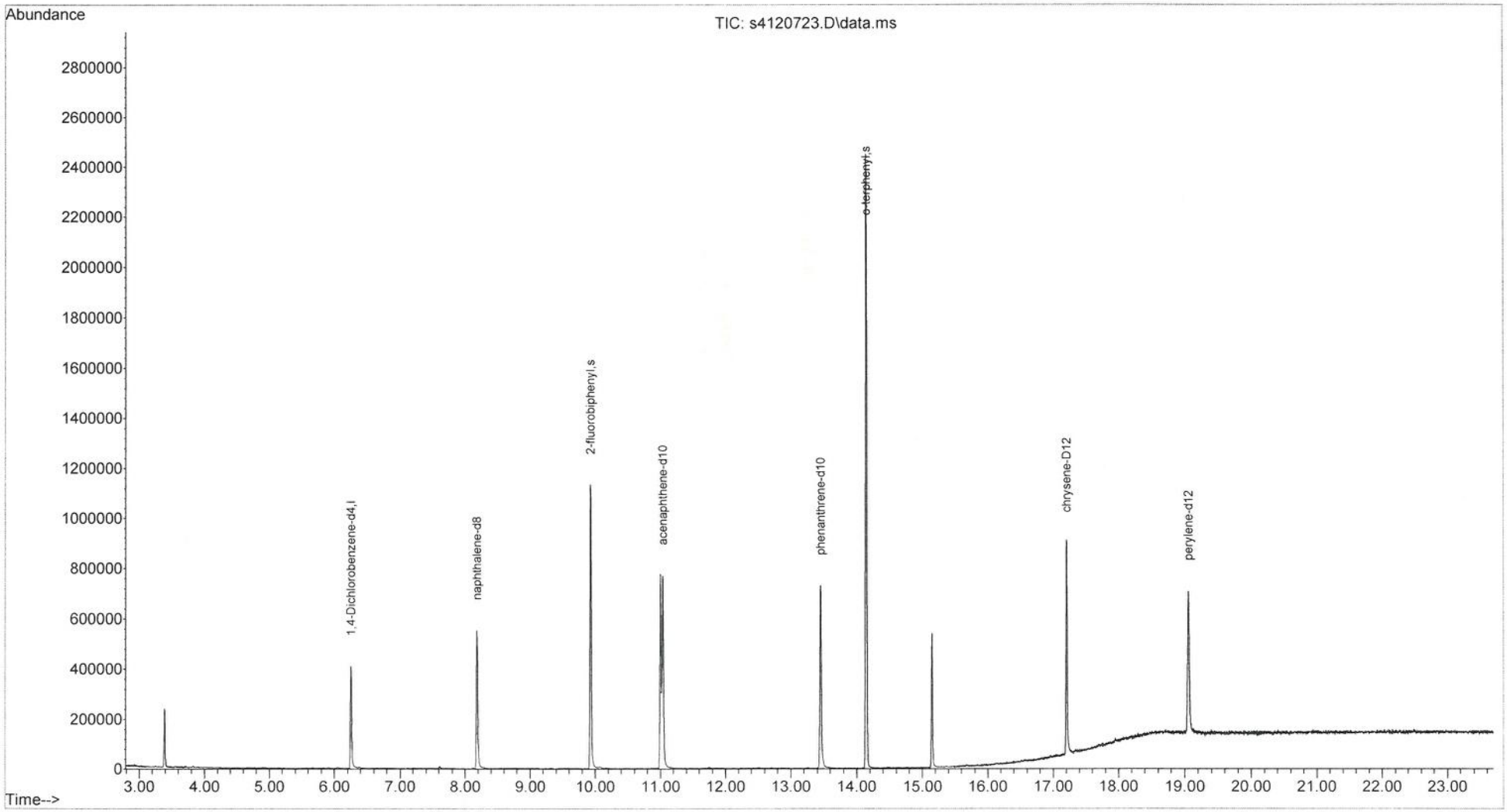
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.253	152	97993	10.00	ug/mL	-0.01
2) naphthalene-d8	8.182	136	380922	10.00	ug/mL	-0.01
5) acenaphthene-d10	11.036	164	223262	10.00	ug/mL	-0.01
11) phenanthrene-d10	13.451	188	441008	10.00	ug/mL	# 0.00
16) chrysene-D12	17.207	240	392597	10.00	ug/mL	0.00
20) perylene-d12	19.057	264	357707	10.00	ug/mL	0.02
System Monitoring Compounds						
6) 2-fluorobiphenyl	9.930	172	513052	14.58	ug/mL	-0.01
Spiked Amount 100.000			Recovery = 14.58%			
14) o-terphenyl	14.144	230	673307	26.89	ug/mL	0.00
Spiked Amount 100.000			Recovery = 26.89%			
Target Compounds						Qvalue
3) naphthalene	8.215	128	1228	Below Cal	#	68
12) phenanthrene	13.487	178	985	Below Cal	#	60
13) anthracene	13.487	178	985	Below Cal	#	61
23) benzo(a)pyrene	18.981	252	1115	Below Cal	#	1

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Dec23\120723\
Data File : s4120723.D
Acq On : 07 Dec 2023 09:22 pm
Operator : cl
Sample : 67798-07 targets x1
Misc : aro frac
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Dec 08 08:54:23 2023
Quant Method : X:\S4\methods\S4PAH110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration



SFP
12/12/23 @ 12:24
SkylaM

Data Path : X:\S6\2023\Dec23\120723\
Data File : s6120748.D
Signal(s) : FID1A.ch
Acq On : 07 Dec 2023 09:38 pm
Operator : dbv
Sample : 67798-07 aro x1
Misc :
ALS Vial : 24 Sample Multiplier: 1

Integration File: rteint.p
Quant Time: Dec 08 17:08:41 2023
Quant Method : X:\S6\methods\S6ARO100423F.M
Quant Title : S6 EPH Aromatics
QLast Update : Thu Oct 05 11:16:37 2023
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :

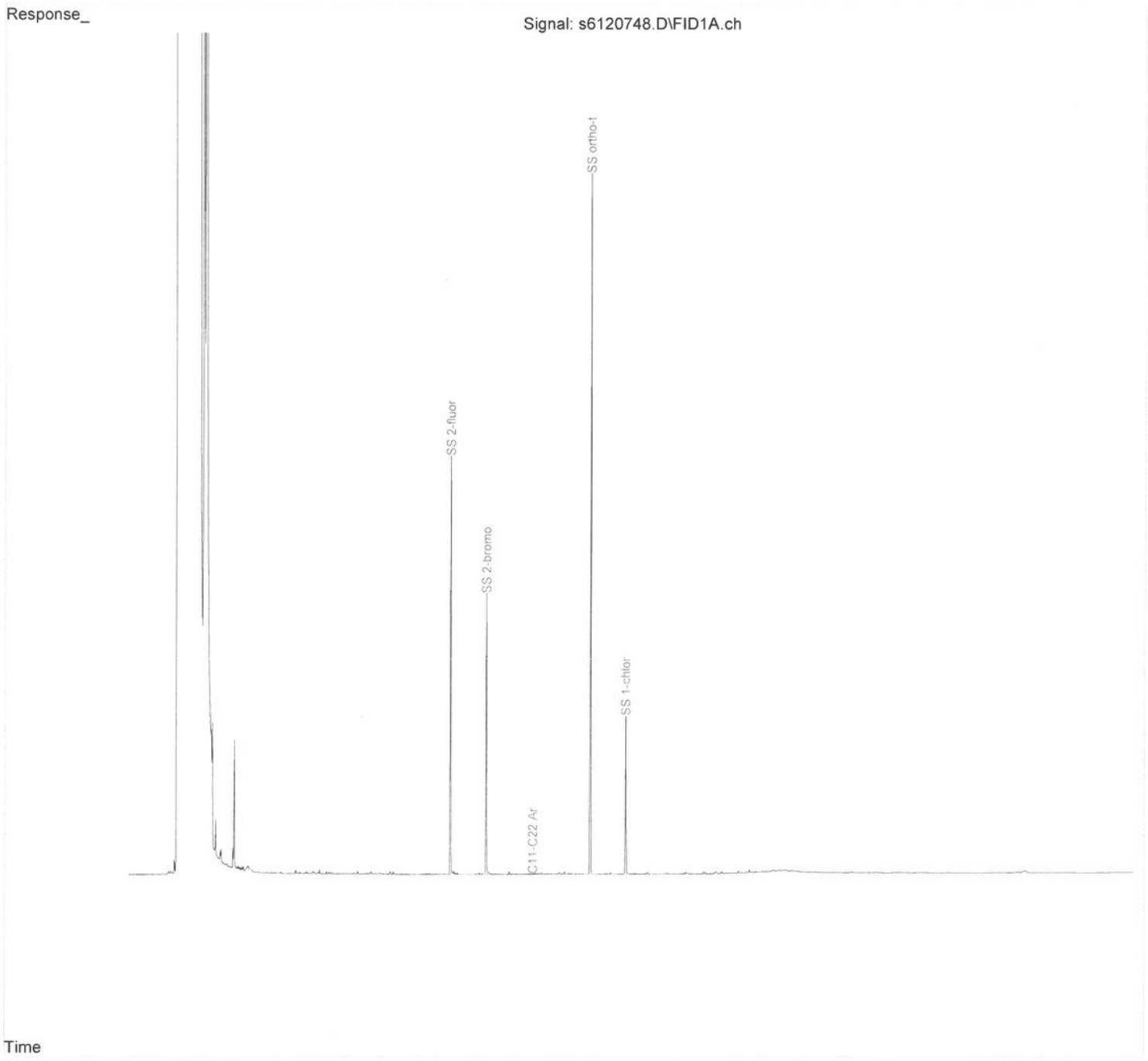
	Compound	R.T.	Response	Conc	Units	
	System Monitoring Compounds					
3)	S SS 2-fluorobiphenyl (...	9.527	2165525	15.346	ug/mLm	BC = Baseline Correction
Spiked Amount	20.000		Recovery =	76.73%		
5)	S SS 2-bromonaphthalene...	10.605	1511852	15.853	ug/mLm	BC = Baseline Correction
Spiked Amount	20.000		Recovery =	79.27%		
10)	S SS ortho-terphenyl (OTP)	13.725	3927916	26.257	ug/mLm	BC = Baseline Correction
Spiked Amount	50.000		Recovery =	52.51%		
11)	S SS 1-chloro-otadecane...	14.764	941593	7.710	ug/mL	
Spiked Amount	50.000		Recovery =	15.42%		
	Target Compounds					
1)	naphthalene	0.000	0	N.D.	ug/mLd	
2)	2-methylnaphthalene	0.000	0	N.D.	ug/mLd	
4)	acenaphthylene	0.000	0	N.D.	ug/mLd	
6)	acenaphthene	0.000	0	N.D.	ug/mLd	
7)	fluorene	0.000	0	N.D.	ug/mLd	
8)	phenanthrene	0.000	0	N.D.	ug/mLd	
9)	anthracene	0.000	0	N.D.	ug/mLd	
12)	fluoranthene	0.000	0	N.D.	ug/mLd	
13)	pyrene	0.000	0	N.D.	ug/mL	
14)	benzo(a)anthracene	0.000	0	N.D.	ug/mLd	
15)	chrysene	0.000	0	N.D.	ug/mL	
16)	benzo(b&k)fluoranthenes	0.000	0	N.D.	ug/mL	
17)	benzo(a)pyrene	0.000	0	N.D.	ug/mL	
18)	indeno&dibenzo	0.000	0	N.D.	ug/mL	
19)	benzo(g,h,i)perylene	0.000	0	N.D.	ug/mL	
20)	H C11-C22 Aromatics	12.000	3817785	26.926	ug/mLm	RI = Range Integration

(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : X:\S6\2023\Dec23\120723\
Data File : s6120748.D
Signal(s) : FID1A.ch
Acq On : 07 Dec 2023 09:38 pm
Operator : dbv
Sample : 67798-07 aro x1
Misc :
ALS Vial : 24 Sample Multiplier: 1

Integration File: rteint.p
Quant Time: Dec 08 17:08:41 2023
Quant Method : X:\S6\methods\S6ARO100423F.M
Quant Title : S6 EPH Aromatics
QLast Update : Thu Oct 05 11:16:37 2023
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : X:\S6\2023\Dec23\120723.SEC\
Data File : s6120747.D
Signal(s) : FID2B.ch
Acq On : 07 Dec 2023 09:38 pm
Operator : dbv
Sample : 67798-07 ali x1
Misc :
ALS Vial : 99 Sample Multiplier: 1

DBV
12/12/23 @ 08:26
DonnaV

COD LOW

Integration File: rteint.p
Quant Time: Dec 08 17:09:03 2023
Quant Method : X:\S6\methods\S6ALI100423A.M
Quant Title : S6 EPH Aliphatics
QLast Update : Thu Oct 05 13:01:54 2023
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :

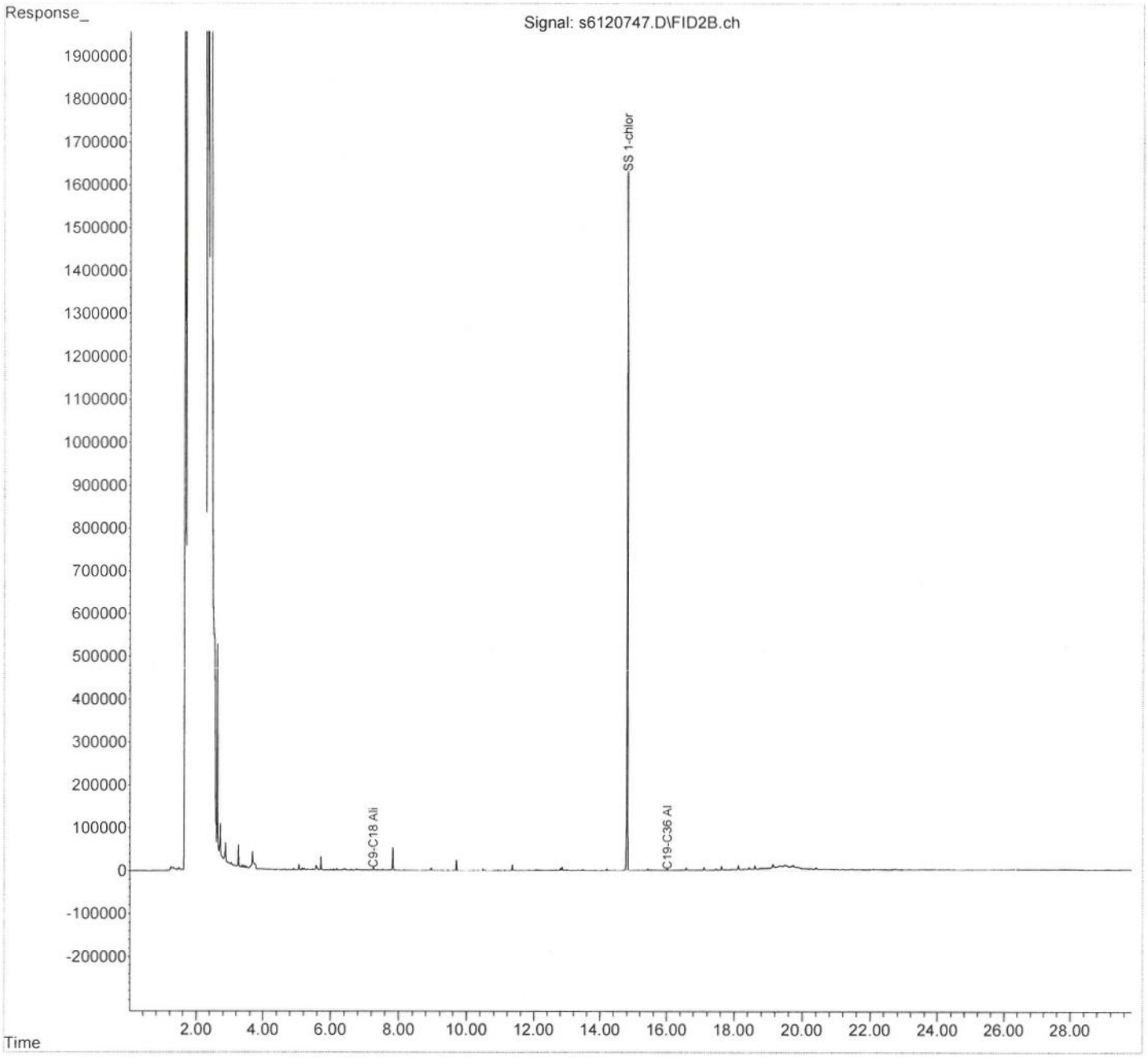
	Compound	R.T.	Response	Conc	Units	
	System Monitoring Compounds					
4)	S SS 2-fluorobiphenyl (...	0.000	0	N.D.	ug/mLd	
Spiked Amount	20.000	Recovery =	0.00%			
6)	S SS 2-bromonaphthalene...	0.000	0	N.D.	ug/mLd	
Spiked Amount	20.000	Recovery =	0.00%			
11)	S SS ortho-terphenyl (OTP)	0.000	0	N.D.	ug/mLd	
Spiked Amount	50.000	Recovery =	0.00%			
13)	S SS 1-chloro-octadecan...	14.808f	2267901	19.306	ug/mLm	BC = Baseline Correction
Spiked Amount	50.000	Recovery =	38.61%			
	Target Compounds					
1)	C9 n-Nonane	0.000	0	N.D.	ug/mLd	
2)	C10 n-Decane	0.000	0	N.D.	ug/mLd	
3)	C12 n-Dodecane	0.000	0	N.D.	ug/mLd	
5)	C14 n-Tetradecane	0.000	0	N.D.	ug/mLd	
7)	C16 n-Hexadecane	0.000	0	N.D.	ug/mLd	
8)	C18 n-Octadecane	0.000	0	N.D.	ug/mLd	
9)	H C9-C18 Aliphatics	7.237	1241334	9.086	ug/mLm	RI = Range Integration
10)	C19 n-Nonadecane	0.000	0	N.D.	ug/mLd	
12)	C20 n-Eicosane	0.000	0	N.D.	ug/mLd	
14)	C22 n-Docosane	0.000	0	N.D.	ug/mLd	
15)	C24 n-Tetracosane	0.000	0	N.D.	ug/mLd	
16)	C26 n-Hexacosane	0.000	0	N.D.	ug/mLd	
17)	C28 n-Octacosane	0.000	0	N.D.	ug/mLd	
18)	C30 n-Triacontane	0.000	0	N.D.	ug/mLd	
19)	C36 n-Hexatriacontane	0.000	0	N.D.	ug/mLd	
20)	H C19-C36 Aliphatics	16.000	2347282	16.660	ug/mLm	RI = Range Integration

(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : X:\S6\2023\Dec23\120723.SEC\
Data File : s6120747.D
Signal(s) : FID2B.ch
Acq On : 07 Dec 2023 09:38 pm
Operator : dbv
Sample : 67798-07 ali x1
Misc :
ALS Vial : 99 Sample Multiplier: 1

Integration File: rteint.p
Quant Time: Dec 08 17:09:03 2023
Quant Method : X:\S6\methods\S6ALI100423A.M
Quant Title : S6 EPH Aliphatics
QLast Update : Thu Oct 05 13:01:54 2023
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Dec23\120723\
Data File : s4120732.D
Acq On : 08 Dec 2023 01:53 am
Operator : cl
Sample : 67798-07ms targets x1
Misc : aro frac
ALS Vial : 27 Sample Multiplier: 1

CL
12/8/23 @ 15:32
CharlesL

Quant Time: Dec 08 08:54:51 2023
Quant Method : X:\S4\methods\S4PAH110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1,4-Dichlorobenzene-d4	6.250	152	80008	10.00 ug/mL	-0.01
2) naphthalene-d8	8.179	136	322887	10.00 ug/mL	-0.02
5) acenaphthene-d10	11.035	164	189781	10.00 ug/mL	-0.01
11) phenanthrene-d10	13.446	188	371423	10.00 ug/mL	-0.01
16) chrysene-D12	17.202	240	349347	10.00 ug/mL	# 0.00
20) perylene-d12	19.054	264	316781	10.00 ug/mL	0.02
System Monitoring Compounds					
6) 2-fluorobiphenyl	9.930	172	465548	15.57 ug/mL	-0.01
Spiked Amount 100.000			Recovery = 15.57%		
14) o-terphenyl	14.142	230	627652	29.76 ug/mL	-0.01
Spiked Amount 100.000			Recovery = 29.76%		
Target Compounds					Qvalue
3) naphthalene	8.212	128	291060	8.444 ug/mL ↓	100
4) 2-methylnaphthalene	9.315	142	240172	10.114 ug/mL ↓	98
7) acenaphthylene	10.788	152	523360	14.015 ug/mL	99
8) acenaphthene	11.086	154	350729	15.109 ug/mL	98
10) fluorene	11.915	166	441311	15.119 ug/mL	100
12) phenanthrene	13.484	178	753263	17.776 ug/mL	100
13) anthracene	13.561	178	731656	17.023 ug/mL	100
15) fluoranthene	15.355	202	830668	18.990 ug/mL	99
17) pyrene	15.665	202	896460	15.755 ug/mL	99
18) benzo(a)anthracene	17.182	228	766067	16.211 ug/mL	99
19) chrysene	17.233	228	755844	17.152 ug/mL	98
21) Benzo(b)fluoranthene	18.514	252	720651	15.486 ug/mL	98
22) benzo(k)fluoranthene	18.545	252	681152	15.991 ug/mL	96
23) benzo(a)pyrene	18.973	252	640648	15.590 ug/mL	98
24) indeno(1,2,3-cd)pyrene	20.892	276	695253	15.987 ug/mL#	77
25) dibenzo(a,h)anthracene	20.889	278	589515	16.183 ug/mL	98
26) benzo(g,h,i)perylene	21.432	276	541578	16.632 ug/mL#	51

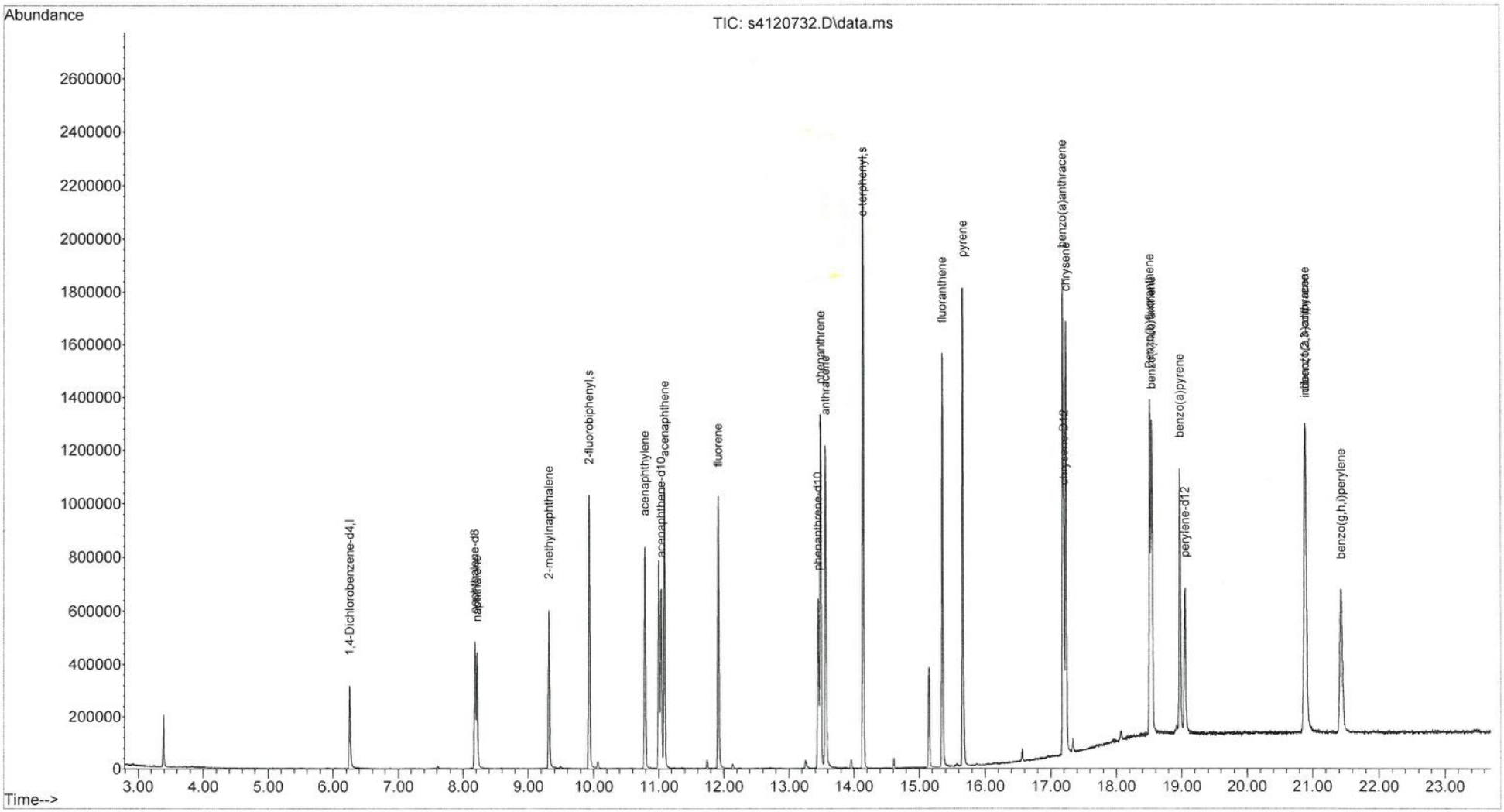
low rec.

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Dec23\120723\
Data File : s4120732.D
Acq On : 08 Dec 2023 01:53 am
Operator : cl
Sample : 67798-07ms targets x1
Misc : aro frac
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Dec 08 08:54:51 2023
Quant Method : X:\S4\methods\S4PAH110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration



SFP
12/12/23 @ 12:24
SkylaM

Data Path : X:\S6\2023\Dec23\120723\
Data File : s6120750.D
Signal(s) : FID1A.ch
Acq On : 07 Dec 2023 10:12 pm
Operator : dbv
Sample : 67798-07ms aro x1
Misc :
ALS Vial : 25 Sample Multiplier: 1

Integration File: rteint.p
Quant Time: Dec 08 17:08:43 2023
Quant Method : X:\S6\methods\S6ARO100423F.M
Quant Title : S6 EPH Aromatics
QLast Update : Thu Oct 05 11:16:37 2023
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :

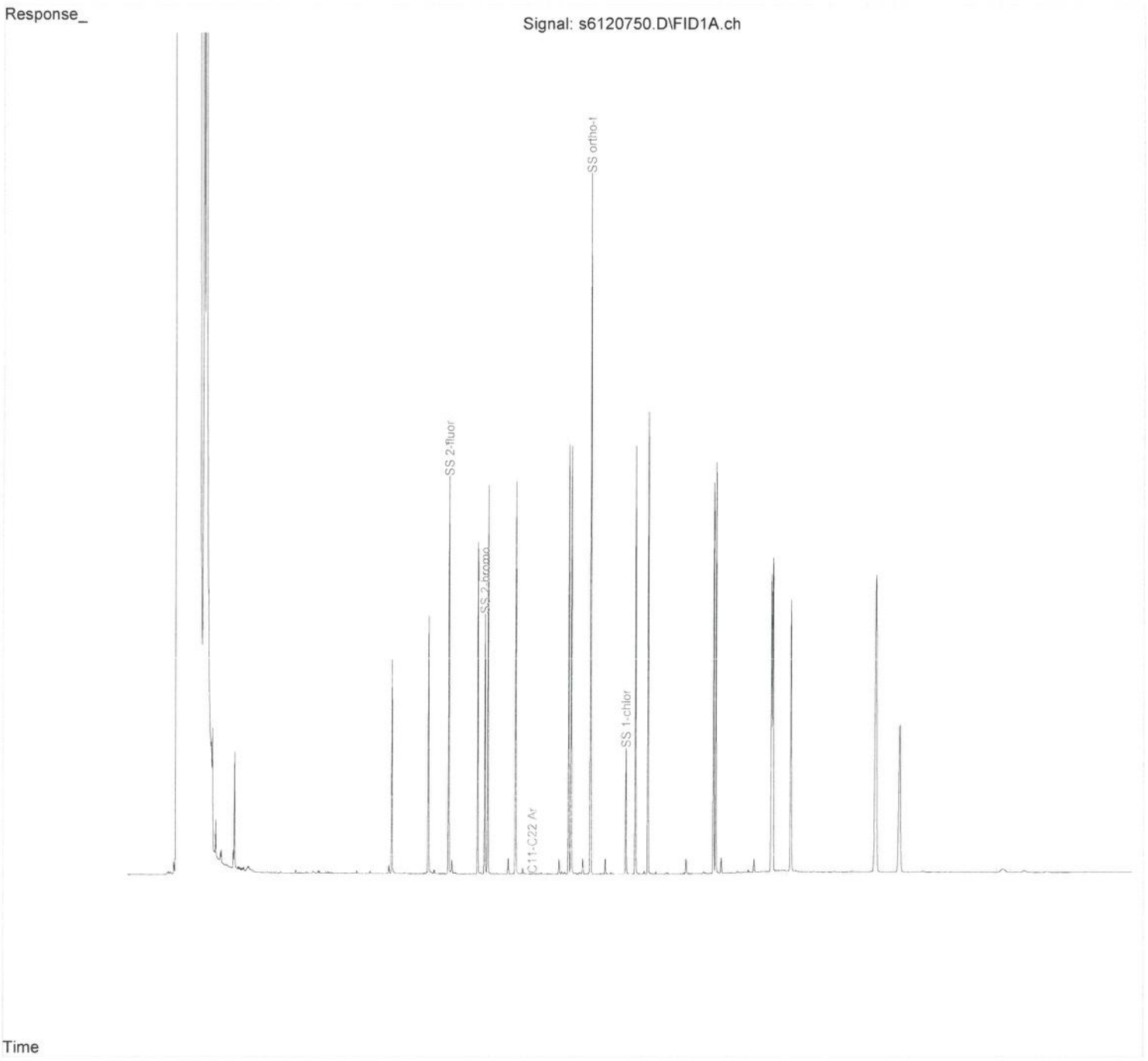
	Compound	R.T.	Response	Conc	Units	
	System Monitoring Compounds					
3) S	SS 2-fluorobiphenyl (...	9.527	2159711	15.304	ug/mLm	BC = Baseline Correction
Spiked Amount	20.000		Recovery =	76.52%		
5) S	SS 2-bromonaphthalene...	10.604	1510098	15.835	ug/mLm	BC = Baseline Correction
Spiked Amount	20.000		Recovery =	79.18%		
10) S	SS ortho-terphenyl (OTP)	13.726	4098775	27.397	ug/mLm	BC = Baseline Correction
Spiked Amount	50.000		Recovery =	54.79%		
11) S	SS 1-chloro-otadecane...	14.765	789058	6.464	ug/mL	
Spiked Amount	50.000		Recovery =	12.93%		
	Target Compounds					
1)	naphthalene	0.000	0	N.D.	ug/mLd	
2)	2-methylnaphthalene	0.000	0	N.D.	ug/mLd	
4)	acenaphthylene	0.000	0	N.D.	ug/mLd	
6)	acenaphthene	0.000	0	N.D.	ug/mLd	
7)	fluorene	0.000	0	N.D.	ug/mLd	
8)	phenanthrene	0.000	0	N.D.	ug/mLd	
9)	anthracene	0.000	0	N.D.	ug/mLd	
12)	fluoranthene	0.000	0	N.D.	ug/mLd	
13)	pyrene	0.000	0	N.D.	ug/mLd	
14)	benzo(a)anthracene	0.000	0	N.D.	ug/mLd	
15)	chrysene	0.000	0	N.D.	ug/mL	
16)	benzo(b&k)fluoranthenes	0.000	0	N.D.	ug/mL	
17)	benzo(a)pyrene	0.000	0	N.D.	ug/mL	
18)	indeno&dibenzo	0.000	0	N.D.	ug/mL	
19)	benzo(g,h,i)perylene	0.000	0	N.D.	ug/mL	
20) H	C11-C22 Aromatics	12.000	44247130	296.139	ug/mLm	RI = Range Integration

(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : X:\S6\2023\Dec23\120723\
Data File : s6120750.D
Signal(s) : FID1A.ch
Acq On : 07 Dec 2023 10:12 pm
Operator : dbv
Sample : 67798-07ms aro x1
Misc :
ALS Vial : 25 Sample Multiplier: 1

Integration File: rteint.p
Quant Time: Dec 08 17:08:43 2023
Quant Method : X:\S6\methods\S6ARO100423F.M
Quant Title : S6 EPH Aromatics
QLast Update : Thu Oct 05 11:16:37 2023
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : X:\S6\2023\Dec23\120723.SEC\
Data File : s6120749.D
Signal(s) : FID2B.ch
Acq On : 07 Dec 2023 10:12 pm
Operator : dbv
Sample : 67798-07ms ali x1
Misc :
ALS Vial : 100 Sample Multiplier: 1

12/12/23 @ 08:26
DonnaV

Integration File: rteint.p
Quant Time: Dec 08 17:09:05 2023
Quant Method : X:\S6\methods\S6ALI100423A.M
Quant Title : S6 EPH Aliphatics
QLast Update : Thu Oct 05 13:01:54 2023
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc	Units	
	System Monitoring Compounds					
4)	S SS 2-fluorobiphenyl (...	0.000	0	N.D.	ug/mLd	
Spiked Amount	20.000	Recovery =	0.00%			
6)	S SS 2-bromonaphthalene...	0.000	0	N.D.	ug/mLd	
Spiked Amount	20.000	Recovery =	0.00%			
11)	S SS ortho-terphenyl (OTP)	0.000	0	N.D.	ug/mLd	
Spiked Amount	50.000	Recovery =	0.00%			
13)	S SS 1-chloro-octadecan...	14.808f	2736804	23.308	ug/mL	
Spiked Amount	50.000	Recovery =	46.62%			
	Target Compounds					
1)	C9 n-Nonane	4.607	89296	0.602	ug/mL	
2)	C10 n-Decane	5.718f	328843	2.481	ug/mL	
3)	C12 n-Dodecane	7.822f	1062476	8.224	ug/mL	
5)	C14 n-Tetradecane	9.692f	1735014	13.571	ug/mL	
7)	C16 n-Hexadecane	11.358f	2175627	16.691	ug/mL	
8)	C18 n-Octadecane	12.853f	2344969	17.716	ug/mL	
9)	H C9-C18 Aliphatics	7.237	10091022	78.285	ug/mLm	RI = Range Integration
10)	C19 n-Nonadecane	13.545f	2395939	18.067	ug/mL	
12)	C20 n-Eicosane	14.207f	2458650	18.074	ug/mL	
14)	C22 n-Docosane	15.445f	2529494	19.055	ug/mL	
15)	C24 n-Tetracosane	16.581f	2562542	19.244	ug/mL	
16)	C26 n-Hexacosane	17.630f	2572778	19.116	ug/mL	
17)	C28 n-Octacosane	18.616f	2568431	19.086	ug/mL	
18)	C30 n-Triacontane	19.743f	2601723	19.285	ug/mLm	BC = Baseline Correction
19)	C36 n-Hexatriacontane	25.966f	2503524	19.537	ug/mLm	BC = Baseline Correction
20)	H C19-C36 Aliphatics	16.000	23060290	173.086	ug/mLm	RI = Range Integration

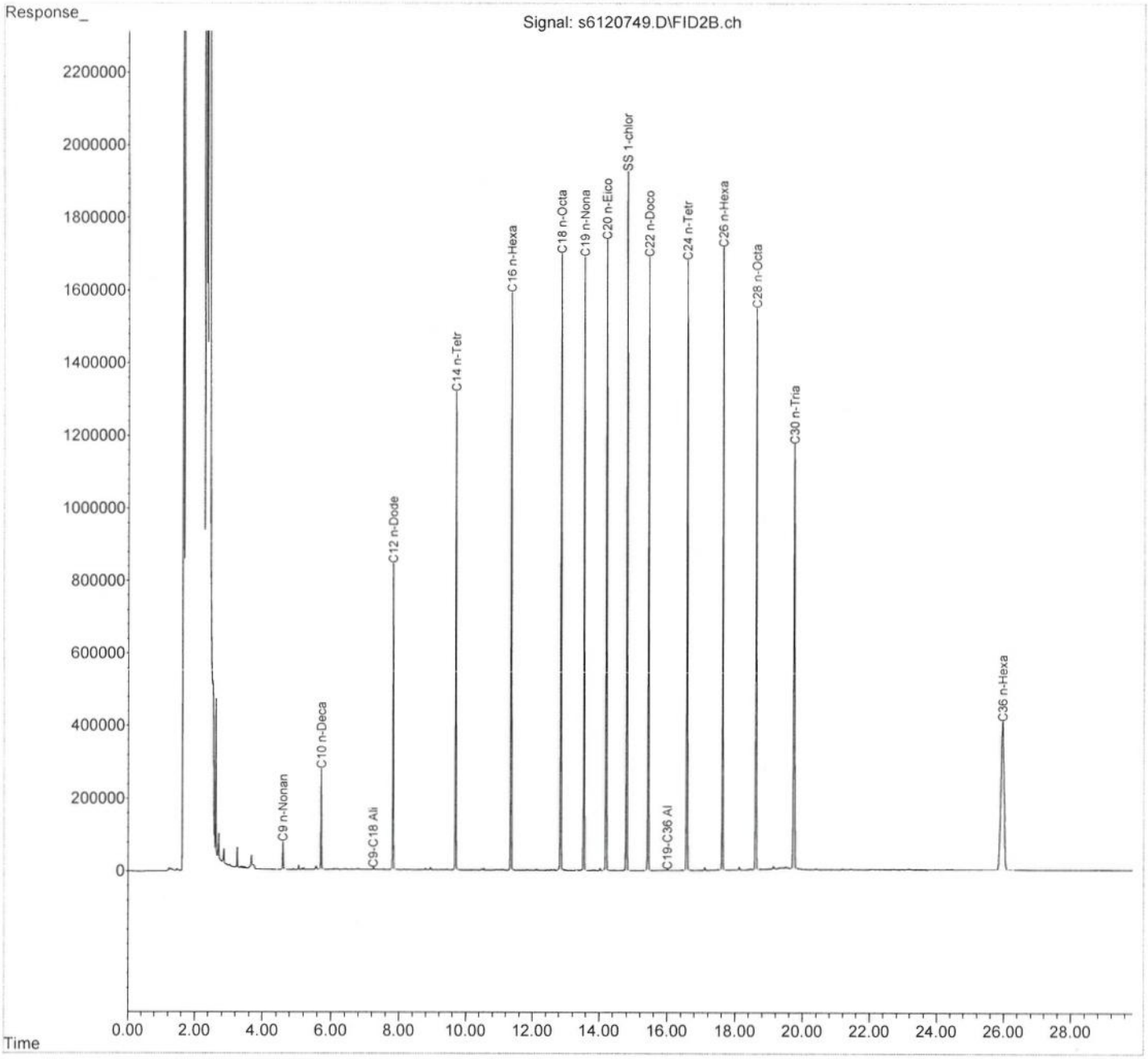
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : X:\S6\2023\Dec23\120723.SEC\
Data File : s6120749.D
Signal(s) : FID2B.ch
Acq On : 07 Dec 2023 10:12 pm
Operator : dbv
Sample : 67798-07ms ali x1
Misc :
ALS Vial : 100 Sample Multiplier: 1

Integration File: rteint.p
Quant Time: Dec 08 17:09:05 2023
Quant Method : X:\S6\methods\S6ALI100423A.M
Quant Title : S6 EPH Aliphatics
QLast Update : Thu Oct 05 13:01:54 2023
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Dec23\120723\
Data File : s4120733.D
Acq On : 08 Dec 2023 02:23 am
Operator : cl
Sample : 67798-07msd targets x1
Misc : aro frac
ALS Vial : 28 Sample Multiplier: 1

CL
12/8/23 @ 15:32
CharlesL

Quant Time: Dec 08 08:54:54 2023
Quant Method : X:\S4\methods\S4PAH110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.252	152	87425	10.00	ug/mL	-0.01
2) naphthalene-d8	8.181	136	362305	10.00	ug/mL	-0.01
5) acenaphthene-d10	11.035	164	215679	10.00	ug/mL	-0.01
11) phenanthrene-d10	13.446	188	426378	10.00	ug/mL	#-0.01
16) chrysene-D12	17.202	240	398218	10.00	ug/mL	0.00
20) perylene-d12	19.049	264	367930	10.00	ug/mL	0.01
System Monitoring Compounds						
6) 2-fluorobiphenyl	9.929	172	478482	14.08	ug/mL	-0.01
Spiked Amount 100.000			Recovery =	14.08%		
14) o-terphenyl	14.141	230	646566	26.70	ug/mL	-0.01
Spiked Amount 100.000			Recovery =	26.70%		
Target Compounds						Qvalue
3) naphthalene	8.212	128	241841	6.237	ug/mL ↓	95
4) 2-methylnaphthalene	9.315	142	204067	7.637	ug/mL ↓	97
7) acenaphthylene	10.786	152	470907	11.088	ug/mL ↓	99
8) acenaphthene	11.089	154	317665	12.023	ug/mL	98
10) fluorene	11.912	166	430417	12.963	ug/mL	98
12) phenanthrene	13.484	178	713174	14.642	ug/mL	100
13) anthracene	13.560	178	707536	14.328	ug/mL	99
15) fluoranthene	15.354	202	798380	15.884	ug/mL	99
17) pyrene	15.665	202	840922	12.961	ug/mL	100
18) benzo(a)anthracene	17.181	228	747424	13.861	ug/mL	99
19) chrysene	17.235	228	743940	14.794	ug/mL	98
21) Benzo(b)fluoranthene	18.514	252	729055	13.481	ug/mL#	97
22) benzo(k)fluoranthene	18.542	252	653308	13.194	ug/mL#	88
23) benzo(a)pyrene	18.970	252	638887	13.378	ug/mL	100
24) indeno(1,2,3-cd)pyrene	20.889	276	688403	13.620	ug/mL#	93
25) dibenzo(a,h)anthracene	20.892	278	593359	14.016	ug/mL#	89
26) benzo(g,h,i)perylene	21.434	276	532516	14.068	ug/mL#	60

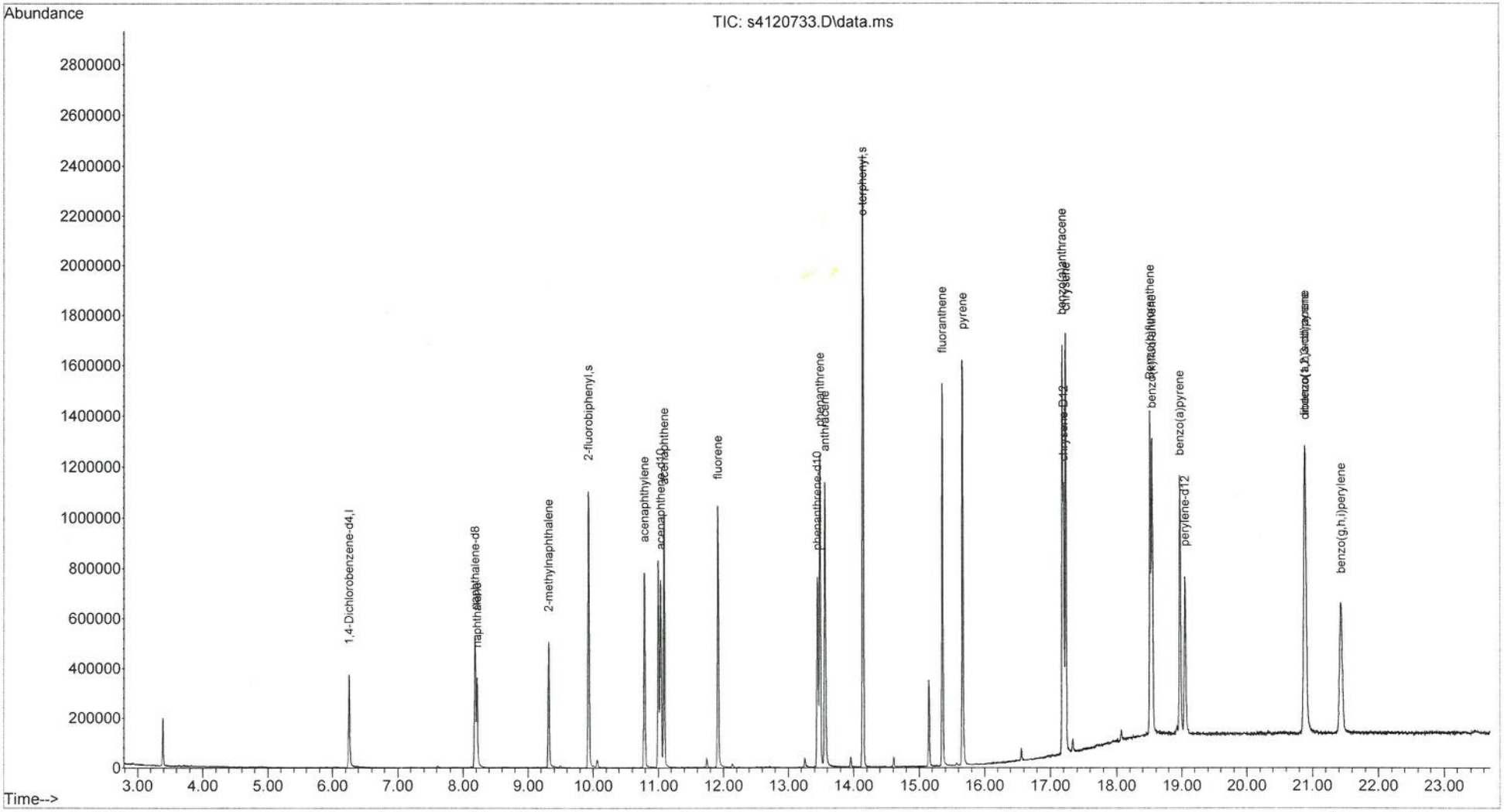
low rec.

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Dec23\120723\
Data File : s4120733.D
Acq On : 08 Dec 2023 02:23 am
Operator : cl
Sample : 67798-07msd targets x1
Misc : aro frac
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Dec 08 08:54:54 2023
Quant Method : X:\S4\methods\S4PAH110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration



SFP
12/12/23 @ 12:24
SkylaM

Data Path : X:\S6\2023\Dec23\120723\
Data File : s6120752.D
Signal(s) : FID1A.ch
Acq On : 07 Dec 2023 10:46 pm
Operator : dbv
Sample : 67798-07msd aro x1
Misc :
ALS Vial : 26 Sample Multiplier: 1

Integration File: rteint.p
Quant Time: Dec 08 17:08:45 2023
Quant Method : X:\S6\methods\S6ARO100423F.M
Quant Title : S6 EPH Aromatics
QLast Update : Thu Oct 05 11:16:37 2023
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :

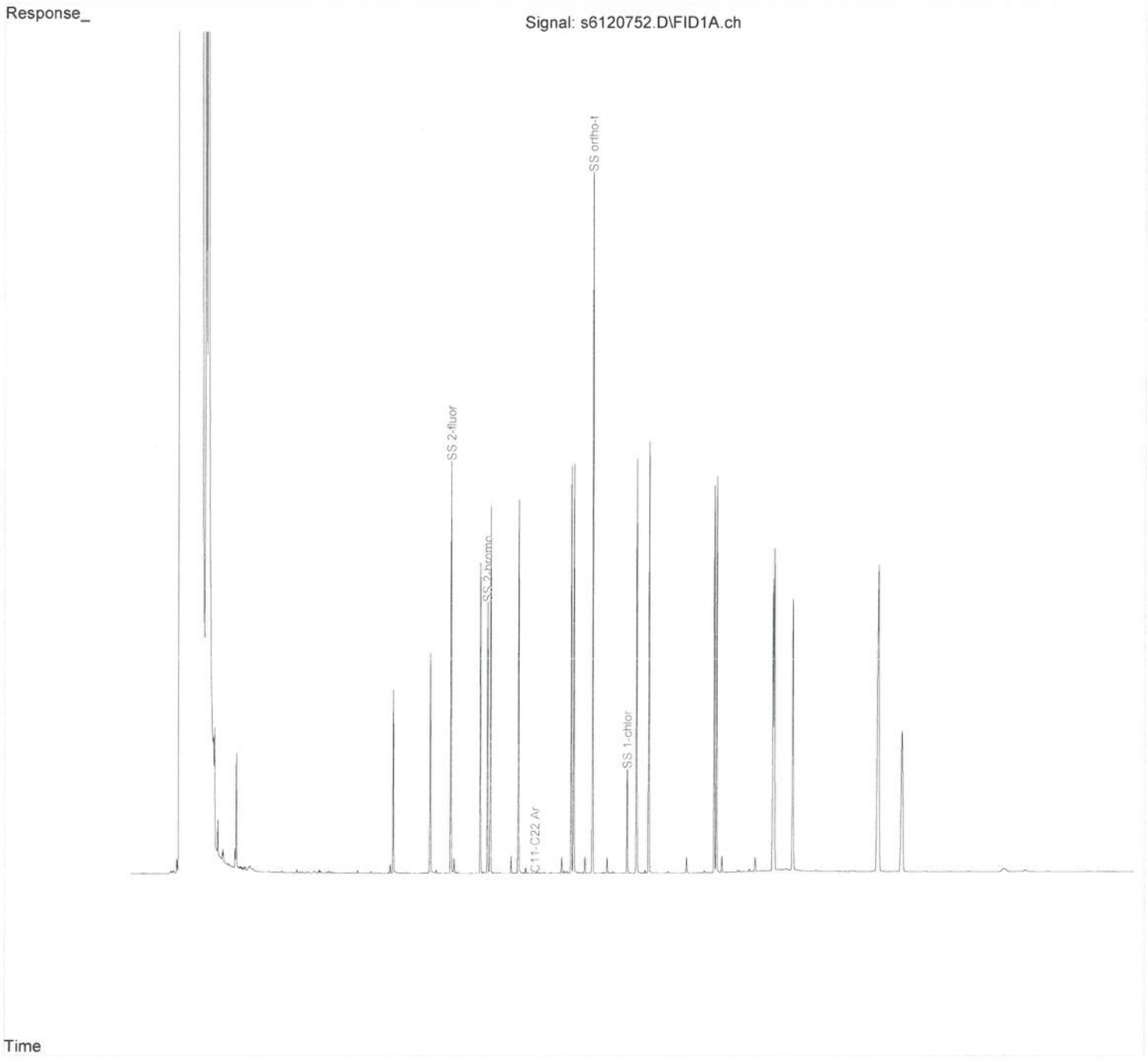
	Compound	R.T.	Response	Conc	Units	
	System Monitoring Compounds					
3) S	SS 2-fluorobiphenyl (...	9.528	2258434	16.005	ug/mLm	BC = Baseline Correction
Spiked Amount	20.000		Recovery =	80.02%		
5) S	SS 2-bromonaphthalene...	10.605	1572048	16.484	ug/mLm	BC = Baseline Correction
Spiked Amount	20.000		Recovery =	82.42%		
10) S	SS ortho-terphenyl (OTP)	13.726	4187054	27.987	ug/mLm	BC = Baseline Correction
Spiked Amount	50.000		Recovery =	55.97%		
11) S	SS 1-chloro-otadecane...	14.764	685388	5.617	ug/mL	
Spiked Amount	50.000		Recovery =	11.23%		
	Target Compounds					
1)	naphthalene	0.000	0	N.D.	ug/mLd	
2)	2-methylnaphthalene	0.000	0	N.D.	ug/mLd	
4)	acenaphthylene	0.000	0	N.D.	ug/mLd	
6)	acenaphthene	0.000	0	N.D.	ug/mLd	
7)	fluorene	0.000	0	N.D.	ug/mLd	
8)	phenanthrene	0.000	0	N.D.	ug/mLd	
9)	anthracene	0.000	0	N.D.	ug/mLd	
12)	fluoranthene	0.000	0	N.D.	ug/mLd	
13)	pyrene	0.000	0	N.D.	ug/mLd	
14)	benzo(a)anthracene	0.000	0	N.D.	ug/mLd	
15)	chrysene	0.000	0	N.D.	ug/mL	
16)	benzo(b&k)fluoranthenes	0.000	0	N.D.	ug/mL	
17)	benzo(a)pyrene	0.000	0	N.D.	ug/mL	
18)	indeno&dibenzo	0.000	0	N.D.	ug/mL	
19)	benzo(g,h,i)perylene	0.000	0	N.D.	ug/mL	
20) H	C11-C22 Aromatics	12.000	42578219	285.026	ug/mLm	RI = Range Integration

(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : X:\S6\2023\Dec23\120723\
Data File : s6120752.D
Signal(s) : FID1A.ch
Acq On : 07 Dec 2023 10:46 pm
Operator : dbv
Sample : 67798-07msd aro x1
Misc :
ALS Vial : 26 Sample Multiplier: 1

Integration File: rteint.p
Quant Time: Dec 08 17:08:45 2023
Quant Method : X:\S6\methods\S6ARO100423F.M
Quant Title : S6 EPH Aromatics
QLast Update : Thu Oct 05 11:16:37 2023
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : X:\S6\2023\Dec23\120723.SEC\
Data File : s6120751.D
Signal(s) : FID2B.ch
Acq On : 07 Dec 2023 10:46 pm
Operator : dbv
Sample : 67798-07msd ali x1
Misc :
ALS Vial : 101 Sample Multiplier: 1

DBV
12/12/23 @ 08:26
DonnaV

C9-C18 LOW

Integration File: rteint.p
Quant Time: Dec 08 17:09:07 2023
Quant Method : X:\S6\methods\S6ALI100423A.M
Quant Title : S6 EPH Aliphatics
QLast Update : Thu Oct 05 13:01:54 2023
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :

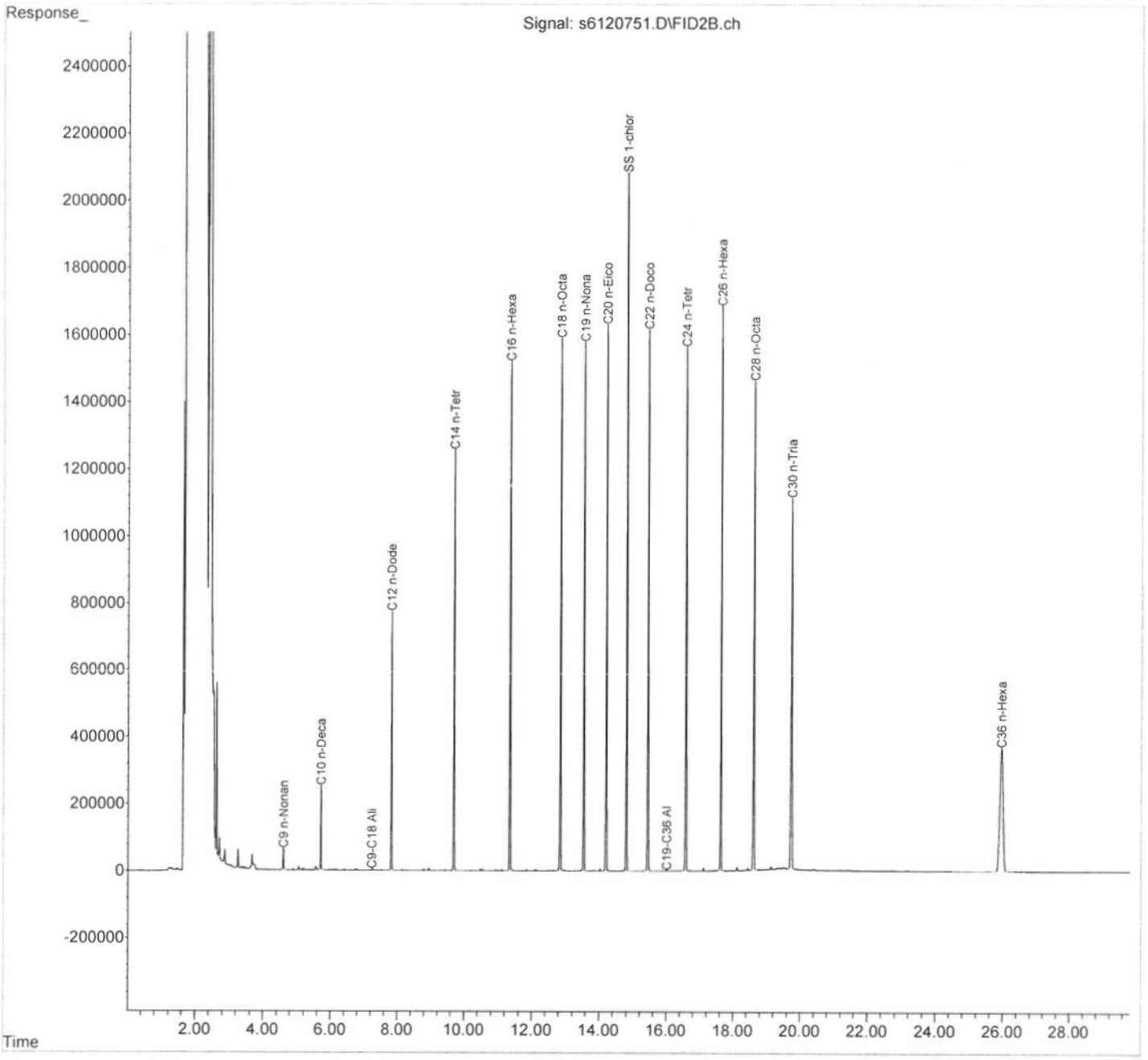
	Compound	R.T.	Response	Conc	Units	
	System Monitoring Compounds					
4)	S SS 2-fluorobiphenyl (...	0.000	0	N.D.	ug/mLd	
Spiked Amount	20.000	Recovery =	0.00%			
6)	S SS 2-bromonaphthalene...	0.000	0	N.D.	ug/mLd	
Spiked Amount	20.000	Recovery =	0.00%			
11)	S SS ortho-terphenyl (OTP)	0.000	0	N.D.	ug/mLd	
Spiked Amount	50.000	Recovery =	0.00%			
13)	S SS 1-chloro-octadecan...	14.808f	2942373	25.062	ug/mL	
Spiked Amount	50.000	Recovery =	50.12%			
	Target Compounds					
1)	C9 n-Nonane	4.608	75398	0.491	ug/mL	
2)	C10 n-Decane	5.719f	302094	2.269	ug/mL	
3)	C12 n-Dodecane	7.823f	993448	7.683	ug/mL	
5)	C14 n-Tetradecane	9.693f	1673205	13.084	ug/mL	
7)	C16 n-Hexadecane	11.358f	2072265	15.894	ug/mL	
8)	C18 n-Octadecane	12.852f	2213499	16.717	ug/mL	
9)	H C9-C18 Aliphatics	7.237	8478048	65.672	ug/mLm	RI = Range Integration
10)	C19 n-Nonadecane	13.547f	2257824	17.020	ug/mL	
12)	C20 n-Eicosane	14.208f	2314603	17.009	ug/mL	
14)	C22 n-Docosane	15.445f	2368601	17.836	ug/mL	
15)	C24 n-Tetracosane	16.579f	2394813	17.976	ug/mL	
16)	C26 n-Hexacosane	17.631f	2397137	17.788	ug/mL	
17)	C28 n-Octacosane	18.617f	2392987	17.774	ug/mL	
18)	C30 n-Triacontane	19.743f	2426649	17.978	ug/mLm	BC = Baseline Correction
19)	C36 n-Hexatriacontane	25.963f	2344236	18.292	ug/mLm	BC = Baseline Correction
20)	H C19-C36 Aliphatics	16.000	21328063	160.004	ug/mLm	RI = Range Integration

(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : X:\S6\2023\Dec23\120723.SEC\
Data File : s6120751.D
Signal(s) : FID2B.ch
Acq On : 07 Dec 2023 10:46 pm
Operator : dbv
Sample : 67798-07msd ali x1
Misc :
ALS Vial : 101 Sample Multiplier: 1

Integration File: rteint.p
Quant Time: Dec 08 17:09:07 2023
Quant Method : X:\S6\methods\S6ALI100423A.M
Quant Title : S6 EPH Aliphatics
QLast Update : Thu Oct 05 13:01:54 2023
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :



This File:	L:\SVOA\Excel Reports\EPH\231213\67798-008		Skyla Marquis L:\SVOA\EPH\EPH ImportFileBuilder2.0.xls
Analysis Group:	EPH	Dow Salvage Yard	12/13/23 3:03 PM
Field ID:	SY-OBMW13-110723	CRE	L:\SVOA\EPH\
Sample:	67798-08 targets x1	67798-08 aro x1	67798-08 ali x1
Misc:	*aro frac*		L:\SVOA\PDF Reports\FUELS\
Method Name:	*SVOA04 Method 8270E (t*	*S6 EPH Aromatics*	*S6 EPH Aliphatics*
Import File Name:	s6 EPHs QC17110		
TestGroupID:	EMA_EPH_PresCert_A		
Aqueous or Soil? (A or S)	A		
Fractionated? (Y/N)	y	y	
Prep Date:	11/13/2023		
Lab#:	67798-008		
QC_Code:			
Prep#	17110		

Reviewer Checks:

Quant Report: Reviewed? Ranges integrated? Analyst Initials & Date?	1
Chromatogram Checked? Major peaks identified?	2
Soil prep data checked: weight, volume, %solid, Prep date	5
Field ID consistent with data and any field replicates	11
Results consistent with any re-runs & internal QC	16
Substitute dilution data checked	20
Correct dilution and reason clear or noted	
Reason for reanalysis documented	
Surrogates pass or flagged & noted	
Flags checked (Expiration, F+, Over Cal)	
Other QC failures, estimates or interferences documented	
Spot checked Reported Result with Quant Report	
Checked Audit flagged data in LIMS	

Notes:

Initials & Date: 12/13/23

X:\S4\2023\Dec23\120723\s4120724.D\S4PAH110223A.XLS PAH targets filename
X:\S6\2023\Dec23\120723\s6120754.D\S6ARO100423F.XLS aromatics filename
X:\S6\2023\Dec23\120723.SEC\s6120753.D\S6ALI100423A.XLS aliphatics filename

#	Surrogate Standards	Concentration (ug/mL)	AnalysisDate	AnalysisTime	AnalyzedBy	Dilution	Weight	Volume	Surr	Recovery	Flag	QC Limits
13	SS 1-chloro-octadecane (COD)	12.42319379	12/7/2023	11:20:00 PM	DBV s6120753.D	1	1	2	100	**25%**	#	40-140
10	SS ortho-terphenyl (OTP)	28.42043392	12/7/2023	11:20:00 PM	DBV s6120754.D	1	1	2	100	**57%**		40-140
3	SS 2-fluorobiphenyl (2FBP)	15.01824414	12/7/2023	11:20:00 PM	DBV s6120754.D	1	1	2	40	**75%**		40-140
5	SS 2-bromonaphthalene (2BN)	15.76189315	12/7/2023	11:20:00 PM	DBV s6120754.D	1	1	2	40	**79%**		40-140

#	AnalyteName	Concentration (ug/mL)	AnalysisDate	AnalysisTime	AnalyzedBy	Dilution	Weight	Volume
3	naphthalene	0	12/07/2023	09:52:00 PM	CL s4120724.D	1	1	2
4	2-methylnaphthalene	0	12/07/2023	09:52:00 PM	CL s4120724.D	1	1	2
12	phenanthrene	0	12/07/2023	09:52:00 PM	CL s4120724.D	1	1	2
8	acenaphthene	0	12/07/2023	09:52:00 PM	CL s4120724.D	1	1	2
7	acenaphthylene	0	12/07/2023	09:52:00 PM	CL s4120724.D	1	1	2
10	fluorene	0	12/07/2023	09:52:00 PM	CL s4120724.D	1	1	2
13	anthracene	0	12/07/2023	09:52:00 PM	CL s4120724.D	1	1	2
15	fluoranthene	0	12/07/2023	09:52:00 PM	CL s4120724.D	1	1	2
17	pyrene	0	12/07/2023	09:52:00 PM	CL s4120724.D	1	1	2
18	benzo(a)anthracene	0	12/07/2023	09:52:00 PM	CL s4120724.D	1	1	2
19	chrysene	0	12/07/2023	09:52:00 PM	CL s4120724.D	1	1	2
21	benzo(b)fluoranthene	0	12/07/2023	09:52:00 PM	CL s4120724.D	1	1	2
22	benzo(k)fluoranthene	0	12/07/2023	09:52:00 PM	CL s4120724.D	1	1	2
23	benzo(a)pyrene	0	12/07/2023	09:52:00 PM	CL s4120724.D	1	1	2
24	indeno(1,2,3-cd)pyrene	0	12/07/2023	09:52:00 PM	CL s4120724.D	1	1	2
25	dibenzo(a,h)anthracene	0	12/07/2023	09:52:00 PM	CL s4120724.D	1	1	2
26	benzo(g,h,i)perylene	0	12/07/2023	09:52:00 PM	CL s4120724.D	1	1	2
20	C11-C22 Aromatics	30.94117315	12/7/2023	11:20:00 PM	DBV s6120754.D	1	1	2
9	C9-C18 Aliphatics	7.60803734	12/7/2023	11:20:00 PM	DBV s6120753.D	1	1	2
20	C19-C36 Aliphatics	18.36745107	12/7/2023	11:20:00 PM	DBV s6120753.D	1	1	2
	Adjusted C11-C22 Aromatics	30.94117315	12/7/2023	11:20:00 PM	DBV s6120754.D	1	1	2

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Dec23\120723\
Data File : s4120724.D
Acq On : 07 Dec 2023 09:52 pm
Operator : cl
Sample : 67798-08 targets x1
Misc : aro frac
ALS Vial : 19 Sample Multiplier: 1

CL
12/8/23 @ 15:32
CharlesL

Quant Time: Dec 08 08:54:26 2023
Quant Method : X:\S4\methods\S4PAH110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration

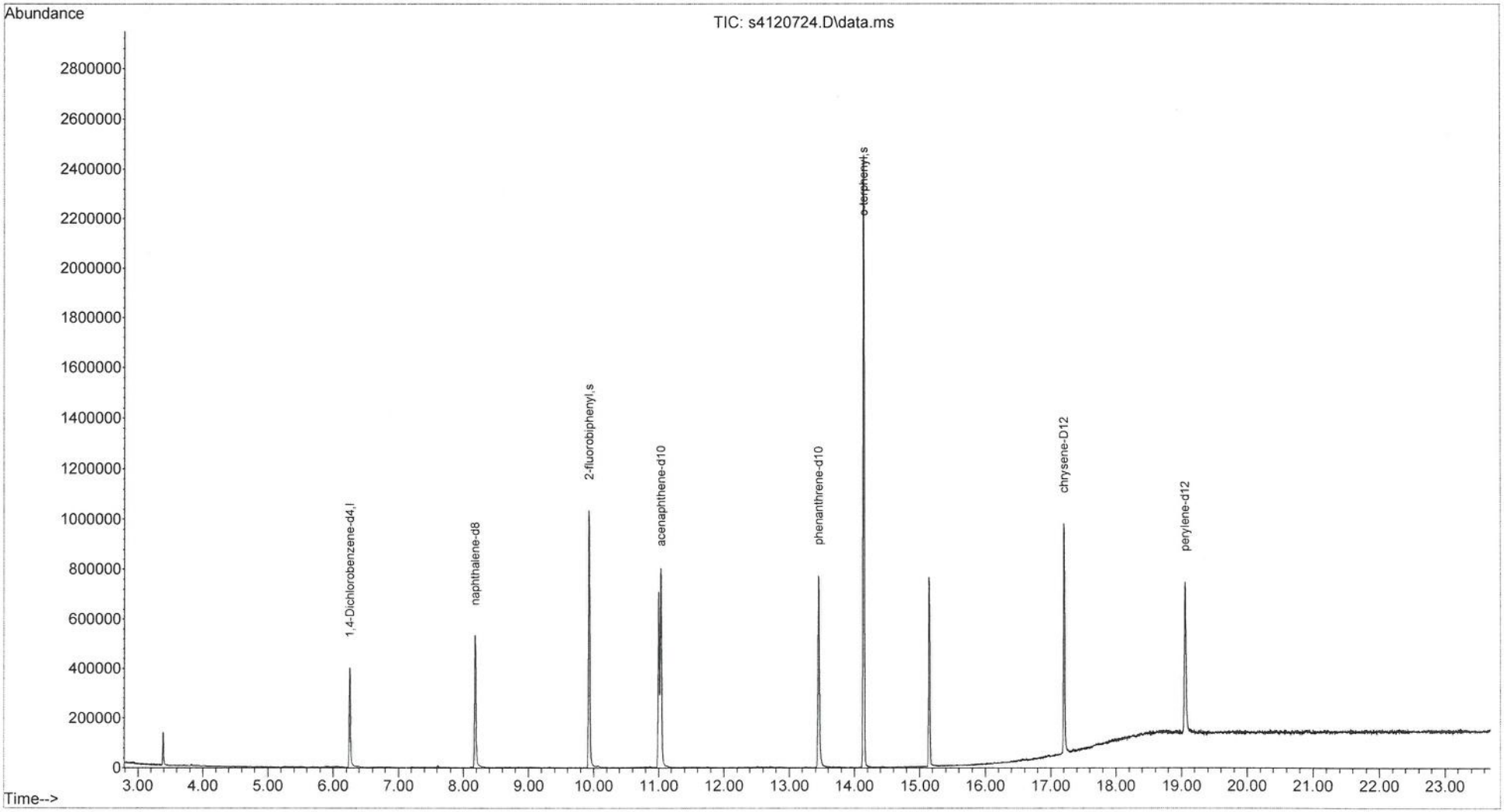
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.250	152	99092	10.00	ug/mL	-0.01
2) naphthalene-d8	8.179	136	388266	10.00	ug/mL	-0.01
5) acenaphthene-d10	11.033	164	231896	10.00	ug/mL	-0.01
11) phenanthrene-d10	13.449	188	460833	10.00	ug/mL	-0.01
16) chrysene-D12	17.205	240	415906	10.00	ug/mL	0.00
20) perylene-d12	19.055	264	384901	10.00	ug/mL	# 0.02
System Monitoring Compounds						
6) 2-fluorobiphenyl	9.930	172	461010	12.61	ug/mL	-0.01
Spiked Amount 100.000			Recovery = 12.61%			
14) o-terphenyl	14.144	230	674148	25.76	ug/mL	0.00
Spiked Amount 100.000			Recovery = 25.76%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Dec23\120723\
Data File : s4120724.D
Acq On : 07 Dec 2023 09:52 pm
Operator : cl
Sample : 67798-08 targets x1
Misc : aro frac
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Dec 08 08:54:26 2023
Quant Method : X:\S4\methods\S4PAH110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration



SFP
12/12/23 @ 12:24
SkylaM

Data Path : X:\S6\2023\Dec23\120723\
Data File : s6120754.D
Signal(s) : FID1A.ch
Acq On : 07 Dec 2023 11:20 pm
Operator : dbv
Sample : 67798-08 aro x1
Misc :
ALS Vial : 27 Sample Multiplier: 1

Integration File: rteint.p
Quant Time: Dec 08 17:08:47 2023
Quant Method : X:\S6\methods\S6ARO100423F.M
Quant Title : S6 EPH Aromatics
QLast Update : Thu Oct 05 11:16:37 2023
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :

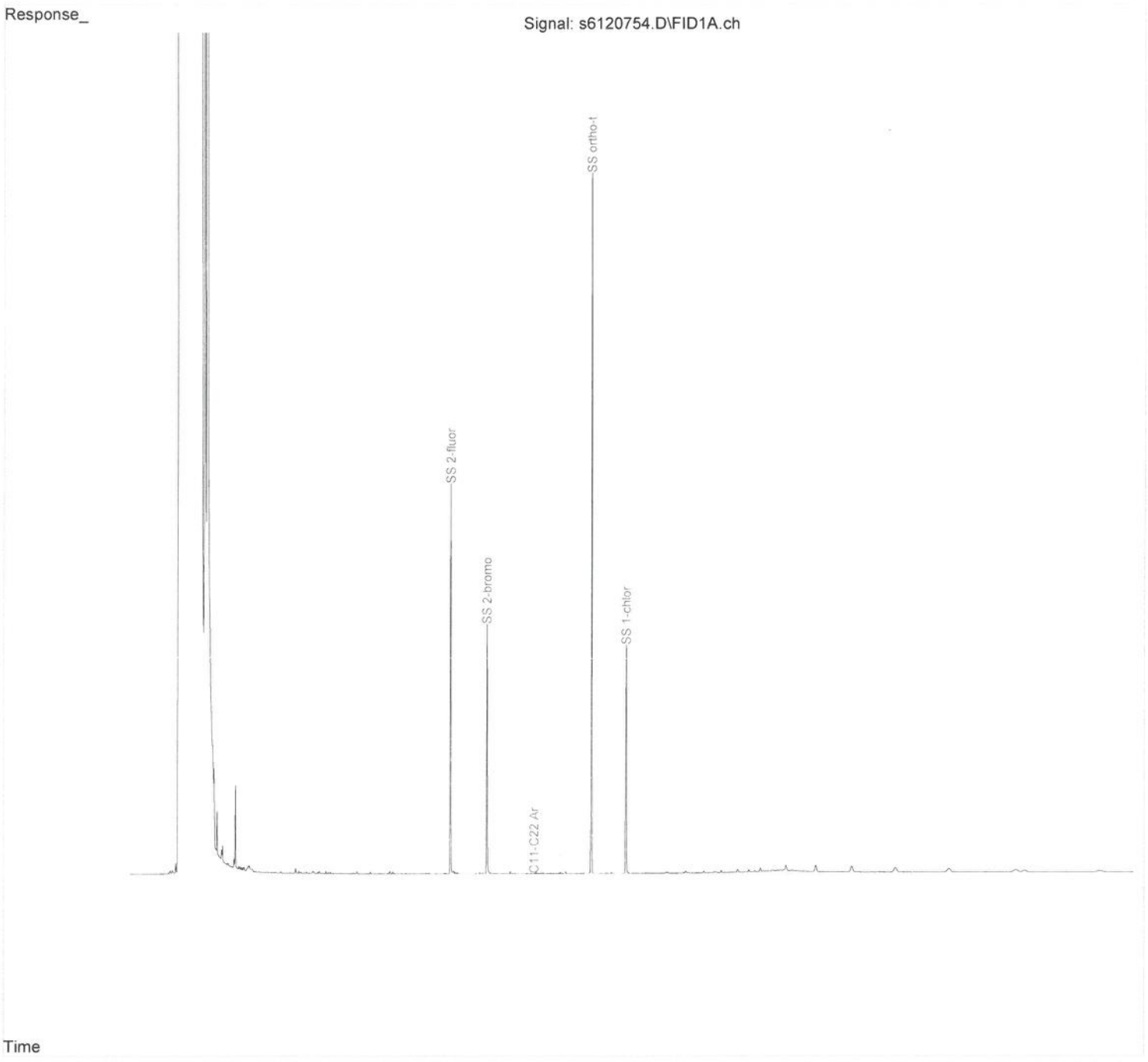
	Compound	R.T.	Response	Conc	Units	
	System Monitoring Compounds					
3)	S SS 2-fluorobiphenyl (...	9.528	2119359	15.018	ug/mLm	BC = Baseline Correction
Spiked Amount	20.000		Recovery =	75.09%		
5)	S SS 2-bromonaphthalene...	10.605	1503133	15.762	ug/mLm	BC = Baseline Correction
Spiked Amount	20.000		Recovery =	78.81%		
10)	S SS ortho-terphenyl (OTP)	13.727	4251989	28.420	ug/mLm	BC = Baseline Correction
Spiked Amount	50.000		Recovery =	56.84%		
11)	S SS 1-chloro-otadecane...	14.766	1419792	11.619	ug/mL	
Spiked Amount	50.000		Recovery =	23.24%		
	Target Compounds					
1)	naphthalene	0.000	0	N.D.	ug/mLd	
2)	2-methylnaphthalene	0.000	0	N.D.	ug/mL	
4)	acenaphthylene	0.000	0	N.D.	ug/mLd	
6)	acenaphthene	0.000	0	N.D.	ug/mL	
7)	fluorene	0.000	0	N.D.	ug/mL	
8)	phenanthrene	0.000	0	N.D.	ug/mL	
9)	anthracene	0.000	0	N.D.	ug/mL	
12)	fluoranthene	0.000	0	N.D.	ug/mL	
13)	pyrene	0.000	0	N.D.	ug/mL	
14)	benzo(a)anthracene	0.000	0	N.D.	ug/mLd	
15)	chrysene	0.000	0	N.D.	ug/mL	
16)	benzo(b&k)fluoranthenes	0.000	0	N.D.	ug/mL	
17)	benzo(a)pyrene	0.000	0	N.D.	ug/mL	
18)	indeno&dibenzo	0.000	0	N.D.	ug/mL	
19)	benzo(g,h,i)perylene	0.000	0	N.D.	ug/mL	
20)	H C11-C22 Aromatics	12.000	4420757	30.941	ug/mLm	RI = Range Integration

(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : X:\S6\2023\Dec23\120723\
Data File : s6120754.D
Signal(s) : FID1A.ch
Acq On : 07 Dec 2023 11:20 pm
Operator : dbv
Sample : 67798-08 aro x1
Misc :
ALS Vial : 27 Sample Multiplier: 1

Integration File: rteint.p
Quant Time: Dec 08 17:08:47 2023
Quant Method : X:\S6\methods\S6ARO100423F.M
Quant Title : S6 EPH Aromatics
QLast Update : Thu Oct 05 11:16:37 2023
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : X:\S6\2023\Dec23\120723.SEC\
Data File : s6120753.D
Signal(s) : FID2B.ch
Acq On : 07 Dec 2023 11:20 pm
Operator : dbv
Sample : 67798-08 ali x1
Misc :
ALS Vial : 102 Sample Multiplier: 1

DBV
12/12/23 @ 08:26
DonnaV

Integration File: rteint.p
Quant Time: Dec 08 17:09:09 2023
Quant Method : X:\S6\methods\S6ALI100423A.M
Quant Title : S6 EPH Aliphatics
QLast Update : Thu Oct 05 13:01:54 2023
Response via : Initial Calibration
Integrator: RTE

COD LOW

Volume Inj. :
Signal Phase :
Signal Info :

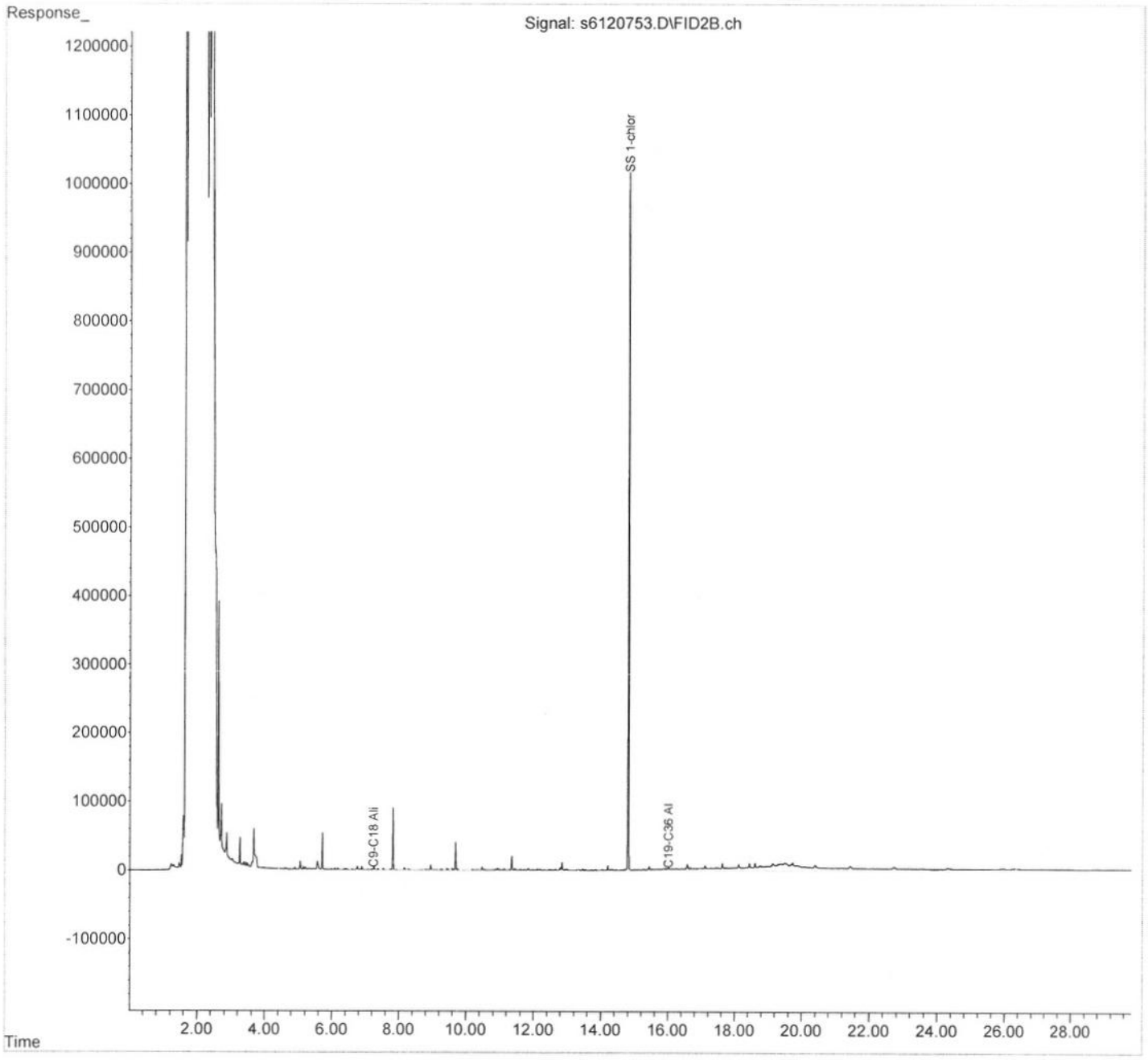
	Compound	R.T.	Response	Conc	Units	
	System Monitoring Compounds					
4) S	SS 2-fluorobiphenyl (...	0.000	0	N.D.	ug/mLd	
Spiked Amount	20.000	Recovery =	0.00%			
6) S	SS 2-bromonaphthalene...	0.000	0	N.D.	ug/mLd	
Spiked Amount	20.000	Recovery =	0.00%			
11) S	SS ortho-terphenyl (OTP)	0.000	0	N.D.	ug/mLd	
Spiked Amount	50.000	Recovery =	0.00%			
13) S	SS 1-chloro-octadecan...	14.807f	1461342	12.423	ug/mLm	BC = Baseline Correction
Spiked Amount	50.000	Recovery =	24.85%			
	Target Compounds					
1)	C9 n-Nonane	0.000	0	N.D.	ug/mLd	
2)	C10 n-Decane	0.000	0	N.D.	ug/mLd	
3)	C12 n-Dodecane	0.000	0	N.D.	ug/mLd	
5)	C14 n-Tetradecane	0.000	0	N.D.	ug/mLd	
7)	C16 n-Hexadecane	0.000	0	N.D.	ug/mLd	
8)	C18 n-Octadecane	0.000	0	N.D.	ug/mLd	
9) H	C9-C18 Aliphatics	7.237	1052350	7.608	ug/mLm	RI = Range Integration
10)	C19 n-Nonadecane	0.000	0	N.D.	ug/mLd	
12)	C20 n-Eicosane	0.000	0	N.D.	ug/mLd	
14)	C22 n-Docosane	0.000	0	N.D.	ug/mLd	
15)	C24 n-Tetracosane	0.000	0	N.D.	ug/mLd	
16)	C26 n-Hexacosane	0.000	0	N.D.	ug/mLd	
17)	C28 n-Octacosane	0.000	0	N.D.	ug/mLd	
18)	C30 n-Triacontane	0.000	0	N.D.	ug/mLd	
19)	C36 n-Hexatriacontane	0.000	0	N.D.	ug/mLd	
20) H	C19-C36 Aliphatics	16.000	2573378	18.367	ug/mLm	RI = Range Integration

(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : X:\S6\2023\Dec23\120723.SEC\
Data File : s6120753.D
Signal(s) : FID2B.ch
Acq On : 07 Dec 2023 11:20 pm
Operator : dbv
Sample : 67798-08 ali x1
Misc :
ALS Vial : 102 Sample Multiplier: 1

Integration File: rteint.p
Quant Time: Dec 08 17:09:09 2023
Quant Method : X:\S6\methods\S6ALI100423A.M
Quant Title : S6 EPH Aliphatics
QLast Update : Thu Oct 05 13:01:54 2023
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :



This File:	L:\SVOA\Excel Reports\EPH\231213\67798-009		Skyla Marquis L:\SVOA\EPH\EPH ImportFileBuilder2.0.xls
Analysis Group:	EPH	Dow Salvage Yard	12/13/23 3:05 PM
Field ID:	SY-OBMW14-110723	CRE	L:\SVOA\EPH\
Sample:	67798-09 targets x1	67798-09 aro x1	67798-09 ali x1
Misc:	aro frac		L:\SVOA\Excel Reports\EPH\2312
Method Name:	SVOA04 Method 8270E (t S6 EPH Aromatics		S6 EPH Aliphatics
Import File Name:	s6 EPHs QC17110		L:\SVOA\PDF Reports\FUELS\
TestGroupID:	EMA_EPH_PresCert_A		
Aqueous or Soil? (A or S)	A		
Fractionated? (Y/N)	y	y	
Prep Date:	11/13/2023		
Lab#:	67798-009		
QC_Code:			
Prep#	17110		

Reviewer Checks:

Quant Report: Reviewed? Ranges integrated? Analyst Initials & Date?	1
Chromatogram Checked? Major peaks identified?	2
Soil prep data checked: weight, volume, %solid, Prep date	5
Field ID consistent with data and any field replicates	11
Results consistent with any re-runs & internal QC	16
Substitute dilution data checked	20
Correct dilution and reason clear or noted	
Reason for reanalysis documented	
Surrogates pass or flagged & noted	
Flags checked (Expiration, F+, Over Cal)	
Other QC failures, estimates or interferences documented	
Spot checked Reported Result with Quant Report	
Checked Audit flagged data in LIMS	

Notes:

Initials & Date: SJ 12/13/23

X:\S4\2023\Dec23\120723\s4120725.D\S4PAH110223A.XLS PAH targets filename
X:\S6\2023\Dec23\120723\s6120764.D\S6ARO100423F.XLS aromatics filename
X:\S6\2023\Dec23\120723.SEC\s6120763.D\S6ALI100423A.XLS aliphatics filename

#	Surrogate Standards	Concentration (ug/mL)	AnalysisDate	AnalysisTime	AnalyzedBy	Dilution	Weight	Volume	Surr	Recovery	Flag	QC Limits
13	SS 1-chloro-octadecane (COD)	19.74599349	12/8/2023	08:22:00 AM	DBV s6120763.D	1	1	2	100	**39%**	#	40-140
10	SS ortho-terphenyl (OTP)	26.89734127	12/8/2023	08:22:00 AM	DBV s6120764.D	1	1	2	100	**54%**		40-140
3	SS 2-fluorobiphenyl (2FBP)	15.18307609	12/8/2023	08:22:00 AM	DBV s6120764.D	1	1	2	40	**76%**		40-140
5	SS 2-bromonaphthalene (2BN)	16.1559602	12/8/2023	08:22:00 AM	DBV s6120764.D	1	1	2	40	**81%**		40-140

#	AnalyteName	Concentration (ug/mL)	AnalysisDate	AnalysisTime	AnalyzedBy	Dilution	Weight	Volume
3	naphthalene	0	12/07/2023	10:22:00 PM	CL s4120725.D	1	1	2
4	2-methylnaphthalene	0	12/07/2023	10:22:00 PM	CL s4120725.D	1	1	2
12	phenanthrene	0	12/07/2023	10:22:00 PM	CL s4120725.D	1	1	2
8	acenaphthene	0	12/07/2023	10:22:00 PM	CL s4120725.D	1	1	2
7	acenaphthylene	0	12/07/2023	10:22:00 PM	CL s4120725.D	1	1	2
10	fluorene	0	12/07/2023	10:22:00 PM	CL s4120725.D	1	1	2
13	anthracene	0	12/07/2023	10:22:00 PM	CL s4120725.D	1	1	2
15	fluoranthene	0	12/07/2023	10:22:00 PM	CL s4120725.D	1	1	2
17	pyrene	0	12/07/2023	10:22:00 PM	CL s4120725.D	1	1	2
18	benzo(a)anthracene	0	12/07/2023	10:22:00 PM	CL s4120725.D	1	1	2
19	chrysene	0	12/07/2023	10:22:00 PM	CL s4120725.D	1	1	2
21	benzo(b)fluoranthene	0	12/07/2023	10:22:00 PM	CL s4120725.D	1	1	2
22	benzo(k)fluoranthene	0	12/07/2023	10:22:00 PM	CL s4120725.D	1	1	2
23	benzo(a)pyrene	0	12/07/2023	10:22:00 PM	CL s4120725.D	1	1	2
24	indeno(1,2,3-cd)pyrene	0	12/07/2023	10:22:00 PM	CL s4120725.D	1	1	2
25	dibenzo(a,h)anthracene	0	12/07/2023	10:22:00 PM	CL s4120725.D	1	1	2
26	benzo(g,h,i)perylene	0	12/07/2023	10:22:00 PM	CL s4120725.D	1	1	2
20	C11-C22 Aromatics	30.07548198	12/8/2023	08:22:00 AM	DBV s6120764.D	1	1	2
9	C9-C18 Aliphatics	44.9098522	12/8/2023	08:22:00 AM	DBV s6120763.D	1	1	2
20	C19-C36 Aliphatics	62.22918539	12/8/2023	08:22:00 AM	DBV s6120763.D	1	1	2
	Adjusted C11-C22 Aromatics	30.07548198	12/8/2023	08:22:00 AM	DBV s6120764.D	1	1	2

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Dec23\120723\
Data File : s4120725.D
Acq On : 07 Dec 2023 10:22 pm
Operator : cl
Sample : 67798-09 targets x1
Misc : aro frac
ALS Vial : 20 Sample Multiplier: 1

CL
12/8/23 @ 15:32
CharlesL

Quant Time: Dec 08 08:54:29 2023
Quant Method : X:\S4\methods\S4PAH110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration

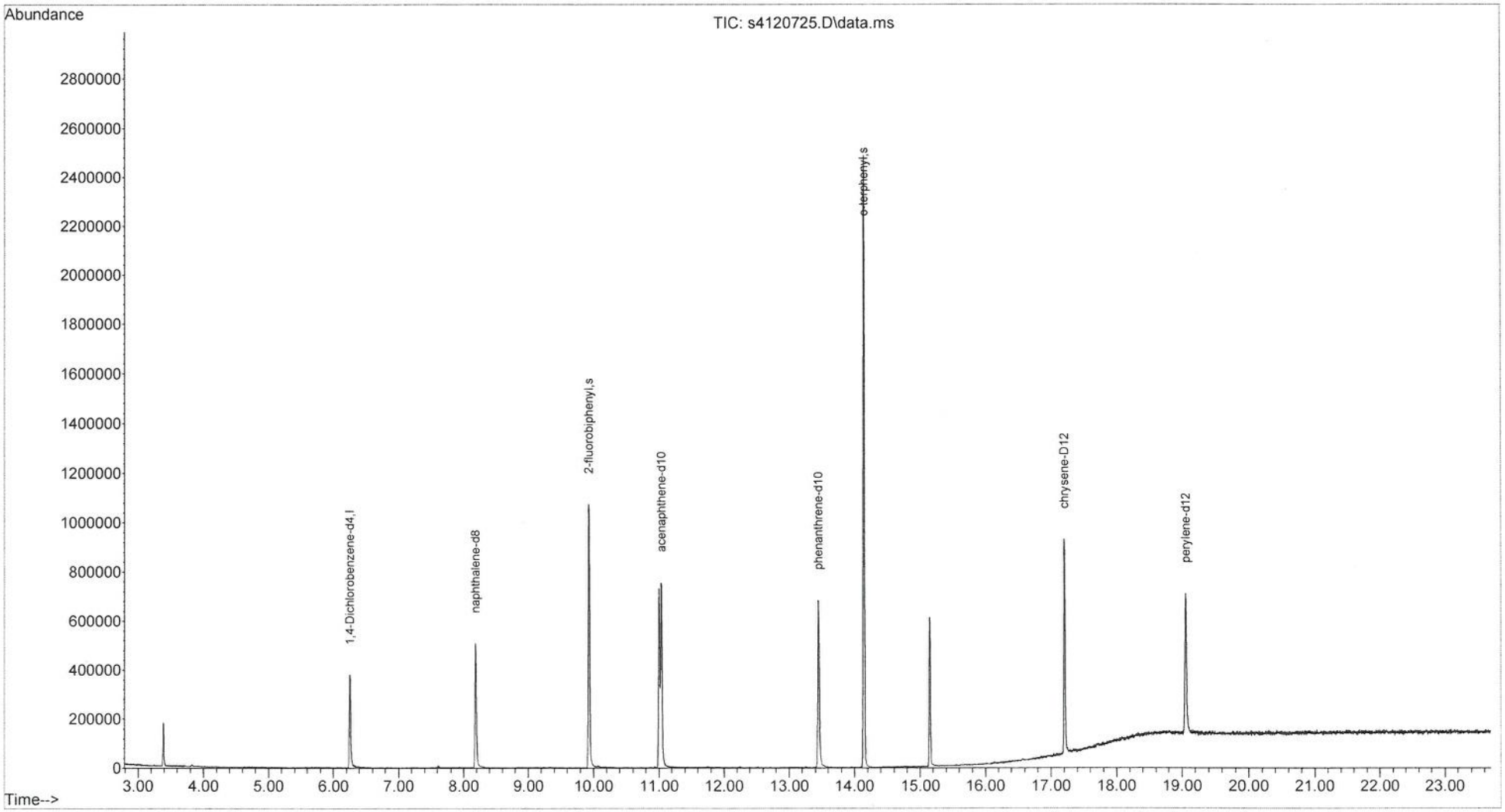
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.252	152	91039	10.00	ug/mL	-0.01
2) naphthalene-d8	8.181	136	374978	10.00	ug/mL	-0.01
5) acenaphthene-d10	11.035	164	219400	10.00	ug/mL	-0.01
11) phenanthrene-d10	13.448	188	422967	10.00	ug/mL	-0.01
16) chrysene-D12	17.204	240	383803	10.00	ug/mL	0.00
20) perylene-d12	19.057	264	347760	10.00	ug/mL	0.02
System Monitoring Compounds						
6) 2-fluorobiphenyl	9.929	172	515635	14.92	ug/mL	-0.01
Spiked Amount 100.000			Recovery = 14.92%			
14) o-terphenyl	14.144	230	683528	28.46	ug/mL	-0.01
Spiked Amount 100.000			Recovery = 28.46%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Dec23\120723\
Data File : s4120725.D
Acq On : 07 Dec 2023 10:22 pm
Operator : cl
Sample : 67798-09 targets x1
Misc : aro frac
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Dec 08 08:54:29 2023
Quant Method : X:\S4\methods\S4PAH110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration



SFP
12/12/23 @ 12:24
SkylaM

Data Path : X:\S6\2023\Dec23\120723\
Data File : s6120764.D
Signal(s) : FID1A.ch
Acq On : 08 Dec 2023 08:22 am
Operator : dbv
Sample : 67798-09 aro x1
Misc :
ALS Vial : 32 Sample Multiplier: 1

Integration File: rteint.p
Quant Time: Dec 08 17:08:53 2023
Quant Method : X:\S6\methods\S6ARO100423F.M
Quant Title : S6 EPH Aromatics
QLast Update : Thu Oct 05 11:16:37 2023
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :

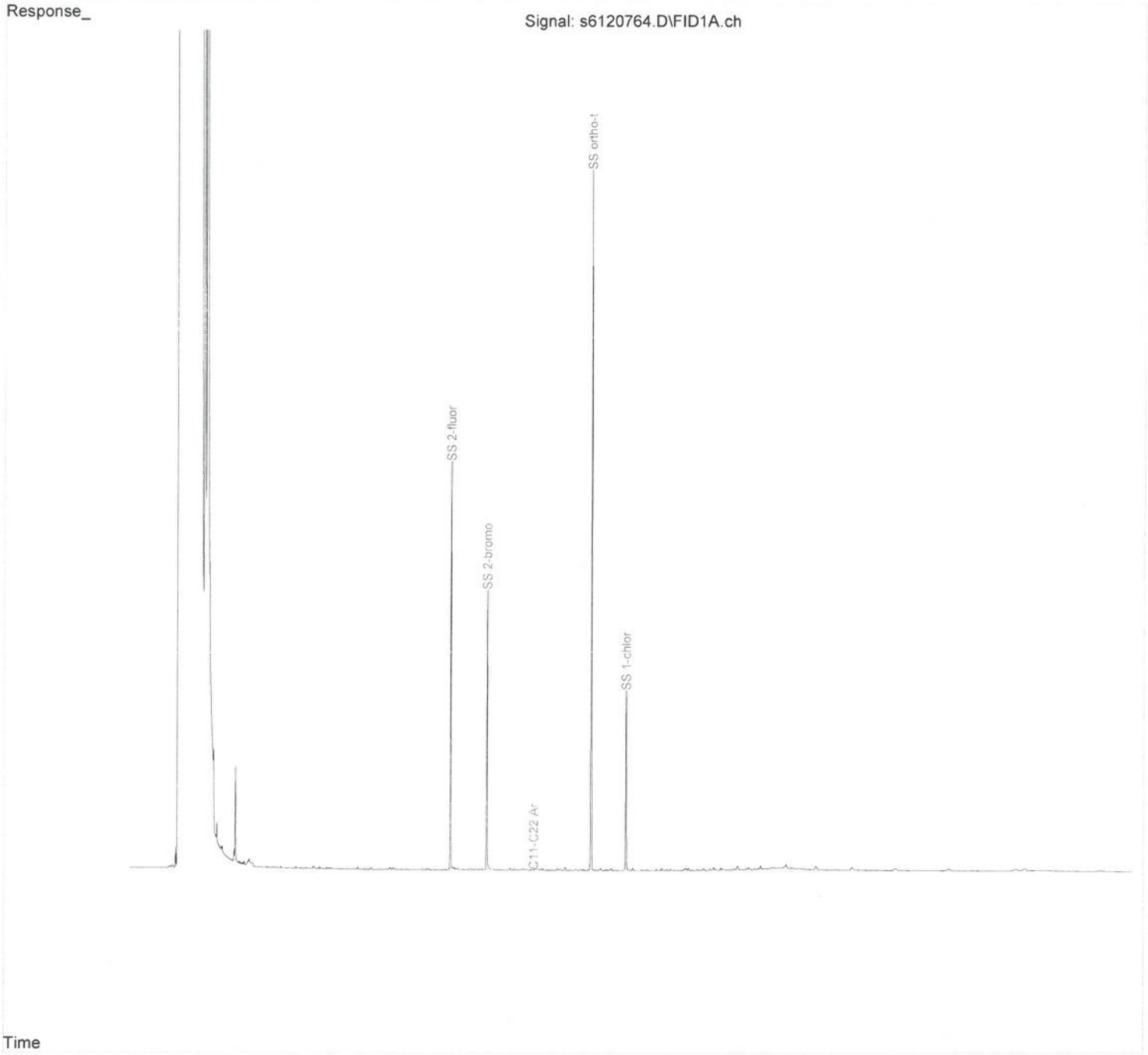
	Compound	R.T.	Response	Conc	Units	
	System Monitoring Compounds					
3) S	SS 2-fluorobiphenyl (...	9.535	2142601	15.183	ug/mLm	BC = Baseline Correction
Spiked Amount	20.000		Recovery =	75.91%		
5) S	SS 2-bromonaphthalene...	10.613	1540732	16.156	ug/mLm	BC = Baseline Correction
Spiked Amount	20.000		Recovery =	80.78%		
10) S	SS ortho-terphenyl (OTP)	13.734	4023878	26.897	ug/mLm	BC = Baseline Correction
Spiked Amount	50.000		Recovery =	53.79%		
11) S	SS 1-chloro-otadecane...	14.773	1089035	8.915	ug/mL	
Spiked Amount	50.000		Recovery =	17.83%		
	Target Compounds					
1)	naphthalene	0.000	0	N.D.	ug/mLd	
2)	2-methylnaphthalene	0.000	0	N.D.	ug/mL	
4)	acenaphthylene	0.000	0	N.D.	ug/mLd	
6)	acenaphthene	0.000	0	N.D.	ug/mL	
7)	fluorene	0.000	0	N.D.	ug/mL	
8)	phenanthrene	0.000	0	N.D.	ug/mL	
9)	anthracene	0.000	0	N.D.	ug/mL	
12)	fluoranthene	0.000	0	N.D.	ug/mL	
13)	pyrene	0.000	0	N.D.	ug/mLd	
14)	benzo(a)anthracene	0.000	0	N.D.	ug/mLd	
15)	chrysene	0.000	0	N.D.	ug/mL	
16)	benzo(b&k)fluoranthenes	0.000	0	N.D.	ug/mL	
17)	benzo(a)pyrene	0.000	0	N.D.	ug/mL	
18)	indeno&dibenzo	0.000	0	N.D.	ug/mL	
19)	benzo(g,h,i)perylene	0.000	0	N.D.	ug/mL	
20) H	C11-C22 Aromatics	12.000	4290751	30.075	ug/mLm	RI = Range Integration

(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : X:\S6\2023\Dec23\120723\
Data File : s6120764.D
Signal(s) : FID1A.ch
Acq On : 08 Dec 2023 08:22 am
Operator : dbv
Sample : 67798-09 aro x1
Misc :
ALS Vial : 32 Sample Multiplier: 1

Integration File: rteint.p
Quant Time: Dec 08 17:08:53 2023
Quant Method : X:\S6\methods\S6ARO100423F.M
Quant Title : S6 EPH Aromatics
QLast Update : Thu Oct 05 11:16:37 2023
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : X:\S6\2023\Dec23\120723.SEC\
Data File : s6120763.D
Signal(s) : FID2B.ch
Acq On : 08 Dec 2023 08:22 am
Operator : dbv
Sample : 67798-09 ali x1
Misc :
ALS Vial : 107 Sample Multiplier: 1

12/12/23 @ 08:26
DonnaV

Integration File: rteint.p
COD LOW
Quant Time: Dec 08 17:09:15 2023
Quant Method : X:\S6\methods\S6ALI100423A.M
Quant Title : S6 EPH Aliphatics
QLast Update : Thu Oct 05 13:01:54 2023
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :

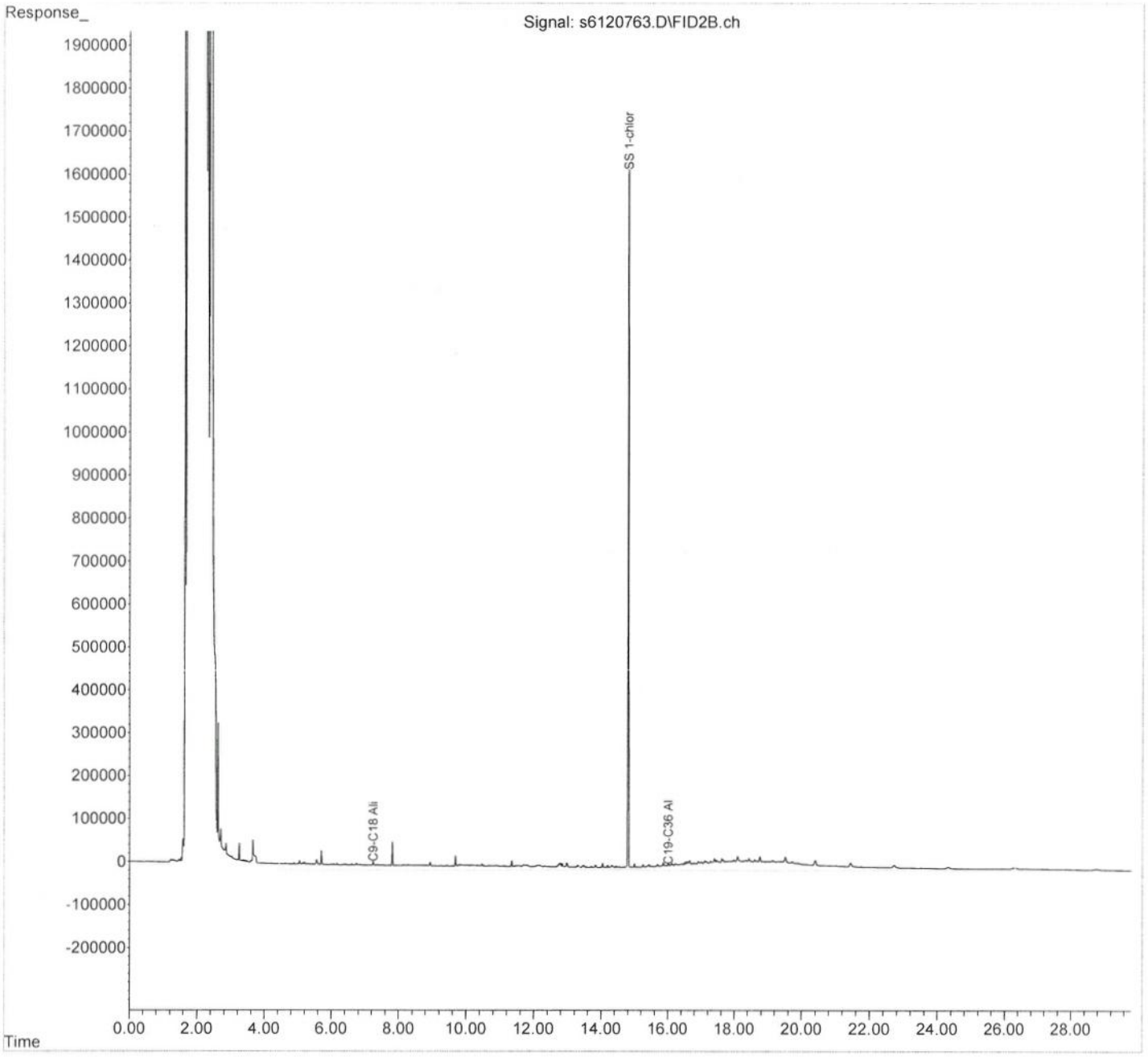
	Compound	R.T.	Response	Conc	Units	
	System Monitoring Compounds					
4)	S SS 2-fluorobiphenyl (...	0.000	0	N.D.	ug/mLd	
Spiked Amount	20.000	Recovery	=	0.00%		
6)	S SS 2-bromonaphthalene...	0.000	0	N.D.	ug/mLd	
Spiked Amount	20.000	Recovery	=	0.00%		
11)	S SS ortho-terphenyl (OTP)	0.000	0	N.D.	ug/mLd	
Spiked Amount	50.000	Recovery	=	0.00%		
13)	S SS 1-chloro-octadecan...	14.806f	2319436	19.746	ug/mLm	BC = Baseline Correction
Spiked Amount	50.000	Recovery	=	39.49%		
	Target Compounds					
1)	C9 n-Nonane	0.000	0	N.D.	ug/mLd	
2)	C10 n-Decane	0.000	0	N.D.	ug/mLd	
3)	C12 n-Dodecane	0.000	0	N.D.	ug/mLd	
5)	C14 n-Tetradecane	0.000	0	N.D.	ug/mLd	
7)	C16 n-Hexadecane	0.000	0	N.D.	ug/mLd	
8)	C18 n-Octadecane	0.000	0	N.D.	ug/mLd	
9)	H C9-C18 Aliphatics	7.237	5822787	44.910	ug/mLm	RI = Range Integration
10)	C19 n-Nonadecane	0.000	0	N.D.	ug/mLd	
12)	C20 n-Eicosane	0.000	0	N.D.	ug/mLd	
14)	C22 n-Docosane	0.000	0	N.D.	ug/mLd	
15)	C24 n-Tetracosane	0.000	0	N.D.	ug/mLd	
16)	C26 n-Hexacosane	0.000	0	N.D.	ug/mLd	
17)	C28 n-Octacosane	0.000	0	N.D.	ug/mLd	
18)	C30 n-Triacontane	0.000	0	N.D.	ug/mLd	
19)	C36 n-Hexatriacontane	0.000	0	N.D.	ug/mLd	
20)	H C19-C36 Aliphatics	16.000	8381276	62.229	ug/mLm	RI = Range Integration

(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : X:\S6\2023\Dec23\120723.SEC\
Data File : s6120763.D
Signal(s) : FID2B.ch
Acq On : 08 Dec 2023 08:22 am
Operator : dbv
Sample : 67798-09 ali x1
Misc :
ALS Vial : 107 Sample Multiplier: 1

Integration File: rteint.p
Quant Time: Dec 08 17:09:15 2023
Quant Method : X:\S6\methods\S6ALI100423A.M
Quant Title : S6 EPH Aliphatics
QLast Update : Thu Oct 05 13:01:54 2023
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :



This File:	L:\SVOA\Excel Reports\EPH\231213\67798-010		Skyla Marquis L:\SVOA\EPH\EPH ImportFileBuilder2.0.xls
Analysis Group:	EPH	Dow Salvage Yard	12/13/23 3:06 PM
Field ID:	'2-252.5-262.5-110723	CRE	L:\SVOA\EPH\
Sample:	67798-10 targets x1	67798-10 aro x1	67798-10 ali x1 L:\SVOA\Excel Reports\EPH\2312:
Misc:	aro frac		L:\SVOA\PDF Reports\FUELS\
Method Name:	SVOA04 Method 8270E (t	S6 EPH Aromatics	S6 EPH Aliphatics
Import File Name:	s6 EPHs QC17110		
TestGroupID:	EMA_EPH_PresCert_A		
Aqueous or Soil? (A or S)	A		
Fractionated? (Y/N)	y	y	
Prep Date:	11/13/2023		
Lab#:	67798-010		
QC_Code:			
Prep#	17110		

Reviewer Checks:

Quant Report: Reviewed? Ranges integrated? Analyst Initials & Date?	1
Chromatogram Checked? Major peaks identified?	2
Soil prep data checked: weight, volume, %solid, Prep date	5
Field ID consistent with data and any field replicates	11
Results consistent with any re-runs & internal QC	16
Substitute dilution data checked	20
Correct dilution and reason clear or noted	
Reason for reanalysis documented	
Surrogates pass or flagged & noted	
Flags checked (Expiration, F+, Over Cal)	
Other QC failures, estimates or interferences documented	
Spot checked Reported Result with Quant Report	
Checked Audit flagged data in LIMS	

Notes:

Initials & Date: 12/13/23

X:\S4\2023\Dec23\120723\s4120726.D\S4PAH110223A.XLS PAH targets filename
X:\S6\2023\Dec23\120723\s6120766.D\S6ARO100423F.XLS aromatics filename
X:\S6\2023\Dec23\120723.SEC\s6120765.D\S6ALI100423A.XLS aliphatics filename

#	Surrogate Standards	Concentration (ug/mL)	AnalysisDate	AnalysisTime	AnalyzedBy	Dilution	Weight	Volume	Surr	Recovery	Flag	QC Limits
13	SS 1-chloro-octadecane (COD)	17.81362618	12/8/2023	08:56:00 AM	DBV s6120765.D	1	1	2	100	**36%**	#	40-140
10	SS ortho-terphenyl (OTP)	28.02253931	12/8/2023	08:56:00 AM	DBV s6120766.D	1	1	2	100	**56%**		40-140
3	SS 2-fluorobiphenyl (2FBP)	15.64377153	12/8/2023	08:56:00 AM	DBV s6120766.D	1	1	2	40	**78%**		40-140
5	SS 2-bromonaphthalene (2BN)	16.09909146	12/8/2023	08:56:00 AM	DBV s6120766.D	1	1	2	40	**80%**		40-140

#	AnalyteName	Concentration (ug/mL)	AnalysisDate	AnalysisTime	AnalyzedBy	Dilution	Weight	Volume
3	naphthalene	0	12/07/2023	10:52:00 PM	CL s4120726.D	1	1	2
4	2-methylnaphthalene	0	12/07/2023	10:52:00 PM	CL s4120726.D	1	1	2
12	phenanthrene	0	12/07/2023	10:52:00 PM	CL s4120726.D	1	1	2
8	acenaphthene	0	12/07/2023	10:52:00 PM	CL s4120726.D	1	1	2
7	acenaphthylene	0	12/07/2023	10:52:00 PM	CL s4120726.D	1	1	2
10	fluorene	0	12/07/2023	10:52:00 PM	CL s4120726.D	1	1	2
13	anthracene	0	12/07/2023	10:52:00 PM	CL s4120726.D	1	1	2
15	fluoranthene	0	12/07/2023	10:52:00 PM	CL s4120726.D	1	1	2
17	pyrene	0	12/07/2023	10:52:00 PM	CL s4120726.D	1	1	2
18	benzo(a)anthracene	0	12/07/2023	10:52:00 PM	CL s4120726.D	1	1	2
19	chrysene	0	12/07/2023	10:52:00 PM	CL s4120726.D	1	1	2
21	benzo(b)fluoranthene	0	12/07/2023	10:52:00 PM	CL s4120726.D	1	1	2
22	benzo(k)fluoranthene	0	12/07/2023	10:52:00 PM	CL s4120726.D	1	1	2
23	benzo(a)pyrene	0	12/07/2023	10:52:00 PM	CL s4120726.D	1	1	2
24	indeno(1,2,3-cd)pyrene	0	12/07/2023	10:52:00 PM	CL s4120726.D	1	1	2
25	dibenzo(a,h)anthracene	0	12/07/2023	10:52:00 PM	CL s4120726.D	1	1	2
26	benzo(g,h,i)perylene	0	12/07/2023	10:52:00 PM	CL s4120726.D	1	1	2
20	C11-C22 Aromatics	26.49636711	12/8/2023	08:56:00 AM	DBV s6120766.D	1	1	2
9	C9-C18 Aliphatics	14.30373311	12/8/2023	08:56:00 AM	DBV s6120765.D	1	1	2
20	C19-C36 Aliphatics	11.69143891	12/8/2023	08:56:00 AM	DBV s6120765.D	1	1	2
	Adjusted C11-C22 Aromatics	26.49636711	12/8/2023	08:56:00 AM	DBV s6120766.D	1	1	2

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Dec23\120723\
Data File : s4120726.D
Acq On : 07 Dec 2023 10:52 pm
Operator : cl
Sample : 67798-10 targets x1
Misc : aro frac
ALS Vial : 21 Sample Multiplier: 1

CL
12/8/23 @ 15:33
CharlesL

Quant Time: Dec 08 08:54:33 2023
Quant Method : X:\S4\methods\S4PAH110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration

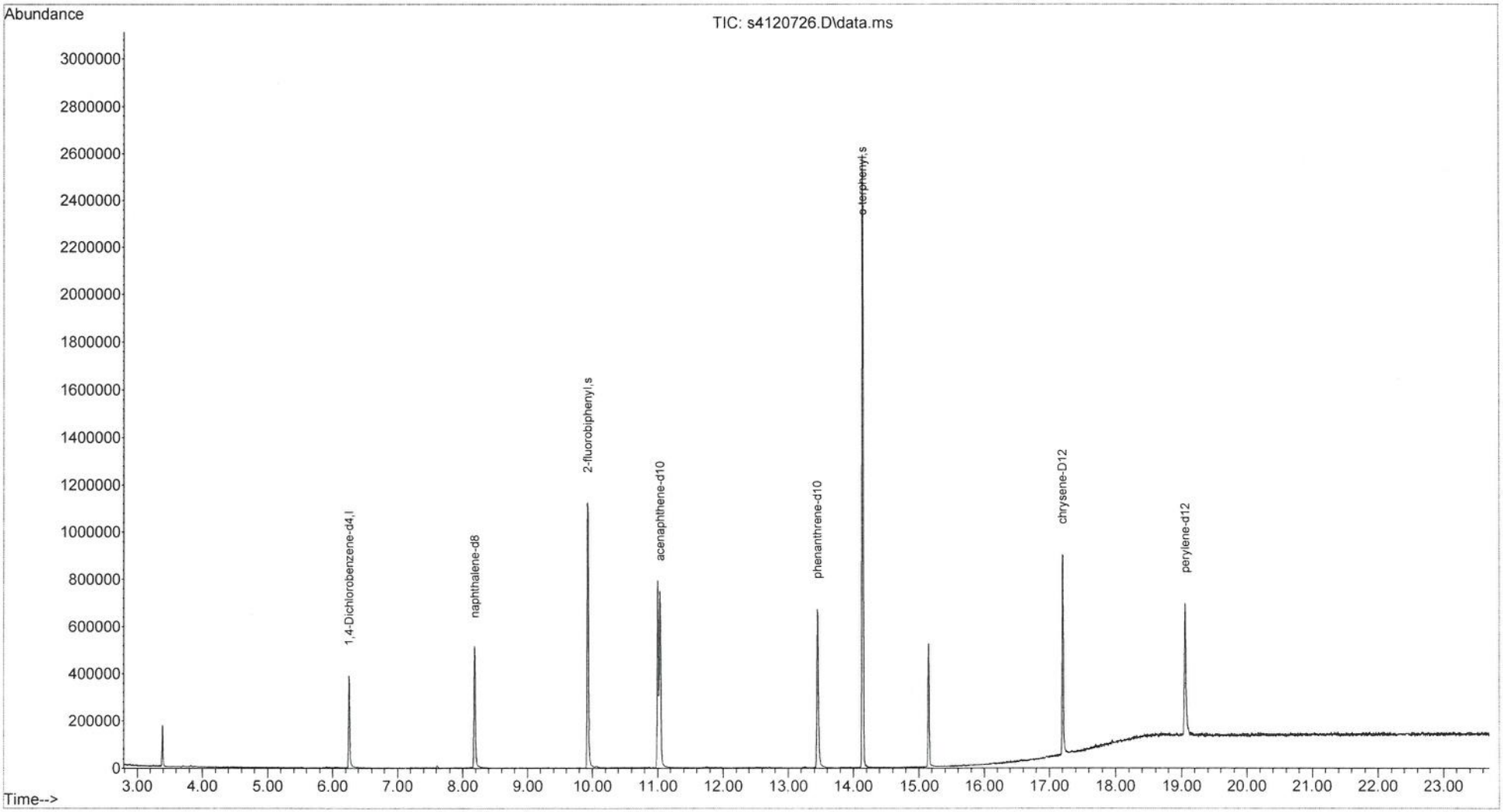
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.253	152	93703	10.00	ug/mL	-0.01
2) naphthalene-d8	8.184	136	364424	10.00	ug/mL	-0.01
5) acenaphthene-d10	11.035	164	213174	10.00	ug/mL	-0.01
11) phenanthrene-d10	13.448	188	417643	10.00	ug/mL	-0.01
16) chrysene-D12	17.204	240	382490	10.00	ug/mL	0.00
20) perylene-d12	19.057	264	352369	10.00	ug/mL	0.02
System Monitoring Compounds						
6) 2-fluorobiphenyl	9.929	172	527822	15.72	ug/mL	-0.01
Spiked Amount 100.000			Recovery = 15.72%			
14) o-terphenyl	14.144	230	723141	30.49	ug/mL	0.00
Spiked Amount 100.000			Recovery = 30.49%			
Target Compounds						Qvalue
3) naphthalene	8.212	128	879	Below Cal	#	68

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Dec23\120723\
Data File : s4120726.D
Acq On : 07 Dec 2023 10:52 pm
Operator : cl
Sample : 67798-10 targets x1
Misc : aro frac
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Dec 08 08:54:33 2023
Quant Method : X:\S4\methods\S4PAH110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration



SFP
12/12/23 @ 12:24
SkylaM

Data Path : X:\S6\2023\Dec23\120723\
Data File : s6120766.D
Signal(s) : FID1A.ch
Acq On : 08 Dec 2023 08:56 am
Operator : dbv
Sample : 67798-10 aro x1
Misc :
ALS Vial : 33 Sample Multiplier: 1

Integration File: rteint.p
Quant Time: Dec 08 17:08:56 2023
Quant Method : X:\S6\methods\S6ARO100423F.M
Quant Title : S6 EPH Aromatics
QLast Update : Thu Oct 05 11:16:37 2023
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :

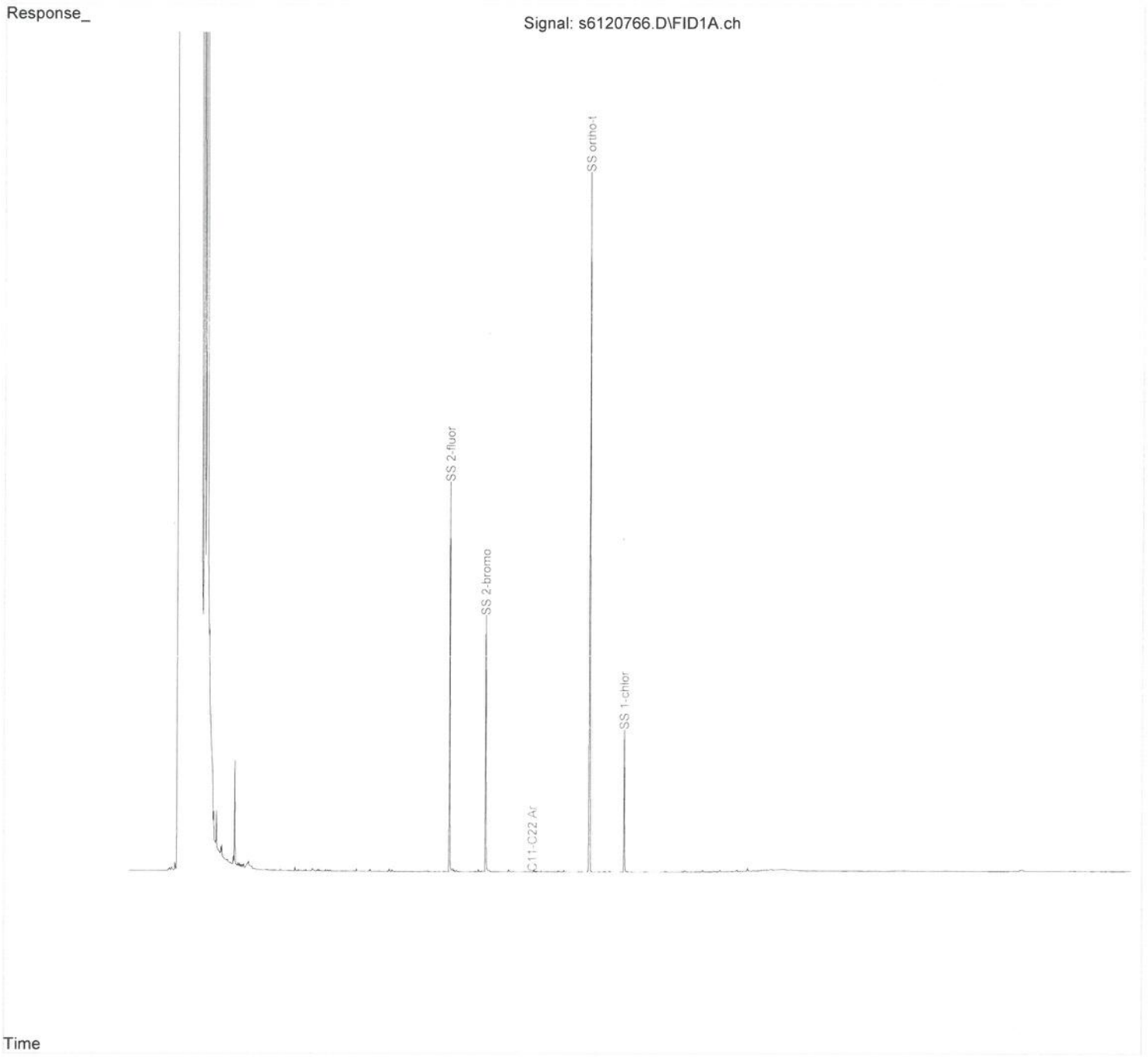
	Compound	R.T.	Response	Conc	Units	
	System Monitoring Compounds					
3) S	SS 2-fluorobiphenyl (...	9.528	2207561	15.644	ug/mLm	BC = Baseline Correction
Spiked Amount	20.000		Recovery =	78.22%		
5) S	SS 2-bromonaphthalene...	10.605	1535306	16.099	ug/mLm	BC = Baseline Correction
Spiked Amount	20.000		Recovery =	80.50%		
10) S	SS ortho-terphenyl (OTP)	13.726	4192397	28.023	ug/mLm	BC = Baseline Correction
Spiked Amount	50.000		Recovery =	56.05%		
11) S	SS 1-chloro-otadecane...	14.765	938535	7.685	ug/mL	
Spiked Amount	50.000		Recovery =	15.37%		
	Target Compounds					
1)	naphthalene	0.000	0	N.D.	ug/mLd	
2)	2-methylnaphthalene	0.000	0	N.D.	ug/mL	
4)	acenaphthylene	0.000	0	N.D.	ug/mLd	
6)	acenaphthene	0.000	0	N.D.	ug/mLd	
7)	fluorene	0.000	0	N.D.	ug/mL	
8)	phenanthrene	0.000	0	N.D.	ug/mL	
9)	anthracene	0.000	0	N.D.	ug/mL	
12)	fluoranthene	0.000	0	N.D.	ug/mL	
13)	pyrene	0.000	0	N.D.	ug/mL	
14)	benzo(a)anthracene	0.000	0	N.D.	ug/mL	
15)	chrysene	0.000	0	N.D.	ug/mL	
16)	benzo(b&k)fluoranthenes	0.000	0	N.D.	ug/mL	
17)	benzo(a)pyrene	0.000	0	N.D.	ug/mL	
18)	indeno&dibenzo	0.000	0	N.D.	ug/mL	
19)	benzo(g,h,i)perylene	0.000	0	N.D.	ug/mL	
20) H	C11-C22 Aromatics	12.000	3753254	26.496	ug/mLm	RI = Range Integration

(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : X:\S6\2023\Dec23\120723\
Data File : s6120766.D
Signal(s) : FID1A.ch
Acq On : 08 Dec 2023 08:56 am
Operator : dbv
Sample : 67798-10 aro x1
Misc :
ALS Vial : 33 Sample Multiplier: 1

Integration File: rteint.p
Quant Time: Dec 08 17:08:56 2023
Quant Method : X:\S6\methods\S6ARO100423F.M
Quant Title : S6 EPH Aromatics
QLast Update : Thu Oct 05 11:16:37 2023
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : X:\S6\2023\Dec23\120723.SEC\
Data File : s6120765.D
Signal(s) : FID2B.ch
Acq On : 08 Dec 2023 08:56 am
Operator : dbv
Sample : 67798-10 ali x1
Misc :
ALS Vial : 108 Sample Multiplier: 1

12/12/23 @ 08:26
DonnaV

COD LOW

Integration File: rteint.p
Quant Time: Dec 08 17:09:17 2023
Quant Method : X:\S6\methods\S6ALI100423A.M
Quant Title : S6 EPH Aliphatics
QLast Update : Thu Oct 05 13:01:54 2023
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :

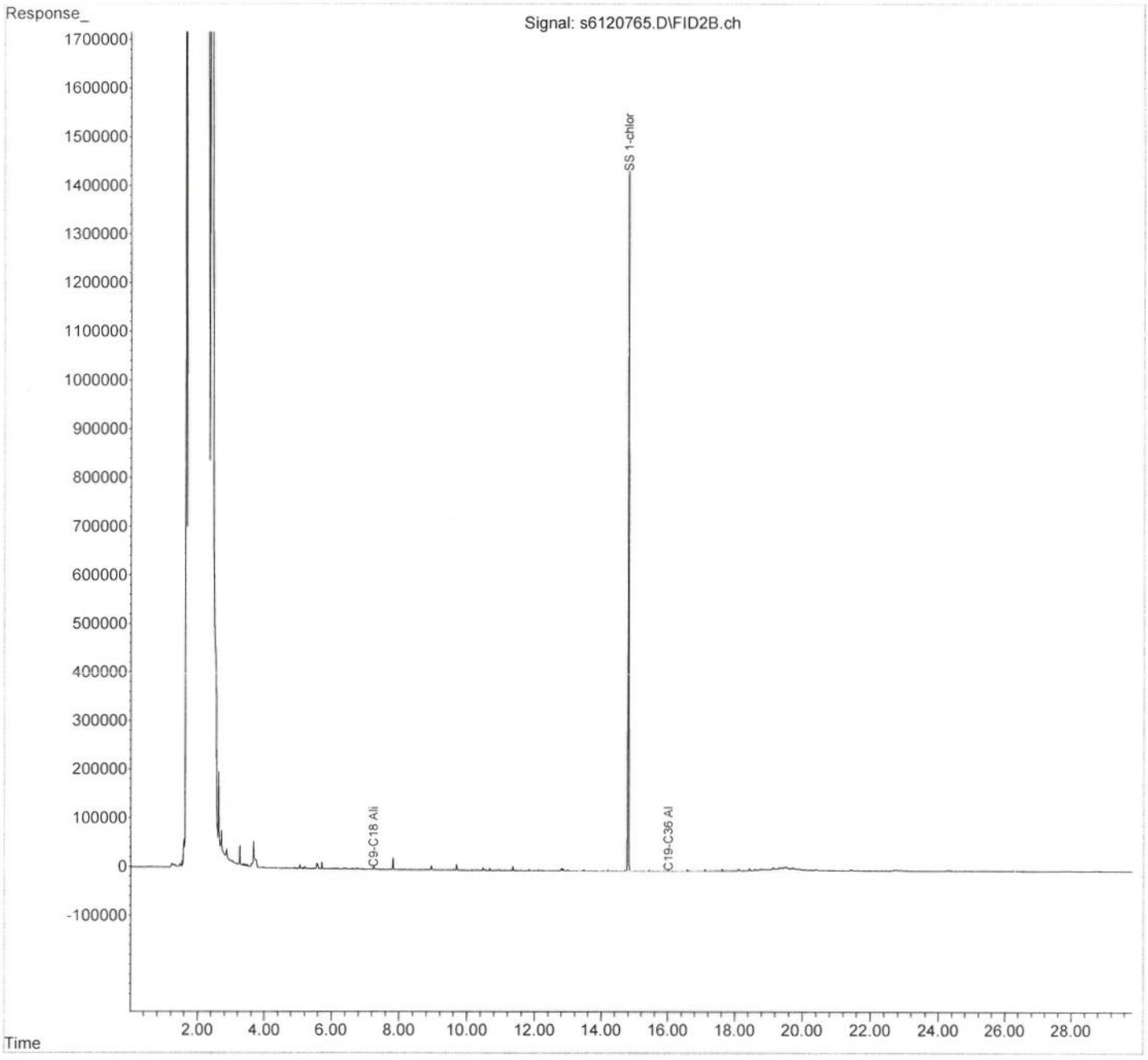
	Compound	R.T.	Response	Conc	Units	
	System Monitoring Compounds					
4) S	SS 2-fluorobiphenyl (...	0.000	0	N.D.	ug/mLd	
Spiked Amount	20.000	Recovery =	0.00%			
6) S	SS 2-bromonaphthalene...	0.000	0	N.D.	ug/mLd	
Spiked Amount	20.000	Recovery =	0.00%			
11) S	SS ortho-terphenyl (OTP)	0.000	0	N.D.	ug/mLd	
Spiked Amount	50.000	Recovery =	0.00%			
13) S	SS 1-chloro-octadecan...	14.806f	2092999	17.814	ug/mLm	BC = Baseline Correction
Spiked Amount	50.000	Recovery =	35.63%			
	Target Compounds					
1)	C9 n-Nonane	0.000	0	N.D.	ug/mLd	
2)	C10 n-Decane	0.000	0	N.D.	ug/mLd	
3)	C12 n-Dodecane	0.000	0	N.D.	ug/mLd	
5)	C14 n-Tetradecane	0.000	0	N.D.	ug/mLd	
7)	C16 n-Hexadecane	0.000	0	N.D.	ug/mLd	
8)	C18 n-Octadecane	0.000	0	N.D.	ug/mLd	
9) H	C9-C18 Aliphatics	7.237	1908646	14.304	ug/mLm	RI = Range Integration
10)	C19 n-Nonadecane	0.000	0	N.D.	ug/mLd	
12)	C20 n-Eicosane	0.000	0	N.D.	ug/mLd	
14)	C22 n-Docosane	0.000	0	N.D.	ug/mLd	
15)	C24 n-Tetracosane	0.000	0	N.D.	ug/mLd	
16)	C26 n-Hexacosane	0.000	0	N.D.	ug/mLd	
17)	C28 n-Octacosane	0.000	0	N.D.	ug/mLd	
18)	C30 n-Triacontane	0.000	0	N.D.	ug/mLd	
19)	C36 n-Hexatriacontane	0.000	0	N.D.	ug/mLd	
20) H	C19-C36 Aliphatics	16.000	1689382	11.691	ug/mLm	RI = Range Integration

(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : X:\S6\2023\Dec23\120723.SEC\
Data File : s6120765.D
Signal(s) : FID2B.ch
Acq On : 08 Dec 2023 08:56 am
Operator : dbv
Sample : 67798-10 ali x1
Misc :
ALS Vial : 108 Sample Multiplier: 1

Integration File: rteint.p
Quant Time: Dec 08 17:09:17 2023
Quant Method : X:\S6\methods\S6ALI100423A.M
Quant Title : S6 EPH Aliphatics
QLast Update : Thu Oct 05 13:01:54 2023
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :



This File:	L:\SVOA\Excel Reports\PCB\112823\s5112816
Analysis Group:	PCB
Field ID:	SY-OBMW12-110723 18001468
Sample:	67798-01 pcb x1 Dow Salvage Yard
Misc:	0 CRE
Import File Name	s5 PCBs QC17179W DOD
TestGroupID	E8082DoD_A
Aqueous or Soil? (A or S)	A
Percent Solid (%)	100
Prep Date	Monday, November 27, 2023
Initial Weight/Volume	1
Volume	1
Lab#:	67798-001
AnalysisDate:	Tuesday, November 28, 2023
AnalysisTime:	13:25
Dilution:	1
AnalyzedBy:	DBV s5112816.D
QC_Code:	
Prep#	17179

Reviewer Checks:

- Quant Report: Reviewed, Analyst Initials & Date ✓
- Chromatogram Checked, Major peaks identified ✓
- Prep data checked: weight, volume, %solid, Prep date X
- Field ID consistent with data and any field replicates
- Results consistent with any re-runs & internal QC ✓
- Correct dilution and reason clear or noted ✓
- Reason for reanalysis documented
- Surrogates pass or flagged & noted ✓
- Flags checked (Expiration, Over Cal)
- Other QC failures, estimates or interferences documented ✓
- Spot checked Reported Result with Quant Report ✓
- Checked Audit flagged data in LIMS
- Correct values averaged ✓ DOD
- Column RPD is OK or both results included ✓
- Correct column reported ✓ 1

Notes:

Reviewer Initials & Date: 12/1/23

#	Surrogate Standards	Concentration (ug/mL)	Recovery	Flag	QC Limits	Report Column
1	SS Tetrachloro-m-xylene	1.19	60%		30-150	1
47	SS Decachlorobiphenyl	1.04	52%		30-150	1

#	AnalyteName	Concentration (ug/mL)	Flag	Report Column
2	Ar-1016	0.00		1
7	Ar-1221	0.00		1
12	Ar-1232	0.00		1
17	Ar-1242	0.00		1
22	Ar-1248	0.00		1
27	Ar-1254	0.00		1
32	Ar-1260	0.00		1
37	Ar-1262	0.00		1
42	Ar-1268	0.00		1

Aroclor	Column #1 average	Column #2 average	Column RPD limit 40%	%rsd	Column #1 1	2	3	4	5
Ar-1016	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1221	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1232	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1242	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1248	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1254	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1260	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1262	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1268	0.00	0.00			0.00	0.00	0.00	0.00	0.00
SS Tetra	1.19	1.24							
SS Deca	1.04	1.15							

Column #2

	%rsd	1	2	3	4	5
Ar-1016		0.00	0.00	0.00	0.00	0.00
Ar-1221		0.00	0.00	0.00	0.00	0.00
Ar-1232		0.00	0.00	0.00	0.00	0.00
Ar-1242		0.00	0.00	0.00	0.00	0.00
Ar-1248		0.00	0.00	0.00	0.00	0.00
Ar-1254		0.00	0.00	0.00	0.00	0.00
Ar-1260		0.00	0.00	0.00	0.00	0.00
Ar-1262		0.00	0.00	0.00	0.00	0.00
Ar-1268		0.00	0.00	0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : X:\S5\2023\Nov23\112823\
Data File : s5112816.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 28 Nov 2023 01:25 pm
Operator : dbv
Sample : 67798-01 pcb x1
Misc :
ALS Vial : 7 Sample Multiplier: 1

DBV
12/1/23 @ 08:42
DonnaV

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Nov 29 06:45:40 2023
Quant Method : X:\S5\methods\S5PCB092123H.M
Quant Title : SVOA03 Method 8082A
QLast Update : Thu Sep 21 17:18:07 2023
Response via : Initial Calibration
Integrator: ChemStation

Take ~~lower of two columns~~ DOD requirement.
column 1
HE DBV

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
System Monitoring Compounds							
1) S SS Tetrac...	2.403	2.289	570.1E6	577.0E6	1.191m	1.243m	BC = Baseline Correction
Spiked Amount	5.000 Range	30 - 150	Recovery =		23.82%#	24.86%#	
47) S SS Decach...	7.048	7.200	435.7E6	365.2E6	1.041m	1.153m	BC = Baseline Correction
Spiked Amount	5.000 Range	30 - 150	Recovery =		20.82%#	23.06%#	
Target Compounds							

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

MS 1016 = 61%
MS 1260 = 72%

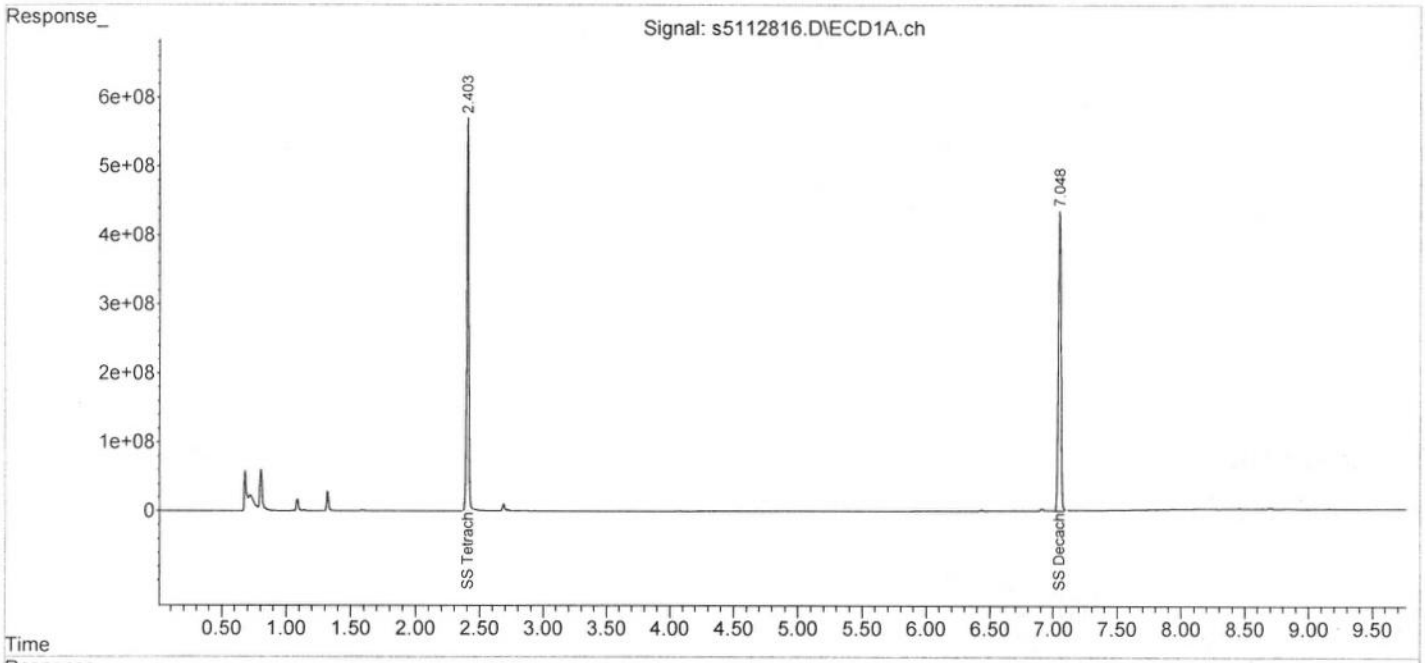
MSD 1016 = 63%. RPD = 2%.
MSD 1260 = 68%. RPD = 5%.

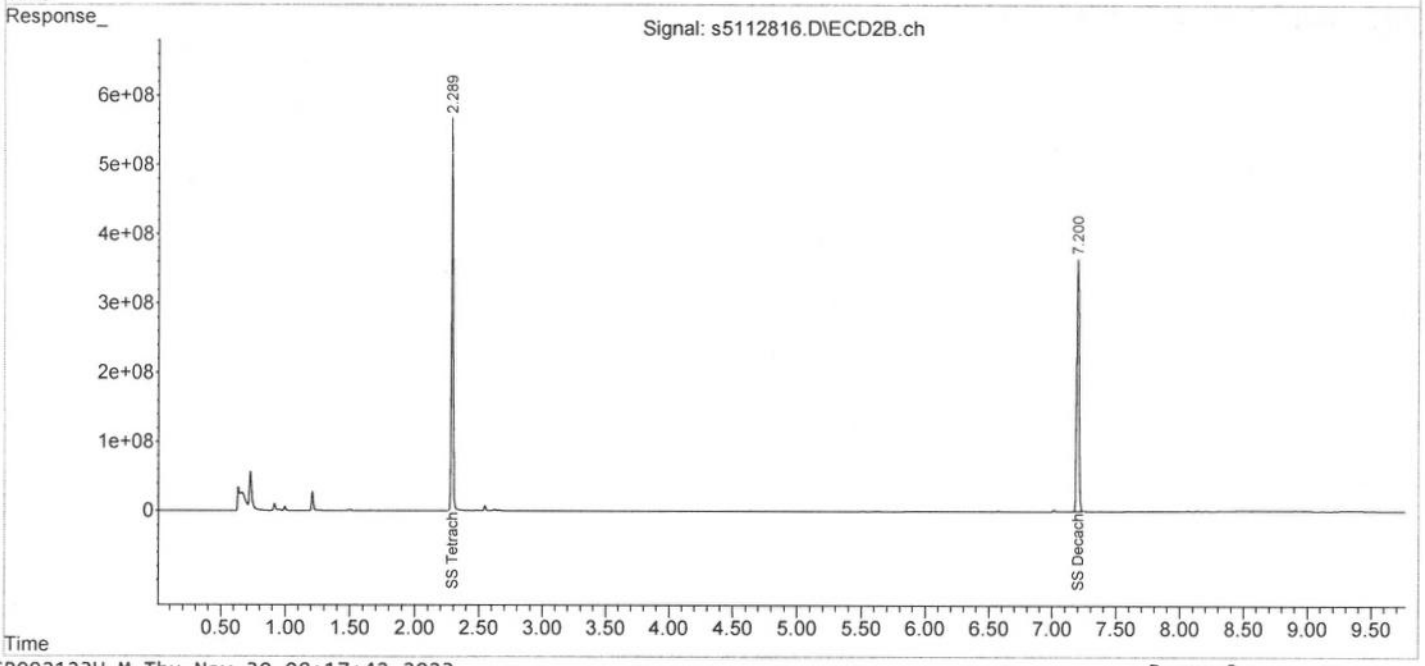
Quantitation Report (QT Reviewed)

Data Path : X:\S5\2023\Nov23\112823\
Data File : s5112816.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 28 Nov 2023 01:25 pm
Operator : dbv
Sample : 67798-01 pcb x1
Misc :
ALS Vial : 7 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Nov 29 06:45:40 2023
Quant Method : X:\S5\methods\S5PCB092123H.M
Quant Title : SVOA03 Method 8082A
QLast Update : Thu Sep 21 17:18:07 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : X:\S5\2023\Nov23\112823\
Data File : s5112817.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 28 Nov 2023 01:39 pm
Operator : dbv
Sample : 67798-01ms pcb x1
Misc :
ALS Vial : 8 Sample Multiplier: 1

DBV 12/1/23 @ 08:42 DonnaV

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Nov 29 06:45:46 2023
Quant Method : X:\S5\methods\S5PCB092123H.M
Quant Title : SVOA03 Method 8082A
QLast Update : Thu Sep 21 17:18:07 2023
Response via : Initial Calibration
Integrator: ChemStation

Take ~~lower of two columns~~ DOD requirement.
col 1 HE DBV

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
	System Monitoring Compounds							
1) S	SS Tetrac...	2.403	2.289	593.0E6	596.4E6	1.246m	1.291m	BC = Baseline Correction
	Spiked Amount	5.000 Range	30 - 150	Recovery	=	24.92%#	25.82%#	
47) S	SS Decach...	7.048	7.200	541.3E6	444.9E6	1.328m	1.444m	BC = Baseline Correction
	Spiked Amount	5.000 Range	30 - 150	Recovery	=	26.56%#	28.88%#	
	Target Compounds							
2) L1	Ar-1016	2.929	2.922	8585854	7582274	0.625	0.675	
3) L1	Ar-1016 {2}	3.290	3.269	11563090	11597088	0.571	0.648	
4) L1	Ar-1016 {3}	3.405	3.384	6497455	6873367	0.587	0.654	
5) L1	Ar-1016 {4}	3.552	3.579	5459510	4729229	0.638m	0.675m	BC = Baseline Correction
6) L1	Ar-1016 {5}	3.748	3.779	6598108	6564718	0.641	0.677	
32) L7	Ar-1260	5.138	4.963	20075237	12418333	0.698	0.763	
33) L7	Ar-1260 {2}	5.408	5.165	18871395	14672473	0.820	0.772	
34) L7	Ar-1260 {3}	5.730	5.854	13316225	12306153	0.615	0.706	
35) L7	Ar-1260 {4}	5.990	6.059	36382456	27041924	0.682	0.766	
36) L7	Ar-1260 {5}	6.225	6.355	17839363	15609222	0.774	0.848	

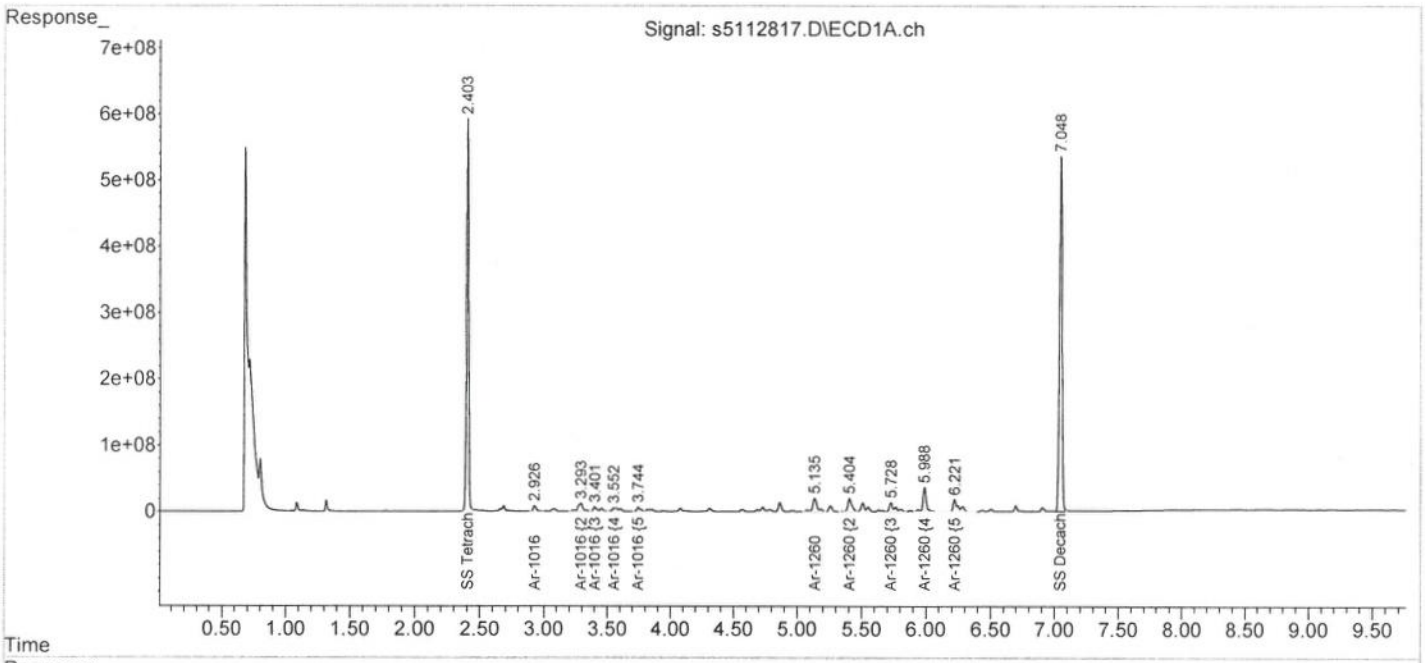
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

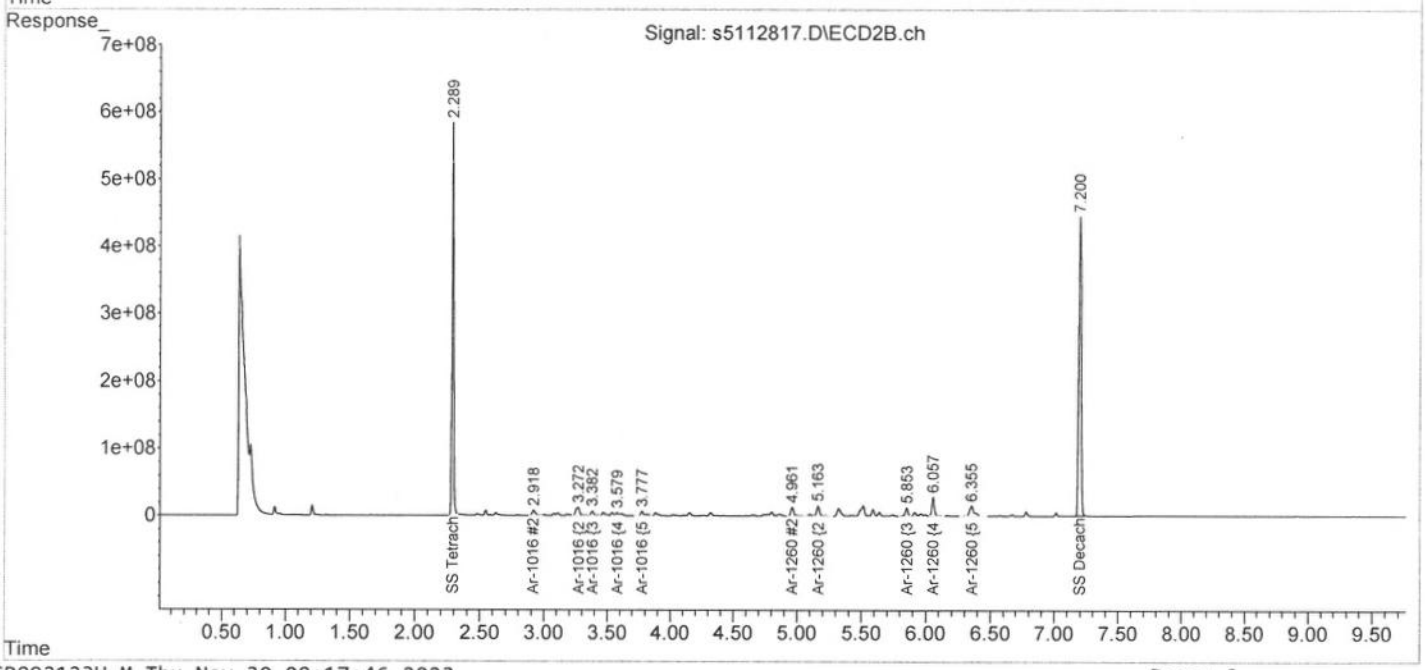
Quantitation Report (QT Reviewed)

Data Path : X:\S5\2023\Nov23\112823\
Data File : s5112817.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 28 Nov 2023 01:39 pm
Operator : dbv
Sample : 67798-01ms pcb x1
Misc :
ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Nov 29 06:45:46 2023
Quant Method : X:\S5\methods\S5PCB092123H.M
Quant Title : SVOA03 Method 8082A
QLast Update : Thu Sep 21 17:18:07 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : X:\S5\2023\Nov23\112823\
Data File : s5112818.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 28 Nov 2023 01:51 pm
Operator : dbv
Sample : 67798-01msd pcb x1
Misc :
ALS Vial : 9 Sample Multiplier: 1

DBV
12/1/23 @ 08:42
DonnaV

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Nov 29 06:45:50 2023
Quant Method : X:\S5\methods\S5PCB092123H.M
Quant Title : SVOA03 Method 8082A
QLast Update : Thu Sep 21 17:18:07 2023
Response via : Initial Calibration
Integrator: ChemStation

Take ~~lower of two columns~~ DOD requirement.
COL 1 HE DBV

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
	System Monitoring Compounds							
1) S	SS Tetrac...	2.402	2.289	582.8E6	580.4E6	1.221m	1.251m	BC = Baseline Correction
	Spiked Amount	5.000 Range	30 - 150	Recovery	=	24.42%#	25.02%#	
47) S	SS Decach...	7.049	7.201	519.2E6	429.6E6	1.267m	1.386m	BC = Baseline Correction
	Spiked Amount	5.000 Range	30 - 150	Recovery	=	25.34%#	27.72%#	
	Target Compounds							
2) L1	Ar-1016	2.928	2.923	8620102	7581707	0.628	0.675	
3) L1	Ar-1016 {2}	3.289	3.268	12471342	12491597	0.616	0.698	
4) L1	Ar-1016 {3}	3.404	3.384	6833761	6947116	0.617	0.661	
5) L1	Ar-1016 {4}	3.552	3.579	5470436	4832365	0.639m	0.690m	BC = Baseline Correction
6) L1	Ar-1016 {5}	3.747	3.779	6532101	6540964	0.635	0.675	
32) L7	Ar-1260	5.137	4.963	18693417	11794759	0.650	0.725	
33) L7	Ar-1260 {2}	5.408	5.165	18543113	14292238	0.806	0.752	
34) L7	Ar-1260 {3}	5.730	5.854	12850997	11553305	0.594	0.663	
35) L7	Ar-1260 {4}	5.991	6.059	33575831	25311121	0.630	0.718	
36) L7	Ar-1260 {5}	6.226	6.355	16753270	14359999	0.727	0.781	

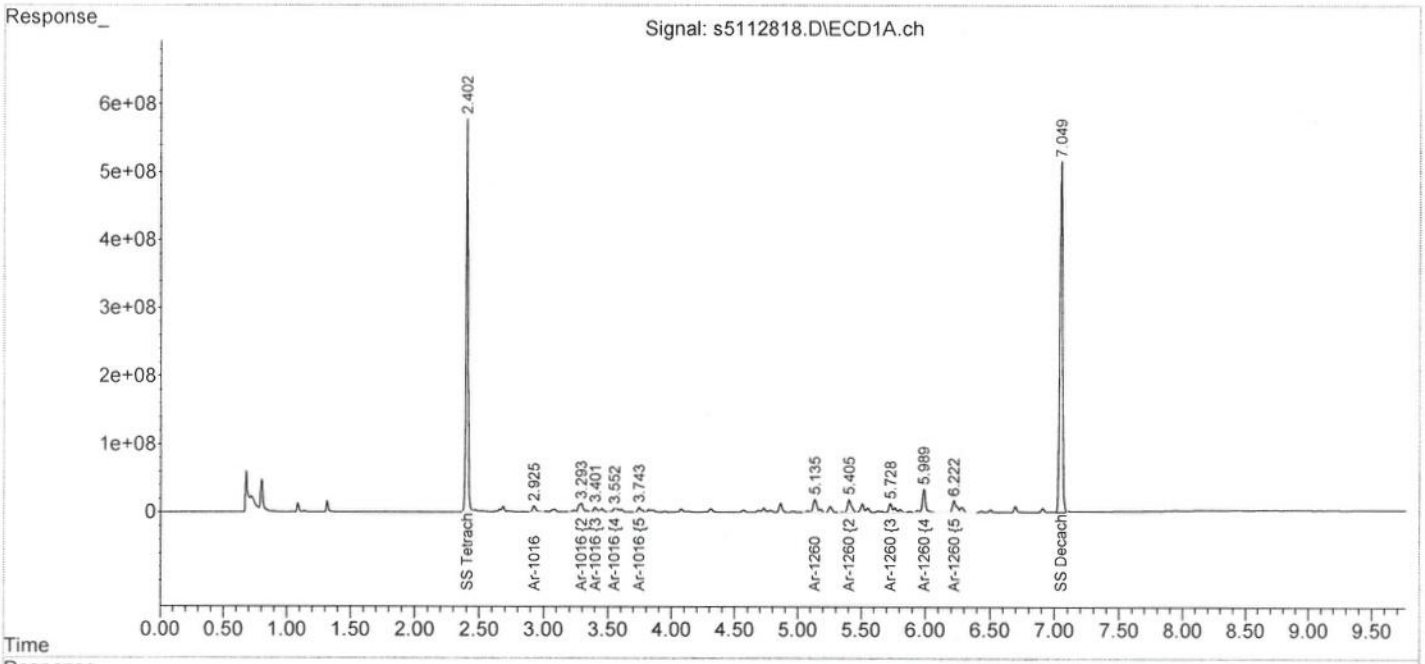
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

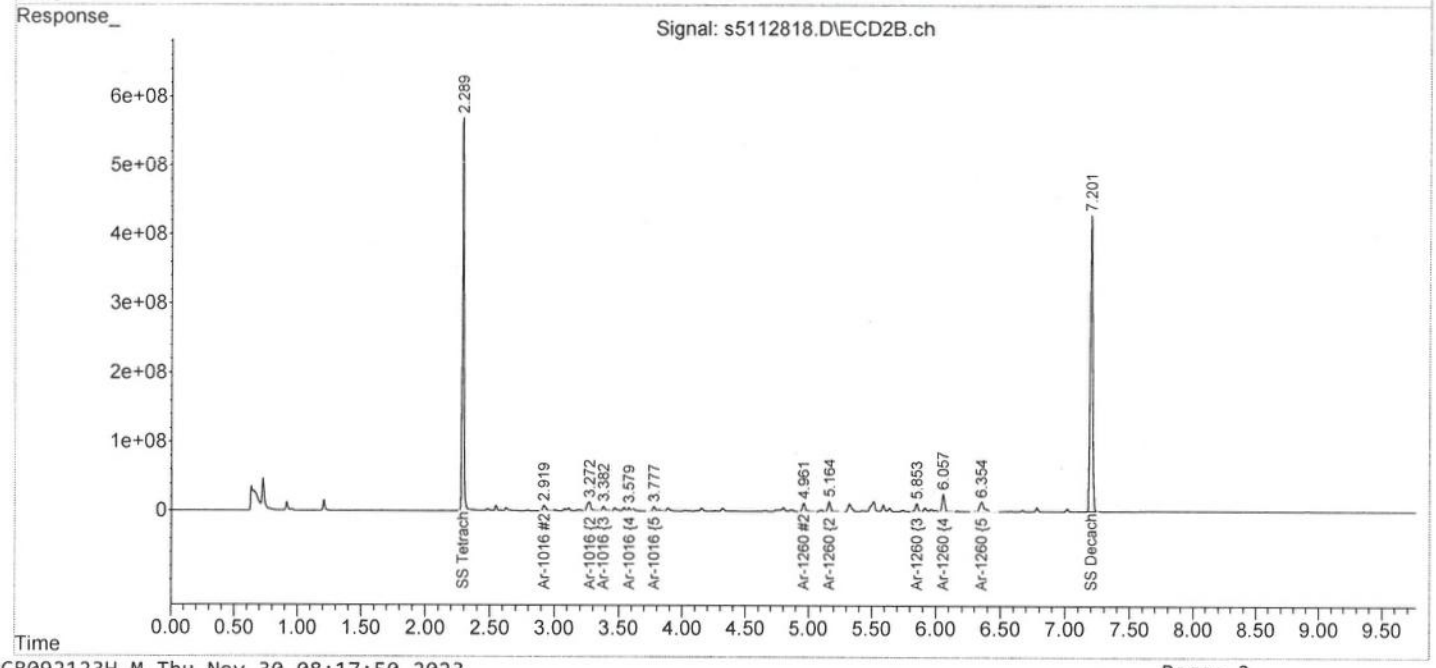
Quantitation Report (QT Reviewed)

Data Path : X:\S5\2023\Nov23\112823\
Data File : s5112818.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 28 Nov 2023 01:51 pm
Operator : dbv
Sample : 67798-01msd pcb x1
Misc :
ALS Vial : 9 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Nov 29 06:45:50 2023
Quant Method : X:\S5\methods\S5PCB092123H.M
Quant Title : SVOA03 Method 8082A
QLast Update : Thu Sep 21 17:18:07 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





This File:	L:\SVOA\Excel Reports\PCB\112823\s5112819
Analysis Group:	PCB
Field ID:	SY-OBMW6-110723 18001468
Sample:	67798-02 pcb x1 Dow Salvage Yard
Misc:	0 CRE
Import File Name	s5 PCBs QC17179W DOD
TestGroupID	E8082DoD_A
Aqueous or Soil? (A or S)	A
Percent Solid (%)	0
Prep Date	Monday, November 27, 2023
Initial Weight/Volume	1
Volume	1
Lab#:	67798-002
AnalysisDate:	Tuesday, November 28, 2023
AnalysisTime:	14:04
Dilution:	1
AnalyzedBy:	DBV s5112819.D
QC_Code:	
Prep#	17179

Reviewer Checks:

- Quant Report: Reviewed, Analyst Initials & Date
- Chromatogram Checked, Major peaks identified
- Prep data checked: weight, volume, %solid, Prep date
- Field ID consistent with data and any field replicates
- Results consistent with any re-runs & internal QC
- Correct dilution and reason clear or noted
- Reason for reanalysis documented
- Surrogates pass or flagged & noted
- Flags checked (Expiration, Over Cal)
- Other QC failures, estimates or interferences documented
- Spot checked Reported Result with Quant Report
- Checked Audit flagged data in LIMS
- Correct values averaged
- Column RPD is OK or both results included
- Correct column reported

Notes:

Reviewer Initials & Date: 12/1/23

#	Surrogate Standards	Concentration (ug/mL)	Recovery	Flag	QC Limits	Report Column
1	SS Tetrachloro-m-xylene	1.37	68%		30-150	1
47	SS Decachlorobiphenyl	1.45	73%		30-150	1

#	AnalyteName	Concentration (ug/mL)	Flag	Report Column
2	Ar-1016	0.00		1
7	Ar-1221	0.00		1
12	Ar-1232	0.00		1
17	Ar-1242	0.00		1
22	Ar-1248	0.00		1
27	Ar-1254	0.00		1
32	Ar-1260	0.00		1
37	Ar-1262	0.00		1
42	Ar-1268	0.00		1

Aroclor	Column #1 average	Column #2 average	Column RPD limit 40%	%rsd	Column #1 1	2	3	4	5
Ar-1016	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1221	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1232	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1242	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1248	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1254	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1260	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1262	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1268	0.00	0.00			0.00	0.00	0.00	0.00	0.00
SS Tetra	1.37	1.40							
SS Deca	1.45	1.64							

	%rsd	Column #2 1	2	3	4	5
Ar-1016		0.00	0.00	0.00	0.00	0.00
Ar-1221		0.00	0.00	0.00	0.00	0.00
Ar-1232		0.00	0.00	0.00	0.00	0.00
Ar-1242		0.00	0.00	0.00	0.00	0.00
Ar-1248		0.00	0.00	0.00	0.00	0.00
Ar-1254		0.00	0.00	0.00	0.00	0.00
Ar-1260		0.00	0.00	0.00	0.00	0.00
Ar-1262		0.00	0.00	0.00	0.00	0.00
Ar-1268		0.00	0.00	0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : X:\S5\2023\Nov23\112823\
Data File : s5112819.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 28 Nov 2023 02:04 pm
Operator : dbv
Sample : 67798-02 pcb x1
Misc :
ALS Vial : 10 Sample Multiplier: 1



Integration File signal 1: events.e
Integration File signal 2: events2.e Take column 1 DOD requirement.
Quant Time: Nov 29 06:45:55 2023
Quant Method : X:\S5\methods\S5PCB092123H.M
Quant Title : SVOA03 Method 8082A
QLast Update : Thu Sep 21 17:18:07 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
System Monitoring Compounds							
1) S SS Tetrac...	2.403	2.289	642.8E6	639.6E6	1.368m	1.402m	BC = Baseline Correction
Spiked Amount	5.000	Range 30 - 150		Recovery =	27.36%#	28.04%#	
47) S SS Decach...	7.048	7.200	584.8E6	495.2E6	1.453m	1.638m	BC = Baseline Correction
Spiked Amount	5.000	Range 30 - 150		Recovery =	29.06%#	32.76%	
Target Compounds							

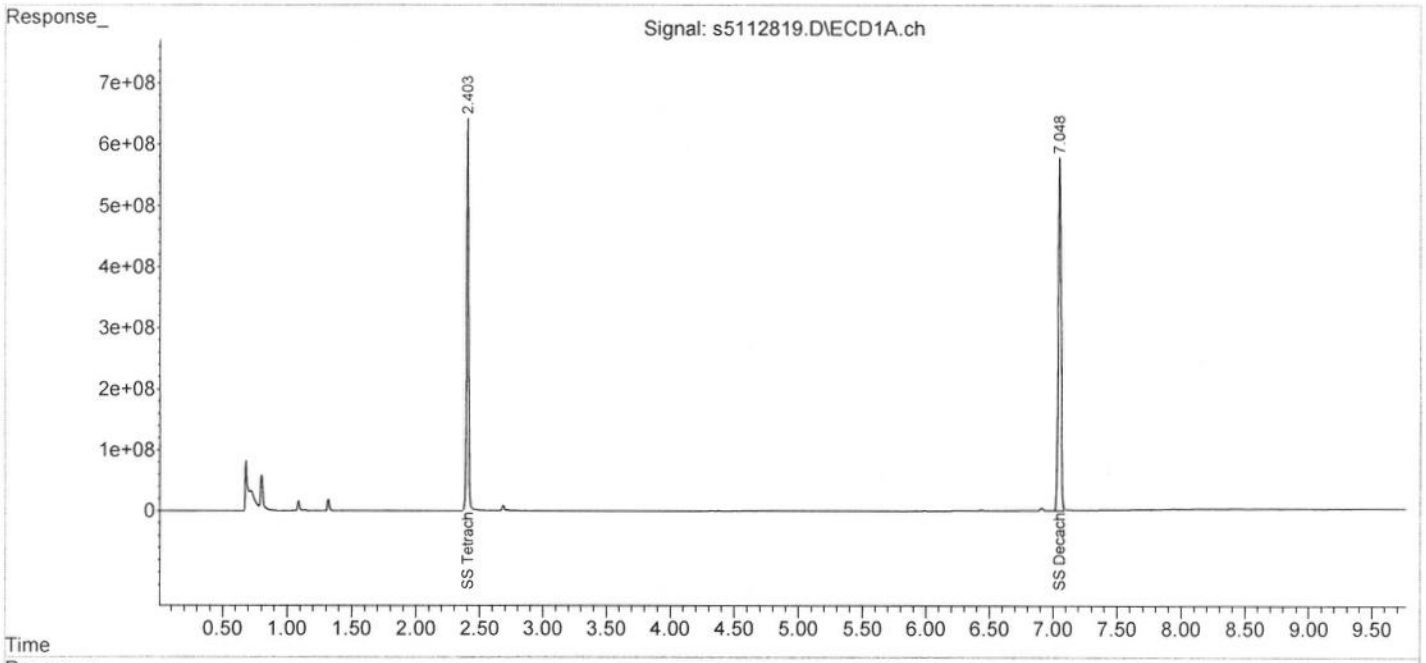
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

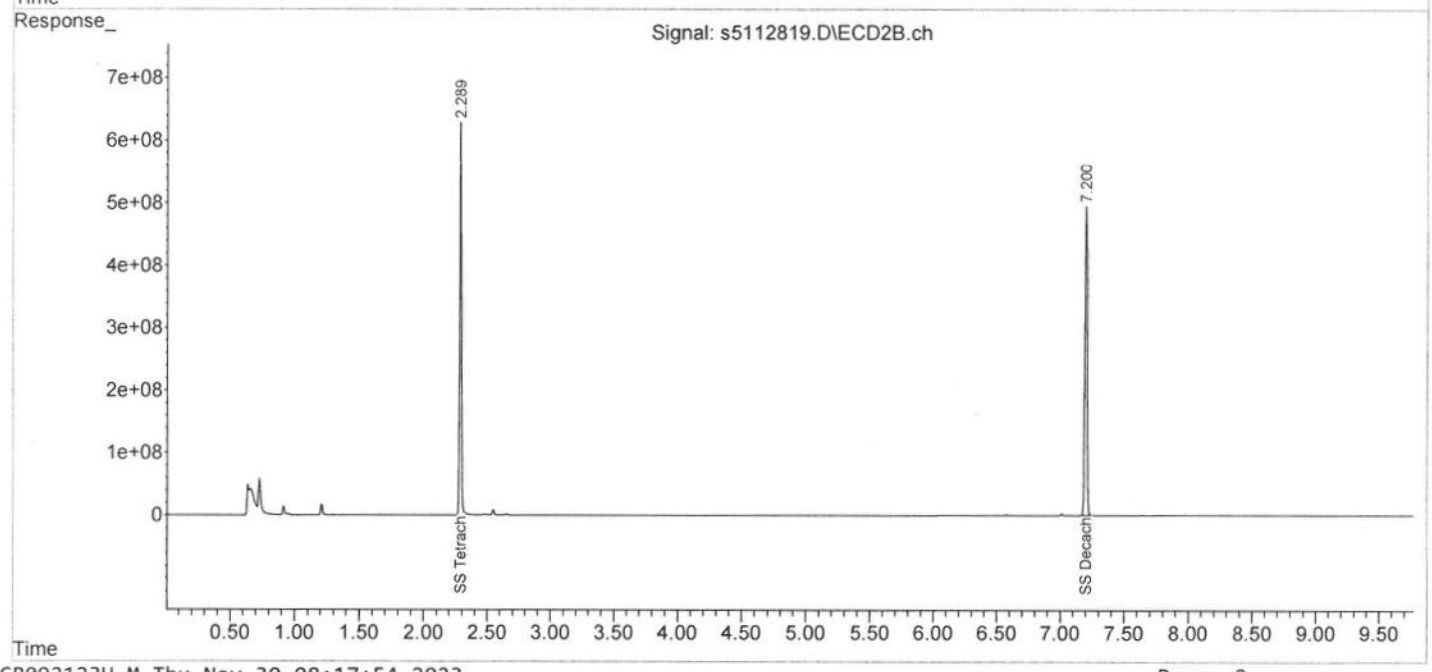
Quantitation Report (QT Reviewed)

Data Path : X:\S5\2023\Nov23\112823\
Data File : s5112819.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 28 Nov 2023 02:04 pm
Operator : dbv
Sample : 67798-02 pcb x1
Misc :
ALS Vial : 10 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Nov 29 06:45:55 2023
Quant Method : X:\S5\methods\S5PCB092123H.M
Quant Title : SVOA03 Method 8082A
QLast Update : Thu Sep 21 17:18:07 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





This File:	L:\SVOA\Excel Reports\PCB\112823\s5112820
Analysis Group:	PCB
Field ID:	SY-OBMW4R-110723 18001468
Sample:	67798-03 pcb x1 Dow Salvage Yard
Misc:	0 CRE
Import File Name	s5 PCBs QC17179W DOD
TestGroupID	E8082DoD_A
Aqueous or Soil? (A or S)	A
Percent Solid (%)	0
Prep Date	Monday, November 27, 2023
Initial Weight/Volume	1
Volume	0.5
Lab#:	67798-003
AnalysisDate:	Tuesday, November 28, 2023
AnalysisTime:	14:17
Dilution:	1
AnalyzedBy:	DBV s5112820.D
QC_Code:	
Prep#	17179

Reviewer Checks:

- Quant Report: Reviewed, Analyst Initials & Date
- Chromatogram Checked, Major peaks identified
- Prep data checked: weight, volume, %solid, Prep date
- Field ID consistent with data and any field replicates
- Results consistent with any re-runs & internal QC
- Correct dilution and reason clear or noted
- Reason for reanalysis documented
- Surrogates pass or flagged & noted
- Flags checked (Expiration, Over Cal)
- Other QC failures, estimates or interferences documented ✓
- Spot checked Reported Result with Quant Report
- Checked Audit flagged data in LIMS
- Correct values averaged ✓
- Column RPD is OK or both results included
- Correct column reported

Notes:

Reviewer Initials & Date: 12/1/23

#	Surrogate Standards	Concentration (ug/mL)	Recovery	Flag	QC Limits	Report Column
1	SS Tetrachloro-m-xylene	0.13	3%	# ✓	30-150	1
47	SS Decachlorobiphenyl	0.12	3%	#	30-150	1

#	AnalyteName	Concentration (ug/mL)	Flag	Report Column
2	Ar-1016	0.00		1
7	Ar-1221	0.00		1
12	Ar-1232	0.00		1
17	Ar-1242	0.00		1
22	Ar-1248	0.00		1
27	Ar-1254	0.00		1
32	Ar-1260	0.00		1
37	Ar-1262	0.00		1
42	Ar-1268	0.00		1

Aroclor	Column #1 average	Column #2 average	Column RPD limit 40%	%rsd	Column #1 1	2	3	4	5
Ar-1016	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1221	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1232	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1242	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1248	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1254	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1260	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1262	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1268	0.00	0.00			0.00	0.00	0.00	0.00	0.00
SS Tetra	0.13	0.13							
SS Deca	0.12	0.13							

	%rsd	Column #2 1	2	3	4	5
Ar-1016		0.00	0.00	0.00	0.00	0.00
Ar-1221		0.00	0.00	0.00	0.00	0.00
Ar-1232		0.00	0.00	0.00	0.00	0.00
Ar-1242		0.00	0.00	0.00	0.00	0.00
Ar-1248		0.00	0.00	0.00	0.00	0.00
Ar-1254		0.00	0.00	0.00	0.00	0.00
Ar-1260		0.00	0.00	0.00	0.00	0.00
Ar-1262		0.00	0.00	0.00	0.00	0.00
Ar-1268		0.00	0.00	0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : X:\S5\2023\Nov23\112823\
Data File : s5112820.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 28 Nov 2023 02:17 pm
Operator : dbv
Sample : 67798-03 pcb x1
Misc :
ALS Vial : 11 Sample Multiplier: 1

DBV
12/1/23 @ 08:42
DonnaV

Take column 1 DOD requirement.

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Nov 29 06:46:00 2023
Quant Method : X:\S5\methods\S5PCB092123H.M
Quant Title : SVOA03 Method 8082A
QLast Update : Thu Sep 21 17:18:07 2023
Response via : Initial Calibration
Integrator: ChemStation

Surrogates are low because sample broke in RV tube. Flag surrogate in ASPEN and say some of the sample was lost during extraction; results are an estimate.

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

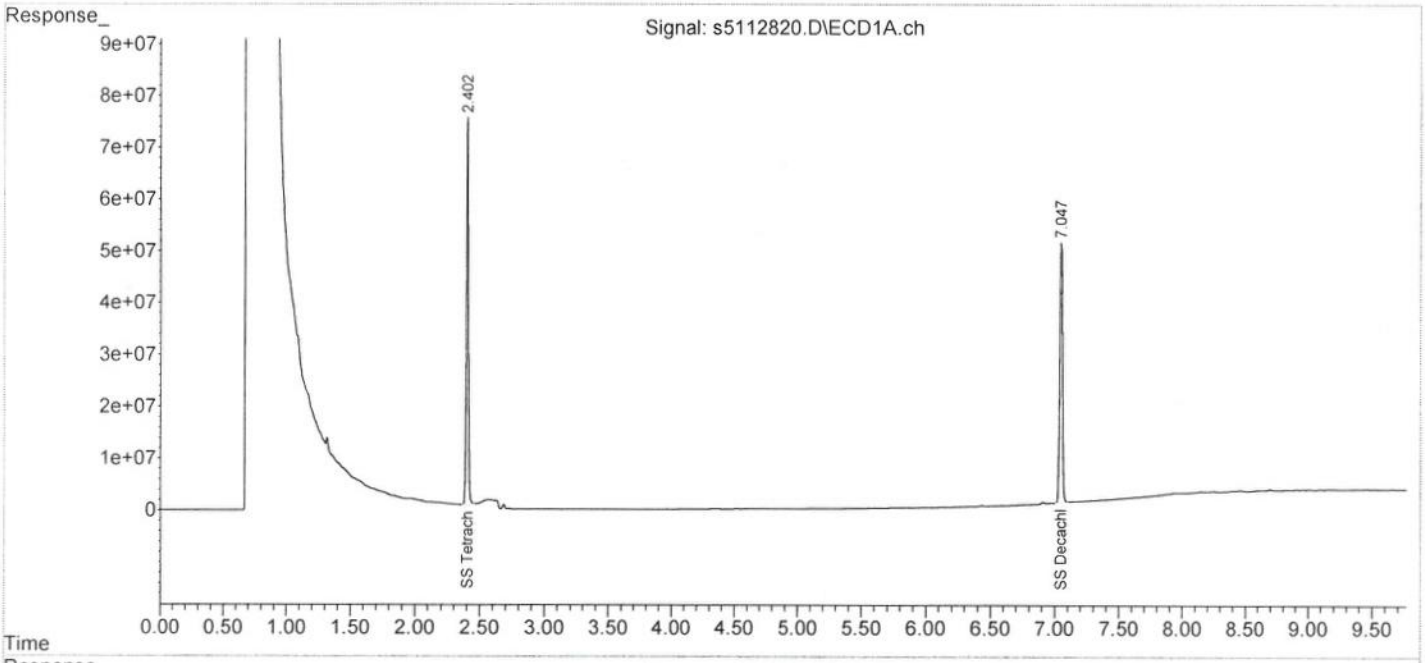
	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
	System Monitoring Compounds							
1)	S SS Tetrac...	2.402	2.289	75315151	76708665	0.125m	0.132m	BC = Baseline Correction
	Spiked Amount	5.000	Range 30 - 150	Recovery =		2.50%#	2.64%#	
47)	S SS Decach...	7.047	7.199	50338241	42380538	0.120m	0.131m	BC = Baseline Correction
	Spiked Amount	5.000	Range 30 - 150	Recovery =		2.40%#	2.62%#	
	Target Compounds							

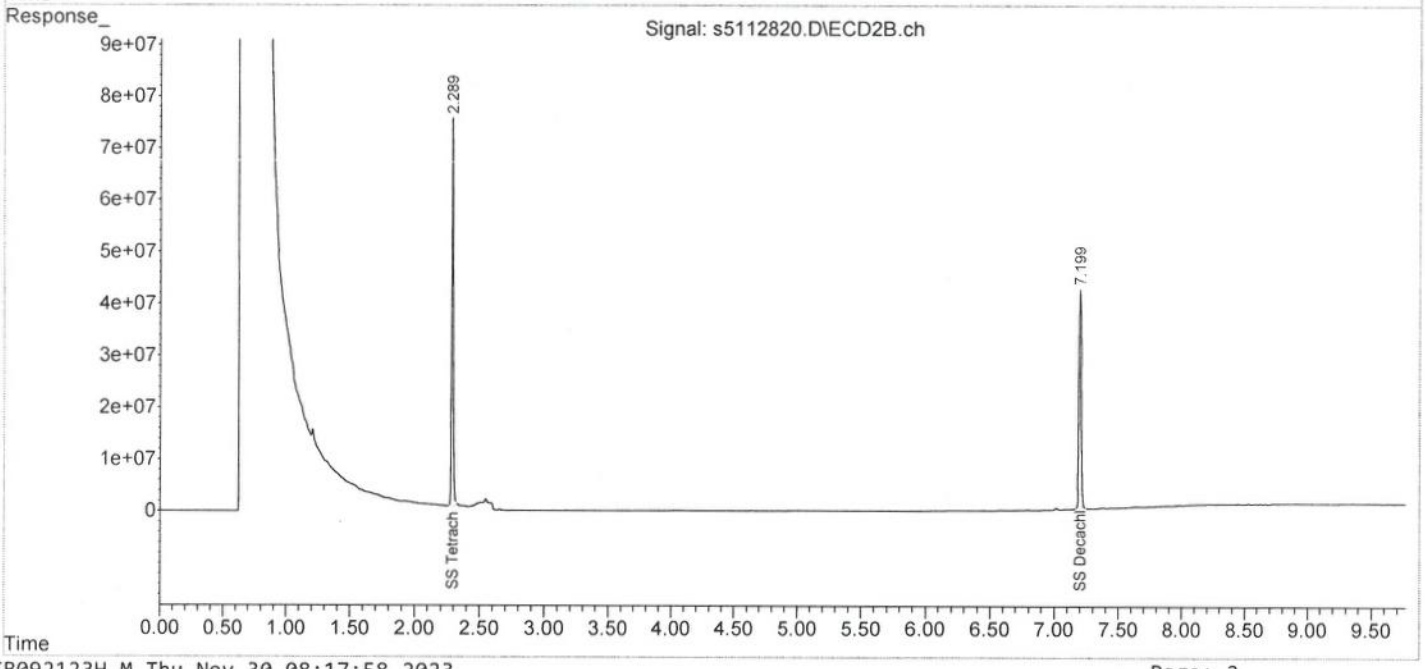
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : X:\S5\2023\Nov23\112823\
Data File : s5112820.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 28 Nov 2023 02:17 pm
Operator : dbv
Sample : 67798-03 pcb x1
Misc :
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Nov 29 06:46:00 2023
Quant Method : X:\S5\methods\S5PCB092123H.M
Quant Title : SVOA03 Method 8082A
QLast Update : Thu Sep 21 17:18:07 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





This File:	L:\SVOA\Excel Reports\PCB\112823\s5112821
Analysis Group:	PCB
Field ID:	-BRMW2-60.5-70.5-110723 18001468
Sample:	67798-04 pcb x1 Dow Salvage Yard
Misc:	0 CRE
Import File Name	s5 PCBs QC17179W DOD
TestGroupID	E8082DoD_A
Aqueous or Soil? (A or S)	A
Percent Solid (%)	0
Prep Date	Monday, November 27, 2023
Initial Weight/Volume	1
Volume	1
Lab#:	67798-004
AnalysisDate:	Tuesday, November 28, 2023
AnalysisTime:	14:30
Dilution:	1
AnalyzedBy:	DBV s5112821.D
QC_Code:	
Prep#	17179

Reviewer Checks:

- Quant Report: Reviewed, Analyst Initials & Date
- Chromatogram Checked, Major peaks identified
- Prep data checked: weight, volume, %solid, Prep date X
- Field ID consistent with data and any field replicates
- Results consistent with any re-runs & internal QC
- Correct dilution and reason clear or noted
- Reason for reanalysis documented
- Surrogates pass or flagged & noted ✓
- Flags checked (Expiration, Over Cal)
- Other QC failures, estimates or interferences documented
- Spot checked Reported Result with Quant Report
- Checked Audit flagged data in LIMS
- Correct values averaged
- Column RPD is OK or both results included
- Correct column reported

Notes:

Reviewer Initials & Date: 12/1/23

#	Surrogate Standards	Concentration (ug/mL)	Recovery	Flag	QC Limits	Report Column
1	SS Tetrachloro-m-xylene	1.37	69%		30-150	1
47	SS Decachlorobiphenyl	1.28	64%		30-150	1

#	AnalyteName	Concentration (ug/mL)	Flag	Report Column
2	Ar-1016	0.00		1
7	Ar-1221	0.00		1
12	Ar-1232	0.00		1
17	Ar-1242	0.00		1
22	Ar-1248	0.00		1
27	Ar-1254	0.00		1
32	Ar-1260	0.00		1
37	Ar-1262	0.00		1
42	Ar-1268	0.00		1

Aroclor	Column #1 average	Column #2 average	Column RPD limit 40%	%rsd	Column #1 1	2	3	4	5
Ar-1016	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1221	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1232	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1242	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1248	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1254	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1260	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1262	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1268	0.00	0.00			0.00	0.00	0.00	0.00	0.00
SS Tetra	1.37	1.37							
SS Deca	1.28	1.44							

	%rsd	Column #2 1	2	3	4	5
Ar-1016		0.00	0.00	0.00	0.00	0.00
Ar-1221		0.00	0.00	0.00	0.00	0.00
Ar-1232		0.00	0.00	0.00	0.00	0.00
Ar-1242		0.00	0.00	0.00	0.00	0.00
Ar-1248		0.00	0.00	0.00	0.00	0.00
Ar-1254		0.00	0.00	0.00	0.00	0.00
Ar-1260		0.00	0.00	0.00	0.00	0.00
Ar-1262		0.00	0.00	0.00	0.00	0.00
Ar-1268		0.00	0.00	0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : X:\S5\2023\Nov23\112823\
Data File : s5112821.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 28 Nov 2023 02:30 pm
Operator : dbv
Sample : 67798-04 pcb x1
Misc :
ALS Vial : 12 Sample Multiplier: 1

DBV
12/1/23 @ 08:42
DonnaV

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Nov 29 06:46:05 2023
Quant Method : X:\S5\methods\S5PCB092123H.M
Quant Title : SVOA03 Method 8082A
QLast Update : Thu Sep 21 17:18:07 2023
Response via : Initial Calibration
Integrator: ChemStation

Take column 1 DOD requirement.

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

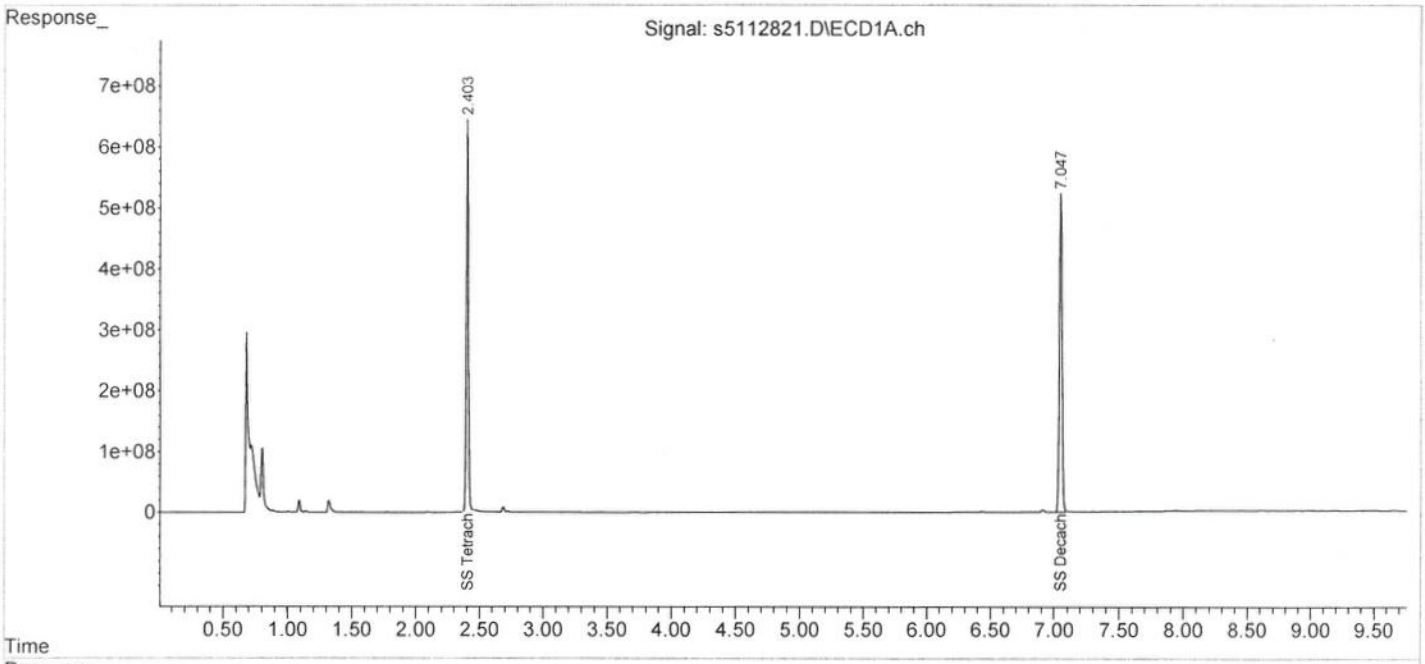
	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
	System Monitoring Compounds							
1) S	SS Tetrac...	2.403	2.289	644.9E6	626.8E6	1.373m	1.369m	BC = Baseline Correction
	Spiked Amount	5.000 Range	30 - 150	Recovery =		27.46%#	27.38%#	
47) S	SS Decach...	7.047	7.200	525.1E6	443.6E6	1.283m	1.439m	BC = Baseline Correction
	Spiked Amount	5.000 Range	30 - 150	Recovery =		25.66%#	28.78%#	
	Target Compounds							

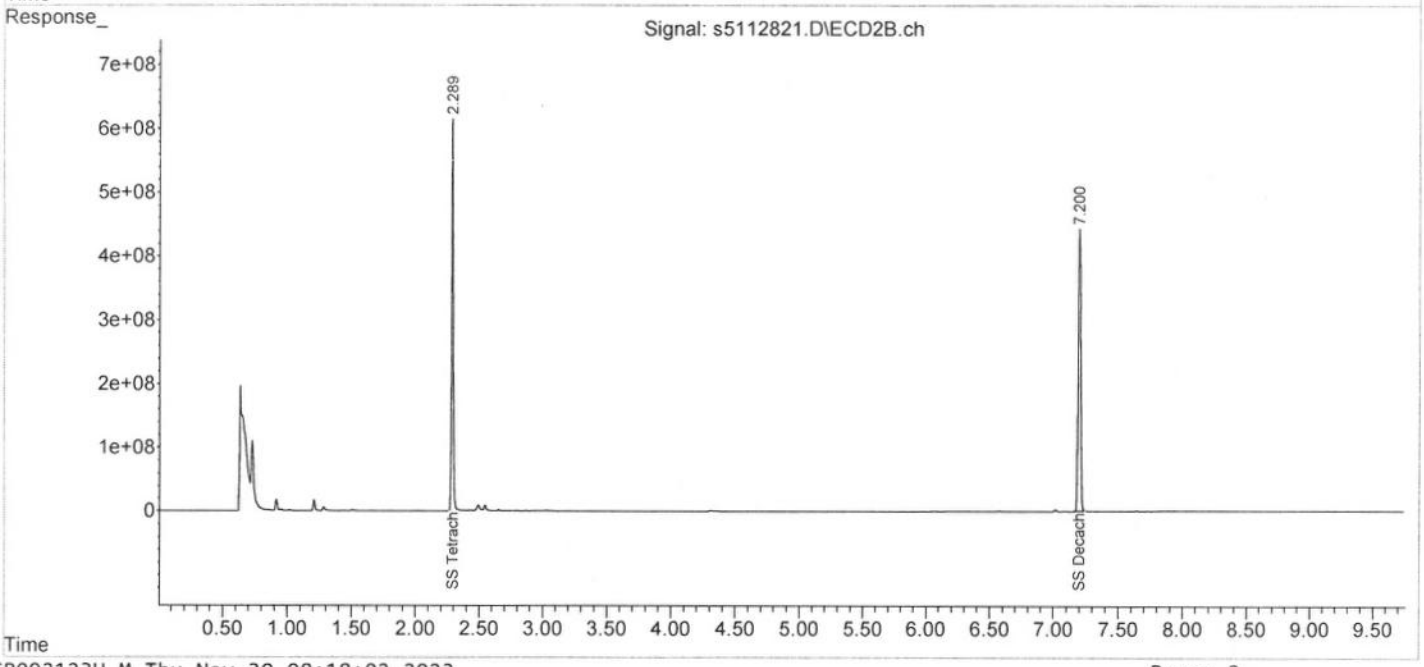
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : X:\S5\2023\Nov23\112823\
Data File : s5112821.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 28 Nov 2023 02:30 pm
Operator : dbv
Sample : 67798-04 pcb x1
Misc :
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Nov 29 06:46:05 2023
Quant Method : X:\S5\methods\S5PCB092123H.M
Quant Title : SVOA03 Method 8082A
QLast Update : Thu Sep 21 17:18:07 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





This File:	L:\SVOA\Excel Reports\PCB\112823\s5112822
Analysis Group:	PCB
Field ID:	SY-OBMW15-110723 18001468
Sample:	67798-05 pcb x1 Dow Salvage Yard
Misc:	0 CRE
Import File Name	s5 PCBs QC17179W DOD
TestGroupID	E8082DoD_A
Aqueous or Soil? (A or S)	A
Percent Solid (%)	0
Prep Date	Monday, November 27, 2023
Initial Weight/Volume	1
Volume	1
Lab#:	67798-005
AnalysisDate:	Tuesday, November 28, 2023
AnalysisTime:	14:43
Dilution:	1
AnalyzedBy:	DBV s5112822.D
QC_Code:	
Prep#	17179

Reviewer Checks:

- Quant Report: Reviewed, Analyst Initials & Date
- Chromatogram Checked, Major peaks identified
- Prep data checked: weight, volume, %solid, Prep date
- Field ID consistent with data and any field replicates
- Results consistent with any re-runs & internal QC
- Correct dilution and reason clear or noted
- Reason for reanalysis documented
- Surrogates pass or flagged & noted
- Flags checked (Expiration, Over Cal)
- Other QC failures, estimates or interferences documented
- Spot checked Reported Result with Quant Report
- Checked Audit flagged data in LIMS
- Correct values averaged
- Column RPD is OK or both results included
- Correct column reported

Notes:

Reviewer Initials & Date: 12/11/23

#	Surrogate Standards	Concentration (ug/mL)	Recovery	Flag	QC Limits	Report Column
1	SS Tetrachloro-m-xylene	1.52	76%		30-150	1
47	SS Decachlorobiphenyl	1.40	70%		30-150	1

#	AnalyteName	Concentration (ug/mL)	Flag	Report Column
2	Ar-1016	0.00		1
7	Ar-1221	0.00		1
12	Ar-1232	0.00		1
17	Ar-1242	0.00		1
22	Ar-1248	0.00		1
27	Ar-1254	0.00		1
32	Ar-1260	0.00		1
37	Ar-1262	0.00		1
42	Ar-1268	0.00		1

Aroclor	Column #1 average	Column #2 average	Column RPD limit 40%	%rsd	Column #1 1	2	3	4	5
Ar-1016	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1221	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1232	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1242	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1248	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1254	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1260	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1262	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1268	0.00	0.00			0.00	0.00	0.00	0.00	0.00
SS Tetra	1.52	1.56							
SS Deca	1.40	1.53							

	%rsd	Column #2 1	2	3	4	5
Ar-1016		0.00	0.00	0.00	0.00	0.00
Ar-1221		0.00	0.00	0.00	0.00	0.00
Ar-1232		0.00	0.00	0.00	0.00	0.00
Ar-1242		0.00	0.00	0.00	0.00	0.00
Ar-1248		0.00	0.00	0.00	0.00	0.00
Ar-1254		0.00	0.00	0.00	0.00	0.00
Ar-1260		0.00	0.00	0.00	0.00	0.00
Ar-1262		0.00	0.00	0.00	0.00	0.00
Ar-1268		0.00	0.00	0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : X:\S5\2023\Nov23\112823\
Data File : s5112822.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 28 Nov 2023 02:43 pm
Operator : dbv
Sample : 67798-05 pcb x1
Misc :
ALS Vial : 13 Sample Multiplier: 1

DBV
12/1/23 @ 08:42
DonnaV

Integration File signal 1: events.e
Integration File signal 2: events2.e
Take column 1 DOD requirement.
Quant Time: Nov 29 06:46:09 2023
Quant Method : X:\S5\methods\S5PCB092123H.M
Quant Title : SVOA03 Method 8082A
QLast Update : Thu Sep 21 17:18:07 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
System Monitoring Compounds							
1) S SS Tetrac...	2.403	2.289	703.0E6	698.3E6	1.520m	1.557m	BC = Baseline Correction
Spiked Amount	5.000 Range	30 - 150	Recovery	=	30.40%	31.14%	
47) S SS Decach...	7.048	7.199	565.9E6	467.4E6	1.398m	1.529m	BC = Baseline Correction
Spiked Amount	5.000 Range	30 - 150	Recovery	=	27.96%#	30.58%	
Target Compounds							

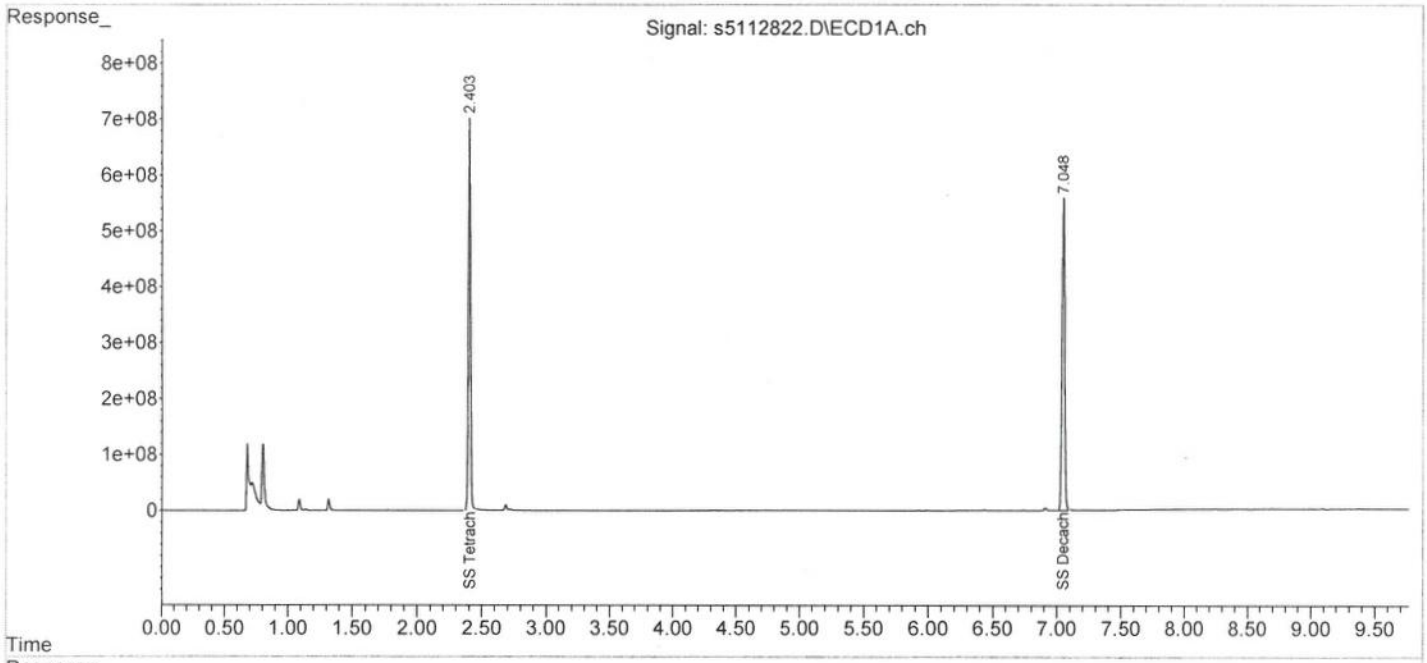
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

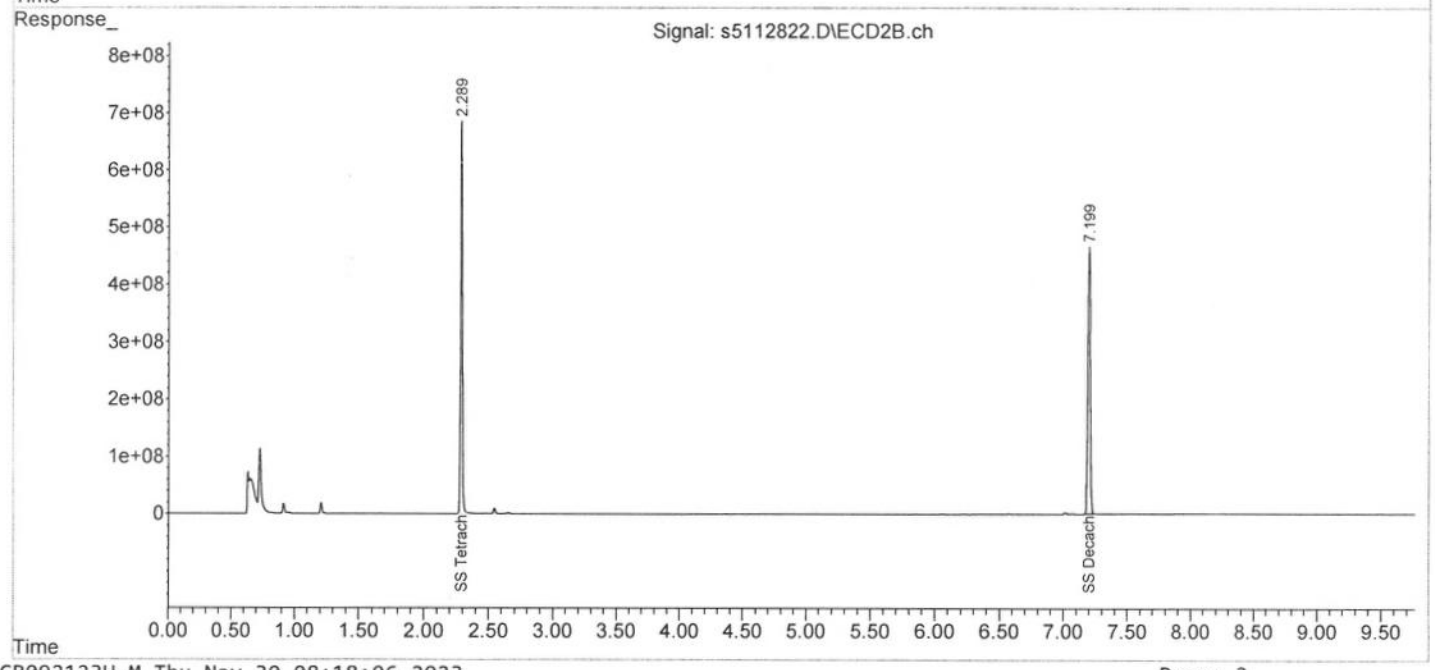
Quantitation Report (QT Reviewed)

Data Path : X:\S5\2023\Nov23\112823\
Data File : s5112822.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 28 Nov 2023 02:43 pm
Operator : dbv
Sample : 67798-05 pcb x1
Misc :
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Nov 29 06:46:09 2023
Quant Method : X:\S5\methods\S5PCB092123H.M
Quant Title : SVOA03 Method 8082A
QLast Update : Thu Sep 21 17:18:07 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





This File:	L:\SVOA\Excel Reports\PCB\112823\s5112823
Analysis Group:	PCB
Field ID:	SY-OBMW5-110723 18001468
Sample:	67798-06 pcb x1 Dow Salvage Yard
Misc:	0 CRE
Import File Name	s5 PCBs QC17179W DOD
TestGroupID	E8082DoD_A
Aqueous or Soil? (A or S)	A
Percent Solid (%)	0
Prep Date	Monday, November 27, 2023
Initial Weight/Volume	1
Volume	1
Lab#:	67798-006
AnalysisDate:	Tuesday, November 28, 2023
AnalysisTime:	14:56
Dilution:	1
AnalyzedBy:	DBV s5112823.D
QC_Code:	
Prep#	17179

Reviewer Checks:

- Quant Report: Reviewed, Analyst Initials & Date
- Chromatogram Checked, Major peaks identified ✓
- Prep data checked: weight, volume, %solid, Prep date X
- Field ID consistent with data and any field replicates
- Results consistent with any re-runs & internal QC
- Correct dilution and reason clear or noted -
- Reason for reanalysis documented
- Surrogates pass or flagged & noted
- Flags checked (Expiration, Over Cal)
- Other QC failures, estimates or interferences documented
- Spot checked Reported Result with Quant Report
- Checked Audit flagged data in LIMS
- Correct values averaged
- Column RPD is OK or both results included
- Correct column reported

Notes:

Reviewer Initials & Date: 12/11/23

#	Surrogate Standards	Concentration (ug/mL)	Recovery	Flag	QC Limits	Report Column
1	SS Tetrachloro-m-xylene	1.39	69%		30-150	1
47	SS Decachlorobiphenyl	1.10	55%		30-150	1

#	AnalyteName	Concentration (ug/mL)	Flag	Report Column
2	Ar-1016	0.00		1
7	Ar-1221	0.00		1
12	Ar-1232	0.00		1
17	Ar-1242	0.00		1
22	Ar-1248	0.00		1
27	Ar-1254	0.00		1
32	Ar-1260	0.00		1
37	Ar-1262	0.00		1
42	Ar-1268	0.00		1

Aroclor	Column #1 average	Column #2 average	Column RPD limit 40%	%rsd	Column #1 1	2	3	4	5
Ar-1016	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1221	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1232	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1242	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1248	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1254	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1260	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1262	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1268	0.00	0.00			0.00	0.00	0.00	0.00	0.00
SS Tetra	1.39	1.43							
SS Deca	1.10	1.20							

	%rsd	Column #2 1	2	3	4	5
Ar-1016		0.00	0.00	0.00	0.00	0.00
Ar-1221		0.00	0.00	0.00	0.00	0.00
Ar-1232		0.00	0.00	0.00	0.00	0.00
Ar-1242		0.00	0.00	0.00	0.00	0.00
Ar-1248		0.00	0.00	0.00	0.00	0.00
Ar-1254		0.00	0.00	0.00	0.00	0.00
Ar-1260		0.00	0.00	0.00	0.00	0.00
Ar-1262		0.00	0.00	0.00	0.00	0.00
Ar-1268		0.00	0.00	0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : X:\S5\2023\Nov23\112823\
Data File : s5112823.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 28 Nov 2023 02:56 pm
Operator : dbv
Sample : 67798-06 pcb x1
Misc :
ALS Vial : 14 Sample Multiplier: 1

12/1/23 @ 08:42
DonnaV

Integration File signal 1: events.e
Integration File signal 2: events2.e
Take column 1 DOD requirement.
Quant Time: Nov 29 06:46:14 2023
Quant Method : X:\S5\methods\S5PCB092123H.M
Quant Title : SVOA03 Method 8082A
QLast Update : Thu Sep 21 17:18:07 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

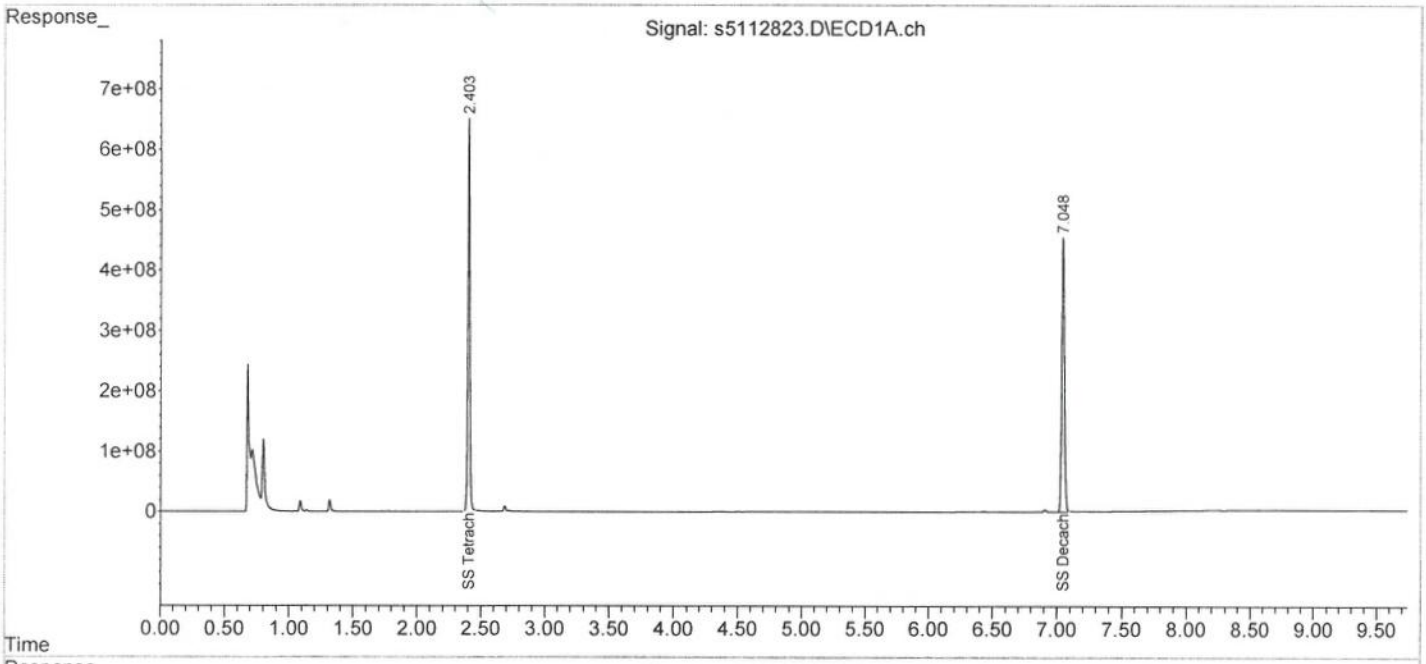
	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
	System Monitoring Compounds							
1)	S SS Tetrac...	2.403	2.289	651.4E6	650.4E6	1.389m	1.430m	BC = Baseline Correction
	Spiked Amount	5.000 Range	30 - 150	Recovery =		27.78%#	28.60%#	
47)	S SS Decach...	7.048	7.200	457.5E6	378.0E6	1.099m	1.198m	BC = Baseline Correction
	Spiked Amount	5.000 Range	30 - 150	Recovery =		21.98%#	23.96%#	
	Target Compounds							

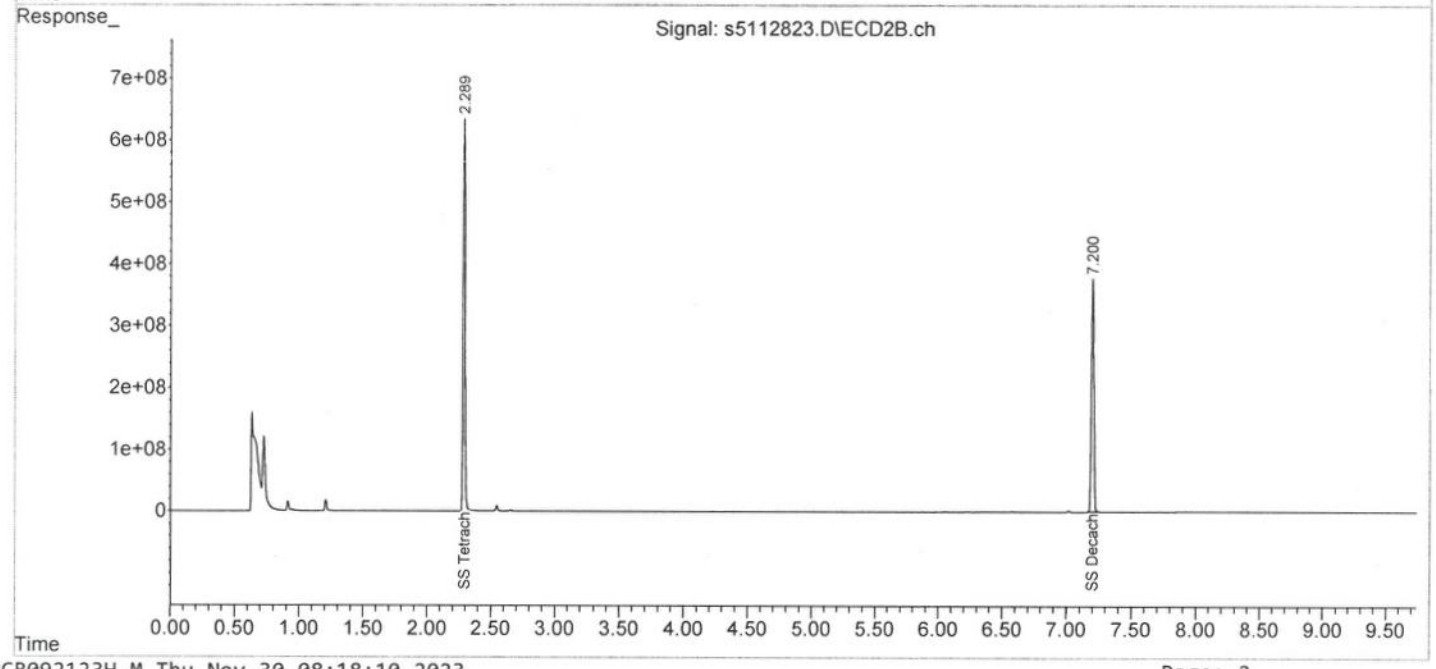
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : X:\S5\2023\Nov23\112823\
Data File : s5112823.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 28 Nov 2023 02:56 pm
Operator : dbv
Sample : 67798-06 pcb x1
Misc :
ALS Vial : 14 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Nov 29 06:46:14 2023
Quant Method : X:\S5\methods\S5PCB092123H.M
Quant Title : SVOA03 Method 8082A
QLast Update : Thu Sep 21 17:18:07 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





This File:	L:\SVOA\Excel Reports\PCB\112823\s5112824
Analysis Group:	PCB
Field ID:	-BRMW2-80.5-95.5-110723 18001468
Sample:	67798-07 pcb x1 Dow Salvage Yard
Misc:	0 CRE
Import File Name	s5 PCBs QC17179W DOD
TestGroupID	E8082DoD_A
Aqueous or Soil? (A or S)	A
Percent Solid (%)	0
Prep Date	Monday, November 27, 2023
Initial Weight/Volume	1
Volume	1
Lab#:	67798-007
AnalysisDate:	Tuesday, November 28, 2023
AnalysisTime:	15:09
Dilution:	1
AnalyzedBy:	DBV s5112824.D
QC_Code:	
Prep#	17179

Reviewer Checks:

- Quant Report: Reviewed, Analyst Initials & Date
- Chromatogram Checked, Major peaks identified
- Prep data checked: weight, volume, %solid, Prep date ✓
- Field ID consistent with data and any field replicates
- Results consistent with any re-runs & internal QC ✓
- Correct dilution and reason clear or noted
- Reason for reanalysis documented
- Surrogates pass or flagged & noted ✓
- Flags checked (Expiration, Over Cal)
- Other QC failures, estimates or interferences documented
- Spot checked Reported Result with Quant Report ✓
- Checked Audit flagged data in LIMS
- Correct values averaged
- Column RPD is OK or both results included
- Correct column reported

Notes:

Reviewer Initials & Date: 12/1/23

#	Surrogate Standards	Concentration (ug/mL)	Recovery	Flag	QC Limits	Report Column
1	SS Tetrachloro-m-xylene	1.12	56%		30-150	1
47	SS Decachlorobiphenyl	0.96	48%		30-150	1

#	AnalyteName	Concentration (ug/mL)	Flag	Report Column
2	Ar-1016	0.00		1
7	Ar-1221	0.00		1
12	Ar-1232	0.00		1
17	Ar-1242	0.00		1
22	Ar-1248	0.00		1
27	Ar-1254	0.00		1
32	Ar-1260	0.00		1
37	Ar-1262	0.00		1
42	Ar-1268	0.00		1

Aroclor	Column #1 average	Column #2 average	Column RPD limit 40%	%rsd	Column #1 1	2	3	4	5
Ar-1016	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1221	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1232	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1242	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1248	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1254	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1260	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1262	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1268	0.00	0.00			0.00	0.00	0.00	0.00	0.00
SS Tetra	1.12	1.16							
SS Deca	0.96	1.05							

	%rsd	Column #2 1	2	3	4	5
Ar-1016		0.00	0.00	0.00	0.00	0.00
Ar-1221		0.00	0.00	0.00	0.00	0.00
Ar-1232		0.00	0.00	0.00	0.00	0.00
Ar-1242		0.00	0.00	0.00	0.00	0.00
Ar-1248		0.00	0.00	0.00	0.00	0.00
Ar-1254		0.00	0.00	0.00	0.00	0.00
Ar-1260		0.00	0.00	0.00	0.00	0.00
Ar-1262		0.00	0.00	0.00	0.00	0.00
Ar-1268		0.00	0.00	0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : X:\S5\2023\Nov23\112823\
Data File : s5112824.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 28 Nov 2023 03:09 pm
Operator : dbv
Sample : 67798-07 pcb x1
Misc :
ALS Vial : 15 Sample Multiplier: 1

DBV
12/1/23 @ 08:42
DonnaV

Integration File signal 1: events.e
Integration File signal 2: events2.e Take column 1 DOD requirement.
Quant Time: Nov 29 06:46:19 2023
Quant Method : X:\S5\methods\S5PCB092123H.M
Quant Title : SVOA03 Method 8082A
QLast Update : Thu Sep 21 17:18:07 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
	System Monitoring Compounds							
1) S	SS Tetrac...	2.403	2.288	540.4E6	542.7E6	1.120m	1.158m	BC = Baseline Correction
	Spiked Amount	5.000 Range	30 - 150	Recovery	=	22.40%#	23.16%#	
47) S	SS Decach...	7.049	7.200	405.7E6	336.2E6	0.963m	1.052m	BC = Baseline Correction
	Spiked Amount	5.000 Range	30 - 150	Recovery	=	19.26%#	21.04%#	
	Target Compounds							

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

MS 1016: 69%

MS 1260: 76%

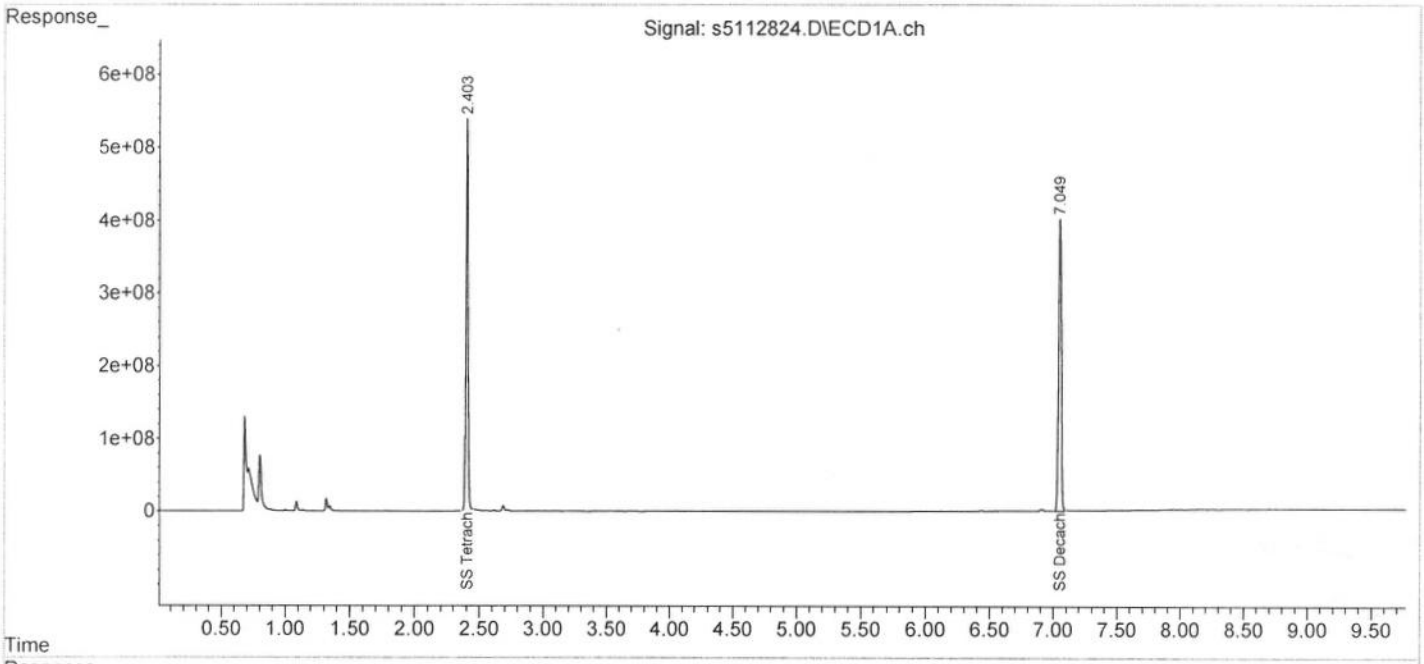
MSD 1016=47%. RPD 38%

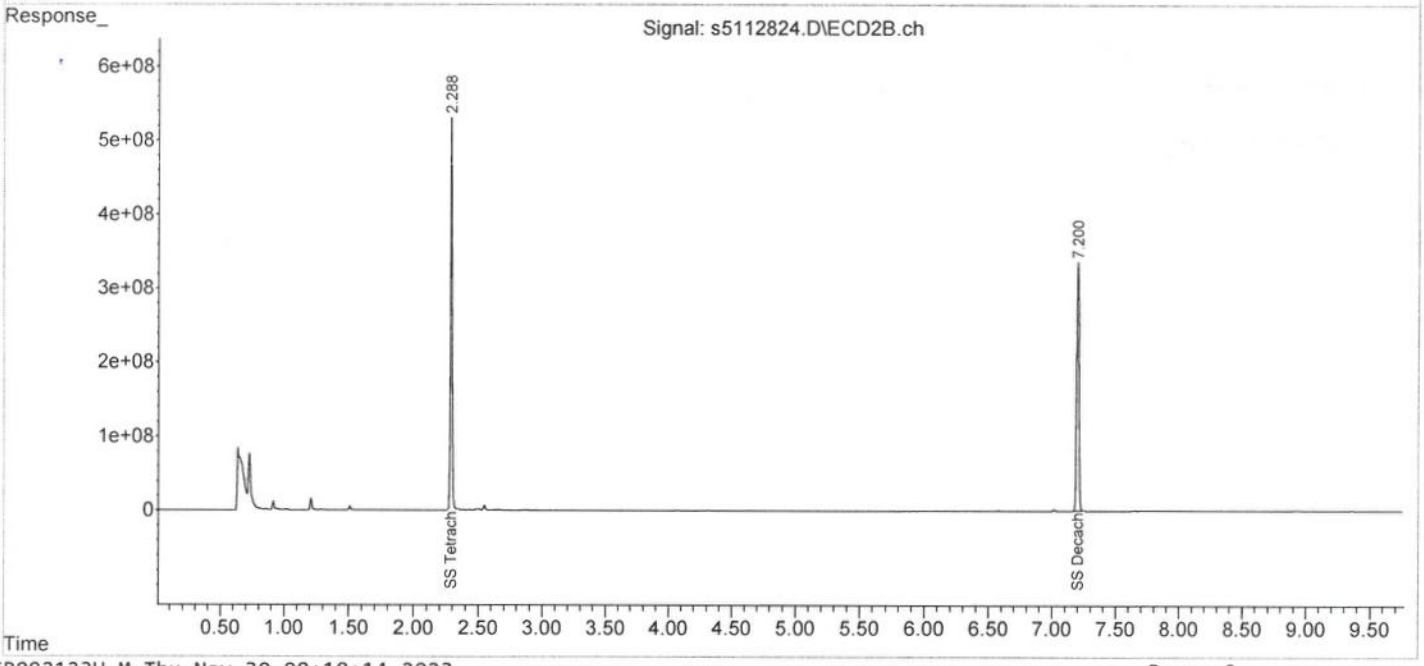
MSD 1260=58%. RPD 26%

Data Path : X:\S5\2023\Nov23\112823\
Data File : s5112824.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 28 Nov 2023 03:09 pm
Operator : dbv
Sample : 67798-07 pcb x1
Misc :
ALS Vial : 15 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Nov 29 06:46:19 2023
Quant Method : X:\S5\methods\S5PCB092123H.M
Quant Title : SVOA03 Method 8082A
QLast Update : Thu Sep 21 17:18:07 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : X:\S5\2023\Nov23\112823\
Data File : s5112825.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 28 Nov 2023 03:22 pm
Operator : dbv
Sample : 67798-07ms pcb x1
Misc :
ALS Vial : 16 Sample Multiplier: 1

DBV
12/1/23 @ 08:42
DonnaV

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Nov 29 06:46:23 2023
Quant Method : X:\S5\methods\S5PCB092123H.M
Quant Title : SVOA03 Method 8082A
QLast Update : Thu Sep 21 17:18:07 2023
Response via : Initial Calibration
Integrator: ChemStation

Take column 1 DOD requirement.

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

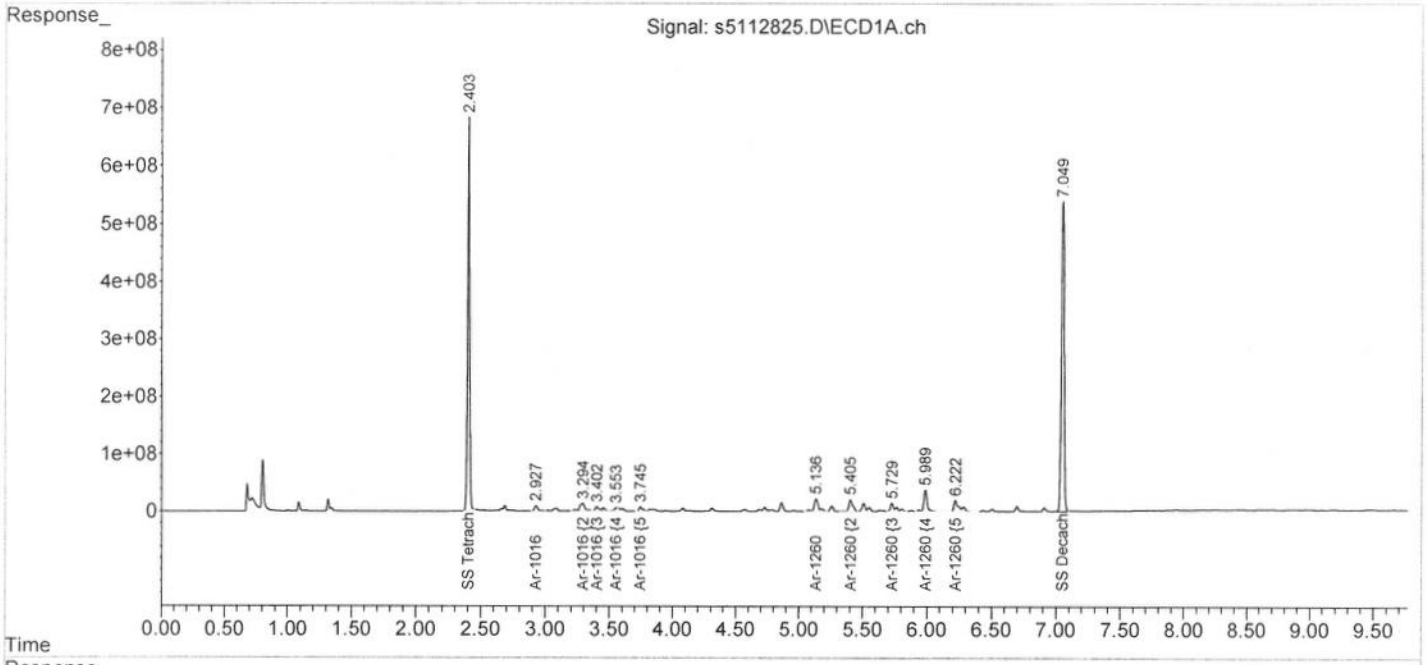
	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
	System Monitoring Compounds							
1)	S SS Tetrac...	2.403	2.289	682.8E6	681.2E6	1.468m	1.511m	BC = Baseline Correction
	Spiked Amount	5.000 Range	30 - 150	Recovery	=	29.36%#	30.22%	
47)	S SS Decach...	7.049	7.200	540.3E6	445.4E6	1.326m	1.445m	BC = Baseline Correction
	Spiked Amount	5.000 Range	30 - 150	Recovery	=	26.52%#	28.90%#	
	Target Compounds							
2)	L1 Ar-1016	2.930	2.918	9170523	9120182	0.670	0.819m	BC = Baseline Correction
3)	L1 Ar-1016 {2}	3.290	3.268	13298340	13718043	0.656	0.767	
4)	L1 Ar-1016 {3}	3.406	3.384	7349428	8305809	0.664	0.791	
5)	L1 Ar-1016 {4}	3.553	3.579	6138269	5442348	0.719m	0.779m	BC = Baseline Correction
6)	L1 Ar-1016 {5}	3.748	3.779	7538860	7596636	0.734	0.786	
32)	L7 Ar-1260	5.139	4.963	21472398	13376617	0.747	0.822	
33)	L7 Ar-1260 {2}	5.409	5.165	20389075	16069228	0.885	0.845	
34)	L7 Ar-1260 {3}	5.731	5.854	14085806	13160997	0.650	0.754	
35)	L7 Ar-1260 {4}	5.991	6.059	36788461	24110760	0.690	0.684	
36)	L7 Ar-1260 {5}	6.225	6.355	18549812	15336468	0.804	0.833	

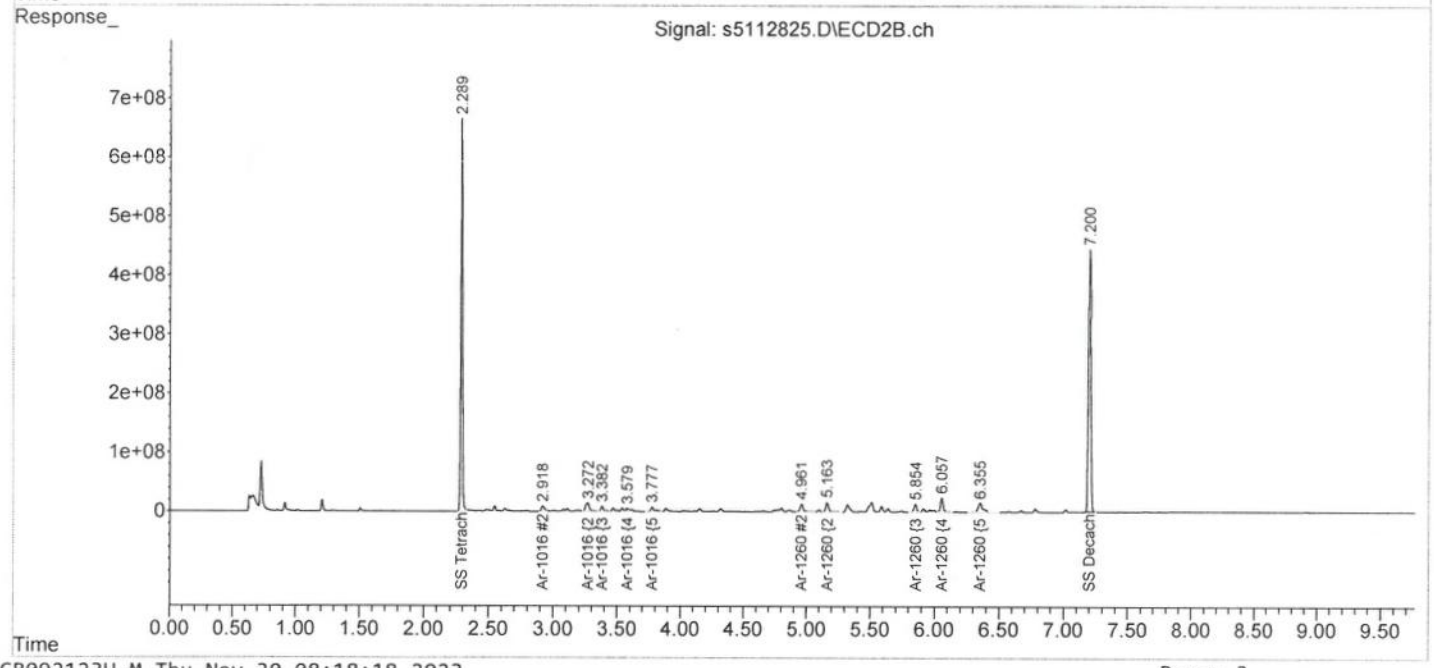
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : X:\S5\2023\Nov23\112823\
Data File : s5112825.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 28 Nov 2023 03:22 pm
Operator : dbv
Sample : 67798-07ms pcb x1
Misc :
ALS Vial : 16 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Nov 29 06:46:23 2023
Quant Method : X:\S5\methods\S5PCB092123H.M
Quant Title : SVOA03 Method 8082A
QLast Update : Thu Sep 21 17:18:07 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : X:\S5\2023\Nov23\112823\
Data File : s5112826.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 28 Nov 2023 03:35 pm
Operator : dbv
Sample : 67798-07msd pcb x1
Misc :
ALS Vial : 17 Sample Multiplier: 1

12/1/23 @ 08:42
DonnaV

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Nov 29 06:46:28 2023
Quant Method : X:\S5\methods\S5PCB092123H.M
Quant Title : SVOA03 Method 8082A
QLast Update : Thu Sep 21 17:18:07 2023
Response via : Initial Calibration
Integrator: ChemStation

Take column 1 DOD requirement.

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
	System Monitoring Compounds							
1) S	SS Tetrac...	2.404	2.289	533.1E6	536.6E6	1.103m	1.143m	BC = Baseline Correction
	Spiked Amount	5.000 Range	30 - 150	Recovery =		22.06%#	22.86%#	
47) S	SS Decach...	7.049	7.200	405.3E6	336.4E6	0.962m	1.052m	BC = Baseline Correction
	Spiked Amount	5.000 Range	30 - 150	Recovery =		19.24%#	21.04%#	
	Target Compounds							
2) L1	Ar-1016	2.930	2.923	6457947	5797604	0.464	0.508	
3) L1	Ar-1016 {2}	3.291	3.269	8649389	9152287	0.428	0.511	
4) L1	Ar-1016 {3}	3.406	3.385	5068992	5581766	0.458	0.530	
5) L1	Ar-1016 {4}	3.553	3.579	4338372	3904401	0.504m	0.554m	BC = Baseline Correction
6) L1	Ar-1016 {5}	3.749	3.779	5127818	5393121	0.496	0.555	
32) L7	Ar-1260	5.139	4.963	17227866	10636905	0.600	0.653	
33) L7	Ar-1260 {2}	5.409	5.165	15610419	12839509	0.679	0.676	
34) L7	Ar-1260 {3}	5.731	5.854	10812345	10311553	0.500	0.592	
35) L7	Ar-1260 {4}	5.991	6.059	29233643	21860893	0.550	0.621	
36) L7	Ar-1260 {5}	6.226	6.355	13215710	12621223	0.576	0.688	

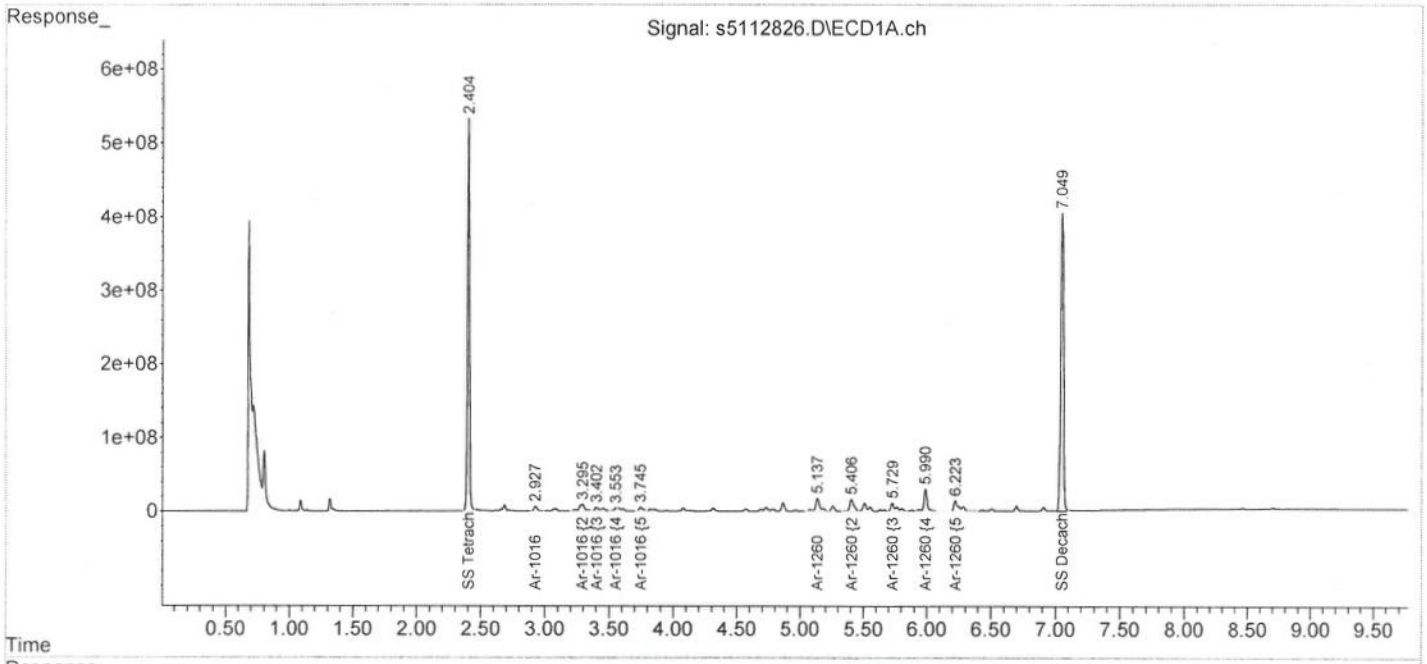
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

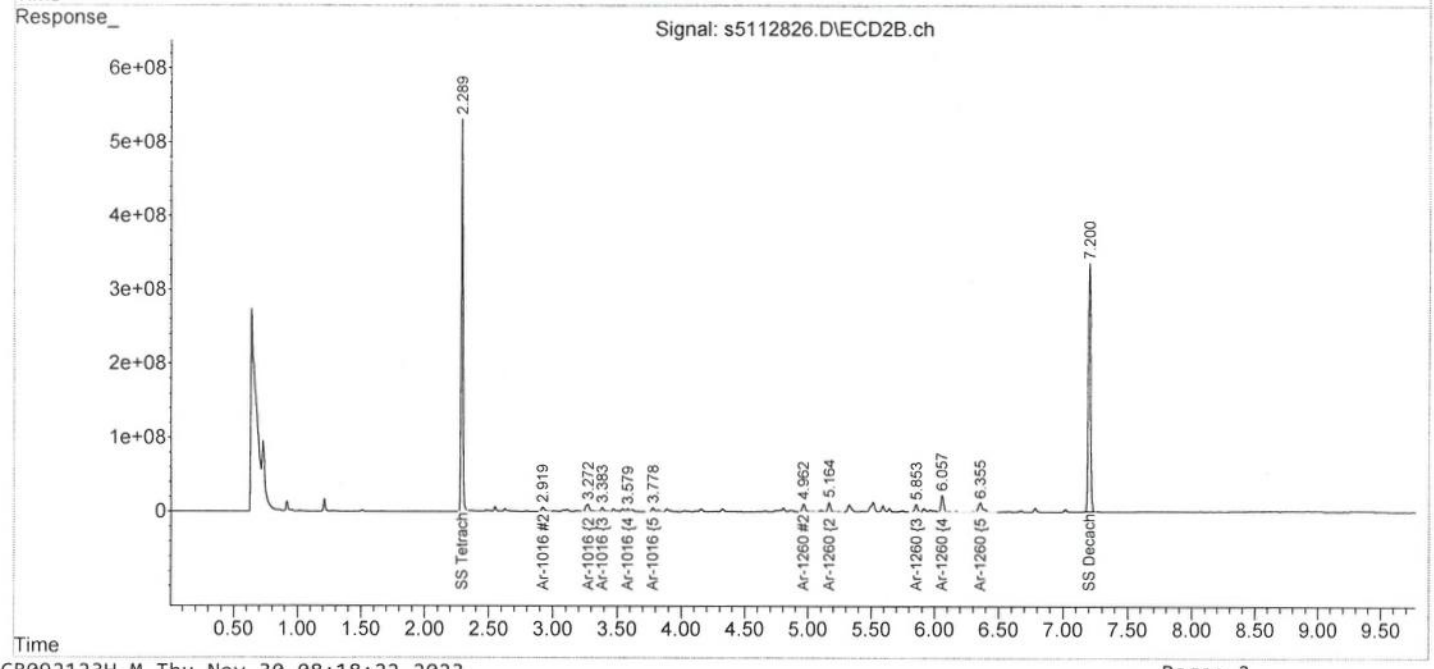
Quantitation Report (QT Reviewed)

Data Path : X:\S5\2023\Nov23\112823\
Data File : s5112826.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 28 Nov 2023 03:35 pm
Operator : dbv
Sample : 67798-07msd pcb x1
Misc :
ALS Vial : 17 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Nov 29 06:46:28 2023
Quant Method : X:\S5\methods\S5PCB092123H.M
Quant Title : SVOA03 Method 8082A
QLast Update : Thu Sep 21 17:18:07 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





This File:	L:\SVOA\Excel Reports\PCB\112823\s5112827
Analysis Group:	PCB
Field ID:	SY-OBMW13-110723 18001468
Sample:	67798-08 pcb x1 Dow Salvage Yard
Misc:	0 CRE
Import File Name	s5 PCBs QC17179W DOD
TestGroupID	E8082DoD_A
Aqueous or Soil? (A or S)	A
Percent Solid (%)	0
Prep Date	Monday, November 27, 2023
Initial Weight/Volume	1
Volume	1
Lab#:	67798-008
AnalysisDate:	Tuesday, November 28, 2023
AnalysisTime:	15:48
Dilution:	1
AnalyzedBy:	DBV s5112827.D
QC_Code:	
Prep#	17179

Reviewer Checks:

- Quant Report: Reviewed, Analyst Initials & Date ✓
- Chromatogram Checked, Major peaks identified ✓
- Prep data checked: weight, volume, %solid, Prep date ✓
- Field ID consistent with data and any field replicates
- Results consistent with any re-runs & internal QC
- Correct dilution and reason clear or noted
- Reason for reanalysis documented
- Surrogates pass or flagged & noted ✓
- Flags checked (Expiration, Over Cal)
- Other QC failures, estimates or interferences documented
- Spot checked Reported Result with Quant Report ✓
- Checked Audit flagged data in LIMS
- Correct values averaged
- Column RPD is OK or both results included
- Correct column reported

Notes:

Reviewer Initials & Date: 12/1/23

#	Surrogate Standards	Concentration (ug/mL)	Recovery	Flag	QC Limits	Report Column
1	SS Tetrachloro-m-xylene	0.95	48%		30-150	1
47	SS Decachlorobiphenyl	0.85	43%		30-150	1

#	AnalyteName	Concentration (ug/mL)	Flag	Report Column
2	Ar-1016	0.00		1
7	Ar-1221	0.00		1
12	Ar-1232	0.00		1
17	Ar-1242	0.00		1
22	Ar-1248	0.00		1
27	Ar-1254	0.00		1
32	Ar-1260	0.00		1
37	Ar-1262	0.00		1
42	Ar-1268	0.00		1

Aroclor	Column #1 average	Column #2 average	Column RPD limit 40%	%rsd	*Column #1* 1	2	3	4	5
Ar-1016	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1221	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1232	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1242	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1248	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1254	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1260	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1262	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1268	0.00	0.00			0.00	0.00	0.00	0.00	0.00
SS Tetra	0.95	0.97							
SS Deca	0.85	0.91							

	%rsd	*Column #2* 1	2	3	4	5
Ar-1016		0.00	0.00	0.00	0.00	0.00
Ar-1221		0.00	0.00	0.00	0.00	0.00
Ar-1232		0.00	0.00	0.00	0.00	0.00
Ar-1242		0.00	0.00	0.00	0.00	0.00
Ar-1248		0.00	0.00	0.00	0.00	0.00
Ar-1254		0.00	0.00	0.00	0.00	0.00
Ar-1260		0.00	0.00	0.00	0.00	0.00
Ar-1262		0.00	0.00	0.00	0.00	0.00
Ar-1268		0.00	0.00	0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : X:\S5\2023\Nov23\112823\
Data File : s5112827.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 28 Nov 2023 03:48 pm
Operator : dbv
Sample : 67798-08 pcb x1
Misc :
ALS Vial : 18 Sample Multiplier: 1

DBV
12/1/23 @ 08:42
DonnaV

Integration File signal 1: events.e
Integration File signal 2: events2.e
Take column 1 DOD requirement.
Quant Time: Nov 29 06:46:33 2023
Quant Method : X:\S5\methods\S5PCB092123H.M
Quant Title : SVOA03 Method 8082A
QLast Update : Thu Sep 21 17:18:07 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

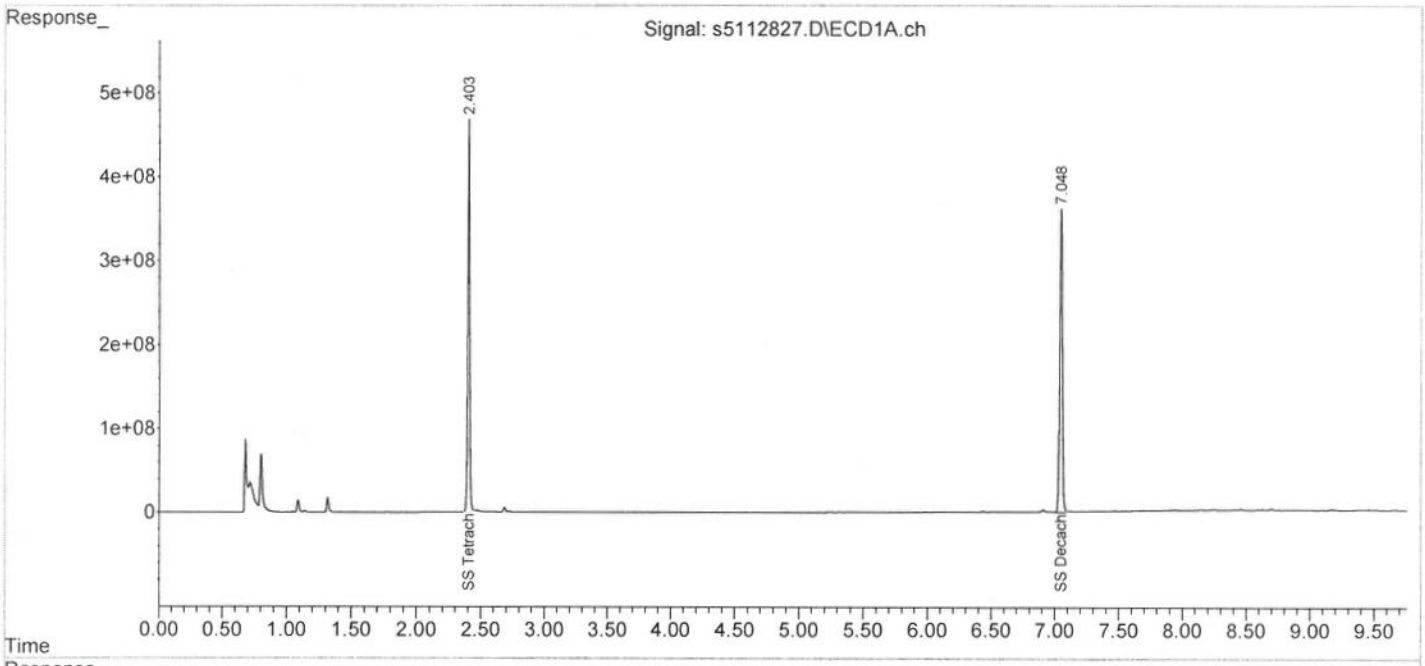
Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
System Monitoring Compounds							
1) S SS Tetrac...	2.403	2.289	468.7E6	464.0E6	0.954m	0.969m	BC = Baseline Correction
Spiked Amount	5.000 Range	30 - 150	Recovery =		19.08%#	19.38%#	
47) S SS Decach...	7.048	7.200	363.0E6	293.6E6	0.854m	0.907m	BC = Baseline Correction
Spiked Amount	5.000 Range	30 - 150	Recovery =		17.08%#	18.14%#	
Target Compounds							

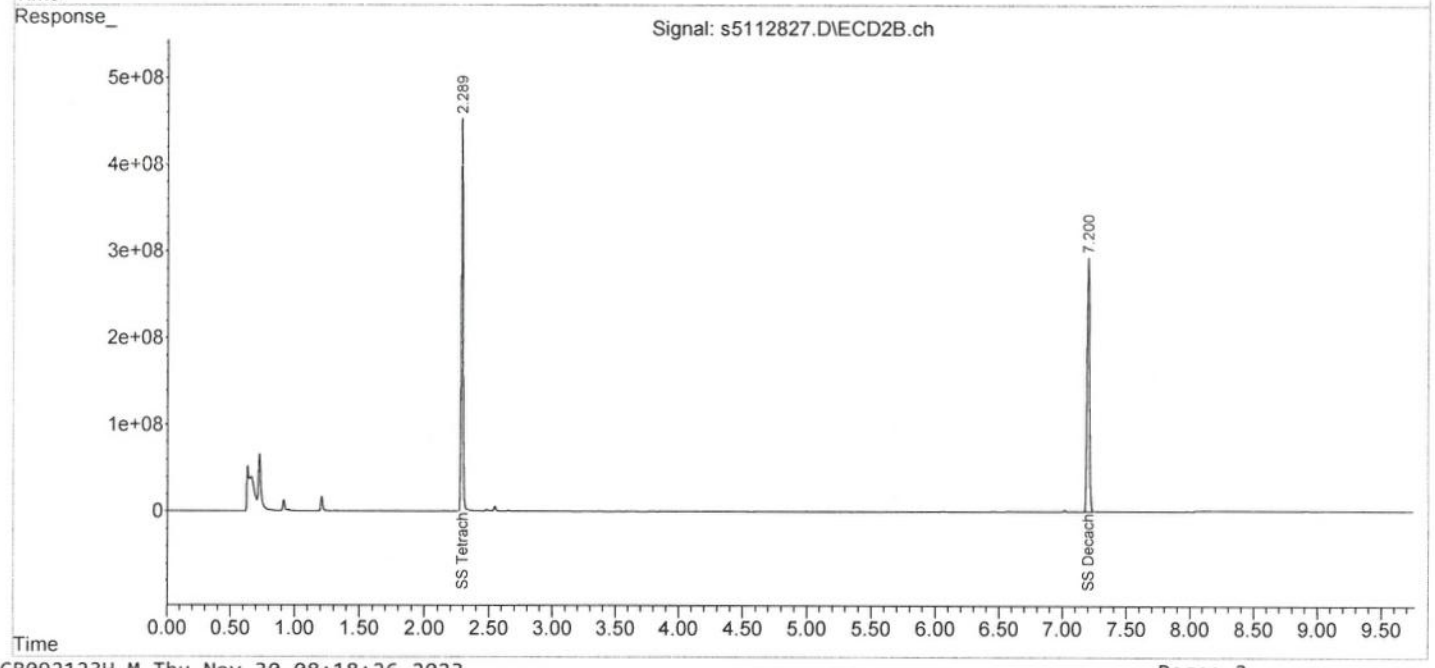
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : X:\S5\2023\Nov23\112823\
Data File : s5112827.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 28 Nov 2023 03:48 pm
Operator : dbv
Sample : 67798-08 pcb x1
Misc :
ALS Vial : 18 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Nov 29 06:46:33 2023
Quant Method : X:\S5\methods\S5PCB092123H.M
Quant Title : SVOA03 Method 8082A
QLast Update : Thu Sep 21 17:18:07 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





This File:	L:\SVOA\Excel Reports\PCB\112823\s5112828
Analysis Group:	PCB
Field ID:	SY-OBMW14-110723 18001468
Sample:	67798-09 pcb x1 Dow Salvage Yard
Misc:	0 CRE
Import File Name	s5 PCBs QC17179W DOD
TestGroupID	E8082DoD_A
Aqueous or Soil? (A or S)	A
Percent Solid (%)	0
Prep Date	Monday, November 27, 2023
Initial Weight/Volume	1
Volume	1
Lab#:	67798-009
AnalysisDate:	Tuesday, November 28, 2023
AnalysisTime:	16:01
Dilution:	1
AnalyzedBy:	DBV s5112828.D
QC_Code:	
Prep#	17179

Reviewer Checks:

- Quant Report: Reviewed, Analyst Initials & Date ✓
- Chromatogram Checked, Major peaks identified ✓
- Prep data checked: weight, volume, %solid, Prep date ✓
- Field ID consistent with data and any field replicates
- Results consistent with any re-runs & internal QC
- Correct dilution and reason clear or noted ✓
- Reason for reanalysis documented
- Surrogates pass or flagged & noted ✓
- Flags checked (Expiration, Over Cal)
- Other QC failures, estimates or interferences documented ✓
- Spot checked Reported Result with Quant Report ✓
- Checked Audit flagged data in LIMS
- Correct values averaged
- Column RPD is OK or both results included
- Correct column reported

Notes:

Reviewer Initials & Date: 12/1/23

#	Surrogate Standards	Concentration (ug/mL)	Recovery	Flag	QC Limits	Report Column
1	SS Tetrachloro-m-xylene	1.21	60%		30-150	1
47	SS Decachlorobiphenyl	1.11	56%		30-150	1

#	AnalyteName	Concentration (ug/mL)	Flag	Report Column
2	Ar-1016	0.00		1
7	Ar-1221	0.00		1
12	Ar-1232	0.00		1
17	Ar-1242	0.00		1
22	Ar-1248	0.00		1
27	Ar-1254	0.00		1
32	Ar-1260	0.00		1
37	Ar-1262	0.00		1
42	Ar-1268	0.00		1

Aroclor	Column #1 average	Column #2 average	Column RPD limit 40%	%rsd	*Column #1* 1	2	3	4	5
Ar-1016	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1221	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1232	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1242	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1248	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1254	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1260	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1262	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1268	0.00	0.00			0.00	0.00	0.00	0.00	0.00
SS Tetra	1.21	1.26							
SS Deca	1.11	1.21							

	%rsd	*Column #2* 1	2	3	4	5
Ar-1016		0.00	0.00	0.00	0.00	0.00
Ar-1221		0.00	0.00	0.00	0.00	0.00
Ar-1232		0.00	0.00	0.00	0.00	0.00
Ar-1242		0.00	0.00	0.00	0.00	0.00
Ar-1248		0.00	0.00	0.00	0.00	0.00
Ar-1254		0.00	0.00	0.00	0.00	0.00
Ar-1260		0.00	0.00	0.00	0.00	0.00
Ar-1262		0.00	0.00	0.00	0.00	0.00
Ar-1268		0.00	0.00	0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : X:\S5\2023\Nov23\112823\
Data File : s5112828.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 28 Nov 2023 04:01 pm
Operator : dbv
Sample : 67798-09 pcb x1
Misc :
ALS Vial : 19 Sample Multiplier: 1

DBV
12/1/23 @ 08:42
DonnaV

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Nov 29 06:46:38 2023
Quant Method : X:\S5\methods\S5PCB092123H.M
Quant Title : SVOA03 Method 8082A
QLast Update : Thu Sep 21 17:18:07 2023
Response via : Initial Calibration
Integrator: ChemStation

Take column 1 DOD requirement.

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
	System Monitoring Compounds							
1)	S SS Tetrac...	2.403	2.289	578.0E6	584.8E6	1.210m	1.262m	BC = Baseline Correction
	Spiked Amount	5.000	Range 30 - 150	Recovery =		24.20%#	25.24%#	
47)	S SS Decach...	7.047	7.200	461.9E6	382.5E6	1.111m	1.215m	BC = Baseline Correction
	Spiked Amount	5.000	Range 30 - 150	Recovery =		22.22%#	24.30%#	
	Target Compounds							

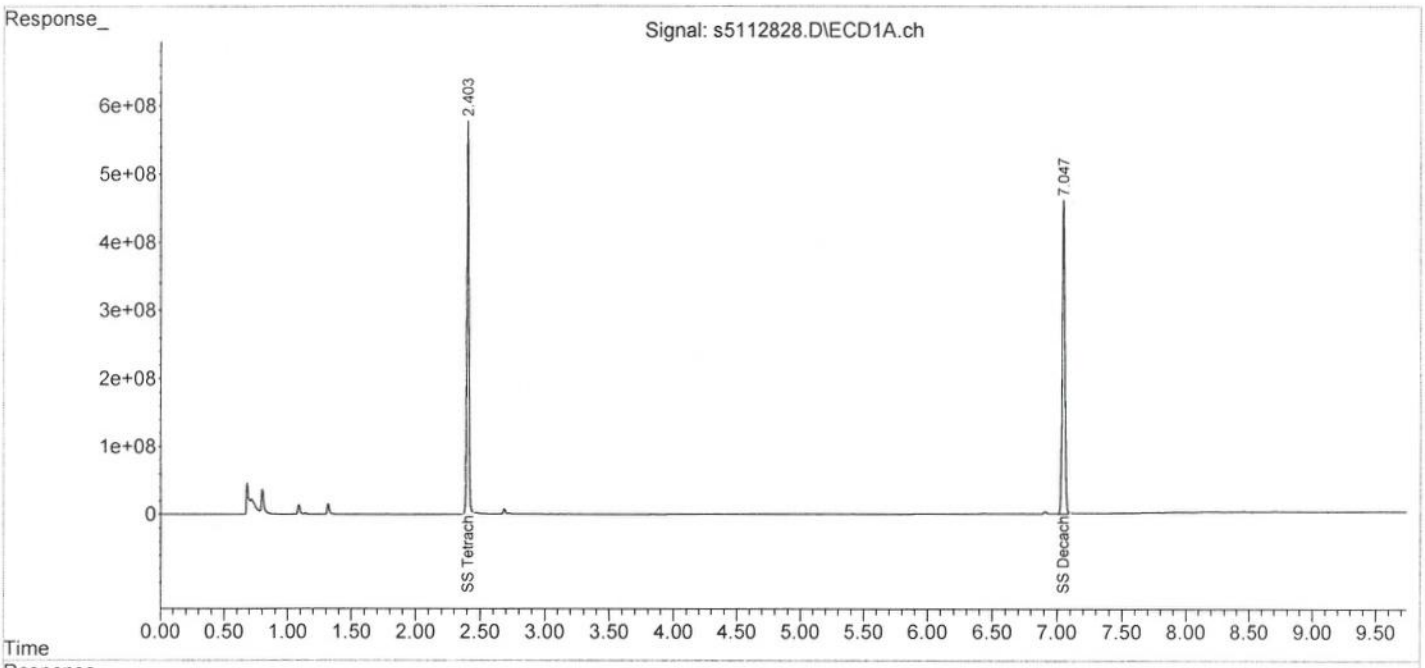
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

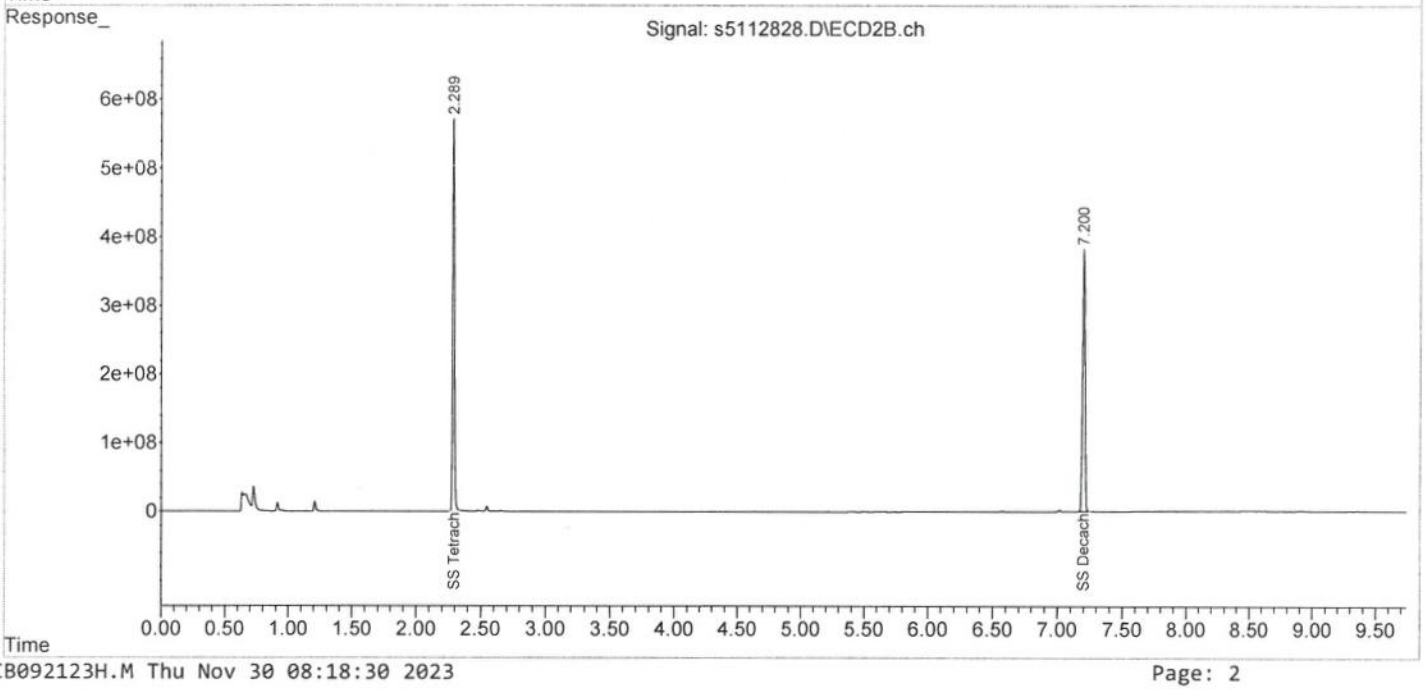
Quantitation Report (QT Reviewed)

Data Path : X:\S5\2023\Nov23\112823\
Data File : s5112828.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 28 Nov 2023 04:01 pm
Operator : dbv
Sample : 67798-09 pcb x1
Misc :
ALS Vial : 19 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Nov 29 06:46:38 2023
Quant Method : X:\S5\methods\S5PCB092123H.M
Quant Title : SVOA03 Method 8082A
QLast Update : Thu Sep 21 17:18:07 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





This File:	L:\SVOA\Excel Reports\PCB\112823\s5112831
Analysis Group:	PCB
Field ID:	RMW2-252.5-262.5-110723 18001468
Sample:	67798-10 pcb x1 Dow Salvage Yard
Misc:	0 CRE
Import File Name	s5 PCBs QC17179W DOD
TestGroupID	E8082DoD_A
Aqueous or Soil? (A or S)	A
Percent Solid (%)	0
Prep Date	Monday, November 27, 2023
Initial Weight/Volume	1
Volume	1
Lab#:	67798-010
AnalysisDate:	Tuesday, November 28, 2023
AnalysisTime:	16:40
Dilution:	1
AnalyzedBy:	DBV s5112831.D
QC_Code:	
Prep#	17179

Reviewer Checks:

- Quant Report: Reviewed, Analyst Initials & Date ✓
- Chromatogram Checked, Major peaks identified ✓
- Prep data checked: weight, volume, %solid, Prep date ✓
- Field ID consistent with data and any field replicates
- Results consistent with any re-runs & internal QC
- Correct dilution and reason clear or noted ✓
- Reason for reanalysis documented
- Surrogates pass or flagged & noted ✓
- Flags checked (Expiration, Over Cal)
- Other QC failures, estimates or interferences documented
- Spot checked Reported Result with Quant Report ✓
- Checked Audit flagged data in LIMS
- Correct values averaged
- Column RPD is OK or both results included
- Correct column reported

Notes:

Reviewer Initials & Date: 12/1/23

#	Surrogate Standards	Concentration (ug/mL)	Recovery	Flag	QC Limits	Report Column
1	SS Tetrachloro-m-xylene	1.30	65%		30-150	1
47	SS Decachlorobiphenyl	1.42	71%		30-150	1

#	AnalyteName	Concentration (ug/mL)	Flag	Report Column
2	Ar-1016	0.00		1
7	Ar-1221	0.00		1
12	Ar-1232	0.00		1
17	Ar-1242	0.00		1
22	Ar-1248	0.00		1
27	Ar-1254	0.00		1
32	Ar-1260	0.00		1
37	Ar-1262	0.00		1
42	Ar-1268	0.00		1

Aroclor	Column #1 average	Column #2 average	Column RPD limit 40%	%rsd	Column #1 1	2	3	4	5
Ar-1016	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1221	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1232	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1242	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1248	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1254	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1260	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1262	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1268	0.00	0.00			0.00	0.00	0.00	0.00	0.00
SS Tetra	1.30	1.33							
SS Deca	1.42	1.54							

	%rsd	Column #2 1	2	3	4	5
Ar-1016		0.00	0.00	0.00	0.00	0.00
Ar-1221		0.00	0.00	0.00	0.00	0.00
Ar-1232		0.00	0.00	0.00	0.00	0.00
Ar-1242		0.00	0.00	0.00	0.00	0.00
Ar-1248		0.00	0.00	0.00	0.00	0.00
Ar-1254		0.00	0.00	0.00	0.00	0.00
Ar-1260		0.00	0.00	0.00	0.00	0.00
Ar-1262		0.00	0.00	0.00	0.00	0.00
Ar-1268		0.00	0.00	0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : X:\S5\2023\Nov23\112823\
Data File : s5112831.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 28 Nov 2023 04:40 pm
Operator : dbv
Sample : 67798-10 pcb x1
Misc :
ALS Vial : 22 Sample Multiplier: 1

12/1/23 @ 08:42
DonnaV

Integration File signal 1: events.e
Integration File signal 2: events2.e Take column 1 DOD requirement.
Quant Time: Nov 29 06:46:53 2023
Quant Method : X:\S5\methods\S5PCB092123H.M
Quant Title : SVOA03 Method 8082A
QLast Update : Thu Sep 21 17:18:07 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
	System Monitoring Compounds							
1)	S SS Tetrac...	2.403	2.289	614.2E6	611.9E6	1.297m	1.331m	BC = Baseline Correction
	Spiked Amount	5.000 Range	30 - 150	Recovery =		25.94%#	26.62%#	
47)	S SS Decach...	7.048	7.199	572.9E6	469.4E6	1.418m	1.537m	BC = Baseline Correction
	Spiked Amount	5.000 Range	30 - 150	Recovery =		28.36%#	30.74%	
	Target Compounds							

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : X:\S5\2023\Nov23\112823\
Data File : s5112831.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 28 Nov 2023 04:40 pm
Operator : dbv
Sample : 67798-10 pcb x1
Misc :
ALS Vial : 22 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Nov 29 06:46:53 2023
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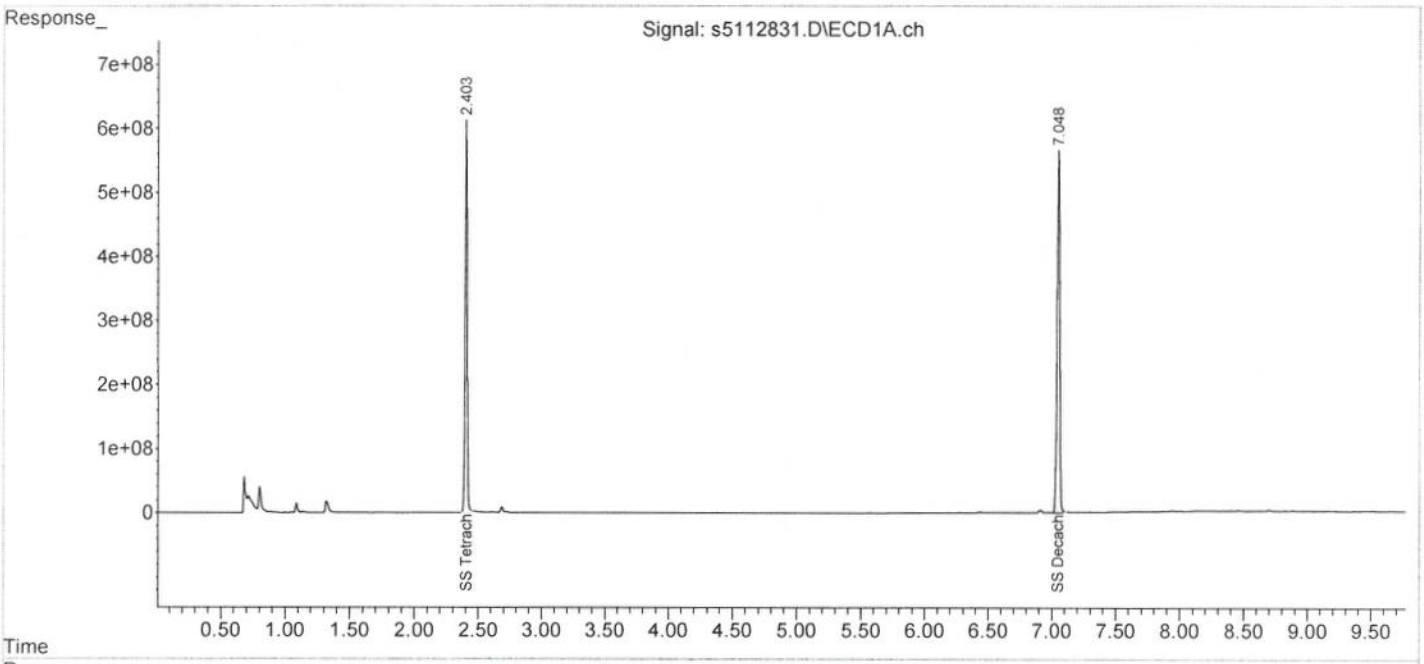
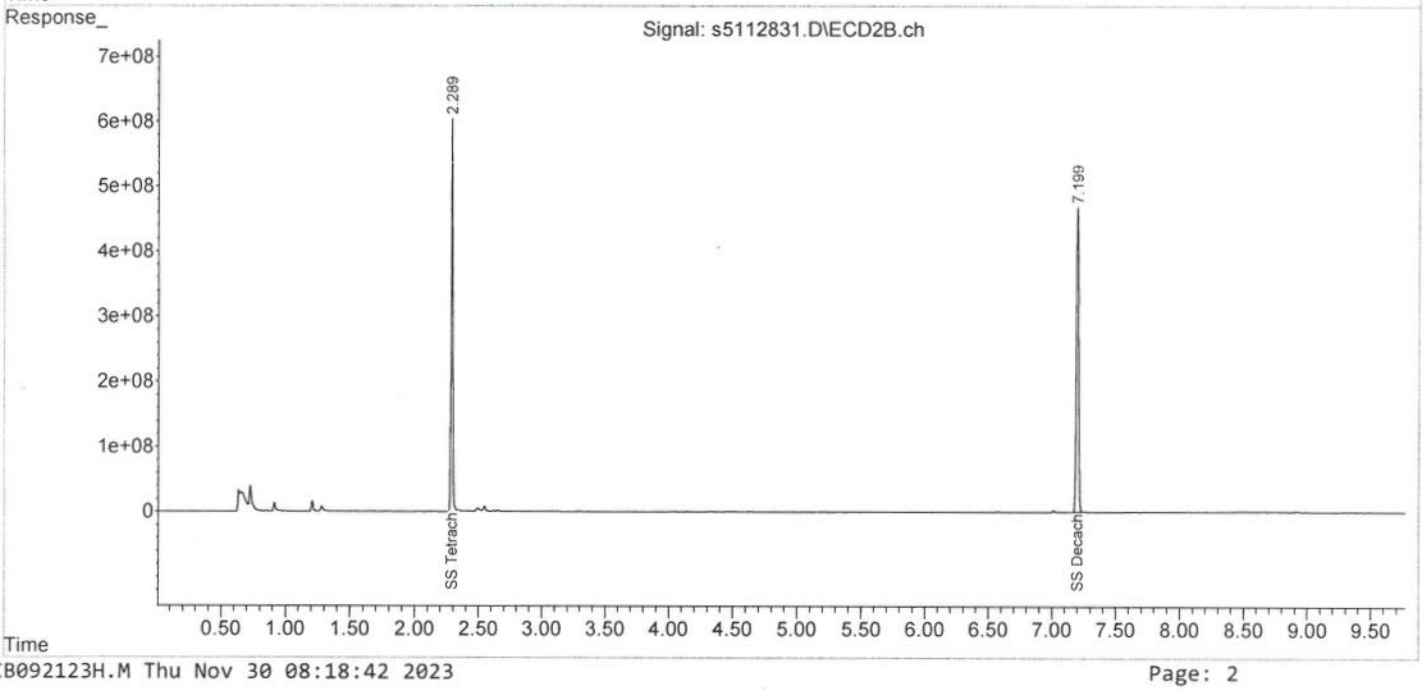
Quant Title : SVOA03 Method 8082A
QLast Update : Thu Sep 21 17:18:07 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Sample Receipt Condition Report

67798 CRE

Absolute Resource Associates **Job Number:**

Samples Received from: ☐-UPS ☐-FedEx ☐-USPS ☒-Lab Courier ☐-Client Drop-off ☐-_____

Custody Seals - present & intact: ☒-Yes ☐-No ☒-N/A AMN 11/9 CoC signed: ☒-Yes ☐-No

Receipt Temp: 0 °C Samples on ice? ☒-Yes ☐-No ☐-N/A Sampled < 24 hrs ago? ☐-Yes ☒-No

PFAS-only real ice? ☐-Yes ☐-No ☒-N/A Any signs of freezing? ☐-Yes ☒-No

Comments:_____

Preservation / Analysis	Bottle Size/Type & Quantity									Check pH for ALL applicable* samples and document:
HCl	40mL(G)	58	250mL(P)		500mL(P)		1L(G)	14		PH ✓OK
HNO_3	125mL(P)		250mL(P)	28	500mL(P)					pH ✓OK
H_2SO_4	40mL(G)		60mL(P)		125mL(P)		250mL(P)		500mL(P)	
NaOH	125mL(P)		250mL(P)							
$(NH_4)_2SO_4$	60mL(P)		125mL(P)		250mL(P)					
ZnAc-NaOH	125mL(P)		250mL(P)							
Trizma	125mL(P)		250mL (P)							
NH_4Ac	125mL(P)		250mL (P)							
NaS_2O_3	40mL(G)		120mL(P)							
MeOH	20mL(G)		40mL(G)							
None (solid)	2oz(G)		4oz(G)		8oz(G)		Syringe			
None (water)	40ml (G)		60mL(P)		125mL(P)		250mL(P)		500mL(P)	

*pH ✓by analyst:VOC, PFAS, TOC,O&G
Residual Cl not present:
ABN625____ Pest608____
Bacteria ResCl ✓by analyst

PC Dry applicable? Y (N)

1L(G) 28 1L (P)

Mold	Cassette		Bulk		Plate		Tape Lift			
Asbestos	~~Cassette~~		~~Bulk~~							
Lead	Cassette		Bulk		Wipe					

Login Review	Yes	No	NA	Comments
Proper lab sample containers/enough volume/correct preservative?	X			
Analyses marked on COC match bottles received?	X			
VOC &TOC Water-no headspace? VOC Solid-MeOH covers solid, no leaks, Prep Expiration OK?	X			
PFAS: ARA bottles & samples/FRB same Lot#? QC rec'd, if req'd?			X	Lot ID#:_____
Bacteria bottles provided by ARA?			X	
Samples within holding time?	X			
Immediate tests communicated in writing: NO_3, NO_2,o-PO_4, pH, BOD, Coliform/*E. coli* (P/A or MPN), Enterococci, Color Surfactants, Turbidity, Odor, CrVI, Ferrous Iron, Dissolved Oxygen, Unpres 624			X	
Date, time & ID on samples match CoC?	X			
Rushes communicated to analyst in writing?			X	
Subcontracted samples sent to sub lab?			X	Date Prep'd:_____ Date sent:_____
Pesticides EPA 608 pH5-9?			X	
Compliance samples have no discrepancies/require no flags?	X			(Or must be rejected)
Log-in Supervisor notified immediately of following items:			X	Discrepancies, compliance samples (NHDES, MADEP, DoD etc.) or uncommon requests.

Inspected and Received By: AMN Date/Time: 11/09/23 17:11

Peer Review Checklist

- ☑ Client ID/Project Manager
- ☑ Project Name
- ☑ TAT/rushes communicated
- ☑ Received Date/Time
- ☑ On Ice, Temperature OK?
- ☐ PO# (if provided)
- ☑ Sub samples sent? Shipping Charge?
- ☑ Issues noted above communicated?
- ☑ Sample IDs
- ☑ Matrix
- ☑ Date/Time collected
- ☑ Short HTs communicated
- ☑ Analyses in Correctly — method? 23-Ca-email in J. -references -wastewater methods
- ☑ Notes from CoC in LIMS

Reviewed By: _____ Date: 11/13/23

Notes: (continue on back as needed)

	Initials	Date	What was sent?
Uploaded / PDF	_____	_____	Report / Data / EDD / Invoice
Uploaded / PDF	_____	_____	Report / Data / EDD / Invoice
Uploaded / PDF	_____	_____	Report / Data / EDD / Invoice

Absolute Resource associates

124 Heritage Avenue #16
Portsmouth, NH 03801
603-436-2001
absoluteresourceassociates.com

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

67798

Company Name: Credere Associates

Company Address: 776 Main St, Westbrook, ME

Report To: Allison Drouin

Phone #: 207-749-1141

Project Name: Dow Salvage Yard
Project #: 18001468
Project Location: NH MA (ME) VT

Accreditation Required? N/(S) ELAP
See absoluteresourceassociates.com for sample acceptance policy and current accreditation lists.

Protocol: RCRA SDWA NPDES MCP NHDES (DOD)
Notify ARA if your samples require specific methods, certifications or compliance protocol.

Reporting Limits: (GAPP) EPA DW GW-1 S-1 Other

ANALYSIS REQUEST

☒ VOC 8260 ☐ VOC 8260 NHDES ☐ VOC 8260 MADEP
☐ VOC 624.1 ☐ VOC BTEX MtBE, only ☐ VOC 8021VT
☒ VPH MADEP ☐ GRO 8015 ☐ 1,4-Dioxane
☐ VOC 524.2 ☐ VOC 524.2 NH List ☐ Gases-List:
☐ TPH 8100 ☐ DRO 8015 ☒ EPH MADEP ☐ TPH Fingerprint
☒ 8270PAH ☐ EDB ☐ 625.1
☒ 8082 PCB ☐ 8081 Pesticides ☐ 608.3 Pest/PCB
☐ PFAS 537.1 ☐ PFAS 533 ☐ PFAS isotope dilution
☐ O&G 1664 ☐ Mineral O&G 1664
☐ pH ☐ BOD ☐ Conductivity ☐ Turbidity ☐ Apparent Color
☐ TSS ☐ TDS ☐ TS ☐ TVS ☐ Alkalinity ☐ Acidity
☐ RCRA Metals ☐ Priority Pollutant Metals ☐ TAL Metals ☐ Hardness
☒ Total Metals-list: RCRA
☒ Dissolved Metals-list: RCRA
☐ Ammonia ☐ COD ☐ TKN ☐ TN ☐ TON ☐ TOC ☐ Ferrous Iron
☐ T-Phosphorus ☐ Bacteria P/A ☐ Bacteria MPN ☐ Enterococci
☐ Cyanide ☐ Sulfide ☐ Nitrate + Nitrite ☐ Ortho P ☐ Phenols
☐ Nitrate ☐ Nitrite ☐ Chloride ☐ Sulfate ☐ Bromide ☐ Fluoride
☐ Corrosivity ☐ Ignitibility/FP
☐ TCLP Metals ☐ TCLP VOC ☐ TCLP SVOC ☐ TCLP Pesticide
Subcontract: ☐ Grain Size ☐ Herbicides ☐ Asbestos
Grab (G) or Composite (C)

	Lab Sample ID (Lab Use Only)	Field ID	# CONTAINERS	Matrix: WATER	SOLID	OTHER	Preservation Method: HCl	HNO_3	H_2SO_4	NaOH	MeOH	Sampling: DATE	TIME	SAMPLER
-12	67798-01	SY-OBMW12-110723	27	X			X	X				11.7	1007	ID
-13	-02	SY-OBMW6-110723	9										1030	PH
-14	-03	SY-OBMW4R-110723	9										1105	GK
-15	-04	SY-BRMW2-60.5-70.5-110723	9										1225	CB
-16	-05	SY-OBMW15-110723	9										1250	GK
-17	-06	SY-OBMW5-110723	9										1325	PH
-18	-07	SY-BRMW2-80.5-95.5-110723	27										1340	CB
-19	-08	SY-OBMW13-110723	9										1425	GK
-20	-09	SY-OBMW14-110723	9										1400	ID
-21	-10	SY-BRMW2-252.5-262.5-110723	9										1535	CB
	-11	TB31-110723	2										1630	SG

Dissolved Metals ↑

TAT REQUESTED
Priority (24 hr)* ☐
Expedited (48 hr)* ☐
Standard (10 Business Days) ☒
*Date Needed

Invoice To: Jenn Taiani
Email: Jenn@crederellc.com, invoices@credere llc.com
PO #:
Quote #:
☐ NH Reimbursement Pricing

SPECIAL INSTRUCTIONS SY-OBMW12-110723 and SY-BRMW2-80.5-95.5-110723 include volume for MS/MSD.
~~Hold samples beginning "SY-OB..."~~ PHT 11/8/23 1035

Reporting Instructions:
☐ EDD: Report To (email): adrouin@crederellc.com

RECEIVED ON ICE ☒ YES ☐ NO
TEMPERATURE 0 °C

CUSTODY RECORD
QSD-01 Revision 07/27/2022

	Relinquished by Sampler:	Date	Time	Received by:	Date	Time
		11/8	0735		11-8	0735
	Relinquished by:	Date	Time	Received by:	Date	Time
		11-8-23	1035		11-8-23	1035
	Relinquished by:	Date	Time	Received by Laboratory:	Date	Time
		11-8-23	1:30		11/8	1630

Aaron DeWees

From: Allison Drouin <adrouin@crederellc.com>
Sent: Monday, November 13, 2023 10:36 AM
To: Aaron DeWees
Cc: Sean Gannon
Subject: RE: Dow Salvage Yard

CAUTION: [EXTERNAL EMAIL] DO NOT CLICK ON links or attachments unless you were expecting the message, recognize the sender's email address, and know the content is safe.

Hi Aaron,

No it would be the full list per the QAPP. Let me know if you need the QAPP, it has not changed and is still the version dated December 2022.

Lab: ARA
Matrix: Groundwater
Method: Metals by EPA Method 6020A (SOP QA-5605)

Compound	PAL (µg/L)	Basis of Human Health PAL	PQLG (µg/L)	LOQ (µg/L)	LOD (µg/L)	MDL (µg/L)
Aluminum	2,000[a,c]	Non-Cancer	1,000	50	10	2.2
Antimony	0.78[a,c]	Non-Cancer	1	1	0.5	0.42
Arsenic	0.052[a,c]	Cancer	5	5	1	0.35
Barium	380[a,c]	Non-Cancer	190	10	0.5	0.22
Beryllium	2.5[a,c]	Non-Cancer	1.25	1	0.1	0.01
Cadmium	0.18[a,c]	Non-Cancer	1	1	0.5	0.1
Chromium, total	NE	-	50	10	1	0.48
Cobalt	0.6[a,c]	Non-Cancer	10	10	1	0.29
Copper	80[a,c]	Non-Cancer	40	10	1	0.29
Iron	1400[a,c]	Non-Cancer	700	50	10	3.2
Lead	5[a,b,c]	Non-Cancer	7.5	5	0.5	0.1
Magnesium	NE	-	500	100	20	0.66
Manganese	43[a,c]	Non-Cancer	21.5	10	5	1
Nickel	39[a,c]	Non-Cancer	19.5	10	1	0.63
Potassium	NE	-	2500	500	100	88
Selenium	10[a,c]	Non-Cancer	10	10	1	0.45
Silver	9.4[a,c]	Non-Cancer	5	5	0.05	0.02
Sodium	NE	-	500	100	50	21
Thallium	0.02[a,c]	Non-Cancer	1	1	0.5	0.04
Vanadium	8.6[a,c]	Non-Cancer	10	10	10	0.64
Zinc	600[a,c]	Non-Cancer	300	10	10	2.8

Thank you,

Allison S. Drouin, PG, LG
Senior Geologist/Project Manager
VP of Quality Assurance and Technical Programs

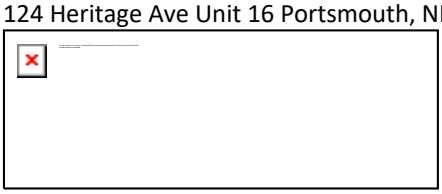
Cell: 207-749-1141
Office: 207-828-1272 ext. 15

Small Business Prime Contractor
of the Year
2023 – New England Region

From: Aaron DeWees <Aarond@absoluteresourceassociates.com>
Sent: Monday, November 13, 2023 10:34 AM
To: Allison Drouin <adrouin@crederellc.com>
Subject: Dow Salvage Yard

Good morning Allison,
Can you confirm that the metals list for Dow Salvage Yard samples is RCRA8?
One of the CoCs just has “metals” checked and the other has “RCRA” written in by the metals.
Thanks, -Aaron.
P.S. Did you know ARA is your PFAS Resource? Click or call for more information about our PFAS Testing Services.

Aaron DeWees
Chief Operating Officer
Aarond@absoluteresourceassociates.com
603-436-2001 x206
absoluteresourceassociates.com
124 Heritage Ave Unit 16 Portsmouth, NH 03801



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Aaron DeWees

From: Allison Drouin <adrouin@crederellc.com>
Sent: Thursday, December 21, 2023 2:26 PM
To: Aaron DeWees
Subject: RE: Dow Salvage Yard 18001468 ARA # 67797 and 67798

CAUTION: [EXTERNAL EMAIL] DO NOT CLICK ON links or attachments unless you were expecting the message, recognize the sender's email address, and know the content is safe.

Go ahead and report those results. They'll probblay be rejected during validation but I think its better than not reporting.

Thank you,

Allison S. Drouin, PG, LG
Senior Geologist/Project Manager
VP of Quality Assurance and Technical Programs

Cell: 207-749-1141
Office: 207-828-1272 ext. 15



Small Business Prime Contractor
of the Year
2023 – New England Region

From: Aaron DeWees <Aarond@absoluteresourceassociates.com>
Sent: Thursday, December 21, 2023 12:29 PM
To: Allison Drouin <adrouin@crederellc.com>
Subject: Dow Salvage Yard 18001468 ARA # 67797 and 67798

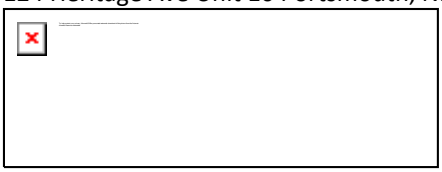
I probably should have communicated these issues awhile back, but they kind of fell through the cracks with everything going on. There are two issues that effected PCB samples for the Dow job.

SY-OBMW7-110623 sample bottle was broken in lab so we had no water remaining to extract. I've noted this on the CoC as well as the case narrative.

SY-OBMW4R-110723 during the final extract concentration step, the vial was dropped and cracked. An unknown portion of the extract was lost, so we continued on, in case not much was lost. However, the surrogate recoveries were 3% which suggests quite a bit was lost. I put these results in the report with an explanation in the case narrative. Let me know if you'd rather we take the results out. The sample was ND.

-Aaron.
P.S. Did you know ARA is your PFAS Resource? Click or call for more information about our PFAS Testing Services.

Aaron DeWees
Chief Operating Officer
Aarond@absoluteresourceassociates.com
603-436-2001 x206
absoluteresourceassociates.com
124 Heritage Ave Unit 16 Portsmouth, NH 03801



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Laboratory Report

Absolute Resource associates
124 Heritage Avenue Portsmouth NH 03801

Allison Drouin
CREDERE Associates
776 Main Street
Westbrook, ME 04092

PO Number: None
Job ID: 67836
Date Received: 11/10/23

Project: Dow Salvage Yard 18001468

Attached please find results for the analysis of the samples received on the date referenced above.

Unless otherwise noted in the attached report, the analyses performed met the requirements of Absolute Resource Associates' Quality Assurance Plan. The Standard Operating Procedures are based upon USEPA SW-846, USEPA Methods for Chemical Analysis of Water and Wastewater, Standard Methods for the Examination of Water and Wastewater and other recognized methodologies. The results contained in this report pertain only to the samples as indicated on the chain of custody.

Absolute Resource Associates maintains certification with the agencies listed below. The reported results apply to the sample(s) in the condition as received at the time the laboratory took custody. This report shall not be reproduced except in full, without written approval of the laboratory. The liability of ARA is limited to the cost of the requested analyses, unless otherwise agreed upon in writing.

We appreciate the opportunity to provide laboratory services. If you have any questions regarding the enclosed report, please contact the laboratory and we will be glad to assist you.

Sincerely,
Absolute Resource Associates

Aaron DeWees
Chief Operating Officer

Date of Approval: 1/3/2024
Total number of pages: 374

Absolute Resource Associates Certifications

New Hampshire	1732	Massachusetts	M-NH902
Maine	NH902		

Absolute Resource associates

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Lab # 67836

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Project ID: Dow Salvage Yard 18001468

Sample Association Table

Field ID	Matrix	Date-Time Sampled	Lab#	Analysis
SY-OBMW2-110823	Water	11/8/2023 9:05	67836-001	
				Acid & Base/Neutral Extractables in water by 8270
				Aluminum in water by 6020
				Antimony in water by 6020
				Arsenic in water by 6020
				Barium in water by 6020
				Beryllium in water by 6020
				Cadmium in water by 6020
				Chromium in water by 6020
				Cobalt in water by 6020
				Combo: TAL 23 Metals
				Copper in water by 6020
				EPH in water by MADEP Method
				Iron in water by 6020
				Lead in water by 6020
				Magnesium in water by 6020
				Manganese in water by 6020
				Mercury in water by 7470
				Nickel in water by 6020
				PCBs in water by 8082 DoD
				Potassium in water by 6020
				SEDD Generation
				Selenium in water by 6020
				Silver in water by 6020
				Sodium in water by 6020
				Thallium in water by 6020
				Vanadium in water by 6020
				VOCs in water by 8260 DoD
				VPH in water by MA DEP Method
				Water Digestion for ICPMS Analysis
				Zinc in water by 6020

Project ID: Dow Salvage Yard 18001468

Sample Association Table

Field ID	Matrix	Date-Time Sampled	Lab#	Analysis
SY-OBMW1-110823	Water	11/8/2023 9:35	67836-002	
				Acid & Base/Neutral Extractables in water by 8270
				Aluminum in water by 6020
				Antimony in water by 6020
				Arsenic in water by 6020
				Barium in water by 6020
				Beryllium in water by 6020
				Cadmium in water by 6020
				Chromium in water by 6020
				Cobalt in water by 6020
				Combo: TAL 23 Metals
				Copper in water by 6020
				EPH in water by MADEP Method
				Iron in water by 6020
				Lead in water by 6020
				Magnesium in water by 6020
				Manganese in water by 6020
				Mercury in water by 7470
				Nickel in water by 6020
				PCBs in water by 8082 DoD
				Potassium in water by 6020
				Selenium in water by 6020
				Silver in water by 6020
				Sodium in water by 6020
				Thallium in water by 6020
				Vanadium in water by 6020
				VOCs in water by 8260 DoD
				VPH in water by MA DEP Method
				Water Digestion for ICPMS Analysis
				Zinc in water by 6020

Project ID: Dow Salvage Yard 18001468

Sample Association Table

Field ID	Matrix	Date-Time Sampled	Lab#	Analysis
SY-OBMW9-110823	Water	11/8/2023 10:16	67836-003	
				Acid & Base/Neutral Extractables in water by 8270
				Aluminum in water by 6020
				Antimony in water by 6020
				Arsenic in water by 6020
				Barium in water by 6020
				Beryllium in water by 6020
				Cadmium in water by 6020
				Chromium in water by 6020
				Cobalt in water by 6020
				Combo: TAL 23 Metals
				Copper in water by 6020
				EPH in water by MADEP Method
				Iron in water by 6020
				Lead in water by 6020
				Magnesium in water by 6020
				Manganese in water by 6020
				Mercury in water by 7470
				Nickel in water by 6020
				PCBs in water by 8082 DoD
				Potassium in water by 6020
				Selenium in water by 6020
				Silver in water by 6020
				Sodium in water by 6020
				Thallium in water by 6020
				Vanadium in water by 6020
				VOCs in water by 8260 DoD
				VPH in water by MA DEP Method
				Water Digestion for ICPMS Analysis
				Zinc in water by 6020

Project ID: Dow Salvage Yard 18001468

Sample Association Table

Field ID	Matrix	Date-Time Sampled	Lab#	Analysis
SY-BRMW5-29-44-110823	Water	11/8/2023 11:00	67836-004	
				Acid & Base/Neutral Extractables in water by 8270
				Aluminum in water by 6020
				Antimony in water by 6020
				Arsenic in water by 6020
				Barium in water by 6020
				Beryllium in water by 6020
				Cadmium in water by 6020
				Chromium in water by 6020
				Cobalt in water by 6020
				Combo: TAL 23 Metals
				Copper in water by 6020
				EPH in water by MADEP Method
				Iron in water by 6020
				Lead in water by 6020
				Magnesium in water by 6020
				Manganese in water by 6020
				Mercury in water by 7470
				Nickel in water by 6020
				PCBs in water by 8082 DoD
				Potassium in water by 6020
				Selenium in water by 6020
				Silver in water by 6020
				Sodium in water by 6020
				Thallium in water by 6020
				Vanadium in water by 6020
				VOCs in water by 8260 DoD
				VPH in water by MA DEP Method
				Water Digestion for ICPMS Analysis
				Zinc in water by 6020

Project ID: Dow Salvage Yard 18001468

Sample Association Table

Field ID	Matrix	Date-Time Sampled	Lab#	Analysis
SY-BRMW5-123-133-110823	Water	11/8/2023 11:40	67836-005	
				Acid & Base/Neutral Extractables in water by 8270
				Aluminum in water by 6020
				Antimony in water by 6020
				Arsenic in water by 6020
				Barium in water by 6020
				Beryllium in water by 6020
				Cadmium in water by 6020
				Chromium in water by 6020
				Cobalt in water by 6020
				Combo: TAL 23 Metals
				Copper in water by 6020
				EPH in water by MADEP Method
				Iron in water by 6020
				Lead in water by 6020
				Magnesium in water by 6020
				Manganese in water by 6020
				Mercury in water by 7470
				Nickel in water by 6020
				PCBs in water by 8082 DoD
				Potassium in water by 6020
				Selenium in water by 6020
				Silver in water by 6020
				Sodium in water by 6020
				Thallium in water by 6020
				Vanadium in water by 6020
				VOCs in water by 8260 DoD
				VPH in water by MA DEP Method
				Water Digestion for ICPMS Analysis
				Zinc in water by 6020

Project ID: Dow Salvage Yard 18001468

Sample Association Table

Field ID	Matrix	Date-Time Sampled	Lab#	Analysis
SY-BRMW5-56-66-110823	Water	11/8/2023 11:15	67836-006	
				Acid & Base/Neutral Extractables in water by 8270
				Aluminum in water by 6020
				Antimony in water by 6020
				Arsenic in water by 6020
				Barium in water by 6020
				Beryllium in water by 6020
				Cadmium in water by 6020
				Chromium in water by 6020
				Cobalt in water by 6020
				Combo: TAL 23 Metals
				Copper in water by 6020
				EPH in water by MADEP Method
				Iron in water by 6020
				Lead in water by 6020
				Magnesium in water by 6020
				Manganese in water by 6020
				Mercury in water by 7470
				Nickel in water by 6020
				PCBs in water by 8082 DoD
				Potassium in water by 6020
				Selenium in water by 6020
				Silver in water by 6020
				Sodium in water by 6020
				Thallium in water by 6020
				Vanadium in water by 6020
				VOCs in water by 8260 DoD
				VPH in water by MA DEP Method
				Water Digestion for ICPMS Analysis
				Zinc in water by 6020

Project ID: Dow Salvage Yard 18001468

Sample Association Table

Field ID	Matrix	Date-Time Sampled	Lab#	Analysis
SY-OBMW8-110823	Water	11/8/2023 12:50	67836-007	
				Acid & Base/Neutral Extractables in water by 8270
				Aluminum in water by 6020
				Antimony in water by 6020
				Arsenic in water by 6020
				Barium in water by 6020
				Beryllium in water by 6020
				Cadmium in water by 6020
				Chromium in water by 6020
				Cobalt in water by 6020
				Combo: TAL 23 Metals
				Copper in water by 6020
				EPH in water by MADEP Method
				Iron in water by 6020
				Lead in water by 6020
				Magnesium in water by 6020
				Manganese in water by 6020
				Mercury in water by 7470
				Nickel in water by 6020
				PCBs in water by 8082 DoD
				Potassium in water by 6020
				Selenium in water by 6020
				Silver in water by 6020
				Sodium in water by 6020
				Thallium in water by 6020
				Vanadium in water by 6020
				VOCs in water by 8260 DoD
				VPH in water by MA DEP Method
				Water Digestion for ICPMS Analysis
				Zinc in water by 6020

Project ID: Dow Salvage Yard 18001468

Sample Association Table

Field ID	Matrix	Date-Time Sampled	Lab#	Analysis
SY-OBMW11-110823	Water	11/8/2023 14:17	67836-008	
				Acid & Base/Neutral Extractables in water by 8270
				Aluminum in water by 6020
				Antimony in water by 6020
				Arsenic in water by 6020
				Barium in water by 6020
				Beryllium in water by 6020
				Cadmium in water by 6020
				Chromium in water by 6020
				Cobalt in water by 6020
				Combo: TAL 23 Metals
				Copper in water by 6020
				EPH in water by MADEP Method
				Iron in water by 6020
				Lead in water by 6020
				Magnesium in water by 6020
				Manganese in water by 6020
				Mercury in water by 7470
				Nickel in water by 6020
				PCBs in water by 8082 DoD
				Potassium in water by 6020
				Selenium in water by 6020
				Silver in water by 6020
				Sodium in water by 6020
				Thallium in water by 6020
				Vanadium in water by 6020
				VOCs in water by 8260 DoD
				VPH in water by MA DEP Method
				Water Digestion for ICPMS Analysis
				Zinc in water by 6020

Project ID: Dow Salvage Yard 18001468

Sample Association Table

Field ID	Matrix	Date-Time Sampled	Lab#	Analysis
SY-OBMW110-110823	Water	11/8/2023 14:22	67836-009	
				Acid & Base/Neutral Extractables in water by 8270
				Aluminum in water by 6020
				Antimony in water by 6020
				Arsenic in water by 6020
				Barium in water by 6020
				Beryllium in water by 6020
				Cadmium in water by 6020
				Chromium in water by 6020
				Cobalt in water by 6020
				Combo: TAL 23 Metals
				Copper in water by 6020
				EPH in water by MADEP Method
				Iron in water by 6020
				Lead in water by 6020
				Magnesium in water by 6020
				Manganese in water by 6020
				Mercury in water by 7470
				Nickel in water by 6020
				PCBs in water by 8082 DoD
				Potassium in water by 6020
				Selenium in water by 6020
				Silver in water by 6020
				Sodium in water by 6020
				Thallium in water by 6020
				Vanadium in water by 6020
				VOCs in water by 8260 DoD
				VPH in water by MA DEP Method
				Water Digestion for ICPMS Analysis
				Zinc in water by 6020
TB32-110823	Water	11/8/2023 16:15	67836-010	
				VOCs in water by 8260 DoD
				VPH in water by MA DEP Method

Project ID: Dow Salvage Yard 18001468

Sample Association Table

Field ID	Matrix	Date-Time Sampled	Lab#	Analysis
SY-OBMW3-110823	Water	11/8/2023 11:15	67836-011	
				Acid & Base/Neutral Extractables in water by 8270
				Aluminum in water by 6020
				Antimony in water by 6020
				Arsenic in water by 6020
				Barium in water by 6020
				Beryllium in water by 6020
				Cadmium in water by 6020
				Chromium in water by 6020
				Cobalt in water by 6020
				Combo: TAL 23 Metals
				Copper in water by 6020
				EPH in water by MADEP Method
				Iron in water by 6020
				Lead in water by 6020
				Magnesium in water by 6020
				Manganese in water by 6020
				Mercury in water by 7470
				Nickel in water by 6020
				PCBs in water by 8082 DoD
				Potassium in water by 6020
				Selenium in water by 6020
				Silver in water by 6020
				Sodium in water by 6020
				Thallium in water by 6020
				Vanadium in water by 6020
				VOCs in water by 8260 DoD
				VPH in water by MA DEP Method
				Water Digestion for ICPMS Analysis
				Zinc in water by 6020

Project ID: Dow Salvage Yard 18001468

Sample Association Table

Field ID	Matrix	Date-Time Sampled	Lab#	Analysis
SY-OBMW2-110823-DISS	Water	11/8/2023 9:05	67836-012	
				Aluminum in water by 6020
				Antimony in water by 6020
				Arsenic in water by 6020
				Barium in water by 6020
				Beryllium in water by 6020
				Cadmium in water by 6020
				Chromium in water by 6020
				Cobalt in water by 6020
				Combo: TAL 23 Metals
				Copper in water by 6020
				Dissolved Prep for ICPMS Analysis
				Iron in water by 6020
				Lead in water by 6020
				Magnesium in water by 6020
				Manganese in water by 6020
				Mercury in water by 7470
				Nickel in water by 6020
				Potassium in water by 6020
				Selenium in water by 6020
				Silver in water by 6020
				Sodium in water by 6020
				Thallium in water by 6020
				Vanadium in water by 6020
				Zinc in water by 6020

Project ID: Dow Salvage Yard 18001468

Sample Association Table

Field ID	Matrix	Date-Time Sampled	Lab#	Analysis
SY-OBMW1-110823-DISS	Water	11/8/2023 9:35	67836-013	
				Aluminum in water by 6020
				Antimony in water by 6020
				Arsenic in water by 6020
				Barium in water by 6020
				Beryllium in water by 6020
				Cadmium in water by 6020
				Chromium in water by 6020
				Cobalt in water by 6020
				Combo: TAL 23 Metals
				Copper in water by 6020
				Dissolved Prep for ICPMS Analysis
				Iron in water by 6020
				Lead in water by 6020
				Magnesium in water by 6020
				Manganese in water by 6020
				Mercury in water by 7470
				Nickel in water by 6020
				Potassium in water by 6020
				Selenium in water by 6020
				Silver in water by 6020
				Sodium in water by 6020
				Thallium in water by 6020
				Vanadium in water by 6020
				Zinc in water by 6020

Project ID: Dow Salvage Yard 18001468

Sample Association Table

Field ID	Matrix	Date-Time Sampled	Lab#	Analysis
SY-OBMW9-110823-DISS	Water	11/8/2023 10:16	67836-014	
				Aluminum in water by 6020
				Antimony in water by 6020
				Arsenic in water by 6020
				Barium in water by 6020
				Beryllium in water by 6020
				Cadmium in water by 6020
				Chromium in water by 6020
				Cobalt in water by 6020
				Combo: TAL 23 Metals
				Copper in water by 6020
				Dissolved Prep for ICPMS Analysis
				Iron in water by 6020
				Lead in water by 6020
				Magnesium in water by 6020
				Manganese in water by 6020
				Mercury in water by 7470
				Nickel in water by 6020
				Potassium in water by 6020
				Selenium in water by 6020
				Silver in water by 6020
				Sodium in water by 6020
				Thallium in water by 6020
				Vanadium in water by 6020
				Zinc in water by 6020

Project ID: Dow Salvage Yard 18001468

Sample Association Table

Field ID	Matrix	Date-Time Sampled	Lab#	Analysis
SY-BRMW5-29-44-110823-DISS	Water	11/8/2023 11:00	67836-015	
				Aluminum in water by 6020
				Antimony in water by 6020
				Arsenic in water by 6020
				Barium in water by 6020
				Beryllium in water by 6020
				Cadmium in water by 6020
				Chromium in water by 6020
				Cobalt in water by 6020
				Combo: TAL 23 Metals
				Copper in water by 6020
				Dissolved Prep for ICPMS Analysis
				Iron in water by 6020
				Lead in water by 6020
				Magnesium in water by 6020
				Manganese in water by 6020
				Mercury in water by 7470
				Nickel in water by 6020
				Potassium in water by 6020
				Selenium in water by 6020
				Silver in water by 6020
				Sodium in water by 6020
				Thallium in water by 6020
				Vanadium in water by 6020
				Zinc in water by 6020

Project ID: Dow Salvage Yard 18001468

Sample Association Table

Field ID	Matrix	Date-Time Sampled	Lab#	Analysis
SY-BRMW5-123-133-110823-DISS	Water	11/8/2023 11:40	67836-016	
				Aluminum in water by 6020
				Antimony in water by 6020
				Arsenic in water by 6020
				Barium in water by 6020
				Beryllium in water by 6020
				Cadmium in water by 6020
				Chromium in water by 6020
				Cobalt in water by 6020
				Combo: TAL 23 Metals
				Copper in water by 6020
				Dissolved Prep for ICPMS Analysis
				Iron in water by 6020
				Lead in water by 6020
				Magnesium in water by 6020
				Manganese in water by 6020
				Mercury in water by 7470
				Nickel in water by 6020
				Potassium in water by 6020
				Selenium in water by 6020
				Silver in water by 6020
				Sodium in water by 6020
				Thallium in water by 6020
				Vanadium in water by 6020
				Zinc in water by 6020

Project ID: Dow Salvage Yard 18001468

Sample Association Table

Field ID	Matrix	Date-Time Sampled	Lab#	Analysis
SY-BRMW5-56-66-110823-DISS	Water	11/8/2023 11:15	67836-017	
				Aluminum in water by 6020
				Antimony in water by 6020
				Arsenic in water by 6020
				Barium in water by 6020
				Beryllium in water by 6020
				Cadmium in water by 6020
				Chromium in water by 6020
				Cobalt in water by 6020
				Combo: TAL 23 Metals
				Copper in water by 6020
				Dissolved Prep for ICPMS Analysis
				Iron in water by 6020
				Lead in water by 6020
				Magnesium in water by 6020
				Manganese in water by 6020
				Mercury in water by 7470
				Nickel in water by 6020
				Potassium in water by 6020
				Selenium in water by 6020
				Silver in water by 6020
				Sodium in water by 6020
				Thallium in water by 6020
				Vanadium in water by 6020
				Zinc in water by 6020

Project ID: Dow Salvage Yard 18001468

Sample Association Table

Field ID	Matrix	Date-Time Sampled	Lab#	Analysis
SY-OBMW8-110823-DISS	Water	11/8/2023 12:50	67836-018	
				Aluminum in water by 6020
				Antimony in water by 6020
				Arsenic in water by 6020
				Barium in water by 6020
				Beryllium in water by 6020
				Cadmium in water by 6020
				Chromium in water by 6020
				Cobalt in water by 6020
				Combo: TAL 23 Metals
				Copper in water by 6020
				Dissolved Prep for ICPMS Analysis
				Iron in water by 6020
				Lead in water by 6020
				Magnesium in water by 6020
				Manganese in water by 6020
				Mercury in water by 7470
				Nickel in water by 6020
				Potassium in water by 6020
				Selenium in water by 6020
				Silver in water by 6020
				Sodium in water by 6020
				Thallium in water by 6020
				Vanadium in water by 6020
				Zinc in water by 6020

Project ID: Dow Salvage Yard 18001468

Sample Association Table

Field ID	Matrix	Date-Time Sampled	Lab#	Analysis
SY-OBMW11-110823-DISS	Water	11/8/2023 14:17	67836-019	
				Aluminum in water by 6020
				Antimony in water by 6020
				Arsenic in water by 6020
				Barium in water by 6020
				Beryllium in water by 6020
				Cadmium in water by 6020
				Chromium in water by 6020
				Cobalt in water by 6020
				Combo: TAL 23 Metals
				Copper in water by 6020
				Dissolved Prep for ICPMS Analysis
				Iron in water by 6020
				Lead in water by 6020
				Magnesium in water by 6020
				Manganese in water by 6020
				Mercury in water by 7470
				Nickel in water by 6020
				Potassium in water by 6020
				Selenium in water by 6020
				Silver in water by 6020
				Sodium in water by 6020
				Thallium in water by 6020
				Vanadium in water by 6020
				Zinc in water by 6020

Project ID: Dow Salvage Yard 18001468

Sample Association Table

Field ID	Matrix	Date-Time Sampled	Lab#	Analysis
SY-OBMW110-110823-DISS	Water	11/8/2023 14:22	67836-020	
				Aluminum in water by 6020
				Antimony in water by 6020
				Arsenic in water by 6020
				Barium in water by 6020
				Beryllium in water by 6020
				Cadmium in water by 6020
				Chromium in water by 6020
				Cobalt in water by 6020
				Combo: TAL 23 Metals
				Copper in water by 6020
				Dissolved Prep for ICPMS Analysis
				Iron in water by 6020
				Lead in water by 6020
				Magnesium in water by 6020
				Manganese in water by 6020
				Mercury in water by 7470
				Nickel in water by 6020
				Potassium in water by 6020
				Selenium in water by 6020
				Silver in water by 6020
				Sodium in water by 6020
				Thallium in water by 6020
				Vanadium in water by 6020
				Zinc in water by 6020

Project ID: Dow Salvage Yard 18001468

Sample Association Table

Field ID	Matrix	Date-Time Sampled	Lab#	Analysis
SY-OBMW3-110823-DISS	Water	11/8/2023 11:15	67836-021	
				Aluminum in water by 6020
				Antimony in water by 6020
				Arsenic in water by 6020
				Barium in water by 6020
				Beryllium in water by 6020
				Cadmium in water by 6020
				Chromium in water by 6020
				Cobalt in water by 6020
				Combo: TAL 23 Metals
				Copper in water by 6020
				Dissolved Prep for ICPMS Analysis
				Iron in water by 6020
				Lead in water by 6020
				Magnesium in water by 6020
				Manganese in water by 6020
				Mercury in water by 7470
				Nickel in water by 6020
				Potassium in water by 6020
				Selenium in water by 6020
				Silver in water by 6020
				Sodium in water by 6020
				Thallium in water by 6020
				Vanadium in water by 6020
				Zinc in water by 6020

Project ID: Dow Salvage Yard 18001468
Job ID: 67836
Sample#: 67836-001
Sample ID: SY-OBMW2-110823
Matrix: Water
Sampled: 11/8/23 9:05

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
dichlorodifluoromethane	1.0 U	2.0	1.0	0.28	ug/L	1	LMM			2303756	11/16/23	14:52	SW5030C8260D
chloromethane	1.0 U	2.0	1.0	0.59	ug/L	1	LMM			2303756	11/16/23	14:52	SW5030C8260D
vinyl chloride	1.0 U	2.0	1.0	0.49	ug/L	1	LMM			2303756	11/16/23	14:52	SW5030C8260D
bromomethane	1.5 U	2.0	1.5	1.1	ug/L	1	LMM			2303756	11/16/23	14:52	SW5030C8260D
chloroethane	1.0 U	2.0	1.0	0.33	ug/L	1	LMM			2303756	11/16/23	14:52	SW5030C8260D
trichlorofluoromethane	1.0 U	2.0	1.0	0.34	ug/L	1	LMM			2303756	11/16/23	14:52	SW5030C8260D
diethyl ether	1.0 U	2.0	1.0	0.41	ug/L	1	LMM			2303756	11/16/23	14:52	SW5030C8260D
acetone	5.0 U	50	5.0	1.9	ug/L	1	LMM			2303756	11/16/23	14:52	SW5030C8260D
1,1-dichloroethene	0.50 U	1.0	0.50	0.35	ug/L	1	LMM			2303756	11/16/23	14:52	SW5030C8260D
methylene chloride	1.0 U	2.0	1.0	0.59	ug/L	1	LMM			2303756	11/16/23	14:52	SW5030C8260D
carbon disulfide	1.0 U	2.0	1.0	0.33	ug/L	1	LMM			2303756	11/16/23	14:52	SW5030C8260D
methyl t-butyl ether (MTBE)	1.0 U	2.0	1.0	0.30	ug/L	1	LMM			2303756	11/16/23	14:52	SW5030C8260D
trans-1,2-dichloroethene	1.0 U	2.0	1.0	0.46	ug/L	1	LMM			2303756	11/16/23	14:52	SW5030C8260D
ethyl t-butyl ether (ETBE)	1.0 U	2.0	1.0	0.24	ug/L	1	LMM			2303756	11/16/23	14:52	SW5030C8260D
1,1-dichloroethane	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303756	11/16/23	14:52	SW5030C8260D
t-butanol (TBA)	10 U	30	10	2.5	ug/L	1	LMM			2303756	11/16/23	14:52	SW5030C8260D
2-butanone (MEK)	5.0 U	10	5.0	0.67	ug/L	1	LMM			2303756	11/16/23	14:52	SW5030C8260D
2,2-dichloropropane	1.0 U	2.0	1.0	0.21	ug/L	1	LMM			2303756	11/16/23	14:52	SW5030C8260D
cis-1,2-dichloroethene	1.5 U	2.0	1.5	1.2	ug/L	1	LMM			2303756	11/16/23	14:52	SW5030C8260D
chloroform	1.5 U	2.0	1.5	1.4	ug/L	1	LMM			2303756	11/16/23	14:52	SW5030C8260D
bromochloromethane	1.0 U	2.0	1.0	0.22	ug/L	1	LMM			2303756	11/16/23	14:52	SW5030C8260D
tetrahydrofuran (THF)	1.5 U	2.0	1.5	0.75	ug/L	1	LMM			2303756	11/16/23	14:52	SW5030C8260D
1,1,1-trichloroethane	1.0 U	2.0	1.0	0.55	ug/L	1	LMM			2303756	11/16/23	14:52	SW5030C8260D
1,1-dichloropropene	1.0 U	2.0	1.0	0.26	ug/L	1	LMM			2303756	11/16/23	14:52	SW5030C8260D
t-amyl-methyl ether (TAME)	1.0 U	2.0	1.0	0.57	ug/L	1	LMM			2303756	11/16/23	14:52	SW5030C8260D
carbon tetrachloride	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303756	11/16/23	14:52	SW5030C8260D
1,2-dichloroethane	1.0 U	2.0	1.0	0.20	ug/L	1	LMM			2303756	11/16/23	14:52	SW5030C8260D
benzene	1.0 U	2.0	1.0	0.40	ug/L	1	LMM			2303756	11/16/23	14:52	SW5030C8260D
trichloroethene	1.0 U	2.0	1.0	0.53	ug/L	1	LMM			2303756	11/16/23	14:52	SW5030C8260D
1,2-dichloropropane	1.0 U	2.0	1.0	0.22	ug/L	1	LMM			2303756	11/16/23	14:52	SW5030C8260D
bromodichloromethane	0.50 U	0.60	0.50	0.38	ug/L	1	LMM			2303756	11/16/23	14:52	SW5030C8260D
1,4-dioxane	10 U	50	10	8.7	ug/L	1	LMM			2303756	11/16/23	14:52	SW5030C8260D
dibromomethane	1.0 U	2.0	1.0	0.23	ug/L	1	LMM			2303756	11/16/23	14:52	SW5030C8260D
4-methyl-2-pentanone (MIBK)	1.0 U	10	1.0	0.56	ug/L	1	LMM			2303756	11/16/23	14:52	SW5030C8260D
cis-1,3-dichloropropene	1.0 U	2.0	1.0	0.30	ug/L	1	LMM			2303756	11/16/23	14:52	SW5030C8260D
toluene	1.0 U	2.0	1.0	0.45	ug/L	1	LMM			2303756	11/16/23	14:52	SW5030C8260D
trans-1,3-dichloropropene	1.0 U	2.0	1.0	0.34	ug/L	1	LMM			2303756	11/16/23	14:52	SW5030C8260D
2-hexanone	1.0 U	10	1.0	0.72	ug/L	1	LMM			2303756	11/16/23	14:52	SW5030C8260D
1,1,2-trichloroethane	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303756	11/16/23	14:52	SW5030C8260D
1,3-dichloropropane	1.0 U	2.0	1.0	0.25	ug/L	1	LMM			2303756	11/16/23	14:52	SW5030C8260D
tetrachloroethene	1.0 U	2.0	1.0	0.76	ug/L	1	LMM			2303756	11/16/23	14:52	SW5030C8260D
dibromochloromethane	1.0 U	2.0	1.0	0.21	ug/L	1	LMM			2303756	11/16/23	14:52	SW5030C8260D

Project ID: Dow Salvage Yard 18001468
Job ID: 67836
Sample#: 67836-001
Sample ID: SY-OBMW2-110823
Matrix: Water
Sampled: 11/8/23 9:05

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
1,2-dibromoethane (EDB)	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303756	11/16/23	14:52	SW5030C8260D
chlorobenzene	1.0 U	2.0	1.0	0.25	ug/L	1	LMM			2303756	11/16/23	14:52	SW5030C8260D
1,1,1,2-tetrachloroethane	1.0 U	2.0	1.0	0.21	ug/L	1	LMM			2303756	11/16/23	14:52	SW5030C8260D
ethylbenzene	1.0 U	2.0	1.0	0.65	ug/L	1	LMM			2303756	11/16/23	14:52	SW5030C8260D
m&p-xylenes	1.5 U	2.0	1.5	1.4	ug/L	1	LMM			2303756	11/16/23	14:52	SW5030C8260D
o-xylene	1.0 U	2.0	1.0	0.55	ug/L	1	LMM			2303756	11/16/23	14:52	SW5030C8260D
styrene	1.0 U	2.0	1.0	0.57	ug/L	1	LMM			2303756	11/16/23	14:52	SW5030C8260D
bromoform	1.0 U	2.0	1.0	0.24	ug/L	1	LMM			2303756	11/16/23	14:52	SW5030C8260D
isopropylbenzene	1.0 U	2.0	1.0	0.65	ug/L	1	LMM			2303756	11/16/23	14:52	SW5030C8260D
1,1,2,2-tetrachloroethane	1.0 U	2.0	1.0	0.29	ug/L	1	LMM			2303756	11/16/23	14:52	SW5030C8260D
1,2,3-trichloropropane	1.0 U	2.0	1.0	0.55	ug/L	1	LMM			2303756	11/16/23	14:52	SW5030C8260D
n-propylbenzene	1.0 U	2.0	1.0	0.44	ug/L	1	LMM			2303756	11/16/23	14:52	SW5030C8260D
bromobenzene	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303756	11/16/23	14:52	SW5030C8260D
2-chlorotoluene	1.0 U	2.0	1.0	0.23	ug/L	1	LMM			2303756	11/16/23	14:52	SW5030C8260D
4-chlorotoluene	1.0 U	2.0	1.0	0.33	ug/L	1	LMM			2303756	11/16/23	14:52	SW5030C8260D
tert-butylbenzene	1.0 U	2.0	1.0	0.39	ug/L	1	LMM			2303756	11/16/23	14:52	SW5030C8260D
1,2,4-trimethylbenzene	1.0 U	2.0	1.0	0.58	ug/L	1	LMM			2303756	11/16/23	14:52	SW5030C8260D
sec-butylbenzene	1.0 U	2.0	1.0	0.44	ug/L	1	LMM			2303756	11/16/23	14:52	SW5030C8260D
1,3-dichlorobenzene	1.0 U	2.0	1.0	0.45	ug/L	1	LMM			2303756	11/16/23	14:52	SW5030C8260D
4-isopropyltoluene	1.0 U	2.0	1.0	0.47	ug/L	1	LMM			2303756	11/16/23	14:52	SW5030C8260D
1,4-dichlorobenzene	1.0 U	2.0	1.0	0.26	ug/L	1	LMM			2303756	11/16/23	14:52	SW5030C8260D
1,2-dichlorobenzene	1.0 U	2.0	1.0	0.39	ug/L	1	LMM			2303756	11/16/23	14:52	SW5030C8260D
n-butylbenzene	1.0 U	2.0	1.0	0.54	ug/L	1	LMM			2303756	11/16/23	14:52	SW5030C8260D
1,2-dibromo-3-chloropropane (DBCP)	1.5 U	2.0	1.5	0.91	ug/L	1	LMM			2303756	11/16/23	14:52	SW5030C8260D
1,3,5-trimethylbenzene	1.0 U	2.0	1.0	0.46	ug/L	1	LMM			2303756	11/16/23	14:52	SW5030C8260D
1,2,4-trichlorobenzene	1.0 U	2.0	1.0	0.79	ug/L	1	LMM			2303756	11/16/23	14:52	SW5030C8260D
hexachlorobutadiene	0.50 U	0.50	0.50	0.19	ug/L	1	LMM			2303756	11/16/23	14:52	SW5030C8260D
naphthalene	1.5 U	2.0	1.5	1.2	ug/L	1	LMM			2303756	11/16/23	14:52	SW5030C8260D
1,2,3-trichlorobenzene	1.0 U	2.0	1.0	0.93	ug/L	1	LMM			2303756	11/16/23	14:52	SW5030C8260D
Surrogate Recovery		Limits											
dibromofluoromethane SUR	97	78-114			%	1	LMM			2303756	11/16/23	14:52	SW5030C8260D
toluene-D8 SUR	98	88-110			%	1	LMM			2303756	11/16/23	14:52	SW5030C8260D
4-bromofluorobenzene SUR	100	86-115			%	1	LMM			2303756	11/16/23	14:52	SW5030C8260D

Project ID: Dow Salvage Yard 18001468
Job ID: 67836
Sample#: 67836-002
Sample ID: SY-OBMW1-110823
Matrix: Water
Sampled: 11/8/23 9:35

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
dichlorodifluoromethane	1.0 U	2.0	1.0	0.28	ug/L	1	LMM			2303756	11/16/23	15:17	SW5030C8260D
chloromethane	1.0 U	2.0	1.0	0.59	ug/L	1	LMM			2303756	11/16/23	15:17	SW5030C8260D
vinyl chloride	1.0 U	2.0	1.0	0.49	ug/L	1	LMM			2303756	11/16/23	15:17	SW5030C8260D
bromomethane	1.5 U	2.0	1.5	1.1	ug/L	1	LMM			2303756	11/16/23	15:17	SW5030C8260D
chloroethane	1.0 U	2.0	1.0	0.33	ug/L	1	LMM			2303756	11/16/23	15:17	SW5030C8260D
trichlorofluoromethane	1.0 U	2.0	1.0	0.34	ug/L	1	LMM			2303756	11/16/23	15:17	SW5030C8260D
diethyl ether	1.0 U	2.0	1.0	0.41	ug/L	1	LMM			2303756	11/16/23	15:17	SW5030C8260D
acetone	5.0 U	50	5.0	1.9	ug/L	1	LMM			2303756	11/16/23	15:17	SW5030C8260D
1,1-dichloroethene	0.50 U	1.0	0.50	0.35	ug/L	1	LMM			2303756	11/16/23	15:17	SW5030C8260D
methylene chloride	1.0 U	2.0	1.0	0.59	ug/L	1	LMM			2303756	11/16/23	15:17	SW5030C8260D
carbon disulfide	1.0 U	2.0	1.0	0.33	ug/L	1	LMM			2303756	11/16/23	15:17	SW5030C8260D
methyl t-butyl ether (MTBE)	1.0 U	2.0	1.0	0.30	ug/L	1	LMM			2303756	11/16/23	15:17	SW5030C8260D
trans-1,2-dichloroethene	1.0 U	2.0	1.0	0.46	ug/L	1	LMM			2303756	11/16/23	15:17	SW5030C8260D
ethyl t-butyl ether (ETBE)	1.0 U	2.0	1.0	0.24	ug/L	1	LMM			2303756	11/16/23	15:17	SW5030C8260D
1,1-dichloroethane	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303756	11/16/23	15:17	SW5030C8260D
t-butanol (TBA)	10 U	30	10	2.5	ug/L	1	LMM			2303756	11/16/23	15:17	SW5030C8260D
2-butanone (MEK)	5.0 U	10	5.0	0.67	ug/L	1	LMM			2303756	11/16/23	15:17	SW5030C8260D
2,2-dichloropropane	1.0 U	2.0	1.0	0.21	ug/L	1	LMM			2303756	11/16/23	15:17	SW5030C8260D
cis-1,2-dichloroethene	1.5 U	2.0	1.5	1.2	ug/L	1	LMM			2303756	11/16/23	15:17	SW5030C8260D
chloroform	1.5 U	2.0	1.5	1.4	ug/L	1	LMM			2303756	11/16/23	15:17	SW5030C8260D
bromochloromethane	1.0 U	2.0	1.0	0.22	ug/L	1	LMM			2303756	11/16/23	15:17	SW5030C8260D
tetrahydrofuran (THF)	1.5 U	2.0	1.5	0.75	ug/L	1	LMM			2303756	11/16/23	15:17	SW5030C8260D
1,1,1-trichloroethane	1.0 U	2.0	1.0	0.55	ug/L	1	LMM			2303756	11/16/23	15:17	SW5030C8260D
1,1-dichloropropene	1.0 U	2.0	1.0	0.26	ug/L	1	LMM			2303756	11/16/23	15:17	SW5030C8260D
t-amyl-methyl ether (TAME)	1.0 U	2.0	1.0	0.57	ug/L	1	LMM			2303756	11/16/23	15:17	SW5030C8260D
carbon tetrachloride	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303756	11/16/23	15:17	SW5030C8260D
1,2-dichloroethane	1.0 U	2.0	1.0	0.20	ug/L	1	LMM			2303756	11/16/23	15:17	SW5030C8260D
benzene	1.0 U	2.0	1.0	0.40	ug/L	1	LMM			2303756	11/16/23	15:17	SW5030C8260D
trichloroethene	1.0 U	2.0	1.0	0.53	ug/L	1	LMM			2303756	11/16/23	15:17	SW5030C8260D
1,2-dichloropropane	1.0 U	2.0	1.0	0.22	ug/L	1	LMM			2303756	11/16/23	15:17	SW5030C8260D
bromodichloromethane	0.50 U	0.60	0.50	0.38	ug/L	1	LMM			2303756	11/16/23	15:17	SW5030C8260D
1,4-dioxane	10 U	50	10	8.7	ug/L	1	LMM			2303756	11/16/23	15:17	SW5030C8260D
dibromomethane	1.0 U	2.0	1.0	0.23	ug/L	1	LMM			2303756	11/16/23	15:17	SW5030C8260D
4-methyl-2-pentanone (MIBK)	1.0 U	10	1.0	0.56	ug/L	1	LMM			2303756	11/16/23	15:17	SW5030C8260D
cis-1,3-dichloropropene	1.0 U	2.0	1.0	0.30	ug/L	1	LMM			2303756	11/16/23	15:17	SW5030C8260D
toluene	1.0 U	2.0	1.0	0.45	ug/L	1	LMM			2303756	11/16/23	15:17	SW5030C8260D
trans-1,3-dichloropropene	1.0 U	2.0	1.0	0.34	ug/L	1	LMM			2303756	11/16/23	15:17	SW5030C8260D
2-hexanone	1.0 U	10	1.0	0.72	ug/L	1	LMM			2303756	11/16/23	15:17	SW5030C8260D
1,1,2-trichloroethane	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303756	11/16/23	15:17	SW5030C8260D
1,3-dichloropropane	1.0 U	2.0	1.0	0.25	ug/L	1	LMM			2303756	11/16/23	15:17	SW5030C8260D
tetrachloroethene	1.0 U	2.0	1.0	0.76	ug/L	1	LMM			2303756	11/16/23	15:17	SW5030C8260D
dibromochloromethane	1.0 U	2.0	1.0	0.21	ug/L	1	LMM			2303756	11/16/23	15:17	SW5030C8260D

Project ID: Dow Salvage Yard 18001468
Job ID: 67836
Sample#: 67836-002
Sample ID: SY-OBMW1-110823
Matrix: Water
Sampled: 11/8/23 9:35

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
1,2-dibromoethane (EDB)	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303756	11/16/23	15:17	SW5030C8260D
chlorobenzene	1.0 U	2.0	1.0	0.25	ug/L	1	LMM			2303756	11/16/23	15:17	SW5030C8260D
1,1,1,2-tetrachloroethane	1.0 U	2.0	1.0	0.21	ug/L	1	LMM			2303756	11/16/23	15:17	SW5030C8260D
ethylbenzene	1.0 U	2.0	1.0	0.65	ug/L	1	LMM			2303756	11/16/23	15:17	SW5030C8260D
m&p-xylenes	1.5 U	2.0	1.5	1.4	ug/L	1	LMM			2303756	11/16/23	15:17	SW5030C8260D
o-xylene	1.0 U	2.0	1.0	0.55	ug/L	1	LMM			2303756	11/16/23	15:17	SW5030C8260D
styrene	1.0 U	2.0	1.0	0.57	ug/L	1	LMM			2303756	11/16/23	15:17	SW5030C8260D
bromoform	1.0 U	2.0	1.0	0.24	ug/L	1	LMM			2303756	11/16/23	15:17	SW5030C8260D
isopropylbenzene	1.0 U	2.0	1.0	0.65	ug/L	1	LMM			2303756	11/16/23	15:17	SW5030C8260D
1,1,2,2-tetrachloroethane	1.0 U	2.0	1.0	0.29	ug/L	1	LMM			2303756	11/16/23	15:17	SW5030C8260D
1,2,3-trichloropropane	1.0 U	2.0	1.0	0.55	ug/L	1	LMM			2303756	11/16/23	15:17	SW5030C8260D
n-propylbenzene	1.0 U	2.0	1.0	0.44	ug/L	1	LMM			2303756	11/16/23	15:17	SW5030C8260D
bromobenzene	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303756	11/16/23	15:17	SW5030C8260D
2-chlorotoluene	1.0 U	2.0	1.0	0.23	ug/L	1	LMM			2303756	11/16/23	15:17	SW5030C8260D
4-chlorotoluene	1.0 U	2.0	1.0	0.33	ug/L	1	LMM			2303756	11/16/23	15:17	SW5030C8260D
tert-butylbenzene	1.0 U	2.0	1.0	0.39	ug/L	1	LMM			2303756	11/16/23	15:17	SW5030C8260D
1,2,4-trimethylbenzene	1.0 U	2.0	1.0	0.58	ug/L	1	LMM			2303756	11/16/23	15:17	SW5030C8260D
sec-butylbenzene	1.0 U	2.0	1.0	0.44	ug/L	1	LMM			2303756	11/16/23	15:17	SW5030C8260D
1,3-dichlorobenzene	1.0 U	2.0	1.0	0.45	ug/L	1	LMM			2303756	11/16/23	15:17	SW5030C8260D
4-isopropyltoluene	1.0 U	2.0	1.0	0.47	ug/L	1	LMM			2303756	11/16/23	15:17	SW5030C8260D
1,4-dichlorobenzene	1.0 U	2.0	1.0	0.26	ug/L	1	LMM			2303756	11/16/23	15:17	SW5030C8260D
1,2-dichlorobenzene	1.0 U	2.0	1.0	0.39	ug/L	1	LMM			2303756	11/16/23	15:17	SW5030C8260D
n-butylbenzene	1.0 U	2.0	1.0	0.54	ug/L	1	LMM			2303756	11/16/23	15:17	SW5030C8260D
1,2-dibromo-3-chloropropane (DBCP)	1.5 U	2.0	1.5	0.91	ug/L	1	LMM			2303756	11/16/23	15:17	SW5030C8260D
1,3,5-trimethylbenzene	1.0 U	2.0	1.0	0.46	ug/L	1	LMM			2303756	11/16/23	15:17	SW5030C8260D
1,2,4-trichlorobenzene	1.0 U	2.0	1.0	0.79	ug/L	1	LMM			2303756	11/16/23	15:17	SW5030C8260D
hexachlorobutadiene	0.50 U	0.50	0.50	0.19	ug/L	1	LMM			2303756	11/16/23	15:17	SW5030C8260D
naphthalene	1.5 U	2.0	1.5	1.2	ug/L	1	LMM			2303756	11/16/23	15:17	SW5030C8260D
1,2,3-trichlorobenzene	1.0 U	2.0	1.0	0.93	ug/L	1	LMM			2303756	11/16/23	15:17	SW5030C8260D
Surrogate Recovery		Limits											
dibromofluoromethane SUR	99	78-114			%	1	LMM			2303756	11/16/23	15:17	SW5030C8260D
toluene-D8 SUR	103	88-110			%	1	LMM			2303756	11/16/23	15:17	SW5030C8260D
4-bromofluorobenzene SUR	97	86-115			%	1	LMM			2303756	11/16/23	15:17	SW5030C8260D

Project ID: Dow Salvage Yard 18001468
Job ID: 67836
Sample#: 67836-003
Sample ID: SY-OBMW9-110823
Matrix: Water
Sampled: 11/8/23 10:16

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
dichlorodifluoromethane	1.0 U	2.0	1.0	0.28	ug/L	1	LMM			2303756	11/16/23	15:43	SW5030C8260D
chloromethane	1.0 U	2.0	1.0	0.59	ug/L	1	LMM			2303756	11/16/23	15:43	SW5030C8260D
vinyl chloride	1.0 U	2.0	1.0	0.49	ug/L	1	LMM			2303756	11/16/23	15:43	SW5030C8260D
bromomethane	1.5 U	2.0	1.5	1.1	ug/L	1	LMM			2303756	11/16/23	15:43	SW5030C8260D
chloroethane	1.0 U	2.0	1.0	0.33	ug/L	1	LMM			2303756	11/16/23	15:43	SW5030C8260D
trichlorofluoromethane	1.0 U	2.0	1.0	0.34	ug/L	1	LMM			2303756	11/16/23	15:43	SW5030C8260D
diethyl ether	1.0 U	2.0	1.0	0.41	ug/L	1	LMM			2303756	11/16/23	15:43	SW5030C8260D
acetone	5.0 U	50	5.0	1.9	ug/L	1	LMM			2303756	11/16/23	15:43	SW5030C8260D
1,1-dichloroethene	0.50 U	1.0	0.50	0.35	ug/L	1	LMM			2303756	11/16/23	15:43	SW5030C8260D
methylene chloride	1.0 U	2.0	1.0	0.59	ug/L	1	LMM			2303756	11/16/23	15:43	SW5030C8260D
carbon disulfide	1.0 U	2.0	1.0	0.33	ug/L	1	LMM			2303756	11/16/23	15:43	SW5030C8260D
methyl t-butyl ether (MTBE)	1.0 U	2.0	1.0	0.30	ug/L	1	LMM			2303756	11/16/23	15:43	SW5030C8260D
trans-1,2-dichloroethene	1.0 U	2.0	1.0	0.46	ug/L	1	LMM			2303756	11/16/23	15:43	SW5030C8260D
ethyl t-butyl ether (ETBE)	1.0 U	2.0	1.0	0.24	ug/L	1	LMM			2303756	11/16/23	15:43	SW5030C8260D
1,1-dichloroethane	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303756	11/16/23	15:43	SW5030C8260D
t-butanol (TBA)	10 U	30	10	2.5	ug/L	1	LMM			2303756	11/16/23	15:43	SW5030C8260D
2-butanone (MEK)	5.0 U	10	5.0	0.67	ug/L	1	LMM			2303756	11/16/23	15:43	SW5030C8260D
2,2-dichloropropane	1.0 U	2.0	1.0	0.21	ug/L	1	LMM			2303756	11/16/23	15:43	SW5030C8260D
cis-1,2-dichloroethene	1.5 U	2.0	1.5	1.2	ug/L	1	LMM			2303756	11/16/23	15:43	SW5030C8260D
chloroform	1.5 U	2.0	1.5	1.4	ug/L	1	LMM			2303756	11/16/23	15:43	SW5030C8260D
bromochloromethane	1.0 U	2.0	1.0	0.22	ug/L	1	LMM			2303756	11/16/23	15:43	SW5030C8260D
tetrahydrofuran (THF)	1.5 U	2.0	1.5	0.75	ug/L	1	LMM			2303756	11/16/23	15:43	SW5030C8260D
1,1,1-trichloroethane	1.0 U	2.0	1.0	0.55	ug/L	1	LMM			2303756	11/16/23	15:43	SW5030C8260D
1,1-dichloropropene	1.0 U	2.0	1.0	0.26	ug/L	1	LMM			2303756	11/16/23	15:43	SW5030C8260D
t-amyl-methyl ether (TAME)	1.0 U	2.0	1.0	0.57	ug/L	1	LMM			2303756	11/16/23	15:43	SW5030C8260D
carbon tetrachloride	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303756	11/16/23	15:43	SW5030C8260D
1,2-dichloroethane	1.0 U	2.0	1.0	0.20	ug/L	1	LMM			2303756	11/16/23	15:43	SW5030C8260D
benzene	1.0 U	2.0	1.0	0.40	ug/L	1	LMM			2303756	11/16/23	15:43	SW5030C8260D
trichloroethene	1.0 U	2.0	1.0	0.53	ug/L	1	LMM			2303756	11/16/23	15:43	SW5030C8260D
1,2-dichloropropane	1.0 U	2.0	1.0	0.22	ug/L	1	LMM			2303756	11/16/23	15:43	SW5030C8260D
bromodichloromethane	0.50 U	0.60	0.50	0.38	ug/L	1	LMM			2303756	11/16/23	15:43	SW5030C8260D
1,4-dioxane	10 U	50	10	8.7	ug/L	1	LMM			2303756	11/16/23	15:43	SW5030C8260D
dibromomethane	1.0 U	2.0	1.0	0.23	ug/L	1	LMM			2303756	11/16/23	15:43	SW5030C8260D
4-methyl-2-pentanone (MIBK)	1.0 U	10	1.0	0.56	ug/L	1	LMM			2303756	11/16/23	15:43	SW5030C8260D
cis-1,3-dichloropropene	1.0 U	2.0	1.0	0.30	ug/L	1	LMM			2303756	11/16/23	15:43	SW5030C8260D
toluene	1.0 U	2.0	1.0	0.45	ug/L	1	LMM			2303756	11/16/23	15:43	SW5030C8260D
trans-1,3-dichloropropene	1.0 U	2.0	1.0	0.34	ug/L	1	LMM			2303756	11/16/23	15:43	SW5030C8260D
2-hexanone	1.0 U	10	1.0	0.72	ug/L	1	LMM			2303756	11/16/23	15:43	SW5030C8260D
1,1,2-trichloroethane	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303756	11/16/23	15:43	SW5030C8260D
1,3-dichloropropane	1.0 U	2.0	1.0	0.25	ug/L	1	LMM			2303756	11/16/23	15:43	SW5030C8260D
tetrachloroethene	1.0 U	2.0	1.0	0.76	ug/L	1	LMM			2303756	11/16/23	15:43	SW5030C8260D
dibromochloromethane	1.0 U	2.0	1.0	0.21	ug/L	1	LMM			2303756	11/16/23	15:43	SW5030C8260D

Project ID: Dow Salvage Yard 18001468
Job ID: 67836
Sample#: 67836-003
Sample ID: SY-OBMW9-110823
Matrix: Water
Sampled: 11/8/23 10:16

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
1,2-dibromoethane (EDB)	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303756	11/16/23	15:43	SW5030C8260D
chlorobenzene	1.0 U	2.0	1.0	0.25	ug/L	1	LMM			2303756	11/16/23	15:43	SW5030C8260D
1,1,1,2-tetrachloroethane	1.0 U	2.0	1.0	0.21	ug/L	1	LMM			2303756	11/16/23	15:43	SW5030C8260D
ethylbenzene	1.0 U	2.0	1.0	0.65	ug/L	1	LMM			2303756	11/16/23	15:43	SW5030C8260D
m&p-xylenes	1.5 U	2.0	1.5	1.4	ug/L	1	LMM			2303756	11/16/23	15:43	SW5030C8260D
o-xylene	1.0 U	2.0	1.0	0.55	ug/L	1	LMM			2303756	11/16/23	15:43	SW5030C8260D
styrene	1.0 U	2.0	1.0	0.57	ug/L	1	LMM			2303756	11/16/23	15:43	SW5030C8260D
bromoform	1.0 U	2.0	1.0	0.24	ug/L	1	LMM			2303756	11/16/23	15:43	SW5030C8260D
isopropylbenzene	1.0 U	2.0	1.0	0.65	ug/L	1	LMM			2303756	11/16/23	15:43	SW5030C8260D
1,1,2,2-tetrachloroethane	1.0 U	2.0	1.0	0.29	ug/L	1	LMM			2303756	11/16/23	15:43	SW5030C8260D
1,2,3-trichloropropane	1.0 U	2.0	1.0	0.55	ug/L	1	LMM			2303756	11/16/23	15:43	SW5030C8260D
n-propylbenzene	1.0 U	2.0	1.0	0.44	ug/L	1	LMM			2303756	11/16/23	15:43	SW5030C8260D
bromobenzene	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303756	11/16/23	15:43	SW5030C8260D
2-chlorotoluene	1.0 U	2.0	1.0	0.23	ug/L	1	LMM			2303756	11/16/23	15:43	SW5030C8260D
4-chlorotoluene	1.0 U	2.0	1.0	0.33	ug/L	1	LMM			2303756	11/16/23	15:43	SW5030C8260D
tert-butylbenzene	1.0 U	2.0	1.0	0.39	ug/L	1	LMM			2303756	11/16/23	15:43	SW5030C8260D
1,2,4-trimethylbenzene	1.0 U	2.0	1.0	0.58	ug/L	1	LMM			2303756	11/16/23	15:43	SW5030C8260D
sec-butylbenzene	1.0 U	2.0	1.0	0.44	ug/L	1	LMM			2303756	11/16/23	15:43	SW5030C8260D
1,3-dichlorobenzene	1.0 U	2.0	1.0	0.45	ug/L	1	LMM			2303756	11/16/23	15:43	SW5030C8260D
4-isopropyltoluene	1.0 U	2.0	1.0	0.47	ug/L	1	LMM			2303756	11/16/23	15:43	SW5030C8260D
1,4-dichlorobenzene	1.0 U	2.0	1.0	0.26	ug/L	1	LMM			2303756	11/16/23	15:43	SW5030C8260D
1,2-dichlorobenzene	1.0 U	2.0	1.0	0.39	ug/L	1	LMM			2303756	11/16/23	15:43	SW5030C8260D
n-butylbenzene	1.0 U	2.0	1.0	0.54	ug/L	1	LMM			2303756	11/16/23	15:43	SW5030C8260D
1,2-dibromo-3-chloropropane (DBCP)	1.5 U	2.0	1.5	0.91	ug/L	1	LMM			2303756	11/16/23	15:43	SW5030C8260D
1,3,5-trimethylbenzene	1.0 U	2.0	1.0	0.46	ug/L	1	LMM			2303756	11/16/23	15:43	SW5030C8260D
1,2,4-trichlorobenzene	1.0 U	2.0	1.0	0.79	ug/L	1	LMM			2303756	11/16/23	15:43	SW5030C8260D
hexachlorobutadiene	0.50 U	0.50	0.50	0.19	ug/L	1	LMM			2303756	11/16/23	15:43	SW5030C8260D
naphthalene	1.5 U	2.0	1.5	1.2	ug/L	1	LMM			2303756	11/16/23	15:43	SW5030C8260D
1,2,3-trichlorobenzene	1.0 U	2.0	1.0	0.93	ug/L	1	LMM			2303756	11/16/23	15:43	SW5030C8260D
Surrogate Recovery		Limits											
dibromofluoromethane SUR	96	78-114			%	1	LMM			2303756	11/16/23	15:43	SW5030C8260D
toluene-D8 SUR	104	88-110			%	1	LMM			2303756	11/16/23	15:43	SW5030C8260D
4-bromofluorobenzene SUR	97	86-115			%	1	LMM			2303756	11/16/23	15:43	SW5030C8260D

Project ID: Dow Salvage Yard 18001468
Job ID: 67836
Sample#: 67836-004
Sample ID: SY-BRMW5-29-44-110823
Matrix: Water
Sampled: 11/8/23 11:00

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
dichlorodifluoromethane	1.0 U	2.0	1.0	0.28	ug/L	1	LMM			2303756	11/16/23	16:08	SW5030C8260D
chloromethane	1.0 U	2.0	1.0	0.59	ug/L	1	LMM			2303756	11/16/23	16:08	SW5030C8260D
vinyl chloride	1.0 U	2.0	1.0	0.49	ug/L	1	LMM			2303756	11/16/23	16:08	SW5030C8260D
bromomethane	1.5 U	2.0	1.5	1.1	ug/L	1	LMM			2303756	11/16/23	16:08	SW5030C8260D
chloroethane	1.0 U	2.0	1.0	0.33	ug/L	1	LMM			2303756	11/16/23	16:08	SW5030C8260D
trichlorofluoromethane	1.0 U	2.0	1.0	0.34	ug/L	1	LMM			2303756	11/16/23	16:08	SW5030C8260D
diethyl ether	1.0 U	2.0	1.0	0.41	ug/L	1	LMM			2303756	11/16/23	16:08	SW5030C8260D
acetone	2.3 J	50	5.0	1.9	ug/L	1	LMM			2303756	11/16/23	16:08	SW5030C8260D
1,1-dichloroethene	0.50 U	1.0	0.50	0.35	ug/L	1	LMM			2303756	11/16/23	16:08	SW5030C8260D
methylene chloride	1.0 U	2.0	1.0	0.59	ug/L	1	LMM			2303756	11/16/23	16:08	SW5030C8260D
carbon disulfide	1.0 U	2.0	1.0	0.33	ug/L	1	LMM			2303756	11/16/23	16:08	SW5030C8260D
methyl t-butyl ether (MTBE)	1.0 U	2.0	1.0	0.30	ug/L	1	LMM			2303756	11/16/23	16:08	SW5030C8260D
trans-1,2-dichloroethene	1.0 U	2.0	1.0	0.46	ug/L	1	LMM			2303756	11/16/23	16:08	SW5030C8260D
ethyl t-butyl ether (ETBE)	1.0 U	2.0	1.0	0.24	ug/L	1	LMM			2303756	11/16/23	16:08	SW5030C8260D
1,1-dichloroethane	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303756	11/16/23	16:08	SW5030C8260D
t-butanol (TBA)	10 U	30	10	2.5	ug/L	1	LMM			2303756	11/16/23	16:08	SW5030C8260D
2-butanone (MEK)	6.6 J	10	5.0	0.67	ug/L	1	LMM			2303756	11/16/23	16:08	SW5030C8260D
2,2-dichloropropane	1.0 U	2.0	1.0	0.21	ug/L	1	LMM			2303756	11/16/23	16:08	SW5030C8260D
cis-1,2-dichloroethene	1.5 U	2.0	1.5	1.2	ug/L	1	LMM			2303756	11/16/23	16:08	SW5030C8260D
chloroform	1.5 U	2.0	1.5	1.4	ug/L	1	LMM			2303756	11/16/23	16:08	SW5030C8260D
bromochloromethane	1.0 U	2.0	1.0	0.22	ug/L	1	LMM			2303756	11/16/23	16:08	SW5030C8260D
tetrahydrofuran (THF)	1.5 U	2.0	1.5	0.75	ug/L	1	LMM			2303756	11/16/23	16:08	SW5030C8260D
1,1,1-trichloroethane	1.0 U	2.0	1.0	0.55	ug/L	1	LMM			2303756	11/16/23	16:08	SW5030C8260D
1,1-dichloropropene	1.0 U	2.0	1.0	0.26	ug/L	1	LMM			2303756	11/16/23	16:08	SW5030C8260D
t-amyl-methyl ether (TAME)	1.0 U	2.0	1.0	0.57	ug/L	1	LMM			2303756	11/16/23	16:08	SW5030C8260D
carbon tetrachloride	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303756	11/16/23	16:08	SW5030C8260D
1,2-dichloroethane	1.0 U	2.0	1.0	0.20	ug/L	1	LMM			2303756	11/16/23	16:08	SW5030C8260D
benzene	1.0 U	2.0	1.0	0.40	ug/L	1	LMM			2303756	11/16/23	16:08	SW5030C8260D
trichloroethene	1.0 U	2.0	1.0	0.53	ug/L	1	LMM			2303756	11/16/23	16:08	SW5030C8260D
1,2-dichloropropane	1.0 U	2.0	1.0	0.22	ug/L	1	LMM			2303756	11/16/23	16:08	SW5030C8260D
bromodichloromethane	0.50 U	0.60	0.50	0.38	ug/L	1	LMM			2303756	11/16/23	16:08	SW5030C8260D
1,4-dioxane	10 U	50	10	8.7	ug/L	1	LMM			2303756	11/16/23	16:08	SW5030C8260D
dibromomethane	1.0 U	2.0	1.0	0.23	ug/L	1	LMM			2303756	11/16/23	16:08	SW5030C8260D
4-methyl-2-pentanone (MIBK)	1.0 U	10	1.0	0.56	ug/L	1	LMM			2303756	11/16/23	16:08	SW5030C8260D
cis-1,3-dichloropropene	1.0 U	2.0	1.0	0.30	ug/L	1	LMM			2303756	11/16/23	16:08	SW5030C8260D
toluene	1.1 J	2.0	1.0	0.45	ug/L	1	LMM			2303756	11/16/23	16:08	SW5030C8260D
trans-1,3-dichloropropene	1.0 U	2.0	1.0	0.34	ug/L	1	LMM			2303756	11/16/23	16:08	SW5030C8260D
2-hexanone	1.0 U	10	1.0	0.72	ug/L	1	LMM			2303756	11/16/23	16:08	SW5030C8260D
1,1,2-trichloroethane	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303756	11/16/23	16:08	SW5030C8260D
1,3-dichloropropane	1.0 U	2.0	1.0	0.25	ug/L	1	LMM			2303756	11/16/23	16:08	SW5030C8260D
tetrachloroethene	1.0 U	2.0	1.0	0.76	ug/L	1	LMM			2303756	11/16/23	16:08	SW5030C8260D
dibromochloromethane	1.0 U	2.0	1.0	0.21	ug/L	1	LMM			2303756	11/16/23	16:08	SW5030C8260D

Project ID: Dow Salvage Yard 18001468
Job ID: 67836
Sample#: 67836-004
Sample ID: SY-BRMW5-29-44-110823
Matrix: Water
Sampled: 11/8/23 11:00

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
1,2-dibromoethane (EDB)	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303756	11/16/23	16:08	SW5030C8260D
chlorobenzene	1.0 U	2.0	1.0	0.25	ug/L	1	LMM			2303756	11/16/23	16:08	SW5030C8260D
1,1,1,2-tetrachloroethane	1.0 U	2.0	1.0	0.21	ug/L	1	LMM			2303756	11/16/23	16:08	SW5030C8260D
ethylbenzene	1.0 U	2.0	1.0	0.65	ug/L	1	LMM			2303756	11/16/23	16:08	SW5030C8260D
m&p-xylenes	1.5 U	2.0	1.5	1.4	ug/L	1	LMM			2303756	11/16/23	16:08	SW5030C8260D
o-xylene	1.0 U	2.0	1.0	0.55	ug/L	1	LMM			2303756	11/16/23	16:08	SW5030C8260D
styrene	1.0 U	2.0	1.0	0.57	ug/L	1	LMM			2303756	11/16/23	16:08	SW5030C8260D
bromoform	1.0 U	2.0	1.0	0.24	ug/L	1	LMM			2303756	11/16/23	16:08	SW5030C8260D
isopropylbenzene	1.0 U	2.0	1.0	0.65	ug/L	1	LMM			2303756	11/16/23	16:08	SW5030C8260D
1,1,2,2-tetrachloroethane	1.0 U	2.0	1.0	0.29	ug/L	1	LMM			2303756	11/16/23	16:08	SW5030C8260D
1,2,3-trichloropropane	1.0 U	2.0	1.0	0.55	ug/L	1	LMM			2303756	11/16/23	16:08	SW5030C8260D
n-propylbenzene	1.0 U	2.0	1.0	0.44	ug/L	1	LMM			2303756	11/16/23	16:08	SW5030C8260D
bromobenzene	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303756	11/16/23	16:08	SW5030C8260D
2-chlorotoluene	1.0 U	2.0	1.0	0.23	ug/L	1	LMM			2303756	11/16/23	16:08	SW5030C8260D
4-chlorotoluene	1.0 U	2.0	1.0	0.33	ug/L	1	LMM			2303756	11/16/23	16:08	SW5030C8260D
tert-butylbenzene	1.0 U	2.0	1.0	0.39	ug/L	1	LMM			2303756	11/16/23	16:08	SW5030C8260D
1,2,4-trimethylbenzene	1.0 U	2.0	1.0	0.58	ug/L	1	LMM			2303756	11/16/23	16:08	SW5030C8260D
sec-butylbenzene	1.0 U	2.0	1.0	0.44	ug/L	1	LMM			2303756	11/16/23	16:08	SW5030C8260D
1,3-dichlorobenzene	1.0 U	2.0	1.0	0.45	ug/L	1	LMM			2303756	11/16/23	16:08	SW5030C8260D
4-isopropyltoluene	1.0 U	2.0	1.0	0.47	ug/L	1	LMM			2303756	11/16/23	16:08	SW5030C8260D
1,4-dichlorobenzene	1.0 U	2.0	1.0	0.26	ug/L	1	LMM			2303756	11/16/23	16:08	SW5030C8260D
1,2-dichlorobenzene	1.0 U	2.0	1.0	0.39	ug/L	1	LMM			2303756	11/16/23	16:08	SW5030C8260D
n-butylbenzene	1.0 U	2.0	1.0	0.54	ug/L	1	LMM			2303756	11/16/23	16:08	SW5030C8260D
1,2-dibromo-3-chloropropane (DBCP)	1.5 U	2.0	1.5	0.91	ug/L	1	LMM			2303756	11/16/23	16:08	SW5030C8260D
1,3,5-trimethylbenzene	1.0 U	2.0	1.0	0.46	ug/L	1	LMM			2303756	11/16/23	16:08	SW5030C8260D
1,2,4-trichlorobenzene	1.0 U	2.0	1.0	0.79	ug/L	1	LMM			2303756	11/16/23	16:08	SW5030C8260D
hexachlorobutadiene	0.50 U	0.50	0.50	0.19	ug/L	1	LMM			2303756	11/16/23	16:08	SW5030C8260D
naphthalene	1.5 U	2.0	1.5	1.2	ug/L	1	LMM			2303756	11/16/23	16:08	SW5030C8260D
1,2,3-trichlorobenzene	1.0 U	2.0	1.0	0.93	ug/L	1	LMM			2303756	11/16/23	16:08	SW5030C8260D
Surrogate Recovery		Limits											
dibromofluoromethane SUR	95	78-114			%	1	LMM			2303756	11/16/23	16:08	SW5030C8260D
toluene-D8 SUR	100	88-110			%	1	LMM			2303756	11/16/23	16:08	SW5030C8260D
4-bromofluorobenzene SUR	99	86-115			%	1	LMM			2303756	11/16/23	16:08	SW5030C8260D

Project ID: Dow Salvage Yard 18001468
Job ID: 67836
Sample#: 67836-005
Sample ID: SY-BRMW5-123-133-110823
Matrix: Water
Sampled: 11/8/23 11:40

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
dichlorodifluoromethane	1.0 U	2.0	1.0	0.28	ug/L	1	LMM			2303756	11/16/23	16:33	SW5030C8260D
chloromethane	1.0 U	2.0	1.0	0.59	ug/L	1	LMM			2303756	11/16/23	16:33	SW5030C8260D
vinyl chloride	1.0 U	2.0	1.0	0.49	ug/L	1	LMM			2303756	11/16/23	16:33	SW5030C8260D
bromomethane	1.5 U	2.0	1.5	1.1	ug/L	1	LMM			2303756	11/16/23	16:33	SW5030C8260D
chloroethane	1.0 U	2.0	1.0	0.33	ug/L	1	LMM			2303756	11/16/23	16:33	SW5030C8260D
trichlorofluoromethane	1.0 U	2.0	1.0	0.34	ug/L	1	LMM			2303756	11/16/23	16:33	SW5030C8260D
diethyl ether	1.0 U	2.0	1.0	0.41	ug/L	1	LMM			2303756	11/16/23	16:33	SW5030C8260D
acetone	5.0 U	50	5.0	1.9	ug/L	1	LMM			2303756	11/16/23	16:33	SW5030C8260D
1,1-dichloroethene	0.50 U	1.0	0.50	0.35	ug/L	1	LMM			2303756	11/16/23	16:33	SW5030C8260D
methylene chloride	1.0 U	2.0	1.0	0.59	ug/L	1	LMM			2303756	11/16/23	16:33	SW5030C8260D
carbon disulfide	1.0 U	2.0	1.0	0.33	ug/L	1	LMM			2303756	11/16/23	16:33	SW5030C8260D
methyl t-butyl ether (MTBE)	1.0 U	2.0	1.0	0.30	ug/L	1	LMM			2303756	11/16/23	16:33	SW5030C8260D
trans-1,2-dichloroethene	1.0 U	2.0	1.0	0.46	ug/L	1	LMM			2303756	11/16/23	16:33	SW5030C8260D
ethyl t-butyl ether (ETBE)	1.0 U	2.0	1.0	0.24	ug/L	1	LMM			2303756	11/16/23	16:33	SW5030C8260D
1,1-dichloroethane	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303756	11/16/23	16:33	SW5030C8260D
t-butanol (TBA)	10 U	30	10	2.5	ug/L	1	LMM			2303756	11/16/23	16:33	SW5030C8260D
2-butanone (MEK)	15	10	5.0	0.67	ug/L	1	LMM			2303756	11/16/23	16:33	SW5030C8260D
2,2-dichloropropane	1.0 U	2.0	1.0	0.21	ug/L	1	LMM			2303756	11/16/23	16:33	SW5030C8260D
cis-1,2-dichloroethene	1.5 U	2.0	1.5	1.2	ug/L	1	LMM			2303756	11/16/23	16:33	SW5030C8260D
chloroform	1.5 U	2.0	1.5	1.4	ug/L	1	LMM			2303756	11/16/23	16:33	SW5030C8260D
bromochloromethane	1.0 U	2.0	1.0	0.22	ug/L	1	LMM			2303756	11/16/23	16:33	SW5030C8260D
tetrahydrofuran (THF)	1.5 U	2.0	1.5	0.75	ug/L	1	LMM			2303756	11/16/23	16:33	SW5030C8260D
1,1,1-trichloroethane	1.0 U	2.0	1.0	0.55	ug/L	1	LMM			2303756	11/16/23	16:33	SW5030C8260D
1,1-dichloropropene	1.0 U	2.0	1.0	0.26	ug/L	1	LMM			2303756	11/16/23	16:33	SW5030C8260D
t-amyl-methyl ether (TAME)	1.0 U	2.0	1.0	0.57	ug/L	1	LMM			2303756	11/16/23	16:33	SW5030C8260D
carbon tetrachloride	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303756	11/16/23	16:33	SW5030C8260D
1,2-dichloroethane	1.0 U	2.0	1.0	0.20	ug/L	1	LMM			2303756	11/16/23	16:33	SW5030C8260D
benzene	1.0 U	2.0	1.0	0.40	ug/L	1	LMM			2303756	11/16/23	16:33	SW5030C8260D
trichloroethene	0.54 J	2.0	1.0	0.53	ug/L	1	LMM			2303756	11/16/23	16:33	SW5030C8260D
1,2-dichloropropane	1.0 U	2.0	1.0	0.22	ug/L	1	LMM			2303756	11/16/23	16:33	SW5030C8260D
bromodichloromethane	0.50 U	0.60	0.50	0.38	ug/L	1	LMM			2303756	11/16/23	16:33	SW5030C8260D
1,4-dioxane	10 U	50	10	8.7	ug/L	1	LMM			2303756	11/16/23	16:33	SW5030C8260D
dibromomethane	1.0 U	2.0	1.0	0.23	ug/L	1	LMM			2303756	11/16/23	16:33	SW5030C8260D
4-methyl-2-pentanone (MIBK)	1.0 U	10	1.0	0.56	ug/L	1	LMM			2303756	11/16/23	16:33	SW5030C8260D
cis-1,3-dichloropropene	1.0 U	2.0	1.0	0.30	ug/L	1	LMM			2303756	11/16/23	16:33	SW5030C8260D
toluene	1.4 J	2.0	1.0	0.45	ug/L	1	LMM			2303756	11/16/23	16:33	SW5030C8260D
trans-1,3-dichloropropene	1.0 U	2.0	1.0	0.34	ug/L	1	LMM			2303756	11/16/23	16:33	SW5030C8260D
2-hexanone	1.0 U	10	1.0	0.72	ug/L	1	LMM			2303756	11/16/23	16:33	SW5030C8260D
1,1,2-trichloroethane	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303756	11/16/23	16:33	SW5030C8260D
1,3-dichloropropane	1.0 U	2.0	1.0	0.25	ug/L	1	LMM			2303756	11/16/23	16:33	SW5030C8260D
tetrachloroethene	1.0 U	2.0	1.0	0.76	ug/L	1	LMM			2303756	11/16/23	16:33	SW5030C8260D
dibromochloromethane	1.0 U	2.0	1.0	0.21	ug/L	1	LMM			2303756	11/16/23	16:33	SW5030C8260D

Project ID: Dow Salvage Yard 18001468
Job ID: 67836
Sample#: 67836-005
Sample ID: SY-BRMW5-123-133-110823
Matrix: Water
Sampled: 11/8/23 11:40

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
1,2-dibromoethane (EDB)	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303756	11/16/23	16:33	SW5030C8260D
chlorobenzene	1.0 U	2.0	1.0	0.25	ug/L	1	LMM			2303756	11/16/23	16:33	SW5030C8260D
1,1,1,2-tetrachloroethane	1.0 U	2.0	1.0	0.21	ug/L	1	LMM			2303756	11/16/23	16:33	SW5030C8260D
ethylbenzene	1.0 U	2.0	1.0	0.65	ug/L	1	LMM			2303756	11/16/23	16:33	SW5030C8260D
m&p-xylenes	1.5 U	2.0	1.5	1.4	ug/L	1	LMM			2303756	11/16/23	16:33	SW5030C8260D
o-xylene	1.0 U	2.0	1.0	0.55	ug/L	1	LMM			2303756	11/16/23	16:33	SW5030C8260D
styrene	1.0 U	2.0	1.0	0.57	ug/L	1	LMM			2303756	11/16/23	16:33	SW5030C8260D
bromoform	1.0 U	2.0	1.0	0.24	ug/L	1	LMM			2303756	11/16/23	16:33	SW5030C8260D
isopropylbenzene	1.0 U	2.0	1.0	0.65	ug/L	1	LMM			2303756	11/16/23	16:33	SW5030C8260D
1,1,2,2-tetrachloroethane	1.0 U	2.0	1.0	0.29	ug/L	1	LMM			2303756	11/16/23	16:33	SW5030C8260D
1,2,3-trichloropropane	1.0 U	2.0	1.0	0.55	ug/L	1	LMM			2303756	11/16/23	16:33	SW5030C8260D
n-propylbenzene	1.0 U	2.0	1.0	0.44	ug/L	1	LMM			2303756	11/16/23	16:33	SW5030C8260D
bromobenzene	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303756	11/16/23	16:33	SW5030C8260D
2-chlorotoluene	1.0 U	2.0	1.0	0.23	ug/L	1	LMM			2303756	11/16/23	16:33	SW5030C8260D
4-chlorotoluene	1.0 U	2.0	1.0	0.33	ug/L	1	LMM			2303756	11/16/23	16:33	SW5030C8260D
tert-butylbenzene	1.0 U	2.0	1.0	0.39	ug/L	1	LMM			2303756	11/16/23	16:33	SW5030C8260D
1,2,4-trimethylbenzene	1.0 U	2.0	1.0	0.58	ug/L	1	LMM			2303756	11/16/23	16:33	SW5030C8260D
sec-butylbenzene	1.0 U	2.0	1.0	0.44	ug/L	1	LMM			2303756	11/16/23	16:33	SW5030C8260D
1,3-dichlorobenzene	1.0 U	2.0	1.0	0.45	ug/L	1	LMM			2303756	11/16/23	16:33	SW5030C8260D
4-isopropyltoluene	1.0 U	2.0	1.0	0.47	ug/L	1	LMM			2303756	11/16/23	16:33	SW5030C8260D
1,4-dichlorobenzene	1.0 U	2.0	1.0	0.26	ug/L	1	LMM			2303756	11/16/23	16:33	SW5030C8260D
1,2-dichlorobenzene	1.0 U	2.0	1.0	0.39	ug/L	1	LMM			2303756	11/16/23	16:33	SW5030C8260D
n-butylbenzene	1.0 U	2.0	1.0	0.54	ug/L	1	LMM			2303756	11/16/23	16:33	SW5030C8260D
1,2-dibromo-3-chloropropane (DBCP)	1.5 U	2.0	1.5	0.91	ug/L	1	LMM			2303756	11/16/23	16:33	SW5030C8260D
1,3,5-trimethylbenzene	1.0 U	2.0	1.0	0.46	ug/L	1	LMM			2303756	11/16/23	16:33	SW5030C8260D
1,2,4-trichlorobenzene	1.0 U	2.0	1.0	0.79	ug/L	1	LMM			2303756	11/16/23	16:33	SW5030C8260D
hexachlorobutadiene	0.50 U	0.50	0.50	0.19	ug/L	1	LMM			2303756	11/16/23	16:33	SW5030C8260D
naphthalene	1.5 U	2.0	1.5	1.2	ug/L	1	LMM			2303756	11/16/23	16:33	SW5030C8260D
1,2,3-trichlorobenzene	1.0 U	2.0	1.0	0.93	ug/L	1	LMM			2303756	11/16/23	16:33	SW5030C8260D
Surrogate Recovery		Limits											
dibromofluoromethane SUR	93	78-114			%	1	LMM			2303756	11/16/23	16:33	SW5030C8260D
toluene-D8 SUR	100	88-110			%	1	LMM			2303756	11/16/23	16:33	SW5030C8260D
4-bromofluorobenzene SUR	97	86-115			%	1	LMM			2303756	11/16/23	16:33	SW5030C8260D

Project ID: Dow Salvage Yard 18001468
Job ID: 67836
Sample#: 67836-006
Sample ID: SY-BRMW5-56-66-110823
Matrix: Water
Sampled: 11/8/23 11:15

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
dichlorodifluoromethane	1.0 U	2.0	1.0	0.28	ug/L	1	LMM			2303756	11/16/23	16:58	SW5030C8260D
chloromethane	1.0 U	2.0	1.0	0.59	ug/L	1	LMM			2303756	11/16/23	16:58	SW5030C8260D
vinyl chloride	1.0 U	2.0	1.0	0.49	ug/L	1	LMM			2303756	11/16/23	16:58	SW5030C8260D
bromomethane	1.5 U	2.0	1.5	1.1	ug/L	1	LMM			2303756	11/16/23	16:58	SW5030C8260D
chloroethane	1.0 U	2.0	1.0	0.33	ug/L	1	LMM			2303756	11/16/23	16:58	SW5030C8260D
trichlorofluoromethane	1.0 U	2.0	1.0	0.34	ug/L	1	LMM			2303756	11/16/23	16:58	SW5030C8260D
diethyl ether	1.0 U	2.0	1.0	0.41	ug/L	1	LMM			2303756	11/16/23	16:58	SW5030C8260D
acetone	5.0 U	50	5.0	1.9	ug/L	1	LMM			2303756	11/16/23	16:58	SW5030C8260D
1,1-dichloroethene	0.50 U	1.0	0.50	0.35	ug/L	1	LMM			2303756	11/16/23	16:58	SW5030C8260D
methylene chloride	1.0 U	2.0	1.0	0.59	ug/L	1	LMM			2303756	11/16/23	16:58	SW5030C8260D
carbon disulfide	1.0 U	2.0	1.0	0.33	ug/L	1	LMM			2303756	11/16/23	16:58	SW5030C8260D
methyl t-butyl ether (MTBE)	1.0 U	2.0	1.0	0.30	ug/L	1	LMM			2303756	11/16/23	16:58	SW5030C8260D
trans-1,2-dichloroethene	1.0 U	2.0	1.0	0.46	ug/L	1	LMM			2303756	11/16/23	16:58	SW5030C8260D
ethyl t-butyl ether (ETBE)	1.0 U	2.0	1.0	0.24	ug/L	1	LMM			2303756	11/16/23	16:58	SW5030C8260D
1,1-dichloroethane	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303756	11/16/23	16:58	SW5030C8260D
t-butanol (TBA)	10 U	30	10	2.5	ug/L	1	LMM			2303756	11/16/23	16:58	SW5030C8260D
2-butanone (MEK)	5.0 U	10	5.0	0.67	ug/L	1	LMM			2303756	11/16/23	16:58	SW5030C8260D
2,2-dichloropropane	1.0 U	2.0	1.0	0.21	ug/L	1	LMM			2303756	11/16/23	16:58	SW5030C8260D
cis-1,2-dichloroethene	1.5 U	2.0	1.5	1.2	ug/L	1	LMM			2303756	11/16/23	16:58	SW5030C8260D
chloroform	1.5 U	2.0	1.5	1.4	ug/L	1	LMM			2303756	11/16/23	16:58	SW5030C8260D
bromochloromethane	1.0 U	2.0	1.0	0.22	ug/L	1	LMM			2303756	11/16/23	16:58	SW5030C8260D
tetrahydrofuran (THF)	1.5 U	2.0	1.5	0.75	ug/L	1	LMM			2303756	11/16/23	16:58	SW5030C8260D
1,1,1-trichloroethane	1.0 U	2.0	1.0	0.55	ug/L	1	LMM			2303756	11/16/23	16:58	SW5030C8260D
1,1-dichloropropene	1.0 U	2.0	1.0	0.26	ug/L	1	LMM			2303756	11/16/23	16:58	SW5030C8260D
t-amyl-methyl ether (TAME)	1.0 U	2.0	1.0	0.57	ug/L	1	LMM			2303756	11/16/23	16:58	SW5030C8260D
carbon tetrachloride	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303756	11/16/23	16:58	SW5030C8260D
1,2-dichloroethane	1.0 U	2.0	1.0	0.20	ug/L	1	LMM			2303756	11/16/23	16:58	SW5030C8260D
benzene	1.0 U	2.0	1.0	0.40	ug/L	1	LMM			2303756	11/16/23	16:58	SW5030C8260D
trichloroethene	1.0 U	2.0	1.0	0.53	ug/L	1	LMM			2303756	11/16/23	16:58	SW5030C8260D
1,2-dichloropropane	1.0 U	2.0	1.0	0.22	ug/L	1	LMM			2303756	11/16/23	16:58	SW5030C8260D
bromodichloromethane	0.50 U	0.60	0.50	0.38	ug/L	1	LMM			2303756	11/16/23	16:58	SW5030C8260D
1,4-dioxane	10 U	50	10	8.7	ug/L	1	LMM			2303756	11/16/23	16:58	SW5030C8260D
dibromomethane	1.0 U	2.0	1.0	0.23	ug/L	1	LMM			2303756	11/16/23	16:58	SW5030C8260D
4-methyl-2-pentanone (MIBK)	1.0 U	10	1.0	0.56	ug/L	1	LMM			2303756	11/16/23	16:58	SW5030C8260D
cis-1,3-dichloropropene	1.0 U	2.0	1.0	0.30	ug/L	1	LMM			2303756	11/16/23	16:58	SW5030C8260D
toluene	1.0 U	2.0	1.0	0.45	ug/L	1	LMM			2303756	11/16/23	16:58	SW5030C8260D
trans-1,3-dichloropropene	1.0 U	2.0	1.0	0.34	ug/L	1	LMM			2303756	11/16/23	16:58	SW5030C8260D
2-hexanone	1.0 U	10	1.0	0.72	ug/L	1	LMM			2303756	11/16/23	16:58	SW5030C8260D
1,1,2-trichloroethane	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303756	11/16/23	16:58	SW5030C8260D
1,3-dichloropropane	1.0 U	2.0	1.0	0.25	ug/L	1	LMM			2303756	11/16/23	16:58	SW5030C8260D
tetrachloroethene	1.0 U	2.0	1.0	0.76	ug/L	1	LMM			2303756	11/16/23	16:58	SW5030C8260D
dibromochloromethane	1.0 U	2.0	1.0	0.21	ug/L	1	LMM			2303756	11/16/23	16:58	SW5030C8260D

Project ID: Dow Salvage Yard 18001468
Job ID: 67836
Sample#: 67836-006
Sample ID: SY-BRMW5-56-66-110823
Matrix: Water
Sampled: 11/8/23 11:15

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
1,2-dibromoethane (EDB)	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303756	11/16/23	16:58	SW5030C8260D
chlorobenzene	1.0 U	2.0	1.0	0.25	ug/L	1	LMM			2303756	11/16/23	16:58	SW5030C8260D
1,1,1,2-tetrachloroethane	1.0 U	2.0	1.0	0.21	ug/L	1	LMM			2303756	11/16/23	16:58	SW5030C8260D
ethylbenzene	1.0 U	2.0	1.0	0.65	ug/L	1	LMM			2303756	11/16/23	16:58	SW5030C8260D
m&p-xylenes	1.5 U	2.0	1.5	1.4	ug/L	1	LMM			2303756	11/16/23	16:58	SW5030C8260D
o-xylene	1.0 U	2.0	1.0	0.55	ug/L	1	LMM			2303756	11/16/23	16:58	SW5030C8260D
styrene	1.0 U	2.0	1.0	0.57	ug/L	1	LMM			2303756	11/16/23	16:58	SW5030C8260D
bromoform	1.0 U	2.0	1.0	0.24	ug/L	1	LMM			2303756	11/16/23	16:58	SW5030C8260D
isopropylbenzene	1.0 U	2.0	1.0	0.65	ug/L	1	LMM			2303756	11/16/23	16:58	SW5030C8260D
1,1,2,2-tetrachloroethane	1.0 U	2.0	1.0	0.29	ug/L	1	LMM			2303756	11/16/23	16:58	SW5030C8260D
1,2,3-trichloropropane	1.0 U	2.0	1.0	0.55	ug/L	1	LMM			2303756	11/16/23	16:58	SW5030C8260D
n-propylbenzene	1.0 U	2.0	1.0	0.44	ug/L	1	LMM			2303756	11/16/23	16:58	SW5030C8260D
bromobenzene	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303756	11/16/23	16:58	SW5030C8260D
2-chlorotoluene	1.0 U	2.0	1.0	0.23	ug/L	1	LMM			2303756	11/16/23	16:58	SW5030C8260D
4-chlorotoluene	1.0 U	2.0	1.0	0.33	ug/L	1	LMM			2303756	11/16/23	16:58	SW5030C8260D
tert-butylbenzene	1.0 U	2.0	1.0	0.39	ug/L	1	LMM			2303756	11/16/23	16:58	SW5030C8260D
1,2,4-trimethylbenzene	1.0 U	2.0	1.0	0.58	ug/L	1	LMM			2303756	11/16/23	16:58	SW5030C8260D
sec-butylbenzene	1.0 U	2.0	1.0	0.44	ug/L	1	LMM			2303756	11/16/23	16:58	SW5030C8260D
1,3-dichlorobenzene	1.0 U	2.0	1.0	0.45	ug/L	1	LMM			2303756	11/16/23	16:58	SW5030C8260D
4-isopropyltoluene	1.0 U	2.0	1.0	0.47	ug/L	1	LMM			2303756	11/16/23	16:58	SW5030C8260D
1,4-dichlorobenzene	1.0 U	2.0	1.0	0.26	ug/L	1	LMM			2303756	11/16/23	16:58	SW5030C8260D
1,2-dichlorobenzene	1.0 U	2.0	1.0	0.39	ug/L	1	LMM			2303756	11/16/23	16:58	SW5030C8260D
n-butylbenzene	1.0 U	2.0	1.0	0.54	ug/L	1	LMM			2303756	11/16/23	16:58	SW5030C8260D
1,2-dibromo-3-chloropropane (DBCP)	1.5 U	2.0	1.5	0.91	ug/L	1	LMM			2303756	11/16/23	16:58	SW5030C8260D
1,3,5-trimethylbenzene	1.0 U	2.0	1.0	0.46	ug/L	1	LMM			2303756	11/16/23	16:58	SW5030C8260D
1,2,4-trichlorobenzene	1.0 U	2.0	1.0	0.79	ug/L	1	LMM			2303756	11/16/23	16:58	SW5030C8260D
hexachlorobutadiene	0.50 U	0.50	0.50	0.19	ug/L	1	LMM			2303756	11/16/23	16:58	SW5030C8260D
naphthalene	1.5 U	2.0	1.5	1.2	ug/L	1	LMM			2303756	11/16/23	16:58	SW5030C8260D
1,2,3-trichlorobenzene	1.0 U	2.0	1.0	0.93	ug/L	1	LMM			2303756	11/16/23	16:58	SW5030C8260D
Surrogate Recovery		Limits											
dibromofluoromethane SUR	97	78-114			%	1	LMM			2303756	11/16/23	16:58	SW5030C8260D
toluene-D8 SUR	100	88-110			%	1	LMM			2303756	11/16/23	16:58	SW5030C8260D
4-bromofluorobenzene SUR	99	86-115			%	1	LMM			2303756	11/16/23	16:58	SW5030C8260D

Project ID: Dow Salvage Yard 18001468
Job ID: 67836
Sample#: 67836-007
Sample ID: SY-OBMW8-110823
Matrix: Water
Sampled: 11/8/23 12:50

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
dichlorodifluoromethane	1.0 U	2.0	1.0	0.28	ug/L	1	LMM			2303756	11/16/23	17:23	SW5030C8260D
chloromethane	1.0 U	2.0	1.0	0.59	ug/L	1	LMM			2303756	11/16/23	17:23	SW5030C8260D
vinyl chloride	1.0 U	2.0	1.0	0.49	ug/L	1	LMM			2303756	11/16/23	17:23	SW5030C8260D
bromomethane	1.5 U	2.0	1.5	1.1	ug/L	1	LMM			2303756	11/16/23	17:23	SW5030C8260D
chloroethane	1.0 U	2.0	1.0	0.33	ug/L	1	LMM			2303756	11/16/23	17:23	SW5030C8260D
trichlorofluoromethane	1.0 U	2.0	1.0	0.34	ug/L	1	LMM			2303756	11/16/23	17:23	SW5030C8260D
diethyl ether	1.0 U	2.0	1.0	0.41	ug/L	1	LMM			2303756	11/16/23	17:23	SW5030C8260D
acetone	5.0 U	50	5.0	1.9	ug/L	1	LMM			2303756	11/16/23	17:23	SW5030C8260D
1,1-dichloroethene	0.50 U	1.0	0.50	0.35	ug/L	1	LMM			2303756	11/16/23	17:23	SW5030C8260D
methylene chloride	1.0 U	2.0	1.0	0.59	ug/L	1	LMM			2303756	11/16/23	17:23	SW5030C8260D
carbon disulfide	1.0 U	2.0	1.0	0.33	ug/L	1	LMM			2303756	11/16/23	17:23	SW5030C8260D
methyl t-butyl ether (MTBE)	1.0 U	2.0	1.0	0.30	ug/L	1	LMM			2303756	11/16/23	17:23	SW5030C8260D
trans-1,2-dichloroethene	1.0 U	2.0	1.0	0.46	ug/L	1	LMM			2303756	11/16/23	17:23	SW5030C8260D
ethyl t-butyl ether (ETBE)	1.0 U	2.0	1.0	0.24	ug/L	1	LMM			2303756	11/16/23	17:23	SW5030C8260D
1,1-dichloroethane	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303756	11/16/23	17:23	SW5030C8260D
t-butanol (TBA)	10 U	30	10	2.5	ug/L	1	LMM			2303756	11/16/23	17:23	SW5030C8260D
2-butanone (MEK)	5.0 U	10	5.0	0.67	ug/L	1	LMM			2303756	11/16/23	17:23	SW5030C8260D
2,2-dichloropropane	1.0 U	2.0	1.0	0.21	ug/L	1	LMM			2303756	11/16/23	17:23	SW5030C8260D
cis-1,2-dichloroethene	1.5 U	2.0	1.5	1.2	ug/L	1	LMM			2303756	11/16/23	17:23	SW5030C8260D
chloroform	1.5 U	2.0	1.5	1.4	ug/L	1	LMM			2303756	11/16/23	17:23	SW5030C8260D
bromochloromethane	1.0 U	2.0	1.0	0.22	ug/L	1	LMM			2303756	11/16/23	17:23	SW5030C8260D
tetrahydrofuran (THF)	1.5 U	2.0	1.5	0.75	ug/L	1	LMM			2303756	11/16/23	17:23	SW5030C8260D
1,1,1-trichloroethane	1.0 U	2.0	1.0	0.55	ug/L	1	LMM			2303756	11/16/23	17:23	SW5030C8260D
1,1-dichloropropene	1.0 U	2.0	1.0	0.26	ug/L	1	LMM			2303756	11/16/23	17:23	SW5030C8260D
t-amyl-methyl ether (TAME)	1.0 U	2.0	1.0	0.57	ug/L	1	LMM			2303756	11/16/23	17:23	SW5030C8260D
carbon tetrachloride	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303756	11/16/23	17:23	SW5030C8260D
1,2-dichloroethane	1.0 U	2.0	1.0	0.20	ug/L	1	LMM			2303756	11/16/23	17:23	SW5030C8260D
benzene	1.0 U	2.0	1.0	0.40	ug/L	1	LMM			2303756	11/16/23	17:23	SW5030C8260D
trichloroethene	1.0 U	2.0	1.0	0.53	ug/L	1	LMM			2303756	11/16/23	17:23	SW5030C8260D
1,2-dichloropropane	1.0 U	2.0	1.0	0.22	ug/L	1	LMM			2303756	11/16/23	17:23	SW5030C8260D
bromodichloromethane	0.50 U	0.60	0.50	0.38	ug/L	1	LMM			2303756	11/16/23	17:23	SW5030C8260D
1,4-dioxane	10 U	50	10	8.7	ug/L	1	LMM			2303756	11/16/23	17:23	SW5030C8260D
dibromomethane	1.0 U	2.0	1.0	0.23	ug/L	1	LMM			2303756	11/16/23	17:23	SW5030C8260D
4-methyl-2-pentanone (MIBK)	1.0 U	10	1.0	0.56	ug/L	1	LMM			2303756	11/16/23	17:23	SW5030C8260D
cis-1,3-dichloropropene	1.0 U	2.0	1.0	0.30	ug/L	1	LMM			2303756	11/16/23	17:23	SW5030C8260D
toluene	1.0 U	2.0	1.0	0.45	ug/L	1	LMM			2303756	11/16/23	17:23	SW5030C8260D
trans-1,3-dichloropropene	1.0 U	2.0	1.0	0.34	ug/L	1	LMM			2303756	11/16/23	17:23	SW5030C8260D
2-hexanone	1.0 U	10	1.0	0.72	ug/L	1	LMM			2303756	11/16/23	17:23	SW5030C8260D
1,1,2-trichloroethane	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303756	11/16/23	17:23	SW5030C8260D
1,3-dichloropropane	1.0 U	2.0	1.0	0.25	ug/L	1	LMM			2303756	11/16/23	17:23	SW5030C8260D
tetrachloroethene	1.0 U	2.0	1.0	0.76	ug/L	1	LMM			2303756	11/16/23	17:23	SW5030C8260D
dibromochloromethane	1.0 U	2.0	1.0	0.21	ug/L	1	LMM			2303756	11/16/23	17:23	SW5030C8260D

Project ID: Dow Salvage Yard 18001468
Job ID: 67836
Sample#: 67836-007
Sample ID: SY-OBMW8-110823
Matrix: Water
Sampled: 11/8/23 12:50

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
1,2-dibromoethane (EDB)	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303756	11/16/23	17:23	SW5030C8260D
chlorobenzene	1.0 U	2.0	1.0	0.25	ug/L	1	LMM			2303756	11/16/23	17:23	SW5030C8260D
1,1,1,2-tetrachloroethane	1.0 U	2.0	1.0	0.21	ug/L	1	LMM			2303756	11/16/23	17:23	SW5030C8260D
ethylbenzene	1.0 U	2.0	1.0	0.65	ug/L	1	LMM			2303756	11/16/23	17:23	SW5030C8260D
m&p-xylenes	1.5 U	2.0	1.5	1.4	ug/L	1	LMM			2303756	11/16/23	17:23	SW5030C8260D
o-xylene	1.0 U	2.0	1.0	0.55	ug/L	1	LMM			2303756	11/16/23	17:23	SW5030C8260D
styrene	1.0 U	2.0	1.0	0.57	ug/L	1	LMM			2303756	11/16/23	17:23	SW5030C8260D
bromoform	1.0 U	2.0	1.0	0.24	ug/L	1	LMM			2303756	11/16/23	17:23	SW5030C8260D
isopropylbenzene	1.0 U	2.0	1.0	0.65	ug/L	1	LMM			2303756	11/16/23	17:23	SW5030C8260D
1,1,2,2-tetrachloroethane	1.0 U	2.0	1.0	0.29	ug/L	1	LMM			2303756	11/16/23	17:23	SW5030C8260D
1,2,3-trichloropropane	1.0 U	2.0	1.0	0.55	ug/L	1	LMM			2303756	11/16/23	17:23	SW5030C8260D
n-propylbenzene	1.0 U	2.0	1.0	0.44	ug/L	1	LMM			2303756	11/16/23	17:23	SW5030C8260D
bromobenzene	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303756	11/16/23	17:23	SW5030C8260D
2-chlorotoluene	1.0 U	2.0	1.0	0.23	ug/L	1	LMM			2303756	11/16/23	17:23	SW5030C8260D
4-chlorotoluene	1.0 U	2.0	1.0	0.33	ug/L	1	LMM			2303756	11/16/23	17:23	SW5030C8260D
tert-butylbenzene	1.0 U	2.0	1.0	0.39	ug/L	1	LMM			2303756	11/16/23	17:23	SW5030C8260D
1,2,4-trimethylbenzene	1.0 U	2.0	1.0	0.58	ug/L	1	LMM			2303756	11/16/23	17:23	SW5030C8260D
sec-butylbenzene	1.0 U	2.0	1.0	0.44	ug/L	1	LMM			2303756	11/16/23	17:23	SW5030C8260D
1,3-dichlorobenzene	1.0 U	2.0	1.0	0.45	ug/L	1	LMM			2303756	11/16/23	17:23	SW5030C8260D
4-isopropyltoluene	1.0 U	2.0	1.0	0.47	ug/L	1	LMM			2303756	11/16/23	17:23	SW5030C8260D
1,4-dichlorobenzene	1.0 U	2.0	1.0	0.26	ug/L	1	LMM			2303756	11/16/23	17:23	SW5030C8260D
1,2-dichlorobenzene	1.0 U	2.0	1.0	0.39	ug/L	1	LMM			2303756	11/16/23	17:23	SW5030C8260D
n-butylbenzene	1.0 U	2.0	1.0	0.54	ug/L	1	LMM			2303756	11/16/23	17:23	SW5030C8260D
1,2-dibromo-3-chloropropane (DBCP)	1.5 U	2.0	1.5	0.91	ug/L	1	LMM			2303756	11/16/23	17:23	SW5030C8260D
1,3,5-trimethylbenzene	1.0 U	2.0	1.0	0.46	ug/L	1	LMM			2303756	11/16/23	17:23	SW5030C8260D
1,2,4-trichlorobenzene	1.0 U	2.0	1.0	0.79	ug/L	1	LMM			2303756	11/16/23	17:23	SW5030C8260D
hexachlorobutadiene	0.50 U	0.50	0.50	0.19	ug/L	1	LMM			2303756	11/16/23	17:23	SW5030C8260D
naphthalene	1.5 U	2.0	1.5	1.2	ug/L	1	LMM			2303756	11/16/23	17:23	SW5030C8260D
1,2,3-trichlorobenzene	1.0 U	2.0	1.0	0.93	ug/L	1	LMM			2303756	11/16/23	17:23	SW5030C8260D
Surrogate Recovery		Limits											
dibromofluoromethane SUR	99	78-114			%	1	LMM			2303756	11/16/23	17:23	SW5030C8260D
toluene-D8 SUR	100	88-110			%	1	LMM			2303756	11/16/23	17:23	SW5030C8260D
4-bromofluorobenzene SUR	100	86-115			%	1	LMM			2303756	11/16/23	17:23	SW5030C8260D

Project ID: Dow Salvage Yard 18001468
Job ID: 67836
Sample#: 67836-008
Sample ID: SY-OBMW11-110823
Matrix: Water
Sampled: 11/8/23 14:17

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
dichlorodifluoromethane	1.0 U	2.0	1.0	0.28	ug/L	1	LMM			2303756	11/16/23	17:48	SW5030C8260D
chloromethane	1.0 U	2.0	1.0	0.59	ug/L	1	LMM			2303756	11/16/23	17:48	SW5030C8260D
vinyl chloride	1.0 U	2.0	1.0	0.49	ug/L	1	LMM			2303756	11/16/23	17:48	SW5030C8260D
bromomethane	1.5 U	2.0	1.5	1.1	ug/L	1	LMM			2303756	11/16/23	17:48	SW5030C8260D
chloroethane	1.0 U	2.0	1.0	0.33	ug/L	1	LMM			2303756	11/16/23	17:48	SW5030C8260D
trichlorofluoromethane	1.0 U	2.0	1.0	0.34	ug/L	1	LMM			2303756	11/16/23	17:48	SW5030C8260D
diethyl ether	1.0 U	2.0	1.0	0.41	ug/L	1	LMM			2303756	11/16/23	17:48	SW5030C8260D
acetone	5.0 U	50	5.0	1.9	ug/L	1	LMM			2303756	11/16/23	17:48	SW5030C8260D
1,1-dichloroethene	0.50 U	1.0	0.50	0.35	ug/L	1	LMM			2303756	11/16/23	17:48	SW5030C8260D
methylene chloride	1.0 U	2.0	1.0	0.59	ug/L	1	LMM			2303756	11/16/23	17:48	SW5030C8260D
carbon disulfide	1.0 U	2.0	1.0	0.33	ug/L	1	LMM			2303756	11/16/23	17:48	SW5030C8260D
methyl t-butyl ether (MTBE)	1.0 U	2.0	1.0	0.30	ug/L	1	LMM			2303756	11/16/23	17:48	SW5030C8260D
trans-1,2-dichloroethene	1.0 U	2.0	1.0	0.46	ug/L	1	LMM			2303756	11/16/23	17:48	SW5030C8260D
ethyl t-butyl ether (ETBE)	1.0 U	2.0	1.0	0.24	ug/L	1	LMM			2303756	11/16/23	17:48	SW5030C8260D
1,1-dichloroethane	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303756	11/16/23	17:48	SW5030C8260D
t-butanol (TBA)	10 U	30	10	2.5	ug/L	1	LMM			2303756	11/16/23	17:48	SW5030C8260D
2-butanone (MEK)	5.0 U	10	5.0	0.67	ug/L	1	LMM			2303756	11/16/23	17:48	SW5030C8260D
2,2-dichloropropane	1.0 U	2.0	1.0	0.21	ug/L	1	LMM			2303756	11/16/23	17:48	SW5030C8260D
cis-1,2-dichloroethene	1.5 U	2.0	1.5	1.2	ug/L	1	LMM			2303756	11/16/23	17:48	SW5030C8260D
chloroform	1.5 U	2.0	1.5	1.4	ug/L	1	LMM			2303756	11/16/23	17:48	SW5030C8260D
bromochloromethane	1.0 U	2.0	1.0	0.22	ug/L	1	LMM			2303756	11/16/23	17:48	SW5030C8260D
tetrahydrofuran (THF)	1.5 U	2.0	1.5	0.75	ug/L	1	LMM			2303756	11/16/23	17:48	SW5030C8260D
1,1,1-trichloroethane	1.0 U	2.0	1.0	0.55	ug/L	1	LMM			2303756	11/16/23	17:48	SW5030C8260D
1,1-dichloropropene	1.0 U	2.0	1.0	0.26	ug/L	1	LMM			2303756	11/16/23	17:48	SW5030C8260D
t-amyl-methyl ether (TAME)	1.0 U	2.0	1.0	0.57	ug/L	1	LMM			2303756	11/16/23	17:48	SW5030C8260D
carbon tetrachloride	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303756	11/16/23	17:48	SW5030C8260D
1,2-dichloroethane	1.0 U	2.0	1.0	0.20	ug/L	1	LMM			2303756	11/16/23	17:48	SW5030C8260D
benzene	1.0 U	2.0	1.0	0.40	ug/L	1	LMM			2303756	11/16/23	17:48	SW5030C8260D
trichloroethene	6.0	2.0	1.0	0.53	ug/L	1	LMM			2303756	11/16/23	17:48	SW5030C8260D
1,2-dichloropropane	1.0 U	2.0	1.0	0.22	ug/L	1	LMM			2303756	11/16/23	17:48	SW5030C8260D
bromodichloromethane	0.50 U	0.60	0.50	0.38	ug/L	1	LMM			2303756	11/16/23	17:48	SW5030C8260D
1,4-dioxane	10 U	50	10	8.7	ug/L	1	LMM			2303756	11/16/23	17:48	SW5030C8260D
dibromomethane	1.0 U	2.0	1.0	0.23	ug/L	1	LMM			2303756	11/16/23	17:48	SW5030C8260D
4-methyl-2-pentanone (MIBK)	1.0 U	10	1.0	0.56	ug/L	1	LMM			2303756	11/16/23	17:48	SW5030C8260D
cis-1,3-dichloropropene	1.0 U	2.0	1.0	0.30	ug/L	1	LMM			2303756	11/16/23	17:48	SW5030C8260D
toluene	1.0 U	2.0	1.0	0.45	ug/L	1	LMM			2303756	11/16/23	17:48	SW5030C8260D
trans-1,3-dichloropropene	1.0 U	2.0	1.0	0.34	ug/L	1	LMM			2303756	11/16/23	17:48	SW5030C8260D
2-hexanone	1.0 U	10	1.0	0.72	ug/L	1	LMM			2303756	11/16/23	17:48	SW5030C8260D
1,1,2-trichloroethane	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303756	11/16/23	17:48	SW5030C8260D
1,3-dichloropropane	1.0 U	2.0	1.0	0.25	ug/L	1	LMM			2303756	11/16/23	17:48	SW5030C8260D
tetrachloroethene	1.0 U	2.0	1.0	0.76	ug/L	1	LMM			2303756	11/16/23	17:48	SW5030C8260D
dibromochloromethane	1.0 U	2.0	1.0	0.21	ug/L	1	LMM			2303756	11/16/23	17:48	SW5030C8260D

Project ID: Dow Salvage Yard 18001468
Job ID: 67836
Sample#: 67836-008
Sample ID: SY-OBMW11-110823
Matrix: Water
Sampled: 11/8/23 14:17

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
1,2-dibromoethane (EDB)	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303756	11/16/23	17:48	SW5030C8260D
chlorobenzene	1.0 U	2.0	1.0	0.25	ug/L	1	LMM			2303756	11/16/23	17:48	SW5030C8260D
1,1,1,2-tetrachloroethane	1.0 U	2.0	1.0	0.21	ug/L	1	LMM			2303756	11/16/23	17:48	SW5030C8260D
ethylbenzene	1.0 U	2.0	1.0	0.65	ug/L	1	LMM			2303756	11/16/23	17:48	SW5030C8260D
m&p-xylenes	1.5 U	2.0	1.5	1.4	ug/L	1	LMM			2303756	11/16/23	17:48	SW5030C8260D
o-xylene	1.0 U	2.0	1.0	0.55	ug/L	1	LMM			2303756	11/16/23	17:48	SW5030C8260D
styrene	1.0 U	2.0	1.0	0.57	ug/L	1	LMM			2303756	11/16/23	17:48	SW5030C8260D
bromoform	1.0 U	2.0	1.0	0.24	ug/L	1	LMM			2303756	11/16/23	17:48	SW5030C8260D
isopropylbenzene	1.0 U	2.0	1.0	0.65	ug/L	1	LMM			2303756	11/16/23	17:48	SW5030C8260D
1,1,2,2-tetrachloroethane	1.0 U	2.0	1.0	0.29	ug/L	1	LMM			2303756	11/16/23	17:48	SW5030C8260D
1,2,3-trichloropropane	1.0 U	2.0	1.0	0.55	ug/L	1	LMM			2303756	11/16/23	17:48	SW5030C8260D
n-propylbenzene	1.0 U	2.0	1.0	0.44	ug/L	1	LMM			2303756	11/16/23	17:48	SW5030C8260D
bromobenzene	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303756	11/16/23	17:48	SW5030C8260D
2-chlorotoluene	1.0 U	2.0	1.0	0.23	ug/L	1	LMM			2303756	11/16/23	17:48	SW5030C8260D
4-chlorotoluene	1.0 U	2.0	1.0	0.33	ug/L	1	LMM			2303756	11/16/23	17:48	SW5030C8260D
tert-butylbenzene	1.0 U	2.0	1.0	0.39	ug/L	1	LMM			2303756	11/16/23	17:48	SW5030C8260D
1,2,4-trimethylbenzene	1.0 U	2.0	1.0	0.58	ug/L	1	LMM			2303756	11/16/23	17:48	SW5030C8260D
sec-butylbenzene	1.0 U	2.0	1.0	0.44	ug/L	1	LMM			2303756	11/16/23	17:48	SW5030C8260D
1,3-dichlorobenzene	1.0 U	2.0	1.0	0.45	ug/L	1	LMM			2303756	11/16/23	17:48	SW5030C8260D
4-isopropyltoluene	1.0 U	2.0	1.0	0.47	ug/L	1	LMM			2303756	11/16/23	17:48	SW5030C8260D
1,4-dichlorobenzene	1.0 U	2.0	1.0	0.26	ug/L	1	LMM			2303756	11/16/23	17:48	SW5030C8260D
1,2-dichlorobenzene	1.0 U	2.0	1.0	0.39	ug/L	1	LMM			2303756	11/16/23	17:48	SW5030C8260D
n-butylbenzene	1.0 U	2.0	1.0	0.54	ug/L	1	LMM			2303756	11/16/23	17:48	SW5030C8260D
1,2-dibromo-3-chloropropane (DBCP)	1.5 U	2.0	1.5	0.91	ug/L	1	LMM			2303756	11/16/23	17:48	SW5030C8260D
1,3,5-trimethylbenzene	1.0 U	2.0	1.0	0.46	ug/L	1	LMM			2303756	11/16/23	17:48	SW5030C8260D
1,2,4-trichlorobenzene	1.0 U	2.0	1.0	0.79	ug/L	1	LMM			2303756	11/16/23	17:48	SW5030C8260D
hexachlorobutadiene	0.50 U	0.50	0.50	0.19	ug/L	1	LMM			2303756	11/16/23	17:48	SW5030C8260D
naphthalene	1.5 U	2.0	1.5	1.2	ug/L	1	LMM			2303756	11/16/23	17:48	SW5030C8260D
1,2,3-trichlorobenzene	1.0 U	2.0	1.0	0.93	ug/L	1	LMM			2303756	11/16/23	17:48	SW5030C8260D
Surrogate Recovery		Limits											
dibromofluoromethane SUR	98	78-114			%	1	LMM			2303756	11/16/23	17:48	SW5030C8260D
toluene-D8 SUR	98	88-110			%	1	LMM			2303756	11/16/23	17:48	SW5030C8260D
4-bromofluorobenzene SUR	101	86-115			%	1	LMM			2303756	11/16/23	17:48	SW5030C8260D

Project ID: Dow Salvage Yard 18001468
Job ID: 67836
Sample#: 67836-009
Sample ID: SY-OBMW110-110823
Matrix: Water
Sampled: 11/8/23 14:22

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
dichlorodifluoromethane	1.0 U	2.0	1.0	0.28	ug/L	1	LMM			2303756	11/16/23	18:13	SW5030C8260D
chloromethane	1.0 U	2.0	1.0	0.59	ug/L	1	LMM			2303756	11/16/23	18:13	SW5030C8260D
vinyl chloride	1.0 U	2.0	1.0	0.49	ug/L	1	LMM			2303756	11/16/23	18:13	SW5030C8260D
bromomethane	1.5 U	2.0	1.5	1.1	ug/L	1	LMM			2303756	11/16/23	18:13	SW5030C8260D
chloroethane	1.0 U	2.0	1.0	0.33	ug/L	1	LMM			2303756	11/16/23	18:13	SW5030C8260D
trichlorofluoromethane	1.0 U	2.0	1.0	0.34	ug/L	1	LMM			2303756	11/16/23	18:13	SW5030C8260D
diethyl ether	1.0 U	2.0	1.0	0.41	ug/L	1	LMM			2303756	11/16/23	18:13	SW5030C8260D
acetone	5.0 U	50	5.0	1.9	ug/L	1	LMM			2303756	11/16/23	18:13	SW5030C8260D
1,1-dichloroethene	0.50 U	1.0	0.50	0.35	ug/L	1	LMM			2303756	11/16/23	18:13	SW5030C8260D
methylene chloride	1.0 U	2.0	1.0	0.59	ug/L	1	LMM			2303756	11/16/23	18:13	SW5030C8260D
carbon disulfide	1.0 U	2.0	1.0	0.33	ug/L	1	LMM			2303756	11/16/23	18:13	SW5030C8260D
methyl t-butyl ether (MTBE)	1.0 U	2.0	1.0	0.30	ug/L	1	LMM			2303756	11/16/23	18:13	SW5030C8260D
trans-1,2-dichloroethene	1.0 U	2.0	1.0	0.46	ug/L	1	LMM			2303756	11/16/23	18:13	SW5030C8260D
ethyl t-butyl ether (ETBE)	1.0 U	2.0	1.0	0.24	ug/L	1	LMM			2303756	11/16/23	18:13	SW5030C8260D
1,1-dichloroethane	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303756	11/16/23	18:13	SW5030C8260D
t-butanol (TBA)	10 U	30	10	2.5	ug/L	1	LMM			2303756	11/16/23	18:13	SW5030C8260D
2-butanone (MEK)	5.0 U	10	5.0	0.67	ug/L	1	LMM			2303756	11/16/23	18:13	SW5030C8260D
2,2-dichloropropane	1.0 U	2.0	1.0	0.21	ug/L	1	LMM			2303756	11/16/23	18:13	SW5030C8260D
cis-1,2-dichloroethene	1.5 U	2.0	1.5	1.2	ug/L	1	LMM			2303756	11/16/23	18:13	SW5030C8260D
chloroform	1.5 U	2.0	1.5	1.4	ug/L	1	LMM			2303756	11/16/23	18:13	SW5030C8260D
bromochloromethane	1.0 U	2.0	1.0	0.22	ug/L	1	LMM			2303756	11/16/23	18:13	SW5030C8260D
tetrahydrofuran (THF)	1.5 U	2.0	1.5	0.75	ug/L	1	LMM			2303756	11/16/23	18:13	SW5030C8260D
1,1,1-trichloroethane	1.0 U	2.0	1.0	0.55	ug/L	1	LMM			2303756	11/16/23	18:13	SW5030C8260D
1,1-dichloropropene	1.0 U	2.0	1.0	0.26	ug/L	1	LMM			2303756	11/16/23	18:13	SW5030C8260D
t-amyl-methyl ether (TAME)	1.0 U	2.0	1.0	0.57	ug/L	1	LMM			2303756	11/16/23	18:13	SW5030C8260D
carbon tetrachloride	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303756	11/16/23	18:13	SW5030C8260D
1,2-dichloroethane	1.0 U	2.0	1.0	0.20	ug/L	1	LMM			2303756	11/16/23	18:13	SW5030C8260D
benzene	1.0 U	2.0	1.0	0.40	ug/L	1	LMM			2303756	11/16/23	18:13	SW5030C8260D
trichloroethene	5.9	2.0	1.0	0.53	ug/L	1	LMM			2303756	11/16/23	18:13	SW5030C8260D
1,2-dichloropropane	1.0 U	2.0	1.0	0.22	ug/L	1	LMM			2303756	11/16/23	18:13	SW5030C8260D
bromodichloromethane	0.50 U	0.60	0.50	0.38	ug/L	1	LMM			2303756	11/16/23	18:13	SW5030C8260D
1,4-dioxane	10 U	50	10	8.7	ug/L	1	LMM			2303756	11/16/23	18:13	SW5030C8260D
dibromomethane	1.0 U	2.0	1.0	0.23	ug/L	1	LMM			2303756	11/16/23	18:13	SW5030C8260D
4-methyl-2-pentanone (MIBK)	1.0 U	10	1.0	0.56	ug/L	1	LMM			2303756	11/16/23	18:13	SW5030C8260D
cis-1,3-dichloropropene	1.0 U	2.0	1.0	0.30	ug/L	1	LMM			2303756	11/16/23	18:13	SW5030C8260D
toluene	1.0 U	2.0	1.0	0.45	ug/L	1	LMM			2303756	11/16/23	18:13	SW5030C8260D
trans-1,3-dichloropropene	1.0 U	2.0	1.0	0.34	ug/L	1	LMM			2303756	11/16/23	18:13	SW5030C8260D
2-hexanone	1.0 U	10	1.0	0.72	ug/L	1	LMM			2303756	11/16/23	18:13	SW5030C8260D
1,1,2-trichloroethane	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303756	11/16/23	18:13	SW5030C8260D
1,3-dichloropropane	1.0 U	2.0	1.0	0.25	ug/L	1	LMM			2303756	11/16/23	18:13	SW5030C8260D
tetrachloroethene	1.0 U	2.0	1.0	0.76	ug/L	1	LMM			2303756	11/16/23	18:13	SW5030C8260D
dibromochloromethane	1.0 U	2.0	1.0	0.21	ug/L	1	LMM			2303756	11/16/23	18:13	SW5030C8260D

Project ID: Dow Salvage Yard 18001468
Job ID: 67836
Sample#: 67836-009
Sample ID: SY-OBMW110-110823
Matrix: Water
Sampled: 11/8/23 14:22

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
1,2-dibromoethane (EDB)	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303756	11/16/23	18:13	SW5030C8260D
chlorobenzene	1.0 U	2.0	1.0	0.25	ug/L	1	LMM			2303756	11/16/23	18:13	SW5030C8260D
1,1,1,2-tetrachloroethane	1.0 U	2.0	1.0	0.21	ug/L	1	LMM			2303756	11/16/23	18:13	SW5030C8260D
ethylbenzene	1.0 U	2.0	1.0	0.65	ug/L	1	LMM			2303756	11/16/23	18:13	SW5030C8260D
m&p-xylenes	1.5 U	2.0	1.5	1.4	ug/L	1	LMM			2303756	11/16/23	18:13	SW5030C8260D
o-xylene	1.0 U	2.0	1.0	0.55	ug/L	1	LMM			2303756	11/16/23	18:13	SW5030C8260D
styrene	1.0 U	2.0	1.0	0.57	ug/L	1	LMM			2303756	11/16/23	18:13	SW5030C8260D
bromoform	1.0 U	2.0	1.0	0.24	ug/L	1	LMM			2303756	11/16/23	18:13	SW5030C8260D
isopropylbenzene	1.0 U	2.0	1.0	0.65	ug/L	1	LMM			2303756	11/16/23	18:13	SW5030C8260D
1,1,2,2-tetrachloroethane	1.0 U	2.0	1.0	0.29	ug/L	1	LMM			2303756	11/16/23	18:13	SW5030C8260D
1,2,3-trichloropropane	1.0 U	2.0	1.0	0.55	ug/L	1	LMM			2303756	11/16/23	18:13	SW5030C8260D
n-propylbenzene	1.0 U	2.0	1.0	0.44	ug/L	1	LMM			2303756	11/16/23	18:13	SW5030C8260D
bromobenzene	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303756	11/16/23	18:13	SW5030C8260D
2-chlorotoluene	1.0 U	2.0	1.0	0.23	ug/L	1	LMM			2303756	11/16/23	18:13	SW5030C8260D
4-chlorotoluene	1.0 U	2.0	1.0	0.33	ug/L	1	LMM			2303756	11/16/23	18:13	SW5030C8260D
tert-butylbenzene	1.0 U	2.0	1.0	0.39	ug/L	1	LMM			2303756	11/16/23	18:13	SW5030C8260D
1,2,4-trimethylbenzene	1.0 U	2.0	1.0	0.58	ug/L	1	LMM			2303756	11/16/23	18:13	SW5030C8260D
sec-butylbenzene	1.0 U	2.0	1.0	0.44	ug/L	1	LMM			2303756	11/16/23	18:13	SW5030C8260D
1,3-dichlorobenzene	1.0 U	2.0	1.0	0.45	ug/L	1	LMM			2303756	11/16/23	18:13	SW5030C8260D
4-isopropyltoluene	1.0 U	2.0	1.0	0.47	ug/L	1	LMM			2303756	11/16/23	18:13	SW5030C8260D
1,4-dichlorobenzene	1.0 U	2.0	1.0	0.26	ug/L	1	LMM			2303756	11/16/23	18:13	SW5030C8260D
1,2-dichlorobenzene	1.0 U	2.0	1.0	0.39	ug/L	1	LMM			2303756	11/16/23	18:13	SW5030C8260D
n-butylbenzene	1.0 U	2.0	1.0	0.54	ug/L	1	LMM			2303756	11/16/23	18:13	SW5030C8260D
1,2-dibromo-3-chloropropane (DBCP)	1.5 U	2.0	1.5	0.91	ug/L	1	LMM			2303756	11/16/23	18:13	SW5030C8260D
1,3,5-trimethylbenzene	1.0 U	2.0	1.0	0.46	ug/L	1	LMM			2303756	11/16/23	18:13	SW5030C8260D
1,2,4-trichlorobenzene	1.0 U	2.0	1.0	0.79	ug/L	1	LMM			2303756	11/16/23	18:13	SW5030C8260D
hexachlorobutadiene	0.50 U	0.50	0.50	0.19	ug/L	1	LMM			2303756	11/16/23	18:13	SW5030C8260D
naphthalene	1.5 U	2.0	1.5	1.2	ug/L	1	LMM			2303756	11/16/23	18:13	SW5030C8260D
1,2,3-trichlorobenzene	1.0 U	2.0	1.0	0.93	ug/L	1	LMM			2303756	11/16/23	18:13	SW5030C8260D
Surrogate Recovery		Limits											
dibromofluoromethane SUR	96	78-114			%	1	LMM			2303756	11/16/23	18:13	SW5030C8260D
toluene-D8 SUR	99	88-110			%	1	LMM			2303756	11/16/23	18:13	SW5030C8260D
4-bromofluorobenzene SUR	96	86-115			%	1	LMM			2303756	11/16/23	18:13	SW5030C8260D

Project ID: Dow Salvage Yard 18001468
Job ID: 67836
Sample#: 67836-010
Sample ID: TB32-110823
Matrix: Water
Sampled: 11/8/23 16:15

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
dichlorodifluoromethane	1.0 U	2.0	1.0	0.28	ug/L	1	LMM			2303756	11/16/23	13:12	SW5030C8260D
chloromethane	1.0 U	2.0	1.0	0.59	ug/L	1	LMM			2303756	11/16/23	13:12	SW5030C8260D
vinyl chloride	1.0 U	2.0	1.0	0.49	ug/L	1	LMM			2303756	11/16/23	13:12	SW5030C8260D
bromomethane	1.5 U	2.0	1.5	1.1	ug/L	1	LMM			2303756	11/16/23	13:12	SW5030C8260D
chloroethane	1.0 U	2.0	1.0	0.33	ug/L	1	LMM			2303756	11/16/23	13:12	SW5030C8260D
trichlorofluoromethane	1.0 U	2.0	1.0	0.34	ug/L	1	LMM			2303756	11/16/23	13:12	SW5030C8260D
diethyl ether	1.0 U	2.0	1.0	0.41	ug/L	1	LMM			2303756	11/16/23	13:12	SW5030C8260D
acetone	5.0 U	50	5.0	1.9	ug/L	1	LMM			2303756	11/16/23	13:12	SW5030C8260D
1,1-dichloroethene	0.50 U	1.0	0.50	0.35	ug/L	1	LMM			2303756	11/16/23	13:12	SW5030C8260D
methylene chloride	1.0 U	2.0	1.0	0.59	ug/L	1	LMM			2303756	11/16/23	13:12	SW5030C8260D
carbon disulfide	1.0 U	2.0	1.0	0.33	ug/L	1	LMM			2303756	11/16/23	13:12	SW5030C8260D
methyl t-butyl ether (MTBE)	1.0 U	2.0	1.0	0.30	ug/L	1	LMM			2303756	11/16/23	13:12	SW5030C8260D
trans-1,2-dichloroethene	1.0 U	2.0	1.0	0.46	ug/L	1	LMM			2303756	11/16/23	13:12	SW5030C8260D
ethyl t-butyl ether (ETBE)	1.0 U	2.0	1.0	0.24	ug/L	1	LMM			2303756	11/16/23	13:12	SW5030C8260D
1,1-dichloroethane	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303756	11/16/23	13:12	SW5030C8260D
t-butanol (TBA)	10 U	30	10	2.5	ug/L	1	LMM			2303756	11/16/23	13:12	SW5030C8260D
2-butanone (MEK)	5.0 U	10	5.0	0.67	ug/L	1	LMM			2303756	11/16/23	13:12	SW5030C8260D
2,2-dichloropropane	1.0 U	2.0	1.0	0.21	ug/L	1	LMM			2303756	11/16/23	13:12	SW5030C8260D
cis-1,2-dichloroethene	1.5 U	2.0	1.5	1.2	ug/L	1	LMM			2303756	11/16/23	13:12	SW5030C8260D
chloroform	1.5 U	2.0	1.5	1.4	ug/L	1	LMM			2303756	11/16/23	13:12	SW5030C8260D
bromochloromethane	1.0 U	2.0	1.0	0.22	ug/L	1	LMM			2303756	11/16/23	13:12	SW5030C8260D
tetrahydrofuran (THF)	1.5 U	2.0	1.5	0.75	ug/L	1	LMM			2303756	11/16/23	13:12	SW5030C8260D
1,1,1-trichloroethane	1.0 U	2.0	1.0	0.55	ug/L	1	LMM			2303756	11/16/23	13:12	SW5030C8260D
1,1-dichloropropene	1.0 U	2.0	1.0	0.26	ug/L	1	LMM			2303756	11/16/23	13:12	SW5030C8260D
t-amyl-methyl ether (TAME)	1.0 U	2.0	1.0	0.57	ug/L	1	LMM			2303756	11/16/23	13:12	SW5030C8260D
carbon tetrachloride	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303756	11/16/23	13:12	SW5030C8260D
1,2-dichloroethane	1.0 U	2.0	1.0	0.20	ug/L	1	LMM			2303756	11/16/23	13:12	SW5030C8260D
benzene	1.0 U	2.0	1.0	0.40	ug/L	1	LMM			2303756	11/16/23	13:12	SW5030C8260D
trichloroethene	1.0 U	2.0	1.0	0.53	ug/L	1	LMM			2303756	11/16/23	13:12	SW5030C8260D
1,2-dichloropropane	1.0 U	2.0	1.0	0.22	ug/L	1	LMM			2303756	11/16/23	13:12	SW5030C8260D
bromodichloromethane	0.50 U	0.60	0.50	0.38	ug/L	1	LMM			2303756	11/16/23	13:12	SW5030C8260D
1,4-dioxane	10 U	50	10	8.7	ug/L	1	LMM			2303756	11/16/23	13:12	SW5030C8260D
dibromomethane	1.0 U	2.0	1.0	0.23	ug/L	1	LMM			2303756	11/16/23	13:12	SW5030C8260D
4-methyl-2-pentanone (MIBK)	1.0 U	10	1.0	0.56	ug/L	1	LMM			2303756	11/16/23	13:12	SW5030C8260D
cis-1,3-dichloropropene	1.0 U	2.0	1.0	0.30	ug/L	1	LMM			2303756	11/16/23	13:12	SW5030C8260D
toluene	1.0 U	2.0	1.0	0.45	ug/L	1	LMM			2303756	11/16/23	13:12	SW5030C8260D
trans-1,3-dichloropropene	1.0 U	2.0	1.0	0.34	ug/L	1	LMM			2303756	11/16/23	13:12	SW5030C8260D
2-hexanone	1.0 U	10	1.0	0.72	ug/L	1	LMM			2303756	11/16/23	13:12	SW5030C8260D
1,1,2-trichloroethane	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303756	11/16/23	13:12	SW5030C8260D
1,3-dichloropropane	1.0 U	2.0	1.0	0.25	ug/L	1	LMM			2303756	11/16/23	13:12	SW5030C8260D
tetrachloroethene	1.0 U	2.0	1.0	0.76	ug/L	1	LMM			2303756	11/16/23	13:12	SW5030C8260D
dibromochloromethane	1.0 U	2.0	1.0	0.21	ug/L	1	LMM			2303756	11/16/23	13:12	SW5030C8260D

Project ID: Dow Salvage Yard 18001468
Job ID: 67836
Sample#: 67836-010
Sample ID: TB32-110823
Matrix: Water
Sampled: 11/8/23 16:15

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
1,2-dibromoethane (EDB)	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303756	11/16/23	13:12	SW5030C8260D
chlorobenzene	1.0 U	2.0	1.0	0.25	ug/L	1	LMM			2303756	11/16/23	13:12	SW5030C8260D
1,1,1,2-tetrachloroethane	1.0 U	2.0	1.0	0.21	ug/L	1	LMM			2303756	11/16/23	13:12	SW5030C8260D
ethylbenzene	1.0 U	2.0	1.0	0.65	ug/L	1	LMM			2303756	11/16/23	13:12	SW5030C8260D
m&p-xylenes	1.5 U	2.0	1.5	1.4	ug/L	1	LMM			2303756	11/16/23	13:12	SW5030C8260D
o-xylene	1.0 U	2.0	1.0	0.55	ug/L	1	LMM			2303756	11/16/23	13:12	SW5030C8260D
styrene	1.0 U	2.0	1.0	0.57	ug/L	1	LMM			2303756	11/16/23	13:12	SW5030C8260D
bromoform	1.0 U	2.0	1.0	0.24	ug/L	1	LMM			2303756	11/16/23	13:12	SW5030C8260D
isopropylbenzene	1.0 U	2.0	1.0	0.65	ug/L	1	LMM			2303756	11/16/23	13:12	SW5030C8260D
1,1,2,2-tetrachloroethane	1.0 U	2.0	1.0	0.29	ug/L	1	LMM			2303756	11/16/23	13:12	SW5030C8260D
1,2,3-trichloropropane	1.0 U	2.0	1.0	0.55	ug/L	1	LMM			2303756	11/16/23	13:12	SW5030C8260D
n-propylbenzene	1.0 U	2.0	1.0	0.44	ug/L	1	LMM			2303756	11/16/23	13:12	SW5030C8260D
bromobenzene	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303756	11/16/23	13:12	SW5030C8260D
2-chlorotoluene	1.0 U	2.0	1.0	0.23	ug/L	1	LMM			2303756	11/16/23	13:12	SW5030C8260D
4-chlorotoluene	1.0 U	2.0	1.0	0.33	ug/L	1	LMM			2303756	11/16/23	13:12	SW5030C8260D
tert-butylbenzene	1.0 U	2.0	1.0	0.39	ug/L	1	LMM			2303756	11/16/23	13:12	SW5030C8260D
1,2,4-trimethylbenzene	1.0 U	2.0	1.0	0.58	ug/L	1	LMM			2303756	11/16/23	13:12	SW5030C8260D
sec-butylbenzene	1.0 U	2.0	1.0	0.44	ug/L	1	LMM			2303756	11/16/23	13:12	SW5030C8260D
1,3-dichlorobenzene	1.0 U	2.0	1.0	0.45	ug/L	1	LMM			2303756	11/16/23	13:12	SW5030C8260D
4-isopropyltoluene	1.0 U	2.0	1.0	0.47	ug/L	1	LMM			2303756	11/16/23	13:12	SW5030C8260D
1,4-dichlorobenzene	1.0 U	2.0	1.0	0.26	ug/L	1	LMM			2303756	11/16/23	13:12	SW5030C8260D
1,2-dichlorobenzene	1.0 U	2.0	1.0	0.39	ug/L	1	LMM			2303756	11/16/23	13:12	SW5030C8260D
n-butylbenzene	1.0 U	2.0	1.0	0.54	ug/L	1	LMM			2303756	11/16/23	13:12	SW5030C8260D
1,2-dibromo-3-chloropropane (DBCP)	1.5 U	2.0	1.5	0.91	ug/L	1	LMM			2303756	11/16/23	13:12	SW5030C8260D
1,3,5-trimethylbenzene	1.0 U	2.0	1.0	0.46	ug/L	1	LMM			2303756	11/16/23	13:12	SW5030C8260D
1,2,4-trichlorobenzene	1.0 U	2.0	1.0	0.79	ug/L	1	LMM			2303756	11/16/23	13:12	SW5030C8260D
hexachlorobutadiene	0.50 U	0.50	0.50	0.19	ug/L	1	LMM			2303756	11/16/23	13:12	SW5030C8260D
naphthalene	1.5 U	2.0	1.5	1.2	ug/L	1	LMM			2303756	11/16/23	13:12	SW5030C8260D
1,2,3-trichlorobenzene	1.0 U	2.0	1.0	0.93	ug/L	1	LMM			2303756	11/16/23	13:12	SW5030C8260D
Surrogate Recovery		Limits											
dibromofluoromethane SUR	97	78-114			%	1	LMM			2303756	11/16/23	13:12	SW5030C8260D
toluene-D8 SUR	99	88-110			%	1	LMM			2303756	11/16/23	13:12	SW5030C8260D
4-bromofluorobenzene SUR	101	86-115			%	1	LMM			2303756	11/16/23	13:12	SW5030C8260D

Project ID: Dow Salvage Yard 18001468
Job ID: 67836
Sample#: 67836-011
Sample ID: SY-OBMW3-110823
Matrix: Water
Sampled: 11/8/23 11:15

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
dichlorodifluoromethane	1.0 U	2.0	1.0	0.28	ug/L	1	LMM			2303756	11/16/23	18:38	SW5030C8260D
chloromethane	1.0 U	2.0	1.0	0.59	ug/L	1	LMM			2303756	11/16/23	18:38	SW5030C8260D
vinyl chloride	1.0 U	2.0	1.0	0.49	ug/L	1	LMM			2303756	11/16/23	18:38	SW5030C8260D
bromomethane	1.5 U	2.0	1.5	1.1	ug/L	1	LMM			2303756	11/16/23	18:38	SW5030C8260D
chloroethane	1.0 U	2.0	1.0	0.33	ug/L	1	LMM			2303756	11/16/23	18:38	SW5030C8260D
trichlorofluoromethane	1.0 U	2.0	1.0	0.34	ug/L	1	LMM			2303756	11/16/23	18:38	SW5030C8260D
diethyl ether	1.0 U	2.0	1.0	0.41	ug/L	1	LMM			2303756	11/16/23	18:38	SW5030C8260D
acetone	5.0 U	50	5.0	1.9	ug/L	1	LMM			2303756	11/16/23	18:38	SW5030C8260D
1,1-dichloroethene	0.50 U	1.0	0.50	0.35	ug/L	1	LMM			2303756	11/16/23	18:38	SW5030C8260D
methylene chloride	1.0 U	2.0	1.0	0.59	ug/L	1	LMM			2303756	11/16/23	18:38	SW5030C8260D
carbon disulfide	1.0 U	2.0	1.0	0.33	ug/L	1	LMM			2303756	11/16/23	18:38	SW5030C8260D
methyl t-butyl ether (MTBE)	1.0 U	2.0	1.0	0.30	ug/L	1	LMM			2303756	11/16/23	18:38	SW5030C8260D
trans-1,2-dichloroethene	1.0 U	2.0	1.0	0.46	ug/L	1	LMM			2303756	11/16/23	18:38	SW5030C8260D
ethyl t-butyl ether (ETBE)	1.0 U	2.0	1.0	0.24	ug/L	1	LMM			2303756	11/16/23	18:38	SW5030C8260D
1,1-dichloroethane	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303756	11/16/23	18:38	SW5030C8260D
t-butanol (TBA)	10 U	30	10	2.5	ug/L	1	LMM			2303756	11/16/23	18:38	SW5030C8260D
2-butanone (MEK)	5.0 U	10	5.0	0.67	ug/L	1	LMM			2303756	11/16/23	18:38	SW5030C8260D
2,2-dichloropropane	1.0 U	2.0	1.0	0.21	ug/L	1	LMM			2303756	11/16/23	18:38	SW5030C8260D
cis-1,2-dichloroethene	1.5 U	2.0	1.5	1.2	ug/L	1	LMM			2303756	11/16/23	18:38	SW5030C8260D
chloroform	1.5 U	2.0	1.5	1.4	ug/L	1	LMM			2303756	11/16/23	18:38	SW5030C8260D
bromochloromethane	1.0 U	2.0	1.0	0.22	ug/L	1	LMM			2303756	11/16/23	18:38	SW5030C8260D
tetrahydrofuran (THF)	1.5 U	2.0	1.5	0.75	ug/L	1	LMM			2303756	11/16/23	18:38	SW5030C8260D
1,1,1-trichloroethane	1.0 U	2.0	1.0	0.55	ug/L	1	LMM			2303756	11/16/23	18:38	SW5030C8260D
1,1-dichloropropene	1.0 U	2.0	1.0	0.26	ug/L	1	LMM			2303756	11/16/23	18:38	SW5030C8260D
t-amyl-methyl ether (TAME)	1.0 U	2.0	1.0	0.57	ug/L	1	LMM			2303756	11/16/23	18:38	SW5030C8260D
carbon tetrachloride	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303756	11/16/23	18:38	SW5030C8260D
1,2-dichloroethane	1.0 U	2.0	1.0	0.20	ug/L	1	LMM			2303756	11/16/23	18:38	SW5030C8260D
benzene	1.0 U	2.0	1.0	0.40	ug/L	1	LMM			2303756	11/16/23	18:38	SW5030C8260D
trichloroethene	1.0 U	2.0	1.0	0.53	ug/L	1	LMM			2303756	11/16/23	18:38	SW5030C8260D
1,2-dichloropropane	1.0 U	2.0	1.0	0.22	ug/L	1	LMM			2303756	11/16/23	18:38	SW5030C8260D
bromodichloromethane	0.50 U	0.60	0.50	0.38	ug/L	1	LMM			2303756	11/16/23	18:38	SW5030C8260D
1,4-dioxane	10 U	50	10	8.7	ug/L	1	LMM			2303756	11/16/23	18:38	SW5030C8260D
dibromomethane	1.0 U	2.0	1.0	0.23	ug/L	1	LMM			2303756	11/16/23	18:38	SW5030C8260D
4-methyl-2-pentanone (MIBK)	1.0 U	10	1.0	0.56	ug/L	1	LMM			2303756	11/16/23	18:38	SW5030C8260D
cis-1,3-dichloropropene	1.0 U	2.0	1.0	0.30	ug/L	1	LMM			2303756	11/16/23	18:38	SW5030C8260D
toluene	1.0 U	2.0	1.0	0.45	ug/L	1	LMM			2303756	11/16/23	18:38	SW5030C8260D
trans-1,3-dichloropropene	1.0 U	2.0	1.0	0.34	ug/L	1	LMM			2303756	11/16/23	18:38	SW5030C8260D
2-hexanone	1.0 U	10	1.0	0.72	ug/L	1	LMM			2303756	11/16/23	18:38	SW5030C8260D
1,1,2-trichloroethane	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303756	11/16/23	18:38	SW5030C8260D
1,3-dichloropropane	1.0 U	2.0	1.0	0.25	ug/L	1	LMM			2303756	11/16/23	18:38	SW5030C8260D
tetrachloroethene	1.0 U	2.0	1.0	0.76	ug/L	1	LMM			2303756	11/16/23	18:38	SW5030C8260D
dibromochloromethane	1.0 U	2.0	1.0	0.21	ug/L	1	LMM			2303756	11/16/23	18:38	SW5030C8260D

Project ID: Dow Salvage Yard 18001468
Job ID: 67836
Sample#: 67836-011
Sample ID: SY-OBMW3-110823
Matrix: Water
Sampled: 11/8/23 11:15

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
1,2-dibromoethane (EDB)	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303756	11/16/23	18:38	SW5030C8260D
chlorobenzene	1.0 U	2.0	1.0	0.25	ug/L	1	LMM			2303756	11/16/23	18:38	SW5030C8260D
1,1,1,2-tetrachloroethane	1.0 U	2.0	1.0	0.21	ug/L	1	LMM			2303756	11/16/23	18:38	SW5030C8260D
ethylbenzene	1.0 U	2.0	1.0	0.65	ug/L	1	LMM			2303756	11/16/23	18:38	SW5030C8260D
m&p-xylenes	1.5 U	2.0	1.5	1.4	ug/L	1	LMM			2303756	11/16/23	18:38	SW5030C8260D
o-xylene	1.0 U	2.0	1.0	0.55	ug/L	1	LMM			2303756	11/16/23	18:38	SW5030C8260D
styrene	1.0 U	2.0	1.0	0.57	ug/L	1	LMM			2303756	11/16/23	18:38	SW5030C8260D
bromoform	1.0 U	2.0	1.0	0.24	ug/L	1	LMM			2303756	11/16/23	18:38	SW5030C8260D
isopropylbenzene	1.0 U	2.0	1.0	0.65	ug/L	1	LMM			2303756	11/16/23	18:38	SW5030C8260D
1,1,2,2-tetrachloroethane	1.0 U	2.0	1.0	0.29	ug/L	1	LMM			2303756	11/16/23	18:38	SW5030C8260D
1,2,3-trichloropropane	1.0 U	2.0	1.0	0.55	ug/L	1	LMM			2303756	11/16/23	18:38	SW5030C8260D
n-propylbenzene	1.0 U	2.0	1.0	0.44	ug/L	1	LMM			2303756	11/16/23	18:38	SW5030C8260D
bromobenzene	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303756	11/16/23	18:38	SW5030C8260D
2-chlorotoluene	1.0 U	2.0	1.0	0.23	ug/L	1	LMM			2303756	11/16/23	18:38	SW5030C8260D
4-chlorotoluene	1.0 U	2.0	1.0	0.33	ug/L	1	LMM			2303756	11/16/23	18:38	SW5030C8260D
tert-butylbenzene	1.0 U	2.0	1.0	0.39	ug/L	1	LMM			2303756	11/16/23	18:38	SW5030C8260D
1,2,4-trimethylbenzene	1.0 U	2.0	1.0	0.58	ug/L	1	LMM			2303756	11/16/23	18:38	SW5030C8260D
sec-butylbenzene	1.0 U	2.0	1.0	0.44	ug/L	1	LMM			2303756	11/16/23	18:38	SW5030C8260D
1,3-dichlorobenzene	1.0 U	2.0	1.0	0.45	ug/L	1	LMM			2303756	11/16/23	18:38	SW5030C8260D
4-isopropyltoluene	1.0 U	2.0	1.0	0.47	ug/L	1	LMM			2303756	11/16/23	18:38	SW5030C8260D
1,4-dichlorobenzene	1.0 U	2.0	1.0	0.26	ug/L	1	LMM			2303756	11/16/23	18:38	SW5030C8260D
1,2-dichlorobenzene	1.0 U	2.0	1.0	0.39	ug/L	1	LMM			2303756	11/16/23	18:38	SW5030C8260D
n-butylbenzene	1.0 U	2.0	1.0	0.54	ug/L	1	LMM			2303756	11/16/23	18:38	SW5030C8260D
1,2-dibromo-3-chloropropane (DBCP)	1.5 U	2.0	1.5	0.91	ug/L	1	LMM			2303756	11/16/23	18:38	SW5030C8260D
1,3,5-trimethylbenzene	1.0 U	2.0	1.0	0.46	ug/L	1	LMM			2303756	11/16/23	18:38	SW5030C8260D
1,2,4-trichlorobenzene	1.0 U	2.0	1.0	0.79	ug/L	1	LMM			2303756	11/16/23	18:38	SW5030C8260D
hexachlorobutadiene	0.50 U	0.50	0.50	0.19	ug/L	1	LMM			2303756	11/16/23	18:38	SW5030C8260D
naphthalene	1.5 U	2.0	1.5	1.2	ug/L	1	LMM			2303756	11/16/23	18:38	SW5030C8260D
1,2,3-trichlorobenzene	1.0 U	2.0	1.0	0.93	ug/L	1	LMM			2303756	11/16/23	18:38	SW5030C8260D
Surrogate Recovery		Limits											
dibromofluoromethane SUR	95	78-114			%	1	LMM			2303756	11/16/23	18:38	SW5030C8260D
toluene-D8 SUR	100	88-110			%	1	LMM			2303756	11/16/23	18:38	SW5030C8260D
4-bromofluorobenzene SUR	100	86-115			%	1	LMM			2303756	11/16/23	18:38	SW5030C8260D

Project ID: Dow Salvage Yard 18001468
Job ID: 67836
Sample#: 67836-001
Sample ID: SY-OBMW2-110823
Matrix: Water
Received on ice at 0˚C, in satisfactory condition.
Sampled: 11/8/23 9:05

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
Unadjusted C5-C8 Aliphatics	50 U	100	50	50	ug/L	1	SFP			2303773	11/16/23	22:37	MA VPH
Unadjusted C9-C12 Aliphatics	50 U	100	50	40	ug/L	1	SFP			2303773	11/16/23	22:37	MA VPH
methyl t-butyl ether (MTBE)	1.0 U	2	1.0	0.73	ug/L	1	SFP			2303773	11/16/23	22:37	MA VPH
benzene	1.0 U	1	1.0	0.76	ug/L	1	SFP			2303773	11/16/23	22:37	MA VPH
toluene	1.0 U	2	1.0	0.58	ug/L	1	SFP			2303773	11/16/23	22:37	MA VPH
ethylbenzene	1.0 U	2	1.0	0.40	ug/L	1	SFP			2303773	11/16/23	22:37	MA VPH
m&p-xylenes	2.0 U	2	2.0	1.1	ug/L	1	SFP			2303773	11/16/23	22:37	MA VPH
o-xylene	1.0 U	2	1.0	0.45	ug/L	1	SFP			2303773	11/16/23	22:37	MA VPH
naphthalene	4.0 U	5	4.0	3.5	ug/L	1	SFP			2303773	11/16/23	22:37	MA VPH
C5-C8 Aliphatics	50 U	100	50	50	ug/L	1	SFP			2303773	11/16/23	22:37	MA VPH
C9-C12 Aliphatics	50 U	100	50	40	ug/L	1	SFP			2303773	11/16/23	22:37	MA VPH
C9-C10 Aromatics	50 U	100	50	33	ug/L	1	SFP			2303773	11/16/23	22:37	MA VPH
Surrogate Recovery		Limits											
2,5-dibromotoluene as Aromatic SUR	78	70-130			%	1	SFP			2303773	11/16/23	22:37	MA VPH
2,5-dibromotoluene as Aliphatic SUR	82	70-130			%	1	SFP			2303773	11/16/23	22:37	MA VPH

Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range.
C5-C8 Aliphatic Hydrocarbons exclude the concentration of target analytes eluting in that range.
C9-C12 Aliphatic Hydrocarbons exclude concentration of target analytes eluting in that range AND C9-C10 Aromatics.

Project ID: Dow Salvage Yard 18001468
Job ID: 67836
Sample#: 67836-002
Sample ID: SY-OBMW1-110823
Matrix: Water
Received on ice at 0˚C, in satisfactory condition.
Sampled: 11/8/23 9:35

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
Unadjusted C5-C8 Aliphatics	50 U	100	50	50	ug/L	1	SFP			2303773	11/16/23	23:10	MA VPH
Unadjusted C9-C12 Aliphatics	50 U	100	50	40	ug/L	1	SFP			2303773	11/16/23	23:10	MA VPH
methyl t-butyl ether (MTBE)	1.0 U	2	1.0	0.73	ug/L	1	SFP			2303773	11/16/23	23:10	MA VPH
benzene	1.0 U	1	1.0	0.76	ug/L	1	SFP			2303773	11/16/23	23:10	MA VPH
toluene	1.0 U	2	1.0	0.58	ug/L	1	SFP			2303773	11/16/23	23:10	MA VPH
ethylbenzene	1.0 U	2	1.0	0.40	ug/L	1	SFP			2303773	11/16/23	23:10	MA VPH
m&p-xylenes	2.0 U	2	2.0	1.1	ug/L	1	SFP			2303773	11/16/23	23:10	MA VPH
o-xylene	1.0 U	2	1.0	0.45	ug/L	1	SFP			2303773	11/16/23	23:10	MA VPH
naphthalene	4.0 U	5	4.0	3.5	ug/L	1	SFP			2303773	11/16/23	23:10	MA VPH
C5-C8 Aliphatics	50 U	100	50	50	ug/L	1	SFP			2303773	11/16/23	23:10	MA VPH
C9-C12 Aliphatics	50 U	100	50	40	ug/L	1	SFP			2303773	11/16/23	23:10	MA VPH
C9-C10 Aromatics	50 U	100	50	33	ug/L	1	SFP			2303773	11/16/23	23:10	MA VPH
Surrogate Recovery		Limits											
2,5-dibromotoluene as Aromatic SUR	107	70-130			%	1	SFP			2303773	11/16/23	23:10	MA VPH
2,5-dibromotoluene as Aliphatic SUR	111	70-130			%	1	SFP			2303773	11/16/23	23:10	MA VPH

Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range.
C5-C8 Aliphatic Hydrocarbons exclude the concentration of target analytes eluting in that range.
C9-C12 Aliphatic Hydrocarbons exclude concentration of target analytes eluting in that range AND C9-C10 Aromatics.

Project ID: Dow Salvage Yard 18001468
Job ID: 67836
Sample#: 67836-003
Sample ID: SY-OBMW9-110823
Matrix: Water
Received on ice at 0˚C, in satisfactory condition.
Sampled: 11/8/23 10:16

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
Unadjusted C5-C8 Aliphatics	50 U	100	50	50	ug/L	1	SFP			2303773	11/16/23	23:44	MA VPH
Unadjusted C9-C12 Aliphatics	50 U	100	50	40	ug/L	1	SFP			2303773	11/16/23	23:44	MA VPH
methyl t-butyl ether (MTBE)	1.0 U	2	1.0	0.73	ug/L	1	SFP			2303773	11/16/23	23:44	MA VPH
benzene	1.0 U	1	1.0	0.76	ug/L	1	SFP			2303773	11/16/23	23:44	MA VPH
toluene	1.0 U	2	1.0	0.58	ug/L	1	SFP			2303773	11/16/23	23:44	MA VPH
ethylbenzene	1.0 U	2	1.0	0.40	ug/L	1	SFP			2303773	11/16/23	23:44	MA VPH
m&p-xylenes	2.0 U	2	2.0	1.1	ug/L	1	SFP			2303773	11/16/23	23:44	MA VPH
o-xylene	1.0 U	2	1.0	0.45	ug/L	1	SFP			2303773	11/16/23	23:44	MA VPH
naphthalene	4.0 U	5	4.0	3.5	ug/L	1	SFP			2303773	11/16/23	23:44	MA VPH
C5-C8 Aliphatics	50 U	100	50	50	ug/L	1	SFP			2303773	11/16/23	23:44	MA VPH
C9-C12 Aliphatics	50 U	100	50	40	ug/L	1	SFP			2303773	11/16/23	23:44	MA VPH
C9-C10 Aromatics	50 U	100	50	33	ug/L	1	SFP			2303773	11/16/23	23:44	MA VPH
Surrogate Recovery		Limits											
2,5-dibromotoluene as Aromatic SUR	92	70-130			%	1	SFP			2303773	11/16/23	23:44	MA VPH
2,5-dibromotoluene as Aliphatic SUR	96	70-130			%	1	SFP			2303773	11/16/23	23:44	MA VPH

Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range.
C5-C8 Aliphatic Hydrocarbons exclude the concentration of target analytes eluting in that range.
C9-C12 Aliphatic Hydrocarbons exclude concentration of target analytes eluting in that range AND C9-C10 Aromatics.

Project ID: Dow Salvage Yard 18001468
Job ID: 67836
Sample#: 67836-004
Sample ID: SY-BRMW5-29-44-110823
Matrix: Water
Received on ice at 0˚C, in satisfactory condition.
Sampled: 11/8/23 11:00

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
Unadjusted C5-C8 Aliphatics	50 U	100	50	50	ug/L	1	SFP			2303773	11/17/23	0:17	MA VPH
Unadjusted C9-C12 Aliphatics	50 U	100	50	40	ug/L	1	SFP			2303773	11/17/23	0:17	MA VPH
methyl t-butyl ether (MTBE)	1.0 U	2	1.0	0.73	ug/L	1	SFP			2303773	11/17/23	0:17	MA VPH
benzene	1.0 U	1	1.0	0.76	ug/L	1	SFP			2303773	11/17/23	0:17	MA VPH
toluene	1.1 J	2	1.0	0.58	ug/L	1	SFP			2303773	11/17/23	0:17	MA VPH
ethylbenzene	1.0 U	2	1.0	0.40	ug/L	1	SFP			2303773	11/17/23	0:17	MA VPH
m&p-xylenes	2.0 U	2	2.0	1.1	ug/L	1	SFP			2303773	11/17/23	0:17	MA VPH
o-xylene	1.0 U	2	1.0	0.45	ug/L	1	SFP			2303773	11/17/23	0:17	MA VPH
naphthalene	4.0 U	5	4.0	3.5	ug/L	1	SFP			2303773	11/17/23	0:17	MA VPH
C5-C8 Aliphatics	50 U	100	50	50	ug/L	1	SFP			2303773	11/17/23	0:17	MA VPH
C9-C12 Aliphatics	50 U	100	50	40	ug/L	1	SFP			2303773	11/17/23	0:17	MA VPH
C9-C10 Aromatics	50 U	100	50	33	ug/L	1	SFP			2303773	11/17/23	0:17	MA VPH
Surrogate Recovery		Limits											
2,5-dibromotoluene as Aromatic SUR	95	70-130			%	1	SFP			2303773	11/17/23	0:17	MA VPH
2,5-dibromotoluene as Aliphatic SUR	99	70-130			%	1	SFP			2303773	11/17/23	0:17	MA VPH

Note: The results were obtained from a vial with an air bubble.

Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range.

C5-C8 Aliphatic Hydrocarbons exclude the concentration of target analytes eluting in that range.

C9-C12 Aliphatic Hydrocarbons exclude concentration of target analytes eluting in that range AND C9-C10 Aromatics.

Project ID: Dow Salvage Yard 18001468
Job ID: 67836
Sample#: 67836-005
Sample ID: SY-BRMW5-123-133-110823
Matrix: Water
Received on ice at 0˚C, in satisfactory condition.
Sampled: 11/8/23 11:40

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
Unadjusted C5-C8 Aliphatics	50 U	100	50	50	ug/L	1	SFP			2303773	11/17/23	0:51	MA VPH
Unadjusted C9-C12 Aliphatics	50 U	100	50	40	ug/L	1	SFP			2303773	11/17/23	0:51	MA VPH
methyl t-butyl ether (MTBE)	1.0 U	2	1.0	0.73	ug/L	1	SFP			2303773	11/17/23	0:51	MA VPH
benzene	1.0 U	1	1.0	0.76	ug/L	1	SFP			2303773	11/17/23	0:51	MA VPH
toluene	1.7 J	2	1.0	0.58	ug/L	1	SFP			2303773	11/17/23	0:51	MA VPH
ethylbenzene	1.0 U	2	1.0	0.40	ug/L	1	SFP			2303773	11/17/23	0:51	MA VPH
m&p-xylenes	2.0 U	2	2.0	1.1	ug/L	1	SFP			2303773	11/17/23	0:51	MA VPH
o-xylene	1.0 U	2	1.0	0.45	ug/L	1	SFP			2303773	11/17/23	0:51	MA VPH
naphthalene	4.0 U	5	4.0	3.5	ug/L	1	SFP			2303773	11/17/23	0:51	MA VPH
C5-C8 Aliphatics	50 U	100	50	50	ug/L	1	SFP			2303773	11/17/23	0:51	MA VPH
C9-C12 Aliphatics	50 U	100	50	40	ug/L	1	SFP			2303773	11/17/23	0:51	MA VPH
C9-C10 Aromatics	50 U	100	50	33	ug/L	1	SFP			2303773	11/17/23	0:51	MA VPH
Surrogate Recovery		Limits											
2,5-dibromotoluene as Aromatic SUR	101	70-130			%	1	SFP			2303773	11/17/23	0:51	MA VPH
2,5-dibromotoluene as Aliphatic SUR	106	70-130			%	1	SFP			2303773	11/17/23	0:51	MA VPH

Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range.
C5-C8 Aliphatic Hydrocarbons exclude the concentration of target analytes eluting in that range.
C9-C12 Aliphatic Hydrocarbons exclude concentration of target analytes eluting in that range AND C9-C10 Aromatics.

Project ID: Dow Salvage Yard 18001468
Job ID: 67836
Sample#: 67836-006
Sample ID: SY-BRMW5-56-66-110823
Matrix: Water
Received on ice at 0˚C, in satisfactory condition.
Sampled: 11/8/23 11:15

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
Unadjusted C5-C8 Aliphatics	50 U	100	50	50	ug/L	1	SFP			2303773	11/17/23	1:24	MA VPH
Unadjusted C9-C12 Aliphatics	50 U	100	50	40	ug/L	1	SFP			2303773	11/17/23	1:24	MA VPH
methyl t-butyl ether (MTBE)	1.0 U	2	1.0	0.73	ug/L	1	SFP			2303773	11/17/23	1:24	MA VPH
benzene	1.0 U	1	1.0	0.76	ug/L	1	SFP			2303773	11/17/23	1:24	MA VPH
toluene	1.0 U	2	1.0	0.58	ug/L	1	SFP			2303773	11/17/23	1:24	MA VPH
ethylbenzene	1.0 U	2	1.0	0.40	ug/L	1	SFP			2303773	11/17/23	1:24	MA VPH
m&p-xylenes	2.0 U	2	2.0	1.1	ug/L	1	SFP			2303773	11/17/23	1:24	MA VPH
o-xylene	1.0 U	2	1.0	0.45	ug/L	1	SFP			2303773	11/17/23	1:24	MA VPH
naphthalene	4.0 U	5	4.0	3.5	ug/L	1	SFP			2303773	11/17/23	1:24	MA VPH
C5-C8 Aliphatics	50 U	100	50	50	ug/L	1	SFP			2303773	11/17/23	1:24	MA VPH
C9-C12 Aliphatics	50 U	100	50	40	ug/L	1	SFP			2303773	11/17/23	1:24	MA VPH
C9-C10 Aromatics	50 U	100	50	33	ug/L	1	SFP			2303773	11/17/23	1:24	MA VPH
Surrogate Recovery		Limits											
2,5-dibromotoluene as Aromatic SUR	87	70-130			%	1	SFP			2303773	11/17/23	1:24	MA VPH
2,5-dibromotoluene as Aliphatic SUR	90	70-130			%	1	SFP			2303773	11/17/23	1:24	MA VPH

Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range.
C5-C8 Aliphatic Hydrocarbons exclude the concentration of target analytes eluting in that range.
C9-C12 Aliphatic Hydrocarbons exclude concentration of target analytes eluting in that range AND C9-C10 Aromatics.

Project ID: Dow Salvage Yard 18001468
Job ID: 67836
Sample#: 67836-007
Sample ID: SY-OBMW8-110823
Matrix: Water
Received on ice at 0˚C, in satisfactory condition.
Sampled: 11/8/23 12:50

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
Unadjusted C5-C8 Aliphatics	50 U	100	50	50	ug/L	1	SFP			2303859	11/20/23	14:11	MA VPH
Unadjusted C9-C12 Aliphatics	50 U	100	50	40	ug/L	1	SFP			2303859	11/20/23	14:11	MA VPH
methyl t-butyl ether (MTBE)	1.0 U	2	1.0	0.73	ug/L	1	SFP			2303859	11/20/23	14:11	MA VPH
benzene	1.0 U	1	1.0	0.76	ug/L	1	SFP			2303859	11/20/23	14:11	MA VPH
toluene	1.0 U	2	1.0	0.58	ug/L	1	SFP			2303859	11/20/23	14:11	MA VPH
ethylbenzene	1.0 U	2	1.0	0.40	ug/L	1	SFP			2303859	11/20/23	14:11	MA VPH
m&p-xylenes	2.0 U	2	2.0	1.1	ug/L	1	SFP			2303859	11/20/23	14:11	MA VPH
o-xylene	1.0 U	2	1.0	0.45	ug/L	1	SFP			2303859	11/20/23	14:11	MA VPH
naphthalene	4.0 U	5	4.0	3.5	ug/L	1	SFP			2303859	11/20/23	14:11	MA VPH
C5-C8 Aliphatics	50 U	100	50	50	ug/L	1	SFP			2303859	11/20/23	14:11	MA VPH
C9-C12 Aliphatics	50 U	100	50	40	ug/L	1	SFP			2303859	11/20/23	14:11	MA VPH
C9-C10 Aromatics	50 U	100	50	33	ug/L	1	SFP			2303859	11/20/23	14:11	MA VPH
Surrogate Recovery		Limits											
2,5-dibromotoluene as Aromatic SUR	99	70-130			%	1	SFP			2303859	11/20/23	14:11	MA VPH
2,5-dibromotoluene as Aliphatic SUR	101	70-130			%	1	SFP			2303859	11/20/23	14:11	MA VPH

Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range.
C5-C8 Aliphatic Hydrocarbons exclude the concentration of target analytes eluting in that range.
C9-C12 Aliphatic Hydrocarbons exclude concentration of target analytes eluting in that range AND C9-C10 Aromatics.

Project ID: Dow Salvage Yard 18001468
Job ID: 67836
Sample#: 67836-008
Sample ID: SY-OBMW11-110823
Matrix: Water
Received on ice at 0˚C, in satisfactory condition.
Sampled: 11/8/23 14:17

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
Unadjusted C5-C8 Aliphatics	50 U	100	50	50	ug/L	1	SFP			2303859	11/20/23	14:44	MA VPH
Unadjusted C9-C12 Aliphatics	50 U	100	50	40	ug/L	1	SFP			2303859	11/20/23	14:44	MA VPH
methyl t-butyl ether (MTBE)	1.0 U	2	1.0	0.73	ug/L	1	SFP			2303859	11/20/23	14:44	MA VPH
benzene	1.0 U	1	1.0	0.76	ug/L	1	SFP			2303859	11/20/23	14:44	MA VPH
toluene	1.0 U	2	1.0	0.58	ug/L	1	SFP			2303859	11/20/23	14:44	MA VPH
ethylbenzene	1.0 U	2	1.0	0.40	ug/L	1	SFP			2303859	11/20/23	14:44	MA VPH
m&p-xylenes	2.0 U	2	2.0	1.1	ug/L	1	SFP			2303859	11/20/23	14:44	MA VPH
o-xylene	1.0 U	2	1.0	0.45	ug/L	1	SFP			2303859	11/20/23	14:44	MA VPH
naphthalene	4.0 U	5	4.0	3.5	ug/L	1	SFP			2303859	11/20/23	14:44	MA VPH
C5-C8 Aliphatics	50 U	100	50	50	ug/L	1	SFP			2303859	11/20/23	14:44	MA VPH
C9-C12 Aliphatics	50 U	100	50	40	ug/L	1	SFP			2303859	11/20/23	14:44	MA VPH
C9-C10 Aromatics	50 U	100	50	33	ug/L	1	SFP			2303859	11/20/23	14:44	MA VPH
Surrogate Recovery		Limits											
2,5-dibromotoluene as Aromatic SUR	101	70-130			%	1	SFP			2303859	11/20/23	14:44	MA VPH
2,5-dibromotoluene as Aliphatic SUR	103	70-130			%	1	SFP			2303859	11/20/23	14:44	MA VPH

Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range.
C5-C8 Aliphatic Hydrocarbons exclude the concentration of target analytes eluting in that range.
C9-C12 Aliphatic Hydrocarbons exclude concentration of target analytes eluting in that range AND C9-C10 Aromatics.

Project ID: Dow Salvage Yard 18001468
Job ID: 67836
Sample#: 67836-009
Sample ID: SY-OBMW110-110823
Matrix: Water
Received on ice at 0˚C, in satisfactory condition.
Sampled: 11/8/23 14:22

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
Unadjusted C5-C8 Aliphatics	50 U	100	50	50	ug/L	1	SFP			2303859	11/20/23	15:18	MA VPH
Unadjusted C9-C12 Aliphatics	50 U	100	50	40	ug/L	1	SFP			2303859	11/20/23	15:18	MA VPH
methyl t-butyl ether (MTBE)	1.0 U	2	1.0	0.73	ug/L	1	SFP			2303859	11/20/23	15:18	MA VPH
benzene	1.0 U	1	1.0	0.76	ug/L	1	SFP			2303859	11/20/23	15:18	MA VPH
toluene	1.0 U	2	1.0	0.58	ug/L	1	SFP			2303859	11/20/23	15:18	MA VPH
ethylbenzene	1.0 U	2	1.0	0.40	ug/L	1	SFP			2303859	11/20/23	15:18	MA VPH
m&p-xylenes	2.0 U	2	2.0	1.1	ug/L	1	SFP			2303859	11/20/23	15:18	MA VPH
o-xylene	1.0 U	2	1.0	0.45	ug/L	1	SFP			2303859	11/20/23	15:18	MA VPH
naphthalene	4.0 U	5	4.0	3.5	ug/L	1	SFP			2303859	11/20/23	15:18	MA VPH
C5-C8 Aliphatics	50 U	100	50	50	ug/L	1	SFP			2303859	11/20/23	15:18	MA VPH
C9-C12 Aliphatics	50 U	100	50	40	ug/L	1	SFP			2303859	11/20/23	15:18	MA VPH
C9-C10 Aromatics	50 U	100	50	33	ug/L	1	SFP			2303859	11/20/23	15:18	MA VPH
Surrogate Recovery		Limits											
2,5-dibromotoluene as Aromatic SUR	99	70-130			%	1	SFP			2303859	11/20/23	15:18	MA VPH
2,5-dibromotoluene as Aliphatic SUR	101	70-130			%	1	SFP			2303859	11/20/23	15:18	MA VPH

Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range.
C5-C8 Aliphatic Hydrocarbons exclude the concentration of target analytes eluting in that range.
C9-C12 Aliphatic Hydrocarbons exclude concentration of target analytes eluting in that range AND C9-C10 Aromatics.

Project ID: Dow Salvage Yard 18001468
Job ID: 67836
Sample#: 67836-010
Sample ID: TB32-110823
Matrix: Water
Received on ice at 0˚C, in satisfactory condition.
Sampled: 11/8/23 16:15

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
Unadjusted C5-C8 Aliphatics	50 U	100	50	50	ug/L	1	SFP			2303859	11/20/23	11:58	MA VPH
Unadjusted C9-C12 Aliphatics	50 U	100	50	40	ug/L	1	SFP			2303859	11/20/23	11:58	MA VPH
methyl t-butyl ether (MTBE)	1.0 U	2	1.0	0.73	ug/L	1	SFP			2303859	11/20/23	11:58	MA VPH
benzene	1.0 U	1	1.0	0.76	ug/L	1	SFP			2303859	11/20/23	11:58	MA VPH
toluene	1.0 U	2	1.0	0.58	ug/L	1	SFP			2303859	11/20/23	11:58	MA VPH
ethylbenzene	1.0 U	2	1.0	0.40	ug/L	1	SFP			2303859	11/20/23	11:58	MA VPH
m&p-xylenes	2.0 U	2	2.0	1.1	ug/L	1	SFP			2303859	11/20/23	11:58	MA VPH
o-xylene	1.0 U	2	1.0	0.45	ug/L	1	SFP			2303859	11/20/23	11:58	MA VPH
naphthalene	4.0 U	5	4.0	3.5	ug/L	1	SFP			2303859	11/20/23	11:58	MA VPH
C5-C8 Aliphatics	50 U	100	50	50	ug/L	1	SFP			2303859	11/20/23	11:58	MA VPH
C9-C12 Aliphatics	50 U	100	50	40	ug/L	1	SFP			2303859	11/20/23	11:58	MA VPH
C9-C10 Aromatics	50 U	100	50	33	ug/L	1	SFP			2303859	11/20/23	11:58	MA VPH
Surrogate Recovery		Limits											
2,5-dibromotoluene as Aromatic SUR	93	70-130			%	1	SFP			2303859	11/20/23	11:58	MA VPH
2,5-dibromotoluene as Aliphatic SUR	94	70-130			%	1	SFP			2303859	11/20/23	11:58	MA VPH

Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range.
C5-C8 Aliphatic Hydrocarbons exclude the concentration of target analytes eluting in that range.
C9-C12 Aliphatic Hydrocarbons exclude concentration of target analytes eluting in that range AND C9-C10 Aromatics.

Project ID: Dow Salvage Yard 18001468
Job ID: 67836
Sample#: 67836-011
Sample ID: SY-OBMW3-110823
Matrix: Water
Received on ice at 0˚C, in satisfactory condition.
Sampled: 11/8/23 11:15

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
Unadjusted C5-C8 Aliphatics	50 U	100	50	50	ug/L	1	SFP			2303859	11/20/23	15:51	MA VPH
Unadjusted C9-C12 Aliphatics	50 U	100	50	40	ug/L	1	SFP			2303859	11/20/23	15:51	MA VPH
methyl t-butyl ether (MTBE)	1.0 U	2	1.0	0.73	ug/L	1	SFP			2303859	11/20/23	15:51	MA VPH
benzene	1.0 U	1	1.0	0.76	ug/L	1	SFP			2303859	11/20/23	15:51	MA VPH
toluene	1.0 U	2	1.0	0.58	ug/L	1	SFP			2303859	11/20/23	15:51	MA VPH
ethylbenzene	1.0 U	2	1.0	0.40	ug/L	1	SFP			2303859	11/20/23	15:51	MA VPH
m&p-xylenes	2.0 U	2	2.0	1.1	ug/L	1	SFP			2303859	11/20/23	15:51	MA VPH
o-xylene	1.0 U	2	1.0	0.45	ug/L	1	SFP			2303859	11/20/23	15:51	MA VPH
naphthalene	4.0 U	5	4.0	3.5	ug/L	1	SFP			2303859	11/20/23	15:51	MA VPH
C5-C8 Aliphatics	50 U	100	50	50	ug/L	1	SFP			2303859	11/20/23	15:51	MA VPH
C9-C12 Aliphatics	50 U	100	50	40	ug/L	1	SFP			2303859	11/20/23	15:51	MA VPH
C9-C10 Aromatics	50 U	100	50	33	ug/L	1	SFP			2303859	11/20/23	15:51	MA VPH
Surrogate Recovery		Limits											
2,5-dibromotoluene as Aromatic SUR	97	70-130			%	1	SFP			2303859	11/20/23	15:51	MA VPH
2,5-dibromotoluene as Aliphatic SUR	99	70-130			%	1	SFP			2303859	11/20/23	15:51	MA VPH

Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range.
C5-C8 Aliphatic Hydrocarbons exclude the concentration of target analytes eluting in that range.
C9-C12 Aliphatic Hydrocarbons exclude concentration of target analytes eluting in that range AND C9-C10 Aromatics.

Project ID: Dow Salvage Yard 18001468
Job ID: 67836
Sample#: 67836-001
Sample ID: SY-OBMW2-110823
Matrix: Water
Sampled: 11/8/23 9:05

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
N-nitrosodimethylamine	1.0 U#	2.0	1.0	0.21	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	15:56	SW3510C8270E
pyridine	1.0 U#	2.0	1.0	0.60	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	15:56	SW3510C8270E
aniline	1.0 U	2.0	1.0	0.39	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	15:56	SW3510C8270E
phenol	1.0 U#	2.0	1.0	0.34	ug/L	1	CL	11/14/23	8:53	17124	11/21/23	18:44	SW3510C8270E
2-chlorophenol	1.0 U	5.0	1.0	0.29	ug/L	1	CL	11/14/23	8:53	17124	11/21/23	18:44	SW3510C8270E
bis(2-chloroethyl)ether	1.0 U	2.0	1.0	0.35	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	15:56	SW3510C8270E
1,3-dichlorobenzene	1.0 U	2.0	1.0	0.41	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	15:56	SW3510C8270E
1,4-dichlorobenzene	1.0 U	2.0	1.0	0.37	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	15:56	SW3510C8270E
1,2-dichlorobenzene	1.0 U	2.0	1.0	0.36	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	15:56	SW3510C8270E
benzyl alcohol	1.0 U	2.0	1.0	0.84	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	15:56	SW3510C8270E
2-methylphenol	1.0 U	5.0	1.0	0.39	ug/L	1	CL	11/14/23	8:53	17124	11/21/23	18:44	SW3510C8270E
2,2'-oxybis(1-chloropropane)	1.0 U	2.0	1.0	0.44	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	15:56	SW3510C8270E
hexachloroethane	1.0 U	2.0	1.0	0.53	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	15:56	SW3510C8270E
N-nitroso-di-N-propylamine	1.0 U	2.0	1.0	0.30	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	15:56	SW3510C8270E
4-methylphenol	1.5 U	2.0	1.5	1.3	ug/L	1	CL	11/14/23	8:53	17124	11/21/23	18:44	SW3510C8270E
nitrobenzene	1.0 U	2.0	1.0	0.41	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	15:56	SW3510C8270E
isophorone	1.0 U	5.0	1.0	0.32	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	15:56	SW3510C8270E
2-nitrophenol	1.0 U	2.0	1.0	0.21	ug/L	1	CL	11/14/23	8:53	17124	11/21/23	18:44	SW3510C8270E
2,4-dimethylphenol	1.0 U	5.0	1.0	0.44	ug/L	1	CL	11/14/23	8:53	17124	11/21/23	18:44	SW3510C8270E
bis(2-chloroethoxy)methane	1.0 U	5.0	1.0	0.26	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	15:56	SW3510C8270E
2,4-dichlorophenol	1.0 U	5.0	1.0	0.19	ug/L	1	CL	11/14/23	8:53	17124	11/21/23	18:44	SW3510C8270E
1,2,4-trichlorobenzene	1.0 U	5.0	1.0	0.34	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	15:56	SW3510C8270E
benzoic acid	45 U#	50	45	20	ug/L	1	CL	11/14/23	8:53	17124	11/21/23	18:44	SW3510C8270E
4-chloroaniline	1.0 U	2.0	1.0	0.41	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	15:56	SW3510C8270E
hexachlorobutadiene	1.0 U	2.0	1.0	0.57	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	15:56	SW3510C8270E
4-chloro-3-methylphenol	1.0 U	2.0	1.0	0.42	ug/L	1	CL	11/14/23	8:53	17124	11/21/23	18:44	SW3510C8270E
hexachlorocyclopentadiene	4.0 U#	10	4.0	1.6	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	15:56	SW3510C8270E
2,4,6-trichlorophenol	1.0 U	2.0	1.0	0.33	ug/L	1	CL	11/14/23	8:53	17124	11/21/23	18:44	SW3510C8270E
2,4,5-trichlorophenol	1.0 U	2.0	1.0	0.28	ug/L	1	CL	11/14/23	8:53	17124	11/21/23	18:44	SW3510C8270E
2-chloronaphthalene	1.0 U	5.0	1.0	0.34	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	15:56	SW3510C8270E
2-nitroaniline	1.0 U	2.0	1.0	0.72	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	15:56	SW3510C8270E
dimethylphthalate	1.0 U#	5.0	1.0	0.41	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	15:56	SW3510C8270E
2,6-dinitrotoluene	1.0 U	5.0	1.0	0.42	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	15:56	SW3510C8270E
2,4-dinitrotoluene	1.0 U	5.0	1.0	0.52	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	15:56	SW3510C8270E
3-nitroaniline	1.5 U	2.0	1.5	1.0	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	15:56	SW3510C8270E
2,4-dinitrophenol	45 U	50	45	3.5	ug/L	1	CL	11/14/23	8:53	17124	11/21/23	18:44	SW3510C8270E
dibenzofuran	0.40 U	0.50	0.40	0.37	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	15:56	SW3510C8270E
4-nitrophenol	5.0 U#	10	5.0	1.6	ug/L	1	CL	11/14/23	8:53	17124	11/21/23	18:44	SW3510C8270E
diethyl phthalate	2.4 J	5.0	1.0	0.30	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	15:56	SW3510C8270E
4-chlorophenyl phenyl ether	1.0 U	5.0	1.0	0.35	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	15:56	SW3510C8270E
4-nitroaniline	3.0 U	5.0	3.0	1.0	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	15:56	SW3510C8270E
4,6-dinitro-2-methylphenol	10 U	20	10	1.7	ug/L	1	CL	11/14/23	8:53	17124	11/21/23	18:44	SW3510C8270E

Project ID: Dow Salvage Yard 18001468
Job ID: 67836
Sample#: 67836-001
Sample ID: SY-OBMW2-110823
Matrix: Water
Sampled: 11/8/23 9:05

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
azobenzene	1.0 U	2.0	1.0	0.25	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	15:56	SW3510C8270E
N-nitrosodiphenylamine	1.0 U	2.0	1.0	0.26	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	15:56	SW3510C8270E
4-bromophenyl phenyl ether	1.0 U	2.0	1.0	0.23	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	15:56	SW3510C8270E
hexachlorobenzene	1.0 U	2.0	1.0	0.25	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	15:56	SW3510C8270E
pentachlorophenol	5.0 U	10	5.0	2.6	ug/L	1	CL	11/14/23	8:53	17124	11/21/23	18:44	SW3510C8270E
carbazole	1.0 U	2.0	1.0	0.32	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	15:56	SW3510C8270E
di-n-butylphthalate	1.0 U	5.0	1.0	0.54	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	15:56	SW3510C8270E
benzidine	25 U	30	25	20	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	15:56	SW3510C8270E
butyl benzyl phthalate	3.0 U#	5.0	3.0	2.1	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	15:56	SW3510C8270E
3,3'-dichlorobenzidine	25 U	30	25	20	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	15:56	SW3510C8270E
bis(2-ethylhexyl)phthalate	3.0 U	5.0	3.0	2.4	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	15:56	SW3510C8270E
di-n-octyl phthalate	3.0 U	5.0	3.0	2.1	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	15:56	SW3510C8270E
Surrogate Recovery		Limits											
2-fluorophenol SUR	26	21-100			%	1	CL	11/14/23	8:53	17124	11/21/23	18:44	SW3510C8270E
phenol-D5 SUR	18	10-102			%	1	CL	11/14/23	8:53	17124	11/21/23	18:44	SW3510C8270E
2,4,6-tribromophenol SUR	74	10-123			%	1	CL	11/14/23	8:53	17124	11/21/23	18:44	SW3510C8270E
nitrobenzene-D5 SUR	53	35-114			%	1	CL	11/14/23	8:53	17124	11/20/23	15:56	SW3510C8270E
2-fluorobiphenyl SUR	58	43-116			%	1	CL	11/14/23	8:53	17124	11/20/23	15:56	SW3510C8270E
p-terphenyl-D14 SUR	74	33-141			%	1	CL	11/14/23	8:53	17124	11/20/23	15:56	SW3510C8270E

 # The percent recovery and/or RPD for the LCS/D was outside acceptance criteria.

Project ID: Dow Salvage Yard 18001468
Job ID: 67836
Sample#: 67836-002
Sample ID: SY-OBMW1-110823
Matrix: Water
Sampled: 11/8/23 9:35

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
N-nitrosodimethylamine	1.0 U#	2.0	1.0	0.21	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	16:25	SW3510C8270E
pyridine	1.0 U#	2.0	1.0	0.60	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	16:25	SW3510C8270E
aniline	1.0 U	2.0	1.0	0.39	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	16:25	SW3510C8270E
phenol	1.0 U#	2.0	1.0	0.34	ug/L	1	CL	11/14/23	8:53	17124	11/15/23	20:43	SW3510C8270E
2-chlorophenol	1.0 U	5.0	1.0	0.29	ug/L	1	CL	11/14/23	8:53	17124	11/15/23	20:43	SW3510C8270E
bis(2-chloroethyl)ether	1.0 U	2.0	1.0	0.35	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	16:25	SW3510C8270E
1,3-dichlorobenzene	1.0 U	2.0	1.0	0.41	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	16:25	SW3510C8270E
1,4-dichlorobenzene	1.0 U	2.0	1.0	0.37	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	16:25	SW3510C8270E
1,2-dichlorobenzene	1.0 U	2.0	1.0	0.36	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	16:25	SW3510C8270E
benzyl alcohol	1.0 U	2.0	1.0	0.84	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	16:25	SW3510C8270E
2-methylphenol	1.0 U	5.0	1.0	0.39	ug/L	1	CL	11/14/23	8:53	17124	11/15/23	20:43	SW3510C8270E
2,2'-oxybis(1-chloropropane)	1.0 U	2.0	1.0	0.44	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	16:25	SW3510C8270E
hexachloroethane	1.0 U	2.0	1.0	0.53	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	16:25	SW3510C8270E
N-nitroso-di-N-propylamine	1.0 U	2.0	1.0	0.30	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	16:25	SW3510C8270E
4-methylphenol	1.5 U	2.0	1.5	1.3	ug/L	1	CL	11/14/23	8:53	17124	11/15/23	20:43	SW3510C8270E
nitrobenzene	1.0 U	2.0	1.0	0.41	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	16:25	SW3510C8270E
isophorone	1.0 U	5.0	1.0	0.32	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	16:25	SW3510C8270E
2-nitrophenol	1.0 U	2.0	1.0	0.21	ug/L	1	CL	11/14/23	8:53	17124	11/15/23	20:43	SW3510C8270E
2,4-dimethylphenol	1.0 U	5.0	1.0	0.44	ug/L	1	CL	11/14/23	8:53	17124	11/15/23	20:43	SW3510C8270E
bis(2-chloroethoxy)methane	1.0 U	5.0	1.0	0.26	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	16:25	SW3510C8270E
2,4-dichlorophenol	1.0 U	5.0	1.0	0.19	ug/L	1	CL	11/14/23	8:53	17124	11/15/23	20:43	SW3510C8270E
1,2,4-trichlorobenzene	1.0 U	5.0	1.0	0.34	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	16:25	SW3510C8270E
benzoic acid	45 U#	50	45	20	ug/L	1	CL	11/14/23	8:53	17124	11/15/23	20:43	SW3510C8270E
4-chloroaniline	1.0 U	2.0	1.0	0.41	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	16:25	SW3510C8270E
hexachlorobutadiene	1.0 U	2.0	1.0	0.57	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	16:25	SW3510C8270E
4-chloro-3-methylphenol	1.0 U	2.0	1.0	0.42	ug/L	1	CL	11/14/23	8:53	17124	11/15/23	20:43	SW3510C8270E
hexachlorocyclopentadiene	4.0 U#	10	4.0	1.6	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	16:25	SW3510C8270E
2,4,6-trichlorophenol	1.0 U	2.0	1.0	0.33	ug/L	1	CL	11/14/23	8:53	17124	11/15/23	20:43	SW3510C8270E
2,4,5-trichlorophenol	1.0 U	2.0	1.0	0.28	ug/L	1	CL	11/14/23	8:53	17124	11/15/23	20:43	SW3510C8270E
2-chloronaphthalene	1.0 U	5.0	1.0	0.34	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	16:25	SW3510C8270E
2-nitroaniline	1.0 U	2.0	1.0	0.72	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	16:25	SW3510C8270E
dimethylphthalate	1.0 U#	5.0	1.0	0.41	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	16:25	SW3510C8270E
2,6-dinitrotoluene	1.0 U	5.0	1.0	0.42	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	16:25	SW3510C8270E
2,4-dinitrotoluene	1.0 U	5.0	1.0	0.52	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	16:25	SW3510C8270E
3-nitroaniline	1.5 U	2.0	1.5	1.0	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	16:25	SW3510C8270E
2,4-dinitrophenol	45 U	50	45	3.5	ug/L	1	CL	11/14/23	8:53	17124	11/15/23	20:43	SW3510C8270E
dibenzofuran	0.40 U	0.50	0.40	0.37	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	16:25	SW3510C8270E
4-nitrophenol	5.0 U#	10	5.0	1.6	ug/L	1	CL	11/14/23	8:53	17124	11/15/23	20:43	SW3510C8270E
diethyl phthalate	4.7 J	5.0	1.0	0.30	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	16:25	SW3510C8270E
4-chlorophenyl phenyl ether	1.0 U	5.0	1.0	0.35	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	16:25	SW3510C8270E
4-nitroaniline	3.0 U	5.0	3.0	1.0	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	16:25	SW3510C8270E
4,6-dinitro-2-methylphenol	10 U	20	10	1.7	ug/L	1	CL	11/14/23	8:53	17124	11/15/23	20:43	SW3510C8270E

Project ID: Dow Salvage Yard 18001468
Job ID: 67836
Sample#: 67836-002
Sample ID: SY-OBMW1-110823
Matrix: Water
Sampled: 11/8/23 9:35

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
azobenzene	1.0 U	2.0	1.0	0.25	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	16:25	SW3510C8270E
N-nitrosodiphenylamine	1.0 U	2.0	1.0	0.26	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	16:25	SW3510C8270E
4-bromophenyl phenyl ether	1.0 U	2.0	1.0	0.23	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	16:25	SW3510C8270E
hexachlorobenzene	1.0 U	2.0	1.0	0.25	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	16:25	SW3510C8270E
pentachlorophenol	5.0 U	10	5.0	2.6	ug/L	1	CL	11/14/23	8:53	17124	11/15/23	20:43	SW3510C8270E
carbazole	1.0 U	2.0	1.0	0.32	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	16:25	SW3510C8270E
di-n-butylphthalate	1.0 U	5.0	1.0	0.54	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	16:25	SW3510C8270E
benzidine	25 U	30	25	20	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	16:25	SW3510C8270E
butyl benzyl phthalate	3.0 U#	5.0	3.0	2.1	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	16:25	SW3510C8270E
3,3'-dichlorobenzidine	25 U	30	25	20	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	16:25	SW3510C8270E
bis(2-ethylhexyl)phthalate	3.0 U	5.0	3.0	2.4	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	16:25	SW3510C8270E
di-n-octyl phthalate	3.0 U	5.0	3.0	2.1	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	16:25	SW3510C8270E
Surrogate Recovery		Limits											
2-fluorophenol SUR	14 *	21-100			%	1	CL	11/14/23	8:53	17124	11/15/23	20:43	SW3510C8270E
phenol-D5 SUR	11	10-102			%	1	CL	11/14/23	8:53	17124	11/15/23	20:43	SW3510C8270E
2,4,6-tribromophenol SUR	42	10-123			%	1	CL	11/14/23	8:53	17124	11/15/23	20:43	SW3510C8270E
nitrobenzene-D5 SUR	49	35-114			%	1	CL	11/14/23	8:53	17124	11/20/23	16:25	SW3510C8270E
2-fluorobiphenyl SUR	56	43-116			%	1	CL	11/14/23	8:53	17124	11/20/23	16:25	SW3510C8270E
p-terphenyl-D14 SUR	82	33-141			%	1	CL	11/14/23	8:53	17124	11/20/23	16:25	SW3510C8270E

**** This surrogate showed recovery outside the acceptance limits. No additional sample remained for re-analysis.***
 # The percent recovery and/or RPD for the LCS/D was outside acceptance criteria.

Project ID: Dow Salvage Yard 18001468
Job ID: 67836
Sample#: 67836-003
Sample ID: SY-OBMW9-110823
Matrix: Water
Sampled: 11/8/23 10:16

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
N-nitrosodimethylamine	1.0 U#	2.0	1.0	0.21	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	16:55	SW3510C8270E
pyridine	1.0 U#	2.0	1.0	0.60	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	16:55	SW3510C8270E
aniline	1.0 U	2.0	1.0	0.39	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	16:55	SW3510C8270E
phenol	1.0 U#	2.0	1.0	0.34	ug/L	1	CL	11/14/23	8:53	17124	11/15/23	21:13	SW3510C8270E
2-chlorophenol	1.0 U	5.0	1.0	0.29	ug/L	1	CL	11/14/23	8:53	17124	11/15/23	21:13	SW3510C8270E
bis(2-chloroethyl)ether	1.0 U	2.0	1.0	0.35	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	16:55	SW3510C8270E
1,3-dichlorobenzene	1.0 U	2.0	1.0	0.41	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	16:55	SW3510C8270E
1,4-dichlorobenzene	1.0 U	2.0	1.0	0.37	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	16:55	SW3510C8270E
1,2-dichlorobenzene	1.0 U	2.0	1.0	0.36	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	16:55	SW3510C8270E
benzyl alcohol	1.0 U	2.0	1.0	0.84	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	16:55	SW3510C8270E
2-methylphenol	1.0 U	5.0	1.0	0.39	ug/L	1	CL	11/14/23	8:53	17124	11/15/23	21:13	SW3510C8270E
2,2'-oxybis(1-chloropropane)	1.0 U	2.0	1.0	0.44	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	16:55	SW3510C8270E
hexachloroethane	1.0 U	2.0	1.0	0.53	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	16:55	SW3510C8270E
N-nitroso-di-N-propylamine	1.0 U	2.0	1.0	0.30	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	16:55	SW3510C8270E
4-methylphenol	1.5 U	2.0	1.5	1.3	ug/L	1	CL	11/14/23	8:53	17124	11/15/23	21:13	SW3510C8270E
nitrobenzene	1.0 U	2.0	1.0	0.41	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	16:55	SW3510C8270E
isophorone	1.0 U	5.0	1.0	0.32	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	16:55	SW3510C8270E
2-nitrophenol	1.0 U	2.0	1.0	0.21	ug/L	1	CL	11/14/23	8:53	17124	11/15/23	21:13	SW3510C8270E
2,4-dimethylphenol	1.0 U	5.0	1.0	0.44	ug/L	1	CL	11/14/23	8:53	17124	11/15/23	21:13	SW3510C8270E
bis(2-chloroethoxy)methane	16	5.0	1.0	0.26	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	16:55	SW3510C8270E
2,4-dichlorophenol	1.0 U	5.0	1.0	0.19	ug/L	1	CL	11/14/23	8:53	17124	11/15/23	21:13	SW3510C8270E
1,2,4-trichlorobenzene	1.0 U	5.0	1.0	0.34	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	16:55	SW3510C8270E
benzoic acid	45 U#	50	45	20	ug/L	1	CL	11/14/23	8:53	17124	11/15/23	21:13	SW3510C8270E
4-chloroaniline	1.0 U	2.0	1.0	0.41	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	16:55	SW3510C8270E
hexachlorobutadiene	1.0 U	2.0	1.0	0.57	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	16:55	SW3510C8270E
4-chloro-3-methylphenol	1.0 U	2.0	1.0	0.42	ug/L	1	CL	11/14/23	8:53	17124	11/15/23	21:13	SW3510C8270E
hexachlorocyclopentadiene	4.0 U#	10	4.0	1.6	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	16:55	SW3510C8270E
2,4,6-trichlorophenol	1.0 U	2.0	1.0	0.33	ug/L	1	CL	11/14/23	8:53	17124	11/15/23	21:13	SW3510C8270E
2,4,5-trichlorophenol	1.0 U	2.0	1.0	0.28	ug/L	1	CL	11/14/23	8:53	17124	11/15/23	21:13	SW3510C8270E
2-chloronaphthalene	1.0 U	5.0	1.0	0.34	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	16:55	SW3510C8270E
2-nitroaniline	1.0 U	2.0	1.0	0.72	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	16:55	SW3510C8270E
dimethylphthalate	1.0 U#	5.0	1.0	0.41	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	16:55	SW3510C8270E
2,6-dinitrotoluene	1.0 U	5.0	1.0	0.42	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	16:55	SW3510C8270E
2,4-dinitrotoluene	1.0 U	5.0	1.0	0.52	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	16:55	SW3510C8270E
3-nitroaniline	1.5 U	2.0	1.5	1.0	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	16:55	SW3510C8270E
2,4-dinitrophenol	45 U	50	45	3.5	ug/L	1	CL	11/14/23	8:53	17124	11/15/23	21:13	SW3510C8270E
dibenzofuran	0.40 U	0.50	0.40	0.37	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	16:55	SW3510C8270E
4-nitrophenol	5.0 U#	10	5.0	1.6	ug/L	1	CL	11/14/23	8:53	17124	11/15/23	21:13	SW3510C8270E
diethyl phthalate	4.3 J	5.0	1.0	0.30	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	16:55	SW3510C8270E
4-chlorophenyl phenyl ether	1.0 U	5.0	1.0	0.35	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	16:55	SW3510C8270E
4-nitroaniline	3.0 U	5.0	3.0	1.0	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	16:55	SW3510C8270E
4,6-dinitro-2-methylphenol	10 U	20	10	1.7	ug/L	1	CL	11/14/23	8:53	17124	11/15/23	21:13	SW3510C8270E

Project ID: Dow Salvage Yard 18001468
Job ID: 67836
Sample#: 67836-003
Sample ID: SY-OBMW9-110823
Matrix: Water
Sampled: 11/8/23 10:16

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
azobenzene	1.0 U	2.0	1.0	0.25	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	16:55	SW3510C8270E
N-nitrosodiphenylamine	1.0 U	2.0	1.0	0.26	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	16:55	SW3510C8270E
4-bromophenyl phenyl ether	1.0 U	2.0	1.0	0.23	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	16:55	SW3510C8270E
hexachlorobenzene	1.0 U	2.0	1.0	0.25	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	16:55	SW3510C8270E
pentachlorophenol	5.0 U	10	5.0	2.6	ug/L	1	CL	11/14/23	8:53	17124	11/15/23	21:13	SW3510C8270E
carbazole	1.0 U	2.0	1.0	0.32	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	16:55	SW3510C8270E
di-n-butylphthalate	1.0 U	5.0	1.0	0.54	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	16:55	SW3510C8270E
benzidine	25 U	30	25	20	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	16:55	SW3510C8270E
butyl benzyl phthalate	3.0 U#	5.0	3.0	2.1	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	16:55	SW3510C8270E
3,3'-dichlorobenzidine	25 U	30	25	20	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	16:55	SW3510C8270E
bis(2-ethylhexyl)phthalate	16 #	5.0	3.0	2.4	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	16:55	SW3510C8270E
di-n-octyl phthalate	3.0 U	5.0	3.0	2.1	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	16:55	SW3510C8270E
Surrogate Recovery		Limits											
2-fluorophenol SUR	32	21-100			%	1	CL	11/14/23	8:53	17124	11/15/23	21:13	SW3510C8270E
phenol-D5 SUR	18	10-102			%	1	CL	11/14/23	8:53	17124	11/15/23	21:13	SW3510C8270E
2,4,6-tribromophenol SUR	65	10-123			%	1	CL	11/14/23	8:53	17124	11/15/23	21:13	SW3510C8270E
nitrobenzene-D5 SUR	60	35-114			%	1	CL	11/14/23	8:53	17124	11/20/23	16:55	SW3510C8270E
2-fluorobiphenyl SUR	64	43-116			%	1	CL	11/14/23	8:53	17124	11/20/23	16:55	SW3510C8270E
p-terphenyl-D14 SUR	92	33-141			%	1	CL	11/14/23	8:53	17124	11/20/23	16:55	SW3510C8270E

 # The percent recovery and/or RPD for the LCS/D was outside acceptance criteria.

Project ID: Dow Salvage Yard 18001468
Job ID: 67836
Sample#: 67836-004
Sample ID: SY-BRMW5-29-44-110823
Matrix: Water
Sampled: 11/8/23 11:00

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
N-nitrosodimethylamine	1.0 U#	2.0	1.0	0.21	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	17:54	SW3510C8270E
pyridine	1.0 U#	2.0	1.0	0.60	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	17:54	SW3510C8270E
aniline	1.0 U	2.0	1.0	0.39	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	17:54	SW3510C8270E
phenol	1.0 U#	2.0	1.0	0.34	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	17:25	SW3510C8270E
2-chlorophenol	1.0 U	5.0	1.0	0.29	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	17:25	SW3510C8270E
bis(2-chloroethyl)ether	1.0 U	2.0	1.0	0.35	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	17:54	SW3510C8270E
1,3-dichlorobenzene	1.0 U	2.0	1.0	0.41	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	17:54	SW3510C8270E
1,4-dichlorobenzene	1.0 U	2.0	1.0	0.37	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	17:54	SW3510C8270E
1,2-dichlorobenzene	1.0 U	2.0	1.0	0.36	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	17:54	SW3510C8270E
benzyl alcohol	1.0 U	2.0	1.0	0.84	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	17:54	SW3510C8270E
2-methylphenol	1.0 U	5.0	1.0	0.39	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	17:25	SW3510C8270E
2,2'-oxybis(1-chloropropane)	1.0 U	2.0	1.0	0.44	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	17:54	SW3510C8270E
hexachloroethane	1.0 U	2.0	1.0	0.53	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	17:54	SW3510C8270E
N-nitroso-di-N-propylamine	1.0 U	2.0	1.0	0.30	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	17:54	SW3510C8270E
4-methylphenol	1.5 U	2.0	1.5	1.3	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	17:25	SW3510C8270E
nitrobenzene	1.0 U	2.0	1.0	0.41	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	17:54	SW3510C8270E
isophorone	1.0 U	5.0	1.0	0.32	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	17:54	SW3510C8270E
2-nitrophenol	1.0 U	2.0	1.0	0.21	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	17:25	SW3510C8270E
2,4-dimethylphenol	1.0 U	5.0	1.0	0.44	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	17:25	SW3510C8270E
bis(2-chloroethoxy)methane	10	5.0	1.0	0.26	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	17:54	SW3510C8270E
2,4-dichlorophenol	1.0 U	5.0	1.0	0.19	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	17:25	SW3510C8270E
1,2,4-trichlorobenzene	1.0 U	5.0	1.0	0.34	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	17:54	SW3510C8270E
benzoic acid	45 U#	50	45	20	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	17:25	SW3510C8270E
4-chloroaniline	1.0 U	2.0	1.0	0.41	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	17:54	SW3510C8270E
hexachlorobutadiene	1.0 U	2.0	1.0	0.57	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	17:54	SW3510C8270E
4-chloro-3-methylphenol	1.0 U	2.0	1.0	0.42	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	17:25	SW3510C8270E
hexachlorocyclopentadiene	4.0 U#	10	4.0	1.6	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	17:54	SW3510C8270E
2,4,6-trichlorophenol	1.0 U	2.0	1.0	0.33	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	17:25	SW3510C8270E
2,4,5-trichlorophenol	1.0 U	2.0	1.0	0.28	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	17:25	SW3510C8270E
2-chloronaphthalene	1.0 U	5.0	1.0	0.34	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	17:54	SW3510C8270E
2-nitroaniline	1.0 U	2.0	1.0	0.72	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	17:54	SW3510C8270E
dimethylphthalate	1.0 U#	5.0	1.0	0.41	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	17:54	SW3510C8270E
2,6-dinitrotoluene	1.0 U	5.0	1.0	0.42	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	17:54	SW3510C8270E
2,4-dinitrotoluene	1.0 U	5.0	1.0	0.52	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	17:54	SW3510C8270E
3-nitroaniline	1.5 U	2.0	1.5	1.0	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	17:54	SW3510C8270E
2,4-dinitrophenol	45 U	50	45	3.5	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	17:25	SW3510C8270E
dibenzofuran	0.40 U	0.50	0.40	0.37	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	17:54	SW3510C8270E
4-nitrophenol	5.0 U#	10	5.0	1.6	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	17:25	SW3510C8270E
diethyl phthalate	5.7	5.0	1.0	0.30	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	17:54	SW3510C8270E
4-chlorophenyl phenyl ether	1.0 U	5.0	1.0	0.35	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	17:54	SW3510C8270E
4-nitroaniline	3.0 U	5.0	3.0	1.0	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	17:54	SW3510C8270E
4,6-dinitro-2-methylphenol	10 U	20	10	1.7	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	17:25	SW3510C8270E

Project ID: Dow Salvage Yard 18001468
Job ID: 67836
Sample#: 67836-004
Sample ID: SY-BRMW5-29-44-110823
Matrix: Water
Sampled: 11/8/23 11:00

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
azobenzene	1.0 U	2.0	1.0	0.25	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	17:54	SW3510C8270E
N-nitrosodiphenylamine	1.0 U	2.0	1.0	0.26	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	17:54	SW3510C8270E
4-bromophenyl phenyl ether	1.0 U	2.0	1.0	0.23	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	17:54	SW3510C8270E
hexachlorobenzene	1.0 U	2.0	1.0	0.25	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	17:54	SW3510C8270E
pentachlorophenol	5.0 U	10	5.0	2.6	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	17:25	SW3510C8270E
carbazole	1.0 U	2.0	1.0	0.32	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	17:54	SW3510C8270E
di-n-butylphthalate	1.0 U	5.0	1.0	0.54	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	17:54	SW3510C8270E
benzidine	25 U	30	25	20	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	17:54	SW3510C8270E
butyl benzyl phthalate	3.0 U#	5.0	3.0	2.1	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	17:54	SW3510C8270E
3,3'-dichlorobenzidine	25 U	30	25	20	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	17:54	SW3510C8270E
bis(2-ethylhexyl)phthalate	10 #	5.0	3.0	2.4	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	17:54	SW3510C8270E
di-n-octyl phthalate	3.0 U	5.0	3.0	2.1	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	17:54	SW3510C8270E
Surrogate Recovery		Limits											
2-fluorophenol SUR	28	21-100			%	1	CL	11/14/23	8:53	17124	11/20/23	17:25	SW3510C8270E
phenol-D5 SUR	16	10-102			%	1	CL	11/14/23	8:53	17124	11/20/23	17:25	SW3510C8270E
2,4,6-tribromophenol SUR	60	10-123			%	1	CL	11/14/23	8:53	17124	11/20/23	17:25	SW3510C8270E
nitrobenzene-D5 SUR	66	35-114			%	1	CL	11/14/23	8:53	17124	11/20/23	17:54	SW3510C8270E
2-fluorobiphenyl SUR	64	43-116			%	1	CL	11/14/23	8:53	17124	11/20/23	17:54	SW3510C8270E
p-terphenyl-D14 SUR	91	33-141			%	1	CL	11/14/23	8:53	17124	11/20/23	17:54	SW3510C8270E

 # The percent recovery and/or RPD for the LCS/D was outside acceptance criteria.

Project ID: Dow Salvage Yard 18001468
Job ID: 67836
Sample#: 67836-005
Sample ID: SY-BRMW5-123-133-110823
Matrix: Water
Sampled: 11/8/23 11:40

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
N-nitrosodimethylamine	1.0 U#	2.0	1.0	0.21	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	18:54	SW3510C8270E
pyridine	1.0 U#	2.0	1.0	0.60	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	18:54	SW3510C8270E
aniline	1.0 U	2.0	1.0	0.39	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	18:54	SW3510C8270E
phenol	1.0 U#	2.0	1.0	0.34	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	18:24	SW3510C8270E
2-chlorophenol	1.0 U	5.0	1.0	0.29	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	18:24	SW3510C8270E
bis(2-chloroethyl)ether	1.0 U	2.0	1.0	0.35	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	18:54	SW3510C8270E
1,3-dichlorobenzene	1.0 U	2.0	1.0	0.41	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	18:54	SW3510C8270E
1,4-dichlorobenzene	1.0 U	2.0	1.0	0.37	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	18:54	SW3510C8270E
1,2-dichlorobenzene	1.0 U	2.0	1.0	0.36	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	18:54	SW3510C8270E
benzyl alcohol	1.0 U	2.0	1.0	0.84	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	18:54	SW3510C8270E
2-methylphenol	1.0 U	5.0	1.0	0.39	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	18:24	SW3510C8270E
2,2'-oxybis(1-chloropropane)	1.0 U	2.0	1.0	0.44	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	18:54	SW3510C8270E
hexachloroethane	1.0 U	2.0	1.0	0.53	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	18:54	SW3510C8270E
N-nitroso-di-N-propylamine	1.0 U	2.0	1.0	0.30	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	18:54	SW3510C8270E
4-methylphenol	1.5 U	2.0	1.5	1.3	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	18:24	SW3510C8270E
nitrobenzene	1.0 U	2.0	1.0	0.41	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	18:54	SW3510C8270E
isophorone	1.0 U	5.0	1.0	0.32	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	18:54	SW3510C8270E
2-nitrophenol	1.0 U	2.0	1.0	0.21	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	18:24	SW3510C8270E
2,4-dimethylphenol	1.0 U	5.0	1.0	0.44	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	18:24	SW3510C8270E
bis(2-chloroethoxy)methane	15	5.0	1.0	0.26	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	18:54	SW3510C8270E
2,4-dichlorophenol	1.0 U	5.0	1.0	0.19	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	18:24	SW3510C8270E
1,2,4-trichlorobenzene	1.0 U	5.0	1.0	0.34	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	18:54	SW3510C8270E
benzoic acid	45 U#	50	45	20	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	18:24	SW3510C8270E
4-chloroaniline	1.0 U	2.0	1.0	0.41	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	18:54	SW3510C8270E
hexachlorobutadiene	1.0 U	2.0	1.0	0.57	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	18:54	SW3510C8270E
4-chloro-3-methylphenol	1.0 U	2.0	1.0	0.42	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	18:24	SW3510C8270E
hexachlorocyclopentadiene	4.0 U#	10	4.0	1.6	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	18:54	SW3510C8270E
2,4,6-trichlorophenol	1.0 U	2.0	1.0	0.33	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	18:24	SW3510C8270E
2,4,5-trichlorophenol	1.0 U	2.0	1.0	0.28	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	18:24	SW3510C8270E
2-chloronaphthalene	1.0 U	5.0	1.0	0.34	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	18:54	SW3510C8270E
2-nitroaniline	1.0 U	2.0	1.0	0.72	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	18:54	SW3510C8270E
dimethylphthalate	1.0 U#	5.0	1.0	0.41	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	18:54	SW3510C8270E
2,6-dinitrotoluene	1.0 U	5.0	1.0	0.42	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	18:54	SW3510C8270E
2,4-dinitrotoluene	1.0 U	5.0	1.0	0.52	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	18:54	SW3510C8270E
3-nitroaniline	1.5 U	2.0	1.5	1.0	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	18:54	SW3510C8270E
2,4-dinitrophenol	45 U	50	45	3.5	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	18:24	SW3510C8270E
dibenzofuran	0.40 U	0.50	0.40	0.37	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	18:54	SW3510C8270E
4-nitrophenol	5.0 U#	10	5.0	1.6	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	18:24	SW3510C8270E
diethyl phthalate	8.3	5.0	1.0	0.30	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	18:54	SW3510C8270E
4-chlorophenyl phenyl ether	1.0 U	5.0	1.0	0.35	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	18:54	SW3510C8270E
4-nitroaniline	3.0 U	5.0	3.0	1.0	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	18:54	SW3510C8270E
4,6-dinitro-2-methylphenol	10 U	20	10	1.7	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	18:24	SW3510C8270E

Project ID: Dow Salvage Yard 18001468
Job ID: 67836
Sample#: 67836-005
Sample ID: SY-BRMW5-123-133-110823
Matrix: Water
Sampled: 11/8/23 11:40

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
azobenzene	1.0 U	2.0	1.0	0.25	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	18:54	SW3510C8270E
N-nitrosodiphenylamine	1.0 U	2.0	1.0	0.26	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	18:54	SW3510C8270E
4-bromophenyl phenyl ether	1.0 U	2.0	1.0	0.23	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	18:54	SW3510C8270E
hexachlorobenzene	1.0 U	2.0	1.0	0.25	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	18:54	SW3510C8270E
pentachlorophenol	5.0 U	10	5.0	2.6	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	18:24	SW3510C8270E
carbazole	1.0 U	2.0	1.0	0.32	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	18:54	SW3510C8270E
di-n-butylphthalate	1.0 U	5.0	1.0	0.54	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	18:54	SW3510C8270E
benzidine	25 U	30	25	20	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	18:54	SW3510C8270E
butyl benzyl phthalate	3.0 U#	5.0	3.0	2.1	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	18:54	SW3510C8270E
3,3'-dichlorobenzidine	25 U	30	25	20	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	18:54	SW3510C8270E
bis(2-ethylhexyl)phthalate	15 #	5.0	3.0	2.4	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	18:54	SW3510C8270E
di-n-octyl phthalate	3.0 U	5.0	3.0	2.1	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	18:54	SW3510C8270E
Surrogate Recovery		Limits											
2-fluorophenol SUR	38	21-100			%	1	CL	11/14/23	8:53	17124	11/20/23	18:24	SW3510C8270E
phenol-D5 SUR	23	10-102			%	1	CL	11/14/23	8:53	17124	11/20/23	18:24	SW3510C8270E
2,4,6-tribromophenol SUR	72	10-123			%	1	CL	11/14/23	8:53	17124	11/20/23	18:24	SW3510C8270E
nitrobenzene-D5 SUR	65	35-114			%	1	CL	11/14/23	8:53	17124	11/20/23	18:54	SW3510C8270E
2-fluorobiphenyl SUR	64	43-116			%	1	CL	11/14/23	8:53	17124	11/20/23	18:54	SW3510C8270E
p-terphenyl-D14 SUR	87	33-141			%	1	CL	11/14/23	8:53	17124	11/20/23	18:54	SW3510C8270E

 # The percent recovery and/or RPD for the LCS/D was outside acceptance criteria.

Project ID: Dow Salvage Yard 18001468
Job ID: 67836
Sample#: 67836-006
Sample ID: SY-BRMW5-56-66-110823
Matrix: Water
Sampled: 11/8/23 11:15

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
N-nitrosodimethylamine	1.0 U#	2.0	1.0	0.21	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	19:54	SW3510C8270E
pyridine	1.0 U#	2.0	1.0	0.60	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	19:54	SW3510C8270E
aniline	1.0 U	2.0	1.0	0.39	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	19:54	SW3510C8270E
phenol	1.0 U#	2.0	1.0	0.34	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	19:23	SW3510C8270E
2-chlorophenol	1.0 U	5.0	1.0	0.29	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	19:23	SW3510C8270E
bis(2-chloroethyl)ether	1.0 U	2.0	1.0	0.35	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	19:54	SW3510C8270E
1,3-dichlorobenzene	1.0 U	2.0	1.0	0.41	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	19:54	SW3510C8270E
1,4-dichlorobenzene	1.0 U	2.0	1.0	0.37	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	19:54	SW3510C8270E
1,2-dichlorobenzene	1.0 U	2.0	1.0	0.36	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	19:54	SW3510C8270E
benzyl alcohol	1.0 U	2.0	1.0	0.84	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	19:54	SW3510C8270E
2-methylphenol	1.0 U	5.0	1.0	0.39	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	19:23	SW3510C8270E
2,2'-oxybis(1-chloropropane)	1.0 U	2.0	1.0	0.44	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	19:54	SW3510C8270E
hexachloroethane	1.0 U	2.0	1.0	0.53	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	19:54	SW3510C8270E
N-nitroso-di-N-propylamine	1.0 U	2.0	1.0	0.30	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	19:54	SW3510C8270E
4-methylphenol	1.5 U	2.0	1.5	1.3	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	19:23	SW3510C8270E
nitrobenzene	1.0 U	2.0	1.0	0.41	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	19:54	SW3510C8270E
isophorone	1.0 U	5.0	1.0	0.32	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	19:54	SW3510C8270E
2-nitrophenol	1.0 U	2.0	1.0	0.21	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	19:23	SW3510C8270E
2,4-dimethylphenol	1.0 U	5.0	1.0	0.44	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	19:23	SW3510C8270E
bis(2-chloroethoxy)methane	25	5.0	1.0	0.26	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	19:54	SW3510C8270E
2,4-dichlorophenol	1.0 U	5.0	1.0	0.19	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	19:23	SW3510C8270E
1,2,4-trichlorobenzene	1.0 U	5.0	1.0	0.34	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	19:54	SW3510C8270E
benzoic acid	45 U#	50	45	20	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	19:23	SW3510C8270E
4-chloroaniline	1.0 U	2.0	1.0	0.41	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	19:54	SW3510C8270E
hexachlorobutadiene	1.0 U	2.0	1.0	0.57	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	19:54	SW3510C8270E
4-chloro-3-methylphenol	1.0 U	2.0	1.0	0.42	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	19:23	SW3510C8270E
hexachlorocyclopentadiene	4.0 U#	10	4.0	1.6	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	19:54	SW3510C8270E
2,4,6-trichlorophenol	1.0 U	2.0	1.0	0.33	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	19:23	SW3510C8270E
2,4,5-trichlorophenol	1.0 U	2.0	1.0	0.28	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	19:23	SW3510C8270E
2-chloronaphthalene	1.0 U	5.0	1.0	0.34	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	19:54	SW3510C8270E
2-nitroaniline	1.0 U	2.0	1.0	0.72	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	19:54	SW3510C8270E
dimethylphthalate	1.0 U#	5.0	1.0	0.41	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	19:54	SW3510C8270E
2,6-dinitrotoluene	1.0 U	5.0	1.0	0.42	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	19:54	SW3510C8270E
2,4-dinitrotoluene	1.0 U	5.0	1.0	0.52	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	19:54	SW3510C8270E
3-nitroaniline	1.5 U	2.0	1.5	1.0	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	19:54	SW3510C8270E
2,4-dinitrophenol	45 U	50	45	3.5	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	19:23	SW3510C8270E
dibenzofuran	0.40 U	0.50	0.40	0.37	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	19:54	SW3510C8270E
4-nitrophenol	5.0 U#	10	5.0	1.6	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	19:23	SW3510C8270E
diethyl phthalate	9.1	5.0	1.0	0.30	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	19:54	SW3510C8270E
4-chlorophenyl phenyl ether	1.0 U	5.0	1.0	0.35	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	19:54	SW3510C8270E
4-nitroaniline	3.0 U	5.0	3.0	1.0	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	19:54	SW3510C8270E
4,6-dinitro-2-methylphenol	10 U	20	10	1.7	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	19:23	SW3510C8270E

Project ID: Dow Salvage Yard 18001468
Job ID: 67836
Sample#: 67836-006
Sample ID: SY-BRMW5-56-66-110823
Matrix: Water
Sampled: 11/8/23 11:15

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
azobenzene	1.0 U	2.0	1.0	0.25	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	19:54	SW3510C8270E
N-nitrosodiphenylamine	1.0 U	2.0	1.0	0.26	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	19:54	SW3510C8270E
4-bromophenyl phenyl ether	1.0 U	2.0	1.0	0.23	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	19:54	SW3510C8270E
hexachlorobenzene	1.0 U	2.0	1.0	0.25	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	19:54	SW3510C8270E
pentachlorophenol	5.0 U	10	5.0	2.6	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	19:23	SW3510C8270E
carbazole	1.0 U	2.0	1.0	0.32	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	19:54	SW3510C8270E
di-n-butylphthalate	1.0 U	5.0	1.0	0.54	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	19:54	SW3510C8270E
benzidine	25 U	30	25	20	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	19:54	SW3510C8270E
butyl benzyl phthalate	3.0 U#	5.0	3.0	2.1	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	19:54	SW3510C8270E
3,3'-dichlorobenzidine	25 U	30	25	20	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	19:54	SW3510C8270E
bis(2-ethylhexyl)phthalate	25 #	5.0	3.0	2.4	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	19:54	SW3510C8270E
di-n-octyl phthalate	3.0 U	5.0	3.0	2.1	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	19:54	SW3510C8270E
Surrogate Recovery		Limits											
2-fluorophenol SUR	39	21-100			%	1	CL	11/14/23	8:53	17124	11/20/23	19:23	SW3510C8270E
phenol-D5 SUR	22	10-102			%	1	CL	11/14/23	8:53	17124	11/20/23	19:23	SW3510C8270E
2,4,6-tribromophenol SUR	74	10-123			%	1	CL	11/14/23	8:53	17124	11/20/23	19:23	SW3510C8270E
nitrobenzene-D5 SUR	74	35-114			%	1	CL	11/14/23	8:53	17124	11/20/23	19:54	SW3510C8270E
2-fluorobiphenyl SUR	71	43-116			%	1	CL	11/14/23	8:53	17124	11/20/23	19:54	SW3510C8270E
p-terphenyl-D14 SUR	94	33-141			%	1	CL	11/14/23	8:53	17124	11/20/23	19:54	SW3510C8270E

 # The percent recovery and/or RPD for the LCS/D was outside acceptance criteria.

Project ID: Dow Salvage Yard 18001468
Job ID: 67836
Sample#: 67836-007
Sample ID: SY-OBMW8-110823
Matrix: Water
Sampled: 11/8/23 12:50

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
N-nitrosodimethylamine	1.0 U#	2.0	1.0	0.21	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	20:23	SW3510C8270E
pyridine	1.0 U#	2.0	1.0	0.60	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	20:23	SW3510C8270E
aniline	1.0 U	2.0	1.0	0.39	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	20:23	SW3510C8270E
phenol	1.0 U#	2.0	1.0	0.34	ug/L	1	CL	11/14/23	8:53	17124	11/15/23	21:43	SW3510C8270E
2-chlorophenol	1.0 U	5.0	1.0	0.29	ug/L	1	CL	11/14/23	8:53	17124	11/15/23	21:43	SW3510C8270E
bis(2-chloroethyl)ether	1.0 U	2.0	1.0	0.35	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	20:23	SW3510C8270E
1,3-dichlorobenzene	1.0 U	2.0	1.0	0.41	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	20:23	SW3510C8270E
1,4-dichlorobenzene	1.0 U	2.0	1.0	0.37	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	20:23	SW3510C8270E
1,2-dichlorobenzene	1.0 U	2.0	1.0	0.36	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	20:23	SW3510C8270E
benzyl alcohol	1.0 U	2.0	1.0	0.84	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	20:23	SW3510C8270E
2-methylphenol	1.0 U	5.0	1.0	0.39	ug/L	1	CL	11/14/23	8:53	17124	11/15/23	21:43	SW3510C8270E
2,2'-oxybis(1-chloropropane)	1.0 U	2.0	1.0	0.44	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	20:23	SW3510C8270E
hexachloroethane	1.0 U	2.0	1.0	0.53	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	20:23	SW3510C8270E
N-nitroso-di-N-propylamine	1.0 U	2.0	1.0	0.30	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	20:23	SW3510C8270E
4-methylphenol	1.5 U	2.0	1.5	1.3	ug/L	1	CL	11/14/23	8:53	17124	11/15/23	21:43	SW3510C8270E
nitrobenzene	1.0 U	2.0	1.0	0.41	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	20:23	SW3510C8270E
isophorone	1.0 U	5.0	1.0	0.32	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	20:23	SW3510C8270E
2-nitrophenol	1.0 U	2.0	1.0	0.21	ug/L	1	CL	11/14/23	8:53	17124	11/15/23	21:43	SW3510C8270E
2,4-dimethylphenol	1.0 U	5.0	1.0	0.44	ug/L	1	CL	11/14/23	8:53	17124	11/15/23	21:43	SW3510C8270E
bis(2-chloroethoxy)methane	57	5.0	1.0	0.26	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	20:23	SW3510C8270E
2,4-dichlorophenol	1.0 U	5.0	1.0	0.19	ug/L	1	CL	11/14/23	8:53	17124	11/15/23	21:43	SW3510C8270E
1,2,4-trichlorobenzene	1.0 U	5.0	1.0	0.34	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	20:23	SW3510C8270E
benzoic acid	45 U#	50	45	20	ug/L	1	CL	11/14/23	8:53	17124	11/15/23	21:43	SW3510C8270E
4-chloroaniline	1.0 U	2.0	1.0	0.41	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	20:23	SW3510C8270E
hexachlorobutadiene	1.0 U	2.0	1.0	0.57	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	20:23	SW3510C8270E
4-chloro-3-methylphenol	1.0 U	2.0	1.0	0.42	ug/L	1	CL	11/14/23	8:53	17124	11/15/23	21:43	SW3510C8270E
hexachlorocyclopentadiene	4.0 U#	10	4.0	1.6	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	20:23	SW3510C8270E
2,4,6-trichlorophenol	1.0 U	2.0	1.0	0.33	ug/L	1	CL	11/14/23	8:53	17124	11/15/23	21:43	SW3510C8270E
2,4,5-trichlorophenol	1.0 U	2.0	1.0	0.28	ug/L	1	CL	11/14/23	8:53	17124	11/15/23	21:43	SW3510C8270E
2-chloronaphthalene	1.0 U	5.0	1.0	0.34	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	20:23	SW3510C8270E
2-nitroaniline	1.0 U	2.0	1.0	0.72	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	20:23	SW3510C8270E
dimethylphthalate	1.0 U#	5.0	1.0	0.41	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	20:23	SW3510C8270E
2,6-dinitrotoluene	1.0 U	5.0	1.0	0.42	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	20:23	SW3510C8270E
2,4-dinitrotoluene	1.0 U	5.0	1.0	0.52	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	20:23	SW3510C8270E
3-nitroaniline	1.5 U	2.0	1.5	1.0	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	20:23	SW3510C8270E
2,4-dinitrophenol	45 U	50	45	3.5	ug/L	1	CL	11/14/23	8:53	17124	11/15/23	21:43	SW3510C8270E
dibenzofuran	0.40 U	0.50	0.40	0.37	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	20:23	SW3510C8270E
4-nitrophenol	5.0 U#	10	5.0	1.6	ug/L	1	CL	11/14/23	8:53	17124	11/15/23	21:43	SW3510C8270E
diethyl phthalate	0.68 J	5.0	1.0	0.30	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	20:23	SW3510C8270E
4-chlorophenyl phenyl ether	1.0 U	5.0	1.0	0.35	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	20:23	SW3510C8270E
4-nitroaniline	3.0 U	5.0	3.0	1.0	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	20:23	SW3510C8270E
4,6-dinitro-2-methylphenol	10 U	20	10	1.7	ug/L	1	CL	11/14/23	8:53	17124	11/15/23	21:43	SW3510C8270E

Project ID: Dow Salvage Yard 18001468
Job ID: 67836
Sample#: 67836-007
Sample ID: SY-OBMW8-110823
Matrix: Water
Sampled: 11/8/23 12:50

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
azobenzene	1.0 U	2.0	1.0	0.25	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	20:23	SW3510C8270E
N-nitrosodiphenylamine	1.0 U	2.0	1.0	0.26	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	20:23	SW3510C8270E
4-bromophenyl phenyl ether	1.0 U	2.0	1.0	0.23	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	20:23	SW3510C8270E
hexachlorobenzene	1.0 U	2.0	1.0	0.25	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	20:23	SW3510C8270E
pentachlorophenol	5.0 U	10	5.0	2.6	ug/L	1	CL	11/14/23	8:53	17124	11/15/23	21:43	SW3510C8270E
carbazole	1.0 U	2.0	1.0	0.32	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	20:23	SW3510C8270E
di-n-butylphthalate	1.0 U	5.0	1.0	0.54	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	20:23	SW3510C8270E
benzidine	25 U	30	25	20	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	20:23	SW3510C8270E
butyl benzyl phthalate	3.0 U#	5.0	3.0	2.1	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	20:23	SW3510C8270E
3,3'-dichlorobenzidine	25 U	30	25	20	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	20:23	SW3510C8270E
bis(2-ethylhexyl)phthalate	57 #	5.0	3.0	2.4	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	20:23	SW3510C8270E
di-n-octyl phthalate	3.0 U	5.0	3.0	2.1	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	20:23	SW3510C8270E
Surrogate Recovery		Limits											
2-fluorophenol SUR	31	21-100			%	1	CL	11/14/23	8:53	17124	11/15/23	21:43	SW3510C8270E
phenol-D5 SUR	21	10-102			%	1	CL	11/14/23	8:53	17124	11/15/23	21:43	SW3510C8270E
2,4,6-tribromophenol SUR	65	10-123			%	1	CL	11/14/23	8:53	17124	11/15/23	21:43	SW3510C8270E
nitrobenzene-D5 SUR	75	35-114			%	1	CL	11/14/23	8:53	17124	11/20/23	20:23	SW3510C8270E
2-fluorobiphenyl SUR	72	43-116			%	1	CL	11/14/23	8:53	17124	11/20/23	20:23	SW3510C8270E
p-terphenyl-D14 SUR	92	33-141			%	1	CL	11/14/23	8:53	17124	11/20/23	20:23	SW3510C8270E

 # The percent recovery and/or RPD for the LCS/D was outside acceptance criteria.

Project ID: Dow Salvage Yard 18001468
Job ID: 67836
Sample#: 67836-008
Sample ID: SY-OBMW11-110823
Matrix: Water
Sampled: 11/8/23 14:17

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
N-nitrosodimethylamine	1.0 U#	2.0	1.0	0.21	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	20:53	SW3510C8270E
pyridine	1.0 U#	2.0	1.0	0.60	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	20:53	SW3510C8270E
aniline	1.0 U	2.0	1.0	0.39	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	20:53	SW3510C8270E
phenol	1.0 U#	2.0	1.0	0.34	ug/L	1	CL	11/14/23	8:53	17124	11/15/23	22:12	SW3510C8270E
2-chlorophenol	1.0 U	5.0	1.0	0.29	ug/L	1	CL	11/14/23	8:53	17124	11/15/23	22:12	SW3510C8270E
bis(2-chloroethyl)ether	1.0 U	2.0	1.0	0.35	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	20:53	SW3510C8270E
1,3-dichlorobenzene	1.0 U	2.0	1.0	0.41	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	20:53	SW3510C8270E
1,4-dichlorobenzene	1.0 U	2.0	1.0	0.37	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	20:53	SW3510C8270E
1,2-dichlorobenzene	1.0 U	2.0	1.0	0.36	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	20:53	SW3510C8270E
benzyl alcohol	1.0 U	2.0	1.0	0.84	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	20:53	SW3510C8270E
2-methylphenol	1.0 U	5.0	1.0	0.39	ug/L	1	CL	11/14/23	8:53	17124	11/15/23	22:12	SW3510C8270E
2,2'-oxybis(1-chloropropane)	1.0 U	2.0	1.0	0.44	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	20:53	SW3510C8270E
hexachloroethane	1.0 U	2.0	1.0	0.53	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	20:53	SW3510C8270E
N-nitroso-di-N-propylamine	1.0 U	2.0	1.0	0.30	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	20:53	SW3510C8270E
4-methylphenol	1.5 U	2.0	1.5	1.3	ug/L	1	CL	11/14/23	8:53	17124	11/15/23	22:12	SW3510C8270E
nitrobenzene	1.0 U	2.0	1.0	0.41	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	20:53	SW3510C8270E
isophorone	1.0 U	5.0	1.0	0.32	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	20:53	SW3510C8270E
2-nitrophenol	1.0 U	2.0	1.0	0.21	ug/L	1	CL	11/14/23	8:53	17124	11/15/23	22:12	SW3510C8270E
2,4-dimethylphenol	1.0 U	5.0	1.0	0.44	ug/L	1	CL	11/14/23	8:53	17124	11/15/23	22:12	SW3510C8270E
bis(2-chloroethoxy)methane	1.0 U	5.0	1.0	0.26	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	20:53	SW3510C8270E
2,4-dichlorophenol	1.0 U	5.0	1.0	0.19	ug/L	1	CL	11/14/23	8:53	17124	11/15/23	22:12	SW3510C8270E
1,2,4-trichlorobenzene	1.0 U	5.0	1.0	0.34	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	20:53	SW3510C8270E
benzoic acid	45 U#	50	45	20	ug/L	1	CL	11/14/23	8:53	17124	11/15/23	22:12	SW3510C8270E
4-chloroaniline	1.0 U	2.0	1.0	0.41	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	20:53	SW3510C8270E
hexachlorobutadiene	1.0 U	2.0	1.0	0.57	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	20:53	SW3510C8270E
4-chloro-3-methylphenol	1.0 U	2.0	1.0	0.42	ug/L	1	CL	11/14/23	8:53	17124	11/15/23	22:12	SW3510C8270E
hexachlorocyclopentadiene	4.0 U#	10	4.0	1.6	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	20:53	SW3510C8270E
2,4,6-trichlorophenol	1.0 U	2.0	1.0	0.33	ug/L	1	CL	11/14/23	8:53	17124	11/15/23	22:12	SW3510C8270E
2,4,5-trichlorophenol	1.0 U	2.0	1.0	0.28	ug/L	1	CL	11/14/23	8:53	17124	11/15/23	22:12	SW3510C8270E
2-chloronaphthalene	1.0 U	5.0	1.0	0.34	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	20:53	SW3510C8270E
2-nitroaniline	1.0 U	2.0	1.0	0.72	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	20:53	SW3510C8270E
dimethylphthalate	1.0 U#	5.0	1.0	0.41	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	20:53	SW3510C8270E
2,6-dinitrotoluene	1.0 U	5.0	1.0	0.42	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	20:53	SW3510C8270E
2,4-dinitrotoluene	1.0 U	5.0	1.0	0.52	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	20:53	SW3510C8270E
3-nitroaniline	1.5 U	2.0	1.5	1.0	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	20:53	SW3510C8270E
2,4-dinitrophenol	45 U	50	45	3.5	ug/L	1	CL	11/14/23	8:53	17124	11/15/23	22:12	SW3510C8270E
dibenzofuran	0.40 U	0.50	0.40	0.37	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	20:53	SW3510C8270E
4-nitrophenol	5.0 U#	10	5.0	1.6	ug/L	1	CL	11/14/23	8:53	17124	11/15/23	22:12	SW3510C8270E
diethyl phthalate	2.9 J	5.0	1.0	0.30	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	20:53	SW3510C8270E
4-chlorophenyl phenyl ether	1.0 U	5.0	1.0	0.35	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	20:53	SW3510C8270E
4-nitroaniline	3.0 U	5.0	3.0	1.0	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	20:53	SW3510C8270E
4,6-dinitro-2-methylphenol	10 U	20	10	1.7	ug/L	1	CL	11/14/23	8:53	17124	11/15/23	22:12	SW3510C8270E

Project ID: Dow Salvage Yard 18001468
Job ID: 67836
Sample#: 67836-008
Sample ID: SY-OBMW11-110823
Matrix: Water
Sampled: 11/8/23 14:17

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
azobenzene	1.0 U	2.0	1.0	0.25	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	20:53	SW3510C8270E
N-nitrosodiphenylamine	1.0 U	2.0	1.0	0.26	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	20:53	SW3510C8270E
4-bromophenyl phenyl ether	1.0 U	2.0	1.0	0.23	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	20:53	SW3510C8270E
hexachlorobenzene	1.0 U	2.0	1.0	0.25	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	20:53	SW3510C8270E
pentachlorophenol	5.0 U	10	5.0	2.6	ug/L	1	CL	11/14/23	8:53	17124	11/15/23	22:12	SW3510C8270E
carbazole	1.0 U	2.0	1.0	0.32	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	20:53	SW3510C8270E
di-n-butylphthalate	1.0 U	5.0	1.0	0.54	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	20:53	SW3510C8270E
benzidine	25 U	30	25	20	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	20:53	SW3510C8270E
butyl benzyl phthalate	3.0 U#	5.0	3.0	2.1	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	20:53	SW3510C8270E
3,3'-dichlorobenzidine	25 U	30	25	20	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	20:53	SW3510C8270E
bis(2-ethylhexyl)phthalate	200 #	25	15	12	ug/L	5	CL	11/14/23	8:53	17124	12/1/23	12:17	SW3510C8270E
di-n-octyl phthalate	3.0 U	5.0	3.0	2.1	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	20:53	SW3510C8270E
Surrogate Recovery		Limits											
2-fluorophenol SUR	35	21-100			%	1	CL	11/14/23	8:53	17124	11/15/23	22:12	SW3510C8270E
phenol-D5 SUR	21	10-102			%	1	CL	11/14/23	8:53	17124	11/15/23	22:12	SW3510C8270E
2,4,6-tribromophenol SUR	69	10-123			%	1	CL	11/14/23	8:53	17124	11/15/23	22:12	SW3510C8270E
nitrobenzene-D5 SUR	67	35-114			%	1	CL	11/14/23	8:53	17124	11/20/23	20:53	SW3510C8270E
2-fluorobiphenyl SUR	66	43-116			%	1	CL	11/14/23	8:53	17124	11/20/23	20:53	SW3510C8270E
p-terphenyl-D14 SUR	88	33-141			%	1	CL	11/14/23	8:53	17124	11/20/23	20:53	SW3510C8270E

 # The percent recovery and/or RPD for the LCS/D was outside acceptance criteria.

Project ID: Dow Salvage Yard 18001468
Job ID: 67836
Sample#: 67836-009
Sample ID: SY-OBMW110-110823
Matrix: Water
Sampled: 11/8/23 14:22

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
N-nitrosodimethylamine	1.0 U#	2.0	1.0	0.21	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	21:24	SW3510C8270E
pyridine	1.0 U#	2.0	1.0	0.60	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	21:24	SW3510C8270E
aniline	1.0 U	2.0	1.0	0.39	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	21:24	SW3510C8270E
phenol	1.0 U#	2.0	1.0	0.34	ug/L	1	CL	11/14/23	8:53	17124	11/15/23	22:42	SW3510C8270E
2-chlorophenol	1.0 U	5.0	1.0	0.29	ug/L	1	CL	11/14/23	8:53	17124	11/15/23	22:42	SW3510C8270E
bis(2-chloroethyl)ether	1.0 U	2.0	1.0	0.35	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	21:24	SW3510C8270E
1,3-dichlorobenzene	1.0 U	2.0	1.0	0.41	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	21:24	SW3510C8270E
1,4-dichlorobenzene	1.0 U	2.0	1.0	0.37	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	21:24	SW3510C8270E
1,2-dichlorobenzene	1.0 U	2.0	1.0	0.36	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	21:24	SW3510C8270E
benzyl alcohol	1.0 U	2.0	1.0	0.84	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	21:24	SW3510C8270E
2-methylphenol	1.0 U	5.0	1.0	0.39	ug/L	1	CL	11/14/23	8:53	17124	11/15/23	22:42	SW3510C8270E
2,2'-oxybis(1-chloropropane)	1.0 U	2.0	1.0	0.44	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	21:24	SW3510C8270E
hexachloroethane	1.0 U	2.0	1.0	0.53	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	21:24	SW3510C8270E
N-nitroso-di-N-propylamine	1.0 U	2.0	1.0	0.30	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	21:24	SW3510C8270E
4-methylphenol	1.5 U	2.0	1.5	1.3	ug/L	1	CL	11/14/23	8:53	17124	11/15/23	22:42	SW3510C8270E
nitrobenzene	1.0 U	2.0	1.0	0.41	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	21:24	SW3510C8270E
isophorone	1.0 U	5.0	1.0	0.32	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	21:24	SW3510C8270E
2-nitrophenol	1.0 U	2.0	1.0	0.21	ug/L	1	CL	11/14/23	8:53	17124	11/15/23	22:42	SW3510C8270E
2,4-dimethylphenol	1.0 U	5.0	1.0	0.44	ug/L	1	CL	11/14/23	8:53	17124	11/15/23	22:42	SW3510C8270E
bis(2-chloroethoxy)methane	1.0 U	5.0	1.0	0.26	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	21:24	SW3510C8270E
2,4-dichlorophenol	1.0 U	5.0	1.0	0.19	ug/L	1	CL	11/14/23	8:53	17124	11/15/23	22:42	SW3510C8270E
1,2,4-trichlorobenzene	1.0 U	5.0	1.0	0.34	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	21:24	SW3510C8270E
benzoic acid	45 U#	50	45	20	ug/L	1	CL	11/14/23	8:53	17124	11/15/23	22:42	SW3510C8270E
4-chloroaniline	1.0 U	2.0	1.0	0.41	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	21:24	SW3510C8270E
hexachlorobutadiene	1.0 U	2.0	1.0	0.57	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	21:24	SW3510C8270E
4-chloro-3-methylphenol	1.0 U	2.0	1.0	0.42	ug/L	1	CL	11/14/23	8:53	17124	11/15/23	22:42	SW3510C8270E
hexachlorocyclopentadiene	4.0 U#	10	4.0	1.6	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	21:24	SW3510C8270E
2,4,6-trichlorophenol	1.0 U	2.0	1.0	0.33	ug/L	1	CL	11/14/23	8:53	17124	11/15/23	22:42	SW3510C8270E
2,4,5-trichlorophenol	1.0 U	2.0	1.0	0.28	ug/L	1	CL	11/14/23	8:53	17124	11/15/23	22:42	SW3510C8270E
2-chloronaphthalene	1.0 U	5.0	1.0	0.34	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	21:24	SW3510C8270E
2-nitroaniline	1.0 U	2.0	1.0	0.72	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	21:24	SW3510C8270E
dimethylphthalate	1.0 U#	5.0	1.0	0.41	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	21:24	SW3510C8270E
2,6-dinitrotoluene	1.0 U	5.0	1.0	0.42	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	21:24	SW3510C8270E
2,4-dinitrotoluene	1.0 U	5.0	1.0	0.52	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	21:24	SW3510C8270E
3-nitroaniline	1.5 U	2.0	1.5	1.0	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	21:24	SW3510C8270E
2,4-dinitrophenol	45 U	50	45	3.5	ug/L	1	CL	11/14/23	8:53	17124	11/15/23	22:42	SW3510C8270E
dibenzofuran	0.40 U	0.50	0.40	0.37	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	21:24	SW3510C8270E
4-nitrophenol	5.0 U#	10	5.0	1.6	ug/L	1	CL	11/14/23	8:53	17124	11/15/23	22:42	SW3510C8270E
diethyl phthalate	2.9 J	5.0	1.0	0.30	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	21:24	SW3510C8270E
4-chlorophenyl phenyl ether	1.0 U	5.0	1.0	0.35	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	21:24	SW3510C8270E
4-nitroaniline	3.0 U	5.0	3.0	1.0	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	21:24	SW3510C8270E
4,6-dinitro-2-methylphenol	10 U	20	10	1.7	ug/L	1	CL	11/14/23	8:53	17124	11/15/23	22:42	SW3510C8270E

Project ID: Dow Salvage Yard 18001468
Job ID: 67836
Sample#: 67836-009
Sample ID: SY-OBMW110-110823
Matrix: Water
Sampled: 11/8/23 14:22

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
azobenzene	1.0 U	2.0	1.0	0.25	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	21:24	SW3510C8270E
N-nitrosodiphenylamine	1.0 U	2.0	1.0	0.26	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	21:24	SW3510C8270E
4-bromophenyl phenyl ether	1.0 U	2.0	1.0	0.23	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	21:24	SW3510C8270E
hexachlorobenzene	1.0 U	2.0	1.0	0.25	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	21:24	SW3510C8270E
pentachlorophenol	5.0 U	10	5.0	2.6	ug/L	1	CL	11/14/23	8:53	17124	11/15/23	22:42	SW3510C8270E
carbazole	1.0 U	2.0	1.0	0.32	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	21:24	SW3510C8270E
di-n-butylphthalate	1.0 U	5.0	1.0	0.54	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	21:24	SW3510C8270E
benzidine	25 U	30	25	20	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	21:24	SW3510C8270E
butyl benzyl phthalate	3.0 U#	5.0	3.0	2.1	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	21:24	SW3510C8270E
3,3'-dichlorobenzidine	25 U	30	25	20	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	21:24	SW3510C8270E
bis(2-ethylhexyl)phthalate	260 #	25	15	12	ug/L	5	CL	11/14/23	8:53	17124	12/1/23	12:47	SW3510C8270E
di-n-octyl phthalate	3.0 U	5.0	3.0	2.1	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	21:24	SW3510C8270E
Surrogate Recovery		Limits											
2-fluorophenol SUR	33	21-100			%	1	CL	11/14/23	8:53	17124	11/15/23	22:42	SW3510C8270E
phenol-D5 SUR	18	10-102			%	1	CL	11/14/23	8:53	17124	11/15/23	22:42	SW3510C8270E
2,4,6-tribromophenol SUR	63	10-123			%	1	CL	11/14/23	8:53	17124	11/15/23	22:42	SW3510C8270E
nitrobenzene-D5 SUR	69	35-114			%	1	CL	11/14/23	8:53	17124	11/20/23	21:24	SW3510C8270E
2-fluorobiphenyl SUR	69	43-116			%	1	CL	11/14/23	8:53	17124	11/20/23	21:24	SW3510C8270E
p-terphenyl-D14 SUR	89	33-141			%	1	CL	11/14/23	8:53	17124	11/20/23	21:24	SW3510C8270E

 # The percent recovery and/or RPD for the LCS/D was outside acceptance criteria.

Project ID: Dow Salvage Yard 18001468
Job ID: 67836
Sample#: 67836-011
Sample ID: SY-OBMW3-110823
Matrix: Water
Sampled: 11/8/23 11:15

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
N-nitrosodimethylamine	1.0 U#	2.0	1.0	0.21	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	21:53	SW3510C8270E
pyridine	1.0 U#	2.0	1.0	0.60	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	21:53	SW3510C8270E
aniline	1.0 U	2.0	1.0	0.39	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	21:53	SW3510C8270E
phenol	1.0 U#	2.0	1.0	0.34	ug/L	1	CL	11/14/23	8:53	17124	11/15/23	23:12	SW3510C8270E
2-chlorophenol	1.0 U	5.0	1.0	0.29	ug/L	1	CL	11/14/23	8:53	17124	11/15/23	23:12	SW3510C8270E
bis(2-chloroethyl)ether	1.0 U	2.0	1.0	0.35	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	21:53	SW3510C8270E
1,3-dichlorobenzene	1.0 U	2.0	1.0	0.41	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	21:53	SW3510C8270E
1,4-dichlorobenzene	1.0 U	2.0	1.0	0.37	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	21:53	SW3510C8270E
1,2-dichlorobenzene	1.0 U	2.0	1.0	0.36	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	21:53	SW3510C8270E
benzyl alcohol	1.0 U	2.0	1.0	0.84	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	21:53	SW3510C8270E
2-methylphenol	1.0 U	5.0	1.0	0.39	ug/L	1	CL	11/14/23	8:53	17124	11/15/23	23:12	SW3510C8270E
2,2'-oxybis(1-chloropropane)	1.0 U	2.0	1.0	0.44	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	21:53	SW3510C8270E
hexachloroethane	1.0 U	2.0	1.0	0.53	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	21:53	SW3510C8270E
N-nitroso-di-N-propylamine	1.0 U	2.0	1.0	0.30	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	21:53	SW3510C8270E
4-methylphenol	1.5 U	2.0	1.5	1.3	ug/L	1	CL	11/14/23	8:53	17124	11/15/23	23:12	SW3510C8270E
nitrobenzene	1.0 U	2.0	1.0	0.41	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	21:53	SW3510C8270E
isophorone	1.0 U	5.0	1.0	0.32	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	21:53	SW3510C8270E
2-nitrophenol	1.0 U	2.0	1.0	0.21	ug/L	1	CL	11/14/23	8:53	17124	11/15/23	23:12	SW3510C8270E
2,4-dimethylphenol	1.0 U	5.0	1.0	0.44	ug/L	1	CL	11/14/23	8:53	17124	11/15/23	23:12	SW3510C8270E
bis(2-chloroethoxy)methane	1.0 U	5.0	1.0	0.26	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	21:53	SW3510C8270E
2,4-dichlorophenol	1.0 U	5.0	1.0	0.19	ug/L	1	CL	11/14/23	8:53	17124	11/15/23	23:12	SW3510C8270E
1,2,4-trichlorobenzene	1.0 U	5.0	1.0	0.34	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	21:53	SW3510C8270E
benzoic acid	45 U#	50	45	20	ug/L	1	CL	11/14/23	8:53	17124	11/15/23	23:12	SW3510C8270E
4-chloroaniline	1.0 U	2.0	1.0	0.41	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	21:53	SW3510C8270E
hexachlorobutadiene	1.0 U	2.0	1.0	0.57	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	21:53	SW3510C8270E
4-chloro-3-methylphenol	1.0 U	2.0	1.0	0.42	ug/L	1	CL	11/14/23	8:53	17124	11/15/23	23:12	SW3510C8270E
hexachlorocyclopentadiene	4.0 U#	10	4.0	1.6	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	21:53	SW3510C8270E
2,4,6-trichlorophenol	1.0 U	2.0	1.0	0.33	ug/L	1	CL	11/14/23	8:53	17124	11/15/23	23:12	SW3510C8270E
2,4,5-trichlorophenol	1.0 U	2.0	1.0	0.28	ug/L	1	CL	11/14/23	8:53	17124	11/15/23	23:12	SW3510C8270E
2-chloronaphthalene	1.0 U	5.0	1.0	0.34	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	21:53	SW3510C8270E
2-nitroaniline	1.0 U	2.0	1.0	0.72	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	21:53	SW3510C8270E
dimethylphthalate	1.0 U#	5.0	1.0	0.41	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	21:53	SW3510C8270E
2,6-dinitrotoluene	1.0 U	5.0	1.0	0.42	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	21:53	SW3510C8270E
2,4-dinitrotoluene	1.0 U	5.0	1.0	0.52	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	21:53	SW3510C8270E
3-nitroaniline	1.5 U	2.0	1.5	1.0	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	21:53	SW3510C8270E
2,4-dinitrophenol	45 U	50	45	3.5	ug/L	1	CL	11/14/23	8:53	17124	11/15/23	23:12	SW3510C8270E
dibenzofuran	0.40 U	0.50	0.40	0.37	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	21:53	SW3510C8270E
4-nitrophenol	5.0 U#	10	5.0	1.6	ug/L	1	CL	11/14/23	8:53	17124	11/15/23	23:12	SW3510C8270E
diethyl phthalate	2.8 J	5.0	1.0	0.30	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	21:53	SW3510C8270E
4-chlorophenyl phenyl ether	1.0 U	5.0	1.0	0.35	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	21:53	SW3510C8270E
4-nitroaniline	3.0 U	5.0	3.0	1.0	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	21:53	SW3510C8270E
4,6-dinitro-2-methylphenol	10 U	20	10	1.7	ug/L	1	CL	11/14/23	8:53	17124	11/15/23	23:12	SW3510C8270E

Project ID: Dow Salvage Yard 18001468
Job ID: 67836
Sample#: 67836-011
Sample ID: SY-OBMW3-110823
Matrix: Water
Sampled: 11/8/23 11:15

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
azobenzene	1.0 U	2.0	1.0	0.25	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	21:53	SW3510C8270E
N-nitrosodiphenylamine	1.0 U	2.0	1.0	0.26	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	21:53	SW3510C8270E
4-bromophenyl phenyl ether	1.0 U	2.0	1.0	0.23	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	21:53	SW3510C8270E
hexachlorobenzene	1.0 U	2.0	1.0	0.25	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	21:53	SW3510C8270E
pentachlorophenol	5.0 U	10	5.0	2.6	ug/L	1	CL	11/14/23	8:53	17124	11/15/23	23:12	SW3510C8270E
carbazole	1.0 U	2.0	1.0	0.32	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	21:53	SW3510C8270E
di-n-butylphthalate	1.0 U	5.0	1.0	0.54	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	21:53	SW3510C8270E
benzidine	25 U	30	25	20	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	21:53	SW3510C8270E
butyl benzyl phthalate	3.0 U#	5.0	3.0	2.1	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	21:53	SW3510C8270E
3,3'-dichlorobenzidine	25 U	30	25	20	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	21:53	SW3510C8270E
bis(2-ethylhexyl)phthalate	160 #	25	15	12	ug/L	5	CL	11/14/23	8:53	17124	12/1/23	13:17	SW3510C8270E
di-n-octyl phthalate	3.0 U	5.0	3.0	2.1	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	21:53	SW3510C8270E
Surrogate Recovery		Limits											
2-fluorophenol SUR	36	21-100			%	1	CL	11/14/23	8:53	17124	11/15/23	23:12	SW3510C8270E
phenol-D5 SUR	24	10-102			%	1	CL	11/14/23	8:53	17124	11/15/23	23:12	SW3510C8270E
2,4,6-tribromophenol SUR	74	10-123			%	1	CL	11/14/23	8:53	17124	11/15/23	23:12	SW3510C8270E
nitrobenzene-D5 SUR	69	35-114			%	1	CL	11/14/23	8:53	17124	11/20/23	21:53	SW3510C8270E
2-fluorobiphenyl SUR	68	43-116			%	1	CL	11/14/23	8:53	17124	11/20/23	21:53	SW3510C8270E
p-terphenyl-D14 SUR	77	33-141			%	1	CL	11/14/23	8:53	17124	11/20/23	21:53	SW3510C8270E

 # The percent recovery and/or RPD for the LCS/D was outside acceptance criteria.

Project ID: Dow Salvage Yard 18001468
Job ID: 67836

Sample#: 67836-001
Sample ID: SY-OBMW2-110823
Matrix: Water
Sampled: 11/8/23 9:05

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
PCB-1016	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	11/29/23	8:13	17190	11/30/23	13:30	SW3510C8082A
PCB-1221	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	11/29/23	8:13	17190	11/30/23	13:30	SW3510C8082A
PCB-1232	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	11/29/23	8:13	17190	11/30/23	13:30	SW3510C8082A
PCB-1242	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	11/29/23	8:13	17190	11/30/23	13:30	SW3510C8082A
PCB-1248	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	11/29/23	8:13	17190	11/30/23	13:30	SW3510C8082A
PCB-1254	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	11/29/23	8:13	17190	11/30/23	13:30	SW3510C8082A
PCB-1260	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	11/29/23	8:13	17190	11/30/23	13:30	SW3510C8082A
Surrogate Recovery		Limits											
tetrachloro-m-xylene SUR	60	30-150			%	1	DBV	11/29/23	8:13	17190	11/30/23	13:30	SW3510C8082A
decachlorobiphenyl SUR	65	30-150			%	1	DBV	11/29/23	8:13	17190	11/30/23	13:30	SW3510C8082A

Sample#: 67836-002
Sample ID: SY-OBMW1-110823
Matrix: Water
Sampled: 11/8/23 9:35

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
PCB-1016	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	11/29/23	8:13	17190	11/30/23	13:43	SW3510C8082A
PCB-1221	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	11/29/23	8:13	17190	11/30/23	13:43	SW3510C8082A
PCB-1232	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	11/29/23	8:13	17190	11/30/23	13:43	SW3510C8082A
PCB-1242	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	11/29/23	8:13	17190	11/30/23	13:43	SW3510C8082A
PCB-1248	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	11/29/23	8:13	17190	11/30/23	13:43	SW3510C8082A
PCB-1254	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	11/29/23	8:13	17190	11/30/23	13:43	SW3510C8082A
PCB-1260	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	11/29/23	8:13	17190	11/30/23	13:43	SW3510C8082A
Surrogate Recovery		Limits											
tetrachloro-m-xylene SUR	66	30-150			%	1	DBV	11/29/23	8:13	17190	11/30/23	13:43	SW3510C8082A
decachlorobiphenyl SUR	68	30-150			%	1	DBV	11/29/23	8:13	17190	11/30/23	13:43	SW3510C8082A

Project ID: Dow Salvage Yard 18001468
Job ID: 67836

Sample#: 67836-003
Sample ID: SY-OBMW9-110823
Matrix: Water
Sampled: 11/8/23 10:16

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
PCB-1016	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	11/29/23	8:13	17190	11/30/23	13:56	SW3510C8082A
PCB-1221	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	11/29/23	8:13	17190	11/30/23	13:56	SW3510C8082A
PCB-1232	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	11/29/23	8:13	17190	11/30/23	13:56	SW3510C8082A
PCB-1242	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	11/29/23	8:13	17190	11/30/23	13:56	SW3510C8082A
PCB-1248	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	11/29/23	8:13	17190	11/30/23	13:56	SW3510C8082A
PCB-1254	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	11/29/23	8:13	17190	11/30/23	13:56	SW3510C8082A
PCB-1260	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	11/29/23	8:13	17190	11/30/23	13:56	SW3510C8082A
Surrogate Recovery		Limits											
tetrachloro-m-xylene SUR	64	30-150			%	1	DBV	11/29/23	8:13	17190	11/30/23	13:56	SW3510C8082A
decachlorobiphenyl SUR	71	30-150			%	1	DBV	11/29/23	8:13	17190	11/30/23	13:56	SW3510C8082A

Sample#: 67836-004
Sample ID: SY-BRMW5-29-44-110823
Matrix: Water
Sampled: 11/8/23 11:00

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
PCB-1016	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	11/29/23	8:13	17190	11/30/23	14:09	SW3510C8082A
PCB-1221	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	11/29/23	8:13	17190	11/30/23	14:09	SW3510C8082A
PCB-1232	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	11/29/23	8:13	17190	11/30/23	14:09	SW3510C8082A
PCB-1242	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	11/29/23	8:13	17190	11/30/23	14:09	SW3510C8082A
PCB-1248	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	11/29/23	8:13	17190	11/30/23	14:09	SW3510C8082A
PCB-1254	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	11/29/23	8:13	17190	11/30/23	14:09	SW3510C8082A
PCB-1260	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	11/29/23	8:13	17190	11/30/23	14:09	SW3510C8082A
Surrogate Recovery		Limits											
tetrachloro-m-xylene SUR	61	30-150			%	1	DBV	11/29/23	8:13	17190	11/30/23	14:09	SW3510C8082A
decachlorobiphenyl SUR	71	30-150			%	1	DBV	11/29/23	8:13	17190	11/30/23	14:09	SW3510C8082A

Project ID: Dow Salvage Yard 18001468
Job ID: 67836

Sample#: 67836-005
Sample ID: SY-BRMW5-123-133-110823
Matrix: Water
Sampled: 11/8/23 11:40

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Prep Analyst	Prep Date	Prep Time	Analysis Batch	Analysis Date	Analysis Time	Reference
PCB-1016	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	11/29/23	8:13	17190	11/30/23	14:22	SW3510C8082A
PCB-1221	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	11/29/23	8:13	17190	11/30/23	14:22	SW3510C8082A
PCB-1232	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	11/29/23	8:13	17190	11/30/23	14:22	SW3510C8082A
PCB-1242	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	11/29/23	8:13	17190	11/30/23	14:22	SW3510C8082A
PCB-1248	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	11/29/23	8:13	17190	11/30/23	14:22	SW3510C8082A
PCB-1254	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	11/29/23	8:13	17190	11/30/23	14:22	SW3510C8082A
PCB-1260	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	11/29/23	8:13	17190	11/30/23	14:22	SW3510C8082A
Surrogate Recovery		Limits											
tetrachloro-m-xylene SUR	55	30-150			%	1	DBV	11/29/23	8:13	17190	11/30/23	14:22	SW3510C8082A
decachlorobiphenyl SUR	49	30-150			%	1	DBV	11/29/23	8:13	17190	11/30/23	14:22	SW3510C8082A

Sample#: 67836-006
Sample ID: SY-BRMW5-56-66-110823
Matrix: Water
Sampled: 11/8/23 11:15

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Prep Analyst	Prep Date	Prep Time	Analysis Batch	Analysis Date	Analysis Time	Reference
PCB-1016	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	11/29/23	8:13	17190	11/30/23	14:35	SW3510C8082A
PCB-1221	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	11/29/23	8:13	17190	11/30/23	14:35	SW3510C8082A
PCB-1232	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	11/29/23	8:13	17190	11/30/23	14:35	SW3510C8082A
PCB-1242	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	11/29/23	8:13	17190	11/30/23	14:35	SW3510C8082A
PCB-1248	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	11/29/23	8:13	17190	11/30/23	14:35	SW3510C8082A
PCB-1254	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	11/29/23	8:13	17190	11/30/23	14:35	SW3510C8082A
PCB-1260	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	11/29/23	8:13	17190	11/30/23	14:35	SW3510C8082A
Surrogate Recovery		Limits											
tetrachloro-m-xylene SUR	55	30-150			%	1	DBV	11/29/23	8:13	17190	11/30/23	14:35	SW3510C8082A
decachlorobiphenyl SUR	47	30-150			%	1	DBV	11/29/23	8:13	17190	11/30/23	14:35	SW3510C8082A

Project ID: Dow Salvage Yard 18001468
Job ID: 67836

Sample#: 67836-007
Sample ID: SY-OBMW8-110823
Matrix: Water
Sampled: 11/8/23 12:50

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
PCB-1016	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	11/29/23	8:13	17190	11/30/23	14:48	SW3510C8082A
PCB-1221	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	11/29/23	8:13	17190	11/30/23	14:48	SW3510C8082A
PCB-1232	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	11/29/23	8:13	17190	11/30/23	14:48	SW3510C8082A
PCB-1242	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	11/29/23	8:13	17190	11/30/23	14:48	SW3510C8082A
PCB-1248	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	11/29/23	8:13	17190	11/30/23	14:48	SW3510C8082A
PCB-1254	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	11/29/23	8:13	17190	11/30/23	14:48	SW3510C8082A
PCB-1260	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	11/29/23	8:13	17190	11/30/23	14:48	SW3510C8082A
Surrogate Recovery		Limits											
tetrachloro-m-xylene SUR	56	30-150			%	1	DBV	11/29/23	8:13	17190	11/30/23	14:48	SW3510C8082A
decachlorobiphenyl SUR	67	30-150			%	1	DBV	11/29/23	8:13	17190	11/30/23	14:48	SW3510C8082A

Sample#: 67836-008
Sample ID: SY-OBMW11-110823
Matrix: Water
Sampled: 11/8/23 14:17

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
PCB-1016	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	11/29/23	8:13	17190	11/30/23	15:01	SW3510C8082A
PCB-1221	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	11/29/23	8:13	17190	11/30/23	15:01	SW3510C8082A
PCB-1232	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	11/29/23	8:13	17190	11/30/23	15:01	SW3510C8082A
PCB-1242	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	11/29/23	8:13	17190	11/30/23	15:01	SW3510C8082A
PCB-1248	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	11/29/23	8:13	17190	11/30/23	15:01	SW3510C8082A
PCB-1254	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	11/29/23	8:13	17190	11/30/23	15:01	SW3510C8082A
PCB-1260	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	11/29/23	8:13	17190	11/30/23	15:01	SW3510C8082A
Surrogate Recovery		Limits											
tetrachloro-m-xylene SUR	60	30-150			%	1	DBV	11/29/23	8:13	17190	11/30/23	15:01	SW3510C8082A
decachlorobiphenyl SUR	63	30-150			%	1	DBV	11/29/23	8:13	17190	11/30/23	15:01	SW3510C8082A

Project ID: Dow Salvage Yard 18001468
Job ID: 67836

Sample#: 67836-009
Sample ID: SY-OBMW110-110823
Matrix: Water
Sampled: 11/8/23 14:22

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Prep Analyst	Prep Date	Prep Time	Analysis Batch	Analysis Date	Analysis Time	Reference
PCB-1016	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	11/29/23	8:13	17190	11/30/23	15:14	SW3510C8082A
PCB-1221	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	11/29/23	8:13	17190	11/30/23	15:14	SW3510C8082A
PCB-1232	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	11/29/23	8:13	17190	11/30/23	15:14	SW3510C8082A
PCB-1242	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	11/29/23	8:13	17190	11/30/23	15:14	SW3510C8082A
PCB-1248	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	11/29/23	8:13	17190	11/30/23	15:14	SW3510C8082A
PCB-1254	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	11/29/23	8:13	17190	11/30/23	15:14	SW3510C8082A
PCB-1260	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	11/29/23	8:13	17190	11/30/23	15:14	SW3510C8082A
Surrogate Recovery		Limits											
tetrachloro-m-xylene SUR	63	30-150			%	1	DBV	11/29/23	8:13	17190	11/30/23	15:14	SW3510C8082A
decachlorobiphenyl SUR	74	30-150			%	1	DBV	11/29/23	8:13	17190	11/30/23	15:14	SW3510C8082A

Sample#: 67836-011
Sample ID: SY-OBMW3-110823
Matrix: Water
Sampled: 11/8/23 11:15

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Prep Analyst	Prep Date	Prep Time	Analysis Batch	Analysis Date	Analysis Time	Reference
PCB-1016	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	11/29/23	8:13	17190	11/30/23	15:27	SW3510C8082A
PCB-1221	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	11/29/23	8:13	17190	11/30/23	15:27	SW3510C8082A
PCB-1232	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	11/29/23	8:13	17190	11/30/23	15:27	SW3510C8082A
PCB-1242	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	11/29/23	8:13	17190	11/30/23	15:27	SW3510C8082A
PCB-1248	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	11/29/23	8:13	17190	11/30/23	15:27	SW3510C8082A
PCB-1254	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	11/29/23	8:13	17190	11/30/23	15:27	SW3510C8082A
PCB-1260	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	11/29/23	8:13	17190	11/30/23	15:27	SW3510C8082A
Surrogate Recovery		Limits											
tetrachloro-m-xylene SUR	64	30-150			%	1	DBV	11/29/23	8:13	17190	11/30/23	15:27	SW3510C8082A
decachlorobiphenyl SUR	71	30-150			%	1	DBV	11/29/23	8:13	17190	11/30/23	15:27	SW3510C8082A

Project ID: Dow Salvage Yard 18001468
Job ID: 67836
Sample#: 67836-001
Sample ID: SY-OBMW2-110823
Matrix: Water
Sampled: 11/8/23 9:05

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
naphthalene	0.70 U	1.0	0.70	0.63	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	5:24	MA EPH
2-methylnaphthalene	0.70 U	1.0	0.70	0.60	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	5:24	MA EPH
phenanthrene	0.50 U	1.0	0.50	0.15	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	5:24	MA EPH
acenaphthene	0.50 U	1.0	0.50	0.22	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	5:24	MA EPH
acenaphthylene	0.50 U	1.0	0.50	0.18	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	5:24	MA EPH
fluorene	0.50 U	1.0	0.50	0.15	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	5:24	MA EPH
anthracene	0.50 U	1.0	0.50	0.18	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	5:24	MA EPH
fluoranthene	0.50 U	1.0	0.50	0.18	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	5:24	MA EPH
pyrene	0.50 U	1.0	0.50	0.23	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	5:24	MA EPH
benzo(a)anthracene	0.50 U	1.0	0.50	0.20	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	5:24	MA EPH
chrysene	0.50 U	1.0	0.50	0.16	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	5:24	MA EPH
benzo(b)fluoranthene	0.50 U	1.0	0.50	0.35	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	5:24	MA EPH
benzo(k)fluoranthene	0.50 U	1.0	0.50	0.41	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	5:24	MA EPH
benzo(a)pyrene	0.70 U	1.0	0.70	0.52	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	5:24	MA EPH
indeno(1,2,3-cd)pyrene	0.50 U	1.0	0.50	0.24	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	5:24	MA EPH
dibenzo(a,h)anthracene	0.50 U	1.0	0.50	0.26	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	5:24	MA EPH
benzo(g,h,i)perylene	0.50 U	1.0	0.50	0.22	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	5:24	MA EPH
Unadjusted C11-C22 Aromatics	85 U	100	85	60	ug/L	1	DBV	11/20/23	8:25	17156	12/8/23	9:30	MA EPH
C9-C18 Aliphatics	95 U#	100	95	94	ug/L	1	DBV	11/20/23	8:25	17156	12/8/23	9:30	MA EPH
C19-C36 Aliphatics	97 U	100	97	96	ug/L	1	DBV	11/20/23	8:25	17156	12/8/23	9:30	MA EPH
C11-C22 Aromatics	85 U	100	85	54	ug/L	1	DBV	11/20/23	8:25	17156	12/8/23	9:30	MA EPH
Surrogate Recovery		Limits											
1-chloro-octadecane SUR	43	40-140			%	1	DBV	11/20/23	8:25	17156	12/8/23	9:30	MA EPH
o-terphenyl SUR	61	40-140			%	1	DBV	11/20/23	8:25	17156	12/8/23	9:30	MA EPH
2-fluorobiphenyl SUR	74	40-140			%	1	DBV	11/20/23	8:25	17156	12/8/23	9:30	MA EPH
2-bromonaphthalene SUR	76	40-140			%	1	DBV	11/20/23	8:25	17156	12/8/23	9:30	MA EPH

 # The percent recovery and/or RPD for the LCS/D was outside acceptance criteria.

Project ID: Dow Salvage Yard 18001468
Job ID: 67836
Sample#: 67836-002
Sample ID: SY-OBMW1-110823
Matrix: Water
Sampled: 11/8/23 9:35

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
naphthalene	0.70 U	1.0	0.70	0.63	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	5:54	MA EPH
2-methylnaphthalene	0.70 U	1.0	0.70	0.60	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	5:54	MA EPH
phenanthrene	0.50 U	1.0	0.50	0.15	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	5:54	MA EPH
acenaphthene	0.50 U	1.0	0.50	0.22	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	5:54	MA EPH
acenaphthylene	0.50 U	1.0	0.50	0.18	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	5:54	MA EPH
fluorene	0.50 U	1.0	0.50	0.15	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	5:54	MA EPH
anthracene	0.50 U	1.0	0.50	0.18	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	5:54	MA EPH
fluoranthene	0.50 U	1.0	0.50	0.18	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	5:54	MA EPH
pyrene	0.50 U	1.0	0.50	0.23	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	5:54	MA EPH
benzo(a)anthracene	0.50 U	1.0	0.50	0.20	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	5:54	MA EPH
chrysene	0.50 U	1.0	0.50	0.16	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	5:54	MA EPH
benzo(b)fluoranthene	0.50 U	1.0	0.50	0.35	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	5:54	MA EPH
benzo(k)fluoranthene	0.50 U	1.0	0.50	0.41	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	5:54	MA EPH
benzo(a)pyrene	0.70 U	1.0	0.70	0.52	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	5:54	MA EPH
indeno(1,2,3-cd)pyrene	0.50 U	1.0	0.50	0.24	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	5:54	MA EPH
dibenzo(a,h)anthracene	0.50 U	1.0	0.50	0.26	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	5:54	MA EPH
benzo(g,h,i)perylene	0.50 U	1.0	0.50	0.22	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	5:54	MA EPH
Unadjusted C11-C22 Aromatics	85 U	100	85	60	ug/L	1	DBV	11/20/23	8:25	17156	12/8/23	10:04	MA EPH
C9-C18 Aliphatics	95 U#	100	95	94	ug/L	1	DBV	11/20/23	8:25	17156	12/8/23	10:04	MA EPH
C19-C36 Aliphatics	97 U	100	97	96	ug/L	1	DBV	11/20/23	8:25	17156	12/8/23	10:04	MA EPH
C11-C22 Aromatics	58 J	100	85	54	ug/L	1	DBV	11/20/23	8:25	17156	12/8/23	10:04	MA EPH
Surrogate Recovery		Limits											
1-chloro-octadecane SUR	46	40-140			%	1	DBV	11/20/23	8:25	17156	12/8/23	10:04	MA EPH
o-terphenyl SUR	61	40-140			%	1	DBV	11/20/23	8:25	17156	12/8/23	10:04	MA EPH
2-fluorobiphenyl SUR	76	40-140			%	1	DBV	11/20/23	8:25	17156	12/8/23	10:04	MA EPH
2-bromonaphthalene SUR	79	40-140			%	1	DBV	11/20/23	8:25	17156	12/8/23	10:04	MA EPH

 # The percent recovery and/or RPD for the LCS/D was outside acceptance criteria.

Project ID: Dow Salvage Yard 18001468
Job ID: 67836
Sample#: 67836-003
Sample ID: SY-OBMW9-110823
Matrix: Water
Sampled: 11/8/23 10:16

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
naphthalene	0.70 U	1.0	0.70	0.63	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	6:24	MA EPH
2-methylnaphthalene	0.70 U	1.0	0.70	0.60	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	6:24	MA EPH
phenanthrene	0.50 U	1.0	0.50	0.15	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	6:24	MA EPH
acenaphthene	0.50 U	1.0	0.50	0.22	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	6:24	MA EPH
acenaphthylene	0.50 U	1.0	0.50	0.18	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	6:24	MA EPH
fluorene	0.50 U	1.0	0.50	0.15	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	6:24	MA EPH
anthracene	0.50 U	1.0	0.50	0.18	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	6:24	MA EPH
fluoranthene	0.50 U	1.0	0.50	0.18	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	6:24	MA EPH
pyrene	0.50 U	1.0	0.50	0.23	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	6:24	MA EPH
benzo(a)anthracene	0.50 U	1.0	0.50	0.20	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	6:24	MA EPH
chrysene	0.50 U	1.0	0.50	0.16	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	6:24	MA EPH
benzo(b)fluoranthene	0.50 U	1.0	0.50	0.35	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	6:24	MA EPH
benzo(k)fluoranthene	0.50 U	1.0	0.50	0.41	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	6:24	MA EPH
benzo(a)pyrene	0.70 U	1.0	0.70	0.52	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	6:24	MA EPH
indeno(1,2,3-cd)pyrene	0.50 U	1.0	0.50	0.24	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	6:24	MA EPH
dibenzo(a,h)anthracene	0.50 U	1.0	0.50	0.26	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	6:24	MA EPH
benzo(g,h,i)perylene	0.50 U	1.0	0.50	0.22	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	6:24	MA EPH
Unadjusted C11-C22 Aromatics	70 J	100	85	60	ug/L	1	DBV	11/20/23	8:25	17156	12/8/23	10:38	MA EPH
C9-C18 Aliphatics	95 U#	100	95	94	ug/L	1	DBV	11/20/23	8:25	17156	12/8/23	10:38	MA EPH
C19-C36 Aliphatics	97 U	100	97	96	ug/L	1	DBV	11/20/23	8:25	17156	12/8/23	10:38	MA EPH
C11-C22 Aromatics	70 J	100	85	54	ug/L	1	DBV	11/20/23	8:25	17156	12/8/23	10:38	MA EPH
Surrogate Recovery		Limits											
1-chloro-octadecane SUR	46	40-140			%	1	DBV	11/20/23	8:25	17156	12/8/23	10:38	MA EPH
o-terphenyl SUR	66	40-140			%	1	DBV	11/20/23	8:25	17156	12/8/23	10:38	MA EPH
2-fluorobiphenyl SUR	81	40-140			%	1	DBV	11/20/23	8:25	17156	12/8/23	10:38	MA EPH
2-bromonaphthalene SUR	85	40-140			%	1	DBV	11/20/23	8:25	17156	12/8/23	10:38	MA EPH

 # The percent recovery and/or RPD for the LCS/D was outside acceptance criteria.

Project ID: Dow Salvage Yard 18001468
Job ID: 67836
Sample#: 67836-004
Sample ID: SY-BRMW5-29-44-110823
Matrix: Water
Sampled: 11/8/23 11:00

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
naphthalene	0.70 U	1.0	0.70	0.63	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	6:55	MA EPH
2-methylnaphthalene	0.70 U	1.0	0.70	0.60	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	6:55	MA EPH
phenanthrene	0.50 U	1.0	0.50	0.15	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	6:55	MA EPH
acenaphthene	0.50 U	1.0	0.50	0.22	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	6:55	MA EPH
acenaphthylene	0.50 U	1.0	0.50	0.18	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	6:55	MA EPH
fluorene	0.50 U	1.0	0.50	0.15	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	6:55	MA EPH
anthracene	0.50 U	1.0	0.50	0.18	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	6:55	MA EPH
fluoranthene	0.50 U	1.0	0.50	0.18	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	6:55	MA EPH
pyrene	0.50 U	1.0	0.50	0.23	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	6:55	MA EPH
benzo(a)anthracene	0.50 U	1.0	0.50	0.20	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	6:55	MA EPH
chrysene	0.50 U	1.0	0.50	0.16	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	6:55	MA EPH
benzo(b)fluoranthene	0.50 U	1.0	0.50	0.35	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	6:55	MA EPH
benzo(k)fluoranthene	0.50 U	1.0	0.50	0.41	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	6:55	MA EPH
benzo(a)pyrene	0.70 U	1.0	0.70	0.52	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	6:55	MA EPH
indeno(1,2,3-cd)pyrene	0.50 U	1.0	0.50	0.24	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	6:55	MA EPH
dibenzo(a,h)anthracene	0.50 U	1.0	0.50	0.26	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	6:55	MA EPH
benzo(g,h,i)perylene	0.50 U	1.0	0.50	0.22	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	6:55	MA EPH
Unadjusted C11-C22 Aromatics	85 U	100	85	60	ug/L	1	DBV	11/20/23	8:25	17156	12/8/23	11:12	MA EPH
C9-C18 Aliphatics	95 U#	100	95	94	ug/L	1	DBV	11/20/23	8:25	17156	12/8/23	11:12	MA EPH
C19-C36 Aliphatics	97 U	100	97	96	ug/L	1	DBV	11/20/23	8:25	17156	12/8/23	11:12	MA EPH
C11-C22 Aromatics	54 J	100	85	54	ug/L	1	DBV	11/20/23	8:25	17156	12/8/23	11:12	MA EPH
Surrogate Recovery		Limits											
1-chloro-octadecane SUR	50	40-140			%	1	DBV	11/20/23	8:25	17156	12/8/23	11:12	MA EPH
o-terphenyl SUR	61	40-140			%	1	DBV	11/20/23	8:25	17156	12/8/23	11:12	MA EPH
2-fluorobiphenyl SUR	73	40-140			%	1	DBV	11/20/23	8:25	17156	12/8/23	11:12	MA EPH
2-bromonaphthalene SUR	77	40-140			%	1	DBV	11/20/23	8:25	17156	12/8/23	11:12	MA EPH

 # The percent recovery and/or RPD for the LCS/D was outside acceptance criteria.

Project ID: Dow Salvage Yard 18001468
Job ID: 67836
Sample#: 67836-005
Sample ID: SY-BRMW5-123-133-110823
Matrix: Water
Sampled: 11/8/23 11:40

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
naphthalene	0.70 U	1.0	0.70	0.63	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	7:24	MA EPH
2-methylnaphthalene	0.70 U	1.0	0.70	0.60	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	7:24	MA EPH
phenanthrene	0.50 U	1.0	0.50	0.15	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	7:24	MA EPH
acenaphthene	0.50 U	1.0	0.50	0.22	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	7:24	MA EPH
acenaphthylene	0.50 U	1.0	0.50	0.18	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	7:24	MA EPH
fluorene	0.50 U	1.0	0.50	0.15	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	7:24	MA EPH
anthracene	0.50 U	1.0	0.50	0.18	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	7:24	MA EPH
fluoranthene	0.50 U	1.0	0.50	0.18	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	7:24	MA EPH
pyrene	0.50 U	1.0	0.50	0.23	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	7:24	MA EPH
benzo(a)anthracene	0.50 U	1.0	0.50	0.20	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	7:24	MA EPH
chrysene	0.50 U	1.0	0.50	0.16	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	7:24	MA EPH
benzo(b)fluoranthene	0.50 U	1.0	0.50	0.35	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	7:24	MA EPH
benzo(k)fluoranthene	0.50 U	1.0	0.50	0.41	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	7:24	MA EPH
benzo(a)pyrene	0.70 U	1.0	0.70	0.52	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	7:24	MA EPH
indeno(1,2,3-cd)pyrene	0.50 U	1.0	0.50	0.24	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	7:24	MA EPH
dibenzo(a,h)anthracene	0.50 U	1.0	0.50	0.26	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	7:24	MA EPH
benzo(g,h,i)perylene	0.50 U	1.0	0.50	0.22	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	7:24	MA EPH
Unadjusted C11-C22 Aromatics	64 J	100	85	60	ug/L	1	DBV	11/20/23	8:25	17156	12/8/23	11:46	MA EPH
C9-C18 Aliphatics	95 U#	100	95	94	ug/L	1	DBV	11/20/23	8:25	17156	12/8/23	11:46	MA EPH
C19-C36 Aliphatics	97 U	100	97	96	ug/L	1	DBV	11/20/23	8:25	17156	12/8/23	11:46	MA EPH
C11-C22 Aromatics	64 J	100	85	54	ug/L	1	DBV	11/20/23	8:25	17156	12/8/23	11:46	MA EPH
Surrogate Recovery		Limits											
1-chloro-octadecane SUR	55	40-140			%	1	DBV	11/20/23	8:25	17156	12/8/23	11:46	MA EPH
o-terphenyl SUR	61	40-140			%	1	DBV	11/20/23	8:25	17156	12/8/23	11:46	MA EPH
2-fluorobiphenyl SUR	70	40-140			%	1	DBV	11/20/23	8:25	17156	12/8/23	11:46	MA EPH
2-bromonaphthalene SUR	73	40-140			%	1	DBV	11/20/23	8:25	17156	12/8/23	11:46	MA EPH

 # The percent recovery and/or RPD for the LCS/D was outside acceptance criteria.

Project ID: Dow Salvage Yard 18001468
Job ID: 67836
Sample#: 67836-006
Sample ID: SY-BRMW5-56-66-110823
Matrix: Water
Sampled: 11/8/23 11:15

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
naphthalene	0.70 U	1.0	0.70	0.63	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	7:54	MA EPH
2-methylnaphthalene	0.70 U	1.0	0.70	0.60	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	7:54	MA EPH
phenanthrene	0.50 U	1.0	0.50	0.15	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	7:54	MA EPH
acenaphthene	0.50 U	1.0	0.50	0.22	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	7:54	MA EPH
acenaphthylene	0.50 U	1.0	0.50	0.18	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	7:54	MA EPH
fluorene	0.50 U	1.0	0.50	0.15	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	7:54	MA EPH
anthracene	0.50 U	1.0	0.50	0.18	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	7:54	MA EPH
fluoranthene	0.50 U	1.0	0.50	0.18	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	7:54	MA EPH
pyrene	0.50 U	1.0	0.50	0.23	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	7:54	MA EPH
benzo(a)anthracene	0.50 U	1.0	0.50	0.20	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	7:54	MA EPH
chrysene	0.50 U	1.0	0.50	0.16	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	7:54	MA EPH
benzo(b)fluoranthene	0.50 U	1.0	0.50	0.35	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	7:54	MA EPH
benzo(k)fluoranthene	0.50 U	1.0	0.50	0.41	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	7:54	MA EPH
benzo(a)pyrene	0.70 U	1.0	0.70	0.52	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	7:54	MA EPH
indeno(1,2,3-cd)pyrene	0.50 U	1.0	0.50	0.24	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	7:54	MA EPH
dibenzo(a,h)anthracene	0.50 U	1.0	0.50	0.26	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	7:54	MA EPH
benzo(g,h,i)perylene	0.50 U	1.0	0.50	0.22	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	7:54	MA EPH
Unadjusted C11-C22 Aromatics	62 J	100	85	60	ug/L	1	DBV	11/20/23	8:25	17156	12/8/23	12:20	MA EPH
C9-C18 Aliphatics	95 U#	100	95	94	ug/L	1	DBV	11/20/23	8:25	17156	12/8/23	12:20	MA EPH
C19-C36 Aliphatics	97 U	100	97	96	ug/L	1	DBV	11/20/23	8:25	17156	12/8/23	12:20	MA EPH
C11-C22 Aromatics	62 J	100	85	54	ug/L	1	DBV	11/20/23	8:25	17156	12/8/23	12:20	MA EPH
Surrogate Recovery		Limits											
1-chloro-octadecane SUR	47	40-140			%	1	DBV	11/20/23	8:25	17156	12/8/23	12:20	MA EPH
o-terphenyl SUR	64	40-140			%	1	DBV	11/20/23	8:25	17156	12/8/23	12:20	MA EPH
2-fluorobiphenyl SUR	76	40-140			%	1	DBV	11/20/23	8:25	17156	12/8/23	12:20	MA EPH
2-bromonaphthalene SUR	79	40-140			%	1	DBV	11/20/23	8:25	17156	12/8/23	12:20	MA EPH

 # The percent recovery and/or RPD for the LCS/D was outside acceptance criteria.

Project ID: Dow Salvage Yard 18001468
Job ID: 67836
Sample#: 67836-007
Sample ID: SY-OBMW8-110823
Matrix: Water
Sampled: 11/8/23 12:50

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
naphthalene	0.71 U	1.0	0.71	0.63	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	8:24	MA EPH
2-methylnaphthalene	0.71 U	1.0	0.71	0.61	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	8:24	MA EPH
phenanthrene	0.51 U	1.0	0.51	0.15	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	8:24	MA EPH
acenaphthene	0.51 U	1.0	0.51	0.22	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	8:24	MA EPH
acenaphthylene	0.51 U	1.0	0.51	0.18	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	8:24	MA EPH
fluorene	0.51 U	1.0	0.51	0.15	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	8:24	MA EPH
anthracene	0.51 U	1.0	0.51	0.18	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	8:24	MA EPH
fluoranthene	0.51 U	1.0	0.51	0.18	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	8:24	MA EPH
pyrene	0.51 U	1.0	0.51	0.23	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	8:24	MA EPH
benzo(a)anthracene	0.51 U	1.0	0.51	0.20	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	8:24	MA EPH
chrysene	0.51 U	1.0	0.51	0.17	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	8:24	MA EPH
benzo(b)fluoranthene	0.51 U	1.0	0.51	0.35	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	8:24	MA EPH
benzo(k)fluoranthene	0.51 U	1.0	0.51	0.41	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	8:24	MA EPH
benzo(a)pyrene	0.71 U	1.0	0.71	0.53	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	8:24	MA EPH
indeno(1,2,3-cd)pyrene	0.51 U	1.0	0.51	0.24	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	8:24	MA EPH
dibenzo(a,h)anthracene	0.51 U	1.0	0.51	0.26	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	8:24	MA EPH
benzo(g,h,i)perylene	0.51 U	1.0	0.51	0.22	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	8:24	MA EPH
Unadjusted C11-C22 Aromatics	86 U	100	86	61	ug/L	1	DBV	11/20/23	8:25	17156	12/8/23	12:54	MA EPH
C9-C18 Aliphatics	96 U#	100	96	95	ug/L	1	DBV	11/20/23	8:25	17156	12/8/23	12:54	MA EPH
C19-C36 Aliphatics	98 U	100	98	97	ug/L	1	DBV	11/20/23	8:25	17156	12/8/23	12:54	MA EPH
C11-C22 Aromatics	86 U	100	86	55	ug/L	1	DBV	11/20/23	8:25	17156	12/8/23	12:54	MA EPH
Surrogate Recovery		Limits											
1-chloro-octadecane SUR	53	40-140			%	1	DBV	11/20/23	8:25	17156	12/8/23	12:54	MA EPH
o-terphenyl SUR	62	40-140			%	1	DBV	11/20/23	8:25	17156	12/8/23	12:54	MA EPH
2-fluorobiphenyl SUR	78	40-140			%	1	DBV	11/20/23	8:25	17156	12/8/23	12:54	MA EPH
2-bromonaphthalene SUR	81	40-140			%	1	DBV	11/20/23	8:25	17156	12/8/23	12:54	MA EPH

 # The percent recovery and/or RPD for the LCS/D was outside acceptance criteria.

Project ID: Dow Salvage Yard 18001468
Job ID: 67836
Sample#: 67836-008
Sample ID: SY-OBMW11-110823
Matrix: Water
Sampled: 11/8/23 14:17

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
naphthalene	0.70 U	1.0	0.70	0.63	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	8:54	MA EPH
2-methylnaphthalene	0.70 U	1.0	0.70	0.60	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	8:54	MA EPH
phenanthrene	0.50 U	1.0	0.50	0.15	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	8:54	MA EPH
acenaphthene	0.50 U	1.0	0.50	0.22	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	8:54	MA EPH
acenaphthylene	0.50 U	1.0	0.50	0.18	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	8:54	MA EPH
fluorene	0.50 U	1.0	0.50	0.15	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	8:54	MA EPH
anthracene	0.50 U	1.0	0.50	0.18	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	8:54	MA EPH
fluoranthene	0.50 U	1.0	0.50	0.18	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	8:54	MA EPH
pyrene	0.50 U	1.0	0.50	0.23	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	8:54	MA EPH
benzo(a)anthracene	0.50 U	1.0	0.50	0.20	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	8:54	MA EPH
chrysene	0.50 U	1.0	0.50	0.16	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	8:54	MA EPH
benzo(b)fluoranthene	0.50 U	1.0	0.50	0.35	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	8:54	MA EPH
benzo(k)fluoranthene	0.50 U	1.0	0.50	0.41	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	8:54	MA EPH
benzo(a)pyrene	0.70 U	1.0	0.70	0.52	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	8:54	MA EPH
indeno(1,2,3-cd)pyrene	0.50 U	1.0	0.50	0.24	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	8:54	MA EPH
dibenzo(a,h)anthracene	0.50 U	1.0	0.50	0.26	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	8:54	MA EPH
benzo(g,h,i)perylene	0.50 U	1.0	0.50	0.22	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	8:54	MA EPH
Unadjusted C11-C22 Aromatics	85 U	100	85	60	ug/L	1	DBV	11/20/23	8:25	17156	12/8/23	13:27	MA EPH
C9-C18 Aliphatics	95 U#	100	95	94	ug/L	1	DBV	11/20/23	8:25	17156	12/8/23	13:27	MA EPH
C19-C36 Aliphatics	97 U	100	97	96	ug/L	1	DBV	11/20/23	8:25	17156	12/8/23	13:27	MA EPH
C11-C22 Aromatics	57 J	100	85	54	ug/L	1	DBV	11/20/23	8:25	17156	12/8/23	13:27	MA EPH
Surrogate Recovery		Limits											
1-chloro-octadecane SUR	51	40-140			%	1	DBV	11/20/23	8:25	17156	12/8/23	13:27	MA EPH
o-terphenyl SUR	63	40-140			%	1	DBV	11/20/23	8:25	17156	12/8/23	13:27	MA EPH
2-fluorobiphenyl SUR	73	40-140			%	1	DBV	11/20/23	8:25	17156	12/8/23	13:27	MA EPH
2-bromonaphthalene SUR	77	40-140			%	1	DBV	11/20/23	8:25	17156	12/8/23	13:27	MA EPH

 # The percent recovery and/or RPD for the LCS/D was outside acceptance criteria.

Project ID: Dow Salvage Yard 18001468
Job ID: 67836
Sample#: 67836-009
Sample ID: SY-OBMW110-110823
Matrix: Water
Sampled: 11/8/23 14:22

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
naphthalene	0.70 U	1.0	0.70	0.63	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	9:23	MA EPH
2-methylnaphthalene	0.70 U	1.0	0.70	0.60	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	9:23	MA EPH
phenanthrene	0.50 U	1.0	0.50	0.15	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	9:23	MA EPH
acenaphthene	0.50 U	1.0	0.50	0.22	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	9:23	MA EPH
acenaphthylene	0.50 U	1.0	0.50	0.18	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	9:23	MA EPH
fluorene	0.50 U	1.0	0.50	0.15	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	9:23	MA EPH
anthracene	0.50 U	1.0	0.50	0.18	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	9:23	MA EPH
fluoranthene	0.50 U	1.0	0.50	0.18	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	9:23	MA EPH
pyrene	0.50 U	1.0	0.50	0.23	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	9:23	MA EPH
benzo(a)anthracene	0.50 U	1.0	0.50	0.20	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	9:23	MA EPH
chrysene	0.50 U	1.0	0.50	0.16	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	9:23	MA EPH
benzo(b)fluoranthene	0.50 U	1.0	0.50	0.35	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	9:23	MA EPH
benzo(k)fluoranthene	0.50 U	1.0	0.50	0.41	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	9:23	MA EPH
benzo(a)pyrene	0.70 U	1.0	0.70	0.52	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	9:23	MA EPH
indeno(1,2,3-cd)pyrene	0.50 U	1.0	0.50	0.24	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	9:23	MA EPH
dibenzo(a,h)anthracene	0.50 U	1.0	0.50	0.26	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	9:23	MA EPH
benzo(g,h,i)perylene	0.50 U	1.0	0.50	0.22	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	9:23	MA EPH
Unadjusted C11-C22 Aromatics	72 J	100	85	60	ug/L	1	DBV	11/20/23	8:25	17156	12/8/23	18:38	MA EPH
C9-C18 Aliphatics	95 U#	100	95	94	ug/L	1	DBV	11/20/23	8:25	17156	12/8/23	18:38	MA EPH
C19-C36 Aliphatics	97 U	100	97	96	ug/L	1	DBV	11/20/23	8:25	17156	12/8/23	18:38	MA EPH
C11-C22 Aromatics	72 J	100	85	54	ug/L	1	DBV	11/20/23	8:25	17156	12/8/23	18:38	MA EPH
Surrogate Recovery		Limits											
1-chloro-octadecane SUR	41	40-140			%	1	DBV	11/20/23	8:25	17156	12/8/23	18:38	MA EPH
o-terphenyl SUR	67	40-140			%	1	DBV	11/20/23	8:25	17156	12/8/23	18:38	MA EPH
2-fluorobiphenyl SUR	81	40-140			%	1	DBV	11/20/23	8:25	17156	12/8/23	18:38	MA EPH
2-bromonaphthalene SUR	85	40-140			%	1	DBV	11/20/23	8:25	17156	12/8/23	18:38	MA EPH

 # The percent recovery and/or RPD for the LCS/D was outside acceptance criteria.

Project ID: Dow Salvage Yard 18001468
Job ID: 67836
Sample#: 67836-011
Sample ID: SY-OBMW3-110823
Matrix: Water
Sampled: 11/8/23 11:15

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
naphthalene	0.70 U	1.0	0.70	0.63	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	9:53	MA EPH
2-methylnaphthalene	0.70 U	1.0	0.70	0.60	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	9:53	MA EPH
phenanthrene	0.50 U	1.0	0.50	0.15	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	9:53	MA EPH
acenaphthene	0.50 U	1.0	0.50	0.22	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	9:53	MA EPH
acenaphthylene	0.50 U	1.0	0.50	0.18	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	9:53	MA EPH
fluorene	0.50 U	1.0	0.50	0.15	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	9:53	MA EPH
anthracene	0.50 U	1.0	0.50	0.18	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	9:53	MA EPH
fluoranthene	0.50 U	1.0	0.50	0.18	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	9:53	MA EPH
pyrene	0.50 U	1.0	0.50	0.23	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	9:53	MA EPH
benzo(a)anthracene	0.50 U	1.0	0.50	0.20	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	9:53	MA EPH
chrysene	0.50 U	1.0	0.50	0.16	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	9:53	MA EPH
benzo(b)fluoranthene	0.50 U	1.0	0.50	0.35	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	9:53	MA EPH
benzo(k)fluoranthene	0.50 U	1.0	0.50	0.41	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	9:53	MA EPH
benzo(a)pyrene	0.70 U	1.0	0.70	0.52	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	9:53	MA EPH
indeno(1,2,3-cd)pyrene	0.50 U	1.0	0.50	0.24	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	9:53	MA EPH
dibenzo(a,h)anthracene	0.50 U	1.0	0.50	0.26	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	9:53	MA EPH
benzo(g,h,i)perylene	0.50 U	1.0	0.50	0.22	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	9:53	MA EPH
Unadjusted C11-C22 Aromatics	85 U	100	85	60	ug/L	1	DBV	11/20/23	8:25	17156	12/8/23	19:12	MA EPH
C9-C18 Aliphatics	95 U#	100	95	94	ug/L	1	DBV	11/20/23	8:25	17156	12/8/23	19:12	MA EPH
C19-C36 Aliphatics	97 U	100	97	96	ug/L	1	DBV	11/20/23	8:25	17156	12/8/23	19:12	MA EPH
C11-C22 Aromatics	59 J	100	85	54	ug/L	1	DBV	11/20/23	8:25	17156	12/8/23	19:12	MA EPH
Surrogate Recovery		Limits											
1-chloro-octadecane SUR	29 *	40-140			%	1	DBV	11/20/23	8:25	17156	12/8/23	19:12	MA EPH
o-terphenyl SUR	51	40-140			%	1	DBV	11/20/23	8:25	17156	12/8/23	19:12	MA EPH
2-fluorobiphenyl SUR	71	40-140			%	1	DBV	11/20/23	8:25	17156	12/8/23	19:12	MA EPH
2-bromonaphthalene SUR	73	40-140			%	1	DBV	11/20/23	8:25	17156	12/8/23	19:12	MA EPH

**** This surrogate showed recovery outside the acceptance limits. No additional sample remains for re-extraction.***
 # The percent recovery and/or RPD for the LCS/D was outside acceptance criteria.

Project ID: Dow Salvage Yard 18001468
Job ID: 67836
Sample#: 67836-001
Sample ID: SY-OBMW2-110823
Matrix: Water
Sampled: 11/8/23 9:05

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
Aluminum	0.012 J	0.050	0.025	0.010	mg/L	1	AGN	11/30/23	7:56	17194	12/5/23	19:49	SW3005A6020A
Antimony	0.00050 U	0.0010	0.00050	0.00014	mg/L	1	AGN	11/30/23	7:56	17194	12/5/23	19:49	SW3005A6020A
Arsenic	0.0039	0.0025	0.0010	0.00067	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	21:31	SW3005A6020A
Barium	0.0073 J	0.010	0.0010	0.00076	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	21:31	SW3005A6020A
Beryllium	0.00050 U	0.0010	0.00050	0.00010	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	21:31	SW3005A6020A
Cadmium	0.00050 U	0.0010	0.00050	0.00014	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	21:31	SW3005A6020A
Chromium	0.025 U	0.050	0.025	0.020	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	21:31	SW3005A6020A
Cobalt	0.00050 U	0.010	0.00050	0.00028	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	21:31	SW3005A6020A
Copper	0.0075 U	0.010	0.0075	0.0054	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	21:31	SW3005A6020A
Iron	0.030 U	0.050	0.030	0.029	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	21:31	SW3005A6020A
Lead	0.00050 U	0.0050	0.00050	0.00011	mg/L	1	AGN	11/30/23	7:56	17194	12/5/23	19:49	SW3005A6020A
Magnesium	18	0.10	0.020	0.0073	mg/L	1	AGN	11/30/23	7:56	17194	12/5/23	19:49	SW3005A6020A
Manganese	0.073	0.010	0.0050	0.0016	mg/L	1	AGN	11/30/23	7:56	17194	12/5/23	19:49	SW3005A6020A
Mercury	0.00015 U	0.00020	0.00015	0.00012	mg/L	1	EEB	11/20/23	12:15	17147	11/22/23	11:16	SW7470A
Nickel	0.025 U	0.050	0.025	0.013	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	21:31	SW3005A6020A
Potassium	1.6	0.50	0.10	0.039	mg/L	1	AGN	11/30/23	7:56	17194	12/5/23	19:49	SW3005A6020A
Selenium	0.0050 U	0.010	0.0050	0.0037	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	21:31	SW3005A6020A
Silver	0.00050 U	0.0050	0.00050	0.00011	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	21:31	SW3005A6020A
Sodium	13	0.10	0.050	0.034	mg/L	1	AGN	11/30/23	7:56	17194	12/5/23	19:49	SW3005A6020A
Thallium	0.00080 U	0.0010	0.00080	0.00068	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	21:31	SW3005A6020A
Vanadium	0.0050 U	0.010	0.0050	0.0018	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	21:31	SW3005A6020A
Zinc	0.0040 U	0.010	0.0040	0.0021	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	21:31	SW3005A6020A

Project ID: Dow Salvage Yard 18001468
Job ID: 67836
Sample#: 67836-002
Sample ID: SY-OBMW1-110823
Matrix: Water
Sampled: 11/8/23 9:35

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
Aluminum	0.025 J	0.050	0.025	0.010	mg/L	1	AGN	11/30/23	7:56	17194	12/5/23	19:58	SW3005A6020A
Antimony	0.00050 U	0.0010	0.00050	0.00014	mg/L	1	AGN	11/30/23	7:56	17194	12/5/23	19:58	SW3005A6020A
Arsenic	0.010	0.0025	0.0010	0.00067	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	21:40	SW3005A6020A
Barium	0.0075 J	0.010	0.0010	0.00076	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	21:40	SW3005A6020A
Beryllium	0.00050 U	0.0010	0.00050	0.00010	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	21:40	SW3005A6020A
Cadmium	0.00050 U	0.0010	0.00050	0.00014	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	21:40	SW3005A6020A
Chromium	0.025 U	0.050	0.025	0.020	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	21:40	SW3005A6020A
Cobalt	0.00050 U	0.010	0.00050	0.00028	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	21:40	SW3005A6020A
Copper	0.0075 U	0.010	0.0075	0.0054	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	21:40	SW3005A6020A
Iron	0.034 J	0.050	0.030	0.029	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	21:40	SW3005A6020A
Lead	0.00050 U	0.0050	0.00050	0.00011	mg/L	1	AGN	11/30/23	7:56	17194	12/5/23	19:58	SW3005A6020A
Magnesium	16	0.10	0.020	0.0073	mg/L	1	AGN	11/30/23	7:56	17194	12/5/23	19:58	SW3005A6020A
Manganese	0.17	0.010	0.0050	0.0016	mg/L	1	AGN	11/30/23	7:56	17194	12/5/23	19:58	SW3005A6020A
Mercury	0.00015 U	0.00020	0.00015	0.00012	mg/L	1	EEB	11/20/23	12:15	17147	11/22/23	11:18	SW7470A
Nickel	0.025 U	0.050	0.025	0.013	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	21:40	SW3005A6020A
Potassium	1.7	0.50	0.10	0.039	mg/L	1	AGN	11/30/23	7:56	17194	12/5/23	19:58	SW3005A6020A
Selenium	0.0050 U	0.010	0.0050	0.0037	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	21:40	SW3005A6020A
Silver	0.00050 U	0.0050	0.00050	0.00011	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	21:40	SW3005A6020A
Sodium	20	0.10	0.050	0.034	mg/L	1	AGN	11/30/23	7:56	17194	12/5/23	19:58	SW3005A6020A
Thallium	0.00080 U	0.0010	0.00080	0.00068	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	21:40	SW3005A6020A
Vanadium	0.0050 U	0.010	0.0050	0.0018	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	21:40	SW3005A6020A
Zinc	0.0040 U	0.010	0.0040	0.0021	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	21:40	SW3005A6020A

Project ID: Dow Salvage Yard 18001468
Job ID: 67836
Sample#: 67836-003
Sample ID: SY-OBMW9-110823
Matrix: Water
Sampled: 11/8/23 10:16

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
Aluminum	0.012 J	0.050	0.025	0.010	mg/L	1	AGN	11/30/23	7:56	17194	12/5/23	20:07	SW3005A6020A
Antimony	0.00050 U	0.0010	0.00050	0.00014	mg/L	1	AGN	11/30/23	7:56	17194	12/5/23	20:07	SW3005A6020A
Arsenic	0.0088	0.0025	0.0010	0.00067	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	21:48	SW3005A6020A
Barium	0.014	0.010	0.0010	0.00076	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	21:48	SW3005A6020A
Beryllium	0.00050 U	0.0010	0.00050	0.00010	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	21:48	SW3005A6020A
Cadmium	0.00050 U	0.0010	0.00050	0.00014	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	21:48	SW3005A6020A
Chromium	0.025 U	0.050	0.025	0.020	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	21:48	SW3005A6020A
Cobalt	0.00050 U	0.010	0.00050	0.00028	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	21:48	SW3005A6020A
Copper	0.0075 U	0.010	0.0075	0.0054	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	21:48	SW3005A6020A
Iron	0.084	0.050	0.030	0.029	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	21:48	SW3005A6020A
Lead	0.00028 J	0.0050	0.00050	0.00011	mg/L	1	AGN	11/30/23	7:56	17194	12/5/23	20:07	SW3005A6020A
Magnesium	16	0.10	0.020	0.0073	mg/L	1	AGN	11/30/23	7:56	17194	12/5/23	20:07	SW3005A6020A
Manganese	0.12	0.010	0.0050	0.0016	mg/L	1	AGN	11/30/23	7:56	17194	12/5/23	20:07	SW3005A6020A
Mercury	0.00015 U	0.00020	0.00015	0.00012	mg/L	1	EEB	11/20/23	12:15	17147	11/22/23	11:20	SW7470A
Nickel	0.025 U	0.050	0.025	0.013	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	21:48	SW3005A6020A
Potassium	2.1	0.50	0.10	0.039	mg/L	1	AGN	11/30/23	7:56	17194	12/5/23	20:07	SW3005A6020A
Selenium	0.0050 U	0.010	0.0050	0.0037	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	21:48	SW3005A6020A
Silver	0.00050 U	0.0050	0.00050	0.00011	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	21:48	SW3005A6020A
Sodium	150	0.10	0.050	0.034	mg/L	1	AGN	11/30/23	7:56	17194	12/5/23	20:07	SW3005A6020A
Thallium	0.00080 U	0.0010	0.00080	0.00068	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	21:48	SW3005A6020A
Vanadium	0.0050 U	0.010	0.0050	0.0018	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	21:48	SW3005A6020A
Zinc	0.0040 U	0.010	0.0040	0.0021	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	21:48	SW3005A6020A

Project ID: Dow Salvage Yard 18001468
Job ID: 67836
Sample#: 67836-004
Sample ID: SY-BRMW5-29-44-110823
Matrix: Water
Sampled: 11/8/23 11:00

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
Aluminum	0.025 U	0.050	0.025	0.010	mg/L	1	AGN	11/30/23	7:56	17194	12/5/23	20:16	SW3005A6020A
Antimony	0.00093 J	0.0010	0.00050	0.00014	mg/L	1	AGN	11/30/23	7:56	17194	12/5/23	20:16	SW3005A6020A
Arsenic	0.0013 J	0.0025	0.0010	0.00067	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	21:57	SW3005A6020A
Barium	0.066	0.010	0.0010	0.00076	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	21:57	SW3005A6020A
Beryllium	0.00050 U	0.0010	0.00050	0.00010	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	21:57	SW3005A6020A
Cadmium	0.00050 U	0.0010	0.00050	0.00014	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	21:57	SW3005A6020A
Chromium	0.025 U	0.050	0.025	0.020	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	21:57	SW3005A6020A
Cobalt	0.00087 J	0.010	0.00050	0.00028	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	21:57	SW3005A6020A
Copper	0.0059 J	0.010	0.0075	0.0054	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	21:57	SW3005A6020A
Iron	0.23	0.050	0.030	0.029	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	21:57	SW3005A6020A
Lead	0.0039 J	0.0050	0.00050	0.00011	mg/L	1	AGN	11/30/23	7:56	17194	12/5/23	20:16	SW3005A6020A
Magnesium	69	0.10	0.020	0.0073	mg/L	1	AGN	11/30/23	7:56	17194	12/5/23	20:16	SW3005A6020A
Manganese	0.34	0.010	0.0050	0.0016	mg/L	1	AGN	11/30/23	7:56	17194	12/5/23	20:16	SW3005A6020A
Mercury	0.00015 U	0.00020	0.00015	0.00012	mg/L	1	EEB	11/20/23	12:15	17147	11/22/23	11:22	SW7470A
Nickel	0.025 U	0.050	0.025	0.013	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	21:57	SW3005A6020A
Potassium	5.5	0.50	0.10	0.039	mg/L	1	AGN	11/30/23	7:56	17194	12/5/23	20:16	SW3005A6020A
Selenium	0.0050 U	0.010	0.0050	0.0037	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	21:57	SW3005A6020A
Silver	0.00050 U	0.0050	0.00050	0.00011	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	21:57	SW3005A6020A
Sodium	190	0.10	0.050	0.034	mg/L	1	AGN	11/30/23	7:56	17194	12/5/23	20:16	SW3005A6020A
Thallium	0.00080 U	0.0010	0.00080	0.00068	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	21:57	SW3005A6020A
Vanadium	0.0050 U	0.010	0.0050	0.0018	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	21:57	SW3005A6020A
Zinc	0.0044 J	0.010	0.0040	0.0021	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	21:57	SW3005A6020A

Project ID: Dow Salvage Yard 18001468
Job ID: 67836
Sample#: 67836-005
Sample ID: SY-BRMW5-123-133-110823
Matrix: Water
Sampled: 11/8/23 11:40

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
Aluminum	0.025 U	0.050	0.025	0.010	mg/L	1	AGN	11/30/23	7:56	17194	12/5/23	20:24	SW3005A6020A
Antimony	0.00053 J	0.0010	0.00050	0.00014	mg/L	1	AGN	11/30/23	7:56	17194	12/5/23	20:24	SW3005A6020A
Arsenic	0.0023 J	0.0025	0.0010	0.00067	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	22:06	SW3005A6020A
Barium	0.026	0.010	0.0010	0.00076	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	22:06	SW3005A6020A
Beryllium	0.00050 U	0.0010	0.00050	0.00010	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	22:06	SW3005A6020A
Cadmium	0.00050 U	0.0010	0.00050	0.00014	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	22:06	SW3005A6020A
Chromium	0.025 U	0.050	0.025	0.020	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	22:06	SW3005A6020A
Cobalt	0.00044 J	0.010	0.00050	0.00028	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	22:06	SW3005A6020A
Copper	0.0075 U	0.010	0.0075	0.0054	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	22:06	SW3005A6020A
Iron	0.030 U	0.050	0.030	0.029	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	22:06	SW3005A6020A
Lead	0.0012 J	0.0050	0.00050	0.00011	mg/L	1	AGN	11/30/23	7:56	17194	12/5/23	20:24	SW3005A6020A
Magnesium	52	0.10	0.020	0.0073	mg/L	1	AGN	11/30/23	7:56	17194	12/5/23	20:24	SW3005A6020A
Manganese	0.036	0.010	0.0050	0.0016	mg/L	1	AGN	11/30/23	7:56	17194	12/5/23	20:24	SW3005A6020A
Mercury	0.00015 U	0.00020	0.00015	0.00012	mg/L	1	EEB	11/20/23	12:15	17147	11/22/23	11:24	SW7470A
Nickel	0.025 U	0.050	0.025	0.013	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	22:06	SW3005A6020A
Potassium	3.6	0.50	0.10	0.039	mg/L	1	AGN	11/30/23	7:56	17194	12/5/23	20:24	SW3005A6020A
Selenium	0.0050 U	0.010	0.0050	0.0037	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	22:06	SW3005A6020A
Silver	0.00050 U	0.0050	0.00050	0.00011	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	22:06	SW3005A6020A
Sodium	110	0.10	0.050	0.034	mg/L	1	AGN	11/30/23	7:56	17194	12/5/23	20:24	SW3005A6020A
Thallium	0.00080 U	0.0010	0.00080	0.00068	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	22:06	SW3005A6020A
Vanadium	0.0050 U	0.010	0.0050	0.0018	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	22:06	SW3005A6020A
Zinc	0.0040 U	0.010	0.0040	0.0021	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	22:06	SW3005A6020A

Project ID: Dow Salvage Yard 18001468
Job ID: 67836
Sample#: 67836-006
Sample ID: SY-BRMW5-56-66-110823
Matrix: Water
Sampled: 11/8/23 11:15

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
Aluminum	0.025 U	0.050	0.025	0.010	mg/L	1	AGN	11/30/23	7:56	17194	12/5/23	20:59	SW3005A6020A
Antimony	0.00024 J	0.0010	0.00050	0.00014	mg/L	1	AGN	11/30/23	7:56	17194	12/5/23	20:59	SW3005A6020A
Arsenic	0.0020 J	0.0025	0.0010	0.00067	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	22:15	SW3005A6020A
Barium	0.027	0.010	0.0010	0.00076	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	22:15	SW3005A6020A
Beryllium	0.00050 U	0.0010	0.00050	0.00010	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	22:15	SW3005A6020A
Cadmium	0.00050 U	0.0010	0.00050	0.00014	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	22:15	SW3005A6020A
Chromium	0.025 U	0.050	0.025	0.020	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	22:15	SW3005A6020A
Cobalt	0.00050 U	0.010	0.00050	0.00028	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	22:15	SW3005A6020A
Copper	0.0075 U	0.010	0.0075	0.0054	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	22:15	SW3005A6020A
Iron	0.030 U	0.050	0.030	0.029	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	22:15	SW3005A6020A
Lead	0.0044 J	0.0050	0.00050	0.00011	mg/L	1	AGN	11/30/23	7:56	17194	12/5/23	20:59	SW3005A6020A
Magnesium	72	0.10	0.020	0.0073	mg/L	1	AGN	11/30/23	7:56	17194	12/5/23	20:59	SW3005A6020A
Manganese	0.034	0.010	0.0050	0.0016	mg/L	1	AGN	11/30/23	7:56	17194	12/5/23	20:59	SW3005A6020A
Mercury	0.00015 U	0.00020	0.00015	0.00012	mg/L	1	EEB	11/20/23	12:15	17147	11/22/23	11:29	SW7470A
Nickel	0.025 U	0.050	0.025	0.013	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	22:15	SW3005A6020A
Potassium	5.0	0.50	0.10	0.039	mg/L	1	AGN	11/30/23	7:56	17194	12/5/23	20:59	SW3005A6020A
Selenium	0.0050 U	0.010	0.0050	0.0037	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	22:15	SW3005A6020A
Silver	0.00050 U	0.0050	0.00050	0.00011	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	22:15	SW3005A6020A
Sodium	67	0.10	0.050	0.034	mg/L	1	AGN	11/30/23	7:56	17194	12/5/23	20:59	SW3005A6020A
Thallium	0.00080 U	0.0010	0.00080	0.00068	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	22:15	SW3005A6020A
Vanadium	0.0050 U	0.010	0.0050	0.0018	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	22:15	SW3005A6020A
Zinc	0.0040 U	0.010	0.0040	0.0021	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	22:15	SW3005A6020A

Project ID: Dow Salvage Yard 18001468
Job ID: 67836
Sample#: 67836-007
Sample ID: SY-OBMW8-110823
Matrix: Water
Sampled: 11/8/23 12:50

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
Aluminum	0.016 J	0.050	0.025	0.010	mg/L	1	AGN	11/30/23	7:56	17194	12/5/23	21:08	SW3005A6020A
Antimony	0.00050 U	0.0010	0.00050	0.00014	mg/L	1	AGN	11/30/23	7:56	17194	12/5/23	21:08	SW3005A6020A
Arsenic	0.011	0.0025	0.0010	0.00067	mg/L	1	AGN	11/30/23	7:56	17194	12/5/23	21:08	SW3005A6020A
Barium	0.0058 J	0.010	0.0010	0.00076	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	22:23	SW3005A6020A
Beryllium	0.00050 U	0.0010	0.00050	0.00010	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	22:23	SW3005A6020A
Cadmium	0.00050 U	0.0010	0.00050	0.00014	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	22:23	SW3005A6020A
Chromium	0.025 U	0.050	0.025	0.020	mg/L	1	AGN	11/30/23	7:56	17194	12/5/23	21:08	SW3005A6020A
Cobalt	0.00050 U	0.010	0.00050	0.00028	mg/L	1	AGN	11/30/23	7:56	17194	12/5/23	21:08	SW3005A6020A
Copper	0.0075 U	0.010	0.0075	0.0054	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	22:23	SW3005A6020A
Iron	0.030 J	0.050	0.030	0.029	mg/L	1	AGN	11/30/23	7:56	17194	12/5/23	21:08	SW3005A6020A
Lead	0.00050 U	0.0050	0.00050	0.00011	mg/L	1	AGN	11/30/23	7:56	17194	12/5/23	21:08	SW3005A6020A
Magnesium	14	0.10	0.020	0.0073	mg/L	1	AGN	11/30/23	7:56	17194	12/5/23	21:08	SW3005A6020A
Manganese	0.43	0.010	0.0050	0.0016	mg/L	1	AGN	11/30/23	7:56	17194	12/5/23	21:08	SW3005A6020A
Mercury	0.00015 U	0.00020	0.00015	0.00012	mg/L	1	EEB	11/20/23	12:15	17147	11/22/23	11:31	SW7470A
Nickel	0.025 U	0.050	0.025	0.013	mg/L	1	AGN	11/30/23	7:56	17194	12/5/23	21:08	SW3005A6020A
Potassium	1.4	0.50	0.10	0.039	mg/L	1	AGN	11/30/23	7:56	17194	12/5/23	21:08	SW3005A6020A
Selenium	0.0050 U	0.010	0.0050	0.0037	mg/L	1	AGN	11/30/23	7:56	17194	12/5/23	21:08	SW3005A6020A
Silver	0.00050 U	0.0050	0.00050	0.00011	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	22:23	SW3005A6020A
Sodium	14	0.10	0.050	0.034	mg/L	1	AGN	11/30/23	7:56	17194	12/5/23	21:08	SW3005A6020A
Thallium	0.00080 U	0.0010	0.00080	0.00068	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	22:23	SW3005A6020A
Vanadium	0.0050 U	0.010	0.0050	0.0018	mg/L	1	AGN	11/30/23	7:56	17194	12/5/23	21:08	SW3005A6020A
Zinc	0.0040 U	0.010	0.0040	0.0021	mg/L	1	AGN	11/30/23	7:56	17194	12/5/23	21:08	SW3005A6020A

Project ID: Dow Salvage Yard 18001468
Job ID: 67836
Sample#: 67836-008
Sample ID: SY-OBMW11-110823
Matrix: Water
Sampled: 11/8/23 14:17

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Prep Analyst	Prep Date	Prep Time	Analysis Batch	Analysis Date	Analysis Time	Reference
Aluminum	0.015 J	0.050	0.025	0.010	mg/L	1	AGN	11/30/23	7:56	17194	12/5/23	21:17	SW3005A6020A
Antimony	0.00050 U	0.0010	0.00050	0.00014	mg/L	1	AGN	11/30/23	7:56	17194	12/5/23	21:17	SW3005A6020A
Arsenic	0.0015 J	0.0025	0.0010	0.00067	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	22:32	SW3005A6020A
Barium	0.021	0.010	0.0010	0.00076	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	22:32	SW3005A6020A
Beryllium	0.00050 U	0.0010	0.00050	0.00010	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	22:32	SW3005A6020A
Cadmium	0.00050 U	0.0010	0.00050	0.00014	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	22:32	SW3005A6020A
Chromium	0.025 U	0.050	0.025	0.020	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	22:32	SW3005A6020A
Cobalt	0.00047 J	0.010	0.00050	0.00028	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	22:32	SW3005A6020A
Copper	0.0075 U	0.010	0.0075	0.0054	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	22:32	SW3005A6020A
Iron	0.075	0.050	0.030	0.029	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	22:32	SW3005A6020A
Lead	0.00050 U	0.0050	0.00050	0.00011	mg/L	1	AGN	11/30/23	7:56	17194	12/5/23	21:17	SW3005A6020A
Magnesium	89	0.50	0.10	0.036	mg/L	5	AGN	11/30/23	7:56	17194	12/6/23	16:54	SW3005A6020A
Manganese	0.31	0.010	0.0050	0.0016	mg/L	1	AGN	11/30/23	7:56	17194	12/5/23	21:17	SW3005A6020A
Mercury	0.00015 U	0.00020	0.00015	0.00012	mg/L	1	EEB	11/20/23	12:15	17147	11/22/23	11:33	SW7470A
Nickel	0.025 U	0.050	0.025	0.013	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	22:32	SW3005A6020A
Potassium	3.9	0.50	0.10	0.039	mg/L	1	AGN	11/30/23	7:56	17194	12/5/23	21:17	SW3005A6020A
Selenium	0.0050 U	0.010	0.0050	0.0037	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	22:32	SW3005A6020A
Silver	0.00050 U	0.0050	0.00050	0.00011	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	22:32	SW3005A6020A
Sodium	220	0.10	0.050	0.034	mg/L	1	AGN	11/30/23	7:56	17194	12/5/23	21:17	SW3005A6020A
Thallium	0.00080 U	0.0010	0.00080	0.00068	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	22:32	SW3005A6020A
Vanadium	0.0050 U	0.010	0.0050	0.0018	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	22:32	SW3005A6020A
Zinc	0.0040 U	0.010	0.0040	0.0021	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	22:32	SW3005A6020A

Project ID: Dow Salvage Yard 18001468
Job ID: 67836
Sample#: 67836-009
Sample ID: SY-OBMW110-110823
Matrix: Water
Sampled: 11/8/23 14:22

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
Aluminum	0.010 J	0.050	0.025	0.010	mg/L	1	AGN	11/30/23	7:56	17194	12/5/23	21:26	SW3005A6020A
Antimony	0.00050 U	0.0010	0.00050	0.00014	mg/L	1	AGN	11/30/23	7:56	17194	12/5/23	21:26	SW3005A6020A
Arsenic	0.0014 J	0.0025	0.0010	0.00067	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	22:41	SW3005A6020A
Barium	0.021	0.010	0.0010	0.00076	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	22:41	SW3005A6020A
Beryllium	0.00050 U	0.0010	0.00050	0.00010	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	22:41	SW3005A6020A
Cadmium	0.00050 U	0.0010	0.00050	0.00014	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	22:41	SW3005A6020A
Chromium	0.025 U	0.050	0.025	0.020	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	22:41	SW3005A6020A
Cobalt	0.00047 J	0.010	0.00050	0.00028	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	22:41	SW3005A6020A
Copper	0.0075 U	0.010	0.0075	0.0054	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	22:41	SW3005A6020A
Iron	0.061	0.050	0.030	0.029	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	22:41	SW3005A6020A
Lead	0.00050 U	0.0050	0.00050	0.00011	mg/L	1	AGN	11/30/23	7:56	17194	12/5/23	21:26	SW3005A6020A
Magnesium	88	0.10	0.020	0.0073	mg/L	1	AGN	11/30/23	7:56	17194	12/5/23	21:26	SW3005A6020A
Manganese	0.31	0.010	0.0050	0.0016	mg/L	1	AGN	11/30/23	7:56	17194	12/5/23	21:26	SW3005A6020A
Mercury	0.00015 U	0.00020	0.00015	0.00012	mg/L	1	EEB	11/20/23	12:15	17147	11/22/23	11:34	SW7470A
Nickel	0.025 U	0.050	0.025	0.013	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	22:41	SW3005A6020A
Potassium	3.8	0.50	0.10	0.039	mg/L	1	AGN	11/30/23	7:56	17194	12/5/23	21:26	SW3005A6020A
Selenium	0.0050 U	0.010	0.0050	0.0037	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	22:41	SW3005A6020A
Silver	0.00050 U	0.0050	0.00050	0.00011	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	22:41	SW3005A6020A
Sodium	210	0.10	0.050	0.034	mg/L	1	AGN	11/30/23	7:56	17194	12/5/23	21:26	SW3005A6020A
Thallium	0.00080 U	0.0010	0.00080	0.00068	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	22:41	SW3005A6020A
Vanadium	0.0050 U	0.010	0.0050	0.0018	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	22:41	SW3005A6020A
Zinc	0.0040 U	0.010	0.0040	0.0021	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	22:41	SW3005A6020A

Project ID: Dow Salvage Yard 18001468
Job ID: 67836
Sample#: 67836-011
Sample ID: SY-OBMW3-110823
Matrix: Water
Sampled: 11/8/23 11:15

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
Aluminum	0.019 J	0.050	0.025	0.010	mg/L	1	AGN	11/30/23	7:56	17194	12/5/23	21:34	SW3005A6020A
Antimony	0.00050 U	0.0010	0.00050	0.00014	mg/L	1	AGN	11/30/23	7:56	17194	12/5/23	21:34	SW3005A6020A
Arsenic	0.0012 J	0.0025	0.0010	0.00067	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	23:16	SW3005A6020A
Barium	0.0025 J	0.010	0.0010	0.00076	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	23:16	SW3005A6020A
Beryllium	0.00050 U	0.0010	0.00050	0.00010	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	23:16	SW3005A6020A
Cadmium	0.00050 U	0.0010	0.00050	0.00014	mg/L	1	AGN	11/30/23	7:56	17194	12/5/23	21:34	SW3005A6020A
Chromium	0.025 U	0.050	0.025	0.020	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	23:16	SW3005A6020A
Cobalt	0.00050 U	0.010	0.00050	0.00028	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	23:16	SW3005A6020A
Copper	0.0075 U	0.010	0.0075	0.0054	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	23:16	SW3005A6020A
Iron	0.035 J	0.050	0.030	0.029	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	23:16	SW3005A6020A
Lead	0.00050 U	0.0050	0.00050	0.00011	mg/L	1	AGN	11/30/23	7:56	17194	12/5/23	21:34	SW3005A6020A
Magnesium	13	0.10	0.020	0.0073	mg/L	1	AGN	11/30/23	7:56	17194	12/5/23	21:34	SW3005A6020A
Manganese	0.085	0.010	0.0050	0.0016	mg/L	1	AGN	11/30/23	7:56	17194	12/5/23	21:34	SW3005A6020A
Mercury	0.00015 U	0.00020	0.00015	0.00012	mg/L	1	EEB	11/20/23	12:15	17147	11/22/23	11:36	SW7470A
Nickel	0.025 U	0.050	0.025	0.013	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	23:16	SW3005A6020A
Potassium	1.4	0.50	0.10	0.039	mg/L	1	AGN	11/30/23	7:56	17194	12/5/23	21:34	SW3005A6020A
Selenium	0.0050 U	0.010	0.0050	0.0037	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	23:16	SW3005A6020A
Silver	0.00050 U	0.0050	0.00050	0.00011	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	23:16	SW3005A6020A
Sodium	8.3	0.10	0.050	0.034	mg/L	1	AGN	11/30/23	7:56	17194	12/5/23	21:34	SW3005A6020A
Thallium	0.00080 U	0.0010	0.00080	0.00068	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	23:16	SW3005A6020A
Vanadium	0.0050 U	0.010	0.0050	0.0018	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	23:16	SW3005A6020A
Zinc	0.0040 U	0.010	0.0040	0.0021	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	23:16	SW3005A6020A

Project ID: Dow Salvage Yard 18001468
Job ID: 67836
Sample#: 67836-012
Sample ID: SY-OBMW2-110823-DISS
Matrix: Water
Sampled: 11/8/23 9:05

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Prep Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
Aluminum	0.027 U	0.054	0.027	0.011	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	6:38	SW3005A6020A
Antimony	0.00054 U	0.0011	0.00054	0.00015	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	6:38	SW3005A6020A
Arsenic	0.0040	0.0027	0.0011	0.00072	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	6:38	SW3005A6020A
Barium	0.0071 J	0.011	0.0011	0.00081	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	6:38	SW3005A6020A
Beryllium	0.00054 U	0.0011	0.00054	0.00011	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	6:38	SW3005A6020A
Cadmium	0.00054 U	0.0011	0.00054	0.00015	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	6:38	SW3005A6020A
Chromium	0.027 U	0.054	0.027	0.022	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	6:38	SW3005A6020A
Cobalt	0.00054 U	0.011	0.00054	0.00030	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	6:38	SW3005A6020A
Copper	0.0080 U	0.011	0.0080	0.0057	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	6:38	SW3005A6020A
Iron	0.032 U	0.054	0.032	0.031	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	6:38	SW3005A6020A
Lead	0.00054 U	0.0054	0.00054	0.00012	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	6:38	SW3005A6020A
Magnesium	17	0.11	0.021	0.0078	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	6:38	SW3005A6020A
Manganese	0.017	0.011	0.0054	0.0017	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	6:38	SW3005A6020A
Mercury	0.00015 U	0.00020	0.00015	0.00012	mg/L	1	EEB	11/20/23	12:15	17147	11/22/23	11:38	SW7470A
Nickel	0.027 U	0.054	0.027	0.013	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	6:38	SW3005A6020A
Potassium	1.5	0.54	0.11	0.042	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	6:38	SW3005A6020A
Selenium	0.0054 U	0.011	0.0054	0.0040	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	6:38	SW3005A6020A
Silver	0.00054 U	0.0054	0.00054	0.00012	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	6:38	SW3005A6020A
Sodium	12	0.11	0.054	0.037	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	6:38	SW3005A6020A
Thallium	0.00086 U	0.0011	0.00086	0.00073	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	6:38	SW3005A6020A
Vanadium	0.0054 U	0.011	0.0054	0.0019	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	6:38	SW3005A6020A
Zinc	0.0043 U	0.011	0.0043	0.0022	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	6:38	SW3005A6020A

Project ID: Dow Salvage Yard 18001468
Job ID: 67836
Sample#: 67836-013
Sample ID: SY-OBMW1-110823-DISS
Matrix: Water
Sampled: 11/8/23 9:35

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
Aluminum	0.027 U	0.054	0.027	0.011	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	6:48	SW3005A6020A
Antimony	0.00054 U	0.0011	0.00054	0.00015	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	6:48	SW3005A6020A
Arsenic	0.010	0.0027	0.0011	0.00072	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	6:48	SW3005A6020A
Barium	0.0072 J	0.011	0.0011	0.00081	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	6:48	SW3005A6020A
Beryllium	0.00054 U	0.0011	0.00054	0.00011	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	6:48	SW3005A6020A
Cadmium	0.00054 U	0.0011	0.00054	0.00015	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	6:48	SW3005A6020A
Chromium	0.027 U	0.054	0.027	0.022	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	6:48	SW3005A6020A
Cobalt	0.00054 U	0.011	0.00054	0.00030	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	6:48	SW3005A6020A
Copper	0.0080 U	0.011	0.0080	0.0057	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	6:48	SW3005A6020A
Iron	0.032 U	0.054	0.032	0.031	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	6:48	SW3005A6020A
Lead	0.00054 U	0.0054	0.00054	0.00012	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	6:48	SW3005A6020A
Magnesium	14	0.11	0.021	0.0078	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	6:48	SW3005A6020A
Manganese	0.16	0.011	0.0054	0.0017	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	6:48	SW3005A6020A
Mercury	0.00015 U	0.00020	0.00015	0.00012	mg/L	1	EEB	11/20/23	12:15	17147	11/22/23	11:40	SW7470A
Nickel	0.027 U	0.054	0.027	0.013	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	6:48	SW3005A6020A
Potassium	1.5	0.54	0.11	0.042	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	6:48	SW3005A6020A
Selenium	0.0054 U	0.011	0.0054	0.0040	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	6:48	SW3005A6020A
Silver	0.00054 U	0.0054	0.00054	0.00012	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	6:48	SW3005A6020A
Sodium	19	0.11	0.054	0.037	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	6:48	SW3005A6020A
Thallium	0.00086 U	0.0011	0.00086	0.00073	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	6:48	SW3005A6020A
Vanadium	0.0054 U	0.011	0.0054	0.0019	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	6:48	SW3005A6020A
Zinc	0.0043 U	0.011	0.0043	0.0022	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	6:48	SW3005A6020A

Project ID: Dow Salvage Yard 18001468
Job ID: 67836
Sample#: 67836-014
Sample ID: SY-OBMW9-110823-DISS
Matrix: Water
Sampled: 11/8/23 10:16

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
Aluminum	0.027 U	0.054	0.027	0.011	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	6:57	SW3005A6020A
Antimony	0.00054 U	0.0011	0.00054	0.00015	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	6:57	SW3005A6020A
Arsenic	0.0091	0.0027	0.0011	0.00072	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	6:57	SW3005A6020A
Barium	0.015	0.011	0.0011	0.00081	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	6:57	SW3005A6020A
Beryllium	0.00054 U	0.0011	0.00054	0.00011	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	6:57	SW3005A6020A
Cadmium	0.00054 U	0.0011	0.00054	0.00015	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	6:57	SW3005A6020A
Chromium	0.027 U	0.054	0.027	0.022	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	6:57	SW3005A6020A
Cobalt	0.00054 U	0.011	0.00054	0.00030	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	6:57	SW3005A6020A
Copper	0.0080 U	0.011	0.0080	0.0057	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	6:57	SW3005A6020A
Iron	0.059	0.054	0.032	0.031	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	6:57	SW3005A6020A
Lead	0.00054 U	0.0054	0.00054	0.00012	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	6:57	SW3005A6020A
Magnesium	16	0.11	0.021	0.0078	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	6:57	SW3005A6020A
Manganese	0.13	0.011	0.0054	0.0017	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	6:57	SW3005A6020A
Mercury	0.00015 U	0.00020	0.00015	0.00012	mg/L	1	EEB	11/20/23	12:15	17147	11/22/23	11:42	SW7470A
Nickel	0.027 U	0.054	0.027	0.013	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	6:57	SW3005A6020A
Potassium	2.0	0.54	0.11	0.042	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	6:57	SW3005A6020A
Selenium	0.0054 U	0.011	0.0054	0.0040	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	6:57	SW3005A6020A
Silver	0.00054 U	0.0054	0.00054	0.00012	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	6:57	SW3005A6020A
Sodium	150	0.11	0.054	0.037	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	6:57	SW3005A6020A
Thallium	0.00086 U	0.0011	0.00086	0.00073	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	6:57	SW3005A6020A
Vanadium	0.0054 U	0.011	0.0054	0.0019	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	6:57	SW3005A6020A
Zinc	0.0043 U	0.011	0.0043	0.0022	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	6:57	SW3005A6020A

Project ID: Dow Salvage Yard 18001468
Job ID: 67836
Sample#: 67836-015
Sample ID: SY-BRMW5-29-44-110823-DISS
Matrix: Water
Sampled: 11/8/23 11:00

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
Aluminum	0.027 U	0.054	0.027	0.011	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	7:07	SW3005A6020A
Antimony	0.00093 J	0.0011	0.00054	0.00015	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	7:07	SW3005A6020A
Arsenic	0.00096 J	0.0027	0.0011	0.00072	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	7:07	SW3005A6020A
Barium	0.068	0.011	0.0011	0.00081	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	7:07	SW3005A6020A
Beryllium	0.00054 U	0.0011	0.00054	0.00011	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	7:07	SW3005A6020A
Cadmium	0.00054 U	0.0011	0.00054	0.00015	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	7:07	SW3005A6020A
Chromium	0.027 U	0.054	0.027	0.022	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	7:07	SW3005A6020A
Cobalt	0.00082 J	0.011	0.00054	0.00030	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	7:07	SW3005A6020A
Copper	0.0080 U	0.011	0.0080	0.0057	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	7:07	SW3005A6020A
Iron	0.17	0.054	0.032	0.031	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	7:07	SW3005A6020A
Lead	0.00077 J	0.0054	0.00054	0.00012	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	7:07	SW3005A6020A
Magnesium	66	0.11	0.021	0.0078	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	7:07	SW3005A6020A
Manganese	0.33	0.011	0.0054	0.0017	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	7:07	SW3005A6020A
Mercury	0.00015 U	0.00020	0.00015	0.00012	mg/L	1	EEB	11/20/23	12:15	17147	11/22/23	11:43	SW7470A
Nickel	0.027 U	0.054	0.027	0.013	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	7:07	SW3005A6020A
Potassium	5.2	0.54	0.11	0.042	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	7:07	SW3005A6020A
Selenium	0.0054 U	0.011	0.0054	0.0040	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	7:07	SW3005A6020A
Silver	0.00054 U	0.0054	0.00054	0.00012	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	7:07	SW3005A6020A
Sodium	190	0.11	0.054	0.037	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	7:07	SW3005A6020A
Thallium	0.00086 U	0.0011	0.00086	0.00073	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	7:07	SW3005A6020A
Vanadium	0.0054 U	0.011	0.0054	0.0019	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	7:07	SW3005A6020A
Zinc	0.0027 J	0.011	0.0043	0.0022	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	7:07	SW3005A6020A

Project ID: Dow Salvage Yard 18001468
Job ID: 67836
Sample#: 67836-016
Sample ID: SY-BRMW5-123-133-110823-DISS
Matrix: Water
Sampled: 11/8/23 11:40

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
Aluminum	0.017 J	0.054	0.027	0.011	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	7:36	SW3005A6020A
Antimony	0.00056 J	0.0011	0.00054	0.00015	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	7:36	SW3005A6020A
Arsenic	0.0022 J	0.0027	0.0011	0.00072	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	7:36	SW3005A6020A
Barium	0.027	0.011	0.0011	0.00081	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	7:36	SW3005A6020A
Beryllium	0.00054 U	0.0011	0.00054	0.00011	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	7:36	SW3005A6020A
Cadmium	0.00054 U	0.0011	0.00054	0.00015	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	7:36	SW3005A6020A
Chromium	0.027 U	0.054	0.027	0.022	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	7:36	SW3005A6020A
Cobalt	0.00037 J	0.011	0.00054	0.00030	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	7:36	SW3005A6020A
Copper	0.0080 U	0.011	0.0080	0.0057	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	7:36	SW3005A6020A
Iron	0.042 J	0.054	0.032	0.031	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	7:36	SW3005A6020A
Lead	0.00038 J	0.0054	0.00054	0.00012	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	7:36	SW3005A6020A
Magnesium	47	0.11	0.021	0.0078	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	7:36	SW3005A6020A
Manganese	0.036	0.011	0.0054	0.0017	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	7:36	SW3005A6020A
Mercury	0.00015 U	0.00020	0.00015	0.00012	mg/L	1	EEB	11/30/23	12:42	17202	12/1/23	13:07	SW7470A
Nickel	0.027 U	0.054	0.027	0.013	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	7:36	SW3005A6020A
Potassium	3.3	0.54	0.11	0.042	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	7:36	SW3005A6020A
Selenium	0.0054 U	0.011	0.0054	0.0040	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	7:36	SW3005A6020A
Silver	0.00054 U	0.0054	0.00054	0.00012	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	7:36	SW3005A6020A
Sodium	95	0.11	0.054	0.037	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	7:36	SW3005A6020A
Thallium	0.00086 U	0.0011	0.00086	0.00073	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	7:36	SW3005A6020A
Vanadium	0.0054 U	0.011	0.0054	0.0019	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	7:36	SW3005A6020A
Zinc	0.0043 U	0.011	0.0043	0.0022	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	7:36	SW3005A6020A

Project ID: Dow Salvage Yard 18001468
Job ID: 67836
Sample#: 67836-017
Sample ID: SY-BRMW5-56-66-110823-DISS
Matrix: Water
Sampled: 11/8/23 11:15

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
Aluminum	0.027 U	0.054	0.027	0.011	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	7:46	SW3005A6020A
Antimony	0.00028 J	0.0011	0.00054	0.00015	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	7:46	SW3005A6020A
Arsenic	0.0018 J	0.0027	0.0011	0.00072	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	7:46	SW3005A6020A
Barium	0.028	0.011	0.0011	0.00081	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	7:46	SW3005A6020A
Beryllium	0.00054 U	0.0011	0.00054	0.00011	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	7:46	SW3005A6020A
Cadmium	0.00054 U	0.0011	0.00054	0.00015	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	7:46	SW3005A6020A
Chromium	0.027 U	0.054	0.027	0.022	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	7:46	SW3005A6020A
Cobalt	0.00054 U	0.011	0.00054	0.00030	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	7:46	SW3005A6020A
Copper	0.0080 U	0.011	0.0080	0.0057	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	7:46	SW3005A6020A
Iron	0.032 U	0.054	0.032	0.031	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	7:46	SW3005A6020A
Lead	0.0018 J	0.0054	0.00054	0.00012	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	7:46	SW3005A6020A
Magnesium	67	0.11	0.021	0.0078	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	7:46	SW3005A6020A
Manganese	0.031	0.011	0.0054	0.0017	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	7:46	SW3005A6020A
Mercury	0.00015 U	0.00020	0.00015	0.00012	mg/L	1	EEB	11/30/23	12:42	17202	12/1/23	13:09	SW7470A
Nickel	0.027 U	0.054	0.027	0.013	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	7:46	SW3005A6020A
Potassium	4.8	0.54	0.11	0.042	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	7:46	SW3005A6020A
Selenium	0.0054 U	0.011	0.0054	0.0040	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	7:46	SW3005A6020A
Silver	0.00054 U	0.0054	0.00054	0.00012	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	7:46	SW3005A6020A
Sodium	63	0.11	0.054	0.037	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	7:46	SW3005A6020A
Thallium	0.00086 U	0.0011	0.00086	0.00073	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	7:46	SW3005A6020A
Vanadium	0.0054 U	0.011	0.0054	0.0019	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	7:46	SW3005A6020A
Zinc	0.0043 U	0.011	0.0043	0.0022	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	7:46	SW3005A6020A

Project ID: Dow Salvage Yard 18001468
Job ID: 67836
Sample#: 67836-018
Sample ID: SY-OBMW8-110823-DISS
Matrix: Water
Sampled: 11/8/23 12:50

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
Aluminum	0.027 U	0.054	0.027	0.011	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	7:56	SW3005A6020A
Antimony	0.00054 U	0.0011	0.00054	0.00015	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	7:56	SW3005A6020A
Arsenic	0.011	0.0027	0.0011	0.00072	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	7:56	SW3005A6020A
Barium	0.0057 J	0.011	0.0011	0.00081	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	7:56	SW3005A6020A
Beryllium	0.00054 U	0.0011	0.00054	0.00011	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	7:56	SW3005A6020A
Cadmium	0.00054 U	0.0011	0.00054	0.00015	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	7:56	SW3005A6020A
Chromium	0.027 U	0.054	0.027	0.022	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	7:56	SW3005A6020A
Cobalt	0.00054 U	0.011	0.00054	0.00030	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	7:56	SW3005A6020A
Copper	0.0080 U	0.011	0.0080	0.0057	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	7:56	SW3005A6020A
Iron	0.032 U	0.054	0.032	0.031	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	7:56	SW3005A6020A
Lead	0.00054 U	0.0054	0.00054	0.00012	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	7:56	SW3005A6020A
Magnesium	13	0.11	0.021	0.0078	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	7:56	SW3005A6020A
Manganese	0.36	0.011	0.0054	0.0017	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	7:56	SW3005A6020A
Mercury	0.00015 U	0.00020	0.00015	0.00012	mg/L	1	EEB	11/30/23	12:42	17202	12/1/23	13:10	SW7470A
Nickel	0.027 U	0.054	0.027	0.013	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	7:56	SW3005A6020A
Potassium	1.4	0.54	0.11	0.042	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	7:56	SW3005A6020A
Selenium	0.0054 U	0.011	0.0054	0.0040	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	7:56	SW3005A6020A
Silver	0.00054 U	0.0054	0.00054	0.00012	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	7:56	SW3005A6020A
Sodium	13	0.11	0.054	0.037	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	7:56	SW3005A6020A
Thallium	0.00086 U	0.0011	0.00086	0.00073	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	7:56	SW3005A6020A
Vanadium	0.0054 U	0.011	0.0054	0.0019	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	7:56	SW3005A6020A
Zinc	0.0043 U	0.011	0.0043	0.0022	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	7:56	SW3005A6020A

Project ID: Dow Salvage Yard 18001468
Job ID: 67836
Sample#: 67836-019
Sample ID: SY-OBMW11-110823-DISS
Matrix: Water
Sampled: 11/8/23 14:17

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
Aluminum	0.027 U	0.054	0.027	0.011	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	8:06	SW3005A6020A
Antimony	0.00054 U	0.0011	0.00054	0.00015	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	8:06	SW3005A6020A
Arsenic	0.00095 J	0.0027	0.0011	0.00072	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	8:06	SW3005A6020A
Barium	0.022	0.011	0.0011	0.00081	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	8:06	SW3005A6020A
Beryllium	0.00054 U	0.0011	0.00054	0.00011	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	8:06	SW3005A6020A
Cadmium	0.00054 U	0.0011	0.00054	0.00015	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	8:06	SW3005A6020A
Chromium	0.027 U	0.054	0.027	0.022	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	8:06	SW3005A6020A
Cobalt	0.00040 J	0.011	0.00054	0.00030	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	8:06	SW3005A6020A
Copper	0.0080 U	0.011	0.0080	0.0057	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	8:06	SW3005A6020A
Iron	0.039 J	0.054	0.032	0.031	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	8:06	SW3005A6020A
Lead	0.00054 U	0.0054	0.00054	0.00012	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	8:06	SW3005A6020A
Magnesium	85	0.11	0.021	0.0078	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	8:06	SW3005A6020A
Manganese	0.30	0.011	0.0054	0.0017	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	8:06	SW3005A6020A
Mercury	0.00015 U	0.00020	0.00015	0.00012	mg/L	1	EEB	11/30/23	12:42	17202	12/1/23	13:12	SW7470A
Nickel	0.027 U	0.054	0.027	0.013	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	8:06	SW3005A6020A
Potassium	3.6	0.54	0.11	0.042	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	8:06	SW3005A6020A
Selenium	0.0054 U	0.011	0.0054	0.0040	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	8:06	SW3005A6020A
Silver	0.00054 U	0.0054	0.00054	0.00012	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	8:06	SW3005A6020A
Sodium	200	0.11	0.054	0.037	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	8:06	SW3005A6020A
Thallium	0.00086 U	0.0011	0.00086	0.00073	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	8:06	SW3005A6020A
Vanadium	0.0054 U	0.011	0.0054	0.0019	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	8:06	SW3005A6020A
Zinc	0.0043 U	0.011	0.0043	0.0022	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	8:06	SW3005A6020A

Project ID: Dow Salvage Yard 18001468
Job ID: 67836
Sample#: 67836-020
Sample ID: SY-OBMW110-110823-DISS
Matrix: Water
Sampled: 11/8/23 14:22

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
Aluminum	0.027 U	0.054	0.027	0.011	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	8:16	SW3005A6020A
Antimony	0.00054 U	0.0011	0.00054	0.00015	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	8:16	SW3005A6020A
Arsenic	0.0010 J	0.0027	0.0011	0.00072	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	8:16	SW3005A6020A
Barium	0.022	0.011	0.0011	0.00081	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	8:16	SW3005A6020A
Beryllium	0.00054 U	0.0011	0.00054	0.00011	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	8:16	SW3005A6020A
Cadmium	0.00054 U	0.0011	0.00054	0.00015	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	8:16	SW3005A6020A
Chromium	0.027 U	0.054	0.027	0.022	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	8:16	SW3005A6020A
Cobalt	0.00042 J	0.011	0.00054	0.00030	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	8:16	SW3005A6020A
Copper	0.0080 U	0.011	0.0080	0.0057	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	8:16	SW3005A6020A
Iron	0.048 J	0.054	0.032	0.031	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	8:16	SW3005A6020A
Lead	0.00054 U	0.0054	0.00054	0.00012	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	8:16	SW3005A6020A
Magnesium	83	0.11	0.021	0.0078	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	8:16	SW3005A6020A
Manganese	0.30	0.011	0.0054	0.0017	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	8:16	SW3005A6020A
Mercury	0.00015 U	0.00020	0.00015	0.00012	mg/L	1	EEB	11/30/23	12:42	17202	12/1/23	13:14	SW7470A
Nickel	0.027 U	0.054	0.027	0.013	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	8:16	SW3005A6020A
Potassium	3.7	0.54	0.11	0.042	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	8:16	SW3005A6020A
Selenium	0.0054 U	0.011	0.0054	0.0040	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	8:16	SW3005A6020A
Silver	0.00054 U	0.0054	0.00054	0.00012	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	8:16	SW3005A6020A
Sodium	200	0.11	0.054	0.037	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	8:16	SW3005A6020A
Thallium	0.00086 U	0.0011	0.00086	0.00073	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	8:16	SW3005A6020A
Vanadium	0.0054 U	0.011	0.0054	0.0019	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	8:16	SW3005A6020A
Zinc	0.0043 U	0.011	0.0043	0.0022	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	8:16	SW3005A6020A

Project ID: Dow Salvage Yard 18001468
Job ID: 67836
Sample#: 67836-021
Sample ID: SY-OBMW3-110823-DISS
Matrix: Water
Sampled: 11/8/23 11:15

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Prep Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
Aluminum	0.027 U	0.054	0.027	0.011	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	8:55	SW3005A6020A
Antimony	0.00054 U	0.0011	0.00054	0.00015	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	8:55	SW3005A6020A
Arsenic	0.0011 J	0.0027	0.0011	0.00072	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	8:55	SW3005A6020A
Barium	0.0021 J	0.011	0.0011	0.00081	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	8:55	SW3005A6020A
Beryllium	0.00054 U	0.0011	0.00054	0.00011	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	8:55	SW3005A6020A
Cadmium	0.00054 U	0.0011	0.00054	0.00015	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	8:55	SW3005A6020A
Chromium	0.027 U	0.054	0.027	0.022	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	8:55	SW3005A6020A
Cobalt	0.00054 U	0.011	0.00054	0.00030	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	8:55	SW3005A6020A
Copper	0.0080 U	0.011	0.0080	0.0057	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	8:55	SW3005A6020A
Iron	0.032 U	0.054	0.032	0.031	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	8:55	SW3005A6020A
Lead	0.00054 U	0.0054	0.00054	0.00012	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	8:55	SW3005A6020A
Magnesium	11	0.11	0.021	0.0078	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	8:55	SW3005A6020A
Manganese	0.048	0.011	0.0054	0.0017	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	8:55	SW3005A6020A
Mercury	0.00015 U	0.00020	0.00015	0.00012	mg/L	1	EEB	11/30/23	12:42	17202	12/1/23	13:16	SW7470A
Nickel	0.027 U	0.054	0.027	0.013	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	8:55	SW3005A6020A
Potassium	1.2	0.54	0.11	0.042	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	8:55	SW3005A6020A
Selenium	0.0054 U	0.011	0.0054	0.0040	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	8:55	SW3005A6020A
Silver	0.00054 U	0.0054	0.00054	0.00012	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	8:55	SW3005A6020A
Sodium	7.6	0.11	0.054	0.037	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	8:55	SW3005A6020A
Thallium	0.00086 U	0.0011	0.00086	0.00073	mg/L	1	EEB	11/28/23	10:49	17176	12/4/23	18:27	SW3005A6020A
Vanadium	0.0054 U	0.011	0.0054	0.0019	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	8:55	SW3005A6020A
Zinc	0.0043 U	0.011	0.0043	0.0022	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	8:55	SW3005A6020A

Quality Control Report



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Portsmouth, NH 03801
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Case Narrative
Lab # 67836

Sample Receiving and Chain of Custody Discrepancies

Samples were received in acceptable condition, between 0 and 6 degrees C, on ice, and in accordance with sample handling, preservation and integrity guidelines.
The analyses performed met the requirements of Absolute Resource Associates' Quality Assurance Plan and the requirements set forth by the associated Sampling and Analysis Plan dated December 2022 (final), except as noted below.
Absolute Resource Associates is an ISO/IEC 17025:2017 DoD accredited "Testing Laboratory" through PJLA with an accreditation # 78237. The analyses performed met the requirements of Absolute Resource Associates' Quality Assurance Plan. Parameters included in the ARA current DoD certification also met the requirements set forth by the current DoD Quality Systems Manual, except as noted below. See included table for analytes or parameters not included in ARA scope of DoD accreditation, if applicable.
VPH: The VOC vials for VPH analysis for sample 67836-004 (SY-BRMW5-29-44-110823) were received with an air bubble. The results have been qualified accordingly.

Calibration

No exceptions noted.

Method Blank

No exceptions noted.

Surrogate Recoveries

SVOC: The sample 67836-002 did not meet acceptance criteria for the extraction surrogate 2-fluorophenol. No additional sample volume remains for re-analysis. The results have been qualified accordingly.

EPH: The sample 67836-011 and LCSD17156 did not meet acceptance criteria for the extraction surrogate 1-chloro-octadecane. No additional sample volume remains for re-analysis. The results have been qualified accordingly.

Laboratory Control Sample Results

VOC: The LCSD2303756 did not meet the acceptance criteria for m&p-xylenes. This compound showed high recovery. There is no impact to the data as this analyte was not detected in the associated samples.
VPH: The relative percent difference between the LCS and LCSD2303859 was outside the acceptance criteria for Unadjusted C9-C12 Aliphatics. There is no impact to the data as this range was not detected in the associated samples.
SVOC: The LCS/D17124 did not meet the acceptance criteria for several compounds. These compounds showed low recoveries. The relative percent difference between the LCS and LCSD17124 was outside the acceptance criteria for one compound. No additional sample volume remains for re-analysis. The results have been qualified accordingly.

EPH: The LCS17156 did not meet the acceptance criteria for C9-C18 Aliphatics. This range showed low recovery. No additional sample volume remains for re-analysis. The results have been qualified accordingly. The relative percent difference between the LCS and LCSD17156 was outside the acceptance criteria for naphthalene and 2-methylnaphthalene. There is no impact to the data as these compounds were not detected in the associated samples.

Matrix Spike/Matrix Spike Duplicate/Duplicate Results

Not requested for this project.

Other

QC: Due to spiking concentrations or expected concentrations being below the LOQ in the LCS/D &/or MS/MSD the following compounds have been reported in these QC samples with lower LOQs to show calculated percent recoveries: benzoic acid, benzidine, and C9-C18 Aliphatics.
Reporting Limits: Dilutions performed during the analysis are noted on the result pages.

No other exceptions noted.

Data Qualifiers

U = This compound was analyzed for, but not detected above the associated limit of detection.
J = The analytical result was below the instrument calibration range, but above the method detection limit. The reported concentration is an estimate.
m = An "m" next to the "Response" value reported on the raw data sheets indicates a manual integration was performed.

Abbreviations for Manual Integrations

BC = Baseline Correction: The software integration of the baseline was inappropriate for the chromatogram
MI = Mis-Identification: The software integrated the incorrect peak
PS = Peak Separation: Two peaks exist in the chromatogram but the software integrated them as one
RI = Range Integration: Software does not perform range integrations, must be performed manually
NB = Noisy Baseline: Software mis-integrated due to a noisy baseline
PM = Peak Missed: Software did not integrate the target peak

Absolute Resource Associates does not hold DoD Certification for the following analytes:

Waters

Analyte	CAS	Reference
1,3,5-trichlorobenzene	108-70-3	SW5030C8260D
1,4-dioxane	123-91-1	SW5030C8260D
diethyl ether	60-29-7	SW5030C8260D
tetrahydrofuran (THF)	109-99-9	SW5030C8260D
azobenzene	103-33-3	SW3510C8270E

GLOSSARY

%R	Percent Recovery
BLK	Blank (Method Blank, Preparation Blank)
CCB	Continuing Calibration Blank
CCV	Continuing Calibration Verification
CRM	Certified Reference Material (associated with solid Metals samples)
CRMD	Certified Reference Material Duplicate (associated with solid Metals samples)
Dil'n	Dilution
DL	Detection Limit
DUP	Duplicate
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
LOD	Limit of Detection
LOQ	Limit of Quantitation
MB	Methanol Blank (associated with solid VOC samples)
MLCS	Methanol Laboratory Control Sample (associated with solid VOC samples)
MLCSD	Methanol Laboratory Control Sample Duplicate (associated with solid VOC samples)
MS	Matrix Spike
MSD	Matrix Spike Duplicate
PB	Preparation Blank
QC	Quality Control
RL	Reporting Limit
RPD	Relative Percent Difference
SUR	Surrogate

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R	Limits		RPD	RPD Limit
MA VPH	BLK2303773	Unadjusted C5-C8 Aliphatics		50 U	100	50	50	ug/L						
		Unadjusted C9-C12 Aliphatics		50 U	100	50	40	ug/L						
		methyl t-butyl ether (MTBE)		1.0 U	2.0	1.0	0.73	ug/L						
		benzene		1.0 U	1.0	1.0	0.76	ug/L						
		toluene		1.0 U	2.0	1.0	0.58	ug/L						
		ethylbenzene		0.41 J	2.0	1.0	0.40	ug/L						
		m&p-xylenes		2.0 U	2.0	2.0	1.1	ug/L						
		o-xylene		1.0 U	2.0	1.0	0.45	ug/L						
		naphthalene		4.0 U	5.0	4.0	3.5	ug/L						
		C5-C8 Aliphatics		50 U	100	50	50	ug/L						
		C9-C12 Aliphatics		50 U	100	50	40	ug/L						
		C9-C10 Aromatics		50 U	100	50	33	ug/L						
		2,5-dibromotoluene as Aromatic		103				%			70	130		
		2,5-dibromotoluene as Aliphatic		101				%			70	130		
MA VPH	LCS2303773	Unadjusted C5-C8 Aliphatics		290	100	50	50	ug/L	300	96	70	130		
		Unadjusted C9-C12 Aliphatics		290	100	50	40	ug/L	300	97	70	130		
		methyl t-butyl ether (MTBE)		100	2.0	1.0	0.73	ug/L	100	104	70	130		
		benzene		100	1.0	1.0	0.76	ug/L	100	101	70	130		
		toluene		100	2.0	1.0	0.58	ug/L	100	100	70	130		
		ethylbenzene		100	2.0	1.0	0.40	ug/L	100	102	70	130		
		m&p-xylenes		200	2.0	2.0	1.1	ug/L	200	101	70	130		
		o-xylene		100	2.0	1.0	0.45	ug/L	100	101	70	130		
		naphthalene		99	5.0	4.0	3.5	ug/L	100	99	70	130		
		C5-C8 Aliphatics		50 U	100	50	50	ug/L			70	130		
		C9-C12 Aliphatics		50 U	100	50	40	ug/L			70	130		
		C9-C10 Aromatics		100	100	50	33	ug/L	100	102	70	130		
		2,5-dibromotoluene as Aromatic		129				%			70	130		
		2,5-dibromotoluene as Aliphatic		125				%			70	130		
MA VPH	LCSD2303773	Unadjusted C5-C8 Aliphatics		280	100	50	50	ug/L	300	95	70	130	2	25
		Unadjusted C9-C12 Aliphatics		270	100	50	40	ug/L	300	90	70	130	8	25
		methyl t-butyl ether (MTBE)		100	2.0	1.0	0.73	ug/L	100	100	70	130	5	25
		benzene		97	1.0	1.0	0.76	ug/L	100	97	70	130	4	25
		toluene		96	2.0	1.0	0.58	ug/L	100	96	70	130	4	25
		ethylbenzene		98	2.0	1.0	0.40	ug/L	100	98	70	130	5	25
		m&p-xylenes		190	2.0	2.0	1.1	ug/L	200	96	70	130	5	25
		o-xylene		96	2.0	1.0	0.45	ug/L	100	96	70	130	5	25
		naphthalene		91	5.0	4.0	3.5	ug/L	100	91	70	130	8	25
		C5-C8 Aliphatics		50 U	100	50	50	ug/L			70	130		25
		C9-C12 Aliphatics		50 U	100	50	40	ug/L			70	130		25
		C9-C10 Aromatics		95 J	100	50	33	ug/L	100	95	70	130	7	25
		2,5-dibromotoluene as Aromatic		111				%			70	130		
		2,5-dibromotoluene as Aliphatic		116				%			70	130		

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R		Limits		RPD	RPD Limit
MA VPH	MS2303773	Unadjusted C5-C8 Aliphatics	67798-001	760	100	50	50	ug/L	600	127		70	130		
		Unadjusted C9-C12 Aliphatics	67798-001	1100	100	50	40	ug/L	800	136	*	70	130		
		methyl t-butyl ether (MTBE)	67798-001	100	2.0	1.0	0.73	ug/L	100	102		70	130		
		benzene	67798-001	100	1.0	1.0	0.76	ug/L	100	102		70	130		
		toluene	67798-001	100	2.0	1.0	0.58	ug/L	100	101		70	130		
		ethylbenzene	67798-001	100	2.0	1.0	0.40	ug/L	100	103		70	130		
		m&p-xylenes	67798-001	200	2.0	2.0	1.1	ug/L	200	101		70	130		
		o-xylene	67798-001	100	2.0	1.0	0.45	ug/L	100	101		70	130		
		naphthalene	67798-001	99	5.0	4.0	3.5	ug/L	100	99		70	130		
		C5-C8 Aliphatics	67798-001	460	100	50	50	ug/L	300	152	*	70	130		
		C9-C12 Aliphatics	67798-001	490	100	50	40	ug/L	300	163	*	70	130		
		C9-C10 Aromatics	67798-001	190	100	50	33	ug/L	100	190	*	70	130		
		2,5-dibromotoluene as Aromatic	67798-001	117				%				70	130		
		2,5-dibromotoluene as Aliphatic	67798-001	119				%				70	130		
MA VPH	MS2303773	Unadjusted C5-C8 Aliphatics	67798-007	740	100	50	50	ug/L	600	123		70	130		
		Unadjusted C9-C12 Aliphatics	67798-007	1000	100	50	40	ug/L	800	131	*	70	130		
		methyl t-butyl ether (MTBE)	67798-007	100	2.0	1.0	0.73	ug/L	100	101		70	130		
		benzene	67798-007	100	1.0	1.0	0.76	ug/L	100	101		70	130		
		toluene	67798-007	100	2.0	1.0	0.58	ug/L	100	100		70	130		
		ethylbenzene	67798-007	100	2.0	1.0	0.40	ug/L	100	102		70	130		
		m&p-xylenes	67798-007	200	2.0	2.0	1.1	ug/L	200	99		70	130		
		o-xylene	67798-007	99	2.0	1.0	0.45	ug/L	100	99		70	130		
		naphthalene	67798-007	95	5.0	4.0	3.5	ug/L	100	95		70	130		
		C5-C8 Aliphatics	67798-007	440	100	50	50	ug/L	300	146	*	70	130		
		C9-C12 Aliphatics	67798-007	470	100	50	40	ug/L	300	157	*	70	130		
		C9-C10 Aromatics	67798-007	170	100	50	33	ug/L	100	174	*	70	130		
		2,5-dibromotoluene as Aromatic	67798-007	104				%				70	130		
		2,5-dibromotoluene as Aliphatic	67798-007	109				%				70	130		

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R		Limits		RPD	RPD Limit
MA VPH	MSD2303773	Unadjusted C5-C8 Aliphatics	67798-001	760	100	50	50	ug/L	600	126		70	130	0	50
		Unadjusted C9-C12 Aliphatics	67798-001	1100	100	50	40	ug/L	800	134	*	70	130	1	50
		methyl t-butyl ether (MTBE)	67798-001	100	2.0	1.0	0.73	ug/L	100	102		70	130	0	50
		benzene	67798-001	100	1.0	1.0	0.76	ug/L	100	102		70	130	0	50
		toluene	67798-001	100	2.0	1.0	0.58	ug/L	100	101		70	130	0	50
		ethylbenzene	67798-001	100	2.0	1.0	0.40	ug/L	100	103		70	130	0	50
		m&p-xylenes	67798-001	200	2.0	2.0	1.1	ug/L	200	101		70	130	0	50
		o-xylene	67798-001	100	2.0	1.0	0.45	ug/L	100	101		70	130	0	50
		naphthalene	67798-001	100	5.0	4.0	3.5	ug/L	100	101		70	130	2	50
		C5-C8 Aliphatics	67798-001	450	100	50	50	ug/L	300	151	*	70	130	0	50
		C9-C12 Aliphatics	67798-001	480	100	50	40	ug/L	300	161	*	70	130	1	50
		C9-C10 Aromatics	67798-001	180	100	50	33	ug/L	100	184	*	70	130	3	50
		2,5-dibromotoluene as Aromatic	67798-001	113				%				70	130		
		2,5-dibromotoluene as Aliphatic	67798-001	116				%				70	130		
MA VPH	MSD2303773	Unadjusted C5-C8 Aliphatics	67798-007	730	100	50	50	ug/L	600	122		70	130	1	50
		Unadjusted C9-C12 Aliphatics	67798-007	1100	100	50	40	ug/L	800	132	*	70	130	1	50
		methyl t-butyl ether (MTBE)	67798-007	100	2.0	1.0	0.73	ug/L	100	102		70	130	1	50
		benzene	67798-007	100	1.0	1.0	0.76	ug/L	100	103		70	130	2	50
		toluene	67798-007	100	2.0	1.0	0.58	ug/L	100	101		70	130	2	50
		ethylbenzene	67798-007	100	2.0	1.0	0.40	ug/L	100	104		70	130	2	50
		m&p-xylenes	67798-007	200	2.0	2.0	1.1	ug/L	200	101		70	130	2	50
		o-xylene	67798-007	100	2.0	1.0	0.45	ug/L	100	101		70	130	2	50
		naphthalene	67798-007	98	5.0	4.0	3.5	ug/L	100	98		70	130	3	50
		C5-C8 Aliphatics	67798-007	430	100	50	50	ug/L	300	142	*	70	130	2	50
		C9-C12 Aliphatics	67798-007	470	100	50	40	ug/L	300	158	*	70	130	1	50
		C9-C10 Aromatics	67798-007	180	100	50	33	ug/L	100	178	*	70	130	2	50
		2,5-dibromotoluene as Aromatic	67798-007	104				%				70	130		
		2,5-dibromotoluene as Aliphatic	67798-007	107				%				70	130		

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R	Limits		RPD	RPD Limit
MA VPH	BLK2303859	Unadjusted C5-C8 Aliphatics		50 U	100	50	50	ug/L						
		Unadjusted C9-C12 Aliphatics		50 U	100	50	40	ug/L						
		methyl t-butyl ether (MTBE)		1.0 U	2.0	1.0	0.73	ug/L						
		benzene		1.0 U	1.0	1.0	0.76	ug/L						
		toluene		1.0 U	2.0	1.0	0.58	ug/L						
		ethylbenzene		0.49 J	2.0	1.0	0.40	ug/L						
		m&p-xylenes		2.0 U	2.0	2.0	1.1	ug/L						
		o-xylene		1.0 U	2.0	1.0	0.45	ug/L						
		naphthalene		4.0 U	5.0	4.0	3.5	ug/L						
		C5-C8 Aliphatics		50 U	100	50	50	ug/L						
		C9-C12 Aliphatics		50 U	100	50	40	ug/L						
		C9-C10 Aromatics		50 U	100	50	33	ug/L						
		2,5-dibromotoluene as Aromatic		96				%			70	130		
		2,5-dibromotoluene as Aliphatic		97				%			70	130		
MA VPH	LCS2303859	Unadjusted C5-C8 Aliphatics		320	100	50	50	ug/L	300	105	70	130		
		Unadjusted C9-C12 Aliphatics		330	100	50	40	ug/L	300	110	70	130		
		methyl t-butyl ether (MTBE)		110	2.0	1.0	0.73	ug/L	100	114	70	130		
		benzene		110	1.0	1.0	0.76	ug/L	100	112	70	130		
		toluene		110	2.0	1.0	0.58	ug/L	100	111	70	130		
		ethylbenzene		110	2.0	1.0	0.40	ug/L	100	113	70	130		
		m&p-xylenes		220	2.0	2.0	1.1	ug/L	200	111	70	130		
		o-xylene		110	2.0	1.0	0.45	ug/L	100	111	70	130		
		naphthalene		98	5.0	4.0	3.5	ug/L	100	98	70	130		
		C5-C8 Aliphatics		50 U	100	50	50	ug/L			70	130		
		C9-C12 Aliphatics		50 U	100	50	40	ug/L			70	130		
		C9-C10 Aromatics		110	100	50	33	ug/L	100	109	70	130		
		2,5-dibromotoluene as Aromatic		119				%			70	130		
		2,5-dibromotoluene as Aliphatic		119				%			70	130		
MA VPH	LCSD2303859	Unadjusted C5-C8 Aliphatics		260	100	50	50	ug/L	300	88	70	130	18	25
		Unadjusted C9-C12 Aliphatics		230	100	50	40	ug/L	300	76	70	130	37 *	25
		methyl t-butyl ether (MTBE)		110	2.0	1.0	0.73	ug/L	100	107	70	130	6	25
		benzene		100	1.0	1.0	0.76	ug/L	100	103	70	130	8	25
		toluene		100	2.0	1.0	0.58	ug/L	100	102	70	130	8	25
		ethylbenzene		100	2.0	1.0	0.40	ug/L	100	104	70	130	8	25
		m&p-xylenes		210	2.0	2.0	1.1	ug/L	200	103	70	130	8	25
		o-xylene		100	2.0	1.0	0.45	ug/L	100	103	70	130	8	25
		naphthalene		94	5.0	4.0	3.5	ug/L	100	94	70	130	4	25
		C5-C8 Aliphatics		50 U	100	50	50	ug/L			70	130		25
		C9-C12 Aliphatics		50 U	100	50	40	ug/L			70	130		25
		C9-C10 Aromatics		100	100	50	33	ug/L	100	103	70	130	6	25
		2,5-dibromotoluene as Aromatic		118				%			70	130		
		2,5-dibromotoluene as Aliphatic		121				%			70	130		

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R	Limits	RPD	RPD Limit
SW5030C8260D	BLK2303756	dichlorodifluoromethane		1.0 U	2.0	1.0	0.28	ug/L					
		chloromethane		1.0 U	2.0	1.0	0.59	ug/L					
		vinyl chloride		1.0 U	2.0	1.0	0.49	ug/L					
		bromomethane		1.5 U	2.0	1.5	1.1	ug/L					
		chloroethane		1.0 U	2.0	1.0	0.33	ug/L					
		trichlorofluoromethane		1.0 U	2.0	1.0	0.34	ug/L					
		diethyl ether		1.0 U	2.0	1.0	0.41	ug/L					
		acetone		5.0 U	50	5.0	1.9	ug/L					
		1,1-dichloroethene		0.50 U	1.0	0.50	0.35	ug/L					
		methylene chloride		1.0 U	2.0	1.0	0.59	ug/L					
		carbon disulfide		0.33 J	2.0	1.0	0.33	ug/L					
		methyl t-butyl ether (MTBE)		1.0 U	2.0	1.0	0.30	ug/L					
		trans-1,2-dichloroethene		1.0 U	2.0	1.0	0.46	ug/L					
		ethyl t-butyl ether (ETBE)		1.0 U	2.0	1.0	0.24	ug/L					
		1,1-dichloroethane		1.0 U	2.0	1.0	0.27	ug/L					
		t-butanol (TBA)		10 U	30	10	2.5	ug/L					
		2-butanone (MEK)		5.0 U	10	5.0	0.67	ug/L					
		2,2-dichloropropane		1.0 U	2.0	1.0	0.21	ug/L					
		cis-1,2-dichloroethene		1.5 U	2.0	1.5	1.2	ug/L					
		chloroform		1.5 U	2.0	1.5	1.4	ug/L					
		bromochloromethane		1.0 U	2.0	1.0	0.22	ug/L					
		tetrahydrofuran (THF)		1.5 U	2.0	1.5	0.75	ug/L					
		1,1,1-trichloroethane		1.0 U	2.0	1.0	0.55	ug/L					
		1,1-dichloropropene		1.0 U	2.0	1.0	0.26	ug/L					
		t-amyl-methyl ether (TAME)		1.0 U	2.0	1.0	0.57	ug/L					
		carbon tetrachloride		1.0 U	2.0	1.0	0.27	ug/L					
		1,2-dichloroethane		1.0 U	2.0	1.0	0.20	ug/L					
		benzene		1.0 U	2.0	1.0	0.40	ug/L					
		trichloroethene		1.0 U	2.0	1.0	0.53	ug/L					
		1,2-dichloropropane		1.0 U	2.0	1.0	0.22	ug/L					
		bromodichloromethane		0.50 U	0.60	0.50	0.38	ug/L					
		1,4-dioxane		10 U	50	10	8.7	ug/L					
		dibromomethane		1.0 U	2.0	1.0	0.23	ug/L					
		4-methyl-2-pentanone (MIBK)		1.0 U	10	1.0	0.56	ug/L					
		cis-1,3-dichloropropene		1.0 U	2.0	1.0	0.30	ug/L					
		toluene		1.0 U	2.0	1.0	0.45	ug/L					
		trans-1,3-dichloropropene		1.0 U	2.0	1.0	0.34	ug/L					
		2-hexanone		1.0 U	10	1.0	0.72	ug/L					
		1,1,2-trichloroethane		1.0 U	2.0	1.0	0.27	ug/L					
		1,3-dichloropropane		1.0 U	2.0	1.0	0.25	ug/L					
		tetrachloroethene		1.0 U	2.0	1.0	0.76	ug/L					
		dibromochloromethane		1.0 U	2.0	1.0	0.21	ug/L					
		1,2-dibromoethane (EDB)		1.0 U	2.0	1.0	0.27	ug/L					
		chlorobenzene		1.0 U	2.0	1.0	0.25	ug/L					
		1,1,1,2-tetrachloroethane		1.0 U	2.0	1.0	0.21	ug/L					
		ethylbenzene		1.0 U	2.0	1.0	0.65	ug/L					
		m&p-xylenes		1.5 U	2.0	1.5	1.4	ug/L					
		o-xylene		1.0 U	2.0	1.0	0.55	ug/L					
		styrene		1.0 U	2.0	1.0	0.57	ug/L					
		bromoform		1.0 U	2.0	1.0	0.24	ug/L					
		isopropylbenzene		1.0 U	2.0	1.0	0.65	ug/L					
		1,1,2,2-tetrachloroethane		1.0 U	2.0	1.0	0.29	ug/L					
		1,2,3-trichloropropane		1.0 U	2.0	1.0	0.55	ug/L					
		n-propylbenzene		1.0 U	2.0	1.0	0.44	ug/L					

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R	Limits	RPD	RPD Limit
SW5030C8260D	BLK2303756	bromobenzene		1.0 U	2.0	1.0	0.27	ug/L					
		2-chlorotoluene		1.0 U	2.0	1.0	0.23	ug/L					
		4-chlorotoluene		1.0 U	2.0	1.0	0.33	ug/L					
		tert-butylbenzene		1.0 U	2.0	1.0	0.39	ug/L					
		1,2,4-trimethylbenzene		1.0 U	2.0	1.0	0.58	ug/L					
		sec-butylbenzene		1.0 U	2.0	1.0	0.44	ug/L					
		1,3-dichlorobenzene		1.0 U	2.0	1.0	0.45	ug/L					
		4-isopropyltoluene		1.0 U	2.0	1.0	0.47	ug/L					
		1,4-dichlorobenzene		1.0 U	2.0	1.0	0.26	ug/L					
		1,2-dichlorobenzene		1.0 U	2.0	1.0	0.39	ug/L					
		n-butylbenzene		1.0 U	2.0	1.0	0.54	ug/L					
		1,2-dibromo-3-chloropropane		1.5 U	2.0	1.5	0.91	ug/L					
		1,3,5-trimethylbenzene		1.0 U	2.0	1.0	0.46	ug/L					
		1,2,4-trichlorobenzene		1.0 U	2.0	1.0	0.79	ug/L					
		hexachlorobutadiene		0.50 U	0.50	0.50	0.19	ug/L					
		naphthalene		1.5 U	2.0	1.5	1.2	ug/L					
		1,2,3-trichlorobenzene		1.0 U	2.0	1.0	0.93	ug/L					
		dibromofluoromethane SUR		95				%			78	114	
		toluene-D8 SUR		101				%			88	110	
		4-bromofluorobenzene SUR		99				%			86	115	

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R	Limits	RPD	RPD Limit
SW5030C8260D	LCS2303756	dichlorodifluoromethane		17	2.0	1.0	0.28	ug/L	20	87	32	152	
		chloromethane		21	2.0	1.0	0.59	ug/L	20	106	50	139	
		vinyl chloride		18	2.0	1.0	0.49	ug/L	20	88	58	137	
		bromomethane		23	2.0	1.5	1.1	ug/L	20	116	53	141	
		chloroethane		25	2.0	1.0	0.33	ug/L	20	126	60	138	
		trichlorofluoromethane		18	2.0	1.0	0.34	ug/L	20	90	65	141	
		diethyl ether		26	2.0	1.0	0.41	ug/L	20	129	68	129	
		acetone		23 J	50	5.0	1.9	ug/L	20	116	39	160	
		1,1-dichloroethene		23	1.0	0.50	0.35	ug/L	20	113	71	131	
		methylene chloride		23	2.0	1.0	0.59	ug/L	20	114	74	124	
		carbon disulfide		25	2.0	1.0	0.33	ug/L	20	123	64	133	
		methyl t-butyl ether (MTBE)		19	2.0	1.0	0.30	ug/L	20	96	71	124	
		trans-1,2-dichloroethene		22	2.0	1.0	0.46	ug/L	20	110	75	124	
		ethyl t-butyl ether (ETBE)		19	2.0	1.0	0.24	ug/L	20	97	70	127	
		1,1-dichloroethane		22	2.0	1.0	0.27	ug/L	20	112	77	125	
		t-butanol (TBA)		110	30	10	2.5	ug/L	100	111	68	129	
		2-butanone (MEK)		19	10	5.0	0.67	ug/L	20	96	56	143	
		2,2-dichloropropane		19	2.0	1.0	0.21	ug/L	20	93	60	139	
		cis-1,2-dichloroethene		22	2.0	1.5	1.2	ug/L	20	110	78	123	
		chloroform		20	2.0	1.5	1.4	ug/L	20	102	79	124	
		bromochloromethane		21	2.0	1.0	0.22	ug/L	20	105	78	123	
		tetrahydrofuran (THF)		19	2.0	1.5	0.75	ug/L	20	96	57	133	
		1,1,1-trichloroethane		18	2.0	1.0	0.55	ug/L	20	88	74	131	
		1,1-dichloropropene		19	2.0	1.0	0.26	ug/L	20	97	79	125	
		t-amyl-methyl ether (TAME)		19	2.0	1.0	0.57	ug/L	20	96	68	128	
		carbon tetrachloride		17	2.0	1.0	0.27	ug/L	20	86	72	136	
		1,2-dichloroethane		19	2.0	1.0	0.20	ug/L	20	95	73	128	
		benzene		22	2.0	1.0	0.40	ug/L	20	110	79	120	
		trichloroethene		21	2.0	1.0	0.53	ug/L	20	103	79	123	
		1,2-dichloropropane		23	2.0	1.0	0.22	ug/L	20	115	78	122	
		bromodichloromethane		19	0.60	0.50	0.38	ug/L	20	96	79	125	
		1,4-dioxane		50 J	50	10	8.7	ug/L	40	124	59	139	
		dibromomethane		21	2.0	1.0	0.23	ug/L	20	105	79	123	
		4-methyl-2-pentanone (MIBK)		22	10	1.0	0.56	ug/L	20	111	67	130	
		cis-1,3-dichloropropene		20	2.0	1.0	0.30	ug/L	20	99	75	124	
		toluene		22	2.0	1.0	0.45	ug/L	20	109	80	121	
		trans-1,3-dichloropropene		20	2.0	1.0	0.34	ug/L	20	98	73	127	
		2-hexanone		23	10	1.0	0.72	ug/L	20	117	57	139	
		1,1,2-trichloroethane		23	2.0	1.0	0.27	ug/L	20	116	80	119	
		1,3-dichloropropane		23	2.0	1.0	0.25	ug/L	20	116	80	119	
		tetrachloroethene		20	2.0	1.0	0.76	ug/L	20	98	74	129	
		dibromochloromethane		19	2.0	1.0	0.21	ug/L	20	93	74	126	
		1,2-dibromoethane (EDB)		22	2.0	1.0	0.27	ug/L	20	109	77	121	
		chlorobenzene		21	2.0	1.0	0.25	ug/L	20	106	82	118	
		1,1,1,2-tetrachloroethane		20	2.0	1.0	0.21	ug/L	20	98	78	124	
		ethylbenzene		23	2.0	1.0	0.65	ug/L	20	114	79	121	
		m&p-xylenes		47	2.0	1.5	1.4	ug/L	40	117	80	121	
		o-xylene		22	2.0	1.0	0.55	ug/L	20	110	78	122	
		styrene		22	2.0	1.0	0.57	ug/L	20	109	78	123	
		bromoform		18	2.0	1.0	0.24	ug/L	20	88	66	130	
		isopropylbenzene		23	2.0	1.0	0.65	ug/L	20	113	72	131	
		1,1,2,2-tetrachloroethane		22	2.0	1.0	0.29	ug/L	20	110	71	121	
		1,2,3-trichloropropane		23	2.0	1.0	0.55	ug/L	20	114	73	122	
		n-propylbenzene		22	2.0	1.0	0.44	ug/L	20	112	76	126	

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R	Limits		RPD	RPD Limit
SW5030C8260D	LCS2303756	bromobenzene		20	2.0	1.0	0.27	ug/L	20	100	80	120		
		2-chlorotoluene		22	2.0	1.0	0.23	ug/L	20	110	79	122		
		4-chlorotoluene		23	2.0	1.0	0.33	ug/L	20	115	78	122		
		tert-butylbenzene		21	2.0	1.0	0.39	ug/L	20	103	78	124		
		1,2,4-trimethylbenzene		22	2.0	1.0	0.58	ug/L	20	109	76	124		
		sec-butylbenzene		22	2.0	1.0	0.44	ug/L	20	110	77	126		
		1,3-dichlorobenzene		21	2.0	1.0	0.45	ug/L	20	107	80	119		
		4-isopropyltoluene		21	2.0	1.0	0.47	ug/L	20	107	77	127		
		1,4-dichlorobenzene		22	2.0	1.0	0.26	ug/L	20	111	79	118		
		1,2-dichlorobenzene		21	2.0	1.0	0.39	ug/L	20	106	80	119		
		n-butylbenzene		21	2.0	1.0	0.54	ug/L	20	106	75	128		
		1,2-dibromo-3-chloropropane		20	2.0	1.5	0.91	ug/L	20	101	62	128		
		1,3,5-trimethylbenzene		22	2.0	1.0	0.46	ug/L	20	112	75	124		
		1,2,4-trichlorobenzene		19	2.0	1.0	0.79	ug/L	20	97	69	130		
		hexachlorobutadiene		20	0.50	0.50	0.19	ug/L	20	98	66	134		
		naphthalene		19	2.0	1.5	1.2	ug/L	20	95	61	128		
		1,2,3-trichlorobenzene		20	2.0	1.0	0.93	ug/L	20	98	69	129		
		dibromofluoromethane SUR		93				%			78	114		
		toluene-D8 SUR		102				%			88	110		
		4-bromofluorobenzene SUR		101				%			86	115		

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R		Limits		RPD	RPD Limit
SW5030C8260D	LCSD2303756	dichlorodifluoromethane		18	2.0	1.0	0.28	ug/L	20	92		32	152	5	20
		chloromethane		22	2.0	1.0	0.59	ug/L	20	111		50	139	5	20
		vinyl chloride		18	2.0	1.0	0.49	ug/L	20	91		58	137	4	20
		bromomethane		24	2.0	1.5	1.1	ug/L	20	118		53	141	1	20
		chloroethane		27	2.0	1.0	0.33	ug/L	20	136		60	138	8	20
		trichlorofluoromethane		20	2.0	1.0	0.34	ug/L	20	100		65	141	10	20
		diethyl ether		25	2.0	1.0	0.41	ug/L	20	124		68	129	3	20
		acetone		22 J	50	5.0	1.9	ug/L	20	110		39	160	5	20
		1,1-dichloroethene		25	1.0	0.50	0.35	ug/L	20	125		71	131	10	20
		methylene chloride		23	2.0	1.0	0.59	ug/L	20	117		74	124	3	20
		carbon disulfide		26	2.0	1.0	0.33	ug/L	20	131		64	133	6	20
		methyl t-butyl ether (MTBE)		19	2.0	1.0	0.30	ug/L	20	94		71	124	2	20
		trans-1,2-dichloroethene		24	2.0	1.0	0.46	ug/L	20	119		75	124	8	20
		ethyl t-butyl ether (ETBE)		20	2.0	1.0	0.24	ug/L	20	98		70	127	1	20
		1,1-dichloroethane		23	2.0	1.0	0.27	ug/L	20	117		77	125	4	20
		t-butanol (TBA)		110	30	10	2.5	ug/L	100	106		68	129	5	20
		2-butanone (MEK)		18	10	5.0	0.67	ug/L	20	89		56	143	7	20
		2,2-dichloropropane		19	2.0	1.0	0.21	ug/L	20	96		60	139	3	20
		cis-1,2-dichloroethene		23	2.0	1.5	1.2	ug/L	20	113		78	123	3	20
		chloroform		21	2.0	1.5	1.4	ug/L	20	106		79	124	3	20
		bromochloromethane		22	2.0	1.0	0.22	ug/L	20	112		78	123	7	20
		tetrahydrofuran (THF)		21	2.0	1.5	0.75	ug/L	20	107		57	133	11	20
		1,1,1-trichloroethane		20	2.0	1.0	0.55	ug/L	20	100		74	131	12	20
		1,1-dichloropropene		22	2.0	1.0	0.26	ug/L	20	108		79	125	11	20
		t-amyl-methyl ether (TAME)		20	2.0	1.0	0.57	ug/L	20	101		68	128	5	20
		carbon tetrachloride		19	2.0	1.0	0.27	ug/L	20	97		72	136	12	20
		1,2-dichloroethane		20	2.0	1.0	0.20	ug/L	20	100		73	128	5	20
		benzene		24	2.0	1.0	0.40	ug/L	20	119		79	120	8	20
		trichloroethene		22	2.0	1.0	0.53	ug/L	20	111		79	123	7	20
		1,2-dichloropropane		24	2.0	1.0	0.22	ug/L	20	119		78	122	3	20
		bromodichloromethane		20	0.60	0.50	0.38	ug/L	20	99		79	125	3	20
		1,4-dioxane		45 J	50	10	8.7	ug/L	40	112		59	139	10	20
		dibromomethane		22	2.0	1.0	0.23	ug/L	20	109		79	123	3	20
		4-methyl-2-pentanone (MIBK)		22	10	1.0	0.56	ug/L	20	109		67	130	1	20
		cis-1,3-dichloropropene		20	2.0	1.0	0.30	ug/L	20	98		75	124	1	20
		toluene		23	2.0	1.0	0.45	ug/L	20	114		80	121	4	20
		trans-1,3-dichloropropene		19	2.0	1.0	0.34	ug/L	20	96		73	127	2	20
		2-hexanone		22	10	1.0	0.72	ug/L	20	110		57	139	6	20
		1,1,2-trichloroethane		23	2.0	1.0	0.27	ug/L	20	117		80	119	0	20
		1,3-dichloropropane		24	2.0	1.0	0.25	ug/L	20	119		80	119	3	20
		tetrachloroethene		21	2.0	1.0	0.76	ug/L	20	104		74	129	6	20
		dibromochloromethane		18	2.0	1.0	0.21	ug/L	20	92		74	126	1	20
		1,2-dibromoethane (EDB)		22	2.0	1.0	0.27	ug/L	20	111		77	121	3	20
		chlorobenzene		22	2.0	1.0	0.25	ug/L	20	112		82	118	6	20
		1,1,1,2-tetrachloroethane		21	2.0	1.0	0.21	ug/L	20	106		78	124	7	20
		ethylbenzene		24	2.0	1.0	0.65	ug/L	20	121		79	121	6	20
		m&p-xylenes		50	2.0	1.5	1.4	ug/L	40	125	*	80	121	7	20
		o-xylene		23	2.0	1.0	0.55	ug/L	20	114		78	122	4	20
		styrene		23	2.0	1.0	0.57	ug/L	20	114		78	123	4	20
		bromoform		18	2.0	1.0	0.24	ug/L	20	88		66	130	1	20
		isopropylbenzene		24	2.0	1.0	0.65	ug/L	20	119		72	131	6	20
		1,1,2,2-tetrachloroethane		22	2.0	1.0	0.29	ug/L	20	112		71	121	2	20
		1,2,3-trichloropropane		23	2.0	1.0	0.55	ug/L	20	113		73	122	1	20
		n-propylbenzene		24	2.0	1.0	0.44	ug/L	20	119		76	126	5	20

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R	Limits		RPD	RPD Limit
SW5030C8260D	LCSD2303756	bromobenzene		21	2.0	1.0	0.27	ug/L	20	107	80	120	7	20
		2-chlorotoluene		24	2.0	1.0	0.23	ug/L	20	119	79	122	9	20
		4-chlorotoluene		23	2.0	1.0	0.33	ug/L	20	117	78	122	1	20
		tert-butylbenzene		22	2.0	1.0	0.39	ug/L	20	109	78	124	6	20
		1,2,4-trimethylbenzene		23	2.0	1.0	0.58	ug/L	20	113	76	124	4	20
		sec-butylbenzene		23	2.0	1.0	0.44	ug/L	20	114	77	126	4	20
		1,3-dichlorobenzene		22	2.0	1.0	0.45	ug/L	20	111	80	119	3	20
		4-isopropyltoluene		22	2.0	1.0	0.47	ug/L	20	110	77	127	3	20
		1,4-dichlorobenzene		23	2.0	1.0	0.26	ug/L	20	113	79	118	2	20
		1,2-dichlorobenzene		22	2.0	1.0	0.39	ug/L	20	109	80	119	3	20
		n-butylbenzene		22	2.0	1.0	0.54	ug/L	20	109	75	128	3	20
		1,2-dibromo-3-chloropropane		21	2.0	1.5	0.91	ug/L	20	103	62	128	3	20
		1,3,5-trimethylbenzene		23	2.0	1.0	0.46	ug/L	20	117	75	124	5	20
		1,2,4-trichlorobenzene		20	2.0	1.0	0.79	ug/L	20	100	69	130	4	20
		hexachlorobutadiene		20	0.50	0.50	0.19	ug/L	20	102	66	134	3	20
		naphthalene		20	2.0	1.5	1.2	ug/L	20	101	61	128	6	20
		1,2,3-trichlorobenzene		21	2.0	1.0	0.93	ug/L	20	103	69	129	5	20
		dibromofluoromethane SUR		98				%			78	114		
		toluene-D8 SUR		101				%			88	110		
		4-bromofluorobenzene SUR		100				%			86	115		

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R		Limits		RPD	RPD Limit
MA EPH	BLK17156	naphthalene		0.70 U	1.0	0.70	0.63	ug/L							
		2-methylnaphthalene		0.70 U	1.0	0.70	0.60	ug/L							
		phenanthrene		0.50 U	1.0	0.50	0.15	ug/L							
		acenaphthene		0.50 U	1.0	0.50	0.22	ug/L							
		acenaphthylene		0.50 U	1.0	0.50	0.18	ug/L							
		fluorene		0.50 U	1.0	0.50	0.15	ug/L							
		anthracene		0.50 U	1.0	0.50	0.18	ug/L							
		fluoranthene		0.50 U	1.0	0.50	0.18	ug/L							
		pyrene		0.50 U	1.0	0.50	0.23	ug/L							
		benzo(a)anthracene		0.50 U	1.0	0.50	0.20	ug/L							
		chrysene		0.50 U	1.0	0.50	0.16	ug/L							
		benzo(b)fluoranthene		0.50 U	1.0	0.50	0.35	ug/L							
		benzo(k)fluoranthene		0.50 U	1.0	0.50	0.41	ug/L							
		benzo(a)pyrene		0.70 U	1.0	0.70	0.52	ug/L							
		indeno(1,2,3-cd)pyrene		0.50 U	1.0	0.50	0.24	ug/L							
		dibenzo(a,h)anthracene		0.50 U	1.0	0.50	0.26	ug/L							
		benzo(g,h,i)perylene		0.50 U	1.0	0.50	0.22	ug/L							
		Unadjusted C11-C22 Aromatics		78 J	100	85	60	ug/L							
		C9-C18 Aliphatics		95 U	100	95	94	ug/L							
		C19-C36 Aliphatics		97 U	100	97	96	ug/L							
		C11-C22 Aromatics		78 J	100	85	54	ug/L							
		1-chloro-octadecane SUR		55				%				40	140		
		o-terphenyl SUR		60				%				40	140		
		2-fluorobiphenyl SUR		76				%				40	140		
		2-bromonaphthalene SUR		76				%				40	140		
MA EPH	LCS17156	naphthalene		25	1.0	0.70	0.63	ug/L	60	42		40	140		
		2-methylnaphthalene		26	1.0	0.70	0.60	ug/L	60	43		40	140		
		phenanthrene		30	1.0	0.50	0.15	ug/L	60	51		40	140		
		acenaphthene		30	1.0	0.50	0.22	ug/L	60	49		40	140		
		acenaphthylene		28	1.0	0.50	0.18	ug/L	60	47		40	140		
		fluorene		27	1.0	0.50	0.15	ug/L	60	44		40	140		
		anthracene		28	1.0	0.50	0.18	ug/L	60	47		40	140		
		fluoranthene		32	1.0	0.50	0.18	ug/L	60	53		40	140		
		pyrene		27	1.0	0.50	0.23	ug/L	60	45		40	140		
		benzo(a)anthracene		27	1.0	0.50	0.20	ug/L	60	45		40	140		
		chrysene		29	1.0	0.50	0.16	ug/L	60	48		40	140		
		benzo(b)fluoranthene		27	1.0	0.50	0.35	ug/L	60	44		40	140		
		benzo(k)fluoranthene		29	1.0	0.50	0.41	ug/L	60	48		40	140		
		benzo(a)pyrene		27	1.0	0.70	0.52	ug/L	60	45		40	140		
		indeno(1,2,3-cd)pyrene		27	1.0	0.50	0.24	ug/L	60	45		40	140		
		dibenzo(a,h)anthracene		28	1.0	0.50	0.26	ug/L	60	46		40	140		
		benzo(g,h,i)perylene		29	1.0	0.50	0.22	ug/L	60	48		40	140		
		Unadjusted C11-C22 Aromatics		620	100	85	60	ug/L	1020	61		40	140		
		C9-C18 Aliphatics		130	100	95	94	ug/L	360	37	*	40	140		
		C19-C36 Aliphatics		340	100	97	96	ug/L	480	72		40	140		
		C11-C22 Aromatics		140	100	85	54	ug/L				40	140		
		1-chloro-octadecane SUR		44				%				40	140		
		o-terphenyl SUR		49				%				40	140		
		2-fluorobiphenyl SUR		74				%				40	140		
		2-bromonaphthalene SUR		77				%				40	140		

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R		Limits		RPD	RPD	Limit
MA EPH	LCSD17156	naphthalene		33	1.0	0.70	0.63	ug/L	60	55		40	140	28	*	25
		2-methylnaphthalene		34	1.0	0.70	0.60	ug/L	60	57		40	140	28	*	25
		phenanthrene		37	1.0	0.50	0.15	ug/L	60	61		40	140	18		25
		acenaphthene		36	1.0	0.50	0.22	ug/L	60	60		40	140	19		25
		acenaphthylene		36	1.0	0.50	0.18	ug/L	60	59		40	140	24		25
		fluorene		34	1.0	0.50	0.15	ug/L	60	57		40	140	24		25
		anthracene		34	1.0	0.50	0.18	ug/L	60	56		40	140	17		25
		fluoranthene		38	1.0	0.50	0.18	ug/L	60	63		40	140	16		25
		pyrene		33	1.0	0.50	0.23	ug/L	60	55		40	140	20		25
		benzo(a)anthracene		32	1.0	0.50	0.20	ug/L	60	53		40	140	16		25
		chrysene		34	1.0	0.50	0.16	ug/L	60	56		40	140	15		25
		benzo(b)fluoranthene		31	1.0	0.50	0.35	ug/L	60	52		40	140	16		25
		benzo(k)fluoranthene		32	1.0	0.50	0.41	ug/L	60	53		40	140	10		25
		benzo(a)pyrene		31	1.0	0.70	0.52	ug/L	60	52		40	140	14		25
		indeno(1,2,3-cd)pyrene		30	1.0	0.50	0.24	ug/L	60	51		40	140	11		25
		dibenzo(a,h)anthracene		31	1.0	0.50	0.26	ug/L	60	52		40	140	11		25
		benzo(g,h,i)perylene		32	1.0	0.50	0.22	ug/L	60	53		40	140	10		25
		Unadjusted C11-C22 Aromatics		650	100	85	60	ug/L	1020	64		40	140	5		25
		C9-C18 Aliphatics		150	100	95	94	ug/L	360	41		40	140	11		25
		C19-C36 Aliphatics		330	100	97	96	ug/L	480	69		40	140	3		25
		C11-C22 Aromatics		82 J	100	85	54	ug/L				40	140			25
		1-chloro-octadecane SUR		39				%			*	40	140			
		o-terphenyl SUR		57				%				40	140			
		2-fluorobiphenyl SUR		76				%				40	140			
		2-bromonaphthalene SUR		78				%				40	140			

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R	Limits	RPD	RPD Limit
SW3510C8082A	BLK17190	PCB-1016		0.12 U	0.20	0.12	0.10	ug/L					
		PCB-1221		0.12 U	0.20	0.12	0.10	ug/L					
		PCB-1232		0.12 U	0.20	0.12	0.10	ug/L					
		PCB-1242		0.12 U	0.20	0.12	0.10	ug/L					
		PCB-1248		0.12 U	0.20	0.12	0.10	ug/L					
		PCB-1254		0.12 U	0.20	0.12	0.10	ug/L					
		PCB-1260		0.12 U	0.20	0.12	0.10	ug/L					
		tetrachloro-m-xylene SUR		63				%			30 150		
		decachlorobiphenyl SUR		75				%			30 150		
SW3510C8082A	LCS17190	PCB-1016		0.70	0.20	0.12	0.10	ug/L	1	70	46 129		
		PCB-1221		0.12 U	0.20	0.12	0.10	ug/L					
		PCB-1232		0.12 U	0.20	0.12	0.10	ug/L					
		PCB-1242		0.12 U	0.20	0.12	0.10	ug/L					
		PCB-1248		0.12 U	0.20	0.12	0.10	ug/L					
		PCB-1254		0.12 U	0.20	0.12	0.10	ug/L					
		PCB-1260		0.79	0.20	0.12	0.10	ug/L	1	79	45 134		
		tetrachloro-m-xylene SUR		60				%			30 150		
		decachlorobiphenyl SUR		71				%			30 150		
SW3510C8082A	LCSD17190	PCB-1016		0.70	0.20	0.12	0.10	ug/L	1	70	46 129	1	20
		PCB-1221		0.12 U	0.20	0.12	0.10	ug/L					20
		PCB-1232		0.12 U	0.20	0.12	0.10	ug/L					20
		PCB-1242		0.12 U	0.20	0.12	0.10	ug/L					20
		PCB-1248		0.12 U	0.20	0.12	0.10	ug/L					20
		PCB-1254		0.12 U	0.20	0.12	0.10	ug/L					20
		PCB-1260		0.66	0.20	0.12	0.10	ug/L	1	66	45 134	18	20
		tetrachloro-m-xylene SUR		60				%			30 150		
		decachlorobiphenyl SUR		60				%			30 150		

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R	Limits	RPD	RPD Limit
SW3510C8270E	BLK17124	N-nitrosodimethylamine		1.0 U	2.0	1.0	0.21	ug/L					
		pyridine		1.0 U	2.0	1.0	0.60	ug/L					
		aniline		1.0 U	2.0	1.0	0.39	ug/L					
		phenol		1.0 U	2.0	1.0	0.34	ug/L					
		2-chlorophenol		1.0 U	5.0	1.0	0.29	ug/L					
		bis(2-chloroethyl)ether		1.0 U	2.0	1.0	0.35	ug/L					
		1,3-dichlorobenzene		1.0 U	2.0	1.0	0.41	ug/L					
		1,4-dichlorobenzene		1.0 U	2.0	1.0	0.37	ug/L					
		1,2-dichlorobenzene		1.0 U	2.0	1.0	0.36	ug/L					
		benzyl alcohol		1.0 U	2.0	1.0	0.84	ug/L					
		2-methylphenol		1.0 U	5.0	1.0	0.39	ug/L					
		2,2'-oxybis(1-chloropropane)		1.0 U	2.0	1.0	0.44	ug/L					
		hexachloroethane		1.0 U	2.0	1.0	0.53	ug/L					
		N-nitroso-di-N-propylamine		1.0 U	2.0	1.0	0.30	ug/L					
		4-methylphenol		1.5 U	2.0	1.5	1.3	ug/L					
		nitrobenzene		1.0 U	2.0	1.0	0.41	ug/L					
		isophorone		1.0 U	5.0	1.0	0.32	ug/L					
		2-nitrophenol		1.0 U	2.0	1.0	0.21	ug/L					
		2,4-dimethylphenol		1.0 U	5.0	1.0	0.44	ug/L					
		bis(2-chloroethoxy)methane		1.0 U	5.0	1.0	0.26	ug/L					
		2,4-dichlorophenol		1.0 U	5.0	1.0	0.19	ug/L					
		1,2,4-trichlorobenzene		1.0 U	5.0	1.0	0.34	ug/L					
		benzoic acid		45 U	50	45	20	ug/L					
		4-chloroaniline		1.0 U	2.0	1.0	0.41	ug/L					
		hexachlorobutadiene		1.0 U	2.0	1.0	0.57	ug/L					
		4-chloro-3-methylphenol		1.0 U	2.0	1.0	0.42	ug/L					
		hexachlorocyclopentadiene		4.0 U	10	4.0	1.6	ug/L					
		2,4,6-trichlorophenol		1.0 U	2.0	1.0	0.33	ug/L					
		2,4,5-trichlorophenol		1.0 U	2.0	1.0	0.28	ug/L					
		2-chloronaphthalene		1.0 U	5.0	1.0	0.34	ug/L					
		2-nitroaniline		1.0 U	2.0	1.0	0.72	ug/L					
		dimethylphthalate		1.0 U	5.0	1.0	0.41	ug/L					
		2,6-dinitrotoluene		1.0 U	5.0	1.0	0.42	ug/L					
		2,4-dinitrotoluene		1.0 U	5.0	1.0	0.52	ug/L					
		3-nitroaniline		1.5 U	2.0	1.5	1.0	ug/L					
		2,4-dinitrophenol		45 U	50	45	3.5	ug/L					
		dibenzofuran		0.40 U	0.50	0.40	0.37	ug/L					
		4-nitrophenol		5.0 U	10	5.0	1.6	ug/L					
		diethyl phthalate		1.0 U	5.0	1.0	0.30	ug/L					
		4-chlorophenyl phenyl ether		1.0 U	5.0	1.0	0.35	ug/L					
		4-nitroaniline		3.0 U	5.0	3.0	1.0	ug/L					
		4,6-dinitro-2-methylphenol		10 U	20	10	1.7	ug/L					
		azobenzene		1.0 U	2.0	1.0	0.25	ug/L					
		N-nitrosodiphenylamine		1.0 U	2.0	1.0	0.26	ug/L					
		4-bromophenyl phenyl ether		1.0 U	2.0	1.0	0.23	ug/L					
		hexachlorobenzene		1.0 U	2.0	1.0	0.25	ug/L					
		pentachlorophenol		5.0 U	10	5.0	2.6	ug/L					
		carbazole		1.0 U	2.0	1.0	0.32	ug/L					
		di-n-butylphthalate		1.0 U	5.0	1.0	0.54	ug/L					
		benzidine		25 U	30	25	20	ug/L					
		butyl benzyl phthalate		3.0 U	5.0	3.0	2.1	ug/L					
		3,3'-dichlorobenzidine		25 U	30	25	20	ug/L					
		bis(2-ethylhexyl)phthalate		3.0 U	5.0	3.0	2.4	ug/L					
		di-n-octyl phthalate		3.0 U	5.0	3.0	2.1	ug/L					

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R	Limits	RPD	RPD Limit
SW3510C8270E	BLK17124	2-fluorophenol SUR		26				%			21	100	
		phenol-D5 SUR		18				%			10	102	
		2,4,6-tribromophenol SUR		71				%			10	123	
		nitrobenzene-D5 SUR		60				%			35	114	
		2-fluorobiphenyl SUR		55				%			43	116	
		p-terphenyl-D14 SUR		80				%			33	141	

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R		Limits		RPD	RPD Limit
SW3510C8270E	LCS17124	N-nitrosodimethylamine		16	2.0	1.0	0.21	ug/L	40	41	*	43	121		
		pyridine		13	2.0	1.0	0.60	ug/L	40	33	*	40	140		
		aniline		19	2.0	1.0	0.39	ug/L	40	47		40	140		
		phenol		11	2.0	1.0	0.34	ug/L	40	28	*	72	132		
		2-chlorophenol		24	5.0	1.0	0.29	ug/L	40	60		38	117		
		bis(2-chloroethyl)ether		26	2.0	1.0	0.35	ug/L	40	66		43	118		
		1,3-dichlorobenzene		22	2.0	1.0	0.41	ug/L	40	55		28	110		
		1,4-dichlorobenzene		22	2.0	1.0	0.37	ug/L	40	55		29	112		
		1,2-dichlorobenzene		23	2.0	1.0	0.36	ug/L	40	57		33	111		
		benzyl alcohol		24	2.0	1.0	0.84	ug/L	40	59		31	112		
		2-methylphenol		23	5.0	1.0	0.39	ug/L	40	58		30	117		
		2,2'-oxybis(1-chloropropane)		35	2.0	1.0	0.44	ug/L	40	88		37	130		
		hexachloroethane		22	2.0	1.0	0.53	ug/L	40	55		21	115		
		N-nitroso-di-N-propylamine		26	2.0	1.0	0.30	ug/L	40	65		49	119		
		4-methylphenol		43	2.0	1.5	1.3	ug/L	80	53		25	120		
		nitrobenzene		26	2.0	1.0	0.41	ug/L	40	64		45	121		
		isophorone		29	5.0	1.0	0.32	ug/L	40	73		42	124		
		2-nitrophenol		27	2.0	1.0	0.21	ug/L	40	67		47	123		
		2,4-dimethylphenol		20	5.0	1.0	0.44	ug/L	40	49		31	124		
		bis(2-chloroethoxy)methane		28	5.0	1.0	0.26	ug/L	40	70		48	120		
		2,4-dichlorophenol		27	5.0	1.0	0.19	ug/L	40	68		47	121		
		1,2,4-trichlorobenzene		24	5.0	1.0	0.34	ug/L	40	59		29	116		
		benzoic acid		8.9 J	50	45	0.0010	ug/L	40	22	*	57	129		
		4-chloroaniline		25	2.0	1.0	0.41	ug/L	40	63		33	117		
		hexachlorobutadiene		23	2.0	1.0	0.57	ug/L	40	58		22	124		
		4-chloro-3-methylphenol		25	2.0	1.0	0.42	ug/L	40	64		52	119		
		hexachlorocyclopentadiene		17	10	4.0	1.6	ug/L	40	41	*	53	135		
		2,4,6-trichlorophenol		28	2.0	1.0	0.33	ug/L	40	69		50	125		
		2,4,5-trichlorophenol		28	2.0	1.0	0.28	ug/L	40	70		53	123		
		2-chloronaphthalene		24	5.0	1.0	0.34	ug/L	40	61		40	116		
		2-nitroaniline		27	2.0	1.0	0.72	ug/L	40	67		55	127		
		dimethylphthalate		12	5.0	1.0	0.41	ug/L	40	29	*	45	127		
		2,6-dinitrotoluene		29	5.0	1.0	0.42	ug/L	40	72		57	124		
		2,4-dinitrotoluene		28	5.0	1.0	0.52	ug/L	40	70		57	128		
		3-nitroaniline		28	2.0	1.5	1.0	ug/L	40	70		41	128		
		2,4-dinitrophenol		23 J	50	45	3.5	ug/L	40	57		23	143		
		dibenzofuran		28	0.50	0.40	0.37	ug/L	40	70		53	118		
		4-nitrophenol		13	10	5.0	1.6	ug/L	40	32	*	61	133		
		diethyl phthalate		23	5.0	1.0	0.30	ug/L	40	57		56	125		
		4-chlorophenyl phenyl ether		26	5.0	1.0	0.35	ug/L	40	65		53	121		
		4-nitroaniline		28	5.0	3.0	1.0	ug/L	40	69		38	126		
		4,6-dinitro-2-methylphenol		27	20	10	1.7	ug/L	40	67		44	137		
		azobenzene		28	2.0	1.0	0.25	ug/L	40	70		61	116		
		N-nitrosodiphenylamine		27	2.0	1.0	0.26	ug/L	40	66		51	123		
		4-bromophenyl phenyl ether		26	2.0	1.0	0.23	ug/L	40	65		55	124		
		hexachlorobenzene		23	2.0	1.0	0.25	ug/L	40	57		53	125		
		pentachlorophenol		29	10	5.0	2.6	ug/L	40	73		35	138		
		carbazole		30	2.0	1.0	0.32	ug/L	40	76		60	122		
		di-n-butylphthalate		25	5.0	1.0	0.54	ug/L	40	63		59	127		
		benzidine		25 U	30	25	20	ug/L	40	50		50	134		
		butyl benzyl phthalate		18	5.0	3.0	2.1	ug/L	40	44	*	53	134		
		3,3'-dichlorobenzidine		29 J	30	25	20	ug/L	40	73		27	129		
		bis(2-ethylhexyl)phthalate		28	5.0	3.0	2.4	ug/L	40	69		55	135		
		di-n-octyl phthalate		28	5.0	3.0	2.1	ug/L	40	69		51	140		

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R	Limits	RPD	RPD Limit
SW3510C8270E	LCS17124	2-fluorophenol SUR		42				%			21	100	
		phenol-D5 SUR		29				%			10	102	
		2,4,6-tribromophenol SUR		88				%			10	123	
		nitrobenzene-D5 SUR		69				%			35	114	
		2-fluorobiphenyl SUR		63				%			43	116	
		p-terphenyl-D14 SUR		83				%			33	141	

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R		Limits		RPD	RPD Limit
SW3510C8270E	LCSD17124	N-nitrosodimethylamine		17	2.0	1.0	0.21	ug/L	40	42	*	43	121	1	20
		pyridine		13	2.0	1.0	0.60	ug/L	40	33	*	40	140	1	20
		aniline		18	2.0	1.0	0.39	ug/L	40	46		40	140	2	20
		phenol		11	2.0	1.0	0.34	ug/L	40	27	*	72	132	5	20
		2-chlorophenol		23	5.0	1.0	0.29	ug/L	40	58		38	117	4	20
		bis(2-chloroethyl)ether		27	2.0	1.0	0.35	ug/L	40	67		43	118	3	20
		1,3-dichlorobenzene		23	2.0	1.0	0.41	ug/L	40	58		28	110	6	20
		1,4-dichlorobenzene		24	2.0	1.0	0.37	ug/L	40	59		29	112	7	20
		1,2-dichlorobenzene		24	2.0	1.0	0.36	ug/L	40	60		32	111	5	20
		benzyl alcohol		23	2.0	1.0	0.84	ug/L	40	57		31	112	4	20
		2-methylphenol		21	5.0	1.0	0.39	ug/L	40	53		30	117	8	20
		2,2'-oxybis(1-chloropropane)		36	2.0	1.0	0.44	ug/L	40	90		37	130	2	20
		hexachloroethane		24	2.0	1.0	0.53	ug/L	40	59		21	115	6	20
		N-nitroso-di-N-propylamine		26	2.0	1.0	0.30	ug/L	40	66		49	119	2	20
		4-methylphenol		39	2.0	1.5	1.3	ug/L	80	48		25	120	10	20
		nitrobenzene		26	2.0	1.0	0.41	ug/L	40	65		45	121	2	20
		isophorone		29	5.0	1.0	0.32	ug/L	40	73		42	124	1	20
		2-nitrophenol		27	2.0	1.0	0.21	ug/L	40	67		47	123	1	20
		2,4-dimethylphenol		20	5.0	1.0	0.44	ug/L	40	49		31	124	0	20
		bis(2-chloroethoxy)methane		28	5.0	1.0	0.26	ug/L	40	70		48	120	0	20
		2,4-dichlorophenol		27	5.0	1.0	0.19	ug/L	40	67		47	121	1	20
		1,2,4-trichlorobenzene		25	5.0	1.0	0.34	ug/L	40	61		29	116	4	20
		benzoic acid		10 J	50	45	0.0010	ug/L	40	26	*	57	129	17	20
		4-chloroaniline		25	2.0	1.0	0.41	ug/L	40	62		33	117	3	20
		hexachlorobutadiene		25	2.0	1.0	0.57	ug/L	40	62		22	124	7	20
		4-chloro-3-methylphenol		25	2.0	1.0	0.42	ug/L	40	62		52	119	2	20
		hexachlorocyclopentadiene		18	10	4.0	1.6	ug/L	40	45	*	53	135	8	20
		2,4,6-trichlorophenol		28	2.0	1.0	0.33	ug/L	40	71		50	125	3	20
		2,4,5-trichlorophenol		28	2.0	1.0	0.28	ug/L	40	71		53	123	1	20
		2-chloronaphthalene		26	5.0	1.0	0.34	ug/L	40	64		40	116	5	20
		2-nitroaniline		27	2.0	1.0	0.72	ug/L	40	66		55	127	2	20
		dimethylphthalate		11	5.0	1.0	0.41	ug/L	40	28	*	45	127	6	20
		2,6-dinitrotoluene		29	5.0	1.0	0.42	ug/L	40	71		57	124	1	20
		2,4-dinitrotoluene		28	5.0	1.0	0.52	ug/L	40	69		57	128	2	20
		3-nitroaniline		27	2.0	1.5	1.0	ug/L	40	67		41	128	5	20
		2,4-dinitrophenol		23 J	50	45	3.5	ug/L	40	58		23	143	2	20
		dibenzofuran		28	0.50	0.40	0.37	ug/L	40	71		53	118	1	20
		4-nitrophenol		11	10	5.0	1.6	ug/L	40	29	*	61	133	12	20
		diethyl phthalate		22	5.0	1.0	0.30	ug/L	40	55	*	56	125	5	20
		4-chlorophenyl phenyl ether		27	5.0	1.0	0.35	ug/L	40	67		53	121	3	20
		4-nitroaniline		25	5.0	3.0	1.0	ug/L	40	62		38	126	11	20
		4,6-dinitro-2-methylphenol		28	20	10	1.7	ug/L	40	69		44	137	2	20
		azobenzene		29	2.0	1.0	0.25	ug/L	40	73		61	116	4	20
		N-nitrosodiphenylamine		27	2.0	1.0	0.26	ug/L	40	68		51	123	3	20
		4-bromophenyl phenyl ether		27	2.0	1.0	0.23	ug/L	40	67		55	124	3	20
		hexachlorobenzene		23	2.0	1.0	0.25	ug/L	40	58		53	125	2	20
		pentachlorophenol		30	10	5.0	2.6	ug/L	40	75		35	138	3	20
		carbazole		30	2.0	1.0	0.32	ug/L	40	76		60	122	1	20
		di-n-butylphthalate		25	5.0	1.0	0.54	ug/L	40	62		59	127	1	20
		benzidine		27 J	30	25	20	ug/L	40	68		50	134	30	* 20
		butyl benzyl phthalate		17	5.0	3.0	2.1	ug/L	40	43	*	53	134	2	20
		3,3'-dichlorobenzidine		29 J	30	25	20	ug/L	40	73		27	129	1	20
		bis(2-ethylhexyl)phthalate		28	5.0	3.0	2.4	ug/L	40	70		55	135	2	20
		di-n-octyl phthalate		28	5.0	3.0	2.1	ug/L	40	70		51	140	1	20

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R	Limits	RPD	RPD Limit
SW3510C8270E	LCSD17124	2-fluorophenol SUR		37				%			21	100	
		phenol-D5 SUR		27				%			10	102	
		2,4,6-tribromophenol SUR		88				%			10	123	
		nitrobenzene-D5 SUR		69				%			35	114	
		2-fluorobiphenyl SUR		64				%			43	116	
		p-terphenyl-D14 SUR		86				%			33	141	

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R	Limits	RPD	RPD Limit
SW3005A6020A	BLK17176	Silver		0.00050 U	0.0050	0.00050	0.00011	mg/L					
		Aluminum		0.025 U	0.050	0.025	0.010	mg/L					
		Arsenic		0.0010 U	0.0050	0.0010	0.00067	mg/L					
		Barium		0.0010 U	0.010	0.0010	0.00076	mg/L					
		Beryllium		0.00050 U	0.0010	0.00050	0.00010	mg/L					
		Cadmium		0.00050 U	0.0010	0.00050	0.00014	mg/L					
		Cobalt		0.00010 U	0.010	0.00010	0.000020	mg/L					
		Chromium		0.025 U	0.050	0.025	0.020	mg/L					
		Copper		0.0075 U	0.010	0.0075	0.0054	mg/L					
		Iron		0.030 U	0.050	0.030	0.029	mg/L					
		Potassium		0.10 U	0.50	0.10	0.039	mg/L					
		Magnesium		0.020 U	0.10	0.020	0.0073	mg/L					
		Manganese		0.0050 U	0.010	0.0050	0.0016	mg/L					
		Sodium		0.050 U	0.10	0.050	0.034	mg/L					
		Nickel		0.025 U	0.050	0.025	0.013	mg/L					
		Lead		0.00050 U	0.0050	0.00050	0.00011	mg/L					
		Antimony		0.00050 U	0.0010	0.00050	0.00014	mg/L					
		Selenium		0.0050 U	0.010	0.0050	0.0037	mg/L					
		Thallium		0.00080 U	0.0010	0.00080	0.00068	mg/L					
		Vanadium		0.0050 U	0.010	0.0050	0.0018	mg/L					
		Zinc		0.0040 U	0.010	0.0040	0.0021	mg/L					
SW3005A6020A	LCS17176	Silver		0.24	0.0050	0.00050	0.00011	mg/L	0.25	98	85	116	
		Aluminum		0.48	0.050	0.025	0.010	mg/L	0.5	97	84	117	
		Arsenic		0.49	0.0050	0.0010	0.00067	mg/L	0.5	98	84	116	
		Barium		0.51	0.010	0.0010	0.00076	mg/L	0.5	102	86	114	
		Beryllium		0.48	0.0010	0.00050	0.00010	mg/L	0.5	96	83	121	
		Cadmium		0.50	0.0010	0.00050	0.00014	mg/L	0.5	100	87	115	
		Cobalt		0.52	0.010	0.00050	0.00028	mg/L	0.5	104	86	115	
		Chromium		0.51	0.050	0.025	0.020	mg/L	0.5	102	85	116	
		Copper		0.53	0.010	0.0075	0.0054	mg/L	0.5	105	85	118	
		Iron		0.48	0.050	0.030	0.029	mg/L	0.5	97	87	118	
		Potassium		4.7	0.50	0.10	0.039	mg/L	5	95	87	115	
		Magnesium		0.48	0.10	0.020	0.0073	mg/L	0.5	96	83	118	
		Manganese		0.49	0.010	0.0050	0.0016	mg/L	0.5	97	87	115	
		Sodium		4.8	0.10	0.050	0.034	mg/L	5	96	85	117	
		Nickel		0.51	0.050	0.025	0.013	mg/L	0.5	103	85	117	
		Lead		0.49	0.0050	0.00050	0.00011	mg/L	0.5	99	88	115	
		Antimony		0.49	0.0010	0.00050	0.00014	mg/L	0.5	99	85	117	
		Selenium		0.46	0.010	0.0050	0.0037	mg/L	0.5	91	80	120	
		Thallium		0.25	0.0010	0.00080	0.00068	mg/L	0.25	101	82	116	
		Vanadium		0.51	0.010	0.0050	0.0018	mg/L	0.5	102	86	115	
		Zinc		0.50	0.010	0.0040	0.0021	mg/L	0.5	100	83	119	

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R	Limits		RPD	RPD Limit
SW3005A6020A	LCSD17176	Silver		0.25	0.0050	0.00050	0.00011	mg/L	0.25	99	85	116	1	20
		Aluminum		0.50	0.050	0.025	0.010	mg/L	0.5	101	84	117	4	20
		Arsenic		0.49	0.0050	0.0010	0.00067	mg/L	0.5	97	84	116	0	20
		Barium		0.52	0.010	0.0010	0.00076	mg/L	0.5	104	86	114	2	20
		Beryllium		0.48	0.0010	0.00050	0.00010	mg/L	0.5	97	83	121	1	20
		Cadmium		0.51	0.0010	0.00050	0.00014	mg/L	0.5	102	87	115	2	20
		Cobalt		0.51	0.010	0.00050	0.00028	mg/L	0.5	102	86	115	2	20
		Chromium		0.51	0.050	0.025	0.020	mg/L	0.5	101	85	116	1	20
		Copper		0.52	0.010	0.0075	0.0054	mg/L	0.5	105	85	118	1	20
		Iron		0.49	0.050	0.030	0.029	mg/L	0.5	99	87	118	2	20
		Potassium		4.8	0.50	0.10	0.039	mg/L	5	96	87	115	1	20
		Magnesium		0.48	0.10	0.020	0.0073	mg/L	0.5	96	83	118	0	20
		Manganese		0.49	0.010	0.0050	0.0016	mg/L	0.5	99	87	115	2	20
		Sodium		4.8	0.10	0.050	0.034	mg/L	5	96	85	117	1	20
		Nickel		0.51	0.050	0.025	0.013	mg/L	0.5	101	85	117	1	20
		Lead		0.50	0.0050	0.00050	0.00011	mg/L	0.5	100	88	115	2	20
		Antimony		0.50	0.0010	0.00050	0.00014	mg/L	0.5	100	85	117	1	20
		Selenium		0.46	0.010	0.0050	0.0037	mg/L	0.5	93	80	120	1	20
		Thallium		0.26	0.0010	0.00080	0.00068	mg/L	0.25	102	82	116	1	20
		Vanadium		0.51	0.010	0.0050	0.0018	mg/L	0.5	102	86	115	0	20
		Zinc		0.49	0.010	0.0040	0.0021	mg/L	0.5	98	83	119	1	20
SW3005A6020A	MS17176	Silver	67798-018	0.24	0.0054	0.00054	0.00012	mg/L	0.268	90	85	116		
		Aluminum	67798-018	0.49	0.054	0.027	0.011	mg/L	0.535	91	84	117		
		Arsenic	67798-018	0.48	0.0054	0.0011	0.00072	mg/L	0.535	90	84	116		
		Barium	67798-018	0.58	0.011	0.0011	0.00081	mg/L	0.535	97	86	114		
		Beryllium	67798-018	0.48	0.0011	0.00054	0.00011	mg/L	0.535	91	83	121		
		Cadmium	67798-018	0.50	0.0011	0.00054	0.00015	mg/L	0.535	94	87	115		
		Cobalt	67798-018	0.49	0.011	0.00054	0.00030	mg/L	0.535	92	86	115		
		Chromium	67798-018	0.50	0.054	0.027	0.022	mg/L	0.535	93	85	116		
		Copper	67798-018	0.50	0.011	0.0080	0.0057	mg/L	0.535	93	85	118		
		Iron	67798-018	0.48	0.054	0.032	0.031	mg/L	0.535	89	87	118		
		Potassium	67798-018	5.5	0.54	0.11	0.042	mg/L	5.35	90	87	115		
		Magnesium	67798-018	9.4	0.11	0.021	0.0078	mg/L	0.53	90	83	118		
		Manganese	67798-018	0.49	0.011	0.0054	0.0017	mg/L	0.535	92	87	115		
		Sodium	67798-018	11	0.11	0.054	0.037	mg/L	5.3	93	85	117		
		Nickel	67798-018	0.49	0.054	0.027	0.013	mg/L	0.535	92	85	117		
		Lead	67798-018	0.50	0.0054	0.00054	0.00012	mg/L	0.535	93	88	115		
		Antimony	67798-018	0.51	0.0011	0.00054	0.00015	mg/L	0.535	96	85	117		
		Selenium	67798-018	0.45	0.011	0.0054	0.0040	mg/L	0.535	84	80	120		
		Thallium	67798-018	0.26	0.0011	0.00086	0.00073	mg/L	0.268	96	82	116		
		Vanadium	67798-018	0.50	0.011	0.0054	0.0019	mg/L	0.535	93	86	115		
		Zinc	67798-018	0.48	0.011	0.0043	0.0022	mg/L	0.535	89	83	119		

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R	Limits		RPD	RPD Limit
SW3005A6020A	MSD17176	Silver	67798-018	0.24	0.0054	0.00054	0.00012	mg/L	0.268	89	85	116	1	20
		Aluminum	67798-018	0.49	0.054	0.027	0.011	mg/L	0.535	91	84	117	0	20
		Arsenic	67798-018	0.48	0.0054	0.0011	0.00072	mg/L	0.535	91	84	116	1	20
		Barium	67798-018	0.58	0.011	0.0011	0.00081	mg/L	0.535	96	86	114	1	20
		Beryllium	67798-018	0.48	0.0011	0.00054	0.00011	mg/L	0.535	91	83	121	0	20
		Cadmium	67798-018	0.49	0.0011	0.00054	0.00015	mg/L	0.535	92	87	115	2	20
		Cobalt	67798-018	0.50	0.011	0.00054	0.00030	mg/L	0.535	93	86	115	1	20
		Chromium	67798-018	0.49	0.054	0.027	0.022	mg/L	0.535	92	85	116	1	20
		Copper	67798-018	0.50	0.011	0.0080	0.0057	mg/L	0.535	94	85	118	0	20
		Iron	67798-018	0.48	0.054	0.032	0.031	mg/L	0.535	91	87	118	1	20
		Potassium	67798-018	5.4	0.54	0.11	0.042	mg/L	5.35	87	87	115	3	20
		Magnesium	67798-018	9.5	0.11	0.021	0.0078	mg/L	0.53	116	83	118	1	20
		Manganese	67798-018	0.48	0.011	0.0054	0.0017	mg/L	0.535	90	87	115	2	20
		Sodium	67798-018	11	0.11	0.054	0.037	mg/L	5.3	91	85	117	1	20
		Nickel	67798-018	0.49	0.054	0.027	0.013	mg/L	0.535	91	85	117	1	20
		Lead	67798-018	0.50	0.0054	0.00054	0.00012	mg/L	0.535	93	88	115	0	20
		Antimony	67798-018	0.50	0.0011	0.00054	0.00015	mg/L	0.535	94	85	117	2	20
		Selenium	67798-018	0.45	0.011	0.0054	0.0040	mg/L	0.535	84	80	120	1	20
		Thallium	67798-018	0.25	0.0011	0.00086	0.00073	mg/L	0.268	95	82	116	2	20
		Vanadium	67798-018	0.50	0.011	0.0054	0.0019	mg/L	0.535	93	86	115	0	20
		Zinc	67798-018	0.48	0.011	0.0043	0.0022	mg/L	0.535	89	83	119	0	20

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R	Limits	RPD	RPD Limit
SW3005A6020A	BLK17194	Silver		0.00050 U	0.0050	0.00050	0.00011	mg/L					
		Aluminum		0.025 U	0.050	0.025	0.010	mg/L					
		Arsenic		0.0010 U	0.0050	0.0010	0.00067	mg/L					
		Barium		0.0010 U	0.010	0.0010	0.00076	mg/L					
		Beryllium		0.00050 U	0.0010	0.00050	0.00010	mg/L					
		Cadmium		0.00050 U	0.0010	0.00050	0.00014	mg/L					
		Cobalt		0.00010 U	0.010	0.00010	0.000020	mg/L					
		Chromium		0.025 U	0.050	0.025	0.020	mg/L					
		Copper		0.0075 U	0.010	0.0075	0.0054	mg/L					
		Iron		0.030 U	0.050	0.030	0.029	mg/L					
		Potassium		0.10 U	0.50	0.10	0.039	mg/L					
		Magnesium		0.020 U	0.10	0.020	0.0073	mg/L					
		Manganese		0.0050 U	0.010	0.0050	0.0016	mg/L					
		Sodium		0.050 U	0.10	0.050	0.034	mg/L					
		Nickel		0.025 U	0.050	0.025	0.013	mg/L					
		Lead		0.00050 U	0.0050	0.00050	0.00011	mg/L					
		Antimony		0.00050 U	0.0010	0.00050	0.00014	mg/L					
		Selenium		0.0050 U	0.010	0.0050	0.0037	mg/L					
		Thallium		0.00080 U	0.0010	0.00080	0.00068	mg/L					
		Vanadium		0.0050 U	0.010	0.0050	0.0018	mg/L					
		Zinc		0.0040 U	0.010	0.0040	0.0021	mg/L					
SW3005A6020A	LCS17194	Silver		0.23	0.0050	0.00050	0.00011	mg/L	0.25	92	85	116	
		Aluminum		0.48	0.050	0.025	0.010	mg/L	0.5	97	84	117	
		Arsenic		0.47	0.0050	0.0010	0.00067	mg/L	0.5	94	84	116	
		Barium		0.48	0.010	0.0010	0.00076	mg/L	0.5	95	86	114	
		Beryllium		0.42	0.0010	0.00050	0.00010	mg/L	0.5	85	83	121	
		Cadmium		0.46	0.0010	0.00050	0.00014	mg/L	0.5	91	87	115	
		Cobalt		0.48	0.010	0.00050	0.00028	mg/L	0.5	96	86	115	
		Chromium		0.47	0.050	0.025	0.020	mg/L	0.5	94	85	116	
		Copper		0.46	0.010	0.0075	0.0054	mg/L	0.5	92	85	118	
		Iron		0.48	0.050	0.030	0.029	mg/L	0.5	97	87	118	
		Potassium		4.7	0.50	0.10	0.039	mg/L	5	94	87	115	
		Magnesium		0.49	0.10	0.020	0.0073	mg/L	0.5	97	83	118	
		Manganese		0.50	0.010	0.0050	0.0016	mg/L	0.5	100	87	115	
		Sodium		4.8	0.10	0.050	0.034	mg/L	5	95	85	117	
		Nickel		0.48	0.050	0.025	0.013	mg/L	0.5	95	85	117	
		Lead		0.47	0.0050	0.00050	0.00011	mg/L	0.5	94	88	115	
		Antimony		0.43	0.0010	0.00050	0.00014	mg/L	0.5	87	85	117	
		Selenium		0.48	0.010	0.0050	0.0037	mg/L	0.5	96	80	120	
		Thallium		0.23	0.0010	0.00080	0.00068	mg/L	0.25	91	82	116	
		Vanadium		0.49	0.010	0.0050	0.0018	mg/L	0.5	98	86	115	
		Zinc		0.48	0.010	0.0040	0.0021	mg/L	0.5	96	83	119	

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R	Limits		RPD	RPD Limit
SW3005A6020A	LCSD17194	Silver		0.23	0.0050	0.00050	0.00011	mg/L	0.25	92	85	116	1	20
		Aluminum		0.49	0.050	0.025	0.010	mg/L	0.5	97	84	117	1	20
		Arsenic		0.48	0.0050	0.0010	0.00067	mg/L	0.5	95	84	116	2	20
		Barium		0.49	0.010	0.0010	0.00076	mg/L	0.5	98	86	114	3	20
		Beryllium		0.43	0.0010	0.00050	0.00010	mg/L	0.5	85	83	121	1	20
		Cadmium		0.46	0.0010	0.00050	0.00014	mg/L	0.5	93	87	115	1	20
		Cobalt		0.49	0.010	0.00050	0.00028	mg/L	0.5	99	86	115	2	20
		Chromium		0.47	0.050	0.025	0.020	mg/L	0.5	94	85	116	0	20
		Copper		0.46	0.010	0.0075	0.0054	mg/L	0.5	93	85	118	0	20
		Iron		0.50	0.050	0.030	0.029	mg/L	0.5	100	87	118	4	20
		Potassium		4.8	0.50	0.10	0.039	mg/L	5	95	87	115	1	20
		Magnesium		0.49	0.10	0.020	0.0073	mg/L	0.5	97	83	118	0	20
		Manganese		0.51	0.010	0.0050	0.0016	mg/L	0.5	101	87	115	1	20
		Sodium		4.8	0.10	0.050	0.034	mg/L	5	97	85	117	2	20
		Nickel		0.47	0.050	0.025	0.013	mg/L	0.5	95	85	117	0	20
		Lead		0.48	0.0050	0.00050	0.00011	mg/L	0.5	96	88	115	3	20
		Antimony		0.44	0.0010	0.00050	0.00014	mg/L	0.5	88	85	117	1	20
		Selenium		0.50	0.010	0.0050	0.0037	mg/L	0.5	100	80	120	4	20
		Thallium		0.23	0.0010	0.00080	0.00068	mg/L	0.25	92	82	116	2	20
		Vanadium		0.48	0.010	0.0050	0.0018	mg/L	0.5	97	86	115	2	20
		Zinc		0.49	0.010	0.0040	0.0021	mg/L	0.5	97	83	119	1	20
SW3005A6020A	MS17194	Silver	67798-007	0.22	0.0050	0.00050	0.00011	mg/L	0.25	90	85	116		
		Aluminum	67798-007	0.49	0.050	0.025	0.010	mg/L	0.5	99	84	117		
		Arsenic	67798-007	0.48	0.0050	0.0010	0.00067	mg/L	0.5	96	84	116		
		Barium	67798-007	0.54	0.010	0.0010	0.00076	mg/L	0.5	97	86	114		
		Beryllium	67798-007	0.44	0.0010	0.00050	0.00010	mg/L	0.5	87	83	121		
		Cadmium	67798-007	0.45	0.0010	0.00050	0.00014	mg/L	0.5	91	87	115		
		Cobalt	67798-007	0.49	0.010	0.00050	0.00028	mg/L	0.5	97	86	115		
		Chromium	67798-007	0.48	0.050	0.025	0.020	mg/L	0.5	95	85	116		
		Copper	67798-007	0.46	0.010	0.0075	0.0054	mg/L	0.5	92	85	118		
		Iron	67798-007	0.50	0.050	0.030	0.029	mg/L	0.5	99	87	118		
		Potassium	67798-007	5.5	0.50	0.10	0.039	mg/L	5	87	87	115		
		Magnesium	67798-007	9.9	0.10	0.020	0.0073	mg/L	0.5	94	83	118		
		Manganese	67798-007	0.50	0.010	0.0050	0.0016	mg/L	0.5	101	87	115		
		Sodium	67798-007	12	0.10	0.050	0.034	mg/L	5	94	85	117		
		Nickel	67798-007	0.47	0.050	0.025	0.013	mg/L	0.5	94	85	117		
		Lead	67798-007	0.48	0.0050	0.00050	0.00011	mg/L	0.5	96	88	115		
		Antimony	67798-007	0.44	0.0010	0.00050	0.00014	mg/L	0.5	87	85	117		
		Selenium	67798-007	0.50	0.010	0.0050	0.0037	mg/L	0.5	100	80	120		
		Thallium	67798-007	0.23	0.0010	0.00080	0.00068	mg/L	0.25	92	82	116		
		Vanadium	67798-007	0.51	0.010	0.0050	0.0018	mg/L	0.5	101	86	115		
		Zinc	67798-007	0.49	0.010	0.0040	0.0021	mg/L	0.5	97	83	119		

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R		Limits		RPD	RPD Limit
SW3005A6020A	MSD17194	Silver	67798-007	0.22	0.0050	0.00050	0.00011	mg/L	0.25	90		85	116	0	20
		Aluminum	67798-007	0.51	0.050	0.025	0.010	mg/L	0.5	102		84	117	3	20
		Arsenic	67798-007	0.48	0.0050	0.0010	0.00067	mg/L	0.5	95		84	116	1	20
		Barium	67798-007	0.53	0.010	0.0010	0.00076	mg/L	0.5	95		86	114	2	20
		Beryllium	67798-007	0.43	0.0010	0.00050	0.00010	mg/L	0.5	86		83	121	1	20
		Cadmium	67798-007	0.45	0.0010	0.00050	0.00014	mg/L	0.5	90		87	115	1	20
		Cobalt	67798-007	0.48	0.010	0.00050	0.00028	mg/L	0.5	96		86	115	1	20
		Chromium	67798-007	0.48	0.050	0.025	0.020	mg/L	0.5	96		85	116	0	20
		Copper	67798-007	0.45	0.010	0.0075	0.0054	mg/L	0.5	91		85	118	1	20
		Iron	67798-007	0.51	0.050	0.030	0.029	mg/L	0.5	101		87	118	2	20
		Potassium	67798-007	5.5	0.50	0.10	0.039	mg/L	5	86	*	87	115	1	20
		Magnesium	67798-007	9.9	0.10	0.020	0.0073	mg/L	0.5	98		83	118	0	20
		Manganese	67798-007	0.51	0.010	0.0050	0.0016	mg/L	0.5	101		87	115	1	20
		Sodium	67798-007	12	0.10	0.050	0.034	mg/L	5	92		85	117	1	20
		Nickel	67798-007	0.47	0.050	0.025	0.013	mg/L	0.5	94		85	117	1	20
		Lead	67798-007	0.49	0.0050	0.00050	0.00011	mg/L	0.5	98		88	115	2	20
		Antimony	67798-007	0.43	0.0010	0.00050	0.00014	mg/L	0.5	87		85	117	1	20
		Selenium	67798-007	0.49	0.010	0.0050	0.0037	mg/L	0.5	97		80	120	3	20
		Thallium	67798-007	0.23	0.0010	0.00080	0.00068	mg/L	0.25	91		82	116	0	20
		Vanadium	67798-007	0.50	0.010	0.0050	0.0018	mg/L	0.5	101		86	115	0	20
		Zinc	67798-007	0.48	0.010	0.0040	0.0021	mg/L	0.5	96		83	119	1	20
SW7470A	BLK17147	Mercury		0.00015 U	0.00020	0.00015	0.00012	mg/L							
SW7470A	LCS17147	Mercury		0.0019	0.00020	0.00015	0.00012	mg/L	0.002	96		82	119		
SW7470A	LCSD17147	Mercury		0.0018	0.00020	0.00015	0.00012	mg/L	0.002	89		82	119	8	20
SW7470A	MS17147	Mercury	67798-007	0.0019	0.00020	0.00015	0.00012	mg/L	0.002	94		82	119		
SW7470A	MSD17147	Mercury	67798-007	0.0018	0.00020	0.00015	0.00012	mg/L	0.002	90		82	119	4	20
SW7470A	BLK17202	Mercury		0.00015 U	0.00020	0.00015	0.00012	mg/L							
SW7470A	LCS17202	Mercury		0.0021	0.00020	0.00015	0.00012	mg/L	0.002	104		82	119		
SW7470A	LCSD17202	Mercury		0.0021	0.00020	0.00015	0.00012	mg/L	0.002	103		82	119	0	20
SW7470A	MS17202	Mercury	67798-012	0.0018	0.00020	0.00015	0.00012	mg/L	0.002	91		82	119		
SW7470A	MSD17202	Mercury	67798-012	0.0017	0.00020	0.00015	0.00012	mg/L	0.002	84		82	119	8	20

AROMATIC HYDROCARBON BREAKTHROUGH CALCULATION

Method: MADEP EPH 2019 Rev 2.1

	lcs17156 Aliphatic Breakthrough (%)	Acceptance Criteria	Date of Analysis
naphthalene	0.1%	<5.0%	12/7/2023
2-methylnaphthalene	0.1%	<5.0%	12/7/2023

	lcsd17156 Aliphatic Breakthrough (%)	Acceptance Criteria	Date of Analysis
naphthalene	0.0%	<5.0%	12/7/2023
2-methylnaphthalene	0.1%	<5.0%	12/7/2023

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AROMATIC HYDROCARBON BREAKTHROUGH CALCULATION

Method: MADEP EPH 2019 Rev 2.1

	lcsd17208 Aliphatic Breakthrough (%)	Acceptance Criteria	Date of Analysis
naphthalene	0.0%	<5.0%	12/8/2023
2-methylnaphthalene	0.0%	<5.0%	12/8/2023

	lcs17208 Aliphatic Breakthrough (%)	Acceptance Criteria	Date of Analysis
naphthalene	0.0%	<5.0%	12/8/2023
2-methylnaphthalene	0.0%	<5.0%	12/8/2023

Supporting Documentation & Chromatograms

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Data File:	L:\VOA\Excel Reports\2023\v8111611
Analysis Group:	8260/8021/624
Field ID:	SY-OBMW2-110823 1.8E+07
Sample:	67836-01 5mL Dow Salvage Yard
Misc:	5 CRE
Import File Name	v8 111623 g DoD
TestGroupID	V8260DoD_A
Aqueous or Soil? (A or S)	A
Solid amount (g)	
Methanol volume (mL)	
Percent Solid (%)	
Soil Prep Date	
Weight:	
Volume:	
Lab#:	67836-001
AnalysisDate:	11/16/2023
AnalysisTime:	14:52
Dilution:	1
AnalyzedBy:	LMM v8111611.D
QC_Code:	
Prep#:	

Reviewer Checks:

- Quant Report: Reviewed, Analyst Initials & Date
- Chromatogram Checked, Major peaks identified
- Results consistent w/ other attached analyses
- Reanalysis reason noted
- Substitute dilution data checked
- Correct dilution and reason clear or noted
- Flags checked (Expiration, F+, Over Cal, Surr, Aspen, QC)
- Other QC failures or issues noted in Aspen
- Correct data file and/or date/time in Aspen

Notes:

Reviewer Initials & Date: 11/17/23

#	Surrogate Standards	Import Value (as ug/L)	Recovery	Flag	QC Limits	Surrogate True Values
32	SS 1,2-dichloroethane-D4	8.86	89%		60-140	10
36	SS dibromofluoromethane	9.67	97%		78-114	10
51	SS toluene-D8	9.82	98%		88-110	10
67	SS 4-bromofluorobenzene	9.96	100%		86-115	10
41	SS a,a,a-trifluorotoluene	0.00	0%		70-130*	20

	AnalyteName	Concentration (ug/L)		AnalyteName	Concentration (ug/L)
2	dichlorodifluoromethane	0	56	1,3-dichloropropane	0
3	chloromethane	0	57	dibromochloromethane	0
4	vinyl chloride	0	58	1,2-dibromoethane (EDB)	0
5	bromomethane	0	59	chlorobenzene	0
6	chloroethane	0	60	1,1,1,2-tetrachloroethane	0
7	trichlorofluoromethane	0	61	ethylbenzene	0
8	diethylether	0	62	m&p-xylenes	0
9	acetone	-1.194864714	63	o-xylene	0
11	1,1-dichloroethene	0	64	styrene	0
13	t-butanol (TBA)	0	65	bromoform	0
15	methylene chloride	0	66	isopropylbenzene	0
16	carbon disulfide	0	69	bromobenzene	0
18	methyl-t-butyl ether (MTBE)	0	70	1,1,2,2-tetrachloroethane	0
19	trans-1,2-dichloroethene	0	71	1,2,3-trichloropropane	0
20	isopropyl ether (DIPE)	0	72	n-propylbenzene	0
22	1,1-dichloroethane	0	73	2-chlorotoluene	0
23	2-butanone (MEK)	0	74	4-chlorotoluene	0
24	ethyl-t-butyl ether (ETBE)	0	75	1,3,5-trimethylbenzene	0
25	2,2-dichloropropane	0	76	tert-butylbenzene	0
26	cis-1,2-dichloroethene	0	77	1,2,4-trimethylbenzene	0
27	bromochloromethane	0	79	sec-butylbenzene	0
28	chloroform	0	80	1,3-dichlorobenzene	0
29	tetrahydrofuran (THF)	0	81	4-isopropyltoluene	0
30	1,1,1-trichloroethane	0	82	1,4-dichlorobenzene	0
33	carbon tetrachloride	0	84	1,2-dichlorobenzene	0
34	1,1-dichloropropene	0	85	n-butylbenzene	0
35	benzene	0	86	1,2-dibromo-3-chloropropane (DBCP)	0
37	1,2-dichloroethane	0	88	1,2,4-trichlorobenzene	0
38	t-amyl-methyl ether (TAME)	0	89	hexachlorobutadiene	0
39	trichloroethene	0	90	naphthalene	0
42	1,2-dichloropropane	0	91	1,2,3-trichlorobenzene	0
43	dibromomethane	0	87	1,3,5-trichlorobenzene	0
44	bromodichloromethane	0	12	1,1,2-trichloro-1,2,2-trifluoroethane	0
45	1,4-dioxane	0	14	methyl acetate	0
47	4-methyl-2-pentanone (MIBK)	0	21	vinyl acetate	0
48	2-hexanone	0	31	cyclohexane	0
49	cis-1,3-dichloropropene	0	40	methylcyclohexane	0
50	toluene	0	10	acrolein	0
52	trans-1,3-dichloropropene	0	17	acrylonitrile	0
53	1,1,2-trichloroethane	0	46	2-chloroethylvinylether (2-CEVE)	0
55	tetrachloroethene	0		Total Xylenes	0

Quantitation Report (QT Reviewed)

Data Path : X:\V8\2023\Nov23\111623\
Data File : v8111611.D
Acq On : 16 Nov 2023 02:52 pm
Operator : lmm
Sample : 67836-01 5mL
Misc : 5
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Nov 16 17:03:13 2023
Quant Method : X:\V8\methods\V88260090823A.M
Quant Title : V5 Method 8260D
QLast Update : Mon Oct 30 11:37:50 2023
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) IS fluorobenzene	8.001	96	125505	10.00	ug/L	0.00
54) IS chlorobenzene-D5	11.215	119	28664	10.00	ug/L	0.00
68) IS 1,4-dichlorobenzene-D4	13.634	152	44203	10.00	ug/L	0.00
92) IS 1,4-Dioxane-d8	8.829	96	818	10.00	ug/L	0.00
System Monitoring Compounds						
32) SS 1,2-dichloroethane-D4	7.646	65	31800	8.86	ug/L	0.00
Spiked Amount 10.000	Range 60 - 140		Recovery = 88.60%			
36) SS dibromofluoromethane	7.076	111	29732	9.67	ug/L	0.00
Spiked Amount 10.000	Range 78 - 114		Recovery = 96.70%			
41) SS a,a,a-trifluorotoluene	0.000	146	0	0.00	ug/L	
Spiked Amount 20.000	Range 70 - 130		Recovery = 0.00%#			
51) SS toluene-D8	9.679	98	290826	9.82	ug/L	0.00
Spiked Amount 10.000	Range 88 - 110		Recovery = 98.20%			
67) SS 4-bromofluorobenzene	12.431	174	32651	9.96	ug/L	0.00
Spiked Amount 10.000	Range 86 - 115		Recovery = 99.60%			
83) NA 1,2-dichlorobenzene-D4	13.634	152	44203	0.00	ug/L	0.00
Spiked Amount 25.000	Range 15 - 25		Recovery = 0.00%#			
Target Compounds						Qvalue
93] 1,4-dioxane SIM	8.886	88	68	0.435	ug/L #	100

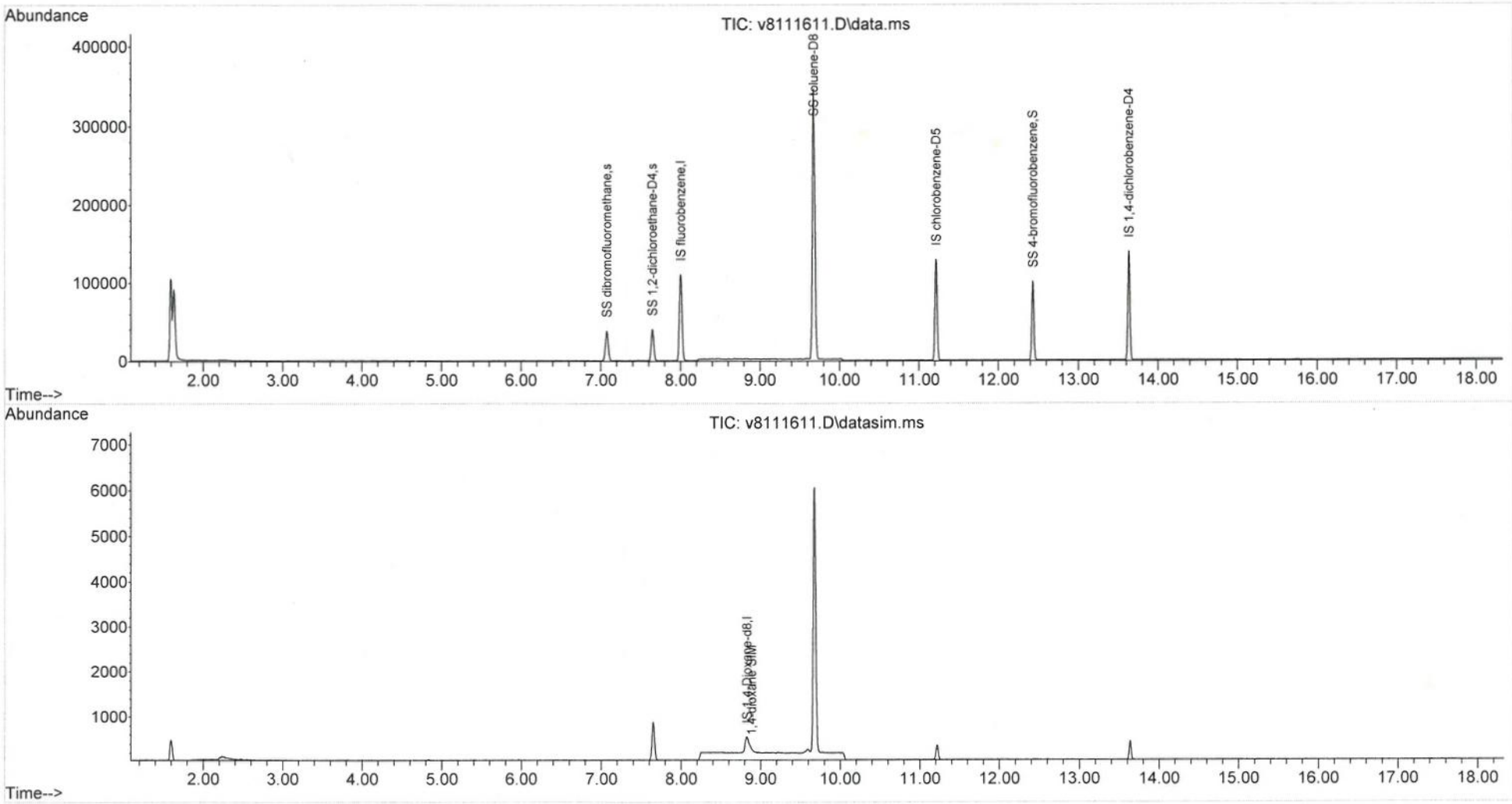
(#) = qualifier out of range (m) = manual integration (+) = signals summed

NOV 16 2023

Quantitation Report (QT Reviewed)

Data Path : X:\V8\2023\Nov23\111623\
Data File : v8111611.D
Acq On : 16 Nov 2023 02:52 pm
Operator : lmm
Sample : 67836-01 5mL
Misc : 5
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Nov 16 17:03:13 2023
Quant Method : X:\V8\methods\V88260090823A.M
Quant Title : V5 Method 8260D
QLast Update : Mon Oct 30 11:37:50 2023
Response via : Initial Calibration



File:	L:\VOA\Excel Reports\2023\v8111612
Analysis Group:	8260/8021/624
Field ID:	SY-OBMW1-110823 1.8E+07
Sample:	67836-02 5mL Dow Salvage Yard
Misc:	5 CRE
Import File Name	v8 111623 g DoD
TestGroupID	V8260DoD_A
Aqueous or Soil? (A or S)	A
Solid amount (g)	
Methanol volume (mL)	
Percent Solid (%)	
Soil Prep Date	
Weight:	
Volume:	
Lab#:	67836-002
AnalysisDate:	11/16/2023
AnalysisTime:	15:17
Dilution:	1
AnalyzedBy:	LMM v8111612.D
QC_Code:	
Prep#:	

Reviewer Checks:

- Quant Report: Reviewed, Analyst Initials & Date
- Chromatogram Checked, Major peaks identified
- Results consistent w/ other attached analyses
- Reanalysis reason noted
- Substitute dilution data checked
- Correct dilution and reason clear or noted
- Flags checked (Expiration, F+, Over Cal, Surr, Aspen, QC)
- Other QC failures or issues noted in Aspen
- Correct data file and/or date/time in Aspen

Notes:

11/17/23

Reviewer Initials & Date:

#	Surrogate Standards	Import Value (as ug/L)	Recovery	Flag	QC Limits	Surrogate True Values
32	SS 1,2-dichloroethane-D4	9.50	**95%**		60-140	10
36	SS dibromofluoromethane	9.90	**99%**		78-114	10
51	SS toluene-D8	10.34	**103%**		88-110	10
67	SS 4-bromofluorobenzene	9.74	**97%**		86-115	10
41	SS a,a,a-trifluorotoluene	0.00	**0%**		70-130*	20

	AnalyteName	Concentration (ug/L)
2	dichlorodifluoromethane	0
3	chloromethane	0
4	vinyl chloride	0
5	bromomethane	0
6	chloroethane	0
7	trichlorofluoromethane	0
8	diethylether	0
9	acetone	-0.044086141
11	1,1-dichloroethene	0
13	t-butanol (TBA)	0
15	methylene chloride	0
16	carbon disulfide	0
18	methyl-t-butyl ether (MTBE)	0
19	trans-1,2-dichloroethene	0
20	isopropyl ether (DIPE)	0
22	1,1-dichloroethane	0
23	2-butanone (MEK)	0
24	ethyl-t-butyl ether (ETBE)	0
25	2,2-dichloropropane	0
26	cis-1,2-dichloroethene	0
27	bromochloromethane	0
28	chloroform	0
29	tetrahydrofuran (THF)	0
30	1,1,1-trichloroethane	0
33	carbon tetrachloride	0
34	1,1-dichloropropene	0
35	benzene	0
37	1,2-dichloroethane	0
38	t-amyl-methyl ether (TAME)	0
39	trichloroethene	0
42	1,2-dichloropropane	0
43	dibromomethane	0
44	bromodichloromethane	0
45	1,4-dioxane	0
47	4-methyl-2-pentanone (MIBK)	0
48	2-hexanone	0
49	cis-1,3-dichloropropene	0
50	toluene	-0.153233784
52	trans-1,3-dichloropropene	0
53	1,1,2-trichloroethane	0
55	tetrachloroethene	0

	AnalyteName	Concentration (ug/L)
56	1,3-dichloropropane	0
57	dibromochloromethane	0
58	1,2-dibromoethane (EDB)	0
59	chlorobenzene	0
60	1,1,1,2-tetrachloroethane	0
61	ethylbenzene	0
62	m&p-xylenes	0
63	o-xylene	0
64	styrene	0
65	bromoform	0
66	isopropylbenzene	0
69	bromobenzene	0
70	1,1,2,2-tetrachloroethane	0
71	1,2,3-trichloropropane	0
72	n-propylbenzene	0
73	2-chlorotoluene	0
74	4-chlorotoluene	0
75	1,3,5-trimethylbenzene	0
76	tert-butylbenzene	0
77	1,2,4-trimethylbenzene	0
79	sec-butylbenzene	0
80	1,3-dichlorobenzene	0
81	4-isopropyltoluene	0
82	1,4-dichlorobenzene	0
84	1,2-dichlorobenzene	0
85	n-butylbenzene	0
86	1,2-dibromo-3-chloropropane (DBCP)	0
88	1,2,4-trichlorobenzene	0
89	hexachlorobutadiene	0
90	naphthalene	0
91	1,2,3-trichlorobenzene	0
87	1,3,5-trichlorobenzene	0
12	1,1,2-trichloro-1,2,2-trifluoroethane	0
14	methyl acetate	0
21	vinyl acetate	0
31	cyclohexane	0
40	methylcyclohexane	0
10	acrolein	0
17	acrylonitrile	0
46	2-chloroethylvinylether (2-CEVE)	0
	Total Xylenes	0

Quantitation Report (QT Reviewed)

Data Path : X:\V8\2023\Nov23\111623\
Data File : v8111612.D
Acq On : 16 Nov 2023 03:17 pm
Operator : lmm
Sample : 67836-02 5mL
Misc : 5
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Nov 16 17:03:17 2023
Quant Method : X:\V8\methods\V88260090823A.M
Quant Title : V5 Method 8260D
QLast Update : Mon Oct 30 11:37:50 2023
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) IS fluorobenzene	8.001	96	120968	10.00	ug/L	0.00
54) IS chlorobenzene-D5	11.218	119	28884	10.00	ug/L	0.00
68) IS 1,4-dichlorobenzene-D4	13.637	152	44771	10.00	ug/L	0.00
92) IS 1,4-Dioxane-d8	8.826	96	811	10.00	ug/L	0.00
System Monitoring Compounds						
32) SS 1,2-dichloroethane-D4	7.646	65	32871	9.50	ug/L	0.00
Spiked Amount 10.000	Range 60 - 140		Recovery = 95.00%			
36) SS dibromofluoromethane	7.076	111	29357	9.90	ug/L	0.00
Spiked Amount 10.000	Range 78 - 114		Recovery = 99.00%			
41) SS a,a,a-trifluorotoluene	0.000	146	0	0.00	ug/L	
Spiked Amount 20.000	Range 70 - 130		Recovery = 0.00%#			
51) SS toluene-D8	9.677	98	295144	10.34	ug/L	0.00
Spiked Amount 10.000	Range 88 - 110		Recovery = 103.40%			
67) SS 4-bromofluorobenzene	12.434	174	32173	9.74	ug/L	0.00
Spiked Amount 10.000	Range 86 - 115		Recovery = 97.40%			
83) NA 1,2-dichlorobenzene-D4	13.637	152	44771	0.00	ug/L	0.00
Spiked Amount 25.000	Range 15 - 25		Recovery = 0.00%#			

Target Compounds Qvalue

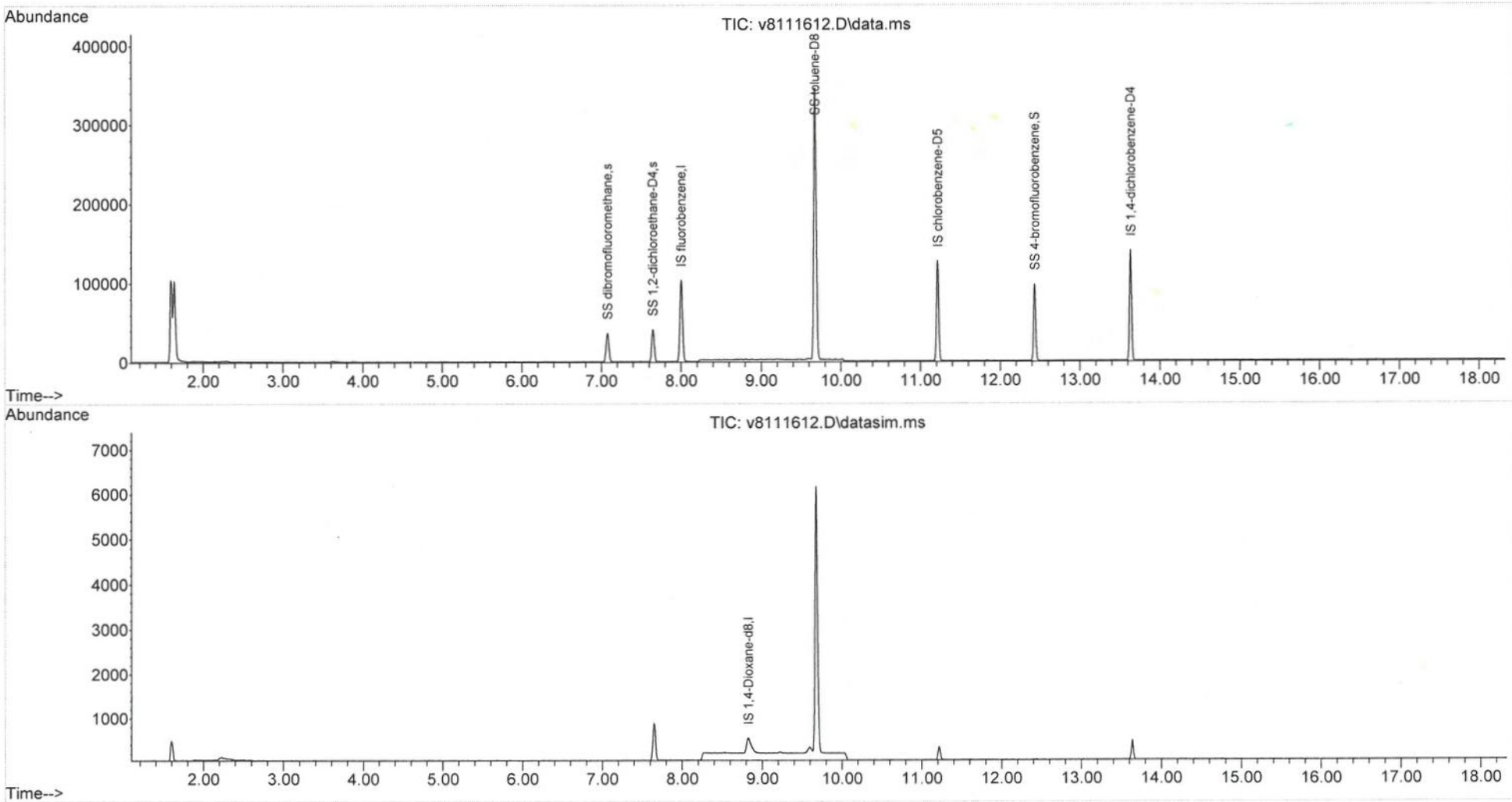
(#) = qualifier out of range (m) = manual integration (+) = signals summed

NOV 16 2023

Quantitation Report (QT Reviewed)

Data Path : X:\V8\2023\Nov23\111623\
Data File : v8111612.D
Acq On : 16 Nov 2023 03:17 pm
Operator : lmm
Sample : 67836-02 5mL
Misc : 5
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Nov 16 17:03:17 2023
Quant Method : X:\V8\methods\V88260090823A.M
Quant Title : V5 Method 8260D
QLast Update : Mon Oct 30 11:37:50 2023
Response via : Initial Calibration



This File	L:\VOA\Excel Reports\2023\v8111613
Analysis Group:	8260/8021/624
Field ID:	SY-OBMW9-110823 1.8E+07
Sample:	67836-03 5mL Dow Salvage Yard
Misc:	5 CRE
Import File Name	v8 111623 g DoD
TestGroupID	V8260DoD_A
Aqueous or Soil? (A or S)	A
Solid amount (g)	
Methanol volume (mL)	
Percent Solid (%)	
Soil Prep Date	
Weight:	
Volume:	
Lab#:	67836-003
AnalysisDate:	11/16/2023
AnalysisTime:	15:43
Dilution:	1
AnalyzedBy:	LMM v8111613.D
QC_Code:	
Prep#:	

Reviewer Checks:

- Quant Report: Reviewed, Analyst Initials & Date
- Chromatogram Checked, Major peaks identified
- Results consistent w/ other attached analyses
- Reanalysis reason noted
- Substitute dilution data checked
- Correct dilution and reason clear or noted
- Flags checked (Expiration, F+, Over Cal, Surr, Aspen, QC)
- Other QC failures or issues noted in Aspen
- Correct data file and/or date/time in Aspen

Notes:

Reviewer Initials & Date: 11/17/23

#	Surrogate Standards	Import Value (as ug/L)	Recovery	Flag	QC Limits	Surrogate True Values
32	SS 1,2-dichloroethane-D4	9.06	91%		60-140	10
36	SS dibromofluoromethane	9.62	96%		78-114	10
51	SS toluene-D8	10.44	104%		88-110	10
67	SS 4-bromofluorobenzene	9.73	97%		86-115	10
41	SS a,a,a-trifluorotoluene	0.00	0%		70-130*	20

	AnalyteName	Concentration (ug/L)
2	dichlorodifluoromethane	0
3	chloromethane	0
4	vinyl chloride	0
5	bromomethane	0
6	chloroethane	0
7	trichlorofluoromethane	0
8	diethylether	0
9	acetone	0.418967788
11	1,1-dichloroethene	0
13	t-butanol (TBA)	0
15	methylene chloride	0
16	carbon disulfide	0
18	methyl-t-butyl ether (MTBE)	0
19	trans-1,2-dichloroethene	0
20	isopropyl ether (DIPE)	0
22	1,1-dichloroethane	0
23	2-butanone (MEK)	0
24	ethyl-t-butyl ether (ETBE)	0
25	2,2-dichloropropane	0
26	cis-1,2-dichloroethene	0
27	bromochloromethane	0
28	chloroform	0
29	tetrahydrofuran (THF)	0
30	1,1,1-trichloroethane	0
33	carbon tetrachloride	0
34	1,1-dichloropropene	0
35	benzene	0
37	1,2-dichloroethane	0
38	t-amyl-methyl ether (TAME)	0
39	trichloroethene	0
42	1,2-dichloropropane	0
43	dibromomethane	0
44	bromodichloromethane	0
45	1,4-dioxane	0
47	4-methyl-2-pentanone (MIBK)	0
48	2-hexanone	0
49	cis-1,3-dichloropropene	0
50	toluene	0
52	trans-1,3-dichloropropene	0
53	1,1,2-trichloroethane	0
55	tetrachloroethene	0

	AnalyteName	Concentration (ug/L)
56	1,3-dichloropropane	0
57	dibromochloromethane	0
58	1,2-dibromoethane (EDB)	0
59	chlorobenzene	0
60	1,1,1,2-tetrachloroethane	0
61	ethylbenzene	0
62	m&p-xylenes	0
63	o-xylene	0
64	styrene	0
65	bromoform	0
66	isopropylbenzene	0
69	bromobenzene	0
70	1,1,2,2-tetrachloroethane	0
71	1,2,3-trichloropropane	0
72	n-propylbenzene	0
73	2-chlorotoluene	0
74	4-chlorotoluene	0
75	1,3,5-trimethylbenzene	0
76	tert-butylbenzene	0
77	1,2,4-trimethylbenzene	0
79	sec-butylbenzene	0
80	1,3-dichlorobenzene	0
81	4-isopropyltoluene	0
82	1,4-dichlorobenzene	0
84	1,2-dichlorobenzene	0
85	n-butylbenzene	0
86	1,2-dibromo-3-chloropropane (DBCP)	0
88	1,2,4-trichlorobenzene	0
89	hexachlorobutadiene	0
90	naphthalene	0
91	1,2,3-trichlorobenzene	0
87	1,3,5-trichlorobenzene	0
12	1,1,2-trichloro-1,2,2-trifluoroethane	0
14	methyl acetate	0
21	vinyl acetate	0
31	cyclohexane	0
40	methylcyclohexane	0
10	acrolein	0
17	acrylonitrile	0
46	2-chloroethylvinylether (2-CEVE)	0
	Total Xylenes	0

Quantitation Report (QT Reviewed)

Data Path : X:\V8\2023\Nov23\111623\
Data File : v8111613.D
Acq On : 16 Nov 2023 03:43 pm
Operator : lmm
Sample : 67836-03 5mL
Misc : 5
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Nov 16 17:03:22 2023
Quant Method : X:\V8\methods\V88260090823A.M
Quant Title : V5 Method 8260D
QLast Update : Mon Oct 30 11:37:50 2023
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) IS fluorobenzene	8.001	96	121131	10.00	ug/L	0.00
54) IS chlorobenzene-D5	11.217	119	28967	10.00	ug/L	0.00
68) IS 1,4-dichlorobenzene-D4	13.637	152	43805	10.00	ug/L	0.00
92) IS 1,4-Dioxane-d8	8.827	96	854	10.00	ug/L	# 0.00
System Monitoring Compounds						
32) SS 1,2-dichloroethane-D4	7.646	65	31384	9.06	ug/L	0.00
Spiked Amount 10.000	Range 60 - 140		Recovery = 90.60%			
36) SS dibromofluoromethane	7.076	111	28573	9.62	ug/L	0.00
Spiked Amount 10.000	Range 78 - 114		Recovery = 96.20%			
41) SS a,a,a-trifluorotoluene	0.000	146	0	0.00	ug/L	
Spiked Amount 20.000	Range 70 - 130		Recovery = 0.00%#			
51) SS toluene-D8	9.677	98	298168	10.44	ug/L	0.00
Spiked Amount 10.000	Range 88 - 110		Recovery = 104.40%			
67) SS 4-bromofluorobenzene	12.434	174	32219	9.73	ug/L	0.00
Spiked Amount 10.000	Range 86 - 115		Recovery = 97.30%			
83) NA 1,2-dichlorobenzene-D4	13.637	152	43805	0.00	ug/L	0.00
Spiked Amount 25.000	Range 15 - 25		Recovery = 0.00%#			
Target Compounds						Qvalue
9) acetone	3.878	43	1264	0.419	ug/L #	58

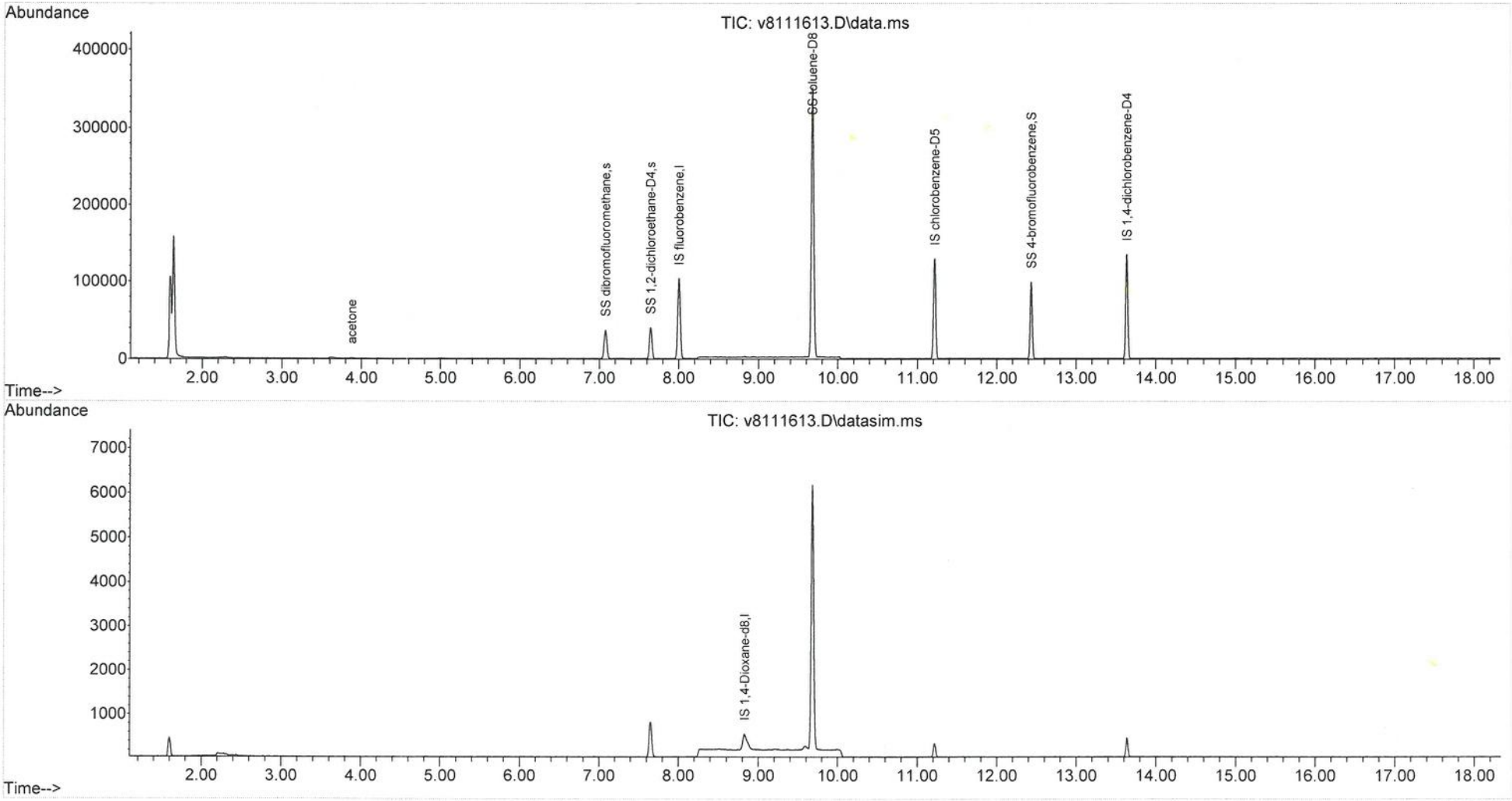
(#) = qualifier out of range (m) = manual integration (+) = signals summed

NOV 16 2023

Quantitation Report (QT Reviewed)

Data Path : X:\V8\2023\Nov23\111623\
Data File : v8111613.D
Acq On : 16 Nov 2023 03:43 pm
Operator : lmm
Sample : 67836-03 5mL
Misc : 5
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Nov 16 17:03:22 2023
Quant Method : X:\V8\methods\V88260090823A.M
Quant Title : V5 Method 8260D
QLast Update : Mon Oct 30 11:37:50 2023
Response via : Initial Calibration



nis File:	L:\VOA\Excel Reports\2023\v8111614
Analysis Group:	8260/8021/624
Field ID:	SY-BRMW5-29-44-110823 1.8E+07
Sample:	67836-04 5mL Dow Salvage Yard
Misc:	5 CRE
Import File Name	v8 111623 g DoD
TestGroupID	V8260DoD_A
Aqueous or Soil? (A or S)	A
Solid amount (g)	
Methanol volume (mL)	
Percent Solid (%)	
Soil Prep Date	
Weight:	
Volume:	
Lab#:	67836-004
AnalysisDate:	11/16/2023
AnalysisTime:	16:08
Dilution:	1
AnalyzedBy:	LMM v8111614.D
QC_Code:	
Prep#:	

Reviewer Checks:

- Quant Report: Reviewed, Analyst Initials & Date
- Chromatogram Checked, Major peaks identified
- Results consistent w/ other attached analyses
- Reanalysis reason noted
- Substitute dilution data checked
- Correct dilution and reason clear or noted
- Flags checked (Expiration, F+, Over Cal, Surr, Aspen, QC)
- Other QC failures or issues noted in Aspen
- Correct data file and/or date/time in Aspen

Notes:

Reviewer Initials & Date: 11/17/23

#	Surrogate Standards	Import Value (as ug/L)	Recovery	Flag	QC Limits	Surrogate True Values
32	SS 1,2-dichloroethane-D4	8.73	87%		60-140	10
36	SS dibromofluoromethane	9.50	95%		78-114	10
51	SS toluene-D8	10.03	100%		88-110	10
67	SS 4-bromofluorobenzene	9.87	99%		86-115	10
41	SS a,a,a-trifluorotoluene	0.00	0%		70-130*	20

	AnalyteName	Concentration (ug/L)
2	dichlorodifluoromethane	0
3	chloromethane	0
4	vinyl chloride	0
5	bromomethane	0
6	chloroethane	0
7	trichlorofluoromethane	0
8	diethylether	0
9	acetone	2.320586121
11	1,1-dichloroethene	0
13	t-butanol (TBA)	0
15	methylene chloride	0
16	carbon disulfide	0
18	methyl-t-butyl ether (MTBE)	0
19	trans-1,2-dichloroethene	0
20	isopropyl ether (DIPE)	0
22	1,1-dichloroethane	0
23	2-butanone (MEK)	6.573704617
24	ethyl-t-butyl ether (ETBE)	0
25	2,2-dichloropropane	0
26	cis-1,2-dichloroethene	0
27	bromochloromethane	0
28	chloroform	0.327783659
29	tetrahydrofuran (THF)	0
30	1,1,1-trichloroethane	0
33	carbon tetrachloride	0
34	1,1-dichloropropene	0
35	benzene	0
37	1,2-dichloroethane	0
38	t-amyl-methyl ether (TAME)	0
39	trichloroethene	0
42	1,2-dichloropropane	0
43	dibromomethane	0
44	bromodichloromethane	0
45	1,4-dioxane	0
47	4-methyl-2-pentanone (MIBK)	0
48	2-hexanone	0
49	cis-1,3-dichloropropene	0
50	toluene	1.092688088
52	trans-1,3-dichloropropene	-1
53	1,1,2-trichloroethane	0
55	tetrachloroethene	0

	AnalyteName	Concentration (ug/L)
56	1,3-dichloropropane	0
57	dibromochloromethane	0
58	1,2-dibromoethane (EDB)	0
59	chlorobenzene	0
60	1,1,1,2-tetrachloroethane	0
61	ethylbenzene	0
62	m&p-xylenes	0
63	o-xylene	0
64	styrene	0
65	bromoform	0
66	isopropylbenzene	0
69	bromobenzene	0
70	1,1,2,2-tetrachloroethane	0
71	1,2,3-trichloropropane	0
72	n-propylbenzene	0
73	2-chlorotoluene	0
74	4-chlorotoluene	0
75	1,3,5-trimethylbenzene	0
76	tert-butylbenzene	0
77	1,2,4-trimethylbenzene	0
79	sec-butylbenzene	0
80	1,3-dichlorobenzene	0
81	4-isopropyltoluene	0
82	1,4-dichlorobenzene	0
84	1,2-dichlorobenzene	0
85	n-butylbenzene	0
86	1,2-dibromo-3-chloropropane (DBCP)	0
88	1,2,4-trichlorobenzene	0
89	hexachlorobutadiene	0
90	naphthalene	0
91	1,2,3-trichlorobenzene	0
87	1,3,5-trichlorobenzene	0
12	1,1,2-trichloro-1,2,2-trifluoroethane	0
14	methyl acetate	0
21	vinyl acetate	0
31	cyclohexane	0
40	methylcyclohexane	0
10	acrolein	0
17	acrylonitrile	0
46	2-chloroethylvinylether (2-CEVE)	0
	Total Xylenes	0

Quantitation Report (QT Reviewed)

Data Path : X:\V8\2023\Nov23\111623\
Data File : v8111614.D
Acq On : 16 Nov 2023 04:08 pm
Operator : lmm
Sample : 67836-04 5mL
Misc : 5
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Nov 16 17:03:27 2023
Quant Method : X:\V8\methods\V88260090823A.M
Quant Title : V5 Method 8260D
QLast Update : Mon Oct 30 11:37:50 2023
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) IS fluorobenzene	8.001	96	120946	10.00	ug/L	0.00
54) IS chlorobenzene-D5	11.217	119	29130	10.00	ug/L	0.00
68) IS 1,4-dichlorobenzene-D4	13.637	152	43906	10.00	ug/L	0.00
92) IS 1,4-Dioxane-d8	8.823	96	755	10.00	ug/L	# 0.00
System Monitoring Compounds						
32) SS 1,2-dichloroethane-D4	7.646	65	30189	8.73	ug/L	0.00
Spiked Amount 10.000	Range 60 - 140		Recovery = 87.30%			
36) SS dibromofluoromethane	7.076	111	28145	9.50	ug/L	0.00
Spiked Amount 10.000	Range 78 - 114		Recovery = 95.00%			
41) SS a,a,a-trifluorotoluene	0.000	146	0	0.00	ug/L	
Spiked Amount 20.000	Range 70 - 130		Recovery = 0.00%#			
51) SS toluene-D8	9.679	98	286066	10.03	ug/L	0.00
Spiked Amount 10.000	Range 88 - 110		Recovery = 100.30%			
67) SS 4-bromofluorobenzene	12.434	174	32882	9.87	ug/L	0.00
Spiked Amount 10.000	Range 86 - 115		Recovery = 98.70%			
83) NA 1,2-dichlorobenzene-D4	13.637	152	43906	0.00	ug/L	0.00
Spiked Amount 25.000	Range 15 - 25		Recovery = 0.00%#			
Target Compounds						Qvalue
9) acetone	3.873	43	2647	2.321	ug/L #	27
23) 2-butanone (MEK)	6.406	43	9118	6.574	ug/L #	92
28) chloroform	6.816	83	1382	0.328	ug/L	99
50) toluene	9.762	92	17730	1.093	ug/L #	83

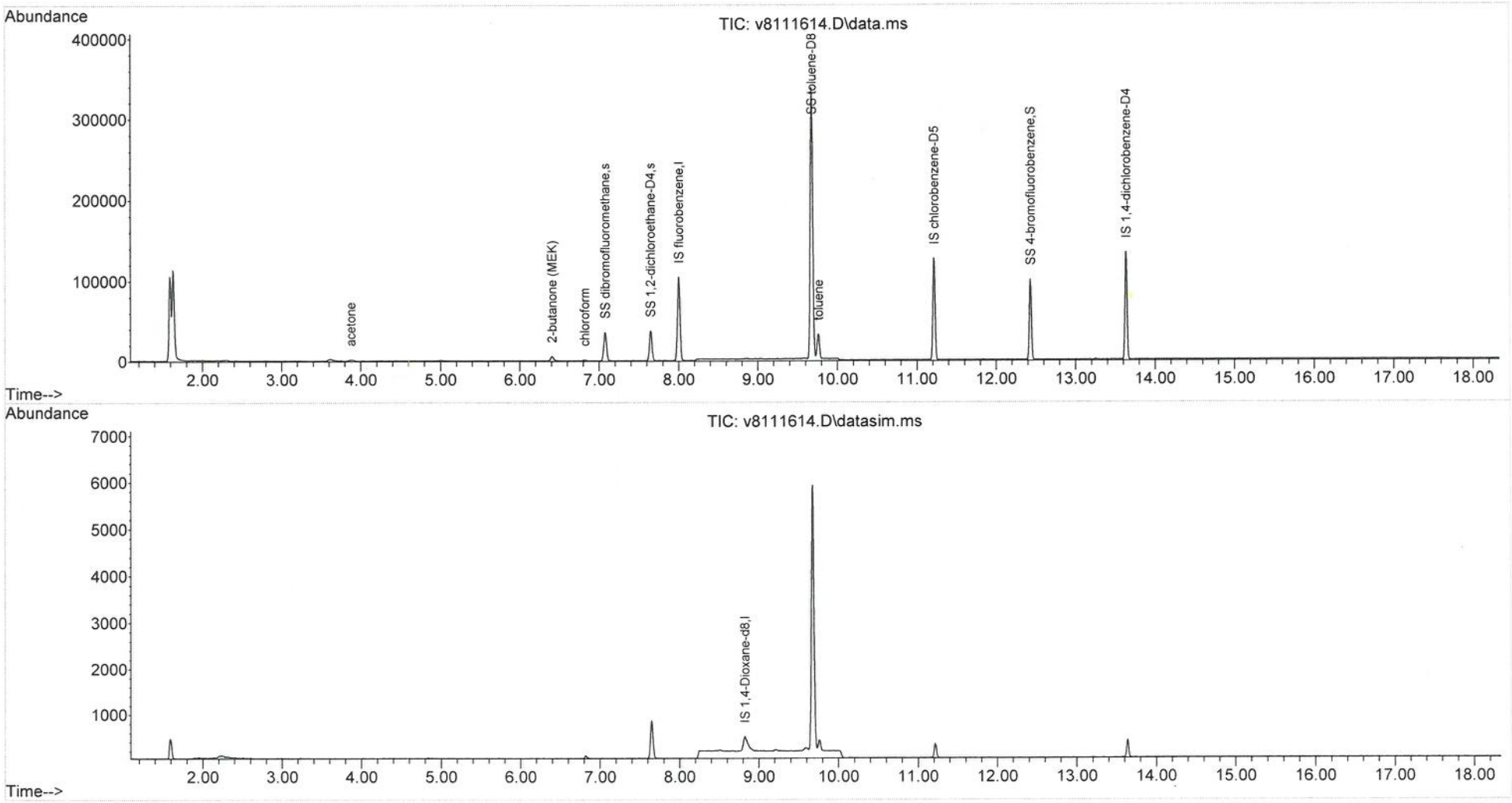
(#) = qualifier out of range (m) = manual integration (+) = signals summed

NOV 16 2023

Quantitation Report (QT Reviewed)

Data Path : X:\V8\2023\Nov23\111623\
Data File : v8111614.D
Acq On : 16 Nov 2023 04:08 pm
Operator : lmm
Sample : 67836-04 5mL
Misc : 5
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Nov 16 17:03:27 2023
Quant Method : X:\V8\methods\V88260090823A.M
Quant Title : V5 Method 8260D
QLast Update : Mon Oct 30 11:37:50 2023
Response via : Initial Calibration



This File:	L:\VOA\Excel Reports\2023\v8111615
Analysis Group:	8260/8021/624
Field ID:	-BRMW5-123-133-110823 1.8E+07
Sample:	67836-05 5mL Dow Salvage Yard
Misc:	5 CRE
Import File Name	v8 111623 g DoD
TestGroupID	V8260DoD_A
Aqueous or Soil? (A or S)	A
Solid amount (g)	
Methanol volume (mL)	
Percent Solid (%)	
Soil Prep Date	
Weight:	
Volume:	
Lab#:	67836-005
AnalysisDate:	11/16/2023
AnalysisTime:	16:33
Dilution:	1
AnalyzedBy:	LMM v8111615.D
QC_Code:	
Prep#:	

Reviewer Checks:

- Quant Report: Reviewed, Analyst Initials & Date
- Chromatogram Checked, Major peaks identified
- Results consistent w/ other attached analyses
- Reanalysis reason noted
- Substitute dilution data checked
- Correct dilution and reason clear or noted
- Flags checked (Expiration, F+, Over Cal, Surr, Aspen, QC)
- Other QC failures or issues noted in Aspen
- Correct data file and/or date/time in Aspen

Notes:

Reviewer Initials & Date: 11/17/23

#	Surrogate Standards	Import Value (as ug/L)	Recovery	Flag	QC Limits	Surrogate True Values
32	SS 1,2-dichloroethane-D4	8.67	**87%**		60-140	10
36	SS dibromofluoromethane	9.25	**93%**		78-114	10
51	SS toluene-D8	10.02	**100%**		88-110	10
67	SS 4-bromofluorobenzene	9.66	**97%**		86-115	10
41	SS a,a,a-trifluorotoluene	0.00	**0%**		70-130*	20

	AnalyteName	Concentration (ug/L)
2	dichlorodifluoromethane	0
3	chloromethane	0
4	vinyl chloride	0
5	bromomethane	0
6	chloroethane	0
7	trichlorofluoromethane	0
8	diethylether	0
9	acetone	-0.035317378
11	1,1-dichloroethene	0
13	t-butanol (TBA)	0
15	methylene chloride	0
16	carbon disulfide	0
18	methyl-t-butyl ether (MTBE)	0
19	trans-1,2-dichloroethene	0
20	isopropyl ether (DIPE)	0
22	1,1-dichloroethane	0
23	2-butanone (MEK)	**14.83429064**
24	ethyl-t-butyl ether (ETBE)	0
25	2,2-dichloropropane	0
26	cis-1,2-dichloroethene	0
27	bromochloromethane	0
28	chloroform	0.154526343
29	tetrahydrofuran (THF)	0.436011856
30	1,1,1-trichloroethane	0
33	carbon tetrachloride	0
34	1,1-dichloropropene	0
35	benzene	0
37	1,2-dichloroethane	0
38	t-amyl-methyl ether (TAME)	0
39	trichloroethene	0.544797876
42	1,2-dichloropropane	0
43	dibromomethane	0
44	bromodichloromethane	0
45	1,4-dioxane	0
47	4-methyl-2-pentanone (MIBK)	0
48	2-hexanone	0
49	cis-1,3-dichloropropene	0
50	toluene	**1.413526969**
52	trans-1,3-dichloropropene	0
53	1,1,2-trichloroethane	0
55	tetrachloroethene	0

	AnalyteName	Concentration (ug/L)
56	1,3-dichloropropane	0
57	dibromochloromethane	0
58	1,2-dibromoethane (EDB)	0
59	chlorobenzene	0
60	1,1,1,2-tetrachloroethane	0
61	ethylbenzene	0
62	m&p-xylenes	0
63	o-xylene	0
64	styrene	0
65	bromoform	0
66	isopropylbenzene	0
69	bromobenzene	0
70	1,1,2,2-tetrachloroethane	0
71	1,2,3-trichloropropane	0
72	n-propylbenzene	0
73	2-chlorotoluene	0
74	4-chlorotoluene	0
75	1,3,5-trimethylbenzene	0
76	tert-butylbenzene	0
77	1,2,4-trimethylbenzene	0
79	sec-butylbenzene	0
80	1,3-dichlorobenzene	0
81	4-isopropyltoluene	0
82	1,4-dichlorobenzene	0
84	1,2-dichlorobenzene	0
85	n-butylbenzene	0
86	1,2-dibromo-3-chloropropane (DBCP)	0
88	1,2,4-trichlorobenzene	0
89	hexachlorobutadiene	0
90	naphthalene	0
91	1,2,3-trichlorobenzene	0
87	1,3,5-trichlorobenzene	0
12	1,1,2-trichloro-1,2,2-trifluoroethane	0
14	methyl acetate	0
21	vinyl acetate	0
31	cyclohexane	0
40	methylcyclohexane	0
10	acrolein	0
17	acrylonitrile	0
46	2-chloroethylvinylether (2-CEVE)	0
	Total Xylenes	0

Quantitation Report (QT Reviewed)

Data Path : X:\V8\2023\Nov23\111623\
Data File : v8111615.D
Acq On : 16 Nov 2023 04:33 pm
Operator : lmm
Sample : 67836-05 5mL
Misc : 5
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Nov 16 17:03:32 2023
Quant Method : X:\V8\methods\V88260090823A.M
Quant Title : V5 Method 8260D
QLast Update : Mon Oct 30 11:37:50 2023
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) IS fluorobenzene	8.001	96	122736	10.00	ug/L	0.00
54) IS chlorobenzene-D5	11.217	119	28553	10.00	ug/L	0.00
68) IS 1,4-dichlorobenzene-D4	13.637	152	43081	10.00	ug/L	0.00
92) IS 1,4-Dioxane-d8	8.827	96	726	10.00	ug/L	0.00
System Monitoring Compounds						
32) SS 1,2-dichloroethane-D4	7.646	65	30416	8.67	ug/L	0.00
Spiked Amount 10.000	Range 60 - 140		Recovery = 86.70%			
36) SS dibromofluoromethane	7.076	111	27830	9.25	ug/L	0.00
Spiked Amount 10.000	Range 78 - 114		Recovery = 92.50%			
41) SS a,a,a-trifluorotoluene	0.000	146	0	0.00	ug/L	
Spiked Amount 20.000	Range 70 - 130		Recovery = 0.00%#			
51) SS toluene-D8	9.678	98	290059	10.02	ug/L	0.00
Spiked Amount 10.000	Range 88 - 110		Recovery = 100.20%			
67) SS 4-bromofluorobenzene	12.434	174	31517	9.66	ug/L	0.00
Spiked Amount 10.000	Range 86 - 115		Recovery = 96.60%			
83) NA 1,2-dichlorobenzene-D4	13.637	152	43081	0.00	ug/L	0.00
Spiked Amount 25.000	Range 15 - 25		Recovery = 0.00%#			
Target Compounds						Qvalue
23) 2-butanone (MEK)	6.406	43	20173	14.834	ug/L	94
29) tetrahydrofuran (THF)	7.053	42	532	0.436	ug/L #	32
39) trichloroethene	8.429	95	4120	0.545	ug/L	94
50) toluene	9.761	92	22599	1.414	ug/L	98

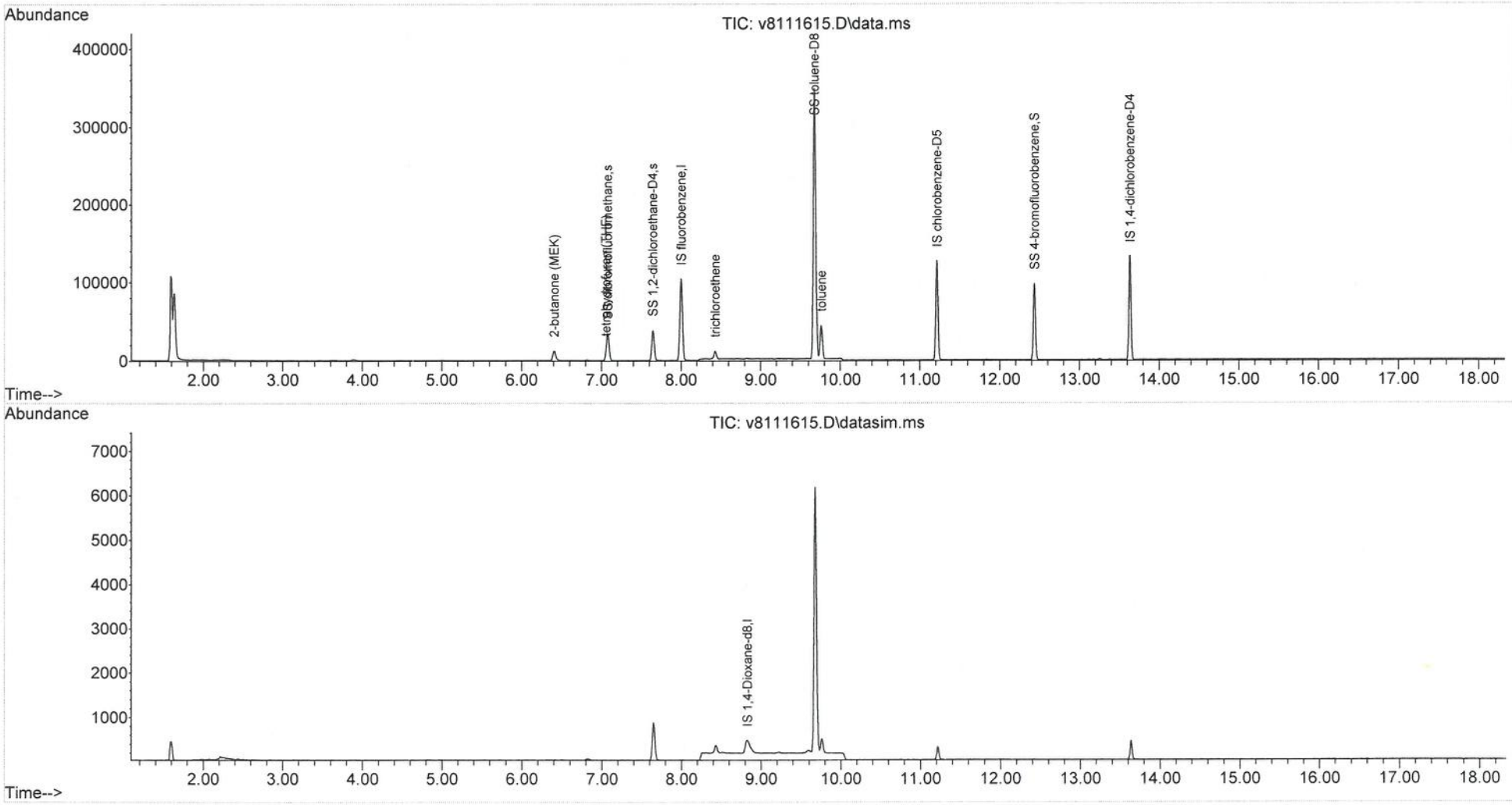
(#) = qualifier out of range (m) = manual integration (+) = signals summed

NOV 16 2023

Quantitation Report (QT Reviewed)

Data Path : X:\V8\2023\Nov23\111623\
Data File : v8111615.D
Acq On : 16 Nov 2023 04:33 pm
Operator : lmm
Sample : 67836-05 5mL
Misc : 5
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Nov 16 17:03:32 2023
Quant Method : X:\V8\methods\V88260090823A.M
Quant Title : V5 Method 8260D
QLast Update : Mon Oct 30 11:37:50 2023
Response via : Initial Calibration



This File:	L:\VOA\Excel Reports\2023\v8111616
Analysis Group:	8260/8021/624
Field ID:	SY-BRMW5-56-66-110823 1.8E+07
Sample:	67836-06 5mL Dow Salvage Yard
Misc:	5 CRE
Import File Name	v8 111623 g DoD
TestGroupID	V8260DoD_A
Aqueous or Soil? (A or S)	A
Solid amount (g)	
Methanol volume (mL)	
Percent Solid (%)	
Soil Prep Date	
Weight:	
Volume:	
Lab#:	67836-006
AnalysisDate:	11/16/2023
AnalysisTime:	16:58
Dilution:	1
AnalyzedBy:	LMM v8111616.D
QC_Code:	
Prep#:	

Reviewer Checks:

- Quant Report: Reviewed, Analyst Initials & Date
- Chromatogram Checked, Major peaks identified
- Results consistent w/ other attached analyses
- Reanalysis reason noted
- Substitute dilution data checked
- Correct dilution and reason clear or noted
- Flags checked (Expiration, F+, Over Cal, Surr, Aspen, QC)
- Other QC failures or issues noted in Aspen
- Correct data file and/or date/time in Aspen

Notes:

Reviewer Initials & Date: 11/17/23

#	Surrogate Standards	Import Value (as ug/L)	Recovery	Flag	QC Limits	Surrogate True Values
32	SS 1,2-dichloroethane-D4	8.80	88%		60-140	10
36	SS dibromofluoromethane	9.69	97%		78-114	10
51	SS toluene-D8	10.01	100%		88-110	10
67	SS 4-bromofluorobenzene	9.86	99%		86-115	10
41	SS a,a,a-trifluorotoluene	0.00	0%		70-130*	20

	AnalyteName	Concentration (ug/L)
2	dichlorodifluoromethane	0
3	chloromethane	0
4	vinyl chloride	0
5	bromomethane	0
6	chloroethane	0
7	trichlorofluoromethane	0
8	diethylether	0
9	acetone	0.005682793
11	1,1-dichloroethene	0
13	t-butanol (TBA)	0
15	methylene chloride	0
16	carbon disulfide	0
18	methyl-t-butyl ether (MTBE)	0
19	trans-1,2-dichloroethene	0
20	isopropyl ether (DIPE)	0
22	1,1-dichloroethane	0
23	2-butanone (MEK)	0
24	ethyl-t-butyl ether (ETBE)	0
25	2,2-dichloropropane	0
26	cis-1,2-dichloroethene	0
27	bromochloromethane	0
28	chloroform	0
29	tetrahydrofuran (THF)	0
30	1,1,1-trichloroethane	0
33	carbon tetrachloride	0
34	1,1-dichloropropene	0
35	benzene	0
37	1,2-dichloroethane	0
38	t-amyl-methyl ether (TAME)	0
39	trichloroethene	0
42	1,2-dichloropropane	0
43	dibromomethane	0
44	bromodichloromethane	0
45	1,4-dioxane	0
47	4-methyl-2-pentanone (MIBK)	0
48	2-hexanone	0
49	cis-1,3-dichloropropene	0
50	toluene	-0.068060212
52	trans-1,3-dichloropropene	0
53	1,1,2-trichloroethane	0
55	tetrachloroethene	0

	AnalyteName	Concentration (ug/L)
56	1,3-dichloropropane	0
57	dibromochloromethane	0
58	1,2-dibromoethane (EDB)	0
59	chlorobenzene	0
60	1,1,1,2-tetrachloroethane	0
61	ethylbenzene	0
62	m&p-xylenes	0
63	o-xylene	0
64	styrene	0
65	bromoform	0
66	isopropylbenzene	0
69	bromobenzene	0
70	1,1,2,2-tetrachloroethane	0
71	1,2,3-trichloropropane	0.114024643
72	n-propylbenzene	0
73	2-chlorotoluene	0
74	4-chlorotoluene	0
75	1,3,5-trimethylbenzene	0
76	tert-butylbenzene	0
77	1,2,4-trimethylbenzene	0
79	sec-butylbenzene	0
80	1,3-dichlorobenzene	0
81	4-isopropyltoluene	0
82	1,4-dichlorobenzene	0
84	1,2-dichlorobenzene	0
85	n-butylbenzene	0
86	1,2-dibromo-3-chloropropane (DBCP)	0
88	1,2,4-trichlorobenzene	0
89	hexachlorobutadiene	0
90	naphthalene	0
91	1,2,3-trichlorobenzene	0
87	1,3,5-trichlorobenzene	0
12	1,1,2-trichloro-1,2,2-trifluoroethane	0
14	methyl acetate	0
21	vinyl acetate	0
31	cyclohexane	0
40	methylcyclohexane	0
10	acrolein	0
17	acrylonitrile	0
46	2-chloroethylvinylether (2-CEVE)	0
	Total Xylenes	0

Quantitation Report (QT Reviewed)

Data Path : X:\V8\2023\Nov23\111623\
Data File : v8111616.D
Acq On : 16 Nov 2023 04:58 pm
Operator : lmm
Sample : 67836-06 5mL
Misc : 5
ALS Vial : 16 Sample Multiplier: 1

11/17/23 @ 07.12
WillieS

Quant Time: Nov 17 06:45:01 2023
Quant Method : X:\V8\methods\V88260090823A.M
Quant Title : V5 Method 8260D
QLast Update : Mon Oct 30 11:37:50 2023
Response via : Initial Calibration

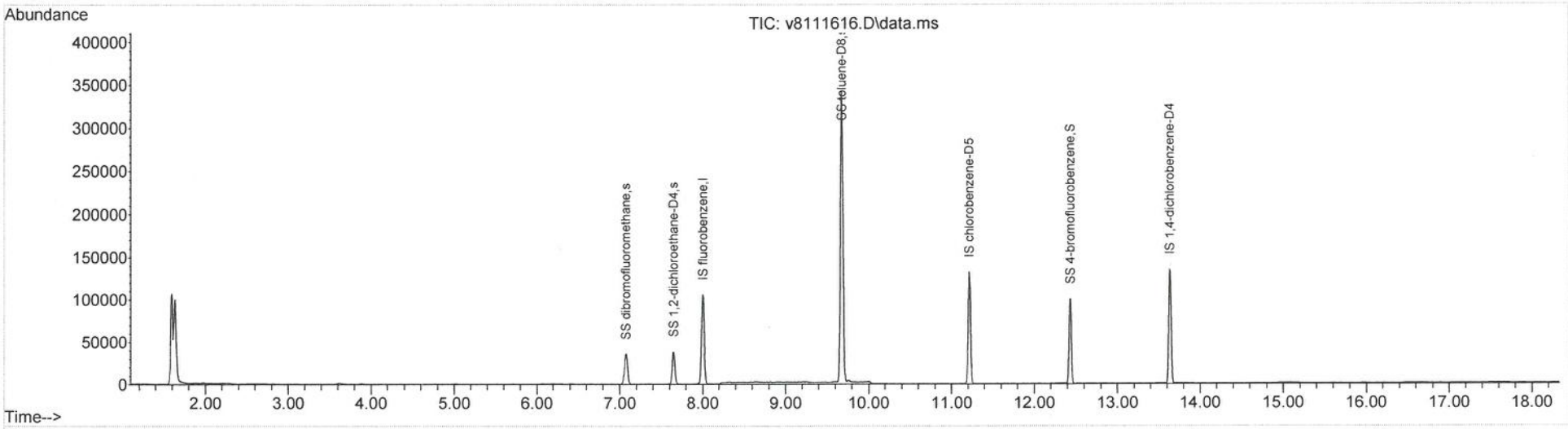
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) IS fluorobenzene	8.001	96	122698	10.00	ug/L	0.00
54) IS chlorobenzene-D5	11.213	119	28828	10.00	ug/L	0.00
68) IS 1,4-dichlorobenzene-D4	13.633	152	43873	10.00	ug/L	0.00
92) IS 1,4-Dioxane-d8	8.823	96	705	10.00	ug/L	0.00
System Monitoring Compounds						
32) SS 1,2-dichloroethane-D4	7.646	65	30872	8.80	ug/L	0.00
Spiked Amount 10.000	Range 60 - 140		Recovery = 88.00%			
36) SS dibromofluoromethane	7.072	111	29133	9.69	ug/L	0.00
Spiked Amount 10.000	Range 78 - 114		Recovery = 96.90%			
41) SS a,a,a-trifluorotoluene	0.000	146	0	0.00	ug/L	
Spiked Amount 20.000	Range 70 - 130		Recovery = 0.00%#			
51) SS toluene-D8	9.679	98	289603	10.01	ug/L	0.00
Spiked Amount 10.000	Range 88 - 110		Recovery = 100.10%			
67) SS 4-bromofluorobenzene	12.435	174	32506	9.86	ug/L	0.00
Spiked Amount 10.000	Range 86 - 115		Recovery = 98.60%			
83) NA 1,2-dichlorobenzene-D4	13.633	152	43873	0.00	ug/L	0.00
Spiked Amount 25.000	Range 15 - 25		Recovery = 0.00%#			
Target Compounds						Qvalue

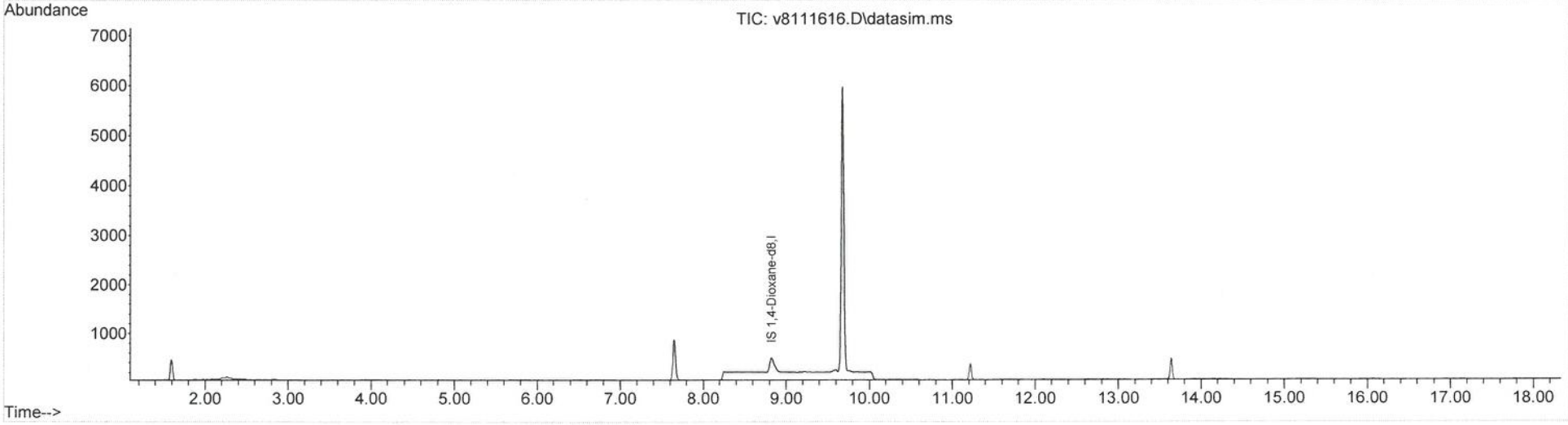
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : X:\V8\2023\Nov23\111623\
Data File : v8111616.D
Acq On : 16 Nov 2023 04:58 pm
Operator : lmm
Sample : 67836-06 5mL
Misc : 5
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Nov 17 06:45:01 2023
Quant Method : X:\V8\methods\V88260090823A.M
Quant Title : V5 Method 8260D
QLast Update : Mon Oct 30 11:37:50 2023
Response via : Initial Calibration





This File:	L:\VOA\Excel Reports\2023\v8111617
Analysis Group:	8260/8021/624
Field ID:	SY-OBMW8-110823 1.8E+07
Sample:	67836-07 5mL Dow Salvage Yard
Misc:	5 CRE
Import File Name	v8 111623 g DoD
TestGroupID	V8260DoD_A
Aqueous or Soil? (A or S)	A
Solid amount (g)	
Methanol volume (mL)	
Percent Solid (%)	
Soil Prep Date	
Weight:	
Volume:	
Lab#:	67836-007
AnalysisDate:	11/16/2023
AnalysisTime:	17:23
Dilution:	1
AnalyzedBy:	LMM v8111617.D
QC_Code:	
Prep#:	

Reviewer Checks:

- Quant Report: Reviewed, Analyst Initials & Date
- Chromatogram Checked, Major peaks identified
- Results consistent w/ other attached analyses
- Reanalysis reason noted
- Substitute dilution data checked
- Correct dilution and reason clear or noted
- Flags checked (Expiration, F+, Over Cal, Surr, Aspen, QC)
- Other QC failures or issues noted in Aspen
- Correct data file and/or date/time in Aspen

Notes:

Reviewer Initials & Date: 11/17/23

#	Surrogate Standards	Import Value (as ug/L)	Recovery	Flag	QC Limits	Surrogate True Values
32	SS 1,2-dichloroethane-D4	9.48	95%		60-140	10
36	SS dibromofluoromethane	9.88	99%		78-114	10
51	SS toluene-D8	10.03	100%		88-110	10
67	SS 4-bromofluorobenzene	10.01	100%		86-115	10
41	SS a,a,a-trifluorotoluene	0.00	0%		70-130*	20

	AnalyteName	Concentration (ug/L)
2	dichlorodifluoromethane	0
3	chloromethane	0
4	vinyl chloride	0
5	bromomethane	0
6	chloroethane	0
7	trichlorofluoromethane	0
8	diethylether	0
9	acetone	-0.613862549
11	1,1-dichloroethene	0
13	t-butanol (TBA)	0
15	methylene chloride	0
16	carbon disulfide	0
18	methyl-t-butyl ether (MTBE)	0
19	trans-1,2-dichloroethene	0
20	isopropyl ether (DIPE)	0
22	1,1-dichloroethane	0
23	2-butanone (MEK)	0
24	ethyl-t-butyl ether (ETBE)	0
25	2,2-dichloropropane	0
26	cis-1,2-dichloroethene	0
27	bromochloromethane	0
28	chloroform	0
29	tetrahydrofuran (THF)	0
30	1,1,1-trichloroethane	0
33	carbon tetrachloride	0
34	1,1-dichloropropene	0
35	benzene	0
37	1,2-dichloroethane	0
38	t-amyl-methyl ether (TAME)	0
39	trichloroethene	-0.078716834
42	1,2-dichloropropane	0
43	dibromomethane	0
44	bromodichloromethane	0
45	1,4-dioxane	0
47	4-methyl-2-pentanone (MIBK)	0
48	2-hexanone	0
49	cis-1,3-dichloropropene	0
50	toluene	-0.148200179
52	trans-1,3-dichloropropene	0
53	1,1,2-trichloroethane	0
55	tetrachloroethene	0

	AnalyteName	Concentration (ug/L)
56	1,3-dichloropropane	0
57	dibromochloromethane	0
58	1,2-dibromoethane (EDB)	0
59	chlorobenzene	0
60	1,1,1,2-tetrachloroethane	0
61	ethylbenzene	0
62	m&p-xylenes	0
63	o-xylene	0
64	styrene	0
65	bromoform	0
66	isopropylbenzene	0
69	bromobenzene	0
70	1,1,2,2-tetrachloroethane	0
71	1,2,3-trichloropropane	0
72	n-propylbenzene	0
73	2-chlorotoluene	0
74	4-chlorotoluene	0
75	1,3,5-trimethylbenzene	0
76	tert-butylbenzene	0
77	1,2,4-trimethylbenzene	0
79	sec-butylbenzene	0
80	1,3-dichlorobenzene	0
81	4-isopropyltoluene	0
82	1,4-dichlorobenzene	0
84	1,2-dichlorobenzene	0
85	n-butylbenzene	0
86	1,2-dibromo-3-chloropropane (DBCP)	0
88	1,2,4-trichlorobenzene	0
89	hexachlorobutadiene	0
90	naphthalene	0
91	1,2,3-trichlorobenzene	0
87	1,3,5-trichlorobenzene	0
12	1,1,2-trichloro-1,2,2-trifluoroethane	0
14	methyl acetate	0
21	vinyl acetate	0
31	cyclohexane	0
40	methylcyclohexane	0
10	acrolein	0
17	acrylonitrile	0
46	2-chloroethylvinylether (2-CEVE)	0
	Total Xylenes	0

Quantitation Report (QT Reviewed)

Data Path : X:\V8\2023\Nov23\111623\
Data File : v8111617.D
Acq On : 16 Nov 2023 05:23 pm
Operator : lmm
Sample : 67836-07 5mL
Misc : 5
ALS Vial : 17 Sample Multiplier: 1

11/17/23 @ 07:12
WillieS

Quant Time: Nov 17 06:45:05 2023
Quant Method : X:\V8\methods\V88260090823A.M
Quant Title : V5 Method 8260D
QLast Update : Mon Oct 30 11:37:50 2023
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) IS fluorobenzene	8.001	96	124298	10.00	ug/L	0.00
54) IS chlorobenzene-D5	11.218	119	28799	10.00	ug/L	0.00
68) IS 1,4-dichlorobenzene-D4	13.637	152	44818	10.00	ug/L	0.00
92) IS 1,4-Dioxane-d8	8.823	96	767	10.00	ug/L	# 0.00
System Monitoring Compounds						
32) SS 1,2-dichloroethane-D4	7.650	65	33711	9.48	ug/L	0.00
Spiked Amount 10.000	Range 60 - 140		Recovery = 94.80%			
36) SS dibromofluoromethane	7.081	111	30096	9.88	ug/L	0.00
Spiked Amount 10.000	Range 78 - 114		Recovery = 98.80%			
41) SS a,a,a-trifluorotoluene	0.000	146	0	0.00	ug/L	
Spiked Amount 20.000	Range 70 - 130		Recovery = 0.00%#			
51) SS toluene-D8	9.679	98	294107	10.03	ug/L	0.00
Spiked Amount 10.000	Range 88 - 110		Recovery = 100.30%			
67) SS 4-bromofluorobenzene	12.434	174	32941	10.01	ug/L	0.00
Spiked Amount 10.000	Range 86 - 115		Recovery = 100.10%			
83) NA 1,2-dichlorobenzene-D4	13.637	152	44818	0.00	ug/L	0.00
Spiked Amount 25.000	Range 15 - 25		Recovery = 0.00%#			

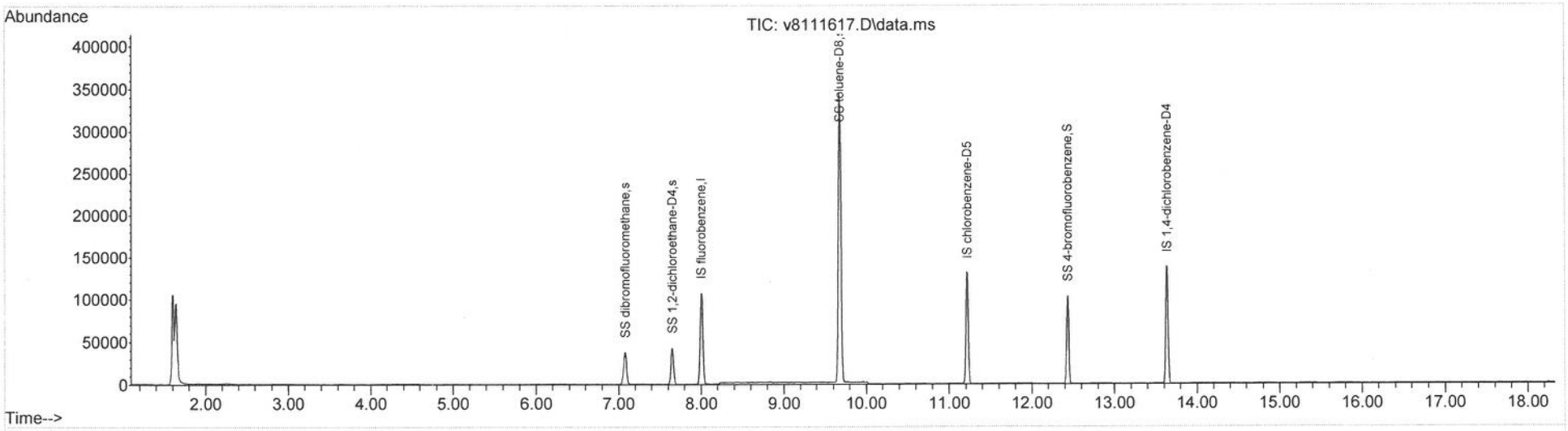
Target Compounds Qvalue

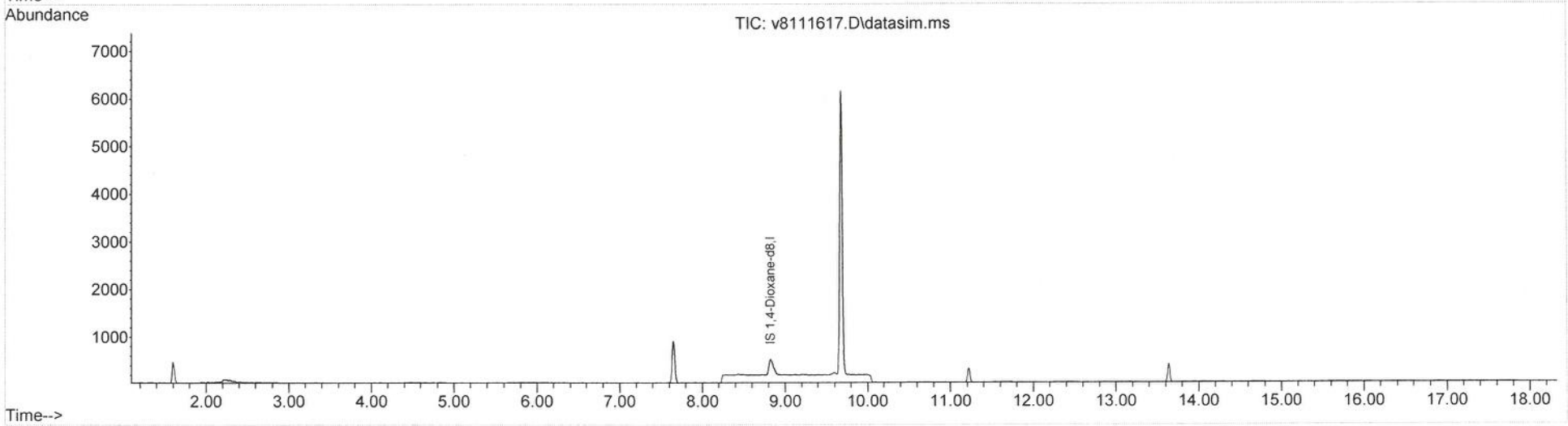
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : X:\V8\2023\Nov23\111623\
Data File : v8111617.D
Acq On : 16 Nov 2023 05:23 pm
Operator : lmm
Sample : 67836-07 5mL
Misc : 5
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Nov 17 06:45:05 2023
Quant Method : X:\V8\methods\V88260090823A.M
Quant Title : V5 Method 8260D
QLast Update : Mon Oct 30 11:37:50 2023
Response via : Initial Calibration





This File:	L:\VOA\Excel Reports\2023\v8111618
Analysis Group:	8260/8021/624
Field ID:	SY-OBMW11-110823 1.8E+07
Sample:	67836-08 5mL Dow Salvage Yard
Misc:	5 CRE
Import File Name	v8 111623 g DoD
TestGroupID	V8260DoD_A
Aqueous or Soil? (A or S)	A
Solid amount (g)	
Methanol volume (mL)	
Percent Solid (%)	
Soil Prep Date	
Weight:	
Volume:	
Lab#:	67836-008
AnalysisDate:	11/16/2023
AnalysisTime:	17:48
Dilution:	1
AnalyzedBy:	LMM v8111618.D
QC_Code:	
Prep#:	

Reviewer Checks:

- Quant Report: Reviewed, Analyst Initials & Date
- Chromatogram Checked, Major peaks identified
- Results consistent w/ other attached analyses
- Reanalysis reason noted
- Substitute dilution data checked
- Correct dilution and reason clear or noted
- Flags checked (Expiration, F+, Over Cal, Surr, Aspen, QC)
- Other QC failures or issues noted in Aspen
- Correct data file and/or date/time in Aspen

Notes:

Reviewer Initials & Date: 11/17/23

#	Surrogate Standards	Import Value (as ug/L)	Recovery	Flag	QC Limits	Surrogate True Values
32	SS 1,2-dichloroethane-D4	8.91	89%		60-140	10
36	SS dibromofluoromethane	9.77	98%		78-114	10
51	SS toluene-D8	9.82	98%		88-110	10
67	SS 4-bromofluorobenzene	10.09	101%		86-115	10
41	SS a,a,a-trifluorotoluene	0.00	0%		70-130*	20

	AnalyteName	Concentration (ug/L)		AnalyteName	Concentration (ug/L)
2	dichlorodifluoromethane	0	56	1,3-dichloropropane	0
3	chloromethane	0	57	dibromochloromethane	0
4	vinyl chloride	0	58	1,2-dibromoethane (EDB)	0
5	bromomethane	0	59	chlorobenzene	0
6	chloroethane	0	60	1,1,1,2-tetrachloroethane	0
7	trichlorofluoromethane	0	61	ethylbenzene	0
8	diethylether	0	62	m&p-xylenes	0
9	acetone	0	63	o-xylene	0
11	1,1-dichloroethene	0	64	styrene	0
13	t-butanol (TBA)	0	65	bromoform	0
15	methylene chloride	0	66	isopropylbenzene	0
16	carbon disulfide	0	69	bromobenzene	0
18	methyl-t-butyl ether (MTBE)	0	70	1,1,2,2-tetrachloroethane	0
19	trans-1,2-dichloroethene	0	71	1,2,3-trichloropropane	0
20	isopropyl ether (DIPE)	0	72	n-propylbenzene	0
22	1,1-dichloroethane	0	73	2-chlorotoluene	0
23	2-butanone (MEK)	0	74	4-chlorotoluene	0
24	ethyl-t-butyl ether (ETBE)	0	75	1,3,5-trimethylbenzene	0
25	2,2-dichloropropane	0	76	tert-butylbenzene	0
26	cis-1,2-dichloroethene	0	77	1,2,4-trimethylbenzene	0
27	bromochloromethane	0	79	sec-butylbenzene	0
28	chloroform	0	80	1,3-dichlorobenzene	0
29	tetrahydrofuran (THF)	0.105352705	81	4-isopropyltoluene	0
30	1,1,1-trichloroethane	0	82	1,4-dichlorobenzene	0
33	carbon tetrachloride	0	84	1,2-dichlorobenzene	0
34	1,1-dichloropropene	0	85	n-butylbenzene	0
35	benzene	0	86	1,2-dibromo-3-chloropropane (DBCP)	0
37	1,2-dichloroethane	0	88	1,2,4-trichlorobenzene	0
38	t-amyl-methyl ether (TAME)	0	89	hexachlorobutadiene	0
39	trichloroethene	**6.025601576**	90	naphthalene	0
42	1,2-dichloropropane	0	91	1,2,3-trichlorobenzene	0
43	dibromomethane	0	87	1,3,5-trichlorobenzene	0
44	bromodichloromethane	0	12	1,1,2-trichloro-1,2,2-trifluoroethane	0
45	1,4-dioxane	0	14	methyl acetate	0
47	4-methyl-2-pentanone (MIBK)	0	21	vinyl acetate	0
48	2-hexanone	0	31	cyclohexane	0
49	cis-1,3-dichloropropene	0	40	methylcyclohexane	0.030829914
50	toluene	0	10	acrolein	0
52	trans-1,3-dichloropropene	0	17	acrylonitrile	0
53	1,1,2-trichloroethane	0	46	2-chloroethylvinylether (2-CEVE)	0
55	tetrachloroethene	0		Total Xylenes	0

Quantitation Report (QT Reviewed)

Data Path : X:\V8\2023\Nov23\111623\
Data File : v8111618.D
Acq On : 16 Nov 2023 05:48 pm
Operator : lmm
Sample : 67836-08 5mL
Misc : 5
ALS Vial : 18 Sample Multiplier: 1

11/17/23 @ 07:12
WillieS

Quant Time: Nov 17 06:45:09 2023
Quant Method : X:\V8\methods\V88260090823A.M
Quant Title : V5 Method 8260D
QLast Update : Mon Oct 30 11:37:50 2023
Response via : Initial Calibration

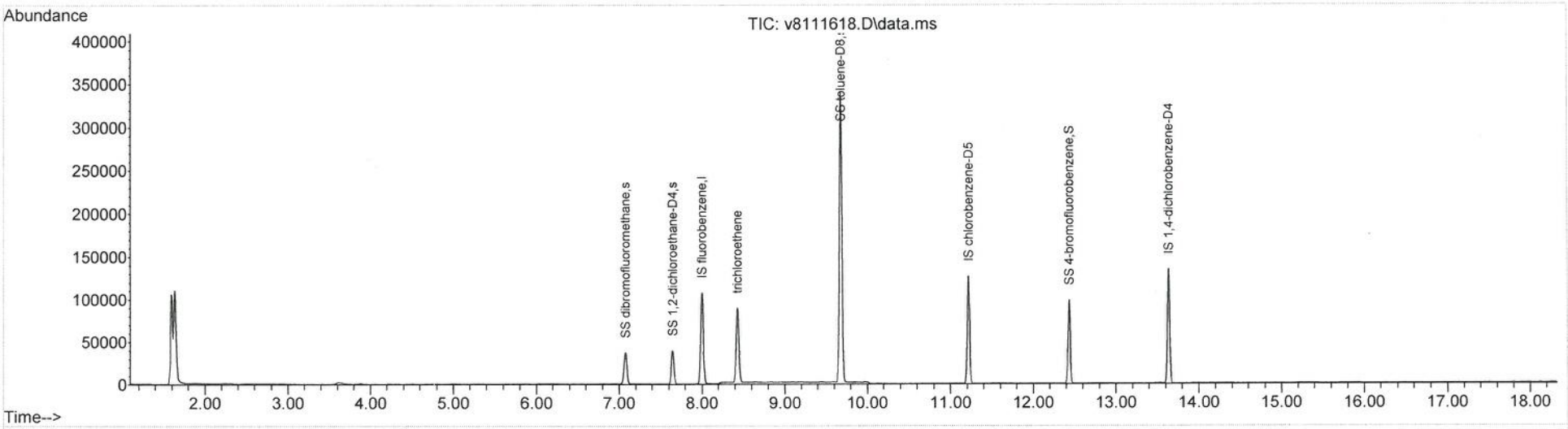
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) IS fluorobenzene	8.001	96	123088	10.00	ug/L	0.00
54) IS chlorobenzene-D5	11.217	119	28672	10.00	ug/L	0.00
68) IS 1,4-dichlorobenzene-D4	13.637	152	43660	10.00	ug/L	0.00
92) IS 1,4-Dioxane-d8	8.823	96	861	10.00	ug/L	# 0.00
System Monitoring Compounds						
32) SS 1,2-dichloroethane-D4	7.646	65	31353	8.91	ug/L	0.00
Spiked Amount 10.000	Range 60 - 140		Recovery = 89.10%			
36) SS dibromofluoromethane	7.076	111	29480	9.77	ug/L	0.00
Spiked Amount 10.000	Range 78 - 114		Recovery = 97.70%			
41) SS a,a,a-trifluorotoluene	0.000	146	0	0.00	ug/L	
Spiked Amount 20.000	Range 70 - 130		Recovery = 0.00%#			
51) SS toluene-D8	9.679	98	285207	9.82	ug/L	0.00
Spiked Amount 10.000	Range 88 - 110		Recovery = 98.20%			
67) SS 4-bromofluorobenzene	12.434	174	33075	10.09	ug/L	0.00
Spiked Amount 10.000	Range 86 - 115		Recovery = 100.90%			
83) NA 1,2-dichlorobenzene-D4	13.637	152	43660	0.00	ug/L	0.00
Spiked Amount 25.000	Range 15 - 25		Recovery = 0.00%#			
Target Compounds						Qvalue
39) trichloroethene	8.430	95	37422	6.026	ug/L	98

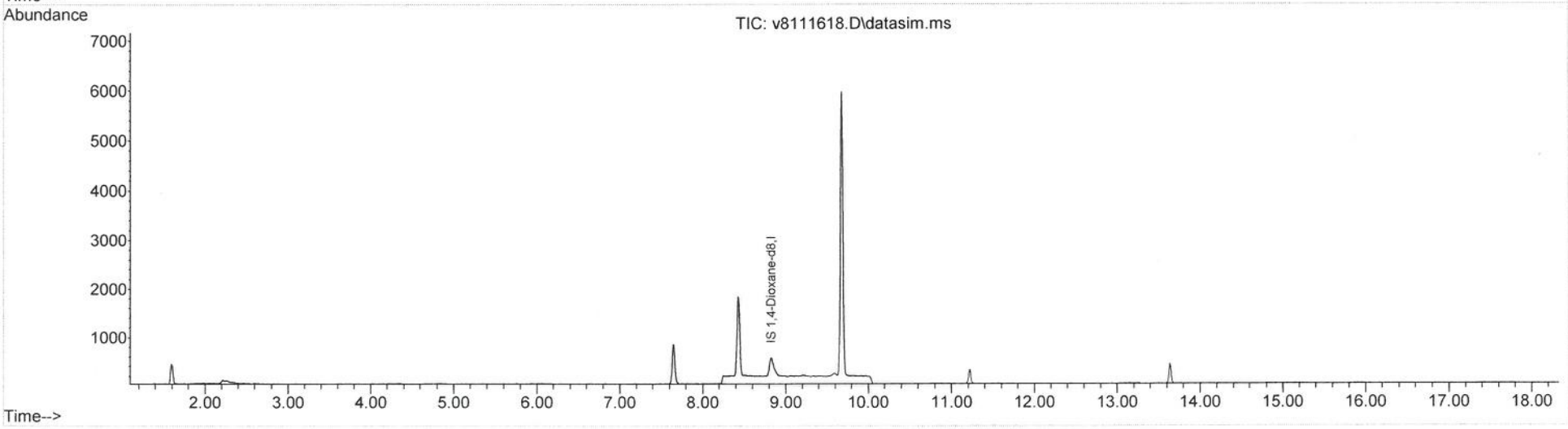
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : X:\V8\2023\Nov23\111623\
Data File : v8111618.D
Acq On : 16 Nov 2023 05:48 pm
Operator : lmm
Sample : 67836-08 5mL
Misc : 5
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Nov 17 06:45:09 2023
Quant Method : X:\V8\methods\V88260090823A.M
Quant Title : V5 Method 8260D
QLast Update : Mon Oct 30 11:37:50 2023
Response via : Initial Calibration





This File:	L:\VOA\Excel Reports\2023\v8111619
Analysis Group:	8260/8021/624
Field ID:	SY-OBMW110-110823 1.8E+07
Sample:	67836-09 5mL Dow Salvage Yard
Misc:	5 CRE
Import File Name	v8 111623 g DoD
TestGroupID	V8260DoD_A
Aqueous or Soil? (A or S)	A
Solid amount (g)	
Methanol volume (mL)	
Percent Solid (%)	
Soil Prep Date	
Weight:	
Volume:	
Lab#:	67836-009
AnalysisDate:	11/16/2023
AnalysisTime:	18:13
Dilution:	1
AnalyzedBy:	LMM v8111619.D
QC_Code:	
Prep#:	

Reviewer Checks:

- Quant Report: Reviewed, Analyst Initials & Date
- Chromatogram Checked, Major peaks identified
- Results consistent w/ other attached analyses
- Reanalysis reason noted
- Substitute dilution data checked
- Correct dilution and reason clear or noted
- Flags checked (Expiration, F+, Over Cal, Surr, Aspen, QC)
- Other QC failures or issues noted in Aspen
- Correct data file and/or date/time in Aspen

Notes:

Reviewer Initials & Date: 11/17/23

#	Surrogate Standards	Import Value (as ug/L)	Recovery	Flag	QC Limits	Surrogate True Values
32	SS 1,2-dichloroethane-D4	9.09	**91%**		60-140	10
36	SS dibromofluoromethane	9.63	**96%**		78-114	10
51	SS toluene-D8	9.89	**99%**		88-110	10
67	SS 4-bromofluorobenzene	9.58	**96%**		86-115	10
41	SS a,a,a-trifluorotoluene	0.00	**0%**		70-130*	20

	AnalyteName	Concentration (ug/L)		AnalyteName	Concentration (ug/L)
2	dichlorodifluoromethane	0	56	1,3-dichloropropane	0
3	chloromethane	0	57	dibromochloromethane	0
4	vinyl chloride	0	58	1,2-dibromoethane (EDB)	0
5	bromomethane	0	59	chlorobenzene	0
6	chloroethane	0	60	1,1,1,2-tetrachloroethane	0
7	trichlorofluoromethane	0	61	ethylbenzene	0
8	diethylether	0	62	m&p-xylenes	0
9	acetone	-0.674415344	63	o-xylene	0
11	1,1-dichloroethene	0	64	styrene	0
13	t-butanol (TBA)	0	65	bromoform	0
15	methylene chloride	0	66	isopropylbenzene	0
16	carbon disulfide	0	69	bromobenzene	0
18	methyl-t-butyl ether (MTBE)	0	70	1,1,2,2-tetrachloroethane	0
19	trans-1,2-dichloroethene	0	71	1,2,3-trichloropropane	0.108283495
20	isopropyl ether (DIPE)	0	72	n-propylbenzene	0
22	1,1-dichloroethane	0	73	2-chlorotoluene	0
23	2-butanone (MEK)	0	74	4-chlorotoluene	0
24	ethyl-t-butyl ether (ETBE)	0	75	1,3,5-trimethylbenzene	0
25	2,2-dichloropropane	0	76	tert-butylbenzene	0
26	cis-1,2-dichloroethene	0	77	1,2,4-trimethylbenzene	0
27	bromochloromethane	0	79	sec-butylbenzene	0
28	chloroform	0	80	1,3-dichlorobenzene	0
29	tetrahydrofuran (THF)	0	81	4-isopropyltoluene	0
30	1,1,1-trichloroethane	0	82	1,4-dichlorobenzene	0
33	carbon tetrachloride	0	84	1,2-dichlorobenzene	0
34	1,1-dichloropropene	0	85	n-butylbenzene	0
35	benzene	0	86	1,2-dibromo-3-chloropropane (DBCP)	0
37	1,2-dichloroethane	0	88	1,2,4-trichlorobenzene	0
38	t-amyl-methyl ether (TAME)	0	89	hexachlorobutadiene	0
39	trichloroethene	**5.867132865**	90	naphthalene	0
42	1,2-dichloropropane	0	91	1,2,3-trichlorobenzene	0
43	dibromomethane	0	87	1,3,5-trichlorobenzene	0
44	bromodichloromethane	0	12	1,1,2-trichloro-1,2,2-trifluoroethane	0
45	1,4-dioxane	0	14	methyl acetate	0
47	4-methyl-2-pentanone (MIBK)	0	21	vinyl acetate	0
48	2-hexanone	0	31	cyclohexane	0
49	cis-1,3-dichloropropene	0	40	methylcyclohexane	0.032256579
50	toluene	-0.153649794	10	acrolein	0
52	trans-1,3-dichloropropene	0	17	acrylonitrile	0
53	1,1,2-trichloroethane	0	46	2-chloroethylvinylether (2-CEVE)	0
55	tetrachloroethene	0		Total Xylenes	0

Quantitation Report (QT Reviewed)

Data Path : X:\V8\2023\Nov23\111623\
Data File : v8111619.D
Acq On : 16 Nov 2023 06:13 pm
Operator : lmm
Sample : 67836-09 5mL
Misc : 5
ALS Vial : 19 Sample Multiplier: 1

11/17/23 @ 07:12
WillieS

Quant Time: Nov 17 06:45:13 2023
Quant Method : X:\V8\methods\V88260090823A.M
Quant Title : V5 Method 8260D
QLast Update : Mon Oct 30 11:37:50 2023
Response via : Initial Calibration

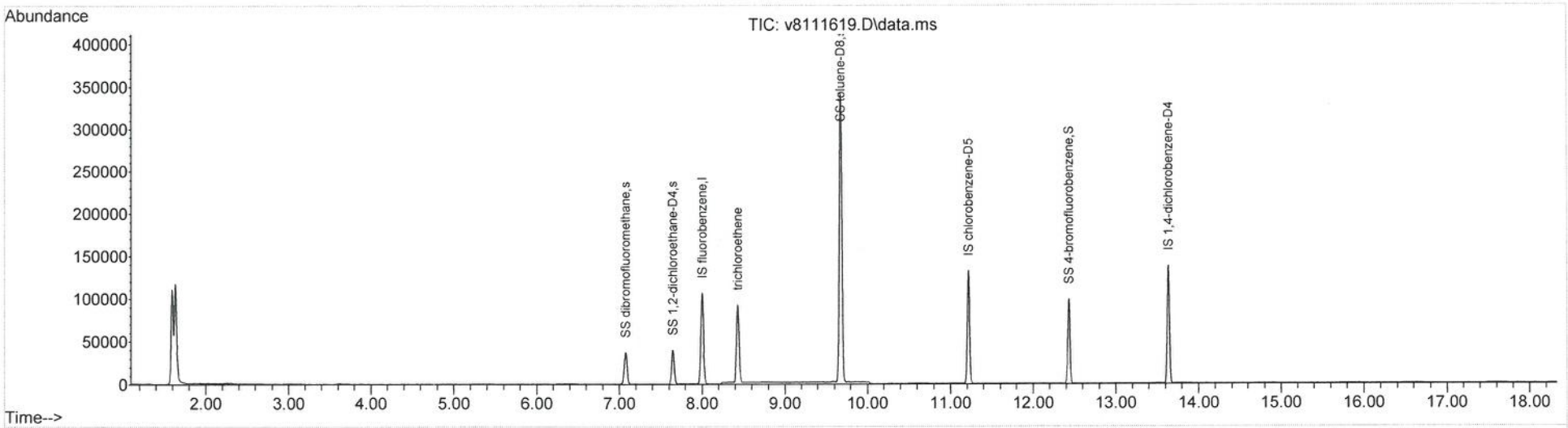
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) IS fluorobenzene	8.001	96	123343	10.00	ug/L	0.00
54) IS chlorobenzene-D5	11.216	119	29322	10.00	ug/L	0.00
68) IS 1,4-dichlorobenzene-D4	13.636	152	44198	10.00	ug/L	0.00
92) IS 1,4-Dioxane-d8	8.821	96	767	10.00	ug/L	0.00
System Monitoring Compounds						
32) SS 1,2-dichloroethane-D4	7.646	65	32065	9.09	ug/L	0.00
Spiked Amount 10.000	Range 60 - 140		Recovery = 90.90%			
36) SS dibromofluoromethane	7.076	111	29115	9.63	ug/L	0.00
Spiked Amount 10.000	Range 78 - 114		Recovery = 96.30%			
41) SS a,a,a-trifluorotoluene	0.000	146	0	0.00	ug/L	
Spiked Amount 20.000	Range 70 - 130		Recovery = 0.00%#			
51) SS toluene-D8	9.677	98	287634	9.89	ug/L	0.00
Spiked Amount 10.000	Range 88 - 110		Recovery = 98.90%			
67) SS 4-bromofluorobenzene	12.433	174	32106	9.58	ug/L	0.00
Spiked Amount 10.000	Range 86 - 115		Recovery = 95.80%			
83) NA 1,2-dichlorobenzene-D4	13.636	152	44198	0.00	ug/L	0.00
Spiked Amount 25.000	Range 15 - 25		Recovery = 0.00%#			
Target Compounds						Qvalue
39) trichloroethene	8.428	95	36535	5.867	ug/L	97

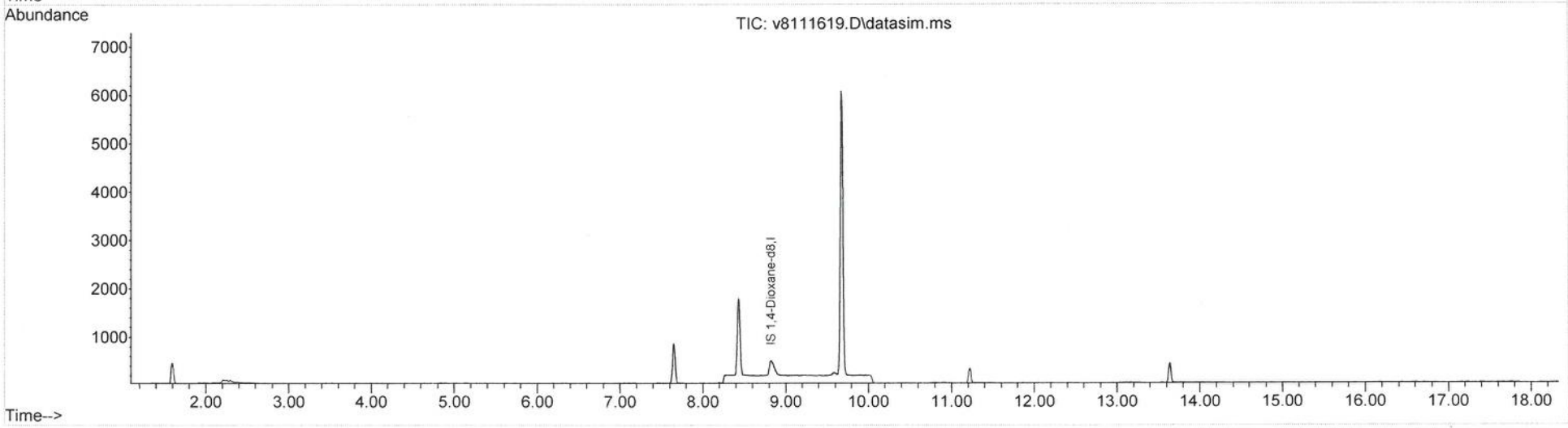
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : X:\V8\2023\Nov23\111623\
Data File : v8111619.D
Acq On : 16 Nov 2023 06:13 pm
Operator : lmm
Sample : 67836-09 5mL
Misc : 5
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Nov 17 06:45:13 2023
Quant Method : X:\V8\methods\V88260090823A.M
Quant Title : V5 Method 8260D
QLast Update : Mon Oct 30 11:37:50 2023
Response via : Initial Calibration





Data File:	L:\VOA\Excel Reports\2023\v8111607
Analysis Group:	8260/8021/624
Field ID:	TB32-110823 1.8E+07
Sample:	67836-10 5mL Dow Salvage Yard
Misc:	5 CRE
Import File Name	v8 111623 g DoD
TestGroupID	V8260DoD_A
Aqueous or Soil? (A or S)	A
Solid amount (g)	
Methanol volume (mL)	
Percent Solid (%)	
Soil Prep Date	
Weight:	
Volume:	
Lab#:	67836-010
AnalysisDate:	11/16/2023
AnalysisTime:	13:12
Dilution:	1
AnalyzedBy:	LMM v8111607.D
QC_Code:	
Prep#:	

Reviewer Checks:

- Quant Report: Reviewed, Analyst Initials & Date
- Chromatogram Checked, Major peaks identified
- Results consistent w/ other attached analyses
- Reanalysis reason noted
- Substitute dilution data checked
- Correct dilution and reason clear or noted
- Flags checked (Expiration, F+, Over Cal, Surr, Aspen, QC)
- Other QC failures or issues noted in Aspen
- Correct data file and/or date/time in Aspen

Notes:

Reviewer Initials & Date: 11/17/23

#	Surrogate Standards	Import Value (as ug/L)	Recovery	Flag	QC Limits	Surrogate True Values
32	SS 1,2-dichloroethane-D4	9.34	93%		60-140	10
36	SS dibromofluoromethane	9.72	97%		78-114	10
51	SS toluene-D8	9.94	99%		88-110	10
67	SS 4-bromofluorobenzene	10.07	101%		86-115	10
41	SS a,a,a-trifluorotoluene	0.00	0%		70-130*	20

	AnalyteName	Concentration (ug/L)		AnalyteName	Concentration (ug/L)
2	dichlorodifluoromethane	0	56	1,3-dichloropropane	0
3	chloromethane	0	57	dibromochloromethane	0
4	vinyl chloride	0	58	1,2-dibromoethane (EDB)	0
5	bromomethane	0	59	chlorobenzene	0
6	chloroethane	0	60	1,1,1,2-tetrachloroethane	0
7	trichlorofluoromethane	0	61	ethylbenzene	-0.112487579
8	diethylether	0	62	m&p-xylenes	0
9	acetone	-0.343683018	63	o-xylene	0
11	1,1-dichloroethene	0	64	styrene	0
13	t-butanol (TBA)	0	65	bromoform	0
15	methylene chloride	-0.22364999	66	isopropylbenzene	0
16	carbon disulfide	0	69	bromobenzene	0
18	methyl-t-butyl ether (MTBE)	0	70	1,1,2,2-tetrachloroethane	0
19	trans-1,2-dichloroethene	0	71	1,2,3-trichloropropane	0
20	isopropyl ether (DIPE)	0	72	n-propylbenzene	0
22	1,1-dichloroethane	0	73	2-chlorotoluene	0
23	2-butanone (MEK)	0	74	4-chlorotoluene	0
24	ethyl-t-butyl ether (ETBE)	0	75	1,3,5-trimethylbenzene	0.055320218
25	2,2-dichloropropane	0	76	tert-butylbenzene	0
26	cis-1,2-dichloroethene	0	77	1,2,4-trimethylbenzene	0.036168575
27	bromochloromethane	0	79	sec-butylbenzene	0
28	chloroform	0	80	1,3-dichlorobenzene	0
29	tetrahydrofuran (THF)	0	81	4-isopropyltoluene	0
30	1,1,1-trichloroethane	0	82	1,4-dichlorobenzene	0
33	carbon tetrachloride	0	84	1,2-dichlorobenzene	0
34	1,1-dichloropropene	0	85	n-butylbenzene	0
35	benzene	0	86	1,2-dibromo-3-chloropropane (DBCP)	0
37	1,2-dichloroethane	0	88	1,2,4-trichlorobenzene	0
38	t-amyl-methyl ether (TAME)	0	89	hexachlorobutadiene	0
39	trichloroethene	0	90	naphthalene	0
42	1,2-dichloropropane	0	91	1,2,3-trichlorobenzene	0
43	dibromomethane	0	87	1,3,5-trichlorobenzene	0
44	bromodichloromethane	0	12	1,1,2-trichloro-1,2,2-trifluoroethane	0
45	1,4-dioxane	0	14	methyl acetate	0
47	4-methyl-2-pentanone (MIBK)	0	21	vinyl acetate	0
48	2-hexanone	0	31	cyclohexane	0
49	cis-1,3-dichloropropene	0	40	methylcyclohexane	0
50	toluene	-0.149611958	10	acrolein	0
52	trans-1,3-dichloropropene	0	17	acrylonitrile	0
53	1,1,2-trichloroethane	0	46	2-chloroethylvinylether (2-CEVE)	0
55	tetrachloroethene	0		Total Xylenes	0

Quantitation Report (QT Reviewed)

Data Path : X:\V8\2023\Nov23\111623\
Data File : v8111607.D
Acq On : 16 Nov 2023 01:12 pm
Operator : lmm
Sample : 67836-10 5mL
Misc : 5
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Nov 16 15:11:49 2023
Quant Method : X:\V8\methods\V88260090823A.M
Quant Title : V5 Method 8260D
QLast Update : Mon Oct 30 11:37:50 2023
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) IS fluorobenzene	8.001	96	134187	10.00	ug/L	0.00
54) IS chlorobenzene-D5	11.213	119	30999	10.00	ug/L	0.00
68) IS 1,4-dichlorobenzene-D4	13.633	152	48199	10.00	ug/L	0.00
92) IS 1,4-Dioxane-d8	8.823	96	866	10.00	ug/L	0.00
System Monitoring Compounds						
32) SS 1,2-dichloroethane-D4	7.646	65	35847	9.34	ug/L	0.00
Spiked Amount 10.000	Range 60 - 140		Recovery = 93.40%			
36) SS dibromofluoromethane	7.076	111	31976	9.72	ug/L	0.00
Spiked Amount 10.000	Range 78 - 114		Recovery = 97.20%			
41) SS a,a,a-trifluorotoluene	0.000	146	0	0.00	ug/L	
Spiked Amount 20.000	Range 70 - 130		Recovery = 0.00%#			
51) SS toluene-D8	9.679	98	314499	9.94	ug/L	0.00
Spiked Amount 10.000	Range 88 - 110		Recovery = 99.40%			
67) SS 4-bromofluorobenzene	12.435	174	35684	10.07	ug/L	0.00
Spiked Amount 10.000	Range 86 - 115		Recovery = 100.70%			
83) NA 1,2-dichlorobenzene-D4	13.633	152	48199	0.00	ug/L	0.00
Spiked Amount 25.000	Range 15 - 25		Recovery = 0.00%#			
Target Compounds						Qvalue
93] 1,4-dioxane SIM	8.886	88	58	0.328	ug/L #	100

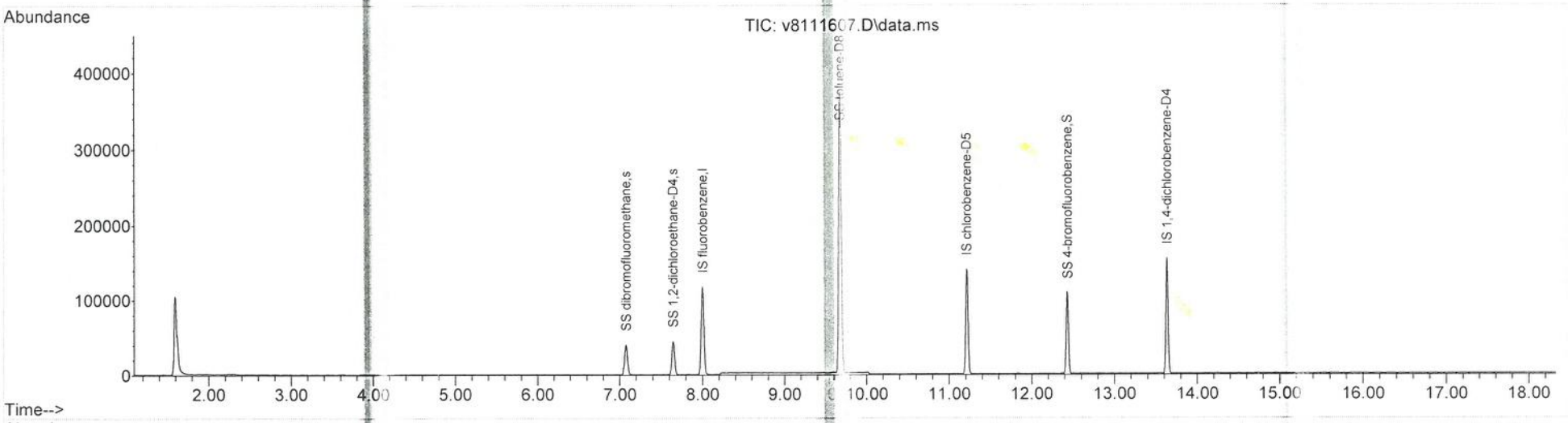
(#) = qualifier out of range (m) = manual integration (+) = signals summed

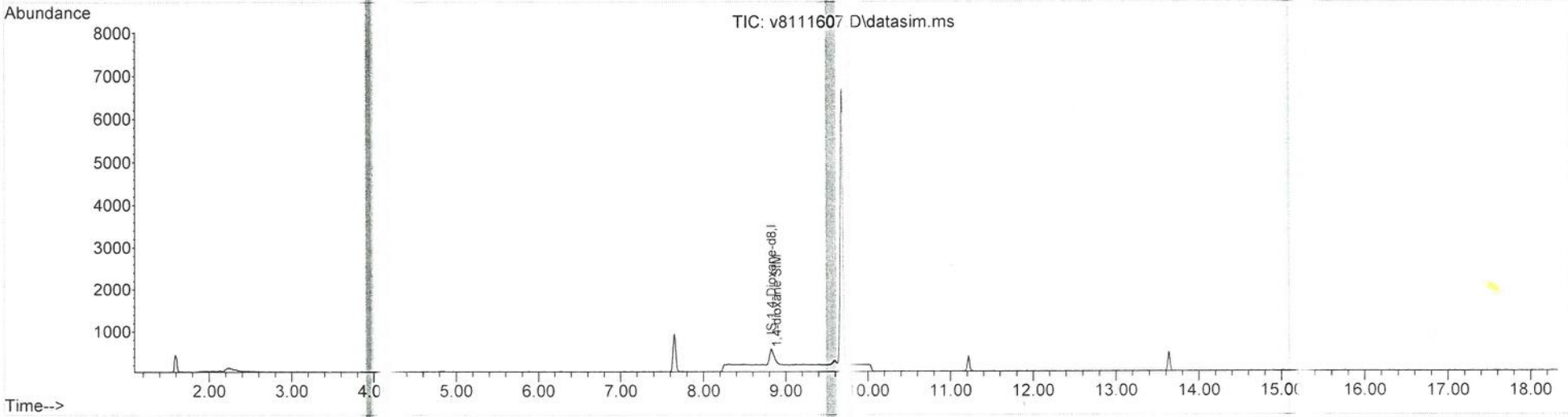
NOV 16 2023

Quantitation Report (QT Reviewed)

Data Path : X:\V8\2023\Nov23\111623
Data File : v8111607.D
Acq On : 16 Nov 2023 01:12 pm
Operator : lmm
Sample : 67836-10 5mL
Misc : 5
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Nov 16 15:11:49 2023
Quant Method : X:\V8\methods\V88260090823A.M
Quant Title : V5 Method 8260D
QLast Update : Mon Oct 30 11:37:50 2023
Response via : Initial Calibration





This File:	L:\VOA\Excel Reports\2023\v8111620
Analysis Group:	8260/8021/624
Field ID:	SY-OBMW3-110823 1.8E+07
Sample:	67836-11 5mL Dow Salvage Yard
Misc:	5 CRE
Import File Name	v8 111623 g DoD
TestGroupID	V8260DoD_A
Aqueous or Soil? (A or S)	A
Solid amount (g)	
Methanol volume (mL)	
Percent Solid (%)	
Soil Prep Date	
Weight:	
Volume:	
Lab#:	67836-011
AnalysisDate:	11/16/2023
AnalysisTime:	18:38
Dilution:	1
AnalyzedBy:	LMM v8111620.D
QC_Code:	
Prep#:	

Reviewer Checks:

- Quant Report: Reviewed, Analyst Initials & Date
- Chromatogram Checked, Major peaks identified
- Results consistent w/ other attached analyses
- Reanalysis reason noted
- Substitute dilution data checked
- Correct dilution and reason clear or noted
- Flags checked (Expiration, F+, Over Cal, Surr, Aspen, QC)
- Other QC failures or issues noted in Aspen
- Correct data file and/or date/time in Aspen

Notes:

Reviewer Initials & Date: 11/17/23

#	Surrogate Standards	Import Value (as ug/L)	Recovery	Flag	QC Limits	Surrogate True Values
32	SS 1,2-dichloroethane-D4	9.17	92%		60-140	10
36	SS dibromofluoromethane	9.46	95%		78-114	10
51	SS toluene-D8	10.01	100%		88-110	10
67	SS 4-bromofluorobenzene	9.97	100%		86-115	10
41	SS a,a,a-trifluorotoluene	0.00	0%		70-130*	20

	AnalyteName	Concentration (ug/L)
2	dichlorodifluoromethane	0
3	chloromethane	0
4	vinyl chloride	0
5	bromomethane	0
6	chloroethane	0
7	trichlorofluoromethane	0
8	diethylether	0
9	acetone	-0.776465826
11	1,1-dichloroethene	0
13	t-butanol (TBA)	0
15	methylene chloride	0
16	carbon disulfide	0
18	methyl-t-butyl ether (MTBE)	0
19	trans-1,2-dichloroethene	0
20	isopropyl ether (DIPE)	0
22	1,1-dichloroethane	0
23	2-butanone (MEK)	0
24	ethyl-t-butyl ether (ETBE)	0
25	2,2-dichloropropane	0
26	cis-1,2-dichloroethene	0
27	bromochloromethane	0
28	chloroform	0
29	tetrahydrofuran (THF)	0
30	1,1,1-trichloroethane	0
33	carbon tetrachloride	0
34	1,1-dichloropropene	0
35	benzene	0
37	1,2-dichloroethane	0
38	t-amyl-methyl ether (TAME)	0
39	trichloroethene	0
42	1,2-dichloropropane	0
43	dibromomethane	0
44	bromodichloromethane	0
45	1,4-dioxane	0
47	4-methyl-2-pentanone (MIBK)	0
48	2-hexanone	0
49	cis-1,3-dichloropropene	0
50	toluene	-0.149049443
52	trans-1,3-dichloropropene	0
53	1,1,2-trichloroethane	0
55	tetrachloroethene	0

	AnalyteName	Concentration (ug/L)
56	1,3-dichloropropane	0
57	dibromochloromethane	0
58	1,2-dibromoethane (EDB)	0
59	chlorobenzene	0
60	1,1,1,2-tetrachloroethane	0
61	ethylbenzene	0
62	m&p-xylenes	0
63	o-xylene	0
64	styrene	0
65	bromoform	0
66	isopropylbenzene	0
69	bromobenzene	0
70	1,1,2,2-tetrachloroethane	0
71	1,2,3-trichloropropane	0
72	n-propylbenzene	0
73	2-chlorotoluene	0
74	4-chlorotoluene	0
75	1,3,5-trimethylbenzene	0
76	tert-butylbenzene	0
77	1,2,4-trimethylbenzene	0
79	sec-butylbenzene	0
80	1,3-dichlorobenzene	0
81	4-isopropyltoluene	0
82	1,4-dichlorobenzene	0
84	1,2-dichlorobenzene	0
85	n-butylbenzene	0
86	1,2-dibromo-3-chloropropane (DBCP)	0
88	1,2,4-trichlorobenzene	0
89	hexachlorobutadiene	0
90	naphthalene	0
91	1,2,3-trichlorobenzene	0
87	1,3,5-trichlorobenzene	0
12	1,1,2-trichloro-1,2,2-trifluoroethane	0
14	methyl acetate	0
21	vinyl acetate	0
31	cyclohexane	0
40	methylcyclohexane	0
10	acrolein	0
17	acrylonitrile	0
46	2-chloroethylvinylether (2-CEVE)	0
	Total Xylenes	0

Quantitation Report (QT Reviewed)

Data Path : X:\V8\2023\Nov23\111623\
Data File : v8111620.D
Acq On : 16 Nov 2023 06:38 pm
Operator : lmm
Sample : 67836-11 5mL
Misc : 5
ALS Vial : 20 Sample Multiplier: 1

11/17/23 @ 07:12
WillieS

Quant Time: Nov 17 06:45:17 2023
Quant Method : X:\V8\methods\V88260090823A.M
Quant Title : V5 Method 8260D
QLast Update : Mon Oct 30 11:37:50 2023
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) IS fluorobenzene	8.001	96	120808	10.00	ug/L	0.00
54) IS chlorobenzene-D5	11.214	119	28311	10.00	ug/L	0.00
68) IS 1,4-dichlorobenzene-D4	13.634	152	43338	10.00	ug/L	0.00
92) IS 1,4-Dioxane-d8	8.823	96	768	10.00	ug/L	0.00
System Monitoring Compounds						
32) SS 1,2-dichloroethane-D4	7.646	65	31667	9.17	ug/L	0.00
Spiked Amount 10.000	Range 60 - 140		Recovery = 91.70%			
36) SS dibromofluoromethane	7.076	111	28022	9.46	ug/L	0.00
Spiked Amount 10.000	Range 78 - 114		Recovery = 94.60%			
41) SS a,a,a-trifluorotoluene	0.000	146	0	0.00	ug/L	
Spiked Amount 20.000	Range 70 - 130		Recovery = 0.00%#			
51) SS toluene-D8	9.679	98	285343	10.01	ug/L	0.00
Spiked Amount 10.000	Range 88 - 110		Recovery = 100.10%			
67) SS 4-bromofluorobenzene	12.436	174	32268	9.97	ug/L	0.00
Spiked Amount 10.000	Range 86 - 115		Recovery = 99.70%			
83) NA 1,2-dichlorobenzene-D4	13.634	152	43338	0.00	ug/L	0.00
Spiked Amount 25.000	Range 15 - 25		Recovery = 0.00%#			

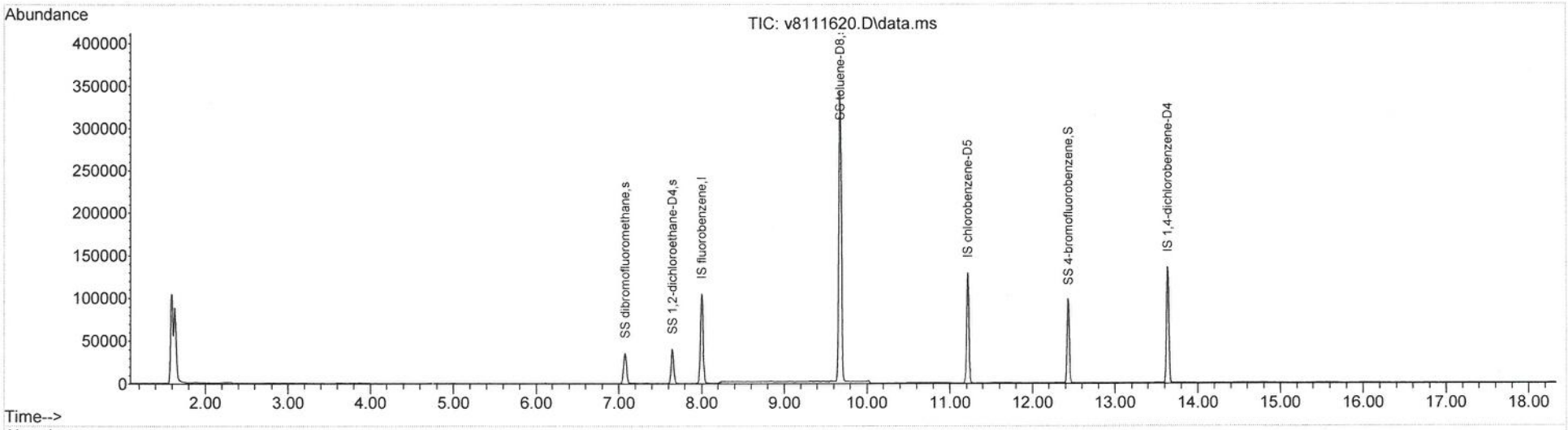
Target Compounds	Qvalue

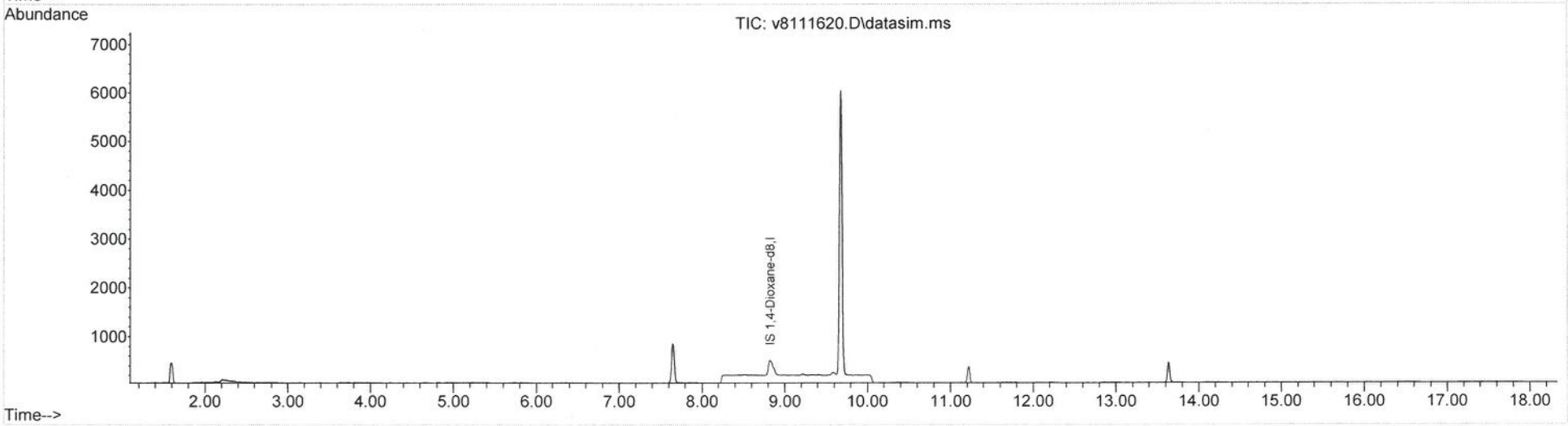
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : X:\V8\2023\Nov23\111623\
Data File : v8111620.D
Acq On : 16 Nov 2023 06:38 pm
Operator : lmm
Sample : 67836-11 5mL
Misc : 5
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Nov 17 06:45:17 2023
Quant Method : X:\V8\methods\V88260090823A.M
Quant Title : V5 Method 8260D
QLast Update : Mon Oct 30 11:37:50 2023
Response via : Initial Calibration





This File:	L:\VOA\Excel Reports\2023\V6111624
Analysis Group:	8260/8021/624
Field ID:	SY-OBMW2-110823 18001468
Sample:	67836-01 5mL Dow Salvage Yard
Misc:	5 CRE
Import File Name	v6 111623
TestGroupID	VMA_VPH_PresCert_A
Aqueous or Soil? (A or S)	A
Solid amount (g)	
Methanol volume (mL)	
Percent Solid (%)	
Soil Prep Date	
Weight:	
Volume:	
Lab#:	67836-001
AnalysisDate:	11/16/2023
AnalysisTime:	22:37
Dilution:	1
AnalyzedBy:	SFP V6111624.D
QC_Code:	
Prep#:	

Reviewer Checks:

Quant Report: Reviewed, Ranges integrated, Analyst Initials & Date
Chromatogram Checked, Major peaks identified
Results consistent w/ other attached analyses
Reanalysis reason noted
Substitute dilution data checked
Correct dilution and reason clear or noted
Flags checked (Expiration, F+, Over Cal, Surr, Aspen, QC)
Other QC failures or issues noted in Aspen
Correct data file and/or date/time in Aspen

Notes: Calibration based on sum of discrete peak areas

Initials & Date: 11/20/23

#	Surrogate Standards	Import Value (as ug/L)	Recovery	Flag	QC Limits	Surrogate True Values
11	SS 2,5-dibromotoluene	31.36	**78%**		70-130	40
22	SS 2,5-dibromotoluene #2	32.67	**82%**		70-130	40
4	SS a,a,a-trifluorotoluene	0.00	**0%**		70-130*	20

#	AnalyteName	Concentration (ug/L)	
	C5-C8 Aliphatics #2	**10.175**	10.175
	C9-C12 Aliphatics #2	**23.051**	23.051
1	Methyl-t-butyl ether (MTBE)	0.000	0
2	benzene	0.000	0
3	toluene	0.068	0.0678
5	ethylbenzene	0.084	0.0839
6	m&p-xylenes	0.180	0.1804
7	o-xylene	0.070	0.0698
10	naphthalene	0.294	0.2938
	C5-C8 Aliphatics Adj	**10.107**	10.107
	C9-C12 Aliphatics Adj	**11.115**	11.115
	C9-C10 Aromatics	**11.602**	11.602
	Total Xylenes	0.000	

Quantitation Report (QT Reviewed)

Data Path : X:\V6\2023\Nov23\111623\
Data File : V6111624.D
Signal(s) : Signal #1: CPDET1B.ch Signal #2: FID2A.ch
Acq On : 16 Nov 2023 10:37 pm
Operator : sfp
Sample : 67836-01 5mL
Misc : 5
ALS Vial : 24 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 17 11:56:42 2023
Quant Method : X:\V6\methods\V6VPH082423CHe.M
Quant Title : VOA06 MA VPH
QLast Update : Thu Aug 24 11:07:18 2023
Response via : Initial Calibration
Integrator: ChemStation

SFP
11/17/23

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

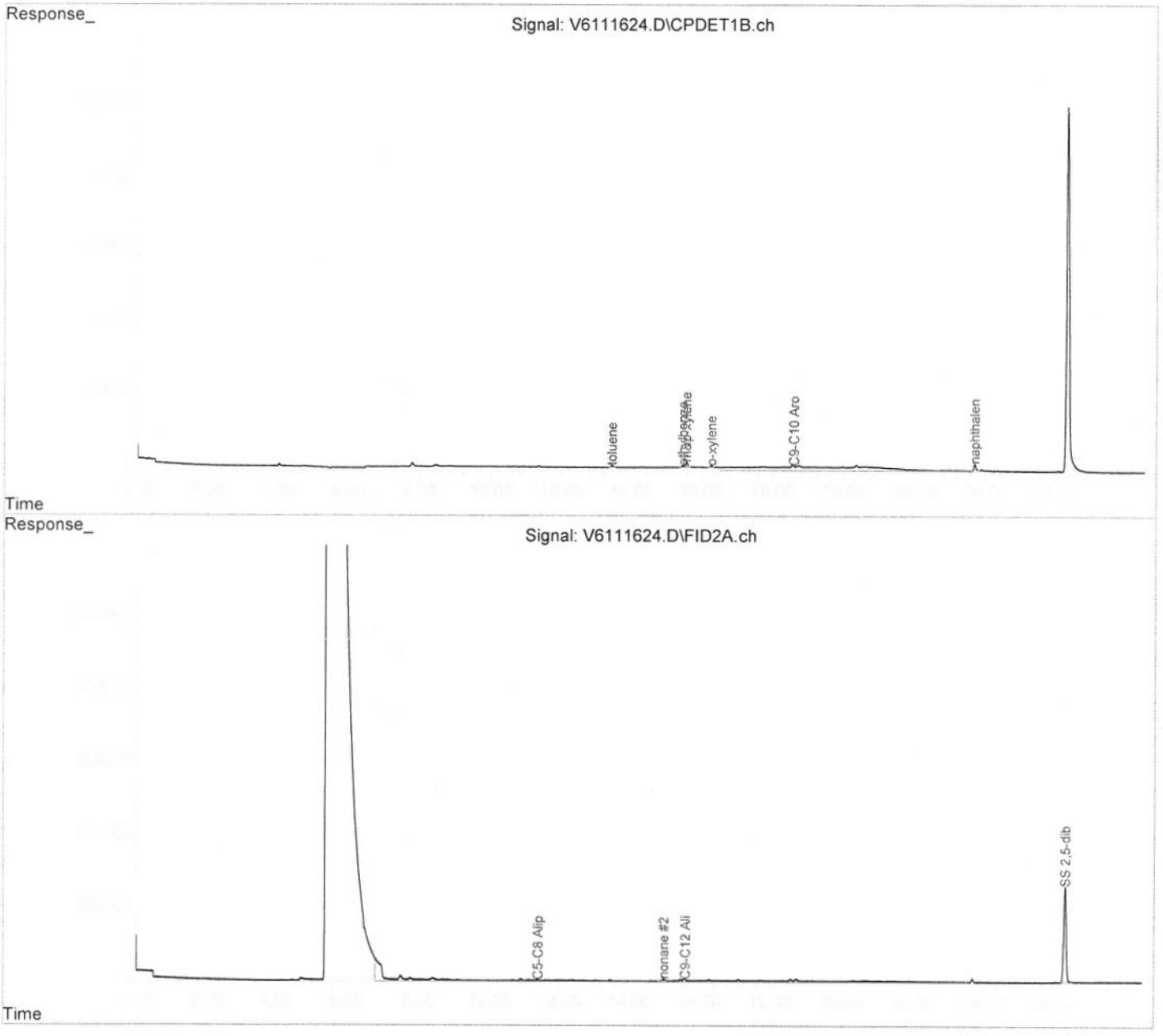
	Compound	R.T.	Response	Conc	Units	
	System Monitoring Compounds					
4) S	SS a,a,a-trifluorotol...	0.000	0	N.D.	ug/L	
Spiked Amount	20.000		Recovery =	0.00%		
11) S	SS 2,5-dibromotoluene	26.357	24867752	31.358	ug/L	
Spiked Amount	40.000 Range 70 - 130		Recovery =	78.40%		
17) S	SS a,a,a-trifluorotol...	0.000	0	N.D.	ug/L	
Spiked Amount	20.000		Recovery =	0.00%		
22) S	SS 2,5-dibromotoluene #2	26.358	12797845	32.670	ug/L	
Spiked Amount	40.000 Range 70 - 130		Recovery =	81.68%		
	Target Compounds					
1)	methyl-t-butyl ether ...	0.000	0	N.D.	ug/L	
2)	benzene	0.000	0	N.D.	ug/L	
3)	toluene	13.448	98201	0.068	ug/L	mPM
5)	ethylbenzene	15.465	100318	0.084	ug/L	m
6)	m&p-xylenes	15.571	257120	0.180	ug/L	m
7)	o-xylene	16.286	85321	0.070	ug/L	m
8)	1,2,4-trimethylbenzene	0.000	0	N.D.	ug/L	
9) H	C9-C10 Aromatics	18.612	15833237	11.602	ug/L	mRI
10)	naphthalene	23.693	393004	0.294	ug/L	mPM
13)	pentane #2	0.000	0	N.D.	ug/L	
14)	2-methylpentane #2	0.000	0	N.D.	ug/L	
15)	2,2,4-trimethylpentan...	0.000	0	N.D.	ug/L	
16) H	C5-C8 Aliphatics #2	11.378	20591994	10.175	ug/L	mRI
18)	nonane #2	14.988	199273	0.590	ug/L	mPM
19)	decane #2	0.000	0	N.D.	ug/L	
20)	n-butylcyclohexane #2	0.000	0	N.D.	ug/L	
21) H	C9-C12 Aliphatics #2	15.611	17545005	23.051	ug/L	mRI

(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : X:\V6\2023\Nov23\111623\
Data File : V6111624.D
Signal(s) : Signal #1: CPDET1B.ch Signal #2: FID2A.ch
Acq On : 16 Nov 2023 10:37 pm
Operator : sfp
Sample : 67836-01 5mL
Misc : 5
ALS Vial : 24 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 17 11:56:42 2023
Quant Method : X:\V6\methods\V6VPH082423CHe.M
Quant Title : VOA06 MA VPH
QLast Update : Thu Aug 24 11:07:18 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



This File:	L:\VOA\Excel Reports\2023\V6111625
Analysis Group:	8260/8021/624
Field ID:	SY-OBMW1-110823 18001468
Sample:	67836-02 5mL Dow Salvage Yard
Misc:	5 CRE
Import File Name	v6 111623
TestGroupID	VMA_VPH_PresCert_A
Aqueous or Soil? (A or S)	A
Solid amount (g)	
Methanol volume (mL)	
Percent Solid (%)	
Soil Prep Date	
Weight:	
Volume:	
Lab#:	67836-002
AnalysisDate:	11/16/2023
AnalysisTime:	23:10
Dilution:	1
AnalyzedBy:	SFP V6111625.D
QC_Code:	
Prep#:	

Reviewer Checks:

Quant Report: Reviewed, Ranges integrated, Analyst Initials & Date
Chromatogram Checked, Major peaks identified
Results consistent w/ other attached analyses
Reanalysis reason noted
Substitute dilution data checked
Correct dilution and reason clear or noted
Flags checked (Expiration, F+, Over Cal, Surr, Aspen, QC)
Other QC failures or issues noted in Aspen
Correct data file and/or date/time in Aspen

Notes: Calibration based on sum of discrete peak areas

Initials & Date: 11/20/23

#	Surrogate Standards	Import Value (as ug/L)	Recovery	Flag	QC Limits	Surrogate True Values
11	SS 2,5-dibromotoluene	42.78	**107%**		70-130	40
22	SS 2,5-dibromotoluene #2	44.39	**111%**		70-130	40
4	SS a,a,a-trifluorotoluene	0.00	**0%**		70-130*	20

#	AnalyteName	Concentration (ug/L)	
	C5-C8 Aliphatics #2	**12.928**	12.928
	C9-C12 Aliphatics #2	**25.759**	25.759
1	Methyl-t-butyl ether (MTBE)	0.000	0
2	benzene	0.000	0
3	toluene	0.000	0
5	ethylbenzene	0.063	0.0635
6	m&p-xylenes	0.150	0.1503
7	o-xylene	0.052	0.0525
10	naphthalene	0.224	0.2243
	C5-C8 Aliphatics Adj	**12.928**	12.928
	C9-C12 Aliphatics Adj	**14.999**	14.999
	C9-C10 Aromatics	**10.494**	10.494
	Total Xylenes	0.000	

Quantitation Report (QT Reviewed)

Data Path : X:\V6\2023\Nov23\111623\
Data File : V6111625.D
Signal(s) : Signal #1: CPDET1B.ch Signal #2: FID2A.ch
Acq On : 16 Nov 2023 11:10 pm
Operator : sfp
Sample : 67836-02 5mL
Misc : 5
ALS Vial : 25 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 17 11:56:45 2023
Quant Method : X:\V6\methods\V6VPH082423CHe.M
Quant Title : VOA06 MA VPH
QLast Update : Thu Aug 24 11:07:18 2023
Response via : Initial Calibration
Integrator: ChemStation

SFP 11/17/23

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	R.T.	Response	Conc	Units		
	System Monitoring Compounds						
4) S	SS a,a,a-trifluorotol...	0.000	0	N.D.	ug/L		
Spiked Amount	20.000		Recovery =	0.00%			
11) S	SS 2,5-dibromotoluene	26.358	32753775	42.775	ug/L		
Spiked Amount	40.000 Range 70 - 130		Recovery =	106.94%			
17) S	SS a,a,a-trifluorotol...	0.000	0	N.D.	ug/L		
Spiked Amount	20.000		Recovery =	0.00%			
22) S	SS 2,5-dibromotoluene #2	26.357	16896204	44.392	ug/L	m	BC
Spiked Amount	40.000 Range 70 - 130		Recovery =	110.98%			
	Target Compounds						
1)	methyl-t-butyl ether ...	0.000	0	N.D.	ug/L		
2)	benzene	0.000	0	N.D.	ug/L		
3)	toluene	0.000	0	N.D.	ug/L		
5)	ethylbenzene	15.466	75896	0.063	ug/L	m	PM
6)	m&p-xylenes	15.569	214187	0.150	ug/L	m	
7)	o-xylene	16.283	64121	0.052	ug/L	m	↓
8)	1,2,4-trimethylbenzene	0.000	0	N.D.	ug/L		
9) H	C9-C10 Aromatics	18.612	14732378	10.494	ug/L	m	RI
10)	naphthalene	23.692	320315	0.224	ug/L	m	PM
13)	pentane #2	0.000	0	N.D.	ug/L		
14)	2-methylpentane #2	8.394	293054	0.327	ug/L	m	PM
15)	2,2,4-trimethylpentan...	0.000	0	N.D.	ug/L		
16) H	C5-C8 Aliphatics #2	11.378	23985181	12.928	ug/L	m	RI
18)	nonane #2	0.000	0	N.D.	ug/L		
19)	decane #2	0.000	0	N.D.	ug/L		
20)	n-butylcyclohexane #2	0.000	0	N.D.	ug/L		
21) H	C9-C12 Aliphatics #2	15.611	20829708	25.759	ug/L	m	RI

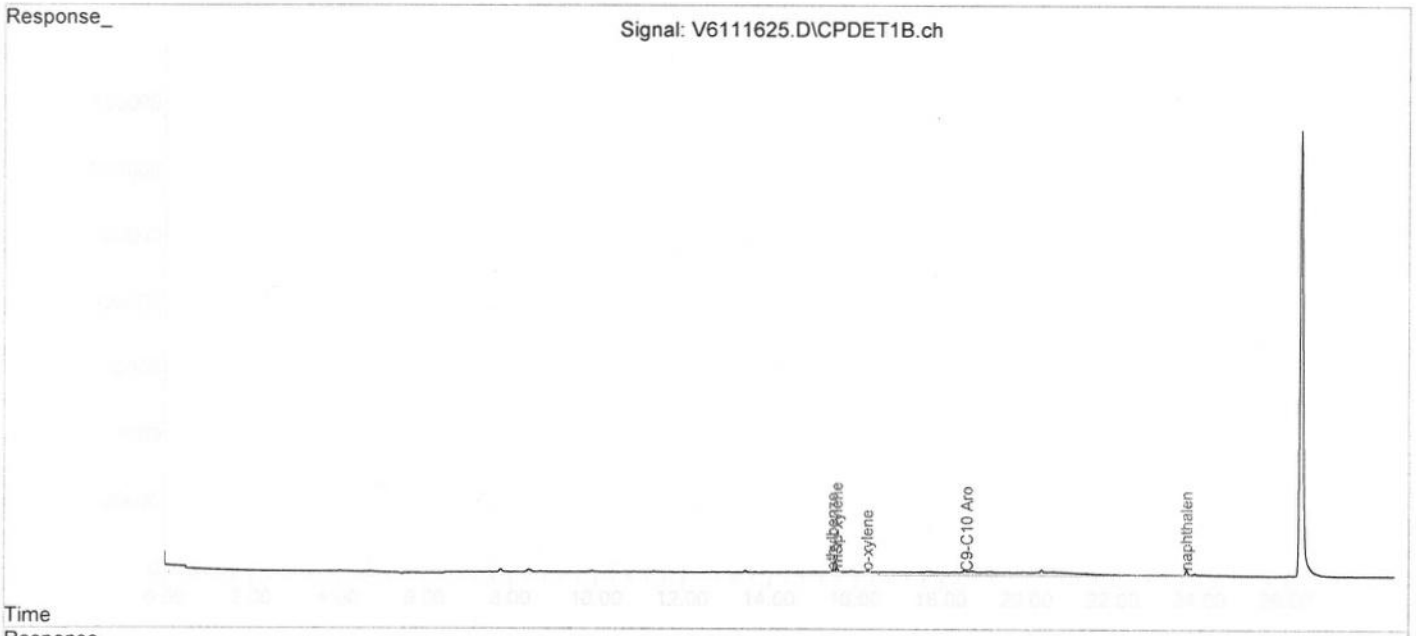
(f)=RT Delta > 1/2 Window (m)=manual int.

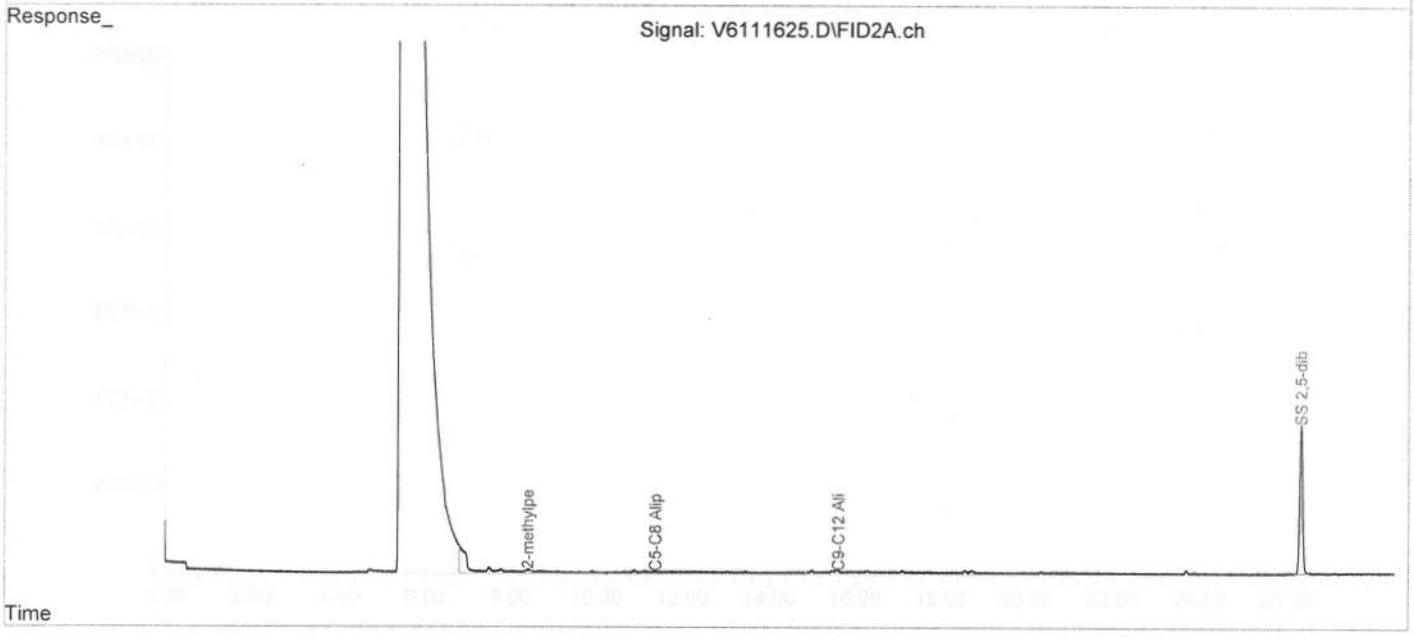
Quantitation Report (QT Reviewed)

Data Path : X:\V6\2023\Nov23\111623\
Data File : V6111625.D
Signal(s) : Signal #1: CPDET1B.ch Signal #2: FID2A.ch
Acq On : 16 Nov 2023 11:10 pm
Operator : sfp
Sample : 67836-02 5mL
Misc : 5
ALS Vial : 25 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 17 11:56:45 2023
Quant Method : X:\V6\methods\V6VPH082423CHe.M
Quant Title : VOA06 MA VPH
QLast Update : Thu Aug 24 11:07:18 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





This File:	L:\VOA\Excel Reports\2023\V6111626
Analysis Group:	8260/8021/624
Field ID:	SY-OBMW9-110823 18001468
Sample:	67836-03 5mL Dow Salvage Yard
Misc:	5 CRE
Import File Name	v6 111623
TestGroupID	VMA_VPH_PresCert_A
Aqueous or Soil? (A or S)	A
Solid amount (g)	
Methanol volume (mL)	
Percent Solid (%)	
Soil Prep Date	
Weight:	
Volume:	
Lab#:	67836-003
AnalysisDate:	11/16/2023
AnalysisTime:	23:44
Dilution:	1
AnalyzedBy:	SFP V6111626.D
QC_Code:	
Prep#:	

Reviewer Checks:

Quant Report: Reviewed, Ranges integrated, Analyst Initials & Date
Chromatogram Checked, Major peaks identified
Results consistent w/ other attached analyses
Reanalysis reason noted
Substitute dilution data checked
Correct dilution and reason clear or noted
Flags checked (Expiration, F+, Over Cal, Surr, Aspen, QC)
Other QC failures or issues noted in Aspen
Correct data file and/or date/time in Aspen

Notes: Calibration based on sum of discrete peak areas

Initials & Date: 11/20/23

#	Surrogate Standards	Import Value (as ug/L)	Recovery	Flag	QC Limits	Surrogate True Values
11	SS 2,5-dibromotoluene	36.66	**92%**		70-130	40
22	SS 2,5-dibromotoluene #2	38.26	**96%**		70-130	40
4	SS a,a,a-trifluorotoluene	0.00	**0%**		70-130*	20

#	AnalyteName	Concentration (ug/L)	
	C5-C8 Aliphatics #2	**10.039**	10.039
	C9-C12 Aliphatics #2	**22.921**	22.921
1	Methyl-t-butyl ether (MTBE)	0.000	0
2	benzene	0.000	0
3	toluene	0.000	0
5	ethylbenzene	0.053	0.053
6	m&p-xylenes	0.142	0.1424
7	o-xylene	0.053	0.0526
10	naphthalene	0.157	0.1568
	C5-C8 Aliphatics Adj	**10.039**	10.039
	C9-C12 Aliphatics Adj	**12.662**	12.662
	C9-C10 Aromatics	**10.011**	10.011
	Total Xylenes	0.000	

Quantitation Report (QT Reviewed)

Data Path : X:\V6\2023\Nov23\111623\
Data File : V6111626.D
Signal(s) : Signal #1: CPDET1B.ch Signal #2: FID2A.ch
Acq On : 16 Nov 2023 11:44 pm
Operator : sfp
Sample : 67836-03 5mL
Misc : 5
ALS Vial : 26 Sample Multiplier: 1

SFP 11/17/23

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 17 11:56:48 2023
Quant Method : X:\V6\methods\V6VPH082423CHe.M
Quant Title : VOA06 MA VPH
QLast Update : Thu Aug 24 11:07:18 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	R.T.	Response	Conc	Units		
	System Monitoring Compounds						
4)	S SS a,a,a-trifluorotol...	0.000	0	N.D.	ug/L		
Spiked Amount	20.000		Recovery =	0.00%			
11)	S SS 2,5-dibromotoluene	26.358	28528726	36.658	ug/L		
Spiked Amount	40.000 Range 70 - 130		Recovery =	91.64%			
17)	S SS a,a,a-trifluorotol...	0.000	0	N.D.	ug/L		
Spiked Amount	20.000		Recovery =	0.00%			
22)	S SS 2,5-dibromotoluene #2	26.358	14750634	38.255	ug/L		
Spiked Amount	40.000 Range 70 - 130		Recovery =	95.64%			
	Target Compounds						
1)	methyl-t-butyl ether ...	0.000	0	N.D.	ug/L		
2)	benzene	0.000	0	N.D.	ug/L		
3)	toluene	0.000	0	N.D.	ug/L		
5)	ethylbenzene	15.470	63403	0.053	ug/L	m	PM
6)	m&p-xylenes	15.565	202901	0.142	ug/L	m	↓
7)	o-xylene	16.280	64354	0.053	ug/L	m	↓
8)	1,2,4-trimethylbenzene	18.559	136694	0.122	ug/L	m	↓
9)	H C9-C10 Aromatics	18.612	14252967	10.011	ug/L	m	RI
10)	naphthalene	23.696	249797	0.157	ug/L	m	PM
13)	pentane #2	0.000	0	N.D.	ug/L		
14)	2-methylpentane #2	0.000	0	N.D.	ug/L		
15)	2,2,4-trimethylpentan...	0.000	0	N.D.	ug/L		
16)	H C5-C8 Aliphatics #2	11.378	20425231	10.039	ug/L	m	RI
18)	nonane #2	14.984	209039	0.598	ug/L	m	PM
19)	decane #2	0.000	0	N.D.	ug/L		
20)	n-butylcyclohexane #2	0.000	0	N.D.	ug/L		
21)	H C9-C12 Aliphatics #2	15.611	17387600	22.921	ug/L	m	RI

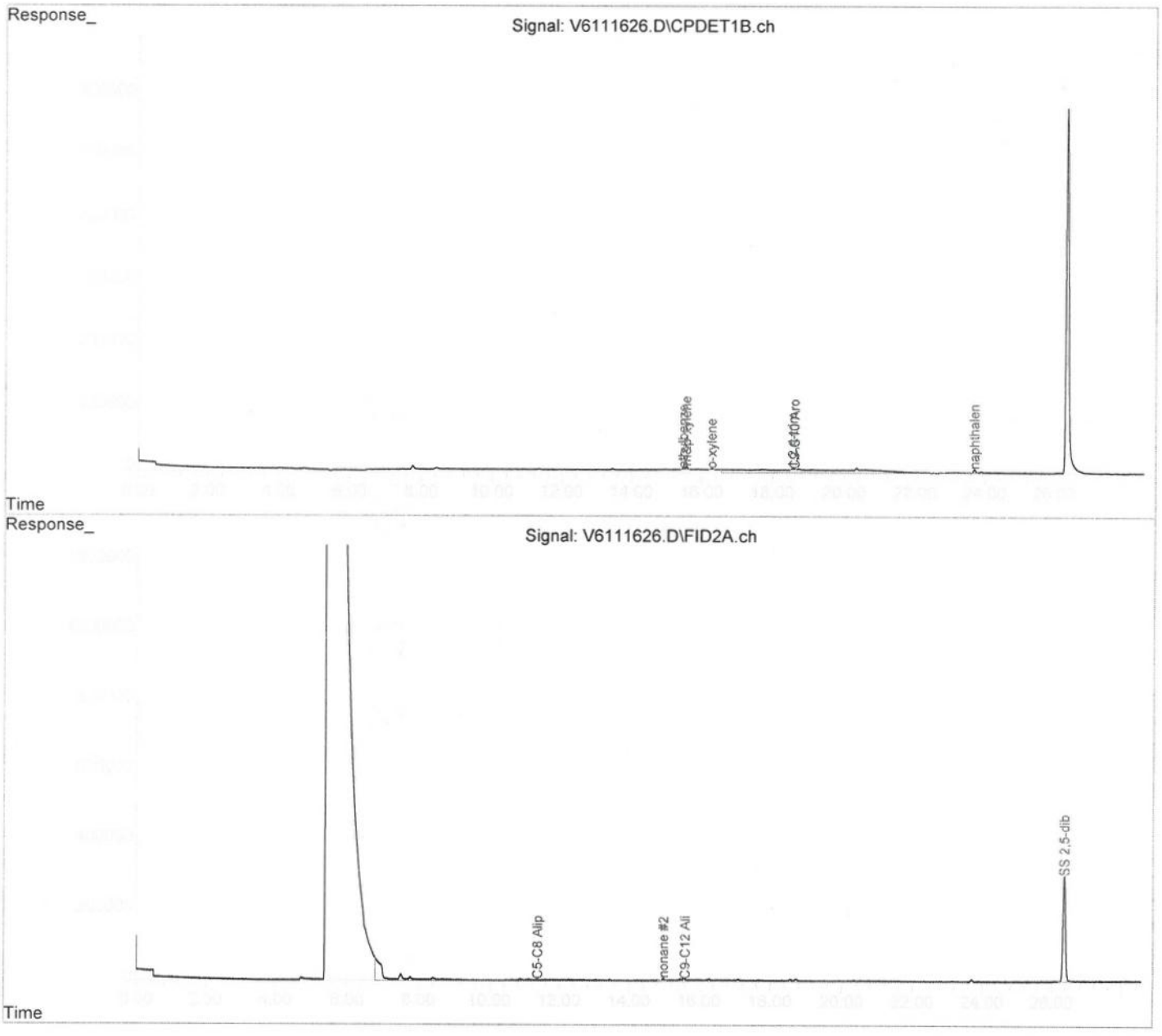
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : X:\V6\2023\Nov23\111623\
Data File : V6111626.D
Signal(s) : Signal #1: CPDET1B.ch Signal #2: FID2A.ch
Acq On : 16 Nov 2023 11:44 pm
Operator : sfp
Sample : 67836-03 5mL
Misc : 5
ALS Vial : 26 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 17 11:56:48 2023
Quant Method : X:\V6\methods\V6VPH082423CHe.M
Quant Title : VOA06 MA VPH
QLast Update : Thu Aug 24 11:07:18 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



This File:	L:\VOA\Excel Reports\2023\V6111627
Analysis Group:	8260/8021/624
Field ID:	SY-BRMW5-29-44-110823 18001468
Sample:	67836-04 5mL Dow Salvage Yard
Misc:	5 CRE
Import File Name	v6 111623
TestGroupID	VMA_VPH_PresCert_A
Aqueous or Soil? (A or S)	A
Solid amount (g)	
Methanol volume (mL)	
Percent Solid (%)	
Soil Prep Date	
Weight:	
Volume:	
Lab#:	67836-004
AnalysisDate:	11/17/2023
AnalysisTime:	0:17
Dilution:	1
AnalyzedBy:	SFP V6111627.D
QC_Code:	
Prep#:	

Reviewer Checks:

Quant Report: Reviewed, Ranges integrated, Analyst Initials & Date
Chromatogram Checked, Major peaks identified
Results consistent w/ other attached analyses
Reanalysis reason noted
Substitute dilution data checked
Correct dilution and reason clear or noted
Flags checked (Expiration, F+, Over Cal, Surr, Aspen, QC)
Other QC failures or issues noted in Aspen
Correct data file and/or date/time in Aspen

Notes: Calibration based on sum of discrete peak areas

Initials & Date: 11/20/23

#	Surrogate Standards	Import Value (as ug/L)	Recovery	Flag	QC Limits	Surrogate True Values
11	SS 2,5-dibromotoluene	37.96	**95%**		70-130	40
22	SS 2,5-dibromotoluene #2	39.75	**99%**		70-130	40
4	SS a,a,a-trifluorotoluene	0.00	**0%**		70-130*	20

#	AnalyteName	Concentration (ug/L)	
	C5-C8 Aliphatics #2	**14.609**	14.609
	C9-C12 Aliphatics #2	**21.256**	21.256
1	Methyl-t-butyl ether (MTBE)	0.000	0
2	benzene	0.000	0
3	toluene	**1.127**	1.1266
5	ethylbenzene	0.000	0
6	m&p-xylenes	0.145	0.1448
7	o-xylene	0.062	0.0622
10	naphthalene	0.000	0
	C5-C8 Aliphatics Adj	**13.483**	13.483
	C9-C12 Aliphatics Adj	**9.637**	9.6368
	C9-C10 Aromatics	**11.412**	11.412
	Total Xylenes	0.000	

Quantitation Report (QT Reviewed)

Data Path : X:\V6\2023\Nov23\111623\
Data File : V6111627.D
Signal(s) : Signal #1: CPDET1B.ch Signal #2: FID2A.ch
Acq On : 17 Nov 2023 12:17 am
Operator : sfp
Sample : 67836-04 5mL
Misc : 5
ALS Vial : 27 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 17 11:56:51 2023
Quant Method : X:\V6\methods\V6VPH082423CHe.M
Quant Title : VOA06 MA VPH
QLast Update : Thu Aug 24 11:07:18 2023
Response via : Initial Calibration
Integrator: ChemStation

SFP 11/17/23

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	R.T.	Response	Conc	Units	
	System Monitoring Compounds					
4) S	SS a,a,a-trifluorotol...	0.000	0	N.D.	ug/L	
Spiked Amount	20.000		Recovery =	0.00%		
11) S	SS 2,5-dibromotoluene	26.357	29428294	37.961	ug/L	
Spiked Amount	40.000 Range 70 - 130		Recovery =	94.90%		
17) S	SS a,a,a-trifluorotol...	0.000	0	N.D.	ug/L	
Spiked Amount	20.000		Recovery =	0.00%		
22) S	SS 2,5-dibromotoluene #2	26.358	15271830	39.746	ug/L	
Spiked Amount	40.000 Range 70 - 130		Recovery =	99.37%		
	Target Compounds					
1)	methyl-t-butyl ether ...	0.000	0	N.D.	ug/L	
2)	benzene	0.000	0	N.D.	ug/L	
3)	toluene	13.449	1631639	1.127	ug/L m	BC
5)	ethylbenzene	0.000	0	N.D.	ug/L	
6)	m&p-xylenes	15.574	206285	0.145	ug/L m	PM
7)	o-xylene	16.273	76012	0.062	ug/L m	↓
8)	1,2,4-trimethylbenzene	0.000	0	N.D.	ug/L	
9) H	C9-C10 Aromatics	18.612	15644577	11.412	ug/L m	RI
10)	naphthalene	0.000	0	N.D.	ug/L	
13)	pentane #2	0.000	0	N.D.	ug/L	
14)	2-methylpentane #2	8.410	223160	0.275	ug/L m	PM
15)	2,2,4-trimethylpentan...	10.885	198646	0.102	ug/L m	↓
16) H	C5-C8 Aliphatics #2	11.378	26057277	14.609	ug/L m	RI
18)	nonane #2	0.000	0	N.D.	ug/L	
19)	decane #2	0.000	0	N.D.	ug/L	
20)	n-butylcyclohexane #2	0.000	0	N.D.	ug/L	
21) H	C9-C12 Aliphatics #2	15.611	15368114	21.256	ug/L m	RI

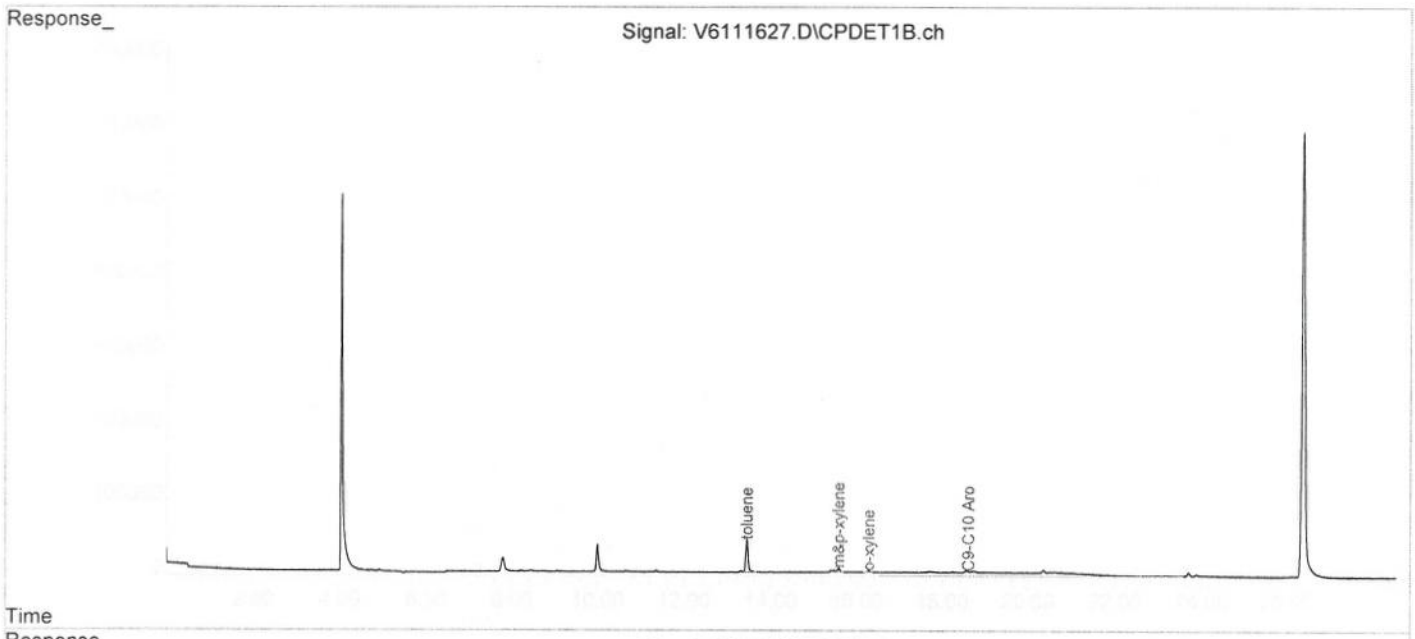
(f)=RT Delta > 1/2 Window (m)=manual int.

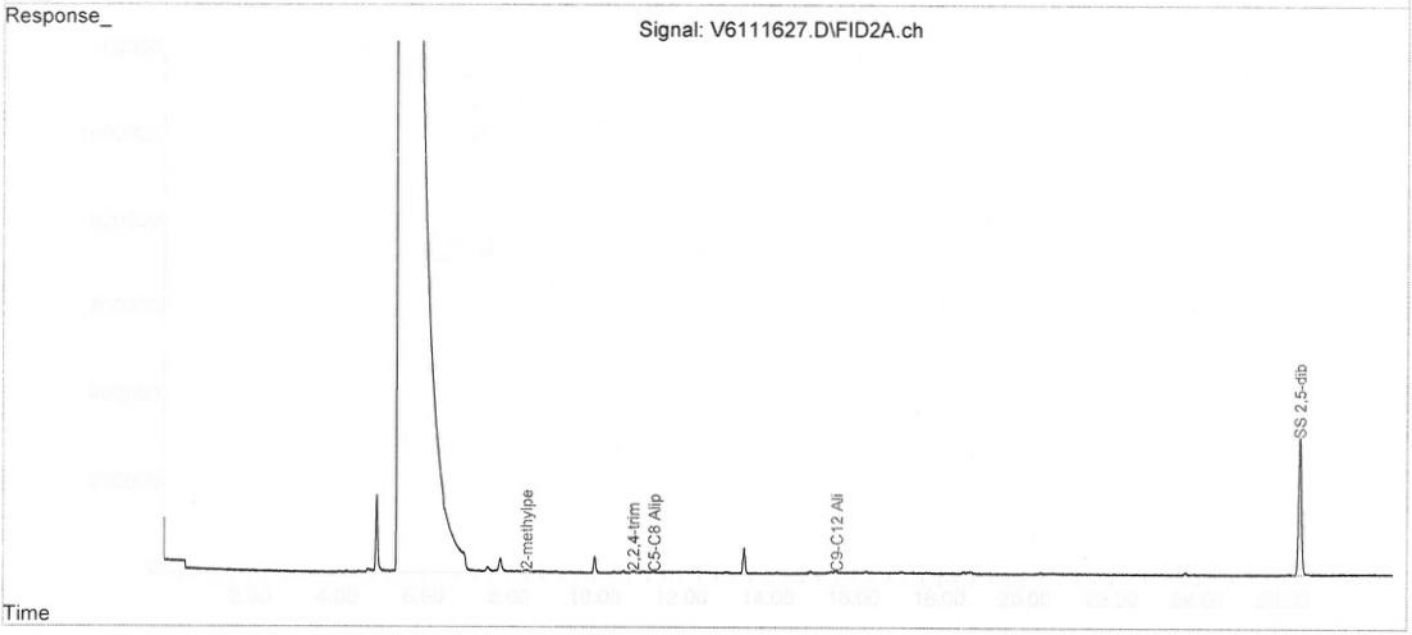
Quantitation Report (QT Reviewed)

Data Path : X:\V6\2023\Nov23\111623\
Data File : V6111627.D
Signal(s) : Signal #1: CPDET1B.ch Signal #2: FID2A.ch
Acq On : 17 Nov 2023 12:17 am
Operator : sfp
Sample : 67836-04 5mL
Misc : 5
ALS Vial : 27 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 17 11:56:51 2023
Quant Method : X:\V6\methods\V6VPH082423CHe.M
Quant Title : VOA06 MA VPH
QLast Update : Thu Aug 24 11:07:18 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





This File:	L:\VOA\Excel Reports\2023\V6111628
Analysis Group:	8260/8021/624
Field ID:	-BRMW5-123-133-110823 18001468
Sample:	67836-05 5mL Dow Salvage Yard
Misc:	5 CRE
Import File Name	v6 111623
TestGroupID	VMA_VPH_PresCert_A
Aqueous or Soil? (A or S)	A
Solid amount (g)	
Methanol volume (mL)	
Percent Solid (%)	
Soil Prep Date	
Weight:	
Volume:	
Lab#:	67836-005
AnalysisDate:	11/17/2023
AnalysisTime:	0:51
Dilution:	1
AnalyzedBy:	SFP V6111628.D
QC_Code:	
Prep#:	

Reviewer Checks:

Quant Report: Reviewed, Ranges integrated, Analyst Initials & Date
Chromatogram Checked, Major peaks identified
Results consistent w/ other attached analyses
Reanalysis reason noted
Substitute dilution data checked
Correct dilution and reason clear or noted
Flags checked (Expiration, F+, Over Cal, Surr, Aspen, QC)
Other QC failures or issues noted in Aspen
Correct data file and/or date/time in Aspen

Notes: Calibration based on sum of discrete peak areas

Initials & Date: 11/20/23

#	Surrogate Standards	Import Value (as ug/L)	Recovery	Flag	QC Limits	Surrogate True Values
11	SS 2,5-dibromotoluene	40.52	**101%**		70-130	40
22	SS 2,5-dibromotoluene #2	42.53	**106%**		70-130	40
4	SS a,a,a-trifluorotoluene	0.00	**0%**		70-130*	20

#	AnalyteName	Concentration (ug/L)	
	C5-C8 Aliphatics #2	**22.615**	22.615
	C9-C12 Aliphatics #2	**25.332**	25.332
1	Methyl-t-butyl ether (MTBE)	0.000	0
2	benzene	0.000	0
3	toluene	**1.743**	1.743
5	ethylbenzene	0.064	0.064
6	m&p-xylenes	0.130	0.1296
7	o-xylene	0.048	0.0478
10	naphthalene	0.089	0.089
	C5-C8 Aliphatics Adj	**20.872**	20.872
	C9-C12 Aliphatics Adj	**13.427**	13.427
	C9-C10 Aromatics	**11.664**	11.664
	Total Xylenes	0.000	

Quantitation Report (QT Reviewed)

Data Path : X:\V6\2023\Nov23\111623\
Data File : V6111628.D
Signal(s) : Signal #1: CPDET1B.ch Signal #2: FID2A.ch
Acq On : 17 Nov 2023 12:51 am
Operator : sfp
Sample : 67836-05 5mL
Misc : 5
ALS Vial : 28 Sample Multiplier: 1

SFP
11/17/23

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 17 11:56:54 2023
Quant Method : X:\V6\methods\V6VPH082423CHe.M
Quant Title : VOA06 MA VPH
QLast Update : Thu Aug 24 11:07:18 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	R.T.	Response	Conc	Units		
	System Monitoring Compounds						
4)	S SS a,a,a-trifluorotol...	0.000	0	N.D.	ug/L		
Spiked Amount	20.000		Recovery =	0.00%			
11)	S SS 2,5-dibromotoluene	26.358	31196027	40.520	ug/L		
Spiked Amount	40.000 Range 70 - 130		Recovery =	101.30%			
17)	S SS a,a,a-trifluorotol...	0.000	0	N.D.	ug/L		
Spiked Amount	20.000		Recovery =	0.00%			
22)	S SS 2,5-dibromotoluene #2	26.358	16245317	42.530	ug/L		
Spiked Amount	40.000 Range 70 - 130		Recovery =	106.33%			
	Target Compounds						
1)	methyl-t-butyl ether ...	0.000	0	N.D.	ug/L		
2)	benzene	0.000	0	N.D.	ug/L		
3)	toluene	13.449	2524449	1.743	ug/L	m	BC
5)	ethylbenzene	15.458	76462	0.064	ug/L	m	PM
6)	m&p-xylenes	15.568	184644	0.130	ug/L	m	
7)	o-xylene	16.273	58459	0.048	ug/L	m	
8)	1,2,4-trimethylbenzene	18.565	115777	0.103	ug/L	m	
9)	H C9-C10 Aromatics	18.612	15894223	11.664	ug/L	m	RI
10)	naphthalene	23.684	178860	0.089	ug/L	m	PM
13)	pentane #2	0.000	0	N.D.	ug/L		
14)	2-methylpentane #2	0.000	0	N.D.	ug/L		
15)	2,2,4-trimethylpentan...	0.000	0	N.D.	ug/L		
16)	H C5-C8 Aliphatics #2	11.378	35924241	22.615	ug/L	m	RI
18)	nonane #2	14.985	141754	0.543	ug/L	m	PM
19)	decane #2	0.000	0	N.D.	ug/L		
20)	n-butylcyclohexane #2	0.000	0	N.D.	ug/L		
21)	H C9-C12 Aliphatics #2	15.611	20311974	25.332	ug/L	m	RI

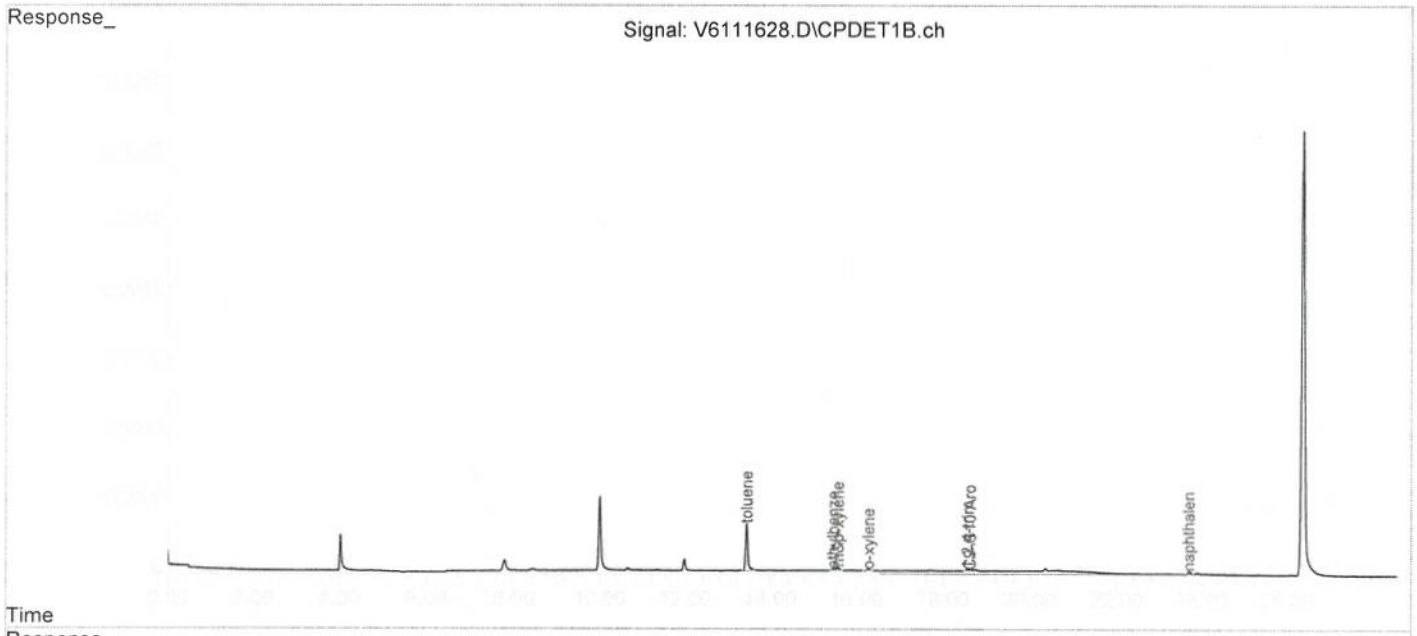
(f)=RT Delta > 1/2 Window (m)=manual int.

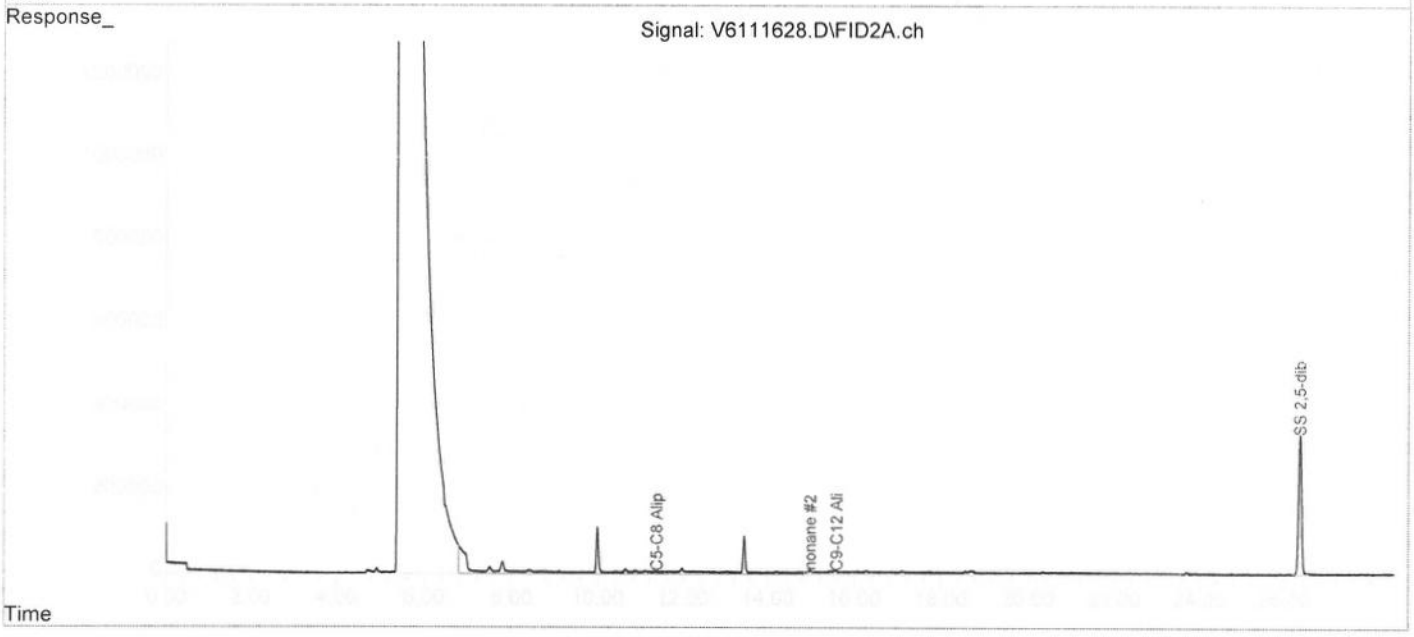
Quantitation Report (QT Reviewed)

Data Path : X:\V6\2023\Nov23\111623\
Data File : V6111628.D
Signal(s) : Signal #1: CPDET1B.ch Signal #2: FID2A.ch
Acq On : 17 Nov 2023 12:51 am
Operator : sfp
Sample : 67836-05 5mL
Misc : 5
ALS Vial : 28 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 17 11:56:54 2023
Quant Method : X:\V6\methods\V6VPH082423CHe.M
Quant Title : VOA06 MA VPH
QLast Update : Thu Aug 24 11:07:18 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





This File:	L:\VOA\Excel Reports\2023\V6111629
Analysis Group:	8260/8021/624
Field ID:	SY-BRMW5-56-66-110823 18001468
Sample:	67836-06 5mL Dow Salvage Yard
Misc:	5 CRE
Import File Name	v6 111623
TestGroupID	VMA_VPH_PresCert_A
Aqueous or Soil? (A or S)	A
Solid amount (g)	
Methanol volume (mL)	
Percent Solid (%)	
Soil Prep Date	
Weight:	
Volume:	
Lab#:	67836-006
AnalysisDate:	11/17/2023
AnalysisTime:	1:24
Dilution:	1
AnalyzedBy:	SFP V6111629.D
QC_Code:	
Prep#:	

Reviewer Checks:

Quant Report: Reviewed, Ranges integrated, Analyst Initials & Date
Chromatogram Checked, Major peaks identified
Results consistent w/ other attached analyses
Reanalysis reason noted
Substitute dilution data checked
Correct dilution and reason clear or noted
Flags checked (Expiration, F+, Over Cal, Surr, Aspen, QC)
Other QC failures or issues noted in Aspen
Correct data file and/or date/time in Aspen

Notes: Calibration based on sum of discrete peak areas

Initials & Date: 11/20/23

#	Surrogate Standards	Import Value (as ug/L)	Recovery	Flag	QC Limits	Surrogate True Values
11	SS 2,5-dibromotoluene	34.67	**87%**		70-130	40
22	SS 2,5-dibromotoluene #2	36.09	**90%**		70-130	40
4	SS a,a,a-trifluorotoluene	0.00	**0%**		70-130*	20

#	AnalyteName	Concentration (ug/L)	
	C5-C8 Aliphatics #2	**11.838**	11.838
	C9-C12 Aliphatics #2	**26.409**	26.409
1	Methyl-t-butyl ether (MTBE)	0.000	0
2	benzene	0.000	0
3	toluene	0.246	0.2463
5	ethylbenzene	0.055	0.0546
6	m&p-xylenes	0.118	0.1184
7	o-xylene	0.000	0
10	naphthalene	0.078	0.0777
	C5-C8 Aliphatics Adj	**11.591**	11.591
	C9-C12 Aliphatics Adj	**17.407**	17.407
	C9-C10 Aromatics	**8.829**	8.8288
	Total Xylenes	0.000	

Quantitation Report (QT Reviewed)

Data Path : X:\V6\2023\Nov23\111623\
Data File : V6111629.D
Signal(s) : Signal #1: CPDET1B.ch Signal #2: FID2A.ch
Acq On : 17 Nov 2023 1:24 am
Operator : sfp
Sample : 67836-06 5mL
Misc : 5
ALS Vial : 29 Sample Multiplier: 1

SFP
11/17/23

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 17 11:56:57 2023
Quant Method : X:\V6\methods\V6VPH082423CHe.M
Quant Title : VOA06 MA VPH
QLast Update : Thu Aug 24 11:07:18 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	R.T.	Response	Conc	Units		
	System Monitoring Compounds						
4)	S SS a,a,a-trifluorotol...	0.000	0	N.D.	ug/L		
Spiked Amount	20.000		Recovery =	0.00%			
11)	S SS 2,5-dibromotoluene	26.357	27158937	34.675	ug/L		
Spiked Amount	40.000 Range 70 - 130		Recovery =	86.69%			
17)	S SS a,a,a-trifluorotol...	0.000	0	N.D.	ug/L		
Spiked Amount	20.000		Recovery =	0.00%			
22)	S SS 2,5-dibromotoluene #2	26.358	13994423	36.092	ug/L		
Spiked Amount	40.000 Range 70 - 130		Recovery =	90.23%			
	Target Compounds						
1)	methyl-t-butyl ether ...	0.000	0	N.D.	ug/L		
2)	benzene	0.000	0	N.D.	ug/L		
3)	toluene	13.452	356690	0.246	ug/L	m	PM
5)	ethylbenzene	15.467	65314	0.055	ug/L	m	↓
6)	m&p-xylenes	15.573	168661	0.118	ug/L	m	
7)	o-xylene	0.000	0	N.D.	ug/L		
8)	1,2,4-trimethylbenzene	0.000	0	N.D.	ug/L		
9)	H C9-C10 Aromatics	18.612	13078288	8.829	ug/L	m	RI
10)	naphthalene	23.707	167046	0.078	ug/L	m	PM
13)	pentane #2	0.000	0	N.D.	ug/L		
14)	2-methylpentane #2	0.000	0	N.D.	ug/L		
15)	2,2,4-trimethylpentan...	0.000	0	N.D.	ug/L		
16)	H C5-C8 Aliphatics #2	11.378	22641411	11.838	ug/L	m	RI
18)	nonane #2	0.000	0	N.D.	ug/L		
19)	decane #2	0.000	0	N.D.	ug/L		
20)	n-butylcyclohexane #2	0.000	0	N.D.	ug/L		
21)	H C9-C12 Aliphatics #2	15.611	21617892	26.409	ug/L	m	RI

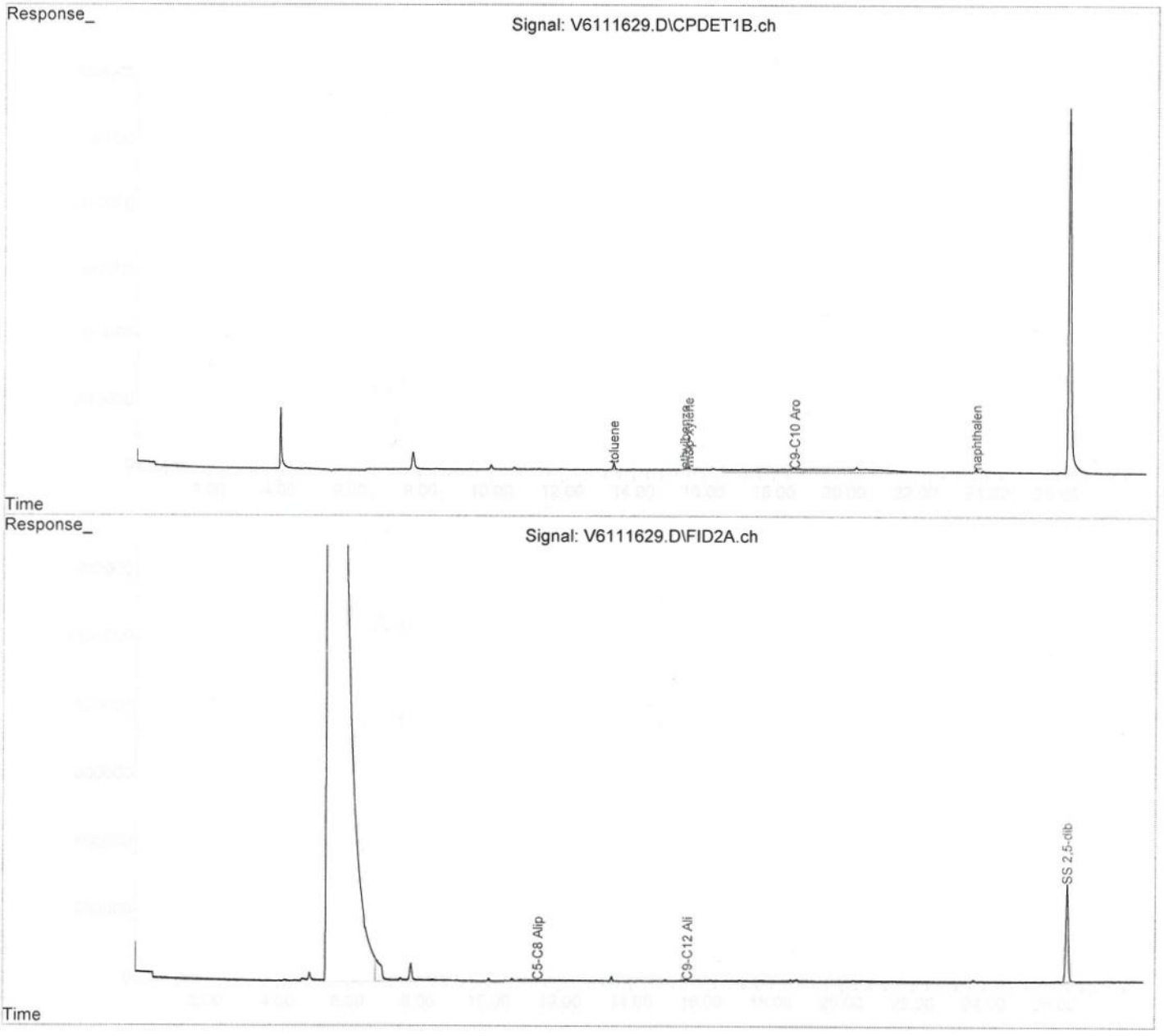
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : X:\V6\2023\Nov23\111623\
Data File : V6111629.D
Signal(s) : Signal #1: CPDET1B.ch Signal #2: FID2A.ch
Acq On : 17 Nov 2023 1:24 am
Operator : sfp
Sample : 67836-06 5mL
Misc : 5
ALS Vial : 29 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 17 11:56:57 2023
Quant Method : X:\V6\methods\V6VPH082423CHe.M
Quant Title : VOA06 MA VPH
QLast Update : Thu Aug 24 11:07:18 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



This File:	L:\VOA\Excel Reports\2023\V6112010
Analysis Group:	8260/8021/624
Field ID:	SY-OBMW8-110823 18001468
Sample:	67836-07 5mL Dow Salvage Yard
Misc:	5 CRE
Import File Name	v6 112023 a
TestGroupID	VMA_VPH_PresCert_A
Aqueous or Soil? (A or S)	A
Solid amount (g)	
Methanol volume (mL)	
Percent Solid (%)	
Soil Prep Date	
Weight:	
Volume:	
Lab#:	67836-007
AnalysisDate:	11/20/2023
AnalysisTime:	14:11
Dilution:	1
AnalyzedBy:	SFP V6112010.D
QC_Code:	
Prep#:	

Reviewer Checks:

Quant Report: Reviewed, Ranges integrated, Analyst Initials & Date
Chromatogram Checked, Major peaks identified
Results consistent w/ other attached analyses
Reanalysis reason noted
Substitute dilution data checked
Correct dilution and reason clear or noted
Flags checked (Expiration, F+, Over Cal, Surr, Aspen, QC)
Other QC failures or issues noted in Aspen
Correct data file and/or date/time in Aspen

Notes: Calibration based on sum of discrete peak areas

Initials & Date: WS 11-28-23

#	Surrogate Standards	Import Value (as ug/L)	Recovery	Flag	QC Limits	Surrogate True Values
11	SS 2,5-dibromotoluene	39.53	**99%**		70-130	40
22	SS 2,5-dibromotoluene #2	40.38	**101%**		70-130	40
4	SS a,a,a-trifluorotoluene	0.00	**0%**		70-130*	20

#	AnalyteName	Concentration (ug/L)	
	C5-C8 Aliphatics #2	**13.885**	13.885
	C9-C12 Aliphatics #2	**22.923**	22.923
1	Methyl-t-butyl ether (MTBE)	0.000	0
2	benzene	0.000	0
3	toluene	0.000	0
5	ethylbenzene	0.057	0.0573
6	m&p-xylenes	0.145	0.1454
7	o-xylene	0.000	0
10	naphthalene	0.175	0.1751
	C5-C8 Aliphatics Adj	**13.885**	13.885
	C9-C12 Aliphatics Adj	**11.804**	11.804
	C9-C10 Aromatics	**10.915**	10.915
	Total Xylenes	0.000	

SFP
11/27/23 @ 11:42
SkylaM

Data Path : X:\V6\2023\Nov23\112023\
Data File : V6112010.D
Signal(s) : Signal #1: CPDET1B.ch Signal #2: FID2A.ch
Acq On : 20 Nov 2023 2:11 pm
Operator : sfp
Sample : 67836-07 5mL
Misc : 5
ALS Vial : 10 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 20 19:50:35 2023
Quant Method : X:\V6\methods\V6VPH082423CHe.M
Quant Title : VOA06 MA VPH
QLast Update : Thu Aug 24 11:07:18 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

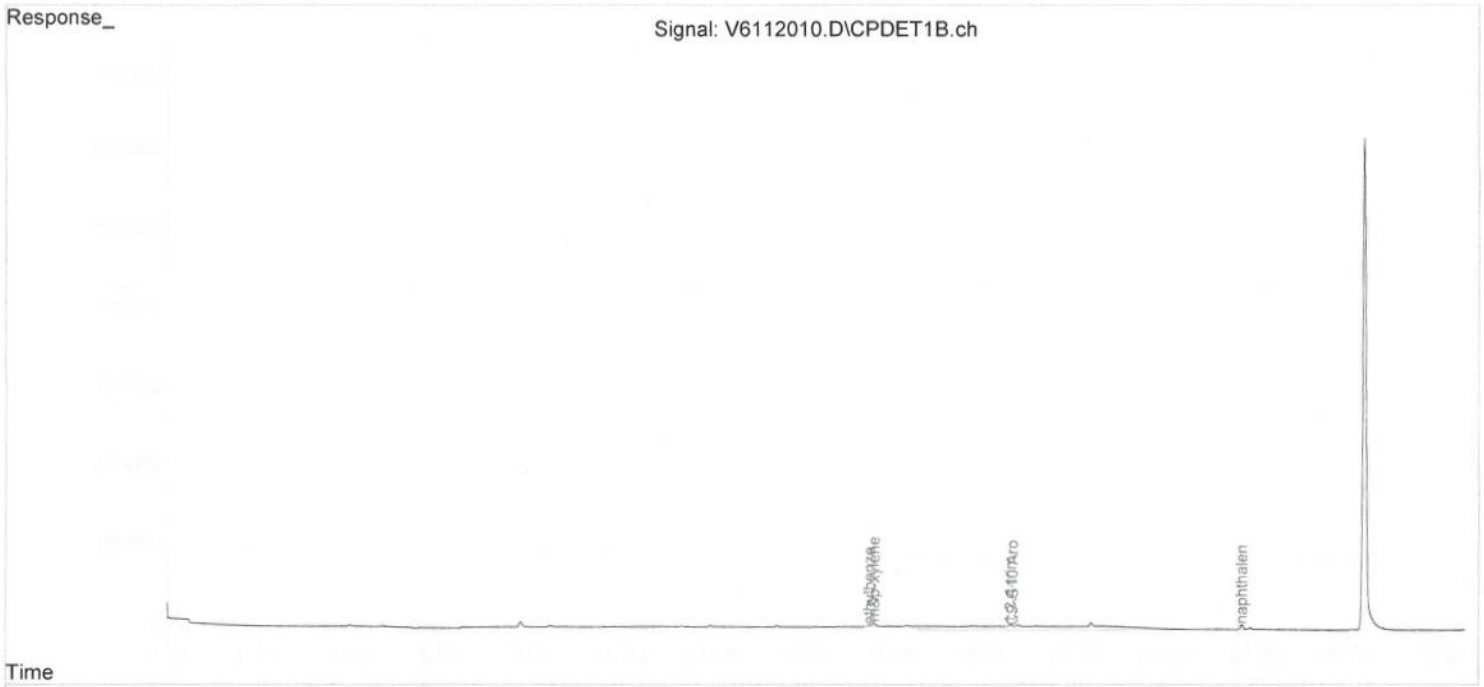
	Compound	R.T.	Response	Conc	Units		
	System Monitoring Compounds						
4)	S SS a,a,a-trifluorotol...	0.000	0	N.D.	ug/L		
Spiked Amount	20.000		Recovery =	0.00%			
11)	S SS 2,5-dibromotoluene	26.358	30510903	39.528	ug/L		
Spiked Amount	40.000 Range 70 - 130		Recovery =	98.82%			
17)	S SS a,a,a-trifluorotol...	0.000	0	N.D.	ug/L		
Spiked Amount	20.000		Recovery =	0.00%			
22)	S SS 2,5-dibromotoluene #2	26.358	15494575	40.383	ug/L		
Spiked Amount	40.000 Range 70 - 130		Recovery =	100.96%			
	Target Compounds						
1)	methyl-t-butyl ether ...	0.000	0	N.D.	ug/L		
2)	benzene	0.000	0	N.D.	ug/L		
3)	toluene	0.000	0	N.D.	ug/L		
5)	ethylbenzene	15.470	68521	0.057	ug/L	m	
6)	m&p-xylenes	15.565	207261	0.145	ug/L	m	PM Nov 27 2023
7)	o-xylene	0.000	0	N.D.	ug/L		
8)	1,2,4-trimethylbenzene	18.561	126494	0.113	ug/L	m	
9)	H C9-C10 Aromatics	18.612	15150838	10.915	ug/L	m	RI
10)	naphthalene	23.688	268850	0.175	ug/L	m	PM
13)	pentane #2	0.000	0	N.D.	ug/L		
14)	2-methylpentane #2	0.000	0	N.D.	ug/L		
15)	2,2,4-trimethylpentan...	0.000	0	N.D.	ug/L		
16)	H C5-C8 Aliphatics #2	11.378	25165063	13.885	ug/L	m	RI
18)	nonane #2	0.000	0	N.D.	ug/L		
19)	decane #2	0.000	0	N.D.	ug/L		
20)	n-butylcyclohexane #2	0.000	0	N.D.	ug/L		
21)	H C9-C12 Aliphatics #2	15.611	17389188	22.923	ug/L	m	RI

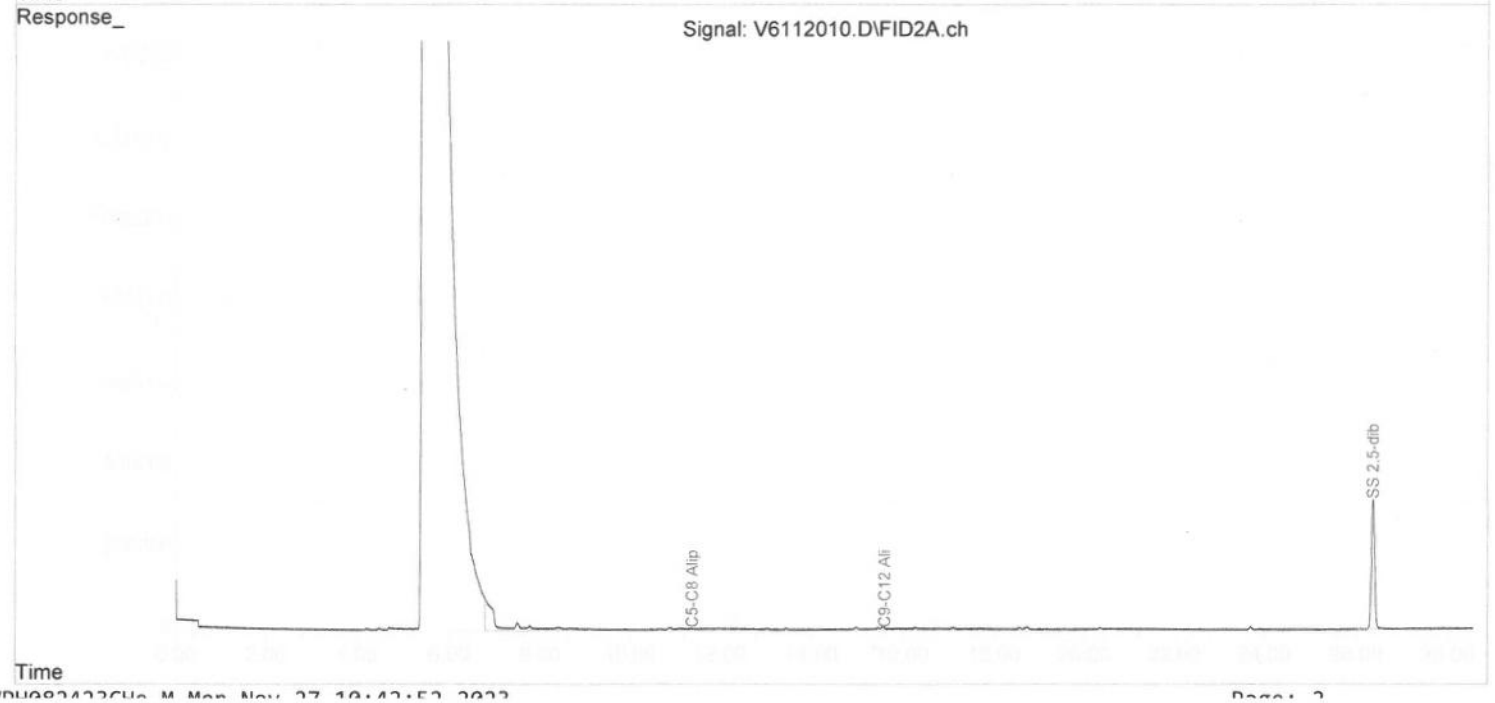
(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : X:\V6\2023\Nov23\112023\
Data File : V6112010.D
Signal(s) : Signal #1: CPDET1B.ch Signal #2: FID2A.ch
Acq On   : 20 Nov 2023   2:11 pm
Operator : sfp
Sample   : 67836-07 5mL
Misc   : 5
ALS Vial : 10   Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 20 19:50:35 2023
Quant Method : X:\V6\methods\V6VPH082423CHe.M
Quant Title : VOA06 MA VPH
QLast Update : Thu Aug 24 11:07:18 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj.   :
Signal #1 Phase :   Signal #2 Phase:
Signal #1 Info :   Signal #2 Info :





This File:	L:\VOA\Excel Reports\2023\V6112011
Analysis Group:	8260/8021/624
Field ID:	SY-OBMW11-110823 18001468
Sample:	67836-08 5mL Dow Salvage Yard
Misc:	5 CRE
Import File Name	v6 112023 a
TestGroupID	VMA_VPH_PresCert_A
Aqueous or Soil? (A or S)	A
Solid amount (g)	
Methanol volume (mL)	
Percent Solid (%)	
Soil Prep Date	
Weight:	
Volume:	
Lab#:	67836-008
AnalysisDate:	11/20/2023
AnalysisTime:	14:44
Dilution:	1
AnalyzedBy:	SFP V6112011.D
QC_Code:	
Prep#:	

Reviewer Checks:

- Quant Report: Reviewed, Ranges integrated, Analyst Initials & Date
- Chromatogram Checked, Major peaks identified
- Results consistent w/ other attached analyses
- Reanalysis reason noted
- Substitute dilution data checked
- Correct dilution and reason clear or noted
- Flags checked (Expiration, F+, Over Cal, Surr, Aspen, QC)
- Other QC failures or issues noted in Aspen
- Correct data file and/or date/time in Aspen

Notes: Calibration based on sum of discrete peak areas

Initials & Date: WB 11.28.23

#	Surrogate Standards	Import Value (as ug/L)	Recovery	Flag	QC Limits	Surrogate True Values
11	SS 2,5-dibromotoluene	40.24	**101%**		70-130	40
22	SS 2,5-dibromotoluene #2	41.33	**103%**		70-130	40
4	SS a,a,a-trifluorotoluene	0.00	**0%**		70-130*	20

#	AnalyteName	Concentration (ug/L)	
	C5-C8 Aliphatics #2	**14.909**	14.909
	C9-C12 Aliphatics #2	**21.734**	21.734
1	Methyl-t-butyl ether (MTBE)	0.000	0
2	benzene	0.000	0
3	toluene	0.000	0
5	ethylbenzene	0.069	0.0688
6	m&p-xylenes	0.124	0.1243
7	o-xylene	0.046	0.0463
10	naphthalene	0.143	0.1433
	C5-C8 Aliphatics Adj	**14.909**	14.909
	C9-C12 Aliphatics Adj	**11.113**	11.113
	C9-C10 Aromatics	**10.382**	10.382
	Total Xylenes	0.000	

Data Path : X:\V6\2023\Nov23\112023\
Data File : V6112011.D
Signal(s) : Signal #1: CPDET1B.ch Signal #2: FID2A.ch
Acq On : 20 Nov 2023 2:44 pm
Operator : sfp
Sample : 67836-08 5mL
Misc : 5
ALS Vial : 11 Sample Multiplier: 1

SFP
11/27/23 @ 11:42
SkylaM

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 20 19:50:38 2023
Quant Method : X:\V6\methods\V6VPH082423CHe.M
Quant Title : VOA06 MA VPH
QLast Update : Thu Aug 24 11:07:18 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	R.T.	Response	Conc	Units	
	System Monitoring Compounds					
4) S	SS a,a,a-trifluorotol...	0.000	0	N.D.	ug/L	d
Spiked Amount	20.000		Recovery =	0.00%		
11) S	SS 2,5-dibromotoluene	26.358	31003648	40.241	ug/L	
Spiked Amount	40.000 Range 70 - 130		Recovery =	100.60%		
17) S	SS a,a,a-trifluorotol...	11.981	2612645	2.606	ug/L	
Spiked Amount	20.000		Recovery =	13.03%		
22) S	SS 2,5-dibromotoluene #2	26.358	15826683	41.333	ug/L	
Spiked Amount	40.000 Range 70 - 130		Recovery =	103.33%		
	Target Compounds					
1)	methyl-t-butyl ether ...	0.000	0	N.D.	ug/L	
2)	benzene	0.000	0	N.D.	ug/L	
3)	toluene	0.000	0	N.D.	ug/L	
5)	ethylbenzene	15.466	82256	0.069	ug/L	m
6)	m&p-xylenes	15.571	177064	0.124	ug/L	m
7)	o-xylene	16.286	56564	0.046	ug/L	m
8)	1,2,4-trimethylbenzene	18.567	114461	0.102	ug/L	m
9) H	C9-C10 Aromatics	18.612	14620637	10.382	ug/L	m
10)	naphthalene	23.693	235660	0.143	ug/L	m
13)	pentane #2	0.000	0	N.D.	ug/L	
14)	2-methylpentane #2	0.000	0	N.D.	ug/L	
15)	2,2,4-trimethylpentan...	0.000	0	N.D.	ug/L	
16) H	C5-C8 Aliphatics #2	11.378	26426929	14.909	ug/L	m
18)	nonane #2	0.000	0	N.D.	ug/L	
19)	decane #2	0.000	0	N.D.	ug/L	
20)	n-butylcyclohexane #2	0.000	0	N.D.	ug/L	
21) H	C9-C12 Aliphatics #2	15.611	15947303	21.734	ug/L	m

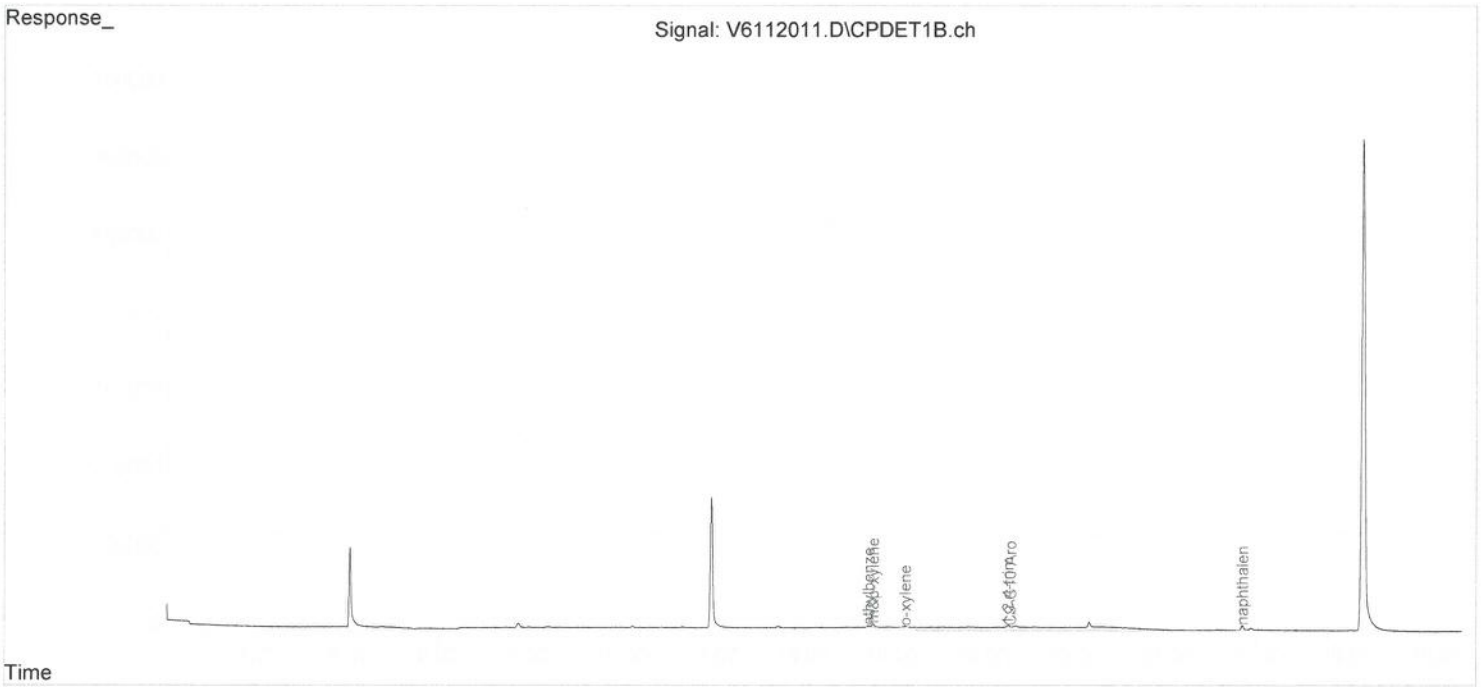
PM
Nov 27,2023
RI
PM
RI
RI

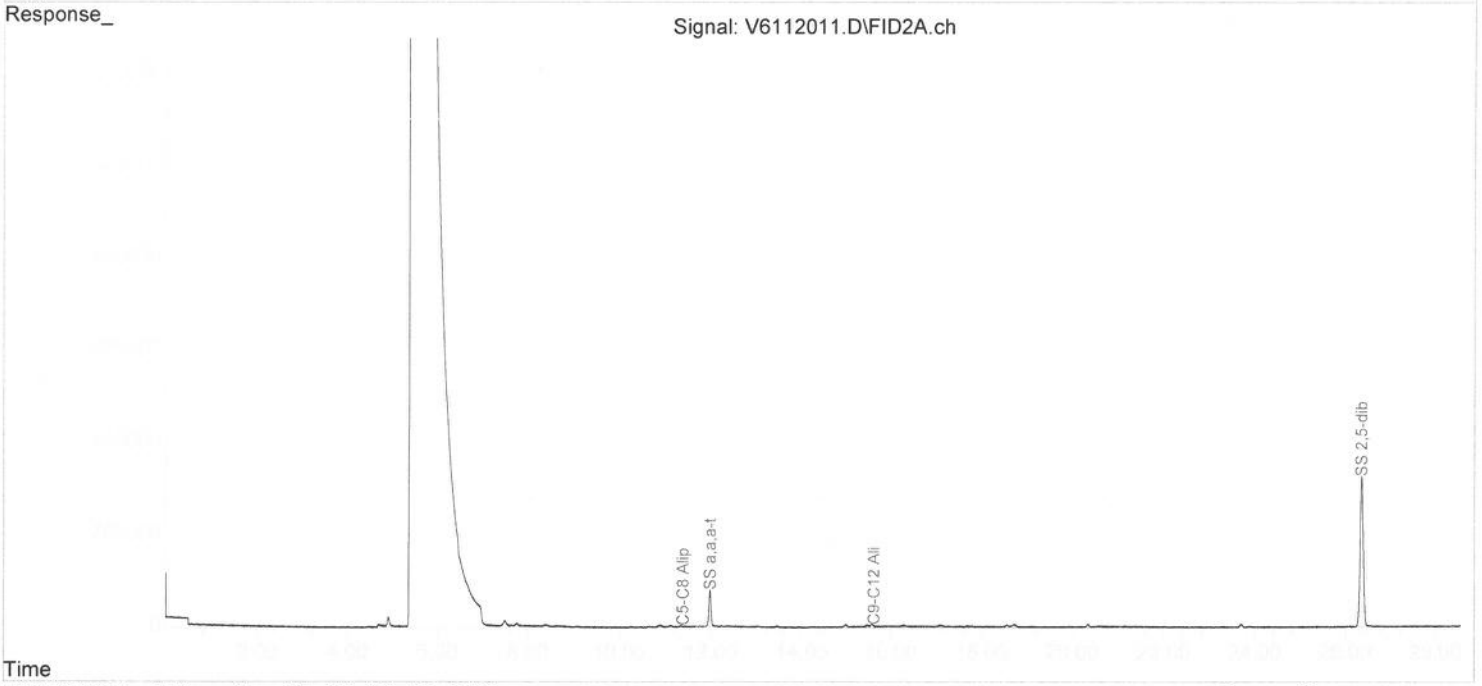
(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : X:\V6\2023\Nov23\112023\
Data File : V6112011.D
Signal(s) : Signal #1: CPDET1B.ch Signal #2: FID2A.ch
Acq On   : 20 Nov 2023   2:44 pm
Operator : sfp
Sample   : 67836-08 5mL
Misc   : 5
ALS Vial : 11   Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 20 19:50:38 2023
Quant Method : X:\V6\methods\V6VPH082423CHe.M
Quant Title : VOA06 MA VPH
QLast Update : Thu Aug 24 11:07:18 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj.   :
Signal #1 Phase :   Signal #2 Phase:
Signal #1 Info :   Signal #2 Info :





..s File:	L:\VOA\Excel Reports\2023\V6112012
Analysis Group:	8260/8021/624
Field ID:	SY-OBMW110-110823 18001468
Sample:	67836-09 5mL Dow Salvage Yard
Misc:	5 CRE
Import File Name	v6 112023 a
TestGroupID	VMA_VPH_PresCert_A
Aqueous or Soil? (A or S)	A
Solid amount (g)	
Methanol volume (mL)	
Percent Solid (%)	
Soil Prep Date	
Weight:	
Volume:	
Lab#:	67836-009
AnalysisDate:	11/20/2023
AnalysisTime:	15:18
Dilution:	1
AnalyzedBy:	SFP V6112012.D
QC_Code:	
Prep#:	

Reviewer Checks:

- Quant Report: Reviewed, Ranges integrated, Analyst Initials & Date
- Chromatogram Checked, Major peaks identified
- Results consistent w/ other attached analyses
- Reanalysis reason noted
- Substitute dilution data checked
- Correct dilution and reason clear or noted
- Flags checked (Expiration, F+, Over Cal, Surr, Aspen, QC)
- Other QC failures or issues noted in Aspen
- Correct data file and/or date/time in Aspen

Notes: Calibration based on sum of discrete peak areas

Initials & Date: WA 11-28-23

#	Surrogate Standards	Import Value (as ug/L)	Recovery	Flag	QC Limits	Surrogate True Values
11	SS 2,5-dibromotoluene	39.64	**99%**		70-130	40
22	SS 2,5-dibromotoluene #2	40.40	**101%**		70-130	40
4	SS a,a,a-trifluorotoluene	0.00	**0%**		70-130*	20

#	AnalyteName	Concentration (ug/L)	
	C5-C8 Aliphatics #2	**12.496**	12.496
	C9-C12 Aliphatics #2	**21.937**	21.937
1	Methyl-t-butyl ether (MTBE)	0.000	0
2	benzene	0.000	0
3	toluene	0.000	0
5	ethylbenzene	0.064	0.0645
6	m&p-xylenes	0.107	0.1066
7	o-xylene	0.047	0.0466
10	naphthalene	0.000	0
	C5-C8 Aliphatics Adj	**12.496**	12.496
	C9-C12 Aliphatics Adj	**11.741**	11.741
	C9-C10 Aromatics	**9.979**	9.9787
	Total Xylenes	0.000	

Data Path : X:\V6\2023\Nov23\112023\
Data File : V6112012.D
Signal(s) : Signal #1: CPDET1B.ch Signal #2: FID2A.ch
Acq On : 20 Nov 2023 3:18 pm
Operator : sfp
Sample : 67836-09 5mL
Misc : 5
ALS Vial : 12 Sample Multiplier: 1

SFP
11/27/23 @ 11:42
SkylaM

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 20 19:50:41 2023
Quant Method : X:\V6\methods\V6VPH082423CHe.M
Quant Title : VOA06 MA VPH
QLast Update : Thu Aug 24 11:07:18 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	R.T.	Response	Conc	Units	
	System Monitoring Compounds					
4)	S SS a,a,a-trifluorotol...	0.000	0	N.D.	ug/L	d
Spiked Amount	20.000		Recovery =	0.00%		
11)	S SS 2,5-dibromotoluene	26.358	30587713	39.639	ug/L	
Spiked Amount	40.000 Range 70 - 130		Recovery =	99.10%		
17)	S SS a,a,a-trifluorotol...	11.980	2585651	2.579	ug/L	m
Spiked Amount	20.000		Recovery =	12.90%		
22)	S SS 2,5-dibromotoluene #2	26.358	15499412	40.397	ug/L	
Spiked Amount	40.000 Range 70 - 130		Recovery =	100.99%		
	Target Compounds					
1)	methyl-t-butyl ether ...	0.000	0	N.D.	ug/L	
2)	benzene	0.000	0	N.D.	ug/L	
3)	toluene	0.000	0	N.D.	ug/L	
5)	ethylbenzene	15.457	77083	0.064	ug/L	m
6)	m&p-xylenes	15.571	151943	0.107	ug/L	m
7)	o-xylene	16.282	56959	0.047	ug/L	m
8)	1,2,4-trimethylbenzene	0.000	0	N.D.	ug/L	
9)	H C9-C10 Aromatics	18.612	14220437	9.979	ug/L	m
10)	naphthalene	0.000	0	N.D.	ug/L	
13)	pentane #2	0.000	0	N.D.	ug/L	
14)	2-methylpentane #2	0.000	0	N.D.	ug/L	
15)	2,2,4-trimethylpentan...	0.000	0	N.D.	ug/L	
16)	H C5-C8 Aliphatics #2	11.378	23452659	12.496	ug/L	m
18)	nonane #2	0.000	0	N.D.	ug/L	
19)	decane #2	0.000	0	N.D.	ug/L	
20)	n-butylcyclohexane #2	0.000	0	N.D.	ug/L	
21)	H C9-C12 Aliphatics #2	15.611	16194417	21.937	ug/L	m

PM
Nov 27, 2023

RI

RI

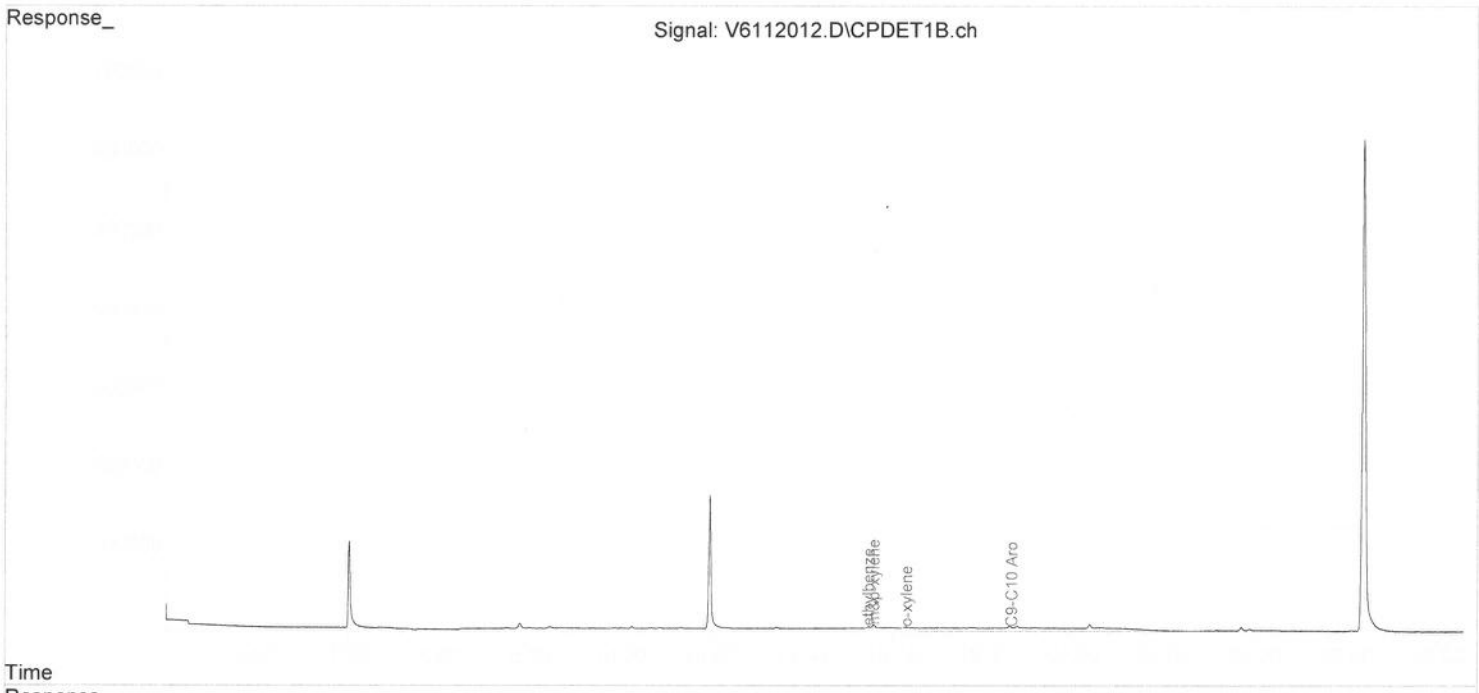
RI

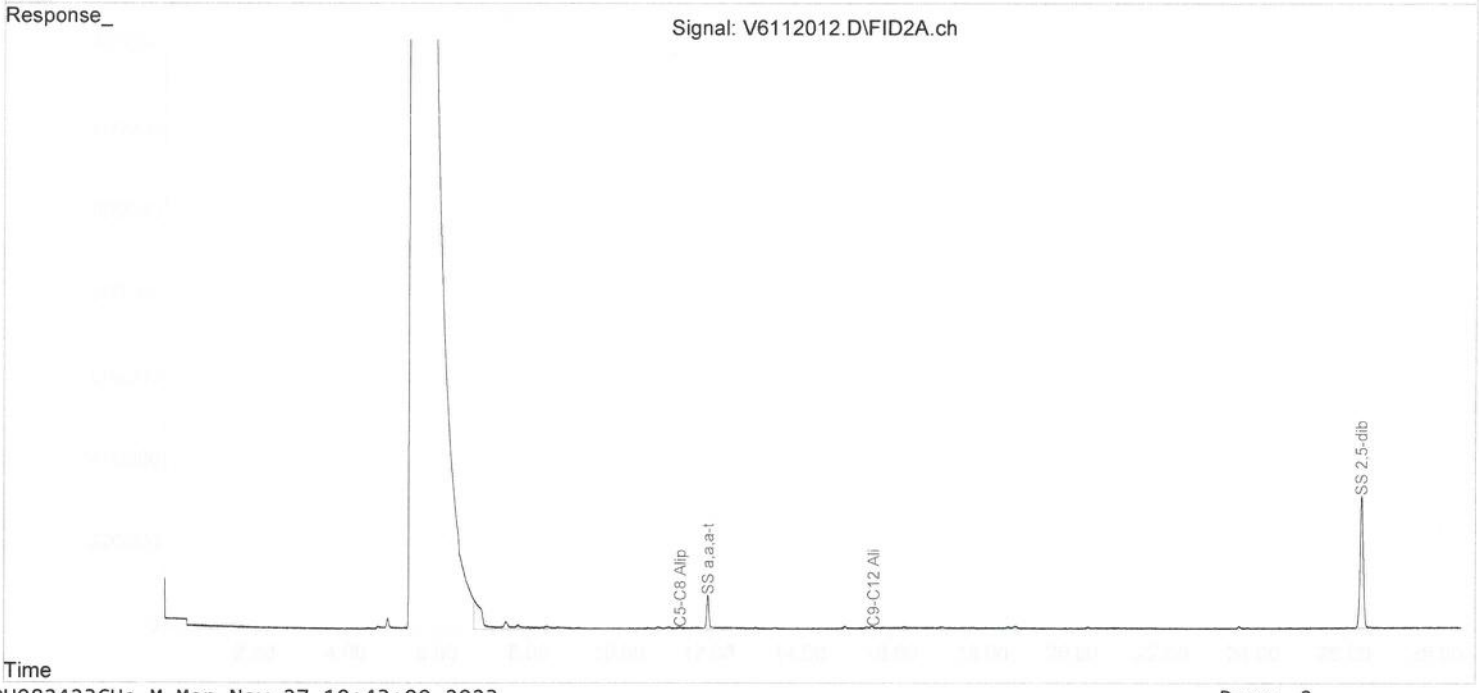
(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : X:\V6\2023\Nov23\112023\
Data File : V6112012.D
Signal(s) : Signal #1: CPDET1B.ch Signal #2: FID2A.ch
Acq On   : 20 Nov 2023   3:18 pm
Operator : sfp
Sample   : 67836-09 5mL
Misc   : 5
ALS Vial : 12   Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 20 19:50:41 2023
Quant Method : X:\V6\methods\V6VPH082423CHe.M
Quant Title : VOA06 MA VPH
QLast Update : Thu Aug 24 11:07:18 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj.   :
Signal #1 Phase :   Signal #2 Phase:
Signal #1 Info :   Signal #2 Info :





This File:	L:\VOA\Excel Reports\2023\V6112006
Analysis Group:	8260/8021/624
Field ID:	TB32-110823 18001468
Sample:	67836-10 5mL Dow Salvage Yard
Misc:	5 CRE
Import File Name	v6 112023 a
TestGroupID	VMA_VPH_PresCert_A
Aqueous or Soil? (A or S)	A
Solid amount (g)	
Methanol volume (mL)	
Percent Solid (%)	
Soil Prep Date	
Weight:	
Volume:	
Lab#:	67836-010
AnalysisDate:	11/20/2023
AnalysisTime:	11:58
Dilution:	1
AnalyzedBy:	SFP V6112006.D
QC_Code:	
Prep#:	

Reviewer Checks:

- Quant Report: Reviewed, Ranges integrated, Analyst Initials & Date
- Chromatogram Checked, Major peaks identified
- Results consistent w/ other attached analyses
- Reanalysis reason noted
- Substitute dilution data checked
- Correct dilution and reason clear or noted
- Flags checked (Expiration, F+, Over Cal, Surr, Aspen, QC)
- Other QC failures or issues noted in Aspen
- Correct data file and/or date/time in Aspen

Notes: Calibration based on sum of discrete peak areas

Initials & Date: WA 11-28-23

#	Surrogate Standards	Import Value (as ug/L)	Recovery	Flag	QC Limits	Surrogate True Values
11	SS 2,5-dibromotoluene	37.22	**93%**		70-130	40
22	SS 2,5-dibromotoluene #2	37.63	**94%**		70-130	40
4	SS a,a,a-trifluorotoluene	0.00	**0%**		70-130*	20

#	AnalyteName	Concentration (ug/L)	
	C5-C8 Aliphatics #2	**13.321**	13.321
	C9-C12 Aliphatics #2	**26.520**	26.52
1	Methyl-t-butyl ether (MTBE)	0.000	0
2	benzene	0.000	0
3	toluene	0.100	0.1004
5	ethylbenzene	0.152	0.1517
6	m&p-xylenes	0.381	0.3813
7	o-xylene	0.130	0.13
10	naphthalene	0.713	0.7134
	C5-C8 Aliphatics Adj	**13.221**	13.221
	C9-C12 Aliphatics Adj	**15.824**	15.824
	C9-C10 Aromatics	**10.032**	10.032
	Total Xylenes	0.000	

Data Path : X:\V6\2023\Nov23\112023\
Data File : V6112006.D
Signal(s) : Signal #1: CPDET1B.ch Signal #2: FID2A.ch
Acq On : 20 Nov 2023 11:58 am
Operator : sfp
Sample : 67836-10 5mL
Misc : 5
ALS Vial : 6 Sample Multiplier: 1

SFP 11/27/23 @ 11:42 SkylaM

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 20 19:50:23 2023
Quant Method : X:\V6\methods\V6VPH082423CHe.M
Quant Title : VOA06 MA VPH
QLast Update : Thu Aug 24 11:07:18 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	R.T.	Response	Conc	Units	
	System Monitoring Compounds					
4) S	SS a,a,a-trifluorotol...	0.000	0	N.D.	ug/L	
Spiked Amount	20.000		Recovery =	0.00%		
11) S	SS 2,5-dibromotoluene	26.355	28916622	37.220	ug/L	
Spiked Amount	40.000 Range 70 - 130		Recovery =	93.05%		
17) S	SS a,a,a-trifluorotol...	0.000	0	N.D.	ug/L	
Spiked Amount	20.000		Recovery =	0.00%		
22) S	SS 2,5-dibromotoluene #2	26.355	14531713	37.629	ug/L	
Spiked Amount	40.000 Range 70 - 130		Recovery =	94.07%		
	Target Compounds					
1)	methyl-t-butyl ether ...	0.000	0	N.D.	ug/L	
2)	benzene	0.000	0	N.D.	ug/L	
3)	toluene	13.457	145420	0.100	ug/L	m
5)	ethylbenzene	15.465	181353	0.152	ug/L	m
6)	m&p-xylenes	15.565	543374	0.381	ug/L	m
7)	o-xylene	16.278	158947	0.130	ug/L	m
8)	1,2,4-trimethylbenzene	18.560	296186	0.264	ug/L	m
9) H	C9-C10 Aromatics	18.612	14273885	10.032	ug/L	m
10)	naphthalene	23.691	831812	0.713	ug/L	m
13)	pentane #2	0.000	0	N.D.	ug/L	
14)	2-methylpentane #2	0.000	0	N.D.	ug/L	
15)	2,2,4-trimethylpentan...	0.000	0	N.D.	ug/L	
16) H	C5-C8 Aliphatics #2	11.378	24470217	13.321	ug/L	m
18)	nonane #2	0.000	0	N.D.	ug/L	
19)	decane #2	0.000	0	N.D.	ug/L	
20)	n-butylcyclohexane #2	0.000	0	N.D.	ug/L	
21) H	C9-C12 Aliphatics #2	15.611	21752217	26.520	ug/L	m

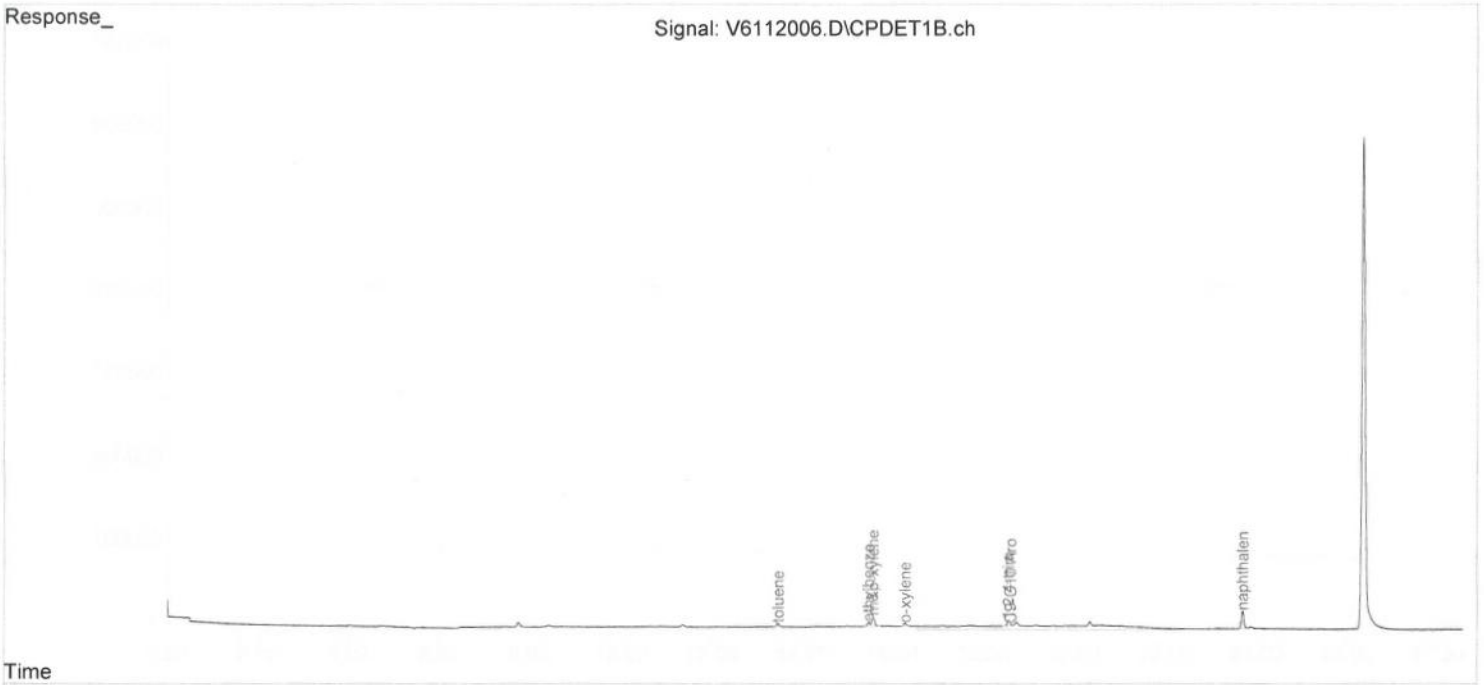
PM Nov 27,2023
RI
PM
RI
RI

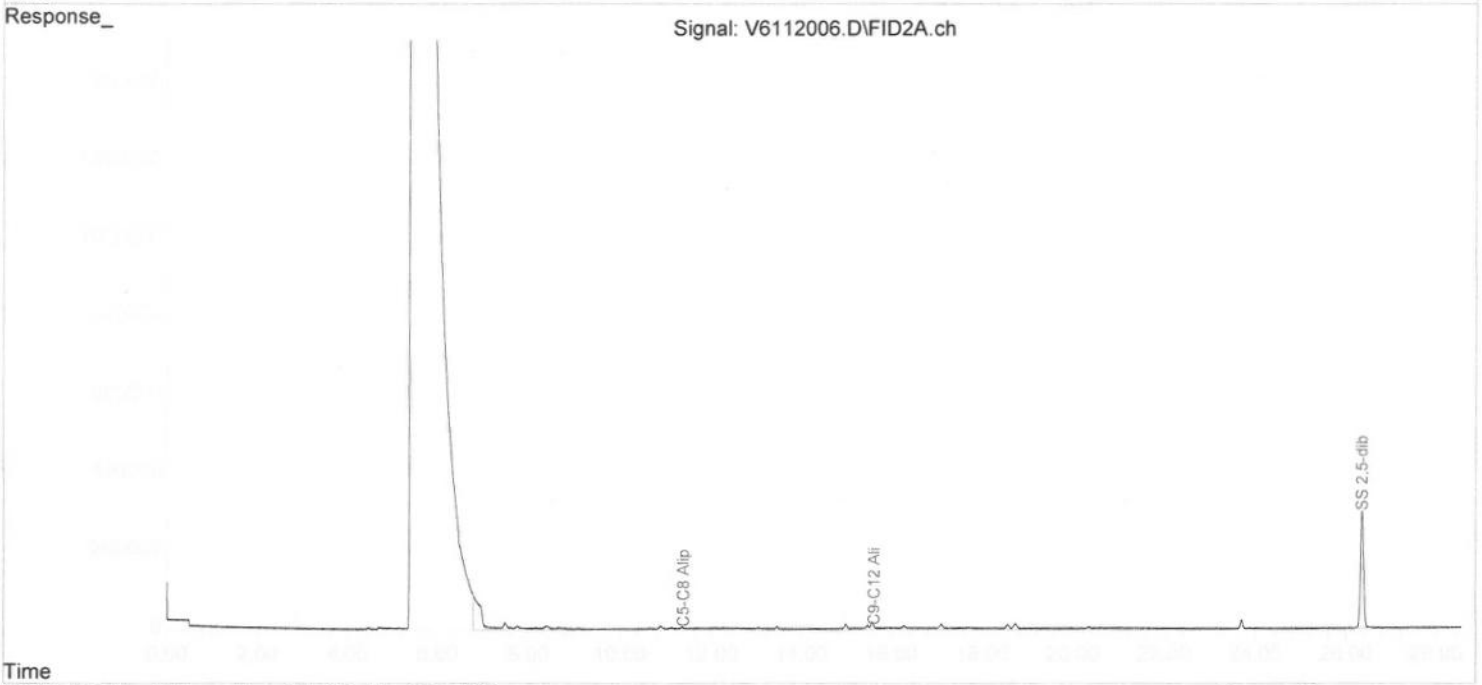
(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : X:\V6\2023\Nov23\112023\
Data File : V6112006.D
Signal(s) : Signal #1: CPDET1B.ch Signal #2: FID2A.ch
Acq On : 20 Nov 2023 11:58 am
Operator : sfp
Sample : 67836-10 5mL
Misc : 5
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 20 19:50:23 2023
Quant Method : X:\V6\methods\V6VPH082423CHe.M
Quant Title : VOA06 MA VPH
QLast Update : Thu Aug 24 11:07:18 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Data File:	L:\VOA\Excel Reports\2023\V6112013
Analysis Group:	8260/8021/624
Field ID:	SY-OBMW3-110823 18001468
Sample:	67836-11 5mL Dow Salvage Yard
Misc:	5 CRE
Import File Name	v6 112023 a
TestGroupID	VMA_VPH_PresCert_A
Aqueous or Soil? (A or S)	A
Solid amount (g)	
Methanol volume (mL)	
Percent Solid (%)	
Soil Prep Date	
Weight:	
Volume:	
Lab#:	67836-011
AnalysisDate:	11/20/2023
AnalysisTime:	15:51
Dilution:	1
AnalyzedBy:	SFP V6112013.D
QC_Code:	
Prep#:	

Reviewer Checks:

- Quant Report: Reviewed, Ranges integrated, Analyst Initials & Date
- Chromatogram Checked, Major peaks identified
- Results consistent w/ other attached analyses
- Reanalysis reason noted
- Substitute dilution data checked
- Correct dilution and reason clear or noted
- Flags checked (Expiration, F+, Over Cal, Surr, Aspen, QC)
- Other QC failures or issues noted in Aspen
- Correct data file and/or date/time in Aspen

Notes: Calibration based on sum of discrete peak areas

Initials & Date: WA 11.28.23

#	Surrogate Standards	Import Value (as ug/L)	Recovery	Flag	QC Limits	Surrogate True Values
11	SS 2,5-dibromotoluene	38.91	**97%**		70-130	40
22	SS 2,5-dibromotoluene #2	39.80	**99%**		70-130	40
4	SS a,a,a-trifluorotoluene	0.00	**0%**		70-130*	20

#	AnalyteName	Concentration (ug/L)	
	C5-C8 Aliphatics #2	**11.329**	11.329
	C9-C12 Aliphatics #2	**22.999**	22.999
1	Methyl-t-butyl ether (MTBE)	0.000	0
2	benzene	0.000	0
3	toluene	0.000	0
5	ethylbenzene	0.042	0.0423
6	m&p-xylenes	0.106	0.106
7	o-xylene	0.000	0
10	naphthalene	0.093	0.093
	C5-C8 Aliphatics Adj	**11.329**	11.329
	C9-C12 Aliphatics Adj	**13.161**	13.161
	C9-C10 Aromatics	**9.690**	9.6899
	Total Xylenes	0.000	

Data Path : X:\V6\2023\Nov23\112023\
Data File : V6112013.D
Signal(s) : Signal #1: CPDET1B.ch Signal #2: FID2A.ch
Acq On : 20 Nov 2023 3:51 pm
Operator : sfp
Sample : 67836-11 5mL
Misc : 5
ALS Vial : 13 Sample Multiplier: 1

SFP
11/27/23 @ 11:42
SkylaM

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 20 19:50:44 2023
Quant Method : X:\V6\methods\V6VPH082423CHe.M
Quant Title : VOA06 MA VPH
QLast Update : Thu Aug 24 11:07:18 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

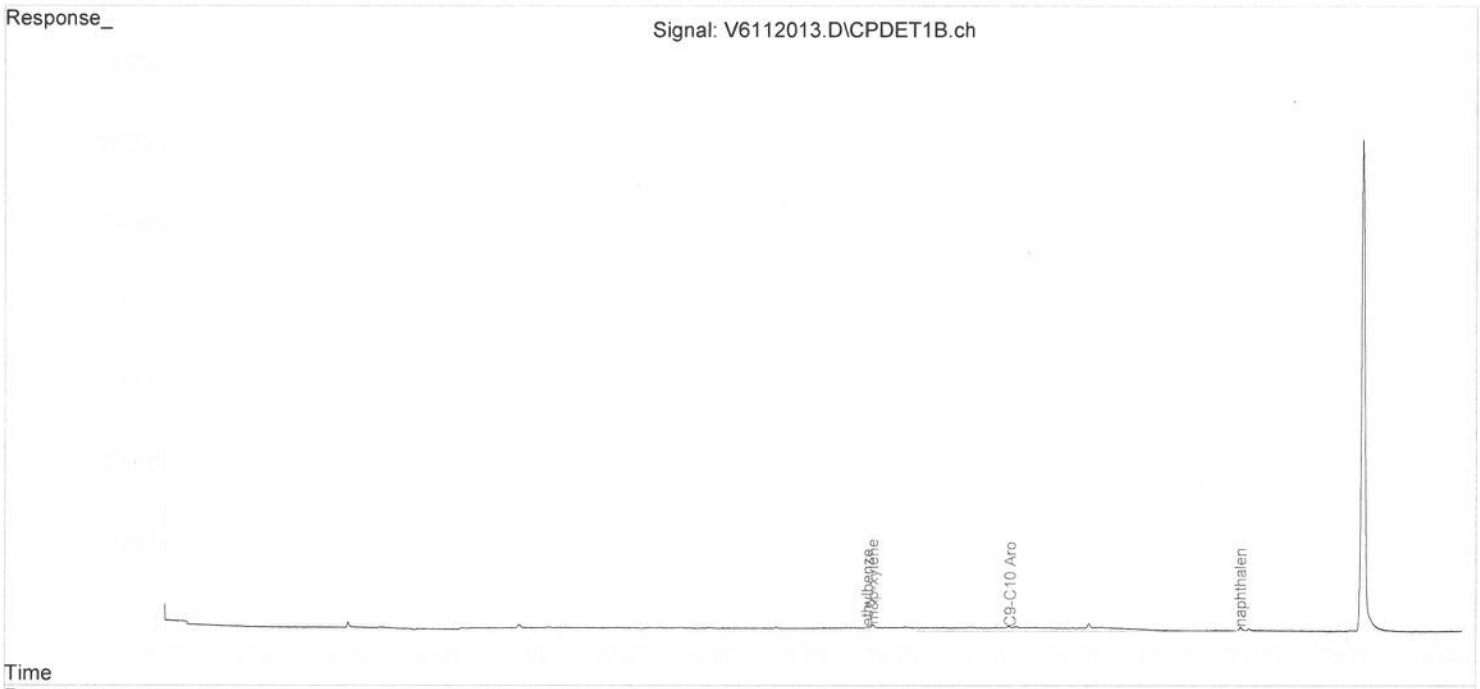
	Compound	R.T.	Response	Conc	Units	
	System Monitoring Compounds					
4) S	SS a,a,a-trifluorotol...	0.000	0	N.D.	ug/L	
Spiked Amount	20.000		Recovery =	0.00%		
11) S	SS 2,5-dibromotoluene	26.357	30084038	38.910	ug/L	
Spiked Amount	40.000 Range 70 - 130		Recovery =	97.27%		
17) S	SS a,a,a-trifluorotol...	0.000	0	N.D.	ug/L	
Spiked Amount	20.000		Recovery =	0.00%		
22) S	SS 2,5-dibromotoluene #2	26.358	15289965	39.798	ug/L	
Spiked Amount	40.000 Range 70 - 130		Recovery =	99.50%		
	Target Compounds					
1)	methyl-t-butyl ether ...	0.000	0	N.D.	ug/L	
2)	benzene	0.000	0	N.D.	ug/L	
3)	toluene	0.000	0	N.D.	ug/L	
5)	ethylbenzene	15.450	50591	0.042	ug/L m	PM Nov 27,2023
6)	m&p-xylenes	15.563	150995	0.106	ug/L m	
7)	o-xylene	0.000	0	N.D.	ug/L	
8)	1,2,4-trimethylbenzene	0.000	0	N.D.	ug/L	
9) H	C9-C10 Aromatics	18.612	13933608	9.690	ug/L m	RI
10)	naphthalene	23.691	183049	0.093	ug/L m	PM
13)	pentane #2	0.000	0	N.D.	ug/L	
14)	2-methylpentane #2	0.000	0	N.D.	ug/L	
15)	2,2,4-trimethylpentan...	0.000	0	N.D.	ug/L	
16) H	C5-C8 Aliphatics #2	11.378	22014434	11.329	ug/L m	RI
18)	nonane #2	0.000	0	N.D.	ug/L	
19)	decane #2	0.000	0	N.D.	ug/L	
20)	n-butylcyclohexane #2	0.000	0	N.D.	ug/L	
21) H	C9-C12 Aliphatics #2	15.611	17482248	22.999	ug/L m	RI

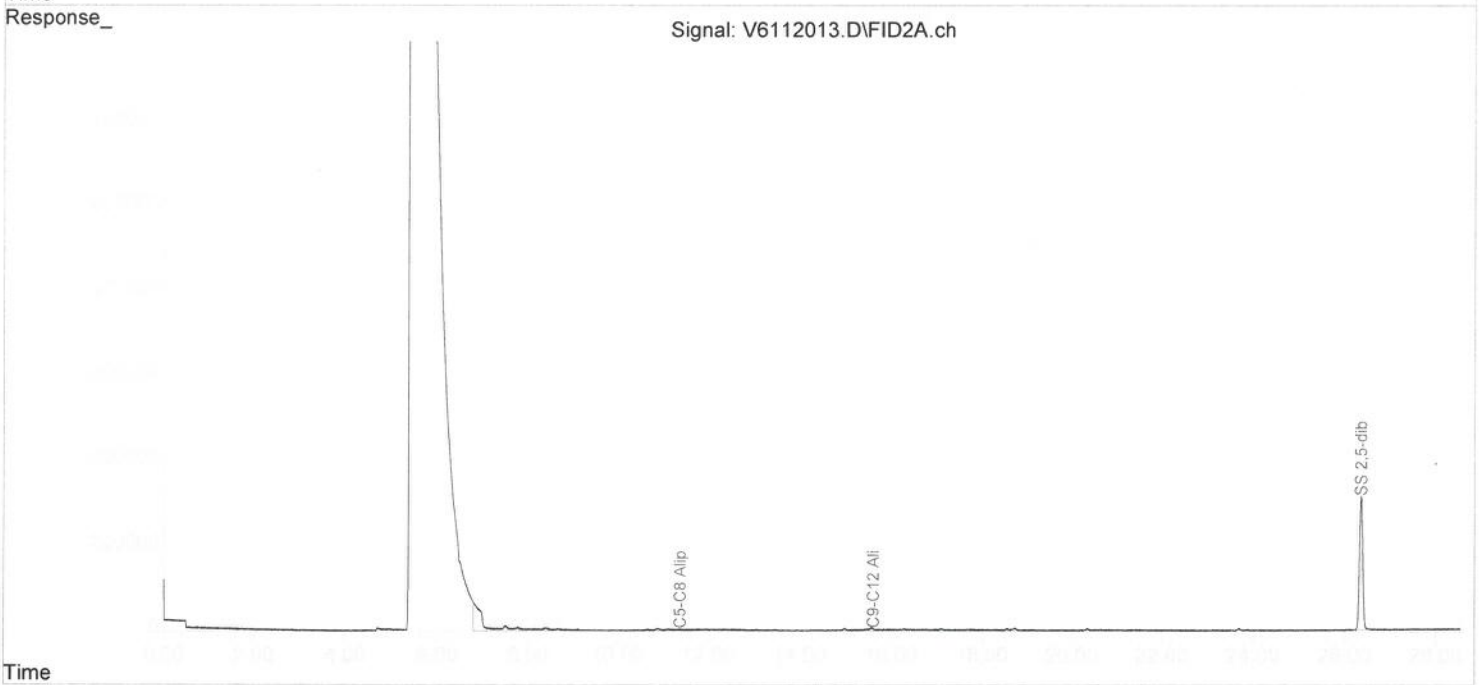
(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : X:\V6\2023\Nov23\112023\
Data File : V6112013.D
Signal(s) : Signal #1: CPDET1B.ch Signal #2: FID2A.ch
Acq On   : 20 Nov 2023   3:51 pm
Operator : sfp
Sample   : 67836-11 5mL
Misc   : 5
ALS Vial : 13   Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 20 19:50:44 2023
Quant Method : X:\V6\methods\V6VPH082423CHe.M
Quant Title : VOA06 MA VPH
QLast Update : Thu Aug 24 11:07:18 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj.   :
Signal #1 Phase :   Signal #2 Phase:
Signal #1 Info :   Signal #2 Info :





This File:	L:\SVOA\Excel Reports\ABN\231205\67836-001		Charles Leahy L:\SVOA\ABN\ABN 8270DoD ImportFileBuilde
Analysis Group:	ABN	Dow Salvage Yard	12/5/23 11:13 AM
Field ID:	SY-OBMW2-110823	CRE	L:\SVOA\ABN\
Sample:	67836-01 acid x1	67836-01 bn x1	L:\SVOA\Excel Reports\ABN\231205\
Misc:			L:\SVOA\PDFReports\
DataFile:	115.D\S4ABN110223A.XLS	4ABN110223A.XLS	
Import File Name	S4 ABN 17124 DoD		
TestGroupID	E8270DoD_A		
Aqueous or Soil? (A or S)	A		
Prep Date	11/14/2023		
Lab#:	67836-001		
QC_Code:			
Prep#	17124		

WS3964

Reviewer Checks:

Quant Report: Reviewed, Analyst Initials & Date ·
Chromatogram Checked, Major peaks identified ·
Results consistent w/ other attached analyses
Reanalysis reason noted
Substitute dilution data checked
Correct dilution and reason clear or noted ·
Flags checked (Expiration, F+, Over Cal, Surr, Aspen, QC)
QC discussed in case narr. Other QC failures or issues noted in Aspen C. NARR
Correct data file and/or date/time in Aspen ✓

Notes:
Reviewer Initials & Date: 12/14/23

#	Surrogate Standards	Conc. (ug/mL)	AnalysisDate	AnalyzedBy	Dil'n	Weight	Volume	Surr	Recovery	Flag	QC Limits
4	2-fluorophenol	26.00	11/21/2023	CL s4112115.D	1	1	1	100	**26%**		21-100
7	phenol-d6	17.71	11/21/2023	CL s4112115.D	1	1	1	100	**18%**		10-102
59	2,4,6-tribromophenol	73.56	11/21/2023	CL s4112115.D	1	1	1	100	**74%**		10-123
22	nitrobenzene-d5	26.43	11/20/2023	CL s4112006.D	1	1	1	50	**53%**		35-114
38	2-fluorobiphenyl	28.85	11/20/2023	CL s4112006.D	1	1	1	50	**58%**		43-116
75	terphenyl-d14	37.25	11/20/2023	CL s4112006.D	1	1	1	50	**74%**		33-141
6	phenol	0.00	11/21/2023	CL s4112115.D	1	1	1				
8	2-chlorophenol	0.00	11/21/2023	CL s4112115.D	1	1	1				
15	2-methylphenol	0.00	11/21/2023	CL s4112115.D	1	1	1				
15	2-methylphenol	0.00	11/21/2023	CL s4112115.D	1	1	1				
20	4-methylphenol	0.00	11/21/2023	CL s4112115.D	1	1	1				
25	2-nitrophenol	0.00	11/21/2023	CL s4112115.D	1	1	1				
26	2,4-dimethylphenol	0.00	11/21/2023	CL s4112115.D	1	1	1				
28	2,4-dichlorophenol	0.00	11/21/2023	CL s4112115.D	1	1	1				
29	2,6-dichlorophenol	0.00	11/21/2023	CL s4112115.D	1	1	1				
32	benzoic acid	0.00	11/21/2023	CL s4112115.D	1	1	1				
35	4-chloro-3-methylphenol	0.00	11/21/2023	CL s4112115.D	1	1	1				
40	2,4,6-trichlorophenol	0.00	11/21/2023	CL s4112115.D	1	1	1				
41	2,4,5-trichlorophenol	0.00	11/21/2023	CL s4112115.D	1	1	1				
51	2,4-dinitrophenol	0.00	11/21/2023	CL s4112115.D	1	1	1				
53	4-nitrophenol	0.00	11/21/2023	CL s4112115.D	1	1	1				
60	4,6-dinitro-2-methylphenol	0.00	11/21/2023	CL s4112115.D	1	1	1				
66	pentachlorophenol	0.00	11/21/2023	CL s4112115.D	1	1	1				
2	N-nitroso-dimethylamine	0.00	11/20/2023	CL s4112006.D	1	1	1				
3	pyridine	0.00	11/20/2023	CL s4112006.D	1	1	1				
5	aniline	0.00	11/20/2023	CL s4112006.D	1	1	1				
9	n-decane	0.00	11/20/2023	CL s4112006.D	1	1	1				
10	bis-(2-choroethyl)ether	0.00	11/20/2023	CL s4112006.D	1	1	1				
11	1,3-dichlorobenzene	0.00	11/20/2023	CL s4112006.D	1	1	1				
12	1,4-diclorobenzene	0.00	11/20/2023	CL s4112006.D	1	1	1				
13	1,2-dichlorobenzene	0.00	11/20/2023	CL s4112006.D	1	1	1				
14	benzyl alcohol	0.00	11/20/2023	CL s4112006.D	1	1	1				
16	2,2'-oxybis(1-chloropropane)	0.00	11/20/2023	CL s4112006.D	1	1	1				
##	acetephenone	#N/A	11/20/2023	CL s4112006.D	1	1	1			#N/A	
18	hexachloroethane	0.00	11/20/2023	CL s4112006.D	1	1	1				
19	N-nitroso-di-n-propylamine	0.00	11/20/2023	CL s4112006.D	1	1	1				
23	nitrobenzene	0.00	11/20/2023	CL s4112006.D	1	1	1				
24	isophorone	0.00	11/20/2023	CL s4112006.D	1	1	1				
27	bis(2-chloroethoxy)methane	0.00	11/20/2023	CL s4112006.D	1	1	1				
30	1,2,4-trichlorobenzene	0.00	11/20/2023	CL s4112006.D	1	1	1				
31	naphthalene	0.00	11/20/2023	CL s4112006.D	1	1	1				
33	4-chloroanaline	0.00	11/20/2023	CL s4112006.D	1	1	1				
34	hexachloro-1,3-butadiene	0.00	11/20/2023	CL s4112006.D	1	1	1				
36	2-methylnaphthalene	0.00	11/20/2023	CL s4112006.D	1	1	1				
39	hexachlorocyclopentadiene	0.00	11/20/2023	CL s4112006.D	1	1	1				
43	2-chloronaphthalene	0.00	11/20/2023	CL s4112006.D	1	1	1				
44	2-nitroanaline	0.00	11/20/2023	CL s4112006.D	1	1	1				
45	acenaphthylene	0.00	11/20/2023	CL s4112006.D	1	1	1				
46	dimethyl phthalate	0.00	11/20/2023	CL s4112006.D	1	1	1				
47	2,6-dinitrotoluene	0.00	11/20/2023	CL s4112006.D	1	1	1				
48	2,4-dinitrotoluene	0.00	11/20/2023	CL s4112006.D	1	1	1				
49	acenaphthene	0.00	11/20/2023	CL s4112006.D	1	1	1				
50	3-nitroanaline	0.00	11/20/2023	CL s4112006.D	1	1	1				
52	dibenzofuran	0.00	11/20/2023	CL s4112006.D	1	1	1				
54	fluorene	0.00	11/20/2023	CL s4112006.D	1	1	1				
55	diethyl phthalate	**2.38**	11/20/2023	CL s4112006.D	1	1	1				
56	4-chlorophenyl phenyl ether	0.00	11/20/2023	CL s4112006.D	1	1	1				
57	4-nitroanaline	0.00	11/20/2023	CL s4112006.D	1	1	1				
61	azobenzene	0.00	11/20/2023	CL s4112006.D	1	1	1				
62	N-nitrosodiphenylamine	0.00	11/20/2023	CL s4112006.D	1	1	1				
63	4-bromophenyl phenyl ether	0.00	11/20/2023	CL s4112006.D	1	1	1				
64	hexachlorobenzene	0.00	11/20/2023	CL s4112006.D	1	1	1				
65	n-octadecane	0.00	11/20/2023	CL s4112006.D	1	1	1				
67	phenanthrene	0.00	11/20/2023	CL s4112006.D	1	1	1				
68	anthracene	0.00	11/20/2023	CL s4112006.D	1	1	1				
70	carbazole	0.00	11/20/2023	CL s4112006.D	1	1	1				
71	di-n-butyl phthalate	0.03	11/20/2023	CL s4112006.D	1	1	1				
73	fluoranthene	0.00	11/20/2023	CL s4112006.D	1	1	1				
76	benzidine	0.00	11/20/2023	CL s4112006.D	1	1	1				
77	pyrene	0.00	11/20/2023	CL s4112006.D	1	1	1				
78	butyl benzyl phthalate	0.00	11/20/2023	CL s4112006.D	1	1	1				
79	benzo(a)anthracene	0.00	11/20/2023	CL s4112006.D	1	1	1				
80	chrysene	0.00	11/20/2023	CL s4112006.D	1	1	1				
81	3,3'-dichlorobenzidine	0.00	11/20/2023	CL s4112006.D	1	1	1				
82	bis-2-ethylhexyl phthalate	0.00	11/20/2023	CL s4112006.D	1	1	1				
84	di-n-octyl phthalate	0.00	11/20/2023	CL s4112006.D	1	1	1				
85	Benzo(b)fluoranthene	0.00	11/20/2023	CL s4112006.D	1	1	1				
86	benzo(k)fluoranthene	0.00	11/20/2023	CL s4112006.D	1	1	1				
87	benzo(a)pyrene	0.00	11/20/2023	CL s4112006.D	1	1	1				
88	indeno(1,2,3-cd)pyrene	0.00	11/20/2023	CL s4112006.D	1	1	1				
89	dibenzo(a,h)anthracene	0.00	11/20/2023	CL s4112006.D	1	1	1				
90	benzo(g,h,i)perylene	0.00	11/20/2023	CL s4112006.D	1	1	1				

Quantitation Report (QT Reviewed)

CL
12/5/23 @ 09:40
CharlesL

Data Path : X:\S4\2023\Nov23\112123\
Data File : s4112115.D
Acq On : 21 Nov 2023 06:44 pm
Operator : cl
Sample : 67836-01 acid x1
Misc :
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Nov 22 09:15:21 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration

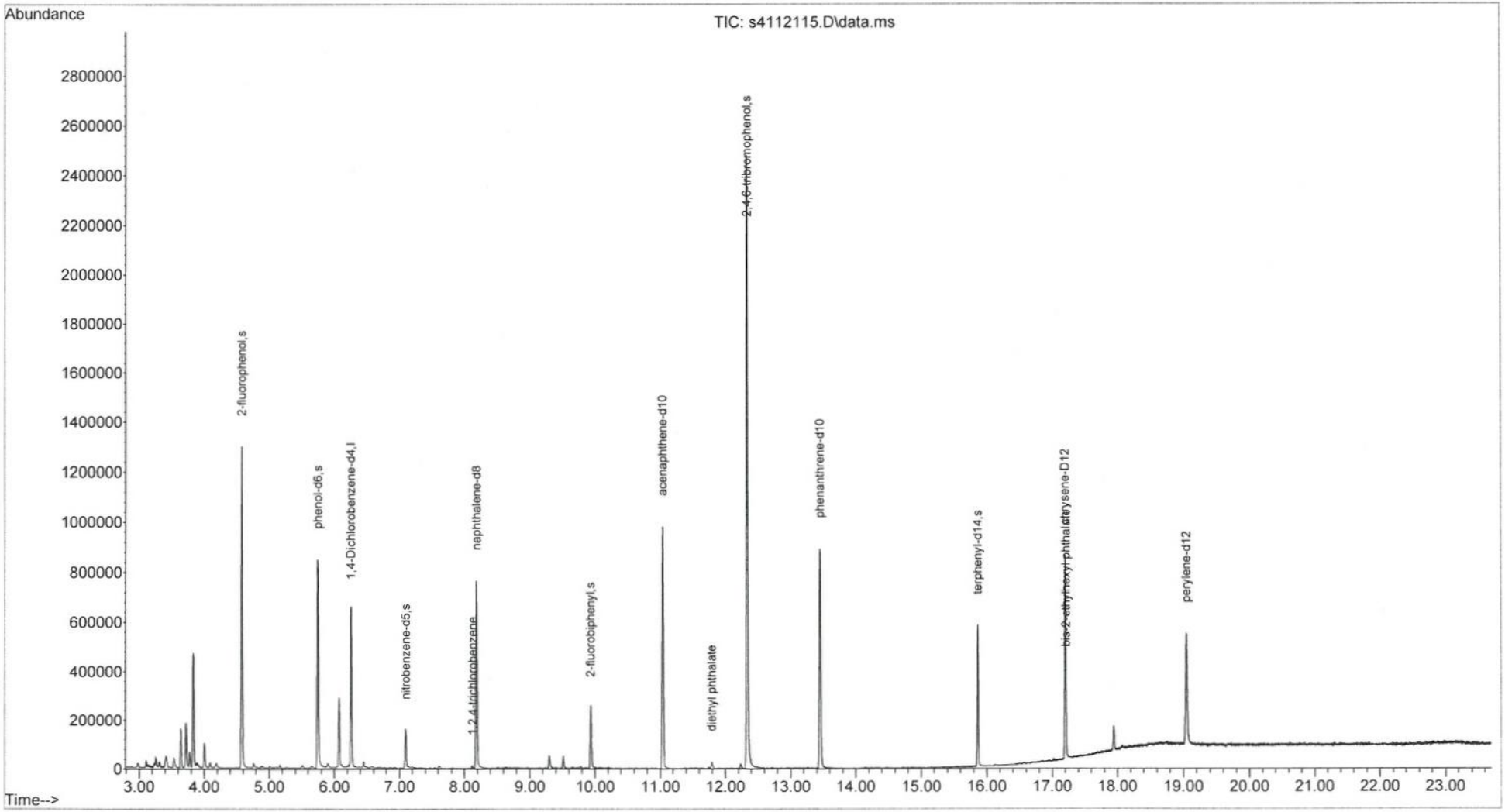
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.253	152	142033	10.00	ug/mL	-0.01
21) naphthalene-d8	8.184	136	522079	10.00	ug/mL	0.00
37) acenaphthene-d10	11.038	164	280850	10.00	ug/mL	0.00
58) phenanthrene-d10	13.449	188	513107	10.00	ug/mL	-0.01
74) chrysene-D12	17.197	240	346260	10.00	ug/mL	0.00
83) perylene-d12	19.044	264	265776	10.00	ug/mL	0.00
System Monitoring Compounds						
4) 2-fluorophenol	4.579	112	458749	26.00	ug/mL	-0.01
Spiked Amount 200.000			Recovery =	13.00%		
7) phenol-d6	5.743	99	379590	17.71	ug/mL	-0.01
Spiked Amount 200.000			Recovery =	8.86%		
22) nitrobenzene-d5	7.094	82	72953	3.97	ug/mL	0.00
Spiked Amount 100.000			Recovery =	3.97%		
38) 2-fluorobiphenyl	9.930	172	115058	2.57	ug/mL	-0.01
Spiked Amount 100.000			Recovery =	2.57%		
59) 2,4,6-tribromophenol	12.338	330	460397	73.56	ug/mL	0.00
Spiked Amount 200.000			Recovery =	36.78%		
69) o-terphenyl	0.000	230	0	0.00	ug/mL	
Spiked Amount 100.000			Recovery =	0.00%		
72) 1-Chloro-octadecane	0.000	57	0	0.00	ug/mL	
Spiked Amount 100.000			Recovery =	0.00%		
75) terphenyl-d14	15.864	244	236587	6.32	ug/mL	0.00
Spiked Amount 100.000			Recovery =	6.32%		
Target Compounds						Qvalue
30) 1,2,4-trichlorobenzene	8.123	180	3276m	BC 0.086	ug/mL	
31) naphthalene	8.217	128	1497	Below Cal #		68
42) 1,1'-Biphenyl	10.083	154	852	Below Cal #		40
55) diethyl phthalate	11.792	149	15477	0.293	ug/mL	99
79) benzo(a)anthracene	17.200	228	907	Below Cal #		51
80) chrysene	17.200	228	907	Below Cal #		49
82) bis-2-ethylhexyl phtha...	17.210	149	1214	0.069	ug/mL#	54
93) DDT	16.631	TIC	1769	Below Cal #		22

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Nov23\112123\
Data File : s4112115.D
Acq On : 21 Nov 2023 06:44 pm
Operator : cl
Sample : 67836-01 acid x1
Misc :
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Nov 22 09:15:21 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Nov23\112023\
Data File : s4112006.D
Acq On : 20 Nov 2023 03:56 pm
Operator : cl
Sample : 67836-01 bn x1
Misc :
ALS Vial : 6 Sample Multiplier: 1

CL
12/4/23 @ 16:03
CharlesL

Quant Time: Nov 21 08:55:00 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration

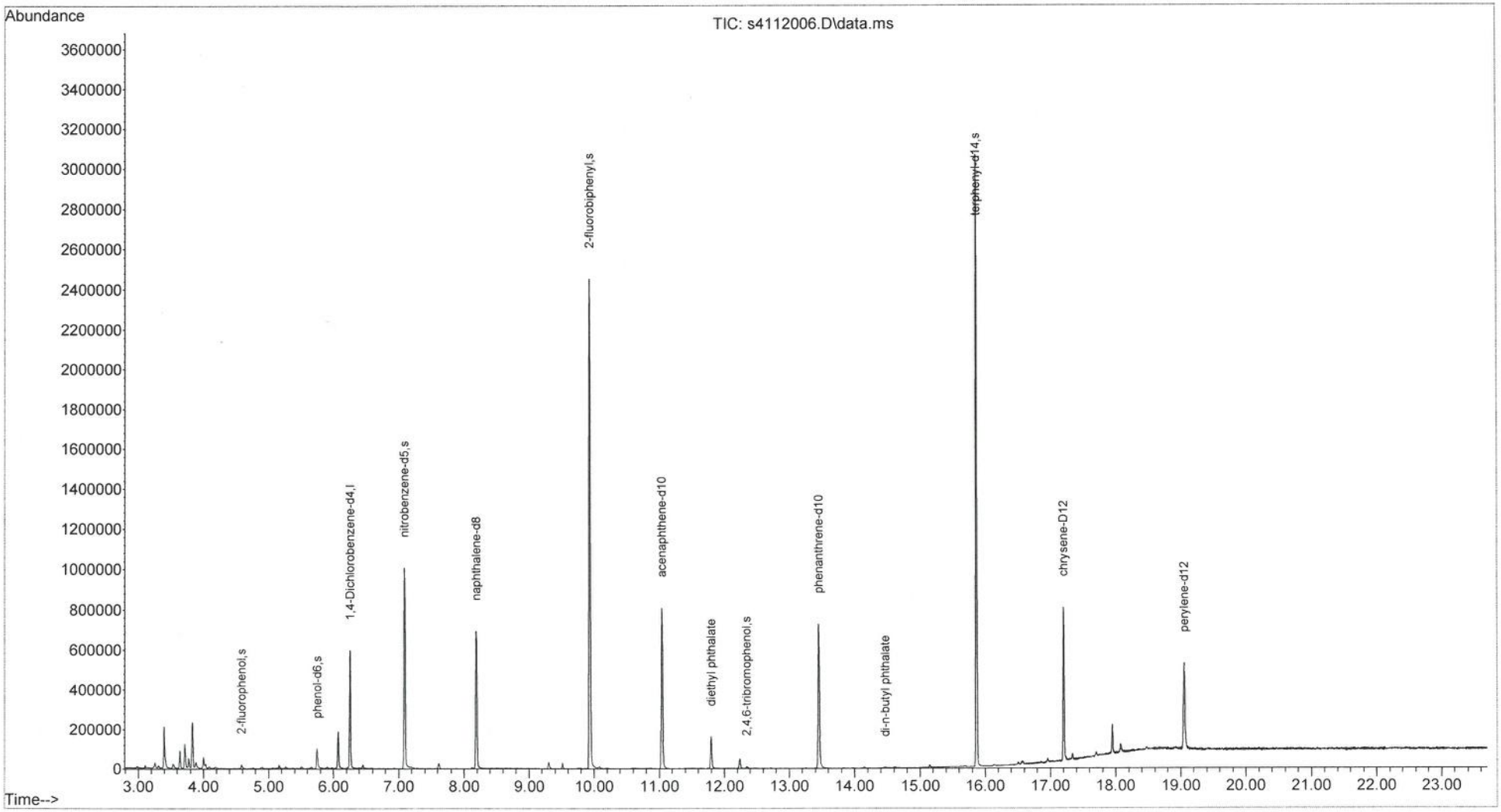
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	6.255	152	130258	10.00	ug/mL		0.00
21) naphthalene-d8	8.184	136	466878	10.00	ug/mL		0.00
37) acenaphthene-d10	11.041	164	239591	10.00	ug/mL		0.00
58) phenanthrene-d10	13.451	188	435297	10.00	ug/mL	#	0.00
74) chrysene-D12	17.202	240	309568	10.00	ug/mL		0.00
83) perylene-d12	19.054	264	252650	10.00	ug/mL		0.02
System Monitoring Compounds							
4) 2-fluorophenol	4.584	112	3800	0.23	ug/mL		0.00
Spiked Amount 200.000			Recovery =	0.11%			
7) phenol-d6	5.746	99	47677	2.43	ug/mL		-0.01
Spiked Amount 200.000			Recovery =	1.22%			
22) nitrobenzene-d5	7.088	82	433133	26.43	ug/mL		-0.01
Spiked Amount 100.000			Recovery =	26.43%			
38) 2-fluorobiphenyl	9.935	172	1087709	28.85	ug/mL		0.00
Spiked Amount 100.000			Recovery =	28.85%			
59) 2,4,6-tribromophenol	12.343	330	1578	0.39	ug/mL		0.00
Spiked Amount 200.000			Recovery =	0.20%			
69) o-terphenyl	0.000	230	0	0.00	ug/mL		
Spiked Amount 100.000			Recovery =	0.00%			
72) 1-Chloro-octadecane	0.000	57	0	0.00	ug/mL		
Spiked Amount 100.000			Recovery =	0.00%			
75) terphenyl-d14	15.867	244	1244793	37.25	ug/mL		0.00
Spiked Amount 100.000			Recovery =	37.25%			
Target Compounds							Qvalue
42) 1,1'-Biphenyl	10.082	154	1754	Below Cal		#	75
55) diethyl phthalate	11.797	149	86793	2.377	ug/mL	#	79
71) di-n-butyl phthalate	14.468	149	2632	0.030	ug/mL	#	78
73) fluoranthene	15.365	202	886	Below Cal		#	64
79) benzo(a)anthracene	17.189	228	1983m	BC Below Cal			
80) chrysene	17.235	228	1858m	BC Below Cal			
85) Benzo(b)fluoranthene	18.512	252	874	Below Cal		#	59
86) benzo(k)fluoranthene	18.535	252	1093m	BC Below Cal			
93) DDT	16.636	TIC	879	BC Below Cal		#	22

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Nov23\112023\
Data File : s4112006.D
Acq On : 20 Nov 2023 03:56 pm
Operator : cl
Sample : 67836-01 bn x1
Misc :
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Nov 21 08:55:00 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration



This File: **L:\SVOA\Excel Reports\ABN\231205\67836-002**
Analysis Group: **ABN** **Dow Salvage Yard**
Field ID: **SY-OBMW1-110823** **CRE**
Sample: **67836-02 acid x1** **67836-02 bn x1**
Misc:
DataFile: 522.D\S4ABN110223A.XLS 4ABN110223A.XLS
Import File Name **S4 ABN 17124 DoD**
TestGroupID **E8270DoD_A**
Aqueous or Soil? (A or S) **A**
Prep Date **11/14/2023**
Lab#: **67836-002**
QC_Code:
Prep# **17124**

Charles Leahy L:\SVOA\ABN\ABN 8270DoD ImportFileBuilde
12/5/23 11:15 AM
L:\SVOA\ABN\
L:\SVOA\Excel Reports\ABN\231205\
L:\SVOA\PDFReports\

Reviewer Checks:
Quant Report: Reviewed, Analyst Initials & Date ✓
Chromatogram Checked, Major peaks identified, Results consistent w/ other attached analyses
Reanalysis reason noted
Substitute dilution data checked
Correct dilution and reason clear or noted.
Flags checked (Expiration, F+, Over Cal, Surr, Aspen, QC) ✓
Other QC failures or issues noted in Aspen C.NARR
Correct data file and/or date/time in Aspen ✓

Notes:
Reviewer Initials & Date: CS 12/6/23

#	Surrogate Standards	Conc. (ug/mL)	AnalysisDate	AnalyzedBy	Dil'n	Weight	Volume	Surr	Recovery	Flag	QC Limits
4	2-fluorophenol	14.35	11/15/2023	CL s4111522.D	1	1	1	100	**14%**	# ✓	21-100
7	phenol-d6	11.26	11/15/2023	CL s4111522.D	1	1	1	100	**11%**		10-102
59	2,4,6-tribromophenol	42.14	11/15/2023	CL s4111522.D	1	1	1	100	**42%**		10-123
22	nitrobenzene-d5	24.39	11/20/2023	CL s4112007.D	1	1	1	50	**49%**		35-114
38	2-fluorobiphenyl	27.95	11/20/2023	CL s4112007.D	1	1	1	50	**56%**		43-116
75	terphenyl-d14	41.19	11/20/2023	CL s4112007.D	1	1	1	50	**82%**		33-141
6	phenol	0.00	11/15/2023	CL s4111522.D	1	1	1				
8	2-chlorophenol	0.00	11/15/2023	CL s4111522.D	1	1	1				
15	2-methylphenol	0.00	11/15/2023	CL s4111522.D	1	1	1				
15	2-methylphenol	0.00	11/15/2023	CL s4111522.D	1	1	1				
20	4-methylphenol	0.00	11/15/2023	CL s4111522.D	1	1	1				
25	2-nitrophenol	0.00	11/15/2023	CL s4111522.D	1	1	1				
26	2,4-dimethylphenol	0.00	11/15/2023	CL s4111522.D	1	1	1				
28	2,4-dichlorophenol	0.00	11/15/2023	CL s4111522.D	1	1	1				
29	2,6-dichlorophenol	0.00	11/15/2023	CL s4111522.D	1	1	1				
32	benzoic acid	0.00	11/15/2023	CL s4111522.D	1	1	1				
35	4-chloro-3-methylphenol	0.00	11/15/2023	CL s4111522.D	1	1	1				
40	2,4,6-trichlorophenol	0.00	11/15/2023	CL s4111522.D	1	1	1				
41	2,4,5-trichlorophenol	0.00	11/15/2023	CL s4111522.D	1	1	1				
51	2,4-dinitrophenol	0.00	11/15/2023	CL s4111522.D	1	1	1				
53	4-nitrophenol	0.00	11/15/2023	CL s4111522.D	1	1	1				
60	4,6-dinitro-2-methylphenol	0.00	11/15/2023	CL s4111522.D	1	1	1				
66	pentachlorophenol	0.00	11/15/2023	CL s4111522.D	1	1	1				
2	N-nitroso-dimethylamine	0.00	11/20/2023	CL s4112007.D	1	1	1				
3	pyridine	0.00	11/20/2023	CL s4112007.D	1	1	1				
5	aniline	0.00	11/20/2023	CL s4112007.D	1	1	1				
9	n-decane	0.00	11/20/2023	CL s4112007.D	1	1	1				
10	bis-(2-choroethyl)ether	0.00	11/20/2023	CL s4112007.D	1	1	1				
11	1,3-dichlorobenzene	0.00	11/20/2023	CL s4112007.D	1	1	1				
12	1,4-diclorobenzene	0.00	11/20/2023	CL s4112007.D	1	1	1				
13	1,2-dichlorobenzene	0.00	11/20/2023	CL s4112007.D	1	1	1				
14	benzyl alcohol	0.00	11/20/2023	CL s4112007.D	1	1	1				
16	2,2'-oxybis(1-chloropropane)	0.00	11/20/2023	CL s4112007.D	1	1	1				
##	acetephenone	#N/A	11/20/2023	CL s4112007.D	1	1	1			#N/A	
18	hexachloroethane	0.00	11/20/2023	CL s4112007.D	1	1	1				
19	N-nitroso-di-n-propylamine	0.00	11/20/2023	CL s4112007.D	1	1	1				
23	nitrobenzene	0.00	11/20/2023	CL s4112007.D	1	1	1				
24	isophorone	0.00	11/20/2023	CL s4112007.D	1	1	1				
27	bis(2-chloroethoxy)methane	0.00	11/20/2023	CL s4112007.D	1	1	1				
30	1,2,4-trichlorobenzene	0.00	11/20/2023	CL s4112007.D	1	1	1				
31	naphthalene	0.00	11/20/2023	CL s4112007.D	1	1	1				
33	4-chloroanaline	0.00	11/20/2023	CL s4112007.D	1	1	1				
34	hexachloro-1,3-butadiene	0.00	11/20/2023	CL s4112007.D	1	1	1				
36	2-methylnaphthalene	0.00	11/20/2023	CL s4112007.D	1	1	1				
39	hexachlorocyclopentadiene	0.00	11/20/2023	CL s4112007.D	1	1	1				
43	2-chloronaphthalene	0.00	11/20/2023	CL s4112007.D	1	1	1				
44	2-nitroanaline	0.00	11/20/2023	CL s4112007.D	1	1	1				
45	acenaphthylene	0.00	11/20/2023	CL s4112007.D	1	1	1				
46	dimethyl phthalate	0.00	11/20/2023	CL s4112007.D	1	1	1				
47	2,6-dinitrotoluene	0.00	11/20/2023	CL s4112007.D	1	1	1				
48	2,4-dinitrotoluene	0.00	11/20/2023	CL s4112007.D	1	1	1				
49	acenaphthene	0.00	11/20/2023	CL s4112007.D	1	1	1				
50	3-nitroanaline	0.00	11/20/2023	CL s4112007.D	1	1	1				
52	dibenzofuran	0.00	11/20/2023	CL s4112007.D	1	1	1				
54	fluorene	0.00	11/20/2023	CL s4112007.D	1	1	1				
55	diethyl phthalate	**4.70**	11/20/2023	CL s4112007.D	1	1	1				
56	4-chlorophenyl phenyl ether	0.00	11/20/2023	CL s4112007.D	1	1	1				
57	4-nitroanaline	0.00	11/20/2023	CL s4112007.D	1	1	1				
61	azobenzene	0.00	11/20/2023	CL s4112007.D	1	1	1				
62	N-nitrosodiphenylamine	0.00	11/20/2023	CL s4112007.D	1	1	1				
63	4-bromophenyl phenyl ether	0.00	11/20/2023	CL s4112007.D	1	1	1				
64	hexachlorobenzene	0.00	11/20/2023	CL s4112007.D	1	1	1				
65	n-octadecane	0.00	11/20/2023	CL s4112007.D	1	1	1				
67	phenanthrene	0.00	11/20/2023	CL s4112007.D	1	1	1				
68	anthracene	0.00	11/20/2023	CL s4112007.D	1	1	1				
70	carbazole	0.00	11/20/2023	CL s4112007.D	1	1	1				
71	di-n-butyl phthalate	0.00	11/20/2023	CL s4112007.D	1	1	1				
73	fluoranthene	0.00	11/20/2023	CL s4112007.D	1	1	1				
76	benzidine	0.00	11/20/2023	CL s4112007.D	1	1	1				
77	pyrene	0.00	11/20/2023	CL s4112007.D	1	1	1				
78	butyl benzyl phthalate	0.00	11/20/2023	CL s4112007.D	1	1	1				
79	benzo(a)anthracene	0.00	11/20/2023	CL s4112007.D	1	1	1				
80	chrysene	0.00	11/20/2023	CL s4112007.D	1	1	1				
81	3,3'-dichlorobenzidine	0.00	11/20/2023	CL s4112007.D	1	1	1				
82	bis-2-ethylhexyl phthalate	0.15	11/20/2023	CL s4112007.D	1	1	1				
84	di-n-octyl phthalate	0.00	11/20/2023	CL s4112007.D	1	1	1				
85	Benzo(b)fluoranthene	0.00	11/20/2023	CL s4112007.D	1	1	1				
86	benzo(k)fluoranthene	0.00	11/20/2023	CL s4112007.D	1	1	1				
87	benzo(a)pyrene	0.00	11/20/2023	CL s4112007.D	1	1	1				
88	indeno(1,2,3-cd)pyrene	0.00	11/20/2023	CL s4112007.D	1	1	1				
89	dibenzo(a,h)anthracene	0.00	11/20/2023	CL s4112007.D	1	1	1				
90	benzo(g,h,i)perylene	0.00	11/20/2023	CL s4112007.D	1	1	1				

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Nov23\111523\
Data File : s4111522.D
Acq On : 15 Nov 2023 08:43 pm
Operator : cl
Sample : 67836-02 acid x1
Misc :
ALS Vial : 20 Sample Multiplier: 1

CL
11/22/23 @ 11:44
CharlesL

Quant Time: Nov 17 16:14:12 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration

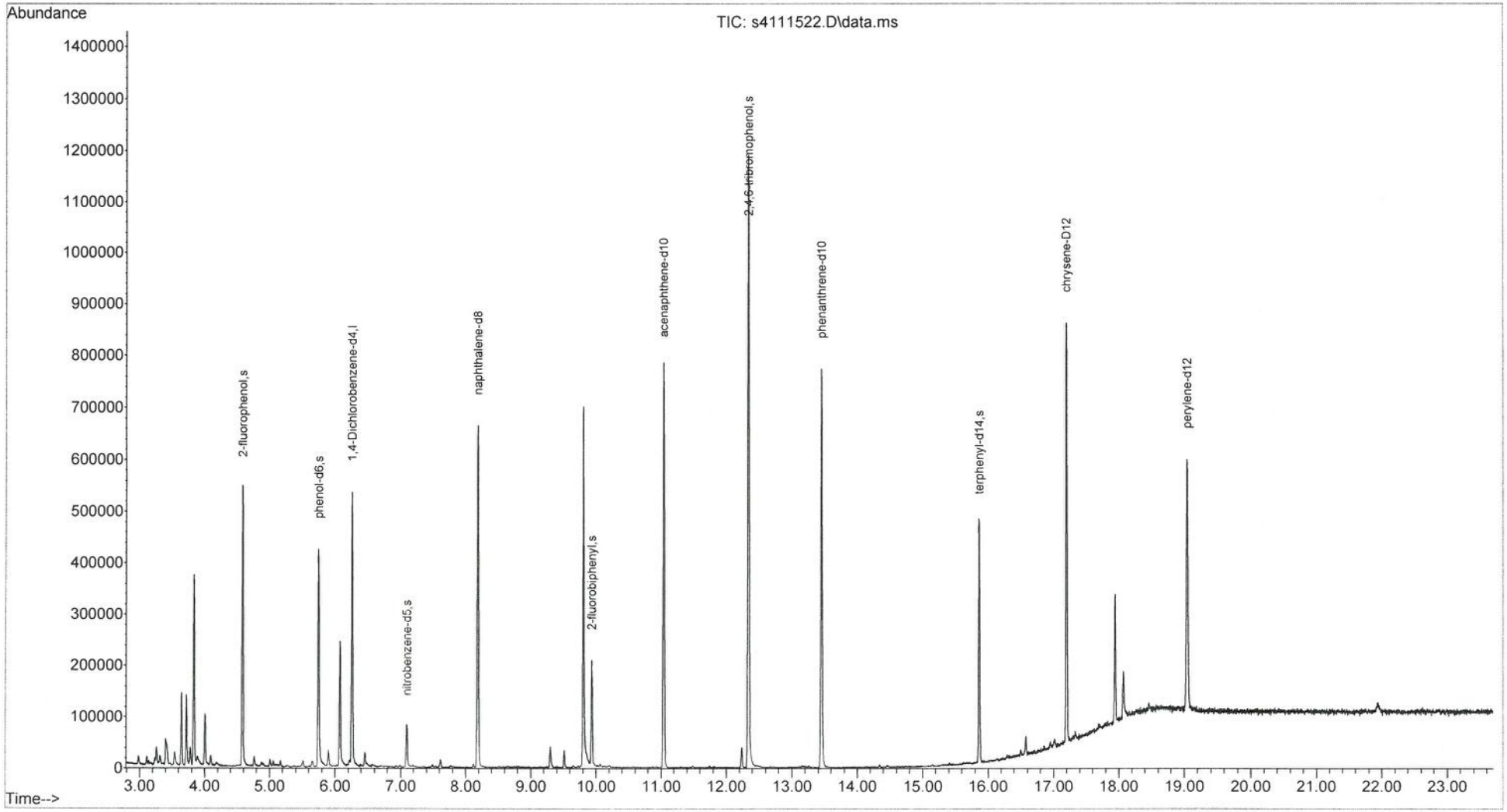
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.255	152	115538	10.00	ug/mL	0.00
21) naphthalene-d8	8.187	136	432405	10.00	ug/mL	0.00
37) acenaphthene-d10	11.038	164	223686	10.00	ug/mL	0.00
58) phenanthrene-d10	13.449	188	420065	10.00	ug/mL	-0.01
74) chrysene-D12	17.197	240	331838	10.00	ug/mL	0.00
83) perylene-d12	19.042	264	280822	10.00	ug/mL	0.00
System Monitoring Compounds						
4) 2-fluorophenol	4.584	112	205908	14.35	ug/mL	0.00
Spiked Amount 200.000			Recovery =	7.17%		
7) phenol-d6	5.746	99	196210	11.26	ug/mL	-0.01
Spiked Amount 200.000			Recovery =	5.63%		
22) nitrobenzene-d5	7.096	82	36885	2.42	ug/mL	0.00
Spiked Amount 100.000			Recovery =	2.42%		
38) 2-fluorobiphenyl	9.932	172	83887	2.35	ug/mL	0.00
Spiked Amount 100.000			Recovery =	2.35%		
59) 2,4,6-tribromophenol	12.338	330	215700	42.14	ug/mL	0.00
Spiked Amount 200.000			Recovery =	21.07%		
69) o-terphenyl	0.000	230	0	0.00	ug/mL	
Spiked Amount 100.000			Recovery =	0.00%		
72) 1-Chloro-octadecane	0.000	57	0	0.00	ug/mL	
Spiked Amount 100.000			Recovery =	0.00%		
75) terphenyl-d14	15.864	244	207758	5.79	ug/mL	0.00
Spiked Amount 100.000			Recovery =	5.79%		
Target Compounds						Qvalue
79) benzo(a)anthracene	17.194	228	1031	Below Cal	#	51
80) chrysene	17.194	228	1031	Below Cal	#	49
93) DDT	16.636	TIC	3721	Below Cal	#	22

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Nov23\111523\
Data File : s4111522.D
Acq On : 15 Nov 2023 08:43 pm
Operator : cl
Sample : 67836-02 acid x1
Misc :
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Nov 17 16:14:12 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

CL
12/4/23 @ 16:03
CharlesL

Data Path : X:\S4\2023\Nov23\112023\
Data File : s4112007.D
Acq On : 20 Nov 2023 04:25 pm
Operator : cl
Sample : 67836-02 bn x1
Misc :
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Nov 21 08:55:04 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration

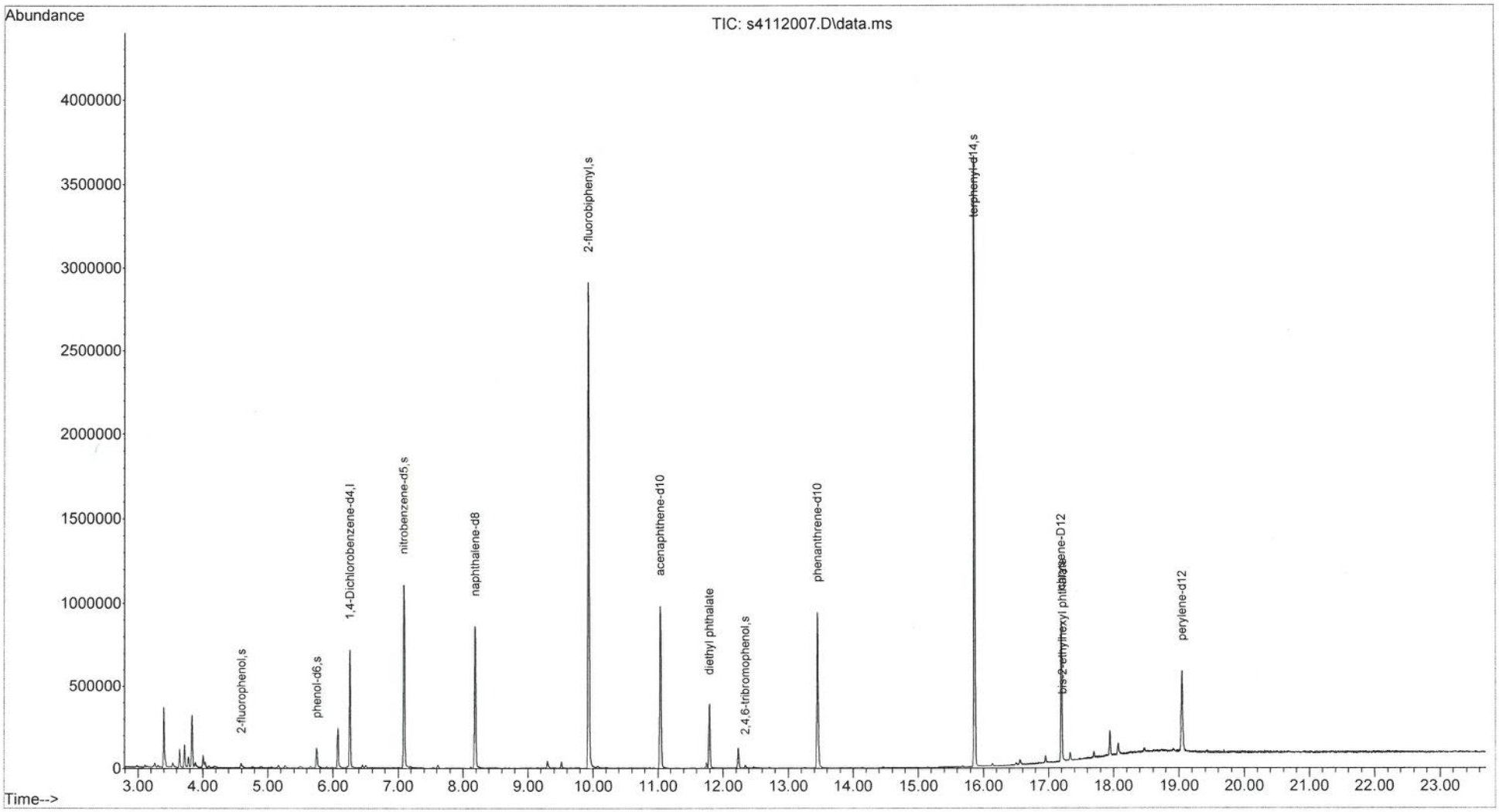
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.255	152	151402	10.00	ug/mL	0.00
21) naphthalene-d8	8.184	136	551443	10.00	ug/mL	0.00
37) acenaphthene-d10	11.038	164	289923	10.00	ug/mL	0.00
58) phenanthrene-d10	13.449	188	517747	10.00	ug/mL	-0.01
74) chrysene-D12	17.197	240	358462	10.00	ug/mL	0.00
83) perylene-d12	19.047	264	276494	10.00	ug/mL	0.00
System Monitoring Compounds						
4) 2-fluorophenol	4.591	112	9920	0.53	ug/mL	0.00
Spiked Amount 200.000			Recovery =	0.27%		
7) phenol-d6	5.746	99	57560	2.52	ug/mL	-0.01
Spiked Amount 200.000			Recovery =	1.26%		
22) nitrobenzene-d5	7.088	82	472140	24.39	ug/mL	-0.01
Spiked Amount 100.000			Recovery =	24.39%		
38) 2-fluorobiphenyl	9.932	172	1275309	27.95	ug/mL	0.00
Spiked Amount 100.000			Recovery =	27.95%		
59) 2,4,6-tribromophenol	12.340	330	2131	0.43	ug/mL	0.00
Spiked Amount 200.000			Recovery =	0.22%		
69) o-terphenyl	0.000	230	0	0.00	ug/mL	
Spiked Amount 100.000			Recovery =	0.00%		
72) 1-Chloro-octadecane	0.000	57	0	0.00	ug/mL	
Spiked Amount 100.000			Recovery =	0.00%		
75) terphenyl-d14	15.864	244	1594075	41.19	ug/mL	0.00
Spiked Amount 100.000			Recovery =	41.19%		
Target Compounds						Qvalue
30) 1,2,4-trichlorobenzene	8.115	180	1122	Below Cal	#	77
42) 1,1'-Biphenyl	10.085	154	2848m	BC Below Cal		
49) acenaphthene	11.043	154	989	Below Cal	#	4
55) diethyl phthalate	11.792	149	204234	4.698	ug/mL	99
77) pyrene	15.671	202	1089	Below Cal	#	57
82) bis-2-ethylhexyl phtha...	17.212	149	4317	0.155	ug/mL#	98
93) DDT	16.631	TIC	1074	Below Cal	#	22

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Nov23\112023\
Data File : s4112007.D
Acq On : 20 Nov 2023 04:25 pm
Operator : cl
Sample : 67836-02 bn x1
Misc :
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Nov 21 08:55:04 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration



This File: **L:\SVOA\Excel Reports\ABN\231205\67836-003**
Analysis Group: **ABN** **Dow Salvage Yard**
Field ID: **SY-OBMW9-110823** **CRE**
Sample: **67836-03 acid x1** **67836-03 bn x1**
Misc:
DataFile: 523.D\S4ABN110223A.XLS 4ABN110223A.XLS
Import File Name **S4 ABN 17124 DoD**
TestGroupID **E8270DoD_A**
Aqueous or Soil? (A or S) **A**
Prep Date **11/14/2023**
Lab#: **67836-003**
QC_Code:
Prep# **17124**

Charles Leahy L:\SVOA\ABN\ABN 8270DoD ImportFileBuilde
12/5/23 11:17 AM
L:\SVOA\ABN\
L:\SVOA\Excel Reports\ABN\231205\
L:\SVOA\PDFReports\

Reviewer Checks:
Quant Report: Reviewed, Analyst Initials & Date
Chromatogram Checked, Major peaks identified ✓
Results consistent w/ other attached analyses
Reanalysis reason noted
Substitute dilution data checked
Correct dilution and reason clear or noted ✓
Flags checked (Expiration, F+, Over Cal, Surr, Aspen, QC) ✓
Other QC failures or issues noted in Aspen ✓ NARR
Correct data file and/or date/time in Aspen ✓

Notes:
Reviewer Initials & Date: JC 12/6/23

#	Surrogate Standards	Conc. (ug/mL)	AnalysisDate	AnalyzedBy	Dil'n	Weight	Volume	Surr	Recovery	Flag	QC Limits
4	2-fluorophenol	31.59	11/15/2023	CL s4111523.D	1	1	1	100	**32%**		21-100
7	phenol-d6	18.41	11/15/2023	CL s4111523.D	1	1	1	100	**18%**		10-102
59	2,4,6-tribromophenol	64.81	11/15/2023	CL s4111523.D	1	1	1	100	**65%**		10-123
22	nitrobenzene-d5	29.96	11/20/2023	CL s4112008.D	1	1	1	50	**60%**		35-114
38	2-fluorobiphenyl	32.11	11/20/2023	CL s4112008.D	1	1	1	50	**64%**		43-116
75	terphenyl-d14	45.89	11/20/2023	CL s4112008.D	1	1	1	50	**92%**		33-141
6	phenol	0.00	11/15/2023	CL s4111523.D	1	1	1				
8	2-chlorophenol	0.00	11/15/2023	CL s4111523.D	1	1	1				
15	2-methylphenol	0.00	11/15/2023	CL s4111523.D	1	1	1				
15	2-methylphenol	0.00	11/15/2023	CL s4111523.D	1	1	1				
20	4-methylphenol	0.00	11/15/2023	CL s4111523.D	1	1	1				
25	2-nitrophenol	0.00	11/15/2023	CL s4111523.D	1	1	1				
26	2,4-dimethylphenol	0.00	11/15/2023	CL s4111523.D	1	1	1				
28	2,4-dichlorophenol	0.00	11/15/2023	CL s4111523.D	1	1	1				
29	2,6-dichlorophenol	0.00	11/15/2023	CL s4111523.D	1	1	1				
32	benzoic acid	0.00	11/15/2023	CL s4111523.D	1	1	1				
35	4-chloro-3-methylphenol	0.00	11/15/2023	CL s4111523.D	1	1	1				
40	2,4,6-trichlorophenol	0.00	11/15/2023	CL s4111523.D	1	1	1				
41	2,4,5-trichlorophenol	0.00	11/15/2023	CL s4111523.D	1	1	1				
51	2,4-dinitrophenol	0.00	11/15/2023	CL s4111523.D	1	1	1				
53	4-nitrophenol	0.00	11/15/2023	CL s4111523.D	1	1	1				
60	4,6-dinitro-2-methylphenol	0.00	11/15/2023	CL s4111523.D	1	1	1				
66	pentachlorophenol	0.00	11/15/2023	CL s4111523.D	1	1	1				
2	N-nitroso-dimethylamine	0.00	11/20/2023	CL s4112008.D	1	1	1				
3	pyridine	0.00	11/20/2023	CL s4112008.D	1	1	1				
5	aniline	0.00	11/20/2023	CL s4112008.D	1	1	1				
9	n-decane	0.00	11/20/2023	CL s4112008.D	1	1	1				
10	bis-(2-choroethyl)ether	0.00	11/20/2023	CL s4112008.D	1	1	1				
11	1,3-dichlorobenzene	0.00	11/20/2023	CL s4112008.D	1	1	1				
12	1,4-diclorobenzene	0.00	11/20/2023	CL s4112008.D	1	1	1				
13	1,2-dichlorobenzene	0.00	11/20/2023	CL s4112008.D	1	1	1				
14	benzyl alcohol	0.00	11/20/2023	CL s4112008.D	1	1	1				
16	2,2'-oxybis(1-chloropropane)	0.00	11/20/2023	CL s4112008.D	1	1	1				
##	acetephenone	#N/A	11/20/2023	CL s4112008.D	1	1	1			#N/A	
18	hexachloroethane	0.00	11/20/2023	CL s4112008.D	1	1	1				
19	N-nitroso-di-n-propylamine	0.00	11/20/2023	CL s4112008.D	1	1	1				
23	nitrobenzene	0.00	11/20/2023	CL s4112008.D	1	1	1				
24	isophorone	0.00	11/20/2023	CL s4112008.D	1	1	1				
27	bis(2-chloroethoxy)methane	0.00	11/20/2023	CL s4112008.D	1	1	1				
30	1,2,4-trichlorobenzene	0.06	11/20/2023	CL s4112008.D	1	1	1				
31	naphthalene	0.00	11/20/2023	CL s4112008.D	1	1	1				
33	4-chloroanaline	0.00	11/20/2023	CL s4112008.D	1	1	1				
34	hexachloro-1,3-butadiene	0.00	11/20/2023	CL s4112008.D	1	1	1				
36	2-methylnaphthalene	0.00	11/20/2023	CL s4112008.D	1	1	1				
39	hexachlorocyclopentadiene	0.00	11/20/2023	CL s4112008.D	1	1	1				
43	2-chloronaphthalene	0.00	11/20/2023	CL s4112008.D	1	1	1				
44	2-nitroanaline	0.00	11/20/2023	CL s4112008.D	1	1	1				
45	acenaphthylene	0.00	11/20/2023	CL s4112008.D	1	1	1				
46	dimethyl phthalate	0.00	11/20/2023	CL s4112008.D	1	1	1				
47	2,6-dinitrotoluene	0.00	11/20/2023	CL s4112008.D	1	1	1				
48	2,4-dinitrotoluene	0.00	11/20/2023	CL s4112008.D	1	1	1				
49	acenaphthene	0.00	11/20/2023	CL s4112008.D	1	1	1				
50	3-nitroanaline	0.00	11/20/2023	CL s4112008.D	1	1	1				
52	dibenzofuran	0.00	11/20/2023	CL s4112008.D	1	1	1				
54	fluorene	0.00	11/20/2023	CL s4112008.D	1	1	1				
55	diethyl phthalate	**4.25**	11/20/2023	CL s4112008.D	1	1	1				
56	4-chlorophenyl phenyl ether	0.00	11/20/2023	CL s4112008.D	1	1	1				
57	4-nitroanaline	0.00	11/20/2023	CL s4112008.D	1	1	1				
61	azobenzene	0.00	11/20/2023	CL s4112008.D	1	1	1				
62	N-nitrosodiphenylamine	0.00	11/20/2023	CL s4112008.D	1	1	1				
63	4-bromophenyl phenyl ether	0.00	11/20/2023	CL s4112008.D	1	1	1				
64	hexachlorobenzene	0.00	11/20/2023	CL s4112008.D	1	1	1				
65	n-octadecane	0.00	11/20/2023	CL s4112008.D	1	1	1				
67	phenanthrene	0.00	11/20/2023	CL s4112008.D	1	1	1				
68	anthracene	0.00	11/20/2023	CL s4112008.D	1	1	1				
70	carbazole	0.00	11/20/2023	CL s4112008.D	1	1	1				
71	di-n-butyl phthalate	0.00	11/20/2023	CL s4112008.D	1	1	1				
73	fluoranthene	0.00	11/20/2023	CL s4112008.D	1	1	1				
76	benzidine	0.00	11/20/2023	CL s4112008.D	1	1	1				
77	pyrene	0.00	11/20/2023	CL s4112008.D	1	1	1				
78	butyl benzyl phthalate	0.00	11/20/2023	CL s4112008.D	1	1	1				
79	benzo(a)anthracene	0.00	11/20/2023	CL s4112008.D	1	1	1				
80	chrysene	0.00	11/20/2023	CL s4112008.D	1	1	1				
81	3,3'-dichlorobenzidine	0.00	11/20/2023	CL s4112008.D	1	1	1				
82	bis-2-ethylhexyl phthalate	0.25 (IU)	11/20/2023	CL s4112008.D	1	1	1				
84	di-n-octyl phthalate	0.00	11/20/2023	CL s4112008.D	1	1	1				
85	Benzo(b)fluoranthene	0.00	11/20/2023	CL s4112008.D	1	1	1				
86	benzo(k)fluoranthene	0.00	11/20/2023	CL s4112008.D	1	1	1				
87	benzo(a)pyrene	0.00	11/20/2023	CL s4112008.D	1	1	1				
88	indeno(1,2,3-cd)pyrene	0.00	11/20/2023	CL s4112008.D	1	1	1				
89	dibenzo(a,h)anthracene	0.00	11/20/2023	CL s4112008.D	1	1	1				
90	benzo(g,h,i)perylene	0.00	11/20/2023	CL s4112008.D	1	1	1				

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Nov23\111523\
Data File : s4111523.D
Acq On : 15 Nov 2023 09:13 pm
Operator : cl
Sample : 67836-03 acid x1
Misc :
ALS Vial : 21 Sample Multiplier: 1

CL
11/22/23 @ 11:44
CharlesL

Quant Time: Nov 17 16:14:17 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration

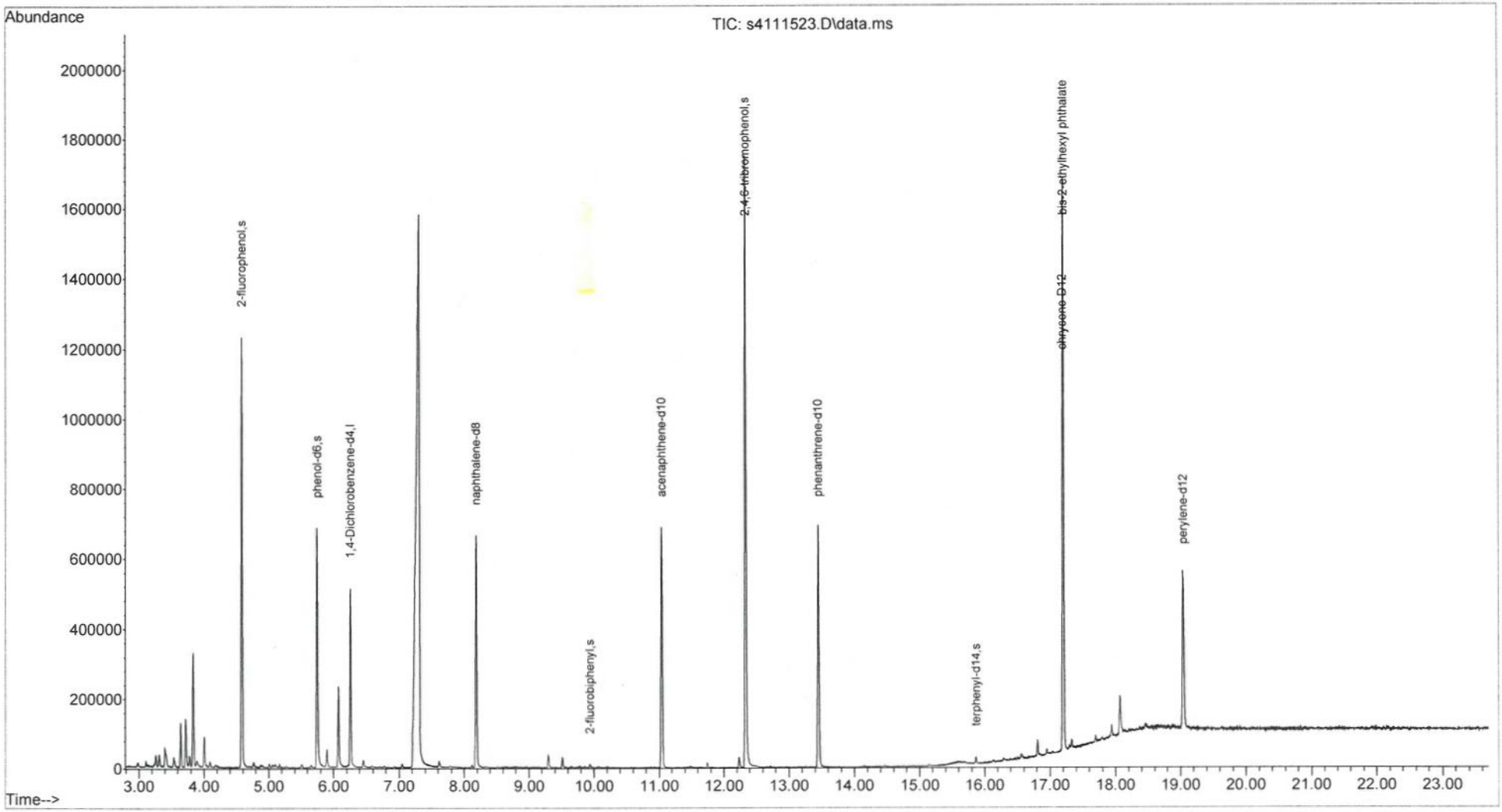
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.255	152	110875	10.00	ug/mL	0.00
21) naphthalene-d8	8.184	136	403935	10.00	ug/mL	0.00
37) acenaphthene-d10	11.041	164	215711	10.00	ug/mL	0.00
58) phenanthrene-d10	13.449	188	399871	10.00	ug/mL	-0.01
74) chrysene-D12	17.197	240	314905	10.00	ug/mL	0.00
83) perylene-d12	19.042	264	267281	10.00	ug/mL	0.00
System Monitoring Compounds						
4) 2-fluorophenol	4.581	112	435108	31.59	ug/mL	0.00
Spiked Amount 200.000			Recovery =	15.80%		
7) phenol-d6	5.746	99	307982	18.41	ug/mL	-0.01
Spiked Amount 200.000			Recovery =	9.21%		
22) nitrobenzene-d5	0.000	82	0	0.00	ug/mL	
Spiked Amount 100.000			Recovery =	0.00%		
38) 2-fluorobiphenyl	9.935	172	2465	0.03	ug/mL	0.00
Spiked Amount 100.000			Recovery =	0.03%		
59) 2,4,6-tribromophenol	12.338	330	316055	64.81	ug/mL	0.00
Spiked Amount 200.000			Recovery =	32.41%		
69) o-terphenyl	0.000	230	0	0.00	ug/mL	
Spiked Amount 100.000			Recovery =	0.00%		
72) 1-Chloro-octadecane	0.000	57	0	0.00	ug/mL	
Spiked Amount 100.000			Recovery =	0.00%		
75) terphenyl-d14	15.867	244	7877	0.22	ug/mL	0.00
Spiked Amount 100.000			Recovery =	0.22%		
Target Compounds						Qvalue
82) bis-2-ethylhexyl phtha...	17.210	149	515139	16.401	ug/mL	100
93) DDT	16.631	TIC	1381	Below Cal	#	22

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Nov23\111523\
Data File : s4111523.D
Acq On : 15 Nov 2023 09:13 pm
Operator : cl
Sample : 67836-03 acid x1
Misc :
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Nov 17 16:14:17 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

CL
12/4/23 @ 16:04
CharlesL

Data Path : X:\S4\2023\Nov23\112023\
Data File : s4112008.D
Acq On : 20 Nov 2023 04:55 pm
Operator : cl
Sample : 67836-03 bn x1
Misc :
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Nov 21 08:55:08 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration

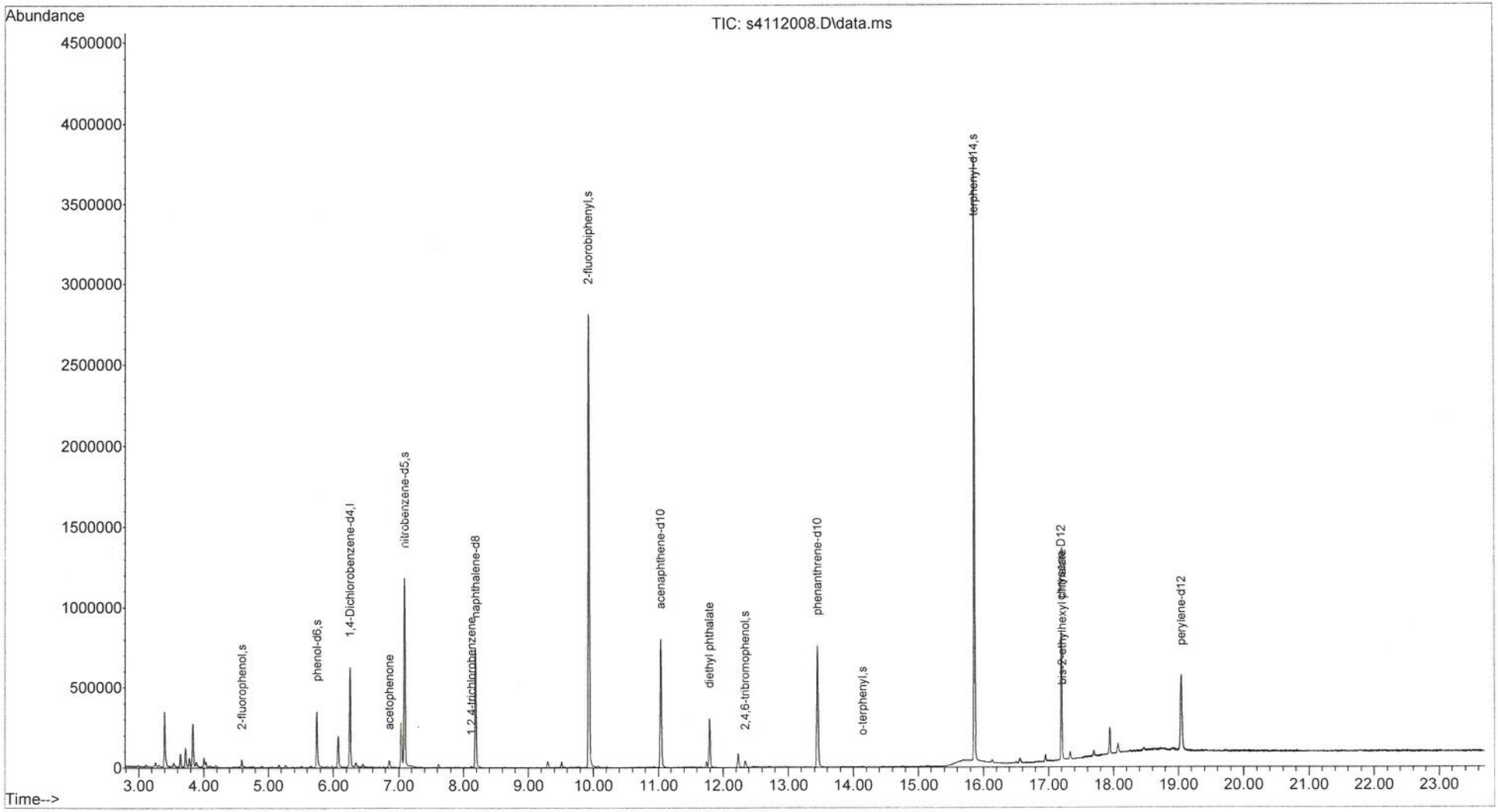
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.255	152	131657	10.00	ug/mL	0.00
21) naphthalene-d8	8.184	136	481936	10.00	ug/mL	0.00
37) acenaphthene-d10	11.038	164	244538	10.00	ug/mL	0.00
58) phenanthrene-d10	13.449	188	441700	10.00	ug/mL	-0.01
74) chrysene-D12	17.197	240	328993	10.00	ug/mL	0.00
83) perylene-d12	19.047	264	269508	10.00	ug/mL	0.00
System Monitoring Compounds						
4) 2-fluorophenol	4.589	112	18914	1.16	ug/mL	0.00
Spiked Amount 200.000			Recovery =	0.58%		
7) phenol-d6	5.746	99	157115	7.91	ug/mL	-0.01
Spiked Amount 200.000			Recovery =	3.96%		
22) nitrobenzene-d5	7.091	82	506846	29.96	ug/mL	0.00
Spiked Amount 100.000			Recovery =	29.96%		
38) 2-fluorobiphenyl	9.930	172	1235405	32.11	ug/mL	-0.01
Spiked Amount 100.000			Recovery =	32.11%		
59) 2,4,6-tribromophenol	12.340	330	8188m BC	1.61	ug/mL	0.00
Spiked Amount 200.000			Recovery =	0.80%		
69) o-terphenyl	14.142	230	951	0.01	ug/mL	-0.01
Spiked Amount 100.000			Recovery =	0.01%		
72) 1-Chloro-octadecane	15.686	57	1376	0.00	ug/mL	-0.15
Spiked Amount 100.000			Recovery =	0.00%		
75) terphenyl-d14	15.864	244	1629950	45.89	ug/mL	0.00
Spiked Amount 100.000			Recovery =	45.89%		
Target Compounds						Qvalue
17) acetophenone	6.859	120	4540	0.781	ug/mL	93
30) 1,2,4-trichlorobenzene	8.121	180	2577	0.059	ug/mL#	88
42) 1,1'-Biphenyl	10.075	154	3159m BC	Below Cal		
55) diethyl phthalate	11.792	149	156223	4.253	ug/mL	98
82) bis-2-ethylhexyl phtha...	17.210	149	6959	0.246	ug/mL#	87
93) DDT	16.639	TIC	1071	Below Cal	#	22

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Nov23\112023\
Data File : s4112008.D
Acq On : 20 Nov 2023 04:55 pm
Operator : cl
Sample : 67836-03 bn x1
Misc :
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Nov 21 08:55:08 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration



This File: **L:\SVOA\Excel Reports\ABN\231205\67836-004**
Analysis Group: **ABN** **Dow Salvage Yard**
Field ID: **/-BRMW5-29-44-110823** **CRE**
Sample: **67836-04 acid x1** **67836-04 bn x1**
Misc:
DataFile: 009.D\S4ABN110223A.XLS 4ABN110223A.XLS
Import File Name **S4 ABN 17124 DoD**
TestGroupID **E8270DoD_A**
Aqueous or Soil? (A or S) **A**
Prep Date **11/14/2023**
Lab#: **67836-004**
QC_Code:
Prep# **17124**

Charles Leahy L:\SVOA\ABN\ABN 8270DoD ImportFileBuilde
12/5/23 11:18 AM
L:\SVOA\ABN\
L:\SVOA\Excel Reports\ABN\231205\
L:\SVOA\PDFReports\

Reviewer Checks:
Quant Report: Reviewed, Analyst Initials & Date ✓
Chromatogram Checked, Major peaks identified ✓
Results consistent w/ other attached analyses
Reanalysis reason noted
Substitute dilution data checked
Correct dilution and reason clear or noted ✓
Flags checked (Expiration, F+, Over Cal, Surr, Aspen, QC) ✓
Other QC failures or issues noted in Aspen C,NH2
Correct data file and/or date/time in Aspen ✓

Notes:
Reviewer Initials & Date: 12/6/23

#	Surrogate Standards	Conc. (ug/mL)	AnalysisDate	AnalyzedBy	Dil'n	Weight	Volume	Surr	Recovery	Flag	QC Limits
4	2-fluorophenol	27.52	11/20/2023	CL s4112009.D	1 ✓	1	1	100	**28%**		21-100
7	phenol-d6	15.69	11/20/2023	CL s4112009.D	1	1	1	100	**16%**		10-102
59	2,4,6-tribromophenol	59.88	11/20/2023	CL s4112009.D	1	1	1	100	**60%** ✓		10-123
22	nitrobenzene-d5	32.87	11/20/2023	CL s4112010.D	1	1	1	50	**66%**		35-114
38	2-fluorobiphenyl	32.01	11/20/2023	CL s4112010.D	1	1	1	50	**64%**		43-116
75	terphenyl-d14	45.67	11/20/2023	CL s4112010.D	1	1	1	50	**91%**		33-141
6	phenol	0.00	11/20/2023	CL s4112009.D	1	1	1				
8	2-chlorophenol	0.00	11/20/2023	CL s4112009.D	1	1	1				
15	2-methylphenol	0.00	11/20/2023	CL s4112009.D	1	1	1				
15	2-methylphenol	0.00	11/20/2023	CL s4112009.D	1	1	1				
20	4-methylphenol	0.00	11/20/2023	CL s4112009.D	1	1	1				
25	2-nitrophenol	0.00	11/20/2023	CL s4112009.D	1	1	1				
26	2,4-dimethylphenol	0.00	11/20/2023	CL s4112009.D	1	1	1				
28	2,4-dichlorophenol	0.00	11/20/2023	CL s4112009.D	1	1	1				
29	2,6-dichlorophenol	0.00	11/20/2023	CL s4112009.D	1	1	1				
32	benzoic acid	0.00	11/20/2023	CL s4112009.D	1	1	1				
35	4-chloro-3-methylphenol	0.00	11/20/2023	CL s4112009.D	1	1	1				
40	2,4,6-trichlorophenol	0.00	11/20/2023	CL s4112009.D	1	1	1				
41	2,4,5-trichlorophenol	0.00	11/20/2023	CL s4112009.D	1	1	1				
51	2,4-dinitrophenol	0.00	11/20/2023	CL s4112009.D	1	1	1				
53	4-nitrophenol	0.00	11/20/2023	CL s4112009.D	1	1	1				
60	4,6-dinitro-2-methylphenol	0.00	11/20/2023	CL s4112009.D	1	1	1				
66	pentachlorophenol	0.00	11/20/2023	CL s4112009.D	1	1	1				
2	N-nitroso-dimethylamine	0.00	11/20/2023	CL s4112010.D	1	1	1				
3	pyridine	0.00	11/20/2023	CL s4112010.D ✓	1	1	1				
5	aniline	0.00	11/20/2023	CL s4112010.D	1	1	1				
9	n-decane	0.00	11/20/2023	CL s4112010.D	1	1	1				
10	bis-(2-choroethyl)ether	0.00	11/20/2023	CL s4112010.D	1	1	1				
11	1,3-dichlorobenzene	0.00	11/20/2023	CL s4112010.D	1	1	1				
12	1,4-diclorobenzene	0.00	11/20/2023	CL s4112010.D	1	1	1				
13	1,2-dichlorobenzene	0.00	11/20/2023	CL s4112010.D	1	1	1				
14	benzyl alcohol	0.00	11/20/2023	CL s4112010.D	1	1	1				
16	2,2'-oxybis(1-chloropropane)	0.00	11/20/2023	CL s4112010.D	1	1	1				
##	acetephenone	#N/A	11/20/2023	CL s4112010.D	1	1	1			#N/A	
18	hexachloroethane	0.00	11/20/2023	CL s4112010.D	1	1	1				
19	N-nitroso-di-n-propylamine	0.00	11/20/2023	CL s4112010.D	1	1	1				
23	nitrobenzene	0.00	11/20/2023	CL s4112010.D	1	1	1				
24	isophorone	0.00	11/20/2023	CL s4112010.D	1	1	1				
27	bis(2-chloroethoxy)methane	0.00	11/20/2023	CL s4112010.D	1	1	1				
30	1,2,4-trichlorobenzene	0.09	11/20/2023	CL s4112010.D	1	1	1				
31	naphthalene	0.00	11/20/2023	CL s4112010.D	1	1	1				
33	4-chloroanaline	0.00	11/20/2023	CL s4112010.D	1	1	1				
34	hexachloro-1,3-butadiene	0.00	11/20/2023	CL s4112010.D	1	1	1				
36	2-methylnaphthalene	0.00	11/20/2023	CL s4112010.D	1	1	1				
39	hexachlorocyclopentadiene	0.00	11/20/2023	CL s4112010.D	1	1	1				
43	2-chloronaphthalene	0.00	11/20/2023	CL s4112010.D	1	1	1				
44	2-nitroanaline	0.00	11/20/2023	CL s4112010.D	1	1	1				
45	acenaphthylene	0.00	11/20/2023	CL s4112010.D	1	1	1				
46	dimethyl phthalate	0.00	11/20/2023	CL s4112010.D	1	1	1				
47	2,6-dinitrotoluene	0.00	11/20/2023	CL s4112010.D	1	1	1				
48	2,4-dinitrotoluene	0.00	11/20/2023	CL s4112010.D	1	1	1				
49	acenaphthene	0.00	11/20/2023	CL s4112010.D	1	1	1				
50	3-nitroanaline	0.00	11/20/2023	CL s4112010.D	1	1	1				
52	dibenzofuran	0.00	11/20/2023	CL s4112010.D	1	1	1				
54	fluorene	0.00	11/20/2023	CL s4112010.D	1	1	1				
55	diethyl phthalate	**2.54**	11/20/2023	CL s4112010.D	1	1	1				
56	4-chlorophenyl phenyl ether	0.00	11/20/2023	CL s4112010.D	1	1	1				
57	4-nitroanaline	0.00	11/20/2023	CL s4112010.D	1	1	1				
61	azobenzene	0.00	11/20/2023	CL s4112010.D	1	1	1				
62	N-nitrosodiphenylamine	0.00	11/20/2023	CL s4112010.D	1	1	1				
63	4-bromophenyl phenyl ether	0.00	11/20/2023	CL s4112010.D	1	1	1				
64	hexachlorobenzene	0.00	11/20/2023	CL s4112010.D	1	1	1				
65	n-octadecane	0.00	11/20/2023	CL s4112010.D	1	1	1				
67	phenanthrene	0.00	11/20/2023	CL s4112010.D	1	1	1				
68	anthracene	0.00	11/20/2023	CL s4112010.D	1	1	1				
70	carbazole	0.00	11/20/2023	CL s4112010.D	1	1	1				
71	di-n-butyl phthalate	0.04	11/20/2023	CL s4112010.D	1	1	1				
73	fluoranthene	0.00	11/20/2023	CL s4112010.D	1	1	1				
76	benzidine	0.00	11/20/2023	CL s4112010.D	1	1	1				
77	pyrene	0.00	11/20/2023	CL s4112010.D	1	1	1				
78	butyl benzyl phthalate	0.10	11/20/2023	CL s4112010.D	1	1	1				
79	benzo(a)anthracene	0.00	11/20/2023	CL s4112010.D	1	1	1				
80	chrysene	0.00	11/20/2023	CL s4112010.D	1	1	1				
81	3,3'-dichlorobenzidine	0.00	11/20/2023	CL s4112010.D	1	1	1				
82	bis-2-ethylhexyl phthalate	0.16 (10)	11/20/2023	CL s4112010.D	1	1	1				
84	di-n-octyl phthalate	0.00	11/20/2023	CL s4112010.D	1	1	1				
85	Benzo(b)fluoranthene	0.00	11/20/2023	CL s4112010.D	1	1	1				
86	benzo(k)fluoranthene	0.00	11/20/2023	CL s4112010.D	1	1	1				
87	benzo(a)pyrene	0.00	11/20/2023	CL s4112010.D	1	1	1				
88	indeno(1,2,3-cd)pyrene	0.00	11/20/2023	CL s4112010.D	1	1	1				
89	dibenzo(a,h)anthracene	0.00	11/20/2023	CL s4112010.D	1	1	1				
90	benzo(g,h,i)perylene	0.00	11/20/2023	CL s4112010.D	1	1	1				

Quantitation Report (QT Reviewed)

CL
12/4/23 @ 16:04
CharlesL

Data Path : X:\S4\2023\Nov23\112023\
Data File : s4112009.D
Acq On : 20 Nov 2023 05:25 pm
Operator : cl
Sample : 67836-04 acid x1
Misc :
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Nov 21 08:55:12 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration

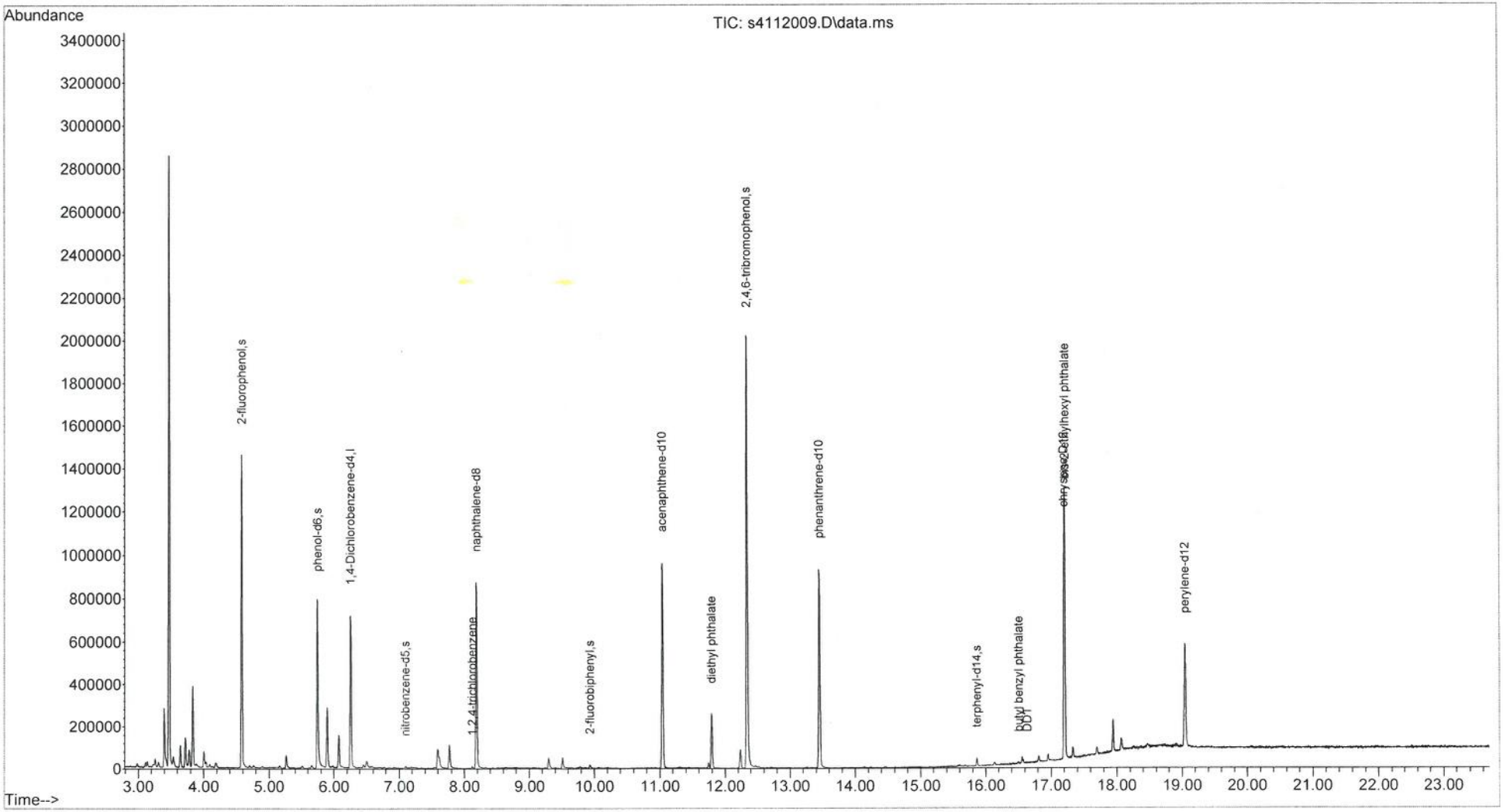
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.255	152	154152	10.00	ug/mL	0.00
21) naphthalene-d8	8.184	136	551694	10.00	ug/mL	0.00
37) acenaphthene-d10	11.038	164	284378	10.00	ug/mL	0.00
58) phenanthrene-d10	13.449	188	501280	10.00	ug/mL	-0.01
74) chrysene-D12	17.197	240	350043	10.00	ug/mL	0.00
83) perylene-d12	19.044	264	283324	10.00	ug/mL	0.00
System Monitoring Compounds						
4) 2-fluorophenol	4.581	112	526942	27.52	ug/mL	0.00
Spiked Amount 200.000			Recovery =	13.76%		
7) phenol-d6	5.746	99	364932	15.69	ug/mL	-0.01
Spiked Amount 200.000			Recovery =	7.84%		
22) nitrobenzene-d5	7.096	82	2557	0.12	ug/mL	0.00
Spiked Amount 100.000			Recovery =	0.12%		
38) 2-fluorobiphenyl	9.932	172	7719	0.13	ug/mL	0.00
Spiked Amount 100.000			Recovery =	0.13%		
59) 2,4,6-tribromophenol	12.338	330	366019	59.88	ug/mL	0.00
Spiked Amount 200.000			Recovery =	29.94%		
69) o-terphenyl	0.000	230	0	0.00	ug/mL	
Spiked Amount 100.000			Recovery =	0.00%		
72) 1-Chloro-octadecane	0.000	57	0	0.00	ug/mL	
Spiked Amount 100.000			Recovery =	0.00%		
75) terphenyl-d14	15.864	244	14614	0.38	ug/mL	0.00
Spiked Amount 100.000			Recovery =	0.38%		
Target Compounds						Qvalue
30) 1,2,4-trichlorobenzene	8.121	180	2602m BC	0.041	ug/mL	
55) diethyl phthalate	11.792	149	135558	3.153	ug/mL	99
67) phenanthrene	13.490	178	821	Below Cal	#	60
68) anthracene	13.490	178	821	Below Cal	#	61
71) di-n-butyl phthalate	14.460	149	997	Below Cal	#	78
78) butyl benzyl phthalate	16.504	149	1215	0.065	ug/mL#	26
82) bis-2-ethylhexyl phtha...	17.212	149	358079	10.269	ug/mL	100
93) DDT	16.636	TIC	853	0.051	ug/mL#	22

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Nov23\112023\
Data File : s4112009.D
Acq On : 20 Nov 2023 05:25 pm
Operator : cl
Sample : 67836-04 acid x1
Misc :
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Nov 21 08:55:12 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Nov23\112023\
Data File : s4112010.D
Acq On : 20 Nov 2023 05:54 pm
Operator : cl
Sample : 67836-04 bn x1
Misc :
ALS Vial : 10 Sample Multiplier: 1

CL
12/4/23 @ 16:05
CharlesL

Quant Time: Nov 21 08:55:16 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration

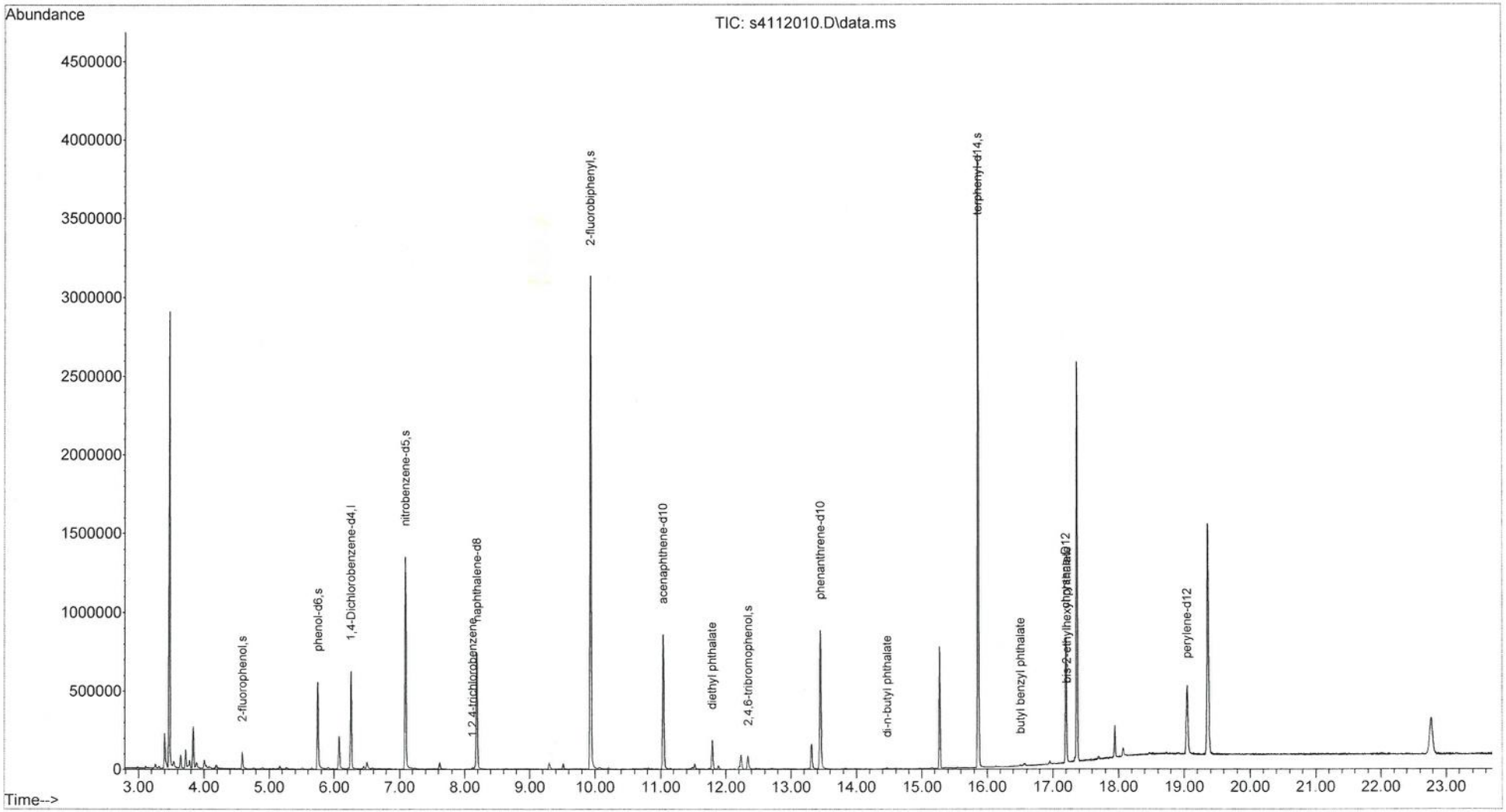
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.255	152	131141	10.00	ug/mL	0.00
21) naphthalene-d8	8.184	136	488319	10.00	ug/mL	0.00
37) acenaphthene-d10	11.038	164	259819	10.00	ug/mL	0.00
58) phenanthrene-d10	13.449	188	480940	10.00	ug/mL	-0.01
74) chrysene-D12	17.197	240	333820	10.00	ug/mL	0.00
83) perylene-d12	19.044	264	261865	10.00	ug/mL	0.00
System Monitoring Compounds						
4) 2-fluorophenol	4.586	112	41786	2.57	ug/mL	0.00
Spiked Amount 200.000			Recovery =	1.28%		
7) phenol-d6	5.746	99	257363	13.01	ug/mL	-0.01
Spiked Amount 200.000			Recovery =	6.50%		
22) nitrobenzene-d5	7.088	82	563430	32.87	ug/mL	-0.01
Spiked Amount 100.000			Recovery =	32.87%		
38) 2-fluorobiphenyl	9.932	172	1308473	32.01	ug/mL	0.00
Spiked Amount 100.000			Recovery =	32.01%		
59) 2,4,6-tribromophenol	12.343	330	16397	2.88	ug/mL	0.00
Spiked Amount 200.000			Recovery =	1.44%		
69) o-terphenyl	0.000	230	0	0.00	ug/mL	
Spiked Amount 100.000			Recovery =	0.00%		
72) 1-Chloro-octadecane	0.000	57	0	0.00	ug/mL	
Spiked Amount 100.000			Recovery =	0.00%		
75) terphenyl-d14	15.864	244	1646026	45.67	ug/mL	0.00
Spiked Amount 100.000			Recovery =	45.67%		
Target Compounds						Qvalue
30) 1,2,4-trichlorobenzene	8.118	180	3098m	BC 0.087	ug/mL	
42) 1,1'-Biphenyl	10.080	154	2112	Below Cal #		40
55) diethyl phthalate	11.792	149	100287	2.538	ug/mL	99
71) di-n-butyl phthalate	14.463	149	3291	0.036	ug/mL#	78
78) butyl benzyl phthalate	16.504	149	1908	0.097	ug/mL#	26
82) bis-2-ethylhexyl phtha...	17.210	149	4098	0.157	ug/mL#	54
93) DDT	16.629	TIC	2044	Below Cal #		22

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Nov23\112023\
Data File : s4112010.D
Acq On : 20 Nov 2023 05:54 pm
Operator : cl
Sample : 67836-04 bn x1
Misc :
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Nov 21 08:55:16 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration



This File: **L:\SVOA\Excel Reports\ABN\231205\67836-005**
Analysis Group: **ABN** **Dow Salvage Yard**
Field ID: **RMW5-123-133-110823** **CRE**
Sample: **67836-05 acid x1** **67836-05 bn x1**
Misc:
DataFile: 011.D\S4ABN110223A.XLS 4ABN110223A.XLS
Import File Name **S4 ABN 17124 DoD**
TestGroupID **E8270DoD_A**
Aqueous or Soil? (A or S) **A**
Prep Date **11/14/2023**
Lab#: **67836-005**
QC_Code:
Prep# **17124**

Charles Leahy L:\SVOA\ABN\ABN 8270DoD ImportFileBuilde
12/5/23 11:20 AM
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L:\SVOA\Excel Reports\ABN\231205\
L:\SVOA\PDFReports\

Reviewer Checks:
Quant Report: Reviewed, Analyst Initials & Date
Chromatogram Checked, Major peaks identified
Results consistent w/ other attached analyses
Reanalysis reason noted
Substitute dilution data checked
Correct dilution and reason clear or noted
Flags checked (Expiration, F+, Over Cal, Surr, Aspen, QC)
Other QC failures or issues noted in Aspen
Correct data file and/or date/time in Aspen

Notes:
Reviewer Initials & Date: 12/7/23

#	Surrogate Standards	Conc. (ug/mL)	AnalysisDate	AnalyzedBy	Dil'n	Weight	Volume	Surr	Recovery	Flag	QC Limits
4	2-fluorophenol	37.62	11/20/2023	CL s4112011.D	1	1	1	100	**38%**		21-100
7	phenol-d6	22.78	11/20/2023	CL s4112011.D	1	1	1	100	**23%**		10-102
59	2,4,6-tribromophenol	71.96	11/20/2023	CL s4112011.D	1	1	1	100	**72%**		10-123
22	nitrobenzene-d5	32.45	11/20/2023	CL s4112012.D	1	1	1	50	**65%**		35-114
38	2-fluorobiphenyl	32.00	11/20/2023	CL s4112012.D	1	1	1	50	**64%**		43-116
75	terphenyl-d14	43.63	11/20/2023	CL s4112012.D	1	1	1	50	**87%**		33-141
6	phenol	0.00	11/20/2023	CL s4112011.D	1	1	1				
8	2-chlorophenol	0.00	11/20/2023	CL s4112011.D	1	1	1				
15	2-methylphenol	0.00	11/20/2023	CL s4112011.D	1	1	1				
15	2-methylphenol	0.00	11/20/2023	CL s4112011.D	1	1	1				
20	4-methylphenol	0.00	11/20/2023	CL s4112011.D	1	1	1				
25	2-nitrophenol	0.00	11/20/2023	CL s4112011.D	1	1	1				
26	2,4-dimethylphenol	0.00	11/20/2023	CL s4112011.D	1	1	1				
28	2,4-dichlorophenol	0.00	11/20/2023	CL s4112011.D	1	1	1				
29	2,6-dichlorophenol	0.00	11/20/2023	CL s4112011.D	1	1	1				
32	benzoic acid	0.00	11/20/2023	CL s4112011.D	1	1	1				
35	4-chloro-3-methylphenol	0.00	11/20/2023	CL s4112011.D	1	1	1				
40	2,4,6-trichlorophenol	0.00	11/20/2023	CL s4112011.D	1	1	1				
41	2,4,5-trichlorophenol	0.00	11/20/2023	CL s4112011.D	1	1	1				
51	2,4-dinitrophenol	0.00	11/20/2023	CL s4112011.D	1	1	1				
53	4-nitrophenol	0.00	11/20/2023	CL s4112011.D	1	1	1				
60	4,6-dinitro-2-methylphenol	0.00	11/20/2023	CL s4112011.D	1	1	1				
66	pentachlorophenol	0.00	11/20/2023	CL s4112011.D	1	1	1				
2	N-nitroso-dimethylamine	0.00	11/20/2023	CL s4112012.D	1	1	1				
3	pyridine	0.00	11/20/2023	CL s4112012.D	1	1	1				
5	aniline	0.00	11/20/2023	CL s4112012.D	1	1	1				
9	n-decane	0.00	11/20/2023	CL s4112012.D	1	1	1				
10	bis-(2-choroethyl)ether	0.00	11/20/2023	CL s4112012.D	1	1	1				
11	1,3-dichlorobenzene	0.00	11/20/2023	CL s4112012.D	1	1	1				
12	1,4-diclorobenzene	0.00	11/20/2023	CL s4112012.D	1	1	1				
13	1,2-dichlorobenzene	0.00	11/20/2023	CL s4112012.D	1	1	1				
14	benzyl alcohol	0.00	11/20/2023	CL s4112012.D	1	1	1				
16	2,2'-oxybis(1-chloropropane)	0.00	11/20/2023	CL s4112012.D	1	1	1				
##	acetephenone	#N/A	11/20/2023	CL s4112012.D	1	1	1			#N/A	
18	hexachloroethane	0.00	11/20/2023	CL s4112012.D	1	1	1				
19	N-nitroso-di-n-propylamine	0.00	11/20/2023	CL s4112012.D	1	1	1				
23	nitrobenzene	0.00	11/20/2023	CL s4112012.D	1	1	1				
24	isophorone	0.00	11/20/2023	CL s4112012.D	1	1	1				
27	bis(2-chloroethoxy)methane	0.00	11/20/2023	CL s4112012.D	1	1	1				
30	1,2,4-trichlorobenzene	0.10	11/20/2023	CL s4112012.D	1	1	1				
31	naphthalene	0.00	11/20/2023	CL s4112012.D	1	1	1				
33	4-chloroanaline	0.00	11/20/2023	CL s4112012.D	1	1	1				
34	hexachloro-1,3-butadiene	0.00	11/20/2023	CL s4112012.D	1	1	1				
36	2-methylnaphthalene	0.00	11/20/2023	CL s4112012.D	1	1	1				
39	hexachlorocyclopentadiene	0.00	11/20/2023	CL s4112012.D	1	1	1				
43	2-chloronaphthalene	0.00	11/20/2023	CL s4112012.D	1	1	1				
44	2-nitroanaline	0.00	11/20/2023	CL s4112012.D	1	1	1				
45	acenaphthylene	0.00	11/20/2023	CL s4112012.D	1	1	1				
46	dimethyl phthalate	0.00	11/20/2023	CL s4112012.D	1	1	1				
47	2,6-dinitrotoluene	0.00	11/20/2023	CL s4112012.D	1	1	1				
48	2,4-dinitrotoluene	0.00	11/20/2023	CL s4112012.D	1	1	1				
49	acenaphthene	0.00	11/20/2023	CL s4112012.D	1	1	1				
50	3-nitroanaline	0.00	11/20/2023	CL s4112012.D	1	1	1				
52	dibenzofuran	0.00	11/20/2023	CL s4112012.D	1	1	1				
54	fluorene	0.00	11/20/2023	CL s4112012.D	1	1	1				
55	diethyl phthalate	**4.68**	11/20/2023	CL s4112012.D	1	1	1				
56	4-chlorophenyl phenyl ether	0.00	11/20/2023	CL s4112012.D	1	1	1				
57	4-nitroanaline	0.00	11/20/2023	CL s4112012.D	1	1	1				
61	azobenzene	0.00	11/20/2023	CL s4112012.D	1	1	1				
62	N-nitrosodiphenylamine	0.00	11/20/2023	CL s4112012.D	1	1	1				
63	4-bromophenyl phenyl ether	0.00	11/20/2023	CL s4112012.D	1	1	1				
64	hexachlorobenzene	0.00	11/20/2023	CL s4112012.D	1	1	1				
65	n-octadecane	0.00	11/20/2023	CL s4112012.D	1	1	1				
67	phenanthrene	0.00	11/20/2023	CL s4112012.D	1	1	1				
68	anthracene	0.00	11/20/2023	CL s4112012.D	1	1	1				
70	carbazole	0.00	11/20/2023	CL s4112012.D	1	1	1				
71	di-n-butyl phthalate	0.02	11/20/2023	CL s4112012.D	1	1	1				
73	fluoranthene	0.00	11/20/2023	CL s4112012.D	1	1	1				
76	benzidine	0.00	11/20/2023	CL s4112012.D	1	1	1				
77	pyrene	0.00	11/20/2023	CL s4112012.D	1	1	1				
78	butyl benzyl phthalate	0.10	11/20/2023	CL s4112012.D	1	1	1				
79	benzo(a)anthracene	0.00	11/20/2023	CL s4112012.D	1	1	1				
80	chrysene	0.00	11/20/2023	CL s4112012.D	1	1	1				
81	3,3'-dichlorobenzidine	0.00	11/20/2023	CL s4112012.D	1	1	1				
82	bis-2-ethylhexyl phthalate	0.16	11/20/2023	CL s4112012.D	1	1	1				
84	di-n-octyl phthalate	0.00	11/20/2023	CL s4112012.D	1	1	1				
85	Benzo(b)fluoranthene	0.00	11/20/2023	CL s4112012.D	1	1	1				
86	benzo(k)fluoranthene	0.00	11/20/2023	CL s4112012.D	1	1	1				
87	benzo(a)pyrene	0.00	11/20/2023	CL s4112012.D	1	1	1				
88	indeno(1,2,3-cd)pyrene	0.00	11/20/2023	CL s4112012.D	1	1	1				
89	dibenzo(a,h)anthracene	0.00	11/20/2023	CL s4112012.D	1	1	1				
90	benzo(g,h,i)perylene	0.00	11/20/2023	CL s4112012.D	1	1	1				

Quantitation Report (QT Reviewed)

CL
12/4/23 @ 16:05
CharlesL

Data Path : X:\S4\2023\Nov23\112023\
Data File : s4112011.D
Acq On : 20 Nov 2023 06:24 pm
Operator : cl
Sample : 67836-05 acid x1
Misc :
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Nov 21 08:55:20 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration

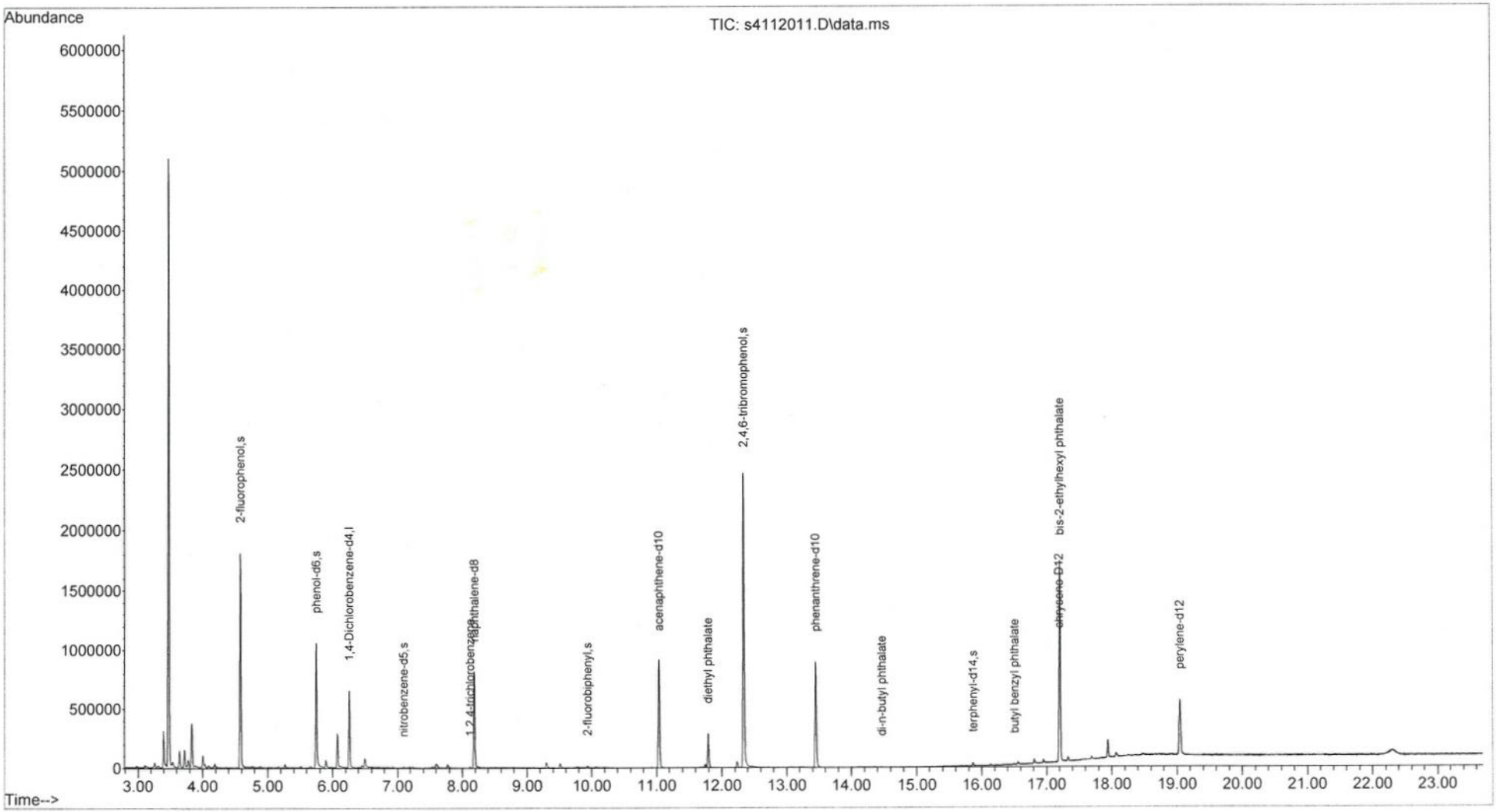
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.255	152	136137	10.00	ug/mL	0.00
21) naphthalene-d8	8.184	136	511451	10.00	ug/mL	0.00
37) acenaphthene-d10	11.036	164	267858	10.00	ug/mL	-0.01
58) phenanthrene-d10	13.449	188	493705	10.00	ug/mL	#-0.01
74) chrysene-D12	17.195	240	339991	10.00	ug/mL	0.00
83) perylene-d12	19.044	264	263501	10.00	ug/mL	0.00
System Monitoring Compounds						
4) 2-fluorophenol	4.581	112	636161	37.62	ug/mL	0.00
Spiked Amount 200.000			Recovery =	18.81%		
7) phenol-d6	5.743	99	467981	22.78	ug/mL	-0.01
Spiked Amount 200.000			Recovery =	11.39%		
22) nitrobenzene-d5	7.094	82	952	0.04	ug/mL	0.00
Spiked Amount 100.000			Recovery =	0.04%		
38) 2-fluorobiphenyl	9.937	172	7193	0.13	ug/mL	0.00
Spiked Amount 100.000			Recovery =	0.13%		
59) 2,4,6-tribromophenol	12.338	330	433339	71.96	ug/mL	0.00
Spiked Amount 200.000			Recovery =	35.98%		
69) o-terphenyl	0.000	230	0	0.00	ug/mL	
Spiked Amount 100.000			Recovery =	0.00%		
72) 1-Chloro-octadecane	0.000	57	0	0.00	ug/mL	
Spiked Amount 100.000			Recovery =	0.00%		
75) terphenyl-d14	15.867	244	11686	0.31	ug/mL	0.00
Spiked Amount 100.000			Recovery =	0.31%		
Target Compounds						Qvalue
9) n-decane	5.888	57	977	Below Cal	#	39
30) 1,2,4-trichlorobenzene	8.121	180	2429m	BC 0.042	ug/mL	
55) diethyl phthalate	11.792	149	145352	3.601	ug/mL	99
71) di-n-butyl phthalate	14.465	149	1914	0.013	ug/mL#	78
78) butyl benzyl phthalate	16.504	149	1013	0.058	ug/mL#	74
82) bis-2-ethylhexyl phtha...	17.210	149	502926	14.834	ug/mL	99
93) DDT	16.629	TIC	3499	Below Cal	#	22

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Nov23\112023\
Data File : s4112011.D
Acq On : 20 Nov 2023 06:24 pm
Operator : cl
Sample : 67836-05 acid x1
Misc :
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Nov 21 08:55:20 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Nov23\112023\
Data File : s4112012.D
Acq On : 20 Nov 2023 06:54 pm
Operator : cl
Sample : 67836-05 bn x1
Misc :
ALS Vial : 12 Sample Multiplier: 1

CL
12/4/23 @ 16:06
CharlesL

Quant Time: Nov 21 08:55:24 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration

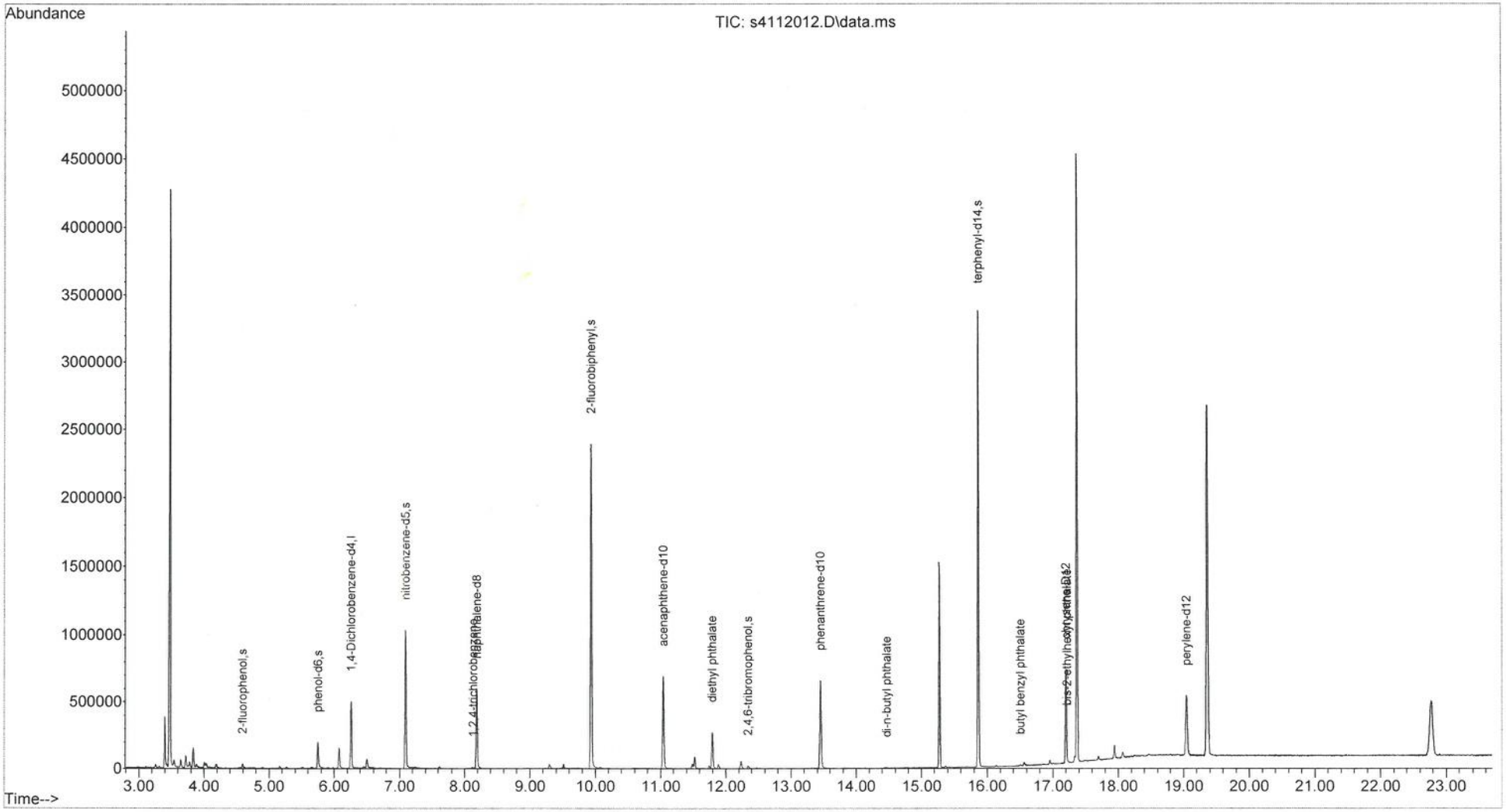
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.255	152	107419	10.00	ug/mL	0.00
21) naphthalene-d8	8.184	136	389305	10.00	ug/mL	0.00
37) acenaphthene-d10	11.040	164	206783	10.00	ug/mL	0.00
58) phenanthrene-d10	13.448	188	380675	10.00	ug/mL	#-0.01
74) chrysene-D12	17.199	240	305827	10.00	ug/mL	0.00
83) perylene-d12	19.044	264	262179	10.00	ug/mL	0.00
System Monitoring Compounds						
4) 2-fluorophenol	4.589	112	11120	0.83	ug/mL	0.00
Spiked Amount 200.000			Recovery = 0.41%			
7) phenol-d6	5.745	99	88769	5.48	ug/mL	-0.01
Spiked Amount 200.000			Recovery = 2.74%			
22) nitrobenzene-d5	7.091	82	443510	32.45	ug/mL	-0.01
Spiked Amount 100.000			Recovery = 32.45%			
38) 2-fluorobiphenyl	9.932	172	1040966	32.00	ug/mL	0.00
Spiked Amount 100.000			Recovery = 32.00%			
59) 2,4,6-tribromophenol	12.337	330	4212	0.99	ug/mL	0.00
Spiked Amount 200.000			Recovery = 0.49%			
69) o-terphenyl	0.000	230	0	0.00	ug/mL	
Spiked Amount 100.000			Recovery = 0.00%			
72) 1-Chloro-octadecane	0.000	57	0	0.00	ug/mL	
Spiked Amount 100.000			Recovery = 0.00%			
75) terphenyl-d14	15.864	244	1440630	43.63	ug/mL	0.00
Spiked Amount 100.000			Recovery = 43.63%			
Target Compounds						Qvalue
9) n-decane	6.067	57	896	Below Cal	#	26
30) 1,2,4-trichlorobenzene	8.128	180	2573m	BC 0.095	ug/mL	
42) 1,1'-Biphenyl	10.085	154	2722m	BC Below Cal		
55) diethyl phthalate	11.792	149	145158	4.682	ug/mL	100
71) di-n-butyl phthalate	14.463	149	1723	0.018	ug/mL#	78
78) butyl benzyl phthalate	16.499	149	1744	0.097	ug/mL#	72
82) bis-2-ethylhexyl phtha...	17.212	149	3978	0.165	ug/mL#	97
93) DDT	16.634	TIC	2063	Below Cal	#	22

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Nov23\112023\
Data File : s4112012.D
Acq On : 20 Nov 2023 06:54 pm
Operator : cl
Sample : 67836-05 bn x1
Misc :
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Nov 21 08:55:24 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration



This File:	L:\SVOA\Excel Reports\ABN\231205\67836-006		Charles Leahy L:\SVOA\ABN\ABN 8270DoD ImportFileBuilde
Analysis Group:	ABN	Dow Salvage Yard	12/5/23 11:21 AM
Field ID:	f-BRMW5-56-66-110823	CRE	L:\SVOA\ABN\
Sample:	67836-06 acid x1	67836-06 bn x1	L:\SVOA\Excel Reports\ABN\231205\
Misc:			L:\SVOA\PDFReports\
DataFile:	013.D\S4ABN110223A.XLS	4ABN110223A.XLS	
Import File Name	S4 ABN 17124 DoD		
TestGroupID	E8270DoD_A		
Aqueous or Soil? (A or S)	A		
Prep Date	11/14/2023		
Lab#:	67836-006		
QC_Code:			
Prep#	17124		

Reviewer Checks:

Quant Report: Reviewed, Analyst Initials & Date
Chromatogram Checked, Major peaks identified
Results consistent w/ other attached analyses
Reanalysis reason noted
Substitute dilution data checked
Correct dilution and reason clear or noted
Flags checked (Expiration, F+, Over Cal, Surr, Aspen, QC)
Other QC failures or issues noted in Aspen
Correct data file and/or date/time in Aspen

Notes:
Reviewer Initials & Date: SJ 12/7/23

#	Surrogate Standards	Conc. (ug/mL)	AnalysisDate	AnalyzedBy	Dil'n	Weight	Volume	Surr	Recovery	Flag	QC Limits
4	2-fluorophenol	39.35	11/20/2023	CL s4112013.D	1	1	1	100	**39%**		21-100
7	phenol-d6	21.91	11/20/2023	CL s4112013.D	1	1	1	100	**22%**		10-102
59	2,4,6-tribromophenol	73.82	11/20/2023	CL s4112013.D	1	1	1	100	**74%**		10-123
22	nitrobenzene-d5	36.98	11/20/2023	CL s4112014.D	1	1	1	50	**74%**		35-114
38	2-fluorobiphenyl	35.60	11/20/2023	CL s4112014.D	1	1	1	50	**71%**		43-116
75	terphenyl-d14	47.22	11/20/2023	CL s4112014.D	1	1	1	50	**94%**		33-141
6	phenol	0.00	11/20/2023	CL s4112013.D	1	1	1				
8	2-chlorophenol	0.00	11/20/2023	CL s4112013.D	1	1	1				
15	2-methylphenol	0.00	11/20/2023	CL s4112013.D	1	1	1				
15	2-methylphenol	0.00	11/20/2023	CL s4112013.D	1	1	1				
20	4-methylphenol	0.00	11/20/2023	CL s4112013.D	1	1	1				
25	2-nitrophenol	0.00	11/20/2023	CL s4112013.D	1	1	1				
26	2,4-dimethylphenol	0.00	11/20/2023	CL s4112013.D	1	1	1				
28	2,4-dichlorophenol	0.00	11/20/2023	CL s4112013.D	1	1	1				
29	2,6-dichlorophenol	0.00	11/20/2023	CL s4112013.D	1	1	1				
32	benzoic acid	0.00	11/20/2023	CL s4112013.D	1	1	1				
35	4-chloro-3-methylphenol	0.00	11/20/2023	CL s4112013.D	1	1	1				
40	2,4,6-trichlorophenol	0.00	11/20/2023	CL s4112013.D	1	1	1				
41	2,4,5-trichlorophenol	0.00	11/20/2023	CL s4112013.D	1	1	1				
51	2,4-dinitrophenol	0.00	11/20/2023	CL s4112013.D	1	1	1				
53	4-nitrophenol	0.00	11/20/2023	CL s4112013.D	1	1	1				
60	4,6-dinitro-2-methylphenol	0.00	11/20/2023	CL s4112013.D	1	1	1				
66	pentachlorophenol	0.00	11/20/2023	CL s4112013.D	1	1	1				
2	N-nitroso-dimethylamine	0.00	11/20/2023	CL s4112014.D	1	1	1				
3	pyridine	0.00	11/20/2023	CL s4112014.D	1	1	1				
5	aniline	0.00	11/20/2023	CL s4112014.D	1	1	1				
9	n-decane	0.00	11/20/2023	CL s4112014.D	1	1	1				
10	bis-(2-choroethyl)ether	0.00	11/20/2023	CL s4112014.D	1	1	1				
11	1,3-dichlorobenzene	0.00	11/20/2023	CL s4112014.D	1	1	1				
12	1,4-diclorobenzene	0.00	11/20/2023	CL s4112014.D	1	1	1				
13	1,2-dichlorobenzene	0.00	11/20/2023	CL s4112014.D	1	1	1				
14	benzyl alcohol	0.00	11/20/2023	CL s4112014.D	1	1	1				
16	2,2'-oxybis(1-chloropropane)	0.00	11/20/2023	CL s4112014.D	1	1	1				
##	acetephenone	#N/A	11/20/2023	CL s4112014.D	1	1	1			#N/A	
18	hexachloroethane	0.00	11/20/2023	CL s4112014.D	1	1	1				
19	N-nitroso-di-n-propylamine	0.00	11/20/2023	CL s4112014.D	1	1	1				
23	nitrobenzene	0.00	11/20/2023	CL s4112014.D	1	1	1				
24	isophorone	0.00	11/20/2023	CL s4112014.D	1	1	1				
27	bis(2-chloroethoxy)methane	0.00	11/20/2023	CL s4112014.D	1	1	1				
30	1,2,4-trichlorobenzene	0.13	11/20/2023	CL s4112014.D	1	1	1				
31	naphthalene	0.00	11/20/2023	CL s4112014.D	1	1	1				
33	4-chloroanaline	0.00	11/20/2023	CL s4112014.D	1	1	1				
34	hexachloro-1,3-butadiene	0.00	11/20/2023	CL s4112014.D	1	1	1				
36	2-methylnaphthalene	0.00	11/20/2023	CL s4112014.D	1	1	1				
39	hexachlorocyclopentadiene	0.00	11/20/2023	CL s4112014.D	1	1	1				
43	2-chloronaphthalene	0.00	11/20/2023	CL s4112014.D	1	1	1				
44	2-nitroanaline	0.00	11/20/2023	CL s4112014.D	1	1	1				
45	acenaphthylene	0.00	11/20/2023	CL s4112014.D	1	1	1				
46	dimethyl phthalate	0.00	11/20/2023	CL s4112014.D	1	1	1				
47	2,6-dinitrotoluene	0.00	11/20/2023	CL s4112014.D	1	1	1				
48	2,4-dinitrotoluene	0.00	11/20/2023	CL s4112014.D	1	1	1				
49	acenaphthene	0.00	11/20/2023	CL s4112014.D	1	1	1				
50	3-nitroanaline	0.00	11/20/2023	CL s4112014.D	1	1	1				
52	dibenzofuran	0.00	11/20/2023	CL s4112014.D	1	1	1				
54	fluorene	0.00	11/20/2023	CL s4112014.D	1	1	1				
55	diethyl phthalate	**5.74**	11/20/2023	CL s4112014.D	1	1	1				
56	4-chlorophenyl phenyl ether	0.00	11/20/2023	CL s4112014.D	1	1	1				
57	4-nitroanaline	0.00	11/20/2023	CL s4112014.D	1	1	1				
61	azobenzene	0.00	11/20/2023	CL s4112014.D	1	1	1				
62	N-nitrosodiphenylamine	0.00	11/20/2023	CL s4112014.D	1	1	1				
63	4-bromophenyl phenyl ether	0.00	11/20/2023	CL s4112014.D	1	1	1				
64	hexachlorobenzene	0.00	11/20/2023	CL s4112014.D	1	1	1				
65	n-octadecane	0.00	11/20/2023	CL s4112014.D	1	1	1				
67	phenanthrene	0.00	11/20/2023	CL s4112014.D	1	1	1				
68	anthracene	0.00	11/20/2023	CL s4112014.D	1	1	1				
70	carbazole	0.00	11/20/2023	CL s4112014.D	1	1	1				
71	di-n-butyl phthalate	0.04	11/20/2023	CL s4112014.D	1	1	1				
73	fluoranthene	0.00	11/20/2023	CL s4112014.D	1	1	1				
76	benzidine	0.00	11/20/2023	CL s4112014.D	1	1	1				
77	pyrene	0.00	11/20/2023	CL s4112014.D	1	1	1				
78	butyl benzyl phthalate	0.00	11/20/2023	CL s4112014.D	1	1	1				
79	benzo(a)anthracene	0.00	11/20/2023	CL s4112014.D	1	1	1				
80	chrysene	0.00	11/20/2023	CL s4112014.D	1	1	1				
81	3,3'-dichlorobenzidine	0.00	11/20/2023	CL s4112014.D	1	1	1				
82	bis-2-ethylhexyl phthalate	0.11	11/20/2023	CL s4112014.D	1	1	1				
84	di-n-octyl phthalate	0.00	11/20/2023	CL s4112014.D	1	1	1				
85	Benzo(b)fluoranthene	0.00	11/20/2023	CL s4112014.D	1	1	1				
86	benzo(k)fluoranthene	0.00	11/20/2023	CL s4112014.D	1	1	1				
87	benzo(a)pyrene	0.00	11/20/2023	CL s4112014.D	1	1	1				
88	indeno(1,2,3-cd)pyrene	0.00	11/20/2023	CL s4112014.D	1	1	1				
89	dibenzo(a,h)anthracene	0.00	11/20/2023	CL s4112014.D	1	1	1				
90	benzo(g,h,i)perylene	0.00	11/20/2023	CL s4112014.D	1	1	1				

Quantitation Report (QT Reviewed)

CL
12/4/23 @ 16:06
CharlesL

Data Path : X:\S4\2023\Nov23\112023\
Data File : s4112013.D
Acq On : 20 Nov 2023 07:23 pm
Operator : cl
Sample : 67836-06 acid x1
Misc :
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Nov 21 08:55:29 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration

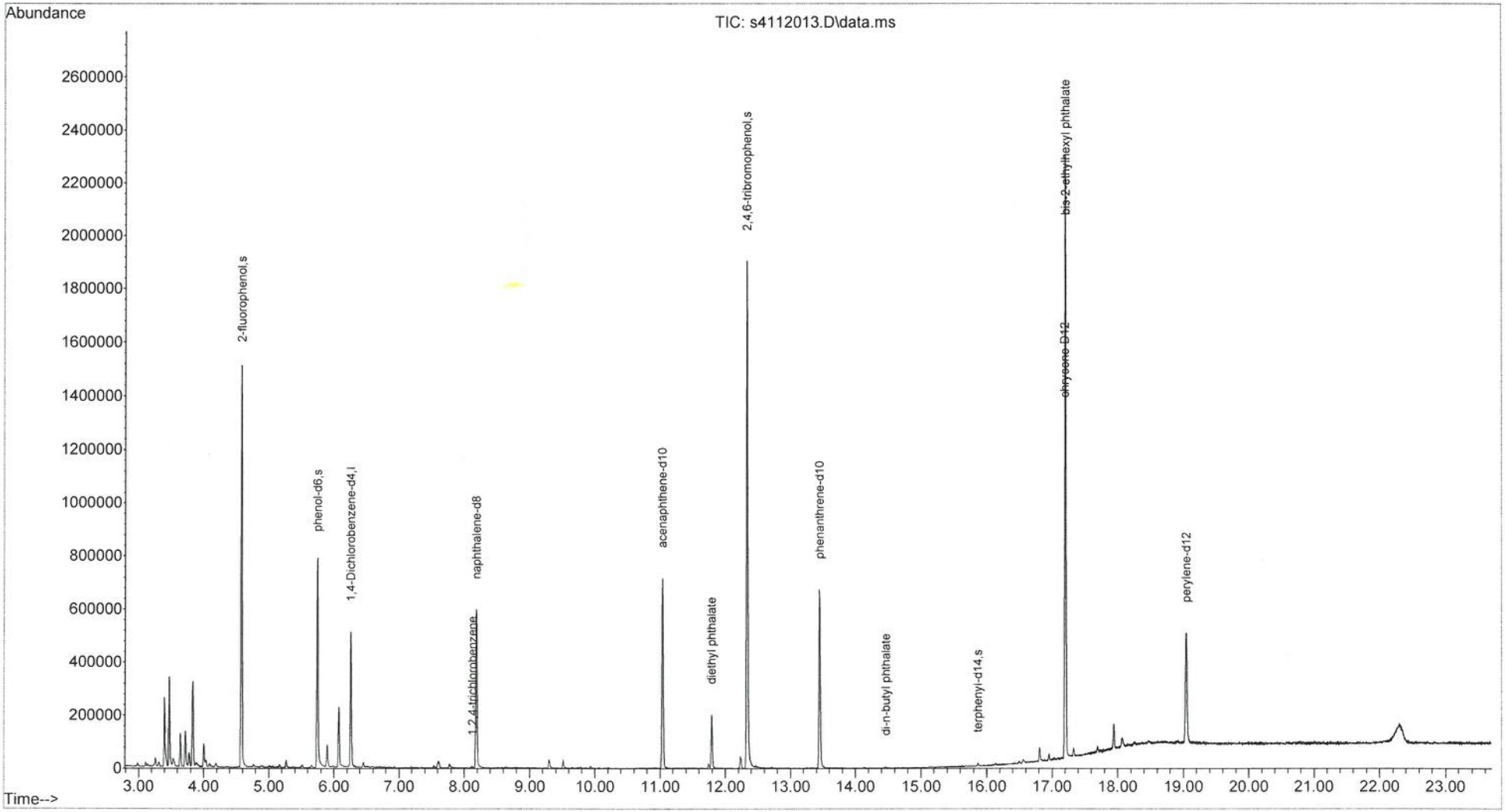
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.255	152	111112	10.00	ug/mL	0.00
21) naphthalene-d8	8.184	136	396172	10.00	ug/mL	0.00
37) acenaphthene-d10	11.038	164	210525	10.00	ug/mL	0.00
58) phenanthrene-d10	13.449	188	377325	10.00	ug/mL	-0.01
74) chrysene-D12	17.200	240	295138	10.00	ug/mL	0.00
83) perylene-d12	19.047	264	243241	10.00	ug/mL	0.00
System Monitoring Compounds						
4) 2-fluorophenol	4.581	112	543115	39.35	ug/mL	0.00
Spiked Amount 200.000			Recovery = 19.68%			
7) phenol-d6	5.743	99	367242	21.91	ug/mL	-0.01
Spiked Amount 200.000			Recovery = 10.96%			
22) nitrobenzene-d5	0.000	82	0	0.00	ug/mL	
Spiked Amount 100.000			Recovery = 0.00%			
38) 2-fluorobiphenyl	9.935	172	1547	0.01	ug/mL	0.00
Spiked Amount 100.000			Recovery = 0.01%			
59) 2,4,6-tribromophenol	12.335	330	339735	73.82	ug/mL	0.00
Spiked Amount 200.000			Recovery = 36.91%			
69) o-terphenyl	0.000	230	0	0.00	ug/mL	
Spiked Amount 100.000			Recovery = 0.00%			
72) 1-Chloro-octadecane	0.000	57	0	0.00	ug/mL	
Spiked Amount 100.000			Recovery = 0.00%			
75) terphenyl-d14	15.867	244	5222	0.16	ug/mL	0.00
Spiked Amount 100.000			Recovery = 0.16%			
Target Compounds						Qvalue
30) 1,2,4-trichlorobenzene	8.123	180	2256m BC	0.069	ug/mL	
55) diethyl phthalate	11.792	149	105653	3.324	ug/mL	99
71) di-n-butyl phthalate	14.463	149	1791	0.020	ug/mL#	78
82) bis-2-ethylhexyl phtha...	17.212	149	721791	24.503	ug/mL	100
93) DDT	16.634	TIC	953	Below Cal	#	22

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Nov23\112023\
Data File : s4112013.D
Acq On : 20 Nov 2023 07:23 pm
Operator : cl
Sample : 67836-06 acid x1
Misc :
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Nov 21 08:55:29 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Nov23\112023\
Data File : s4112014.D
Acq On : 20 Nov 2023 07:54 pm
Operator : cl
Sample : 67836-06 bn x1
Misc :
ALS Vial : 14 Sample Multiplier: 1

CL
12/4/23 @ 16:06
CharlesL

Quant Time: Nov 21 08:55:33 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1,4-Dichlorobenzene-d4	6.255	152	112213	10.00 ug/mL	0.00
21) naphthalene-d8	8.186	136	409589	10.00 ug/mL	0.00
37) acenaphthene-d10	11.040	164	221182	10.00 ug/mL	0.00
58) phenanthrene-d10	13.448	188	417321	10.00 ug/mL	-0.01
74) chrysene-D12	17.199	240	339755	10.00 ug/mL	0.00
83) perylene-d12	19.046	264	294037	10.00 ug/mL	0.00
System Monitoring Compounds					
4) 2-fluorophenol	4.586	112	23554	1.69 ug/mL	0.00
Spiked Amount 200.000			Recovery =	0.84%	
7) phenol-d6	5.745	99	186356	11.01 ug/mL	-0.01
Spiked Amount 200.000			Recovery =	5.50%	
22) nitrobenzene-d5	7.091	82	531621	36.98 ug/mL	-0.01
Spiked Amount 100.000			Recovery =	36.98%	
38) 2-fluorobiphenyl	9.932	172	1238527	35.60 ug/mL	-0.01
Spiked Amount 100.000			Recovery =	35.60%	
59) 2,4,6-tribromophenol	12.342	330	8390	1.73 ug/mL	0.00
Spiked Amount 200.000			Recovery =	0.86%	
69) o-terphenyl	0.000	230	0	0.00 ug/mL	
Spiked Amount 100.000			Recovery =	0.00%	
72) 1-Chloro-octadecane	0.000	57	0	0.00 ug/mL	
Spiked Amount 100.000			Recovery =	0.00%	
75) terphenyl-d14	15.864	244	1732033	47.22 ug/mL	0.00
Spiked Amount 100.000			Recovery =	47.22%	
Target Compounds					Qvalue
9) n-decane	6.071	57	886	Below Cal #	1
30) 1,2,4-trichlorobenzene	8.120	180	3240m BC	0.132 ug/mL	
42) 1,1'-Biphenyl	10.080	154	2929	Below Cal #	40
55) diethyl phthalate	11.792	149	189925	5.745 ug/mL	98
71) di-n-butyl phthalate	14.460	149	3091	0.041 ug/mL#	78
82) bis-2-ethylhexyl phtha...	17.212	149	2736	0.115 ug/mL#	54
93) DDT	16.626	TIC	1253	Below Cal #	22

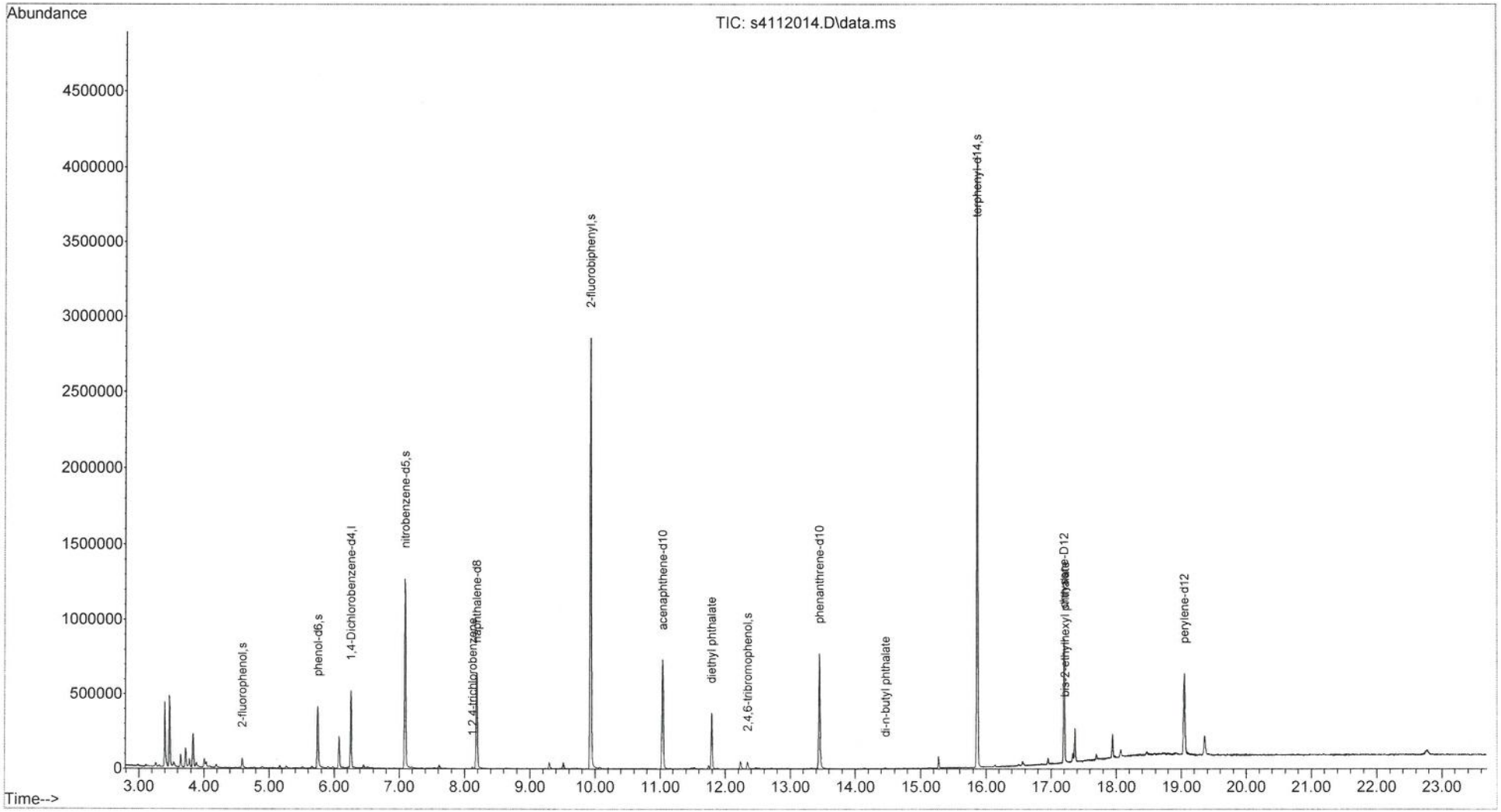
+ 3.32 = 9.06

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Nov23\112023\
Data File : s4112014.D
Acq On : 20 Nov 2023 07:54 pm
Operator : cl
Sample : 67836-06 bn x1
Misc :
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Nov 21 08:55:33 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration



This File: **L:\SVOA\Excel Reports\ABN\231205\67836-007**
Analysis Group: **ABN** **Dow Salvage Yard**
Field ID: **SY-OBMW8-110823 CRE**
Sample: **67836-07 acid x1** **67836-07 bn x1**
Misc:
DataFile: 524.D\S4ABN110223A.XLS 4ABN110223A.XLS
Import File Name **S4 ABN 17124 DoD**
TestGroupID **E8270DoD_A**
Aqueous or Soil? (A or S) **A**
Prep Date **11/14/2023**
Lab#: **67836-007**
QC_Code:
Prep# **17124**

Charles Leahy L:\SVOA\ABN\ABN 8270DoD ImportFileBuilde
12/5/23 11:23 AM
L:\SVOA\ABN\
L:\SVOA\Excel Reports\ABN\231205\
L:\SVOA\PDFReports\

Reviewer Checks:
Quant Report: Reviewed, Analyst Initials & Date
Chromatogram Checked, Major peaks identified
Results consistent w/ other attached analyses
Reanalysis reason noted
Substitute dilution data checked
Correct dilution and reason clear or noted
Flags checked (Expiration, F+, Over Cal, Surr, Aspen, QC)
Other QC failures or issues noted in Aspen
Correct data file and/or date/time in Aspen

Notes:
Reviewer Initials & Date: 12/7/23

#	Surrogate Standards	Conc. (ug/mL)	AnalysisDate	AnalyzedBy	Dil'n	Weight	Volume	Surr	Recovery	Flag	QC Limits
4	2-fluorophenol	31.15	11/15/2023	CL s4111524.D	1	1	1	100	**31%**		21-100
7	phenol-d6	20.77	11/15/2023	CL s4111524.D	1	1	1	100	**21%**		10-102
59	2,4,6-tribromophenol	64.61	11/15/2023	CL s4111524.D	1	1	1	100	**65%**		10-123
22	nitrobenzene-d5	37.36	11/20/2023	CL s4112015.D	1	1	1	50	**75%**		35-114
38	2-fluorobiphenyl	36.23	11/20/2023	CL s4112015.D	1	1	1	50	**72%**		43-116
75	terphenyl-d14	46.00	11/20/2023	CL s4112015.D	1	1	1	50	**92%**		33-141
6	phenol	0.00	11/15/2023	CL s4111524.D	1	1	1				
8	2-chlorophenol	0.00	11/15/2023	CL s4111524.D	1	1	1				
15	2-methylphenol	0.00	11/15/2023	CL s4111524.D	1	1	1				
15	2-methylphenol	0.00	11/15/2023	CL s4111524.D	1	1	1				
20	4-methylphenol	0.00	11/15/2023	CL s4111524.D	1	1	1				
25	2-nitrophenol	0.00	11/15/2023	CL s4111524.D	1	1	1				
26	2,4-dimethylphenol	0.00	11/15/2023	CL s4111524.D	1	1	1				
28	2,4-dichlorophenol	0.00	11/15/2023	CL s4111524.D	1	1	1				
29	2,6-dichlorophenol	0.00	11/15/2023	CL s4111524.D	1	1	1				
32	benzoic acid	0.00	11/15/2023	CL s4111524.D	1	1	1				
35	4-chloro-3-methylphenol	0.00	11/15/2023	CL s4111524.D	1	1	1				
40	2,4,6-trichlorophenol	0.00	11/15/2023	CL s4111524.D	1	1	1				
41	2,4,5-trichlorophenol	0.00	11/15/2023	CL s4111524.D	1	1	1				
51	2,4-dinitrophenol	0.00	11/15/2023	CL s4111524.D	1	1	1				
53	4-nitrophenol	0.00	11/15/2023	CL s4111524.D	1	1	1				
60	4,6-dinitro-2-methylphenol	0.00	11/15/2023	CL s4111524.D	1	1	1				
66	pentachlorophenol	0.00	11/15/2023	CL s4111524.D	1	1	1				
2	N-nitroso-dimethylamine	0.00	11/20/2023	CL s4112015.D	1	1	1				
3	pyridine	0.00	11/20/2023	CL s4112015.D	1	1	1				
5	aniline	0.00	11/20/2023	CL s4112015.D	1	1	1				
9	n-decane	0.00	11/20/2023	CL s4112015.D	1	1	1				
10	bis-(2-choroethyl)ether	0.00	11/20/2023	CL s4112015.D	1	1	1				
11	1,3-dichlorobenzene	0.00	11/20/2023	CL s4112015.D	1	1	1				
12	1,4-diclorobenzene	0.00	11/20/2023	CL s4112015.D	1	1	1				
13	1,2-dichlorobenzene	0.00	11/20/2023	CL s4112015.D	1	1	1				
14	benzyl alcohol	0.00	11/20/2023	CL s4112015.D	1	1	1				
16	2,2'-oxybis(1-chloropropane)	0.00	11/20/2023	CL s4112015.D	1	1	1				
##	acetephenone	#N/A	11/20/2023	CL s4112015.D	1	1	1			#N/A	
18	hexachloroethane	0.00	11/20/2023	CL s4112015.D	1	1	1				
19	N-nitroso-di-n-propylamine	0.00	11/20/2023	CL s4112015.D	1	1	1				
23	nitrobenzene	0.07	11/20/2023	CL s4112015.D	1	1	1				
24	isophorone	0.00	11/20/2023	CL s4112015.D	1	1	1				
27	bis(2-chloroethoxy)methane	0.00	11/20/2023	CL s4112015.D	1	1	1				
30	1,2,4-trichlorobenzene	0.33	11/20/2023	CL s4112015.D	1	1	1				
31	naphthalene	0.00	11/20/2023	CL s4112015.D	1	1	1				
33	4-chloroanaline	0.00	11/20/2023	CL s4112015.D	1	1	1				
34	hexachloro-1,3-butadiene	0.00	11/20/2023	CL s4112015.D	1	1	1				
36	2-methylnaphthalene	0.00	11/20/2023	CL s4112015.D	1	1	1				
39	hexachlorocyclopentadiene	0.00	11/20/2023	CL s4112015.D	1	1	1				
43	2-chloronaphthalene	0.00	11/20/2023	CL s4112015.D	1	1	1				
44	2-nitroanaline	0.00	11/20/2023	CL s4112015.D	1	1	1				
45	acenaphthylene	0.00	11/20/2023	CL s4112015.D	1	1	1				
46	dimethyl phthalate	0.00	11/20/2023	CL s4112015.D	1	1	1				
47	2,6-dinitrotoluene	0.00	11/20/2023	CL s4112015.D	1	1	1				
48	2,4-dinitrotoluene	0.00	11/20/2023	CL s4112015.D	1	1	1				
49	acenaphthene	0.00	11/20/2023	CL s4112015.D	1	1	1				
50	3-nitroanaline	0.00	11/20/2023	CL s4112015.D	1	1	1				
52	dibenzofuran	0.00	11/20/2023	CL s4112015.D	1	1	1				
54	fluorene	0.00	11/20/2023	CL s4112015.D	1	1	1				
55	diethyl phthalate	0.68	11/20/2023	CL s4112015.D	1	1	1				
56	4-chlorophenyl phenyl ether	0.00	11/20/2023	CL s4112015.D	1	1	1				
57	4-nitroanaline	0.00	11/20/2023	CL s4112015.D	1	1	1				
61	azobenzene	0.00	11/20/2023	CL s4112015.D	1	1	1				
62	N-nitrosodiphenylamine	0.00	11/20/2023	CL s4112015.D	1	1	1				
63	4-bromophenyl phenyl ether	0.00	11/20/2023	CL s4112015.D	1	1	1				
64	hexachlorobenzene	0.00	11/20/2023	CL s4112015.D	1	1	1				
65	n-octadecane	0.00	11/20/2023	CL s4112015.D	1	1	1				
67	phenanthrene	0.00	11/20/2023	CL s4112015.D	1	1	1				
68	anthracene	0.00	11/20/2023	CL s4112015.D	1	1	1				
70	carbazole	0.00	11/20/2023	CL s4112015.D	1	1	1				
71	di-n-butyl phthalate	0.00	11/20/2023	CL s4112015.D	1	1	1				
73	fluoranthene	0.00	11/20/2023	CL s4112015.D	1	1	1				
76	benzidine	0.00	11/20/2023	CL s4112015.D	1	1	1				
77	pyrene	0.00	11/20/2023	CL s4112015.D	1	1	1				
78	butyl benzyl phthalate	0.00	11/20/2023	CL s4112015.D	1	1	1				
79	benzo(a)anthracene	0.00	11/20/2023	CL s4112015.D	1	1	1				
80	chrysene	0.00	11/20/2023	CL s4112015.D	1	1	1				
81	3,3'-dichlorobenzidine	0.00	11/20/2023	CL s4112015.D	1	1	1				
82	bis-2-ethylhexyl phthalate	0.13	11/20/2023	CL s4112015.D	1	1	1				
84	di-n-octyl phthalate	0.00	11/20/2023	CL s4112015.D	1	1	1				
85	Benzo(b)fluoranthene	0.00	11/20/2023	CL s4112015.D	1	1	1				
86	benzo(k)fluoranthene	0.00	11/20/2023	CL s4112015.D	1	1	1				
87	benzo(a)pyrene	0.00	11/20/2023	CL s4112015.D	1	1	1				
88	indeno(1,2,3-cd)pyrene	0.00	11/20/2023	CL s4112015.D	1	1	1				
89	dibenzo(a,h)anthracene	0.00	11/20/2023	CL s4112015.D	1	1	1				
90	benzo(g,h,i)perylene	0.00	11/20/2023	CL s4112015.D	1	1	1				

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Nov23\111523\
Data File : s4111524.D
Acq On : 15 Nov 2023 09:43 pm
Operator : cl
Sample : 67836-07 acid x1
Misc :
ALS Vial : 22 Sample Multiplier: 1

CL
11/22/23 @ 11:44
CharlesL

Quant Time: Nov 17 16:14:22 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration

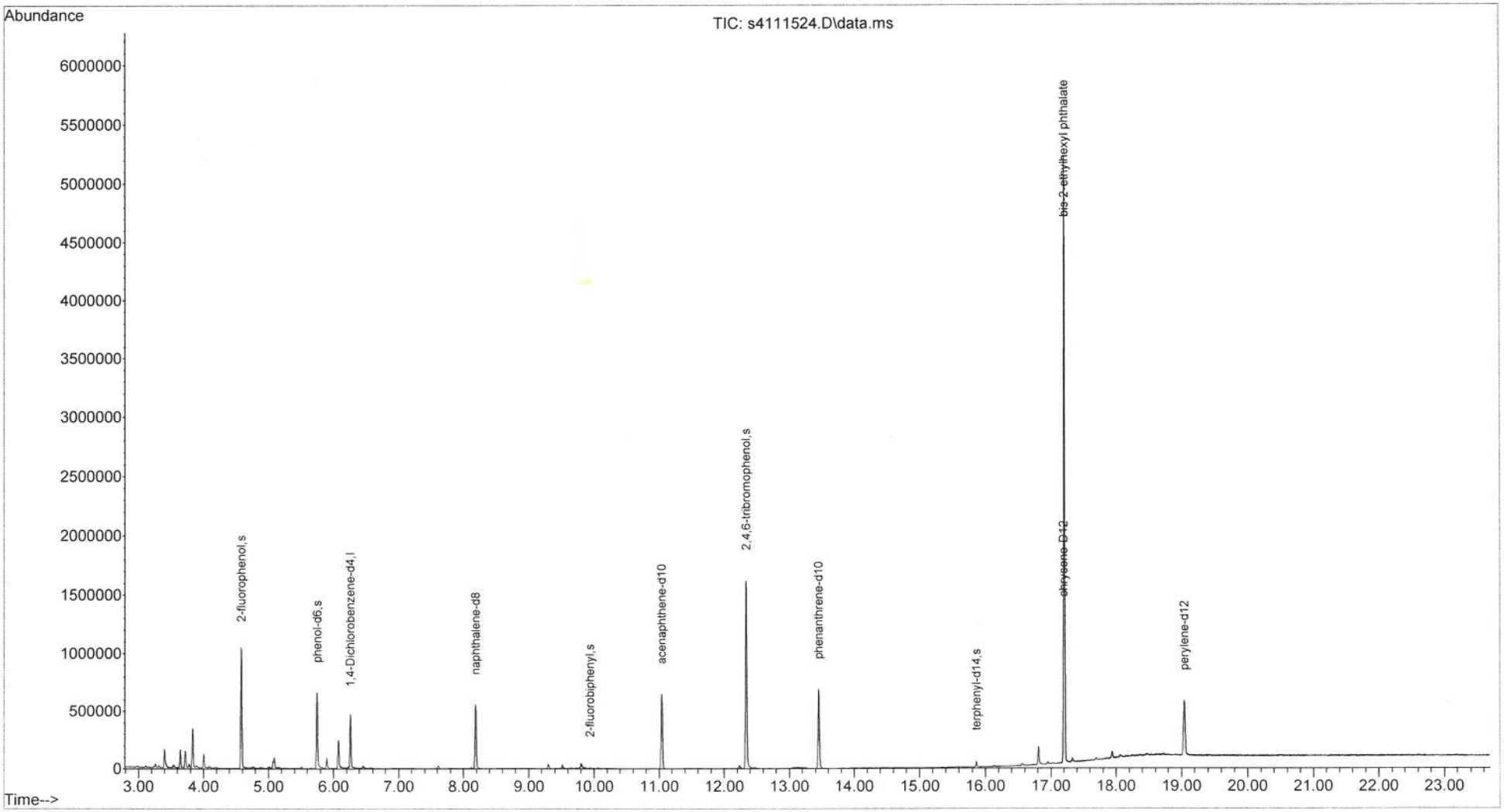
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.255	152	95885	10.00	ug/mL	0.00
21) naphthalene-d8	8.184	136	349217	10.00	ug/mL	-0.01
37) acenaphthene-d10	11.040	164	194249	10.00	ug/mL	0.00
58) phenanthrene-d10	13.448	188	366198	10.00	ug/mL	-0.01
74) chrysene-D12	17.194	240	312642	10.00	ug/mL	0.00
83) perylene-d12	19.041	264	277315	10.00	ug/mL	0.00
System Monitoring Compounds						
4) 2-fluorophenol	4.583	112	371026	31.15	ug/mL	0.00
Spiked Amount 200.000			Recovery =	15.57%		
7) phenol-d6	5.745	99	300421	20.77	ug/mL	-0.01
Spiked Amount 200.000			Recovery =	10.39%		
22) nitrobenzene-d5	0.000	82	0	0.00	ug/mL	
Spiked Amount 100.000			Recovery =	0.00%		
38) 2-fluorobiphenyl	9.937	172	2177	0.03	ug/mL	0.00
Spiked Amount 100.000			Recovery =	0.03%		
59) 2,4,6-tribromophenol	12.337	330	288551	64.61	ug/mL	0.00
Spiked Amount 200.000			Recovery =	32.31%		
69) o-terphenyl	0.000	230	0	0.00	ug/mL	
Spiked Amount 100.000			Recovery =	0.00%		
72) 1-Chloro-octadecane	0.000	57	0	0.00	ug/mL	
Spiked Amount 100.000			Recovery =	0.00%		
75) terphenyl-d14	15.864	244	20152	0.59	ug/mL	0.00
Spiked Amount 100.000			Recovery =	0.59%		
Target Compounds						Qvalue
82) bis-2-ethylhexyl phtha...	17.209	149	1774085	56.807	ug/mL	99
93) DDT	16.611	TIC	1039	Below Cal	#	22

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Nov23\111523\
Data File : s4111524.D
Acq On : 15 Nov 2023 09:43 pm
Operator : cl
Sample : 67836-07 acid x1
Misc :
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Nov 17 16:14:22 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Nov23\112023\
Data File : s4112015.D
Acq On : 20 Nov 2023 08:23 pm
Operator : cl
Sample : 67836-07 bn x1
Misc :
ALS Vial : 15 Sample Multiplier: 1

CL
12/4/23 @ 16:07
CharlesL

Quant Time: Nov 21 08:55:37 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration

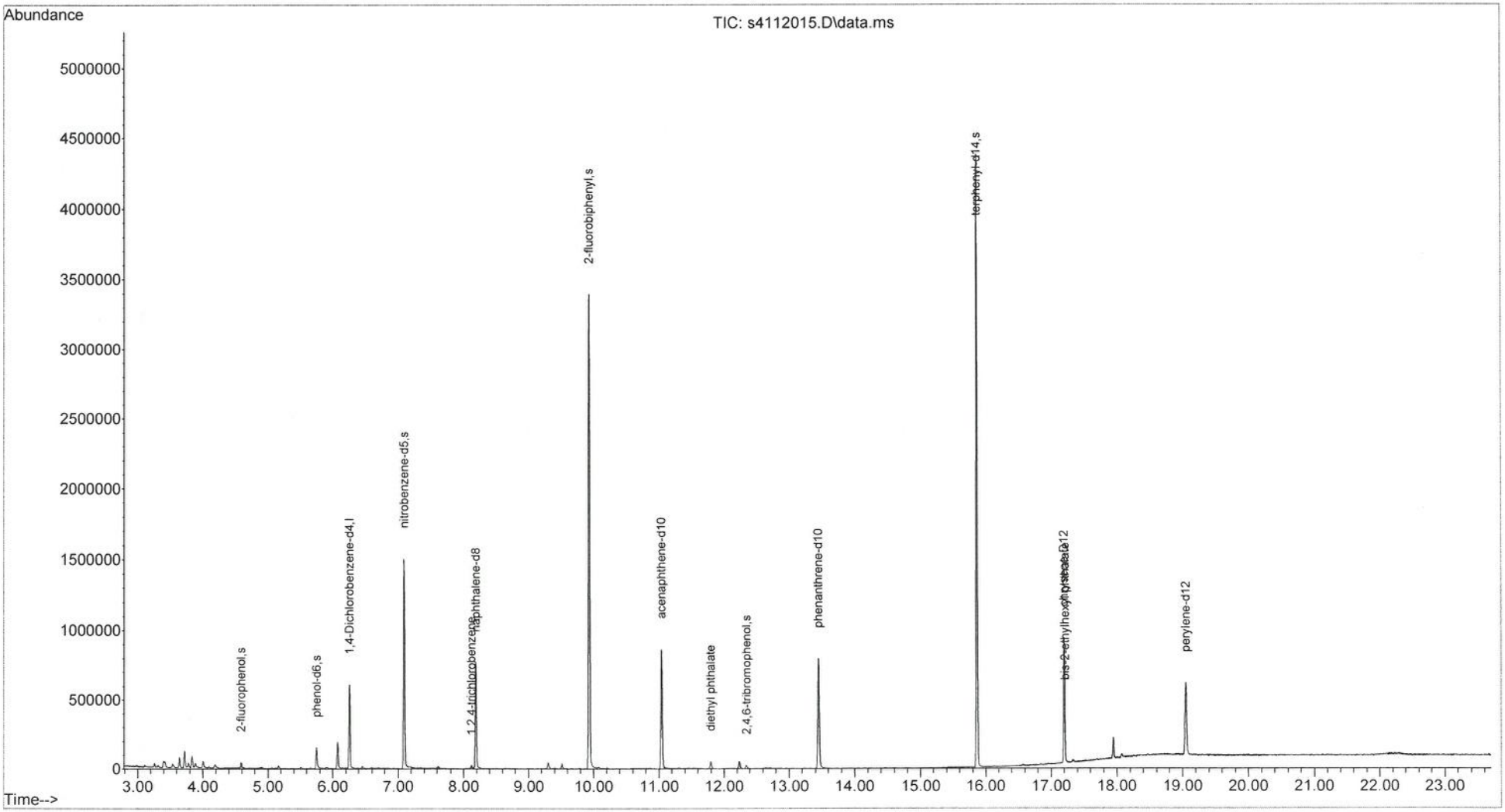
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.255	152	131109	10.00	ug/mL	0.00
21) naphthalene-d8	8.184	136	485647	10.00	ug/mL	0.00
37) acenaphthene-d10	11.038	164	256511	10.00	ug/mL	-0.01
58) phenanthrene-d10	13.446	188	476136	10.00	ug/mL	#-0.01
74) chrysene-D12	17.197	240	377224	10.00	ug/mL	0.00
83) perylene-d12	19.047	264	312363	10.00	ug/mL	0.00
System Monitoring Compounds						
4) 2-fluorophenol	4.586	112	16135	0.99	ug/mL	0.00
Spiked Amount 200.000			Recovery =	0.49%		
7) phenol-d6	5.745	99	69016	3.49	ug/mL	-0.01
Spiked Amount 200.000			Recovery =	1.75%		
22) nitrobenzene-d5	7.091	82	636915	37.36	ug/mL	-0.01
Spiked Amount 100.000			Recovery =	37.36%		
38) 2-fluorobiphenyl	9.932	172	1461794	36.23	ug/mL	0.00
Spiked Amount 100.000			Recovery =	36.23%		
59) 2,4,6-tribromophenol	12.345	330	4817	0.92	ug/mL	0.00
Spiked Amount 200.000			Recovery =	0.46%		
69) o-terphenyl	0.000	230	0	0.00	ug/mL	
Spiked Amount 100.000			Recovery =	0.00%		
72) 1-Chloro-octadecane	0.000	57	0	0.00	ug/mL	
Spiked Amount 100.000			Recovery =	0.00%		
75) terphenyl-d14	15.864	244	1873345	46.00	ug/mL	0.00
Spiked Amount 100.000			Recovery =	46.00%		
Target Compounds						Qvalue
23) nitrobenzene	7.091	77	2021	0.068	ug/mL#	39
30) 1,2,4-trichlorobenzene	8.118	180	7183m BC	0.328	ug/mL	
55) diethyl phthalate	11.795	149	28817	0.682	ug/mL#	77
82) bis-2-ethylhexyl phtha...	17.210	149	3615	0.130	ug/mL#	98
87) benzo(a)pyrene	19.047	252	1042	Below Cal	#	54
93) DDT	16.624	TIC	1889	Below Cal	#	22

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Nov23\112023\
Data File : s4112015.D
Acq On : 20 Nov 2023 08:23 pm
Operator : cl
Sample : 67836-07 bn x1
Misc :
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Nov 21 08:55:37 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration



This File: L:\SVOA\Excel Reports\ABN\231205\67836-008
Analysis Group: ABN Dow Salvage Yard
Field ID: SY-OBMW11-110823 CRE
Sample: 67836-08 acid x1 67836-08 bn x1
Misc:
DataFile: 525.D\S4ABN110223A.XLS 4ABN110223A.XLS
Import File Name: S4 ABN 17124 DoD
TestGroupID: E8270DoD_A
Aqueous or Soil? (A or S): A
Prep Date: 11/14/2023
Lab#: 67836-008
QC_Code:
Prep#: 17124

Charles Leahy L:\SVOA\ABN\ABN 8270DoD ImportFileBuilde
12/5/23 11:25 AM
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L:\SVOA\Excel Reports\ABN\231205\
L:\SVOA\PDFReports\

Reviewer Checks:

Quant Report: Reviewed, Analyst Initials & Date
Chromatogram Checked, Major peaks identified
Results consistent w/ other attached analyses
Reanalysis reason noted
Substitute dilution data checked
Correct dilution and reason clear or noted
Flags checked (Expiration, F+, Over Cal, Surr, Aspen, QC)
Other QC failures or issues noted in Aspen
Correct data file and/or date/time in Aspen

Notes:
Reviewer Initials & Date: SJ 12/7/23

#	Surrogate Standards	Conc. (ug/mL)	AnalysisDate	AnalyzedBy	Dil'n	Weight	Volume	Surr	Recovery	Flag	QC Limits
4	2-fluorophenol	35.15	11/15/2023	CL s4111525.D	1	1	1	100	**35%**		21-100
7	phenol-d6	20.89	11/15/2023	CL s4111525.D	1	1	1	100	**21%**		10-102
59	2,4,6-tribromophenol	69.12	11/15/2023	CL s4111525.D	1	1	1	100	**69%**		10-123
22	nitrobenzene-d5	33.34	11/20/2023	CL s4112016.D	1	1	1	50	**67%**		35-114
38	2-fluorobiphenyl	33.23	11/20/2023	CL s4112016.D	1	1	1	50	**66%**		43-116
75	terphenyl-d14	43.79	11/20/2023	CL s4112016.D	1	1	1	50	**88%**		33-141
6	phenol	0.00	11/15/2023	CL s4111525.D	1	1	1				
8	2-chlorophenol	0.00	11/15/2023	CL s4111525.D	1	1	1				
15	2-methylphenol	0.00	11/15/2023	CL s4111525.D	1	1	1				
15	2-methylphenol	0.00	11/15/2023	CL s4111525.D	1	1	1				
20	4-methylphenol	0.00	11/15/2023	CL s4111525.D	1	1	1				
25	2-nitrophenol	0.00	11/15/2023	CL s4111525.D	1	1	1				
26	2,4-dimethylphenol	0.00	11/15/2023	CL s4111525.D	1	1	1				
28	2,4-dichlorophenol	0.00	11/15/2023	CL s4111525.D	1	1	1				
29	2,6-dichlorophenol	0.00	11/15/2023	CL s4111525.D	1	1	1				
32	benzoic acid	0.00	11/15/2023	CL s4111525.D	1	1	1				
35	4-chloro-3-methylphenol	0.00	11/15/2023	CL s4111525.D	1	1	1				
40	2,4,6-trichlorophenol	0.00	11/15/2023	CL s4111525.D	1	1	1				
41	2,4,5-trichlorophenol	0.00	11/15/2023	CL s4111525.D	1	1	1				
51	2,4-dinitrophenol	0.00	11/15/2023	CL s4111525.D	1	1	1				
53	4-nitrophenol	0.00	11/15/2023	CL s4111525.D	1	1	1				
60	4,6-dinitro-2-methylphenol	0.00	11/15/2023	CL s4111525.D	1	1	1				
66	pentachlorophenol	0.00	11/15/2023	CL s4111525.D	1	1	1				
2	N-nitroso-dimethylamine	0.00	11/20/2023	CL s4112016.D	1	1	1				
3	pyridine	0.00	11/20/2023	CL s4112016.D	1	1	1				
5	aniline	0.00	11/20/2023	CL s4112016.D	1	1	1				
9	n-decane	0.00	11/20/2023	CL s4112016.D	1	1	1				
10	bis-(2-choroethyl)ether	0.00	11/20/2023	CL s4112016.D	1	1	1				
11	1,3-dichlorobenzene	0.00	11/20/2023	CL s4112016.D	1	1	1				
12	1,4-diclorobenzene	0.00	11/20/2023	CL s4112016.D	1	1	1				
13	1,2-dichlorobenzene	0.00	11/20/2023	CL s4112016.D	1	1	1				
14	benzyl alcohol	0.00	11/20/2023	CL s4112016.D	1	1	1				
16	2,2'-oxybis(1-chloropropane)	0.00	11/20/2023	CL s4112016.D	1	1	1				
##	acetephenone	#N/A	11/20/2023	CL s4112016.D	1	1	1			#N/A	
18	hexachloroethane	0.00	11/20/2023	CL s4112016.D	1	1	1				
19	N-nitroso-di-n-propylamine	0.00	11/20/2023	CL s4112016.D	1	1	1				
23	nitrobenzene	0.00	11/20/2023	CL s4112016.D	1	1	1				
24	isophorone	0.00	11/20/2023	CL s4112016.D	1	1	1				
27	bis(2-chloroethoxy)methane	0.00	11/20/2023	CL s4112016.D	1	1	1				
30	1,2,4-trichlorobenzene	0.09	11/20/2023	CL s4112016.D	1	1	1				
31	naphthalene	0.00	11/20/2023	CL s4112016.D	1	1	1				
33	4-chloroanaline	0.00	11/20/2023	CL s4112016.D	1	1	1				
34	hexachloro-1,3-butadiene	0.00	11/20/2023	CL s4112016.D	1	1	1				
36	2-methylnaphthalene	0.00	11/20/2023	CL s4112016.D	1	1	1				
39	hexachlorocyclopentadiene	0.00	11/20/2023	CL s4112016.D	1	1	1				
43	2-chloronaphthalene	0.00	11/20/2023	CL s4112016.D	1	1	1				
44	2-nitroanaline	0.00	11/20/2023	CL s4112016.D	1	1	1				
45	acenaphthylene	0.00	11/20/2023	CL s4112016.D	1	1	1				
46	dimethyl phthalate	0.00	11/20/2023	CL s4112016.D	1	1	1				
47	2,6-dinitrotoluene	0.00	11/20/2023	CL s4112016.D	1	1	1				
48	2,4-dinitrotoluene	0.00	11/20/2023	CL s4112016.D	1	1	1				
49	acenaphthene	0.00	11/20/2023	CL s4112016.D	1	1	1				
50	3-nitroanaline	0.00	11/20/2023	CL s4112016.D	1	1	1				
52	dibenzofuran	0.00	11/20/2023	CL s4112016.D	1	1	1				
54	fluorene	0.00	11/20/2023	CL s4112016.D	1	1	1				
55	diethyl phthalate	**2.90**	11/20/2023	CL s4112016.D	1	1	1				
56	4-chlorophenyl phenyl ether	0.00	11/20/2023	CL s4112016.D	1	1	1				
57	4-nitroanaline	0.00	11/20/2023	CL s4112016.D	1	1	1				
61	azobenzene	0.00	11/20/2023	CL s4112016.D	1	1	1				
62	N-nitrosodiphenylamine	0.00	11/20/2023	CL s4112016.D	1	1	1				
63	4-bromophenyl phenyl ether	0.00	11/20/2023	CL s4112016.D	1	1	1				
64	hexachlorobenzene	0.00	11/20/2023	CL s4112016.D	1	1	1				
65	n-octadecane	0.00	11/20/2023	CL s4112016.D	1	1	1				
67	phenanthrene	0.00	11/20/2023	CL s4112016.D	1	1	1				
68	anthracene	0.00	11/20/2023	CL s4112016.D	1	1	1				
70	carbazole	0.00	11/20/2023	CL s4112016.D	1	1	1				
71	di-n-butyl phthalate	0.00	11/20/2023	CL s4112016.D	1	1	1				
73	fluoranthene	0.00	11/20/2023	CL s4112016.D	1	1	1				
76	benzidine	0.00	11/20/2023	CL s4112016.D	1	1	1				
77	pyrene	0.00	11/20/2023	CL s4112016.D	1	1	1				
78	butyl benzyl phthalate	0.00	11/20/2023	CL s4112016.D	1	1	1				
79	benzo(a)anthracene	0.00	11/20/2023	CL s4112016.D	1	1	1				
80	chrysene	0.00	11/20/2023	CL s4112016.D	1	1	1				
81	3,3'-dichlorobenzidine	0.00	11/20/2023	CL s4112016.D	1	1	1				
82	bis-2-ethylhexyl phthalate	**203.74**	11/20/2023	CL s4112016.D	1	1	1			OverCal?	
84	di-n-octyl phthalate	0.00	11/20/2023	CL s4112016.D	1	1	1				
85	Benzo(b)fluoranthene	0.00	11/20/2023	CL s4112016.D	1	1	1				
86	benzo(k)fluoranthene	0.00	11/20/2023	CL s4112016.D	1	1	1				
87	benzo(a)pyrene	0.00	11/20/2023	CL s4112016.D	1	1	1				
88	indeno(1,2,3-cd)pyrene	0.00	11/20/2023	CL s4112016.D	1	1	1				
89	dibenzo(a,h)anthracene	0.00	11/20/2023	CL s4112016.D	1	1	1				
90	benzo(g,h,i)perylene	0.00	11/20/2023	CL s4112016.D	1	1	1				

SJ 12/7/23

Absolute Resource Associates

This File: L:\SVOA\Excel Reports\ABN\231205\67836-008
Analysis Group: ABN Dow Salvage Yard
Field ID: SY-OBMW11-110823 CRE
Sample: 67836-08 acid x1 67836-08 bn x5
Misc:
DataFile: 525.D\S4ABN110223A.XLS 4ABN110223A.XLS
Import File Name: S4 ABN 17124 DoD
TestGroupID: E8270DoD_A
Aqueous or Soil? (A or S): A
Prep Date: 11/14/2023
Lab#: 67836-008
QC_Code:
Prep#: 17124

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12/5/23 11:26 AM
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L:\SVOA\Excel Reports\ABN\231205\
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Reviewer Checks:

Quant Report: Reviewed, Analyst Initials & Date
Chromatogram Checked, Major peaks identified
Results consistent w/ other attached analyses
Reanalysis reason noted
Substitute dilution data checked
Correct dilution and reason clear or noted
Flags checked (Expiration, F+, Over Cal, Surr, Aspen, QC)
Other QC failures or issues noted in Aspen
Correct data file and/or date/time in Aspen

Notes:
Reviewer Initials & Date:

#	Surrogate Standards	Conc. (ug/mL)	AnalysisDate	AnalyzedBy	Dil'n	Weight	Volume	Surr	Recovery	Flag	QC Limits
4	2-fluorophenol	35.15	11/15/2023	CL s4111525.D	1	1	1	100	**35%**		21-100
7	phenol-d6	20.89	11/15/2023	CL s4111525.D	1	1	1	100	**21%**		10-102
59	2,4,6-tribromophenol	69.12	11/15/2023	CL s4111525.D	1	1	1	100	**69%**		10-123
22	nitrobenzene-d5	6.38	12/01/2023	CL s4120107.D	5	1	1	50	**64%**		35-114
38	2-fluorobiphenyl	6.99	12/01/2023	CL s4120107.D	5	1	1	50	**70%**		43-116
75	terphenyl-d14	8.18	12/01/2023	CL s4120107.D	5	1	1	50	**82%**		33-141
6	phenol	0.00	11/15/2023	CL s4111525.D	1	1	1				
8	2-chlorophenol	0.00	11/15/2023	CL s4111525.D	1	1	1				
15	2-methylphenol	0.00	11/15/2023	CL s4111525.D	1	1	1				
15	2-methylphenol	0.00	11/15/2023	CL s4111525.D	1	1	1				
20	4-methylphenol	0.00	11/15/2023	CL s4111525.D	1	1	1				
25	2-nitrophenol	0.00	11/15/2023	CL s4111525.D	1	1	1				
26	2,4-dimethylphenol	0.00	11/15/2023	CL s4111525.D	1	1	1				
28	2,4-dichlorophenol	0.00	11/15/2023	CL s4111525.D	1	1	1				
29	2,6-dichlorophenol	0.00	11/15/2023	CL s4111525.D	1	1	1				
32	benzoic acid	0.00	11/15/2023	CL s4111525.D	1	1	1				
35	4-chloro-3-methylphenol	0.00	11/15/2023	CL s4111525.D	1	1	1				
40	2,4,6-trichlorophenol	0.00	11/15/2023	CL s4111525.D	1	1	1				
41	2,4,5-trichlorophenol	0.00	11/15/2023	CL s4111525.D	1	1	1				
51	2,4-dinitrophenol	0.00	11/15/2023	CL s4111525.D	1	1	1				
53	4-nitrophenol	0.00	11/15/2023	CL s4111525.D	1	1	1				
60	4,6-dinitro-2-methylphenol	0.00	11/15/2023	CL s4111525.D	1	1	1				
66	pentachlorophenol	0.00	11/15/2023	CL s4111525.D	1	1	1				
2	N-nitroso-dimethylamine	0.00	12/01/2023	CL s4120107.D	5	1	1				
3	pyridine	0.00	12/01/2023	CL s4120107.D	5	1	1				
5	aniline	0.00	12/01/2023	CL s4120107.D	5	1	1				
9	n-decane	0.00	12/01/2023	CL s4120107.D	5	1	1				
10	bis-(2-choroethyl)ether	0.00	12/01/2023	CL s4120107.D	5	1	1				
11	1,3-dichlorobenzene	0.00	12/01/2023	CL s4120107.D	5	1	1				
12	1,4-diclorobenzene	0.00	12/01/2023	CL s4120107.D	5	1	1				
13	1,2-dichlorobenzene	0.00	12/01/2023	CL s4120107.D	5	1	1				
14	benzyl alcohol	0.00	12/01/2023	CL s4120107.D	5	1	1				
16	2,2'-oxybis(1-chloropropane)	0.00	12/01/2023	CL s4120107.D	5	1	1				
##	acetephenone	#N/A	12/01/2023	CL s4120107.D	5	1	1			#N/A	
18	hexachloroethane	0.00	12/01/2023	CL s4120107.D	5	1	1				
19	N-nitroso-di-n-propylamine	0.00	12/01/2023	CL s4120107.D	5	1	1				
23	nitrobenzene	0.00	12/01/2023	CL s4120107.D	5	1	1				
24	isophorone	0.00	12/01/2023	CL s4120107.D	5	1	1				
27	bis(2-chloroethoxy)methane	0.00	12/01/2023	CL s4120107.D	5	1	1				
30	1,2,4-trichlorobenzene	0.00	12/01/2023	CL s4120107.D	5	1	1				
31	naphthalene	0.00	12/01/2023	CL s4120107.D	5	1	1				
33	4-chloroanaline	0.00	12/01/2023	CL s4120107.D	5	1	1				
34	hexachloro-1,3-butadiene	0.00	12/01/2023	CL s4120107.D	5	1	1				
36	2-methylnaphthalene	0.00	12/01/2023	CL s4120107.D	5	1	1				
39	hexachlorocyclopentadiene	0.00	12/01/2023	CL s4120107.D	5	1	1				
43	2-chloronaphthalene	0.00	12/01/2023	CL s4120107.D	5	1	1				
44	2-nitroanaline	0.00	12/01/2023	CL s4120107.D	5	1	1				
45	acenaphthylene	0.00	12/01/2023	CL s4120107.D	5	1	1				
46	dimethyl phthalate	0.00	12/01/2023	CL s4120107.D	5	1	1				
47	2,6-dinitrotoluene	0.00	12/01/2023	CL s4120107.D	5	1	1				
48	2,4-dinitrotoluene	0.00	12/01/2023	CL s4120107.D	5	1	1				
49	acenaphthene	0.00	12/01/2023	CL s4120107.D	5	1	1				
50	3-nitroanaline	0.00	12/01/2023	CL s4120107.D	5	1	1				
52	dibenzofuran	0.00	12/01/2023	CL s4120107.D	5	1	1				
54	fluorene	0.00	12/01/2023	CL s4120107.D	5	1	1				
55	diethyl phthalate	0.28	12/01/2023	CL s4120107.D	5	1	1				
56	4-chlorophenyl phenyl ether	0.00	12/01/2023	CL s4120107.D	5	1	1				
57	4-nitroanaline	0.00	12/01/2023	CL s4120107.D	5	1	1				
61	azobenzene	0.00	12/01/2023	CL s4120107.D	5	1	1				
62	N-nitrosodiphenylamine	0.00	12/01/2023	CL s4120107.D	5	1	1				
63	4-bromophenyl phenyl ether	0.00	12/01/2023	CL s4120107.D	5	1	1				
64	hexachlorobenzene	0.00	12/01/2023	CL s4120107.D	5	1	1				
65	n-octadecane	0.00	12/01/2023	CL s4120107.D	5	1	1				
67	phenanthrene	0.00	12/01/2023	CL s4120107.D	5	1	1				
68	anthracene	0.00	12/01/2023	CL s4120107.D	5	1	1				
70	carbazole	0.00	12/01/2023	CL s4120107.D	5	1	1				
71	di-n-butyl phthalate	0.00	12/01/2023	CL s4120107.D	5	1	1				
73	fluoranthene	0.00	12/01/2023	CL s4120107.D	5	1	1				
76	benzidine	0.00	12/01/2023	CL s4120107.D	5	1	1				
77	pyrene	0.00	12/01/2023	CL s4120107.D	5	1	1				
78	butyl benzyl phthalate	0.06	12/01/2023	CL s4120107.D	5	1	1				
79	benzo(a)anthracene	0.00	12/01/2023	CL s4120107.D	5	1	1				
80	chrysene	0.00	12/01/2023	CL s4120107.D	5	1	1				
81	3,3'-dichlorobenzidine	0.00	12/01/2023	CL s4120107.D	5	1	1				
82	bis-2-ethylhexyl phthalate	**40.34**	12/01/2023	CL s4120107.D	5	1	1				
84	di-n-octyl phthalate	0.14	12/01/2023	CL s4120107.D	5	1	1				
85	Benzo(b)fluoranthene	0.00	12/01/2023	CL s4120107.D	5	1	1				
86	benzo(k)fluoranthene	0.00	12/01/2023	CL s4120107.D	5	1	1				
87	benzo(a)pyrene	0.00	12/01/2023	CL s4120107.D	5	1	1				
88	indeno(1,2,3-cd)pyrene	0.00	12/01/2023	CL s4120107.D	5	1	1				
89	dibenzo(a,h)anthracene	0.00	12/01/2023	CL s4120107.D	5	1	1				
90	benzo(g,h,i)perylene	0.00	12/01/2023	CL s4120107.D	5	1	1				

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Nov23\111523\
Data File : s4111525.D
Acq On : 15 Nov 2023 10:12 pm
Operator : cl
Sample : 67836-08 acid x1
Misc :
ALS Vial : 23 Sample Multiplier: 1

CL
11/22/23 @ 11:44
CharlesL

Quant Time: Nov 17 16:14:27 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1,4-Dichlorobenzene-d4	6.258	152	111372	10.00 ug/mL	0.00
21) naphthalene-d8	8.184	136	404672	10.00 ug/mL	0.00
37) acenaphthene-d10	11.038	164	219435	10.00 ug/mL	0.00
58) phenanthrene-d10	13.451	188	415898	10.00 ug/mL	0.00
74) chrysene-D12	17.197	240	325528	10.00 ug/mL	0.00
83) perylene-d12	19.039	264	260090	10.00 ug/mL	0.00
System Monitoring Compounds					
4) 2-fluorophenol	4.581	112	486290	35.15 ug/mL	0.00
Spiked Amount 200.000			Recovery =	17.57%	
7) phenol-d6	5.746	99	351029	20.89 ug/mL	-0.01
Spiked Amount 200.000			Recovery =	10.45%	
22) nitrobenzene-d5	7.094	82	8056	0.55 ug/mL	0.00
Spiked Amount 100.000			Recovery =	0.55%	
38) 2-fluorobiphenyl	9.932	172	34747	0.97 ug/mL	0.00
Spiked Amount 100.000			Recovery =	0.97%	
59) 2,4,6-tribromophenol	12.338	330	350578	69.12 ug/mL	0.00
Spiked Amount 200.000			Recovery =	34.56%	
69) o-terphenyl	0.000	230	0	0.00 ug/mL	
Spiked Amount 100.000			Recovery =	0.00%	
72) 1-Chloro-octadecane	0.000	57	0	0.00 ug/mL	
Spiked Amount 100.000			Recovery =	0.00%	
75) terphenyl-d14	15.864	244	44299	1.25 ug/mL	0.00
Spiked Amount 100.000			Recovery =	1.25%	
Target Compounds					Qvalue
82) bis-2-ethylhexyl phtha...	17.210	149	608126	18.725 ug/mL	99
93) DDT	16.624	TIC	901	Below Cal #	22

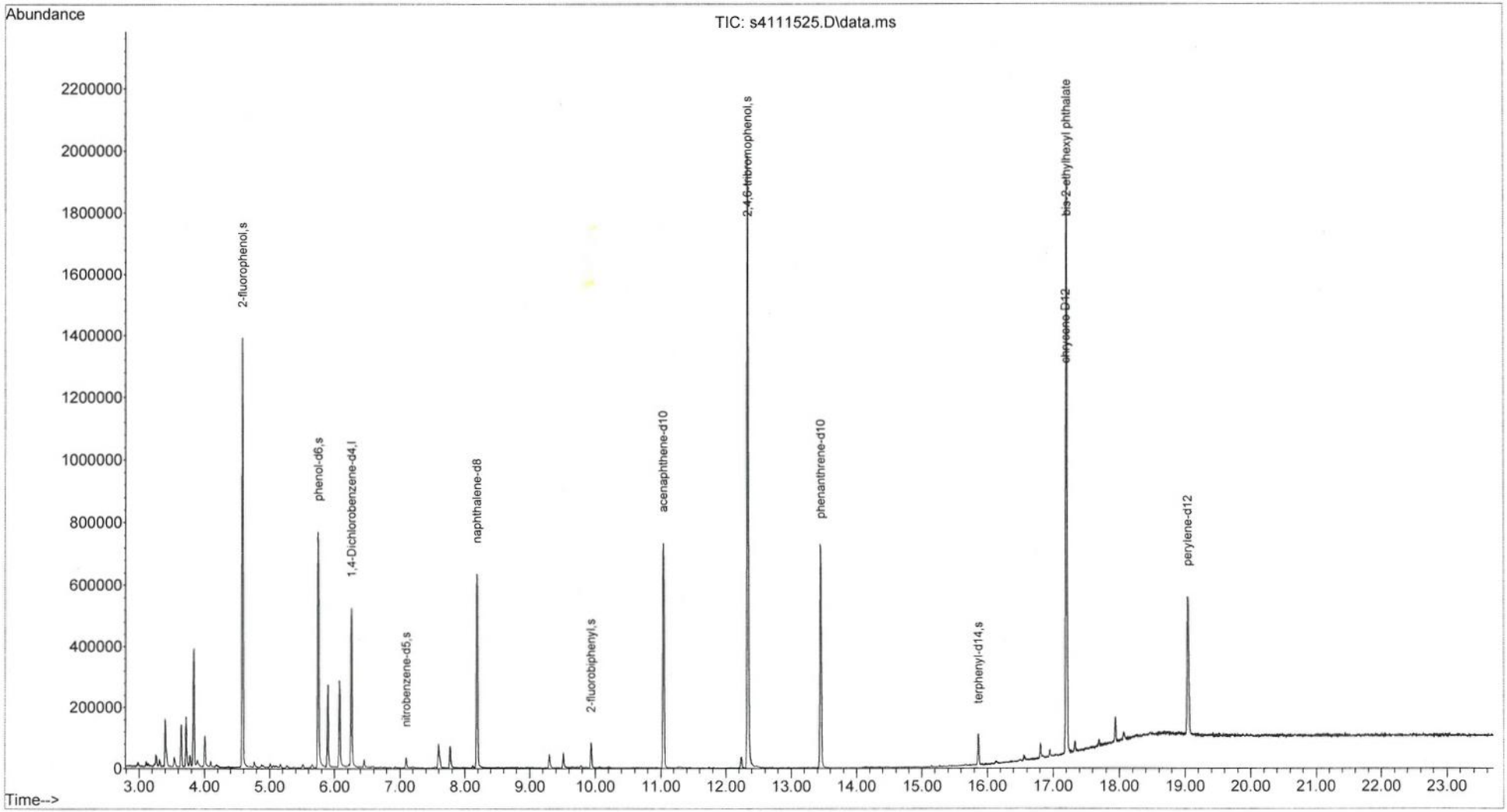
Diluted run got imported

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Nov23\111523\
Data File : s4111525.D
Acq On : 15 Nov 2023 10:12 pm
Operator : cl
Sample : 67836-08 acid x1
Misc :
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Nov 17 16:14:27 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Nov23\112023\
Data File : s4112016.D
Acq On : 20 Nov 2023 08:53 pm
Operator : cl
Sample : 67836-08 bn x1
Misc :
ALS Vial : 16 Sample Multiplier: 1

CL
12/4/23 @ 16:07
CharlesL

Quant Time: Nov 21 08:55:41 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023 RR x5
Response via : Initial Calibration

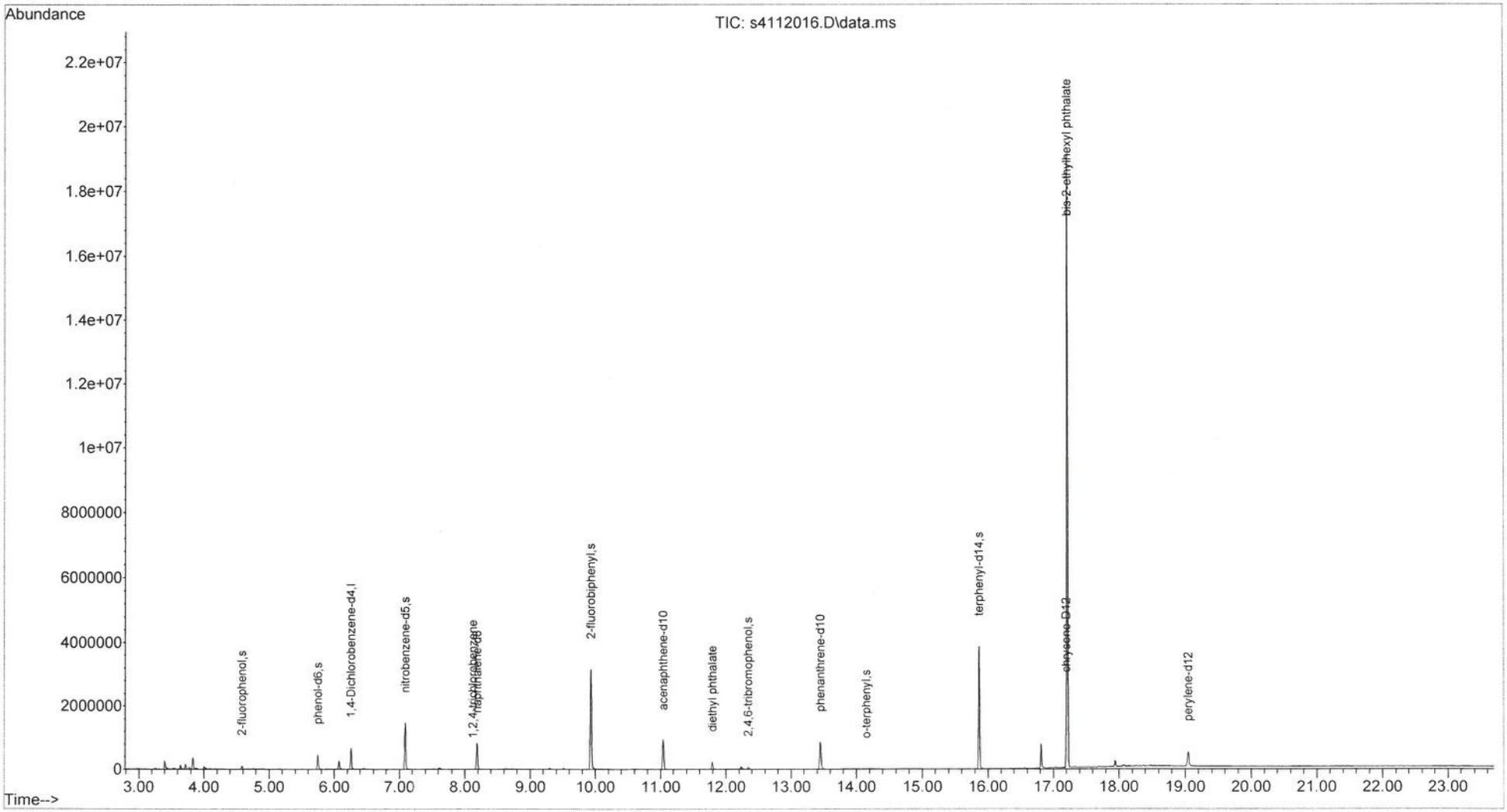
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
Internal Standards							
1) 1,4-Dichlorobenzene-d4	6.255	152	137964	10.00	ug/mL	0.00	
21) naphthalene-d8	8.184	136	522265	10.00	ug/mL	0.00	
37) acenaphthene-d10	11.041	164	271121	10.00	ug/mL	0.00	
58) phenanthrene-d10	13.449	188	488323	10.00	ug/mL	-0.01	
74) chrysene-D12	17.197	240	346198	10.00	ug/mL	# 0.00	
83) perylene-d12	19.044	264	263211	10.00	ug/mL	0.00	
System Monitoring Compounds							
4) 2-fluorophenol	4.584	112	37734	2.20	ug/mL	0.00	
Spiked Amount 200.000			Recovery =	1.10%			
7) phenol-d6	5.743	99	206204	9.91	ug/mL	-0.01	
Spiked Amount 200.000			Recovery =	4.96%			
22) nitrobenzene-d5	7.091	82	611227	33.34	ug/mL	0.00	
Spiked Amount 100.000			Recovery =	33.34%			
38) 2-fluorobiphenyl	9.932	172	1417306	33.23	ug/mL	0.00	
Spiked Amount 100.000			Recovery =	33.23%			
59) 2,4,6-tribromophenol	12.338	330	14133	2.46	ug/mL	0.00	
Spiked Amount 200.000			Recovery =	1.23%			
69) o-terphenyl	14.147	230	1993	0.05	ug/mL	0.00	
Spiked Amount 100.000			Recovery =	0.05%			
72) 1-Chloro-octadecane	0.000	57	0	0.00	ug/mL		
Spiked Amount 100.000			Recovery =	0.00%			
75) terphenyl-d14	15.864	244	1636640	43.79	ug/mL	0.00	
Spiked Amount 100.000			Recovery =	43.79%			
Target Compounds						Qvalue	
30) 1,2,4-trichlorobenzene	8.120	180	3349	0.089	ug/mL#	86	
49) acenaphthene	11.038	154	938	Below Cal	#	4	
55) diethyl phthalate	11.795	149	119210	2.902	ug/mL#	94	
82) bis-2-ethylhexyl phtha...	17.215	149	7048631	203.736	ug/mL	98	Over - cal
93) DDT	16.619	TIC	1032	Below Cal	#	22	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Nov23\112023\
Data File : s4112016.D
Acq On : 20 Nov 2023 08:53 pm
Operator : cl
Sample : 67836-08 bn x1
Misc :
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Nov 21 08:55:41 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Dec23\120123\
Data File : s4120107.D
Acq On : 01 Dec 2023 12:17 pm
Operator : cl
Sample : 67836-08 bn x5
Misc :
ALS Vial : 7 Sample Multiplier: 1

CL
12/5/23 @ 10:31
CharlesL

Quant Time: Dec 01 16:30:50 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.252	152	157643	10.00	ug/mL	-0.01
21) naphthalene-d8	8.186	136	548061	10.00	ug/mL	0.00
37) acenaphthene-d10	11.040	164	264806	10.00	ug/mL	0.00
58) phenanthrene-d10	13.453	188	427322	10.00	ug/mL	0.00
74) chrysene-D12	17.209	240	315566	10.00	ug/mL	# 0.00
83) perylene-d12	19.062	264	332287	10.00	ug/mL	0.02
System Monitoring Compounds						
4) 2-fluorophenol	4.588	112	4609	0.24	ug/mL	0.00
Spiked Amount 200.000			Recovery =	0.12%		
7) phenol-d6	5.748	99	32020	1.35	ug/mL	0.00
Spiked Amount 200.000			Recovery =	0.68%		
22) nitrobenzene-d5	7.091	82	122947	6.38	ug/mL	-0.01
Spiked Amount 100.000			Recovery =	6.38%		
38) 2-fluorobiphenyl	9.934	172	292583	6.99	ug/mL	0.00
Spiked Amount 100.000			Recovery =	6.99%		
59) 2,4,6-tribromophenol	0.000	330	0	0.00	ug/mL	
Spiked Amount 200.000			Recovery =	0.00%		
69) o-terphenyl	0.000	230	0	0.00	ug/mL	
Spiked Amount 100.000			Recovery =	0.00%		
72) 1-Chloro-octadecane	0.000	57	0	0.00	ug/mL	
Spiked Amount 100.000			Recovery =	0.00%		
75) terphenyl-d14	15.872	244	279033	8.18	ug/mL	0.00
Spiked Amount 100.000			Recovery =	8.18%		
Target Compounds						Qvalue
55) diethyl phthalate	11.795	149	14068	0.280	ug/mL#	84
78) butyl benzyl phthalate	16.511	149	1048	0.063	ug/mL#	26
82) bis-2-ethylhexyl phtha...	17.222	149	1271324	40.341	ug/mL	100
84) di-n-octyl phthalate	17.956	149	3374	0.137	ug/mL#	61
93) DDT	16.621	TIC	2875	Below Cal	#	22

Sub - in

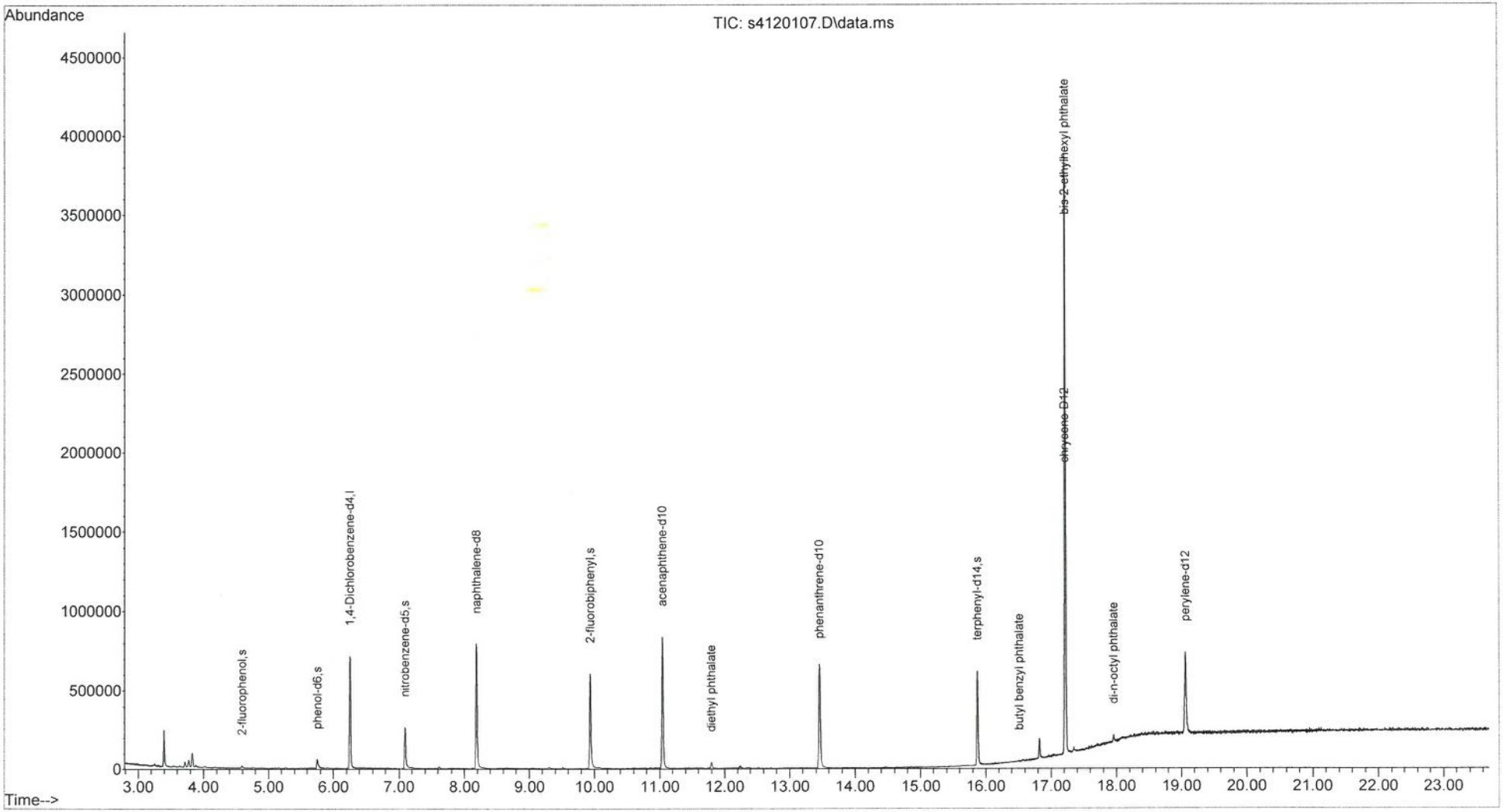
202
+ 18.7
220.7

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Dec23\120123\
Data File : s4120107.D
Acq On : 01 Dec 2023 12:17 pm
Operator : cl
Sample : 67836-08 bn x5
Misc :
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Dec 01 16:30:50 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration



This File:	L:\SVOA\Excel Reports\ABN\231205\67836-009		Charles Leahy L:\SVOA\ABN\ABN 8270DoD ImportFileBuilde
Analysis Group:	ABN	Dow Salvage Yard	12/5/23 11:31 AM
Field ID:	SY-OBMW110-110823	CRE	L:\SVOA\ABN\
Sample:	67836-09 acid x1	67836-09 bn x1	L:\SVOA\Excel Reports\ABN\231205\
Misc:			L:\SVOA\PDFReports\
DataFile:	526.D\S4ABN110223A.XLS	4ABN110223A.XLS	
Import File Name	S4 ABN 17124 DoD		
TestGroupID	E8270DoD_A		
Aqueous or Soil? (A or S)	A		
Prep Date	11/14/2023		
Lab#:	67836-009		
QC_Code:			
Prep#	17124		

Reviewer Checks:

Quant Report: Reviewed, Analyst Initials & Date
Chromatogram Checked, Major peaks identified
Results consistent w/ other attached analyses
Reanalysis reason noted
Substitute dilution data checked
Correct dilution and reason clear or noted
Flags checked (Expiration, F+, Over Cal, Surr, Aspen, QC)
Other QC failures or issues noted in Aspen
Correct data file and/or date/time in Aspen

Notes:
Reviewer Initials & Date: SY 12/7/23

#	Surrogate Standards	Conc. (ug/mL)	AnalysisDate	AnalyzedBy	Dil'n	Weight	Volume	Surr	Recovery	Flag	QC Limits
4	2-fluorophenol	32.77	11/15/2023	CL s4111526.D	1	1	1	100	**33%**		21-100
7	phenol-d6	17.76	11/15/2023	CL s4111526.D	1	1	1	100	**18%**		10-102
59	2,4,6-tribromophenol	62.73	11/15/2023	CL s4111526.D	1	1	1	100	**63%**		10-123
22	nitrobenzene-d5	34.30	11/20/2023	CL s4112017.D	1	1	1	50	**69%**		35-114
38	2-fluorobiphenyl	34.66	11/20/2023	CL s4112017.D	1	1	1	50	**69%**		43-116
75	terphenyl-d14	44.43	11/20/2023	CL s4112017.D	1	1	1	50	**89%**		33-141
6	phenol	0.00	11/15/2023	CL s4111526.D	1	1	1				
8	2-chlorophenol	0.00	11/15/2023	CL s4111526.D	1	1	1				
15	2-methylphenol	0.00	11/15/2023	CL s4111526.D	1	1	1				
15	2-methylphenol	0.00	11/15/2023	CL s4111526.D	1	1	1				
20	4-methylphenol	0.00	11/15/2023	CL s4111526.D	1	1	1				
25	2-nitrophenol	0.00	11/15/2023	CL s4111526.D	1	1	1				
26	2,4-dimethylphenol	0.00	11/15/2023	CL s4111526.D	1	1	1				
28	2,4-dichlorophenol	0.00	11/15/2023	CL s4111526.D	1	1	1				
29	2,6-dichlorophenol	0.00	11/15/2023	CL s4111526.D	1	1	1				
32	benzoic acid	0.00	11/15/2023	CL s4111526.D	1	1	1				
35	4-chloro-3-methylphenol	0.00	11/15/2023	CL s4111526.D	1	1	1				
40	2,4,6-trichlorophenol	0.00	11/15/2023	CL s4111526.D	1	1	1				
41	2,4,5-trichlorophenol	0.00	11/15/2023	CL s4111526.D	1	1	1				
51	2,4-dinitrophenol	0.00	11/15/2023	CL s4111526.D	1	1	1				
53	4-nitrophenol	0.00	11/15/2023	CL s4111526.D	1	1	1				
60	4,6-dinitro-2-methylphenol	0.00	11/15/2023	CL s4111526.D	1	1	1				
66	pentachlorophenol	0.00	11/15/2023	CL s4111526.D	1	1	1				
2	N-nitroso-dimethylamine	0.00	11/20/2023	CL s4112017.D	1	1	1				
3	pyridine	0.00	11/20/2023	CL s4112017.D	1	1	1				
5	aniline	0.00	11/20/2023	CL s4112017.D	1	1	1				
9	n-decane	0.00	11/20/2023	CL s4112017.D	1	1	1				
10	bis-(2-choroethyl)ether	0.00	11/20/2023	CL s4112017.D	1	1	1				
11	1,3-dichlorobenzene	0.00	11/20/2023	CL s4112017.D	1	1	1				
12	1,4-diclorobenzene	0.00	11/20/2023	CL s4112017.D	1	1	1				
13	1,2-dichlorobenzene	0.00	11/20/2023	CL s4112017.D	1	1	1				
14	benzyl alcohol	0.00	11/20/2023	CL s4112017.D	1	1	1				
16	2,2'-oxybis(1-chloropropane)	0.00	11/20/2023	CL s4112017.D	1	1	1				
##	acetephenone	#N/A	11/20/2023	CL s4112017.D	1	1	1			#N/A	
18	hexachloroethane	0.00	11/20/2023	CL s4112017.D	1	1	1				
19	N-nitroso-di-n-propylamine	0.00	11/20/2023	CL s4112017.D	1	1	1				
23	nitrobenzene	0.00	11/20/2023	CL s4112017.D	1	1	1				
24	isophorone	0.00	11/20/2023	CL s4112017.D	1	1	1				
27	bis(2-chloroethoxy)methane	0.00	11/20/2023	CL s4112017.D	1	1	1				
30	1,2,4-trichlorobenzene	0.07	11/20/2023	CL s4112017.D	1	1	1				
31	naphthalene	0.00	11/20/2023	CL s4112017.D	1	1	1				
33	4-chloroanaline	0.00	11/20/2023	CL s4112017.D	1	1	1				
34	hexachloro-1,3-butadiene	0.00	11/20/2023	CL s4112017.D	1	1	1				
36	2-methylnaphthalene	0.00	11/20/2023	CL s4112017.D	1	1	1				
39	hexachlorocyclopentadiene	0.00	11/20/2023	CL s4112017.D	1	1	1				
43	2-chloronaphthalene	0.00	11/20/2023	CL s4112017.D	1	1	1				
44	2-nitroanaline	0.00	11/20/2023	CL s4112017.D	1	1	1				
45	acenaphthylene	0.00	11/20/2023	CL s4112017.D	1	1	1				
46	dimethyl phthalate	0.00	11/20/2023	CL s4112017.D	1	1	1				
47	2,6-dinitrotoluene	0.00	11/20/2023	CL s4112017.D	1	1	1				
48	2,4-dinitrotoluene	0.00	11/20/2023	CL s4112017.D	1	1	1				
49	acenaphthene	0.00	11/20/2023	CL s4112017.D	1	1	1				
50	3-nitroanaline	0.00	11/20/2023	CL s4112017.D	1	1	1				
52	dibenzofuran	0.00	11/20/2023	CL s4112017.D	1	1	1				
54	fluorene	0.00	11/20/2023	CL s4112017.D	1	1	1				
55	diethyl phthalate	**2.90**	11/20/2023	CL s4112017.D	1	1	1				
56	4-chlorophenyl phenyl ether	0.00	11/20/2023	CL s4112017.D	1	1	1				
57	4-nitroanaline	0.00	11/20/2023	CL s4112017.D	1	1	1				
61	azobenzene	0.00	11/20/2023	CL s4112017.D	1	1	1				
62	N-nitrosodiphenylamine	0.00	11/20/2023	CL s4112017.D	1	1	1				
63	4-bromophenyl phenyl ether	0.00	11/20/2023	CL s4112017.D	1	1	1				
64	hexachlorobenzene	0.00	11/20/2023	CL s4112017.D	1	1	1				
65	n-octadecane	0.00	11/20/2023	CL s4112017.D	1	1	1				
67	phenanthrene	0.00	11/20/2023	CL s4112017.D	1	1	1				
68	anthracene	0.00	11/20/2023	CL s4112017.D	1	1	1				
70	carbazole	0.00	11/20/2023	CL s4112017.D	1	1	1				
71	di-n-butyl phthalate	0.00	11/20/2023	CL s4112017.D	1	1	1				
73	fluoranthene	0.00	11/20/2023	CL s4112017.D	1	1	1				
76	benzidine	0.00	11/20/2023	CL s4112017.D	1	1	1				
77	pyrene	0.00	11/20/2023	CL s4112017.D	1	1	1				
78	butyl benzyl phthalate	0.00	11/20/2023	CL s4112017.D	1	1	1				
79	benzo(a)anthracene	0.00	11/20/2023	CL s4112017.D	1	1	1				
80	chrysene	0.00	11/20/2023	CL s4112017.D	1	1	1				
81	3,3'-dichlorobenzidine	0.00	11/20/2023	CL s4112017.D	1	1	1				
82	bis-2-ethylhexyl phthalate	**233.98**	11/20/2023	CL s4112017.D	1	1	1				
84	di-n-octyl phthalate	0.00	11/20/2023	CL s4112017.D	1	1	1				
85	Benzo(b)fluoranthene	0.00	11/20/2023	CL s4112017.D	1	1	1				
86	benzo(k)fluoranthene	0.00	11/20/2023	CL s4112017.D	1	1	1				
87	benzo(a)pyrene	0.00	11/20/2023	CL s4112017.D	1	1	1				
88	indeno(1,2,3-cd)pyrene	0.00	11/20/2023	CL s4112017.D	1	1	1				
89	dibenzo(a,h)anthracene	0.00	11/20/2023	CL s4112017.D	1	1	1				
90	benzo(g,h,i)perylene	0.00	11/20/2023	CL s4112017.D	1	1	1				

Over Cal?
SVb

This File:	**L:\SVOA\Excel Reports\ABN\231205\67836-009**		Charles Leahy L:\SVOA\ABN\ABN 8270DoD ImportFileBuilde
Analysis Group:	**ABN**	**Dow Salvage Yard**	12/5/23 11:32 AM
Field ID:	**SY-OBMW110-110823**	**CRE**	L:\SVOA\ABN\
Sample:	**67836-09 acid x1**	**67836-09 bn x5**	L:\SVOA\Excel Reports\ABN\231205\
Misc:			L:\SVOA\PDFReports\
DataFile:	526.D\S4ABN110223A.XLS	4ABN110223A.XLS	
Import File Name	**S4 ABN 17124 DoD**		
TestGroupID	**E8270DoD_A**		
Aqueous or Soil? (A or S)	**A**		
Prep Date	**11/14/2023**		
Lab#:	**67836-009**		
QC_Code:			
Prep#	**17124**		

Reviewer Checks:

Quant Report: Reviewed, Analyst Initials & Date
Chromatogram Checked, Major peaks identified
Results consistent w/ other attached analyses
Reanalysis reason noted
Substitute dilution data checked
Correct dilution and reason clear or noted
Flags checked (Expiration, F+, Over Cal, Surr, Aspen, QC)
Other QC failures or issues noted in Aspen
Correct data file and/or date/time in Aspen

Notes:
Reviewer Initials & Date:

#	Surrogate Standards	Conc. (ug/mL)	AnalysisDate	AnalyzedBy		Dil'n	Weight	Volume	Surr	Recovery	Flag	QC Limits
4	2-fluorophenol	32.77	11/15/2023	CL	s4111526.D	1	1	1	100	**33%**		21-100
7	phenol-d6	17.76	11/15/2023	CL	s4111526.D	1	1	1	100	**18%**		10-102
59	2,4,6-tribromophenol	62.73	11/15/2023	CL	s4111526.D	1	1	1	100	**63%**		10-123
22	nitrobenzene-d5	6.64	12/01/2023	CL	s4120108.D	5	1	1	50	**66%**		35-114
38	2-fluorobiphenyl	7.69	12/01/2023	CL	s4120108.D	5	1	1	50	**77%**		43-116
75	terphenyl-d14	9.33	12/01/2023	CL	s4120108.D	5	1	1	50	**93%**		33-141
6	phenol	0.00	11/15/2023	CL	s4111526.D	1	1	1				
8	2-chlorophenol	0.00	11/15/2023	CL	s4111526.D	1	1	1				
15	2-methylphenol	0.00	11/15/2023	CL	s4111526.D	1	1	1				
15	2-methylphenol	0.00	11/15/2023	CL	s4111526.D	1	1	1				
20	4-methylphenol	0.00	11/15/2023	CL	s4111526.D	1	1	1				
25	2-nitrophenol	0.00	11/15/2023	CL	s4111526.D	1	1	1				
26	2,4-dimethylphenol	0.00	11/15/2023	CL	s4111526.D	1	1	1				
28	2,4-dichlorophenol	0.00	11/15/2023	CL	s4111526.D	1	1	1				
29	2,6-dichlorophenol	0.00	11/15/2023	CL	s4111526.D	1	1	1				
32	benzoic acid	0.00	11/15/2023	CL	s4111526.D	1	1	1				
35	4-chloro-3-methylphenol	0.00	11/15/2023	CL	s4111526.D	1	1	1				
40	2,4,6-trichlorophenol	0.00	11/15/2023	CL	s4111526.D	1	1	1				
41	2,4,5-trichlorophenol	0.00	11/15/2023	CL	s4111526.D	1	1	1				
51	2,4-dinitrophenol	0.00	11/15/2023	CL	s4111526.D	1	1	1				
53	4-nitrophenol	0.00	11/15/2023	CL	s4111526.D	1	1	1				
60	4,6-dinitro-2-methylphenol	0.00	11/15/2023	CL	s4111526.D	1	1	1				
66	pentachlorophenol	0.00	11/15/2023	CL	s4111526.D	1	1	1				
2	N-nitroso-dimethylamine	0.00	12/01/2023	CL	s4120108.D	5	1	1				
3	pyridine	0.00	12/01/2023	CL	s4120108.D	5	1	1				
5	aniline	0.00	12/01/2023	CL	s4120108.D	5	1	1				
9	n-decane	0.00	12/01/2023	CL	s4120108.D	5	1	1				
10	bis-(2-choroethyl)ether	0.00	12/01/2023	CL	s4120108.D	5	1	1				
11	1,3-dichlorobenzene	0.00	12/01/2023	CL	s4120108.D	5	1	1				
12	1,4-diclorobenzene	0.00	12/01/2023	CL	s4120108.D	5	1	1				
13	1,2-dichlorobenzene	0.00	12/01/2023	CL	s4120108.D	5	1	1				
14	benzyl alcohol	0.00	12/01/2023	CL	s4120108.D	5	1	1				
16	2,2'-oxybis(1-chloropropane)	0.00	12/01/2023	CL	s4120108.D	5	1	1				
##	acetephenone	#N/A	12/01/2023	CL	s4120108.D	5	1	1			#N/A	
18	hexachloroethane	0.00	12/01/2023	CL	s4120108.D	5	1	1				
19	N-nitroso-di-n-propylamine	0.00	12/01/2023	CL	s4120108.D	5	1	1				
23	nitrobenzene	0.00	12/01/2023	CL	s4120108.D	5	1	1				
24	isophorone	0.00	12/01/2023	CL	s4120108.D	5	1	1				
27	bis(2-chloroethoxy)methane	0.00	12/01/2023	CL	s4120108.D	5	1	1				
30	1,2,4-trichlorobenzene	0.00	12/01/2023	CL	s4120108.D	5	1	1				
31	naphthalene	0.00	12/01/2023	CL	s4120108.D	5	1	1				
33	4-chloroanaline	0.00	12/01/2023	CL	s4120108.D	5	1	1				
34	hexachloro-1,3-butadiene	0.00	12/01/2023	CL	s4120108.D	5	1	1				
36	2-methylnaphthalene	0.00	12/01/2023	CL	s4120108.D	5	1	1				
39	hexachlorocyclopentadiene	0.00	12/01/2023	CL	s4120108.D	5	1	1				
43	2-chloronaphthalene	0.00	12/01/2023	CL	s4120108.D	5	1	1				
44	2-nitroanaline	0.00	12/01/2023	CL	s4120108.D	5	1	1				
45	acenaphthylene	0.00	12/01/2023	CL	s4120108.D	5	1	1				
46	dimethyl phthalate	0.00	12/01/2023	CL	s4120108.D	5	1	1				
47	2,6-dinitrotoluene	0.00	12/01/2023	CL	s4120108.D	5	1	1				
48	2,4-dinitrotoluene	0.00	12/01/2023	CL	s4120108.D	5	1	1				
49	acenaphthene	0.00	12/01/2023	CL	s4120108.D	5	1	1				
50	3-nitroanaline	0.00	12/01/2023	CL	s4120108.D	5	1	1				
52	dibenzofuran	0.00	12/01/2023	CL	s4120108.D	5	1	1				
54	fluorene	0.00	12/01/2023	CL	s4120108.D	5	1	1				
55	diethyl phthalate	0.49	12/01/2023	CL	s4120108.D	5	1	1				
56	4-chlorophenyl phenyl ether	0.00	12/01/2023	CL	s4120108.D	5	1	1				
57	4-nitroanaline	0.00	12/01/2023	CL	s4120108.D	5	1	1				
61	azobenzene	0.00	12/01/2023	CL	s4120108.D	5	1	1				
62	N-nitrosodiphenylamine	0.00	12/01/2023	CL	s4120108.D	5	1	1				
63	4-bromophenyl phenyl ether	0.00	12/01/2023	CL	s4120108.D	5	1	1				
64	hexachlorobenzene	0.00	12/01/2023	CL	s4120108.D	5	1	1				
65	n-octadecane	0.00	12/01/2023	CL	s4120108.D	5	1	1				
67	phenanthrene	0.00	12/01/2023	CL	s4120108.D	5	1	1				
68	anthracene	0.00	12/01/2023	CL	s4120108.D	5	1	1				
70	carbazole	0.00	12/01/2023	CL	s4120108.D	5	1	1				
71	di-n-butyl phthalate	0.00	12/01/2023	CL	s4120108.D	5	1	1				
73	fluoranthene	0.00	12/01/2023	CL	s4120108.D	5	1	1				
76	benzidine	0.00	12/01/2023	CL	s4120108.D	5	1	1				
77	pyrene	0.00	12/01/2023	CL	s4120108.D	5	1	1				
78	butyl benzyl phthalate	0.06	12/01/2023	CL	s4120108.D	5	1	1				
79	benzo(a)anthracene	0.00	12/01/2023	CL	s4120108.D	5	1	1				
80	chrysene	0.00	12/01/2023	CL	s4120108.D	5	1	1				
81	3,3'-dichlorobenzidine	0.00	12/01/2023	CL	s4120108.D	5	1	1				
82	bis-2-ethylhexyl phthalate	**51.77**	12/01/2023	CL	s4120108.D	5	1	1				
84	di-n-octyl phthalate	0.12	12/01/2023	CL	s4120108.D	5	1	1				
85	Benzo(b)fluoranthene	0.00	12/01/2023	CL	s4120108.D	5	1	1				
86	benzo(k)fluoranthene	0.00	12/01/2023	CL	s4120108.D	5	1	1				
87	benzo(a)pyrene	0.00	12/01/2023	CL	s4120108.D	5	1	1				
88	indeno(1,2,3-cd)pyrene	0.00	12/01/2023	CL	s4120108.D	5	1	1				
89	dibenzo(a,h)anthracene	0.00	12/01/2023	CL	s4120108.D	5	1	1				
90	benzo(g,h,i)perylene	0.00	12/01/2023	CL	s4120108.D	5	1	1				

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Nov23\111523\
Data File : s4111526.D
Acq On : 15 Nov 2023 10:42 pm
Operator : cl
Sample : 67836-09 acid x1
Misc :
ALS Vial : 24 Sample Multiplier: 1

CL
11/22/23 @ 11:45
CharlesL

Quant Time: Nov 17 16:14:32 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration

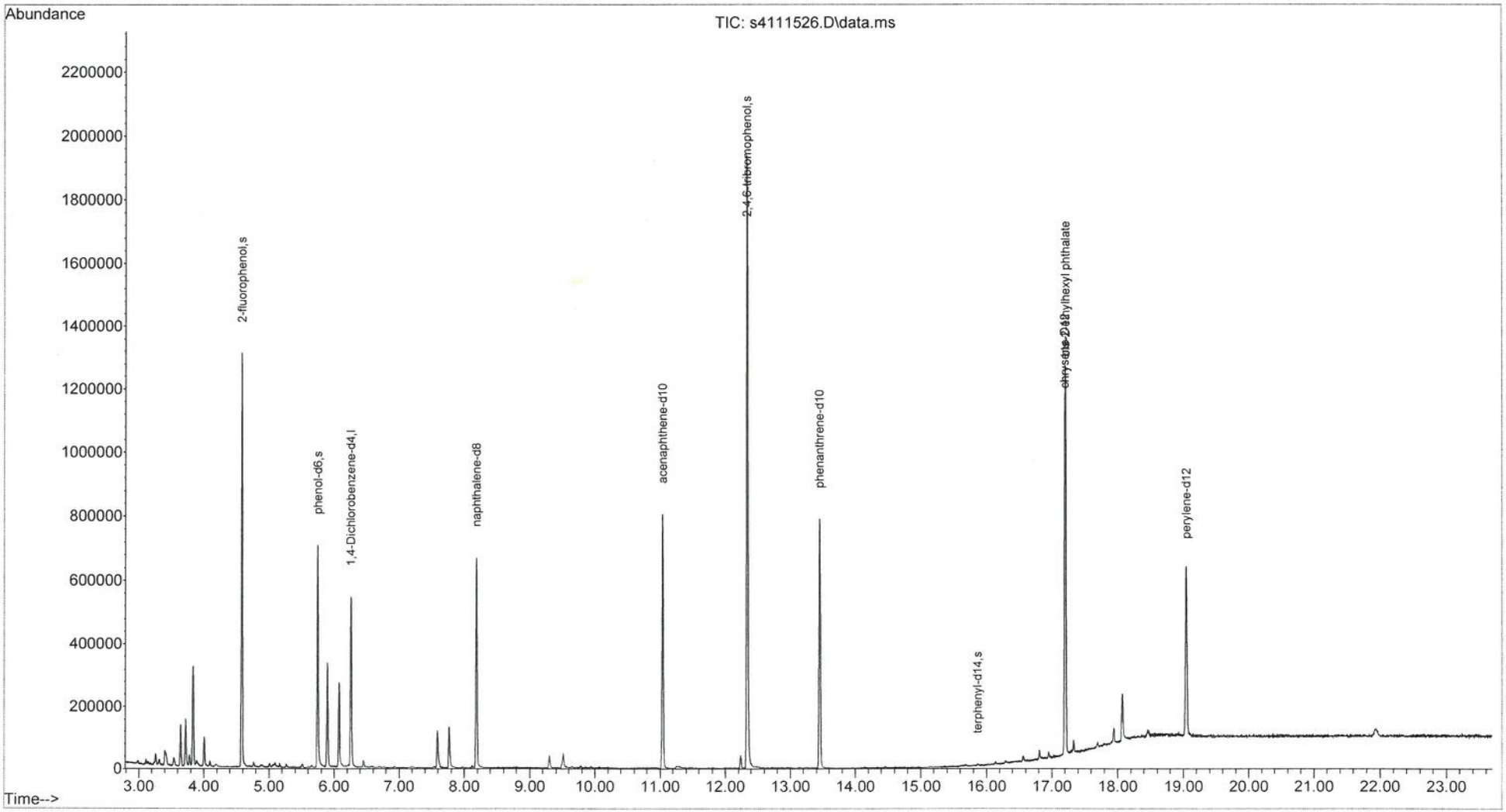
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.255	152	114452	10.00	ug/mL	0.00
21) naphthalene-d8	8.187	136	427138	10.00	ug/mL	0.00
37) acenaphthene-d10	11.041	164	232813	10.00	ug/mL	0.00
58) phenanthrene-d10	13.449	188	441363	10.00	ug/mL	-0.01
74) chrysene-D12	17.197	240	357608	10.00	ug/mL	0.00
83) perylene-d12	19.044	264	307778	10.00	ug/mL	0.00
System Monitoring Compounds						
4) 2-fluorophenol	4.581	112	465859	32.77	ug/mL	0.00
Spiked Amount 200.000			Recovery =	16.39%		
7) phenol-d6	5.746	99	306743	17.76	ug/mL	-0.01
Spiked Amount 200.000			Recovery =	8.88%		
22) nitrobenzene-d5	0.000	82	0	0.00	ug/mL	
Spiked Amount 100.000			Recovery =	0.00%		
38) 2-fluorobiphenyl	0.000	172	0	0.00	ug/mL	
Spiked Amount 100.000			Recovery =	0.00%		
59) 2,4,6-tribromophenol	12.335	330	337650	62.73	ug/mL	0.00
Spiked Amount 200.000			Recovery =	31.36%		
69) o-terphenyl	0.000	230	0	0.00	ug/mL	
Spiked Amount 100.000			Recovery =	0.00%		
72) 1-Chloro-octadecane	0.000	57	0	0.00	ug/mL	
Spiked Amount 100.000			Recovery =	0.00%		
75) terphenyl-d14	15.864	244	1294	0.03	ug/mL	0.00
Spiked Amount 100.000			Recovery =	0.03%		
Target Compounds						Qvalue
82) bis-2-ethylhexyl phtha...	17.210	149	342793	9.625	ug/mL	100
93) DDT	16.629	TIC	2734	Below Cal	#	22

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Nov23\111523\
Data File : s4111526.D
Acq On : 15 Nov 2023 10:42 pm
Operator : cl
Sample : 67836-09 acid x1
Misc :
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Nov 17 16:14:32 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Nov23\112023\
Data File : s4112017.D
Acq On : 20 Nov 2023 09:24 pm
Operator : cl
Sample : 67836-09 bn x1
Misc :
ALS Vial : 17 Sample Multiplier: 1

CL
12/4/23 @ 16:08
CharlesL

Quant Time: Nov 21 08:55:45 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration

RR x5

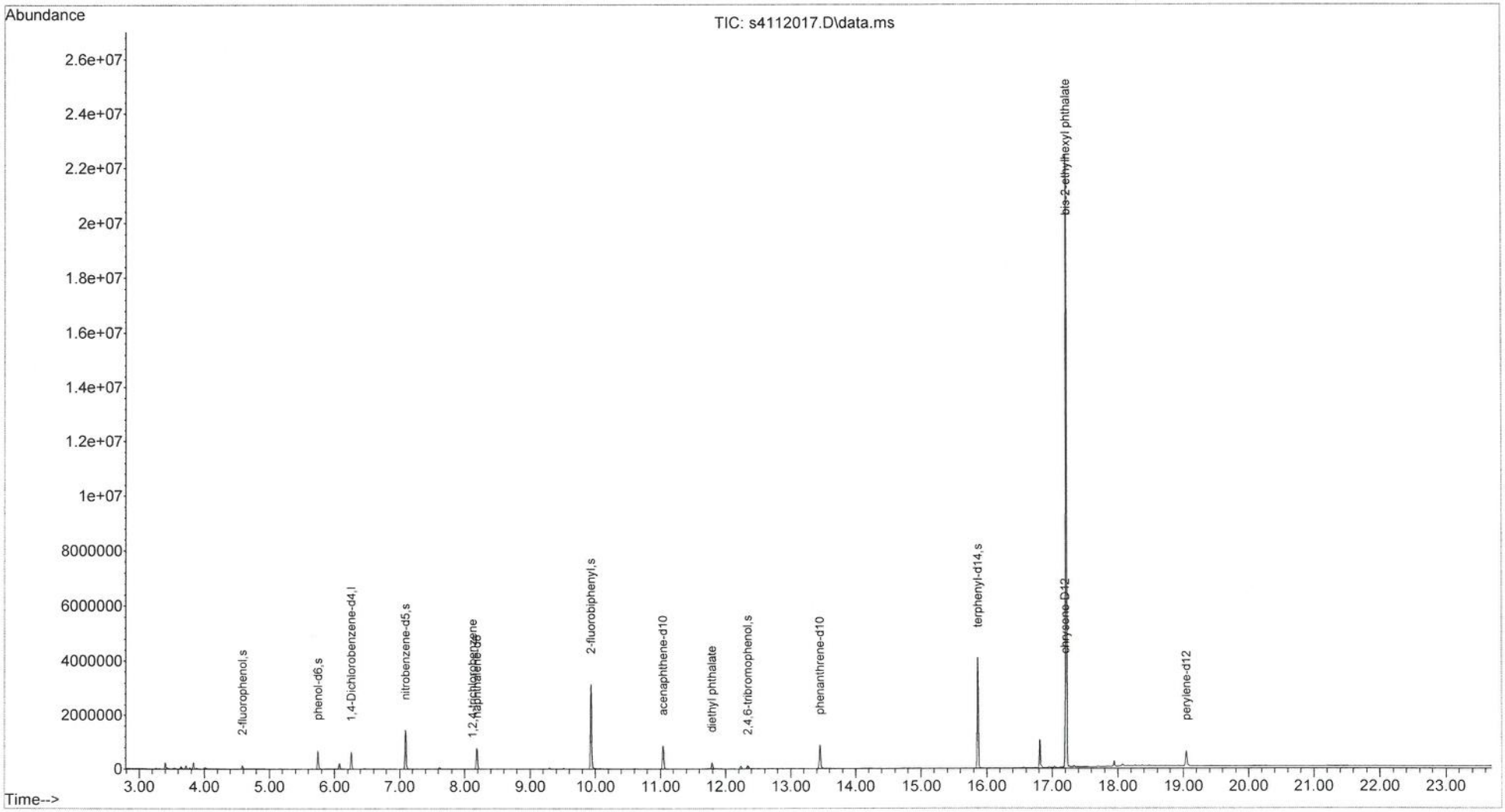
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
Internal Standards							
1) 1,4-Dichlorobenzene-d4	6.255	152	136288	10.00	ug/mL	0.00	
21) naphthalene-d8	8.184	136	496116	10.00	ug/mL	0.00	
37) acenaphthene-d10	11.041	164	256473	10.00	ug/mL	0.00	
58) phenanthrene-d10	13.449	188	477291	10.00	ug/mL	-0.01	
74) chrysene-D12	17.199	240	376004	10.00	ug/mL	0.00	
83) perylene-d12	19.047	264	316053	10.00	ug/mL	0.00	
System Monitoring Compounds							
4) 2-fluorophenol	4.586	112	50638	2.99	ug/mL	0.00	
Spiked Amount 200.000			Recovery =	1.50%			
7) phenol-d6	5.743	99	291154	14.16	ug/mL	-0.01	
Spiked Amount 200.000			Recovery =	7.08%			
22) nitrobenzene-d5	7.091	82	597333	34.30	ug/mL	-0.01	
Spiked Amount 100.000			Recovery =	34.30%			
38) 2-fluorobiphenyl	9.932	172	1398328	34.66	ug/mL	0.00	
Spiked Amount 100.000			Recovery =	34.66%			
59) 2,4,6-tribromophenol	12.340	330	22822	4.00	ug/mL	0.00	
Spiked Amount 200.000			Recovery =	2.00%			
69) o-terphenyl	14.147	230	849	0.00	ug/mL	0.00	
Spiked Amount 100.000			Recovery =	0.00%			
72) 1-Chloro-octadecane	0.000	57	0	0.00	ug/mL		
Spiked Amount 100.000			Recovery =	0.00%			
75) terphenyl-d14	15.867	244	1803396	44.43	ug/mL	0.00	
Spiked Amount 100.000			Recovery =	44.43%			
Target Compounds						Qvalue	
30) 1,2,4-trichlorobenzene	8.120	180	2886	0.072	ug/mL#	98	
55) diethyl phthalate	11.792	149	112772	2.902	ug/mL	99	
71) di-n-butyl phthalate	14.458	149	834	Below Cal	#	78	
79) benzo(a)anthracene	17.199	228	931	Below Cal	#	51	
80) chrysene	17.199	228	931	Below Cal	#	49	
82) bis-2-ethylhexyl phtha...	17.217	149	8791950	233.976	ug/mL	98	Over - cal
93) DDT	16.631	TIC	2155	Below Cal	#	22	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Nov23\112023\
Data File : s4112017.D
Acq On : 20 Nov 2023 09:24 pm
Operator : cl
Sample : 67836-09 bn x1
Misc :
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Nov 21 08:55:45 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Dec23\120123\
Data File : s4120108.D
Acq On : 01 Dec 2023 12:47 pm
Operator : cl
Sample : 67836-09 bn x5
Misc :
ALS Vial : 8 Sample Multiplier: 1

CL
12/5/23 @ 10:31
CharlesL

Quant Time: Dec 01 16:30:55 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.255	152	164800	10.00	ug/mL	0.00
21) naphthalene-d8	8.184	136	556859	10.00	ug/mL	0.00
37) acenaphthene-d10	11.038	164	254361	10.00	ug/mL	-0.01
58) phenanthrene-d10	13.451	188	388825	10.00	ug/mL	0.00
74) chrysene-D12	17.207	240	267685	10.00	ug/mL	# 0.00
83) perylene-d12	19.054	264	130536	10.00	ug/mL	# 0.02
System Monitoring Compounds						
4) 2-fluorophenol	4.584	112	3021	0.15	ug/mL	0.00
Spiked Amount 200.000			Recovery =	0.07%		
7) phenol-d6	5.748	99	50686	2.04	ug/mL	0.00
Spiked Amount 200.000			Recovery =	1.02%		
22) nitrobenzene-d5	7.091	82	129989	6.64	ug/mL	-0.01
Spiked Amount 100.000			Recovery =	6.64%		
38) 2-fluorobiphenyl	9.932	172	308994	7.69	ug/mL	0.00
Spiked Amount 100.000			Recovery =	7.69%		
59) 2,4,6-tribromophenol	0.000	330	0	0.00	ug/mL	
Spiked Amount 200.000			Recovery =	0.00%		
69) o-terphenyl	0.000	230	0	0.00	ug/mL	
Spiked Amount 100.000			Recovery =	0.00%		
72) 1-Chloro-octadecane	0.000	57	0	0.00	ug/mL	
Spiked Amount 100.000			Recovery =	0.00%		
75) terphenyl-d14	15.869	244	269715	9.33	ug/mL	0.00
Spiked Amount 100.000			Recovery =	9.33%		
Target Compounds						Qvalue
55) diethyl phthalate	11.797	149	21271	0.487	ug/mL#	64
78) butyl benzyl phthalate	16.504	149	858	0.061	ug/mL#	26
82) bis-2-ethylhexyl phtha...	17.220	149	1384212	51.770	ug/mL	100
84) di-n-octyl phthalate	17.915	149	815	0.117	ug/mL#	79
93) DDT	16.639	TIC	1169	Below Cal	#	22

Sub - in

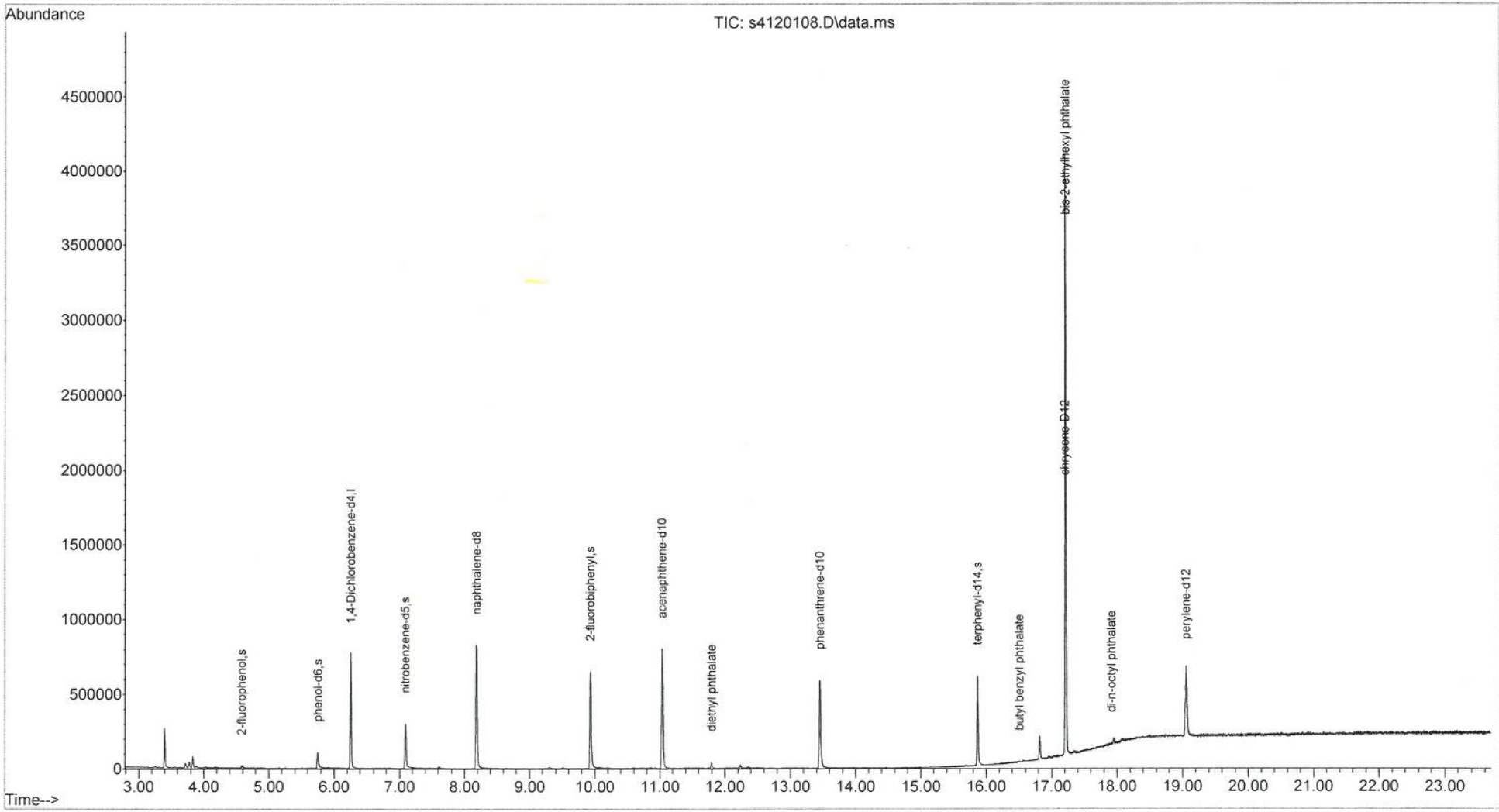
(#) = qualifier out of range (m) = manual integration (+) = signals summed

260
+9.6
269.6

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Dec23\120123\
Data File : s4120108.D
Acq On : 01 Dec 2023 12:47 pm
Operator : cl
Sample : 67836-09 bn x5
Misc :
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Dec 01 16:30:55 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration



This File: **L:\SVOA\Excel Reports\ABN\231205\67836-011**
Analysis Group: **ABN** **Dow Salvage Yard**
Field ID: **SY-OBMW3-110823** **CRE**
Sample: **67836-11 acid x1** **67836-11 bn x1**
Misc:
DataFile: 527.D\S4ABN110223A.XLS 4ABN110223A.XLS
Import File Name **S4 ABN 17124 DoD**
TestGroupID **E8270DoD_A**
Aqueous or Soil? (A or S) **A**
Prep Date **11/14/2023**
Lab#: **67836-011**
QC_Code:
Prep# **17124**

Charles Leahy L:\SVOA\ABN\ABN 8270DoD ImportFileBuilde
12/5/23 11:34 AM
L:\SVOA\ABN\
L:\SVOA\Excel Reports\ABN\231205\
L:\SVOA\PDFReports\

Reviewer Checks:
Quant Report: Reviewed, Analyst Initials & Date
Chromatogram Checked, Major peaks identified
Results consistent w/ other attached analyses
Reanalysis reason noted
Substitute dilution data checked
Correct dilution and reason clear or noted
Flags checked (Expiration, F+, Over Cal, Surr, Aspen, QC)
Other QC failures or issues noted in Aspen
Correct data file and/or date/time in Aspen

Notes:
Reviewer Initials & Date: 12/7/23

#	Surrogate Standards	Conc. (ug/mL)	AnalysisDate	AnalyzedBy	Dil'n	Weight	Volume	Surr	Recovery	Flag	QC Limits
4	2-fluorophenol	35.86	11/15/2023	CL s4111527.D	1	1	1	100	**36%**		21-100
7	phenol-d6	23.66	11/15/2023	CL s4111527.D	1	1	1	100	**24%**		10-102
59	2,4,6-tribromophenol	74.18	11/15/2023	CL s4111527.D	1	1	1	100	**74%**		10-123
22	nitrobenzene-d5	34.58	11/20/2023	CL s4112018.D	1	1	1	50	**69%**		35-114
38	2-fluorobiphenyl	33.88	11/20/2023	CL s4112018.D	1	1	1	50	**68%**		43-116
75	terphenyl-d14	38.65	11/20/2023	CL s4112018.D	1	1	1	50	**77%**		33-141
6	phenol	0.00	11/15/2023	CL s4111527.D	1	1	1				
8	2-chlorophenol	0.00	11/15/2023	CL s4111527.D	1	1	1				
15	2-methylphenol	0.00	11/15/2023	CL s4111527.D	1	1	1				
15	2-methylphenol	0.00	11/15/2023	CL s4111527.D	1	1	1				
20	4-methylphenol	0.00	11/15/2023	CL s4111527.D	1	1	1				
25	2-nitrophenol	0.00	11/15/2023	CL s4111527.D	1	1	1				
26	2,4-dimethylphenol	0.00	11/15/2023	CL s4111527.D	1	1	1				
28	2,4-dichlorophenol	0.00	11/15/2023	CL s4111527.D	1	1	1				
29	2,6-dichlorophenol	0.00	11/15/2023	CL s4111527.D	1	1	1				
32	benzoic acid	0.00	11/15/2023	CL s4111527.D	1	1	1				
35	4-chloro-3-methylphenol	0.00	11/15/2023	CL s4111527.D	1	1	1				
40	2,4,6-trichlorophenol	0.00	11/15/2023	CL s4111527.D	1	1	1				
41	2,4,5-trichlorophenol	0.00	11/15/2023	CL s4111527.D	1	1	1				
51	2,4-dinitrophenol	0.00	11/15/2023	CL s4111527.D	1	1	1				
53	4-nitrophenol	0.00	11/15/2023	CL s4111527.D	1	1	1				
60	4,6-dinitro-2-methylphenol	0.00	11/15/2023	CL s4111527.D	1	1	1				
66	pentachlorophenol	0.00	11/15/2023	CL s4111527.D	1	1	1				
2	N-nitroso-dimethylamine	0.00	11/20/2023	CL s4112018.D	1	1	1				
3	pyridine	0.00	11/20/2023	CL s4112018.D	1	1	1				
5	aniline	0.00	11/20/2023	CL s4112018.D	1	1	1				
9	n-decane	0.00	11/20/2023	CL s4112018.D	1	1	1				
10	bis-(2-choroethyl)ether	0.00	11/20/2023	CL s4112018.D	1	1	1				
11	1,3-dichlorobenzene	0.00	11/20/2023	CL s4112018.D	1	1	1				
12	1,4-diclorobenzene	0.00	11/20/2023	CL s4112018.D	1	1	1				
13	1,2-dichlorobenzene	0.00	11/20/2023	CL s4112018.D	1	1	1				
14	benzyl alcohol	0.00	11/20/2023	CL s4112018.D	1	1	1				
16	2,2'-oxybis(1-chloropropane)	0.00	11/20/2023	CL s4112018.D	1	1	1				
##	acetephenone	#N/A	11/20/2023	CL s4112018.D	1	1	1			#N/A	
18	hexachloroethane	0.00	11/20/2023	CL s4112018.D	1	1	1				
19	N-nitroso-di-n-propylamine	0.00	11/20/2023	CL s4112018.D	1	1	1				
23	nitrobenzene	0.00	11/20/2023	CL s4112018.D	1	1	1				
24	isophorone	0.00	11/20/2023	CL s4112018.D	1	1	1				
27	bis(2-chloroethoxy)methane	0.00	11/20/2023	CL s4112018.D	1	1	1				
30	1,2,4-trichlorobenzene	0.10	11/20/2023	CL s4112018.D	1	1	1				
31	naphthalene	0.00	11/20/2023	CL s4112018.D	1	1	1				
33	4-chloroanaline	0.00	11/20/2023	CL s4112018.D	1	1	1				
34	hexachloro-1,3-butadiene	0.00	11/20/2023	CL s4112018.D	1	1	1				
36	2-methylnaphthalene	0.00	11/20/2023	CL s4112018.D	1	1	1				
39	hexachlorocyclopentadiene	0.00	11/20/2023	CL s4112018.D	1	1	1				
43	2-chloronaphthalene	0.00	11/20/2023	CL s4112018.D	1	1	1				
44	2-nitroanaline	0.00	11/20/2023	CL s4112018.D	1	1	1				
45	acenaphthylene	0.00	11/20/2023	CL s4112018.D	1	1	1				
46	dimethyl phthalate	0.00	11/20/2023	CL s4112018.D	1	1	1				
47	2,6-dinitrotoluene	0.00	11/20/2023	CL s4112018.D	1	1	1				
48	2,4-dinitrotoluene	0.00	11/20/2023	CL s4112018.D	1	1	1				
49	acenaphthene	0.00	11/20/2023	CL s4112018.D	1	1	1				
50	3-nitroanaline	0.00	11/20/2023	CL s4112018.D	1	1	1				
52	dibenzofuran	0.00	11/20/2023	CL s4112018.D	1	1	1				
54	fluorene	0.00	11/20/2023	CL s4112018.D	1	1	1				
55	diethyl phthalate	**2.79**	11/20/2023	CL s4112018.D	1	1	1				
56	4-chlorophenyl phenyl ether	0.00	11/20/2023	CL s4112018.D	1	1	1				
57	4-nitroanaline	0.00	11/20/2023	CL s4112018.D	1	1	1				
61	azobenzene	0.00	11/20/2023	CL s4112018.D	1	1	1				
62	N-nitrosodiphenylamine	0.00	11/20/2023	CL s4112018.D	1	1	1				
63	4-bromophenyl phenyl ether	0.00	11/20/2023	CL s4112018.D	1	1	1				
64	hexachlorobenzene	0.00	11/20/2023	CL s4112018.D	1	1	1				
65	n-octadecane	0.00	11/20/2023	CL s4112018.D	1	1	1				
67	phenanthrene	0.00	11/20/2023	CL s4112018.D	1	1	1				
68	anthracene	0.00	11/20/2023	CL s4112018.D	1	1	1				
70	carbazole	0.00	11/20/2023	CL s4112018.D	1	1	1				
71	di-n-butyl phthalate	0.02	11/20/2023	CL s4112018.D	1	1	1				
73	fluoranthene	0.00	11/20/2023	CL s4112018.D	1	1	1				
76	benzidine	0.00	11/20/2023	CL s4112018.D	1	1	1				
77	pyrene	0.00	11/20/2023	CL s4112018.D	1	1	1				
78	butyl benzyl phthalate	0.00	11/20/2023	CL s4112018.D	1	1	1				
79	benzo(a)anthracene	0.00	11/20/2023	CL s4112018.D	1	1	1				
80	chrysene	0.00	11/20/2023	CL s4112018.D	1	1	1				
81	3,3'-dichlorobenzidine	0.00	11/20/2023	CL s4112018.D	1	1	1				
82	bis-2-ethylhexyl phthalate	**155.36**	11/20/2023	CL s4112018.D	1	1	1			OverCal?	
84	di-n-octyl phthalate	0.00	11/20/2023	CL s4112018.D	1	1	1				
85	Benzo(b)fluoranthene	0.00	11/20/2023	CL s4112018.D	1	1	1				
86	benzo(k)fluoranthene	0.00	11/20/2023	CL s4112018.D	1	1	1				
87	benzo(a)pyrene	0.00	11/20/2023	CL s4112018.D	1	1	1				
88	indeno(1,2,3-cd)pyrene	0.00	11/20/2023	CL s4112018.D	1	1	1				
89	dibenzo(a,h)anthracene	0.00	11/20/2023	CL s4112018.D	1	1	1				
90	benzo(g,h,i)perylene	0.00	11/20/2023	CL s4112018.D	1	1	1				

This File:	**L:\SVOA\Excel Reports\ABN\231205\67836-011**		Charles Leahy L:\SVOA\ABN\ABN 8270DoD ImportFileBuilde
Analysis Group:	**ABN**	**Dow Salvage Yard**	12/5/23 11:36 AM
Field ID:	**SY-OBMW3-110823**	**CRE**	L:\SVOA\ABN\
Sample:	**67836-11 acid x1**	**67836-11 bn x5**	L:\SVOA\Excel Reports\ABN\231205\
Misc:			L:\SVOA\PDFReports\
DataFile:	527.D\S4ABN110223A.XLS	4ABN110223A.XLS	
Import File Name	**S4 ABN 17124 DoD**		
TestGroupID	**E8270DoD_A**		
Aqueous or Soil? (A or S)	**A**		
Prep Date	**11/14/2023**		
Lab#:	**67836-011**		
QC_Code:			
Prep#	**17124**		

Reviewer Checks:

Quant Report: Reviewed, Analyst Initials & Date
Chromatogram Checked, Major peaks identified
Results consistent w/ other attached analyses
Reanalysis reason noted
Substitute dilution data checked
Correct dilution and reason clear or noted
Flags checked (Expiration, F+, Over Cal, Surr, Aspen, QC)
Other QC failures or issues noted in Aspen
Correct data file and/or date/time in Aspen

Notes:
Reviewer Initials & Date:

#	Surrogate Standards	Conc. (ug/mL)	AnalysisDate	AnalyzedBy	Dil'n	Weight	Volume	Surr	Recovery	Flag	QC Limits
4	2-fluorophenol	35.86	11/15/2023	CL s4111527.D	1	1	1	100	**36%**		21-100
7	phenol-d6	23.66	11/15/2023	CL s4111527.D	1	1	1	100	**24%**		10-102
59	2,4,6-tribromophenol	74.18	11/15/2023	CL s4111527.D	1	1	1	100	**74%**		10-123
22	nitrobenzene-d5	6.60	12/01/2023	CL s4120109.D	5	1	1	50	**66%**		35-114
38	2-fluorobiphenyl	7.42	12/01/2023	CL s4120109.D	5	1	1	50	**74%**		43-116
75	terphenyl-d14	7.93	12/01/2023	CL s4120109.D	5	1	1	50	**79%**		33-141
6	phenol	0.00	11/15/2023	CL s4111527.D	1	1	1				
8	2-chlorophenol	0.00	11/15/2023	CL s4111527.D	1	1	1				
15	2-methylphenol	0.00	11/15/2023	CL s4111527.D	1	1	1				
15	2-methylphenol	0.00	11/15/2023	CL s4111527.D	1	1	1				
20	4-methylphenol	0.00	11/15/2023	CL s4111527.D	1	1	1				
25	2-nitrophenol	0.00	11/15/2023	CL s4111527.D	1	1	1				
26	2,4-dimethylphenol	0.00	11/15/2023	CL s4111527.D	1	1	1				
28	2,4-dichlorophenol	0.00	11/15/2023	CL s4111527.D	1	1	1				
29	2,6-dichlorophenol	0.00	11/15/2023	CL s4111527.D	1	1	1				
32	benzoic acid	0.00	11/15/2023	CL s4111527.D	1	1	1				
35	4-chloro-3-methylphenol	0.00	11/15/2023	CL s4111527.D	1	1	1				
40	2,4,6-trichlorophenol	0.00	11/15/2023	CL s4111527.D	1	1	1				
41	2,4,5-trichlorophenol	0.00	11/15/2023	CL s4111527.D	1	1	1				
51	2,4-dinitrophenol	0.00	11/15/2023	CL s4111527.D	1	1	1				
53	4-nitrophenol	0.00	11/15/2023	CL s4111527.D	1	1	1				
60	4,6-dinitro-2-methylphenol	0.00	11/15/2023	CL s4111527.D	1	1	1				
66	pentachlorophenol	0.00	11/15/2023	CL s4111527.D	1	1	1				
2	N-nitroso-dimethylamine	0.00	12/01/2023	CL s4120109.D	5	1	1				
3	pyridine	0.00	12/01/2023	CL s4120109.D	5	1	1				
5	aniline	0.00	12/01/2023	CL s4120109.D	5	1	1				
9	n-decane	0.00	12/01/2023	CL s4120109.D	5	1	1				
10	bis-(2-choroethyl)ether	0.00	12/01/2023	CL s4120109.D	5	1	1				
11	1,3-dichlorobenzene	0.00	12/01/2023	CL s4120109.D	5	1	1				
12	1,4-diclorobenzene	0.00	12/01/2023	CL s4120109.D	5	1	1				
13	1,2-dichlorobenzene	0.00	12/01/2023	CL s4120109.D	5	1	1				
14	benzyl alcohol	0.00	12/01/2023	CL s4120109.D	5	1	1				
16	2,2'-oxybis(1-chloropropane)	0.00	12/01/2023	CL s4120109.D	5	1	1				
##	acetephenone	#N/A	12/01/2023	CL s4120109.D	5	1	1			#N/A	
18	hexachloroethane	0.00	12/01/2023	CL s4120109.D	5	1	1				
19	N-nitroso-di-n-propylamine	0.00	12/01/2023	CL s4120109.D	5	1	1				
23	nitrobenzene	0.00	12/01/2023	CL s4120109.D	5	1	1				
24	isophorone	0.00	12/01/2023	CL s4120109.D	5	1	1				
27	bis(2-chloroethoxy)methane	0.00	12/01/2023	CL s4120109.D	5	1	1				
30	1,2,4-trichlorobenzene	0.00	12/01/2023	CL s4120109.D	5	1	1				
31	naphthalene	0.00	12/01/2023	CL s4120109.D	5	1	1				
33	4-chloroanaline	0.00	12/01/2023	CL s4120109.D	5	1	1				
34	hexachloro-1,3-butadiene	0.00	12/01/2023	CL s4120109.D	5	1	1				
36	2-methylnaphthalene	0.00	12/01/2023	CL s4120109.D	5	1	1				
39	hexachlorocyclopentadiene	0.00	12/01/2023	CL s4120109.D	5	1	1				
43	2-chloronaphthalene	0.00	12/01/2023	CL s4120109.D	5	1	1				
44	2-nitroanaline	0.00	12/01/2023	CL s4120109.D	5	1	1				
45	acenaphthylene	0.00	12/01/2023	CL s4120109.D	5	1	1				
46	dimethyl phthalate	0.00	12/01/2023	CL s4120109.D	5	1	1				
47	2,6-dinitrotoluene	0.00	12/01/2023	CL s4120109.D	5	1	1				
48	2,4-dinitrotoluene	0.00	12/01/2023	CL s4120109.D	5	1	1				
49	acenaphthene	0.00	12/01/2023	CL s4120109.D	5	1	1				
50	3-nitroanaline	0.00	12/01/2023	CL s4120109.D	5	1	1				
52	dibenzofuran	0.00	12/01/2023	CL s4120109.D	5	1	1				
54	fluorene	0.00	12/01/2023	CL s4120109.D	5	1	1				
55	diethyl phthalate	0.47	12/01/2023	CL s4120109.D	5	1	1				
56	4-chlorophenyl phenyl ether	0.00	12/01/2023	CL s4120109.D	5	1	1				
57	4-nitroanaline	0.00	12/01/2023	CL s4120109.D	5	1	1				
61	azobenzene	0.00	12/01/2023	CL s4120109.D	5	1	1				
62	N-nitrosodiphenylamine	0.00	12/01/2023	CL s4120109.D	5	1	1				
63	4-bromophenyl phenyl ether	0.00	12/01/2023	CL s4120109.D	5	1	1				
64	hexachlorobenzene	0.00	12/01/2023	CL s4120109.D	5	1	1				
65	n-octadecane	0.00	12/01/2023	CL s4120109.D	5	1	1				
67	phenanthrene	0.00	12/01/2023	CL s4120109.D	5	1	1				
68	anthracene	0.00	12/01/2023	CL s4120109.D	5	1	1				
70	carbazole	0.00	12/01/2023	CL s4120109.D	5	1	1				
71	di-n-butyl phthalate	0.00	12/01/2023	CL s4120109.D	5	1	1				
73	fluoranthene	0.00	12/01/2023	CL s4120109.D	5	1	1				
76	benzidine	0.00	12/01/2023	CL s4120109.D	5	1	1				
77	pyrene	0.00	12/01/2023	CL s4120109.D	5	1	1				
78	butyl benzyl phthalate	0.00	12/01/2023	CL s4120109.D	5	1	1				
79	benzo(a)anthracene	0.00	12/01/2023	CL s4120109.D	5	1	1				
80	chrysene	0.00	12/01/2023	CL s4120109.D	5	1	1				
81	3,3'-dichlorobenzidine	0.00	12/01/2023	CL s4120109.D	5	1	1				
82	bis-2-ethylhexyl phthalate	**32.39**	12/01/2023	CL s4120109.D	5	1	1				
84	di-n-octyl phthalate	0.17	12/01/2023	CL s4120109.D	5	1	1				
85	Benzo(b)fluoranthene	0.00	12/01/2023	CL s4120109.D	5	1	1				
86	benzo(k)fluoranthene	0.00	12/01/2023	CL s4120109.D	5	1	1				
87	benzo(a)pyrene	0.00	12/01/2023	CL s4120109.D	5	1	1				
88	indeno(1,2,3-cd)pyrene	0.00	12/01/2023	CL s4120109.D	5	1	1				
89	dibenzo(a,h)anthracene	0.00	12/01/2023	CL s4120109.D	5	1	1				
90	benzo(g,h,i)perylene	0.00	12/01/2023	CL s4120109.D	5	1	1				

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Nov23\111523\
Data File : s4111527.D
Acq On : 15 Nov 2023 11:12 pm
Operator : cl
Sample : 67836-11 acid x1
Misc :
ALS Vial : 25 Sample Multiplier: 1

CL
11/22/23 @ 11:45
CharlesL

Quant Time: Nov 17 16:14:37 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration

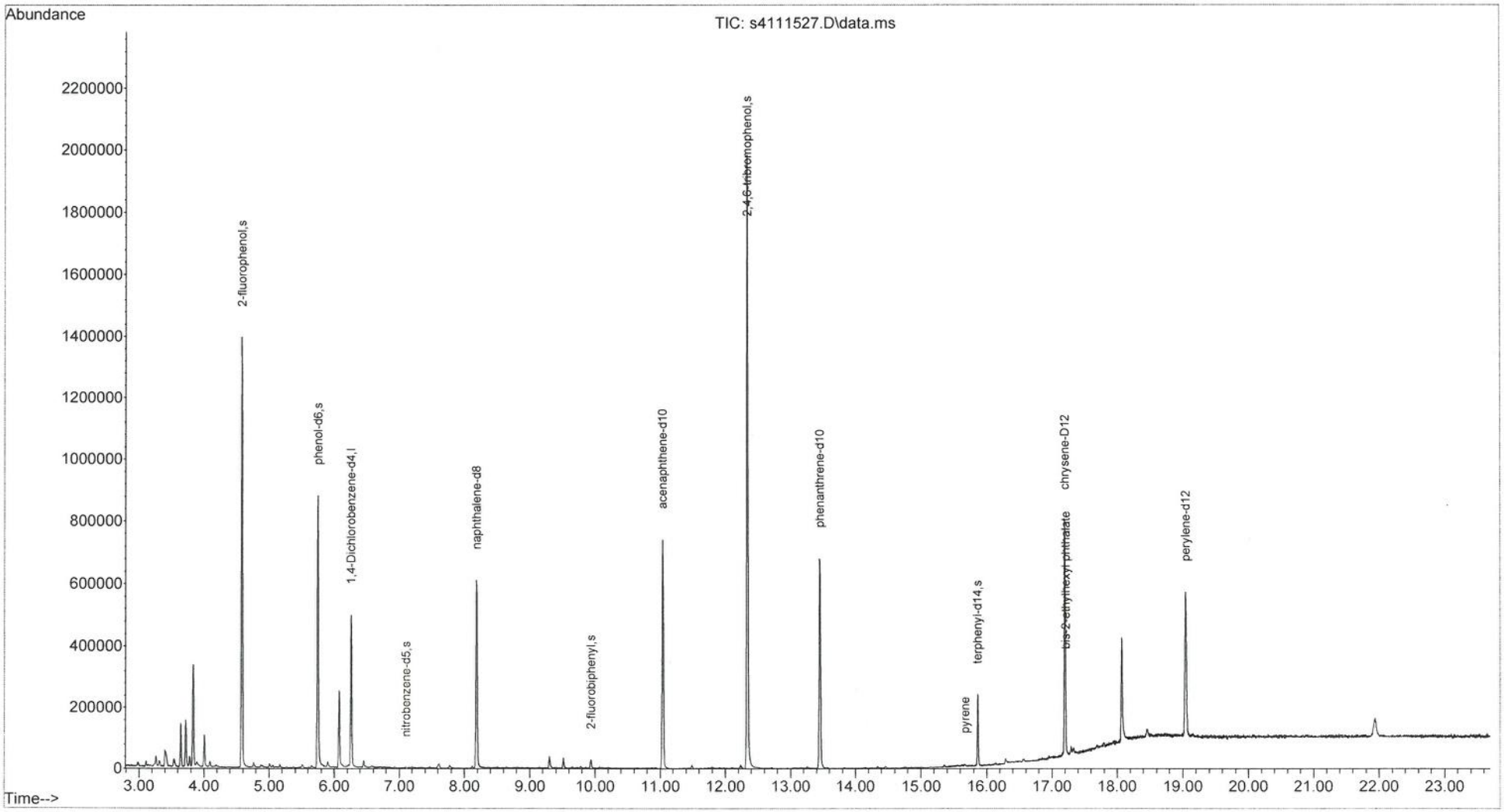
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.255	152	108489	10.00	ug/mL	0.00
21) naphthalene-d8	8.187	136	399723	10.00	ug/mL	0.00
37) acenaphthene-d10	11.038	164	215343	10.00	ug/mL	0.00
58) phenanthrene-d10	13.449	188	394207	10.00	ug/mL	#-0.01
74) chrysene-D12	17.194	240	305307	10.00	ug/mL	0.00
83) perylene-d12	19.042	264	263996	10.00	ug/mL	0.00
System Monitoring Compounds						
4) 2-fluorophenol	4.581	112	483230	35.86	ug/mL	0.00
Spiked Amount 200.000			Recovery =	17.93%		
7) phenol-d6	5.746	99	387264	23.66	ug/mL	-0.01
Spiked Amount 200.000			Recovery =	11.83%		
22) nitrobenzene-d5	7.101	82	979	0.06	ug/mL	0.00
Spiked Amount 100.000			Recovery =	0.06%		
38) 2-fluorobiphenyl	9.935	172	12205	0.32	ug/mL	0.00
Spiked Amount 100.000			Recovery =	0.32%		
59) 2,4,6-tribromophenol	12.338	330	356679	74.18	ug/mL	0.00
Spiked Amount 200.000			Recovery =	37.09%		
69) o-terphenyl	0.000	230	0	0.00	ug/mL	
Spiked Amount 100.000			Recovery =	0.00%		
72) 1-Chloro-octadecane	0.000	57	0	0.00	ug/mL	
Spiked Amount 100.000			Recovery =	0.00%		
75) terphenyl-d14	15.862	244	98174	2.97	ug/mL	0.00
Spiked Amount 100.000			Recovery =	2.97%		
Target Compounds						Qvalue
24) isophorone	7.463	82	1056	Below Cal	#	63
67) phenanthrene	13.492	178	2724m	Below Cal		
68) anthracene	13.563	178	2069m	Below Cal		
70) carbazole	13.828	167	1942	Below Cal	#	60
73) fluoranthene	15.357	202	2845m	Below Cal		
77) pyrene	15.665	202	2436m	0.021	ug/mL	
79) benzo(a)anthracene	17.182	228	2604m	Below Cal		
80) chrysene	17.227	228	2298m	Below Cal		
82) bis-2-ethylhexyl phtha...	17.210	149	26473	0.902	ug/mL	# 97
93) DDT	16.636	TIC	1305	Below Cal	#	22

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Nov23\111523\
Data File : s4111527.D
Acq On : 15 Nov 2023 11:12 pm
Operator : cl
Sample : 67836-11 acid x1
Misc :
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Nov 17 16:14:37 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Nov23\112023\
Data File : s4112018.D
Acq On : 20 Nov 2023 09:53 pm
Operator : cl
Sample : 67836-11 bn x1
Misc :
ALS Vial : 18 Sample Multiplier: 1

CL
12/4/23 @ 16:09
CharlesL

Quant Time: Nov 21 08:55:50 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration

RR x5

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.258	152	110684	10.00	ug/mL	0.00
21) naphthalene-d8	8.184	136	403535	10.00	ug/mL	-0.01
37) acenaphthene-d10	11.040	164	214389	10.00	ug/mL	0.00
58) phenanthrene-d10	13.448	188	401821	10.00	ug/mL	-0.01
74) chrysene-D12	17.199	240	338798	10.00	ug/mL	0.00
83) perylene-d12	19.044	264	296339	10.00	ug/mL	0.00
System Monitoring Compounds						
4) 2-fluorophenol	4.588	112	6735	0.49	ug/mL	0.00
Spiked Amount 200.000			Recovery =	0.25%		
7) phenol-d6	5.748	99	42781	2.56	ug/mL	0.00
Spiked Amount 200.000			Recovery =	1.28%		
22) nitrobenzene-d5	7.091	82	489783	34.58	ug/mL	-0.01
Spiked Amount 100.000			Recovery =	34.58%		
38) 2-fluorobiphenyl	9.932	172	1142713	33.88	ug/mL	-0.01
Spiked Amount 100.000			Recovery =	33.88%		
59) 2,4,6-tribromophenol	0.000	330	0	0.00	ug/mL	
Spiked Amount 200.000			Recovery =	0.00%		
69) o-terphenyl	0.000	230	0	0.00	ug/mL	
Spiked Amount 100.000			Recovery =	0.00%		
72) 1-Chloro-octadecane	0.000	57	0	0.00	ug/mL	
Spiked Amount 100.000			Recovery =	0.00%		
75) terphenyl-d14	15.864	244	1413813	38.65	ug/mL	0.00
Spiked Amount 100.000			Recovery =	38.65%		
Target Compounds						Qvalue
30) 1,2,4-trichlorobenzene	8.120	180	2803	0.105	ug/mL#	57
42) 1,1'-Biphenyl	10.085	154	2709m	Below Cal		
55) diethyl phthalate	11.795	149	90790	2.792	ug/mL	98
71) di-n-butyl phthalate	14.468	149	1908	0.020	ug/mL#	78
82) bis-2-ethylhexyl phtha...	17.215	149	5259832	155.361	ug/mL	99
93) DDT	16.634	TIC	3582	Below Cal	#	22

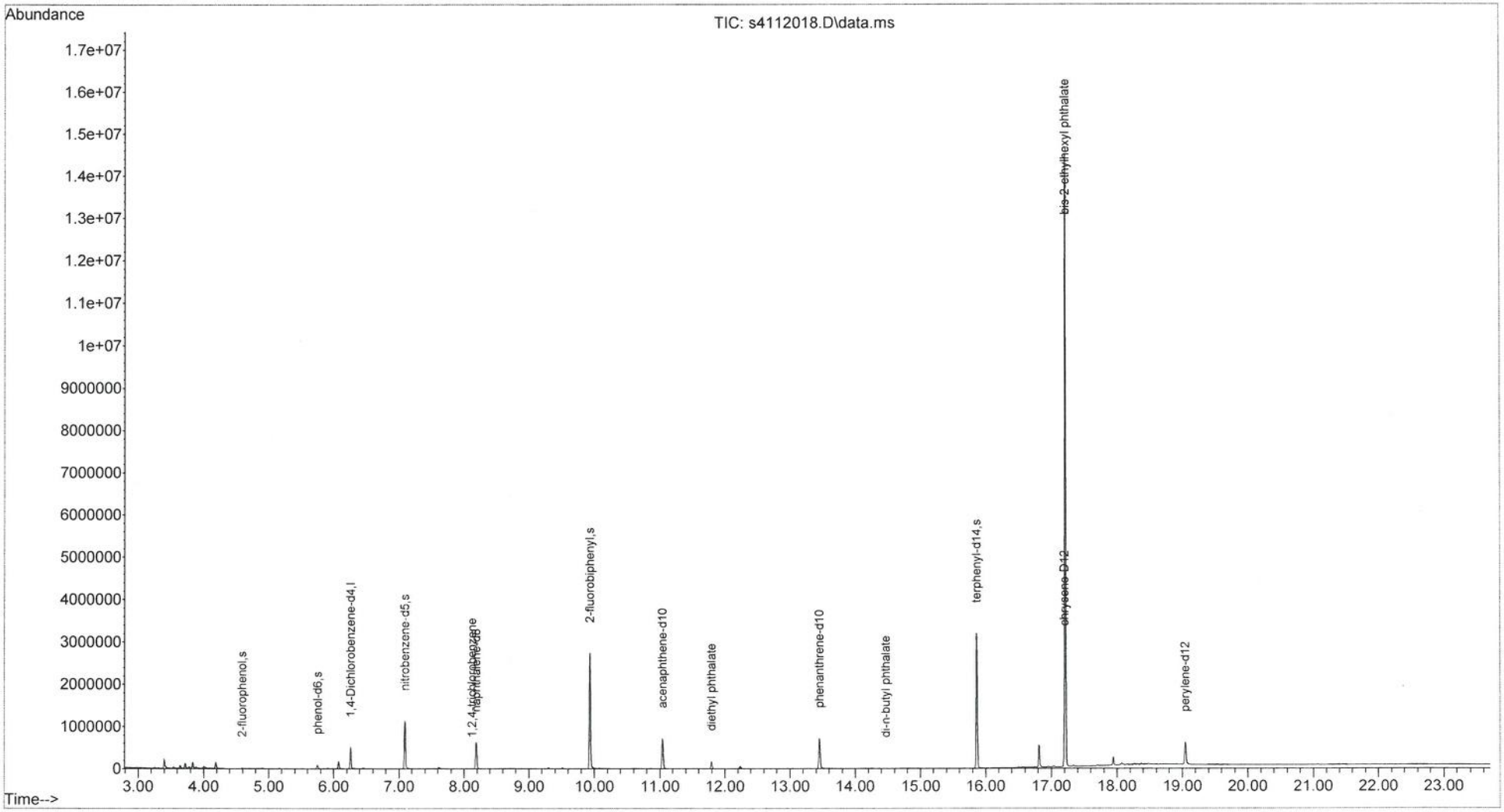
Over - cal

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Nov23\112023\
Data File : s4112018.D
Acq On : 20 Nov 2023 09:53 pm
Operator : cl
Sample : 67836-11 bn x1
Misc :
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Nov 21 08:55:50 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Dec23\120123\
Data File : s4120109.D
Acq On : 01 Dec 2023 01:17 pm
Operator : cl
Sample : 67836-11 bn x5
Misc :
ALS Vial : 9 Sample Multiplier: 1

CL
12/5/23 @ 10:32
CharlesL

Quant Time: Dec 01 16:30:59 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	6.255	152	139611	10.00	ug/mL		0.00
21) naphthalene-d8	8.184	136	478031	10.00	ug/mL		0.00
37) acenaphthene-d10	11.041	164	228005	10.00	ug/mL		0.00
58) phenanthrene-d10	13.454	188	354544	10.00	ug/mL	#	0.00
74) chrysene-D12	17.207	240	256671	10.00	ug/mL	#	0.00
83) perylene-d12	19.060	264	280353	10.00	ug/mL		0.02
System Monitoring Compounds							
4) 2-fluorophenol	0.000	112	0	0.00	ug/mL		
Spiked Amount 200.000			Recovery =	0.00%			
7) phenol-d6	5.758	99	3220	0.15	ug/mL		0.00
Spiked Amount 200.000			Recovery =	0.07%			
22) nitrobenzene-d5	7.091	82	110965	6.60	ug/mL		0.00
Spiked Amount 100.000			Recovery =	6.60%			
38) 2-fluorobiphenyl	9.932	172	267336	7.42	ug/mL		0.00
Spiked Amount 100.000			Recovery =	7.42%			
59) 2,4,6-tribromophenol	0.000	330	0	0.00	ug/mL		
Spiked Amount 200.000			Recovery =	0.00%			
69) o-terphenyl	0.000	230	0	0.00	ug/mL		
Spiked Amount 100.000			Recovery =	0.00%			
72) 1-Chloro-octadecane	0.000	57	0	0.00	ug/mL		
Spiked Amount 100.000			Recovery =	0.00%			
75) terphenyl-d14	15.869	244	219942	7.93	ug/mL		0.00
Spiked Amount 100.000			Recovery =	7.93%			
Target Compounds							Qvalue
49) acenaphthene	11.036	154	1089	Below Cal		#	4
55) diethyl phthalate	11.795	149	18517	0.470	ug/mL	#	95
82) bis-2-ethylhexyl phtha...	17.217	149	830109	32.392	ug/mL		99
84) di-n-octyl phthalate	17.946	149	4693	0.172	ug/mL	#	66
93) DDT	16.634	TIC	2832	Below Cal		#	22

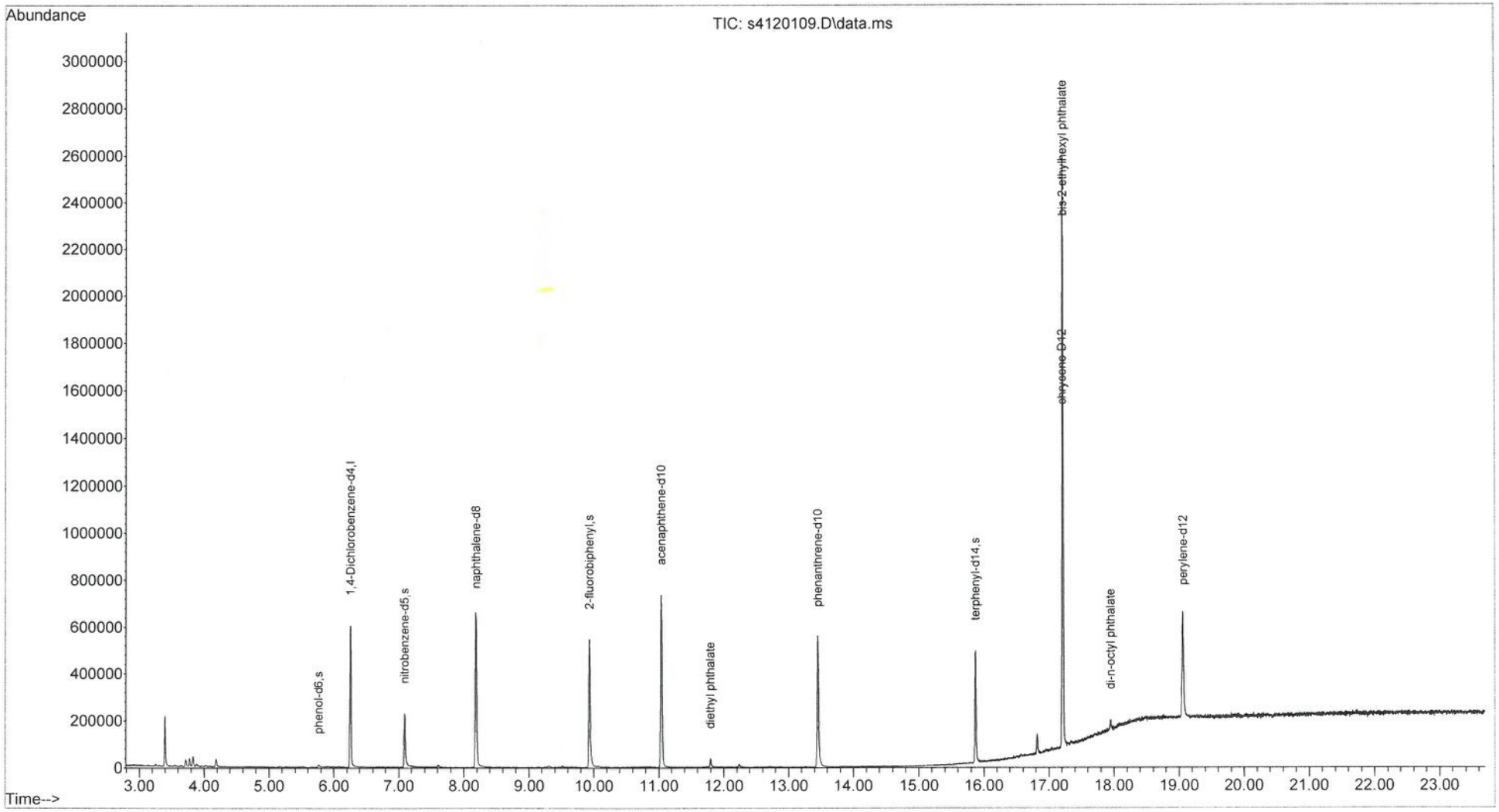
Sub - in

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Dec23\120123\
Data File : s4120109.D
Acq On : 01 Dec 2023 01:17 pm
Operator : cl
Sample : 67836-11 bn x5
Misc :
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Dec 01 16:30:59 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration



This File:	L:\SVOA\Excel Reports\EPH\231214\67836-001		
Analysis Group:	EPH	Dow Salvage Yard	
Field ID:	SY-08MW2-110823	CRE	
Sample:	67836-01 targets x1	67836-01 aro x1	67836-01 ali x1
Misc:	aro frac		
Method Name:	SVOA04 Method 8270E (€	S6 EPH Aromatics	S6 EPH Aliphatics
Import File Name:	s6 EPHs QC17156W		
TestGroupID:	EMA_EPH_PresCert_A		
Aqueous or Soil? (A or S)	A		
Fractionated? (Y/N)	Y	Y	
Prep Date:	11/20/2023		
Lab#:	67836-001		
QC_Code:			
Prep#	17156		

Donna Valley L:\SVOA\EPH\EPH ImportFileBuilder2.0.xls
12/14/23 12:04 PM
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L:\SVOA\Excel Reports\EPH\2312
L:\SVOA\PDF Reports\FUELS\

Reviewer Checks:

Quant Report: Reviewed? Ranges integrated? Analyst Initials & Date?	1
Chromatogram Checked? Major peaks identified?	2
Soil prep data checked: weight, volume, %solid, Prep date	5
Field ID consistent with data and any field replicates	11
Results consistent with any re-runs & internal QC	16
Substitute dilution data checked	20
Correct dilution and reason clear or noted	
Reason for reanalysis documented	
Surrogates pass or flagged & noted	
Flags checked (Expiration, F+, Over Cal)	
Other QC failures, estimates or interferences documented	
Spot checked Reported Result with Quant Report	
Checked Audit flagged data in LIMS	

Notes:

Initials & Date: 12/14/23

X:\S4\2023\Dec23\120723\s4120739.D\S4PAH110223A.XLS PAH targets filename
X:\S6\2023\Dec23\120723\s6120768.D\S6ARO100423F.XLS aromatics filename
X:\S6\2023\Dec23\120723.SEC\s6120767.D\S6ALI100423A.XLS aliphatics filename

#	Surrogate Standards	Concentration (ug/mL)	AnalysisDate	AnalysisTime	AnalyzedBy	Dilution	Weight	Volume	Surr	Recovery	Flag	QC Limits
13	SS 1-chloro-octadecane (COD)	21.6618223	12/8/2023	09:30:00 AM	DBV s6120767.D	1	1	2	100	**43%**		40-140
10	SS ortho-terphenyl (OTP)	30.36452353	12/8/2023	09:30:00 AM	DBV s6120768.D	1	1	2	100	**61%**		40-140
3	SS 2-fluorobiphenyl (2FBP)	14.76673393	12/8/2023	09:30:00 AM	DBV s6120768.D	1	1	2	40	**74%**		40-140
5	SS 2-bromonaphthalene (2BN)	15.21245894	12/8/2023	09:30:00 AM	DBV s6120768.D	1	1	2	40	**76%**		40-140

#	AnalyteName	Concentration (ug/mL)	AnalysisDate	AnalysisTime	AnalyzedBy	Dilution	Weight	Volume
3	naphthalene	0	12/08/2023	05:24:00 AM	CL s4120739.D	1	1	2
4	2-methylnaphthalene	0	12/08/2023	05:24:00 AM	CL s4120739.D	1	1	2
12	phenanthrene	0	12/08/2023	05:24:00 AM	CL s4120739.D	1	1	2
8	acenaphthene	0	12/08/2023	05:24:00 AM	CL s4120739.D	1	1	2
7	acenaphthylene	0	12/08/2023	05:24:00 AM	CL s4120739.D	1	1	2
10	fluorene	0	12/08/2023	05:24:00 AM	CL s4120739.D	1	1	2
13	anthracene	0	12/08/2023	05:24:00 AM	CL s4120739.D	1	1	2
15	fluoranthene	0	12/08/2023	05:24:00 AM	CL s4120739.D	1	1	2
17	pyrene	0	12/08/2023	05:24:00 AM	CL s4120739.D	1	1	2
18	benzo(a)anthracene	0	12/08/2023	05:24:00 AM	CL s4120739.D	1	1	2
19	chrysene	0	12/08/2023	05:24:00 AM	CL s4120739.D	1	1	2
21	benzo(b)fluoranthene	0	12/08/2023	05:24:00 AM	CL s4120739.D	1	1	2
22	benzo(k)fluoranthene	0	12/08/2023	05:24:00 AM	CL s4120739.D	1	1	2
23	benzo(a)pyrene	0	12/08/2023	05:24:00 AM	CL s4120739.D	1	1	2
24	indeno(1,2,3-cd)pyrene	0	12/08/2023	05:24:00 AM	CL s4120739.D	1	1	2
25	dibenzo(a,h)anthracene	0	12/08/2023	05:24:00 AM	CL s4120739.D	1	1	2
26	benzo(g,h,i)perylene	0	12/08/2023	05:24:00 AM	CL s4120739.D	1	1	2
20	C11-C22 Aromatics	23.05031616	12/8/2023	09:30:00 AM	DBV s6120768.D	1	1	2
9	C9-C18 Aliphatics	7.192688012	12/8/2023	09:30:00 AM	DBV s6120767.D	1	1	2
20	C19-C36 Aliphatics	16.7765819	12/8/2023	09:30:00 AM	DBV s6120767.D	1	1	2
	Adjusted C11-C22 Aromatics	23.05031616	12/8/2023	09:30:00 AM	DBV s6120768.D	1	1	2

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Dec23\120723\
Data File : s4120739.D
Acq On : 08 Dec 2023 05:24 am
Operator : cl
Sample : 67836-01 targets x1
Misc : aro frac
ALS Vial : 34 Sample Multiplier: 1

C L
12/8/23 @ 15:33
CharlesL

Quant Time: Dec 08 09:00:13 2023
Quant Method : X:\S4\methods\S4PAH110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration

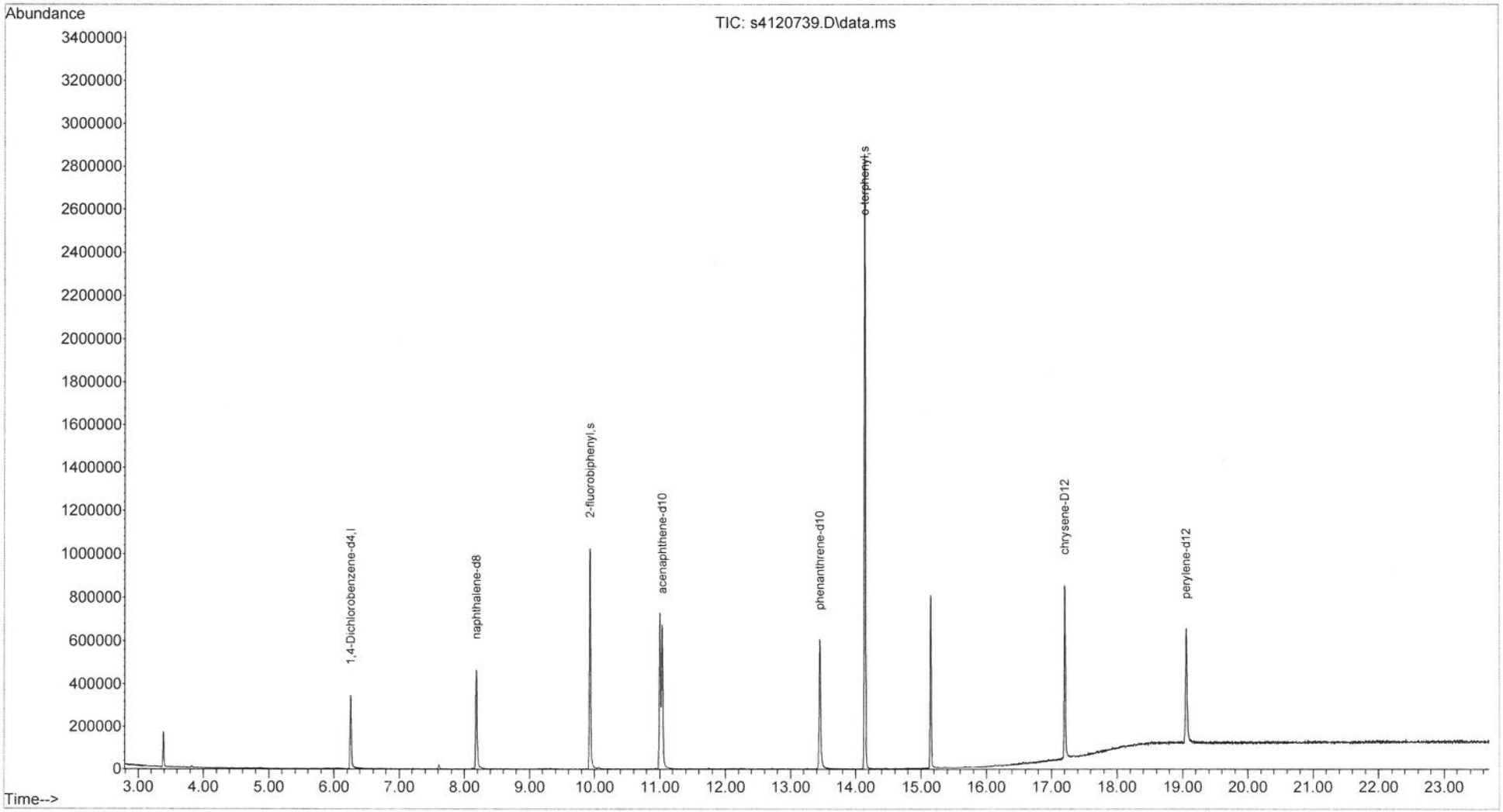
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.250	152	81512	10.00	ug/mL	-0.01
2) naphthalene-d8	8.182	136	338376	10.00	ug/mL	-0.01
5) acenaphthene-d10	11.035	164	197039	10.00	ug/mL	-0.01
11) phenanthrene-d10	13.449	188	386857	10.00	ug/mL	-0.01
16) chrysene-D12	17.205	240	352220	10.00	ug/mL	0.00
20) perylene-d12	19.052	264	328459	10.00	ug/mL	0.01
System Monitoring Compounds						
6) 2-fluorobiphenyl	9.930	172	483659	15.58	ug/mL	-0.01
Spiked Amount 100.000			Recovery = 15.58%			
14) o-terphenyl	14.142	230	777332	35.39	ug/mL	-0.01
Spiked Amount 100.000			Recovery = 35.39%			
Target Compounds						Qvalue
15) fluoranthene	15.365	202	812	Below Cal	#	64
17) pyrene	15.676	202	974	Below Cal	#	57
18) benzo(a)anthracene	17.238	228	1219	Below Cal	#	51
19) chrysene	17.238	228	1219	Below Cal	#	49

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Dec23\120723\
Data File : s4120739.D
Acq On : 08 Dec 2023 05:24 am
Operator : cl
Sample : 67836-01 targets x1
Misc : aro frac
ALS Vial : 34 Sample Multiplier: 1

Quant Time: Dec 08 09:00:13 2023
Quant Method : X:\S4\methods\S4PAH110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration



SFP
12/12/23 @ 12:24
SkylaM

Data Path : X:\S6\2023\Dec23\120723\
Data File : s6120768.D
Signal(s) : FID1A.ch
Acq On : 08 Dec 2023 09:30 am
Operator : dbv
Sample : 67836-01 aro x1
Misc :
ALS Vial : 34 Sample Multiplier: 1

Integration File: rteint.p
Quant Time: Dec 08 17:08:59 2023
Quant Method : X:\S6\methods\S6ARO100423F.M
Quant Title : S6 EPH Aromatics
QLast Update : Thu Oct 05 11:16:37 2023
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :

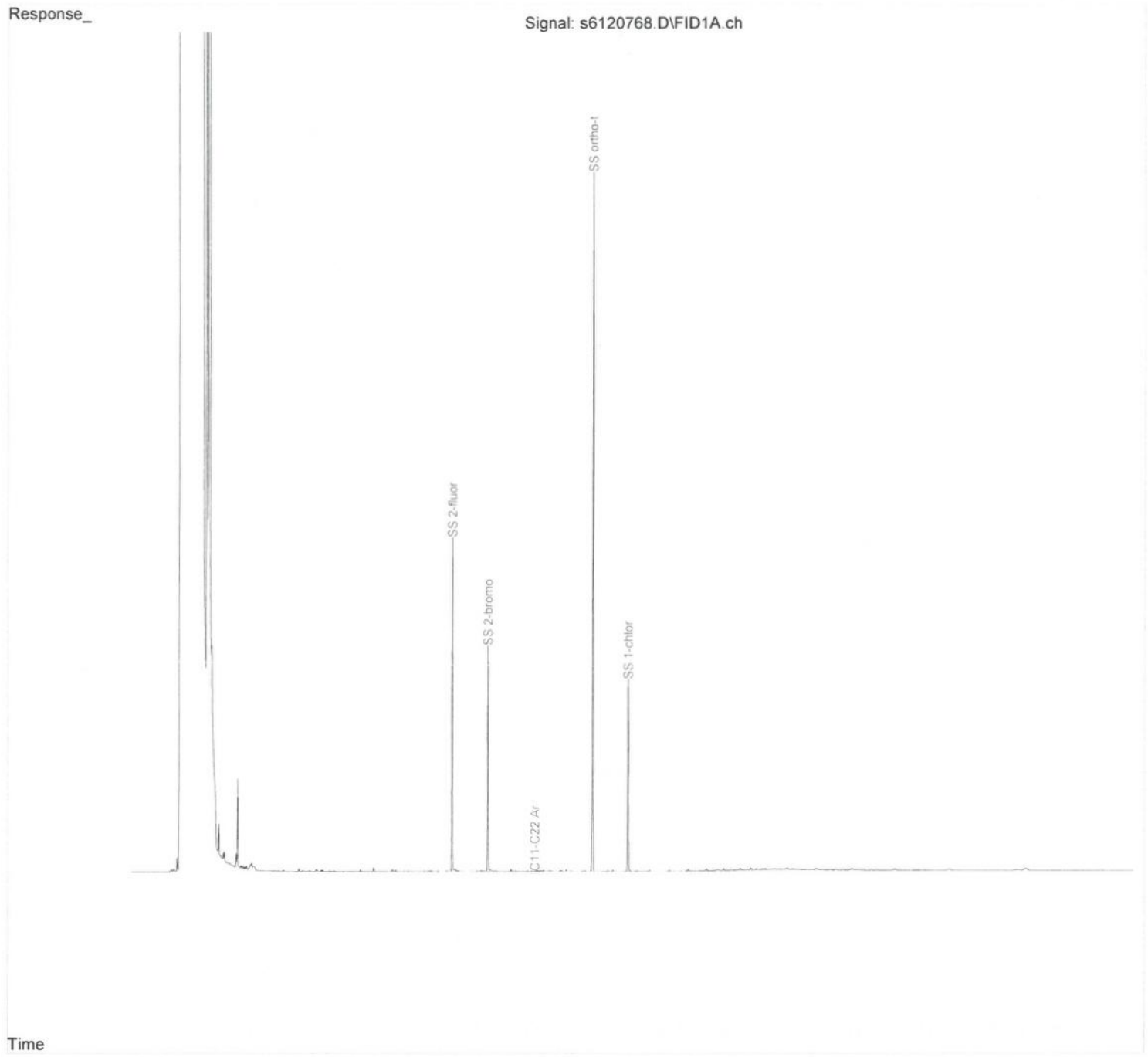
	Compound	R.T.	Response	Conc	Units	
	System Monitoring Compounds					
3) S	SS 2-fluorobiphenyl (...	9.527	2083895	14.767	ug/mLm	BC = Baseline Correction
Spiked Amount	20.000		Recovery =	73.83%		
5) S	SS 2-bromonaphthalene...	10.604	1450710	15.212	ug/mLm	BC = Baseline Correction
Spiked Amount	20.000		Recovery =	76.06%		
10) S	SS ortho-terphenyl (OTP)	13.725	4543152	30.365	ug/mLm	BC = Baseline Correction
Spiked Amount	50.000		Recovery =	60.73%		
11) S	SS 1-chloro-otadecane...	14.767	1380903	11.301	ug/mL	
Spiked Amount	50.000		Recovery =	22.60%		
	Target Compounds					
1)	naphthalene	0.000	0	N.D.	ug/mLd	
2)	2-methylnaphthalene	0.000	0	N.D.	ug/mLd	
4)	acenaphthylene	0.000	0	N.D.	ug/mLd	
6)	acenaphthene	0.000	0	N.D.	ug/mL	
7)	fluorene	0.000	0	N.D.	ug/mLd	
8)	phenanthrene	0.000	0	N.D.	ug/mLd	
9)	anthracene	0.000	0	N.D.	ug/mLd	
12)	fluoranthene	0.000	0	N.D.	ug/mLd	
13)	pyrene	0.000	0	N.D.	ug/mL	
14)	benzo(a)anthracene	0.000	0	N.D.	ug/mLd	
15)	chrysene	0.000	0	N.D.	ug/mL	
16)	benzo(b&k)fluoranthenes	0.000	0	N.D.	ug/mL	
17)	benzo(a)pyrene	0.000	0	N.D.	ug/mL	
18)	indeno&dibenzo	0.000	0	N.D.	ug/mL	
19)	benzo(g,h,i)perylene	0.000	0	N.D.	ug/mL	
20) H	C11-C22 Aromatics	12.000	3235740	23.050	ug/mLm	RI = Range Integration

(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : X:\S6\2023\Dec23\120723\
Data File : s6120768.D
Signal(s) : FID1A.ch
Acq On : 08 Dec 2023 09:30 am
Operator : dbv
Sample : 67836-01 aro x1
Misc :
ALS Vial : 34 Sample Multiplier: 1

Integration File: rteint.p
Quant Time: Dec 08 17:08:59 2023
Quant Method : X:\S6\methods\S6ARO100423F.M
Quant Title : S6 EPH Aromatics
QLast Update : Thu Oct 05 11:16:37 2023
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : X:\S6\2023\Dec23\120723.SEC\
Data File : s6120767.D
Signal(s) : FID2B.ch
Acq On : 08 Dec 2023 09:30 am
Operator : dbv
Sample : 67836-01 ali x1
Misc :
ALS Vial : 109 Sample Multiplier: 1

12/12/23 @ 08:26
DonnaV

Integration File: rteint.p
Quant Time: Dec 08 17:09:20 2023
Quant Method : X:\S6\methods\S6ALI100423A.M
Quant Title : S6 EPH Aliphatics
QLast Update : Thu Oct 05 13:01:54 2023
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :

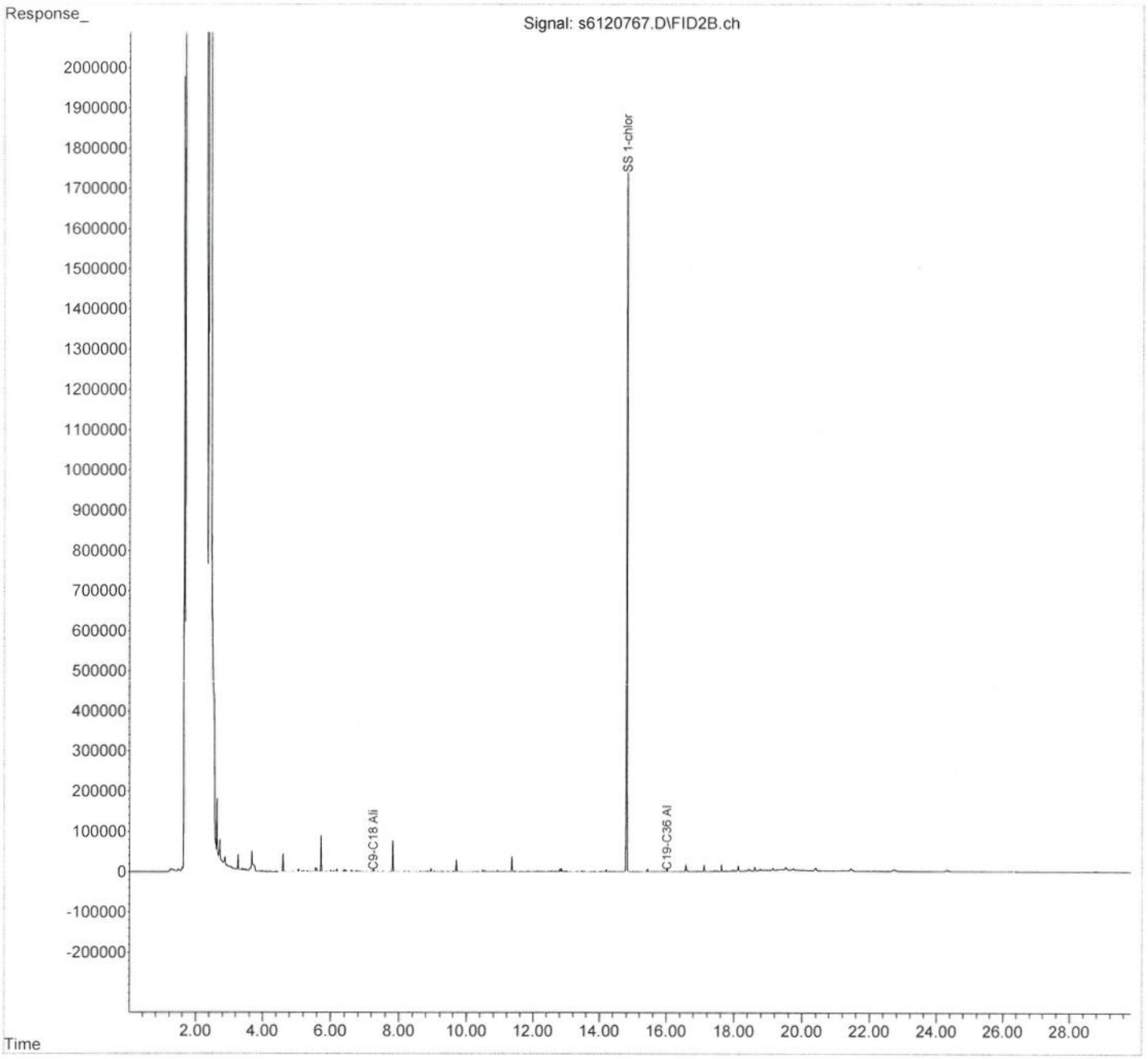
	Compound	R.T.	Response	Conc	Units	
	System Monitoring Compounds					
4) S	SS 2-fluorobiphenyl (...	0.000	0	N.D.	ug/mLd	
Spiked Amount	20.000	Recovery	=	0.00%		
6) S	SS 2-bromonaphthalene...	0.000	0	N.D.	ug/mLd	
Spiked Amount	20.000	Recovery	=	0.00%		
11) S	SS ortho-terphenyl (OTP)	0.000	0	N.D.	ug/mLd	
Spiked Amount	50.000	Recovery	=	0.00%		
13) S	SS 1-chloro-octadecan...	14.807f	2543935	21.662	ug/mLm	BC = Baseline Correction
Spiked Amount	50.000	Recovery	=	43.32%		
	Target Compounds					
1)	C9 n-Nonane	0.000	0	N.D.	ug/mLd	
2)	C10 n-Decane	0.000	0	N.D.	ug/mLd	
3)	C12 n-Dodecane	0.000	0	N.D.	ug/mLd	
5)	C14 n-Tetradecane	0.000	0	N.D.	ug/mLd	
7)	C16 n-Hexadecane	0.000	0	N.D.	ug/mLd	
8)	C18 n-Octadecane	0.000	0	N.D.	ug/mLd	
9) H	C9-C18 Aliphatics	7.237	999232	7.193	ug/mLm	RI = Range Integration
10)	C19 n-Nonadecane	0.000	0	N.D.	ug/mLd	
12)	C20 n-Eicosane	0.000	0	N.D.	ug/mLd	
14)	C22 n-Docosane	0.000	0	N.D.	ug/mLd	
15)	C24 n-Tetracosane	0.000	0	N.D.	ug/mLd	
16)	C26 n-Hexacosane	0.000	0	N.D.	ug/mLd	
17)	C28 n-Octacosane	0.000	0	N.D.	ug/mLd	
18)	C30 n-Triacontane	0.000	0	N.D.	ug/mLd	
19)	C36 n-Hexatriacontane	0.000	0	N.D.	ug/mLd	
20) H	C19-C36 Aliphatics	16.000	2362725	16.777	ug/mLm	RI = Range Integration

(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : X:\S6\2023\Dec23\120723.SEC\
Data File : s6120767.D
Signal(s) : FID2B.ch
Acq On : 08 Dec 2023 09:30 am
Operator : dbv
Sample : 67836-01 ali x1
Misc :
ALS Vial : 109 Sample Multiplier: 1

Integration File: rteint.p
Quant Time: Dec 08 17:09:20 2023
Quant Method : X:\S6\methods\S6ALI100423A.M
Quant Title : S6 EPH Aliphatics
QLast Update : Thu Oct 05 13:01:54 2023
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :



This File:	**L:\SVOA\Excel Reports\EPH\231214\67836-002**		
Analysis Group:	**EPH**	**Dow Salvage Yard**	
Field ID:	**SY-OBMW1-110823**	**CRE**	
Sample:	**67836-02 targets x1**	**67836-02 aro x1**	**67836-02 ali x1**
Misc:	*aro frac*		
Method Name:	*SVOA04 Method 8270E (E*	*S6 EPH Aromatics*	*S6 EPH Aliphatics*
Import File Name:	**s6 EPHs QC17156W**		
TestGroupID:	**EMA_EPH_PresCert_A**		
Aqueous or Soil? (A or S)	**A**		
Fractionated? (Y/N)	**y**	**y**	
Prep Date:	11/20/2023		
Lab#:	**67836-002**		
QC_Code:			
Prep#	**17156**		

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L:\SVOA\Excel Reports\EPH\2312
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Reviewer Checks:

- Quant Report: Reviewed? Ranges integrated? Analyst Initials & Date?
- Chromatogram Checked? Major peaks identified?
- Soil prep data checked: weight, volume, %solid, Prep date
- Field ID consistent with data and any field replicates
- Results consistent with any re-runs & internal QC
- Substitute dilution data checked
- Correct dilution and reason clear or noted
- Reason for reanalysis documented
- Surrogates pass or flagged & noted
- Flags checked (Expiration, F+, Over Cal)
- Other QC failures, estimates or interferences documented
- Spot checked Reported Result with Quant Report
- Checked Audit flagged data in LIMS

Notes:

Initials & Date: 12/14/23

1
2
5
11
16
20

X:\S4\2023\Dec23\120723\s4120740.D\S4PAH110223A.XLS PAH targets filename
X:\S6\2023\Dec23\120723\s6120770.D\S6ARO100423F.XLS aromatics filename
X:\S6\2023\Dec23\120723.SEC\s6120769.D\S6ALI100423A.XLS aliphatics filename

#	Surrogate Standards	Concentration (ug/mL)	AnalysisDate	AnalysisTime	AnalyzedBy	Dilution	Weight	Volume	Surr	Recovery	Flag	QC Limits
13	SS 1-chloro-octadecane (COD)	23.24358711	12/8/2023	10:04:00 AM	DBV s6120769.D	1	1	2	100	**46%**		40-140
10	SS ortho-terphenyl (OTP)	30.42176528	12/8/2023	10:04:00 AM	DBV s6120770.D	1	1	2	100	**61%**		40-140
3	SS 2-fluorobiphenyl (2FBP)	15.28237099	12/8/2023	10:04:00 AM	DBV s6120770.D	1	1	2	40	**76%**		40-140
5	SS 2-bromonaphthalene (2BN)	15.86532802	12/8/2023	10:04:00 AM	DBV s6120770.D	1	1	2	40	**79%**		40-140

#	AnalyteName	Concentration (ug/mL)	AnalysisDate	AnalysisTime	AnalyzedBy	Dilution	Weight	Volume
3	naphthalene	0	12/08/2023	05:54:00 AM	CL s4120740.D	1	1	2
4	2-methylnaphthalene	0	12/08/2023	05:54:00 AM	CL s4120740.D	1	1	2
12	phenanthrene	0	12/08/2023	05:54:00 AM	CL s4120740.D	1	1	2
8	acenaphthene	0	12/08/2023	05:54:00 AM	CL s4120740.D	1	1	2
7	acenaphthylene	0	12/08/2023	05:54:00 AM	CL s4120740.D	1	1	2
10	fluorene	0	12/08/2023	05:54:00 AM	CL s4120740.D	1	1	2
13	anthracene	0	12/08/2023	05:54:00 AM	CL s4120740.D	1	1	2
15	fluoranthene	0	12/08/2023	05:54:00 AM	CL s4120740.D	1	1	2
17	pyrene	0	12/08/2023	05:54:00 AM	CL s4120740.D	1	1	2
18	benzo(a)anthracene	0	12/08/2023	05:54:00 AM	CL s4120740.D	1	1	2
19	chrysene	0	12/08/2023	05:54:00 AM	CL s4120740.D	1	1	2
21	benzo(b)fluoranthene	0	12/08/2023	05:54:00 AM	CL s4120740.D	1	1	2
22	benzo(k)fluoranthene	0	12/08/2023	05:54:00 AM	CL s4120740.D	1	1	2
23	benzo(a)pyrene	0	12/08/2023	05:54:00 AM	CL s4120740.D	1	1	2
24	indeno(1,2,3-cd)pyrene	0	12/08/2023	05:54:00 AM	CL s4120740.D	1	1	2
25	dibenzo(a,h)anthracene	0	12/08/2023	05:54:00 AM	CL s4120740.D	1	1	2
26	benzo(g,h,i)perylene	0	12/08/2023	05:54:00 AM	CL s4120740.D	1	1	2
20	C11-C22 Aromatics	28.83566301	12/8/2023	10:04:00 AM	DBV s6120770.D	1	1	2
9	C9-C18 Aliphatics	4.667946172	12/8/2023	10:04:00 AM	DBV s6120769.D	1	1	2
20	C19-C36 Aliphatics	14.95063144	12/8/2023	10:04:00 AM	DBV s6120769.D	1	1	2
	Adjusted C11-C22 Aromatics	28.83566301	12/8/2023	10:04:00 AM	DBV s6120770.D	1	1	2

Quantitation Report (QT Reviewed)

CL
12/8/23 @ 15:33
CharlesL

Data Path : X:\S4\2023\Dec23\120723\
Data File : s4120740.D
Acq On : 08 Dec 2023 05:54 am
Operator : cl
Sample : 67836-02 targets x1
Misc : aro frac
ALS Vial : 35 Sample Multiplier: 1

Quant Time: Dec 08 09:00:16 2023
Quant Method : X:\S4\methods\S4PAH110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration

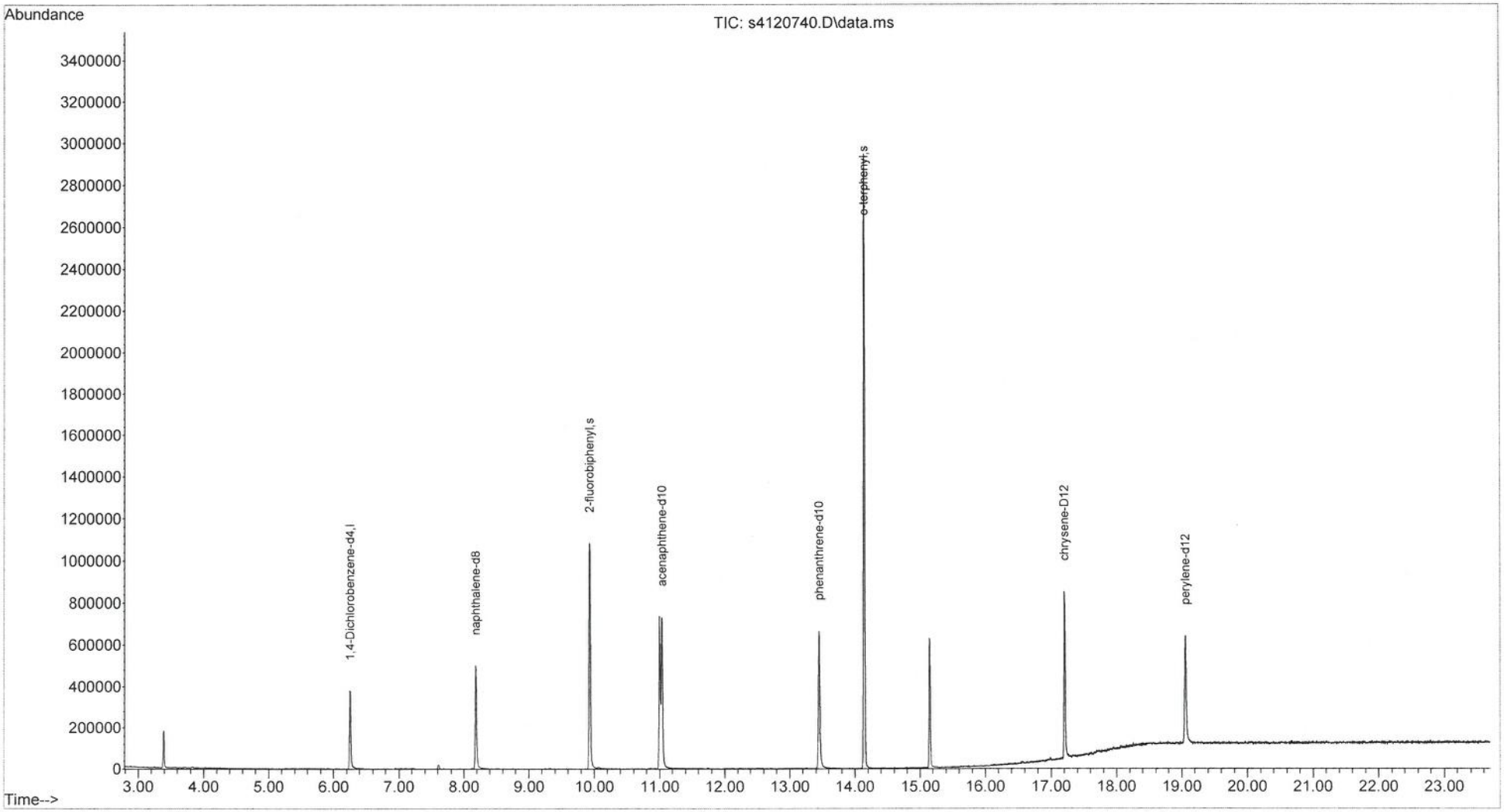
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.250	152	90807	10.00	ug/mL	-0.01
2) naphthalene-d8	8.182	136	366711	10.00	ug/mL	-0.01
5) acenaphthene-d10	11.036	164	214397	10.00	ug/mL	-0.01
11) phenanthrene-d10	13.451	188	421235	10.00	ug/mL	# 0.00
16) chrysene-D12	17.202	240	370298	10.00	ug/mL	0.00
20) perylene-d12	19.057	264	330865	10.00	ug/mL	0.02
System Monitoring Compounds						
6) 2-fluorobiphenyl	9.930	172	508099	15.04	ug/mL	-0.01
Spiked Amount 100.000			Recovery = 15.04%			
14) o-terphenyl	14.144	230	776793	32.48	ug/mL	0.00
Spiked Amount 100.000			Recovery = 32.48%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Dec23\120723\
Data File : s4120740.D
Acq On : 08 Dec 2023 05:54 am
Operator : cl
Sample : 67836-02 targets x1
Misc : aro frac
ALS Vial : 35 Sample Multiplier: 1

Quant Time: Dec 08 09:00:16 2023
Quant Method : X:\S4\methods\S4PAH110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration



SFP
12/12/23 @ 12:24
SkylaM

Data Path : X:\S6\2023\Dec23\120723\
Data File : s6120770.D
Signal(s) : FID1A.ch
Acq On : 08 Dec 2023 10:04 am
Operator : dbv
Sample : 67836-02 aro x1
Misc :
ALS Vial : 35 Sample Multiplier: 1

Integration File: rteint.p
Quant Time: Dec 08 17:09:02 2023
Quant Method : X:\S6\methods\S6ARO100423F.M
Quant Title : S6 EPH Aromatics
QLast Update : Thu Oct 05 11:16:37 2023
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :

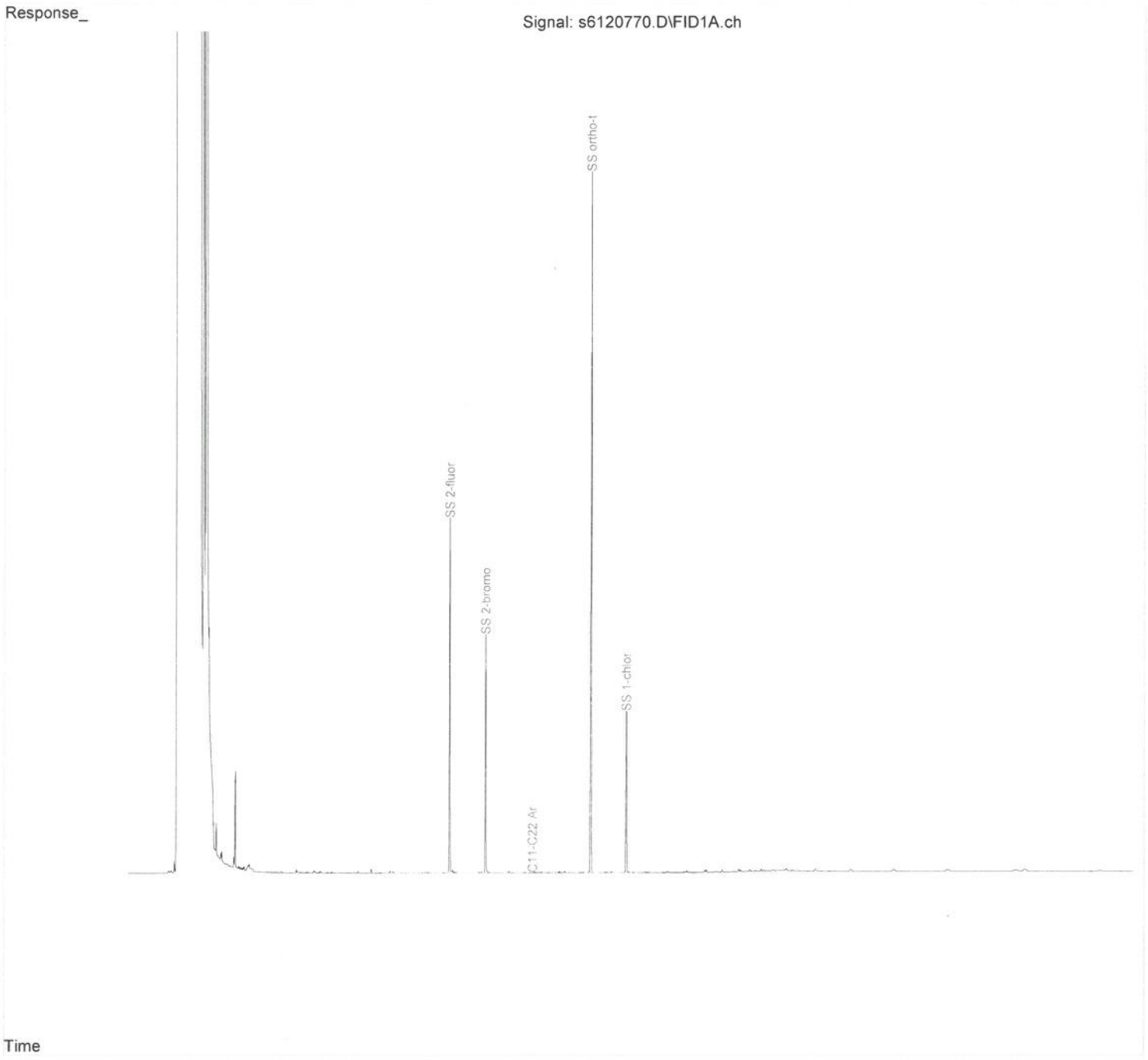
	Compound	R.T.	Response	Conc	Units	
	System Monitoring Compounds					
3) S	SS 2-fluorobiphenyl (...	9.527	2156602	15.282	ug/mLm	BC = Baseline Correction
Spiked Amount	20.000		Recovery =	76.41%		
5) S	SS 2-bromonaphthalene...	10.603	1513002	15.865	ug/mLm	BC = Baseline Correction
Spiked Amount	20.000		Recovery =	79.33%		
10) S	SS ortho-terphenyl (OTP)	13.724	4551725	30.422	ug/mLm	BC = Baseline Correction
Spiked Amount	50.000		Recovery =	60.84%		
11) S	SS 1-chloro-otadecane...	14.762f	1112373	9.106	ug/mL	
Spiked Amount	50.000		Recovery =	18.21%		
	Target Compounds					
1)	naphthalene	0.000	0	N.D.	ug/mLd	
2)	2-methylnaphthalene	0.000	0	N.D.	ug/mL	
4)	acenaphthylene	0.000	0	N.D.	ug/mLd	
6)	acenaphthene	0.000	0	N.D.	ug/mL	
7)	fluorene	0.000	0	N.D.	ug/mL	
8)	phenanthrene	0.000	0	N.D.	ug/mL	
9)	anthracene	0.000	0	N.D.	ug/mL	
12)	fluoranthene	0.000	0	N.D.	ug/mL	
13)	pyrene	0.000	0	N.D.	ug/mL	
14)	benzo(a)anthracene	0.000	0	N.D.	ug/mLd	
15)	chrysene	0.000	0	N.D.	ug/mL	
16)	benzo(b&k)fluoranthenes	0.000	0	N.D.	ug/mL	
17)	benzo(a)pyrene	0.000	0	N.D.	ug/mL	
18)	indeno&dibenzo	0.000	0	N.D.	ug/mL	
19)	benzo(g,h,i)perylene	0.000	0	N.D.	ug/mL	
20) H	C11-C22 Aromatics	12.000	4104560	28.836	ug/mLm	RI = Range Integration

(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : X:\S6\2023\Dec23\120723\
Data File : s6120770.D
Signal(s) : FID1A.ch
Acq On : 08 Dec 2023 10:04 am
Operator : dbv
Sample : 67836-02 aro x1
Misc :
ALS Vial : 35 Sample Multiplier: 1

Integration File: rteint.p
Quant Time: Dec 08 17:09:02 2023
Quant Method : X:\S6\methods\S6ARO100423F.M
Quant Title : S6 EPH Aromatics
QLast Update : Thu Oct 05 11:16:37 2023
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : X:\S6\2023\Dec23\120723.SEC\
Data File : s6120769.D
Signal(s) : FID2B.ch
Acq On : 08 Dec 2023 10:04 am
Operator : dbv
Sample : 67836-02 ali x1
Misc :
ALS Vial : 110 Sample Multiplier: 1

DBV
12/12/23 @ 08:26
DonnaV

Integration File: rteint.p
Quant Time: Dec 08 17:09:23 2023
Quant Method : X:\S6\methods\S6ALI100423A.M
Quant Title : S6 EPH Aliphatics
QLast Update : Thu Oct 05 13:01:54 2023
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :

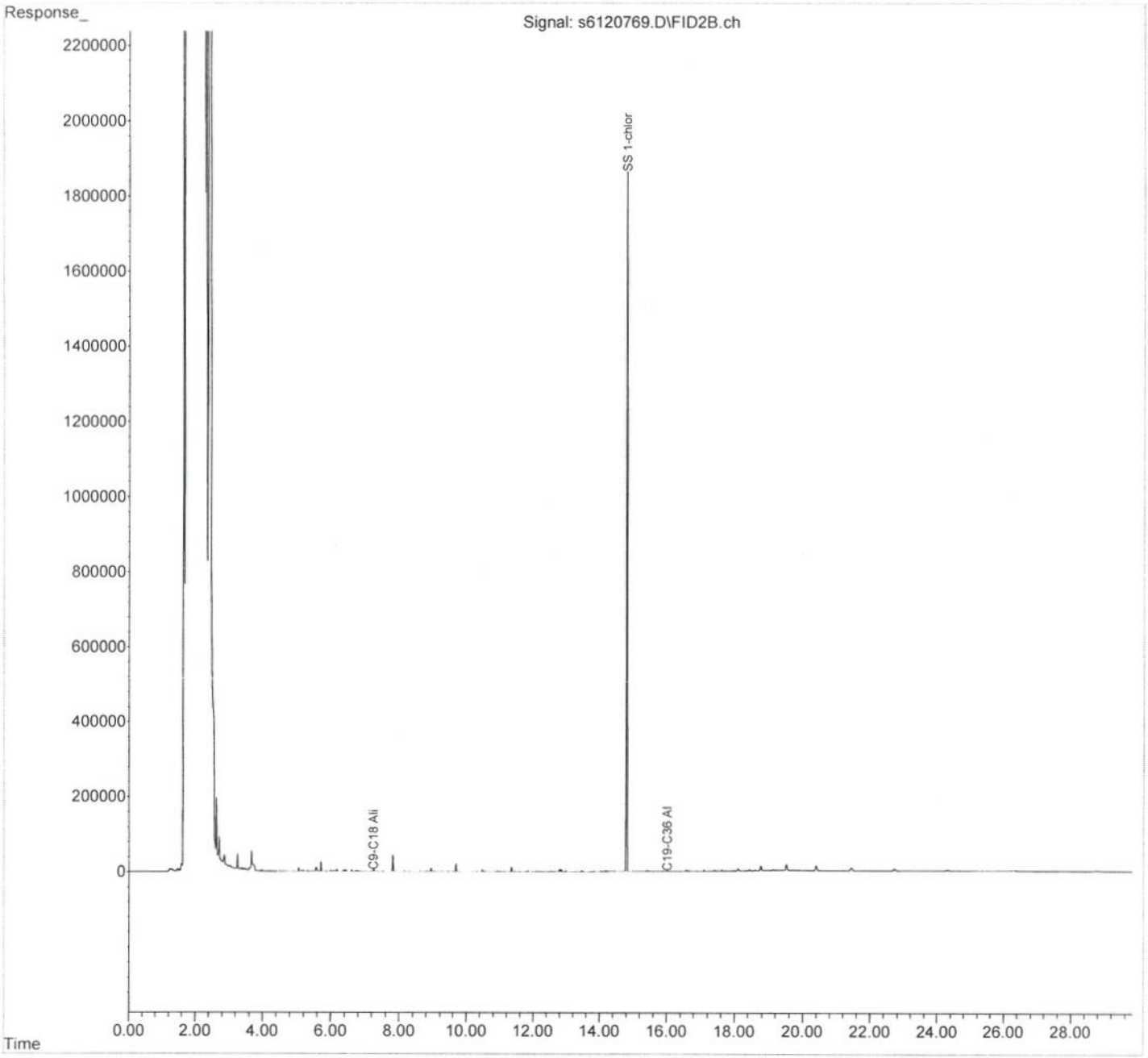
	Compound	R.T.	Response	Conc	Units	
	System Monitoring Compounds					
4) S	SS 2-fluorobiphenyl (...	0.000	0	N.D.	ug/mLd	
Spiked Amount	20.000	Recovery	=	0.00%		
6) S	SS 2-bromonaphthalene...	0.000	0	N.D.	ug/mLd	
Spiked Amount	20.000	Recovery	=	0.00%		
11) S	SS ortho-terphenyl (OTP)	0.000	0	N.D.	ug/mLd	
Spiked Amount	50.000	Recovery	=	0.00%		
13) S	SS 1-chloro-octadecan...	14.807f	2729288	23.244	ug/mLm	BC = Baseline Correction
Spiked Amount	50.000	Recovery	=	46.49%		
	Target Compounds					
1)	C9 n-Nonane	0.000	0	N.D.	ug/mLd	
2)	C10 n-Decane	0.000	0	N.D.	ug/mLd	
3)	C12 n-Dodecane	0.000	0	N.D.	ug/mLd	
5)	C14 n-Tetradecane	0.000	0	N.D.	ug/mLd	
7)	C16 n-Hexadecane	0.000	0	N.D.	ug/mLd	
8)	C18 n-Octadecane	0.000	0	N.D.	ug/mLd	
9) H	C9-C18 Aliphatics	7.237	676349	4.668	ug/mLm	RI = Range Integration
10)	C19 n-Nonadecane	0.000	0	N.D.	ug/mLd	
12)	C20 n-Eicosane	0.000	0	N.D.	ug/mLd	
14)	C22 n-Docosane	0.000	0	N.D.	ug/mLd	
15)	C24 n-Tetracosane	0.000	0	N.D.	ug/mLd	
16)	C26 n-Hexacosane	0.000	0	N.D.	ug/mLd	
17)	C28 n-Octacosane	0.000	0	N.D.	ug/mLd	
18)	C30 n-Triacontane	0.000	0	N.D.	ug/mLd	
19)	C36 n-Hexatriacontane	0.000	0	N.D.	ug/mLd	
20) H	C19-C36 Aliphatics	16.000	2120944	14.951	ug/mLm	RI = Range Integration

(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : X:\S6\2023\Dec23\120723.SEC\
Data File : s6120769.D
Signal(s) : FID2B.ch
Acq On : 08 Dec 2023 10:04 am
Operator : dbv
Sample : 67836-02 ali x1
Misc :
ALS Vial : 110 Sample Multiplier: 1

Integration File: rteint.p
Quant Time: Dec 08 17:09:23 2023
Quant Method : X:\S6\methods\S6ALI100423A.M
Quant Title : S6 EPH Aliphatics
QLast Update : Thu Oct 05 13:01:54 2023
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :



This File:	**L:\SVOA\Excel Reports\EPH\231214\67836-003**		
Analysis Group:	**EPH**	**Dow Salvage Yard**	
Field ID:	**SY-OBMW9-110823**	**CRE**	
Sample:	**67836-03 targets x1**	**67836-03 aro x1**	**67836-03 ali x1**
Misc:	*aro frac*		
Method Name:	*SVOA04 Method 8270E (t*	*S6 EPH Aromatics*	*S6 EPH Aliphatics*
Import File Name:	**s6 EPHs QC17156W**		
TestGroupID:	**EMA_EPH_PresCert_A**		
Aqueous or Soil? (A or S)	**A**		
Fractionated? (Y/N)	**y**	**y**	
Prep Date:	11/20/2023		
Lab#:	**67836-003**		
QC_Code:			
Prep#	**17156**		

Donna Valley L:\SVOA\EPH\EPH ImportFileBuilder2.0.xls
12/14/23 12:06 PM
L:\SVOA\EPH\
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L:\SVOA\PDF Reports\FUELS\

Reviewer Checks:

- Quant Report: Reviewed? Ranges integrated? Analyst Initials & Date?
- Chromatogram Checked? Major peaks identified?
- Soil prep data checked: weight, volume, %solid, Prep date
- Field ID consistent with data and any field replicates
- Results consistent with any re-runs & internal QC
- Substitute dilution data checked
- Correct dilution and reason clear or noted
- Reason for reanalysis documented
- Surrogates pass or flagged & noted
- Flags checked (Expiration, F+, Over Cal)
- Other QC failures, estimates or interferences documented
- Spot checked Reported Result with Quant Report
- Checked Audit flagged data in LIMS

Notes:

Initials & Date: 12/14/23

1
2
5
11
16
20

X:\S4\2023\Dec23\120723\s4120741.D\S4PAH110223A.XLS PAH targets filename
X:\S6\2023\Dec23\120723\s6120772.D\S6ARO100423F.XLS aromatics filename
X:\S6\2023\Dec23\120723.SEC\s6120771.D\S6ALI100423A.XLS aliphatics filename

#	Surrogate Standards	Concentration (ug/mL)	AnalysisDate	AnalysisTime	AnalyzedBy	Dilution	Weight	Volume	Surr	Recovery	Flag	QC Limits
13	SS 1-chloro-octadecane (COD)	23.09438221	12/8/2023	10:38:00 AM	DBV s6120771.D	1	1	2	100	**46%**		40-140
10	SS ortho-terphenyl (OTP)	32.75881521	12/8/2023	10:38:00 AM	DBV s6120772.D	1	1	2	100	**66%**		40-140
3	SS 2-fluorobiphenyl (2FBP)	16.11171498	12/8/2023	10:38:00 AM	DBV s6120772.D	1	1	2	40	**81%**		40-140
5	SS 2-bromonaphthalene (2BN)	16.93873862	12/8/2023	10:38:00 AM	DBV s6120772.D	1	1	2	40	**85%**		40-140

#	AnalyteName	Concentration (ug/mL)	AnalysisDate	AnalysisTime	AnalyzedBy	Dilution	Weight	Volume
3	naphthalene	0	12/08/2023	06:24:00 AM	CL s4120741.D	1	1	2
4	2-methylnaphthalene	0	12/08/2023	06:24:00 AM	CL s4120741.D	1	1	2
12	phenanthrene	0	12/08/2023	06:24:00 AM	CL s4120741.D	1	1	2
8	acenaphthene	0	12/08/2023	06:24:00 AM	CL s4120741.D	1	1	2
7	acenaphthylene	0	12/08/2023	06:24:00 AM	CL s4120741.D	1	1	2
10	fluorene	0	12/08/2023	06:24:00 AM	CL s4120741.D	1	1	2
13	anthracene	0	12/08/2023	06:24:00 AM	CL s4120741.D	1	1	2
15	fluoranthene	0	12/08/2023	06:24:00 AM	CL s4120741.D	1	1	2
17	pyrene	0	12/08/2023	06:24:00 AM	CL s4120741.D	1	1	2
18	benzo(a)anthracene	0	12/08/2023	06:24:00 AM	CL s4120741.D	1	1	2
19	chrysene	0	12/08/2023	06:24:00 AM	CL s4120741.D	1	1	2
21	benzo(b)fluoranthene	0	12/08/2023	06:24:00 AM	CL s4120741.D	1	1	2
22	benzo(k)fluoranthene	0	12/08/2023	06:24:00 AM	CL s4120741.D	1	1	2
23	benzo(a)pyrene	0	12/08/2023	06:24:00 AM	CL s4120741.D	1	1	2
24	indeno(1,2,3-cd)pyrene	0	12/08/2023	06:24:00 AM	CL s4120741.D	1	1	2
25	dibenzo(a,h)anthracene	0	12/08/2023	06:24:00 AM	CL s4120741.D	1	1	2
26	benzo(g,h,i)perylene	0	12/08/2023	06:24:00 AM	CL s4120741.D	1	1	2
20	C11-C22 Aromatics	35.02528229	12/8/2023	10:38:00 AM	DBV s6120772.D	1	1	2
9	C9-C18 Aliphatics	5.843463433	12/8/2023	10:38:00 AM	DBV s6120771.D	1	1	2
20	C19-C36 Aliphatics	13.73301647	12/8/2023	10:38:00 AM	DBV s6120771.D	1	1	2
	Adjusted C11-C22 Aromatics	35.02528229	12/8/2023	10:38:00 AM	DBV s6120772.D	1	1	2

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Dec23\120723\
Data File : s4120741.D
Acq On : 08 Dec 2023 06:24 am
Operator : cl
Sample : 67836-03 targets x1
Misc : aro frac
ALS Vial : 36 Sample Multiplier: 1

CL
12/8/23 @ 15:34
CharlesL

Quant Time: Dec 08 09:00:19 2023
Quant Method : X:\S4\methods\S4PAH110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration

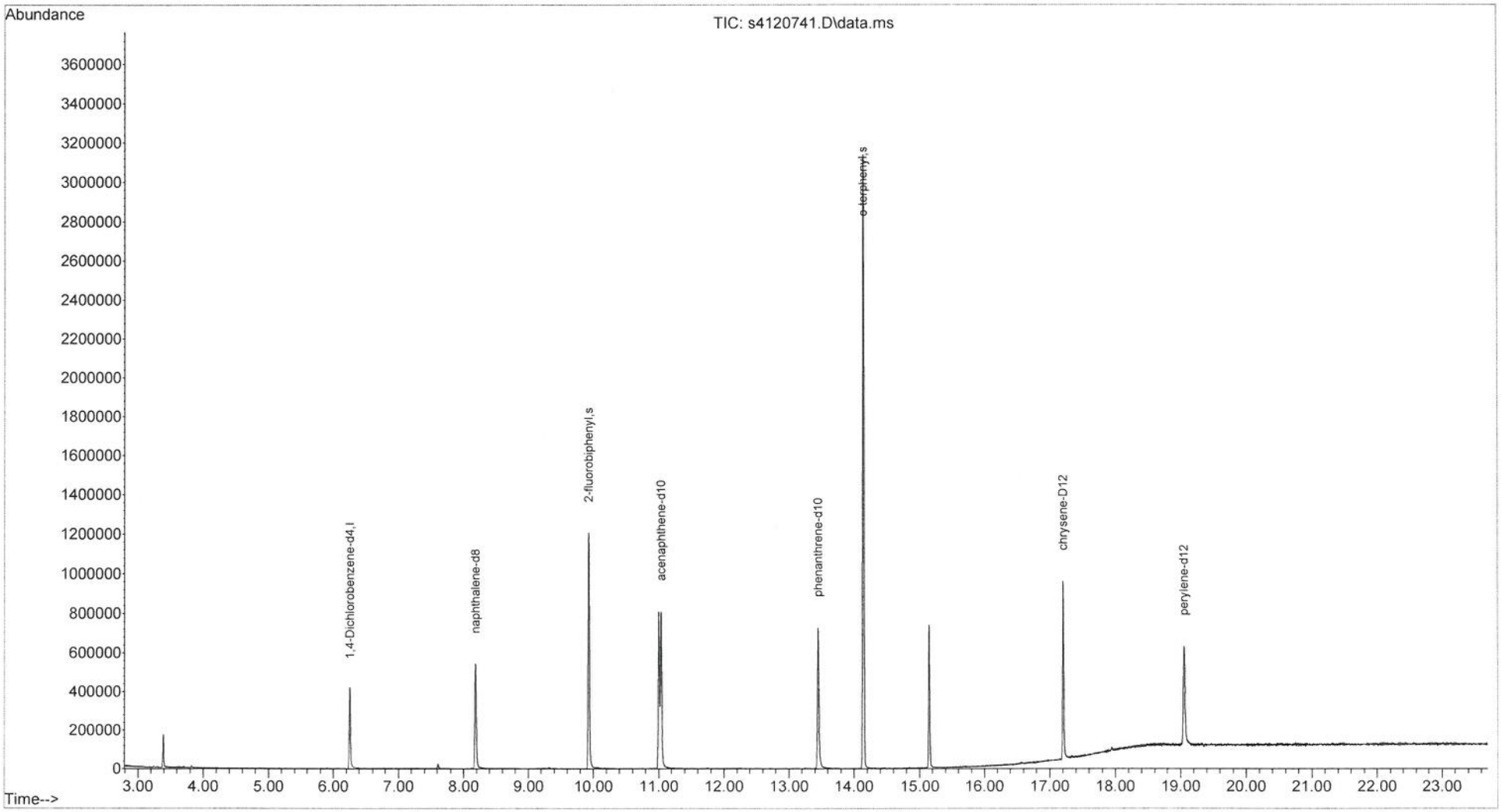
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.253	152	99985	10.00	ug/mL	-0.01
2) naphthalene-d8	8.182	136	399822	10.00	ug/mL	-0.01
5) acenaphthene-d10	11.036	164	235972	10.00	ug/mL	-0.01
11) phenanthrene-d10	13.449	188	444749	10.00	ug/mL	#-0.01
16) chrysene-D12	17.202	240	391598	10.00	ug/mL	0.00
20) perylene-d12	19.052	264	336427	10.00	ug/mL	0.01
System Monitoring Compounds						
6) 2-fluorobiphenyl	9.930	172	538450	14.48	ug/mL	-0.01
Spiked Amount 100.000			Recovery = 14.48%			
14) o-terphenyl	14.142	230	829085	32.83	ug/mL	-0.01
Spiked Amount 100.000			Recovery = 32.83%			
Target Compounds						Qvalue
18) benzo(a)anthracene	17.202	228	1187	Below Cal	#	51
19) chrysene	17.202	228	1187	Below Cal	#	49

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Dec23\120723\
Data File : s4120741.D
Acq On : 08 Dec 2023 06:24 am
Operator : cl
Sample : 67836-03 targets x1
Misc : aro frac
ALS Vial : 36 Sample Multiplier: 1

Quant Time: Dec 08 09:00:19 2023
Quant Method : X:\S4\methods\S4PAH110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration



SFP
12/12/23 @ 12:24
SkylaM

Data Path : X:\S6\2023\Dec23\120723\
Data File : s6120772.D
Signal(s) : FID1A.ch
Acq On : 08 Dec 2023 10:38 am
Operator : dbv
Sample : 67836-03 aro x1
Misc :
ALS Vial : 36 Sample Multiplier: 1

Integration File: rteint.p
Quant Time: Dec 08 17:09:05 2023
Quant Method : X:\S6\methods\S6ARO100423F.M
Quant Title : S6 EPH Aromatics
QLast Update : Thu Oct 05 11:16:37 2023
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :

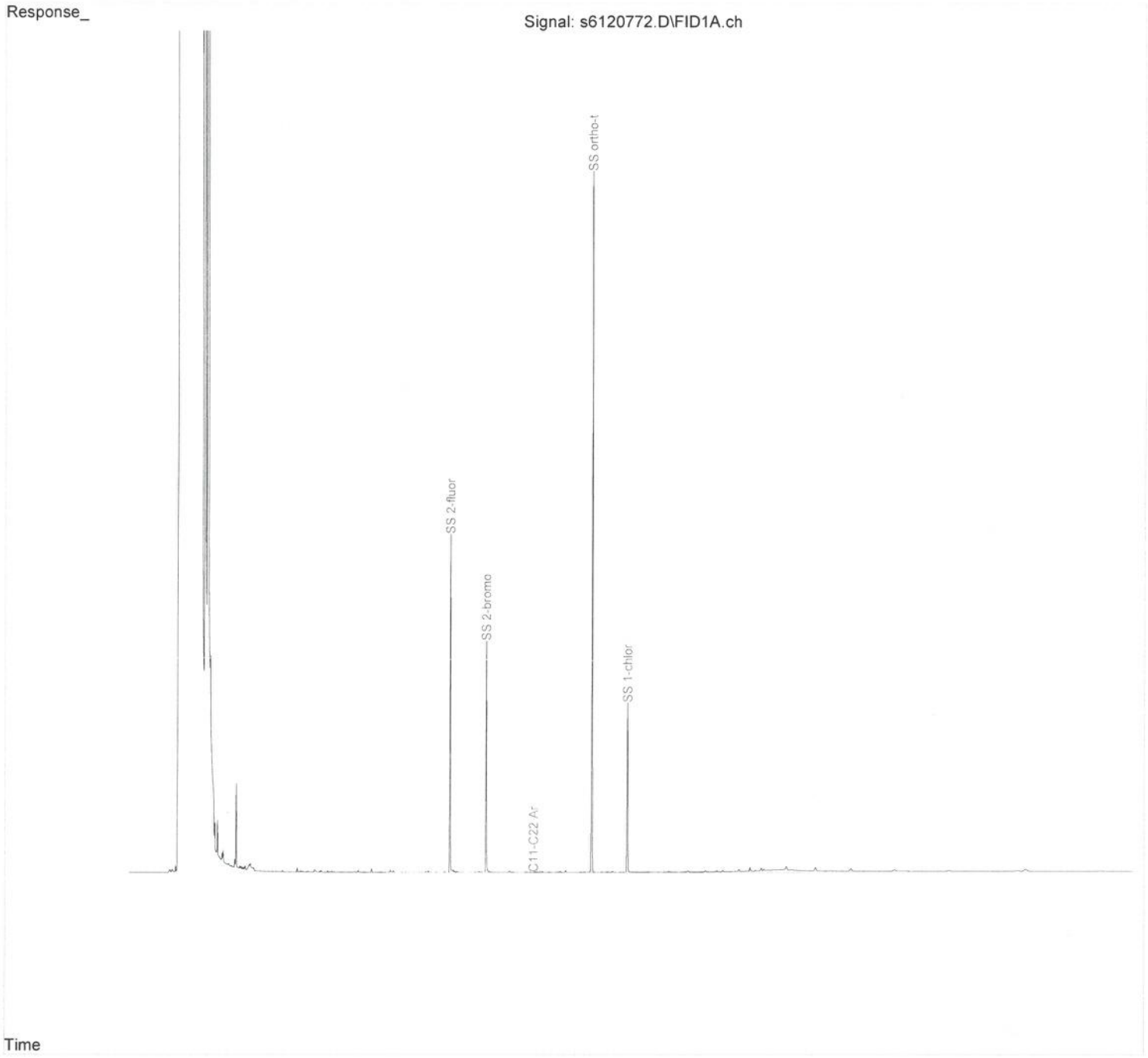
	Compound	R.T.	Response	Conc	Units	
	System Monitoring Compounds					
3) S	SS 2-fluorobiphenyl (...	9.527	2273543	16.112	ug/mLm	BC = Baseline Correction
Spiked Amount	20.000		Recovery =	80.56%		
5) S	SS 2-bromonaphthalene...	10.604	1615419	16.939	ug/mLm	BC = Baseline Correction
Spiked Amount	20.000		Recovery =	84.69%		
10) S	SS ortho-terphenyl (OTP)	13.726	4901741	32.759	ug/mLm	BC = Baseline Correction
Spiked Amount	50.000		Recovery =	65.52%		
11) S	SS 1-chloro-otadecane...	14.765	1280821	10.483	ug/mL	
Spiked Amount	50.000		Recovery =	20.97%		
	Target Compounds					
1)	naphthalene	0.000	0	N.D.	ug/mLd	
2)	2-methylnaphthalene	0.000	0	N.D.	ug/mL	
4)	acenaphthylene	0.000	0	N.D.	ug/mLd	
6)	acenaphthene	0.000	0	N.D.	ug/mL	
7)	fluorene	0.000	0	N.D.	ug/mL	
8)	phenanthrene	0.000	0	N.D.	ug/mL	
9)	anthracene	0.000	0	N.D.	ug/mL	
12)	fluoranthene	0.000	0	N.D.	ug/mL	
13)	pyrene	0.000	0	N.D.	ug/mL	
14)	benzo(a)anthracene	0.000	0	N.D.	ug/mLd	
15)	chrysene	0.000	0	N.D.	ug/mL	
16)	benzo(b&k)fluoranthenes	0.000	0	N.D.	ug/mL	
17)	benzo(a)pyrene	0.000	0	N.D.	ug/mL	
18)	indeno&dibenzo	0.000	0	N.D.	ug/mL	
19)	benzo(g,h,i)perylene	0.000	0	N.D.	ug/mL	
20) H	C11-C22 Aromatics	12.000	5034092	35.025	ug/mLm	RI = Range Integration

(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : X:\S6\2023\Dec23\120723\
Data File : s6120772.D
Signal(s) : FID1A.ch
Acq On : 08 Dec 2023 10:38 am
Operator : dbv
Sample : 67836-03 aro x1
Misc :
ALS Vial : 36 Sample Multiplier: 1

Integration File: rteint.p
Quant Time: Dec 08 17:09:05 2023
Quant Method : X:\S6\methods\S6ARO100423F.M
Quant Title : S6 EPH Aromatics
QLast Update : Thu Oct 05 11:16:37 2023
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : X:\S6\2023\Dec23\120723.SEC\
Data File : s6120771.D
Signal(s) : FID2B.ch
Acq On : 08 Dec 2023 10:38 am
Operator : dbv
Sample : 67836-03 ali x1
Misc :
ALS Vial : 111 Sample Multiplier: 1

12/12/23 @ 08:26
DonnaV

Integration File: rteint.p
Quant Time: Dec 08 17:09:26 2023
Quant Method : X:\S6\methods\S6ALI100423A.M
Quant Title : S6 EPH Aliphatics
QLast Update : Thu Oct 05 13:01:54 2023
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :

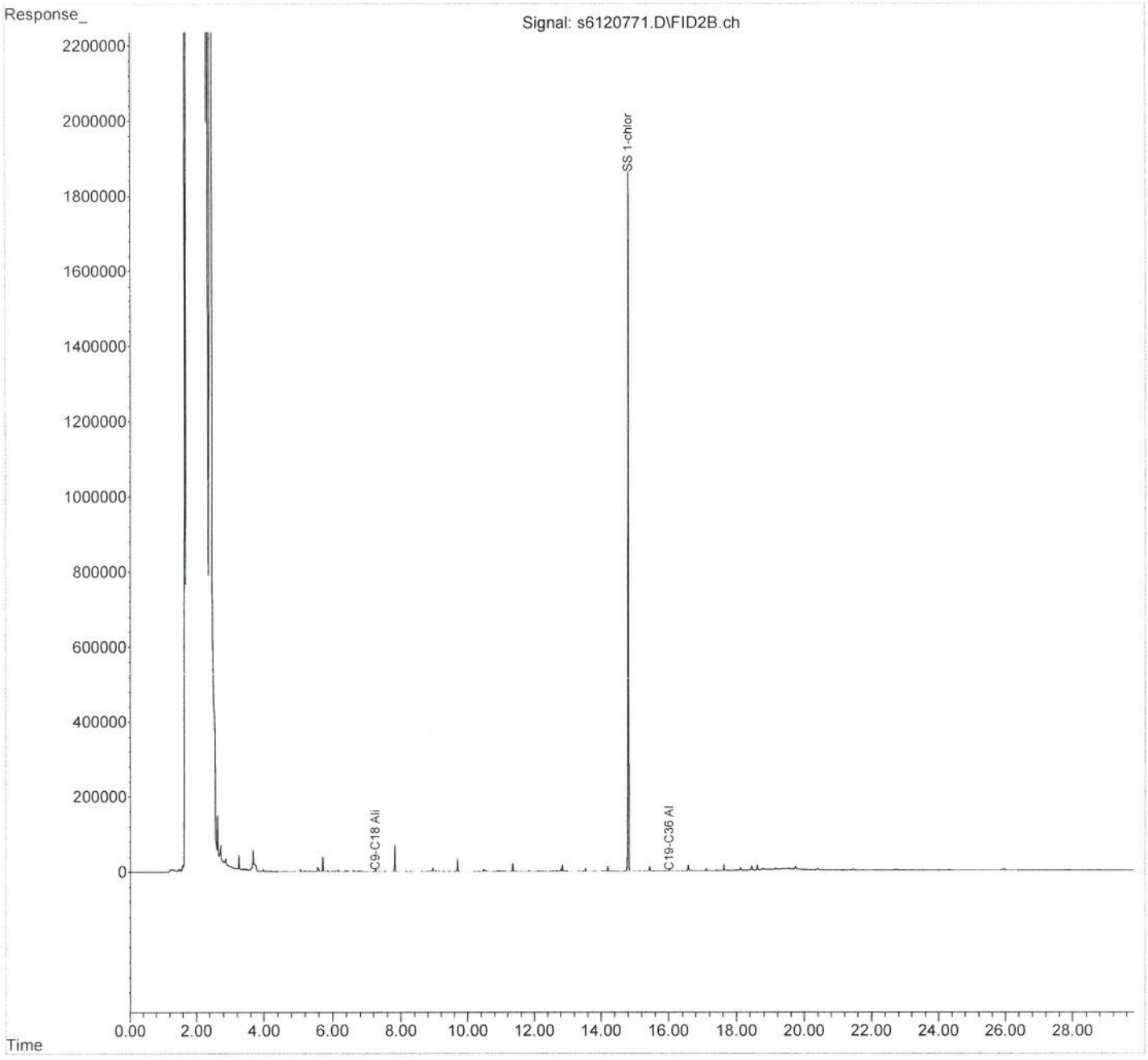
	Compound	R.T.	Response	Conc	Units	
	System Monitoring Compounds					
4)	S SS 2-fluorobiphenyl (...	0.000	0	N.D.	ug/mLd	
Spiked Amount	20.000	Recovery	=	0.00%		
6)	S SS 2-bromonaphthalene...	0.000	0	N.D.	ug/mLd	
Spiked Amount	20.000	Recovery	=	0.00%		
11)	S SS ortho-terphenyl (OTP)	0.000	0	N.D.	ug/mLd	
Spiked Amount	50.000	Recovery	=	0.00%		
13)	S SS 1-chloro-octadecan...	14.806f	2711804	23.094	ug/mLm	BC = Baseline Correction
Spiked Amount	50.000	Recovery	=	46.19%		
	Target Compounds					
1)	C9 n-Nonane	0.000	0	N.D.	ug/mLd	
2)	C10 n-Decane	0.000	0	N.D.	ug/mLd	
3)	C12 n-Dodecane	0.000	0	N.D.	ug/mLd	
5)	C14 n-Tetradecane	0.000	0	N.D.	ug/mLd	
7)	C16 n-Hexadecane	0.000	0	N.D.	ug/mLd	
8)	C18 n-Octadecane	0.000	0	N.D.	ug/mLd	
9)	H C9-C18 Aliphatics	7.237	826683	5.843	ug/mLm	RI = Range Integration
10)	C19 n-Nonadecane	0.000	0	N.D.	ug/mLd	
12)	C20 n-Eicosane	0.000	0	N.D.	ug/mLd	
14)	C22 n-Docosane	0.000	0	N.D.	ug/mLd	
15)	C24 n-Tetracosane	0.000	0	N.D.	ug/mLd	
16)	C26 n-Hexacosane	0.000	0	N.D.	ug/mLd	
17)	C28 n-Octacosane	0.000	0	N.D.	ug/mLd	
18)	C30 n-Triacontane	0.000	0	N.D.	ug/mLd	
19)	C36 n-Hexatriacontane	0.000	0	N.D.	ug/mLd	
20)	H C19-C36 Aliphatics	16.000	1959715	13.733	ug/mLm	RI = Range Integration

(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : X:\S6\2023\Dec23\120723.SEC\
Data File : s6120771.D
Signal(s) : FID2B.ch
Acq On : 08 Dec 2023 10:38 am
Operator : dbv
Sample : 67836-03 ali x1
Misc :
ALS Vial : 111 Sample Multiplier: 1

Integration File: rteint.p
Quant Time: Dec 08 17:09:26 2023
Quant Method : X:\S6\methods\S6ALI100423A.M
Quant Title : S6 EPH Aliphatics
QLast Update : Thu Oct 05 13:01:54 2023
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :



This File:	**L:\SVOA\Excel Reports\EPH\231214\67836-004**		
Analysis Group:	**EPH**	**Dow Salvage Yard**	
Field ID:	**BRMW5-29-44-110823**	**CRE**	
Sample:	**67836-04 targets x1**	**67836-04 aro x1**	**67836-04 ali x1**
Misc:	*aro frac*		
Method Name:	*SVOA04 Method 8270E (€*	*S6 EPH Aromatics*	*S6 EPH Aliphatics*
Import File Name:	**s6 EPHs QC17156W**		
TestGroupID:	**EMA_EPH_PresCert_A**		
Aqueous or Soil? (A or S)	**A**		
Fractionated? (Y/N)	**Y**	**Y**	
Prep Date:	11/20/2023		
Lab#:	**67836-004**		
QC_Code:			
Prep#	**17156**		

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Reviewer Checks:

Quant Report: Reviewed? Ranges integrated? Analyst Initials & Date?
Chromatogram Checked? Major peaks identified?
Soil prep data checked: weight, volume, %solid, Prep date
Field ID consistent with data and any field replicates
Results consistent with any re-runs & internal QC
Substitute dilution data checked
Correct dilution and reason clear or noted
Reason for reanalysis documented
Surrogates pass or flagged & noted
Flags checked (Expiration, F+, Over Cal)
Other QC failures, estimates or interferences documented
Spot checked Reported Result with Quant Report
Checked Audit flagged data in LIMS

Notes:

Initials & Date: 12/14/23

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X:\S4\2023\Dec23\120723\s4120742.D\S4PAH110223A.XLS PAH targets filename
X:\S6\2023\Dec23\120723\s6120774.D\S6ARO100423F.XLS aromatics filename
X:\S6\2023\Dec23\120723.SEC\s6120773.D\S6ALI100423A.XLS aliphatics filename

#	Surrogate Standards	Concentration (ug/mL)	AnalysisDate	AnalysisTime	AnalyzedBy	Dilution	Weight	Volume	Surr	Recovery	Flag	QC Limits
13	SS 1-chloro-octadecane (COD)	24.97742417	12/8/2023	11:12:00 AM	DBV s6120773.D	1	1	2	100	**50%**		40-140
10	SS ortho-terphenyl (OTP)	30.33295476	12/8/2023	11:12:00 AM	DBV s6120774.D	1	1	2	100	**61%**		40-140
3	SS 2-fluorobiphenyl (2FBP)	14.69448786	12/8/2023	11:12:00 AM	DBV s6120774.D	1	1	2	40	**73%**		40-140
5	SS 2-bromonaphthalene (2BN)	15.39138691	12/8/2023	11:12:00 AM	DBV s6120774.D	1	1	2	40	**77%**		40-140

#	AnalyteName	Concentration (ug/mL)	AnalysisDate	AnalysisTime	AnalyzedBy	Dilution	Weight	Volume
3	naphthalene	0	12/08/2023	06:55:00 AM	CL s4120742.D	1	1	2
4	2-methylnaphthalene	0	12/08/2023	06:55:00 AM	CL s4120742.D	1	1	2
12	phenanthrene	0	12/08/2023	06:55:00 AM	CL s4120742.D	1	1	2
8	acenaphthene	0	12/08/2023	06:55:00 AM	CL s4120742.D	1	1	2
7	acenaphthylene	0	12/08/2023	06:55:00 AM	CL s4120742.D	1	1	2
10	fluorene	0	12/08/2023	06:55:00 AM	CL s4120742.D	1	1	2
13	anthracene	0	12/08/2023	06:55:00 AM	CL s4120742.D	1	1	2
15	fluoranthene	0	12/08/2023	06:55:00 AM	CL s4120742.D	1	1	2
17	pyrene	0	12/08/2023	06:55:00 AM	CL s4120742.D	1	1	2
18	benzo(a)anthracene	0	12/08/2023	06:55:00 AM	CL s4120742.D	1	1	2
19	chrysene	0	12/08/2023	06:55:00 AM	CL s4120742.D	1	1	2
21	benzo(b)fluoranthene	0	12/08/2023	06:55:00 AM	CL s4120742.D	1	1	2
22	benzo(k)fluoranthene	0	12/08/2023	06:55:00 AM	CL s4120742.D	1	1	2
23	benzo(a)pyrene	0	12/08/2023	06:55:00 AM	CL s4120742.D	1	1	2
24	indeno(1,2,3-cd)pyrene	0	12/08/2023	06:55:00 AM	CL s4120742.D	1	1	2
25	dibenzo(a,h)anthracene	0	12/08/2023	06:55:00 AM	CL s4120742.D	1	1	2
26	benzo(g,h,i)perylene	0	12/08/2023	06:55:00 AM	CL s4120742.D	1	1	2
20	C11-C22 Aromatics	27.10811617	12/8/2023	11:12:00 AM	DBV s6120774.D	1	1	2
9	C9-C18 Aliphatics	10.30061415	12/8/2023	11:12:00 AM	DBV s6120773.D	1	1	2
20	C19-C36 Aliphatics	18.63174381	12/8/2023	11:12:00 AM	DBV s6120773.D	1	1	2
	Adjusted C11-C22 Aromatics	27.10811617	12/8/2023	11:12:00 AM	DBV s6120774.D	1	1	2

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Dec23\120723\
Data File : s4120742.D
Acq On : 08 Dec 2023 06:55 am
Operator : cl
Sample : 67836-04 targets x1
Misc : aro frac
ALS Vial : 37 Sample Multiplier: 1

CL
12/8/23 @ 15:34
CharlesL

Quant Time: Dec 08 09:00:22 2023
Quant Method : X:\S4\methods\S4PAH110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration

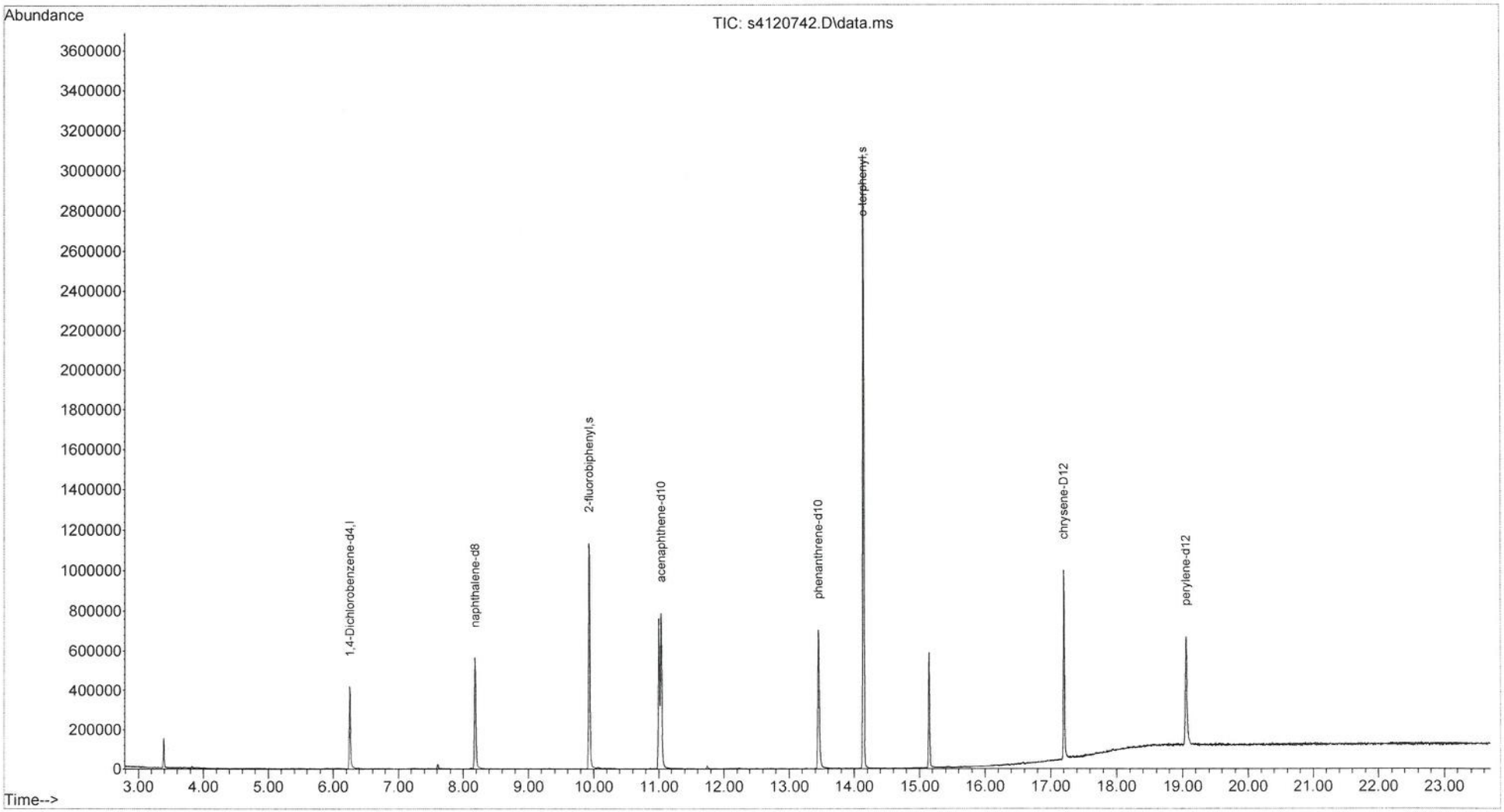
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.250	152	100272	10.00	ug/mL	-0.01
2) naphthalene-d8	8.182	136	401087	10.00	ug/mL	-0.01
5) acenaphthene-d10	11.038	164	231774	10.00	ug/mL	0.00
11) phenanthrene-d10	13.449	188	443271	10.00	ug/mL	#-0.01
16) chrysene-D12	17.202	240	397372	10.00	ug/mL	0.00
20) perylene-d12	19.052	264	351694	10.00	ug/mL	0.01
System Monitoring Compounds						
6) 2-fluorobiphenyl	9.930	172	524361	14.36	ug/mL	-0.01
Spiked Amount 100.000			Recovery = 14.36%			
14) o-terphenyl	14.142	230	813669	32.33	ug/mL	-0.01
Spiked Amount 100.000			Recovery = 32.33%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Dec23\120723\
Data File : s4120742.D
Acq On : 08 Dec 2023 06:55 am
Operator : cl
Sample : 67836-04 targets x1
Misc : aro frac
ALS Vial : 37 Sample Multiplier: 1

Quant Time: Dec 08 09:00:22 2023
Quant Method : X:\S4\methods\S4PAH110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration



SFP
12/12/23 @ 12:24
SkylaM

Data Path : X:\S6\2023\Dec23\120723\
Data File : s6120774.D
Signal(s) : FID1A.ch
Acq On : 08 Dec 2023 11:12 am
Operator : dbv
Sample : 67836-04 aro x1
Misc :
ALS Vial : 37 Sample Multiplier: 1

Integration File: rteint.p
Quant Time: Dec 08 17:09:08 2023
Quant Method : X:\S6\methods\S6ARO100423F.M
Quant Title : S6 EPH Aromatics
QLast Update : Thu Oct 05 11:16:37 2023
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :

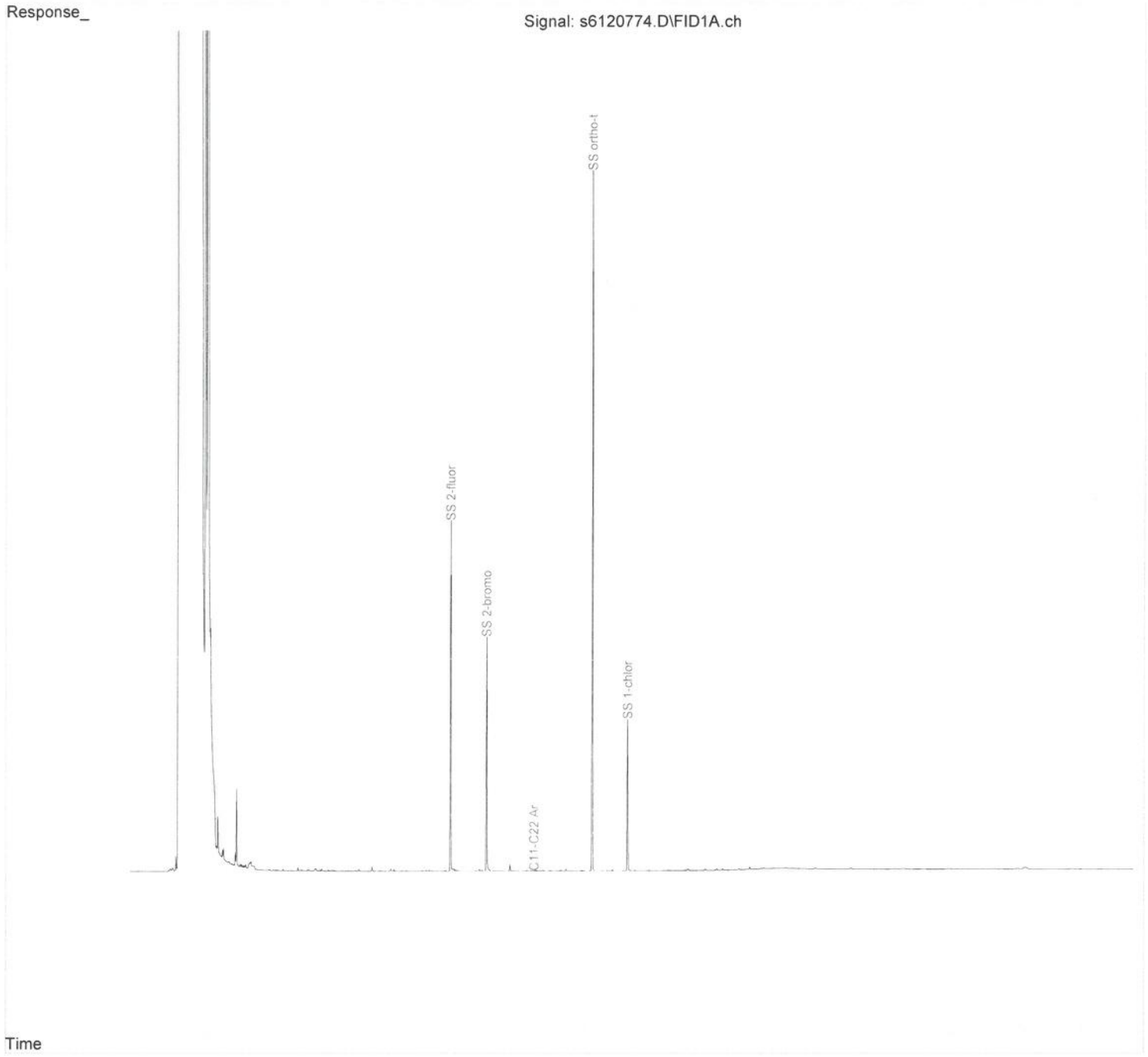
	Compound	R.T.	Response	Conc	Units	
	System Monitoring Compounds					
3) S	SS 2-fluorobiphenyl (...	9.527	2073708	14.694	ug/mLm	BC = Baseline Correction
Spiked Amount	20.000		Recovery =	73.47%		
5) S	SS 2-bromonaphthalene...	10.603	1467782	15.391	ug/mLm	BC = Baseline Correction
Spiked Amount	20.000		Recovery =	76.95%		
10) S	SS ortho-terphenyl (OTP)	13.725	4538424	30.333	ug/mLm	BC = Baseline Correction
Spiked Amount	50.000		Recovery =	60.67%		
11) S	SS 1-chloro-otadecane...	14.765	1007345	8.248	ug/mL	
Spiked Amount	50.000		Recovery =	16.50%		
	Target Compounds					
1)	naphthalene	0.000	0	N.D.	ug/mLd	
2)	2-methylnaphthalene	0.000	0	N.D.	ug/mL	
4)	acenaphthylene	0.000	0	N.D.	ug/mLd	
6)	acenaphthene	0.000	0	N.D.	ug/mL	
7)	fluorene	0.000	0	N.D.	ug/mL	
8)	phenanthrene	0.000	0	N.D.	ug/mL	
9)	anthracene	0.000	0	N.D.	ug/mL	
12)	fluoranthene	0.000	0	N.D.	ug/mL	
13)	pyrene	0.000	0	N.D.	ug/mL	
14)	benzo(a)anthracene	0.000	0	N.D.	ug/mL	
15)	chrysene	0.000	0	N.D.	ug/mL	
16)	benzo(b&k)fluoranthenes	0.000	0	N.D.	ug/mL	
17)	benzo(a)pyrene	0.000	0	N.D.	ug/mL	
18)	indeno&dibenzo	0.000	0	N.D.	ug/mL	
19)	benzo(g,h,i)perylene	0.000	0	N.D.	ug/mL	
20) H	C11-C22 Aromatics	12.000	3845124	27.108	ug/mLm	RI = Range Integration

(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : X:\S6\2023\Dec23\120723\
Data File : s6120774.D
Signal(s) : FID1A.ch
Acq On : 08 Dec 2023 11:12 am
Operator : dbv
Sample : 67836-04 aro x1
Misc :
ALS Vial : 37 Sample Multiplier: 1

Integration File: rteint.p
Quant Time: Dec 08 17:09:08 2023
Quant Method : X:\S6\methods\S6ARO100423F.M
Quant Title : S6 EPH Aromatics
QLast Update : Thu Oct 05 11:16:37 2023
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : X:\S6\2023\Dec23\120723.SEC\
Data File : s6120773.D
Signal(s) : FID2B.ch
Acq On : 08 Dec 2023 11:12 am
Operator : dbv
Sample : 67836-04 ali x1
Misc :
ALS Vial : 112 Sample Multiplier: 1

12/12/23 @ 08:26
DonnaV

Integration File: rteint.p
Quant Time: Dec 08 17:09:29 2023
Quant Method : X:\S6\methods\S6ALI100423A.M
Quant Title : S6 EPH Aliphatics
QLast Update : Thu Oct 05 13:01:54 2023
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :

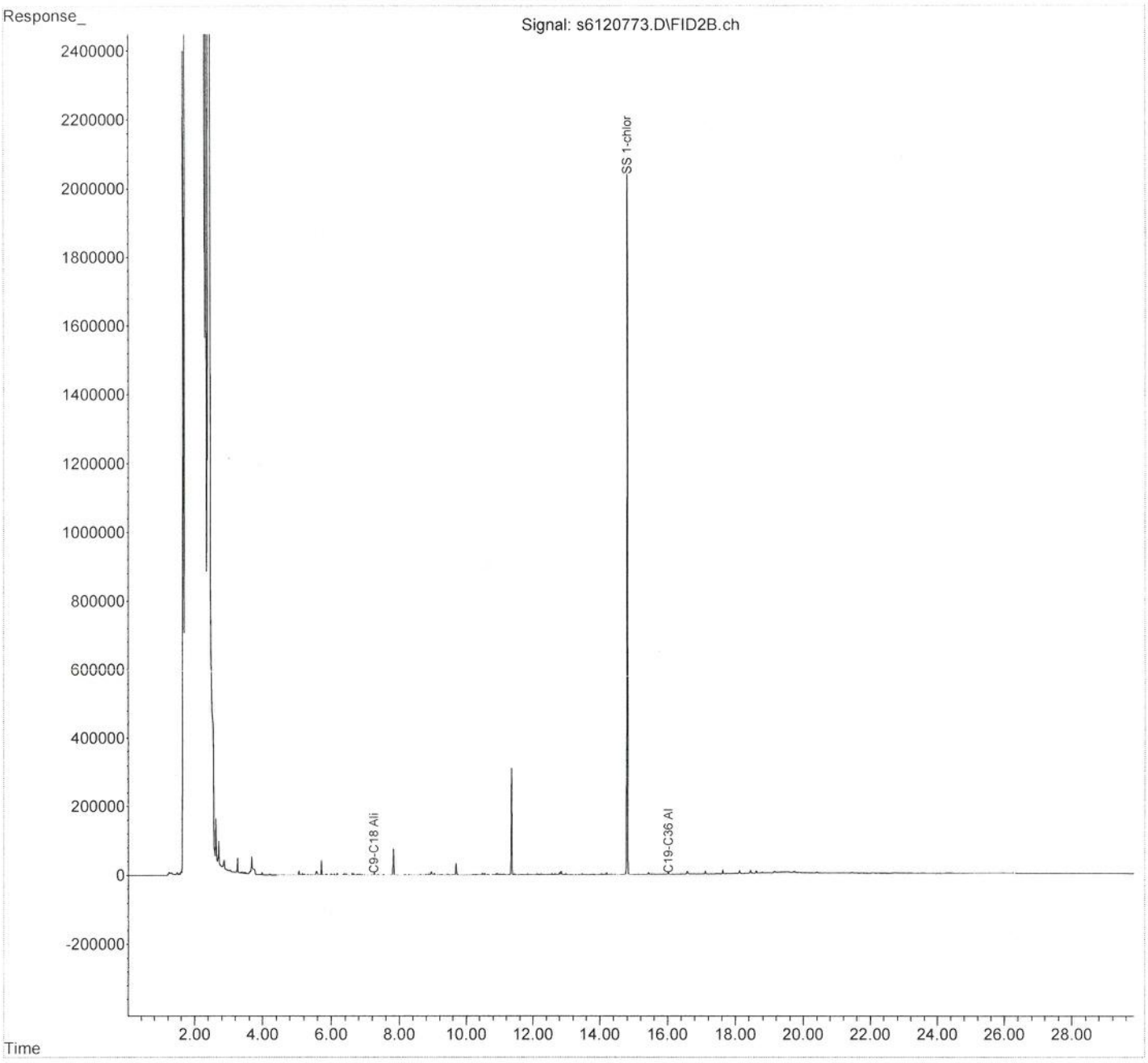
	Compound	R.T.	Response	Conc	Units	
	System Monitoring Compounds					
4) S	SS 2-fluorobiphenyl (...	0.000	0	N.D.	ug/mLd	
Spiked Amount	20.000		Recovery =	0.00%		
6) S	SS 2-bromonaphthalene...	0.000	0	N.D.	ug/mLd	
Spiked Amount	20.000		Recovery =	0.00%		
11) S	SS ortho-terphenyl (OTP)	0.000	0	N.D.	ug/mLd	
Spiked Amount	50.000		Recovery =	0.00%		
13) S	SS 1-chloro-octadecan...	14.806f	2932461	24.977	ug/mLm	BC = Baseline Correction
Spiked Amount	50.000		Recovery =	49.95%		
	Target Compounds					
1)	C9 n-Nonane	0.000	0	N.D.	ug/mLd	
2)	C10 n-Decane	0.000	0	N.D.	ug/mLd	
3)	C12 n-Dodecane	0.000	0	N.D.	ug/mLd	
5)	C14 n-Tetradecane	0.000	0	N.D.	ug/mLd	
7)	C16 n-Hexadecane	0.000	0	N.D.	ug/mLd	
8)	C18 n-Octadecane	0.000	0	N.D.	ug/mLd	
9) H	C9-C18 Aliphatics	7.237	1396697	10.301	ug/mLm	RI = Range Integration
10)	C19 n-Nonadecane	0.000	0	N.D.	ug/mLd	
12)	C20 n-Eicosane	0.000	0	N.D.	ug/mLd	
14)	C22 n-Docosane	0.000	0	N.D.	ug/mLd	
15)	C24 n-Tetracosane	0.000	0	N.D.	ug/mLd	
16)	C26 n-Hexacosane	0.000	0	N.D.	ug/mLd	
17)	C28 n-Octacosane	0.000	0	N.D.	ug/mLd	
18)	C30 n-Triacontane	0.000	0	N.D.	ug/mLd	
19)	C36 n-Hexatriacontane	0.000	0	N.D.	ug/mLd	
20) H	C19-C36 Aliphatics	16.000	2608374	18.632	ug/mLm	RI = Range Integration

(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : X:\S6\2023\Dec23\120723.SEC\
Data File : s6120773.D
Signal(s) : FID2B.ch
Acq On : 08 Dec 2023 11:12 am
Operator : dbv
Sample : 67836-04 ali x1
Misc :
ALS Vial : 112 Sample Multiplier: 1

Integration File: rteint.p
Quant Time: Dec 08 17:09:29 2023
Quant Method : X:\S6\methods\S6ALI100423A.M
Quant Title : S6 EPH Aliphatics
QLast Update : Thu Oct 05 13:01:54 2023
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :



This File:	L:\SVOA\Excel Reports\EPH\231214\67836-005		
Analysis Group:	EPH	Dow Salvage Yard	
Field ID:	MW5-123-133-110823	CRE	
Sample:	67836-05 targets x1	67836-05 aro x1	67836-05 ali x1
Misc:	aro frac		
Method Name:	SVOA04 Method 8270E (€	S6 EPH Aromatics	S6 EPH Aliphatics
Import File Name:	s6 EPHs QC17156W		
TestGroupID:	EMA_EPH_PresCert_A		
Aqueous or Soil? (A or S)	A		
Fractionated? (Y/N)	y	y	
Prep Date:	11/20/2023		
Lab#:	67836-005		
QC_Code:			
Prep#	17156		

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Reviewer Checks:

- Quant Report: Reviewed? Ranges integrated? Analyst Initials & Date?
- Chromatogram Checked? Major peaks identified?
- Soil prep data checked: weight, volume, %solid, Prep date
- Field ID consistent with data and any field replicates
- Results consistent with any re-runs & internal QC
- Substitute dilution data checked
- Correct dilution and reason clear or noted
- Reason for reanalysis documented
- Surrogates pass or flagged & noted
- Flags checked (Expiration, F+, Over Cal)
- Other QC failures, estimates or interferences documented
- Spot checked Reported Result with Quant Report
- Checked Audit flagged data in LIMS

Notes:

Initials & Date: 12/14/23

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X:\S4\2023\Dec23\120723\s4120743.D\S4PAH110223A.XLS PAH targets filename
X:\S6\2023\Dec23\120723\s6120776.D\S6ARO100423F.XLS aromatics filename
X:\S6\2023\Dec23\120723.SEC\s6120775.D\S6ALI100423A.XLS aliphatics filename

#	Surrogate Standards	Concentration (ug/mL)	AnalysisDate	AnalysisTime	AnalyzedBy	Dilution	Weight	Volume	Surr	Recovery	Flag	QC Limits
13	SS 1-chloro-octadecane (COD)	27.59514069	12/8/2023	11:46:00 AM	DBV s6120775.D	1	1	2	100	**55%**		40-140
10	SS ortho-terphenyl (OTP)	30.40152067	12/8/2023	11:46:00 AM	DBV s6120776.D	1	1	2	100	**61%**		40-140
3	SS 2-fluorobiphenyl (2FBP)	14.08940667	12/8/2023	11:46:00 AM	DBV s6120776.D	1	1	2	40	**70%**		40-140
5	SS 2-bromonaphthalene (2BN)	14.67982543	12/8/2023	11:46:00 AM	DBV s6120776.D	1	1	2	40	**73%**		40-140

#	AnalyteName	Concentration (ug/mL)	AnalysisDate	AnalysisTime	AnalyzedBy	Dilution	Weight	Volume
3	naphthalene	0	12/08/2023	07:24:00 AM	CL s4120743.D	1	1	2
4	2-methylnaphthalene	0	12/08/2023	07:24:00 AM	CL s4120743.D	1	1	2
12	phenanthrene	0	12/08/2023	07:24:00 AM	CL s4120743.D	1	1	2
8	acenaphthene	0	12/08/2023	07:24:00 AM	CL s4120743.D	1	1	2
7	acenaphthylene	0	12/08/2023	07:24:00 AM	CL s4120743.D	1	1	2
10	fluorene	0	12/08/2023	07:24:00 AM	CL s4120743.D	1	1	2
13	anthracene	0	12/08/2023	07:24:00 AM	CL s4120743.D	1	1	2
15	fluoranthene	0	12/08/2023	07:24:00 AM	CL s4120743.D	1	1	2
17	pyrene	0	12/08/2023	07:24:00 AM	CL s4120743.D	1	1	2
18	benzo(a)anthracene	0	12/08/2023	07:24:00 AM	CL s4120743.D	1	1	2
19	chrysene	0	12/08/2023	07:24:00 AM	CL s4120743.D	1	1	2
21	benzo(b)fluoranthene	0	12/08/2023	07:24:00 AM	CL s4120743.D	1	1	2
22	benzo(k)fluoranthene	0	12/08/2023	07:24:00 AM	CL s4120743.D	1	1	2
23	benzo(a)pyrene	0	12/08/2023	07:24:00 AM	CL s4120743.D	1	1	2
24	indeno(1,2,3-cd)pyrene	0	12/08/2023	07:24:00 AM	CL s4120743.D	1	1	2
25	dibenzo(a,h)anthracene	0	12/08/2023	07:24:00 AM	CL s4120743.D	1	1	2
26	benzo(g,h,i)perylene	0	12/08/2023	07:24:00 AM	CL s4120743.D	1	1	2
20	C11-C22 Aromatics	31.76260956	12/8/2023	11:46:00 AM	DBV s6120776.D	1	1	2
9	C9-C18 Aliphatics	5.20243925	12/8/2023	11:46:00 AM	DBV s6120775.D	1	1	2
20	C19-C36 Aliphatics	13.77918236	12/8/2023	11:46:00 AM	DBV s6120775.D	1	1	2
	Adjusted C11-C22 Aromatics	31.76260956	12/8/2023	11:46:00 AM	DBV s6120776.D	1	1	2

Data Path : X:\S4\2023\Dec23\120723\
Data File : s4120743.D
Acq On : 08 Dec 2023 07:24 am
Operator : cl
Sample : 67836-05 targets x1
Misc : aro frac
ALS Vial : 38 Sample Multiplier: 1

CL
12/8/23 @ 15:34
CharlesL

Quant Time: Dec 08 09:00:25 2023
Quant Method : X:\S4\methods\S4PAH110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration

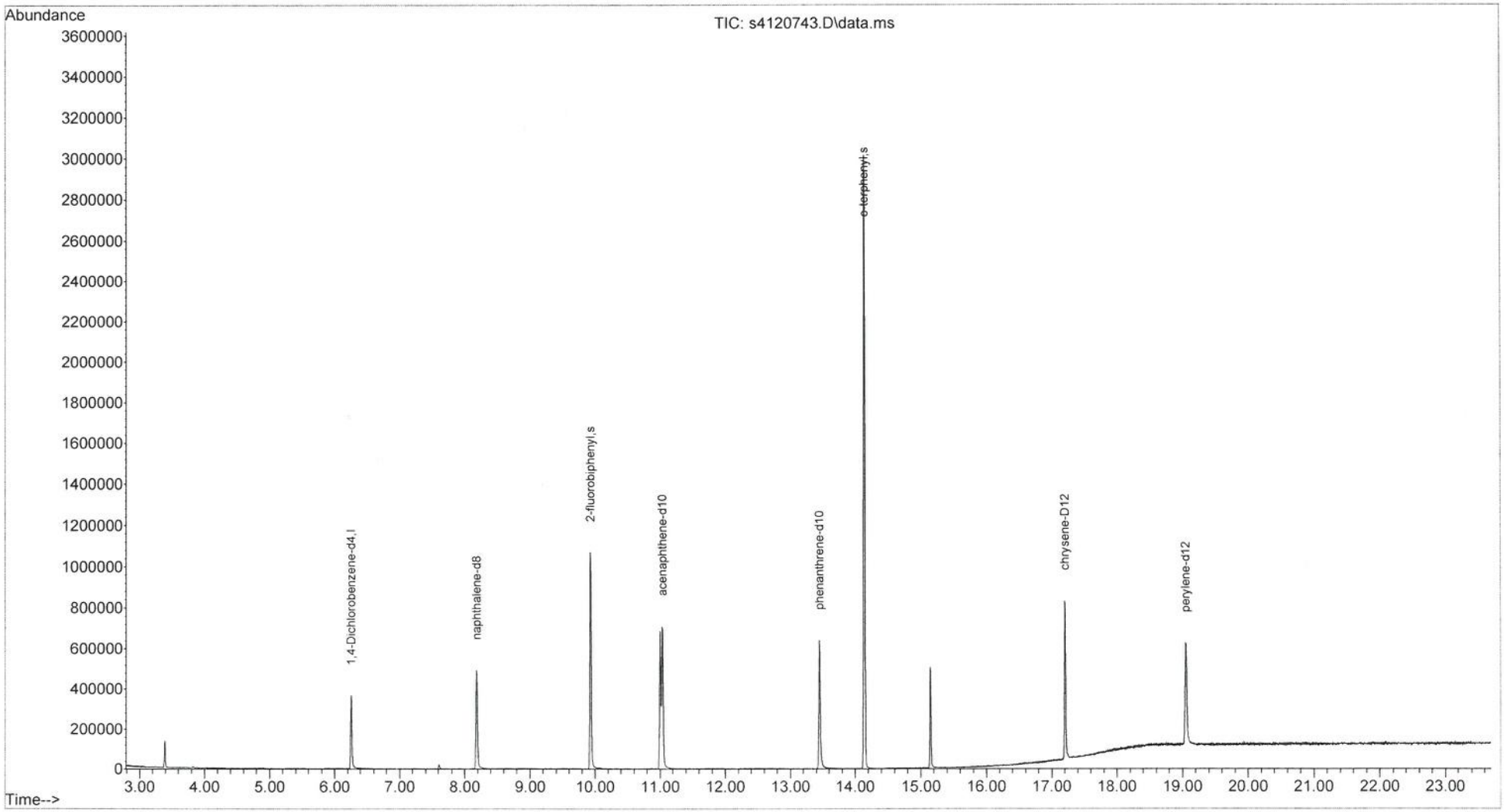
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.253	152	86148	10.00	ug/mL	-0.01
2) naphthalene-d8	8.182	136	360933	10.00	ug/mL	-0.01
5) acenaphthene-d10	11.035	164	206746	10.00	ug/mL	-0.01
11) phenanthrene-d10	13.449	188	394555	10.00	ug/mL	-0.01
16) chrysene-D12	17.202	240	361788	10.00	ug/mL	0.00
20) perylene-d12	19.049	264	332339	10.00	ug/mL	0.01
System Monitoring Compounds						
6) 2-fluorobiphenyl	9.927	172	478541	14.69	ug/mL	-0.01
Spiked Amount 100.000			Recovery = 14.69%			
14) o-terphenyl	14.142	230	802811	35.84	ug/mL	-0.01
Spiked Amount 100.000			Recovery = 35.84%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Dec23\120723\
Data File : s4120743.D
Acq On : 08 Dec 2023 07:24 am
Operator : cl
Sample : 67836-05 targets x1
Misc : aro frac
ALS Vial : 38 Sample Multiplier: 1

Quant Time: Dec 08 09:00:25 2023
Quant Method : X:\S4\methods\S4PAH110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration



SFP
12/12/23 @ 12:24
SkylaM

Data Path : X:\S6\2023\Dec23\120723\
Data File : s6120776.D
Signal(s) : FID1A.ch
Acq On : 08 Dec 2023 11:46 am
Operator : dbv
Sample : 67836-05 aro x1
Misc :
ALS Vial : 38 Sample Multiplier: 1

Integration File: rteint.p
Quant Time: Dec 08 17:09:11 2023
Quant Method : X:\S6\methods\S6ARO100423F.M
Quant Title : S6 EPH Aromatics
QLast Update : Thu Oct 05 11:16:37 2023
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :

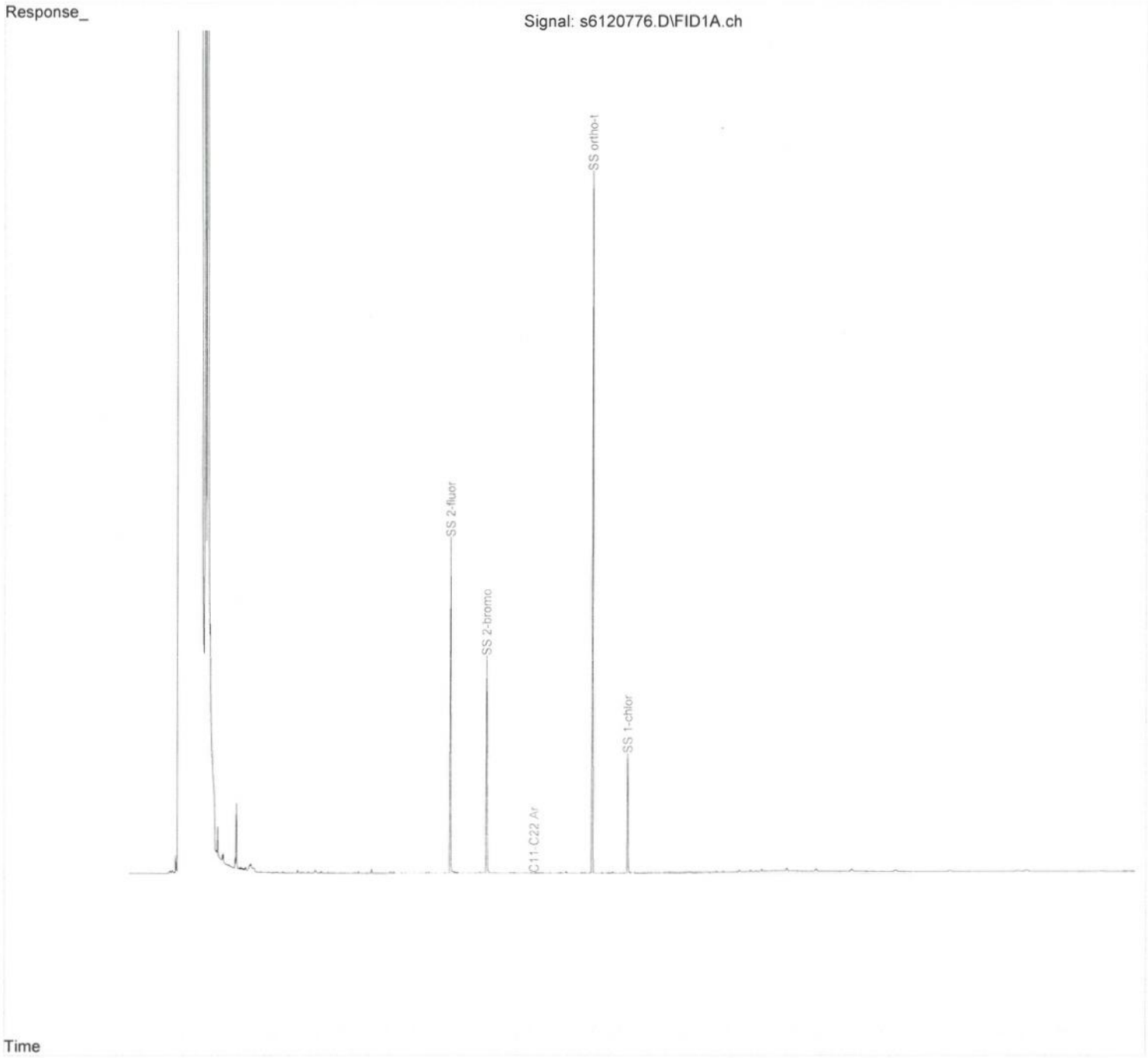
	Compound	R.T.	Response	Conc	Units	
	System Monitoring Compounds					
3) S	SS 2-fluorobiphenyl (...	9.527	1988389	14.089	ug/mLm	BC = Baseline Correction
Spiked Amount	20.000		Recovery =	70.45%		
5) S	SS 2-bromonaphthalene...	10.604	1399890	14.680	ug/mLm	BC = Baseline Correction
Spiked Amount	20.000		Recovery =	73.40%		
10) S	SS ortho-terphenyl (OTP)	13.726	4548693	30.402	ug/mLm	BC = Baseline Correction
Spiked Amount	50.000		Recovery =	60.80%		
11) S	SS 1-chloro-otadecane...	14.765	862053	7.060	ug/mL	
Spiked Amount	50.000		Recovery =	14.12%		
	Target Compounds					
1)	naphthalene	0.000	0	N.D.	ug/mLd	
2)	2-methylnaphthalene	0.000	0	N.D.	ug/mL	
4)	acenaphthylene	0.000	0	N.D.	ug/mLd	
6)	acenaphthene	0.000	0	N.D.	ug/mL	
7)	fluorene	0.000	0	N.D.	ug/mL	
8)	phenanthrene	0.000	0	N.D.	ug/mL	
9)	anthracene	0.000	0	N.D.	ug/mL	
12)	fluoranthene	0.000	0	N.D.	ug/mL	
13)	pyrene	0.000	0	N.D.	ug/mL	
14)	benzo(a)anthracene	0.000	0	N.D.	ug/mLd	
15)	chrysene	0.000	0	N.D.	ug/mL	
16)	benzo(b&k)fluoranthenes	0.000	0	N.D.	ug/mL	
17)	benzo(a)pyrene	0.000	0	N.D.	ug/mL	
18)	indeno&dibenzo	0.000	0	N.D.	ug/mL	
19)	benzo(g,h,i)perylene	0.000	0	N.D.	ug/mL	
20) H	C11-C22 Aromatics	12.000	4544117	31.763	ug/mLm	RI = Range Integration

(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : X:\S6\2023\Dec23\120723\
Data File : s6120776.D
Signal(s) : FID1A.ch
Acq On : 08 Dec 2023 11:46 am
Operator : dbv
Sample : 67836-05 aro x1
Misc :
ALS Vial : 38 Sample Multiplier: 1

Integration File: rteint.p
Quant Time: Dec 08 17:09:11 2023
Quant Method : X:\S6\methods\S6ARO100423F.M
Quant Title : S6 EPH Aromatics
QLast Update : Thu Oct 05 11:16:37 2023
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : X:\S6\2023\Dec23\120723.SEC\
Data File : s6120775.D
Signal(s) : FID2B.ch
Acq On : 08 Dec 2023 11:46 am
Operator : dbv
Sample : 67836-05 ali x1
Misc :
ALS Vial : 113 Sample Multiplier: 1

12/12/23 @ 08:26
DonnaV

Integration File: rteint.p
Quant Time: Dec 08 17:09:32 2023
Quant Method : X:\S6\methods\S6ALI100423A.M
Quant Title : S6 EPH Aliphatics
QLast Update : Thu Oct 05 13:01:54 2023
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :

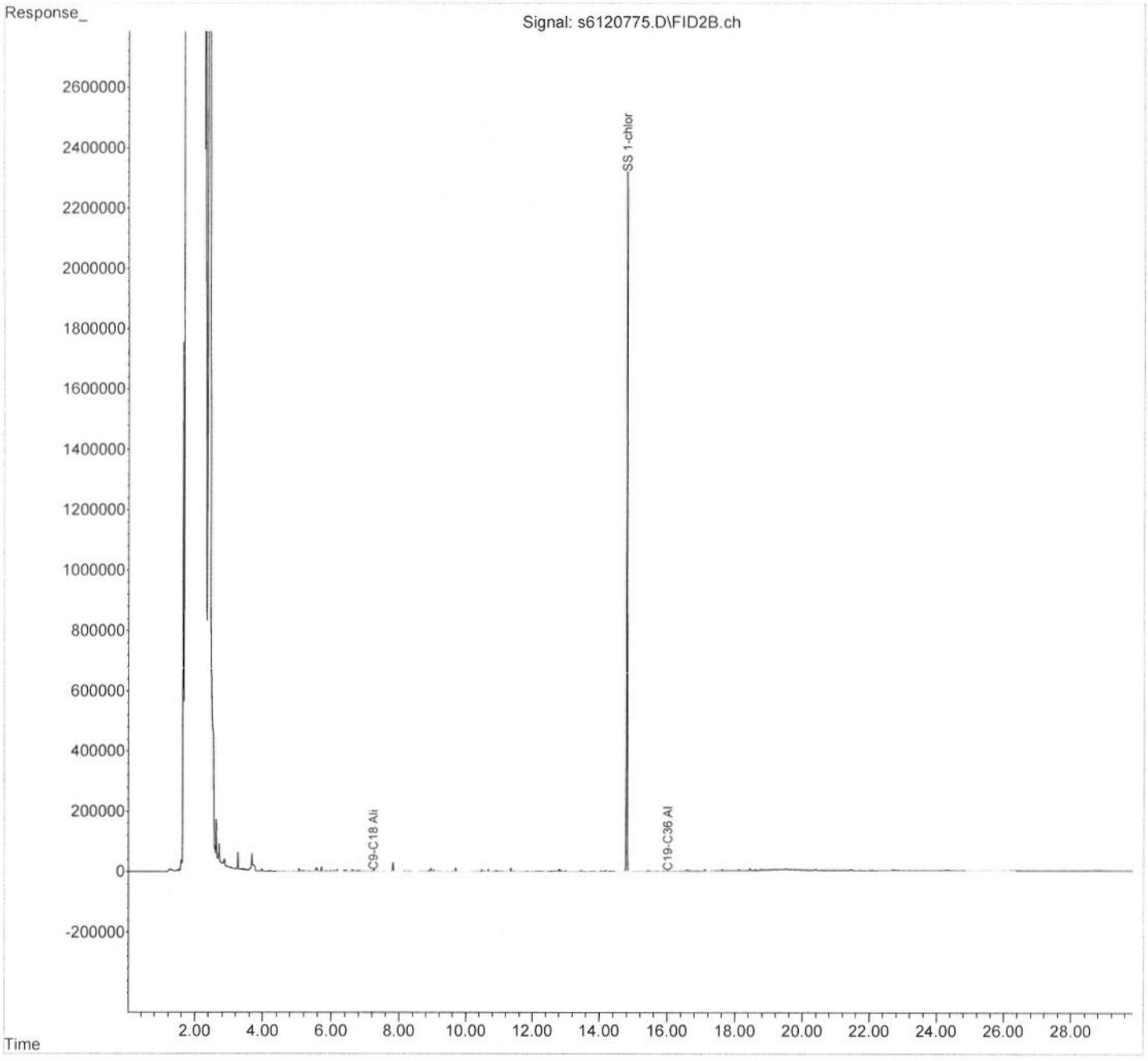
	Compound	R.T.	Response	Conc	Units	
	System Monitoring Compounds					
4) S	SS 2-fluorobiphenyl (...	0.000	0	N.D.	ug/mLd	
Spiked Amount	20.000		Recovery =	0.00%		
6) S	SS 2-bromonaphthalene...	0.000	0	N.D.	ug/mLd	
Spiked Amount	20.000		Recovery =	0.00%		
11) S	SS ortho-terphenyl (OTP)	0.000	0	N.D.	ug/mLd	
Spiked Amount	50.000		Recovery =	0.00%		
13) S	SS 1-chloro-octadecan...	14.808f	3239208	27.595	ug/mLm	BC = Baseline Correction
Spiked Amount	50.000		Recovery =	55.19%		
	Target Compounds					
1)	C9 n-Nonane	0.000	0	N.D.	ug/mLd	
2)	C10 n-Decane	0.000	0	N.D.	ug/mLd	
3)	C12 n-Dodecane	0.000	0	N.D.	ug/mLd	
5)	C14 n-Tetradecane	0.000	0	N.D.	ug/mLd	
7)	C16 n-Hexadecane	0.000	0	N.D.	ug/mLd	
8)	C18 n-Octadecane	0.000	0	N.D.	ug/mLd	
9) H	C9-C18 Aliphatics	7.237	744704	5.202	ug/mLm	RI = Range Integration
10)	C19 n-Nonadecane	0.000	0	N.D.	ug/mLd	
12)	C20 n-Eicosane	0.000	0	N.D.	ug/mLd	
14)	C22 n-Docosane	0.000	0	N.D.	ug/mLd	
15)	C24 n-Tetracosane	0.000	0	N.D.	ug/mLd	
16)	C26 n-Hexacosane	0.000	0	N.D.	ug/mLd	
17)	C28 n-Octacosane	0.000	0	N.D.	ug/mLd	
18)	C30 n-Triacontane	0.000	0	N.D.	ug/mLd	
19)	C36 n-Hexatriacontane	0.000	0	N.D.	ug/mLd	
20) H	C19-C36 Aliphatics	16.000	1965828	13.779	ug/mLm	RI = Range Integration

(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : X:\S6\2023\Dec23\120723.SEC\
Data File : s6120775.D
Signal(s) : FID2B.ch
Acq On : 08 Dec 2023 11:46 am
Operator : dbv
Sample : 67836-05 ali x1
Misc :
ALS Vial : 113 Sample Multiplier: 1

Integration File: rteint.p
Quant Time: Dec 08 17:09:32 2023
Quant Method : X:\S6\methods\S6ALI100423A.M
Quant Title : S6 EPH Aliphatics
QLast Update : Thu Oct 05 13:01:54 2023
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :



This File:	**L:\SVOA\Excel Reports\EPH\231214\67836-006**		
Analysis Group:	**EPH**	**Dow Salvage Yard**	
Field ID:	**BRMW5-56-66-110823**	**CRE**	
Sample:	**67836-06 targets x1**	**67836-06 aro x1**	**67836-06 ali x1**
Misc:	*aro frac*		
Method Name:	*SVOA04 Method 8270E (t*	*S6 EPH Aromatics*	*S6 EPH Aliphatics*
Import File Name:	**s6 EPHs QC17156W**		
TestGroupID:	**EMA_EPH_PresCert_A**		
Aqueous or Soil? (A or S)	**A**		
Fractionated? (Y/N)	**y**	**y**	
Prep Date:	11/20/2023		
Lab#:	**67836-006**		
QC_Code:			
Prep#	**17156**		

Donna Valley L:\SVOA\EPH\EPH ImportFileBuilder2.0.xls
12/14/23 12:10 PM
L:\SVOA\EPH\
L:\SVOA\Excel Reports\EPH\2312
L:\SVOA\PDF Reports\FUELS\

Reviewer Checks:

- Quant Report: Reviewed? Ranges integrated? Analyst Initials & Date?
- Chromatogram Checked? Major peaks identified?
- Soil prep data checked: weight, volume, %solid, Prep date
- Field ID consistent with data and any field replicates
- Results consistent with any re-runs & internal QC
- Substitute dilution data checked
- Correct dilution and reason clear or noted
- Reason for reanalysis documented
- Surrogates pass or flagged & noted
- Flags checked (Expiration, F+, Over Cal)
- Other QC failures, estimates or interferences documented
- Spot checked Reported Result with Quant Report
- Checked Audit flagged data in LIMS

Notes:

Initials & Date: 12/14/23

1
2
5
11
16
20

X:\S4\2023\Dec23\120723\s4120744.D\S4PAH110223A.XLS PAH targets filename
X:\S6\2023\Dec23\120723\s6120778.D\S6ARO100423F.XLS aromatics filename
X:\S6\2023\Dec23\120723.SEC\s6120777.D\S6ALI100423A.XLS aliphatics filename

#	Surrogate Standards	Concentration (ug/mL)	AnalysisDate	AnalysisTime	AnalyzedBy	Dilution	Weight	Volume	Surr	Recovery	Flag	QC Limits
13	SS 1-chloro-octadecane (COD)	23.28471148	12/8/2023	12:20:00 PM	DBV s6120777.D	1	1	2	100	**47%**		40-140
10	SS ortho-terphenyl (OTP)	31.83361276	12/8/2023	12:20:00 PM	DBV s6120778.D	1	1	2	100	**64%**		40-140
3	SS 2-fluorobiphenyl (2FBP)	15.13746043	12/8/2023	12:20:00 PM	DBV s6120778.D	1	1	2	40	**76%**		40-140
5	SS 2-bromonaphthalene (2BN)	15.70582095	12/8/2023	12:20:00 PM	DBV s6120778.D	1	1	2	40	**79%**		40-140

#	AnalyteName	Concentration (ug/mL)	AnalysisDate	AnalysisTime	AnalyzedBy	Dilution	Weight	Volume
3	naphthalene	0	12/08/2023	07:54:00 AM	CL s4120744.D	1	1	2
4	2-methylnaphthalene	0	12/08/2023	07:54:00 AM	CL s4120744.D	1	1	2
12	phenanthrene	0	12/08/2023	07:54:00 AM	CL s4120744.D	1	1	2
8	acenaphthene	0	12/08/2023	07:54:00 AM	CL s4120744.D	1	1	2
7	acenaphthylene	0	12/08/2023	07:54:00 AM	CL s4120744.D	1	1	2
10	fluorene	0	12/08/2023	07:54:00 AM	CL s4120744.D	1	1	2
13	anthracene	0	12/08/2023	07:54:00 AM	CL s4120744.D	1	1	2
15	fluoranthene	0	12/08/2023	07:54:00 AM	CL s4120744.D	1	1	2
17	pyrene	0	12/08/2023	07:54:00 AM	CL s4120744.D	1	1	2
18	benzo(a)anthracene	0	12/08/2023	07:54:00 AM	CL s4120744.D	1	1	2
19	chrysene	0	12/08/2023	07:54:00 AM	CL s4120744.D	1	1	2
21	benzo(b)fluoranthene	0	12/08/2023	07:54:00 AM	CL s4120744.D	1	1	2
22	benzo(k)fluoranthene	0	12/08/2023	07:54:00 AM	CL s4120744.D	1	1	2
23	benzo(a)pyrene	0	12/08/2023	07:54:00 AM	CL s4120744.D	1	1	2
24	indeno(1,2,3-cd)pyrene	0	12/08/2023	07:54:00 AM	CL s4120744.D	1	1	2
25	dibenzo(a,h)anthracene	0	12/08/2023	07:54:00 AM	CL s4120744.D	1	1	2
26	benzo(g,h,i)perylene	0	12/08/2023	07:54:00 AM	CL s4120744.D	1	1	2
20	C11-C22 Aromatics	30.93100507	12/8/2023	12:20:00 PM	DBV s6120778.D	1	1	2
9	C9-C18 Aliphatics	4.77307761	12/8/2023	12:20:00 PM	DBV s6120777.D	1	1	2
20	C19-C36 Aliphatics	16.48182405	12/8/2023	12:20:00 PM	DBV s6120777.D	1	1	2
	Adjusted C11-C22 Aromatics	30.93100507	12/8/2023	12:20:00 PM	DBV s6120778.D	1	1	2

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Dec23\120723\
Data File : s4120744.D
Acq On : 08 Dec 2023 07:54 am
Operator : cl
Sample : 67836-06 targets x1
Misc : aro frac
ALS Vial : 39 Sample Multiplier: 1

CL
12/8/23 @ 15:34
CharlesL

Quant Time: Dec 08 09:00:28 2023
Quant Method : X:\S4\methods\S4PAH110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration

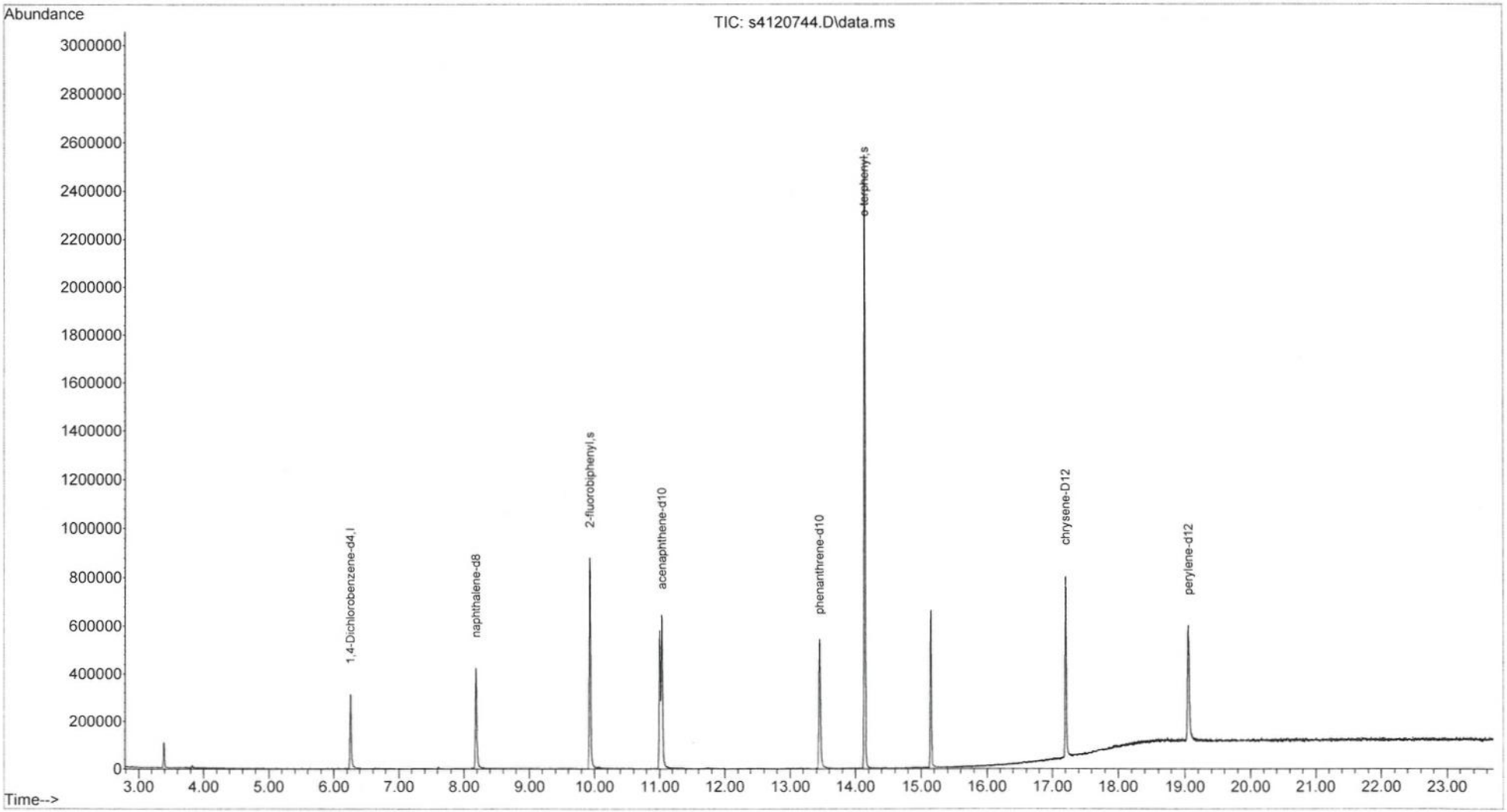
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.252	152	77423	10.00	ug/mL	-0.01
2) naphthalene-d8	8.181	136	314844	10.00	ug/mL	-0.01
5) acenaphthene-d10	11.038	164	184694	10.00	ug/mL	-0.01
11) phenanthrene-d10	13.448	188	360552	10.00	ug/mL	#-0.01
16) chrysene-D12	17.204	240	335592	10.00	ug/mL	0.00
20) perylene-d12	19.054	264	300013	10.00	ug/mL	0.02
System Monitoring Compounds						
6) 2-fluorobiphenyl	9.927	172	404180	13.89	ug/mL	-0.02
Spiked Amount 100.000			Recovery = 13.89%			
14) o-terphenyl	14.142	230	666021	32.53	ug/mL	-0.01
Spiked Amount 100.000			Recovery = 32.53%			
Target Compounds						Qvalue
18) benzo(a)anthracene	17.202	228	864	Below Cal	#	51
19) chrysene	17.202	228	864	Below Cal	#	49

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Dec23\120723\
Data File : s4120744.D
Acq On : 08 Dec 2023 07:54 am
Operator : cl
Sample : 67836-06 targets x1
Misc : aro frac
ALS Vial : 39 Sample Multiplier: 1

Quant Time: Dec 08 09:00:28 2023
Quant Method : X:\S4\methods\S4PAH110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration



SFP
12/12/23 @ 12:24
SkylaM

Data Path : X:\S6\2023\Dec23\120723\
Data File : s6120778.D
Signal(s) : FID1A.ch
Acq On : 08 Dec 2023 12:20 pm
Operator : dbv
Sample : 67836-06 aro x1
Misc :
ALS Vial : 39 Sample Multiplier: 1

Integration File: rteint.p
Quant Time: Dec 08 17:09:14 2023
Quant Method : X:\S6\methods\S6ARO100423F.M
Quant Title : S6 EPH Aromatics
QLast Update : Thu Oct 05 11:16:37 2023
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :

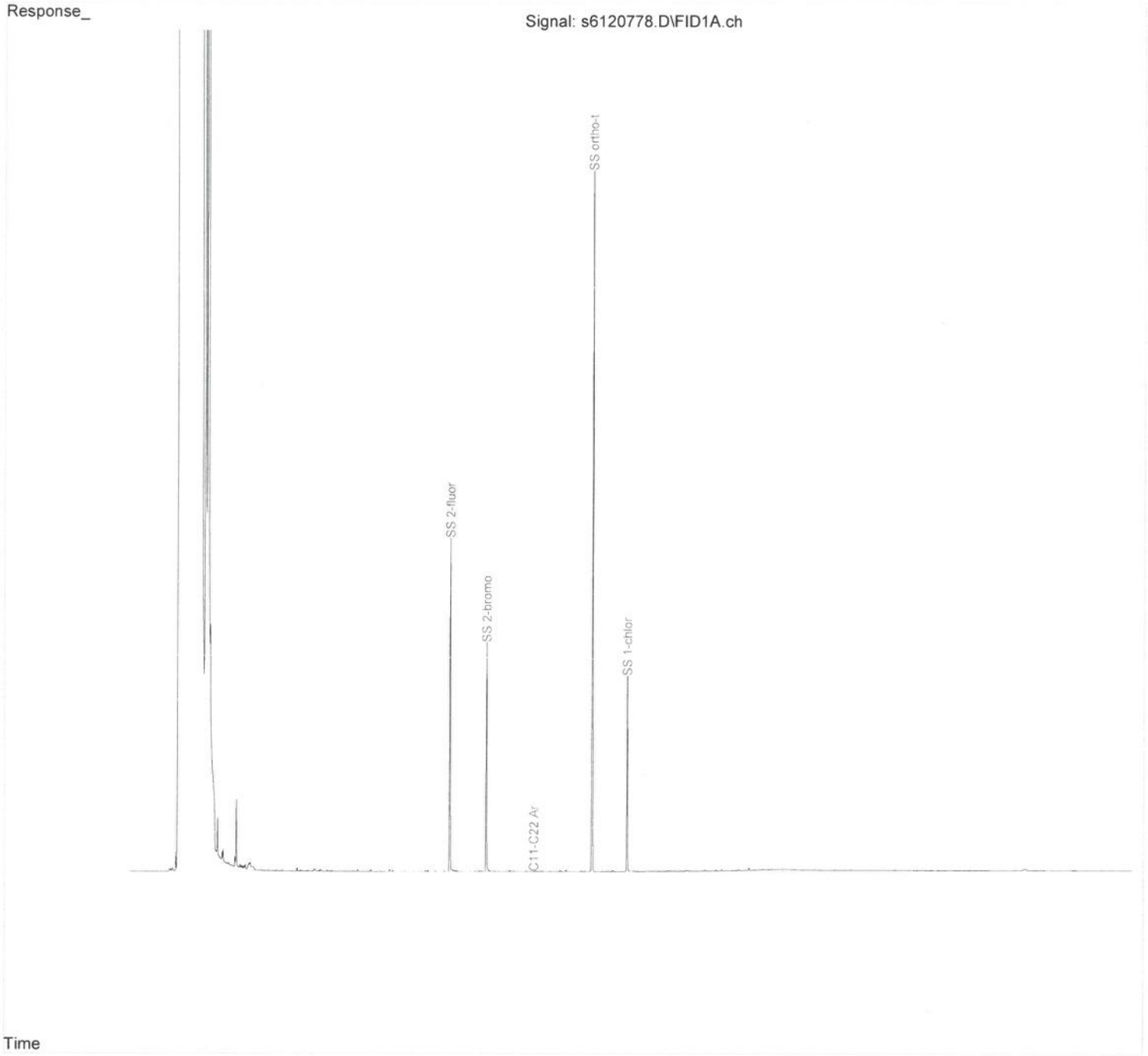
	Compound	R.T.	Response	Conc	Units	
	System Monitoring Compounds					
3) S	SS 2-fluorobiphenyl (...	9.527	2136169	15.137	ug/mLm	BC = Baseline Correction
Spiked Amount	20.000		Recovery =	75.69%		
5) S	SS 2-bromonaphthalene...	10.604	1497783	15.706	ug/mLm	BC = Baseline Correction
Spiked Amount	20.000		Recovery =	78.53%		
10) S	SS ortho-terphenyl (OTP)	13.725	4763175	31.834	ug/mLm	BC = Baseline Correction
Spiked Amount	50.000		Recovery =	63.67%		
11) S	SS 1-chloro-otadecane...	14.764	1387262	11.353	ug/mL	
Spiked Amount	50.000		Recovery =	22.71%		
	Target Compounds					
1)	naphthalene	0.000	0	N.D.	ug/mLd	
2)	2-methylnaphthalene	0.000	0	N.D.	ug/mL	
4)	acenaphthylene	0.000	0	N.D.	ug/mLd	
6)	acenaphthene	0.000	0	N.D.	ug/mL	
7)	fluorene	0.000	0	N.D.	ug/mL	
8)	phenanthrene	0.000	0	N.D.	ug/mL	
9)	anthracene	0.000	0	N.D.	ug/mL	
12)	fluoranthene	0.000	0	N.D.	ug/mL	
13)	pyrene	0.000	0	N.D.	ug/mL	
14)	benzo(a)anthracene	0.000	0	N.D.	ug/mL	
15)	chrysene	0.000	0	N.D.	ug/mL	
16)	benzo(b&k)fluoranthenes	0.000	0	N.D.	ug/mL	
17)	benzo(a)pyrene	0.000	0	N.D.	ug/mL	
18)	indeno&dibenzo	0.000	0	N.D.	ug/mL	
19)	benzo(g,h,i)perylene	0.000	0	N.D.	ug/mL	
20) H	C11-C22 Aromatics	12.000	4419230	30.931	ug/mLm	RI = Range Integration

(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : X:\S6\2023\Dec23\120723\
Data File : s6120778.D
Signal(s) : FID1A.ch
Acq On : 08 Dec 2023 12:20 pm
Operator : dbv
Sample : 67836-06 aro x1
Misc :
ALS Vial : 39 Sample Multiplier: 1

Integration File: rteint.p
Quant Time: Dec 08 17:09:14 2023
Quant Method : X:\S6\methods\S6ARO100423F.M
Quant Title : S6 EPH Aromatics
QLast Update : Thu Oct 05 11:16:37 2023
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : X:\S6\2023\Dec23\120723.SEC\
Data File : s6120777.D
Signal(s) : FID2B.ch
Acq On : 08 Dec 2023 12:20 pm
Operator : dbv
Sample : 67836-06 ali x1
Misc :
ALS Vial : 114 Sample Multiplier: 1

12/12/23 @ 08:26
DonnaV

Integration File: rteint.p
Quant Time: Dec 08 17:09:35 2023
Quant Method : X:\S6\methods\S6ALI100423A.M
Quant Title : S6 EPH Aliphatics
QLast Update : Thu Oct 05 13:01:54 2023
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :

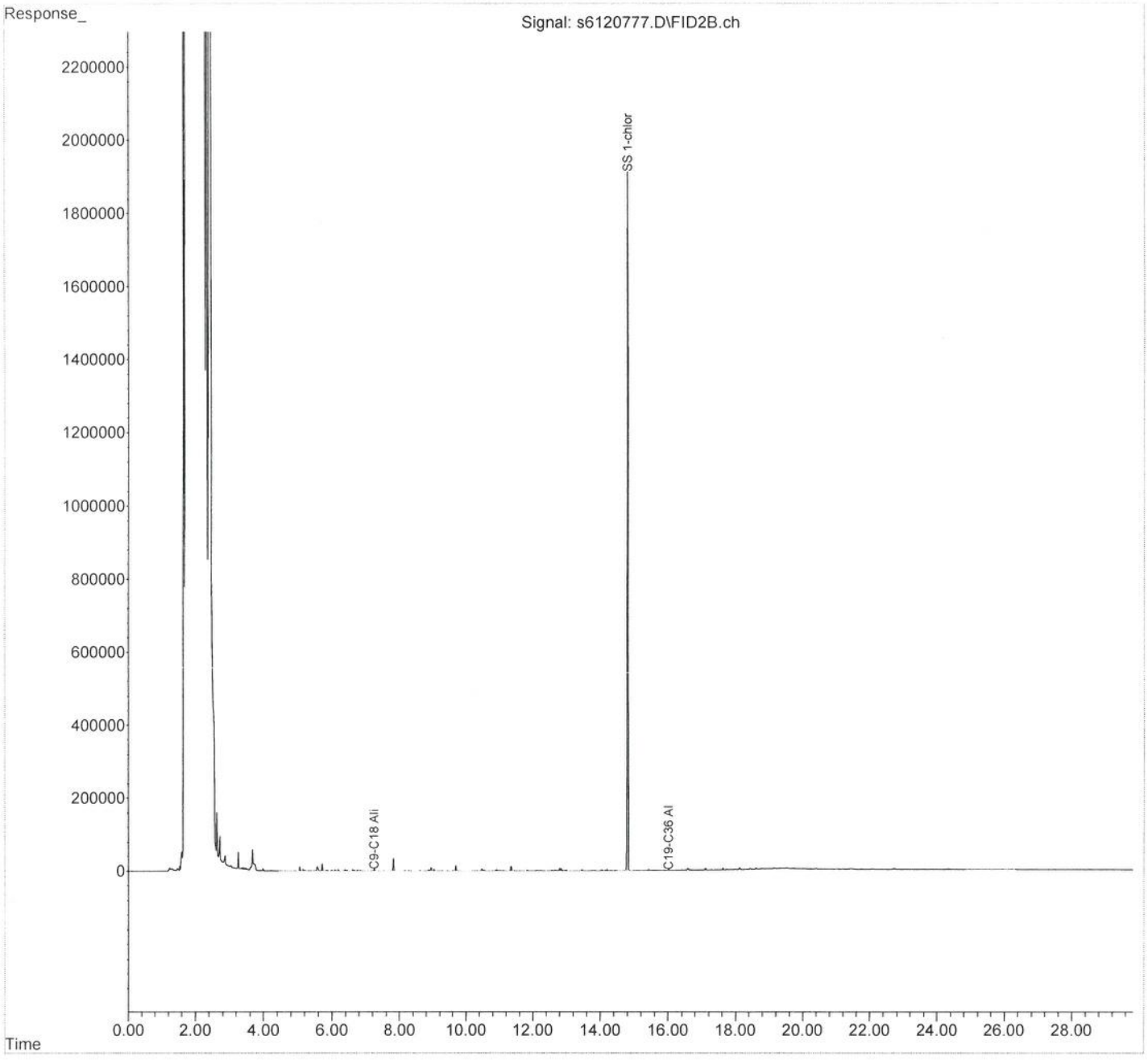
	Compound	R.T.	Response	Conc	Units	
	System Monitoring Compounds					
4) S	SS 2-fluorobiphenyl (...	0.000	0	N.D.	ug/mLd	
Spiked Amount	20.000	Recovery	=	0.00%		
6) S	SS 2-bromonaphthalene...	0.000	0	N.D.	ug/mLd	
Spiked Amount	20.000	Recovery	=	0.00%		
11) S	SS ortho-terphenyl (OTP)	0.000	0	N.D.	ug/mLd	
Spiked Amount	50.000	Recovery	=	0.00%		
13) S	SS 1-chloro-octadecan...	14.807f	2734107	23.285	ug/mLm	BC = Baseline Correction
Spiked Amount	50.000	Recovery	=	46.57%		
	Target Compounds					
1)	C9 n-Nonane	0.000	0	N.D.	ug/mLd	
2)	C10 n-Decane	0.000	0	N.D.	ug/mLd	
3)	C12 n-Dodecane	0.000	0	N.D.	ug/mLd	
5)	C14 n-Tetradecane	0.000	0	N.D.	ug/mLd	
7)	C16 n-Hexadecane	0.000	0	N.D.	ug/mLd	
8)	C18 n-Octadecane	0.000	0	N.D.	ug/mLd	
9) H	C9-C18 Aliphatics	7.237	689794	4.773	ug/mLm	RI = Range Integration
10)	C19 n-Nonadecane	0.000	0	N.D.	ug/mLd	
12)	C20 n-Eicosane	0.000	0	N.D.	ug/mLd	
14)	C22 n-Docosane	0.000	0	N.D.	ug/mLd	
15)	C24 n-Tetracosane	0.000	0	N.D.	ug/mLd	
16)	C26 n-Hexacosane	0.000	0	N.D.	ug/mLd	
17)	C28 n-Octacosane	0.000	0	N.D.	ug/mLd	
18)	C30 n-Triacontane	0.000	0	N.D.	ug/mLd	
19)	C36 n-Hexatriacontane	0.000	0	N.D.	ug/mLd	
20) H	C19-C36 Aliphatics	16.000	2323695	16.482	ug/mLm	RI = Range Integration

(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : X:\S6\2023\Dec23\120723.SEC\
Data File : s6120777.D
Signal(s) : FID2B.ch
Acq On : 08 Dec 2023 12:20 pm
Operator : dbv
Sample : 67836-06 ali x1
Misc :
ALS Vial : 114 Sample Multiplier: 1

Integration File: rteint.p
Quant Time: Dec 08 17:09:35 2023
Quant Method : X:\S6\methods\S6ALI100423A.M
Quant Title : S6 EPH Aliphatics
QLast Update : Thu Oct 05 13:01:54 2023
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :



This File:	L:\SVOA\Excel Reports\EPH\231214\67836-007		
Analysis Group:	EPH	Dow Salvage Yard	
Field ID:	SY-08MW8-110823	CRE	
Sample:	67836-07 targets x1	67836-07 aro x1	67836-07 ali x1
Misc:	aro frac		
Method Name:	SVOA04 Method 8270E (€	S6 EPH Aromatics	S6 EPH Aliphatics
Import File Name:	s6 EPHs QC17156W		
TestGroupID:	EMA_EPH_PresCert_A		
Aqueous or Soil? (A or S)	A		
Fractionated? (Y/N)	Y	Y	
Prep Date:	11/20/2023		
Lab#:	67836-007		
QC_Code:			
Prep#	17156		

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Reviewer Checks:

- Quant Report: Reviewed? Ranges integrated? Analyst Initials & Date?
- Chromatogram Checked? Major peaks identified?
- Soil prep data checked: weight, volume, %solid, Prep date
- Field ID consistent with data and any field replicates
- Results consistent with any re-runs & internal QC
- Substitute dilution data checked
- Correct dilution and reason clear or noted
- Reason for reanalysis documented
- Surrogates pass or flagged & noted
- Flags checked (Expiration, F+, Over Cal)
- Other QC failures, estimates or interferences documented
- Spot checked Reported Result with Quant Report
- Checked Audit flagged data in LIMS

Notes:

Initials & Date: 12/14/23

1
2
5
11
16
20

X:\S4\2023\Dec23\120723\s4120745.D\S4PAH110223A.XLS PAH targets filename
X:\S6\2023\Dec23\120723\s6120780.D\S6ARO100423F.XLS aromatics filename
X:\S6\2023\Dec23\120723.SEC\s6120779.D\S6ALI100423A.XLS aliphatics filename

#	Surrogate Standards	Concentration (ug/mL)	AnalysisDate	AnalysisTime	AnalyzedBy	Dilution	Weight	Volume	Surr	Recovery	Flag	QC Limits
13	SS 1-chloro-octadecane (COD)	26.54344413	12/8/2023	12:54:00 PM	DBV s6120779.D	1	1	2	100	**53%**		40-140
10	SS ortho-terphenyl (OTP)	30.91240314	12/8/2023	12:54:00 PM	DBV s6120780.D	1	1	2	100	**62%**		40-140
3	SS 2-fluorobiphenyl (2FBP)	15.61726168	12/8/2023	12:54:00 PM	DBV s6120780.D	1	1	2	40	**78%**		40-140
5	SS 2-bromonaphthalene (2BN)	16.1460873	12/8/2023	12:54:00 PM	DBV s6120780.D	1	1	2	40	**81%**		40-140

#	AnalyteName	Concentration (ug/mL)	AnalysisDate	AnalysisTime	AnalyzedBy	Dilution	Weight	Volume
3	naphthalene	0	12/08/2023	08:24:00 AM	CL s4120745.D	1	0.99	2
4	2-methylnaphthalene	0	12/08/2023	08:24:00 AM	CL s4120745.D	1	0.99	2
12	phenanthrene	0	12/08/2023	08:24:00 AM	CL s4120745.D	1	0.99	2
8	acenaphthene	0	12/08/2023	08:24:00 AM	CL s4120745.D	1	0.99	2
7	acenaphthylene	0	12/08/2023	08:24:00 AM	CL s4120745.D	1	0.99	2
10	fluorene	0	12/08/2023	08:24:00 AM	CL s4120745.D	1	0.99	2
13	anthracene	0	12/08/2023	08:24:00 AM	CL s4120745.D	1	0.99	2
15	fluoranthene	0	12/08/2023	08:24:00 AM	CL s4120745.D	1	0.99	2
17	pyrene	0	12/08/2023	08:24:00 AM	CL s4120745.D	1	0.99	2
18	benzo(a)anthracene	0	12/08/2023	08:24:00 AM	CL s4120745.D	1	0.99	2
19	chrysene	0	12/08/2023	08:24:00 AM	CL s4120745.D	1	0.99	2
21	benzo(b)fluoranthene	0	12/08/2023	08:24:00 AM	CL s4120745.D	1	0.99	2
22	benzo(k)fluoranthene	0	12/08/2023	08:24:00 AM	CL s4120745.D	1	0.99	2
23	benzo(a)pyrene	0	12/08/2023	08:24:00 AM	CL s4120745.D	1	0.99	2
24	indeno(1,2,3-cd)pyrene	0	12/08/2023	08:24:00 AM	CL s4120745.D	1	0.99	2
25	dibenzo(a,h)anthracene	0	12/08/2023	08:24:00 AM	CL s4120745.D	1	0.99	2
26	benzo(g,h,i)perylene	0	12/08/2023	08:24:00 AM	CL s4120745.D	1	0.99	2
20	C11-C22 Aromatics	27.19711843	12/8/2023	12:54:00 PM	DBV s6120780.D	1	0.99	2
9	C9-C18 Aliphatics	6.450176218	12/8/2023	12:54:00 PM	DBV s6120779.D	1	0.99	2
20	C19-C36 Aliphatics	15.66673516	12/8/2023	12:54:00 PM	DBV s6120779.D	1	0.99	2
	Adjusted C11-C22 Aromatics	27.19711843	12/8/2023	12:54:00 PM	DBV s6120780.D	1	0.99	2

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Dec23\120723\
Data File : s4120745.D
Acq On : 08 Dec 2023 08:24 am
Operator : cl
Sample : 67836-07 targets x1
Misc : aro frac
ALS Vial : 40 Sample Multiplier: 1

C L
12/8/23 @ 15:35
CharlesL

Quant Time: Dec 08 12:08:05 2023
Quant Method : X:\S4\methods\S4PAH110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration

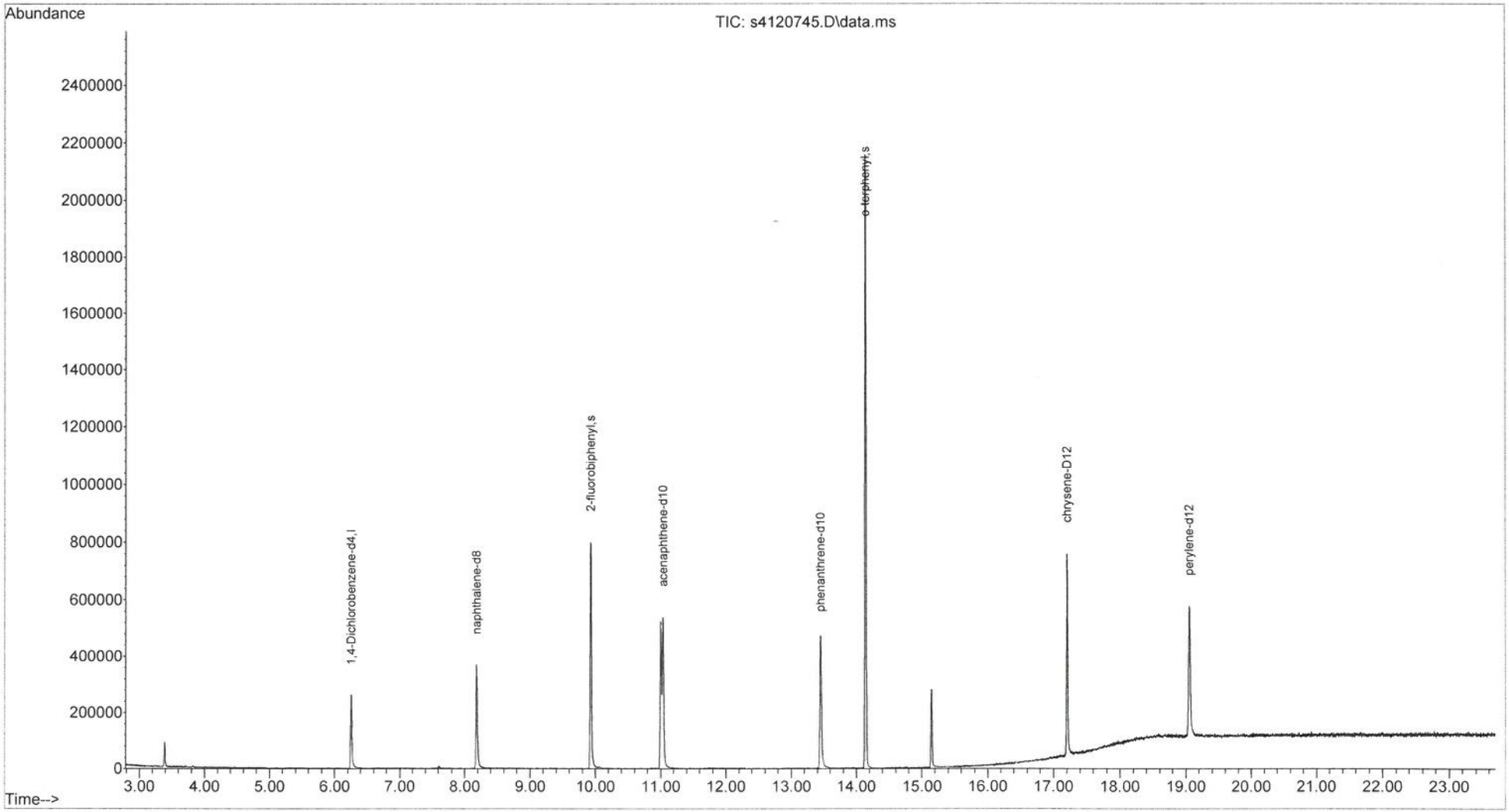
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.250	152	66348	10.00	ug/mL	-0.01
2) naphthalene-d8	8.182	136	265951	10.00	ug/mL	-0.01
5) acenaphthene-d10	11.036	164	162474	10.00	ug/mL	-0.01
11) phenanthrene-d10	13.449	188	319324	10.00	ug/mL	#-0.01
16) chrysene-D12	17.205	240	299793	10.00	ug/mL	0.00
20) perylene-d12	19.052	264	286866	10.00	ug/mL	0.01
System Monitoring Compounds						
6) 2-fluorobiphenyl	9.927	172	374554	14.63	ug/mL	-0.01
Spiked Amount 100.000			Recovery = 14.63%			
14) o-terphenyl	14.142	230	591567	32.63	ug/mL	-0.01
Spiked Amount 100.000			Recovery = 32.63%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Dec23\120723\
Data File : s4120745.D
Acq On : 08 Dec 2023 08:24 am
Operator : cl
Sample : 67836-07 targets x1
Misc : aro frac
ALS Vial : 40 Sample Multiplier: 1

Quant Time: Dec 08 12:08:05 2023
Quant Method : X:\S4\methods\S4PAH110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration



SFP
12/12/23 @ 12:24
SkylaM

Data Path : X:\S6\2023\Dec23\120723\
Data File : s6120780.D
Signal(s) : FID1A.ch
Acq On : 08 Dec 2023 12:54 pm
Operator : dbv
Sample : 67836-07 aro x1
Misc :
ALS Vial : 40 Sample Multiplier: 1

Integration File: rteint.p
Quant Time: Dec 08 17:09:17 2023
Quant Method : X:\S6\methods\S6ARO100423F.M
Quant Title : S6 EPH Aromatics
QLast Update : Thu Oct 05 11:16:37 2023
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :

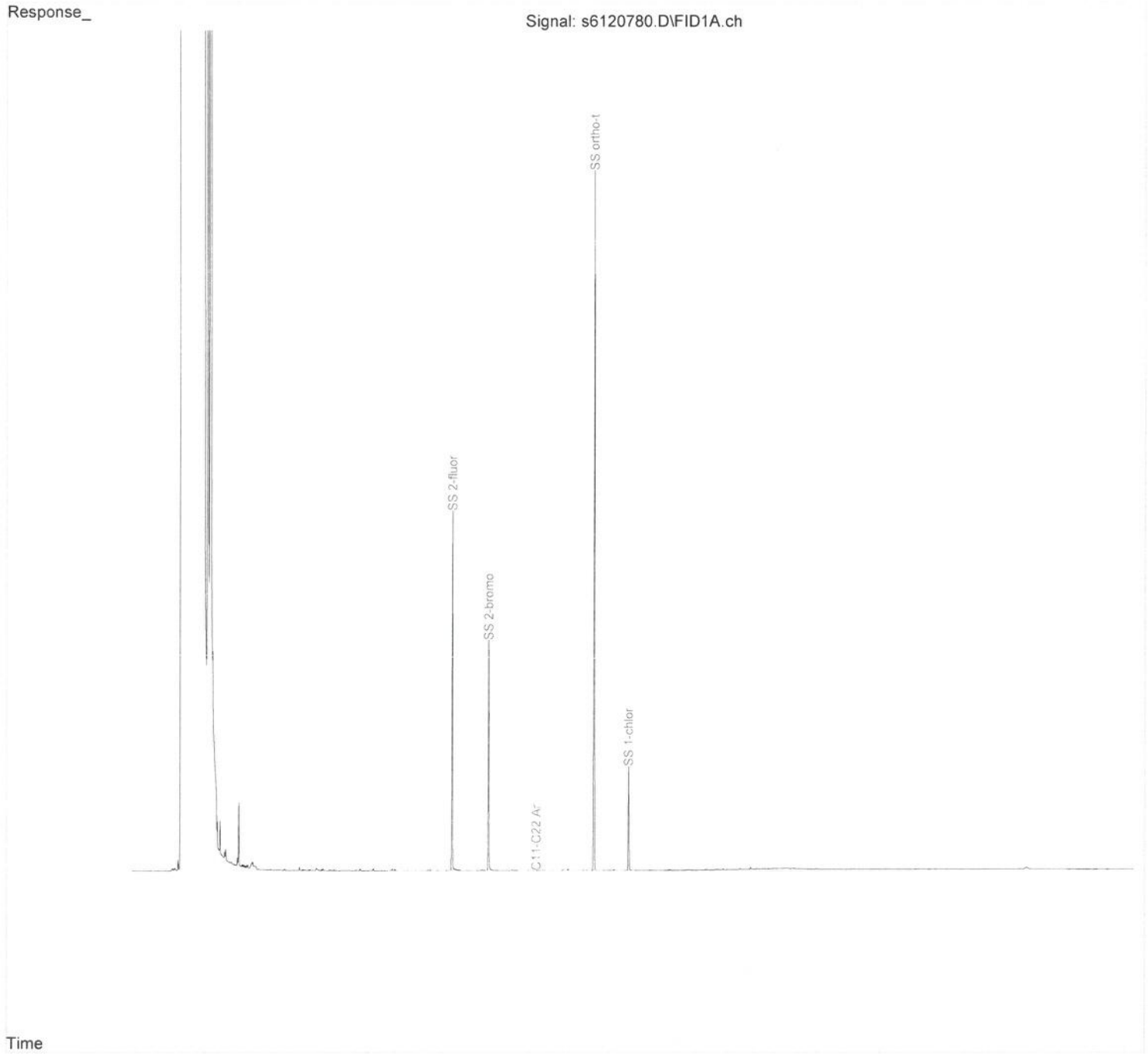
	Compound	R.T.	Response	Conc	Units	
	System Monitoring Compounds					
3)	S SS 2-fluorobiphenyl (...	9.527	2203823	15.617	ug/mLm	BC = Baseline Correction
Spiked Amount	20.000		Recovery =	78.09%		
5)	S SS 2-bromonaphthalene...	10.603	1539790	16.146	ug/mLm	BC = Baseline Correction
Spiked Amount	20.000		Recovery =	80.73%		
10)	S SS ortho-terphenyl (OTP)	13.724	4625207	30.912	ug/mLm	BC = Baseline Correction
Spiked Amount	50.000		Recovery =	61.82%		
11)	S SS 1-chloro-otadecane...	14.762f	746182	6.113	ug/mL	
Spiked Amount	50.000		Recovery =	12.23%		
	Target Compounds					
1)	naphthalene	0.000	0	N.D.	ug/mLd	
2)	2-methylnaphthalene	0.000	0	N.D.	ug/mL	
4)	acenaphthylene	0.000	0	N.D.	ug/mLd	
6)	acenaphthene	0.000	0	N.D.	ug/mL	
7)	fluorene	0.000	0	N.D.	ug/mL	
8)	phenanthrene	0.000	0	N.D.	ug/mL	
9)	anthracene	0.000	0	N.D.	ug/mL	
12)	fluoranthene	0.000	0	N.D.	ug/mL	
13)	pyrene	0.000	0	N.D.	ug/mL	
14)	benzo(a)anthracene	0.000	0	N.D.	ug/mLd	
15)	chrysene	0.000	0	N.D.	ug/mL	
16)	benzo(b&k)fluoranthenes	0.000	0	N.D.	ug/mL	
17)	benzo(a)pyrene	0.000	0	N.D.	ug/mL	
18)	indeno&dibenzo	0.000	0	N.D.	ug/mL	
19)	benzo(g,h,i)perylene	0.000	0	N.D.	ug/mL	
20)	H C11-C22 Aromatics	12.000	3858490	27.197	ug/mLm	RI = Range Integration

(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : X:\S6\2023\Dec23\120723\
Data File : s6120780.D
Signal(s) : FID1A.ch
Acq On : 08 Dec 2023 12:54 pm
Operator : dbv
Sample : 67836-07 aro x1
Misc :
ALS Vial : 40 Sample Multiplier: 1

Integration File: rteint.p
Quant Time: Dec 08 17:09:17 2023
Quant Method : X:\S6\methods\S6ARO100423F.M
Quant Title : S6 EPH Aromatics
QLast Update : Thu Oct 05 11:16:37 2023
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : X:\S6\2023\Dec23\120723.SEC\
Data File : s6120779.D
Signal(s) : FID2B.ch
Acq On : 08 Dec 2023 12:54 pm
Operator : dbv
Sample : 67836-07 ali x1
Misc :
ALS Vial : 115 Sample Multiplier: 1

12/12/23 @ 08:26
DonnaV

Integration File: rteint.p
Quant Time: Dec 08 17:09:38 2023
Quant Method : X:\S6\methods\S6ALI100423A.M
Quant Title : S6 EPH Aliphatics
QLast Update : Thu Oct 05 13:01:54 2023
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :

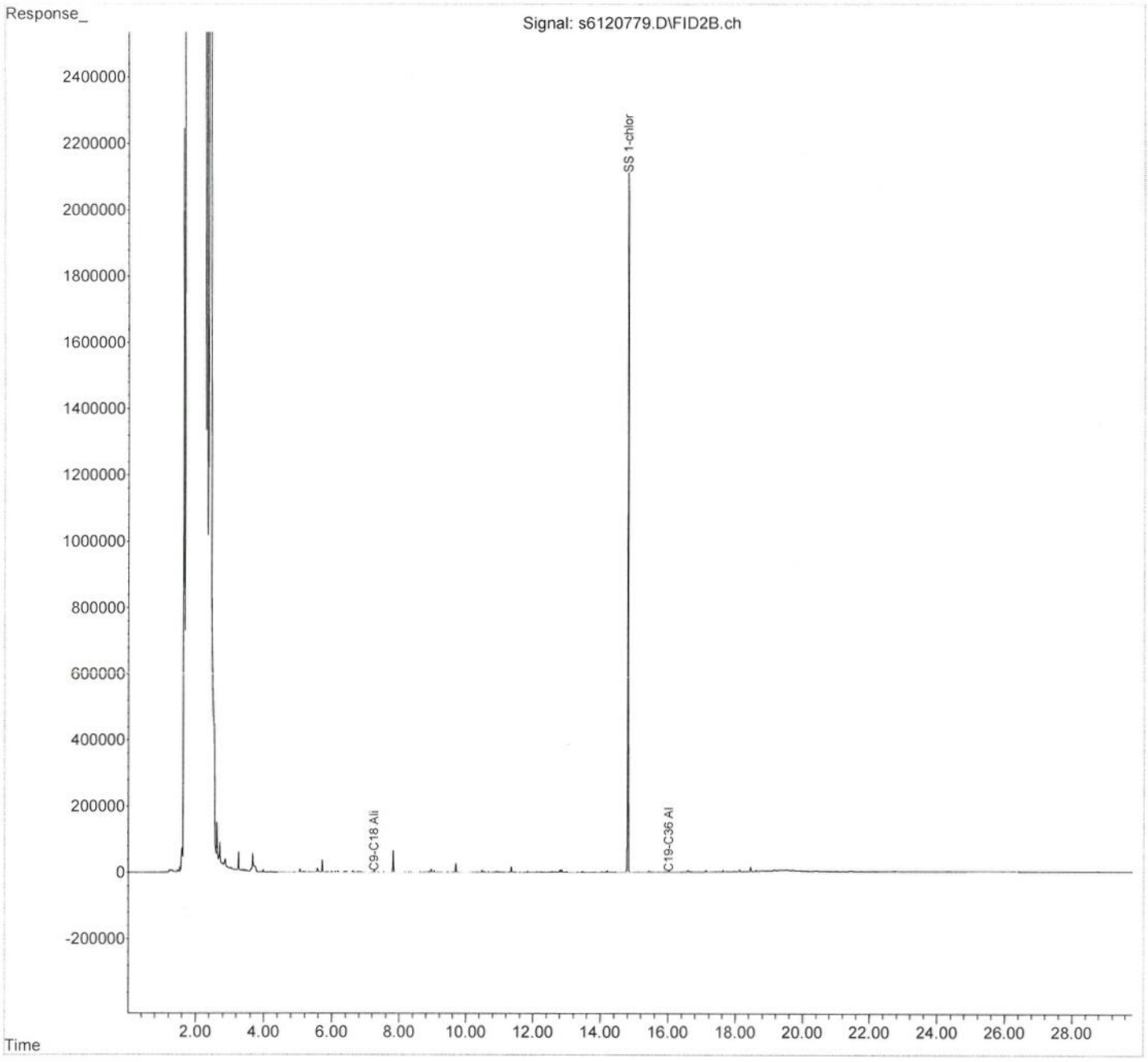
	Compound	R.T.	Response	Conc	Units	
	System Monitoring Compounds					
4) S	SS 2-fluorobiphenyl (...	0.000	0	N.D.	ug/mLd	
Spiked Amount	20.000	Recovery	=	0.00%		
6) S	SS 2-bromonaphthalene...	0.000	0	N.D.	ug/mLd	
Spiked Amount	20.000	Recovery	=	0.00%		
11) S	SS ortho-terphenyl (OTP)	0.000	0	N.D.	ug/mLd	
Spiked Amount	50.000	Recovery	=	0.00%		
13) S	SS 1-chloro-octadecan...	14.807f	3115969	26.543	ug/mLm	BC = Baseline Correction
Spiked Amount	50.000	Recovery	=	53.09%		
	Target Compounds					
1)	C9 n-Nonane	0.000	0	N.D.	ug/mLd	
2)	C10 n-Decane	0.000	0	N.D.	ug/mLd	
3)	C12 n-Dodecane	0.000	0	N.D.	ug/mLd	
5)	C14 n-Tetradecane	0.000	0	N.D.	ug/mLd	
7)	C16 n-Hexadecane	0.000	0	N.D.	ug/mLd	
8)	C18 n-Octadecane	0.000	0	N.D.	ug/mLd	
9) H	C9-C18 Aliphatics	7.237	904274	6.450	ug/mLm	RI = Range Integration
10)	C19 n-Nonadecane	0.000	0	N.D.	ug/mLd	
12)	C20 n-Eicosane	0.000	0	N.D.	ug/mLd	
14)	C22 n-Docosane	0.000	0	N.D.	ug/mLd	
15)	C24 n-Tetracosane	0.000	0	N.D.	ug/mLd	
16)	C26 n-Hexacosane	0.000	0	N.D.	ug/mLd	
17)	C28 n-Octacosane	0.000	0	N.D.	ug/mLd	
18)	C30 n-Triacontane	0.000	0	N.D.	ug/mLd	
19)	C36 n-Hexatriacontane	0.000	0	N.D.	ug/mLd	
20) H	C19-C36 Aliphatics	16.000	2215766	15.667	ug/mLm	RI = Range Integration

(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : X:\S6\2023\Dec23\120723.SEC\
Data File : s6120779.D
Signal(s) : FID2B.ch
Acq On : 08 Dec 2023 12:54 pm
Operator : dbv
Sample : 67836-07 ali x1
Misc :
ALS Vial : 115 Sample Multiplier: 1

Integration File: rteint.p
Quant Time: Dec 08 17:09:38 2023
Quant Method : X:\S6\methods\S6ALI100423A.M
Quant Title : S6 EPH Aliphatics
QLast Update : Thu Oct 05 13:01:54 2023
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :



This File:	L:\SVOA\Excel Reports\EPH\231214\67836-008		
Analysis Group:	EPH	Dow Salvage Yard	
Field ID:	SY-OBMW11-110823	CRE	
Sample:	67836-08 targets x1	67836-08 aro x1	67836-08 ali x1
Misc:	aro frac		
Method Name:	SVOA04 Method 8270E (t	S6 EPH Aromatics	S6 EPH Aliphatics
Import File Name:	s6 EPHs QC17156W		
TestGroupID:	EMA_EPH_PresCert_A		
Aqueous or Soil? (A or S)	A		
Fractionated? (Y/N)	y	y	
Prep Date:	11/20/2023		
Lab#:	67836-008		
QC_Code:			
Prep#	17156		

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Reviewer Checks:

Quant Report: Reviewed? Ranges integrated? Analyst Initials & Date?	1
Chromatogram Checked? Major peaks identified?	2
Soil prep data checked: weight, volume, %solid, Prep date	5
Field ID consistent with data and any field replicates	11
Results consistent with any re-runs & internal QC	16
Substitute dilution data checked	20
Correct dilution and reason clear or noted	
Reason for reanalysis documented	
Surrogates pass or flagged & noted	
Flags checked (Expiration, F+, Over Cal)	
Other QC failures, estimates or interferences documented	
Spot checked Reported Result with Quant Report	
Checked Audit flagged data in LIMS	

Notes:

Initials & Date: 12/14/23

X:\S4\2023\Dec23\120723\s4120746.D\S4PAH110223A.XLS PAH targets filename
X:\S6\2023\Dec23\120723\s6120782.D\S6ARO100423F.XLS aromatics filename
X:\S6\2023\Dec23\120723.SEC\s6120781.D\S6ALI100423A.XLS aliphatics filename

#	Surrogate Standards	Concentration (ug/mL)	AnalysisDate	AnalysisTime	AnalyzedBy	Dilution	Weight	Volume	Surr	Recovery	Flag	QC Limits
13	SS 1-chloro-octadecane (COD)	25.25384238	12/8/2023	01:27:00 PM	DBV s6120781.D	1	1	2	100	**51%**		40-140
10	SS ortho-terphenyl (OTP)	31.49821468	12/8/2023	01:27:00 PM	DBV s6120782.D	1	1	2	100	**63%**		40-140
3	SS 2-fluorobiphenyl (2FBP)	14.6231283	12/8/2023	01:27:00 PM	DBV s6120782.D	1	1	2	40	**73%**		40-140
5	SS 2-bromonaphthalene (2BN)	15.34936944	12/8/2023	01:27:00 PM	DBV s6120782.D	1	1	2	40	**77%**		40-140

#	AnalyteName	Concentration (ug/mL)	AnalysisDate	AnalysisTime	AnalyzedBy	Dilution	Weight	Volume
3	naphthalene	0	12/08/2023	08:54:00 AM	CL s4120746.D	1	1	2
4	2-methylnaphthalene	0	12/08/2023	08:54:00 AM	CL s4120746.D	1	1	2
12	phenanthrene	0	12/08/2023	08:54:00 AM	CL s4120746.D	1	1	2
8	acenaphthene	0	12/08/2023	08:54:00 AM	CL s4120746.D	1	1	2
7	acenaphthylene	0	12/08/2023	08:54:00 AM	CL s4120746.D	1	1	2
10	fluorene	0	12/08/2023	08:54:00 AM	CL s4120746.D	1	1	2
13	anthracene	0	12/08/2023	08:54:00 AM	CL s4120746.D	1	1	2
15	fluoranthene	0	12/08/2023	08:54:00 AM	CL s4120746.D	1	1	2
17	pyrene	0	12/08/2023	08:54:00 AM	CL s4120746.D	1	1	2
18	benzo(a)anthracene	0	12/08/2023	08:54:00 AM	CL s4120746.D	1	1	2
19	chrysene	0	12/08/2023	08:54:00 AM	CL s4120746.D	1	1	2
21	benzo(b)fluoranthene	0	12/08/2023	08:54:00 AM	CL s4120746.D	1	1	2
22	benzo(k)fluoranthene	0	12/08/2023	08:54:00 AM	CL s4120746.D	1	1	2
23	benzo(a)pyrene	0	12/08/2023	08:54:00 AM	CL s4120746.D	1	1	2
24	indeno(1,2,3-cd)pyrene	0	12/08/2023	08:54:00 AM	CL s4120746.D	1	1	2
25	dibenzo(a,h)anthracene	0	12/08/2023	08:54:00 AM	CL s4120746.D	1	1	2
26	benzo(g,h,i)perylene	0	12/08/2023	08:54:00 AM	CL s4120746.D	1	1	2
20	C11-C22 Aromatics	28.66686102	12/8/2023	01:27:00 PM	DBV s6120782.D	1	1	2
9	C9-C18 Aliphatics	4.544611239	12/8/2023	01:27:00 PM	DBV s6120781.D	1	1	2
20	C19-C36 Aliphatics	14.07822224	12/8/2023	01:27:00 PM	DBV s6120781.D	1	1	2
	Adjusted C11-C22 Aromatics	28.66686102	12/8/2023	01:27:00 PM	DBV s6120782.D	1	1	2

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Dec23\120723\
Data File : s4120746.D
Acq On : 08 Dec 2023 08:54 am
Operator : cl
Sample : 67836-08 targets x1
Misc : aro frac
ALS Vial : 41 Sample Multiplier: 1

CL
12/8/23 @ 15:35
CharlesL

Quant Time: Dec 08 12:08:08 2023
Quant Method : X:\S4\methods\S4PAH110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration

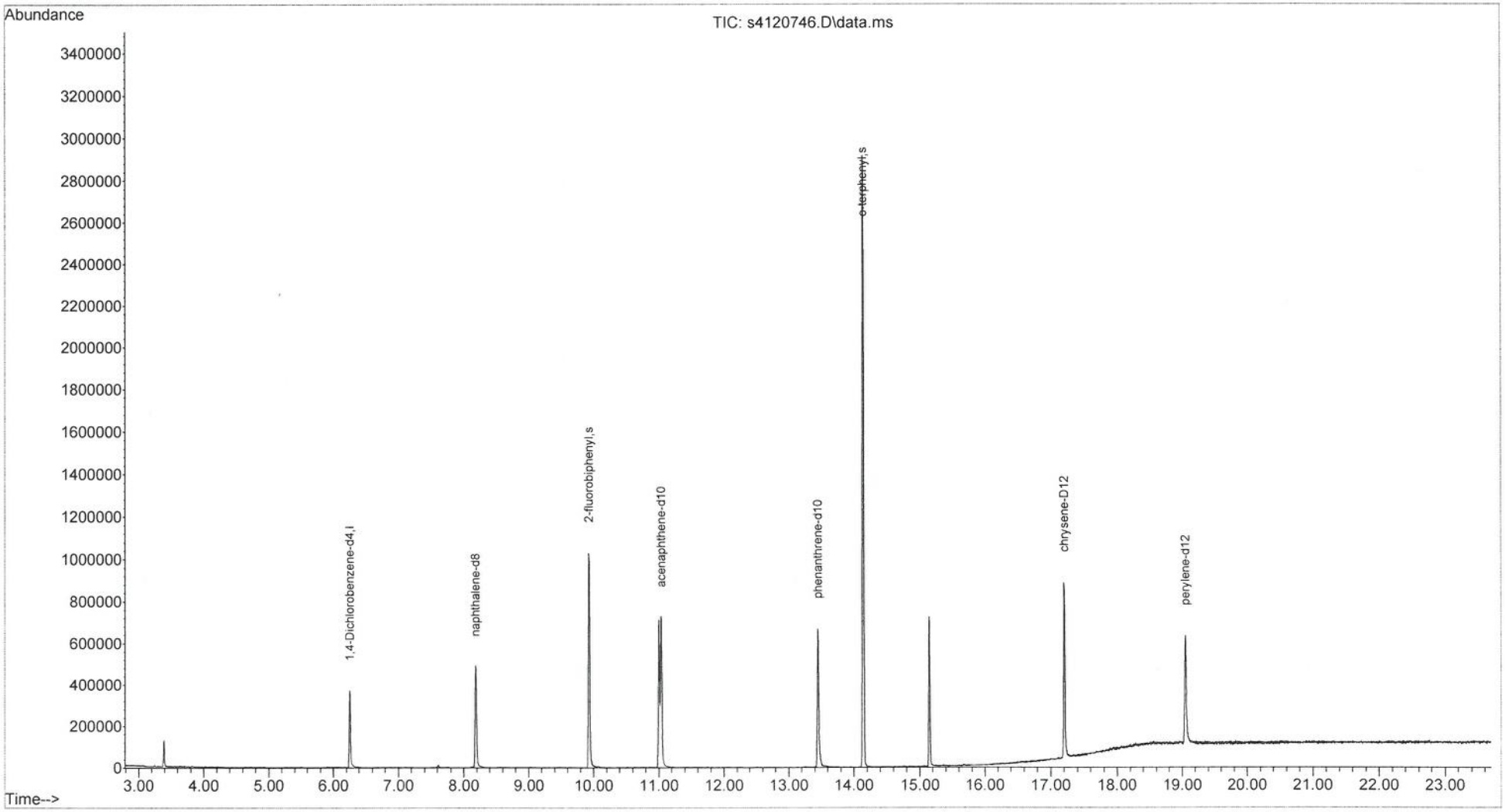
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.253	152	92132	10.00	ug/mL	-0.01
2) naphthalene-d8	8.179	136	367928	10.00	ug/mL	-0.01
5) acenaphthene-d10	11.033	164	217981	10.00	ug/mL	-0.01
11) phenanthrene-d10	13.449	188	413541	10.00	ug/mL	#-0.01
16) chrysene-D12	17.202	240	374393	10.00	ug/mL	0.00
20) perylene-d12	19.052	264	327041	10.00	ug/mL	0.01
System Monitoring Compounds						
6) 2-fluorobiphenyl	9.927	172	477094	13.89	ug/mL	-0.01
Spiked Amount 100.000			Recovery = 13.89%			
14) o-terphenyl	14.142	230	801292	34.13	ug/mL	-0.01
Spiked Amount 100.000			Recovery = 34.13%			
Target Compounds						Qvalue
12) phenanthrene	13.492	178	1829	Below Cal	#	60
13) anthracene	13.492	178	1829	Below Cal	#	61
15) fluoranthene	15.373	202	3387m	Below Cal		
18) benzo(a)anthracene	17.230	228	851	Below Cal	#	51
19) chrysene	17.230	228	851	Below Cal	#	49
21) Benzo(b)fluoranthene	18.512	252	880	Below Cal	#	59
22) benzo(k)fluoranthene	18.512	252	880	Below Cal	#	58
23) benzo(a)pyrene	18.978	252	975	Below Cal	#	54

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Dec23\120723\
Data File : s4120746.D
Acq On : 08 Dec 2023 08:54 am
Operator : cl
Sample : 67836-08 targets x1
Misc : aro frac
ALS Vial : 41 Sample Multiplier: 1

Quant Time: Dec 08 12:08:08 2023
Quant Method : X:\S4\methods\S4PAH110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration



SFP
12/12/23 @ 12:24
SkylaM

Data Path : X:\S6\2023\Dec23\120723\
Data File : s6120782.D
Signal(s) : FID1A.ch
Acq On : 08 Dec 2023 01:27 pm
Operator : dbv
Sample : 67836-08 aro x1
Misc :
ALS Vial : 41 Sample Multiplier: 1

Integration File: rteint.p
Quant Time: Dec 08 17:09:20 2023
Quant Method : X:\S6\methods\S6ARO100423F.M
Quant Title : S6 EPH Aromatics
QLast Update : Thu Oct 05 11:16:37 2023
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :

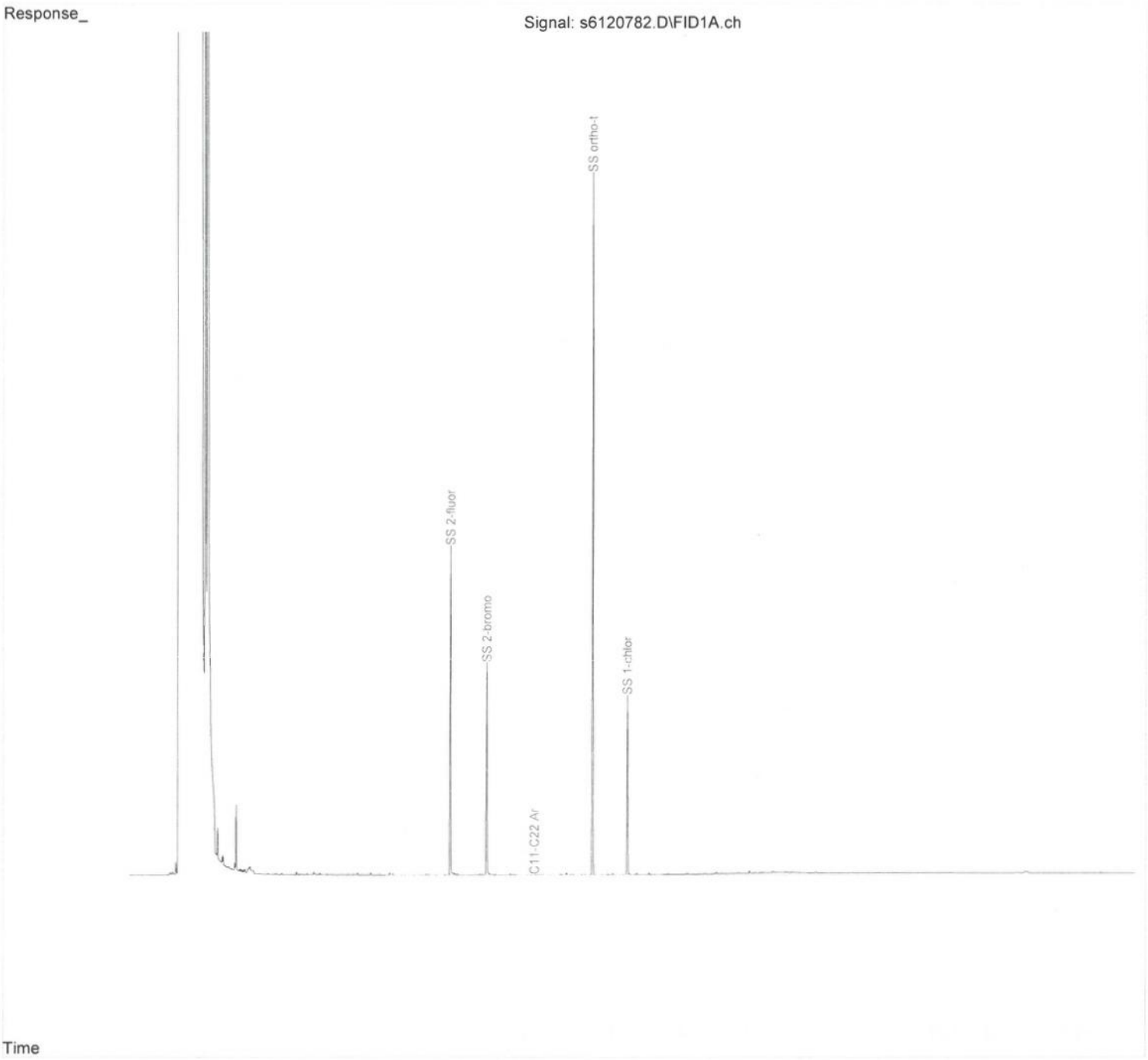
	Compound	R.T.	Response	Conc	Units	
	System Monitoring Compounds					
3) S	SS 2-fluorobiphenyl (...	9.527	2063646	14.623	ug/mLm	BC = Baseline Correction
Spiked Amount	20.000		Recovery =	73.11%		
5) S	SS 2-bromonaphthalene...	10.603	1463773	15.349	ug/mLm	BC = Baseline Correction
Spiked Amount	20.000		Recovery =	76.74%		
10) S	SS ortho-terphenyl (OTP)	13.724	4712943	31.498	ug/mLm	BC = Baseline Correction
Spiked Amount	50.000		Recovery =	63.00%		
11) S	SS 1-chloro-otadecane...	14.763	1319439	10.798	ug/mL	
Spiked Amount	50.000		Recovery =	21.60%		
	Target Compounds					
1)	naphthalene	0.000	0	N.D.	ug/mLd	
2)	2-methylnaphthalene	0.000	0	N.D.	ug/mL	
4)	acenaphthylene	0.000	0	N.D.	ug/mLd	
6)	acenaphthene	0.000	0	N.D.	ug/mL	
7)	fluorene	0.000	0	N.D.	ug/mL	
8)	phenanthrene	0.000	0	N.D.	ug/mLd	
9)	anthracene	0.000	0	N.D.	ug/mLd	
12)	fluoranthene	0.000	0	N.D.	ug/mLd	
13)	pyrene	0.000	0	N.D.	ug/mL	
14)	benzo(a)anthracene	0.000	0	N.D.	ug/mLd	
15)	chrysene	0.000	0	N.D.	ug/mL	
16)	benzo(b&k)fluoranthenes	0.000	0	N.D.	ug/mL	
17)	benzo(a)pyrene	0.000	0	N.D.	ug/mL	
18)	indeno&dibenzo	0.000	0	N.D.	ug/mL	
19)	benzo(g,h,i)perylene	0.000	0	N.D.	ug/mL	
20) H	C11-C22 Aromatics	12.000	4079210	28.667	ug/mLm	RI = Range Integration

(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : X:\S6\2023\Dec23\120723\
Data File : s6120782.D
Signal(s) : FID1A.ch
Acq On : 08 Dec 2023 01:27 pm
Operator : dbv
Sample : 67836-08 aro x1
Misc :
ALS Vial : 41 Sample Multiplier: 1

Integration File: rteint.p
Quant Time: Dec 08 17:09:20 2023
Quant Method : X:\S6\methods\S6ARO100423F.M
Quant Title : S6 EPH Aromatics
QLast Update : Thu Oct 05 11:16:37 2023
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : X:\S6\2023\Dec23\120723.SEC\
Data File : s6120781.D
Signal(s) : FID2B.ch
Acq On : 08 Dec 2023 01:27 pm
Operator : dbv
Sample : 67836-08 ali x1
Misc :
ALS Vial : 116 Sample Multiplier: 1

12/12/23 @ 08:26
DonnaV

Integration File: rteint.p
Quant Time: Dec 08 17:09:41 2023
Quant Method : X:\S6\methods\S6ALI100423A.M
Quant Title : S6 EPH Aliphatics
QLast Update : Thu Oct 05 13:01:54 2023
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :

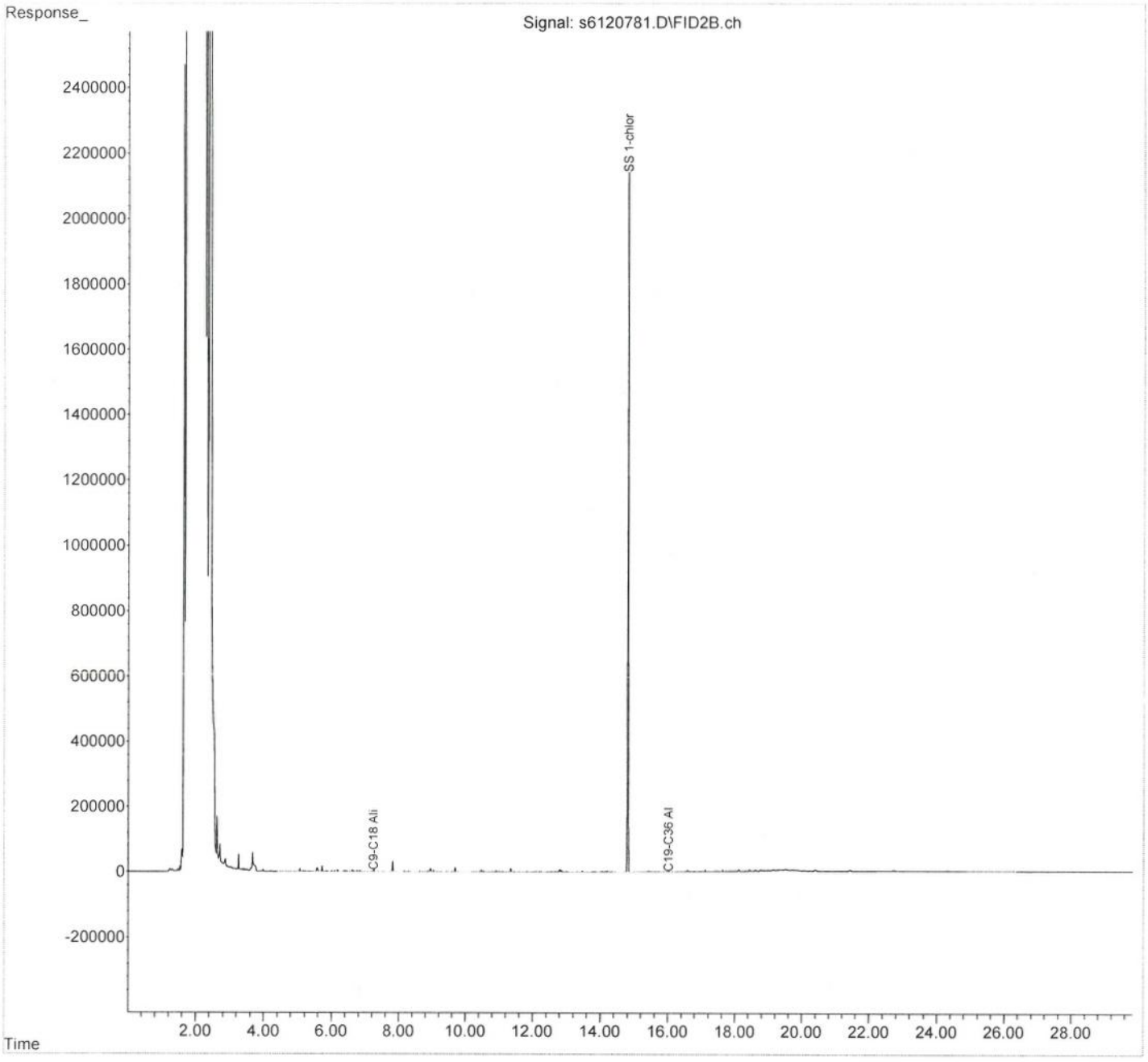
	Compound	R.T.	Response	Conc	Units	
	System Monitoring Compounds					
4) S	SS 2-fluorobiphenyl (...	0.000	0	N.D.	ug/mLd	
Spiked Amount	20.000	Recovery =	0.00%			
6) S	SS 2-bromonaphthalene...	0.000	0	N.D.	ug/mLd	
Spiked Amount	20.000	Recovery =	0.00%			
11) S	SS ortho-terphenyl (OTP)	0.000	0	N.D.	ug/mLd	
Spiked Amount	50.000	Recovery =	0.00%			
13) S	SS 1-chloro-octadecan...	14.807f	2964852	25.254	ug/mLm	BC = Baseline Correction
Spiked Amount	50.000	Recovery =	50.51%			
	Target Compounds					
1)	C9 n-Nonane	0.000	0	N.D.	ug/mLd	
2)	C10 n-Decane	0.000	0	N.D.	ug/mLd	
3)	C12 n-Dodecane	0.000	0	N.D.	ug/mLd	
5)	C14 n-Tetradecane	0.000	0	N.D.	ug/mLd	
7)	C16 n-Hexadecane	0.000	0	N.D.	ug/mLd	
8)	C18 n-Octadecane	0.000	0	N.D.	ug/mLd	
9) H	C9-C18 Aliphatics	7.237	660576	4.545	ug/mLm	RI = Range Integration
10)	C19 n-Nonadecane	0.000	0	N.D.	ug/mLd	
12)	C20 n-Eicosane	0.000	0	N.D.	ug/mLd	
14)	C22 n-Docosane	0.000	0	N.D.	ug/mLd	
15)	C24 n-Tetracosane	0.000	0	N.D.	ug/mLd	
16)	C26 n-Hexacosane	0.000	0	N.D.	ug/mLd	
17)	C28 n-Octacosane	0.000	0	N.D.	ug/mLd	
18)	C30 n-Triacontane	0.000	0	N.D.	ug/mLd	
19)	C36 n-Hexatriacontane	0.000	0	N.D.	ug/mLd	
20) H	C19-C36 Aliphatics	16.000	2005425	14.078	ug/mLm	RI = Range Integration

(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : X:\S6\2023\Dec23\120723.SEC\
Data File : s6120781.D
Signal(s) : FID2B.ch
Acq On : 08 Dec 2023 01:27 pm
Operator : dbv
Sample : 67836-08 ali x1
Misc :
ALS Vial : 116 Sample Multiplier: 1

Integration File: rteint.p
Quant Time: Dec 08 17:09:41 2023
Quant Method : X:\S6\methods\S6ALI100423A.M
Quant Title : S6 EPH Aliphatics
QLast Update : Thu Oct 05 13:01:54 2023
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :



This File:	**L:\SVOA\Excel Reports\EPH\231214\67836-009**		
Analysis Group:	**EPH**	**Dow Salvage Yard**	
Field ID:	**SY-OBMW110-110823**	**CRE**	
Sample:	**67836-09 targets x1**	**67836-09 aro x1**	**67836-09 ali x1**
Misc:	*aro frac*		
Method Name:	*SVOA04 Method 8270E (€*	*S6 EPH Aromatics*	*S6 EPH Aliphatics*
Import File Name:	**s6 EPHs QC17156W**		
TestGroupID:	**EMA_EPH_PresCert_A**		
Aqueous or Soil? (A or S)	**A**		
Fractionated? (Y/N)	**y**	**y**	
Prep Date:	11/20/2023		
Lab#:	**67836-009**		
QC_Code:			
Prep#	**17156**		

Donna Valley L:\SVOA\EPH\EPH ImportFileBuilder2.0.xls

Reviewer Checks:

Quant Report: Reviewed? Ranges integrated? Analyst Initials & Date?	12/14/23 12:17 PM
Chromatogram Checked? Major peaks identified?	L:\SVOA\EPH\
Soil prep data checked: weight, volume, %solid, Prep date	L:\SVOA\Excel Reports\EPH\2312
Field ID consistent with data and any field replicates	L:\SVOA\PDF Reports\FUELS\
Results consistent with any re-runs & internal QC	
Substitute dilution data checked	
Correct dilution and reason clear or noted	
Reason for reanalysis documented	
Surrogates pass or flagged & noted	
Flags checked (Expiration, F+, Over Cal)	
Other QC failures, estimates or interferences documented	
Spot checked Reported Result with Quant Report	
Checked Audit flagged data in LIMS	

Notes:

Initials & Date: 12/14/23

1
2
5
11
16
20

X:\S4\2023\Dec23\120723\s4120747.D\S4PAH110223A.XLS PAH targets filename
X:\S6\2023\Dec23\120823\s6120808.D\S6ARO100423F.XLS aromatics filename
X:\S6\2023\Dec23\120823.SEC\s6120807.D\S6ALI100423A.XLS aliphatics filename

#	Surrogate Standards	Concentration (ug/mL)	AnalysisDate	AnalysisTime	AnalyzedBy	Dilution	Weight	Volume	Surr	Recovery	Flag	QC Limits
13	SS 1-chloro-octadecane (COD)	20.29614176	12/8/2023	06:38:00 PM	DBV s6120807.D	1	1	2	100	**41%**		40-140
10	SS ortho-terphenyl (OTP)	33.36988577	12/8/2023	06:38:00 PM	DBV s6120808.D	1	1	2	100	**67%**		40-140
3	SS 2-fluorobiphenyl (2FBP)	16.1670112	12/8/2023	06:38:00 PM	DBV s6120808.D	1	1	2	40	**81%**		40-140
5	SS 2-bromonaphthalene (2BN)	16.96488818	12/8/2023	06:38:00 PM	DBV s6120808.D	1	1	2	40	**85%**		40-140

#	AnalyteName	Concentration (ug/mL)	AnalysisDate	AnalysisTime	AnalyzedBy	Dilution	Weight	Volume
3	naphthalene	0	12/08/2023	09:23:00 AM	CL s4120747.D	1	1	2
4	2-methylnaphthalene	0	12/08/2023	09:23:00 AM	CL s4120747.D	1	1	2
12	phenanthrene	0	12/08/2023	09:23:00 AM	CL s4120747.D	1	1	2
8	acenaphthene	0	12/08/2023	09:23:00 AM	CL s4120747.D	1	1	2
7	acenaphthylene	0	12/08/2023	09:23:00 AM	CL s4120747.D	1	1	2
10	fluorene	0	12/08/2023	09:23:00 AM	CL s4120747.D	1	1	2
13	anthracene	0	12/08/2023	09:23:00 AM	CL s4120747.D	1	1	2
15	fluoranthene	0	12/08/2023	09:23:00 AM	CL s4120747.D	1	1	2
17	pyrene	0	12/08/2023	09:23:00 AM	CL s4120747.D	1	1	2
18	benzo(a)anthracene	0	12/08/2023	09:23:00 AM	CL s4120747.D	1	1	2
19	chrysene	0	12/08/2023	09:23:00 AM	CL s4120747.D	1	1	2
21	benzo(b)fluoranthene	0	12/08/2023	09:23:00 AM	CL s4120747.D	1	1	2
22	benzo(k)fluoranthene	0	12/08/2023	09:23:00 AM	CL s4120747.D	1	1	2
23	benzo(a)pyrene	0	12/08/2023	09:23:00 AM	CL s4120747.D	1	1	2
24	indeno(1,2,3-cd)pyrene	0	12/08/2023	09:23:00 AM	CL s4120747.D	1	1	2
25	dibenzo(a,h)anthracene	0	12/08/2023	09:23:00 AM	CL s4120747.D	1	1	2
26	benzo(g,h,i)perylene	0	12/08/2023	09:23:00 AM	CL s4120747.D	1	1	2
20	C11-C22 Aromatics	35.91677653	12/8/2023	06:38:00 PM	DBV s6120808.D	1	1	2
9	C9-C18 Aliphatics	6.987155855	12/8/2023	06:38:00 PM	DBV s6120807.D	1	1	2
20	C19-C36 Aliphatics	18.48490864	12/8/2023	06:38:00 PM	DBV s6120807.D	1	1	2
	Adjusted C11-C22 Aromatics	35.91677653	12/8/2023	06:38:00 PM	DBV s6120808.D	1	1	2

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Dec23\120723\
Data File : s4120747.D
Acq On : 08 Dec 2023 09:23 am
Operator : cl
Sample : 67836-09 targets x1
Misc : aro frac
ALS Vial : 42 Sample Multiplier: 1

CL
12/8/23 @ 15:35
CharlesL

Quant Time: Dec 08 12:08:11 2023
Quant Method : X:\S4\methods\S4PAH110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration

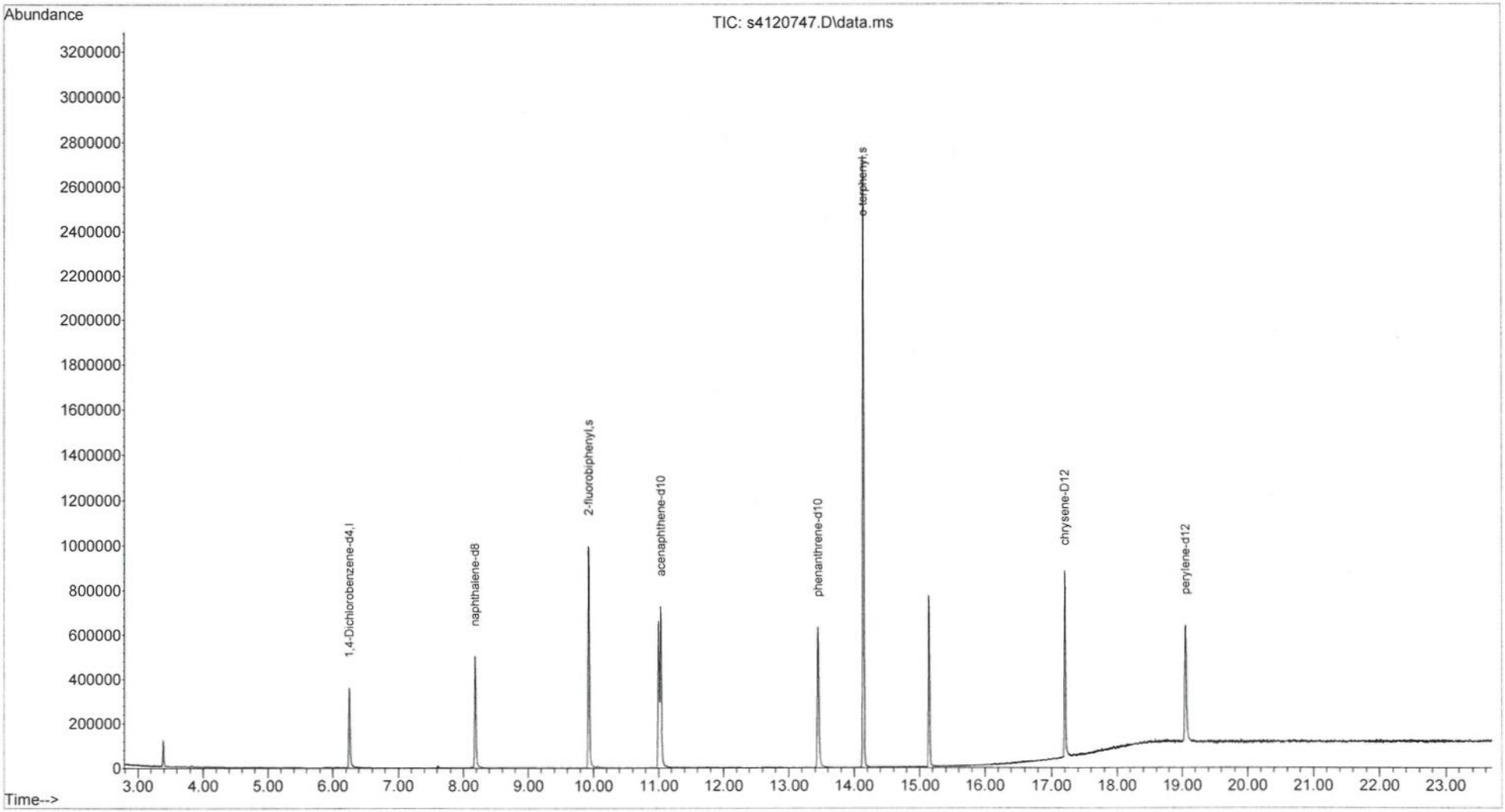
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.250	152	85811	10.00	ug/mL	-0.01
2) naphthalene-d8	8.179	136	344152	10.00	ug/mL	-0.01
5) acenaphthene-d10	11.033	164	207143	10.00	ug/mL	-0.02
11) phenanthrene-d10	13.449	188	400666	10.00	ug/mL	#-0.01
16) chrysene-D12	17.205	240	372428	10.00	ug/mL	0.00
20) perylene-d12	19.055	264	340748	10.00	ug/mL	0.02
System Monitoring Compounds						
6) 2-fluorobiphenyl	9.927	172	452862	13.87	ug/mL	-0.01
Spiked Amount 100.000			Recovery = 13.87%			
14) o-terphenyl	14.142	230	749187	32.93	ug/mL	-0.01
Spiked Amount 100.000			Recovery = 32.93%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Dec23\120723\
Data File : s4120747.D
Acq On : 08 Dec 2023 09:23 am
Operator : cl
Sample : 67836-09 targets x1
Misc : aro frac
ALS Vial : 42 Sample Multiplier: 1

Quant Time: Dec 08 12:08:11 2023
Quant Method : X:\S4\methods\S4PAH110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration



SFP
12/12/23 @ 12:24
SkylaM

Data Path : X:\S6\2023\Dec23\120823\
Data File : s6120808.D
Signal(s) : FID1A.ch
Acq On : 08 Dec 2023 06:38 pm
Operator : dbv
Sample : 67836-09 aro x1
Misc :
ALS Vial : 4 Sample Multiplier: 1

Integration File: rteint.p
Quant Time: Dec 09 17:34:51 2023
Quant Method : X:\S6\methods\S6ARO100423F.M
Quant Title : S6 EPH Aromatics
QLast Update : Thu Oct 05 11:16:37 2023
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :

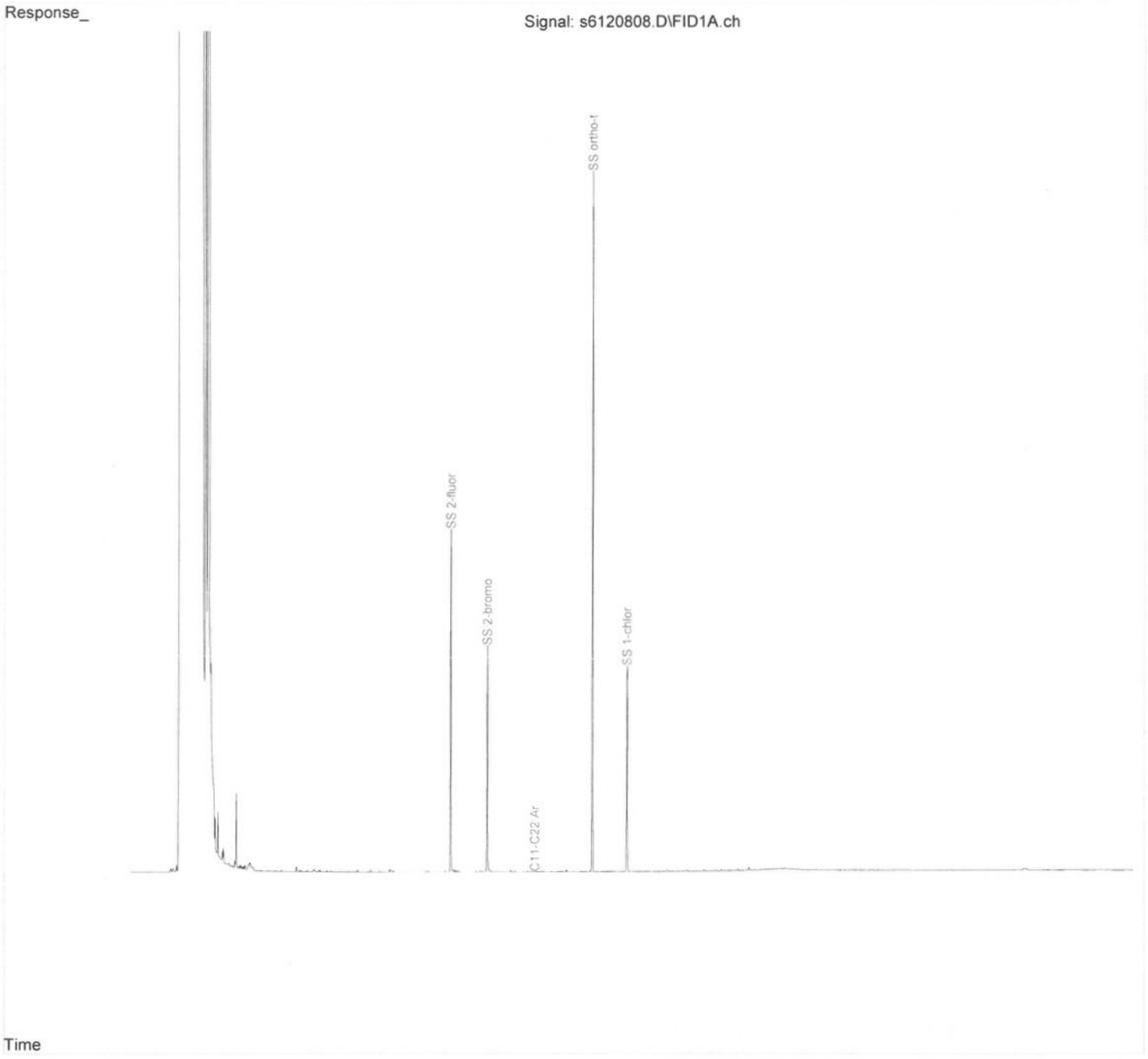
	Compound	R.T.	Response	Conc	Units	
	System Monitoring Compounds					
3)	S SS 2-fluorobiphenyl (...	9.526	2281340	16.167	ug/mL	
Spiked Amount	20.000		Recovery =	80.84%		
5)	S SS 2-bromonaphthalene...	10.603	1617914	16.965	ug/mL	
Spiked Amount	20.000		Recovery =	84.82%		
10)	S SS ortho-terphenyl (OTP)	13.725	4993260	33.370	ug/mL	
Spiked Amount	50.000		Recovery =	66.74%		
11)	S SS 1-chloro-otadecane...	14.763	1548070	12.667	ug/mL	
Spiked Amount	50.000		Recovery =	25.33%		
	Target Compounds					
1)	naphthalene	0.000	0	N.D.	ug/mLd	
2)	2-methylnaphthalene	0.000	0	N.D.	ug/mL	
4)	acenaphthylene	0.000	0	N.D.	ug/mLd	
6)	acenaphthene	0.000	0	N.D.	ug/mL	
7)	fluorene	0.000	0	N.D.	ug/mL	
8)	phenanthrene	0.000	0	N.D.	ug/mL	
9)	anthracene	0.000	0	N.D.	ug/mL	
12)	fluoranthene	0.000	0	N.D.	ug/mL	
13)	pyrene	0.000	0	N.D.	ug/mL	
14)	benzo(a)anthracene	0.000	0	N.D.	ug/mL	
15)	chrysene	0.000	0	N.D.	ug/mL	
16)	benzo(b&k)fluoranthenes	0.000	0	N.D.	ug/mL	
17)	benzo(a)pyrene	0.000	0	N.D.	ug/mL	
18)	indeno&dibenzo	0.000	0	N.D.	ug/mL	
19)	benzo(g,h,i)perylene	0.000	0	N.D.	ug/mL	
20)	H C11-C22 Aromatics	12.000	5167973	35.917	ug/mLm	RI = Range Integration

(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : X:\S6\2023\Dec23\120823\
Data File : s6120808.D
Signal(s) : FID1A.ch
Acq On : 08 Dec 2023 06:38 pm
Operator : dbv
Sample : 67836-09 aro x1
Misc :
ALS Vial : 4 Sample Multiplier: 1

Integration File: rteint.p
Quant Time: Dec 09 17:34:51 2023
Quant Method : X:\S6\methods\S6ARO100423F.M
Quant Title : S6 EPH Aromatics
QLast Update : Thu Oct 05 11:16:37 2023
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : X:\S6\2023\Dec23\120823.SEC\
Data File : s6120807.D
Signal(s) : FID2B.ch
Acq On : 08 Dec 2023 06:38 pm
Operator : dbv
Sample : 67836-09 ali x1
Misc :
ALS Vial : 79 Sample Multiplier: 1

12/12/23 @ 08:45
DonnaV

Integration File: rteint.p
Quant Time: Dec 09 17:35:09 2023
Quant Method : X:\S6\methods\S6ALI100423A.M
Quant Title : S6 EPH Aliphatics
QLast Update : Thu Oct 05 13:01:54 2023
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :

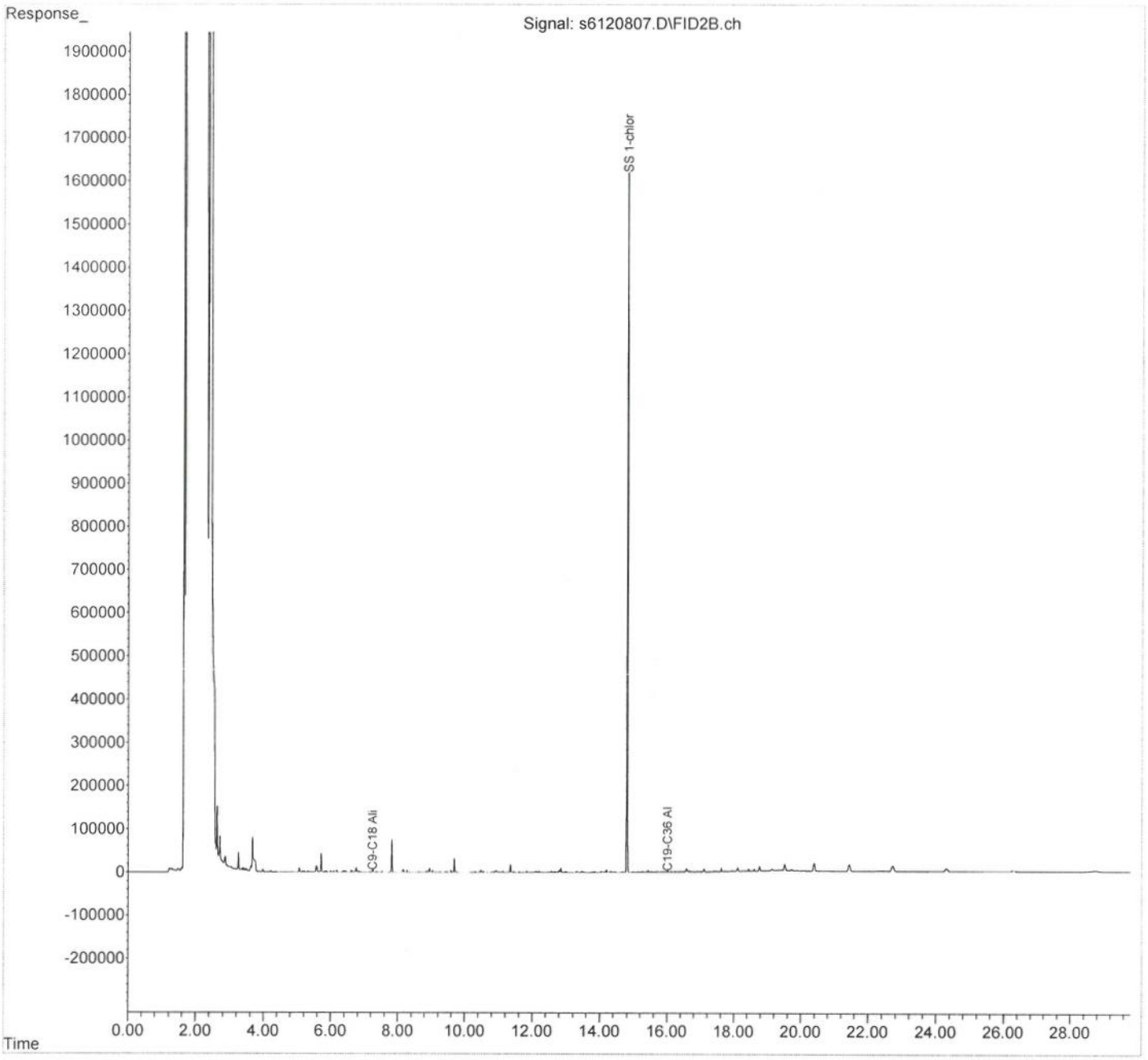
	Compound	R.T.	Response	Conc	Units	
	System Monitoring Compounds					
4)	S SS 2-fluorobiphenyl (...	0.000	0	N.D.	ug/mLd	
Spiked Amount	20.000	Recovery	=	0.00%		
6)	S SS 2-bromonaphthalene...	0.000	0	N.D.	ug/mLd	
Spiked Amount	20.000	Recovery	=	0.00%		
11)	S SS ortho-terphenyl (OTP)	0.000	0	N.D.	ug/mLd	
Spiked Amount	50.000	Recovery	=	0.00%		
13)	S SS 1-chloro-octadecan...	14.806f	2383903	20.296	ug/mL	
Spiked Amount	50.000	Recovery	=	40.59%		
	Target Compounds					
1)	C9 n-Nonane	0.000	0	N.D.	ug/mLd	
2)	C10 n-Decane	0.000	0	N.D.	ug/mLd	
3)	C12 n-Dodecane	0.000	0	N.D.	ug/mLd	
5)	C14 n-Tetradecane	0.000	0	N.D.	ug/mLd	
7)	C16 n-Hexadecane	0.000	0	N.D.	ug/mLd	
8)	C18 n-Octadecane	0.000	0	N.D.	ug/mLd	
9)	H C9-C18 Aliphatics	7.237	972947	6.987	ug/mLm	RI = Range Integration
10)	C19 n-Nonadecane	0.000	0	N.D.	ug/mLd	
12)	C20 n-Eicosane	0.000	0	N.D.	ug/mLd	
14)	C22 n-Docosane	0.000	0	N.D.	ug/mLd	
15)	C24 n-Tetracosane	0.000	0	N.D.	ug/mLd	
16)	C26 n-Hexacosane	0.000	0	N.D.	ug/mLd	
17)	C28 n-Octacosane	0.000	0	N.D.	ug/mLd	
18)	C30 n-Triacontane	0.000	0	N.D.	ug/mLd	
19)	C36 n-Hexatriacontane	0.000	0	N.D.	ug/mLd	
20)	H C19-C36 Aliphatics	16.000	2588931	18.485	ug/mLm	RI = Range Integration

(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : X:\S6\2023\Dec23\120823.SEC\
Data File : s6120807.D
Signal(s) : FID2B.ch
Acq On : 08 Dec 2023 06:38 pm
Operator : dbv
Sample : 67836-09 ali x1
Misc :
ALS Vial : 79 Sample Multiplier: 1

Integration File: rteint.p
Quant Time: Dec 09 17:35:09 2023
Quant Method : X:\S6\methods\S6ALI100423A.M
Quant Title : S6 EPH Aliphatics
QLast Update : Thu Oct 05 13:01:54 2023
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :



This File:	**L:\SVOA\Excel Reports\EPH\231214\67836-011**		Donna Valley L:\SVOA\EPH\EPH ImportFileBuilder2.0.xls
Analysis Group:	**EPH**	**Dow Salvage Yard**	12/14/23 12:19 PM
Field ID:	**SY-OBMW3-110823**	**CRE**	L:\SVOA\EPH\
Sample:	**67836-11 targets x1**	**67836-11 aro x1**	**67836-11 ali x1** L:\SVOA\Excel Reports\EPH\2312
Misc:	*aro frac*		L:\SVOA\PDF Reports\FUELS\
Method Name:	*SVOA04 Method 8270E (6*	*S6 EPH Aromatics*	*S6 EPH Aliphatics*
Import File Name:	**s6 EPHs QC17156W**		
TestGroupID:	**EMA_EPH_PresCert_A**		
Aqueous or Soil? (A or S)	**A**		
Fractionated? (Y/N)	**y**	**y**	
Prep Date:	11/20/2023		
Lab#:	**67836-011**		
QC_Code:			
Prep#	**17156**		

Reviewer Checks:

Quant Report: Reviewed? Ranges integrated? Analyst Initials & Date?	✓
Chromatogram Checked? Major peaks identified?	✓
Soil prep data checked: weight, volume, %solid, Prep date	✓
Field ID consistent with data and any field replicates	✓
Results consistent with any re-runs & internal QC	✓
Substitute dilution data checked	✓
Correct dilution and reason clear or noted	✓
Reason for reanalysis documented	✓
Surrogates pass or flagged & noted	✓
Flags checked (Expiration, F+, Over Cal)	✓
Other QC failures, estimates or interferences documented	✓
Spot checked Reported Result with Quant Report	✓
Checked Audit flagged data in LIMS	✓

Notes: ✓

Initials & Date: 12/14/23

1
2
5
11
16
20

X:\S4\2023\Dec23\120723\s4120748.D\S4PAH110223A.XLS PAH targets filename
X:\S6\2023\Dec23\120823\s6120810.D\S6ARO100423F.XLS aromatics filename
X:\S6\2023\Dec23\120823.SEC\s6120809.D\S6ALI100423A.XLS aliphatics filename

#	Surrogate Standards	Concentration (ug/mL)	AnalysisDate	AnalysisTime	AnalyzedBy	Dilution	Weight	Volume	Surr	Recovery	Flag	QC Limits
13	SS 1-chloro-octadecane (COD)	14.68802075	12/8/2023	07:12:00 PM	DBV s6120809.D	1	1	2	100	**29%**	#	40-140
10	SS ortho-terphenyl (OTP)	25.40432174	12/8/2023	07:12:00 PM	DBV s6120810.D	1	1	2	100	**54%**		40-140
3	SS 2-fluorobiphenyl (2FBP)	14.1160229	12/8/2023	07:12:00 PM	DBV s6120810.D	1	1	2	40	**71%**		40-140
5	SS 2-bromonaphthalene (2BN)	14.65312038	12/8/2023	07:12:00 PM	DBV s6120810.D	1	1	2	40	**73%**		40-140

#	AnalyteName	Concentration (ug/mL)	AnalysisDate	AnalysisTime	AnalyzedBy	Dilution	Weight	Volume
3	naphthalene	0	12/08/2023	09:53:00 AM	CL s4120748.D	1	1	2
4	2-methylnaphthalene	0	12/08/2023	09:53:00 AM	CL s4120748.D	1	1	2
12	phenanthrene	0	12/08/2023	09:53:00 AM	CL s4120748.D	1	1	2
8	acenaphthene	0	12/08/2023	09:53:00 AM	CL s4120748.D	1	1	2
7	acenaphthylene	0	12/08/2023	09:53:00 AM	CL s4120748.D	1	1	2
10	fluorene	0	12/08/2023	09:53:00 AM	CL s4120748.D	1	1	2
13	anthracene	0	12/08/2023	09:53:00 AM	CL s4120748.D	1	1	2
15	fluoranthene	0	12/08/2023	09:53:00 AM	CL s4120748.D	1	1	2
17	pyrene	0	12/08/2023	09:53:00 AM	CL s4120748.D	1	1	2
18	benzo(a)anthracene	0	12/08/2023	09:53:00 AM	CL s4120748.D	1	1	2
19	chrysene	0	12/08/2023	09:53:00 AM	CL s4120748.D	1	1	2
21	benzo(b)fluoranthene	0	12/08/2023	09:53:00 AM	CL s4120748.D	1	1	2
22	benzo(k)fluoranthene	0	12/08/2023	09:53:00 AM	CL s4120748.D	1	1	2
23	benzo(a)pyrene	0	12/08/2023	09:53:00 AM	CL s4120748.D	1	1	2
24	indeno(1,2,3-cd)pyrene	0	12/08/2023	09:53:00 AM	CL s4120748.D	1	1	2
25	dibenzo(a,h)anthracene	0	12/08/2023	09:53:00 AM	CL s4120748.D	1	1	2
26	benzo(g,h,i)perylene	0	12/08/2023	09:53:00 AM	CL s4120748.D	1	1	2
20	C11-C22 Aromatics	29.56668548	12/8/2023	07:12:00 PM	DBV s6120810.D	1	1	2
9	C9-C18 Aliphatics	4.453703237	12/8/2023	07:12:00 PM	DBV s6120809.D	1	1	2
20	C19-C36 Aliphatics	12.47779212	12/8/2023	07:12:00 PM	DBV s6120809.D	1	1	2
	Adjusted C11-C22 Aromatics	29.56668548	12/8/2023	07:12:00 PM	DBV s6120810.D	1	1	2

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Dec23\120723\
Data File : s4120748.D
Acq On : 08 Dec 2023 09:53 am
Operator : cl
Sample : 67836-11 targets x1
Misc : aro frac
ALS Vial : 43 Sample Multiplier: 1

CL
12/8/23 @ 15:35
CharlesL

Quant Time: Dec 08 12:08:14 2023
Quant Method : X:\S4\methods\S4PAH110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration

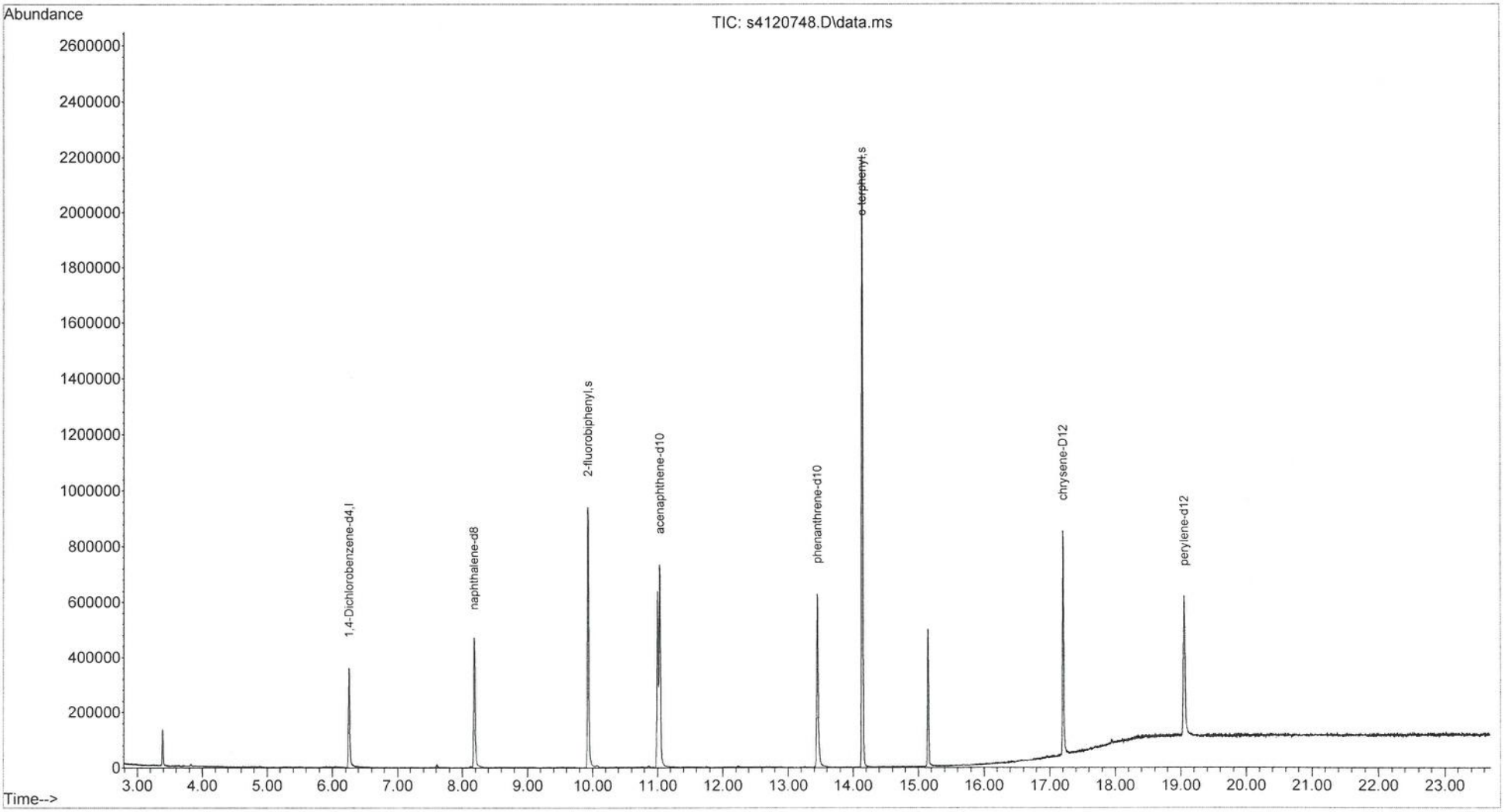
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.250	152	84509	10.00	ug/mL	-0.01
2) naphthalene-d8	8.179	136	353912	10.00	ug/mL	-0.02
5) acenaphthene-d10	11.035	164	202534	10.00	ug/mL	-0.01
11) phenanthrene-d10	13.449	188	395831	10.00	ug/mL	-0.01
16) chrysene-D12	17.205	240	361616	10.00	ug/mL	0.00
20) perylene-d12	19.054	264	332045	10.00	ug/mL	0.02
System Monitoring Compounds						
6) 2-fluorobiphenyl	9.930	172	435601	13.65	ug/mL	-0.01
Spiked Amount 100.000			Recovery = 13.65%			
14) o-terphenyl	14.142	230	601931	26.78	ug/mL	-0.01
Spiked Amount 100.000			Recovery = 26.78%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Dec23\120723\
Data File : s4120748.D
Acq On : 08 Dec 2023 09:53 am
Operator : cl
Sample : 67836-11 targets x1
Misc : aro frac
ALS Vial : 43 Sample Multiplier: 1

Quant Time: Dec 08 12:08:14 2023
Quant Method : X:\S4\methods\S4PAH110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration



Data Path : X:\S6\2023\Dec23\120823\
Data File : s6120810.D
Signal(s) : FID1A.ch
Acq On : 08 Dec 2023 07:12 pm
Operator : dbv
Sample : 67836-11 aro x1
Misc :
ALS Vial : 5 Sample Multiplier: 1

Integration File: rteint.p
Quant Time: Dec 09 17:34:54 2023
Quant Method : X:\S6\methods\S6ARO100423F.M
Quant Title : S6 EPH Aromatics
QLast Update : Thu Oct 05 11:16:37 2023
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :

	Compound	R.T.	Response	Conc Units
	System Monitoring Compounds			
3) S	SS 2-fluorobiphenyl (...	9.526	1992142	14.116 ug/mL
Spiked Amount	20.000		Recovery =	70.58%
5) S	SS 2-bromonaphthalene...	10.603	1397342	14.653 ug/mL
Spiked Amount	20.000		Recovery =	73.27%
10) S	SS ortho-terphenyl (OTP)	13.723	3800271	25.404 ug/mL
Spiked Amount	50.000		Recovery =	50.81%
11) S	SS 1-chloro-otadecane...	14.763	994099	8.140 ug/mLm
Spiked Amount	50.000		Recovery =	16.28%
	Target Compounds			
1)	naphthalene	7.827	9110	0.160 ug/mL
2)	2-methylnaphthalene	0.000	0	N.D. ug/mL
4)	acenaphthylene	10.412	16092	0.176 ug/mL
6)	acenaphthene	0.000	0	N.D. ug/mL
7)	fluorene	0.000	0	N.D. ug/mL
8)	phenanthrene	0.000	0	N.D. ug/mL
9)	anthracene	0.000	0	N.D. ug/mL
12)	fluoranthene	0.000	0	N.D. ug/mL
13)	pyrene	0.000	0	N.D. ug/mL
14)	benzo(a)anthracene	0.000	0	N.D. ug/mL
15)	chrysene	0.000	0	N.D. ug/mL
16)	benzo(b&k)fluoranthenes	0.000	0	N.D. ug/mL
17)	benzo(a)pyrene	0.000	0	N.D. ug/mL
18)	indeno&dibenzo	0.000	0	N.D. ug/mL
19)	benzo(g,h,i)perylene	0.000	0	N.D. ug/mL
20) H	C11-C22 Aromatics	12.000	4214342	29.567 ug/mLm

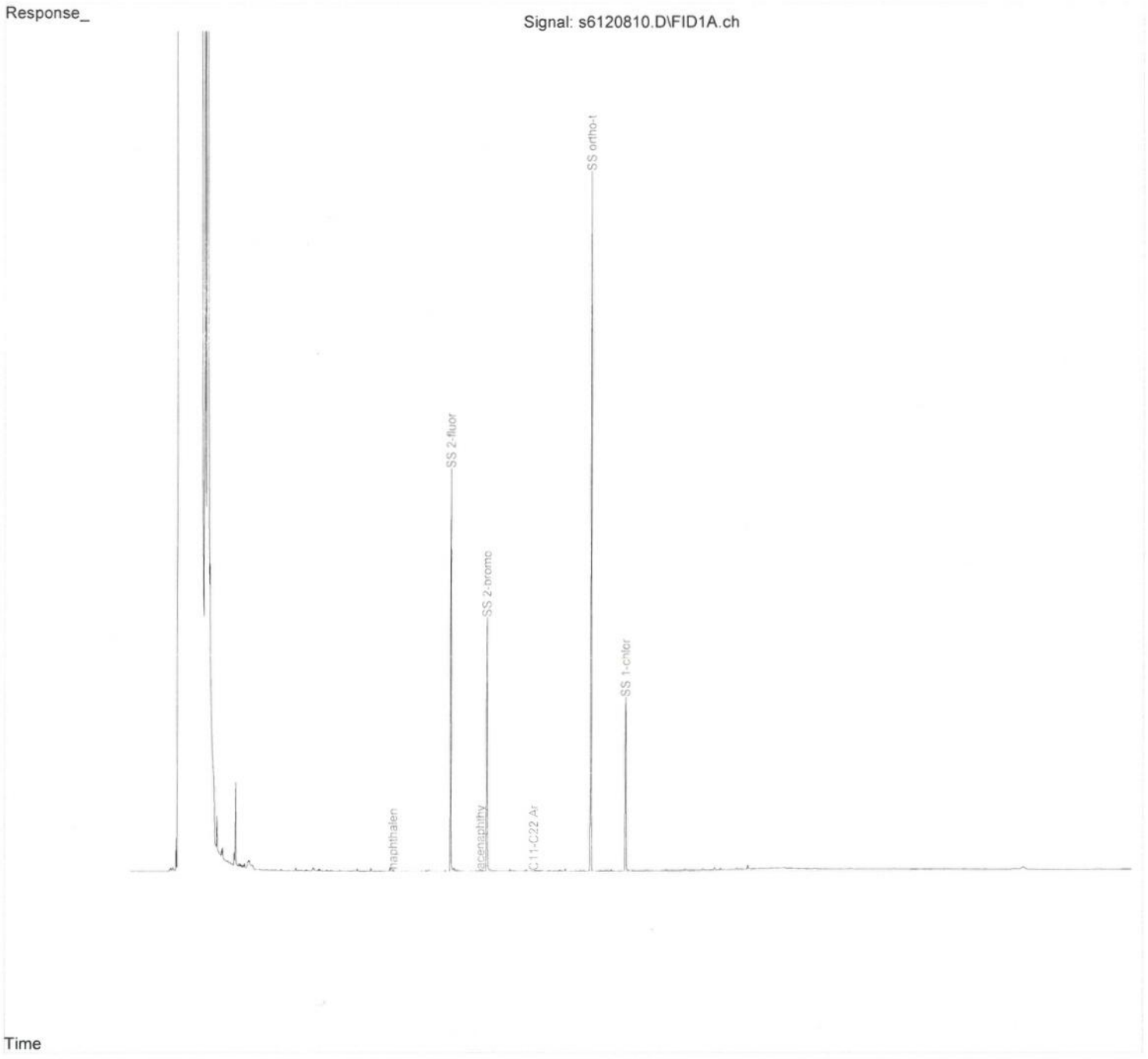
RI = Range Integration

(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : X:\S6\2023\Dec23\120823\
Data File : s6120810.D
Signal(s) : FID1A.ch
Acq On : 08 Dec 2023 07:12 pm
Operator : dbv
Sample : 67836-11 aro x1
Misc :
ALS Vial : 5 Sample Multiplier: 1

Integration File: rteint.p
Quant Time: Dec 09 17:34:54 2023
Quant Method : X:\S6\methods\S6ARO100423F.M
Quant Title : S6 EPH Aromatics
QLast Update : Thu Oct 05 11:16:37 2023
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : X:\S6\2023\Dec23\120823.SEC\
Data File : s6120809.D
Signal(s) : FID2B.ch
Acq On : 08 Dec 2023 07:12 pm
Operator : dbv
Sample : 67836-11 ali x1
Misc :
ALS Vial : 80 Sample Multiplier: 1

12/12/23 @ 08:45
DonnaV

Integration File: rteint.p
Quant Time: Dec 09 17:35:12 2023
Quant Method : X:\S6\methods\S6ALI100423A.M
Quant Title : S6 EPH Aliphatics
QLast Update : Thu Oct 05 13:01:54 2023
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :

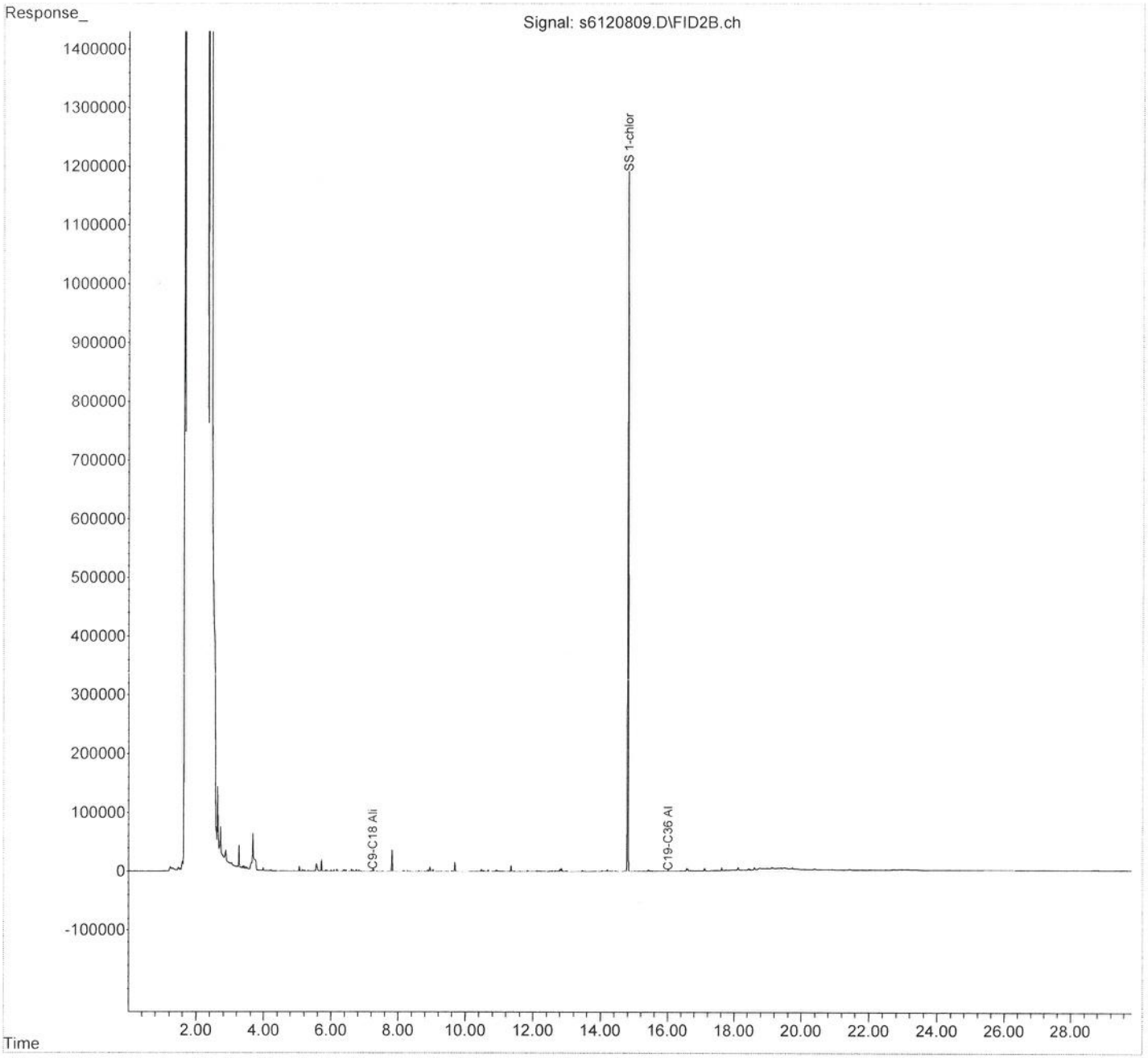
	Compound	R.T.	Response	Conc	Units	
	System Monitoring Compounds					
4) S	SS 2-fluorobiphenyl (...	0.000	0	N.D.	ug/mLd	
Spiked Amount	20.000	Recovery =	0.00%			
6) S	SS 2-bromonaphthalene...	0.000	0	N.D.	ug/mLd	
Spiked Amount	20.000	Recovery =	0.00%			
11) S	SS ortho-terphenyl (OTP)	0.000	0	N.D.	ug/mLd	
Spiked Amount	50.000	Recovery =	0.00%			
13) S	SS 1-chloro-octadecan...	14.806f	1726737	14.688	ug/mL	COD
Spiked Amount	50.000	Recovery =	29.38%			
	Target Compounds					
1)	C9 n-Nonane	0.000	0	N.D.	ug/mLd	
2)	C10 n-Decane	0.000	0	N.D.	ug/mLd	
3)	C12 n-Dodecane	0.000	0	N.D.	ug/mLd	
5)	C14 n-Tetradecane	0.000	0	N.D.	ug/mLd	
7)	C16 n-Hexadecane	0.000	0	N.D.	ug/mLd	
8)	C18 n-Octadecane	0.000	0	N.D.	ug/mLd	
9) H	C9-C18 Aliphatics	7.237	648950	4.454	ug/mLm	RI = Range Integration
10)	C19 n-Nonadecane	0.000	0	N.D.	ug/mLd	
12)	C20 n-Eicosane	0.000	0	N.D.	ug/mLd	
14)	C22 n-Docosane	0.000	0	N.D.	ug/mLd	
15)	C24 n-Tetracosane	0.000	0	N.D.	ug/mLd	
16)	C26 n-Hexacosane	0.000	0	N.D.	ug/mLd	
17)	C28 n-Octacosane	0.000	0	N.D.	ug/mLd	
18)	C30 n-Triacontane	0.000	0	N.D.	ug/mLd	
19)	C36 n-Hexatriacontane	0.000	0	N.D.	ug/mLd	
20) H	C19-C36 Aliphatics	16.000	1793506	12.478	ug/mLm	RI = Range Integration

(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : X:\S6\2023\Dec23\120823.SEC\
Data File : s6120809.D
Signal(s) : FID2B.ch
Acq On : 08 Dec 2023 07:12 pm
Operator : dbv
Sample : 67836-11 ali x1
Misc :
ALS Vial : 80 Sample Multiplier: 1

Integration File: rteint.p
Quant Time: Dec 09 17:35:12 2023
Quant Method : X:\S6\methods\S6ALI100423A.M
Quant Title : S6 EPH Aliphatics
QLast Update : Thu Oct 05 13:01:54 2023
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :



This File:	L:\SVOA\Excel Reports\PCB\113023\s5113008
Analysis Group:	PCB
Field ID:	SY-OBMW2-110823 18001468
Sample:	67836-01 pcb x1 Dow Salvage Yard
Misc:	0 CRE
Import File Name	s5 PCBs QC17190W DOD
TestGroupID	E8082DoD_A
Aqueous or Soil? (A or S)	A
Percent Solid (%)	0
Prep Date	Wednesday, November 29, 2023
Initial Weight/Volume	1
Volume	1
Lab#:	67836-001
AnalysisDate:	Thursday, November 30, 2023
AnalysisTime:	13:30
Dilution:	1
AnalyzedBy:	DBV s5113008.D
QC_Code:	
Prep#	17190

Reviewer Checks:

- Quant Report: Reviewed, Analyst Initials & Date
- Chromatogram Checked, Major peaks identified
- Prep data checked: weight, volume, %solid, Prep date
- Field ID consistent with data and any field replicates
- Results consistent with any re-runs & internal QC
- Correct dilution and reason clear or noted
- Reason for reanalysis documented
- Surrogates pass or flagged & noted
- Flags checked (Expiration, Over Cal)
- Other QC failures, estimates or interferences documented
- Spot checked Reported Result with Quant Report
- Checked Audit flagged data in LIMS
- Correct values averaged
- Column RPD is OK or both results included
- Correct column reported

Notes:

Reviewer Initials & Date: 12/4/23

#	Surrogate Standards	Concentration (ug/mL)	Recovery	Flag	QC Limits	Report Column
1	SS Tetrachloro-m-xylene	1.21	60%		30-150	1
47	SS Decachlorobiphenyl	1.30	65%		30-150	1

#	AnalyteName	Concentration (ug/mL)	Flag	Report Column
2	Ar-1016	0.00		1
7	Ar-1221	0.00		1
12	Ar-1232	0.00		1
17	Ar-1242	0.00		1
22	Ar-1248	0.00		1
27	Ar-1254	0.00		1
32	Ar-1260	0.00		1
37	Ar-1262	0.00		1
42	Ar-1268	0.00		1

Aroclor	Column #1 average	Column #2 average	Column RPD limit 40%	%rsd	Column #1 1	2	3	4	5
Ar-1016	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1221	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1232	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1242	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1248	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1254	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1260	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1262	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1268	0.00	0.00			0.00	0.00	0.00	0.00	0.00
SS Tetra	1.21	1.25							
SS Decac	1.30	1.41							

	%rsd	Column #2 1	2	3	4	5
Ar-1016		0.00	0.00	0.00	0.00	0.00
Ar-1221		0.00	0.00	0.00	0.00	0.00
Ar-1232		0.00	0.00	0.00	0.00	0.00
Ar-1242		0.00	0.00	0.00	0.00	0.00
Ar-1248		0.00	0.00	0.00	0.00	0.00
Ar-1254		0.00	0.00	0.00	0.00	0.00
Ar-1260		0.00	0.00	0.00	0.00	0.00
Ar-1262		0.00	0.00	0.00	0.00	0.00
Ar-1268		0.00	0.00	0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : X:\S5\2023\Nov23\113023\
Data File : s5113008.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 30 Nov 2023 01:30 pm
Operator : dbv
Sample : 67836-01 pcb x1
Misc :
ALS Vial : 8 Sample Multiplier: 1



Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Dec 01 08:11:09 2023
Quant Method : X:\S5\methods\S5PCB092123H.M
Quant Title : SVOA03 Method 8082A
QLast Update : Thu Sep 21 17:18:07 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

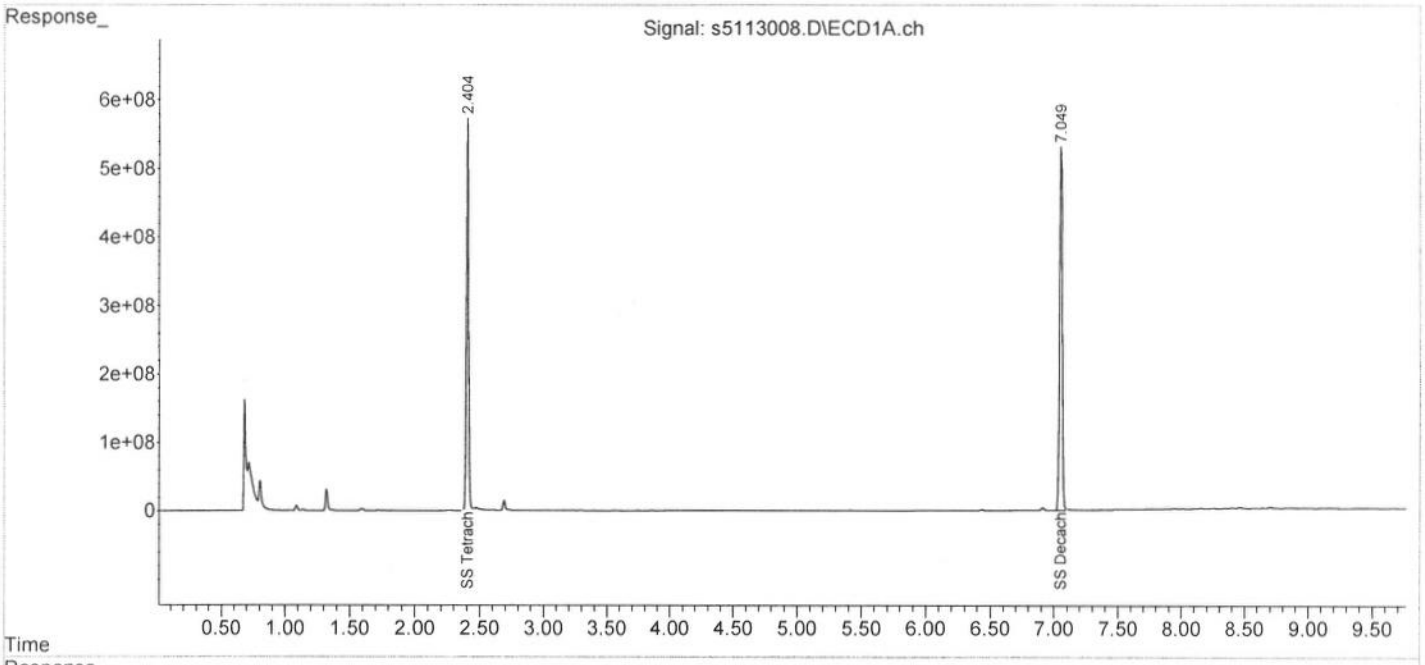
Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
System Monitoring Compounds							
1) S SS Tetrac...	2.404	2.290	576.8E6	580.6E6	1.207m	1.252m	BC = Baseline Correction
Spiked Amount	5.000 Range	30 - 150	Recovery =		24.14%#	25.04%#	
47) S SS Decach...	7.049	7.202	531.2E6	435.0E6	1.300m	1.406m	BC = Baseline Correction
Spiked Amount	5.000 Range	30 - 150	Recovery =		26.00%#	28.12%#	
Target Compounds							

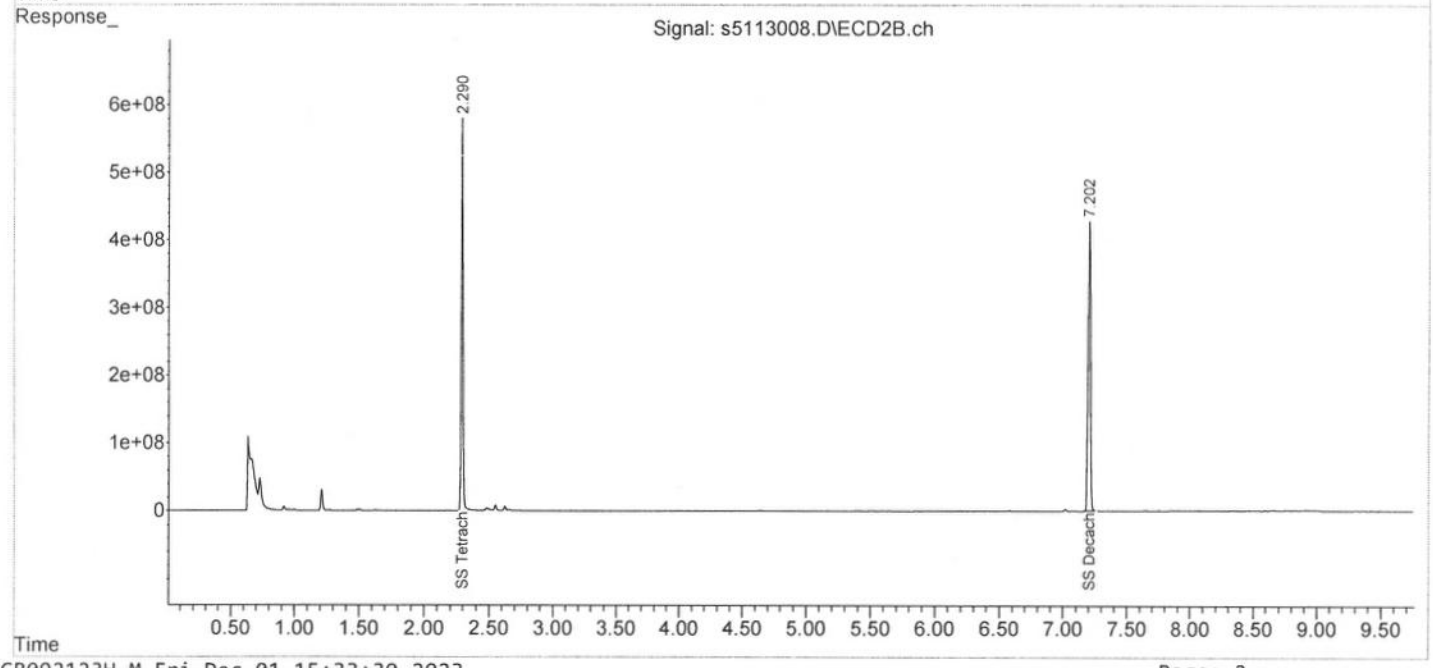
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : X:\S5\2023\Nov23\113023\
Data File : s5113008.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 30 Nov 2023 01:30 pm
Operator : dbv
Sample : 67836-01 pcb x1
Misc :
ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Dec 01 08:11:09 2023
Quant Method : X:\S5\methods\S5PCB092123H.M
Quant Title : SVOA03 Method 8082A
QLast Update : Thu Sep 21 17:18:07 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





This File:	L:\SVOA\Excel Reports\PCB\113023\s5113009
Analysis Group:	PCB
Field ID:	SY-OBMW1-110823 18001468
Sample:	67836-02 pcb x1 Dow Salvage Yard
Misc:	0 CRE
Import File Name	s5 PCBs QC17190W DOD
TestGroupID	E8082DoD_A
Aqueous or Soil? (A or S)	A
Percent Solid (%)	0
Prep Date	Wednesday, November 29, 2023
Initial Weight/Volume	1
Volume	1
Lab#:	67836-002
AnalysisDate:	Thursday, November 30, 2023
AnalysisTime:	13:43
Dilution:	1
AnalyzedBy:	DBV s5113009.D
QC_Code:	
Prep#	17190

Reviewer Checks:

- Quant Report: Reviewed, Analyst Initials & Date
- Chromatogram Checked, Major peaks identified
- Prep data checked: weight, volume, %solid, Prep date
- Field ID consistent with data and any field replicates
- Results consistent with any re-runs & internal QC
- Correct dilution and reason clear or noted
- Reason for reanalysis documented
- Surrogates pass or flagged & noted
- Flags checked (Expiration, Over Cal)
- Other QC failures, estimates or interferences documented
- Spot checked Reported Result with Quant Report
- Checked Audit flagged data in LIMS
- Correct values averaged
- Column RPD is OK or both results included
- Correct column reported

Notes:

Reviewer Initials & Date: 12/4/23

#	Surrogate Standards	Concentration (ug/mL)	Recovery	Flag	QC Limits	Report Column
1	SS Tetrachloro-m-xylene	1.32	66%		30-150	1
47	SS Decachlorobiphenyl	1.36	68%		30-150	1

#	AnalyteName	Concentration (ug/mL)	Flag	Report Column
2	Ar-1016	0.00		1
7	Ar-1221	0.00		1
12	Ar-1232	0.00		1
17	Ar-1242	0.00		1
22	Ar-1248	0.00		1
27	Ar-1254	0.00		1
32	Ar-1260	0.00		1
37	Ar-1262	0.00		1
42	Ar-1268	0.00		1

Aroclor	Column #1 average	Column #2 average	Column RPD limit 40%	%rsd	Column #1 1	2	3	4	5
Ar-1016	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1221	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1232	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1242	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1248	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1254	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1260	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1262	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1268	0.00	0.00			0.00	0.00	0.00	0.00	0.00
SS Tetra	1.32	1.36							
SS Deca	1.36	1.46							

	%rsd	Column #2 1	2	3	4	5
Ar-1016		0.00	0.00	0.00	0.00	0.00
Ar-1221		0.00	0.00	0.00	0.00	0.00
Ar-1232		0.00	0.00	0.00	0.00	0.00
Ar-1242		0.00	0.00	0.00	0.00	0.00
Ar-1248		0.00	0.00	0.00	0.00	0.00
Ar-1254		0.00	0.00	0.00	0.00	0.00
Ar-1260		0.00	0.00	0.00	0.00	0.00
Ar-1262		0.00	0.00	0.00	0.00	0.00
Ar-1268		0.00	0.00	0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : X:\S5\2023\Nov23\113023\
Data File : s5113009.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 30 Nov 2023 01:43 pm
Operator : dbv
Sample : 67836-02 pcb x1
Misc :
ALS Vial : 9 Sample Multiplier: 1

12/1/23 @ 15:50
DonnaV

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Dec 01 08:11:13 2023
Quant Method : X:\S5\methods\S5PCB092123H.M
Quant Title : SVOA03 Method 8082A
QLast Update : Thu Sep 21 17:18:07 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
	System Monitoring Compounds							
1) S	SS Tetrac...	2.405	2.290	622.5E6	625.2E6	1.318m	1.365m	BC = Baseline Correction
	Spiked Amount	5.000 Range	30 - 150	Recovery	=	26.36%#	27.30%#	
47) S	SS Decach...	7.049	7.201	551.8E6	447.9E6	1.358m	1.455m	BC = Baseline Correction
	Spiked Amount	5.000 Range	30 - 150	Recovery	=	27.16%#	29.10%#	
	Target Compounds							

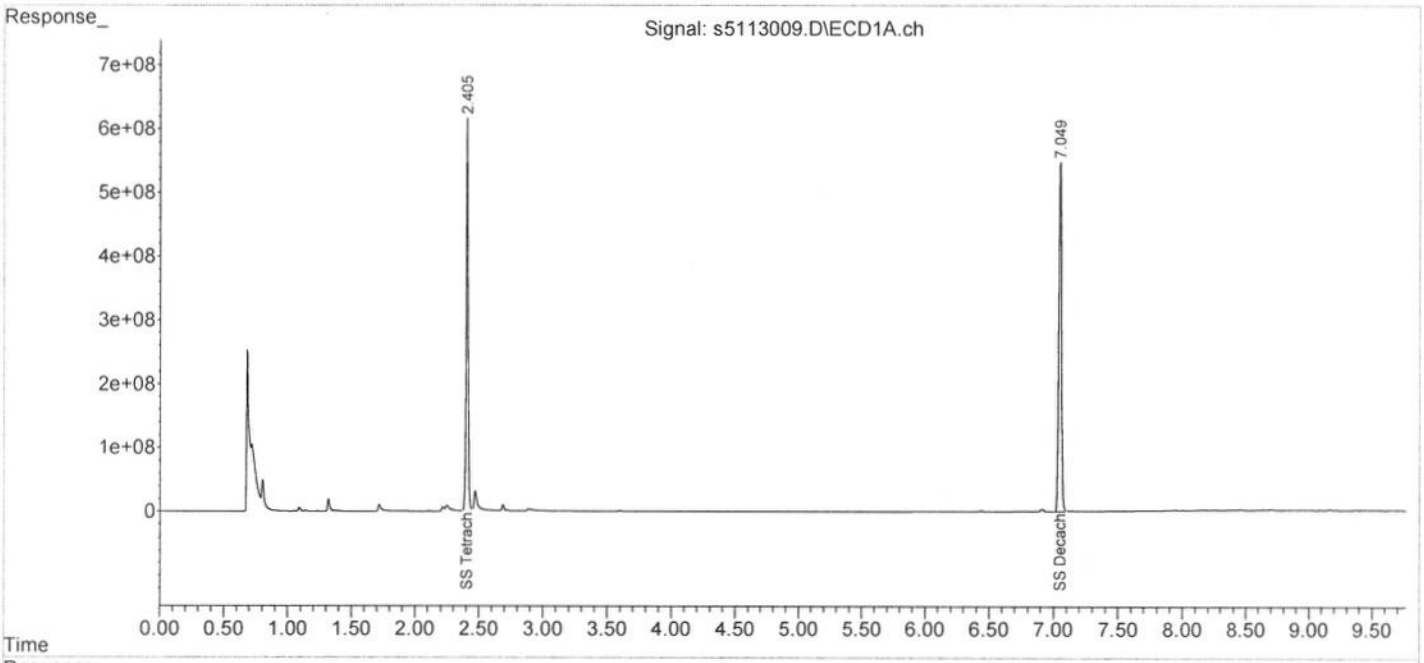
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

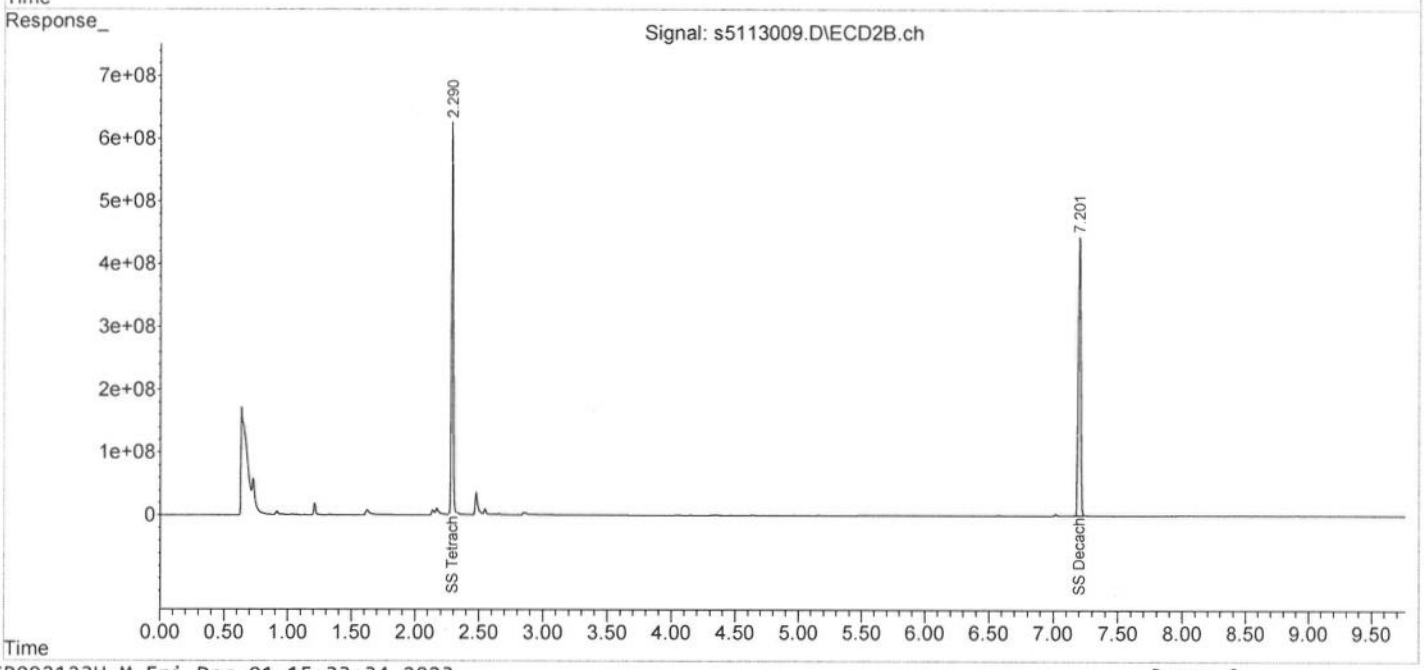
Quantitation Report (QT Reviewed)

Data Path : X:\S5\2023\Nov23\113023\
Data File : s5113009.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 30 Nov 2023 01:43 pm
Operator : dbv
Sample : 67836-02 pcb x1
Misc :
ALS Vial : 9 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Dec 01 08:11:13 2023
Quant Method : X:\S5\methods\S5PCB092123H.M
Quant Title : SVOA03 Method 8082A
QLast Update : Thu Sep 21 17:18:07 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





This File:	L:\SVOA\Excel Reports\PCB\113023\s5113010
Analysis Group:	PCB
Field ID:	SY-OBMW9-110823 18001468
Sample:	67836-03 pcb x1 Dow Salvage Yard
Misc:	0 CRE
Import File Name	s5 PCBs QC17190W DOD
TestGroupID	E8082DoD_A
Aqueous or Soil? (A or S)	A
Percent Solid (%)	0
Prep Date	Wednesday, November 29, 2023
Initial Weight/Volume	1
Volume	1
Lab#:	67836-003
AnalysisDate:	Thursday, November 30, 2023
AnalysisTime:	13:56
Dilution:	1
AnalyzedBy:	DBV s5113010.D
QC_Code:	
Prep#	17190

Reviewer Checks:

- Quant Report: Reviewed, Analyst Initials & Date
- Chromatogram Checked, Major peaks identified
- Prep data checked: weight, volume, %solid, Prep date
- Field ID consistent with data and any field replicates
- Results consistent with any re-runs & internal QC
- Correct dilution and reason clear or noted
- Reason for reanalysis documented
- Surrogates pass or flagged & noted
- Flags checked (Expiration, Over Cal)
- Other QC failures, estimates or interferences documented
- Spot checked Reported Result with Quant Report
- Checked Audit flagged data in LIMS
- Correct values averaged
- Column RPD is OK or both results included
- Correct column reported

Notes:

Reviewer Initials & Date: 12/4/23

#	Surrogate Standards	Concentration (ug/mL)	Recovery	Flag	QC Limits	Report Column
1	SS Tetrachloro-m-xylene	1.28	64%		30-150	1
47	SS Decachlorobiphenyl	1.43	71%		30-150	1

#	AnalyteName	Concentration (ug/mL)	Flag	Report Column
2	Ar-1016	0.00		1
7	Ar-1221	0.00		1
12	Ar-1232	0.00		1
17	Ar-1242	0.00		1
22	Ar-1248	0.00		1
27	Ar-1254	0.00		1
32	Ar-1260	0.00		1
37	Ar-1262	0.00		1
42	Ar-1268	0.00		1

Aroclor	Column #1 average	Column #2 average	Column RPD limit 40%	%rsd	Column #1 1	2	3	4	5
Ar-1016	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1221	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1232	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1242	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1248	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1254	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1260	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1262	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1268	0.00	0.00			0.00	0.00	0.00	0.00	0.00
SS Tetra	1.28	1.32							
SS Deca	1.43	1.47							

	%rsd	Column #2 1	2	3	4	5
Ar-1016		0.00	0.00	0.00	0.00	0.00
Ar-1221		0.00	0.00	0.00	0.00	0.00
Ar-1232		0.00	0.00	0.00	0.00	0.00
Ar-1242		0.00	0.00	0.00	0.00	0.00
Ar-1248		0.00	0.00	0.00	0.00	0.00
Ar-1254		0.00	0.00	0.00	0.00	0.00
Ar-1260		0.00	0.00	0.00	0.00	0.00
Ar-1262		0.00	0.00	0.00	0.00	0.00
Ar-1268		0.00	0.00	0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : X:\S5\2023\Nov23\113023\
Data File : s5113010.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 30 Nov 2023 01:56 pm
Operator : dbv
Sample : 67836-03 pcb x1
Misc :
ALS Vial : 10 Sample Multiplier: 1

DBV
12/1/23 @ 15:50
DonnaV

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Dec 01 08:11:17 2023
Quant Method : X:\S5\methods\S5PCB092123H.M
Quant Title : SVOA03 Method 8082A
QLast Update : Thu Sep 21 17:18:07 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

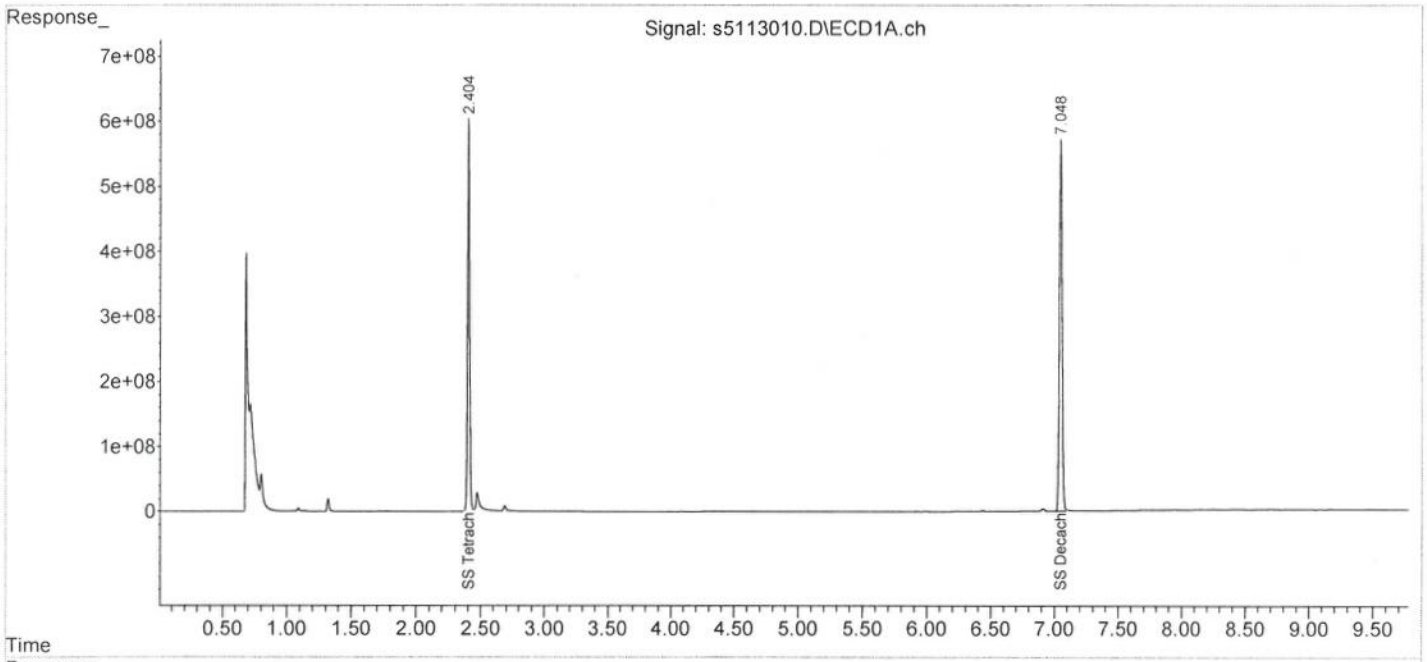
Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
System Monitoring Compounds							
1) S SS Tetrac...	2.404	2.290	608.8E6	607.2E6	1.284m	1.319m	BC = Baseline Correction
Spiked Amount	5.000 Range	30 - 150	Recovery =		25.68%#	26.38%#	
47) S SS Decach...	7.048	7.201	576.1E6	451.0E6	1.427m	1.467m	BC = Baseline Correction
Spiked Amount	5.000 Range	30 - 150	Recovery =		28.54%#	29.34%#	
Target Compounds							

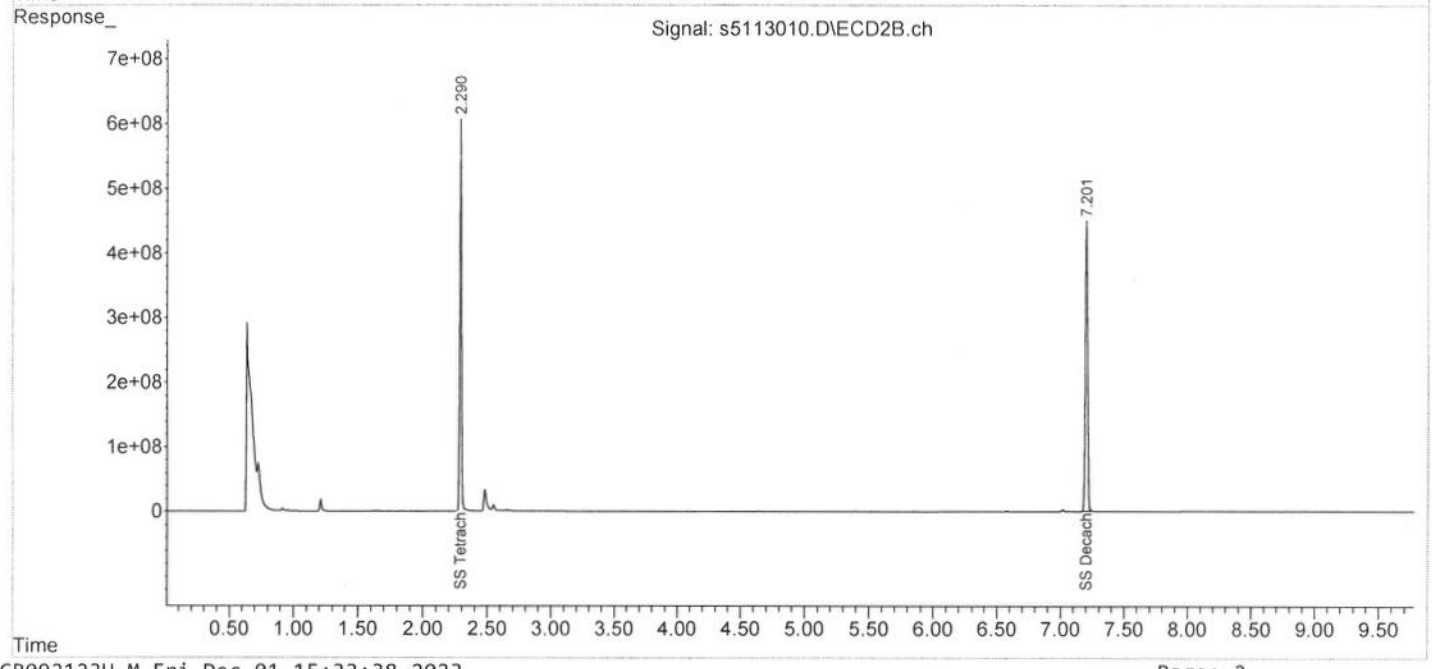
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : X:\S5\2023\Nov23\113023\
Data File : s5113010.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 30 Nov 2023 01:56 pm
Operator : dbv
Sample : 67836-03 pcb x1
Misc :
ALS Vial : 10 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Dec 01 08:11:17 2023
Quant Method : X:\S5\methods\S5PCB092123H.M
Quant Title : SVOA03 Method 8082A
QLast Update : Thu Sep 21 17:18:07 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





This File:	L:\SVOA\Excel Reports\PCB\113023\s5113011
Analysis Group:	PCB
Field ID:	SY-BRMW5-29-44-110823 18001468
Sample:	67836-04 pcb x1 Dow Salvage Yard
Misc:	0 CRE
Import File Name	s5 PCBs QC17190W DOD
TestGroupID	E8082DoD_A
Aqueous or Soil? (A or S)	A
Percent Solid (%)	0
Prep Date	Wednesday, November 29, 2023
Initial Weight/Volume	1
Volume	1
Lab#:	67836-004
AnalysisDate:	Thursday, November 30, 2023
AnalysisTime:	14:09
Dilution:	1
AnalyzedBy:	DBV s5113011.D
QC_Code:	
Prep#	17190

Reviewer Checks:

- Quant Report: Reviewed, Analyst Initials & Date
- Chromatogram Checked, Major peaks identified
- Prep data checked: weight, volume, %solid, Prep date
- Field ID consistent with data and any field replicates
- Results consistent with any re-runs & internal QC
- Correct dilution and reason clear or noted
- Reason for reanalysis documented
- Surrogates pass or flagged & noted
- Flags checked (Expiration, Over Cal)
- Other QC failures, estimates or interferences documented
- Spot checked Reported Result with Quant Report
- Checked Audit flagged data in LIMS
- Correct values averaged
- Column RPD is OK or both results included
- Correct column reported

Notes:

Reviewer Initials & Date: 12/4/23

#	Surrogate Standards	Concentration (ug/mL)	Recovery	Flag	QC Limits	Report Column
1	SS Tetrachloro-m-xylene	1.21	**61%**		30-150	1
47	SS Decachlorobiphenyl	1.41	**71%**		30-150	1

#	AnalyteName	Concentration (ug/mL)	Flag	Report Column
2	Ar-1016	0.00		1
7	Ar-1221	0.00		1
12	Ar-1232	0.00		1
17	Ar-1242	0.00		1
22	Ar-1248	0.00		1
27	Ar-1254	0.00		1
32	Ar-1260	0.00		1
37	Ar-1262	0.00		1
42	Ar-1268	0.00		1

Aroclor	Column #1 average	Column #2 average	Column RPD limit 40%	%rsd	*Column #1* 1	2	3	4	5
Ar-1016	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1221	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1232	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1242	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1248	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1254	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1260	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1262	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1268	0.00	0.00			0.00	0.00	0.00	0.00	0.00
SS Tetra	1.21	1.25							
SS Deca	1.41	1.49							

	%rsd	*Column #2* 1	2	3	4	5
Ar-1016		0.00	0.00	0.00	0.00	0.00
Ar-1221		0.00	0.00	0.00	0.00	0.00
Ar-1232		0.00	0.00	0.00	0.00	0.00
Ar-1242		0.00	0.00	0.00	0.00	0.00
Ar-1248		0.00	0.00	0.00	0.00	0.00
Ar-1254		0.00	0.00	0.00	0.00	0.00
Ar-1260		0.00	0.00	0.00	0.00	0.00
Ar-1262		0.00	0.00	0.00	0.00	0.00
Ar-1268		0.00	0.00	0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : X:\S5\2023\Nov23\113023\
Data File : s5113011.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 30 Nov 2023 02:09 pm
Operator : dbv
Sample : 67836-04 pcb x1
Misc :
ALS Vial : 11 Sample Multiplier: 1

12/1/23 @ 15:50
DonnaV

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Dec 01 08:11:21 2023
Quant Method : X:\S5\methods\S5PCB092123H.M
Quant Title : SVOA03 Method 8082A
QLast Update : Thu Sep 21 17:18:07 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

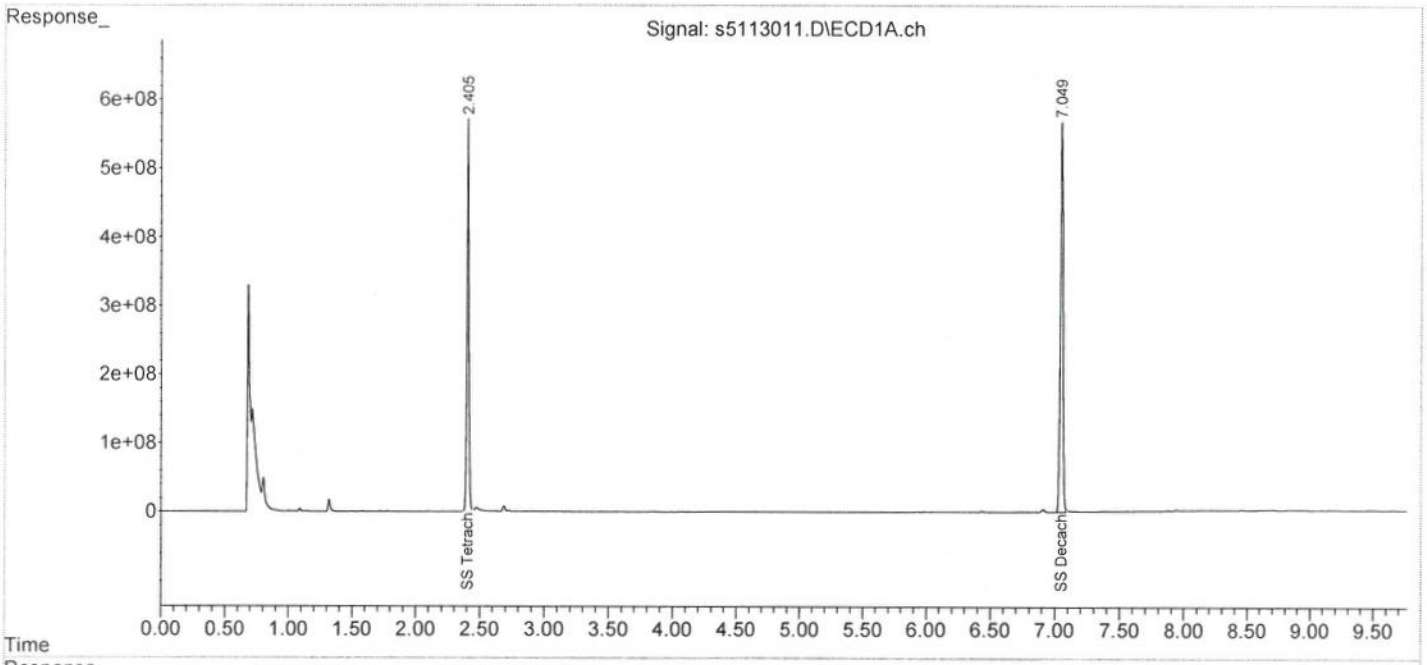
	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
	System Monitoring Compounds							
1) S	SS Tetrac...	2.405	2.290	578.3E6	579.4E6	1.210m	1.249m	BC = Baseline Correction
	Spiked Amount	5.000 Range	30 - 150	Recovery	=	24.20%#	24.98%#	
47) S	SS Decach...	7.049	7.201	571.2E6	456.9E6	1.413m	1.489m	BC = Baseline Correction
	Spiked Amount	5.000 Range	30 - 150	Recovery	=	28.26%#	29.78%#	
	Target Compounds							

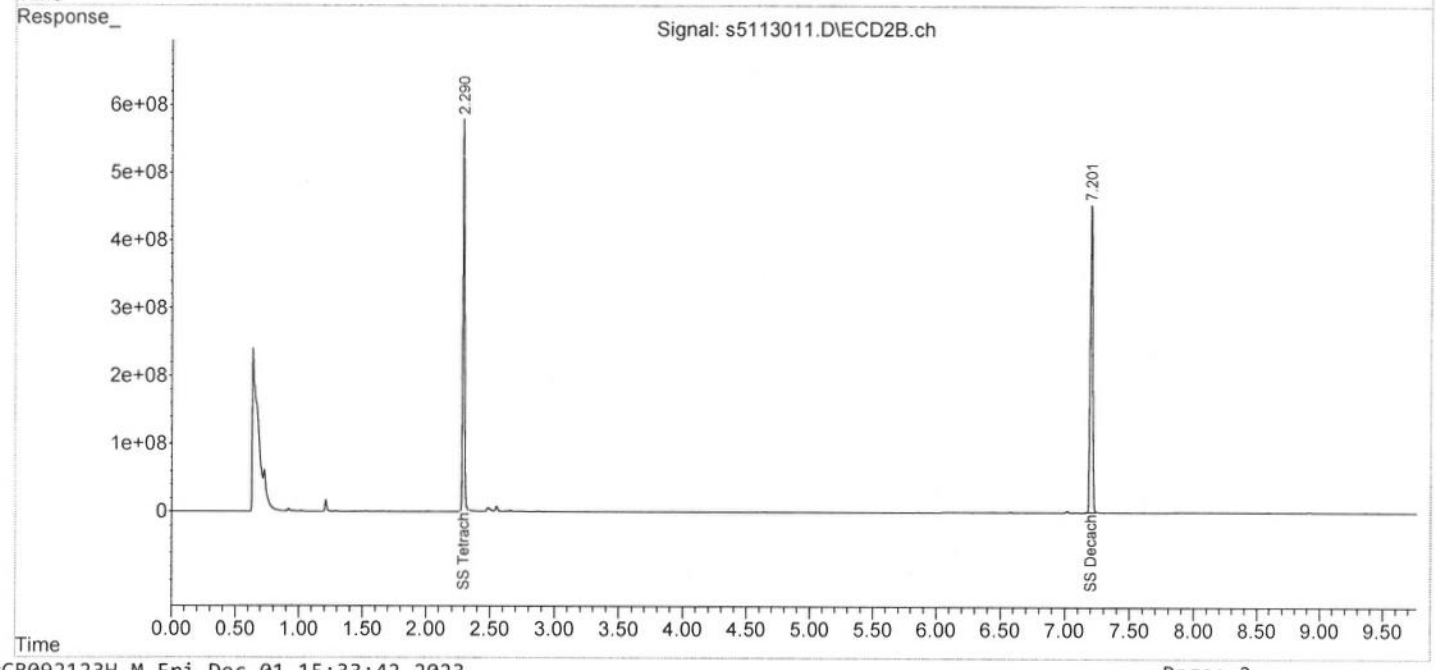
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : X:\S5\2023\Nov23\113023\
Data File : s5113011.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 30 Nov 2023 02:09 pm
Operator : dbv
Sample : 67836-04 pcb x1
Misc :
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Dec 01 08:11:21 2023
Quant Method : X:\S5\methods\S5PCB092123H.M
Quant Title : SVOA03 Method 8082A
QLast Update : Thu Sep 21 17:18:07 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





This File:	L:\SVOA\Excel Reports\PCB\113023\s5113012	
Analysis Group:	PCB	
Field ID:	Y-BRMW5-123-133-110823	18001468
Sample:	67836-05 pcb x1	Dow Salvage Yard
Misc:	0	CRE
Import File Name	s5 PCBs QC17190W DOD	
TestGroupID	E8082DoD_A	
Aqueous or Soil? (A or S)	A	
Percent Solid (%)	0	
Prep Date	Wednesday, November 29, 2023	
Initial Weight/Volume	1	
Volume	1	
Lab#:	67836-005	
AnalysisDate:	Thursday, November 30, 2023	
AnalysisTime:	14:22	
Dilution:	1	
AnalyzedBy:	DBV s5113012.D	
QC_Code:		
Prep#	17190	

Reviewer Checks:

- Quant Report: Reviewed, Analyst Initials & Date
- Chromatogram Checked, Major peaks identified
- Prep data checked: weight, volume, %solid, Prep date
- Field ID consistent with data and any field replicates
- Results consistent with any re-runs & internal QC
- Correct dilution and reason clear or noted
- Reason for reanalysis documented
- Surrogates pass or flagged & noted
- Flags checked (Expiration, Over Cal)
- Other QC failures, estimates or interferences documented
- Spot checked Reported Result with Quant Report
- Checked Audit flagged data in LIMS
- Correct values averaged
- Column RPD is OK or both results included
- Correct column reported

Notes:

Reviewer Initials & Date: 12/4/23

#	Surrogate Standards	Concentration (ug/mL)	Recovery	Flag	QC Limits	Report Column
1	SS Tetrachloro-m-xylene	1.09	55%		30-150	1
47	SS Decachlorobiphenyl	0.99	49%		30-150	1

#	AnalyteName	Concentration (ug/mL)	Flag	Report Column
2	Ar-1016	0.00		1
7	Ar-1221	0.00		1
12	Ar-1232	0.00		1
17	Ar-1242	0.00		1
22	Ar-1248	0.00		1
27	Ar-1254	0.00		1
32	Ar-1260	0.00		1
37	Ar-1262	0.00		1
42	Ar-1268	0.00		1

Aroclor	Column #1 average	Column #2 average	Column RPD limit 40%	%rsd	Column #1 1	2	3	4	5
Ar-1016	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1221	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1232	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1242	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1248	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1254	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1260	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1262	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1268	0.00	0.00			0.00	0.00	0.00	0.00	0.00
SS Tetra	1.09	1.13							
SS Deca	0.99	1.03							

	%rsd	Column #2 1	2	3	4	5
Ar-1016		0.00	0.00	0.00	0.00	0.00
Ar-1221		0.00	0.00	0.00	0.00	0.00
Ar-1232		0.00	0.00	0.00	0.00	0.00
Ar-1242		0.00	0.00	0.00	0.00	0.00
Ar-1248		0.00	0.00	0.00	0.00	0.00
Ar-1254		0.00	0.00	0.00	0.00	0.00
Ar-1260		0.00	0.00	0.00	0.00	0.00
Ar-1262		0.00	0.00	0.00	0.00	0.00
Ar-1268		0.00	0.00	0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : X:\S5\2023\Nov23\113023\
Data File : s5113012.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 30 Nov 2023 02:22 pm
Operator : dbv
Sample : 67836-05 pcb x1
Misc :
ALS Vial : 12 Sample Multiplier: 1

DBV
12/1/23 @ 15:50
DonnaV

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Dec 01 08:11:25 2023
Quant Method : X:\S5\methods\S5PCB092123H.M
Quant Title : SVOA03 Method 8082A
QLast Update : Thu Sep 21 17:18:07 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

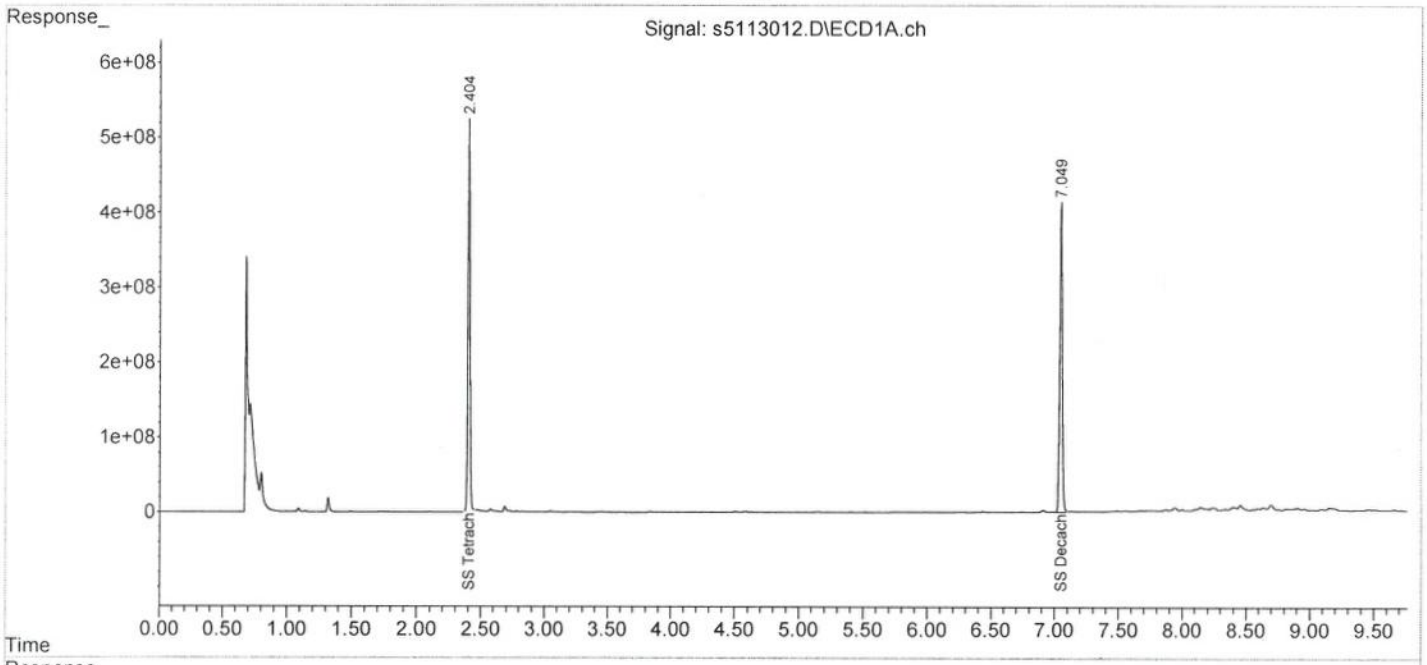
Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
System Monitoring Compounds							
1) S SS Tetrac...	2.404	2.290	529.3E6	530.2E6	1.094m	1.127m	BC = Baseline Correction
Spiked Amount	5.000 Range	30 - 150	Recovery =		21.88%#	22.54%#	
47) S SS Decach...	7.049	7.201	415.9E6	331.2E6	0.989m	1.035m	BC = Baseline Correction
Spiked Amount	5.000 Range	30 - 150	Recovery =		19.78%#	20.70%#	
Target Compounds							

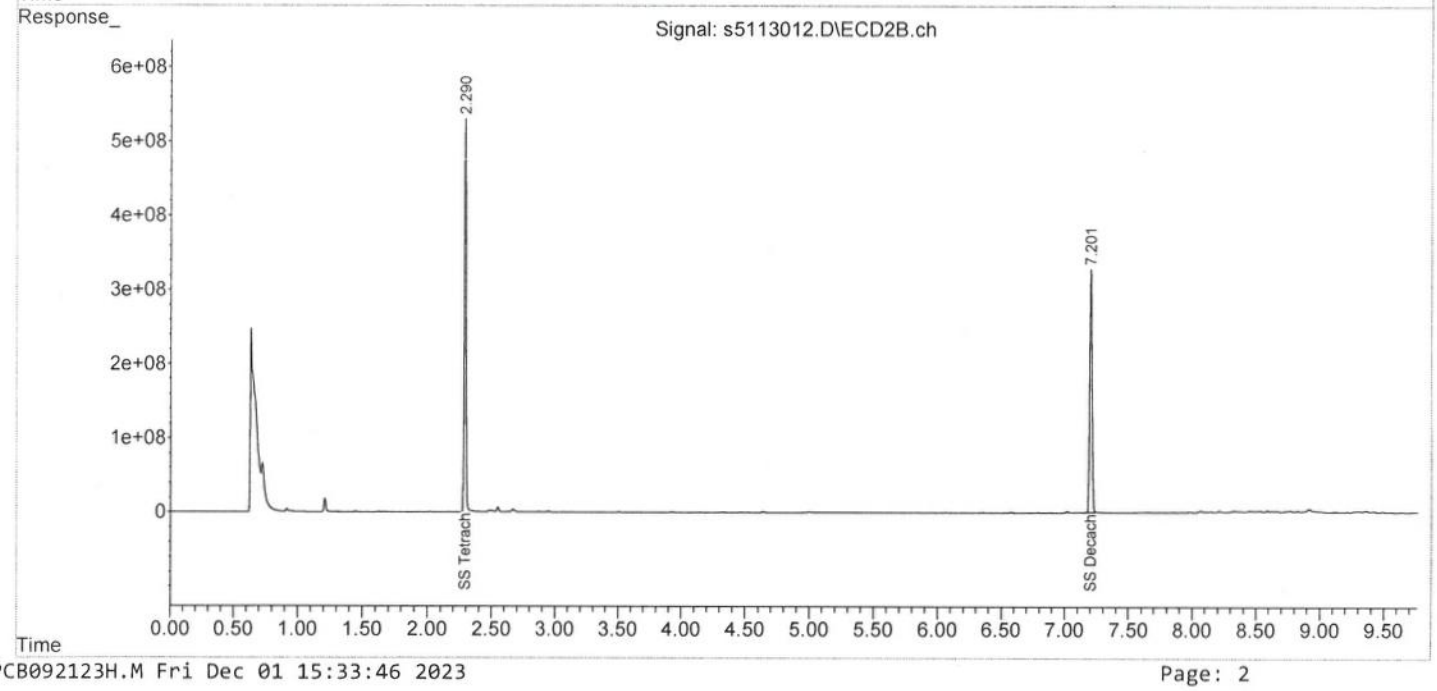
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : X:\S5\2023\Nov23\113023\
Data File : s5113012.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 30 Nov 2023 02:22 pm
Operator : dbv
Sample : 67836-05 pcb x1
Misc :
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Dec 01 08:11:25 2023
Quant Method : X:\S5\methods\S5PCB092123H.M
Quant Title : SVOA03 Method 8082A
QLast Update : Thu Sep 21 17:18:07 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





This File:	L:\SVOA\Excel Reports\PCB\113023\s5113013
Analysis Group:	PCB
Field ID:	SY-BRMW5-56-66-110823 18001468
Sample:	67836-06 pcb x1 Dow Salvage Yard
Misc:	0 CRE
Import File Name	s5 PCBs QC17190W DOD
TestGroupID	E8082DoD_A
Aqueous or Soil? (A or S)	A
Percent Solid (%)	0
Prep Date	Wednesday, November 29, 2023
Initial Weight/Volume	1
Volume	1
Lab#:	67836-006
AnalysisDate:	Thursday, November 30, 2023
AnalysisTime:	14:35
Dilution:	1
AnalyzedBy:	DBV s5113013.D
QC_Code:	
Prep#	17190

Reviewer Checks:

- Quant Report: Reviewed, Analyst Initials & Date
- Chromatogram Checked, Major peaks identified
- Prep data checked: weight, volume, %solid, Prep date
- Field ID consistent with data and any field replicates
- Results consistent with any re-runs & internal QC
- Correct dilution and reason clear or noted
- Reason for reanalysis documented
- Surrogates pass or flagged & noted
- Flags checked (Expiration, Over Cal)
- Other QC failures, estimates or interferences documented
- Spot checked Reported Result with Quant Report
- Checked Audit flagged data in LIMS
- Correct values averaged
- Column RPD is OK or both results included
- Correct column reported

Notes:

Reviewer Initials & Date: 12/4/23

#	Surrogate Standards	Concentration (ug/mL)	Recovery	Flag	QC Limits	Report Column
1	SS Tetrachloro-m-xylene	1.11	55%		30-150	1
47	SS Decachlorobiphenyl	0.94	47%		30-150	1

#	AnalyteName	Concentration (ug/mL)	Flag	Report Column
2	Ar-1016	0.00		1
7	Ar-1221	0.00		1
12	Ar-1232	0.00		1
17	Ar-1242	0.00		1
22	Ar-1248	0.00		1
27	Ar-1254	0.00		1
32	Ar-1260	0.00		1
37	Ar-1262	0.00		1
42	Ar-1268	0.00		1

Aroclor	Column #1 average	Column #2 average	Column RPD limit 40%	%rsd	Column #1 1	2	3	4	5
Ar-1016	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1221	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1232	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1242	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1248	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1254	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1260	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1262	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1268	0.00	0.00			0.00	0.00	0.00	0.00	0.00
SS Tetra	1.11	1.15							
SS Deca	0.94	1.01							

	%rsd	Column #2 1	2	3	4	5
Ar-1016		0.00	0.00	0.00	0.00	0.00
Ar-1221		0.00	0.00	0.00	0.00	0.00
Ar-1232		0.00	0.00	0.00	0.00	0.00
Ar-1242		0.00	0.00	0.00	0.00	0.00
Ar-1248		0.00	0.00	0.00	0.00	0.00
Ar-1254		0.00	0.00	0.00	0.00	0.00
Ar-1260		0.00	0.00	0.00	0.00	0.00
Ar-1262		0.00	0.00	0.00	0.00	0.00
Ar-1268		0.00	0.00	0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : X:\S5\2023\Nov23\113023\
Data File : s5113013.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 30 Nov 2023 02:35 pm
Operator : dbv
Sample : 67836-06 pcb x1
Misc :
ALS Vial : 13 Sample Multiplier: 1



Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Dec 01 08:11:29 2023
Quant Method : X:\S5\methods\S5PCB092123H.M
Quant Title : SVOA03 Method 8082A
QLast Update : Thu Sep 21 17:18:07 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
System Monitoring Compounds							
1) S SS Tetrac...	2.404	2.290	535.5E6	540.7E6	1.108m	1.153m	BC = Baseline Correction
Spiked Amount	5.000 Range	30 - 150	Recovery =		22.16%#	23.06%#	
47) S SS Decach...	7.048	7.201	397.1E6	324.9E6	0.940m	1.013m	BC = Baseline Correction
Spiked Amount	5.000 Range	30 - 150	Recovery =		18.80%#	20.26%#	
Target Compounds							

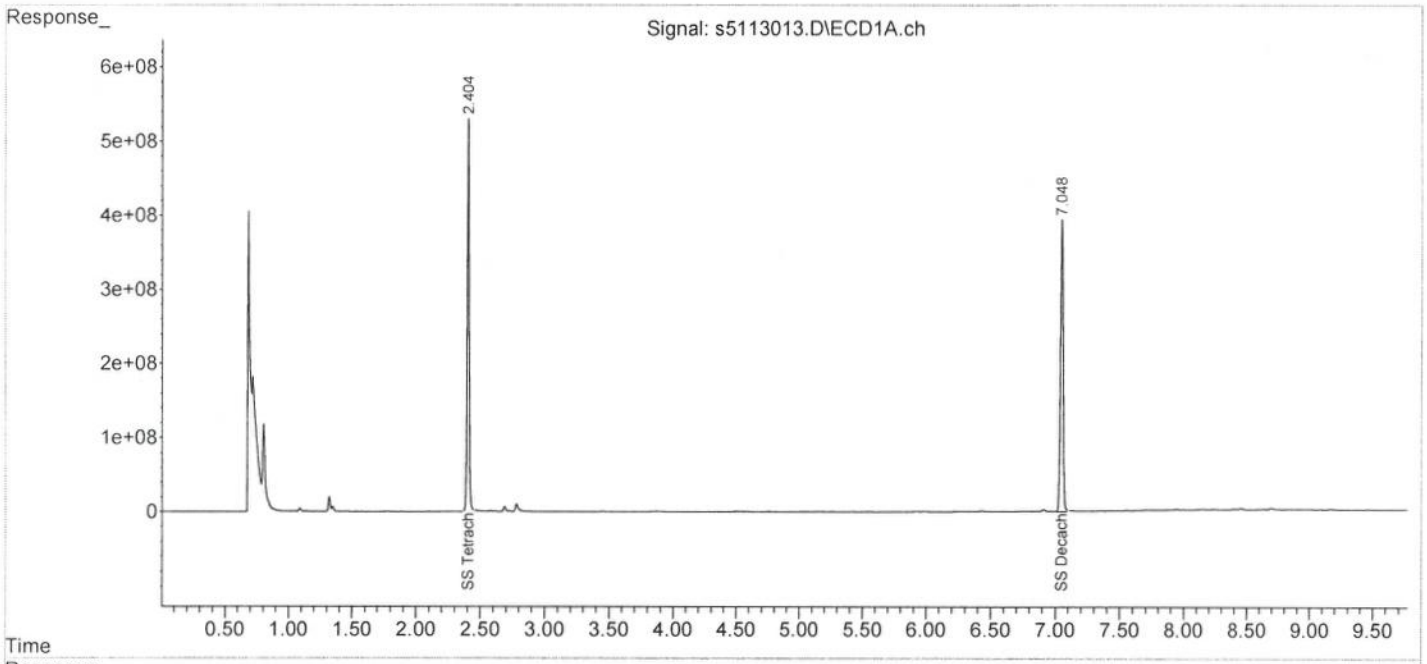
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

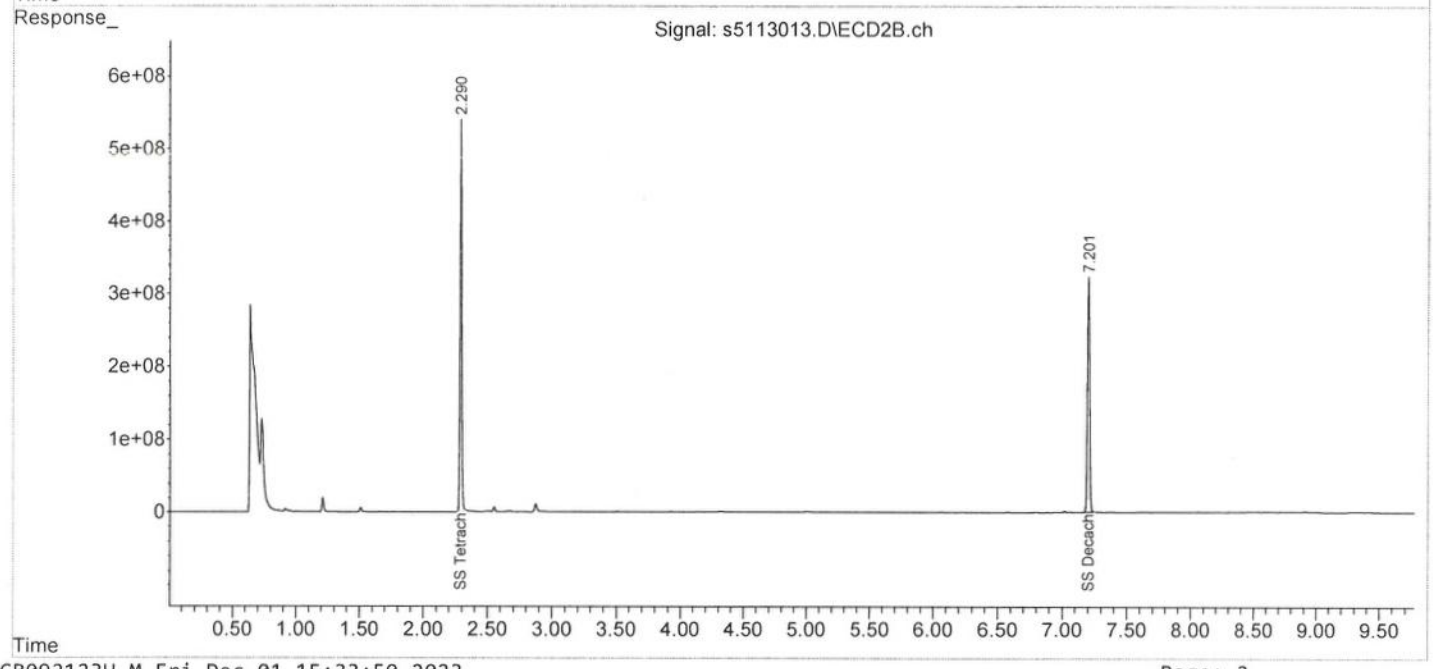
Quantitation Report (QT Reviewed)

Data Path : X:\S5\2023\Nov23\113023\
Data File : s5113013.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 30 Nov 2023 02:35 pm
Operator : dbv
Sample : 67836-06 pcb x1
Misc :
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Dec 01 08:11:29 2023
Quant Method : X:\S5\methods\S5PCB092123H.M
Quant Title : SVOA03 Method 8082A
QLast Update : Thu Sep 21 17:18:07 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





This File:	L:\SVOA\Excel Reports\PCB\113023\s5113014
Analysis Group:	PCB
Field ID:	SY-OBMW8-110823 18001468
Sample:	67836-07 pcb x1 Dow Salvage Yard
Misc:	0 CRE
Import File Name	s5 PCBs QC17190W DOD
TestGroupID	E8082DoD_A
Aqueous or Soil? (A or S)	A
Percent Solid (%)	0
Prep Date	Wednesday, November 29, 2023
Initial Weight/Volume	1
Volume	1
Lab#:	67836-007
AnalysisDate:	Thursday, November 30, 2023
AnalysisTime:	14:48
Dilution:	1
AnalyzedBy:	DBV s5113014.D
QC_Code:	
Prep#	17190

Reviewer Checks:

- Quant Report: Reviewed, Analyst Initials & Date
- Chromatogram Checked, Major peaks identified
- Prep data checked: weight, volume, %solid, Prep date
- Field ID consistent with data and any field replicates
- Results consistent with any re-runs & internal QC
- Correct dilution and reason clear or noted
- Reason for reanalysis documented
- Surrogates pass or flagged & noted
- Flags checked (Expiration, Over Cal)
- Other QC failures, estimates or interferences documented
- Spot checked Reported Result with Quant Report
- Checked Audit flagged data in LIMS
- Correct values averaged
- Column RPD is OK or both results included
- Correct column reported

Notes:

12/4/23

Reviewer Initials & Date:

#	Surrogate Standards	Concentration (ug/mL)	Recovery	Flag	QC Limits	Report Column
1	SS Tetrachloro-m-xylene	1.12	56%		30-150	1
47	SS Decachlorobiphenyl	1.34	67%		30-150	1

#	AnalyteName	Concentration (ug/mL)	Flag	Report Column
2	Ar-1016	0.00		1
7	Ar-1221	0.00		1
12	Ar-1232	0.00		1
17	Ar-1242	0.00		1
22	Ar-1248	0.00		1
27	Ar-1254	0.00		1
32	Ar-1260	0.00		1
37	Ar-1262	0.00		1
42	Ar-1268	0.00		1

Aroclor	Column #1 average	Column #2 average	Column RPD limit 40%	%rsd	Column #1 1	2	3	4	5
Ar-1016	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1221	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1232	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1242	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1248	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1254	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1260	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1262	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1268	0.00	0.00			0.00	0.00	0.00	0.00	0.00
SS Tetra	1.12	1.17							
SS Deca	1.34	1.40							

	%rsd	Column #2 1	2	3	4	5
Ar-1016		0.00	0.00	0.00	0.00	0.00
Ar-1221		0.00	0.00	0.00	0.00	0.00
Ar-1232		0.00	0.00	0.00	0.00	0.00
Ar-1242		0.00	0.00	0.00	0.00	0.00
Ar-1248		0.00	0.00	0.00	0.00	0.00
Ar-1254		0.00	0.00	0.00	0.00	0.00
Ar-1260		0.00	0.00	0.00	0.00	0.00
Ar-1262		0.00	0.00	0.00	0.00	0.00
Ar-1268		0.00	0.00	0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : X:\S5\2023\Nov23\113023\
Data File : s5113014.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 30 Nov 2023 02:48 pm
Operator : dbv
Sample : 67836-07 pcb x1
Misc :
ALS Vial : 14 Sample Multiplier: 1

12/1/23 @ 15:50
DonnaV

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Dec 01 08:11:33 2023
Quant Method : X:\S5\methods\S5PCB092123H.M
Quant Title : SVOA03 Method 8082A
QLast Update : Thu Sep 21 17:18:07 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

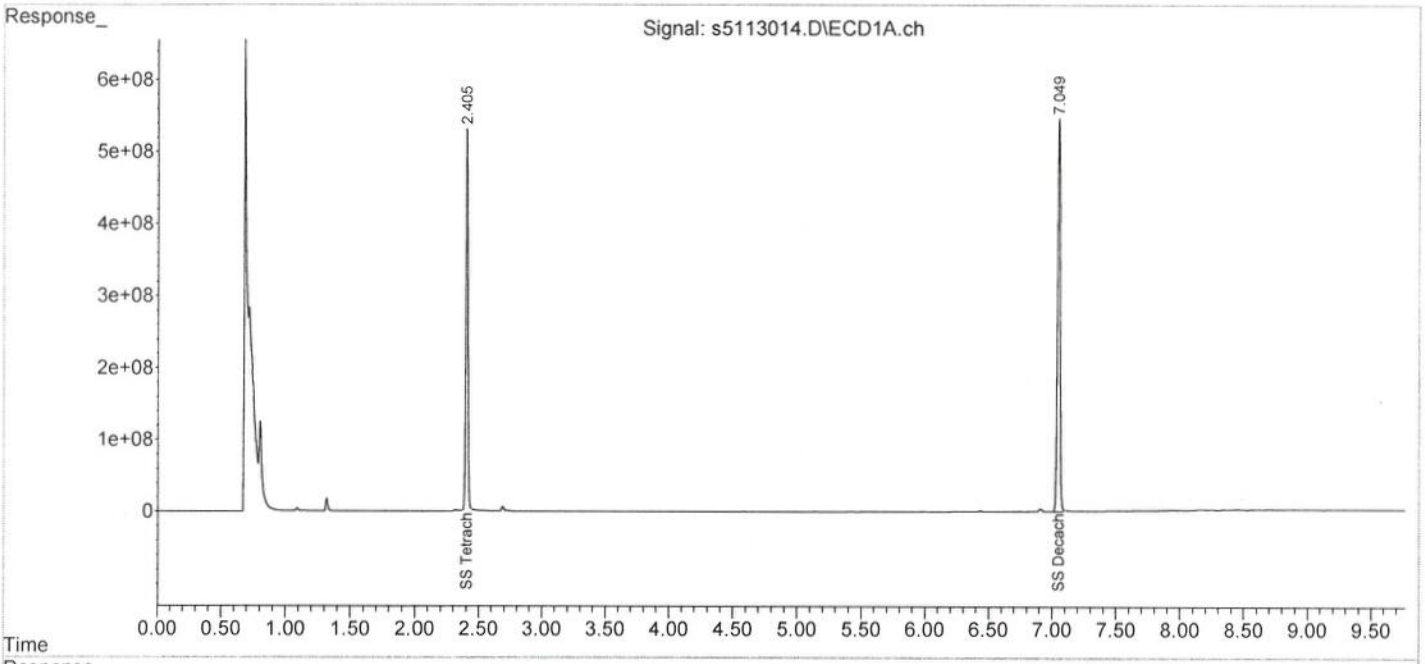
Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
System Monitoring Compounds							
1) S SS Tetrac...	2.405	2.290	539.6E6	548.6E6	1.118m	1.172m	BC = Baseline Correction
Spiked Amount	5.000	Range 30 - 150	Recovery =		22.36%#	23.44%#	
47) S SS Decach...	7.049	7.201	546.5E6	434.3E6	1.343m	1.404m	BC = Baseline Correction
Spiked Amount	5.000	Range 30 - 150	Recovery =		26.86%#	28.08%#	
Target Compounds							

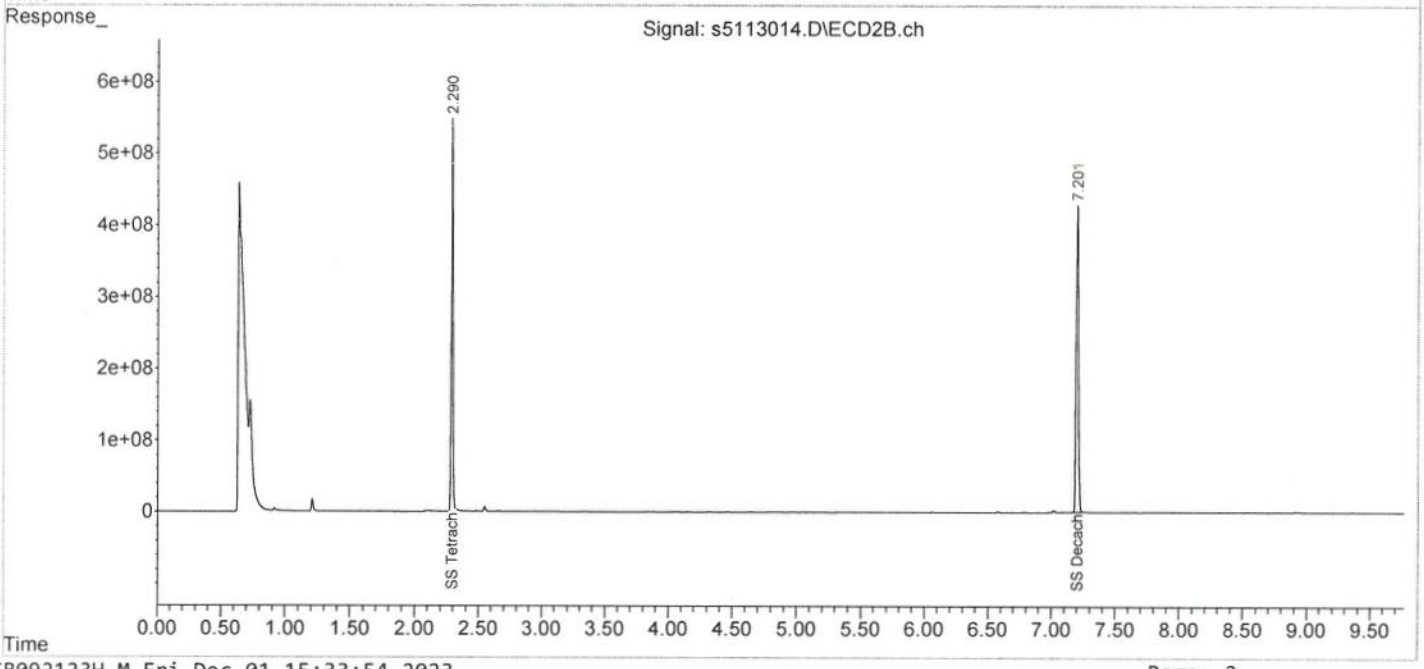
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : X:\S5\2023\Nov23\113023\
Data File : s5113014.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 30 Nov 2023 02:48 pm
Operator : dbv
Sample : 67836-07 pcb x1
Misc :
ALS Vial : 14 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Dec 01 08:11:33 2023
Quant Method : X:\S5\methods\S5PCB092123H.M
Quant Title : SVOA03 Method 8082A
QLast Update : Thu Sep 21 17:18:07 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





This File:	L:\SVOA\Excel Reports\PCB\113023\s5113015
Analysis Group:	PCB
Field ID:	SY-OBMW11-110823 18001468
Sample:	67836-08 pcb x1 Dow Salvage Yard
Misc:	0 CRE
Import File Name	s5 PCBs QC17190W DOD
TestGroupID	E8082DoD_A
Aqueous or Soil? (A or S)	A
Percent Solid (%)	0
Prep Date	Wednesday, November 29, 2023
Initial Weight/Volume	1
Volume	1
Lab#:	67836-008
AnalysisDate:	Thursday, November 30, 2023
AnalysisTime:	15:01
Dilution:	1
AnalyzedBy:	DBV s5113015.D
QC_Code:	
Prep#	17190

Reviewer Checks:

- Quant Report: Reviewed, Analyst Initials & Date
- Chromatogram Checked, Major peaks identified
- Prep data checked: weight, volume, %solid, Prep date
- Field ID consistent with data and any field replicates
- Results consistent with any re-runs & internal QC
- Correct dilution and reason clear or noted
- Reason for reanalysis documented
- Surrogates pass or flagged & noted
- Flags checked (Expiration, Over Cal)
- Other QC failures, estimates or interferences documented
- Spot checked Reported Result with Quant Report
- Checked Audit flagged data in LIMS
- Correct values averaged
- Column RPD is OK or both results included
- Correct column reported

Notes:

Reviewer Initials & Date: 12/4/23

#	Surrogate Standards	Concentration (ug/mL)	Recovery	Flag	QC Limits	Report Column
1	SS Tetrachloro-m-xylene	1.20	60%		30-150	1
47	SS Decachlorobiphenyl	1.27	63%		30-150	1

#	AnalyteName	Concentration (ug/mL)	Flag	Report Column
2	Ar-1016	0.00		1
7	Ar-1221	0.00		1
12	Ar-1232	0.00		1
17	Ar-1242	0.00		1
22	Ar-1248	0.00		1
27	Ar-1254	0.00		1
32	Ar-1260	0.00		1
37	Ar-1262	0.00		1
42	Ar-1268	0.00		1

Aroclor	Column #1 average	Column #2 average	Column RPD limit 40%	%rsd	Column #1 1	2	3	4	5
Ar-1016	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1221	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1232	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1242	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1248	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1254	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1260	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1262	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1268	0.00	0.00			0.00	0.00	0.00	0.00	0.00
SS Tetra	1.20	1.23							
SS Deca	1.27	1.41							

	%rsd	Column #2 1	2	3	4	5
Ar-1016		0.00	0.00	0.00	0.00	0.00
Ar-1221		0.00	0.00	0.00	0.00	0.00
Ar-1232		0.00	0.00	0.00	0.00	0.00
Ar-1242		0.00	0.00	0.00	0.00	0.00
Ar-1248		0.00	0.00	0.00	0.00	0.00
Ar-1254		0.00	0.00	0.00	0.00	0.00
Ar-1260		0.00	0.00	0.00	0.00	0.00
Ar-1262		0.00	0.00	0.00	0.00	0.00
Ar-1268		0.00	0.00	0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : X:\S5\2023\Nov23\113023\
Data File : s5113015.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 30 Nov 2023 03:01 pm
Operator : dbv
Sample : 67836-08 pcb x1
Misc :
ALS Vial : 15 Sample Multiplier: 1

DBV
12/1/23 @ 15:50
DonnaV

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Dec 01 08:11:37 2023
Quant Method : X:\S5\methods\S5PCB092123H.M
Quant Title : SVOA03 Method 8082A
QLast Update : Thu Sep 21 17:18:07 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

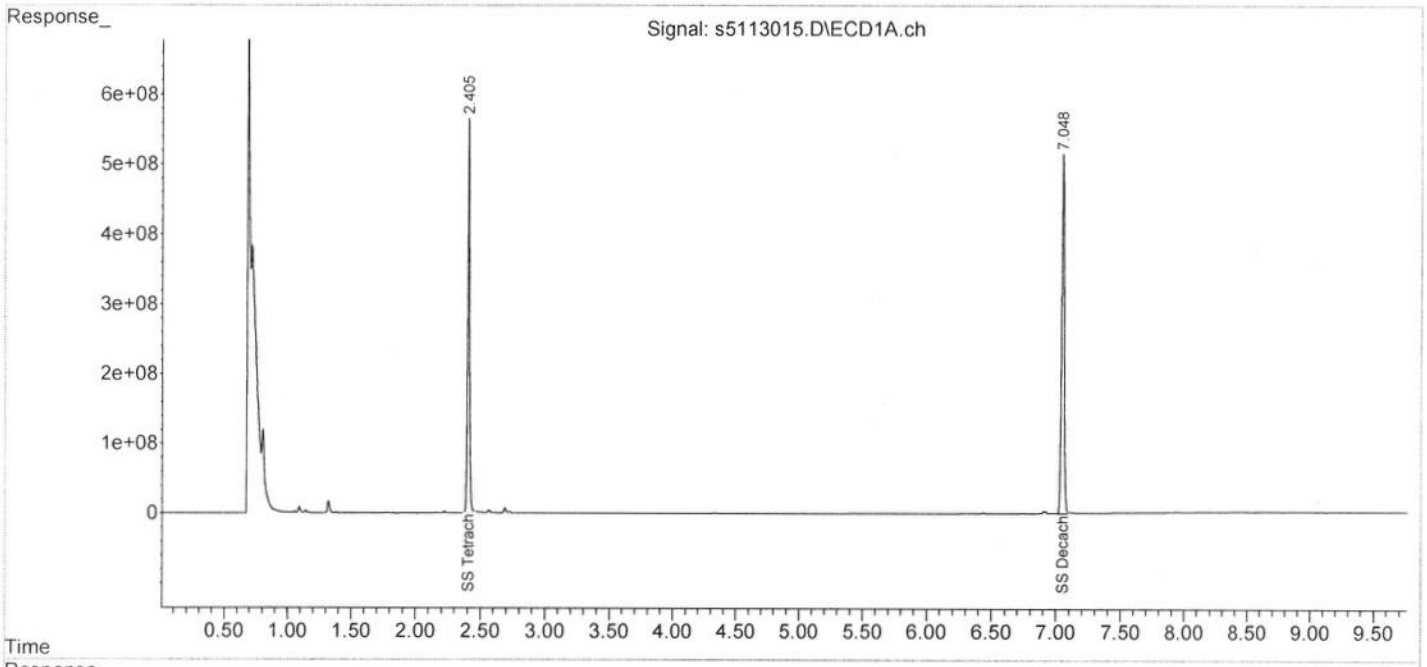
Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
System Monitoring Compounds							
1) S SS Tetrac...	2.405	2.290	574.0E6	573.3E6	1.200m	1.233m	BC = Baseline Correction
Spiked Amount	5.000 Range	30 - 150	Recovery =		24.00%#	24.66%#	
47) S SS Decach...	7.048	7.201	519.9E6	435.7E6	1.269m	1.409m	BC = Baseline Correction
Spiked Amount	5.000 Range	30 - 150	Recovery =		25.38%#	28.18%#	
Target Compounds							

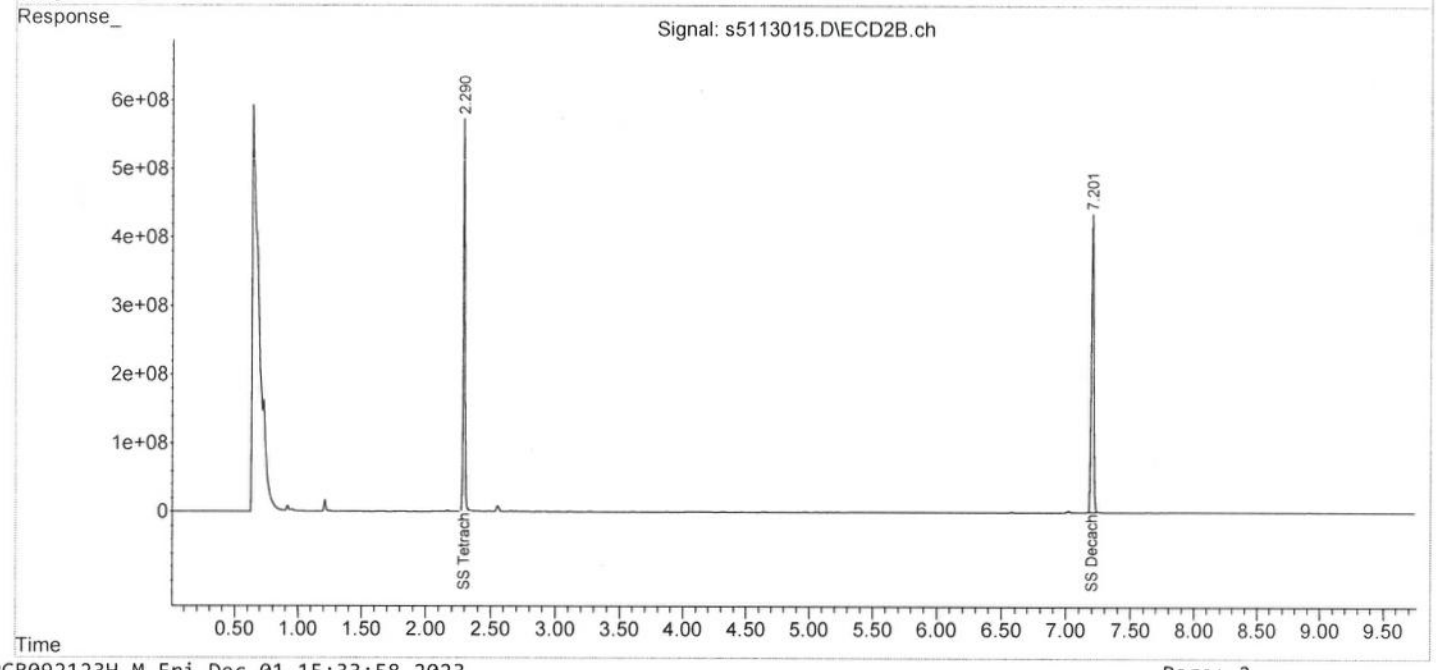
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : X:\S5\2023\Nov23\113023\
Data File : s5113015.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 30 Nov 2023 03:01 pm
Operator : dbv
Sample : 67836-08 pcb x1
Misc :
ALS Vial : 15 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Dec 01 08:11:37 2023
Quant Method : X:\S5\methods\S5PCB092123H.M
Quant Title : SVOA03 Method 8082A
QLast Update : Thu Sep 21 17:18:07 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





This File:	L:\SVOA\Excel Reports\PCB\113023\s5113016
Analysis Group:	PCB
Field ID:	SY-OBMW110-110823 18001468
Sample:	67836-09 pcb x1 Dow Salvage Yard
Misc:	0 CRE
Import File Name	s5 PCBs QC17190W DOD
TestGroupID	E8082DoD_A
Aqueous or Soil? (A or S)	A
Percent Solid (%)	0
Prep Date	Wednesday, November 29, 2023
Initial Weight/Volume	1
Volume	1
Lab#:	67836-009
AnalysisDate:	Thursday, November 30, 2023
AnalysisTime:	15:14
Dilution:	1
AnalyzedBy:	DBV s5113016.D
QC_Code:	
Prep#	17190

Reviewer Checks:

- Quant Report: Reviewed, Analyst Initials & Date
- Chromatogram Checked, Major peaks identified
- Prep data checked: weight, volume, %solid, Prep date
- Field ID consistent with data and any field replicates
- Results consistent with any re-runs & internal QC
- Correct dilution and reason clear or noted
- Reason for reanalysis documented
- Surrogates pass or flagged & noted
- Flags checked (Expiration, Over Cal)
- Other QC failures, estimates or interferences documented
- Spot checked Reported Result with Quant Report
- Checked Audit flagged data in LIMS
- Correct values averaged
- Column RPD is OK or both results included
- Correct column reported

Notes:

Reviewer Initials & Date: 12/4/23

#	Surrogate Standards	Concentration (ug/mL)	Recovery	Flag	QC Limits	Report Column
1	SS Tetrachloro-m-xylene	1.26	63%		30-150	1
47	SS Decachlorobiphenyl	1.47	74%		30-150	1

#	AnalyteName	Concentration (ug/mL)	Flag	Report Column
2	Ar-1016	0.00		1
7	Ar-1221	0.00		1
12	Ar-1232	0.00		1
17	Ar-1242	0.00		1
22	Ar-1248	0.00		1
27	Ar-1254	0.00		1
32	Ar-1260	0.00		1
37	Ar-1262	0.00		1
42	Ar-1268	0.00		1

Aroclor	Column #1 average	Column #2 average	Column RPD limit 40%	%rsd	Column #1 1	2	3	4	5
Ar-1016	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1221	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1232	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1242	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1248	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1254	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1260	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1262	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1268	0.00	0.00			0.00	0.00	0.00	0.00	0.00
SS Tetra	1.26	1.33							
SS Deca	1.47	1.63							

	%rsd	Column #2 1	2	3	4	5
Ar-1016		0.00	0.00	0.00	0.00	0.00
Ar-1221		0.00	0.00	0.00	0.00	0.00
Ar-1232		0.00	0.00	0.00	0.00	0.00
Ar-1242		0.00	0.00	0.00	0.00	0.00
Ar-1248		0.00	0.00	0.00	0.00	0.00
Ar-1254		0.00	0.00	0.00	0.00	0.00
Ar-1260		0.00	0.00	0.00	0.00	0.00
Ar-1262		0.00	0.00	0.00	0.00	0.00
Ar-1268		0.00	0.00	0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : X:\S5\2023\Nov23\113023\
Data File : s5113016.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 30 Nov 2023 03:14 pm
Operator : dbv
Sample : 67836-09 pcb x1
Misc :
ALS Vial : 16 Sample Multiplier: 1



Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Dec 01 08:11:41 2023
Quant Method : X:\S5\methods\S5PCB092123H.M
Quant Title : SVOA03 Method 8082A
QLast Update : Thu Sep 21 17:18:07 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

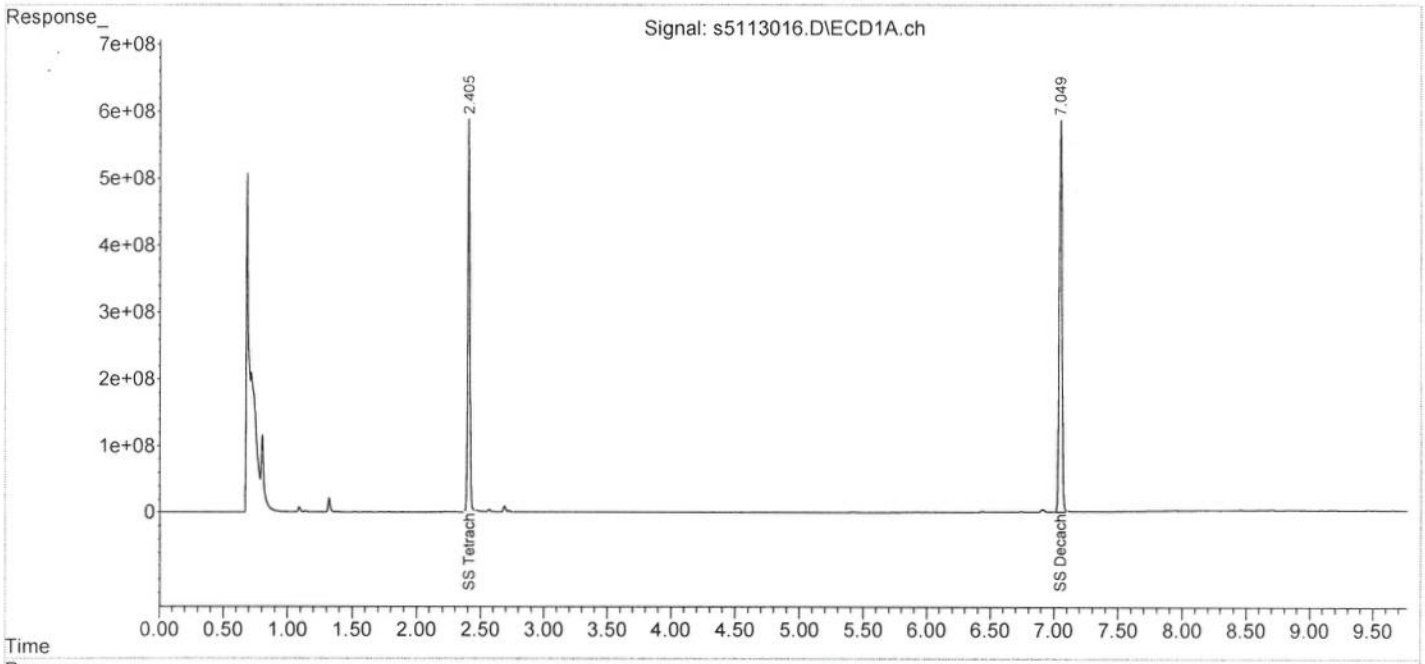
Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
System Monitoring Compounds							
1) S SS Tetrac...	2.405	2.290	600.7E6	609.7E6	1.264m	1.325m	BC = Baseline Correction
Spiked Amount	5.000 Range	30 - 150	Recovery =		25.28%#	26.50%#	
47) S SS Decach...	7.048	7.201	591.9E6	493.7E6	1.473m	1.632m	BC = Baseline Correction
Spiked Amount	5.000 Range	30 - 150	Recovery =		29.46%#	32.64%	
Target Compounds							

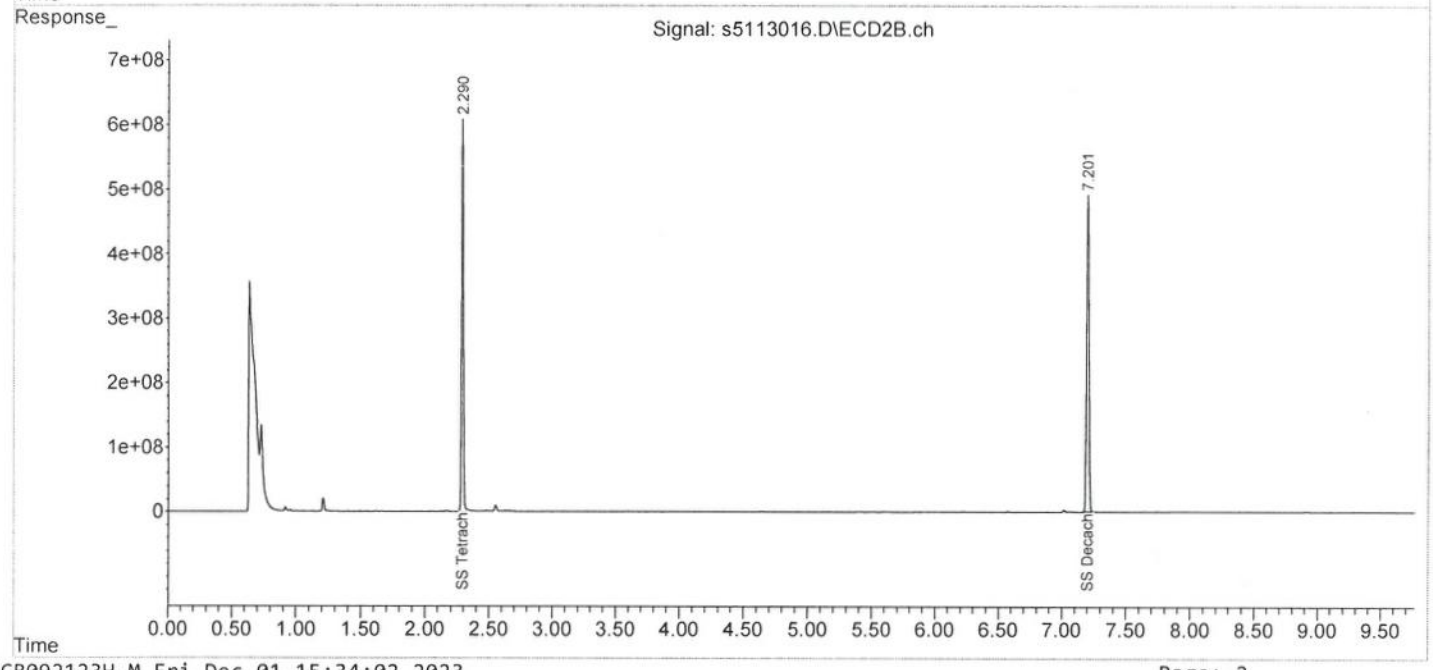
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : X:\S5\2023\Nov23\113023\
Data File : s5113016.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 30 Nov 2023 03:14 pm
Operator : dbv
Sample : 67836-09 pcb x1
Misc :
ALS Vial : 16 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Dec 01 08:11:41 2023
Quant Method : X:\S5\methods\S5PCB092123H.M
Quant Title : SVOA03 Method 8082A
QLast Update : Thu Sep 21 17:18:07 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





This File:	L:\SVOA\Excel Reports\PCB\113023\s5113017
Analysis Group:	PCB
Field ID:	SY-OBMW3-110823 18001468
Sample:	67836-11 pcb x1 Dow Salvage Yard
Misc:	0 CRE
Import File Name	s5 PCBs QC17190W DOD
TestGroupID	E8082DoD_A
Aqueous or Soil? (A or S)	A
Percent Solid (%)	0
Prep Date	Wednesday, November 29, 2023
Initial Weight/Volume	1
Volume	1
Lab#:	67836-011
AnalysisDate:	Thursday, November 30, 2023
AnalysisTime:	15:27
Dilution:	1
AnalyzedBy:	DBV s5113017.D
QC_Code:	
Prep#	17190

Reviewer Checks:

- Quant Report: Reviewed, Analyst Initials & Date
- Chromatogram Checked, Major peaks identified
- Prep data checked: weight, volume, %solid, Prep date
- Field ID consistent with data and any field replicates
- Results consistent with any re-runs & internal QC
- Correct dilution and reason clear or noted
- Reason for reanalysis documented
- Surrogates pass or flagged & noted
- Flags checked (Expiration, Over Cal)
- Other QC failures, estimates or interferences documented
- Spot checked Reported Result with Quant Report
- Checked Audit flagged data in LIMS
- Correct values averaged
- Column RPD is OK or both results included
- Correct column reported

Notes:

Reviewer Initials & Date: 12/4/23

#	Surrogate Standards	Concentration (ug/mL)	Recovery	Flag	QC Limits	Report Column
1	SS Tetrachloro-m-xylene	1.28	64%		30-150	1
47	SS Decachlorobiphenyl	1.42	71%		30-150	1

#	AnalyteName	Concentration (ug/mL)	Flag	Report Column
2	Ar-1016	0.00		1
7	Ar-1221	0.00		1
12	Ar-1232	0.00		1
17	Ar-1242	0.00		1
22	Ar-1248	0.00		1
27	Ar-1254	0.00		1
32	Ar-1260	0.00		1
37	Ar-1262	0.00		1
42	Ar-1268	0.00		1

Aroclor	Column #1 average	Column #2 average	Column RPD limit 40%	%rsd	Column #1 1	2	3	4	5
Ar-1016	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1221	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1232	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1242	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1248	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1254	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1260	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1262	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1268	0.00	0.00			0.00	0.00	0.00	0.00	0.00
SS Tetra	1.28	1.32							
SS Deca	1.42	1.52							

	%rsd	Column #2 1	2	3	4	5
Ar-1016		0.00	0.00	0.00	0.00	0.00
Ar-1221		0.00	0.00	0.00	0.00	0.00
Ar-1232		0.00	0.00	0.00	0.00	0.00
Ar-1242		0.00	0.00	0.00	0.00	0.00
Ar-1248		0.00	0.00	0.00	0.00	0.00
Ar-1254		0.00	0.00	0.00	0.00	0.00
Ar-1260		0.00	0.00	0.00	0.00	0.00
Ar-1262		0.00	0.00	0.00	0.00	0.00
Ar-1268		0.00	0.00	0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : X:\S5\2023\Nov23\113023\
Data File : s5113017.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 30 Nov 2023 03:27 pm
Operator : dbv
Sample : 67836-11 pcb x1
Misc :
ALS Vial : 17 Sample Multiplier: 1



Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Dec 01 08:11:45 2023
Quant Method : X:\S5\methods\S5PCB092123H.M
Quant Title : SVOA03 Method 8082A
QLast Update : Thu Sep 21 17:18:07 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
	System Monitoring Compounds							
1) S	SS Tetrac...	2.405	2.290	608.1E6	606.4E6	1.282m	1.317m	BC = Baseline Correction
	Spiked Amount	5.000 Range	30 - 150	Recovery	=	25.64%#	26.34%#	
47) S	SS Decach...	7.050	7.201	573.4E6	465.6E6	1.420m	1.522m	BC = Baseline Correction
	Spiked Amount	5.000 Range	30 - 150	Recovery	=	28.40%#	30.44%	
	Target Compounds							

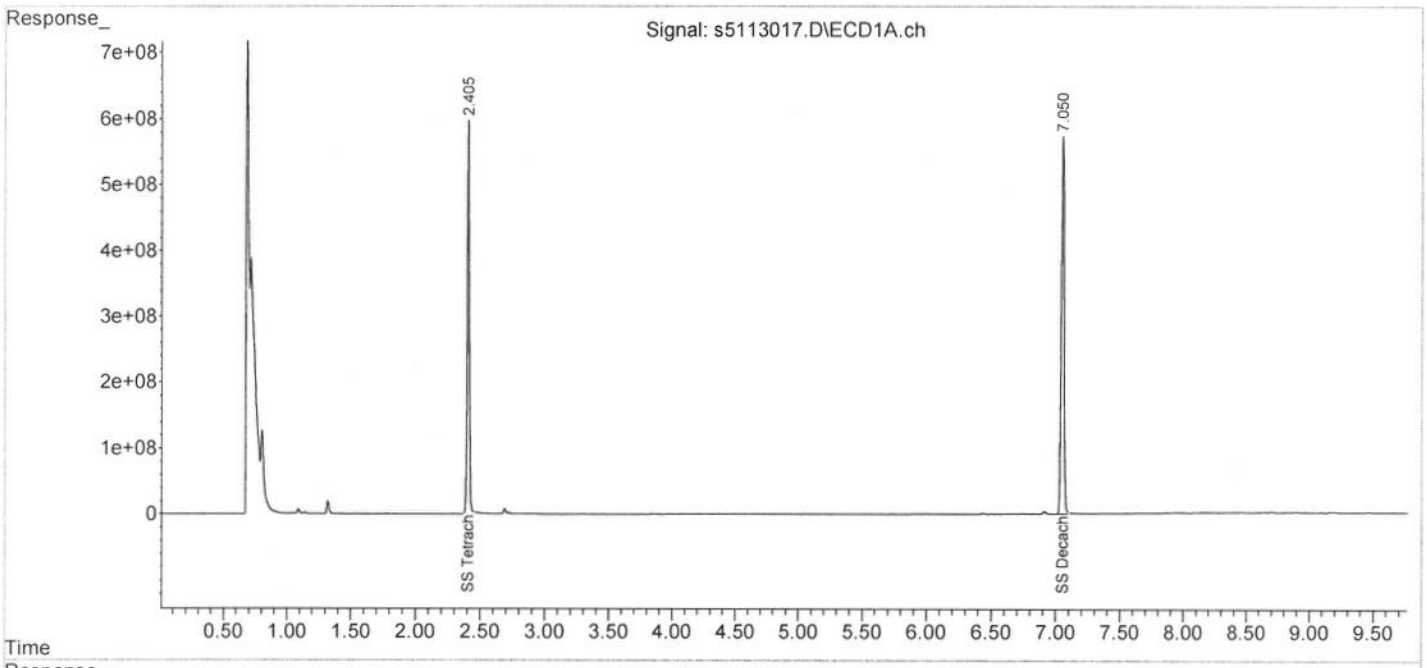
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

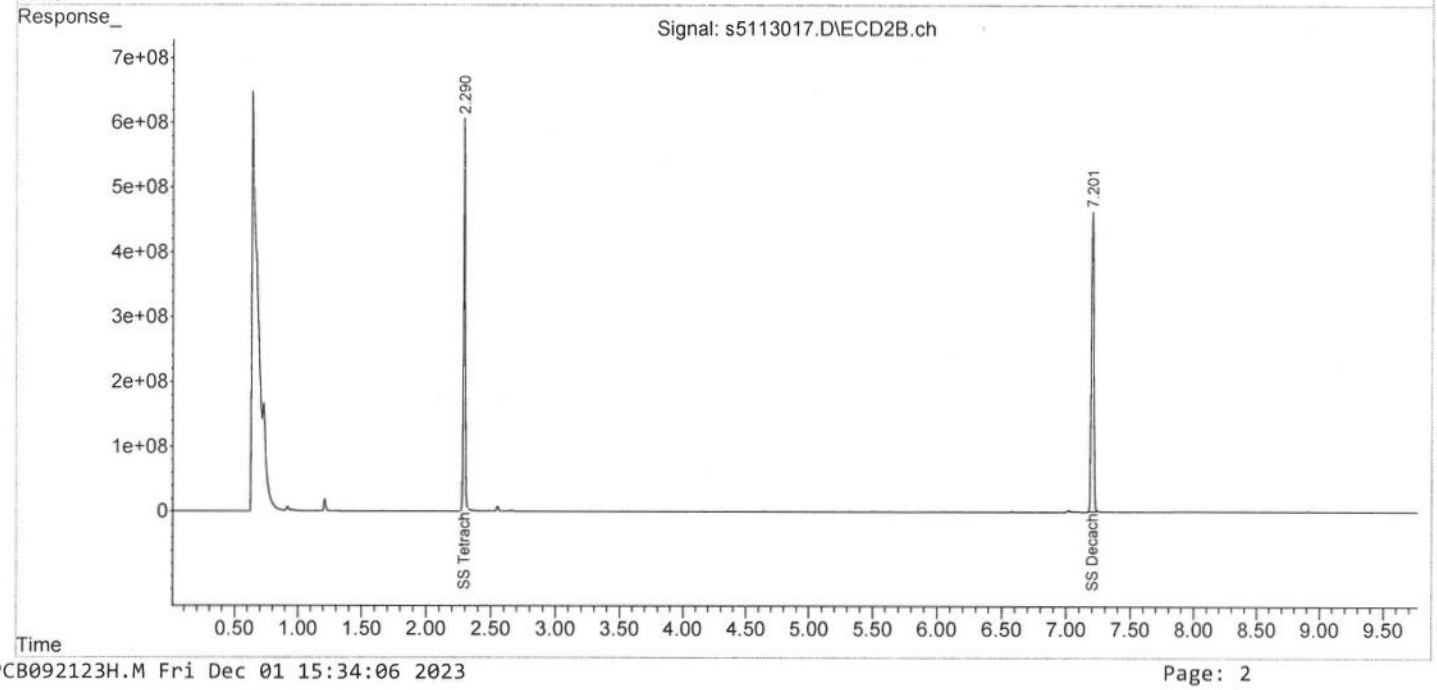
Quantitation Report (QT Reviewed)

Data Path : X:\S5\2023\Nov23\113023\
Data File : s5113017.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 30 Nov 2023 03:27 pm
Operator : dbv
Sample : 67836-11 pcb x1
Misc :
ALS Vial : 17 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Dec 01 08:11:45 2023
Quant Method : X:\S5\methods\S5PCB092123H.M
Quant Title : SVOA03 Method 8082A
QLast Update : Thu Sep 21 17:18:07 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Sample Receipt Condition Report

67836

Absolute Resource Associates **Job Number:**

Samples Received from: ☐-UPS ☐-FedEx ☐-USPS ☑-Lab Courier ☐-Client Drop-off ☐-_____

Custody Seals - present & intact: ☐-Yes ☐-No ☑-N/A CoC signed: ☒-Yes ☐-No

Receipt Temp: 0 °C Samples on ice? ☒-Yes ☐-No ☐-N/A Sampled < 24 hrs ago? ☐-Yes ☑-No

PFAS-only real ice? ☐-Yes ☐-No ☒-N/A Any signs of freezing? ☐-Yes ☒-No

Comments:

Preservation / Analysis	Bottle Size/Type & Quantity										Check pH for ALL applicable* samples and document:
HCl	40mL(G)	42	250mL(P)		500mL(P)		1L(G)	10			pH ✓ OK
HNO_3	125mL(P)		250mL(P)	20	500mL(P)						pH ✓ OK
H_2SO_4	40mL(G)		60mL(P)		125mL(P)		250mL(P)		500mL(P)		
NaOH	125mL(P)		250mL(P)								
$(NH_4)_2SO_4$	60mL(P)		125mL(P)		250mL(P)						
ZnAc-NaOH	125mL(P)		250mL(P)								
Trizma	125mL(P)		250mL (P)								*pH ✓ by analyst: VOC, PFAS, TOC, O&G
NH_4Ac	125mL(P)		250mL (P)								Residual Cl not present:
NaS_2O_3	40mL(G)		120mL(P)								ABN625____Pest608____
MeOH	20mL(G)		40mL(G)								Bacteria ResCl ✓ by analyst
None (solid)	2oz(G)		4oz(G)		8oz(G)		Syringe				PC Dry applicable? Y (N)
None (water)	40ml (G)		60mL(P)		125mL(P)		250mL(P)		500mL(P)		1L(G) 20 1L (P)
Mold	Cassette		Bulk		Plate		Tape Lift				
Asbestos	Cassette		Bulk								
Lead	Cassette		Bulk		Wipe						

Login Review	Yes	No	NA	Comments
Proper lab sample containers/enough volume/correct preservative?	X			
Analyses marked on COC match bottles received?	X			
VOC &TOC Water-no headspace? VOC Solid-MeOH covers solid, no leaks, Prep Expiration OK?		X		-04 A+B bubble (vpn)
PFAS: ARA bottles & samples/FRB same Lot#? QC rec'd, if req'd?			X	Lot ID#:_____
Bacteria bottles provided by ARA?			X	
Samples within holding time?	X			
Immediate tests communicated in writing: NO_3, NO_2,o-PO_4, pH, BOD, Coliform/*E. coli* (P/A or MPN), Enterococci, Color Surfactants, Turbidity, Odor, CrVI, Ferrous Iron, Dissolved Oxygen, Unpres 624			X	
Date, time & ID on samples match CoC?	X			
Rushes communicated to analyst in writing?			X	
Subcontracted samples sent to sub lab?			X	Date Prep'd:_____ Date sent:_____
Pesticides EPA 608 pH5-9?			X	
Compliance samples have no discrepancies/require no flags?			X	(Or must be rejected)
Log-in Supervisor notified immediately of following items:	X			Discrepancies, compliance samples (NHDES, MADEP, DoD etc.) or uncommon requests.

Inspected and Received By: ORL Date/Time: 11/13/23 13:35

Peer Review Checklist

- ☑ Client ID/Project Manager
- ☑ Project Name
- ☑ TAT/rushes communicated
- ☑ Received Date/Time
- ☑ On Ice, Temperature OK?
- ☑ PO# (if provided)
- ☑ Sub samples sent? Shipping Charge?
- ☑ Issues noted above communicated? email response on J
- ☑ Sample IDs
- ☑ Matrix
- ☑ Date/Time collected
- ☑ Short HTs communicated
- ☑ Analyses in Correctly metals from email/Qapp (TAL23-Ca)
  - -references
  - -wastewater methods
- ☑ Notes from CoC in LIMS

Reviewed By: [signature] Date: 11/14/23

Notes: (continue on back as needed)

	Initials	Date	What was sent?
Uploaded / PDF	_____	_____	Report / Data / EDD / Invoice
Uploaded / PDF	_____	_____	Report / Data / EDD / Invoice
Uploaded / PDF	_____	_____	Report / Data / EDD / Invoice

QSD-04 Rev10 04/06/22 CLD (Page 1 of 1)

Absolute Resource associates
124 Heritage Avenue #16
Portsmouth, NH 03801
603-436-2001
absoluteresourceassociates.com

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

67836

Company Name: Credere Associates

Company Address: 776 Main St, Westbrook, ME

Report To: Allison Drouin

Phone #: 207-749-1141

Project Name: Dow Salvage Yard
Project #: 18001468
Project Location: NH MA (ME) VT

Accreditation Required? N/Y: ELAP
See absoluteresourceassociates.com for sample acceptance policy and current accreditation lists.

Protocol: RCRA SDWA NPDES MCP NHDES (DOD)
Notify ARA if your samples require specific methods, certifications or compliance protocol.

Reporting Limits: (QAPP) EPA DW GW-1 S-1 Other

ANALYSIS REQUEST

Lab Sample ID (Lab Use Only)	Field ID	# CONTAINERS	Matrix: WATER	SOLID	OTHER	Preservation Method: HCl	HNO_3	H_2SO_4	NaOH	MeOH	Sampling: DATE	TIME	SAMPLER	☒ VOC 8260	☐ VOC 624.1	☒ VPH MADEP	☐ VOC 524.2	☐ TPH 8100	☐ DRO 8015	☒ 8270PAH	☒ 8082 PCB	☐ PFAS 537.1	☐ O&G 1664	☐ pH	☐ TSS	☐ RCRA Metals	☒ Total Metals-list: RCRA	☒ Dissolved Metals-list: RCRA	☐ Ammonia	☐ T-Phosphorus	☐ Cyanide	☐ Nitrate	☐ TCLP Metals	Subcontract:	Grab (G) or Composite (C)
DISS -12	67836-01 SY-OBMW2-110823	9	X			X	X				11/8	0905	GK	X		X		X	X	X	X					X	X								G
-13	-02 SY-OBMW1-110823											0935	PH																						G
-14	-03 SY-OBMW9-110823											1016	JD																						G
-15	-04 SY-BRMW5-29-44-110823											1100	CB																						G
-16	-05 SY-BRMW5-123-133-110823											1140	CB																						G
-17	-06 SY-BRMW5-56-66-110823											1115	CB																						G
-18	-07 SY-OBMW8-110823											1250	PH																						G
-19	-08 SY-OBMW11-110823											1417	JD																						G
-20	-09 SY-OBMW10-110823											1422	JD																						G
	-10 TB32-110823	2										1615	SG	X		X																			G
-21	-11 SY-OBMW3-110823	9				X	X					1115	GK	X		X		X	X	X	X						X	X							G

TAT REQUESTED
Priority (24 hr)* ☐
Expedited (48 hr)* ☐
Standard ☒ (10 Business Days)
*Date Needed_____

Invoice To: Jen Taiani
Email: Jenn@crederellc.com, invoices@crederellc.com
PO #:
Quote #:
☐ NH Reimbursement Pricing

SPECIAL INSTRUCTIONS: Bottle labels for SY-BR... samples include parantheses, do not include parantheses, use sample IDs

Reporting Instructions:
☐ EDD:_____ Report To (email):

RECEIVED ON ICE ☒ YES ☐ NO
TEMPERATURE 0 °C

CUSTODY RECORD

QSD-01 Revision 07/27/2022

	Date	Time		Date	Time
Relinquished by Sampler:			Received by:	11/10	1:00
Relinquished by:			Received by:		
Relinquished by:	11/10	14:05	Received by Laboratory:	11/10/23	1405

Aaron DeWees

From: Allison Drouin <adrouin@crederellc.com>
Sent: Monday, November 13, 2023 10:36 AM
To: Aaron DeWees
Cc: Sean Gannon
Subject: RE: Dow Salvage Yard

CAUTION: [EXTERNAL EMAIL] DO NOT CLICK ON links or attachments unless you were expecting the message, recognize the sender's email address, and know the content is safe.

Hi Aaron,

No it would be the full list per the QAPP. Let me know if you need the QAPP, it has not changed and is still the version dated December 2022.

Lab: ARA
Matrix: Groundwater
Method: Metals by EPA Method 6020A (SOP QA-5605)

Compound	PAL (µg/L)	Basis of Human Health PAL	PQLG (µg/L)	LOQ (µg/L)	LOD (µg/L)	MDL (µg/L)
Aluminum	2,000[a,c]	Non-Cancer	1,000	50	10	2.2
Antimony	0.78[a,c]	Non-Cancer	1	1	0.5	0.42
Arsenic	0.052[a,c]	Cancer	5	5	1	0.35
Barium	380[a,c]	Non-Cancer	190	10	0.5	0.22
Beryllium	2.5[a,c]	Non-Cancer	1.25	1	0.1	0.01
Cadmium	0.18[a,c]	Non-Cancer	1	1	0.5	0.1
Chromium, total	NE	-	50	10	1	0.48
Cobalt	0.6[a,c]	Non-Cancer	10	10	1	0.29
Copper	80[a,c]	Non-Cancer	40	10	1	0.29
Iron	1400[a,c]	Non-Cancer	700	50	10	3.2
Lead	5[a,b,c]	Non-Cancer	7.5	5	0.5	0.1
Magnesium	NE	-	500	100	20	0.66
Manganese	43[a,c]	Non-Cancer	21.5	10	5	1
Nickel	39[a,c]	Non-Cancer	19.5	10	1	0.63
Potassium	NE	-	2500	500	100	88
Selenium	10[a,c]	Non-Cancer	10	10	1	0.45
Silver	9.4[a,c]	Non-Cancer	5	5	0.05	0.02
Sodium	NE	-	500	100	50	21
Thallium	0.02[a,c]	Non-Cancer	1	1	0.5	0.04
Vanadium	8.6[a,c]	Non-Cancer	10	10	10	0.64
Zinc	600[a,c]	Non-Cancer	300	10	10	2.8

Thank you,

Allison S. Drouin, PG, LG
Senior Geologist/Project Manager
VP of Quality Assurance and Technical Programs

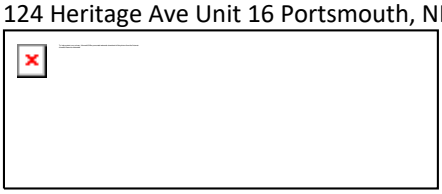
Cell: 207-749-1141
Office: 207-828-1272 ext. 15

Small Business Prime Contractor
of the Year
2023 – New England Region

From: Aaron DeWees <Aarond@absoluteresourceassociates.com>
Sent: Monday, November 13, 2023 10:34 AM
To: Allison Drouin <adrouin@crederellc.com>
Subject: Dow Salvage Yard

Good morning Allison,
Can you confirm that the metals list for Dow Salvage Yard samples is RCRA8?
One of the CoCs just has “metals” checked and the other has “RCRA” written in by the metals.
Thanks, -Aaron.
P.S. Did you know ARA is your PFAS Resource? Click or call for more information about our PFAS Testing Services.

Aaron DeWees
Chief Operating Officer
Aarond@absoluteresourceassociates.com
603-436-2001 x206
absoluteresourceassociates.com
124 Heritage Ave Unit 16 Portsmouth, NH 03801



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Aaron DeWees

From: Allison Drouin <adrouin@crederellc.com>
Sent: Tuesday, November 14, 2023 6:49 AM
To: Olivia Langdon
Cc: Cathy DeWees; Sean Gannon
Subject: RE: 67836 & 67839 Samples

CAUTION: [EXTERNAL EMAIL] DO NOT CLICK ON links or attachments unless you were expecting the message, recognize the sender's email address, and know the content is safe.

Hi Olivia,

Yes please proceed here in both cases. I'll make note.

Thank you,

Allison S. Drouin, PG, LG
Senior Geologist/Project Manager
VP of Quality Assurance and Technical Programs

Cell: 207-749-1141
Office: 207-828-1272 ext. 15

U.S. Small Business Administration

Small Business Prime Contractor
of the Year
2023 – New England Region

From: Olivia Langdon <OliviaL@absoluteresourceassociates.com>
Sent: Monday, November 13, 2023 4:34 PM
To: Allison Drouin <adrouin@crederellc.com>
Cc: Cathy DeWees <cathyd@absoluteresourceassociates.com>
Subject: 67836 & 67839 Samples

Hi Allison,

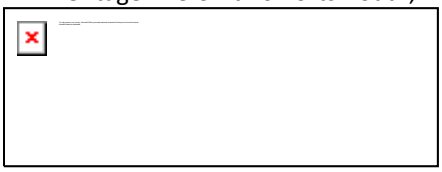
A few things we noticed with "Dow Salvage Yard" we had questions on.

Sample "SY-BRMW5-29-44-110823" from Group 1 samples had headspace in both vials. Would you like us to proceed with analysis?

Sample "SY-BRMW4-138-148-110923" from Group 2 samples had no volume in the second vial, so we only have the first vial to run for VPH analysis.

Thanks,
Olivia
P.S. Did you know ARA is your PFAS Resource? Click or call for more information about our PFAS Testing Services.

Olivia Langdon
Customer Relations & Sample Receiving Supervisor
OliviaL@absoluteresourceassociates.com
603-436-2001 x214
absoluteresourceassociates.com
124 Heritage Ave Unit 16 Portsmouth, NH 03801



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Please consider the environment before printing this email.

Laboratory Report

Absolute Resource associates
124 Heritage Avenue Portsmouth NH 03801

Allison Drouin
CREDERE Associates
776 Main Street
Westbrook, ME 04092

PO Number: None
Job ID: 67839
Date Received: 11/10/23

Project: Dow Salvage Yard 18001468

Attached please find results for the analysis of the samples received on the date referenced above.

Unless otherwise noted in the attached report, the analyses performed met the requirements of Absolute Resource Associates' Quality Assurance Plan. The Standard Operating Procedures are based upon USEPA SW-846, USEPA Methods for Chemical Analysis of Water and Wastewater, Standard Methods for the Examination of Water and Wastewater and other recognized methodologies. The results contained in this report pertain only to the samples as indicated on the chain of custody.

Absolute Resource Associates maintains certification with the agencies listed below. The reported results apply to the sample(s) in the condition as received at the time the laboratory took custody. This report shall not be reproduced except in full, without written approval of the laboratory. The liability of ARA is limited to the cost of the requested analyses, unless otherwise agreed upon in writing.

We appreciate the opportunity to provide laboratory services. If you have any questions regarding the enclosed report, please contact the laboratory and we will be glad to assist you.

Sincerely,
Absolute Resource Associates

Aaron DeWees
Chief Operating Officer

Date of Approval: 1/3/2024
Total number of pages: 459

Absolute Resource Associates Certifications

New Hampshire	1732	Massachusetts	M-NH902
Maine	NH902		

Absolute Resource associates

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Project ID: Dow Salvage Yard 18001468

Sample Association Table

Field ID	Matrix	Date-Time Sampled	Lab#	Analysis
SY-BRMW4-62-72-110923	Water	11/9/2023 9:00	67839-001	
				Acid & Base/Neutral Extractables in water by 8270
				Aluminum in water by 6020
				Antimony in water by 6020
				Arsenic in water by 6020
				Barium in water by 6020
				Beryllium in water by 6020
				Cadmium in water by 6020
				Chromium in water by 6020
				Cobalt in water by 6020
				Combo: TAL 23 Metals
				Copper in water by 6020
				EPH in water by MADEP Method
				Iron in water by 6020
				Lead in water by 6020
				Magnesium in water by 6020
				Manganese in water by 6020
				Mercury in water by 7470
				Nickel in water by 6020
				PCBs in water by 8082 DoD
				Potassium in water by 6020
				SEDD Generation
				Selenium in water by 6020
				Silver in water by 6020
				Sodium in water by 6020
				Thallium in water by 6020
				Vanadium in water by 6020
				VOCs in water by 8260 DoD
				VPH in water by MA DEP Method
				Water Digestion for ICPMS Analysis
				Zinc in water by 6020

Project ID: Dow Salvage Yard 18001468

Sample Association Table

Field ID	Matrix	Date-Time Sampled	Lab#	Analysis
SY-BRMW4D-52-72-110923	Water	11/9/2023 9:05	67839-002	
				Acid & Base/Neutral Extractables in water by 8270
				Aluminum in water by 6020
				Antimony in water by 6020
				Arsenic in water by 6020
				Barium in water by 6020
				Beryllium in water by 6020
				Cadmium in water by 6020
				Chromium in water by 6020
				Cobalt in water by 6020
				Combo: TAL 23 Metals
				Copper in water by 6020
				EPH in water by MADEP Method
				Iron in water by 6020
				Lead in water by 6020
				Magnesium in water by 6020
				Manganese in water by 6020
				Mercury in water by 7470
				Nickel in water by 6020
				PCBs in water by 8082 DoD
				Potassium in water by 6020
				Selenium in water by 6020
				Silver in water by 6020
				Sodium in water by 6020
				Thallium in water by 6020
				Vanadium in water by 6020
				VOCs in water by 8260 DoD
				VPH in water by MA DEP Method
				Water Digestion for ICPMS Analysis
				Zinc in water by 6020

Project ID: Dow Salvage Yard 18001468

Sample Association Table

Field ID	Matrix	Date-Time Sampled	Lab#	Analysis
SY-BRMW4-138-148-110923	Water	11/9/2023 9:40	67839-003	
				Acid & Base/Neutral Extractables in water by 8270
				Aluminum in water by 6020
				Antimony in water by 6020
				Arsenic in water by 6020
				Barium in water by 6020
				Beryllium in water by 6020
				Cadmium in water by 6020
				Chromium in water by 6020
				Cobalt in water by 6020
				Combo: TAL 23 Metals
				Copper in water by 6020
				EPH in water by MADEP Method
				Iron in water by 6020
				Lead in water by 6020
				Magnesium in water by 6020
				Manganese in water by 6020
				Mercury in water by 7470
				Nickel in water by 6020
				PCBs in water by 8082 DoD
				Potassium in water by 6020
				Selenium in water by 6020
				Silver in water by 6020
				Sodium in water by 6020
				Thallium in water by 6020
				Vanadium in water by 6020
				VOCs in water by 8260 DoD
				VPH in water by MA DEP Method
				Water Digestion for ICPMS Analysis
				Zinc in water by 6020

Project ID: Dow Salvage Yard 18001468

Sample Association Table

Field ID	Matrix	Date-Time Sampled	Lab#	Analysis
SY-BRMW3-47-62-110923	Water	11/9/2023 9:45	67839-004	
				Acid & Base/Neutral Extractables in water by 8270
				Aluminum in water by 6020
				Antimony in water by 6020
				Arsenic in water by 6020
				Barium in water by 6020
				Beryllium in water by 6020
				Cadmium in water by 6020
				Chromium in water by 6020
				Cobalt in water by 6020
				Combo: TAL 23 Metals
				Copper in water by 6020
				EPH in water by MADEP Method
				Iron in water by 6020
				Lead in water by 6020
				Magnesium in water by 6020
				Manganese in water by 6020
				Mercury in water by 7470
				Nickel in water by 6020
				PCBs in water by 8082 DoD
				Potassium in water by 6020
				Selenium in water by 6020
				Silver in water by 6020
				Sodium in water by 6020
				Thallium in water by 6020
				Vanadium in water by 6020
				VOCs in water by 8260 DoD
				VPH in water by MA DEP Method
				Water Digestion for ICPMS Analysis
				Zinc in water by 6020

Project ID: Dow Salvage Yard 18001468

Sample Association Table

Field ID	Matrix	Date-Time Sampled	Lab#	Analysis
SY-BRMW3-145-155-110923	Water	11/9/2023 10:00	67839-005	
				Acid & Base/Neutral Extractables in water by 8270
				Aluminum in water by 6020
				Antimony in water by 6020
				Arsenic in water by 6020
				Barium in water by 6020
				Beryllium in water by 6020
				Cadmium in water by 6020
				Chromium in water by 6020
				Cobalt in water by 6020
				Combo: TAL 23 Metals
				Copper in water by 6020
				EPH in water by MADEP Method
				Iron in water by 6020
				Lead in water by 6020
				Magnesium in water by 6020
				Manganese in water by 6020
				Mercury in water by 7470
				Nickel in water by 6020
				PCBs in water by 8082 DoD
				Potassium in water by 6020
				Selenium in water by 6020
				Silver in water by 6020
				Sodium in water by 6020
				Thallium in water by 6020
				Vanadium in water by 6020
				VOCs in water by 8260 DoD
				VPH in water by MA DEP Method
				Water Digestion for ICPMS Analysis
				Zinc in water by 6020

Project ID: Dow Salvage Yard 18001468

Sample Association Table

Field ID	Matrix	Date-Time Sampled	Lab#	Analysis
SY-BRMW3-287-297-110923	Water	11/9/2023 10:15	67839-006	
				Acid & Base/Neutral Extractables in water by 8270
				Aluminum in water by 6020
				Antimony in water by 6020
				Arsenic in water by 6020
				Barium in water by 6020
				Beryllium in water by 6020
				Cadmium in water by 6020
				Chromium in water by 6020
				Cobalt in water by 6020
				Combo: TAL 23 Metals
				Copper in water by 6020
				EPH in water by MADEP Method
				Iron in water by 6020
				Lead in water by 6020
				Magnesium in water by 6020
				Manganese in water by 6020
				Mercury in water by 7470
				Nickel in water by 6020
				PCBs in water by 8082 DoD
				Potassium in water by 6020
				Selenium in water by 6020
				Silver in water by 6020
				Sodium in water by 6020
				Thallium in water by 6020
				Vanadium in water by 6020
				VOCs in water by 8260 DoD
				VPH in water by MA DEP Method
				Water Digestion for ICPMS Analysis
				Zinc in water by 6020

Project ID: Dow Salvage Yard 18001468

Sample Association Table

Field ID	Matrix	Date-Time Sampled	Lab#	Analysis
SY-BRMW4-291-301-110923	Water	11/9/2023 11:00	67839-007	
				Acid & Base/Neutral Extractables in water by 8270
				Aluminum in water by 6020
				Antimony in water by 6020
				Arsenic in water by 6020
				Barium in water by 6020
				Beryllium in water by 6020
				Cadmium in water by 6020
				Chromium in water by 6020
				Cobalt in water by 6020
				Combo: TAL 23 Metals
				Copper in water by 6020
				EPH in water by MADEP Method
				Iron in water by 6020
				Lead in water by 6020
				Magnesium in water by 6020
				Manganese in water by 6020
				Mercury in water by 7470
				Nickel in water by 6020
				PCBs in water by 8082 DoD
				Potassium in water by 6020
				Selenium in water by 6020
				Silver in water by 6020
				Sodium in water by 6020
				Thallium in water by 6020
				Vanadium in water by 6020
				VOCs in water by 8260 DoD
				VPH in water by MA DEP Method
				Water Digestion for ICPMS Analysis
				Zinc in water by 6020

Project ID: Dow Salvage Yard 18001468

Sample Association Table

Field ID	Matrix	Date-Time Sampled	Lab#	Analysis
SY-BRMW1-42-52-110923	Water	11/9/2023 11:45	67839-008	
				Acid & Base/Neutral Extractables in water by 8270
				Aluminum in water by 6020
				Antimony in water by 6020
				Arsenic in water by 6020
				Barium in water by 6020
				Beryllium in water by 6020
				Cadmium in water by 6020
				Chromium in water by 6020
				Cobalt in water by 6020
				Combo: TAL 23 Metals
				Copper in water by 6020
				EPH in water by MADEP Method
				Iron in water by 6020
				Lead in water by 6020
				Magnesium in water by 6020
				Manganese in water by 6020
				Mercury in water by 7470
				Nickel in water by 6020
				PCBs in water by 8082 DoD
				Potassium in water by 6020
				Selenium in water by 6020
				Silver in water by 6020
				Sodium in water by 6020
				Thallium in water by 6020
				Vanadium in water by 6020
				VOCs in water by 8260 DoD
				VPH in water by MA DEP Method
				Water Digestion for ICPMS Analysis
				Zinc in water by 6020

Project ID: Dow Salvage Yard 18001468

Sample Association Table

Field ID	Matrix	Date-Time Sampled	Lab#	Analysis
SY-BRMW1-150-157-110923	Water	11/9/2023 12:40	67839-009	
				Acid & Base/Neutral Extractables in water by 8270
				Aluminum in water by 6020
				Antimony in water by 6020
				Arsenic in water by 6020
				Barium in water by 6020
				Beryllium in water by 6020
				Cadmium in water by 6020
				Chromium in water by 6020
				Cobalt in water by 6020
				Combo: TAL 23 Metals
				Copper in water by 6020
				EPH in water by MADEP Method
				Iron in water by 6020
				Lead in water by 6020
				Magnesium in water by 6020
				Manganese in water by 6020
				Mercury in water by 7470
				Nickel in water by 6020
				PCBs in water by 8082 DoD
				Potassium in water by 6020
				Selenium in water by 6020
				Silver in water by 6020
				Sodium in water by 6020
				Thallium in water by 6020
				Vanadium in water by 6020
				VOCs in water by 8260 DoD
				VPH in water by MA DEP Method
				Water Digestion for ICPMS Analysis
				Zinc in water by 6020

Project ID: Dow Salvage Yard 18001468

Sample Association Table

Field ID	Matrix	Date-Time Sampled	Lab#	Analysis
SY-BRMW1-65-75-110923	Water	11/9/2023 13:50	67839-010	
				Acid & Base/Neutral Extractables in water by 8270
				Aluminum in water by 6020
				Antimony in water by 6020
				Arsenic in water by 6020
				Barium in water by 6020
				Beryllium in water by 6020
				Cadmium in water by 6020
				Chromium in water by 6020
				Cobalt in water by 6020
				Combo: TAL 23 Metals
				Copper in water by 6020
				EPH in water by MADEP Method
				Iron in water by 6020
				Lead in water by 6020
				Magnesium in water by 6020
				Manganese in water by 6020
				Mercury in water by 7470
				Nickel in water by 6020
				PCBs in water by 8082 DoD
				Potassium in water by 6020
				Selenium in water by 6020
				Silver in water by 6020
				Sodium in water by 6020
				Thallium in water by 6020
				Vanadium in water by 6020
				VOCs in water by 8260 DoD
				VPH in water by MA DEP Method
				Water Digestion for ICPMS Analysis
				Zinc in water by 6020

Project ID: Dow Salvage Yard 18001468

Sample Association Table

Field ID	Matrix	Date-Time Sampled	Lab#	Analysis
SY-BRMW1D-65-75-110923	Water	11/9/2023 13:55	67839-011	
				Acid & Base/Neutral Extractables in water by 8270
				Aluminum in water by 6020
				Antimony in water by 6020
				Arsenic in water by 6020
				Barium in water by 6020
				Beryllium in water by 6020
				Cadmium in water by 6020
				Chromium in water by 6020
				Cobalt in water by 6020
				Combo: TAL 23 Metals
				Copper in water by 6020
				EPH in water by MADEP Method
				Iron in water by 6020
				Lead in water by 6020
				Magnesium in water by 6020
				Manganese in water by 6020
				Mercury in water by 7470
				Nickel in water by 6020
				PCBs in water by 8082 DoD
				Potassium in water by 6020
				Selenium in water by 6020
				Silver in water by 6020
				Sodium in water by 6020
				Thallium in water by 6020
				Vanadium in water by 6020
				VOCs in water by 8260 DoD
				VPH in water by MA DEP Method
				Water Digestion for ICPMS Analysis
				Zinc in water by 6020

Project ID: Dow Salvage Yard 18001468

Sample Association Table

Field ID	Matrix	Date-Time Sampled	Lab#	Analysis
SY-BRMW4-62-72-110923-DISS	Water	11/9/2023 9:00	67839-012	
				Aluminum in water by 6020
				Antimony in water by 6020
				Arsenic in water by 6020
				Barium in water by 6020
				Beryllium in water by 6020
				Cadmium in water by 6020
				Chromium in water by 6020
				Cobalt in water by 6020
				Combo: TAL 23 Metals
				Copper in water by 6020
				Dissolved Prep for ICPMS Analysis
				Iron in water by 6020
				Lead in water by 6020
				Magnesium in water by 6020
				Manganese in water by 6020
				Mercury in water by 7470
				Nickel in water by 6020
				Potassium in water by 6020
				Selenium in water by 6020
				Silver in water by 6020
				Sodium in water by 6020
				Thallium in water by 6020
				Vanadium in water by 6020
				Zinc in water by 6020

Project ID: Dow Salvage Yard 18001468

Sample Association Table

Field ID	Matrix	Date-Time Sampled	Lab#	Analysis
SY-BRMW4D-52-72-110923-DISS	Water	11/9/2023 9:05	67839-013	
				Aluminum in water by 6020
				Antimony in water by 6020
				Arsenic in water by 6020
				Barium in water by 6020
				Beryllium in water by 6020
				Cadmium in water by 6020
				Chromium in water by 6020
				Cobalt in water by 6020
				Combo: TAL 23 Metals
				Copper in water by 6020
				Dissolved Prep for ICPMS Analysis
				Iron in water by 6020
				Lead in water by 6020
				Magnesium in water by 6020
				Manganese in water by 6020
				Mercury in water by 7470
				Nickel in water by 6020
				Potassium in water by 6020
				Selenium in water by 6020
				Silver in water by 6020
				Sodium in water by 6020
				Thallium in water by 6020
				Vanadium in water by 6020
				Zinc in water by 6020

Project ID: Dow Salvage Yard 18001468

Sample Association Table

Field ID	Matrix	Date-Time Sampled	Lab#	Analysis
SY-BRMW4-138-148-110923-DISS	Water	11/9/2023 9:40	67839-014	
				Aluminum in water by 6020
				Antimony in water by 6020
				Arsenic in water by 6020
				Barium in water by 6020
				Beryllium in water by 6020
				Cadmium in water by 6020
				Chromium in water by 6020
				Cobalt in water by 6020
				Combo: TAL 23 Metals
				Copper in water by 6020
				Dissolved Prep for ICPMS Analysis
				Iron in water by 6020
				Lead in water by 6020
				Magnesium in water by 6020
				Manganese in water by 6020
				Mercury in water by 7470
				Nickel in water by 6020
				Potassium in water by 6020
				Selenium in water by 6020
				Silver in water by 6020
				Sodium in water by 6020
				Thallium in water by 6020
				Vanadium in water by 6020
				Zinc in water by 6020

Project ID: Dow Salvage Yard 18001468

Sample Association Table

Field ID	Matrix	Date-Time Sampled	Lab#	Analysis
SY-BRMW3-47-62-110923-DISS	Water	11/9/2023 9:40	67839-015	
				Aluminum in water by 6020
				Antimony in water by 6020
				Arsenic in water by 6020
				Barium in water by 6020
				Beryllium in water by 6020
				Cadmium in water by 6020
				Chromium in water by 6020
				Cobalt in water by 6020
				Combo: TAL 23 Metals
				Copper in water by 6020
				Dissolved Prep for ICPMS Analysis
				Iron in water by 6020
				Lead in water by 6020
				Magnesium in water by 6020
				Manganese in water by 6020
				Mercury in water by 7470
				Nickel in water by 6020
				Potassium in water by 6020
				Selenium in water by 6020
				Silver in water by 6020
				Sodium in water by 6020
				Thallium in water by 6020
				Vanadium in water by 6020
				Zinc in water by 6020

Project ID: Dow Salvage Yard 18001468

Sample Association Table

Field ID	Matrix	Date-Time Sampled	Lab#	Analysis
SY-BRMW3-145-155-110923-DISS	Water	11/9/2023 10:00	67839-016	
				Aluminum in water by 6020
				Antimony in water by 6020
				Arsenic in water by 6020
				Barium in water by 6020
				Beryllium in water by 6020
				Cadmium in water by 6020
				Chromium in water by 6020
				Cobalt in water by 6020
				Combo: TAL 23 Metals
				Copper in water by 6020
				Dissolved Prep for ICPMS Analysis
				Iron in water by 6020
				Lead in water by 6020
				Magnesium in water by 6020
				Manganese in water by 6020
				Mercury in water by 7470
				Nickel in water by 6020
				Potassium in water by 6020
				Selenium in water by 6020
				Silver in water by 6020
				Sodium in water by 6020
				Thallium in water by 6020
				Vanadium in water by 6020
				Zinc in water by 6020

Project ID: Dow Salvage Yard 18001468

Sample Association Table

Field ID	Matrix	Date-Time Sampled	Lab#	Analysis
SY-BRMW3-287-297-110923-DISS	Water	11/9/2023 10:15	67839-017	
				Aluminum in water by 6020
				Antimony in water by 6020
				Arsenic in water by 6020
				Barium in water by 6020
				Beryllium in water by 6020
				Cadmium in water by 6020
				Chromium in water by 6020
				Cobalt in water by 6020
				Combo: TAL 23 Metals
				Copper in water by 6020
				Dissolved Prep for ICPMS Analysis
				Iron in water by 6020
				Lead in water by 6020
				Magnesium in water by 6020
				Manganese in water by 6020
				Mercury in water by 7470
				Nickel in water by 6020
				Potassium in water by 6020
				Selenium in water by 6020
				Silver in water by 6020
				Sodium in water by 6020
				Thallium in water by 6020
				Vanadium in water by 6020
				Zinc in water by 6020

Project ID: Dow Salvage Yard 18001468

Sample Association Table

Field ID	Matrix	Date-Time Sampled	Lab#	Analysis
SY-BRMW4-291-301-110923-DISS	Water	11/9/2023 11:00	67839-018	
				Aluminum in water by 6020
				Antimony in water by 6020
				Arsenic in water by 6020
				Barium in water by 6020
				Beryllium in water by 6020
				Cadmium in water by 6020
				Chromium in water by 6020
				Cobalt in water by 6020
				Combo: TAL 23 Metals
				Copper in water by 6020
				Dissolved Prep for ICPMS Analysis
				Iron in water by 6020
				Lead in water by 6020
				Magnesium in water by 6020
				Manganese in water by 6020
				Mercury in water by 7470
				Nickel in water by 6020
				Potassium in water by 6020
				Selenium in water by 6020
				Silver in water by 6020
				Sodium in water by 6020
				Thallium in water by 6020
				Vanadium in water by 6020
				Zinc in water by 6020

Project ID: Dow Salvage Yard 18001468

Sample Association Table

Field ID	Matrix	Date-Time Sampled	Lab#	Analysis
SY-BRMW1-42-52-110923-DISS	Water	11/9/2023 11:45	67839-019	
				Aluminum in water by 6020
				Antimony in water by 6020
				Arsenic in water by 6020
				Barium in water by 6020
				Beryllium in water by 6020
				Cadmium in water by 6020
				Chromium in water by 6020
				Cobalt in water by 6020
				Combo: TAL 23 Metals
				Copper in water by 6020
				Dissolved Prep for ICPMS Analysis
				Iron in water by 6020
				Lead in water by 6020
				Magnesium in water by 6020
				Manganese in water by 6020
				Mercury in water by 7470
				Nickel in water by 6020
				Potassium in water by 6020
				Selenium in water by 6020
				Silver in water by 6020
				Sodium in water by 6020
				Thallium in water by 6020
				Vanadium in water by 6020
				Zinc in water by 6020

Project ID: Dow Salvage Yard 18001468

Sample Association Table

Field ID	Matrix	Date-Time Sampled	Lab#	Analysis
SY-BRMW1-150-157-110923-DISS	Water	11/9/2023 12:40	67839-020	
				Aluminum in water by 6020
				Antimony in water by 6020
				Arsenic in water by 6020
				Barium in water by 6020
				Beryllium in water by 6020
				Cadmium in water by 6020
				Chromium in water by 6020
				Cobalt in water by 6020
				Combo: TAL 23 Metals
				Copper in water by 6020
				Dissolved Prep for ICPMS Analysis
				Iron in water by 6020
				Lead in water by 6020
				Magnesium in water by 6020
				Manganese in water by 6020
				Mercury in water by 7470
				Nickel in water by 6020
				Potassium in water by 6020
				Selenium in water by 6020
				Silver in water by 6020
				Sodium in water by 6020
				Thallium in water by 6020
				Vanadium in water by 6020
				Zinc in water by 6020

Project ID: Dow Salvage Yard 18001468

Sample Association Table

Field ID	Matrix	Date-Time Sampled	Lab#	Analysis
SY-BRMW1-65-75-110923-DISS	Water	11/9/2023 13:50	67839-021	
				Aluminum in water by 6020
				Antimony in water by 6020
				Arsenic in water by 6020
				Barium in water by 6020
				Beryllium in water by 6020
				Cadmium in water by 6020
				Chromium in water by 6020
				Cobalt in water by 6020
				Combo: TAL 23 Metals
				Copper in water by 6020
				Dissolved Prep for ICPMS Analysis
				Iron in water by 6020
				Lead in water by 6020
				Magnesium in water by 6020
				Manganese in water by 6020
				Mercury in water by 7470
				Nickel in water by 6020
				Potassium in water by 6020
				Selenium in water by 6020
				Silver in water by 6020
				Sodium in water by 6020
				Thallium in water by 6020
				Vanadium in water by 6020
				Zinc in water by 6020

Project ID: Dow Salvage Yard 18001468

Sample Association Table

Field ID	Matrix	Date-Time Sampled	Lab#	Analysis
SY-BRMW1D-65-75-110923-DISS	Water	11/9/2023 13:55	67839-022	
				Aluminum in water by 6020
				Antimony in water by 6020
				Arsenic in water by 6020
				Barium in water by 6020
				Beryllium in water by 6020
				Cadmium in water by 6020
				Chromium in water by 6020
				Cobalt in water by 6020
				Combo: TAL 23 Metals
				Copper in water by 6020
				Dissolved Prep for ICPMS Analysis
				Iron in water by 6020
				Lead in water by 6020
				Magnesium in water by 6020
				Manganese in water by 6020
				Mercury in water by 7470
				Nickel in water by 6020
				Potassium in water by 6020
				Selenium in water by 6020
				Silver in water by 6020
				Sodium in water by 6020
				Thallium in water by 6020
				Vanadium in water by 6020
				Zinc in water by 6020
GAC-110923	Water	11/9/2023 13:40	67839-023	
				VOCs in water by 8260 DoD
				VPH in water by MA DEP Method
TB33-110923	Water	11/9/2023 15:00	67839-024	
				VOCs in water by 8260 DoD
				VPH in water by MA DEP Method

Project ID: Dow Salvage Yard 18001468
Job ID: 67839
Sample#: 67839-001
Sample ID: SY-BRMW4-62-72-110923
Matrix: Water
Sampled: 11/9/23 9:00

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
dichlorodifluoromethane	1.0 U	2.0	1.0	0.28	ug/L	1	LMM			2303756	11/16/23	19:02	SW5030C8260D
chloromethane	1.0 U	2.0	1.0	0.59	ug/L	1	LMM			2303756	11/16/23	19:02	SW5030C8260D
vinyl chloride	1.0 U	2.0	1.0	0.49	ug/L	1	LMM			2303756	11/16/23	19:02	SW5030C8260D
bromomethane	1.5 U	2.0	1.5	1.1	ug/L	1	LMM			2303756	11/16/23	19:02	SW5030C8260D
chloroethane	1.0 U	2.0	1.0	0.33	ug/L	1	LMM			2303756	11/16/23	19:02	SW5030C8260D
trichlorofluoromethane	1.0 U	2.0	1.0	0.34	ug/L	1	LMM			2303756	11/16/23	19:02	SW5030C8260D
diethyl ether	1.0 U	2.0	1.0	0.41	ug/L	1	LMM			2303756	11/16/23	19:02	SW5030C8260D
acetone	2.7 J	50	5.0	1.9	ug/L	1	LMM			2303756	11/16/23	19:02	SW5030C8260D
1,1-dichloroethene	0.50 U	1.0	0.50	0.35	ug/L	1	LMM			2303756	11/16/23	19:02	SW5030C8260D
methylene chloride	1.0 U	2.0	1.0	0.59	ug/L	1	LMM			2303756	11/16/23	19:02	SW5030C8260D
carbon disulfide	1.0 U	2.0	1.0	0.33	ug/L	1	LMM			2303756	11/16/23	19:02	SW5030C8260D
methyl t-butyl ether (MTBE)	1.0 U	2.0	1.0	0.30	ug/L	1	LMM			2303756	11/16/23	19:02	SW5030C8260D
trans-1,2-dichloroethene	1.0 U	2.0	1.0	0.46	ug/L	1	LMM			2303756	11/16/23	19:02	SW5030C8260D
ethyl t-butyl ether (ETBE)	1.0 U	2.0	1.0	0.24	ug/L	1	LMM			2303756	11/16/23	19:02	SW5030C8260D
1,1-dichloroethane	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303756	11/16/23	19:02	SW5030C8260D
t-butanol (TBA)	10 U	30	10	2.5	ug/L	1	LMM			2303756	11/16/23	19:02	SW5030C8260D
2-butanone (MEK)	13	10	5.0	0.67	ug/L	1	LMM			2303756	11/16/23	19:02	SW5030C8260D
2,2-dichloropropane	1.0 U	2.0	1.0	0.21	ug/L	1	LMM			2303756	11/16/23	19:02	SW5030C8260D
cis-1,2-dichloroethene	1.5 U	2.0	1.5	1.2	ug/L	1	LMM			2303756	11/16/23	19:02	SW5030C8260D
chloroform	1.5 U	2.0	1.5	1.4	ug/L	1	LMM			2303756	11/16/23	19:02	SW5030C8260D
bromochloromethane	1.0 U	2.0	1.0	0.22	ug/L	1	LMM			2303756	11/16/23	19:02	SW5030C8260D
tetrahydrofuran (THF)	1.5 U	2.0	1.5	0.75	ug/L	1	LMM			2303756	11/16/23	19:02	SW5030C8260D
1,1,1-trichloroethane	1.0 U	2.0	1.0	0.55	ug/L	1	LMM			2303756	11/16/23	19:02	SW5030C8260D
1,1-dichloropropene	1.0 U	2.0	1.0	0.26	ug/L	1	LMM			2303756	11/16/23	19:02	SW5030C8260D
t-amyl-methyl ether (TAME)	1.0 U	2.0	1.0	0.57	ug/L	1	LMM			2303756	11/16/23	19:02	SW5030C8260D
carbon tetrachloride	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303756	11/16/23	19:02	SW5030C8260D
1,2-dichloroethane	1.0 U	2.0	1.0	0.20	ug/L	1	LMM			2303756	11/16/23	19:02	SW5030C8260D
benzene	1.0 U	2.0	1.0	0.40	ug/L	1	LMM			2303756	11/16/23	19:02	SW5030C8260D
trichloroethene	1.0 U	2.0	1.0	0.53	ug/L	1	LMM			2303756	11/16/23	19:02	SW5030C8260D
1,2-dichloropropane	1.0 U	2.0	1.0	0.22	ug/L	1	LMM			2303756	11/16/23	19:02	SW5030C8260D
bromodichloromethane	0.50 U	0.60	0.50	0.38	ug/L	1	LMM			2303756	11/16/23	19:02	SW5030C8260D
1,4-dioxane	10 U	50	10	8.7	ug/L	1	LMM			2303756	11/16/23	19:02	SW5030C8260D
dibromomethane	1.0 U	2.0	1.0	0.23	ug/L	1	LMM			2303756	11/16/23	19:02	SW5030C8260D
4-methyl-2-pentanone (MIBK)	1.0 U	10	1.0	0.56	ug/L	1	LMM			2303756	11/16/23	19:02	SW5030C8260D
cis-1,3-dichloropropene	1.0 U	2.0	1.0	0.30	ug/L	1	LMM			2303756	11/16/23	19:02	SW5030C8260D
toluene	1.5 J	2.0	1.0	0.45	ug/L	1	LMM			2303756	11/16/23	19:02	SW5030C8260D
trans-1,3-dichloropropene	1.0 U	2.0	1.0	0.34	ug/L	1	LMM			2303756	11/16/23	19:02	SW5030C8260D
2-hexanone	1.0 U	10	1.0	0.72	ug/L	1	LMM			2303756	11/16/23	19:02	SW5030C8260D
1,1,2-trichloroethane	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303756	11/16/23	19:02	SW5030C8260D
1,3-dichloropropane	1.0 U	2.0	1.0	0.25	ug/L	1	LMM			2303756	11/16/23	19:02	SW5030C8260D
tetrachloroethene	1.0 U	2.0	1.0	0.76	ug/L	1	LMM			2303756	11/16/23	19:02	SW5030C8260D
dibromochloromethane	1.0 U	2.0	1.0	0.21	ug/L	1	LMM			2303756	11/16/23	19:02	SW5030C8260D

Project ID: Dow Salvage Yard 18001468
Job ID: 67839
Sample#: 67839-001
Sample ID: SY-BRMW4-62-72-110923
Matrix: Water
Sampled: 11/9/23 9:00

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
1,2-dibromoethane (EDB)	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303756	11/16/23	19:02	SW5030C8260D
chlorobenzene	1.0 U	2.0	1.0	0.25	ug/L	1	LMM			2303756	11/16/23	19:02	SW5030C8260D
1,1,1,2-tetrachloroethane	1.0 U	2.0	1.0	0.21	ug/L	1	LMM			2303756	11/16/23	19:02	SW5030C8260D
ethylbenzene	1.0 U	2.0	1.0	0.65	ug/L	1	LMM			2303756	11/16/23	19:02	SW5030C8260D
m&p-xylenes	1.5 U	2.0	1.5	1.4	ug/L	1	LMM			2303756	11/16/23	19:02	SW5030C8260D
o-xylene	1.0 U	2.0	1.0	0.55	ug/L	1	LMM			2303756	11/16/23	19:02	SW5030C8260D
styrene	1.0 U	2.0	1.0	0.57	ug/L	1	LMM			2303756	11/16/23	19:02	SW5030C8260D
bromoform	1.0 U	2.0	1.0	0.24	ug/L	1	LMM			2303756	11/16/23	19:02	SW5030C8260D
isopropylbenzene	1.0 U	2.0	1.0	0.65	ug/L	1	LMM			2303756	11/16/23	19:02	SW5030C8260D
1,1,2,2-tetrachloroethane	1.0 U	2.0	1.0	0.29	ug/L	1	LMM			2303756	11/16/23	19:02	SW5030C8260D
1,2,3-trichloropropane	1.0 U	2.0	1.0	0.55	ug/L	1	LMM			2303756	11/16/23	19:02	SW5030C8260D
n-propylbenzene	1.0 U	2.0	1.0	0.44	ug/L	1	LMM			2303756	11/16/23	19:02	SW5030C8260D
bromobenzene	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303756	11/16/23	19:02	SW5030C8260D
2-chlorotoluene	1.0 U	2.0	1.0	0.23	ug/L	1	LMM			2303756	11/16/23	19:02	SW5030C8260D
4-chlorotoluene	1.0 U	2.0	1.0	0.33	ug/L	1	LMM			2303756	11/16/23	19:02	SW5030C8260D
tert-butylbenzene	1.0 U	2.0	1.0	0.39	ug/L	1	LMM			2303756	11/16/23	19:02	SW5030C8260D
1,2,4-trimethylbenzene	1.0 U	2.0	1.0	0.58	ug/L	1	LMM			2303756	11/16/23	19:02	SW5030C8260D
sec-butylbenzene	1.0 U	2.0	1.0	0.44	ug/L	1	LMM			2303756	11/16/23	19:02	SW5030C8260D
1,3-dichlorobenzene	1.0 U	2.0	1.0	0.45	ug/L	1	LMM			2303756	11/16/23	19:02	SW5030C8260D
4-isopropyltoluene	1.0 U	2.0	1.0	0.47	ug/L	1	LMM			2303756	11/16/23	19:02	SW5030C8260D
1,4-dichlorobenzene	1.0 U	2.0	1.0	0.26	ug/L	1	LMM			2303756	11/16/23	19:02	SW5030C8260D
1,2-dichlorobenzene	1.0 U	2.0	1.0	0.39	ug/L	1	LMM			2303756	11/16/23	19:02	SW5030C8260D
n-butylbenzene	1.0 U	2.0	1.0	0.54	ug/L	1	LMM			2303756	11/16/23	19:02	SW5030C8260D
1,2-dibromo-3-chloropropane (DBCP)	1.5 U	2.0	1.5	0.91	ug/L	1	LMM			2303756	11/16/23	19:02	SW5030C8260D
1,3,5-trimethylbenzene	1.0 U	2.0	1.0	0.46	ug/L	1	LMM			2303756	11/16/23	19:02	SW5030C8260D
1,2,4-trichlorobenzene	1.0 U	2.0	1.0	0.79	ug/L	1	LMM			2303756	11/16/23	19:02	SW5030C8260D
hexachlorobutadiene	0.50 U	0.50	0.50	0.19	ug/L	1	LMM			2303756	11/16/23	19:02	SW5030C8260D
naphthalene	1.5 U	2.0	1.5	1.2	ug/L	1	LMM			2303756	11/16/23	19:02	SW5030C8260D
1,2,3-trichlorobenzene	1.0 U	2.0	1.0	0.93	ug/L	1	LMM			2303756	11/16/23	19:02	SW5030C8260D
Surrogate Recovery		Limits											
dibromofluoromethane SUR	98	78-114			%	1	LMM			2303756	11/16/23	19:02	SW5030C8260D
toluene-D8 SUR	100	88-110			%	1	LMM			2303756	11/16/23	19:02	SW5030C8260D
4-bromofluorobenzene SUR	100	86-115			%	1	LMM			2303756	11/16/23	19:02	SW5030C8260D

Project ID: Dow Salvage Yard 18001468
Job ID: 67839
Sample#: 67839-002
Sample ID: SY-BRMW40-62-72-110923
Matrix: Water
Sampled: 11/9/23 9:05

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
dichlorodifluoromethane	1.0 U	2.0	1.0	0.28	ug/L	1	LMM			2303756	11/16/23	19:27	SW5030C8260D
chloromethane	1.0 U	2.0	1.0	0.59	ug/L	1	LMM			2303756	11/16/23	19:27	SW5030C8260D
vinyl chloride	1.0 U	2.0	1.0	0.49	ug/L	1	LMM			2303756	11/16/23	19:27	SW5030C8260D
bromomethane	1.5 U	2.0	1.5	1.1	ug/L	1	LMM			2303756	11/16/23	19:27	SW5030C8260D
chloroethane	1.0 U	2.0	1.0	0.33	ug/L	1	LMM			2303756	11/16/23	19:27	SW5030C8260D
trichlorofluoromethane	1.0 U	2.0	1.0	0.34	ug/L	1	LMM			2303756	11/16/23	19:27	SW5030C8260D
diethyl ether	1.0 U	2.0	1.0	0.41	ug/L	1	LMM			2303756	11/16/23	19:27	SW5030C8260D
acetone	3.5 J	50	5.0	1.9	ug/L	1	LMM			2303756	11/16/23	19:27	SW5030C8260D
1,1-dichloroethene	0.50 U	1.0	0.50	0.35	ug/L	1	LMM			2303756	11/16/23	19:27	SW5030C8260D
methylene chloride	1.0 U	2.0	1.0	0.59	ug/L	1	LMM			2303756	11/16/23	19:27	SW5030C8260D
carbon disulfide	1.0 U	2.0	1.0	0.33	ug/L	1	LMM			2303756	11/16/23	19:27	SW5030C8260D
methyl t-butyl ether (MTBE)	1.0 U	2.0	1.0	0.30	ug/L	1	LMM			2303756	11/16/23	19:27	SW5030C8260D
trans-1,2-dichloroethene	1.0 U	2.0	1.0	0.46	ug/L	1	LMM			2303756	11/16/23	19:27	SW5030C8260D
ethyl t-butyl ether (ETBE)	1.0 U	2.0	1.0	0.24	ug/L	1	LMM			2303756	11/16/23	19:27	SW5030C8260D
1,1-dichloroethane	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303756	11/16/23	19:27	SW5030C8260D
t-butanol (TBA)	10 U	30	10	2.5	ug/L	1	LMM			2303756	11/16/23	19:27	SW5030C8260D
2-butanone (MEK)	14	10	5.0	0.67	ug/L	1	LMM			2303756	11/16/23	19:27	SW5030C8260D
2,2-dichloropropane	1.0 U	2.0	1.0	0.21	ug/L	1	LMM			2303756	11/16/23	19:27	SW5030C8260D
cis-1,2-dichloroethene	1.5 U	2.0	1.5	1.2	ug/L	1	LMM			2303756	11/16/23	19:27	SW5030C8260D
chloroform	1.5 U	2.0	1.5	1.4	ug/L	1	LMM			2303756	11/16/23	19:27	SW5030C8260D
bromochloromethane	1.0 U	2.0	1.0	0.22	ug/L	1	LMM			2303756	11/16/23	19:27	SW5030C8260D
tetrahydrofuran (THF)	3.4	2.0	1.5	0.75	ug/L	1	LMM			2303756	11/16/23	19:27	SW5030C8260D
1,1,1-trichloroethane	1.0 U	2.0	1.0	0.55	ug/L	1	LMM			2303756	11/16/23	19:27	SW5030C8260D
1,1-dichloropropene	1.0 U	2.0	1.0	0.26	ug/L	1	LMM			2303756	11/16/23	19:27	SW5030C8260D
t-amyl-methyl ether (TAME)	1.0 U	2.0	1.0	0.57	ug/L	1	LMM			2303756	11/16/23	19:27	SW5030C8260D
carbon tetrachloride	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303756	11/16/23	19:27	SW5030C8260D
1,2-dichloroethane	1.0 U	2.0	1.0	0.20	ug/L	1	LMM			2303756	11/16/23	19:27	SW5030C8260D
benzene	1.0 U	2.0	1.0	0.40	ug/L	1	LMM			2303756	11/16/23	19:27	SW5030C8260D
trichloroethene	1.0 U	2.0	1.0	0.53	ug/L	1	LMM			2303756	11/16/23	19:27	SW5030C8260D
1,2-dichloropropane	1.0 U	2.0	1.0	0.22	ug/L	1	LMM			2303756	11/16/23	19:27	SW5030C8260D
bromodichloromethane	0.50 U	0.60	0.50	0.38	ug/L	1	LMM			2303756	11/16/23	19:27	SW5030C8260D
1,4-dioxane	10 U	50	10	8.7	ug/L	1	LMM			2303756	11/16/23	19:27	SW5030C8260D
dibromomethane	1.0 U	2.0	1.0	0.23	ug/L	1	LMM			2303756	11/16/23	19:27	SW5030C8260D
4-methyl-2-pentanone (MIBK)	1.0 U	10	1.0	0.56	ug/L	1	LMM			2303756	11/16/23	19:27	SW5030C8260D
cis-1,3-dichloropropene	1.0 U	2.0	1.0	0.30	ug/L	1	LMM			2303756	11/16/23	19:27	SW5030C8260D
toluene	1.6 J	2.0	1.0	0.45	ug/L	1	LMM			2303756	11/16/23	19:27	SW5030C8260D
trans-1,3-dichloropropene	1.0 U	2.0	1.0	0.34	ug/L	1	LMM			2303756	11/16/23	19:27	SW5030C8260D
2-hexanone	1.0 U	10	1.0	0.72	ug/L	1	LMM			2303756	11/16/23	19:27	SW5030C8260D
1,1,2-trichloroethane	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303756	11/16/23	19:27	SW5030C8260D
1,3-dichloropropane	1.0 U	2.0	1.0	0.25	ug/L	1	LMM			2303756	11/16/23	19:27	SW5030C8260D
tetrachloroethene	1.0 U	2.0	1.0	0.76	ug/L	1	LMM			2303756	11/16/23	19:27	SW5030C8260D
dibromochloromethane	1.0 U	2.0	1.0	0.21	ug/L	1	LMM			2303756	11/16/23	19:27	SW5030C8260D

Project ID: Dow Salvage Yard 18001468
Job ID: 67839
Sample#: 67839-002
Sample ID: SY-BRMW40-62-72-110923
Matrix: Water
Sampled: 11/9/23 9:05

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
1,2-dibromoethane (EDB)	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303756	11/16/23	19:27	SW5030C8260D
chlorobenzene	1.0 U	2.0	1.0	0.25	ug/L	1	LMM			2303756	11/16/23	19:27	SW5030C8260D
1,1,1,2-tetrachloroethane	1.0 U	2.0	1.0	0.21	ug/L	1	LMM			2303756	11/16/23	19:27	SW5030C8260D
ethylbenzene	1.0 U	2.0	1.0	0.65	ug/L	1	LMM			2303756	11/16/23	19:27	SW5030C8260D
m&p-xylenes	1.5 U	2.0	1.5	1.4	ug/L	1	LMM			2303756	11/16/23	19:27	SW5030C8260D
o-xylene	1.0 U	2.0	1.0	0.55	ug/L	1	LMM			2303756	11/16/23	19:27	SW5030C8260D
styrene	1.0 U	2.0	1.0	0.57	ug/L	1	LMM			2303756	11/16/23	19:27	SW5030C8260D
bromoform	1.0 U	2.0	1.0	0.24	ug/L	1	LMM			2303756	11/16/23	19:27	SW5030C8260D
isopropylbenzene	1.0 U	2.0	1.0	0.65	ug/L	1	LMM			2303756	11/16/23	19:27	SW5030C8260D
1,1,2,2-tetrachloroethane	1.0 U	2.0	1.0	0.29	ug/L	1	LMM			2303756	11/16/23	19:27	SW5030C8260D
1,2,3-trichloropropane	1.0 U	2.0	1.0	0.55	ug/L	1	LMM			2303756	11/16/23	19:27	SW5030C8260D
n-propylbenzene	1.0 U	2.0	1.0	0.44	ug/L	1	LMM			2303756	11/16/23	19:27	SW5030C8260D
bromobenzene	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303756	11/16/23	19:27	SW5030C8260D
2-chlorotoluene	1.0 U	2.0	1.0	0.23	ug/L	1	LMM			2303756	11/16/23	19:27	SW5030C8260D
4-chlorotoluene	1.0 U	2.0	1.0	0.33	ug/L	1	LMM			2303756	11/16/23	19:27	SW5030C8260D
tert-butylbenzene	1.0 U	2.0	1.0	0.39	ug/L	1	LMM			2303756	11/16/23	19:27	SW5030C8260D
1,2,4-trimethylbenzene	1.0 U	2.0	1.0	0.58	ug/L	1	LMM			2303756	11/16/23	19:27	SW5030C8260D
sec-butylbenzene	1.0 U	2.0	1.0	0.44	ug/L	1	LMM			2303756	11/16/23	19:27	SW5030C8260D
1,3-dichlorobenzene	1.0 U	2.0	1.0	0.45	ug/L	1	LMM			2303756	11/16/23	19:27	SW5030C8260D
4-isopropyltoluene	1.0 U	2.0	1.0	0.47	ug/L	1	LMM			2303756	11/16/23	19:27	SW5030C8260D
1,4-dichlorobenzene	1.0 U	2.0	1.0	0.26	ug/L	1	LMM			2303756	11/16/23	19:27	SW5030C8260D
1,2-dichlorobenzene	1.0 U	2.0	1.0	0.39	ug/L	1	LMM			2303756	11/16/23	19:27	SW5030C8260D
n-butylbenzene	1.0 U	2.0	1.0	0.54	ug/L	1	LMM			2303756	11/16/23	19:27	SW5030C8260D
1,2-dibromo-3-chloropropane (DBCP)	1.5 U	2.0	1.5	0.91	ug/L	1	LMM			2303756	11/16/23	19:27	SW5030C8260D
1,3,5-trimethylbenzene	1.0 U	2.0	1.0	0.46	ug/L	1	LMM			2303756	11/16/23	19:27	SW5030C8260D
1,2,4-trichlorobenzene	1.0 U	2.0	1.0	0.79	ug/L	1	LMM			2303756	11/16/23	19:27	SW5030C8260D
hexachlorobutadiene	0.50 U	0.50	0.50	0.19	ug/L	1	LMM			2303756	11/16/23	19:27	SW5030C8260D
naphthalene	1.5 U	2.0	1.5	1.2	ug/L	1	LMM			2303756	11/16/23	19:27	SW5030C8260D
1,2,3-trichlorobenzene	1.0 U	2.0	1.0	0.93	ug/L	1	LMM			2303756	11/16/23	19:27	SW5030C8260D
Surrogate Recovery		Limits											
dibromofluoromethane SUR	96	78-114			%	1	LMM			2303756	11/16/23	19:27	SW5030C8260D
toluene-D8 SUR	100	88-110			%	1	LMM			2303756	11/16/23	19:27	SW5030C8260D
4-bromofluorobenzene SUR	96	86-115			%	1	LMM			2303756	11/16/23	19:27	SW5030C8260D

Project ID: Dow Salvage Yard 18001468
Job ID: 67839
Sample#: 67839-003
Sample ID: SY-BRMW4-138-148-110923
Matrix: Water
Sampled: 11/9/23 9:40

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
dichlorodifluoromethane	1.0 U	2.0	1.0	0.28	ug/L	1	LMM			2303766	11/17/23	0:24	SW5030C8260D
chloromethane	1.0 U	2.0	1.0	0.59	ug/L	1	LMM			2303766	11/17/23	0:24	SW5030C8260D
vinyl chloride	1.0 U	2.0	1.0	0.49	ug/L	1	LMM			2303766	11/17/23	0:24	SW5030C8260D
bromomethane	1.5 U	2.0	1.5	1.1	ug/L	1	LMM			2303766	11/17/23	0:24	SW5030C8260D
chloroethane	1.0 U	2.0	1.0	0.33	ug/L	1	LMM			2303766	11/17/23	0:24	SW5030C8260D
trichlorofluoromethane	1.0 U	2.0	1.0	0.34	ug/L	1	LMM			2303766	11/17/23	0:24	SW5030C8260D
diethyl ether	1.0 U	2.0	1.0	0.41	ug/L	1	LMM			2303766	11/17/23	0:24	SW5030C8260D
acetone	5.0 U	50	5.0	1.9	ug/L	1	LMM			2303766	11/17/23	0:24	SW5030C8260D
1,1-dichloroethene	0.50 U	1.0	0.50	0.35	ug/L	1	LMM			2303766	11/17/23	0:24	SW5030C8260D
methylene chloride	1.0 U	2.0	1.0	0.59	ug/L	1	LMM			2303766	11/17/23	0:24	SW5030C8260D
carbon disulfide	1.0 U	2.0	1.0	0.33	ug/L	1	LMM			2303766	11/17/23	0:24	SW5030C8260D
methyl t-butyl ether (MTBE)	1.0 U	2.0	1.0	0.30	ug/L	1	LMM			2303766	11/17/23	0:24	SW5030C8260D
trans-1,2-dichloroethene	1.0 U	2.0	1.0	0.46	ug/L	1	LMM			2303766	11/17/23	0:24	SW5030C8260D
ethyl t-butyl ether (ETBE)	1.0 U	2.0	1.0	0.24	ug/L	1	LMM			2303766	11/17/23	0:24	SW5030C8260D
1,1-dichloroethane	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303766	11/17/23	0:24	SW5030C8260D
t-butanol (TBA)	10 U	30	10	2.5	ug/L	1	LMM			2303766	11/17/23	0:24	SW5030C8260D
2-butanone (MEK)	11	10	5.0	0.67	ug/L	1	LMM			2303766	11/17/23	0:24	SW5030C8260D
2,2-dichloropropane	1.0 U	2.0	1.0	0.21	ug/L	1	LMM			2303766	11/17/23	0:24	SW5030C8260D
cis-1,2-dichloroethene	1.5 U	2.0	1.5	1.2	ug/L	1	LMM			2303766	11/17/23	0:24	SW5030C8260D
chloroform	1.5 U	2.0	1.5	1.4	ug/L	1	LMM			2303766	11/17/23	0:24	SW5030C8260D
bromochloromethane	1.0 U	2.0	1.0	0.22	ug/L	1	LMM			2303766	11/17/23	0:24	SW5030C8260D
tetrahydrofuran (THF)	1.5 U	2.0	1.5	0.75	ug/L	1	LMM			2303766	11/17/23	0:24	SW5030C8260D
1,1,1-trichloroethane	1.0 U	2.0	1.0	0.55	ug/L	1	LMM			2303766	11/17/23	0:24	SW5030C8260D
1,1-dichloropropene	1.0 U	2.0	1.0	0.26	ug/L	1	LMM			2303766	11/17/23	0:24	SW5030C8260D
t-amyl-methyl ether (TAME)	1.0 U	2.0	1.0	0.57	ug/L	1	LMM			2303766	11/17/23	0:24	SW5030C8260D
carbon tetrachloride	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303766	11/17/23	0:24	SW5030C8260D
1,2-dichloroethane	1.0 U	2.0	1.0	0.20	ug/L	1	LMM			2303766	11/17/23	0:24	SW5030C8260D
benzene	1.0 U	2.0	1.0	0.40	ug/L	1	LMM			2303766	11/17/23	0:24	SW5030C8260D
trichloroethene	1.0 U	2.0	1.0	0.53	ug/L	1	LMM			2303766	11/17/23	0:24	SW5030C8260D
1,2-dichloropropane	1.0 U	2.0	1.0	0.22	ug/L	1	LMM			2303766	11/17/23	0:24	SW5030C8260D
bromodichloromethane	0.50 U	0.60	0.50	0.38	ug/L	1	LMM			2303766	11/17/23	0:24	SW5030C8260D
1,4-dioxane	10 U	50	10	8.7	ug/L	1	LMM			2303766	11/17/23	0:24	SW5030C8260D
dibromomethane	1.0 U	2.0	1.0	0.23	ug/L	1	LMM			2303766	11/17/23	0:24	SW5030C8260D
4-methyl-2-pentanone (MIBK)	1.0 U	10	1.0	0.56	ug/L	1	LMM			2303766	11/17/23	0:24	SW5030C8260D
cis-1,3-dichloropropene	1.0 U	2.0	1.0	0.30	ug/L	1	LMM			2303766	11/17/23	0:24	SW5030C8260D
toluene	6.3	2.0	1.0	0.45	ug/L	1	LMM			2303766	11/17/23	0:24	SW5030C8260D
trans-1,3-dichloropropene	1.0 U	2.0	1.0	0.34	ug/L	1	LMM			2303766	11/17/23	0:24	SW5030C8260D
2-hexanone	1.0 U	10	1.0	0.72	ug/L	1	LMM			2303766	11/17/23	0:24	SW5030C8260D
1,1,2-trichloroethane	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303766	11/17/23	0:24	SW5030C8260D
1,3-dichloropropane	1.0 U	2.0	1.0	0.25	ug/L	1	LMM			2303766	11/17/23	0:24	SW5030C8260D
tetrachloroethene	1.0 U	2.0	1.0	0.76	ug/L	1	LMM			2303766	11/17/23	0:24	SW5030C8260D
dibromochloromethane	1.0 U	2.0	1.0	0.21	ug/L	1	LMM			2303766	11/17/23	0:24	SW5030C8260D

Project ID: Dow Salvage Yard 18001468
Job ID: 67839
Sample#: 67839-003
Sample ID: SY-BRMW4-138-148-110923
Matrix: Water
Sampled: 11/9/23 9:40

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
1,2-dibromoethane (EDB)	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303766	11/17/23	0:24	SW5030C8260D
chlorobenzene	1.0 U	2.0	1.0	0.25	ug/L	1	LMM			2303766	11/17/23	0:24	SW5030C8260D
1,1,1,2-tetrachloroethane	1.0 U	2.0	1.0	0.21	ug/L	1	LMM			2303766	11/17/23	0:24	SW5030C8260D
ethylbenzene	1.0 U	2.0	1.0	0.65	ug/L	1	LMM			2303766	11/17/23	0:24	SW5030C8260D
m&p-xylenes	1.5 U	2.0	1.5	1.4	ug/L	1	LMM			2303766	11/17/23	0:24	SW5030C8260D
o-xylene	1.0 U	2.0	1.0	0.55	ug/L	1	LMM			2303766	11/17/23	0:24	SW5030C8260D
styrene	1.0 U	2.0	1.0	0.57	ug/L	1	LMM			2303766	11/17/23	0:24	SW5030C8260D
bromoform	1.0 U	2.0	1.0	0.24	ug/L	1	LMM			2303766	11/17/23	0:24	SW5030C8260D
isopropylbenzene	1.0 U	2.0	1.0	0.65	ug/L	1	LMM			2303766	11/17/23	0:24	SW5030C8260D
1,1,2,2-tetrachloroethane	1.0 U	2.0	1.0	0.29	ug/L	1	LMM			2303766	11/17/23	0:24	SW5030C8260D
1,2,3-trichloropropane	1.0 U	2.0	1.0	0.55	ug/L	1	LMM			2303766	11/17/23	0:24	SW5030C8260D
n-propylbenzene	1.0 U	2.0	1.0	0.44	ug/L	1	LMM			2303766	11/17/23	0:24	SW5030C8260D
bromobenzene	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303766	11/17/23	0:24	SW5030C8260D
2-chlorotoluene	1.0 U	2.0	1.0	0.23	ug/L	1	LMM			2303766	11/17/23	0:24	SW5030C8260D
4-chlorotoluene	1.0 U	2.0	1.0	0.33	ug/L	1	LMM			2303766	11/17/23	0:24	SW5030C8260D
tert-butylbenzene	1.0 U	2.0	1.0	0.39	ug/L	1	LMM			2303766	11/17/23	0:24	SW5030C8260D
1,2,4-trimethylbenzene	1.0 U	2.0	1.0	0.58	ug/L	1	LMM			2303766	11/17/23	0:24	SW5030C8260D
sec-butylbenzene	1.0 U	2.0	1.0	0.44	ug/L	1	LMM			2303766	11/17/23	0:24	SW5030C8260D
1,3-dichlorobenzene	1.0 U	2.0	1.0	0.45	ug/L	1	LMM			2303766	11/17/23	0:24	SW5030C8260D
4-isopropyltoluene	1.0 U	2.0	1.0	0.47	ug/L	1	LMM			2303766	11/17/23	0:24	SW5030C8260D
1,4-dichlorobenzene	1.0 U	2.0	1.0	0.26	ug/L	1	LMM			2303766	11/17/23	0:24	SW5030C8260D
1,2-dichlorobenzene	1.0 U	2.0	1.0	0.39	ug/L	1	LMM			2303766	11/17/23	0:24	SW5030C8260D
n-butylbenzene	1.0 U	2.0	1.0	0.54	ug/L	1	LMM			2303766	11/17/23	0:24	SW5030C8260D
1,2-dibromo-3-chloropropane (DBCP)	1.5 U	2.0	1.5	0.91	ug/L	1	LMM			2303766	11/17/23	0:24	SW5030C8260D
1,3,5-trimethylbenzene	1.0 U	2.0	1.0	0.46	ug/L	1	LMM			2303766	11/17/23	0:24	SW5030C8260D
1,2,4-trichlorobenzene	1.0 U	2.0	1.0	0.79	ug/L	1	LMM			2303766	11/17/23	0:24	SW5030C8260D
hexachlorobutadiene	0.50 U	0.50	0.50	0.19	ug/L	1	LMM			2303766	11/17/23	0:24	SW5030C8260D
naphthalene	1.5 U	2.0	1.5	1.2	ug/L	1	LMM			2303766	11/17/23	0:24	SW5030C8260D
1,2,3-trichlorobenzene	1.0 U	2.0	1.0	0.93	ug/L	1	LMM			2303766	11/17/23	0:24	SW5030C8260D
Surrogate Recovery		Limits											
dibromofluoromethane SUR	93	78-114			%	1	LMM			2303766	11/17/23	0:24	SW5030C8260D
toluene-D8 SUR	97	88-110			%	1	LMM			2303766	11/17/23	0:24	SW5030C8260D
4-bromofluorobenzene SUR	99	86-115			%	1	LMM			2303766	11/17/23	0:24	SW5030C8260D

Project ID: Dow Salvage Yard 18001468
Job ID: 67839
Sample#: 67839-004
Sample ID: SY-BRMW3-47-62-110923
Matrix: Water
Sampled: 11/9/23 9:45

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
dichlorodifluoromethane	1.0 U	2.0	1.0	0.28	ug/L	1	LMM			2303766	11/17/23	0:49	SW5030C8260D
chloromethane	1.0 U	2.0	1.0	0.59	ug/L	1	LMM			2303766	11/17/23	0:49	SW5030C8260D
vinyl chloride	1.0 U	2.0	1.0	0.49	ug/L	1	LMM			2303766	11/17/23	0:49	SW5030C8260D
bromomethane	1.5 U	2.0	1.5	1.1	ug/L	1	LMM			2303766	11/17/23	0:49	SW5030C8260D
chloroethane	1.0 U	2.0	1.0	0.33	ug/L	1	LMM			2303766	11/17/23	0:49	SW5030C8260D
trichlorofluoromethane	1.0 U	2.0	1.0	0.34	ug/L	1	LMM			2303766	11/17/23	0:49	SW5030C8260D
diethyl ether	1.0 U	2.0	1.0	0.41	ug/L	1	LMM			2303766	11/17/23	0:49	SW5030C8260D
acetone	2.5 J	50	5.0	1.9	ug/L	1	LMM			2303766	11/17/23	0:49	SW5030C8260D
1,1-dichloroethene	0.50 U	1.0	0.50	0.35	ug/L	1	LMM			2303766	11/17/23	0:49	SW5030C8260D
methylene chloride	1.0 U	2.0	1.0	0.59	ug/L	1	LMM			2303766	11/17/23	0:49	SW5030C8260D
carbon disulfide	1.0 U	2.0	1.0	0.33	ug/L	1	LMM			2303766	11/17/23	0:49	SW5030C8260D
methyl t-butyl ether (MTBE)	1.0 U	2.0	1.0	0.30	ug/L	1	LMM			2303766	11/17/23	0:49	SW5030C8260D
trans-1,2-dichloroethene	1.0 U	2.0	1.0	0.46	ug/L	1	LMM			2303766	11/17/23	0:49	SW5030C8260D
ethyl t-butyl ether (ETBE)	1.0 U	2.0	1.0	0.24	ug/L	1	LMM			2303766	11/17/23	0:49	SW5030C8260D
1,1-dichloroethane	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303766	11/17/23	0:49	SW5030C8260D
t-butanol (TBA)	10 U	30	10	2.5	ug/L	1	LMM			2303766	11/17/23	0:49	SW5030C8260D
2-butanone (MEK)	5.0 U	10	5.0	0.67	ug/L	1	LMM			2303766	11/17/23	0:49	SW5030C8260D
2,2-dichloropropane	1.0 U	2.0	1.0	0.21	ug/L	1	LMM			2303766	11/17/23	0:49	SW5030C8260D
cis-1,2-dichloroethene	1.5 U	2.0	1.5	1.2	ug/L	1	LMM			2303766	11/17/23	0:49	SW5030C8260D
chloroform	1.5 U	2.0	1.5	1.4	ug/L	1	LMM			2303766	11/17/23	0:49	SW5030C8260D
bromochloromethane	1.0 U	2.0	1.0	0.22	ug/L	1	LMM			2303766	11/17/23	0:49	SW5030C8260D
tetrahydrofuran (THF)	1.1 J	2.0	1.5	0.75	ug/L	1	LMM			2303766	11/17/23	0:49	SW5030C8260D
1,1,1-trichloroethane	1.0 U	2.0	1.0	0.55	ug/L	1	LMM			2303766	11/17/23	0:49	SW5030C8260D
1,1-dichloropropene	1.0 U	2.0	1.0	0.26	ug/L	1	LMM			2303766	11/17/23	0:49	SW5030C8260D
t-amyl-methyl ether (TAME)	1.0 U	2.0	1.0	0.57	ug/L	1	LMM			2303766	11/17/23	0:49	SW5030C8260D
carbon tetrachloride	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303766	11/17/23	0:49	SW5030C8260D
1,2-dichloroethane	1.0 U	2.0	1.0	0.20	ug/L	1	LMM			2303766	11/17/23	0:49	SW5030C8260D
benzene	1.0 U	2.0	1.0	0.40	ug/L	1	LMM			2303766	11/17/23	0:49	SW5030C8260D
trichloroethene	1.0 U	2.0	1.0	0.53	ug/L	1	LMM			2303766	11/17/23	0:49	SW5030C8260D
1,2-dichloropropane	1.0 U	2.0	1.0	0.22	ug/L	1	LMM			2303766	11/17/23	0:49	SW5030C8260D
bromodichloromethane	0.50 U	0.60	0.50	0.38	ug/L	1	LMM			2303766	11/17/23	0:49	SW5030C8260D
1,4-dioxane	10 U	50	10	8.7	ug/L	1	LMM			2303766	11/17/23	0:49	SW5030C8260D
dibromomethane	1.0 U	2.0	1.0	0.23	ug/L	1	LMM			2303766	11/17/23	0:49	SW5030C8260D
4-methyl-2-pentanone (MIBK)	1.0 U	10	1.0	0.56	ug/L	1	LMM			2303766	11/17/23	0:49	SW5030C8260D
cis-1,3-dichloropropene	1.0 U	2.0	1.0	0.30	ug/L	1	LMM			2303766	11/17/23	0:49	SW5030C8260D
toluene	12	2.0	1.0	0.45	ug/L	1	LMM			2303766	11/17/23	0:49	SW5030C8260D
trans-1,3-dichloropropene	1.0 U	2.0	1.0	0.34	ug/L	1	LMM			2303766	11/17/23	0:49	SW5030C8260D
2-hexanone	1.0 U	10	1.0	0.72	ug/L	1	LMM			2303766	11/17/23	0:49	SW5030C8260D
1,1,2-trichloroethane	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303766	11/17/23	0:49	SW5030C8260D
1,3-dichloropropane	1.0 U	2.0	1.0	0.25	ug/L	1	LMM			2303766	11/17/23	0:49	SW5030C8260D
tetrachloroethene	1.0 U	2.0	1.0	0.76	ug/L	1	LMM			2303766	11/17/23	0:49	SW5030C8260D
dibromochloromethane	1.0 U	2.0	1.0	0.21	ug/L	1	LMM			2303766	11/17/23	0:49	SW5030C8260D

Project ID: Dow Salvage Yard 18001468
Job ID: 67839
Sample#: 67839-004
Sample ID: SY-BRMW3-47-62-110923
Matrix: Water
Sampled: 11/9/23 9:45

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
1,2-dibromoethane (EDB)	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303766	11/17/23	0:49	SW5030C8260D
chlorobenzene	1.0 U	2.0	1.0	0.25	ug/L	1	LMM			2303766	11/17/23	0:49	SW5030C8260D
1,1,1,2-tetrachloroethane	1.0 U	2.0	1.0	0.21	ug/L	1	LMM			2303766	11/17/23	0:49	SW5030C8260D
ethylbenzene	1.0 U	2.0	1.0	0.65	ug/L	1	LMM			2303766	11/17/23	0:49	SW5030C8260D
m&p-xylenes	1.5 U	2.0	1.5	1.4	ug/L	1	LMM			2303766	11/17/23	0:49	SW5030C8260D
o-xylene	1.0 U	2.0	1.0	0.55	ug/L	1	LMM			2303766	11/17/23	0:49	SW5030C8260D
styrene	1.0 U	2.0	1.0	0.57	ug/L	1	LMM			2303766	11/17/23	0:49	SW5030C8260D
bromoform	1.0 U	2.0	1.0	0.24	ug/L	1	LMM			2303766	11/17/23	0:49	SW5030C8260D
isopropylbenzene	1.0 U	2.0	1.0	0.65	ug/L	1	LMM			2303766	11/17/23	0:49	SW5030C8260D
1,1,2,2-tetrachloroethane	1.0 U	2.0	1.0	0.29	ug/L	1	LMM			2303766	11/17/23	0:49	SW5030C8260D
1,2,3-trichloropropane	1.0 U	2.0	1.0	0.55	ug/L	1	LMM			2303766	11/17/23	0:49	SW5030C8260D
n-propylbenzene	1.0 U	2.0	1.0	0.44	ug/L	1	LMM			2303766	11/17/23	0:49	SW5030C8260D
bromobenzene	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303766	11/17/23	0:49	SW5030C8260D
2-chlorotoluene	1.0 U	2.0	1.0	0.23	ug/L	1	LMM			2303766	11/17/23	0:49	SW5030C8260D
4-chlorotoluene	1.0 U	2.0	1.0	0.33	ug/L	1	LMM			2303766	11/17/23	0:49	SW5030C8260D
tert-butylbenzene	1.0 U	2.0	1.0	0.39	ug/L	1	LMM			2303766	11/17/23	0:49	SW5030C8260D
1,2,4-trimethylbenzene	1.0 U	2.0	1.0	0.58	ug/L	1	LMM			2303766	11/17/23	0:49	SW5030C8260D
sec-butylbenzene	1.0 U	2.0	1.0	0.44	ug/L	1	LMM			2303766	11/17/23	0:49	SW5030C8260D
1,3-dichlorobenzene	1.0 U	2.0	1.0	0.45	ug/L	1	LMM			2303766	11/17/23	0:49	SW5030C8260D
4-isopropyltoluene	1.0 U	2.0	1.0	0.47	ug/L	1	LMM			2303766	11/17/23	0:49	SW5030C8260D
1,4-dichlorobenzene	1.0 U	2.0	1.0	0.26	ug/L	1	LMM			2303766	11/17/23	0:49	SW5030C8260D
1,2-dichlorobenzene	1.0 U	2.0	1.0	0.39	ug/L	1	LMM			2303766	11/17/23	0:49	SW5030C8260D
n-butylbenzene	1.0 U	2.0	1.0	0.54	ug/L	1	LMM			2303766	11/17/23	0:49	SW5030C8260D
1,2-dibromo-3-chloropropane (DBCP)	1.5 U	2.0	1.5	0.91	ug/L	1	LMM			2303766	11/17/23	0:49	SW5030C8260D
1,3,5-trimethylbenzene	1.0 U	2.0	1.0	0.46	ug/L	1	LMM			2303766	11/17/23	0:49	SW5030C8260D
1,2,4-trichlorobenzene	1.0 U	2.0	1.0	0.79	ug/L	1	LMM			2303766	11/17/23	0:49	SW5030C8260D
hexachlorobutadiene	0.50 U	0.50	0.50	0.19	ug/L	1	LMM			2303766	11/17/23	0:49	SW5030C8260D
naphthalene	1.5 U	2.0	1.5	1.2	ug/L	1	LMM			2303766	11/17/23	0:49	SW5030C8260D
1,2,3-trichlorobenzene	1.0 U	2.0	1.0	0.93	ug/L	1	LMM			2303766	11/17/23	0:49	SW5030C8260D
Surrogate Recovery		Limits											
dibromofluoromethane SUR	94	78-114			%	1	LMM			2303766	11/17/23	0:49	SW5030C8260D
toluene-D8 SUR	100	88-110			%	1	LMM			2303766	11/17/23	0:49	SW5030C8260D
4-bromofluorobenzene SUR	102	86-115			%	1	LMM			2303766	11/17/23	0:49	SW5030C8260D

Project ID: Dow Salvage Yard 18001468
Job ID: 67839
Sample#: 67839-005
Sample ID: SY-BRMW3-145-155-110923
Matrix: Water
Sampled: 11/9/23 10:00

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
dichlorodifluoromethane	1.0 U	2.0	1.0	0.28	ug/L	1	LMM			2303766	11/17/23	1:14	SW5030C8260D
chloromethane	1.0 U	2.0	1.0	0.59	ug/L	1	LMM			2303766	11/17/23	1:14	SW5030C8260D
vinyl chloride	1.0 U	2.0	1.0	0.49	ug/L	1	LMM			2303766	11/17/23	1:14	SW5030C8260D
bromomethane	1.5 U	2.0	1.5	1.1	ug/L	1	LMM			2303766	11/17/23	1:14	SW5030C8260D
chloroethane	1.0 U	2.0	1.0	0.33	ug/L	1	LMM			2303766	11/17/23	1:14	SW5030C8260D
trichlorofluoromethane	1.0 U	2.0	1.0	0.34	ug/L	1	LMM			2303766	11/17/23	1:14	SW5030C8260D
diethyl ether	1.0 U	2.0	1.0	0.41	ug/L	1	LMM			2303766	11/17/23	1:14	SW5030C8260D
acetone	5.0 U	50	5.0	1.9	ug/L	1	LMM			2303766	11/17/23	1:14	SW5030C8260D
1,1-dichloroethene	0.50 U	1.0	0.50	0.35	ug/L	1	LMM			2303766	11/17/23	1:14	SW5030C8260D
methylene chloride	1.0 U	2.0	1.0	0.59	ug/L	1	LMM			2303766	11/17/23	1:14	SW5030C8260D
carbon disulfide	1.0 U	2.0	1.0	0.33	ug/L	1	LMM			2303766	11/17/23	1:14	SW5030C8260D
methyl t-butyl ether (MTBE)	1.0 U	2.0	1.0	0.30	ug/L	1	LMM			2303766	11/17/23	1:14	SW5030C8260D
trans-1,2-dichloroethene	1.0 U	2.0	1.0	0.46	ug/L	1	LMM			2303766	11/17/23	1:14	SW5030C8260D
ethyl t-butyl ether (ETBE)	1.0 U	2.0	1.0	0.24	ug/L	1	LMM			2303766	11/17/23	1:14	SW5030C8260D
1,1-dichloroethane	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303766	11/17/23	1:14	SW5030C8260D
t-butanol (TBA)	10 U	30	10	2.5	ug/L	1	LMM			2303766	11/17/23	1:14	SW5030C8260D
2-butanone (MEK)	5.0 U	10	5.0	0.67	ug/L	1	LMM			2303766	11/17/23	1:14	SW5030C8260D
2,2-dichloropropane	1.0 U	2.0	1.0	0.21	ug/L	1	LMM			2303766	11/17/23	1:14	SW5030C8260D
cis-1,2-dichloroethene	1.5 U	2.0	1.5	1.2	ug/L	1	LMM			2303766	11/17/23	1:14	SW5030C8260D
chloroform	1.5 U	2.0	1.5	1.4	ug/L	1	LMM			2303766	11/17/23	1:14	SW5030C8260D
bromochloromethane	1.0 U	2.0	1.0	0.22	ug/L	1	LMM			2303766	11/17/23	1:14	SW5030C8260D
tetrahydrofuran (THF)	2.2	2.0	1.5	0.75	ug/L	1	LMM			2303766	11/17/23	1:14	SW5030C8260D
1,1,1-trichloroethane	1.0 U	2.0	1.0	0.55	ug/L	1	LMM			2303766	11/17/23	1:14	SW5030C8260D
1,1-dichloropropene	1.0 U	2.0	1.0	0.26	ug/L	1	LMM			2303766	11/17/23	1:14	SW5030C8260D
t-amyl-methyl ether (TAME)	1.0 U	2.0	1.0	0.57	ug/L	1	LMM			2303766	11/17/23	1:14	SW5030C8260D
carbon tetrachloride	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303766	11/17/23	1:14	SW5030C8260D
1,2-dichloroethane	1.0 U	2.0	1.0	0.20	ug/L	1	LMM			2303766	11/17/23	1:14	SW5030C8260D
benzene	1.0 U	2.0	1.0	0.40	ug/L	1	LMM			2303766	11/17/23	1:14	SW5030C8260D
trichloroethene	1.0 U	2.0	1.0	0.53	ug/L	1	LMM			2303766	11/17/23	1:14	SW5030C8260D
1,2-dichloropropane	1.0 U	2.0	1.0	0.22	ug/L	1	LMM			2303766	11/17/23	1:14	SW5030C8260D
bromodichloromethane	0.50 U	0.60	0.50	0.38	ug/L	1	LMM			2303766	11/17/23	1:14	SW5030C8260D
1,4-dioxane	10 U	50	10	8.7	ug/L	1	LMM			2303766	11/17/23	1:14	SW5030C8260D
dibromomethane	1.0 U	2.0	1.0	0.23	ug/L	1	LMM			2303766	11/17/23	1:14	SW5030C8260D
4-methyl-2-pentanone (MIBK)	1.0 U	10	1.0	0.56	ug/L	1	LMM			2303766	11/17/23	1:14	SW5030C8260D
cis-1,3-dichloropropene	1.0 U	2.0	1.0	0.30	ug/L	1	LMM			2303766	11/17/23	1:14	SW5030C8260D
toluene	4.4	2.0	1.0	0.45	ug/L	1	LMM			2303766	11/17/23	1:14	SW5030C8260D
trans-1,3-dichloropropene	1.0 U	2.0	1.0	0.34	ug/L	1	LMM			2303766	11/17/23	1:14	SW5030C8260D
2-hexanone	1.0 U	10	1.0	0.72	ug/L	1	LMM			2303766	11/17/23	1:14	SW5030C8260D
1,1,2-trichloroethane	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303766	11/17/23	1:14	SW5030C8260D
1,3-dichloropropane	1.0 U	2.0	1.0	0.25	ug/L	1	LMM			2303766	11/17/23	1:14	SW5030C8260D
tetrachloroethene	1.0 U	2.0	1.0	0.76	ug/L	1	LMM			2303766	11/17/23	1:14	SW5030C8260D
dibromochloromethane	1.0 U	2.0	1.0	0.21	ug/L	1	LMM			2303766	11/17/23	1:14	SW5030C8260D

Project ID: Dow Salvage Yard 18001468
Job ID: 67839
Sample#: 67839-005
Sample ID: SY-BRMW3-145-155-110923
Matrix: Water
Sampled: 11/9/23 10:00

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
1,2-dibromoethane (EDB)	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303766	11/17/23	1:14	SW5030C8260D
chlorobenzene	1.0 U	2.0	1.0	0.25	ug/L	1	LMM			2303766	11/17/23	1:14	SW5030C8260D
1,1,1,2-tetrachloroethane	1.0 U	2.0	1.0	0.21	ug/L	1	LMM			2303766	11/17/23	1:14	SW5030C8260D
ethylbenzene	1.0 U	2.0	1.0	0.65	ug/L	1	LMM			2303766	11/17/23	1:14	SW5030C8260D
m&p-xylenes	1.5 U	2.0	1.5	1.4	ug/L	1	LMM			2303766	11/17/23	1:14	SW5030C8260D
o-xylene	1.0 U	2.0	1.0	0.55	ug/L	1	LMM			2303766	11/17/23	1:14	SW5030C8260D
styrene	1.0 U	2.0	1.0	0.57	ug/L	1	LMM			2303766	11/17/23	1:14	SW5030C8260D
bromoform	1.0 U	2.0	1.0	0.24	ug/L	1	LMM			2303766	11/17/23	1:14	SW5030C8260D
isopropylbenzene	1.0 U	2.0	1.0	0.65	ug/L	1	LMM			2303766	11/17/23	1:14	SW5030C8260D
1,1,2,2-tetrachloroethane	1.0 U	2.0	1.0	0.29	ug/L	1	LMM			2303766	11/17/23	1:14	SW5030C8260D
1,2,3-trichloropropane	1.0 U	2.0	1.0	0.55	ug/L	1	LMM			2303766	11/17/23	1:14	SW5030C8260D
n-propylbenzene	1.0 U	2.0	1.0	0.44	ug/L	1	LMM			2303766	11/17/23	1:14	SW5030C8260D
bromobenzene	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303766	11/17/23	1:14	SW5030C8260D
2-chlorotoluene	1.0 U	2.0	1.0	0.23	ug/L	1	LMM			2303766	11/17/23	1:14	SW5030C8260D
4-chlorotoluene	1.0 U	2.0	1.0	0.33	ug/L	1	LMM			2303766	11/17/23	1:14	SW5030C8260D
tert-butylbenzene	1.0 U	2.0	1.0	0.39	ug/L	1	LMM			2303766	11/17/23	1:14	SW5030C8260D
1,2,4-trimethylbenzene	1.0 U	2.0	1.0	0.58	ug/L	1	LMM			2303766	11/17/23	1:14	SW5030C8260D
sec-butylbenzene	1.0 U	2.0	1.0	0.44	ug/L	1	LMM			2303766	11/17/23	1:14	SW5030C8260D
1,3-dichlorobenzene	1.0 U	2.0	1.0	0.45	ug/L	1	LMM			2303766	11/17/23	1:14	SW5030C8260D
4-isopropyltoluene	1.0 U	2.0	1.0	0.47	ug/L	1	LMM			2303766	11/17/23	1:14	SW5030C8260D
1,4-dichlorobenzene	1.0 U	2.0	1.0	0.26	ug/L	1	LMM			2303766	11/17/23	1:14	SW5030C8260D
1,2-dichlorobenzene	1.0 U	2.0	1.0	0.39	ug/L	1	LMM			2303766	11/17/23	1:14	SW5030C8260D
n-butylbenzene	1.0 U	2.0	1.0	0.54	ug/L	1	LMM			2303766	11/17/23	1:14	SW5030C8260D
1,2-dibromo-3-chloropropane (DBCP)	1.5 U	2.0	1.5	0.91	ug/L	1	LMM			2303766	11/17/23	1:14	SW5030C8260D
1,3,5-trimethylbenzene	1.0 U	2.0	1.0	0.46	ug/L	1	LMM			2303766	11/17/23	1:14	SW5030C8260D
1,2,4-trichlorobenzene	1.0 U	2.0	1.0	0.79	ug/L	1	LMM			2303766	11/17/23	1:14	SW5030C8260D
hexachlorobutadiene	0.50 U	0.50	0.50	0.19	ug/L	1	LMM			2303766	11/17/23	1:14	SW5030C8260D
naphthalene	1.5 U	2.0	1.5	1.2	ug/L	1	LMM			2303766	11/17/23	1:14	SW5030C8260D
1,2,3-trichlorobenzene	1.0 U	2.0	1.0	0.93	ug/L	1	LMM			2303766	11/17/23	1:14	SW5030C8260D
Surrogate Recovery		Limits											
dibromofluoromethane SUR	95	78-114			%	1	LMM			2303766	11/17/23	1:14	SW5030C8260D
toluene-D8 SUR	99	88-110			%	1	LMM			2303766	11/17/23	1:14	SW5030C8260D
4-bromofluorobenzene SUR	101	86-115			%	1	LMM			2303766	11/17/23	1:14	SW5030C8260D

Project ID: Dow Salvage Yard 18001468
Job ID: 67839
Sample#: 67839-006
Sample ID: SY-BRMW3-287-297-110923
Matrix: Water
Sampled: 11/9/23 10:15

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
dichlorodifluoromethane	1.0 U	2.0	1.0	0.28	ug/L	1	LMM			2303766	11/17/23	1:39	SW5030C8260D
chloromethane	1.0 U	2.0	1.0	0.59	ug/L	1	LMM			2303766	11/17/23	1:39	SW5030C8260D
vinyl chloride	1.0 U	2.0	1.0	0.49	ug/L	1	LMM			2303766	11/17/23	1:39	SW5030C8260D
bromomethane	1.5 U	2.0	1.5	1.1	ug/L	1	LMM			2303766	11/17/23	1:39	SW5030C8260D
chloroethane	1.0 U	2.0	1.0	0.33	ug/L	1	LMM			2303766	11/17/23	1:39	SW5030C8260D
trichlorofluoromethane	1.0 U	2.0	1.0	0.34	ug/L	1	LMM			2303766	11/17/23	1:39	SW5030C8260D
diethyl ether	1.0 U	2.0	1.0	0.41	ug/L	1	LMM			2303766	11/17/23	1:39	SW5030C8260D
acetone	3.7 J	50	5.0	1.9	ug/L	1	LMM			2303766	11/17/23	1:39	SW5030C8260D
1,1-dichloroethene	0.50 U	1.0	0.50	0.35	ug/L	1	LMM			2303766	11/17/23	1:39	SW5030C8260D
methylene chloride	1.0 U	2.0	1.0	0.59	ug/L	1	LMM			2303766	11/17/23	1:39	SW5030C8260D
carbon disulfide	1.0 U	2.0	1.0	0.33	ug/L	1	LMM			2303766	11/17/23	1:39	SW5030C8260D
methyl t-butyl ether (MTBE)	1.0 U	2.0	1.0	0.30	ug/L	1	LMM			2303766	11/17/23	1:39	SW5030C8260D
trans-1,2-dichloroethene	1.0 U	2.0	1.0	0.46	ug/L	1	LMM			2303766	11/17/23	1:39	SW5030C8260D
ethyl t-butyl ether (ETBE)	1.0 U	2.0	1.0	0.24	ug/L	1	LMM			2303766	11/17/23	1:39	SW5030C8260D
1,1-dichloroethane	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303766	11/17/23	1:39	SW5030C8260D
t-butanol (TBA)	10 U	30	10	2.5	ug/L	1	LMM			2303766	11/17/23	1:39	SW5030C8260D
2-butanone (MEK)	5.0 U	10	5.0	0.67	ug/L	1	LMM			2303766	11/17/23	1:39	SW5030C8260D
2,2-dichloropropane	1.0 U	2.0	1.0	0.21	ug/L	1	LMM			2303766	11/17/23	1:39	SW5030C8260D
cis-1,2-dichloroethene	1.5 U	2.0	1.5	1.2	ug/L	1	LMM			2303766	11/17/23	1:39	SW5030C8260D
chloroform	1.7 J	2.0	1.5	1.4	ug/L	1	LMM			2303766	11/17/23	1:39	SW5030C8260D
bromochloromethane	1.0 U	2.0	1.0	0.22	ug/L	1	LMM			2303766	11/17/23	1:39	SW5030C8260D
tetrahydrofuran (THF)	1.7 J	2.0	1.5	0.75	ug/L	1	LMM			2303766	11/17/23	1:39	SW5030C8260D
1,1,1-trichloroethane	1.0 U	2.0	1.0	0.55	ug/L	1	LMM			2303766	11/17/23	1:39	SW5030C8260D
1,1-dichloropropene	1.0 U	2.0	1.0	0.26	ug/L	1	LMM			2303766	11/17/23	1:39	SW5030C8260D
t-amyl-methyl ether (TAME)	1.0 U	2.0	1.0	0.57	ug/L	1	LMM			2303766	11/17/23	1:39	SW5030C8260D
carbon tetrachloride	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303766	11/17/23	1:39	SW5030C8260D
1,2-dichloroethane	1.0 U	2.0	1.0	0.20	ug/L	1	LMM			2303766	11/17/23	1:39	SW5030C8260D
benzene	1.0 U	2.0	1.0	0.40	ug/L	1	LMM			2303766	11/17/23	1:39	SW5030C8260D
trichloroethene	1.0 U	2.0	1.0	0.53	ug/L	1	LMM			2303766	11/17/23	1:39	SW5030C8260D
1,2-dichloropropane	1.0 U	2.0	1.0	0.22	ug/L	1	LMM			2303766	11/17/23	1:39	SW5030C8260D
bromodichloromethane	0.50 U	0.60	0.50	0.38	ug/L	1	LMM			2303766	11/17/23	1:39	SW5030C8260D
1,4-dioxane	10 U	50	10	8.7	ug/L	1	LMM			2303766	11/17/23	1:39	SW5030C8260D
dibromomethane	1.0 U	2.0	1.0	0.23	ug/L	1	LMM			2303766	11/17/23	1:39	SW5030C8260D
4-methyl-2-pentanone (MIBK)	1.0 U	10	1.0	0.56	ug/L	1	LMM			2303766	11/17/23	1:39	SW5030C8260D
cis-1,3-dichloropropene	1.0 U	2.0	1.0	0.30	ug/L	1	LMM			2303766	11/17/23	1:39	SW5030C8260D
toluene	12	2.0	1.0	0.45	ug/L	1	LMM			2303766	11/17/23	1:39	SW5030C8260D
trans-1,3-dichloropropene	1.0 U	2.0	1.0	0.34	ug/L	1	LMM			2303766	11/17/23	1:39	SW5030C8260D
2-hexanone	1.0 U	10	1.0	0.72	ug/L	1	LMM			2303766	11/17/23	1:39	SW5030C8260D
1,1,2-trichloroethane	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303766	11/17/23	1:39	SW5030C8260D
1,3-dichloropropane	1.0 U	2.0	1.0	0.25	ug/L	1	LMM			2303766	11/17/23	1:39	SW5030C8260D
tetrachloroethene	1.0 U	2.0	1.0	0.76	ug/L	1	LMM			2303766	11/17/23	1:39	SW5030C8260D
dibromochloromethane	1.0 U	2.0	1.0	0.21	ug/L	1	LMM			2303766	11/17/23	1:39	SW5030C8260D

Project ID: Dow Salvage Yard 18001468
Job ID: 67839
Sample#: 67839-006
Sample ID: SY-BRMW3-287-297-110923
Matrix: Water
Sampled: 11/9/23 10:15

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
1,2-dibromoethane (EDB)	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303766	11/17/23	1:39	SW5030C8260D
chlorobenzene	1.0 U	2.0	1.0	0.25	ug/L	1	LMM			2303766	11/17/23	1:39	SW5030C8260D
1,1,1,2-tetrachloroethane	1.0 U	2.0	1.0	0.21	ug/L	1	LMM			2303766	11/17/23	1:39	SW5030C8260D
ethylbenzene	1.0 U	2.0	1.0	0.65	ug/L	1	LMM			2303766	11/17/23	1:39	SW5030C8260D
m&p-xylenes	1.5 U	2.0	1.5	1.4	ug/L	1	LMM			2303766	11/17/23	1:39	SW5030C8260D
o-xylene	1.0 U	2.0	1.0	0.55	ug/L	1	LMM			2303766	11/17/23	1:39	SW5030C8260D
styrene	1.0 U	2.0	1.0	0.57	ug/L	1	LMM			2303766	11/17/23	1:39	SW5030C8260D
bromoform	1.0 U	2.0	1.0	0.24	ug/L	1	LMM			2303766	11/17/23	1:39	SW5030C8260D
isopropylbenzene	1.0 U	2.0	1.0	0.65	ug/L	1	LMM			2303766	11/17/23	1:39	SW5030C8260D
1,1,2,2-tetrachloroethane	1.0 U	2.0	1.0	0.29	ug/L	1	LMM			2303766	11/17/23	1:39	SW5030C8260D
1,2,3-trichloropropane	1.0 U	2.0	1.0	0.55	ug/L	1	LMM			2303766	11/17/23	1:39	SW5030C8260D
n-propylbenzene	1.0 U	2.0	1.0	0.44	ug/L	1	LMM			2303766	11/17/23	1:39	SW5030C8260D
bromobenzene	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303766	11/17/23	1:39	SW5030C8260D
2-chlorotoluene	1.0 U	2.0	1.0	0.23	ug/L	1	LMM			2303766	11/17/23	1:39	SW5030C8260D
4-chlorotoluene	1.0 U	2.0	1.0	0.33	ug/L	1	LMM			2303766	11/17/23	1:39	SW5030C8260D
tert-butylbenzene	1.0 U	2.0	1.0	0.39	ug/L	1	LMM			2303766	11/17/23	1:39	SW5030C8260D
1,2,4-trimethylbenzene	1.0 U	2.0	1.0	0.58	ug/L	1	LMM			2303766	11/17/23	1:39	SW5030C8260D
sec-butylbenzene	1.0 U	2.0	1.0	0.44	ug/L	1	LMM			2303766	11/17/23	1:39	SW5030C8260D
1,3-dichlorobenzene	1.0 U	2.0	1.0	0.45	ug/L	1	LMM			2303766	11/17/23	1:39	SW5030C8260D
4-isopropyltoluene	1.0 U	2.0	1.0	0.47	ug/L	1	LMM			2303766	11/17/23	1:39	SW5030C8260D
1,4-dichlorobenzene	1.0 U	2.0	1.0	0.26	ug/L	1	LMM			2303766	11/17/23	1:39	SW5030C8260D
1,2-dichlorobenzene	1.0 U	2.0	1.0	0.39	ug/L	1	LMM			2303766	11/17/23	1:39	SW5030C8260D
n-butylbenzene	1.0 U	2.0	1.0	0.54	ug/L	1	LMM			2303766	11/17/23	1:39	SW5030C8260D
1,2-dibromo-3-chloropropane (DBCP)	1.5 U	2.0	1.5	0.91	ug/L	1	LMM			2303766	11/17/23	1:39	SW5030C8260D
1,3,5-trimethylbenzene	1.0 U	2.0	1.0	0.46	ug/L	1	LMM			2303766	11/17/23	1:39	SW5030C8260D
1,2,4-trichlorobenzene	1.0 U	2.0	1.0	0.79	ug/L	1	LMM			2303766	11/17/23	1:39	SW5030C8260D
hexachlorobutadiene	0.50 U	0.50	0.50	0.19	ug/L	1	LMM			2303766	11/17/23	1:39	SW5030C8260D
naphthalene	1.5 U	2.0	1.5	1.2	ug/L	1	LMM			2303766	11/17/23	1:39	SW5030C8260D
1,2,3-trichlorobenzene	1.0 U	2.0	1.0	0.93	ug/L	1	LMM			2303766	11/17/23	1:39	SW5030C8260D
Surrogate Recovery		Limits											
dibromofluoromethane SUR	98	78-114			%	1	LMM			2303766	11/17/23	1:39	SW5030C8260D
toluene-D8 SUR	99	88-110			%	1	LMM			2303766	11/17/23	1:39	SW5030C8260D
4-bromofluorobenzene SUR	100	86-115			%	1	LMM			2303766	11/17/23	1:39	SW5030C8260D

Project ID: Dow Salvage Yard 18001468
Job ID: 67839
Sample#: 67839-007
Sample ID: SY-BRMW4-291-301-110923
Matrix: Water
Sampled: 11/9/23 11:00

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
dichlorodifluoromethane	1.0 U	2.0	1.0	0.28	ug/L	1	LMM			2303766	11/17/23	2:03	SW5030C8260D
chloromethane	1.0 U	2.0	1.0	0.59	ug/L	1	LMM			2303766	11/17/23	2:03	SW5030C8260D
vinyl chloride	1.0 U	2.0	1.0	0.49	ug/L	1	LMM			2303766	11/17/23	2:03	SW5030C8260D
bromomethane	1.5 U	2.0	1.5	1.1	ug/L	1	LMM			2303766	11/17/23	2:03	SW5030C8260D
chloroethane	1.0 U	2.0	1.0	0.33	ug/L	1	LMM			2303766	11/17/23	2:03	SW5030C8260D
trichlorofluoromethane	1.0 U	2.0	1.0	0.34	ug/L	1	LMM			2303766	11/17/23	2:03	SW5030C8260D
diethyl ether	1.0 U	2.0	1.0	0.41	ug/L	1	LMM			2303766	11/17/23	2:03	SW5030C8260D
acetone	5.0 U	50	5.0	1.9	ug/L	1	LMM			2303766	11/17/23	2:03	SW5030C8260D
1,1-dichloroethene	0.50 U	1.0	0.50	0.35	ug/L	1	LMM			2303766	11/17/23	2:03	SW5030C8260D
methylene chloride	1.0 U	2.0	1.0	0.59	ug/L	1	LMM			2303766	11/17/23	2:03	SW5030C8260D
carbon disulfide	1.0 U	2.0	1.0	0.33	ug/L	1	LMM			2303766	11/17/23	2:03	SW5030C8260D
methyl t-butyl ether (MTBE)	1.0 U	2.0	1.0	0.30	ug/L	1	LMM			2303766	11/17/23	2:03	SW5030C8260D
trans-1,2-dichloroethene	1.0 U	2.0	1.0	0.46	ug/L	1	LMM			2303766	11/17/23	2:03	SW5030C8260D
ethyl t-butyl ether (ETBE)	1.0 U	2.0	1.0	0.24	ug/L	1	LMM			2303766	11/17/23	2:03	SW5030C8260D
1,1-dichloroethane	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303766	11/17/23	2:03	SW5030C8260D
t-butanol (TBA)	10 U	30	10	2.5	ug/L	1	LMM			2303766	11/17/23	2:03	SW5030C8260D
2-butanone (MEK)	2.7 J	10	5.0	0.67	ug/L	1	LMM			2303766	11/17/23	2:03	SW5030C8260D
2,2-dichloropropane	1.0 U	2.0	1.0	0.21	ug/L	1	LMM			2303766	11/17/23	2:03	SW5030C8260D
cis-1,2-dichloroethene	1.5 U	2.0	1.5	1.2	ug/L	1	LMM			2303766	11/17/23	2:03	SW5030C8260D
chloroform	1.5 U	2.0	1.5	1.4	ug/L	1	LMM			2303766	11/17/23	2:03	SW5030C8260D
bromochloromethane	1.0 U	2.0	1.0	0.22	ug/L	1	LMM			2303766	11/17/23	2:03	SW5030C8260D
tetrahydrofuran (THF)	4.2	2.0	1.5	0.75	ug/L	1	LMM			2303766	11/17/23	2:03	SW5030C8260D
1,1,1-trichloroethane	1.0 U	2.0	1.0	0.55	ug/L	1	LMM			2303766	11/17/23	2:03	SW5030C8260D
1,1-dichloropropene	1.0 U	2.0	1.0	0.26	ug/L	1	LMM			2303766	11/17/23	2:03	SW5030C8260D
t-amyl-methyl ether (TAME)	1.0 U	2.0	1.0	0.57	ug/L	1	LMM			2303766	11/17/23	2:03	SW5030C8260D
carbon tetrachloride	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303766	11/17/23	2:03	SW5030C8260D
1,2-dichloroethane	1.0 U	2.0	1.0	0.20	ug/L	1	LMM			2303766	11/17/23	2:03	SW5030C8260D
benzene	1.0 U	2.0	1.0	0.40	ug/L	1	LMM			2303766	11/17/23	2:03	SW5030C8260D
trichloroethene	1.0 U	2.0	1.0	0.53	ug/L	1	LMM			2303766	11/17/23	2:03	SW5030C8260D
1,2-dichloropropane	1.0 U	2.0	1.0	0.22	ug/L	1	LMM			2303766	11/17/23	2:03	SW5030C8260D
bromodichloromethane	0.50 U	0.60	0.50	0.38	ug/L	1	LMM			2303766	11/17/23	2:03	SW5030C8260D
1,4-dioxane	10 U	50	10	8.7	ug/L	1	LMM			2303766	11/17/23	2:03	SW5030C8260D
dibromomethane	1.0 U	2.0	1.0	0.23	ug/L	1	LMM			2303766	11/17/23	2:03	SW5030C8260D
4-methyl-2-pentanone (MIBK)	1.0 U	10	1.0	0.56	ug/L	1	LMM			2303766	11/17/23	2:03	SW5030C8260D
cis-1,3-dichloropropene	1.0 U	2.0	1.0	0.30	ug/L	1	LMM			2303766	11/17/23	2:03	SW5030C8260D
toluene	9.8	2.0	1.0	0.45	ug/L	1	LMM			2303766	11/17/23	2:03	SW5030C8260D
trans-1,3-dichloropropene	1.0 U	2.0	1.0	0.34	ug/L	1	LMM			2303766	11/17/23	2:03	SW5030C8260D
2-hexanone	1.0 U	10	1.0	0.72	ug/L	1	LMM			2303766	11/17/23	2:03	SW5030C8260D
1,1,2-trichloroethane	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303766	11/17/23	2:03	SW5030C8260D
1,3-dichloropropane	1.0 U	2.0	1.0	0.25	ug/L	1	LMM			2303766	11/17/23	2:03	SW5030C8260D
tetrachloroethene	1.0 U	2.0	1.0	0.76	ug/L	1	LMM			2303766	11/17/23	2:03	SW5030C8260D
dibromochloromethane	1.0 U	2.0	1.0	0.21	ug/L	1	LMM			2303766	11/17/23	2:03	SW5030C8260D

Project ID: Dow Salvage Yard 18001468
Job ID: 67839
Sample#: 67839-007
Sample ID: SY-BRMW4-291-301-110923
Matrix: Water
Sampled: 11/9/23 11:00

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
1,2-dibromoethane (EDB)	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303766	11/17/23	2:03	SW5030C8260D
chlorobenzene	1.0 U	2.0	1.0	0.25	ug/L	1	LMM			2303766	11/17/23	2:03	SW5030C8260D
1,1,1,2-tetrachloroethane	1.0 U	2.0	1.0	0.21	ug/L	1	LMM			2303766	11/17/23	2:03	SW5030C8260D
ethylbenzene	1.0 U	2.0	1.0	0.65	ug/L	1	LMM			2303766	11/17/23	2:03	SW5030C8260D
m&p-xylenes	1.5 U	2.0	1.5	1.4	ug/L	1	LMM			2303766	11/17/23	2:03	SW5030C8260D
o-xylene	1.0 U	2.0	1.0	0.55	ug/L	1	LMM			2303766	11/17/23	2:03	SW5030C8260D
styrene	1.0 U	2.0	1.0	0.57	ug/L	1	LMM			2303766	11/17/23	2:03	SW5030C8260D
bromoform	1.0 U	2.0	1.0	0.24	ug/L	1	LMM			2303766	11/17/23	2:03	SW5030C8260D
isopropylbenzene	1.0 U	2.0	1.0	0.65	ug/L	1	LMM			2303766	11/17/23	2:03	SW5030C8260D
1,1,2,2-tetrachloroethane	1.0 U	2.0	1.0	0.29	ug/L	1	LMM			2303766	11/17/23	2:03	SW5030C8260D
1,2,3-trichloropropane	1.0 U	2.0	1.0	0.55	ug/L	1	LMM			2303766	11/17/23	2:03	SW5030C8260D
n-propylbenzene	1.0 U	2.0	1.0	0.44	ug/L	1	LMM			2303766	11/17/23	2:03	SW5030C8260D
bromobenzene	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303766	11/17/23	2:03	SW5030C8260D
2-chlorotoluene	1.0 U	2.0	1.0	0.23	ug/L	1	LMM			2303766	11/17/23	2:03	SW5030C8260D
4-chlorotoluene	1.0 U	2.0	1.0	0.33	ug/L	1	LMM			2303766	11/17/23	2:03	SW5030C8260D
tert-butylbenzene	1.0 U	2.0	1.0	0.39	ug/L	1	LMM			2303766	11/17/23	2:03	SW5030C8260D
1,2,4-trimethylbenzene	1.0 U	2.0	1.0	0.58	ug/L	1	LMM			2303766	11/17/23	2:03	SW5030C8260D
sec-butylbenzene	1.0 U	2.0	1.0	0.44	ug/L	1	LMM			2303766	11/17/23	2:03	SW5030C8260D
1,3-dichlorobenzene	1.0 U	2.0	1.0	0.45	ug/L	1	LMM			2303766	11/17/23	2:03	SW5030C8260D
4-isopropyltoluene	1.0 U	2.0	1.0	0.47	ug/L	1	LMM			2303766	11/17/23	2:03	SW5030C8260D
1,4-dichlorobenzene	1.0 U	2.0	1.0	0.26	ug/L	1	LMM			2303766	11/17/23	2:03	SW5030C8260D
1,2-dichlorobenzene	1.0 U	2.0	1.0	0.39	ug/L	1	LMM			2303766	11/17/23	2:03	SW5030C8260D
n-butylbenzene	1.0 U	2.0	1.0	0.54	ug/L	1	LMM			2303766	11/17/23	2:03	SW5030C8260D
1,2-dibromo-3-chloropropane (DBCP)	1.5 U	2.0	1.5	0.91	ug/L	1	LMM			2303766	11/17/23	2:03	SW5030C8260D
1,3,5-trimethylbenzene	1.0 U	2.0	1.0	0.46	ug/L	1	LMM			2303766	11/17/23	2:03	SW5030C8260D
1,2,4-trichlorobenzene	1.0 U	2.0	1.0	0.79	ug/L	1	LMM			2303766	11/17/23	2:03	SW5030C8260D
hexachlorobutadiene	0.50 U	0.50	0.50	0.19	ug/L	1	LMM			2303766	11/17/23	2:03	SW5030C8260D
naphthalene	1.5 U	2.0	1.5	1.2	ug/L	1	LMM			2303766	11/17/23	2:03	SW5030C8260D
1,2,3-trichlorobenzene	1.0 U	2.0	1.0	0.93	ug/L	1	LMM			2303766	11/17/23	2:03	SW5030C8260D
Surrogate Recovery		Limits											
dibromofluoromethane SUR	97	78-114			%	1	LMM			2303766	11/17/23	2:03	SW5030C8260D
toluene-D8 SUR	100	88-110			%	1	LMM			2303766	11/17/23	2:03	SW5030C8260D
4-bromofluorobenzene SUR	99	86-115			%	1	LMM			2303766	11/17/23	2:03	SW5030C8260D

Project ID: Dow Salvage Yard 18001468
Job ID: 67839
Sample#: 67839-008
Sample ID: SY-BRMW1-42-52-110923
Matrix: Water
Sampled: 11/9/23 11:45

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
dichlorodifluoromethane	1.0 U	2.0	1.0	0.28	ug/L	1	LMM			2303766	11/17/23	2:28	SW5030C8260D
chloromethane	1.0 U	2.0	1.0	0.59	ug/L	1	LMM			2303766	11/17/23	2:28	SW5030C8260D
vinyl chloride	1.0 U	2.0	1.0	0.49	ug/L	1	LMM			2303766	11/17/23	2:28	SW5030C8260D
bromomethane	1.5 U	2.0	1.5	1.1	ug/L	1	LMM			2303766	11/17/23	2:28	SW5030C8260D
chloroethane	1.0 U	2.0	1.0	0.33	ug/L	1	LMM			2303766	11/17/23	2:28	SW5030C8260D
trichlorofluoromethane	1.0 U	2.0	1.0	0.34	ug/L	1	LMM			2303766	11/17/23	2:28	SW5030C8260D
diethyl ether	1.0 U	2.0	1.0	0.41	ug/L	1	LMM			2303766	11/17/23	2:28	SW5030C8260D
acetone	4.9 J	50	5.0	1.9	ug/L	1	LMM			2303766	11/17/23	2:28	SW5030C8260D
1,1-dichloroethene	0.50 U	1.0	0.50	0.35	ug/L	1	LMM			2303766	11/17/23	2:28	SW5030C8260D
methylene chloride	1.0 U	2.0	1.0	0.59	ug/L	1	LMM			2303766	11/17/23	2:28	SW5030C8260D
carbon disulfide	1.0 U	2.0	1.0	0.33	ug/L	1	LMM			2303766	11/17/23	2:28	SW5030C8260D
methyl t-butyl ether (MTBE)	1.0 U	2.0	1.0	0.30	ug/L	1	LMM			2303766	11/17/23	2:28	SW5030C8260D
trans-1,2-dichloroethene	1.0 U	2.0	1.0	0.46	ug/L	1	LMM			2303766	11/17/23	2:28	SW5030C8260D
ethyl t-butyl ether (ETBE)	1.0 U	2.0	1.0	0.24	ug/L	1	LMM			2303766	11/17/23	2:28	SW5030C8260D
1,1-dichloroethane	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303766	11/17/23	2:28	SW5030C8260D
t-butanol (TBA)	10 U	30	10	2.5	ug/L	1	LMM			2303766	11/17/23	2:28	SW5030C8260D
2-butanone (MEK)	9.1 J	10	5.0	0.67	ug/L	1	LMM			2303766	11/17/23	2:28	SW5030C8260D
2,2-dichloropropane	1.0 U	2.0	1.0	0.21	ug/L	1	LMM			2303766	11/17/23	2:28	SW5030C8260D
cis-1,2-dichloroethene	1.5 U	2.0	1.5	1.2	ug/L	1	LMM			2303766	11/17/23	2:28	SW5030C8260D
chloroform	1.5 U	2.0	1.5	1.4	ug/L	1	LMM			2303766	11/17/23	2:28	SW5030C8260D
bromochloromethane	1.0 U	2.0	1.0	0.22	ug/L	1	LMM			2303766	11/17/23	2:28	SW5030C8260D
tetrahydrofuran (THF)	4.2	2.0	1.5	0.75	ug/L	1	LMM			2303766	11/17/23	2:28	SW5030C8260D
1,1,1-trichloroethane	1.0 U	2.0	1.0	0.55	ug/L	1	LMM			2303766	11/17/23	2:28	SW5030C8260D
1,1-dichloropropene	1.0 U	2.0	1.0	0.26	ug/L	1	LMM			2303766	11/17/23	2:28	SW5030C8260D
t-amyl-methyl ether (TAME)	1.0 U	2.0	1.0	0.57	ug/L	1	LMM			2303766	11/17/23	2:28	SW5030C8260D
carbon tetrachloride	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303766	11/17/23	2:28	SW5030C8260D
1,2-dichloroethane	1.0 U	2.0	1.0	0.20	ug/L	1	LMM			2303766	11/17/23	2:28	SW5030C8260D
benzene	1.0 U	2.0	1.0	0.40	ug/L	1	LMM			2303766	11/17/23	2:28	SW5030C8260D
trichloroethene	1.0 U	2.0	1.0	0.53	ug/L	1	LMM			2303766	11/17/23	2:28	SW5030C8260D
1,2-dichloropropane	1.0 U	2.0	1.0	0.22	ug/L	1	LMM			2303766	11/17/23	2:28	SW5030C8260D
bromodichloromethane	0.50 U	0.60	0.50	0.38	ug/L	1	LMM			2303766	11/17/23	2:28	SW5030C8260D
1,4-dioxane	10 U	50	10	8.7	ug/L	1	LMM			2303766	11/17/23	2:28	SW5030C8260D
dibromomethane	1.0 U	2.0	1.0	0.23	ug/L	1	LMM			2303766	11/17/23	2:28	SW5030C8260D
4-methyl-2-pentanone (MIBK)	1.0 U	10	1.0	0.56	ug/L	1	LMM			2303766	11/17/23	2:28	SW5030C8260D
cis-1,3-dichloropropene	1.0 U	2.0	1.0	0.30	ug/L	1	LMM			2303766	11/17/23	2:28	SW5030C8260D
toluene	11	2.0	1.0	0.45	ug/L	1	LMM			2303766	11/17/23	2:28	SW5030C8260D
trans-1,3-dichloropropene	1.0 U	2.0	1.0	0.34	ug/L	1	LMM			2303766	11/17/23	2:28	SW5030C8260D
2-hexanone	1.0 U	10	1.0	0.72	ug/L	1	LMM			2303766	11/17/23	2:28	SW5030C8260D
1,1,2-trichloroethane	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303766	11/17/23	2:28	SW5030C8260D
1,3-dichloropropane	1.0 U	2.0	1.0	0.25	ug/L	1	LMM			2303766	11/17/23	2:28	SW5030C8260D
tetrachloroethene	1.0 U	2.0	1.0	0.76	ug/L	1	LMM			2303766	11/17/23	2:28	SW5030C8260D
dibromochloromethane	1.0 U	2.0	1.0	0.21	ug/L	1	LMM			2303766	11/17/23	2:28	SW5030C8260D

Project ID: Dow Salvage Yard 18001468
Job ID: 67839
Sample#: 67839-008
Sample ID: SY-BRMW1-42-52-110923
Matrix: Water
Sampled: 11/9/23 11:45

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
1,2-dibromoethane (EDB)	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303766	11/17/23	2:28	SW5030C8260D
chlorobenzene	1.0 U	2.0	1.0	0.25	ug/L	1	LMM			2303766	11/17/23	2:28	SW5030C8260D
1,1,1,2-tetrachloroethane	1.0 U	2.0	1.0	0.21	ug/L	1	LMM			2303766	11/17/23	2:28	SW5030C8260D
ethylbenzene	1.0 U	2.0	1.0	0.65	ug/L	1	LMM			2303766	11/17/23	2:28	SW5030C8260D
m&p-xylenes	1.5 U	2.0	1.5	1.4	ug/L	1	LMM			2303766	11/17/23	2:28	SW5030C8260D
o-xylene	1.0 U	2.0	1.0	0.55	ug/L	1	LMM			2303766	11/17/23	2:28	SW5030C8260D
styrene	1.0 U	2.0	1.0	0.57	ug/L	1	LMM			2303766	11/17/23	2:28	SW5030C8260D
bromoform	1.0 U	2.0	1.0	0.24	ug/L	1	LMM			2303766	11/17/23	2:28	SW5030C8260D
isopropylbenzene	1.0 U	2.0	1.0	0.65	ug/L	1	LMM			2303766	11/17/23	2:28	SW5030C8260D
1,1,2,2-tetrachloroethane	1.0 U	2.0	1.0	0.29	ug/L	1	LMM			2303766	11/17/23	2:28	SW5030C8260D
1,2,3-trichloropropane	1.0 U	2.0	1.0	0.55	ug/L	1	LMM			2303766	11/17/23	2:28	SW5030C8260D
n-propylbenzene	1.0 U	2.0	1.0	0.44	ug/L	1	LMM			2303766	11/17/23	2:28	SW5030C8260D
bromobenzene	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303766	11/17/23	2:28	SW5030C8260D
2-chlorotoluene	1.0 U	2.0	1.0	0.23	ug/L	1	LMM			2303766	11/17/23	2:28	SW5030C8260D
4-chlorotoluene	1.0 U	2.0	1.0	0.33	ug/L	1	LMM			2303766	11/17/23	2:28	SW5030C8260D
tert-butylbenzene	1.0 U	2.0	1.0	0.39	ug/L	1	LMM			2303766	11/17/23	2:28	SW5030C8260D
1,2,4-trimethylbenzene	1.0 U	2.0	1.0	0.58	ug/L	1	LMM			2303766	11/17/23	2:28	SW5030C8260D
sec-butylbenzene	1.0 U	2.0	1.0	0.44	ug/L	1	LMM			2303766	11/17/23	2:28	SW5030C8260D
1,3-dichlorobenzene	1.0 U	2.0	1.0	0.45	ug/L	1	LMM			2303766	11/17/23	2:28	SW5030C8260D
4-isopropyltoluene	1.0 U	2.0	1.0	0.47	ug/L	1	LMM			2303766	11/17/23	2:28	SW5030C8260D
1,4-dichlorobenzene	1.0 U	2.0	1.0	0.26	ug/L	1	LMM			2303766	11/17/23	2:28	SW5030C8260D
1,2-dichlorobenzene	1.0 U	2.0	1.0	0.39	ug/L	1	LMM			2303766	11/17/23	2:28	SW5030C8260D
n-butylbenzene	1.0 U	2.0	1.0	0.54	ug/L	1	LMM			2303766	11/17/23	2:28	SW5030C8260D
1,2-dibromo-3-chloropropane (DBCP)	1.5 U	2.0	1.5	0.91	ug/L	1	LMM			2303766	11/17/23	2:28	SW5030C8260D
1,3,5-trimethylbenzene	1.0 U	2.0	1.0	0.46	ug/L	1	LMM			2303766	11/17/23	2:28	SW5030C8260D
1,2,4-trichlorobenzene	1.0 U	2.0	1.0	0.79	ug/L	1	LMM			2303766	11/17/23	2:28	SW5030C8260D
hexachlorobutadiene	0.50 U	0.50	0.50	0.19	ug/L	1	LMM			2303766	11/17/23	2:28	SW5030C8260D
naphthalene	1.5 U	2.0	1.5	1.2	ug/L	1	LMM			2303766	11/17/23	2:28	SW5030C8260D
1,2,3-trichlorobenzene	1.0 U	2.0	1.0	0.93	ug/L	1	LMM			2303766	11/17/23	2:28	SW5030C8260D
Surrogate Recovery		Limits											
dibromofluoromethane SUR	95	78-114			%	1	LMM			2303766	11/17/23	2:28	SW5030C8260D
toluene-D8 SUR	99	88-110			%	1	LMM			2303766	11/17/23	2:28	SW5030C8260D
4-bromofluorobenzene SUR	99	86-115			%	1	LMM			2303766	11/17/23	2:28	SW5030C8260D

Project ID: Dow Salvage Yard 18001468
Job ID: 67839
Sample#: 67839-009
Sample ID: SY-BRMW1-150-157-110923
Matrix: Water
Sampled: 11/9/23 12:40

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
dichlorodifluoromethane	1.0 U	2.0	1.0	0.28	ug/L	1	LMM			2303766	11/17/23	2:53	SW5030C8260D
chloromethane	1.0 U	2.0	1.0	0.59	ug/L	1	LMM			2303766	11/17/23	2:53	SW5030C8260D
vinyl chloride	1.0 U	2.0	1.0	0.49	ug/L	1	LMM			2303766	11/17/23	2:53	SW5030C8260D
bromomethane	1.5 U	2.0	1.5	1.1	ug/L	1	LMM			2303766	11/17/23	2:53	SW5030C8260D
chloroethane	1.0 U	2.0	1.0	0.33	ug/L	1	LMM			2303766	11/17/23	2:53	SW5030C8260D
trichlorofluoromethane	1.0 U	2.0	1.0	0.34	ug/L	1	LMM			2303766	11/17/23	2:53	SW5030C8260D
diethyl ether	1.0 U	2.0	1.0	0.41	ug/L	1	LMM			2303766	11/17/23	2:53	SW5030C8260D
acetone	5.0 U	50	5.0	1.9	ug/L	1	LMM			2303766	11/17/23	2:53	SW5030C8260D
1,1-dichloroethene	0.50 U	1.0	0.50	0.35	ug/L	1	LMM			2303766	11/17/23	2:53	SW5030C8260D
methylene chloride	1.0 U	2.0	1.0	0.59	ug/L	1	LMM			2303766	11/17/23	2:53	SW5030C8260D
carbon disulfide	1.0 U	2.0	1.0	0.33	ug/L	1	LMM			2303766	11/17/23	2:53	SW5030C8260D
methyl t-butyl ether (MTBE)	1.0 U	2.0	1.0	0.30	ug/L	1	LMM			2303766	11/17/23	2:53	SW5030C8260D
trans-1,2-dichloroethene	1.0 U	2.0	1.0	0.46	ug/L	1	LMM			2303766	11/17/23	2:53	SW5030C8260D
ethyl t-butyl ether (ETBE)	1.0 U	2.0	1.0	0.24	ug/L	1	LMM			2303766	11/17/23	2:53	SW5030C8260D
1,1-dichloroethane	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303766	11/17/23	2:53	SW5030C8260D
t-butanol (TBA)	10 U	30	10	2.5	ug/L	1	LMM			2303766	11/17/23	2:53	SW5030C8260D
2-butanone (MEK)	3.8 J	10	5.0	0.67	ug/L	1	LMM			2303766	11/17/23	2:53	SW5030C8260D
2,2-dichloropropane	1.0 U	2.0	1.0	0.21	ug/L	1	LMM			2303766	11/17/23	2:53	SW5030C8260D
cis-1,2-dichloroethene	1.5 U	2.0	1.5	1.2	ug/L	1	LMM			2303766	11/17/23	2:53	SW5030C8260D
chloroform	1.5 U	2.0	1.5	1.4	ug/L	1	LMM			2303766	11/17/23	2:53	SW5030C8260D
bromochloromethane	1.0 U	2.0	1.0	0.22	ug/L	1	LMM			2303766	11/17/23	2:53	SW5030C8260D
tetrahydrofuran (THF)	5.0	2.0	1.5	0.75	ug/L	1	LMM			2303766	11/17/23	2:53	SW5030C8260D
1,1,1-trichloroethane	1.0 U	2.0	1.0	0.55	ug/L	1	LMM			2303766	11/17/23	2:53	SW5030C8260D
1,1-dichloropropene	1.0 U	2.0	1.0	0.26	ug/L	1	LMM			2303766	11/17/23	2:53	SW5030C8260D
t-amyl-methyl ether (TAME)	1.0 U	2.0	1.0	0.57	ug/L	1	LMM			2303766	11/17/23	2:53	SW5030C8260D
carbon tetrachloride	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303766	11/17/23	2:53	SW5030C8260D
1,2-dichloroethane	1.0 U	2.0	1.0	0.20	ug/L	1	LMM			2303766	11/17/23	2:53	SW5030C8260D
benzene	1.0 U	2.0	1.0	0.40	ug/L	1	LMM			2303766	11/17/23	2:53	SW5030C8260D
trichloroethene	0.70 J	2.0	1.0	0.53	ug/L	1	LMM			2303766	11/17/23	2:53	SW5030C8260D
1,2-dichloropropane	1.0 U	2.0	1.0	0.22	ug/L	1	LMM			2303766	11/17/23	2:53	SW5030C8260D
bromodichloromethane	0.50 U	0.60	0.50	0.38	ug/L	1	LMM			2303766	11/17/23	2:53	SW5030C8260D
1,4-dioxane	10 U	50	10	8.7	ug/L	1	LMM			2303766	11/17/23	2:53	SW5030C8260D
dibromomethane	1.0 U	2.0	1.0	0.23	ug/L	1	LMM			2303766	11/17/23	2:53	SW5030C8260D
4-methyl-2-pentanone (MIBK)	1.0 U	10	1.0	0.56	ug/L	1	LMM			2303766	11/17/23	2:53	SW5030C8260D
cis-1,3-dichloropropene	1.0 U	2.0	1.0	0.30	ug/L	1	LMM			2303766	11/17/23	2:53	SW5030C8260D
toluene	2.9	2.0	1.0	0.45	ug/L	1	LMM			2303766	11/17/23	2:53	SW5030C8260D
trans-1,3-dichloropropene	1.0 U	2.0	1.0	0.34	ug/L	1	LMM			2303766	11/17/23	2:53	SW5030C8260D
2-hexanone	1.0 U	10	1.0	0.72	ug/L	1	LMM			2303766	11/17/23	2:53	SW5030C8260D
1,1,2-trichloroethane	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303766	11/17/23	2:53	SW5030C8260D
1,3-dichloropropane	1.0 U	2.0	1.0	0.25	ug/L	1	LMM			2303766	11/17/23	2:53	SW5030C8260D
tetrachloroethene	1.0 U	2.0	1.0	0.76	ug/L	1	LMM			2303766	11/17/23	2:53	SW5030C8260D
dibromochloromethane	1.0 U	2.0	1.0	0.21	ug/L	1	LMM			2303766	11/17/23	2:53	SW5030C8260D

Project ID: Dow Salvage Yard 18001468
Job ID: 67839
Sample#: 67839-009
Sample ID: SY-BRMW1-150-157-110923
Matrix: Water
Sampled: 11/9/23 12:40

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
1,2-dibromoethane (EDB)	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303766	11/17/23	2:53	SW5030C8260D
chlorobenzene	1.0 U	2.0	1.0	0.25	ug/L	1	LMM			2303766	11/17/23	2:53	SW5030C8260D
1,1,1,2-tetrachloroethane	1.0 U	2.0	1.0	0.21	ug/L	1	LMM			2303766	11/17/23	2:53	SW5030C8260D
ethylbenzene	1.0 U	2.0	1.0	0.65	ug/L	1	LMM			2303766	11/17/23	2:53	SW5030C8260D
m&p-xylenes	1.5 U	2.0	1.5	1.4	ug/L	1	LMM			2303766	11/17/23	2:53	SW5030C8260D
o-xylene	1.0 U	2.0	1.0	0.55	ug/L	1	LMM			2303766	11/17/23	2:53	SW5030C8260D
styrene	1.0 U	2.0	1.0	0.57	ug/L	1	LMM			2303766	11/17/23	2:53	SW5030C8260D
bromoform	1.0 U	2.0	1.0	0.24	ug/L	1	LMM			2303766	11/17/23	2:53	SW5030C8260D
isopropylbenzene	1.0 U	2.0	1.0	0.65	ug/L	1	LMM			2303766	11/17/23	2:53	SW5030C8260D
1,1,2,2-tetrachloroethane	1.0 U	2.0	1.0	0.29	ug/L	1	LMM			2303766	11/17/23	2:53	SW5030C8260D
1,2,3-trichloropropane	1.0 U	2.0	1.0	0.55	ug/L	1	LMM			2303766	11/17/23	2:53	SW5030C8260D
n-propylbenzene	1.0 U	2.0	1.0	0.44	ug/L	1	LMM			2303766	11/17/23	2:53	SW5030C8260D
bromobenzene	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303766	11/17/23	2:53	SW5030C8260D
2-chlorotoluene	1.0 U	2.0	1.0	0.23	ug/L	1	LMM			2303766	11/17/23	2:53	SW5030C8260D
4-chlorotoluene	1.0 U	2.0	1.0	0.33	ug/L	1	LMM			2303766	11/17/23	2:53	SW5030C8260D
tert-butylbenzene	1.0 U	2.0	1.0	0.39	ug/L	1	LMM			2303766	11/17/23	2:53	SW5030C8260D
1,2,4-trimethylbenzene	1.0 U	2.0	1.0	0.58	ug/L	1	LMM			2303766	11/17/23	2:53	SW5030C8260D
sec-butylbenzene	1.0 U	2.0	1.0	0.44	ug/L	1	LMM			2303766	11/17/23	2:53	SW5030C8260D
1,3-dichlorobenzene	1.0 U	2.0	1.0	0.45	ug/L	1	LMM			2303766	11/17/23	2:53	SW5030C8260D
4-isopropyltoluene	1.0 U	2.0	1.0	0.47	ug/L	1	LMM			2303766	11/17/23	2:53	SW5030C8260D
1,4-dichlorobenzene	1.0 U	2.0	1.0	0.26	ug/L	1	LMM			2303766	11/17/23	2:53	SW5030C8260D
1,2-dichlorobenzene	1.0 U	2.0	1.0	0.39	ug/L	1	LMM			2303766	11/17/23	2:53	SW5030C8260D
n-butylbenzene	1.0 U	2.0	1.0	0.54	ug/L	1	LMM			2303766	11/17/23	2:53	SW5030C8260D
1,2-dibromo-3-chloropropane (DBCP)	1.5 U	2.0	1.5	0.91	ug/L	1	LMM			2303766	11/17/23	2:53	SW5030C8260D
1,3,5-trimethylbenzene	1.0 U	2.0	1.0	0.46	ug/L	1	LMM			2303766	11/17/23	2:53	SW5030C8260D
1,2,4-trichlorobenzene	1.0 U	2.0	1.0	0.79	ug/L	1	LMM			2303766	11/17/23	2:53	SW5030C8260D
hexachlorobutadiene	0.50 U	0.50	0.50	0.19	ug/L	1	LMM			2303766	11/17/23	2:53	SW5030C8260D
naphthalene	1.5 U	2.0	1.5	1.2	ug/L	1	LMM			2303766	11/17/23	2:53	SW5030C8260D
1,2,3-trichlorobenzene	1.0 U	2.0	1.0	0.93	ug/L	1	LMM			2303766	11/17/23	2:53	SW5030C8260D
Surrogate Recovery		Limits											
dibromofluoromethane SUR	96	78-114			%	1	LMM			2303766	11/17/23	2:53	SW5030C8260D
toluene-D8 SUR	100	88-110			%	1	LMM			2303766	11/17/23	2:53	SW5030C8260D
4-bromofluorobenzene SUR	98	86-115			%	1	LMM			2303766	11/17/23	2:53	SW5030C8260D

Project ID: Dow Salvage Yard 18001468
Job ID: 67839
Sample#: 67839-010
Sample ID: SY-BRMW1-65-75-110923
Matrix: Water
Sampled: 11/9/23 13:50

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
dichlorodifluoromethane	1.0 U	2.0	1.0	0.28	ug/L	1	LMM			2303766	11/17/23	3:17	SW5030C8260D
chloromethane	1.0 U	2.0	1.0	0.59	ug/L	1	LMM			2303766	11/17/23	3:17	SW5030C8260D
vinyl chloride	1.0 U	2.0	1.0	0.49	ug/L	1	LMM			2303766	11/17/23	3:17	SW5030C8260D
bromomethane	1.5 U	2.0	1.5	1.1	ug/L	1	LMM			2303766	11/17/23	3:17	SW5030C8260D
chloroethane	1.0 U	2.0	1.0	0.33	ug/L	1	LMM			2303766	11/17/23	3:17	SW5030C8260D
trichlorofluoromethane	1.0 U	2.0	1.0	0.34	ug/L	1	LMM			2303766	11/17/23	3:17	SW5030C8260D
diethyl ether	1.0 U	2.0	1.0	0.41	ug/L	1	LMM			2303766	11/17/23	3:17	SW5030C8260D
acetone	1.9 J	50	5.0	1.9	ug/L	1	LMM			2303766	11/17/23	3:17	SW5030C8260D
1,1-dichloroethene	0.50 U	1.0	0.50	0.35	ug/L	1	LMM			2303766	11/17/23	3:17	SW5030C8260D
methylene chloride	1.0 U	2.0	1.0	0.59	ug/L	1	LMM			2303766	11/17/23	3:17	SW5030C8260D
carbon disulfide	1.0 U	2.0	1.0	0.33	ug/L	1	LMM			2303766	11/17/23	3:17	SW5030C8260D
methyl t-butyl ether (MTBE)	1.0 U	2.0	1.0	0.30	ug/L	1	LMM			2303766	11/17/23	3:17	SW5030C8260D
trans-1,2-dichloroethene	1.0 U	2.0	1.0	0.46	ug/L	1	LMM			2303766	11/17/23	3:17	SW5030C8260D
ethyl t-butyl ether (ETBE)	1.0 U	2.0	1.0	0.24	ug/L	1	LMM			2303766	11/17/23	3:17	SW5030C8260D
1,1-dichloroethane	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303766	11/17/23	3:17	SW5030C8260D
t-butanol (TBA)	10 U	30	10	2.5	ug/L	1	LMM			2303766	11/17/23	3:17	SW5030C8260D
2-butanone (MEK)	4.4 J	10	5.0	0.67	ug/L	1	LMM			2303766	11/17/23	3:17	SW5030C8260D
2,2-dichloropropane	1.0 U	2.0	1.0	0.21	ug/L	1	LMM			2303766	11/17/23	3:17	SW5030C8260D
cis-1,2-dichloroethene	1.5 U	2.0	1.5	1.2	ug/L	1	LMM			2303766	11/17/23	3:17	SW5030C8260D
chloroform	1.5 U	2.0	1.5	1.4	ug/L	1	LMM			2303766	11/17/23	3:17	SW5030C8260D
bromochloromethane	1.0 U	2.0	1.0	0.22	ug/L	1	LMM			2303766	11/17/23	3:17	SW5030C8260D
tetrahydrofuran (THF)	4.1	2.0	1.5	0.75	ug/L	1	LMM			2303766	11/17/23	3:17	SW5030C8260D
1,1,1-trichloroethane	1.0 U	2.0	1.0	0.55	ug/L	1	LMM			2303766	11/17/23	3:17	SW5030C8260D
1,1-dichloropropene	1.0 U	2.0	1.0	0.26	ug/L	1	LMM			2303766	11/17/23	3:17	SW5030C8260D
t-amyl-methyl ether (TAME)	1.0 U	2.0	1.0	0.57	ug/L	1	LMM			2303766	11/17/23	3:17	SW5030C8260D
carbon tetrachloride	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303766	11/17/23	3:17	SW5030C8260D
1,2-dichloroethane	1.0 U	2.0	1.0	0.20	ug/L	1	LMM			2303766	11/17/23	3:17	SW5030C8260D
benzene	1.0 U	2.0	1.0	0.40	ug/L	1	LMM			2303766	11/17/23	3:17	SW5030C8260D
trichloroethene	1.0 U	2.0	1.0	0.53	ug/L	1	LMM			2303766	11/17/23	3:17	SW5030C8260D
1,2-dichloropropane	1.0 U	2.0	1.0	0.22	ug/L	1	LMM			2303766	11/17/23	3:17	SW5030C8260D
bromodichloromethane	0.50 U	0.60	0.50	0.38	ug/L	1	LMM			2303766	11/17/23	3:17	SW5030C8260D
1,4-dioxane	10 U	50	10	8.7	ug/L	1	LMM			2303766	11/17/23	3:17	SW5030C8260D
dibromomethane	1.0 U	2.0	1.0	0.23	ug/L	1	LMM			2303766	11/17/23	3:17	SW5030C8260D
4-methyl-2-pentanone (MIBK)	1.0 U	10	1.0	0.56	ug/L	1	LMM			2303766	11/17/23	3:17	SW5030C8260D
cis-1,3-dichloropropene	1.0 U	2.0	1.0	0.30	ug/L	1	LMM			2303766	11/17/23	3:17	SW5030C8260D
toluene	7.9	2.0	1.0	0.45	ug/L	1	LMM			2303766	11/17/23	3:17	SW5030C8260D
trans-1,3-dichloropropene	1.0 U	2.0	1.0	0.34	ug/L	1	LMM			2303766	11/17/23	3:17	SW5030C8260D
2-hexanone	1.0 U	10	1.0	0.72	ug/L	1	LMM			2303766	11/17/23	3:17	SW5030C8260D
1,1,2-trichloroethane	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303766	11/17/23	3:17	SW5030C8260D
1,3-dichloropropane	1.0 U	2.0	1.0	0.25	ug/L	1	LMM			2303766	11/17/23	3:17	SW5030C8260D
tetrachloroethene	1.0 U	2.0	1.0	0.76	ug/L	1	LMM			2303766	11/17/23	3:17	SW5030C8260D
dibromochloromethane	1.0 U	2.0	1.0	0.21	ug/L	1	LMM			2303766	11/17/23	3:17	SW5030C8260D

Project ID: Dow Salvage Yard 18001468
Job ID: 67839
Sample#: 67839-010
Sample ID: SY-BRMW1-65-75-110923
Matrix: Water
Sampled: 11/9/23 13:50

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
1,2-dibromoethane (EDB)	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303766	11/17/23	3:17	SW5030C8260D
chlorobenzene	1.0 U	2.0	1.0	0.25	ug/L	1	LMM			2303766	11/17/23	3:17	SW5030C8260D
1,1,1,2-tetrachloroethane	1.0 U	2.0	1.0	0.21	ug/L	1	LMM			2303766	11/17/23	3:17	SW5030C8260D
ethylbenzene	1.0 U	2.0	1.0	0.65	ug/L	1	LMM			2303766	11/17/23	3:17	SW5030C8260D
m&p-xylenes	1.5 U	2.0	1.5	1.4	ug/L	1	LMM			2303766	11/17/23	3:17	SW5030C8260D
o-xylene	1.0 U	2.0	1.0	0.55	ug/L	1	LMM			2303766	11/17/23	3:17	SW5030C8260D
styrene	1.0 U	2.0	1.0	0.57	ug/L	1	LMM			2303766	11/17/23	3:17	SW5030C8260D
bromoform	1.0 U	2.0	1.0	0.24	ug/L	1	LMM			2303766	11/17/23	3:17	SW5030C8260D
isopropylbenzene	1.0 U	2.0	1.0	0.65	ug/L	1	LMM			2303766	11/17/23	3:17	SW5030C8260D
1,1,2,2-tetrachloroethane	1.0 U	2.0	1.0	0.29	ug/L	1	LMM			2303766	11/17/23	3:17	SW5030C8260D
1,2,3-trichloropropane	1.0 U	2.0	1.0	0.55	ug/L	1	LMM			2303766	11/17/23	3:17	SW5030C8260D
n-propylbenzene	1.0 U	2.0	1.0	0.44	ug/L	1	LMM			2303766	11/17/23	3:17	SW5030C8260D
bromobenzene	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303766	11/17/23	3:17	SW5030C8260D
2-chlorotoluene	1.0 U	2.0	1.0	0.23	ug/L	1	LMM			2303766	11/17/23	3:17	SW5030C8260D
4-chlorotoluene	1.0 U	2.0	1.0	0.33	ug/L	1	LMM			2303766	11/17/23	3:17	SW5030C8260D
tert-butylbenzene	1.0 U	2.0	1.0	0.39	ug/L	1	LMM			2303766	11/17/23	3:17	SW5030C8260D
1,2,4-trimethylbenzene	1.0 U	2.0	1.0	0.58	ug/L	1	LMM			2303766	11/17/23	3:17	SW5030C8260D
sec-butylbenzene	1.0 U	2.0	1.0	0.44	ug/L	1	LMM			2303766	11/17/23	3:17	SW5030C8260D
1,3-dichlorobenzene	1.0 U	2.0	1.0	0.45	ug/L	1	LMM			2303766	11/17/23	3:17	SW5030C8260D
4-isopropyltoluene	1.0 U	2.0	1.0	0.47	ug/L	1	LMM			2303766	11/17/23	3:17	SW5030C8260D
1,4-dichlorobenzene	1.0 U	2.0	1.0	0.26	ug/L	1	LMM			2303766	11/17/23	3:17	SW5030C8260D
1,2-dichlorobenzene	1.0 U	2.0	1.0	0.39	ug/L	1	LMM			2303766	11/17/23	3:17	SW5030C8260D
n-butylbenzene	1.0 U	2.0	1.0	0.54	ug/L	1	LMM			2303766	11/17/23	3:17	SW5030C8260D
1,2-dibromo-3-chloropropane (DBCP)	1.5 U	2.0	1.5	0.91	ug/L	1	LMM			2303766	11/17/23	3:17	SW5030C8260D
1,3,5-trimethylbenzene	1.0 U	2.0	1.0	0.46	ug/L	1	LMM			2303766	11/17/23	3:17	SW5030C8260D
1,2,4-trichlorobenzene	1.0 U	2.0	1.0	0.79	ug/L	1	LMM			2303766	11/17/23	3:17	SW5030C8260D
hexachlorobutadiene	0.50 U	0.50	0.50	0.19	ug/L	1	LMM			2303766	11/17/23	3:17	SW5030C8260D
naphthalene	1.5 U	2.0	1.5	1.2	ug/L	1	LMM			2303766	11/17/23	3:17	SW5030C8260D
1,2,3-trichlorobenzene	1.0 U	2.0	1.0	0.93	ug/L	1	LMM			2303766	11/17/23	3:17	SW5030C8260D
Surrogate Recovery		Limits											
dibromofluoromethane SUR	97	78-114			%	1	LMM			2303766	11/17/23	3:17	SW5030C8260D
toluene-D8 SUR	101	88-110			%	1	LMM			2303766	11/17/23	3:17	SW5030C8260D
4-bromofluorobenzene SUR	96	86-115			%	1	LMM			2303766	11/17/23	3:17	SW5030C8260D

Project ID: Dow Salvage Yard 18001468
Job ID: 67839
Sample#: 67839-011
Sample ID: SY-BRMW10-65-75-110923
Matrix: Water
Sampled: 11/9/23 13:55

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
dichlorodifluoromethane	1.0 U	2.0	1.0	0.28	ug/L	1	LMM			2303766	11/17/23	3:42	SW5030C8260D
chloromethane	1.0 U	2.0	1.0	0.59	ug/L	1	LMM			2303766	11/17/23	3:42	SW5030C8260D
vinyl chloride	1.0 U	2.0	1.0	0.49	ug/L	1	LMM			2303766	11/17/23	3:42	SW5030C8260D
bromomethane	1.5 U	2.0	1.5	1.1	ug/L	1	LMM			2303766	11/17/23	3:42	SW5030C8260D
chloroethane	1.0 U	2.0	1.0	0.33	ug/L	1	LMM			2303766	11/17/23	3:42	SW5030C8260D
trichlorofluoromethane	1.0 U	2.0	1.0	0.34	ug/L	1	LMM			2303766	11/17/23	3:42	SW5030C8260D
diethyl ether	1.0 U	2.0	1.0	0.41	ug/L	1	LMM			2303766	11/17/23	3:42	SW5030C8260D
acetone	4.2 J	50	5.0	1.9	ug/L	1	LMM			2303766	11/17/23	3:42	SW5030C8260D
1,1-dichloroethene	0.50 U	1.0	0.50	0.35	ug/L	1	LMM			2303766	11/17/23	3:42	SW5030C8260D
methylene chloride	1.0 U	2.0	1.0	0.59	ug/L	1	LMM			2303766	11/17/23	3:42	SW5030C8260D
carbon disulfide	1.0 U	2.0	1.0	0.33	ug/L	1	LMM			2303766	11/17/23	3:42	SW5030C8260D
methyl t-butyl ether (MTBE)	1.0 U	2.0	1.0	0.30	ug/L	1	LMM			2303766	11/17/23	3:42	SW5030C8260D
trans-1,2-dichloroethene	1.0 U	2.0	1.0	0.46	ug/L	1	LMM			2303766	11/17/23	3:42	SW5030C8260D
ethyl t-butyl ether (ETBE)	1.0 U	2.0	1.0	0.24	ug/L	1	LMM			2303766	11/17/23	3:42	SW5030C8260D
1,1-dichloroethane	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303766	11/17/23	3:42	SW5030C8260D
t-butanol (TBA)	10 U	30	10	2.5	ug/L	1	LMM			2303766	11/17/23	3:42	SW5030C8260D
2-butanone (MEK)	6.3 J	10	5.0	0.67	ug/L	1	LMM			2303766	11/17/23	3:42	SW5030C8260D
2,2-dichloropropane	1.0 U	2.0	1.0	0.21	ug/L	1	LMM			2303766	11/17/23	3:42	SW5030C8260D
cis-1,2-dichloroethene	1.5 U	2.0	1.5	1.2	ug/L	1	LMM			2303766	11/17/23	3:42	SW5030C8260D
chloroform	1.5 U	2.0	1.5	1.4	ug/L	1	LMM			2303766	11/17/23	3:42	SW5030C8260D
bromochloromethane	1.0 U	2.0	1.0	0.22	ug/L	1	LMM			2303766	11/17/23	3:42	SW5030C8260D
tetrahydrofuran (THF)	3.7	2.0	1.5	0.75	ug/L	1	LMM			2303766	11/17/23	3:42	SW5030C8260D
1,1,1-trichloroethane	1.0 U	2.0	1.0	0.55	ug/L	1	LMM			2303766	11/17/23	3:42	SW5030C8260D
1,1-dichloropropene	1.0 U	2.0	1.0	0.26	ug/L	1	LMM			2303766	11/17/23	3:42	SW5030C8260D
t-amyl-methyl ether (TAME)	1.0 U	2.0	1.0	0.57	ug/L	1	LMM			2303766	11/17/23	3:42	SW5030C8260D
carbon tetrachloride	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303766	11/17/23	3:42	SW5030C8260D
1,2-dichloroethane	1.0 U	2.0	1.0	0.20	ug/L	1	LMM			2303766	11/17/23	3:42	SW5030C8260D
benzene	1.0 U	2.0	1.0	0.40	ug/L	1	LMM			2303766	11/17/23	3:42	SW5030C8260D
trichloroethene	1.0 U	2.0	1.0	0.53	ug/L	1	LMM			2303766	11/17/23	3:42	SW5030C8260D
1,2-dichloropropane	1.0 U	2.0	1.0	0.22	ug/L	1	LMM			2303766	11/17/23	3:42	SW5030C8260D
bromodichloromethane	0.50 U	0.60	0.50	0.38	ug/L	1	LMM			2303766	11/17/23	3:42	SW5030C8260D
1,4-dioxane	10 U	50	10	8.7	ug/L	1	LMM			2303766	11/17/23	3:42	SW5030C8260D
dibromomethane	1.0 U	2.0	1.0	0.23	ug/L	1	LMM			2303766	11/17/23	3:42	SW5030C8260D
4-methyl-2-pentanone (MIBK)	1.0 U	10	1.0	0.56	ug/L	1	LMM			2303766	11/17/23	3:42	SW5030C8260D
cis-1,3-dichloropropene	1.0 U	2.0	1.0	0.30	ug/L	1	LMM			2303766	11/17/23	3:42	SW5030C8260D
toluene	9.4	2.0	1.0	0.45	ug/L	1	LMM			2303766	11/17/23	3:42	SW5030C8260D
trans-1,3-dichloropropene	1.0 U	2.0	1.0	0.34	ug/L	1	LMM			2303766	11/17/23	3:42	SW5030C8260D
2-hexanone	1.0 U	10	1.0	0.72	ug/L	1	LMM			2303766	11/17/23	3:42	SW5030C8260D
1,1,2-trichloroethane	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303766	11/17/23	3:42	SW5030C8260D
1,3-dichloropropane	1.0 U	2.0	1.0	0.25	ug/L	1	LMM			2303766	11/17/23	3:42	SW5030C8260D
tetrachloroethene	1.0 U	2.0	1.0	0.76	ug/L	1	LMM			2303766	11/17/23	3:42	SW5030C8260D
dibromochloromethane	1.0 U	2.0	1.0	0.21	ug/L	1	LMM			2303766	11/17/23	3:42	SW5030C8260D

Project ID: Dow Salvage Yard 18001468
Job ID: 67839
Sample#: 67839-011
Sample ID: SY-BRMW10-65-75-110923
Matrix: Water
Sampled: 11/9/23 13:55

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
1,2-dibromoethane (EDB)	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303766	11/17/23	3:42	SW5030C8260D
chlorobenzene	1.0 U	2.0	1.0	0.25	ug/L	1	LMM			2303766	11/17/23	3:42	SW5030C8260D
1,1,1,2-tetrachloroethane	1.0 U	2.0	1.0	0.21	ug/L	1	LMM			2303766	11/17/23	3:42	SW5030C8260D
ethylbenzene	1.0 U	2.0	1.0	0.65	ug/L	1	LMM			2303766	11/17/23	3:42	SW5030C8260D
m&p-xylenes	1.5 U	2.0	1.5	1.4	ug/L	1	LMM			2303766	11/17/23	3:42	SW5030C8260D
o-xylene	1.0 U	2.0	1.0	0.55	ug/L	1	LMM			2303766	11/17/23	3:42	SW5030C8260D
styrene	1.0 U	2.0	1.0	0.57	ug/L	1	LMM			2303766	11/17/23	3:42	SW5030C8260D
bromoform	1.0 U	2.0	1.0	0.24	ug/L	1	LMM			2303766	11/17/23	3:42	SW5030C8260D
isopropylbenzene	1.0 U	2.0	1.0	0.65	ug/L	1	LMM			2303766	11/17/23	3:42	SW5030C8260D
1,1,2,2-tetrachloroethane	1.0 U	2.0	1.0	0.29	ug/L	1	LMM			2303766	11/17/23	3:42	SW5030C8260D
1,2,3-trichloropropane	1.0 U	2.0	1.0	0.55	ug/L	1	LMM			2303766	11/17/23	3:42	SW5030C8260D
n-propylbenzene	1.0 U	2.0	1.0	0.44	ug/L	1	LMM			2303766	11/17/23	3:42	SW5030C8260D
bromobenzene	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303766	11/17/23	3:42	SW5030C8260D
2-chlorotoluene	1.0 U	2.0	1.0	0.23	ug/L	1	LMM			2303766	11/17/23	3:42	SW5030C8260D
4-chlorotoluene	1.0 U	2.0	1.0	0.33	ug/L	1	LMM			2303766	11/17/23	3:42	SW5030C8260D
tert-butylbenzene	1.0 U	2.0	1.0	0.39	ug/L	1	LMM			2303766	11/17/23	3:42	SW5030C8260D
1,2,4-trimethylbenzene	1.0 U	2.0	1.0	0.58	ug/L	1	LMM			2303766	11/17/23	3:42	SW5030C8260D
sec-butylbenzene	1.0 U	2.0	1.0	0.44	ug/L	1	LMM			2303766	11/17/23	3:42	SW5030C8260D
1,3-dichlorobenzene	1.0 U	2.0	1.0	0.45	ug/L	1	LMM			2303766	11/17/23	3:42	SW5030C8260D
4-isopropyltoluene	1.0 U	2.0	1.0	0.47	ug/L	1	LMM			2303766	11/17/23	3:42	SW5030C8260D
1,4-dichlorobenzene	1.0 U	2.0	1.0	0.26	ug/L	1	LMM			2303766	11/17/23	3:42	SW5030C8260D
1,2-dichlorobenzene	1.0 U	2.0	1.0	0.39	ug/L	1	LMM			2303766	11/17/23	3:42	SW5030C8260D
n-butylbenzene	1.0 U	2.0	1.0	0.54	ug/L	1	LMM			2303766	11/17/23	3:42	SW5030C8260D
1,2-dibromo-3-chloropropane (DBCP)	1.5 U	2.0	1.5	0.91	ug/L	1	LMM			2303766	11/17/23	3:42	SW5030C8260D
1,3,5-trimethylbenzene	1.0 U	2.0	1.0	0.46	ug/L	1	LMM			2303766	11/17/23	3:42	SW5030C8260D
1,2,4-trichlorobenzene	1.0 U	2.0	1.0	0.79	ug/L	1	LMM			2303766	11/17/23	3:42	SW5030C8260D
hexachlorobutadiene	0.50 U	0.50	0.50	0.19	ug/L	1	LMM			2303766	11/17/23	3:42	SW5030C8260D
naphthalene	1.5 U	2.0	1.5	1.2	ug/L	1	LMM			2303766	11/17/23	3:42	SW5030C8260D
1,2,3-trichlorobenzene	1.0 U	2.0	1.0	0.93	ug/L	1	LMM			2303766	11/17/23	3:42	SW5030C8260D
Surrogate Recovery		Limits											
dibromofluoromethane SUR	94	78-114			%	1	LMM			2303766	11/17/23	3:42	SW5030C8260D
toluene-D8 SUR	101	88-110			%	1	LMM			2303766	11/17/23	3:42	SW5030C8260D
4-bromofluorobenzene SUR	100	86-115			%	1	LMM			2303766	11/17/23	3:42	SW5030C8260D

Project ID: Dow Salvage Yard 18001468
Job ID: 67839
Sample#: 67839-023
Sample ID: GAC-110923
Matrix: Water
Sampled: 11/9/23 13:40

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
dichlorodifluoromethane	1.0 U	2.0	1.0	0.28	ug/L	1	LMM			2303766	11/17/23	4:07	SW5030C8260D
chloromethane	1.0 U	2.0	1.0	0.59	ug/L	1	LMM			2303766	11/17/23	4:07	SW5030C8260D
vinyl chloride	1.0 U	2.0	1.0	0.49	ug/L	1	LMM			2303766	11/17/23	4:07	SW5030C8260D
bromomethane	1.5 U	2.0	1.5	1.1	ug/L	1	LMM			2303766	11/17/23	4:07	SW5030C8260D
chloroethane	1.0 U	2.0	1.0	0.33	ug/L	1	LMM			2303766	11/17/23	4:07	SW5030C8260D
trichlorofluoromethane	1.0 U	2.0	1.0	0.34	ug/L	1	LMM			2303766	11/17/23	4:07	SW5030C8260D
diethyl ether	1.0 U	2.0	1.0	0.41	ug/L	1	LMM			2303766	11/17/23	4:07	SW5030C8260D
acetone	5.0 U	50	5.0	1.9	ug/L	1	LMM			2303766	11/17/23	4:07	SW5030C8260D
1,1-dichloroethene	0.50 U	1.0	0.50	0.35	ug/L	1	LMM			2303766	11/17/23	4:07	SW5030C8260D
methylene chloride	1.0 U	2.0	1.0	0.59	ug/L	1	LMM			2303766	11/17/23	4:07	SW5030C8260D
carbon disulfide	1.0 U	2.0	1.0	0.33	ug/L	1	LMM			2303766	11/17/23	4:07	SW5030C8260D
methyl t-butyl ether (MTBE)	1.0 U	2.0	1.0	0.30	ug/L	1	LMM			2303766	11/17/23	4:07	SW5030C8260D
trans-1,2-dichloroethene	1.0 U	2.0	1.0	0.46	ug/L	1	LMM			2303766	11/17/23	4:07	SW5030C8260D
ethyl t-butyl ether (ETBE)	1.0 U	2.0	1.0	0.24	ug/L	1	LMM			2303766	11/17/23	4:07	SW5030C8260D
1,1-dichloroethane	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303766	11/17/23	4:07	SW5030C8260D
t-butanol (TBA)	10 U	30	10	2.5	ug/L	1	LMM			2303766	11/17/23	4:07	SW5030C8260D
2-butanone (MEK)	5.0 U	10	5.0	0.67	ug/L	1	LMM			2303766	11/17/23	4:07	SW5030C8260D
2,2-dichloropropane	1.0 U	2.0	1.0	0.21	ug/L	1	LMM			2303766	11/17/23	4:07	SW5030C8260D
cis-1,2-dichloroethene	1.5 U	2.0	1.5	1.2	ug/L	1	LMM			2303766	11/17/23	4:07	SW5030C8260D
chloroform	1.5 U	2.0	1.5	1.4	ug/L	1	LMM			2303766	11/17/23	4:07	SW5030C8260D
bromochloromethane	1.0 U	2.0	1.0	0.22	ug/L	1	LMM			2303766	11/17/23	4:07	SW5030C8260D
tetrahydrofuran (THF)	6.6	2.0	1.5	0.75	ug/L	1	LMM			2303766	11/17/23	4:07	SW5030C8260D
1,1,1-trichloroethane	1.0 U	2.0	1.0	0.55	ug/L	1	LMM			2303766	11/17/23	4:07	SW5030C8260D
1,1-dichloropropene	1.0 U	2.0	1.0	0.26	ug/L	1	LMM			2303766	11/17/23	4:07	SW5030C8260D
t-amyl-methyl ether (TAME)	1.0 U	2.0	1.0	0.57	ug/L	1	LMM			2303766	11/17/23	4:07	SW5030C8260D
carbon tetrachloride	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303766	11/17/23	4:07	SW5030C8260D
1,2-dichloroethane	1.0 U	2.0	1.0	0.20	ug/L	1	LMM			2303766	11/17/23	4:07	SW5030C8260D
benzene	1.0 U	2.0	1.0	0.40	ug/L	1	LMM			2303766	11/17/23	4:07	SW5030C8260D
trichloroethene	1.0 U	2.0	1.0	0.53	ug/L	1	LMM			2303766	11/17/23	4:07	SW5030C8260D
1,2-dichloropropane	1.0 U	2.0	1.0	0.22	ug/L	1	LMM			2303766	11/17/23	4:07	SW5030C8260D
bromodichloromethane	0.50 U	0.60	0.50	0.38	ug/L	1	LMM			2303766	11/17/23	4:07	SW5030C8260D
1,4-dioxane	10 U	50	10	8.7	ug/L	1	LMM			2303766	11/17/23	4:07	SW5030C8260D
dibromomethane	1.0 U	2.0	1.0	0.23	ug/L	1	LMM			2303766	11/17/23	4:07	SW5030C8260D
4-methyl-2-pentanone (MIBK)	1.0 U	10	1.0	0.56	ug/L	1	LMM			2303766	11/17/23	4:07	SW5030C8260D
cis-1,3-dichloropropene	1.0 U	2.0	1.0	0.30	ug/L	1	LMM			2303766	11/17/23	4:07	SW5030C8260D
toluene	1.0 U	2.0	1.0	0.45	ug/L	1	LMM			2303766	11/17/23	4:07	SW5030C8260D
trans-1,3-dichloropropene	1.0 U	2.0	1.0	0.34	ug/L	1	LMM			2303766	11/17/23	4:07	SW5030C8260D
2-hexanone	1.0 U	10	1.0	0.72	ug/L	1	LMM			2303766	11/17/23	4:07	SW5030C8260D
1,1,2-trichloroethane	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303766	11/17/23	4:07	SW5030C8260D
1,3-dichloropropane	1.0 U	2.0	1.0	0.25	ug/L	1	LMM			2303766	11/17/23	4:07	SW5030C8260D
tetrachloroethene	1.0 U	2.0	1.0	0.76	ug/L	1	LMM			2303766	11/17/23	4:07	SW5030C8260D
dibromochloromethane	1.0 U	2.0	1.0	0.21	ug/L	1	LMM			2303766	11/17/23	4:07	SW5030C8260D

Project ID: Dow Salvage Yard 18001468
Job ID: 67839
Sample#: 67839-023
Sample ID: GAC-110923
Matrix: Water
Sampled: 11/9/23 13:40

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
1,2-dibromoethane (EDB)	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303766	11/17/23	4:07	SW5030C8260D
chlorobenzene	1.0 U	2.0	1.0	0.25	ug/L	1	LMM			2303766	11/17/23	4:07	SW5030C8260D
1,1,1,2-tetrachloroethane	1.0 U	2.0	1.0	0.21	ug/L	1	LMM			2303766	11/17/23	4:07	SW5030C8260D
ethylbenzene	1.0 U	2.0	1.0	0.65	ug/L	1	LMM			2303766	11/17/23	4:07	SW5030C8260D
m&p-xylenes	1.5 U	2.0	1.5	1.4	ug/L	1	LMM			2303766	11/17/23	4:07	SW5030C8260D
o-xylene	1.0 U	2.0	1.0	0.55	ug/L	1	LMM			2303766	11/17/23	4:07	SW5030C8260D
styrene	1.0 U	2.0	1.0	0.57	ug/L	1	LMM			2303766	11/17/23	4:07	SW5030C8260D
bromoform	1.0 U	2.0	1.0	0.24	ug/L	1	LMM			2303766	11/17/23	4:07	SW5030C8260D
isopropylbenzene	1.0 U	2.0	1.0	0.65	ug/L	1	LMM			2303766	11/17/23	4:07	SW5030C8260D
1,1,2,2-tetrachloroethane	1.0 U	2.0	1.0	0.29	ug/L	1	LMM			2303766	11/17/23	4:07	SW5030C8260D
1,2,3-trichloropropane	1.0 U	2.0	1.0	0.55	ug/L	1	LMM			2303766	11/17/23	4:07	SW5030C8260D
n-propylbenzene	1.0 U	2.0	1.0	0.44	ug/L	1	LMM			2303766	11/17/23	4:07	SW5030C8260D
bromobenzene	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303766	11/17/23	4:07	SW5030C8260D
2-chlorotoluene	1.0 U	2.0	1.0	0.23	ug/L	1	LMM			2303766	11/17/23	4:07	SW5030C8260D
4-chlorotoluene	1.0 U	2.0	1.0	0.33	ug/L	1	LMM			2303766	11/17/23	4:07	SW5030C8260D
tert-butylbenzene	1.0 U	2.0	1.0	0.39	ug/L	1	LMM			2303766	11/17/23	4:07	SW5030C8260D
1,2,4-trimethylbenzene	1.0 U	2.0	1.0	0.58	ug/L	1	LMM			2303766	11/17/23	4:07	SW5030C8260D
sec-butylbenzene	1.0 U	2.0	1.0	0.44	ug/L	1	LMM			2303766	11/17/23	4:07	SW5030C8260D
1,3-dichlorobenzene	1.0 U	2.0	1.0	0.45	ug/L	1	LMM			2303766	11/17/23	4:07	SW5030C8260D
4-isopropyltoluene	1.0 U	2.0	1.0	0.47	ug/L	1	LMM			2303766	11/17/23	4:07	SW5030C8260D
1,4-dichlorobenzene	1.0 U	2.0	1.0	0.26	ug/L	1	LMM			2303766	11/17/23	4:07	SW5030C8260D
1,2-dichlorobenzene	1.0 U	2.0	1.0	0.39	ug/L	1	LMM			2303766	11/17/23	4:07	SW5030C8260D
n-butylbenzene	1.0 U	2.0	1.0	0.54	ug/L	1	LMM			2303766	11/17/23	4:07	SW5030C8260D
1,2-dibromo-3-chloropropane (DBCP)	1.5 U	2.0	1.5	0.91	ug/L	1	LMM			2303766	11/17/23	4:07	SW5030C8260D
1,3,5-trimethylbenzene	1.0 U	2.0	1.0	0.46	ug/L	1	LMM			2303766	11/17/23	4:07	SW5030C8260D
1,2,4-trichlorobenzene	1.0 U	2.0	1.0	0.79	ug/L	1	LMM			2303766	11/17/23	4:07	SW5030C8260D
hexachlorobutadiene	0.50 U	0.50	0.50	0.19	ug/L	1	LMM			2303766	11/17/23	4:07	SW5030C8260D
naphthalene	1.5 U	2.0	1.5	1.2	ug/L	1	LMM			2303766	11/17/23	4:07	SW5030C8260D
1,2,3-trichlorobenzene	1.0 U	2.0	1.0	0.93	ug/L	1	LMM			2303766	11/17/23	4:07	SW5030C8260D
Surrogate Recovery		Limits											
dibromofluoromethane SUR	97	78-114			%	1	LMM			2303766	11/17/23	4:07	SW5030C8260D
toluene-D8 SUR	102	88-110			%	1	LMM			2303766	11/17/23	4:07	SW5030C8260D
4-bromofluorobenzene SUR	98	86-115			%	1	LMM			2303766	11/17/23	4:07	SW5030C8260D

Project ID: Dow Salvage Yard 18001468
Job ID: 67839
Sample#: 67839-024
Sample ID: TB33-110923
Matrix: Water
Sampled: 11/9/23 15:00

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
dichlorodifluoromethane	1.0 U	2.0	1.0	0.28	ug/L	1	LMM			2303756	11/16/23	13:37	SW5030C8260D
chloromethane	1.0 U	2.0	1.0	0.59	ug/L	1	LMM			2303756	11/16/23	13:37	SW5030C8260D
vinyl chloride	1.0 U	2.0	1.0	0.49	ug/L	1	LMM			2303756	11/16/23	13:37	SW5030C8260D
bromomethane	1.5 U	2.0	1.5	1.1	ug/L	1	LMM			2303756	11/16/23	13:37	SW5030C8260D
chloroethane	1.0 U	2.0	1.0	0.33	ug/L	1	LMM			2303756	11/16/23	13:37	SW5030C8260D
trichlorofluoromethane	1.0 U	2.0	1.0	0.34	ug/L	1	LMM			2303756	11/16/23	13:37	SW5030C8260D
diethyl ether	1.0 U	2.0	1.0	0.41	ug/L	1	LMM			2303756	11/16/23	13:37	SW5030C8260D
acetone	5.0 U	50	5.0	1.9	ug/L	1	LMM			2303756	11/16/23	13:37	SW5030C8260D
1,1-dichloroethene	0.50 U	1.0	0.50	0.35	ug/L	1	LMM			2303756	11/16/23	13:37	SW5030C8260D
methylene chloride	1.0 U	2.0	1.0	0.59	ug/L	1	LMM			2303756	11/16/23	13:37	SW5030C8260D
carbon disulfide	1.0 U	2.0	1.0	0.33	ug/L	1	LMM			2303756	11/16/23	13:37	SW5030C8260D
methyl t-butyl ether (MTBE)	1.0 U	2.0	1.0	0.30	ug/L	1	LMM			2303756	11/16/23	13:37	SW5030C8260D
trans-1,2-dichloroethene	1.0 U	2.0	1.0	0.46	ug/L	1	LMM			2303756	11/16/23	13:37	SW5030C8260D
ethyl t-butyl ether (ETBE)	1.0 U	2.0	1.0	0.24	ug/L	1	LMM			2303756	11/16/23	13:37	SW5030C8260D
1,1-dichloroethane	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303756	11/16/23	13:37	SW5030C8260D
t-butanol (TBA)	10 U	30	10	2.5	ug/L	1	LMM			2303756	11/16/23	13:37	SW5030C8260D
2-butanone (MEK)	5.0 U	10	5.0	0.67	ug/L	1	LMM			2303756	11/16/23	13:37	SW5030C8260D
2,2-dichloropropane	1.0 U	2.0	1.0	0.21	ug/L	1	LMM			2303756	11/16/23	13:37	SW5030C8260D
cis-1,2-dichloroethene	1.5 U	2.0	1.5	1.2	ug/L	1	LMM			2303756	11/16/23	13:37	SW5030C8260D
chloroform	1.5 U	2.0	1.5	1.4	ug/L	1	LMM			2303756	11/16/23	13:37	SW5030C8260D
bromochloromethane	1.0 U	2.0	1.0	0.22	ug/L	1	LMM			2303756	11/16/23	13:37	SW5030C8260D
tetrahydrofuran (THF)	1.5 U	2.0	1.5	0.75	ug/L	1	LMM			2303756	11/16/23	13:37	SW5030C8260D
1,1,1-trichloroethane	1.0 U	2.0	1.0	0.55	ug/L	1	LMM			2303756	11/16/23	13:37	SW5030C8260D
1,1-dichloropropene	1.0 U	2.0	1.0	0.26	ug/L	1	LMM			2303756	11/16/23	13:37	SW5030C8260D
t-amyl-methyl ether (TAME)	1.0 U	2.0	1.0	0.57	ug/L	1	LMM			2303756	11/16/23	13:37	SW5030C8260D
carbon tetrachloride	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303756	11/16/23	13:37	SW5030C8260D
1,2-dichloroethane	1.0 U	2.0	1.0	0.20	ug/L	1	LMM			2303756	11/16/23	13:37	SW5030C8260D
benzene	1.0 U	2.0	1.0	0.40	ug/L	1	LMM			2303756	11/16/23	13:37	SW5030C8260D
trichloroethene	1.0 U	2.0	1.0	0.53	ug/L	1	LMM			2303756	11/16/23	13:37	SW5030C8260D
1,2-dichloropropane	1.0 U	2.0	1.0	0.22	ug/L	1	LMM			2303756	11/16/23	13:37	SW5030C8260D
bromodichloromethane	0.50 U	0.60	0.50	0.38	ug/L	1	LMM			2303756	11/16/23	13:37	SW5030C8260D
1,4-dioxane	10 U	50	10	8.7	ug/L	1	LMM			2303756	11/16/23	13:37	SW5030C8260D
dibromomethane	1.0 U	2.0	1.0	0.23	ug/L	1	LMM			2303756	11/16/23	13:37	SW5030C8260D
4-methyl-2-pentanone (MIBK)	1.0 U	10	1.0	0.56	ug/L	1	LMM			2303756	11/16/23	13:37	SW5030C8260D
cis-1,3-dichloropropene	1.0 U	2.0	1.0	0.30	ug/L	1	LMM			2303756	11/16/23	13:37	SW5030C8260D
toluene	1.0 U	2.0	1.0	0.45	ug/L	1	LMM			2303756	11/16/23	13:37	SW5030C8260D
trans-1,3-dichloropropene	1.0 U	2.0	1.0	0.34	ug/L	1	LMM			2303756	11/16/23	13:37	SW5030C8260D
2-hexanone	1.0 U	10	1.0	0.72	ug/L	1	LMM			2303756	11/16/23	13:37	SW5030C8260D
1,1,2-trichloroethane	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303756	11/16/23	13:37	SW5030C8260D
1,3-dichloropropane	1.0 U	2.0	1.0	0.25	ug/L	1	LMM			2303756	11/16/23	13:37	SW5030C8260D
tetrachloroethene	1.0 U	2.0	1.0	0.76	ug/L	1	LMM			2303756	11/16/23	13:37	SW5030C8260D
dibromochloromethane	1.0 U	2.0	1.0	0.21	ug/L	1	LMM			2303756	11/16/23	13:37	SW5030C8260D

Project ID: Dow Salvage Yard 18001468
Job ID: 67839
Sample#: 67839-024
Sample ID: TB33-110923
Matrix: Water
Sampled: 11/9/23 15:00

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
1,2-dibromoethane (EDB)	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303756	11/16/23	13:37	SW5030C8260D
chlorobenzene	1.0 U	2.0	1.0	0.25	ug/L	1	LMM			2303756	11/16/23	13:37	SW5030C8260D
1,1,1,2-tetrachloroethane	1.0 U	2.0	1.0	0.21	ug/L	1	LMM			2303756	11/16/23	13:37	SW5030C8260D
ethylbenzene	1.0 U	2.0	1.0	0.65	ug/L	1	LMM			2303756	11/16/23	13:37	SW5030C8260D
m&p-xylenes	1.5 U	2.0	1.5	1.4	ug/L	1	LMM			2303756	11/16/23	13:37	SW5030C8260D
o-xylene	1.0 U	2.0	1.0	0.55	ug/L	1	LMM			2303756	11/16/23	13:37	SW5030C8260D
styrene	1.0 U	2.0	1.0	0.57	ug/L	1	LMM			2303756	11/16/23	13:37	SW5030C8260D
bromoform	1.0 U	2.0	1.0	0.24	ug/L	1	LMM			2303756	11/16/23	13:37	SW5030C8260D
isopropylbenzene	1.0 U	2.0	1.0	0.65	ug/L	1	LMM			2303756	11/16/23	13:37	SW5030C8260D
1,1,2,2-tetrachloroethane	1.0 U	2.0	1.0	0.29	ug/L	1	LMM			2303756	11/16/23	13:37	SW5030C8260D
1,2,3-trichloropropane	1.0 U	2.0	1.0	0.55	ug/L	1	LMM			2303756	11/16/23	13:37	SW5030C8260D
n-propylbenzene	1.0 U	2.0	1.0	0.44	ug/L	1	LMM			2303756	11/16/23	13:37	SW5030C8260D
bromobenzene	1.0 U	2.0	1.0	0.27	ug/L	1	LMM			2303756	11/16/23	13:37	SW5030C8260D
2-chlorotoluene	1.0 U	2.0	1.0	0.23	ug/L	1	LMM			2303756	11/16/23	13:37	SW5030C8260D
4-chlorotoluene	1.0 U	2.0	1.0	0.33	ug/L	1	LMM			2303756	11/16/23	13:37	SW5030C8260D
tert-butylbenzene	1.0 U	2.0	1.0	0.39	ug/L	1	LMM			2303756	11/16/23	13:37	SW5030C8260D
1,2,4-trimethylbenzene	1.0 U	2.0	1.0	0.58	ug/L	1	LMM			2303756	11/16/23	13:37	SW5030C8260D
sec-butylbenzene	1.0 U	2.0	1.0	0.44	ug/L	1	LMM			2303756	11/16/23	13:37	SW5030C8260D
1,3-dichlorobenzene	1.0 U	2.0	1.0	0.45	ug/L	1	LMM			2303756	11/16/23	13:37	SW5030C8260D
4-isopropyltoluene	1.0 U	2.0	1.0	0.47	ug/L	1	LMM			2303756	11/16/23	13:37	SW5030C8260D
1,4-dichlorobenzene	1.0 U	2.0	1.0	0.26	ug/L	1	LMM			2303756	11/16/23	13:37	SW5030C8260D
1,2-dichlorobenzene	1.0 U	2.0	1.0	0.39	ug/L	1	LMM			2303756	11/16/23	13:37	SW5030C8260D
n-butylbenzene	1.0 U	2.0	1.0	0.54	ug/L	1	LMM			2303756	11/16/23	13:37	SW5030C8260D
1,2-dibromo-3-chloropropane (DBCP)	1.5 U	2.0	1.5	0.91	ug/L	1	LMM			2303756	11/16/23	13:37	SW5030C8260D
1,3,5-trimethylbenzene	1.0 U	2.0	1.0	0.46	ug/L	1	LMM			2303756	11/16/23	13:37	SW5030C8260D
1,2,4-trichlorobenzene	1.0 U	2.0	1.0	0.79	ug/L	1	LMM			2303756	11/16/23	13:37	SW5030C8260D
hexachlorobutadiene	0.50 U	0.50	0.50	0.19	ug/L	1	LMM			2303756	11/16/23	13:37	SW5030C8260D
naphthalene	1.5 U	2.0	1.5	1.2	ug/L	1	LMM			2303756	11/16/23	13:37	SW5030C8260D
1,2,3-trichlorobenzene	1.0 U	2.0	1.0	0.93	ug/L	1	LMM			2303756	11/16/23	13:37	SW5030C8260D
Surrogate Recovery		Limits											
dibromofluoromethane SUR	93	78-114			%	1	LMM			2303756	11/16/23	13:37	SW5030C8260D
toluene-D8 SUR	101	88-110			%	1	LMM			2303756	11/16/23	13:37	SW5030C8260D
4-bromofluorobenzene SUR	100	86-115			%	1	LMM			2303756	11/16/23	13:37	SW5030C8260D

Project ID: Dow Salvage Yard 18001468
Job ID: 67839
Sample#: 67839-001
Sample ID: SY-BRMW4-62-72-110923
Matrix: Water
Received on ice at 0˚C, in satisfactory condition.
Sampled: 11/9/23 9:00

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
Unadjusted C5-C8 Aliphatics	50 U	100	50	50	ug/L	1	SFP			2303859	11/20/23	16:25	MA VPH
Unadjusted C9-C12 Aliphatics	50 U	100	50	40	ug/L	1	SFP			2303859	11/20/23	16:25	MA VPH
methyl t-butyl ether (MTBE)	1.0 U	2	1.0	0.73	ug/L	1	SFP			2303859	11/20/23	16:25	MA VPH
benzene	1.0 U	1	1.0	0.76	ug/L	1	SFP			2303859	11/20/23	16:25	MA VPH
toluene	1.7 J	2	1.0	0.58	ug/L	1	SFP			2303859	11/20/23	16:25	MA VPH
ethylbenzene	1.0 U	2	1.0	0.40	ug/L	1	SFP			2303859	11/20/23	16:25	MA VPH
m&p-xylenes	2.0 U	2	2.0	1.1	ug/L	1	SFP			2303859	11/20/23	16:25	MA VPH
o-xylene	1.0 U	2	1.0	0.45	ug/L	1	SFP			2303859	11/20/23	16:25	MA VPH
naphthalene	4.0 U	5	4.0	3.5	ug/L	1	SFP			2303859	11/20/23	16:25	MA VPH
C5-C8 Aliphatics	50 U	100	50	50	ug/L	1	SFP			2303859	11/20/23	16:25	MA VPH
C9-C12 Aliphatics	50 U	100	50	40	ug/L	1	SFP			2303859	11/20/23	16:25	MA VPH
C9-C10 Aromatics	50 U	100	50	33	ug/L	1	SFP			2303859	11/20/23	16:25	MA VPH
Surrogate Recovery		Limits											
2,5-dibromotoluene as Aromatic SUR	96	70-130			%	1	SFP			2303859	11/20/23	16:25	MA VPH
2,5-dibromotoluene as Aliphatic SUR	99	70-130			%	1	SFP			2303859	11/20/23	16:25	MA VPH

Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range.
C5-C8 Aliphatic Hydrocarbons exclude the concentration of target analytes eluting in that range.
C9-C12 Aliphatic Hydrocarbons exclude concentration of target analytes eluting in that range AND C9-C10 Aromatics.

Project ID: Dow Salvage Yard 18001468
Job ID: 67839
Sample#: 67839-002
Sample ID: SY-BRMW40-62-72-110923
Matrix: Water
Received on ice at 0˚C, in satisfactory condition.
Sampled: 11/9/23 9:05

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
Unadjusted C5-C8 Aliphatics	50 U	100	50	50	ug/L	1	SFP			2303859	11/20/23	16:58	MA VPH
Unadjusted C9-C12 Aliphatics	50 U	100	50	40	ug/L	1	SFP			2303859	11/20/23	16:58	MA VPH
methyl t-butyl ether (MTBE)	1.0 U	2	1.0	0.73	ug/L	1	SFP			2303859	11/20/23	16:58	MA VPH
benzene	1.0 U	1	1.0	0.76	ug/L	1	SFP			2303859	11/20/23	16:58	MA VPH
toluene	2.0 J	2	1.0	0.58	ug/L	1	SFP			2303859	11/20/23	16:58	MA VPH
ethylbenzene	1.0 U	2	1.0	0.40	ug/L	1	SFP			2303859	11/20/23	16:58	MA VPH
m&p-xylenes	2.0 U	2	2.0	1.1	ug/L	1	SFP			2303859	11/20/23	16:58	MA VPH
o-xylene	1.0 U	2	1.0	0.45	ug/L	1	SFP			2303859	11/20/23	16:58	MA VPH
naphthalene	4.0 U	5	4.0	3.5	ug/L	1	SFP			2303859	11/20/23	16:58	MA VPH
C5-C8 Aliphatics	50 U	100	50	50	ug/L	1	SFP			2303859	11/20/23	16:58	MA VPH
C9-C12 Aliphatics	50 U	100	50	40	ug/L	1	SFP			2303859	11/20/23	16:58	MA VPH
C9-C10 Aromatics	50 U	100	50	33	ug/L	1	SFP			2303859	11/20/23	16:58	MA VPH
Surrogate Recovery		Limits											
2,5-dibromotoluene as Aromatic SUR	94	70-130			%	1	SFP			2303859	11/20/23	16:58	MA VPH
2,5-dibromotoluene as Aliphatic SUR	96	70-130			%	1	SFP			2303859	11/20/23	16:58	MA VPH

Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range.
C5-C8 Aliphatic Hydrocarbons exclude the concentration of target analytes eluting in that range.
C9-C12 Aliphatic Hydrocarbons exclude concentration of target analytes eluting in that range AND C9-C10 Aromatics.

Project ID: Dow Salvage Yard 18001468
Job ID: 67839
Sample#: 67839-003
Sample ID: SY-BRMW4-138-148-110923
Matrix: Water
Received on ice at 0˚C, in satisfactory condition.
Sampled: 11/9/23 9:40

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
Unadjusted C5-C8 Aliphatics	50 U	100	50	50	ug/L	1	SFP			2303859	11/20/23	17:32	MA VPH
Unadjusted C9-C12 Aliphatics	50 U	100	50	40	ug/L	1	SFP			2303859	11/20/23	17:32	MA VPH
methyl t-butyl ether (MTBE)	1.0 U	2	1.0	0.73	ug/L	1	SFP			2303859	11/20/23	17:32	MA VPH
benzene	1.0 U	1	1.0	0.76	ug/L	1	SFP			2303859	11/20/23	17:32	MA VPH
toluene	8	2	1.0	0.58	ug/L	1	SFP			2303859	11/20/23	17:32	MA VPH
ethylbenzene	1.0 U	2	1.0	0.40	ug/L	1	SFP			2303859	11/20/23	17:32	MA VPH
m&p-xylenes	2.0 U	2	2.0	1.1	ug/L	1	SFP			2303859	11/20/23	17:32	MA VPH
o-xylene	1.0 U	2	1.0	0.45	ug/L	1	SFP			2303859	11/20/23	17:32	MA VPH
naphthalene	4.0 U	5	4.0	3.5	ug/L	1	SFP			2303859	11/20/23	17:32	MA VPH
C5-C8 Aliphatics	50 U	100	50	50	ug/L	1	SFP			2303859	11/20/23	17:32	MA VPH
C9-C12 Aliphatics	50 U	100	50	40	ug/L	1	SFP			2303859	11/20/23	17:32	MA VPH
C9-C10 Aromatics	50 U	100	50	33	ug/L	1	SFP			2303859	11/20/23	17:32	MA VPH
Surrogate Recovery		Limits											
2,5-dibromotoluene as Aromatic SUR	93	70-130			%	1	SFP			2303859	11/20/23	17:32	MA VPH
2,5-dibromotoluene as Aliphatic SUR	96	70-130			%	1	SFP			2303859	11/20/23	17:32	MA VPH

Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range.
C5-C8 Aliphatic Hydrocarbons exclude the concentration of target analytes eluting in that range.
C9-C12 Aliphatic Hydrocarbons exclude concentration of target analytes eluting in that range AND C9-C10 Aromatics.

Project ID: Dow Salvage Yard 18001468
Job ID: 67839
Sample#: 67839-004
Sample ID: SY-BRMW3-47-62-110923
Matrix: Water
Received on ice at 0˚C, in satisfactory condition.
Sampled: 11/9/23 9:45

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
Unadjusted C5-C8 Aliphatics	50 U	100	50	50	ug/L	1	SFP			2303861	11/21/23	22:14	MA VPH
Unadjusted C9-C12 Aliphatics	50 U	100	50	40	ug/L	1	SFP			2303861	11/21/23	22:14	MA VPH
methyl t-butyl ether (MTBE)	1.0 U	2	1.0	0.73	ug/L	1	SFP			2303861	11/21/23	22:14	MA VPH
benzene	1.0 U	1	1.0	0.76	ug/L	1	SFP			2303861	11/21/23	22:14	MA VPH
toluene	12	2	1.0	0.58	ug/L	1	SFP			2303861	11/21/23	22:14	MA VPH
ethylbenzene	1.0 U	2	1.0	0.40	ug/L	1	SFP			2303861	11/21/23	22:14	MA VPH
m&p-xylenes	2.0 U	2	2.0	1.1	ug/L	1	SFP			2303861	11/21/23	22:14	MA VPH
o-xylene	1.0 U	2	1.0	0.45	ug/L	1	SFP			2303861	11/21/23	22:14	MA VPH
naphthalene	4.0 U	5	4.0	3.5	ug/L	1	SFP			2303861	11/21/23	22:14	MA VPH
C5-C8 Aliphatics	50 U	100	50	50	ug/L	1	SFP			2303861	11/21/23	22:14	MA VPH
C9-C12 Aliphatics	50 U	100	50	40	ug/L	1	SFP			2303861	11/21/23	22:14	MA VPH
C9-C10 Aromatics	50 U	100	50	33	ug/L	1	SFP			2303861	11/21/23	22:14	MA VPH
Surrogate Recovery		Limits											
2,5-dibromotoluene as Aromatic SUR	100	70-130			%	1	SFP			2303861	11/21/23	22:14	MA VPH
2,5-dibromotoluene as Aliphatic SUR	104	70-130			%	1	SFP			2303861	11/21/23	22:14	MA VPH

Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range.
C5-C8 Aliphatic Hydrocarbons exclude the concentration of target analytes eluting in that range.
C9-C12 Aliphatic Hydrocarbons exclude concentration of target analytes eluting in that range AND C9-C10 Aromatics.

Project ID: Dow Salvage Yard 18001468
Job ID: 67839
Sample#: 67839-005
Sample ID: SY-BRMW3-145-155-110923
Matrix: Water
Received on ice at 0˚C, in satisfactory condition.
Sampled: 11/9/23 10:00

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
Unadjusted C5-C8 Aliphatics	50 U	100	50	50	ug/L	1	SFP			2303861	11/21/23	22:47	MA VPH
Unadjusted C9-C12 Aliphatics	50 U	100	50	40	ug/L	1	SFP			2303861	11/21/23	22:47	MA VPH
methyl t-butyl ether (MTBE)	1.0 U	2	1.0	0.73	ug/L	1	SFP			2303861	11/21/23	22:47	MA VPH
benzene	1.0 U	1	1.0	0.76	ug/L	1	SFP			2303861	11/21/23	22:47	MA VPH
toluene	5	2	1.0	0.58	ug/L	1	SFP			2303861	11/21/23	22:47	MA VPH
ethylbenzene	1.0 U	2	1.0	0.40	ug/L	1	SFP			2303861	11/21/23	22:47	MA VPH
m&p-xylenes	2.0 U	2	2.0	1.1	ug/L	1	SFP			2303861	11/21/23	22:47	MA VPH
o-xylene	1.0 U	2	1.0	0.45	ug/L	1	SFP			2303861	11/21/23	22:47	MA VPH
naphthalene	4.0 U	5	4.0	3.5	ug/L	1	SFP			2303861	11/21/23	22:47	MA VPH
C5-C8 Aliphatics	50 U	100	50	50	ug/L	1	SFP			2303861	11/21/23	22:47	MA VPH
C9-C12 Aliphatics	50 U	100	50	40	ug/L	1	SFP			2303861	11/21/23	22:47	MA VPH
C9-C10 Aromatics	50 U	100	50	33	ug/L	1	SFP			2303861	11/21/23	22:47	MA VPH
Surrogate Recovery		Limits											
2,5-dibromotoluene as Aromatic SUR	97	70-130			%	1	SFP			2303861	11/21/23	22:47	MA VPH
2,5-dibromotoluene as Aliphatic SUR	101	70-130			%	1	SFP			2303861	11/21/23	22:47	MA VPH

Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range.
C5-C8 Aliphatic Hydrocarbons exclude the concentration of target analytes eluting in that range.
C9-C12 Aliphatic Hydrocarbons exclude concentration of target analytes eluting in that range AND C9-C10 Aromatics.

Project ID: Dow Salvage Yard 18001468
Job ID: 67839
Sample#: 67839-006
Sample ID: SY-BRMW3-287-297-110923
Matrix: Water
Received on ice at 0˚C, in satisfactory condition.
Sampled: 11/9/23 10:15

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
Unadjusted C5-C8 Aliphatics	50 U	100	50	50	ug/L	1	SFP			2303861	11/21/23	23:21	MA VPH
Unadjusted C9-C12 Aliphatics	50 U	100	50	40	ug/L	1	SFP			2303861	11/21/23	23:21	MA VPH
methyl t-butyl ether (MTBE)	1.0 U	2	1.0	0.73	ug/L	1	SFP			2303861	11/21/23	23:21	MA VPH
benzene	1.0 U	1	1.0	0.76	ug/L	1	SFP			2303861	11/21/23	23:21	MA VPH
toluene	14	2	1.0	0.58	ug/L	1	SFP			2303861	11/21/23	23:21	MA VPH
ethylbenzene	1.0 U	2	1.0	0.40	ug/L	1	SFP			2303861	11/21/23	23:21	MA VPH
m&p-xylenes	2.0 U	2	2.0	1.1	ug/L	1	SFP			2303861	11/21/23	23:21	MA VPH
o-xylene	1.0 U	2	1.0	0.45	ug/L	1	SFP			2303861	11/21/23	23:21	MA VPH
naphthalene	4.0 U	5	4.0	3.5	ug/L	1	SFP			2303861	11/21/23	23:21	MA VPH
C5-C8 Aliphatics	50 U	100	50	50	ug/L	1	SFP			2303861	11/21/23	23:21	MA VPH
C9-C12 Aliphatics	50 U	100	50	40	ug/L	1	SFP			2303861	11/21/23	23:21	MA VPH
C9-C10 Aromatics	50 U	100	50	33	ug/L	1	SFP			2303861	11/21/23	23:21	MA VPH
Surrogate Recovery		Limits											
2,5-dibromotoluene as Aromatic SUR	94	70-130			%	1	SFP			2303861	11/21/23	23:21	MA VPH
2,5-dibromotoluene as Aliphatic SUR	98	70-130			%	1	SFP			2303861	11/21/23	23:21	MA VPH

Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range.
C5-C8 Aliphatic Hydrocarbons exclude the concentration of target analytes eluting in that range.
C9-C12 Aliphatic Hydrocarbons exclude concentration of target analytes eluting in that range AND C9-C10 Aromatics.

Project ID: Dow Salvage Yard 18001468
Job ID: 67839
Sample#: 67839-007
Sample ID: SY-BRMW4-291-301-110923
Matrix: Water
Received on ice at 0˚C, in satisfactory condition.
Sampled: 11/9/23 11:00

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
Unadjusted C5-C8 Aliphatics	50 U	100	50	50	ug/L	1	SFP			2303859	11/20/23	19:48	MA VPH
Unadjusted C9-C12 Aliphatics	50 U	100	50	40	ug/L	1	SFP			2303859	11/20/23	19:48	MA VPH
methyl t-butyl ether (MTBE)	1.0 U	2	1.0	0.73	ug/L	1	SFP			2303859	11/20/23	19:48	MA VPH
benzene	1.0 U	1	1.0	0.76	ug/L	1	SFP			2303859	11/20/23	19:48	MA VPH
toluene	12	2	1.0	0.58	ug/L	1	SFP			2303859	11/20/23	19:48	MA VPH
ethylbenzene	1.0 U	2	1.0	0.40	ug/L	1	SFP			2303859	11/20/23	19:48	MA VPH
m&p-xylenes	2.0 U	2	2.0	1.1	ug/L	1	SFP			2303859	11/20/23	19:48	MA VPH
o-xylene	1.0 U	2	1.0	0.45	ug/L	1	SFP			2303859	11/20/23	19:48	MA VPH
naphthalene	4.0 U	5	4.0	3.5	ug/L	1	SFP			2303859	11/20/23	19:48	MA VPH
C5-C8 Aliphatics	50 U	100	50	50	ug/L	1	SFP			2303859	11/20/23	19:48	MA VPH
C9-C12 Aliphatics	50 U	100	50	40	ug/L	1	SFP			2303859	11/20/23	19:48	MA VPH
C9-C10 Aromatics	50 U	100	50	33	ug/L	1	SFP			2303859	11/20/23	19:48	MA VPH
Surrogate Recovery		Limits											
2,5-dibromotoluene as Aromatic SUR	91	70-130			%	1	SFP			2303859	11/20/23	19:48	MA VPH
2,5-dibromotoluene as Aliphatic SUR	93	70-130			%	1	SFP			2303859	11/20/23	19:48	MA VPH

Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range.
C5-C8 Aliphatic Hydrocarbons exclude the concentration of target analytes eluting in that range.
C9-C12 Aliphatic Hydrocarbons exclude concentration of target analytes eluting in that range AND C9-C10 Aromatics.

Project ID: Dow Salvage Yard 18001468
Job ID: 67839
Sample#: 67839-008
Sample ID: SY-BRMW1-42-52-110923
Matrix: Water
Received on ice at 0˚C, in satisfactory condition.
Sampled: 11/9/23 11:45

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
Unadjusted C5-C8 Aliphatics	50 U	100	50	50	ug/L	1	SFP			2303859	11/20/23	20:21	MA VPH
Unadjusted C9-C12 Aliphatics	50 U	100	50	40	ug/L	1	SFP			2303859	11/20/23	20:21	MA VPH
methyl t-butyl ether (MTBE)	1.0 U	2	1.0	0.73	ug/L	1	SFP			2303859	11/20/23	20:21	MA VPH
benzene	1.0 U	1	1.0	0.76	ug/L	1	SFP			2303859	11/20/23	20:21	MA VPH
toluene	11	2	1.0	0.58	ug/L	1	SFP			2303859	11/20/23	20:21	MA VPH
ethylbenzene	1.0 U	2	1.0	0.40	ug/L	1	SFP			2303859	11/20/23	20:21	MA VPH
m&p-xylenes	2.0 U	2	2.0	1.1	ug/L	1	SFP			2303859	11/20/23	20:21	MA VPH
o-xylene	1.0 U	2	1.0	0.45	ug/L	1	SFP			2303859	11/20/23	20:21	MA VPH
naphthalene	4.0 U	5	4.0	3.5	ug/L	1	SFP			2303859	11/20/23	20:21	MA VPH
C5-C8 Aliphatics	50 U	100	50	50	ug/L	1	SFP			2303859	11/20/23	20:21	MA VPH
C9-C12 Aliphatics	50 U	100	50	40	ug/L	1	SFP			2303859	11/20/23	20:21	MA VPH
C9-C10 Aromatics	50 U	100	50	33	ug/L	1	SFP			2303859	11/20/23	20:21	MA VPH
Surrogate Recovery		Limits											
2,5-dibromotoluene as Aromatic SUR	103	70-130			%	1	SFP			2303859	11/20/23	20:21	MA VPH
2,5-dibromotoluene as Aliphatic SUR	106	70-130			%	1	SFP			2303859	11/20/23	20:21	MA VPH

Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range.
C5-C8 Aliphatic Hydrocarbons exclude the concentration of target analytes eluting in that range.
C9-C12 Aliphatic Hydrocarbons exclude concentration of target analytes eluting in that range AND C9-C10 Aromatics.

Project ID: Dow Salvage Yard 18001468
Job ID: 67839
Sample#: 67839-009
Sample ID: SY-BRMW1-150-157-110923
Matrix: Water
Received on ice at 0˚C, in satisfactory condition.
Sampled: 11/9/23 12:40

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
Unadjusted C5-C8 Aliphatics	50 U	100	50	50	ug/L	1	SFP			2303859	11/20/23	20:55	MA VPH
Unadjusted C9-C12 Aliphatics	50 U	100	50	40	ug/L	1	SFP			2303859	11/20/23	20:55	MA VPH
methyl t-butyl ether (MTBE)	1.0 U	2	1.0	0.73	ug/L	1	SFP			2303859	11/20/23	20:55	MA VPH
benzene	1.0 U	1	1.0	0.76	ug/L	1	SFP			2303859	11/20/23	20:55	MA VPH
toluene	3	2	1.0	0.58	ug/L	1	SFP			2303859	11/20/23	20:55	MA VPH
ethylbenzene	1.0 U	2	1.0	0.40	ug/L	1	SFP			2303859	11/20/23	20:55	MA VPH
m&p-xylenes	2.0 U	2	2.0	1.1	ug/L	1	SFP			2303859	11/20/23	20:55	MA VPH
o-xylene	1.0 U	2	1.0	0.45	ug/L	1	SFP			2303859	11/20/23	20:55	MA VPH
naphthalene	4.0 U	5	4.0	3.5	ug/L	1	SFP			2303859	11/20/23	20:55	MA VPH
C5-C8 Aliphatics	50 U	100	50	50	ug/L	1	SFP			2303859	11/20/23	20:55	MA VPH
C9-C12 Aliphatics	50 U	100	50	40	ug/L	1	SFP			2303859	11/20/23	20:55	MA VPH
C9-C10 Aromatics	50 U	100	50	33	ug/L	1	SFP			2303859	11/20/23	20:55	MA VPH
Surrogate Recovery		Limits											
2,5-dibromotoluene as Aromatic SUR	103	70-130			%	1	SFP			2303859	11/20/23	20:55	MA VPH
2,5-dibromotoluene as Aliphatic SUR	105	70-130			%	1	SFP			2303859	11/20/23	20:55	MA VPH

Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range.
C5-C8 Aliphatic Hydrocarbons exclude the concentration of target analytes eluting in that range.
C9-C12 Aliphatic Hydrocarbons exclude concentration of target analytes eluting in that range AND C9-C10 Aromatics.

Project ID: Dow Salvage Yard 18001468
Job ID: 67839
Sample#: 67839-010
Sample ID: SY-BRMW1-65-75-110923
Matrix: Water
Received on ice at 0˚C, in satisfactory condition.
Sampled: 11/9/23 13:50

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
Unadjusted C5-C8 Aliphatics	50 U	100	50	50	ug/L	1	SFP			2303859	11/20/23	21:29	MA VPH
Unadjusted C9-C12 Aliphatics	50 U	100	50	40	ug/L	1	SFP			2303859	11/20/23	21:29	MA VPH
methyl t-butyl ether (MTBE)	1.0 U	2	1.0	0.73	ug/L	1	SFP			2303859	11/20/23	21:29	MA VPH
benzene	1.0 U	1	1.0	0.76	ug/L	1	SFP			2303859	11/20/23	21:29	MA VPH
toluene	8	2	1.0	0.58	ug/L	1	SFP			2303859	11/20/23	21:29	MA VPH
ethylbenzene	1.0 U	2	1.0	0.40	ug/L	1	SFP			2303859	11/20/23	21:29	MA VPH
m&p-xylenes	2.0 U	2	2.0	1.1	ug/L	1	SFP			2303859	11/20/23	21:29	MA VPH
o-xylene	1.0 U	2	1.0	0.45	ug/L	1	SFP			2303859	11/20/23	21:29	MA VPH
naphthalene	4.0 U	5	4.0	3.5	ug/L	1	SFP			2303859	11/20/23	21:29	MA VPH
C5-C8 Aliphatics	50 U	100	50	50	ug/L	1	SFP			2303859	11/20/23	21:29	MA VPH
C9-C12 Aliphatics	50 U	100	50	40	ug/L	1	SFP			2303859	11/20/23	21:29	MA VPH
C9-C10 Aromatics	50 U	100	50	33	ug/L	1	SFP			2303859	11/20/23	21:29	MA VPH
Surrogate Recovery		Limits											
2,5-dibromotoluene as Aromatic SUR	98	70-130			%	1	SFP			2303859	11/20/23	21:29	MA VPH
2,5-dibromotoluene as Aliphatic SUR	101	70-130			%	1	SFP			2303859	11/20/23	21:29	MA VPH

Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range.
C5-C8 Aliphatic Hydrocarbons exclude the concentration of target analytes eluting in that range.
C9-C12 Aliphatic Hydrocarbons exclude concentration of target analytes eluting in that range AND C9-C10 Aromatics.

Project ID: Dow Salvage Yard 18001468
Job ID: 67839
Sample#: 67839-011
Sample ID: SY-BRMW10-65-75-110923
Matrix: Water
Received on ice at 0˚C, in satisfactory condition.
Sampled: 11/9/23 13:55

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
Unadjusted C5-C8 Aliphatics	50 U	100	50	50	ug/L	1	SFP			2303859	11/20/23	22:03	MA VPH
Unadjusted C9-C12 Aliphatics	50 U	100	50	40	ug/L	1	SFP			2303859	11/20/23	22:03	MA VPH
methyl t-butyl ether (MTBE)	1.0 U	2	1.0	0.73	ug/L	1	SFP			2303859	11/20/23	22:03	MA VPH
benzene	1.0 U	1	1.0	0.76	ug/L	1	SFP			2303859	11/20/23	22:03	MA VPH
toluene	10	2	1.0	0.58	ug/L	1	SFP			2303859	11/20/23	22:03	MA VPH
ethylbenzene	1.0 U	2	1.0	0.40	ug/L	1	SFP			2303859	11/20/23	22:03	MA VPH
m&p-xylenes	2.0 U	2	2.0	1.1	ug/L	1	SFP			2303859	11/20/23	22:03	MA VPH
o-xylene	1.0 U	2	1.0	0.45	ug/L	1	SFP			2303859	11/20/23	22:03	MA VPH
naphthalene	4.0 U	5	4.0	3.5	ug/L	1	SFP			2303859	11/20/23	22:03	MA VPH
C5-C8 Aliphatics	50 U	100	50	50	ug/L	1	SFP			2303859	11/20/23	22:03	MA VPH
C9-C12 Aliphatics	50 U	100	50	40	ug/L	1	SFP			2303859	11/20/23	22:03	MA VPH
C9-C10 Aromatics	50 U	100	50	33	ug/L	1	SFP			2303859	11/20/23	22:03	MA VPH
Surrogate Recovery		Limits											
2,5-dibromotoluene as Aromatic SUR	101	70-130			%	1	SFP			2303859	11/20/23	22:03	MA VPH
2,5-dibromotoluene as Aliphatic SUR	102	70-130			%	1	SFP			2303859	11/20/23	22:03	MA VPH

Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range.
C5-C8 Aliphatic Hydrocarbons exclude the concentration of target analytes eluting in that range.
C9-C12 Aliphatic Hydrocarbons exclude concentration of target analytes eluting in that range AND C9-C10 Aromatics.

Project ID: Dow Salvage Yard 18001468
Job ID: 67839
Sample#: 67839-023
Sample ID: GAC-110923
Matrix: Water
Received on ice at 0˚C, in satisfactory condition.
Sampled: 11/9/23 13:40

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
Unadjusted C5-C8 Aliphatics	50 U	100	50	50	ug/L	1	SFP			2303859	11/21/23	8:17	MA VPH
Unadjusted C9-C12 Aliphatics	50 U	100	50	40	ug/L	1	SFP			2303859	11/21/23	8:17	MA VPH
methyl t-butyl ether (MTBE)	1.0 U	2	1.0	0.73	ug/L	1	SFP			2303859	11/21/23	8:17	MA VPH
benzene	1.0 U	1	1.0	0.76	ug/L	1	SFP			2303859	11/21/23	8:17	MA VPH
toluene	1.0 U	2	1.0	0.58	ug/L	1	SFP			2303859	11/21/23	8:17	MA VPH
ethylbenzene	1.0 U	2	1.0	0.40	ug/L	1	SFP			2303859	11/21/23	8:17	MA VPH
m&p-xylenes	2.0 U	2	2.0	1.1	ug/L	1	SFP			2303859	11/21/23	8:17	MA VPH
o-xylene	1.0 U	2	1.0	0.45	ug/L	1	SFP			2303859	11/21/23	8:17	MA VPH
naphthalene	4.0 U	5	4.0	3.5	ug/L	1	SFP			2303859	11/21/23	8:17	MA VPH
C5-C8 Aliphatics	50 U	100	50	50	ug/L	1	SFP			2303859	11/21/23	8:17	MA VPH
C9-C12 Aliphatics	50 U	100	50	40	ug/L	1	SFP			2303859	11/21/23	8:17	MA VPH
C9-C10 Aromatics	50 U	100	50	33	ug/L	1	SFP			2303859	11/21/23	8:17	MA VPH
Surrogate Recovery		Limits											
2,5-dibromotoluene as Aromatic SUR	89	70-130			%	1	SFP			2303859	11/21/23	8:17	MA VPH
2,5-dibromotoluene as Aliphatic SUR	91	70-130			%	1	SFP			2303859	11/21/23	8:17	MA VPH

Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range.
C5-C8 Aliphatic Hydrocarbons exclude the concentration of target analytes eluting in that range.
C9-C12 Aliphatic Hydrocarbons exclude concentration of target analytes eluting in that range AND C9-C10 Aromatics.

Project ID: Dow Salvage Yard 18001468
Job ID: 67839
Sample#: 67839-024
Sample ID: TB33-110923
Matrix: Water
Received on ice at 0˚C, in satisfactory condition.
Sampled: 11/9/23 15:00

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
Unadjusted C5-C8 Aliphatics	50 U	100	50	50	ug/L	1	SFP			2303859	11/20/23	12:31	MA VPH
Unadjusted C9-C12 Aliphatics	50 U	100	50	40	ug/L	1	SFP			2303859	11/20/23	12:31	MA VPH
methyl t-butyl ether (MTBE)	1.0 U	2	1.0	0.73	ug/L	1	SFP			2303859	11/20/23	12:31	MA VPH
benzene	1.0 U	1	1.0	0.76	ug/L	1	SFP			2303859	11/20/23	12:31	MA VPH
toluene	1.0 U	2	1.0	0.58	ug/L	1	SFP			2303859	11/20/23	12:31	MA VPH
ethylbenzene	1.0 U	2	1.0	0.40	ug/L	1	SFP			2303859	11/20/23	12:31	MA VPH
m&p-xylenes	2.0 U	2	2.0	1.1	ug/L	1	SFP			2303859	11/20/23	12:31	MA VPH
o-xylene	1.0 U	2	1.0	0.45	ug/L	1	SFP			2303859	11/20/23	12:31	MA VPH
naphthalene	4.0 U	5	4.0	3.5	ug/L	1	SFP			2303859	11/20/23	12:31	MA VPH
C5-C8 Aliphatics	50 U	100	50	50	ug/L	1	SFP			2303859	11/20/23	12:31	MA VPH
C9-C12 Aliphatics	50 U	100	50	40	ug/L	1	SFP			2303859	11/20/23	12:31	MA VPH
C9-C10 Aromatics	50 U	100	50	33	ug/L	1	SFP			2303859	11/20/23	12:31	MA VPH
Surrogate Recovery		Limits											
2,5-dibromotoluene as Aromatic SUR	91	70-130			%	1	SFP			2303859	11/20/23	12:31	MA VPH
2,5-dibromotoluene as Aliphatic SUR	94	70-130			%	1	SFP			2303859	11/20/23	12:31	MA VPH

Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range.
C5-C8 Aliphatic Hydrocarbons exclude the concentration of target analytes eluting in that range.
C9-C12 Aliphatic Hydrocarbons exclude concentration of target analytes eluting in that range AND C9-C10 Aromatics.

Project ID: Dow Salvage Yard 18001468
Job ID: 67839
Sample#: 67839-001
Sample ID: SY-BRMW4-62-72-110923
Matrix: Water
Sampled: 11/9/23 9:00

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
N-nitrosodimethylamine	1.0 U#	2.0	1.0	0.21	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	22:23	SW3510C8270E
pyridine	1.0 U#	2.0	1.0	0.60	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	22:23	SW3510C8270E
aniline	1.0 U	2.0	1.0	0.39	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	22:23	SW3510C8270E
phenol	1.0 U#	2.0	1.0	0.34	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	14:36	SW3510C8270E
2-chlorophenol	1.0 U	5.0	1.0	0.29	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	14:36	SW3510C8270E
bis(2-chloroethyl)ether	1.0 U	2.0	1.0	0.35	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	22:23	SW3510C8270E
1,3-dichlorobenzene	1.0 U	2.0	1.0	0.41	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	22:23	SW3510C8270E
1,4-dichlorobenzene	1.0 U	2.0	1.0	0.37	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	22:23	SW3510C8270E
1,2-dichlorobenzene	1.0 U	2.0	1.0	0.36	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	22:23	SW3510C8270E
benzyl alcohol	1.0 U	2.0	1.0	0.84	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	22:23	SW3510C8270E
2-methylphenol	1.0 U	5.0	1.0	0.39	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	14:36	SW3510C8270E
2,2'-oxybis(1-chloropropane)	1.0 U	2.0	1.0	0.44	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	22:23	SW3510C8270E
hexachloroethane	1.0 U	2.0	1.0	0.53	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	22:23	SW3510C8270E
N-nitroso-di-N-propylamine	1.0 U	2.0	1.0	0.30	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	22:23	SW3510C8270E
4-methylphenol	1.5 U	2.0	1.5	1.3	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	14:36	SW3510C8270E
nitrobenzene	1.0 U	2.0	1.0	0.41	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	22:23	SW3510C8270E
isophorone	1.0 U	5.0	1.0	0.32	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	22:23	SW3510C8270E
2-nitrophenol	1.0 U	2.0	1.0	0.21	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	14:36	SW3510C8270E
2,4-dimethylphenol	1.0 U	5.0	1.0	0.44	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	14:36	SW3510C8270E
bis(2-chloroethoxy)methane	1.0 U	5.0	1.0	0.26	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	22:23	SW3510C8270E
2,4-dichlorophenol	1.0 U	5.0	1.0	0.19	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	14:36	SW3510C8270E
1,2,4-trichlorobenzene	1.0 U	5.0	1.0	0.34	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	22:23	SW3510C8270E
benzoic acid	45 U#	50	45	20	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	14:36	SW3510C8270E
4-chloroaniline	1.0 U	2.0	1.0	0.41	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	22:23	SW3510C8270E
hexachlorobutadiene	1.0 U	2.0	1.0	0.57	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	22:23	SW3510C8270E
4-chloro-3-methylphenol	1.0 U	2.0	1.0	0.42	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	14:36	SW3510C8270E
hexachlorocyclopentadiene	4.0 U#	10	4.0	1.6	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	22:23	SW3510C8270E
2,4,6-trichlorophenol	1.0 U	2.0	1.0	0.33	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	14:36	SW3510C8270E
2,4,5-trichlorophenol	1.0 U	2.0	1.0	0.28	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	14:36	SW3510C8270E
2-chloronaphthalene	1.0 U	5.0	1.0	0.34	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	22:23	SW3510C8270E
2-nitroaniline	1.0 U	2.0	1.0	0.72	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	22:23	SW3510C8270E
dimethylphthalate	1.0 U#	5.0	1.0	0.41	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	22:23	SW3510C8270E
2,6-dinitrotoluene	1.0 U	5.0	1.0	0.42	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	22:23	SW3510C8270E
2,4-dinitrotoluene	1.0 U	5.0	1.0	0.52	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	22:23	SW3510C8270E
3-nitroaniline	1.5 U	2.0	1.5	1.0	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	22:23	SW3510C8270E
2,4-dinitrophenol	45 U	50	45	3.5	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	14:36	SW3510C8270E
dibenzofuran	0.40 U	0.50	0.40	0.37	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	22:23	SW3510C8270E
4-nitrophenol	5.0 U#	10	5.0	1.6	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	14:36	SW3510C8270E
diethyl phthalate	0.46 J	5.0	1.0	0.30	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	22:23	SW3510C8270E
4-chlorophenyl phenyl ether	1.0 U	5.0	1.0	0.35	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	22:23	SW3510C8270E
4-nitroaniline	3.0 U	5.0	3.0	1.0	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	22:23	SW3510C8270E
4,6-dinitro-2-methylphenol	10 U	20	10	1.7	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	14:36	SW3510C8270E

Project ID: Dow Salvage Yard 18001468
Job ID: 67839
Sample#: 67839-001
Sample ID: SY-BRMW4-62-72-110923
Matrix: Water
Sampled: 11/9/23 9:00

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Analysis Batch	Analysis Date	Analysis Time	Reference
azobenzene	1.0 U	2.0	1.0	0.25	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	22:23	SW3510C8270E
N-nitrosodiphenylamine	1.0 U	2.0	1.0	0.26	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	22:23	SW3510C8270E
4-bromophenyl phenyl ether	1.0 U	2.0	1.0	0.23	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	22:23	SW3510C8270E
hexachlorobenzene	1.0 U	2.0	1.0	0.25	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	22:23	SW3510C8270E
pentachlorophenol	5.0 U	10	5.0	2.6	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	14:36	SW3510C8270E
carbazole	1.0 U	2.0	1.0	0.32	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	22:23	SW3510C8270E
di-n-butylphthalate	1.0 U	5.0	1.0	0.54	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	22:23	SW3510C8270E
benzidine	25 U	30	25	20	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	22:23	SW3510C8270E
butyl benzyl phthalate	3.0 U#	5.0	3.0	2.1	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	22:23	SW3510C8270E
3,3'-dichlorobenzidine	25 U	30	25	20	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	22:23	SW3510C8270E
bis(2-ethylhexyl)phthalate	160 #	25	15	12	ug/L	5	CL	11/14/23	8:53	17124	12/1/23	13:48	SW3510C8270E
di-n-octyl phthalate	3.0 U	5.0	3.0	2.1	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	22:23	SW3510C8270E
Surrogate Recovery		Limits											
2-fluorophenol SUR	32	21-100			%	1	CL	11/14/23	8:53	17124	11/20/23	14:36	SW3510C8270E
phenol-D5 SUR	20	10-102			%	1	CL	11/14/23	8:53	17124	11/20/23	14:36	SW3510C8270E
2,4,6-tribromophenol SUR	56	10-123			%	1	CL	11/14/23	8:53	17124	11/20/23	14:36	SW3510C8270E
nitrobenzene-D5 SUR	71	35-114			%	1	CL	11/14/23	8:53	17124	11/20/23	22:23	SW3510C8270E
2-fluorobiphenyl SUR	71	43-116			%	1	CL	11/14/23	8:53	17124	11/20/23	22:23	SW3510C8270E
p-terphenyl-D14 SUR	88	33-141			%	1	CL	11/14/23	8:53	17124	11/20/23	22:23	SW3510C8270E

 # The percent recovery and/or RPD for the LCS/D was outside acceptance criteria.

Project ID: Dow Salvage Yard 18001468
Job ID: 67839
Sample#: 67839-002
Sample ID: SY-BRMW40-62-72-110923
Matrix: Water
Sampled: 11/9/23 9:05

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
N-nitrosodimethylamine	1.0 U#	2.0	1.0	0.21	ug/L	1	CL	11/14/23	8:53	17124	11/21/23	19:43	SW3510C8270E
pyridine	1.0 U#	2.0	1.0	0.60	ug/L	1	CL	11/14/23	8:53	17124	11/21/23	19:43	SW3510C8270E
aniline	1.0 U	2.0	1.0	0.39	ug/L	1	CL	11/14/23	8:53	17124	11/21/23	19:43	SW3510C8270E
phenol	1.0 U#	2.0	1.0	0.34	ug/L	1	CL	11/14/23	8:53	17124	11/21/23	19:13	SW3510C8270E
2-chlorophenol	1.0 U	5.0	1.0	0.29	ug/L	1	CL	11/14/23	8:53	17124	11/21/23	19:13	SW3510C8270E
bis(2-chloroethyl)ether	1.0 U	2.0	1.0	0.35	ug/L	1	CL	11/14/23	8:53	17124	11/21/23	19:43	SW3510C8270E
1,3-dichlorobenzene	1.0 U	2.0	1.0	0.41	ug/L	1	CL	11/14/23	8:53	17124	11/21/23	19:43	SW3510C8270E
1,4-dichlorobenzene	1.0 U	2.0	1.0	0.37	ug/L	1	CL	11/14/23	8:53	17124	11/21/23	19:43	SW3510C8270E
1,2-dichlorobenzene	1.0 U	2.0	1.0	0.36	ug/L	1	CL	11/14/23	8:53	17124	11/21/23	19:43	SW3510C8270E
benzyl alcohol	1.0 U	2.0	1.0	0.84	ug/L	1	CL	11/14/23	8:53	17124	11/21/23	19:43	SW3510C8270E
2-methylphenol	1.0 U	5.0	1.0	0.39	ug/L	1	CL	11/14/23	8:53	17124	11/21/23	19:13	SW3510C8270E
2,2'-oxybis(1-chloropropane)	1.0 U	2.0	1.0	0.44	ug/L	1	CL	11/14/23	8:53	17124	11/21/23	19:43	SW3510C8270E
hexachloroethane	1.0 U	2.0	1.0	0.53	ug/L	1	CL	11/14/23	8:53	17124	11/21/23	19:43	SW3510C8270E
N-nitroso-di-N-propylamine	1.0 U	2.0	1.0	0.30	ug/L	1	CL	11/14/23	8:53	17124	11/21/23	19:43	SW3510C8270E
4-methylphenol	1.5 U	2.0	1.5	1.3	ug/L	1	CL	11/14/23	8:53	17124	11/21/23	19:13	SW3510C8270E
nitrobenzene	1.0 U	2.0	1.0	0.41	ug/L	1	CL	11/14/23	8:53	17124	11/21/23	19:43	SW3510C8270E
isophorone	1.0 U	5.0	1.0	0.32	ug/L	1	CL	11/14/23	8:53	17124	11/21/23	19:43	SW3510C8270E
2-nitrophenol	1.0 U	2.0	1.0	0.21	ug/L	1	CL	11/14/23	8:53	17124	11/21/23	19:13	SW3510C8270E
2,4-dimethylphenol	1.0 U	5.0	1.0	0.44	ug/L	1	CL	11/14/23	8:53	17124	11/21/23	19:13	SW3510C8270E
bis(2-chloroethoxy)methane	1.0 U	5.0	1.0	0.26	ug/L	1	CL	11/14/23	8:53	17124	11/21/23	19:43	SW3510C8270E
2,4-dichlorophenol	1.0 U	5.0	1.0	0.19	ug/L	1	CL	11/14/23	8:53	17124	11/21/23	19:13	SW3510C8270E
1,2,4-trichlorobenzene	1.0 U	5.0	1.0	0.34	ug/L	1	CL	11/14/23	8:53	17124	11/21/23	19:43	SW3510C8270E
benzoic acid	45 U#	50	45	20	ug/L	1	CL	11/14/23	8:53	17124	11/21/23	19:13	SW3510C8270E
4-chloroaniline	1.0 U	2.0	1.0	0.41	ug/L	1	CL	11/14/23	8:53	17124	11/21/23	19:43	SW3510C8270E
hexachlorobutadiene	1.0 U	2.0	1.0	0.57	ug/L	1	CL	11/14/23	8:53	17124	11/21/23	19:43	SW3510C8270E
4-chloro-3-methylphenol	1.0 U	2.0	1.0	0.42	ug/L	1	CL	11/14/23	8:53	17124	11/21/23	19:13	SW3510C8270E
hexachlorocyclopentadiene	4.0 U#	10	4.0	1.6	ug/L	1	CL	11/14/23	8:53	17124	11/21/23	19:43	SW3510C8270E
2,4,6-trichlorophenol	1.0 U	2.0	1.0	0.33	ug/L	1	CL	11/14/23	8:53	17124	11/21/23	19:13	SW3510C8270E
2,4,5-trichlorophenol	1.0 U	2.0	1.0	0.28	ug/L	1	CL	11/14/23	8:53	17124	11/21/23	19:13	SW3510C8270E
2-chloronaphthalene	1.0 U	5.0	1.0	0.34	ug/L	1	CL	11/14/23	8:53	17124	11/21/23	19:43	SW3510C8270E
2-nitroaniline	1.0 U	2.0	1.0	0.72	ug/L	1	CL	11/14/23	8:53	17124	11/21/23	19:43	SW3510C8270E
dimethylphthalate	1.0 U#	5.0	1.0	0.41	ug/L	1	CL	11/14/23	8:53	17124	11/21/23	19:43	SW3510C8270E
2,6-dinitrotoluene	1.0 U	5.0	1.0	0.42	ug/L	1	CL	11/14/23	8:53	17124	11/21/23	19:43	SW3510C8270E
2,4-dinitrotoluene	1.0 U	5.0	1.0	0.52	ug/L	1	CL	11/14/23	8:53	17124	11/21/23	19:43	SW3510C8270E
3-nitroaniline	1.5 U	2.0	1.5	1.0	ug/L	1	CL	11/14/23	8:53	17124	11/21/23	19:43	SW3510C8270E
2,4-dinitrophenol	45 U	50	45	3.5	ug/L	1	CL	11/14/23	8:53	17124	11/21/23	19:13	SW3510C8270E
dibenzofuran	0.40 U	0.50	0.40	0.37	ug/L	1	CL	11/14/23	8:53	17124	11/21/23	19:43	SW3510C8270E
4-nitrophenol	5.0 U#	10	5.0	1.6	ug/L	1	CL	11/14/23	8:53	17124	11/21/23	19:13	SW3510C8270E
diethyl phthalate	0.37 J	5.0	1.0	0.30	ug/L	1	CL	11/14/23	8:53	17124	11/21/23	19:43	SW3510C8270E
4-chlorophenyl phenyl ether	1.0 U	5.0	1.0	0.35	ug/L	1	CL	11/14/23	8:53	17124	11/21/23	19:43	SW3510C8270E
4-nitroaniline	3.0 U	5.0	3.0	1.0	ug/L	1	CL	11/14/23	8:53	17124	11/21/23	19:43	SW3510C8270E
4,6-dinitro-2-methylphenol	10 U	20	10	1.7	ug/L	1	CL	11/14/23	8:53	17124	11/21/23	19:13	SW3510C8270E

Project ID: Dow Salvage Yard 18001468
Job ID: 67839
Sample#: 67839-002
Sample ID: SY-BRMW40-62-72-110923
Matrix: Water
Sampled: 11/9/23 9:05

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
azobenzene	1.0 U	2.0	1.0	0.25	ug/L	1	CL	11/14/23	8:53	17124	11/21/23	19:43	SW3510C8270E
N-nitrosodiphenylamine	1.0 U	2.0	1.0	0.26	ug/L	1	CL	11/14/23	8:53	17124	11/21/23	19:43	SW3510C8270E
4-bromophenyl phenyl ether	1.0 U	2.0	1.0	0.23	ug/L	1	CL	11/14/23	8:53	17124	11/21/23	19:43	SW3510C8270E
hexachlorobenzene	1.0 U	2.0	1.0	0.25	ug/L	1	CL	11/14/23	8:53	17124	11/21/23	19:43	SW3510C8270E
pentachlorophenol	5.0 U	10	5.0	2.6	ug/L	1	CL	11/14/23	8:53	17124	11/21/23	19:13	SW3510C8270E
carbazole	1.0 U	2.0	1.0	0.32	ug/L	1	CL	11/14/23	8:53	17124	11/21/23	19:43	SW3510C8270E
di-n-butylphthalate	1.0 U	5.0	1.0	0.54	ug/L	1	CL	11/14/23	8:53	17124	11/21/23	19:43	SW3510C8270E
benzidine	25 U	30	25	20	ug/L	1	CL	11/14/23	8:53	17124	11/21/23	19:43	SW3510C8270E
butyl benzyl phthalate	3.0 U#	5.0	3.0	2.1	ug/L	1	CL	11/14/23	8:53	17124	11/21/23	19:43	SW3510C8270E
3,3'-dichlorobenzidine	25 U	30	25	20	ug/L	1	CL	11/14/23	8:53	17124	11/21/23	19:43	SW3510C8270E
bis(2-ethylhexyl)phthalate	130 #	25	15	12	ug/L	5	CL	11/14/23	8:53	17124	12/1/23	14:18	SW3510C8270E
di-n-octyl phthalate	3.0 U	5.0	3.0	2.1	ug/L	1	CL	11/14/23	8:53	17124	11/21/23	19:43	SW3510C8270E
Surrogate Recovery		Limits											
2-fluorophenol SUR	35	21-100			%	1	CL	11/14/23	8:53	17124	11/21/23	19:13	SW3510C8270E
phenol-D5 SUR	23	10-102			%	1	CL	11/14/23	8:53	17124	11/21/23	19:13	SW3510C8270E
2,4,6-tribromophenol SUR	66	10-123			%	1	CL	11/14/23	8:53	17124	11/21/23	19:13	SW3510C8270E
nitrobenzene-D5 SUR	72	35-114			%	1	CL	11/14/23	8:53	17124	11/21/23	19:43	SW3510C8270E
2-fluorobiphenyl SUR	74	43-116			%	1	CL	11/14/23	8:53	17124	11/21/23	19:43	SW3510C8270E
p-terphenyl-D14 SUR	80	33-141			%	1	CL	11/14/23	8:53	17124	11/21/23	19:43	SW3510C8270E

 # The percent recovery and/or RPD for the LCS/D was outside acceptance criteria.

Project ID: Dow Salvage Yard 18001468
Job ID: 67839
Sample#: 67839-003
Sample ID: SY-BRMW4-138-148-110923
Matrix: Water
Sampled: 11/9/23 9:40

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
N-nitrosodimethylamine	1.0 U#	2.0	1.0	0.21	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	22:53	SW3510C8270E
pyridine	1.0 U#	2.0	1.0	0.60	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	22:53	SW3510C8270E
aniline	1.0 U	2.0	1.0	0.39	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	22:53	SW3510C8270E
phenol	1.0 U#	2.0	1.0	0.34	ug/L	1	CL	11/14/23	8:53	17124	11/21/23	20:13	SW3510C8270E
2-chlorophenol	1.0 U	5.0	1.0	0.29	ug/L	1	CL	11/14/23	8:53	17124	11/21/23	20:13	SW3510C8270E
bis(2-chloroethyl)ether	1.0 U	2.0	1.0	0.35	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	22:53	SW3510C8270E
1,3-dichlorobenzene	1.0 U	2.0	1.0	0.41	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	22:53	SW3510C8270E
1,4-dichlorobenzene	1.0 U	2.0	1.0	0.37	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	22:53	SW3510C8270E
1,2-dichlorobenzene	1.0 U	2.0	1.0	0.36	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	22:53	SW3510C8270E
benzyl alcohol	1.0 U	2.0	1.0	0.84	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	22:53	SW3510C8270E
2-methylphenol	1.0 U	5.0	1.0	0.39	ug/L	1	CL	11/14/23	8:53	17124	11/21/23	20:13	SW3510C8270E
2,2'-oxybis(1-chloropropane)	1.0 U	2.0	1.0	0.44	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	22:53	SW3510C8270E
hexachloroethane	1.0 U	2.0	1.0	0.53	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	22:53	SW3510C8270E
N-nitroso-di-N-propylamine	1.0 U	2.0	1.0	0.30	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	22:53	SW3510C8270E
4-methylphenol	1.5 U	2.0	1.5	1.3	ug/L	1	CL	11/14/23	8:53	17124	11/21/23	20:13	SW3510C8270E
nitrobenzene	1.0 U	2.0	1.0	0.41	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	22:53	SW3510C8270E
isophorone	1.0 U	5.0	1.0	0.32	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	22:53	SW3510C8270E
2-nitrophenol	1.0 U	2.0	1.0	0.21	ug/L	1	CL	11/14/23	8:53	17124	11/21/23	20:13	SW3510C8270E
2,4-dimethylphenol	1.0 U	5.0	1.0	0.44	ug/L	1	CL	11/14/23	8:53	17124	11/21/23	20:13	SW3510C8270E
bis(2-chloroethoxy)methane	1.0 U	5.0	1.0	0.26	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	22:53	SW3510C8270E
2,4-dichlorophenol	1.0 U	5.0	1.0	0.19	ug/L	1	CL	11/14/23	8:53	17124	11/21/23	20:13	SW3510C8270E
1,2,4-trichlorobenzene	1.0 U	5.0	1.0	0.34	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	22:53	SW3510C8270E
benzoic acid	45 U#	50	45	20	ug/L	1	CL	11/14/23	8:53	17124	11/21/23	20:13	SW3510C8270E
4-chloroaniline	1.0 U	2.0	1.0	0.41	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	22:53	SW3510C8270E
hexachlorobutadiene	1.0 U	2.0	1.0	0.57	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	22:53	SW3510C8270E
4-chloro-3-methylphenol	1.0 U	2.0	1.0	0.42	ug/L	1	CL	11/14/23	8:53	17124	11/21/23	20:13	SW3510C8270E
hexachlorocyclopentadiene	4.0 U#	10	4.0	1.6	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	22:53	SW3510C8270E
2,4,6-trichlorophenol	1.0 U	2.0	1.0	0.33	ug/L	1	CL	11/14/23	8:53	17124	11/21/23	20:13	SW3510C8270E
2,4,5-trichlorophenol	1.0 U	2.0	1.0	0.28	ug/L	1	CL	11/14/23	8:53	17124	11/21/23	20:13	SW3510C8270E
2-chloronaphthalene	1.0 U	5.0	1.0	0.34	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	22:53	SW3510C8270E
2-nitroaniline	1.0 U	2.0	1.0	0.72	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	22:53	SW3510C8270E
dimethylphthalate	1.0 U#	5.0	1.0	0.41	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	22:53	SW3510C8270E
2,6-dinitrotoluene	1.0 U	5.0	1.0	0.42	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	22:53	SW3510C8270E
2,4-dinitrotoluene	1.0 U	5.0	1.0	0.52	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	22:53	SW3510C8270E
3-nitroaniline	1.5 U	2.0	1.5	1.0	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	22:53	SW3510C8270E
2,4-dinitrophenol	45 U	50	45	3.5	ug/L	1	CL	11/14/23	8:53	17124	11/21/23	20:13	SW3510C8270E
dibenzofuran	0.40 U	0.50	0.40	0.37	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	22:53	SW3510C8270E
4-nitrophenol	5.0 U#	10	5.0	1.6	ug/L	1	CL	11/14/23	8:53	17124	11/21/23	20:13	SW3510C8270E
diethyl phthalate	5.8	5.0	1.0	0.30	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	22:53	SW3510C8270E
4-chlorophenyl phenyl ether	1.0 U	5.0	1.0	0.35	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	22:53	SW3510C8270E
4-nitroaniline	3.0 U	5.0	3.0	1.0	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	22:53	SW3510C8270E
4,6-dinitro-2-methylphenol	10 U	20	10	1.7	ug/L	1	CL	11/14/23	8:53	17124	11/21/23	20:13	SW3510C8270E

Project ID: Dow Salvage Yard 18001468
Job ID: 67839
Sample#: 67839-003
Sample ID: SY-BRMW4-138-148-110923
Matrix: Water
Sampled: 11/9/23 9:40

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
azobenzene	1.0 U	2.0	1.0	0.25	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	22:53	SW3510C8270E
N-nitrosodiphenylamine	1.0 U	2.0	1.0	0.26	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	22:53	SW3510C8270E
4-bromophenyl phenyl ether	1.0 U	2.0	1.0	0.23	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	22:53	SW3510C8270E
hexachlorobenzene	1.0 U	2.0	1.0	0.25	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	22:53	SW3510C8270E
pentachlorophenol	5.0 U	10	5.0	2.6	ug/L	1	CL	11/14/23	8:53	17124	11/21/23	20:13	SW3510C8270E
carbazole	1.0 U	2.0	1.0	0.32	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	22:53	SW3510C8270E
di-n-butylphthalate	1.0 U	5.0	1.0	0.54	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	22:53	SW3510C8270E
benzidine	25 U	30	25	20	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	22:53	SW3510C8270E
butyl benzyl phthalate	3.0 U#	5.0	3.0	2.1	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	22:53	SW3510C8270E
3,3'-dichlorobenzidine	25 U	30	25	20	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	22:53	SW3510C8270E
bis(2-ethylhexyl)phthalate	120 #	25	15	12	ug/L	5	CL	11/14/23	8:53	17124	12/1/23	14:48	SW3510C8270E
di-n-octyl phthalate	3.0 U	5.0	3.0	2.1	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	22:53	SW3510C8270E
Surrogate Recovery		Limits											
2-fluorophenol SUR	37	21-100			%	1	CL	11/14/23	8:53	17124	11/21/23	20:13	SW3510C8270E
phenol-D5 SUR	24	10-102			%	1	CL	11/14/23	8:53	17124	11/21/23	20:13	SW3510C8270E
2,4,6-tribromophenol SUR	75	10-123			%	1	CL	11/14/23	8:53	17124	11/21/23	20:13	SW3510C8270E
nitrobenzene-D5 SUR	61	35-114			%	1	CL	11/14/23	8:53	17124	11/20/23	22:53	SW3510C8270E
2-fluorobiphenyl SUR	64	43-116			%	1	CL	11/14/23	8:53	17124	11/20/23	22:53	SW3510C8270E
p-terphenyl-D14 SUR	97	33-141			%	1	CL	11/14/23	8:53	17124	11/20/23	22:53	SW3510C8270E

 # The percent recovery and/or RPD for the LCS/D was outside acceptance criteria.

Project ID: Dow Salvage Yard 18001468
Job ID: 67839
Sample#: 67839-004
Sample ID: SY-BRMW3-47-62-110923
Matrix: Water
Sampled: 11/9/23 9:45

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
N-nitrosodimethylamine	1.0 U#	2.0	1.0	0.21	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	23:23	SW3510C8270E
pyridine	1.0 U#	2.0	1.0	0.60	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	23:23	SW3510C8270E
aniline	1.0 U	2.0	1.0	0.39	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	23:23	SW3510C8270E
phenol	1.0 U#	2.0	1.0	0.34	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	15:05	SW3510C8270E
2-chlorophenol	1.0 U	5.0	1.0	0.29	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	15:05	SW3510C8270E
bis(2-chloroethyl)ether	1.0 U	2.0	1.0	0.35	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	23:23	SW3510C8270E
1,3-dichlorobenzene	1.0 U	2.0	1.0	0.41	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	23:23	SW3510C8270E
1,4-dichlorobenzene	1.0 U	2.0	1.0	0.37	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	23:23	SW3510C8270E
1,2-dichlorobenzene	1.0 U	2.0	1.0	0.36	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	23:23	SW3510C8270E
benzyl alcohol	1.0 U	2.0	1.0	0.84	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	23:23	SW3510C8270E
2-methylphenol	1.0 U	5.0	1.0	0.39	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	15:05	SW3510C8270E
2,2'-oxybis(1-chloropropane)	1.0 U	2.0	1.0	0.44	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	23:23	SW3510C8270E
hexachloroethane	1.0 U	2.0	1.0	0.53	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	23:23	SW3510C8270E
N-nitroso-di-N-propylamine	1.0 U	2.0	1.0	0.30	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	23:23	SW3510C8270E
4-methylphenol	1.5 U	2.0	1.5	1.3	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	15:05	SW3510C8270E
nitrobenzene	1.0 U	2.0	1.0	0.41	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	23:23	SW3510C8270E
isophorone	1.0 U	5.0	1.0	0.32	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	23:23	SW3510C8270E
2-nitrophenol	1.0 U	2.0	1.0	0.21	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	15:05	SW3510C8270E
2,4-dimethylphenol	1.0 U	5.0	1.0	0.44	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	15:05	SW3510C8270E
bis(2-chloroethoxy)methane	1.0 U	5.0	1.0	0.26	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	23:23	SW3510C8270E
2,4-dichlorophenol	1.0 U	5.0	1.0	0.19	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	15:05	SW3510C8270E
1,2,4-trichlorobenzene	1.0 U	5.0	1.0	0.34	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	23:23	SW3510C8270E
benzoic acid	45 U#	50	45	20	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	15:05	SW3510C8270E
4-chloroaniline	1.0 U	2.0	1.0	0.41	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	23:23	SW3510C8270E
hexachlorobutadiene	1.0 U	2.0	1.0	0.57	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	23:23	SW3510C8270E
4-chloro-3-methylphenol	1.0 U	2.0	1.0	0.42	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	15:05	SW3510C8270E
hexachlorocyclopentadiene	4.0 U#	10	4.0	1.6	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	23:23	SW3510C8270E
2,4,6-trichlorophenol	1.0 U	2.0	1.0	0.33	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	15:05	SW3510C8270E
2,4,5-trichlorophenol	1.0 U	2.0	1.0	0.28	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	15:05	SW3510C8270E
2-chloronaphthalene	1.0 U	5.0	1.0	0.34	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	23:23	SW3510C8270E
2-nitroaniline	1.0 U	2.0	1.0	0.72	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	23:23	SW3510C8270E
dimethylphthalate	1.0 U#	5.0	1.0	0.41	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	23:23	SW3510C8270E
2,6-dinitrotoluene	1.0 U	5.0	1.0	0.42	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	23:23	SW3510C8270E
2,4-dinitrotoluene	1.0 U	5.0	1.0	0.52	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	23:23	SW3510C8270E
3-nitroaniline	1.5 U	2.0	1.5	1.0	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	23:23	SW3510C8270E
2,4-dinitrophenol	45 U	50	45	3.5	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	15:05	SW3510C8270E
dibenzofuran	0.40 U	0.50	0.40	0.37	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	23:23	SW3510C8270E
4-nitrophenol	5.0 U#	10	5.0	1.6	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	15:05	SW3510C8270E
diethyl phthalate	0.83 J	5.0	1.0	0.30	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	23:23	SW3510C8270E
4-chlorophenyl phenyl ether	1.0 U	5.0	1.0	0.35	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	23:23	SW3510C8270E
4-nitroaniline	3.0 U	5.0	3.0	1.0	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	23:23	SW3510C8270E
4,6-dinitro-2-methylphenol	10 U	20	10	1.7	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	15:05	SW3510C8270E

Project ID: Dow Salvage Yard 18001468
Job ID: 67839
Sample#: 67839-004
Sample ID: SY-BRMW3-47-62-110923
Matrix: Water
Sampled: 11/9/23 9:45

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
azobenzene	1.0 U	2.0	1.0	0.25	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	23:23	SW3510C8270E
N-nitrosodiphenylamine	1.0 U	2.0	1.0	0.26	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	23:23	SW3510C8270E
4-bromophenyl phenyl ether	1.0 U	2.0	1.0	0.23	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	23:23	SW3510C8270E
hexachlorobenzene	1.0 U	2.0	1.0	0.25	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	23:23	SW3510C8270E
pentachlorophenol	5.0 U	10	5.0	2.6	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	15:05	SW3510C8270E
carbazole	1.0 U	2.0	1.0	0.32	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	23:23	SW3510C8270E
di-n-butylphthalate	1.0 U	5.0	1.0	0.54	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	23:23	SW3510C8270E
benzidine	25 U	30	25	20	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	23:23	SW3510C8270E
butyl benzyl phthalate	3.0 U#	5.0	3.0	2.1	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	23:23	SW3510C8270E
3,3'-dichlorobenzidine	25 U	30	25	20	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	23:23	SW3510C8270E
bis(2-ethylhexyl)phthalate	190 #	25	15	12	ug/L	5	CL	11/14/23	8:53	17124	12/1/23	15:18	SW3510C8270E
di-n-octyl phthalate	3.0 U	5.0	3.0	2.1	ug/L	1	CL	11/14/23	8:53	17124	11/20/23	23:23	SW3510C8270E
Surrogate Recovery		Limits											
2-fluorophenol SUR	24	21-100			%	1	CL	11/14/23	8:53	17124	11/20/23	15:05	SW3510C8270E
phenol-D5 SUR	17	10-102			%	1	CL	11/14/23	8:53	17124	11/20/23	15:05	SW3510C8270E
2,4,6-tribromophenol SUR	56	10-123			%	1	CL	11/14/23	8:53	17124	11/20/23	15:05	SW3510C8270E
nitrobenzene-D5 SUR	65	35-114			%	1	CL	11/14/23	8:53	17124	11/20/23	23:23	SW3510C8270E
2-fluorobiphenyl SUR	65	43-116			%	1	CL	11/14/23	8:53	17124	11/20/23	23:23	SW3510C8270E
p-terphenyl-D14 SUR	78	33-141			%	1	CL	11/14/23	8:53	17124	11/20/23	23:23	SW3510C8270E

 # The percent recovery and/or RPD for the LCS/D was outside acceptance criteria.

Project ID: Dow Salvage Yard 18001468
Job ID: 67839
Sample#: 67839-005
Sample ID: SY-BRMW3-145-155-110923
Matrix: Water
Sampled: 11/9/23 10:00

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
N-nitrosodimethylamine	1.0 U	2.0	1.0	0.21	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	14:18	SW3510C8270E
pyridine	1.0 U#	2.0	1.0	0.60	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	14:18	SW3510C8270E
aniline	1.0 U	2.0	1.0	0.39	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	14:18	SW3510C8270E
phenol	1.0 U#	2.0	1.0	0.34	ug/L	1	CL	11/15/23	8:34	17145	11/20/23	23:53	SW3510C8270E
2-chlorophenol	1.0 U	5.0	1.0	0.29	ug/L	1	CL	11/15/23	8:34	17145	11/20/23	23:53	SW3510C8270E
bis(2-chloroethyl)ether	1.0 U	2.0	1.0	0.35	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	14:18	SW3510C8270E
1,3-dichlorobenzene	1.0 U#	2.0	1.0	0.41	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	14:18	SW3510C8270E
1,4-dichlorobenzene	1.0 U#	2.0	1.0	0.37	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	14:18	SW3510C8270E
1,2-dichlorobenzene	1.0 U#	2.0	1.0	0.36	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	14:18	SW3510C8270E
benzyl alcohol	1.0 U	2.0	1.0	0.84	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	14:18	SW3510C8270E
2-methylphenol	1.0 U	5.0	1.0	0.39	ug/L	1	CL	11/15/23	8:34	17145	11/20/23	23:53	SW3510C8270E
2,2'-oxybis(1-chloropropane)	1.0 U	2.0	1.0	0.44	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	14:18	SW3510C8270E
hexachloroethane	1.0 U#	2.0	1.0	0.53	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	14:18	SW3510C8270E
N-nitroso-di-N-propylamine	1.0 U	2.0	1.0	0.30	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	14:18	SW3510C8270E
4-methylphenol	1.5 U	2.0	1.5	1.3	ug/L	1	CL	11/15/23	8:34	17145	11/20/23	23:53	SW3510C8270E
nitrobenzene	1.0 U	2.0	1.0	0.41	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	14:18	SW3510C8270E
isophorone	1.0 U	5.0	1.0	0.32	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	14:18	SW3510C8270E
2-nitrophenol	1.0 U	2.0	1.0	0.21	ug/L	1	CL	11/15/23	8:34	17145	11/20/23	23:53	SW3510C8270E
2,4-dimethylphenol	1.0 U	5.0	1.0	0.44	ug/L	1	CL	11/15/23	8:34	17145	11/20/23	23:53	SW3510C8270E
bis(2-chloroethoxy)methane	1.0 U	5.0	1.0	0.26	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	14:18	SW3510C8270E
2,4-dichlorophenol	1.0 U	5.0	1.0	0.19	ug/L	1	CL	11/15/23	8:34	17145	11/20/23	23:53	SW3510C8270E
1,2,4-trichlorobenzene	1.0 U#	5.0	1.0	0.34	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	14:18	SW3510C8270E
benzoic acid	45 U#	50	45	20	ug/L	1	CL	11/15/23	8:34	17145	11/20/23	23:53	SW3510C8270E
4-chloroaniline	1.0 U	2.0	1.0	0.41	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	14:18	SW3510C8270E
hexachlorobutadiene	1.0 U#	2.0	1.0	0.57	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	14:18	SW3510C8270E
4-chloro-3-methylphenol	1.0 U#	2.0	1.0	0.42	ug/L	1	CL	11/15/23	8:34	17145	11/20/23	23:53	SW3510C8270E
hexachlorocyclopentadiene	4.0 U#	10	4.0	1.6	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	14:18	SW3510C8270E
2,4,6-trichlorophenol	1.0 U	2.0	1.0	0.33	ug/L	1	CL	11/15/23	8:34	17145	11/20/23	23:53	SW3510C8270E
2,4,5-trichlorophenol	1.0 U	2.0	1.0	0.28	ug/L	1	CL	11/15/23	8:34	17145	11/20/23	23:53	SW3510C8270E
2-chloronaphthalene	1.0 U	5.0	1.0	0.34	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	14:18	SW3510C8270E
2-nitroaniline	1.0 U	2.0	1.0	0.72	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	14:18	SW3510C8270E
dimethylphthalate	1.0 U#	5.0	1.0	0.41	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	14:18	SW3510C8270E
2,6-dinitrotoluene	1.0 U	5.0	1.0	0.42	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	14:18	SW3510C8270E
2,4-dinitrotoluene	1.0 U	5.0	1.0	0.52	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	14:18	SW3510C8270E
3-nitroaniline	1.5 U	2.0	1.5	1.0	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	14:18	SW3510C8270E
2,4-dinitrophenol	45 U	50	45	3.5	ug/L	1	CL	11/15/23	8:34	17145	11/20/23	23:53	SW3510C8270E
dibenzofuran	0.40 U	0.50	0.40	0.37	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	14:18	SW3510C8270E
4-nitrophenol	5.0 U#	10	5.0	1.6	ug/L	1	CL	11/15/23	8:34	17145	11/20/23	23:53	SW3510C8270E
diethyl phthalate	0.59 J	5.0	1.0	0.30	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	14:18	SW3510C8270E
4-chlorophenyl phenyl ether	1.0 U	5.0	1.0	0.35	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	14:18	SW3510C8270E
4-nitroaniline	3.0 U	5.0	3.0	1.0	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	14:18	SW3510C8270E
4,6-dinitro-2-methylphenol	10 U	20	10	1.7	ug/L	1	CL	11/15/23	8:34	17145	11/20/23	23:53	SW3510C8270E

Project ID: Dow Salvage Yard 18001468
Job ID: 67839
Sample#: 67839-005
Sample ID: SY-BRMW3-145-155-110923
Matrix: Water
Sampled: 11/9/23 10:00

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
azobenzene	1.0 U	2.0	1.0	0.25	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	14:18	SW3510C8270E
N-nitrosodiphenylamine	1.0 U	2.0	1.0	0.26	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	14:18	SW3510C8270E
4-bromophenyl phenyl ether	1.0 U	2.0	1.0	0.23	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	14:18	SW3510C8270E
hexachlorobenzene	1.0 U	2.0	1.0	0.25	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	14:18	SW3510C8270E
pentachlorophenol	5.0 U	10	5.0	2.6	ug/L	1	CL	11/15/23	8:34	17145	11/20/23	23:53	SW3510C8270E
carbazole	1.0 U	2.0	1.0	0.32	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	14:18	SW3510C8270E
di-n-butylphthalate	1.0 U	5.0	1.0	0.54	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	14:18	SW3510C8270E
benzidine	25 U	30	25	20	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	14:18	SW3510C8270E
butyl benzyl phthalate	3.0 U#	5.0	3.0	2.1	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	14:18	SW3510C8270E
3,3'-dichlorobenzidine	25 U	30	25	20	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	14:18	SW3510C8270E
bis(2-ethylhexyl)phthalate	3.0 U	5.0	3.0	2.4	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	14:18	SW3510C8270E
di-n-octyl phthalate	3.0 U	5.0	3.0	2.1	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	14:18	SW3510C8270E
Surrogate Recovery		Limits											
2-fluorophenol SUR	25	21-100			%	1	CL	11/15/23	8:34	17145	11/20/23	23:53	SW3510C8270E
phenol-D5 SUR	18	10-102			%	1	CL	11/15/23	8:34	17145	11/20/23	23:53	SW3510C8270E
2,4,6-tribromophenol SUR	66	10-123			%	1	CL	11/15/23	8:34	17145	11/20/23	23:53	SW3510C8270E
nitrobenzene-D5 SUR	74	35-114			%	1	CL	11/15/23	8:34	17145	11/21/23	14:18	SW3510C8270E
2-fluorobiphenyl SUR	76	43-116			%	1	CL	11/15/23	8:34	17145	11/21/23	14:18	SW3510C8270E
p-terphenyl-D14 SUR	95	33-141			%	1	CL	11/15/23	8:34	17145	11/21/23	14:18	SW3510C8270E

 # The percent recovery and/or RPD for the LCS/D was outside acceptance criteria.

Project ID: Dow Salvage Yard 18001468
Job ID: 67839
Sample#: 67839-006
Sample ID: SY-BRMW3-287-297-110923
Matrix: Water
Sampled: 11/9/23 10:15

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
N-nitrosodimethylamine	1.0 U	2.0	1.0	0.21	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	15:17	SW3510C8270E
pyridine	1.0 U#	2.0	1.0	0.60	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	15:17	SW3510C8270E
aniline	1.0 U	2.0	1.0	0.39	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	15:17	SW3510C8270E
phenol	1.0 U#	2.0	1.0	0.34	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	14:47	SW3510C8270E
2-chlorophenol	1.0 U	5.0	1.0	0.29	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	14:47	SW3510C8270E
bis(2-chloroethyl)ether	1.0 U	2.0	1.0	0.35	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	15:17	SW3510C8270E
1,3-dichlorobenzene	1.0 U#	2.0	1.0	0.41	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	15:17	SW3510C8270E
1,4-dichlorobenzene	1.0 U#	2.0	1.0	0.37	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	15:17	SW3510C8270E
1,2-dichlorobenzene	1.0 U#	2.0	1.0	0.36	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	15:17	SW3510C8270E
benzyl alcohol	1.0 U	2.0	1.0	0.84	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	15:17	SW3510C8270E
2-methylphenol	1.0 U	5.0	1.0	0.39	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	14:47	SW3510C8270E
2,2'-oxybis(1-chloropropane)	1.0 U	2.0	1.0	0.44	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	15:17	SW3510C8270E
hexachloroethane	1.0 U#	2.0	1.0	0.53	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	15:17	SW3510C8270E
N-nitroso-di-N-propylamine	1.0 U	2.0	1.0	0.30	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	15:17	SW3510C8270E
4-methylphenol	1.5 U	2.0	1.5	1.3	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	14:47	SW3510C8270E
nitrobenzene	1.0 U	2.0	1.0	0.41	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	15:17	SW3510C8270E
isophorone	1.0 U	5.0	1.0	0.32	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	15:17	SW3510C8270E
2-nitrophenol	1.0 U	2.0	1.0	0.21	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	14:47	SW3510C8270E
2,4-dimethylphenol	1.0 U	5.0	1.0	0.44	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	14:47	SW3510C8270E
bis(2-chloroethoxy)methane	1.0 U	5.0	1.0	0.26	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	15:17	SW3510C8270E
2,4-dichlorophenol	1.0 U	5.0	1.0	0.19	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	14:47	SW3510C8270E
1,2,4-trichlorobenzene	1.0 U#	5.0	1.0	0.34	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	15:17	SW3510C8270E
benzoic acid	45 U#	50	45	20	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	14:47	SW3510C8270E
4-chloroaniline	1.0 U	2.0	1.0	0.41	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	15:17	SW3510C8270E
hexachlorobutadiene	1.0 U#	2.0	1.0	0.57	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	15:17	SW3510C8270E
4-chloro-3-methylphenol	1.0 U#	2.0	1.0	0.42	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	14:47	SW3510C8270E
hexachlorocyclopentadiene	4.0 U#	10	4.0	1.6	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	15:17	SW3510C8270E
2,4,6-trichlorophenol	1.0 U	2.0	1.0	0.33	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	14:47	SW3510C8270E
2,4,5-trichlorophenol	1.0 U	2.0	1.0	0.28	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	14:47	SW3510C8270E
2-chloronaphthalene	1.0 U	5.0	1.0	0.34	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	15:17	SW3510C8270E
2-nitroaniline	1.0 U	2.0	1.0	0.72	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	15:17	SW3510C8270E
dimethylphthalate	1.0 U#	5.0	1.0	0.41	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	15:17	SW3510C8270E
2,6-dinitrotoluene	1.0 U	5.0	1.0	0.42	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	15:17	SW3510C8270E
2,4-dinitrotoluene	1.0 U	5.0	1.0	0.52	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	15:17	SW3510C8270E
3-nitroaniline	1.5 U	2.0	1.5	1.0	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	15:17	SW3510C8270E
2,4-dinitrophenol	45 U	50	45	3.5	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	14:47	SW3510C8270E
dibenzofuran	0.40 U	0.50	0.40	0.37	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	15:17	SW3510C8270E
4-nitrophenol	5.0 U#	10	5.0	1.6	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	14:47	SW3510C8270E
diethyl phthalate	0.74 J	5.0	1.0	0.30	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	15:17	SW3510C8270E
4-chlorophenyl phenyl ether	1.0 U	5.0	1.0	0.35	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	15:17	SW3510C8270E
4-nitroaniline	3.0 U	5.0	3.0	1.0	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	15:17	SW3510C8270E
4,6-dinitro-2-methylphenol	10 U	20	10	1.7	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	14:47	SW3510C8270E

Project ID: Dow Salvage Yard 18001468
Job ID: 67839
Sample#: 67839-006
Sample ID: SY-BRMW3-287-297-110923
Matrix: Water
Sampled: 11/9/23 10:15

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
azobenzene	1.0 U	2.0	1.0	0.25	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	15:17	SW3510C8270E
N-nitrosodiphenylamine	1.0 U	2.0	1.0	0.26	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	15:17	SW3510C8270E
4-bromophenyl phenyl ether	1.0 U	2.0	1.0	0.23	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	15:17	SW3510C8270E
hexachlorobenzene	1.0 U	2.0	1.0	0.25	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	15:17	SW3510C8270E
pentachlorophenol	5.0 U	10	5.0	2.6	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	14:47	SW3510C8270E
carbazole	1.0 U	2.0	1.0	0.32	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	15:17	SW3510C8270E
di-n-butylphthalate	1.0 U	5.0	1.0	0.54	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	15:17	SW3510C8270E
benzidine	25 U	30	25	20	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	15:17	SW3510C8270E
butyl benzyl phthalate	3.0 U#	5.0	3.0	2.1	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	15:17	SW3510C8270E
3,3'-dichlorobenzidine	25 U	30	25	20	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	15:17	SW3510C8270E
bis(2-ethylhexyl)phthalate	3.0 U	5.0	3.0	2.4	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	15:17	SW3510C8270E
di-n-octyl phthalate	3.0 U	5.0	3.0	2.1	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	15:17	SW3510C8270E
Surrogate Recovery		Limits											
2-fluorophenol SUR	33	21-100			%	1	CL	11/15/23	8:34	17145	11/21/23	14:47	SW3510C8270E
phenol-D5 SUR	22	10-102			%	1	CL	11/15/23	8:34	17145	11/21/23	14:47	SW3510C8270E
2,4,6-tribromophenol SUR	69	10-123			%	1	CL	11/15/23	8:34	17145	11/21/23	14:47	SW3510C8270E
nitrobenzene-D5 SUR	72	35-114			%	1	CL	11/15/23	8:34	17145	11/21/23	15:17	SW3510C8270E
2-fluorobiphenyl SUR	73	43-116			%	1	CL	11/15/23	8:34	17145	11/21/23	15:17	SW3510C8270E
p-terphenyl-D14 SUR	95	33-141			%	1	CL	11/15/23	8:34	17145	11/21/23	15:17	SW3510C8270E

 # The percent recovery and/or RPD for the LCS/D was outside acceptance criteria.

Project ID: Dow Salvage Yard 18001468
Job ID: 67839
Sample#: 67839-007
Sample ID: SY-BRMW4-291-301-110923
Matrix: Water
Sampled: 11/9/23 11:00

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
N-nitrosodimethylamine	1.0 U	2.0	1.0	0.21	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	21:12	SW3510C8270E
pyridine	1.0 U#	2.0	1.0	0.60	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	21:12	SW3510C8270E
aniline	1.0 U	2.0	1.0	0.39	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	21:12	SW3510C8270E
phenol	1.0 U#	2.0	1.0	0.34	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	20:42	SW3510C8270E
2-chlorophenol	1.0 U	5.0	1.0	0.29	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	20:42	SW3510C8270E
bis(2-chloroethyl)ether	1.0 U	2.0	1.0	0.35	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	21:12	SW3510C8270E
1,3-dichlorobenzene	1.0 U#	2.0	1.0	0.41	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	21:12	SW3510C8270E
1,4-dichlorobenzene	1.0 U#	2.0	1.0	0.37	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	21:12	SW3510C8270E
1,2-dichlorobenzene	1.0 U#	2.0	1.0	0.36	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	21:12	SW3510C8270E
benzyl alcohol	1.0 U	2.0	1.0	0.84	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	21:12	SW3510C8270E
2-methylphenol	1.0 U	5.0	1.0	0.39	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	20:42	SW3510C8270E
2,2'-oxybis(1-chloropropane)	1.0 U	2.0	1.0	0.44	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	21:12	SW3510C8270E
hexachloroethane	1.0 U#	2.0	1.0	0.53	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	21:12	SW3510C8270E
N-nitroso-di-N-propylamine	1.0 U	2.0	1.0	0.30	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	21:12	SW3510C8270E
4-methylphenol	1.5 U	2.0	1.5	1.3	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	20:42	SW3510C8270E
nitrobenzene	1.0 U	2.0	1.0	0.41	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	21:12	SW3510C8270E
isophorone	1.0 U	5.0	1.0	0.32	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	21:12	SW3510C8270E
2-nitrophenol	1.0 U	2.0	1.0	0.21	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	20:42	SW3510C8270E
2,4-dimethylphenol	1.0 U	5.0	1.0	0.44	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	20:42	SW3510C8270E
bis(2-chloroethoxy)methane	1.0 U	5.0	1.0	0.26	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	21:12	SW3510C8270E
2,4-dichlorophenol	1.0 U	5.0	1.0	0.19	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	20:42	SW3510C8270E
1,2,4-trichlorobenzene	1.0 U#	5.0	1.0	0.34	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	21:12	SW3510C8270E
benzoic acid	45 U#	50	45	20	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	20:42	SW3510C8270E
4-chloroaniline	1.0 U	2.0	1.0	0.41	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	21:12	SW3510C8270E
hexachlorobutadiene	1.0 U#	2.0	1.0	0.57	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	21:12	SW3510C8270E
4-chloro-3-methylphenol	1.0 U#	2.0	1.0	0.42	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	20:42	SW3510C8270E
hexachlorocyclopentadiene	4.0 U#	10	4.0	1.6	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	21:12	SW3510C8270E
2,4,6-trichlorophenol	1.0 U	2.0	1.0	0.33	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	20:42	SW3510C8270E
2,4,5-trichlorophenol	1.0 U	2.0	1.0	0.28	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	20:42	SW3510C8270E
2-chloronaphthalene	1.0 U	5.0	1.0	0.34	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	21:12	SW3510C8270E
2-nitroaniline	1.0 U	2.0	1.0	0.72	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	21:12	SW3510C8270E
dimethylphthalate	1.0 U#	5.0	1.0	0.41	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	21:12	SW3510C8270E
2,6-dinitrotoluene	1.0 U	5.0	1.0	0.42	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	21:12	SW3510C8270E
2,4-dinitrotoluene	1.0 U	5.0	1.0	0.52	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	21:12	SW3510C8270E
3-nitroaniline	1.5 U	2.0	1.5	1.0	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	21:12	SW3510C8270E
2,4-dinitrophenol	45 U	50	45	3.5	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	20:42	SW3510C8270E
dibenzofuran	0.40 U	0.50	0.40	0.37	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	21:12	SW3510C8270E
4-nitrophenol	5.0 U#	10	5.0	1.6	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	20:42	SW3510C8270E
diethyl phthalate	3.2 J	5.0	1.0	0.30	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	21:12	SW3510C8270E
4-chlorophenyl phenyl ether	1.0 U	5.0	1.0	0.35	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	21:12	SW3510C8270E
4-nitroaniline	3.0 U	5.0	3.0	1.0	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	21:12	SW3510C8270E
4,6-dinitro-2-methylphenol	10 U	20	10	1.7	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	20:42	SW3510C8270E

Project ID: Dow Salvage Yard 18001468
Job ID: 67839
Sample#: 67839-007
Sample ID: SY-BRMW4-291-301-110923
Matrix: Water
Sampled: 11/9/23 11:00

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
azobenzene	1.0 U	2.0	1.0	0.25	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	21:12	SW3510C8270E
N-nitrosodiphenylamine	1.0 U	2.0	1.0	0.26	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	21:12	SW3510C8270E
4-bromophenyl phenyl ether	1.0 U	2.0	1.0	0.23	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	21:12	SW3510C8270E
hexachlorobenzene	1.0 U	2.0	1.0	0.25	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	21:12	SW3510C8270E
pentachlorophenol	5.0 U	10	5.0	2.6	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	20:42	SW3510C8270E
carbazole	1.0 U	2.0	1.0	0.32	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	21:12	SW3510C8270E
di-n-butylphthalate	1.0 U	5.0	1.0	0.54	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	21:12	SW3510C8270E
benzidine	25 U	30	25	20	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	21:12	SW3510C8270E
butyl benzyl phthalate	3.0 U#	5.0	3.0	2.1	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	21:12	SW3510C8270E
3,3'-dichlorobenzidine	25 U	30	25	20	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	21:12	SW3510C8270E
bis(2-ethylhexyl)phthalate	3.0 U	5.0	3.0	2.4	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	21:12	SW3510C8270E
di-n-octyl phthalate	3.0 U	5.0	3.0	2.1	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	21:12	SW3510C8270E
Surrogate Recovery		Limits											
2-fluorophenol SUR	36	21-100			%	1	CL	11/15/23	8:34	17145	11/21/23	20:42	SW3510C8270E
phenol-D5 SUR	22	10-102			%	1	CL	11/15/23	8:34	17145	11/21/23	20:42	SW3510C8270E
2,4,6-tribromophenol SUR	69	10-123			%	1	CL	11/15/23	8:34	17145	11/21/23	20:42	SW3510C8270E
nitrobenzene-D5 SUR	72	35-114			%	1	CL	11/15/23	8:34	17145	11/21/23	21:12	SW3510C8270E
2-fluorobiphenyl SUR	72	43-116			%	1	CL	11/15/23	8:34	17145	11/21/23	21:12	SW3510C8270E
p-terphenyl-D14 SUR	100	33-141			%	1	CL	11/15/23	8:34	17145	11/21/23	21:12	SW3510C8270E

 # The percent recovery and/or RPD for the LCS/D was outside acceptance criteria.

Project ID: Dow Salvage Yard 18001468
Job ID: 67839
Sample#: 67839-008
Sample ID: SY-BRMW1-42-52-110923
Matrix: Water
Sampled: 11/9/23 11:45

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
N-nitrosodimethylamine	1.0 U	2.0	1.0	0.21	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	22:11	SW3510C8270E
pyridine	1.0 U#	2.0	1.0	0.60	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	22:11	SW3510C8270E
aniline	1.0 U	2.0	1.0	0.39	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	22:11	SW3510C8270E
phenol	1.0 U#	2.0	1.0	0.34	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	21:42	SW3510C8270E
2-chlorophenol	1.0 U	5.0	1.0	0.29	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	21:42	SW3510C8270E
bis(2-chloroethyl)ether	1.0 U	2.0	1.0	0.35	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	22:11	SW3510C8270E
1,3-dichlorobenzene	1.0 U#	2.0	1.0	0.41	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	22:11	SW3510C8270E
1,4-dichlorobenzene	1.0 U#	2.0	1.0	0.37	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	22:11	SW3510C8270E
1,2-dichlorobenzene	1.0 U#	2.0	1.0	0.36	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	22:11	SW3510C8270E
benzyl alcohol	1.0 U	2.0	1.0	0.84	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	22:11	SW3510C8270E
2-methylphenol	1.0 U	5.0	1.0	0.39	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	21:42	SW3510C8270E
2,2'-oxybis(1-chloropropane)	1.0 U	2.0	1.0	0.44	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	22:11	SW3510C8270E
hexachloroethane	1.0 U#	2.0	1.0	0.53	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	22:11	SW3510C8270E
N-nitroso-di-N-propylamine	1.0 U	2.0	1.0	0.30	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	22:11	SW3510C8270E
4-methylphenol	1.5 U	2.0	1.5	1.3	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	21:42	SW3510C8270E
nitrobenzene	1.0 U	2.0	1.0	0.41	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	22:11	SW3510C8270E
isophorone	1.0 U	5.0	1.0	0.32	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	22:11	SW3510C8270E
2-nitrophenol	1.0 U	2.0	1.0	0.21	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	21:42	SW3510C8270E
2,4-dimethylphenol	1.0 U	5.0	1.0	0.44	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	21:42	SW3510C8270E
bis(2-chloroethoxy)methane	1.0 U	5.0	1.0	0.26	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	22:11	SW3510C8270E
2,4-dichlorophenol	1.0 U	5.0	1.0	0.19	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	21:42	SW3510C8270E
1,2,4-trichlorobenzene	1.0 U#	5.0	1.0	0.34	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	22:11	SW3510C8270E
benzoic acid	45 U#	50	45	20	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	21:42	SW3510C8270E
4-chloroaniline	1.0 U	2.0	1.0	0.41	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	22:11	SW3510C8270E
hexachlorobutadiene	1.0 U#	2.0	1.0	0.57	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	22:11	SW3510C8270E
4-chloro-3-methylphenol	1.0 U#	2.0	1.0	0.42	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	21:42	SW3510C8270E
hexachlorocyclopentadiene	4.0 U#	10	4.0	1.6	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	22:11	SW3510C8270E
2,4,6-trichlorophenol	1.0 U	2.0	1.0	0.33	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	21:42	SW3510C8270E
2,4,5-trichlorophenol	1.0 U	2.0	1.0	0.28	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	21:42	SW3510C8270E
2-chloronaphthalene	1.0 U	5.0	1.0	0.34	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	22:11	SW3510C8270E
2-nitroaniline	1.0 U	2.0	1.0	0.72	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	22:11	SW3510C8270E
dimethylphthalate	1.0 U#	5.0	1.0	0.41	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	22:11	SW3510C8270E
2,6-dinitrotoluene	1.0 U	5.0	1.0	0.42	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	22:11	SW3510C8270E
2,4-dinitrotoluene	1.0 U	5.0	1.0	0.52	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	22:11	SW3510C8270E
3-nitroaniline	1.5 U	2.0	1.5	1.0	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	22:11	SW3510C8270E
2,4-dinitrophenol	45 U	50	45	3.5	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	21:42	SW3510C8270E
dibenzofuran	0.40 U	0.50	0.40	0.37	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	22:11	SW3510C8270E
4-nitrophenol	5.0 U#	10	5.0	1.6	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	21:42	SW3510C8270E
diethyl phthalate	0.50 J	5.0	1.0	0.30	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	22:11	SW3510C8270E
4-chlorophenyl phenyl ether	1.0 U	5.0	1.0	0.35	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	22:11	SW3510C8270E
4-nitroaniline	3.0 U	5.0	3.0	1.0	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	22:11	SW3510C8270E
4,6-dinitro-2-methylphenol	10 U	20	10	1.7	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	21:42	SW3510C8270E

Project ID: Dow Salvage Yard 18001468
Job ID: 67839
Sample#: 67839-008
Sample ID: SY-BRMW1-42-52-110923
Matrix: Water
Sampled: 11/9/23 11:45

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
azobenzene	1.0 U	2.0	1.0	0.25	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	22:11	SW3510C8270E
N-nitrosodiphenylamine	1.0 U	2.0	1.0	0.26	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	22:11	SW3510C8270E
4-bromophenyl phenyl ether	1.0 U	2.0	1.0	0.23	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	22:11	SW3510C8270E
hexachlorobenzene	1.0 U	2.0	1.0	0.25	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	22:11	SW3510C8270E
pentachlorophenol	5.0 U	10	5.0	2.6	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	21:42	SW3510C8270E
carbazole	1.0 U	2.0	1.0	0.32	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	22:11	SW3510C8270E
di-n-butylphthalate	1.0 U	5.0	1.0	0.54	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	22:11	SW3510C8270E
benzidine	25 U	30	25	20	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	22:11	SW3510C8270E
butyl benzyl phthalate	3.0 U#	5.0	3.0	2.1	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	22:11	SW3510C8270E
3,3'-dichlorobenzidine	25 U	30	25	20	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	22:11	SW3510C8270E
bis(2-ethylhexyl)phthalate	3.0 U	5.0	3.0	2.4	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	22:11	SW3510C8270E
di-n-octyl phthalate	3.0 U	5.0	3.0	2.1	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	22:11	SW3510C8270E
Surrogate Recovery		Limits											
2-fluorophenol SUR	37	21-100			%	1	CL	11/15/23	8:34	17145	11/21/23	21:42	SW3510C8270E
phenol-D5 SUR	21	10-102			%	1	CL	11/15/23	8:34	17145	11/21/23	21:42	SW3510C8270E
2,4,6-tribromophenol SUR	67	10-123			%	1	CL	11/15/23	8:34	17145	11/21/23	21:42	SW3510C8270E
nitrobenzene-D5 SUR	64	35-114			%	1	CL	11/15/23	8:34	17145	11/21/23	22:11	SW3510C8270E
2-fluorobiphenyl SUR	65	43-116			%	1	CL	11/15/23	8:34	17145	11/21/23	22:11	SW3510C8270E
p-terphenyl-D14 SUR	89	33-141			%	1	CL	11/15/23	8:34	17145	11/21/23	22:11	SW3510C8270E

 # The percent recovery and/or RPD for the LCS/D was outside acceptance criteria.

Project ID: Dow Salvage Yard 18001468
Job ID: 67839
Sample#: 67839-009
Sample ID: SY-BRMW1-150-157-110923
Matrix: Water
Sampled: 11/9/23 12:40

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
N-nitrosodimethylamine	1.0 U	2.0	1.0	0.21	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	23:10	SW3510C8270E
pyridine	1.0 U#	2.0	1.0	0.60	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	23:10	SW3510C8270E
aniline	1.0 U	2.0	1.0	0.39	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	23:10	SW3510C8270E
phenol	1.0 U#	2.0	1.0	0.34	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	22:41	SW3510C8270E
2-chlorophenol	1.0 U	5.0	1.0	0.29	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	22:41	SW3510C8270E
bis(2-chloroethyl)ether	1.0 U	2.0	1.0	0.35	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	23:10	SW3510C8270E
1,3-dichlorobenzene	1.0 U#	2.0	1.0	0.41	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	23:10	SW3510C8270E
1,4-dichlorobenzene	1.0 U#	2.0	1.0	0.37	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	23:10	SW3510C8270E
1,2-dichlorobenzene	1.0 U#	2.0	1.0	0.36	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	23:10	SW3510C8270E
benzyl alcohol	1.0 U	2.0	1.0	0.84	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	23:10	SW3510C8270E
2-methylphenol	1.0 U	5.0	1.0	0.39	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	22:41	SW3510C8270E
2,2'-oxybis(1-chloropropane)	1.0 U	2.0	1.0	0.44	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	23:10	SW3510C8270E
hexachloroethane	1.0 U#	2.0	1.0	0.53	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	23:10	SW3510C8270E
N-nitroso-di-N-propylamine	1.0 U	2.0	1.0	0.30	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	23:10	SW3510C8270E
4-methylphenol	1.5 U	2.0	1.5	1.3	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	22:41	SW3510C8270E
nitrobenzene	1.0 U	2.0	1.0	0.41	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	23:10	SW3510C8270E
isophorone	1.0 U	5.0	1.0	0.32	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	23:10	SW3510C8270E
2-nitrophenol	1.0 U	2.0	1.0	0.21	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	22:41	SW3510C8270E
2,4-dimethylphenol	1.0 U	5.0	1.0	0.44	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	22:41	SW3510C8270E
bis(2-chloroethoxy)methane	1.0 U	5.0	1.0	0.26	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	23:10	SW3510C8270E
2,4-dichlorophenol	1.0 U	5.0	1.0	0.19	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	22:41	SW3510C8270E
1,2,4-trichlorobenzene	1.0 U#	5.0	1.0	0.34	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	23:10	SW3510C8270E
benzoic acid	45 U#	50	45	20	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	22:41	SW3510C8270E
4-chloroaniline	1.0 U	2.0	1.0	0.41	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	23:10	SW3510C8270E
hexachlorobutadiene	1.0 U#	2.0	1.0	0.57	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	23:10	SW3510C8270E
4-chloro-3-methylphenol	1.0 U#	2.0	1.0	0.42	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	22:41	SW3510C8270E
hexachlorocyclopentadiene	4.0 U#	10	4.0	1.6	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	23:10	SW3510C8270E
2,4,6-trichlorophenol	1.0 U	2.0	1.0	0.33	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	22:41	SW3510C8270E
2,4,5-trichlorophenol	1.0 U	2.0	1.0	0.28	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	22:41	SW3510C8270E
2-chloronaphthalene	1.0 U	5.0	1.0	0.34	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	23:10	SW3510C8270E
2-nitroaniline	1.0 U	2.0	1.0	0.72	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	23:10	SW3510C8270E
dimethylphthalate	1.0 U#	5.0	1.0	0.41	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	23:10	SW3510C8270E
2,6-dinitrotoluene	1.0 U	5.0	1.0	0.42	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	23:10	SW3510C8270E
2,4-dinitrotoluene	1.0 U	5.0	1.0	0.52	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	23:10	SW3510C8270E
3-nitroaniline	1.5 U	2.0	1.5	1.0	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	23:10	SW3510C8270E
2,4-dinitrophenol	45 U	50	45	3.5	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	22:41	SW3510C8270E
dibenzofuran	0.40 U	0.50	0.40	0.37	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	23:10	SW3510C8270E
4-nitrophenol	5.0 U#	10	5.0	1.6	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	22:41	SW3510C8270E
diethyl phthalate	0.41 J	5.0	1.0	0.30	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	23:10	SW3510C8270E
4-chlorophenyl phenyl ether	1.0 U	5.0	1.0	0.35	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	23:10	SW3510C8270E
4-nitroaniline	3.0 U	5.0	3.0	1.0	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	23:10	SW3510C8270E
4,6-dinitro-2-methylphenol	10 U	20	10	1.7	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	22:41	SW3510C8270E

Project ID: Dow Salvage Yard 18001468
Job ID: 67839
Sample#: 67839-009
Sample ID: SY-BRMW1-150-157-110923
Matrix: Water
Sampled: 11/9/23 12:40

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
azobenzene	1.0 U	2.0	1.0	0.25	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	23:10	SW3510C8270E
N-nitrosodiphenylamine	1.0 U	2.0	1.0	0.26	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	23:10	SW3510C8270E
4-bromophenyl phenyl ether	1.0 U	2.0	1.0	0.23	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	23:10	SW3510C8270E
hexachlorobenzene	1.0 U	2.0	1.0	0.25	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	23:10	SW3510C8270E
pentachlorophenol	5.0 U	10	5.0	2.6	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	22:41	SW3510C8270E
carbazole	1.0 U	2.0	1.0	0.32	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	23:10	SW3510C8270E
di-n-butylphthalate	1.0 U	5.0	1.0	0.54	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	23:10	SW3510C8270E
benzidine	25 U	30	25	20	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	23:10	SW3510C8270E
butyl benzyl phthalate	3.0 U#	5.0	3.0	2.1	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	23:10	SW3510C8270E
3,3'-dichlorobenzidine	25 U	30	25	20	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	23:10	SW3510C8270E
bis(2-ethylhexyl)phthalate	3.0 U	5.0	3.0	2.4	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	23:10	SW3510C8270E
di-n-octyl phthalate	3.0 U	5.0	3.0	2.1	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	23:10	SW3510C8270E
Surrogate Recovery		Limits											
2-fluorophenol SUR	38	21-100			%	1	CL	11/15/23	8:34	17145	11/21/23	22:41	SW3510C8270E
phenol-D5 SUR	25	10-102			%	1	CL	11/15/23	8:34	17145	11/21/23	22:41	SW3510C8270E
2,4,6-tribromophenol SUR	76	10-123			%	1	CL	11/15/23	8:34	17145	11/21/23	22:41	SW3510C8270E
nitrobenzene-D5 SUR	67	35-114			%	1	CL	11/15/23	8:34	17145	11/21/23	23:10	SW3510C8270E
2-fluorobiphenyl SUR	68	43-116			%	1	CL	11/15/23	8:34	17145	11/21/23	23:10	SW3510C8270E
p-terphenyl-D14 SUR	96	33-141			%	1	CL	11/15/23	8:34	17145	11/21/23	23:10	SW3510C8270E

 # The percent recovery and/or RPD for the LCS/D was outside acceptance criteria.

Project ID: Dow Salvage Yard 18001468
Job ID: 67839
Sample#: 67839-010
Sample ID: SY-BRMW1-65-75-110923
Matrix: Water
Sampled: 11/9/23 13:50

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
N-nitrosodimethylamine	1.0 U	2.0	1.0	0.21	ug/L	1	CL	11/15/23	8:34	17145	11/22/23	0:10	SW3510C8270E
pyridine	1.0 U#	2.0	1.0	0.60	ug/L	1	CL	11/15/23	8:34	17145	11/22/23	0:10	SW3510C8270E
aniline	1.0 U	2.0	1.0	0.39	ug/L	1	CL	11/15/23	8:34	17145	11/22/23	0:10	SW3510C8270E
phenol	1.0 U#	2.0	1.0	0.34	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	23:40	SW3510C8270E
2-chlorophenol	1.0 U	5.0	1.0	0.29	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	23:40	SW3510C8270E
bis(2-chloroethyl)ether	1.0 U	2.0	1.0	0.35	ug/L	1	CL	11/15/23	8:34	17145	11/22/23	0:10	SW3510C8270E
1,3-dichlorobenzene	1.0 U#	2.0	1.0	0.41	ug/L	1	CL	11/15/23	8:34	17145	11/22/23	0:10	SW3510C8270E
1,4-dichlorobenzene	1.0 U#	2.0	1.0	0.37	ug/L	1	CL	11/15/23	8:34	17145	11/22/23	0:10	SW3510C8270E
1,2-dichlorobenzene	1.0 U#	2.0	1.0	0.36	ug/L	1	CL	11/15/23	8:34	17145	11/22/23	0:10	SW3510C8270E
benzyl alcohol	1.0 U	2.0	1.0	0.84	ug/L	1	CL	11/15/23	8:34	17145	11/22/23	0:10	SW3510C8270E
2-methylphenol	1.0 U	5.0	1.0	0.39	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	23:40	SW3510C8270E
2,2'-oxybis(1-chloropropane)	1.0 U	2.0	1.0	0.44	ug/L	1	CL	11/15/23	8:34	17145	11/22/23	0:10	SW3510C8270E
hexachloroethane	1.0 U#	2.0	1.0	0.53	ug/L	1	CL	11/15/23	8:34	17145	11/22/23	0:10	SW3510C8270E
N-nitroso-di-N-propylamine	1.0 U	2.0	1.0	0.30	ug/L	1	CL	11/15/23	8:34	17145	11/22/23	0:10	SW3510C8270E
4-methylphenol	1.5 U	2.0	1.5	1.3	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	23:40	SW3510C8270E
nitrobenzene	1.0 U	2.0	1.0	0.41	ug/L	1	CL	11/15/23	8:34	17145	11/22/23	0:10	SW3510C8270E
isophorone	1.0 U	5.0	1.0	0.32	ug/L	1	CL	11/15/23	8:34	17145	11/22/23	0:10	SW3510C8270E
2-nitrophenol	1.0 U	2.0	1.0	0.21	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	23:40	SW3510C8270E
2,4-dimethylphenol	1.0 U	5.0	1.0	0.44	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	23:40	SW3510C8270E
bis(2-chloroethoxy)methane	1.0 U	5.0	1.0	0.26	ug/L	1	CL	11/15/23	8:34	17145	11/22/23	0:10	SW3510C8270E
2,4-dichlorophenol	1.0 U	5.0	1.0	0.19	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	23:40	SW3510C8270E
1,2,4-trichlorobenzene	1.0 U#	5.0	1.0	0.34	ug/L	1	CL	11/15/23	8:34	17145	11/22/23	0:10	SW3510C8270E
benzoic acid	45 U#	50	45	20	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	23:40	SW3510C8270E
4-chloroaniline	1.0 U	2.0	1.0	0.41	ug/L	1	CL	11/15/23	8:34	17145	11/22/23	0:10	SW3510C8270E
hexachlorobutadiene	1.0 U#	2.0	1.0	0.57	ug/L	1	CL	11/15/23	8:34	17145	11/22/23	0:10	SW3510C8270E
4-chloro-3-methylphenol	1.0 U#	2.0	1.0	0.42	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	23:40	SW3510C8270E
hexachlorocyclopentadiene	4.0 U#	10	4.0	1.6	ug/L	1	CL	11/15/23	8:34	17145	11/22/23	0:10	SW3510C8270E
2,4,6-trichlorophenol	1.0 U	2.0	1.0	0.33	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	23:40	SW3510C8270E
2,4,5-trichlorophenol	1.0 U	2.0	1.0	0.28	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	23:40	SW3510C8270E
2-chloronaphthalene	1.0 U	5.0	1.0	0.34	ug/L	1	CL	11/15/23	8:34	17145	11/22/23	0:10	SW3510C8270E
2-nitroaniline	1.0 U	2.0	1.0	0.72	ug/L	1	CL	11/15/23	8:34	17145	11/22/23	0:10	SW3510C8270E
dimethylphthalate	1.0 U#	5.0	1.0	0.41	ug/L	1	CL	11/15/23	8:34	17145	11/22/23	0:10	SW3510C8270E
2,6-dinitrotoluene	1.0 U	5.0	1.0	0.42	ug/L	1	CL	11/15/23	8:34	17145	11/22/23	0:10	SW3510C8270E
2,4-dinitrotoluene	1.0 U	5.0	1.0	0.52	ug/L	1	CL	11/15/23	8:34	17145	11/22/23	0:10	SW3510C8270E
3-nitroaniline	1.5 U	2.0	1.5	1.0	ug/L	1	CL	11/15/23	8:34	17145	11/22/23	0:10	SW3510C8270E
2,4-dinitrophenol	45 U	50	45	3.5	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	23:40	SW3510C8270E
dibenzofuran	0.40 U	0.50	0.40	0.37	ug/L	1	CL	11/15/23	8:34	17145	11/22/23	0:10	SW3510C8270E
4-nitrophenol	5.0 U#	10	5.0	1.6	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	23:40	SW3510C8270E
diethyl phthalate	0.54 J	5.0	1.0	0.30	ug/L	1	CL	11/15/23	8:34	17145	11/22/23	0:10	SW3510C8270E
4-chlorophenyl phenyl ether	1.0 U	5.0	1.0	0.35	ug/L	1	CL	11/15/23	8:34	17145	11/22/23	0:10	SW3510C8270E
4-nitroaniline	3.0 U	5.0	3.0	1.0	ug/L	1	CL	11/15/23	8:34	17145	11/22/23	0:10	SW3510C8270E
4,6-dinitro-2-methylphenol	10 U	20	10	1.7	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	23:40	SW3510C8270E

Project ID: Dow Salvage Yard 18001468
Job ID: 67839
Sample#: 67839-010
Sample ID: SY-BRMW1-65-75-110923
Matrix: Water
Sampled: 11/9/23 13:50

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
azobenzene	1.0 U	2.0	1.0	0.25	ug/L	1	CL	11/15/23	8:34	17145	11/22/23	0:10	SW3510C8270E
N-nitrosodiphenylamine	1.0 U	2.0	1.0	0.26	ug/L	1	CL	11/15/23	8:34	17145	11/22/23	0:10	SW3510C8270E
4-bromophenyl phenyl ether	1.0 U	2.0	1.0	0.23	ug/L	1	CL	11/15/23	8:34	17145	11/22/23	0:10	SW3510C8270E
hexachlorobenzene	1.0 U	2.0	1.0	0.25	ug/L	1	CL	11/15/23	8:34	17145	11/22/23	0:10	SW3510C8270E
pentachlorophenol	5.0 U	10	5.0	2.6	ug/L	1	CL	11/15/23	8:34	17145	11/21/23	23:40	SW3510C8270E
carbazole	1.0 U	2.0	1.0	0.32	ug/L	1	CL	11/15/23	8:34	17145	11/22/23	0:10	SW3510C8270E
di-n-butylphthalate	1.0 U	5.0	1.0	0.54	ug/L	1	CL	11/15/23	8:34	17145	11/22/23	0:10	SW3510C8270E
benzidine	25 U	30	25	20	ug/L	1	CL	11/15/23	8:34	17145	11/22/23	0:10	SW3510C8270E
butyl benzyl phthalate	3.0 U#	5.0	3.0	2.1	ug/L	1	CL	11/15/23	8:34	17145	11/22/23	0:10	SW3510C8270E
3,3'-dichlorobenzidine	25 U	30	25	20	ug/L	1	CL	11/15/23	8:34	17145	11/22/23	0:10	SW3510C8270E
bis(2-ethylhexyl)phthalate	120	25	15	12	ug/L	5	CL	11/15/23	8:34	17145	12/1/23	15:48	SW3510C8270E
di-n-octyl phthalate	3.0 U	5.0	3.0	2.1	ug/L	1	CL	11/15/23	8:34	17145	11/22/23	0:10	SW3510C8270E
Surrogate Recovery		Limits											
2-fluorophenol SUR	29	21-100			%	1	CL	11/15/23	8:34	17145	11/21/23	23:40	SW3510C8270E
phenol-D5 SUR	17	10-102			%	1	CL	11/15/23	8:34	17145	11/21/23	23:40	SW3510C8270E
2,4,6-tribromophenol SUR	61	10-123			%	1	CL	11/15/23	8:34	17145	11/21/23	23:40	SW3510C8270E
nitrobenzene-D5 SUR	69	35-114			%	1	CL	11/15/23	8:34	17145	11/22/23	0:10	SW3510C8270E
2-fluorobiphenyl SUR	65	43-116			%	1	CL	11/15/23	8:34	17145	11/22/23	0:10	SW3510C8270E
p-terphenyl-D14 SUR	85	33-141			%	1	CL	11/15/23	8:34	17145	11/22/23	0:10	SW3510C8270E

 # The percent recovery and/or RPD for the LCS/D was outside acceptance criteria.

Project ID: Dow Salvage Yard 18001468
Job ID: 67839
Sample#: 67839-011
Sample ID: SY-BRMW10-65-75-110923
Matrix: Water
Sampled: 11/9/23 13:55

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
N-nitrosodimethylamine	1.0 U	2.0	1.0	0.21	ug/L	1	CL	11/15/23	8:34	17145	11/22/23	11:20	SW3510C8270E
pyridine	1.0 U#	2.0	1.0	0.60	ug/L	1	CL	11/15/23	8:34	17145	11/22/23	11:20	SW3510C8270E
aniline	1.0 U	2.0	1.0	0.39	ug/L	1	CL	11/15/23	8:34	17145	11/22/23	11:20	SW3510C8270E
phenol	1.0 U#	2.0	1.0	0.34	ug/L	1	CL	11/15/23	8:34	17145	11/22/23	0:40	SW3510C8270E
2-chlorophenol	1.0 U	5.0	1.0	0.29	ug/L	1	CL	11/15/23	8:34	17145	11/22/23	0:40	SW3510C8270E
bis(2-chloroethyl)ether	1.0 U	2.0	1.0	0.35	ug/L	1	CL	11/15/23	8:34	17145	11/22/23	11:20	SW3510C8270E
1,3-dichlorobenzene	1.0 U#	2.0	1.0	0.41	ug/L	1	CL	11/15/23	8:34	17145	11/22/23	11:20	SW3510C8270E
1,4-dichlorobenzene	1.0 U#	2.0	1.0	0.37	ug/L	1	CL	11/15/23	8:34	17145	11/22/23	11:20	SW3510C8270E
1,2-dichlorobenzene	1.0 U#	2.0	1.0	0.36	ug/L	1	CL	11/15/23	8:34	17145	11/22/23	11:20	SW3510C8270E
benzyl alcohol	1.0 U	2.0	1.0	0.84	ug/L	1	CL	11/15/23	8:34	17145	11/22/23	11:20	SW3510C8270E
2-methylphenol	1.0 U	5.0	1.0	0.39	ug/L	1	CL	11/15/23	8:34	17145	11/22/23	0:40	SW3510C8270E
2,2'-oxybis(1-chloropropane)	1.0 U	2.0	1.0	0.44	ug/L	1	CL	11/15/23	8:34	17145	11/22/23	11:20	SW3510C8270E
hexachloroethane	1.0 U#	2.0	1.0	0.53	ug/L	1	CL	11/15/23	8:34	17145	11/22/23	11:20	SW3510C8270E
N-nitroso-di-N-propylamine	1.0 U	2.0	1.0	0.30	ug/L	1	CL	11/15/23	8:34	17145	11/22/23	11:20	SW3510C8270E
4-methylphenol	1.5 U	2.0	1.5	1.3	ug/L	1	CL	11/15/23	8:34	17145	11/22/23	0:40	SW3510C8270E
nitrobenzene	1.0 U	2.0	1.0	0.41	ug/L	1	CL	11/15/23	8:34	17145	11/22/23	11:20	SW3510C8270E
isophorone	1.0 U	5.0	1.0	0.32	ug/L	1	CL	11/15/23	8:34	17145	11/22/23	11:20	SW3510C8270E
2-nitrophenol	1.0 U	2.0	1.0	0.21	ug/L	1	CL	11/15/23	8:34	17145	11/22/23	0:40	SW3510C8270E
2,4-dimethylphenol	1.0 U	5.0	1.0	0.44	ug/L	1	CL	11/15/23	8:34	17145	11/22/23	0:40	SW3510C8270E
bis(2-chloroethoxy)methane	1.0 U	5.0	1.0	0.26	ug/L	1	CL	11/15/23	8:34	17145	11/22/23	11:20	SW3510C8270E
2,4-dichlorophenol	1.0 U	5.0	1.0	0.19	ug/L	1	CL	11/15/23	8:34	17145	11/22/23	0:40	SW3510C8270E
1,2,4-trichlorobenzene	1.0 U#	5.0	1.0	0.34	ug/L	1	CL	11/15/23	8:34	17145	11/22/23	11:20	SW3510C8270E
benzoic acid	45 U#	50	45	20	ug/L	1	CL	11/15/23	8:34	17145	11/22/23	0:40	SW3510C8270E
4-chloroaniline	1.0 U	2.0	1.0	0.41	ug/L	1	CL	11/15/23	8:34	17145	11/22/23	11:20	SW3510C8270E
hexachlorobutadiene	1.0 U#	2.0	1.0	0.57	ug/L	1	CL	11/15/23	8:34	17145	11/22/23	11:20	SW3510C8270E
4-chloro-3-methylphenol	1.0 U#	2.0	1.0	0.42	ug/L	1	CL	11/15/23	8:34	17145	11/22/23	0:40	SW3510C8270E
hexachlorocyclopentadiene	4.0 U#	10	4.0	1.6	ug/L	1	CL	11/15/23	8:34	17145	11/22/23	11:20	SW3510C8270E
2,4,6-trichlorophenol	1.0 U	2.0	1.0	0.33	ug/L	1	CL	11/15/23	8:34	17145	11/22/23	0:40	SW3510C8270E
2,4,5-trichlorophenol	1.0 U	2.0	1.0	0.28	ug/L	1	CL	11/15/23	8:34	17145	11/22/23	0:40	SW3510C8270E
2-chloronaphthalene	1.0 U	5.0	1.0	0.34	ug/L	1	CL	11/15/23	8:34	17145	11/22/23	11:20	SW3510C8270E
2-nitroaniline	1.0 U	2.0	1.0	0.72	ug/L	1	CL	11/15/23	8:34	17145	11/22/23	11:20	SW3510C8270E
dimethylphthalate	1.0 U#	5.0	1.0	0.41	ug/L	1	CL	11/15/23	8:34	17145	11/22/23	11:20	SW3510C8270E
2,6-dinitrotoluene	1.0 U	5.0	1.0	0.42	ug/L	1	CL	11/15/23	8:34	17145	11/22/23	11:20	SW3510C8270E
2,4-dinitrotoluene	1.0 U	5.0	1.0	0.52	ug/L	1	CL	11/15/23	8:34	17145	11/22/23	11:20	SW3510C8270E
3-nitroaniline	1.5 U	2.0	1.5	1.0	ug/L	1	CL	11/15/23	8:34	17145	11/22/23	11:20	SW3510C8270E
2,4-dinitrophenol	45 U	50	45	3.5	ug/L	1	CL	11/15/23	8:34	17145	11/22/23	0:40	SW3510C8270E
dibenzofuran	0.40 U	0.50	0.40	0.37	ug/L	1	CL	11/15/23	8:34	17145	11/22/23	11:20	SW3510C8270E
4-nitrophenol	5.0 U#	10	5.0	1.6	ug/L	1	CL	11/15/23	8:34	17145	11/22/23	0:40	SW3510C8270E
diethyl phthalate	3.4 J	5.0	1.0	0.30	ug/L	1	CL	11/15/23	8:34	17145	11/22/23	11:20	SW3510C8270E
4-chlorophenyl phenyl ether	1.0 U	5.0	1.0	0.35	ug/L	1	CL	11/15/23	8:34	17145	11/22/23	11:20	SW3510C8270E
4-nitroaniline	3.0 U	5.0	3.0	1.0	ug/L	1	CL	11/15/23	8:34	17145	11/22/23	11:20	SW3510C8270E
4,6-dinitro-2-methylphenol	10 U	20	10	1.7	ug/L	1	CL	11/15/23	8:34	17145	11/22/23	0:40	SW3510C8270E

Project ID: Dow Salvage Yard 18001468
Job ID: 67839
Sample#: 67839-011
Sample ID: SY-BRMW10-65-75-110923
Matrix: Water
Sampled: 11/9/23 13:55

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
azobenzene	1.0 U	2.0	1.0	0.25	ug/L	1	CL	11/15/23	8:34	17145	11/22/23	11:20	SW3510C8270E
N-nitrosodiphenylamine	1.0 U	2.0	1.0	0.26	ug/L	1	CL	11/15/23	8:34	17145	11/22/23	11:20	SW3510C8270E
4-bromophenyl phenyl ether	1.0 U	2.0	1.0	0.23	ug/L	1	CL	11/15/23	8:34	17145	11/22/23	11:20	SW3510C8270E
hexachlorobenzene	1.0 U	2.0	1.0	0.25	ug/L	1	CL	11/15/23	8:34	17145	11/22/23	11:20	SW3510C8270E
pentachlorophenol	5.0 U	10	5.0	2.6	ug/L	1	CL	11/15/23	8:34	17145	11/22/23	0:40	SW3510C8270E
carbazole	1.0 U	2.0	1.0	0.32	ug/L	1	CL	11/15/23	8:34	17145	11/22/23	11:20	SW3510C8270E
di-n-butylphthalate	1.0 U	5.0	1.0	0.54	ug/L	1	CL	11/15/23	8:34	17145	11/22/23	11:20	SW3510C8270E
benzidine	25 U	30	25	20	ug/L	1	CL	11/15/23	8:34	17145	11/22/23	11:20	SW3510C8270E
butyl benzyl phthalate	3.0 U#	5.0	3.0	2.1	ug/L	1	CL	11/15/23	8:34	17145	11/22/23	11:20	SW3510C8270E
3,3'-dichlorobenzidine	25 U	30	25	20	ug/L	1	CL	11/15/23	8:34	17145	11/22/23	11:20	SW3510C8270E
bis(2-ethylhexyl)phthalate	3.0 U	5.0	3.0	2.4	ug/L	1	CL	11/15/23	8:34	17145	11/22/23	11:20	SW3510C8270E
di-n-octyl phthalate	3.0 U	5.0	3.0	2.1	ug/L	1	CL	11/15/23	8:34	17145	11/22/23	11:20	SW3510C8270E
Surrogate Recovery		Limits											
2-fluorophenol SUR	33	21-100			%	1	CL	11/15/23	8:34	17145	11/22/23	0:40	SW3510C8270E
phenol-D5 SUR	20	10-102			%	1	CL	11/15/23	8:34	17145	11/22/23	0:40	SW3510C8270E
2,4,6-tribromophenol SUR	67	10-123			%	1	CL	11/15/23	8:34	17145	11/22/23	0:40	SW3510C8270E
nitrobenzene-D5 SUR	72	35-114			%	1	CL	11/15/23	8:34	17145	11/22/23	11:20	SW3510C8270E
2-fluorobiphenyl SUR	72	43-116			%	1	CL	11/15/23	8:34	17145	11/22/23	11:20	SW3510C8270E
p-terphenyl-D14 SUR	103	33-141			%	1	CL	11/15/23	8:34	17145	11/22/23	11:20	SW3510C8270E

 # The percent recovery and/or RPD for the LCS/D was outside acceptance criteria.

Project ID: Dow Salvage Yard 18001468
Job ID: 67839

Sample#: 67839-001
Sample ID: SY-BRMW4-62-72-110923
Matrix: Water
Sampled: 11/9/23 9:00

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
PCB-1016	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	12/6/23	8:46	17225	12/11/23	19:22	SW3510C8082A
PCB-1221	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	12/6/23	8:46	17225	12/11/23	19:22	SW3510C8082A
PCB-1232	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	12/6/23	8:46	17225	12/11/23	19:22	SW3510C8082A
PCB-1242	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	12/6/23	8:46	17225	12/11/23	19:22	SW3510C8082A
PCB-1248	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	12/6/23	8:46	17225	12/11/23	19:22	SW3510C8082A
PCB-1254	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	12/6/23	8:46	17225	12/11/23	19:22	SW3510C8082A
PCB-1260	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	12/6/23	8:46	17225	12/11/23	19:22	SW3510C8082A
Surrogate Recovery		Limits											
tetrachloro-m-xylene SUR	63	30-150			%	1	DBV	12/6/23	8:46	17225	12/11/23	19:22	SW3510C8082A
decachlorobiphenyl SUR	72	30-150			%	1	DBV	12/6/23	8:46	17225	12/11/23	19:22	SW3510C8082A

Sample#: 67839-002
Sample ID: SY-BRMW40-62-72-110923
Matrix: Water
Sampled: 11/9/23 9:05

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
PCB-1016	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	12/6/23	8:46	17225	12/11/23	19:35	SW3510C8082A
PCB-1221	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	12/6/23	8:46	17225	12/11/23	19:35	SW3510C8082A
PCB-1232	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	12/6/23	8:46	17225	12/11/23	19:35	SW3510C8082A
PCB-1242	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	12/6/23	8:46	17225	12/11/23	19:35	SW3510C8082A
PCB-1248	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	12/6/23	8:46	17225	12/11/23	19:35	SW3510C8082A
PCB-1254	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	12/6/23	8:46	17225	12/11/23	19:35	SW3510C8082A
PCB-1260	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	12/6/23	8:46	17225	12/11/23	19:35	SW3510C8082A
Surrogate Recovery		Limits											
tetrachloro-m-xylene SUR	64	30-150			%	1	DBV	12/6/23	8:46	17225	12/11/23	19:35	SW3510C8082A
decachlorobiphenyl SUR	59	30-150			%	1	DBV	12/6/23	8:46	17225	12/11/23	19:35	SW3510C8082A

Project ID: Dow Salvage Yard 18001468
Job ID: 67839

Sample#: 67839-003
Sample ID: SY-BRMW4-138-148-110923
Matrix: Water
Sampled: 11/9/23 9:40

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
PCB-1016	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	12/6/23	8:46	17225	12/13/23	13:56	SW3510C8082A
PCB-1221	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	12/6/23	8:46	17225	12/13/23	13:56	SW3510C8082A
PCB-1232	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	12/6/23	8:46	17225	12/13/23	13:56	SW3510C8082A
PCB-1242	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	12/6/23	8:46	17225	12/13/23	13:56	SW3510C8082A
PCB-1248	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	12/6/23	8:46	17225	12/13/23	13:56	SW3510C8082A
PCB-1254	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	12/6/23	8:46	17225	12/13/23	13:56	SW3510C8082A
PCB-1260	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	12/6/23	8:46	17225	12/13/23	13:56	SW3510C8082A
Surrogate Recovery		Limits											
tetrachloro-m-xylene SUR	63	30-150			%	1	DBV	12/6/23	8:46	17225	12/13/23	13:56	SW3510C8082A
decachlorobiphenyl SUR	79	30-150			%	1	DBV	12/6/23	8:46	17225	12/13/23	13:56	SW3510C8082A

Sample#: 67839-004
Sample ID: SY-BRMW3-47-62-110923
Matrix: Water
Sampled: 11/9/23 9:45

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
PCB-1016	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	12/6/23	8:46	17225	12/13/23	14:09	SW3510C8082A
PCB-1221	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	12/6/23	8:46	17225	12/13/23	14:09	SW3510C8082A
PCB-1232	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	12/6/23	8:46	17225	12/13/23	14:09	SW3510C8082A
PCB-1242	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	12/6/23	8:46	17225	12/13/23	14:09	SW3510C8082A
PCB-1248	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	12/6/23	8:46	17225	12/13/23	14:09	SW3510C8082A
PCB-1254	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	12/6/23	8:46	17225	12/13/23	14:09	SW3510C8082A
PCB-1260	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	12/6/23	8:46	17225	12/13/23	14:09	SW3510C8082A
Surrogate Recovery		Limits											
tetrachloro-m-xylene SUR	67	30-150			%	1	DBV	12/6/23	8:46	17225	12/13/23	14:09	SW3510C8082A
decachlorobiphenyl SUR	73	30-150			%	1	DBV	12/6/23	8:46	17225	12/13/23	14:09	SW3510C8082A

Project ID: Dow Salvage Yard 18001468
Job ID: 67839

Sample#: 67839-005
Sample ID: SY-BRMW3-145-155-110923
Matrix: Water
Sampled: 11/9/23 10:00

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
PCB-1016	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	12/6/23	8:46	17225	12/13/23	14:22	SW3510C8082A
PCB-1221	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	12/6/23	8:46	17225	12/13/23	14:22	SW3510C8082A
PCB-1232	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	12/6/23	8:46	17225	12/13/23	14:22	SW3510C8082A
PCB-1242	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	12/6/23	8:46	17225	12/13/23	14:22	SW3510C8082A
PCB-1248	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	12/6/23	8:46	17225	12/13/23	14:22	SW3510C8082A
PCB-1254	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	12/6/23	8:46	17225	12/13/23	14:22	SW3510C8082A
PCB-1260	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	12/6/23	8:46	17225	12/13/23	14:22	SW3510C8082A
Surrogate Recovery		Limits											
tetrachloro-m-xylene SUR	64	30-150			%	1	DBV	12/6/23	8:46	17225	12/13/23	14:22	SW3510C8082A
decachlorobiphenyl SUR	59	30-150			%	1	DBV	12/6/23	8:46	17225	12/13/23	14:22	SW3510C8082A

Sample#: 67839-006
Sample ID: SY-BRMW3-287-297-110923
Matrix: Water
Sampled: 11/9/23 10:15

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
PCB-1016	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	12/6/23	8:46	17225	12/13/23	14:35	SW3510C8082A
PCB-1221	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	12/6/23	8:46	17225	12/13/23	14:35	SW3510C8082A
PCB-1232	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	12/6/23	8:46	17225	12/13/23	14:35	SW3510C8082A
PCB-1242	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	12/6/23	8:46	17225	12/13/23	14:35	SW3510C8082A
PCB-1248	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	12/6/23	8:46	17225	12/13/23	14:35	SW3510C8082A
PCB-1254	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	12/6/23	8:46	17225	12/13/23	14:35	SW3510C8082A
PCB-1260	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	12/6/23	8:46	17225	12/13/23	14:35	SW3510C8082A
Surrogate Recovery		Limits											
tetrachloro-m-xylene SUR	65	30-150			%	1	DBV	12/6/23	8:46	17225	12/13/23	14:35	SW3510C8082A
decachlorobiphenyl SUR	73	30-150			%	1	DBV	12/6/23	8:46	17225	12/13/23	14:35	SW3510C8082A

Project ID: Dow Salvage Yard 18001468
Job ID: 67839

Sample#: 67839-007
Sample ID: SY-BRMW4-291-301-110923
Matrix: Water
Sampled: 11/9/23 11:00

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
PCB-1016	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	12/6/23	8:46	17225	12/13/23	14:48	SW3510C8082A
PCB-1221	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	12/6/23	8:46	17225	12/13/23	14:48	SW3510C8082A
PCB-1232	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	12/6/23	8:46	17225	12/13/23	14:48	SW3510C8082A
PCB-1242	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	12/6/23	8:46	17225	12/13/23	14:48	SW3510C8082A
PCB-1248	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	12/6/23	8:46	17225	12/13/23	14:48	SW3510C8082A
PCB-1254	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	12/6/23	8:46	17225	12/13/23	14:48	SW3510C8082A
PCB-1260	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	12/6/23	8:46	17225	12/13/23	14:48	SW3510C8082A
Surrogate Recovery		Limits											
tetrachloro-m-xylene SUR	66	30-150			%	1	DBV	12/6/23	8:46	17225	12/13/23	14:48	SW3510C8082A
decachlorobiphenyl SUR	68	30-150			%	1	DBV	12/6/23	8:46	17225	12/13/23	14:48	SW3510C8082A

Sample#: 67839-008
Sample ID: SY-BRMW1-42-52-110923
Matrix: Water
Sampled: 11/9/23 11:45

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
PCB-1016	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	12/6/23	8:46	17225	12/13/23	16:05	SW3510C8082A
PCB-1221	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	12/6/23	8:46	17225	12/13/23	16:05	SW3510C8082A
PCB-1232	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	12/6/23	8:46	17225	12/13/23	16:05	SW3510C8082A
PCB-1242	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	12/6/23	8:46	17225	12/13/23	16:05	SW3510C8082A
PCB-1248	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	12/6/23	8:46	17225	12/13/23	16:05	SW3510C8082A
PCB-1254	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	12/6/23	8:46	17225	12/13/23	16:05	SW3510C8082A
PCB-1260	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	12/6/23	8:46	17225	12/13/23	16:05	SW3510C8082A
Surrogate Recovery		Limits											
tetrachloro-m-xylene SUR	51	30-150			%	1	DBV	12/6/23	8:46	17225	12/13/23	16:05	SW3510C8082A
decachlorobiphenyl SUR	38	30-150			%	1	DBV	12/6/23	8:46	17225	12/13/23	16:05	SW3510C8082A

Project ID: Dow Salvage Yard 18001468
Job ID: 67839

Sample#: 67839-009
Sample ID: SY-BRMW1-150-157-110923
Matrix: Water
Sampled: 11/9/23 12:40

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
PCB-1016	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	12/6/23	8:46	17225	12/13/23	16:18	SW3510C8082A
PCB-1221	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	12/6/23	8:46	17225	12/13/23	16:18	SW3510C8082A
PCB-1232	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	12/6/23	8:46	17225	12/13/23	16:18	SW3510C8082A
PCB-1242	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	12/6/23	8:46	17225	12/13/23	16:18	SW3510C8082A
PCB-1248	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	12/6/23	8:46	17225	12/13/23	16:18	SW3510C8082A
PCB-1254	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	12/6/23	8:46	17225	12/13/23	16:18	SW3510C8082A
PCB-1260	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	12/6/23	8:46	17225	12/13/23	16:18	SW3510C8082A
Surrogate Recovery		Limits											
tetrachloro-m-xylene SUR	48	30-150			%	1	DBV	12/6/23	8:46	17225	12/13/23	16:18	SW3510C8082A
decachlorobiphenyl SUR	37	30-150			%	1	DBV	12/6/23	8:46	17225	12/13/23	16:18	SW3510C8082A

Sample#: 67839-010
Sample ID: SY-BRMW1-65-75-110923
Matrix: Water
Sampled: 11/9/23 13:50

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
PCB-1016	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	12/6/23	8:46	17225	12/13/23	13:43	SW3510C8082A
PCB-1221	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	12/6/23	8:46	17225	12/13/23	13:43	SW3510C8082A
PCB-1232	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	12/6/23	8:46	17225	12/13/23	13:43	SW3510C8082A
PCB-1242	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	12/6/23	8:46	17225	12/13/23	13:43	SW3510C8082A
PCB-1248	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	12/6/23	8:46	17225	12/13/23	13:43	SW3510C8082A
PCB-1254	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	12/6/23	8:46	17225	12/13/23	13:43	SW3510C8082A
PCB-1260	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	12/6/23	8:46	17225	12/13/23	13:43	SW3510C8082A
Surrogate Recovery		Limits											
tetrachloro-m-xylene SUR	52	30-150			%	1	DBV	12/6/23	8:46	17225	12/13/23	13:43	SW3510C8082A
decachlorobiphenyl SUR	37	30-150			%	1	DBV	12/6/23	8:46	17225	12/13/23	13:43	SW3510C8082A

Project ID: Dow Salvage Yard 18001468
Job ID: 67839
Sample#: 67839-011
Sample ID: SY-BRMW10-65-75-110923
Matrix: Water
Sampled: 11/9/23 13:55

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
PCB-1016	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	12/6/23	8:46	17225	12/13/23	16:31	SW3510C8082A
PCB-1221	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	12/6/23	8:46	17225	12/13/23	16:31	SW3510C8082A
PCB-1232	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	12/6/23	8:46	17225	12/13/23	16:31	SW3510C8082A
PCB-1242	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	12/6/23	8:46	17225	12/13/23	16:31	SW3510C8082A
PCB-1248	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	12/6/23	8:46	17225	12/13/23	16:31	SW3510C8082A
PCB-1254	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	12/6/23	8:46	17225	12/13/23	16:31	SW3510C8082A
PCB-1260	0.12 U	0.20	0.12	0.10	ug/L	1	DBV	12/6/23	8:46	17225	12/13/23	16:31	SW3510C8082A
Surrogate Recovery		Limits											
tetrachloro-m-xylene SUR	41	30-150			%	1	DBV	12/6/23	8:46	17225	12/13/23	16:31	SW3510C8082A
decachlorobiphenyl SUR	32	30-150			%	1	DBV	12/6/23	8:46	17225	12/13/23	16:31	SW3510C8082A

Project ID: Dow Salvage Yard 18001468
Job ID: 67839
Sample#: 67839-001
Sample ID: SY-BRMW4-62-72-110923
Matrix: Water
Sampled: 11/9/23 9:00

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
naphthalene	0.70 U	1.0	0.70	0.63	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	10:23	MA EPH
2-methylnaphthalene	0.70 U	1.0	0.70	0.60	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	10:23	MA EPH
phenanthrene	0.50 U	1.0	0.50	0.15	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	10:23	MA EPH
acenaphthene	0.50 U	1.0	0.50	0.22	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	10:23	MA EPH
acenaphthylene	0.50 U	1.0	0.50	0.18	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	10:23	MA EPH
fluorene	0.50 U	1.0	0.50	0.15	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	10:23	MA EPH
anthracene	0.50 U	1.0	0.50	0.18	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	10:23	MA EPH
fluoranthene	0.50 U	1.0	0.50	0.18	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	10:23	MA EPH
pyrene	0.50 U	1.0	0.50	0.23	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	10:23	MA EPH
benzo(a)anthracene	0.50 U	1.0	0.50	0.20	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	10:23	MA EPH
chrysene	0.50 U	1.0	0.50	0.16	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	10:23	MA EPH
benzo(b)fluoranthene	0.50 U	1.0	0.50	0.35	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	10:23	MA EPH
benzo(k)fluoranthene	0.50 U	1.0	0.50	0.41	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	10:23	MA EPH
benzo(a)pyrene	0.70 U	1.0	0.70	0.52	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	10:23	MA EPH
indeno(1,2,3-cd)pyrene	0.50 U	1.0	0.50	0.24	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	10:23	MA EPH
dibenzo(a,h)anthracene	0.50 U	1.0	0.50	0.26	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	10:23	MA EPH
benzo(g,h,i)perylene	0.50 U	1.0	0.50	0.22	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	10:23	MA EPH
Unadjusted C11-C22 Aromatics	85 U	100	85	60	ug/L	1	DBV	11/20/23	8:25	17156	12/8/23	20:20	MA EPH
C9-C18 Aliphatics	95 U#	100	95	94	ug/L	1	DBV	11/20/23	8:25	17156	12/8/23	20:20	MA EPH
C19-C36 Aliphatics	97 U	100	97	96	ug/L	1	DBV	11/20/23	8:25	17156	12/8/23	20:20	MA EPH
C11-C22 Aromatics	85 U	100	85	54	ug/L	1	DBV	11/20/23	8:25	17156	12/8/23	20:20	MA EPH
Surrogate Recovery		Limits											
1-chloro-octadecane SUR	53	40-140			%	1	DBV	11/20/23	8:25	17156	12/8/23	20:20	MA EPH
o-terphenyl SUR	61	40-140			%	1	DBV	11/20/23	8:25	17156	12/8/23	20:20	MA EPH
2-fluorobiphenyl SUR	79	40-140			%	1	DBV	11/20/23	8:25	17156	12/8/23	20:20	MA EPH
2-bromonaphthalene SUR	82	40-140			%	1	DBV	11/20/23	8:25	17156	12/8/23	20:20	MA EPH

 # The percent recovery and/or RPD for the LCS/D was outside acceptance criteria.

Project ID: Dow Salvage Yard 18001468
Job ID: 67839
Sample#: 67839-002
Sample ID: SY-BRMW40-62-72-110923
Matrix: Water
Sampled: 11/9/23 9:05

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
naphthalene	0.70 U	1.0	0.70	0.63	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	10:53	MA EPH
2-methylnaphthalene	0.70 U	1.0	0.70	0.60	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	10:53	MA EPH
phenanthrene	0.50 U	1.0	0.50	0.15	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	10:53	MA EPH
acenaphthene	0.50 U	1.0	0.50	0.22	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	10:53	MA EPH
acenaphthylene	0.50 U	1.0	0.50	0.18	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	10:53	MA EPH
fluorene	0.50 U	1.0	0.50	0.15	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	10:53	MA EPH
anthracene	0.50 U	1.0	0.50	0.18	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	10:53	MA EPH
fluoranthene	0.50 U	1.0	0.50	0.18	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	10:53	MA EPH
pyrene	0.50 U	1.0	0.50	0.23	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	10:53	MA EPH
benzo(a)anthracene	0.50 U	1.0	0.50	0.20	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	10:53	MA EPH
chrysene	0.50 U	1.0	0.50	0.16	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	10:53	MA EPH
benzo(b)fluoranthene	0.50 U	1.0	0.50	0.35	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	10:53	MA EPH
benzo(k)fluoranthene	0.50 U	1.0	0.50	0.41	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	10:53	MA EPH
benzo(a)pyrene	0.70 U	1.0	0.70	0.52	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	10:53	MA EPH
indeno(1,2,3-cd)pyrene	0.50 U	1.0	0.50	0.24	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	10:53	MA EPH
dibenzo(a,h)anthracene	0.50 U	1.0	0.50	0.26	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	10:53	MA EPH
benzo(g,h,i)perylene	0.50 U	1.0	0.50	0.22	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	10:53	MA EPH
Unadjusted C11-C22 Aromatics	85 U	100	85	60	ug/L	1	DBV	11/20/23	8:25	17156	12/8/23	20:54	MA EPH
C9-C18 Aliphatics	95 U#	100	95	94	ug/L	1	DBV	11/20/23	8:25	17156	12/8/23	20:54	MA EPH
C19-C36 Aliphatics	97 U	100	97	96	ug/L	1	DBV	11/20/23	8:25	17156	12/8/23	20:54	MA EPH
C11-C22 Aromatics	59 J	100	85	54	ug/L	1	DBV	11/20/23	8:25	17156	12/8/23	20:54	MA EPH
Surrogate Recovery		Limits											
1-chloro-octadecane SUR	40	40-140			%	1	DBV	11/20/23	8:25	17156	12/8/23	20:54	MA EPH
o-terphenyl SUR	65	40-140			%	1	DBV	11/20/23	8:25	17156	12/8/23	20:54	MA EPH
2-fluorobiphenyl SUR	85	40-140			%	1	DBV	11/20/23	8:25	17156	12/8/23	20:54	MA EPH
2-bromonaphthalene SUR	90	40-140			%	1	DBV	11/20/23	8:25	17156	12/8/23	20:54	MA EPH

 # The percent recovery and/or RPD for the LCS/D was outside acceptance criteria.

Project ID: Dow Salvage Yard 18001468
Job ID: 67839
Sample#: 67839-003
Sample ID: SY-BRMW4-138-148-110923
Matrix: Water
Sampled: 11/9/23 9:40

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
naphthalene	0.70 U	1.0	0.70	0.63	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	11:23	MA EPH
2-methylnaphthalene	0.70 U	1.0	0.70	0.60	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	11:23	MA EPH
phenanthrene	0.50 U	1.0	0.50	0.15	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	11:23	MA EPH
acenaphthene	0.50 U	1.0	0.50	0.22	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	11:23	MA EPH
acenaphthylene	0.50 U	1.0	0.50	0.18	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	11:23	MA EPH
fluorene	0.50 U	1.0	0.50	0.15	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	11:23	MA EPH
anthracene	0.50 U	1.0	0.50	0.18	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	11:23	MA EPH
fluoranthene	0.50 U	1.0	0.50	0.18	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	11:23	MA EPH
pyrene	0.50 U	1.0	0.50	0.23	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	11:23	MA EPH
benzo(a)anthracene	0.50 U	1.0	0.50	0.20	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	11:23	MA EPH
chrysene	0.50 U	1.0	0.50	0.16	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	11:23	MA EPH
benzo(b)fluoranthene	0.50 U	1.0	0.50	0.35	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	11:23	MA EPH
benzo(k)fluoranthene	0.50 U	1.0	0.50	0.41	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	11:23	MA EPH
benzo(a)pyrene	0.70 U	1.0	0.70	0.52	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	11:23	MA EPH
indeno(1,2,3-cd)pyrene	0.50 U	1.0	0.50	0.24	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	11:23	MA EPH
dibenzo(a,h)anthracene	0.50 U	1.0	0.50	0.26	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	11:23	MA EPH
benzo(g,h,i)perylene	0.50 U	1.0	0.50	0.22	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	11:23	MA EPH
Unadjusted C11-C22 Aromatics	85 U	100	85	60	ug/L	1	DBV	11/20/23	8:25	17156	12/8/23	21:28	MA EPH
C9-C18 Aliphatics	95 U#	100	95	94	ug/L	1	DBV	11/20/23	8:25	17156	12/8/23	21:28	MA EPH
C19-C36 Aliphatics	97 U	100	97	96	ug/L	1	DBV	11/20/23	8:25	17156	12/8/23	21:28	MA EPH
C11-C22 Aromatics	85 U	100	85	54	ug/L	1	DBV	11/20/23	8:25	17156	12/8/23	21:28	MA EPH
Surrogate Recovery		Limits											
1-chloro-octadecane SUR	43	40-140			%	1	DBV	11/20/23	8:25	17156	12/8/23	21:28	MA EPH
o-terphenyl SUR	58	40-140			%	1	DBV	11/20/23	8:25	17156	12/8/23	21:28	MA EPH
2-fluorobiphenyl SUR	78	40-140			%	1	DBV	11/20/23	8:25	17156	12/8/23	21:28	MA EPH
2-bromonaphthalene SUR	81	40-140			%	1	DBV	11/20/23	8:25	17156	12/8/23	21:28	MA EPH

 # The percent recovery and/or RPD for the LCS/D was outside acceptance criteria.

Project ID: Dow Salvage Yard 18001468
Job ID: 67839
Sample#: 67839-004
Sample ID: SY-BRMW3-47-62-110923
Matrix: Water
Sampled: 11/9/23 9:45

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
naphthalene	0.70 U	1.0	0.70	0.63	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	11:52	MA EPH
2-methylnaphthalene	0.70 U	1.0	0.70	0.60	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	11:52	MA EPH
phenanthrene	0.50 U	1.0	0.50	0.15	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	11:52	MA EPH
acenaphthene	0.50 U	1.0	0.50	0.22	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	11:52	MA EPH
acenaphthylene	0.50 U	1.0	0.50	0.18	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	11:52	MA EPH
fluorene	0.50 U	1.0	0.50	0.15	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	11:52	MA EPH
anthracene	0.50 U	1.0	0.50	0.18	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	11:52	MA EPH
fluoranthene	0.50 U	1.0	0.50	0.18	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	11:52	MA EPH
pyrene	0.50 U	1.0	0.50	0.23	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	11:52	MA EPH
benzo(a)anthracene	0.50 U	1.0	0.50	0.20	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	11:52	MA EPH
chrysene	0.50 U	1.0	0.50	0.16	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	11:52	MA EPH
benzo(b)fluoranthene	0.50 U	1.0	0.50	0.35	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	11:52	MA EPH
benzo(k)fluoranthene	0.50 U	1.0	0.50	0.41	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	11:52	MA EPH
benzo(a)pyrene	0.70 U	1.0	0.70	0.52	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	11:52	MA EPH
indeno(1,2,3-cd)pyrene	0.50 U	1.0	0.50	0.24	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	11:52	MA EPH
dibenzo(a,h)anthracene	0.50 U	1.0	0.50	0.26	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	11:52	MA EPH
benzo(g,h,i)perylene	0.50 U	1.0	0.50	0.22	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	11:52	MA EPH
Unadjusted C11-C22 Aromatics	85 U	100	85	60	ug/L	1	DBV	11/20/23	8:25	17156	12/8/23	22:02	MA EPH
C9-C18 Aliphatics	95 U#	100	95	94	ug/L	1	DBV	11/20/23	8:25	17156	12/8/23	22:02	MA EPH
C19-C36 Aliphatics	97 U	100	97	96	ug/L	1	DBV	11/20/23	8:25	17156	12/8/23	22:02	MA EPH
C11-C22 Aromatics	85 U	100	85	54	ug/L	1	DBV	11/20/23	8:25	17156	12/8/23	22:02	MA EPH
Surrogate Recovery		Limits											
1-chloro-octadecane SUR	43	40-140			%	1	DBV	11/20/23	8:25	17156	12/8/23	22:02	MA EPH
o-terphenyl SUR	58	40-140			%	1	DBV	11/20/23	8:25	17156	12/8/23	22:02	MA EPH
2-fluorobiphenyl SUR	75	40-140			%	1	DBV	11/20/23	8:25	17156	12/8/23	22:02	MA EPH
2-bromonaphthalene SUR	77	40-140			%	1	DBV	11/20/23	8:25	17156	12/8/23	22:02	MA EPH

 # The percent recovery and/or RPD for the LCS/D was outside acceptance criteria.

Project ID: Dow Salvage Yard 18001468
Job ID: 67839
Sample#: 67839-005
Sample ID: SY-BRMW3-145-155-110923
Matrix: Water
Sampled: 11/9/23 10:00

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
naphthalene	0.70 U	1.0	0.70	0.63	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	12:22	MA EPH
2-methylnaphthalene	0.70 U	1.0	0.70	0.60	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	12:22	MA EPH
phenanthrene	0.50 U	1.0	0.50	0.15	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	12:22	MA EPH
acenaphthene	0.50 U	1.0	0.50	0.22	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	12:22	MA EPH
acenaphthylene	0.50 U	1.0	0.50	0.18	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	12:22	MA EPH
fluorene	0.50 U	1.0	0.50	0.15	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	12:22	MA EPH
anthracene	0.50 U	1.0	0.50	0.18	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	12:22	MA EPH
fluoranthene	0.50 U	1.0	0.50	0.18	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	12:22	MA EPH
pyrene	0.50 U	1.0	0.50	0.23	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	12:22	MA EPH
benzo(a)anthracene	0.50 U	1.0	0.50	0.20	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	12:22	MA EPH
chrysene	0.50 U	1.0	0.50	0.16	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	12:22	MA EPH
benzo(b)fluoranthene	0.50 U	1.0	0.50	0.35	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	12:22	MA EPH
benzo(k)fluoranthene	0.50 U	1.0	0.50	0.41	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	12:22	MA EPH
benzo(a)pyrene	0.70 U	1.0	0.70	0.52	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	12:22	MA EPH
indeno(1,2,3-cd)pyrene	0.50 U	1.0	0.50	0.24	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	12:22	MA EPH
dibenzo(a,h)anthracene	0.50 U	1.0	0.50	0.26	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	12:22	MA EPH
benzo(g,h,i)perylene	0.50 U	1.0	0.50	0.22	ug/L	1	CL	11/20/23	8:25	17156	12/8/23	12:22	MA EPH
Unadjusted C11-C22 Aromatics	85 U	100	85	60	ug/L	1	DBV	11/20/23	8:25	17156	12/8/23	22:36	MA EPH
C9-C18 Aliphatics	95 U#	100	95	94	ug/L	1	DBV	11/20/23	8:25	17156	12/8/23	22:36	MA EPH
C19-C36 Aliphatics	97 U	100	97	96	ug/L	1	DBV	11/20/23	8:25	17156	12/8/23	22:36	MA EPH
C11-C22 Aromatics	57 J	100	85	54	ug/L	1	DBV	11/20/23	8:25	17156	12/8/23	22:36	MA EPH
Surrogate Recovery		Limits											
1-chloro-octadecane SUR	50	40-140			%	1	DBV	11/20/23	8:25	17156	12/8/23	22:36	MA EPH
o-terphenyl SUR	66	40-140			%	1	DBV	11/20/23	8:25	17156	12/8/23	22:36	MA EPH
2-fluorobiphenyl SUR	75	40-140			%	1	DBV	11/20/23	8:25	17156	12/8/23	22:36	MA EPH
2-bromonaphthalene SUR	78	40-140			%	1	DBV	11/20/23	8:25	17156	12/8/23	22:36	MA EPH

 # The percent recovery and/or RPD for the LCS/D was outside acceptance criteria.

Project ID: Dow Salvage Yard 18001468
Job ID: 67839
Sample#: 67839-006
Sample ID: SY-BRMW3-287-297-110923
Matrix: Water
Sampled: 11/9/23 10:15

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
naphthalene	0.70 U	1.0	0.70	0.63	ug/L	1	CL	11/20/23	13:26	17156	12/8/23	12:52	MA EPH
2-methylnaphthalene	0.70 U	1.0	0.70	0.60	ug/L	1	CL	11/20/23	13:26	17156	12/8/23	12:52	MA EPH
phenanthrene	0.50 U	1.0	0.50	0.15	ug/L	1	CL	11/20/23	13:26	17156	12/8/23	12:52	MA EPH
acenaphthene	0.50 U	1.0	0.50	0.22	ug/L	1	CL	11/20/23	13:26	17156	12/8/23	12:52	MA EPH
acenaphthylene	0.50 U	1.0	0.50	0.18	ug/L	1	CL	11/20/23	13:26	17156	12/8/23	12:52	MA EPH
fluorene	0.50 U	1.0	0.50	0.15	ug/L	1	CL	11/20/23	13:26	17156	12/8/23	12:52	MA EPH
anthracene	0.50 U	1.0	0.50	0.18	ug/L	1	CL	11/20/23	13:26	17156	12/8/23	12:52	MA EPH
fluoranthene	0.50 U	1.0	0.50	0.18	ug/L	1	CL	11/20/23	13:26	17156	12/8/23	12:52	MA EPH
pyrene	0.50 U	1.0	0.50	0.23	ug/L	1	CL	11/20/23	13:26	17156	12/8/23	12:52	MA EPH
benzo(a)anthracene	0.50 U	1.0	0.50	0.20	ug/L	1	CL	11/20/23	13:26	17156	12/8/23	12:52	MA EPH
chrysene	0.50 U	1.0	0.50	0.16	ug/L	1	CL	11/20/23	13:26	17156	12/8/23	12:52	MA EPH
benzo(b)fluoranthene	0.50 U	1.0	0.50	0.35	ug/L	1	CL	11/20/23	13:26	17156	12/8/23	12:52	MA EPH
benzo(k)fluoranthene	0.50 U	1.0	0.50	0.41	ug/L	1	CL	11/20/23	13:26	17156	12/8/23	12:52	MA EPH
benzo(a)pyrene	0.70 U	1.0	0.70	0.52	ug/L	1	CL	11/20/23	13:26	17156	12/8/23	12:52	MA EPH
indeno(1,2,3-cd)pyrene	0.50 U	1.0	0.50	0.24	ug/L	1	CL	11/20/23	13:26	17156	12/8/23	12:52	MA EPH
dibenzo(a,h)anthracene	0.50 U	1.0	0.50	0.26	ug/L	1	CL	11/20/23	13:26	17156	12/8/23	12:52	MA EPH
benzo(g,h,i)perylene	0.50 U	1.0	0.50	0.22	ug/L	1	CL	11/20/23	13:26	17156	12/8/23	12:52	MA EPH
Unadjusted C11-C22 Aromatics	85 U	100	85	60	ug/L	1	DBV	11/20/23	13:26	17156	12/8/23	23:10	MA EPH
C9-C18 Aliphatics	95 U#	100	95	94	ug/L	1	DBV	11/20/23	13:26	17156	12/8/23	23:10	MA EPH
C19-C36 Aliphatics	97 U	100	97	96	ug/L	1	DBV	11/20/23	13:26	17156	12/8/23	23:10	MA EPH
C11-C22 Aromatics	85 U	100	85	54	ug/L	1	DBV	11/20/23	13:26	17156	12/8/23	23:10	MA EPH
Surrogate Recovery		Limits											
1-chloro-octadecane SUR	42	40-140			%	1	DBV	11/20/23	13:26	17156	12/8/23	23:10	MA EPH
o-terphenyl SUR	67	40-140			%	1	DBV	11/20/23	13:26	17156	12/8/23	23:10	MA EPH
2-fluorobiphenyl SUR	80	40-140			%	1	DBV	11/20/23	13:26	17156	12/8/23	23:10	MA EPH
2-bromonaphthalene SUR	83	40-140			%	1	DBV	11/20/23	13:26	17156	12/8/23	23:10	MA EPH

 # The percent recovery and/or RPD for the LCS/D was outside acceptance criteria.

Project ID: Dow Salvage Yard 18001468
Job ID: 67839
Sample#: 67839-007
Sample ID: SY-BRMW4-291-301-110923
Matrix: Water
Sampled: 11/9/23 11:00

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
naphthalene	0.70 U	1.0	0.70	0.63	ug/L	1	CL	11/20/23	13:26	17156	12/8/23	13:22	MA EPH
2-methylnaphthalene	0.70 U	1.0	0.70	0.60	ug/L	1	CL	11/20/23	13:26	17156	12/8/23	13:22	MA EPH
phenanthrene	0.50 U	1.0	0.50	0.15	ug/L	1	CL	11/20/23	13:26	17156	12/8/23	13:22	MA EPH
acenaphthene	0.50 U	1.0	0.50	0.22	ug/L	1	CL	11/20/23	13:26	17156	12/8/23	13:22	MA EPH
acenaphthylene	0.50 U	1.0	0.50	0.18	ug/L	1	CL	11/20/23	13:26	17156	12/8/23	13:22	MA EPH
fluorene	0.50 U	1.0	0.50	0.15	ug/L	1	CL	11/20/23	13:26	17156	12/8/23	13:22	MA EPH
anthracene	0.50 U	1.0	0.50	0.18	ug/L	1	CL	11/20/23	13:26	17156	12/8/23	13:22	MA EPH
fluoranthene	0.50 U	1.0	0.50	0.18	ug/L	1	CL	11/20/23	13:26	17156	12/8/23	13:22	MA EPH
pyrene	0.50 U	1.0	0.50	0.23	ug/L	1	CL	11/20/23	13:26	17156	12/8/23	13:22	MA EPH
benzo(a)anthracene	0.50 U	1.0	0.50	0.20	ug/L	1	CL	11/20/23	13:26	17156	12/8/23	13:22	MA EPH
chrysene	0.50 U	1.0	0.50	0.16	ug/L	1	CL	11/20/23	13:26	17156	12/8/23	13:22	MA EPH
benzo(b)fluoranthene	0.50 U	1.0	0.50	0.35	ug/L	1	CL	11/20/23	13:26	17156	12/8/23	13:22	MA EPH
benzo(k)fluoranthene	0.50 U	1.0	0.50	0.41	ug/L	1	CL	11/20/23	13:26	17156	12/8/23	13:22	MA EPH
benzo(a)pyrene	0.70 U	1.0	0.70	0.52	ug/L	1	CL	11/20/23	13:26	17156	12/8/23	13:22	MA EPH
indeno(1,2,3-cd)pyrene	0.50 U	1.0	0.50	0.24	ug/L	1	CL	11/20/23	13:26	17156	12/8/23	13:22	MA EPH
dibenzo(a,h)anthracene	0.50 U	1.0	0.50	0.26	ug/L	1	CL	11/20/23	13:26	17156	12/8/23	13:22	MA EPH
benzo(g,h,i)perylene	0.50 U	1.0	0.50	0.22	ug/L	1	CL	11/20/23	13:26	17156	12/8/23	13:22	MA EPH
Unadjusted C11-C22 Aromatics	85 U	100	85	60	ug/L	1	DBV	11/20/23	13:26	17156	12/8/23	23:43	MA EPH
C9-C18 Aliphatics	95 U#	100	95	94	ug/L	1	DBV	11/20/23	13:26	17156	12/8/23	23:43	MA EPH
C19-C36 Aliphatics	97 U	100	97	96	ug/L	1	DBV	11/20/23	13:26	17156	12/8/23	23:43	MA EPH
C11-C22 Aromatics	85 U	100	85	54	ug/L	1	DBV	11/20/23	13:26	17156	12/8/23	23:43	MA EPH
Surrogate Recovery		Limits											
1-chloro-octadecane SUR	50	40-140			%	1	DBV	11/20/23	13:26	17156	12/8/23	23:43	MA EPH
o-terphenyl SUR	60	40-140			%	1	DBV	11/20/23	13:26	17156	12/8/23	23:43	MA EPH
2-fluorobiphenyl SUR	76	40-140			%	1	DBV	11/20/23	13:26	17156	12/8/23	23:43	MA EPH
2-bromonaphthalene SUR	80	40-140			%	1	DBV	11/20/23	13:26	17156	12/8/23	23:43	MA EPH

 # The percent recovery and/or RPD for the LCS/D was outside acceptance criteria.

Project ID: Dow Salvage Yard 18001468
Job ID: 67839
Sample#: 67839-008
Sample ID: SY-BRMW1-42-52-110923
Matrix: Water
Sampled: 11/9/23 11:45

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
naphthalene	0.70 U	1.0	0.70	0.63	ug/L	1	CL	11/20/23	13:26	17156	12/8/23	13:51	MA EPH
2-methylnaphthalene	0.70 U	1.0	0.70	0.60	ug/L	1	CL	11/20/23	13:26	17156	12/8/23	13:51	MA EPH
phenanthrene	0.50 U	1.0	0.50	0.15	ug/L	1	CL	11/20/23	13:26	17156	12/8/23	13:51	MA EPH
acenaphthene	0.50 U	1.0	0.50	0.22	ug/L	1	CL	11/20/23	13:26	17156	12/8/23	13:51	MA EPH
acenaphthylene	0.50 U	1.0	0.50	0.18	ug/L	1	CL	11/20/23	13:26	17156	12/8/23	13:51	MA EPH
fluorene	0.50 U	1.0	0.50	0.15	ug/L	1	CL	11/20/23	13:26	17156	12/8/23	13:51	MA EPH
anthracene	0.50 U	1.0	0.50	0.18	ug/L	1	CL	11/20/23	13:26	17156	12/8/23	13:51	MA EPH
fluoranthene	0.50 U	1.0	0.50	0.18	ug/L	1	CL	11/20/23	13:26	17156	12/8/23	13:51	MA EPH
pyrene	0.50 U	1.0	0.50	0.23	ug/L	1	CL	11/20/23	13:26	17156	12/8/23	13:51	MA EPH
benzo(a)anthracene	0.50 U	1.0	0.50	0.20	ug/L	1	CL	11/20/23	13:26	17156	12/8/23	13:51	MA EPH
chrysene	0.50 U	1.0	0.50	0.16	ug/L	1	CL	11/20/23	13:26	17156	12/8/23	13:51	MA EPH
benzo(b)fluoranthene	0.50 U	1.0	0.50	0.35	ug/L	1	CL	11/20/23	13:26	17156	12/8/23	13:51	MA EPH
benzo(k)fluoranthene	0.50 U	1.0	0.50	0.41	ug/L	1	CL	11/20/23	13:26	17156	12/8/23	13:51	MA EPH
benzo(a)pyrene	0.70 U	1.0	0.70	0.52	ug/L	1	CL	11/20/23	13:26	17156	12/8/23	13:51	MA EPH
indeno(1,2,3-cd)pyrene	0.50 U	1.0	0.50	0.24	ug/L	1	CL	11/20/23	13:26	17156	12/8/23	13:51	MA EPH
dibenzo(a,h)anthracene	0.50 U	1.0	0.50	0.26	ug/L	1	CL	11/20/23	13:26	17156	12/8/23	13:51	MA EPH
benzo(g,h,i)perylene	0.50 U	1.0	0.50	0.22	ug/L	1	CL	11/20/23	13:26	17156	12/8/23	13:51	MA EPH
Unadjusted C11-C22 Aromatics	85 U	100	85	60	ug/L	1	DBV	11/20/23	13:26	17156	12/9/23	2:33	MA EPH
C9-C18 Aliphatics	95 U#	100	95	94	ug/L	1	DBV	11/20/23	13:26	17156	12/9/23	2:33	MA EPH
C19-C36 Aliphatics	97 U	100	97	96	ug/L	1	DBV	11/20/23	13:26	17156	12/9/23	2:33	MA EPH
C11-C22 Aromatics	85 U	100	85	54	ug/L	1	DBV	11/20/23	13:26	17156	12/9/23	2:33	MA EPH
Surrogate Recovery		Limits											
1-chloro-octadecane SUR	48	40-140			%	1	DBV	11/20/23	13:26	17156	12/9/23	2:33	MA EPH
o-terphenyl SUR	68	40-140			%	1	DBV	11/20/23	13:26	17156	12/9/23	2:33	MA EPH
2-fluorobiphenyl SUR	79	40-140			%	1	DBV	11/20/23	13:26	17156	12/9/23	2:33	MA EPH
2-bromonaphthalene SUR	83	40-140			%	1	DBV	11/20/23	13:26	17156	12/9/23	2:33	MA EPH

 # The percent recovery and/or RPD for the LCS/D was outside acceptance criteria.

Project ID: Dow Salvage Yard 18001468
Job ID: 67839
Sample#: 67839-009
Sample ID: SY-BRMW1-150-157-110923
Matrix: Water
Sampled: 11/9/23 12:40

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
naphthalene	0.70 U	1.0	0.70	0.63	ug/L	1	CL	11/20/23	13:26	17156	12/8/23	14:21	MA EPH
2-methylnaphthalene	0.70 U	1.0	0.70	0.60	ug/L	1	CL	11/20/23	13:26	17156	12/8/23	14:21	MA EPH
phenanthrene	0.50 U	1.0	0.50	0.15	ug/L	1	CL	11/20/23	13:26	17156	12/8/23	14:21	MA EPH
acenaphthene	0.50 U	1.0	0.50	0.22	ug/L	1	CL	11/20/23	13:26	17156	12/8/23	14:21	MA EPH
acenaphthylene	0.50 U	1.0	0.50	0.18	ug/L	1	CL	11/20/23	13:26	17156	12/8/23	14:21	MA EPH
fluorene	0.50 U	1.0	0.50	0.15	ug/L	1	CL	11/20/23	13:26	17156	12/8/23	14:21	MA EPH
anthracene	0.50 U	1.0	0.50	0.18	ug/L	1	CL	11/20/23	13:26	17156	12/8/23	14:21	MA EPH
fluoranthene	0.50 U	1.0	0.50	0.18	ug/L	1	CL	11/20/23	13:26	17156	12/8/23	14:21	MA EPH
pyrene	0.50 U	1.0	0.50	0.23	ug/L	1	CL	11/20/23	13:26	17156	12/8/23	14:21	MA EPH
benzo(a)anthracene	0.50 U	1.0	0.50	0.20	ug/L	1	CL	11/20/23	13:26	17156	12/8/23	14:21	MA EPH
chrysene	0.50 U	1.0	0.50	0.16	ug/L	1	CL	11/20/23	13:26	17156	12/8/23	14:21	MA EPH
benzo(b)fluoranthene	0.50 U	1.0	0.50	0.35	ug/L	1	CL	11/20/23	13:26	17156	12/8/23	14:21	MA EPH
benzo(k)fluoranthene	0.50 U	1.0	0.50	0.41	ug/L	1	CL	11/20/23	13:26	17156	12/8/23	14:21	MA EPH
benzo(a)pyrene	0.70 U	1.0	0.70	0.52	ug/L	1	CL	11/20/23	13:26	17156	12/8/23	14:21	MA EPH
indeno(1,2,3-cd)pyrene	0.50 U	1.0	0.50	0.24	ug/L	1	CL	11/20/23	13:26	17156	12/8/23	14:21	MA EPH
dibenzo(a,h)anthracene	0.50 U	1.0	0.50	0.26	ug/L	1	CL	11/20/23	13:26	17156	12/8/23	14:21	MA EPH
benzo(g,h,i)perylene	0.50 U	1.0	0.50	0.22	ug/L	1	CL	11/20/23	13:26	17156	12/8/23	14:21	MA EPH
Unadjusted C11-C22 Aromatics	85 U	100	85	60	ug/L	1	DBV	11/20/23	13:26	17156	12/9/23	3:07	MA EPH
C9-C18 Aliphatics	95 U#	100	95	94	ug/L	1	DBV	11/20/23	13:26	17156	12/9/23	3:07	MA EPH
C19-C36 Aliphatics	97 U	100	97	96	ug/L	1	DBV	11/20/23	13:26	17156	12/9/23	3:07	MA EPH
C11-C22 Aromatics	85 U	100	85	54	ug/L	1	DBV	11/20/23	13:26	17156	12/9/23	3:07	MA EPH
Surrogate Recovery		Limits											
1-chloro-octadecane SUR	45	40-140			%	1	DBV	11/20/23	13:26	17156	12/9/23	3:07	MA EPH
o-terphenyl SUR	63	40-140			%	1	DBV	11/20/23	13:26	17156	12/9/23	3:07	MA EPH
2-fluorobiphenyl SUR	79	40-140			%	1	DBV	11/20/23	13:26	17156	12/9/23	3:07	MA EPH
2-bromonaphthalene SUR	85	40-140			%	1	DBV	11/20/23	13:26	17156	12/9/23	3:07	MA EPH

 # The percent recovery and/or RPD for the LCS/D was outside acceptance criteria.

Project ID: Dow Salvage Yard 18001468
Job ID: 67839
Sample#: 67839-010
Sample ID: SY-BRMW1-65-75-110923
Matrix: Water
Sampled: 11/9/23 13:50

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
naphthalene	0.70 U	1.0	0.70	0.63	ug/L	1	CL	11/20/23	13:26	17156	12/8/23	14:51	MA EPH
2-methylnaphthalene	0.70 U	1.0	0.70	0.60	ug/L	1	CL	11/20/23	13:26	17156	12/8/23	14:51	MA EPH
phenanthrene	0.50 U	1.0	0.50	0.15	ug/L	1	CL	11/20/23	13:26	17156	12/8/23	14:51	MA EPH
acenaphthene	0.50 U	1.0	0.50	0.22	ug/L	1	CL	11/20/23	13:26	17156	12/8/23	14:51	MA EPH
acenaphthylene	0.50 U	1.0	0.50	0.18	ug/L	1	CL	11/20/23	13:26	17156	12/8/23	14:51	MA EPH
fluorene	0.50 U	1.0	0.50	0.15	ug/L	1	CL	11/20/23	13:26	17156	12/8/23	14:51	MA EPH
anthracene	0.50 U	1.0	0.50	0.18	ug/L	1	CL	11/20/23	13:26	17156	12/8/23	14:51	MA EPH
fluoranthene	0.50 U	1.0	0.50	0.18	ug/L	1	CL	11/20/23	13:26	17156	12/8/23	14:51	MA EPH
pyrene	0.50 U	1.0	0.50	0.23	ug/L	1	CL	11/20/23	13:26	17156	12/8/23	14:51	MA EPH
benzo(a)anthracene	0.50 U	1.0	0.50	0.20	ug/L	1	CL	11/20/23	13:26	17156	12/8/23	14:51	MA EPH
chrysene	0.50 U	1.0	0.50	0.16	ug/L	1	CL	11/20/23	13:26	17156	12/8/23	14:51	MA EPH
benzo(b)fluoranthene	0.50 U	1.0	0.50	0.35	ug/L	1	CL	11/20/23	13:26	17156	12/8/23	14:51	MA EPH
benzo(k)fluoranthene	0.50 U	1.0	0.50	0.41	ug/L	1	CL	11/20/23	13:26	17156	12/8/23	14:51	MA EPH
benzo(a)pyrene	0.70 U	1.0	0.70	0.52	ug/L	1	CL	11/20/23	13:26	17156	12/8/23	14:51	MA EPH
indeno(1,2,3-cd)pyrene	0.50 U	1.0	0.50	0.24	ug/L	1	CL	11/20/23	13:26	17156	12/8/23	14:51	MA EPH
dibenzo(a,h)anthracene	0.50 U	1.0	0.50	0.26	ug/L	1	CL	11/20/23	13:26	17156	12/8/23	14:51	MA EPH
benzo(g,h,i)perylene	0.50 U	1.0	0.50	0.22	ug/L	1	CL	11/20/23	13:26	17156	12/8/23	14:51	MA EPH
Unadjusted C11-C22 Aromatics	85 U	100	85	60	ug/L	1	DBV	11/20/23	13:26	17156	12/9/23	3:41	MA EPH
C9-C18 Aliphatics	95 U#	100	95	94	ug/L	1	DBV	11/20/23	13:26	17156	12/9/23	3:41	MA EPH
C19-C36 Aliphatics	97 U	100	97	96	ug/L	1	DBV	11/20/23	13:26	17156	12/9/23	3:41	MA EPH
C11-C22 Aromatics	85 U	100	85	54	ug/L	1	DBV	11/20/23	13:26	17156	12/9/23	3:41	MA EPH
Surrogate Recovery		Limits											
1-chloro-octadecane SUR	58	40-140			%	1	DBV	11/20/23	13:26	17156	12/9/23	3:41	MA EPH
o-terphenyl SUR	70	40-140			%	1	DBV	11/20/23	13:26	17156	12/9/23	3:41	MA EPH
2-fluorobiphenyl SUR	88	40-140			%	1	DBV	11/20/23	13:26	17156	12/9/23	3:41	MA EPH
2-bromonaphthalene SUR	90	40-140			%	1	DBV	11/20/23	13:26	17156	12/9/23	3:41	MA EPH

 # The percent recovery and/or RPD for the LCS/D was outside acceptance criteria.

Project ID: Dow Salvage Yard 18001468
Job ID: 67839
Sample#: 67839-011
Sample ID: SY-BRMW10-65-75-110923
Matrix: Water
Sampled: 11/9/23 13:55

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
naphthalene	0.70 U	1.0	0.70	0.63	ug/L	1	CL	11/20/23	13:26	17157	12/12/23	14:56	MA EPH
2-methylnaphthalene	0.70 U	1.0	0.70	0.60	ug/L	1	CL	11/20/23	13:26	17157	12/12/23	14:56	MA EPH
phenanthrene	0.50 U	1.0	0.50	0.15	ug/L	1	CL	11/20/23	13:26	17157	12/12/23	14:56	MA EPH
acenaphthene	0.50 U	1.0	0.50	0.22	ug/L	1	CL	11/20/23	13:26	17157	12/12/23	14:56	MA EPH
acenaphthylene	0.50 U	1.0	0.50	0.18	ug/L	1	CL	11/20/23	13:26	17157	12/12/23	14:56	MA EPH
fluorene	0.50 U	1.0	0.50	0.15	ug/L	1	CL	11/20/23	13:26	17157	12/12/23	14:56	MA EPH
anthracene	0.50 U	1.0	0.50	0.18	ug/L	1	CL	11/20/23	13:26	17157	12/12/23	14:56	MA EPH
fluoranthene	0.50 U	1.0	0.50	0.18	ug/L	1	CL	11/20/23	13:26	17157	12/12/23	14:56	MA EPH
pyrene	0.50 U	1.0	0.50	0.23	ug/L	1	CL	11/20/23	13:26	17157	12/12/23	14:56	MA EPH
benzo(a)anthracene	0.50 U	1.0	0.50	0.20	ug/L	1	CL	11/20/23	13:26	17157	12/12/23	14:56	MA EPH
chrysene	0.50 U	1.0	0.50	0.16	ug/L	1	CL	11/20/23	13:26	17157	12/12/23	14:56	MA EPH
benzo(b)fluoranthene	0.50 U	1.0	0.50	0.35	ug/L	1	CL	11/20/23	13:26	17157	12/12/23	14:56	MA EPH
benzo(k)fluoranthene	0.50 U	1.0	0.50	0.41	ug/L	1	CL	11/20/23	13:26	17157	12/12/23	14:56	MA EPH
benzo(a)pyrene	0.70 U	1.0	0.70	0.52	ug/L	1	CL	11/20/23	13:26	17157	12/12/23	14:56	MA EPH
indeno(1,2,3-cd)pyrene	0.50 U	1.0	0.50	0.24	ug/L	1	CL	11/20/23	13:26	17157	12/12/23	14:56	MA EPH
dibenzo(a,h)anthracene	0.50 U	1.0	0.50	0.26	ug/L	1	CL	11/20/23	13:26	17157	12/12/23	14:56	MA EPH
benzo(g,h,i)perylene	0.50 U	1.0	0.50	0.22	ug/L	1	CL	11/20/23	13:26	17157	12/12/23	14:56	MA EPH
Unadjusted C11-C22 Aromatics	85 U	100	85	60	ug/L	1	DBV	11/20/23	13:26	17157	12/8/23	19:46	MA EPH
C9-C18 Aliphatics	95 U#	100	95	94	ug/L	1	DBV	11/20/23	13:26	17157	12/8/23	19:46	MA EPH
C19-C36 Aliphatics	97 U#	100	97	96	ug/L	1	DBV	11/20/23	13:26	17157	12/8/23	19:46	MA EPH
C11-C22 Aromatics	85 U	100	85	54	ug/L	1	DBV	11/20/23	13:26	17157	12/8/23	19:46	MA EPH
Surrogate Recovery		Limits											
1-chloro-octadecane SUR	64	40-140			%	1	DBV	11/20/23	13:26	17157	12/8/23	19:46	MA EPH
o-terphenyl SUR	80	40-140			%	1	DBV	11/20/23	13:26	17157	12/8/23	19:46	MA EPH
2-fluorobiphenyl SUR	83	40-140			%	1	DBV	11/20/23	13:26	17157	12/8/23	19:46	MA EPH
2-bromonaphthalene SUR	85	40-140			%	1	DBV	11/20/23	13:26	17157	12/8/23	19:46	MA EPH

 # The percent recovery and/or RPD for the LCS/D was outside acceptance criteria.

Project ID: Dow Salvage Yard 18001468
Job ID: 67839
Sample#: 67839-001
Sample ID: SY-BRMW4-62-72-110923
Matrix: Water
Sampled: 11/9/23 9:00

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
Aluminum	0.025 U	0.050	0.025	0.010	mg/L	1	AGN	11/30/23	7:56	17194	12/5/23	21:43	SW3005A6020A
Antimony	0.00049 J	0.0010	0.00050	0.00014	mg/L	1	AGN	11/30/23	7:56	17194	12/5/23	21:43	SW3005A6020A
Arsenic	0.0029	0.0025	0.0010	0.00067	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	23:25	SW3005A6020A
Barium	0.034	0.010	0.0010	0.00076	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	23:25	SW3005A6020A
Beryllium	0.00050 U	0.0010	0.00050	0.00010	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	23:25	SW3005A6020A
Cadmium	0.00050 U	0.0010	0.00050	0.00014	mg/L	1	AGN	11/30/23	7:56	17194	12/5/23	21:43	SW3005A6020A
Chromium	0.025 U	0.050	0.025	0.020	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	23:25	SW3005A6020A
Cobalt	0.0012 J	0.010	0.00050	0.00028	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	23:25	SW3005A6020A
Copper	0.0075 U	0.010	0.0075	0.0054	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	23:25	SW3005A6020A
Iron	0.11	0.050	0.030	0.029	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	23:25	SW3005A6020A
Lead	0.0015 J	0.0050	0.00050	0.00011	mg/L	1	AGN	11/30/23	7:56	17194	12/5/23	21:43	SW3005A6020A
Magnesium	59	0.10	0.020	0.0073	mg/L	1	AGN	11/30/23	7:56	17194	12/5/23	21:43	SW3005A6020A
Manganese	0.38	0.010	0.0050	0.0016	mg/L	1	AGN	11/30/23	7:56	17194	12/5/23	21:43	SW3005A6020A
Mercury	0.00015 U	0.00020	0.00015	0.00012	mg/L	1	EEB	11/30/23	12:42	17202	12/1/23	13:18	SW7470A
Nickel	0.025 U	0.050	0.025	0.013	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	23:25	SW3005A6020A
Potassium	4.8	0.50	0.10	0.039	mg/L	1	AGN	11/30/23	7:56	17194	12/5/23	21:43	SW3005A6020A
Selenium	0.0050 U	0.010	0.0050	0.0037	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	23:25	SW3005A6020A
Silver	0.00050 U	0.0050	0.00050	0.00011	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	23:25	SW3005A6020A
Sodium	50	0.10	0.050	0.034	mg/L	1	AGN	11/30/23	7:56	17194	12/5/23	21:43	SW3005A6020A
Thallium	0.00080 U	0.0010	0.00080	0.00068	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	23:25	SW3005A6020A
Vanadium	0.0050 U	0.010	0.0050	0.0018	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	23:25	SW3005A6020A
Zinc	0.0040 U	0.010	0.0040	0.0021	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	23:25	SW3005A6020A

Project ID: Dow Salvage Yard 18001468
Job ID: 67839
Sample#: 67839-002
Sample ID: SY-BRMW40-62-72-110923
Matrix: Water
Sampled: 11/9/23 9:05

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
Aluminum	0.025 U	0.050	0.025	0.010	mg/L	1	AGN	11/30/23	7:56	17194	12/5/23	21:52	SW3005A6020A
Antimony	0.00048 J	0.0010	0.00050	0.00014	mg/L	1	AGN	11/30/23	7:56	17194	12/5/23	21:52	SW3005A6020A
Arsenic	0.0028	0.0025	0.0010	0.00067	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	23:33	SW3005A6020A
Barium	0.034	0.010	0.0010	0.00076	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	23:33	SW3005A6020A
Beryllium	0.00050 U	0.0010	0.00050	0.00010	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	23:33	SW3005A6020A
Cadmium	0.00050 U	0.0010	0.00050	0.00014	mg/L	1	AGN	11/30/23	7:56	17194	12/5/23	21:52	SW3005A6020A
Chromium	0.025 U	0.050	0.025	0.020	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	23:33	SW3005A6020A
Cobalt	0.0013 J	0.010	0.00050	0.00028	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	23:33	SW3005A6020A
Copper	0.0075 U	0.010	0.0075	0.0054	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	23:33	SW3005A6020A
Iron	0.12	0.050	0.030	0.029	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	23:33	SW3005A6020A
Lead	0.0014 J	0.0050	0.00050	0.00011	mg/L	1	AGN	11/30/23	7:56	17194	12/5/23	21:52	SW3005A6020A
Magnesium	58	0.10	0.020	0.0073	mg/L	1	AGN	11/30/23	7:56	17194	12/5/23	21:52	SW3005A6020A
Manganese	0.39	0.010	0.0050	0.0016	mg/L	1	AGN	11/30/23	7:56	17194	12/5/23	21:52	SW3005A6020A
Mercury	0.00015 U	0.00020	0.00015	0.00012	mg/L	1	EEB	11/30/23	12:42	17202	12/1/23	13:20	SW7470A
Nickel	0.025 U	0.050	0.025	0.013	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	23:33	SW3005A6020A
Potassium	4.7	0.50	0.10	0.039	mg/L	1	AGN	11/30/23	7:56	17194	12/5/23	21:52	SW3005A6020A
Selenium	0.0050 U	0.010	0.0050	0.0037	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	23:33	SW3005A6020A
Silver	0.00050 U	0.0050	0.00050	0.00011	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	23:33	SW3005A6020A
Sodium	49	0.10	0.050	0.034	mg/L	1	AGN	11/30/23	7:56	17194	12/5/23	21:52	SW3005A6020A
Thallium	0.00080 U	0.0010	0.00080	0.00068	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	23:33	SW3005A6020A
Vanadium	0.0050 U	0.010	0.0050	0.0018	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	23:33	SW3005A6020A
Zinc	0.0040 U	0.010	0.0040	0.0021	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	23:33	SW3005A6020A

Project ID: Dow Salvage Yard 18001468
Job ID: 67839
Sample#: 67839-003
Sample ID: SY-BRMW4-138-148-110923
Matrix: Water
Sampled: 11/9/23 9:40

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
Aluminum	0.025 U	0.050	0.025	0.010	mg/L	1	AGN	11/30/23	7:56	17194	12/5/23	22:01	SW3005A6020A
Antimony	0.00060 J	0.0010	0.00050	0.00014	mg/L	1	AGN	11/30/23	7:56	17194	12/5/23	22:01	SW3005A6020A
Arsenic	0.0090	0.0025	0.0010	0.00067	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	23:42	SW3005A6020A
Barium	0.046	0.010	0.0010	0.00076	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	23:42	SW3005A6020A
Beryllium	0.00050 U	0.0010	0.00050	0.00010	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	23:42	SW3005A6020A
Cadmium	0.00050 U	0.0010	0.00050	0.00014	mg/L	1	AGN	11/30/23	7:56	17194	12/5/23	22:01	SW3005A6020A
Chromium	0.025 U	0.050	0.025	0.020	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	23:42	SW3005A6020A
Cobalt	0.00057 J	0.010	0.00050	0.00028	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	23:42	SW3005A6020A
Copper	0.0075 U	0.010	0.0075	0.0054	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	23:42	SW3005A6020A
Iron	0.16	0.050	0.030	0.029	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	23:42	SW3005A6020A
Lead	0.0018 J	0.0050	0.00050	0.00011	mg/L	1	AGN	11/30/23	7:56	17194	12/5/23	22:01	SW3005A6020A
Magnesium	60	0.10	0.020	0.0073	mg/L	1	AGN	11/30/23	7:56	17194	12/5/23	22:01	SW3005A6020A
Manganese	0.052	0.010	0.0050	0.0016	mg/L	1	AGN	11/30/23	7:56	17194	12/5/23	22:01	SW3005A6020A
Mercury	0.00015 U	0.00020	0.00015	0.00012	mg/L	1	EEB	11/30/23	12:42	17202	12/1/23	13:22	SW7470A
Nickel	0.025 U	0.050	0.025	0.013	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	23:42	SW3005A6020A
Potassium	4.0	0.50	0.10	0.039	mg/L	1	AGN	11/30/23	7:56	17194	12/5/23	22:01	SW3005A6020A
Selenium	0.0050 U	0.010	0.0050	0.0037	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	23:42	SW3005A6020A
Silver	0.00050 U	0.0050	0.00050	0.00011	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	23:42	SW3005A6020A
Sodium	85	0.10	0.050	0.034	mg/L	1	AGN	11/30/23	7:56	17194	12/5/23	22:01	SW3005A6020A
Thallium	0.00080 U	0.0010	0.00080	0.00068	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	23:42	SW3005A6020A
Vanadium	0.0050 U	0.010	0.0050	0.0018	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	23:42	SW3005A6020A
Zinc	0.0040 U	0.010	0.0040	0.0021	mg/L	1	EEB	11/30/23	7:56	17194	12/4/23	23:42	SW3005A6020A

Project ID: Dow Salvage Yard 18001468
Job ID: 67839
Sample#: 67839-004
Sample ID: SY-BRMW3-47-62-110923
Matrix: Water
Sampled: 11/9/23 9:45

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
Aluminum	0.011 J	0.050	0.025	0.010	mg/L	1	AGN	12/6/23	7:25	17218	12/12/23	4:43	SW3005A6020A
Antimony	0.0027	0.0010	0.00050	0.00014	mg/L	1	AGN	12/6/23	7:25	17218	12/12/23	4:43	SW3005A6020A
Arsenic	0.027	0.0025	0.0010	0.00067	mg/L	1	AGN	12/6/23	7:25	17218	12/12/23	4:43	SW3005A6020A
Barium	0.082	0.010	0.0010	0.00076	mg/L	1	AGN	12/6/23	7:25	17218	12/12/23	4:43	SW3005A6020A
Beryllium	0.00050 U	0.0010	0.00050	0.00010	mg/L	1	AGN	12/6/23	7:25	17218	12/12/23	4:43	SW3005A6020A
Cadmium	0.00050 U	0.0010	0.00050	0.00014	mg/L	1	AGN	12/6/23	7:25	17218	12/12/23	4:43	SW3005A6020A
Chromium	0.025 U	0.050	0.025	0.020	mg/L	1	AGN	12/6/23	7:25	17218	12/12/23	4:43	SW3005A6020A
Cobalt	0.00046 J	0.010	0.00050	0.00028	mg/L	1	AGN	12/6/23	7:25	17218	12/12/23	4:43	SW3005A6020A
Copper	0.0075 U	0.010	0.0075	0.0054	mg/L	1	AGN	12/6/23	7:25	17218	12/12/23	4:43	SW3005A6020A
Iron	0.030 U	0.050	0.030	0.029	mg/L	1	AGN	12/6/23	7:25	17218	12/12/23	4:43	SW3005A6020A
Lead	0.0021 J	0.0050	0.00050	0.00011	mg/L	1	AGN	12/6/23	7:25	17218	12/12/23	4:43	SW3005A6020A
Magnesium	23	0.10	0.020	0.0073	mg/L	1	AGN	12/6/23	7:25	17218	12/13/23	1:59	SW3005A6020A
Manganese	0.26	0.010	0.0050	0.0016	mg/L	1	AGN	12/6/23	7:25	17218	12/12/23	4:43	SW3005A6020A
Mercury	0.00015 U	0.00020	0.00015	0.00012	mg/L	1	EEB	11/30/23	12:42	17202	12/1/23	13:27	SW7470A
Nickel	0.025 U	0.050	0.025	0.013	mg/L	1	AGN	12/6/23	7:25	17218	12/12/23	4:43	SW3005A6020A
Potassium	7.4	0.50	0.10	0.039	mg/L	1	AGN	12/6/23	7:25	17218	12/13/23	1:59	SW3005A6020A
Selenium	0.0050 U	0.010	0.0050	0.0037	mg/L	1	AGN	12/6/23	7:25	17218	12/12/23	4:43	SW3005A6020A
Silver	0.00050 U	0.0050	0.00050	0.00011	mg/L	1	AGN	12/6/23	7:25	17218	12/12/23	4:43	SW3005A6020A
Sodium	25	0.10	0.050	0.034	mg/L	1	AGN	12/6/23	7:25	17218	12/13/23	1:59	SW3005A6020A
Thallium	0.00080 U	0.0010	0.00080	0.00068	mg/L	1	AGN	12/6/23	7:25	17218	12/12/23	4:43	SW3005A6020A
Vanadium	0.0050 U	0.010	0.0050	0.0018	mg/L	1	AGN	12/6/23	7:25	17218	12/12/23	4:43	SW3005A6020A
Zinc	0.0040 U	0.010	0.0040	0.0021	mg/L	1	AGN	12/6/23	7:25	17218	12/12/23	4:43	SW3005A6020A

Project ID: Dow Salvage Yard 18001468
Job ID: 67839
Sample#: 67839-005
Sample ID: SY-BRMW3-145-155-110923
Matrix: Water
Sampled: 11/9/23 10:00

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
Aluminum	0.025 U	0.050	0.025	0.010	mg/L	1	AGN	12/6/23	7:25	17218	12/12/23	5:42	SW3005A6020A
Antimony	0.00064 J	0.0010	0.00050	0.00014	mg/L	1	AGN	12/6/23	7:25	17218	12/12/23	5:42	SW3005A6020A
Arsenic	0.011	0.0025	0.0010	0.00067	mg/L	1	AGN	12/6/23	7:25	17218	12/13/23	2:28	SW3005A6020A
Barium	0.096	0.010	0.0010	0.00076	mg/L	1	AGN	12/6/23	7:25	17218	12/13/23	2:28	SW3005A6020A
Beryllium	0.00050 U	0.0010	0.00050	0.00010	mg/L	1	AGN	12/6/23	7:25	17218	12/12/23	5:42	SW3005A6020A
Cadmium	0.00050 U	0.0010	0.00050	0.00014	mg/L	1	AGN	12/6/23	7:25	17218	12/12/23	5:42	SW3005A6020A
Chromium	0.025 U	0.050	0.025	0.020	mg/L	1	AGN	12/6/23	7:25	17218	12/12/23	5:42	SW3005A6020A
Cobalt	0.00065 J	0.010	0.00050	0.00028	mg/L	1	AGN	12/6/23	7:25	17218	12/12/23	5:42	SW3005A6020A
Copper	0.0075 U	0.010	0.0075	0.0054	mg/L	1	AGN	12/6/23	7:25	17218	12/12/23	5:42	SW3005A6020A
Iron	0.030 U	0.050	0.030	0.029	mg/L	1	AGN	12/6/23	7:25	17218	12/12/23	5:42	SW3005A6020A
Lead	0.0014 J	0.0050	0.00050	0.00011	mg/L	1	AGN	12/6/23	7:25	17218	12/12/23	5:42	SW3005A6020A
Magnesium	17	0.10	0.020	0.0073	mg/L	1	AGN	12/6/23	7:25	17218	12/13/23	2:28	SW3005A6020A
Manganese	0.43	0.010	0.0050	0.0016	mg/L	1	AGN	12/6/23	7:25	17218	12/13/23	2:28	SW3005A6020A
Mercury	0.00015 U	0.00020	0.00015	0.00012	mg/L	1	EEB	11/30/23	12:42	17202	12/1/23	13:29	SW7470A
Nickel	0.025 U	0.050	0.025	0.013	mg/L	1	AGN	12/6/23	7:25	17218	12/12/23	5:42	SW3005A6020A
Potassium	3.2	0.50	0.10	0.039	mg/L	1	AGN	12/6/23	7:25	17218	12/12/23	5:42	SW3005A6020A
Selenium	0.0050 U	0.010	0.0050	0.0037	mg/L	1	AGN	12/6/23	7:25	17218	12/12/23	5:42	SW3005A6020A
Silver	0.00050 U	0.0050	0.00050	0.00011	mg/L	1	AGN	12/6/23	7:25	17218	12/12/23	5:42	SW3005A6020A
Sodium	13	0.10	0.050	0.034	mg/L	1	AGN	12/6/23	7:25	17218	12/13/23	2:28	SW3005A6020A
Thallium	0.00080 U	0.0010	0.00080	0.00068	mg/L	1	AGN	12/6/23	7:25	17218	12/12/23	5:42	SW3005A6020A
Vanadium	0.0050 U	0.010	0.0050	0.0018	mg/L	1	AGN	12/6/23	7:25	17218	12/12/23	5:42	SW3005A6020A
Zinc	0.0040 U	0.010	0.0040	0.0021	mg/L	1	AGN	12/6/23	7:25	17218	12/12/23	5:42	SW3005A6020A

Project ID: Dow Salvage Yard 18001468
Job ID: 67839
Sample#: 67839-006
Sample ID: SY-BRMW3-287-297-110923
Matrix: Water
Sampled: 11/9/23 10:15

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
Aluminum	0.010 J	0.050	0.025	0.010	mg/L	1	AGN	12/6/23	7:25	17218	12/12/23	5:52	SW3005A6020A
Antimony	0.0014	0.0010	0.00050	0.00014	mg/L	1	AGN	12/6/23	7:25	17218	12/12/23	5:52	SW3005A6020A
Arsenic	0.051	0.0025	0.0010	0.00067	mg/L	1	AGN	12/6/23	7:25	17218	12/13/23	3:07	SW3005A6020A
Barium	0.083	0.010	0.0010	0.00076	mg/L	1	AGN	12/6/23	7:25	17218	12/13/23	3:07	SW3005A6020A
Beryllium	0.00050 U	0.0010	0.00050	0.00010	mg/L	1	AGN	12/6/23	7:25	17218	12/12/23	5:52	SW3005A6020A
Cadmium	0.00050 U	0.0010	0.00050	0.00014	mg/L	1	AGN	12/6/23	7:25	17218	12/12/23	5:52	SW3005A6020A
Chromium	0.025 U	0.050	0.025	0.020	mg/L	1	AGN	12/6/23	7:25	17218	12/12/23	5:52	SW3005A6020A
Cobalt	0.0012 J	0.010	0.00050	0.00028	mg/L	1	AGN	12/6/23	7:25	17218	12/12/23	5:52	SW3005A6020A
Copper	0.0075 U	0.010	0.0075	0.0054	mg/L	1	AGN	12/6/23	7:25	17218	12/12/23	5:52	SW3005A6020A
Iron	0.081 #	0.050	0.030	0.029	mg/L	1	AGN	12/6/23	7:25	17218	12/13/23	19:19	SW3005A6020A
# = The associated CCV showed recovery above the acceptance criteria. The LCS/D were acceptable. The reported result is an estimate.													
Lead	0.0034 J	0.0050	0.00050	0.00011	mg/L	1	AGN	12/6/23	7:25	17218	12/12/23	5:52	SW3005A6020A
Magnesium	20	0.10	0.020	0.0073	mg/L	1	AGN	12/6/23	7:25	17218	12/13/23	3:07	SW3005A6020A
Manganese	0.69	0.010	0.0050	0.0016	mg/L	1	AGN	12/6/23	7:25	17218	12/13/23	19:19	SW3005A6020A
Mercury	0.00018 J	0.00020	0.00015	0.00012	mg/L	1	EEB	11/30/23	12:42	17202	12/1/23	13:31	SW7470A
Nickel	0.025 U	0.050	0.025	0.013	mg/L	1	AGN	12/6/23	7:25	17218	12/12/23	5:52	SW3005A6020A
Potassium	3.3	0.50	0.10	0.039	mg/L	1	AGN	12/6/23	7:25	17218	12/12/23	5:52	SW3005A6020A
Selenium	0.0050 U	0.010	0.0050	0.0037	mg/L	1	AGN	12/6/23	7:25	17218	12/12/23	5:52	SW3005A6020A
Silver	0.00050 U	0.0050	0.00050	0.00011	mg/L	1	AGN	12/6/23	7:25	17218	12/12/23	5:52	SW3005A6020A
Sodium	17	0.10	0.050	0.034	mg/L	1	AGN	12/6/23	7:25	17218	12/13/23	3:07	SW3005A6020A
Thallium	0.00080 U	0.0010	0.00080	0.00068	mg/L	1	AGN	12/6/23	7:25	17218	12/12/23	5:52	SW3005A6020A
Vanadium	0.0050 U	0.010	0.0050	0.0018	mg/L	1	AGN	12/6/23	7:25	17218	12/12/23	5:52	SW3005A6020A
Zinc	0.0040 U	0.010	0.0040	0.0021	mg/L	1	AGN	12/6/23	7:25	17218	12/12/23	5:52	SW3005A6020A

Project ID: Dow Salvage Yard 18001468
Job ID: 67839
Sample#: 67839-007
Sample ID: SY-BRMW4-291-301-110923
Matrix: Water
Sampled: 11/9/23 11:00

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
Aluminum	0.025 U	0.050	0.025	0.010	mg/L	1	AGN	12/6/23	7:25	17218	12/12/23	6:01	SW3005A6020A
Antimony	0.00092 J	0.0010	0.00050	0.00014	mg/L	1	AGN	12/6/23	7:25	17218	12/12/23	6:01	SW3005A6020A
Arsenic	0.010	0.0025	0.0010	0.00067	mg/L	1	AGN	12/6/23	7:25	17218	12/13/23	3:17	SW3005A6020A
Barium	0.16	0.010	0.0010	0.00076	mg/L	1	AGN	12/6/23	7:25	17218	12/13/23	3:17	SW3005A6020A
Beryllium	0.00050 U	0.0010	0.00050	0.00010	mg/L	1	AGN	12/6/23	7:25	17218	12/12/23	6:01	SW3005A6020A
Cadmium	0.00050 U	0.0010	0.00050	0.00014	mg/L	1	AGN	12/6/23	7:25	17218	12/12/23	6:01	SW3005A6020A
Chromium	0.025 U	0.050	0.025	0.020	mg/L	1	AGN	12/6/23	7:25	17218	12/12/23	6:01	SW3005A6020A
Cobalt	0.0027 J	0.010	0.00050	0.00028	mg/L	1	AGN	12/6/23	7:25	17218	12/12/23	6:01	SW3005A6020A
Copper	0.0075 U	0.010	0.0075	0.0054	mg/L	1	AGN	12/6/23	7:25	17218	12/12/23	6:01	SW3005A6020A
Iron	0.087 #	0.050	0.030	0.029	mg/L	1	AGN	12/6/23	7:25	17218	12/13/23	19:28	SW3005A6020A
# = The associated CCV showed recovery above the acceptance criteria. The LCS/D were acceptable. The reported result is an estimate.													
Lead	0.0016 J	0.0050	0.00050	0.00011	mg/L	1	AGN	12/6/23	7:25	17218	12/12/23	6:01	SW3005A6020A
Magnesium	73	0.10	0.020	0.0073	mg/L	1	AGN	12/6/23	7:25	17218	12/13/23	3:17	SW3005A6020A
Manganese	0.49	0.010	0.0050	0.0016	mg/L	1	AGN	12/6/23	7:25	17218	12/13/23	19:28	SW3005A6020A
Mercury	0.00015 U	0.00020	0.00015	0.00012	mg/L	1	EEB	11/30/23	12:42	17202	12/1/23	13:33	SW7470A
Nickel	0.025 U	0.050	0.025	0.013	mg/L	1	AGN	12/6/23	7:25	17218	12/12/23	6:01	SW3005A6020A
Potassium	3.8	0.50	0.10	0.039	mg/L	1	AGN	12/6/23	7:25	17218	12/12/23	6:01	SW3005A6020A
Selenium	0.0050 U	0.010	0.0050	0.0037	mg/L	1	AGN	12/6/23	7:25	17218	12/12/23	6:01	SW3005A6020A
Silver	0.00050 U	0.0050	0.00050	0.00011	mg/L	1	AGN	12/6/23	7:25	17218	12/12/23	6:01	SW3005A6020A
Sodium	80	0.10	0.050	0.034	mg/L	1	AGN	12/6/23	7:25	17218	12/13/23	3:17	SW3005A6020A
Thallium	0.00080 U	0.0010	0.00080	0.00068	mg/L	1	AGN	12/6/23	7:25	17218	12/12/23	6:01	SW3005A6020A
Vanadium	0.0050 U	0.010	0.0050	0.0018	mg/L	1	AGN	12/6/23	7:25	17218	12/12/23	6:01	SW3005A6020A
Zinc	0.0024 J	0.010	0.0040	0.0021	mg/L	1	AGN	12/6/23	7:25	17218	12/12/23	6:01	SW3005A6020A

Project ID: Dow Salvage Yard 18001468
Job ID: 67839
Sample#: 67839-008
Sample ID: SY-BRMW1-42-52-110923
Matrix: Water
Sampled: 11/9/23 11:45

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
Aluminum	0.025 U	0.050	0.025	0.010	mg/L	1	AGN	12/6/23	7:25	17218	12/12/23	6:11	SW3005A6020A
Antimony	0.00077 J	0.0010	0.00050	0.00014	mg/L	1	AGN	12/6/23	7:25	17218	12/12/23	6:11	SW3005A6020A
Arsenic	0.0020 J	0.0025	0.0010	0.00067	mg/L	1	AGN	12/6/23	7:25	17218	12/12/23	6:11	SW3005A6020A
Barium	0.045	0.010	0.0010	0.00076	mg/L	1	AGN	12/6/23	7:25	17218	12/13/23	3:26	SW3005A6020A
Beryllium	0.00050 U	0.0010	0.00050	0.00010	mg/L	1	AGN	12/6/23	7:25	17218	12/12/23	6:11	SW3005A6020A
Cadmium	0.00050 U	0.0010	0.00050	0.00014	mg/L	1	AGN	12/6/23	7:25	17218	12/12/23	6:11	SW3005A6020A
Chromium	0.025 U	0.050	0.025	0.020	mg/L	1	AGN	12/6/23	7:25	17218	12/12/23	6:11	SW3005A6020A
Cobalt	0.0014 J	0.010	0.00050	0.00028	mg/L	1	AGN	12/6/23	7:25	17218	12/12/23	6:11	SW3005A6020A
Copper	0.0075 U	0.010	0.0075	0.0054	mg/L	1	AGN	12/6/23	7:25	17218	12/12/23	6:11	SW3005A6020A
Iron	2.0 #	0.050	0.030	0.029	mg/L	1	AGN	12/6/23	7:25	17218	12/13/23	19:37	SW3005A6020A
# = The associated CCV showed recovery above the acceptance criteria. The LCS/D were acceptable. The reported result is an estimate.													
Lead	0.0022 J	0.0050	0.00050	0.00011	mg/L	1	AGN	12/6/23	7:25	17218	12/12/23	6:11	SW3005A6020A
Magnesium	110	0.50	0.10	0.036	mg/L	5	AGN	12/6/23	7:25	17218	12/13/23	3:36	SW3005A6020A
Manganese	1.2	0.010	0.0050	0.0016	mg/L	1	AGN	12/6/23	7:25	17218	12/13/23	19:37	SW3005A6020A
Mercury	0.00015 U	0.00020	0.00015	0.00012	mg/L	1	AGN	12/4/23	13:17	17206	12/5/23	11:55	SW7470A
Nickel	0.025 U	0.050	0.025	0.013	mg/L	1	AGN	12/6/23	7:25	17218	12/12/23	6:11	SW3005A6020A
Potassium	6.5	0.50	0.10	0.039	mg/L	1	AGN	12/6/23	7:25	17218	12/12/23	6:11	SW3005A6020A
Selenium	0.0050 U	0.010	0.0050	0.0037	mg/L	1	AGN	12/6/23	7:25	17218	12/12/23	6:11	SW3005A6020A
Silver	0.00050 U	0.0050	0.00050	0.00011	mg/L	1	AGN	12/6/23	7:25	17218	12/12/23	6:11	SW3005A6020A
Sodium	160	0.10	0.050	0.034	mg/L	1	AGN	12/6/23	7:25	17218	12/13/23	3:26	SW3005A6020A
Thallium	0.00080 U	0.0010	0.00080	0.00068	mg/L	1	AGN	12/6/23	7:25	17218	12/12/23	6:11	SW3005A6020A
Vanadium	0.0050 U	0.010	0.0050	0.0018	mg/L	1	AGN	12/6/23	7:25	17218	12/12/23	6:11	SW3005A6020A
Zinc	0.0035 J	0.010	0.0040	0.0021	mg/L	1	AGN	12/6/23	7:25	17218	12/12/23	6:11	SW3005A6020A

Project ID: Dow Salvage Yard 18001468
Job ID: 67839
Sample#: 67839-009
Sample ID: SY-BRMW1-150-157-110923
Matrix: Water
Sampled: 11/9/23 12:40

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
Aluminum	0.028 J	0.050	0.025	0.010	mg/L	1	AGN	12/6/23	7:25	17218	12/12/23	6:40	SW3005A6020A
Antimony	0.00053 J	0.0010	0.00050	0.00014	mg/L	1	AGN	12/6/23	7:25	17218	12/12/23	6:40	SW3005A6020A
Arsenic	0.0022 J	0.0025	0.0010	0.00067	mg/L	1	AGN	12/6/23	7:25	17218	12/12/23	6:40	SW3005A6020A
Barium	0.0056 J	0.010	0.0010	0.00076	mg/L	1	AGN	12/6/23	7:25	17218	12/12/23	6:40	SW3005A6020A
Beryllium	0.00050 U	0.0010	0.00050	0.00010	mg/L	1	AGN	12/6/23	7:25	17218	12/12/23	6:40	SW3005A6020A
Cadmium	0.00050 U	0.0010	0.00050	0.00014	mg/L	1	AGN	12/6/23	7:25	17218	12/12/23	6:40	SW3005A6020A
Chromium	0.025 U	0.050	0.025	0.020	mg/L	1	AGN	12/6/23	7:25	17218	12/12/23	6:40	SW3005A6020A
Cobalt	0.00050 U	0.010	0.00050	0.00028	mg/L	1	AGN	12/6/23	7:25	17218	12/12/23	6:40	SW3005A6020A
Copper	0.0075 U	0.010	0.0075	0.0054	mg/L	1	AGN	12/6/23	7:25	17218	12/12/23	6:40	SW3005A6020A
Iron	0.030 U	0.050	0.030	0.029	mg/L	1	AGN	12/6/23	7:25	17218	12/13/23	19:46	SW3005A6020A
Lead	0.0024 J	0.0050	0.00050	0.00011	mg/L	1	AGN	12/6/23	7:25	17218	12/12/23	6:40	SW3005A6020A
Magnesium	29	0.10	0.020	0.0073	mg/L	1	AGN	12/6/23	7:25	17218	12/13/23	3:46	SW3005A6020A
Manganese	0.12	0.010	0.0050	0.0016	mg/L	1	AGN	12/6/23	7:25	17218	12/13/23	19:46	SW3005A6020A
Mercury	0.00015 U	0.00020	0.00015	0.00012	mg/L	1	AGN	12/4/23	13:17	17206	12/5/23	11:57	SW7470A
Nickel	0.025 U	0.050	0.025	0.013	mg/L	1	AGN	12/6/23	7:25	17218	12/12/23	6:40	SW3005A6020A
Potassium	3.5	0.50	0.10	0.039	mg/L	1	AGN	12/6/23	7:25	17218	12/12/23	6:40	SW3005A6020A
Selenium	0.0050 U	0.010	0.0050	0.0037	mg/L	1	AGN	12/6/23	7:25	17218	12/12/23	6:40	SW3005A6020A
Silver	0.00050 U	0.0050	0.00050	0.00011	mg/L	1	AGN	12/6/23	7:25	17218	12/12/23	6:40	SW3005A6020A
Sodium	49	0.10	0.050	0.034	mg/L	1	AGN	12/6/23	7:25	17218	12/13/23	3:46	SW3005A6020A
Thallium	0.00080 U	0.0010	0.00080	0.00068	mg/L	1	AGN	12/6/23	7:25	17218	12/12/23	6:40	SW3005A6020A
Vanadium	0.0050 U	0.010	0.0050	0.0018	mg/L	1	AGN	12/6/23	7:25	17218	12/12/23	6:40	SW3005A6020A
Zinc	0.0024 J	0.010	0.0040	0.0021	mg/L	1	AGN	12/6/23	7:25	17218	12/12/23	6:40	SW3005A6020A

Project ID: Dow Salvage Yard 18001468
Job ID: 67839
Sample#: 67839-010
Sample ID: SY-BRMW1-65-75-110923
Matrix: Water
Sampled: 11/9/23 13:50

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
Aluminum	0.018 J	0.050	0.025	0.010	mg/L	1	AGN	12/6/23	7:25	17218	12/12/23	6:50	SW3005A6020A
Antimony	0.00084 J	0.0010	0.00050	0.00014	mg/L	1	AGN	12/6/23	7:25	17218	12/12/23	6:50	SW3005A6020A
Arsenic	0.0019 J	0.0025	0.0010	0.00067	mg/L	1	AGN	12/6/23	7:25	17218	12/12/23	6:50	SW3005A6020A
Barium	0.030	0.010	0.0010	0.00076	mg/L	1	AGN	12/6/23	7:25	17218	12/13/23	3:56	SW3005A6020A
Beryllium	0.00050 U	0.0010	0.00050	0.00010	mg/L	1	AGN	12/6/23	7:25	17218	12/12/23	6:50	SW3005A6020A
Cadmium	0.00050 U	0.0010	0.00050	0.00014	mg/L	1	AGN	12/6/23	7:25	17218	12/12/23	6:50	SW3005A6020A
Chromium	0.025 U	0.050	0.025	0.020	mg/L	1	AGN	12/6/23	7:25	17218	12/12/23	6:50	SW3005A6020A
Cobalt	0.0020 J	0.010	0.00050	0.00028	mg/L	1	AGN	12/6/23	7:25	17218	12/12/23	6:50	SW3005A6020A
Copper	0.0075 U	0.010	0.0075	0.0054	mg/L	1	AGN	12/6/23	7:25	17218	12/12/23	6:50	SW3005A6020A
Iron	0.20 #	0.050	0.030	0.029	mg/L	1	AGN	12/6/23	7:25	17218	12/13/23	19:55	SW3005A6020A
# = The associated CCV showed recovery above the acceptance criteria. The LCS/D were acceptable. The reported result is an estimate.													
Lead	0.0048 J	0.0050	0.00050	0.00011	mg/L	1	AGN	12/6/23	7:25	17218	12/12/23	6:50	SW3005A6020A
Magnesium	130	0.50	0.10	0.036	mg/L	5	AGN	12/6/23	7:25	17218	12/13/23	4:05	SW3005A6020A
Manganese	1.2	0.010	0.0050	0.0016	mg/L	1	AGN	12/6/23	7:25	17218	12/13/23	19:55	SW3005A6020A
Mercury	0.00015 U	0.00020	0.00015	0.00012	mg/L	1	AGN	12/4/23	13:17	17206	12/5/23	11:58	SW7470A
Nickel	0.025 U	0.050	0.025	0.013	mg/L	1	AGN	12/6/23	7:25	17218	12/12/23	6:50	SW3005A6020A
Potassium	6.6	0.50	0.10	0.039	mg/L	1	AGN	12/6/23	7:25	17218	12/12/23	6:50	SW3005A6020A
Selenium	0.0050 U	0.010	0.0050	0.0037	mg/L	1	AGN	12/6/23	7:25	17218	12/12/23	6:50	SW3005A6020A
Silver	0.00050 U	0.0050	0.00050	0.00011	mg/L	1	AGN	12/6/23	7:25	17218	12/12/23	6:50	SW3005A6020A
Sodium	130	0.10	0.050	0.034	mg/L	1	AGN	12/6/23	7:25	17218	12/13/23	3:56	SW3005A6020A
Thallium	0.00080 U	0.0010	0.00080	0.00068	mg/L	1	AGN	12/6/23	7:25	17218	12/12/23	6:50	SW3005A6020A
Vanadium	0.0050 U	0.010	0.0050	0.0018	mg/L	1	AGN	12/6/23	7:25	17218	12/12/23	6:50	SW3005A6020A
Zinc	0.0035 J	0.010	0.0040	0.0021	mg/L	1	AGN	12/6/23	7:25	17218	12/12/23	6:50	SW3005A6020A

Project ID: Dow Salvage Yard 18001468
Job ID: 67839
Sample#: 67839-011
Sample ID: SY-BRMW10-65-75-110923
Matrix: Water
Sampled: 11/9/23 13:55

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
Aluminum	0.025 U	0.050	0.025	0.010	mg/L	1	AGN	12/6/23	7:25	17218	12/12/23	7:00	SW3005A6020A
Antimony	0.00094 J	0.0010	0.00050	0.00014	mg/L	1	AGN	12/6/23	7:25	17218	12/12/23	7:00	SW3005A6020A
Arsenic	0.0020 J	0.0025	0.0010	0.00067	mg/L	1	AGN	12/6/23	7:25	17218	12/12/23	7:00	SW3005A6020A
Barium	0.029	0.010	0.0010	0.00076	mg/L	1	AGN	12/6/23	7:25	17218	12/13/23	4:15	SW3005A6020A
Beryllium	0.00050 U	0.0010	0.00050	0.00010	mg/L	1	AGN	12/6/23	7:25	17218	12/12/23	7:00	SW3005A6020A
Cadmium	0.00050 U	0.0010	0.00050	0.00014	mg/L	1	AGN	12/6/23	7:25	17218	12/12/23	7:00	SW3005A6020A
Chromium	0.025 U	0.050	0.025	0.020	mg/L	1	AGN	12/6/23	7:25	17218	12/12/23	7:00	SW3005A6020A
Cobalt	0.0019 J	0.010	0.00050	0.00028	mg/L	1	AGN	12/6/23	7:25	17218	12/12/23	7:00	SW3005A6020A
Copper	0.0075 U	0.010	0.0075	0.0054	mg/L	1	AGN	12/6/23	7:25	17218	12/12/23	7:00	SW3005A6020A
Iron	0.21 #	0.050	0.030	0.029	mg/L	1	AGN	12/6/23	7:25	17218	12/13/23	20:03	SW3005A6020A
# = The associated CCV showed recovery above the acceptance criteria. The LCS/D were acceptable. The reported result is an estimate.													
Lead	0.0040 J	0.0050	0.00050	0.00011	mg/L	1	AGN	12/6/23	7:25	17218	12/12/23	7:00	SW3005A6020A
Magnesium	130	0.50	0.10	0.036	mg/L	5	AGN	12/6/23	7:25	17218	12/13/23	4:25	SW3005A6020A
Manganese	1.2	0.010	0.0050	0.0016	mg/L	1	AGN	12/6/23	7:25	17218	12/13/23	20:03	SW3005A6020A
Mercury	0.00015 U	0.00020	0.00015	0.00012	mg/L	1	AGN	12/4/23	13:17	17206	12/5/23	12:00	SW7470A
Nickel	0.025 U	0.050	0.025	0.013	mg/L	1	AGN	12/6/23	7:25	17218	12/12/23	7:00	SW3005A6020A
Potassium	6.6	0.50	0.10	0.039	mg/L	1	AGN	12/6/23	7:25	17218	12/12/23	7:00	SW3005A6020A
Selenium	0.0050 U	0.010	0.0050	0.0037	mg/L	1	AGN	12/6/23	7:25	17218	12/12/23	7:00	SW3005A6020A
Silver	0.00050 U	0.0050	0.00050	0.00011	mg/L	1	AGN	12/6/23	7:25	17218	12/12/23	7:00	SW3005A6020A
Sodium	130	0.10	0.050	0.034	mg/L	1	AGN	12/6/23	7:25	17218	12/13/23	4:15	SW3005A6020A
Thallium	0.00080 U	0.0010	0.00080	0.00068	mg/L	1	AGN	12/6/23	7:25	17218	12/12/23	7:00	SW3005A6020A
Vanadium	0.0050 U	0.010	0.0050	0.0018	mg/L	1	AGN	12/6/23	7:25	17218	12/12/23	7:00	SW3005A6020A
Zinc	0.0036 J	0.010	0.0040	0.0021	mg/L	1	AGN	12/6/23	7:25	17218	12/12/23	7:00	SW3005A6020A

Project ID: Dow Salvage Yard 18001468
Job ID: 67839
Sample#: 67839-012
Sample ID: SY-BRMW4-62-72-110923-DISS
Matrix: Water
Sampled: 11/9/23 9:00

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
Aluminum	0.011 J	0.054	0.027	0.011	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	9:04	SW3005A6020A
Antimony	0.00074 J	0.0011	0.00054	0.00015	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	9:04	SW3005A6020A
Arsenic	0.0037	0.0027	0.0011	0.00072	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	9:04	SW3005A6020A
Barium	0.040	0.011	0.0011	0.00081	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	9:04	SW3005A6020A
Beryllium	0.00054 U	0.0011	0.00054	0.00011	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	9:04	SW3005A6020A
Cadmium	0.00054 U	0.0011	0.00054	0.00015	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	9:04	SW3005A6020A
Chromium	0.027 U	0.054	0.027	0.022	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	9:04	SW3005A6020A
Cobalt	0.0017 J	0.011	0.00054	0.00030	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	9:04	SW3005A6020A
Copper	0.0080 U	0.011	0.0080	0.0057	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	9:04	SW3005A6020A
Iron	0.21	0.054	0.032	0.031	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	9:04	SW3005A6020A
Lead	0.00017 J	0.0054	0.00054	0.00012	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	9:04	SW3005A6020A
Magnesium	55	0.11	0.021	0.0078	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	9:04	SW3005A6020A
Manganese	0.55	0.011	0.0054	0.0017	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	9:04	SW3005A6020A
Mercury	0.00015 U	0.00020	0.00015	0.00012	mg/L	1	AGN	12/4/23	13:17	17206	12/5/23	12:02	SW7470A
Nickel	0.027 U	0.054	0.027	0.013	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	9:04	SW3005A6020A
Potassium	5.0	0.54	0.11	0.042	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	9:04	SW3005A6020A
Selenium	0.0054 U	0.011	0.0054	0.0040	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	9:04	SW3005A6020A
Silver	0.00054 U	0.0054	0.00054	0.00012	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	9:04	SW3005A6020A
Sodium	46	0.11	0.054	0.037	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	9:04	SW3005A6020A
Thallium	0.00086 U	0.0011	0.00086	0.00073	mg/L	1	EEB	11/28/23	10:49	17176	12/4/23	18:36	SW3005A6020A
Vanadium	0.0054 U	0.011	0.0054	0.0019	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	9:04	SW3005A6020A
Zinc	0.0025 J	0.011	0.0043	0.0022	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	9:04	SW3005A6020A

Project ID: Dow Salvage Yard 18001468
Job ID: 67839
Sample#: 67839-013
Sample ID: SY-BRMW40-62-72-110923-DISS
Matrix: Water
Sampled: 11/9/23 9:05

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
Aluminum	0.027 U	0.054	0.027	0.011	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	9:14	SW3005A6020A
Antimony	0.00050 J	0.0011	0.00054	0.00015	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	9:14	SW3005A6020A
Arsenic	0.0022 J	0.0027	0.0011	0.00072	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	9:14	SW3005A6020A
Barium	0.033	0.011	0.0011	0.00081	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	9:14	SW3005A6020A
Beryllium	0.00054 U	0.0011	0.00054	0.00011	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	9:14	SW3005A6020A
Cadmium	0.00054 U	0.0011	0.00054	0.00015	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	9:14	SW3005A6020A
Chromium	0.027 U	0.054	0.027	0.022	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	9:14	SW3005A6020A
Cobalt	0.0011 J	0.011	0.00054	0.00030	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	9:14	SW3005A6020A
Copper	0.0080 U	0.011	0.0080	0.0057	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	9:14	SW3005A6020A
Iron	0.074	0.054	0.032	0.031	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	9:14	SW3005A6020A
Lead	0.0019 J	0.0054	0.00054	0.00012	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	9:14	SW3005A6020A
Magnesium	55	0.11	0.021	0.0078	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	9:14	SW3005A6020A
Manganese	0.33	0.011	0.0054	0.0017	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	9:14	SW3005A6020A
Mercury	0.00015 U	0.00020	0.00015	0.00012	mg/L	1	AGN	12/4/23	13:17	17206	12/5/23	12:04	SW7470A
Nickel	0.027 U	0.054	0.027	0.013	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	9:14	SW3005A6020A
Potassium	4.4	0.54	0.11	0.042	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	9:14	SW3005A6020A
Selenium	0.0054 U	0.011	0.0054	0.0040	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	9:14	SW3005A6020A
Silver	0.00054 U	0.0054	0.00054	0.00012	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	9:14	SW3005A6020A
Sodium	48	0.11	0.054	0.037	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	9:14	SW3005A6020A
Thallium	0.00086 U	0.0011	0.00086	0.00073	mg/L	1	EEB	11/28/23	10:49	17176	12/4/23	18:44	SW3005A6020A
Vanadium	0.0054 U	0.011	0.0054	0.0019	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	9:14	SW3005A6020A
Zinc	0.0043 U	0.011	0.0043	0.0022	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	9:14	SW3005A6020A

Project ID: Dow Salvage Yard 18001468
Job ID: 67839
Sample#: 67839-014
Sample ID: SY-BRMW4-138-148-110923-DISS
Matrix: Water
Sampled: 11/9/23 9:40

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
Aluminum	0.027 U	0.054	0.027	0.011	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	9:24	SW3005A6020A
Antimony	0.00045 J	0.0011	0.00054	0.00015	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	9:24	SW3005A6020A
Arsenic	0.0042	0.0027	0.0011	0.00072	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	9:24	SW3005A6020A
Barium	0.043	0.011	0.0011	0.00081	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	9:24	SW3005A6020A
Beryllium	0.00054 U	0.0011	0.00054	0.00011	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	9:24	SW3005A6020A
Cadmium	0.00054 U	0.0011	0.00054	0.00015	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	9:24	SW3005A6020A
Chromium	0.027 U	0.054	0.027	0.022	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	9:24	SW3005A6020A
Cobalt	0.00054 U	0.011	0.00054	0.00030	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	9:24	SW3005A6020A
Copper	0.0080 U	0.011	0.0080	0.0057	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	9:24	SW3005A6020A
Iron	0.044 J	0.054	0.032	0.031	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	9:24	SW3005A6020A
Lead	0.0014 J	0.0054	0.00054	0.00012	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	9:24	SW3005A6020A
Magnesium	57	0.11	0.021	0.0078	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	9:24	SW3005A6020A
Manganese	0.021	0.011	0.0054	0.0017	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	9:24	SW3005A6020A
Mercury	0.00015 U	0.00020	0.00015	0.00012	mg/L	1	AGN	12/4/23	13:17	17206	12/5/23	12:06	SW7470A
Nickel	0.027 U	0.054	0.027	0.013	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	9:24	SW3005A6020A
Potassium	3.7	0.54	0.11	0.042	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	9:24	SW3005A6020A
Selenium	0.0054 U	0.011	0.0054	0.0040	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	9:24	SW3005A6020A
Silver	0.00054 U	0.0054	0.00054	0.00012	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	9:24	SW3005A6020A
Sodium	82	0.11	0.054	0.037	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	9:24	SW3005A6020A
Thallium	0.00086 U	0.0011	0.00086	0.00073	mg/L	1	EEB	11/28/23	10:49	17176	12/4/23	18:53	SW3005A6020A
Vanadium	0.0054 U	0.011	0.0054	0.0019	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	9:24	SW3005A6020A
Zinc	0.0038 J	0.011	0.0043	0.0022	mg/L	1	EEB	11/28/23	10:49	17176	12/2/23	9:24	SW3005A6020A

Project ID: Dow Salvage Yard 18001468
Job ID: 67839
Sample#: 67839-015
Sample ID: SY-BRMW3-47-62-110923-DISS
Matrix: Water
Sampled: 11/9/23 9:45

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
Aluminum	0.027 U	0.054	0.027	0.011	mg/L	1	AGN	12/1/23	11:47	17205	12/6/23	2:50	SW3005A6020A
Antimony	0.0020	0.0011	0.00054	0.00015	mg/L	1	AGN	12/1/23	11:47	17205	12/6/23	2:50	SW3005A6020A
Arsenic	0.022	0.0027	0.0011	0.00072	mg/L	1	AGN	12/1/23	11:47	17205	12/6/23	2:50	SW3005A6020A
Barium	0.078	0.011	0.0011	0.00081	mg/L	1	AGN	12/1/23	11:47	17205	12/6/23	2:50	SW3005A6020A
Beryllium	0.00054 U	0.0011	0.00054	0.00011	mg/L	1	AGN	12/1/23	11:47	17205	12/6/23	2:50	SW3005A6020A
Cadmium	0.00054 U	0.0011	0.00054	0.00015	mg/L	1	AGN	12/1/23	11:47	17205	12/6/23	2:50	SW3005A6020A
Chromium	0.027 U	0.054	0.027	0.022	mg/L	1	AGN	12/1/23	11:47	17205	12/6/23	2:50	SW3005A6020A
Cobalt	0.00037 J	0.011	0.00054	0.00030	mg/L	1	AGN	12/1/23	11:47	17205	12/6/23	2:50	SW3005A6020A
Copper	0.0080 U	0.011	0.0080	0.0057	mg/L	1	AGN	12/1/23	11:47	17205	12/6/23	2:50	SW3005A6020A
Iron	0.032 U	0.054	0.032	0.031	mg/L	1	AGN	12/1/23	11:47	17205	12/6/23	2:50	SW3005A6020A
Lead	0.0022 J	0.0054	0.00054	0.00012	mg/L	1	AGN	12/1/23	11:47	17205	12/6/23	2:50	SW3005A6020A
Magnesium	23	0.11	0.021	0.0078	mg/L	1	AGN	12/1/23	11:47	17205	12/6/23	2:50	SW3005A6020A
Manganese	0.28	0.011	0.0054	0.0017	mg/L	1	AGN	12/1/23	11:47	17205	12/6/23	2:50	SW3005A6020A
Mercury	0.00015 U	0.00020	0.00015	0.00012	mg/L	1	AGN	12/4/23	13:17	17206	12/5/23	12:08	SW7470A
Nickel	0.027 U	0.054	0.027	0.013	mg/L	1	AGN	12/1/23	11:47	17205	12/6/23	2:50	SW3005A6020A
Potassium	6.3	0.54	0.11	0.042	mg/L	1	AGN	12/1/23	11:47	17205	12/6/23	2:50	SW3005A6020A
Selenium	0.0054 U	0.011	0.0054	0.0040	mg/L	1	AGN	12/1/23	11:47	17205	12/6/23	2:50	SW3005A6020A
Silver	0.00054 U	0.0054	0.00054	0.00012	mg/L	1	AGN	12/1/23	11:47	17205	12/6/23	2:50	SW3005A6020A
Sodium	23	0.11	0.054	0.037	mg/L	1	AGN	12/1/23	11:47	17205	12/6/23	2:50	SW3005A6020A
Thallium	0.00086 U	0.0011	0.00086	0.00073	mg/L	1	AGN	12/1/23	11:47	17205	12/6/23	2:50	SW3005A6020A
Vanadium	0.0054 U	0.011	0.0054	0.0019	mg/L	1	AGN	12/1/23	11:47	17205	12/6/23	2:50	SW3005A6020A
Zinc	0.0043 U	0.011	0.0043	0.0022	mg/L	1	AGN	12/1/23	11:47	17205	12/6/23	2:50	SW3005A6020A

Project ID: Dow Salvage Yard 18001468
Job ID: 67839
Sample#: 67839-016
Sample ID: SY-BRMW3-145-155-110923-DISS
Matrix: Water
Sampled: 11/9/23 10:00

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
Aluminum	0.027 U	0.054	0.027	0.011	mg/L	1	AGN	12/1/23	11:47	17205	12/6/23	3:16	SW3005A6020A
Antimony	0.00046 J	0.0011	0.00054	0.00015	mg/L	1	AGN	12/1/23	11:47	17205	12/6/23	3:16	SW3005A6020A
Arsenic	0.011	0.0027	0.0011	0.00072	mg/L	1	AGN	12/1/23	11:47	17205	12/6/23	3:16	SW3005A6020A
Barium	0.085	0.011	0.0011	0.00081	mg/L	1	AGN	12/1/23	11:47	17205	12/6/23	3:16	SW3005A6020A
Beryllium	0.00054 U	0.0011	0.00054	0.00011	mg/L	1	AGN	12/1/23	11:47	17205	12/6/23	3:16	SW3005A6020A
Cadmium	0.00054 U	0.0011	0.00054	0.00015	mg/L	1	AGN	12/1/23	11:47	17205	12/6/23	3:16	SW3005A6020A
Chromium	0.027 U	0.054	0.027	0.022	mg/L	1	AGN	12/1/23	11:47	17205	12/6/23	3:16	SW3005A6020A
Cobalt	0.00067 J	0.011	0.00054	0.00030	mg/L	1	AGN	12/1/23	11:47	17205	12/6/23	3:16	SW3005A6020A
Copper	0.0080 U	0.011	0.0080	0.0057	mg/L	1	AGN	12/1/23	11:47	17205	12/6/23	3:16	SW3005A6020A
Iron	0.032 U	0.054	0.032	0.031	mg/L	1	AGN	12/1/23	11:47	17205	12/6/23	3:16	SW3005A6020A
Lead	0.00039 J	0.0054	0.00054	0.00012	mg/L	1	AGN	12/1/23	11:47	17205	12/6/23	3:16	SW3005A6020A
Magnesium	17	0.11	0.021	0.0078	mg/L	1	AGN	12/1/23	11:47	17205	12/6/23	3:16	SW3005A6020A
Manganese	0.40	0.011	0.0054	0.0017	mg/L	1	AGN	12/1/23	11:47	17205	12/6/23	3:16	SW3005A6020A
Mercury	0.00015 U	0.00020	0.00015	0.00012	mg/L	1	AGN	12/4/23	13:17	17206	12/5/23	12:09	SW7470A
Nickel	0.027 U	0.054	0.027	0.013	mg/L	1	AGN	12/1/23	11:47	17205	12/6/23	3:16	SW3005A6020A
Potassium	2.9	0.54	0.11	0.042	mg/L	1	AGN	12/1/23	11:47	17205	12/6/23	3:16	SW3005A6020A
Selenium	0.0054 U	0.011	0.0054	0.0040	mg/L	1	AGN	12/1/23	11:47	17205	12/6/23	3:16	SW3005A6020A
Silver	0.00054 U	0.0054	0.00054	0.00012	mg/L	1	AGN	12/1/23	11:47	17205	12/6/23	3:16	SW3005A6020A
Sodium	13	0.11	0.054	0.037	mg/L	1	AGN	12/1/23	11:47	17205	12/6/23	3:16	SW3005A6020A
Thallium	0.00086 U	0.0011	0.00086	0.00073	mg/L	1	AGN	12/1/23	11:47	17205	12/6/23	3:16	SW3005A6020A
Vanadium	0.0054 U	0.011	0.0054	0.0019	mg/L	1	AGN	12/1/23	11:47	17205	12/6/23	3:16	SW3005A6020A
Zinc	0.0043 U	0.011	0.0043	0.0022	mg/L	1	AGN	12/1/23	11:47	17205	12/6/23	3:16	SW3005A6020A

Project ID: Dow Salvage Yard 18001468
Job ID: 67839
Sample#: 67839-017
Sample ID: SY-BRMW3-287-297-110923-DISS
Matrix: Water
Sampled: 11/9/23 10:15

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
Aluminum	0.027 U	0.054	0.027	0.011	mg/L	1	AGN	12/1/23	11:47	17205	12/6/23	3:25	SW3005A6020A
Antimony	0.0014	0.0011	0.00054	0.00015	mg/L	1	AGN	12/1/23	11:47	17205	12/6/23	3:25	SW3005A6020A
Arsenic	0.053	0.0027	0.0011	0.00072	mg/L	1	AGN	12/1/23	11:47	17205	12/6/23	3:25	SW3005A6020A
Barium	0.082	0.011	0.0011	0.00081	mg/L	1	AGN	12/1/23	11:47	17205	12/6/23	3:25	SW3005A6020A
Beryllium	0.00054 U	0.0011	0.00054	0.00011	mg/L	1	AGN	12/1/23	11:47	17205	12/6/23	3:25	SW3005A6020A
Cadmium	0.00054 U	0.0011	0.00054	0.00015	mg/L	1	AGN	12/1/23	11:47	17205	12/6/23	3:25	SW3005A6020A
Chromium	0.027 U	0.054	0.027	0.022	mg/L	1	AGN	12/1/23	11:47	17205	12/6/23	3:25	SW3005A6020A
Cobalt	0.0013 J	0.011	0.00054	0.00030	mg/L	1	AGN	12/1/23	11:47	17205	12/6/23	3:25	SW3005A6020A
Copper	0.0080 U	0.011	0.0080	0.0057	mg/L	1	AGN	12/1/23	11:47	17205	12/6/23	3:25	SW3005A6020A
Iron	0.032 U	0.054	0.032	0.031	mg/L	1	AGN	12/1/23	11:47	17205	12/6/23	3:25	SW3005A6020A
Lead	0.00069 J	0.0054	0.00054	0.00012	mg/L	1	AGN	12/1/23	11:47	17205	12/6/23	3:25	SW3005A6020A
Magnesium	20	0.11	0.021	0.0078	mg/L	1	AGN	12/1/23	11:47	17205	12/6/23	3:25	SW3005A6020A
Manganese	0.64	0.011	0.0054	0.0017	mg/L	1	AGN	12/1/23	11:47	17205	12/6/23	3:25	SW3005A6020A
Mercury	0.00015 U	0.00020	0.00015	0.00012	mg/L	1	AGN	12/4/23	13:17	17206	12/5/23	12:15	SW7470A
Nickel	0.027 U	0.054	0.027	0.013	mg/L	1	AGN	12/1/23	11:47	17205	12/6/23	3:25	SW3005A6020A
Potassium	3.1	0.54	0.11	0.042	mg/L	1	AGN	12/1/23	11:47	17205	12/6/23	3:25	SW3005A6020A
Selenium	0.0054 U	0.011	0.0054	0.0040	mg/L	1	AGN	12/1/23	11:47	17205	12/6/23	3:25	SW3005A6020A
Silver	0.00054 U	0.0054	0.00054	0.00012	mg/L	1	AGN	12/1/23	11:47	17205	12/6/23	3:25	SW3005A6020A
Sodium	16	0.11	0.054	0.037	mg/L	1	AGN	12/1/23	11:47	17205	12/6/23	3:25	SW3005A6020A
Thallium	0.00086 U	0.0011	0.00086	0.00073	mg/L	1	AGN	12/1/23	11:47	17205	12/6/23	3:25	SW3005A6020A
Vanadium	0.0054 U	0.011	0.0054	0.0019	mg/L	1	AGN	12/1/23	11:47	17205	12/6/23	3:25	SW3005A6020A
Zinc	0.0043 U	0.011	0.0043	0.0022	mg/L	1	AGN	12/1/23	11:47	17205	12/6/23	3:25	SW3005A6020A

Project ID: Dow Salvage Yard 18001468

Job ID: 67839

Sample#: 67839-018

Sample ID: SY-BRMW4-291-301-110923-DISS

Matrix: Water

Sampled: 11/9/23 11:00

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
Aluminum	0.027 U	0.054	0.027	0.011	mg/L	1	AGN	12/1/23	11:47	17205	12/6/23	3:34	SW3005A6020A
Antimony	0.0011	0.0011	0.00054	0.00015	mg/L	1	AGN	12/1/23	11:47	17205	12/6/23	3:34	SW3005A6020A
Arsenic	0.020	0.0027	0.0011	0.00072	mg/L	1	AGN	12/1/23	11:47	17205	12/6/23	3:34	SW3005A6020A
Barium	0.13	0.011	0.0011	0.00081	mg/L	1	AGN	12/1/23	11:47	17205	12/6/23	3:34	SW3005A6020A
Beryllium	0.00054 U	0.0011	0.00054	0.00011	mg/L	1	AGN	12/1/23	11:47	17205	12/6/23	3:34	SW3005A6020A
Cadmium	0.00054 U	0.0011	0.00054	0.00015	mg/L	1	AGN	12/1/23	11:47	17205	12/6/23	3:34	SW3005A6020A
Chromium	0.027 U	0.054	0.027	0.022	mg/L	1	AGN	12/1/23	11:47	17205	12/6/23	3:34	SW3005A6020A
Cobalt	0.0026 J	0.011	0.00054	0.00030	mg/L	1	AGN	12/1/23	11:47	17205	12/6/23	3:34	SW3005A6020A
Copper	0.0080 U	0.011	0.0080	0.0057	mg/L	1	AGN	12/1/23	11:47	17205	12/6/23	3:34	SW3005A6020A
Iron	0.051 J	0.054	0.032	0.031	mg/L	1	AGN	12/1/23	11:47	17205	12/6/23	3:34	SW3005A6020A
Lead	0.00057 J	0.0054	0.00054	0.00012	mg/L	1	AGN	12/1/23	11:47	17205	12/6/23	3:34	SW3005A6020A
Magnesium	67	0.11	0.021	0.0078	mg/L	1	AGN	12/1/23	11:47	17205	12/6/23	3:34	SW3005A6020A
Manganese	0.47	0.011	0.0054	0.0017	mg/L	1	AGN	12/1/23	11:47	17205	12/6/23	3:34	SW3005A6020A
Mercury	0.00015 U	0.00020	0.00015	0.00012	mg/L	1	AGN	12/4/23	13:17	17206	12/5/23	12:16	SW7470A
Nickel	0.027 U	0.054	0.027	0.013	mg/L	1	AGN	12/1/23	11:47	17205	12/6/23	3:34	SW3005A6020A
Potassium	3.6	0.54	0.11	0.042	mg/L	1	AGN	12/1/23	11:47	17205	12/6/23	3:34	SW3005A6020A
Selenium	0.0054 U	0.011	0.0054	0.0040	mg/L	1	AGN	12/1/23	11:47	17205	12/6/23	3:34	SW3005A6020A
Silver	0.00054 U	0.0054	0.00054	0.00012	mg/L	1	AGN	12/1/23	11:47	17205	12/6/23	3:34	SW3005A6020A
Sodium	84	0.11	0.054	0.037	mg/L	1	AGN	12/1/23	11:47	17205	12/6/23	3:34	SW3005A6020A
Thallium	0.00086 U	0.0011	0.00086	0.00073	mg/L	1	AGN	12/1/23	11:47	17205	12/6/23	3:34	SW3005A6020A
Vanadium	0.0054 U	0.011	0.0054	0.0019	mg/L	1	AGN	12/1/23	11:47	17205	12/6/23	3:34	SW3005A6020A
Zinc	0.0049 J	0.011	0.0043	0.0022	mg/L	1	AGN	12/1/23	11:47	17205	12/6/23	3:34	SW3005A6020A

Project ID: Dow Salvage Yard 18001468
Job ID: 67839
Sample#: 67839-019
Sample ID: SY-BRMW1-42-52-110923-DISS
Matrix: Water
Sampled: 11/9/23 11:45

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
Aluminum	0.027 U	0.054	0.027	0.011	mg/L	1	AGN	12/1/23	11:47	17205	12/6/23	3:42	SW3005A6020A
Antimony	0.00064 J	0.0011	0.00054	0.00015	mg/L	1	AGN	12/1/23	11:47	17205	12/6/23	3:42	SW3005A6020A
Arsenic	0.0022 J	0.0027	0.0011	0.00072	mg/L	1	AGN	12/1/23	11:47	17205	12/6/23	3:42	SW3005A6020A
Barium	0.040	0.011	0.0011	0.00081	mg/L	1	AGN	12/1/23	11:47	17205	12/6/23	3:42	SW3005A6020A
Beryllium	0.00054 U	0.0011	0.00054	0.00011	mg/L	1	AGN	12/1/23	11:47	17205	12/6/23	3:42	SW3005A6020A
Cadmium	0.00054 U	0.0011	0.00054	0.00015	mg/L	1	AGN	12/1/23	11:47	17205	12/6/23	3:42	SW3005A6020A
Chromium	0.027 U	0.054	0.027	0.022	mg/L	1	AGN	12/1/23	11:47	17205	12/6/23	3:42	SW3005A6020A
Cobalt	0.0012 J	0.011	0.00054	0.00030	mg/L	1	AGN	12/1/23	11:47	17205	12/6/23	3:42	SW3005A6020A
Copper	0.0080 U	0.011	0.0080	0.0057	mg/L	1	AGN	12/1/23	11:47	17205	12/6/23	3:42	SW3005A6020A
Iron	1.3	0.054	0.032	0.031	mg/L	1	AGN	12/1/23	11:47	17205	12/6/23	3:42	SW3005A6020A
Lead	0.00054 U	0.0054	0.00054	0.00012	mg/L	1	AGN	12/1/23	11:47	17205	12/6/23	3:42	SW3005A6020A
Magnesium	120	0.54	0.11	0.039	mg/L	5	AGN	12/1/23	11:47	17205	12/6/23	17:20	SW3005A6020A
Manganese	1.1	0.011	0.0054	0.0017	mg/L	1	AGN	12/1/23	11:47	17205	12/6/23	3:42	SW3005A6020A
Mercury	0.00015 U	0.00020	0.00015	0.00012	mg/L	1	AGN	12/4/23	13:17	17206	12/5/23	12:18	SW7470A
Nickel	0.027 U	0.054	0.027	0.013	mg/L	1	AGN	12/1/23	11:47	17205	12/6/23	3:42	SW3005A6020A
Potassium	6.2	0.54	0.11	0.042	mg/L	1	AGN	12/1/23	11:47	17205	12/6/23	3:42	SW3005A6020A
Selenium	0.0054 U	0.011	0.0054	0.0040	mg/L	1	AGN	12/1/23	11:47	17205	12/6/23	3:42	SW3005A6020A
Silver	0.00054 U	0.0054	0.00054	0.00012	mg/L	1	AGN	12/1/23	11:47	17205	12/6/23	3:42	SW3005A6020A
Sodium	160	0.11	0.054	0.037	mg/L	1	AGN	12/1/23	11:47	17205	12/6/23	3:42	SW3005A6020A
Thallium	0.00086 U	0.0011	0.00086	0.00073	mg/L	1	AGN	12/1/23	11:47	17205	12/6/23	3:42	SW3005A6020A
Vanadium	0.0054 U	0.011	0.0054	0.0019	mg/L	1	AGN	12/1/23	11:47	17205	12/6/23	3:42	SW3005A6020A
Zinc	0.0026 J	0.011	0.0043	0.0022	mg/L	1	AGN	12/1/23	11:47	17205	12/6/23	3:42	SW3005A6020A

Project ID: Dow Salvage Yard 18001468
Job ID: 67839
Sample#: 67839-020
Sample ID: SY-BRMW1-150-157-110923-DISS
Matrix: Water
Sampled: 11/9/23 12:40

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
Aluminum	0.027 U	0.054	0.027	0.011	mg/L	1	AGN	12/1/23	11:47	17205	12/6/23	3:51	SW3005A6020A
Antimony	0.00042 J	0.0011	0.00054	0.00015	mg/L	1	AGN	12/1/23	11:47	17205	12/6/23	3:51	SW3005A6020A
Arsenic	0.0020 J	0.0027	0.0011	0.00072	mg/L	1	AGN	12/1/23	11:47	17205	12/6/23	3:51	SW3005A6020A
Barium	0.0053 J	0.011	0.0011	0.00081	mg/L	1	AGN	12/1/23	11:47	17205	12/6/23	3:51	SW3005A6020A
Beryllium	0.00054 U	0.0011	0.00054	0.00011	mg/L	1	AGN	12/1/23	11:47	17205	12/6/23	3:51	SW3005A6020A
Cadmium	0.00054 U	0.0011	0.00054	0.00015	mg/L	1	AGN	12/1/23	11:47	17205	12/6/23	3:51	SW3005A6020A
Chromium	0.027 U	0.054	0.027	0.022	mg/L	1	AGN	12/1/23	11:47	17205	12/6/23	3:51	SW3005A6020A
Cobalt	0.00054 U	0.011	0.00054	0.00030	mg/L	1	AGN	12/1/23	11:47	17205	12/6/23	3:51	SW3005A6020A
Copper	0.0080 U	0.011	0.0080	0.0057	mg/L	1	AGN	12/1/23	11:47	17205	12/6/23	3:51	SW3005A6020A
Iron	0.032 U	0.054	0.032	0.031	mg/L	1	AGN	12/1/23	11:47	17205	12/6/23	3:51	SW3005A6020A
Lead	0.00025 J	0.0054	0.00054	0.00012	mg/L	1	AGN	12/1/23	11:47	17205	12/6/23	3:51	SW3005A6020A
Magnesium	28	0.11	0.021	0.0078	mg/L	1	AGN	12/1/23	11:47	17205	12/6/23	3:51	SW3005A6020A
Manganese	0.12	0.011	0.0054	0.0017	mg/L	1	AGN	12/1/23	11:47	17205	12/6/23	3:51	SW3005A6020A
Mercury	0.00015 U	0.00020	0.00015	0.00012	mg/L	1	AGN	12/4/23	13:17	17206	12/5/23	12:20	SW7470A
Nickel	0.027 U	0.054	0.027	0.013	mg/L	1	AGN	12/1/23	11:47	17205	12/6/23	3:51	SW3005A6020A
Potassium	3.0	0.54	0.11	0.042	mg/L	1	AGN	12/1/23	11:47	17205	12/6/23	3:51	SW3005A6020A
Selenium	0.0054 U	0.011	0.0054	0.0040	mg/L	1	AGN	12/1/23	11:47	17205	12/6/23	3:51	SW3005A6020A
Silver	0.00054 U	0.0054	0.00054	0.00012	mg/L	1	AGN	12/1/23	11:47	17205	12/6/23	3:51	SW3005A6020A
Sodium	46	0.11	0.054	0.037	mg/L	1	AGN	12/1/23	11:47	17205	12/6/23	3:51	SW3005A6020A
Thallium	0.00086 U	0.0011	0.00086	0.00073	mg/L	1	AGN	12/1/23	11:47	17205	12/6/23	3:51	SW3005A6020A
Vanadium	0.0054 U	0.011	0.0054	0.0019	mg/L	1	AGN	12/1/23	11:47	17205	12/6/23	3:51	SW3005A6020A
Zinc	0.0024 J	0.011	0.0043	0.0022	mg/L	1	AGN	12/1/23	11:47	17205	12/6/23	3:51	SW3005A6020A

Project ID: Dow Salvage Yard 18001468
Job ID: 67839
Sample#: 67839-021
Sample ID: SY-BRMW1-65-75-110923-DISS
Matrix: Water
Sampled: 11/9/23 13:50

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
Aluminum	0.027 U	0.054	0.027	0.011	mg/L	1	AGN	12/1/23	11:47	17205	12/6/23	4:00	SW3005A6020A
Antimony	0.00061 J	0.0011	0.00054	0.00015	mg/L	1	AGN	12/1/23	11:47	17205	12/6/23	4:00	SW3005A6020A
Arsenic	0.0014 J	0.0027	0.0011	0.00072	mg/L	1	AGN	12/1/23	11:47	17205	12/6/23	4:00	SW3005A6020A
Barium	0.025	0.011	0.0011	0.00081	mg/L	1	AGN	12/1/23	11:47	17205	12/6/23	4:00	SW3005A6020A
Beryllium	0.00054 U	0.0011	0.00054	0.00011	mg/L	1	AGN	12/1/23	11:47	17205	12/6/23	4:00	SW3005A6020A
Cadmium	0.00054 U	0.0011	0.00054	0.00015	mg/L	1	AGN	12/1/23	11:47	17205	12/6/23	4:00	SW3005A6020A
Chromium	0.027 U	0.054	0.027	0.022	mg/L	1	AGN	12/1/23	11:47	17205	12/6/23	4:00	SW3005A6020A
Cobalt	0.0015 J	0.011	0.00054	0.00030	mg/L	1	AGN	12/1/23	11:47	17205	12/6/23	4:00	SW3005A6020A
Copper	0.0080 U	0.011	0.0080	0.0057	mg/L	1	AGN	12/1/23	11:47	17205	12/6/23	4:00	SW3005A6020A
Iron	0.12	0.054	0.032	0.031	mg/L	1	AGN	12/1/23	11:47	17205	12/6/23	4:00	SW3005A6020A
Lead	0.00026 J	0.0054	0.00054	0.00012	mg/L	1	AGN	12/1/23	11:47	17205	12/6/23	4:00	SW3005A6020A
Magnesium	130	0.54	0.11	0.039	mg/L	5	AGN	12/1/23	11:47	17205	12/6/23	17:29	SW3005A6020A
Manganese	0.96	0.011	0.0054	0.0017	mg/L	1	AGN	12/1/23	11:47	17205	12/6/23	4:00	SW3005A6020A
Mercury	0.00015 U	0.00020	0.00015	0.00012	mg/L	1	AGN	12/4/23	13:17	17206	12/5/23	12:22	SW7470A
Nickel	0.027 U	0.054	0.027	0.013	mg/L	1	AGN	12/1/23	11:47	17205	12/6/23	4:00	SW3005A6020A
Potassium	6.1	0.54	0.11	0.042	mg/L	1	AGN	12/1/23	11:47	17205	12/6/23	4:00	SW3005A6020A
Selenium	0.0054 U	0.011	0.0054	0.0040	mg/L	1	AGN	12/1/23	11:47	17205	12/6/23	4:00	SW3005A6020A
Silver	0.00054 U	0.0054	0.00054	0.00012	mg/L	1	AGN	12/1/23	11:47	17205	12/6/23	4:00	SW3005A6020A
Sodium	130	0.11	0.054	0.037	mg/L	1	AGN	12/1/23	11:47	17205	12/6/23	4:00	SW3005A6020A
Thallium	0.00086 U	0.0011	0.00086	0.00073	mg/L	1	AGN	12/1/23	11:47	17205	12/6/23	4:00	SW3005A6020A
Vanadium	0.0054 U	0.011	0.0054	0.0019	mg/L	1	AGN	12/1/23	11:47	17205	12/6/23	4:00	SW3005A6020A
Zinc	0.0036 J	0.011	0.0043	0.0022	mg/L	1	AGN	12/1/23	11:47	17205	12/6/23	4:00	SW3005A6020A

Project ID: Dow Salvage Yard 18001468
Job ID: 67839
Sample#: 67839-022
Sample ID: SY-BRMW10-65-75-110923-DISS
Matrix: Water
Sampled: 11/9/23 13:55

Parameter	Result	LOQ	LOD	DL	Units	Instr Dil'n	Analyst	Prep Date	Prep Time	Batch	Analysis Date	Analysis Time	Reference
Aluminum	0.027 U	0.054	0.027	0.011	mg/L	1	AGN	12/1/23	11:47	17205	12/6/23	4:35	SW3005A6020A
Antimony	0.00059 J	0.0011	0.00054	0.00015	mg/L	1	AGN	12/1/23	11:47	17205	12/6/23	4:35	SW3005A6020A
Arsenic	0.0015 J	0.0027	0.0011	0.00072	mg/L	1	AGN	12/1/23	11:47	17205	12/6/23	4:35	SW3005A6020A
Barium	0.024	0.011	0.0011	0.00081	mg/L	1	AGN	12/1/23	11:47	17205	12/6/23	4:35	SW3005A6020A
Beryllium	0.00054 U	0.0011	0.00054	0.00011	mg/L	1	AGN	12/1/23	11:47	17205	12/6/23	4:35	SW3005A6020A
Cadmium	0.00054 U	0.0011	0.00054	0.00015	mg/L	1	AGN	12/1/23	11:47	17205	12/6/23	4:35	SW3005A6020A
Chromium	0.027 U	0.054	0.027	0.022	mg/L	1	AGN	12/1/23	11:47	17205	12/6/23	4:35	SW3005A6020A
Cobalt	0.0015 J	0.011	0.00054	0.00030	mg/L	1	AGN	12/1/23	11:47	17205	12/6/23	4:35	SW3005A6020A
Copper	0.0080 U	0.011	0.0080	0.0057	mg/L	1	AGN	12/1/23	11:47	17205	12/6/23	4:35	SW3005A6020A
Iron	0.15 J	0.27	0.16	0.15	mg/L	5	AGN	12/1/23	11:47	17205	12/6/23	17:46	SW3005A6020A
Lead	0.00054 U	0.0054	0.00054	0.00012	mg/L	1	AGN	12/1/23	11:47	17205	12/6/23	4:35	SW3005A6020A
Magnesium	140	0.54	0.11	0.039	mg/L	5	AGN	12/1/23	11:47	17205	12/6/23	17:46	SW3005A6020A
Manganese	0.95	0.011	0.0054	0.0017	mg/L	1	AGN	12/1/23	11:47	17205	12/6/23	4:35	SW3005A6020A
Mercury	0.00015 U	0.00020	0.00015	0.00012	mg/L	1	AGN	12/4/23	13:17	17206	12/5/23	12:24	SW7470A
Nickel	0.027 U	0.054	0.027	0.013	mg/L	1	AGN	12/1/23	11:47	17205	12/6/23	4:35	SW3005A6020A
Potassium	6.2	0.54	0.11	0.042	mg/L	1	AGN	12/1/23	11:47	17205	12/6/23	4:35	SW3005A6020A
Selenium	0.0054 U	0.011	0.0054	0.0040	mg/L	1	AGN	12/1/23	11:47	17205	12/6/23	4:35	SW3005A6020A
Silver	0.00054 U	0.0054	0.00054	0.00012	mg/L	1	AGN	12/1/23	11:47	17205	12/6/23	4:35	SW3005A6020A
Sodium	130	0.11	0.054	0.037	mg/L	1	AGN	12/1/23	11:47	17205	12/6/23	4:35	SW3005A6020A
Thallium	0.00086 U	0.0011	0.00086	0.00073	mg/L	1	AGN	12/1/23	11:47	17205	12/6/23	4:35	SW3005A6020A
Vanadium	0.0054 U	0.011	0.0054	0.0019	mg/L	1	AGN	12/1/23	11:47	17205	12/6/23	4:35	SW3005A6020A
Zinc	0.0043 U	0.011	0.0043	0.0022	mg/L	1	AGN	12/1/23	11:47	17205	12/6/23	4:35	SW3005A6020A

Quality Control Report



124 Heritage Avenue Unit 16
Portsmouth, NH 03801
www.absoluteresourceassociates.com

Case Narrative
Lab # 67839

Sample Receiving and Chain of Custody Discrepancies

Samples were received in acceptable condition, between 0 and 6 degrees C, on ice, and in accordance with sample handling, preservation and integrity guidelines.
The analyses performed met the requirements of Absolute Resource Associates' Quality Assurance Plan and the requirements set forth by the associated Sampling and Analysis Plan dated December 2022 (final), except as noted below.
Absolute Resource Associates is an ISO/IEC 17025:2017 DoD accredited "Testing Laboratory" through PJLA with an accreditation # 78237. The analyses performed met the requirements of Absolute Resource Associates' Quality Assurance Plan. Parameters included in the ARA current DoD certification also met the requirements set forth by the current DoD Quality Systems Manual, except as noted below. See included table for analytes or parameters not included in ARA scope of DoD accreditation, if applicable.

Calibration

Metals: Samples associated with continuing calibration verifications (CCV) that do not meet the acceptance criteria are re-analyzed for those particular elements. In circumstances where the same elements do not meet the acceptance criteria in the re-analysis, the results are reported with qualifiers. (Percent recovery range between 75% and 125%)

Method Blank

EPH: A reportable concentration of the range, Unadjusted C11-C22 Aromatics and C11-C22 Aromatics, was detected in the BLK17157. There is no impact to the data as these ranges were not detected above the LOQ in the associated field samples.

Surrogate Recoveries

EPH: The sample 67836-011 and LCSD17156 did not meet acceptance criteria for the extraction surrogate 1-chloro-octadecane. No additional sample volume remains for re-analysis. The results have been qualified accordingly.

Laboratory Control Sample Results

VOC: The LCSD2303756 did not meet the acceptance criteria for m&p-xylenes. This compound showed high recovery. There is no impact to the data as this analyte was not detected in the associated samples.
VOC: The LCS/D2303766 did not meet the acceptance criteria for diethyl ether, 1,3-dichloropropane, and m&p-xylenes. These compounds showed high recoveries. The relative percent difference between the LCS and LCSD2303766 was outside the acceptance criteria for 1,1,2-trichloroethane. There is no impact to the data as this analyte was not detected in the associated samples.
VPH: The relative percent difference between the LCS and LCSD2303859 was outside the acceptance criteria for Unadjusted C9-C12 Aliphatics. There is no impact to the data as this range was not detected in the associated samples.

SVOC: The LCS/D17124 did not meet the acceptance criteria for several compounds. These compounds showed low recoveries. The relative percent difference between the LCS and LCSD17124 was outside the acceptance criteria for one compound. No additional sample volume remains for re-analysis. The results have been qualified accordingly.
SVOC: The LCS/D17145 did not meet the acceptance criteria for several compounds. These compounds showed low recoveries. The relative percent difference between the LCS and LCSD17145 was outside the acceptance criteria for several compounds. No additional sample volume remains for re-analysis. The results have been qualified accordingly.
EPH: The LCS17156 did not meet the acceptance criteria for C9-C18 Aliphatics. This range showed low recovery. No additional sample volume remains for re-analysis. The results have been qualified accordingly. The relative percent difference between the LCS and LCSD17156 was outside the acceptance criteria for naphthalene and 2-methylnaphthalene. There is no impact to the data as these compounds were not detected in the associated samples.
EPH: The LCS/D17157 did not meet the acceptance criteria for C9-C18 Aliphatics and C19-C36 Aliphatics. These ranges showed low recoveries. No additional sample volume remains for re-analysis. The results have been qualified accordingly.

Matrix Spike/Matrix Spike Duplicate/Duplicate Results

Not requested for this project.

Other

QC: Due to spiking concentrations or expected concentrations being below the LOQ in the LCS/D &/or MS/MSD the following compounds have been reported in these QC samples with lower LOQs to show calculated percent recoveries: benzoic acid, benzidine, and C9-C18 Aliphatics.
Reporting Limits: Dilutions performed during the analysis are noted on the result pages.

No other exceptions noted.

Data Qualifiers

U = This compound was analyzed for, but not detected above the associated limit of detection.
J = The analytical result was below the instrument calibration range, but above the method detection limit. The reported concentration is an estimate.
m = An "m" next to the "Response" value reported on the raw data sheets indicates a manual integration was performed.

Abbreviations for Manual Integrations

BC = Baseline Correction: The software integration of the baseline was inappropriate for the chromatogram
MI = Mis-Identification: The software integrated the incorrect peak
PS = Peak Separation: Two peaks exist in the chromatogram but the software integrated them as one
RI = Range Integration: Software does not perform range integrations, must be performed manually
NB = Noisy Baseline: Software mis-integrated due to a noisy baseline
PM = Peak Missed: Software did not integrate the target peak

Absolute Resource Associates does not hold DoD Certification for the following analytes:

Waters

Analyte	CAS	Reference
1,3,5-trichlorobenzene	108-70-3	SW5030C8260D
1,4-dioxane	123-91-1	SW5030C8260D
diethyl ether	60-29-7	SW5030C8260D
tetrahydrofuran (THF)	109-99-9	SW5030C8260D
azobenzene	103-33-3	SW3510C8270E

GLOSSARY

%R	Percent Recovery
BLK	Blank (Method Blank, Preparation Blank)
CCB	Continuing Calibration Blank
CCV	Continuing Calibration Verification
CRM	Certified Reference Material (associated with solid Metals samples)
CRMD	Certified Reference Material Duplicate (associated with solid Metals samples)
Dil'n	Dilution
DL	Detection Limit
DUP	Duplicate
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
LOD	Limit of Detection
LOQ	Limit of Quantitation
MB	Methanol Blank (associated with solid VOC samples)
MLCS	Methanol Laboratory Control Sample (associated with solid VOC samples)
MLCSD	Methanol Laboratory Control Sample Duplicate (associated with solid VOC samples)
MS	Matrix Spike
MSD	Matrix Spike Duplicate
PB	Preparation Blank
QC	Quality Control
RL	Reporting Limit
RPD	Relative Percent Difference
SUR	Surrogate

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R	Limits		RPD		RPD Limit
MA VPH	BLK2303859	Unadjusted C5-C8 Aliphatics		50 U	100	50	50	ug/L							
		Unadjusted C9-C12 Aliphatics		50 U	100	50	40	ug/L							
		methyl t-butyl ether (MTBE)		1.0 U	2.0	1.0	0.73	ug/L							
		benzene		1.0 U	1.0	1.0	0.76	ug/L							
		toluene		1.0 U	2.0	1.0	0.58	ug/L							
		ethylbenzene		0.49 J	2.0	1.0	0.40	ug/L							
		m&p-xylenes		2.0 U	2.0	2.0	1.1	ug/L							
		o-xylene		1.0 U	2.0	1.0	0.45	ug/L							
		naphthalene		4.0 U	5.0	4.0	3.5	ug/L							
		C5-C8 Aliphatics		50 U	100	50	50	ug/L							
		C9-C12 Aliphatics		50 U	100	50	40	ug/L							
		C9-C10 Aromatics		50 U	100	50	33	ug/L							
		2,5-dibromotoluene as Aromatic		96				%			70	130			
		2,5-dibromotoluene as Aliphatic		97				%			70	130			
MA VPH	LCS2303859	Unadjusted C5-C8 Aliphatics		320	100	50	50	ug/L	300	105	70	130			
		Unadjusted C9-C12 Aliphatics		330	100	50	40	ug/L	300	110	70	130			
		methyl t-butyl ether (MTBE)		110	2.0	1.0	0.73	ug/L	100	114	70	130			
		benzene		110	1.0	1.0	0.76	ug/L	100	112	70	130			
		toluene		110	2.0	1.0	0.58	ug/L	100	111	70	130			
		ethylbenzene		110	2.0	1.0	0.40	ug/L	100	113	70	130			
		m&p-xylenes		220	2.0	2.0	1.1	ug/L	200	111	70	130			
		o-xylene		110	2.0	1.0	0.45	ug/L	100	111	70	130			
		naphthalene		98	5.0	4.0	3.5	ug/L	100	98	70	130			
		C5-C8 Aliphatics		50 U	100	50	50	ug/L			70	130			
		C9-C12 Aliphatics		50 U	100	50	40	ug/L			70	130			
		C9-C10 Aromatics		110	100	50	33	ug/L	100	109	70	130			
		2,5-dibromotoluene as Aromatic		119				%			70	130			
		2,5-dibromotoluene as Aliphatic		119				%			70	130			
MA VPH	LCSD2303859	Unadjusted C5-C8 Aliphatics		260	100	50	50	ug/L	300	88	70	130	18		25
		Unadjusted C9-C12 Aliphatics		230	100	50	40	ug/L	300	76	70	130	37	*	25
		methyl t-butyl ether (MTBE)		110	2.0	1.0	0.73	ug/L	100	107	70	130	6		25
		benzene		100	1.0	1.0	0.76	ug/L	100	103	70	130	8		25
		toluene		100	2.0	1.0	0.58	ug/L	100	102	70	130	8		25
		ethylbenzene		100	2.0	1.0	0.40	ug/L	100	104	70	130	8		25
		m&p-xylenes		210	2.0	2.0	1.1	ug/L	200	103	70	130	8		25
		o-xylene		100	2.0	1.0	0.45	ug/L	100	103	70	130	8		25
		naphthalene		94	5.0	4.0	3.5	ug/L	100	94	70	130	4		25
		C5-C8 Aliphatics		50 U	100	50	50	ug/L			70	130			25
		C9-C12 Aliphatics		50 U	100	50	40	ug/L			70	130			25
		C9-C10 Aromatics		100	100	50	33	ug/L	100	103	70	130	6		25
		2,5-dibromotoluene as Aromatic		118				%			70	130			
		2,5-dibromotoluene as Aliphatic		121				%			70	130			

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R	Limits		RPD	RPD Limit
MA VPH	BLK2303861	Unadjusted C5-C8 Aliphatics		50 U	100	50	50	ug/L						
		Unadjusted C9-C12 Aliphatics		50 U	100	50	40	ug/L						
		methyl t-butyl ether (MTBE)		1.0 U	2.0	1.0	0.73	ug/L						
		benzene		1.0 U	1.0	1.0	0.76	ug/L						
		toluene		1.0 U	2.0	1.0	0.58	ug/L						
		ethylbenzene		0.47 J	2.0	1.0	0.40	ug/L						
		m&p-xylenes		2.0 U	2.0	2.0	1.1	ug/L						
		o-xylene		1.0 U	2.0	1.0	0.45	ug/L						
		naphthalene		4.0 U	5.0	4.0	3.5	ug/L						
		C5-C8 Aliphatics		50 U	100	50	50	ug/L						
		C9-C12 Aliphatics		50 U	100	50	40	ug/L						
		C9-C10 Aromatics		50 U	100	50	33	ug/L						
		2,5-dibromotoluene as Aromatic		88				%			70	130		
		2,5-dibromotoluene as Aliphatic		90				%			70	130		
MA VPH	LCS2303861	Unadjusted C5-C8 Aliphatics		290	100	50	50	ug/L	300	97	70	130		
		Unadjusted C9-C12 Aliphatics		280	100	50	40	ug/L	300	93	70	130		
		methyl t-butyl ether (MTBE)		110	2.0	1.0	0.73	ug/L	100	109	70	130		
		benzene		110	1.0	1.0	0.76	ug/L	100	109	70	130		
		toluene		110	2.0	1.0	0.58	ug/L	100	107	70	130		
		ethylbenzene		110	2.0	1.0	0.40	ug/L	100	110	70	130		
		m&p-xylenes		220	2.0	2.0	1.1	ug/L	200	109	70	130		
		o-xylene		110	2.0	1.0	0.45	ug/L	100	109	70	130		
		naphthalene		95	5.0	4.0	3.5	ug/L	100	95	70	130		
		C5-C8 Aliphatics		50 U	100	50	50	ug/L			70	130		
		C9-C12 Aliphatics		50 U	100	50	40	ug/L			70	130		
		C9-C10 Aromatics		110	100	50	33	ug/L	100	110	70	130		
		2,5-dibromotoluene as Aromatic		122				%			70	130		
		2,5-dibromotoluene as Aliphatic		124				%			70	130		
MA VPH	LCSD2303861	Unadjusted C5-C8 Aliphatics		300	100	50	50	ug/L	300	100	70	130	3	25
		Unadjusted C9-C12 Aliphatics		300	100	50	40	ug/L	300	100	70	130	7	25
		methyl t-butyl ether (MTBE)		110	2.0	1.0	0.73	ug/L	100	108	70	130	0	25
		benzene		110	1.0	1.0	0.76	ug/L	100	108	70	130	1	25
		toluene		110	2.0	1.0	0.58	ug/L	100	107	70	130	0	25
		ethylbenzene		110	2.0	1.0	0.40	ug/L	100	110	70	130	0	25
		m&p-xylenes		220	2.0	2.0	1.1	ug/L	200	109	70	130	0	25
		o-xylene		110	2.0	1.0	0.45	ug/L	100	109	70	130	0	25
		naphthalene		92	5.0	4.0	3.5	ug/L	100	92	70	130	3	25
		C5-C8 Aliphatics		50 U	100	50	50	ug/L			70	130		25
		C9-C12 Aliphatics		50 U	100	50	40	ug/L			70	130		25
		C9-C10 Aromatics		110	100	50	33	ug/L	100	109	70	130	0	25
		2,5-dibromotoluene as Aromatic		102				%			70	130		
		2,5-dibromotoluene as Aliphatic		107				%			70	130		

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R	Limits	RPD	RPD Limit
SW5030C8260D	BLK2303756	dichlorodifluoromethane		1.0 U	2.0	1.0	0.28	ug/L					
		chloromethane		1.0 U	2.0	1.0	0.59	ug/L					
		vinyl chloride		1.0 U	2.0	1.0	0.49	ug/L					
		bromomethane		1.5 U	2.0	1.5	1.1	ug/L					
		chloroethane		1.0 U	2.0	1.0	0.33	ug/L					
		trichlorofluoromethane		1.0 U	2.0	1.0	0.34	ug/L					
		diethyl ether		1.0 U	2.0	1.0	0.41	ug/L					
		acetone		5.0 U	50	5.0	1.9	ug/L					
		1,1-dichloroethene		0.50 U	1.0	0.50	0.35	ug/L					
		methylene chloride		1.0 U	2.0	1.0	0.59	ug/L					
		carbon disulfide		0.33 J	2.0	1.0	0.33	ug/L					
		methyl t-butyl ether (MTBE)		1.0 U	2.0	1.0	0.30	ug/L					
		trans-1,2-dichloroethene		1.0 U	2.0	1.0	0.46	ug/L					
		ethyl t-butyl ether (ETBE)		1.0 U	2.0	1.0	0.24	ug/L					
		1,1-dichloroethane		1.0 U	2.0	1.0	0.27	ug/L					
		t-butanol (TBA)		10 U	30	10	2.5	ug/L					
		2-butanone (MEK)		5.0 U	10	5.0	0.67	ug/L					
		2,2-dichloropropane		1.0 U	2.0	1.0	0.21	ug/L					
		cis-1,2-dichloroethene		1.5 U	2.0	1.5	1.2	ug/L					
		chloroform		1.5 U	2.0	1.5	1.4	ug/L					
		bromochloromethane		1.0 U	2.0	1.0	0.22	ug/L					
		tetrahydrofuran (THF)		1.5 U	2.0	1.5	0.75	ug/L					
		1,1,1-trichloroethane		1.0 U	2.0	1.0	0.55	ug/L					
		1,1-dichloropropene		1.0 U	2.0	1.0	0.26	ug/L					
		t-amyl-methyl ether (TAME)		1.0 U	2.0	1.0	0.57	ug/L					
		carbon tetrachloride		1.0 U	2.0	1.0	0.27	ug/L					
		1,2-dichloroethane		1.0 U	2.0	1.0	0.20	ug/L					
		benzene		1.0 U	2.0	1.0	0.40	ug/L					
		trichloroethene		1.0 U	2.0	1.0	0.53	ug/L					
		1,2-dichloropropane		1.0 U	2.0	1.0	0.22	ug/L					
		bromodichloromethane		0.50 U	0.60	0.50	0.38	ug/L					
		1,4-dioxane		10 U	50	10	8.7	ug/L					
		dibromomethane		1.0 U	2.0	1.0	0.23	ug/L					
		4-methyl-2-pentanone (MIBK)		1.0 U	10	1.0	0.56	ug/L					
		cis-1,3-dichloropropene		1.0 U	2.0	1.0	0.30	ug/L					
		toluene		1.0 U	2.0	1.0	0.45	ug/L					
		trans-1,3-dichloropropene		1.0 U	2.0	1.0	0.34	ug/L					
		2-hexanone		1.0 U	10	1.0	0.72	ug/L					
		1,1,2-trichloroethane		1.0 U	2.0	1.0	0.27	ug/L					
		1,3-dichloropropane		1.0 U	2.0	1.0	0.25	ug/L					
		tetrachloroethene		1.0 U	2.0	1.0	0.76	ug/L					
		dibromochloromethane		1.0 U	2.0	1.0	0.21	ug/L					
		1,2-dibromoethane (EDB)		1.0 U	2.0	1.0	0.27	ug/L					
		chlorobenzene		1.0 U	2.0	1.0	0.25	ug/L					
		1,1,1,2-tetrachloroethane		1.0 U	2.0	1.0	0.21	ug/L					
		ethylbenzene		1.0 U	2.0	1.0	0.65	ug/L					
		m&p-xylenes		1.5 U	2.0	1.5	1.4	ug/L					
		o-xylene		1.0 U	2.0	1.0	0.55	ug/L					
		styrene		1.0 U	2.0	1.0	0.57	ug/L					
		bromoform		1.0 U	2.0	1.0	0.24	ug/L					
		isopropylbenzene		1.0 U	2.0	1.0	0.65	ug/L					
		1,1,2,2-tetrachloroethane		1.0 U	2.0	1.0	0.29	ug/L					
		1,2,3-trichloropropane		1.0 U	2.0	1.0	0.55	ug/L					
		n-propylbenzene		1.0 U	2.0	1.0	0.44	ug/L					

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R	Limits	RPD	RPD Limit
SW5030C8260D	BLK2303756	bromobenzene		1.0 U	2.0	1.0	0.27	ug/L					
		2-chlorotoluene		1.0 U	2.0	1.0	0.23	ug/L					
		4-chlorotoluene		1.0 U	2.0	1.0	0.33	ug/L					
		tert-butylbenzene		1.0 U	2.0	1.0	0.39	ug/L					
		1,2,4-trimethylbenzene		1.0 U	2.0	1.0	0.58	ug/L					
		sec-butylbenzene		1.0 U	2.0	1.0	0.44	ug/L					
		1,3-dichlorobenzene		1.0 U	2.0	1.0	0.45	ug/L					
		4-isopropyltoluene		1.0 U	2.0	1.0	0.47	ug/L					
		1,4-dichlorobenzene		1.0 U	2.0	1.0	0.26	ug/L					
		1,2-dichlorobenzene		1.0 U	2.0	1.0	0.39	ug/L					
		n-butylbenzene		1.0 U	2.0	1.0	0.54	ug/L					
		1,2-dibromo-3-chloropropane		1.5 U	2.0	1.5	0.91	ug/L					
		1,3,5-trimethylbenzene		1.0 U	2.0	1.0	0.46	ug/L					
		1,2,4-trichlorobenzene		1.0 U	2.0	1.0	0.79	ug/L					
		hexachlorobutadiene		0.50 U	0.50	0.50	0.19	ug/L					
		naphthalene		1.5 U	2.0	1.5	1.2	ug/L					
		1,2,3-trichlorobenzene		1.0 U	2.0	1.0	0.93	ug/L					
		dibromofluoromethane SUR		95				%			78	114	
		toluene-D8 SUR		101				%			88	110	
		4-bromofluorobenzene SUR		99				%			86	115	

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R	Limits	RPD	RPD Limit
SW5030C8260D	LCS2303756	dichlorodifluoromethane		17	2.0	1.0	0.28	ug/L	20	87	32	152	
		chloromethane		21	2.0	1.0	0.59	ug/L	20	106	50	139	
		vinyl chloride		18	2.0	1.0	0.49	ug/L	20	88	58	137	
		bromomethane		23	2.0	1.5	1.1	ug/L	20	116	53	141	
		chloroethane		25	2.0	1.0	0.33	ug/L	20	126	60	138	
		trichlorofluoromethane		18	2.0	1.0	0.34	ug/L	20	90	65	141	
		diethyl ether		26	2.0	1.0	0.41	ug/L	20	129	68	129	
		acetone		23 J	50	5.0	1.9	ug/L	20	116	39	160	
		1,1-dichloroethene		23	1.0	0.50	0.35	ug/L	20	113	71	131	
		methylene chloride		23	2.0	1.0	0.59	ug/L	20	114	74	124	
		carbon disulfide		25	2.0	1.0	0.33	ug/L	20	123	64	133	
		methyl t-butyl ether (MTBE)		19	2.0	1.0	0.30	ug/L	20	96	71	124	
		trans-1,2-dichloroethene		22	2.0	1.0	0.46	ug/L	20	110	75	124	
		ethyl t-butyl ether (ETBE)		19	2.0	1.0	0.24	ug/L	20	97	70	127	
		1,1-dichloroethane		22	2.0	1.0	0.27	ug/L	20	112	77	125	
		t-butanol (TBA)		110	30	10	2.5	ug/L	100	111	68	129	
		2-butanone (MEK)		19	10	5.0	0.67	ug/L	20	96	56	143	
		2,2-dichloropropane		19	2.0	1.0	0.21	ug/L	20	93	60	139	
		cis-1,2-dichloroethene		22	2.0	1.5	1.2	ug/L	20	110	78	123	
		chloroform		20	2.0	1.5	1.4	ug/L	20	102	79	124	
		bromochloromethane		21	2.0	1.0	0.22	ug/L	20	105	78	123	
		tetrahydrofuran (THF)		19	2.0	1.5	0.75	ug/L	20	96	57	133	
		1,1,1-trichloroethane		18	2.0	1.0	0.55	ug/L	20	88	74	131	
		1,1-dichloropropene		19	2.0	1.0	0.26	ug/L	20	97	79	125	
		t-amyl-methyl ether (TAME)		19	2.0	1.0	0.57	ug/L	20	96	68	128	
		carbon tetrachloride		17	2.0	1.0	0.27	ug/L	20	86	72	136	
		1,2-dichloroethane		19	2.0	1.0	0.20	ug/L	20	95	73	128	
		benzene		22	2.0	1.0	0.40	ug/L	20	110	79	120	
		trichloroethene		21	2.0	1.0	0.53	ug/L	20	103	79	123	
		1,2-dichloropropane		23	2.0	1.0	0.22	ug/L	20	115	78	122	
		bromodichloromethane		19	0.60	0.50	0.38	ug/L	20	96	79	125	
		1,4-dioxane		50 J	50	10	8.7	ug/L	40	124	59	139	
		dibromomethane		21	2.0	1.0	0.23	ug/L	20	105	79	123	
		4-methyl-2-pentanone (MIBK)		22	10	1.0	0.56	ug/L	20	111	67	130	
		cis-1,3-dichloropropene		20	2.0	1.0	0.30	ug/L	20	99	75	124	
		toluene		22	2.0	1.0	0.45	ug/L	20	109	80	121	
		trans-1,3-dichloropropene		20	2.0	1.0	0.34	ug/L	20	98	73	127	
		2-hexanone		23	10	1.0	0.72	ug/L	20	117	57	139	
		1,1,2-trichloroethane		23	2.0	1.0	0.27	ug/L	20	116	80	119	
		1,3-dichloropropane		23	2.0	1.0	0.25	ug/L	20	116	80	119	
		tetrachloroethene		20	2.0	1.0	0.76	ug/L	20	98	74	129	
		dibromochloromethane		19	2.0	1.0	0.21	ug/L	20	93	74	126	
		1,2-dibromoethane (EDB)		22	2.0	1.0	0.27	ug/L	20	109	77	121	
		chlorobenzene		21	2.0	1.0	0.25	ug/L	20	106	82	118	
		1,1,1,2-tetrachloroethane		20	2.0	1.0	0.21	ug/L	20	98	78	124	
		ethylbenzene		23	2.0	1.0	0.65	ug/L	20	114	79	121	
		m&p-xylenes		47	2.0	1.5	1.4	ug/L	40	117	80	121	
		o-xylene		22	2.0	1.0	0.55	ug/L	20	110	78	122	
		styrene		22	2.0	1.0	0.57	ug/L	20	109	78	123	
		bromoform		18	2.0	1.0	0.24	ug/L	20	88	66	130	
		isopropylbenzene		23	2.0	1.0	0.65	ug/L	20	113	72	131	
		1,1,2,2-tetrachloroethane		22	2.0	1.0	0.29	ug/L	20	110	71	121	
		1,2,3-trichloropropane		23	2.0	1.0	0.55	ug/L	20	114	73	122	
		n-propylbenzene		22	2.0	1.0	0.44	ug/L	20	112	76	126	

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R	Limits		RPD	RPD Limit
SW5030C8260D	LCS2303756	bromobenzene		20	2.0	1.0	0.27	ug/L	20	100	80	120		
		2-chlorotoluene		22	2.0	1.0	0.23	ug/L	20	110	79	122		
		4-chlorotoluene		23	2.0	1.0	0.33	ug/L	20	115	78	122		
		tert-butylbenzene		21	2.0	1.0	0.39	ug/L	20	103	78	124		
		1,2,4-trimethylbenzene		22	2.0	1.0	0.58	ug/L	20	109	76	124		
		sec-butylbenzene		22	2.0	1.0	0.44	ug/L	20	110	77	126		
		1,3-dichlorobenzene		21	2.0	1.0	0.45	ug/L	20	107	80	119		
		4-isopropyltoluene		21	2.0	1.0	0.47	ug/L	20	107	77	127		
		1,4-dichlorobenzene		22	2.0	1.0	0.26	ug/L	20	111	79	118		
		1,2-dichlorobenzene		21	2.0	1.0	0.39	ug/L	20	106	80	119		
		n-butylbenzene		21	2.0	1.0	0.54	ug/L	20	106	75	128		
		1,2-dibromo-3-chloropropane		20	2.0	1.5	0.91	ug/L	20	101	62	128		
		1,3,5-trimethylbenzene		22	2.0	1.0	0.46	ug/L	20	112	75	124		
		1,2,4-trichlorobenzene		19	2.0	1.0	0.79	ug/L	20	97	69	130		
		hexachlorobutadiene		20	0.50	0.50	0.19	ug/L	20	98	66	134		
		naphthalene		19	2.0	1.5	1.2	ug/L	20	95	61	128		
		1,2,3-trichlorobenzene		20	2.0	1.0	0.93	ug/L	20	98	69	129		
		dibromofluoromethane SUR		93				%			78	114		
		toluene-D8 SUR		102				%			88	110		
		4-bromofluorobenzene SUR		101				%			86	115		

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R		Limits		RPD	RPD Limit
SW5030C8260D	LCSD2303756	dichlorodifluoromethane		18	2.0	1.0	0.28	ug/L	20	92		32	152	5	20
		chloromethane		22	2.0	1.0	0.59	ug/L	20	111		50	139	5	20
		vinyl chloride		18	2.0	1.0	0.49	ug/L	20	91		58	137	4	20
		bromomethane		24	2.0	1.5	1.1	ug/L	20	118		53	141	1	20
		chloroethane		27	2.0	1.0	0.33	ug/L	20	136		60	138	8	20
		trichlorofluoromethane		20	2.0	1.0	0.34	ug/L	20	100		65	141	10	20
		diethyl ether		25	2.0	1.0	0.41	ug/L	20	124		68	129	3	20
		acetone		22 J	50	5.0	1.9	ug/L	20	110		39	160	5	20
		1,1-dichloroethene		25	1.0	0.50	0.35	ug/L	20	125		71	131	10	20
		methylene chloride		23	2.0	1.0	0.59	ug/L	20	117		74	124	3	20
		carbon disulfide		26	2.0	1.0	0.33	ug/L	20	131		64	133	6	20
		methyl t-butyl ether (MTBE)		19	2.0	1.0	0.30	ug/L	20	94		71	124	2	20
		trans-1,2-dichloroethene		24	2.0	1.0	0.46	ug/L	20	119		75	124	8	20
		ethyl t-butyl ether (ETBE)		20	2.0	1.0	0.24	ug/L	20	98		70	127	1	20
		1,1-dichloroethane		23	2.0	1.0	0.27	ug/L	20	117		77	125	4	20
		t-butanol (TBA)		110	30	10	2.5	ug/L	100	106		68	129	5	20
		2-butanone (MEK)		18	10	5.0	0.67	ug/L	20	89		56	143	7	20
		2,2-dichloropropane		19	2.0	1.0	0.21	ug/L	20	96		60	139	3	20
		cis-1,2-dichloroethene		23	2.0	1.5	1.2	ug/L	20	113		78	123	3	20
		chloroform		21	2.0	1.5	1.4	ug/L	20	106		79	124	3	20
		bromochloromethane		22	2.0	1.0	0.22	ug/L	20	112		78	123	7	20
		tetrahydrofuran (THF)		21	2.0	1.5	0.75	ug/L	20	107		57	133	11	20
		1,1,1-trichloroethane		20	2.0	1.0	0.55	ug/L	20	100		74	131	12	20
		1,1-dichloropropene		22	2.0	1.0	0.26	ug/L	20	108		79	125	11	20
		t-amyl-methyl ether (TAME)		20	2.0	1.0	0.57	ug/L	20	101		68	128	5	20
		carbon tetrachloride		19	2.0	1.0	0.27	ug/L	20	97		72	136	12	20
		1,2-dichloroethane		20	2.0	1.0	0.20	ug/L	20	100		73	128	5	20
		benzene		24	2.0	1.0	0.40	ug/L	20	119		79	120	8	20
		trichloroethene		22	2.0	1.0	0.53	ug/L	20	111		79	123	7	20
		1,2-dichloropropane		24	2.0	1.0	0.22	ug/L	20	119		78	122	3	20
		bromodichloromethane		20	0.60	0.50	0.38	ug/L	20	99		79	125	3	20
		1,4-dioxane		45 J	50	10	8.7	ug/L	40	112		59	139	10	20
		dibromomethane		22	2.0	1.0	0.23	ug/L	20	109		79	123	3	20
		4-methyl-2-pentanone (MIBK)		22	10	1.0	0.56	ug/L	20	109		67	130	1	20
		cis-1,3-dichloropropene		20	2.0	1.0	0.30	ug/L	20	98		75	124	1	20
		toluene		23	2.0	1.0	0.45	ug/L	20	114		80	121	4	20
		trans-1,3-dichloropropene		19	2.0	1.0	0.34	ug/L	20	96		73	127	2	20
		2-hexanone		22	10	1.0	0.72	ug/L	20	110		57	139	6	20
		1,1,2-trichloroethane		23	2.0	1.0	0.27	ug/L	20	117		80	119	0	20
		1,3-dichloropropane		24	2.0	1.0	0.25	ug/L	20	119		80	119	3	20
		tetrachloroethene		21	2.0	1.0	0.76	ug/L	20	104		74	129	6	20
		dibromochloromethane		18	2.0	1.0	0.21	ug/L	20	92		74	126	1	20
		1,2-dibromoethane (EDB)		22	2.0	1.0	0.27	ug/L	20	111		77	121	3	20
		chlorobenzene		22	2.0	1.0	0.25	ug/L	20	112		82	118	6	20
		1,1,1,2-tetrachloroethane		21	2.0	1.0	0.21	ug/L	20	106		78	124	7	20
		ethylbenzene		24	2.0	1.0	0.65	ug/L	20	121		79	121	6	20
		m&p-xylenes		50	2.0	1.5	1.4	ug/L	40	125	*	80	121	7	20
		o-xylene		23	2.0	1.0	0.55	ug/L	20	114		78	122	4	20
		styrene		23	2.0	1.0	0.57	ug/L	20	114		78	123	4	20
		bromoform		18	2.0	1.0	0.24	ug/L	20	88		66	130	1	20
		isopropylbenzene		24	2.0	1.0	0.65	ug/L	20	119		72	131	6	20
		1,1,2,2-tetrachloroethane		22	2.0	1.0	0.29	ug/L	20	112		71	121	2	20
		1,2,3-trichloropropane		23	2.0	1.0	0.55	ug/L	20	113		73	122	1	20
		n-propylbenzene		24	2.0	1.0	0.44	ug/L	20	119		76	126	5	20

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R	Limits		RPD	RPD Limit
SW5030C8260D	LCSD2303756	bromobenzene		21	2.0	1.0	0.27	ug/L	20	107	80	120	7	20
		2-chlorotoluene		24	2.0	1.0	0.23	ug/L	20	119	79	122	9	20
		4-chlorotoluene		23	2.0	1.0	0.33	ug/L	20	117	78	122	1	20
		tert-butylbenzene		22	2.0	1.0	0.39	ug/L	20	109	78	124	6	20
		1,2,4-trimethylbenzene		23	2.0	1.0	0.58	ug/L	20	113	76	124	4	20
		sec-butylbenzene		23	2.0	1.0	0.44	ug/L	20	114	77	126	4	20
		1,3-dichlorobenzene		22	2.0	1.0	0.45	ug/L	20	111	80	119	3	20
		4-isopropyltoluene		22	2.0	1.0	0.47	ug/L	20	110	77	127	3	20
		1,4-dichlorobenzene		23	2.0	1.0	0.26	ug/L	20	113	79	118	2	20
		1,2-dichlorobenzene		22	2.0	1.0	0.39	ug/L	20	109	80	119	3	20
		n-butylbenzene		22	2.0	1.0	0.54	ug/L	20	109	75	128	3	20
		1,2-dibromo-3-chloropropane		21	2.0	1.5	0.91	ug/L	20	103	62	128	3	20
		1,3,5-trimethylbenzene		23	2.0	1.0	0.46	ug/L	20	117	75	124	5	20
		1,2,4-trichlorobenzene		20	2.0	1.0	0.79	ug/L	20	100	69	130	4	20
		hexachlorobutadiene		20	0.50	0.50	0.19	ug/L	20	102	66	134	3	20
		naphthalene		20	2.0	1.5	1.2	ug/L	20	101	61	128	6	20
		1,2,3-trichlorobenzene		21	2.0	1.0	0.93	ug/L	20	103	69	129	5	20
		dibromofluoromethane SUR		98				%			78	114		
		toluene-D8 SUR		101				%			88	110		
		4-bromofluorobenzene SUR		100				%			86	115		

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R	Limits	RPD	RPD Limit
SW5030C8260D	BLK2303766	dichlorodifluoromethane		1.0 U	2.0	1.0	0.28	ug/L					
		chloromethane		1.0 U	2.0	1.0	0.59	ug/L					
		vinyl chloride		1.0 U	2.0	1.0	0.49	ug/L					
		bromomethane		1.5 U	2.0	1.5	1.1	ug/L					
		chloroethane		1.0 U	2.0	1.0	0.33	ug/L					
		trichlorofluoromethane		1.0 U	2.0	1.0	0.34	ug/L					
		diethyl ether		1.0 U	2.0	1.0	0.41	ug/L					
		acetone		5.0 U	50	5.0	1.9	ug/L					
		1,1-dichloroethene		0.50 U	1.0	0.50	0.35	ug/L					
		methylene chloride		1.0 U	2.0	1.0	0.59	ug/L					
		carbon disulfide		1.0 U	2.0	1.0	0.33	ug/L					
		methyl t-butyl ether (MTBE)		1.0 U	2.0	1.0	0.30	ug/L					
		trans-1,2-dichloroethene		1.0 U	2.0	1.0	0.46	ug/L					
		ethyl t-butyl ether (ETBE)		1.0 U	2.0	1.0	0.24	ug/L					
		1,1-dichloroethane		1.0 U	2.0	1.0	0.27	ug/L					
		t-butanol (TBA)		10 U	30	10	2.5	ug/L					
		2-butanone (MEK)		5.0 U	10	5.0	0.67	ug/L					
		2,2-dichloropropane		1.0 U	2.0	1.0	0.21	ug/L					
		cis-1,2-dichloroethene		1.5 U	2.0	1.5	1.2	ug/L					
		chloroform		1.5 U	2.0	1.5	1.4	ug/L					
		bromochloromethane		1.0 U	2.0	1.0	0.22	ug/L					
		tetrahydrofuran (THF)		1.5 U	2.0	1.5	0.75	ug/L					
		1,1,1-trichloroethane		1.0 U	2.0	1.0	0.55	ug/L					
		1,1-dichloropropene		1.0 U	2.0	1.0	0.26	ug/L					
		t-amyl-methyl ether (TAME)		1.0 U	2.0	1.0	0.57	ug/L					
		carbon tetrachloride		1.0 U	2.0	1.0	0.27	ug/L					
		1,2-dichloroethane		1.0 U	2.0	1.0	0.20	ug/L					
		benzene		1.0 U	2.0	1.0	0.40	ug/L					
		trichloroethene		1.0 U	2.0	1.0	0.53	ug/L					
		1,2-dichloropropane		1.0 U	2.0	1.0	0.22	ug/L					
		bromodichloromethane		0.50 U	0.60	0.50	0.38	ug/L					
		1,4-dioxane		10 U	50	10	8.7	ug/L					
		dibromomethane		1.0 U	2.0	1.0	0.23	ug/L					
		4-methyl-2-pentanone (MIBK)		1.0 U	10	1.0	0.56	ug/L					
		cis-1,3-dichloropropene		1.0 U	2.0	1.0	0.30	ug/L					
		toluene		1.0 U	2.0	1.0	0.45	ug/L					
		trans-1,3-dichloropropene		1.0 U	2.0	1.0	0.34	ug/L					
		2-hexanone		1.0 U	10	1.0	0.72	ug/L					
		1,1,2-trichloroethane		1.0 U	2.0	1.0	0.27	ug/L					
		1,3-dichloropropane		1.0 U	2.0	1.0	0.25	ug/L					
		tetrachloroethene		1.0 U	2.0	1.0	0.76	ug/L					
		dibromochloromethane		1.0 U	2.0	1.0	0.21	ug/L					
		1,2-dibromoethane (EDB)		1.0 U	2.0	1.0	0.27	ug/L					
		chlorobenzene		1.0 U	2.0	1.0	0.25	ug/L					
		1,1,1,2-tetrachloroethane		1.0 U	2.0	1.0	0.21	ug/L					
		ethylbenzene		1.0 U	2.0	1.0	0.65	ug/L					
		m&p-xylenes		1.5 U	2.0	1.5	1.4	ug/L					
		o-xylene		1.0 U	2.0	1.0	0.55	ug/L					
		styrene		1.0 U	2.0	1.0	0.57	ug/L					
		bromoform		1.0 U	2.0	1.0	0.24	ug/L					
		isopropylbenzene		1.0 U	2.0	1.0	0.65	ug/L					
		1,1,2,2-tetrachloroethane		1.0 U	2.0	1.0	0.29	ug/L					
		1,2,3-trichloropropane		1.0 U	2.0	1.0	0.55	ug/L					
		n-propylbenzene		1.0 U	2.0	1.0	0.44	ug/L					

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R	Limits	RPD	RPD Limit
SW5030C8260D	BLK2303766	bromobenzene		1.0 U	2.0	1.0	0.27	ug/L					
		2-chlorotoluene		1.0 U	2.0	1.0	0.23	ug/L					
		4-chlorotoluene		1.0 U	2.0	1.0	0.33	ug/L					
		tert-butylbenzene		1.0 U	2.0	1.0	0.39	ug/L					
		1,2,4-trimethylbenzene		1.0 U	2.0	1.0	0.58	ug/L					
		sec-butylbenzene		1.0 U	2.0	1.0	0.44	ug/L					
		1,3-dichlorobenzene		1.0 U	2.0	1.0	0.45	ug/L					
		4-isopropyltoluene		1.0 U	2.0	1.0	0.47	ug/L					
		1,4-dichlorobenzene		1.0 U	2.0	1.0	0.26	ug/L					
		1,2-dichlorobenzene		1.0 U	2.0	1.0	0.39	ug/L					
		n-butylbenzene		1.0 U	2.0	1.0	0.54	ug/L					
		1,2-dibromo-3-chloropropane		1.5 U	2.0	1.5	0.91	ug/L					
		1,3,5-trimethylbenzene		1.0 U	2.0	1.0	0.46	ug/L					
		1,2,4-trichlorobenzene		1.0 U	2.0	1.0	0.79	ug/L					
		hexachlorobutadiene		0.50 U	0.50	0.50	0.19	ug/L					
		naphthalene		1.5 U	2.0	1.5	1.2	ug/L					
		1,2,3-trichlorobenzene		1.0 U	2.0	1.0	0.93	ug/L					
		dibromofluoromethane SUR		95				%			78	114	
		toluene-D8 SUR		102				%			88	110	
		4-bromofluorobenzene SUR		101				%			86	115	

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R	Limits	RPD	RPD Limit
SW5030C8260D	LCS2303766	dichlorodifluoromethane		18	2.0	1.0	0.28	ug/L	20	92	32	152	
		chloromethane		21	2.0	1.0	0.59	ug/L	20	107	50	139	
		vinyl chloride		18	2.0	1.0	0.49	ug/L	20	91	58	137	
		bromomethane		24	2.0	1.5	1.1	ug/L	20	121	53	141	
		chloroethane		27	2.0	1.0	0.33	ug/L	20	135	60	138	
		trichlorofluoromethane		20	2.0	1.0	0.34	ug/L	20	99	65	141	
		diethyl ether		25	2.0	1.0	0.41	ug/L	20	126	68	129	
		acetone		24 J	50	5.0	1.9	ug/L	20	119	39	160	
		1,1-dichloroethene		24	1.0	0.50	0.35	ug/L	20	122	71	131	
		methylene chloride		23	2.0	1.0	0.59	ug/L	20	117	74	124	
		carbon disulfide		26	2.0	1.0	0.33	ug/L	20	131	64	133	
		methyl t-butyl ether (MTBE)		19	2.0	1.0	0.30	ug/L	20	96	71	124	
		trans-1,2-dichloroethene		23	2.0	1.0	0.46	ug/L	20	117	75	124	
		ethyl t-butyl ether (ETBE)		19	2.0	1.0	0.24	ug/L	20	97	70	127	
		1,1-dichloroethane		23	2.0	1.0	0.27	ug/L	20	117	77	125	
		t-butanol (TBA)		110	30	10	2.5	ug/L	100	110	68	129	
		2-butanone (MEK)		18	10	5.0	0.67	ug/L	20	90	56	143	
		2,2-dichloropropane		18	2.0	1.0	0.21	ug/L	20	89	60	139	
		cis-1,2-dichloroethene		23	2.0	1.5	1.2	ug/L	20	113	78	123	
		chloroform		21	2.0	1.5	1.4	ug/L	20	105	79	124	
		bromochloromethane		21	2.0	1.0	0.22	ug/L	20	107	78	123	
		tetrahydrofuran (THF)		20	2.0	1.5	0.75	ug/L	20	101	57	133	
		1,1,1-trichloroethane		20	2.0	1.0	0.55	ug/L	20	99	74	131	
		1,1-dichloropropene		21	2.0	1.0	0.26	ug/L	20	105	79	125	
		t-amyl-methyl ether (TAME)		20	2.0	1.0	0.57	ug/L	20	99	68	128	
		carbon tetrachloride		19	2.0	1.0	0.27	ug/L	20	96	72	136	
		1,2-dichloroethane		20	2.0	1.0	0.20	ug/L	20	101	73	128	
		benzene		23	2.0	1.0	0.40	ug/L	20	117	79	120	
		trichloroethene		21	2.0	1.0	0.53	ug/L	20	106	79	123	
		1,2-dichloropropane		23	2.0	1.0	0.22	ug/L	20	116	78	122	
		bromodichloromethane		20	0.60	0.50	0.38	ug/L	20	100	79	125	
		1,4-dioxane		45 J	50	10	8.7	ug/L	40	112	59	139	
		dibromomethane		22	2.0	1.0	0.23	ug/L	20	112	79	123	
		4-methyl-2-pentanone (MIBK)		21	10	1.0	0.56	ug/L	20	104	67	130	
		cis-1,3-dichloropropene		20	2.0	1.0	0.30	ug/L	20	100	75	124	
		toluene		23	2.0	1.0	0.45	ug/L	20	114	80	121	
		trans-1,3-dichloropropene		19	2.0	1.0	0.34	ug/L	20	94	73	127	
		2-hexanone		18	10	1.0	0.72	ug/L	20	92	57	139	
		1,1,2-trichloroethane		19	2.0	1.0	0.27	ug/L	20	95	80	119	
		1,3-dichloropropane		24	2.0	1.0	0.25	ug/L	20	118	80	119	
		tetrachloroethene		21	2.0	1.0	0.76	ug/L	20	104	74	129	
		dibromochloromethane		19	2.0	1.0	0.21	ug/L	20	93	74	126	
		1,2-dibromoethane (EDB)		22	2.0	1.0	0.27	ug/L	20	110	77	121	
		chlorobenzene		22	2.0	1.0	0.25	ug/L	20	108	82	118	
		1,1,1,2-tetrachloroethane		21	2.0	1.0	0.21	ug/L	20	103	78	124	
		ethylbenzene		24	2.0	1.0	0.65	ug/L	20	118	79	121	
		m&p-xylenes		48	2.0	1.5	1.4	ug/L	40	120	80	121	
		o-xylene		23	2.0	1.0	0.55	ug/L	20	114	78	122	
		styrene		22	2.0	1.0	0.57	ug/L	20	110	78	123	
		bromoform		18	2.0	1.0	0.24	ug/L	20	90	66	130	
		isopropylbenzene		23	2.0	1.0	0.65	ug/L	20	115	72	131	
		1,1,2,2-tetrachloroethane		22	2.0	1.0	0.29	ug/L	20	112	71	121	
		1,2,3-trichloropropane		23	2.0	1.0	0.55	ug/L	20	115	73	122	
		n-propylbenzene		23	2.0	1.0	0.44	ug/L	20	117	76	126	

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R	Limits		RPD	RPD Limit
SW5030C8260D	LCS2303766	bromobenzene		21	2.0	1.0	0.27	ug/L	20	106	80	120		
		2-chlorotoluene		23	2.0	1.0	0.23	ug/L	20	116	79	122		
		4-chlorotoluene		23	2.0	1.0	0.33	ug/L	20	116	78	122		
		tert-butylbenzene		21	2.0	1.0	0.39	ug/L	20	106	78	124		
		1,2,4-trimethylbenzene		23	2.0	1.0	0.58	ug/L	20	113	76	124		
		sec-butylbenzene		23	2.0	1.0	0.44	ug/L	20	115	77	126		
		1,3-dichlorobenzene		22	2.0	1.0	0.45	ug/L	20	109	80	119		
		4-isopropyltoluene		22	2.0	1.0	0.47	ug/L	20	110	77	127		
		1,4-dichlorobenzene		22	2.0	1.0	0.26	ug/L	20	111	79	118		
		1,2-dichlorobenzene		22	2.0	1.0	0.39	ug/L	20	110	80	119		
		n-butylbenzene		22	2.0	1.0	0.54	ug/L	20	109	75	128		
		1,2-dibromo-3-chloropropane		22	2.0	1.5	0.91	ug/L	20	109	62	128		
		1,3,5-trimethylbenzene		23	2.0	1.0	0.46	ug/L	20	114	75	124		
		1,2,4-trichlorobenzene		20	2.0	1.0	0.79	ug/L	20	99	69	130		
		hexachlorobutadiene		20	0.50	0.50	0.19	ug/L	20	102	66	134		
		naphthalene		20	2.0	1.5	1.2	ug/L	20	98	61	128		
		1,2,3-trichlorobenzene		20	2.0	1.0	0.93	ug/L	20	100	69	129		
		dibromofluoromethane SUR		95				%			78	114		
		toluene-D8 SUR		100				%			88	110		
		4-bromofluorobenzene SUR		99				%			86	115		

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R		Limits		RPD	RPD Limit
SW5030C8260D	LCSD2303766	dichlorodifluoromethane		18	2.0	1.0	0.28	ug/L	20	88		32	152	4	20
		chloromethane		21	2.0	1.0	0.59	ug/L	20	104		50	139	3	20
		vinyl chloride		18	2.0	1.0	0.49	ug/L	20	88		58	137	3	20
		bromomethane		20	2.0	1.5	1.1	ug/L	20	99		53	141	20	20
		chloroethane		27	2.0	1.0	0.33	ug/L	20	133		60	138	1	20
		trichlorofluoromethane		19	2.0	1.0	0.34	ug/L	20	97		65	141	2	20
		diethyl ether		26	2.0	1.0	0.41	ug/L	20	130	*	68	129	3	20
		acetone		22 J	50	5.0	1.9	ug/L	20	111		39	160	7	20
		1,1-dichloroethene		24	1.0	0.50	0.35	ug/L	20	120		71	131	2	20
		methylene chloride		24	2.0	1.0	0.59	ug/L	20	119		74	124	2	20
		carbon disulfide		26	2.0	1.0	0.33	ug/L	20	131		64	133	0	20
		methyl t-butyl ether (MTBE)		19	2.0	1.0	0.30	ug/L	20	95		71	124	1	20
		trans-1,2-dichloroethene		23	2.0	1.0	0.46	ug/L	20	115		75	124	1	20
		ethyl t-butyl ether (ETBE)		20	2.0	1.0	0.24	ug/L	20	98		70	127	0	20
		1,1-dichloroethane		23	2.0	1.0	0.27	ug/L	20	115		77	125	1	20
		t-butanol (TBA)		110	30	10	2.5	ug/L	100	106		68	129	4	20
		2-butanone (MEK)		17	10	5.0	0.67	ug/L	20	86		56	143	5	20
		2,2-dichloropropane		19	2.0	1.0	0.21	ug/L	20	94		60	139	5	20
		cis-1,2-dichloroethene		23	2.0	1.5	1.2	ug/L	20	113		78	123	0	20
		chloroform		21	2.0	1.5	1.4	ug/L	20	105		79	124	0	20
		bromochloromethane		22	2.0	1.0	0.22	ug/L	20	111		78	123	4	20
		tetrahydrofuran (THF)		20	2.0	1.5	0.75	ug/L	20	98		57	133	3	20
		1,1,1-trichloroethane		19	2.0	1.0	0.55	ug/L	20	96		74	131	2	20
		1,1-dichloropropene		21	2.0	1.0	0.26	ug/L	20	105		79	125	0	20
		t-amyl-methyl ether (TAME)		20	2.0	1.0	0.57	ug/L	20	98		68	128	2	20
		carbon tetrachloride		19	2.0	1.0	0.27	ug/L	20	94		72	136	1	20
		1,2-dichloroethane		20	2.0	1.0	0.20	ug/L	20	101		73	128	0	20
		benzene		23	2.0	1.0	0.40	ug/L	20	116		79	120	1	20
		trichloroethene		21	2.0	1.0	0.53	ug/L	20	107		79	123	2	20
		1,2-dichloropropane		23	2.0	1.0	0.22	ug/L	20	117		78	122	2	20
		bromodichloromethane		20	0.60	0.50	0.38	ug/L	20	99		79	125	2	20
		1,4-dioxane		48 J	50	10	8.7	ug/L	40	121		59	139	8	20
		dibromomethane		22	2.0	1.0	0.23	ug/L	20	110		79	123	2	20
		4-methyl-2-pentanone (MIBK)		21	10	1.0	0.56	ug/L	20	103		67	130	0	20
		cis-1,3-dichloropropene		20	2.0	1.0	0.30	ug/L	20	100		75	124	0	20
		toluene		23	2.0	1.0	0.45	ug/L	20	114		80	121	0	20
		trans-1,3-dichloropropene		19	2.0	1.0	0.34	ug/L	20	97		73	127	4	20
		2-hexanone		22	10	1.0	0.72	ug/L	20	110		57	139	18	20
		1,1,2-trichloroethane		23	2.0	1.0	0.27	ug/L	20	117		80	119	21	* 20
		1,3-dichloropropane		25	2.0	1.0	0.25	ug/L	20	124	*	80	119	5	20
		tetrachloroethene		21	2.0	1.0	0.76	ug/L	20	106		74	129	2	20
		dibromochloromethane		20	2.0	1.0	0.21	ug/L	20	98		74	126	5	20
		1,2-dibromoethane (EDB)		23	2.0	1.0	0.27	ug/L	20	115		77	121	5	20
		chlorobenzene		22	2.0	1.0	0.25	ug/L	20	112		82	118	3	20
		1,1,1,2-tetrachloroethane		21	2.0	1.0	0.21	ug/L	20	105		78	124	2	20
		ethylbenzene		24	2.0	1.0	0.65	ug/L	20	119		79	121	1	20
		m&p-xylenes		49	2.0	1.5	1.4	ug/L	40	124	*	80	121	3	20
		o-xylene		23	2.0	1.0	0.55	ug/L	20	114		78	122	0	20
		styrene		23	2.0	1.0	0.57	ug/L	20	113		78	123	3	20
		bromoform		19	2.0	1.0	0.24	ug/L	20	96		66	130	6	20
		isopropylbenzene		23	2.0	1.0	0.65	ug/L	20	117		72	131	2	20
		1,1,2,2-tetrachloroethane		23	2.0	1.0	0.29	ug/L	20	113		71	121	1	20
		1,2,3-trichloropropane		23	2.0	1.0	0.55	ug/L	20	114		73	122	1	20
		n-propylbenzene		23	2.0	1.0	0.44	ug/L	20	114		76	126	2	20

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R	Limits		RPD	RPD Limit
SW5030C8260D	LCSD2303766	bromobenzene		21	2.0	1.0	0.27	ug/L	20	104	80	120	2	20
		2-chlorotoluene		23	2.0	1.0	0.23	ug/L	20	117	79	122	0	20
		4-chlorotoluene		23	2.0	1.0	0.33	ug/L	20	114	78	122	2	20
		tert-butylbenzene		21	2.0	1.0	0.39	ug/L	20	106	78	124	0	20
		1,2,4-trimethylbenzene		22	2.0	1.0	0.58	ug/L	20	110	76	124	3	20
		sec-butylbenzene		23	2.0	1.0	0.44	ug/L	20	113	77	126	2	20
		1,3-dichlorobenzene		22	2.0	1.0	0.45	ug/L	20	110	80	119	1	20
		4-isopropyltoluene		22	2.0	1.0	0.47	ug/L	20	109	77	127	2	20
		1,4-dichlorobenzene		22	2.0	1.0	0.26	ug/L	20	111	79	118	0	20
		1,2-dichlorobenzene		22	2.0	1.0	0.39	ug/L	20	110	80	119	0	20
		n-butylbenzene		22	2.0	1.0	0.54	ug/L	20	109	75	128	0	20
		1,2-dibromo-3-chloropropane		21	2.0	1.5	0.91	ug/L	20	103	62	128	5	20
		1,3,5-trimethylbenzene		23	2.0	1.0	0.46	ug/L	20	113	75	124	1	20
		1,2,4-trichlorobenzene		20	2.0	1.0	0.79	ug/L	20	98	69	130	1	20
		hexachlorobutadiene		21	0.50	0.50	0.19	ug/L	20	103	66	134	0	20
		naphthalene		19	2.0	1.5	1.2	ug/L	20	97	61	128	1	20
		1,2,3-trichlorobenzene		20	2.0	1.0	0.93	ug/L	20	101	69	129	1	20
		dibromofluoromethane SUR		98				%			78	114		
		toluene-D8 SUR		101				%			88	110		
		4-bromofluorobenzene SUR		103				%			86	115		

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R		Limits		RPD	RPD Limit
MA EPH	BLK17156	naphthalene		0.70 U	1.0	0.70	0.63	ug/L							
		2-methylnaphthalene		0.70 U	1.0	0.70	0.60	ug/L							
		phenanthrene		0.50 U	1.0	0.50	0.15	ug/L							
		acenaphthene		0.50 U	1.0	0.50	0.22	ug/L							
		acenaphthylene		0.50 U	1.0	0.50	0.18	ug/L							
		fluorene		0.50 U	1.0	0.50	0.15	ug/L							
		anthracene		0.50 U	1.0	0.50	0.18	ug/L							
		fluoranthene		0.50 U	1.0	0.50	0.18	ug/L							
		pyrene		0.50 U	1.0	0.50	0.23	ug/L							
		benzo(a)anthracene		0.50 U	1.0	0.50	0.20	ug/L							
		chrysene		0.50 U	1.0	0.50	0.16	ug/L							
		benzo(b)fluoranthene		0.50 U	1.0	0.50	0.35	ug/L							
		benzo(k)fluoranthene		0.50 U	1.0	0.50	0.41	ug/L							
		benzo(a)pyrene		0.70 U	1.0	0.70	0.52	ug/L							
		indeno(1,2,3-cd)pyrene		0.50 U	1.0	0.50	0.24	ug/L							
		dibenzo(a,h)anthracene		0.50 U	1.0	0.50	0.26	ug/L							
		benzo(g,h,i)perylene		0.50 U	1.0	0.50	0.22	ug/L							
		Unadjusted C11-C22 Aromatics		78 J	100	85	60	ug/L							
		C9-C18 Aliphatics		95 U	100	95	94	ug/L							
		C19-C36 Aliphatics		97 U	100	97	96	ug/L							
		C11-C22 Aromatics		78 J	100	85	54	ug/L							
		1-chloro-octadecane SUR		55				%				40	140		
		o-terphenyl SUR		60				%				40	140		
		2-fluorobiphenyl SUR		76				%				40	140		
		2-bromonaphthalene SUR		76				%				40	140		
MA EPH	LCS17156	naphthalene		25	1.0	0.70	0.63	ug/L	60	42		40	140		
		2-methylnaphthalene		26	1.0	0.70	0.60	ug/L	60	43		40	140		
		phenanthrene		30	1.0	0.50	0.15	ug/L	60	51		40	140		
		acenaphthene		30	1.0	0.50	0.22	ug/L	60	49		40	140		
		acenaphthylene		28	1.0	0.50	0.18	ug/L	60	47		40	140		
		fluorene		27	1.0	0.50	0.15	ug/L	60	44		40	140		
		anthracene		28	1.0	0.50	0.18	ug/L	60	47		40	140		
		fluoranthene		32	1.0	0.50	0.18	ug/L	60	53		40	140		
		pyrene		27	1.0	0.50	0.23	ug/L	60	45		40	140		
		benzo(a)anthracene		27	1.0	0.50	0.20	ug/L	60	45		40	140		
		chrysene		29	1.0	0.50	0.16	ug/L	60	48		40	140		
		benzo(b)fluoranthene		27	1.0	0.50	0.35	ug/L	60	44		40	140		
		benzo(k)fluoranthene		29	1.0	0.50	0.41	ug/L	60	48		40	140		
		benzo(a)pyrene		27	1.0	0.70	0.52	ug/L	60	45		40	140		
		indeno(1,2,3-cd)pyrene		27	1.0	0.50	0.24	ug/L	60	45		40	140		
		dibenzo(a,h)anthracene		28	1.0	0.50	0.26	ug/L	60	46		40	140		
		benzo(g,h,i)perylene		29	1.0	0.50	0.22	ug/L	60	48		40	140		
		Unadjusted C11-C22 Aromatics		620	100	85	60	ug/L	1020	61		40	140		
		C9-C18 Aliphatics		130	100	95	94	ug/L	360	37	*	40	140		
		C19-C36 Aliphatics		340	100	97	96	ug/L	480	72		40	140		
		C11-C22 Aromatics		140	100	85	54	ug/L				40	140		
		1-chloro-octadecane SUR		44				%				40	140		
		o-terphenyl SUR		49				%				40	140		
		2-fluorobiphenyl SUR		74				%				40	140		
		2-bromonaphthalene SUR		77				%				40	140		

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R		Limits		RPD	RPD	Limit
MA EPH	LCSD17156	naphthalene		33	1.0	0.70	0.63	ug/L	60	55		40	140	28	*	25
		2-methylnaphthalene		34	1.0	0.70	0.60	ug/L	60	57		40	140	28	*	25
		phenanthrene		37	1.0	0.50	0.15	ug/L	60	61		40	140	18		25
		acenaphthene		36	1.0	0.50	0.22	ug/L	60	60		40	140	19		25
		acenaphthylene		36	1.0	0.50	0.18	ug/L	60	59		40	140	24		25
		fluorene		34	1.0	0.50	0.15	ug/L	60	57		40	140	24		25
		anthracene		34	1.0	0.50	0.18	ug/L	60	56		40	140	17		25
		fluoranthene		38	1.0	0.50	0.18	ug/L	60	63		40	140	16		25
		pyrene		33	1.0	0.50	0.23	ug/L	60	55		40	140	20		25
		benzo(a)anthracene		32	1.0	0.50	0.20	ug/L	60	53		40	140	16		25
		chrysene		34	1.0	0.50	0.16	ug/L	60	56		40	140	15		25
		benzo(b)fluoranthene		31	1.0	0.50	0.35	ug/L	60	52		40	140	16		25
		benzo(k)fluoranthene		32	1.0	0.50	0.41	ug/L	60	53		40	140	10		25
		benzo(a)pyrene		31	1.0	0.70	0.52	ug/L	60	52		40	140	14		25
		indeno(1,2,3-cd)pyrene		30	1.0	0.50	0.24	ug/L	60	51		40	140	11		25
		dibenzo(a,h)anthracene		31	1.0	0.50	0.26	ug/L	60	52		40	140	11		25
		benzo(g,h,i)perylene		32	1.0	0.50	0.22	ug/L	60	53		40	140	10		25
		Unadjusted C11-C22 Aromatics		650	100	85	60	ug/L	1020	64		40	140	5		25
		C9-C18 Aliphatics		150	100	95	94	ug/L	360	41		40	140	11		25
		C19-C36 Aliphatics		330	100	97	96	ug/L	480	69		40	140	3		25
		C11-C22 Aromatics		82 J	100	85	54	ug/L				40	140			25
		1-chloro-octadecane SUR		39				%			*	40	140			
		o-terphenyl SUR		57				%				40	140			
		2-fluorobiphenyl SUR		76				%				40	140			
		2-bromonaphthalene SUR		78				%				40	140			

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R		Limits		RPD	RPD Limit
MA EPH	BLK17157	naphthalene		0.70 U	1.0	0.70	0.63	ug/L							
		2-methylnaphthalene		0.70 U	1.0	0.70	0.60	ug/L							
		phenanthrene		0.50 U	1.0	0.50	0.15	ug/L							
		acenaphthene		0.50 U	1.0	0.50	0.22	ug/L							
		acenaphthylene		0.50 U	1.0	0.50	0.18	ug/L							
		fluorene		0.50 U	1.0	0.50	0.15	ug/L							
		anthracene		0.50 U	1.0	0.50	0.18	ug/L							
		fluoranthene		0.50 U	1.0	0.50	0.18	ug/L							
		pyrene		0.50 U	1.0	0.50	0.23	ug/L							
		benzo(a)anthracene		0.50 U	1.0	0.50	0.20	ug/L							
		chrysene		0.50 U	1.0	0.50	0.16	ug/L							
		benzo(b)fluoranthene		0.50 U	1.0	0.50	0.35	ug/L							
		benzo(k)fluoranthene		0.50 U	1.0	0.50	0.41	ug/L							
		benzo(a)pyrene		0.70 U	1.0	0.70	0.52	ug/L							
		indeno(1,2,3-cd)pyrene		0.50 U	1.0	0.50	0.24	ug/L							
		dibenzo(a,h)anthracene		0.50 U	1.0	0.50	0.26	ug/L							
		benzo(g,h,i)perylene		0.50 U	1.0	0.50	0.22	ug/L							
		Unadjusted C11-C22 Aromatics		100	100	85	60	ug/L			*				
		C9-C18 Aliphatics		95 U	100	95	94	ug/L							
		C19-C36 Aliphatics		97 U	100	97	96	ug/L							
		C11-C22 Aromatics		100	100	85	54	ug/L			*				
		1-chloro-octadecane SUR		65				%				40	140		
		o-terphenyl SUR		74				%				40	140		
		2-fluorobiphenyl SUR		83				%				40	140		
		2-bromonaphthalene SUR		85				%				40	140		
MA EPH	LCS17157	naphthalene		34	1.0	0.70	0.63	ug/L	60	57		40	140		
		2-methylnaphthalene		34	1.0	0.70	0.60	ug/L	60	57		40	140		
		phenanthrene		42	1.0	0.50	0.15	ug/L	60	69		40	140		
		acenaphthene		40	1.0	0.50	0.22	ug/L	60	67		40	140		
		acenaphthylene		41	1.0	0.50	0.18	ug/L	60	68		40	140		
		fluorene		36	1.0	0.50	0.15	ug/L	60	60		40	140		
		anthracene		39	1.0	0.50	0.18	ug/L	60	66		40	140		
		fluoranthene		35	1.0	0.50	0.18	ug/L	60	58		40	140		
		pyrene		45	1.0	0.50	0.23	ug/L	60	75		40	140		
		benzo(a)anthracene		41	1.0	0.50	0.20	ug/L	60	69		40	140		
		chrysene		43	1.0	0.50	0.16	ug/L	60	71		40	140		
		benzo(b)fluoranthene		39	1.0	0.50	0.35	ug/L	60	65		40	140		
		benzo(k)fluoranthene		38	1.0	0.50	0.41	ug/L	60	64		40	140		
		benzo(a)pyrene		39	1.0	0.70	0.52	ug/L	60	66		40	140		
		indeno(1,2,3-cd)pyrene		44	1.0	0.50	0.24	ug/L	60	74		40	140		
		dibenzo(a,h)anthracene		45	1.0	0.50	0.26	ug/L	60	75		40	140		
		benzo(g,h,i)perylene		48	1.0	0.50	0.22	ug/L	60	81		40	140		
		Unadjusted C11-C22 Aromatics		920	100	85	60	ug/L	1020	90		40	140		
		C9-C18 Aliphatics		60 J	100	95	47	ug/L	360	17	*	40	140		
		C19-C36 Aliphatics		170	100	97	96	ug/L	480	36	*	40	140		
		C11-C22 Aromatics		230	100	85	54	ug/L				40	140		
		1-chloro-octadecane SUR		59				%				40	140		
		o-terphenyl SUR		81				%				40	140		
		2-fluorobiphenyl SUR		83				%				40	140		
		2-bromonaphthalene SUR		86				%				40	140		

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R		Limits		RPD	RPD Limit
MA EPH	LCSD17157	naphthalene		34	1.0	0.70	0.63	ug/L	60	57		40	140	1	25
		2-methylnaphthalene		34	1.0	0.70	0.60	ug/L	60	57		40	140	0	25
		phenanthrene		40	1.0	0.50	0.15	ug/L	60	66		40	140	4	25
		acenaphthene		38	1.0	0.50	0.22	ug/L	60	64		40	140	5	25
		acenaphthylene		39	1.0	0.50	0.18	ug/L	60	65		40	140	4	25
		fluorene		34	1.0	0.50	0.15	ug/L	60	56		40	140	6	25
		anthracene		37	1.0	0.50	0.18	ug/L	60	62		40	140	6	25
		fluoranthene		33	1.0	0.50	0.18	ug/L	60	54		40	140	6	25
		pyrene		45	1.0	0.50	0.23	ug/L	60	75		40	140	0	25
		benzo(a)anthracene		37	1.0	0.50	0.20	ug/L	60	62		40	140	11	25
		chrysene		39	1.0	0.50	0.16	ug/L	60	65		40	140	10	25
		benzo(b)fluoranthene		33	1.0	0.50	0.35	ug/L	60	56		40	140	16	25
		benzo(k)fluoranthene		36	1.0	0.50	0.41	ug/L	60	59		40	140	8	25
		benzo(a)pyrene		36	1.0	0.70	0.52	ug/L	60	59		40	140	10	25
		indeno(1,2,3-cd)pyrene		41	1.0	0.50	0.24	ug/L	60	68		40	140	9	25
		dibenzo(a,h)anthracene		42	1.0	0.50	0.26	ug/L	60	70		40	140	7	25
		benzo(g,h,i)perylene		45	1.0	0.50	0.22	ug/L	60	75		40	140	8	25
		Unadjusted C11-C22 Aromatics		840	100	85	60	ug/L	1020	82		40	140	9	25
		C9-C18 Aliphatics		53 J	100	95	47	ug/L	360	15	*	40	140	12	25
		C19-C36 Aliphatics		180	100	97	96	ug/L	480	38	*	40	140	5	25
		C11-C22 Aromatics		190	100	85	54	ug/L				40	140		25
		1-chloro-octadecane SUR		51				%				40	140		
		o-terphenyl SUR		75				%				40	140		
		2-fluorobiphenyl SUR		81				%				40	140		
		2-bromonaphthalene SUR		84				%				40	140		

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R	Limits	RPD	RPD Limit
SW3510C8082A	BLK17225	PCB-1016		0.12 U	0.20	0.12	0.10	ug/L					
		PCB-1221		0.12 U	0.20	0.12	0.10	ug/L					
		PCB-1232		0.12 U	0.20	0.12	0.10	ug/L					
		PCB-1242		0.12 U	0.20	0.12	0.10	ug/L					
		PCB-1248		0.12 U	0.20	0.12	0.10	ug/L					
		PCB-1254		0.12 U	0.20	0.12	0.10	ug/L					
		PCB-1260		0.12 U	0.20	0.12	0.10	ug/L					
		tetrachloro-m-xylene SUR		63				%			30 150		
		decachlorobiphenyl SUR		53				%			30 150		
SW3510C8082A	LCS17225	PCB-1016		0.81	0.20	0.12	0.10	ug/L	1	81	46 129		
		PCB-1221		0.12 U	0.20	0.12	0.10	ug/L					
		PCB-1232		0.12 U	0.20	0.12	0.10	ug/L					
		PCB-1242		0.12 U	0.20	0.12	0.10	ug/L					
		PCB-1248		0.12 U	0.20	0.12	0.10	ug/L					
		PCB-1254		0.12 U	0.20	0.12	0.10	ug/L					
		PCB-1260		0.75	0.20	0.12	0.10	ug/L	1	75	45 134		
		tetrachloro-m-xylene SUR		62				%			30 150		
		decachlorobiphenyl SUR		62				%			30 150		
SW3510C8082A	LCSD17225	PCB-1016		0.81	0.20	0.12	0.10	ug/L	1	81	46 129	0	20
		PCB-1221		0.12 U	0.20	0.12	0.10	ug/L					20
		PCB-1232		0.12 U	0.20	0.12	0.10	ug/L					20
		PCB-1242		0.12 U	0.20	0.12	0.10	ug/L					20
		PCB-1248		0.12 U	0.20	0.12	0.10	ug/L					20
		PCB-1254		0.12 U	0.20	0.12	0.10	ug/L					20
		PCB-1260		0.68	0.20	0.12	0.10	ug/L	1	68	45 134	10	20
		tetrachloro-m-xylene SUR		60				%			30 150		
		decachlorobiphenyl SUR		55				%			30 150		

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R	Limits	RPD	RPD Limit
SW3510C8270E	BLK17124	N-nitrosodimethylamine		1.0 U	2.0	1.0	0.21	ug/L					
		pyridine		1.0 U	2.0	1.0	0.60	ug/L					
		aniline		1.0 U	2.0	1.0	0.39	ug/L					
		phenol		1.0 U	2.0	1.0	0.34	ug/L					
		2-chlorophenol		1.0 U	5.0	1.0	0.29	ug/L					
		bis(2-chloroethyl)ether		1.0 U	2.0	1.0	0.35	ug/L					
		1,3-dichlorobenzene		1.0 U	2.0	1.0	0.41	ug/L					
		1,4-dichlorobenzene		1.0 U	2.0	1.0	0.37	ug/L					
		1,2-dichlorobenzene		1.0 U	2.0	1.0	0.36	ug/L					
		benzyl alcohol		1.0 U	2.0	1.0	0.84	ug/L					
		2-methylphenol		1.0 U	5.0	1.0	0.39	ug/L					
		2,2'-oxybis(1-chloropropane)		1.0 U	2.0	1.0	0.44	ug/L					
		hexachloroethane		1.0 U	2.0	1.0	0.53	ug/L					
		N-nitroso-di-N-propylamine		1.0 U	2.0	1.0	0.30	ug/L					
		4-methylphenol		1.5 U	2.0	1.5	1.3	ug/L					
		nitrobenzene		1.0 U	2.0	1.0	0.41	ug/L					
		isophorone		1.0 U	5.0	1.0	0.32	ug/L					
		2-nitrophenol		1.0 U	2.0	1.0	0.21	ug/L					
		2,4-dimethylphenol		1.0 U	5.0	1.0	0.44	ug/L					
		bis(2-chloroethoxy)methane		1.0 U	5.0	1.0	0.26	ug/L					
		2,4-dichlorophenol		1.0 U	5.0	1.0	0.19	ug/L					
		1,2,4-trichlorobenzene		1.0 U	5.0	1.0	0.34	ug/L					
		benzoic acid		45 U	50	45	20	ug/L					
		4-chloroaniline		1.0 U	2.0	1.0	0.41	ug/L					
		hexachlorobutadiene		1.0 U	2.0	1.0	0.57	ug/L					
		4-chloro-3-methylphenol		1.0 U	2.0	1.0	0.42	ug/L					
		hexachlorocyclopentadiene		4.0 U	10	4.0	1.6	ug/L					
		2,4,6-trichlorophenol		1.0 U	2.0	1.0	0.33	ug/L					
		2,4,5-trichlorophenol		1.0 U	2.0	1.0	0.28	ug/L					
		2-chloronaphthalene		1.0 U	5.0	1.0	0.34	ug/L					
		2-nitroaniline		1.0 U	2.0	1.0	0.72	ug/L					
		dimethylphthalate		1.0 U	5.0	1.0	0.41	ug/L					
		2,6-dinitrotoluene		1.0 U	5.0	1.0	0.42	ug/L					
		2,4-dinitrotoluene		1.0 U	5.0	1.0	0.52	ug/L					
		3-nitroaniline		1.5 U	2.0	1.5	1.0	ug/L					
		2,4-dinitrophenol		45 U	50	45	3.5	ug/L					
		dibenzofuran		0.40 U	0.50	0.40	0.37	ug/L					
		4-nitrophenol		5.0 U	10	5.0	1.6	ug/L					
		diethyl phthalate		1.0 U	5.0	1.0	0.30	ug/L					
		4-chlorophenyl phenyl ether		1.0 U	5.0	1.0	0.35	ug/L					
		4-nitroaniline		3.0 U	5.0	3.0	1.0	ug/L					
		4,6-dinitro-2-methylphenol		10 U	20	10	1.7	ug/L					
		azobenzene		1.0 U	2.0	1.0	0.25	ug/L					
		N-nitrosodiphenylamine		1.0 U	2.0	1.0	0.26	ug/L					
		4-bromophenyl phenyl ether		1.0 U	2.0	1.0	0.23	ug/L					
		hexachlorobenzene		1.0 U	2.0	1.0	0.25	ug/L					
		pentachlorophenol		5.0 U	10	5.0	2.6	ug/L					
		carbazole		1.0 U	2.0	1.0	0.32	ug/L					
		di-n-butylphthalate		1.0 U	5.0	1.0	0.54	ug/L					
		benzidine		25 U	30	25	20	ug/L					
		butyl benzyl phthalate		3.0 U	5.0	3.0	2.1	ug/L					
		3,3'-dichlorobenzidine		25 U	30	25	20	ug/L					
		bis(2-ethylhexyl)phthalate		3.0 U	5.0	3.0	2.4	ug/L					
		di-n-octyl phthalate		3.0 U	5.0	3.0	2.1	ug/L					

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R	Limits	RPD	RPD Limit
SW3510C8270E	BLK17124	2-fluorophenol SUR		26				%			21	100	
		phenol-D5 SUR		18				%			10	102	
		2,4,6-tribromophenol SUR		71				%			10	123	
		nitrobenzene-D5 SUR		60				%			35	114	
		2-fluorobiphenyl SUR		55				%			43	116	
		p-terphenyl-D14 SUR		80				%			33	141	

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R		Limits		RPD	RPD Limit
SW3510C8270E	LCS17124	N-nitrosodimethylamine		16	2.0	1.0	0.21	ug/L	40	41	*	43	121		
		pyridine		13	2.0	1.0	0.60	ug/L	40	33	*	40	140		
		aniline		19	2.0	1.0	0.39	ug/L	40	47		40	140		
		phenol		11	2.0	1.0	0.34	ug/L	40	28	*	72	132		
		2-chlorophenol		24	5.0	1.0	0.29	ug/L	40	60		38	117		
		bis(2-chloroethyl)ether		26	2.0	1.0	0.35	ug/L	40	66		43	118		
		1,3-dichlorobenzene		22	2.0	1.0	0.41	ug/L	40	55		28	110		
		1,4-dichlorobenzene		22	2.0	1.0	0.37	ug/L	40	55		29	112		
		1,2-dichlorobenzene		23	2.0	1.0	0.36	ug/L	40	57		33	111		
		benzyl alcohol		24	2.0	1.0	0.84	ug/L	40	59		31	112		
		2-methylphenol		23	5.0	1.0	0.39	ug/L	40	58		30	117		
		2,2'-oxybis(1-chloropropane)		35	2.0	1.0	0.44	ug/L	40	88		37	130		
		hexachloroethane		22	2.0	1.0	0.53	ug/L	40	55		21	115		
		N-nitroso-di-N-propylamine		26	2.0	1.0	0.30	ug/L	40	65		49	119		
		4-methylphenol		43	2.0	1.5	1.3	ug/L	80	53		25	120		
		nitrobenzene		26	2.0	1.0	0.41	ug/L	40	64		45	121		
		isophorone		29	5.0	1.0	0.32	ug/L	40	73		42	124		
		2-nitrophenol		27	2.0	1.0	0.21	ug/L	40	67		47	123		
		2,4-dimethylphenol		20	5.0	1.0	0.44	ug/L	40	49		31	124		
		bis(2-chloroethoxy)methane		28	5.0	1.0	0.26	ug/L	40	70		48	120		
		2,4-dichlorophenol		27	5.0	1.0	0.19	ug/L	40	68		47	121		
		1,2,4-trichlorobenzene		24	5.0	1.0	0.34	ug/L	40	59		29	116		
		benzoic acid		8.9 J	50	45	0.0010	ug/L	40	22	*	57	129		
		4-chloroaniline		25	2.0	1.0	0.41	ug/L	40	63		33	117		
		hexachlorobutadiene		23	2.0	1.0	0.57	ug/L	40	58		22	124		
		4-chloro-3-methylphenol		25	2.0	1.0	0.42	ug/L	40	64		52	119		
		hexachlorocyclopentadiene		17	10	4.0	1.6	ug/L	40	41	*	53	135		
		2,4,6-trichlorophenol		28	2.0	1.0	0.33	ug/L	40	69		50	125		
		2,4,5-trichlorophenol		28	2.0	1.0	0.28	ug/L	40	70		53	123		
		2-chloronaphthalene		24	5.0	1.0	0.34	ug/L	40	61		40	116		
		2-nitroaniline		27	2.0	1.0	0.72	ug/L	40	67		55	127		
		dimethylphthalate		12	5.0	1.0	0.41	ug/L	40	29	*	45	127		
		2,6-dinitrotoluene		29	5.0	1.0	0.42	ug/L	40	72		57	124		
		2,4-dinitrotoluene		28	5.0	1.0	0.52	ug/L	40	70		57	128		
		3-nitroaniline		28	2.0	1.5	1.0	ug/L	40	70		41	128		
		2,4-dinitrophenol		23 J	50	45	3.5	ug/L	40	57		23	143		
		dibenzofuran		28	0.50	0.40	0.37	ug/L	40	70		53	118		
		4-nitrophenol		13	10	5.0	1.6	ug/L	40	32	*	61	133		
		diethyl phthalate		23	5.0	1.0	0.30	ug/L	40	57		56	125		
		4-chlorophenyl phenyl ether		26	5.0	1.0	0.35	ug/L	40	65		53	121		
		4-nitroaniline		28	5.0	3.0	1.0	ug/L	40	69		38	126		
		4,6-dinitro-2-methylphenol		27	20	10	1.7	ug/L	40	67		44	137		
		azobenzene		28	2.0	1.0	0.25	ug/L	40	70		61	116		
		N-nitrosodiphenylamine		27	2.0	1.0	0.26	ug/L	40	66		51	123		
		4-bromophenyl phenyl ether		26	2.0	1.0	0.23	ug/L	40	65		55	124		
		hexachlorobenzene		23	2.0	1.0	0.25	ug/L	40	57		53	125		
		pentachlorophenol		29	10	5.0	2.6	ug/L	40	73		35	138		
		carbazole		30	2.0	1.0	0.32	ug/L	40	76		60	122		
		di-n-butylphthalate		25	5.0	1.0	0.54	ug/L	40	63		59	127		
		benzidine		25 U	30	25	20	ug/L	40	50		50	134		
		butyl benzyl phthalate		18	5.0	3.0	2.1	ug/L	40	44	*	53	134		
		3,3'-dichlorobenzidine		29 J	30	25	20	ug/L	40	73		27	129		
		bis(2-ethylhexyl)phthalate		28	5.0	3.0	2.4	ug/L	40	69		55	135		
		di-n-octyl phthalate		28	5.0	3.0	2.1	ug/L	40	69		51	140		

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R	Limits	RPD	RPD Limit
SW3510C8270E	LCS17124	2-fluorophenol SUR		42				%			21	100	
		phenol-D5 SUR		29				%			10	102	
		2,4,6-tribromophenol SUR		88				%			10	123	
		nitrobenzene-D5 SUR		69				%			35	114	
		2-fluorobiphenyl SUR		63				%			43	116	
		p-terphenyl-D14 SUR		83				%			33	141	

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R		Limits		RPD	RPD Limit
SW3510C8270E	LCSD17124	N-nitrosodimethylamine		17	2.0	1.0	0.21	ug/L	40	42	*	43	121	1	20
		pyridine		13	2.0	1.0	0.60	ug/L	40	33	*	40	140	1	20
		aniline		18	2.0	1.0	0.39	ug/L	40	46		40	140	2	20
		phenol		11	2.0	1.0	0.34	ug/L	40	27	*	72	132	5	20
		2-chlorophenol		23	5.0	1.0	0.29	ug/L	40	58		38	117	4	20
		bis(2-chloroethyl)ether		27	2.0	1.0	0.35	ug/L	40	67		43	118	3	20
		1,3-dichlorobenzene		23	2.0	1.0	0.41	ug/L	40	58		28	110	6	20
		1,4-dichlorobenzene		24	2.0	1.0	0.37	ug/L	40	59		29	112	7	20
		1,2-dichlorobenzene		24	2.0	1.0	0.36	ug/L	40	60		32	111	5	20
		benzyl alcohol		23	2.0	1.0	0.84	ug/L	40	57		31	112	4	20
		2-methylphenol		21	5.0	1.0	0.39	ug/L	40	53		30	117	8	20
		2,2'-oxybis(1-chloropropane)		36	2.0	1.0	0.44	ug/L	40	90		37	130	2	20
		hexachloroethane		24	2.0	1.0	0.53	ug/L	40	59		21	115	6	20
		N-nitroso-di-N-propylamine		26	2.0	1.0	0.30	ug/L	40	66		49	119	2	20
		4-methylphenol		39	2.0	1.5	1.3	ug/L	80	48		25	120	10	20
		nitrobenzene		26	2.0	1.0	0.41	ug/L	40	65		45	121	2	20
		isophorone		29	5.0	1.0	0.32	ug/L	40	73		42	124	1	20
		2-nitrophenol		27	2.0	1.0	0.21	ug/L	40	67		47	123	1	20
		2,4-dimethylphenol		20	5.0	1.0	0.44	ug/L	40	49		31	124	0	20
		bis(2-chloroethoxy)methane		28	5.0	1.0	0.26	ug/L	40	70		48	120	0	20
		2,4-dichlorophenol		27	5.0	1.0	0.19	ug/L	40	67		47	121	1	20
		1,2,4-trichlorobenzene		25	5.0	1.0	0.34	ug/L	40	61		29	116	4	20
		benzoic acid		10 J	50	45	0.0010	ug/L	40	26	*	57	129	17	20
		4-chloroaniline		25	2.0	1.0	0.41	ug/L	40	62		33	117	3	20
		hexachlorobutadiene		25	2.0	1.0	0.57	ug/L	40	62		22	124	7	20
		4-chloro-3-methylphenol		25	2.0	1.0	0.42	ug/L	40	62		52	119	2	20
		hexachlorocyclopentadiene		18	10	4.0	1.6	ug/L	40	45	*	53	135	8	20
		2,4,6-trichlorophenol		28	2.0	1.0	0.33	ug/L	40	71		50	125	3	20
		2,4,5-trichlorophenol		28	2.0	1.0	0.28	ug/L	40	71		53	123	1	20
		2-chloronaphthalene		26	5.0	1.0	0.34	ug/L	40	64		40	116	5	20
		2-nitroaniline		27	2.0	1.0	0.72	ug/L	40	66		55	127	2	20
		dimethylphthalate		11	5.0	1.0	0.41	ug/L	40	28	*	45	127	6	20
		2,6-dinitrotoluene		29	5.0	1.0	0.42	ug/L	40	71		57	124	1	20
		2,4-dinitrotoluene		28	5.0	1.0	0.52	ug/L	40	69		57	128	2	20
		3-nitroaniline		27	2.0	1.5	1.0	ug/L	40	67		41	128	5	20
		2,4-dinitrophenol		23 J	50	45	3.5	ug/L	40	58		23	143	2	20
		dibenzofuran		28	0.50	0.40	0.37	ug/L	40	71		53	118	1	20
		4-nitrophenol		11	10	5.0	1.6	ug/L	40	29	*	61	133	12	20
		diethyl phthalate		22	5.0	1.0	0.30	ug/L	40	55	*	56	125	5	20
		4-chlorophenyl phenyl ether		27	5.0	1.0	0.35	ug/L	40	67		53	121	3	20
		4-nitroaniline		25	5.0	3.0	1.0	ug/L	40	62		38	126	11	20
		4,6-dinitro-2-methylphenol		28	20	10	1.7	ug/L	40	69		44	137	2	20
		azobenzene		29	2.0	1.0	0.25	ug/L	40	73		61	116	4	20
		N-nitrosodiphenylamine		27	2.0	1.0	0.26	ug/L	40	68		51	123	3	20
		4-bromophenyl phenyl ether		27	2.0	1.0	0.23	ug/L	40	67		55	124	3	20
		hexachlorobenzene		23	2.0	1.0	0.25	ug/L	40	58		53	125	2	20
		pentachlorophenol		30	10	5.0	2.6	ug/L	40	75		35	138	3	20
		carbazole		30	2.0	1.0	0.32	ug/L	40	76		60	122	1	20
		di-n-butylphthalate		25	5.0	1.0	0.54	ug/L	40	62		59	127	1	20
		benzidine		27 J	30	25	20	ug/L	40	68		50	134	30	* 20
		butyl benzyl phthalate		17	5.0	3.0	2.1	ug/L	40	43	*	53	134	2	20
		3,3'-dichlorobenzidine		29 J	30	25	20	ug/L	40	73		27	129	1	20
		bis(2-ethylhexyl)phthalate		28	5.0	3.0	2.4	ug/L	40	70		55	135	2	20
		di-n-octyl phthalate		28	5.0	3.0	2.1	ug/L	40	70		51	140	1	20

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R	Limits	RPD	RPD Limit
SW3510C8270E	LCSD17124	2-fluorophenol SUR		37				%			21	100	
		phenol-D5 SUR		27				%			10	102	
		2,4,6-tribromophenol SUR		88				%			10	123	
		nitrobenzene-D5 SUR		69				%			35	114	
		2-fluorobiphenyl SUR		64				%			43	116	
		p-terphenyl-D14 SUR		86				%			33	141	

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R	Limits	RPD	RPD Limit
SW3510C8270E	BLK17145	N-nitrosodimethylamine		1.0 U	2.0	1.0	0.21	ug/L					
		pyridine		1.0 U	2.0	1.0	0.60	ug/L					
		aniline		1.0 U	2.0	1.0	0.39	ug/L					
		phenol		1.0 U	2.0	1.0	0.34	ug/L					
		2-chlorophenol		1.0 U	5.0	1.0	0.29	ug/L					
		bis(2-chloroethyl)ether		1.0 U	2.0	1.0	0.35	ug/L					
		1,3-dichlorobenzene		1.0 U	2.0	1.0	0.41	ug/L					
		1,4-dichlorobenzene		1.0 U	2.0	1.0	0.37	ug/L					
		1,2-dichlorobenzene		1.0 U	2.0	1.0	0.36	ug/L					
		benzyl alcohol		1.0 U	2.0	1.0	0.84	ug/L					
		2-methylphenol		1.0 U	5.0	1.0	0.39	ug/L					
		2,2'-oxybis(1-chloropropane)		1.0 U	2.0	1.0	0.44	ug/L					
		hexachloroethane		1.0 U	2.0	1.0	0.53	ug/L					
		N-nitroso-di-N-propylamine		1.0 U	2.0	1.0	0.30	ug/L					
		4-methylphenol		1.5 U	2.0	1.5	1.3	ug/L					
		nitrobenzene		1.0 U	2.0	1.0	0.41	ug/L					
		isophorone		1.0 U	5.0	1.0	0.32	ug/L					
		2-nitrophenol		1.0 U	2.0	1.0	0.21	ug/L					
		2,4-dimethylphenol		1.0 U	5.0	1.0	0.44	ug/L					
		bis(2-chloroethoxy)methane		1.0 U	5.0	1.0	0.26	ug/L					
		2,4-dichlorophenol		1.0 U	5.0	1.0	0.19	ug/L					
		1,2,4-trichlorobenzene		1.0 U	5.0	1.0	0.34	ug/L					
		benzoic acid		45 U	50	45	20	ug/L					
		4-chloroaniline		1.0 U	2.0	1.0	0.41	ug/L					
		hexachlorobutadiene		1.0 U	2.0	1.0	0.57	ug/L					
		4-chloro-3-methylphenol		1.0 U	2.0	1.0	0.42	ug/L					
		hexachlorocyclopentadiene		4.0 U	10	4.0	1.6	ug/L					
		2,4,6-trichlorophenol		1.0 U	2.0	1.0	0.33	ug/L					
		2,4,5-trichlorophenol		1.0 U	2.0	1.0	0.28	ug/L					
		2-chloronaphthalene		1.0 U	5.0	1.0	0.34	ug/L					
		2-nitroaniline		1.0 U	2.0	1.0	0.72	ug/L					
		dimethylphthalate		1.0 U	5.0	1.0	0.41	ug/L					
		2,6-dinitrotoluene		1.0 U	5.0	1.0	0.42	ug/L					
		2,4-dinitrotoluene		1.0 U	5.0	1.0	0.52	ug/L					
		3-nitroaniline		1.5 U	2.0	1.5	1.0	ug/L					
		2,4-dinitrophenol		45 U	50	45	3.5	ug/L					
		dibenzofuran		0.40 U	0.50	0.40	0.37	ug/L					
		4-nitrophenol		5.0 U	10	5.0	1.6	ug/L					
		diethyl phthalate		1.0 U	5.0	1.0	0.30	ug/L					
		4-chlorophenyl phenyl ether		1.0 U	5.0	1.0	0.35	ug/L					
		4-nitroaniline		3.0 U	5.0	3.0	1.0	ug/L					
		4,6-dinitro-2-methylphenol		10 U	20	10	1.7	ug/L					
		azobenzene		1.0 U	2.0	1.0	0.25	ug/L					
		N-nitrosodiphenylamine		1.0 U	2.0	1.0	0.26	ug/L					
		4-bromophenyl phenyl ether		1.0 U	2.0	1.0	0.23	ug/L					
		hexachlorobenzene		1.0 U	2.0	1.0	0.25	ug/L					
		pentachlorophenol		5.0 U	10	5.0	2.6	ug/L					
		carbazole		1.0 U	2.0	1.0	0.32	ug/L					
		di-n-butylphthalate		1.0 U	5.0	1.0	0.54	ug/L					
		benzidine		25 U	30	25	20	ug/L					
		butyl benzyl phthalate		3.0 U	5.0	3.0	2.1	ug/L					
		3,3'-dichlorobenzidine		25 U	30	25	20	ug/L					
		bis(2-ethylhexyl)phthalate		3.0 U	5.0	3.0	2.4	ug/L					
		di-n-octyl phthalate		3.0 U	5.0	3.0	2.1	ug/L					

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R	Limits	RPD	RPD Limit
SW3510C8270E	BLK17145	2-fluorophenol SUR		32				%			21	100	
		phenol-D5 SUR		22				%			10	102	
		2,4,6-tribromophenol SUR		76				%			10	123	
		nitrobenzene-D5 SUR		70				%			35	114	
		2-fluorobiphenyl SUR		70				%			43	116	
		p-terphenyl-D14 SUR		100				%			33	141	

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R		Limits	RPD	RPD Limit
SW3510C8270E	LCS17145	N-nitrosodimethylamine		18	2.0	1.0	0.21	ug/L	40	45		43 121		
		pyridine		15	2.0	1.0	0.60	ug/L	40	38	*	40 140		
		aniline		22	2.0	1.0	0.39	ug/L	40	54		40 140		
		phenol		11	2.0	1.0	0.34	ug/L	40	26	*	72 132		
		2-chlorophenol		19	5.0	1.0	0.29	ug/L	40	49		38 117		
		bis(2-chloroethyl)ether		30	2.0	1.0	0.35	ug/L	40	75		43 118		
		1,3-dichlorobenzene		19	2.0	1.0	0.41	ug/L	40	47		28 110		
		1,4-dichlorobenzene		19	2.0	1.0	0.37	ug/L	40	48		29 112		
		1,2-dichlorobenzene		21	2.0	1.0	0.36	ug/L	40	52		33 111		
		benzyl alcohol		22	2.0	1.0	0.84	ug/L	40	56		31 112		
		2-methylphenol		19	5.0	1.0	0.39	ug/L	40	47		30 117		
		2,2'-oxybis(1-chloropropane)		40	2.0	1.0	0.44	ug/L	40	99		37 130		
		hexachloroethane		17	2.0	1.0	0.53	ug/L	40	41		21 115		
		N-nitroso-di-N-propylamine		30	2.0	1.0	0.30	ug/L	40	75		49 119		
		4-methylphenol		33	2.0	1.5	1.3	ug/L	80	42		25 120		
		nitrobenzene		29	2.0	1.0	0.41	ug/L	40	72		45 121		
		isophorone		32	5.0	1.0	0.32	ug/L	40	81		42 124		
		2-nitrophenol		24	2.0	1.0	0.21	ug/L	40	61		47 123		
		2,4-dimethylphenol		19	5.0	1.0	0.44	ug/L	40	47		31 124		
		bis(2-chloroethoxy)methane		31	5.0	1.0	0.26	ug/L	40	78		48 120		
		2,4-dichlorophenol		22	5.0	1.0	0.19	ug/L	40	55		47 121		
		1,2,4-trichlorobenzene		21	5.0	1.0	0.34	ug/L	40	53		29 116		
		benzoic acid		4.4 J	50	45	0.0010	ug/L	40	11	*	57 129		
		4-chloroaniline		28	2.0	1.0	0.41	ug/L	40	70		33 117		
		hexachlorobutadiene		18	2.0	1.0	0.57	ug/L	40	45		22 124		
		4-chloro-3-methylphenol		18	2.0	1.0	0.42	ug/L	40	44	*	52 119		
		hexachlorocyclopentadiene		16	10	4.0	1.6	ug/L	40	41	*	53 135		
		2,4,6-trichlorophenol		26	2.0	1.0	0.33	ug/L	40	66		50 125		
		2,4,5-trichlorophenol		24	2.0	1.0	0.28	ug/L	40	60		53 123		
		2-chloronaphthalene		27	5.0	1.0	0.34	ug/L	40	67		40 116		
		2-nitroaniline		29	2.0	1.0	0.72	ug/L	40	74		55 127		
		dimethylphthalate		16	5.0	1.0	0.41	ug/L	40	39	*	45 127		
		2,6-dinitrotoluene		32	5.0	1.0	0.42	ug/L	40	81		57 124		
		2,4-dinitrotoluene		32	5.0	1.0	0.52	ug/L	40	79		57 128		
		3-nitroaniline		31	2.0	1.5	1.0	ug/L	40	76		41 128		
		2,4-dinitrophenol		14 J	50	45	3.5	ug/L	40	36		23 143		
		dibenzofuran		31	0.50	0.40	0.37	ug/L	40	78		53 118		
		4-nitrophenol		8.6 J	10	5.0	1.6	ug/L	40	22	*	61 133		
		diethyl phthalate		27	5.0	1.0	0.30	ug/L	40	69		56 125		
		4-chlorophenyl phenyl ether		30	5.0	1.0	0.35	ug/L	40	75		53 121		
		4-nitroaniline		29	5.0	3.0	1.0	ug/L	40	72		38 126		
		4,6-dinitro-2-methylphenol		23	20	10	1.7	ug/L	40	58		44 137		
		azobenzene		33	2.0	1.0	0.25	ug/L	40	82		61 116		
		N-nitrosodiphenylamine		31	2.0	1.0	0.26	ug/L	40	78		51 123		
		4-bromophenyl phenyl ether		31	2.0	1.0	0.23	ug/L	40	77		55 124		
		hexachlorobenzene		30	2.0	1.0	0.25	ug/L	40	76		53 125		
		pentachlorophenol		28	10	5.0	2.6	ug/L	40	69		35 138		
		carbazole		34	2.0	1.0	0.32	ug/L	40	85		60 122		
		di-n-butylphthalate		31	5.0	1.0	0.54	ug/L	40	76		59 127		
		benzidine		36	30	25	20	ug/L	40	91		50 134		
		butyl benzyl phthalate		27	5.0	3.0	2.1	ug/L	40	68		53 134		
		3,3'-dichlorobenzidine		32	30	25	20	ug/L	40	81		27 129		
		bis(2-ethylhexyl)phthalate		29	5.0	3.0	2.4	ug/L	40	73		55 135		
		di-n-octyl phthalate		29	5.0	3.0	2.1	ug/L	40	72		51 140		

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R	Limits	RPD	RPD Limit
SW3510C8270E	LCS17145	2-fluorophenol SUR		35				%			21	100	
		phenol-D5 SUR		27				%			10	102	
		2,4,6-tribromophenol SUR		95				%			10	123	
		nitrobenzene-D5 SUR		78				%			35	114	
		2-fluorobiphenyl SUR		76				%			43	116	
		p-terphenyl-D14 SUR		98				%			33	141	

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R		Limits	RPD	RPD		Limit
SW3510C8270E	LCSD17145	N-nitrosodimethylamine		18	2.0	1.0	0.21	ug/L	40	46		43	121	2		20
		pyridine		15	2.0	1.0	0.60	ug/L	40	39	*	40	140	2		20
		aniline		21	2.0	1.0	0.39	ug/L	40	52		40	140	5		20
		phenol		11	2.0	1.0	0.34	ug/L	40	27	*	72	132	1		20
		2-chlorophenol		23	5.0	1.0	0.29	ug/L	40	57		38	117	17		20
		bis(2-chloroethyl)ether		30	2.0	1.0	0.35	ug/L	40	74		43	118	1		20
		1,3-dichlorobenzene		26	2.0	1.0	0.41	ug/L	40	65		28	110	31	*	20
		1,4-dichlorobenzene		26	2.0	1.0	0.37	ug/L	40	64		29	112	29	*	20
		1,2-dichlorobenzene		26	2.0	1.0	0.36	ug/L	40	66		32	111	24	*	20
		benzyl alcohol		24	2.0	1.0	0.84	ug/L	40	60		31	112	8		20
		2-methylphenol		22	5.0	1.0	0.39	ug/L	40	54		30	117	14		20
		2,2'-oxybis(1-chloropropane)		41	2.0	1.0	0.44	ug/L	40	102		37	130	3		20
		hexachloroethane		25	2.0	1.0	0.53	ug/L	40	64		21	115	42	*	20
		N-nitroso-di-N-propylamine		29	2.0	1.0	0.30	ug/L	40	73		49	119	3		20
		4-methylphenol		39	2.0	1.5	1.3	ug/L	80	49		25	120	15		20
		nitrobenzene		30	2.0	1.0	0.41	ug/L	40	74		45	121	4		20
		isophorone		34	5.0	1.0	0.32	ug/L	40	85		42	124	4		20
		2-nitrophenol		27	2.0	1.0	0.21	ug/L	40	68		47	123	11		20
		2,4-dimethylphenol		21	5.0	1.0	0.44	ug/L	40	52		31	124	10		20
		bis(2-chloroethoxy)methane		32	5.0	1.0	0.26	ug/L	40	80		48	120	2		20
		2,4-dichlorophenol		26	5.0	1.0	0.19	ug/L	40	65		47	121	17		20
		1,2,4-trichlorobenzene		28	5.0	1.0	0.34	ug/L	40	69		29	116	26	*	20
		benzoic acid		0.010 J	50	45	0.0010	ug/L	40	0	*	57	129	199	*	20
		4-chloroaniline		28	2.0	1.0	0.41	ug/L	40	70		33	117	0		20
		hexachlorobutadiene		26	2.0	1.0	0.57	ug/L	40	66		22	124	37	*	20
		4-chloro-3-methylphenol		24	2.0	1.0	0.42	ug/L	40	59		52	119	28	*	20
		hexachlorocyclopentadiene		15	10	4.0	1.6	ug/L	40	37	*	53	135	10		20
		2,4,6-trichlorophenol		29	2.0	1.0	0.33	ug/L	40	72		50	125	9		20
		2,4,5-trichlorophenol		28	2.0	1.0	0.28	ug/L	40	70		53	123	16		20
		2-chloronaphthalene		29	5.0	1.0	0.34	ug/L	40	71		40	116	7		20
		2-nitroaniline		31	2.0	1.0	0.72	ug/L	40	77		55	127	4		20
		dimethylphthalate		11	5.0	1.0	0.41	ug/L	40	27	*	45	127	35	*	20
		2,6-dinitrotoluene		33	5.0	1.0	0.42	ug/L	40	83		57	124	3		20
		2,4-dinitrotoluene		33	5.0	1.0	0.52	ug/L	40	82		57	128	3		20
		3-nitroaniline		32	2.0	1.5	1.0	ug/L	40	79		41	128	3		20
		2,4-dinitrophenol		16 J	50	45	3.5	ug/L	40	40		23	143	12		20
		dibenzofuran		32	0.50	0.40	0.37	ug/L	40	80		53	118	3		20
		4-nitrophenol		10	10	5.0	1.6	ug/L	40	25	*	61	133	15		20
		diethyl phthalate		25	5.0	1.0	0.30	ug/L	40	63		56	125	9		20
		4-chlorophenyl phenyl ether		29	5.0	1.0	0.35	ug/L	40	74		53	121	2		20
		4-nitroaniline		30	5.0	3.0	1.0	ug/L	40	74		38	126	3		20
		4,6-dinitro-2-methylphenol		26	20	10	1.7	ug/L	40	64		44	137	10		20
		azobenzene		33	2.0	1.0	0.25	ug/L	40	82		61	116	1		20
		N-nitrosodiphenylamine		30	2.0	1.0	0.26	ug/L	40	75		51	123	4		20
		4-bromophenyl phenyl ether		28	2.0	1.0	0.23	ug/L	40	71		55	124	8		20
		hexachlorobenzene		25	2.0	1.0	0.25	ug/L	40	62		53	125	20		20
		pentachlorophenol		29	10	5.0	2.6	ug/L	40	71		35	138	3		20
		carbazole		35	2.0	1.0	0.32	ug/L	40	88		60	122	3		20
		di-n-butylphthalate		26	5.0	1.0	0.54	ug/L	40	66		59	127	15		20
		benzidine		34	30	25	20	ug/L	40	85		50	134	7		20
		butyl benzyl phthalate		22	5.0	3.0	2.1	ug/L	40	55		53	134	21	*	20
		3,3'-dichlorobenzidine		33	30	25	20	ug/L	40	83		27	129	3		20
		bis(2-ethylhexyl)phthalate		31	5.0	3.0	2.4	ug/L	40	78		55	135	7		20
		di-n-octyl phthalate		29	5.0	3.0	2.1	ug/L	40	72		51	140	1		20

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R	Limits	RPD	RPD Limit
SW3510C8270E	LCSD17145	2-fluorophenol SUR		39				%			21	100	
		phenol-D5 SUR		28				%			10	102	
		2,4,6-tribromophenol SUR		97				%			10	123	
		nitrobenzene-D5 SUR		80				%			35	114	
		2-fluorobiphenyl SUR		75				%			43	116	
		p-terphenyl-D14 SUR		89				%			33	141	

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R	Limits	RPD	RPD Limit
SW3005A6020A	BLK17176	Silver		0.00050 U	0.0050	0.00050	0.00011	mg/L					
		Aluminum		0.025 U	0.050	0.025	0.010	mg/L					
		Arsenic		0.0010 U	0.0050	0.0010	0.00067	mg/L					
		Barium		0.0010 U	0.010	0.0010	0.00076	mg/L					
		Beryllium		0.00050 U	0.0010	0.00050	0.00010	mg/L					
		Cadmium		0.00050 U	0.0010	0.00050	0.00014	mg/L					
		Cobalt		0.00010 U	0.010	0.00010	0.000020	mg/L					
		Chromium		0.025 U	0.050	0.025	0.020	mg/L					
		Copper		0.0075 U	0.010	0.0075	0.0054	mg/L					
		Iron		0.030 U	0.050	0.030	0.029	mg/L					
		Potassium		0.10 U	0.50	0.10	0.039	mg/L					
		Magnesium		0.020 U	0.10	0.020	0.0073	mg/L					
		Manganese		0.0050 U	0.010	0.0050	0.0016	mg/L					
		Sodium		0.050 U	0.10	0.050	0.034	mg/L					
		Nickel		0.025 U	0.050	0.025	0.013	mg/L					
		Lead		0.00050 U	0.0050	0.00050	0.00011	mg/L					
		Antimony		0.00050 U	0.0010	0.00050	0.00014	mg/L					
		Selenium		0.0050 U	0.010	0.0050	0.0037	mg/L					
		Thallium		0.00080 U	0.0010	0.00080	0.00068	mg/L					
		Vanadium		0.0050 U	0.010	0.0050	0.0018	mg/L					
		Zinc		0.0040 U	0.010	0.0040	0.0021	mg/L					
SW3005A6020A	LCS17176	Silver		0.24	0.0050	0.00050	0.00011	mg/L	0.25	98	85	116	
		Aluminum		0.48	0.050	0.025	0.010	mg/L	0.5	97	84	117	
		Arsenic		0.49	0.0050	0.0010	0.00067	mg/L	0.5	98	84	116	
		Barium		0.51	0.010	0.0010	0.00076	mg/L	0.5	102	86	114	
		Beryllium		0.48	0.0010	0.00050	0.00010	mg/L	0.5	96	83	121	
		Cadmium		0.50	0.0010	0.00050	0.00014	mg/L	0.5	100	87	115	
		Cobalt		0.52	0.010	0.00050	0.00028	mg/L	0.5	104	86	115	
		Chromium		0.51	0.050	0.025	0.020	mg/L	0.5	102	85	116	
		Copper		0.53	0.010	0.0075	0.0054	mg/L	0.5	105	85	118	
		Iron		0.48	0.050	0.030	0.029	mg/L	0.5	97	87	118	
		Potassium		4.7	0.50	0.10	0.039	mg/L	5	95	87	115	
		Magnesium		0.48	0.10	0.020	0.0073	mg/L	0.5	96	83	118	
		Manganese		0.49	0.010	0.0050	0.0016	mg/L	0.5	97	87	115	
		Sodium		4.8	0.10	0.050	0.034	mg/L	5	96	85	117	
		Nickel		0.51	0.050	0.025	0.013	mg/L	0.5	103	85	117	
		Lead		0.49	0.0050	0.00050	0.00011	mg/L	0.5	99	88	115	
		Antimony		0.49	0.0010	0.00050	0.00014	mg/L	0.5	99	85	117	
		Selenium		0.46	0.010	0.0050	0.0037	mg/L	0.5	91	80	120	
		Thallium		0.25	0.0010	0.00080	0.00068	mg/L	0.25	101	82	116	
		Vanadium		0.51	0.010	0.0050	0.0018	mg/L	0.5	102	86	115	
		Zinc		0.50	0.010	0.0040	0.0021	mg/L	0.5	100	83	119	

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R	Limits		RPD	RPD Limit
SW3005A6020A	LCSD17176	Silver		0.25	0.0050	0.00050	0.00011	mg/L	0.25	99	85	116	1	20
		Aluminum		0.50	0.050	0.025	0.010	mg/L	0.5	101	84	117	4	20
		Arsenic		0.49	0.0050	0.0010	0.00067	mg/L	0.5	97	84	116	0	20
		Barium		0.52	0.010	0.0010	0.00076	mg/L	0.5	104	86	114	2	20
		Beryllium		0.48	0.0010	0.00050	0.00010	mg/L	0.5	97	83	121	1	20
		Cadmium		0.51	0.0010	0.00050	0.00014	mg/L	0.5	102	87	115	2	20
		Cobalt		0.51	0.010	0.00050	0.00028	mg/L	0.5	102	86	115	2	20
		Chromium		0.51	0.050	0.025	0.020	mg/L	0.5	101	85	116	1	20
		Copper		0.52	0.010	0.0075	0.0054	mg/L	0.5	105	85	118	1	20
		Iron		0.49	0.050	0.030	0.029	mg/L	0.5	99	87	118	2	20
		Potassium		4.8	0.50	0.10	0.039	mg/L	5	96	87	115	1	20
		Magnesium		0.48	0.10	0.020	0.0073	mg/L	0.5	96	83	118	0	20
		Manganese		0.49	0.010	0.0050	0.0016	mg/L	0.5	99	87	115	2	20
		Sodium		4.8	0.10	0.050	0.034	mg/L	5	96	85	117	1	20
		Nickel		0.51	0.050	0.025	0.013	mg/L	0.5	101	85	117	1	20
		Lead		0.50	0.0050	0.00050	0.00011	mg/L	0.5	100	88	115	2	20
		Antimony		0.50	0.0010	0.00050	0.00014	mg/L	0.5	100	85	117	1	20
		Selenium		0.46	0.010	0.0050	0.0037	mg/L	0.5	93	80	120	1	20
		Thallium		0.26	0.0010	0.00080	0.00068	mg/L	0.25	102	82	116	1	20
		Vanadium		0.51	0.010	0.0050	0.0018	mg/L	0.5	102	86	115	0	20
		Zinc		0.49	0.010	0.0040	0.0021	mg/L	0.5	98	83	119	1	20
SW3005A6020A	MS17176	Silver	67798-018	0.24	0.0054	0.00054	0.00012	mg/L	0.268	90	85	116		
		Aluminum	67798-018	0.49	0.054	0.027	0.011	mg/L	0.535	91	84	117		
		Arsenic	67798-018	0.48	0.0054	0.0011	0.00072	mg/L	0.535	90	84	116		
		Barium	67798-018	0.58	0.011	0.0011	0.00081	mg/L	0.535	97	86	114		
		Beryllium	67798-018	0.48	0.0011	0.00054	0.00011	mg/L	0.535	91	83	121		
		Cadmium	67798-018	0.50	0.0011	0.00054	0.00015	mg/L	0.535	94	87	115		
		Cobalt	67798-018	0.49	0.011	0.00054	0.00030	mg/L	0.535	92	86	115		
		Chromium	67798-018	0.50	0.054	0.027	0.022	mg/L	0.535	93	85	116		
		Copper	67798-018	0.50	0.011	0.0080	0.0057	mg/L	0.535	93	85	118		
		Iron	67798-018	0.48	0.054	0.032	0.031	mg/L	0.535	89	87	118		
		Potassium	67798-018	5.5	0.54	0.11	0.042	mg/L	5.35	90	87	115		
		Magnesium	67798-018	9.4	0.11	0.021	0.0078	mg/L	0.53	90	83	118		
		Manganese	67798-018	0.49	0.011	0.0054	0.0017	mg/L	0.535	92	87	115		
		Sodium	67798-018	11	0.11	0.054	0.037	mg/L	5.3	93	85	117		
		Nickel	67798-018	0.49	0.054	0.027	0.013	mg/L	0.535	92	85	117		
		Lead	67798-018	0.50	0.0054	0.00054	0.00012	mg/L	0.535	93	88	115		
		Antimony	67798-018	0.51	0.0011	0.00054	0.00015	mg/L	0.535	96	85	117		
		Selenium	67798-018	0.45	0.011	0.0054	0.0040	mg/L	0.535	84	80	120		
		Thallium	67798-018	0.26	0.0011	0.00086	0.00073	mg/L	0.268	96	82	116		
		Vanadium	67798-018	0.50	0.011	0.0054	0.0019	mg/L	0.535	93	86	115		
		Zinc	67798-018	0.48	0.011	0.0043	0.0022	mg/L	0.535	89	83	119		

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R	Limits		RPD	RPD Limit
SW3005A6020A	MSD17176	Silver	67798-018	0.24	0.0054	0.00054	0.00012	mg/L	0.268	89	85	116	1	20
		Aluminum	67798-018	0.49	0.054	0.027	0.011	mg/L	0.535	91	84	117	0	20
		Arsenic	67798-018	0.48	0.0054	0.0011	0.00072	mg/L	0.535	91	84	116	1	20
		Barium	67798-018	0.58	0.011	0.0011	0.00081	mg/L	0.535	96	86	114	1	20
		Beryllium	67798-018	0.48	0.0011	0.00054	0.00011	mg/L	0.535	91	83	121	0	20
		Cadmium	67798-018	0.49	0.0011	0.00054	0.00015	mg/L	0.535	92	87	115	2	20
		Cobalt	67798-018	0.50	0.011	0.00054	0.00030	mg/L	0.535	93	86	115	1	20
		Chromium	67798-018	0.49	0.054	0.027	0.022	mg/L	0.535	92	85	116	1	20
		Copper	67798-018	0.50	0.011	0.0080	0.0057	mg/L	0.535	94	85	118	0	20
		Iron	67798-018	0.48	0.054	0.032	0.031	mg/L	0.535	91	87	118	1	20
		Potassium	67798-018	5.4	0.54	0.11	0.042	mg/L	5.35	87	87	115	3	20
		Magnesium	67798-018	9.5	0.11	0.021	0.0078	mg/L	0.53	116	83	118	1	20
		Manganese	67798-018	0.48	0.011	0.0054	0.0017	mg/L	0.535	90	87	115	2	20
		Sodium	67798-018	11	0.11	0.054	0.037	mg/L	5.3	91	85	117	1	20
		Nickel	67798-018	0.49	0.054	0.027	0.013	mg/L	0.535	91	85	117	1	20
		Lead	67798-018	0.50	0.0054	0.00054	0.00012	mg/L	0.535	93	88	115	0	20
		Antimony	67798-018	0.50	0.0011	0.00054	0.00015	mg/L	0.535	94	85	117	2	20
		Selenium	67798-018	0.45	0.011	0.0054	0.0040	mg/L	0.535	84	80	120	1	20
		Thallium	67798-018	0.25	0.0011	0.00086	0.00073	mg/L	0.268	95	82	116	2	20
		Vanadium	67798-018	0.50	0.011	0.0054	0.0019	mg/L	0.535	93	86	115	0	20
		Zinc	67798-018	0.48	0.011	0.0043	0.0022	mg/L	0.535	89	83	119	0	20

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R	Limits	RPD	RPD Limit
SW3005A6020A	BLK17194	Silver		0.00050 U	0.0050	0.00050	0.00011	mg/L					
		Aluminum		0.025 U	0.050	0.025	0.010	mg/L					
		Arsenic		0.0010 U	0.0050	0.0010	0.00067	mg/L					
		Barium		0.0010 U	0.010	0.0010	0.00076	mg/L					
		Beryllium		0.00050 U	0.0010	0.00050	0.00010	mg/L					
		Cadmium		0.00050 U	0.0010	0.00050	0.00014	mg/L					
		Cobalt		0.00010 U	0.010	0.00010	0.000020	mg/L					
		Chromium		0.025 U	0.050	0.025	0.020	mg/L					
		Copper		0.0075 U	0.010	0.0075	0.0054	mg/L					
		Iron		0.030 U	0.050	0.030	0.029	mg/L					
		Potassium		0.10 U	0.50	0.10	0.039	mg/L					
		Magnesium		0.020 U	0.10	0.020	0.0073	mg/L					
		Manganese		0.0050 U	0.010	0.0050	0.0016	mg/L					
		Sodium		0.050 U	0.10	0.050	0.034	mg/L					
		Nickel		0.025 U	0.050	0.025	0.013	mg/L					
		Lead		0.00050 U	0.0050	0.00050	0.00011	mg/L					
		Antimony		0.00050 U	0.0010	0.00050	0.00014	mg/L					
		Selenium		0.0050 U	0.010	0.0050	0.0037	mg/L					
		Thallium		0.00080 U	0.0010	0.00080	0.00068	mg/L					
		Vanadium		0.0050 U	0.010	0.0050	0.0018	mg/L					
		Zinc		0.0040 U	0.010	0.0040	0.0021	mg/L					
SW3005A6020A	LCS17194	Silver		0.23	0.0050	0.00050	0.00011	mg/L	0.25	92	85	116	
		Aluminum		0.48	0.050	0.025	0.010	mg/L	0.5	97	84	117	
		Arsenic		0.47	0.0050	0.0010	0.00067	mg/L	0.5	94	84	116	
		Barium		0.48	0.010	0.0010	0.00076	mg/L	0.5	95	86	114	
		Beryllium		0.42	0.0010	0.00050	0.00010	mg/L	0.5	85	83	121	
		Cadmium		0.46	0.0010	0.00050	0.00014	mg/L	0.5	91	87	115	
		Cobalt		0.48	0.010	0.00050	0.00028	mg/L	0.5	96	86	115	
		Chromium		0.47	0.050	0.025	0.020	mg/L	0.5	94	85	116	
		Copper		0.46	0.010	0.0075	0.0054	mg/L	0.5	92	85	118	
		Iron		0.48	0.050	0.030	0.029	mg/L	0.5	97	87	118	
		Potassium		4.7	0.50	0.10	0.039	mg/L	5	94	87	115	
		Magnesium		0.49	0.10	0.020	0.0073	mg/L	0.5	97	83	118	
		Manganese		0.50	0.010	0.0050	0.0016	mg/L	0.5	100	87	115	
		Sodium		4.8	0.10	0.050	0.034	mg/L	5	95	85	117	
		Nickel		0.48	0.050	0.025	0.013	mg/L	0.5	95	85	117	
		Lead		0.47	0.0050	0.00050	0.00011	mg/L	0.5	94	88	115	
		Antimony		0.43	0.0010	0.00050	0.00014	mg/L	0.5	87	85	117	
		Selenium		0.48	0.010	0.0050	0.0037	mg/L	0.5	96	80	120	
		Thallium		0.23	0.0010	0.00080	0.00068	mg/L	0.25	91	82	116	
		Vanadium		0.49	0.010	0.0050	0.0018	mg/L	0.5	98	86	115	
		Zinc		0.48	0.010	0.0040	0.0021	mg/L	0.5	96	83	119	

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R	Limits		RPD	RPD Limit
SW3005A6020A	LCSD17194	Silver		0.23	0.0050	0.00050	0.00011	mg/L	0.25	92	85	116	1	20
		Aluminum		0.49	0.050	0.025	0.010	mg/L	0.5	97	84	117	1	20
		Arsenic		0.48	0.0050	0.0010	0.00067	mg/L	0.5	95	84	116	2	20
		Barium		0.49	0.010	0.0010	0.00076	mg/L	0.5	98	86	114	3	20
		Beryllium		0.43	0.0010	0.00050	0.00010	mg/L	0.5	85	83	121	1	20
		Cadmium		0.46	0.0010	0.00050	0.00014	mg/L	0.5	93	87	115	1	20
		Cobalt		0.49	0.010	0.00050	0.00028	mg/L	0.5	99	86	115	2	20
		Chromium		0.47	0.050	0.025	0.020	mg/L	0.5	94	85	116	0	20
		Copper		0.46	0.010	0.0075	0.0054	mg/L	0.5	93	85	118	0	20
		Iron		0.50	0.050	0.030	0.029	mg/L	0.5	100	87	118	4	20
		Potassium		4.8	0.50	0.10	0.039	mg/L	5	95	87	115	1	20
		Magnesium		0.49	0.10	0.020	0.0073	mg/L	0.5	97	83	118	0	20
		Manganese		0.51	0.010	0.0050	0.0016	mg/L	0.5	101	87	115	1	20
		Sodium		4.8	0.10	0.050	0.034	mg/L	5	97	85	117	2	20
		Nickel		0.47	0.050	0.025	0.013	mg/L	0.5	95	85	117	0	20
		Lead		0.48	0.0050	0.00050	0.00011	mg/L	0.5	96	88	115	3	20
		Antimony		0.44	0.0010	0.00050	0.00014	mg/L	0.5	88	85	117	1	20
		Selenium		0.50	0.010	0.0050	0.0037	mg/L	0.5	100	80	120	4	20
		Thallium		0.23	0.0010	0.00080	0.00068	mg/L	0.25	92	82	116	2	20
		Vanadium		0.48	0.010	0.0050	0.0018	mg/L	0.5	97	86	115	2	20
		Zinc		0.49	0.010	0.0040	0.0021	mg/L	0.5	97	83	119	1	20
SW3005A6020A	MS17194	Silver	67798-007	0.22	0.0050	0.00050	0.00011	mg/L	0.25	90	85	116		
		Aluminum	67798-007	0.49	0.050	0.025	0.010	mg/L	0.5	99	84	117		
		Arsenic	67798-007	0.48	0.0050	0.0010	0.00067	mg/L	0.5	96	84	116		
		Barium	67798-007	0.54	0.010	0.0010	0.00076	mg/L	0.5	97	86	114		
		Beryllium	67798-007	0.44	0.0010	0.00050	0.00010	mg/L	0.5	87	83	121		
		Cadmium	67798-007	0.45	0.0010	0.00050	0.00014	mg/L	0.5	91	87	115		
		Cobalt	67798-007	0.49	0.010	0.00050	0.00028	mg/L	0.5	97	86	115		
		Chromium	67798-007	0.48	0.050	0.025	0.020	mg/L	0.5	95	85	116		
		Copper	67798-007	0.46	0.010	0.0075	0.0054	mg/L	0.5	92	85	118		
		Iron	67798-007	0.50	0.050	0.030	0.029	mg/L	0.5	99	87	118		
		Potassium	67798-007	5.5	0.50	0.10	0.039	mg/L	5	87	87	115		
		Magnesium	67798-007	9.9	0.10	0.020	0.0073	mg/L	0.5	94	83	118		
		Manganese	67798-007	0.50	0.010	0.0050	0.0016	mg/L	0.5	101	87	115		
		Sodium	67798-007	12	0.10	0.050	0.034	mg/L	5	94	85	117		
		Nickel	67798-007	0.47	0.050	0.025	0.013	mg/L	0.5	94	85	117		
		Lead	67798-007	0.48	0.0050	0.00050	0.00011	mg/L	0.5	96	88	115		
		Antimony	67798-007	0.44	0.0010	0.00050	0.00014	mg/L	0.5	87	85	117		
		Selenium	67798-007	0.50	0.010	0.0050	0.0037	mg/L	0.5	100	80	120		
		Thallium	67798-007	0.23	0.0010	0.00080	0.00068	mg/L	0.25	92	82	116		
		Vanadium	67798-007	0.51	0.010	0.0050	0.0018	mg/L	0.5	101	86	115		
		Zinc	67798-007	0.49	0.010	0.0040	0.0021	mg/L	0.5	97	83	119		

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R		Limits		RPD	RPD Limit
SW3005A6020A	MSD17194	Silver	67798-007	0.22	0.0050	0.00050	0.00011	mg/L	0.25	90		85	116	0	20
		Aluminum	67798-007	0.51	0.050	0.025	0.010	mg/L	0.5	102		84	117	3	20
		Arsenic	67798-007	0.48	0.0050	0.0010	0.00067	mg/L	0.5	95		84	116	1	20
		Barium	67798-007	0.53	0.010	0.0010	0.00076	mg/L	0.5	95		86	114	2	20
		Beryllium	67798-007	0.43	0.0010	0.00050	0.00010	mg/L	0.5	86		83	121	1	20
		Cadmium	67798-007	0.45	0.0010	0.00050	0.00014	mg/L	0.5	90		87	115	1	20
		Cobalt	67798-007	0.48	0.010	0.00050	0.00028	mg/L	0.5	96		86	115	1	20
		Chromium	67798-007	0.48	0.050	0.025	0.020	mg/L	0.5	96		85	116	0	20
		Copper	67798-007	0.45	0.010	0.0075	0.0054	mg/L	0.5	91		85	118	1	20
		Iron	67798-007	0.51	0.050	0.030	0.029	mg/L	0.5	101		87	118	2	20
		Potassium	67798-007	5.5	0.50	0.10	0.039	mg/L	5	86	*	87	115	1	20
		Magnesium	67798-007	9.9	0.10	0.020	0.0073	mg/L	0.5	98		83	118	0	20
		Manganese	67798-007	0.51	0.010	0.0050	0.0016	mg/L	0.5	101		87	115	1	20
		Sodium	67798-007	12	0.10	0.050	0.034	mg/L	5	92		85	117	1	20
		Nickel	67798-007	0.47	0.050	0.025	0.013	mg/L	0.5	94		85	117	1	20
		Lead	67798-007	0.49	0.0050	0.00050	0.00011	mg/L	0.5	98		88	115	2	20
		Antimony	67798-007	0.43	0.0010	0.00050	0.00014	mg/L	0.5	87		85	117	1	20
		Selenium	67798-007	0.49	0.010	0.0050	0.0037	mg/L	0.5	97		80	120	3	20
		Thallium	67798-007	0.23	0.0010	0.00080	0.00068	mg/L	0.25	91		82	116	0	20
		Vanadium	67798-007	0.50	0.010	0.0050	0.0018	mg/L	0.5	101		86	115	0	20
		Zinc	67798-007	0.48	0.010	0.0040	0.0021	mg/L	0.5	96		83	119	1	20

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R	Limits	RPD	RPD Limit
SW3005A6020A	BLK17205	Silver		0.00050 U	0.0050	0.00050	0.00011	mg/L					
		Aluminum		0.020 J	0.050	0.025	0.010	mg/L					
		Arsenic		0.0010 U	0.0050	0.0010	0.00067	mg/L					
		Barium		0.0010 U	0.010	0.0010	0.00076	mg/L					
		Beryllium		0.00050 U	0.0010	0.00050	0.00010	mg/L					
		Cadmium		0.00050 U	0.0010	0.00050	0.00014	mg/L					
		Cobalt		0.00010 U	0.010	0.00010	0.000020	mg/L					
		Chromium		0.025 U	0.050	0.025	0.020	mg/L					
		Copper		0.0075 U	0.010	0.0075	0.0054	mg/L					
		Iron		0.030 U	0.050	0.030	0.029	mg/L					
		Potassium		0.10 U	0.50	0.10	0.039	mg/L					
		Magnesium		0.020 U	0.10	0.020	0.0073	mg/L					
		Manganese		0.0050 U	0.010	0.0050	0.0016	mg/L					
		Sodium		0.050 U	0.10	0.050	0.034	mg/L					
		Nickel		0.025 U	0.050	0.025	0.013	mg/L					
		Lead		0.00050 U	0.0050	0.00050	0.00011	mg/L					
		Antimony		0.00050 U	0.0010	0.00050	0.00014	mg/L					
		Selenium		0.0050 U	0.010	0.0050	0.0037	mg/L					
		Thallium		0.00080 U	0.0010	0.00080	0.00068	mg/L					
		Vanadium		0.0050 U	0.010	0.0050	0.0018	mg/L					
		Zinc		0.0040 U	0.010	0.0040	0.0021	mg/L					
SW3005A6020A	LCS17205	Silver		0.24	0.0050	0.00050	0.00011	mg/L	0.25	98	85	116	
		Aluminum		0.50	0.050	0.025	0.010	mg/L	0.5	99	84	117	
		Arsenic		0.49	0.0050	0.0010	0.00067	mg/L	0.5	98	84	116	
		Barium		0.49	0.010	0.0010	0.00076	mg/L	0.5	99	86	114	
		Beryllium		0.48	0.0010	0.00050	0.00010	mg/L	0.5	95	83	121	
		Cadmium		0.49	0.0010	0.00050	0.00014	mg/L	0.5	99	87	115	
		Cobalt		0.51	0.010	0.00050	0.00028	mg/L	0.5	103	86	115	
		Chromium		0.50	0.050	0.025	0.020	mg/L	0.5	100	85	116	
		Copper		0.52	0.010	0.0075	0.0054	mg/L	0.5	105	85	118	
		Iron		0.51	0.050	0.030	0.029	mg/L	0.5	102	87	118	
		Potassium		4.8	0.50	0.10	0.039	mg/L	5	97	87	115	
		Magnesium		0.49	0.10	0.020	0.0073	mg/L	0.5	98	83	118	
		Manganese		0.49	0.010	0.0050	0.0016	mg/L	0.5	98	87	115	
		Sodium		4.9	0.10	0.050	0.034	mg/L	5	98	85	117	
		Nickel		0.50	0.050	0.025	0.013	mg/L	0.5	101	85	117	
		Lead		0.48	0.0050	0.00050	0.00011	mg/L	0.5	97	88	115	
		Antimony		0.49	0.0010	0.00050	0.00014	mg/L	0.5	98	85	117	
		Selenium		0.47	0.010	0.0050	0.0037	mg/L	0.5	93	80	120	
		Thallium		0.24	0.0010	0.00080	0.00068	mg/L	0.25	98	82	116	
		Vanadium		0.51	0.010	0.0050	0.0018	mg/L	0.5	102	86	115	
		Zinc		0.50	0.010	0.0040	0.0021	mg/L	0.5	100	83	119	

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R	Limits		RPD	RPD Limit
SW3005A6020A	LCSD17205	Silver		0.24	0.0050	0.00050	0.00011	mg/L	0.25	96	85	116	2	20
		Aluminum		0.49	0.050	0.025	0.010	mg/L	0.5	98	84	117	2	20
		Arsenic		0.48	0.0050	0.0010	0.00067	mg/L	0.5	97	84	116	1	20
		Barium		0.49	0.010	0.0010	0.00076	mg/L	0.5	98	86	114	1	20
		Beryllium		0.47	0.0010	0.00050	0.00010	mg/L	0.5	94	83	121	2	20
		Cadmium		0.49	0.0010	0.00050	0.00014	mg/L	0.5	98	87	115	1	20
		Cobalt		0.51	0.010	0.00050	0.00028	mg/L	0.5	101	86	115	1	20
		Chromium		0.49	0.050	0.025	0.020	mg/L	0.5	98	85	116	2	20
		Copper		0.50	0.010	0.0075	0.0054	mg/L	0.5	101	85	118	4	20
		Iron		0.50	0.050	0.030	0.029	mg/L	0.5	100	87	118	2	20
		Potassium		4.7	0.50	0.10	0.039	mg/L	5	95	87	115	2	20
		Magnesium		0.48	0.10	0.020	0.0073	mg/L	0.5	96	83	118	2	20
		Manganese		0.48	0.010	0.0050	0.0016	mg/L	0.5	95	87	115	3	20
		Sodium		4.7	0.10	0.050	0.034	mg/L	5	95	85	117	4	20
		Nickel		0.49	0.050	0.025	0.013	mg/L	0.5	99	85	117	2	20
		Lead		0.48	0.0050	0.00050	0.00011	mg/L	0.5	96	88	115	1	20
		Antimony		0.50	0.0010	0.00050	0.00014	mg/L	0.5	100	85	117	1	20
		Selenium		0.46	0.010	0.0050	0.0037	mg/L	0.5	93	80	120	0	20
		Thallium		0.24	0.0010	0.00080	0.00068	mg/L	0.25	97	82	116	1	20
		Vanadium		0.49	0.010	0.0050	0.0018	mg/L	0.5	98	86	115	4	20
		Zinc		0.49	0.010	0.0040	0.0021	mg/L	0.5	97	83	119	3	20
SW3005A6020A	MS17205	Silver	67839-015	0.23	0.0054	0.00054	0.00012	mg/L	0.268	87	85	116		
		Aluminum	67839-015	0.48	0.054	0.027	0.011	mg/L	0.535	90	84	117		
		Arsenic	67839-015	0.51	0.0054	0.0011	0.00072	mg/L	0.535	92	84	116		
		Barium	67839-015	0.57	0.011	0.0011	0.00081	mg/L	0.535	92	86	114		
		Beryllium	67839-015	0.48	0.0011	0.00054	0.00011	mg/L	0.535	89	83	121		
		Cadmium	67839-015	0.49	0.0011	0.00054	0.00015	mg/L	0.535	91	87	115		
		Cobalt	67839-015	0.49	0.011	0.00054	0.00030	mg/L	0.535	92	86	115		
		Chromium	67839-015	0.49	0.054	0.027	0.022	mg/L	0.535	91	85	116		
		Copper	67839-015	0.49	0.011	0.0080	0.0057	mg/L	0.535	91	85	118		
		Iron	67839-015	0.50	0.054	0.032	0.031	mg/L	0.535	93	87	118		
		Potassium	67839-015	11	0.54	0.11	0.042	mg/L	5.3	93	87	115		
		Magnesium	67839-015	23	0.11	0.021	0.0078	mg/L	0.5	100	83	118		
		Manganese	67839-015	0.75	0.011	0.0054	0.0017	mg/L	0.535	89	87	115		
		Sodium	67839-015	28	0.11	0.054	0.037	mg/L	5.3	99	85	117		
		Nickel	67839-015	0.48	0.054	0.027	0.013	mg/L	0.535	90	85	117		
		Lead	67839-015	0.50	0.0054	0.00054	0.00012	mg/L	0.535	93	88	115		
		Antimony	67839-015	0.51	0.0011	0.00054	0.00015	mg/L	0.535	94	85	117		
		Selenium	67839-015	0.47	0.011	0.0054	0.0040	mg/L	0.535	88	80	120		
		Thallium	67839-015	0.24	0.0011	0.00086	0.00073	mg/L	0.268	91	82	116		
		Vanadium	67839-015	0.50	0.011	0.0054	0.0019	mg/L	0.535	94	86	115		
		Zinc	67839-015	0.49	0.011	0.0043	0.0022	mg/L	0.535	91	83	119		

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R	Limits		RPD	RPD Limit
SW3005A6020A	MSD17205	Silver	67839-015	0.23	0.0054	0.00054	0.00012	mg/L	0.268	86	85	116	1	20
		Aluminum	67839-015	0.49	0.054	0.027	0.011	mg/L	0.535	91	84	117	0	20
		Arsenic	67839-015	0.51	0.0054	0.0011	0.00072	mg/L	0.535	91	84	116	1	20
		Barium	67839-015	0.58	0.011	0.0011	0.00081	mg/L	0.535	93	86	114	1	20
		Beryllium	67839-015	0.47	0.0011	0.00054	0.00011	mg/L	0.535	88	83	121	1	20
		Cadmium	67839-015	0.49	0.0011	0.00054	0.00015	mg/L	0.535	91	87	115	0	20
		Cobalt	67839-015	0.50	0.011	0.00054	0.00030	mg/L	0.535	94	86	115	2	20
		Chromium	67839-015	0.50	0.054	0.027	0.022	mg/L	0.535	93	85	116	2	20
		Copper	67839-015	0.49	0.011	0.0080	0.0057	mg/L	0.535	91	85	118	1	20
		Iron	67839-015	0.50	0.054	0.032	0.031	mg/L	0.535	93	87	118	1	20
		Potassium	67839-015	11	0.54	0.11	0.042	mg/L	5.3	87	87	115	3	20
		Magnesium	67839-015	23	0.11	0.021	0.0078	mg/L	0.5	80	83	118	0	20
		Manganese	67839-015	0.75	0.011	0.0054	0.0017	mg/L	0.535	89	87	115	0	20
		Sodium	67839-015	28	0.11	0.054	0.037	mg/L	5.3	87	85	117	2	20
		Nickel	67839-015	0.48	0.054	0.027	0.013	mg/L	0.535	90	85	117	0	20
		Lead	67839-015	0.49	0.0054	0.00054	0.00012	mg/L	0.535	91	88	115	1	20
		Antimony	67839-015	0.50	0.0011	0.00054	0.00015	mg/L	0.535	94	85	117	1	20
		Selenium	67839-015	0.46	0.011	0.0054	0.0040	mg/L	0.535	85	80	120	3	20
		Thallium	67839-015	0.24	0.0011	0.00086	0.00073	mg/L	0.268	91	82	116	0	20
		Vanadium	67839-015	0.50	0.011	0.0054	0.0019	mg/L	0.535	94	86	115	0	20
		Zinc	67839-015	0.48	0.011	0.0043	0.0022	mg/L	0.535	90	83	119	1	20

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R	Limits	RPD	RPD Limit
SW3005A6020A	BLK17218	Silver		0.00050 U	0.0050	0.00050	0.00011	mg/L					
		Aluminum		0.019 J	0.050	0.025	0.010	mg/L					
		Arsenic		0.0010 U	0.0050	0.0010	0.00067	mg/L					
		Barium		0.0010 U	0.010	0.0010	0.00076	mg/L					
		Beryllium		0.00050 U	0.0010	0.00050	0.00010	mg/L					
		Cadmium		0.00050 U	0.0010	0.00050	0.00014	mg/L					
		Cobalt		0.000021 J	0.010	0.00010	0.000020	mg/L					
		Chromium		0.025 U	0.050	0.025	0.020	mg/L					
		Copper		0.0075 U	0.010	0.0075	0.0054	mg/L					
		Iron		0.030 U	0.050	0.030	0.029	mg/L					
		Potassium		0.059 J	0.50	0.10	0.039	mg/L					
		Magnesium		0.020 U	0.10	0.020	0.0073	mg/L					
		Manganese		0.0050 U	0.010	0.0050	0.0016	mg/L					
		Sodium		0.050 U	0.10	0.050	0.034	mg/L					
		Nickel		0.025 U	0.050	0.025	0.013	mg/L					
		Lead		0.00050 U	0.0050	0.00050	0.00011	mg/L					
		Antimony		0.00022 J	0.0010	0.00050	0.00014	mg/L					
		Selenium		0.0050 U	0.010	0.0050	0.0037	mg/L					
		Thallium		0.00080 U	0.0010	0.00080	0.00068	mg/L					
		Vanadium		0.0050 U	0.010	0.0050	0.0018	mg/L					
		Zinc		0.0032 J	0.010	0.0040	0.0021	mg/L					
SW3005A6020A	LCS17218	Silver		0.26	0.0050	0.00050	0.00011	mg/L	0.25	103	85	116	
		Aluminum		0.55	0.050	0.025	0.010	mg/L	0.5	110	84	117	
		Arsenic		0.54	0.0050	0.0010	0.00067	mg/L	0.5	108	84	116	
		Barium		0.49	0.010	0.0010	0.00076	mg/L	0.5	99	86	114	
		Beryllium		0.47	0.0010	0.00050	0.00010	mg/L	0.5	95	83	121	
		Cadmium		0.46	0.0010	0.00050	0.00014	mg/L	0.5	92	87	115	
		Cobalt		0.53	0.010	0.00050	0.00028	mg/L	0.5	105	86	115	
		Chromium		0.52	0.050	0.025	0.020	mg/L	0.5	104	85	116	
		Copper		0.51	0.010	0.0075	0.0054	mg/L	0.5	103	85	118	
		Iron		0.52	0.050	0.030	0.029	mg/L	0.5	103	87	118	
		Potassium		5.2	0.50	0.10	0.039	mg/L	5	103	87	115	
		Magnesium		0.47	0.10	0.020	0.0073	mg/L	0.5	93	83	118	
		Manganese		0.48	0.010	0.0050	0.0016	mg/L	0.5	96	87	115	
		Sodium		5.1	0.10	0.050	0.034	mg/L	5	102	85	117	
		Nickel		0.54	0.050	0.025	0.013	mg/L	0.5	108	85	117	
		Lead		0.49	0.0050	0.00050	0.00011	mg/L	0.5	99	88	115	
		Antimony		0.48	0.0010	0.00050	0.00014	mg/L	0.5	96	85	117	
		Selenium		0.47	0.010	0.0050	0.0037	mg/L	0.5	94	80	120	
		Thallium		0.26	0.0010	0.00080	0.00068	mg/L	0.25	102	82	116	
		Vanadium		0.51	0.010	0.0050	0.0018	mg/L	0.5	102	86	115	
		Zinc		0.53	0.010	0.0040	0.0021	mg/L	0.5	106	83	119	

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R	Limits		RPD	RPD Limit
SW3005A6020A	LCSD17218	Silver		0.27	0.0050	0.00050	0.00011	mg/L	0.25	109	85	116	6	20
		Aluminum		0.55	0.050	0.025	0.010	mg/L	0.5	111	84	117	1	20
		Arsenic		0.55	0.0050	0.0010	0.00067	mg/L	0.5	111	84	116	2	20
		Barium		0.51	0.010	0.0010	0.00076	mg/L	0.5	102	86	114	4	20
		Beryllium		0.50	0.0010	0.00050	0.00010	mg/L	0.5	99	83	121	5	20
		Cadmium		0.49	0.0010	0.00050	0.00014	mg/L	0.5	97	87	115	5	20
		Cobalt		0.54	0.010	0.00050	0.00028	mg/L	0.5	109	86	115	3	20
		Chromium		0.54	0.050	0.025	0.020	mg/L	0.5	108	85	116	4	20
		Copper		0.53	0.010	0.0075	0.0054	mg/L	0.5	106	85	118	3	20
		Iron		0.53	0.050	0.030	0.029	mg/L	0.5	106	87	118	3	20
		Potassium		5.4	0.50	0.10	0.039	mg/L	5	107	87	115	4	20
		Magnesium		0.49	0.10	0.020	0.0073	mg/L	0.5	97	83	118	4	20
		Manganese		0.49	0.010	0.0050	0.0016	mg/L	0.5	98	87	115	2	20
		Sodium		5.2	0.10	0.050	0.034	mg/L	5	104	85	117	1	20
		Nickel		0.55	0.050	0.025	0.013	mg/L	0.5	111	85	117	2	20
		Lead		0.52	0.0050	0.00050	0.00011	mg/L	0.5	103	88	115	4	20
		Antimony		0.51	0.0010	0.00050	0.00014	mg/L	0.5	101	85	117	5	20
		Selenium		0.49	0.010	0.0050	0.0037	mg/L	0.5	98	80	120	4	20
		Thallium		0.27	0.0010	0.00080	0.00068	mg/L	0.25	108	82	116	5	20
		Vanadium		0.52	0.010	0.0050	0.0018	mg/L	0.5	104	86	115	1	20
		Zinc		0.54	0.010	0.0040	0.0021	mg/L	0.5	108	83	119	3	20
SW3005A6020A	MS17218	Silver	67839-004	0.25	0.0050	0.00050	0.00011	mg/L	0.25	98	85	116		
		Aluminum	67839-004	0.55	0.050	0.025	0.010	mg/L	0.5	110	84	117		
		Arsenic	67839-004	0.55	0.0050	0.0010	0.00067	mg/L	0.5	105	84	116		
		Barium	67839-004	0.58	0.010	0.0010	0.00076	mg/L	0.5	99	86	114		
		Beryllium	67839-004	0.47	0.0010	0.00050	0.00010	mg/L	0.5	95	83	121		
		Cadmium	67839-004	0.44	0.0010	0.00050	0.00014	mg/L	0.5	89	87	115		
		Cobalt	67839-004	0.50	0.010	0.00050	0.00028	mg/L	0.5	100	86	115		
		Chromium	67839-004	0.51	0.050	0.025	0.020	mg/L	0.5	102	85	116		
		Copper	67839-004	0.46	0.010	0.0075	0.0054	mg/L	0.5	91	85	118		
		Iron	67839-004	0.50	0.050	0.030	0.029	mg/L	0.5	99	87	118		
		Potassium	67839-004	12	0.50	0.10	0.039	mg/L	5	98	87	115		
		Magnesium	67839-004	24	0.10	0.020	0.0073	mg/L	0.5	218	83	118		
		Manganese	67839-004	0.72	0.010	0.0050	0.0016	mg/L	0.5	92	87	115		
		Sodium	67839-004	30	0.10	0.050	0.034	mg/L	5	102	85	117		
		Nickel	67839-004	0.51	0.050	0.025	0.013	mg/L	0.5	101	85	117		
		Lead	67839-004	0.48	0.0050	0.00050	0.00011	mg/L	0.5	96	88	115		
		Antimony	67839-004	0.48	0.0010	0.00050	0.00014	mg/L	0.5	95	85	117		
		Selenium	67839-004	0.46	0.010	0.0050	0.0037	mg/L	0.5	92	80	120		
		Thallium	67839-004	0.25	0.0010	0.00080	0.00068	mg/L	0.25	101	82	116		
		Vanadium	67839-004	0.50	0.010	0.0050	0.0018	mg/L	0.5	100	86	115		
		Zinc	67839-004	0.50	0.010	0.0040	0.0021	mg/L	0.5	99	83	119		

Method	QC ID	Parameter	Associated Sample	Result	LOQ	LOD	DL	Units	Added	%R	Limits		RPD	RPD Limit
SW3005A6020A	MSD17218	Silver	67839-004	0.26	0.0050	0.00050	0.00011	mg/L	0.25	103	85	116	5	20
		Aluminum	67839-004	0.55	0.050	0.025	0.010	mg/L	0.5	110	84	117	0	20
		Arsenic	67839-004	0.53	0.0050	0.0010	0.00067	mg/L	0.5	101	84	116	4	20
		Barium	67839-004	0.61	0.010	0.0010	0.00076	mg/L	0.5	105	86	114	5	20
		Beryllium	67839-004	0.49	0.0010	0.00050	0.00010	mg/L	0.5	97	83	121	3	20
		Cadmium	67839-004	0.47	0.0010	0.00050	0.00014	mg/L	0.5	94	87	115	5	20
		Cobalt	67839-004	0.48	0.010	0.00050	0.00028	mg/L	0.5	96	86	115	4	20
		Chromium	67839-004	0.49	0.050	0.025	0.020	mg/L	0.5	98	85	116	4	20
		Copper	67839-004	0.49	0.010	0.0075	0.0054	mg/L	0.5	98	85	118	7	20
		Iron	67839-004	0.55	0.050	0.030	0.029	mg/L	0.5	110	87	118	11	20
		Potassium	67839-004	12	0.50	0.10	0.039	mg/L	5	93	87	115	2	20
		Magnesium	67839-004	23	0.10	0.020	0.0073	mg/L	0.5	32	83	118	4	20
		Manganese	67839-004	0.76	0.010	0.0050	0.0016	mg/L	0.5	101	87	115	7	20
		Sodium	67839-004	29	0.10	0.050	0.034	mg/L	5	82	85	117	3	20
		Nickel	67839-004	0.48	0.050	0.025	0.013	mg/L	0.5	97	85	117	5	20
		Lead	67839-004	0.50	0.0050	0.00050	0.00011	mg/L	0.5	100	88	115	4	20
		Antimony	67839-004	0.50	0.0010	0.00050	0.00014	mg/L	0.5	100	85	117	6	20
		Selenium	67839-004	0.46	0.010	0.0050	0.0037	mg/L	0.5	93	80	120	1	20
		Thallium	67839-004	0.26	0.0010	0.00080	0.00068	mg/L	0.25	105	82	116	4	20
		Vanadium	67839-004	0.50	0.010	0.0050	0.0018	mg/L	0.5	101	86	115	1	20
		Zinc	67839-004	0.48	0.010	0.0040	0.0021	mg/L	0.5	95	83	119	4	20
SW7470A	BLK17202	Mercury		0.00015 U	0.00020	0.00015	0.00012	mg/L						
SW7470A	LCS17202	Mercury		0.0021	0.00020	0.00015	0.00012	mg/L	0.002	104	82	119		
SW7470A	LCSD17202	Mercury		0.0021	0.00020	0.00015	0.00012	mg/L	0.002	103	82	119	0	20
SW7470A	MS17202	Mercury	67798-012	0.0018	0.00020	0.00015	0.00012	mg/L	0.002	91	82	119		
SW7470A	MSD17202	Mercury	67798-012	0.0017	0.00020	0.00015	0.00012	mg/L	0.002	84	82	119	8	20
SW7470A	BLK17206	Mercury		0.00015 U	0.00020	0.00015	0.00012	mg/L						
SW7470A	LCS17206	Mercury		0.0020	0.00020	0.00015	0.00012	mg/L	0.002	99	82	119		
SW7470A	LCSD17206	Mercury		0.0019	0.00020	0.00015	0.00012	mg/L	0.002	96	82	119	3	20
SW7470A	MS17206	Mercury	67798-018	0.0019	0.00020	0.00015	0.00012	mg/L	0.002	95	82	119		
SW7470A	MSD17206	Mercury	67798-018	0.0020	0.00020	0.00015	0.00012	mg/L	0.002	98	82	119	3	20

AROMATIC HYDROCARBON BREAKTHROUGH CALCULATION

Method: MADEP EPH 2019 Rev 2.1

	lcs17156 Aliphatic Breakthrough (%)	Acceptance Criteria	Date of Analysis
naphthalene	0.1%	<5.0%	12/7/2023
2-methylnaphthalene	0.1%	<5.0%	12/7/2023

	lcsd17156 Aliphatic Breakthrough (%)	Acceptance Criteria	Date of Analysis
naphthalene	0.0%	<5.0%	12/7/2023
2-methylnaphthalene	0.1%	<5.0%	12/7/2023

AROMATIC HYDROCARBON BREAKTHROUGH CALCULATION

Method: MADEP EPH 2019 Rev 2.1

	lcsd17208 Aliphatic Breakthrough (%)	Acceptance Criteria	Date of Analysis
naphthalene	0.0%	<5.0%	12/8/2023
2-methylnaphthalene	0.0%	<5.0%	12/8/2023

	lcs17208 Aliphatic Breakthrough (%)	Acceptance Criteria	Date of Analysis
naphthalene	0.0%	<5.0%	12/8/2023
2-methylnaphthalene	0.0%	<5.0%	12/8/2023

Supporting Documentation & Chromatograms

Absolute Resource associates
124 Heritage Avenue Unit 16
Portsmouth, NH 03801
www.absoluteresourceassociates.com

This File:	L:\VOA\Excel Reports\2023\v8111621
Analysis Group:	8260/8021/624
Field ID:	SY-BRMW4-62-72-110923 1.8E+07
Sample:	67839-01 5mL Dow Salvage Yard
Misc:	5 CRE
Import File Name	v8 111623 g DoD
TestGroupID	V8260DoD_A
Aqueous or Soil? (A or S)	A
Solid amount (g)	
Methanol volume (mL)	
Percent Solid (%)	
Soil Prep Date	
Weight:	
Volume:	
Lab#:	67839-001
AnalysisDate:	11/16/2023
AnalysisTime:	19:02
Dilution:	1
AnalyzedBy:	LMM v8111621.D
QC_Code:	
Prep#:	

Reviewer Checks:

- Quant Report: Reviewed, Analyst Initials & Date
- Chromatogram Checked, Major peaks identified
- Results consistent w/ other attached analyses
- Reanalysis reason noted
- Substitute dilution data checked
- Correct dilution and reason clear or noted
- Flags checked (Expiration, F+, Over Cal, Surr, Aspen, QC)
- Other QC failures or issues noted in Aspen
- Correct data file and/or date/time in Aspen

Notes:

Reviewer Initials & Date: 11/17/23

#	Surrogate Standards	Import Value (as ug/L)	Recovery	Flag	QC Limits	Surrogate True Values
32	SS 1,2-dichloroethane-D4	8.81	**88%**		60-140	10
36	SS dibromofluoromethane	9.79	**98%**		78-114	10
51	SS toluene-D8	9.96	**100%**		88-110	10
67	SS 4-bromofluorobenzene	10.00	**100%**		86-115	10
41	SS a,a,a-trifluorotoluene	0.00	**0%**		70-130*	20

	AnalyteName	Concentration (ug/L)		AnalyteName	Concentration (ug/L)
2	dichlorodifluoromethane	0	56	1,3-dichloropropane	0
3	chloromethane	0	57	dibromochloromethane	0
4	vinyl chloride	0	58	1,2-dibromoethane (EDB)	0
5	bromomethane	0	59	chlorobenzene	0
6	chloroethane	0	60	1,1,1,2-tetrachloroethane	0
7	trichlorofluoromethane	0	61	ethylbenzene	-0.126206879
8	diethylether	0	62	m&p-xylenes	0
9	acetone	2.708181448	63	o-xylene	0
11	1,1-dichloroethene	0	64	styrene	0
13	t-butanol (TBA)	0	65	bromoform	0
15	methylene chloride	0	66	isopropylbenzene	0
16	carbon disulfide	0	69	bromobenzene	0
18	methyl-t-butyl ether (MTBE)	0	70	1,1,2,2-tetrachloroethane	0
19	trans-1,2-dichloroethene	0	71	1,2,3-trichloropropane	0
20	isopropyl ether (DIPE)	0	72	n-propylbenzene	0
22	1,1-dichloroethane	0	73	2-chlorotoluene	0
23	2-butanone (MEK)	**12.69052015**	74	4-chlorotoluene	0
24	ethyl-t-butyl ether (ETBE)	0	75	1,3,5-trimethylbenzene	0
25	2,2-dichloropropane	0	76	tert-butylbenzene	0
26	cis-1,2-dichloroethene	0	77	1,2,4-trimethylbenzene	0
27	bromochloromethane	0	79	sec-butylbenzene	0
28	chloroform	0.826259959	80	1,3-dichlorobenzene	0
29	tetrahydrofuran (THF)	0	81	4-isopropyltoluene	0
30	1,1,1-trichloroethane	0	82	1,4-dichlorobenzene	0
33	carbon tetrachloride	0	84	1,2-dichlorobenzene	0
34	1,1-dichloropropene	0	85	n-butylbenzene	0
35	benzene	0	86	1,2-dibromo-3-chloropropane (DBCP)	0
37	1,2-dichloroethane	0	88	1,2,4-trichlorobenzene	0
38	t-amyl-methyl ether (TAME)	0	89	hexachlorobutadiene	0
39	trichloroethene	0	90	naphthalene	0
42	1,2-dichloropropane	0	91	1,2,3-trichlorobenzene	0
43	dibromomethane	0	87	1,3,5-trichlorobenzene	0
44	bromodichloromethane	0	12	1,1,2-trichloro-1,2,2-trifluoroethane	0
45	1,4-dioxane	-2.1946385	14	methyl acetate	0
47	4-methyl-2-pentanone (MIBK)	0	21	vinyl acetate	0
48	2-hexanone	0	31	cyclohexane	0
49	cis-1,3-dichloropropene	0	40	methylcyclohexane	0
50	toluene	**1.520294692**	10	acrolein	0
52	trans-1,3-dichloropropene	0	17	acrylonitrile	0
53	1,1,2-trichloroethane	0	46	2-chloroethylvinylether (2-CEVE)	0
55	tetrachloroethene	0		Total Xylenes	0

Quantitation Report (QT Reviewed)

Data Path : X:\V8\2023\Nov23\111623\
Data File : v8111621.D
Acq On : 16 Nov 2023 07:02 pm
Operator : lmm
Sample : 67839-01 5mL
Misc : 5
ALS Vial : 21 Sample Multiplier: 1

11/17/23 @ 07:12
WillieS

Quant Time: Nov 17 06:45:21 2023
Quant Method : X:\V8\methods\V88260090823A.M
Quant Title : V5 Method 8260D
QLast Update : Mon Oct 30 11:37:50 2023
Response via : Initial Calibration

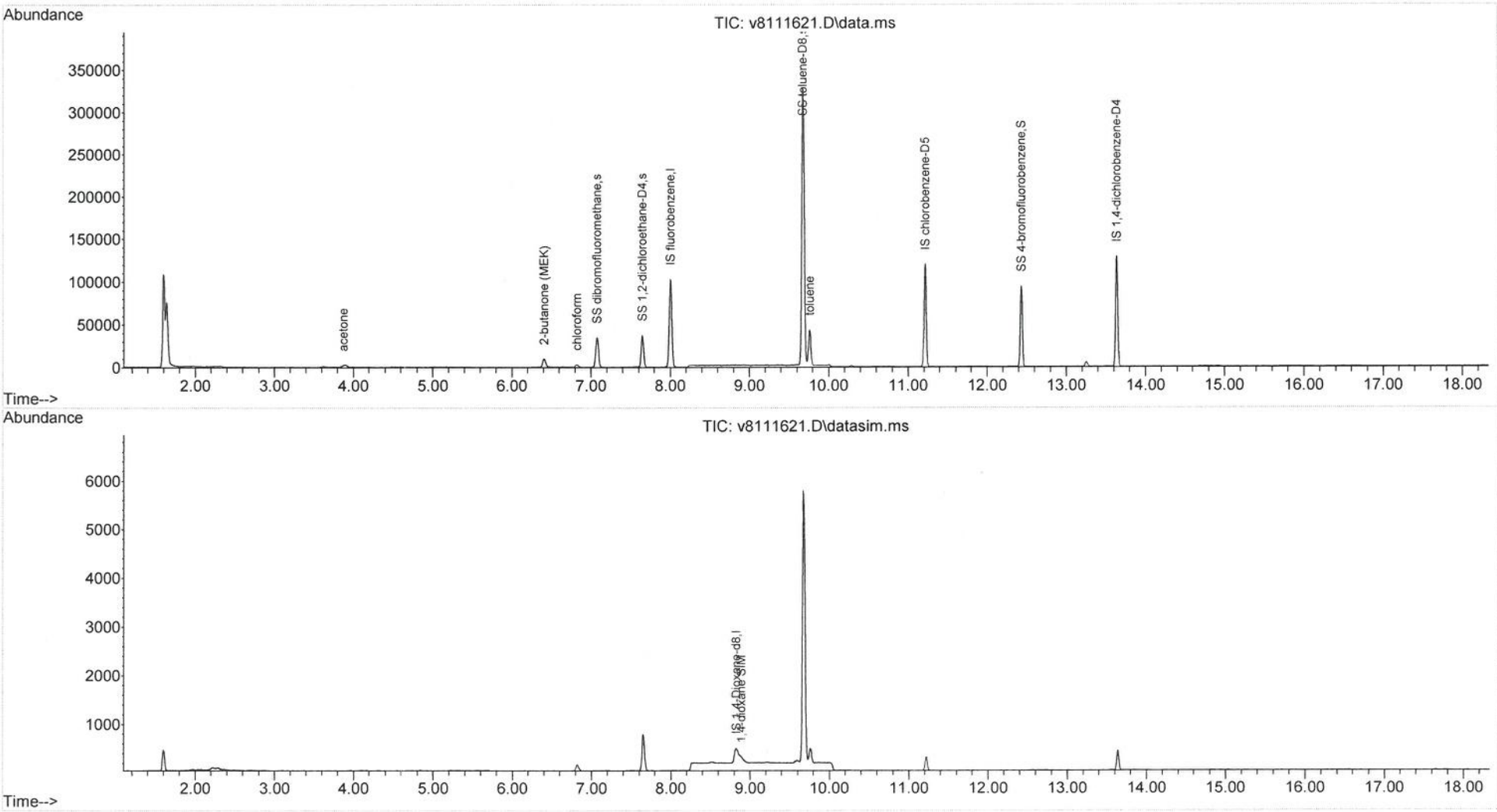
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) IS fluorobenzene	8.001	96	117879	10.00	ug/L	0.00
54) IS chlorobenzene-D5	11.216	119	27089	10.00	ug/L	0.00
68) IS 1,4-dichlorobenzene-D4	13.636	152	41890	10.00	ug/L	0.00
92) IS 1,4-Dioxane-d8	8.827	96	755	10.00	ug/L	# 0.00
System Monitoring Compounds						
32) SS 1,2-dichloroethane-D4	7.646	65	29688	8.81	ug/L	0.00
Spiked Amount 10.000	Range 60 - 140		Recovery = 88.10%			
36) SS dibromofluoromethane	7.076	111	28293	9.79	ug/L	0.00
Spiked Amount 10.000	Range 78 - 114		Recovery = 97.90%			
41) SS a,a,a-trifluorotoluene	0.000	146	0	0.00	ug/L	
Spiked Amount 20.000	Range 70 - 130		Recovery = 0.00%#			
51) SS toluene-D8	9.677	98	276988	9.96	ug/L	0.00
Spiked Amount 10.000	Range 88 - 110		Recovery = 99.60%			
67) SS 4-bromofluorobenzene	12.433	174	30961	10.00	ug/L	0.00
Spiked Amount 10.000	Range 86 - 115		Recovery = 100.00%			
83) NA 1,2-dichlorobenzene-D4	13.636	152	41890	0.00	ug/L	0.00
Spiked Amount 25.000	Range 15 - 25		Recovery = 0.00%#			
Target Compounds						Qvalue
9) acetone	3.873	43	2855	2.708	ug/L #	1
23) 2-butanone (MEK)	6.406	43	16651	12.691	ug/L	96
28) chloroform	6.821	83	3393	0.826	ug/L	90
50) toluene	9.760	92	23177	1.520	ug/L	89
93] 1,4-dioxane SIM	8.889	88	181	1.477	ug/L #	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : X:\V8\2023\Nov23\111623\
Data File : v8111621.D
Acq On : 16 Nov 2023 07:02 pm
Operator : lmm
Sample : 67839-01 5mL
Misc : 5
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Nov 17 06:45:21 2023
Quant Method : X:\V8\methods\V88260090823A.M
Quant Title : V5 Method 8260D
QLast Update : Mon Oct 30 11:37:50 2023
Response via : Initial Calibration



This File:	L:\VOA\Excel Reports\2023\v8111622
Analysis Group:	8260/8021/624
Field ID:	Y-BRMW40-62-72-110923 1.8E+07
Sample:	67839-02 5mL Dow Salvage Yard
Misc:	5 CRE
Import File Name	v8 111623 g DoD
TestGroupID	V8260DoD_A
Aqueous or Soil? (A or S)	A
Solid amount (g)	
Methanol volume (mL)	
Percent Solid (%)	
Soil Prep Date	
Weight:	
Volume:	
Lab#:	67839-002
AnalysisDate:	11/16/2023
AnalysisTime:	19:27
Dilution:	1
AnalyzedBy:	LMM v8111622.D
QC_Code:	
Prep#:	

Reviewer Checks:

- Quant Report: Reviewed, Analyst Initials & Date
- Chromatogram Checked, Major peaks identified
- Results consistent w/ other attached analyses
- Reanalysis reason noted
- Substitute dilution data checked
- Correct dilution and reason clear or noted
- Flags checked (Expiration, F+, Over Cal, Surr, Aspen, QC)
- Other QC failures or issues noted in Aspen
- Correct data file and/or date/time in Aspen

Notes:

11/17/23

Reviewer Initials & Date:

#	Surrogate Standards	Import Value (as ug/L)	Recovery	Flag	QC Limits	Surrogate True Values
32	SS 1,2-dichloroethane-D4	8.81	**88%**		60-140	10
36	SS dibromofluoromethane	9.61	**96%**		78-114	10
51	SS toluene-D8	9.99	**100%**		88-110	10
67	SS 4-bromofluorobenzene	9.59	**96%**		86-115	10
41	SS a,a,a-trifluorotoluene	0.00	**0%**		70-130*	20

	AnalyteName	Concentration (ug/L)	Flag
2	dichlorodifluoromethane	0	
3	chloromethane	0	
4	vinyl chloride	0	
5	bromomethane	0	
6	chloroethane	0	
7	trichlorofluoromethane	0	
8	diethylether	0	
9	acetone	3.468383951	
11	1,1-dichloroethene	0	
13	t-butanol (TBA)	0	
15	methylene chloride	0	
16	carbon disulfide	0	
18	methyl-t-butyl ether (MTBE)	0	
19	trans-1,2-dichloroethene	0	
20	isopropyl ether (DIPE)	0	
22	1,1-dichloroethane	0	
23	2-butanone (MEK)	**14.20296914**	
24	ethyl-t-butyl ether (ETBE)	0	
25	2,2-dichloropropane	0	
26	cis-1,2-dichloroethene	0	
27	bromochloromethane	0	
28	chloroform	0.89958759	
29	tetrahydrofuran (THF)	**3.353384274**	F+?
30	1,1,1-trichloroethane	0	
33	carbon tetrachloride	0	
34	1,1-dichloropropene	0	
35	benzene	0	
37	1,2-dichloroethane	0	
38	t-amyl-methyl ether (TAME)	0	
39	trichloroethene	0	
42	1,2-dichloropropane	0	
43	dibromomethane	0	
44	bromodichloromethane	0	
45	1,4-dioxane	0	
47	4-methyl-2-pentanone (MIBK)	0	
48	2-hexanone	0	
49	cis-1,3-dichloropropene	0	
50	toluene	**1.569947765**	
52	trans-1,3-dichloropropene	-1	
53	1,1,2-trichloroethane	0	
55	tetrachloroethene	0	

	AnalyteName	Concentration (ug/L)
56	1,3-dichloropropane	0
57	dibromochloromethane	0
58	1,2-dibromoethane (EDB)	0
59	chlorobenzene	0
60	1,1,1,2-tetrachloroethane	0
61	ethylbenzene	0
62	m&p-xylenes	0
63	o-xylene	0
64	styrene	0
65	bromoform	0
66	isopropylbenzene	0
69	bromobenzene	0
70	1,1,2,2-tetrachloroethane	0
71	1,2,3-trichloropropane	0
72	n-propylbenzene	0
73	2-chlorotoluene	0
74	4-chlorotoluene	0
75	1,3,5-trimethylbenzene	0
76	tert-butylbenzene	0
77	1,2,4-trimethylbenzene	0
79	sec-butylbenzene	0
80	1,3-dichlorobenzene	0
81	4-isopropyltoluene	0
82	1,4-dichlorobenzene	0
84	1,2-dichlorobenzene	0
85	n-butylbenzene	0
86	1,2-dibromo-3-chloropropane (DBCP)	0
88	1,2,4-trichlorobenzene	0
89	hexachlorobutadiene	0
90	naphthalene	0
91	1,2,3-trichlorobenzene	0
87	1,3,5-trichlorobenzene	0
12	1,1,2-trichloro-1,2,2-trifluoroethane	0
14	methyl acetate	0
21	vinyl acetate	0
31	cyclohexane	0
40	methylcyclohexane	0
10	acrolein	0
17	acrylonitrile	0
46	2-chloroethylvinylether (2-CEVE)	0
	Total Xylenes	0

Quantitation Report (QT Reviewed)

Data Path : X:\V8\2023\Nov23\111623\
Data File : v8111622.D
Acq On : 16 Nov 2023 07:27 pm
Operator : lmm
Sample : 67839-02 5mL
Misc : 5
ALS Vial : 22 Sample Multiplier: 1

11/17/23 @ 07:12
WillieS

Quant Time: Nov 17 06:45:25 2023
Quant Method : X:\V8\methods\V88260090823A.M
Quant Title : V5 Method 8260D
QLast Update : Mon Oct 30 11:37:50 2023
Response via : Initial Calibration

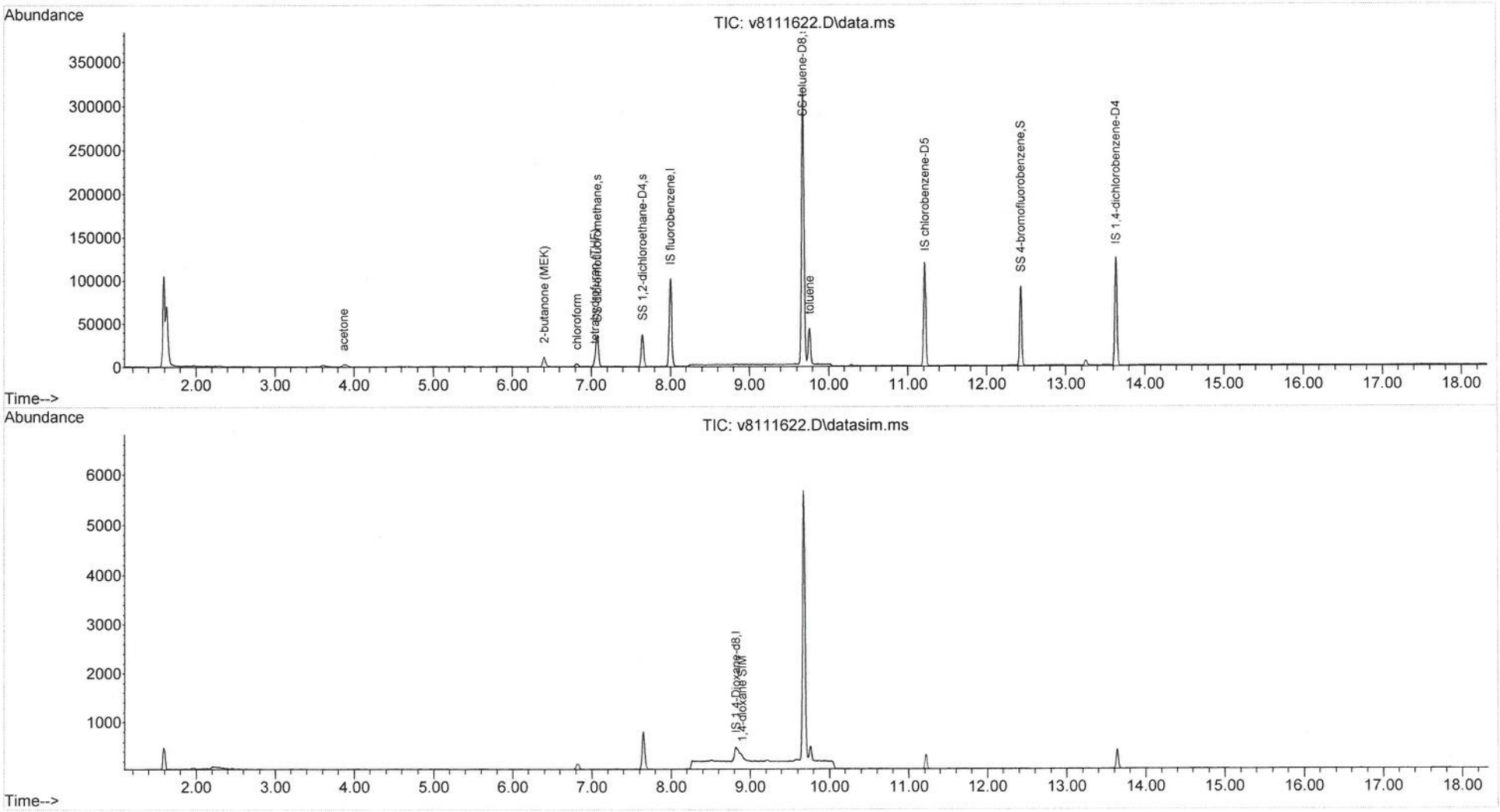
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) IS fluorobenzene	8.001	96	113795	10.00	ug/L	0.00
54) IS chlorobenzene-D5	11.218	119	27093	10.00	ug/L	0.00
68) IS 1,4-dichlorobenzene-D4	13.638	152	40793	10.00	ug/L	0.00
92) IS 1,4-Dioxane-d8	8.821	96	741	10.00	ug/L	# 0.00
System Monitoring Compounds						
32) SS 1,2-dichloroethane-D4	7.646	65	28681	8.81	ug/L	0.00
Spiked Amount 10.000	Range 60 - 140		Recovery = 88.10%			
36) SS dibromofluoromethane	7.076	111	26792	9.61	ug/L	0.00
Spiked Amount 10.000	Range 78 - 114		Recovery = 96.10%			
41) SS a,a,a-trifluorotoluene	0.000	146	0	0.00	ug/L	
Spiked Amount 20.000	Range 70 - 130		Recovery = 0.00%#			
51) SS toluene-D8	9.677	98	268226	9.99	ug/L	0.00
Spiked Amount 10.000	Range 88 - 110		Recovery = 99.90%			
67) SS 4-bromofluorobenzene	12.435	174	29704	9.59	ug/L	0.00
Spiked Amount 10.000	Range 86 - 115		Recovery = 95.90%			
83) NA 1,2-dichlorobenzene-D4	13.638	152	40793	0.00	ug/L	0.00
Spiked Amount 25.000	Range 15 - 25		Recovery = 0.00%#			
Target Compounds						Qvalue
9) acetone	3.868	43	3277	3.468	ug/L #	1
23) 2-butanone (MEK)	6.406	43	17929	14.203	ug/L	94
28) chloroform	6.816	83	3566	0.900	ug/L	93
29) tetrahydrofuran (THF)	7.044	42	2863	3.353	ug/L	90
50) toluene	9.760	92	23035	1.570	ug/L	87
93] 1,4-dioxane SIM	8.899	88	206	1.732	ug/L #	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : X:\V8\2023\Nov23\111623\
Data File : v8111622.D
Acq On : 16 Nov 2023 07:27 pm
Operator : lmm
Sample : 67839-02 5mL
Misc : 5
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Nov 17 06:45:25 2023
Quant Method : X:\V8\methods\V88260090823A.M
Quant Title : V5 Method 8260D
QLast Update : Mon Oct 30 11:37:50 2023
Response via : Initial Calibration



	L:\VOA\Excel Reports\2023\v8111634
Analysis Group:	8260/8021/624
Field ID:	-BRMW4-138-148-110923 1.8E+07
Sample:	67839-03 5mL Dow Salvage Yard
Misc:	5 CRE
Import File Name	v8 111623 h DoD
TestGroupID	V8260DoD_A
Aqueous or Soil? (A or S)	A
Solid amount (g)	
Methanol volume (mL)	
Percent Solid (%)	
Soil Prep Date	
Weight:	
Volume:	
Lab#:	67839-003
AnalysisDate:	11/17/2023
AnalysisTime:	00:24
Dilution:	1
AnalyzedBy:	LMM v8111634.D
QC_Code:	
Prep#:	

Reviewer Checks:

- Quant Report: Reviewed, Analyst Initials & Date
- Chromatogram Checked, Major peaks identified
- Results consistent w/ other attached analyses
- Reanalysis reason noted
- Substitute dilution data checked
- Correct dilution and reason clear or noted
- Flags checked (Expiration, F+, Over Cal, Surr, Aspen, QC)
- Other QC failures or issues noted in Aspen
- Correct data file and/or date/time in Aspen

Notes:

Reviewer Initials & Date: 11/17/23

#	Surrogate Standards	Import Value (as ug/L)	Recovery	Flag	QC Limits	Surrogate True Values
32	SS 1,2-dichloroethane-D4	8.76	**88%**		60-140	10
36	SS dibromofluoromethane	9.28	**93%**		78-114	10
51	SS toluene-D8	9.72	**97%**		88-110	10
67	SS 4-bromofluorobenzene	9.90	**99%**		86-115	10
41	SS a,a,a-trifluorotoluene	0.00	**0%**		70-130*	20

	AnalyteName	Concentration (ug/L)
2	dichlorodifluoromethane	0
3	chloromethane	0
4	vinyl chloride	0
5	bromomethane	0
6	chloroethane	0
7	trichlorofluoromethane	0
8	diethylether	0
9	acetone	-0.031460925
11	1,1-dichloroethene	0
13	t-butanol (TBA)	0
15	methylene chloride	0
16	carbon disulfide	0
18	methyl-t-butyl ether (MTBE)	0
19	trans-1,2-dichloroethene	0
20	isopropyl ether (DIPE)	0
22	1,1-dichloroethane	0
23	2-butanone (MEK)	**10.64592467**
24	ethyl-t-butyl ether (ETBE)	0
25	2,2-dichloropropane	0
26	cis-1,2-dichloroethene	0
27	bromochloromethane	0
28	chloroform	0.087254002
29	tetrahydrofuran (THF)	-0.062912179
30	1,1,1-trichloroethane	0
33	carbon tetrachloride	0
34	1,1-dichloropropene	0
35	benzene	0
37	1,2-dichloroethane	0
38	t-amyl-methyl ether (TAME)	0
39	trichloroethene	-0.059453352
42	1,2-dichloropropane	0
43	dibromomethane	0
44	bromodichloromethane	0
45	1,4-dioxane	0
47	4-methyl-2-pentanone (MIBK)	0
48	2-hexanone	0
49	cis-1,3-dichloropropene	0
50	toluene	**6.282793067**
52	trans-1,3-dichloropropene	0.024415085
53	1,1,2-trichloroethane	0
55	tetrachloroethene	0
56	1,3-dichloropropane	0
57	dibromochloromethane	0
58	1,2-dibromoethane (EDB)	0
59	chlorobenzene	0
60	1,1,1,2-tetrachloroethane	0
61	ethylbenzene	-0.10913116
62	m&p-xylenes	0
63	o-xylene	0
64	styrene	0
65	bromoform	0
66	isopropylbenzene	0
69	bromobenzene	0
70	1,1,2,2-tetrachloroethane	0
71	1,2,3-trichloropropane	0
72	n-propylbenzene	0
73	2-chlorotoluene	0
74	4-chlorotoluene	0
75	1,3,5-trimethylbenzene	0
76	tert-butylbenzene	0
77	1,2,4-trimethylbenzene	0.044175499
79	sec-butylbenzene	0
80	1,3-dichlorobenzene	0
81	4-isopropyltoluene	0
82	1,4-dichlorobenzene	0
84	1,2-dichlorobenzene	0
85	n-butylbenzene	0
86	1,2-dibromo-3-chloropropane (DBCP)	0
88	1,2,4-trichlorobenzene	0
89	hexachlorobutadiene	0
90	naphthalene	0
91	1,2,3-trichlorobenzene	0
87	1,3,5-trichlorobenzene	0
12	1,1,2-trichloro-1,2,2-trifluoroethane	0
14	methyl acetate	0
21	vinyl acetate	0
31	cyclohexane	0
40	methylcyclohexane	0
10	acrolein	0
17	acrylonitrile	0
46	2-chloroethylvinylether (2-CEVE)	0
	Total Xylenes	0

Quantitation Report (QT Reviewed)

Data Path : X:\V8\2023\Nov23\111623\
Data File : v8111634.D
Acq On : 17 Nov 2023 12:24 am
Operator : lmm
Sample : 67839-03 5mL
Misc : 5
ALS Vial : 34 Sample Multiplier: 1

11/17/23 @ 07:32
WillieS

Quant Time: Nov 17 06:46:15 2023
Quant Method : X:\V8\methods\V88260090823A.M
Quant Title : V5 Method 8260D
QLast Update : Mon Oct 30 11:37:50 2023
Response via : Initial Calibration

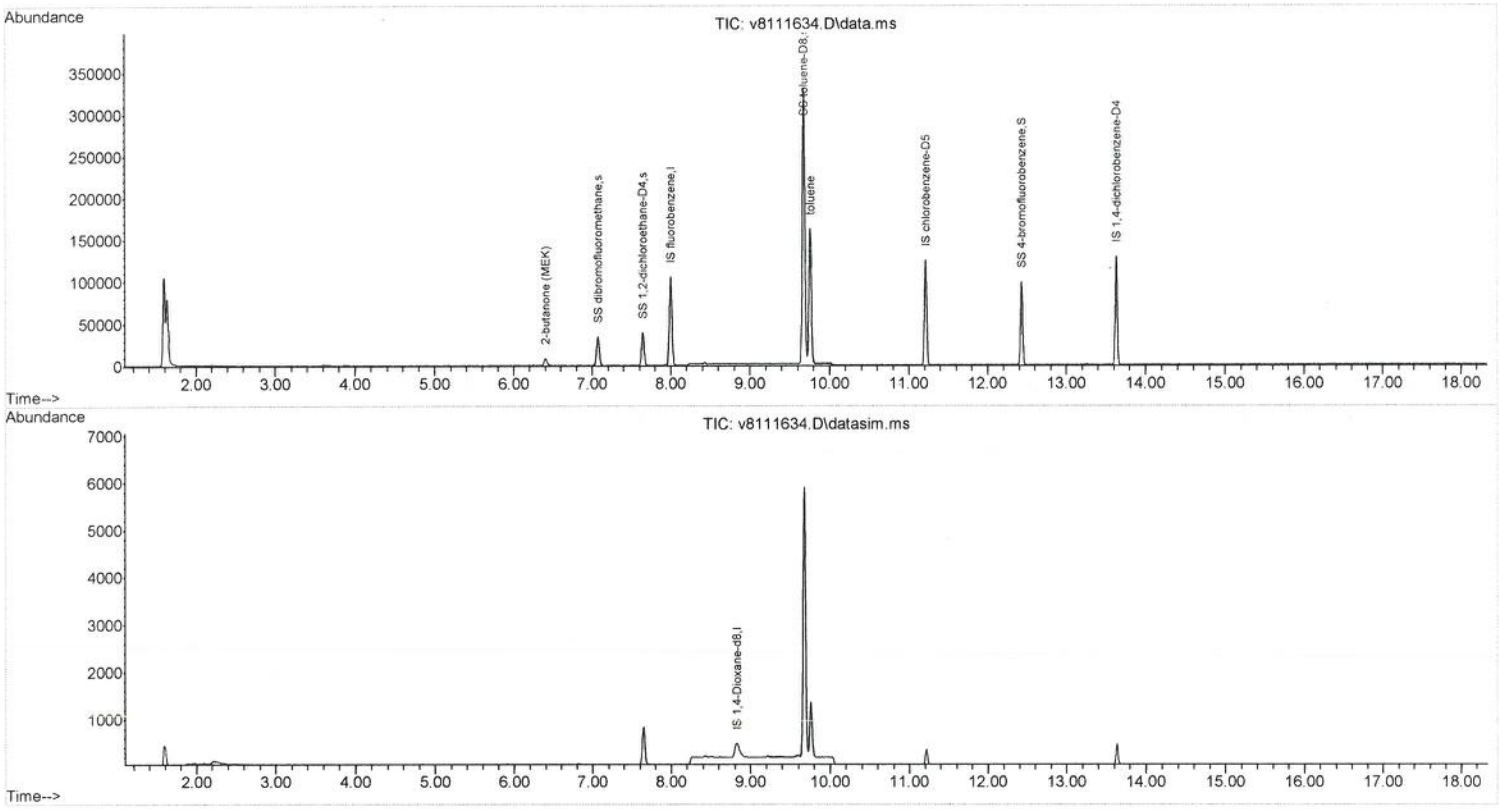
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) IS fluorobenzene	8.001	96	121590	10.00	ug/L	0.00
54) IS chlorobenzene-D5	11.217	119	28177	10.00	ug/L	0.00
68) IS 1,4-dichlorobenzene-D4	13.637	152	43157	10.00	ug/L	0.00
92) IS 1,4-Dioxane-d8	8.827	96	743	10.00	ug/L	# 0.00
System Monitoring Compounds						
32) SS 1,2-dichloroethane-D4	7.646	65	30462	8.76	ug/L	0.00
Spiked Amount 10.000	Range 60 - 140		Recovery = 87.60%			
36) SS dibromofluoromethane	7.076	111	27653	9.28	ug/L	0.00
Spiked Amount 10.000	Range 78 - 114		Recovery = 92.80%			
41) SS a,a,a-trifluorotoluene	0.000	146	0	0.00	ug/L	
Spiked Amount 20.000	Range 70 - 130		Recovery = 0.00%#			
51) SS toluene-D8	9.678	98	278690	9.72	ug/L	0.00
Spiked Amount 10.000	Range 88 - 110		Recovery = 97.20%			
67) SS 4-bromofluorobenzene	12.434	174	31896	9.90	ug/L	0.00
Spiked Amount 10.000	Range 86 - 115		Recovery = 99.00%			
83) NA 1,2-dichlorobenzene-D4	13.637	152	43157	0.00	ug/L	0.00
Spiked Amount 25.000	Range 15 - 25		Recovery = 0.00%#			
Target Compounds						Qvalue
23) 2-butanone (MEK)	6.406	43	14497	10.646	ug/L #	96
50) toluene	9.761	92	91648	6.283	ug/L #	85

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : X:\V8\2023\Nov23\111623\
Data File : v8111634.D
Acq On : 17 Nov 2023 12:24 am
Operator : lmm
Sample : 67839-03 5mL
Misc : 5
ALS Vial : 34 Sample Multiplier: 1

Quant Time: Nov 17 06:46:15 2023
Quant Method : X:\V8\methods\V88260090823A.M
Quant Title : V5 Method 8260D
QLast Update : Mon Oct 30 11:37:50 2023
Response via : Initial Calibration



This File:	L:\VOA\Excel Reports\2023\v8111635
Analysis Group:	8260/8021/624
Field ID:	SY-BRMW3-47-62-110923 1.8E+07
Sample:	67839-04 5mL Dow Salvage Yard
Misc:	5 CRE
Import File Name	v8 111623 h DoD
TestGroupID	V8260DoD_A
Aqueous or Soil? (A or S)	A
Solid amount (g)	
Methanol volume (mL)	
Percent Solid (%)	
Soil Prep Date	
Weight:	
Volume:	
Lab#:	67839-004
AnalysisDate:	11/17/2023
AnalysisTime:	00:49
Dilution:	1
AnalyzedBy:	LMM v8111635.D
QC_Code:	
Prep#:	

Reviewer Checks:

Quant Report: Reviewed, Analyst Initials & Date
Chromatogram Checked, Major peaks identified
Results consistent w/ other attached analyses
Reanalysis reason noted
Substitute dilution data checked
Correct dilution and reason clear or noted
Flags checked (Expiration, F+, Over Cal, Surr, Aspen, QC)
Other QC failures or issues noted in Aspen
Correct data file and/or date/time in Aspen

Notes:

Reviewer Initials & Date: 11/17/23

#	Surrogate Standards	Import Value (as ug/L)	Recovery	Flag	QC Limits	Surrogate True Values
32	SS 1,2-dichloroethane-D4	8.63	**86%**		60-140	10
36	SS dibromofluoromethane	9.37	**94%**		78-114	10
51	SS toluene-D8	10.02	**100%**		88-110	10
67	SS 4-bromofluorobenzene	10.16	**102%**		86-115	10
41	SS a,a,a-trifluorotoluene	0.00	**0%**		70-130*	20

	AnalyteName	Concentration (ug/L)		AnalyteName	Concentration (ug/L)
2	dichlorodifluoromethane	0	56	1,3-dichloropropane	0
3	chloromethane	0	57	dibromochloromethane	0
4	vinyl chloride	0	58	1,2-dibromoethane (EDB)	0
5	bromomethane	0	59	chlorobenzene	0
6	chloroethane	0	60	1,1,1,2-tetrachloroethane	0
7	trichlorofluoromethane	0	61	ethylbenzene	0
8	diethylether	0	62	m&p-xylenes	0
9	acetone	2.549062874	63	o-xylene	0
11	1,1-dichloroethene	0	64	styrene	0
13	t-butanol (TBA)	0	65	bromoform	0
15	methylene chloride	0	66	isopropylbenzene	0
16	carbon disulfide	0	69	bromobenzene	0
18	methyl-t-butyl ether (MTBE)	0	70	1,1,2,2-tetrachloroethane	0
19	trans-1,2-dichloroethene	0	71	1,2,3-trichloropropane	0.17669321
20	isopropyl ether (DIPE)	0	72	n-propylbenzene	0
22	1,1-dichloroethane	0	73	2-chlorotoluene	0
23	2-butanone (MEK)	-1	74	4-chlorotoluene	0
24	ethyl-t-butyl ether (ETBE)	0	75	1,3,5-trimethylbenzene	0
25	2,2-dichloropropane	0	76	tert-butylbenzene	0
26	cis-1,2-dichloroethene	0	77	1,2,4-trimethylbenzene	0
27	bromochloromethane	0	79	sec-butylbenzene	0
28	chloroform	0.279704711	80	1,3-dichlorobenzene	0
29	tetrahydrofuran (THF)	1.062579137	81	4-isopropyltoluene	0
30	1,1,1-trichloroethane	0	82	1,4-dichlorobenzene	0
33	carbon tetrachloride	0	84	1,2-dichlorobenzene	0
34	1,1-dichloropropene	0	85	n-butylbenzene	0
35	benzene	0.00481888	86	1,2-dibromo-3-chloropropane (DBCP)	0
37	1,2-dichloroethane	0	88	1,2,4-trichlorobenzene	0
38	t-amyl-methyl ether (TAME)	0	89	hexachlorobutadiene	0
39	trichloroethene	0	90	naphthalene	0
42	1,2-dichloropropane	0	91	1,2,3-trichlorobenzene	0
43	dibromomethane	0	87	1,3,5-trichlorobenzene	0
44	bromodichloromethane	0	12	1,1,2-trichloro-1,2,2-trifluoroethane	0
45	1,4-dioxane	0	14	methyl acetate	0
47	4-methyl-2-pentanone (MIBK)	0	21	vinyl acetate	0
48	2-hexanone	0	31	cyclohexane	0
49	cis-1,3-dichloropropene	0	40	methylcyclohexane	0
50	toluene	**12.01677457**	10	acrolein	0
52	trans-1,3-dichloropropene	0.081585431	17	acrylonitrile	0
53	1,1,2-trichloroethane	0	46	2-chloroethylvinylether (2-CEVE)	0
55	tetrachloroethene	0		Total Xylenes	0

Quantitation Report (QT Reviewed)

Data Path : X:\V8\2023\Nov23\111623\
Data File : v8111635.D
Acq On : 17 Nov 2023 12:49 am
Operator : lmm
Sample : 67839-04 5mL
Misc : 5
ALS Vial : 35 Sample Multiplier: 1

11/17/23 @ 07:32
WillieS

Quant Time: Nov 17 06:46:19 2023
Quant Method : X:\V8\methods\V88260090823A.M
Quant Title : V5 Method 8260D
QLast Update : Mon Oct 30 11:37:50 2023
Response via : Initial Calibration

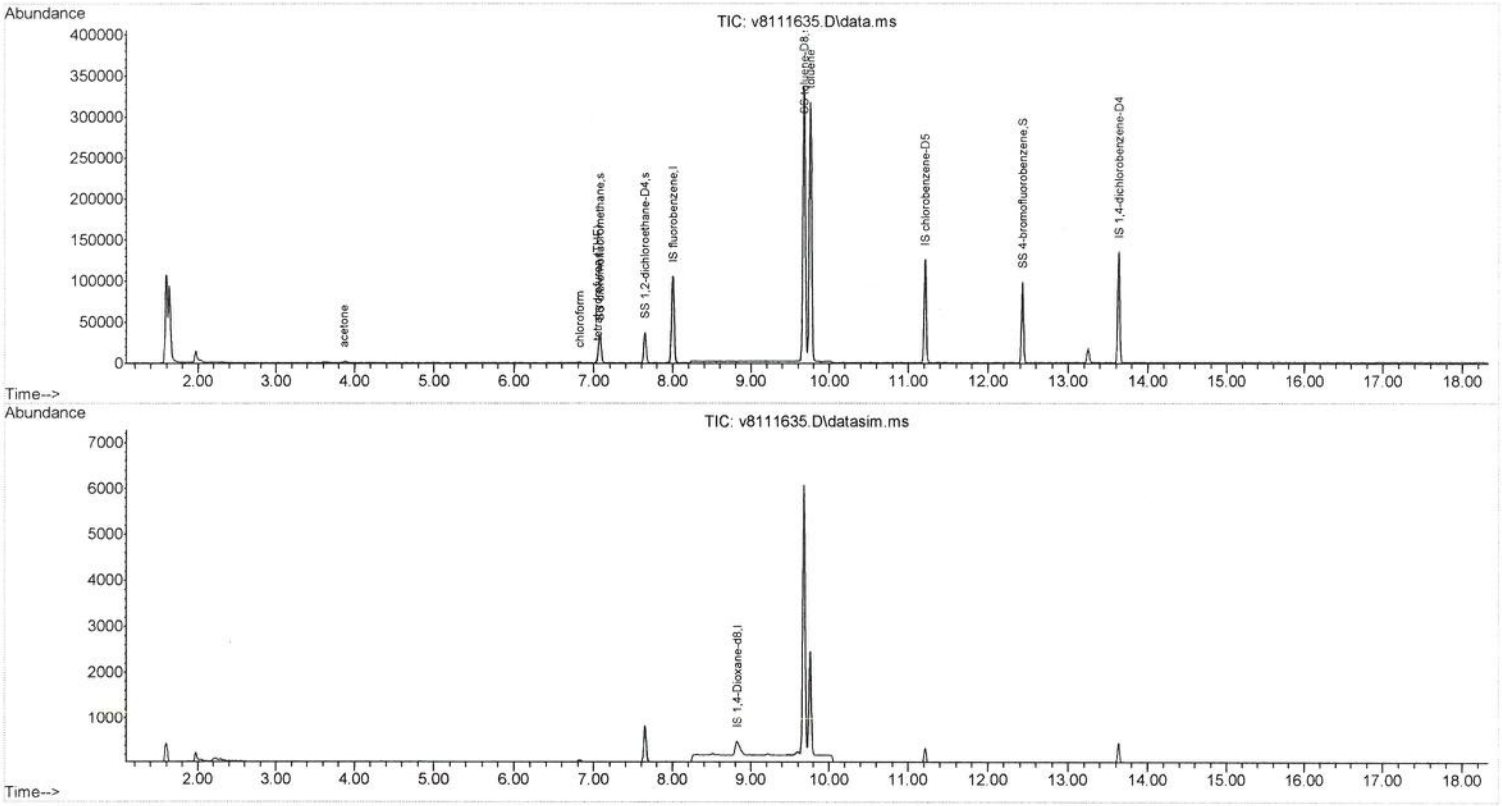
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) IS fluorobenzene	8.001	96	120585	10.00	ug/L	0.00
54) IS chlorobenzene-D5	11.217	119	27063	10.00	ug/L	0.00
68) IS 1,4-dichlorobenzene-D4	13.636	152	43035	10.00	ug/L	0.00
92) IS 1,4-Dioxane-d8	8.827	96	728	10.00	ug/L	0.00
System Monitoring Compounds						
32) SS 1,2-dichloroethane-D4	7.646	65	29754	8.63	ug/L	0.00
Spiked Amount 10.000	Range 60 - 140		Recovery = 86.30%			
36) SS dibromofluoromethane	7.076	111	27692	9.37	ug/L	0.00
Spiked Amount 10.000	Range 78 - 114		Recovery = 93.70%			
41) SS a,a,a-trifluorotoluene	0.000	146	0	0.00	ug/L	
Spiked Amount 20.000	Range 70 - 130		Recovery = 0.00%#			
51) SS toluene-D8	9.677	98	285098	10.02	ug/L	0.00
Spiked Amount 10.000	Range 88 - 110		Recovery = 100.20%			
67) SS 4-bromofluorobenzene	12.433	174	31445	10.16	ug/L	0.00
Spiked Amount 10.000	Range 86 - 115		Recovery = 101.60%			
83) NA 1,2-dichlorobenzene-D4	13.636	152	43035	0.00	ug/L	0.00
Spiked Amount 25.000	Range 15 - 25		Recovery = 0.00%#			
Target Compounds						Qvalue
9) acetone	3.864	43	2805	2.549	ug/L #	59
28) chloroform	6.821	83	1176	0.280	ug/L	93
29) tetrahydrofuran (THF)	7.049	42	1062	1.063	ug/L	82
50) toluene	9.760	92	171776	12.017	ug/L	94

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : X:\V8\2023\Nov23\111623\
Data File : v8111635.D
Acq On : 17 Nov 2023 12:49 am
Operator : lmm
Sample : 67839-04 5mL
Misc : 5
ALS Vial : 35 Sample Multiplier: 1

Quant Time: Nov 17 06:46:19 2023
Quant Method : X:\V8\methods\V88260090823A.M
Quant Title : V5 Method 8260D
QLast Update : Mon Oct 30 11:37:50 2023
Response via : Initial Calibration



WS 3766

This File:	L:\VOA\Excel Reports\2023\v8111636
Analysis Group:	8260/8021/624
Field ID:	-BRMW3-145-155-110923 1.8E+07
Sample:	67839-05 5mL Dow Salvage Yard
Misc:	5 CRE
Import File Name	v8 111623 h DoD
TestGroupID	V8260DoD_A
Aqueous or Soil? (A or S)	A
Solid amount (g)	
Methanol volume (mL)	
Percent Solid (%)	
Soil Prep Date	
Weight:	
Volume:	
Lab#:	67839-005
AnalysisDate:	11/17/2023
AnalysisTime:	01:14
Dilution:	1
AnalyzedBy:	LMM v8111636.D
QC_Code:	
Prep#:	

Reviewer Checks:

- Quant Report: Reviewed, Analyst Initials & Date
- Chromatogram Checked, Major peaks identified
- Results consistent w/ other attached analyses
- Reanalysis reason noted
- Substitute dilution data checked
- Correct dilution and reason clear or noted
- Flags checked (Expiration, F+, Over Cal, Surr, Aspen, QC)
- Other QC failures or issues noted in Aspen
- Correct data file and/or date/time in Aspen

Notes:

Reviewer Initials & Date: 11/17/23

#	Surrogate Standards	Import Value (as ug/L)	Recovery	Flag	QC Limits	Surrogate True Values
32	SS 1,2-dichloroethane-D4	8.72	87%		60-140	10
36	SS dibromofluoromethane	9.49	95%		78-114	10
51	SS toluene-D8	9.90	99%		88-110	10
67	SS 4-bromofluorobenzene	10.11	101%		86-115	10
41	SS a,a,a-trifluorotoluene	0.00	0%		70-130*	20

	AnalyteName	Concentration (ug/L)		AnalyteName	Concentration (ug/L)
2	dichlorodifluoromethane	0	56	1,3-dichloropropane	0
3	chloromethane	0	57	dibromochloromethane	0
4	vinyl chloride	0	58	1,2-dibromoethane (EDB)	0
5	bromomethane	0	59	chlorobenzene	0
6	chloroethane	0	60	1,1,1,2-tetrachloroethane	0
7	trichlorofluoromethane	0	61	ethylbenzene	0
8	diethylether	0	62	m&p-xylenes	0
9	acetone	-0.520694508	63	o-xylene	0
11	1,1-dichloroethene	0	64	styrene	0
13	t-butanol (TBA)	0	65	bromoform	0
15	methylene chloride	0	66	isopropylbenzene	0
16	carbon disulfide	0	69	bromobenzene	0
18	methyl-t-butyl ether (MTBE)	0.012777561	70	1,1,2,2-tetrachloroethane	0
19	trans-1,2-dichloroethene	0	71	1,2,3-trichloropropane	0
20	isopropyl ether (DIPE)	0	72	n-propylbenzene	0
22	1,1-dichloroethane	0	73	2-chlorotoluene	0
23	2-butanone (MEK)	0	74	4-chlorotoluene	0
24	ethyl-t-butyl ether (ETBE)	0	75	1,3,5-trimethylbenzene	0
25	2,2-dichloropropane	0	76	tert-butylbenzene	0
26	cis-1,2-dichloroethene	0	77	1,2,4-trimethylbenzene	0.032289983
27	bromochloromethane	0	79	sec-butylbenzene	0
28	chloroform	0.197750579	80	1,3-dichlorobenzene	0
29	tetrahydrofuran (THF)	**2.191241749** F+?	81	4-isopropyltoluene	0
30	1,1,1-trichloroethane	0	82	1,4-dichlorobenzene	0
33	carbon tetrachloride	0	84	1,2-dichlorobenzene	0
34	1,1-dichloropropene	0	85	n-butylbenzene	0
35	benzene	0	86	1,2-dibromo-3-chloropropane (DBCP)	0
37	1,2-dichloroethane	0	88	1,2,4-trichlorobenzene	0
38	t-amyl-methyl ether (TAME)	0	89	hexachlorobutadiene	0
39	trichloroethene	0	90	naphthalene	0
42	1,2-dichloropropane	0	91	1,2,3-trichlorobenzene	0
43	dibromomethane	0	87	1,3,5-trichlorobenzene	0
44	bromodichloromethane	0	12	1,1,2-trichloro-1,2,2-trifluoroethane	0
45	1,4-dioxane	0	14	methyl acetate	0
47	4-methyl-2-pentanone (MIBK)	0	21	vinyl acetate	0
48	2-hexanone	0	31	cyclohexane	0
49	cis-1,3-dichloropropene	0	40	methylcyclohexane	0
50	toluene	**4.412735514**	10	acrolein	0
52	trans-1,3-dichloropropene	-1	17	acrylonitrile	0
53	1,1,2-trichloroethane	0	46	2-chloroethylvinylether (2-CEVE)	0
55	tetrachloroethene	0		Total Xylenes	0

Quantitation Report (QT Reviewed)

Data Path : X:\V8\2023\Nov23\111623\
Data File : v8111636.D
Acq On : 17 Nov 2023 01:14 am
Operator : lmm
Sample : 67839-05 5mL
Misc : 5
ALS Vial : 36 Sample Multiplier: 1

11/17/23 @ 07:32
WillieS

Quant Time: Nov 17 06:46:23 2023
Quant Method : X:\V8\methods\V88260090823A.M
Quant Title : V5 Method 8260D
QLast Update : Mon Oct 30 11:37:50 2023
Response via : Initial Calibration

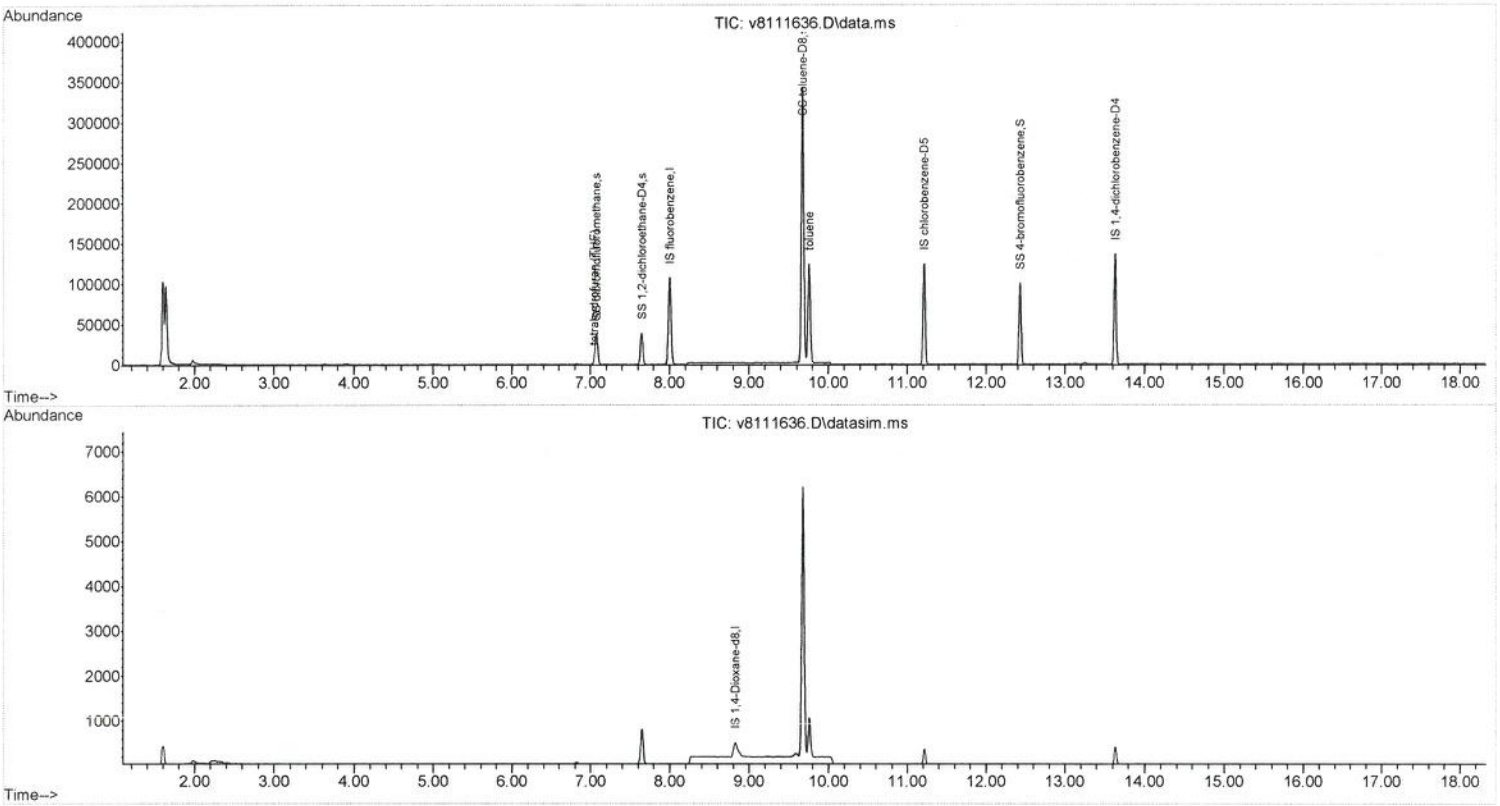
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) IS fluorobenzene	8.006	96	123935	10.00	ug/L	0.00
54) IS chlorobenzene-D5	11.216	119	28245	10.00	ug/L	0.00
68) IS 1,4-dichlorobenzene-D4	13.636	152	43704	10.00	ug/L	0.00
92) IS 1,4-Dioxane-d8	8.826	96	757	10.00	ug/L	# 0.00
System Monitoring Compounds						
32) SS 1,2-dichloroethane-D4	7.650	65	30898	8.72	ug/L	0.00
Spiked Amount 10.000	Range 60 - 140		Recovery = 87.20%			
36) SS dibromofluoromethane	7.076	111	28819	9.49	ug/L	0.00
Spiked Amount 10.000	Range 78 - 114		Recovery = 94.90%			
41) SS a,a,a-trifluorotoluene	0.000	146	0	0.00	ug/L	
Spiked Amount 20.000	Range 70 - 130		Recovery = 0.00%#			
51) SS toluene-D8	9.677	98	289533	9.90	ug/L	0.00
Spiked Amount 10.000	Range 88 - 110		Recovery = 99.00%			
67) SS 4-bromofluorobenzene	12.433	174	32647	10.11	ug/L	0.00
Spiked Amount 10.000	Range 86 - 115		Recovery = 101.10%			
83) NA 1,2-dichlorobenzene-D4	13.636	152	43704	0.00	ug/L	0.00
Spiked Amount 25.000	Range 15 - 25		Recovery = 0.00%#			
Target Compounds						Qvalue
29) tetrahydrofuran (THF)	7.044	42	2090	2.191	ug/L	74
50) toluene	9.760	92	66303	4.413	ug/L #	85

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : X:\V8\2023\Nov23\111623\
Data File : v8111636.D
Acq On : 17 Nov 2023 01:14 am
Operator : 1mm
Sample : 67839-05 5mL
Misc : 5
ALS Vial : 36 Sample Multiplier: 1

Quant Time: Nov 17 06:46:23 2023
Quant Method : X:\V8\methods\V88260090823A.M
Quant Title : V5 Method 8260D
QLast Update : Mon Oct 30 11:37:50 2023
Response via : Initial Calibration



This File:	L:\VOA\Excel Reports\2023\v8111637
Analysis Group:	8260/8021/624
Field ID:	-BRMW3-287-297-110923 1.8E+07
Sample:	67839-06 5mL Dow Salvage Yard
Misc:	5 CRE
Import File Name	v8 111623 h DoD
TestGroupID	V8260DoD_A
Aqueous or Soil? (A or S)	A
Solid amount (g)	
Methanol volume (mL)	
Percent Solid (%)	
Soil Prep Date	
Weight:	
Volume:	
Lab#:	67839-006
AnalysisDate:	11/17/2023
AnalysisTime:	01:39
Dilution:	1
AnalyzedBy:	LMM v8111637.D
QC_Code:	
Prep#:	

Reviewer Checks:

- Quant Report: Reviewed, Analyst Initials & Date
- Chromatogram Checked, Major peaks identified
- Results consistent w/ other attached analyses
- Reanalysis reason noted
- Substitute dilution data checked
- Correct dilution and reason clear or noted
- Flags checked (Expiration, F+, Over Cal, Surr, Aspen, QC)
- Other QC failures or issues noted in Aspen
- Correct data file and/or date/time in Aspen

Notes:

Reviewer Initials & Date: 11/17/23

#	Surrogate Standards	Import Value (as ug/L)	Recovery	Flag	QC Limits	Surrogate True Values
32	SS 1,2-dichloroethane-D4	8.71	**87%**		60-140	10
36	SS dibromofluoromethane	9.77	**98%**		78-114	10
51	SS toluene-D8	9.87	**99%**		88-110	10
67	SS 4-bromofluorobenzene	9.99	**100%**		86-115	10
41	SS a,a,a-trifluorotoluene	0.00	**0%**		70-130*	20

	AnalyteName	Concentration (ug/L)
2	dichlorodifluoromethane	0
3	chloromethane	0
4	vinyl chloride	0
5	bromomethane	0
6	chloroethane	0
7	trichlorofluoromethane	0
8	diethylether	0
9	acetone	3.658897334
11	1,1-dichloroethene	0
13	t-butanol (TBA)	0
15	methylene chloride	0
16	carbon disulfide	0
18	methyl-t-butyl ether (MTBE)	0
19	trans-1,2-dichloroethene	0
20	isopropyl ether (DIPE)	0
22	1,1-dichloroethane	0
23	2-butanone (MEK)	-1
24	ethyl-t-butyl ether (ETBE)	0
25	2,2-dichloropropane	0
26	cis-1,2-dichloroethene	0
27	bromochloromethane	0
28	chloroform	**1.702243388**
29	tetrahydrofuran (THF)	1.744143856
30	1,1,1-trichloroethane	0
33	carbon tetrachloride	0
34	1,1-dichloropropene	0
35	benzene	0.00503955
37	1,2-dichloroethane	0
38	t-amyl-methyl ether (TAME)	0
39	trichloroethene	0
42	1,2-dichloropropane	0
43	dibromomethane	0
44	bromodichloromethane	0
45	1,4-dioxane	0
47	4-methyl-2-pentanone (MIBK)	0
48	2-hexanone	0
49	cis-1,3-dichloropropene	0
50	toluene	**12.43571465**
52	trans-1,3-dichloropropene	0
53	1,1,2-trichloroethane	0
55	tetrachloroethene	0

	AnalyteName	Concentration (ug/L)
56	1,3-dichloropropane	0
57	dibromochloromethane	0
58	1,2-dibromoethane (EDB)	0
59	chlorobenzene	0
60	1,1,1,2-tetrachloroethane	0
61	ethylbenzene	-0.079809731
62	m&p-xylenes	-0.293008327
63	o-xylene	0
64	styrene	0
65	bromoform	0
66	isopropylbenzene	0
69	bromobenzene	0
70	1,1,2,2-tetrachloroethane	0
71	1,2,3-trichloropropane	0
72	n-propylbenzene	0
73	2-chlorotoluene	0
74	4-chlorotoluene	0
75	1,3,5-trimethylbenzene	0
76	tert-butylbenzene	0
77	1,2,4-trimethylbenzene	0
79	sec-butylbenzene	0
80	1,3-dichlorobenzene	0
81	4-isopropyltoluene	0
82	1,4-dichlorobenzene	0
84	1,2-dichlorobenzene	0
85	n-butylbenzene	0
86	1,2-dibromo-3-chloropropane (DBCP)	0
88	1,2,4-trichlorobenzene	0
89	hexachlorobutadiene	0
90	naphthalene	0
91	1,2,3-trichlorobenzene	0
87	1,3,5-trichlorobenzene	0
12	1,1,2-trichloro-1,2,2-trifluoroethane	0
14	methyl acetate	0
21	vinyl acetate	0
31	cyclohexane	0
40	methylcyclohexane	0
10	acrolein	0
17	acrylonitrile	0
46	2-chloroethylvinylether (2-CEVE)	0
	Total Xylenes	0

Quantitation Report (QT Reviewed)

Data Path : X:\V8\2023\Nov23\111623\
Data File : v8111637.D
Acq On : 17 Nov 2023 01:39 am
Operator : lmm
Sample : 67839-06 5mL
Misc : 5
ALS Vial : 37 Sample Multiplier: 1

11/17/23 @ 07:32
WillieS

Quant Time: Nov 17 06:46:27 2023
Quant Method : X:\V8\methods\V88260090823A.M
Quant Title : V5 Method 8260D
QLast Update : Mon Oct 30 11:37:50 2023
Response via : Initial Calibration

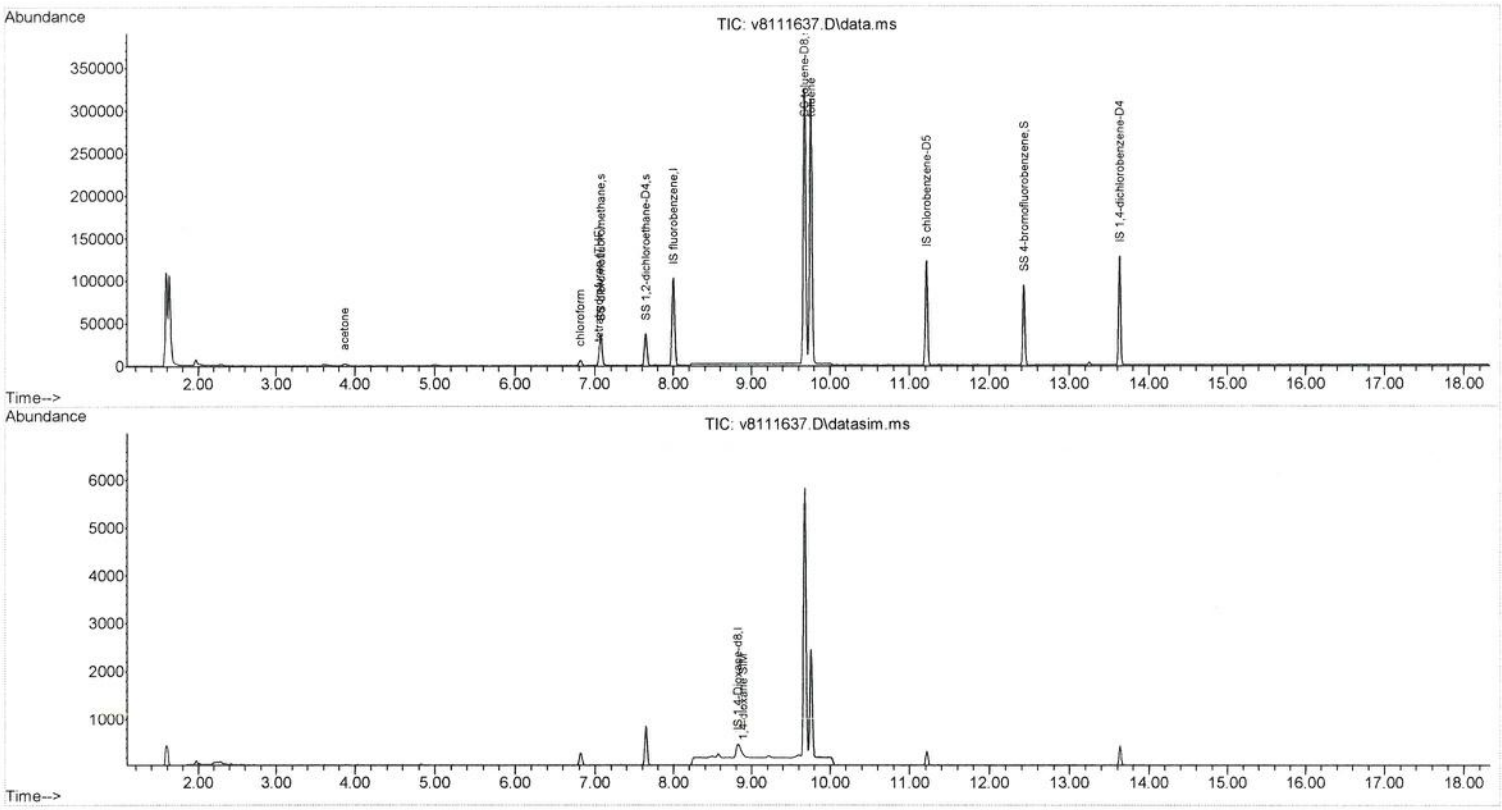
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) IS fluorobenzene	8.001	96	117684	10.00	ug/L	0.00
54) IS chlorobenzene-D5	11.217	119	26886	10.00	ug/L	0.00
68) IS 1,4-dichlorobenzene-D4	13.636	152	41286	10.00	ug/L	0.00
92) IS 1,4-Dioxane-d8	8.823	96	713	10.00	ug/L	0.00
System Monitoring Compounds						
32) SS 1,2-dichloroethane-D4	7.646	65	29319	8.71	ug/L	0.00
Spiked Amount 10.000	Range 60 - 140		Recovery = 87.10%			
36) SS dibromofluoromethane	7.076	111	28191	9.77	ug/L	0.00
Spiked Amount 10.000	Range 78 - 114		Recovery = 97.70%			
41) SS a,a,a-trifluorotoluene	0.000	146	0	0.00	ug/L	
Spiked Amount 20.000	Range 70 - 130		Recovery = 0.00%#			
51) SS toluene-D8	9.678	98	273899	9.87	ug/L	0.00
Spiked Amount 10.000	Range 88 - 110		Recovery = 98.70%			
67) SS 4-bromofluorobenzene	12.433	174	30704	9.99	ug/L	0.00
Spiked Amount 10.000	Range 86 - 115		Recovery = 99.90%			
83) NA 1,2-dichlorobenzene-D4	13.636	152	41286	0.00	ug/L	0.00
Spiked Amount 25.000	Range 15 - 25		Recovery = 0.00%#			
Target Compounds						Qvalue
9) acetone	3.869	43	3524	3.659	ug/L #	15
28) chloroform	6.817	83	6977	1.702	ug/L	93
29) tetrahydrofuran (THF)	7.049	42	1609	1.744	ug/L	83
50) toluene	9.762	92	173411	12.436	ug/L	87
93] 1,4-dioxane SIM	8.890	88	57	0.414	ug/L #	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : X:\V8\2023\Nov23\111623\
Data File : v8111637.D
Acq On : 17 Nov 2023 01:39 am
Operator : lmm
Sample : 67839-06 5mL
Misc : 5
ALS Vial : 37 Sample Multiplier: 1

Quant Time: Nov 17 06:46:27 2023
Quant Method : X:\V8\methods\V88260090823A.M
Quant Title : V5 Method 8260D
QLast Update : Mon Oct 30 11:37:50 2023
Response via : Initial Calibration



This File:	L:\VOA\Excel Reports\2023\v8111638
Analysis Group:	8260/8021/624
Field ID:	-BRMW4-297-301-110923 1.8E+07
Sample:	67839-07 5mL Dow Salvage Yard
Misc:	5 CRE
Import File Name	v8 111623 h DoD
TestGroupID	V8260DoD_A
Aqueous or Soil? (A or S)	A
Solid amount (g)	
Methanol volume (mL)	
Percent Solid (%)	
Soil Prep Date	
Weight:	
Volume:	
Lab#:	67839-007
AnalysisDate:	11/17/2023
AnalysisTime:	02:03
Dilution:	1
AnalyzedBy:	LMM v8111638.D
QC_Code:	
Prep#:	

Reviewer Checks:

- Quant Report: Reviewed, Analyst Initials & Date
- Chromatogram Checked, Major peaks identified
- Results consistent w/ other attached analyses
- Reanalysis reason noted
- Substitute dilution data checked
- Correct dilution and reason clear or noted
- Flags checked (Expiration, F+, Over Cal, Surr, Aspen, QC)
- Other QC failures or issues noted in Aspen
- Correct data file and/or date/time in Aspen

Notes:

Reviewer Initials & Date: 11/17/23

#	Surrogate Standards	Import Value (as ug/L)	Recovery	Flag	QC Limits	Surrogate True Values
32	SS 1,2-dichloroethane-D4	8.86	**89%**		60-140	10
36	SS dibromofluoromethane	9.72	**97%**		78-114	10
51	SS toluene-D8	10.05	**100%**		88-110	10
67	SS 4-bromofluorobenzene	9.90	**99%**		86-115	10
41	SS a,a,a-trifluorotoluene	0.00	**0%**		70-130*	20

	AnalyteName	Concentration (ug/L)	Flag
2	dichlorodifluoromethane	0	
3	chloromethane	0	
4	vinyl chloride	0	
5	bromomethane	0	
6	chloroethane	0	
7	trichlorofluoromethane	0	
8	diethylether	0	
9	acetone	0.464562663	
11	1,1-dichloroethene	0	
13	t-butanol (TBA)	0	
15	methylene chloride	0	
16	carbon disulfide	0	
18	methyl-t-butyl ether (MTBE)	0	
19	trans-1,2-dichloroethene	0	
20	isopropyl ether (DIPE)	0	
22	1,1-dichloroethane	0	
23	2-butanone (MEK)	**2.706511064**	
24	ethyl-t-butyl ether (ETBE)	0	
25	2,2-dichloropropane	0	
26	cis-1,2-dichloroethene	0	
27	bromochloromethane	0	
28	chloroform	0.648097244	✓
29	tetrahydrofuran (THF)	**4.160015386**	F+?
30	1,1,1-trichloroethane	0	
33	carbon tetrachloride	0	
34	1,1-dichloropropene	0	
35	benzene	0	
37	1,2-dichloroethane	0	
38	t-amyl-methyl ether (TAME)	0	
39	trichloroethene	-0.047653091	
42	1,2-dichloropropane	0	
43	dibromomethane	0	
44	bromodichloromethane	0	
45	1,4-dioxane	0	
47	4-methyl-2-pentanone (MIBK)	0	
48	2-hexanone	0	
49	cis-1,3-dichloropropene	0	
50	toluene	**9.825929772**	
52	trans-1,3-dichloropropene	0.040863263	
53	1,1,2-trichloroethane	0	
55	tetrachloroethene	0	
56	1,3-dichloropropane	0	
57	dibromochloromethane	0	
58	1,2-dibromoethane (EDB)	0	
59	chlorobenzene	0	
60	1,1,1,2-tetrachloroethane	0	
61	ethylbenzene	-0.081304162	
62	m&p-xylenes	0	
63	o-xylene	0	
64	styrene	0	
65	bromoform	0	
66	isopropylbenzene	0	
69	bromobenzene	0	
70	1,1,2,2-tetrachloroethane	0	
71	1,2,3-trichloropropane	0	
72	n-propylbenzene	0	
73	2-chlorotoluene	0	
74	4-chlorotoluene	0	
75	1,3,5-trimethylbenzene	0	
76	tert-butylbenzene	0	
77	1,2,4-trimethylbenzene	0	
79	sec-butylbenzene	0	
80	1,3-dichlorobenzene	0	
81	4-isopropyltoluene	0	
82	1,4-dichlorobenzene	0	
84	1,2-dichlorobenzene	0	
85	n-butylbenzene	0	
86	1,2-dibromo-3-chloropropane (DBCP)	0	
88	1,2,4-trichlorobenzene	0	
89	hexachlorobutadiene	0	
90	naphthalene	0	
91	1,2,3-trichlorobenzene	0	
87	1,3,5-trichlorobenzene	0	
12	1,1,2-trichloro-1,2,2-trifluoroethane	0	
14	methyl acetate	0	
21	vinyl acetate	0	
31	cyclohexane	0	
40	methylcyclohexane	0	
10	acrolein	0	
17	acrylonitrile	0	
46	2-chloroethylvinylether (2-CEVE)	0	
	Total Xylenes	0	

Quantitation Report (QT Reviewed)

Data Path : X:\V8\2023\Nov23\111623\
Data File : v8111638.D
Acq On : 17 Nov 2023 02:03 am
Operator : lmm
Sample : 67839-07 5mL
Misc : 5
ALS Vial : 38 Sample Multiplier: 1

11/17/23 @ 07:32
WillieS

Quant Time: Nov 17 06:46:31 2023
Quant Method : X:\V8\methods\V88260090823A.M
Quant Title : V5 Method 8260D
QLast Update : Mon Oct 30 11:37:50 2023
Response via : Initial Calibration

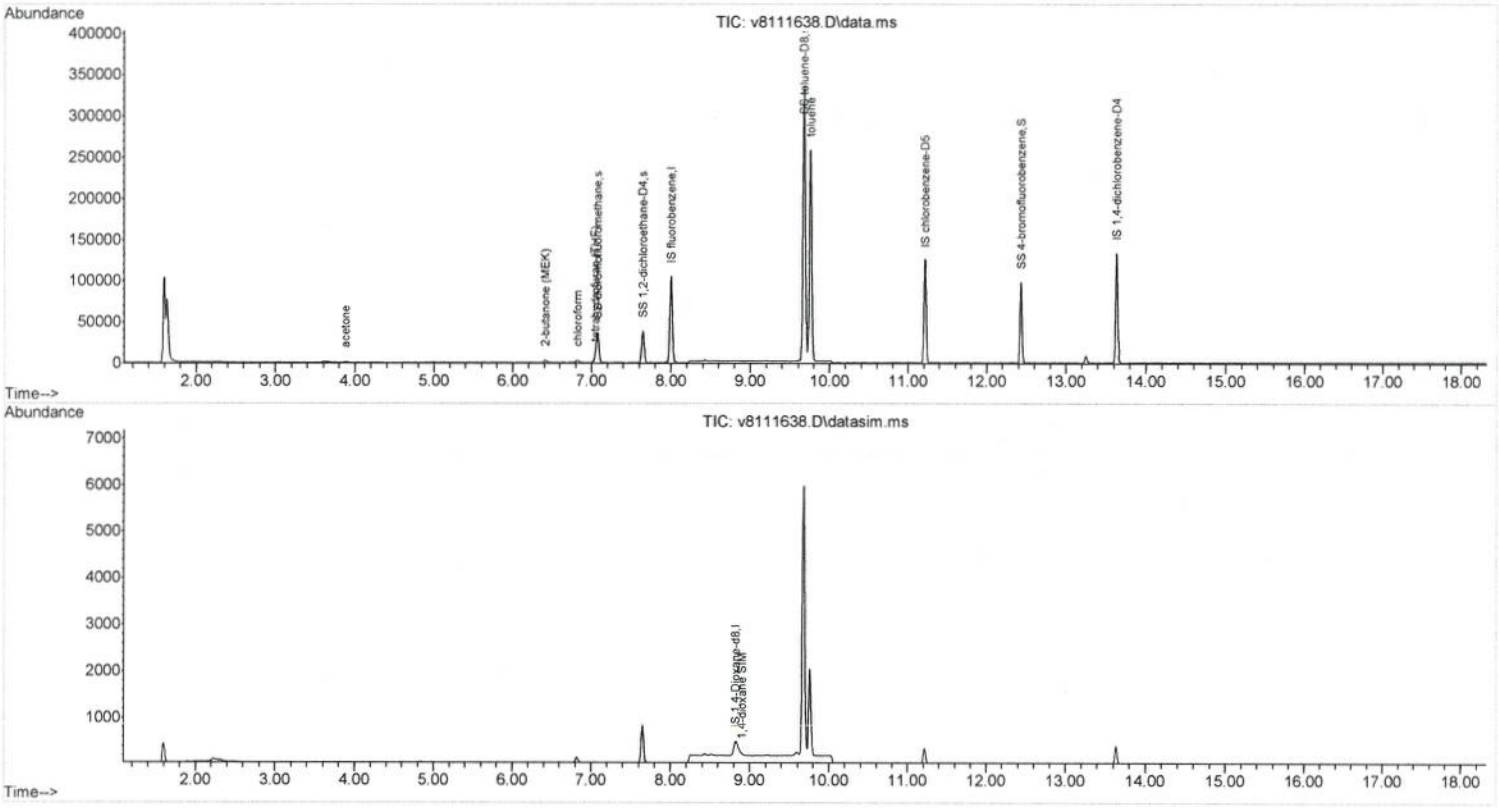
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) IS fluorobenzene	8.001	96	118866	10.00 ug/L	0.00
54) IS chlorobenzene-D5	11.218	119	27478	10.00 ug/L	0.00
68) IS 1,4-dichlorobenzene-D4	13.633	152	43202	10.00 ug/L	0.00
92) IS 1,4-Dioxane-d8	8.823	96	763	10.00 ug/L	0.00
System Monitoring Compounds					
32) SS 1,2-dichloroethane-D4	7.646	65	30130	8.86 ug/L	0.00
Spiked Amount 10.000	Range 60 - 140		Recovery = 88.60%		
36) SS dibromofluoromethane	7.076	111	28326	9.72 ug/L	0.00
Spiked Amount 10.000	Range 78 - 114		Recovery = 97.20%		
41) SS a,a,a-trifluorotoluene	0.000	146	0	0.00 ug/L	
Spiked Amount 20.000	Range 70 - 130		Recovery = 0.00%#		
51) SS toluene-D8	9.679	98	281689	10.05 ug/L	0.00
Spiked Amount 10.000	Range 88 - 110		Recovery = 100.50%		
67) SS 4-bromofluorobenzene	12.435	174	31101	9.90 ug/L	0.00
Spiked Amount 10.000	Range 86 - 115		Recovery = 99.00%		
83) NA 1,2-dichlorobenzene-D4	13.633	152	43202	0.00 ug/L	0.00
Spiked Amount 25.000	Range 15 - 25		Recovery = 0.00%#		
Target Compounds					Qvalue
9) acetone	3.878	43	1273	0.465 ug/L #	23
23) 2-butanone (MEK)	6.411	43	4017	2.707 ug/L #	88
28) chloroform	6.821	83	2684	0.648 ug/L	100
29) tetrahydrofuran (THF)	7.044	42	3675	4.160 ug/L	80
50) toluene	9.762	92	138863	9.826 ug/L	90
93] 1,4-dioxane SIM	8.901	88	56	0.370 ug/L #	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : X:\V8\2023\Nov23\111623\
Data File : v8111638.D
Acq On : 17 Nov 2023 02:03 am
Operator : 1mm
Sample : 67839-07 5mL
Misc : 5
ALS Vial : 38 Sample Multiplier: 1

Quant Time: Nov 17 06:46:31 2023
Quant Method : X:\V8\methods\V88260090823A.M
Quant Title : V5 Method 8260D
QLast Update : Mon Oct 30 11:37:50 2023
Response via : Initial Calibration



This File:	L:\VOA\Excel Reports\2023\v8111639
Analysis Group:	8260/8021/624
Field ID:	SY-BRMW1-42-52-110923 1.8E+07
Sample:	67839-08 5mL Dow Salvage Yard
Misc:	5 CRE
Import File Name	v8 111623 h DoD
TestGroupID	V8260DoD_A
Aqueous or Soil? (A or S)	A
Solid amount (g)	
Methanol volume (mL)	
Percent Solid (%)	
Soil Prep Date	
Weight:	
Volume:	
Lab#:	67839-008
AnalysisDate:	11/17/2023
AnalysisTime:	02:28
Dilution:	1
AnalyzedBy:	LMM v8111639.D
QC_Code:	
Prep#:	

Reviewer Checks:

Quant Report: Reviewed, Analyst Initials & Date
Chromatogram Checked, Major peaks identified
Results consistent w/ other attached analyses
Reanalysis reason noted
Substitute dilution data checked
Correct dilution and reason clear or noted
Flags checked (Expiration, F+, Over Cal, Surr, Aspen, QC)
Other QC failures or issues noted in Aspen
Correct data file and/or date/time in Aspen

Notes:

11/17/23

Reviewer Initials & Date:

#	Surrogate Standards	Import Value (as ug/L)	Recovery	Flag	QC Limits	Surrogate True Values
32	SS 1,2-dichloroethane-D4	8.83	**88%**		60-140	10
36	SS dibromofluoromethane	9.49	**95%**		78-114	10
51	SS toluene-D8	9.91	**99%**		88-110	10
67	SS 4-bromofluorobenzene	9.94	**99%**		86-115	10
41	SS a,a,a-trifluorotoluene	0.00	**0%**		70-130*	20

	AnalyteName	Concentration (ug/L)		AnalyteName	Concentration (ug/L)
2	dichlorodifluoromethane	0	56	1,3-dichloropropane	0
3	chloromethane	0	57	dibromochloromethane	0
4	vinyl chloride	0	58	1,2-dibromoethane (EDB)	0
5	bromomethane	0	59	chlorobenzene	0
6	chloroethane	0	60	1,1,1,2-tetrachloroethane	0
7	trichlorofluoromethane	0	61	ethylbenzene	-0.127091018
8	diethylether	0	62	m&p-xylenes	0
9	acetone	4.910245102	63	o-xylene	0
11	1,1-dichloroethene	0	64	styrene	0
13	t-butanol (TBA)	0	65	bromoform	0
15	methylene chloride	0	66	isopropylbenzene	0
16	carbon disulfide	0	69	bromobenzene	0
18	methyl-t-butyl ether (MTBE)	0	70	1,1,2,2-tetrachloroethane	0
19	trans-1,2-dichloroethene	0	71	1,2,3-trichloropropane	0.158946173
20	isopropyl ether (DIPE)	0	72	n-propylbenzene	0
22	1,1-dichloroethane	0	73	2-chlorotoluene	0
23	2-butanone (MEK)	**9.095211034**	74	4-chlorotoluene	0
24	ethyl-t-butyl ether (ETBE)	0	75	1,3,5-trimethylbenzene	0
25	2,2-dichloropropane	0	76	tert-butylbenzene	0
26	cis-1,2-dichloroethene	0	77	1,2,4-trimethylbenzene	0
27	bromochloromethane	0	79	sec-butylbenzene	0
28	chloroform	0.396109148	80	1,3-dichlorobenzene	0
29	tetrahydrofuran (THF)	**4.211422523**	81	4-isopropyltoluene	0
30	1,1,1-trichloroethane	0	82	1,4-dichlorobenzene	0
33	carbon tetrachloride	0	84	1,2-dichlorobenzene	0
34	1,1-dichloropropene	0	85	n-butylbenzene	0
35	benzene	-0.002954515	86	1,2-dibromo-3-chloropropane (DBCP)	0
37	1,2-dichloroethane	0	88	1,2,4-trichlorobenzene	0
38	t-amyl-methyl ether (TAME)	0	89	hexachlorobutadiene	0
39	trichloroethene	-0.083655845	90	naphthalene	0
42	1,2-dichloropropane	0	91	1,2,3-trichlorobenzene	0
43	dibromomethane	0	87	1,3,5-trichlorobenzene	0
44	bromodichloromethane	0	12	1,1,2-trichloro-1,2,2-trifluoroethane	0
45	1,4-dioxane	0	14	methyl acetate	0
47	4-methyl-2-pentanone (MIBK)	0	21	vinyl acetate	0
48	2-hexanone	0	31	cyclohexane	0
49	cis-1,3-dichloropropene	0	40	methylcyclohexane	0
50	toluene	**11.019103**	10	acrolein	0
52	trans-1,3-dichloropropene	0	17	acrylonitrile	0
53	1,1,2-trichloroethane	0	46	2-chloroethylvinylether (2-CEVE)	0
55	tetrachloroethene	0		Total Xylenes	0

F+?

Quantitation Report (QT Reviewed)

Data Path : X:\V8\2023\Nov23\111623\
Data File : v8111639.D
Acq On : 17 Nov 2023 02:28 am
Operator : lmm
Sample : 67839-08 5mL
Misc : 5
ALS Vial : 39 Sample Multiplier: 1

11/17/23 @ 07:32
WillieS

Quant Time: Nov 17 06:46:35 2023
Quant Method : X:\V8\methods\V88260090823A.M
Quant Title : V5 Method 8260D
QLast Update : Mon Oct 30 11:37:50 2023
Response via : Initial Calibration

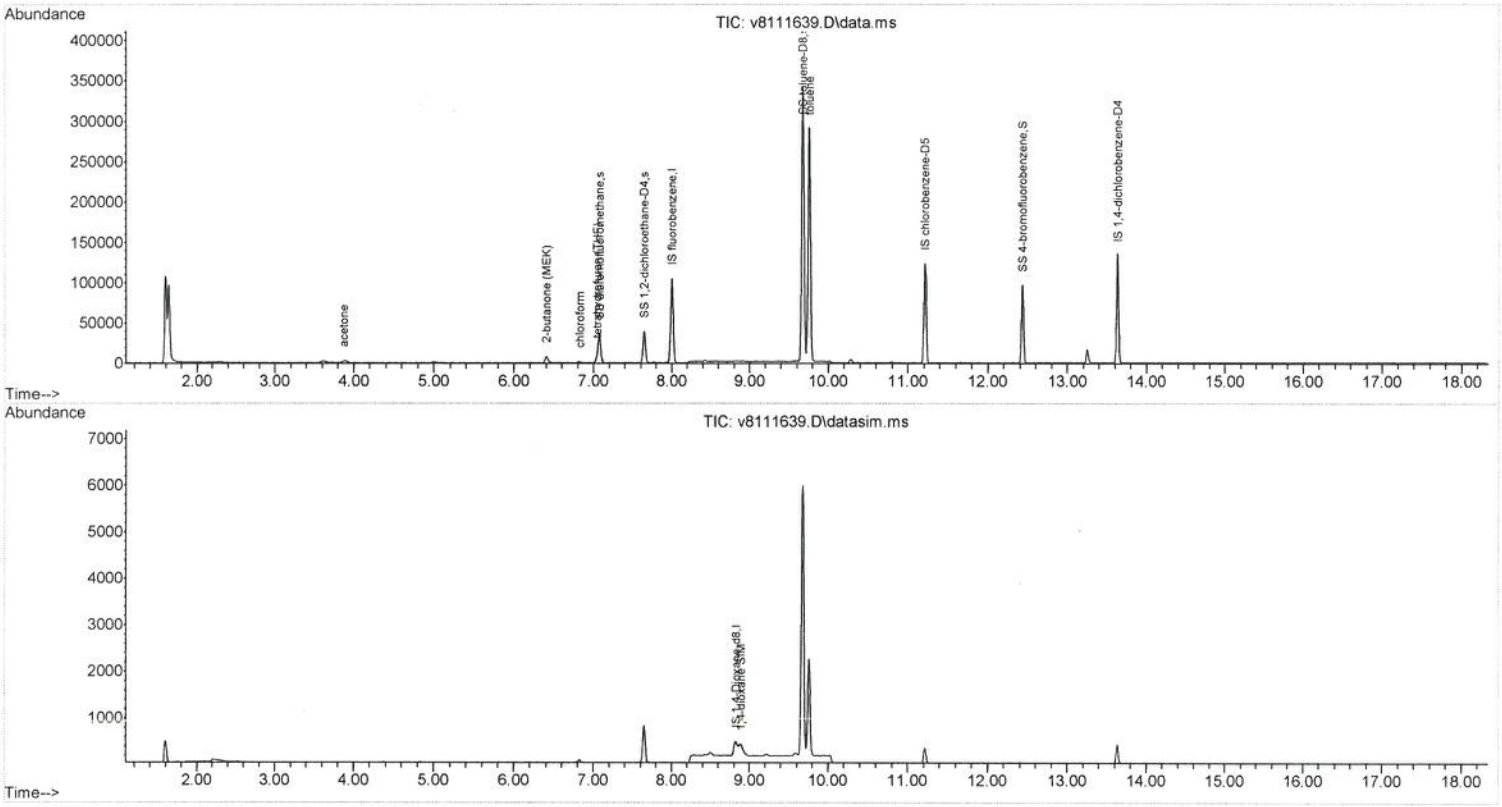
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) IS fluorobenzene	8.001	96	120892	10.00	ug/L	0.00
54) IS chlorobenzene-D5	11.213	119	27358	10.00	ug/L	0.00
68) IS 1,4-dichlorobenzene-D4	13.638	152	43066	10.00	ug/L	0.00
92) IS 1,4-Dioxane-d8	8.828	96	737	10.00	ug/L	# 0.00
System Monitoring Compounds						
32) SS 1,2-dichloroethane-D4	7.646	65	30507	8.83	ug/L	0.00
Spiked Amount 10.000	Range 60 - 140		Recovery = 88.30%			
36) SS dibromofluoromethane	7.076	111	28119	9.49	ug/L	0.00
Spiked Amount 10.000	Range 78 - 114		Recovery = 94.90%			
41) SS a,a,a-trifluorotoluene	0.000	146	0	0.00	ug/L	
Spiked Amount 20.000	Range 70 - 130		Recovery = 0.00%#			
51) SS toluene-D8	9.678	98	282533	9.91	ug/L	0.00
Spiked Amount 10.000	Range 88 - 110		Recovery = 99.10%			
67) SS 4-bromofluorobenzene	12.435	174	31086	9.94	ug/L	0.00
Spiked Amount 10.000	Range 86 - 115		Recovery = 99.40%			
83) NA 1,2-dichlorobenzene-D4	13.638	152	43066	0.00	ug/L	0.00
Spiked Amount 25.000	Range 15 - 25		Recovery = 0.00%#			
Target Compounds						Qvalue
9) acetone	3.873	43	4531	4.910	ug/L #	18
23) 2-butanone (MEK)	6.406	43	12395	9.095	ug/L	96
28) chloroform	6.826	83	1669	0.396	ug/L	91
29) tetrahydrofuran (THF)	7.049	42	3782	4.211	ug/L	85
50) toluene	9.762	92	158104	11.019	ug/L	91
93] 1,4-dioxane SIM	8.896	88	463	4.062	ug/L #	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : X:\V8\2023\Nov23\111623\
Data File : v8111639.D
Acq On : 17 Nov 2023 02:28 am
Operator : lmm
Sample : 67839-08 5mL
Misc : 5
ALS Vial : 39 Sample Multiplier: 1

Quant Time: Nov 17 06:46:35 2023
Quant Method : X:\V8\methods\V88260090823A.M
Quant Title : V5 Method 8260D
QLast Update : Mon Oct 30 11:37:50 2023
Response via : Initial Calibration



L:\VOA\Excel Reports\2023\v8111640

Analysis Group:	8260/8021/624
Field ID:	-BRMW1-150-157-110923 1.8E+07
Sample:	67839-09 5mL Dow Salvage Yard
Misc:	5 CRE
Import File Name	v8 111623 h DoD
TestGroupID	V8260DoD_A
Aqueous or Soil? (A or S)	A
Solid amount (g)	
Methanol volume (mL)	
Percent Solid (%)	
Soil Prep Date	
Weight:	
Volume:	
Lab#:	67839-009
AnalysisDate:	11/17/2023
AnalysisTime:	02:53
Dilution:	1
AnalyzedBy:	LMM v8111640.D
QC_Code:	
Prep#:	

Reviewer Checks:

- Quant Report: Reviewed, Analyst Initials & Date
- Chromatogram Checked, Major peaks identified
- Results consistent w/ other attached analyses
- Reanalysis reason noted
- Substitute dilution data checked
- Correct dilution and reason clear or noted
- Flags checked (Expiration, F+, Over Cal, Surr, Aspen, QC)
- Other QC failures or issues noted in Aspen
- Correct data file and/or date/time in Aspen

Notes:

11/17/23

Reviewer Initials & Date:

#	Surrogate Standards	Import Value (as ug/L)	Recovery	Flag	QC Limits	Surrogate True Values
32	SS 1,2-dichloroethane-D4	8.82	**88%**		60-140	10
36	SS dibromofluoromethane	9.63	**96%**		78-114	10
51	SS toluene-D8	9.98	**100%**		88-110	10
67	SS 4-bromofluorobenzene	9.82	**98%**		86-115	10
41	SS a,a,a-trifluorotoluene	0.00	**0%**		70-130*	20

	AnalyteName	Concentration (ug/L)	Flag
2	dichlorodifluoromethane	0	
3	chloromethane	0	
4	vinyl chloride	0	
5	bromomethane	0	
6	chloroethane	0	
7	trichlorofluoromethane	0	
8	diethylether	0	
9	acetone	1.462284402	
11	1,1-dichloroethene	0	
13	t-butanol (TBA)	0	
15	methylene chloride	0	
16	carbon disulfide	0	
18	methyl-t-butyl ether (MTBE)	0	
19	trans-1,2-dichloroethene	0	
20	isopropyl ether (DIPE)	0	
22	1,1-dichloroethane	0	
23	2-butanone (MEK)	**3.835749343**	
24	ethyl-t-butyl ether (ETBE)	0	
25	2,2-dichloropropane	0	
26	cis-1,2-dichloroethene	0	
27	bromochloromethane	0	
28	chloroform	0.067745954	
29	tetrahydrofuran (THF)	**4.98271156**	F+?
30	1,1,1-trichloroethane	0	
33	carbon tetrachloride	0	
34	1,1-dichloropropene	0	
35	benzene	0	
37	1,2-dichloroethane	0	
38	t-amyl-methyl ether (TAME)	0	
39	trichloroethene	0.699636478	
42	1,2-dichloropropane	0	
43	dibromomethane	0	
44	bromodichloromethane	0	
45	1,4-dioxane	0	
47	4-methyl-2-pentanone (MIBK)	0	
48	2-hexanone	0	
49	cis-1,3-dichloropropene	0	
50	toluene	**2.878623288**	
52	trans-1,3-dichloropropene	-1	
53	1,1,2-trichloroethane	0	
55	tetrachloroethene	0	

	AnalyteName	Concentration (ug/L)
56	1,3-dichloropropane	0
57	dibromochloromethane	0
58	1,2-dibromoethane (EDB)	0
59	chlorobenzene	0
60	1,1,1,2-tetrachloroethane	0
61	ethylbenzene	0
62	m&p-xylenes	0
63	o-xylene	0
64	styrene	0
65	bromoform	0
66	isopropylbenzene	0
69	bromobenzene	0
70	1,1,2,2-tetrachloroethane	0
71	1,2,3-trichloropropane	0
72	n-propylbenzene	0
73	2-chlorotoluene	0
74	4-chlorotoluene	0
75	1,3,5-trimethylbenzene	0
76	tert-butylbenzene	0
77	1,2,4-trimethylbenzene	0
79	sec-butylbenzene	0
80	1,3-dichlorobenzene	0
81	4-isopropyltoluene	0
82	1,4-dichlorobenzene	0
84	1,2-dichlorobenzene	0
85	n-butylbenzene	0
86	1,2-dibromo-3-chloropropane (DBCP)	0
88	1,2,4-trichlorobenzene	0
89	hexachlorobutadiene	0
90	naphthalene	0
91	1,2,3-trichlorobenzene	0
87	1,3,5-trichlorobenzene	0
12	1,1,2-trichloro-1,2,2-trifluoroethane	0
14	methyl acetate	0
21	vinyl acetate	0
31	cyclohexane	0
40	methylcyclohexane	0
10	acrolein	0
17	acrylonitrile	0
46	2-chloroethylvinylether (2-CEVE)	0
	Total Xylenes	0

Quantitation Report (QT Reviewed)

Data Path : X:\V8\2023\Nov23\111623\
Data File : v8111640.D
Acq On : 17 Nov 2023 02:53 am
Operator : lmm
Sample : 67839-09 5mL
Misc : 5
ALS Vial : 40 Sample Multiplier: 1

11/17/23 @ 07:32
WillieS

Quant Time: Nov 17 06:46:39 2023
Quant Method : X:\V8\methods\V88260090823A.M
Quant Title : V5 Method 8260D
QLast Update : Mon Oct 30 11:37:50 2023
Response via : Initial Calibration

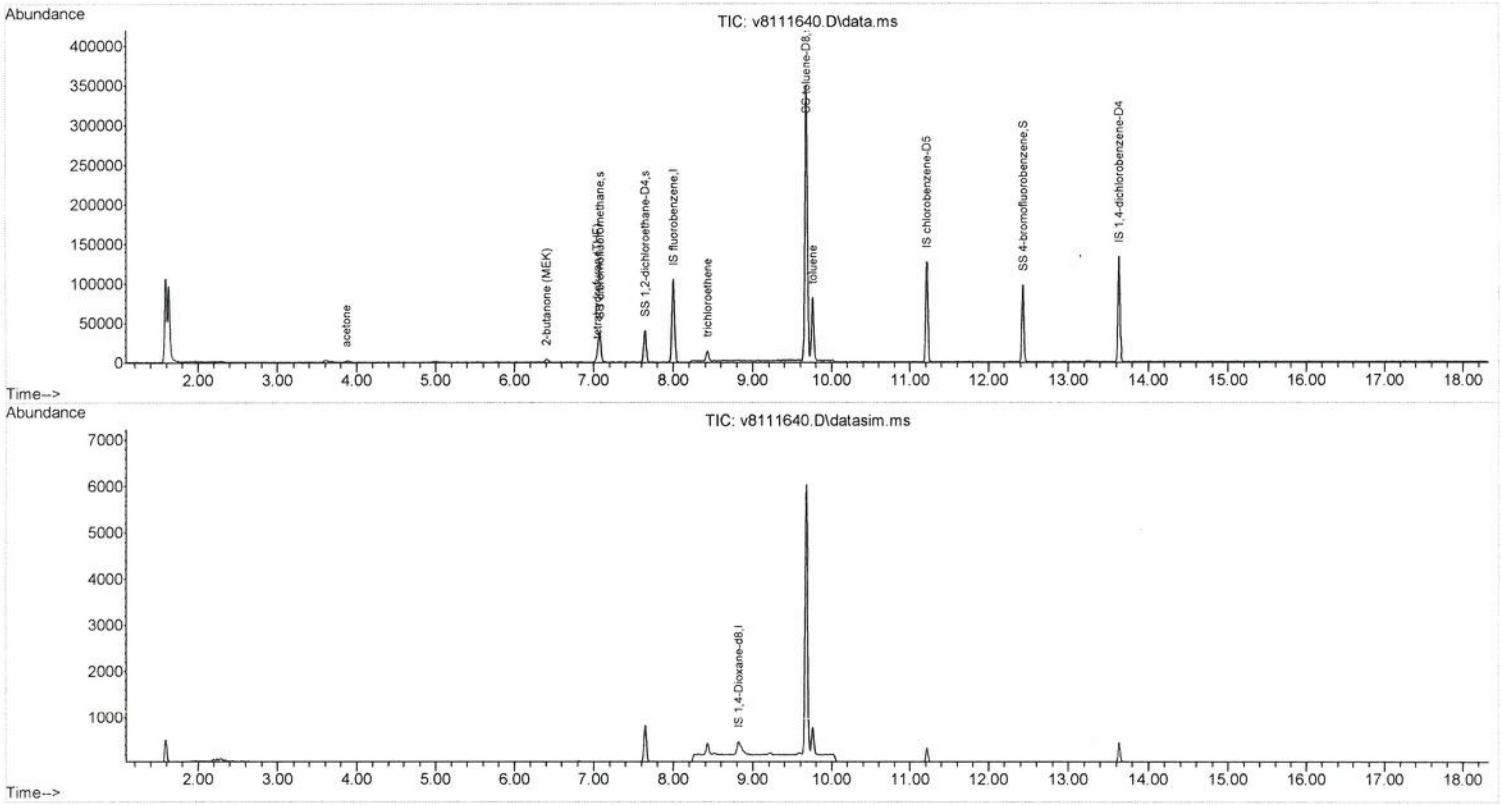
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) IS fluorobenzene	8.001	96	123105	10.00	ug/L	0.00
54) IS chlorobenzene-D5	11.213	119	27939	10.00	ug/L	0.00
68) IS 1,4-dichlorobenzene-D4	13.637	152	42067	10.00	ug/L	0.00
92) IS 1,4-Dioxane-d8	8.822	96	696	10.00	ug/L	# 0.00
System Monitoring Compounds						
32) SS 1,2-dichloroethane-D4	7.646	65	31063	8.82	ug/L	0.00
Spiked Amount 10.000	Range 60 - 140		Recovery = 88.20%			
36) SS dibromofluoromethane	7.076	111	29069	9.63	ug/L	0.00
Spiked Amount 10.000	Range 78 - 114		Recovery = 96.30%			
41) SS a,a,a-trifluorotoluene	0.000	146	0	0.00	ug/L	
Spiked Amount 20.000	Range 70 - 130		Recovery = 0.00%#			
51) SS toluene-D8	9.678	98	289671	9.98	ug/L	0.00
Spiked Amount 10.000	Range 88 - 110		Recovery = 99.80%			
67) SS 4-bromofluorobenzene	12.434	174	31367	9.82	ug/L	0.00
Spiked Amount 10.000	Range 86 - 115		Recovery = 98.20%			
83) NA 1,2-dichlorobenzene-D4	13.637	152	42067	0.00	ug/L	0.00
Spiked Amount 25.000	Range 15 - 25		Recovery = 0.00%#			
Target Compounds						Qvalue
9) acetone	3.869	43	2058	1.462	ug/L #	1
23) 2-butanone (MEK)	6.402	43	5655	3.836	ug/L #	93
29) tetrahydrofuran (THF)	7.044	42	4529	4.983	ug/L	86
39) trichloroethene	8.429	95	5073	0.700	ug/L #	71
50) toluene	9.761	92	43766	2.879	ug/L	93

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : X:\V8\2023\Nov23\111623\
Data File : v8111640.D
Acq On : 17 Nov 2023 02:53 am
Operator : lmm
Sample : 67839-09 5mL
Misc : 5
ALS Vial : 40 Sample Multiplier: 1

Quant Time: Nov 17 06:46:39 2023
Quant Method : X:\V8\methods\V88260090823A.M
Quant Title : V5 Method 8260D
QLast Update : Mon Oct 30 11:37:50 2023
Response via : Initial Calibration



This File:	L:\VOA\Excel Reports\2023\v8111641
Analysis Group:	8260/8021/624
Field ID:	SY-BRMW1-65-75-110923 1.8E+07
Sample:	67839-10 5mL Dow Salvage Yard
Misc:	5 CRE
Import File Name	v8 111623 h DoD
TestGroupID	V8260DoD_A
Aqueous or Soil? (A or S)	A
Solid amount (g)	
Methanol volume (mL)	
Percent Solid (%)	
Soil Prep Date	
Weight:	
Volume:	
Lab#:	67839-010
AnalysisDate:	11/17/2023
AnalysisTime:	03:17
Dilution:	1
AnalyzedBy:	LMM v8111641.D
QC_Code:	
Prep#:	

Reviewer Checks:

Quant Report: Reviewed, Analyst Initials & Date
Chromatogram Checked, Major peaks identified
Results consistent w/ other attached analyses
Reanalysis reason noted
Substitute dilution data checked
Correct dilution and reason clear or noted
Flags checked (Expiration, F+, Over Cal, Surr, Aspen, QC)
Other QC failures or issues noted in Aspen
Correct data file and/or date/time in Aspen

Notes:

Reviewer Initials & Date: 11/17/23

#	Surrogate Standards	Import Value (as ug/L)	Recovery	Flag	QC Limits	Surrogate True Values
32	SS 1,2-dichloroethane-D4	8.70	**87%**		60-140	10
36	SS dibromofluoromethane	9.69	**97%**		78-114	10
51	SS toluene-D8	10.10	**101%**		88-110	10
67	SS 4-bromofluorobenzene	9.63	**96%**		86-115	10
41	SS a,a,a-trifluorotoluene	0.00	**0%**		70-130*	20

	AnalyteName	Concentration (ug/L)		AnalyteName	Concentration (ug/L)
2	dichlorodifluoromethane	0	56	1,3-dichloropropane	0
3	chloromethane	0	57	dibromochloromethane	0
4	vinyl chloride	0	58	1,2-dibromoethane (EDB)	0
5	bromomethane	0	59	chlorobenzene	0
6	chloroethane	0	60	1,1,1,2-tetrachloroethane	0
7	trichlorofluoromethane	0	61	ethylbenzene	0
8	diethylether	0	62	m&p-xylenes	0
9	acetone	1.936393458	63	o-xylene	0
11	1,1-dichloroethene	0	64	styrene	0
13	t-butanol (TBA)	0	65	bromoform	0
15	methylene chloride	0	66	isopropylbenzene	0
16	carbon disulfide	0	69	bromobenzene	0
18	methyl-t-butyl ether (MTBE)	0	70	1,1,2,2-tetrachloroethane	0
19	trans-1,2-dichloroethene	0	71	1,2,3-trichloropropane	0.107194664
20	isopropyl ether (DIPE)	0	72	n-propylbenzene	0
22	1,1-dichloroethane	0	73	2-chlorotoluene	0
23	2-butanone (MEK)	**4.425858372**	74	4-chlorotoluene	0
24	ethyl-t-butyl ether (ETBE)	0	75	1,3,5-trimethylbenzene	0
25	2,2-dichloropropane	0	76	tert-butylbenzene	0
26	cis-1,2-dichloroethene	0	77	1,2,4-trimethylbenzene	0
27	bromochloromethane	0	79	sec-butylbenzene	0
28	chloroform	0.226978961	80	1,3-dichlorobenzene	0
29	tetrahydrofuran (THF)	**4.065542503** F+?	81	4-isopropyltoluene	0
30	1,1,1-trichloroethane	0	82	1,4-dichlorobenzene	0
33	carbon tetrachloride	0	84	1,2-dichlorobenzene	0
34	1,1-dichloropropene	0	85	n-butylbenzene	0
35	benzene	0	86	1,2-dibromo-3-chloropropane (DBCP)	0
37	1,2-dichloroethane	0	88	1,2,4-trichlorobenzene	0
38	t-amyl-methyl ether (TAME)	0	89	hexachlorobutadiene	0
39	trichloroethene	-0.045681842	90	naphthalene	0
42	1,2-dichloropropane	0	91	1,2,3-trichlorobenzene	0
43	dibromomethane	0	87	1,3,5-trichlorobenzene	0
44	bromodichloromethane	0	12	1,1,2-trichloro-1,2,2-trifluoroethane	0
45	1,4-dioxane	0	14	methyl acetate	0
47	4-methyl-2-pentanone (MIBK)	0	21	vinyl acetate	0
48	2-hexanone	0	31	cyclohexane	0
49	cis-1,3-dichloropropene	0	40	methylcyclohexane	0
50	toluene	**7.941056347**	10	acrolein	0
52	trans-1,3-dichloropropene	0.034247987	17	acrylonitrile	0
53	1,1,2-trichloroethane	0	46	2-chloroethylvinylether (2-CEVE)	0
55	tetrachloroethene	0		Total Xylenes	0

Quantitation Report (QT Reviewed)

Data Path : X:\V8\2023\Nov23\111623\
Data File : v8111641.D
Acq On : 17 Nov 2023 03:17 am
Operator : lmm
Sample : 67839-10 5mL
Misc : 5
ALS Vial : 41 Sample Multiplier: 1

11/17/23 @ 07:32
WillieS

Quant Time: Nov 17 06:46:43 2023
Quant Method : X:\V8\methods\V88260090823A.M
Quant Title : V5 Method 8260D
QLast Update : Mon Oct 30 11:37:50 2023
Response via : Initial Calibration

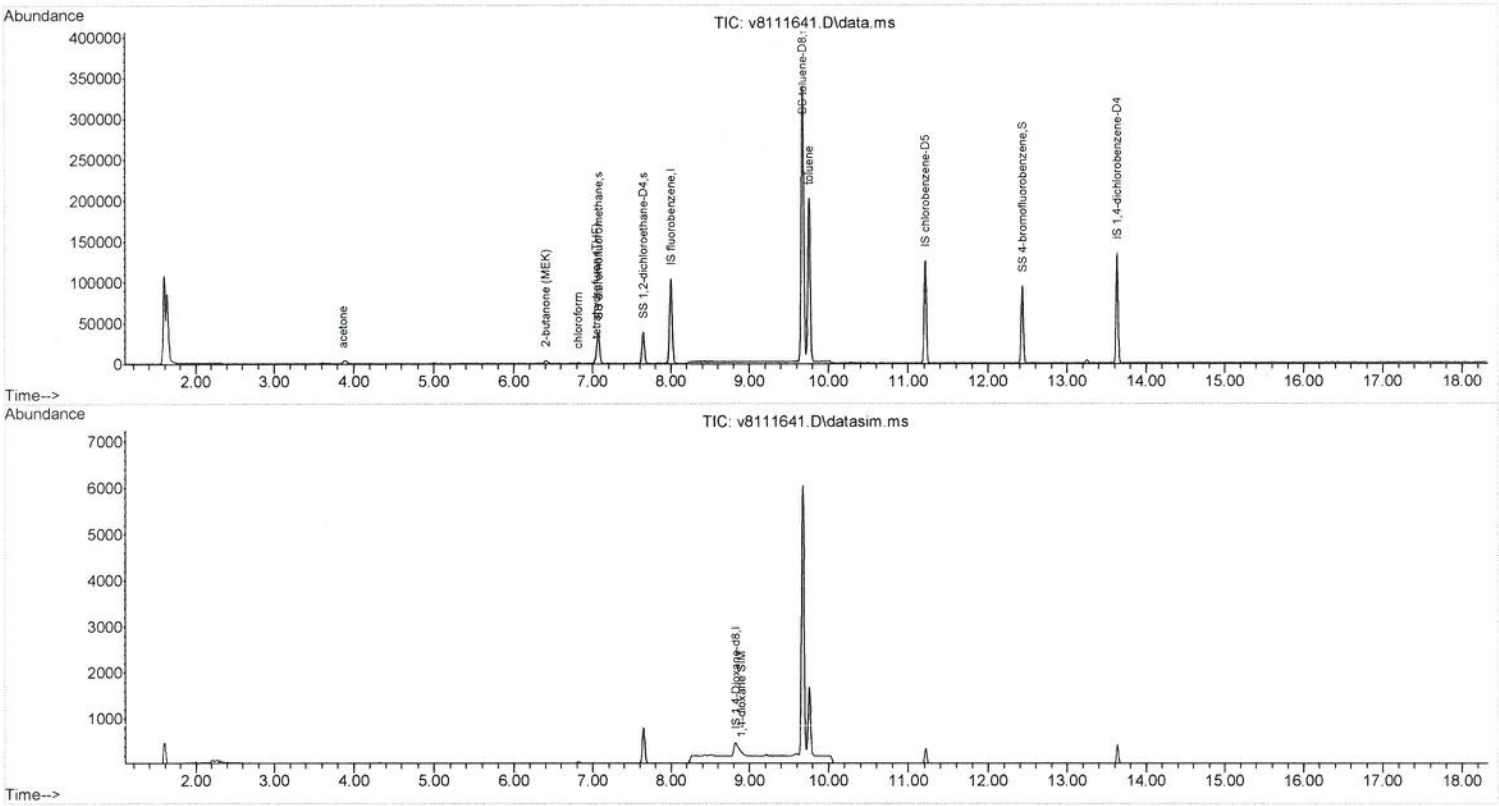
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) IS fluorobenzene	8.001	96	118739	10.00	ug/L	0.00
54) IS chlorobenzene-D5	11.217	119	27890	10.00	ug/L	0.00
68) IS 1,4-dichlorobenzene-D4	13.637	152	42619	10.00	ug/L	0.00
92) IS 1,4-Dioxane-d8	8.827	96	734	10.00	ug/L	# 0.00
System Monitoring Compounds						
32) SS 1,2-dichloroethane-D4	7.646	65	29546	8.70	ug/L	0.00
Spiked Amount 10.000	Range 60 - 140		Recovery = 87.00%			
36) SS dibromofluoromethane	7.076	111	28203	9.69	ug/L	0.00
Spiked Amount 10.000	Range 78 - 114		Recovery = 96.90%			
41) SS a,a,a-trifluorotoluene	0.000	146	0	0.00	ug/L	
Spiked Amount 20.000	Range 70 - 130		Recovery = 0.00%#			
51) SS toluene-D8	9.678	98	282766	10.10	ug/L	0.00
Spiked Amount 10.000	Range 88 - 110		Recovery = 101.00%			
67) SS 4-bromofluorobenzene	12.434	174	30690	9.63	ug/L	0.00
Spiked Amount 10.000	Range 86 - 115		Recovery = 96.30%			
83) NA 1,2-dichlorobenzene-D4	13.637	152	42619	0.00	ug/L	0.00
Spiked Amount 25.000	Range 15 - 25		Recovery = 0.00%#			
Target Compounds						Qvalue
9) acetone	3.868	43	2324	1.936	ug/L #	1
23) 2-butanone (MEK)	6.402	43	6208	4.426	ug/L #	90
28) chloroform	6.816	83	940	0.227	ug/L	98
29) tetrahydrofuran (THF)	7.049	42	3591	4.066	ug/L	88
50) toluene	9.761	92	112533	7.941	ug/L	88
93] 1,4-dioxane SIM	8.895	88	143	1.178	ug/L #	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : X:\V8\2023\Nov23\111623\
Data File : v8111641.D
Acq On : 17 Nov 2023 03:17 am
Operator : 1mm
Sample : 67839-10 5mL
Misc : 5
ALS Vial : 41 Sample Multiplier: 1

Quant Time: Nov 17 06:46:43 2023
Quant Method : X:\V8\methods\V88260090823A.M
Quant Title : V5 Method 8260D
QLast Update : Mon Oct 30 11:37:50 2023
Response via : Initial Calibration



This File:	L:\VOA\Excel Reports\2023\v8111642
Analysis Group:	8260/8021/624
Field ID:	Y-BRMW10-65-75-110923 1.8E+07
Sample:	67839-11 5mL Dow Salvage Yard
Misc:	5 CRE
Import File Name	v8 111623 h DoD
TestGroupID	V8260DoD_A
Aqueous or Soil? (A or S)	A
Solid amount (g)	
Methanol volume (mL)	
Percent Solid (%)	
Soil Prep Date	
Weight:	
Volume:	
Lab#:	67839-011
AnalysisDate:	11/17/2023
AnalysisTime:	03:42
Dilution:	1
AnalyzedBy:	LMM v8111642.D
QC_Code:	
Prep#:	

Reviewer Checks:

- Quant Report: Reviewed, Analyst Initials & Date
- Chromatogram Checked, Major peaks identified
- Results consistent w/ other attached analyses
- Reanalysis reason noted
- Substitute dilution data checked
- Correct dilution and reason clear or noted
- Flags checked (Expiration, F+, Over Cal, Surr, Aspen, QC)
- Other QC failures or issues noted in Aspen
- Correct data file and/or date/time in Aspen

Notes:

Reviewer Initials & Date: 11/17/23

#	Surrogate Standards	Import Value (as ug/L)	Recovery	Flag	QC Limits	Surrogate True Values
32	SS 1,2-dichloroethane-D4	8.94	**89%**		60-140	10
36	SS dibromofluoromethane	9.44	**94%**		78-114	10
51	SS toluene-D8	10.11	**101%**		88-110	10
67	SS 4-bromofluorobenzene	9.96	**100%**		86-115	10
41	SS a,a,a-trifluorotoluene	0.00	**0%**		70-130*	20

	AnalyteName	Concentration (ug/L)		AnalyteName	Concentration (ug/L)
2	dichlorodifluoromethane	0	56	1,3-dichloropropane	0
3	chloromethane	0	57	dibromochloromethane	0
4	vinyl chloride	0	58	1,2-dibromoethane (EDB)	0
5	bromomethane	0	59	chlorobenzene	0
6	chloroethane	0	60	1,1,1,2-tetrachloroethane	0
7	trichlorofluoromethane	0	61	ethylbenzene	0
8	diethylether	0	62	m&p-xylenes	0
9	acetone	4.202137301	63	o-xylene	0
11	1,1-dichloroethene	0	64	styrene	0
13	t-butanol (TBA)	0	65	bromoform	0
15	methylene chloride	0	66	isopropylbenzene	0
16	carbon disulfide	0	69	bromobenzene	0
18	methyl-t-butyl ether (MTBE)	0	70	1,1,2,2-tetrachloroethane	0
19	trans-1,2-dichloroethene	0	71	1,2,3-trichloropropane	0
20	isopropyl ether (DIPE)	0	72	n-propylbenzene	0
22	1,1-dichloroethane	0	73	2-chlorotoluene	0
23	2-butanone (MEK)	**6.304209704**	74	4-chlorotoluene	0
24	ethyl-t-butyl ether (ETBE)	0	75	1,3,5-trimethylbenzene	0
25	2,2-dichloropropane	0	76	tert-butylbenzene	0
26	cis-1,2-dichloroethene	0	77	1,2,4-trimethylbenzene	0
27	bromochloromethane	0	79	sec-butylbenzene	0
28	chloroform	0.251855499	80	1,3-dichlorobenzene	0
29	tetrahydrofuran (THF)	**3.713778823** F+?	81	4-isopropyltoluene	0
30	1,1,1-trichloroethane	0	82	1,4-dichlorobenzene	0
33	carbon tetrachloride	0	84	1,2-dichlorobenzene	0
34	1,1-dichloropropene	0	85	n-butylbenzene	0
35	benzene	0	86	1,2-dibromo-3-chloropropane (DBCP)	0
37	1,2-dichloroethane	0	88	1,2,4-trichlorobenzene	0
38	t-amyl-methyl ether (TAME)	0	89	hexachlorobutadiene	0
39	trichloroethene	-0.048428544	90	naphthalene	0
42	1,2-dichloropropane	0	91	1,2,3-trichlorobenzene	0
43	dibromomethane	0	87	1,3,5-trichlorobenzene	0
44	bromodichloromethane	0	12	1,1,2-trichloro-1,2,2-trifluoroethane	0
45	1,4-dioxane	0	14	methyl acetate	0
47	4-methyl-2-pentanone (MIBK)	0	21	vinyl acetate	0
48	2-hexanone	0	31	cyclohexane	0
49	cis-1,3-dichloropropene	0	40	methylcyclohexane	0
50	toluene	**9.426373061**	10	acrolein	0
52	trans-1,3-dichloropropene	0	17	acrylonitrile	0
53	1,1,2-trichloroethane	0	46	2-chloroethylvinylether (2-CEVE)	0
55	tetrachloroethene	0		Total Xylenes	0

Quantitation Report (QT Reviewed)

Data Path : X:\V8\2023\Nov23\111623\
Data File : v8111642.D
Acq On : 17 Nov 2023 03:42 am
Operator : lmm
Sample : 67839-11 5mL
Misc : 5
ALS Vial : 42 Sample Multiplier: 1

11/17/23 @ 07:32
WillieS

Quant Time: Nov 17 06:46:47 2023
Quant Method : X:\V8\methods\V88260090823A.M
Quant Title : V5 Method 8260D
QLast Update : Mon Oct 30 11:37:50 2023
Response via : Initial Calibration

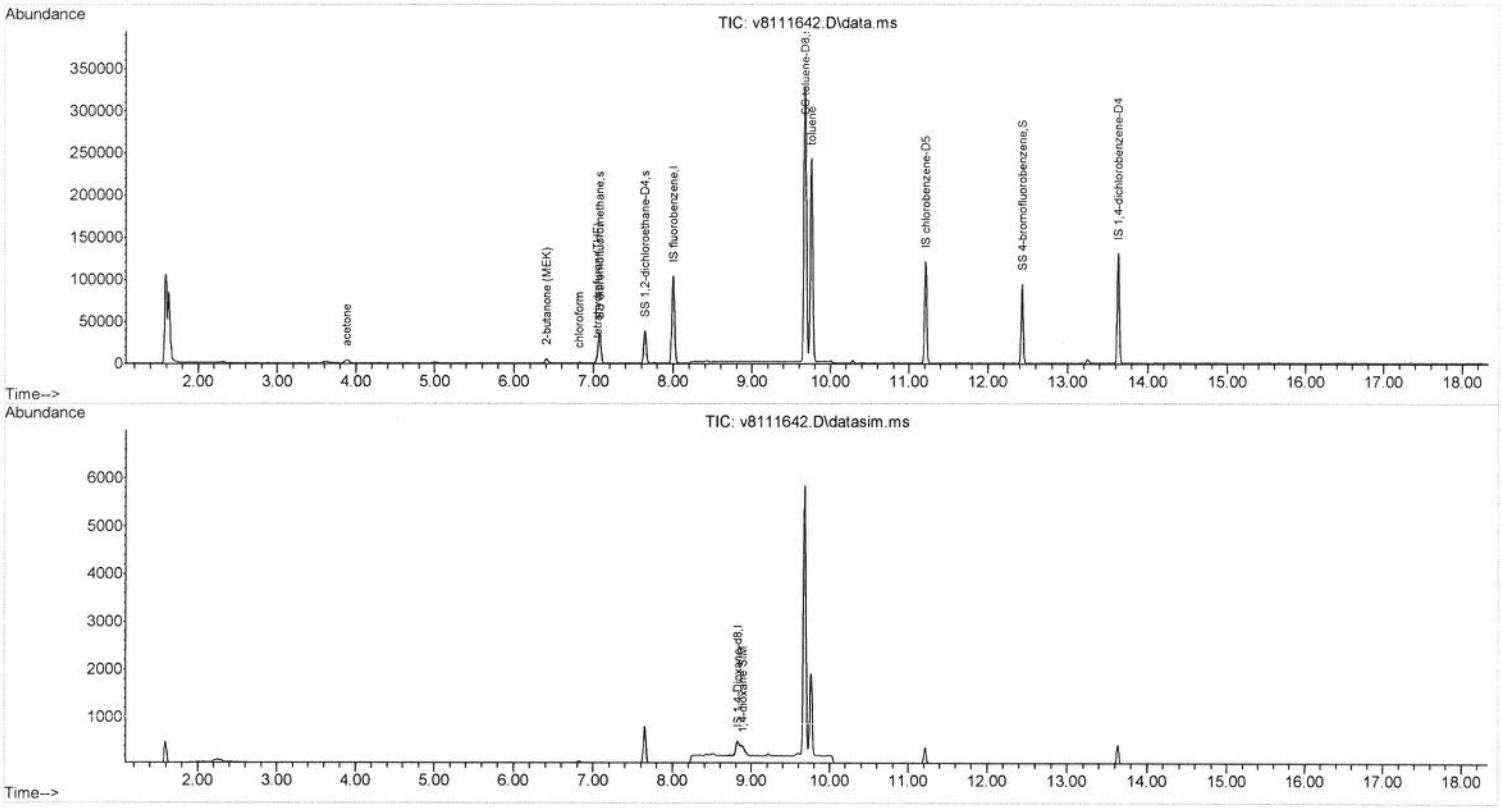
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) IS fluorobenzene	8.001	96	118528	10.00	ug/L	0.00
54) IS chlorobenzene-D5	11.213	119	26744	10.00	ug/L	0.00
68) IS 1,4-dichlorobenzene-D4	13.633	152	41152	10.00	ug/L	0.00
92) IS 1,4-Dioxane-d8	8.823	96	717	10.00	ug/L	0.00
System Monitoring Compounds						
32) SS 1,2-dichloroethane-D4	7.646	65	30299	8.94	ug/L	0.00
Spiked Amount 10.000	Range 60 - 140		Recovery = 89.40%			
36) SS dibromofluoromethane	7.076	111	27432	9.44	ug/L	0.00
Spiked Amount 10.000	Range 78 - 114		Recovery = 94.40%			
41) SS a,a,a-trifluorotoluene	0.000	146	0	0.00	ug/L	
Spiked Amount 20.000	Range 70 - 130		Recovery = 0.00%#			
51) SS toluene-D8	9.679	98	282751	10.11	ug/L	0.00
Spiked Amount 10.000	Range 88 - 110		Recovery = 101.10%			
67) SS 4-bromofluorobenzene	12.435	174	30439	9.96	ug/L	0.00
Spiked Amount 10.000	Range 86 - 115		Recovery = 99.60%			
83) NA 1,2-dichlorobenzene-D4	13.633	152	41152	0.00	ug/L	0.00
Spiked Amount 25.000	Range 15 - 25		Recovery = 0.00%#			
Target Compounds						Qvalue
9) acetone	3.882	43	3937	4.202	ug/L #	1
23) 2-butanone (MEK)	6.406	43	8592	6.304	ug/L #	91
28) chloroform	6.816	83	1041	0.252	ug/L	95
29) tetrahydrofuran (THF)	7.049	42	3287	3.714	ug/L	89
50) toluene	9.762	92	132928	9.426	ug/L	88
93] 1,4-dioxane SIM	8.891	88	334	2.981	ug/L #	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : X:\V8\2023\Nov23\111623\
Data File : v8111642.D
Acq On : 17 Nov 2023 03:42 am
Operator : lmm
Sample : 67839-11 5mL
Misc : 5
ALS Vial : 42 Sample Multiplier: 1

Quant Time: Nov 17 06:46:47 2023
Quant Method : X:\V8\methods\V88260090823A.M
Quant Title : V5 Method 8260D
QLast Update : Mon Oct 30 11:37:50 2023
Response via : Initial Calibration



This File:	L:\VOA\Excel Reports\2023\v8111643
Analysis Group:	8260/8021/624
Field ID:	GAC-110923 1.8E+07
Sample:	67839-23 5mL Dow Salvage Yard
Misc:	5 CRE
Import File Name	v8 111623 h DoD
TestGroupID	V8260DoD_A
Aqueous or Soil? (A or S)	A
Solid amount (g)	
Methanol volume (mL)	
Percent Solid (%)	
Soil Prep Date	
Weight:	
Volume:	
Lab#:	67839-023
AnalysisDate:	11/17/2023
AnalysisTime:	04:07
Dilution:	1
AnalyzedBy:	LMM v8111643.D
QC_Code:	
Prep#:	

Reviewer Checks:

- Quant Report: Reviewed, Analyst Initials & Date
- Chromatogram Checked, Major peaks identified
- Results consistent w/ other attached analyses
- Reanalysis reason noted
- Substitute dilution data checked
- Correct dilution and reason clear or noted
- Flags checked (Expiration, F+, Over Cal, Surr, Aspen, QC)
- Other QC failures or issues noted in Aspen
- Correct data file and/or date/time in Aspen

Notes:

11/17/23

Reviewer Initials & Date:

#	Surrogate Standards	Import Value (as ug/L)	Recovery	Flag	QC Limits	Surrogate True Values
32	SS 1,2-dichloroethane-D4	9.24	92%		60-140	10
36	SS dibromofluoromethane	9.73	97%		78-114	10
51	SS toluene-D8	10.24	102%		88-110	10
67	SS 4-bromofluorobenzene	9.78	98%		86-115	10
41	SS a,a,a-trifluorotoluene	0.00	0%		70-130*	20

	AnalyteName	Concentration (ug/L)		AnalyteName	Concentration (ug/L)
2	dichlorodifluoromethane	0	56	1,3-dichloropropane	0
3	chloromethane	0	57	dibromochloromethane	0
4	vinyl chloride	0	58	1,2-dibromoethane (EDB)	0
5	bromomethane	0	59	chlorobenzene	0
6	chloroethane	0	60	1,1,1,2-tetrachloroethane	0
7	trichlorofluoromethane	0	61	ethylbenzene	0
8	diethylether	0	62	m&p-xylenes	0
9	acetone	0.760884594	63	o-xylene	0
11	1,1-dichloroethene	0	64	styrene	0
13	t-butanol (TBA)	0	65	bromoform	0
15	methylene chloride	0	66	isopropylbenzene	0
16	carbon disulfide	0	69	bromobenzene	0
18	methyl-t-butyl ether (MTBE)	0	70	1,1,2,2-tetrachloroethane	0
19	trans-1,2-dichloroethene	0	71	1,2,3-trichloropropane	0
20	isopropyl ether (DIPE)	0	72	n-propylbenzene	0
22	1,1-dichloroethane	0	73	2-chlorotoluene	0
23	2-butanone (MEK)	0	74	4-chlorotoluene	0
24	ethyl-t-butyl ether (ETBE)	0	75	1,3,5-trimethylbenzene	0
25	2,2-dichloropropane	0	76	tert-butylbenzene	0
26	cis-1,2-dichloroethene	0	77	1,2,4-trimethylbenzene	0
27	bromochloromethane	0	79	sec-butylbenzene	0
28	chloroform	0	80	1,3-dichlorobenzene	0
29	tetrahydrofuran (THF)	6.564838068 E+2	81	4-isopropyltoluene	0
30	1,1,1-trichloroethane	0	82	1,4-dichlorobenzene	0
33	carbon tetrachloride	0	84	1,2-dichlorobenzene	0
34	1,1-dichloropropene	0	85	n-butylbenzene	0
35	benzene	0	86	1,2-dibromo-3-chloropropane (DBCP)	0
37	1,2-dichloroethane	0	88	1,2,4-trichlorobenzene	0
38	t-amyl-methyl ether (TAME)	0	89	hexachlorobutadiene	0
39	trichloroethene	0	90	naphthalene	0
42	1,2-dichloropropane	0	91	1,2,3-trichlorobenzene	0
43	dibromomethane	0	87	1,3,5-trichlorobenzene	0
44	bromodichloromethane	0	12	1,1,2-trichloro-1,2,2-trifluoroethane	0
45	1,4-dioxane	0	14	methyl acetate	0
47	4-methyl-2-pentanone (MIBK)	0	21	vinyl acetate	0
48	2-hexanone	0	31	cyclohexane	0
49	cis-1,3-dichloropropene	0	40	methylcyclohexane	0
50	toluene	0	10	acrolein	0
52	trans-1,3-dichloropropene	0	17	acrylonitrile	0
53	1,1,2-trichloroethane	0	46	2-chloroethylvinylether (2-CEVE)	0
55	tetrachloroethene	0		Total Xylenes	0

Quantitation Report (QT Reviewed)

Data Path : X:\V8\2023\Nov23\111623\
Data File : v8111643.D
Acq On : 17 Nov 2023 04:07 am
Operator : lmm
Sample : 67839-23 5mL
Misc : 5
ALS Vial : 43 Sample Multiplier: 1

11/17/23 @ 07:32
WillieS

Quant Time: Nov 17 06:46:51 2023
Quant Method : X:\V8\methods\V88260090823A.M
Quant Title : V5 Method 8260D
QLast Update : Mon Oct 30 11:37:50 2023
Response via : Initial Calibration

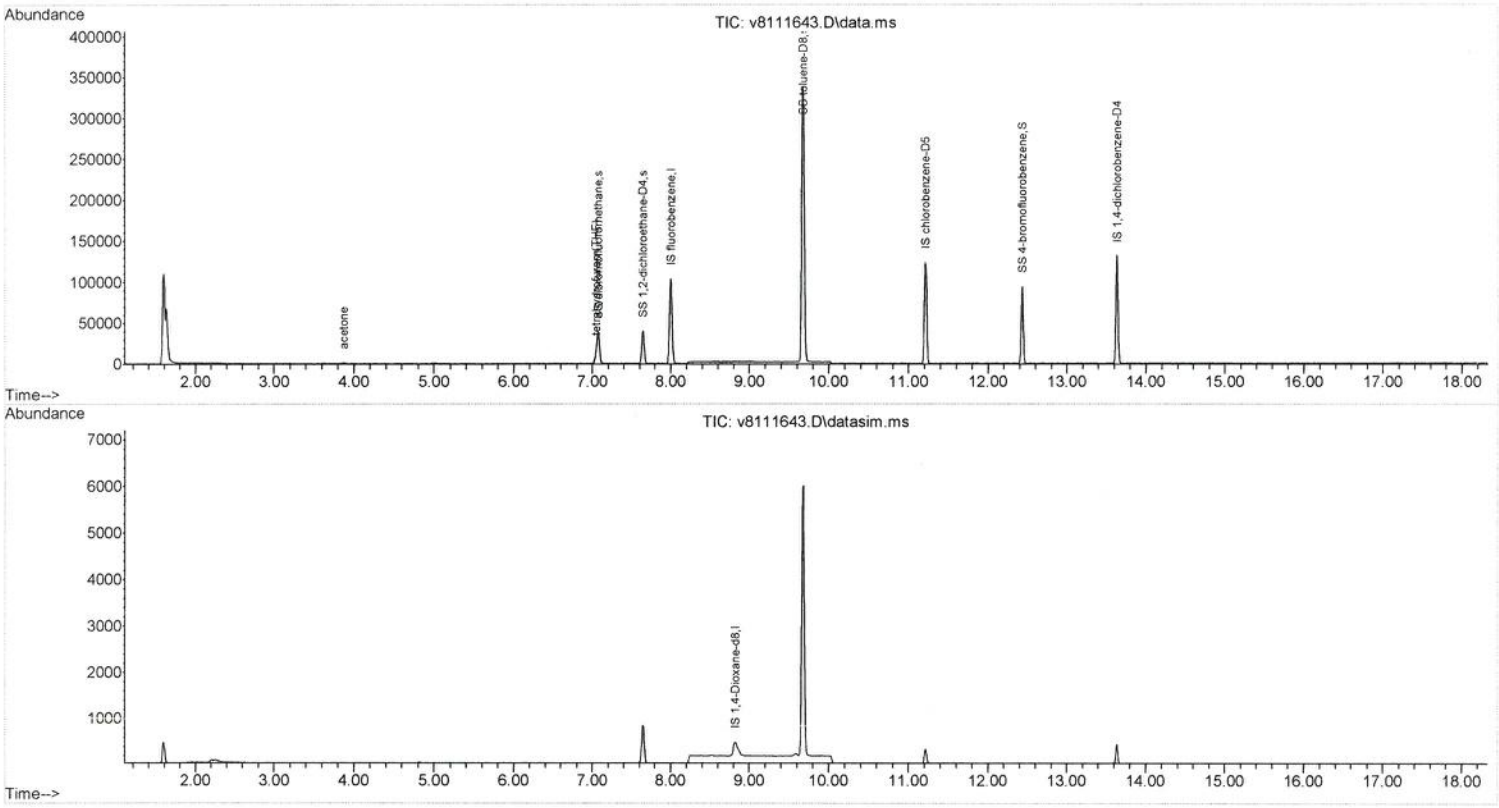
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) IS fluorobenzene	8.001	96	118378	10.00	ug/L	0.00
54) IS chlorobenzene-D5	11.213	119	28074	10.00	ug/L	0.00
68) IS 1,4-dichlorobenzene-D4	13.637	152	42160	10.00	ug/L	0.00
92) IS 1,4-Dioxane-d8	8.823	96	730	10.00	ug/L	# 0.00
System Monitoring Compounds						
32) SS 1,2-dichloroethane-D4	7.646	65	31290	9.24	ug/L	0.00
Spiked Amount 10.000	Range 60 - 140		Recovery = 92.40%			
36) SS dibromofluoromethane	7.076	111	28237	9.73	ug/L	0.00
Spiked Amount 10.000	Range 78 - 114		Recovery = 97.30%			
41) SS a,a,a-trifluorotoluene	0.000	146	0	0.00	ug/L	
Spiked Amount 20.000	Range 70 - 130		Recovery = 0.00%#			
51) SS toluene-D8	9.679	98	285863	10.24	ug/L	0.00
Spiked Amount 10.000	Range 88 - 110		Recovery = 102.40%			
67) SS 4-bromofluorobenzene	12.434	174	31401	9.78	ug/L	0.00
Spiked Amount 10.000	Range 86 - 115		Recovery = 97.80%			
83) NA 1,2-dichlorobenzene-D4	13.637	152	42160	0.00	ug/L	0.00
Spiked Amount 25.000	Range 15 - 25		Recovery = 0.00%#			
Target Compounds						Qvalue
9) acetone	3.873	43	1479	0.761	ug/L #	41
29) tetrahydrofuran (THF)	7.049	42	5692	6.565	ug/L	85

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : X:\V8\2023\Nov23\111623\
Data File : v8111643.D
Acq On : 17 Nov 2023 04:07 am
Operator : 1mm
Sample : 67839-23 5mL
Misc : 5
ALS Vial : 43 Sample Multiplier: 1

Quant Time: Nov 17 06:46:51 2023
Quant Method : X:\V8\methods\V88260090823A.M
Quant Title : V5 Method 8260D
QLast Update : Mon Oct 30 11:37:50 2023
Response via : Initial Calibration



This File:	L:\VOA\Excel Reports\2023\v8111608
Analysis Group:	8260/8021/624
Field ID:	TB33-110923 1.8E+07
Sample:	67839-24 5mL Dow Salvage Yard
Misc:	5 CRE
Import File Name	v8 111623 g DoD
TestGroupID	V8260DoD_A
Aqueous or Soil? (A or S)	A
Solid amount (g)	
Methanol volume (mL)	
Percent Solid (%)	
Soil Prep Date	
Weight:	
Volume:	
Lab#:	67839-024
AnalysisDate:	11/16/2023
AnalysisTime:	13:37
Dilution:	1
AnalyzedBy:	LMM v8111608.D
QC_Code:	
Prep#:	

Reviewer Checks:

- Quant Report: Reviewed, Analyst Initials & Date
- Chromatogram Checked, Major peaks identified
- Results consistent w/ other attached analyses
- Reanalysis reason noted
- Substitute dilution data checked
- Correct dilution and reason clear or noted
- Flags checked (Expiration, F+, Over Cal, Surr, Aspen, QC)
- Other QC failures or issues noted in Aspen
- Correct data file and/or date/time in Aspen

Notes:

Reviewer Initials & Date: 11/17/23

#	Surrogate Standards	Import Value (as ug/L)	Recovery	Flag	QC Limits	Surrogate True Values
32	SS 1,2-dichloroethane-D4	9.24	**92%**		60-140	10
36	SS dibromofluoromethane	9.33	**93%**		78-114	10
51	SS toluene-D8	10.13	**101%**		88-110	10
67	SS 4-bromofluorobenzene	10.00	**100%**		86-115	10
41	SS a,a,a-trifluorotoluene	0.00	**0%**		70-130*	20

	AnalyteName	Concentration (ug/L)		AnalyteName	Concentration (ug/L)
2	dichlorodifluoromethane	0	56	1,3-dichloropropane	0
3	chloromethane	0	57	dibromochloromethane	0
4	vinyl chloride	0	58	1,2-dibromoethane (EDB)	0
5	bromomethane	0	59	chlorobenzene	0
6	chloroethane	0	60	1,1,1,2-tetrachloroethane	0
7	trichlorofluoromethane	0	61	ethylbenzene	0
8	diethylether	0	62	m&p-xylenes	0
9	acetone	0.018977485	63	o-xylene	0
11	1,1-dichloroethene	0	64	styrene	0
13	t-butanol (TBA)	0	65	bromoform	0
15	methylene chloride	0	66	isopropylbenzene	0
16	carbon disulfide	0	69	bromobenzene	0
18	methyl-t-butyl ether (MTBE)	0	70	1,1,2,2-tetrachloroethane	0
19	trans-1,2-dichloroethene	0	71	1,2,3-trichloropropane	0
20	isopropyl ether (DIPE)	0	72	n-propylbenzene	0
22	1,1-dichloroethane	0	73	2-chlorotoluene	0
23	2-butanone (MEK)	0	74	4-chlorotoluene	0
24	ethyl-t-butyl ether (ETBE)	0	75	1,3,5-trimethylbenzene	0
25	2,2-dichloropropane	0	76	tert-butylbenzene	0
26	cis-1,2-dichloroethene	0	77	1,2,4-trimethylbenzene	0.036008206
27	bromochloromethane	0	79	sec-butylbenzene	0
28	chloroform	0	80	1,3-dichlorobenzene	0
29	tetrahydrofuran (THF)	0	81	4-isopropyltoluene	0
30	1,1,1-trichloroethane	0	82	1,4-dichlorobenzene	0
33	carbon tetrachloride	0	84	1,2-dichlorobenzene	0
34	1,1-dichloropropene	0	85	n-butylbenzene	0
35	benzene	0	86	1,2-dibromo-3-chloropropane (DBCP)	0
37	1,2-dichloroethane	0	88	1,2,4-trichlorobenzene	0
38	t-amyl-methyl ether (TAME)	0	89	hexachlorobutadiene	0
39	trichloroethene	0	90	naphthalene	0
42	1,2-dichloropropane	0	91	1,2,3-trichlorobenzene	0
43	dibromomethane	0	87	1,3,5-trichlorobenzene	0
44	bromodichloromethane	0	12	1,1,2-trichloro-1,2,2-trifluoroethane	0
45	1,4-dioxane	0	14	methyl acetate	0
47	4-methyl-2-pentanone (MIBK)	0	21	vinyl acetate	0
48	2-hexanone	0	31	cyclohexane	0
49	cis-1,3-dichloropropene	0	40	methylcyclohexane	0
50	toluene	-0.157204096	10	acrolein	0
52	trans-1,3-dichloropropene	0	17	acrylonitrile	0
53	1,1,2-trichloroethane	0	46	2-chloroethylvinylether (2-CEVE)	0
55	tetrachloroethene	0		Total Xylenes	0

Quantitation Report (QT Reviewed)

Data Path : X:\V8\2023\Nov23\111623\
Data File : v8111608.D
Acq On : 16 Nov 2023 01:37 pm
Operator : lmm
Sample : 67839-24 5mL
Misc : 5
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Nov 16 15:11:53 2023
Quant Method : X:\V8\methods\V88260090823A.M
Quant Title : V5 Method 8260D
QLast Update : Mon Oct 30 11:37:50 2023
Response via : Initial Calibration

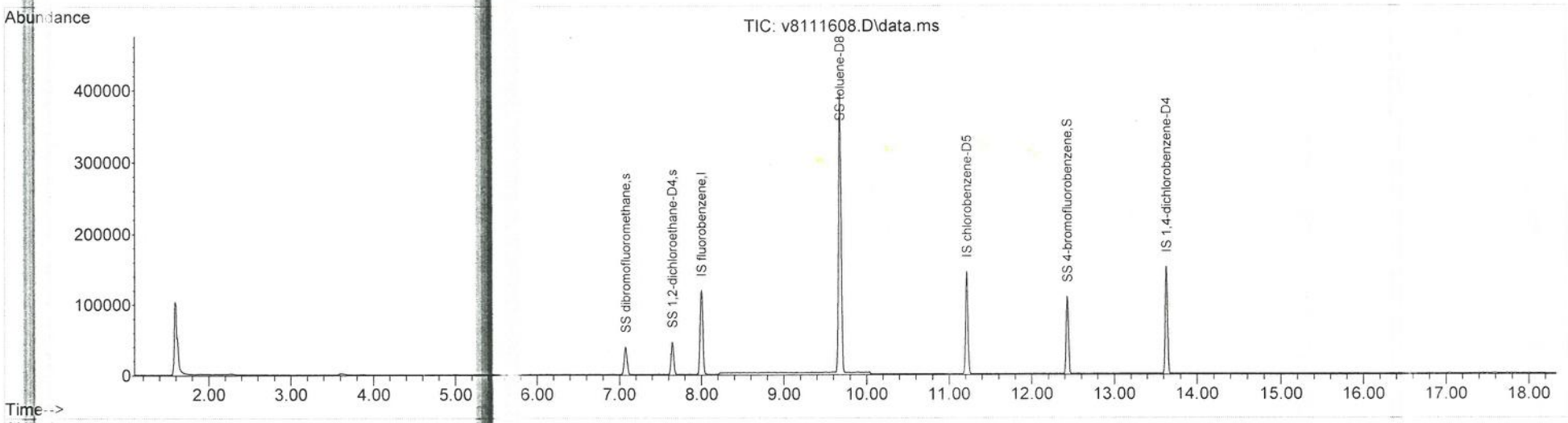
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) IS fluorobenzene	8.001	96	137297	10.00	ug/L	0.00
54) IS chlorobenzene-D5	11.216	119	31177	10.00	ug/L	0.00
68) IS 1,4-dichlorobenzene-D4	13.636	152	47370	10.00	ug/L	0.00
92) IS 1,4-Dioxane-d8	8.823	96	848	10.00	ug/L	0.00
System Monitoring Compounds						
32) SS 1,2-dichloroethane-D4	7.646	65	36279	9.24	ug/L	0.00
Spiked Amount 10.000	Range 60 - 140		Recovery = 92.40%			
36) SS dibromofluoromethane	7.076	111	31410	9.33	ug/L	0.00
Spiked Amount 10.000	Range 78 - 114		Recovery = 93.30%			
41) SS a,a,a-trifluorotoluene	0.000	146	0	0.00	ug/L	
Spiked Amount 20.000	Range 70 - 130		Recovery = 0.00%#			
51) SS toluene-D8	9.679	98	328173	10.13	ug/L	0.00
Spiked Amount 10.000	Range 88 - 110		Recovery = 101.30%			
67) SS 4-bromofluorobenzene	12.433	174	35625	10.00	ug/L	0.00
Spiked Amount 10.000	Range 86 - 115		Recovery = 100.00%			
83) NA 1,2-dichlorobenzene-D4	13.636	152	47370	0.00	ug/L	0.00
Spiked Amount 25.000	Range 15 - 25		Recovery = 0.00%#			
Target Compounds						Qvalue
93] 1,4-dioxane SIM	8.896	88	59	0.345	ug/L #	100

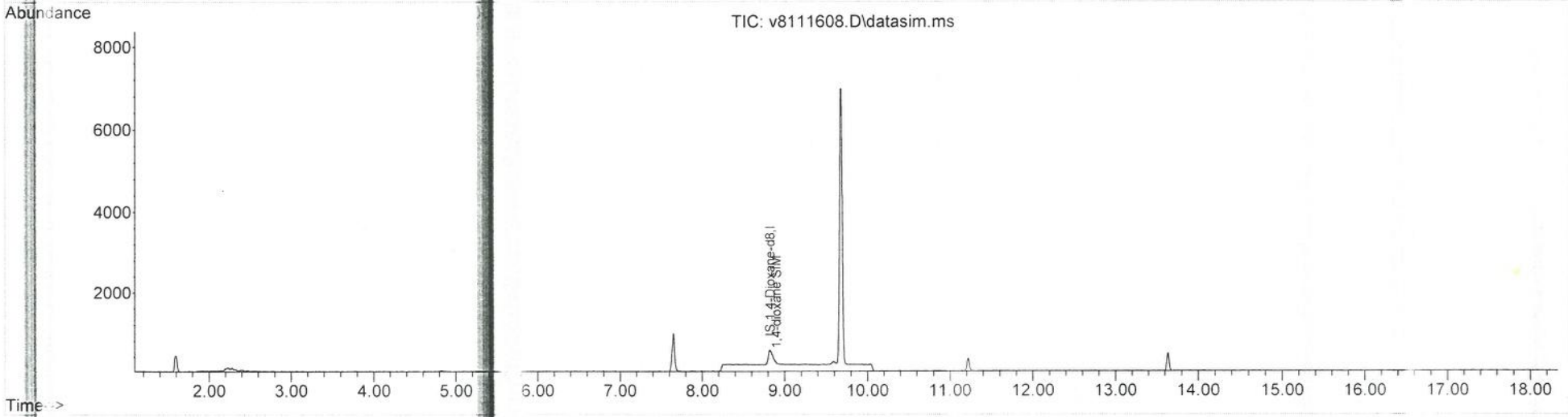
(#) = qualifier out of range (m) = manual integration (+) = signals summed

NOV 16 2023

Dat Path : X:\V8\2023\Nov23\111623\
Dat File : v8111608.D
Acq On : 16 Nov 2023 01:37 pm
Operator : lmm
Sample : 67839-24 5mL
Misc : 5
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Nov 16 15:11:53 2023
Quant Method : X:\V8\methods\V88260090823A.M
Quant Title : V5 Method 8260D
QLast Update : Mon Oct 30 11:37:50 2023
Response via : Initial Calibration





This File:	L:\VOA\Excel Reports\2023\V6112014
Analysis Group:	8260/8021/624
Field ID:	SY-BRMW4-62-72-110923 18001468
Sample:	67839-01 5mL Dow Salvage Yard
Misc:	5 CRE
Import File Name	v6 112023 a
TestGroupID	VMA_VPH_PresCert_A
Aqueous or Soil? (A or S)	A
Solid amount (g)	
Methanol volume (mL)	
Percent Solid (%)	
Soil Prep Date	
Weight:	
Volume:	
Lab#:	67839-001
AnalysisDate:	11/20/2023
AnalysisTime:	16:25
Dilution:	1
AnalyzedBy:	SFP V6112014.D
QC_Code:	
Prep#:	

Reviewer Checks:

Quant Report: Reviewed, Ranges integrated, Analyst Initials & Date
Chromatogram Checked, Major peaks identified
Results consistent w/ other attached analyses
Reanalysis reason noted
Substitute dilution data checked
Correct dilution and reason clear or noted
Flags checked (Expiration, F+, Over Cal, Surr, Aspen, QC)
Other QC failures or issues noted in Aspen
Correct data file and/or date/time in Aspen

Notes: Calibration based on sum of discrete peak areas

Initials & Date: WA 11-28-23

#	Surrogate Standards	Import Value (as ug/L)	Recovery	Flag	QC Limits	Surrogate True Values
11	SS 2,5-dibromotoluene	38.59	**96%**		70-130	40
22	SS 2,5-dibromotoluene #2	39.52	**99%**		70-130	40
4	SS a,a,a-trifluorotoluene	0.00	**0%**		70-130*	20

#	AnalyteName	Concentration (ug/L)	
	C5-C8 Aliphatics #2	**18.226**	18.226
	C9-C12 Aliphatics #2	**25.043**	25.043
1	Methyl-t-butyl ether (MTBE)	0.000	0
2	benzene	0.000	0
3	toluene	**1.671**	1.6713
5	ethylbenzene	0.000	0
6	m&p-xylenes	0.000	0
7	o-xylene	0.000	0
10	naphthalene	0.000	0
	C5-C8 Aliphatics Adj	**16.554**	16.554
	C9-C12 Aliphatics Adj	**14.081**	14.081
	C9-C10 Aromatics	**10.962**	10.962
	Total Xylenes	0.000	

Data Path : X:\V6\2023\Nov23\112023\
Data File : V6112014.D
Signal(s) : Signal #1: CPDET1B.ch Signal #2: FID2A.ch
Acq On : 20 Nov 2023 4:25 pm
Operator : sfp
Sample : 67839-01 5mL
Misc : 5
ALS Vial : 14 Sample Multiplier: 1

SFP 11/27/23 @ 11:42 SkylaM

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 20 19:50:47 2023
Quant Method : X:\V6\methods\V6VPH082423CHe.M
Quant Title : VOA06 MA VPH
QLast Update : Thu Aug 24 11:07:18 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

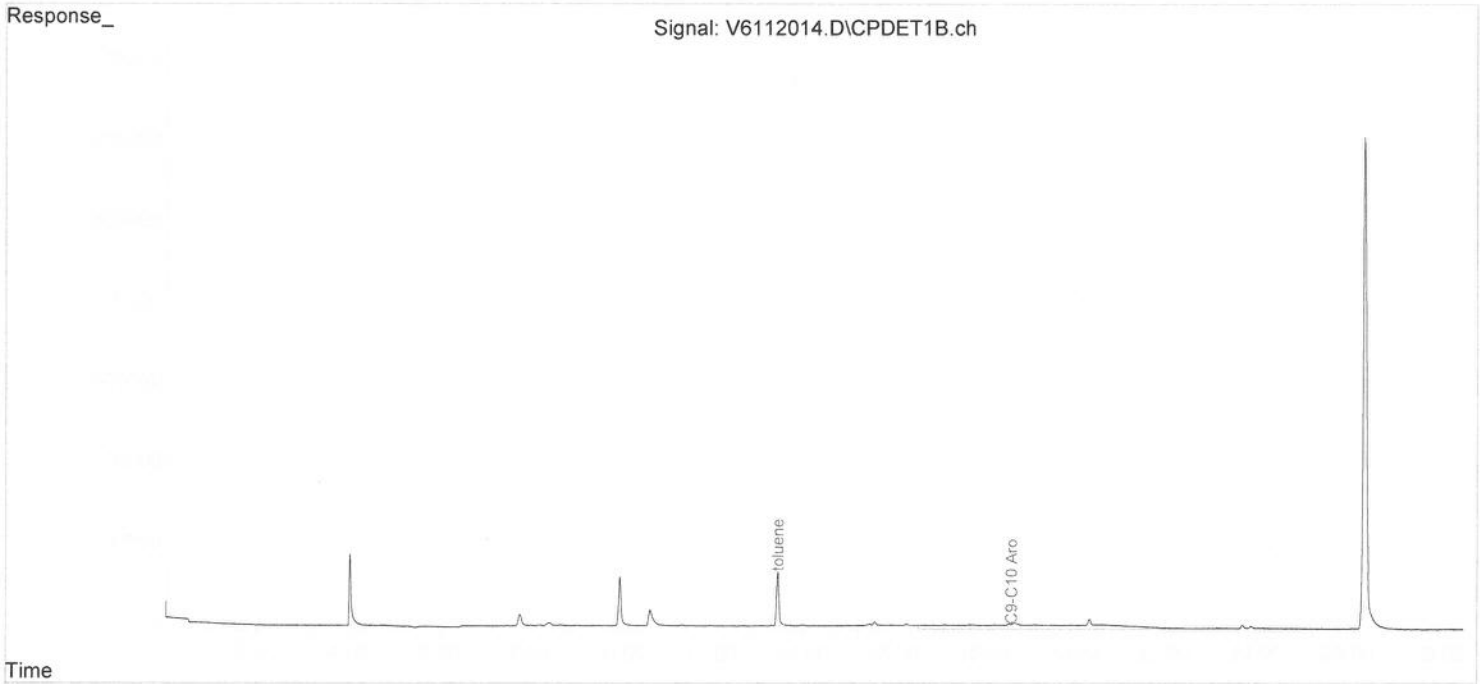
	Compound	R.T.	Response	Conc	Units		
	System Monitoring Compounds						
4)	S SS a,a,a-trifluorotol...	0.000	0	N.D.	ug/L		
Spiked Amount	20.000		Recovery =	0.00%			
11)	S SS 2,5-dibromotoluene	26.358	29860096	38.586	ug/L		
Spiked Amount	40.000 Range 70 - 130		Recovery =	96.47%			
17)	S SS a,a,a-trifluorotol...	0.000	0	N.D.	ug/L		
Spiked Amount	20.000		Recovery =	0.00%			
22)	S SS 2,5-dibromotoluene #2	26.358	15193251	39.521	ug/L		
Spiked Amount	40.000 Range 70 - 130		Recovery =	98.80%			
	Target Compounds						
1)	methyl-t-butyl ether ...	0.000	0	N.D.	ug/L		
2)	benzene	0.000	0	N.D.	ug/L		
3)	toluene	13.448	2420546	1.671	ug/L	m	BC
5)	ethylbenzene	0.000	0	N.D.	ug/L		
6)	m&p-xylenes	0.000	0	N.D.	ug/L		
7)	o-xylene	0.000	0	N.D.	ug/L		
8)	1,2,4-trimethylbenzene	0.000	0	N.D.	ug/L		
9)	H C9-C10 Aromatics	18.612	15197627	10.962	ug/L	m	RI
10)	naphthalene	0.000	0	N.D.	ug/L		
13)	pentane #2	0.000	0	N.D.	ug/L		
14)	2-methylpentane #2	0.000	0	N.D.	ug/L		
15)	2,2,4-trimethylpentan...	0.000	0	N.D.	ug/L	d	
16)	H C5-C8 Aliphatics #2	11.378	30514534	18.226	ug/L	m	RI
18)	nonane #2	0.000	0	N.D.	ug/L		
19)	decane #2	0.000	0	N.D.	ug/L		
20)	n-butylcyclohexane #2	0.000	0	N.D.	ug/L		
21)	H C9-C12 Aliphatics #2	15.611	19961490	25.043	ug/L	m	RI

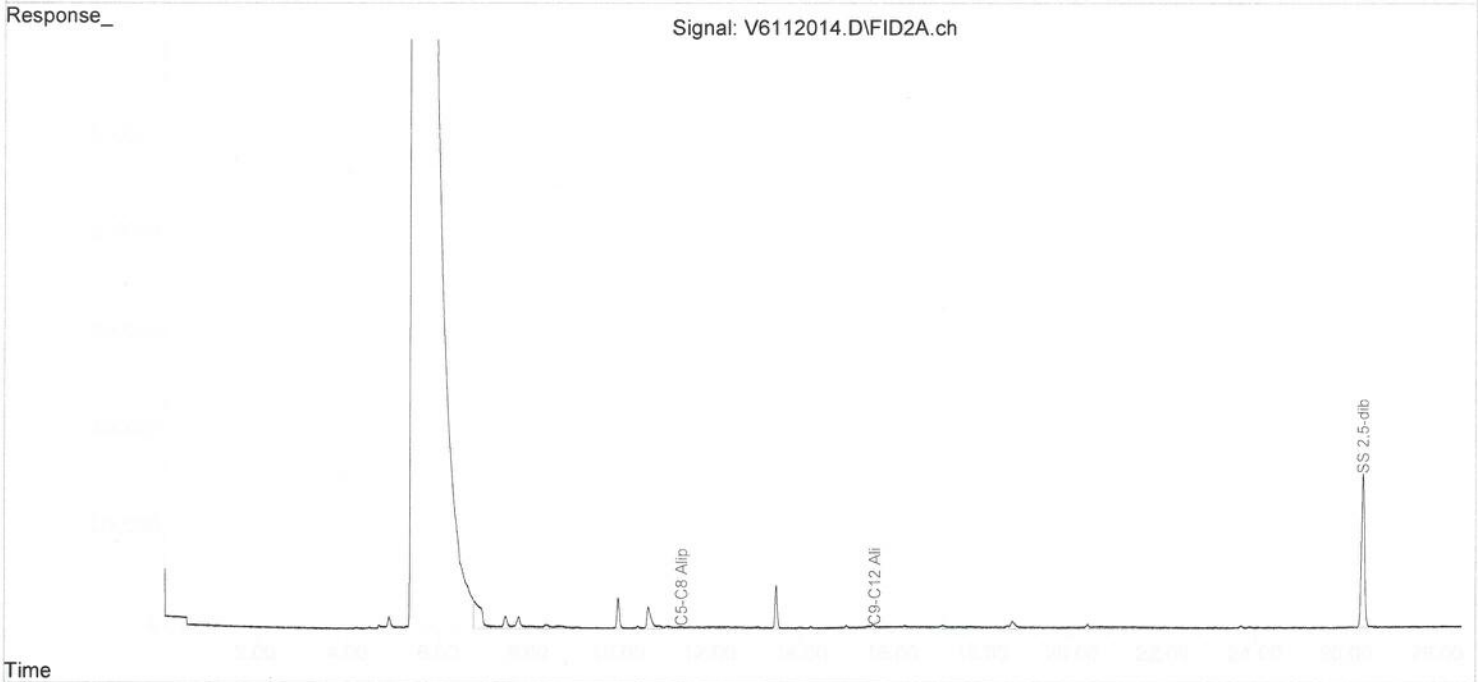
(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : X:\V6\2023\Nov23\112023\
Data File : V6112014.D
Signal(s) : Signal #1: CPDET1B.ch Signal #2: FID2A.ch
Acq On   : 20 Nov 2023   4:25 pm
Operator : sfp
Sample   : 67839-01 5mL
Misc   : 5
ALS Vial : 14   Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 20 19:50:47 2023
Quant Method : X:\V6\methods\V6VPH082423CHe.M
Quant Title : VOA06 MA VPH
QLast Update : Thu Aug 24 11:07:18 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj.   :
Signal #1 Phase :   Signal #2 Phase:
Signal #1 Info :   Signal #2 Info :





This File:	L:\VOA\Excel Reports\2023\V6112015
Analysis Group:	8260/8021/624
Field ID:	Y-BRMW40-62-72-110923 18001468
Sample:	67839-02 5mL Dow Salvage Yard
Misc:	5 CRE
Import File Name	v6 112023 a
TestGroupID	VMA_VPH_PresCert_A
Aqueous or Soil? (A or S)	A
Solid amount (g)	
Methanol volume (mL)	
Percent Solid (%)	
Soil Prep Date	
Weight:	
Volume:	
Lab#:	67839-002
AnalysisDate:	11/20/2023
AnalysisTime:	16:58
Dilution:	1
AnalyzedBy:	SFP V6112015.D
QC_Code:	
Prep#:	

Reviewer Checks:

Quant Report: Reviewed, Ranges integrated, Analyst Initials & Date
Chromatogram Checked, Major peaks identified
Results consistent w/ other attached analyses
Reanalysis reason noted
Substitute dilution data checked
Correct dilution and reason clear or noted
Flags checked (Expiration, F+, Over Cal, Surr, Aspen, QC)
Other QC failures or issues noted in Aspen
Correct data file and/or date/time in Aspen

Notes: Calibration based on sum of discrete peak areas

Initials & Date: WA 11.28.23

#	Surrogate Standards	Import Value (as ug/L)	Recovery	Flag	QC Limits	Surrogate True Values
11	SS 2,5-dibromotoluene	37.59	**94%**		70-130	40
22	SS 2,5-dibromotoluene #2	38.34	**96%**		70-130	40
4	SS a,a,a-trifluorotoluene	0.00	**0%**		70-130*	20

#	AnalyteName	Concentration (ug/L)	
	C5-C8 Aliphatics #2	**23.423**	23.423
	C9-C12 Aliphatics #2	**27.146**	27.146
1	Methyl-t-butyl ether (MTBE)	0.000	0
2	benzene	0.000	0
3	toluene	**1.993**	1.9932
5	ethylbenzene	0.000	0
6	m&p-xylenes	0.118	0.1177
7	o-xylene	0.046	0.0455
10	naphthalene	0.076	0.0757
	C5-C8 Aliphatics Adj	**21.429**	21.429
	C9-C12 Aliphatics Adj	**14.226**	14.226
	C9-C10 Aromatics	**12.756**	12.756
	Total Xylenes	0.000	

SFP
11/27/23 @ 11:42
SkylaM

Data Path : X:\V6\2023\Nov23\112023\
Data File : V6112015.D
Signal(s) : Signal #1: CPDET1B.ch Signal #2: FID2A.ch
Acq On : 20 Nov 2023 4:58 pm
Operator : sfp
Sample : 67839-02 5mL
Misc : 5
ALS Vial : 15 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 20 19:50:50 2023
Quant Method : X:\V6\methods\V6VPH082423CHe.M
Quant Title : VOA06 MA VPH
QLast Update : Thu Aug 24 11:07:18 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

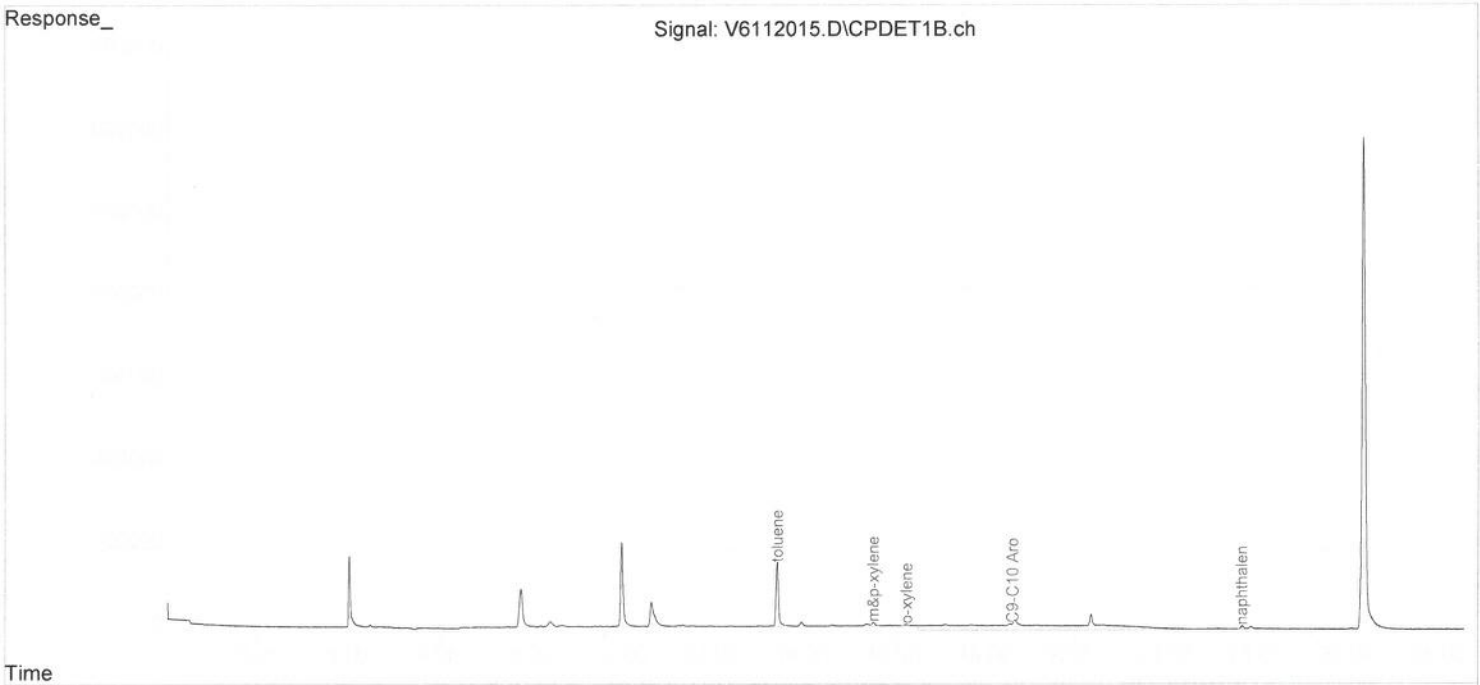
	Compound	R.T.	Response	Conc	Units	
	System Monitoring Compounds					
4)	S SS a,a,a-trifluorotol...	0.000	0	N.D.	ug/L	
Spiked Amount	20.000		Recovery =	0.00%		
11)	S SS 2,5-dibromotoluene	26.357	29170914	37.588	ug/L	
Spiked Amount	40.000 Range 70 - 130		Recovery =	93.97%		
17)	S SS a,a,a-trifluorotol...	0.000	0	N.D.	ug/L	
Spiked Amount	20.000		Recovery =	0.00%		
22)	S SS 2,5-dibromotoluene #2	26.358	14781093	38.342	ug/L	
Spiked Amount	40.000 Range 70 - 130		Recovery =	95.86%		
	Target Compounds					
1)	methyl-t-butyl ether ...	0.000	0	N.D.	ug/L	
2)	benzene	0.000	0	N.D.	ug/L	
3)	toluene	13.451	2886753	1.993	ug/L m	BC
5)	ethylbenzene	0.000	0	N.D.	ug/L	
6)	m&p-xylenes	15.566	167748	0.118	ug/L m	PM
7)	o-xylene	16.292	55675	0.046	ug/L m	
8)	1,2,4-trimethylbenzene	0.000	0	N.D.	ug/L	
9)	H C9-C10 Aromatics	18.612	16979550	12.756	ug/L m	RI
10)	naphthalene	23.684	164986	0.076	ug/L m	PM
13)	pentane #2	0.000	0	N.D.	ug/L	
14)	2-methylpentane #2	8.398	424695	0.427	ug/L m	PM
15)	2,2,4-trimethylpentan...	0.000	0	N.D.	ug/L d	
16)	H C5-C8 Aliphatics #2	11.378	36919828	23.423	ug/L m	RI
18)	nonane #2	0.000	0	N.D.	ug/L	
19)	decane #2	0.000	0	N.D.	ug/L	
20)	n-butylcyclohexane #2	18.661	1576766	1.584	ug/L m	PM
21)	H C9-C12 Aliphatics #2	15.611	22511421	27.146	ug/L m	RI

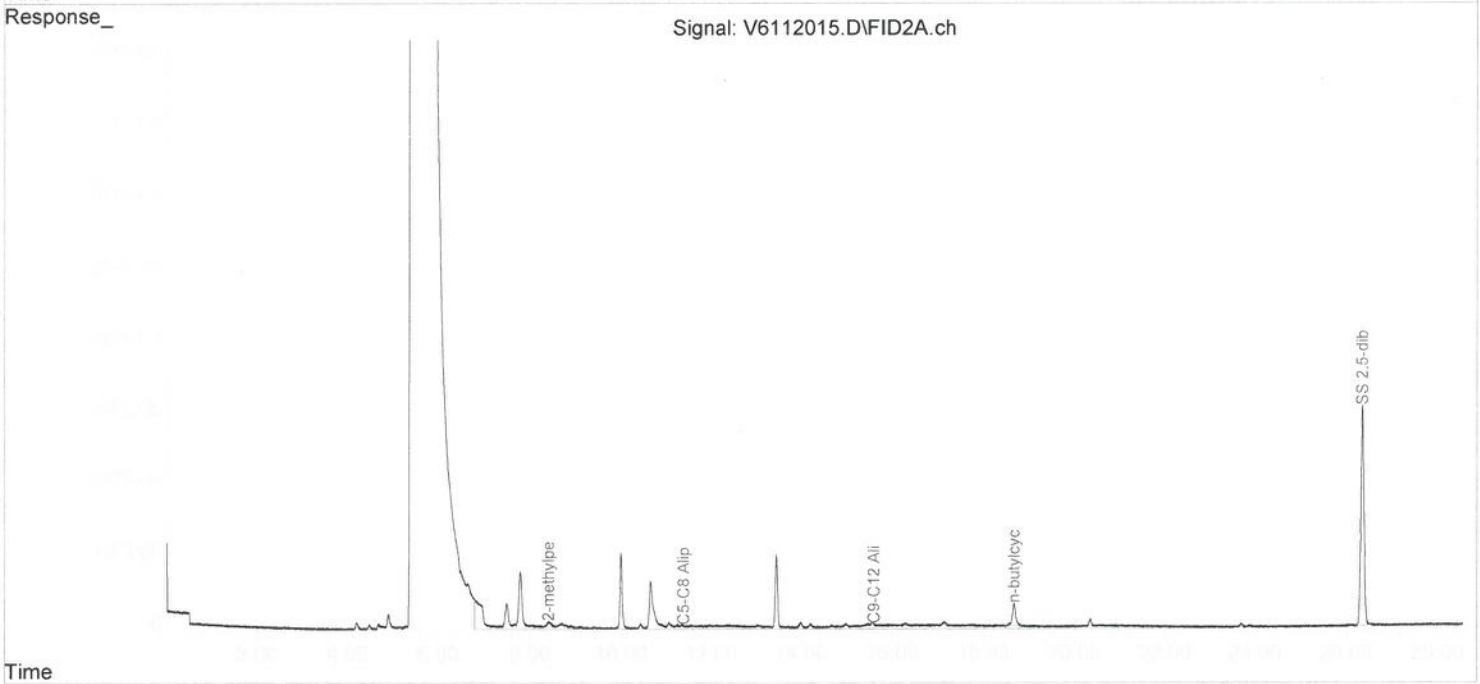
(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : X:\V6\2023\Nov23\112023\
Data File : V6112015.D
Signal(s) : Signal #1: CPDET1B.ch Signal #2: FID2A.ch
Acq On   : 20 Nov 2023   4:58 pm
Operator : sfp
Sample   : 67839-02 5mL
Misc   : 5
ALS Vial : 15   Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 20 19:50:50 2023
Quant Method : X:\V6\methods\V6VPH082423CHe.M
Quant Title : VOA06 MA VPH
QLast Update : Thu Aug 24 11:07:18 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj.   :
Signal #1 Phase :   Signal #2 Phase:
Signal #1 Info :   Signal #2 Info :





This File:	L:\VOA\Excel Reports\2023\V6112016
Analysis Group:	8260/8021/624
Field ID:	-BRMW4-138-148-110923 18001468
Sample:	67839-03 5mL Dow Salvage Yard
Misc:	5 CRE
Import File Name	v6 112023 a
TestGroupID	VMA_VPH_PresCert_A
Aqueous or Soil? (A or S)	A
Solid amount (g)	
Methanol volume (mL)	
Percent Solid (%)	
Soil Prep Date	
Weight:	
Volume:	
Lab#:	67839-003
AnalysisDate:	11/20/2023
AnalysisTime:	17:32
Dilution:	1
AnalyzedBy:	SFP V6112016.D
QC_Code:	
Prep#:	

Reviewer Checks:

Quant Report: Reviewed, Ranges integrated, Analyst Initials & Date
Chromatogram Checked, Major peaks identified
Results consistent w/ other attached analyses
Reanalysis reason noted
Substitute dilution data checked
Correct dilution and reason clear or noted
Flags checked (Expiration, F+, Over Cal, Surr, Aspen, QC)
Other QC failures or issues noted in Aspen
Correct data file and/or date/time in Aspen

Notes: Calibration based on sum of discrete peak areas

Initials & Date: WS 11.28.23

#	Surrogate Standards	Import Value (as ug/L)	Recovery	Flag	QC Limits	Surrogate True Values
11	SS 2,5-dibromotoluene	37.39	**93%**		70-130	40
22	SS 2,5-dibromotoluene #2	38.55	**96%**		70-130	40
4	SS a,a,a-trifluorotoluene	0.00	**0%**		70-130*	20

#	AnalyteName	Concentration (ug/L)	
	C5-C8 Aliphatics #2	**26.264**	26.264
	C9-C12 Aliphatics #2	**26.913**	26.913
1	Methyl-t-butyl ether (MTBE)	0.000	0
2	benzene	0.000	0
3	toluene	**7.555**	7.5547
5	ethylbenzene	0.049	0.0493
6	m&p-xylenes	0.113	0.1126
7	o-xylene	0.072	0.0715
10	naphthalene	0.046	0.0458
	C5-C8 Aliphatics Adj	**18.709**	18.709
	C9-C12 Aliphatics Adj	**14.206**	14.206
	C9-C10 Aromatics	**12.474**	12.474
	Total Xylenes	0.000	

Data Path : X:\V6\2023\Nov23\112023\
Data File : V6112016.D
Signal(s) : Signal #1: CPDET1B.ch Signal #2: FID2A.ch
Acq On : 20 Nov 2023 5:32 pm
Operator : sfp
Sample : 67839-03 5mL
Misc : 5
ALS Vial : 16 Sample Multiplier: 1

SFP 11/27/23 @ 11:42 SkylaM

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 20 19:50:53 2023
Quant Method : X:\V6\methods\V6VPH082423CHe.M
Quant Title : VOA06 MA VPH
QLast Update : Thu Aug 24 11:07:18 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

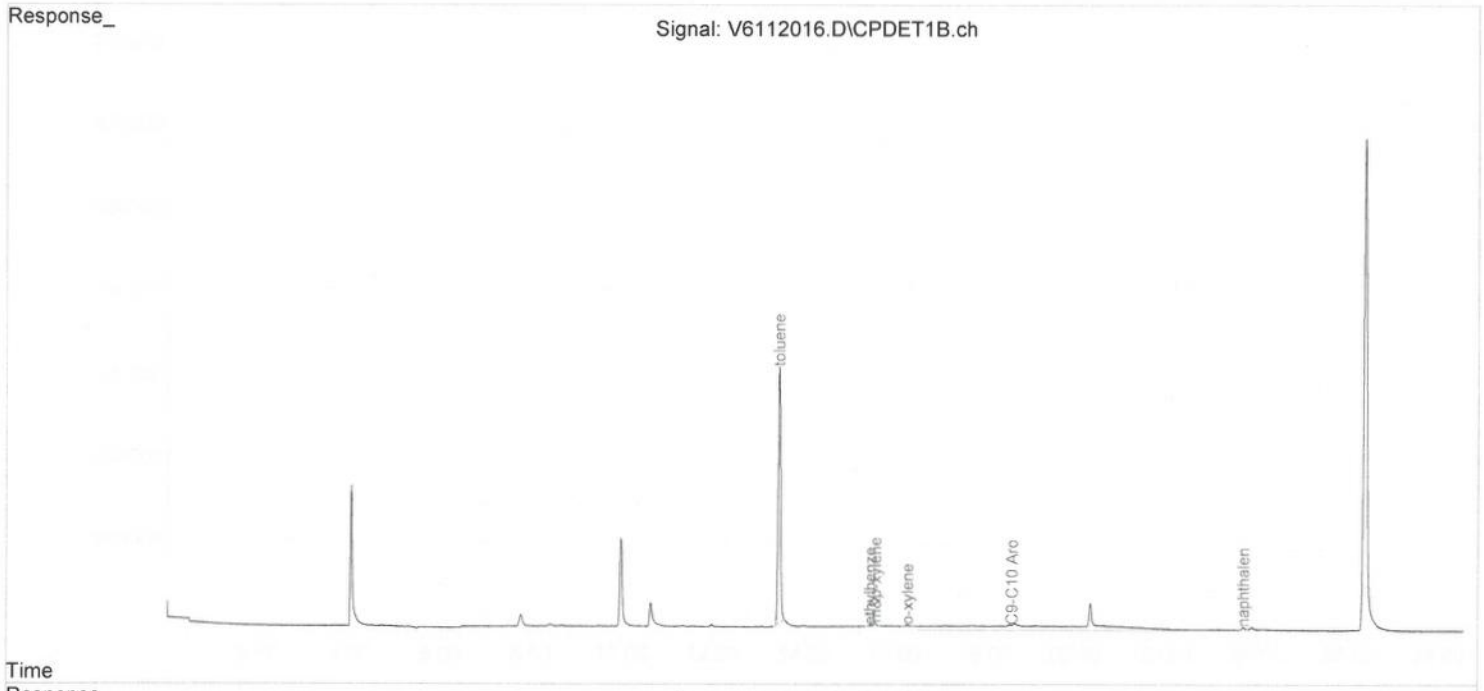
	Compound	R.T.	Response	Conc	Units	
	System Monitoring Compounds					
4)	S SS a,a,a-trifluorotol...	0.000	0	N.D.	ug/L	
Spiked Amount	20.000		Recovery =	0.00%		
11)	S SS 2,5-dibromotoluene	26.358	29036952	37.394	ug/L	
Spiked Amount	40.000 Range 70 - 130		Recovery =	93.48%		
17)	S SS a,a,a-trifluorotol...	0.000	0	N.D.	ug/L	
Spiked Amount	20.000		Recovery =	0.00%		
22)	S SS 2,5-dibromotoluene #2	26.358	14853397	38.549	ug/L	
Spiked Amount	40.000 Range 70 - 130		Recovery =	96.37%		
	Target Compounds					
1)	methyl-t-butyl ether ...	0.000	0	N.D.	ug/L	
2)	benzene	0.000	0	N.D.	ug/L	
3)	toluene	13.448	10941645	7.555	ug/L	
5)	ethylbenzene	15.452	58980	0.049	ug/L m	PM Nov 27,2023
6)	m&p-xylenes	15.572	160397	0.113	ug/L m	
7)	o-xylene	16.291	87413	0.072	ug/L m	
8)	1,2,4-trimethylbenzene	0.000	0	N.D.	ug/L	
9)	H C9-C10 Aromatics	18.612	16699087	12.474	ug/L m	RI
10)	naphthalene	23.695	133676	0.046	ug/L m	PM
13)	pentane #2	0.000	0	N.D.	ug/L	
14)	2-methylpentane #2	8.384	285573	0.322	ug/L m	PM
15)	2,2,4-trimethylpentan...	0.000	0	N.D.	ug/L d	
16)	H C5-C8 Aliphatics #2	11.378	40422006	26.264	ug/L m	RI
18)	nonane #2	0.000	0	N.D.	ug/L	
19)	decane #2	0.000	0	N.D.	ug/L	
20)	n-butylcyclohexane #2	0.000	0	N.D.	ug/L	
21)	H C9-C12 Aliphatics #2	15.611	22229170	26.913	ug/L m	RI

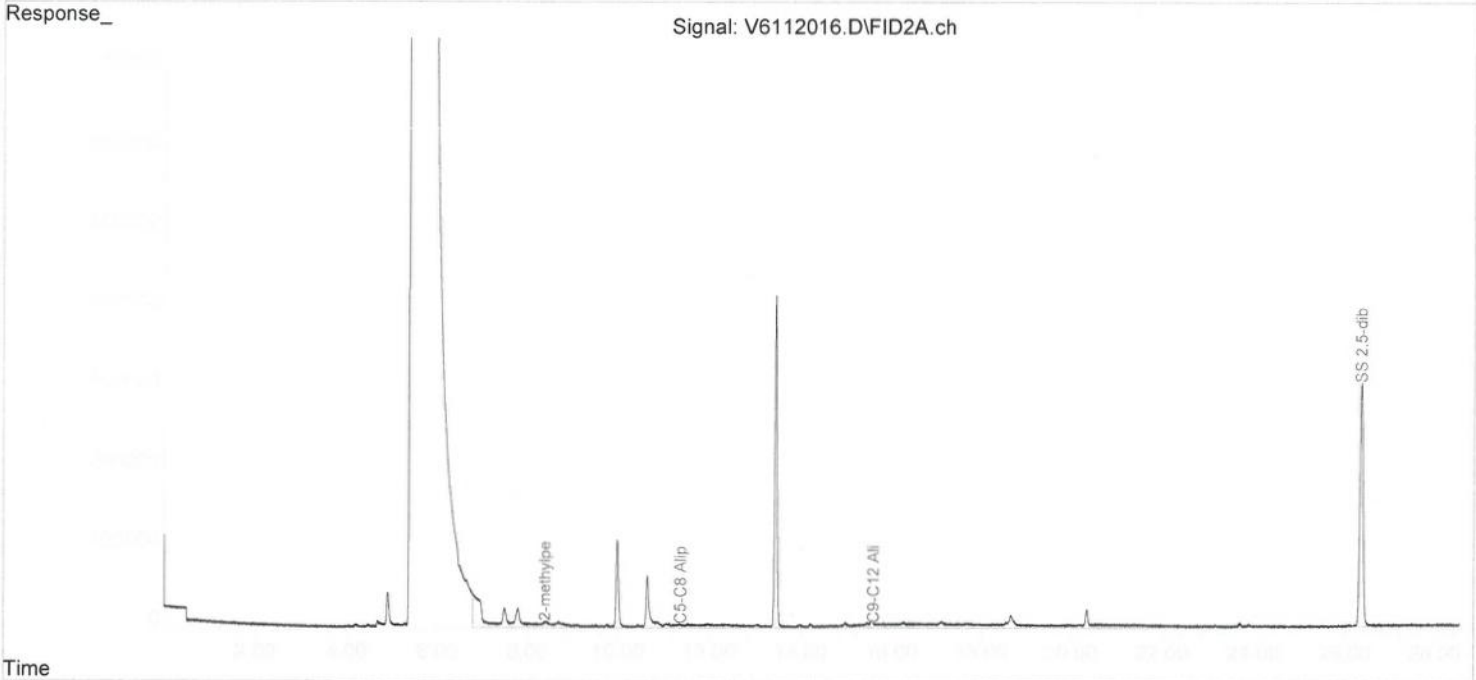
(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : X:\V6\2023\Nov23\112023\
Data File : V6112016.D
Signal(s) : Signal #1: CPDET1B.ch Signal #2: FID2A.ch
Acq On : 20 Nov 2023 5:32 pm
Operator : sfp
Sample : 67839-03 5mL
Misc : 5
ALS Vial : 16 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 20 19:50:53 2023
Quant Method : X:\V6\methods\V6VPH082423CHe.M
Quant Title : VOA06 MA VPH
QLast Update : Thu Aug 24 11:07:18 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Data File:	L:\VOA\Excel Reports\2023\V6112050
Analysis Group:	8260/8021/624
Field ID:	SY-BRMW3-47-62-110923 18001468
Sample:	67839-04 5mL Dow Salvage Yard
Misc:	5 CRE
Import File Name	v6 112023 b
TestGroupID	VMA_VPH_PresCert_A
Aqueous or Soil? (A or S)	A
Solid amount (g)	
Methanol volume (mL)	
Percent Solid (%)	
Soil Prep Date	
Weight:	
Volume:	
Lab#:	67839-004
AnalysisDate:	11/21/2023
AnalysisTime:	22:14
Dilution:	1
AnalyzedBy:	SFP V6112050.D
QC_Code:	
Prep#:	

Reviewer Checks:

- Quant Report: Reviewed, Ranges integrated, Analyst Initials & Date
- Chromatogram Checked, Major peaks identified
- Results consistent w/ other attached analyses
- Reanalysis reason noted
- Substitute dilution data checked
- Correct dilution and reason clear or noted
- Flags checked (Expiration, F+, Over Cal, Surr, Aspen, QC)
- Other QC failures or issues noted in Aspen
- Correct data file and/or date/time in Aspen

Notes: Calibration based on sum of discrete peak areas

Initials & Date: WS 11-28-23

#	Surrogate Standards	Import Value (as ug/L)	Recovery	Flag	QC Limits	Surrogate True Values
11	SS 2,5-dibromotoluene	40.15	**100%**		70-130	40
22	SS 2,5-dibromotoluene #2	41.71	**104%**		70-130	40
4	SS a,a,a-trifluorotoluene	0.00	**0%**		70-130*	20

#	AnalyteName	Concentration (ug/L)	
	C5-C8 Aliphatics #2	**34.204**	34.204
	C9-C12 Aliphatics #2	**25.617**	25.617
1	Methyl-t-butyl ether (MTBE)	0.000	0
2	benzene	0.065	0.0653
3	toluene	**12.128**	12.128
5	ethylbenzene	0.000	0
6	m&p-xylenes	0.000	0
7	o-xylene	0.000	0
10	naphthalene	0.000	0
	C5-C8 Aliphatics Adj	**22.010**	22.01
	C9-C12 Aliphatics Adj	**15.526**	15.526
	C9-C10 Aromatics	**10.092**	10.092
	Total Xylenes	0.000	

SFP
11/27/23 @ 11:41
SkylaM

Data Path : X:\V6\2023\Nov23\112023\
Data File : V6112050.D
Signal(s) : Signal #1: CPDET1B.ch Signal #2: FID2A.ch
Acq On : 21 Nov 2023 10:14 pm
Operator : sfp
Sample : 67839-04 5mL
Misc : 5
ALS Vial : 50 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 22 09:57:49 2023
Quant Method : X:\V6\methods\V6VPH082423CHe.M
Quant Title : VOA06 MA VPH
QLast Update : Thu Aug 24 11:07:18 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

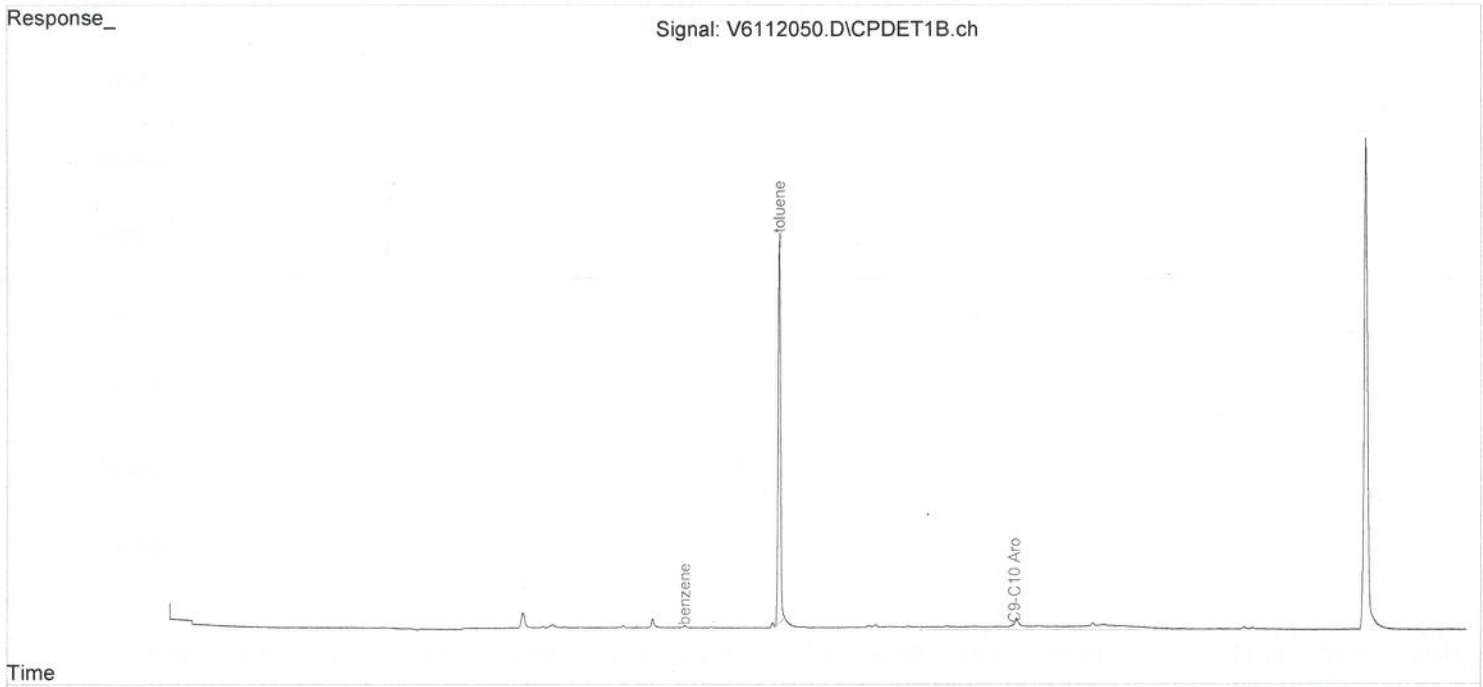
	Compound	R.T.	Response	Conc	Units		
	System Monitoring Compounds						
4) S	SS a,a,a-trifluorotol...	0.000	0	N.D.	ug/L		
Spiked Amount	20.000		Recovery =	0.00%			
11) S	SS 2,5-dibromotoluene	26.356	30938354	40.147	ug/L		
Spiked Amount	40.000 Range	70 - 130	Recovery =	100.37%			
17) S	SS a,a,a-trifluorotol...	0.000	0	N.D.	ug/L		
Spiked Amount	20.000		Recovery =	0.00%			
22) S	SS 2,5-dibromotoluene #2	26.357	15957984	41.708	ug/L		
Spiked Amount	40.000 Range	70 - 130	Recovery =	104.27%			
	Target Compounds						
1)	methyl-t-butyl ether ...	0.000	0	N.D.	ug/L		
2)	benzene	11.349	102547	0.065	ug/L	m	BC
3)	toluene	13.447	17565809	12.128	ug/L		
5)	ethylbenzene	0.000	0	N.D.	ug/L		
6)	m&p-xylenes	0.000	0	N.D.	ug/L		
7)	o-xylene	0.000	0	N.D.	ug/L		
8)	1,2,4-trimethylbenzene	0.000	0	N.D.	ug/L		
9) H	C9-C10 Aromatics	18.612	14332524	10.092	ug/L	m	RI
10)	naphthalene	0.000	0	N.D.	ug/L		
13)	pentane #2	0.000	0	N.D.	ug/L		
14)	2-methylpentane #2	0.000	0	N.D.	ug/L		
15)	2,2,4-trimethylpentan...	0.000	0	N.D.	ug/L	d	
16) H	C5-C8 Aliphatics #2	11.378	50207336	34.204	ug/L	m	RI
18)	nonane #2	0.000	0	N.D.	ug/L		
19)	decane #2	0.000	0	N.D.	ug/L		
20)	n-butylcyclohexane #2	18.661	2645765	2.534	ug/L	m	BC
21) H	C9-C12 Aliphatics #2	15.611	20657404	25.617	ug/L	m	RI

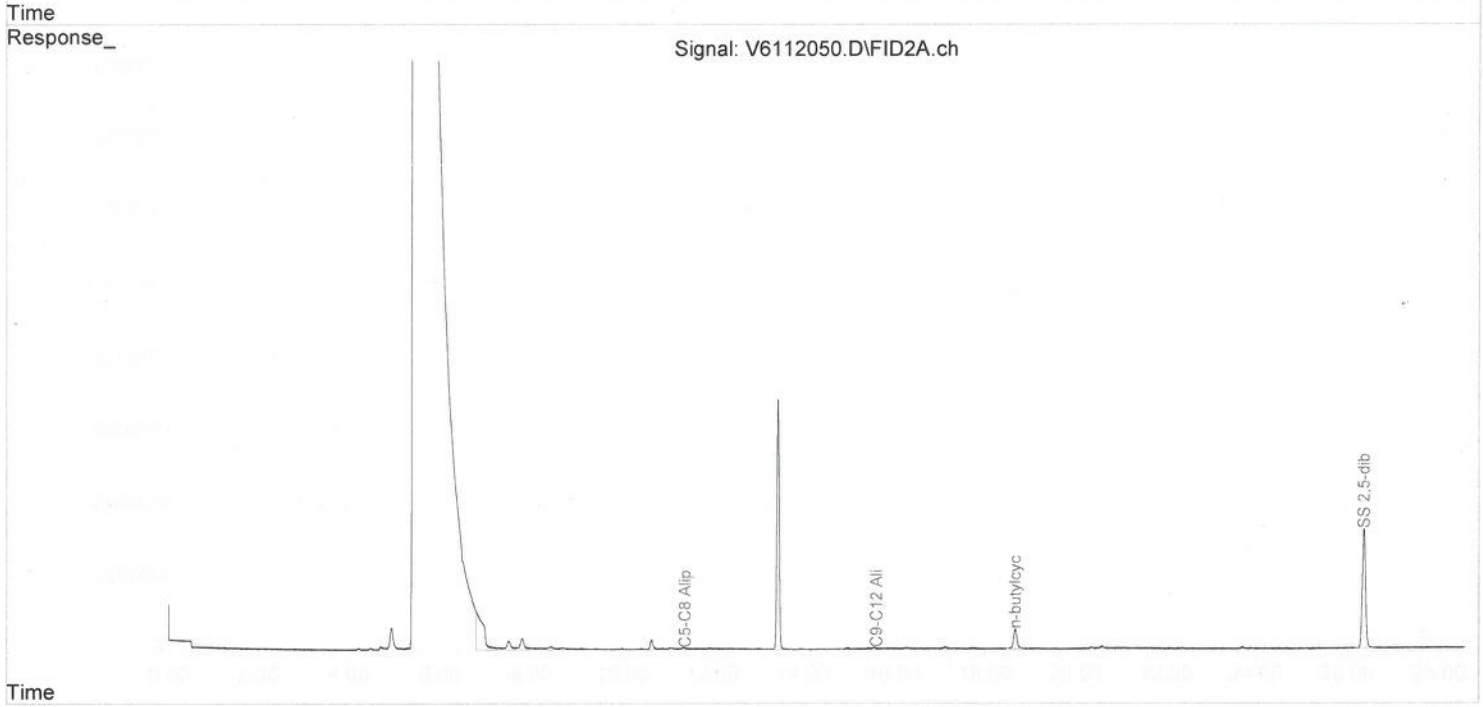
(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : X:\V6\2023\Nov23\112023\
Data File : V6112050.D
Signal(s) : Signal #1: CPDET1B.ch Signal #2: FID2A.ch
Acq On : 21 Nov 2023 10:14 pm
Operator : sfp
Sample : 67839-04 5mL
Misc : 5
ALS Vial : 50 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 22 09:57:49 2023
Quant Method : X:\V6\methods\V6VPH082423CHe.M
Quant Title : VOA06 MA VPH
QLast Update : Thu Aug 24 11:07:18 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





This File:	L:\VOA\Excel Reports\2023\V6112051
Analysis Group:	8260/8021/624
Field ID:	-BRMW3-145-155-110923 18001468
Sample:	67839-05 5mL Dow Salvage Yard
Misc:	5 CRE
Import File Name	v6 112023 b
TestGroupID	VMA_VPH_PresCert_A
Aqueous or Soil? (A or S)	A
Solid amount (g)	
Methanol volume (mL)	
Percent Solid (%)	
Soil Prep Date	
Weight:	
Volume:	
Lab#:	67839-005
AnalysisDate:	11/21/2023
AnalysisTime:	22:47
Dilution:	1
AnalyzedBy:	SFP V6112051.D
QC_Code:	
Prep#:	

Reviewer Checks:

Quant Report: Reviewed, Ranges integrated, Analyst Initials & Date
Chromatogram Checked, Major peaks identified
Results consistent w/ other attached analyses
Reanalysis reason noted
Substitute dilution data checked
Correct dilution and reason clear or noted
Flags checked (Expiration, F+, Over Cal, Surr, Aspen, QC)
Other QC failures or issues noted in Aspen
Correct data file and/or date/time in Aspen

Notes: Calibration based on sum of discrete peak areas

Initials & Date: WA 11-28-23

#	Surrogate Standards	Import Value (as ug/L)	Recovery	Flag	QC Limits	Surrogate True Values
11	SS 2,5-dibromotoluene	38.86	**97%**		70-130	40
22	SS 2,5-dibromotoluene #2	40.51	**101%**		70-130	40
4	SS a,a,a-trifluorotoluene	0.00	**0%**		70-130*	20

#	AnalyteName	Concentration (ug/L)	
	C5-C8 Aliphatics #2	**18.376**	18.376
	C9-C12 Aliphatics #2	**27.830**	27.83
1	Methyl-t-butyl ether (MTBE)	0.000	0
2	benzene	0.000	0
3	toluene	**4.969**	4.9687
5	ethylbenzene	0.000	0
6	m&p-xylenes	0.000	0
7	o-xylene	0.000	0
10	naphthalene	0.000	0
	C5-C8 Aliphatics Adj	**13.407**	13.407
	C9-C12 Aliphatics Adj	**17.634**	17.634
	C9-C10 Aromatics	**10.196**	10.196
	Total Xylenes	0.000	

SFP
11/27/23 @ 11:41
SkylaM

Data Path : X:\V6\2023\Nov23\112023\
Data File : V6112051.D
Signal(s) : Signal #1: CPDET1B.ch Signal #2: FID2A.ch
Acq On : 21 Nov 2023 10:47 pm
Operator : sfp
Sample : 67839-05 5mL
Misc : 5
ALS Vial : 51 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 22 09:57:52 2023
Quant Method : X:\V6\methods\V6VPH082423CHe.M
Quant Title : VOA06 MA VPH
QLast Update : Thu Aug 24 11:07:18 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

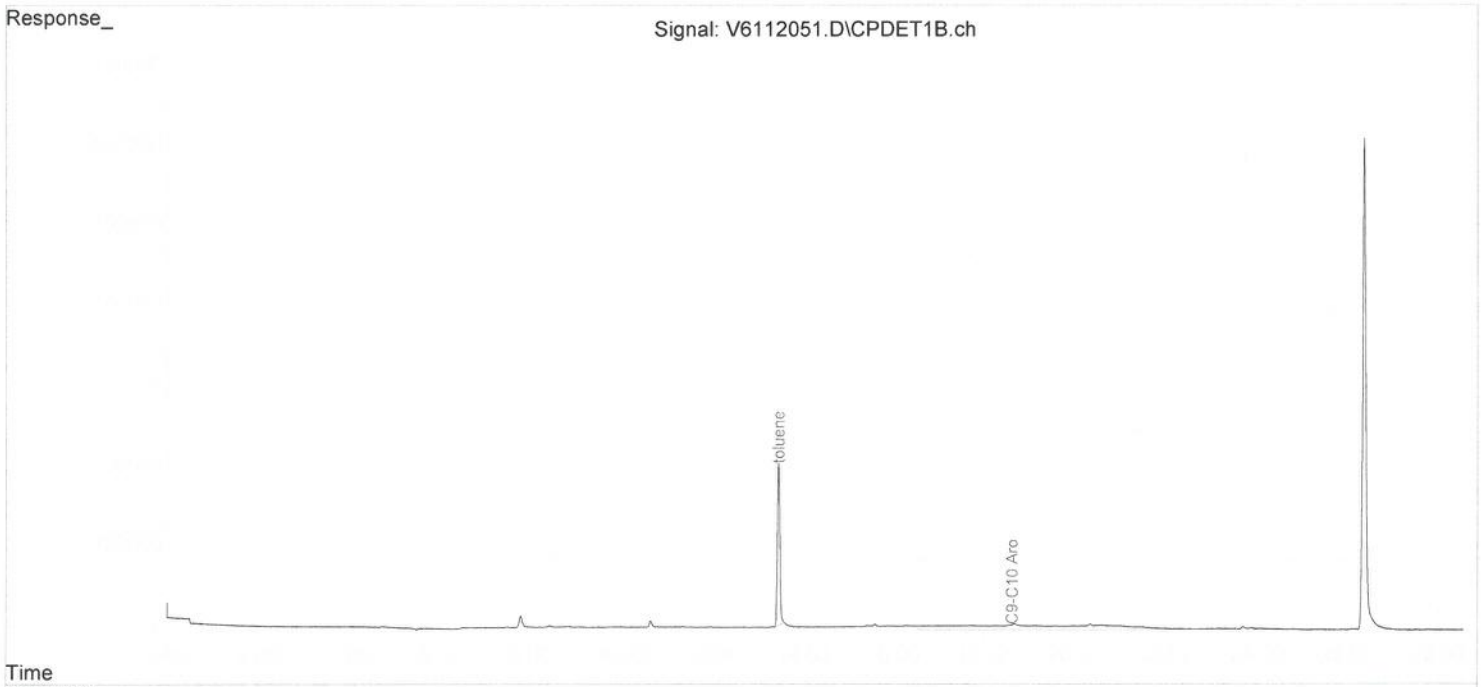
	Compound	R.T.	Response	Conc	Units		
	System Monitoring Compounds						
4) S	SS a,a,a-trifluorotol...	0.000	0	N.D.	ug/L		
Spiked Amount	20.000		Recovery =	0.00%			
11) S	SS 2,5-dibromotoluene	26.356	30050407	38.861	ug/L		
Spiked Amount	40.000 Range	70 - 130	Recovery =	97.15%			
17) S	SS a,a,a-trifluorotol...	0.000	0	N.D.	ug/L		
Spiked Amount	20.000		Recovery =	0.00%			
22) S	SS 2,5-dibromotoluene #2	26.356	15537523	40.506	ug/L		
Spiked Amount	40.000 Range	70 - 130	Recovery =	101.27%			
	Target Compounds						
1)	methyl-t-butyl ether ...	0.000	0	N.D.	ug/L		
2)	benzene	0.000	0	N.D.	ug/L		
3)	toluene	13.448	7196273	4.969	ug/L		
5)	ethylbenzene	0.000	0	N.D.	ug/L		
6)	m&p-xylenes	0.000	0	N.D.	ug/L		
7)	o-xylene	0.000	0	N.D.	ug/L		
8)	1,2,4-trimethylbenzene	0.000	0	N.D.	ug/L		
9) H	C9-C10 Aromatics	18.612	14436627	10.196	ug/L	m	RI
10)	naphthalene	0.000	0	N.D.	ug/L		
13)	pentane #2	0.000	0	N.D.	ug/L		
14)	2-methylpentane #2	0.000	0	N.D.	ug/L		
15)	2,2,4-trimethylpentan...	0.000	0	N.D.	ug/L	d	
16) H	C5-C8 Aliphatics #2	11.378	30699823	18.376	ug/L	m	RI
18)	nonane #2	0.000	0	N.D.	ug/L		
19)	decane #2	0.000	0	N.D.	ug/L		
20)	n-butylcyclohexane #2	0.000	0	N.D.	ug/L		
21) H	C9-C12 Aliphatics #2	15.611	23341454	27.830	ug/L	m	RI

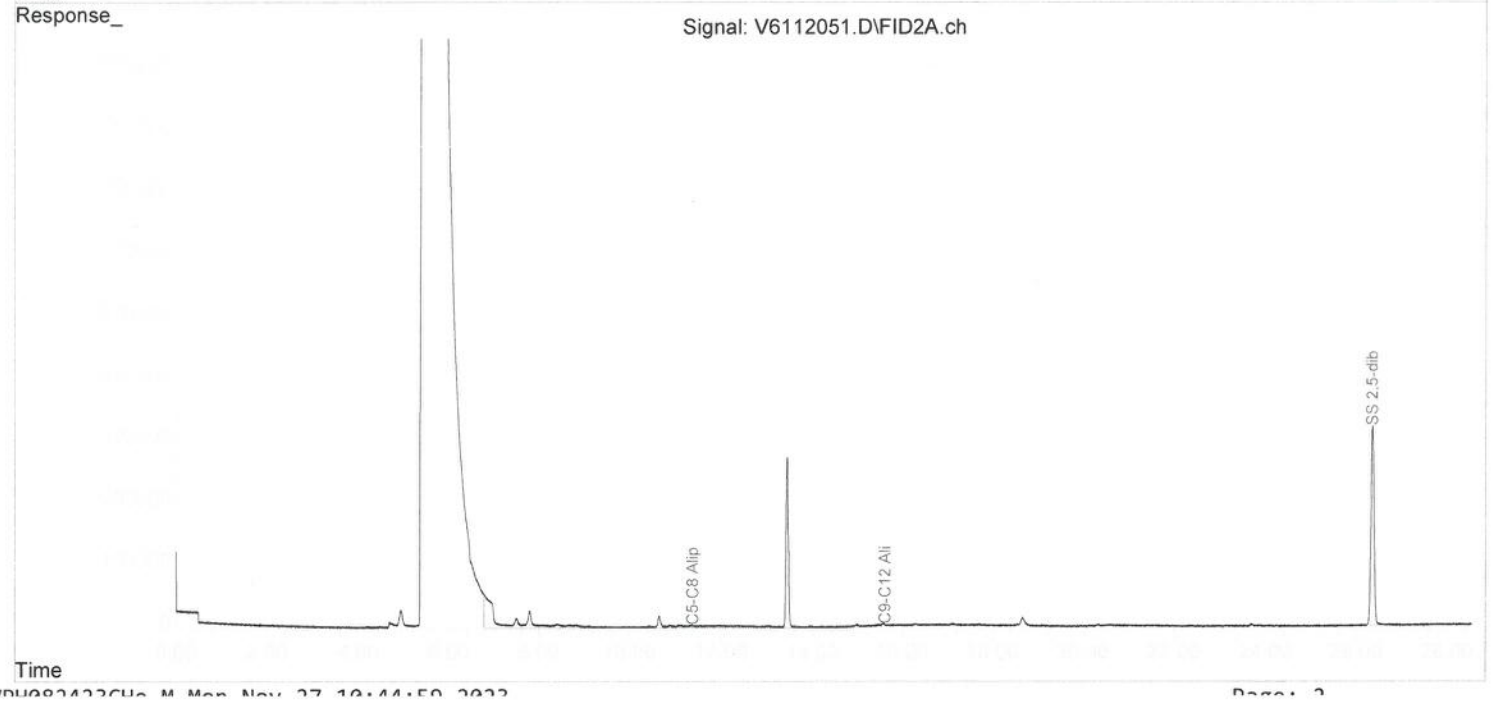
(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : X:\V6\2023\Nov23\112023\
Data File : V6112051.D
Signal(s) : Signal #1: CPDET1B.ch Signal #2: FID2A.ch
Acq On   : 21 Nov 2023 10:47 pm
Operator : sfp
Sample   : 67839-05 5mL
Misc   : 5
ALS Vial : 51   Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 22 09:57:52 2023
Quant Method : X:\V6\methods\V6VPH082423CHe.M
Quant Title : VOA06 MA VPH
QLast Update : Thu Aug 24 11:07:18 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj.   :
Signal #1 Phase :   Signal #2 Phase:
Signal #1 Info :   Signal #2 Info :





This File:	L:\VOA\Excel Reports\2023\V6112052
Analysis Group:	8260/8021/624
Field ID:	-BRMW3-287-297-110923 18001468
Sample:	67839-06 5mL Dow Salvage Yard
Misc:	5 CRE
Import File Name	v6 112023 b
TestGroupID	VMA_VPH_PresCert_A
Aqueous or Soil? (A or S)	A
Solid amount (g)	
Methanol volume (mL)	
Percent Solid (%)	
Soil Prep Date	
Weight:	
Volume:	
Lab#:	67839-006
AnalysisDate:	11/21/2023
AnalysisTime:	23:21
Dilution:	1
AnalyzedBy:	SFP V6112052.D
QC_Code:	
Prep#:	

Reviewer Checks:

Quant Report: Reviewed, Ranges integrated, Analyst Initials & Date
Chromatogram Checked, Major peaks identified
Results consistent w/ other attached analyses
Reanalysis reason noted
Substitute dilution data checked
Correct dilution and reason clear or noted
Flags checked (Expiration, F+, Over Cal, Surr, Aspen, QC)
Other QC failures or issues noted in Aspen
Correct data file and/or date/time in Aspen

Notes: Calibration based on sum of discrete peak areas

Initials & Date: WA 11.28.23

#	Surrogate Standards	Import Value (as ug/L)	Recovery	Flag	QC Limits	Surrogate True Values
11	SS 2,5-dibromotoluene	37.72	**94%**		70-130	40
22	SS 2,5-dibromotoluene #2	39.33	**98%**		70-130	40
4	SS a,a,a-trifluorotoluene	0.00	**0%**		70-130*	20

#	AnalyteName	Concentration (ug/L)	
	C5-C8 Aliphatics #2	**43.495**	43.495
	C9-C12 Aliphatics #2	**24.739**	24.739
1	Methyl-t-butyl ether (MTBE)	0.000	0
2	benzene	0.067	0.067
3	toluene	**13.970**	13.97
5	ethylbenzene	0.000	0
6	m&p-xylenes	0.000	0
7	o-xylene	0.000	0
10	naphthalene	0.000	0
	C5-C8 Aliphatics Adj	**29.458**	29.458
	C9-C12 Aliphatics Adj	**14.453**	14.453
	C9-C10 Aromatics	**10.287**	10.287
	Total Xylenes	0.000	

SFP
11/27/23 @ 11:41
SkylaM

Data Path : X:\V6\2023\Nov23\112023\
Data File : V6112052.D
Signal(s) : Signal #1: CPDET1B.ch Signal #2: FID2A.ch
Acq On : 21 Nov 2023 11:21 pm
Operator : sfp
Sample : 67839-06 5mL
Misc : 5
ALS Vial : 52 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 22 09:57:55 2023
Quant Method : X:\V6\methods\V6VPH082423CHe.M
Quant Title : VOA06 MA VPH
QLast Update : Thu Aug 24 11:07:18 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

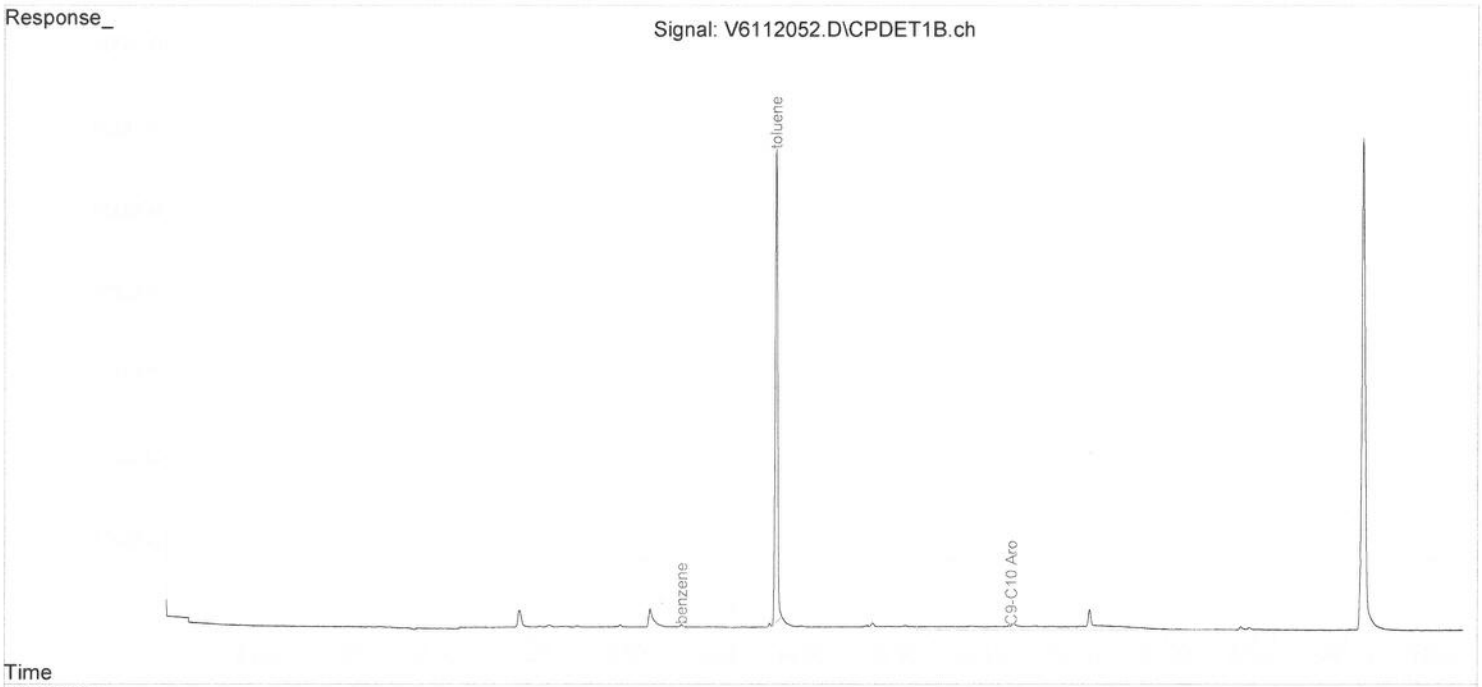
	Compound	R.T.	Response	Conc	Units		
	System Monitoring Compounds						
4)	S SS a,a,a-trifluorotol...	0.000	0	N.D.	ug/L		
Spiked Amount	20.000		Recovery =	0.00%			
11)	S SS 2,5-dibromotoluene	26.356	29261937	37.720	ug/L		
Spiked Amount	40.000 Range 70 - 130		Recovery =	94.30%			
17)	S SS a,a,a-trifluorotol...	0.000	0	N.D.	ug/L		
Spiked Amount	20.000		Recovery =	0.00%			
22)	S SS 2,5-dibromotoluene #2	26.357	15126143	39.329	ug/L		
Spiked Amount	40.000 Range 70 - 130		Recovery =	98.32%			
	Target Compounds						
1)	methyl-t-butyl ether ...	0.000	0	N.D.	ug/L		
2)	benzene	11.351	105084	0.067	ug/L	m	BC
3)	toluene	13.447	20232858	13.970	ug/L		
5)	ethylbenzene	0.000	0	N.D.	ug/L		
6)	m&p-xylenes	0.000	0	N.D.	ug/L		
7)	o-xylene	0.000	0	N.D.	ug/L		
8)	1,2,4-trimethylbenzene	0.000	0	N.D.	ug/L		
9)	H C9-C10 Aromatics	18.612	14526441	10.287	ug/L	m	RI
10)	naphthalene	0.000	0	N.D.	ug/L		
13)	pentane #2	0.000	0	N.D.	ug/L		
14)	2-methylpentane #2	0.000	0	N.D.	ug/L		
15)	2,2,4-trimethylpentan...	0.000	0	N.D.	ug/L	d	
16)	H C5-C8 Aliphatics #2	11.378	61658821	43.495	ug/L	m	RI
18)	nonane #2	0.000	0	N.D.	ug/L		
19)	decane #2	0.000	0	N.D.	ug/L		
20)	n-butylcyclohexane #2	18.666	941588	1.020	ug/L		
21)	H C9-C12 Aliphatics #2	15.611	19592866	24.739	ug/L	m	RI

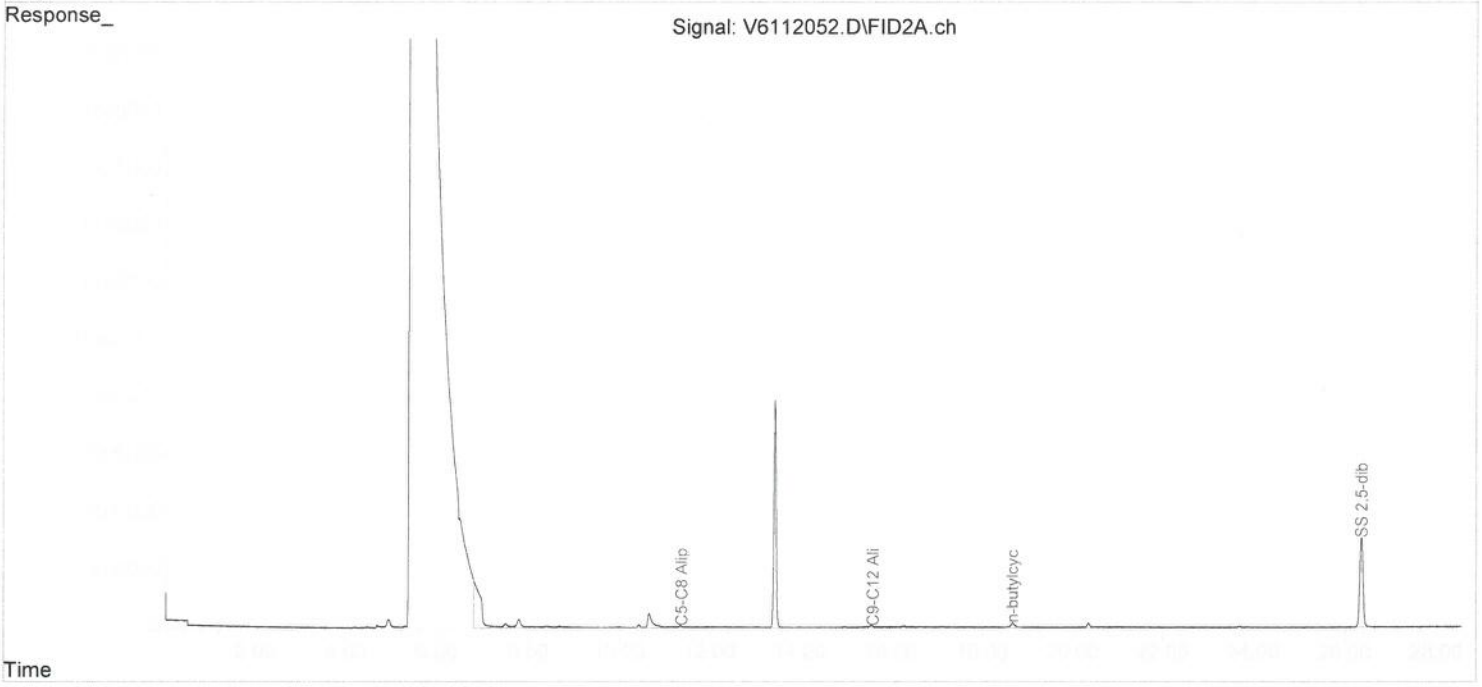
(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : X:\V6\2023\Nov23\112023\
Data File : V6112052.D
Signal(s) : Signal #1: CPDET1B.ch Signal #2: FID2A.ch
Acq On : 21 Nov 2023 11:21 pm
Operator : sfp
Sample : 67839-06 5mL
Misc : 5
ALS Vial : 52 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 22 09:57:55 2023
Quant Method : X:\V6\methods\V6VPH082423CHe.M
Quant Title : VOA06 MA VPH
QLast Update : Thu Aug 24 11:07:18 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





This File:	L:\VOA\Excel Reports\2023\V6112020
Analysis Group:	8260/8021/624
Field ID:	-BRMW4-297-301-110923 18001468
Sample:	67839-07 5mL Dow Salvage Yard
Misc:	5 CRE
Import File Name	v6 112023 a
TestGroupID	VMA_VPH_PresCert_A
Aqueous or Soil? (A or S)	A
Solid amount (g)	
Methanol volume (mL)	
Percent Solid (%)	
Soil Prep Date	
Weight:	
Volume:	
Lab#:	67839-007
AnalysisDate:	11/20/2023
AnalysisTime:	19:48
Dilution:	1
AnalyzedBy:	SFP V6112020.D
QC_Code:	
Prep#:	

Reviewer Checks:

- Quant Report: Reviewed, Ranges integrated, Analyst Initials & Date
- Chromatogram Checked, Major peaks identified
- Results consistent w/ other attached analyses
- Reanalysis reason noted
- Substitute dilution data checked
- Correct dilution and reason clear or noted
- Flags checked (Expiration, F+, Over Cal, Surr, Aspen, QC)
- Other QC failures or issues noted in Aspen
- Correct data file and/or date/time in Aspen

Notes: Calibration based on sum of discrete peak areas

Initials & Date: WA 11.28.23

#	Surrogate Standards	Import Value (as ug/L)	Recovery	Flag	QC Limits	Surrogate True Values
11	SS 2,5-dibromotoluene	36.54	**91%**		70-130	40
22	SS 2,5-dibromotoluene #2	37.31	**93%**		70-130	40
4	SS a,a,a-trifluorotoluene	0.00	**0%**		70-130*	20

#	AnalyteName	Concentration (ug/L)	
	C5-C8 Aliphatics #2	**40.104**	40.104
	C9-C12 Aliphatics #2	**27.832**	27.832
1	Methyl-t-butyl ether (MTBE)	0.000	0
2	benzene	0.000	0
3	toluene	**12.096**	12.096
5	ethylbenzene	0.089	0.0887
6	m&p-xylenes	0.158	0.1583
7	o-xylene	0.069	0.0694
10	naphthalene	0.000	0
	C5-C8 Aliphatics Adj	**28.007**	28.007
	C9-C12 Aliphatics Adj	**16.379**	16.379
	C9-C10 Aromatics	**11.137**	11.137
	Total Xylenes	0.000	

Data Path : X:\V6\2023\Nov23\112023\
Data File : V6112020.D
Signal(s) : Signal #1: CPDET1B.ch Signal #2: FID2A.ch
Acq On : 20 Nov 2023 7:48 pm
Operator : sfp
Sample : 67839-07 5mL
Misc : 5
ALS Vial : 20 Sample Multiplier: 1

SFP
11/27/23 @ 11:42
SkylaM

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 22 12:02:33 2023
Quant Method : X:\V6\methods\V6VPH082423CHe.M
Quant Title : VOA06 MA VPH
QLast Update : Thu Aug 24 11:07:18 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	R.T.	Response	Conc	Units	
	System Monitoring Compounds					
4)	S SS a,a,a-trifluorotol...	0.000	0	N.D.	ug/L	
Spiked Amount	20.000		Recovery =	0.00%		
11)	S SS 2,5-dibromotoluene	26.359	28445543	36.538	ug/L	
Spiked Amount	40.000 Range 70 - 130		Recovery =	91.34%		
17)	S SS a,a,a-trifluorotol...	0.000	0	N.D.	ug/L	
Spiked Amount	20.000		Recovery =	0.00%		
22)	S SS 2,5-dibromotoluene #2	26.360	14419881	37.309	ug/L	
Spiked Amount	40.000 Range 70 - 130		Recovery =	93.27%		
	Target Compounds					
1)	methyl-t-butyl ether ...	0.000	0	N.D.	ug/L	
2)	benzene	0.000	0	N.D.	ug/L	
3)	toluene	13.448	17519150	12.096	ug/L	
5)	ethylbenzene	15.463	106098	0.089	ug/L m	
6)	m&p-xylenes	15.578	225564	0.158	ug/L m	
7)	o-xylene	16.284	84807	0.069	ug/L m	
8)	1,2,4-trimethylbenzene	0.000	0	N.D.	ug/L	
9)	H C9-C10 Aromatics	18.612	15370722	11.137	ug/L m	
10)	naphthalene	0.000	0	N.D.	ug/L	
13)	pentane #2	0.000	0	N.D.	ug/L	
14)	2-methylpentane #2	0.000	0	N.D.	ug/L	
15)	2,2,4-trimethylpentan...	0.000	0	N.D.	ug/L d	
16)	H C5-C8 Aliphatics #2	11.378	57478862	40.104	ug/L m	
18)	nonane #2	0.000	0	N.D.	ug/L	
19)	decane #2	0.000	0	N.D.	ug/L	
20)	n-butylcyclohexane #2	18.666	2372790	2.292	ug/L	
21)	H C9-C12 Aliphatics #2	15.611	23343828	27.832	ug/L m	

PM
Nov 27,2023

RI

RI

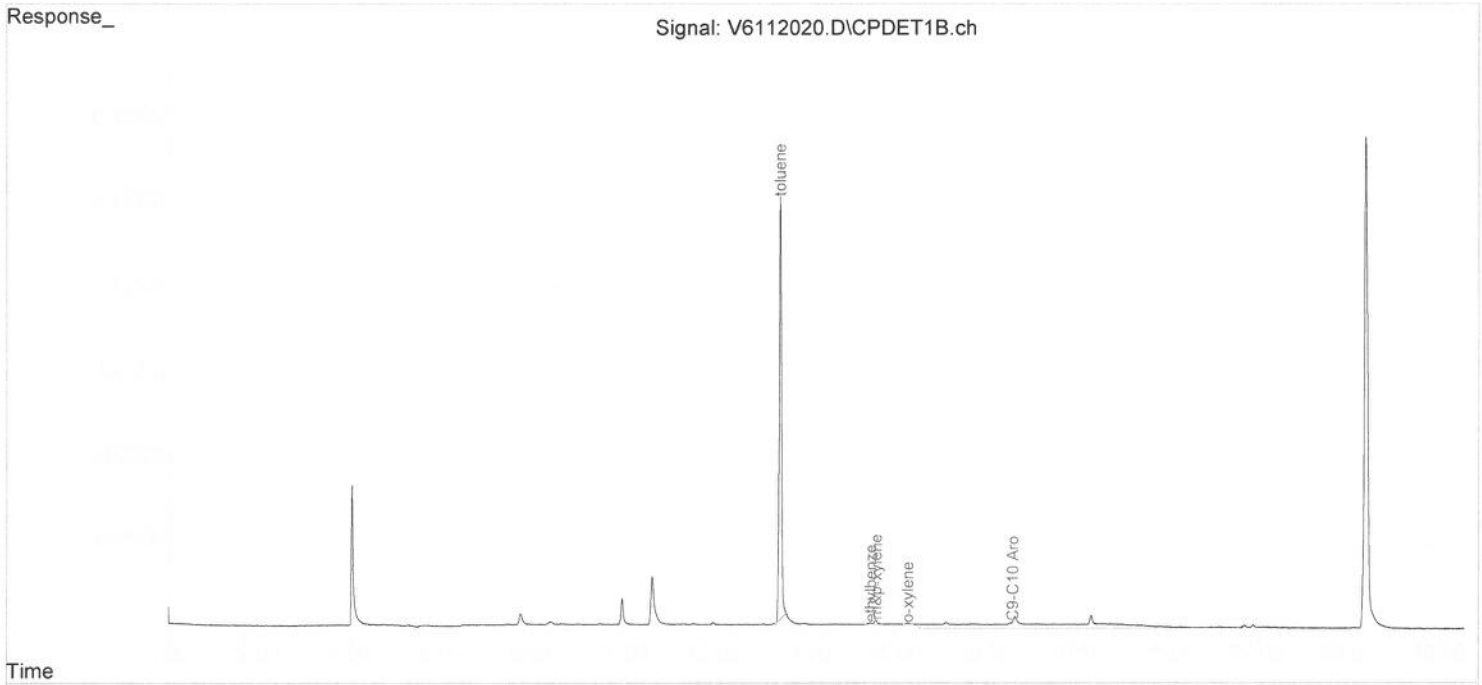
RI

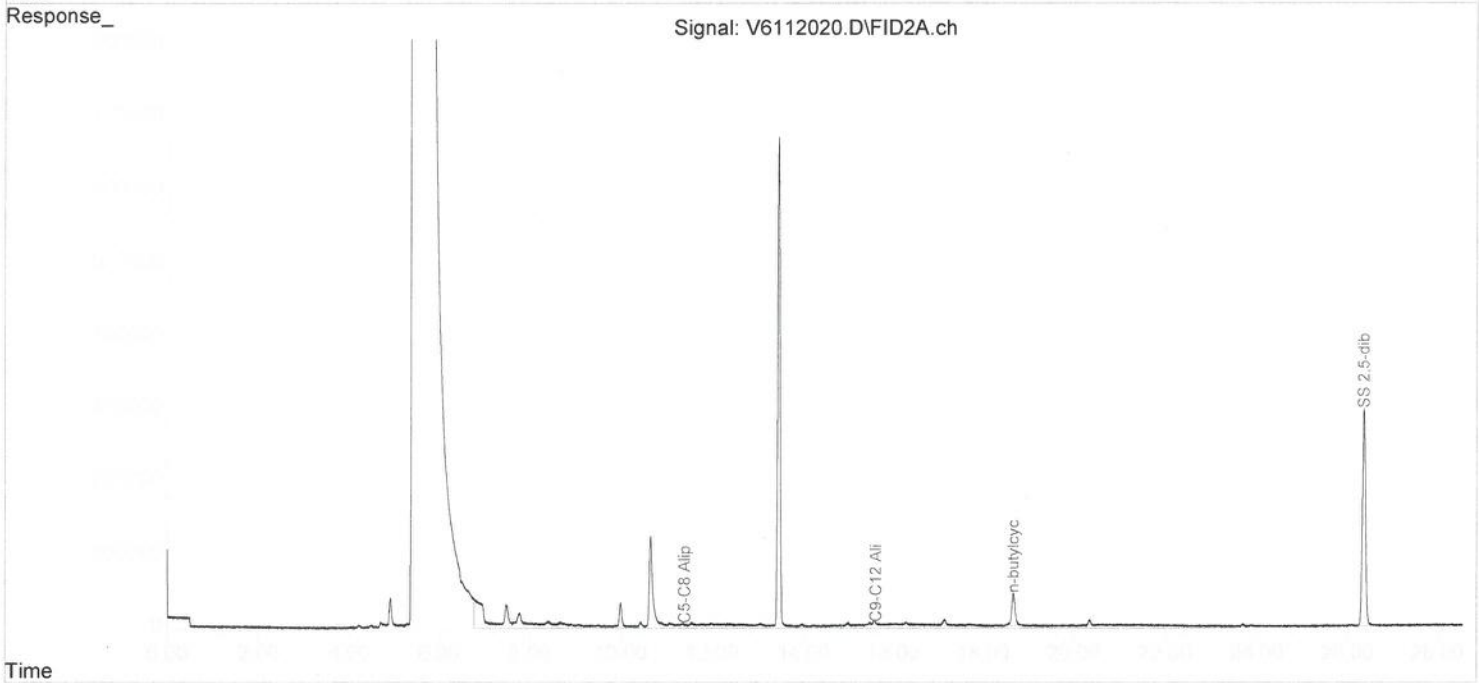
(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : X:\V6\2023\Nov23\112023\
Data File : V6112020.D
Signal(s) : Signal #1: CPDET1B.ch Signal #2: FID2A.ch
Acq On   : 20 Nov 2023   7:48 pm
Operator : sfp
Sample   : 67839-07 5mL
Misc   : 5
ALS Vial : 20   Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 22 12:02:33 2023
Quant Method : X:\V6\methods\V6VPH082423CHe.M
Quant Title : VOA06 MA VPH
QLast Update : Thu Aug 24 11:07:18 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj.   :
Signal #1 Phase :   Signal #2 Phase:
Signal #1 Info :   Signal #2 Info :





This File:	L:\VOA\Excel Reports\2023\V6112021
Analysis Group:	8260/8021/624
Field ID:	SY-BRMW1-42-52-110923 18001468
Sample:	67839-08 5mL Dow Salvage Yard
Misc:	5 CRE
Import File Name	v6 112023 a
TestGroupID	VMA_VPH_PresCert_A
Aqueous or Soil? (A or S)	A
Solid amount (g)	
Methanol volume (mL)	
Percent Solid (%)	
Soil Prep Date	
Weight:	
Volume:	
Lab#:	67839-008
AnalysisDate:	11/20/2023
AnalysisTime:	20:21
Dilution:	1
AnalyzedBy:	SFP V6112021.D
QC_Code:	
Prep#:	

Reviewer Checks:

Quant Report: Reviewed, Ranges integrated, Analyst Initials & Date
Chromatogram Checked, Major peaks identified
Results consistent w/ other attached analyses
Reanalysis reason noted
Substitute dilution data checked
Correct dilution and reason clear or noted
Flags checked (Expiration, F+, Over Cal, Surr, Aspen, QC)
Other QC failures or issues noted in Aspen
Correct data file and/or date/time in Aspen

Notes: Calibration based on sum of discrete peak areas

Initials & Date: WB 11.28.23

#	Surrogate Standards	Import Value (as ug/L)	Recovery	Flag	QC Limits	Surrogate True Values
11	SS 2,5-dibromotoluene	41.39	**103%**		70-130	40
22	SS 2,5-dibromotoluene #2	42.33	**106%**		70-130	40
4	SS a,a,a-trifluorotoluene	0.00	**0%**		70-130*	20

#	AnalyteName	Concentration (ug/L)	
	C5-C8 Aliphatics #2	**34.712**	34.712
	C9-C12 Aliphatics #2	**30.546**	30.546
1	Methyl-t-butyl ether (MTBE)	0.000	0
2	benzene	0.000	0
3	toluene	**11.279**	11.279
5	ethylbenzene	0.045	0.0449
6	m&p-xylenes	0.107	0.1073
7	o-xylene	0.052	0.052
10	naphthalene	0.040	0.0398
	C5-C8 Aliphatics Adj	**23.433**	23.433
	C9-C12 Aliphatics Adj	**19.823**	19.823
	C9-C10 Aromatics	**10.519**	10.519
	Total Xylenes	0.000	

Data Path : X:\V6\2023\Nov23\112023\
Data File : V6112021.D
Signal(s) : Signal #1: CPDET1B.ch Signal #2: FID2A.ch
Acq On : 20 Nov 2023 8:21 pm
Operator : sfp
Sample : 67839-08 5mL
Misc : 5
ALS Vial : 21 Sample Multiplier: 1

SFP
11/27/23 @ 11:42
SkylaM

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 22 12:02:36 2023
Quant Method : X:\V6\methods\V6VPH082423CHe.M
Quant Title : VOA06 MA VPH
QLast Update : Thu Aug 24 11:07:18 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

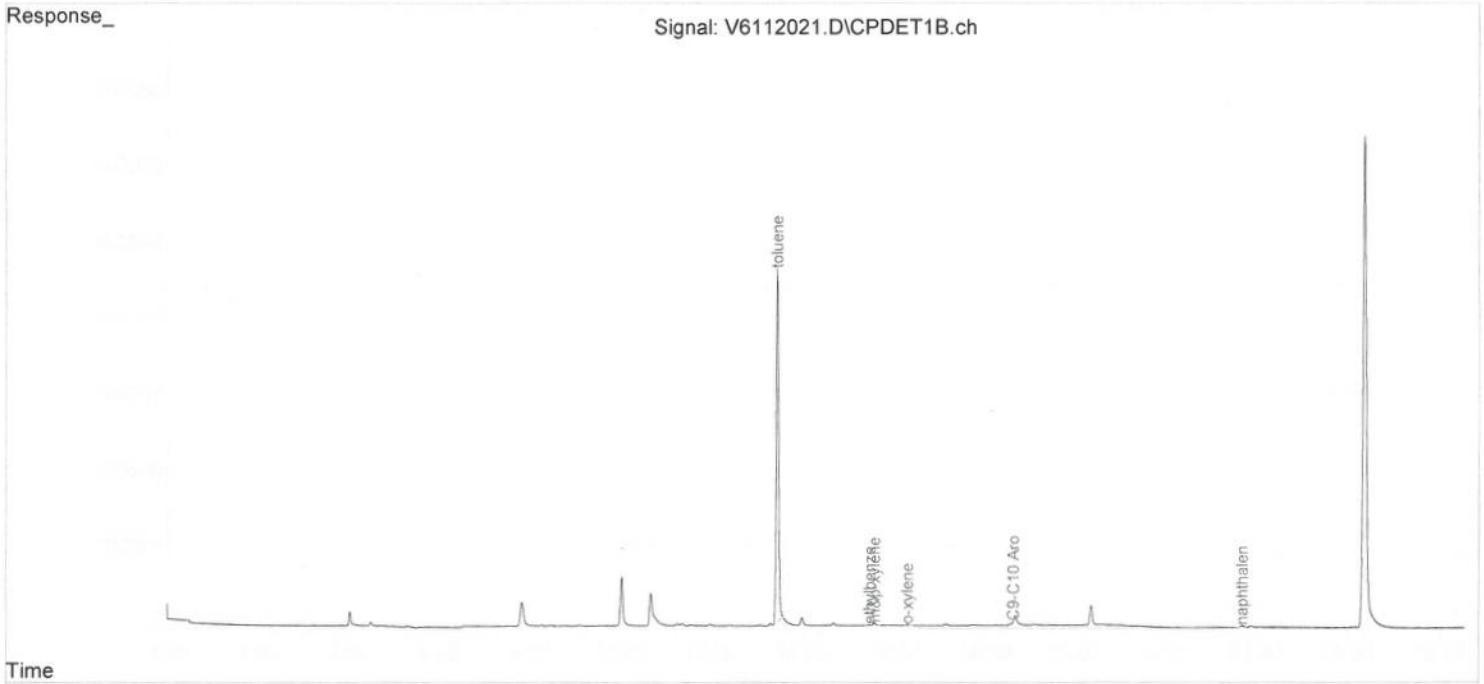
	Compound	R.T.	Response	Conc	Units		
	System Monitoring Compounds						
4) S	SS a,a,a-trifluorotol...	0.000	0	N.D.	ug/L		
Spiked Amount	20.000		Recovery =	0.00%			
11) S	SS 2,5-dibromotoluene	26.358	31796956	41.390	ug/L		
Spiked Amount	40.000 Range 70 - 130		Recovery =	103.48%			
17) S	SS a,a,a-trifluorotol...	0.000	0	N.D.	ug/L		
Spiked Amount	20.000		Recovery =	0.00%			
22) S	SS 2,5-dibromotoluene #2	26.359	16176707	42.334	ug/L		
Spiked Amount	40.000 Range 70 - 130		Recovery =	105.84%			
	Target Compounds						
1)	methyl-t-butyl ether ...	0.000	0	N.D.	ug/L		
2)	benzene	0.000	0	N.D.	ug/L		
3)	toluene	13.448	16336262	11.279	ug/L		
5)	ethylbenzene	15.461	53677	0.045	ug/L	m	PM
6)	m&p-xylenes	15.570	152971	0.107	ug/L	m	↓
7)	o-xylene	16.288	63576	0.052	ug/L	m	↓
8)	1,2,4-trimethylbenzene	0.000	0	N.D.	ug/L		↓
9) H	C9-C10 Aromatics	18.612	14756993	10.519	ug/L	m	RI
10)	naphthalene	23.690	127379	0.040	ug/L	m	PM
13)	pentane #2	0.000	0	N.D.	ug/L		
14)	2-methylpentane #2	0.000	0	N.D.	ug/L		
15)	2,2,4-trimethylpentan...	0.000	0	N.D.	ug/L	d	
16) H	C5-C8 Aliphatics #2	11.378	50834057	34.712	ug/L	m	RI
18)	nonane #2	0.000	0	N.D.	ug/L		
19)	decane #2	0.000	0	N.D.	ug/L		
20)	n-butylcyclohexane #2	0.000	0	N.D.	ug/L	d	
21) H	C9-C12 Aliphatics #2	15.611	26635463	30.546	ug/L	m	RI

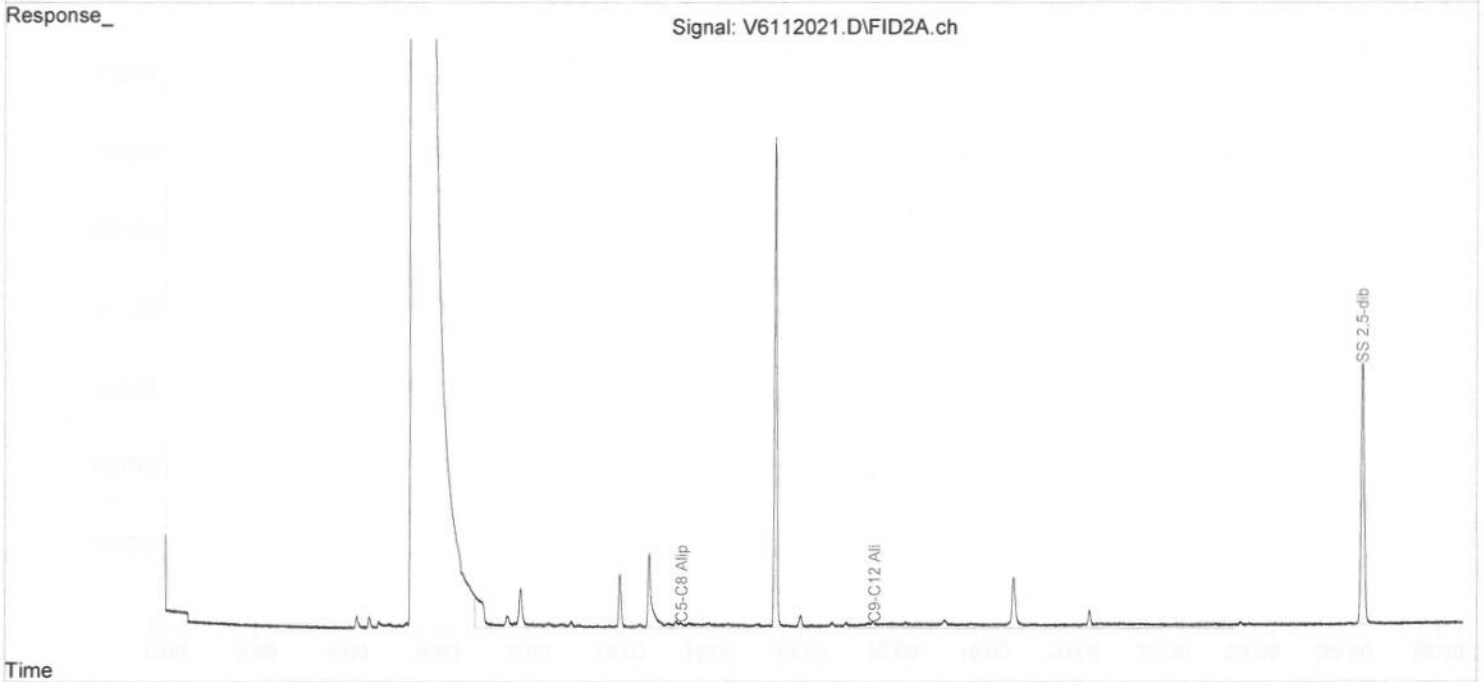
(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : X:\V6\2023\Nov23\112023\
Data File : V6112021.D
Signal(s) : Signal #1: CPDET1B.ch Signal #2: FID2A.ch
Acq On   : 20 Nov 2023   8:21 pm
Operator : sfp
Sample   : 67839-08 5mL
Misc   : 5
ALS Vial : 21   Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 22 12:02:36 2023
Quant Method : X:\V6\methods\V6VPH082423CHe.M
Quant Title : VOA06 MA VPH
QLast Update : Thu Aug 24 11:07:18 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj.   :
Signal #1 Phase :   Signal #2 Phase:
Signal #1 Info :   Signal #2 Info :





This File:	L:\VOA\Excel Reports\2023\V6112022
Analysis Group:	8260/8021/624
Field ID:	-BRMW1-150-157-110923 18001468
Sample:	67839-09 5mL Dow Salvage Yard
Misc:	5 CRE
Import File Name	v6 112023 a
TestGroupID	VMA_VPH_PresCert_A
Aqueous or Soil? (A or S)	A
Solid amount (g)	
Methanol volume (mL)	
Percent Solid (%)	
Soil Prep Date	
Weight:	
Volume:	
Lab#:	67839-009
AnalysisDate:	11/20/2023
AnalysisTime:	20:55
Dilution:	1
AnalyzedBy:	SFP V6112022.D
QC_Code:	
Prep#:	

Reviewer Checks:

Quant Report: Reviewed, Ranges integrated, Analyst Initials & Date
Chromatogram Checked, Major peaks identified
Results consistent w/ other attached analyses
Reanalysis reason noted
Substitute dilution data checked
Correct dilution and reason clear or noted
Flags checked (Expiration, F+, Over Cal, Surr, Aspen, QC)
Other QC failures or issues noted in Aspen
Correct data file and/or date/time in Aspen

Notes: Calibration based on sum of discrete peak areas

Initials & Date: WB 11.28.23

#	Surrogate Standards	Import Value (as ug/L)	Recovery	Flag	QC Limits	Surrogate True Values
11	SS 2,5-dibromotoluene	41.17	**103%**		70-130	40
22	SS 2,5-dibromotoluene #2	42.06	**105%**		70-130	40
4	SS a,a,a-trifluorotoluene	0.00	**0%**		70-130*	20

#	AnalyteName	Concentration (ug/L)	
	C5-C8 Aliphatics #2	**21.188**	21.188
	C9-C12 Aliphatics #2	**23.508**	23.508
1	Methyl-t-butyl ether (MTBE)	0.000	0
2	benzene	0.000	0
3	toluene	**3.273**	3.2726
5	ethylbenzene	0.000	0
6	m&p-xylenes	0.000	0
7	o-xylene	0.000	0
10	naphthalene	0.007	0.0069
	C5-C8 Aliphatics Adj	**17.915**	17.915
	C9-C12 Aliphatics Adj	**14.651**	14.651
	C9-C10 Aromatics	**8.857**	8.8566
	Total Xylenes	0.000	

SFP
11/27/23 @ 11:42
SkylaM

Data Path : X:\V6\2023\Nov23\112023\
Data File : V6112022.D
Signal(s) : Signal #1: CPDET1B.ch Signal #2: FID2A.ch
Acq On : 20 Nov 2023 8:55 pm
Operator : sfp
Sample : 67839-09 5mL
Misc : 5
ALS Vial : 22 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 22 12:02:39 2023
Quant Method : X:\V6\methods\V6VPH082423CHe.M
Quant Title : VOA06 MA VPH
QLast Update : Thu Aug 24 11:07:18 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

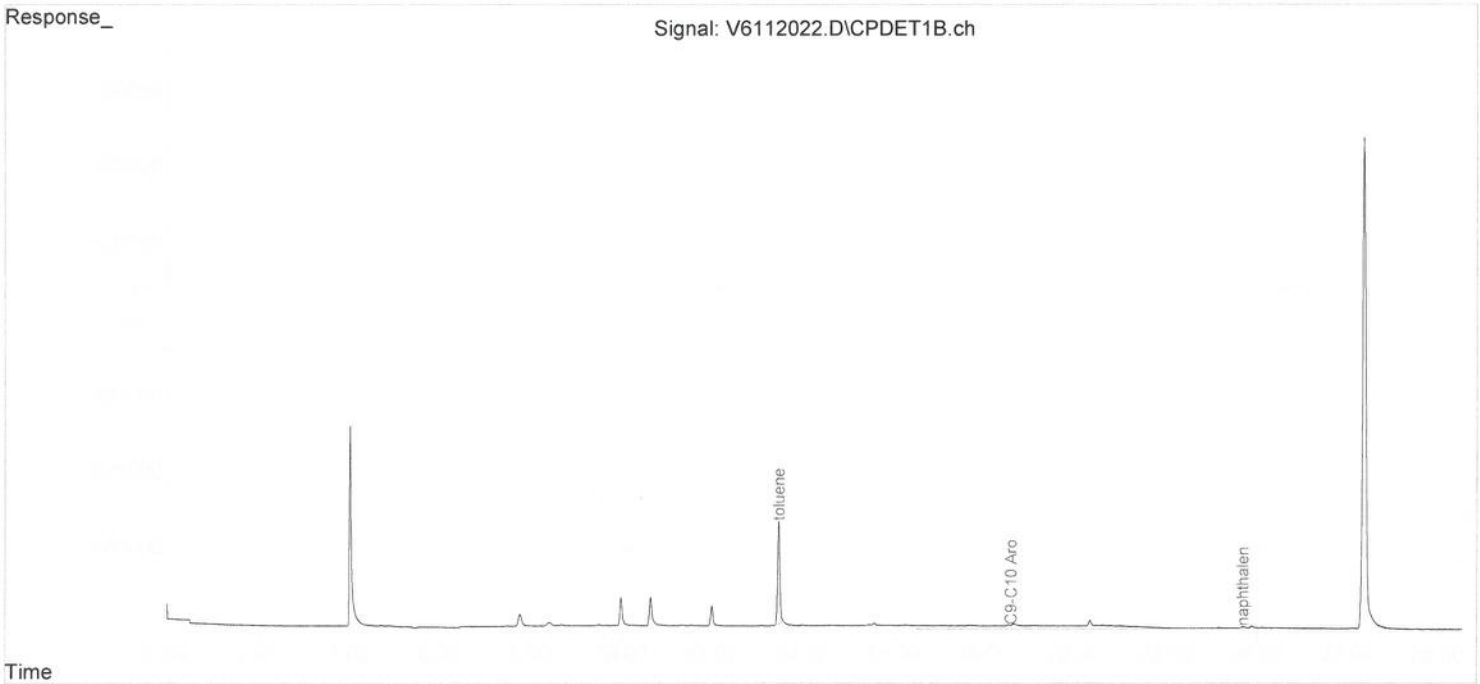
	Compound	R.T.	Response	Conc	Units	
	System Monitoring Compounds					
4)	S SS a,a,a-trifluorotol...	0.000	0	N.D.	ug/L	
Spiked Amount	20.000		Recovery =	0.00%		
11)	S SS 2,5-dibromotoluene	26.359	31645000	41.170	ug/L	
Spiked Amount	40.000 Range 70 - 130		Recovery =	102.93%		
17)	S SS a,a,a-trifluorotol...	11.986	444665	0.407	ug/L m	PM Nov 27 2023
Spiked Amount	20.000		Recovery =	2.04%		
22)	S SS 2,5-dibromotoluene #2	26.360	16079672	42.056	ug/L	
Spiked Amount	40.000 Range 70 - 130		Recovery =	105.14%		
	Target Compounds					
1)	methyl-t-butyl ether ...	0.000	0	N.D.	ug/L	
2)	benzene	0.000	0	N.D.	ug/L	
3)	toluene	13.449	4739830	3.273	ug/L	
5)	ethylbenzene	0.000	0	N.D.	ug/L	
6)	m&p-xylenes	0.000	0	N.D.	ug/L	
7)	o-xylene	0.000	0	N.D.	ug/L	
8)	1,2,4-trimethylbenzene	0.000	0	N.D.	ug/L	
9)	H C9-C10 Aromatics	18.612	13105823	8.857	ug/L m	RI
10)	naphthalene	23.688	92981	0.007	ug/L m	PM
13)	pentane #2	0.000	0	N.D.	ug/L	
14)	2-methylpentane #2	0.000	0	N.D.	ug/L	
15)	2,2,4-trimethylpentan...	0.000	0	N.D.	ug/L d	
16)	H C5-C8 Aliphatics #2	11.378	34165100	21.188	ug/L m	RI
18)	nonane #2	0.000	0	N.D.	ug/L	
19)	decane #2	0.000	0	N.D.	ug/L	
20)	n-butylcyclohexane #2	0.000	0	N.D.	ug/L	
21)	H C9-C12 Aliphatics #2	15.611	18099128	23.508	ug/L m	RI

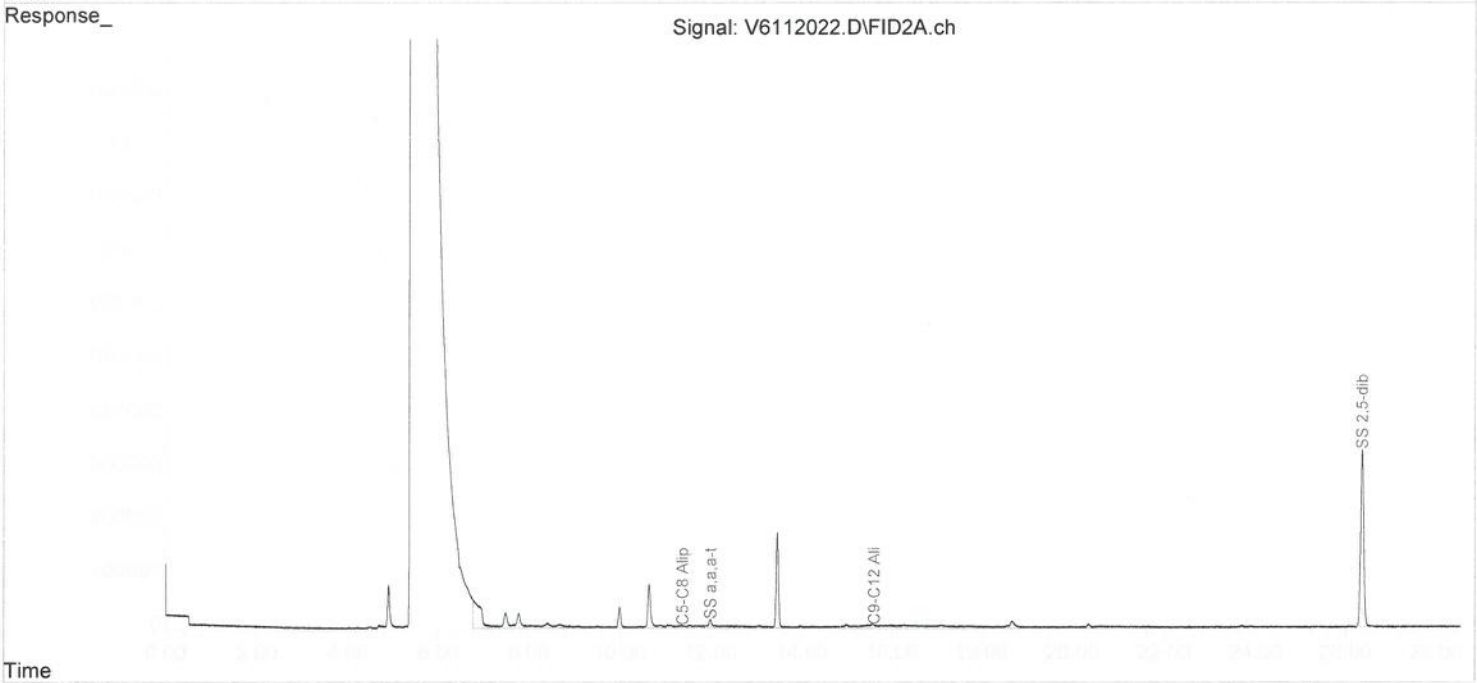
(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : X:\V6\2023\Nov23\112023\
Data File : V6112022.D
Signal(s) : Signal #1: CPDET1B.ch Signal #2: FID2A.ch
Acq On   : 20 Nov 2023   8:55 pm
Operator : sfp
Sample   : 67839-09 5mL
Misc   : 5
ALS Vial : 22   Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 22 12:02:39 2023
Quant Method : X:\V6\methods\V6VPH082423CHe.M
Quant Title : VOA06 MA VPH
QLast Update : Thu Aug 24 11:07:18 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj.   :
Signal #1 Phase :   Signal #2 Phase:
Signal #1 Info :   Signal #2 Info :





This File:	L:\VOA\Excel Reports\2023\V6112023
Analysis Group:	8260/8021/624
Field ID:	SY-BRMW1-65-75-110923 18001468
Sample:	67839-10 5mL Dow Salvage Yard
Misc:	5 CRE
Import File Name	v6 112023 a
TestGroupID	VMA_VPH_PresCert_A
Aqueous or Soil? (A or S)	A
Solid amount (g)	
Methanol volume (mL)	
Percent Solid (%)	
Soil Prep Date	
Weight:	
Volume:	
Lab#:	67839-010
AnalysisDate:	11/20/2023
AnalysisTime:	21:29
Dilution:	1
AnalyzedBy:	SFP V6112023.D
QC_Code:	
Prep#:	

Reviewer Checks:

- Quant Report: Reviewed, Ranges integrated, Analyst Initials & Date
- Chromatogram Checked, Major peaks identified
- Results consistent w/ other attached analyses
- Reanalysis reason noted
- Substitute dilution data checked
- Correct dilution and reason clear or noted
- Flags checked (Expiration, F+, Over Cal, Surr, Aspen, QC)
- Other QC failures or issues noted in Aspen
- Correct data file and/or date/time in Aspen

Notes: Calibration based on sum of discrete peak areas

Initials & Date: WS 11/21/23

#	Surrogate Standards	Import Value (as ug/L)	Recovery	Flag	QC Limits	Surrogate True Values
11	SS 2,5-dibromotoluene	39.05	**98%**		70-130	40
22	SS 2,5-dibromotoluene #2	40.21	**101%**		70-130	40
4	SS a,a,a-trifluorotoluene	0.00	**0%**		70-130*	20

#	AnalyteName	Concentration (ug/L)	
	C5-C8 Aliphatics #2	**30.525**	30.525
	C9-C12 Aliphatics #2	**22.172**	22.172
1	Methyl-t-butyl ether (MTBE)	0.000	0
2	benzene	0.000	0
3	toluene	**8.377**	8.3766
5	ethylbenzene	0.033	0.0326
6	m&p-xylenes	0.093	0.0931
7	o-xylene	0.000	0
10	naphthalene	0.015	0.015
	C5-C8 Aliphatics Adj	**22.148**	22.148
	C9-C12 Aliphatics Adj	**10.034**	10.034
	C9-C10 Aromatics	**12.013**	12.013
	Total Xylenes	0.000	

Data Path : X:\V6\2023\Nov23\112023\
Data File : V6112023.D
Signal(s) : Signal #1: CPDET1B.ch Signal #2: FID2A.ch
Acq On : 20 Nov 2023 9:29 pm
Operator : sfp
Sample : 67839-10 5mL
Misc : 5
ALS Vial : 23 Sample Multiplier: 1

SFP 11/27/23 @ 11:42 SkylaM

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 22 12:02:42 2023
Quant Method : X:\V6\methods\V6VPH082423CHe.M
Quant Title : VOA06 MA VPH
QLast Update : Thu Aug 24 11:07:18 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	R.T.	Response	Conc	Units		
	System Monitoring Compounds						
4) S	SS a,a,a-trifluorotol...	0.000	0	N.D.	ug/L		
Spiked Amount	20.000		Recovery =	0.00%			
11) S	SS 2,5-dibromotoluene	26.359	30179033	39.047	ug/L		
Spiked Amount	40.000 Range 70 - 130		Recovery =	97.62%			
17) S	SS a,a,a-trifluorotol...	0.000	0	N.D.	ug/L		
Spiked Amount	20.000		Recovery =	0.00%			
22) S	SS 2,5-dibromotoluene #2	26.360	15435687	40.215	ug/L		
Spiked Amount	40.000 Range 70 - 130		Recovery =	100.54%			
	Target Compounds						
1)	methyl-t-butyl ether ...	0.000	0	N.D.	ug/L		
2)	benzene	0.000	0	N.D.	ug/L		
3)	toluene	13.449	12131961	8.377	ug/L		
5)	ethylbenzene	15.475	38942	0.033	ug/L	m	PM
6)	m&p-xylenes	15.572	132718	0.093	ug/L	m	
7)	o-xylene	0.000	0	N.D.	ug/L		
8)	1,2,4-trimethylbenzene	0.000	0	N.D.	ug/L		
9) H	C9-C10 Aromatics	18.612	6856709	2.565	ug/L	m	RI
10)	naphthalene	23.695	101467	0.015	ug/L	m	BC
13)	pentane #2	0.000	0	N.D.	ug/L		
14)	2-methylpentane #2	8.409	276837	0.315	ug/L	m	BC
15)	2,2,4-trimethylpentan...	0.000	0	N.D.	ug/L	d	
16) H	C5-C8 Aliphatics #2	11.378	45672887	30.525	ug/L	m	RI
18)	nonane #2	0.000	0	N.D.	ug/L		
19)	decane #2	0.000	0	N.D.	ug/L		
20)	n-butylcyclohexane #2	0.000	0	N.D.	ug/L	d	
21) H	C9-C12 Aliphatics #2	15.611	16478930	22.172	ug/L	m	RI

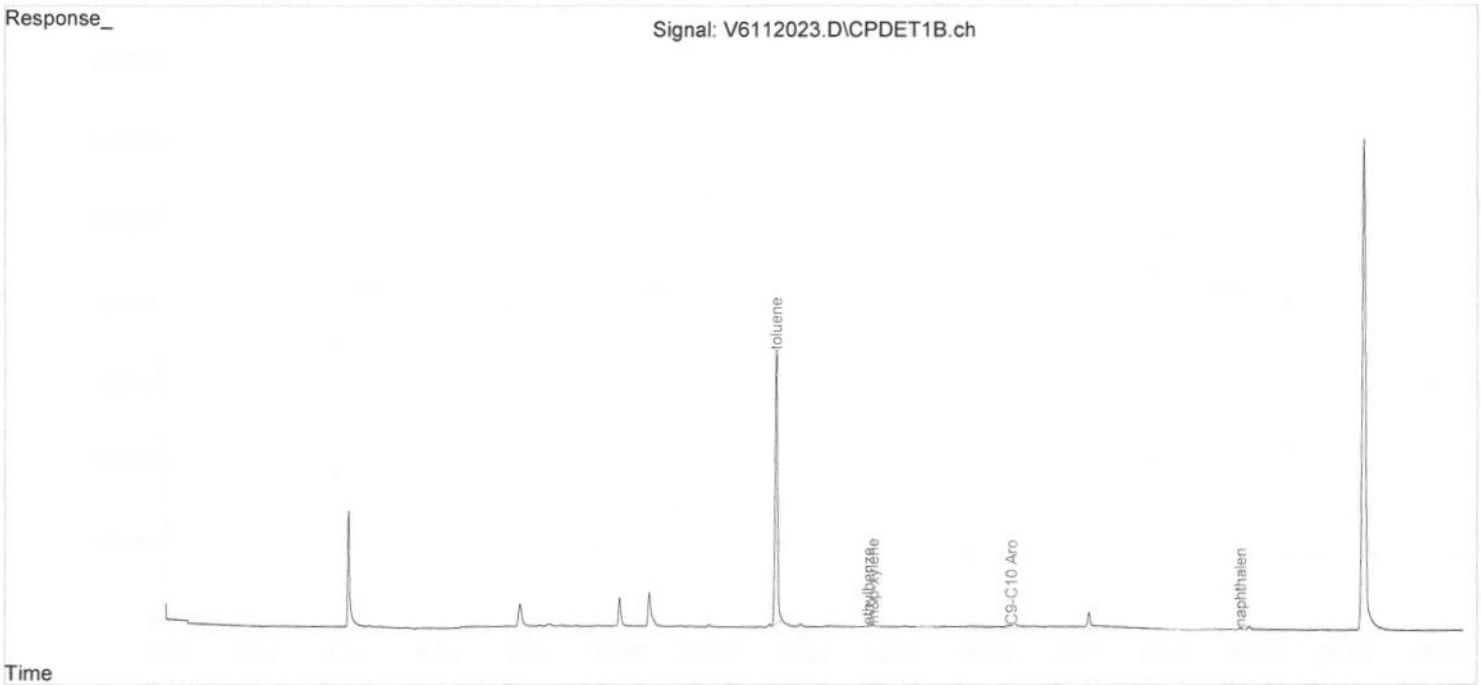
done after quant sheet printed

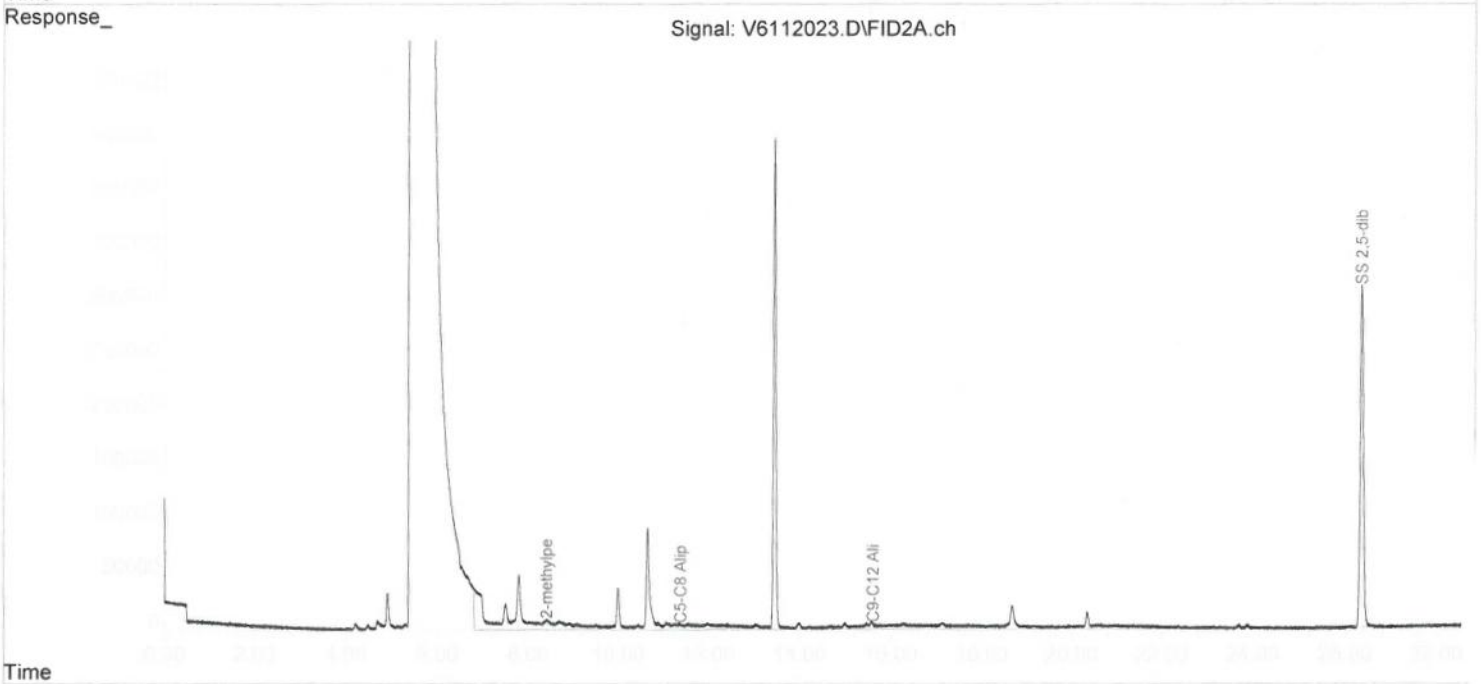
f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : X:\V6\2023\Nov23\112023\
Data File : V6112023.D
Signal(s) : Signal #1: CPDET1B.ch Signal #2: FID2A.ch
Acq On   : 20 Nov 2023   9:29 pm
Operator : sfp
Sample   : 67839-10 5mL
Misc   : 5
ALS Vial : 23   Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 22 12:02:42 2023
Quant Method : X:\V6\methods\V6VPH082423CHe.M
Quant Title : VOA06 MA VPH
QLast Update : Thu Aug 24 11:07:18 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj.   :
Signal #1 Phase :   Signal #2 Phase:
Signal #1 Info :   Signal #2 Info :





This File:	L:\VOA\Excel Reports\2023\V6112024
Analysis Group:	8260/8021/624
Field ID:	Y-BRMW10-65-75-110923 18001468
Sample:	67839-11 5mL Dow Salvage Yard
Misc:	5 CRE
Import File Name	v6 112023 a
TestGroupID	VMA_VPH_PresCert_A
Aqueous or Soil? (A or S)	A
Solid amount (g)	
Methanol volume (mL)	
Percent Solid (%)	
Soil Prep Date	
Weight:	
Volume:	
Lab#:	67839-011
AnalysisDate:	11/20/2023
AnalysisTime:	22:03
Dilution:	1
AnalyzedBy:	SFP V6112024.D
QC_Code:	
Prep#:	

Reviewer Checks:

Quant Report: Reviewed, Ranges integrated, Analyst Initials & Date
Chromatogram Checked, Major peaks identified
Results consistent w/ other attached analyses
Reanalysis reason noted
Substitute dilution data checked
Correct dilution and reason clear or noted
Flags checked (Expiration, F+, Over Cal, Surr, Aspen, QC)
Other QC failures or issues noted in Aspen
Correct data file and/or date/time in Aspen

Notes: Calibration based on sum of discrete peak areas

Initials & Date: WA 11.28.23

#	Surrogate Standards	Import Value (as ug/L)	Recovery	Flag	QC Limits	Surrogate True Values
11	SS 2,5-dibromotoluene	40.32	**101%**		70-130	40
22	SS 2,5-dibromotoluene #2	40.68	**102%**		70-130	40
4	SS a,a,a-trifluorotoluene	0.00	**0%**		70-130*	20

#	AnalyteName	Concentration (ug/L)	
	C5-C8 Aliphatics #2	**34.310**	34.31
	C9-C12 Aliphatics #2	**27.211**	27.211
1	Methyl-t-butyl ether (MTBE)	0.000	0
2	benzene	0.000	0
3	toluene	**9.566**	9.5659
5	ethylbenzene	0.000	0
6	m&p-xylenes	0.000	0
7	o-xylene	0.000	0
10	naphthalene	0.000	0
	C5-C8 Aliphatics Adj	**24.744**	24.744
	C9-C12 Aliphatics Adj	**17.238**	17.238
	C9-C10 Aromatics	**9.972**	9.9724
	Total Xylenes	0.000	

Data Path : X:\V6\2023\Nov23\112023\
Data File : V6112024.D
Signal(s) : Signal #1: CPDET1B.ch Signal #2: FID2A.ch
Acq On : 20 Nov 2023 10:03 pm
Operator : sfp
Sample : 67839-11 5mL
Misc : 5
ALS Vial : 24 Sample Multiplier: 1

SFP
11/27/23 @ 11:42
SkylaM

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 22 12:02:45 2023
Quant Method : X:\V6\methods\V6VPH082423CHe.M
Quant Title : VOA06 MA VPH
QLast Update : Thu Aug 24 11:07:18 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

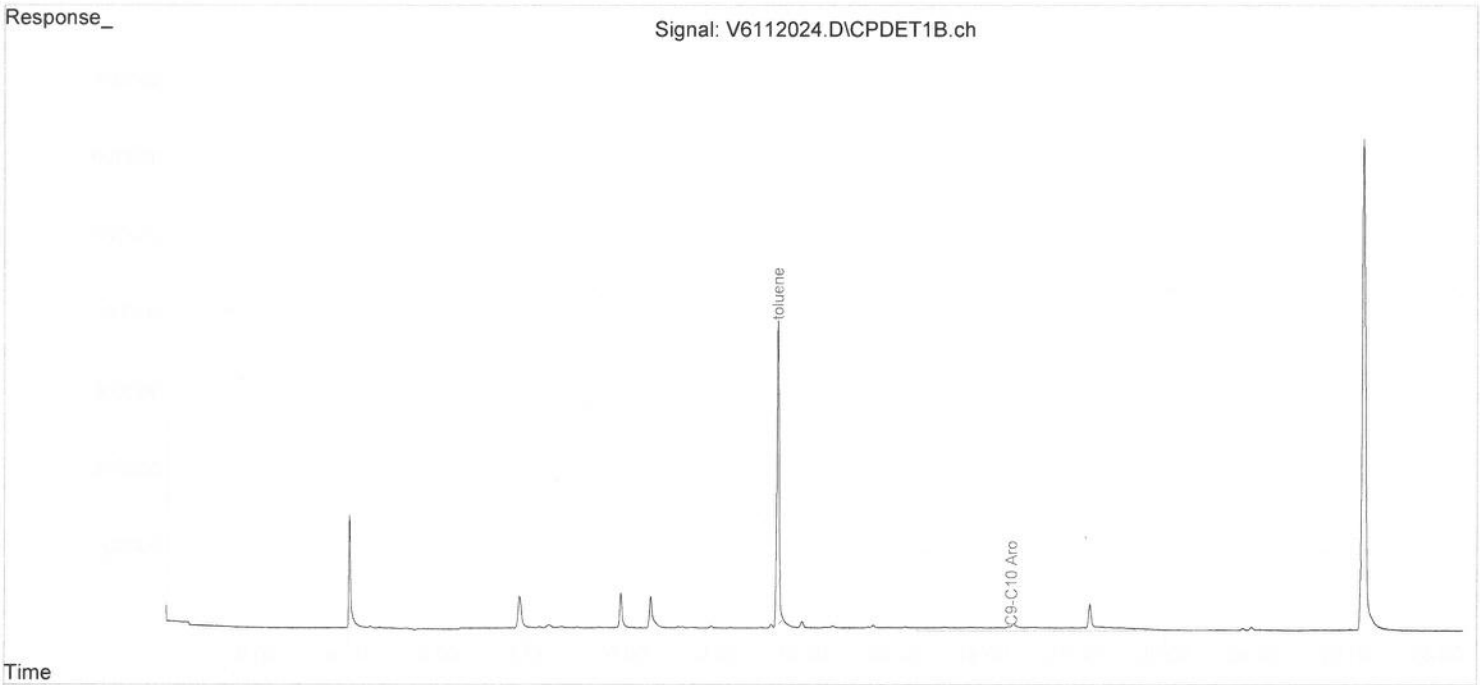
	Compound	R.T.	Response	Conc	Units		
	System Monitoring Compounds						
4) S	SS a,a,a-trifluorotol...	0.000	0	N.D.	ug/L		
Spiked Amount	20.000		Recovery =	0.00%			
11) S	SS 2,5-dibromotoluene	26.359	31057362	40.319	ug/L		
Spiked Amount	40.000 Range 70 - 130		Recovery =	100.80%			
17) S	SS a,a,a-trifluorotol...	0.000	0	N.D.	ug/L		
Spiked Amount	20.000		Recovery =	0.00%			
22) S	SS 2,5-dibromotoluene #2	26.360	15597667	40.678	ug/L		
Spiked Amount	40.000 Range 70 - 130		Recovery =	101.70%			
	Target Compounds						
1)	methyl-t-butyl ether ...	0.000	0	N.D.	ug/L		
2)	benzene	0.000	0	N.D.	ug/L		
3)	toluene	13.448	13854520	9.566	ug/L		
5)	ethylbenzene	0.000	0	N.D.	ug/L		
6)	m&p-xylenes	0.000	0	N.D.	ug/L		
7)	o-xylene	0.000	0	N.D.	ug/L		
8)	1,2,4-trimethylbenzene	0.000	0	N.D.	ug/L		
9) H	C9-C10 Aromatics	18.612	14214204	9.972	ug/L	m	RI
10)	naphthalene	0.000	0	N.D.	ug/L		
13)	pentane #2	0.000	0	N.D.	ug/L		
14)	2-methylpentane #2	0.000	0	N.D.	ug/L		
15)	2,2,4-trimethylpentan...	0.000	0	N.D.	ug/L	d	
16) H	C5-C8 Aliphatics #2	11.378	50338728	34.310	ug/L	m	RI
18)	nonane #2	0.000	0	N.D.	ug/L		
19)	decane #2	0.000	0	N.D.	ug/L		PM
20)	n-butylcyclohexane #2	18.666	1064674	1.129	ug/L	m	
21) H	C9-C12 Aliphatics #2	15.611	22589964	27.211	ug/L	m	RI

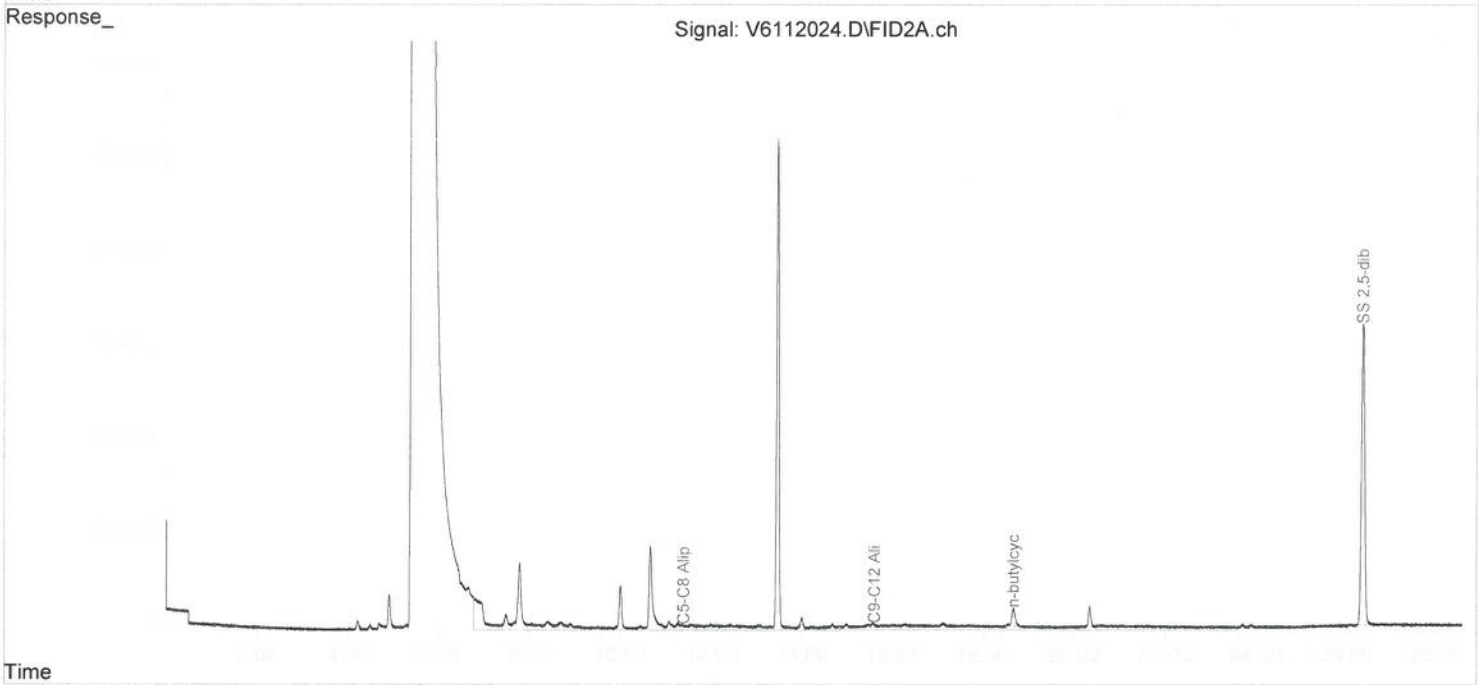
(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : X:\V6\2023\Nov23\112023\
Data File : V6112024.D
Signal(s) : Signal #1: CPDET1B.ch Signal #2: FID2A.ch
Acq On   : 20 Nov 2023 10:03 pm
Operator : sfp
Sample   : 67839-11 5mL
Misc   : 5
ALS Vial : 24   Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 22 12:02:45 2023
Quant Method : X:\V6\methods\V6VPH082423CHe.M
Quant Title : VOA06 MA VPH
QLast Update : Thu Aug 24 11:07:18 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj.   :
Signal #1 Phase :   Signal #2 Phase:
Signal #1 Info :   Signal #2 Info :





This File:	L:\VOA\Excel Reports\2023\V6112025
Analysis Group:	8260/8021/624
Field ID:	GAC-110923 18001468
Sample:	67839-23 5mL Dow Salvage Yard
Misc:	5 CRE
Import File Name	v6 112023 a
TestGroupID	VMA_VPH_PresCert_A
Aqueous or Soil? (A or S)	A
Solid amount (g)	
Methanol volume (mL)	
Percent Solid (%)	
Soil Prep Date	
Weight:	
Volume:	
Lab#:	67839-023
AnalysisDate:	11/21/2023
AnalysisTime:	8:17
Dilution:	1
AnalyzedBy:	SFP V6112025.D
QC_Code:	
Prep#:	

Reviewer Checks:

- Quant Report: Reviewed, Ranges integrated, Analyst Initials & Date
- Chromatogram Checked, Major peaks identified
- Results consistent w/ other attached analyses
- Reanalysis reason noted
- Substitute dilution data checked
- Correct dilution and reason clear or noted
- Flags checked (Expiration, F+, Over Cal, Surr, Aspen, QC)
- Other QC failures or issues noted in Aspen
- Correct data file and/or date/time in Aspen

Notes: Calibration based on sum of discrete peak areas

Initials & Date: WA 11-28-23

#	Surrogate Standards	Import Value (as ug/L)	Recovery	Flag	QC Limits	Surrogate True Values
11	SS 2,5-dibromotoluene	35.80	**89%**		70-130	40
22	SS 2,5-dibromotoluene #2	36.39	**91%**		70-130	40
4	SS a,a,a-trifluorotoluene	0.00	**0%**		70-130*	20

#	AnalyteName	Concentration (ug/L)	
	C5-C8 Aliphatics #2	**17.559**	17.559
	C9-C12 Aliphatics #2	**24.494**	24.494
1	Methyl-t-butyl ether (MTBE)	0.000	0
2	benzene	0.000	0
3	toluene	0.070	0.0705
5	ethylbenzene	0.024	0.0239
6	m&p-xylenes	0.059	0.0594
7	o-xylene	0.000	0
10	naphthalene	0.000	0
	C5-C8 Aliphatics Adj	**17.488**	17.488
	C9-C12 Aliphatics Adj	**18.254**	18.254
	C9-C10 Aromatics	**6.156**	6.1559
	Total Xylenes	0.000	

SFP
11/27/23 @ 11:42
SkylaM

Data Path : X:\V6\2023\Nov23\112023\
Data File : V6112025.D
Signal(s) : Signal #1: CPDET1B.ch Signal #2: FID2A.ch
Acq On : 21 Nov 2023 8:17 am
Operator : sfp
Sample : 67839-23 5mL
Misc : 5
ALS Vial : 25 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 22 12:02:48 2023
Quant Method : X:\V6\methods\V6VPH082423CHe.M
Quant Title : VOA06 MA VPH
QLast Update : Thu Aug 24 11:07:18 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

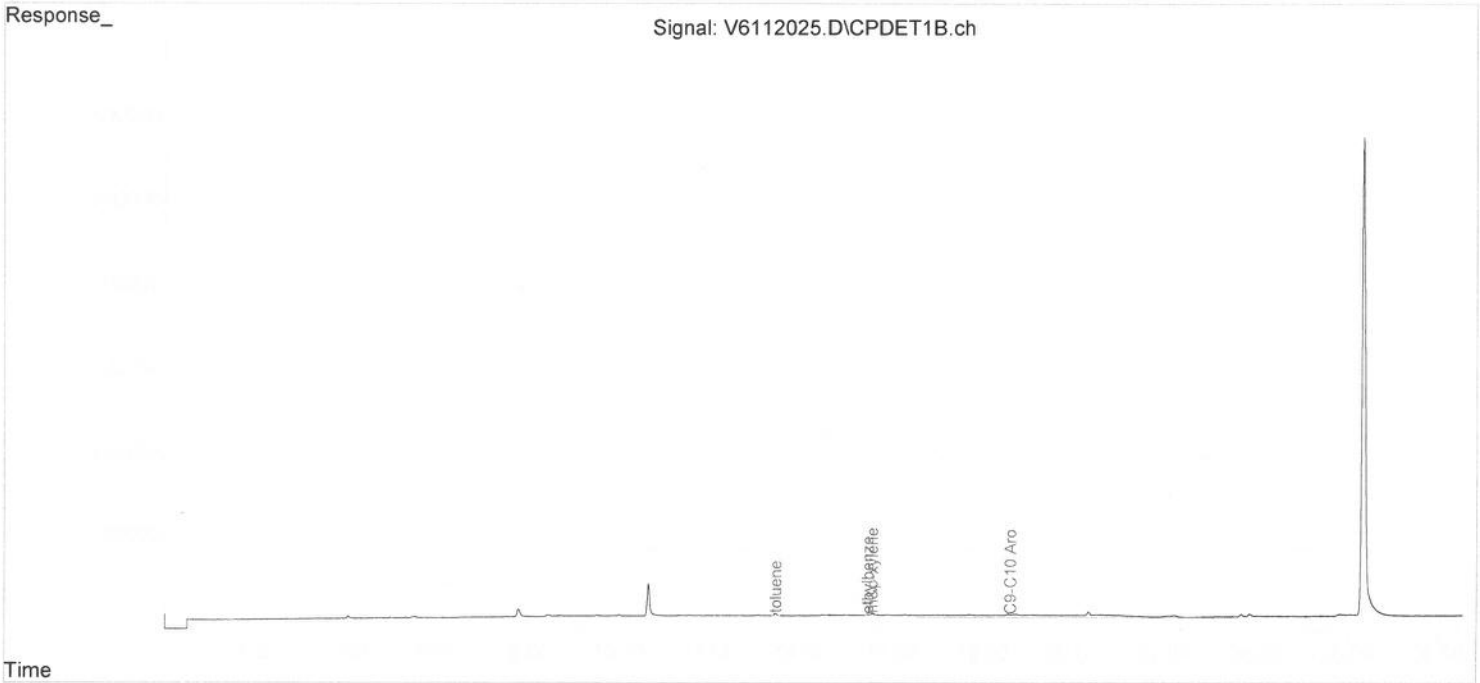
	Compound	R.T.	Response	Conc	Units		
	System Monitoring Compounds						
4) S	SS a,a,a-trifluorotol...	0.000	0	N.D.	ug/L		
Spiked Amount	20.000		Recovery =	0.00%			
11) S	SS 2,5-dibromotoluene	26.353	27932901	35.795	ug/L		
Spiked Amount	40.000 Range 70 - 130		Recovery =	89.49%			
17) S	SS a,a,a-trifluorotol...	0.000	0	N.D.	ug/L		
Spiked Amount	20.000		Recovery =	0.00%			
22) S	SS 2,5-dibromotoluene #2	26.353	14096864	36.385	ug/L		
Spiked Amount	40.000 Range 70 - 130		Recovery =	90.96%			
	Target Compounds						
1)	methyl-t-butyl ether ...	0.000	0	N.D.	ug/L		
2)	benzene	0.000	0	N.D.	ug/L		
3)	toluene	13.447	102042	0.070	ug/L	m	PM
5)	ethylbenzene	15.459	28605	0.024	ug/L	m	
6)	m&p-xylenes	15.557	84588	0.059	ug/L	m	
7)	o-xylene	0.000	0	N.D.	ug/L		
8)	1,2,4-trimethylbenzene	0.000	0	N.D.	ug/L		
9) H	C9-C10 Aromatics	18.612	10423201	6.156	ug/L	m	RI
10)	naphthalene	0.000	0	N.D.	ug/L		
13)	pentane #2	0.000	0	N.D.	ug/L		
14)	2-methylpentane #2	0.000	0	N.D.	ug/L		
15)	2,2,4-trimethylpentan...	0.000	0	N.D.	ug/L	d	
16) H	C5-C8 Aliphatics #2	11.378	29692489	17.559	ug/L	m	RI
18)	nonane #2	0.000	0	N.D.	ug/L		
19)	decane #2	0.000	0	N.D.	ug/L		
20)	n-butylcyclohexane #2	0.000	0	N.D.	ug/L		
21) H	C9-C12 Aliphatics #2	15.611	19294657	24.494	ug/L	m	RI

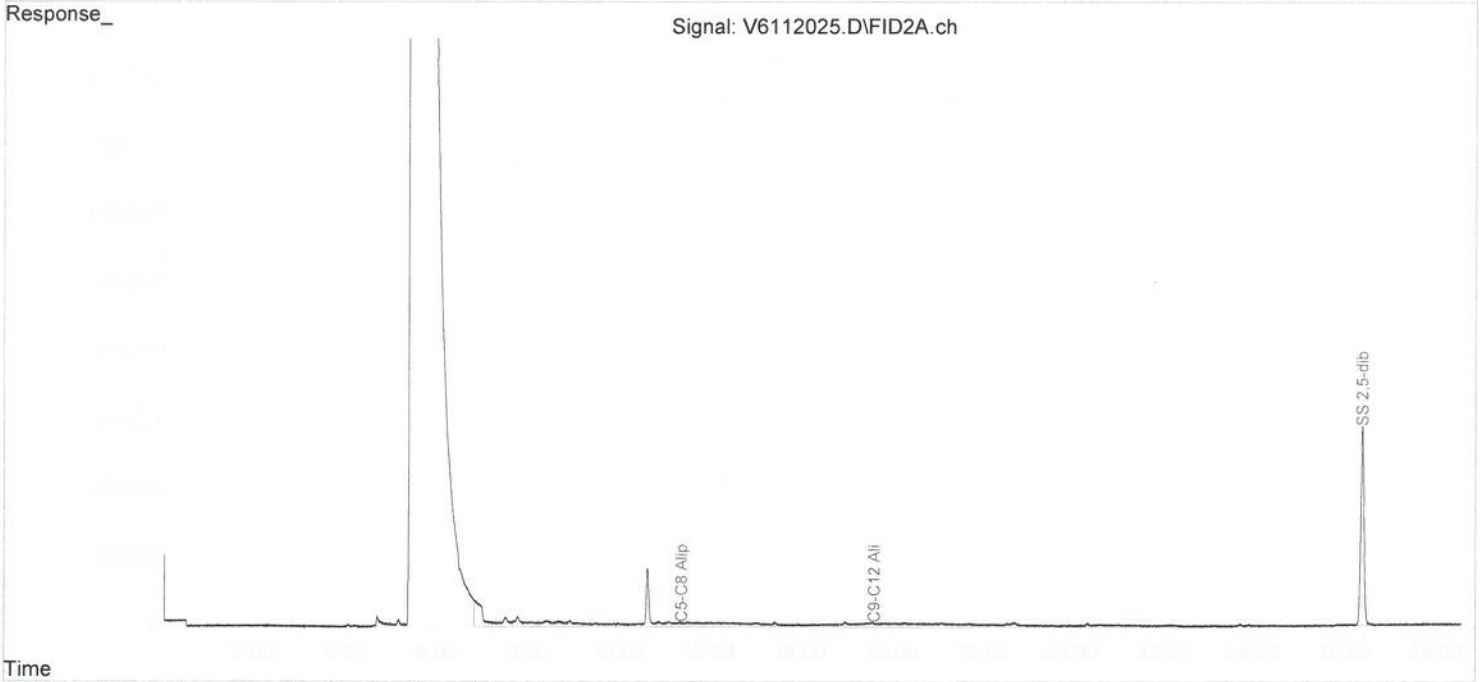
(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : X:\V6\2023\Nov23\112023\
Data File : V6112025.D
Signal(s) : Signal #1: CPDET1B.ch Signal #2: FID2A.ch
Acq On   : 21 Nov 2023   8:17 am
Operator : sfp
Sample   : 67839-23 5mL
Misc   : 5
ALS Vial : 25   Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 22 12:02:48 2023
Quant Method : X:\V6\methods\V6VPH082423CHe.M
Quant Title : VOA06 MA VPH
QLast Update : Thu Aug 24 11:07:18 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj.   :
Signal #1 Phase :   Signal #2 Phase:
Signal #1 Info :   Signal #2 Info :





This File:	L:\VOA\Excel Reports\2023\V6112007
Analysis Group:	8260/8021/624
Field ID:	TB33-110923 18001468
Sample:	67839-24 5mL Dow Salvage Yard
Misc:	5 CRE
Import File Name	v6 112023 a
TestGroupID	VMA_VPH_PresCert_A
Aqueous or Soil? (A or S)	A
Solid amount (g)	
Methanol volume (mL)	
Percent Solid (%)	
Soil Prep Date	
Weight:	
Volume:	
Lab#:	67839-024
AnalysisDate:	11/20/2023
AnalysisTime:	12:31
Dilution:	1
AnalyzedBy:	SFP V6112007.D
QC_Code:	
Prep#:	

Reviewer Checks:

Quant Report: Reviewed, Ranges integrated, Analyst Initials & Date
Chromatogram Checked, Major peaks identified
Results consistent w/ other attached analyses
Reanalysis reason noted
Substitute dilution data checked
Correct dilution and reason clear or noted
Flags checked (Expiration, F+, Over Cal, Surr, Aspen, QC)
Other QC failures or issues noted in Aspen
Correct data file and/or date/time in Aspen

Notes: Calibration based on sum of discrete peak areas

Initials & Date: wb 11-28-23

#	Surrogate Standards	Import Value (as ug/L)	Recovery	Flag	QC Limits	Surrogate True Values
11	SS 2,5-dibromotoluene	36.45	**91%**		70-130	40
22	SS 2,5-dibromotoluene #2	37.41	**94%**		70-130	40
4	SS a,a,a-trifluorotoluene	0.00	**0%**		70-130*	20

#	AnalyteName	Concentration (ug/L)	
	C5-C8 Aliphatics #2	**11.395**	11.395
	C9-C12 Aliphatics #2	**19.863**	19.863
1	Methyl-t-butyl ether (MTBE)	0.000	0
2	benzene	0.000	0
3	toluene	0.000	0
5	ethylbenzene	0.099	0.0991
6	m&p-xylenes	0.245	0.2447
7	o-xylene	0.105	0.1049
10	naphthalene	0.430	0.4299
	C5-C8 Aliphatics Adj	**11.395**	11.395
	C9-C12 Aliphatics Adj	**8.807**	8.8075
	C9-C10 Aromatics	**10.607**	10.607
	Total Xylenes	0.000	

SFP 11/27/23 @ 11:42 SkylaM

Data Path : X:\V6\2023\Nov23\112023\
Data File : V6112007.D
Signal(s) : Signal #1: CPDET1B.ch Signal #2: FID2A.ch
Acq On : 20 Nov 2023 12:31 pm
Operator : sfp
Sample : 67839-24 5mL
Misc : 5
ALS Vial : 7 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 20 19:50:26 2023
Quant Method : X:\V6\methods\V6VPH082423CHe.M
Quant Title : VOA06 MA VPH
QLast Update : Thu Aug 24 11:07:18 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	R.T.	Response	Conc	Units	
	System Monitoring Compounds					
4) S	SS a,a,a-trifluorotol...	0.000	0	N.D.	ug/L	
Spiked Amount	20.000		Recovery =	0.00%		
11) S	SS 2,5-dibromotoluene	26.355	28386748	36.453	ug/L	
Spiked Amount	40.000 Range 70 - 130		Recovery =	91.13%		
17) S	SS a,a,a-trifluorotol...	0.000	0	N.D.	ug/L	
Spiked Amount	20.000		Recovery =	0.00%		
22) S	SS 2,5-dibromotoluene #2	26.356	14454454	37.408	ug/L	
Spiked Amount	40.000 Range 70 - 130		Recovery =	93.52%		
	Target Compounds					
1)	methyl-t-butyl ether ...	0.000	0	N.D.	ug/L	
2)	benzene	0.000	0	N.D.	ug/L	
3)	toluene	0.000	0	N.D.	ug/L	
5)	ethylbenzene	15.458	118488	0.099	ug/L	m
6)	m&p-xylenes	15.567	348654	0.245	ug/L	m
7)	o-xylene	16.279	128212	0.105	ug/L	m
8)	1,2,4-trimethylbenzene	18.566	223998	0.199	ug/L	m
9) H	C9-C10 Aromatics	18.612	14844560	10.607	ug/L	m
10)	naphthalene	23.686	535353	0.430	ug/L	m
13)	pentane #2	0.000	0	N.D.	ug/L	
14)	2-methylpentane #2	0.000	0	N.D.	ug/L	
15)	2,2,4-trimethylpentan...	0.000	0	N.D.	ug/L	
16) H	C5-C8 Aliphatics #2	11.378	22095867	11.395	ug/L	m
18)	nonane #2	0.000	0	N.D.	ug/L	
19)	decane #2	0.000	0	N.D.	ug/L	
20)	n-butylcyclohexane #2	0.000	0	N.D.	ug/L	
21) H	C9-C12 Aliphatics #2	15.611	13678519	19.863	ug/L	m

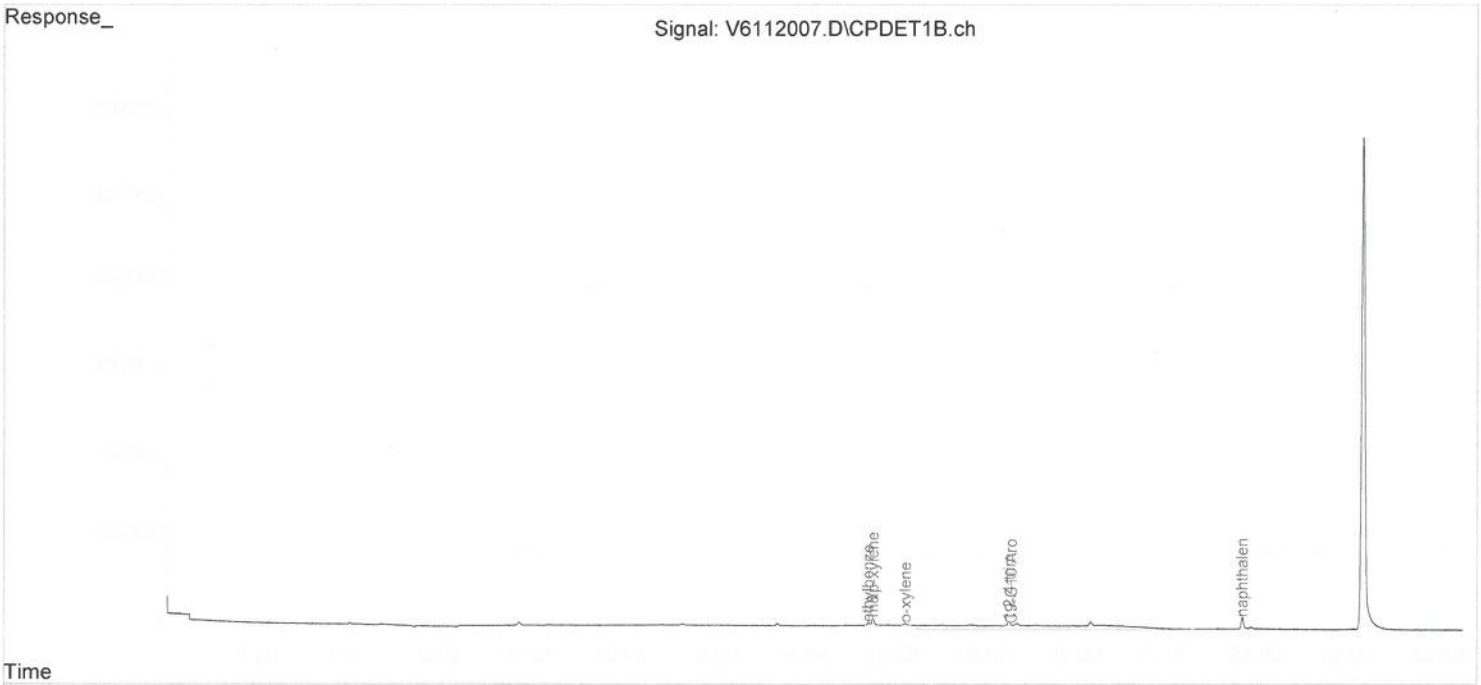
PM Nov 27 2023
RI
PM
RI
RI

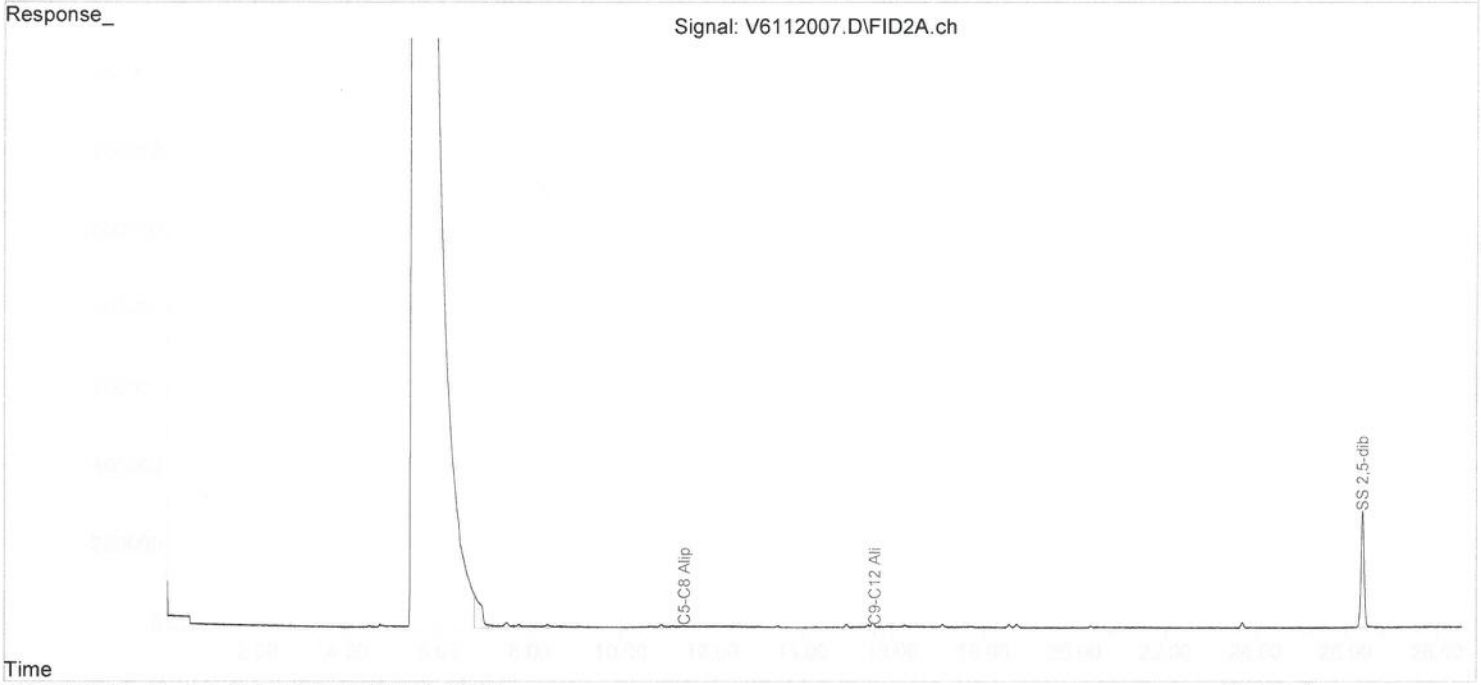
(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : X:\V6\2023\Nov23\112023\
Data File : V6112007.D
Signal(s) : Signal #1: CPDET1B.ch Signal #2: FID2A.ch
Acq On   : 20 Nov 2023 12:31 pm
Operator : sfp
Sample   : 67839-24 5mL
Misc   : 5
ALS Vial : 7   Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 20 19:50:26 2023
Quant Method : X:\V6\methods\V6VPH082423CHe.M
Quant Title : VOA06 MA VPH
QLast Update : Thu Aug 24 11:07:18 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj.   :
Signal #1 Phase :   Signal #2 Phase:
Signal #1 Info :   Signal #2 Info :





This File: **L:\SVOA\Excel Reports\ABN\231205\67839-001** Charles Leahy L:\SVOA\ABN\ABN 8270DoD ImportFileBuilde
Analysis Group: **ABN** **Dow Salvage Yard** 12/5/23 1:09 PM
Field ID: **(-BRMW4-62-72-110923** **CRE** L:\SVOA\ABN\
Sample: **67839-01 acid x1** **67839-01 bn x1** L:\SVOA\Excel Reports\ABN\231205\
Misc: L:\SVOA\PDFReports\
DataFile: 004.D\S4ABN110223A.XLS 4ABN110223A.XLS

Import File Name **S4 ABN 17124 DoD**
TestGroupID **E8270DoD_A**
Aqueous or Soil? (A or S) **A**
Prep Date **11/14/2023**
Lab#: **67839-001**
QC_Code:
Prep# **17124**

Reviewer Checks:
Quant Report: Reviewed, Analyst Initials & Date
Chromatogram Checked, Major peaks identified
Results consistent w/ other attached analyses
Reanalysis reason noted
Substitute dilution data checked
Correct dilution and reason clear or noted
Flags checked (Expiration, F+, Over Cal, Surr, Aspen, QC)
Other QC failures or issues noted in Aspen
Correct data file and/or date/time in Aspen

Notes:
Reviewer Initials & Date: SV 12/7/23

#	Surrogate Standards	Conc. (ug/mL)	AnalysisDate	AnalyzedBy	Dil'n	Weight	Volume	Surr	Recovery	Flag	QC Limits
4	2-fluorophenol	32.22	11/20/2023	CL s4112004.D	1	1	1	100	**32%**		21-100
7	phenol-d6	19.85	11/20/2023	CL s4112004.D	1	1	1	100	**20%**		10-102
59	2,4,6-tribromophenol	55.70	11/20/2023	CL s4112004.D	1	1	1	100	**56%**		10-123
22	nitrobenzene-d5	35.32	11/20/2023	CL s4112019.D	1	1	1	50	**71%**		35-114
38	2-fluorobiphenyl	35.52	11/20/2023	CL s4112019.D	1	1	1	50	**71%**		43-116
75	terphenyl-d14	44.09	11/20/2023	CL s4112019.D	1	1	1	50	**88%**		33-141
6	phenol	0.00	11/20/2023	CL s4112004.D	1	1	1				
8	2-chlorophenol	0.00	11/20/2023	CL s4112004.D	1	1	1				
15	2-methylphenol	0.00	11/20/2023	CL s4112004.D	1	1	1				
15	2-methylphenol	0.00	11/20/2023	CL s4112004.D	1	1	1				
20	4-methylphenol	0.00	11/20/2023	CL s4112004.D	1	1	1				
25	2-nitrophenol	0.00	11/20/2023	CL s4112004.D	1	1	1				
26	2,4-dimethylphenol	0.00	11/20/2023	CL s4112004.D	1	1	1				
28	2,4-dichlorophenol	0.00	11/20/2023	CL s4112004.D	1	1	1				
29	2,6-dichlorophenol	0.00	11/20/2023	CL s4112004.D	1	1	1				
32	benzoic acid	0.00	11/20/2023	CL s4112004.D	1	1	1				
35	4-chloro-3-methylphenol	0.00	11/20/2023	CL s4112004.D	1	1	1				
40	2,4,6-trichlorophenol	0.00	11/20/2023	CL s4112004.D	1	1	1				
41	2,4,5-trichlorophenol	0.00	11/20/2023	CL s4112004.D	1	1	1				
51	2,4-dinitrophenol	0.00	11/20/2023	CL s4112004.D	1	1	1				
53	4-nitrophenol	0.00	11/20/2023	CL s4112004.D	1	1	1				
60	4,6-dinitro-2-methylphenol	0.00	11/20/2023	CL s4112004.D	1	1	1				
66	pentachlorophenol	0.00	11/20/2023	CL s4112004.D	1	1	1				
2	N-nitroso-dimethylamine	0.00	11/20/2023	CL s4112019.D	1	1	1				
3	pyridine	0.00	11/20/2023	CL s4112019.D	1	1	1				
5	aniline	0.00	11/20/2023	CL s4112019.D	1	1	1				
9	n-decane	0.00	11/20/2023	CL s4112019.D	1	1	1				
10	bis-(2-choroethyl)ether	0.00	11/20/2023	CL s4112019.D	1	1	1				
11	1,3-dichlorobenzene	0.00	11/20/2023	CL s4112019.D	1	1	1				
12	1,4-diclorobenzene	0.00	11/20/2023	CL s4112019.D	1	1	1				
13	1,2-dichlorobenzene	0.00	11/20/2023	CL s4112019.D	1	1	1				
14	benzyl alcohol	0.00	11/20/2023	CL s4112019.D	1	1	1				
16	2,2'-oxybis(1-chloropropane)	0.00	11/20/2023	CL s4112019.D	1	1	1				
##	acetephenone	#N/A	11/20/2023	CL s4112019.D	1	1	1			#N/A	
18	hexachloroethane	0.00	11/20/2023	CL s4112019.D	1	1	1				
19	N-nitroso-di-n-propylamine	0.00	11/20/2023	CL s4112019.D	1	1	1				
23	nitrobenzene	0.00	11/20/2023	CL s4112019.D	1	1	1				
24	isophorone	0.00	11/20/2023	CL s4112019.D	1	1	1				
27	bis(2-chloroethoxy)methane	0.00	11/20/2023	CL s4112019.D	1	1	1				
30	1,2,4-trichlorobenzene	0.23	11/20/2023	CL s4112019.D	1	1	1				
31	naphthalene	0.00	11/20/2023	CL s4112019.D	1	1	1				
33	4-chloroanaline	0.00	11/20/2023	CL s4112019.D	1	1	1				
34	hexachloro-1,3-butadiene	0.00	11/20/2023	CL s4112019.D	1	1	1				
36	2-methylnaphthalene	0.00	11/20/2023	CL s4112019.D	1	1	1				
39	hexachlorocyclopentadiene	0.00	11/20/2023	CL s4112019.D	1	1	1				
43	2-chloronaphthalene	0.00	11/20/2023	CL s4112019.D	1	1	1				
44	2-nitroanaline	0.00	11/20/2023	CL s4112019.D	1	1	1				
45	acenaphthylene	0.00	11/20/2023	CL s4112019.D	1	1	1				
46	dimethyl phthalate	0.00	11/20/2023	CL s4112019.D	1	1	1				
47	2,6-dinitrotoluene	0.00	11/20/2023	CL s4112019.D	1	1	1				
48	2,4-dinitrotoluene	0.00	11/20/2023	CL s4112019.D	1	1	1				
49	acenaphthene	0.00	11/20/2023	CL s4112019.D	1	1	1				
50	3-nitroanaline	0.00	11/20/2023	CL s4112019.D	1	1	1				
52	dibenzofuran	0.00	11/20/2023	CL s4112019.D	1	1	1				
54	fluorene	0.00	11/20/2023	CL s4112019.D	1	1	1				
55	diethyl phthalate	0.46	11/20/2023	CL s4112019.D	1	1	1				
56	4-chlorophenyl phenyl ether	0.00	11/20/2023	CL s4112019.D	1	1	1				
57	4-nitroanaline	0.00	11/20/2023	CL s4112019.D	1	1	1				
61	azobenzene	0.00	11/20/2023	CL s4112019.D	1	1	1				
62	N-nitrosodiphenylamine	0.00	11/20/2023	CL s4112019.D	1	1	1				
63	4-bromophenyl phenyl ether	0.00	11/20/2023	CL s4112019.D	1	1	1				
64	hexachlorobenzene	0.00	11/20/2023	CL s4112019.D	1	1	1				
65	n-octadecane	0.00	11/20/2023	CL s4112019.D	1	1	1				
67	phenanthrene	0.00	11/20/2023	CL s4112019.D	1	1	1				
68	anthracene	0.00	11/20/2023	CL s4112019.D	1	1	1				
70	carbazole	0.00	11/20/2023	CL s4112019.D	1	1	1				
71	di-n-butyl phthalate	0.01	11/20/2023	CL s4112019.D	1	1	1				
73	fluoranthene	0.00	11/20/2023	CL s4112019.D	1	1	1				
76	benzidine	0.00	11/20/2023	CL s4112019.D	1	1	1				
77	pyrene	0.00	11/20/2023	CL s4112019.D	1	1	1				
78	butyl benzyl phthalate	0.00	11/20/2023	CL s4112019.D	1	1	1				
79	benzo(a)anthracene	0.00	11/20/2023	CL s4112019.D	1	1	1				
80	chrysene	0.00	11/20/2023	CL s4112019.D	1	1	1				
81	3,3'-dichlorobenzidine	0.00	11/20/2023	CL s4112019.D	1	1	1				
82	bis-2-ethylhexyl phthalate	**145.32**	11/20/2023	CL s4112019.D	1	1	1			OverCal?	
84	di-n-octyl phthalate	0.00	11/20/2023	CL s4112019.D	1	1	1				
85	Benzo(b)fluoranthene	0.00	11/20/2023	CL s4112019.D	1	1	1				
86	benzo(k)fluoranthene	0.00	11/20/2023	CL s4112019.D	1	1	1				
87	benzo(a)pyrene	0.00	11/20/2023	CL s4112019.D	1	1	1				
88	indeno(1,2,3-cd)pyrene	0.00	11/20/2023	CL s4112019.D	1	1	1				
89	dibenzo(a,h)anthracene	0.00	11/20/2023	CL s4112019.D	1	1	1				
90	benzo(g,h,i)perylene	0.00	11/20/2023	CL s4112019.D	1	1	1				

SV 12/7/23

This File: **L:\SVOA\Excel Reports\ABN\231205\67839-001** Charles Leahy L:\SVOA\ABN\ABN 8270DoD ImportFileBuilde
Analysis Group: **ABN** **Dow Salvage Yard** 12/5/23 1:11 PM
Field ID: **/-BRMW4-62-72-110923** **CRE** L:\SVOA\ABN\
Sample: **67839-01 acid x1** **67839-01 bn x5** L:\SVOA\Excel Reports\ABN\231205\
Misc: L:\SVOA\PDFReports\
DataFile: 004.D\S4ABN110223A.XLS 4ABN110223A.XLS
Import File Name **S4 ABN 17124 DoD**
TestGroupID **E8270DoD_A**
Aqueous or Soil? (A or S) **A**
Prep Date **11/14/2023**
Lab#: **67839-001**
QC_Code:
Prep# **17124**

Reviewer Checks:

Quant Report: Reviewed, Analyst Initials & Date
Chromatogram Checked, Major peaks identified
Results consistent w/ other attached analyses
Reanalysis reason noted
Substitute dilution data checked
Correct dilution and reason clear or noted
Flags checked (Expiration, F+, Over Cal, Surr, Aspen, QC)
Other QC failures or issues noted in Aspen
Correct data file and/or date/time in Aspen

Notes:
Reviewer Initials & Date:

#	Surrogate Standards	Conc. (ug/mL)	AnalysisDate	AnalyzedBy	Dil'n	Weight	Volume	Surr	Recovery	Flag	QC Limits
4	2-fluorophenol	32.22	11/20/2023	CL s4112004.D	1	1	1	100	**32%**		21-100
7	phenol-d6	19.85	11/20/2023	CL s4112004.D	1	1	1	100	**20%**		10-102
59	2,4,6-tribromophenol	55.70	11/20/2023	CL s4112004.D	1	1	1	100	**56%**		10-123
22	nitrobenzene-d5	6.75	12/01/2023	CL s4120110.D	5	1	1	50	**67%**		35-114
38	2-fluorobiphenyl	7.59	12/01/2023	CL s4120110.D	5	1	1	50	**76%**		43-116
75	terphenyl-d14	9.25	12/01/2023	CL s4120110.D	5	1	1	50	**92%**		33-141
6	phenol	0.00	11/20/2023	CL s4112004.D	1	1	1				
8	2-chlorophenol	0.00	11/20/2023	CL s4112004.D	1	1	1				
15	2-methylphenol	0.00	11/20/2023	CL s4112004.D	1	1	1				
15	2-methylphenol	0.00	11/20/2023	CL s4112004.D	1	1	1				
20	4-methylphenol	0.00	11/20/2023	CL s4112004.D	1	1	1				
25	2-nitrophenol	0.00	11/20/2023	CL s4112004.D	1	1	1				
26	2,4-dimethylphenol	0.00	11/20/2023	CL s4112004.D	1	1	1				
28	2,4-dichlorophenol	0.00	11/20/2023	CL s4112004.D	1	1	1				
29	2,6-dichlorophenol	0.00	11/20/2023	CL s4112004.D	1	1	1				
32	benzoic acid	0.00	11/20/2023	CL s4112004.D	1	1	1				
35	4-chloro-3-methylphenol	0.00	11/20/2023	CL s4112004.D	1	1	1				
40	2,4,6-trichlorophenol	0.00	11/20/2023	CL s4112004.D	1	1	1				
41	2,4,5-trichlorophenol	0.00	11/20/2023	CL s4112004.D	1	1	1				
51	2,4-dinitrophenol	0.00	11/20/2023	CL s4112004.D	1	1	1				
53	4-nitrophenol	0.00	11/20/2023	CL s4112004.D	1	1	1				
60	4,6-dinitro-2-methylphenol	0.00	11/20/2023	CL s4112004.D	1	1	1				
66	pentachlorophenol	0.00	11/20/2023	CL s4112004.D	1	1	1				
2	N-nitroso-dimethylamine	0.00	12/01/2023	CL s4120110.D	5	1	1				
3	pyridine	0.00	12/01/2023	CL s4120110.D	5	1	1				
5	aniline	0.00	12/01/2023	CL s4120110.D	5	1	1				
9	n-decane	0.00	12/01/2023	CL s4120110.D	5	1	1				
10	bis-(2-choroethyl)ether	0.00	12/01/2023	CL s4120110.D	5	1	1				
11	1,3-dichlorobenzene	0.00	12/01/2023	CL s4120110.D	5	1	1				
12	1,4-diclorobenzene	0.00	12/01/2023	CL s4120110.D	5	1	1				
13	1,2-dichlorobenzene	0.00	12/01/2023	CL s4120110.D	5	1	1				
14	benzyl alcohol	0.00	12/01/2023	CL s4120110.D	5	1	1				
16	2,2'-oxybis(1-chloropropane)	0.00	12/01/2023	CL s4120110.D	5	1	1				
##	acetephenone	#N/A	12/01/2023	CL s4120110.D	5	1	1			#N/A	
18	hexachloroethane	0.00	12/01/2023	CL s4120110.D	5	1	1				
19	N-nitroso-di-n-propylamine	0.00	12/01/2023	CL s4120110.D	5	1	1				
23	nitrobenzene	0.00	12/01/2023	CL s4120110.D	5	1	1				
24	isophorone	0.00	12/01/2023	CL s4120110.D	5	1	1				
27	bis(2-chloroethoxy)methane	0.00	12/01/2023	CL s4120110.D	5	1	1				
30	1,2,4-trichlorobenzene	0.00	12/01/2023	CL s4120110.D	5	1	1				
31	naphthalene	0.00	12/01/2023	CL s4120110.D	5	1	1				
33	4-chloroanaline	0.00	12/01/2023	CL s4120110.D	5	1	1				
34	hexachloro-1,3-butadiene	0.00	12/01/2023	CL s4120110.D	5	1	1				
36	2-methylnaphthalene	0.00	12/01/2023	CL s4120110.D	5	1	1				
39	hexachlorocyclopentadiene	0.00	12/01/2023	CL s4120110.D	5	1	1				
43	2-chloronaphthalene	0.00	12/01/2023	CL s4120110.D	5	1	1				
44	2-nitroanaline	0.00	12/01/2023	CL s4120110.D	5	1	1				
45	acenaphthylene	0.00	12/01/2023	CL s4120110.D	5	1	1				
46	dimethyl phthalate	0.00	12/01/2023	CL s4120110.D	5	1	1				
47	2,6-dinitrotoluene	0.00	12/01/2023	CL s4120110.D	5	1	1				
48	2,4-dinitrotoluene	0.00	12/01/2023	CL s4120110.D	5	1	1				
49	acenaphthene	0.00	12/01/2023	CL s4120110.D	5	1	1				
50	3-nitroanaline	0.00	12/01/2023	CL s4120110.D	5	1	1				
52	dibenzofuran	0.00	12/01/2023	CL s4120110.D	5	1	1				
54	fluorene	0.00	12/01/2023	CL s4120110.D	5	1	1				
55	diethyl phthalate	0.00	12/01/2023	CL s4120110.D	5	1	1				
56	4-chlorophenyl phenyl ether	0.00	12/01/2023	CL s4120110.D	5	1	1				
57	4-nitroanaline	0.00	12/01/2023	CL s4120110.D	5	1	1				
61	azobenzene	0.00	12/01/2023	CL s4120110.D	5	1	1				
62	N-nitrosodiphenylamine	0.00	12/01/2023	CL s4120110.D	5	1	1				
63	4-bromophenyl phenyl ether	0.00	12/01/2023	CL s4120110.D	5	1	1				
64	hexachlorobenzene	0.00	12/01/2023	CL s4120110.D	5	1	1				
65	n-octadecane	0.00	12/01/2023	CL s4120110.D	5	1	1				
67	phenanthrene	0.00	12/01/2023	CL s4120110.D	5	1	1				
68	anthracene	0.00	12/01/2023	CL s4120110.D	5	1	1				
70	carbazole	0.00	12/01/2023	CL s4120110.D	5	1	1				
71	di-n-butyl phthalate	0.00	12/01/2023	CL s4120110.D	5	1	1				
73	fluoranthene	0.00	12/01/2023	CL s4120110.D	5	1	1				
76	benzidine	0.00	12/01/2023	CL s4120110.D	5	1	1				
77	pyrene	0.00	12/01/2023	CL s4120110.D	5	1	1				
78	butyl benzyl phthalate	0.07	12/01/2023	CL s4120110.D	5	1	1				
79	benzo(a)anthracene	0.00	12/01/2023	CL s4120110.D	5	1	1				
80	chrysene	0.00	12/01/2023	CL s4120110.D	5	1	1				
81	3,3'-dichlorobenzidine	0.00	12/01/2023	CL s4120110.D	5	1	1				
82	bis-2-ethylhexyl phthalate	**31.57**	12/01/2023	CL s4120110.D	5	1	1				
84	di-n-octyl phthalate	0.10	12/01/2023	CL s4120110.D	5	1	1				
85	Benzo(b)fluoranthene	0.00	12/01/2023	CL s4120110.D	5	1	1				
86	benzo(k)fluoranthene	0.00	12/01/2023	CL s4120110.D	5	1	1				
87	benzo(a)pyrene	0.00	12/01/2023	CL s4120110.D	5	1	1				
88	indeno(1,2,3-cd)pyrene	0.00	12/01/2023	CL s4120110.D	5	1	1				
89	dibenzo(a,h)anthracene	0.00	12/01/2023	CL s4120110.D	5	1	1				
90	benzo(g,h,i)perylene	0.00	12/01/2023	CL s4120110.D	5	1	1				

Quantitation Report (QT Reviewed)

CL
12/4/23 @ 16:09
CharlesL

Data Path : X:\S4\2023\Nov23\112023\
Data File : s4112004.D
Acq On : 20 Nov 2023 02:36 pm
Operator : cl
Sample : 67839-01 acid x1
Misc :
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Nov 21 08:54:52 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration

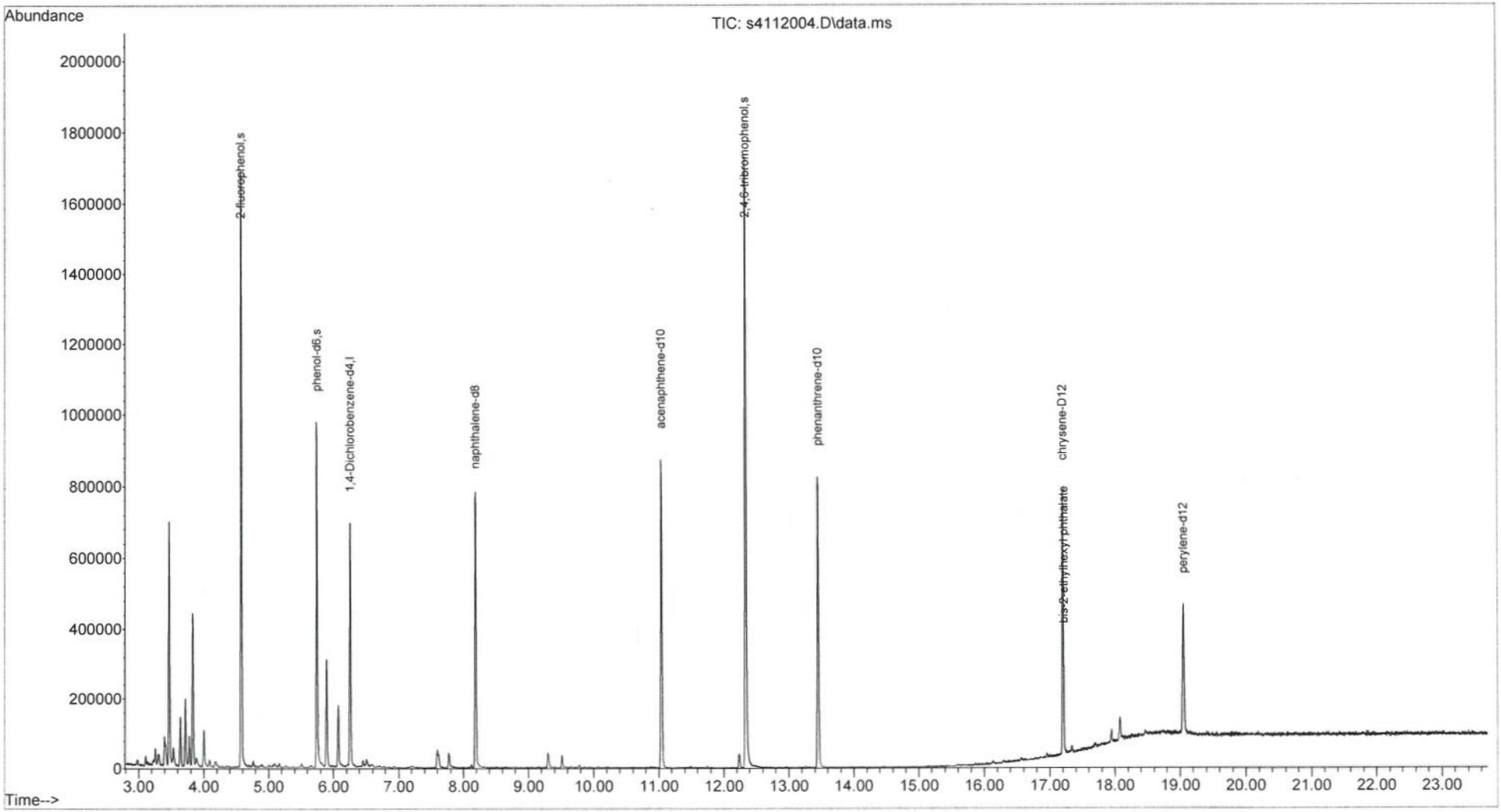
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.255	152	149604	10.00	ug/mL	0.00
21) naphthalene-d8	8.184	136	522766	10.00	ug/mL	0.00
37) acenaphthene-d10	11.041	164	265023	10.00	ug/mL	0.00
58) phenanthrene-d10	13.451	188	467925	10.00	ug/mL	0.00
74) chrysene-D12	17.199	240	308875	10.00	ug/mL	0.00
83) perylene-d12	19.052	264	214014	10.00	ug/mL	0.01
System Monitoring Compounds						
4) 2-fluorophenol	4.576	112	598684	32.22	ug/mL	-0.01
Spiked Amount 200.000			Recovery = 16.11%			
7) phenol-d6	5.743	99	448019	19.85	ug/mL	-0.01
Spiked Amount 200.000			Recovery = 9.93%			
22) nitrobenzene-d5	0.000	82	0	0.00	ug/mL	
Spiked Amount 100.000			Recovery = 0.00%			
38) 2-fluorobiphenyl	0.000	172	0	0.00	ug/mL	
Spiked Amount 100.000			Recovery = 0.00%			
59) 2,4,6-tribromophenol	12.338	330	317769	55.70	ug/mL	0.00
Spiked Amount 200.000			Recovery = 27.85%			
69) o-terphenyl	0.000	230	0	0.00	ug/mL	
Spiked Amount 100.000			Recovery = 0.00%			
72) 1-Chloro-octadecane	0.000	57	0	0.00	ug/mL	
Spiked Amount 100.000			Recovery = 0.00%			
75) terphenyl-d14	0.000	244	0	0.00	ug/mL	
Spiked Amount 100.000			Recovery = 0.00%			
Target Compounds						Qvalue
30) 1,2,4-trichlorobenzene	8.118	180	1174	Below Cal	#	60
49) acenaphthene	11.041	154	1082	Below Cal	#	4
71) di-n-butyl phthalate	14.468	149	932	Below Cal	#	78
82) bis-2-ethylhexyl phtha...	17.212	149	13948	0.486	ug/mL#	93
93) DDT	16.624	TIC	1089	Below Cal	#	22

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Nov23\112023\
Data File : s4112004.D
Acq On : 20 Nov 2023 02:36 pm
Operator : cl
Sample : 67839-01 acid x1
Misc :
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Nov 21 08:54:52 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

CL
12/4/23 @ 16:10
CharlesL

Data Path : X:\S4\2023\Nov23\112023\
Data File : s4112019.D
Acq On : 20 Nov 2023 10:23 pm
Operator : cl
Sample : 67839-01 bn x1
Misc :
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Nov 21 08:55:54 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration

RR x5

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1,4-Dichlorobenzene-d4	6.255	152	114995	10.00 ug/mL	0.00
21) naphthalene-d8	8.184	136	418715	10.00 ug/mL	0.00
37) acenaphthene-d10	11.038	164	220447	10.00 ug/mL	0.00
58) phenanthrene-d10	13.449	188	403000	10.00 ug/mL	-0.01
74) chrysene-D12	17.200	240	308927	10.00 ug/mL	0.00
83) perylene-d12	19.044	264	251786	10.00 ug/mL	0.00
System Monitoring Compounds					
4) 2-fluorophenol	4.584	112	21429m	1.50 ug/mL	0.00
Spiked Amount 200.000			Recovery =	0.75%	
7) phenol-d6	5.746	99	125756	7.25 ug/mL	-0.01
Spiked Amount 200.000			Recovery =	3.62%	
22) nitrobenzene-d5	7.091	82	519070	35.32 ug/mL	0.00
Spiked Amount 100.000			Recovery =	35.32%	
38) 2-fluorobiphenyl	9.932	172	1231816	35.52 ug/mL	0.00
Spiked Amount 100.000			Recovery =	35.52%	
59) 2,4,6-tribromophenol	12.345	330	7727m	1.66 ug/mL	0.00
Spiked Amount 200.000			Recovery =	0.83%	
69) o-terphenyl	0.000	230	0	0.00 ug/mL	
Spiked Amount 100.000			Recovery =	0.00%	
72) 1-Chloro-octadecane	0.000	57	0	0.00 ug/mL	
Spiked Amount 100.000			Recovery =	0.00%	
75) terphenyl-d14	15.864	244	1470467	44.09 ug/mL	0.00
Spiked Amount 100.000			Recovery =	44.09%	
Target Compounds					Qvalue
30) 1,2,4-trichlorobenzene	8.123	180	4715m	0.227 ug/mL	
42) 1,1'-Biphenyl	10.078	154	1390	Below Cal #	63
55) diethyl phthalate	11.795	149	17474	0.457 ug/mL#	78
71) di-n-butyl phthalate	14.458	149	1449	0.011 ug/mL#	78
82) bis-2-ethylhexyl phtha...	17.215	149	4486026	145.319 ug/mL	99
93) DDT	16.639	TIC	1811	Below Cal #	22

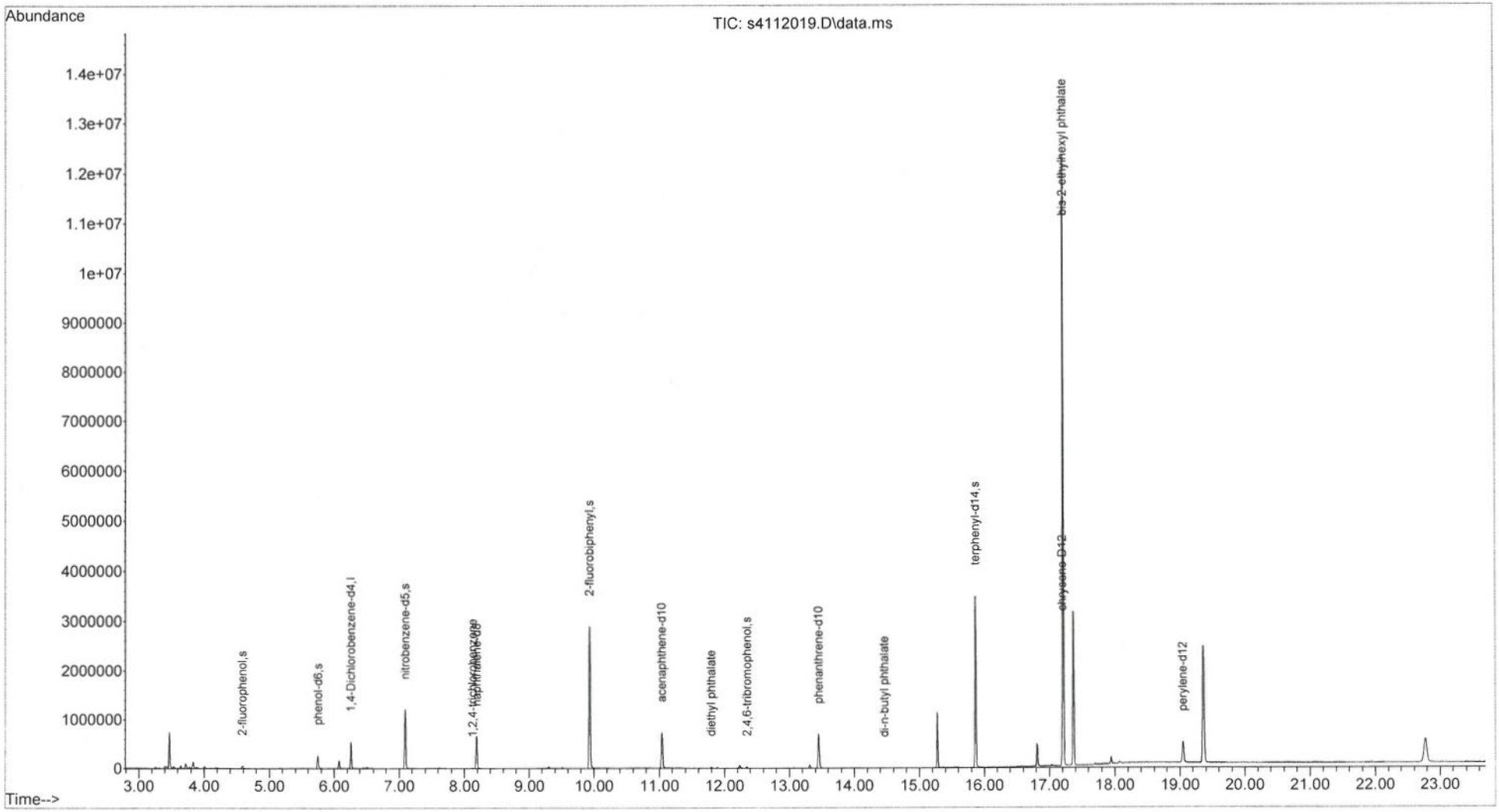
Over - cal

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Nov23\112023\
Data File : s4112019.D
Acq On : 20 Nov 2023 10:23 pm
Operator : cl
Sample : 67839-01 bn x1
Misc :
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Nov 21 08:55:54 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

CL
12/5/23 @ 10:32
CharlesL

Data Path : X:\S4\2023\Dec23\120123\
Data File : s4120110.D
Acq On : 01 Dec 2023 01:48 pm
Operator : cl
Sample : 67839-01 bn x5
Misc :
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Dec 01 16:31:03 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.255	152	150695	10.00	ug/mL	0.00
21) naphthalene-d8	8.184	136	529073	10.00	ug/mL	0.00
37) acenaphthene-d10	11.038	164	248177	10.00	ug/mL	-0.01
58) phenanthrene-d10	13.451	188	391105	10.00	ug/mL	0.00
74) chrysene-D12	17.204	240	269613	10.00	ug/mL	0.00
83) perylene-d12	19.054	264	278475	10.00	ug/mL	0.02
System Monitoring Compounds						
4) 2-fluorophenol	4.589	112	1287	0.07	ug/mL	0.00
Spiked Amount 200.000			Recovery =	0.04%		
7) phenol-d6	5.756	99	24957	1.10	ug/mL	0.00
Spiked Amount 200.000			Recovery =	0.55%		
22) nitrobenzene-d5	7.093	82	125531	6.75	ug/mL	0.00
Spiked Amount 100.000			Recovery =	6.75%		
38) 2-fluorobiphenyl	9.932	172	297614	7.59	ug/mL	0.00
Spiked Amount 100.000			Recovery =	7.59%		
59) 2,4,6-tribromophenol	0.000	330	0	0.00	ug/mL	
Spiked Amount 200.000			Recovery =	0.00%		
69) o-terphenyl	0.000	230	0	0.00	ug/mL	
Spiked Amount 100.000			Recovery =	0.00%		
72) 1-Chloro-octadecane	0.000	57	0	0.00	ug/mL	
Spiked Amount 100.000			Recovery =	0.00%		
75) terphenyl-d14	15.869	244	269305	9.25	ug/mL	0.00
Spiked Amount 100.000			Recovery =	9.25%		
Target Compounds						Qvalue
55) diethyl phthalate	11.795	149	2703	Below Cal	#	59
78) butyl benzyl phthalate	16.506	149	1027	0.070	ug/mL#	26
82) bis-2-ethylhexyl phtha...	17.217	149	849705	31.566	ug/mL	100
84) di-n-octyl phthalate	17.936	149	802	0.099	ug/mL#	79
93) DDT	16.634	TIC	1540	Below Cal	#	22

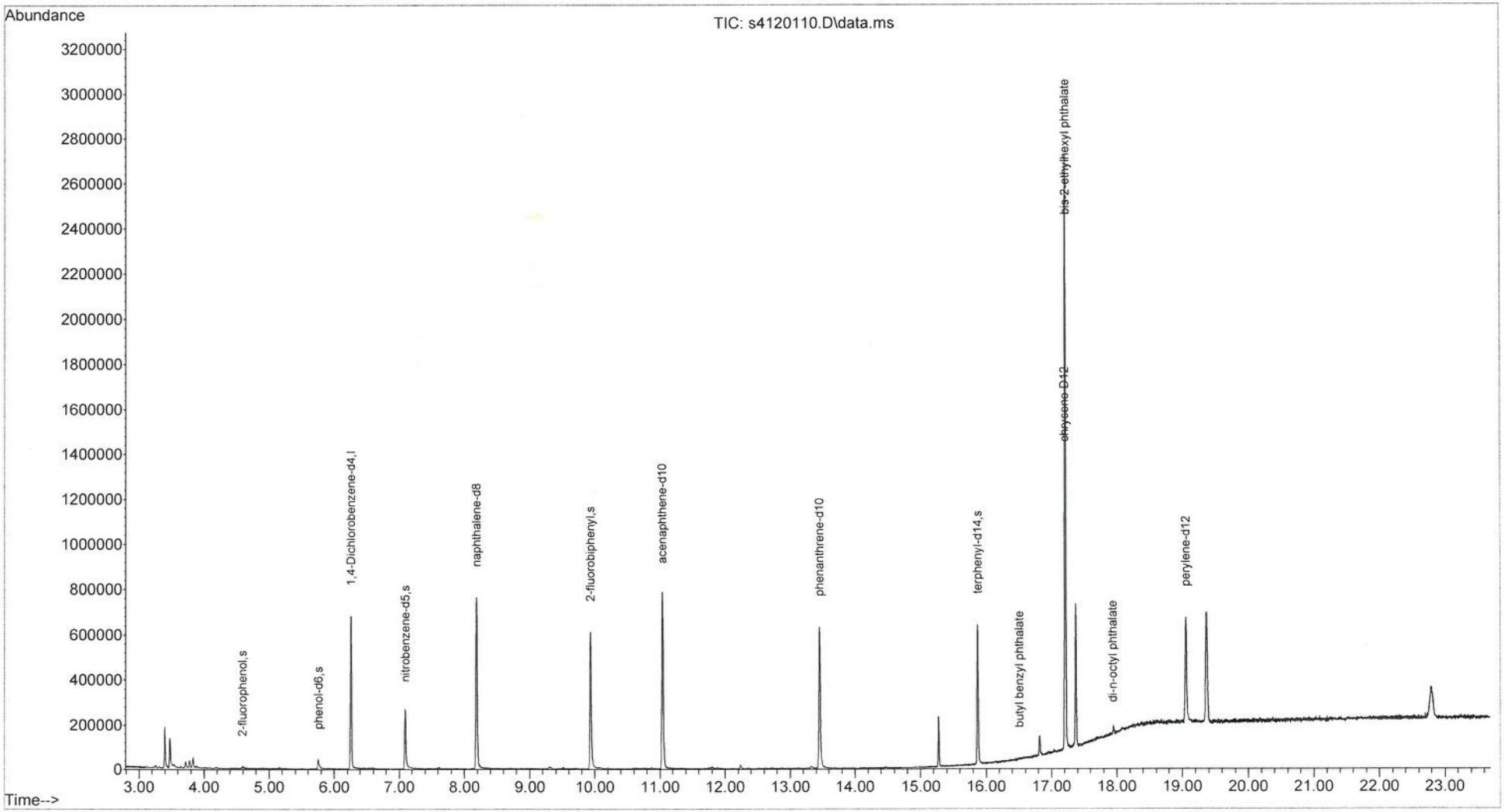
Sub - in

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Dec23\120123\
Data File : s4120110.D
Acq On : 01 Dec 2023 01:48 pm
Operator : cl
Sample : 67839-01 bn x5
Misc :
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Dec 01 16:31:03 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration



This File: **L:\SVOA\Excel Reports\ABN\231205\67839-002**
Analysis Group: **ABN** **Dow Salvage Yard**
Field ID: **BRMW40-62-72-110923** **CRE**
Sample: **67839-02 acid x1** **67839-02 bn x1**
Misc:
DataFile: 116.D\S4ABN110223A.XLS 4ABN110223A.XLS
Import File Name **S4 ABN 17124 DoD**
TestGroupID **E8270DoD_A**
Aqueous or Soil? (A or S) **A**
Prep Date **11/14/2023**
Lab#: **67839-002**
QC_Code:
Prep# **17124**

Charles Leahy L:\SVOA\ABN\ABN 8270DoD ImportFileBuilde
12/5/23 2:00 PM
L:\SVOA\ABN\
L:\SVOA\Excel Reports\ABN\231205\
L:\SVOA\PDFReports\

Reviewer Checks:
Quant Report: Reviewed, Analyst Initials & Date
Chromatogram Checked, Major peaks identified
Results consistent w/ other attached analyses
Reanalysis reason noted
Substitute dilution data checked
Correct dilution and reason clear or noted
Flags checked (Expiration, F+, Over Cal, Surr, Aspen, QC)
Other QC failures or issues noted in Aspen
Correct data file and/or date/time in Aspen

Notes:
Reviewer Initials & Date: SV 12/7/23

#	Surrogate Standards	Conc. (ug/mL)	AnalysisDate	AnalyzedBy	Dil'n	Weight	Volume	Surr	Recovery	Flag	QC Limits
4	2-fluorophenol	35.32	11/21/2023	CL s4112116.D	1	1	1	100	**35%**		21-100
7	phenol-d6	22.67	11/21/2023	CL s4112116.D	1	1	1	100	**23%**		10-102
59	2,4,6-tribromophenol	65.98	11/21/2023	CL s4112116.D	1	1	1	100	**66%**		10-123
22	nitrobenzene-d5	36.12	11/21/2023	CL s4112117.D	1	1	1	50	**72%**		35-114
38	2-fluorobiphenyl	37.19	11/21/2023	CL s4112117.D	1	1	1	50	**74%**		43-116
75	terphenyl-d14	40.13	11/21/2023	CL s4112117.D	1	1	1	50	**80%**		33-141
6	phenol	0.00	11/21/2023	CL s4112116.D	1	1	1				
8	2-chlorophenol	0.00	11/21/2023	CL s4112116.D	1	1	1				
15	2-methylphenol	0.00	11/21/2023	CL s4112116.D	1	1	1				
15	2-methylphenol	0.00	11/21/2023	CL s4112116.D	1	1	1				
20	4-methylphenol	0.00	11/21/2023	CL s4112116.D	1	1	1				
25	2-nitrophenol	0.00	11/21/2023	CL s4112116.D	1	1	1				
26	2,4-dimethylphenol	0.00	11/21/2023	CL s4112116.D	1	1	1				
28	2,4-dichlorophenol	0.00	11/21/2023	CL s4112116.D	1	1	1				
29	2,6-dichlorophenol	0.00	11/21/2023	CL s4112116.D	1	1	1				
32	benzoic acid	0.00	11/21/2023	CL s4112116.D	1	1	1				
35	4-chloro-3-methylphenol	0.00	11/21/2023	CL s4112116.D	1	1	1				
40	2,4,6-trichlorophenol	0.00	11/21/2023	CL s4112116.D	1	1	1				
41	2,4,5-trichlorophenol	0.00	11/21/2023	CL s4112116.D	1	1	1				
51	2,4-dinitrophenol	0.00	11/21/2023	CL s4112116.D	1	1	1				
53	4-nitrophenol	0.00	11/21/2023	CL s4112116.D	1	1	1				
60	4,6-dinitro-2-methylphenol	0.00	11/21/2023	CL s4112116.D	1	1	1				
66	pentachlorophenol	0.00	11/21/2023	CL s4112116.D	1	1	1				
2	N-nitroso-dimethylamine	0.00	11/21/2023	CL s4112117.D	1	1	1				
3	pyridine	0.00	11/21/2023	CL s4112117.D	1	1	1				
5	aniline	0.00	11/21/2023	CL s4112117.D	1	1	1				
9	n-decane	0.00	11/21/2023	CL s4112117.D	1	1	1				
10	bis-(2-choroethyl)ether	0.00	11/21/2023	CL s4112117.D	1	1	1				
11	1,3-dichlorobenzene	0.00	11/21/2023	CL s4112117.D	1	1	1				
12	1,4-diclorobenzene	0.00	11/21/2023	CL s4112117.D	1	1	1				
13	1,2-dichlorobenzene	0.00	11/21/2023	CL s4112117.D	1	1	1				
14	benzyl alcohol	0.00	11/21/2023	CL s4112117.D	1	1	1				
16	2,2'-oxybis(1-chloropropane)	0.00	11/21/2023	CL s4112117.D	1	1	1				
##	acetephenone	#N/A	11/21/2023	CL s4112117.D	1	1	1			#N/A	
18	hexachloroethane	0.00	11/21/2023	CL s4112117.D	1	1	1				
19	N-nitroso-di-n-propylamine	0.00	11/21/2023	CL s4112117.D	1	1	1				
23	nitrobenzene	0.00	11/21/2023	CL s4112117.D	1	1	1				
24	isophorone	0.00	11/21/2023	CL s4112117.D	1	1	1				
27	bis(2-chloroethoxy)methane	0.00	11/21/2023	CL s4112117.D	1	1	1				
30	1,2,4-trichlorobenzene	0.08	11/21/2023	CL s4112117.D	1	1	1				
31	naphthalene	0.00	11/21/2023	CL s4112117.D	1	1	1				
33	4-chloroanaline	0.00	11/21/2023	CL s4112117.D	1	1	1				
34	hexachloro-1,3-butadiene	0.00	11/21/2023	CL s4112117.D	1	1	1				
36	2-methylnaphthalene	0.00	11/21/2023	CL s4112117.D	1	1	1				
39	hexachlorocyclopentadiene	0.00	11/21/2023	CL s4112117.D	1	1	1				
43	2-chloronaphthalene	0.00	11/21/2023	CL s4112117.D	1	1	1				
44	2-nitroanaline	0.00	11/21/2023	CL s4112117.D	1	1	1				
45	acenaphthylene	0.00	11/21/2023	CL s4112117.D	1	1	1				
46	dimethyl phthalate	0.00	11/21/2023	CL s4112117.D	1	1	1				
47	2,6-dinitrotoluene	0.00	11/21/2023	CL s4112117.D	1	1	1				
48	2,4-dinitrotoluene	0.00	11/21/2023	CL s4112117.D	1	1	1				
49	acenaphthene	0.00	11/21/2023	CL s4112117.D	1	1	1				
50	3-nitroanaline	0.00	11/21/2023	CL s4112117.D	1	1	1				
52	dibenzofuran	0.00	11/21/2023	CL s4112117.D	1	1	1				
54	fluorene	0.00	11/21/2023	CL s4112117.D	1	1	1				
55	diethyl phthalate	0.37	11/21/2023	CL s4112117.D	1	1	1				
56	4-chlorophenyl phenyl ether	0.00	11/21/2023	CL s4112117.D	1	1	1				
57	4-nitroanaline	0.00	11/21/2023	CL s4112117.D	1	1	1				
61	azobenzene	0.00	11/21/2023	CL s4112117.D	1	1	1				
62	N-nitrosodiphenylamine	0.00	11/21/2023	CL s4112117.D	1	1	1				
63	4-bromophenyl phenyl ether	0.00	11/21/2023	CL s4112117.D	1	1	1				
64	hexachlorobenzene	0.00	11/21/2023	CL s4112117.D	1	1	1				
65	n-octadecane	0.00	11/21/2023	CL s4112117.D	1	1	1				
67	phenanthrene	0.00	11/21/2023	CL s4112117.D	1	1	1				
68	anthracene	0.00	11/21/2023	CL s4112117.D	1	1	1				
70	carbazole	0.00	11/21/2023	CL s4112117.D	1	1	1				
71	di-n-butyl phthalate	0.02	11/21/2023	CL s4112117.D	1	1	1				
73	fluoranthene	0.00	11/21/2023	CL s4112117.D	1	1	1				
76	benzidine	0.00	11/21/2023	CL s4112117.D	1	1	1				
77	pyrene	0.00	11/21/2023	CL s4112117.D	1	1	1				
78	butyl benzyl phthalate	0.00	11/21/2023	CL s4112117.D	1	1	1				
79	benzo(a)anthracene	0.00	11/21/2023	CL s4112117.D	1	1	1				
80	chrysene	0.00	11/21/2023	CL s4112117.D	1	1	1				
81	3,3'-dichlorobenzidine	0.00	11/21/2023	CL s4112117.D	1	1	1				
82	bis-2-ethylhexyl phthalate	**132.04**	11/21/2023	CL s4112117.D	1	1	1			Over Cal?	
84	di-n-octyl phthalate	0.00	11/21/2023	CL s4112117.D	1	1	1				
85	Benzo(b)fluoranthene	0.00	11/21/2023	CL s4112117.D	1	1	1				
86	benzo(k)fluoranthene	0.00	11/21/2023	CL s4112117.D	1	1	1				
87	benzo(a)pyrene	0.00	11/21/2023	CL s4112117.D	1	1	1				
88	indeno(1,2,3-cd)pyrene	0.00	11/21/2023	CL s4112117.D	1	1	1				
89	dibenzo(a,h)anthracene	0.00	11/21/2023	CL s4112117.D	1	1	1				
90	benzo(g,h,i)perylene	0.00	11/21/2023	CL s4112117.D	1	1	1				

SVD

This File: **L:\SVOA\Excel Reports\ABN\231205\67839-002** Charles Leahy L:\SVOA\ABN\ABN 8270DoD ImportFileBuilde
Analysis Group: **ABN Dow Salvage Yard** 12/5/23 2:02 PM
Field ID: **BRMW40-62-72-110923 CRE** L:\SVOA\ABN\
Sample: **67839-02 acid x1 67839-02 bn x5** L:\SVOA\Excel Reports\ABN\231205\
Misc: L:\SVOA\PDFReports\
DataFile: 116.D\S4ABN110223A.XLS 4ABN110223A.XLS

Import File Name **S4 ABN 17124 DoD**
TestGroupID **E8270DoD_A**
Aqueous or Soil? (A or S) **A**
Prep Date **11/14/2023**
Lab#: **67839-002**
QC_Code:
Prep# **17124**

Reviewer Checks:
Quant Report: Reviewed, Analyst Initials & Date
Chromatogram Checked, Major peaks identified
Results consistent w/ other attached analyses
Reanalysis reason noted
Substitute dilution data checked
Correct dilution and reason clear or noted
Flags checked (Expiration, F+, Over Cal, Surr, Aspen, QC)
Other QC failures or issues noted in Aspen
Correct data file and/or date/time in Aspen

Notes:
Reviewer Initials & Date:

#	Surrogate Standards	Conc. (ug/mL)	AnalysisDate	AnalyzedBy	Dil'n	Weight	Volume	Surr	Recovery	Flag	QC Limits
4	2-fluorophenol	35.32	11/21/2023	CL s4112116.D	1	1	1	100	**35%**		21-100
7	phenol-d6	22.67	11/21/2023	CL s4112116.D	1	1	1	100	**23%**		10-102
59	2,4,6-tribromophenol	65.98	11/21/2023	CL s4112116.D	1	1	1	100	**66%**		10-123
22	nitrobenzene-d5	6.81	12/01/2023	CL s4120111.D	5	1	1	50	**68%**		35-114
38	2-fluorobiphenyl	7.82	12/01/2023	CL s4120111.D	5	1	1	50	**78%**		43-116
75	terphenyl-d14	7.92	12/01/2023	CL s4120111.D	5	1	1	50	**79%**		33-141
6	phenol	0.00	11/21/2023	CL s4112116.D	1	1	1				
8	2-chlorophenol	0.00	11/21/2023	CL s4112116.D	1	1	1				
15	2-methylphenol	0.00	11/21/2023	CL s4112116.D	1	1	1				
15	2-methylphenol	0.00	11/21/2023	CL s4112116.D	1	1	1				
20	4-methylphenol	0.00	11/21/2023	CL s4112116.D	1	1	1				
25	2-nitrophenol	0.00	11/21/2023	CL s4112116.D	1	1	1				
26	2,4-dimethylphenol	0.00	11/21/2023	CL s4112116.D	1	1	1				
28	2,4-dichlorophenol	0.00	11/21/2023	CL s4112116.D	1	1	1				
29	2,6-dichlorophenol	0.00	11/21/2023	CL s4112116.D	1	1	1				
32	benzoic acid	0.00	11/21/2023	CL s4112116.D	1	1	1				
35	4-chloro-3-methylphenol	0.00	11/21/2023	CL s4112116.D	1	1	1				
40	2,4,6-trichlorophenol	0.00	11/21/2023	CL s4112116.D	1	1	1				
41	2,4,5-trichlorophenol	0.00	11/21/2023	CL s4112116.D	1	1	1				
51	2,4-dinitrophenol	0.00	11/21/2023	CL s4112116.D	1	1	1				
53	4-nitrophenol	0.00	11/21/2023	CL s4112116.D	1	1	1				
60	4,6-dinitro-2-methylphenol	0.00	11/21/2023	CL s4112116.D	1	1	1				
66	pentachlorophenol	0.00	11/21/2023	CL s4112116.D	1	1	1				
2	N-nitroso-dimethylamine	0.00	12/01/2023	CL s4120111.D	5	1	1				
3	pyridine	0.00	12/01/2023	CL s4120111.D	5	1	1				
5	aniline	0.00	12/01/2023	CL s4120111.D	5	1	1				
9	n-decane	0.00	12/01/2023	CL s4120111.D	5	1	1				
10	bis-(2-choroethyl)ether	0.00	12/01/2023	CL s4120111.D	5	1	1				
11	1,3-dichlorobenzene	0.00	12/01/2023	CL s4120111.D	5	1	1				
12	1,4-diclorobenzene	0.00	12/01/2023	CL s4120111.D	5	1	1				
13	1,2-dichlorobenzene	0.00	12/01/2023	CL s4120111.D	5	1	1				
14	benzyl alcohol	0.00	12/01/2023	CL s4120111.D	5	1	1				
16	2,2'-oxybis(1-chloropropane)	0.00	12/01/2023	CL s4120111.D	5	1	1				
##	acetephenone	#N/A	12/01/2023	CL s4120111.D	5	1	1			#N/A	
18	hexachloroethane	0.00	12/01/2023	CL s4120111.D	5	1	1				
19	N-nitroso-di-n-propylamine	0.00	12/01/2023	CL s4120111.D	5	1	1				
23	nitrobenzene	0.00	12/01/2023	CL s4120111.D	5	1	1				
24	isophorone	0.00	12/01/2023	CL s4120111.D	5	1	1				
27	bis(2-chloroethoxy)methane	0.00	12/01/2023	CL s4120111.D	5	1	1				
30	1,2,4-trichlorobenzene	0.00	12/01/2023	CL s4120111.D	5	1	1				
31	naphthalene	0.00	12/01/2023	CL s4120111.D	5	1	1				
33	4-chloroanaline	0.00	12/01/2023	CL s4120111.D	5	1	1				
34	hexachloro-1,3-butadiene	0.00	12/01/2023	CL s4120111.D	5	1	1				
36	2-methylnaphthalene	0.00	12/01/2023	CL s4120111.D	5	1	1				
39	hexachlorocyclopentadiene	0.00	12/01/2023	CL s4120111.D	5	1	1				
43	2-chloronaphthalene	0.00	12/01/2023	CL s4120111.D	5	1	1				
44	2-nitroanaline	0.00	12/01/2023	CL s4120111.D	5	1	1				
45	acenaphthylene	0.00	12/01/2023	CL s4120111.D	5	1	1				
46	dimethyl phthalate	0.00	12/01/2023	CL s4120111.D	5	1	1				
47	2,6-dinitrotoluene	0.00	12/01/2023	CL s4120111.D	5	1	1				
48	2,4-dinitrotoluene	0.00	12/01/2023	CL s4120111.D	5	1	1				
49	acenaphthene	0.00	12/01/2023	CL s4120111.D	5	1	1				
50	3-nitroanaline	0.00	12/01/2023	CL s4120111.D	5	1	1				
52	dibenzofuran	0.00	12/01/2023	CL s4120111.D	5	1	1				
54	fluorene	0.00	12/01/2023	CL s4120111.D	5	1	1				
55	diethyl phthalate	0.00	12/01/2023	CL s4120111.D	5	1	1				
56	4-chlorophenyl phenyl ether	0.00	12/01/2023	CL s4120111.D	5	1	1				
57	4-nitroanaline	0.00	12/01/2023	CL s4120111.D	5	1	1				
61	azobenzene	0.00	12/01/2023	CL s4120111.D	5	1	1				
62	N-nitrosodiphenylamine	0.00	12/01/2023	CL s4120111.D	5	1	1				
63	4-bromophenyl phenyl ether	0.00	12/01/2023	CL s4120111.D	5	1	1				
64	hexachlorobenzene	0.00	12/01/2023	CL s4120111.D	5	1	1				
65	n-octadecane	0.00	12/01/2023	CL s4120111.D	5	1	1				
67	phenanthrene	0.00	12/01/2023	CL s4120111.D	5	1	1				
68	anthracene	0.00	12/01/2023	CL s4120111.D	5	1	1				
70	carbazole	0.00	12/01/2023	CL s4120111.D	5	1	1				
71	di-n-butyl phthalate	0.00	12/01/2023	CL s4120111.D	5	1	1				
73	fluoranthene	0.00	12/01/2023	CL s4120111.D	5	1	1				
76	benzidine	0.00	12/01/2023	CL s4120111.D	5	1	1				
77	pyrene	0.00	12/01/2023	CL s4120111.D	5	1	1				
78	butyl benzyl phthalate	0.00	12/01/2023	CL s4120111.D	5	1	1				
79	benzo(a)anthracene	0.00	12/01/2023	CL s4120111.D	5	1	1				
80	chrysene	0.00	12/01/2023	CL s4120111.D	5	1	1				
81	3,3'-dichlorobenzidine	0.00	12/01/2023	CL s4120111.D	5	1	1				
82	bis-2-ethylhexyl phthalate	**26.55**	12/01/2023	CL s4120111.D	5	1	1				
84	di-n-octyl phthalate	0.10	12/01/2023	CL s4120111.D	5	1	1				
85	Benzo(b)fluoranthene	0.00	12/01/2023	CL s4120111.D	5	1	1				
86	benzo(k)fluoranthene	0.00	12/01/2023	CL s4120111.D	5	1	1				
87	benzo(a)pyrene	0.00	12/01/2023	CL s4120111.D	5	1	1				
88	indeno(1,2,3-cd)pyrene	0.00	12/01/2023	CL s4120111.D	5	1	1				
89	dibenzo(a,h)anthracene	0.00	12/01/2023	CL s4120111.D	5	1	1				
90	benzo(g,h,i)perylene	0.00	12/01/2023	CL s4120111.D	5	1	1				

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Nov23\112123\
Data File : s4112116.D
Acq On : 21 Nov 2023 07:13 pm
Operator : cl
Sample : 67839-02 acid x1
Misc :
ALS Vial : 14 Sample Multiplier: 1

CL
12/5/23 @ 09:40
CharlesL

Quant Time: Nov 22 09:15:25 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration

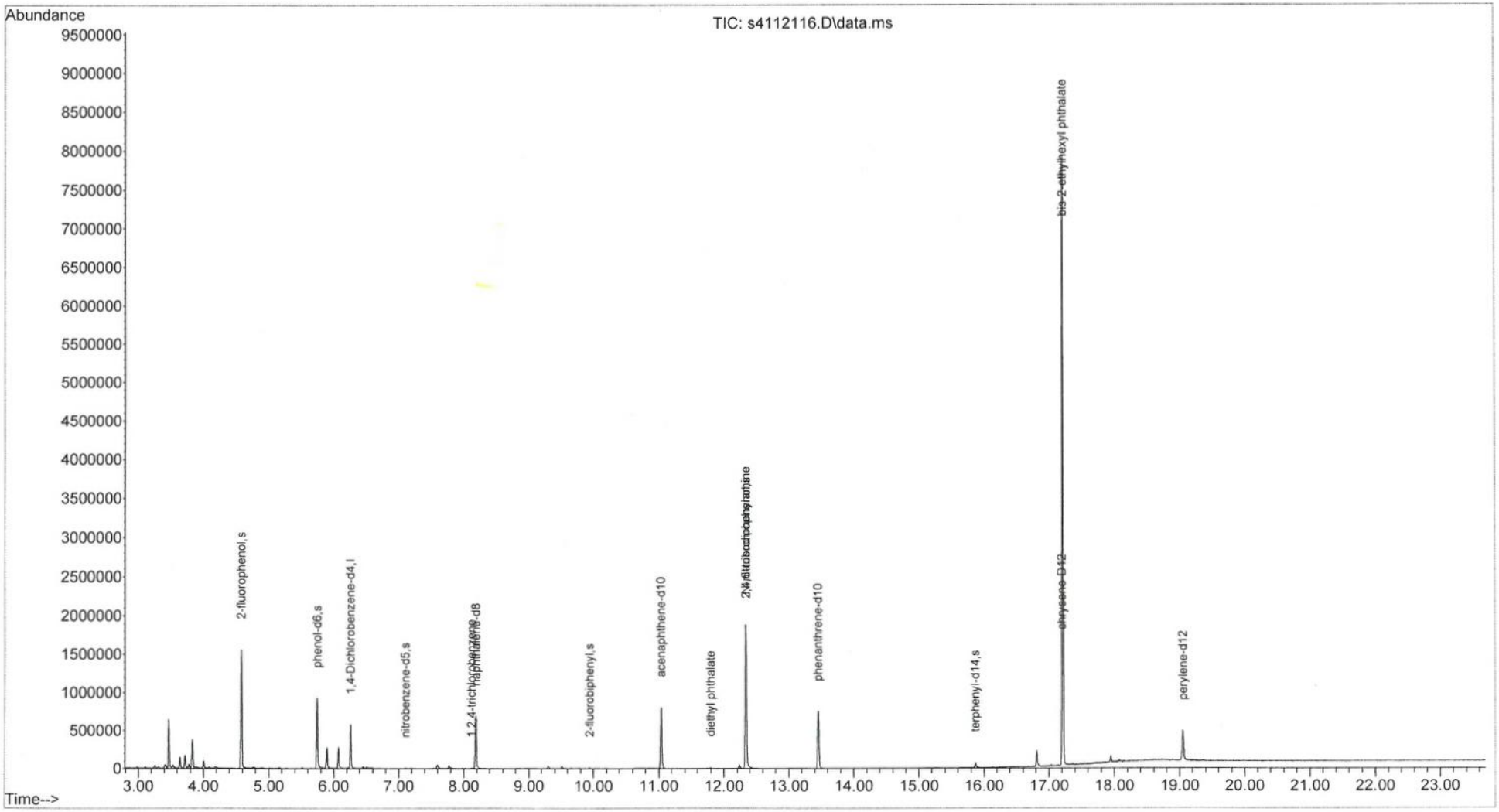
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.255	152	122786	10.00	ug/mL	0.00
21) naphthalene-d8	8.184	136	452963	10.00	ug/mL	-0.01
37) acenaphthene-d10	11.038	164	238393	10.00	ug/mL	-0.01
58) phenanthrene-d10	13.448	188	429002	10.00	ug/mL	-0.01
74) chrysene-D12	17.197	240	296968	10.00	ug/mL	0.00
83) perylene-d12	19.047	264	239825	10.00	ug/mL	0.00
System Monitoring Compounds						
4) 2-fluorophenol	4.578	112	538675	35.32	ug/mL	-0.01
Spiked Amount 200.000			Recovery =	17.66%		
7) phenol-d6	5.743	99	419907	22.67	ug/mL	-0.01
Spiked Amount 200.000			Recovery =	11.34%		
22) nitrobenzene-d5	7.101	82	2176	0.12	ug/mL	0.00
Spiked Amount 100.000			Recovery =	0.12%		
38) 2-fluorobiphenyl	9.937	172	4835	0.09	ug/mL	0.00
Spiked Amount 100.000			Recovery =	0.09%		
59) 2,4,6-tribromophenol	12.337	330	345190	65.98	ug/mL	0.00
Spiked Amount 200.000			Recovery =	32.99%		
69) o-terphenyl	0.000	230	0	0.00	ug/mL	
Spiked Amount 100.000			Recovery =	0.00%		
72) 1-Chloro-octadecane	0.000	57	0	0.00	ug/mL	
Spiked Amount 100.000			Recovery =	0.00%		
75) terphenyl-d14	15.864	244	28261	0.87	ug/mL	0.00
Spiked Amount 100.000			Recovery =	0.87%		
Target Compounds						Qvalue
9) n-decane	6.069	57	1138	Below Cal	#	1
30) 1,2,4-trichlorobenzene	8.115	180	2940m	BC 0.092	ug/mL	
55) diethyl phthalate	11.795	149	7840	0.143	ug/mL#	77
62) N-nitrosodiphenylamine	12.335	169	8821	0.312	ug/mL#	33
82) bis-2-ethylhexyl phtha...	17.212	149	2792535	94.116	ug/mL	99
93) DDT	16.639	TIC	902	Below Cal	#	22

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Nov23\112123\
Data File : s4112116.D
Acq On : 21 Nov 2023 07:13 pm
Operator : cl
Sample : 67839-02 acid x1
Misc :
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Nov 22 09:15:25 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Nov23\112123\
Data File : s4112117.D
Acq On : 21 Nov 2023 07:43 pm
Operator : cl
Sample : 67839-02 bn x1
Misc :
ALS Vial : 15 Sample Multiplier: 1

CL
12/5/23 @ 09:41
CharlesL

Quant Time: Nov 22 09:15:29 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration

RR x5

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.255	152	128143	10.00	ug/mL	0.00
21) naphthalene-d8	8.184	136	465787	10.00	ug/mL	0.00
37) acenaphthene-d10	11.041	164	243377	10.00	ug/mL	# 0.00
58) phenanthrene-d10	13.448	188	448703	10.00	ug/mL	-0.01
74) chrysene-D12	17.197	240	361063	10.00	ug/mL	0.00
83) perylene-d12	19.042	264	305810	10.00	ug/mL	0.00
System Monitoring Compounds						
4) 2-fluorophenol	4.589	112	12565	0.79	ug/mL	0.00
Spiked Amount 200.000			Recovery =	0.40%		
7) phenol-d6	5.745	99	107832	5.58	ug/mL	-0.01
Spiked Amount 200.000			Recovery =	2.79%		
22) nitrobenzene-d5	7.091	82	590528	36.12	ug/mL	-0.01
Spiked Amount 100.000			Recovery =	36.12%		
38) 2-fluorobiphenyl	9.932	172	1423658	37.19	ug/mL	0.00
Spiked Amount 100.000			Recovery =	37.19%		
59) 2,4,6-tribromophenol	12.345	330	4005m	0.82	ug/mL	0.00
Spiked Amount 200.000			Recovery =	0.41%		
69) o-terphenyl	14.139	230	1155	0.02	ug/mL	-0.01
Spiked Amount 100.000			Recovery =	0.02%		
72) 1-Chloro-octadecane	0.000	57	0	0.00	ug/mL	
Spiked Amount 100.000			Recovery =	0.00%		
75) terphenyl-d14	15.864	244	1564165	40.13	ug/mL	0.00
Spiked Amount 100.000			Recovery =	40.13%		
Target Compounds						Qvalue
30) 1,2,4-trichlorobenzene	8.120	180	2843	0.081	ug/mL#	72
42) 1,1'-Biphenyl	10.085	154	2898m	BC	Below Cal	
55) diethyl phthalate	11.792	149	16255m	BC	0.373 ug/mL	
71) di-n-butyl phthalate	14.460	149	2065	0.019	ug/mL#	78
82) bis-2-ethylhexyl phtha...	17.212	149	4764035	132.044	ug/mL	99
93) DDT	16.626	TIC	811	0.161	ug/mL#	22

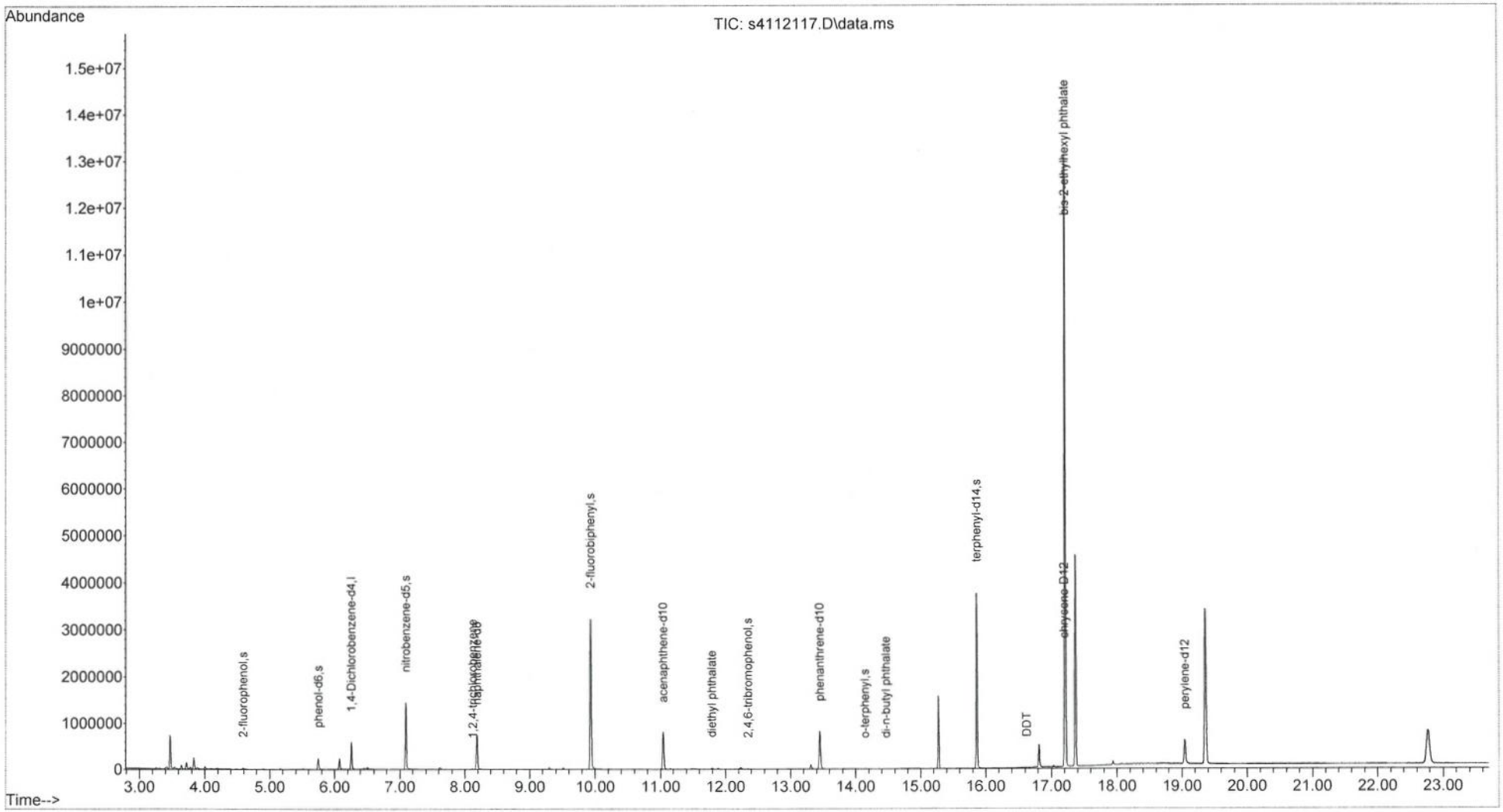
Over - cal

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Nov23\112123\
Data File : s4112117.D
Acq On : 21 Nov 2023 07:43 pm
Operator : cl
Sample : 67839-02 bn x1
Misc :
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Nov 22 09:15:29 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Dec23\120123\
Data File : s4120111.D
Acq On : 01 Dec 2023 02:18 pm
Operator : cl
Sample : 67839-02 bn x5
Misc :
ALS Vial : 11 Sample Multiplier: 1

CL
12/5/23 @ 10:33
CharlesL

Quant Time: Dec 01 16:31:07 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.253	152	152947	10.00	ug/mL	-0.01
21) naphthalene-d8	8.182	136	511806	10.00	ug/mL	-0.01
37) acenaphthene-d10	11.041	164	244248	10.00	ug/mL	0.00
58) phenanthrene-d10	13.451	188	371845	10.00	ug/mL	0.00
74) chrysene-D12	17.205	240	254765	10.00	ug/mL	0.00
83) perylene-d12	19.052	264	283218	10.00	ug/mL	0.01
System Monitoring Compounds						
4) 2-fluorophenol	0.000	112	0	0.00	ug/mL	
Spiked Amount 200.000			Recovery =	0.00%		
7) phenol-d6	5.751	99	14363	0.62	ug/mL	0.00
Spiked Amount 200.000			Recovery =	0.31%		
22) nitrobenzene-d5	7.091	82	122605	6.81	ug/mL	0.00
Spiked Amount 100.000			Recovery =	6.81%		
38) 2-fluorobiphenyl	9.932	172	301651	7.82	ug/mL	0.00
Spiked Amount 100.000			Recovery =	7.82%		
59) 2,4,6-tribromophenol	0.000	330	0	0.00	ug/mL	
Spiked Amount 200.000			Recovery =	0.00%		
69) o-terphenyl	0.000	230	0	0.00	ug/mL	
Spiked Amount 100.000			Recovery =	0.00%		
72) 1-Chloro-octadecane	0.000	57	0	0.00	ug/mL	
Spiked Amount 100.000			Recovery =	0.00%		
75) terphenyl-d14	15.869	244	217947	7.92	ug/mL	0.00
Spiked Amount 100.000			Recovery =	7.92%		
Target Compounds						Qvalue
55) diethyl phthalate	11.800	149	1300	Below Cal	#	59
82) bis-2-ethylhexyl phtha...	17.217	149	675235	26.552	ug/mL	100
84) di-n-octyl phthalate	17.951	149	844	0.100	ug/mL#	27
93) DDT	16.621	TIC	2017	Below Cal	#	22

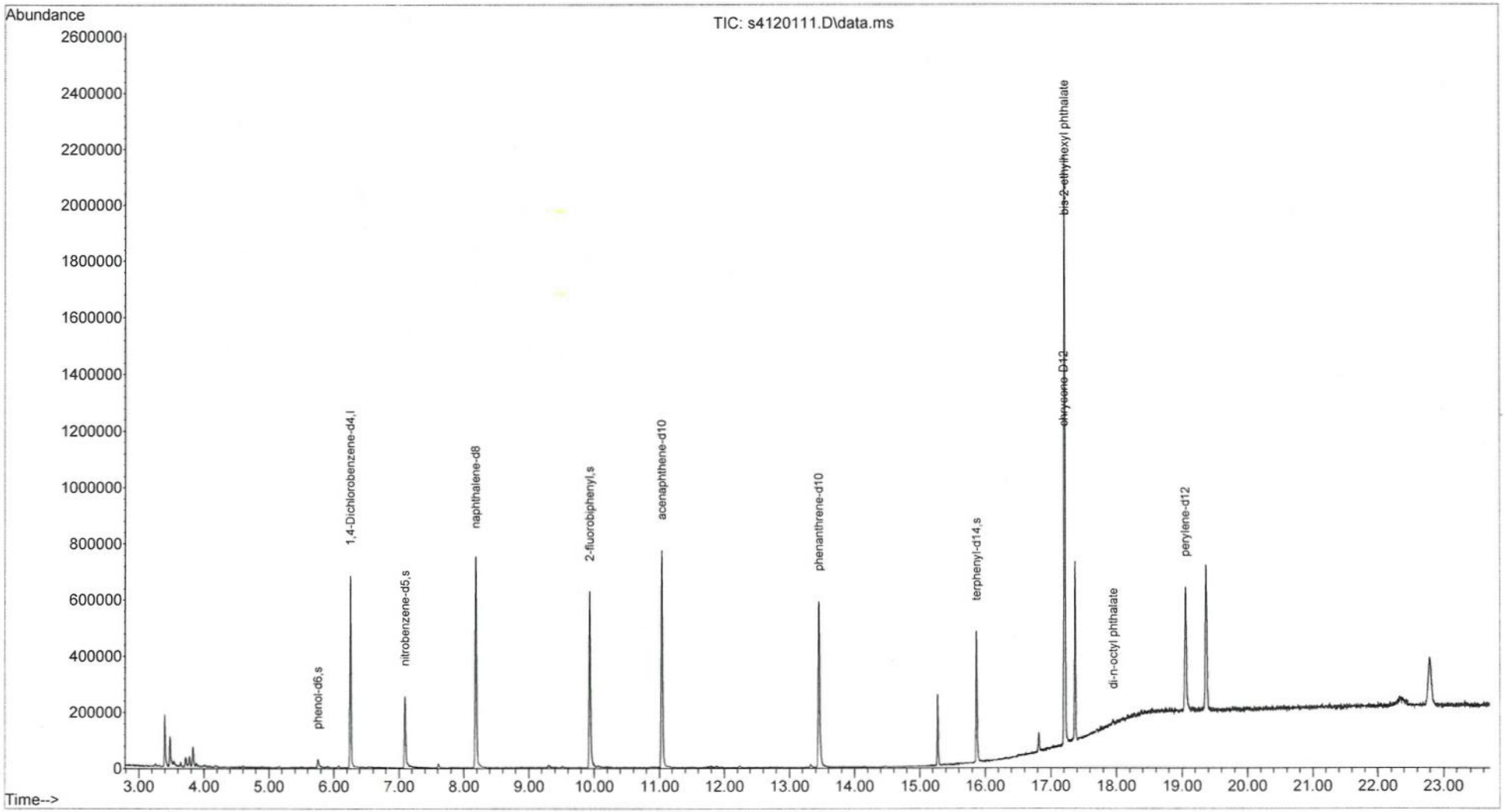
Sub - in

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Dec23\120123\
Data File : s4120111.D
Acq On : 01 Dec 2023 02:18 pm
Operator : cl
Sample : 67839-02 bn x5
Misc :
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Dec 01 16:31:07 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration



This File: **L:\SVOA\Excel Reports\ABN\231205\67839-003** Charles Leahy L:\SVOA\ABN\ABN 8270DoD ImportFileBuilde
Analysis Group: **ABN** **Dow Salvage Yard** 12/5/23 2:04 PM
Field ID: **RMW4-138-148-110923** **CRE** L:\SVOA\ABN\
Sample: **67839-03 acid x1** **67839-03 bn x1** L:\SVOA\Excel Reports\ABN\231205\
Misc: L:\SVOA\PDFReports\
DataFile: 118.D\S4ABN110223A.XLS 4ABN110223A.XLS

Import File Name **S4 ABN 17124 DoD**
TestGroupID **E8270DoD_A**
Aqueous or Soil? (A or S) **A**
Prep Date **11/14/2023**
Lab#: **67839-003**
QC_Code:
Prep# **17124**

Reviewer Checks:
Quant Report: Reviewed, Analyst Initials & Date
Chromatogram Checked, Major peaks identified
Results consistent w/ other attached analyses
Reanalysis reason noted
Substitute dilution data checked
Correct dilution and reason clear or noted
Flags checked (Expiration, F+, Over Cal, Surr, Aspen, QC)
Other QC failures or issues noted in Aspen
Correct data file and/or date/time in Aspen

Notes:
Reviewer Initials & Date: 12/7/23

#	Surrogate Standards	Conc. (ug/mL)	AnalysisDate	AnalyzedBy	Dil'n	Weight	Volume	Surr	Recovery	Flag	QC Limits
4	2-fluorophenol	36.78	11/21/2023	CL s4112118.D	1	1	1	100	**37%**		21-100
7	phenol-d6	23.55	11/21/2023	CL s4112118.D	1	1	1	100	**24%**		10-102
59	2,4,6-tribromophenol	74.77	11/21/2023	CL s4112118.D	1	1	1	100	**75%**		10-123
22	nitrobenzene-d5	30.72	11/20/2023	CL s4112020.D	1	1	1	50	**61%**		35-114
38	2-fluorobiphenyl	32.22	11/20/2023	CL s4112020.D	1	1	1	50	**64%**		43-116
75	terphenyl-d14	48.34	11/20/2023	CL s4112020.D	1	1	1	50	**97%**		33-141
6	phenol	0.00	11/21/2023	CL s4112118.D	1	1	1				
8	2-chlorophenol	0.00	11/21/2023	CL s4112118.D	1	1	1				
15	2-methylphenol	0.00	11/21/2023	CL s4112118.D	1	1	1				
15	2-methylphenol	0.00	11/21/2023	CL s4112118.D	1	1	1				
20	4-methylphenol	0.00	11/21/2023	CL s4112118.D	1	1	1				
25	2-nitrophenol	0.00	11/21/2023	CL s4112118.D	1	1	1				
26	2,4-dimethylphenol	0.00	11/21/2023	CL s4112118.D	1	1	1				
28	2,4-dichlorophenol	0.00	11/21/2023	CL s4112118.D	1	1	1				
29	2,6-dichlorophenol	0.00	11/21/2023	CL s4112118.D	1	1	1				
32	benzoic acid	0.00	11/21/2023	CL s4112118.D	1	1	1				
35	4-chloro-3-methylphenol	0.00	11/21/2023	CL s4112118.D	1	1	1				
40	2,4,6-trichlorophenol	0.00	11/21/2023	CL s4112118.D	1	1	1				
41	2,4,5-trichlorophenol	0.00	11/21/2023	CL s4112118.D	1	1	1				
51	2,4-dinitrophenol	0.00	11/21/2023	CL s4112118.D	1	1	1				
53	4-nitrophenol	0.00	11/21/2023	CL s4112118.D	1	1	1				
60	4,6-dinitro-2-methylphenol	0.00	11/21/2023	CL s4112118.D	1	1	1				
66	pentachlorophenol	0.00	11/21/2023	CL s4112118.D	1	1	1				
2	N-nitroso-dimethylamine	0.00	11/20/2023	CL s4112020.D	1	1	1				
3	pyridine	0.00	11/20/2023	CL s4112020.D	1	1	1				
5	aniline	0.00	11/20/2023	CL s4112020.D	1	1	1				
9	n-decane	0.00	11/20/2023	CL s4112020.D	1	1	1				
10	bis-(2-choroethyl)ether	0.00	11/20/2023	CL s4112020.D	1	1	1				
11	1,3-dichlorobenzene	0.00	11/20/2023	CL s4112020.D	1	1	1				
12	1,4-diclorobenzene	0.00	11/20/2023	CL s4112020.D	1	1	1				
13	1,2-dichlorobenzene	0.00	11/20/2023	CL s4112020.D	1	1	1				
14	benzyl alcohol	0.00	11/20/2023	CL s4112020.D	1	1	1				
16	2,2'-oxybis(1-chloropropane)	0.00	11/20/2023	CL s4112020.D	1	1	1				
##	acetephenone	#N/A	11/20/2023	CL s4112020.D	1	1	1			#N/A	
18	hexachloroethane	0.00	11/20/2023	CL s4112020.D	1	1	1				
19	N-nitroso-di-n-propylamine	0.00	11/20/2023	CL s4112020.D	1	1	1				
23	nitrobenzene	0.00	11/20/2023	CL s4112020.D	1	1	1				
24	isophorone	0.00	11/20/2023	CL s4112020.D	1	1	1				
27	bis(2-chloroethoxy)methane	0.00	11/20/2023	CL s4112020.D	1	1	1				
30	1,2,4-trichlorobenzene	0.07	11/20/2023	CL s4112020.D	1	1	1				
31	naphthalene	0.00	11/20/2023	CL s4112020.D	1	1	1				
33	4-chloroanaline	0.00	11/20/2023	CL s4112020.D	1	1	1				
34	hexachloro-1,3-butadiene	0.00	11/20/2023	CL s4112020.D	1	1	1				
36	2-methylnaphthalene	0.00	11/20/2023	CL s4112020.D	1	1	1				
39	hexachlorocyclopentadiene	0.00	11/20/2023	CL s4112020.D	1	1	1				
43	2-chloronaphthalene	0.00	11/20/2023	CL s4112020.D	1	1	1				
44	2-nitroanaline	0.00	11/20/2023	CL s4112020.D	1	1	1				
45	acenaphthylene	0.00	11/20/2023	CL s4112020.D	1	1	1				
46	dimethyl phthalate	0.00	11/20/2023	CL s4112020.D	1	1	1				
47	2,6-dinitrotoluene	0.00	11/20/2023	CL s4112020.D	1	1	1				
48	2,4-dinitrotoluene	0.00	11/20/2023	CL s4112020.D	1	1	1				
49	acenaphthene	0.00	11/20/2023	CL s4112020.D	1	1	1				
50	3-nitroanaline	0.00	11/20/2023	CL s4112020.D	1	1	1				
52	dibenzofuran	0.00	11/20/2023	CL s4112020.D	1	1	1				
54	fluorene	0.00	11/20/2023	CL s4112020.D	1	1	1				
55	diethyl phthalate	**5.76**	11/20/2023	CL s4112020.D	1	1	1				
56	4-chlorophenyl phenyl ether	0.00	11/20/2023	CL s4112020.D	1	1	1				
57	4-nitroanaline	0.00	11/20/2023	CL s4112020.D	1	1	1				
61	azobenzene	0.00	11/20/2023	CL s4112020.D	1	1	1				
62	N-nitrosodiphenylamine	0.00	11/20/2023	CL s4112020.D	1	1	1				
63	4-bromophenyl phenyl ether	0.00	11/20/2023	CL s4112020.D	1	1	1				
64	hexachlorobenzene	0.00	11/20/2023	CL s4112020.D	1	1	1				
65	n-octadecane	0.00	11/20/2023	CL s4112020.D	1	1	1				
67	phenanthrene	0.00	11/20/2023	CL s4112020.D	1	1	1				
68	anthracene	0.00	11/20/2023	CL s4112020.D	1	1	1				
70	carbazole	0.00	11/20/2023	CL s4112020.D	1	1	1				
71	di-n-butyl phthalate	0.08	11/20/2023	CL s4112020.D	1	1	1				
73	fluoranthene	0.00	11/20/2023	CL s4112020.D	1	1	1				
76	benzidine	0.00	11/20/2023	CL s4112020.D	1	1	1				
77	pyrene	0.00	11/20/2023	CL s4112020.D	1	1	1				
78	butyl benzyl phthalate	0.14	11/20/2023	CL s4112020.D	1	1	1				
79	benzo(a)anthracene	0.00	11/20/2023	CL s4112020.D	1	1	1				
80	chrysene	0.00	11/20/2023	CL s4112020.D	1	1	1				
81	3,3'-dichlorobenzidine	0.00	11/20/2023	CL s4112020.D	1	1	1				
82	bis-2-ethylhexyl phthalate	**129.22**	11/20/2023	CL s4112020.D	1	1	1			OverCal?	
84	di-n-octyl phthalate	0.00	11/20/2023	CL s4112020.D	1	1	1				
85	Benzo(b)fluoranthene	0.00	11/20/2023	CL s4112020.D	1	1	1				
86	benzo(k)fluoranthene	0.00	11/20/2023	CL s4112020.D	1	1	1				
87	benzo(a)pyrene	0.00	11/20/2023	CL s4112020.D	1	1	1				
88	indeno(1,2,3-cd)pyrene	0.00	11/20/2023	CL s4112020.D	1	1	1				
89	dibenzo(a,h)anthracene	0.00	11/20/2023	CL s4112020.D	1	1	1				
90	benzo(g,h,i)perylene	0.00	11/20/2023	CL s4112020.D	1	1	1				

Sub

This File: **L:\SVOA\Excel Reports\ABN\231205\67839-003**
Analysis Group: **ABN** **Dow Salvage Yard**
Field ID: **RMW4-138-148-110923** **CRE**
Sample: **67839-03 acid x1** **67839-03 bn x5**
Misc:
DataFile: 118.D\S4ABN110223A.XLS 4ABN110223A.XLS
Import File Name **S4 ABN 17124 DoD**
TestGroupID **E8270DoD_A**
Aqueous or Soil? (A or S) **A**
Prep Date **11/14/2023**
Lab#: **67839-003**
QC_Code:
Prep# **17124**

Charles Leahy L:\SVOA\ABN\ABN 8270DoD ImportFileBuilde
12/5/23 2:06 PM
L:\SVOA\ABN\
L:\SVOA\Excel Reports\ABN\231205\
L:\SVOA\PDFReports\

Reviewer Checks:

Quant Report: Reviewed, Analyst Initials & Date
Chromatogram Checked, Major peaks identified
Results consistent w/ other attached analyses
Reanalysis reason noted
Substitute dilution data checked
Correct dilution and reason clear or noted
Flags checked (Expiration, F+, Over Cal, Surr, Aspen, QC)
Other QC failures or issues noted in Aspen
Correct data file and/or date/time in Aspen

Notes:
Reviewer Initials & Date:

#	Surrogate Standards	Conc. (ug/mL)	AnalysisDate	AnalyzedBy		Dil'n	Weight	Volume	Surr	Recovery	Flag	QC Limits
4	2-fluorophenol	36.78	11/21/2023	CL	s4112118.D	1	1	1	100	**37%**		21-100
7	phenol-d6	23.55	11/21/2023	CL	s4112118.D	1	1	1	100	**24%**		10-102
59	2,4,6-tribromophenol	74.77	11/21/2023	CL	s4112118.D	1	1	1	100	**75%**		10-123
22	nitrobenzene-d5	5.76	12/01/2023	CL	s4120112.D	5	1	1	50	**58%**		35-114
38	2-fluorobiphenyl	6.67	12/01/2023	CL	s4120112.D	5	1	1	50	**67%**		43-116
75	terphenyl-d14	8.99	12/01/2023	CL	s4120112.D	5	1	1	50	**90%**		33-141
6	phenol	0.00	11/21/2023	CL	s4112118.D	1	1	1				
8	2-chlorophenol	0.00	11/21/2023	CL	s4112118.D	1	1	1				
15	2-methylphenol	0.00	11/21/2023	CL	s4112118.D	1	1	1				
15	2-methylphenol	0.00	11/21/2023	CL	s4112118.D	1	1	1				
20	4-methylphenol	0.00	11/21/2023	CL	s4112118.D	1	1	1				
25	2-nitrophenol	0.00	11/21/2023	CL	s4112118.D	1	1	1				
26	2,4-dimethylphenol	0.00	11/21/2023	CL	s4112118.D	1	1	1				
28	2,4-dichlorophenol	0.00	11/21/2023	CL	s4112118.D	1	1	1				
29	2,6-dichlorophenol	0.00	11/21/2023	CL	s4112118.D	1	1	1				
32	benzoic acid	0.00	11/21/2023	CL	s4112118.D	1	1	1				
35	4-chloro-3-methylphenol	0.00	11/21/2023	CL	s4112118.D	1	1	1				
40	2,4,6-trichlorophenol	0.00	11/21/2023	CL	s4112118.D	1	1	1				
41	2,4,5-trichlorophenol	0.00	11/21/2023	CL	s4112118.D	1	1	1				
51	2,4-dinitrophenol	0.00	11/21/2023	CL	s4112118.D	1	1	1				
53	4-nitrophenol	0.00	11/21/2023	CL	s4112118.D	1	1	1				
60	4,6-dinitro-2-methylphenol	0.00	11/21/2023	CL	s4112118.D	1	1	1				
66	pentachlorophenol	0.00	11/21/2023	CL	s4112118.D	1	1	1				
2	N-nitroso-dimethylamine	0.00	12/01/2023	CL	s4120112.D	5	1	1				
3	pyridine	0.00	12/01/2023	CL	s4120112.D	5	1	1				
5	aniline	0.00	12/01/2023	CL	s4120112.D	5	1	1				
9	n-decane	0.00	12/01/2023	CL	s4120112.D	5	1	1				
10	bis-(2-choroethyl)ether	0.00	12/01/2023	CL	s4120112.D	5	1	1				
11	1,3-dichlorobenzene	0.00	12/01/2023	CL	s4120112.D	5	1	1				
12	1,4-diclorobenzene	0.00	12/01/2023	CL	s4120112.D	5	1	1				
13	1,2-dichlorobenzene	0.00	12/01/2023	CL	s4120112.D	5	1	1				
14	benzyl alcohol	0.00	12/01/2023	CL	s4120112.D	5	1	1				
16	2,2'-oxybis(1-chloropropane)	0.00	12/01/2023	CL	s4120112.D	5	1	1				
##	acetephenone	#N/A	12/01/2023	CL	s4120112.D	5	1	1			#N/A	
18	hexachloroethane	0.00	12/01/2023	CL	s4120112.D	5	1	1				
19	N-nitroso-di-n-propylamine	0.00	12/01/2023	CL	s4120112.D	5	1	1				
23	nitrobenzene	0.00	12/01/2023	CL	s4120112.D	5	1	1				
24	isophorone	0.00	12/01/2023	CL	s4120112.D	5	1	1				
27	bis(2-chloroethoxy)methane	0.00	12/01/2023	CL	s4120112.D	5	1	1				
30	1,2,4-trichlorobenzene	0.00	12/01/2023	CL	s4120112.D	5	1	1				
31	naphthalene	0.00	12/01/2023	CL	s4120112.D	5	1	1				
33	4-chloroanaline	0.00	12/01/2023	CL	s4120112.D	5	1	1				
34	hexachloro-1,3-butadiene	0.00	12/01/2023	CL	s4120112.D	5	1	1				
36	2-methylnaphthalene	0.00	12/01/2023	CL	s4120112.D	5	1	1				
39	hexachlorocyclopentadiene	0.00	12/01/2023	CL	s4120112.D	5	1	1				
43	2-chloronaphthalene	0.00	12/01/2023	CL	s4120112.D	5	1	1				
44	2-nitroanaline	0.00	12/01/2023	CL	s4120112.D	5	1	1				
45	acenaphthylene	0.00	12/01/2023	CL	s4120112.D	5	1	1				
46	dimethyl phthalate	0.00	12/01/2023	CL	s4120112.D	5	1	1				
47	2,6-dinitrotoluene	0.00	12/01/2023	CL	s4120112.D	5	1	1				
48	2,4-dinitrotoluene	0.00	12/01/2023	CL	s4120112.D	5	1	1				
49	acenaphthene	0.00	12/01/2023	CL	s4120112.D	5	1	1				
50	3-nitroanaline	0.00	12/01/2023	CL	s4120112.D	5	1	1				
52	dibenzofuran	0.00	12/01/2023	CL	s4120112.D	5	1	1				
54	fluorene	0.00	12/01/2023	CL	s4120112.D	5	1	1				
55	diethyl phthalate	**1.10**	12/01/2023	CL	s4120112.D	5	1	1				
56	4-chlorophenyl phenyl ether	0.00	12/01/2023	CL	s4120112.D	5	1	1				
57	4-nitroanaline	0.00	12/01/2023	CL	s4120112.D	5	1	1				
61	azobenzene	0.00	12/01/2023	CL	s4120112.D	5	1	1				
62	N-nitrosodiphenylamine	0.00	12/01/2023	CL	s4120112.D	5	1	1				
63	4-bromophenyl phenyl ether	0.00	12/01/2023	CL	s4120112.D	5	1	1				
64	hexachlorobenzene	0.00	12/01/2023	CL	s4120112.D	5	1	1				
65	n-octadecane	0.00	12/01/2023	CL	s4120112.D	5	1	1				
67	phenanthrene	0.00	12/01/2023	CL	s4120112.D	5	1	1				
68	anthracene	0.00	12/01/2023	CL	s4120112.D	5	1	1				
70	carbazole	0.00	12/01/2023	CL	s4120112.D	5	1	1				
71	di-n-butyl phthalate	0.03	12/01/2023	CL	s4120112.D	5	1	1				
73	fluoranthene	0.00	12/01/2023	CL	s4120112.D	5	1	1				
76	benzidine	0.00	12/01/2023	CL	s4120112.D	5	1	1				
77	pyrene	0.00	12/01/2023	CL	s4120112.D	5	1	1				
78	butyl benzyl phthalate	0.06	12/01/2023	CL	s4120112.D	5	1	1				
79	benzo(a)anthracene	0.00	12/01/2023	CL	s4120112.D	5	1	1				
80	chrysene	0.00	12/01/2023	CL	s4120112.D	5	1	1				
81	3,3'-dichlorobenzidine	0.00	12/01/2023	CL	s4120112.D	5	1	1				
82	bis-2-ethylhexyl phthalate	**24.44**	12/01/2023	CL	s4120112.D	5	1	1				
84	di-n-octyl phthalate	0.18	12/01/2023	CL	s4120112.D	5	1	1				
85	Benzo(b)fluoranthene	0.00	12/01/2023	CL	s4120112.D	5	1	1				
86	benzo(k)fluoranthene	0.00	12/01/2023	CL	s4120112.D	5	1	1				
87	benzo(a)pyrene	0.00	12/01/2023	CL	s4120112.D	5	1	1				
88	indeno(1,2,3-cd)pyrene	0.00	12/01/2023	CL	s4120112.D	5	1	1				
89	dibenzo(a,h)anthracene	0.00	12/01/2023	CL	s4120112.D	5	1	1				
90	benzo(g,h,i)perylene	0.00	12/01/2023	CL	s4120112.D	5	1	1				

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Nov23\112123\
Data File : s4112118.D
Acq On : 21 Nov 2023 08:13 pm
Operator : cl
Sample : 67839-03 acid x1
Misc :
ALS Vial : 16 Sample Multiplier: 1

CL
12/5/23 @ 09:42
CharlesL

Quant Time: Nov 22 09:15:33 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration

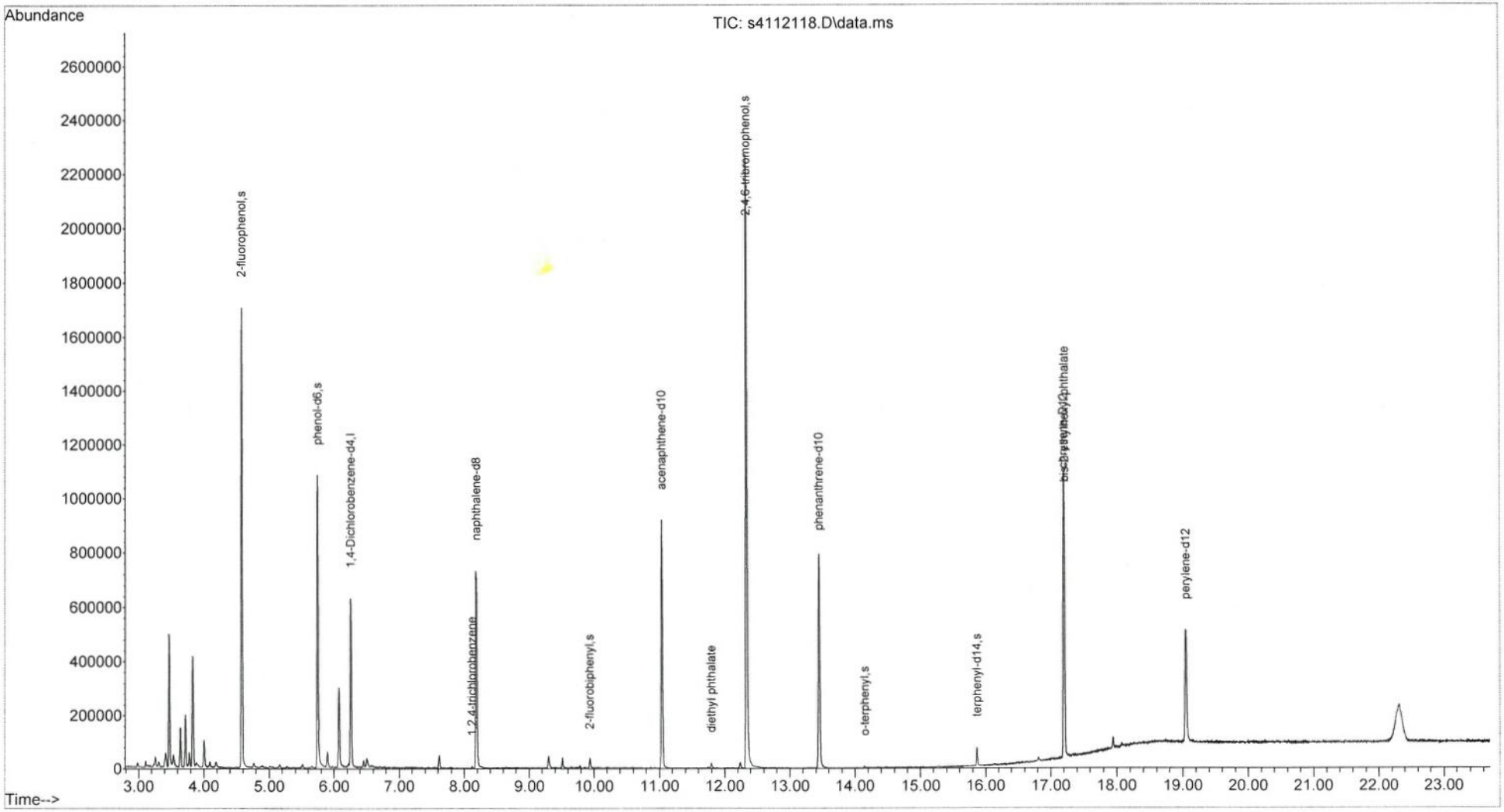
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.255	152	132550	10.00	ug/mL	0.00
21) naphthalene-d8	8.184	136	491288	10.00	ug/mL	0.00
37) acenaphthene-d10	11.038	164	256817	10.00	ug/mL	-0.01
58) phenanthrene-d10	13.448	188	463785	10.00	ug/mL	-0.01
74) chrysene-D12	17.199	240	323705	10.00	ug/mL	0.00
83) perylene-d12	19.047	264	253421	10.00	ug/mL	0.00
System Monitoring Compounds						
4) 2-fluorophenol	4.578	112	605638	36.78	ug/mL	-0.01
Spiked Amount 200.000			Recovery = 18.39%			
7) phenol-d6	5.743	99	471047	23.55	ug/mL	-0.01
Spiked Amount 200.000			Recovery = 11.78%			
22) nitrobenzene-d5	0.000	82	0	0.00	ug/mL	
Spiked Amount 100.000			Recovery = 0.00%			
38) 2-fluorobiphenyl	9.932	172	15068	0.33	ug/mL	0.00
Spiked Amount 100.000			Recovery = 0.33%			
59) 2,4,6-tribromophenol	12.335	330	422974	74.77	ug/mL	-0.01
Spiked Amount 200.000			Recovery = 37.38%			
69) o-terphenyl	14.147	230	1610	0.03	ug/mL	0.00
Spiked Amount 100.000			Recovery = 0.03%			
72) 1-Chloro-octadecane	0.000	57	0	0.00	ug/mL	
Spiked Amount 100.000			Recovery = 0.00%			
75) terphenyl-d14	15.867	244	27932	0.79	ug/mL	0.00
Spiked Amount 100.000			Recovery = 0.79%			
Target Compounds						Qvalue
30) 1,2,4-trichlorobenzene	8.118	180	2398m	BC 0.046	ug/mL	
55) diethyl phthalate	11.795	149	10000m	BC 0.184	ug/mL	
82) bis-2-ethylhexyl phtha...	17.212	149	248024	7.700	ug/mL	100
93) DDT	16.629	TIC	1845	Below Cal	#	22

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Nov23\112123\
Data File : s4112118.D
Acq On : 21 Nov 2023 08:13 pm
Operator : cl
Sample : 67839-03 acid x1
Misc :
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Nov 22 09:15:33 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Nov23\112023\
Data File : s4112020.D
Acq On : 20 Nov 2023 10:53 pm
Operator : cl
Sample : 67839-03 bn x1
Misc :
ALS Vial : 20 Sample Multiplier: 1

CL
12/4/23 @ 16:10
CharlesL

Quant Time: Nov 21 08:55:58 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration

RR x5

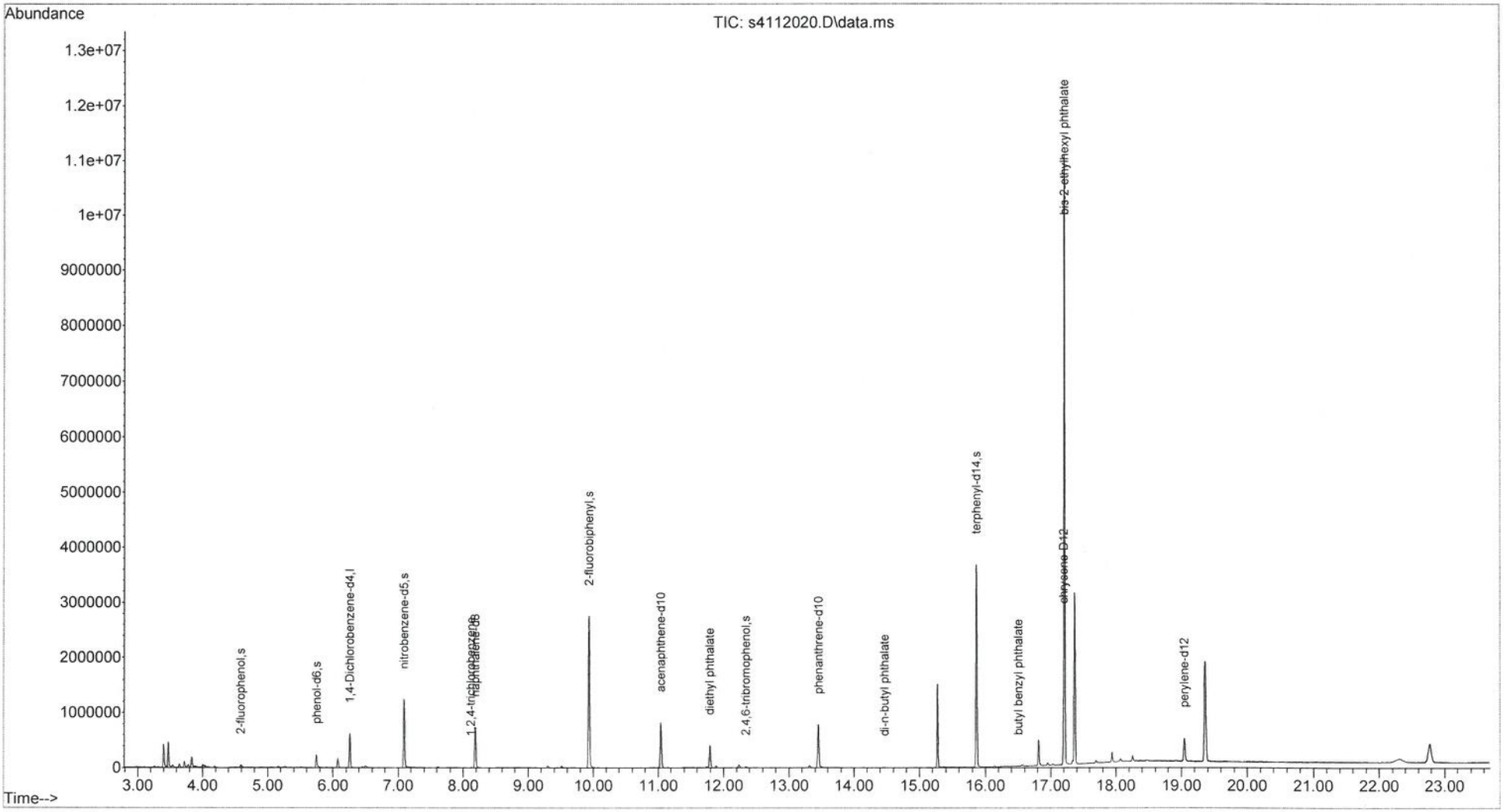
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
Internal Standards							
1) 1,4-Dichlorobenzene-d4	6.255	152	130632	10.00	ug/mL	0.00	
21) naphthalene-d8	8.184	136	478542	10.00	ug/mL	-0.01	
37) acenaphthene-d10	11.040	164	242692	10.00	ug/mL	0.00	
58) phenanthrene-d10	13.451	188	439751	10.00	ug/mL	0.00	
74) chrysene-D12	17.199	240	302332	10.00	ug/mL	0.00	
83) perylene-d12	19.044	264	239529	10.00	ug/mL	0.00	
System Monitoring Compounds							
4) 2-fluorophenol	4.586	112	14902	0.92	ug/mL	0.00	
Spiked Amount 200.000			Recovery =	0.46%			
7) phenol-d6	5.745	99	108137	5.49	ug/mL	-0.01	
Spiked Amount 200.000			Recovery =	2.75%			
22) nitrobenzene-d5	7.091	82	516037	30.72	ug/mL	-0.01	
Spiked Amount 100.000			Recovery =	30.72%			
38) 2-fluorobiphenyl	9.932	172	1230239	32.22	ug/mL	-0.01	
Spiked Amount 100.000			Recovery =	32.22%			
59) 2,4,6-tribromophenol	12.340	330	2465	0.55	ug/mL	0.00	
Spiked Amount 200.000			Recovery =	0.28%			
69) o-terphenyl	0.000	230	0	0.00	ug/mL		
Spiked Amount 100.000			Recovery =	0.00%			
72) 1-Chloro-octadecane	0.000	57	0	0.00	ug/mL		
Spiked Amount 100.000			Recovery =	0.00%			
75) terphenyl-d14	15.864	244	1577865	48.34	ug/mL	0.00	
Spiked Amount 100.000			Recovery =	48.34%			
Target Compounds						Qvalue	
30) 1,2,4-trichlorobenzene	8.118	180	2816m	BC 0.074	ug/mL		
42) 1,1'-Biphenyl	10.077	154	2724	Below Cal #		40	
55) diethyl phthalate	11.792	149	208786	5.756	ug/mL	99	
71) di-n-butyl phthalate	14.463	149	5734m	BC 0.084	ug/mL		
78) butyl benzyl phthalate	16.501	149	2684	0.143	ug/mL#	84	
82) bis-2-ethylhexyl phtha...	17.212	149	3903694	129.218	ug/mL	99	Over - cal
93) DDT	16.631	TIC	1099	Below Cal #		22	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Nov23\112023\
Data File : s4112020.D
Acq On : 20 Nov 2023 10:53 pm
Operator : cl
Sample : 67839-03 bn x1
Misc :
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Nov 21 08:55:58 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Dec23\120123\
Data File : s4120112.D
Acq On : 01 Dec 2023 02:48 pm
Operator : cl
Sample : 67839-03 bn x5
Misc :
ALS Vial : 12 Sample Multiplier: 1

CL
12/5/23 @ 10:33
CharlesL

Quant Time: Dec 01 16:31:11 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.253	152	154373	10.00	ug/mL	-0.01
21) naphthalene-d8	8.184	136	547430	10.00	ug/mL	0.00
37) acenaphthene-d10	11.038	164	265804	10.00	ug/mL	0.00
58) phenanthrene-d10	13.451	188	431904	10.00	ug/mL	0.00
74) chrysene-D12	17.204	240	324083	10.00	ug/mL	0.00
83) perylene-d12	19.052	264	346311	10.00	ug/mL	0.01
System Monitoring Compounds						
4) 2-fluorophenol	4.596	112	1464	0.08	ug/mL	0.00
Spiked Amount 200.000			Recovery =	0.04%		
7) phenol-d6	5.753	99	14508	0.62	ug/mL	0.00
Spiked Amount 200.000			Recovery =	0.31%		
22) nitrobenzene-d5	7.088	82	110935	5.76	ug/mL	-0.01
Spiked Amount 100.000			Recovery =	5.76%		
38) 2-fluorobiphenyl	9.932	172	280433	6.67	ug/mL	0.00
Spiked Amount 100.000			Recovery =	6.67%		
59) 2,4,6-tribromophenol	0.000	330	0	0.00	ug/mL	
Spiked Amount 200.000			Recovery =	0.00%		
69) o-terphenyl	0.000	230	0	0.00	ug/mL	
Spiked Amount 100.000			Recovery =	0.00%		
72) 1-Chloro-octadecane	0.000	57	0	0.00	ug/mL	
Spiked Amount 100.000			Recovery =	0.00%		
75) terphenyl-d14	15.867	244	314690	8.99	ug/mL	0.00
Spiked Amount 100.000			Recovery =	8.99%		
Target Compounds						Qvalue
55) diethyl phthalate	11.795	149	46085	1.096	ug/mL#	93
71) di-n-butyl phthalate	14.463	149	2533	0.029	ug/mL#	78
78) butyl benzyl phthalate	16.506	149	1075	0.063	ug/mL#	71
82) bis-2-ethylhexyl phtha...	17.215	149	790567	24.440	ug/mL	100
84) di-n-octyl phthalate	17.946	149	6091	0.176	ug/mL#	68
87) benzo(a)pyrene	19.057	252	965	Below Cal	#	1
93) DDT	16.634	TIC	1547	Below Cal	#	22

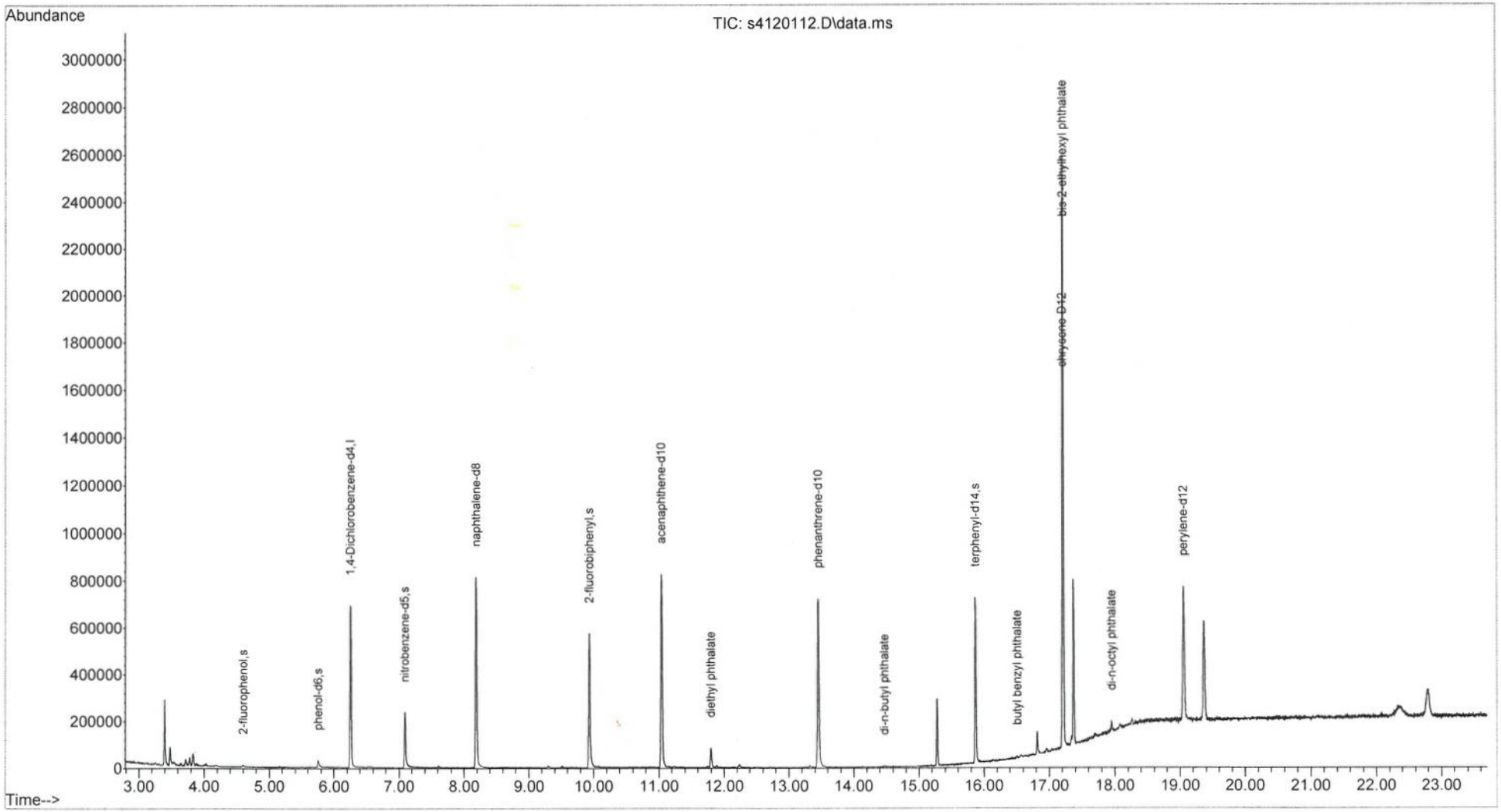
Sub - in

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Dec23\120123\
Data File : s4120112.D
Acq On : 01 Dec 2023 02:48 pm
Operator : cl
Sample : 67839-03 bn x5
Misc :
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Dec 01 16:31:11 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration



This File: L:\SVOA\Excel Reports\ABN\231205\67839-004
Analysis Group: ABN Dow Salvage Yard
Field ID: /-BRMW3-47-62-110923 CRE
Sample: 67839-04 acid x1 67839-04 bn x1
Misc:
DataFile: 005.D\S4ABN110223A.XLS 4ABN110223A.XLS
Import File Name: S4 ABN 17124 DoD
TestGroupID: E8270DoD_A
Aqueous or Soil? (A or S): A
Prep Date: 11/14/2023
Lab#: 67839-004
QC_Code:
Prep#: 17124

Charles Leahy L:\SVOA\ABN\ABN 8270DoD ImportFileBuilde
12/5/23 2:08 PM
L:\SVOA\ABN\
L:\SVOA\Excel Reports\ABN\231205\
L:\SVOA\PDFReports\

Reviewer Checks:

Quant Report: Reviewed, Analyst Initials & Date
Chromatogram Checked, Major peaks identified
Results consistent w/ other attached analyses
Reanalysis reason noted
Substitute dilution data checked
Correct dilution and reason clear or noted
Flags checked (Expiration, F+, Over Cal, Surr, Aspen, QC)
Other QC failures or issues noted in Aspen
Correct data file and/or date/time in Aspen

Notes:
Reviewer Initials & Date: SJ 12/7/23

#	Surrogate Standards	Conc. (ug/mL)	AnalysisDate	AnalyzedBy	Dil'n	Weight	Volume	Surr	Recovery	Flag	QC Limits
4	2-fluorophenol	24.03	11/20/2023	CL s4112005.D	1	1	1	100	**24%**		21-100
7	phenol-d6	17.36	11/20/2023	CL s4112005.D	1	1	1	100	**17%**		10-102
59	2,4,6-tribromophenol	56.35	11/20/2023	CL s4112005.D	1	1	1	100	**56%**		10-123
22	nitrobenzene-d5	32.31	11/20/2023	CL s4112021.D	1	1	1	50	**65%**		35-114
38	2-fluorobiphenyl	32.32	11/20/2023	CL s4112021.D	1	1	1	50	**65%**		43-116
75	terphenyl-d14	38.96	11/20/2023	CL s4112021.D	1	1	1	50	**78%**		33-141
6	phenol	0.00	11/20/2023	CL s4112005.D	1	1	1				
8	2-chlorophenol	0.00	11/20/2023	CL s4112005.D	1	1	1				
15	2-methylphenol	0.00	11/20/2023	CL s4112005.D	1	1	1				
15	2-methylphenol	0.00	11/20/2023	CL s4112005.D	1	1	1				
20	4-methylphenol	0.00	11/20/2023	CL s4112005.D	1	1	1				
25	2-nitrophenol	0.00	11/20/2023	CL s4112005.D	1	1	1				
26	2,4-dimethylphenol	0.00	11/20/2023	CL s4112005.D	1	1	1				
28	2,4-dichlorophenol	0.00	11/20/2023	CL s4112005.D	1	1	1				
29	2,6-dichlorophenol	0.00	11/20/2023	CL s4112005.D	1	1	1				
32	benzoic acid	0.00	11/20/2023	CL s4112005.D	1	1	1				
35	4-chloro-3-methylphenol	0.00	11/20/2023	CL s4112005.D	1	1	1				
40	2,4,6-trichlorophenol	0.00	11/20/2023	CL s4112005.D	1	1	1				
41	2,4,5-trichlorophenol	0.00	11/20/2023	CL s4112005.D	1	1	1				
51	2,4-dinitrophenol	0.00	11/20/2023	CL s4112005.D	1	1	1				
53	4-nitrophenol	0.00	11/20/2023	CL s4112005.D	1	1	1				
60	4,6-dinitro-2-methylphenol	0.00	11/20/2023	CL s4112005.D	1	1	1				
66	pentachlorophenol	0.00	11/20/2023	CL s4112005.D	1	1	1				
2	N-nitroso-dimethylamine	0.00	11/20/2023	CL s4112021.D	1	1	1				
3	pyridine	0.00	11/20/2023	CL s4112021.D	1	1	1				
5	aniline	0.00	11/20/2023	CL s4112021.D	1	1	1				
9	n-decane	0.00	11/20/2023	CL s4112021.D	1	1	1				
10	bis-(2-choroethyl)ether	0.00	11/20/2023	CL s4112021.D	1	1	1				
11	1,3-dichlorobenzene	0.00	11/20/2023	CL s4112021.D	1	1	1				
12	1,4-diclorobenzene	0.00	11/20/2023	CL s4112021.D	1	1	1				
13	1,2-dichlorobenzene	0.00	11/20/2023	CL s4112021.D	1	1	1				
14	benzyl alcohol	0.00	11/20/2023	CL s4112021.D	1	1	1				
16	2,2'-oxybis(1-chloropropane)	0.00	11/20/2023	CL s4112021.D	1	1	1				
##	acetephenone	#N/A	11/20/2023	CL s4112021.D	1	1	1			#N/A	
18	hexachloroethane	0.00	11/20/2023	CL s4112021.D	1	1	1				
19	N-nitroso-di-n-propylamine	0.00	11/20/2023	CL s4112021.D	1	1	1				
23	nitrobenzene	0.00	11/20/2023	CL s4112021.D	1	1	1				
24	isophorone	0.00	11/20/2023	CL s4112021.D	1	1	1				
27	bis(2-chloroethoxy)methane	0.00	11/20/2023	CL s4112021.D	1	1	1				
30	1,2,4-trichlorobenzene	0.21	11/20/2023	CL s4112021.D	1	1	1				
31	naphthalene	0.00	11/20/2023	CL s4112021.D	1	1	1				
33	4-chloroanaline	0.00	11/20/2023	CL s4112021.D	1	1	1				
34	hexachloro-1,3-butadiene	0.00	11/20/2023	CL s4112021.D	1	1	1				
36	2-methylnaphthalene	0.00	11/20/2023	CL s4112021.D	1	1	1				
39	hexachlorocyclopentadiene	0.00	11/20/2023	CL s4112021.D	1	1	1				
43	2-chloronaphthalene	0.00	11/20/2023	CL s4112021.D	1	1	1				
44	2-nitroanaline	0.00	11/20/2023	CL s4112021.D	1	1	1				
45	acenaphthylene	0.00	11/20/2023	CL s4112021.D	1	1	1				
46	dimethyl phthalate	0.00	11/20/2023	CL s4112021.D	1	1	1				
47	2,6-dinitrotoluene	0.00	11/20/2023	CL s4112021.D	1	1	1				
48	2,4-dinitrotoluene	0.00	11/20/2023	CL s4112021.D	1	1	1				
49	acenaphthene	0.00	11/20/2023	CL s4112021.D	1	1	1				
50	3-nitroanaline	0.00	11/20/2023	CL s4112021.D	1	1	1				
52	dibenzofuran	0.00	11/20/2023	CL s4112021.D	1	1	1				
54	fluorene	0.00	11/20/2023	CL s4112021.D	1	1	1				
55	diethyl phthalate	0.83	11/20/2023	CL s4112021.D	1	1	1				
56	4-chlorophenyl phenyl ether	0.00	11/20/2023	CL s4112021.D	1	1	1				
57	4-nitroanaline	0.00	11/20/2023	CL s4112021.D	1	1	1				
61	azobenzene	0.00	11/20/2023	CL s4112021.D	1	1	1				
62	N-nitrosodiphenylamine	0.00	11/20/2023	CL s4112021.D	1	1	1				
63	4-bromophenyl phenyl ether	0.00	11/20/2023	CL s4112021.D	1	1	1				
64	hexachlorobenzene	0.00	11/20/2023	CL s4112021.D	1	1	1				
65	n-octadecane	0.00	11/20/2023	CL s4112021.D	1	1	1				
67	phenanthrene	0.00	11/20/2023	CL s4112021.D	1	1	1				
68	anthracene	0.00	11/20/2023	CL s4112021.D	1	1	1				
70	carbazole	0.00	11/20/2023	CL s4112021.D	1	1	1				
71	di-n-butyl phthalate	0.00	11/20/2023	CL s4112021.D	1	1	1				
73	fluoranthene	0.00	11/20/2023	CL s4112021.D	1	1	1				
76	benzidine	0.00	11/20/2023	CL s4112021.D	1	1	1				
77	pyrene	0.00	11/20/2023	CL s4112021.D	1	1	1				
78	butyl benzyl phthalate	0.00	11/20/2023	CL s4112021.D	1	1	1				
79	benzo(a)anthracene	0.00	11/20/2023	CL s4112021.D	1	1	1				
80	chrysene	0.00	11/20/2023	CL s4112021.D	1	1	1				
81	3,3'-dichlorobenzidine	0.00	11/20/2023	CL s4112021.D	1	1	1				
82	bis-2-ethylhexyl phthalate	**178.44**	11/20/2023	CL s4112021.D	1	1	1			OverCal?	
84	di-n-octyl phthalate	0.00	11/20/2023	CL s4112021.D	1	1	1				
85	Benzo(b)fluoranthene	0.00	11/20/2023	CL s4112021.D	1	1	1				
86	benzo(k)fluoranthene	0.00	11/20/2023	CL s4112021.D	1	1	1				
87	benzo(a)pyrene	0.00	11/20/2023	CL s4112021.D	1	1	1				
88	indeno(1,2,3-cd)pyrene	0.00	11/20/2023	CL s4112021.D	1	1	1				
89	dibenzo(a,h)anthracene	0.00	11/20/2023	CL s4112021.D	1	1	1				
90	benzo(g,h,i)perylene	0.00	11/20/2023	CL s4112021.D	1	1	1				

SJ 12/7/23

Absolute Resource Associates

This File: **L:\SVOA\Excel Reports\ABN\231205\67839-004** Charles Leahy L:\SVOA\ABN\ABN 8270DoD ImportFileBuilde
Analysis Group: **ABN** **Dow Salvage Yard** 12/5/23 2:09 PM
Field ID: **/-BRMW3-47-62-110923** **CRE** L:\SVOA\ABN\
Sample: **67839-04 acid x1** **67839-04 bn x5** L:\SVOA\Excel Reports\ABN\231205\
Misc: L:\SVOA\PDFReports\
DataFile: 005.D\S4ABN110223A.XLS 4ABN110223A.XLS
Import File Name **S4 ABN 17124 DoD**
TestGroupID **E8270DoD_A**
Aqueous or Soil? (A or S) **A**
Prep Date **11/14/2023**
Lab#: **67839-004**
QC_Code:
Prep# **17124**

Reviewer Checks:

Quant Report: Reviewed, Analyst Initials & Date
Chromatogram Checked, Major peaks identified
Results consistent w/ other attached analyses
Reanalysis reason noted
Substitute dilution data checked
Correct dilution and reason clear or noted
Flags checked (Expiration, F+, Over Cal, Surr, Aspen, QC)
Other QC failures or issues noted in Aspen
Correct data file and/or date/time in Aspen

Notes:
Reviewer Initials & Date:

#	Surrogate Standards	Conc. (ug/mL)	AnalysisDate	AnalyzedBy	Dil'n	Weight	Volume	Surr	Recovery	Flag	QC Limits
4	2-fluorophenol	24.03	11/20/2023	CL s4112005.D	1	1	1	100	**24%**		21-100
7	phenol-d6	17.36	11/20/2023	CL s4112005.D	1	1	1	100	**17%**		10-102
59	2,4,6-tribromophenol	56.35	11/20/2023	CL s4112005.D	1	1	1	100	**56%**		10-123
22	nitrobenzene-d5	6.49	12/01/2023	CL s4120113.D	5	1	1	50	**65%**		35-114
38	2-fluorobiphenyl	6.89	12/01/2023	CL s4120113.D	5	1	1	50	**69%**		43-116
75	terphenyl-d14	8.22	12/01/2023	CL s4120113.D	5	1	1	50	**82%**		33-141
6	phenol	0.00	11/20/2023	CL s4112005.D	1	1	1				
8	2-chlorophenol	0.00	11/20/2023	CL s4112005.D	1	1	1				
15	2-methylphenol	0.00	11/20/2023	CL s4112005.D	1	1	1				
15	2-methylphenol	0.00	11/20/2023	CL s4112005.D	1	1	1				
20	4-methylphenol	0.00	11/20/2023	CL s4112005.D	1	1	1				
25	2-nitrophenol	0.00	11/20/2023	CL s4112005.D	1	1	1				
26	2,4-dimethylphenol	0.00	11/20/2023	CL s4112005.D	1	1	1				
28	2,4-dichlorophenol	0.00	11/20/2023	CL s4112005.D	1	1	1				
29	2,6-dichlorophenol	0.00	11/20/2023	CL s4112005.D	1	1	1				
32	benzoic acid	0.00	11/20/2023	CL s4112005.D	1	1	1				
35	4-chloro-3-methylphenol	0.00	11/20/2023	CL s4112005.D	1	1	1				
40	2,4,6-trichlorophenol	0.00	11/20/2023	CL s4112005.D	1	1	1				
41	2,4,5-trichlorophenol	0.00	11/20/2023	CL s4112005.D	1	1	1				
51	2,4-dinitrophenol	0.00	11/20/2023	CL s4112005.D	1	1	1				
53	4-nitrophenol	0.00	11/20/2023	CL s4112005.D	1	1	1				
60	4,6-dinitro-2-methylphenol	0.00	11/20/2023	CL s4112005.D	1	1	1				
66	pentachlorophenol	0.00	11/20/2023	CL s4112005.D	1	1	1				
2	N-nitroso-dimethylamine	0.00	12/01/2023	CL s4120113.D	5	1	1				
3	pyridine	0.00	12/01/2023	CL s4120113.D	5	1	1				
5	aniline	0.00	12/01/2023	CL s4120113.D	5	1	1				
9	n-decane	0.00	12/01/2023	CL s4120113.D	5	1	1				
10	bis-(2-choroethyl)ether	0.00	12/01/2023	CL s4120113.D	5	1	1				
11	1,3-dichlorobenzene	0.00	12/01/2023	CL s4120113.D	5	1	1				
12	1,4-diclorobenzene	0.00	12/01/2023	CL s4120113.D	5	1	1				
13	1,2-dichlorobenzene	0.00	12/01/2023	CL s4120113.D	5	1	1				
14	benzyl alcohol	0.00	12/01/2023	CL s4120113.D	5	1	1				
16	2,2'-oxybis(1-chloropropane)	0.00	12/01/2023	CL s4120113.D	5	1	1				
##	acetephenone	#N/A	12/01/2023	CL s4120113.D	5	1	1			#N/A	
18	hexachloroethane	0.00	12/01/2023	CL s4120113.D	5	1	1				
19	N-nitroso-di-n-propylamine	0.00	12/01/2023	CL s4120113.D	5	1	1				
23	nitrobenzene	0.00	12/01/2023	CL s4120113.D	5	1	1				
24	isophorone	0.00	12/01/2023	CL s4120113.D	5	1	1				
27	bis(2-chloroethoxy)methane	0.00	12/01/2023	CL s4120113.D	5	1	1				
30	1,2,4-trichlorobenzene	0.00	12/01/2023	CL s4120113.D	5	1	1				
31	naphthalene	0.00	12/01/2023	CL s4120113.D	5	1	1				
33	4-chloroanaline	0.00	12/01/2023	CL s4120113.D	5	1	1				
34	hexachloro-1,3-butadiene	0.00	12/01/2023	CL s4120113.D	5	1	1				
36	2-methylnaphthalene	0.00	12/01/2023	CL s4120113.D	5	1	1				
39	hexachlorocyclopentadiene	0.00	12/01/2023	CL s4120113.D	5	1	1				
43	2-chloronaphthalene	0.00	12/01/2023	CL s4120113.D	5	1	1				
44	2-nitroanaline	0.00	12/01/2023	CL s4120113.D	5	1	1				
45	acenaphthylene	0.00	12/01/2023	CL s4120113.D	5	1	1				
46	dimethyl phthalate	0.00	12/01/2023	CL s4120113.D	5	1	1				
47	2,6-dinitrotoluene	0.00	12/01/2023	CL s4120113.D	5	1	1				
48	2,4-dinitrotoluene	0.00	12/01/2023	CL s4120113.D	5	1	1				
49	acenaphthene	0.00	12/01/2023	CL s4120113.D	5	1	1				
50	3-nitroanaline	0.00	12/01/2023	CL s4120113.D	5	1	1				
52	dibenzofuran	0.00	12/01/2023	CL s4120113.D	5	1	1				
54	fluorene	0.00	12/01/2023	CL s4120113.D	5	1	1				
55	diethyl phthalate	0.03	12/01/2023	CL s4120113.D	5	1	1				
56	4-chlorophenyl phenyl ether	0.00	12/01/2023	CL s4120113.D	5	1	1				
57	4-nitroanaline	0.00	12/01/2023	CL s4120113.D	5	1	1				
61	azobenzene	0.00	12/01/2023	CL s4120113.D	5	1	1				
62	N-nitrosodiphenylamine	0.00	12/01/2023	CL s4120113.D	5	1	1				
63	4-bromophenyl phenyl ether	0.00	12/01/2023	CL s4120113.D	5	1	1				
64	hexachlorobenzene	0.00	12/01/2023	CL s4120113.D	5	1	1				
65	n-octadecane	0.00	12/01/2023	CL s4120113.D	5	1	1				
67	phenanthrene	0.00	12/01/2023	CL s4120113.D	5	1	1				
68	anthracene	0.00	12/01/2023	CL s4120113.D	5	1	1				
70	carbazole	0.00	12/01/2023	CL s4120113.D	5	1	1				
71	di-n-butyl phthalate	0.00	12/01/2023	CL s4120113.D	5	1	1				
73	fluoranthene	0.00	12/01/2023	CL s4120113.D	5	1	1				
76	benzidine	0.00	12/01/2023	CL s4120113.D	5	1	1				
77	pyrene	0.00	12/01/2023	CL s4120113.D	5	1	1				
78	butyl benzyl phthalate	0.05	12/01/2023	CL s4120113.D	5	1	1				
79	benzo(a)anthracene	0.00	12/01/2023	CL s4120113.D	5	1	1				
80	chrysene	0.00	12/01/2023	CL s4120113.D	5	1	1				
81	3,3'-dichlorobenzidine	0.00	12/01/2023	CL s4120113.D	5	1	1				
82	bis-2-ethylhexyl phthalate	**39.00**	12/01/2023	CL s4120113.D	5	1	1				
84	di-n-octyl phthalate	0.17	12/01/2023	CL s4120113.D	5	1	1				
85	Benzo(b)fluoranthene	0.00	12/01/2023	CL s4120113.D	5	1	1				
86	benzo(k)fluoranthene	0.00	12/01/2023	CL s4120113.D	5	1	1				
87	benzo(a)pyrene	0.00	12/01/2023	CL s4120113.D	5	1	1				
88	indeno(1,2,3-cd)pyrene	0.00	12/01/2023	CL s4120113.D	5	1	1				
89	dibenzo(a,h)anthracene	0.00	12/01/2023	CL s4120113.D	5	1	1				
90	benzo(g,h,i)perylene	0.00	12/01/2023	CL s4120113.D	5	1	1				

Quantitation Report (QT Reviewed)

CL
12/4/23 @ 16:11
CharlesL

Data Path : X:\S4\2023\Nov23\112023\
Data File : s4112005.D
Acq On : 20 Nov 2023 03:05 pm
Operator : cl
Sample : 67839-04 acid x1
Misc :
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Nov 21 08:54:56 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration

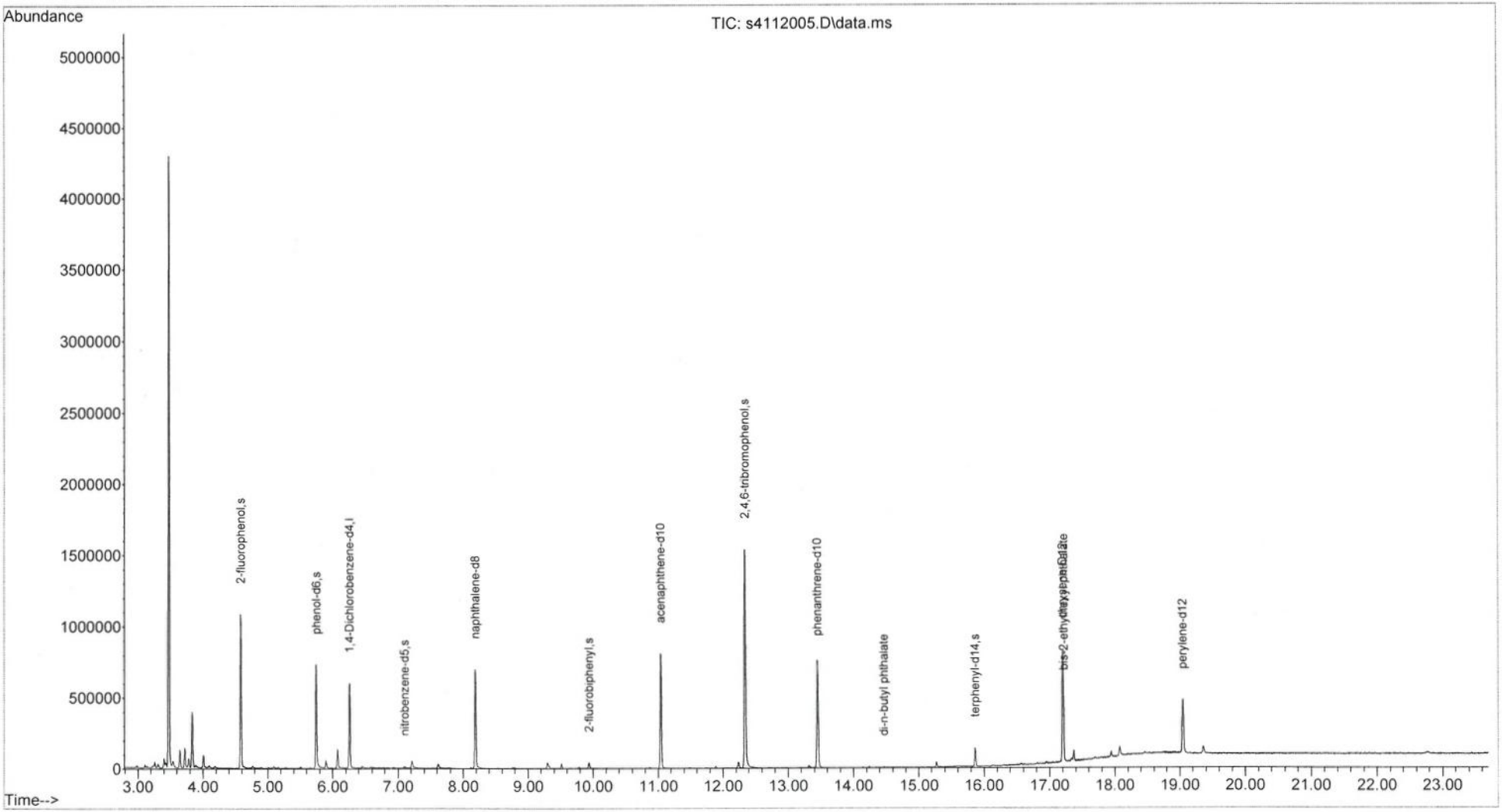
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.255	152	126737	10.00	ug/mL	0.00
21) naphthalene-d8	8.184	136	451269	10.00	ug/mL	0.00
37) acenaphthene-d10	11.038	164	236557	10.00	ug/mL	-0.01
58) phenanthrene-d10	13.446	188	420683	10.00	ug/mL	-0.01
74) chrysene-D12	17.199	240	296770	10.00	ug/mL	0.00
83) perylene-d12	19.044	264	214007	10.00	ug/mL	0.00
System Monitoring Compounds						
4) 2-fluorophenol	4.581	112	378270	24.03	ug/mL	0.00
Spiked Amount 200.000			Recovery =	12.02%		
7) phenol-d6	5.745	99	331954	17.36	ug/mL	-0.01
Spiked Amount 200.000			Recovery =	8.68%		
22) nitrobenzene-d5	7.099	82	5169	0.31	ug/mL	0.00
Spiked Amount 100.000			Recovery =	0.31%		
38) 2-fluorobiphenyl	9.937	172	18139	0.45	ug/mL	0.00
Spiked Amount 100.000			Recovery =	0.45%		
59) 2,4,6-tribromophenol	12.338	330	289031	56.35	ug/mL	0.00
Spiked Amount 200.000			Recovery =	28.18%		
69) o-terphenyl	0.000	230	0	0.00	ug/mL	
Spiked Amount 100.000			Recovery =	0.00%		
72) 1-Chloro-octadecane	0.000	57	0	0.00	ug/mL	
Spiked Amount 100.000			Recovery =	0.00%		
75) terphenyl-d14	15.864	244	55710	1.73	ug/mL	0.00
Spiked Amount 100.000			Recovery =	1.73%		
Target Compounds						Qvalue
30) 1,2,4-trichlorobenzene	8.115	180	1348	Below Cal	#	20
61) azobenzene	12.335	77	1105	Below Cal	#	46
71) di-n-butyl phthalate	14.460	149	1603	0.013	ug/mL#	78
82) bis-2-ethylhexyl phtha...	17.212	149	93808	3.197	ug/mL	100
93) DDT	16.623	TIC	7630	Below Cal	#	22

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Nov23\112023\
Data File : s4112005.D
Acq On : 20 Nov 2023 03:05 pm
Operator : cl
Sample : 67839-04 acid x1
Misc :
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Nov 21 08:54:56 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

CL
12/4/23 @ 16:11
CharlesL

Data Path : X:\S4\2023\Nov23\112023\
Data File : s4112021.D
Acq On : 20 Nov 2023 11:23 pm
Operator : cl
Sample : 67839-04 bn x1
Misc :
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Nov 21 08:56:02 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration

RR x5

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1,4-Dichlorobenzene-d4	6.255	152	135763	10.00 ug/mL	0.00
21) naphthalene-d8	8.184	136	496991	10.00 ug/mL	0.00
37) acenaphthene-d10	11.038	164	264652	10.00 ug/mL	0.00
58) phenanthrene-d10	13.449	188	482749	10.00 ug/mL	-0.01
74) chrysene-D12	17.197	240	377807	10.00 ug/mL	0.00
83) perylene-d12	19.044	264	310728	10.00 ug/mL	0.00
System Monitoring Compounds					
4) 2-fluorophenol	4.589	112	10690	0.63 ug/mL	0.00
Spiked Amount 200.000			Recovery =	0.32%	
7) phenol-d6	5.748	99	56633	2.77 ug/mL	0.00
Spiked Amount 200.000			Recovery =	1.39%	
22) nitrobenzene-d5	7.091	82	563763	32.31 ug/mL	-0.01
Spiked Amount 100.000			Recovery =	32.31%	
38) 2-fluorobiphenyl	9.932	172	1345869	32.32 ug/mL	0.00
Spiked Amount 100.000			Recovery =	32.32%	
59) 2,4,6-tribromophenol	12.340	330	2220	0.47 ug/mL	0.00
Spiked Amount 200.000			Recovery =	0.23%	
69) o-terphenyl	0.000	230	0	0.00 ug/mL	
Spiked Amount 100.000			Recovery =	0.00%	
72) 1-Chloro-octadecane	0.000	57	0	0.00 ug/mL	
Spiked Amount 100.000			Recovery =	0.00%	
75) terphenyl-d14	15.864	244	1589183	38.96 ug/mL	0.00
Spiked Amount 100.000			Recovery =	38.96%	
Target Compounds					Qvalue
30) 1,2,4-trichlorobenzene	8.118	180	5300m	BC 0.210 ug/mL	
42) 1,1'-Biphenyl	10.085	154	3122m	BC Below Cal	
55) diethyl phthalate	11.795	149	35664	0.834 ug/mL#	77
82) bis-2-ethylhexyl phtha...	17.215	149	6737070	178.443 ug/mL	98
93) DDT	16.629	TIC	3040	Below Cal #	22

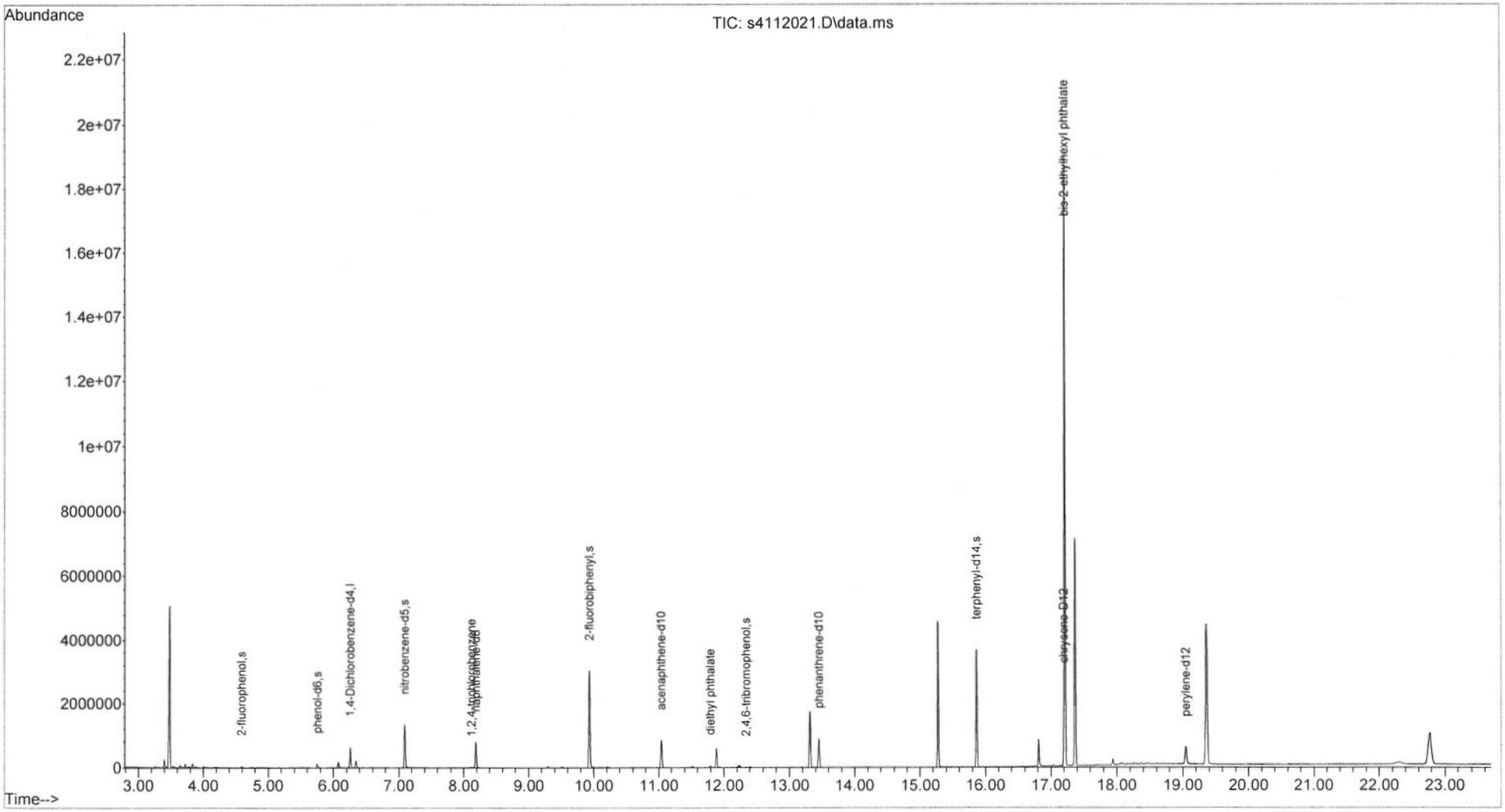
Over - cal

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Nov23\112023\
Data File : s4112021.D
Acq On : 20 Nov 2023 11:23 pm
Operator : cl
Sample : 67839-04 bn x1
Misc :
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Nov 21 08:56:02 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Dec23\120123\
Data File : s4120113.D
Acq On : 01 Dec 2023 03:18 pm
Operator : cl
Sample : 67839-04 bn x5
Misc :
ALS Vial : 13 Sample Multiplier: 1

CL
12/5/23 @ 10:34
CharlesL

Quant Time: Dec 01 16:31:15 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.255	152	128046	10.00	ug/mL	0.00
21) naphthalene-d8	8.184	136	462103	10.00	ug/mL	0.00
37) acenaphthene-d10	11.041	164	244317	10.00	ug/mL	0.00
58) phenanthrene-d10	13.451	188	412786	10.00	ug/mL	0.00
74) chrysene-D12	17.207	240	329949	10.00	ug/mL	0.00
83) perylene-d12	19.055	264	331304	10.00	ug/mL	0.02
System Monitoring Compounds						
4) 2-fluorophenol	0.000	112	0	0.00	ug/mL	
Spiked Amount 200.000			Recovery =	0.00%		
7) phenol-d6	5.758	99	2067	0.11	ug/mL	0.00
Spiked Amount 200.000			Recovery =	0.06%		
22) nitrobenzene-d5	7.094	82	105433	6.49	ug/mL	0.00
Spiked Amount 100.000			Recovery =	6.49%		
38) 2-fluorobiphenyl	9.932	172	265897	6.89	ug/mL	0.00
Spiked Amount 100.000			Recovery =	6.89%		
59) 2,4,6-tribromophenol	0.000	330	0	0.00	ug/mL	
Spiked Amount 200.000			Recovery =	0.00%		
69) o-terphenyl	0.000	230	0	0.00	ug/mL	
Spiked Amount 100.000			Recovery =	0.00%		
72) 1-Chloro-octadecane	0.000	57	0	0.00	ug/mL	
Spiked Amount 100.000			Recovery =	0.00%		
75) terphenyl-d14	15.867	244	292898	8.22	ug/mL	0.00
Spiked Amount 100.000			Recovery =	8.22%		
Target Compounds						Qvalue
30) 1,2,4-trichlorobenzene	8.123	180	917	Below Cal	#	3
49) acenaphthene	11.041	154	1076	Below Cal	#	4
55) diethyl phthalate	11.792	149	4054	0.032	ug/mL#	82
61) azobenzene	12.215	77	958	Below Cal	#	46
78) butyl benzyl phthalate	16.506	149	859	0.053	ug/mL#	26
82) bis-2-ethylhexyl phtha...	17.217	149	1284978	38.998	ug/mL	100
84) di-n-octyl phthalate	17.946	149	5432	0.170	ug/mL#	71
93) DDT	16.624	TIC	6674	Below Cal	#	22

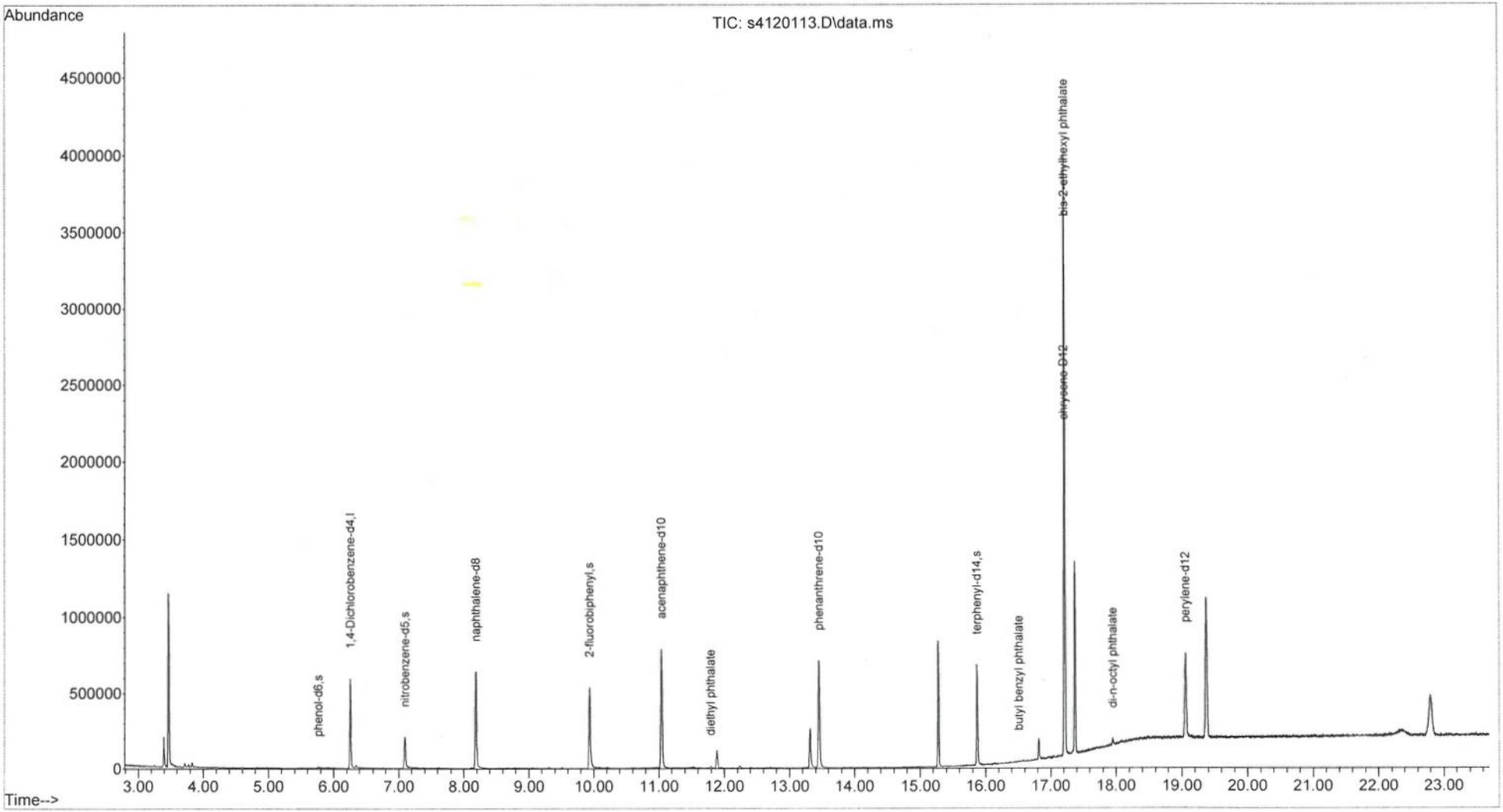
Sub - in

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Dec23\120123\
Data File : s4120113.D
Acq On : 01 Dec 2023 03:18 pm
Operator : cl
Sample : 67839-04 bn x5
Misc :
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Dec 01 16:31:15 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration



This File: **L:\SVOA\Excel Reports\ABN\231206\67839-005**
Analysis Group: **ABN** **Dow Salvage Yard**
Field ID: **RMW3-145-155-110923** **CRE**
Sample: **67839-05 acid x1** **67839-05 bn x1**
Misc:
DataFile: 022.D\S4ABN110223A.XLS 4ABN110223A.XLS
Import File Name **S4 ABN 17145 DoD**
TestGroupID **E8270DoD_A**
Aqueous or Soil? (A or S) **A**
Prep Date **11/15/2023**
Lab#: **67839-005**
QC_Code:
Prep# **17145**

Charles Leahy L:\SVOA\ABN\ABN 8270DoD ImportFileBuilde
12/6/23 10:29 AM
L:\SVOA\ABN\
L:\SVOA\Excel Reports\ABN\231206\
L:\SVOA\PDFReports\

WS 3978

Reviewer Checks:

Quant Report: Reviewed, Analyst Initials & Date
Chromatogram Checked, Major peaks identified
Results consistent w/ other attached analyses
Reanalysis reason noted
Substitute dilution data checked
Correct dilution and reason clear or noted
Flags checked (Expiration, F+, Over Cal, Surr, Aspen, QC)
Other QC failures or issues noted in Aspen
Correct data file and/or date/time in Aspen

Notes:
Reviewer Initials & Date: 12/7/23

#	Surrogate Standards	Conc. (ug/mL)	AnalysisDate	AnalyzedBy	Dil'n	Weight	Volume	Surr	Recovery	Flag	QC Limits
4	2-fluorophenol	25.28	11/20/2023	CL s4112022.D	1	1	1	100	**25%**		21-100
7	phenol-d6	18.02	11/20/2023	CL s4112022.D	1	1	1	100	**18%**		10-102
59	2,4,6-tribromophenol	65.70	11/20/2023	CL s4112022.D	1	1	1	100	**66%**		10-123
22	nitrobenzene-d5	37.14	11/21/2023	CL s4112106.D	1	1	1	50	**74%**		35-114
38	2-fluorobiphenyl	37.93	11/21/2023	CL s4112106.D	1	1	1	50	**76%**		43-116
75	terphenyl-d14	47.33	11/21/2023	CL s4112106.D	1	1	1	50	**95%**		33-141
6	phenol	0.00	11/20/2023	CL s4112022.D	1	1	1				
8	2-chlorophenol	0.00	11/20/2023	CL s4112022.D	1	1	1				
15	2-methylphenol	0.00	11/20/2023	CL s4112022.D	1	1	1				
15	2-methylphenol	0.00	11/20/2023	CL s4112022.D	1	1	1				
20	4-methylphenol	0.00	11/20/2023	CL s4112022.D	1	1	1				
25	2-nitrophenol	0.00	11/20/2023	CL s4112022.D	1	1	1				
26	2,4-dimethylphenol	0.00	11/20/2023	CL s4112022.D	1	1	1				
28	2,4-dichlorophenol	0.00	11/20/2023	CL s4112022.D	1	1	1				
29	2,6-dichlorophenol	0.00	11/20/2023	CL s4112022.D	1	1	1				
32	benzoic acid	0.00	11/20/2023	CL s4112022.D	1	1	1				
35	4-chloro-3-methylphenol	0.00	11/20/2023	CL s4112022.D	1	1	1				
40	2,4,6-trichlorophenol	0.00	11/20/2023	CL s4112022.D	1	1	1				
41	2,4,5-trichlorophenol	0.00	11/20/2023	CL s4112022.D	1	1	1				
51	2,4-dinitrophenol	0.00	11/20/2023	CL s4112022.D	1	1	1				
53	4-nitrophenol	0.00	11/20/2023	CL s4112022.D	1	1	1				
60	4,6-dinitro-2-methylphenol	0.00	11/20/2023	CL s4112022.D	1	1	1				
66	pentachlorophenol	0.00	11/20/2023	CL s4112022.D	1	1	1				
2	N-nitroso-dimethylamine	0.00	11/21/2023	CL s4112106.D	1	1	1				
3	pyridine	0.00	11/21/2023	CL s4112106.D	1	1	1				
5	aniline	0.00	11/21/2023	CL s4112106.D	1	1	1				
9	n-decane	0.29	11/21/2023	CL s4112106.D	1	1	1				
10	bis-(2-choroethyl)ether	0.00	11/21/2023	CL s4112106.D	1	1	1				
11	1,3-dichlorobenzene	0.00	11/21/2023	CL s4112106.D	1	1	1				
12	1,4-diclorobenzene	0.00	11/21/2023	CL s4112106.D	1	1	1				
13	1,2-dichlorobenzene	0.00	11/21/2023	CL s4112106.D	1	1	1				
14	benzyl alcohol	0.00	11/21/2023	CL s4112106.D	1	1	1				
16	2,2'-oxybis(1-chloropropane)	0.00	11/21/2023	CL s4112106.D	1	1	1				
##	acetephenone	#N/A	11/21/2023	CL s4112106.D	1	1	1			#N/A	
18	hexachloroethane	0.00	11/21/2023	CL s4112106.D	1	1	1				
19	N-nitroso-di-n-propylamine	0.00	11/21/2023	CL s4112106.D	1	1	1				
23	nitrobenzene	0.00	11/21/2023	CL s4112106.D	1	1	1				
24	isophorone	0.00	11/21/2023	CL s4112106.D	1	1	1				
27	bis(2-chloroethoxy)methane	0.00	11/21/2023	CL s4112106.D	1	1	1				
30	1,2,4-trichlorobenzene	0.33	11/21/2023	CL s4112106.D	1	1	1				
31	naphthalene	0.00	11/21/2023	CL s4112106.D	1	1	1				
33	4-chloroanaline	0.00	11/21/2023	CL s4112106.D	1	1	1				
34	hexachloro-1,3-butadiene	0.00	11/21/2023	CL s4112106.D	1	1	1				
36	2-methylnaphthalene	0.00	11/21/2023	CL s4112106.D	1	1	1				
39	hexachlorocyclopentadiene	0.00	11/21/2023	CL s4112106.D	1	1	1				
43	2-chloronaphthalene	0.00	11/21/2023	CL s4112106.D	1	1	1				
44	2-nitroanaline	0.00	11/21/2023	CL s4112106.D	1	1	1				
45	acenaphthylene	0.00	11/21/2023	CL s4112106.D	1	1	1				
46	dimethyl phthalate	0.00	11/21/2023	CL s4112106.D	1	1	1				
47	2,6-dinitrotoluene	0.00	11/21/2023	CL s4112106.D	1	1	1				
48	2,4-dinitrotoluene	0.00	11/21/2023	CL s4112106.D	1	1	1				
49	acenaphthene	0.00	11/21/2023	CL s4112106.D	1	1	1				
50	3-nitroanaline	0.00	11/21/2023	CL s4112106.D	1	1	1				
52	dibenzofuran	0.00	11/21/2023	CL s4112106.D	1	1	1				
54	fluorene	0.00	11/21/2023	CL s4112106.D	1	1	1				
55	diethyl phthalate	0.59	11/21/2023	CL s4112106.D	1	1	1				
56	4-chlorophenyl phenyl ether	0.00	11/21/2023	CL s4112106.D	1	1	1				
57	4-nitroanaline	0.00	11/21/2023	CL s4112106.D	1	1	1				
61	azobenzene	0.00	11/21/2023	CL s4112106.D	1	1	1				
62	N-nitrosodiphenylamine	0.00	11/21/2023	CL s4112106.D	1	1	1				
63	4-bromophenyl phenyl ether	0.00	11/21/2023	CL s4112106.D	1	1	1				
64	hexachlorobenzene	0.00	11/21/2023	CL s4112106.D	1	1	1				
65	n-octadecane	0.00	11/21/2023	CL s4112106.D	1	1	1				
67	phenanthrene	0.00	11/21/2023	CL s4112106.D	1	1	1				
68	anthracene	0.00	11/21/2023	CL s4112106.D	1	1	1				
70	carbazole	0.00	11/21/2023	CL s4112106.D	1	1	1				
71	di-n-butyl phthalate	0.00	11/21/2023	CL s4112106.D	1	1	1				
73	fluoranthene	0.00	11/21/2023	CL s4112106.D	1	1	1				
76	benzidine	0.00	11/21/2023	CL s4112106.D	1	1	1				
77	pyrene	0.00	11/21/2023	CL s4112106.D	1	1	1				
78	butyl benzyl phthalate	0.00	11/21/2023	CL s4112106.D	1	1	1				
79	benzo(a)anthracene	0.00	11/21/2023	CL s4112106.D	1	1	1				
80	chrysene	0.00	11/21/2023	CL s4112106.D	1	1	1				
81	3,3'-dichlorobenzidine	0.00	11/21/2023	CL s4112106.D	1	1	1				
82	bis-2-ethylhexyl phthalate	**1.78**	11/21/2023	CL s4112106.D	1	1	1				
84	di-n-octyl phthalate	0.00	11/21/2023	CL s4112106.D	1	1	1				
85	Benzo(b)fluoranthene	0.00	11/21/2023	CL s4112106.D	1	1	1				
86	benzo(k)fluoranthene	0.00	11/21/2023	CL s4112106.D	1	1	1				
87	benzo(a)pyrene	0.00	11/21/2023	CL s4112106.D	1	1	1				
88	indeno(1,2,3-cd)pyrene	0.00	11/21/2023	CL s4112106.D	1	1	1				
89	dibenzo(a,h)anthracene	0.00	11/21/2023	CL s4112106.D	1	1	1				
90	benzo(g,h,i)perylene	0.00	11/21/2023	CL s4112106.D	1	1	1				

Absolute Resource Associates

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Nov23\112023\
Data File : s4112022.D
Acq On : 20 Nov 2023 11:53 pm
Operator : cl
Sample : 67839-05 acid x1
Misc :
ALS Vial : 22 Sample Multiplier: 1

CL
12/4/23 @ 16:12
CharlesL

Quant Time: Nov 21 08:56:07 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration

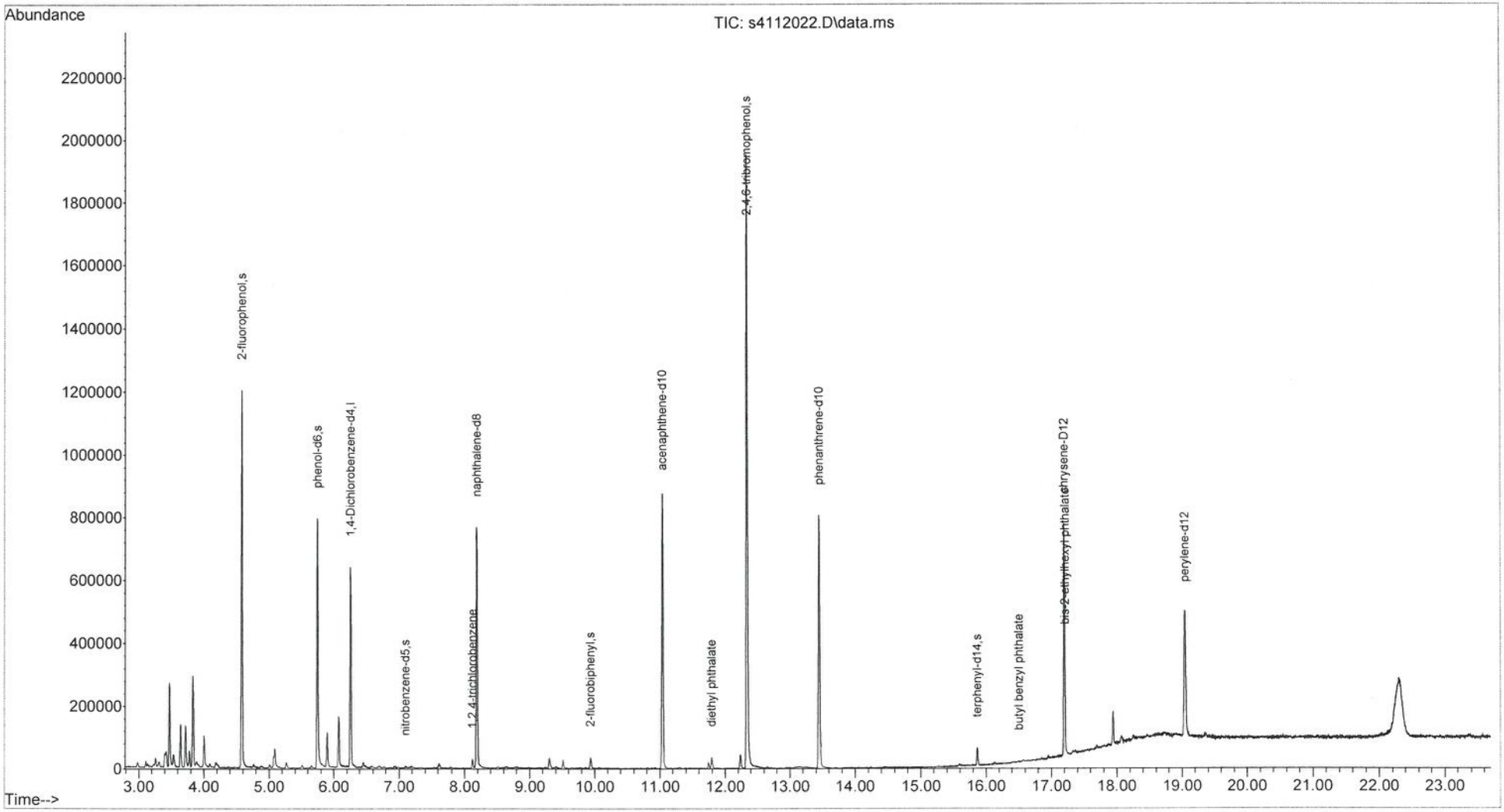
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.255	152	136786	10.00	ug/mL	0.00
21) naphthalene-d8	8.184	136	487060	10.00	ug/mL	0.00
37) acenaphthene-d10	11.038	164	256975	10.00	ug/mL	-0.01
58) phenanthrene-d10	13.448	188	459345	10.00	ug/mL	-0.01
74) chrysene-D12	17.197	240	324659	10.00	ug/mL	0.00
83) perylene-d12	19.044	264	247643	10.00	ug/mL	0.00
System Monitoring Compounds						
4) 2-fluorophenol	4.578	112	429612	25.28	ug/mL	-0.01
Spiked Amount 200.000			Recovery = 12.64%			
7) phenol-d6	5.743	99	371801	18.02	ug/mL	-0.01
Spiked Amount 200.000			Recovery = 9.01%			
22) nitrobenzene-d5	7.096	82	3394m BC	0.18	ug/mL	0.00
Spiked Amount 100.000			Recovery = 0.18%			
38) 2-fluorobiphenyl	9.932	172	14888	0.33	ug/mL	0.00
Spiked Amount 100.000			Recovery = 0.33%			
59) 2,4,6-tribromophenol	12.338	330	368036	65.70	ug/mL	0.00
Spiked Amount 200.000			Recovery = 32.85%			
69) o-terphenyl	0.000	230	0	0.00	ug/mL	
Spiked Amount 100.000			Recovery = 0.00%			
72) 1-Chloro-octadecane	0.000	57	0	0.00	ug/mL	
Spiked Amount 100.000			Recovery = 0.00%			
75) terphenyl-d14	15.864	244	24539	0.69	ug/mL	0.00
Spiked Amount 100.000			Recovery = 0.69%			
Target Compounds						Qvalue
9) n-decane	5.896	57	1223	Below Cal	#	3
30) 1,2,4-trichlorobenzene	8.118	180	7575	0.349	ug/mL#	95
55) diethyl phthalate	11.792	149	18238	0.401	ug/mL#	75
78) butyl benzyl phthalate	16.499	149	1075	0.063	ug/mL#	26
82) bis-2-ethylhexyl phtha...	17.210	149	9545	0.329	ug/mL#	96
93) DDT	16.631	TIC	2157	Below Cal	#	22

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Nov23\112023\
Data File : s4112022.D
Acq On : 20 Nov 2023 11:53 pm
Operator : cl
Sample : 67839-05 acid x1
Misc :
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Nov 21 08:56:07 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

CL
12/5/23 @ 09:42
CharlesL

Data Path : X:\S4\2023\Nov23\112123\
Data File : s4112106.D
Acq On : 21 Nov 2023 02:18 pm
Operator : cl
Sample : 67839-05 bn x1
Misc :
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Nov 22 09:14:42 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration

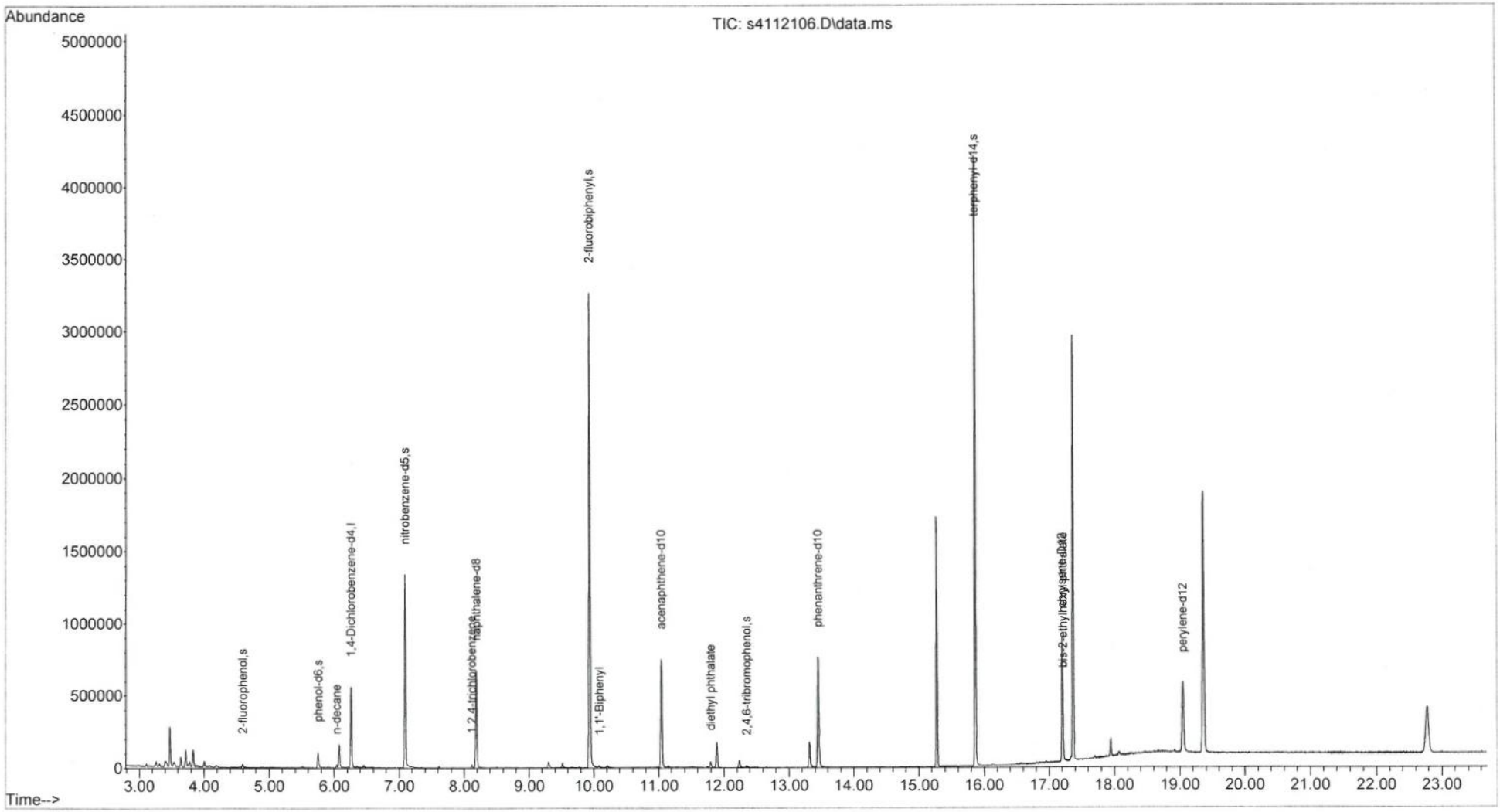
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.255	152	118476	10.00	ug/mL	0.00
21) naphthalene-d8	8.184	136	446183	10.00	ug/mL	-0.01
37) acenaphthene-d10	11.040	164	233234	10.00	ug/mL	0.00
58) phenanthrene-d10	13.448	188	435755	10.00	ug/mL	-0.01
74) chrysene-D12	17.199	240	347325	10.00	ug/mL	0.00
83) perylene-d12	19.047	264	303207	10.00	ug/mL	0.00
System Monitoring Compounds						
4) 2-fluorophenol	4.591	112	7208	0.49	ug/mL	0.00
Spiked Amount 200.000			Recovery =	0.25%		
7) phenol-d6	5.748	99	48926	2.74	ug/mL	0.00
Spiked Amount 200.000			Recovery =	1.37%		
22) nitrobenzene-d5	7.091	82	581615	37.14	ug/mL	-0.01
Spiked Amount 100.000			Recovery =	37.14%		
38) 2-fluorobiphenyl	9.932	172	1391541	37.93	ug/mL	-0.01
Spiked Amount 100.000			Recovery =	37.93%		
59) 2,4,6-tribromophenol	12.347	330	1158	0.31	ug/mL	0.00
Spiked Amount 200.000			Recovery =	0.16%		
69) o-terphenyl	0.000	230	0	0.00	ug/mL	
Spiked Amount 100.000			Recovery =	0.00%		
72) 1-Chloro-octadecane	0.000	57	0	0.00	ug/mL	
Spiked Amount 100.000			Recovery =	0.00%		
75) terphenyl-d14	15.861	244	1774659	47.33	ug/mL	0.00
Spiked Amount 100.000			Recovery =	47.33%		
Target Compounds						Qvalue
9) n-decane	6.033	57	5176m	BC 0.290	ug/mL	
30) 1,2,4-trichlorobenzene	8.118	180	6668m	BC 0.332	ug/mL	
42) 1,1'-Biphenyl	10.082	154	4453m	BC 0.033	ug/mL	
55) diethyl phthalate	11.797	149	22899	0.586	ug/mL#	91
82) bis-2-ethylhexyl phtha...	17.212	149	60480	1.777	ug/mL	98
93) DDT	16.636	TIC	1581	Below Cal	#	22

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Nov23\112123\
Data File : s4112106.D
Acq On : 21 Nov 2023 02:18 pm
Operator : cl
Sample : 67839-05 bn x1
Misc :
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Nov 22 09:14:42 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration



This File: **L:\SVOA\Excel Reports\ABN\231206\67839-006**
Analysis Group: **ABN** **Dow Salvage Yard**
Field ID: **RMW3-287-297-110923** **CRE**
Sample: **67839-06 acid x1** **67839-06 bn x1**
Misc:
DataFile: 107.D\S4ABN110223A.XLS 4ABN110223A.XLS

Import File Name **S4 ABN 17145 DoD**
TestGroupID **E8270DoD_A**
Aqueous or Soil? (A or S) **A**
Prep Date **11/15/2023**
Lab#: **67839-006**
QC_Code:
Prep# **17145**

Charles Leahy L:\SVOA\ABN\ABN 8270DoD ImportFileBuilde
12/6/23 11:03 AM
L:\SVOA\ABN\
L:\SVOA\Excel Reports\ABN\231206\
L:\SVOA\PDFReports\

Reviewer Checks:

Quant Report: Reviewed, Analyst Initials & Date
Chromatogram Checked, Major peaks identified
Results consistent w/ other attached analyses
Reanalysis reason noted
Substitute dilution data checked
Correct dilution and reason clear or noted
Flags checked (Expiration, F+, Over Cal, Surr, Aspen, QC)
Other QC failures or issues noted in Aspen
Correct data file and/or date/time in Aspen

Notes:
Reviewer Initials & Date: 12/7/23

#	Surrogate Standards	Conc. (ug/mL)	AnalysisDate	AnalyzedBy	Dil'n	Weight	Volume	Surr	Recovery	Flag	QC Limits
4	2-fluorophenol	33.02	11/21/2023	CL s4112107.D	1	1	1	100	**33%**		21-100
7	phenol-d6	22.09	11/21/2023	CL s4112107.D	1	1	1	100	**22%**		10-102
59	2,4,6-tribromophenol	68.57	11/21/2023	CL s4112107.D	1	1	1	100	**69%**		10-123
22	nitrobenzene-d5	35.75	11/21/2023	CL s4112108.D	1	1	1	50	**71%**		35-114
38	2-fluorobiphenyl	36.30	11/21/2023	CL s4112108.D	1	1	1	50	**73%**		43-116
75	terphenyl-d14	47.61	11/21/2023	CL s4112108.D	1	1	1	50	**95%**		33-141
6	phenol	0.00	11/21/2023	CL s4112107.D	1	1	1				
8	2-chlorophenol	0.00	11/21/2023	CL s4112107.D	1	1	1				
15	2-methylphenol	0.00	11/21/2023	CL s4112107.D	1	1	1				
15	2-methylphenol	0.00	11/21/2023	CL s4112107.D	1	1	1				
20	4-methylphenol	0.00	11/21/2023	CL s4112107.D	1	1	1				
25	2-nitrophenol	0.00	11/21/2023	CL s4112107.D	1	1	1				
26	2,4-dimethylphenol	0.00	11/21/2023	CL s4112107.D	1	1	1				
28	2,4-dichlorophenol	0.00	11/21/2023	CL s4112107.D	1	1	1				
29	2,6-dichlorophenol	0.00	11/21/2023	CL s4112107.D	1	1	1				
32	benzoic acid	0.00	11/21/2023	CL s4112107.D	1	1	1				
35	4-chloro-3-methylphenol	0.00	11/21/2023	CL s4112107.D	1	1	1				
40	2,4,6-trichlorophenol	0.00	11/21/2023	CL s4112107.D	1	1	1				
41	2,4,5-trichlorophenol	0.00	11/21/2023	CL s4112107.D	1	1	1				
51	2,4-dinitrophenol	0.00	11/21/2023	CL s4112107.D	1	1	1				
53	4-nitrophenol	0.00	11/21/2023	CL s4112107.D	1	1	1				
60	4,6-dinitro-2-methylphenol	0.00	11/21/2023	CL s4112107.D	1	1	1				
66	pentachlorophenol	0.00	11/21/2023	CL s4112107.D	1	1	1				
2	N-nitroso-dimethylamine	0.00	11/21/2023	CL s4112108.D	1	1	1				
3	pyridine	0.06	11/21/2023	CL s4112108.D	1	1	1				
5	aniline	0.00	11/21/2023	CL s4112108.D	1	1	1				
9	n-decane	0.00	11/21/2023	CL s4112108.D	1	1	1				
10	bis-(2-choroethyl)ether	0.00	11/21/2023	CL s4112108.D	1	1	1				
11	1,3-dichlorobenzene	0.00	11/21/2023	CL s4112108.D	1	1	1				
12	1,4-diclorobenzene	0.00	11/21/2023	CL s4112108.D	1	1	1				
13	1,2-dichlorobenzene	0.00	11/21/2023	CL s4112108.D	1	1	1				
14	benzyl alcohol	0.00	11/21/2023	CL s4112108.D	1	1	1				
16	2,2'-oxybis(1-chloropropane)	0.00	11/21/2023	CL s4112108.D	1	1	1				
##	acetephenone	#N/A	11/21/2023	CL s4112108.D	1	1	1			#N/A	
18	hexachloroethane	0.00	11/21/2023	CL s4112108.D	1	1	1				
19	N-nitroso-di-n-propylamine	0.00	11/21/2023	CL s4112108.D	1	1	1				
23	nitrobenzene	0.00	11/21/2023	CL s4112108.D	1	1	1				
24	isophorone	0.00	11/21/2023	CL s4112108.D	1	1	1				
27	bis(2-chloroethoxy)methane	0.00	11/21/2023	CL s4112108.D	1	1	1				
30	1,2,4-trichlorobenzene	0.24	11/21/2023	CL s4112108.D	1	1	1				
31	naphthalene	0.00	11/21/2023	CL s4112108.D	1	1	1				
33	4-chloroanaline	0.00	11/21/2023	CL s4112108.D	1	1	1				
34	hexachloro-1,3-butadiene	0.00	11/21/2023	CL s4112108.D	1	1	1				
36	2-methylnaphthalene	0.00	11/21/2023	CL s4112108.D	1	1	1				
39	hexachlorocyclopentadiene	0.00	11/21/2023	CL s4112108.D	1	1	1				
43	2-chloronaphthalene	0.00	11/21/2023	CL s4112108.D	1	1	1				
44	2-nitroanaline	0.00	11/21/2023	CL s4112108.D	1	1	1				
45	acenaphthylene	0.00	11/21/2023	CL s4112108.D	1	1	1				
46	dimethyl phthalate	0.00	11/21/2023	CL s4112108.D	1	1	1				
47	2,6-dinitrotoluene	0.00	11/21/2023	CL s4112108.D	1	1	1				
48	2,4-dinitrotoluene	0.00	11/21/2023	CL s4112108.D	1	1	1				
49	acenaphthene	0.00	11/21/2023	CL s4112108.D	1	1	1				
50	3-nitroanaline	0.00	11/21/2023	CL s4112108.D	1	1	1				
52	dibenzofuran	0.00	11/21/2023	CL s4112108.D	1	1	1				
54	fluorene	0.00	11/21/2023	CL s4112108.D	1	1	1				
55	diethyl phthalate	0.74	11/21/2023	CL s4112108.D	1	1	1				
56	4-chlorophenyl phenyl ether	0.00	11/21/2023	CL s4112108.D	1	1	1				
57	4-nitroanaline	0.00	11/21/2023	CL s4112108.D	1	1	1				
61	azobenzene	0.03	11/21/2023	CL s4112108.D	1	1	1				
62	N-nitrosodiphenylamine	0.00	11/21/2023	CL s4112108.D	1	1	1				
63	4-bromophenyl phenyl ether	0.00	11/21/2023	CL s4112108.D	1	1	1				
64	hexachlorobenzene	0.00	11/21/2023	CL s4112108.D	1	1	1				
65	n-octadecane	0.00	11/21/2023	CL s4112108.D	1	1	1				
67	phenanthrene	0.00	11/21/2023	CL s4112108.D	1	1	1				
68	anthracene	0.00	11/21/2023	CL s4112108.D	1	1	1				
70	carbazole	0.00	11/21/2023	CL s4112108.D	1	1	1				
71	di-n-butyl phthalate	0.00	11/21/2023	CL s4112108.D	1	1	1				
73	fluoranthene	0.00	11/21/2023	CL s4112108.D	1	1	1				
76	benzidine	0.00	11/21/2023	CL s4112108.D	1	1	1				
77	pyrene	0.00	11/21/2023	CL s4112108.D	1	1	1				
78	butyl benzyl phthalate	0.00	11/21/2023	CL s4112108.D	1	1	1				
79	benzo(a)anthracene	0.00	11/21/2023	CL s4112108.D	1	1	1				
80	chrysene	0.00	11/21/2023	CL s4112108.D	1	1	1				
81	3,3'-dichlorobenzidine	0.00	11/21/2023	CL s4112108.D	1	1	1				
82	bis-2-ethylhexyl phthalate	0.34	11/21/2023	CL s4112108.D	1	1	1				
84	di-n-octyl phthalate	0.00	11/21/2023	CL s4112108.D	1	1	1				
85	Benzo(b)fluoranthene	0.00	11/21/2023	CL s4112108.D	1	1	1				
86	benzo(k)fluoranthene	0.00	11/21/2023	CL s4112108.D	1	1	1				
87	benzo(a)pyrene	0.00	11/21/2023	CL s4112108.D	1	1	1				
88	indeno(1,2,3-cd)pyrene	0.00	11/21/2023	CL s4112108.D	1	1	1				
89	dibenzo(a,h)anthracene	0.00	11/21/2023	CL s4112108.D	1	1	1				
90	benzo(g,h,i)perylene	0.00	11/21/2023	CL s4112108.D	1	1	1				

Quantitation Report (QT Reviewed)

CL
12/5/23 @ 09:42
CharlesL

Data Path : X:\S4\2023\Nov23\112123\
Data File : s4112107.D
Acq On : 21 Nov 2023 02:47 pm
Operator : cl
Sample : 67839-06 acid x1
Misc :
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Nov 22 09:14:46 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration

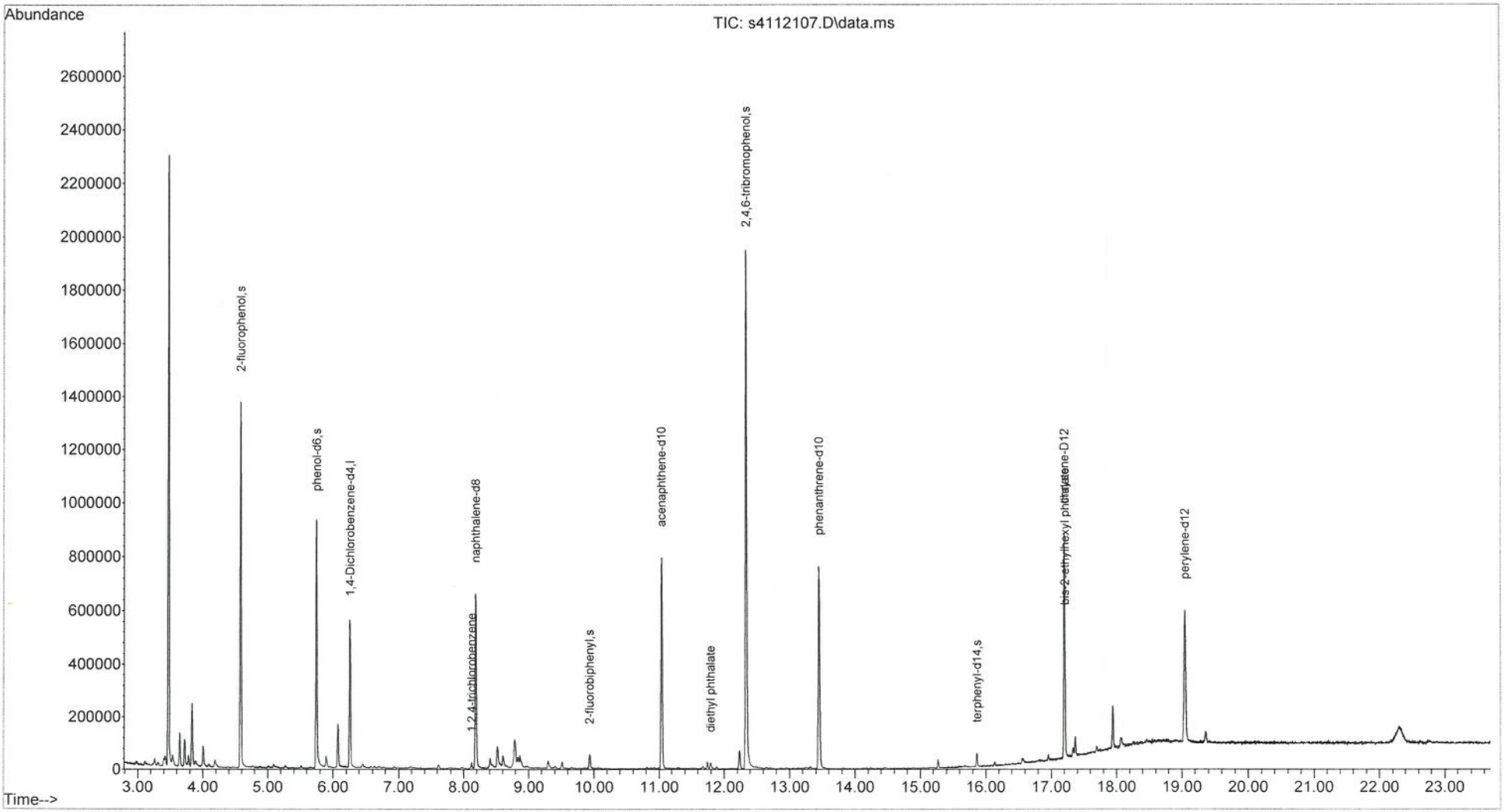
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.258	152	120932	10.00	ug/mL	0.00
21) naphthalene-d8	8.184	136	431172	10.00	ug/mL	0.00
37) acenaphthene-d10	11.038	164	231953	10.00	ug/mL	0.00
58) phenanthrene-d10	13.449	188	430174	10.00	ug/mL	-0.01
74) chrysene-D12	17.202	240	342536	10.00	ug/mL	0.00
83) perylene-d12	19.047	264	307904	10.00	ug/mL	0.00
System Monitoring Compounds						
4) 2-fluorophenol	4.581	112	496027	33.02	ug/mL	0.00
Spiked Amount 200.000			Recovery =	16.51%		
7) phenol-d6	5.746	99	402968	22.09	ug/mL	-0.01
Spiked Amount 200.000			Recovery =	11.05%		
22) nitrobenzene-d5	0.000	82	0	0.00	ug/mL	
Spiked Amount 100.000			Recovery =	0.00%		
38) 2-fluorobiphenyl	9.932	172	23749	0.61	ug/mL	0.00
Spiked Amount 100.000			Recovery =	0.61%		
59) 2,4,6-tribromophenol	12.338	330	359722	68.57	ug/mL	0.00
Spiked Amount 200.000			Recovery =	34.28%		
69) o-terphenyl	0.000	230	0	0.00	ug/mL	
Spiked Amount 100.000			Recovery =	0.00%		
72) 1-Chloro-octadecane	0.000	57	0	0.00	ug/mL	
Spiked Amount 100.000			Recovery =	0.00%		
75) terphenyl-d14	15.867	244	21932	0.59	ug/mL	0.00
Spiked Amount 100.000			Recovery =	0.59%		
Target Compounds						Qvalue
30) 1,2,4-trichlorobenzene	8.120	180	4827	0.225	ug/mL#	77
55) diethyl phthalate	11.795	149	12417	0.283	ug/mL#	76
82) bis-2-ethylhexyl phtha...	17.210	149	46436	1.391	ug/mL#	97
93) DDT	16.636	TIC	2272	Below Cal	#	22

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Nov23\112123\
Data File : s4112107.D
Acq On : 21 Nov 2023 02:47 pm
Operator : cl
Sample : 67839-06 acid x1
Misc :
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Nov 22 09:14:46 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Nov23\112123\
Data File : s4112108.D
Acq On : 21 Nov 2023 03:17 pm
Operator : cl
Sample : 67839-06 bn x1
Misc :
ALS Vial : 6 Sample Multiplier: 1

CL
12/5/23 @ 09:43
CharlesL

Quant Time: Nov 22 09:14:50 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration

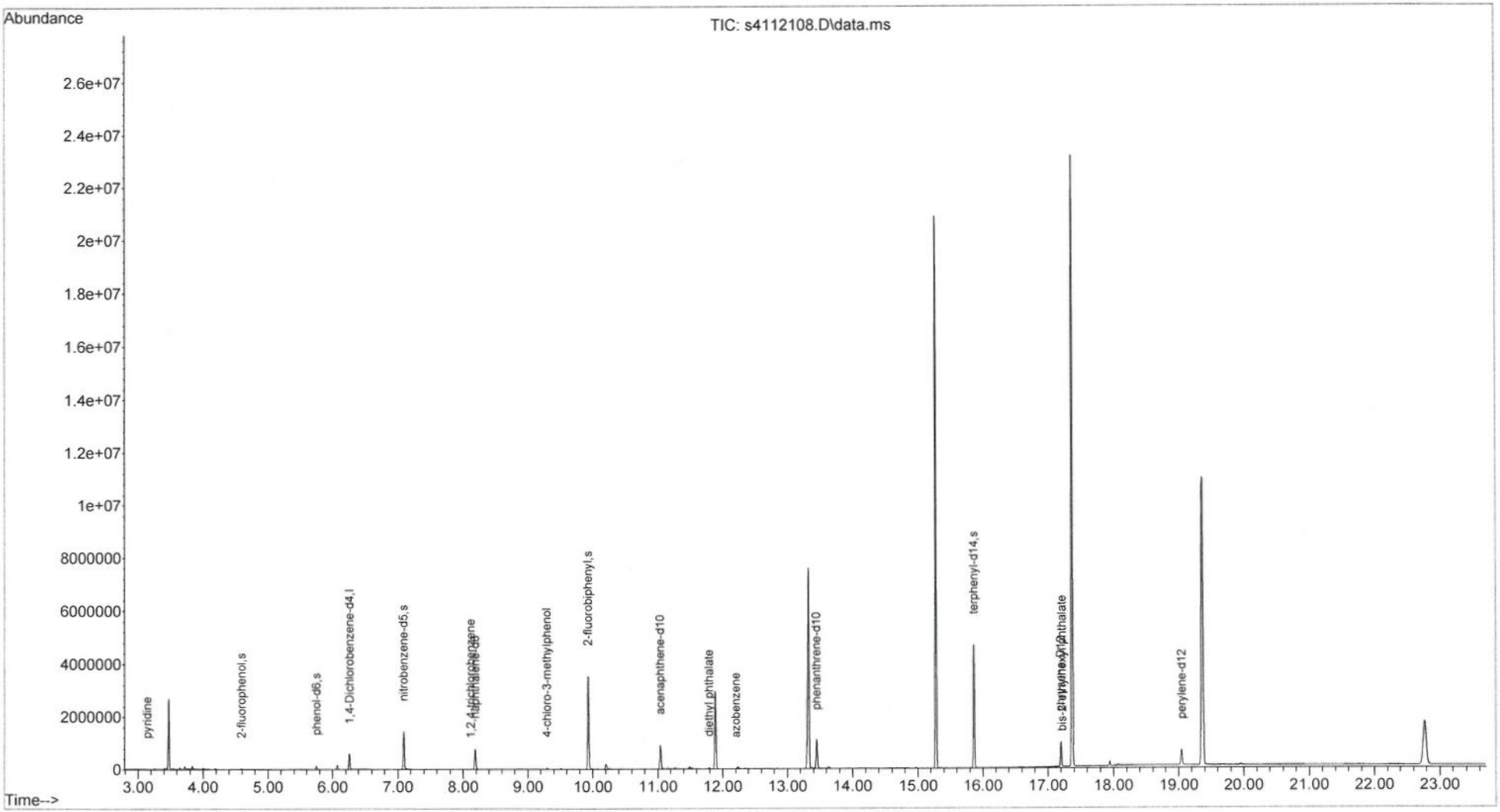
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.258	152	128745	10.00	ug/mL	0.00
21) naphthalene-d8	8.184	136	484114	10.00	ug/mL	0.00
37) acenaphthene-d10	11.038	164	258479	10.00	ug/mL	0.00
58) phenanthrene-d10	13.446	188	503605	10.00	ug/mL	-0.01
74) chrysene-D12	17.200	240	381921	10.00	ug/mL	0.00
83) perylene-d12	19.047	264	334983	10.00	ug/mL	0.00
System Monitoring Compounds						
4) 2-fluorophenol	4.589	112	9361	0.59	ug/mL	0.00
Spiked Amount 200.000			Recovery =	0.29%		
7) phenol-d6	5.746	99	64922	3.34	ug/mL	-0.01
Spiked Amount 200.000			Recovery =	1.67%		
22) nitrobenzene-d5	7.089	82	607478	35.75	ug/mL	-0.01
Spiked Amount 100.000			Recovery =	35.75%		
38) 2-fluorobiphenyl	9.930	172	1475883	36.30	ug/mL	-0.01
Spiked Amount 100.000			Recovery =	36.30%		
59) 2,4,6-tribromophenol	0.000	330	0	0.00	ug/mL	
Spiked Amount 200.000			Recovery =	0.00%		
69) o-terphenyl	0.000	230	0	0.00	ug/mL	
Spiked Amount 100.000			Recovery =	0.00%		
72) 1-Chloro-octadecane	0.000	57	0	0.00	ug/mL	
Spiked Amount 100.000			Recovery =	0.00%		
75) terphenyl-d14	15.864	244	1962857	47.61	ug/mL	0.00
Spiked Amount 100.000			Recovery =	47.61%		
Target Compounds						Qvalue
3) pyridine	3.136	79	1202	0.060	ug/mL#	18
30) 1,2,4-trichlorobenzene	8.118	180	5631m BC	0.238	ug/mL	
35) 4-chloro-3-methylphenol	9.293	107	1838	0.090	ug/mL#	14
42) 1,1'-Biphenyl	10.078	154	3256mBC	Below Cal		
49) acenaphthene	11.041	154	890	Below Cal	#	4
55) diethyl phthalate	11.792	149	31210	0.739	ug/mL#	95
61) azobenzene	12.203	77	2280	0.027	ug/mL#	46
82) bis-2-ethylhexyl phtha...	17.215	149	11675	0.340	ug/mL#	91
93) DDT	16.634	TIC	1404	Below Cal	#	22

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Nov23\112123\
Data File : s4112108.D
Acq On : 21 Nov 2023 03:17 pm
Operator : cl
Sample : 67839-06 bn x1
Misc :
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Nov 22 09:14:50 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration



This File: **L:\SVOA\Excel Reports\ABN\231206\67839-007** Charles Leahy L:\SVOA\ABN\ABN 8270DoD ImportFileBuilde
Analysis Group: **ABN** **Dow Salvage Yard** 12/6/23 11:04 AM
Field ID: **RMW4-297-301-110923 CRE** L:\SVOA\ABN\
Sample: **67839-07 acid x1** **67839-07 bn x1** L:\SVOA\Excel Reports\ABN\231206\
Misc: L:\SVOA\PDFReports\
DataFile: 119.D\S4ABN110223A.XLS 4ABN110223A.XLS
Import File Name **S4 ABN 17145 DoD**
TestGroupID **E8270DoD_A**
Aqueous or Soil? (A or S) **A**
Prep Date **11/15/2023**
Lab#: **67839-007**
QC_Code:
Prep# **17145**

Reviewer Checks:
Quant Report: Reviewed, Analyst Initials & Date
Chromatogram Checked, Major peaks identified
Results consistent w/ other attached analyses
Reanalysis reason noted
Substitute dilution data checked
Correct dilution and reason clear or noted
Flags checked (Expiration, F+, Over Cal, Surr, Aspen, QC)
Other QC failures or issues noted in Aspen
Correct data file and/or date/time in Aspen
12/7/23
Notes:
Reviewer Initials & Date:

#	Surrogate Standards	Conc. (ug/mL)	AnalysisDate	AnalyzedBy		Dil'n	Weight	Volume	Surr	Recovery	Flag	QC Limits
4	2-fluorophenol	35.86	11/21/2023	CL	s4112119.D	1	1	1	100	**36%**		21-100
7	phenol-d6	22.48	11/21/2023	CL	s4112119.D	1	1	1	100	**22%**		10-102
59	2,4,6-tribromophenol	68.72	11/21/2023	CL	s4112119.D	1	1	1	100	**69%**		10-123
22	nitrobenzene-d5	35.97	11/21/2023	CL	s4112120.D	1	1	1	50	**72%**		35-114
38	2-fluorobiphenyl	35.91	11/21/2023	CL	s4112120.D	1	1	1	50	**72%**		43-116
75	terphenyl-d14	49.99	11/21/2023	CL	s4112120.D	1	1	1	50	**100%**		33-141
6	phenol	0.00	11/21/2023	CL	s4112119.D	1	1	1				
8	2-chlorophenol	0.00	11/21/2023	CL	s4112119.D	1	1	1				
15	2-methylphenol	0.00	11/21/2023	CL	s4112119.D	1	1	1				
15	2-methylphenol	0.00	11/21/2023	CL	s4112119.D	1	1	1				
20	4-methylphenol	0.00	11/21/2023	CL	s4112119.D	1	1	1				
25	2-nitrophenol	0.00	11/21/2023	CL	s4112119.D	1	1	1				
26	2,4-dimethylphenol	0.00	11/21/2023	CL	s4112119.D	1	1	1				
28	2,4-dichlorophenol	0.00	11/21/2023	CL	s4112119.D	1	1	1				
29	2,6-dichlorophenol	0.00	11/21/2023	CL	s4112119.D	1	1	1				
32	benzoic acid	0.00	11/21/2023	CL	s4112119.D	1	1	1				
35	4-chloro-3-methylphenol	0.00	11/21/2023	CL	s4112119.D	1	1	1				
40	2,4,6-trichlorophenol	0.00	11/21/2023	CL	s4112119.D	1	1	1				
41	2,4,5-trichlorophenol	0.00	11/21/2023	CL	s4112119.D	1	1	1				
51	2,4-dinitrophenol	0.00	11/21/2023	CL	s4112119.D	1	1	1				
53	4-nitrophenol	0.00	11/21/2023	CL	s4112119.D	1	1	1				
60	4,6-dinitro-2-methylphenol	0.00	11/21/2023	CL	s4112119.D	1	1	1				
66	pentachlorophenol	0.00	11/21/2023	CL	s4112119.D	1	1	1				
2	N-nitroso-dimethylamine	0.00	11/21/2023	CL	s4112120.D	1	1	1				
3	pyridine	0.00	11/21/2023	CL	s4112120.D	1	1	1				
5	aniline	0.00	11/21/2023	CL	s4112120.D	1	1	1				
9	n-decane	0.00	11/21/2023	CL	s4112120.D	1	1	1				
10	bis-(2-choroethyl)ether	0.00	11/21/2023	CL	s4112120.D	1	1	1				
11	1,3-dichlorobenzene	0.00	11/21/2023	CL	s4112120.D	1	1	1				
12	1,4-diclorobenzene	0.00	11/21/2023	CL	s4112120.D	1	1	1				
13	1,2-dichlorobenzene	0.00	11/21/2023	CL	s4112120.D	1	1	1				
14	benzyl alcohol	0.00	11/21/2023	CL	s4112120.D	1	1	1				
16	2,2'-oxybis(1-chloropropane)	0.00	11/21/2023	CL	s4112120.D	1	1	1				
##	acetephenone	#N/A	11/21/2023	CL	s4112120.D	1	1	1			#N/A	
18	hexachloroethane	0.00	11/21/2023	CL	s4112120.D	1	1	1				
19	N-nitroso-di-n-propylamine	0.00	11/21/2023	CL	s4112120.D	1	1	1				
23	nitrobenzene	0.00	11/21/2023	CL	s4112120.D	1	1	1				
24	isophorone	0.00	11/21/2023	CL	s4112120.D	1	1	1				
27	bis(2-chloroethoxy)methane	0.00	11/21/2023	CL	s4112120.D	1	1	1				
30	1,2,4-trichlorobenzene	0.26	11/21/2023	CL	s4112120.D	1	1	1				
31	naphthalene	0.00	11/21/2023	CL	s4112120.D	1	1	1				
33	4-chloroanaline	0.00	11/21/2023	CL	s4112120.D	1	1	1				
34	hexachloro-1,3-butadiene	0.00	11/21/2023	CL	s4112120.D	1	1	1				
36	2-methylnaphthalene	0.00	11/21/2023	CL	s4112120.D	1	1	1				
39	hexachlorocyclopentadiene	0.00	11/21/2023	CL	s4112120.D	1	1	1				
43	2-chloronaphthalene	0.00	11/21/2023	CL	s4112120.D	1	1	1				
44	2-nitroanaline	0.00	11/21/2023	CL	s4112120.D	1	1	1				
45	acenaphthylene	0.00	11/21/2023	CL	s4112120.D	1	1	1				
46	dimethyl phthalate	0.00	11/21/2023	CL	s4112120.D	1	1	1				
47	2,6-dinitrotoluene	0.00	11/21/2023	CL	s4112120.D	1	1	1				
48	2,4-dinitrotoluene	0.00	11/21/2023	CL	s4112120.D	1	1	1				
49	acenaphthene	0.00	11/21/2023	CL	s4112120.D	1	1	1				
50	3-nitroanaline	0.00	11/21/2023	CL	s4112120.D	1	1	1				
52	dibenzofuran	0.00	11/21/2023	CL	s4112120.D	1	1	1				
54	fluorene	0.00	11/21/2023	CL	s4112120.D	1	1	1				
55	diethyl phthalate	**3.20**	11/21/2023	CL	s4112120.D	1	1	1				
56	4-chlorophenyl phenyl ether	0.00	11/21/2023	CL	s4112120.D	1	1	1				
57	4-nitroanaline	0.00	11/21/2023	CL	s4112120.D	1	1	1				
61	azobenzene	0.00	11/21/2023	CL	s4112120.D	1	1	1				
62	N-nitrosodiphenylamine	0.00	11/21/2023	CL	s4112120.D	1	1	1				
63	4-bromophenyl phenyl ether	0.00	11/21/2023	CL	s4112120.D	1	1	1				
64	hexachlorobenzene	0.00	11/21/2023	CL	s4112120.D	1	1	1				
65	n-octadecane	0.02	11/21/2023	CL	s4112120.D	1	1	1				
67	phenanthrene	0.00	11/21/2023	CL	s4112120.D	1	1	1				
68	anthracene	0.00	11/21/2023	CL	s4112120.D	1	1	1				
70	carbazole	0.00	11/21/2023	CL	s4112120.D	1	1	1				
71	di-n-butyl phthalate	0.00	11/21/2023	CL	s4112120.D	1	1	1				
73	fluoranthene	0.00	11/21/2023	CL	s4112120.D	1	1	1				
76	benzidine	0.00	11/21/2023	CL	s4112120.D	1	1	1				
77	pyrene	0.00	11/21/2023	CL	s4112120.D	1	1	1				
78	butyl benzyl phthalate	0.00	11/21/2023	CL	s4112120.D	1	1	1				
79	benzo(a)anthracene	0.00	11/21/2023	CL	s4112120.D	1	1	1				
80	chrysene	0.00	11/21/2023	CL	s4112120.D	1	1	1				
81	3,3'-dichlorobenzidine	0.00	11/21/2023	CL	s4112120.D	1	1	1				
82	bis-2-ethylhexyl phthalate	0.26	11/21/2023	CL	s4112120.D	1	1	1				
84	di-n-octyl phthalate	0.00	11/21/2023	CL	s4112120.D	1	1	1				
85	Benzo(b)fluoranthene	0.00	11/21/2023	CL	s4112120.D	1	1	1				
86	benzo(k)fluoranthene	0.00	11/21/2023	CL	s4112120.D	1	1	1				
87	benzo(a)pyrene	0.00	11/21/2023	CL	s4112120.D	1	1	1				
88	indeno(1,2,3-cd)pyrene	0.00	11/21/2023	CL	s4112120.D	1	1	1				
89	dibenzo(a,h)anthracene	0.00	11/21/2023	CL	s4112120.D	1	1	1				
90	benzo(g,h,i)perylene	0.00	11/21/2023	CL	s4112120.D	1	1	1				

Quantitation Report (QT Reviewed)

CL
12/5/23 @ 09:43
CharlesL

Data Path : X:\S4\2023\Nov23\112123\
Data File : s4112119.D
Acq On : 21 Nov 2023 08:42 pm
Operator : cl
Sample : 67839-07 acid x1
Misc :
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Nov 22 09:15:37 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration

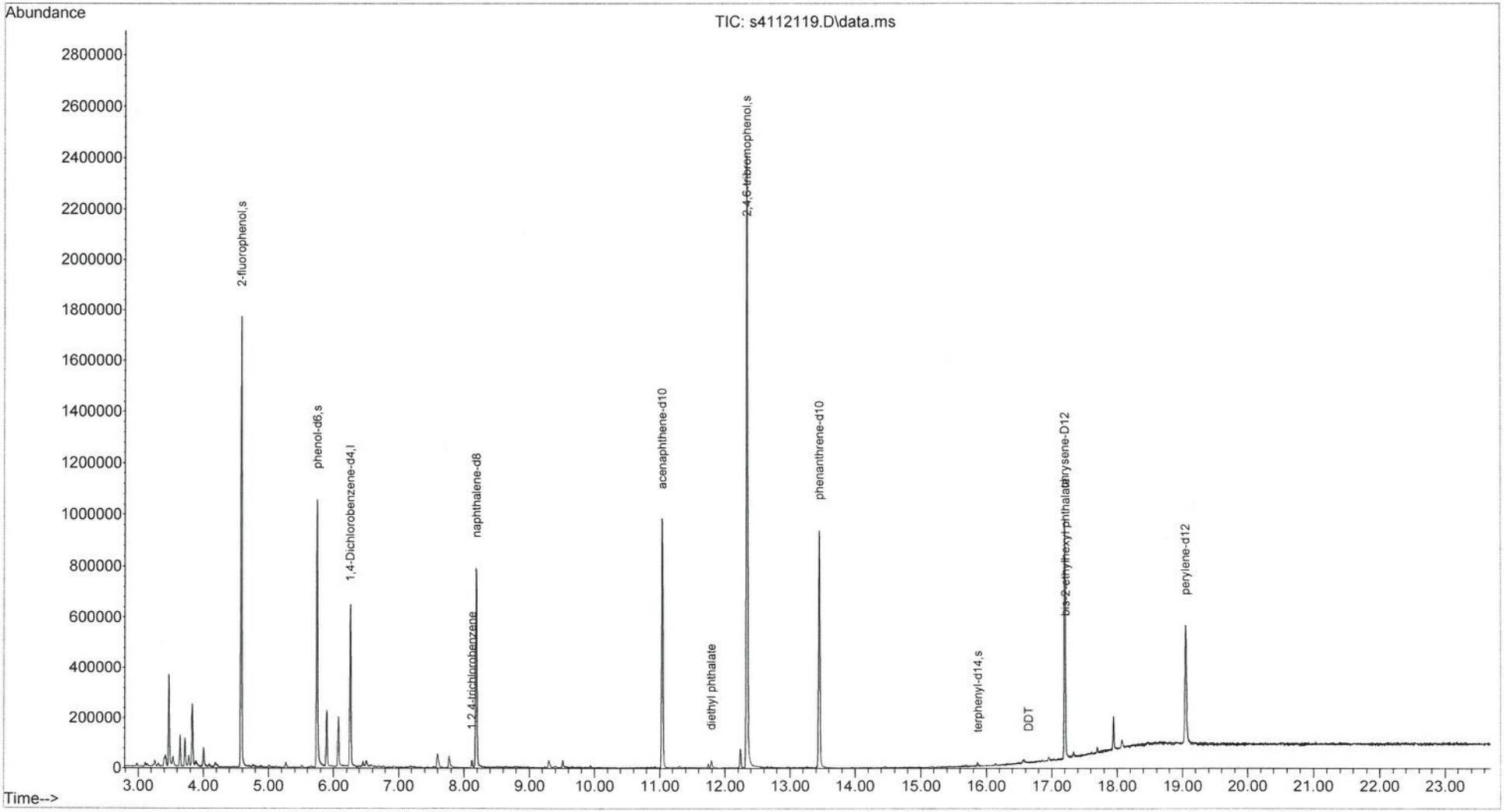
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.253	152	136376	10.00	ug/mL	-0.01
21) naphthalene-d8	8.184	136	520422	10.00	ug/mL	0.00
37) acenaphthene-d10	11.035	164	287197	10.00	ug/mL	-0.01
58) phenanthrene-d10	13.448	188	540457	10.00	ug/mL	#-0.01
74) chrysene-D12	17.199	240	390142	10.00	ug/mL	0.00
83) perylene-d12	19.044	264	294544	10.00	ug/mL	0.00
System Monitoring Compounds						
4) 2-fluorophenol	4.578	112	607446	35.86	ug/mL	-0.01
Spiked Amount 200.000			Recovery = 17.93%			
7) phenol-d6	5.743	99	462497	22.48	ug/mL	-0.01
Spiked Amount 200.000			Recovery = 11.24%			
22) nitrobenzene-d5	0.000	82	0	0.00	ug/mL	
Spiked Amount 100.000			Recovery = 0.00%			
38) 2-fluorobiphenyl	9.937	172	2112	0.01	ug/mL	0.00
Spiked Amount 100.000			Recovery = 0.01%			
59) 2,4,6-tribromophenol	12.335	330	452948	68.72	ug/mL	-0.01
Spiked Amount 200.000			Recovery = 34.36%			
69) o-terphenyl	0.000	230	0	0.00	ug/mL	
Spiked Amount 100.000			Recovery = 0.00%			
72) 1-Chloro-octadecane	0.000	57	0	0.00	ug/mL	
Spiked Amount 100.000			Recovery = 0.00%			
75) terphenyl-d14	15.869	244	4795	0.11	ug/mL	0.00
Spiked Amount 100.000			Recovery = 0.11%			
Target Compounds						Qvalue
30) 1,2,4-trichlorobenzene	8.118	180	8029	0.346	ug/mL#	99
55) diethyl phthalate	11.792	149	15668m BC	0.290	ug/mL	
82) bis-2-ethylhexyl phtha...	17.210	149	7652	0.231	ug/mL#	76
93) DDT	16.646	TIC	826	0.114	ug/mL#	22

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Nov23\112123\
Data File : s4112119.D
Acq On : 21 Nov 2023 08:42 pm
Operator : cl
Sample : 67839-07 acid x1
Misc :
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Nov 22 09:15:37 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Nov23\112123\
Data File : s4112120.D
Acq On : 21 Nov 2023 09:12 pm
Operator : cl
Sample : 67839-07 bn x1
Misc :
ALS Vial : 18 Sample Multiplier: 1

CL
12/5/23 @ 09:44
CharlesL

Quant Time: Nov 22 09:15:41 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration

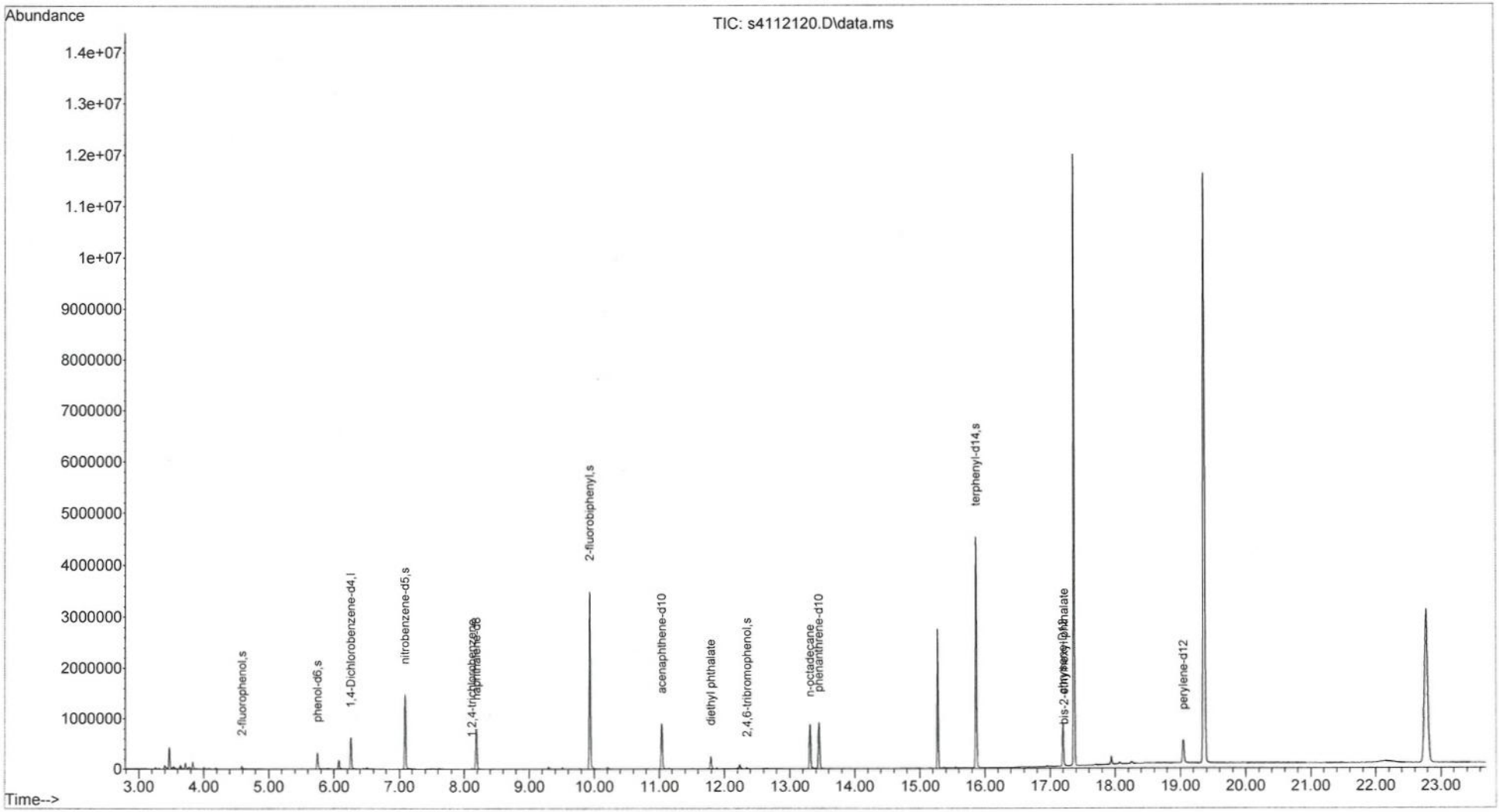
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.255	152	129307	10.00	ug/mL	0.00
21) naphthalene-d8	8.184	136	490472	10.00	ug/mL	0.00
37) acenaphthene-d10	11.041	164	266686	10.00	ug/mL	0.00
58) phenanthrene-d10	13.446	188	510132	10.00	ug/mL	-0.01
74) chrysene-D12	17.197	240	359417	10.00	ug/mL	0.00
83) perylene-d12	19.047	264	272304	10.00	ug/mL	0.00
System Monitoring Compounds						
4) 2-fluorophenol	4.589	112	22456	1.40	ug/mL	0.00
Spiked Amount 200.000			Recovery =	0.70%		
7) phenol-d6	5.743	99	156238	8.01	ug/mL	-0.01
Spiked Amount 200.000			Recovery =	4.00%		
22) nitrobenzene-d5	7.088	82	619307	35.97	ug/mL	-0.01
Spiked Amount 100.000			Recovery =	35.97%		
38) 2-fluorobiphenyl	9.930	172	1506538	35.91	ug/mL	-0.01
Spiked Amount 100.000			Recovery =	35.91%		
59) 2,4,6-tribromophenol	12.345	330	5357m BC	0.95	ug/mL	0.00
Spiked Amount 200.000			Recovery =	0.47%		
69) o-terphenyl	0.000	230	0	0.00	ug/mL	
Spiked Amount 100.000			Recovery =	0.00%		
72) 1-Chloro-octadecane	0.000	57	0	0.00	ug/mL	
Spiked Amount 100.000			Recovery =	0.00%		
75) terphenyl-d14	15.864	244	1939762	49.99	ug/mL	0.00
Spiked Amount 100.000			Recovery =	49.99%		
Target Compounds						Qvalue
30) 1,2,4-trichlorobenzene	8.118	180	6088m BC	0.260	ug/mL	
55) diethyl phthalate	11.795	149	129101	3.204	ug/mL	99
65) n-octadecane	13.306	57	1292	0.024	ug/mL#	22
82) bis-2-ethylhexyl phtha...	17.212	149	8139	0.261	ug/mL#	54
93) DDT	16.629	TIC	2264	Below Cal	#	22

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Nov23\112123\
Data File : s4112120.D
Acq On : 21 Nov 2023 09:12 pm
Operator : cl
Sample : 67839-07 bn x1
Misc :
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Nov 22 09:15:41 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration



This File:	L:\SVOA\Excel Reports\ABN\231206\67839-008		Charles Leahy L:\SVOA\ABN\ABN 8270DoD ImportFileBuilde
Analysis Group:	ABN	Dow Salvage Yard	12/6/23 11:05 AM
Field ID:	/-BRMW1-42-52-110923	CRE	L:\SVOA\ABN\
Sample:	67839-08 acid x1	67839-08 bn x1	L:\SVOA\Excel Reports\ABN\231206\
Misc:			L:\SVOA\PDFReports\
DataFile:	121.D\S4ABN110223A.XLS	4ABN110223A.XLS	
Import File Name	S4 ABN 17145 DoD		
TestGroupID	E8270DoD_A		
Aqueous or Soil? (A or S)	A		
Prep Date	11/15/2023		
Lab#:	67839-008		
QC_Code:			
Prep#	17145		

Reviewer Checks:

Quant Report: Reviewed, Analyst Initials & Date

Chromatogram Checked, Major peaks identified
Results consistent w/ other attached analyses
Reanalysis reason noted

Substitute dilution data checked
Correct dilution and reason clear or noted
Flags checked (Expiration, F+, Over Cal, Surr, Aspen, QC)
Other QC failures or issues noted in Aspen
Correct data file and/or date/time in Aspen

Notes:

Reviewer Initials & Date: 12/7/23

#	Surrogate Standards	Conc. (ug/mL)	AnalysisDate	AnalyzedBy	Dil'n	Weight	Volume	Surr	Recovery	Flag	QC Limits
4	2-fluorophenol	36.69	11/21/2023	CL s4112121.D	1	1	1	100	**37%**		21-100
7	phenol-d6	21.15	11/21/2023	CL s4112121.D	1	1	1	100	**21%**		10-102
59	2,4,6-tribromophenol	67.00	11/21/2023	CL s4112121.D	1	1	1	100	**67%**		10-123
22	nitrobenzene-d5	32.16	11/21/2023	CL s4112122.D	1	1	1	50	**64%**		35-114
38	2-fluorobiphenyl	32.61	11/21/2023	CL s4112122.D	1	1	1	50	**65%**		43-116
75	terphenyl-d14	44.50	11/21/2023	CL s4112122.D	1	1	1	50	**89%**		33-141
6	phenol	0.00	11/21/2023	CL s4112121.D	1	1	1				
8	2-chlorophenol	0.00	11/21/2023	CL s4112121.D	1	1	1				
15	2-methylphenol	0.00	11/21/2023	CL s4112121.D	1	1	1				
15	2-methylphenol	0.00	11/21/2023	CL s4112121.D	1	1	1				
20	4-methylphenol	0.00	11/21/2023	CL s4112121.D	1	1	1				
25	2-nitrophenol	0.00	11/21/2023	CL s4112121.D	1	1	1				
26	2,4-dimethylphenol	0.00	11/21/2023	CL s4112121.D	1	1	1				
28	2,4-dichlorophenol	0.00	11/21/2023	CL s4112121.D	1	1	1				
29	2,6-dichlorophenol	0.00	11/21/2023	CL s4112121.D	1	1	1				
32	benzoic acid	0.00	11/21/2023	CL s4112121.D	1	1	1				
35	4-chloro-3-methylphenol	0.00	11/21/2023	CL s4112121.D	1	1	1				
40	2,4,6-trichlorophenol	0.00	11/21/2023	CL s4112121.D	1	1	1				
41	2,4,5-trichlorophenol	0.00	11/21/2023	CL s4112121.D	1	1	1				
51	2,4-dinitrophenol	0.00	11/21/2023	CL s4112121.D	1	1	1				
53	4-nitrophenol	0.00	11/21/2023	CL s4112121.D	1	1	1				
60	4,6-dinitro-2-methylphenol	0.00	11/21/2023	CL s4112121.D	1	1	1				
66	pentachlorophenol	0.00	11/21/2023	CL s4112121.D	1	1	1				
2	N-nitroso-dimethylamine	0.00	11/21/2023	CL s4112122.D	1	1	1				
3	pyridine	0.00	11/21/2023	CL s4112122.D	1	1	1				
5	aniline	0.00	11/21/2023	CL s4112122.D	1	1	1				
9	n-decane	0.00	11/21/2023	CL s4112122.D	1	1	1				
10	bis-(2-choroethyl)ether	0.00	11/21/2023	CL s4112122.D	1	1	1				
11	1,3-dichlorobenzene	0.00	11/21/2023	CL s4112122.D	1	1	1				
12	1,4-diclorobenzene	0.00	11/21/2023	CL s4112122.D	1	1	1				
13	1,2-dichlorobenzene	0.00	11/21/2023	CL s4112122.D	1	1	1				
14	benzyl alcohol	0.00	11/21/2023	CL s4112122.D	1	1	1				
16	2,2'-oxybis(1-chloropropane)	0.00	11/21/2023	CL s4112122.D	1	1	1				
##	acetephenone	#N/A	11/21/2023	CL s4112122.D	1	1	1			#N/A	
18	hexachloroethane	0.00	11/21/2023	CL s4112122.D	1	1	1				
19	N-nitroso-di-n-propylamine	0.00	11/21/2023	CL s4112122.D	1	1	1				
23	nitrobenzene	0.00	11/21/2023	CL s4112122.D	1	1	1				
24	isophorone	0.00	11/21/2023	CL s4112122.D	1	1	1				
27	bis(2-chloroethoxy)methane	0.00	11/21/2023	CL s4112122.D	1	1	1				
30	1,2,4-trichlorobenzene	0.25	11/21/2023	CL s4112122.D	1	1	1				
31	naphthalene	0.00	11/21/2023	CL s4112122.D	1	1	1				
33	4-chloroanaline	0.00	11/21/2023	CL s4112122.D	1	1	1				
34	hexachloro-1,3-butadiene	0.00	11/21/2023	CL s4112122.D	1	1	1				
36	2-methylnaphthalene	0.00	11/21/2023	CL s4112122.D	1	1	1				
39	hexachlorocyclopentadiene	0.00	11/21/2023	CL s4112122.D	1	1	1				
43	2-chloronaphthalene	0.00	11/21/2023	CL s4112122.D	1	1	1				
44	2-nitroanaline	0.00	11/21/2023	CL s4112122.D	1	1	1				
45	acenaphthylene	0.00	11/21/2023	CL s4112122.D	1	1	1				
46	dimethyl phthalate	0.00	11/21/2023	CL s4112122.D	1	1	1				
47	2,6-dinitrotoluene	0.00	11/21/2023	CL s4112122.D	1	1	1				
48	2,4-dinitrotoluene	0.00	11/21/2023	CL s4112122.D	1	1	1				
49	acenaphthene	0.00	11/21/2023	CL s4112122.D	1	1	1				
50	3-nitroanaline	0.00	11/21/2023	CL s4112122.D	1	1	1				
52	dibenzofuran	0.00	11/21/2023	CL s4112122.D	1	1	1				
54	fluorene	0.00	11/21/2023	CL s4112122.D	1	1	1				
55	diethyl phthalate	0.50	11/21/2023	CL s4112122.D	1	1	1				
56	4-chlorophenyl phenyl ether	0.00	11/21/2023	CL s4112122.D	1	1	1				
57	4-nitroanaline	0.00	11/21/2023	CL s4112122.D	1	1	1				
61	azobenzene	0.00	11/21/2023	CL s4112122.D	1	1	1				
62	N-nitrosodiphenylamine	0.00	11/21/2023	CL s4112122.D	1	1	1				
63	4-bromophenyl phenyl ether	0.00	11/21/2023	CL s4112122.D	1	1	1				
64	hexachlorobenzene	0.00	11/21/2023	CL s4112122.D	1	1	1				
65	n-octadecane	0.00	11/21/2023	CL s4112122.D	1	1	1				
67	phenanthrene	0.00	11/21/2023	CL s4112122.D	1	1	1				
68	anthracene	0.00	11/21/2023	CL s4112122.D	1	1	1				
70	carbazole	0.00	11/21/2023	CL s4112122.D	1	1	1				
71	di-n-butyl phthalate	0.00	11/21/2023	CL s4112122.D	1	1	1				
73	fluoranthene	0.00	11/21/2023	CL s4112122.D	1	1	1				
76	benzidine	0.00	11/21/2023	CL s4112122.D	1	1	1				
77	pyrene	0.00	11/21/2023	CL s4112122.D	1	1	1				
78	butyl benzyl phthalate	0.00	11/21/2023	CL s4112122.D	1	1	1				
79	benzo(a)anthracene	0.00	11/21/2023	CL s4112122.D	1	1	1				
80	chrysene	0.00	11/21/2023	CL s4112122.D	1	1	1				
81	3,3'-dichlorobenzidine	0.00	11/21/2023	CL s4112122.D	1	1	1				
82	bis-2-ethylhexyl phthalate	0.24	11/21/2023	CL s4112122.D	1	1	1				
84	di-n-octyl phthalate	0.00	11/21/2023	CL s4112122.D	1	1	1				
85	Benzo(b)fluoranthene	0.00	11/21/2023	CL s4112122.D	1	1	1				
86	benzo(k)fluoranthene	0.00	11/21/2023	CL s4112122.D	1	1	1				
87	benzo(a)pyrene	0.00	11/21/2023	CL s4112122.D	1	1	1				
88	indeno(1,2,3-cd)pyrene	0.00	11/21/2023	CL s4112122.D	1	1	1				
89	dibenzo(a,h)anthracene	0.00	11/21/2023	CL s4112122.D	1	1	1				
90	benzo(g,h,i)perylene	0.00	11/21/2023	CL s4112122.D	1	1	1				

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Nov23\112123\
Data File : s4112121.D
Acq On : 21 Nov 2023 09:42 pm
Operator : cl
Sample : 67839-08 acid x1
Misc :
ALS Vial : 19 Sample Multiplier: 1

CL
12/5/23 @ 09:44
CharlesL

Quant Time: Nov 22 09:15:45 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration

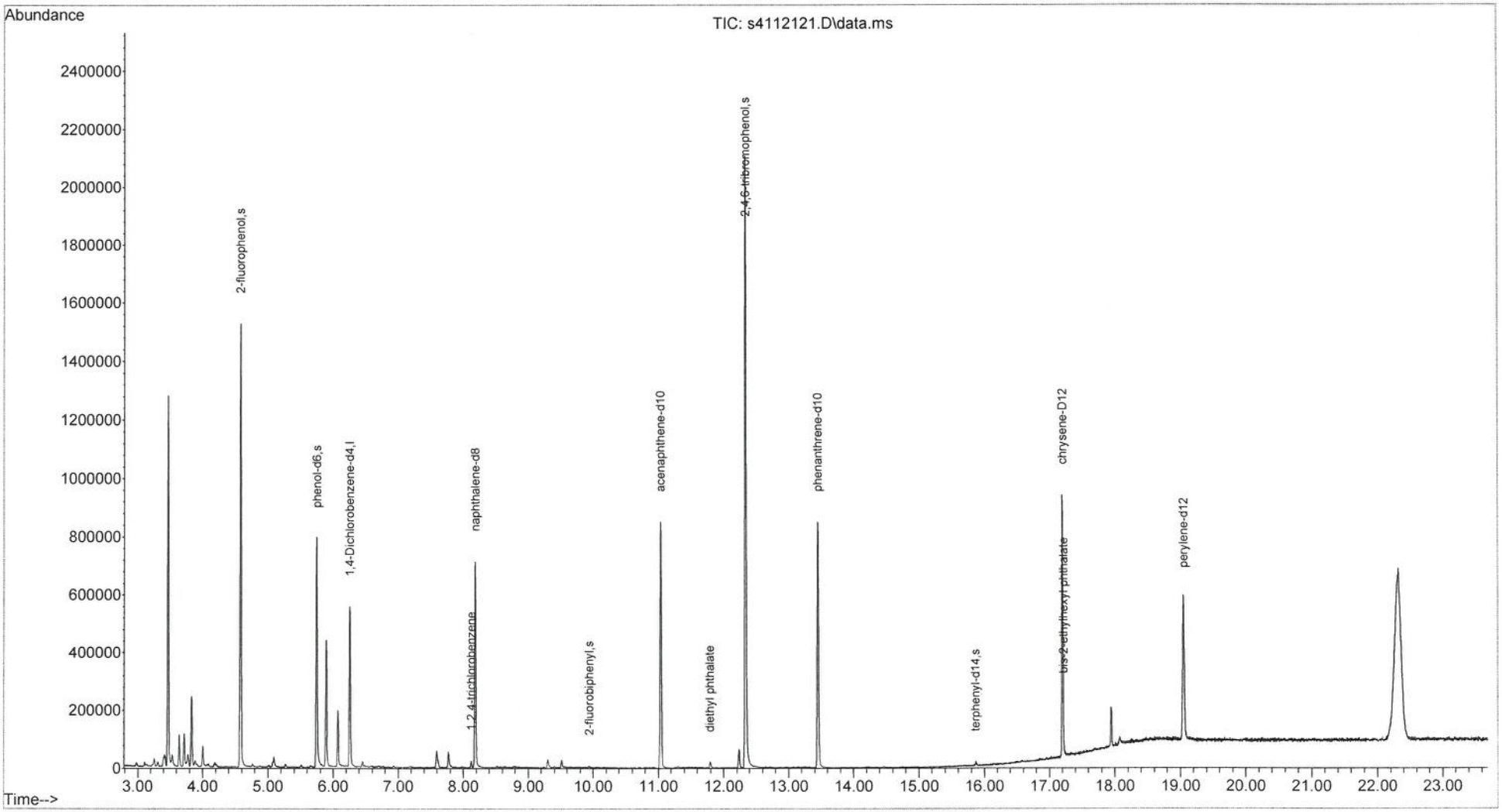
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.255	152	116243	10.00	ug/mL	0.00
21) naphthalene-d8	8.184	136	446375	10.00	ug/mL	0.00
37) acenaphthene-d10	11.038	164	245187	10.00	ug/mL	0.00
58) phenanthrene-d10	13.449	188	481294	10.00	ug/mL	#-0.01
74) chrysene-D12	17.199	240	376036	10.00	ug/mL	0.00
83) perylene-d12	19.047	264	296512	10.00	ug/mL	0.00
System Monitoring Compounds						
4) 2-fluorophenol	4.578	112	529820	36.69	ug/mL	-0.01
Spiked Amount 200.000			Recovery = 18.34%			
7) phenol-d6	5.746	99	370865	21.15	ug/mL	-0.01
Spiked Amount 200.000			Recovery = 10.57%			
22) nitrobenzene-d5	0.000	82	0	0.00	ug/mL	
Spiked Amount 100.000			Recovery = 0.00%			
38) 2-fluorobiphenyl	9.937	172	3056	0.04	ug/mL	0.00
Spiked Amount 100.000			Recovery = 0.04%			
59) 2,4,6-tribromophenol	12.338	330	393254	67.00	ug/mL	0.00
Spiked Amount 200.000			Recovery = 33.50%			
69) o-terphenyl	0.000	230	0	0.00	ug/mL	
Spiked Amount 100.000			Recovery = 0.00%			
72) 1-Chloro-octadecane	0.000	57	0	0.00	ug/mL	
Spiked Amount 100.000			Recovery = 0.00%			
75) terphenyl-d14	15.864	244	2585	0.06	ug/mL	0.00
Spiked Amount 100.000			Recovery = 0.06%			
Target Compounds						Qvalue
30) 1,2,4-trichlorobenzene	8.120	180	6174	0.300	ug/mL#	61
55) diethyl phthalate	11.790	149	10893	0.221	ug/mL#	74
61) azobenzene	12.335	77	1107	Below Cal	#	46
79) benzo(a)anthracene	17.202	228	1094	Below Cal	#	51
80) chrysene	17.202	228	1094	Below Cal	#	49
82) bis-2-ethylhexyl phtha...	17.215	149	13618	0.397	ug/mL#	98
93) DDT	16.634	TIC	1634	Below Cal	#	22

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Nov23\112123\
Data File : s4112121.D
Acq On : 21 Nov 2023 09:42 pm
Operator : cl
Sample : 67839-08 acid x1
Misc :
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Nov 22 09:15:45 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Nov23\112123\
Data File : s4112122.D
Acq On : 21 Nov 2023 10:11 pm
Operator : cl
Sample : 67839-08 bn x1
Misc :
ALS Vial : 20 Sample Multiplier: 1

CL
12/5/23 @ 09:44
CharlesL

Quant Time: Nov 22 09:15:49 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration

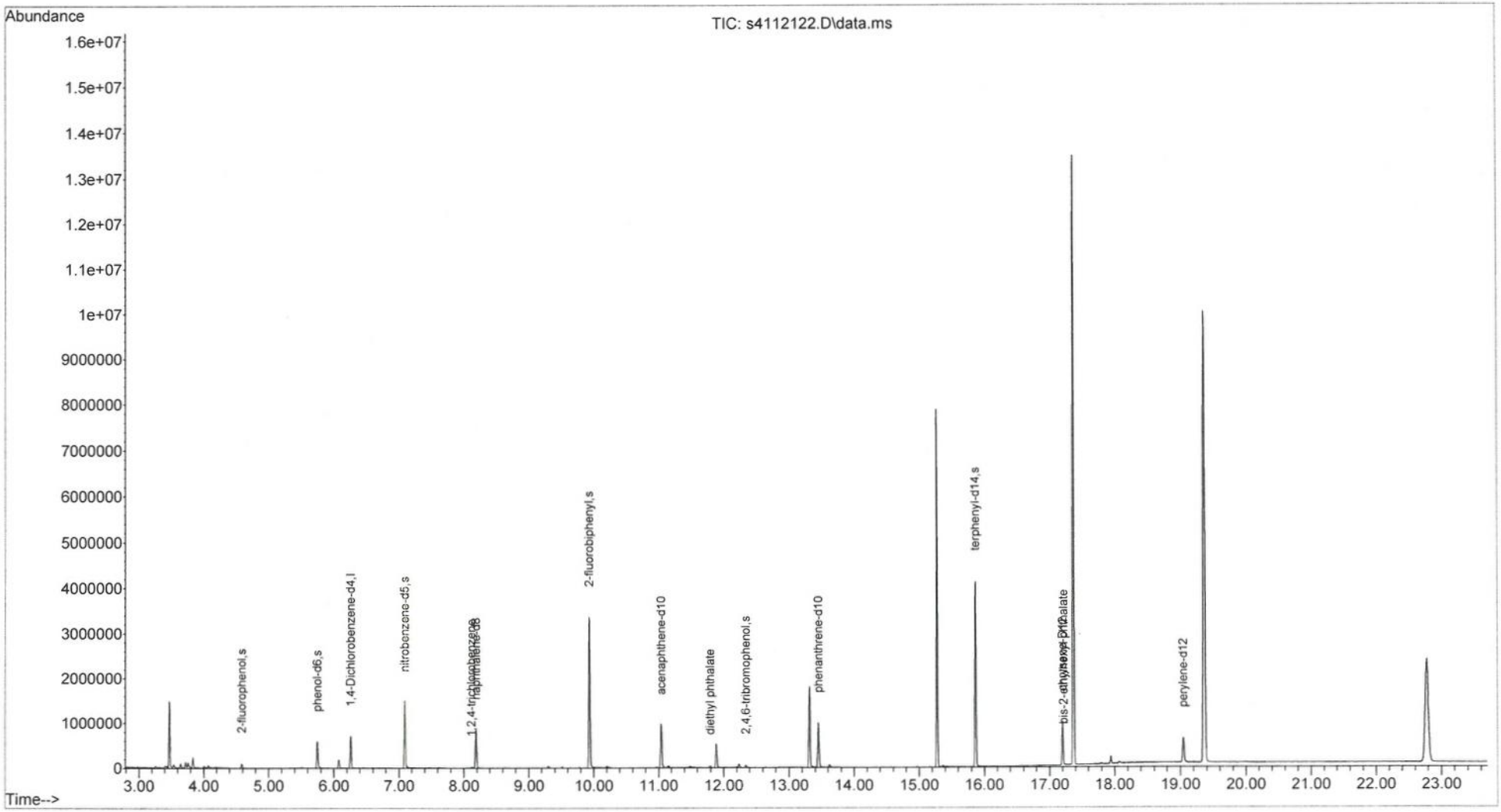
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.255	152	150124	10.00	ug/mL	0.00
21) naphthalene-d8	8.184	136	547954	10.00	ug/mL	0.00
37) acenaphthene-d10	11.041	164	283700	10.00	ug/mL	0.00
58) phenanthrene-d10	13.449	188	526616	10.00	ug/mL	-0.01
74) chrysene-D12	17.200	240	378654	10.00	ug/mL	0.00
83) perylene-d12	19.045	264	317674	10.00	ug/mL	0.00
System Monitoring Compounds						
4) 2-fluorophenol	4.586	112	37517	2.01	ug/mL	0.00
Spiked Amount 200.000			Recovery =	1.00%		
7) phenol-d6	5.743	99	259916	11.48	ug/mL	-0.01
Spiked Amount 200.000			Recovery =	5.74%		
22) nitrobenzene-d5	7.089	82	618540	32.16	ug/mL	-0.01
Spiked Amount 100.000			Recovery =	32.16%		
38) 2-fluorobiphenyl	9.930	172	1455419	32.61	ug/mL	-0.01
Spiked Amount 100.000			Recovery =	32.61%		
59) 2,4,6-tribromophenol	12.340	330	10715m BC	1.75	ug/mL	0.00
Spiked Amount 200.000			Recovery =	0.88%		
69) o-terphenyl	0.000	230	0	0.00	ug/mL	
Spiked Amount 100.000			Recovery =	0.00%		
72) 1-Chloro-octadecane	0.000	57	0	0.00	ug/mL	
Spiked Amount 100.000			Recovery =	0.00%		
75) terphenyl-d14	15.864	244	1819038	44.50	ug/mL	0.00
Spiked Amount 100.000			Recovery =	44.50%		
Target Compounds						Qvalue
30) 1,2,4-trichlorobenzene	8.116	180	6547m BC	0.247	ug/mL	
42) 1,1'-Biphenyl	10.075	154	3692m BC	Below Cal		
55) diethyl phthalate	11.795	149	24307	0.501	ug/mL	99
61) azobenzene	12.205	77	1357	Below Cal	#	1
71) di-n-butyl phthalate	14.466	149	979	Below Cal	#	78
79) benzo(a)anthracene	17.200	228	1055	Below Cal	#	51
80) chrysene	17.200	228	1055	Below Cal	#	49
82) bis-2-ethylhexyl phtha...	17.212	149	7849	0.242	ug/mL#	72
93) DDT	16.621	TIC	1419	Below Cal	#	22

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Nov23\112123\
Data File : s4112122.D
Acq On : 21 Nov 2023 10:11 pm
Operator : cl
Sample : 67839-08 bn x1
Misc :
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Nov 22 09:15:49 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration



This File: **L:\SVOA\Excel Reports\ABN\231206\67839-009**
Analysis Group: **ABN** **Dow Salvage Yard**
Field ID: **RMW1-150-157-110923** **CRE**
Sample: **67839-09 acid x1** **67839-09 bn x1**
Misc:
DataFile: 123.D\S4ABN110223A.XLS 4ABN110223A.XLS
Import File Name **S4 ABN 17145 DoD**
TestGroupID **E8270DoD_A**
Aqueous or Soil? (A or S) **A**
Prep Date **11/15/2023**
Lab#: **67839-009**
QC_Code:
Prep# **17145**

Charles Leahy L:\SVOA\ABN\ABN 8270DoD ImportFileBuilde
12/6/23 11:07 AM
L:\SVOA\ABN\
L:\SVOA\Excel Reports\ABN\231206\
L:\SVOA\PDFReports\

Reviewer Checks:

Quant Report: Reviewed, Analyst Initials & Date
Chromatogram Checked, Major peaks identified
Results consistent w/ other attached analyses
Reanalysis reason noted
Substitute dilution data checked
Correct dilution and reason clear or noted
Flags checked (Expiration, F+, Over Cal, Surr, Aspen, QC)
Other QC failures or issues noted in Aspen
Correct data file and/or date/time in Aspen

12/7/23

Notes:
Reviewer Initials & Date:

#	Surrogate Standards	Conc. (ug/mL)	AnalysisDate	AnalyzedBy	Dil'n	Weight	Volume	Surr	Recovery	Flag	QC Limits
4	2-fluorophenol	37.97	11/21/2023	CL s4112123.D	1	1	1	100	**38%**		21-100
7	phenol-d6	24.54	11/21/2023	CL s4112123.D	1	1	1	100	**25%**		10-102
59	2,4,6-tribromophenol	76.05	11/21/2023	CL s4112123.D	1	1	1	100	**76%**		10-123
22	nitrobenzene-d5	33.66	11/21/2023	CL s4112124.D	1	1	1	50	**67%**		35-114
38	2-fluorobiphenyl	33.91	11/21/2023	CL s4112124.D	1	1	1	50	**68%**		43-116
75	terphenyl-d14	47.78	11/21/2023	CL s4112124.D	1	1	1	50	**96%**		33-141
6	phenol	0.00	11/21/2023	CL s4112123.D	1	1	1				
8	2-chlorophenol	0.00	11/21/2023	CL s4112123.D	1	1	1				
15	2-methylphenol	0.00	11/21/2023	CL s4112123.D	1	1	1				
15	2-methylphenol	0.00	11/21/2023	CL s4112123.D	1	1	1				
20	4-methylphenol	0.00	11/21/2023	CL s4112123.D	1	1	1				
25	2-nitrophenol	0.00	11/21/2023	CL s4112123.D	1	1	1				
26	2,4-dimethylphenol	0.00	11/21/2023	CL s4112123.D	1	1	1				
28	2,4-dichlorophenol	0.00	11/21/2023	CL s4112123.D	1	1	1				
29	2,6-dichlorophenol	0.00	11/21/2023	CL s4112123.D	1	1	1				
32	benzoic acid	0.00	11/21/2023	CL s4112123.D	1	1	1				
35	4-chloro-3-methylphenol	0.00	11/21/2023	CL s4112123.D	1	1	1				
40	2,4,6-trichlorophenol	0.00	11/21/2023	CL s4112123.D	1	1	1				
41	2,4,5-trichlorophenol	0.00	11/21/2023	CL s4112123.D	1	1	1				
51	2,4-dinitrophenol	0.00	11/21/2023	CL s4112123.D	1	1	1				
53	4-nitrophenol	0.00	11/21/2023	CL s4112123.D	1	1	1				
60	4,6-dinitro-2-methylphenol	0.00	11/21/2023	CL s4112123.D	1	1	1				
66	pentachlorophenol	0.00	11/21/2023	CL s4112123.D	1	1	1				
2	N-nitroso-dimethylamine	0.00	11/21/2023	CL s4112124.D	1	1	1				
3	pyridine	0.00	11/21/2023	CL s4112124.D	1	1	1				
5	aniline	0.00	11/21/2023	CL s4112124.D	1	1	1				
9	n-decane	0.00	11/21/2023	CL s4112124.D	1	1	1				
10	bis-(2-choroethyl)ether	0.00	11/21/2023	CL s4112124.D	1	1	1				
11	1,3-dichlorobenzene	0.00	11/21/2023	CL s4112124.D	1	1	1				
12	1,4-diclorobenzene	0.00	11/21/2023	CL s4112124.D	1	1	1				
13	1,2-dichlorobenzene	0.00	11/21/2023	CL s4112124.D	1	1	1				
14	benzyl alcohol	0.00	11/21/2023	CL s4112124.D	1	1	1				
16	2,2'-oxybis(1-chloropropane)	0.00	11/21/2023	CL s4112124.D	1	1	1				
##	acetephenone	#N/A	11/21/2023	CL s4112124.D	1	1	1			#N/A	
18	hexachloroethane	0.00	11/21/2023	CL s4112124.D	1	1	1				
19	N-nitroso-di-n-propylamine	0.00	11/21/2023	CL s4112124.D	1	1	1				
23	nitrobenzene	0.00	11/21/2023	CL s4112124.D	1	1	1				
24	isophorone	0.00	11/21/2023	CL s4112124.D	1	1	1				
27	bis(2-chloroethoxy)methane	0.00	11/21/2023	CL s4112124.D	1	1	1				
30	1,2,4-trichlorobenzene	0.22	11/21/2023	CL s4112124.D	1	1	1				
31	naphthalene	0.00	11/21/2023	CL s4112124.D	1	1	1				
33	4-chloroanaline	0.00	11/21/2023	CL s4112124.D	1	1	1				
34	hexachloro-1,3-butadiene	0.00	11/21/2023	CL s4112124.D	1	1	1				
36	2-methylnaphthalene	0.00	11/21/2023	CL s4112124.D	1	1	1				
39	hexachlorocyclopentadiene	0.00	11/21/2023	CL s4112124.D	1	1	1				
43	2-chloronaphthalene	0.00	11/21/2023	CL s4112124.D	1	1	1				
44	2-nitroanaline	0.00	11/21/2023	CL s4112124.D	1	1	1				
45	acenaphthylene	0.00	11/21/2023	CL s4112124.D	1	1	1				
46	dimethyl phthalate	0.00	11/21/2023	CL s4112124.D	1	1	1				
47	2,6-dinitrotoluene	0.00	11/21/2023	CL s4112124.D	1	1	1				
48	2,4-dinitrotoluene	0.00	11/21/2023	CL s4112124.D	1	1	1				
49	acenaphthene	0.00	11/21/2023	CL s4112124.D	1	1	1				
50	3-nitroanaline	0.00	11/21/2023	CL s4112124.D	1	1	1				
52	dibenzofuran	0.00	11/21/2023	CL s4112124.D	1	1	1				
54	fluorene	0.00	11/21/2023	CL s4112124.D	1	1	1				
55	diethyl phthalate	0.41	11/21/2023	CL s4112124.D	1	1	1				
56	4-chlorophenyl phenyl ether	0.00	11/21/2023	CL s4112124.D	1	1	1				
57	4-nitroanaline	0.00	11/21/2023	CL s4112124.D	1	1	1				
61	azobenzene	0.00	11/21/2023	CL s4112124.D	1	1	1				
62	N-nitrosodiphenylamine	0.00	11/21/2023	CL s4112124.D	1	1	1				
63	4-bromophenyl phenyl ether	0.00	11/21/2023	CL s4112124.D	1	1	1				
64	hexachlorobenzene	0.00	11/21/2023	CL s4112124.D	1	1	1				
65	n-octadecane	0.00	11/21/2023	CL s4112124.D	1	1	1				
67	phenanthrene	0.00	11/21/2023	CL s4112124.D	1	1	1				
68	anthracene	0.00	11/21/2023	CL s4112124.D	1	1	1				
70	carbazole	0.00	11/21/2023	CL s4112124.D	1	1	1				
71	di-n-butyl phthalate	0.00	11/21/2023	CL s4112124.D	1	1	1				
73	fluoranthene	0.00	11/21/2023	CL s4112124.D	1	1	1				
76	benzidine	0.00	11/21/2023	CL s4112124.D	1	1	1				
77	pyrene	0.00	11/21/2023	CL s4112124.D	1	1	1				
78	butyl benzyl phthalate	0.00	11/21/2023	CL s4112124.D	1	1	1				
79	benzo(a)anthracene	0.00	11/21/2023	CL s4112124.D	1	1	1				
80	chrysene	0.00	11/21/2023	CL s4112124.D	1	1	1				
81	3,3'-dichlorobenzidine	0.00	11/21/2023	CL s4112124.D	1	1	1				
82	bis-2-ethylhexyl phthalate	0.15	11/21/2023	CL s4112124.D	1	1	1				
84	di-n-octyl phthalate	0.00	11/21/2023	CL s4112124.D	1	1	1				
85	Benzo(b)fluoranthene	0.00	11/21/2023	CL s4112124.D	1	1	1				
86	benzo(k)fluoranthene	0.00	11/21/2023	CL s4112124.D	1	1	1				
87	benzo(a)pyrene	0.00	11/21/2023	CL s4112124.D	1	1	1				
88	indeno(1,2,3-cd)pyrene	0.00	11/21/2023	CL s4112124.D	1	1	1				
89	dibenzo(a,h)anthracene	0.00	11/21/2023	CL s4112124.D	1	1	1				
90	benzo(g,h,i)perylene	0.00	11/21/2023	CL s4112124.D	1	1	1				

Absolute Resource Associates

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Nov23\112123\
Data File : s4112123.D
Acq On : 21 Nov 2023 10:41 pm
Operator : cl
Sample : 67839-09 acid x1
Misc :
ALS Vial : 21 Sample Multiplier: 1

CL
12/5/23 @ 09:45
CharlesL

Quant Time: Nov 22 09:15:53 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration

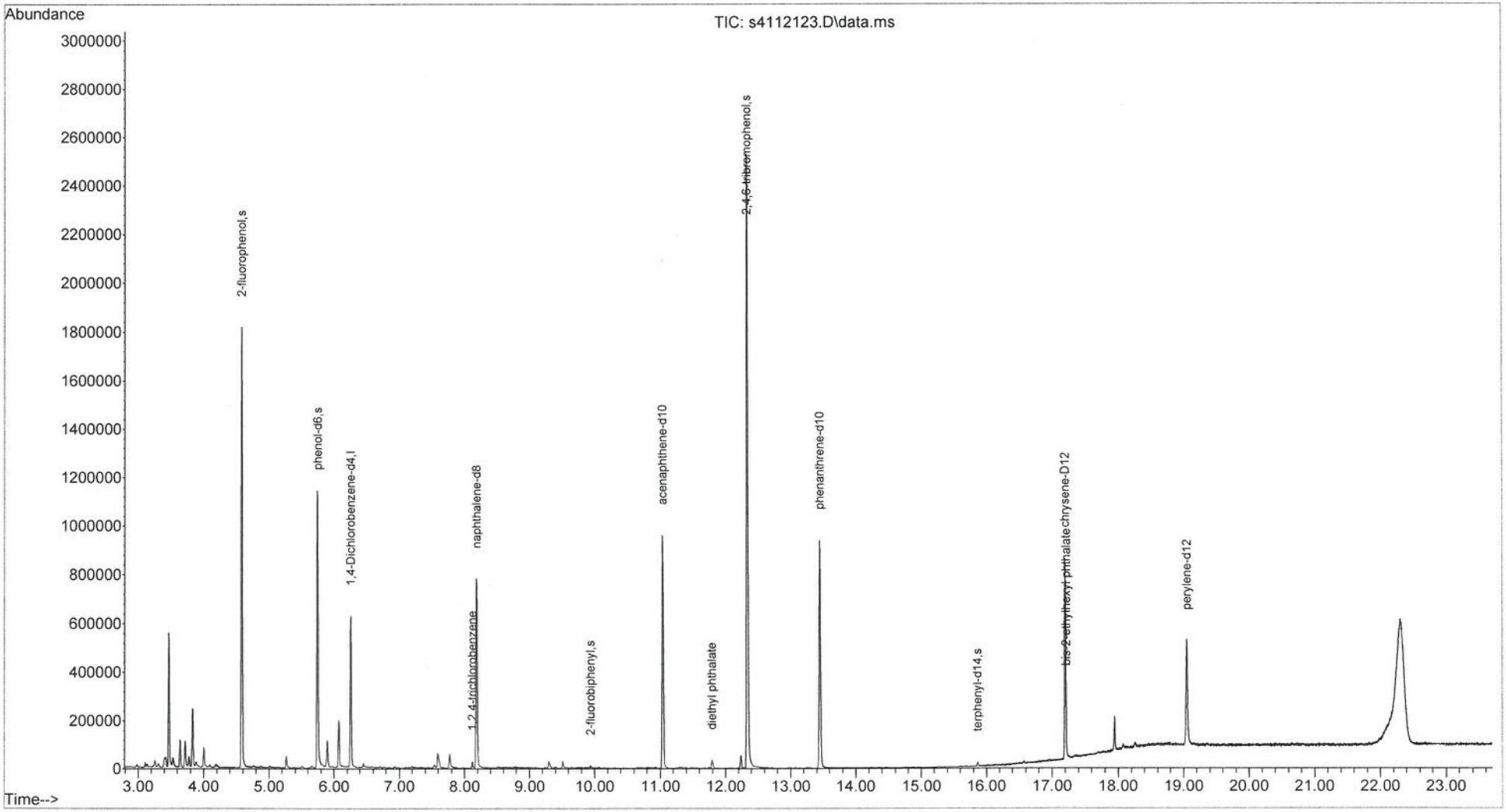
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.255	152	134161	10.00	ug/mL	0.00
21) naphthalene-d8	8.184	136	503272	10.00	ug/mL	0.00
37) acenaphthene-d10	11.038	164	274932	10.00	ug/mL	-0.01
58) phenanthrene-d10	13.449	188	503222	10.00	ug/mL	-0.01
74) chrysene-D12	17.199	240	344103	10.00	ug/mL	0.00
83) perylene-d12	19.049	264	259073	10.00	ug/mL	0.01
System Monitoring Compounds						
4) 2-fluorophenol	4.578	112	632831	37.97	ug/mL	-0.01
Spiked Amount 200.000			Recovery = 18.98%			
7) phenol-d6	5.745	99	496663	24.54	ug/mL	-0.01
Spiked Amount 200.000			Recovery = 12.27%			
22) nitrobenzene-d5	0.000	82	0	0.00	ug/mL	
Spiked Amount 100.000			Recovery = 0.00%			
38) 2-fluorobiphenyl	9.935	172	2716	0.02	ug/mL	0.00
Spiked Amount 100.000			Recovery = 0.02%			
59) 2,4,6-tribromophenol	12.335	330	466771	76.05	ug/mL	-0.01
Spiked Amount 200.000			Recovery = 38.02%			
69) o-terphenyl	0.000	230	0	0.00	ug/mL	
Spiked Amount 100.000			Recovery = 0.00%			
72) 1-Chloro-octadecane	0.000	57	0	0.00	ug/mL	
Spiked Amount 100.000			Recovery = 0.00%			
75) terphenyl-d14	15.864	244	4944	0.13	ug/mL	0.00
Spiked Amount 100.000			Recovery = 0.13%			
Target Compounds						Qvalue
30) 1,2,4-trichlorobenzene	8.118	180	7723	0.343	ug/mL#	56
55) diethyl phthalate	11.792	149	19432	0.399	ug/mL#	75
71) di-n-butyl phthalate	14.460	149	1085	Below Cal	#	78
82) bis-2-ethylhexyl phtha...	17.212	149	4375	0.162	ug/mL#	96
93) DDT	16.629	TIC	1520	Below Cal	#	22

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Nov23\112123\
Data File : s4112123.D
Acq On : 21 Nov 2023 10:41 pm
Operator : cl
Sample : 67839-09 acid x1
Misc :
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Nov 22 09:15:53 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

CL
12/5/23 @ 09:45
CharlesL

Data Path : X:\S4\2023\Nov23\112123\
Data File : s4112124.D
Acq On : 21 Nov 2023 11:10 pm
Operator : cl
Sample : 67839-09 bn x1
Misc :
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Nov 22 09:15:57 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration

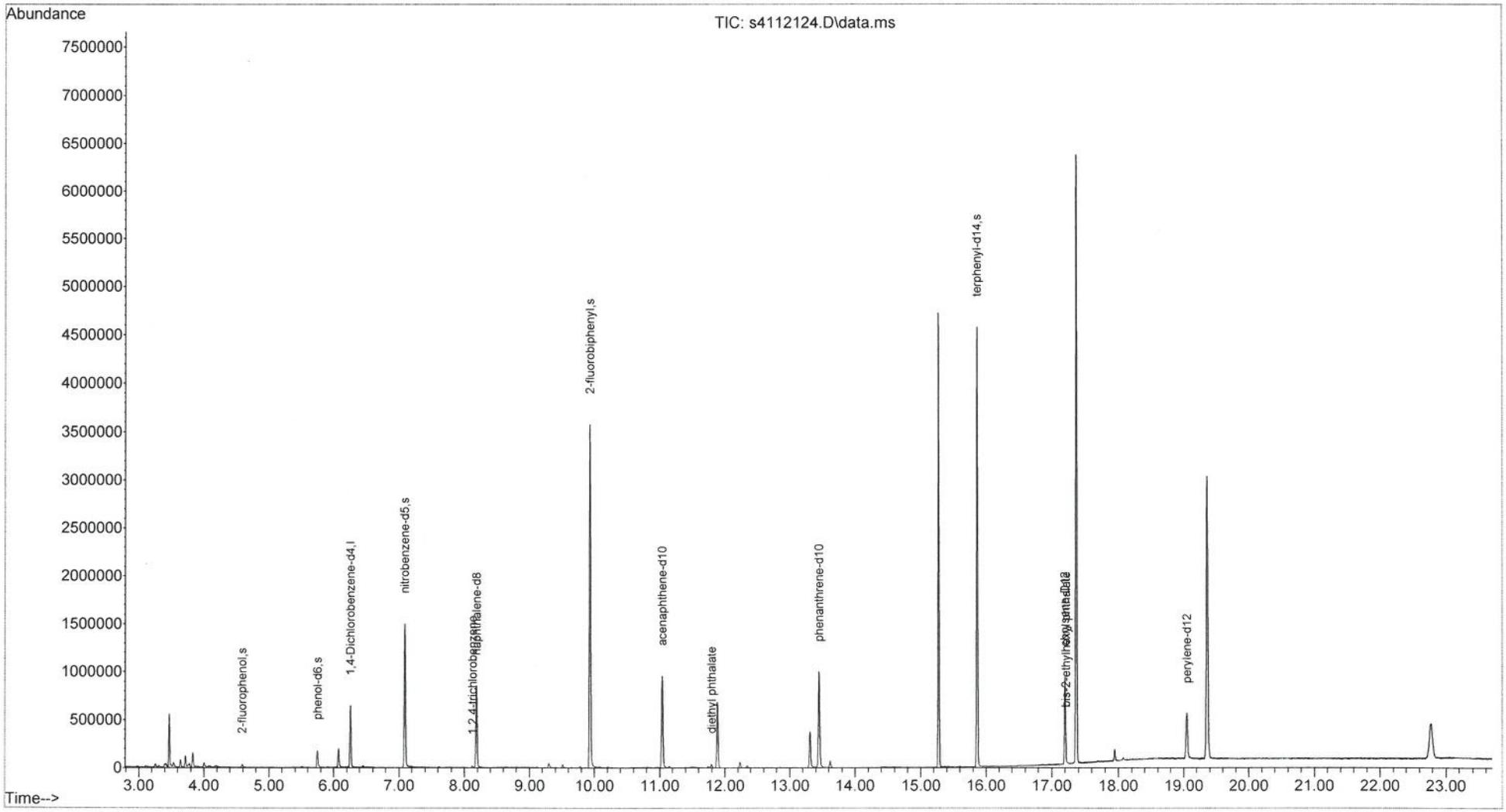
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.255	152	135438	10.00	ug/mL	0.00
21) naphthalene-d8	8.184	136	524217	10.00	ug/mL	0.00
37) acenaphthene-d10	11.040	164	287511	10.00	ug/mL	0.00
58) phenanthrene-d10	13.448	188	545229	10.00	ug/mL	-0.01
74) chrysene-D12	17.199	240	381433	10.00	ug/mL	# 0.00
83) perylene-d12	19.049	264	289616	10.00	ug/mL	0.01
System Monitoring Compounds						
4) 2-fluorophenol	4.586	112	11953	0.71	ug/mL	0.00
Spiked Amount 200.000			Recovery =	0.35%		
7) phenol-d6	5.745	99	83677	4.10	ug/mL	-0.01
Spiked Amount 200.000			Recovery =	2.05%		
22) nitrobenzene-d5	7.088	82	619402	33.66	ug/mL	-0.01
Spiked Amount 100.000			Recovery =	33.66%		
38) 2-fluorobiphenyl	9.932	172	1533593	33.91	ug/mL	0.00
Spiked Amount 100.000			Recovery =	33.91%		
59) 2,4,6-tribromophenol	0.000	330	0	0.00	ug/mL	
Spiked Amount 200.000			Recovery =	0.00%		
69) o-terphenyl	0.000	230	0	0.00	ug/mL	
Spiked Amount 100.000			Recovery =	0.00%		
72) 1-Chloro-octadecane	0.000	57	0	0.00	ug/mL	
Spiked Amount 100.000			Recovery =	0.00%		
75) terphenyl-d14	15.864	244	1967603	47.78	ug/mL	0.00
Spiked Amount 100.000			Recovery =	47.78%		
Target Compounds						Qvalue
30) 1,2,4-trichlorobenzene	8.123	180	5834	0.223	ug/mL#	86
42) 1,1'-Biphenyl	10.082	154	3441	Below Cal	#	40
55) diethyl phthalate	11.797	149	20709m	BC 0.408	ug/mL	
71) di-n-butyl phthalate	14.463	149	915	Below Cal	#	78
82) bis-2-ethylhexyl phtha...	17.212	149	4270	0.146	ug/mL#	54
93) DDT	16.641	TIC	1945	Below Cal	#	22

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Nov23\112123\
Data File : s4112124.D
Acq On : 21 Nov 2023 11:10 pm
Operator : cl
Sample : 67839-09 bn x1
Misc :
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Nov 22 09:15:57 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration



This File:	L:\SVOA\Excel Reports\ABN\231206\67839-010		Charles Leahy L:\SVOA\ABN\ABN 8270DoD ImportFileBuilde
Analysis Group:	ABN	Dow Salvage Yard	12/6/23 11:08 AM
Field ID:	/-BRMW1-65-75-110923	CRE	L:\SVOA\ABN\
Sample:	67839-10 acid x1	67839-10 bn x1	L:\SVOA\Excel Reports\ABN\231206\
Misc:			L:\SVOA\PDFReports\
DataFile:	125.D\S4ABN110223A.XLS	4ABN110223A.XLS	
Import File Name	S4 ABN 17145 DoD		
TestGroupID	E8270DoD_A		
Aqueous or Soil? (A or S)	A		
Prep Date	11/15/2023		
Lab#:	67839-010		
QC_Code:			
Prep#	17145		

Reviewer Checks:

Quant Report: Reviewed, Analyst Initials & Date

Chromatogram Checked, Major peaks identified
Results consistent w/ other attached analyses
Reanalysis reason noted

Substitute dilution data checked
Correct dilution and reason clear or noted
Flags checked (Expiration, F+, Over Cal, Surr, Aspen, QC)
Other QC failures or issues noted in Aspen
Correct data file and/or date/time in Aspen

12/7/23

Notes:
Reviewer Initials & Date:

#	Surrogate Standards	Conc. (ug/mL)	AnalysisDate	AnalyzedBy		Dil'n	Weight	Volume	Surr	Recovery	Flag	QC Limits
4	2-fluorophenol	28.67	11/21/2023	CL	s4112125.D	1	1	1	100	**29%**		21-100
7	phenol-d6	17.43	11/21/2023	CL	s4112125.D	1	1	1	100	**17%**		10-102
59	2,4,6-tribromophenol	60.83	11/21/2023	CL	s4112125.D	1	1	1	100	**61%**		10-123
22	nitrobenzene-d5	34.33	11/22/2023	CL	s4112126.D	1	1	1	50	**69%**		35-114
38	2-fluorobiphenyl	32.68	11/22/2023	CL	s4112126.D	1	1	1	50	**65%**		43-116
75	terphenyl-d14	42.66	11/22/2023	CL	s4112126.D	1	1	1	50	**85%**		33-141
6	phenol	0.00	11/21/2023	CL	s4112125.D	1	1	1				
8	2-chlorophenol	0.00	11/21/2023	CL	s4112125.D	1	1	1				
15	2-methylphenol	0.00	11/21/2023	CL	s4112125.D	1	1	1				
15	2-methylphenol	0.00	11/21/2023	CL	s4112125.D	1	1	1				
20	4-methylphenol	0.00	11/21/2023	CL	s4112125.D	1	1	1				
25	2-nitrophenol	0.00	11/21/2023	CL	s4112125.D	1	1	1				
26	2,4-dimethylphenol	0.00	11/21/2023	CL	s4112125.D	1	1	1				
28	2,4-dichlorophenol	0.00	11/21/2023	CL	s4112125.D	1	1	1				
29	2,6-dichlorophenol	0.00	11/21/2023	CL	s4112125.D	1	1	1				
32	benzoic acid	0.00	11/21/2023	CL	s4112125.D	1	1	1				
35	4-chloro-3-methylphenol	0.00	11/21/2023	CL	s4112125.D	1	1	1				
40	2,4,6-trichlorophenol	0.00	11/21/2023	CL	s4112125.D	1	1	1				
41	2,4,5-trichlorophenol	0.00	11/21/2023	CL	s4112125.D	1	1	1				
51	2,4-dinitrophenol	0.00	11/21/2023	CL	s4112125.D	1	1	1				
53	4-nitrophenol	0.00	11/21/2023	CL	s4112125.D	1	1	1				
60	4,6-dinitro-2-methylphenol	0.00	11/21/2023	CL	s4112125.D	1	1	1				
66	pentachlorophenol	0.00	11/21/2023	CL	s4112125.D	1	1	1				
2	N-nitroso-dimethylamine	0.00	11/22/2023	CL	s4112126.D	1	1	1				
3	pyridine	0.00	11/22/2023	CL	s4112126.D	1	1	1				
5	aniline	0.00	11/22/2023	CL	s4112126.D	1	1	1				
9	n-decane	0.00	11/22/2023	CL	s4112126.D	1	1	1				
10	bis-(2-choroethyl)ether	0.00	11/22/2023	CL	s4112126.D	1	1	1				
11	1,3-dichlorobenzene	0.00	11/22/2023	CL	s4112126.D	1	1	1				
12	1,4-diclorobenzene	0.00	11/22/2023	CL	s4112126.D	1	1	1				
13	1,2-dichlorobenzene	0.00	11/22/2023	CL	s4112126.D	1	1	1				
14	benzyl alcohol	0.00	11/22/2023	CL	s4112126.D	1	1	1				
16	2,2'-oxybis(1-chloropropane)	0.00	11/22/2023	CL	s4112126.D	1	1	1				
##	acetephenone	#N/A	11/22/2023	CL	s4112126.D	1	1	1			#N/A	
18	hexachloroethane	0.00	11/22/2023	CL	s4112126.D	1	1	1				
19	N-nitroso-di-n-propylamine	0.00	11/22/2023	CL	s4112126.D	1	1	1				
23	nitrobenzene	0.00	11/22/2023	CL	s4112126.D	1	1	1				
24	isophorone	0.11	11/22/2023	CL	s4112126.D	1	1	1				
27	bis(2-chloroethoxy)methane	0.00	11/22/2023	CL	s4112126.D	1	1	1				
30	1,2,4-trichlorobenzene	0.27	11/22/2023	CL	s4112126.D	1	1	1				
31	naphthalene	0.00	11/22/2023	CL	s4112126.D	1	1	1				
33	4-chloroanaline	0.00	11/22/2023	CL	s4112126.D	1	1	1				
34	hexachloro-1,3-butadiene	0.00	11/22/2023	CL	s4112126.D	1	1	1				
36	2-methylnaphthalene	0.00	11/22/2023	CL	s4112126.D	1	1	1				
39	hexachlorocyclopentadiene	0.00	11/22/2023	CL	s4112126.D	1	1	1				
43	2-chloronaphthalene	0.00	11/22/2023	CL	s4112126.D	1	1	1				
44	2-nitroanaline	0.00	11/22/2023	CL	s4112126.D	1	1	1				
45	acenaphthylene	0.00	11/22/2023	CL	s4112126.D	1	1	1				
46	dimethyl phthalate	0.00	11/22/2023	CL	s4112126.D	1	1	1				
47	2,6-dinitrotoluene	0.00	11/22/2023	CL	s4112126.D	1	1	1				
48	2,4-dinitrotoluene	0.00	11/22/2023	CL	s4112126.D	1	1	1				
49	acenaphthene	0.00	11/22/2023	CL	s4112126.D	1	1	1				
50	3-nitroanaline	0.00	11/22/2023	CL	s4112126.D	1	1	1				
52	dibenzofuran	0.00	11/22/2023	CL	s4112126.D	1	1	1				
54	fluorene	0.00	11/22/2023	CL	s4112126.D	1	1	1				
55	diethyl phthalate	0.54	11/22/2023	CL	s4112126.D	1	1	1				
56	4-chlorophenyl phenyl ether	0.00	11/22/2023	CL	s4112126.D	1	1	1				
57	4-nitroanaline	0.00	11/22/2023	CL	s4112126.D	1	1	1				
61	azobenzene	0.00	11/22/2023	CL	s4112126.D	1	1	1				
62	N-nitrosodiphenylamine	0.00	11/22/2023	CL	s4112126.D	1	1	1				
63	4-bromophenyl phenyl ether	0.00	11/22/2023	CL	s4112126.D	1	1	1				
64	hexachlorobenzene	0.00	11/22/2023	CL	s4112126.D	1	1	1				
65	n-octadecane	0.00	11/22/2023	CL	s4112126.D	1	1	1				
67	phenanthrene	0.00	11/22/2023	CL	s4112126.D	1	1	1				
68	anthracene	0.00	11/22/2023	CL	s4112126.D	1	1	1				
70	carbazole	0.00	11/22/2023	CL	s4112126.D	1	1	1				
71	di-n-butyl phthalate	0.03	11/22/2023	CL	s4112126.D	1	1	1				
73	fluoranthene	0.00	11/22/2023	CL	s4112126.D	1	1	1				
76	benzidine	0.00	11/22/2023	CL	s4112126.D	1	1	1				
77	pyrene	0.00	11/22/2023	CL	s4112126.D	1	1	1				
78	butyl benzyl phthalate	0.00	11/22/2023	CL	s4112126.D	1	1	1				
79	benzo(a)anthracene	0.00	11/22/2023	CL	s4112126.D	1	1	1				
80	chrysene	0.00	11/22/2023	CL	s4112126.D	1	1	1				
81	3,3'-dichlorobenzidine	0.00	11/22/2023	CL	s4112126.D	1	1	1				
82	bis-2-ethylhexyl phthalate	~~124.22~~ *	11/22/2023	CL	s4112126.D	1	1	1				
84	di-n-octyl phthalate	0.00	11/22/2023	CL	s4112126.D	1	1	1				
85	Benzo(b)fluoranthene	0.00	11/22/2023	CL	s4112126.D	1	1	1				
86	benzo(k)fluoranthene	0.00	11/22/2023	CL	s4112126.D	1	1	1				
87	benzo(a)pyrene	0.00	11/22/2023	CL	s4112126.D	1	1	1				
88	indeno(1,2,3-cd)pyrene	0.00	11/22/2023	CL	s4112126.D	1	1	1				
89	dibenzo(a,h)anthracene	0.00	11/22/2023	CL	s4112126.D	1	1	1				
90	benzo(g,h,i)perylene	0.00	11/22/2023	CL	s4112126.D	1	1	1				

* MAY NEED TO REPORT THIS WITH E-FLAG IF IT CAUSES SEDD ISSUES

OverCal?

12/7/23

This File: **L:\SVOA\Excel Reports\ABN\231206\67839-010**
Analysis Group: **ABN** **Dow Salvage Yard**
Field ID: **SS-BRMW1-65-75-110923** **CRE**
Sample: **67839-10 acid x1** **67839-10 bn x5**
Misc:
DataFile: 125.D\S4ABN110223A.XLS 4ABN110223A.XLS
Import File Name **S4 ABN 17145 DoD**
TestGroupID **E8270DoD_A**
Aqueous or Soil? (A or S) **A**
Prep Date **11/15/2023**
Lab#: **67839-010**
QC_Code:
Prep# **17145**

Charles Leahy L:\SVOA\ABN\ABN 8270DoD ImportFileBuilde
12/6/23 11:09 AM
L:\SVOA\ABN\
L:\SVOA\Excel Reports\ABN\231206\
L:\SVOA\PDFReports\

Reviewer Checks:

Quant Report: Reviewed, Analyst Initials & Date
Chromatogram Checked, Major peaks identified
Results consistent w/ other attached analyses
Reanalysis reason noted
Substitute dilution data checked
Correct dilution and reason clear or noted
Flags checked (Expiration, F+, Over Cal, Surr, Aspen, QC)
Other QC failures or issues noted in Aspen
Correct data file and/or date/time in Aspen

Notes:
Reviewer Initials & Date: 12/7/23

#	Surrogate Standards	Conc. (ug/mL)	AnalysisDate	AnalyzedBy		Dil'n	Weight	Volume	Surr	Recovery	Flag	QC Limits
4	2-fluorophenol	28.67	11/21/2023	CL	s4112125.D	1	1	1	100	**29%**		21-100
7	phenol-d6	17.43	11/21/2023	CL	s4112125.D	1	1	1	100	**17%**		10-102
59	2,4,6-tribromophenol	60.83	11/21/2023	CL	s4112125.D	1	1	1	100	**61%**		10-123
22	nitrobenzene-d5	6.25	12/01/2023	CL	s4120114.D	5	1	1	50	**63%**		35-114
38	2-fluorobiphenyl	6.88	12/01/2023	CL	s4120114.D	5	1	1	50	**69%**		43-116
75	terphenyl-d14	8.41	12/01/2023	CL	s4120114.D	5	1	1	50	**84%**		33-141
6	phenol	0.00	11/21/2023	CL	s4112125.D	1	1	1				
8	2-chlorophenol	0.00	11/21/2023	CL	s4112125.D	1	1	1				
15	2-methylphenol	0.00	11/21/2023	CL	s4112125.D	1	1	1				
15	2-methylphenol	0.00	11/21/2023	CL	s4112125.D	1	1	1				
20	4-methylphenol	0.00	11/21/2023	CL	s4112125.D	1	1	1				
25	2-nitrophenol	0.00	11/21/2023	CL	s4112125.D	1	1	1				
26	2,4-dimethylphenol	0.00	11/21/2023	CL	s4112125.D	1	1	1				
28	2,4-dichlorophenol	0.00	11/21/2023	CL	s4112125.D	1	1	1				
29	2,6-dichlorophenol	0.00	11/21/2023	CL	s4112125.D	1	1	1				
32	benzoic acid	0.00	11/21/2023	CL	s4112125.D	1	1	1				
35	4-chloro-3-methylphenol	0.00	11/21/2023	CL	s4112125.D	1	1	1				
40	2,4,6-trichlorophenol	0.00	11/21/2023	CL	s4112125.D	1	1	1				
41	2,4,5-trichlorophenol	0.00	11/21/2023	CL	s4112125.D	1	1	1				
51	2,4-dinitrophenol	0.00	11/21/2023	CL	s4112125.D	1	1	1				
53	4-nitrophenol	0.00	11/21/2023	CL	s4112125.D	1	1	1				
60	4,6-dinitro-2-methylphenol	0.00	11/21/2023	CL	s4112125.D	1	1	1				
66	pentachlorophenol	0.00	11/21/2023	CL	s4112125.D	1	1	1				
2	N-nitroso-dimethylamine	0.00	12/01/2023	CL	s4120114.D	5	1	1				
3	pyridine	0.00	12/01/2023	CL	s4120114.D	5	1	1				
5	aniline	0.00	12/01/2023	CL	s4120114.D	5	1	1				
9	n-decane	0.00	12/01/2023	CL	s4120114.D	5	1	1				
10	bis-(2-choroethyl)ether	0.00	12/01/2023	CL	s4120114.D	5	1	1				
11	1,3-dichlorobenzene	0.00	12/01/2023	CL	s4120114.D	5	1	1				
12	1,4-diclorobenzene	0.00	12/01/2023	CL	s4120114.D	5	1	1				
13	1,2-dichlorobenzene	0.00	12/01/2023	CL	s4120114.D	5	1	1				
14	benzyl alcohol	0.00	12/01/2023	CL	s4120114.D	5	1	1				
16	2,2'-oxybis(1-chloropropane)	0.00	12/01/2023	CL	s4120114.D	5	1	1				
##	acetephenone	#N/A	12/01/2023	CL	s4120114.D	5	1	1			#N/A	
18	hexachloroethane	0.00	12/01/2023	CL	s4120114.D	5	1	1				
19	N-nitroso-di-n-propylamine	0.00	12/01/2023	CL	s4120114.D	5	1	1				
23	nitrobenzene	0.00	12/01/2023	CL	s4120114.D	5	1	1				
24	isophorone	0.00	12/01/2023	CL	s4120114.D	5	1	1				
27	bis(2-chloroethoxy)methane	0.00	12/01/2023	CL	s4120114.D	5	1	1				
30	1,2,4-trichlorobenzene	0.00	12/01/2023	CL	s4120114.D	5	1	1				
31	naphthalene	0.00	12/01/2023	CL	s4120114.D	5	1	1				
33	4-chloroanaline	0.00	12/01/2023	CL	s4120114.D	5	1	1				
34	hexachloro-1,3-butadiene	0.00	12/01/2023	CL	s4120114.D	5	1	1				
36	2-methylnaphthalene	0.00	12/01/2023	CL	s4120114.D	5	1	1				
39	hexachlorocyclopentadiene	0.00	12/01/2023	CL	s4120114.D	5	1	1				
43	2-chloronaphthalene	0.00	12/01/2023	CL	s4120114.D	5	1	1				
44	2-nitroanaline	0.00	12/01/2023	CL	s4120114.D	5	1	1				
45	acenaphthylene	0.00	12/01/2023	CL	s4120114.D	5	1	1				
46	dimethyl phthalate	0.00	12/01/2023	CL	s4120114.D	5	1	1				
47	2,6-dinitrotoluene	0.00	12/01/2023	CL	s4120114.D	5	1	1				
48	2,4-dinitrotoluene	0.00	12/01/2023	CL	s4120114.D	5	1	1				
49	acenaphthene	0.00	12/01/2023	CL	s4120114.D	5	1	1				
50	3-nitroanaline	0.00	12/01/2023	CL	s4120114.D	5	1	1				
52	dibenzofuran	0.00	12/01/2023	CL	s4120114.D	5	1	1				
54	fluorene	0.00	12/01/2023	CL	s4120114.D	5	1	1				
55	diethyl phthalate	0.02	12/01/2023	CL	s4120114.D	5	1	1				
56	4-chlorophenyl phenyl ether	0.00	12/01/2023	CL	s4120114.D	5	1	1				
57	4-nitroanaline	0.00	12/01/2023	CL	s4120114.D	5	1	1				
61	azobenzene	0.00	12/01/2023	CL	s4120114.D	5	1	1				
62	N-nitrosodiphenylamine	0.00	12/01/2023	CL	s4120114.D	5	1	1				
63	4-bromophenyl phenyl ether	0.00	12/01/2023	CL	s4120114.D	5	1	1				
64	hexachlorobenzene	0.00	12/01/2023	CL	s4120114.D	5	1	1				
65	n-octadecane	0.00	12/01/2023	CL	s4120114.D	5	1	1				
67	phenanthrene	0.00	12/01/2023	CL	s4120114.D	5	1	1				
68	anthracene	0.00	12/01/2023	CL	s4120114.D	5	1	1				
70	carbazole	0.00	12/01/2023	CL	s4120114.D	5	1	1				
71	di-n-butyl phthalate	0.00	12/01/2023	CL	s4120114.D	5	1	1				
73	fluoranthene	0.00	12/01/2023	CL	s4120114.D	5	1	1				
76	benzidine	0.00	12/01/2023	CL	s4120114.D	5	1	1				
77	pyrene	0.00	12/01/2023	CL	s4120114.D	5	1	1				
78	butyl benzyl phthalate	0.00	12/01/2023	CL	s4120114.D	5	1	1				
79	benzo(a)anthracene	0.00	12/01/2023	CL	s4120114.D	5	1	1				
80	chrysene	0.00	12/01/2023	CL	s4120114.D	5	1	1				
81	3,3'-dichlorobenzidine	0.00	12/01/2023	CL	s4120114.D	5	1	1				
82	bis-2-ethylhexyl phthalate	**23.83**	12/01/2023	CL	s4120114.D	5	1	1				
84	di-n-octyl phthalate	0.17	12/01/2023	CL	s4120114.D	5	1	1				
85	Benzo(b)fluoranthene	0.00	12/01/2023	CL	s4120114.D	5	1	1				
86	benzo(k)fluoranthene	0.00	12/01/2023	CL	s4120114.D	5	1	1				
87	benzo(a)pyrene	0.00	12/01/2023	CL	s4120114.D	5	1	1				
88	indeno(1,2,3-cd)pyrene	0.00	12/01/2023	CL	s4120114.D	5	1	1				
89	dibenzo(a,h)anthracene	0.00	12/01/2023	CL	s4120114.D	5	1	1				
90	benzo(g,h,i)perylene	0.00	12/01/2023	CL	s4120114.D	5	1	1				

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Nov23\112123\
Data File : s4112125.D
Acq On : 21 Nov 2023 11:40 pm
Operator : cl
Sample : 67839-10 acid x1
Misc :
ALS Vial : 23 Sample Multiplier: 1

CL
12/5/23 @ 09:46
CharlesL

Quant Time: Nov 22 09:16:01 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration

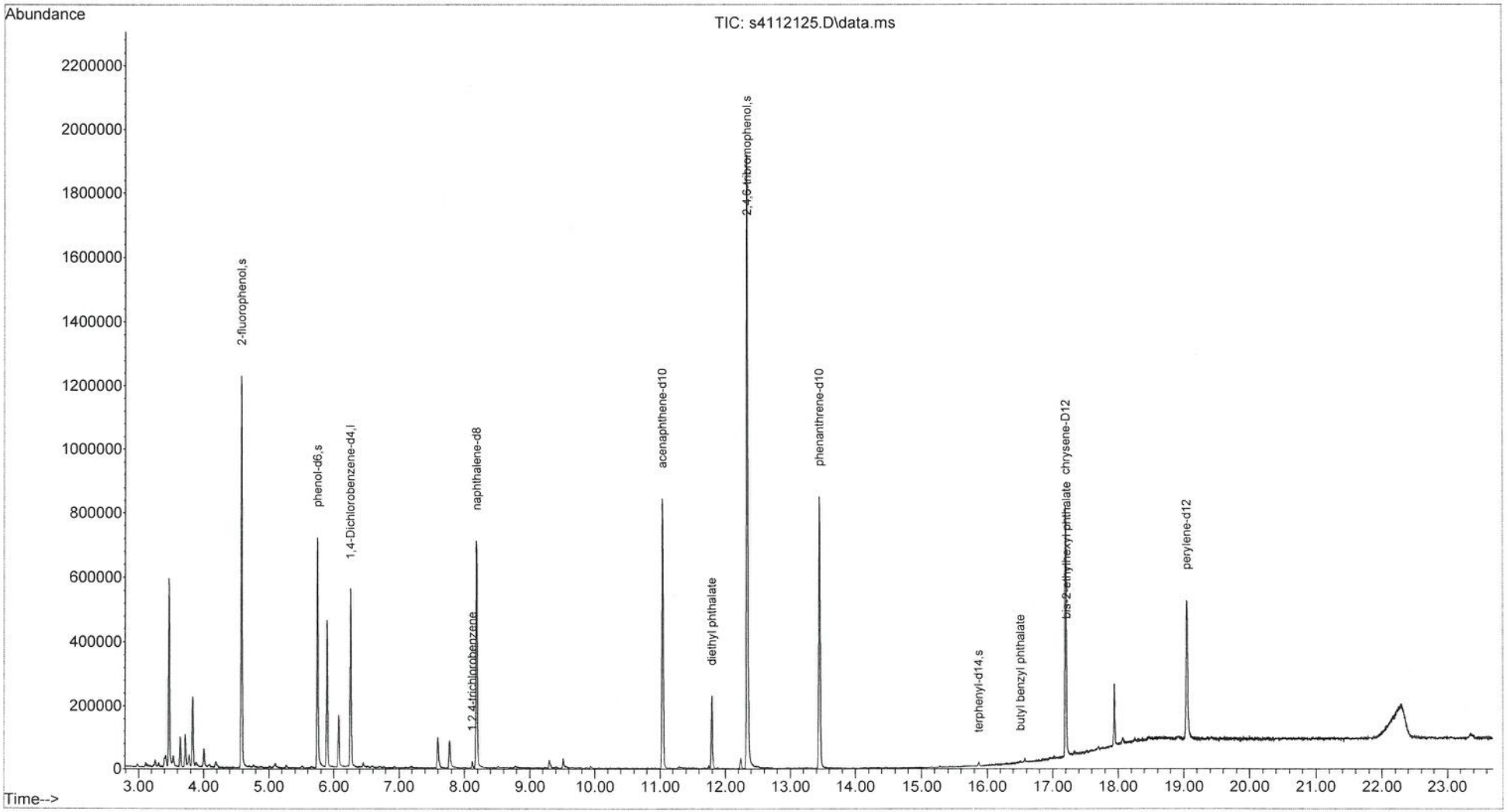
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.253	152	121506	10.00	ug/mL	-0.01
21) naphthalene-d8	8.184	136	459999	10.00	ug/mL	0.00
37) acenaphthene-d10	11.038	164	255837	10.00	ug/mL	-0.01
58) phenanthrene-d10	13.448	188	487092	10.00	ug/mL	-0.01
74) chrysene-D12	17.202	240	342196	10.00	ug/mL	0.00
83) perylene-d12	19.044	264	269977	10.00	ug/mL	0.00
System Monitoring Compounds						
4) 2-fluorophenol	4.578	112	432672	28.67	ug/mL	-0.01
Spiked Amount 200.000			Recovery =	14.34%		
7) phenol-d6	5.743	99	319514	17.43	ug/mL	-0.01
Spiked Amount 200.000			Recovery =	8.71%		
22) nitrobenzene-d5	0.000	82	0	0.00	ug/mL	
Spiked Amount 100.000			Recovery =	0.00%		
38) 2-fluorobiphenyl	9.930	172	1285	-0.01	ug/mL	-0.01
Spiked Amount 100.000			Recovery =	-0.01%		
59) 2,4,6-tribromophenol	12.337	330	361299	60.83	ug/mL	0.00
Spiked Amount 200.000			Recovery =	30.41%		
69) o-terphenyl	0.000	230	0	0.00	ug/mL	
Spiked Amount 100.000			Recovery =	0.00%		
72) 1-Chloro-octadecane	0.000	57	0	0.00	ug/mL	
Spiked Amount 100.000			Recovery =	0.00%		
75) terphenyl-d14	15.867	244	5216	0.13	ug/mL	0.00
Spiked Amount 100.000			Recovery =	0.13%		
Target Compounds						Qvalue
30) 1,2,4-trichlorobenzene	8.118	180	5457	0.244	ug/mL#	93
55) diethyl phthalate	11.795	149	122435	3.166	ug/mL	99
78) butyl benzyl phthalate	16.504	149	1371	0.073	ug/mL#	26
79) benzo(a)anthracene	17.197	228	999	Below Cal	#	51
80) chrysene	17.197	228	999	Below Cal	#	49
82) bis-2-ethylhexyl phtha...	17.212	149	23168	0.712	ug/mL#	98
93) DDT	16.636	TIC	1246	Below Cal	#	22

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Nov23\112123\
Data File : s4112125.D
Acq On : 21 Nov 2023 11:40 pm
Operator : cl
Sample : 67839-10 acid x1
Misc :
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Nov 22 09:16:01 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Nov23\112123\
Data File : s4112126.D
Acq On : 22 Nov 2023 12:10 am
Operator : cl
Sample : 67839-10 bn x1
Misc :
ALS Vial : 24 Sample Multiplier: 1

CL
12/5/23 @ 09:46
CharlesL

Quant Time: Nov 22 09:16:05 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration

RR x5

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.255	152	122014	10.00	ug/mL	0.00
21) naphthalene-d8	8.184	136	466872	10.00	ug/mL	0.00
37) acenaphthene-d10	11.038	164	257756	10.00	ug/mL	0.00
58) phenanthrene-d10	13.449	188	498825	10.00	ug/mL	#-0.01
74) chrysene-D12	17.200	240	396592	10.00	ug/mL	0.00
83) perylene-d12	19.044	264	297965	10.00	ug/mL	0.00
System Monitoring Compounds						
4) 2-fluorophenol	4.584	112	27367	1.81	ug/mL	0.00
Spiked Amount 200.000			Recovery = 0.91%			
7) phenol-d6	5.743	99	200746	10.91	ug/mL	-0.01
Spiked Amount 200.000			Recovery = 5.46%			
22) nitrobenzene-d5	7.089	82	562666	34.33	ug/mL	-0.01
Spiked Amount 100.000			Recovery = 34.33%			
38) 2-fluorobiphenyl	9.930	172	1325376	32.68	ug/mL	-0.01
Spiked Amount 100.000			Recovery = 32.68%			
59) 2,4,6-tribromophenol	12.338	330	10992	1.89	ug/mL	0.00
Spiked Amount 200.000			Recovery = 0.95%			
69) o-terphenyl	0.000	230	0	0.00	ug/mL	
Spiked Amount 100.000			Recovery = 0.00%			
72) 1-Chloro-octadecane	15.862	57	1022	0.00	ug/mL	0.03
Spiked Amount 100.000			Recovery = 0.00%			
75) terphenyl-d14	15.864	244	1826559	42.66	ug/mL	0.00
Spiked Amount 100.000			Recovery = 42.66%			
Target Compounds						Qvalue
24) isophorone	7.463	82	4287	0.109	ug/mL#	63
30) 1,2,4-trichlorobenzene	8.121	180	5956m	BC 0.270	ug/mL	
42) 1,1'-Biphenyl	10.078	154	3000m	BC Below Cal		
55) diethyl phthalate	11.795	149	23596	0.541	ug/mL	98
71) di-n-butyl phthalate	14.463	149	3250	0.034	ug/mL#	78
82) bis-2-ethylhexyl phtha...	17.215	149	4922611	124.218	ug/mL	99
93) DDT	16.636	TIC	824	0.126	ug/mL#	22

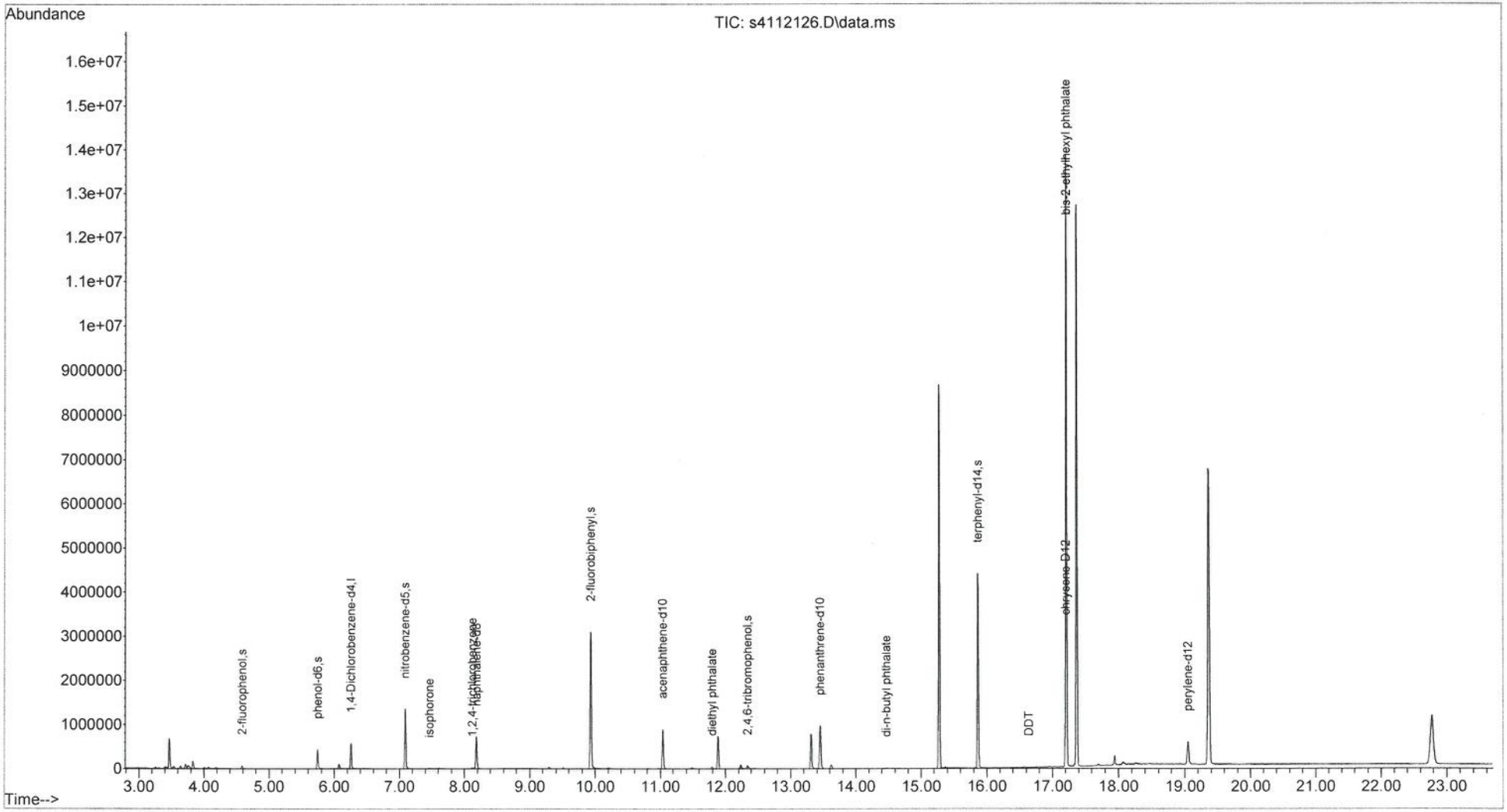
Over - cal

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Nov23\112123\
Data File : s4112126.D
Acq On : 22 Nov 2023 12:10 am
Operator : cl
Sample : 67839-10 bn x1
Misc :
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Nov 22 09:16:05 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Dec23\120123\
Data File : s4120114.D
Acq On : 01 Dec 2023 03:48 pm
Operator : cl
Sample : 67839-10 bn x5
Misc :
ALS Vial : 14 Sample Multiplier: 1

CL
12/5/23 @ 10:34
CharlesL

Quant Time: Dec 01 16:31:19 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.255	152	123194	10.00	ug/mL	0.00
21) naphthalene-d8	8.184	136	429506	10.00	ug/mL	0.00
37) acenaphthene-d10	11.041	164	214701	10.00	ug/mL	0.00
58) phenanthrene-d10	13.451	188	365398	10.00	ug/mL	0.00
74) chrysene-D12	17.205	240	265551	10.00	ug/mL	0.00
83) perylene-d12	19.055	264	269576	10.00	ug/mL	0.02
System Monitoring Compounds						
4) 2-fluorophenol	4.599	112	1779	0.12	ug/mL	0.00
Spiked Amount 200.000			Recovery =	0.06%		
7) phenol-d6	5.751	99	16792	0.91	ug/mL	0.00
Spiked Amount 200.000			Recovery =	0.46%		
22) nitrobenzene-d5	7.091	82	94442	6.25	ug/mL	-0.01
Spiked Amount 100.000			Recovery =	6.25%		
38) 2-fluorobiphenyl	9.932	172	233463	6.88	ug/mL	0.00
Spiked Amount 100.000			Recovery =	6.88%		
59) 2,4,6-tribromophenol	0.000	330	0	0.00	ug/mL	
Spiked Amount 200.000			Recovery =	0.00%		
69) o-terphenyl	0.000	230	0	0.00	ug/mL	
Spiked Amount 100.000			Recovery =	0.00%		
72) 1-Chloro-octadecane	0.000	57	0	0.00	ug/mL	
Spiked Amount 100.000			Recovery =	0.00%		
75) terphenyl-d14	15.869	244	241267	8.41	ug/mL	0.00
Spiked Amount 100.000			Recovery =	8.41%		
Target Compounds						Qvalue
30) 1,2,4-trichlorobenzene	8.118	180	834	Below Cal	#	3
55) diethyl phthalate	11.795	149	3279	0.023	ug/mL#	59
82) bis-2-ethylhexyl phtha...	17.217	149	631456	23.825	ug/mL	100
84) di-n-octyl phthalate	17.946	149	4420	0.170	ug/mL#	71
93) DDT	16.634	TIC	1902	Below Cal	#	22

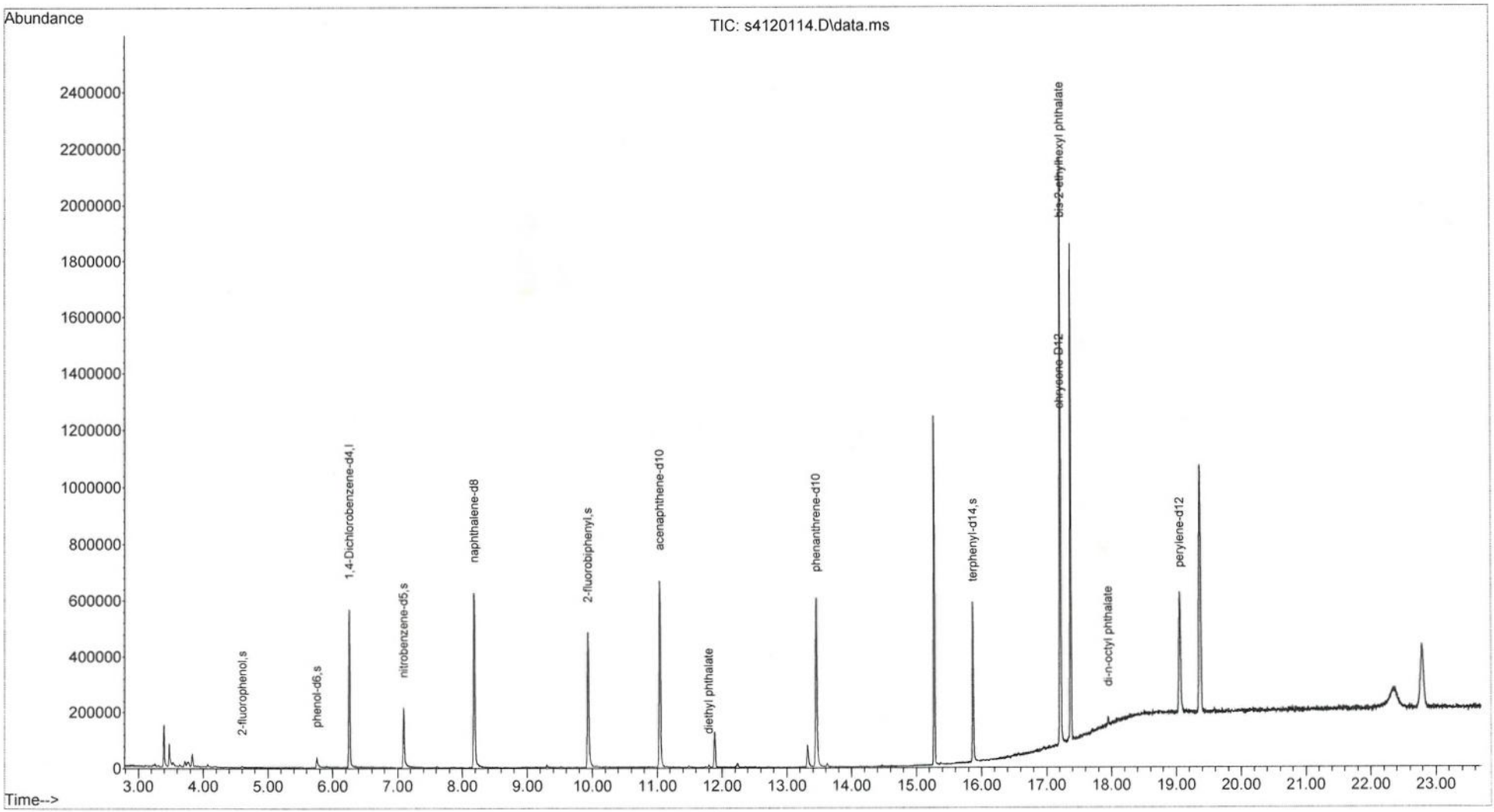
Sub - in

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Dec23\120123\
Data File : s4120114.D
Acq On : 01 Dec 2023 03:48 pm
Operator : cl
Sample : 67839-10 bn x5
Misc :
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Dec 01 16:31:19 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration



This File: **L:\SVOA\Excel Reports\ABN\231206\67839-011**
Analysis Group: **ABN** **Dow Salvage Yard**
Field ID: **BRMW10-65-75-110923** **CRE**
Sample: **67839-11 acid x1** **67839-11 bn x1**
Misc:
DataFile: 127.D\S4ABN110223A.XLS 4ABN110223A.XLS
Import File Name **S4 ABN 17145 DoD**
TestGroupID **E8270DoD_A**
Aqueous or Soil? (A or S) **A**
Prep Date **11/15/2023**
Lab#: **67839-011**
QC_Code:
Prep# **17145**

Charles Leahy L:\SVOA\ABN\ABN 8270DoD ImportFileBuilde
12/6/23 11:11 AM
L:\SVOA\ABN\
L:\SVOA\Excel Reports\ABN\231206\
L:\SVOA\PDFReports\

Reviewer Checks:

Quant Report: Reviewed, Analyst Initials & Date
Chromatogram Checked, Major peaks identified
Results consistent w/ other attached analyses
Reanalysis reason noted
Substitute dilution data checked
Correct dilution and reason clear or noted
Flags checked (Expiration, F+, Over Cal, Surr, Aspen, QC)
Other QC failures or issues noted in Aspen
Correct data file and/or date/time in Aspen

12/7/23

Notes:
Reviewer Initials & Date:

#	Surrogate Standards	Conc. (ug/mL)	AnalysisDate	AnalyzedBy	Dil'n	Weight	Volume	Surr	Recovery	Flag	QC Limits
4	2-fluorophenol	33.21	11/22/2023	CL s4112127.D	1	1	1	100	**33%**		21-100
7	phenol-d6	20.32	11/22/2023	CL s4112127.D	1	1	1	100	**20%**		10-102
59	2,4,6-tribromophenol	66.59	11/22/2023	CL s4112127.D	1	1	1	100	**67%**		10-123
22	nitrobenzene-d5	36.09	11/22/2023	CL s4112204.D	1	1	1	50	**72%**		35-114
38	2-fluorobiphenyl	36.16	11/22/2023	CL s4112204.D	1	1	1	50	**72%**		43-116
75	terphenyl-d14	51.42	11/22/2023	CL s4112204.D	1	1	1	50	**103%**		33-141
6	phenol	0.00	11/22/2023	CL s4112127.D	1	1	1				
8	2-chlorophenol	0.00	11/22/2023	CL s4112127.D	1	1	1				
15	2-methylphenol	0.00	11/22/2023	CL s4112127.D	1	1	1				
15	2-methylphenol	0.00	11/22/2023	CL s4112127.D	1	1	1				
20	4-methylphenol	0.00	11/22/2023	CL s4112127.D	1	1	1				
25	2-nitrophenol	0.00	11/22/2023	CL s4112127.D	1	1	1				
26	2,4-dimethylphenol	0.00	11/22/2023	CL s4112127.D	1	1	1				
28	2,4-dichlorophenol	0.00	11/22/2023	CL s4112127.D	1	1	1				
29	2,6-dichlorophenol	0.00	11/22/2023	CL s4112127.D	1	1	1				
32	benzoic acid	0.00	11/22/2023	CL s4112127.D	1	1	1				
35	4-chloro-3-methylphenol	0.00	11/22/2023	CL s4112127.D	1	1	1				
40	2,4,6-trichlorophenol	0.00	11/22/2023	CL s4112127.D	1	1	1				
41	2,4,5-trichlorophenol	0.00	11/22/2023	CL s4112127.D	1	1	1				
51	2,4-dinitrophenol	0.00	11/22/2023	CL s4112127.D	1	1	1				
53	4-nitrophenol	0.00	11/22/2023	CL s4112127.D	1	1	1				
60	4,6-dinitro-2-methylphenol	0.00	11/22/2023	CL s4112127.D	1	1	1				
66	pentachlorophenol	0.00	11/22/2023	CL s4112127.D	1	1	1				
2	N-nitroso-dimethylamine	0.00	11/22/2023	CL s4112204.D	1	1	1				
3	pyridine	0.00	11/22/2023	CL s4112204.D	1	1	1				
5	aniline	0.00	11/22/2023	CL s4112204.D	1	1	1				
9	n-decane	0.00	11/22/2023	CL s4112204.D	1	1	1				
10	bis-(2-choroethyl)ether	0.00	11/22/2023	CL s4112204.D	1	1	1				
11	1,3-dichlorobenzene	0.00	11/22/2023	CL s4112204.D	1	1	1				
12	1,4-diclorobenzene	0.00	11/22/2023	CL s4112204.D	1	1	1				
13	1,2-dichlorobenzene	0.00	11/22/2023	CL s4112204.D	1	1	1				
14	benzyl alcohol	0.00	11/22/2023	CL s4112204.D	1	1	1				
16	2,2'-oxybis(1-chloropropane)	0.00	11/22/2023	CL s4112204.D	1	1	1				
##	acetephenone	#N/A	11/22/2023	CL s4112204.D	1	1	1			#N/A	
18	hexachloroethane	0.00	11/22/2023	CL s4112204.D	1	1	1				
19	N-nitroso-di-n-propylamine	0.00	11/22/2023	CL s4112204.D	1	1	1				
23	nitrobenzene	0.00	11/22/2023	CL s4112204.D	1	1	1				
24	isophorone	0.00	11/22/2023	CL s4112204.D	1	1	1				
27	bis(2-chloroethoxy)methane	0.00	11/22/2023	CL s4112204.D	1	1	1				
30	1,2,4-trichlorobenzene	0.14	11/22/2023	CL s4112204.D	1	1	1				
31	naphthalene	0.00	11/22/2023	CL s4112204.D	1	1	1				
33	4-chloroanaline	0.00	11/22/2023	CL s4112204.D	1	1	1				
34	hexachloro-1,3-butadiene	0.00	11/22/2023	CL s4112204.D	1	1	1				
36	2-methylnaphthalene	0.00	11/22/2023	CL s4112204.D	1	1	1				
39	hexachlorocyclopentadiene	0.00	11/22/2023	CL s4112204.D	1	1	1				
43	2-chloronaphthalene	0.00	11/22/2023	CL s4112204.D	1	1	1				
44	2-nitroanaline	0.00	11/22/2023	CL s4112204.D	1	1	1				
45	acenaphthylene	0.00	11/22/2023	CL s4112204.D	1	1	1				
46	dimethyl phthalate	0.00	11/22/2023	CL s4112204.D	1	1	1				
47	2,6-dinitrotoluene	0.00	11/22/2023	CL s4112204.D	1	1	1				
48	2,4-dinitrotoluene	0.00	11/22/2023	CL s4112204.D	1	1	1				
49	acenaphthene	0.00	11/22/2023	CL s4112204.D	1	1	1				
50	3-nitroanaline	0.00	11/22/2023	CL s4112204.D	1	1	1				
52	dibenzofuran	0.00	11/22/2023	CL s4112204.D	1	1	1				
54	fluorene	0.00	11/22/2023	CL s4112204.D	1	1	1				
55	diethyl phthalate	**3.43**	11/22/2023	CL s4112204.D	1	1	1				
56	4-chlorophenyl phenyl ether	0.00	11/22/2023	CL s4112204.D	1	1	1				
57	4-nitroanaline	0.00	11/22/2023	CL s4112204.D	1	1	1				
61	azobenzene	0.03	11/22/2023	CL s4112204.D	1	1	1				
62	N-nitrosodiphenylamine	0.00	11/22/2023	CL s4112204.D	1	1	1				
63	4-bromophenyl phenyl ether	0.00	11/22/2023	CL s4112204.D	1	1	1				
64	hexachlorobenzene	0.00	11/22/2023	CL s4112204.D	1	1	1				
65	n-octadecane	0.00	11/22/2023	CL s4112204.D	1	1	1				
67	phenanthrene	0.00	11/22/2023	CL s4112204.D	1	1	1				
68	anthracene	0.00	11/22/2023	CL s4112204.D	1	1	1				
70	carbazole	0.00	11/22/2023	CL s4112204.D	1	1	1				
71	di-n-butyl phthalate	0.00	11/22/2023	CL s4112204.D	1	1	1				
73	fluoranthene	0.00	11/22/2023	CL s4112204.D	1	1	1				
76	benzidine	0.00	11/22/2023	CL s4112204.D	1	1	1				
77	pyrene	0.00	11/22/2023	CL s4112204.D	1	1	1				
78	butyl benzyl phthalate	0.00	11/22/2023	CL s4112204.D	1	1	1				
79	benzo(a)anthracene	0.00	11/22/2023	CL s4112204.D	1	1	1				
80	chrysene	0.00	11/22/2023	CL s4112204.D	1	1	1				
81	3,3'-dichlorobenzidine	0.00	11/22/2023	CL s4112204.D	1	1	1				
82	bis-2-ethylhexyl phthalate	**1.06**	11/22/2023	CL s4112204.D	1	1	1				
84	di-n-octyl phthalate	0.00	11/22/2023	CL s4112204.D	1	1	1				
85	Benzo(b)fluoranthene	0.00	11/22/2023	CL s4112204.D	1	1	1				
86	benzo(k)fluoranthene	0.00	11/22/2023	CL s4112204.D	1	1	1				
87	benzo(a)pyrene	0.00	11/22/2023	CL s4112204.D	1	1	1				
88	indeno(1,2,3-cd)pyrene	0.00	11/22/2023	CL s4112204.D	1	1	1				
89	dibenzo(a,h)anthracene	0.00	11/22/2023	CL s4112204.D	1	1	1				
90	benzo(g,h,i)perylene	0.00	11/22/2023	CL s4112204.D	1	1	1				

Quantitation Report (QT Reviewed)

CL
12/5/23 @ 09:47
CharlesL

Data Path : X:\S4\2023\Nov23\112123\
Data File : s4112127.D
Acq On : 22 Nov 2023 12:40 am
Operator : cl
Sample : 67839-11 acid x1
Misc :
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Nov 22 09:16:09 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration

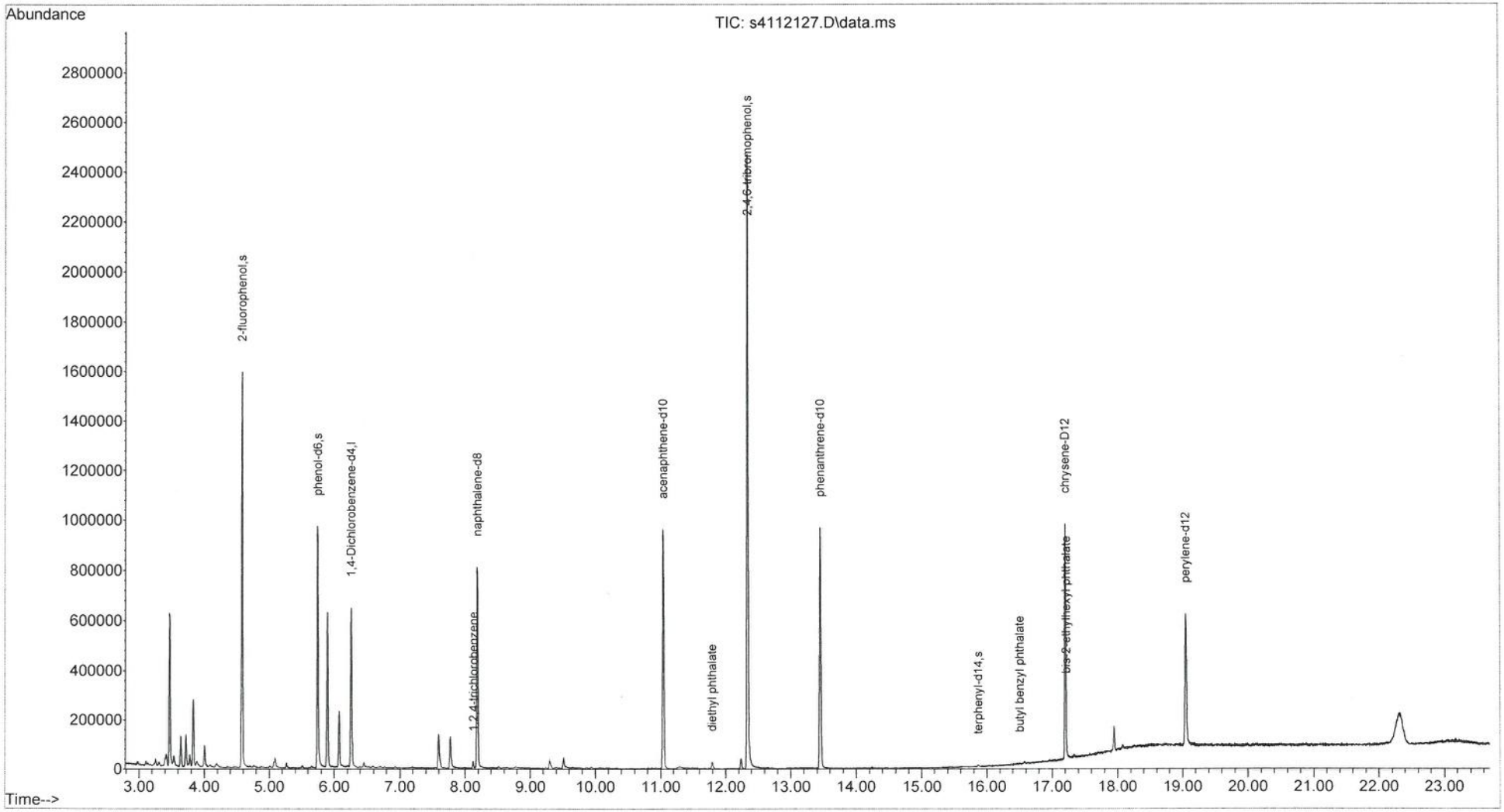
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.255	152	138014	10.00	ug/mL	0.00
21) naphthalene-d8	8.184	136	525953	10.00	ug/mL	-0.01
37) acenaphthene-d10	11.038	164	285595	10.00	ug/mL	-0.01
58) phenanthrene-d10	13.448	188	547724	10.00	ug/mL	-0.01
74) chrysene-D12	17.199	240	392725	10.00	ug/mL	0.00
83) perylene-d12	19.047	264	309429	10.00	ug/mL	0.00
System Monitoring Compounds						
4) 2-fluorophenol	4.578	112	569299	33.21	ug/mL	-0.01
Spiked Amount 200.000			Recovery =	16.61%		
7) phenol-d6	5.743	99	423094	20.32	ug/mL	-0.01
Spiked Amount 200.000			Recovery =	10.16%		
22) nitrobenzene-d5	0.000	82	0	0.00	ug/mL	
Spiked Amount 100.000			Recovery =	0.00%		
38) 2-fluorobiphenyl	9.929	172	1309	-0.01	ug/mL	-0.01
Spiked Amount 100.000			Recovery =	-0.01%		
59) 2,4,6-tribromophenol	12.337	330	444823	66.59	ug/mL	0.00
Spiked Amount 200.000			Recovery =	33.30%		
69) o-terphenyl	0.000	230	0	0.00	ug/mL	
Spiked Amount 100.000			Recovery =	0.00%		
72) 1-Chloro-octadecane	0.000	57	0	0.00	ug/mL	
Spiked Amount 100.000			Recovery =	0.00%		
75) terphenyl-d14	15.867	244	2772	0.06	ug/mL	0.00
Spiked Amount 100.000			Recovery =	0.06%		
Target Compounds						Qvalue
9) n-decane	6.069	57	960	Below Cal	#	1
30) 1,2,4-trichlorobenzene	8.123	180	7651m	BC 0.321	ug/mL	
55) diethyl phthalate	11.789	149	15108m	BC 0.278	ug/mL	
78) butyl benzyl phthalate	16.501	149	822	0.045	ug/mL#	26
79) benzo(a)anthracene	17.199	228	917	Below Cal	#	51
80) chrysene	17.199	228	917	Below Cal	#	49
82) bis-2-ethylhexyl phtha...	17.214	149	7769	0.232	ug/mL#	87
93) DDT	16.613	TIC	1311	Below Cal	#	22

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Nov23\112123\
Data File : s4112127.D
Acq On : 22 Nov 2023 12:40 am
Operator : cl
Sample : 67839-11 acid x1
Misc :
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Nov 22 09:16:09 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Nov23\112223\
Data File : s4112204.D
Acq On : 22 Nov 2023 11:20 am
Operator : cl
Sample : 67839-11 bn x1
Misc :
ALS Vial : 4 Sample Multiplier: 1

CL
11/28/23 @ 16:34
CharlesL

Quant Time: Nov 22 12:46:52 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration

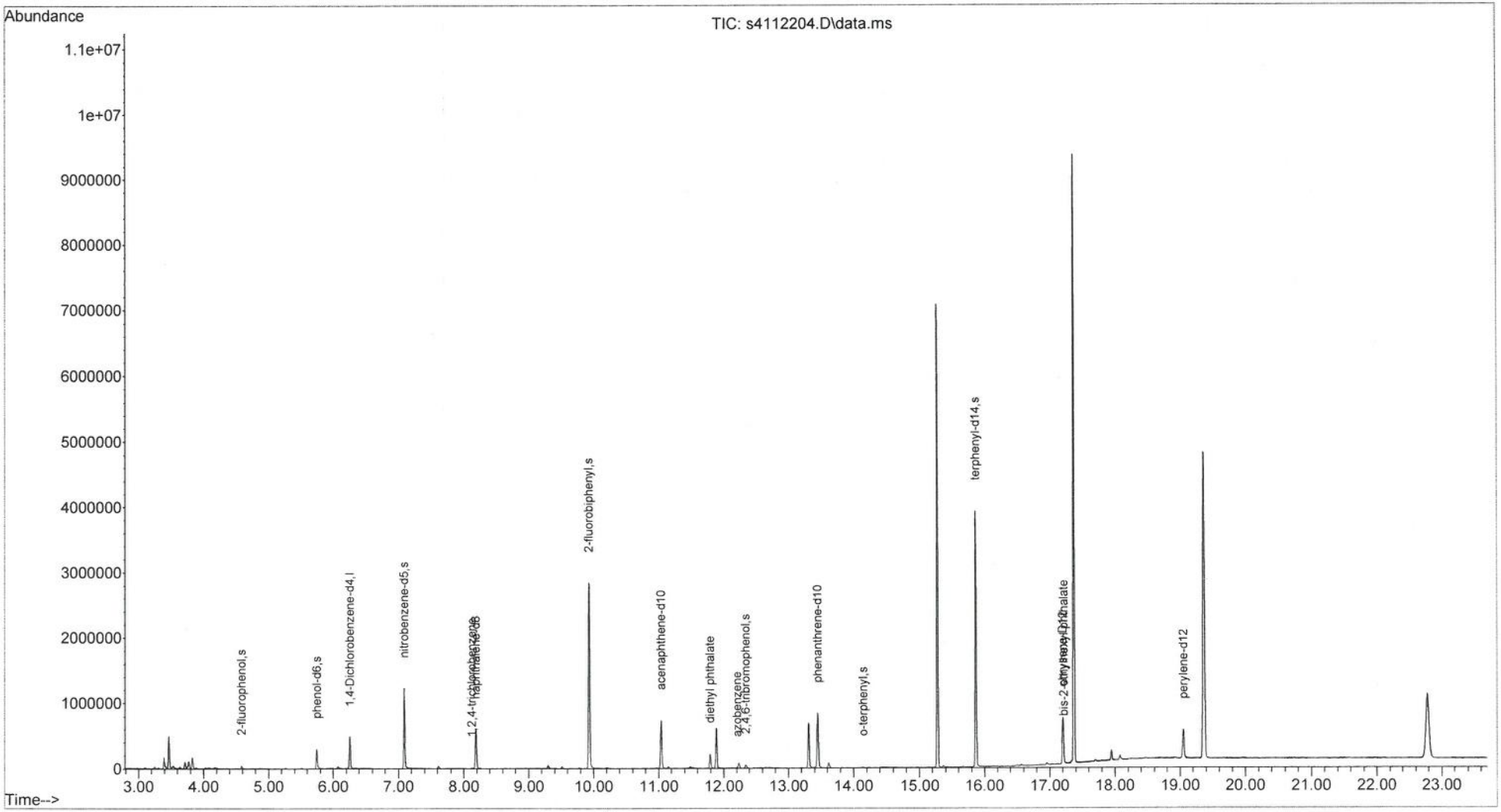
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.255	152	102519	10.00	ug/mL	0.00
21) naphthalene-d8	8.182	136	397182	10.00	ug/mL	-0.01
37) acenaphthene-d10	11.038	164	223409	10.00	ug/mL	0.00
58) phenanthrene-d10	13.449	188	436324	10.00	ug/mL	-0.01
74) chrysene-D12	17.200	240	301768	10.00	ug/mL	0.00
83) perylene-d12	19.049	264	261677	10.00	ug/mL	0.01
System Monitoring Compounds						
4) 2-fluorophenol	4.584	112	14539	1.14	ug/mL	0.00
Spiked Amount 200.000			Recovery =	0.57%		
7) phenol-d6	5.743	99	140777	9.10	ug/mL	-0.01
Spiked Amount 200.000			Recovery =	4.55%		
22) nitrobenzene-d5	7.088	82	503155	36.09	ug/mL	-0.01
Spiked Amount 100.000			Recovery =	36.09%		
38) 2-fluorobiphenyl	9.930	172	1270696	36.16	ug/mL	-0.01
Spiked Amount 100.000			Recovery =	36.16%		
59) 2,4,6-tribromophenol	12.340	330	9733m BC	1.92	ug/mL	0.00
Spiked Amount 200.000			Recovery =	0.96%		
69) o-terphenyl	14.144	230	1471	0.03	ug/mL	0.00
Spiked Amount 100.000			Recovery =	0.03%		
72) 1-Chloro-octadecane	0.000	57	0	0.00	ug/mL	
Spiked Amount 100.000			Recovery =	0.00%		
75) terphenyl-d14	15.864	244	1675258	51.42	ug/mL	0.00
Spiked Amount 100.000			Recovery =	51.42%		
Target Compounds						Qvalue
24) isophorone	7.466	82	874	Below Cal	#	63
30) 1,2,4-trichlorobenzene	8.120	180	3205m BC	0.137	ug/mL	
42) 1,1'-Biphenyl	10.077	154	1849	Below Cal	#	40
55) diethyl phthalate	11.792	149	115717	3.433	ug/mL	99
61) azobenzene	12.205	77	1943	0.026	ug/mL#	69
82) bis-2-ethylhexyl phtha...	17.215	149	31020	1.063	ug/mL	99
93) DDT	16.629	TIC	1489	Below Cal	#	22

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Nov23\112223\
Data File : s4112204.D
Acq On : 22 Nov 2023 11:20 am
Operator : cl
Sample : 67839-11 bn x1
Misc :
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Nov 22 12:46:52 2023
Quant Method : X:\S4\methods\S4ABN110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration



This File:	L:\SVOA\Excel Reports\EPH\231214\67839-001			Donna Valley L:\SVOA\EPH\EPH ImportFileBuilder2.0.xls
Analysis Group:	EPH	Dow Salvage Yard		12/14/23 12:27 PM
Field ID:	BRMW4-62-72-110923	CRE		L:\SVOA\EPH\
Sample:	67839-01 targets x1	67839-01 aro x1	67839-01 ali x1	L:\SVOA\Excel Reports\EPH\2312
Misc:	aro frac			L:\SVOA\PDF Reports\FUELS\
Method Name:	SVOA04 Method 8270E (t	S6 EPH Aromatics	S6 EPH Aliphatics	
Import File Name:	s6 EPHs QC17156W			
TestGroupID:	EMA_EPH_PresCert_A			
Aqueous or Soil? (A or S)	A			
Fractionated? (Y/N)	Y	Y		
Prep Date:	11/20/2023			
Lab#:	67839-001			
QC_Code:				
Prep#	17156			

Reviewer Checks:

- Quant Report: Reviewed? Ranges integrated? Analyst Initials & Date?
- Chromatogram Checked? Major peaks identified?
- Soil prep data checked: weight, volume, %solid, Prep date
- Field ID consistent with data and any field replicates
- Results consistent with any re-runs & internal QC
- Substitute dilution data checked
- Correct dilution and reason clear or noted
- Reason for reanalysis documented
- Surrogates pass or flagged & noted
- Flags checked (Expiration, F+, Over Cal)
- Other QC failures, estimates or interferences documented
- Spot checked Reported Result with Quant Report
- Checked Audit flagged data in LIMS

Notes:

Initials & Date: 12/14/23

1
2
5
11
16
20

X:\S4\2023\Dec23\120723\s4120749.D\S4PAH110223A.XLS PAH targets filename
X:\S6\2023\Dec23\120823\s6120814.D\S6ARO100423F.XLS aromatics filename
X:\S6\2023\Dec23\120823.SEC\s6120813.D\S6ALI100423A.XLS aliphatics filename

#	Surrogate Standards	Concentration (ug/mL)	AnalysisDate	AnalysisTime	AnalyzedBy	Dilution	Weight	Volume	Surr	Recovery	Flag	QC Limits
13	SS 1-chloro-octadecane (COD)	26.29243957	12/8/2023	08:20:00 PM	DBV s6120813.D	1	1	2	100	**53%**		40-140
10	SS ortho-terphenyl (OTP)	30.57960909	12/8/2023	08:20:00 PM	DBV s6120814.D	1	1	2	100	**61%**		40-140
3	SS 2-fluorobiphenyl (2FBP)	15.85165183	12/8/2023	08:20:00 PM	DBV s6120814.D	1	1	2	40	**79%**		40-140
5	SS 2-bromonaphthalene (2BN)	16.38101411	12/8/2023	08:20:00 PM	DBV s6120814.D	1	1	2	40	**82%**		40-140

#	AnalyteName	Concentration (ug/mL)	AnalysisDate	AnalysisTime	AnalyzedBy	Dilution	Weight	Volume
3	naphthalene	0	12/08/2023	10:23:00 AM	CL s4120749.D	1	1	2
4	2-methylnaphthalene	0	12/08/2023	10:23:00 AM	CL s4120749.D	1	1	2
12	phenanthrene	0	12/08/2023	10:23:00 AM	CL s4120749.D	1	1	2
8	acenaphthene	0	12/08/2023	10:23:00 AM	CL s4120749.D	1	1	2
7	acenaphthylene	0	12/08/2023	10:23:00 AM	CL s4120749.D	1	1	2
10	fluorene	0	12/08/2023	10:23:00 AM	CL s4120749.D	1	1	2
13	anthracene	0	12/08/2023	10:23:00 AM	CL s4120749.D	1	1	2
15	fluoranthene	0	12/08/2023	10:23:00 AM	CL s4120749.D	1	1	2
17	pyrene	0	12/08/2023	10:23:00 AM	CL s4120749.D	1	1	2
18	benzo(a)anthracene	0	12/08/2023	10:23:00 AM	CL s4120749.D	1	1	2
19	chrysene	0	12/08/2023	10:23:00 AM	CL s4120749.D	1	1	2
21	benzo(b)fluoranthene	0	12/08/2023	10:23:00 AM	CL s4120749.D	1	1	2
22	benzo(k)fluoranthene	0	12/08/2023	10:23:00 AM	CL s4120749.D	1	1	2
23	benzo(a)pyrene	0	12/08/2023	10:23:00 AM	CL s4120749.D	1	1	2
24	indeno(1,2,3-cd)pyrene	0	12/08/2023	10:23:00 AM	CL s4120749.D	1	1	2
25	dibenzo(a,h)anthracene	0	12/08/2023	10:23:00 AM	CL s4120749.D	1	1	2
26	benzo(g,h,i)perylene	0	12/08/2023	10:23:00 AM	CL s4120749.D	1	1	2
20	C11-C22 Aromatics	24.7002274	12/8/2023	08:20:00 PM	DBV s6120814.D	1	1	2
9	C9-C18 Aliphatics	8.717308893	12/8/2023	08:20:00 PM	DBV s6120813.D	1	1	2
20	C19-C36 Aliphatics	13.57655994	12/8/2023	08:20:00 PM	DBV s6120813.D	1	1	2
	Adjusted C11-C22 Aromatics	24.7002274	12/8/2023	08:20:00 PM	DBV s6120814.D	1	1	2

Quantitation Report (QT Reviewed)

CL
12/8/23 @ 15:36
CharlesL

Data Path : X:\S4\2023\Dec23\120723\
Data File : s4120749.D
Acq On : 08 Dec 2023 10:23 am
Operator : cl
Sample : 67839-01 targets x1
Misc : aro frac
ALS Vial : 44 Sample Multiplier: 1

Quant Time: Dec 08 12:08:17 2023
Quant Method : X:\S4\methods\S4PAH110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration

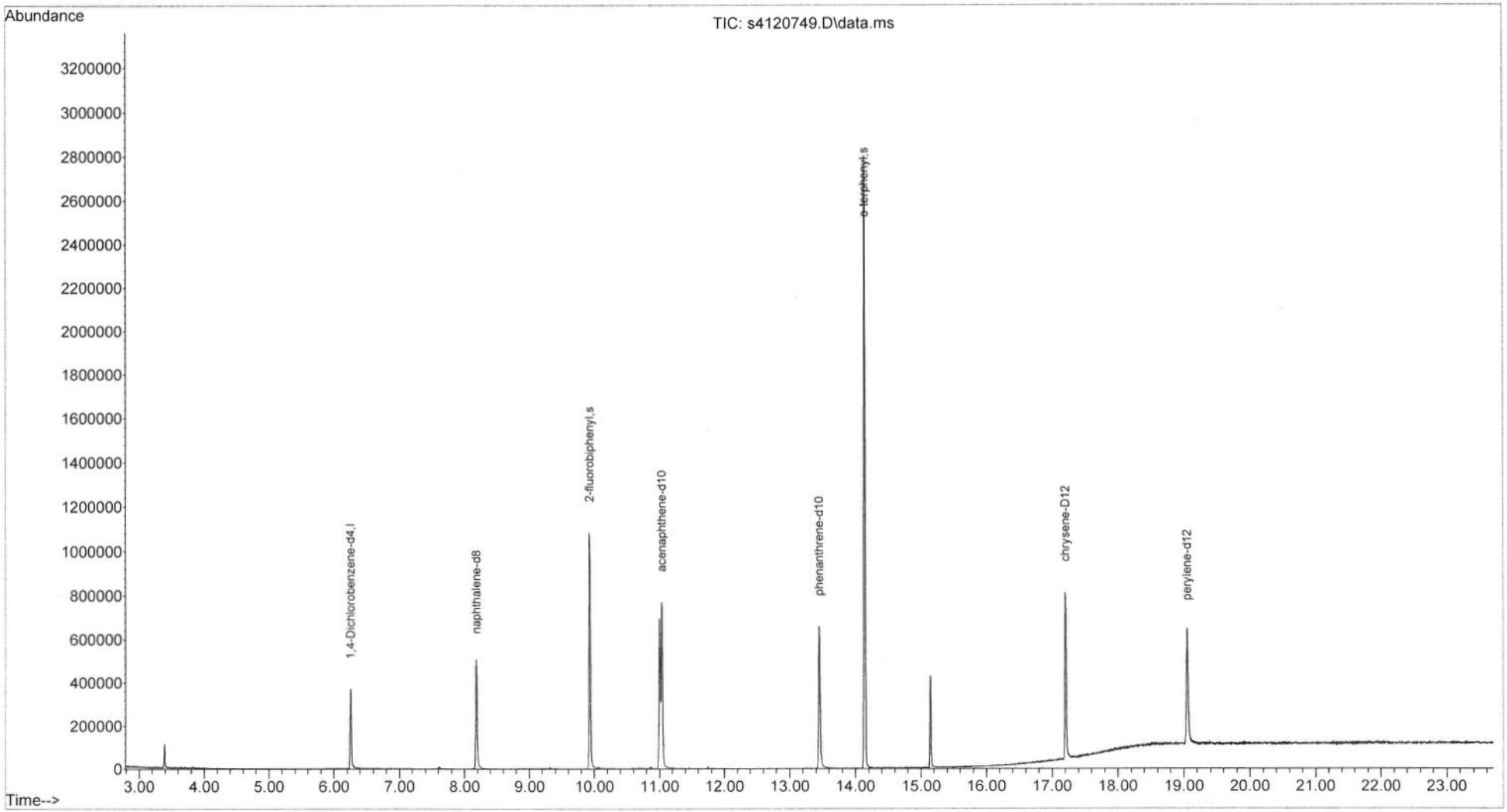
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.250	152	91755	10.00	ug/mL	-0.01
2) naphthalene-d8	8.181	136	357458	10.00	ug/mL	-0.01
5) acenaphthene-d10	11.035	164	209842	10.00	ug/mL	-0.01
11) phenanthrene-d10	13.448	188	418262	10.00	ug/mL	-0.01
16) chrysene-D12	17.202	240	377346	10.00	ug/mL	# 0.00
20) perylene-d12	19.049	264	340750	10.00	ug/mL	0.01
System Monitoring Compounds						
6) 2-fluorobiphenyl	9.927	172	486828	14.72	ug/mL	-0.02
Spiked Amount 100.000			Recovery = 14.72%			
14) o-terphenyl	14.142	230	735615	30.97	ug/mL	-0.01
Spiked Amount 100.000			Recovery = 30.97%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Dec23\120723\
Data File : s4120749.D
Acq On : 08 Dec 2023 10:23 am
Operator : cl
Sample : 67839-01 targets x1
Misc : aro frac
ALS Vial : 44 Sample Multiplier: 1

Quant Time: Dec 08 12:08:17 2023
Quant Method : X:\S4\methods\S4PAH110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration



SFP
12/12/23 @ 12:2
SkylaM

Data Path : X:\S6\2023\Dec23\120823\
Data File : s6120814.D
Signal(s) : FID1A.ch
Acq On : 08 Dec 2023 08:20 pm
Operator : dbv
Sample : 67839-01 aro x1
Misc :
ALS Vial : 7 Sample Multiplier: 1

Integration File: rteint.p
Quant Time: Dec 09 17:35:00 2023
Quant Method : X:\S6\methods\S6ARO100423F.M
Quant Title : S6 EPH Aromatics
QLast Update : Thu Oct 05 11:16:37 2023
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :

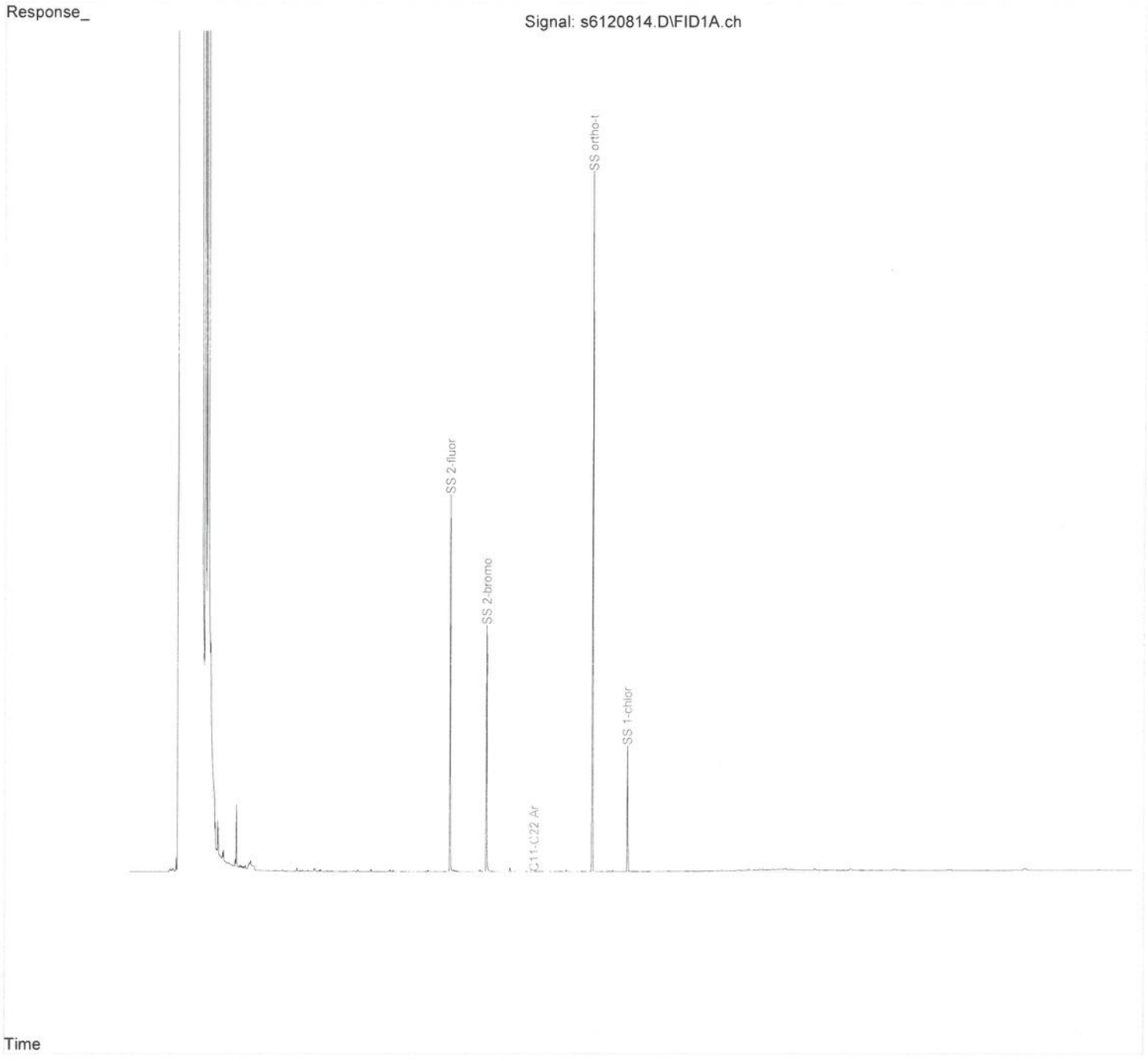
	Compound	R.T.	Response	Conc	Units	
	System Monitoring Compounds					
3) S	SS 2-fluorobiphenyl (...	9.526	2236873	15.852	ug/mL	
Spiked Amount	20.000		Recovery =	79.26%		
5) S	SS 2-bromonaphthalene...	10.603	1562205	16.381	ug/mL	
Spiked Amount	20.000		Recovery =	81.91%		
10) S	SS ortho-terphenyl (OTP)	13.724	4575365	30.580	ug/mLm	BC = Baseline Correction
Spiked Amount	50.000		Recovery =	61.16%		
11) S	SS 1-chloro-otadecane...	14.763	854423	6.998	ug/mL	
Spiked Amount	50.000		Recovery =	14.00%		
	Target Compounds					
1)	naphthalene	0.000	0	N.D.	ug/mLd	
2)	2-methylnaphthalene	0.000	0	N.D.	ug/mL	
4)	acenaphthylene	0.000	0	N.D.	ug/mLd	
6)	acenaphthene	0.000	0	N.D.	ug/mL	
7)	fluorene	0.000	0	N.D.	ug/mL	
8)	phenanthrene	0.000	0	N.D.	ug/mL	
9)	anthracene	0.000	0	N.D.	ug/mL	
12)	fluoranthene	0.000	0	N.D.	ug/mL	
13)	pyrene	0.000	0	N.D.	ug/mL	
14)	benzo(a)anthracene	0.000	0	N.D.	ug/mL	
15)	chrysene	0.000	0	N.D.	ug/mL	
16)	benzo(b&k)fluoranthenes	0.000	0	N.D.	ug/mL	
17)	benzo(a)pyrene	0.000	0	N.D.	ug/mL	
18)	indeno&dibenzo	0.000	0	N.D.	ug/mL	
19)	benzo(g,h,i)perylene	0.000	0	N.D.	ug/mL	
20) H	C11-C22 Aromatics	12.000	3483517	24.700	ug/mLm	RI = Range Integration

(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : X:\S6\2023\Dec23\120823\
Data File : s6120814.D
Signal(s) : FID1A.ch
Acq On : 08 Dec 2023 08:20 pm
Operator : dbv
Sample : 67839-01 aro x1
Misc :
ALS Vial : 7 Sample Multiplier: 1

Integration File: rteint.p
Quant Time: Dec 09 17:35:00 2023
Quant Method : X:\S6\methods\S6ARO100423F.M
Quant Title : S6 EPH Aromatics
QLast Update : Thu Oct 05 11:16:37 2023
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : X:\S6\2023\Dec23\120823.SEC\
Data File : s6120813.D
Signal(s) : FID2B.ch
Acq On : 08 Dec 2023 08:20 pm
Operator : dbv
Sample : 67839-01 ali x1
Misc :
ALS Vial : 82 Sample Multiplier: 1

12/12/23 @ 08:45
DonnaV

Integration File: rteint.p
Quant Time: Dec 09 17:35:18 2023
Quant Method : X:\S6\methods\S6ALI100423A.M
Quant Title : S6 EPH Aliphatics
QLast Update : Thu Oct 05 13:01:54 2023
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :

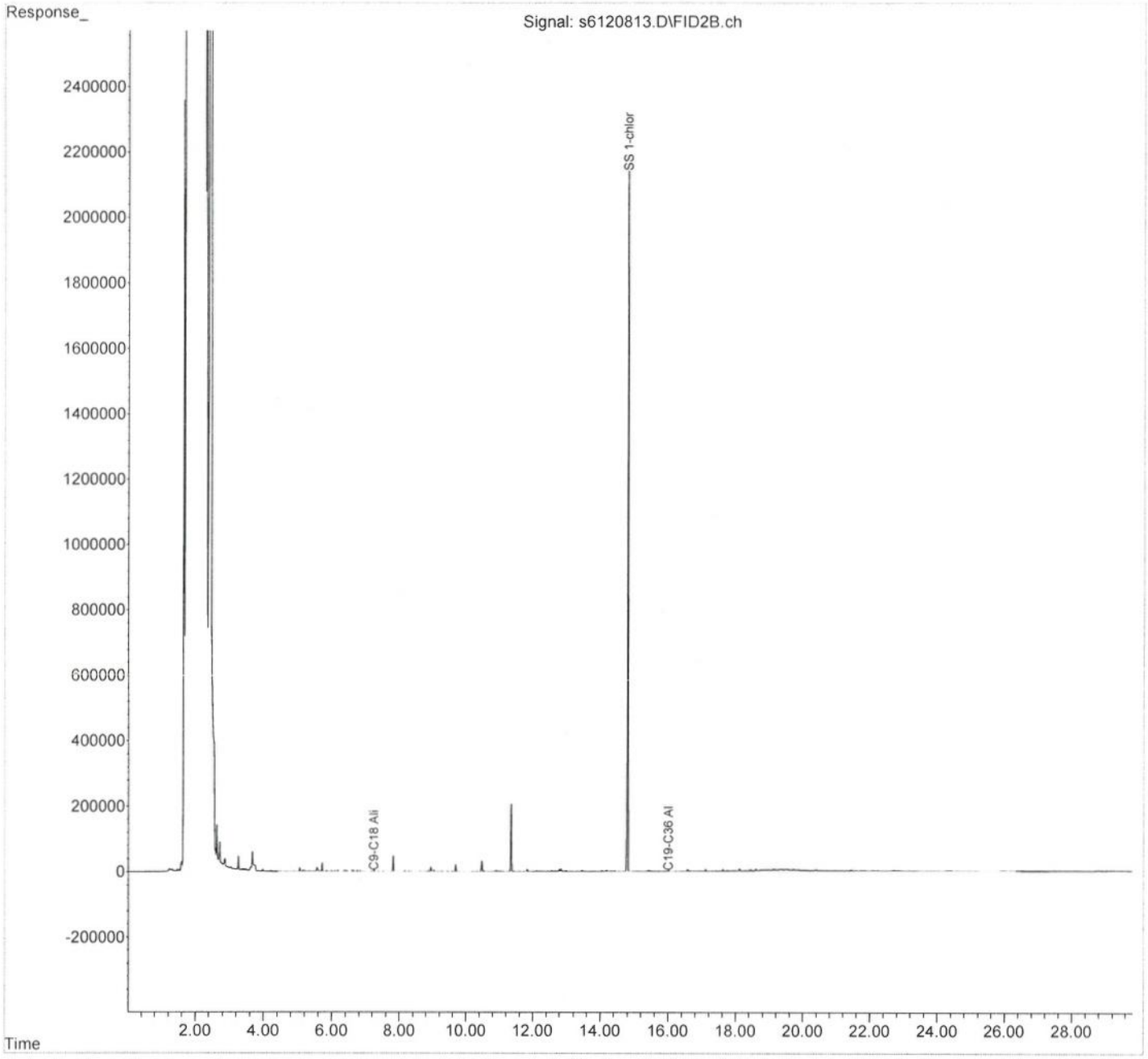
	Compound	R.T.	Response	Conc	Units	
	System Monitoring Compounds					
4) S	SS 2-fluorobiphenyl (...	0.000	0	N.D.	ug/mLd	
Spiked Amount	20.000	Recovery	=	0.00%		
6) S	SS 2-bromonaphthalene...	0.000	0	N.D.	ug/mLd	
Spiked Amount	20.000	Recovery	=	0.00%		
11) S	SS ortho-terphenyl (OTP)	0.000	0	N.D.	ug/mLd	
Spiked Amount	50.000	Recovery	=	0.00%		
13) S	SS 1-chloro-octadecan...	14.806f	3086556	26.292	ug/mL	
Spiked Amount	50.000	Recovery	=	52.58%		
	Target Compounds					
1)	C9 n-Nonane	0.000	0	N.D.	ug/mLd	
2)	C10 n-Decane	0.000	0	N.D.	ug/mLd	
3)	C12 n-Dodecane	0.000	0	N.D.	ug/mLd	
5)	C14 n-Tetradecane	0.000	0	N.D.	ug/mLd	
7)	C16 n-Hexadecane	0.000	0	N.D.	ug/mLd	
8)	C18 n-Octadecane	0.000	0	N.D.	ug/mLd	
9) H	C9-C18 Aliphatics	7.237	1194212	8.717	ug/mLm	RI = Range Integration
10)	C19 n-Nonadecane	0.000	0	N.D.	ug/mLd	
12)	C20 n-Eicosane	0.000	0	N.D.	ug/mLd	
14)	C22 n-Docosane	0.000	0	N.D.	ug/mLd	
15)	C24 n-Tetracosane	0.000	0	N.D.	ug/mLd	
16)	C26 n-Hexacosane	0.000	0	N.D.	ug/mLd	
17)	C28 n-Octacosane	0.000	0	N.D.	ug/mLd	
18)	C30 n-Triacontane	0.000	0	N.D.	ug/mLd	
19)	C36 n-Hexatriacontane	0.000	0	N.D.	ug/mLd	
20) H	C19-C36 Aliphatics	16.000	1938998	13.577	ug/mLm	RI = Range Integration

(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : X:\S6\2023\Dec23\120823.SEC\
Data File : s6120813.D
Signal(s) : FID2B.ch
Acq On : 08 Dec 2023 08:20 pm
Operator : dbv
Sample : 67839-01 ali x1
Misc :
ALS Vial : 82 Sample Multiplier: 1

Integration File: rteint.p
Quant Time: Dec 09 17:35:18 2023
Quant Method : X:\S6\methods\S6ALI100423A.M
Quant Title : S6 EPH Aliphatics
QLast Update : Thu Oct 05 13:01:54 2023
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :



This File:	L:\SVOA\Excel Reports\EPH\231214\67839-002		
Analysis Group:	EPH	Dow Salvage Yard	
Field ID:	RMW40-62-72-110923	CRE	
Sample:	67839-02 targets x1	67839-02 aro x1	67839-02 ali x1
Misc:	aro frac		
Method Name:	SVOA04 Method 8270E (E	S6 EPH Aromatics	S6 EPH Aliphatics
Import File Name:	s6 EPHs QC17156W		
TestGroupID:	EMA_EPH_PresCert_A		
Aqueous or Soil? (A or S)	A		
Fractionated? (Y/N)	Y	Y	
Prep Date:	11/20/2023		
Lab#:	67839-002		
QC_Code:			
Prep#	17156		

Donna Valley L:\SVOA\EPH\EPH ImportFileBuilder2.0.xls
12/14/23 12:29 PM
L:\SVOA\EPH\
L:\SVOA\Excel Reports\EPH\2312:
L:\SVOA\PDF Reports\FUELS\

Reviewer Checks:

- Quant Report: Reviewed? Ranges integrated? Analyst Initials & Date?
- Chromatogram Checked? Major peaks identified?
- Soil prep data checked: weight, volume, %solid, Prep date
- Field ID consistent with data and any field replicates
- Results consistent with any re-runs & internal QC
- Substitute dilution data checked
- Correct dilution and reason clear or noted
- Reason for reanalysis documented
- Surrogates pass or flagged & noted
- Flags checked (Expiration, F+, Over Cal)
- Other QC failures, estimates or interferences documented
- Spot checked Reported Result with Quant Report
- Checked Audit flagged data in LIMS

Notes:

Initials & Date: 12/14/23

1
2
5
11
16
20

X:\S4\2023\Dec23\120723\s4120750.D\S4PAH110223A.XLS PAH targets filename
X:\S6\2023\Dec23\120823\s6120816.D\S6ARO100423F.XLS aromatics filename
X:\S6\2023\Dec23\120823.SEC\s6120815.D\S6ALI100423A.XLS aliphatics filename

#	Surrogate Standards	Concentration (ug/mL)	AnalysisDate	AnalysisTime	AnalyzedBy	Dilution	Weight	Volume	Surr	Recovery	Flag	QC Limits
13	SS 1-chloro-octadecane (COD)	19.79816059	12/8/2023	08:54:00 PM	DBV s6120815.D	1	1	2	100	**40%**	#	40-140
10	SS ortho-terphenyl (OTP)	32.46462078	12/8/2023	08:54:00 PM	DBV s6120816.D	1	1	2	100	**65%**		40-140
3	SS 2-fluorobiphenyl (2FBP)	16.98249035	12/8/2023	08:54:00 PM	DBV s6120816.D	1	1	2	40	**85%**		40-140
5	SS 2-bromonaphthalene (2BN)	17.92080917	12/8/2023	08:54:00 PM	DBV s6120816.D	1	1	2	40	**90%**		40-140

#	AnalyteName	Concentration (ug/mL)	AnalysisDate	AnalysisTime	AnalyzedBy	Dilution	Weight	Volume
3	naphthalene	0	12/08/2023	10:53:00 AM	CL s4120750.D	1	1	2
4	2-methylnaphthalene	0	12/08/2023	10:53:00 AM	CL s4120750.D	1	1	2
12	phenanthrene	0	12/08/2023	10:53:00 AM	CL s4120750.D	1	1	2
8	acenaphthene	0	12/08/2023	10:53:00 AM	CL s4120750.D	1	1	2
7	acenaphthylene	0	12/08/2023	10:53:00 AM	CL s4120750.D	1	1	2
10	fluorene	0	12/08/2023	10:53:00 AM	CL s4120750.D	1	1	2
13	anthracene	0	12/08/2023	10:53:00 AM	CL s4120750.D	1	1	2
15	fluoranthene	0	12/08/2023	10:53:00 AM	CL s4120750.D	1	1	2
17	pyrene	0	12/08/2023	10:53:00 AM	CL s4120750.D	1	1	2
18	benzo(a)anthracene	0	12/08/2023	10:53:00 AM	CL s4120750.D	1	1	2
19	chrysene	0	12/08/2023	10:53:00 AM	CL s4120750.D	1	1	2
21	benzo(b)fluoranthene	0	12/08/2023	10:53:00 AM	CL s4120750.D	1	1	2
22	benzo(k)fluoranthene	0	12/08/2023	10:53:00 AM	CL s4120750.D	1	1	2
23	benzo(a)pyrene	0	12/08/2023	10:53:00 AM	CL s4120750.D	1	1	2
24	indeno(1,2,3-cd)pyrene	0	12/08/2023	10:53:00 AM	CL s4120750.D	1	1	2
25	dibenzo(a,h)anthracene	0	12/08/2023	10:53:00 AM	CL s4120750.D	1	1	2
26	benzo(g,h,i)perylene	0	12/08/2023	10:53:00 AM	CL s4120750.D	1	1	2
20	C11-C22 Aromatics	29.71279409	12/8/2023	08:54:00 PM	DBV s6120816.D	1	1	2
9	C9-C18 Aliphatics	7.092905023	12/8/2023	08:54:00 PM	DBV s6120815.D	1	1	2
20	C19-C36 Aliphatics	14.83095357	12/8/2023	08:54:00 PM	DBV s6120815.D	1	1	2
	Adjusted C11-C22 Aromatics	29.71279409	12/8/2023	08:54:00 PM	DBV s6120816.D	1	1	2

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Dec23\120723\
Data File : s4120750.D
Acq On : 08 Dec 2023 10:53 am
Operator : cl
Sample : 67839-02 targets x1
Misc : aro frac
ALS Vial : 45 Sample Multiplier: 1

CL
12/8/23 @ 15:36
CharlesL

Quant Time: Dec 08 12:32:31 2023
Quant Method : X:\S4\methods\S4PAH110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration

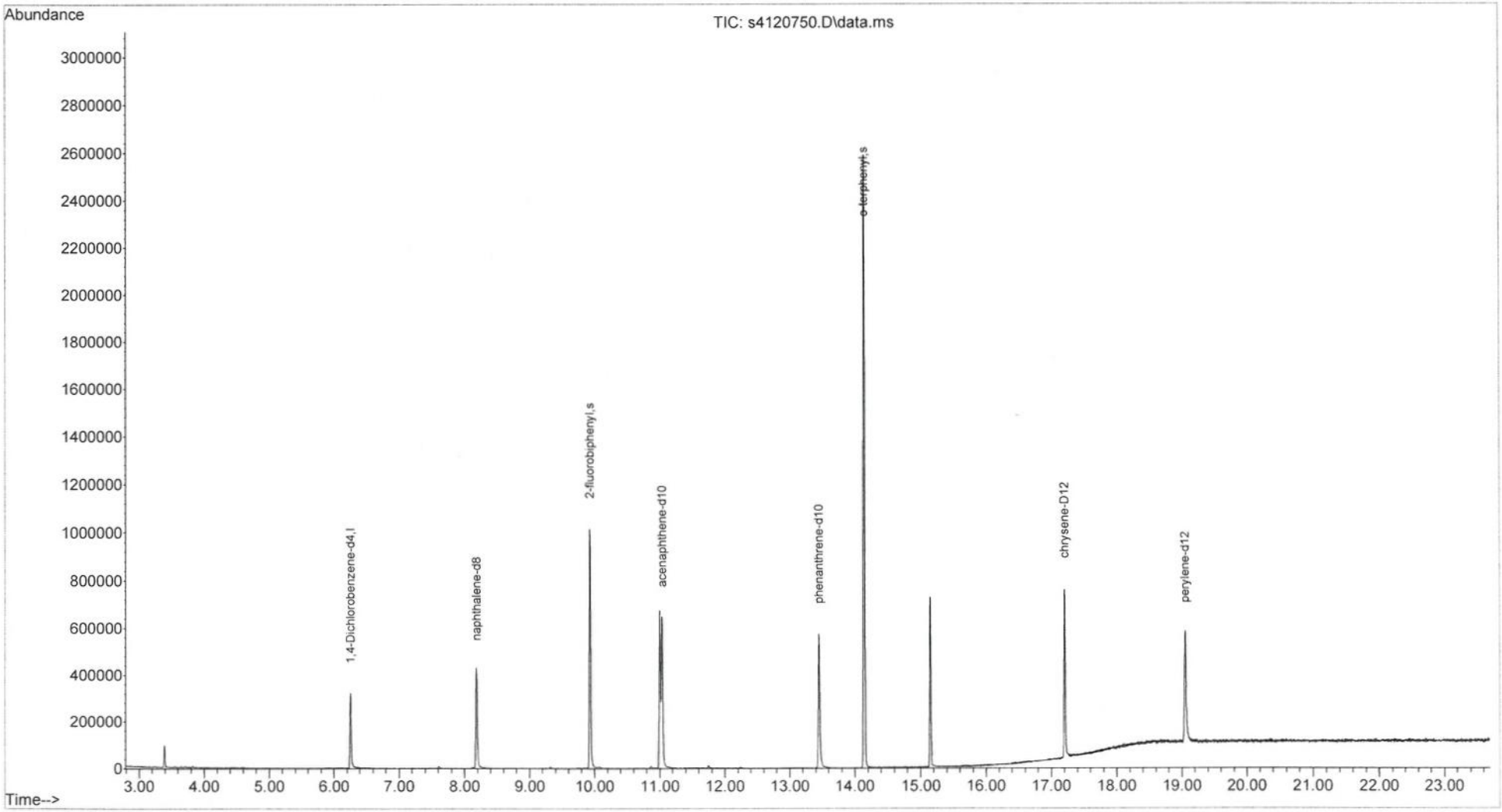
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.252	152	74349	10.00	ug/mL	-0.01
2) naphthalene-d8	8.181	136	310923	10.00	ug/mL	-0.01
5) acenaphthene-d10	11.035	164	184402	10.00	ug/mL	-0.01
11) phenanthrene-d10	13.448	188	354657	10.00	ug/mL	#-0.01
16) chrysene-D12	17.204	240	328903	10.00	ug/mL	# 0.00
20) perylene-d12	19.049	264	303075m	10.00	ug/mL	0.01
System Monitoring Compounds						
6) 2-fluorobiphenyl	9.927	172	465373	16.02	ug/mL	-0.02
Spiked Amount 100.000			Recovery = 16.02%			
14) o-terphenyl	14.141	230	710617	35.29	ug/mL	-0.01
Spiked Amount 100.000			Recovery = 35.29%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Dec23\120723\
Data File : s4120750.D
Acq On : 08 Dec 2023 10:53 am
Operator : cl
Sample : 67839-02 targets x1
Misc : aro frac
ALS Vial : 45 Sample Multiplier: 1

Quant Time: Dec 08 12:32:31 2023
Quant Method : X:\S4\methods\S4PAH110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration



SFP
12/12/23 @ 12:24
SkylaM

Data Path : X:\S6\2023\Dec23\120823\
Data File : s6120816.D
Signal(s) : FID1A.ch
Acq On : 08 Dec 2023 08:54 pm
Operator : dbv
Sample : 67839-02 aro x1
Misc :
ALS Vial : 8 Sample Multiplier: 1

Integration File: rteint.p
Quant Time: Dec 09 17:35:03 2023
Quant Method : X:\S6\methods\S6ARO100423F.M
Quant Title : S6 EPH Aromatics
QLast Update : Thu Oct 05 11:16:37 2023
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :

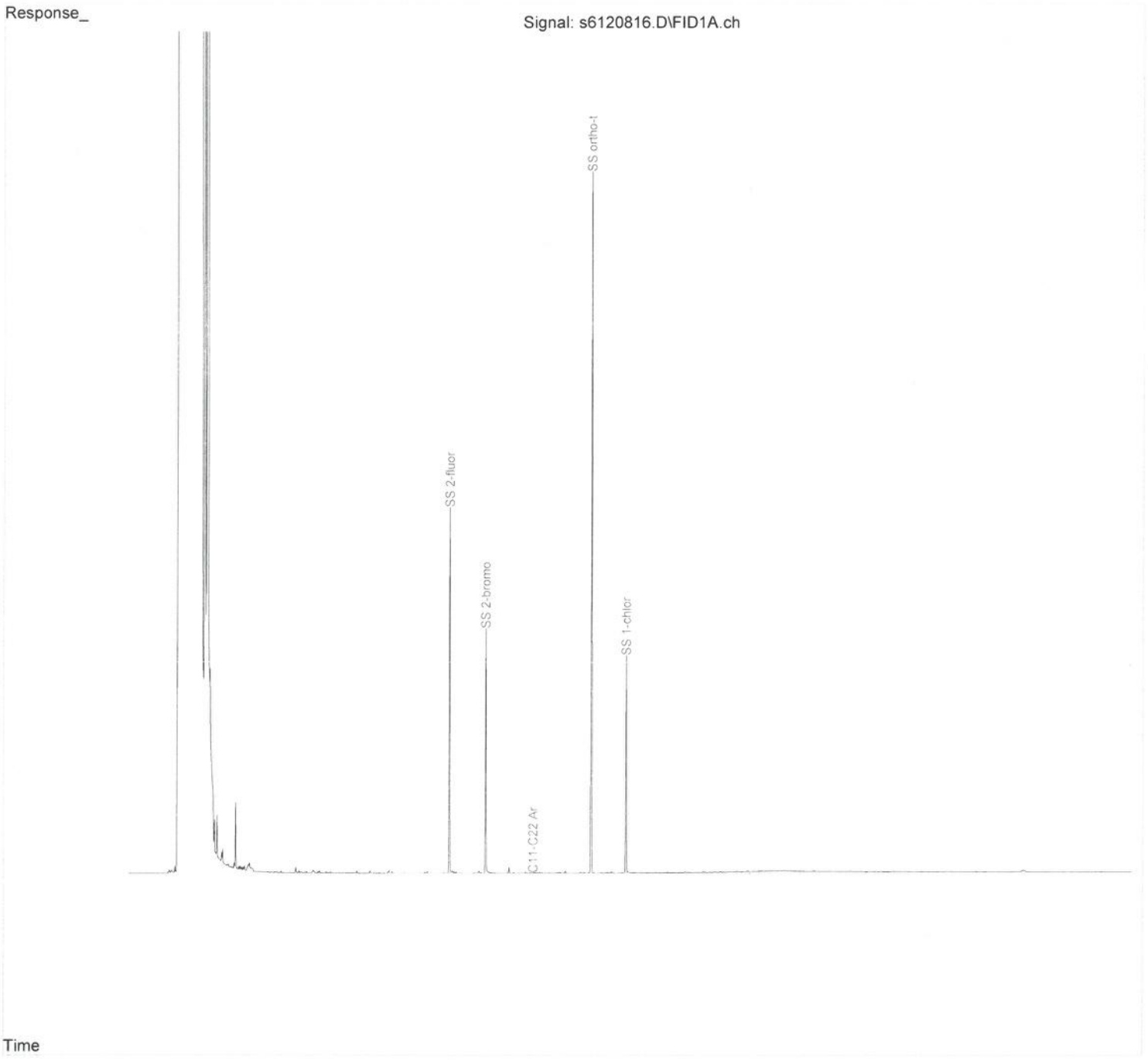
	Compound	R.T.	Response	Conc	Units	
	System Monitoring Compounds					
3) S	SS 2-fluorobiphenyl (...	9.527	2396326	16.982	ug/mLm	BC = Baseline Correction
Spiked Amount	20.000		Recovery =	84.91%		
5) S	SS 2-bromonaphthalene...	10.603	1709121	17.921	ug/mL	
Spiked Amount	20.000		Recovery =	89.61%		
10) S	SS ortho-terphenyl (OTP)	13.725	4857680	32.465	ug/mLm	BC = Baseline Correction
Spiked Amount	50.000		Recovery =	64.93%		
11) S	SS 1-chloro-otadecane...	14.763	1526622	12.492	ug/mLm	
Spiked Amount	50.000		Recovery =	24.98%		
	Target Compounds					
1)	naphthalene	0.000	0	N.D.	ug/mLd	
2)	2-methylnaphthalene	0.000	0	N.D.	ug/mL	
4)	acenaphthylene	0.000	0	N.D.	ug/mLd	
6)	acenaphthene	0.000	0	N.D.	ug/mL	
7)	fluorene	0.000	0	N.D.	ug/mL	
8)	phenanthrene	0.000	0	N.D.	ug/mL	
9)	anthracene	0.000	0	N.D.	ug/mL	
12)	fluoranthene	0.000	0	N.D.	ug/mL	
13)	pyrene	0.000	0	N.D.	ug/mL	
14)	benzo(a)anthracene	0.000	0	N.D.	ug/mL	
15)	chrysene	0.000	0	N.D.	ug/mL	
16)	benzo(b&k)fluoranthenes	0.000	0	N.D.	ug/mL	
17)	benzo(a)pyrene	0.000	0	N.D.	ug/mL	
18)	indeno&dibenzo	0.000	0	N.D.	ug/mL	
19)	benzo(g,h,i)perylene	0.000	0	N.D.	ug/mL	
20) H	C11-C22 Aromatics	12.000	4236284	29.713	ug/mLm	RI = Range Integration

(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : X:\S6\2023\Dec23\120823\
Data File : s6120816.D
Signal(s) : FID1A.ch
Acq On : 08 Dec 2023 08:54 pm
Operator : dbv
Sample : 67839-02 aro x1
Misc :
ALS Vial : 8 Sample Multiplier: 1

Integration File: rteint.p
Quant Time: Dec 09 17:35:03 2023
Quant Method : X:\S6\methods\S6ARO100423F.M
Quant Title : S6 EPH Aromatics
QLast Update : Thu Oct 05 11:16:37 2023
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : X:\S6\2023\Dec23\120823.SEC\
Data File : s6120815.D
Signal(s) : FID2B.ch
Acq On : 08 Dec 2023 08:54 pm
Operator : dbv
Sample : 67839-02 ali x1
Misc :
ALS Vial : 83 Sample Multiplier: 1

12/12/23 @ 08:45
DonnaV

Integration File: rteint.p
Quant Time: Dec 09 17:35:21 2023
Quant Method : X:\S6\methods\S6ALI100423A.M
Quant Title : S6 EPH Aliphatics
QLast Update : Thu Oct 05 13:01:54 2023
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :

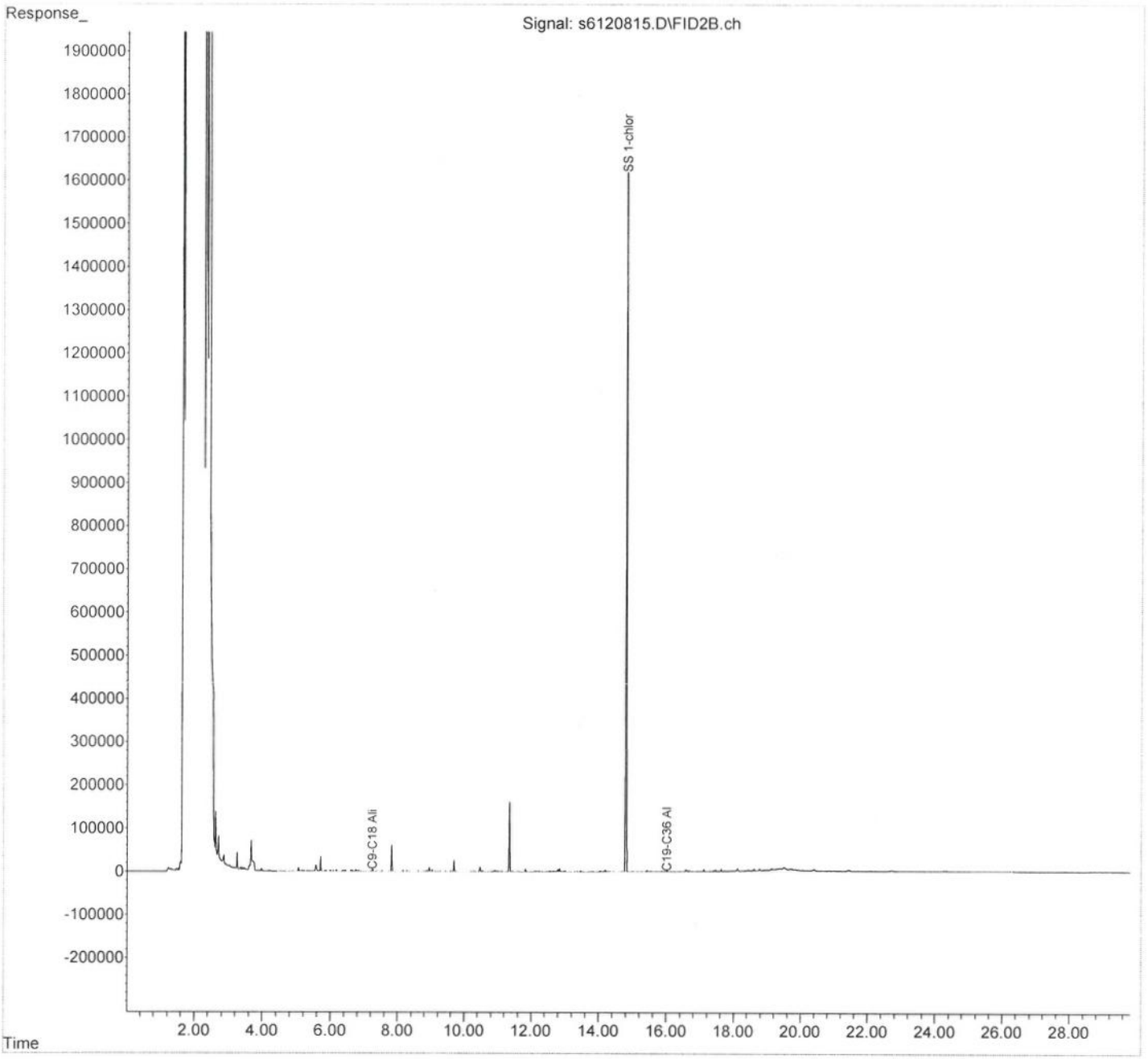
	Compound	R.T.	Response	Conc	Units	
	System Monitoring Compounds					
4) S	SS 2-fluorobiphenyl (...	0.000	0	N.D.	ug/mLd	
Spiked Amount	20.000	Recovery =	0.00%			
6) S	SS 2-bromonaphthalene...	0.000	0	N.D.	ug/mLd	
Spiked Amount	20.000	Recovery =	0.00%			
11) S	SS ortho-terphenyl (OTP)	0.000	0	N.D.	ug/mLd	
Spiked Amount	50.000	Recovery =	0.00%			
13) S	SS 1-chloro-octadecan...	14.807f	2325549	19.798	ug/mL	
Spiked Amount	50.000	Recovery =	39.60%			
	Target Compounds					
1)	C9 n-Nonane	0.000	0	N.D.	ug/mLd	
2)	C10 n-Decane	0.000	0	N.D.	ug/mLd	
3)	C12 n-Dodecane	0.000	0	N.D.	ug/mLd	
5)	C14 n-Tetradecane	0.000	0	N.D.	ug/mLd	
7)	C16 n-Hexadecane	0.000	0	N.D.	ug/mLd	
8)	C18 n-Octadecane	0.000	0	N.D.	ug/mLd	
9) H	C9-C18 Aliphatics	7.237	986471	7.093	ug/mLm	RI = Range Integration
10)	C19 n-Nonadecane	0.000	0	N.D.	ug/mLd	
12)	C20 n-Eicosane	0.000	0	N.D.	ug/mLd	
14)	C22 n-Docosane	0.000	0	N.D.	ug/mLd	
15)	C24 n-Tetracosane	0.000	0	N.D.	ug/mLd	
16)	C26 n-Hexacosane	0.000	0	N.D.	ug/mLd	
17)	C28 n-Octacosane	0.000	0	N.D.	ug/mLd	
18)	C30 n-Triacontane	0.000	0	N.D.	ug/mLd	
19)	C36 n-Hexatriacontane	0.000	0	N.D.	ug/mLd	
20) H	C19-C36 Aliphatics	16.000	2105097	14.831	ug/mLm	RI = Range Integration

(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : X:\S6\2023\Dec23\120823.SEC\
Data File : s6120815.D
Signal(s) : FID2B.ch
Acq On : 08 Dec 2023 08:54 pm
Operator : dbv
Sample : 67839-02 ali x1
Misc :
ALS Vial : 83 Sample Multiplier: 1

Integration File: rteint.p
Quant Time: Dec 09 17:35:21 2023
Quant Method : X:\S6\methods\S6ALI100423A.M
Quant Title : S6 EPH Aliphatics
QLast Update : Thu Oct 05 13:01:54 2023
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :



This File:	L:\SVOA\Excel Reports\EPH\231214\67839-003		
Analysis Group:	EPH	Dow Salvage Yard	
Field ID:	MW4-138-148-110923	CRE	
Sample:	67839-03 targets x1	67839-03 aro x1	67839-03 ali x1
Misc:	aro frac		
Method Name:	SVOA04 Method 8270E (t	S6 EPH Aromatics	S6 EPH Aliphatics
Import File Name:	s6 EPHs QC17156W		
TestGroupID:	EMA_EPH_PresCert_A		
Aqueous or Soil? (A or S)	A		
Fractionated? (Y/N)	y	y	
Prep Date:	11/20/2023		
Lab#:	67839-003		
QC_Code:			
Prep#	~~17225~~ 17156 HG DMV		

Donna Valley L:\SVOA\EPH\EPH ImportFileBuilder2.0.xls
12/14/23 12:30 PM
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L:\SVOA\Excel Reports\EPH\2312
L:\SVOA\PDF Reports\FUELS\

Reviewer Checks:

Quant Report: Reviewed? Ranges integrated? Analyst Initials & Date?	1
Chromatogram Checked? Major peaks identified?	2
Soil prep data checked: weight, volume, %solid, Prep date	5
Field ID consistent with data and any field replicates	11
Results consistent with any re-runs & internal QC	16
Substitute dilution data checked	20
Correct dilution and reason clear or noted	
Reason for reanalysis documented	
Surrogates pass or flagged & noted	
Flags checked (Expiration, F+, Over Cal)	
Other QC failures, estimates or interferences documented	
Spot checked Reported Result with Quant Report	
Checked Audit flagged data in LIMS	

Notes:

Initials & Date: 12/14/23

X:\S4\2023\Dec23\120723\s4120751.D\S4PAH110223A.XLS PAH targets filename
X:\S6\2023\Dec23\120823\s6120818.D\S6ARO100423F.XLS aromatics filename
X:\S6\2023\Dec23\120823.SEC\s6120817.D\S6ALI100423A.XLS aliphatics filename

#	Surrogate Standards	Concentration (ug/mL)	AnalysisDate	AnalysisTime	AnalyzedBy	Dilution	Weight	Volume	Surr	Recovery	Flag	QC Limits
13	SS 1-chloro-octadecane (COD)	21.69585508	12/8/2023	09:28:00 PM	DBV s6120817.D	1	1	2	100	**43%**		40-140
10	SS ortho-terphenyl (OTP)	28.86470683	12/8/2023	09:28:00 PM	DBV s6120818.D	1	1	2	100	**58%**		40-140
3	SS 2-fluorobiphenyl (2FBP)	15.68756454	12/8/2023	09:28:00 PM	DBV s6120818.D	1	1	2	40	**78%**		40-140
5	SS 2-bromonaphthalene (2BN)	16.25467872	12/8/2023	09:28:00 PM	DBV s6120818.D	1	1	2	40	**81%**		40-140

#	AnalyteName	Concentration (ug/mL)	AnalysisDate	AnalysisTime	AnalyzedBy	Dilution	Weight	Volume
3	naphthalene	0	12/08/2023	11:23:00 AM	CL s4120751.D	1	1	2
4	2-methylnaphthalene	0	12/08/2023	11:23:00 AM	CL s4120751.D	1	1	2
12	phenanthrene	0	12/08/2023	11:23:00 AM	CL s4120751.D	1	1	2
8	acenaphthene	0	12/08/2023	11:23:00 AM	CL s4120751.D	1	1	2
7	acenaphthylene	0	12/08/2023	11:23:00 AM	CL s4120751.D	1	1	2
10	fluorene	0	12/08/2023	11:23:00 AM	CL s4120751.D	1	1	2
13	anthracene	0	12/08/2023	11:23:00 AM	CL s4120751.D	1	1	2
15	fluoranthene	0	12/08/2023	11:23:00 AM	CL s4120751.D	1	1	2
17	pyrene	0	12/08/2023	11:23:00 AM	CL s4120751.D	1	1	2
18	benzo(a)anthracene	0	12/08/2023	11:23:00 AM	CL s4120751.D	1	1	2
19	chrysene	0	12/08/2023	11:23:00 AM	CL s4120751.D	1	1	2
21	benzo(b)fluoranthene	0	12/08/2023	11:23:00 AM	CL s4120751.D	1	1	2
22	benzo(k)fluoranthene	0	12/08/2023	11:23:00 AM	CL s4120751.D	1	1	2
23	benzo(a)pyrene	0	12/08/2023	11:23:00 AM	CL s4120751.D	1	1	2
24	indeno(1,2,3-cd)pyrene	0	12/08/2023	11:23:00 AM	CL s4120751.D	1	1	2
25	dibenzo(a,h)anthracene	0	12/08/2023	11:23:00 AM	CL s4120751.D	1	1	2
26	benzo(g,h,i)perylene	0	12/08/2023	11:23:00 AM	CL s4120751.D	1	1	2
20	C11-C22 Aromatics	22.66436224	12/8/2023	09:28:00 PM	DBV s6120818.D	1	1	2
9	C9-C18 Aliphatics	5.388837406	12/8/2023	09:28:00 PM	DBV s6120817.D	1	1	2
20	C19-C36 Aliphatics	16.69482303	12/8/2023	09:28:00 PM	DBV s6120817.D	1	1	2
	Adjusted C11-C22 Aromatics	22.66436224	12/8/2023	09:28:00 PM	DBV s6120818.D	1	1	2

Data Path : X:\S4\2023\Dec23\120723\
Data File : s4120751.D
Acq On : 08 Dec 2023 11:23 am
Operator : cl
Sample : 67839-03 targets x1
Misc : aro frac
ALS Vial : 46 Sample Multiplier: 1

CL
12/8/23 @ 15:36
CharlesL

Quant Time: Dec 08 12:33:19 2023
Quant Method : X:\S4\methods\S4PAH110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration

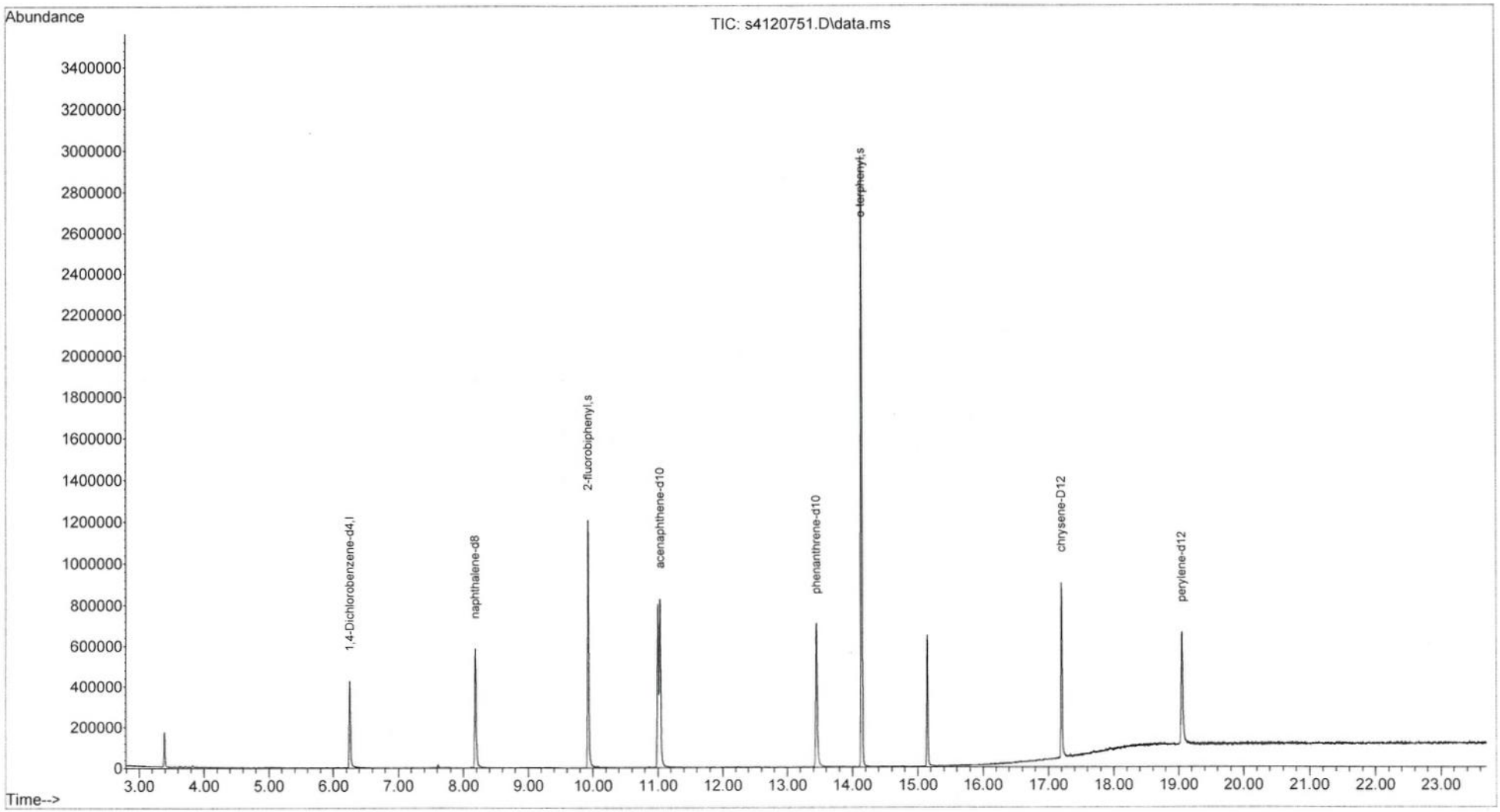
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.250	152	104453	10.00	ug/mL	-0.01
2) naphthalene-d8	8.179	136	412580	10.00	ug/mL	-0.02
5) acenaphthene-d10	11.035	164	243393	10.00	ug/mL	-0.01
11) phenanthrene-d10	13.449	188	456837	10.00	ug/mL	#-0.01
16) chrysene-D12	17.202	240	400732	10.00	ug/mL	0.00
20) perylene-d12	19.052	264	343556	10.00	ug/mL	0.01
System Monitoring Compounds						
6) 2-fluorobiphenyl	9.927	172	547238	14.27	ug/mL	-0.01
Spiked Amount 100.000			Recovery = 14.27%			
14) o-terphenyl	14.142	230	782526	30.17	ug/mL	-0.01
Spiked Amount 100.000			Recovery = 30.17%			
Target Compounds						Qvalue
18) benzo(a)anthracene	17.199	228	964	Below Cal	#	51
19) chrysene	17.199	228	964	Below Cal	#	49

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Dec23\120723\
Data File : s4120751.D
Acq On : 08 Dec 2023 11:23 am
Operator : cl
Sample : 67839-03 targets x1
Misc : aro frac
ALS Vial : 46 Sample Multiplier: 1

Quant Time: Dec 08 12:33:19 2023
Quant Method : X:\S4\methods\S4PAH110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration



SFP
12/12/23 @ 12:24
SkylaM

Data Path : X:\S6\2023\Dec23\120823\
Data File : s6120818.D
Signal(s) : FID1A.ch
Acq On : 08 Dec 2023 09:28 pm
Operator : dbv
Sample : 67839-03 aro x1
Misc :
ALS Vial : 9 Sample Multiplier: 1

Integration File: rteint.p
Quant Time: Dec 09 17:35:06 2023
Quant Method : X:\S6\methods\S6ARO100423F.M
Quant Title : S6 EPH Aromatics
QLast Update : Thu Oct 05 11:16:37 2023
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :

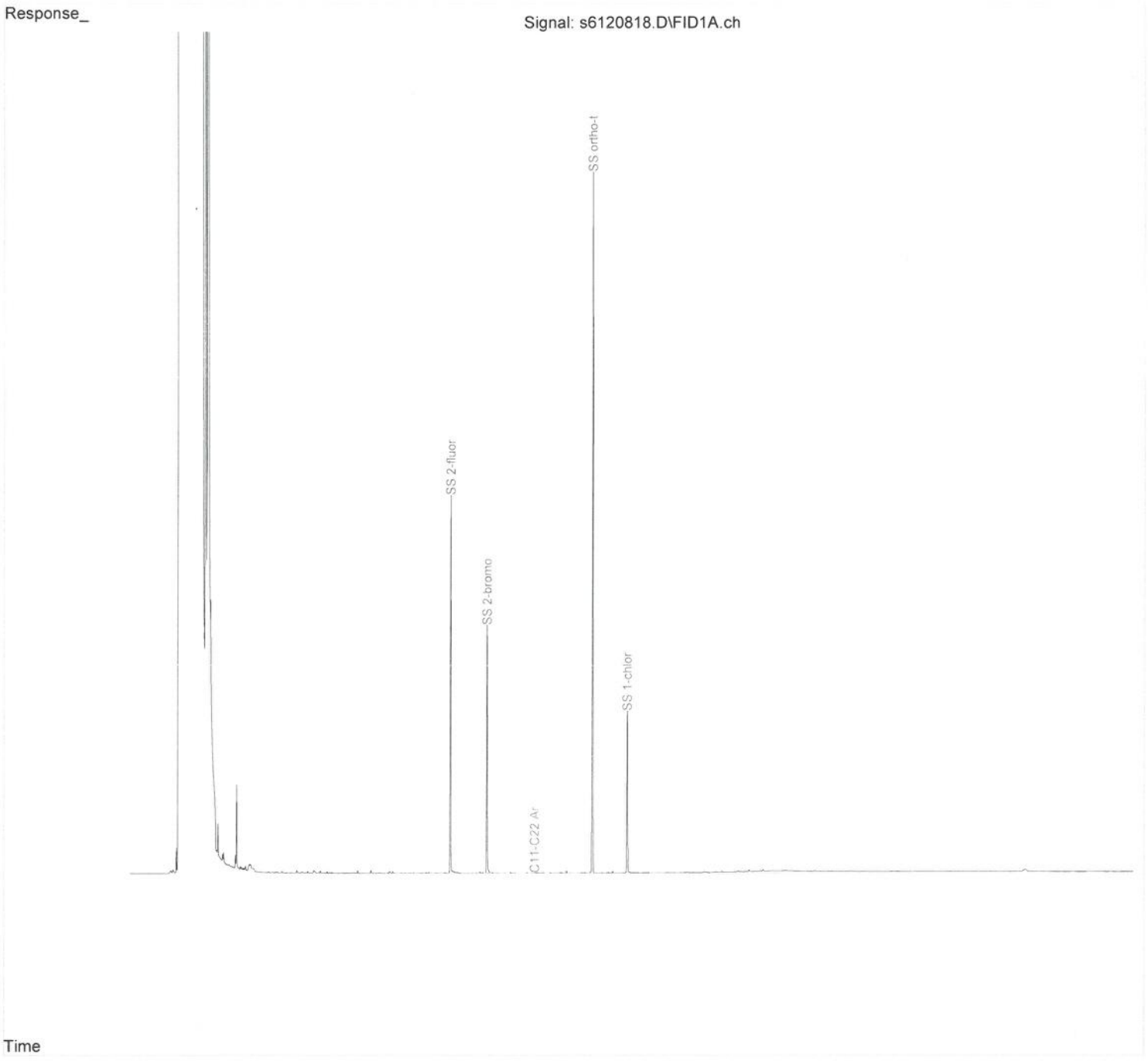
	Compound	R.T.	Response	Conc	Units	
	System Monitoring Compounds					
3) S	SS 2-fluorobiphenyl (...	9.527	2213736	15.688	ug/mL	
Spiked Amount	20.000		Recovery =	78.44%		
5) S	SS 2-bromonaphthalene...	10.603	1550151	16.255	ug/mLm	BC = Baseline Correction
Spiked Amount	20.000		Recovery =	81.27%		
10) S	SS ortho-terphenyl (OTP)	13.724	4318527	28.865	ug/mLm	BC = Baseline Correction
Spiked Amount	50.000		Recovery =	57.73%		
11) S	SS 1-chloro-otadecane...	14.762f	1064378	8.714	ug/mLm	
Spiked Amount	50.000		Recovery =	17.43%		
	Target Compounds					
1)	naphthalene	0.000	0	N.D.	ug/mLd	
2)	2-methylnaphthalene	0.000	0	N.D.	ug/mL	
4)	acenaphthylene	0.000	0	N.D.	ug/mLd	
6)	acenaphthene	0.000	0	N.D.	ug/mL	
7)	fluorene	0.000	0	N.D.	ug/mL	
8)	phenanthrene	0.000	0	N.D.	ug/mL	
9)	anthracene	0.000	0	N.D.	ug/mL	
12)	fluoranthene	0.000	0	N.D.	ug/mL	
13)	pyrene	0.000	0	N.D.	ug/mL	
14)	benzo(a)anthracene	0.000	0	N.D.	ug/mL	
15)	chrysene	0.000	0	N.D.	ug/mL	
16)	benzo(b&k)fluoranthenes	0.000	0	N.D.	ug/mL	
17)	benzo(a)pyrene	0.000	0	N.D.	ug/mL	
18)	indeno&dibenzo	0.000	0	N.D.	ug/mL	
19)	benzo(g,h,i)perylene	0.000	0	N.D.	ug/mL	
20) H	C11-C22 Aromatics	12.000	3177779	22.664	ug/mLm	RI = Range Integration

(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : X:\S6\2023\Dec23\120823\
Data File : s6120818.D
Signal(s) : FID1A.ch
Acq On : 08 Dec 2023 09:28 pm
Operator : dbv
Sample : 67839-03 aro x1
Misc :
ALS Vial : 9 Sample Multiplier: 1

Integration File: rteint.p
Quant Time: Dec 09 17:35:06 2023
Quant Method : X:\S6\methods\S6ARO100423F.M
Quant Title : S6 EPH Aromatics
QLast Update : Thu Oct 05 11:16:37 2023
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :



Data Path : X:\S6\2023\Dec23\120823.SEC\
Data File : s6120817.D
Signal(s) : FID2B.ch
Acq On : 08 Dec 2023 09:28 pm
Operator : dbv
Sample : 67839-03 ali x1
Misc :
ALS Vial : 84 Sample Multiplier: 1



Integration File: rteint.p
Quant Time: Dec 09 17:35:24 2023
Quant Method : X:\S6\methods\S6ALI100423A.M
Quant Title : S6 EPH Aliphatics
QLast Update : Thu Oct 05 13:01:54 2023
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :

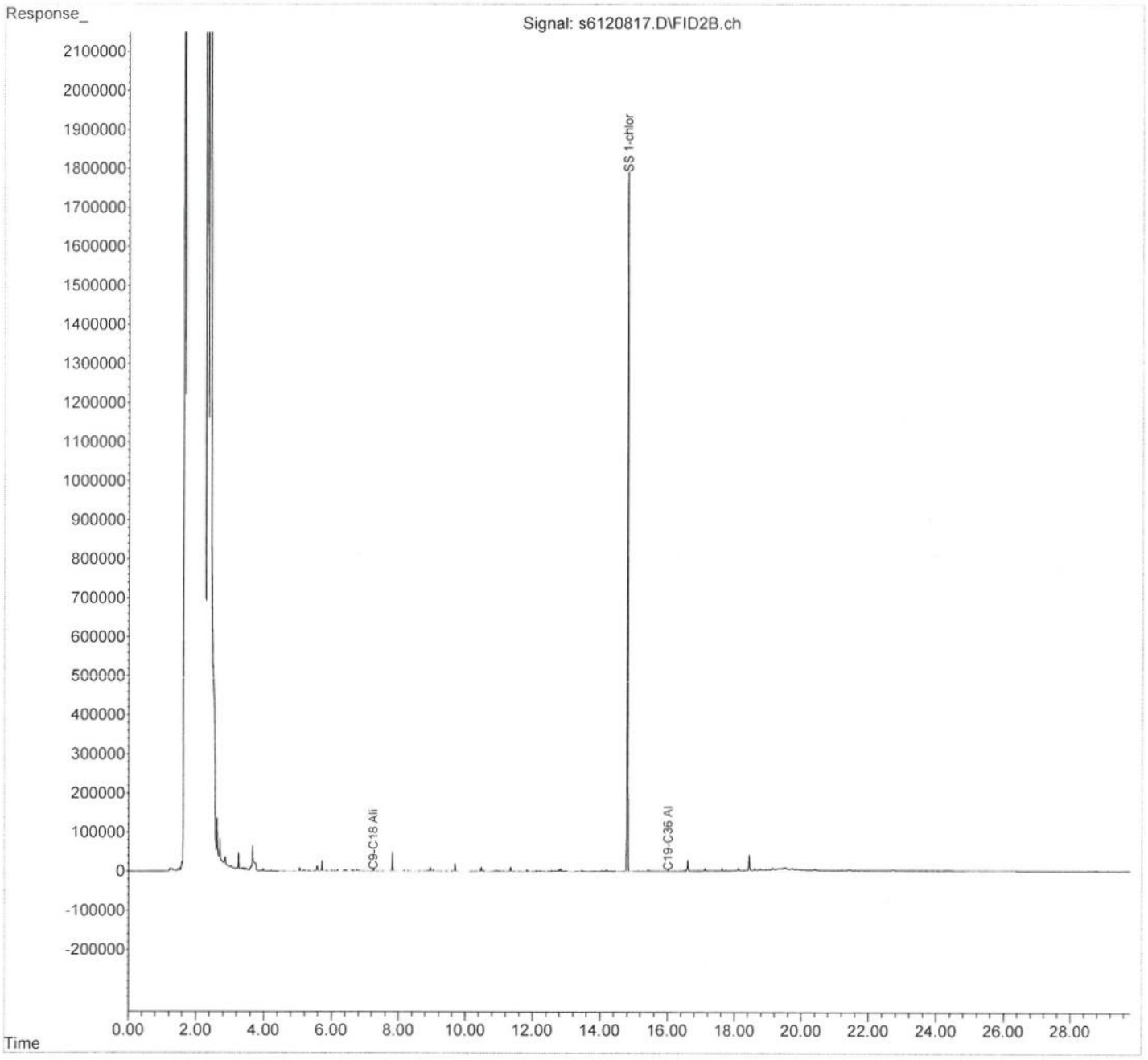
	Compound	R.T.	Response	Conc	Units	
	System Monitoring Compounds					
4) S	SS 2-fluorobiphenyl (...	0.000	0	N.D.	ug/mLd	
Spiked Amount	20.000	Recovery =	0.00%			
6) S	SS 2-bromonaphthalene...	0.000	0	N.D.	ug/mLd	
Spiked Amount	20.000	Recovery =	0.00%			
11) S	SS ortho-terphenyl (OTP)	0.000	0	N.D.	ug/mLd	
Spiked Amount	50.000	Recovery =	0.00%			
13) S	SS 1-chloro-octadecan...	14.807f	2547923	21.696	ug/mL	
Spiked Amount	50.000	Recovery =	43.39%			
	Target Compounds					
1)	C9 n-Nonane	0.000	0	N.D.	ug/mLd	
2)	C10 n-Decane	0.000	0	N.D.	ug/mLd	
3)	C12 n-Dodecane	0.000	0	N.D.	ug/mLd	
5)	C14 n-Tetradecane	0.000	0	N.D.	ug/mLd	
7)	C16 n-Hexadecane	0.000	0	N.D.	ug/mLd	
8)	C18 n-Octadecane	0.000	0	N.D.	ug/mLd	
9) H	C9-C18 Aliphatics	7.237	768542	5.389	ug/mLm	RI = Range Integration
10)	C19 n-Nonadecane	0.000	0	N.D.	ug/mLd	
12)	C20 n-Eicosane	0.000	0	N.D.	ug/mLd	
14)	C22 n-Docosane	0.000	0	N.D.	ug/mLd	
15)	C24 n-Tetracosane	0.000	0	N.D.	ug/mLd	
16)	C26 n-Hexacosane	0.000	0	N.D.	ug/mLd	
17)	C28 n-Octacosane	0.000	0	N.D.	ug/mLd	
18)	C30 n-Triacontane	0.000	0	N.D.	ug/mLd	
19)	C36 n-Hexatriacontane	0.000	0	N.D.	ug/mLd	
20) H	C19-C36 Aliphatics	16.000	2351899	16.695	ug/mLm	RI = Range Integration

(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : X:\S6\2023\Dec23\120823.SEC\
Data File : s6120817.D
Signal(s) : FID2B.ch
Acq On : 08 Dec 2023 09:28 pm
Operator : dbv
Sample : 67839-03 ali x1
Misc :
ALS Vial : 84 Sample Multiplier: 1

Integration File: rteint.p
Quant Time: Dec 09 17:35:24 2023
Quant Method : X:\S6\methods\S6ALI100423A.M
Quant Title : S6 EPH Aliphatics
QLast Update : Thu Oct 05 13:01:54 2023
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :



This File:	L:\SVOA\Excel Reports\EPH\231214\67839-004		
Analysis Group:	EPH	Dow Salvage Yard	
Field ID:	BRMW3-47-62-110923	CRE	
Sample:	67839-04 targets x1	67839-04 aro x1	67839-04 ali x1
Misc:	aro frac		
Method Name:	SVOA04 Method 8270E (E	S6 EPH Aromatics	S6 EPH Aliphatics
Import File Name:	s6 EPHs QC17156W		
TestGroupID:	EMA_EPH_PresCert_A		
Aqueous or Soil? (A or S)	A		
Fractionated? (Y/N)	Y	Y	
Prep Date:	11/20/2023		
Lab#:	67839-004		
QC_Code:			
Prep#	~~17225~~ 17156 HGDBV		

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12/14/23 12:31 PM
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Reviewer Checks:

- Quant Report: Reviewed? Ranges integrated? Analyst Initials & Date?
- Chromatogram Checked? Major peaks identified?
- Soil prep data checked: weight, volume, %solid, Prep date
- Field ID consistent with data and any field replicates
- Results consistent with any re-runs & internal QC
- Substitute dilution data checked
- Correct dilution and reason clear or noted
- Reason for reanalysis documented
- Surrogates pass or flagged & noted
- Flags checked (Expiration, F+, Over Cal)
- Other QC failures, estimates or interferences documented
- Spot checked Reported Result with Quant Report
- Checked Audit flagged data in LIMS

Notes:

Initials & Date: 12/14/23

1
2
5
11
16
20

X:\S4\2023\Dec23\120723\s4120752.D\S4PAH110223A.XLS PAH targets filename
X:\S6\2023\Dec23\120823\s6120820.D\S6ARO100423F.XLS aromatics filename
X:\S6\2023\Dec23\120823.SEC\s6120819.D\S6ALI100423A.XLS aliphatics filename

#	Surrogate Standards	Concentration (ug/mL)	AnalysisDate	AnalysisTime	AnalyzedBy	Dilution	Weight	Volume	Surr	Recovery	Flag	QC Limits
13	SS 1-chloro-octadecane (COD)	21.51541649	12/8/2023	10:02:00 PM	DBV s6120819.D	1	1	2	100	**43%**		40-140
10	SS ortho-terphenyl (OTP)	28.80872703	12/8/2023	10:02:00 PM	DBV s6120820.D	1	1	2	100	**58%**		40-140
3	SS 2-fluorobiphenyl (2FBP)	15.02547087	12/8/2023	10:02:00 PM	DBV s6120820.D	1	1	2	40	**75%**		40-140
5	SS 2-bromonaphthalene (2BN)	15.46864078	12/8/2023	10:02:00 PM	DBV s6120820.D	1	1	2	40	**77%**		40-140

#	AnalyteName	Concentration (ug/mL)	AnalysisDate	AnalysisTime	AnalyzedBy	Dilution	Weight	Volume
3	naphthalene	0	12/08/2023	11:52:00 AM	CL s4120752.D	1	1	2
4	2-methyinaphthalene	0	12/08/2023	11:52:00 AM	CL s4120752.D	1	1	2
12	phenanthrene	0	12/08/2023	11:52:00 AM	CL s4120752.D	1	1	2
8	acenaphthene	0	12/08/2023	11:52:00 AM	CL s4120752.D	1	1	2
7	acenaphthylene	0	12/08/2023	11:52:00 AM	CL s4120752.D	1	1	2
10	fluorene	0	12/08/2023	11:52:00 AM	CL s4120752.D	1	1	2
13	anthracene	0	12/08/2023	11:52:00 AM	CL s4120752.D	1	1	2
15	fluoranthene	0	12/08/2023	11:52:00 AM	CL s4120752.D	1	1	2
17	pyrene	0	12/08/2023	11:52:00 AM	CL s4120752.D	1	1	2
18	benzo(a)anthracene	0	12/08/2023	11:52:00 AM	CL s4120752.D	1	1	2
19	chrysene	0	12/08/2023	11:52:00 AM	CL s4120752.D	1	1	2
21	benzo(b)fluoranthene	0	12/08/2023	11:52:00 AM	CL s4120752.D	1	1	2
22	benzo(k)fluoranthene	0	12/08/2023	11:52:00 AM	CL s4120752.D	1	1	2
23	benzo(a)pyrene	0	12/08/2023	11:52:00 AM	CL s4120752.D	1	1	2
24	indeno(1,2,3-cd)pyrene	0	12/08/2023	11:52:00 AM	CL s4120752.D	1	1	2
25	dibenzo(a,h)anthracene	0	12/08/2023	11:52:00 AM	CL s4120752.D	1	1	2
26	benzo(g,h,i)perylene	0	12/08/2023	11:52:00 AM	CL s4120752.D	1	1	2
20	C11-C22 Aromatics	24.55610979	12/8/2023	10:02:00 PM	DBV s6120820.D	1	1	2
9	C9-C18 Aliphatics	7.156859656	12/8/2023	10:02:00 PM	DBV s6120819.D	1	1	2
20	C19-C36 Aliphatics	18.43674145	12/8/2023	10:02:00 PM	DBV s6120819.D	1	1	2
	Adjusted C11-C22 Aromatics	24.55610979	12/8/2023	10:02:00 PM	DBV s6120820.D	1	1	2

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Dec23\120723\
Data File : s4120752.D
Acq On : 08 Dec 2023 11:52 am
Operator : cl
Sample : 67839-04 targets x1
Misc : aro frac
ALS Vial : 47 Sample Multiplier: 1

CL
12/8/23 @ 15:37
CharlesL

Quant Time: Dec 08 12:34:28 2023
Quant Method : X:\S4\methods\S4PAH110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration

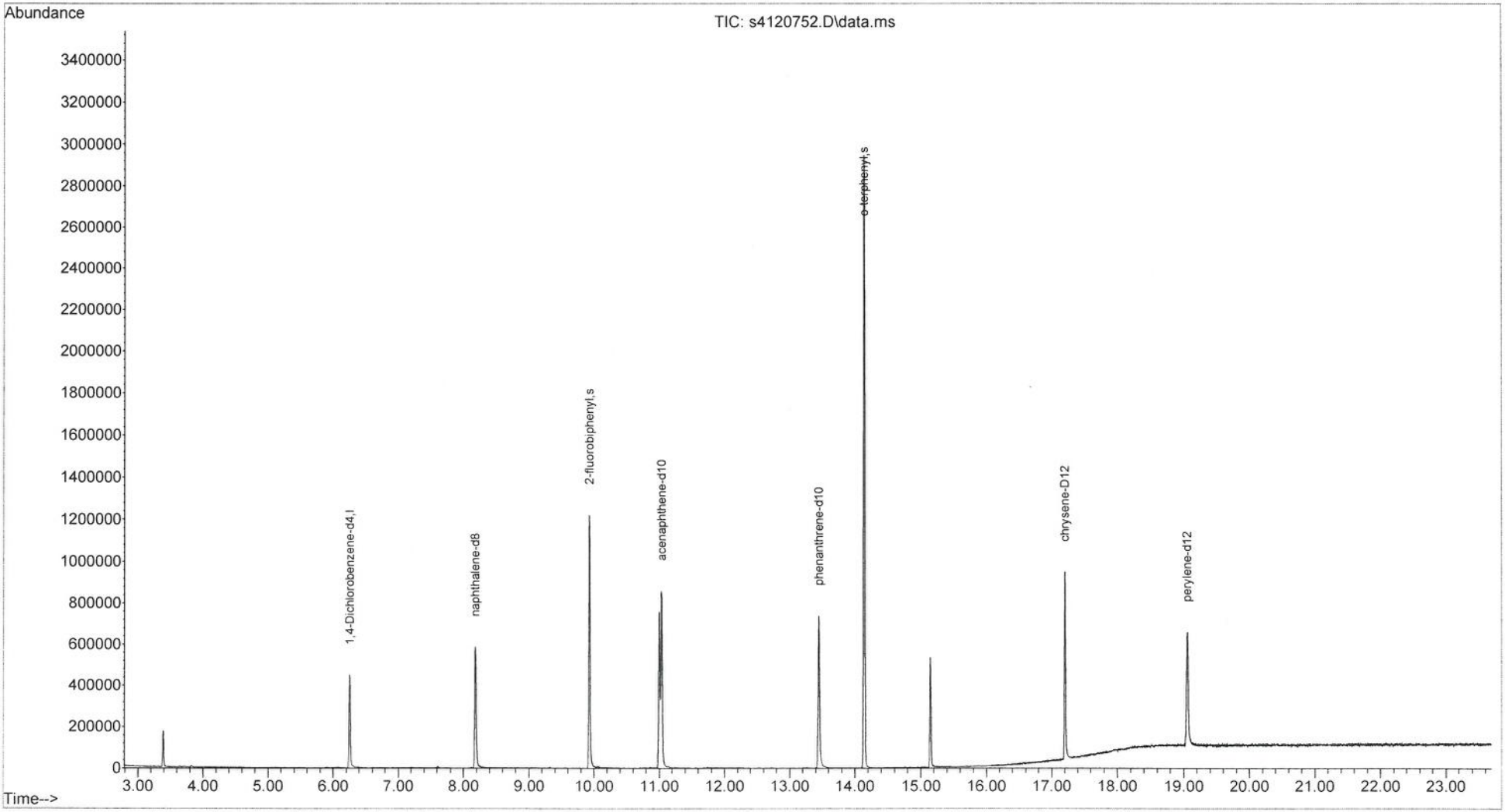
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.250	152	102831	10.00	ug/mL	-0.01
2) naphthalene-d8	8.179	136	418650	10.00	ug/mL	-0.02
5) acenaphthene-d10	11.035	164	248636	10.00	ug/mL	-0.01
11) phenanthrene-d10	13.448	188	463515	10.00	ug/mL	#-0.01
16) chrysene-D12	17.202	240	407136	10.00	ug/mL	0.00
20) perylene-d12	19.052	264	352806	10.00	ug/mL	0.01
System Monitoring Compounds						
6) 2-fluorobiphenyl	9.927	172	529069	13.50	ug/mL	-0.02
Spiked Amount 100.000			Recovery = 13.50%			
14) o-terphenyl	14.142	230	784167	29.79	ug/mL	-0.01
Spiked Amount 100.000			Recovery = 29.79%			
Target Compounds						Qvalue
3) naphthalene	8.212	128	1026	Below Cal	#	68
8) acenaphthene	11.035	154	912	Below Cal	#	4

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Dec23\120723\
Data File : s4120752.D
Acq On : 08 Dec 2023 11:52 am
Operator : cl
Sample : 67839-04 targets x1
Misc : aro frac
ALS Vial : 47 Sample Multiplier: 1

Quant Time: Dec 08 12:34:28 2023
Quant Method : X:\S4\methods\S4PAH110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration



SFP
12/12/23 @ 12:24
SkylaM

Data Path : X:\S6\2023\Dec23\120823\
Data File : s6120820.D
Signal(s) : FID1A.ch
Acq On : 08 Dec 2023 10:02 pm
Operator : dbv
Sample : 67839-04 aro x1
Misc :
ALS Vial : 10 Sample Multiplier: 1

Integration File: rteint.p
Quant Time: Dec 09 17:35:09 2023
Quant Method : X:\S6\methods\S6ARO100423F.M
Quant Title : S6 EPH Aromatics
QLast Update : Thu Oct 05 11:16:37 2023
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :

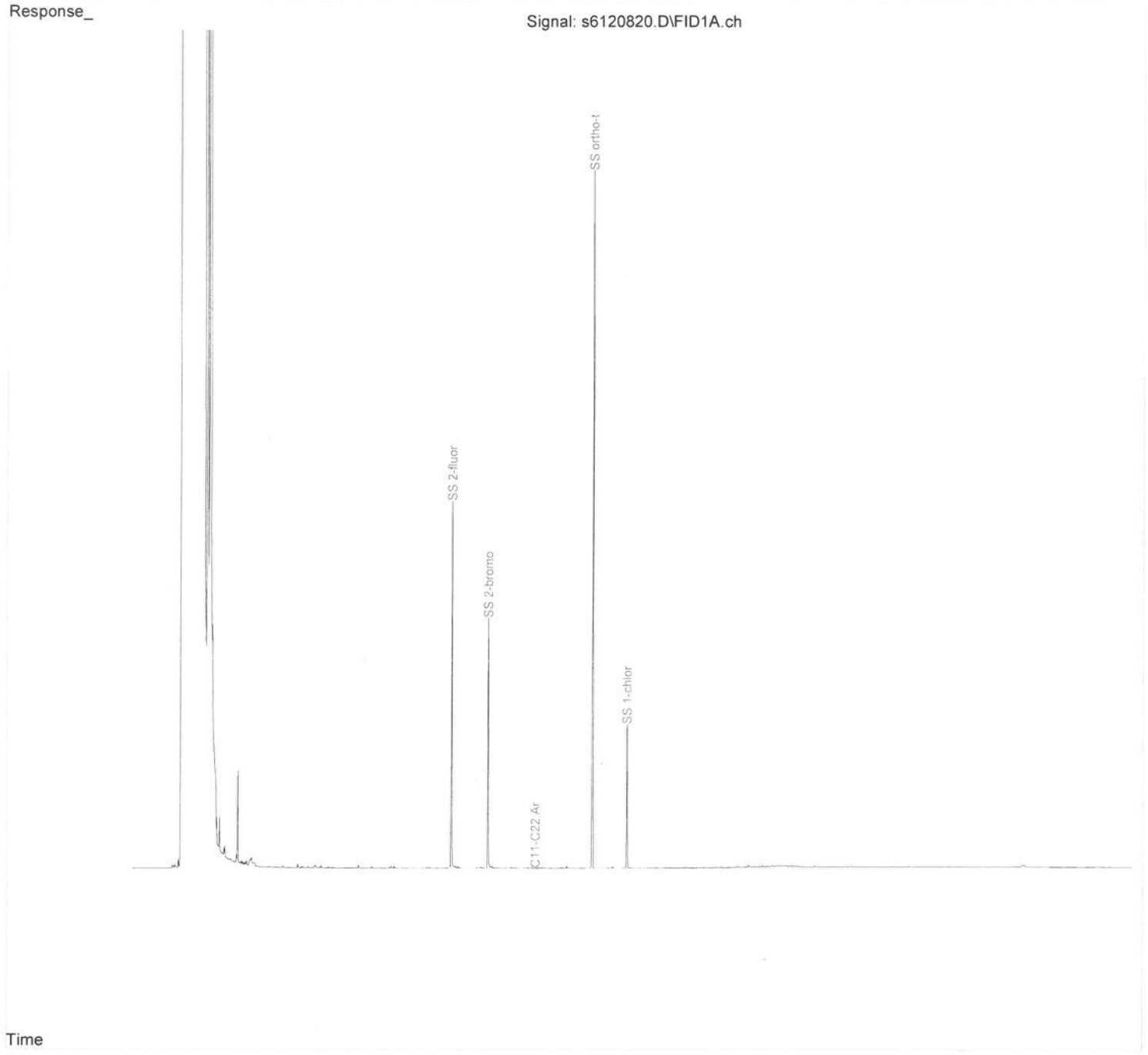
	Compound	R.T.	Response	Conc	Units	
	System Monitoring Compounds					
3) S	SS 2-fluorobiphenyl (...	9.526	2120378	15.025	ug/mL	
Spiked Amount	20.000		Recovery =	75.13%		
5) S	SS 2-bromonaphthalene...	10.602	1475153	15.469	ug/mLm	BC = Baseline Correction
Spiked Amount	20.000		Recovery =	77.34%		
10) S	SS ortho-terphenyl (OTP)	13.725	4310143	28.809	ug/mL	
Spiked Amount	50.000		Recovery =	57.62%		
11) S	SS 1-chloro-otadecane...	14.762f	903220	7.397	ug/mLm	
Spiked Amount	50.000		Recovery =	14.79%		
	Target Compounds					
1)	naphthalene	0.000	0	N.D.	ug/mLd	
2)	2-methylnaphthalene	0.000	0	N.D.	ug/mL	
4)	acenaphthylene	0.000	0	N.D.	ug/mLd	
6)	acenaphthene	0.000	0	N.D.	ug/mLd	
7)	fluorene	0.000	0	N.D.	ug/mL	
8)	phenanthrene	0.000	0	N.D.	ug/mL	
9)	anthracene	0.000	0	N.D.	ug/mL	
12)	fluoranthene	0.000	0	N.D.	ug/mL	
13)	pyrene	0.000	0	N.D.	ug/mL	
14)	benzo(a)anthracene	0.000	0	N.D.	ug/mL	
15)	chrysene	0.000	0	N.D.	ug/mL	
16)	benzo(b&k)fluoranthenes	0.000	0	N.D.	ug/mL	
17)	benzo(a)pyrene	0.000	0	N.D.	ug/mL	
18)	indeno&dibenzo	0.000	0	N.D.	ug/mL	
19)	benzo(g,h,i)perylene	0.000	0	N.D.	ug/mL	
20) H	C11-C22 Aromatics	12.000	3461874	24.556	ug/mLm	RI = Range Integration

(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : X:\S6\2023\Dec23\120823\
Data File : s6120820.D
Signal(s) : FID1A.ch
Acq On : 08 Dec 2023 10:02 pm
Operator : dbv
Sample : 67839-04 aro x1
Misc :
ALS Vial : 10 Sample Multiplier: 1

Integration File: rteint.p
Quant Time: Dec 09 17:35:09 2023
Quant Method : X:\S6\methods\S6ARO100423F.M
Quant Title : S6 EPH Aromatics
QLast Update : Thu Oct 05 11:16:37 2023
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : X:\S6\2023\Dec23\120823.SEC\
Data File : s6120819.D
Signal(s) : FID2B.ch
Acq On : 08 Dec 2023 10:02 pm
Operator : dbv
Sample : 67839-04 ali x1
Misc :
ALS Vial : 85 Sample Multiplier: 1

Integration File: rteint.p
Quant Time: Dec 09 17:35:27 2023
Quant Method : X:\S6\methods\S6ALI100423A.M
Quant Title : S6 EPH Aliphatics
QLast Update : Thu Oct 05 13:01:54 2023
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :

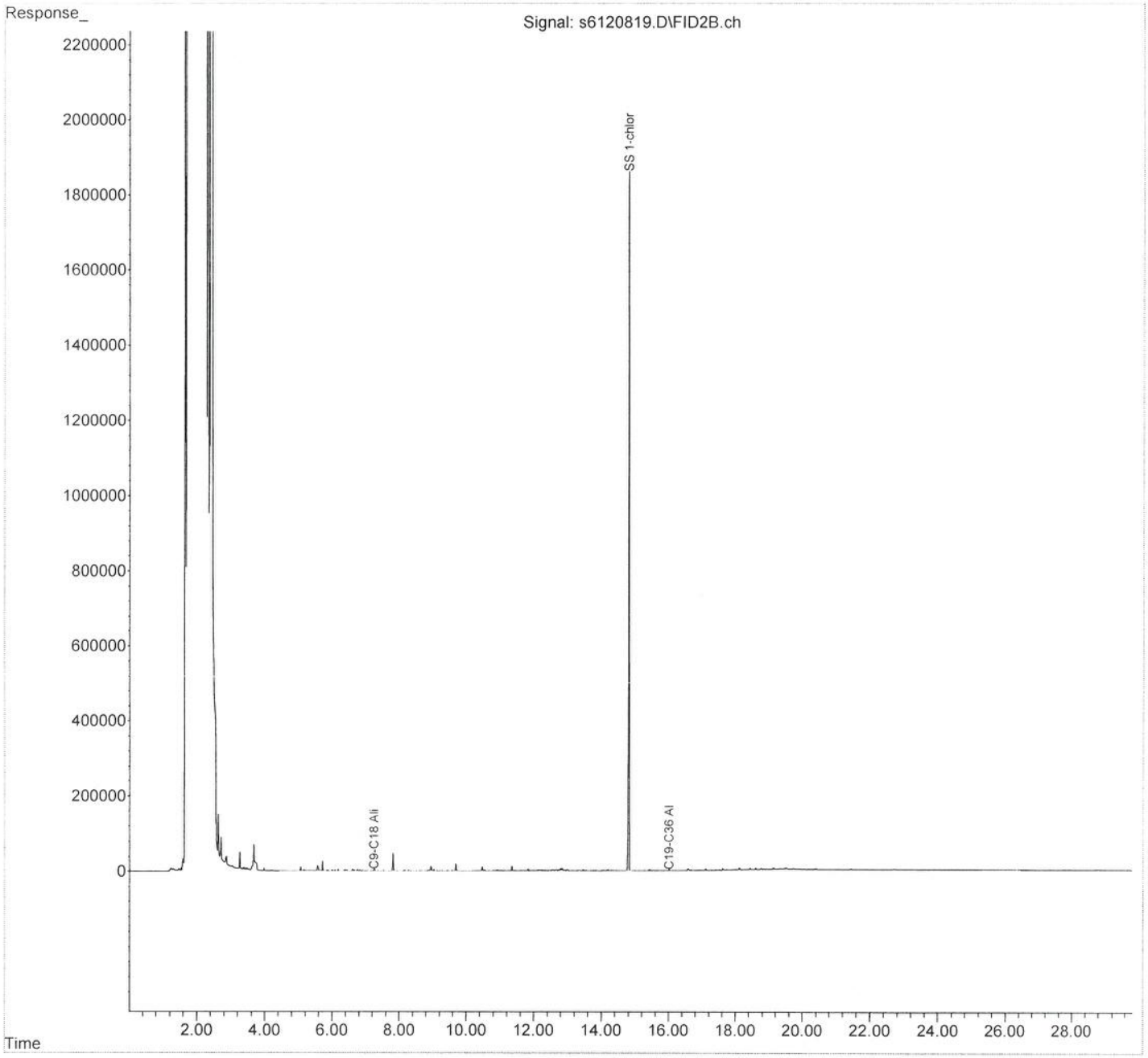
	Compound	R.T.	Response	Conc	Units	
	System Monitoring Compounds					
4) S	SS 2-fluorobiphenyl (...	0.000	0	N.D.	ug/mLd	
Spiked Amount	20.000	Recovery	=	0.00%		
6) S	SS 2-bromonaphthalene...	0.000	0	N.D.	ug/mLd	
Spiked Amount	20.000	Recovery	=	0.00%		
11) S	SS ortho-terphenyl (OTP)	0.000	0	N.D.	ug/mLd	
Spiked Amount	50.000	Recovery	=	0.00%		
13) S	SS 1-chloro-octadecan...	14.805f	2526779	21.515	ug/mL	
Spiked Amount	50.000	Recovery	=	43.03%		
	Target Compounds					
1)	C9 n-Nonane	0.000	0	N.D.	ug/mLd	
2)	C10 n-Decane	0.000	0	N.D.	ug/mLd	
3)	C12 n-Dodecane	0.000	0	N.D.	ug/mLd	
5)	C14 n-Tetradecane	0.000	0	N.D.	ug/mLd	
7)	C16 n-Hexadecane	0.000	0	N.D.	ug/mLd	
8)	C18 n-Octadecane	0.000	0	N.D.	ug/mLd	
9) H	C9-C18 Aliphatics	7.237	994650	7.157	ug/mLm	RI = Range Integration
10)	C19 n-Nonadecane	0.000	0	N.D.	ug/mLd	
12)	C20 n-Eicosane	0.000	0	N.D.	ug/mLd	
14)	C22 n-Docosane	0.000	0	N.D.	ug/mLd	
15)	C24 n-Tetracosane	0.000	0	N.D.	ug/mLd	
16)	C26 n-Hexacosane	0.000	0	N.D.	ug/mLd	
17)	C28 n-Octacosane	0.000	0	N.D.	ug/mLd	
18)	C30 n-Triacontane	0.000	0	N.D.	ug/mLd	
19)	C36 n-Hexatriacontane	0.000	0	N.D.	ug/mLd	
20) H	C19-C36 Aliphatics	16.000	2582553	18.437	ug/mLm	RI = Range Integration

(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : X:\S6\2023\Dec23\120823.SEC\
Data File : s6120819.D
Signal(s) : FID2B.ch
Acq On : 08 Dec 2023 10:02 pm
Operator : dbv
Sample : 67839-04 ali x1
Misc :
ALS Vial : 85 Sample Multiplier: 1

Integration File: rteint.p
Quant Time: Dec 09 17:35:27 2023
Quant Method : X:\S6\methods\S6ALI100423A.M
Quant Title : S6 EPH Aliphatics
QLast Update : Thu Oct 05 13:01:54 2023
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :



This File:	L:\SVOA\Excel Reports\EPH\231214\67839-005		
Analysis Group:	EPH	Dow Salvage Yard	
Field ID:	MW3-145-155-110923	CRE	
Sample:	67839-05 targets x1	67839-05 aro x1	67839-05 ali x1
Misc:	aro frac		
Method Name:	SVOA04 Method 8270E (t	S6 EPH Aromatics	S6 EPH Aliphatics
Import File Name:	s6 EPHs QC17156W		
TestGroupID:	EMA_EPH_PresCert_A		
Aqueous or Soil? (A or S)	A		
Fractionated? (Y/N)	y	y	
Prep Date:	11/20/2023		
Lab#:	67839-005		
QC_Code:			
Prep#	L7225 17156 HE DBL		

Donna Valley L:\SVOA\EPH\EPH ImportFileBuilder2.0.xls
12/14/23 12:32 PM
L:\SVOA\EPH\
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Reviewer Checks:

- Quant Report: Reviewed? Ranges integrated? Analyst Initials & Date?
- Chromatogram Checked? Major peaks identified?
- Soil prep data checked: weight, volume, %solid, Prep date
- Field ID consistent with data and any field replicates
- Results consistent with any re-runs & internal QC
- Substitute dilution data checked
- Correct dilution and reason clear or noted
- Reason for reanalysis documented
- Surrogates pass or flagged & noted
- Flags checked (Expiration, F+, Over Cal)
- Other QC failures, estimates or interferences documented
- Spot checked Reported Result with Quant Report
- Checked Audit flagged data in LIMS

Notes:

Initials & Date: 12/14/23

1
2
5
11
16
20

X:\S4\2023\Dec23\120723\s4120753.D\S4PAH110223A.XLS PAH targets filename
X:\S6\2023\Dec23\120823\s6120822.D\S6ARO100423F.XLS aromatics filename
X:\S6\2023\Dec23\120823.SEC\s6120821.D\S6ALI100423A.XLS aliphatics filename

#	Surrogate Standards	Concentration (ug/mL)	AnalysisDate	AnalysisTime	AnalyzedBy	Dilution	Weight	Volume	Surr	Recovery	Flag	QC Limits
13	SS 1-chloro-octadecane (COD)	24.91300254	12/8/2023	10:36:00 PM	DBV s6120821.D	1	1	2	100	**50%**		40-140
10	SS ortho-terphenyl (OTP)	33.06217045	12/8/2023	10:36:00 PM	DBV s6120822.D	1	1	2	100	**66%**		40-140
3	SS 2-fluorobiphenyl (2FBP)	15.07864659	12/8/2023	10:36:00 PM	DBV s6120822.D	1	1	2	40	**75%**		40-140
5	SS 2-bromonaphthalene (2BN)	15.63857623	12/8/2023	10:36:00 PM	DBV s6120822.D	1	1	2	40	**78%**		40-140

#	AnalyteName	Concentration (ug/mL)	AnalysisDate	AnalysisTime	AnalyzedBy	Dilution	Weight	Volume
3	naphthalene	0	12/08/2023	12:22:00 PM	CL s4120753.D	1	1	2
4	2-methylnaphthalene	0	12/08/2023	12:22:00 PM	CL s4120753.D	1	1	2
12	phenanthrene	0	12/08/2023	12:22:00 PM	CL s4120753.D	1	1	2
8	acenaphthene	0	12/08/2023	12:22:00 PM	CL s4120753.D	1	1	2
7	acenaphthylene	0	12/08/2023	12:22:00 PM	CL s4120753.D	1	1	2
10	fluorene	0	12/08/2023	12:22:00 PM	CL s4120753.D	1	1	2
13	anthracene	0	12/08/2023	12:22:00 PM	CL s4120753.D	1	1	2
15	fluoranthene	0	12/08/2023	12:22:00 PM	CL s4120753.D	1	1	2
17	pyrene	0	12/08/2023	12:22:00 PM	CL s4120753.D	1	1	2
18	benzo(a)anthracene	0	12/08/2023	12:22:00 PM	CL s4120753.D	1	1	2
19	chrysene	0	12/08/2023	12:22:00 PM	CL s4120753.D	1	1	2
21	benzo(b)fluoranthene	0	12/08/2023	12:22:00 PM	CL s4120753.D	1	1	2
22	benzo(k)fluoranthene	0	12/08/2023	12:22:00 PM	CL s4120753.D	1	1	2
23	benzo(a)pyrene	0	12/08/2023	12:22:00 PM	CL s4120753.D	1	1	2
24	indeno(1,2,3-cd)pyrene	0	12/08/2023	12:22:00 PM	CL s4120753.D	1	1	2
25	dibenzo(a,h)anthracene	0	12/08/2023	12:22:00 PM	CL s4120753.D	1	1	2
26	benzo(g,h,i)perylene	0	12/08/2023	12:22:00 PM	CL s4120753.D	1	1	2
20	C11-C22 Aromatics	28.4793077	12/8/2023	10:36:00 PM	DBV s6120822.D	1	1	2
9	C9-C18 Aliphatics	5.658840273	12/8/2023	10:36:00 PM	DBV s6120821.D	1	1	2
20	C19-C36 Aliphatics	14.01793395	12/8/2023	10:36:00 PM	DBV s6120821.D	1	1	2
	Adjusted C11-C22 Aromatics	28.4793077	12/8/2023	10:36:00 PM	DBV s6120822.D	1	1	2

Quantitation Report (QT Reviewed)

CL
12/8/23 @ 15:37
CharlesL

Data Path : X:\S4\2023\Dec23\120723\
Data File : s4120753.D
Acq On : 08 Dec 2023 12:22 pm
Operator : cl
Sample : 67839-05 targets x1
Misc : aro frac
ALS Vial : 48 Sample Multiplier: 1

Quant Time: Dec 08 13:40:05 2023
Quant Method : X:\S4\methods\S4PAH110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration

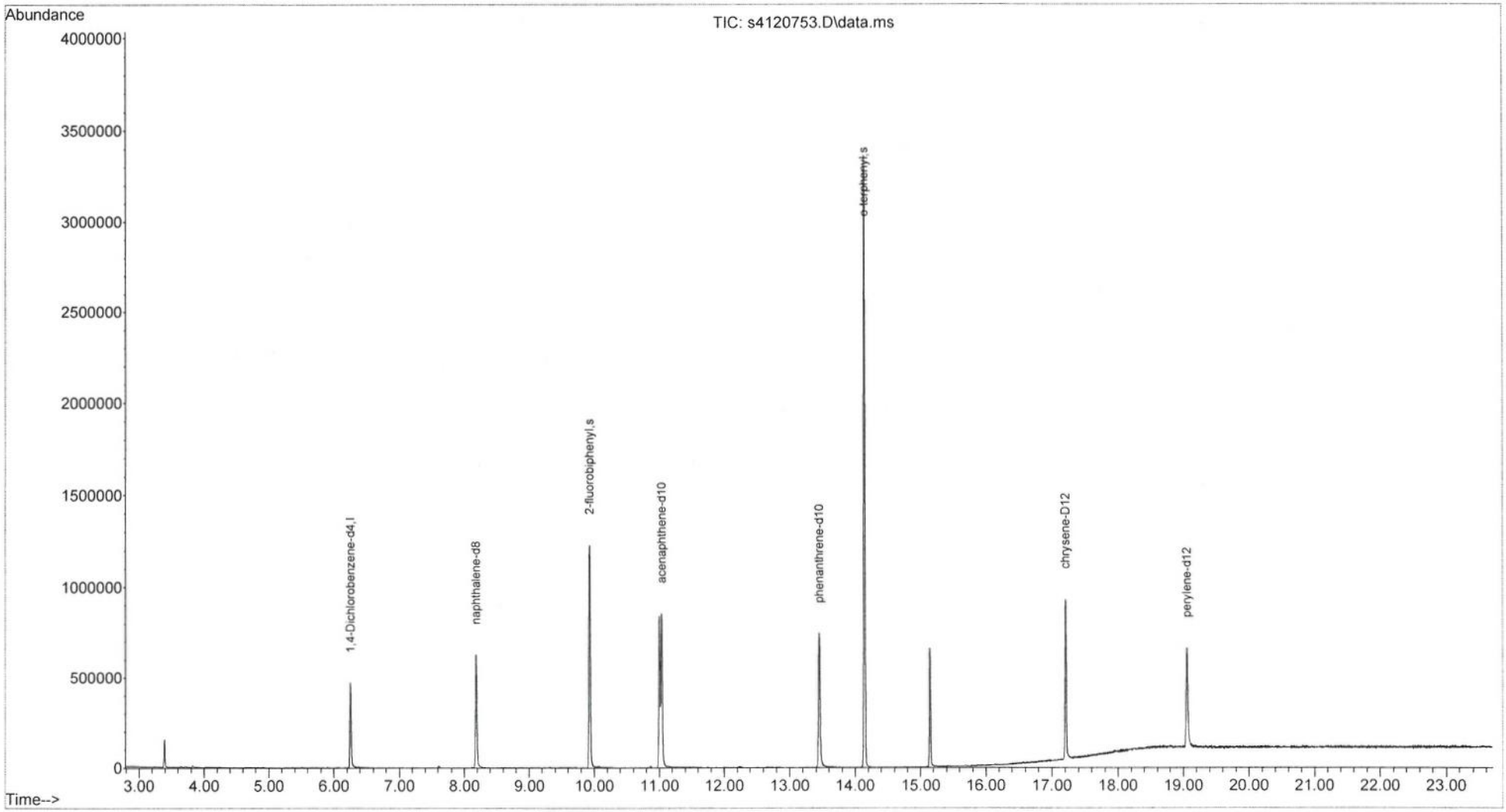
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.250	152	108270	10.00	ug/mL	-0.01
2) naphthalene-d8	8.179	136	439151	10.00	ug/mL	-0.02
5) acenaphthene-d10	11.033	164	253562	10.00	ug/mL	-0.02
11) phenanthrene-d10	13.448	188	473712	10.00	ug/mL	#-0.01
16) chrysene-D12	17.204	240	407194	10.00	ug/mL	0.00
20) perylene-d12	19.054	264	357829	10.00	ug/mL	0.02
System Monitoring Compounds						
6) 2-fluorobiphenyl	9.930	172	563767	14.11	ug/mL	-0.01
Spiked Amount 100.000			Recovery = 14.11%			
14) o-terphenyl	14.142	230	915251	34.03	ug/mL	-0.01
Spiked Amount 100.000			Recovery = 34.03%			
Target Compounds						Qvalue
3) naphthalene	8.217	128	1165	Below Cal	#	68

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Dec23\120723\
Data File : s4120753.D
Acq On : 08 Dec 2023 12:22 pm
Operator : cl
Sample : 67839-05 targets x1
Misc : aro frac
ALS Vial : 48 Sample Multiplier: 1

Quant Time: Dec 08 13:40:05 2023
Quant Method : X:\S4\methods\S4PAH110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration



SFP
12/12/23 @ 12:24
SkylaM

Data Path : X:\S6\2023\Dec23\120823\
Data File : s6120822.D
Signal(s) : FID1A.ch
Acq On : 08 Dec 2023 10:36 pm
Operator : dbv
Sample : 67839-05 aro x1
Misc :
ALS Vial : 11 Sample Multiplier: 1

Integration File: rteint.p
Quant Time: Dec 09 17:35:12 2023
Quant Method : X:\S6\methods\S6ARO100423F.M
Quant Title : S6 EPH Aromatics
QLast Update : Thu Oct 05 11:16:37 2023
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :

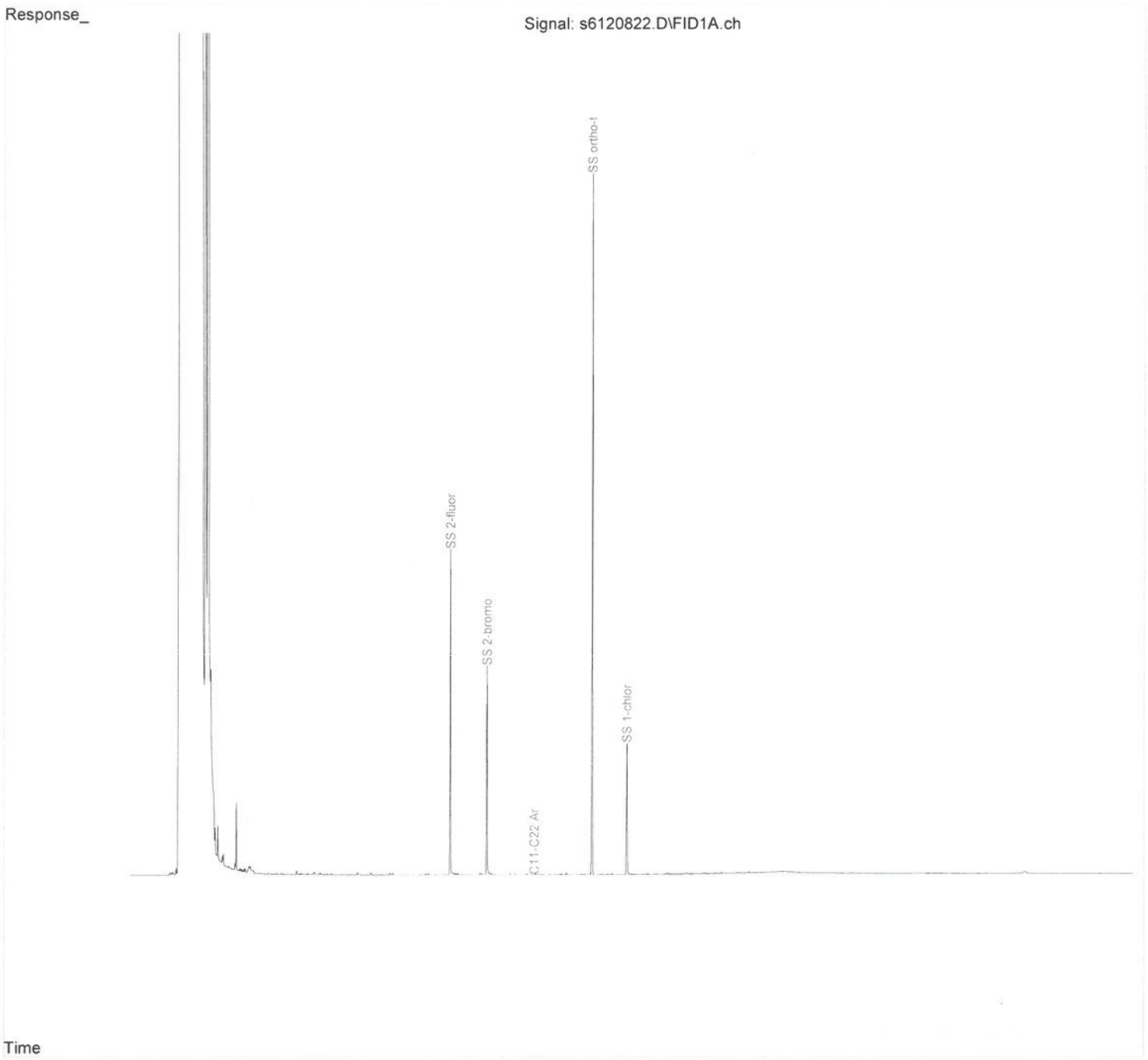
	Compound	R.T.	Response	Conc Units	
	System Monitoring Compounds				
3) S	SS 2-fluorobiphenyl (...	9.527	2127876	15.079 ug/mLm	BC = Baseline Correction
Spiked Amount	20.000		Recovery =	75.39%	
5) S	SS 2-bromonaphthalene...	10.602	1491367	15.639 ug/mLm	BC = Baseline Correction
Spiked Amount	20.000		Recovery =	78.19%	
10) S	SS ortho-terphenyl (OTP)	13.724	4947174	33.062 ug/mL	
Spiked Amount	50.000		Recovery =	66.12%	
11) S	SS 1-chloro-otadecane...	14.762f	1013948	8.302 ug/mL	
Spiked Amount	50.000		Recovery =	16.60%	
	Target Compounds				
1)	naphthalene	0.000	0	N.D. ug/mLd	
2)	2-methylnaphthalene	0.000	0	N.D. ug/mL	
4)	acenaphthylene	0.000	0	N.D. ug/mLd	
6)	acenaphthene	0.000	0	N.D. ug/mLd	
7)	fluorene	0.000	0	N.D. ug/mL	
8)	phenanthrene	0.000	0	N.D. ug/mL	
9)	anthracene	0.000	0	N.D. ug/mL	
12)	fluoranthene	0.000	0	N.D. ug/mL	
13)	pyrene	0.000	0	N.D. ug/mL	
14)	benzo(a)anthracene	0.000	0	N.D. ug/mL	
15)	chrysene	0.000	0	N.D. ug/mL	
16)	benzo(b&k)fluoranthenes	0.000	0	N.D. ug/mL	
17)	benzo(a)pyrene	0.000	0	N.D. ug/mL	
18)	indeno&dibenzo	0.000	0	N.D. ug/mL	
19)	benzo(g,h,i)perylene	0.000	0	N.D. ug/mL	
20) H	C11-C22 Aromatics	12.000	4051044	28.479 ug/mLm	RI = Range Integration

(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : X:\S6\2023\Dec23\120823\
Data File : s6120822.D
Signal(s) : FID1A.ch
Acq On : 08 Dec 2023 10:36 pm
Operator : dbv
Sample : 67839-05 aro x1
Misc :
ALS Vial : 11 Sample Multiplier: 1

Integration File: rteint.p
Quant Time: Dec 09 17:35:12 2023
Quant Method : X:\S6\methods\S6ARO100423F.M
Quant Title : S6 EPH Aromatics
QLast Update : Thu Oct 05 11:16:37 2023
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : X:\S6\2023\Dec23\120823.SEC\
Data File : s6120821.D
Signal(s) : FID2B.ch
Acq On : 08 Dec 2023 10:36 pm
Operator : dbv
Sample : 67839-05 ali x1
Misc :
ALS Vial : 86 Sample Multiplier: 1

12/12/23 @ 08:46
DonnaV

Integration File: rteint.p
Quant Time: Dec 09 17:35:30 2023
Quant Method : X:\S6\methods\S6ALI100423A.M
Quant Title : S6 EPH Aliphatics
QLast Update : Thu Oct 05 13:01:54 2023
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :

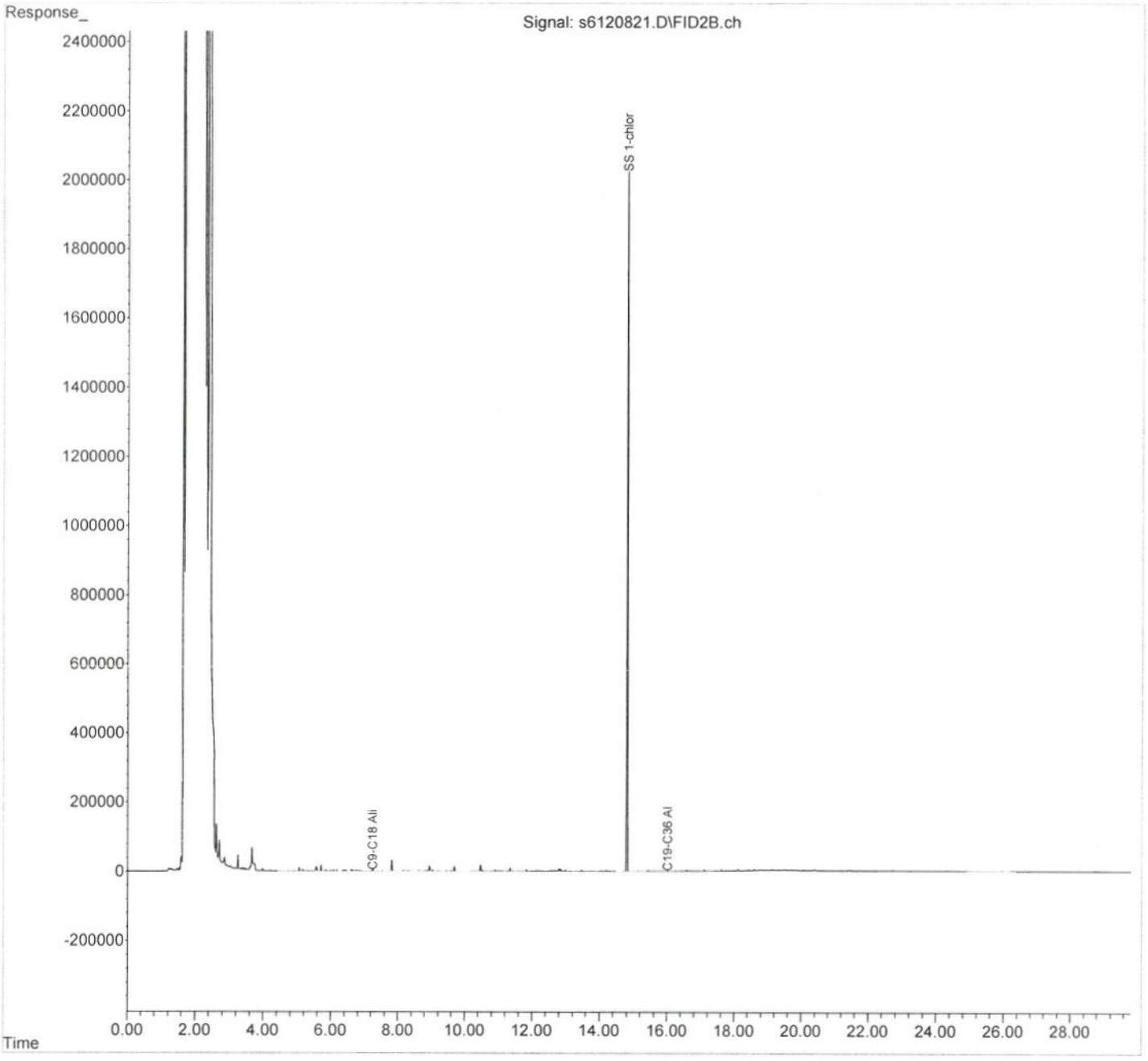
	Compound	R.T.	Response	Conc	Units	
	System Monitoring Compounds					
4) S	SS 2-fluorobiphenyl (...	0.000	0	N.D.	ug/mLd	
Spiked Amount	20.000	Recovery	=	0.00%		
6) S	SS 2-bromonaphthalene...	0.000	0	N.D.	ug/mLd	
Spiked Amount	20.000	Recovery	=	0.00%		
11) S	SS ortho-terphenyl (OTP)	0.000	0	N.D.	ug/mLd	
Spiked Amount	50.000	Recovery	=	0.00%		
13) S	SS 1-chloro-octadecan...	14.807f	2924912	24.913	ug/mL	
Spiked Amount	50.000	Recovery	=	49.83%		
	Target Compounds					
1)	C9 n-Nonane	0.000	0	N.D.	ug/mLd	
2)	C10 n-Decane	0.000	0	N.D.	ug/mLd	
3)	C12 n-Dodecane	0.000	0	N.D.	ug/mLd	
5)	C14 n-Tetradecane	0.000	0	N.D.	ug/mLd	
7)	C16 n-Hexadecane	0.000	0	N.D.	ug/mLd	
8)	C18 n-Octadecane	0.000	0	N.D.	ug/mLd	
9) H	C9-C18 Aliphatics	7.237	803072	5.659	ug/mLm	RI = Range Integration
10)	C19 n-Nonadecane	0.000	0	N.D.	ug/mLd	
12)	C20 n-Eicosane	0.000	0	N.D.	ug/mLd	
14)	C22 n-Docosane	0.000	0	N.D.	ug/mLd	
15)	C24 n-Tetracosane	0.000	0	N.D.	ug/mLd	
16)	C26 n-Hexacosane	0.000	0	N.D.	ug/mLd	
17)	C28 n-Octacosane	0.000	0	N.D.	ug/mLd	
18)	C30 n-Triacontane	0.000	0	N.D.	ug/mLd	
19)	C36 n-Hexatriacontane	0.000	0	N.D.	ug/mLd	
20) H	C19-C36 Aliphatics	16.000	1997442	14.018	ug/mLm	RI = Range Integration

(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : X:\S6\2023\Dec23\120823.SEC\
Data File : s6120821.D
Signal(s) : FID2B.ch
Acq On : 08 Dec 2023 10:36 pm
Operator : dbv
Sample : 67839-05 ali x1
Misc :
ALS Vial : 86 Sample Multiplier: 1

Integration File: rteint.p
Quant Time: Dec 09 17:35:30 2023
Quant Method : X:\S6\methods\S6ALI100423A.M
Quant Title : S6 EPH Aliphatics
QLast Update : Thu Oct 05 13:01:54 2023
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :



This File:	L:\SVOA\Excel Reports\EPH\231214\67839-006		
Analysis Group:	EPH	Dow Salvage Yard	
Field ID:	:MW3-287-297-110923	CRE	
Sample:	67839-06 targets x1	67839-06 aro x1	67839-06 ali x1
Misc:	*aro frac*		
Method Name:	*SVOA04 Method 8270E (t*	*S6 EPH Aromatics*	*S6 EPH Aliphatics*
Import File Name:	s6 EPHs QC17156W		
TestGroupID:	EMA_EPH_PresCert_A		
Aqueous or Soil? (A or S)	A		
Fractionated? (Y/N)	Y	Y	
Prep Date:	11/20/2023		
Lab#:	67839-006		
QC_Code:			
Prep#	~~17225~~ 17156 HE DBV		

Donna Valley L:\SVOA\EPH\EPH ImportFileBuilder2.0.xls
12/14/23 12:45 PM
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L:\SVOA\Excel Reports\EPH\2312
L:\SVOA\PDF Reports\FUELS\

Reviewer Checks:

- Quant Report: Reviewed? Ranges integrated? Analyst Initials & Date?
- Chromatogram Checked? Major peaks identified?
- Soil prep data checked: weight, volume, %solid, Prep date
- Field ID consistent with data and any field replicates
- Results consistent with any re-runs & internal QC
- Substitute dilution data checked
- Correct dilution and reason clear or noted
- Reason for reanalysis documented
- Surrogates pass or flagged & noted
- Flags checked (Expiration, F+, Over Cal)
- Other QC failures, estimates or interferences documented
- Spot checked Reported Result with Quant Report
- Checked Audit flagged data in LIMS

Notes:

Initials & Date: 12/14/23

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X:\S4\2023\Dec23\120723\s4120754.D\S4PAH110223A.XLS PAH targets filename
X:\S6\2023\Dec23\120823\s6120824.D\S6ARO100423F.XLS aromatics filename
X:\S6\2023\Dec23\120823.SEC\s6120823.D\S6ALI100423A.XLS aliphatics filename

#	Surrogate Standards	Concentration (ug/mL)	AnalysisDate	AnalysisTime	AnalyzedBy	Dilution	Weight	Volume	Surr	Recovery	Flag	QC Limits
13	SS 1-chloro-octadecane (COD)	20.75791403	12/8/2023	11:10:00 PM	DBV s6120823.D	1	1	2	100	**42%**		40-140
10	SS ortho-terphenyl (OTP)	33.54513647	12/8/2023	11:10:00 PM	DBV s6120824.D	1	1	2	100	**67%**		40-140
3	SS 2-fluorobiphenyl (2FBP)	16.09454528	12/8/2023	11:10:00 PM	DBV s6120824.D	1	1	2	40	**80%**		40-140
5	SS 2-bromonaphthalene (2BN)	16.5541986	12/8/2023	11:10:00 PM	DBV s6120824.D	1	1	2	40	**83%**		40-140

#	AnalyteName	Concentration (ug/mL)	AnalysisDate	AnalysisTime	AnalyzedBy	Dilution	Weight	Volume
3	naphthalene	0	12/08/2023	12:52:00 PM	CL s4120754.D	1	1	2
4	2-methylnaphthalene	0	12/08/2023	12:52:00 PM	CL s4120754.D	1	1	2
12	phenanthrene	0	12/08/2023	12:52:00 PM	CL s4120754.D	1	1	2
8	acenaphthene	0	12/08/2023	12:52:00 PM	CL s4120754.D	1	1	2
7	acenaphthylene	0	12/08/2023	12:52:00 PM	CL s4120754.D	1	1	2
10	fluorene	0	12/08/2023	12:52:00 PM	CL s4120754.D	1	1	2
13	anthracene	0	12/08/2023	12:52:00 PM	CL s4120754.D	1	1	2
15	fluoranthene	0	12/08/2023	12:52:00 PM	CL s4120754.D	1	1	2
17	pyrene	0	12/08/2023	12:52:00 PM	CL s4120754.D	1	1	2
18	benzo(a)anthracene	0	12/08/2023	12:52:00 PM	CL s4120754.D	1	1	2
19	chrysene	0	12/08/2023	12:52:00 PM	CL s4120754.D	1	1	2
21	benzo(b)fluoranthene	0	12/08/2023	12:52:00 PM	CL s4120754.D	1	1	2
22	benzo(k)fluoranthene	0	12/08/2023	12:52:00 PM	CL s4120754.D	1	1	2
23	benzo(a)pyrene	0	12/08/2023	12:52:00 PM	CL s4120754.D	1	1	2
24	indeno(1,2,3-cd)pyrene	0	12/08/2023	12:52:00 PM	CL s4120754.D	1	1	2
25	dibenzo(a,h)anthracene	0	12/08/2023	12:52:00 PM	CL s4120754.D	1	1	2
26	benzo(g,h,i)perylene	0	12/08/2023	12:52:00 PM	CL s4120754.D	1	1	2
20	C11-C22 Aromatics	25.657338	12/8/2023	11:10:00 PM	DBV s6120824.D	1	1	2
9	C9-C18 Aliphatics	5.277317543	12/8/2023	11:10:00 PM	DBV s6120823.D	1	1	2
20	C19-C36 Aliphatics	14.83934393	12/8/2023	11:10:00 PM	DBV s6120823.D	1	1	2
	Adjusted C11-C22 Aromatics	25.657338	12/8/2023	11:10:00 PM	DBV s6120824.D	1	1	2

Quantitation Report (QT Reviewed)

CL
12/8/23 @ 15:37
CharlesL

Data Path : X:\S4\2023\Dec23\120723\
Data File : s4120754.D
Acq On : 08 Dec 2023 12:52 pm
Operator : cl
Sample : 67839-06 targets x1
Misc : aro frac
ALS Vial : 49 Sample Multiplier: 1

Quant Time: Dec 08 13:43:51 2023
Quant Method : X:\S4\methods\S4PAH110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration

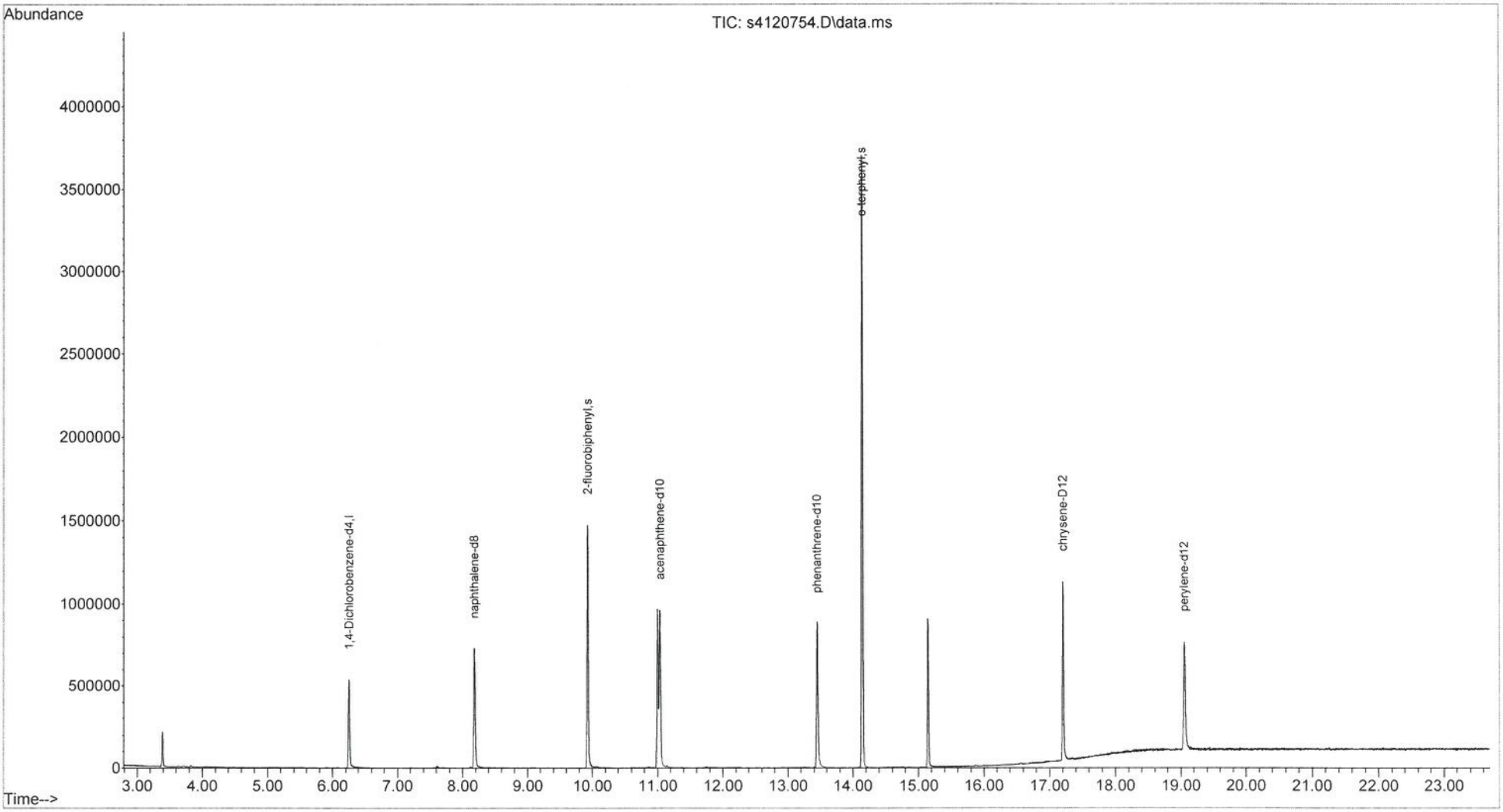
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.250	152	127475	10.00	ug/mL	-0.01
2) naphthalene-d8	8.179	136	501163	10.00	ug/mL	-0.02
5) acenaphthene-d10	11.035	164	287039	10.00	ug/mL	-0.01
11) phenanthrene-d10	13.446	188	561358	10.00	ug/mL	-0.01
16) chrysene-D12	17.202	240	480660	10.00	ug/mL	0.00
20) perylene-d12	19.052	264	415789	10.00	ug/mL	0.01
System Monitoring Compounds						
6) 2-fluorobiphenyl	9.927	172	627088	13.86	ug/mL	-0.02
Spiked Amount 100.000			Recovery = 13.86%			
14) o-terphenyl	14.142	230	1006903	31.59	ug/mL	-0.01
Spiked Amount 100.000			Recovery = 31.59%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Dec23\120723\
Data File : s4120754.D
Acq On : 08 Dec 2023 12:52 pm
Operator : cl
Sample : 67839-06 targets x1
Misc : aro frac
ALS Vial : 49 Sample Multiplier: 1

Quant Time: Dec 08 13:43:51 2023
Quant Method : X:\S4\methods\S4PAH110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration



SFP
12/12/23 @ 12:24
SkylaM

Data Path : X:\S6\2023\Dec23\120823\
Data File : s6120824.D
Signal(s) : FID1A.ch
Acq On : 08 Dec 2023 11:10 pm
Operator : dbv
Sample : 67839-06 aro x1
Misc :
ALS Vial : 12 Sample Multiplier: 1

Integration File: rteint.p
Quant Time: Dec 09 17:35:15 2023
Quant Method : X:\S6\methods\S6ARO100423F.M
Quant Title : S6 EPH Aromatics
QLast Update : Thu Oct 05 11:16:37 2023
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :

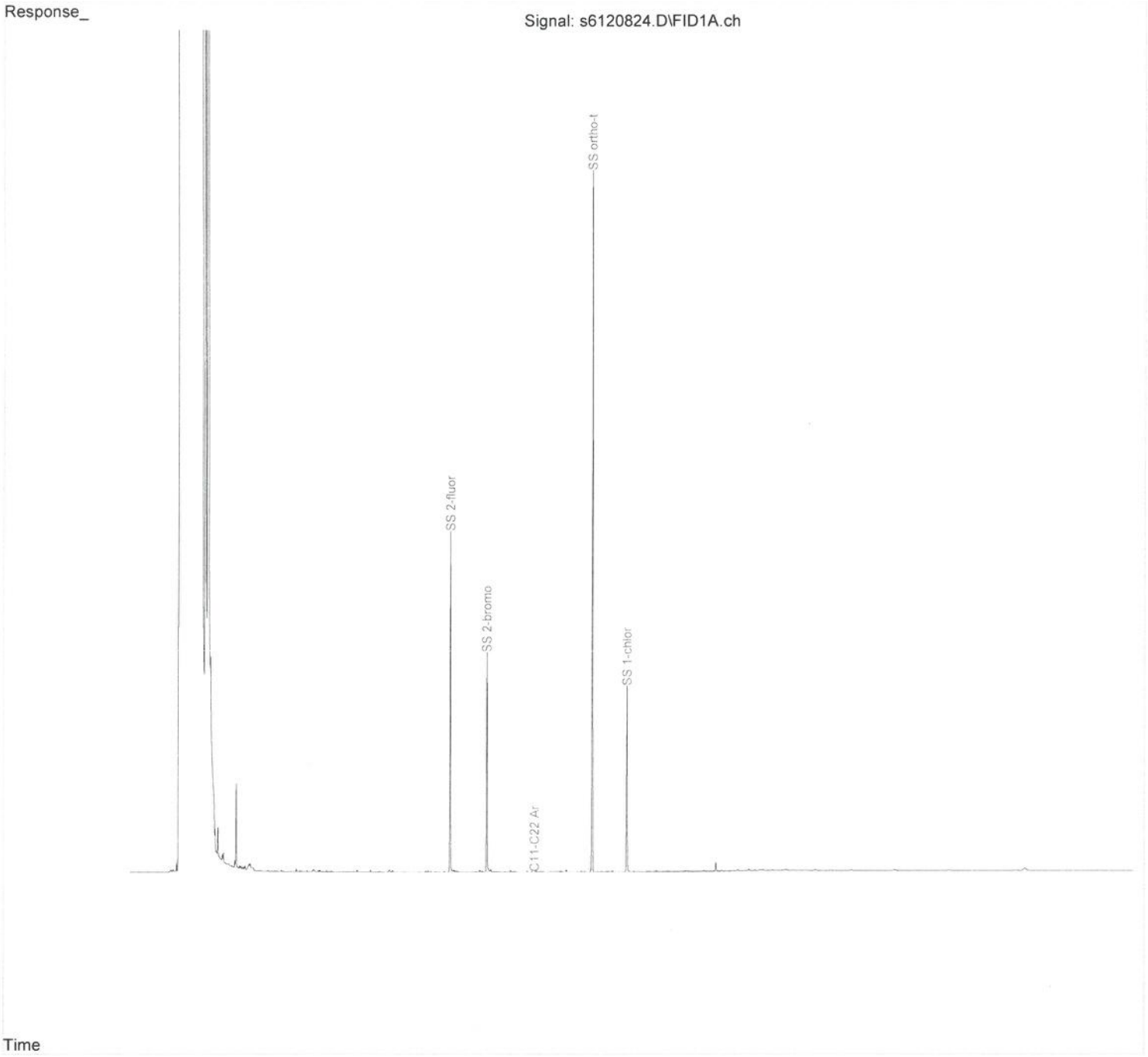
	Compound	R.T.	Response	Conc Units	
	System Monitoring Compounds				
3) S	SS 2-fluorobiphenyl (...	9.527	2271122	16.095 ug/mL	
Spiked Amount	20.000		Recovery =	80.47%	
5) S	SS 2-bromonaphthalene...	10.603	1578729	16.554 ug/mLm	BC = Baseline Correction
Spiked Amount	20.000		Recovery =	82.77%	
10) S	SS ortho-terphenyl (OTP)	13.724	5019507	33.545 ug/mL	
Spiked Amount	50.000		Recovery =	67.09%	
11) S	SS 1-chloro-otadecane...	14.762f	1374132	11.245 ug/mL	
Spiked Amount	50.000		Recovery =	22.49%	
	Target Compounds				
1)	naphthalene	0.000	0	N.D. ug/mLd	
2)	2-methylnaphthalene	0.000	0	N.D. ug/mL	
4)	acenaphthylene	0.000	0	N.D. ug/mLd	
6)	acenaphthene	0.000	0	N.D. ug/mLd	
7)	fluorene	0.000	0	N.D. ug/mL	
8)	phenanthrene	0.000	0	N.D. ug/mL	
9)	anthracene	0.000	0	N.D. ug/mL	
12)	fluoranthene	0.000	0	N.D. ug/mL	
13)	pyrene	0.000	0	N.D. ug/mL	
14)	benzo(a)anthracene	0.000	0	N.D. ug/mLd	
15)	chrysene	0.000	0	N.D. ug/mL	
16)	benzo(b&k)fluoranthenes	0.000	0	N.D. ug/mL	
17)	benzo(a)pyrene	0.000	0	N.D. ug/mL	
18)	indeno&dibenzo	0.000	0	N.D. ug/mL	
19)	benzo(g,h,i)perylene	0.000	0	N.D. ug/mL	
20) H	C11-C22 Aromatics	12.000	3627252	25.657 ug/mLm	RI = Range Integration

(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : X:\S6\2023\Dec23\120823\
Data File : s6120824.D
Signal(s) : FID1A.ch
Acq On : 08 Dec 2023 11:10 pm
Operator : dbv
Sample : 67839-06 aro x1
Misc :
ALS Vial : 12 Sample Multiplier: 1

Integration File: rteint.p
Quant Time: Dec 09 17:35:15 2023
Quant Method : X:\S6\methods\S6ARO100423F.M
Quant Title : S6 EPH Aromatics
QLast Update : Thu Oct 05 11:16:37 2023
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : X:\S6\2023\Dec23\120823.SEC\
Data File : s6120823.D
Signal(s) : FID2B.ch
Acq On : 08 Dec 2023 11:10 pm
Operator : dbv
Sample : 67839-06 ali x1
Misc :
ALS Vial : 87 Sample Multiplier: 1

12/12/23 @ 08:46
DonnaV

Integration File: rteint.p
Quant Time: Dec 09 17:35:33 2023
Quant Method : X:\S6\methods\S6ALI100423A.M
Quant Title : S6 EPH Aliphatics
QLast Update : Thu Oct 05 13:01:54 2023
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :

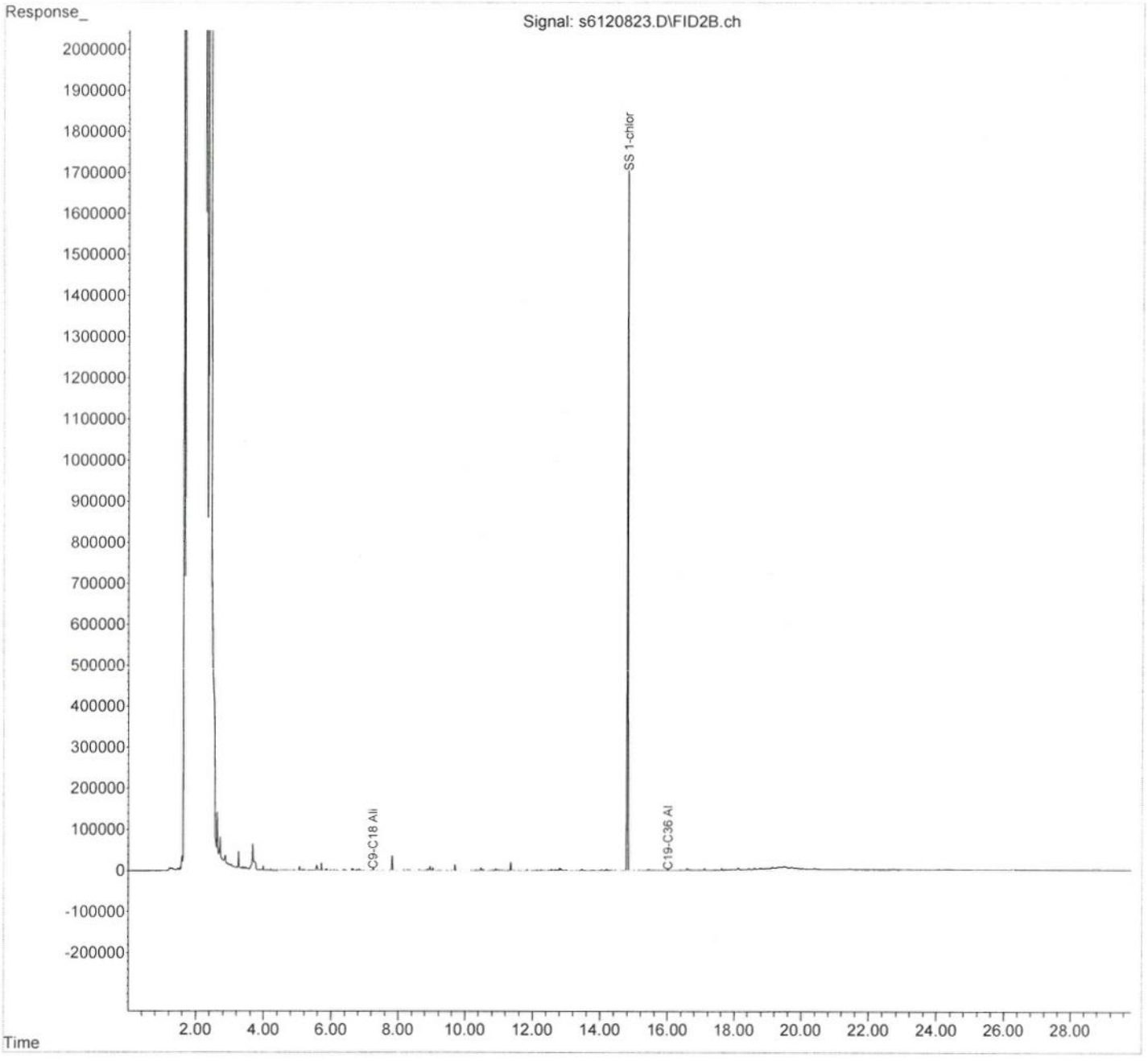
	Compound	R.T.	Response	Conc	Units	
	System Monitoring Compounds					
4) S	SS 2-fluorobiphenyl (...	0.000	0	N.D.	ug/mLd	
Spiked Amount	20.000		Recovery =	0.00%		
6) S	SS 2-bromonaphthalene...	0.000	0	N.D.	ug/mLd	
Spiked Amount	20.000		Recovery =	0.00%		
11) S	SS ortho-terphenyl (OTP)	0.000	0	N.D.	ug/mLd	
Spiked Amount	50.000		Recovery =	0.00%		
13) S	SS 1-chloro-octadecan...	14.807f	2438014	20.758	ug/mL	
Spiked Amount	50.000		Recovery =	41.52%		
	Target Compounds					
1)	C9 n-Nonane	0.000	0	N.D.	ug/mLd	
2)	C10 n-Decane	0.000	0	N.D.	ug/mLd	
3)	C12 n-Dodecane	0.000	0	N.D.	ug/mLd	
5)	C14 n-Tetradecane	0.000	0	N.D.	ug/mLd	
7)	C16 n-Hexadecane	0.000	0	N.D.	ug/mLd	
8)	C18 n-Octadecane	0.000	0	N.D.	ug/mLd	
9) H	C9-C18 Aliphatics	7.237	754280	5.277	ug/mLm	RI = Range Integration
10)	C19 n-Nonadecane	0.000	0	N.D.	ug/mLd	
12)	C20 n-Eicosane	0.000	0	N.D.	ug/mLd	
14)	C22 n-Docosane	0.000	0	N.D.	ug/mLd	
15)	C24 n-Tetracosane	0.000	0	N.D.	ug/mLd	
16)	C26 n-Hexacosane	0.000	0	N.D.	ug/mLd	
17)	C28 n-Octacosane	0.000	0	N.D.	ug/mLd	
18)	C30 n-Triacontane	0.000	0	N.D.	ug/mLd	
19)	C36 n-Hexatriacontane	0.000	0	N.D.	ug/mLd	
20) H	C19-C36 Aliphatics	16.000	2106208	14.839	ug/mLm	RI = Range Integration

(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : X:\S6\2023\Dec23\120823.SEC\
Data File : s6120823.D
Signal(s) : FID2B.ch
Acq On : 08 Dec 2023 11:10 pm
Operator : dbv
Sample : 67839-06 ali x1
Misc :
ALS Vial : 87 Sample Multiplier: 1

Integration File: rteint.p
Quant Time: Dec 09 17:35:33 2023
Quant Method : X:\S6\methods\S6ALI100423A.M
Quant Title : S6 EPH Aliphatics
QLast Update : Thu Oct 05 13:01:54 2023
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :



This File:	L:\SVOA\Excel Reports\EPH\231214\67839-007		
Analysis Group:	EPH	Dow Salvage Yard	
Field ID:	MW4-297-301-110923	CRE	
Sample:	67839-07 targets x1	67839-07 aro x1	67839-07 ali x1
Misc:	aro frac		
Method Name:	SVOA04 Method 8270E (€	S6 EPH Aromatics	S6 EPH Aliphatics
Import File Name:	s6 EPHs QC17156W		
TestGroupID:	EMA_EPH_PresCert_A		
Aqueous or Soil? (A or S)	A		
Fractionated? (Y/N)	y	y	
Prep Date:	11/20/2023		
Lab#:	67839-007		
QC_Code:			
Prep#	17225/7156 HS DMV		

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Reviewer Checks:

- Quant Report: Reviewed? Ranges integrated? Analyst Initials & Date?
- Chromatogram Checked? Major peaks identified?
- Soil prep data checked: weight, volume, %solid, Prep date
- Field ID consistent with data and any field replicates
- Results consistent with any re-runs & internal QC
- Substitute dilution data checked
- Correct dilution and reason clear or noted
- Reason for reanalysis documented
- Surrogates pass or flagged & noted
- Flags checked (Expiration, F+, Over Cal)
- Other QC failures, estimates or interferences documented
- Spot checked Reported Result with Quant Report
- Checked Audit flagged data in LIMS

Notes:

Initials & Date: 12/14/23

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X:\S4\2023\Dec23\120723\s4120755.D\S4PAH110223A.XLS PAH targets filename
X:\S6\2023\Dec23\120823\s6120826.D\S6ARO100423F.XLS aromatics filename
X:\S6\2023\Dec23\120823.SEC\s6120825.D\S6ALI100423A.XLS aliphatics filename

#	Surrogate Standards	Concentration (ug/mL)	AnalysisDate	AnalysisTime	AnalyzedBy	Dilution	Weight	Volume	Surr	Recovery	Flag	QC Limits
13	SS 1-chloro-octadecane (COD)	25.17145711	12/8/2023	11:43:00 PM	DBV s6120825.D	1	1	2	100	**50%**		40-140
10	SS ortho-terphenyl (OTP)	30.12279681	12/8/2023	11:43:00 PM	DBV s6120826.D	1	1	2	100	**60%**		40-140
3	SS 2-fluorobiphenyl (2FBP)	15.16204835	12/8/2023	11:43:00 PM	DBV s6120826.D	1	1	2	40	**76%**		40-140
5	SS 2-bromonaphthalene (2BN)	16.09967838	12/8/2023	11:43:00 PM	DBV s6120826.D	1	1	2	40	**80%**		40-140

#	AnalyteName	Concentration (ug/mL)	AnalysisDate	AnalysisTime	AnalyzedBy	Dilution	Weight	Volume
3	naphthalene	0	12/08/2023	01:22:00 PM	CL s4120755.D	1	1	2
4	2-methylnaphthalene	0	12/08/2023	01:22:00 PM	CL s4120755.D	1	1	2
12	phenanthrene	0	12/08/2023	01:22:00 PM	CL s4120755.D	1	1	2
8	acenaphthene	0	12/08/2023	01:22:00 PM	CL s4120755.D	1	1	2
7	acenaphthylene	0	12/08/2023	01:22:00 PM	CL s4120755.D	1	1	2
10	fluorene	0	12/08/2023	01:22:00 PM	CL s4120755.D	1	1	2
13	anthracene	0	12/08/2023	01:22:00 PM	CL s4120755.D	1	1	2
15	fluoranthene	0	12/08/2023	01:22:00 PM	CL s4120755.D	1	1	2
17	pyrene	0	12/08/2023	01:22:00 PM	CL s4120755.D	1	1	2
18	benzo(a)anthracene	0	12/08/2023	01:22:00 PM	CL s4120755.D	1	1	2
19	chrysene	0	12/08/2023	01:22:00 PM	CL s4120755.D	1	1	2
21	benzo(b)fluoranthene	0	12/08/2023	01:22:00 PM	CL s4120755.D	1	1	2
22	benzo(k)fluoranthene	0	12/08/2023	01:22:00 PM	CL s4120755.D	1	1	2
23	benzo(a)pyrene	0	12/08/2023	01:22:00 PM	CL s4120755.D	1	1	2
24	indeno(1,2,3-cd)pyrene	0	12/08/2023	01:22:00 PM	CL s4120755.D	1	1	2
25	dibenzo(a,h)anthracene	0	12/08/2023	01:22:00 PM	CL s4120755.D	1	1	2
26	benzo(g,h,i)perylene	0	12/08/2023	01:22:00 PM	CL s4120755.D	1	1	2
20	C11-C22 Aromatics	25.02527944	12/8/2023	11:43:00 PM	DBV s6120826.D	1	1	2
9	C9-C18 Aliphatics	7.839545445	12/8/2023	11:43:00 PM	DBV s6120825.D	1	1	2
20	C19-C36 Aliphatics	15.10131818	12/8/2023	11:43:00 PM	DBV s6120825.D	1	1	2
	Adjusted C11-C22 Aromatics	25.02527944	12/8/2023	11:43:00 PM	DBV s6120826.D	1	1	2

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Dec23\120723\
Data File : s4120755.D
Acq On : 08 Dec 2023 01:22 pm
Operator : cl
Sample : 67839-07 targets x1
Misc : aro frac
ALS Vial : 50 Sample Multiplier: 1

CL
12/8/23 @ 15:38
CharlesL

Quant Time: Dec 08 14:31:21 2023
Quant Method : X:\S4\methods\S4PAH110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration

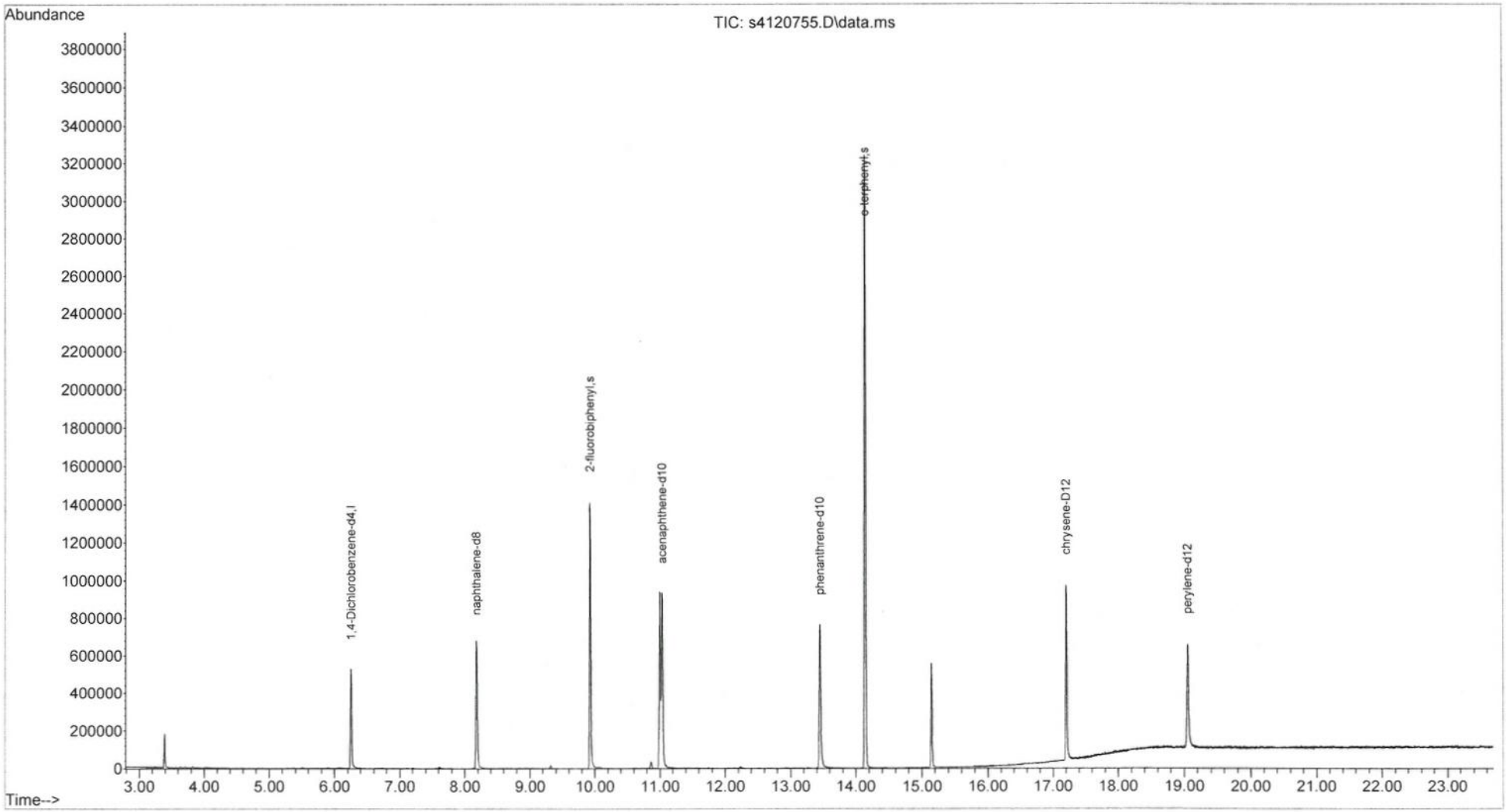
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.250	152	122914	10.00	ug/mL	-0.01
2) naphthalene-d8	8.179	136	479493	10.00	ug/mL	-0.01
5) acenaphthene-d10	11.035	164	275916	10.00	ug/mL	-0.01
11) phenanthrene-d10	13.449	188	515009	10.00	ug/mL	-0.01
16) chrysene-D12	17.205	240	423014	10.00	ug/mL	0.00
20) perylene-d12	19.052	264	359027	10.00	ug/mL	0.01
System Monitoring Compounds						
6) 2-fluorobiphenyl	9.927	172	619911	14.26	ug/mL	-0.01
Spiked Amount 100.000			Recovery = 14.26%			
14) o-terphenyl	14.142	230	885669	30.29	ug/mL	-0.01
Spiked Amount 100.000			Recovery = 30.29%			
Target Compounds						Qvalue
3) naphthalene	8.210	128	823	Below Cal	#	68

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Dec23\120723\
Data File : s4120755.D
Acq On : 08 Dec 2023 01:22 pm
Operator : cl
Sample : 67839-07 targets x1
Misc : aro frac
ALS Vial : 50 Sample Multiplier: 1

Quant Time: Dec 08 14:31:21 2023
Quant Method : X:\S4\methods\S4PAH110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration



SFP
12/12/23 @ 12:25
SkylaM

Data Path : X:\S6\2023\Dec23\120823\
Data File : s6120826.D
Signal(s) : FID1A.ch
Acq On : 08 Dec 2023 11:43 pm
Operator : dbv
Sample : 67839-07 aro x1
Misc :
ALS Vial : 13 Sample Multiplier: 1

Integration File: rteint.p
Quant Time: Dec 09 17:35:18 2023
Quant Method : X:\S6\methods\S6ARO100423F.M
Quant Title : S6 EPH Aromatics
QLast Update : Thu Oct 05 11:16:37 2023
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :

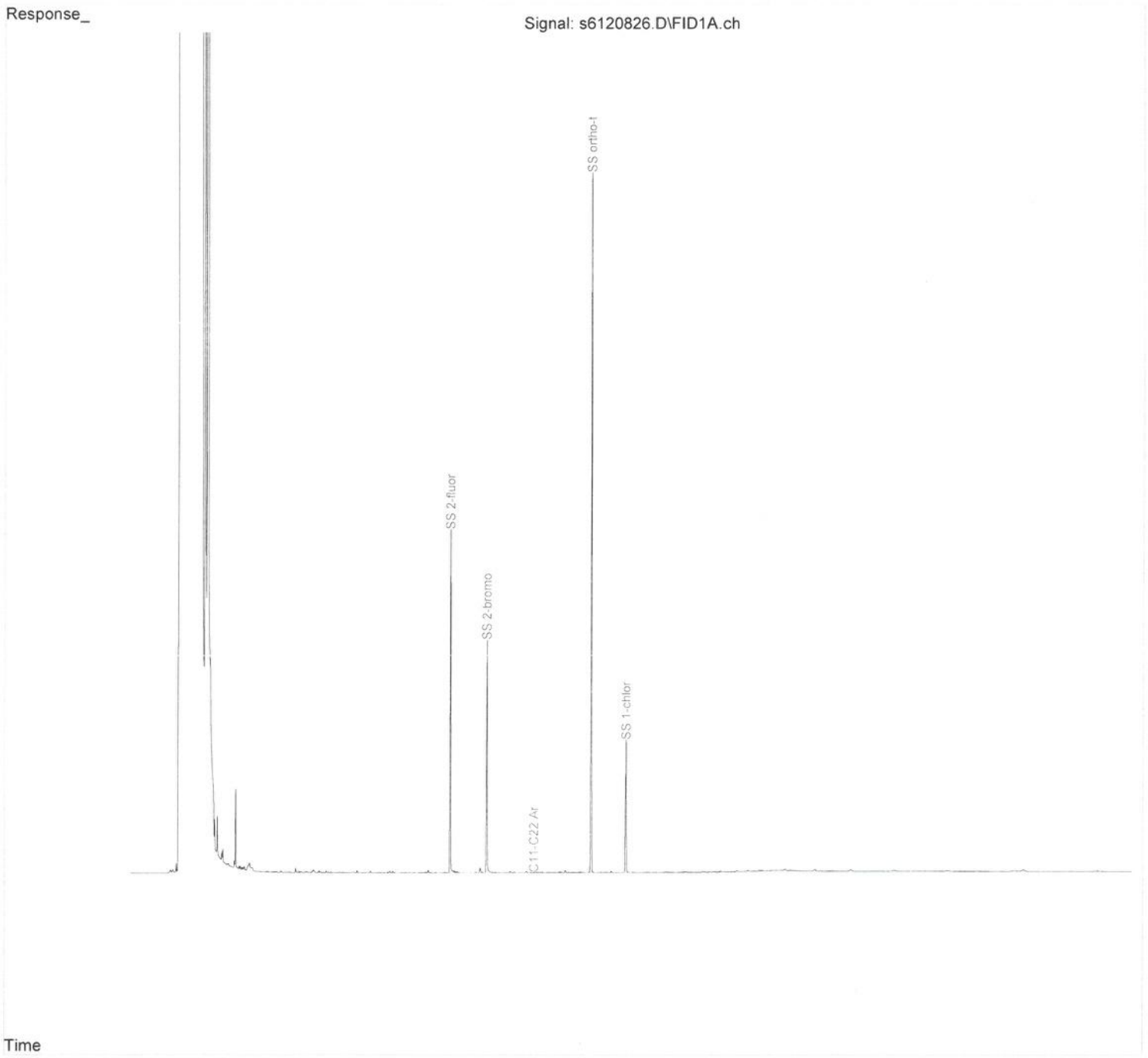
	Compound	R.T.	Response	Conc Units	
	System Monitoring Compounds				
3) S	SS 2-fluorobiphenyl (...	9.526	2139636	15.162 ug/mLm	BC = Baseline Correction
Spiked Amount	20.000		Recovery =	75.81%	
5) S	SS 2-bromonaphthalene...	10.602	1535362	16.100 ug/mL	
Spiked Amount	20.000		Recovery =	80.50%	
10) S	SS ortho-terphenyl (OTP)	13.724	4506949	30.123 ug/mL	
Spiked Amount	50.000		Recovery =	60.25%	
11) S	SS 1-chloro-otadecane...	14.762f	899519	7.367 ug/mL	
Spiked Amount	50.000		Recovery =	14.73%	
	Target Compounds				
1)	naphthalene	0.000	0	N.D. ug/mLd	
2)	2-methylnaphthalene	0.000	0	N.D. ug/mL	
4)	acenaphthylene	0.000	0	N.D. ug/mLd	
6)	acenaphthene	0.000	0	N.D. ug/mL	
7)	fluorene	0.000	0	N.D. ug/mL	
8)	phenanthrene	0.000	0	N.D. ug/mL	
9)	anthracene	0.000	0	N.D. ug/mL	
12)	fluoranthene	0.000	0	N.D. ug/mL	
13)	pyrene	0.000	0	N.D. ug/mL	
14)	benzo(a)anthracene	0.000	0	N.D. ug/mL	
15)	chrysene	0.000	0	N.D. ug/mL	
16)	benzo(b&k)fluoranthenes	0.000	0	N.D. ug/mL	
17)	benzo(a)pyrene	0.000	0	N.D. ug/mL	
18)	indeno&dibenzo	0.000	0	N.D. ug/mL	
19)	benzo(g,h,i)perylene	0.000	0	N.D. ug/mL	
20) H	C11-C22 Aromatics	12.000	3532332	25.025 ug/mLm	RI = Range Integration

(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : X:\S6\2023\Dec23\120823\
Data File : s6120826.D
Signal(s) : FID1A.ch
Acq On : 08 Dec 2023 11:43 pm
Operator : dbv
Sample : 67839-07 aro x1
Misc :
ALS Vial : 13 Sample Multiplier: 1

Integration File: rteint.p
Quant Time: Dec 09 17:35:18 2023
Quant Method : X:\S6\methods\S6ARO100423F.M
Quant Title : S6 EPH Aromatics
QLast Update : Thu Oct 05 11:16:37 2023
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : X:\S6\2023\Dec23\120823.SEC\
Data File : s6120825.D
Signal(s) : FID2B.ch
Acq On : 08 Dec 2023 11:43 pm
Operator : dbv
Sample : 67839-07 ali x1
Misc :
ALS Vial : 88 Sample Multiplier: 1

12/12/23 @ 08:46
DonnaV

Integration File: rteint.p
Quant Time: Dec 09 17:35:36 2023
Quant Method : X:\S6\methods\S6ALI100423A.M
Quant Title : S6 EPH Aliphatics
QLast Update : Thu Oct 05 13:01:54 2023
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :

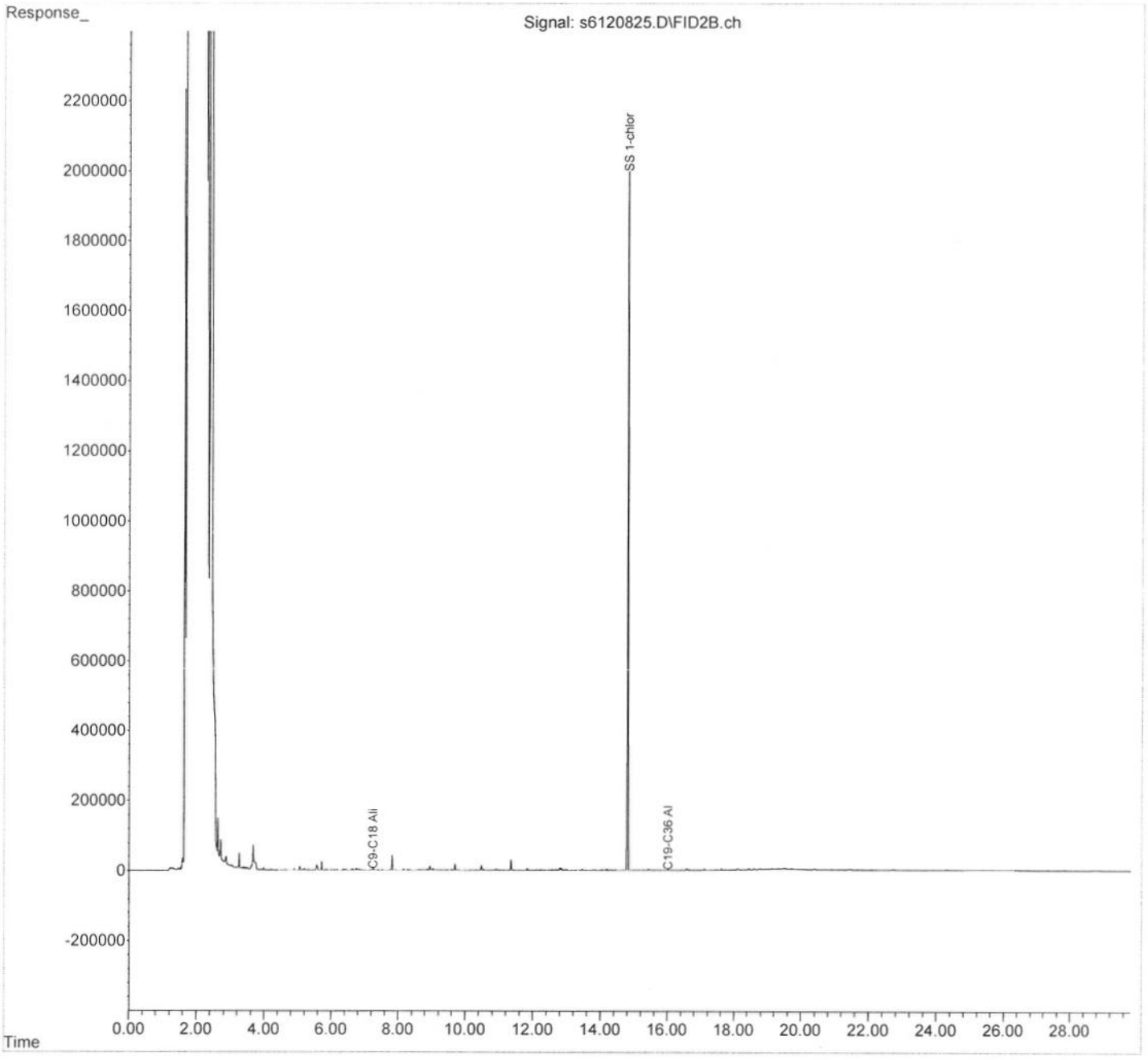
	Compound	R.T.	Response	Conc	Units	
	System Monitoring Compounds					
4) S	SS 2-fluorobiphenyl (...	0.000	0	N.D.	ug/mLd	
Spiked Amount	20.000	Recovery	=	0.00%		
6) S	SS 2-bromonaphthalene...	0.000	0	N.D.	ug/mLd	
Spiked Amount	20.000	Recovery	=	0.00%		
11) S	SS ortho-terphenyl (OTP)	0.000	0	N.D.	ug/mLd	
Spiked Amount	50.000	Recovery	=	0.00%		
13) S	SS 1-chloro-octadecan...	14.806f	2955198	25.171	ug/mL	
Spiked Amount	50.000	Recovery	=	50.34%		
	Target Compounds					
1)	C9 n-Nonane	0.000	0	N.D.	ug/mLd	
2)	C10 n-Decane	0.000	0	N.D.	ug/mLd	
3)	C12 n-Dodecane	0.000	0	N.D.	ug/mLd	
5)	C14 n-Tetradecane	0.000	0	N.D.	ug/mLd	
7)	C16 n-Hexadecane	0.000	0	N.D.	ug/mLd	
8)	C18 n-Octadecane	0.000	0	N.D.	ug/mLd	
9) H	C9-C18 Aliphatics	7.237	1081957	7.840	ug/mLm	RI = Range Integration
10)	C19 n-Nonadecane	0.000	0	N.D.	ug/mLd	
12)	C20 n-Eicosane	0.000	0	N.D.	ug/mLd	
14)	C22 n-Docosane	0.000	0	N.D.	ug/mLd	
15)	C24 n-Tetracosane	0.000	0	N.D.	ug/mLd	
16)	C26 n-Hexacosane	0.000	0	N.D.	ug/mLd	
17)	C28 n-Octacosane	0.000	0	N.D.	ug/mLd	
18)	C30 n-Triacontane	0.000	0	N.D.	ug/mLd	
19)	C36 n-Hexatriacontane	0.000	0	N.D.	ug/mLd	
20) H	C19-C36 Aliphatics	16.000	2140897	15.101	ug/mLm	RI = Range Integration

(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : X:\S6\2023\Dec23\120823.SEC\
Data File : s6120825.D
Signal(s) : FID2B.ch
Acq On : 08 Dec 2023 11:43 pm
Operator : dbv
Sample : 67839-07 ali x1
Misc :
ALS Vial : 88 Sample Multiplier: 1

Integration File: rteint.p
Quant Time: Dec 09 17:35:36 2023
Quant Method : X:\S6\methods\S6ALI100423A.M
Quant Title : S6 EPH Aliphatics
QLast Update : Thu Oct 05 13:01:54 2023
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :



This File:	L:\SVOA\Excel Reports\EPH\231214\67839-008			Donna Valley L:\SVOA\EPH\EPH ImportFileBuilder2.0.xls
Analysis Group:	EPH	Dow Salvage Yard		12/14/23 12:47 PM
Field ID:	BRMW1-42-52-110923	CRE		L:\SVOA\EPH\
Sample:	67839-08 targets x1	67839-08 aro x1	67839-08 ali x1	L:\SVOA\Excel Reports\EPH\2312:
Misc:	*aro frac*			L:\SVOA\PDF Reports\FUELS\
Method Name:	*SVOA04 Method 8270E (t*	*S6 EPH Aromatics*	*S6 EPH Aliphatics*	
Import File Name:	s6 EPHs QC17156W			
TestGroupID:	EMA_EPH_PresCert_A			
Aqueous or Soil? (A or S)	A			
Fractionated? (Y/N)	Y	Y		
Prep Date:	11/20/2023			
Lab#:	67839-008			
QC_Code:				
Prep#	~~17225~~ 17156 NB OBV			

Reviewer Checks:

Quant Report: Reviewed? Ranges integrated? Analyst Initials & Date?	1
Chromatogram Checked? Major peaks identified?	2
Soil prep data checked: weight, volume, %solid, Prep date	5
Field ID consistent with data and any field replicates	11
Results consistent with any re-runs & internal QC	
Substitute dilution data checked	
Correct dilution and reason clear or noted	
Reason for reanalysis documented	
Surrogates pass or flagged & noted	
Flags checked (Expiration, F+, Over Cal)	
Other QC failures, estimates or interferences documented	
Spot checked Reported Result with Quant Report	
Checked Audit flagged data in LIMS	16

Notes:

Initials & Date: 12/14/23 — 20

X:\S4\2023\Dec23\120723\s4120756.D\S4PAH110223A.XLS PAH targets filename
X:\S6\2023\Dec23\120823\s6120836.D\S6ARO100423F.XLS aromatics filename
X:\S6\2023\Dec23\120823.SEC\s6120835.D\S6ALI100423A.XLS aliphatics filename

#	Surrogate Standards	Concentration (ug/mL)	AnalysisDate	AnalysisTime	AnalyzedBy	Dilution	Weight	Volume	Surr	Recovery	Flag	QC Limits
13	SS 1-chloro-octadecane (COD)	23.95407688	12/9/2023	02:33:00 AM	DBV s6120835.D	1	1	2	100	**48%**		40-140
10	SS ortho-terphenyl (OTP)	34.18632688	12/9/2023	02:33:00 AM	DBV s6120836.D	1	1	2	100	**68%**		40-140
3	SS 2-fluorobiphenyl (2FBP)	15.84002807	12/9/2023	02:33:00 AM	DBV s6120836.D	1	1	2	40	**79%**		40-140
5	SS 2-bromonaphthalene (2BN)	16.57704672	12/9/2023	02:33:00 AM	DBV s6120836.D	1	1	2	40	**83%**		40-140

#	AnalyteName	Concentration (ug/mL)	AnalysisDate	AnalysisTime	AnalyzedBy	Dilution	Weight	Volume
3	naphthalene	0	12/08/2023	01:51:00 PM	CL s4120756.D	1	1	2
4	2-methylnaphthalene	0	12/08/2023	01:51:00 PM	CL s4120756.D	1	1	2
12	phenanthrene	0	12/08/2023	01:51:00 PM	CL s4120756.D	1	1	2
8	acenaphthene	0	12/08/2023	01:51:00 PM	CL s4120756.D	1	1	2
7	acenaphthylene	0	12/08/2023	01:51:00 PM	CL s4120756.D	1	1	2
10	fluorene	0	12/08/2023	01:51:00 PM	CL s4120756.D	1	1	2
13	anthracene	0	12/08/2023	01:51:00 PM	CL s4120756.D	1	1	2
15	fluoranthene	0	12/08/2023	01:51:00 PM	CL s4120756.D	1	1	2
17	pyrene	0	12/08/2023	01:51:00 PM	CL s4120756.D	1	1	2
18	benzo(a)anthracene	0	12/08/2023	01:51:00 PM	CL s4120756.D	1	1	2
19	chrysene	0	12/08/2023	01:51:00 PM	CL s4120756.D	1	1	2
21	benzo(b)fluoranthene	0	12/08/2023	01:51:00 PM	CL s4120756.D	1	1	2
22	benzo(k)fluoranthene	0	12/08/2023	01:51:00 PM	CL s4120756.D	1	1	2
23	benzo(a)pyrene	0	12/08/2023	01:51:00 PM	CL s4120756.D	1	1	2
24	indeno(1,2,3-cd)pyrene	0	12/08/2023	01:51:00 PM	CL s4120756.D	1	1	2
25	dibenzo(a,h)anthracene	0	12/08/2023	01:51:00 PM	CL s4120756.D	1	1	2
26	benzo(g,h,i)perylene	0	12/08/2023	01:51:00 PM	CL s4120756.D	1	1	2
20	C11-C22 Aromatics	26.57090634	12/9/2023	02:33:00 AM	DBV s6120836.D	1	1	2
9	C9-C18 Aliphatics	6.362442879	12/9/2023	02:33:00 AM	DBV s6120835.D	1	1	2
20	C19-C36 Aliphatics	13.00801639	12/9/2023	02:33:00 AM	DBV s6120835.D	1	1	2
	Adjusted C11-C22 Aromatics	26.57090634	12/9/2023	02:33:00 AM	DBV s6120836.D	1	1	2

Quantitation Report (QT Reviewed)

CL
12/8/23 @ 15:38
CharlesL

Data Path : X:\S4\2023\Dec23\120723\
Data File : s4120756.D
Acq On : 08 Dec 2023 01:51 pm
Operator : cl
Sample : 67839-08 targets x1
Misc : aro frac
ALS Vial : 51 Sample Multiplier: 1

Quant Time: Dec 08 14:32:13 2023
Quant Method : X:\S4\methods\S4PAH110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration

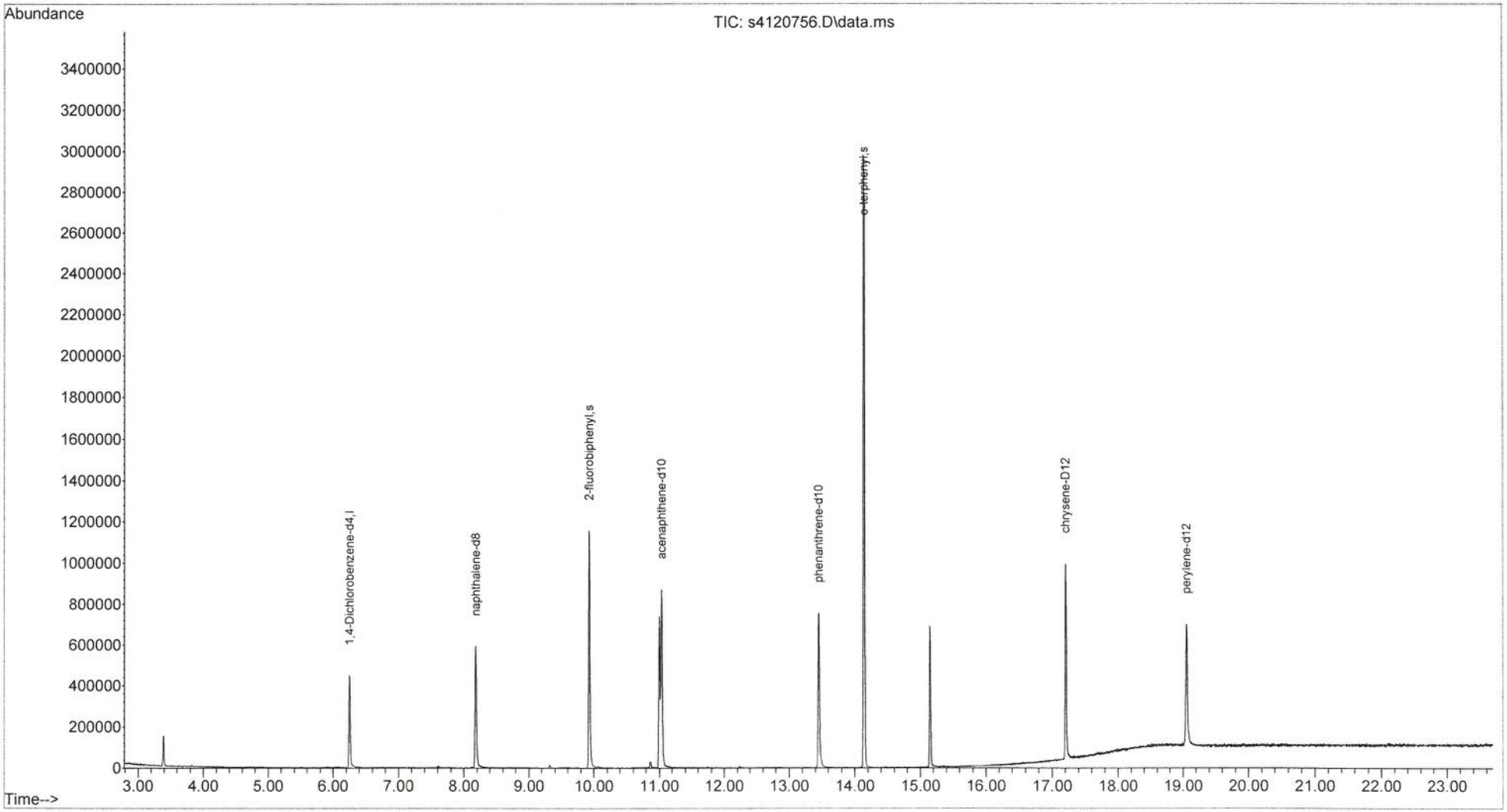
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.250	152	111071	10.00	ug/mL	-0.01
2) naphthalene-d8	8.182	136	423774	10.00	ug/mL	-0.01
5) acenaphthene-d10	11.036	164	243634	10.00	ug/mL	-0.01
11) phenanthrene-d10	13.449	188	477979	10.00	ug/mL	#-0.01
16) chrysene-D12	17.202	240	417549	10.00	ug/mL	0.00
20) perylene-d12	19.052	264	376686	10.00	ug/mL	0.01
System Monitoring Compounds						
6) 2-fluorobiphenyl	9.927	172	506488	13.19	ug/mL	-0.01
Spiked Amount 100.000			Recovery = 13.19%			
14) o-terphenyl	14.142	230	839355	30.93	ug/mL	-0.01
Spiked Amount 100.000			Recovery = 30.93%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Dec23\120723\
Data File : s4120756.D
Acq On : 08 Dec 2023 01:51 pm
Operator : cl
Sample : 67839-08 targets x1
Misc : aro frac
ALS Vial : 51 Sample Multiplier: 1

Quant Time: Dec 08 14:32:13 2023
Quant Method : X:\S4\methods\S4PAH110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration



SFP
12/12/23 @ 12:2
SkylaM

Data Path : X:\S6\2023\Dec23\120823\
Data File : s6120836.D
Signal(s) : FID1A.ch
Acq On : 09 Dec 2023 02:33 am
Operator : dbv
Sample : 67839-08 aro x1
Misc :
ALS Vial : 18 Sample Multiplier: 1

Integration File: rteint.p
Quant Time: Dec 09 17:35:33 2023
Quant Method : X:\S6\methods\S6ARO100423F.M
Quant Title : S6 EPH Aromatics
QLast Update : Thu Oct 05 11:16:37 2023
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :

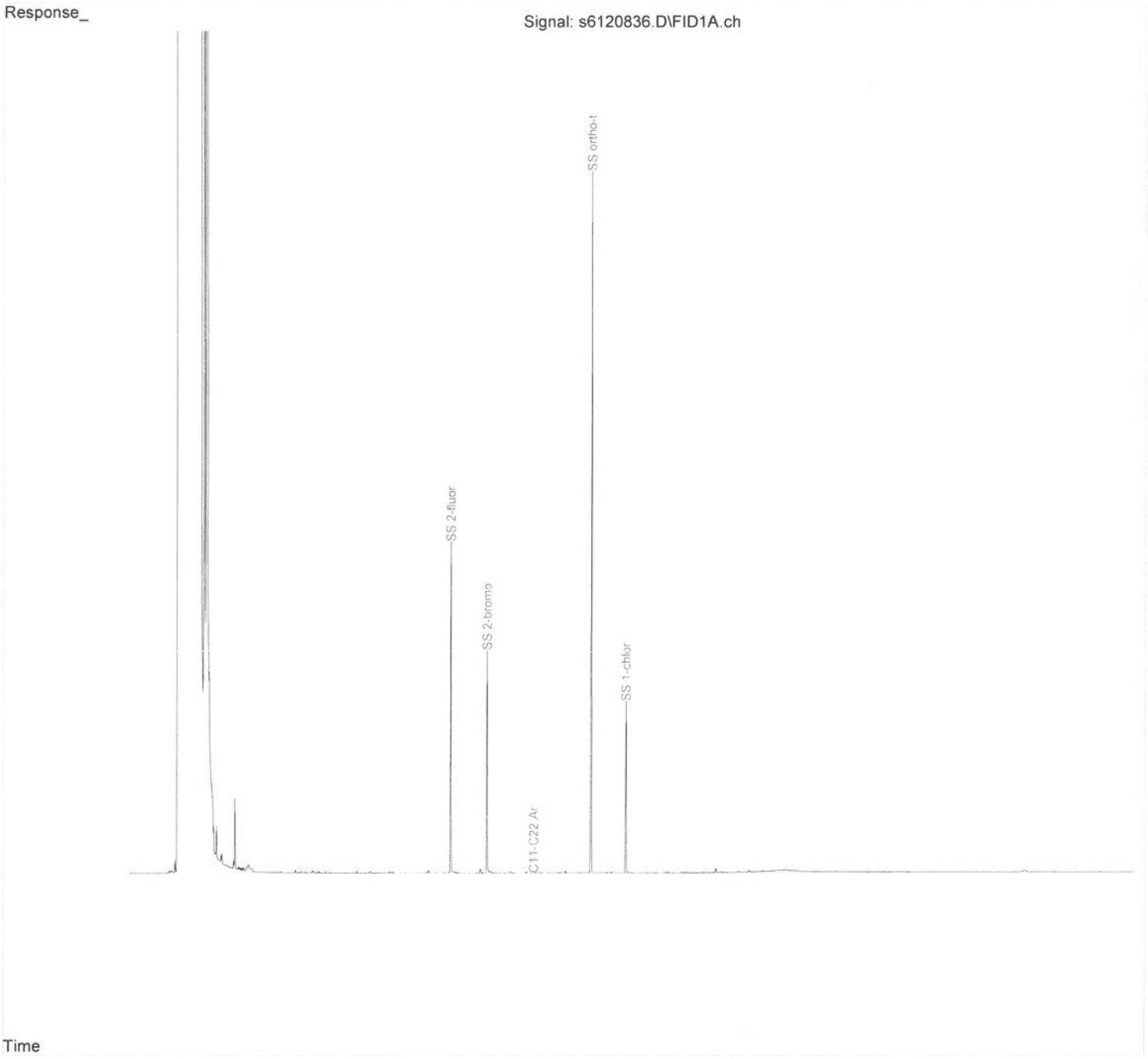
	Compound	R.T.	Response	Conc Units	
	System Monitoring Compounds				
3) S	SS 2-fluorobiphenyl (...	9.527	2235234	15.840 ug/mLm	BC = Baseline Correction
Spiked Amount	20.000		Recovery =	79.20%	
5) S	SS 2-bromonaphthalene...	10.603	1580909	16.577 ug/mLm	BC = Baseline Correction
Spiked Amount	20.000		Recovery =	82.89%	
10) S	SS ortho-terphenyl (OTP)	13.726	5115537	34.186 ug/mLm	BC = Baseline Correction
Spiked Amount	50.000		Recovery =	68.37%	
11) S	SS 1-chloro-otadecane...	14.762f	1329684	10.882 ug/mLm	
Spiked Amount	50.000		Recovery =	21.76%	
	Target Compounds				
1)	naphthalene	0.000	0	N.D. ug/mLd	
2)	2-methylnaphthalene	0.000	0	N.D. ug/mL	
4)	acenaphthylene	0.000	0	N.D. ug/mLd	
6)	acenaphthene	0.000	0	N.D. ug/mLd	
7)	fluorene	0.000	0	N.D. ug/mL	
8)	phenanthrene	0.000	0	N.D. ug/mL	
9)	anthracene	0.000	0	N.D. ug/mL	
12)	fluoranthene	0.000	0	N.D. ug/mL	
13)	pyrene	0.000	0	N.D. ug/mL	
14)	benzo(a)anthracene	0.000	0	N.D. ug/mL	
15)	chrysene	0.000	0	N.D. ug/mL	
16)	benzo(b&k)fluoranthenes	0.000	0	N.D. ug/mL	
17)	benzo(a)pyrene	0.000	0	N.D. ug/mL	
18)	indeno&dibenzo	0.000	0	N.D. ug/mL	
19)	benzo(g,h,i)perylene	0.000	0	N.D. ug/mL	
20) H	C11-C22 Aromatics	12.000	3764448	26.571 ug/mLm	RI = Range Integration

(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : X:\S6\2023\Dec23\120823\
Data File : s6120836.D
Signal(s) : FID1A.ch
Acq On : 09 Dec 2023 02:33 am
Operator : dbv
Sample : 67839-08 aro x1
Misc :
ALS Vial : 18 Sample Multiplier: 1

Integration File: rteint.p
Quant Time: Dec 09 17:35:33 2023
Quant Method : X:\S6\methods\S6ARO100423F.M
Quant Title : S6 EPH Aromatics
QLast Update : Thu Oct 05 11:16:37 2023
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : X:\S6\2023\Dec23\120823.SEC\
Data File : s6120835.D
Signal(s) : FID2B.ch
Acq On : 09 Dec 2023 02:33 am
Operator : dbv
Sample : 67839-08 ali x1
Misc :
ALS Vial : 93 Sample Multiplier: 1

12/12/23 @ 08:46
DonnaV

Integration File: rteint.p
Quant Time: Dec 09 17:35:51 2023
Quant Method : X:\S6\methods\S6ALI100423A.M
Quant Title : S6 EPH Aliphatics
QLast Update : Thu Oct 05 13:01:54 2023
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :

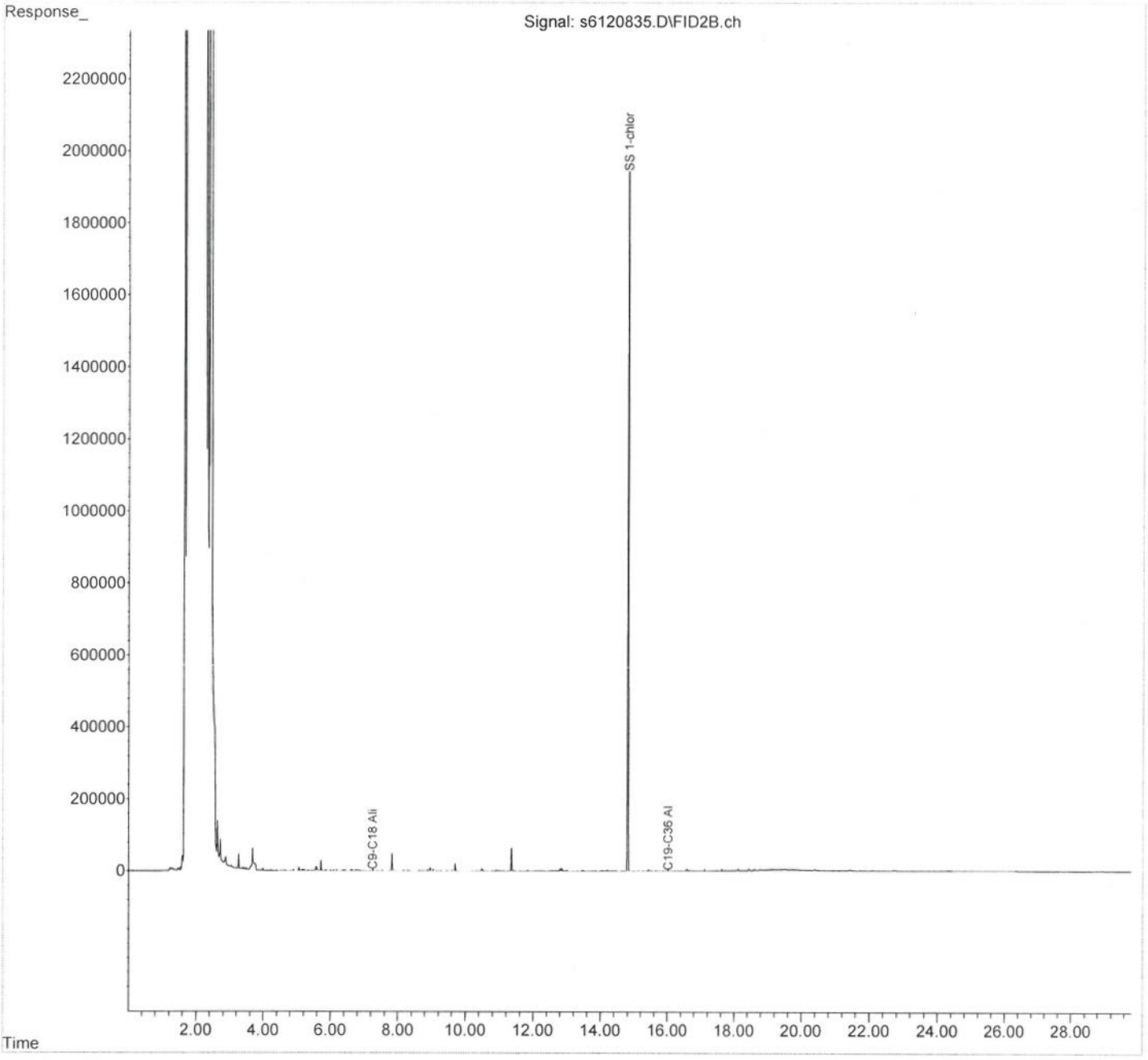
	Compound	R.T.	Response	Conc	Units	
	System Monitoring Compounds					
4) S	SS 2-fluorobiphenyl (...	0.000	0	N.D.	ug/mLd	
Spiked Amount	20.000	Recovery =	0.00%			
6) S	SS 2-bromonaphthalene...	0.000	0	N.D.	ug/mLd	
Spiked Amount	20.000	Recovery =	0.00%			
11) S	SS ortho-terphenyl (OTP)	0.000	0	N.D.	ug/mLd	
Spiked Amount	50.000	Recovery =	0.00%			
13) S	SS 1-chloro-octadecan...	14.807f	2812544	23.954	ug/mL	
Spiked Amount	50.000	Recovery =	47.91%			
	Target Compounds					
1)	C9 n-Nonane	0.000	0	N.D.	ug/mLd	
2)	C10 n-Decane	0.000	0	N.D.	ug/mLd	
3)	C12 n-Dodecane	0.000	0	N.D.	ug/mLd	
5)	C14 n-Tetradecane	0.000	0	N.D.	ug/mLd	
7)	C16 n-Hexadecane	0.000	0	N.D.	ug/mLd	
8)	C18 n-Octadecane	0.000	0	N.D.	ug/mLd	
9) H	C9-C18 Aliphatics	7.237	893054	6.362	ug/mLm	RI = Range Integration
10)	C19 n-Nonadecane	0.000	0	N.D.	ug/mLd	
12)	C20 n-Eicosane	0.000	0	N.D.	ug/mLd	
14)	C22 n-Docosane	0.000	0	N.D.	ug/mLd	
15)	C24 n-Tetracosane	0.000	0	N.D.	ug/mLd	
16)	C26 n-Hexacosane	0.000	0	N.D.	ug/mLd	
17)	C28 n-Octacosane	0.000	0	N.D.	ug/mLd	
18)	C30 n-Triacontane	0.000	0	N.D.	ug/mLd	
19)	C36 n-Hexatriacontane	0.000	0	N.D.	ug/mLd	
20) H	C19-C36 Aliphatics	16.000	1863715	13.008	ug/mLm	RI = Range Integration

(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : X:\S6\2023\Dec23\120823.SEC\
Data File : s6120835.D
Signal(s) : FID2B.ch
Acq On : 09 Dec 2023 02:33 am
Operator : dbv
Sample : 67839-08 ali x1
Misc :
ALS Vial : 93 Sample Multiplier: 1

Integration File: rteint.p
Quant Time: Dec 09 17:35:51 2023
Quant Method : X:\S6\methods\S6ALI100423A.M
Quant Title : S6 EPH Aliphatics
QLast Update : Thu Oct 05 13:01:54 2023
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :



This File:	L:\SVOA\Excel Reports\EPH\231214\67839-009		
Analysis Group:	EPH	Dow Salvage Yard	
Field ID:	MW1-150-157-110923	CRE	
Sample:	67839-09 targets x1	67839-09 aro x1	67839-09 ali x1
Misc:	aro frac		
Method Name:	SVOA04 Method 8270E (ε S6 EPH Aromatics		S6 EPH Aliphatics
Import File Name:	s6 EPHs QC17156W		
TestGroupID:	EMA_EPH_PresCert_A		
Aqueous or Soil? (A or S)	A		
Fractionated? (Y/N)	y	y	
Prep Date:	11/20/2023		
Lab#:	67839-009		
QC_Code:			
Prep#	~~17225~~ 17156 HE DBV		

Donna Valley L:\SVOA\EPH\EPH ImportFileBuilder2.0.xls
12/14/23 12:48 PM
L:\SVOA\EPH\
L:\SVOA\Excel Reports\EPH\2312
L:\SVOA\PDF Reports\FUELS\

Reviewer Checks:

- Quant Report: Reviewed? Ranges integrated? Analyst Initials & Date?
- Chromatogram Checked? Major peaks identified?
- Soil prep data checked: weight, volume, %solid, Prep date
- Field ID consistent with data and any field replicates
- Results consistent with any re-runs & internal QC
- Substitute dilution data checked
- Correct dilution and reason clear or noted
- Reason for reanalysis documented
- Surrogates pass or flagged & noted
- Flags checked (Expiration, F+, Over Cal)
- Other QC failures, estimates or interferences documented
- Spot checked Reported Result with Quant Report
- Checked Audit flagged data in LIMS

Notes:

Initials & Date: 12/14/23

1
2
5
11
16
20

X:\S4\2023\Dec23\120723\s4120757.D\S4PAH110223A.XLS PAH targets filename
X:\S6\2023\Dec23\120823\s6120838.D\S6ARO100423F.XLS aromatics filename
X:\S6\2023\Dec23\120823.SEC\s6120837.D\S6ALI100423A.XLS aliphatics filename

#	Surrogate Standards	Concentration (ug/mL)	AnalysisDate	AnalysisTime	AnalyzedBy	Dilution	Weight	Volume	Surr	Recovery	Flag	QC Limits
13	SS 1-chloro-octadecane (COD)	22.68314708	12/9/2023	03:07:00 AM	DBV s6120837.D	1	1	2	100	**45%**		40-140
10	SS ortho-terphenyl (OTP)	31.27911625	12/9/2023	03:07:00 AM	DBV s6120838.D	1	1	2	100	**63%**		40-140
3	SS 2-fluorobiphenyl (2FBP)	15.86438195	12/9/2023	03:07:00 AM	DBV s6120838.D	1	1	2	40	**79%**		40-140
5	SS 2-bromonaphthalene (2BN)	16.96775991	12/9/2023	03:07:00 AM	DBV s6120838.D	1	1	2	40	**85%**		40-140

#	AnalyteName	Concentration (ug/mL)	AnalysisDate	AnalysisTime	AnalyzedBy	Dilution	Weight	Volume
3	naphthalene	0	12/08/2023	02:21:00 PM	CL s4120757.D	1	1	2
4	2-methylnaphthalene	0	12/08/2023	02:21:00 PM	CL s4120757.D	1	1	2
12	phenanthrene	0	12/08/2023	02:21:00 PM	CL s4120757.D	1	1	2
8	acenaphthene	0	12/08/2023	02:21:00 PM	CL s4120757.D	1	1	2
7	acenaphthylene	0	12/08/2023	02:21:00 PM	CL s4120757.D	1	1	2
10	fluorene	0	12/08/2023	02:21:00 PM	CL s4120757.D	1	1	2
13	anthracene	0	12/08/2023	02:21:00 PM	CL s4120757.D	1	1	2
15	fluoranthene	0	12/08/2023	02:21:00 PM	CL s4120757.D	1	1	2
17	pyrene	0	12/08/2023	02:21:00 PM	CL s4120757.D	1	1	2
18	benzo(a)anthracene	0	12/08/2023	02:21:00 PM	CL s4120757.D	1	1	2
19	chrysene	0	12/08/2023	02:21:00 PM	CL s4120757.D	1	1	2
21	benzo(b)fluoranthene	0	12/08/2023	02:21:00 PM	CL s4120757.D	1	1	2
22	benzo(k)fluoranthene	0	12/08/2023	02:21:00 PM	CL s4120757.D	1	1	2
23	benzo(a)pyrene	0	12/08/2023	02:21:00 PM	CL s4120757.D	1	1	2
24	indeno(1,2,3-cd)pyrene	0	12/08/2023	02:21:00 PM	CL s4120757.D	1	1	2
25	dibenzo(a,h)anthracene	0	12/08/2023	02:21:00 PM	CL s4120757.D	1	1	2
26	benzo(g,h,i)perylene	0	12/08/2023	02:21:00 PM	CL s4120757.D	1	1	2
20	C11-C22 Aromatics	22.79242535	12/9/2023	03:07:00 AM	DBV s6120838.D	1	1	2
9	C9-C18 Aliphatics	6.1166957	12/9/2023	03:07:00 AM	DBV s6120837.D	1	1	2
20	C19-C36 Aliphatics	15.19012314	12/9/2023	03:07:00 AM	DBV s6120837.D	1	1	2
	Adjusted C11-C22 Aromatics	22.79242535	12/9/2023	03:07:00 AM	DBV s6120838.D	1	1	2

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Dec23\120723\
Data File : s4120757.D
Acq On : 08 Dec 2023 02:21 pm
Operator : cl
Sample : 67839-09 targets x1
Misc : aro frac
ALS Vial : 52 Sample Multiplier: 1

CL
12/8/23 @ 15:41
CharlesL

Quant Time: Dec 08 15:39:05 2023
Quant Method : X:\S4\methods\S4PAH110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration

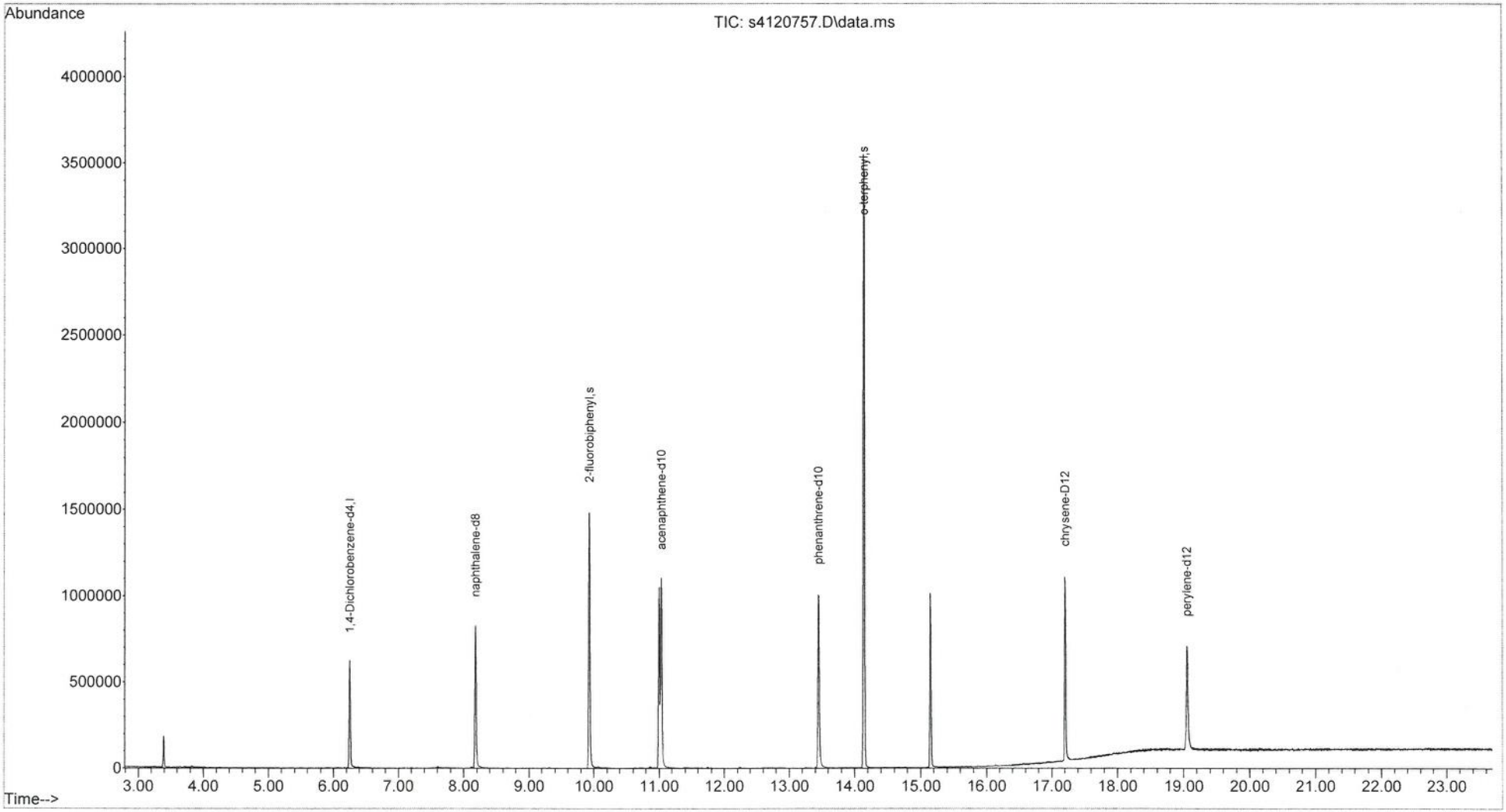
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.250	152	139123	10.00	ug/mL	-0.01
2) naphthalene-d8	8.179	136	555396	10.00	ug/mL	-0.02
5) acenaphthene-d10	11.035	164	315551	10.00	ug/mL	-0.01
11) phenanthrene-d10	13.446	188	598961	10.00	ug/mL	-0.01
16) chrysene-D12	17.204	240	472538	10.00	ug/mL	0.00
20) perylene-d12	19.049	264	386033	10.00	ug/mL	0.01
System Monitoring Compounds						
6) 2-fluorobiphenyl	9.930	172	671406	13.50	ug/mL	-0.01
Spiked Amount 100.000			Recovery = 13.50%			
14) o-terphenyl	14.142	230	964291	28.35	ug/mL	-0.01
Spiked Amount 100.000			Recovery = 28.35%			
Target Compounds						Qvalue
18) benzo(a)anthracene	17.204	228	866	Below Cal	#	51
19) chrysene	17.204	228	866	Below Cal	#	49
23) benzo(a)pyrene	19.049	252	1085	Below Cal	#	54

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Dec23\120723\
Data File : s4120757.D
Acq On : 08 Dec 2023 02:21 pm
Operator : cl
Sample : 67839-09 targets x1
Misc : aro frac
ALS Vial : 52 Sample Multiplier: 1

Quant Time: Dec 08 15:39:05 2023
Quant Method : X:\S4\methods\S4PAH110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration



SFP
12/12/23 @ 12:2
SkylaM

Data Path : X:\S6\2023\Dec23\120823\
Data File : s6120838.D
Signal(s) : FID1A.ch
Acq On : 09 Dec 2023 03:07 am
Operator : dbv
Sample : 67839-09 aro x1
Misc :
ALS Vial : 19 Sample Multiplier: 1

Integration File: rteint.p
Quant Time: Dec 09 17:35:36 2023
Quant Method : X:\S6\methods\S6ARO100423F.M
Quant Title : S6 EPH Aromatics
QLast Update : Thu Oct 05 11:16:37 2023
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :

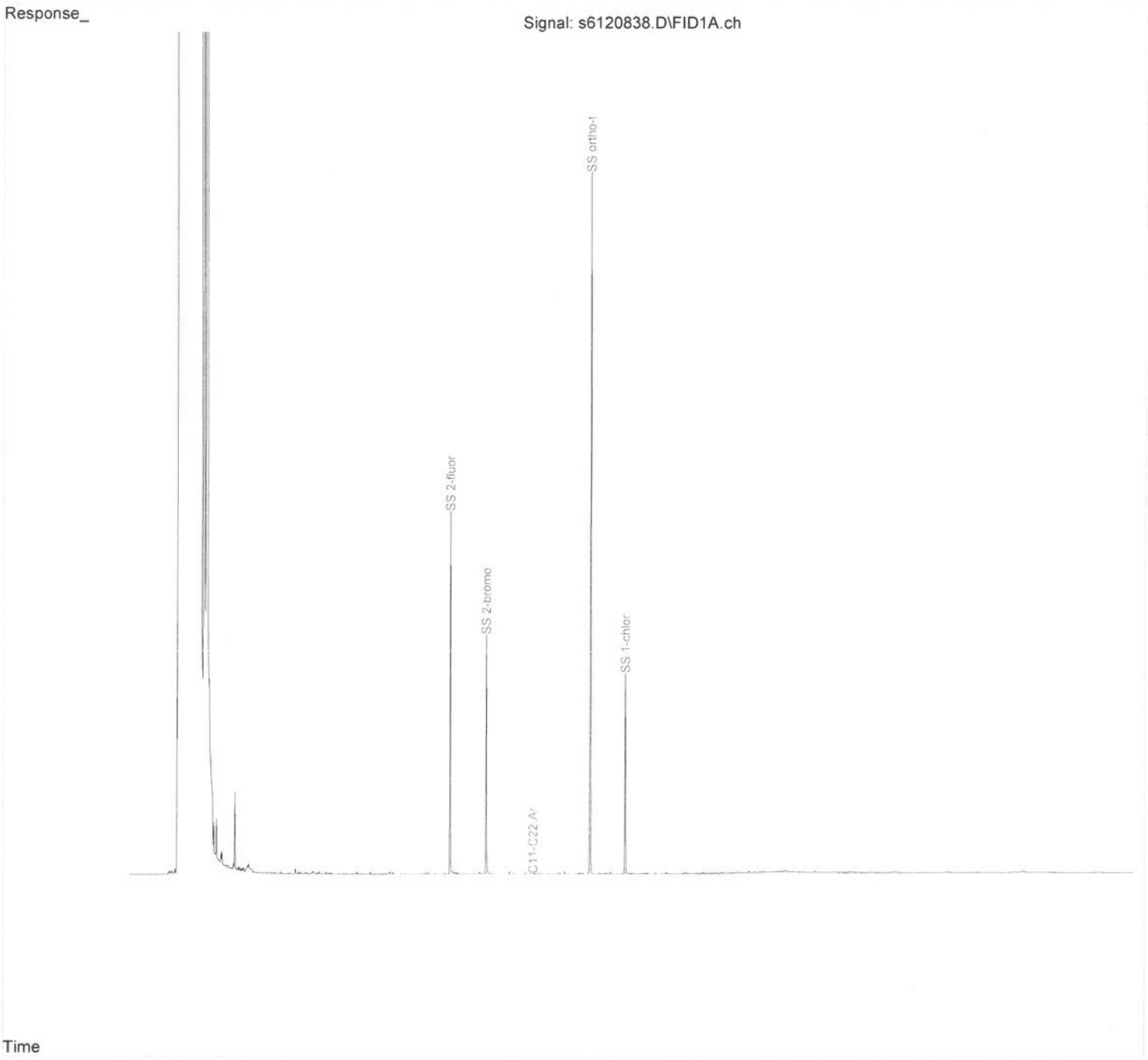
	Compound	R.T.	Response	Conc	Units	
	System Monitoring Compounds					
3) S	SS 2-fluorobiphenyl (...	9.526	2238668	15.864	ug/mLm	BC = Baseline Correction
Spiked Amount	20.000		Recovery =	79.32%		
5) S	SS 2-bromonaphthalene...	10.602	1618188	16.968	ug/mLm	BC = Baseline Correction
Spiked Amount	20.000		Recovery =	84.84%		
10) S	SS ortho-terphenyl (OTP)	13.724	4680129	31.279	ug/mLm	BC = Baseline Correction
Spiked Amount	50.000		Recovery =	62.56%		
11) S	SS 1-chloro-otadecane...	14.763	1431562	11.715	ug/mLm	
Spiked Amount	50.000		Recovery =	23.43%		
	Target Compounds					
1)	naphthalene	0.000	0	N.D.	ug/mLd	
2)	2-methylnaphthalene	0.000	0	N.D.	ug/mL	
4)	acenaphthylene	0.000	0	N.D.	ug/mLd	
6)	acenaphthene	0.000	0	N.D.	ug/mL	
7)	fluorene	0.000	0	N.D.	ug/mL	
8)	phenanthrene	0.000	0	N.D.	ug/mL	
9)	anthracene	0.000	0	N.D.	ug/mL	
12)	fluoranthene	0.000	0	N.D.	ug/mL	
13)	pyrene	0.000	0	N.D.	ug/mL	
14)	benzo(a)anthracene	0.000	0	N.D.	ug/mLd	
15)	chrysene	0.000	0	N.D.	ug/mL	
16)	benzo(b&k)fluoranthenes	0.000	0	N.D.	ug/mL	
17)	benzo(a)pyrene	0.000	0	N.D.	ug/mL	
18)	indeno&dibenzo	0.000	0	N.D.	ug/mL	
19)	benzo(g,h,i)perylene	0.000	0	N.D.	ug/mL	
20) H	C11-C22 Aromatics	12.000	3197011	22.792	ug/mLm	RI = Range Integration

(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : X:\S6\2023\Dec23\120823\
Data File : s6120838.D
Signal(s) : FID1A.ch
Acq On : 09 Dec 2023 03:07 am
Operator : dbv
Sample : 67839-09 aro x1
Misc :
ALS Vial : 19 Sample Multiplier: 1

Integration File: rteint.p
Quant Time: Dec 09 17:35:36 2023
Quant Method : X:\S6\methods\S6ARO100423F.M
Quant Title : S6 EPH Aromatics
QLast Update : Thu Oct 05 11:16:37 2023
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : X:\S6\2023\Dec23\120823.SEC\
Data File : s6120837.D
Signal(s) : FID2B.ch
Acq On : 09 Dec 2023 03:07 am
Operator : dbv
Sample : 67839-09 ali x1
Misc :
ALS Vial : 94 Sample Multiplier: 1

12/12/23 @ 08:46
DonnaV

Integration File: rteint.p
Quant Time: Dec 09 17:35:54 2023
Quant Method : X:\S6\methods\S6ALI100423A.M
Quant Title : S6 EPH Aliphatics
QLast Update : Thu Oct 05 13:01:54 2023
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :

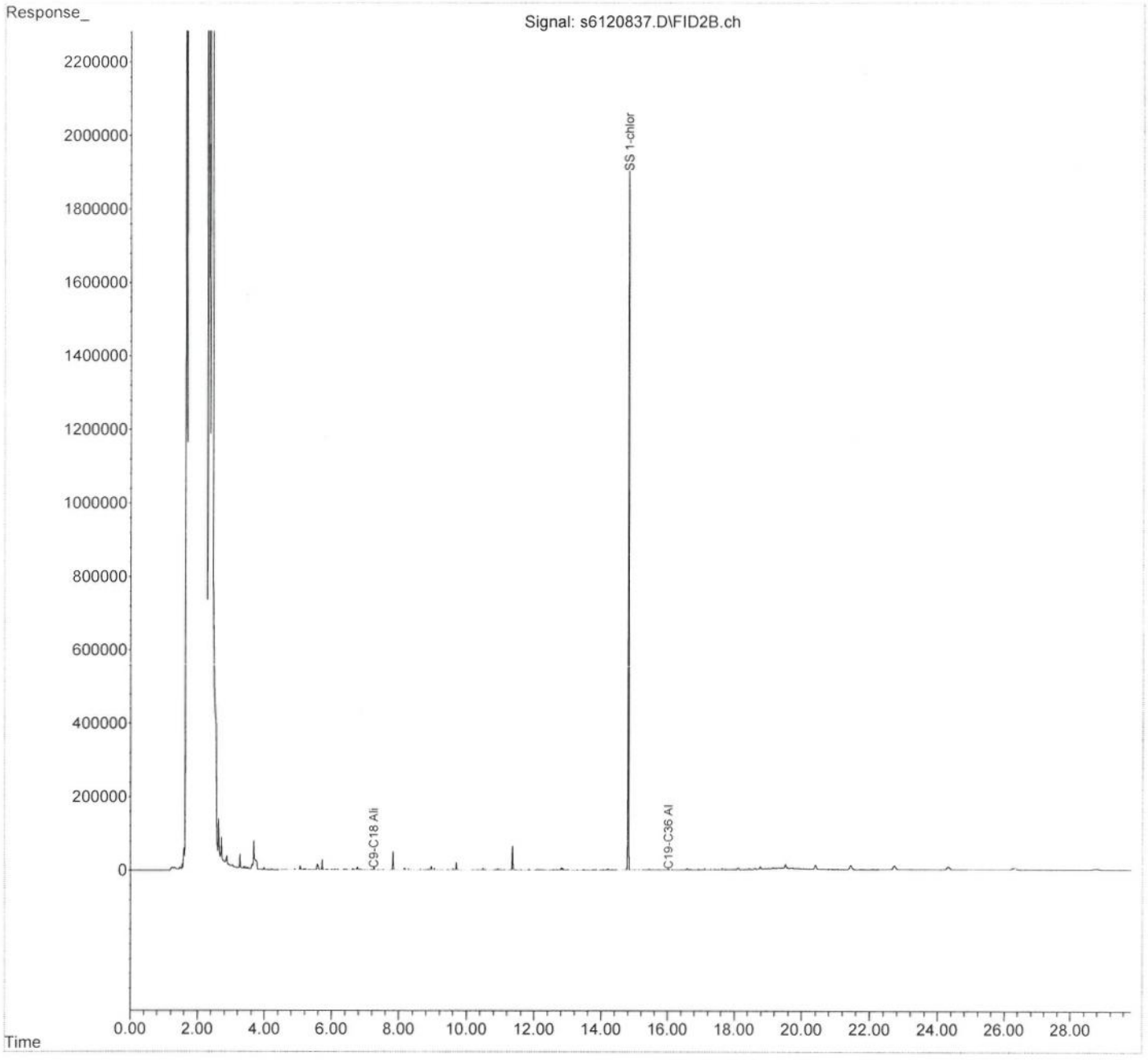
	Compound	R.T.	Response	Conc	Units	
	System Monitoring Compounds					
4) S	SS 2-fluorobiphenyl (...	0.000	0	N.D.	ug/mLd	
Spiked Amount	20.000	Recovery	=	0.00%		
6) S	SS 2-bromonaphthalene...	0.000	0	N.D.	ug/mLd	
Spiked Amount	20.000	Recovery	=	0.00%		
11) S	SS ortho-terphenyl (OTP)	0.000	0	N.D.	ug/mLd	
Spiked Amount	50.000	Recovery	=	0.00%		
13) S	SS 1-chloro-octadecan...	14.807f	2663615	22.683	ug/mL	
Spiked Amount	50.000	Recovery	=	45.37%		
	Target Compounds					
1)	C9 n-Nonane	0.000	0	N.D.	ug/mLd	
2)	C10 n-Decane	0.000	0	N.D.	ug/mLd	
3)	C12 n-Dodecane	0.000	0	N.D.	ug/mLd	
5)	C14 n-Tetradecane	0.000	0	N.D.	ug/mLd	
7)	C16 n-Hexadecane	0.000	0	N.D.	ug/mLd	
8)	C18 n-Octadecane	0.000	0	N.D.	ug/mLd	
9) H	C9-C18 Aliphatics	7.237	861626	6.117	ug/mLm	RI = Range Integration
10)	C19 n-Nonadecane	0.000	0	N.D.	ug/mLd	
12)	C20 n-Eicosane	0.000	0	N.D.	ug/mLd	
14)	C22 n-Docosane	0.000	0	N.D.	ug/mLd	
15)	C24 n-Tetracosane	0.000	0	N.D.	ug/mLd	
16)	C26 n-Hexacosane	0.000	0	N.D.	ug/mLd	
17)	C28 n-Octacosane	0.000	0	N.D.	ug/mLd	
18)	C30 n-Triacontane	0.000	0	N.D.	ug/mLd	
19)	C36 n-Hexatriacontane	0.000	0	N.D.	ug/mLd	
20) H	C19-C36 Aliphatics	16.000	2152656	15.190	ug/mLm	RI = Range Integration

(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : X:\S6\2023\Dec23\120823.SEC\
Data File : s6120837.D
Signal(s) : FID2B.ch
Acq On : 09 Dec 2023 03:07 am
Operator : dbv
Sample : 67839-09 ali x1
Misc :
ALS Vial : 94 Sample Multiplier: 1

Integration File: rteint.p
Quant Time: Dec 09 17:35:54 2023
Quant Method : X:\S6\methods\S6ALI100423A.M
Quant Title : S6 EPH Aliphatics
QLast Update : Thu Oct 05 13:01:54 2023
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :



This File:	**L:\SVOA\Excel Reports\EPH\231214\67839-010**		Donna Valley L:\SVOA\EPH\EPH ImportFileBuilder2.0.xls
Analysis Group:	**EPH**	**Dow Salvage Yard**	12/14/23 12:49 PM
Field ID:	**BRMW1-65-75-110923**	**CRE**	L:\SVOA\EPH\
Sample:	**67839-10 targets x1**	**67839-10 aro x1**	**67839-10 ali x1** L:\SVOA\Excel Reports\EPH\2312:
Misc:	*aro frac*		L:\SVOA\PDF Reports\FUELS\
Method Name:	*SVOA04 Method 8270E (t*	*S6 EPH Aromatics*	*S6 EPH Aliphatics*
Import File Name:	**s6 EPHs QC171S6W**		
TestGroupID:	**EMA_EPH_PresCert_A**		
Aqueous or Soil? (A or S)	**A**		
Fractionated? (Y/N)	**Y**	**Y**	
Prep Date:	11/20/2023		
Lab#:	**67839-010**		
QC_Code:			
Prep#	~~12225~~ 17156 HG DBV		

Reviewer Checks:

Quant Report: Reviewed? Ranges integrated? Analyst Initials & Date?	1
Chromatogram Checked? Major peaks identified?	2
Soil prep data checked: weight, volume, %solid, Prep date	5
Field ID consistent with data and any field replicates	11
Results consistent with any re-runs & internal QC	
Substitute dilution data checked	
Correct dilution and reason clear or noted	
Reason for reanalysis documented	
Surrogates pass or flagged & noted	
Flags checked (Expiration, F+, Over Cal)	
Other QC failures, estimates or interferences documented	
Spot checked Reported Result with Quant Report	
Checked Audit flagged data in LIMS	16

Notes:

Initials & Date: 12/19/23 — 20

X:\S4\2023\Dec23\120723\s4120758.D\S4PAH110223A.XLS PAH targets filename
X:\S6\2023\Dec23\120823\s6120840.D\S6ARO100423F.XLS aromatics filename
X:\S6\2023\Dec23\120823.SEC\s6120839.D\S6ALI100423A.XLS aliphatics filename

#	Surrogate Standards	Concentration (ug/mL)	AnalysisDate	AnalysisTime	AnalyzedBy	Dilution	Weight	Volume	Surr	Recovery	Flag	QC Limits
13	SS 1-chloro-octadecane (COD)	28.88404267	12/9/2023	03:41:00 AM	DBV s6120839.D	1	1	2	100	**58%**		40-140
10	SS ortho-terphenyl (OTP)	34.86962901	12/9/2023	03:41:00 AM	DBV s6120840.D	1	1	2	100	**70%**		40-140
3	SS 2-fluorobiphenyl (2FBP)	17.56058653	12/9/2023	03:41:00 AM	DBV s6120840.D	1	1	2	40	**88%**		40-140
5	SS 2-bromonaphthalene (2BN)	18.05174562	12/9/2023	03:41:00 AM	DBV s6120840.D	1	1	2	40	**90%**		40-140

#	AnalyteName	Concentration (ug/mL)	AnalysisDate	AnalysisTime	AnalyzedBy	Dilution	Weight	Volume
3	naphthalene	0	12/08/2023	02:51:00 PM	CL s4120758.D	1	1	2
4	2-methylnaphthalene	0	12/08/2023	02:51:00 PM	CL s4120758.D	1	1	2
12	phenanthrene	0	12/08/2023	02:51:00 PM	CL s4120758.D	1	1	2
8	acenaphthene	0	12/08/2023	02:51:00 PM	CL s4120758.D	1	1	2
7	acenaphthylene	0	12/08/2023	02:51:00 PM	CL s4120758.D	1	1	2
10	fluorene	0	12/08/2023	02:51:00 PM	CL s4120758.D	1	1	2
13	anthracene	0	12/08/2023	02:51:00 PM	CL s4120758.D	1	1	2
15	fluoranthene	0	12/08/2023	02:51:00 PM	CL s4120758.D	1	1	2
17	pyrene	0	12/08/2023	02:51:00 PM	CL s4120758.D	1	1	2
18	benzo(a)anthracene	0	12/08/2023	02:51:00 PM	CL s4120758.D	1	1	2
19	chrysene	0	12/08/2023	02:51:00 PM	CL s4120758.D	1	1	2
21	benzo(b)fluoranthene	0	12/08/2023	02:51:00 PM	CL s4120758.D	1	1	2
22	benzo(k)fluoranthene	0	12/08/2023	02:51:00 PM	CL s4120758.D	1	1	2
23	benzo(a)pyrene	0	12/08/2023	02:51:00 PM	CL s4120758.D	1	1	2
24	indeno(1,2,3-cd)pyrene	0	12/08/2023	02:51:00 PM	CL s4120758.D	1	1	2
25	dibenzo(a,h)anthracene	0	12/08/2023	02:51:00 PM	CL s4120758.D	1	1	2
26	benzo(g,h,i)perylene	0	12/08/2023	02:51:00 PM	CL s4120758.D	1	1	2
20	C11-C22 Aromatics	20.8802684	12/9/2023	03:41:00 AM	DBV s6120840.D	1	1	2
9	C9-C18 Aliphatics	9.001558653	12/9/2023	03:41:00 AM	DBV s6120839.D	1	1	2
20	C19-C36 Aliphatics	15.82161331	12/9/2023	03:41:00 AM	DBV s6120839.D	1	1	2
	Adjusted C11-C22 Aromatics	20.8802684	12/9/2023	03:41:00 AM	DBV s6120840.D	1	1	2

CL
12/8/23 @ 16:01
CharlesL

Data Path : X:\S4\2023\Dec23\120723\
Data File : s4120758.D
Acq On : 08 Dec 2023 02:51 pm
Operator : cl
Sample : 67839-10 targets x1
Misc : aro frac
ALS Vial : 53 Sample Multiplier: 1

Quant Time: Dec 08 15:41:55 2023
Quant Method : X:\S4\methods\S4PAH110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration

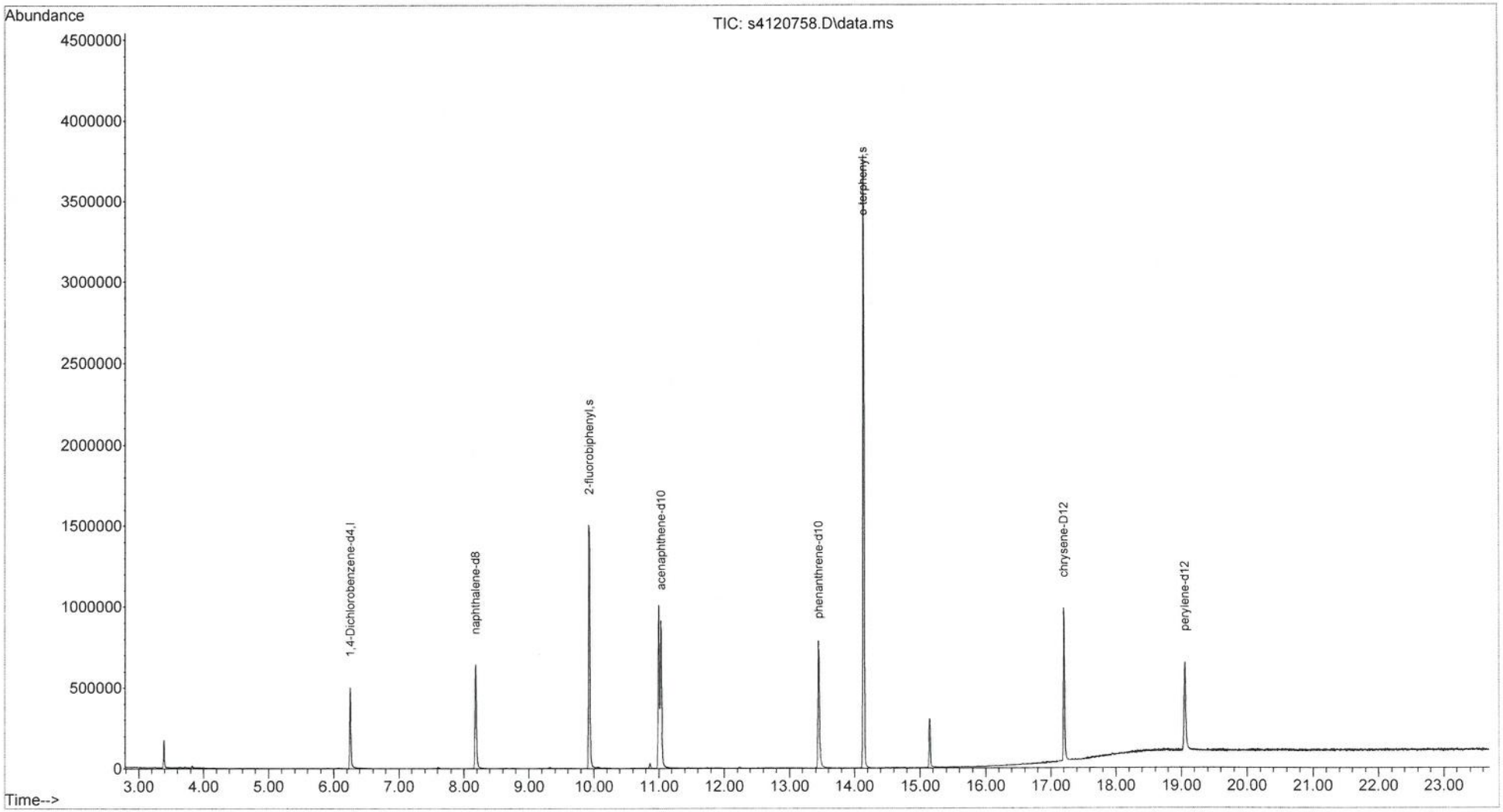
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.250	152	116276	10.00	ug/mL	-0.01
2) naphthalene-d8	8.179	136	448348	10.00	ug/mL	-0.01
5) acenaphthene-d10	11.033	164	258279	10.00	ug/mL	-0.02
11) phenanthrene-d10	13.449	188	494654	10.00	ug/mL	-0.01
16) chrysene-D12	17.205	240	424332	10.00	ug/mL	0.00
20) perylene-d12	19.055	264	346938	10.00	ug/mL	0.02
System Monitoring Compounds						
6) 2-fluorobiphenyl	9.927	172	676803	16.64	ug/mL	-0.01
Spiked Amount 100.000			Recovery = 16.64%			
14) o-terphenyl	14.142	230	1011945	36.03	ug/mL	-0.01
Spiked Amount 100.000			Recovery = 36.03%			
Target Compounds						Qvalue
8) acenaphthene	11.030	154	1079	Below Cal	#	4
18) benzo(a)anthracene	17.207	228	858	Below Cal	#	51
19) chrysene	17.207	228	858	Below Cal	#	49

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Dec23\120723\
Data File : s4120758.D
Acq On : 08 Dec 2023 02:51 pm
Operator : cl
Sample : 67839-10 targets x1
Misc : aro frac
ALS Vial : 53 Sample Multiplier: 1

Quant Time: Dec 08 15:41:55 2023
Quant Method : X:\S4\methods\S4PAH110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration



SFP
12/12/23 @ 12:25
SkylaM

Data Path : X:\S6\2023\Dec23\120823\
Data File : s6120840.D
Signal(s) : FID1A.ch
Acq On : 09 Dec 2023 03:41 am
Operator : dbv
Sample : 67839-11 aro x1
Misc : 10 Mistype SFP 12/12/23
ALS Vial : 20 Sample Multiplier: 1

Integration File: rteint.p
Quant Time: Dec 09 17:35:39 2023
Quant Method : X:\S6\methods\S6ARO100423F.M
Quant Title : S6 EPH Aromatics
QLast Update : Thu Oct 05 11:16:37 2023
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :

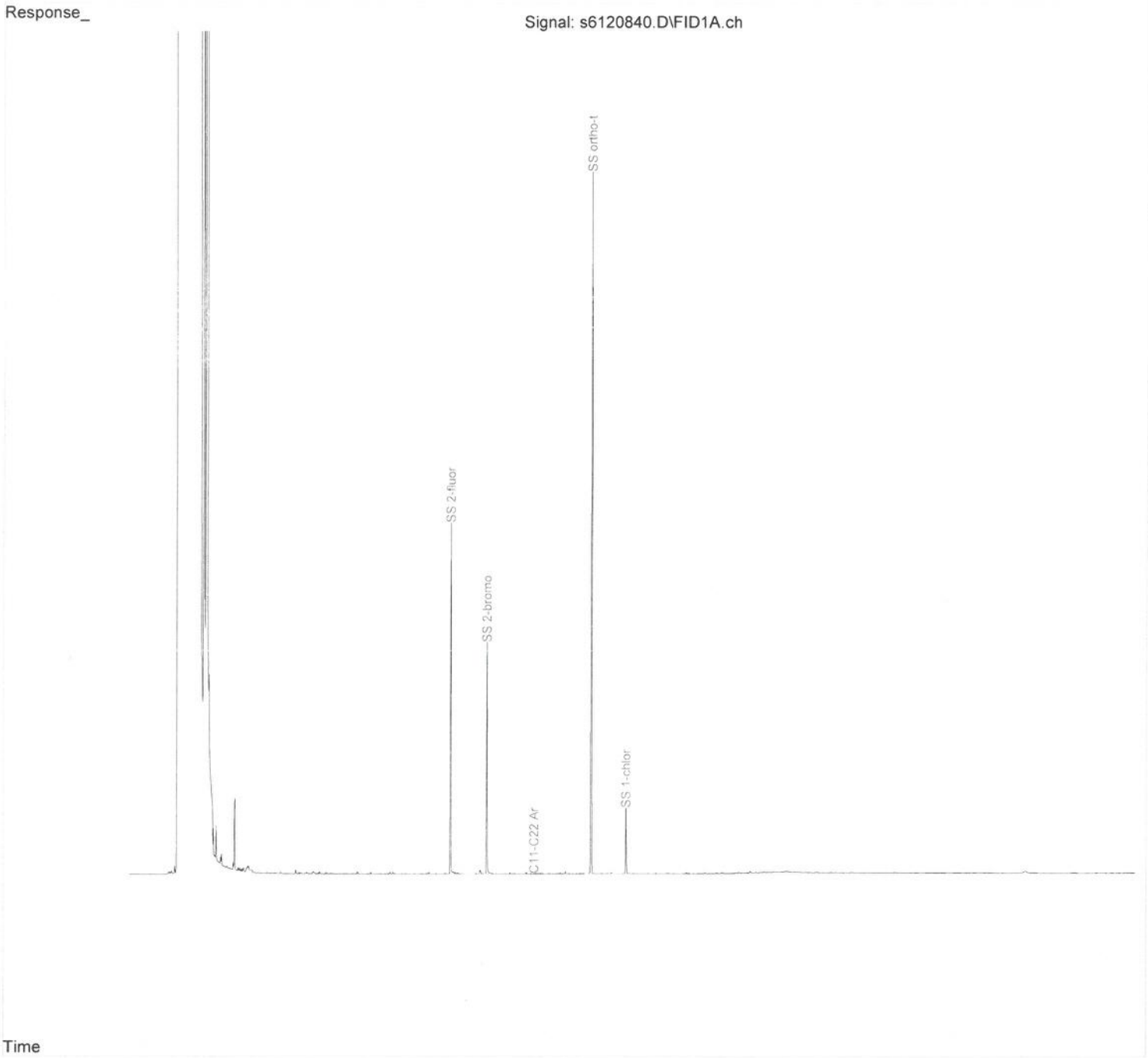
	Compound	R.T.	Response	Conc	Units	
	System Monitoring Compounds					
3) S	SS 2-fluorobiphenyl (...	9.526	2477840	17.561	ug/mLm	BC = Baseline Correction
Spiked Amount	20.000		Recovery =	87.81%		
5) S	SS 2-bromonaphthalene...	10.602	1721614	18.052	ug/mLm	BC = Baseline Correction
Spiked Amount	20.000		Recovery =	90.26%		
10) S	SS ortho-terphenyl (OTP)	13.725	5217874	34.870	ug/mLm	BC = Baseline Correction
Spiked Amount	50.000		Recovery =	69.74%		
11) S	SS 1-chloro-otadecane...	14.761f	527468	4.326	ug/mLm	
Spiked Amount	50.000		Recovery =	8.65%		
	Target Compounds					
1)	naphthalene	0.000	0	N.D.	ug/mLd	
2)	2-methylnaphthalene	0.000	0	N.D.	ug/mL	
4)	acenaphthylene	0.000	0	N.D.	ug/mLd	
6)	acenaphthene	0.000	0	N.D.	ug/mL	
7)	fluorene	0.000	0	N.D.	ug/mL	
8)	phenanthrene	0.000	0	N.D.	ug/mL	
9)	anthracene	0.000	0	N.D.	ug/mL	
12)	fluoranthene	0.000	0	N.D.	ug/mL	
13)	pyrene	0.000	0	N.D.	ug/mL	
14)	benzo(a)anthracene	0.000	0	N.D.	ug/mLd	
15)	chrysene	0.000	0	N.D.	ug/mL	
16)	benzo(b&k)fluoranthenes	0.000	0	N.D.	ug/mL	
17)	benzo(a)pyrene	0.000	0	N.D.	ug/mL	
18)	indeno&dibenzo	0.000	0	N.D.	ug/mL	
19)	benzo(g,h,i)perylene	0.000	0	N.D.	ug/mL	
20) H	C11-C22 Aromatics	12.000	2909851	20.880	ug/mLm	RI = Range Integration

(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : X:\S6\2023\Dec23\120823\
Data File : s6120840.D
Signal(s) : FID1A.ch
Acq On : 09 Dec 2023 03:41 am
Operator : dbv
Sample : 67839-11 aro x1
Misc :
ALS Vial : 20 Sample Multiplier: 1

Integration File: rteint.p
Quant Time: Dec 09 17:35:39 2023
Quant Method : X:\S6\methods\S6ARO100423F.M
Quant Title : S6 EPH Aromatics
QLast Update : Thu Oct 05 11:16:37 2023
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : X:\S6\2023\Dec23\120823.SEC\
Data File : s6120839.D
Signal(s) : FID2B.ch
Acq On : 09 Dec 2023 03:41 am
Operator : dbv
Sample : 67839-10 ali x1
Misc :
ALS Vial : 95 Sample Multiplier: 1

12/12/23 @ 08:46
DonnaV

Integration File: rteint.p
Quant Time: Dec 09 17:35:57 2023
Quant Method : X:\S6\methods\S6ALI100423A.M
Quant Title : S6 EPH Aliphatics
QLast Update : Thu Oct 05 13:01:54 2023
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :

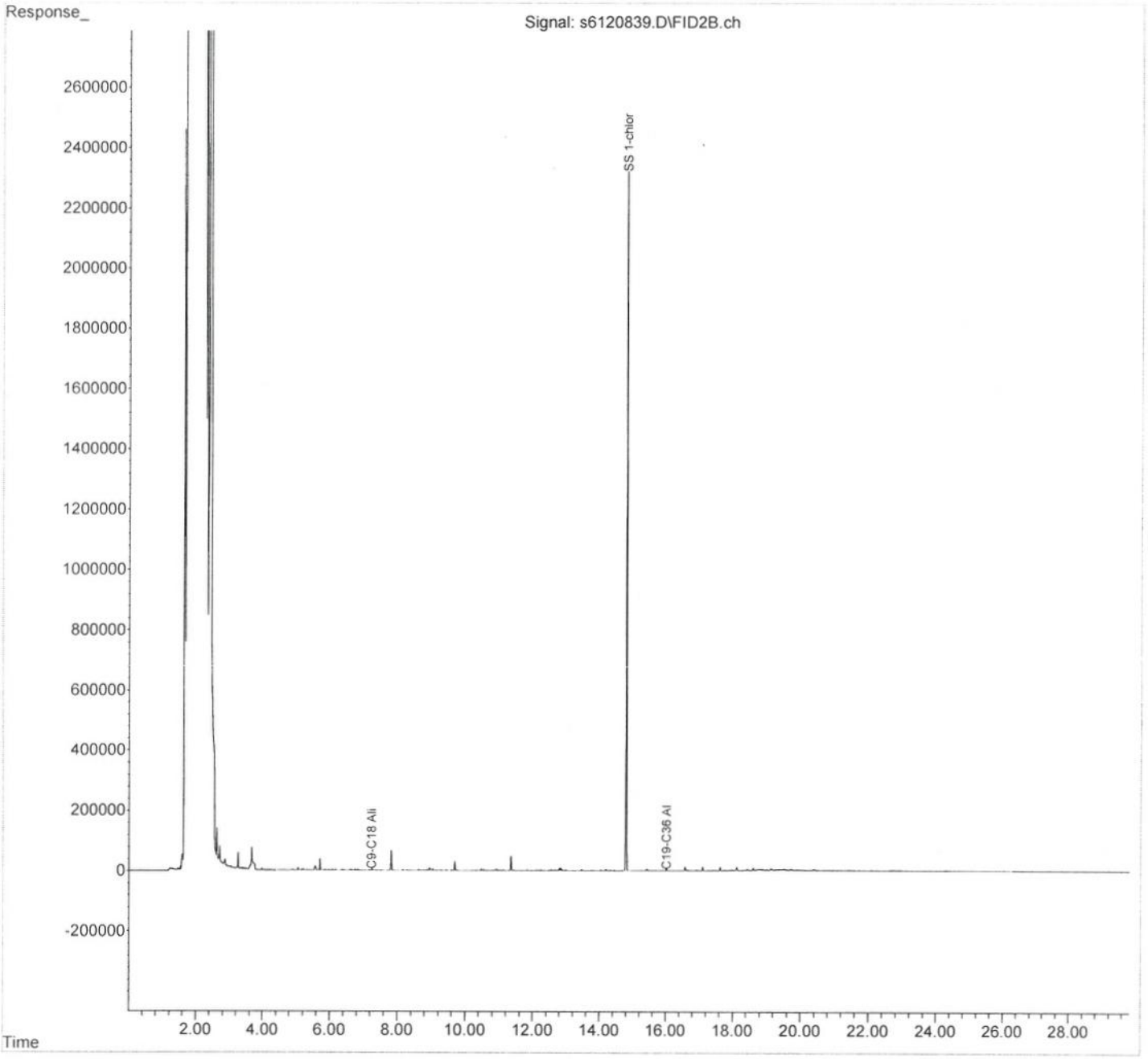
	Compound	R.T.	Response	Conc	Units	
	System Monitoring Compounds					
4) S	SS 2-fluorobiphenyl (...	0.000	0	N.D.	ug/mLd	
Spiked Amount	20.000	Recovery	=	0.00%		
6) S	SS 2-bromonaphthalene...	0.000	0	N.D.	ug/mLd	
Spiked Amount	20.000	Recovery	=	0.00%		
11) S	SS ortho-terphenyl (OTP)	0.000	0	N.D.	ug/mLd	
Spiked Amount	50.000	Recovery	=	0.00%		
13) S	SS 1-chloro-octadecan...	14.807f	3390243	28.884	ug/mL	
Spiked Amount	50.000	Recovery	=	57.77%		
	Target Compounds					
1)	C9 n-Nonane	0.000	0	N.D.	ug/mLd	
2)	C10 n-Decane	0.000	0	N.D.	ug/mLd	
3)	C12 n-Dodecane	0.000	0	N.D.	ug/mLd	
5)	C14 n-Tetradecane	0.000	0	N.D.	ug/mLd	
7)	C16 n-Hexadecane	0.000	0	N.D.	ug/mLd	
8)	C18 n-Octadecane	0.000	0	N.D.	ug/mLd	
9) H	C9-C18 Aliphatics	7.237	1230564	9.002	ug/mLm	RI = Range Integration
10)	C19 n-Nonadecane	0.000	0	N.D.	ug/mLd	
12)	C20 n-Eicosane	0.000	0	N.D.	ug/mLd	
14)	C22 n-Docosane	0.000	0	N.D.	ug/mLd	
15)	C24 n-Tetracosane	0.000	0	N.D.	ug/mLd	
16)	C26 n-Hexacosane	0.000	0	N.D.	ug/mLd	
17)	C28 n-Octacosane	0.000	0	N.D.	ug/mLd	
18)	C30 n-Triacontane	0.000	0	N.D.	ug/mLd	
19)	C36 n-Hexatriacontane	0.000	0	N.D.	ug/mLd	
20) H	C19-C36 Aliphatics	16.000	2236274	15.822	ug/mLm	RI = Range Integration

(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : X:\S6\2023\Dec23\120823.SEC\
Data File : s6120839.D
Signal(s) : FID2B.ch
Acq On : 09 Dec 2023 03:41 am
Operator : dbv
Sample : 67839-10 ali x1
Misc :
ALS Vial : 95 Sample Multiplier: 1

Integration File: rteint.p
Quant Time: Dec 09 17:35:57 2023
Quant Method : X:\S6\methods\S6ALI100423A.M
Quant Title : S6 EPH Aliphatics
QLast Update : Thu Oct 05 13:01:54 2023
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :



4060

This File:	L:\SVOA\Excel Reports\EPH\231214\67839-011		Donna Valley L:\SVOA\EPH\EPH ImportFileBuilder2.0.xls
Analysis Group:	EPH	Dow Salvage Yard	12/14/23 1:23 PM
Field ID:	RMW10-65-75-110923	CRE	L:\SVOA\EPH\
Sample:	67839-11 targets x1	67839-11 aro x1	67839-11 ali x1
Misc:	aro frac		L:\SVOA\Excel Reports\EPH\2312
Method Name:	SVOA04 Method 8270E (t	S6 EPH Aromatics	S6 EPH Aliphatics
Import File Name:	s6 EPHs QC17157W		L:\SVOA\PDF Reports\FUELS\
TestGroupID:	EMA_EPH_PresCert_A		
Aqueous or Soil? (A or S)	A		
Fractionated? (Y/N)	y	y	
Prep Date:	11/20/2023		
Lab#:	67839-011		
QC_Code:			
Prep#	17157		

Reviewer Checks:

- Quant Report: Reviewed? Ranges integrated? Analyst Initials & Date?
- Chromatogram Checked? Major peaks identified?
- Soil prep data checked: weight, volume, %solid, Prep date
- Field ID consistent with data and any field replicates
- Results consistent with any re-runs & internal QC
- Substitute dilution data checked
- Correct dilution and reason clear or noted
- Reason for reanalysis documented
- Surrogates pass or flagged & noted
- Flags checked (Expiration, F+, Over Cal)
- Other QC failures, estimates or interferences documented
- Spot checked Reported Result with Quant Report
- Checked Audit flagged data in LIMS

Notes:

Initials & Date: 12/14/23

1
2
5
11
16
20

X:\S4\2023\Dec23\121223\s4121209.D\S4PAH110223A.XLS PAH targets filename
X:\S6\2023\Dec23\120823\s6120812.D\S6ARO100423F.XLS aromatics filename
X:\S6\2023\Dec23\120823.SEC\s6120811.D\S6ALI100423A.XLS aliphatics filename

#	Surrogate Standards	Concentration (ug/mL)	AnalysisDate	AnalysisTime	AnalyzedBy	Dilution	Weight	Volume	Surr	Recovery	Flag	QC Limits
13	SS 1-chloro-octadecane (COD)	32.23397601	12/8/2023	07:46:00 PM	DBV s6120811.D	1	1	2	100	**64%**		40-140
10	SS ortho-terphenyl (OTP)	39.84892697	12/8/2023	07:46:00 PM	DBV s6120812.D	1	1	2	100	**80%**		40-140
3	SS 2-fluorobiphenyl (2FBP)	16.59570759	12/8/2023	07:46:00 PM	DBV s6120812.D	1	1	2	40	**83%**		40-140
5	SS 2-bromonaphthalene (2BN)	16.98708648	12/8/2023	07:46:00 PM	DBV s6120812.D	1	1	2	40	**85%**		40-140

#	AnalyteName	Concentration (ug/mL)	AnalysisDate	AnalysisTime	AnalyzedBy	Dilution	Weight	Volume
3	naphthalene	0	12/12/2023	02:56:00 PM	CL s4121209.D	1	1	2
4	2-methylnaphthalene	0	12/12/2023	02:56:00 PM	CL s4121209.D	1	1	2
12	phenanthrene	0	12/12/2023	02:56:00 PM	CL s4121209.D	1	1	2
8	acenaphthene	0	12/12/2023	02:56:00 PM	CL s4121209.D	1	1	2
7	acenaphthylene	0	12/12/2023	02:56:00 PM	CL s4121209.D	1	1	2
10	fluorene	0	12/12/2023	02:56:00 PM	CL s4121209.D	1	1	2
13	anthracene	0	12/12/2023	02:56:00 PM	CL s4121209.D	1	1	2
15	fluoranthene	0	12/12/2023	02:56:00 PM	CL s4121209.D	1	1	2
17	pyrene	0	12/12/2023	02:56:00 PM	CL s4121209.D	1	1	2
18	benzo(a)anthracene	0	12/12/2023	02:56:00 PM	CL s4121209.D	1	1	2
19	chrysene	0	12/12/2023	02:56:00 PM	CL s4121209.D	1	1	2
21	benzo(b)fluoranthene	0	12/12/2023	02:56:00 PM	CL s4121209.D	1	1	2
22	benzo(k)fluoranthene	0	12/12/2023	02:56:00 PM	CL s4121209.D	1	1	2
23	benzo(a)pyrene	0	12/12/2023	02:56:00 PM	CL s4121209.D	1	1	2
24	indeno(1,2,3-cd)pyrene	0	12/12/2023	02:56:00 PM	CL s4121209.D	1	1	2
25	dibenzo(a,h)anthracene	0	12/12/2023	02:56:00 PM	CL s4121209.D	1	1	2
26	benzo(g,h,i)perylene	0	12/12/2023	02:56:00 PM	CL s4121209.D	1	1	2
20	C11-C22 Aromatics	23.97400596	12/8/2023	07:46:00 PM	DBV s6120812.D	1	1	2
9	C9-C18 Aliphatics	6.935086667	12/8/2023	07:46:00 PM	DBV s6120811.D	1	1	2
20	C19-C36 Aliphatics	12.95834634	12/8/2023	07:46:00 PM	DBV s6120811.D	1	1	2
	Adjusted C11-C22 Aromatics	23.97400596	12/8/2023	07:46:00 PM	DBV s6120812.D	1	1	2

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Dec23\121223\
Data File : s4121209.D
Acq On : 12 Dec 2023 02:56 pm
Operator : cl
Sample : 67839-11 targets x1
Misc : aro frac
ALS Vial : 9 Sample Multiplier: 1

CL
12/13/23 @ 10:21
CharlesL

Quant Time: Dec 13 09:11:55 2023
Quant Method : X:\S4\methods\S4PAH110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration

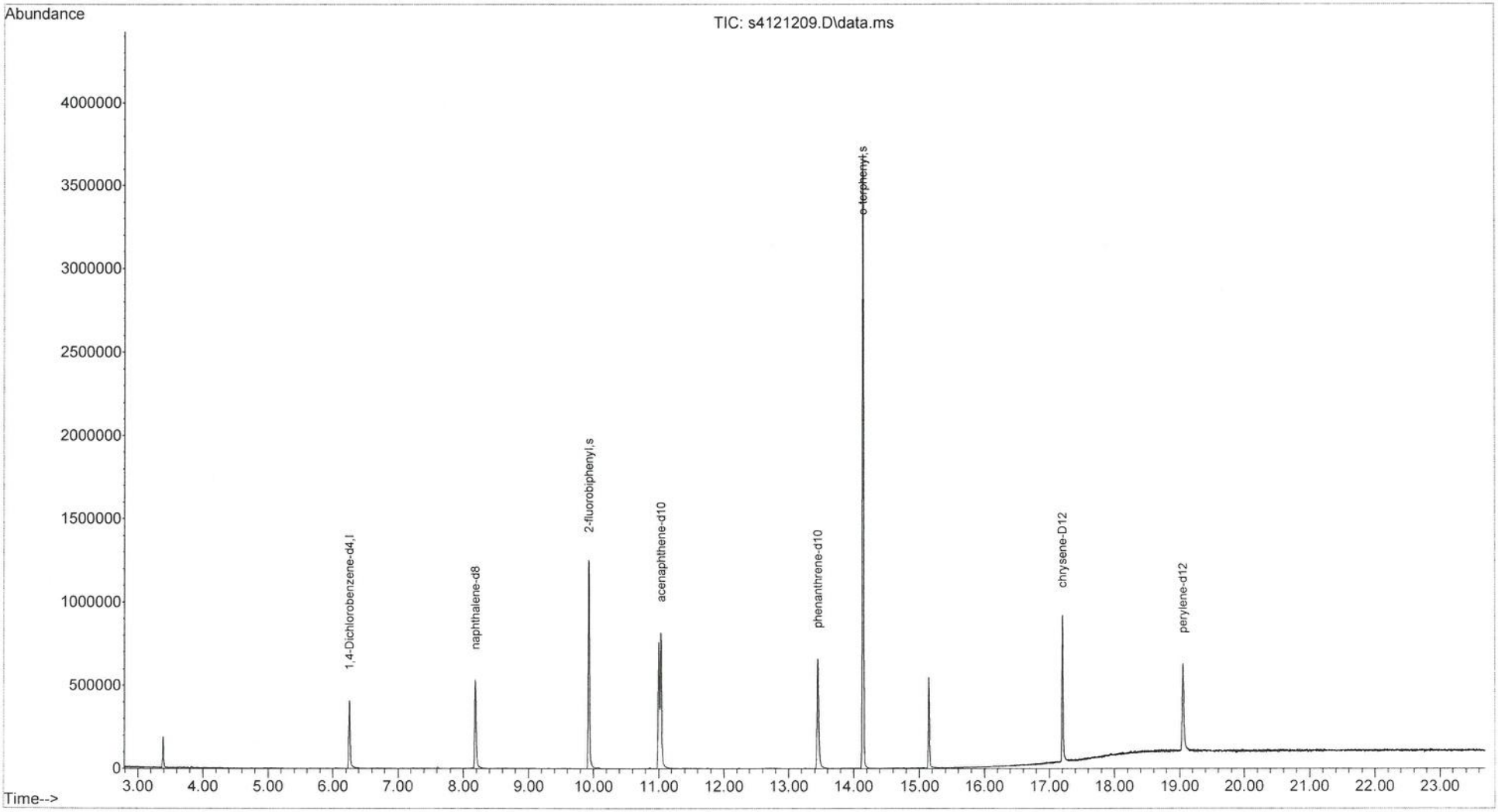
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.253	152	103363	10.00	ug/mL	-0.01
2) naphthalene-d8	8.181	136	399227	10.00	ug/mL	-0.01
5) acenaphthene-d10	11.033	164	234218	10.00	ug/mL	-0.02
11) phenanthrene-d10	13.448	188	430320	10.00	ug/mL	#-0.01
16) chrysene-D12	17.202	240	378888	10.00	ug/mL	0.00
20) perylene-d12	19.052	264	335055	10.00	ug/mL	0.01
System Monitoring Compounds						
6) 2-fluorobiphenyl	9.930	172	550197	14.91	ug/mL	-0.01
Spiked Amount 100.000			Recovery = 14.91%			
14) o-terphenyl	14.142	230	1012313	41.44	ug/mL	-0.01
Spiked Amount 100.000			Recovery = 41.44%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : X:\S4\2023\Dec23\121223\
Data File : s4121209.D
Acq On : 12 Dec 2023 02:56 pm
Operator : cl
Sample : 67839-11 targets x1
Misc : aro frac
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Dec 13 09:11:55 2023
Quant Method : X:\S4\methods\S4PAH110223A.M
Quant Title : SVOA04 Method 8270E (625.1)
QLast Update : Fri Nov 03 15:25:05 2023
Response via : Initial Calibration



QC17157
WS40060

SFP
12/12/23 @ 12:24
SkylaM

Data Path : X:\S6\2023\Dec23\120823\
Data File : s6120812.D
Signal(s) : FID1A.ch
Acq On : 08 Dec 2023 07:46 pm
Operator : dbv
Sample : 67839-11 aro x1
Misc :
ALS Vial : 6 Sample Multiplier: 1

SFP
12/5/23

Integration File: rteint.p
Quant Time: Dec 09 17:34:57 2023
Quant Method : X:\S6\methods\S6ARO100423F.M
Quant Title : S6 EPH Aromatics
QLast Update : Thu Oct 05 11:16:37 2023
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :

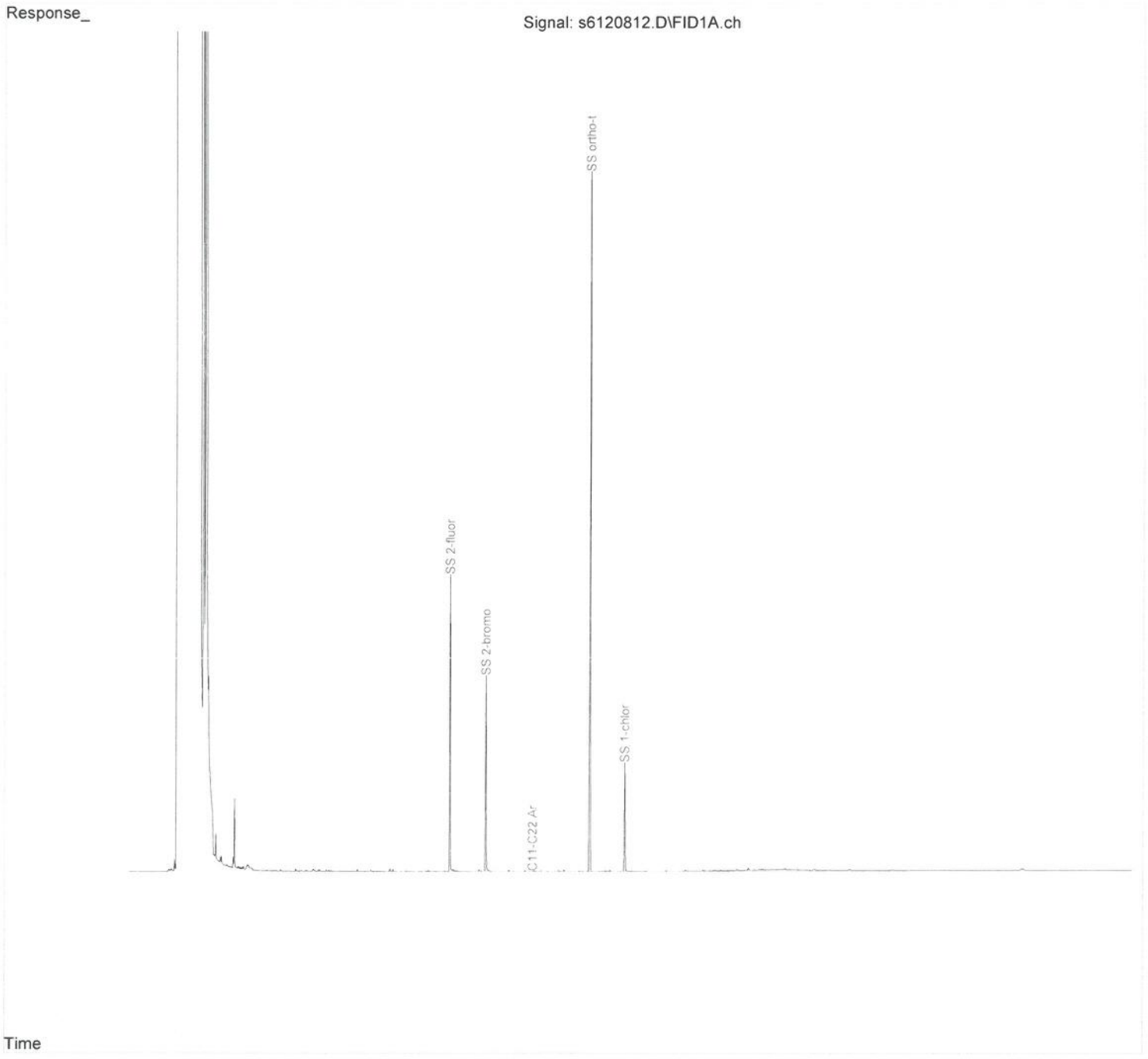
	Compound	R.T.	Response	Conc	Units	
	System Monitoring Compounds					
3) S	SS 2-fluorobiphenyl (...	9.527	2341788	16.596	ug/mL	
Spiked Amount	20.000		Recovery =	82.98%		
5) S	SS 2-bromonaphthalene...	10.604	1620032	16.987	ug/mL	
Spiked Amount	20.000		Recovery =	84.93%		
10) S	SS ortho-terphenyl (OTP)	13.727	5963615	39.849	ug/mLm	BC = Baseline Correction
Spiked Amount	50.000		Recovery =	79.70%		
11) S	SS 1-chloro-otadecane...	14.763	983515	8.053	ug/mL	
Spiked Amount	50.000		Recovery =	16.11%		
	Target Compounds					
1)	naphthalene	0.000	0	N.D.	ug/mLd	
2)	2-methylnaphthalene	0.000	0	N.D.	ug/mLd	
4)	acenaphthylene	0.000	0	N.D.	ug/mLd	
6)	acenaphthene	0.000	0	N.D.	ug/mL	
7)	fluorene	0.000	0	N.D.	ug/mL	
8)	phenanthrene	0.000	0	N.D.	ug/mL	
9)	anthracene	0.000	0	N.D.	ug/mL	
12)	fluoranthene	0.000	0	N.D.	ug/mL	
13)	pyrene	0.000	0	N.D.	ug/mL	
14)	benzo(a)anthracene	0.000	0	N.D.	ug/mLd	
15)	chrysene	0.000	0	N.D.	ug/mL	
16)	benzo(b&k)fluoranthenes	0.000	0	N.D.	ug/mL	
17)	benzo(a)pyrene	0.000	0	N.D.	ug/mL	
18)	indeno&dibenzo	0.000	0	N.D.	ug/mL	
19)	benzo(g,h,i)perylene	0.000	0	N.D.	ug/mL	
20) H	C11-C22 Aromatics	12.000	3374456	23.974	ug/mLm	RI = Range Integration

(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : X:\S6\2023\Dec23\120823\
Data File : s6120812.D
Signal(s) : FID1A.ch
Acq On : 08 Dec 2023 07:46 pm
Operator : dbv
Sample : 67839-11 aro x1
Misc :
ALS Vial : 6 Sample Multiplier: 1

Integration File: rteint.p
Quant Time: Dec 09 17:34:57 2023
Quant Method : X:\S6\methods\S6ARO100423F.M
Quant Title : S6 EPH Aromatics
QLast Update : Thu Oct 05 11:16:37 2023
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (QT Reviewed)

Data Path : X:\S6\2023\Dec23\120823.SEC\
Data File : s6120811.D
Signal(s) : FID2B.ch
Acq On : 08 Dec 2023 07:46 pm
Operator : dbv
Sample : 67839-11 ali x1
Misc :
ALS Vial : 81 Sample Multiplier: 1

12/12/23 @ 08:45
DonnaV

Integration File: rteint.p
Quant Time: Dec 09 17:35:15 2023
Quant Method : X:\S6\methods\S6ALI100423A.M
Quant Title : S6 EPH Aliphatics
QLast Update : Thu Oct 05 13:01:54 2023
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :

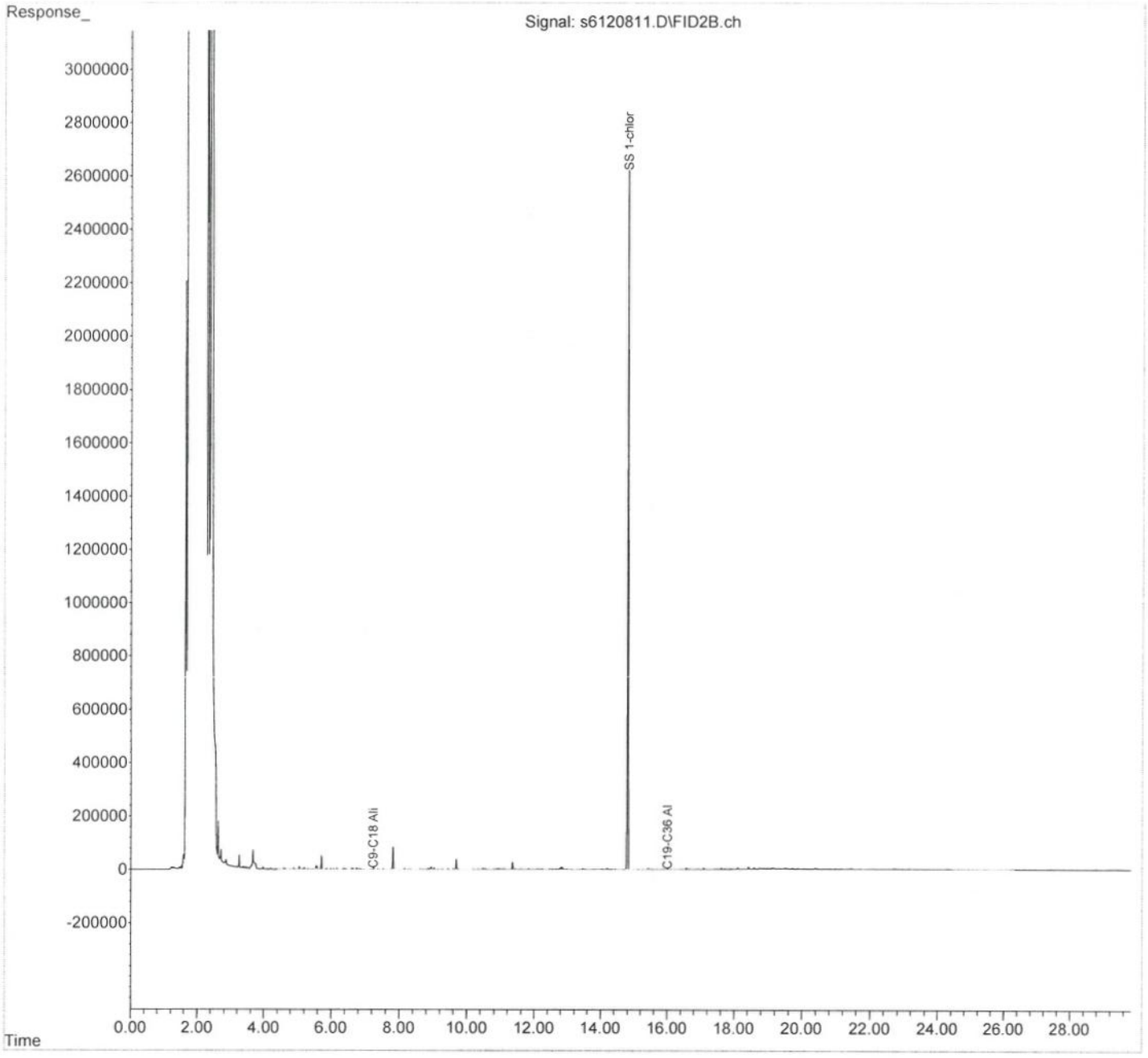
	Compound	R.T.	Response	Conc	Units	
	System Monitoring Compounds					
4)	S SS 2-fluorobiphenyl (...	0.000	0	N.D.	ug/mLd	
Spiked Amount	20.000	Recovery	=	0.00%		
6)	S SS 2-bromonaphthalene...	0.000	0	N.D.	ug/mLd	
Spiked Amount	20.000	Recovery	=	0.00%		
11)	S SS ortho-terphenyl (OTP)	0.000	0	N.D.	ug/mLd	
Spiked Amount	50.000	Recovery	=	0.00%		
13)	S SS 1-chloro-octadecan...	14.808f	3782792	32.234	ug/mL	
Spiked Amount	50.000	Recovery	=	64.47%		
	Target Compounds					
1)	C9 n-Nonane	0.000	0	N.D.	ug/mLd	
2)	C10 n-Decane	0.000	0	N.D.	ug/mLd	
3)	C12 n-Dodecane	0.000	0	N.D.	ug/mLd	
5)	C14 n-Tetradecane	0.000	0	N.D.	ug/mLd	
7)	C16 n-Hexadecane	0.000	0	N.D.	ug/mLd	
8)	C18 n-Octadecane	0.000	0	N.D.	ug/mLd	
9)	H C9-C18 Aliphatics	7.237	966288	6.935	ug/mLm	RI = Range Integration
10)	C19 n-Nonadecane	0.000	0	N.D.	ug/mLd	
12)	C20 n-Eicosane	0.000	0	N.D.	ug/mLd	
14)	C22 n-Docosane	0.000	0	N.D.	ug/mLd	
15)	C24 n-Tetracosane	0.000	0	N.D.	ug/mLd	
16)	C26 n-Hexacosane	0.000	0	N.D.	ug/mLd	
17)	C28 n-Octacosane	0.000	0	N.D.	ug/mLd	
18)	C30 n-Triacontane	0.000	0	N.D.	ug/mLd	
19)	C36 n-Hexatriacontane	0.000	0	N.D.	ug/mLd	
20)	H C19-C36 Aliphatics	16.000	1857138	12.958	ug/mLm	RI = Range Integration

(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : X:\S6\2023\Dec23\120823.SEC\
Data File : s6120811.D
Signal(s) : FID2B.ch
Acq On : 08 Dec 2023 07:46 pm
Operator : dbv
Sample : 67839-11 ali x1
Misc :
ALS Vial : 81 Sample Multiplier: 1

Integration File: rteint.p
Quant Time: Dec 09 17:35:15 2023
Quant Method : X:\S6\methods\S6ALI100423A.M
Quant Title : S6 EPH Aliphatics
QLast Update : Thu Oct 05 13:01:54 2023
Response via : Initial Calibration
Integrator: RTE

Volume Inj. :
Signal Phase :
Signal Info :



This File:	L:\SVOA\Excel Reports\PCB\121123\s5121146
Analysis Group:	PCB
Field ID:	SY-BRMW4-62-72-110923 18001468
Sample:	67839-01 pcb x1 Dow Salvage Yard
Misc:	*0* CRE
Import File Name	s5 PCBs QC17225W DOD
TestGroupID	E8082DoD_A
Aqueous or Soil? (A or S)	A
Percent Solid (%)	0
Prep Date	Wednesday, December 06, 2023
Initial Weight/Volume	1
Volume	1
Lab#:	67839-001
AnalysisDate:	Monday, December 11, 2023
AnalysisTime:	19:22
Dilution:	1
AnalyzedBy:	DBV s5121146.D
QC_Code:	
Prep#	17225

Reviewer Checks:

- Quant Report: Reviewed, Analyst Initials & Date
- Chromatogram Checked, Major peaks identified
- Prep data checked: weight, volume, %solid, Prep date
- Field ID consistent with data and any field replicates
- Results consistent with any re-runs & internal QC
- Correct dilution and reason clear or noted
- Reason for reanalysis documented
- Surrogates pass or flagged & noted
- Flags checked (Expiration, Over Cal)
- Other QC failures, estimates or interferences documented
- Spot checked Reported Result with Quant Report
- Checked Audit flagged data in LIMS
- Correct values averaged
- Column RPD is OK or both results included
- Correct column reported

Notes:

Reviewer Initials & Date: 12/12/23

#	Surrogate Standards	Concentration (ug/mL)	Recovery	Flag	QC Limits	Report Column
1	SS Tetrachloro-m-xylene	1.27	63%		30-150	1
47	SS Decachlorobiphenyl	1.45	72%		30-150	1

#	AnalyteName	Concentration (ug/mL)	Flag	Report Column
2	Ar-1016	0.00		1
7	Ar-1221	0.00		1
12	Ar-1232	0.00		1
17	Ar-1242	0.00		1
22	Ar-1248	0.00		1
27	Ar-1254	0.00		1
32	Ar-1260	0.00		1
37	Ar-1262	0.00		1
42	Ar-1268	0.00		1

Aroclor	Column #1 average	Column #2 average	Column RPD limit 40%	%rsd	Column #1 1	2	3	4	5
Ar-1016	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1221	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1232	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1242	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1248	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1254	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1260	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1262	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1268	0.00	0.00			0.00	0.00	0.00	0.00	0.00
SS Tetrac	1.27	1.30							
SS Decac	1.45	1.47							

	%rsd	Column #2 1	2	3	4	5
Ar-1016		0.00	0.00	0.00	0.00	0.00
Ar-1221		0.00	0.00	0.00	0.00	0.00
Ar-1232		0.00	0.00	0.00	0.00	0.00
Ar-1242		0.00	0.00	0.00	0.00	0.00
Ar-1248		0.00	0.00	0.00	0.00	0.00
Ar-1254		0.00	0.00	0.00	0.00	0.00
Ar-1260		0.00	0.00	0.00	0.00	0.00
Ar-1262		0.00	0.00	0.00	0.00	0.00
Ar-1268		0.00	0.00	0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : X:\S5\2023\Dec23\121123\
Data File : s5121146.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 11 Dec 2023 07:22 pm
Operator : dbv
Sample : 67839-01 pcb x1
Misc :
ALS Vial : 46 Sample Multiplier: 1

12/12/23 @ 14:17
DonnaV

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Dec 12 11:16:48 2023
Quant Method : X:\S5\methods\S5PCB121123A.M
Quant Title : SVOA03 Method 8082A
QLast Update : Tue Dec 12 11:05:50 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
System Monitoring Compounds							
1) S SS Tetrac...	2.499	2.318	727.7E6	741.7E6	1.269m	1.304m	BC = Baseline Correction
Spiked Amount	5.000 Range	30 - 150	Recovery =		25.38%#	26.08%#	
47) S SS Decach...	7.157f	7.232	390.4E6	345.0E6	1.448m	1.472m	BC = Baseline Correction
Spiked Amount	5.000 Range	30 - 150	Recovery =		28.96%#	29.44%#	
Target Compounds							

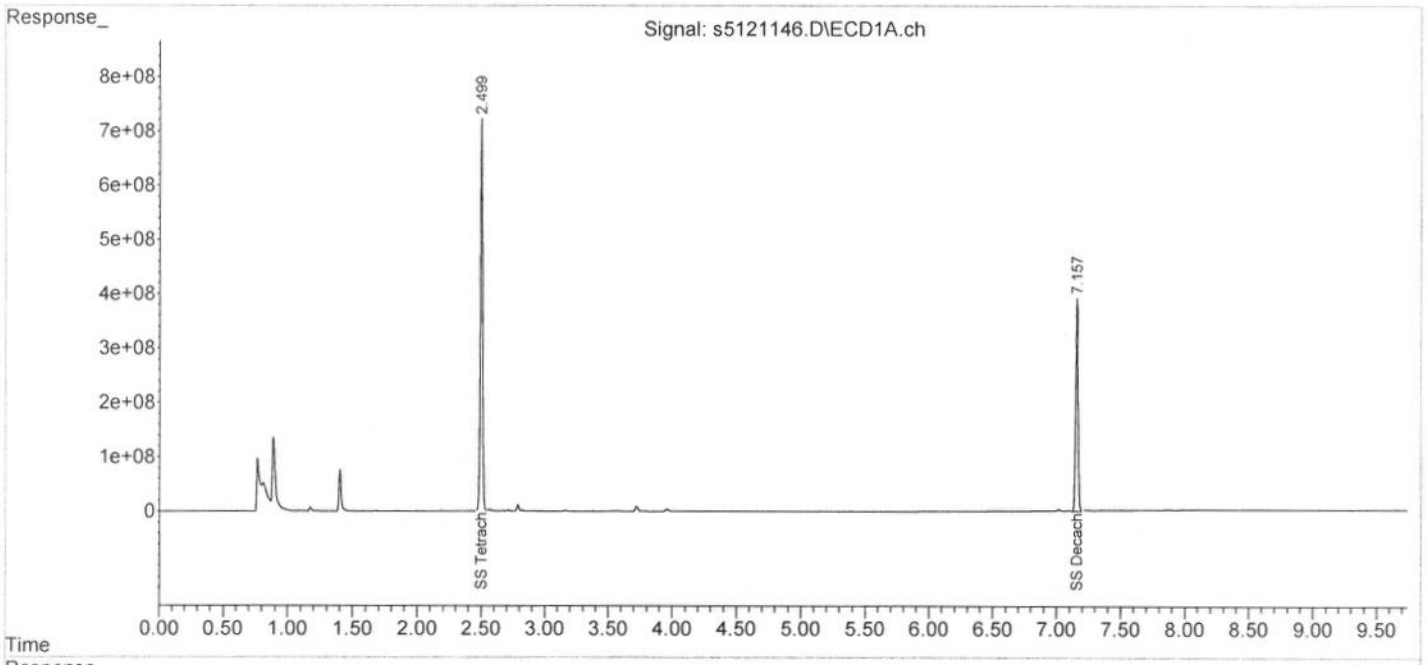
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

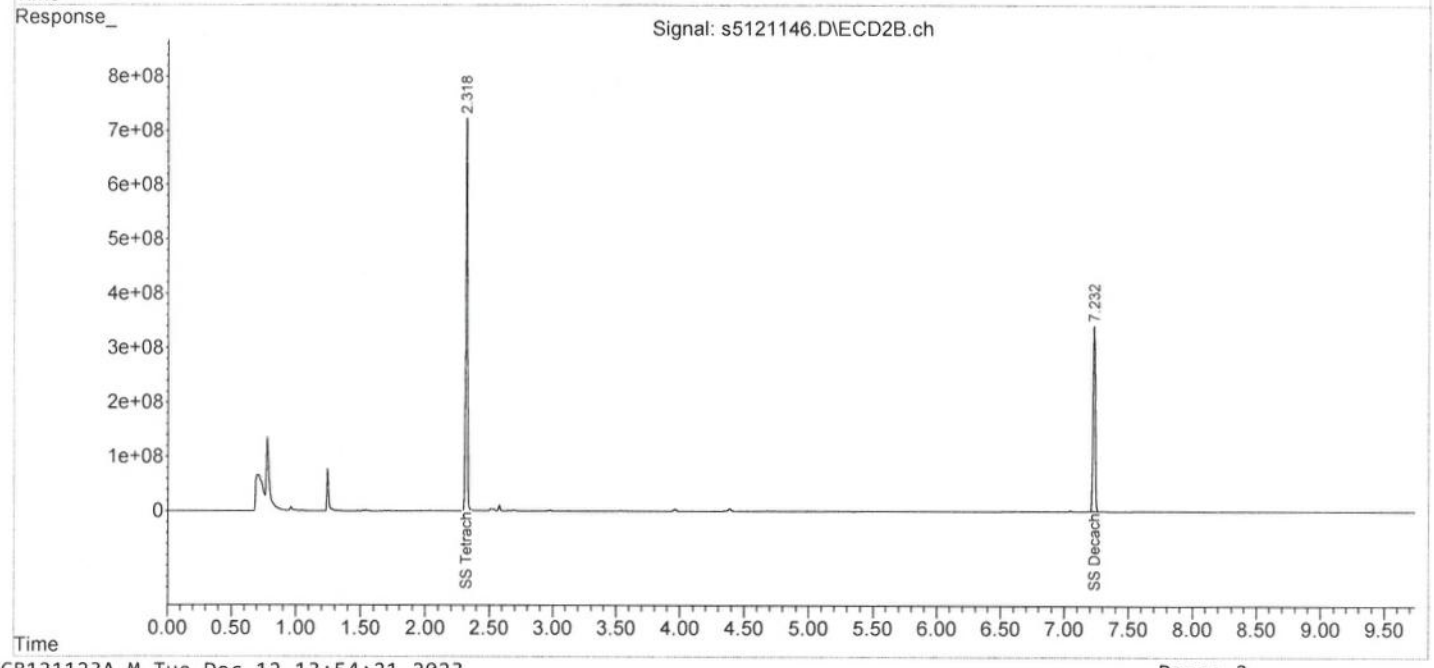
Quantitation Report (QT Reviewed)

Data Path : X:\S5\2023\Dec23\121123\
Data File : s5121146.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 11 Dec 2023 07:22 pm
Operator : dbv
Sample : 67839-01 pcb x1
Misc :
ALS Vial : 46 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Dec 12 11:16:48 2023
Quant Method : X:\S5\methods\S5PCB121123A.M
Quant Title : SVOA03 Method 8082A
QLast Update : Tue Dec 12 11:05:50 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





This File:	L:\SVOA\Excel Reports\PCB\121123\s5121147
Analysis Group:	PCB
Field ID:	SY-BRMW40-62-72-110923 18001468
Sample:	67839-02 pcb x1 Dow Salvage Yard
Misc:	0 CRE
Import File Name	s5 PCBs QC17225W DOD
TestGroupID	E8082DoD_A
Aqueous or Soil? (A or S)	A
Percent Solid (%)	0
Prep Date	Wednesday, December 06, 2023
Initial Weight/Volume	1
Volume	1
Lab#:	67839-002
AnalysisDate:	Monday, December 11, 2023
AnalysisTime:	19:35
Dilution:	1
AnalyzedBy:	DBV s5121147.D
QC_Code:	
Prep#	17225

Reviewer Checks:

- Quant Report: Reviewed, Analyst Initials & Date
- Chromatogram Checked, Major peaks identified
- Prep data checked: weight, volume, %solid, Prep date
- Field ID consistent with data and any field replicates
- Results consistent with any re-runs & internal QC
- Correct dilution and reason clear or noted
- Reason for reanalysis documented
- Surrogates pass or flagged & noted
- Flags checked (Expiration, Over Cal)
- Other QC failures, estimates or interferences documented
- Spot checked Reported Result with Quant Report
- Checked Audit flagged data in LIMS
- Correct values averaged
- Column RPD is OK or both results included
- Correct column reported

Notes:

Reviewer Initials & Date: 12/12/23

#	Surrogate Standards	Concentration (ug/mL)	Recovery	Flag	QC Limits	Report Column
1	SS Tetrachloro-m-xylene	1.27	64%		30-150	1
47	SS Decachlorobiphenyl	1.18	59%		30-150	1

#	AnalyteName	Concentration (ug/mL)	Flag	Report Column
2	Ar-1016	0.00		1
7	Ar-1221	0.00		1
12	Ar-1232	0.00		1
17	Ar-1242	0.00		1
22	Ar-1248	0.00		1
27	Ar-1254	0.00		1
32	Ar-1260	0.00		1
37	Ar-1262	0.00		1
42	Ar-1268	0.00		1

Aroclor	Column #1 average	Column #2 average	Column RPD limit 40%	%rsd	Column #1 1	2	3	4	5
Ar-1016	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1221	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1232	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1242	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1248	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1254	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1260	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1262	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1268	0.00	0.00			0.00	0.00	0.00	0.00	0.00
SS Tetra	1.27	1.30							
SS Deca	1.18	1.20							

Column #2

	%rsd	1	2	3	4	5
Ar-1016		0.00	0.00	0.00	0.00	0.00
Ar-1221		0.00	0.00	0.00	0.00	0.00
Ar-1232		0.00	0.00	0.00	0.00	0.00
Ar-1242		0.00	0.00	0.00	0.00	0.00
Ar-1248		0.00	0.00	0.00	0.00	0.00
Ar-1254		0.00	0.00	0.00	0.00	0.00
Ar-1260		0.00	0.00	0.00	0.00	0.00
Ar-1262		0.00	0.00	0.00	0.00	0.00
Ar-1268		0.00	0.00	0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : X:\S5\2023\Dec23\121123\
Data File : s5121147.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 11 Dec 2023 07:35 pm
Operator : dbv
Sample : 67839-02 pcb x1
Misc :
ALS Vial : 47 Sample Multiplier: 1

12/12/23 @ 14:17
DonnaV

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Dec 12 11:16:53 2023
Quant Method : X:\S5\methods\S5PCB121123A.M
Quant Title : SVOA03 Method 8082A
QLast Update : Tue Dec 12 11:05:50 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
System Monitoring Compounds							
1) S SS Tetrac...	2.499	2.319	729.6E6	737.9E6	1.273m	1.296m	BC = Baseline Correction
Spiked Amount	5.000 Range	30 - 150	Recovery =		25.46%#	25.92%#	
47) S SS Decach...	7.157f	7.231f	325.6E6	289.8E6	1.180m	1.203m	BC = Baseline Correction
Spiked Amount	5.000 Range	30 - 150	Recovery =		23.60%#	24.06%#	
Target Compounds							

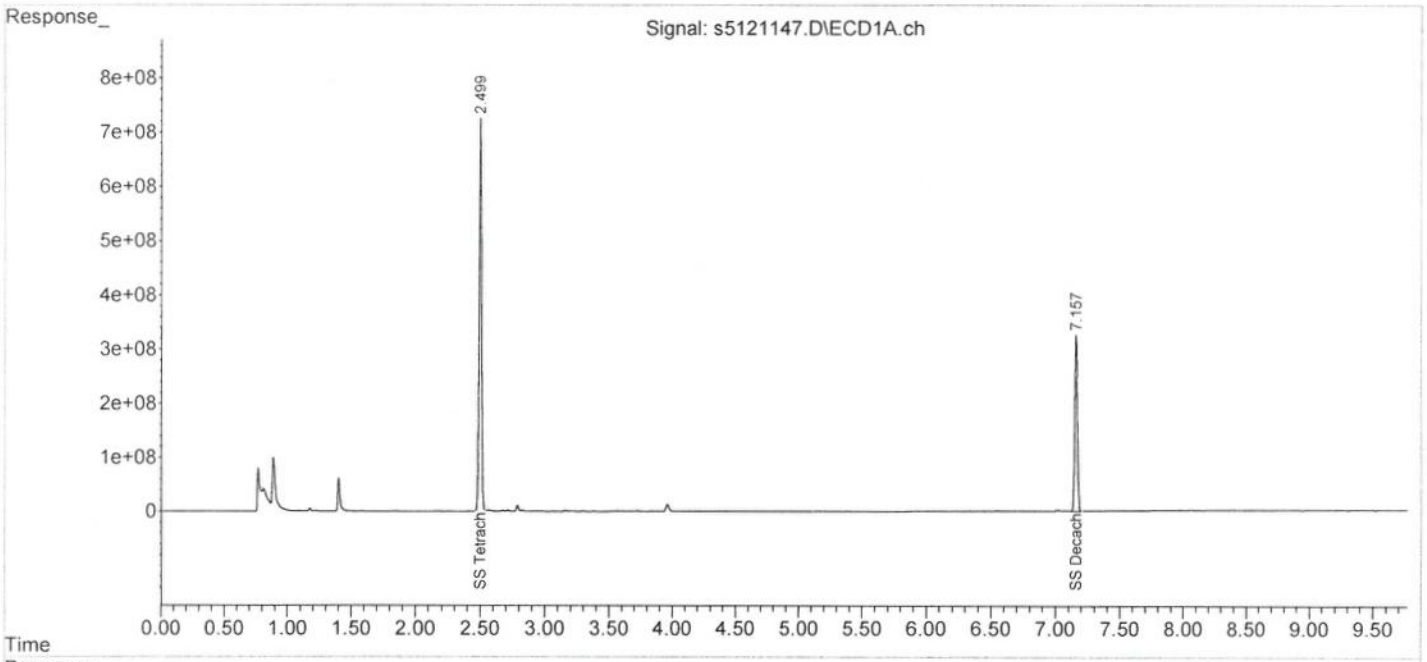
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

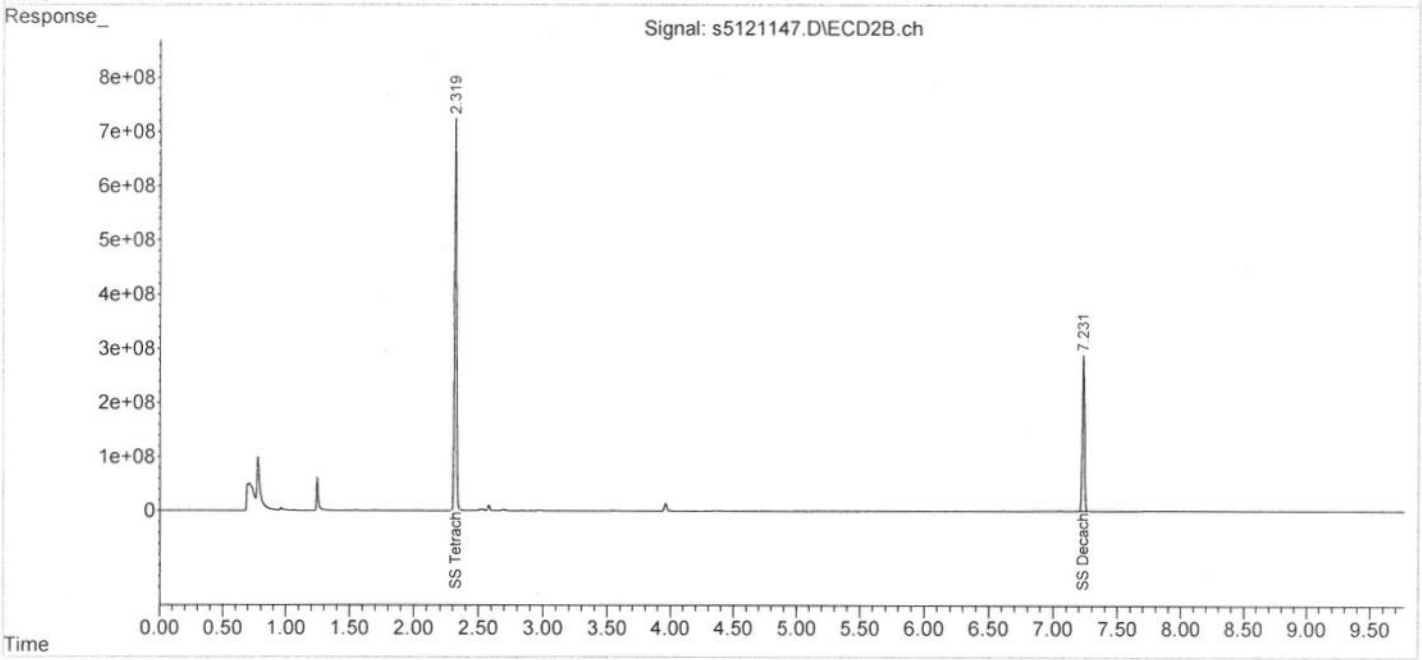
Quantitation Report (QT Reviewed)

Data Path : X:\S5\2023\Dec23\121123\
Data File : s5121147.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 11 Dec 2023 07:35 pm
Operator : dbv
Sample : 67839-02 pcb x1
Misc :
ALS Vial : 47 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Dec 12 11:16:53 2023
Quant Method : X:\S5\methods\S5PCB121123A.M
Quant Title : SVOA03 Method 8082A
QLast Update : Tue Dec 12 11:05:50 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





This File:	L:\SVOA\Excel Reports\PCB\121323\s5121316
Analysis Group:	PCB
Field ID:	Y-BRMW4-138-148-110923 18001468
Sample:	67839-03 pcb x1 Dow Salvage Yard
Misc:	0 CRE
Import File Name	s5 PCBs QC17225W DOD
TestGroupID	E8082DoD_A
Aqueous or Soil? (A or S)	A
Percent Solid (%)	0
Prep Date	Wednesday, December 06, 2023
Initial Weight/Volume	1
Volume	1
Lab#:	67839-003
AnalysisDate:	Wednesday, December 13, 2023
AnalysisTime:	13:56
Dilution:	1
AnalyzedBy:	DBV s5121316.D
QC_Code:	
Prep#	17225

Reviewer Checks:

- Quant Report: Reviewed, Analyst Initials & Date
- Chromatogram Checked, Major peaks identified
- Prep data checked: weight, volume, %solid, Prep date
- Field ID consistent with data and any field replicates
- Results consistent with any re-runs & internal QC
- Correct dilution and reason clear or noted
- Reason for reanalysis documented
- Surrogates pass or flagged & noted
- Flags checked (Expiration, Over Cal)
- Other QC failures, estimates or interferences documented
- Spot checked Reported Result with Quant Report
- Checked Audit flagged data in LIMS
- Correct values averaged
- Column RPD is OK or both results included
- Correct column reported

Notes:

Reviewer Initials & Date: 12/14/23

#	Surrogate Standards	Concentration (ug/mL)	Recovery	Flag	QC Limits	Report Column
1	SS Tetrachloro-m-xylene	1.27	63%		30-150	1
47	SS Decachlorobiphenyl	1.59	79%		30-150	1

#	AnalyteName	Concentration (ug/mL)	Flag	Report Column
2	Ar-1016	0.00		1
7	Ar-1221	0.00		1
12	Ar-1232	0.00		1
17	Ar-1242	0.00		1
22	Ar-1248	0.00		1
27	Ar-1254	0.00		1
32	Ar-1260	0.00		1
37	Ar-1262	0.00		1
42	Ar-1268	0.00		1

Aroclor	Column #1 average	Column #2 average	Column RPD limit 40%	%rsd	Column #1 1	2	3	4	5
Ar-1016	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1221	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1232	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1242	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1248	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1254	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1260	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1262	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1268	0.00	0.00			0.00	0.00	0.00	0.00	0.00
SS Tetra	1.27	1.27							
SS Deca	1.59	1.55							

	%rsd	Column #2 1	2	3	4	5
Ar-1016		0.00	0.00	0.00	0.00	0.00
Ar-1221		0.00	0.00	0.00	0.00	0.00
Ar-1232		0.00	0.00	0.00	0.00	0.00
Ar-1242		0.00	0.00	0.00	0.00	0.00
Ar-1248		0.00	0.00	0.00	0.00	0.00
Ar-1254		0.00	0.00	0.00	0.00	0.00
Ar-1260		0.00	0.00	0.00	0.00	0.00
Ar-1262		0.00	0.00	0.00	0.00	0.00
Ar-1268		0.00	0.00	0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : X:\S5\2023\Dec23\121323\
Data File : s5121316.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 13 Dec 2023 01:56 pm
Operator : dbv
Sample : 67839-03 pcb x1
Misc :
ALS Vial : 16 Sample Multiplier: 1

12/14/23 @ 10:35
DonnaV

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Dec 13 14:15:44 2023
Quant Method : X:\S5\methods\S5PCB121123B.M
Quant Title : SVOA03 Method 8082A
QLast Update : Tue Dec 12 11:05:50 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
System Monitoring Compounds							
1) S SS Tetrac...	2.473	2.292	725.9E6	727.5E6	1.265m	1.275m	BC = Baseline Correction
Spiked Amount	5.000	Range 30 - 150	Recovery =		25.30%#	25.50%#	
47) S SS Decach...	7.128f	7.198	422.4E6	360.0E6	1.587m	1.548m	BC = Baseline Correction
Spiked Amount	5.000	Range 30 - 150	Recovery =		31.74%	30.96%	
Target Compounds							

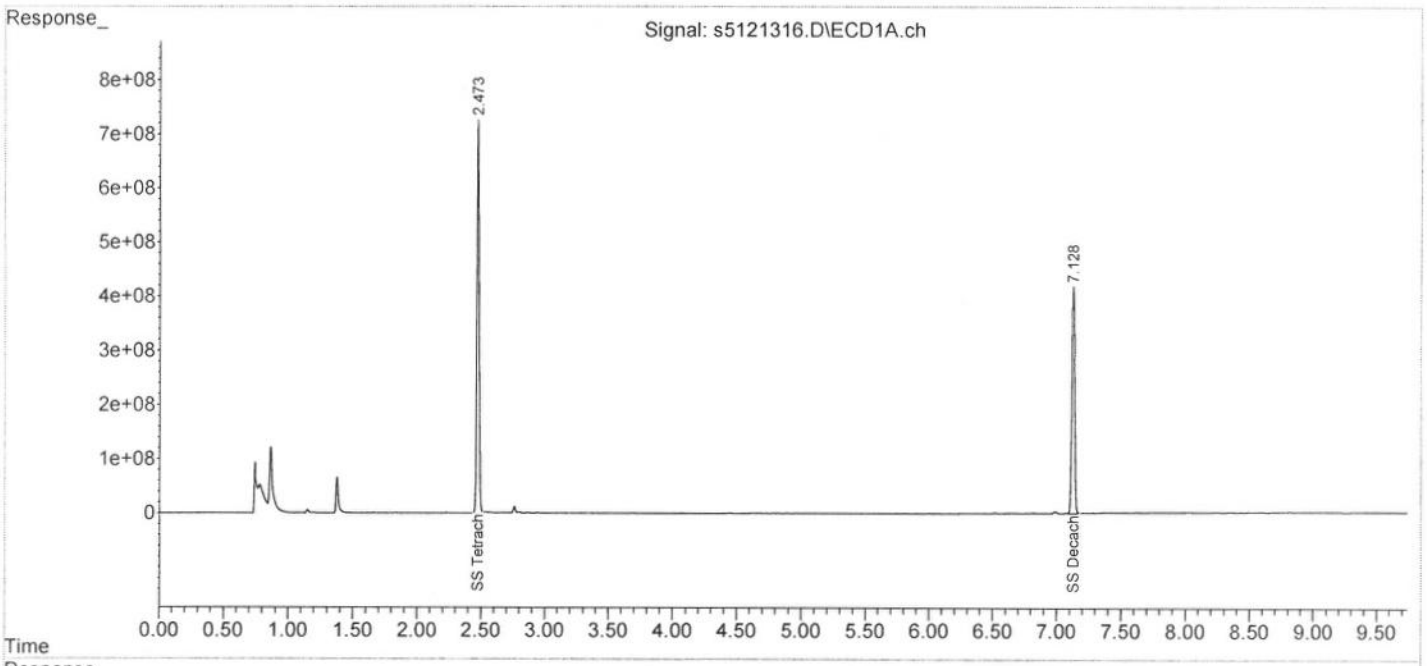
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

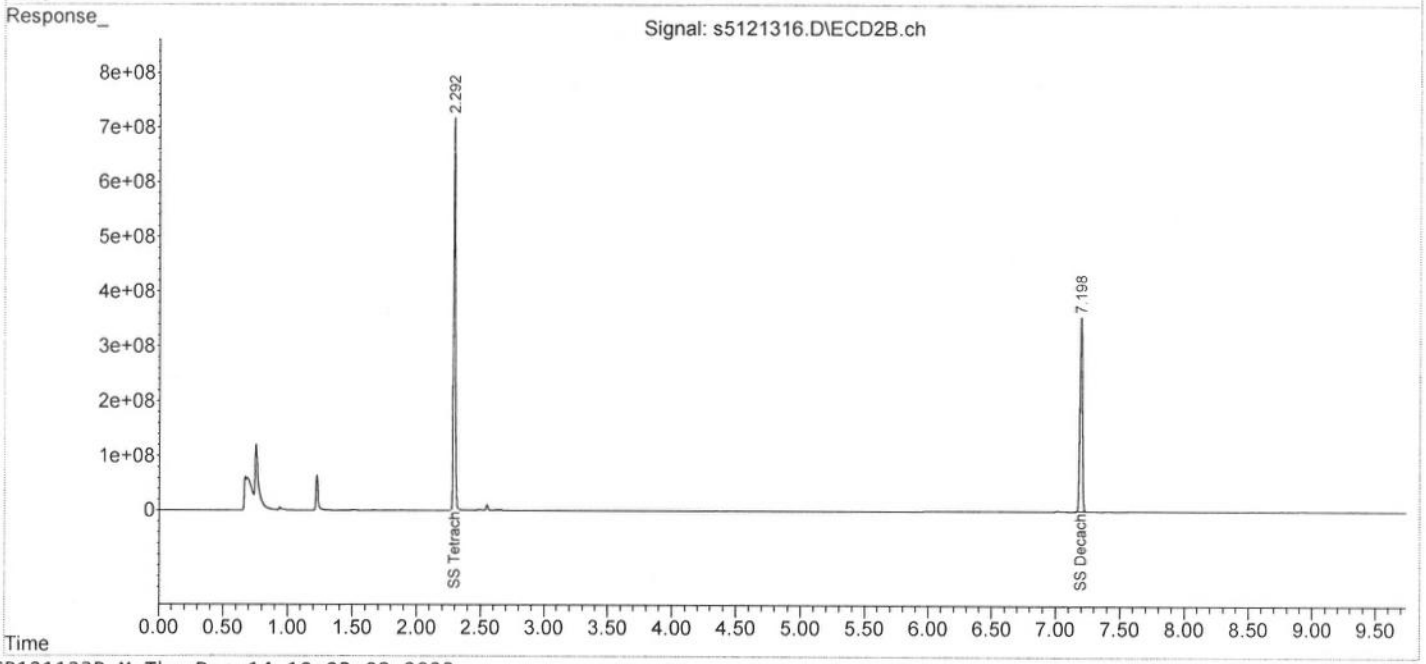
Quantitation Report (QT Reviewed)

Data Path : X:\S5\2023\Dec23\121323\
Data File : s5121316.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 13 Dec 2023 01:56 pm
Operator : dbv
Sample : 67839-03 pcb x1
Misc :
ALS Vial : 16 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Dec 13 14:15:44 2023
Quant Method : X:\S5\methods\S5PCB121123B.M
Quant Title : SVOA03 Method 8082A
QLast Update : Tue Dec 12 11:05:50 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : X:\S5\2023\Dec23\121123\
Data File : s5121153.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 11 Dec 2023 08:53 pm
Operator : dbv
Sample : 67839-03 pcb x1
Misc :
ALS Vial : 53 Sample Multiplier: 1

12/12/23 @ 14:17
DonnaV

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Dec 12 11:17:23 2023
Quant Method : X:\S5\methods\S5PCB121123A.M
Quant Title : SVOA03 Method 8082A
QLast Update : Tue Dec 12 11:05:50 2023
Response via : Initial Calibration
Integrator: ChemStation

RR x1. 1260 ccv low col 1. DOD samples need col 1 to pass.

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

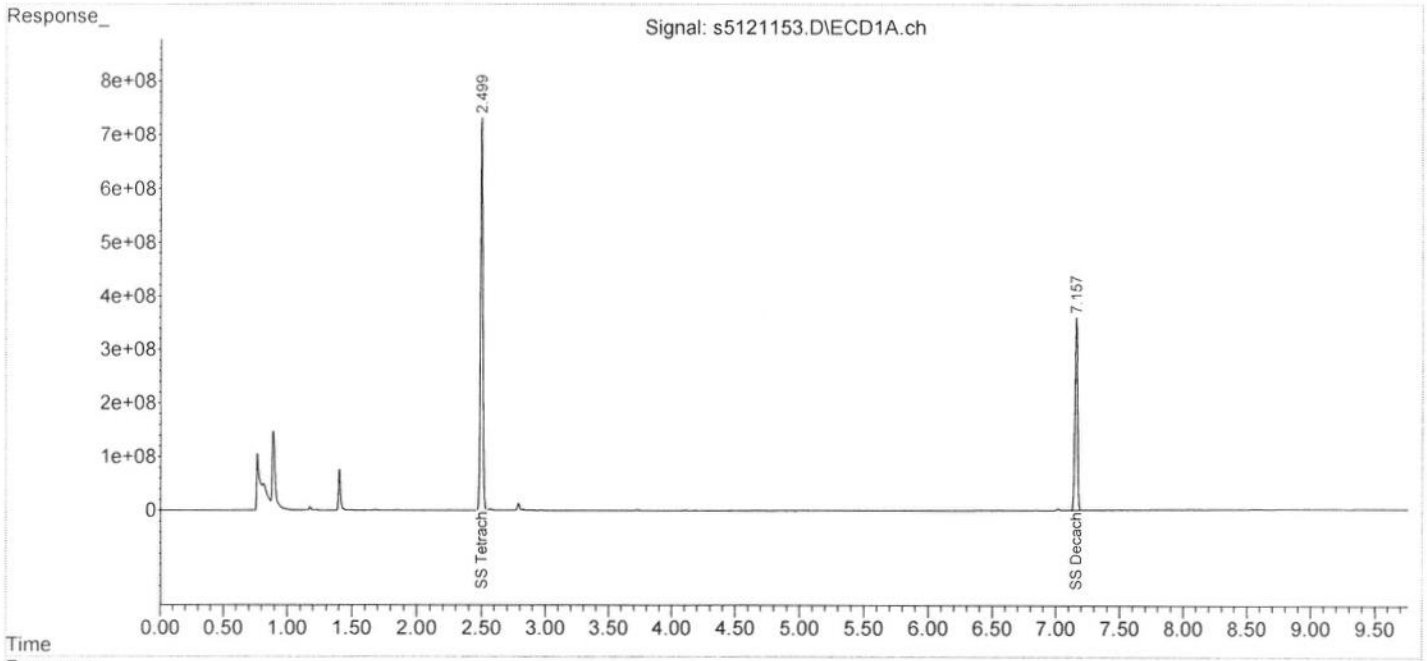
	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL
	System Monitoring Compounds						
1)	S SS Tetrac...	2.499	2.319	737.0E6	739.3E6	1.288m	1.299m
	Spiked Amount	5.000	Range 30 - 150	Recovery =		25.76%#	25.98%#
47)	S SS Decach...	7.157f	7.231	358.9E6	300.7E6	1.316m	1.255m
	Spiked Amount	5.000	Range 30 - 150	Recovery =		26.32%#	25.10%#
	Target Compounds						

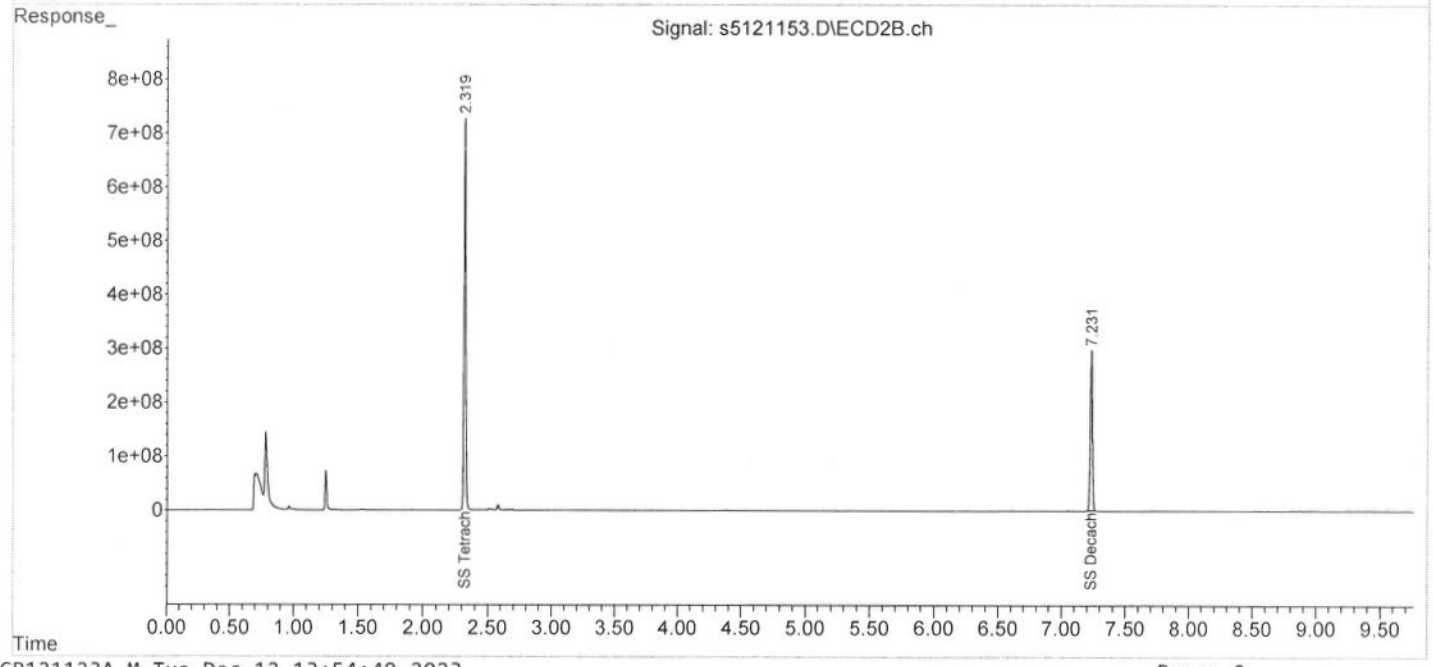
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : X:\S5\2023\Dec23\121123\
Data File : s5121153.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 11 Dec 2023 08:53 pm
Operator : dbv
Sample : 67839-03 pcb x1
Misc :
ALS Vial : 53 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Dec 12 11:17:23 2023
Quant Method : X:\S5\methods\S5PCB121123A.M
Quant Title : SVOA03 Method 8082A
QLast Update : Tue Dec 12 11:05:50 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





This File:	L:\SVOA\Excel Reports\PCB\121323\s5121317
Analysis Group:	PCB
Field ID:	SY-BRMW3-47-62-110923 18001468
Sample:	67839-04 pcb x1 Dow Salvage Yard
Misc:	0 CRE
Import File Name	s5 PCBs QC17225W DOD
TestGroupID	E8082DoD_A
Aqueous or Soil? (A or S)	A
Percent Solid (%)	0
Prep Date	Wednesday, December 06, 2023
Initial Weight/Volume	1
Volume	1
Lab#:	67839-004
AnalysisDate:	Wednesday, December 13, 2023
AnalysisTime:	14:09
Dilution:	1
AnalyzedBy:	DBV s5121317.D
QC_Code:	
Prep#	17225

Reviewer Checks:

- Quant Report: Reviewed, Analyst Initials & Date
- Chromatogram Checked, Major peaks identified
- Prep data checked: weight, volume, %solid, Prep date
- Field ID consistent with data and any field replicates
- Results consistent with any re-runs & internal QC
- Correct dilution and reason clear or noted
- Reason for reanalysis documented
- Surrogates pass or flagged & noted
- Flags checked (Expiration, Over Cal)
- Other QC failures, estimates or interferences documented
- Spot checked Reported Result with Quant Report
- Checked Audit flagged data in LIMS
- Correct values averaged
- Column RPD is OK or both results included
- Correct column reported

Notes:

Reviewer Initials & Date: 12/14/23

#	Surrogate Standards	Concentration (ug/mL)	Recovery	Flag	QC Limits	Report Column
1	SS Tetrachloro-m-xylene	1.33	67%		30-150	1
47	SS Decachlorobiphenyl	1.47	73%		30-150	1

#	AnalyteName	Concentration (ug/mL)	Flag	Report Column
2	Ar-1016	0.00		1
7	Ar-1221	0.00		1
12	Ar-1232	0.00		1
17	Ar-1242	0.00		1
22	Ar-1248	0.00		1
27	Ar-1254	0.00		1
32	Ar-1260	0.00		1
37	Ar-1262	0.00		1
42	Ar-1268	0.00		1

Aroclor	Column #1 average	Column #2 average	Column RPD limit 40%	%rsd	Column #1 1	2	3	4	5
Ar-1016	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1221	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1232	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1242	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1248	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1254	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1260	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1262	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1268	0.00	0.00			0.00	0.00	0.00	0.00	0.00
SS Tetra	1.33	1.35							
SS Deca	1.47	1.45							

	%rsd	Column #2 1	2	3	4	5
Ar-1016		0.00	0.00	0.00	0.00	0.00
Ar-1221		0.00	0.00	0.00	0.00	0.00
Ar-1232		0.00	0.00	0.00	0.00	0.00
Ar-1242		0.00	0.00	0.00	0.00	0.00
Ar-1248		0.00	0.00	0.00	0.00	0.00
Ar-1254		0.00	0.00	0.00	0.00	0.00
Ar-1260		0.00	0.00	0.00	0.00	0.00
Ar-1262		0.00	0.00	0.00	0.00	0.00
Ar-1268		0.00	0.00	0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : X:\S5\2023\Dec23\121323\
Data File : s5121317.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 13 Dec 2023 02:09 pm
Operator : dbv
Sample : 67839-04 pcb x1
Misc :
ALS Vial : 17 Sample Multiplier: 1

12/14/23 @ 10:35
DonnaV

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Dec 13 14:21:58 2023
Quant Method : X:\S5\methods\S5PCB121123B.M
Quant Title : SVOA03 Method 8082A
QLast Update : Tue Dec 12 11:05:50 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
System Monitoring Compounds							
1) S SS Tetrac...	2.474	2.292	760.1E6	761.4E6	1.335m	1.345m	BC = Baseline Correction
Spiked Amount	5.000 Range	30 - 150	Recovery =		26.70%#	26.90%#	
47) S SS Decach...	7.129f	7.199	394.5E6	340.2E6	1.466m	1.448m	BC = Baseline Correction
Spiked Amount	5.000 Range	30 - 150	Recovery =		29.32%#	28.96%#	
Target Compounds							

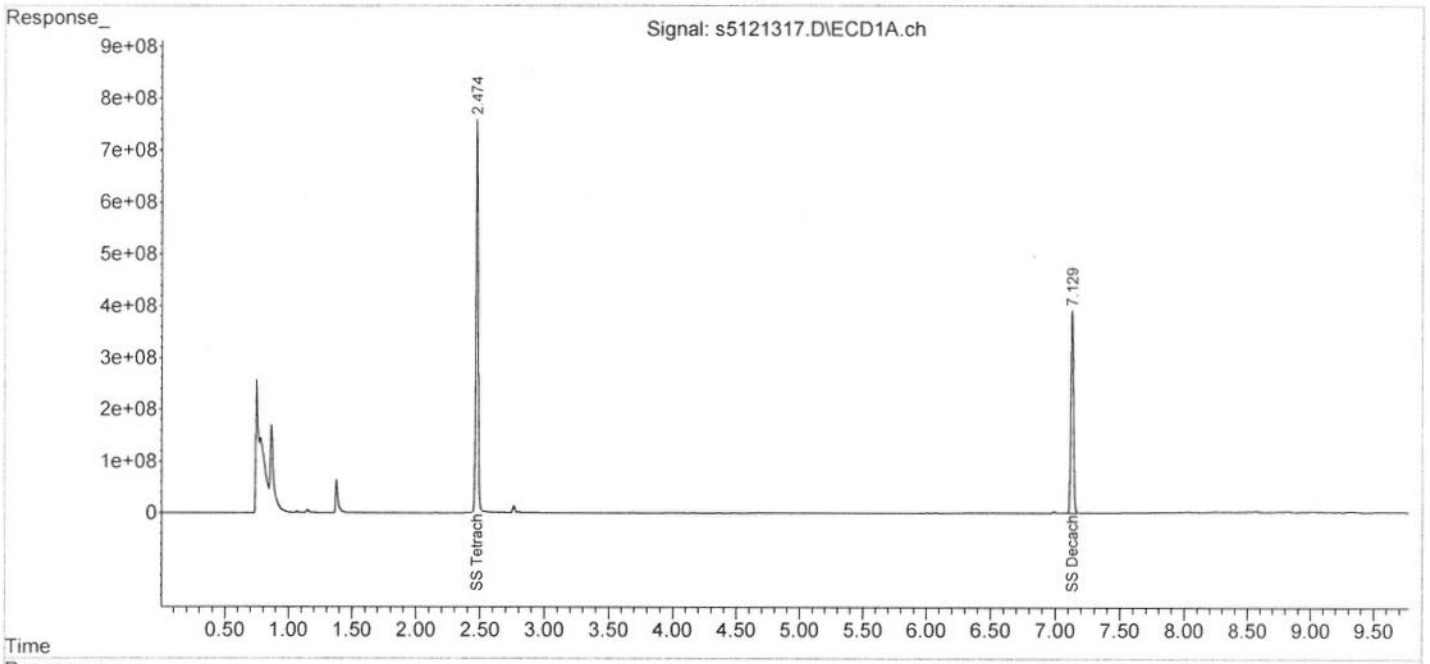
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

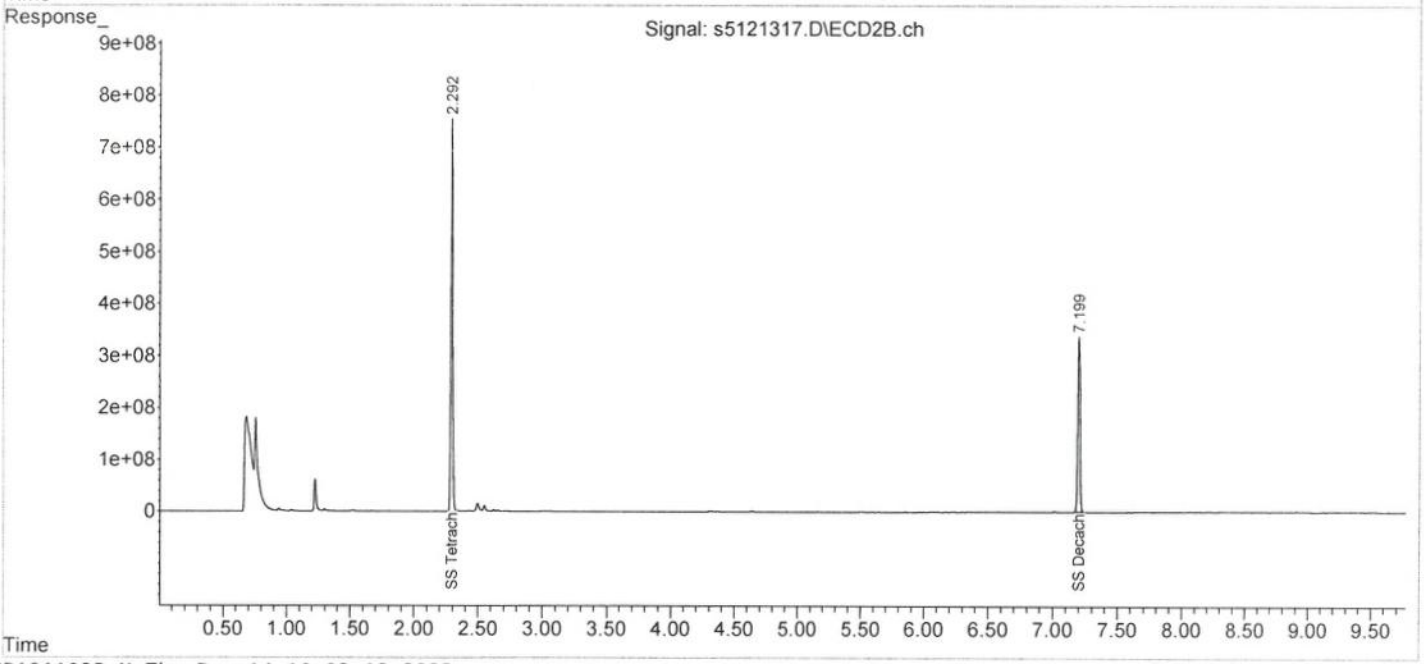
Quantitation Report (QT Reviewed)

Data Path : X:\S5\2023\Dec23\121323\
Data File : s5121317.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 13 Dec 2023 02:09 pm
Operator : dbv
Sample : 67839-04 pcb x1
Misc :
ALS Vial : 17 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Dec 13 14:21:58 2023
Quant Method : X:\S5\methods\S5PCB121123B.M
Quant Title : SVOA03 Method 8082A
QLast Update : Tue Dec 12 11:05:50 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : X:\S5\2023\Dec23\121123\
Data File : s5121154.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 11 Dec 2023 09:06 pm
Operator : dbv
Sample : 67839-04 pcb x1
Misc :
ALS Vial : 54 Sample Multiplier: 1



Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Dec 12 11:17:30 2023
Quant Method : X:\S5\methods\S5PCB121123A.M
Quant Title : SVOA03 Method 8082A
QLast Update : Tue Dec 12 11:05:50 2023
Response via : Initial Calibration
Integrator: ChemStation

RR x1. 1260 ccv low col 1. DOD samples need col 1 to pass.

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL
	System Monitoring Compounds						
1)	S SS Tetrac...	2.499	2.319	770.5E6	757.1E6	1.356m	1.336m
	Spiked Amount	5.000	Range 30 - 150	Recovery =		27.12%#	26.72%#
47)	S SS Decach...	7.157f	7.231f	337.2E6	289.1E6	1.227m	1.201m
	Spiked Amount	5.000	Range 30 - 150	Recovery =		24.54%#	24.02%#
	Target Compounds						

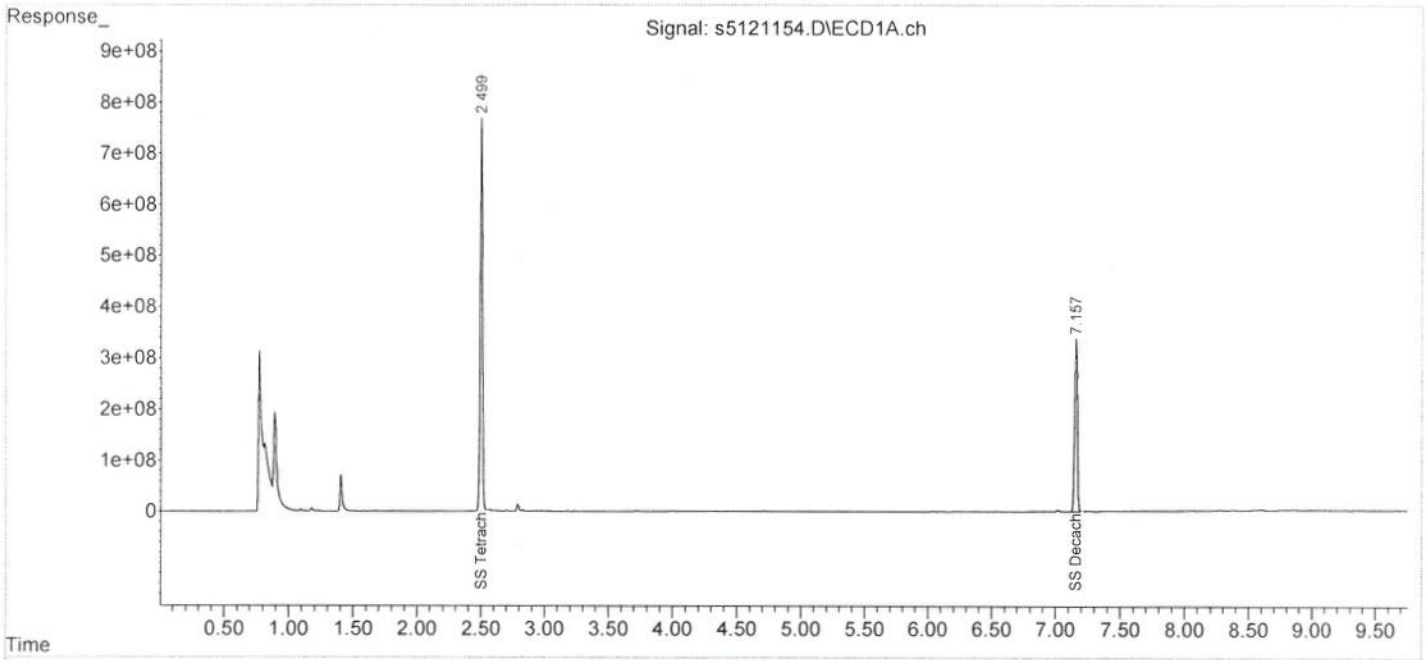
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

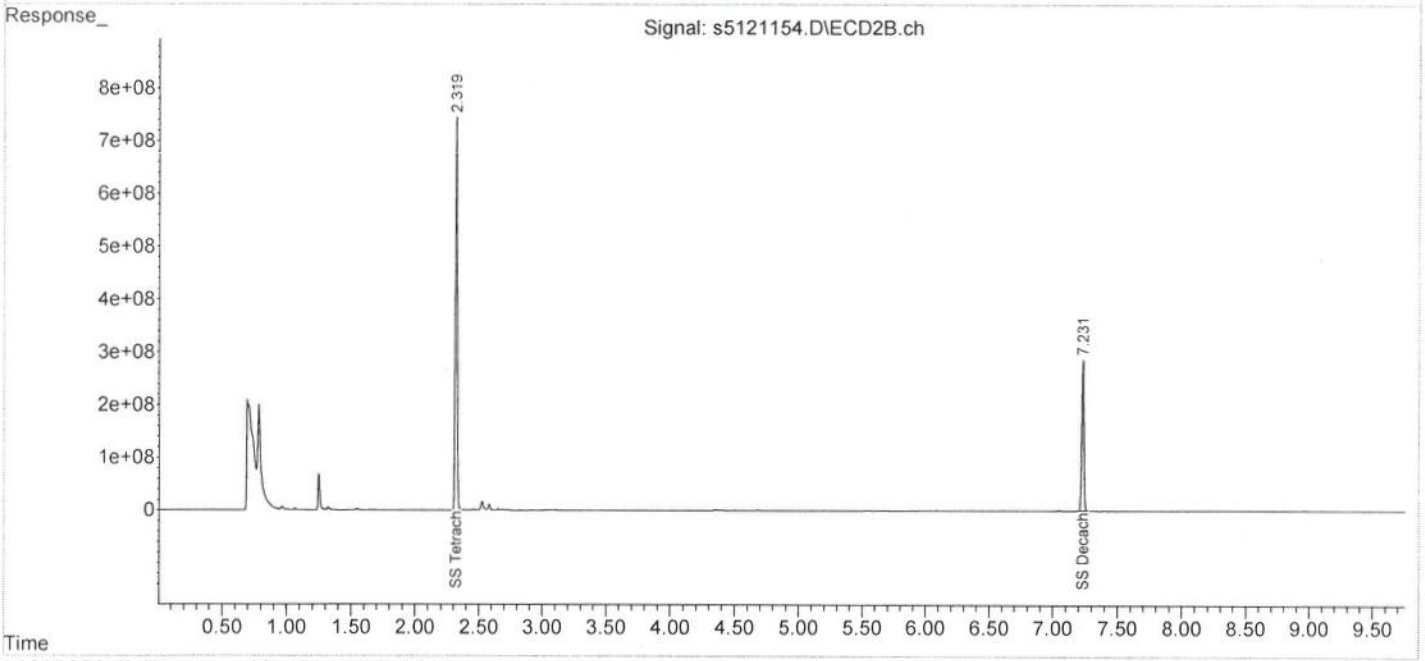
Quantitation Report (QT Reviewed)

Data Path : X:\S5\2023\Dec23\121123\
Data File : s5121154.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 11 Dec 2023 09:06 pm
Operator : dbv
Sample : 67839-04 pcb x1
Misc :
ALS Vial : 54 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Dec 12 11:17:30 2023
Quant Method : X:\S5\methods\S5PCB121123A.M
Quant Title : SVOA03 Method 8082A
QLast Update : Tue Dec 12 11:05:50 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





This File:	L:\SVOA\Excel Reports\PCB\121323\s5121318
Analysis Group:	PCB
Field ID:	Y-BRMW3-145-155-110923 18001468
Sample:	67839-05 pcb x1 Dow Salvage Yard
Misc:	0 CRE
Import File Name	s5 PCBs QC17225W DOD
TestGroupID	E8082DoD_A
Aqueous or Soil? (A or S)	A
Percent Solid (%)	0
Prep Date	Wednesday, December 06, 2023
Initial Weight/Volume	1
Volume	1
Lab#:	67839-005
AnalysisDate:	Wednesday, December 13, 2023
AnalysisTime:	14:22
Dilution:	1
AnalyzedBy:	DBV s5121318.D
QC_Code:	
Prep#	17225

Reviewer Checks:

- Quant Report: Reviewed, Analyst Initials & Date
- Chromatogram Checked, Major peaks identified
- Prep data checked: weight, volume, %solid, Prep date
- Field ID consistent with data and any field replicates
- Results consistent with any re-runs & internal QC
- Correct dilution and reason clear or noted
- Reason for reanalysis documented
- Surrogates pass or flagged & noted
- Flags checked (Expiration, Over Cal)
- Other QC failures, estimates or interferences documented
- Spot checked Reported Result with Quant Report
- Checked Audit flagged data in LIMS
- Correct values averaged
- Column RPD is OK or both results included
- Correct column reported

Notes:

12/14/23

Reviewer Initials & Date:

#	Surrogate Standards	Concentration (ug/mL)	Recovery	Flag	QC Limits	Report Column
1	SS Tetrachloro-m-xylene	1.28	64%		30-150	1
47	SS Decachlorobiphenyl	1.19	59%		30-150	1

#	AnalyteName	Concentration (ug/mL)	Flag	Report Column
2	Ar-1016	0.00		1
7	Ar-1221	0.00		1
12	Ar-1232	0.00		1
17	Ar-1242	0.00		1
22	Ar-1248	0.00		1
27	Ar-1254	0.00		1
32	Ar-1260	0.00		1
37	Ar-1262	0.00		1
42	Ar-1268	0.00		1

Aroclor	Column #1 average	Column #2 average	Column RPD limit 40%	%rsd	Column #1 1	2	3	4	5
Ar-1016	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1221	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1232	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1242	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1248	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1254	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1260	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1262	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1268	0.00	0.00			0.00	0.00	0.00	0.00	0.00
SS Tetra	1.28	1.32							
SS Deca	1.19	1.15							

	%rsd	Column #2 1	2	3	4	5
Ar-1016		0.00	0.00	0.00	0.00	0.00
Ar-1221		0.00	0.00	0.00	0.00	0.00
Ar-1232		0.00	0.00	0.00	0.00	0.00
Ar-1242		0.00	0.00	0.00	0.00	0.00
Ar-1248		0.00	0.00	0.00	0.00	0.00
Ar-1254		0.00	0.00	0.00	0.00	0.00
Ar-1260		0.00	0.00	0.00	0.00	0.00
Ar-1262		0.00	0.00	0.00	0.00	0.00
Ar-1268		0.00	0.00	0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : X:\S5\2023\Dec23\121323\
Data File : s5121318.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 13 Dec 2023 02:22 pm
Operator : dbv
Sample : 67839-05 pcb x1
Misc :
ALS Vial : 18 Sample Multiplier: 1



Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Dec 13 15:08:57 2023
Quant Method : X:\S5\methods\S5PCB121123B.M
Quant Title : SVOA03 Method 8082A
QLast Update : Tue Dec 12 11:05:50 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

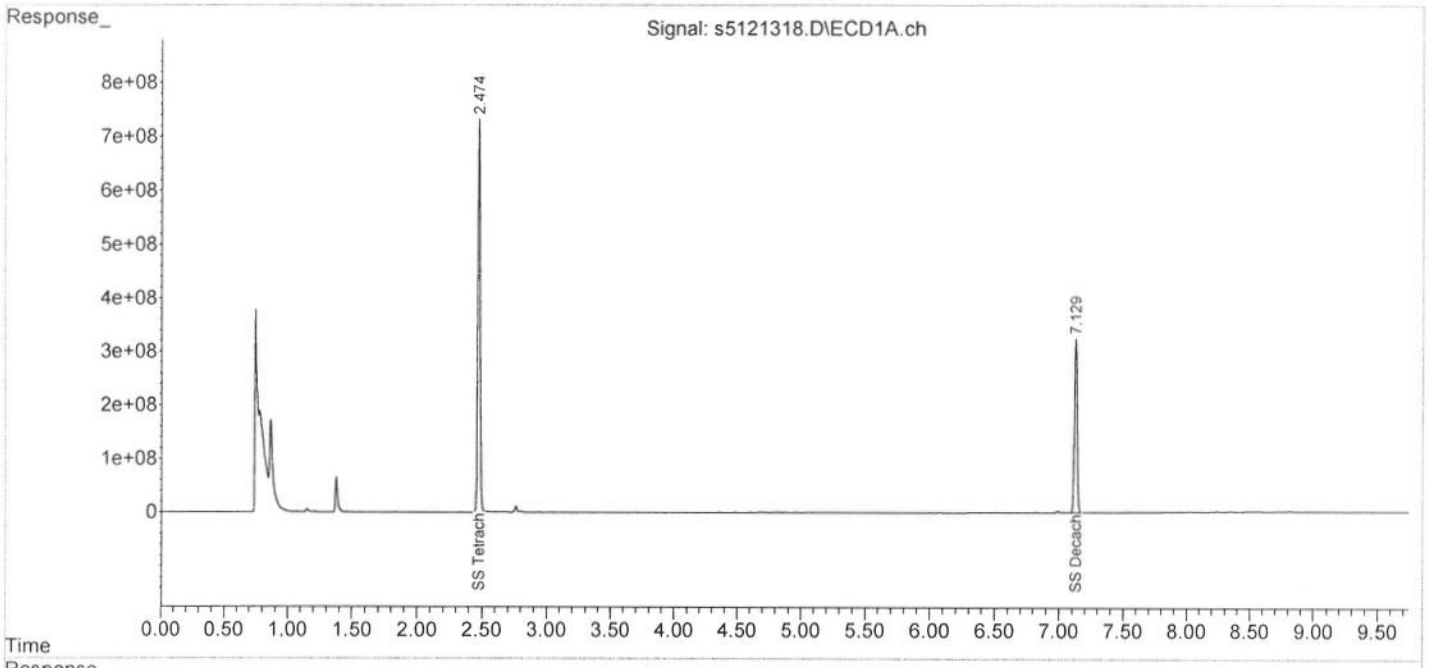
Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
System Monitoring Compounds							
1) S SS Tetrac...	2.474	2.292	733.6E6	749.0E6	1.281m	1.319m	BC = Baseline Correction
Spiked Amount	5.000 Range	30 - 150	Recovery	=	25.62%#	26.38%#	
47) S SS Decach...	7.129f	7.198	327.4E6	277.8E6	1.187m	1.147m	BC = Baseline Correction
Spiked Amount	5.000 Range	30 - 150	Recovery	=	23.74%#	22.94%#	
Target Compounds							

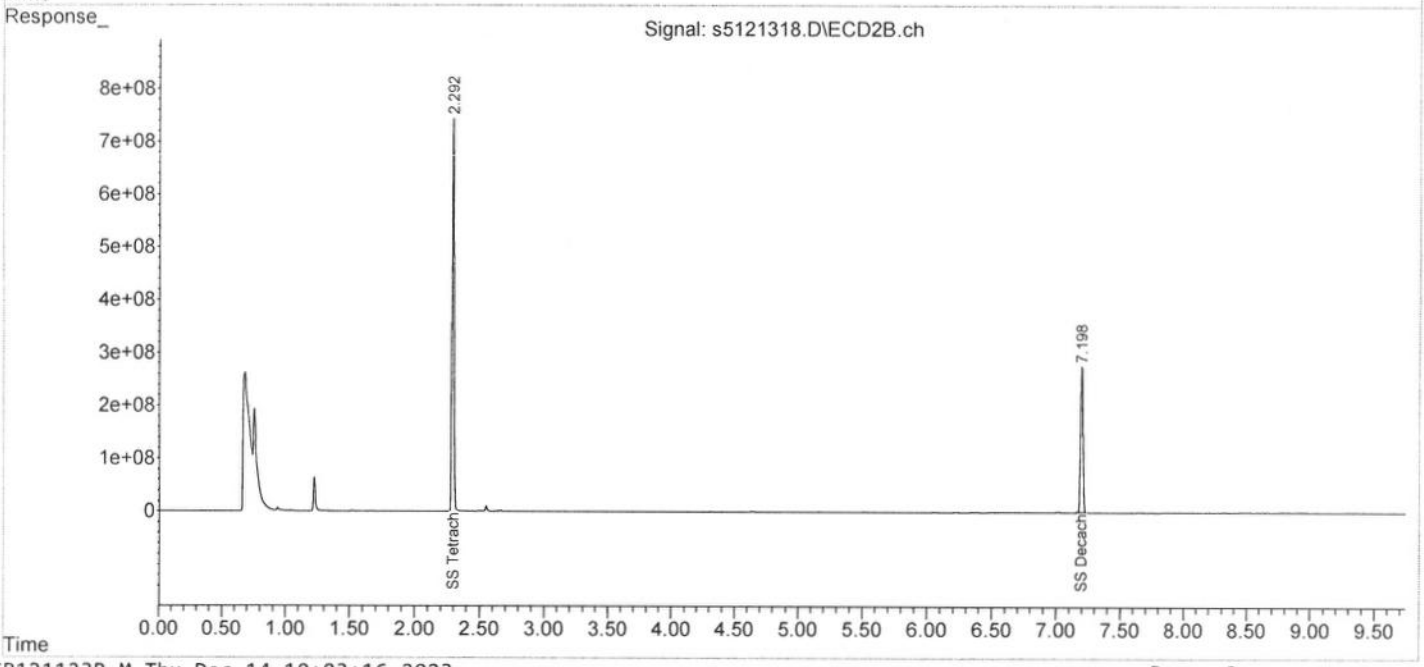
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : X:\S5\2023\Dec23\121323\
Data File : s5121318.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 13 Dec 2023 02:22 pm
Operator : dbv
Sample : 67839-05 pcb x1
Misc :
ALS Vial : 18 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Dec 13 15:08:57 2023
Quant Method : X:\S5\methods\S5PCB121123B.M
Quant Title : SVOA03 Method 8082A
QLast Update : Tue Dec 12 11:05:50 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : X:\S5\2023\Dec23\121123\
Data File : s5121155.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 11 Dec 2023 09:19 pm
Operator : dbv
Sample : 67839-05 pcb x1
Misc :
ALS Vial : 55 Sample Multiplier: 1

12/12/23 @ 14:17
DonnaV

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Dec 12 11:17:35 2023
Quant Method : X:\S5\methods\S5PCB121123A.M
Quant Title : SVOA03 Method 8082A
QLast Update : Tue Dec 12 11:05:50 2023
Response via : Initial Calibration
Integrator: ChemStation

RR x1. 1260 ccv low col 1. DOD samples need col 1 to pass.

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL
System Monitoring Compounds						
1) S SS Tetrac...	2.499	2.319	736.4E6	741.6E6	1.286m	1.304m
Spiked Amount	5.000 Range	30 - 150	Recovery =		25.72%#	26.08%#
47) S SS Decach...	7.156f	7.231f	326.6E6	275.8E6	1.184m	1.138m
Spiked Amount	5.000 Range	30 - 150	Recovery =		23.68%#	22.76%#
Target Compounds						

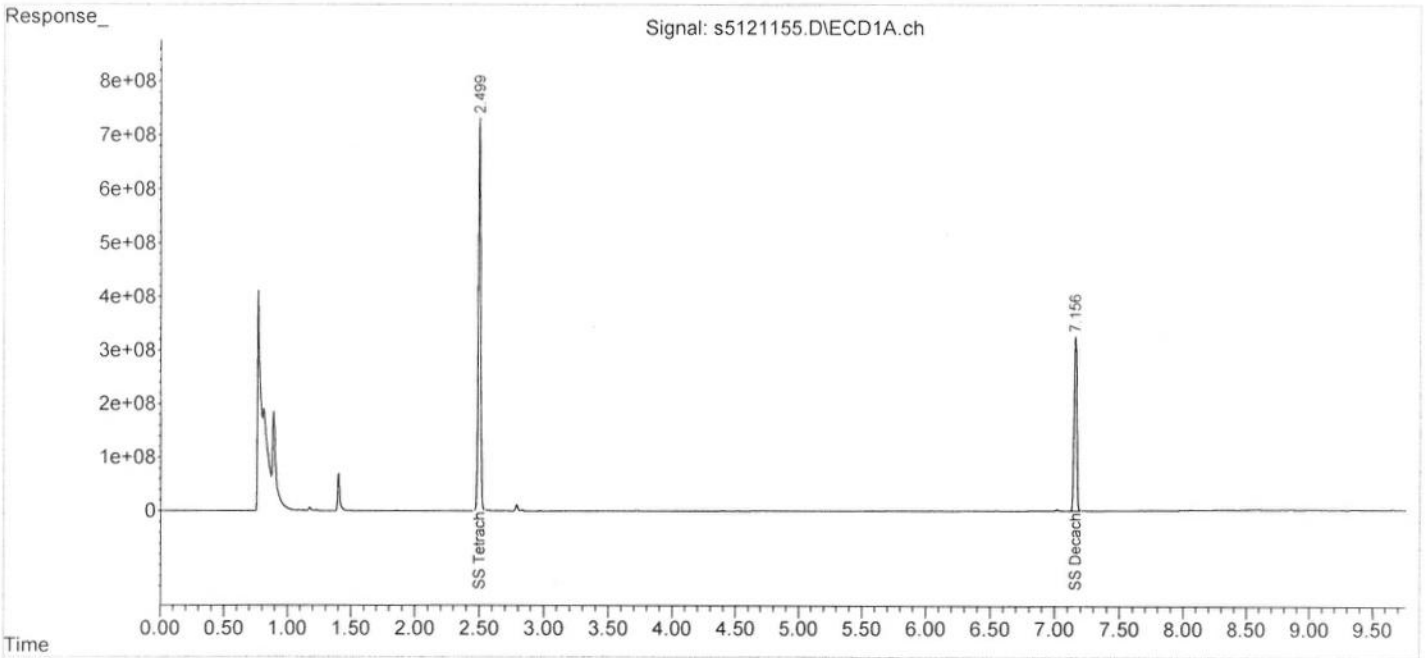
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

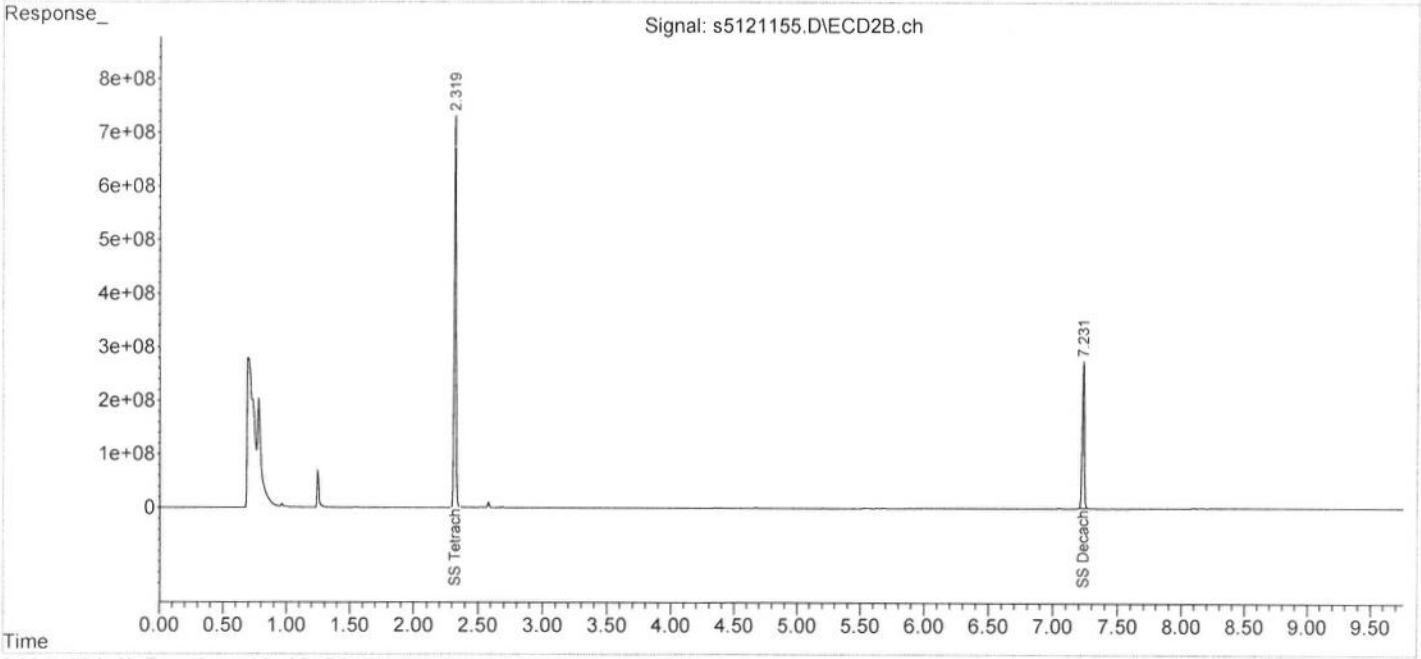
Quantitation Report (QT Reviewed)

Data Path : X:\S5\2023\Dec23\121123\
Data File : s5121155.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 11 Dec 2023 09:19 pm
Operator : dbv
Sample : 67839-05 pcb x1
Misc :
ALS Vial : 55 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Dec 12 11:17:35 2023
Quant Method : X:\S5\methods\S5PCB121123A.M
Quant Title : SVOA03 Method 8082A
QLast Update : Tue Dec 12 11:05:50 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





This File:	L:\SVOA\Excel Reports\PCB\121323\s5121319	
Analysis Group:	PCB	
Field ID:	Y-BRMW3-287-297-110923	18001468
Sample:	67839-06 pcb x1	Dow Salvage Yard
Misc:	0	CRE
Import File Name	s5 PCBs QC17225W DOD	
TestGroupID	E8082DoD_A	
Aqueous or Soil? (A or S)	A	
Percent Solid (%)	0	
Prep Date	Wednesday, December 06, 2023	
Initial Weight/Volume	1	
Volume	1	
Lab#:	67839-006	
AnalysisDate:	Wednesday, December 13, 2023	
AnalysisTime:	14:35	
Dilution:	1	
AnalyzedBy:	DBV s5121319.D	
QC_Code:		
Prep#	17225	

Reviewer Checks:

- Quant Report: Reviewed, Analyst Initials & Date
- Chromatogram Checked, Major peaks identified
- Prep data checked: weight, volume, %solid, Prep date
- Field ID consistent with data and any field replicates
- Results consistent with any re-runs & internal QC
- Correct dilution and reason clear or noted
- Reason for reanalysis documented
- Surrogates pass or flagged & noted
- Flags checked (Expiration, Over Cal)
- Other QC failures, estimates or interferences documented
- Spot checked Reported Result with Quant Report
- Checked Audit flagged data in LIMS
- Correct values averaged
- Column RPD is OK or both results included
- Correct column reported

Notes:

Reviewer Initials & Date: 12/14/23

#	Surrogate Standards	Concentration (ug/mL)	Recovery	Flag	QC Limits	Report Column
1	SS Tetrachloro-m-xylene	1.30	65%		30-150	1
47	SS Decachlorobiphenyl	1.45	73%		30-150	1

#	AnalyteName	Concentration (ug/mL)	Flag	Report Column
2	Ar-1016	0.00		1
7	Ar-1221	0.00		1
12	Ar-1232	0.00		1
17	Ar-1242	0.00		1
22	Ar-1248	0.00		1
27	Ar-1254	0.00		1
32	Ar-1260	0.00		1
37	Ar-1262	0.00		1
42	Ar-1268	0.00		1

Aroclor	Column #1 average	Column #2 average	Column RPD limit 40%	%rsd	Column #1 1	2	3	4	5
Ar-1016	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1221	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1232	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1242	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1248	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1254	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1260	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1262	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1268	0.00	0.00			0.00	0.00	0.00	0.00	0.00
SS Tetra	1.30	1.32							
SS Deca	1.45	1.43							

	%rsd	Column #2 1	2	3	4	5
Ar-1016		0.00	0.00	0.00	0.00	0.00
Ar-1221		0.00	0.00	0.00	0.00	0.00
Ar-1232		0.00	0.00	0.00	0.00	0.00
Ar-1242		0.00	0.00	0.00	0.00	0.00
Ar-1248		0.00	0.00	0.00	0.00	0.00
Ar-1254		0.00	0.00	0.00	0.00	0.00
Ar-1260		0.00	0.00	0.00	0.00	0.00
Ar-1262		0.00	0.00	0.00	0.00	0.00
Ar-1268		0.00	0.00	0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : X:\S5\2023\Dec23\121323\
Data File : s5121319.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 13 Dec 2023 02:35 pm
Operator : dbv
Sample : 67839-06 pcb x1
Misc :
ALS Vial : 19 Sample Multiplier: 1



Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Dec 13 15:09:01 2023
Quant Method : X:\S5\methods\S5PCB121123B.M
Quant Title : SVOA03 Method 8082A
QLast Update : Tue Dec 12 11:05:50 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
System Monitoring Compounds							
1) S SS Tetrac...	2.474	2.293	740.7E6	750.1E6	1.295m	1.321m	BC = Baseline Correction
Spiked Amount	5.000 Range	30 - 150	Recovery =		25.90%#	26.42%#	
47) S SS Decach...	7.127f	7.198	391.4E6	337.5E6	1.453m	1.434m	BC = Baseline Correction
Spiked Amount	5.000 Range	30 - 150	Recovery =		29.06%#	28.68%#	
Target Compounds							

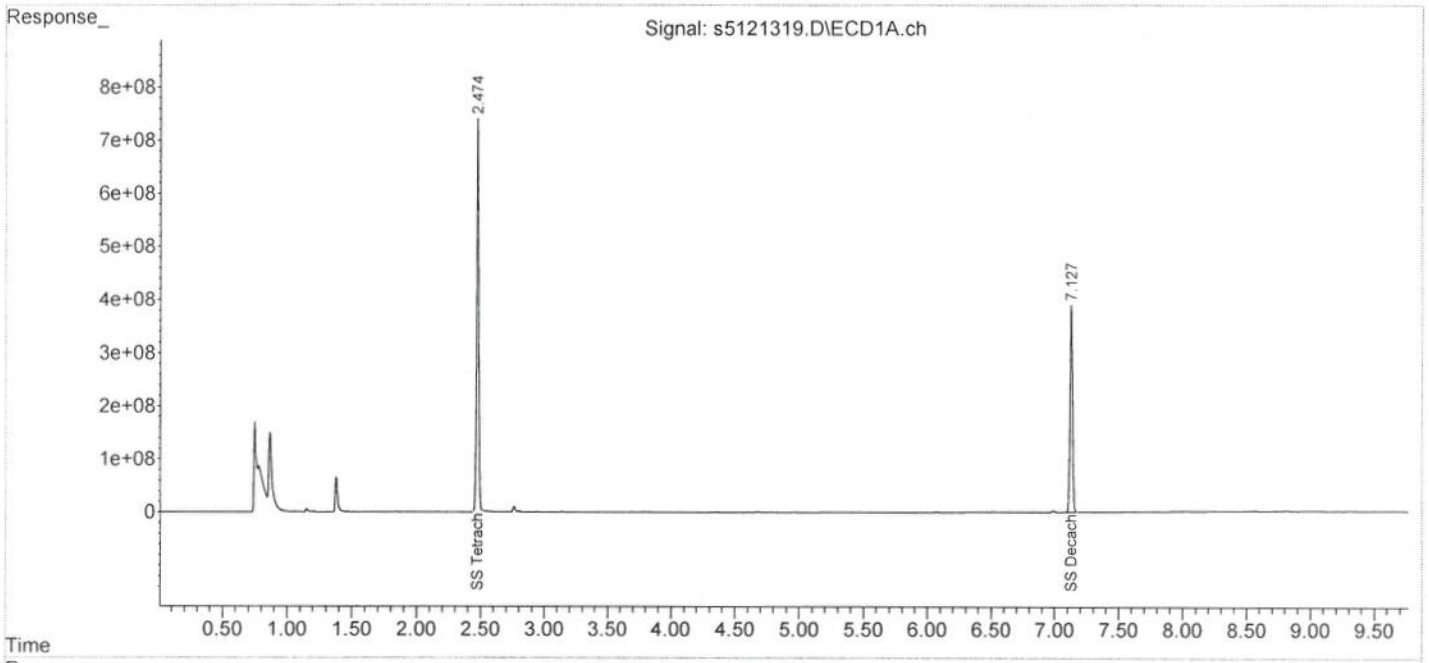
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

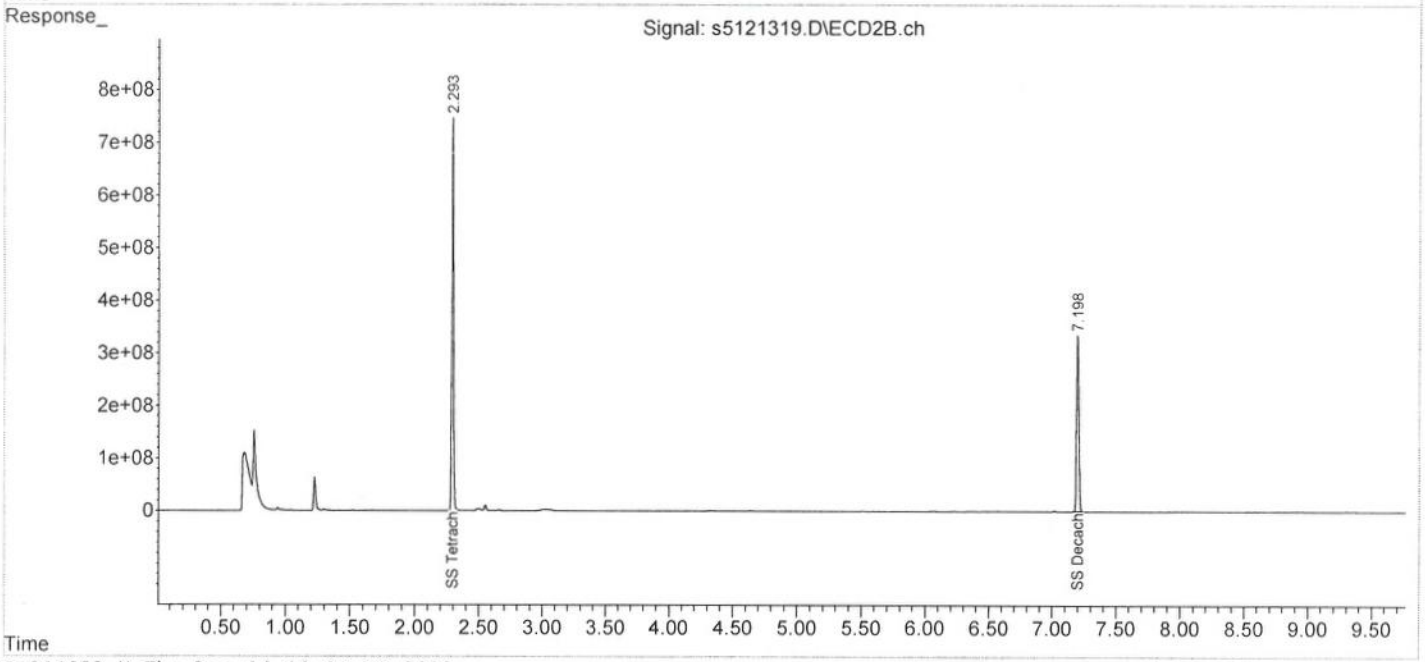
Quantitation Report (QT Reviewed)

Data Path : X:\S5\2023\Dec23\121323\
Data File : s5121319.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 13 Dec 2023 02:35 pm
Operator : dbv
Sample : 67839-06 pcb x1
Misc :
ALS Vial : 19 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Dec 13 15:09:01 2023
Quant Method : X:\S5\methods\S5PCB121123B.M
Quant Title : SVOA03 Method 8082A
QLast Update : Tue Dec 12 11:05:50 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : X:\S5\2023\Dec23\121123\
Data File : s5121156.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 11 Dec 2023 09:32 pm
Operator : dbv
Sample : 67839-06 pcb x1
Misc :
ALS Vial : 56 Sample Multiplier: 1

12/12/23 @ 14:17
DonnaV

Integration File signal 1: events.e
Integration File signal 2: events2.e
RR x1. 1260 ccv low col 1. DOD samples need col 1 to pass.
Quant Time: Dec 12 11:17:40 2023
Quant Method : X:\S5\methods\S5PCB121123A.M
Quant Title : SVOA03 Method 8082A
QLast Update : Tue Dec 12 11:05:50 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL
	System Monitoring Compounds						
1) S	SS Tetrac...	2.499	2.319	735.7E6	738.9E6	1.285m	1.298m
	Spiked Amount	5.000 Range	30 - 150	Recovery	=	25.70%#	25.96%#
47) S	SS Decach...	7.157f	7.231f	359.6E6	296.2E6	1.319m	1.234m
	Spiked Amount	5.000 Range	30 - 150	Recovery	=	26.38%#	24.68%#
	Target Compounds						

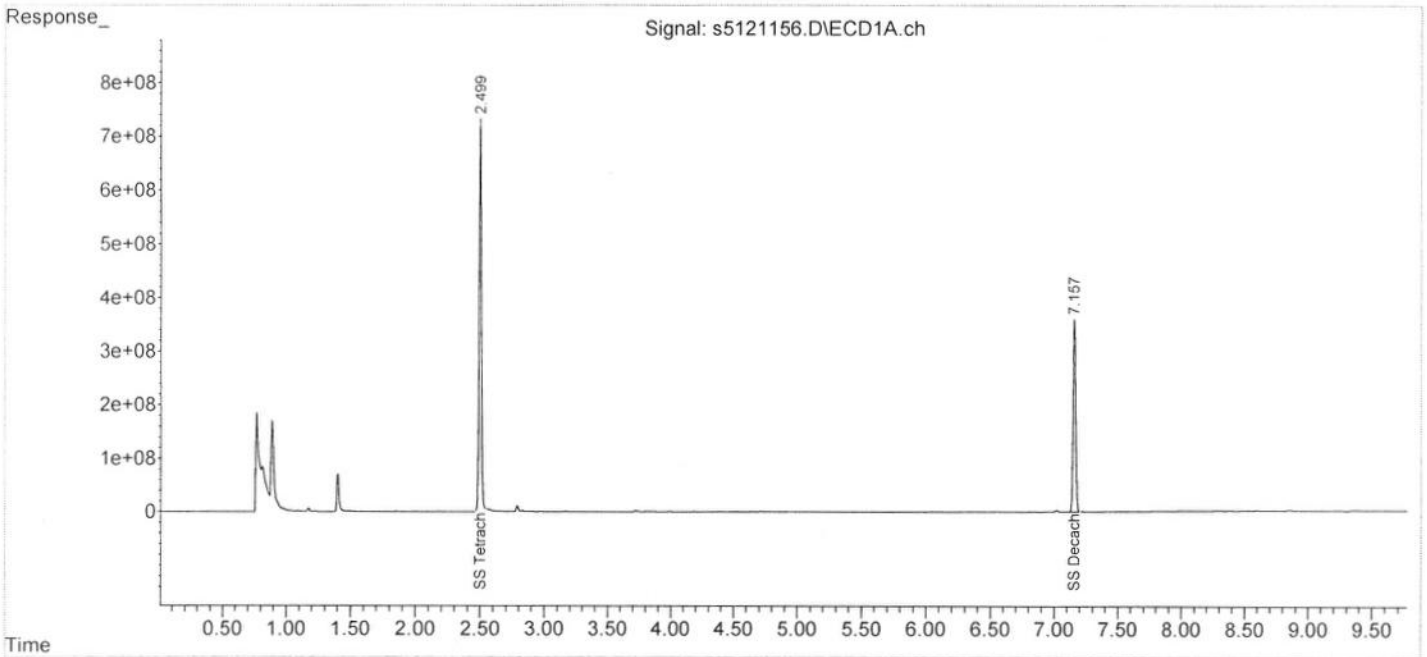
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

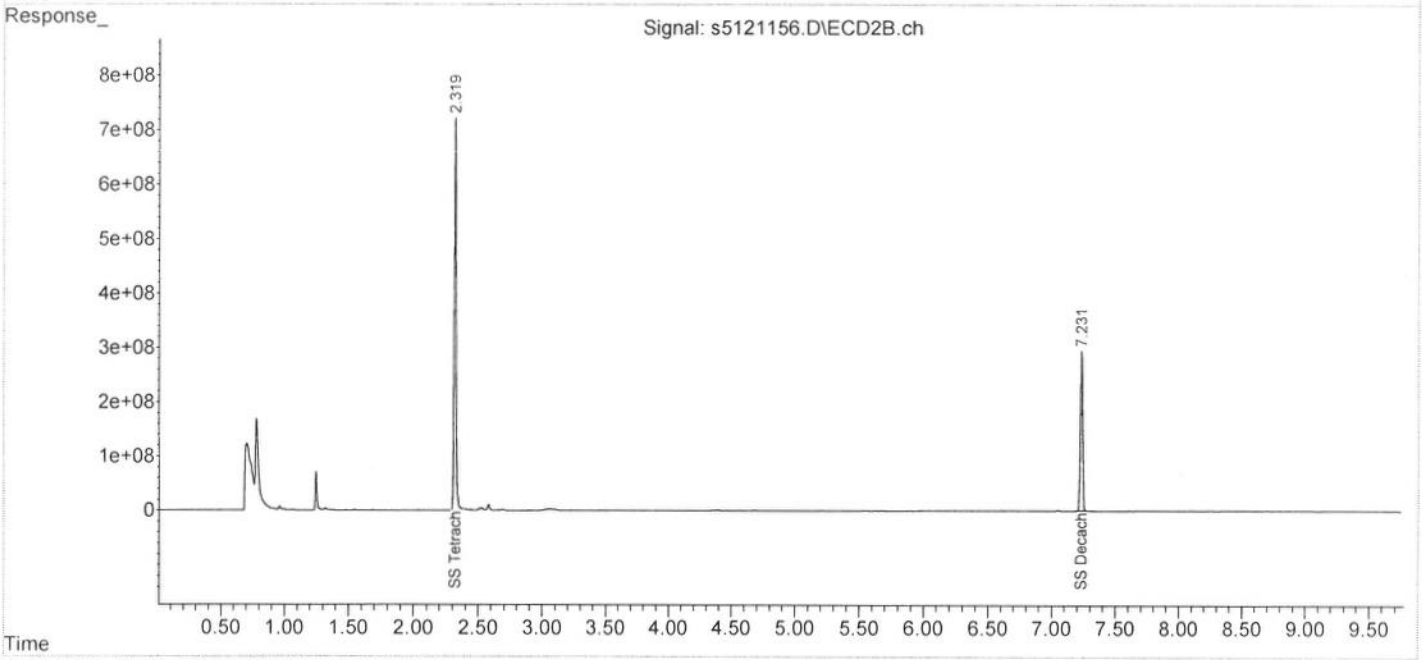
Quantitation Report (QT Reviewed)

Data Path : X:\S5\2023\Dec23\121123\
Data File : s5121156.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 11 Dec 2023 09:32 pm
Operator : dbv
Sample : 67839-06 pcb x1
Misc :
ALS Vial : 56 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Dec 12 11:17:40 2023
Quant Method : X:\S5\methods\S5PCB121123A.M
Quant Title : SVOA03 Method 8082A
QLast Update : Tue Dec 12 11:05:50 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





This File:	L:\SVOA\Excel Reports\PCB\121323\s5121320		
Analysis Group:	PCB		
Field ID:	Y-BRMW4-297-301-110923	18001468	
Sample:	67839-07 pcb x1	Dow Salvage Yard	
Misc:	0	CRE	
Import File Name	s5 PCBs QC17225W DOD		
TestGroupID	E8082DoD_A		
Aqueous or Soil? (A or S)	A		
Percent Solid (%)	0		
Prep Date	Wednesday, December 06, 2023		
Initial Weight/Volume	1		
Volume	1		
Lab#:	67839-007		
AnalysisDate:	Wednesday, December 13, 2023		
AnalysisTime:	14:48		
Dilution:	1		
AnalyzedBy:	DBV s5121320.D		
QC_Code:			
Prep#	17225		

Reviewer Checks:

- Quant Report: Reviewed, Analyst Initials & Date
- Chromatogram Checked, Major peaks identified
- Prep data checked: weight, volume, %solid, Prep date
- Field ID consistent with data and any field replicates
- Results consistent with any re-runs & internal QC
- Correct dilution and reason clear or noted
- Reason for reanalysis documented
- Surrogates pass or flagged & noted
- Flags checked (Expiration, Over Cal)
- Other QC failures, estimates or interferences documented
- Spot checked Reported Result with Quant Report
- Checked Audit flagged data in LIMS
- Correct values averaged
- Column RPD is OK or both results included
- Correct column reported

Notes:

Reviewer Initials & Date: 12/14/23

#	Surrogate Standards	Concentration (ug/mL)	Recovery	Flag	QC Limits	Report Column
1	SS Tetrachloro-m-xylene	1.32	66%		30-150	1
47	SS Decachlorobiphenyl	1.35	68%		30-150	1

#	AnalyteName	Concentration (ug/mL)	Flag	Report Column
2	Ar-1016	0.00		1
7	Ar-1221	0.00		1
12	Ar-1232	0.00		1
17	Ar-1242	0.00		1
22	Ar-1248	0.00		1
27	Ar-1254	0.00		1
32	Ar-1260	0.00		1
37	Ar-1262	0.00		1
42	Ar-1268	0.00		1

Aroclor	Column #1 average	Column #2 average	Column RPD limit 40%	%rsd	Column #1 1	2	3	4	5
Ar-1016	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1221	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1232	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1242	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1248	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1254	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1260	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1262	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1268	0.00	0.00			0.00	0.00	0.00	0.00	0.00
SS Tetra	1.32	1.33							
SS Deca	1.35	1.30							

	%rsd	Column #2 1	2	3	4	5
Ar-1016		0.00	0.00	0.00	0.00	0.00
Ar-1221		0.00	0.00	0.00	0.00	0.00
Ar-1232		0.00	0.00	0.00	0.00	0.00
Ar-1242		0.00	0.00	0.00	0.00	0.00
Ar-1248		0.00	0.00	0.00	0.00	0.00
Ar-1254		0.00	0.00	0.00	0.00	0.00
Ar-1260		0.00	0.00	0.00	0.00	0.00
Ar-1262		0.00	0.00	0.00	0.00	0.00
Ar-1268		0.00	0.00	0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : X:\S5\2023\Dec23\121323\
Data File : s5121320.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 13 Dec 2023 02:48 pm
Operator : dbv
Sample : 67839-07 pcb x1
Misc :
ALS Vial : 20 Sample Multiplier: 1

12/14/23 @ 10:35
DonnaV

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Dec 13 15:09:06 2023
Quant Method : X:\S5\methods\S5PCB121123B.M
Quant Title : SVOA03 Method 8082A
QLast Update : Tue Dec 12 11:05:50 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
	System Monitoring Compounds							
1) S	SS Tetrac...	2.474	2.292	754.3E6	753.2E6	1.323m	1.328m	BC = Baseline Correction
	Spiked Amount	5.000 Range	30 - 150	Recovery	=	26.46%#	26.56%#	
47) S	SS Decach...	7.130	7.199	367.2E6	310.2E6	1.351m	1.301m	BC = Baseline Correction
	Spiked Amount	5.000 Range	30 - 150	Recovery	=	27.02%#	26.02%#	
	Target Compounds							

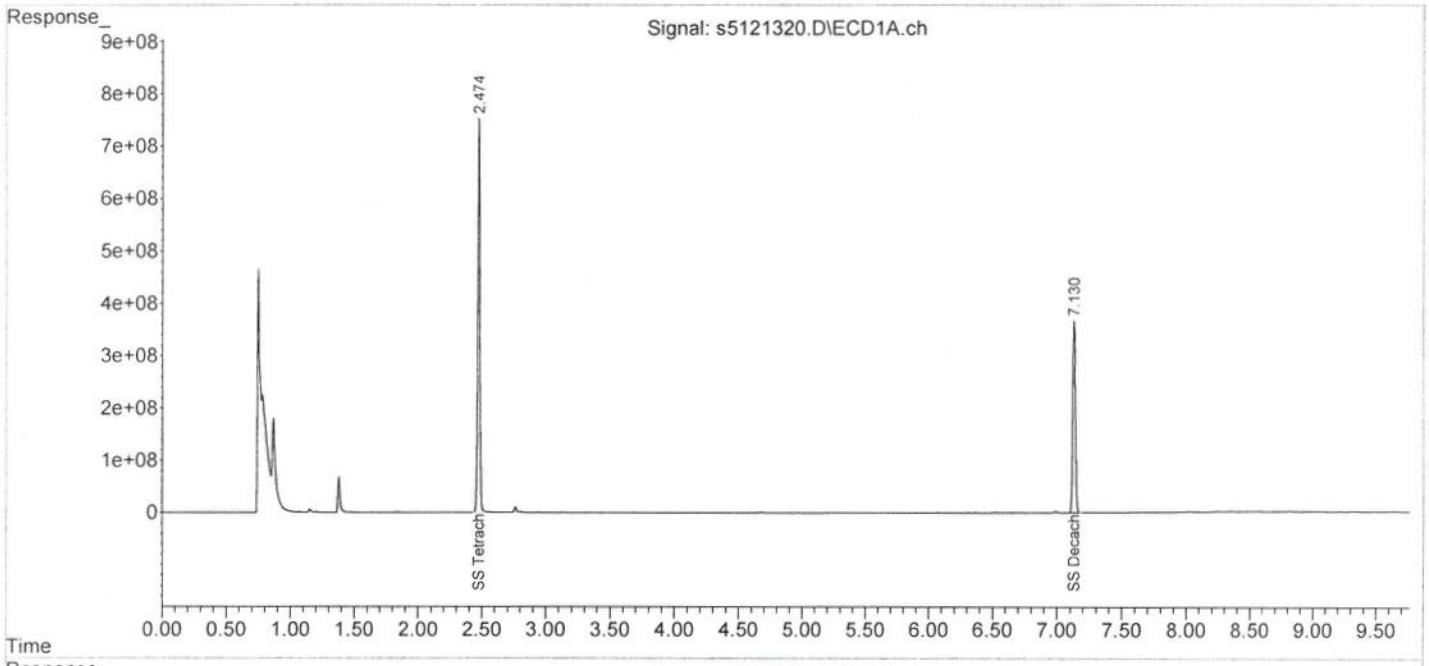
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

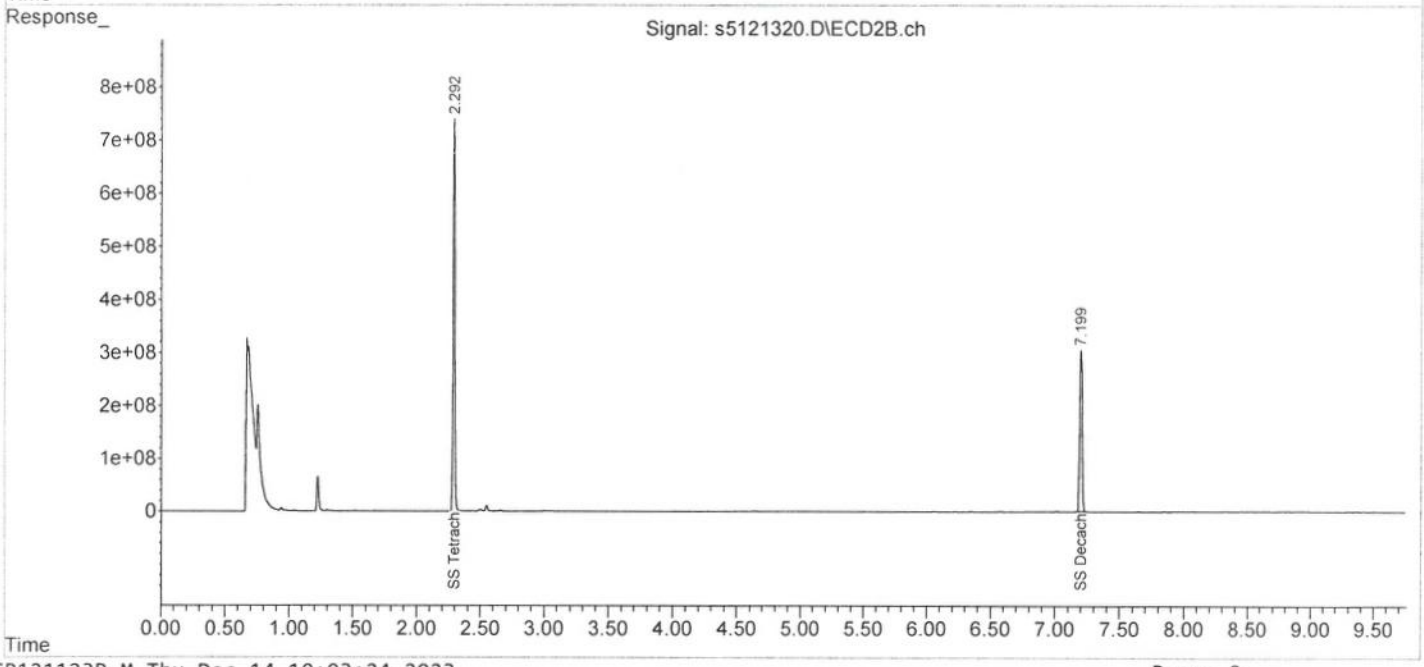
Quantitation Report (QT Reviewed)

Data Path : X:\S5\2023\Dec23\121323\
Data File : s5121320.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 13 Dec 2023 02:48 pm
Operator : dbv
Sample : 67839-07 pcb x1
Misc :
ALS Vial : 20 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Dec 13 15:09:06 2023
Quant Method : X:\S5\methods\S5PCB121123B.M
Quant Title : SVOA03 Method 8082A
QLast Update : Tue Dec 12 11:05:50 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : X:\S5\2023\Dec23\121123\
Data File : s5121157.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 11 Dec 2023 09:45 pm
Operator : dbv
Sample : 67839-07 pcb x1
Misc :
ALS Vial : 57 Sample Multiplier: 1

dbv 12/12/23 @ 14:17 DonnaV

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Dec 12 11:17:46 2023
Quant Method : X:\S5\methods\S5PCB121123A.M
Quant Title : SVOA03 Method 8082A
QLast Update : Tue Dec 12 11:05:50 2023
Response via : Initial Calibration
Integrator: ChemStation

RR x1. 1260 ccv low col 1. DOD samples need col 1 to pass.

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL
	System Monitoring Compounds						
1) S	SS Tetrac...	2.500	2.319	755.5E6	756.0E6	1.325m	1.334m
	Spiked Amount	5.000	Range 30 - 150	Recovery =		26.50%#	26.68%#
47) S	SS Decach...	7.157f	7.230f	354.1E6	294.5E6	1.296m	1.226m
	Spiked Amount	5.000	Range 30 - 150	Recovery =		25.92%#	24.52%#
	Target Compounds						

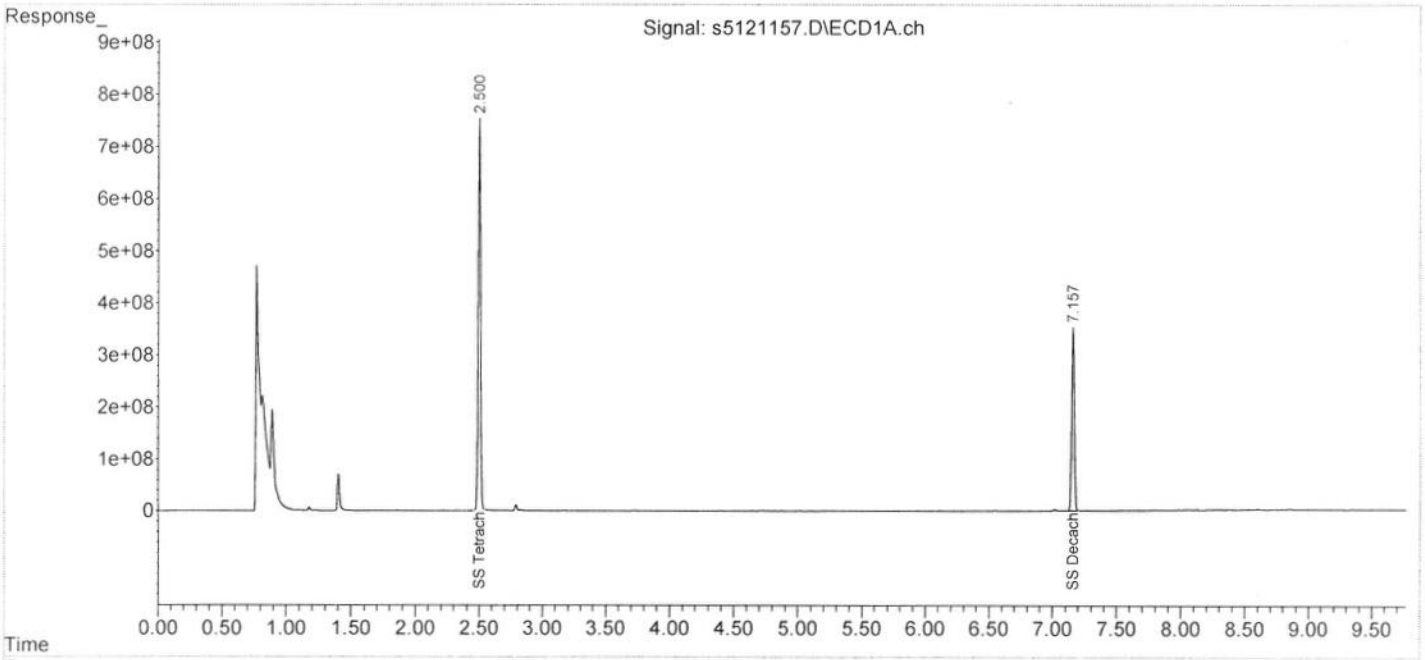
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

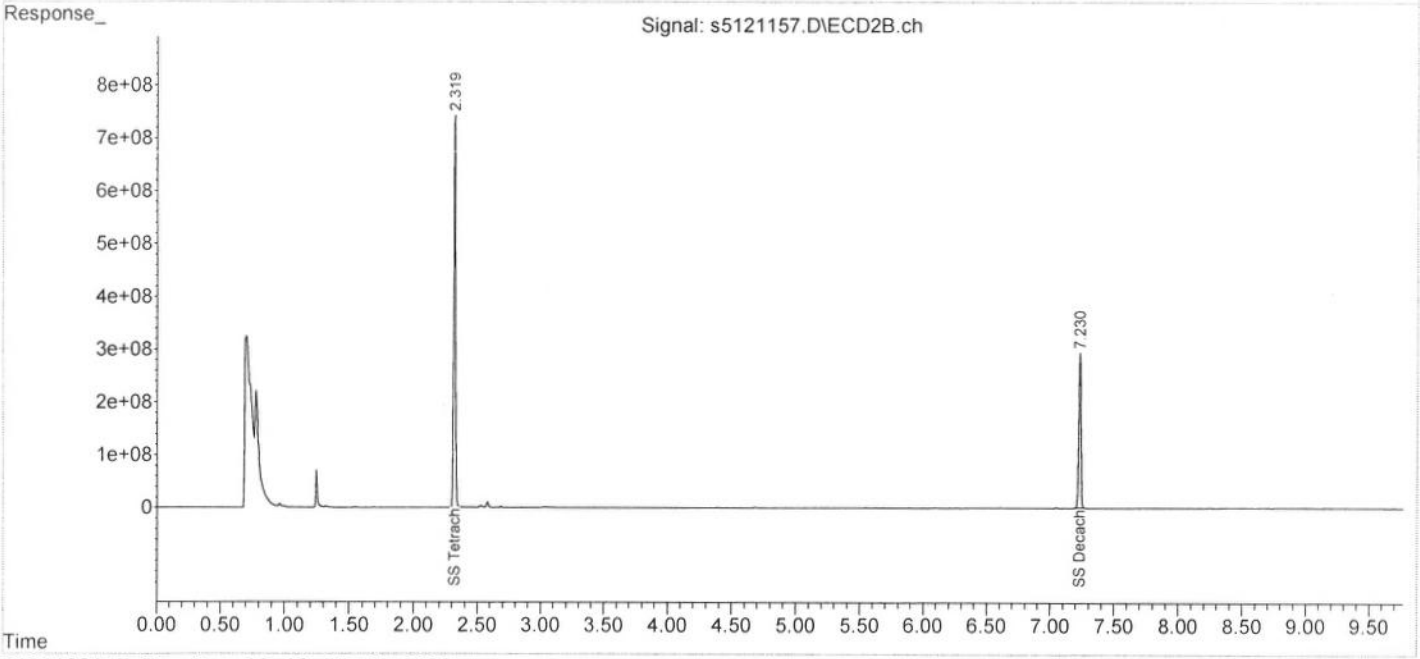
Quantitation Report (QT Reviewed)

Data Path : X:\S5\2023\Dec23\121123\
Data File : s5121157.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 11 Dec 2023 09:45 pm
Operator : dbv
Sample : 67839-07 pcb x1
Misc :
ALS Vial : 57 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Dec 12 11:17:46 2023
Quant Method : X:\S5\methods\S5PCB121123A.M
Quant Title : SVOA03 Method 8082A
QLast Update : Tue Dec 12 11:05:50 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





This File:	L:\SVOA\Excel Reports\PCB\121323\s5121326
Analysis Group:	PCB
Field ID:	SY-BRMW1-42-52-110923 18001468
Sample:	67839-08 pcb x1 Dow Salvage Yard
Misc:	0 CRE
Import File Name	s5 PCBs QC17225W DOD
TestGroupID	E8082DoD_A
Aqueous or Soil? (A or S)	A
Percent Solid (%)	0
Prep Date	Wednesday, December 06, 2023
Initial Weight/Volume	1
Volume	1
Lab#:	67839-008
AnalysisDate:	Wednesday, December 13, 2023
AnalysisTime:	16:05
Dilution:	1
AnalyzedBy:	DBV s5121326.D
QC_Code:	
Prep#	17225

Reviewer Checks:

- Quant Report: Reviewed, Analyst Initials & Date
- Chromatogram Checked, Major peaks identified
- Prep data checked: weight, volume, %solid, Prep date
- Field ID consistent with data and any field replicates
- Results consistent with any re-runs & internal QC
- Correct dilution and reason clear or noted
- Reason for reanalysis documented
- Surrogates pass or flagged & noted
- Flags checked (Expiration, Over Cal)
- Other QC failures, estimates or interferences documented
- Spot checked Reported Result with Quant Report
- Checked Audit flagged data in LIMS
- Correct values averaged
- Column RPD is OK or both results included
- Correct column reported

Notes:

Reviewer Initials & Date: 12/14/23

#	Surrogate Standards	Concentration (ug/mL)	Recovery	Flag	QC Limits	Report Column
1	SS Tetrachloro-m-xylene	1.02	51%		30-150	1
47	SS Decachlorobiphenyl	0.75	38%		30-150	1

#	AnalyteName	Concentration (ug/mL)	Flag	Report Column
2	Ar-1016	0.00		1
7	Ar-1221	0.00		1
12	Ar-1232	0.00		1
17	Ar-1242	0.00		1
22	Ar-1248	0.00		1
27	Ar-1254	0.00		1
32	Ar-1260	0.00		1
37	Ar-1262	0.00		1
42	Ar-1268	0.00		1

Aroclor	Column #1 average	Column #2 average	Column RPD limit 40%	%rsd	Column #1 1	2	3	4	5
Ar-1016	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1221	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1232	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1242	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1248	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1254	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1260	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1262	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1268	0.00	0.00			0.00	0.00	0.00	0.00	0.00
SS Tetra	1.02	1.04							
SS Deca	0.75	0.71							

	%rsd	Column #2 1	2	3	4	5
Ar-1016		0.00	0.00	0.00	0.00	0.00
Ar-1221		0.00	0.00	0.00	0.00	0.00
Ar-1232		0.00	0.00	0.00	0.00	0.00
Ar-1242		0.00	0.00	0.00	0.00	0.00
Ar-1248		0.00	0.00	0.00	0.00	0.00
Ar-1254		0.00	0.00	0.00	0.00	0.00
Ar-1260		0.00	0.00	0.00	0.00	0.00
Ar-1262		0.00	0.00	0.00	0.00	0.00
Ar-1268		0.00	0.00	0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : X:\S5\2023\Dec23\121323\
Data File : s5121326.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 13 Dec 2023 04:05 pm
Operator : dbv
Sample : 67839-08 pcb x1
Misc :
ALS Vial : 26 Sample Multiplier: 1



Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Dec 13 16:31:04 2023
Quant Method : X:\S5\methods\S5PCB121123B.M
Quant Title : SVOA03 Method 8082A
QLast Update : Tue Dec 12 11:05:50 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

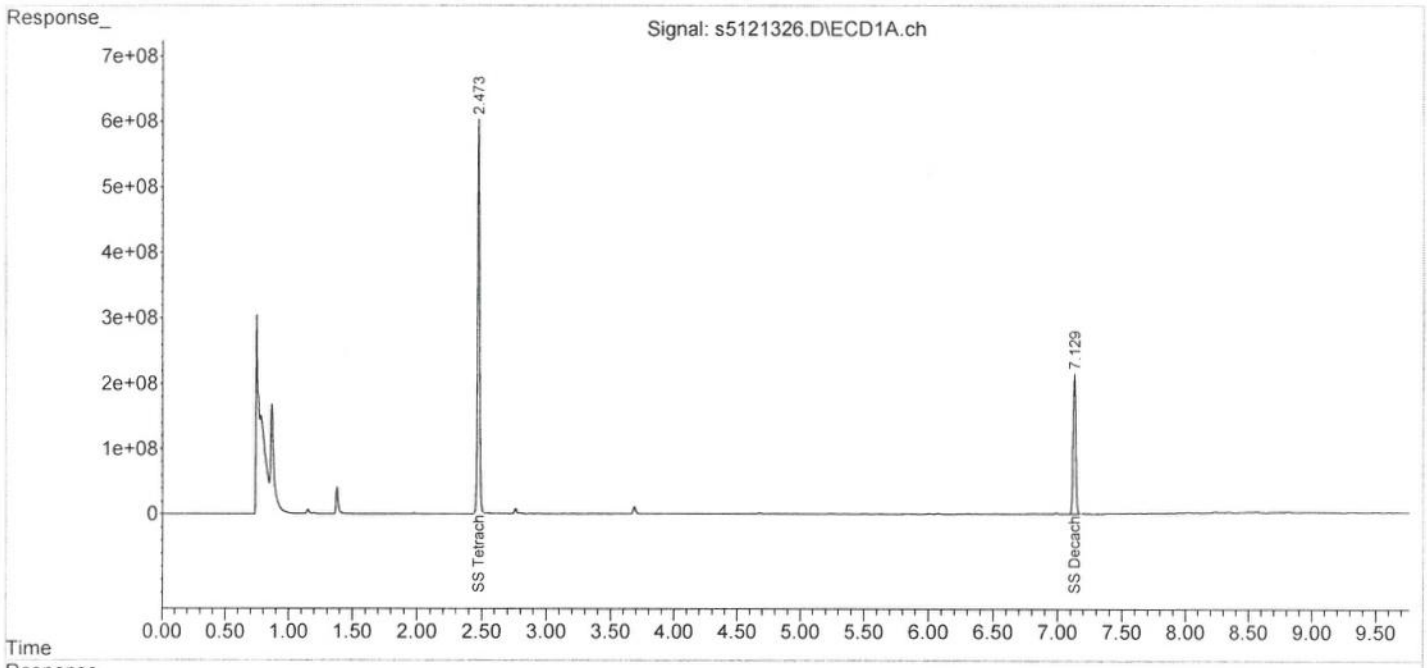
Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
System Monitoring Compounds							
1) S SS Tetrac...	2.473	2.292	603.0E6	609.7E6	1.024m	1.040m	BC = Baseline Correction
Spiked Amount	5.000 Range	30 - 150	Recovery =		20.48%#	20.80%#	
47) S SS Decach...	7.129f	7.198	215.7E6	180.1E6	0.753m	0.714m	BC = Baseline Correction
Spiked Amount	5.000 Range	30 - 150	Recovery =		15.06%#	14.28%#	
Target Compounds							

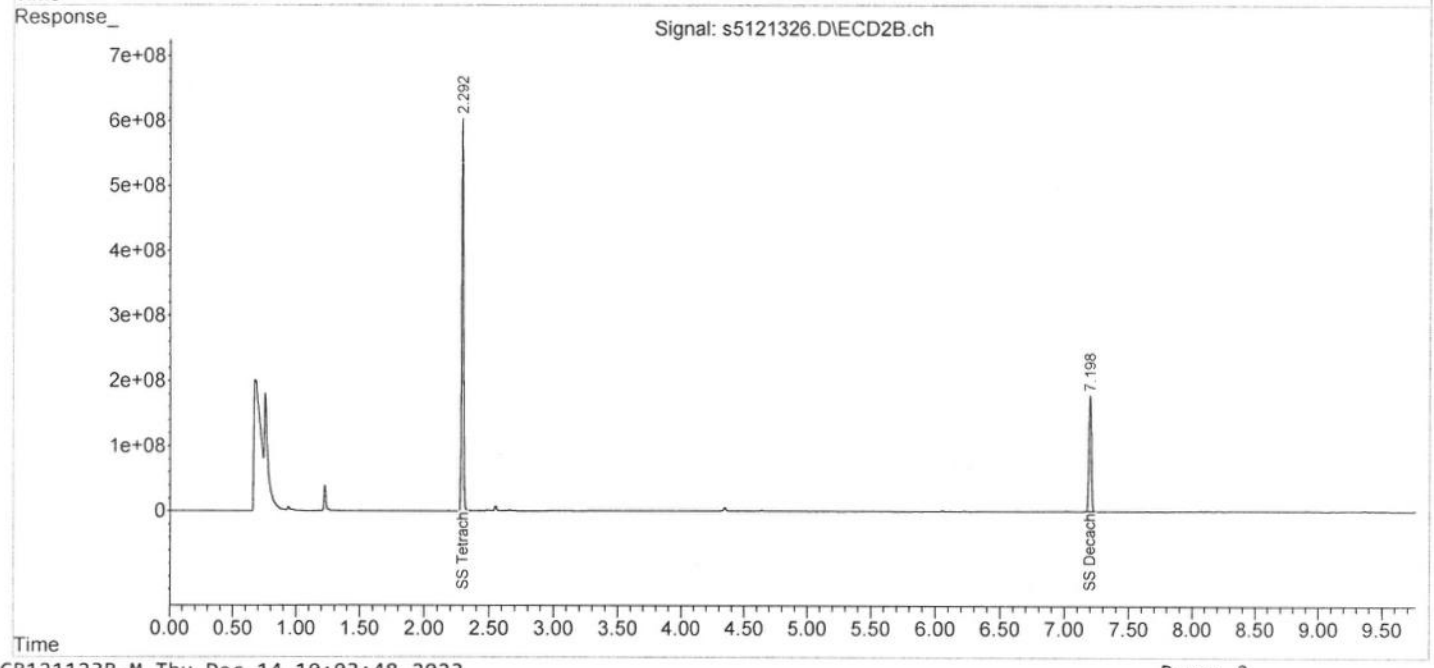
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : X:\S5\2023\Dec23\121323\
Data File : s5121326.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 13 Dec 2023 04:05 pm
Operator : dbv
Sample : 67839-08 pcb x1
Misc :
ALS Vial : 26 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Dec 13 16:31:04 2023
Quant Method : X:\S5\methods\S5PCB121123B.M
Quant Title : SVOA03 Method 8082A
QLast Update : Tue Dec 12 11:05:50 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : X:\S5\2023\Dec23\121123\
Data File : s5121158.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 11 Dec 2023 09:58 pm
Operator : dbv
Sample : 67839-08 pcb x1
Misc :
ALS Vial : 58 Sample Multiplier: 1

12/12/23 @ 14:17
DonnaV

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Dec 12 11:17:50 2023
Quant Method : X:\S5\methods\S5PCB121123A.M
Quant Title : SVOA03 Method 8082A
QLast Update : Tue Dec 12 11:05:50 2023
Response via : Initial Calibration
Integrator: ChemStation

RR x1. 1260 ccv low col 1. DOD samples need col 1 to pass.

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

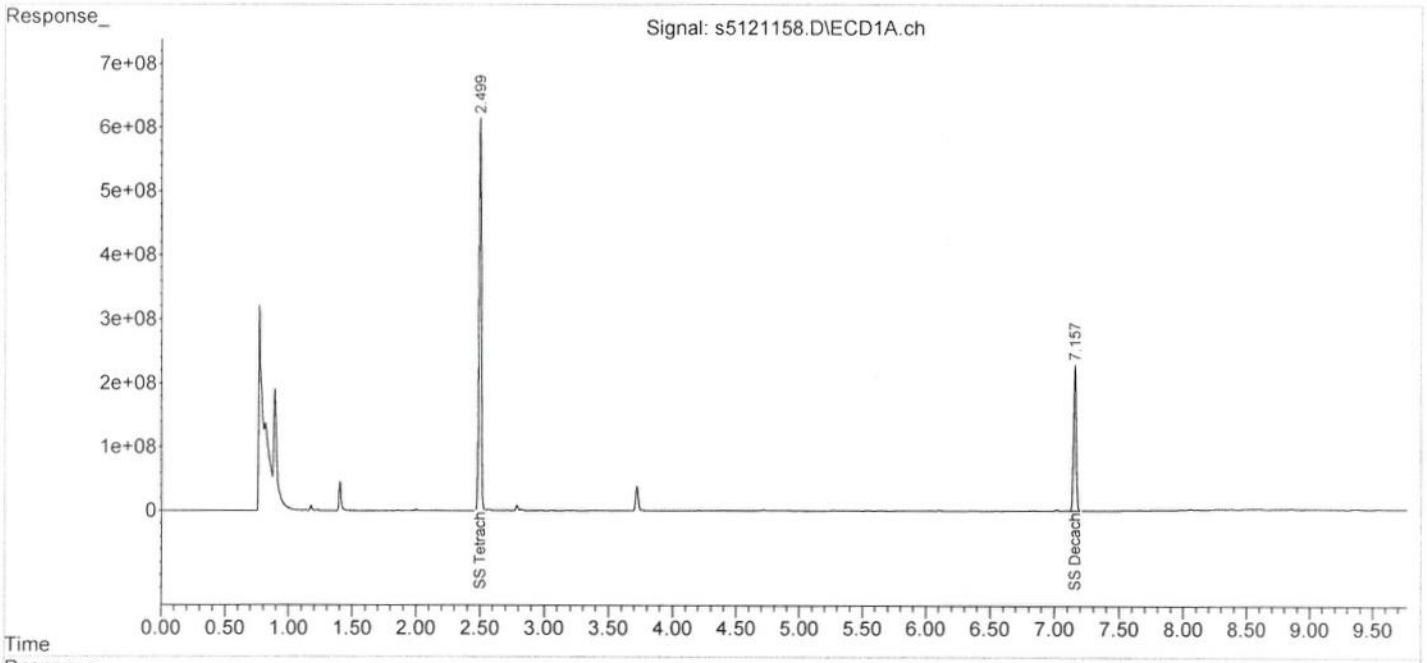
	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL
	System Monitoring Compounds						
1)	S SS Tetrac...	2.499	2.319	617.5E6	620.4E6	1.052m	1.061m
	Spiked Amount	5.000	Range 30 - 150	Recovery =		21.04%#	21.22%#
47)	S SS Decach...	7.157f	7.231	228.4E6	187.1E6	0.801m	0.744m
	Spiked Amount	5.000	Range 30 - 150	Recovery =		16.02%#	14.88%#
	Target Compounds						

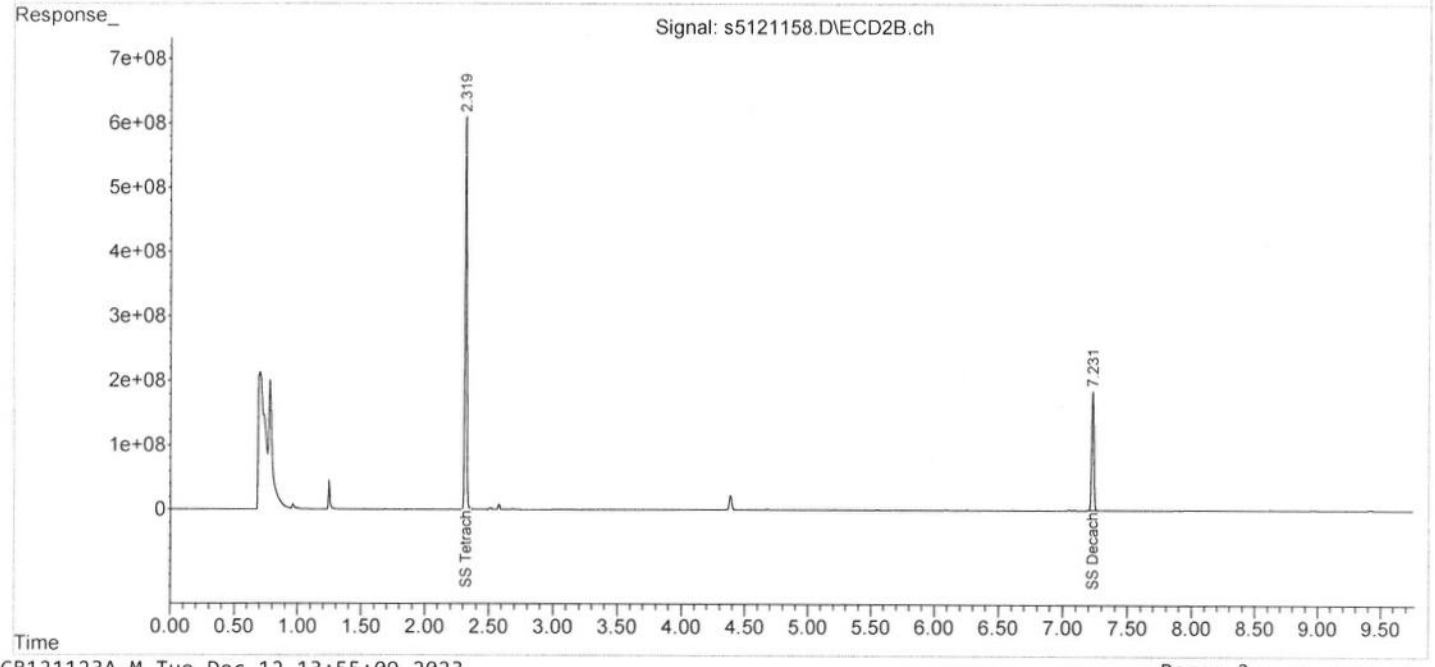
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : X:\S5\2023\Dec23\121123\
Data File : s5121158.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 11 Dec 2023 09:58 pm
Operator : dbv
Sample : 67839-08 pcb x1
Misc :
ALS Vial : 58 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Dec 12 11:17:50 2023
Quant Method : X:\S5\methods\S5PCB121123A.M
Quant Title : SVOA03 Method 8082A
QLast Update : Tue Dec 12 11:05:50 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





This File:	L:\SVOA\Excel Reports\PCB\121323\s5121327
Analysis Group:	PCB
Field ID:	Y-BRMW1-150-157-110923 18001468
Sample:	67839-09 pcb x1 Dow Salvage Yard
Misc:	0 CRE
Import File Name	s5 PCBs QC17225W DOD
TestGroupID	E8082DoD_A
Aqueous or Soil? (A or S)	A
Percent Solid (%)	0
Prep Date	Wednesday, December 06, 2023
Initial Weight/Volume	1
Volume	1
Lab#:	67839-009
AnalysisDate:	Wednesday, December 13, 2023
AnalysisTime:	16:18
Dilution:	1
AnalyzedBy:	DBV s5121327.D
QC_Code:	
Prep#	17225

Reviewer Checks:

- Quant Report: Reviewed, Analyst Initials & Date
- Chromatogram Checked, Major peaks identified
- Prep data checked: weight, volume, %solid, Prep date
- Field ID consistent with data and any field replicates
- Results consistent with any re-runs & internal QC
- Correct dilution and reason clear or noted
- Reason for reanalysis documented
- Surrogates pass or flagged & noted
- Flags checked (Expiration, Over Cal)
- Other QC failures, estimates or interferences documented
- Spot checked Reported Result with Quant Report
- Checked Audit flagged data in LIMS
- Correct values averaged
- Column RPD is OK or both results included
- Correct column reported

Notes:

Reviewer Initials & Date: 12/14/23

#	Surrogate Standards	Concentration (ug/mL)	Recovery	Flag	QC Limits	Report Column
1	SS Tetrachloro-m-xylene	0.96	48%		30-150	1
47	SS Decachlorobiphenyl	0.73	37%		30-150	1

#	AnalyteName	Concentration (ug/mL)	Flag	Report Column
2	Ar-1016	0.00		1
7	Ar-1221	0.00		1
12	Ar-1232	0.00		1
17	Ar-1242	0.00		1
22	Ar-1248	0.00		1
27	Ar-1254	0.00		1
32	Ar-1260	0.00		1
37	Ar-1262	0.00		1
42	Ar-1268	0.00		1

Aroclor	Column #1 average	Column #2 average	Column RPD limit 40%	%rsd	Column #1 1	2	3	4	5
Ar-1016	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1221	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1232	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1242	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1248	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1254	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1260	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1262	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1268	0.00	0.00			0.00	0.00	0.00	0.00	0.00
SS Tetra	0.96	0.98							
SS Deca	0.73	0.68							

	%rsd	Column #2 1	2	3	4	5
Ar-1016		0.00	0.00	0.00	0.00	0.00
Ar-1221		0.00	0.00	0.00	0.00	0.00
Ar-1232		0.00	0.00	0.00	0.00	0.00
Ar-1242		0.00	0.00	0.00	0.00	0.00
Ar-1248		0.00	0.00	0.00	0.00	0.00
Ar-1254		0.00	0.00	0.00	0.00	0.00
Ar-1260		0.00	0.00	0.00	0.00	0.00
Ar-1262		0.00	0.00	0.00	0.00	0.00
Ar-1268		0.00	0.00	0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : X:\S5\2023\Dec23\121323\
Data File : s5121327.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 13 Dec 2023 04:18 pm
Operator : dbv
Sample : 67839-09 pcb x1
Misc :
ALS Vial : 27 Sample Multiplier: 1



Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Dec 13 16:31:09 2023
Quant Method : X:\S5\methods\S5PCB121123B.M
Quant Title : SVOA03 Method 8082A
QLast Update : Tue Dec 12 11:05:50 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

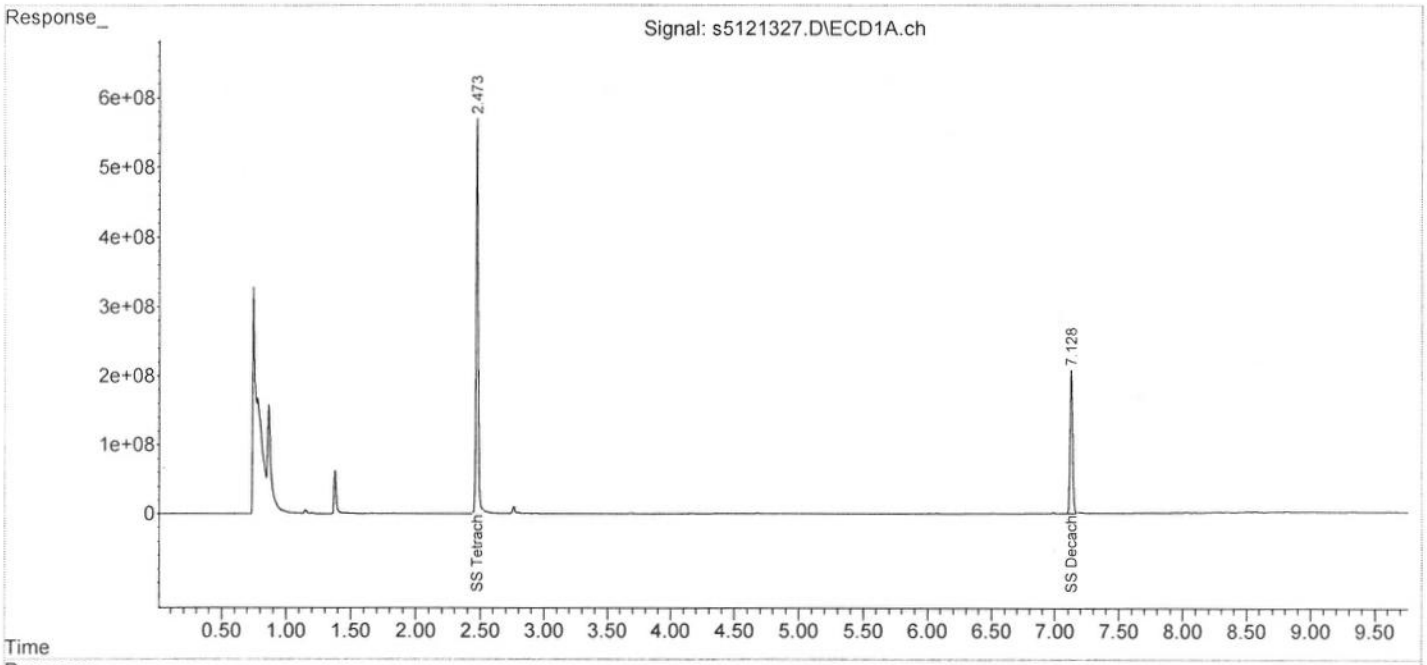
Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
System Monitoring Compounds							
1) S SS Tetrac...	2.473	2.292	569.7E6	580.1E6	0.961m	0.983m	BC = Baseline Correction
Spiked Amount	5.000 Range	30 - 150	Recovery =		19.22%#	19.66%#	
47) S SS Decach...	7.128f	7.199	209.9E6	173.2E6	0.732m	0.685m	BC = Baseline Correction
Spiked Amount	5.000 Range	30 - 150	Recovery =		14.64%#	13.70%#	
Target Compounds							

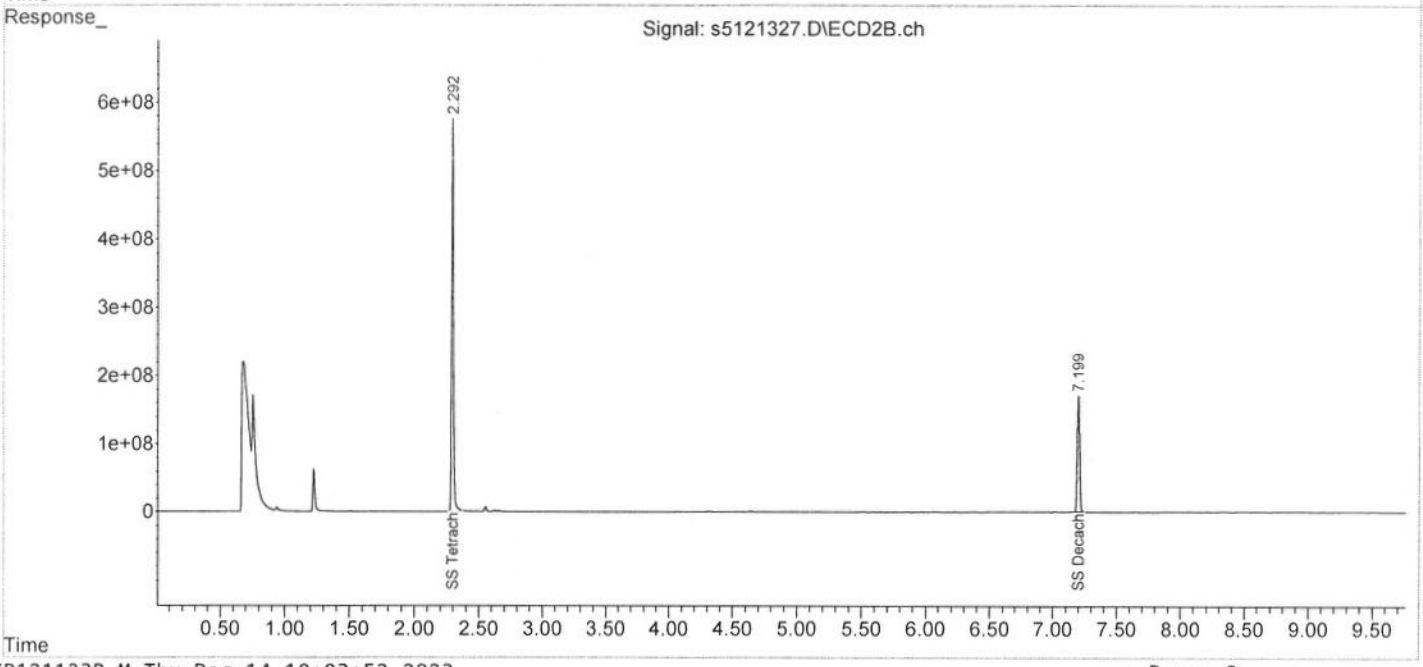
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : X:\S5\2023\Dec23\121323\
Data File : s5121327.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 13 Dec 2023 04:18 pm
Operator : dbv
Sample : 67839-09 pcb x1
Misc :
ALS Vial : 27 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Dec 13 16:31:09 2023
Quant Method : X:\S5\methods\S5PCB121123B.M
Quant Title : SVOA03 Method 8082A
QLast Update : Tue Dec 12 11:05:50 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : X:\S5\2023\Dec23\121123\
Data File : s5121159.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 11 Dec 2023 10:11 pm
Operator : dbv
Sample : 67839-09 pcb x1
Misc :
ALS Vial : 59 Sample Multiplier: 1

dbv
12/12/23 @ 14:17
DonnaV

Integration File signal 1: events.e
Integration File signal 2: events2.e
RR x1. 1260 ccv low col 1. DOD samples need col 1 to pass.
Quant Time: Dec 12 11:17:55 2023
Quant Method : X:\S5\methods\S5PCB121123A.M
Quant Title : SVOA03 Method 8082A
QLast Update : Tue Dec 12 11:05:50 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL
	System Monitoring Compounds						
1)	S SS Tetrac...	2.499	2.319	607.7E6	613.6E6	1.033m	1.048m
	Spiked Amount	5.000 Range	30 - 150	Recovery	=	20.66%#	20.96%#
47)	S SS Decach...	7.156f	7.230f	209.1E6	179.9E6	0.729m	0.713m
	Spiked Amount	5.000 Range	30 - 150	Recovery	=	14.58%#	14.26%#
	Target Compounds						

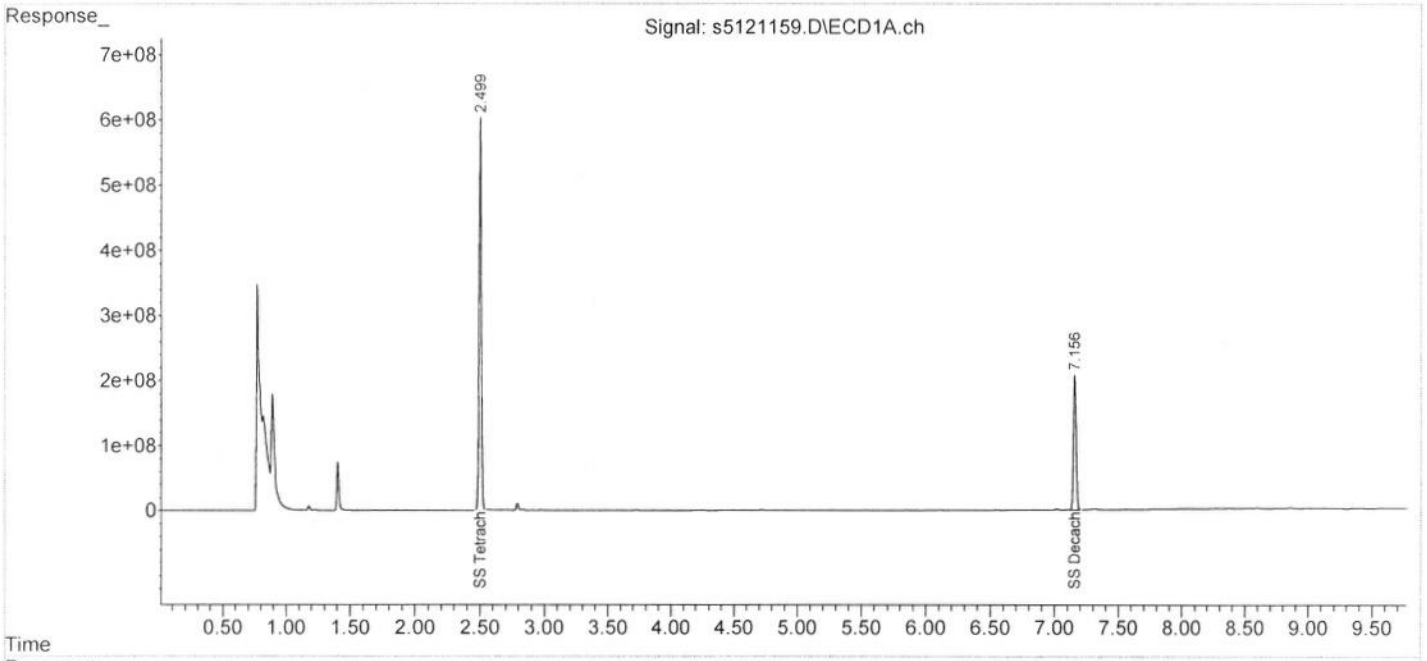
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

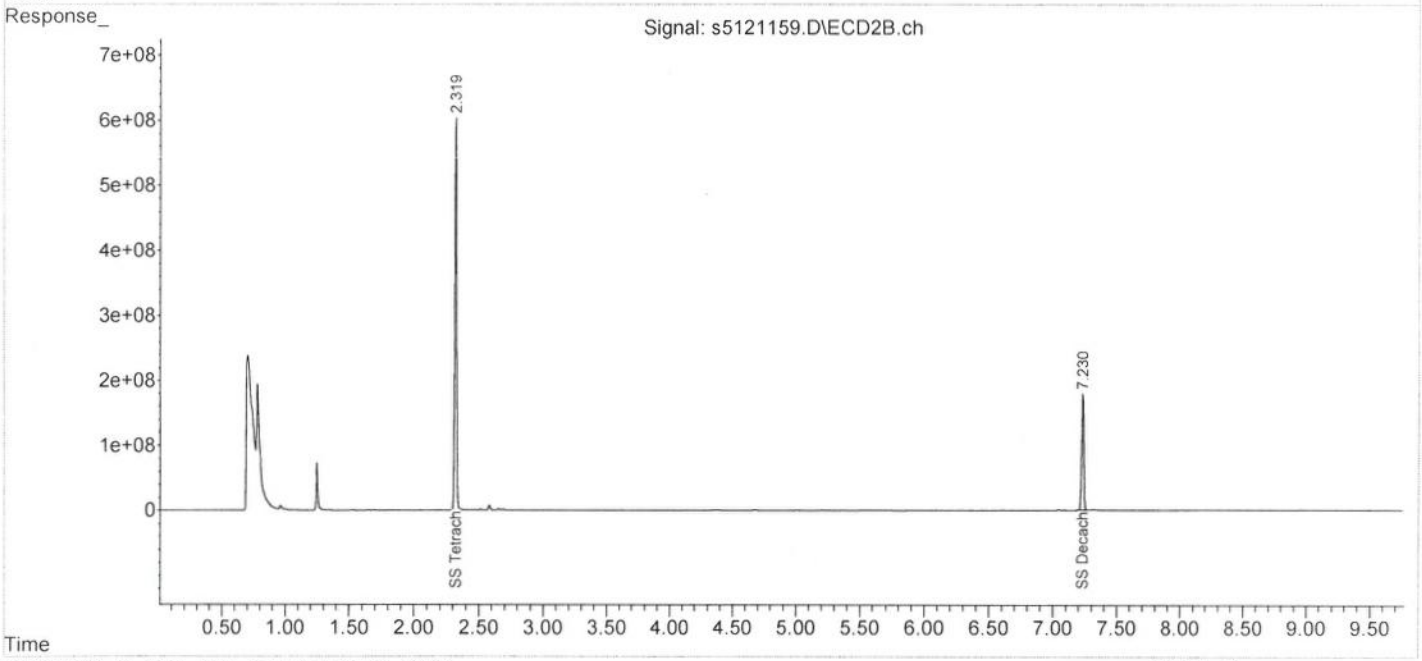
Quantitation Report (QT Reviewed)

Data Path : X:\S5\2023\Dec23\121123\
Data File : s5121159.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 11 Dec 2023 10:11 pm
Operator : dbv
Sample : 67839-09 pcb x1
Misc :
ALS Vial : 59 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Dec 12 11:17:55 2023
Quant Method : X:\S5\methods\S5PCB121123A.M
Quant Title : SVOA03 Method 8082A
QLast Update : Tue Dec 12 11:05:50 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





4046

This File:	L:\SVOA\Excel Reports\PCB\121323\s5121315
Analysis Group:	PCB
Field ID:	SY-BRMW1-65-75-110923 18001468
Sample:	67839-10 pcb x1 Dow Salvage Yard
Misc:	*o-10016B Cu added* CRE
Import File Name	s5 PCBs QC17225W DOD
TestGroupID	E8082DoD_A
Aqueous or Soil? (A or S)	A
Percent Solid (%)	0
Prep Date	Wednesday, December 06, 2023
Initial Weight/Volume	1
Volume	1
Lab#:	67839-010
AnalysisDate:	Wednesday, December 13, 2023
AnalysisTime:	13:43
Dilution:	1
AnalyzedBy:	DBV s5121315.D
QC_Code:	
Prep#	17225

Reviewer Checks:

- Quant Report: Reviewed, Analyst Initials & Date
- Chromatogram Checked, Major peaks identified
- Prep data checked: weight, volume, %solid, Prep date
- Field ID consistent with data and any field replicates
- Results consistent with any re-runs & internal QC
- Correct dilution and reason clear or noted
- Reason for reanalysis documented
- Surrogates pass or flagged & noted
- Flags checked (Expiration, Over Cal)
- Other QC failures, estimates or interferences documented
- Spot checked Reported Result with Quant Report
- Checked Audit flagged data in LIMS
- Correct values averaged
- Column RPD is OK or both results included
- Correct column reported

Notes:

Reviewer Initials & Date: 12/14/23

#	Surrogate Standards	Concentration (ug/mL)	Recovery	Flag	QC Limits	Report Column
1	SS Tetrachloro-m-xylene	1.04	**52%**		30-150	1
47	SS Decachlorobiphenyl	0.73	**37%**		30-150	1

#	AnalyteName	Concentration (ug/mL)	Flag	Report Column
2	Ar-1016	0.00		1
7	Ar-1221	0.00		1
12	Ar-1232	0.00		1
17	Ar-1242	0.00		1
22	Ar-1248	0.00		1
27	Ar-1254	0.00		1
32	Ar-1260	0.00		1
37	Ar-1262	0.00		1
42	Ar-1268	0.00		1

Aroclor	Column #1 average	Column #2 average	Column RPD limit 40%	%rsd	*Column #1* 1	2	3	4	5
Ar-1016	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1221	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1232	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1242	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1248	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1254	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1260	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1262	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1268	0.00	0.00			0.00	0.00	0.00	0.00	0.00
SS Tetra	1.04	1.07							
SS Deca	0.73	0.83							

	%rsd	*Column #2* 1	2	3	4	5
Ar-1016		0.00	0.00	0.00	0.00	0.00
Ar-1221		0.00	0.00	0.00	0.00	0.00
Ar-1232		0.00	0.00	0.00	0.00	0.00
Ar-1242		0.00	0.00	0.00	0.00	0.00
Ar-1248		0.00	0.00	0.00	0.00	0.00
Ar-1254		0.00	0.00	0.00	0.00	0.00
Ar-1260		0.00	0.00	0.00	0.00	0.00
Ar-1262		0.00	0.00	0.00	0.00	0.00
Ar-1268		0.00	0.00	0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : X:\S5\2023\Dec23\121323\
Data File : s5121315.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 13 Dec 2023 01:43 pm
Operator : dbv
Sample : 67839-10 pcb x1
Misc : o-10016B Cu added
ALS Vial : 15 Sample Multiplier: 1

12/14/23 @ 10:35
DonnaV

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Dec 13 14:15:39 2023
Quant Method : X:\S5\methods\S5PCB121123B.M
Quant Title : SVOA03 Method 8082A
QLast Update : Tue Dec 12 11:05:50 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
	System Monitoring Compounds							
1) S	SS Tetrac...	2.474	2.292	610.6E6	627.4E6	1.039m	1.075m	BC = Baseline Correction
	Spiked Amount	5.000 Range	30 - 150	Recovery =		20.78%#	21.50%#	
47) S	SS Decach...	7.129f	7.198	209.8E6	207.2E6	0.731m	0.831m	BC = Baseline Correction
	Spiked Amount	5.000 Range	30 - 150	Recovery =		14.62%#	16.62%#	
	Target Compounds							

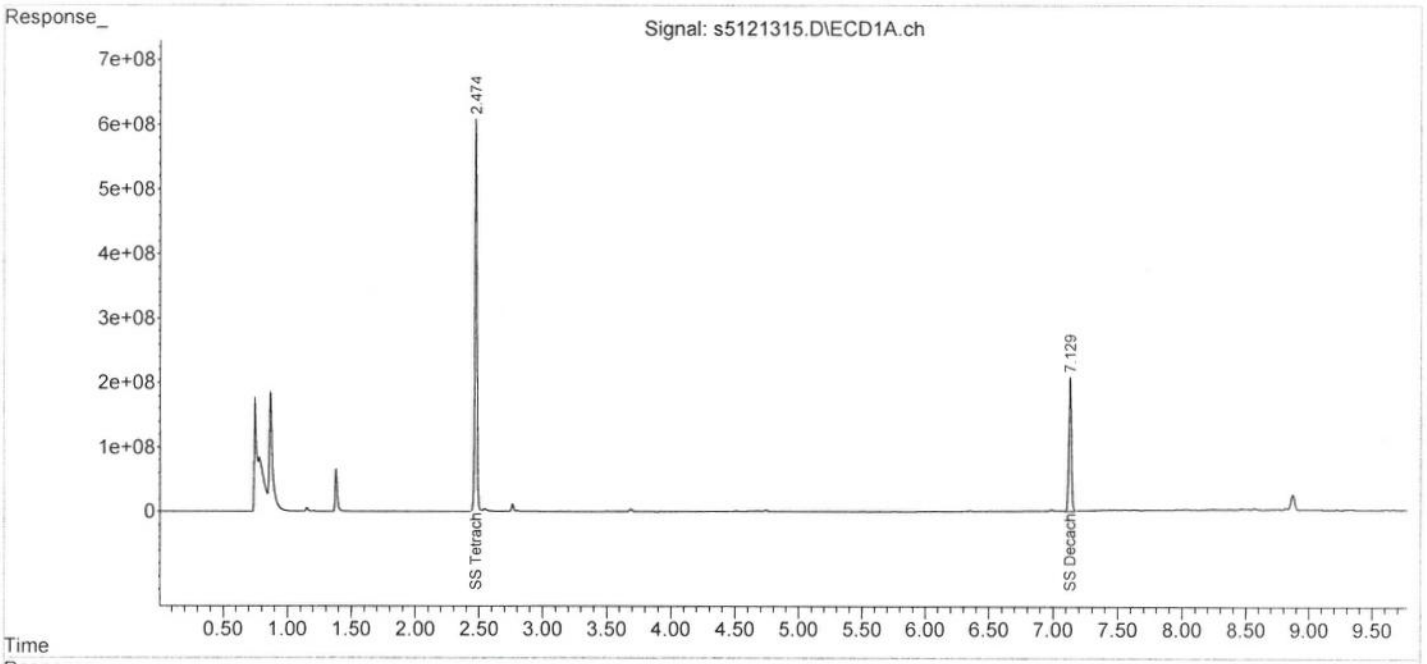
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

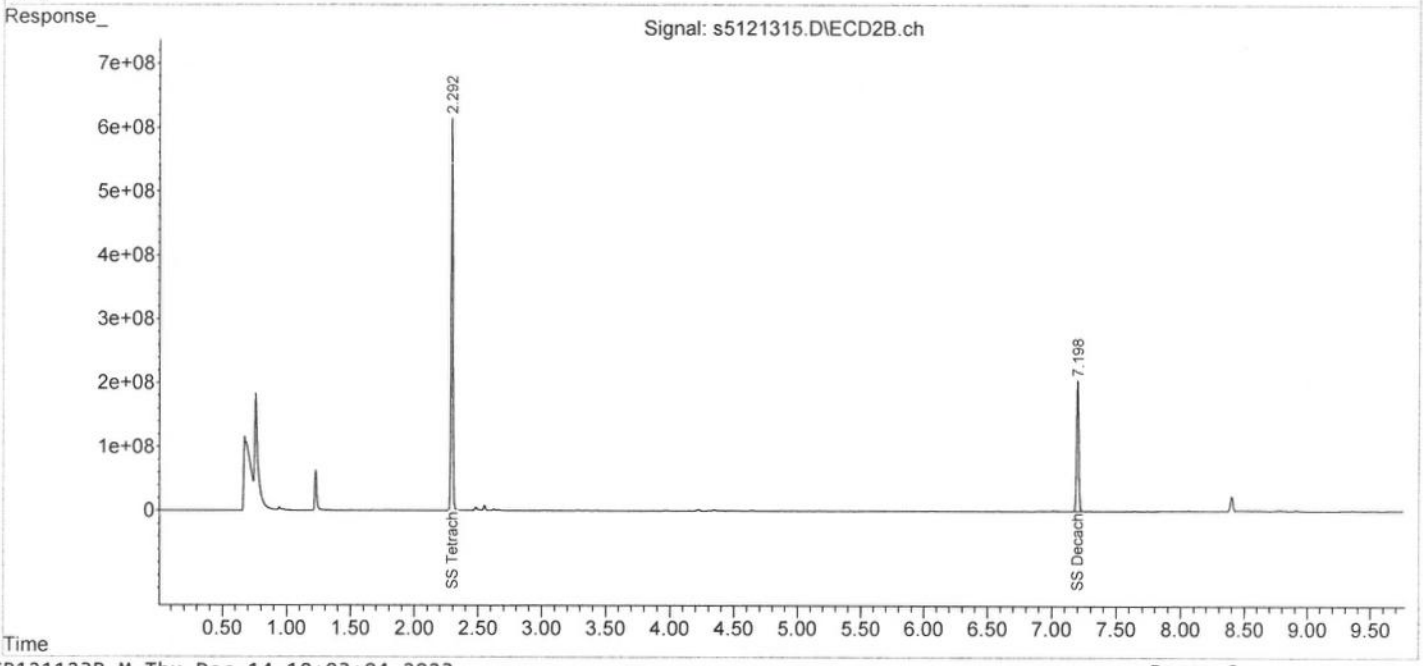
Quantitation Report (QT Reviewed)

Data Path : X:\S5\2023\Dec23\121323\
Data File : s5121315.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 13 Dec 2023 01:43 pm
Operator : dbv
Sample : 67839-10 pcb x1
Misc : o-10016B Cu added
ALS Vial : 15 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Dec 13 14:15:39 2023
Quant Method : X:\S5\methods\S5PCB121123B.M
Quant Title : SVOA03 Method 8082A
QLast Update : Tue Dec 12 11:05:50 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : X:\S5\2023\Dec23\121123\
Data File : s5121160.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 11 Dec 2023 10:24 pm
Operator : dbv
Sample : 67839-10 pcb x1
Misc :
ALS Vial : 60 Sample Multiplier: 1



Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Dec 12 11:18:01 2023
Quant Method : X:\S5\methods\S5PCB121123A.M
Quant Title : SVOA03 Method 8082A
QLast Update : Tue Dec 12 11:05:50 2023
Response via : Initial Calibration
Integrator: ChemStation

RR x1. 1260 ccv low col 1. DOD samples need col 1 to pass.
Put on copper

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL
System Monitoring Compounds						
1) S SS Tetrac...	2.501	2.320	608.9E6	594.0E6	1.036	1.010
Spiked Amount	5.000 Range	30 - 150	Recovery =		20.72%#	20.20%#
47) S SS Decach...	7.157f	7.232	230.7E6	192.5E6	0.810	0.767
Spiked Amount	5.000 Range	30 - 150	Recovery =		16.20%#	15.34%#
Target Compounds						

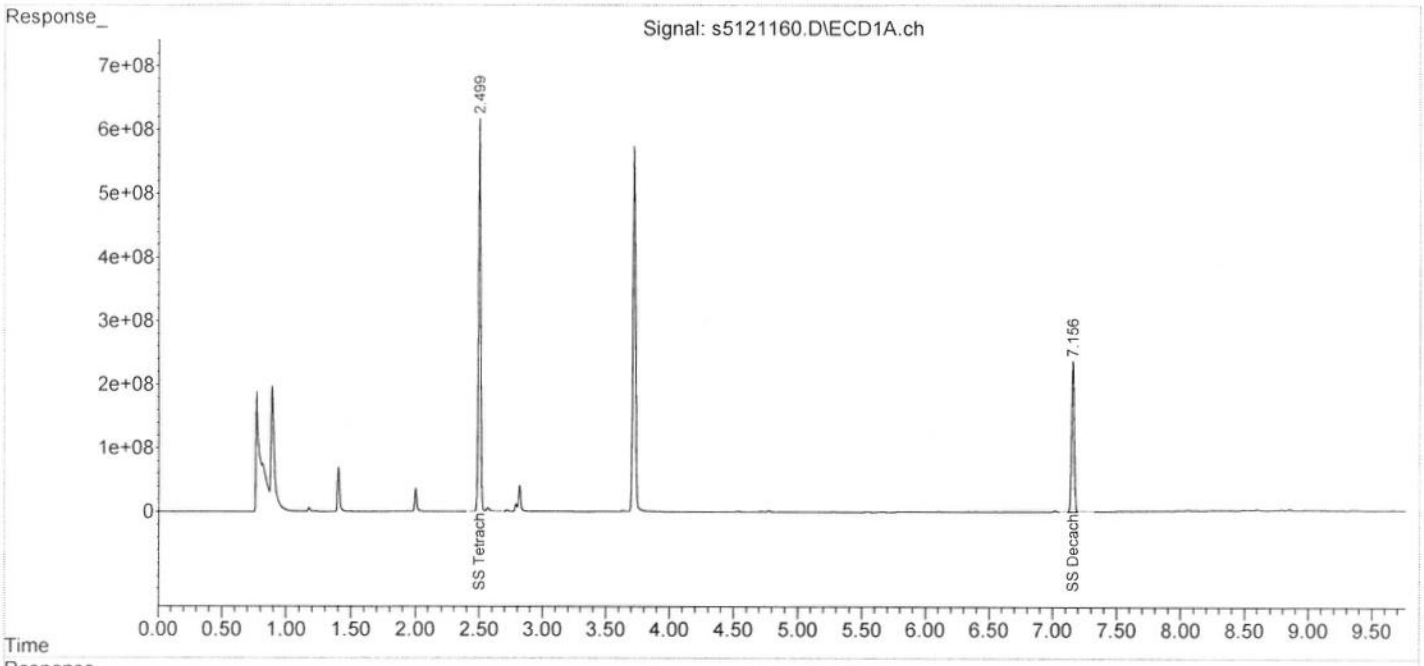
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

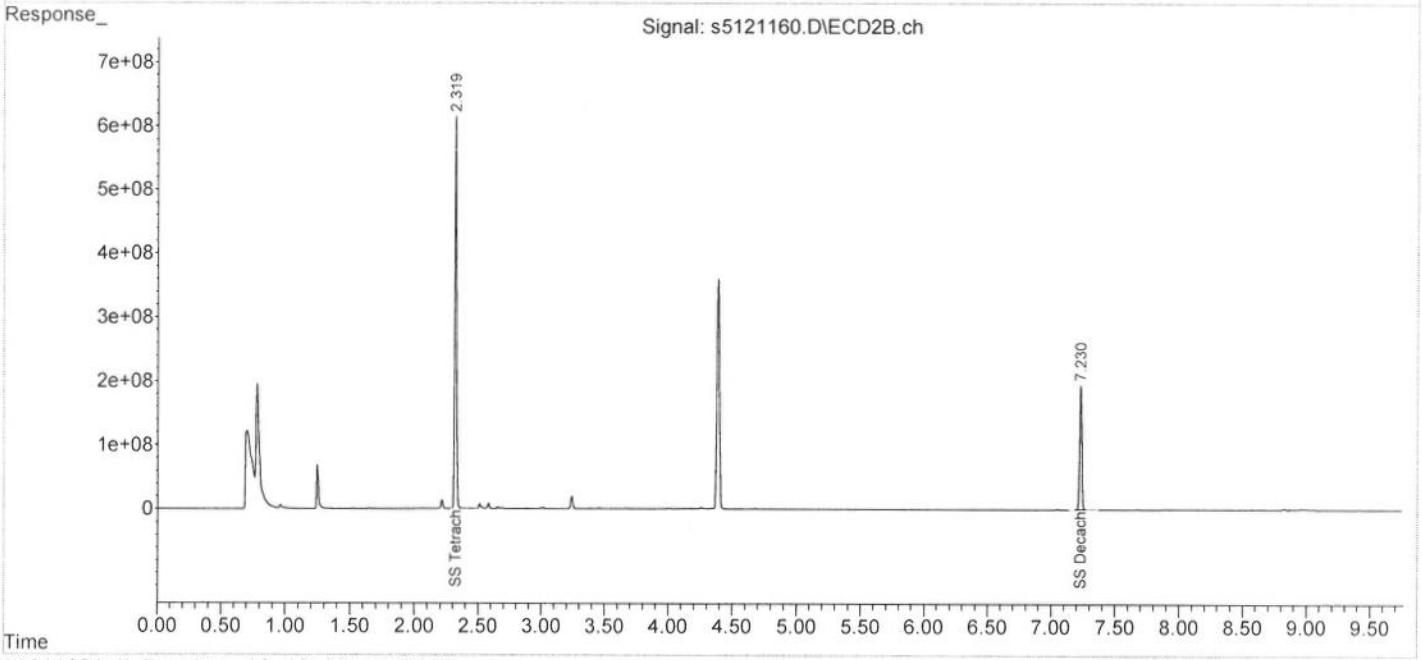
Quantitation Report (QT Reviewed)

Data Path : X:\S5\2023\Dec23\121123\
Data File : s5121160.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 11 Dec 2023 10:24 pm
Operator : dbv
Sample : 67839-10 pcb x1
Misc :
ALS Vial : 60 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Dec 12 11:18:01 2023
Quant Method : X:\S5\methods\S5PCB121123A.M
Quant Title : SVOA03 Method 8082A
QLast Update : Tue Dec 12 11:05:50 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





This File:	L:\SVOA\Excel Reports\PCB\121323\s5121328
Analysis Group:	PCB
Field ID:	SY-BRMW10-65-75-110923 18001468
Sample:	67839-11 pcb x1 Dow Salvage Yard
Misc:	0 CRE
Import File Name	s5 PCBs QC17225W DOD
TestGroupID	E8082DoD_A
Aqueous or Soil? (A or S)	A
Percent Solid (%)	0
Prep Date	Wednesday, December 06, 2023
Initial Weight/Volume	1
Volume	1
Lab#:	67839-011
AnalysisDate:	Wednesday, December 13, 2023
AnalysisTime:	16:31
Dilution:	1
AnalyzedBy:	DBV s5121328.D
QC_Code:	
Prep#	17225

Reviewer Checks:

- Quant Report: Reviewed, Analyst Initials & Date
- Chromatogram Checked, Major peaks identified
- Prep data checked: weight, volume, %solid, Prep date
- Field ID consistent with data and any field replicates
- Results consistent with any re-runs & internal QC
- Correct dilution and reason clear or noted
- Reason for reanalysis documented
- Surrogates pass or flagged & noted
- Flags checked (Expiration, Over Cal)
- Other QC failures, estimates or interferences documented
- Spot checked Reported Result with Quant Report
- Checked Audit flagged data in LIMS
- Correct values averaged
- Column RPD is OK or both results included
- Correct column reported

Notes:

12/14/23

Reviewer Initials & Date:

#	Surrogate Standards	Concentration (ug/mL)	Recovery	Flag	QC Limits	Report Column
1	SS Tetrachloro-m-xylene	0.82	41%		30-150	1
47	SS Decachlorobiphenyl	0.64	32%		30-150	1

#	AnalyteName	Concentration (ug/mL)	Flag	Report Column
2	Ar-1016	0.00		1
7	Ar-1221	0.00		1
12	Ar-1232	0.00		1
17	Ar-1242	0.00		1
22	Ar-1248	0.00		1
27	Ar-1254	0.00		1
32	Ar-1260	0.00		1
37	Ar-1262	0.00		1
42	Ar-1268	0.00		1

Aroclor	Column #1 average	Column #2 average	Column RPD limit 40%	%rsd	Column #1 1	2	3	4	5
Ar-1016	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1221	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1232	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1242	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1248	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1254	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1260	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1262	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Ar-1268	0.00	0.00			0.00	0.00	0.00	0.00	0.00
SS Tetra	0.82	0.82							
SS Deca	0.64	0.62							

	%rsd	Column #2 1	2	3	4	5
Ar-1016		0.00	0.00	0.00	0.00	0.00
Ar-1221		0.00	0.00	0.00	0.00	0.00
Ar-1232		0.00	0.00	0.00	0.00	0.00
Ar-1242		0.00	0.00	0.00	0.00	0.00
Ar-1248		0.00	0.00	0.00	0.00	0.00
Ar-1254		0.00	0.00	0.00	0.00	0.00
Ar-1260		0.00	0.00	0.00	0.00	0.00
Ar-1262		0.00	0.00	0.00	0.00	0.00
Ar-1268		0.00	0.00	0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : X:\S5\2023\Dec23\121323\
Data File : s5121328.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 13 Dec 2023 04:31 pm
Operator : dbv
Sample : 67839-11 pcb x1
Misc :
ALS Vial : 28 Sample Multiplier: 1



Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Dec 14 08:06:52 2023
Quant Method : X:\S5\methods\S5PCB121123B.M
Quant Title : SVOA03 Method 8082A
QLast Update : Tue Dec 12 11:05:50 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

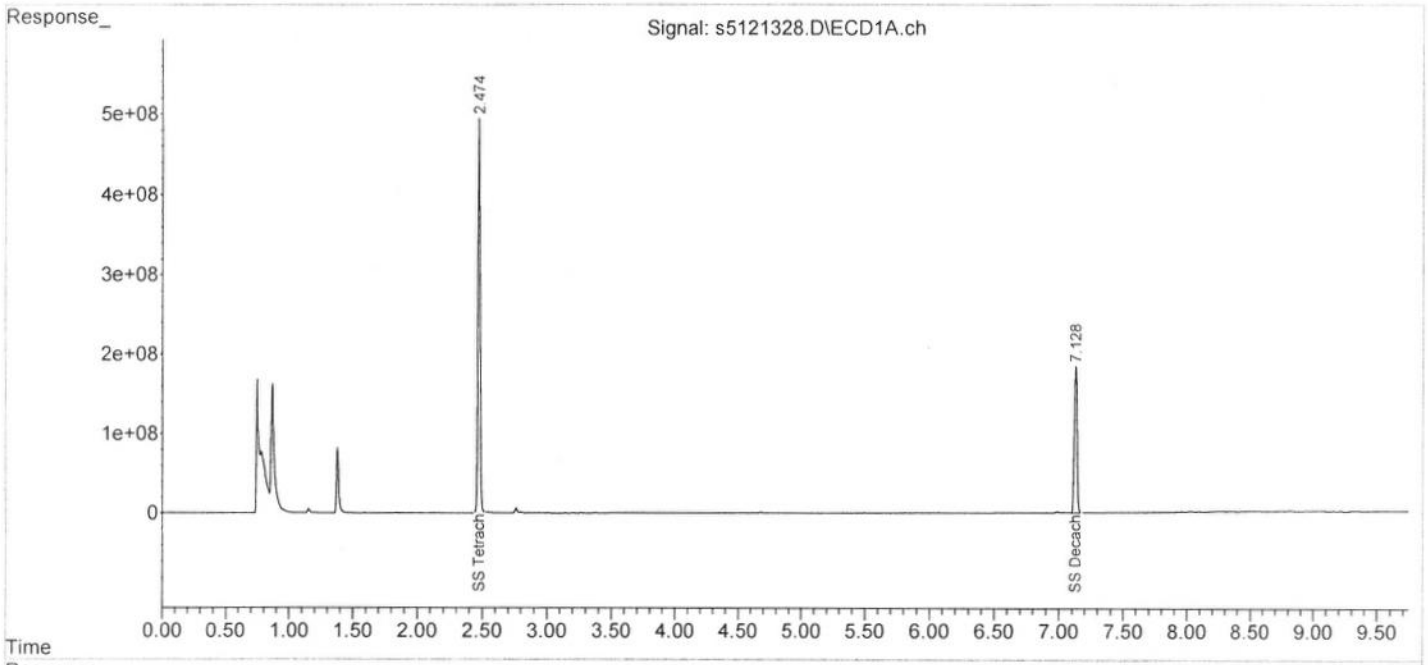
	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
	System Monitoring Compounds							
1) S	SS Tetrac...	2.474	2.293	495.0E6	494.4E6	0.822m	0.822m	BC = Baseline Correction
	Spiked Amount	5.000 Range	30 - 150	Recovery	=	16.44%#	16.44%#	
47) S	SS Decach...	7.128f	7.198	186.3E6	157.7E6	0.644m	0.620m	BC = Baseline Correction
	Spiked Amount	5.000 Range	30 - 150	Recovery	=	12.88%#	12.40%#	
	Target Compounds							

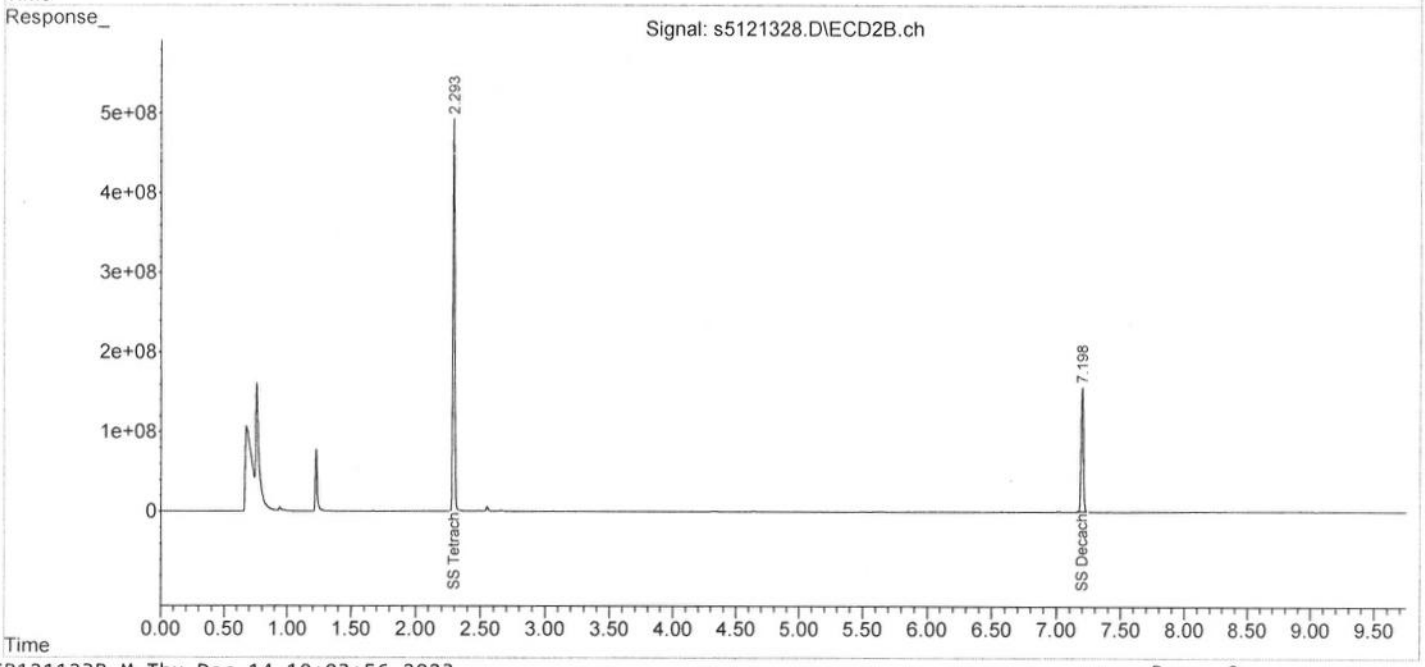
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : X:\S5\2023\Dec23\121323\
Data File : s5121328.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 13 Dec 2023 04:31 pm
Operator : dbv
Sample : 67839-11 pcb x1
Misc :
ALS Vial : 28 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Dec 14 08:06:52 2023
Quant Method : X:\S5\methods\S5PCB121123B.M
Quant Title : SVOA03 Method 8082A
QLast Update : Tue Dec 12 11:05:50 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : X:\S5\2023\Dec23\121123\
Data File : s5121161.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 11 Dec 2023 10:37 pm
Operator : dbv
Sample : 67839-11 pcb x1
Misc :
ALS Vial : 61 Sample Multiplier: 1

12/12/23 @ 14:17
DonnaV

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Dec 12 11:18:05 2023
Quant Method : X:\S5\methods\S5PCB121123A.M
Quant Title : SVOA03 Method 8082A
QLast Update : Tue Dec 12 11:05:50 2023
Response via : Initial Calibration
Integrator: ChemStation

RR x1. 1260 ccv low col 1. DOD samples need col 1 to pass.

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL
	System Monitoring Compounds						
1) S	SS Tetrac...	2.500	2.319	516.9E6	530.7E6	0.863m	0.890m
	Spiked Amount	5.000	Range 30 - 150		Recovery =	17.26%#	17.80%#
47) S	SS Decach...	7.157f	7.230f	180.9E6	149.2E6	0.625m	0.585m
	Spiked Amount	5.000	Range 30 - 150		Recovery =	12.50%#	11.70%#
	Target Compounds						

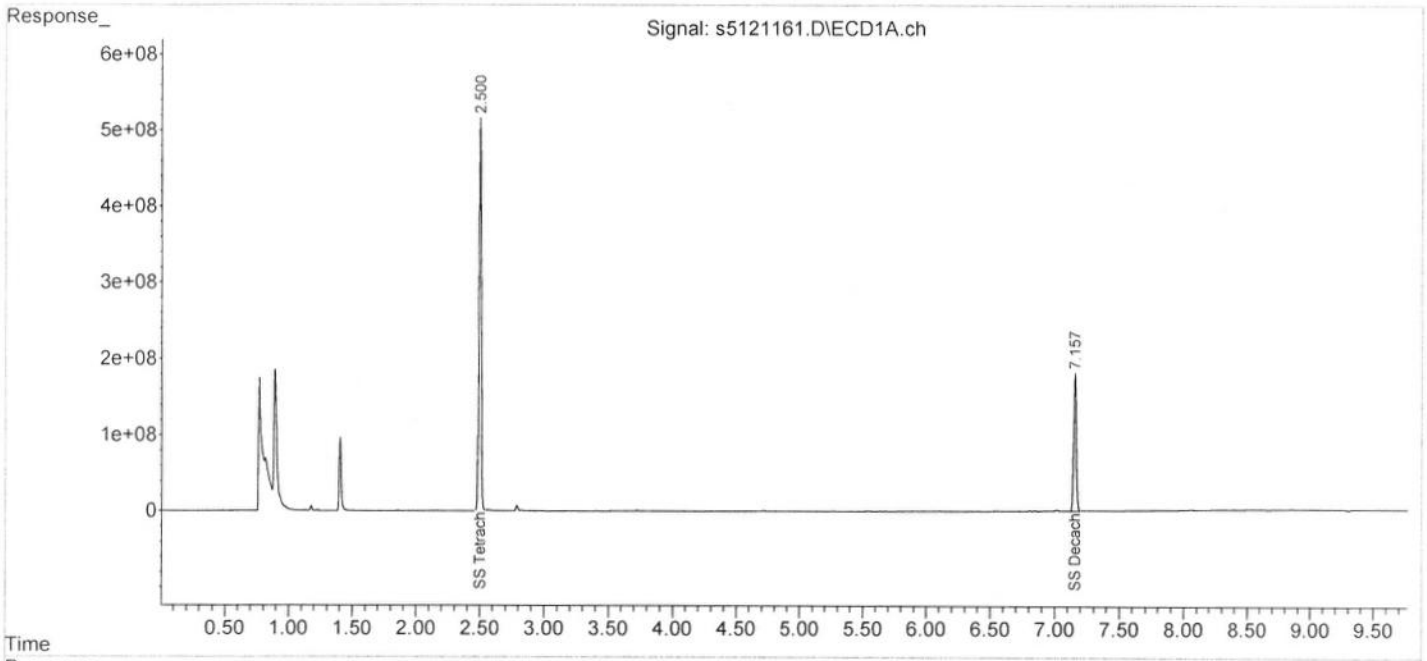
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

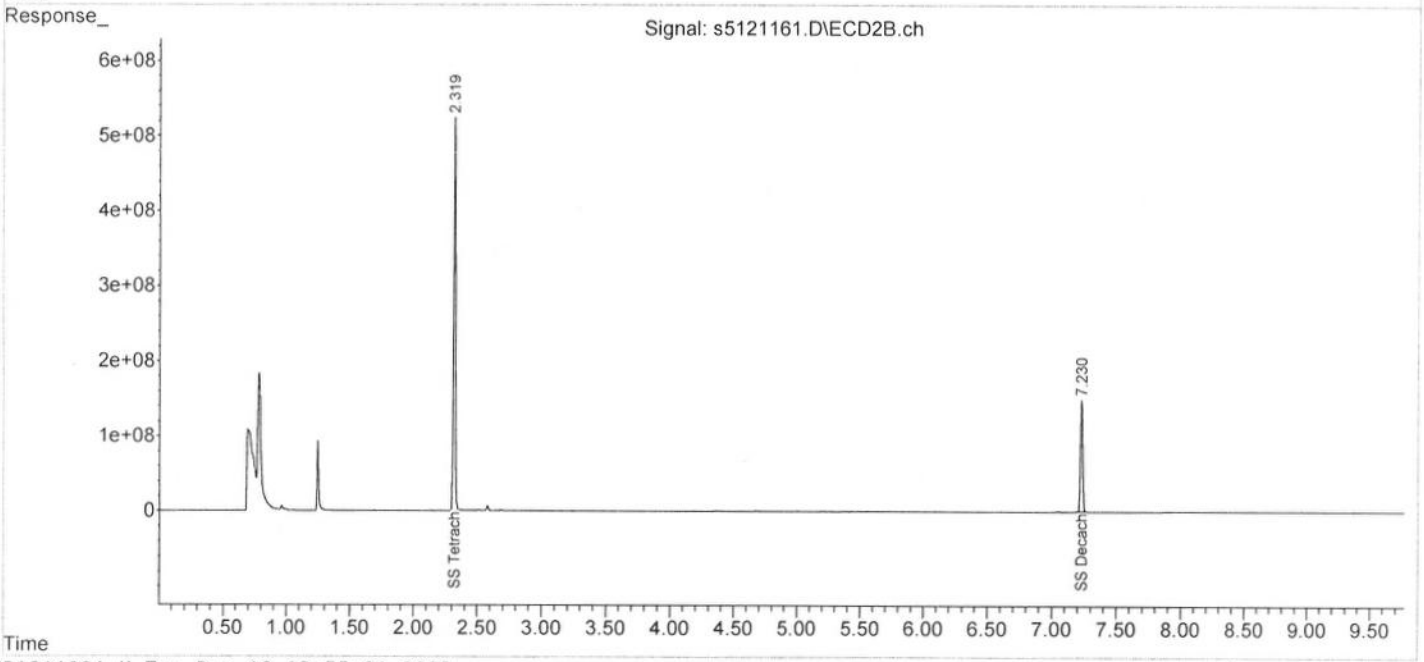
Quantitation Report (QT Reviewed)

Data Path : X:\S5\2023\Dec23\121123\
Data File : s5121161.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 11 Dec 2023 10:37 pm
Operator : dbv
Sample : 67839-11 pcb x1
Misc :
ALS Vial : 61 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Dec 12 11:18:05 2023
Quant Method : X:\S5\methods\S5PCB121123A.M
Quant Title : SVOA03 Method 8082A
QLast Update : Tue Dec 12 11:05:50 2023
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Sample Receipt Condition Report

67839

Absolute Resource Associates **Job Number:**

Samples Received from: ☐-UPS ☐-FedEx ☐-USPS ☒-Lab Courier ☐-Client Drop-off ☐-_____

Custody Seals - present & intact: ☐-Yes ☐-No ☒-N/A CoC signed: ☒-Yes ☐-No

Receipt Temp: 0 °C Samples on ice? ☒-Yes ☐-No ☐-N/A Sampled < 24 hrs ago? ☐-Yes ☒-No

PFAS-only real ice? ☐-Yes ☐-No ☒-N/A Any signs of freezing? ☐-Yes ☒-No

Comments:

Preservation / Analysis	Bottle Size/Type & Quantity										Check pH for ALL applicable* samples and document:
HCl	40mL(G)	50	250mL(P)		500mL(P)		1L(G)	11			pH ✓ OK
HNO_3	125mL(P)		250mL(P)	22	500mL(P)						pH ✓ OK
H_2SO_4	40mL(G)		60mL(P)		125mL(P)		250mL(P)		500mL(P)		
NaOH	125mL(P)		250mL(P)								
$(NH_4)_2SO_4$	60mL(P)		125mL(P)		250mL(P)						
ZnAc-NaOH	125mL(P)		250mL(P)								
Trizma	125mL(P)		250mL (P)								*pH ✓ by analyst: VOC, PFAS, TOC, O&G
NH_4Ac	125mL(P)		250mL (P)								Residual Cl not present:
NaS_2O_3	40mL(G)		120mL(P)								ABN625____ Pest608____
MeOH	20mL(G)		40mL(G)								Bacteria ResCl ✓ by analyst
None (solid)	2oz(G)		4oz(G)		8oz(G)		Syringe				PC Dry applicable? Y N
None (water)	40ml (G)		60mL(P)		125mL(P)		250mL(P)		500mL(P)		1L(G) 22 1L (P)
Mold	Cassette		Bulk		Plate		Tape Lift				
Asbestos	Cassette		Bulk								
Lead	Cassette		Bulk		Wipe						

Login Review	Yes	No	NA	Comments
Proper lab sample containers/enough volume/correct preservative?	X			
Analyses marked on COC match bottles received?	X			
VOC &TOC Water-no headspace? VOC Solid-MeOH covers solid, no leaks, Prep Expiration OK?		X		-03B VPH empty
PFAS: ARA bottles & samples/FRB same Lot#? QC rec'd, if req'd?			X	Lot ID#:_____
Bacteria bottles provided by ARA?			X	
Samples within holding time?	X			
Immediate tests communicated in writing: NO_3, NO_2,o-PO_4, pH, BOD, Coliform/*E. coli* (P/A or MPN), Enterococci, Color Surfactants, Turbidity, Odor, CrVI, Ferrous Iron, Dissolved Oxygen, Unpres 624			X	
Date, time & ID on samples match CoC?	X			
Rushes communicated to analyst in writing?			X	
Subcontracted samples sent to sub lab?			X	Date Prep'd:_____ Date sent:_____
Pesticides EPA 608 pH5-9?			X	
Compliance samples have no discrepancies/require no flags?			X	(Or must be rejected)
Log-in Supervisor notified immediately of following items:			X	Discrepancies, compliance samples (NHDES, MADEP, DoD etc.) or uncommon requests.

Inspected and Received By: OPL Date/Time: 11/14/23 10:46

Peer Review Checklist

- ☑ Client ID/Project Manager
- ☑ Project Name
- ☑ TAT/rushes communicated
- ☑ Received Date/Time
- ☑ On Ice, Temperature OK?
- ☑ PO# (if provided)
- ☑ Sub samples sent? Shipping Charge?
- ☑ Issues noted above communicated? Told LM about -03B
- ☑ Sample IDs fixed
- ☑ Matrix
- ☑ Date/Time collected
- ☑ Short HTs communicated
- ☑ Analyses in Correctly (?'s)
  - -references
  - -wastewater methods
- ☑ Notes from CoC in LIMS

Reviewed By: [signature] Date: 11/17/23

Notes: (continue on back as needed)

	Initials	Date	What was sent?
Uploaded / PDF			Report / Data / EDD / Invoice
Uploaded / PDF			Report / Data / EDD / Invoice
Uploaded / PDF			Report / Data / EDD / Invoice

QSD-04 Rev10 04/06/22 CLD (Page 1 of 1)

Absolute Resource associates
124 Heritage Avenue #16
Portsmouth, NH 03801
603-436-2001
absoluteresourceassociates.com

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

67839

Company Name: Credere Associates

Company Address: 776 Main St, Westbrook, ME

Report To: Allison Drouin

Phone #: 207-749-1141

Project Name: Dow Salvage Yard
Project #: 18001468
Project Location: NH MA (ME) VT

Accreditation Required? N/Y: ELAP
See absoluteresourceassociates.com for sample acceptance policy and current accreditation lists.

Protocol: RCRA SDWA NPDES; MCP NHDES (DOD)
Notify ARA if your samples require specific methods, certifications or compliance protocol.

Reporting Limits: (QAPP) EPA DW GW-1 S-1 Other

Lab Sample ID (Lab Use Only)	Field ID	# CONTAINERS	Matrix: WATER	SOLID	OTHER	Preservation Method: HCl	HNO_3	H_2SO_4	NaOH	MeOH	Sampling: DATE	TIME	SAMPLER
DISS -12	67839-01 SY-BRMW4-62-72-112923	9	X			X	X				11.9	0900	pH
-13	-02 SY-BRMW4D-62-72-112923											0905	pH
-14	-03 SY-BRMW4-138-148-112923											0940	pH
-15	-04 SY-BRMW3-47-62-112923											0945	CB
-16	-05 SY-BRMW3-145-155-112923											1000	CB
-17	-06 SY-BRMW3-287-297-112923											1015	CB
-18	-07 SY-BRMW4-291-301-112923											1100	pH
-19	-08 SY-BRMW1-42-52-112923											1145	JD
-20	-09 SY-BRMW1-150-157-112923											1240	JD
-21	-10 SY-BRMW1-65-75-112923											1350	JD
-22	-11 SY-BRMW10-65-75-112923											1355	JD

ANALYSIS REQUEST

| Grab (G) or Composite (C) | | | | | | | | | | |

Absolute Resource associates

124 Heritage Avenue #16
Portsmouth, NH 03801
603-436-2001
absoluteresourceassociates.com

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

Lab ID Here

Company Name: Credere Associates

Company Address: 776 Main St, Westbrook, ME

Report To: Allison Drouin

Phone #: 207-749-1141

Project Name: Dow Salvage Yard
Project #: 18001468
Project Location: NH MA ME VT

Accreditation Required? N/Y: ELAP
See absoluteresourceassociates.com for sample acceptance policy and current accreditation lists.

Protocol: RCRA SDWA NPDES MCP NHDES DOD
Notify ARA if your samples require specific methods, certifications or compliance protocol.

Reporting Limits: QAPP GW-1 S-1 EPA DW Other

ANALYSIS REQUEST

Lab Sample ID (Lab Use Only)	Field ID	# CONTAINERS	Matrix: WATER	Matrix: SOLID	Matrix: OTHER	Preservation Method: HCl	Preservation Method: HNO_3	Preservation Method: H_2SO_4	Preservation Method: NaOH	Preservation Method: MeOH	Sampling: DATE	Sampling: TIME	Sampling: SAMPLER	☒ VOC 8260 ☐ VOC 8260 NHDES ☐ VOC 8260 MADEP	☒ VOC 624.1 ☐ VOC BTEX MIBE, only ☐ VOC 8021VT	☐ VPH MADEP ☐ GRO 8015 ☐ 1,4-Dioxane	☐ VOC 524.2 ☐ VOC 524.2 NH List ☐ Gases-List:	☐ TPH 8100 ☐ DRO 8015 ☒ EPH MADEP ☐ TPH Fingerprint	☐ 8270PAH ☒ 8270ABN ☐ 625.1 ☐ EDB	☒ 8082 PCB ☐ 8081 Pesticides ☐ 608.3 Pest/PCB	☐ PFAS 537.1 ☐ PFAS 533 ☐ PFAS isotope dilution	☐ O&G 1664 ☐ Mineral O&G 1664	☐ pH ☐ BOD ☐ Conductivity ☐ Turbidity ☐ Apparent Color	☐ TSS ☐ TDS ☐ TS ☐ TVS ☐ Alkalinity ☐ Acidity	☐ RCRA Metals ☐ Priority Pollutant Metals ☐ TAL Metals ☐ Hardness	☒ Total Metals-list:	☒ Dissolved Metals-list:	☐ Ammonia ☐ COD ☐ TKN ☐ TN ☐ TON ☐ TOC ☐ Ferrous Iron	☐ T-Phosphorus ☐ Bacteria P/A ☐ Bacteria MPN ☐ Enterococci	☐ Cyanide ☐ Sulfide ☐ Nitrate + Nitrite ☐ Ortho P ☐ Phenols	☐ Nitrate ☐ Nitrite ☐ Chloride ☐ Sulfate ☐ Bromide ☐ Fluoride	☐ Corrosivity ☐ Ignitibility/FP	☐ TCLP Metals ☐ TCLP VOC ☐ TCLP SVOC ☐ TCLP Pesticide	Subcontract: ☐ Grain Size ☐ Herbicides ☐ Asbestos			Grab (G) or Composite (C)
23 ~~12~~	GAC-110923	4	X			X					11.9	1340	SG	X	X																							
24 ~~13~~	TB33-110923	2	X			X					11.9	1500	SG	X	X																							

HE 11/14/23

TAT REQUESTED
Priority (24 hr)* ☐
Expedited (48 hr)* ☐
Standard ☒
(10 Business Days)
*Date Needed

Invoice To: Jenn Taiani
Email: invoices@crederellc.com
PO #:
Quote #:
☐ NH Reimbursement Pricing

SPECIAL INSTRUCTIONS

Reporting Instructions:
☐ EDD: Report To (email):

RECEIVED ON ICE ☒YES ☐NO
TEMPERATURE 0 °C

CUSTODY RECORD
QSD-01 Revision 07/27/2022

	Date	Time		Date	Time
Relinquished by Sampler: [signature]	11.10	1300	Received by: [signature]	11/10	1:00
Relinquished by:			Received by:		
Relinquished by: [signature]	11/10	14:05	Received by Laboratory: [signature]	11/10/23	14:05

Aaron DeWees

From: Allison Drouin <adrouin@crederellc.com>
Sent: Tuesday, November 14, 2023 6:49 AM
To: Olivia Langdon
Cc: Cathy DeWees; Sean Gannon
Subject: RE: 67836 & 67839 Samples

CAUTION: [EXTERNAL EMAIL] DO NOT CLICK ON links or attachments unless you were expecting the message, recognize the sender's email address, and know the content is safe.

Hi Olivia,

Yes please proceed here in both cases. I'll make note.

Thank you,

Allison S. Drouin, PG, LG
Senior Geologist/Project Manager
VP of Quality Assurance and Technical Programs

Cell: 207-749-1141
Office: 207-828-1272 ext. 15

U.S. Small Business Administration

Small Business Prime Contractor
of the Year
2023 – New England Region

From: Olivia Langdon <OliviaL@absoluteresourceassociates.com>
Sent: Monday, November 13, 2023 4:34 PM
To: Allison Drouin <adrouin@crederellc.com>
Cc: Cathy DeWees <cathyd@absoluteresourceassociates.com>
Subject: 67836 & 67839 Samples

Hi Allison,

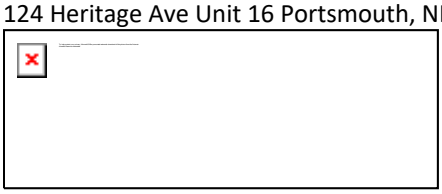
A few things we noticed with "Dow Salvage Yard" we had questions on.

Sample "SY-BRMW5-29-44-110823" from Group 1 samples had headspace in both vials. Would you like us to proceed with analysis?

Sample "SY-BRMW4-138-148-110923" from Group 2 samples had no volume in the second vial, so we only have the first vial to run for VPH analysis.

Thanks,
Olivia
P.S. Did you know ARA is your PFAS Resource? Click or call for more information about our PFAS Testing Services.

Olivia Langdon
Customer Relations & Sample Receiving Supervisor
OliviaL@absoluteresourceassociates.com
603-436-2001 x214
absoluteresourceassociates.com
124 Heritage Ave Unit 16 Portsmouth, NH 03801



WOSB, WBE, DBE, NELAC, DoDELAP, ISO/IEC 17025
The information contained in this email and any attachments may be privileged, confidential, and/or proprietary and is intended solely for the use of the person(s) to whom it is addressed. If you are not the intended recipient, any review, reliance, retransmission, dissemination or any other use of the information contained in this email and any attachments is strictly prohibited. If you have received this message in error, please notify the sender immediately by replying to this email and delete it from your data system. Thank you.
Please consider the environment before printing this email.

Aaron DeWees

From: Allison Drouin <adrouin@crederellc.com>
Sent: Monday, December 18, 2023 12:21 PM
To: Cliff Chase
Cc: Aaron DeWees
Subject: RE: 67839 Dow - sampled 11-09-23

Sorry, I wasn't quite following that what you sent was from FUDSChem. Its corrected in FUDSChem now.

Thank you,

Allison S. Drouin, PG, LG
Senior Geologist/Project Manager
VP of Quality Assurance and Technical Programs

Cell: 207-749-1141
Office: 207-828-1272 ext. 15



Small Business Prime Contractor
of the Year
2023 – New England Region

From: Cliff Chase <cliffc@absoluteresourceassociates.com>
Sent: Monday, December 18, 2023 11:43 AM
To: Allison Drouin <adrouin@crederellc.com>
Cc: Aaron DeWees <Aarond@absoluteresourceassociates.com>
Subject: RE: 67839 Dow - sampled 11-09-23

OK. Can you let me know when that's been changed in FUDSClem?

From: Allison Drouin <adrouin@crederellc.com>
Sent: Monday, December 18, 2023 11:37 AM
To: Cliff Chase <cliffc@absoluteresourceassociates.com>
Cc: Aaron DeWees <Aarond@absoluteresourceassociates.com>
Subject: RE: 67839 Dow - sampled 11-09-23

The COC appears correct, I think the login was off

Thank you,

Allison S. Drouin, PG, LG
Senior Geologist/Project Manager
VP of Quality Assurance and Technical Programs

Cell: 207-749-1141
Office: 207-828-1272 ext. 15

Small Business Prime Contractor
of the Year
2023 – New England Region

From: Cliff Chase <cliffc@absoluteresourceassociates.com>
Sent: Monday, December 18, 2023 11:35 AM
To: Allison Drouin <adrouin@crederellc.com>
Cc: Aaron DeWees <Aarond@absoluteresourceassociates.com>
Subject: RE: 67839 Dow - sampled 11-09-23

Can you provide a corrected CoC which we can include in the report?

From: Allison Drouin <adrouin@crederellc.com>
Sent: Monday, December 18, 2023 11:32 AM
To: Cliff Chase <cliffc@absoluteresourceassociates.com>
Cc: Aaron DeWees <Aarond@absoluteresourceassociates.com>
Subject: RE: 67839 Dow - sampled 11-09-23

CAUTION: [EXTERNAL EMAIL] DO NOT CLICK ON links or attachments unless you were expecting the message, recognize the sender's email address, and know the content is safe.

I correlated the IDs by the times and added what I think the ID should be from the COC.

Field Sample	Collection Date/ Time	Correct ID
SY-BRMW10-42-52-110923	11/09/2023 13:55	SY-BRMW1**D-65-75**-110923
SY-BRMW40-138-148-110923	11/09/2023 9:05	SY-BRMW4**D-62-72**-110923

Thank you,

Allison S. Drouin, PG, LG
Senior Geologist/Project Manager
VP of Quality Assurance and Technical Programs

Cell: 207-749-1141
Office: 207-828-1272 ext. 15

Small Business Prime Contractor
of the Year
2023 – New England Region

From: Cliff Chase <cliffc@absoluteresourceassociates.com>
Sent: Monday, December 18, 2023 11:24 AM
To: Allison Drouin <adrouin@crederellc.com>
Cc: Aaron DeWees <Aarond@absoluteresourceassociates.com>
Subject: 67839 Dow - sampled 11-09-23

Hi Allison,

I'm having difficulty reconciling the Field IDs and sampling times for 2 samples on the attached CoC, identified as 67839-02 & -11 with FUDSChem:

Field Sample	**Collection Date/ Time**
SY-BRMW10-42-52-110923	11/09/2023 13:55
SY-BRMW40-138-148-110923	11/09/2023 9:05

Can you let me know how to proceed?

Thanks,
Cliff
P.S. Did you know ARA is your PFAS Resource? Click or call for more information about our PFAS Testing Services.

Cliff Chase
VP, Director of Technology
cliffc@absoluteresourceassociates.com
O: 603-436-2001 x203 M: 603-966-6790
absoluteresourceassociates.com
124 Heritage Ave Unit 16 Portsmouth, NH 03801

WOSB, WBE, DBE, NELAC, DoDELAP, ISO/IEC 17025

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CREDERE ASSOCIATES

DOW MILITARY AIRFIELD
SALVAGE YARD

SQ6112

Jennifer Prescott
207-874-2400

KATAHDIN ANALYTICAL SERVICES
600 TECHNOLOGY WAY
SCARBOROUGH, ME 04074

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SAMPLE DATA PACKAGE

NARRATIVE
KATAHDIN ANALYTICAL SERVICES
CREDERE ASSOCIATES
DOW MILITARY AIRFIELD SALVAGE YARD
SQ6112

Sample Receipt

The following samples were received on November 07, 2023 and were logged in under Katahdin Analytical Services work order number SQ6112 for a hardcopy due date of November 28, 2023.

KATAHDIN Sample No.	CREDERE Sample Identification
SQ6112-1	SY-OBMW7-110623
SQ6112-2	SY-OBMW10-110623
SQ6112-3	TB30-110623

The samples were logged in for the analyses specified on the chain of custody form. All problems encountered and resolved during sample receipt have been documented on the applicable chain of custody forms.

We certify that the test results provided in this report meet all the requirements of the NELAP standards unless otherwise noted in this narrative or in the Report of Analysis.

We certify that the test results provided in this report are accredited under the laboratory's ISO/IEC 17025:2017 and DoD-ELAP accreditation issued by the ANSI-ASQ National Accreditation Board. Refer to certificate and scope of accreditation L2223.

Analytes which are reported but not listed on our ANAB scope of accreditation will be "^" flagged and the following language will be included in the case narrative for all DoD compliant work: "^" Indicates this analyte is not included on Katahdin Analytical Services DoD-ELAP Scope of Accreditation.

Sample analyses have been performed by the methods as noted herein.

Should you have any questions or comments concerning this Report of Analysis, please do not hesitate to contact your Katahdin Analytical Services Project Manager, **Heather Manz**. This narrative is an integral part of the Report of Analysis.

Organics Analysis

The samples of Work Order SQ6112 were analyzed in accordance with Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, EPA publication SW-846, Third Edition, Final Updates I (1993), II (1995), IIA (1994), IIB (1995), III (1997), IIIA (1999), IIIB (2005), IV (2008), V (2015) and VI (2019), and/or "Analysis of Dissolved Methane, Ethane, and Ethylene in Water Samples Using a GC Headspace Equilibration Technique", EPA Method RSK175, Revision No.2, May 2004, and/or for the specific methods listed below or on the Report of Analysis.

RSK 175 v.2 Analysis

The target analyte methane was detected below ½ the LOQ in the method blank WG345521-1. According to the DoD QSM, a method blank is considered to be contaminated if the concentration of any target analyte in the blank exceeds ½ the reporting limit and is greater than 1/10 the amount measured in any sample. Since the method blank was acceptable, no further action was taken.

8260C SIM Analysis

There were no protocol deviations or observations noted by the organics laboratory staff for this analysis.

8270D SIM Analysis

Sample SQ6112-2RA had low recoveries for the extraction surrogates 2-methylnaphthalene-d10 and pyrene-d10 that were outside of the DoD QSM acceptance limits. The client was contacted on 12/06/2023 and the laboratory was instructed to proceed with narration.

The method blank WG345173-1 had a high recovery for the extraction surrogate 2-methylnaphthalene-d10 that was outside of the DoD QSM acceptance limits. As this would indicate a high bias, and there were no target analytes detected in the method blank, no further action was taken.

The LCS WG345173-2RA had a high recovery for the extraction surrogate 2-methylnaphthalene-d10 that was outside of the DoD QSM acceptance limits. Since the recoveries of the spiked target analytes were acceptable, no further action was taken.

The initial calibration analyzed on the N instrument on 12/01/2023 had %RSD values for analytes that exceeded the method acceptance limit of 20%. For these analytes, either a linear or quadratic model was used for quantitation instead of an average response factor. The target analytes indeno(1,2,3-cd)pyrene and dibenzo(a,h)anthracene failed for both the linear and quadratic models in the initial calibration curve due to the correlation coefficient and the coefficient of determination being less than the method acceptance criteria of 0.995 and 0.990 respectively. These compounds were calibrated using the average model.

The initial calibration on the N instrument on 12/01/2023 had RSE values for the target analytes benzo(a)pyrene and benzo(g,h,i)perylene that were outside of the acceptance limits.

Note: The Form VII has a column for %D that is set to 20%. The DoD QSM criterion for an opening CV is 20%D and a closing CV is 50%D. All of the compounds in the CV's were evaluated to either 20% criteria for opening CV's or 50% criteria for closing CV's.

The closing CV (file N0323) had low responses for the internal standards chryseme-d12 and perylene-d12, which were outside the DoD QSM acceptance limits of -50% to +100% of the responses of the internal standard of the mid-point level calibration standard from the initial calibration. If a closing CV fails, the DoD QSM allows for the analysis of two additional CV's which do not need to be within the 12-hour window. The two additional CV's (files N0324 and N0325) were analyzed, and all three CV's are reported.

There were no other protocol deviations or observations noted by the organics laboratory staff.

Wet Chemistry Analysis

The samples of Work Order SQ6112 were analyzed in accordance with the specific methods listed on the Report of Analysis.

Analyses for hexavalent chromium were performed according to Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, EPA publication SW-846, Third Edition, Final Updates I (1993), II (1995), IIA (1994), IIB (1995), III (1997), IIIA (1999), IIIB (2005), IV (2008), V (2015) and VI (2019).

Analyses for alkalinity, ferrous iron, and total organic carbon were performed according to "Standard Methods for the Examination of Water and Wastewater", 15th, 16th, 17th, 18th, 19th, and 20th editions, 1980, 1985, 1989, 1992, 1995, 1999. APHA-AWWA-WPCF.

Analyses for chloride, nitrate, and sulfate were performed according to “Methods for the Determination of Inorganic Substances in Environmental Samples”, EPA 600/R-93/100, August 1993.

All Wet Chemistry results were evaluated to Katahdin Analytical Services’ Method Detection Limits (MDL). Measured concentrations that fall between the MDL and Katahdin’s Limit of Quantitation (LOQ) are flagged “J”. Measured concentrations that are below the MDL are flagged “U” and reported as “U LOD”, where “LOD” is the numerical value of the Limit of Detection.

All analyses were performed within analytical holding times. All quality control criteria were met.

On the raw data packet for the total organic carbon (TOC) analysis, the calibration curve used for processing the TOC data for the samples of work order SQ6112 is marked as having expired on 11/24/23 (the samples were analyzed on 12/1/23). Katahdin’s Standard Operating Procedure for TOC analysis states that calibration curves are only valid for 3 months, but this is in the process of being updated to the most current standards which state that these calibration curves do not have a 3-month expiration date.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package has been authorized by the Quality Assurance Officer, or their designee, as verified by the following signature.



01/03/2024

Jennifer Prescott
Quality Assurance Officer

Katahdin Analytical Services, Inc.

Manual Integration Codes For GC/MS, GC, HPLC and/or IC

M1	Peak splitting.
M2	Well defined peaks on the shoulders of the other peaks.
M3	There is additional area due to a coeluting interferant.
M4	There are negative spikes in the baseline.
M5	There are rising or falling baselines.
M6	The software has failed to detect a peak or misidentified a peak.
M7	Excessive peak tailing.
M8	Analysis such as GRO, DRO and TPH require a baseline hold.
M9	Peak was not completely integrated as in GC/MS.
M10	Primary ion was correctly integrated, but secondary or tertiary ion needed manual integration as in GC/MS.
M11	For GC analysis, when a sample is diluted by 1:10 or more, the surrogate is set to undetected and then the area under the surrogate is manually integrated.
M12	Manual integration saved in method due to TurboChrom floating point error.

Katahdin Analytical Services, LLC. **Sample Receipt Condition Report**

Client: Credere Associates	KAS PM: HHM	Sampled By: Client
Project:	KIMS Entry By: JGB	Delivered By: UniShip
KAS Work Order#: SQ 6112	KIMS Review By: HHM	Received By: EP
	Labeled By: EP	
SDG #:	Cooler: 1 of 1	Date/Time Rec.: 11-7-23 1008

Receipt Criteria	Y	N	EX*	NA	Comments and/or Resolution
1. Custody seals present / intact?	✓				
2. Chain of Custody present in cooler?	✓				
3. Chain of Custody signed by client?	✓				
4. Chain of Custody matches samples?	✓				
5. Temperature Blanks present? If not, take temperature of any sample w/ IR gun.	✓				Temp (°C): 1.1° ✓ Thermometer ID: IR-1
Samples received at <6 °C w/o freezing?	✓				Note: Not required for metals (except Hg soil) analysis.
Ice packs or ice present?	✓				The lack of ice or ice packs (i.e. no attempt to begin cooling process) or insufficient ice may not meet certain regulatory requirements and may invalidate certain data.
If yes, was there sufficient ice to meet temperature requirements?	✓				
If temp. out, has the cooling process begun (i.e. ice or packs present) and sample collection times <6hrs., but samples are not yet cool?				✓	Note: No cooling process required for metals (except Hg soil) analysis.
6. Volatiles: **Aqueous:** No bubble larger than a pea?	✓				
Soil/Sediment: Received in airtight container?				✓	
Received in methanol?				✓	
Methanol covering soil?				✓	
D.I. Water - Received within 48 hour HT?				✓	
7. Trip Blank present in cooler?	✓				
8. Proper sample containers and volume?	✓				
9. Samples within hold time upon receipt?	✓				
10. Aqueous samples properly preserved? Metals, COD, NH3, TKN, O/G, phenol, TPO4, N+N, TOC, DRO, TPH – pH <2	✓				
Sulfide - >9				✓	
Cyanide – pH >12				✓	
11. Bottleware Prepped on:					

* Log-In Notes to Exceptions: document any problems with samples or discrepancies or pH adjustments.

Katahdin ANALYTICAL SERVICES
600 Technology Way
P.O. Box 540
Scarborough, ME 04070
Tel: (207) 874-2400
Fax: (207) 775-4029

Chain of Custody

Client:	Contact:	Phone #:	Fax #:
Credere Associates	Allison Drouin	207-749-1141	( )
Address: 776 Main Street	City: Westbrook	State: ME	Zip Code: 04092
Purchase Order #:	Proj. Name/No.: Dow/18001468		Katahdin Quote #:
Bill (if different than above): invoices@crederellc.com	Address:		
Sampler (Print/Sign):			Copies To:

LAB USE ONLY — Work Order #: SQ 6112 (Katahdin Project Number)

Remarks:

Shipping Info: FEDEX UPS CLIENT

Airbill No:

Temp C Temp Blank Intact Not Intact

*	Sample Description	Date/Time Collected	Matrix	No. of Containers	Analysis and Container Type Preservatives: Filt. Y/N CVOC SIM	Filt. Y/N BNA SIM	Filt. Y/N TOC	Filt. Y/N Dissolved Gasses	Filt. Y/N Anions	Filt. Y/N Alkalinity	Filt. Y/N Hex. Chromium	Filt. Y/N Ferrous Iron	Filt. Y/N	Filt. Y/N
	SY-08MW7-110623	11/6/1610	W	12	X	X	X	X	X	X	X	X		
	SY-08MW10-110623	11/6/1620	W	12	X	X	X	X	X	X	X	X		
	TB30-110623	11/6/1600	W	3	X									

COMMENTS:

Relinquished By:	Date/Time	Received By:	Relinquished By:	Date/Time	Received By:
	11/7/0800			11-7-23 0734	
Relinquished By:	Date/Time	Received By:	Relinquished By:	Date/Time	Received By:
	11-7-23	10:08			

The terms and conditions on the following page hereof shall govern services, except when a signed contractual agreement exists.

Katahdin
ANALYTICAL SERVICES

Katahdin Analytical Services

Login Chain of Custody (ln01)

Nov. 10, 2023
01:17 PM

Login Number: SQ6112

Account: CREDEREASSOC001
Credere Associates

Project: CREDERE-DOW

Primary Report Address:
Allison Drouin
Credere Associates, LLC
776 Main Street

Westbrook, ME 04092

adrouin@crederellc.com

Primary Invoice Address:
Accounts Payable
Credere Associates, LLC
776 main Street

Westbrook,ME 04092

jenn@crederellc.com (also, cc PM)

Report CC Addresses:
Invoice CC Addresses:

Quote/Incoming: CREDERE-DOW

Login Information

ANALYSIS INSTRUCTIONS	:	VOA, PAHs, MEE, Alk, TOC are on hold. DOD, ND to LOD w/ J flags. SVOA use 3550C/3510C/8270D mg/kg. Anions = NO3, SO4, Cl. When hex Cr MS/MSD fail, perform pH & ORP, include this data in the case narrative. Need to include copies of standard receipt and standard prep logbooks in final report.
CHECK NO.	:	
CLIENT PO#	:	18001468
CLIENT PROJECT MANAGE	:	Peter Thompson
CONTRACT	:	W912WJ-18-C-0019
COOLER TEMPERATURE	:	1.1
DELIVERY SERVICES	:	Uniship
EDD FORMAT	:	FUDSCHEM
ISM INSTRUCTIONS	:	
LOGIN INITIALS	:	JCB
PM	:	HHM
PROJECT NAME	:	Dow Military Airfield Salvage Yard
QC LEVEL	:	IV
REPORT INSTRUCTIONS	:	Upload to FUDSChem. Report to adrouin@crederellc.com and apollom@crederellc.com. Invoices to pthompson@crederellc.com and jenn@crederellc.com.
SDG ID	:	
SDG STATUS	:	
TEMPLATE	:	
VERBAL TAT	:	

HHM

1:37 pm, Nov 10, 2023

Run Reports: Logindetail

Login Number: SQ6112

Account: CREDEREASSOC001
Credere Associates

Project: CREDERE-DOW

Quote/Incoming: CREDERE-DOW

Laboratory Sample ID	Client Sample Number	Collect Date/Time	Receive Date	PR	Due Date	Verbal Due Date	Mailed
SQ6112-1	SY-OBMW7-110623	06-NOV-23 16:10	07-NOV-23		28-NOV-23		

Sample Comments: VOA, PAHs, MEE, Alk, TOC are on hold. Anions = NO3, SO4, Cl.

Matrix		Product	Hold Date (shortest)		Notes	Bottle Type
Aqueous	S	E300.0-ANIONS	09-NOV-23	SHORT		250mL Plastic
Service	S	EDD-CHARGE				
Service	S	REPORTING				
Aqueous	S	RSKSOP175-MEE	20-NOV-23			40mL Vial+HCl
Aqueous	S	SM2320B-ALKALINITY	20-NOV-23			500mL Plastic
Aqueous	S	SM3500D-FERROUS IRON	07-NOV-23	SHORT	Rec. on Holddate	250mL Plastic+HCl
Aqueous	S	SM5310B-TOC	04-DEC-23			40mL Vial+HCl
Aqueous	S	SW7196A-CRVI-AQ	07-NOV-23	SHORT	Rec. on Holddate	250mL Plastic
Aqueous	S	SW8260SIM-S	20-NOV-23			40mL Vial+HCl
Aqueous	S	SW8270SIMPAH-S	13-NOV-23			1L N-Amber Glass
Service	S	WASTE-DISPOSAL				

SQ6112-2	SY-OBMW10-110623	06-NOV-23 16:20	07-NOV-23		28-NOV-23		

Sample Comments: VOA, PAHs, MEE, Alk, TOC are on hold. Anions = NO3, SO4, Cl.

Matrix		Product	Hold Date (shortest)		Notes	Bottle Type
Aqueous	S	E300.0-ANIONS	09-NOV-23	SHORT		250mL Plastic
Aqueous	S	RSKSOP175-MEE	20-NOV-23			40mL Vial+HCl
Aqueous	S	SM2320B-ALKALINITY	20-NOV-23			500mL Plastic
Aqueous	S	SM3500D-FERROUS IRON	07-NOV-23	SHORT	Rec. on Holddate	250mL Plastic+HCl
Aqueous	S	SM5310B-TOC	04-DEC-23			40mL Vial+HCl
Aqueous	S	SW7196A-CRVI-AQ	07-NOV-23	SHORT	Rec. on Holddate	250mL Plastic
Aqueous	S	SW8260SIM-S	20-NOV-23			40mL Vial+HCl
Aqueous	S	SW8270SIMPAH-S	13-NOV-23			1L N-Amber Glass

SQ6112-3	TB30-110623	06-NOV-23 16:00	07-NOV-23		28-NOV-23		

Sample Comments: VOA on hold.

Matrix		Product	Hold Date (shortest)	Notes	Bottle Type
Aqueous	S	SW8260SIM-S	20-NOV-23		40mL Vial+HCl

Total Samples: 3 ***Total Analyses: 20***

1:37 pm, Nov 10, 2023

Run Reports: Logindetail

SAMPLE DATA SUMMARY PACKAGE

KATAHDIN ANALYTICAL SERVICES - ORGANIC DATA QUALIFIERS

U Indicates the compound was analyzed for but not detected above the specified level. This level may be the Practical Quantitation Level (PQL) (also called Limit of Quantitation (LOQ)), the Limit of Detection (LOD) or Method Detection Limit (MDL) as required by the client.

Note: All results reported as "U" MDL have a 50% rate for false negatives compared to those results reported as "U" PQL, "U" LOQ or "U" LOD, where the rate of false negatives is <1%.

* Compound recovery or percent RPD (relative percent difference) was outside of quality control limits.

D Indicates the result was obtained from analysis of a diluted sample. Surrogate recoveries may not be calculable.

E Estimated value. This flag identifies compounds whose concentrations exceed the upper level of the calibration range of the instrument for that specific analysis.

J Estimated value. The analyte was detected in the sample at a concentration less than the laboratory Practical Quantitation Level (PQL) (also called Limit of Quantitation (LOQ)), but above the Method Detection Limit (MDL).

And/or

J Used for Dual Column analytes when there is a greater than 40% difference for detected concentrations between the two GC/HPLC columns.

B Indicates the analyte was detected in the laboratory method blank analyzed concurrently with the sample.

I Indicates that the flagged compound did not meet DoD criteria in the corresponding Initial Calibration (ICAL).

D Indicates that the flagged compound did not meet DoD criteria in the corresponding Initial Calibration Verification (ICV).

C Indicates that the flagged compound did not meet DoD criteria in the corresponding opening Calibration Verification (CV).

V Indicates that the flagged compound did not meet DoD criteria in the corresponding closing Calibration Verification (CV).

L/LL Indicates that the flagged compound did not meet DoD criteria in the corresponding Laboratory Control Sample (LCS) and/or Laboratory Control Sample Duplicate (LCSD) prepared and/or analyzed concurrently with the sample.

M/MM Indicates that the flagged compound did not meet DoD criteria in the Matrix Spike (MS) and/or Matrix Spike Duplicate MSD) prepared and/or analyzed concurrently with the native sample.

H Indicates the flagged compound was detected on the primary column but was not detected on the confirmation column therefore the compound is not reported as a positive detection. (SW846 8330A/B only)

KATAHDIN ANALYTICAL SERVICES – INORGANIC DATA QUALIFIERS

The sampled date indicated on the attached Report(s) of Analysis (ROA) is the date for which a grab sample was collected or the date for which a composite sample was completed. Beginning and start times for composite samples can be found on the Chain-of-Custody.

U Indicates the compound was analyzed for but not detected above the specified level. This level may be the Practical Quantitation Level (PQL) (also called Limit of Quantitation (LOQ)), the Limit of Detection (LOD) or Method Detection Limit (MDL) as required by the client.

Note: All results reported as "U" MDL have a 50% rate for false negatives compared to those results reported as "U" PQL "U" LOQ or "U" LOD, where the rate of false negatives is <1%.

E Estimated value. This flag identifies compounds whose concentrations exceed the upper level of the calibration range of the instrument for that specific analysis.

J Estimated value. The analyte was detected in the sample at a concentration less than the laboratory Practical Quantitation Level (PQL) (also called Limit of Quantitation (LOQ)), but above the Method Detection Limit (MDL).

I-7 The laboratory's Practical Quantitation Level (PQL) or LOQ could not be achieved for this parameter due to sample composition, matrix effects, sample volume, or quantity used for analysis.

A-4 Please refer to cover letter or narrative for further information.

H_ Please note that the regulatory holding time for _____ is "analyze immediately". Ideally, this analysis must be performed in the field at the time of sample collection. _____ for this sample was not performed at the time of sample collection. The analysis was performed as soon as possible after receipt by the laboratory.

H1 - pH H2 - DO H3 - sulfite H4 - residual chlorine

T1 The client did not provide the full volume of at least one liter for analysis of TSS. Therefore, the PQL of 2.5 mg/L could not be achieved.

T2 The client provided the required volume of at least one liter for analysis of TSS, but the laboratory could not filter the full one liter volume due to the sample matrix. Therefore, the PQL of 2.5 mg/L could not be achieved.

M1 The matrix spike and/or matrix spike duplicate recovery performed on this sample was outside of the laboratory acceptance criteria. Sample matrix is suspected. The laboratory criteria was met for the Laboratory Control Sample (LCS) analyzed concurrently with this sample.

M2 The matrix spike and/or matrix spike duplicate recovery was outside of the laboratory acceptance criteria. The native sample concentration is greater than four times the spike added concentration so the spike added could not be distinguished from the native sample concentration.

R1 The relative percent difference (RPD) between the duplicate analyses performed on this sample was outside of the laboratory acceptance criteria (when both values are greater than ten times the PQL).

MCL	Maximum Contaminant Level	NL	No limit
NFL	No Free Liquid Present	FLP	Free Liquid Present
NOD	No Odor Detected	TON	Threshold Odor Number

D-1 As required by Method 5210B, APHA Standard Methods for the Examination of Water and Wastewater (21st edition), the BOD value reported for this sample is 'qualified' because the check standard run concurrently with the sample analysis did not meet the criteria specified in the method (198 +/- 30.5 mg/L). These results may not be reportable for compliance purposes.

D-2 The measured final dissolved oxygen concentrations of all dilutions were less than the method-specified limit of 1 mg/L. The reported BOD result was calculated assuming a final oxygen concentration equal to 1 mg/L. The reported value should be considered a minimum value.

D-3 The dilution water used to prepare this sample did not meet the method and/or regulatory criteria of less than 0.2 or 0.4 mg/L dissolved oxygen (DO) uptake over the five day period of incubation. These results may not be reportable for compliance purposes.

Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

SDG: SQ6112
Lab ID: SQ6112-1
Client ID: SY-OBMW7-110623
Matrix: AQ
Lab File ID: D8874.D

Sample Date: 06-NOV-23
Extract Date: 16-NOV-23
Extracted By: JSS
Extraction Method: SW846 5030C
Lab Prep Batch: WG345527

Report Date: 05-DEC-23
Analysis Date: 16-NOV-23
Analyst: JSS
Analysis Method: SW846 8260C SIM
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Vinyl Chloride	U	0.10	ug/L	1	.1	0.10	0.0037	0.050
1,1-Dichloroethene	U	0.050	ug/L	1	.05	0.050	0.0091	0.025
trans-1,2-Dichloroethene	U	0.050	ug/L	1	.05	0.050	0.0033	0.025
cis-1,2-Dichloroethene	U	0.050	ug/L	1	.05	0.050	0.0057	0.025
Trichloroethene	U	0.050	ug/L	1	.05	0.050	0.012	0.025
Tetrachloroethene	U	0.050	ug/L	1	.05	0.050	0.0091	0.025
Dibromofluoromethane		113.	%					
1,2-Dichloroethane-d4		114.	%					
Toluene-D8		99.1	%					
p-Bromofluorobenzene		79.5	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029
http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

SDG: SQ6112
Lab ID: SQ6112-2
Client ID: SY-OBMW10-110623
Matrix: AQ
Lab File ID: D8875.D

Sample Date: 06-NOV-23
Extract Date: 16-NOV-23
Extracted By: JSS
Extraction Method: SW846 5030C
Lab Prep Batch: WG345527

Report Date: 05-DEC-23
Analysis Date: 16-NOV-23
Analyst: JSS
Analysis Method: SW846 8260C SIM
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Vinyl Chloride	U	0.10	ug/L	1	.1	0.10	0.0037	0.050
1,1-Dichloroethene	U	0.050	ug/L	1	.05	0.050	0.0091	0.025
trans-1,2-Dichloroethene	U	0.050	ug/L	1	.05	0.050	0.0033	0.025
cis-1,2-Dichloroethene	U	0.050	ug/L	1	.05	0.050	0.0057	0.025
Trichloroethene	U	0.050	ug/L	1	.05	0.050	0.012	0.025
Tetrachloroethene	U	0.050	ug/L	1	.05	0.050	0.0091	0.025
Dibromofluoromethane		111.	%					
1,2-Dichloroethane-d4		112.	%					
Toluene-D8		100.	%					
p-Bromofluorobenzene		79.9	%					

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Report of Analytical Results

SDG: SQ6112
Lab ID: SQ6112-3
Client ID: TB30-110623
Matrix: AQ
Lab File ID: D8872.D

Sample Date: 06-NOV-23
Extract Date: 16-NOV-23
Extracted By: JSS
Extraction Method: SW846 5030C
Lab Prep Batch: WG345527

Report Date: 05-DEC-23
Analysis Date: 16-NOV-23
Analyst: JSS
Analysis Method: SW846 8260C SIM
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Vinyl Chloride	U	0.10	ug/L	1	.1	0.10	0.0037	0.050
1,1-Dichloroethene	U	0.050	ug/L	1	.05	0.050	0.0091	0.025
trans-1,2-Dichloroethene	U	0.050	ug/L	1	.05	0.050	0.0033	0.025
cis-1,2-Dichloroethene	U	0.050	ug/L	1	.05	0.050	0.0057	0.025
Trichloroethene	U	0.050	ug/L	1	.05	0.050	0.012	0.025
Tetrachloroethene	U	0.050	ug/L	1	.05	0.050	0.0091	0.025
Dibromofluoromethane		112.	%					
1,2-Dichloroethane-d4		111.	%					
Toluene-D8		100.	%					
p-Bromofluorobenzene		80.1	%					

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Report of Analytical Results

SDG: SQ6112
Lab ID: SQ6112-1
Client ID: SY-OBMW7-110623
Matrix: AQ
Lab File ID: N0321.D

Sample Date: 06-NOV-23
Extract Date: 10-NOV-23
Extracted By: AN/CMW
Extraction Method: SW846 3510C
Lab Prep Batch: WG345173

Report Date: 29-DEC-23
Analysis Date: 01-DEC-23
Analyst: EP
Analysis Method: SW846 8270D SIM
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	0.093	ug/L	1	.2	0.19	0.060	0.093
2-Methylnaphthalene	U	0.093	ug/L	1	.2	0.19	0.072	0.093
Acenaphthylene	U	0.093	ug/L	1	.2	0.19	0.050	0.093
Acenaphthene	U	0.093	ug/L	1	.2	0.19	0.060	0.093
Fluorene	U	0.093	ug/L	1	.2	0.19	0.057	0.093
Phenanthrene	U	0.093	ug/L	1	.2	0.19	0.048	0.093
Anthracene	U	0.093	ug/L	1	.2	0.19	0.041	0.093
Fluoranthene	U	0.093	ug/L	1	.2	0.19	0.068	0.093
Pyrene	U	0.093	ug/L	1	.2	0.19	0.055	0.093
Benzo(a)anthracene	U	0.093	ug/L	1	.2	0.19	0.043	0.093
Chrysene	U	0.093	ug/L	1	.2	0.19	0.034	0.093
Benzo(b)Fluoranthene	U	0.093	ug/L	1	.2	0.19	0.083	0.093
Benzo(k)fluoranthene	U	0.093	ug/L	1	.2	0.19	0.046	0.093
Benzo(a)pyrene	U	0.093	ug/L	1	.2	0.19	0.062	0.093
Indeno(1,2,3-cd)pyrene	U	0.093	ug/L	1	.2	0.19	0.048	0.093
Dibenzo(a,h)anthracene	U	0.093	ug/L	1	.2	0.19	0.065	0.093
Benzo(g,h,i)perylene	U	0.093	ug/L	1	.2	0.19	0.061	0.093
2-Methylnaphthalene-D10		44.0	%					
Fluorene-D10		41.7	%					
Pyrene-D10		52.9	%					

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Report of Analytical Results

SDG: SQ6112
Lab ID: SQ6112-2RA
Client ID: SY-OBMW10-110623
Matrix: AQ
Lab File ID: N0343.D

Sample Date: 06-NOV-23
Extract Date: 10-NOV-23
Extracted By: AN/CMW
Extraction Method: SW846 3510C
Lab Prep Batch: WG345173

Report Date: 29-DEC-23
Analysis Date: 04-DEC-23
Analyst: EP
Analysis Method: SW846 8270D SIM
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	0.093	ug/L	1	.2	0.19	0.060	0.093
2-Methylnaphthalene	U	0.093	ug/L	1	.2	0.19	0.072	0.093
Acenaphthylene	U	0.093	ug/L	1	.2	0.19	0.050	0.093
Acenaphthene	U	0.093	ug/L	1	.2	0.19	0.060	0.093
Fluorene	U	0.093	ug/L	1	.2	0.19	0.057	0.093
Phenanthrene	U	0.093	ug/L	1	.2	0.19	0.048	0.093
Anthracene	U	0.093	ug/L	1	.2	0.19	0.041	0.093
Fluoranthene	U	0.093	ug/L	1	.2	0.19	0.068	0.093
Pyrene	U	0.093	ug/L	1	.2	0.19	0.055	0.093
Benzo(a)anthracene	U	0.093	ug/L	1	.2	0.19	0.043	0.093
Chrysene	U	0.093	ug/L	1	.2	0.19	0.034	0.093
Benzo(b)Fluoranthene	U	0.093	ug/L	1	.2	0.19	0.083	0.093
Benzo(k)fluoranthene	U	0.093	ug/L	1	.2	0.19	0.046	0.093
Benzo(a)pyrene	U	0.093	ug/L	1	.2	0.19	0.062	0.093
Indeno(1,2,3-cd)pyrene	U	0.093	ug/L	1	.2	0.19	0.048	0.093
Dibenzo(a,h)anthracene	U	0.093	ug/L	1	.2	0.19	0.065	0.093
Benzo(g,h,i)perylene	U	0.093	ug/L	1	.2	0.19	0.061	0.093
2-Methylnaphthalene-D10	*	39.1	%					
Fluorene-D10		37.4	%					
Pyrene-D10	*	44.2	%					

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Report of Analytical Results

SDG: SQ6112
Lab ID: SQ6112-1
Client ID: SY-OBMW7-110623
Matrix: AQ
Lab File ID: 5QK20192.D

Sample Date: 06-NOV-23
Extract Date: 16-NOV-23
Extracted By: DL
Extraction Method: RSK SOP 175
Lab Prep Batch: WG345521

Report Date: 30-NOV-23
Analysis Date: 16-NOV-23
Analyst: DL
Analysis Method: RSK SOP 175 v.2
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Methane	J	7.2	ug/L	1	10.3	10.	2.6	5.2
Ethane	U	9.8	ug/L	1	13.1	13.	5.0	9.8
Ethene	U	9.8	ug/L	1	13.1	13.	5.0	9.8

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Report of Analytical Results

SDG: SQ6112
Lab ID: SQ6112-2
Client ID: SY-OBMW10-110623
Matrix: AQ
Lab File ID: 5QK20193.D

Sample Date: 06-NOV-23
Extract Date: 16-NOV-23
Extracted By: DL
Extraction Method: RSK SOP 175
Lab Prep Batch: WG345521

Report Date: 30-NOV-23
Analysis Date: 16-NOV-23
Analyst: DL
Analysis Method: RSK SOP 175 v.2
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Methane	J	4.5	ug/L	1	10.3	10.	2.6	5.2
Ethane	U	9.8	ug/L	1	13.1	13.	5.0	9.8
Ethene	U	9.8	ug/L	1	13.1	13.	5.0	9.8

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Report of Analytical Results

Lab Sample ID: SQ6112-1
Client ID: SY-OBMW7-110623
SDG: SQ6112
Report Date: 05-DEC-23

Matrix	Date Sampled	Date Received
AQ	06-NOV-23 16:10	07-NOV-23

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Alkalinity	210 mg/L	5.0	0.23	4.0	SM2320B	WG345360	13-NOV-23 13:54	N/A	N/A	
Chloride	760 mg/L	40.	2.0	20.	EPA 300.0	WG345625	16-NOV-23 19:27	N/A	N/A	
Chromium, Hexavalent	U0.012 mg/L	0.025	0.00076	0.012	SW846 7196A	WG345009	07-NOV-23 10:34	N/A	N/A	
Ferrous Iron	J0.096 mg/L	0.10	0.026	0.050	SM3500D	WG344991	07-NOV-23 11:26	N/A	N/A	
Nitrate as N	J0.018 mg/L	0.050	0.017	0.025	EPA 300.0	WG345075	07-NOV-23 19:07	N/A	N/A	
Sulfate	98 mg/L	2.0	0.13	1.0	EPA 300.0	WG345625	16-NOV-23 19:45	N/A	N/A	
Total Organic Carbon	2.0 mg/L	1.0	0.37	0.75	SM5310B	WG346357	01-DEC-23 15:14	N/A	N/A	

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Report of Analytical Results

Lab Sample ID: SQ6112-2
Client ID: SY-OBMW10-110623
SDG: SQ6112
Report Date: 05-DEC-23

Matrix	Date Sampled	Date Received
AQ	06-NOV-23 16:20	07-NOV-23

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Alkalinity	160 mg/L	5.0	0.23	4.0	SM2320B	WG345360	13-NOV-23 14:03	N/A	N/A	
Chloride	480 mg/L	40.	2.0	20.	EPA 300.0	WG345625	16-NOV-23 20:02	N/A	N/A	
Chromium, Hexavalent	U0.012 mg/L	0.025	0.00076	0.012	SW846 7196A	WG345009	07-NOV-23 10:34	N/A	N/A	
Ferrous Iron	U0.050 mg/L	0.10	0.026	0.050	SM3500D	WG344991	07-NOV-23 11:26	N/A	N/A	
Nitrate as N	J0.044 mg/L	0.050	0.017	0.025	EPA 300.0	WG345075	07-NOV-23 19:24	N/A	N/A	
Sulfate	77 mg/L	1.0	0.064	0.50	EPA 300.0	WG345075	07-NOV-23 19:24	N/A	N/A	
Total Organic Carbon	J0.78 mg/L	1.0	0.37	0.75	SM5310B	WG346357	01-DEC-23 15:39	N/A	N/A	

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SIM VOLATILES DATA

QC Summary Section

Form 2
System Monitoring Compound Recovery

Lab Name: Katahdin Analytical Services **SDG:** SQ6112 **Matrix:** AQ

Client Sample ID	Lab Sample ID	Col. ID	BFB #	DBF #	DCA #	TOL #
SY-OBMW7-110623	SQ6112-1		79.5	113.	114.	99.1
SY-OBMW10-110623	SQ6112-2		79.9	111.	112.	100.
TB30-110623	SQ6112-3		80.1	112.	111.	100.
Laboratory Control S	WG345527-10		102.	104.	102.	98.9
Method Blank	WG345527-11		79.3	114.	115.	102.
Laboratory Control S	WG345527-14		102.	102.	100.	99.2

Abbr.	Surrogate Compound	QC Limits
BFB	p-Bromofluorobenzene	70-130
DBF	Dibromofluoromethane	70-130
DCA	1,2-Dichloroethane-d4	70-130
TOL	Toluene-D8	70-130

= Column to be used to flag recovery limits.
* = Values outside of contract required QC limits.
D= System Monitoring Compound diluted out.

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Form 4
Method Blank Summary

Lab File ID : D8870.D
Instrument ID : GCMS-D
Heated Purge : No
Prep Temperature (C) : N/A

SDG : SQ6112
Lab Sample ID : WG345527-11
Date Analyzed : 16-NOV-23
Time Analyzed : 14:15

This Method Blank applies to the following samples and QC samples:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	
Laboratory Control S	WG345527-10	D8867.D	11/16/23	12:35	
Laboratory Control S	WG345527-14	D8868.D	11/16/23	13:08	
TB30-110623	SQ6112-3	D8872.D	11/16/23	15:21	
SY-OBMW7-110623	SQ6112-1	D8874.D	11/16/23	16:28	
SY-OBMW10-110623	SQ6112-2	D8875.D	11/16/23	17:01	

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Form 5
Volatile Organic Instrument Performance Check

Lab Name : Katahdin Analytical Services
Lab File ID : DB230A.D
Instrument ID : GCMS-D

SDG : SQ6112
Date Analyzed : 16-NOV-23
Time Analyzed : 06:37
Heated Purge : No

m/e	Ion Abundance Criteria	% Relative Abundance		
50	15.0 - 40.0% of mass 95	15.6		
75	30.0 - 60.0% of mass 95	47.2		
95	Base Peak, 100% relative abundance	100		
96	5.0 - 9.0% of mass 95	7.0		
173	Less than 2.0% of mass 174	0.7	0.79	1
174	Greater than 50.0% of mass 95	91.3		
175	5.0 - 9.0% of mass 174	6.5	7.14	1
176	95.0 - 101.0% of mass 174	88.1	96.46	1
177	5.0 - 9.0% of mass 176	5.4	6.08	2

1-Value is % mass 174 2-Value is % mass 176

This check applies to the following samples, LCS, MS, MSD and standards:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Initial Calibration	WG345527-1	D8857.D	11/16/23	07:03
Initial Calibration	WG345527-2	D8858.D	11/16/23	07:36
Initial Calibration	WG345527-3	D8859.D	11/16/23	08:09
Initial Calibration	WG345527-4	D8860.D	11/16/23	08:42
Initial Calibration	WG345527-8	D8861.D	11/16/23	09:15
Initial Calibration	WG345527-7	D8862.D	11/16/23	09:48
Initial Calibration	WG345527-6	D8863.D	11/16/23	10:22
Initial Calibration	WG345527-5	D8864.D	11/16/23	10:55
Laboratory Control S	WG345527-10	D8867.D	11/16/23	12:35
Independent Source	WG345527-9	D8867A.D	11/16/23	12:35
Laboratory Control S	WG345527-14	D8868.D	11/16/23	13:08
Method Blank	WG345527-11	D8870.D	11/16/23	14:15
TB30-110623	SQ6112-3	D8872.D	11/16/23	15:21
SY-OBMW7-110623	SQ6112-1	D8874.D	11/16/23	16:28
SY-OBMW10-110623	SQ6112-2	D8875.D	11/16/23	17:01
Continuing Calibrati	WG345527-13	D8877.D	11/16/23	18:08

Form 8
Internal Standard Area and RT Summary

Lab Name : Katahdin Analytical Services
Lab ID : WG345527-5
Lab File ID : D8864.d

SDG: SQ6112
Analytical Date: 11/16/23 10:55
Instrument ID: GCMS-D

		PENTAFLUOROBENZENE				1,4-DIFLUOROBENZENE				CHLOROBENZENE-D5			
		Area	#	RT	#	Area	#	RT	#	Area	#	RT	#
	Std .	20191		5.55		30045		6.10		26800		8.98	
	Upper Limit	40382		5.72		60090		6.26		53600		9.15	
	Lower Limit	10095.5		5.38		15022.5		5.93		13400		8.82	
Client Sample ID	Lab Sample ID												
Laboratory Control S	WG345527-10	18530		5.55		27333		6.10		24578		8.98	
Laboratory Control S	WG345527-14	19177		5.55		28370		6.10		25324		8.98	
Method Blank	WG345527-11	16361		5.55		24617		6.10		23024		8.98	
TB30-110623	SQ6112-3	16502		5.55		24210		6.10		21893		8.98	
SY-OBMW7-110623	SQ6112-1	16130		5.55		24013		6.10		21597		8.98	
SY-OBMW10-110623	SQ6112-2	16138		5.55		23723		6.10		21599		8.98	
Continuing Calibrati	WG345527-13	18719		5.55		26660		6.10		23911		8.98	

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area
RT Upper Limit = + 10 seconds of internal standard RT
RT Lower Limit = - 10 seconds of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

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Sample Data Section

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U Indicates the compound was analyzed for but not detected above the specified level. This level may be the Practical Quantitation Level (PQL) (also called Limit of Quantitation (LOQ)), the Limit of Detection (LOD) or Method Detection Limit (MDL) as required by the client.

Note: All results reported as "U" MDL have a 50% rate for false negatives compared to those results reported as "U" PQL, "U" LOQ or "U" LOD, where the rate of false negatives is <1%.

* Compound recovery or percent RPD (relative percent difference) was outside of quality control limits.

D Indicates the result was obtained from analysis of a diluted sample. Surrogate recoveries may not be calculable.

E Estimated value. This flag identifies compounds whose concentrations exceed the upper level of the calibration range of the instrument for that specific analysis.

J Estimated value. The analyte was detected in the sample at a concentration less than the laboratory Practical Quantitation Level (PQL) (also called Limit of Quantitation (LOQ)), but above the Method Detection Limit (MDL).

And/or

J Used for Dual Column analytes when there is a greater than 40% difference for detected concentrations between the two GC/HPLC columns.

B Indicates the analyte was detected in the laboratory method blank analyzed concurrently with the sample.

I Indicates that the flagged compound did not meet DoD criteria in the corresponding Initial Calibration (ICAL).

D Indicates that the flagged compound did not meet DoD criteria in the corresponding Initial Calibration Verification (ICV).

C Indicates that the flagged compound did not meet DoD criteria in the corresponding opening Calibration Verification (CV).

V Indicates that the flagged compound did not meet DoD criteria in the corresponding closing Calibration Verification (CV).

L/LL Indicates that the flagged compound did not meet DoD criteria in the corresponding Laboratory Control Sample (LCS) and/or Laboratory Control Sample Duplicate (LCSD) prepared and/or analyzed concurrently with the sample.

M/MM Indicates that the flagged compound did not meet DoD criteria in the Matrix Spike (MS) and/or Matrix Spike Duplicate MSD) prepared and/or analyzed concurrently with the native sample.

H Indicates the flagged compound was detected on the primary column but was not detected on the confirmation column therefore the compound is not reported as a positive detection. (SW846 8330A/B only)

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Manual Integration Codes For GC/MS, GC, HPLC and/or IC

M1	Peak splitting.
M2	Well defined peaks on the shoulders of the other peaks.
M3	There is additional area due to a coeluting interferant.
M4	There are negative spikes in the baseline.
M5	There are rising or falling baselines.
M6	The software has failed to detect a peak or misidentified a peak.
M7	Excessive peak tailing.
M8	Analysis such as GRO, DRO and TPH require a baseline hold.
M9	Peak was not completely integrated as in GC/MS.
M10	Primary ion was correctly integrated, but secondary or tertiary ion needed manual integration as in GC/MS.
M11	For GC analysis, when a sample is diluted by 1:10 or more, the surrogate is set to undetected and then the area under the surrogate is manually integrated.
M12	Manual integration saved in method due to TurboChrom floating point error.

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Report of Analytical Results

SDG: SQ6112
Lab ID: SQ6112-1
Client ID: SY-OBMW7-110623
Matrix: AQ
Lab File ID: D8874.D

Sample Date: 06-NOV-23
Extract Date: 16-NOV-23
Extracted By: JSS
Extraction Method: SW846 5030C
Lab Prep Batch: WG345527

Report Date: 05-DEC-23
Analysis Date: 16-NOV-23
Analyst: JSS
Analysis Method: SW846 8260C SIM
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Vinyl Chloride	U	0.10	ug/L	1	.1	0.10	0.0037	0.050
1,1-Dichloroethene	U	0.050	ug/L	1	.05	0.050	0.0091	0.025
trans-1,2-Dichloroethene	U	0.050	ug/L	1	.05	0.050	0.0033	0.025
cis-1,2-Dichloroethene	U	0.050	ug/L	1	.05	0.050	0.0057	0.025
Trichloroethene	U	0.050	ug/L	1	.05	0.050	0.012	0.025
Tetrachloroethene	U	0.050	ug/L	1	.05	0.050	0.0091	0.025
Dibromofluoromethane		113.	%					
1,2-Dichloroethane-d4		114.	%					
Toluene-D8		99.1	%					
p-Bromofluorobenzene		79.5	%					

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Data File: \\target_server\gg\chem\gcms-d.i\D111623.b\D8874.d
Report Date: 05-Dec-2023 10:38

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-d.i\D111623.b\D8874.d
Lab Smp Id: SQ6112-1 Client Smp ID: SY-OBMW7-110623
Inj Date : 16-NOV-2023 16:28
Operator : JSS Inst ID: gcms-d.i
Smp Info : SQ6112-1
Misc Info : WG345527,WG345527-5
Comment : SW846 5030C
Method : \\target_server\gg\chem\gcms-d.i\D111623.b\DSIM(01)CR23.m
Meth Date : 04-Dec-2023 12:57 gcms-d.i Quant Type: ISTD
Cal Date : 16-NOV-2023 10:22 Cal File: D8863.d
Als bottle: 18
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.12

Concentration Formula: Amt * DF * 25/Vo * CpndVariable

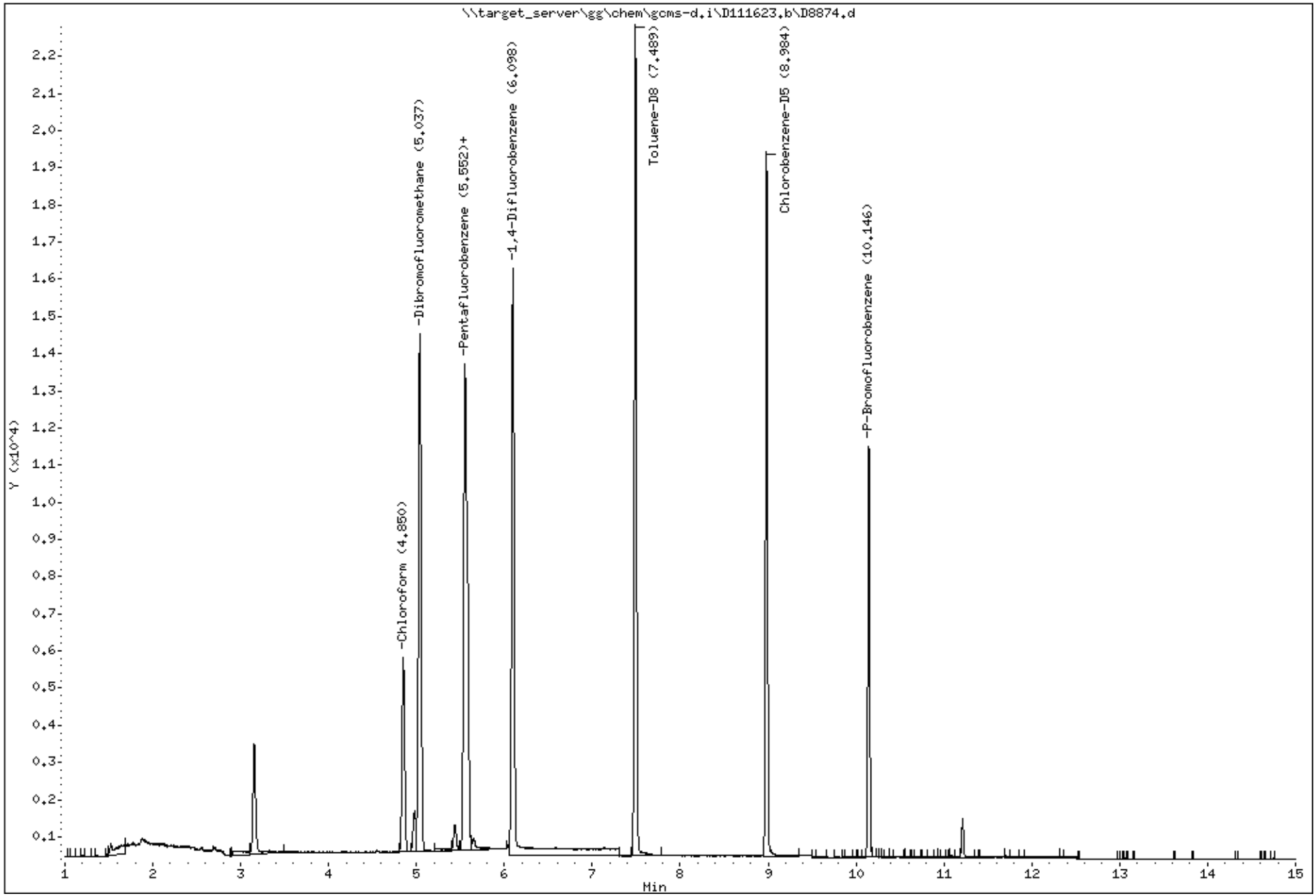
Name	Value	Description
DF	1.000	Dilution Factor
Vo	25.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)	REVIEW CODE
6 Chloroform	83	4.848	4.848	(0.873)	6073		(a)	
$ 7 Dibromofluoromethane	113	5.036	5.037	(0.907)	14248	1.13110	1.13	
* 10 Pentafluorobenzene	168	5.551	5.549	(1.000)	16130	1.00000		
$ 11 1,2-Dichloroethane-D4	65	5.579	5.582	(1.005)	8440	1.13518	1.14	
* 14 1,4-Difluorobenzene	114	6.097	6.096	(1.000)	24013	1.00000		
$ 15 Toluene-D8	98	7.488	7.491	(1.228)	21550	0.99110	0.991	
* 18 Chlorobenzene-D5	117	8.983	8.984	(1.000)	21597	1.00000		
$ 20 P-Bromofluorobenzene	95	10.145	10.146	(1.129)	5742	0.79505	0.795	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: \\target_server\gg\chem\gcms-d.i\D111623.b\D8874.d
Date : 16-NOV-2023 16:28
Client ID: SY-OBMW7-110623
Instrument: gcms-d.i
Sample Info: SQ6112-1



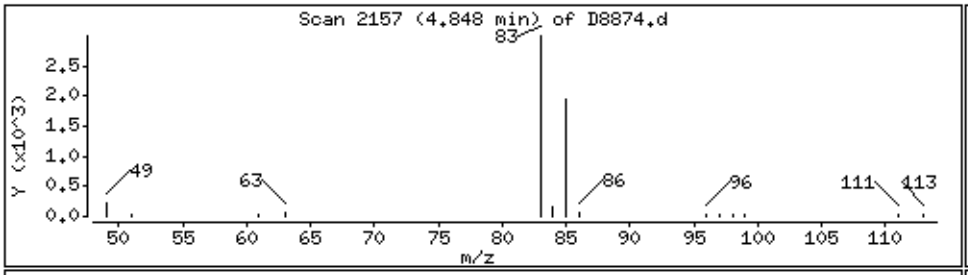
Data File: \\target_server\gg\chem\gcms-d.i\D111623.b\D8874.d

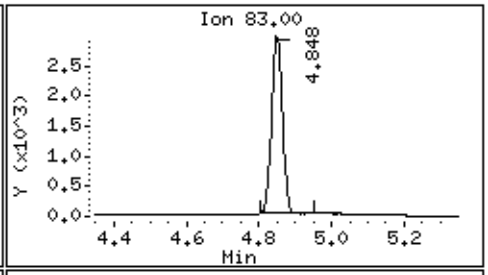
Date : 16-NOV-2023 16:28

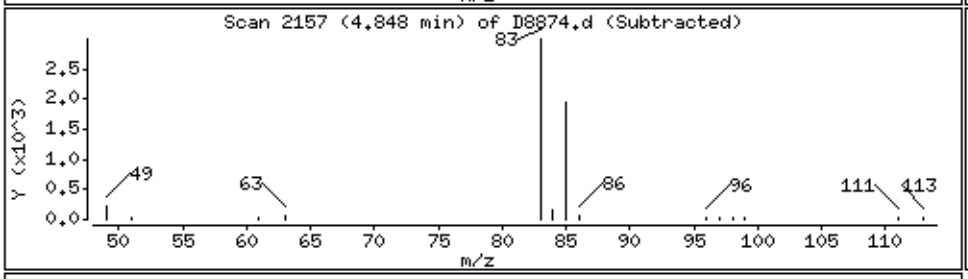
Client ID: SY-OBMW7-110623 Instrument: gcms-d.i

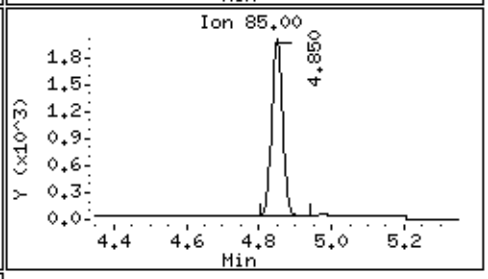
Sample Info: SQ6112-1

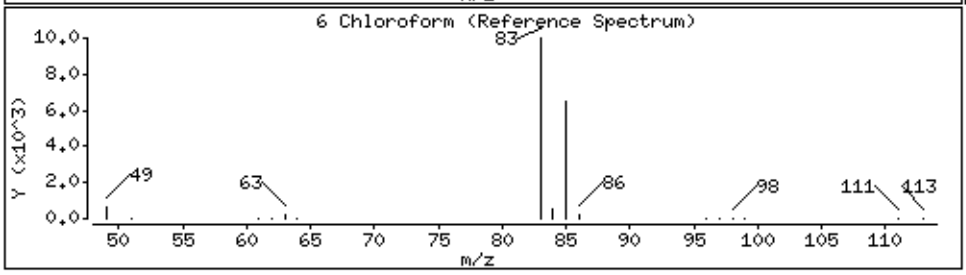
6 Chloroform











Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

SDG: SQ6112
Lab ID: SQ6112-2
Client ID: SY-OBMW10-110623
Matrix: AQ
Lab File ID: D8875.D

Sample Date: 06-NOV-23
Extract Date: 16-NOV-23
Extracted By: JSS
Extraction Method: SW846 5030C
Lab Prep Batch: WG345527

Report Date: 05-DEC-23
Analysis Date: 16-NOV-23
Analyst: JSS
Analysis Method: SW846 8260C SIM
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Vinyl Chloride	U	0.10	ug/L	1	.1	0.10	0.0037	0.050
1,1-Dichloroethene	U	0.050	ug/L	1	.05	0.050	0.0091	0.025
trans-1,2-Dichloroethene	U	0.050	ug/L	1	.05	0.050	0.0033	0.025
cis-1,2-Dichloroethene	U	0.050	ug/L	1	.05	0.050	0.0057	0.025
Trichloroethene	U	0.050	ug/L	1	.05	0.050	0.012	0.025
Tetrachloroethene	U	0.050	ug/L	1	.05	0.050	0.0091	0.025
Dibromofluoromethane		111.	%					
1,2-Dichloroethane-d4		112.	%					
Toluene-D8		100.	%					
p-Bromofluorobenzene		79.9	%					

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Data File: \\target_server\gg\chem\gcms-d.i\D111623.b\D8875.d
Report Date: 05-Dec-2023 10:38

Katahdin Analytical Services

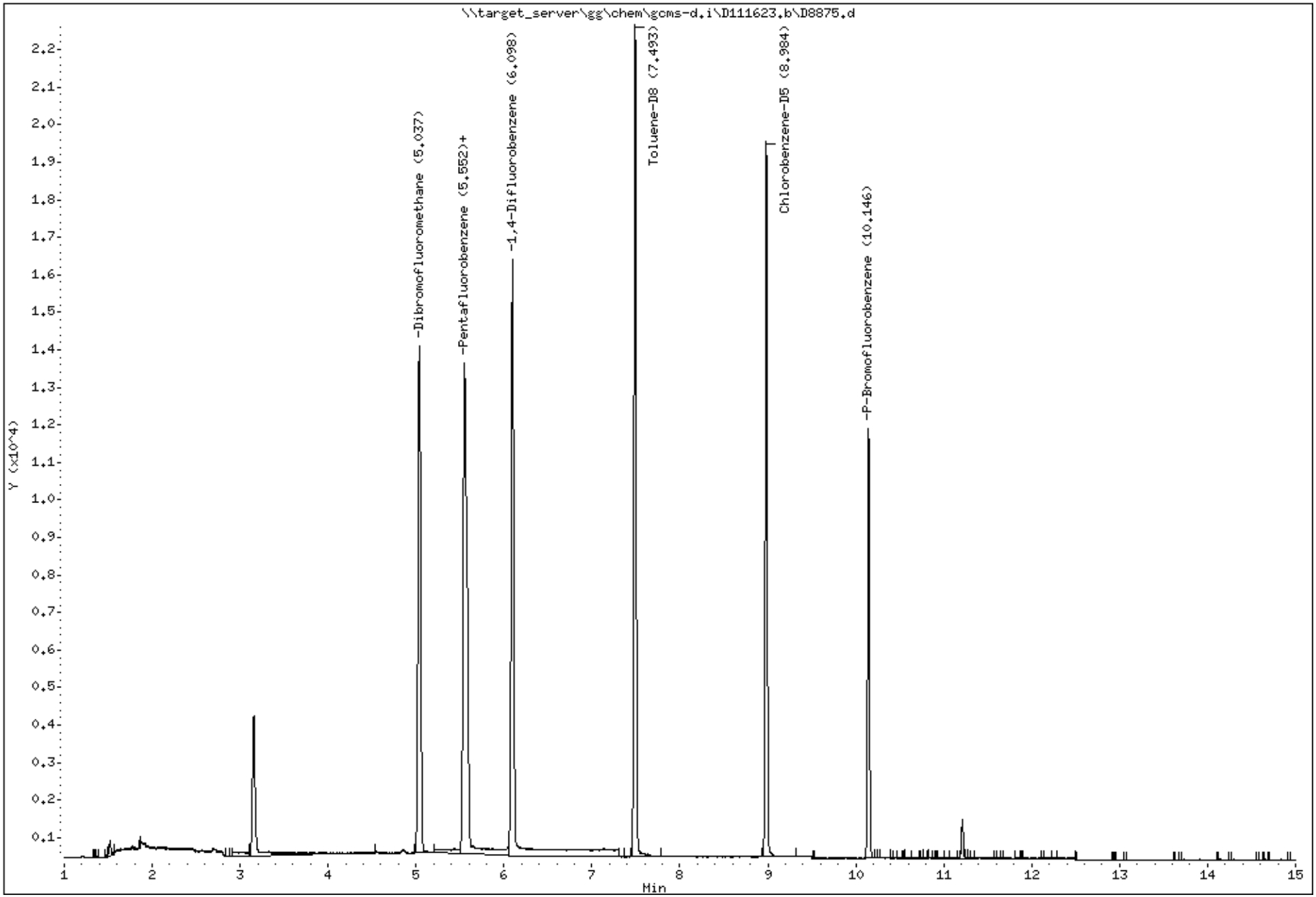
Data file : \\target_server\gg\chem\gcms-d.i\D111623.b\D8875.d
Lab Smp Id: SQ6112-2 Client Smp ID: SY-OBMW10-110623
Inj Date : 16-NOV-2023 17:01
Operator : JSS Inst ID: gcms-d.i
Smp Info : SQ6112-2
Misc Info : WG345527,WG345527-5
Comment : SW846 5030C
Method : \\target_server\gg\chem\gcms-d.i\D111623.b\DSIM(01)CR23.m
Meth Date : 04-Dec-2023 12:57 gcms-d.i Quant Type: ISTD
Cal Date : 16-NOV-2023 10:22 Cal File: D8863.d
Als bottle: 19
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.12

Concentration Formula: Amt * DF * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	25.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)	REVIEW CODE
$ 7 Dibromofluoromethane	113	5.036	5.037	(0.908)	14000	1.11086	1.11	
* 10 Pentafluorobenzene	168	5.547	5.549	(1.000)	16138	1.00000		
$ 11 1,2-Dichloroethane-D4	65	5.579	5.582	(1.006)	8328	1.11956	1.12	
* 14 1,4-Difluorobenzene	114	6.097	6.096	(1.000)	23723	1.00000		
$ 15 Toluene-D8	98	7.492	7.491	(1.229)	21491	1.00047	1.00	
* 18 Chlorobenzene-D5	117	8.983	8.984	(1.000)	21599	1.00000		
$ 20 P-Bromofluorobenzene	95	10.145	10.146	(1.129)	5773	0.79927	0.799	

Data File: \\target_server\gg\chem\gcms-d.i\D111623.b\D8875.d
Date : 16-NOV-2023 17:01
Client ID: SY-OBMW10-110623 Instrument: gcms-d.i
Sample Info: SQ6112-2



Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

SDG: SQ6112
Lab ID: SQ6112-3
Client ID: TB30-110623
Matrix: AQ
Lab File ID: D8872.D

Sample Date: 06-NOV-23
Extract Date: 16-NOV-23
Extracted By: JSS
Extraction Method: SW846 5030C
Lab Prep Batch: WG345527

Report Date: 05-DEC-23
Analysis Date: 16-NOV-23
Analyst: JSS
Analysis Method: SW846 8260C SIM
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Vinyl Chloride	U	0.10	ug/L	1	.1	0.10	0.0037	0.050
1,1-Dichloroethene	U	0.050	ug/L	1	.05	0.050	0.0091	0.025
trans-1,2-Dichloroethene	U	0.050	ug/L	1	.05	0.050	0.0033	0.025
cis-1,2-Dichloroethene	U	0.050	ug/L	1	.05	0.050	0.0057	0.025
Trichloroethene	U	0.050	ug/L	1	.05	0.050	0.012	0.025
Tetrachloroethene	U	0.050	ug/L	1	.05	0.050	0.0091	0.025
Dibromofluoromethane		112.	%					
1,2-Dichloroethane-d4		111.	%					
Toluene-D8		100.	%					
p-Bromofluorobenzene		80.1	%					

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Data File: \\target_server\gg\chem\gcms-d.i\D111623.b\D8872.d
Report Date: 05-Dec-2023 10:38

Katahdin Analytical Services

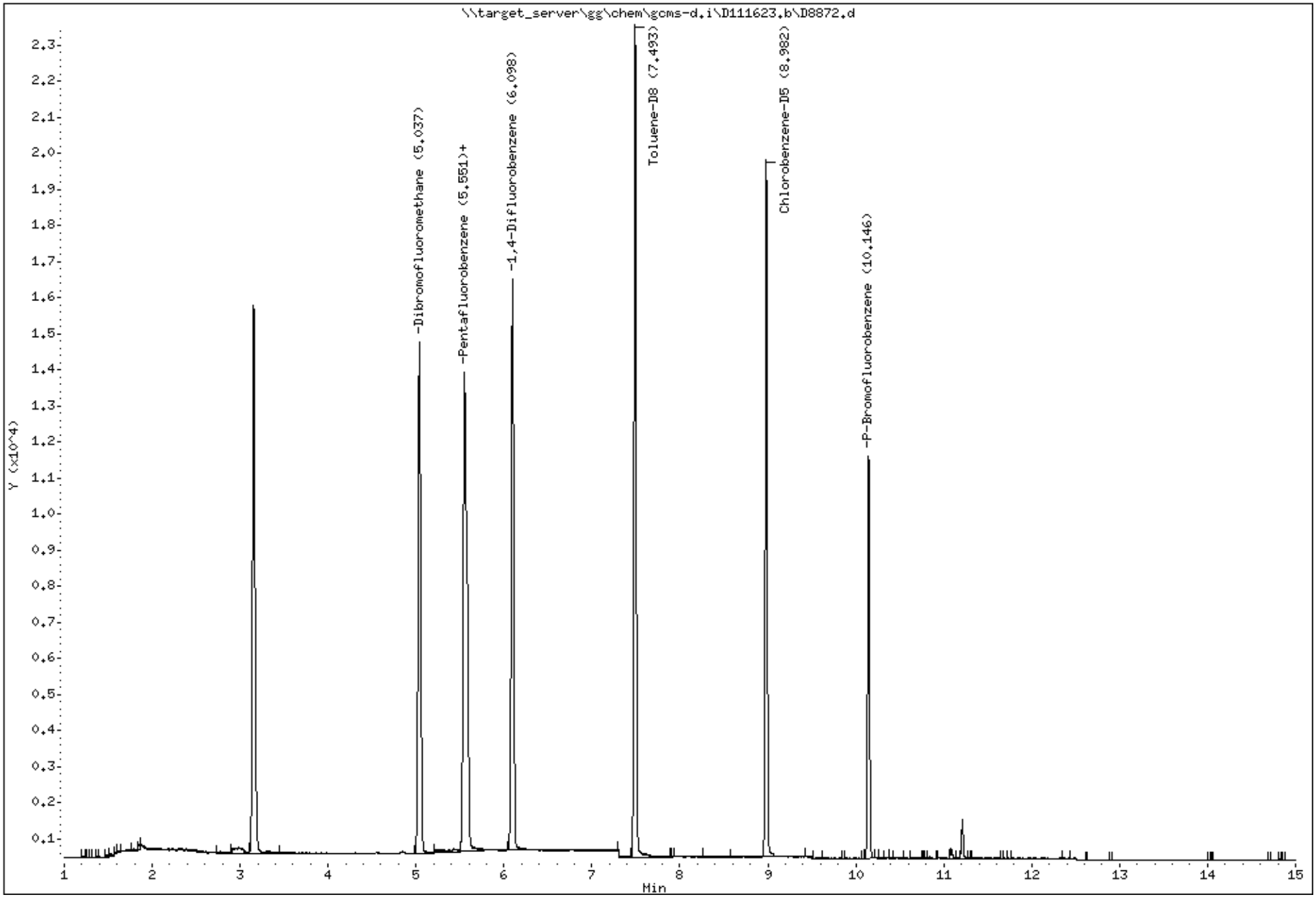
Data file : \\target_server\gg\chem\gcms-d.i\D111623.b\D8872.d
Lab Smp Id: SQ6112-3 Client Smp ID: TB30-110623
Inj Date : 16-NOV-2023 15:21
Operator : JSS Inst ID: gcms-d.i
Smp Info : SQ6112-3
Misc Info : WG345527,WG345527-5
Comment : SW846 5030C
Method : \\target_server\gg\chem\gcms-d.i\D111623.b\DSIM(01)CR23.m
Meth Date : 04-Dec-2023 12:57 gcms-d.i Quant Type: ISTD
Cal Date : 16-NOV-2023 10:22 Cal File: D8863.d
Als bottle: 16
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.12

Concentration Formula: Amt * DF * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	25.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)	REVIEW CODE
$ 7 Dibromofluoromethane	113	5.036	5.037	(0.908)	14383	1.11607	1.12	
* 10 Pentafluorobenzene	168	5.549	5.549	(1.000)	16502	1.00000		
$ 11 1,2-Dichloroethane-D4	65	5.581	5.582	(1.006)	8449	1.11077	1.11	
* 14 1,4-Difluorobenzene	114	6.097	6.096	(1.000)	24210	1.00000		
$ 15 Toluene-D8	98	7.492	7.491	(1.229)	21935	1.00060	1.00	
* 18 Chlorobenzene-D5	117	8.983	8.984	(1.000)	21893	1.00000		
$ 20 P-Bromofluorobenzene	95	10.145	10.146	(1.129)	5865	0.80110	0.801	

Data File: \\target_server\gg\chem\gcms-d.i\D111623.b\D8872.d
Date : 16-NOV-2023 15:21
Client ID: TB30-110623
Instrument: gcms-d.i
Sample Info: SQ6112-3



Standards Data Section

Form 6
Initial Calibration Summary

Lab Name : Katahdin Analytical Services **SDG:** SQ6112

Instrument ID: GCMS-D **Column ID:**

Lab File IDs : D8857.d D8858.d D8859.d D8860.d D8864.d D8863.d D8862.d D8861.d

Calibration Date(s): 16-NOV-23 07:03, 16-NOV-23 10:55

	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Level 7	Level 8	Curve				%RSD or R^2		
	0.0500000	0.0750000	0.1000000	0.3000000	0.5000000	0.7500000	1.0000	2.0000	Type	b	m1	m2	Result	Limit	
Vinyl chloride	0.52945	0.72743	0.76855	0.77482	0.76390	0.72809	0.68602	0.63518	AVG		0.70168		11.97008	15	O
1,1-Dichloroethene	0.49275	0.71974	0.73490	0.71180	0.68912	0.63922	0.59643	0.56885	AVG		0.64410		13.30914	15	O
trans-1,2-Dichloroethene	0.60562	0.75957	0.80828	0.80738	0.79441	0.74641	0.70032	0.63795	AVG		0.73249		10.59785	15	O
cis-1,2-Dichloroethene	0.55423	0.56601	0.59641	0.57998	0.59650	0.55985	0.53725	0.49246	AVG		0.56034		6.11031	15	O
Trichloroethene	0.39193	0.47329	0.47280	0.45148	0.44906	0.43876	0.42564	0.41309	AVG		0.43951		6.45761	15	O
Tetrachloroethene	0.26930	0.38638	0.40828	0.40354	0.39587	0.38279	0.36947	0.36610	AVG		0.37272		11.90812	15	O
Dibromofluoromethane	0.83786	0.82422	0.83983	0.84612	0.77232	0.73731	0.71786	0.67202	AVG		0.78094		8.47335	15	
1,2-Dichloroethane-D4	0.52482	0.47906	0.49059	0.50003	0.45505	0.42864	0.42223	0.38709	AVG		0.46094		9.99112	15	
Toluene-D8	0.92229	0.91817	0.91349	0.90697	0.90295	0.90168	0.89676	0.88160	AVG		0.90549		1.43214	15	
P-Bromofluorobenzene	0.28630	0.27651	0.28209	0.31889	0.34399	0.36984	0.38547	0.41217	AVG		0.33441		15.4335	15	

Legend: O = Acceptable; W = Failed %RSD Value; X = Failed R^2 Value; Y = Failed Minimum RF

Data File: \\target_server\gg\chem\gcms-d.i\D111623.b\D8867a.d
Report Date: 04-Dec-2023 12:54

Katahdin Analytical Services

RECOVERY REPORT

Client Name: Client SDG: SDGa02236
Sample Matrix: LIQUID Fraction: VOA
Lab Smp Id: WG345527-9 Client Smp ID: INDSOURCE
Level: LOW Operator: JSS
Data Type: MS DATA SampleType: INDSOURCE
SpikeList File: IND_CHECKsim.spk Quant Type: ISTD
Sublist File: all.sub
Method File: \\target_server\gg\chem\gcms-d.i\D111623.b\DSIM(01)CR23.m
Misc Info: WG345527,WG345527-5

SPIKE COMPOUND	CONC ADDED ug/l	CONC RECOVERED ug/l	% RECOVERED	LIMITS
1 Vinyl chloride	0.500	0.539	107.74	80-120
2 1,1-Dichloroethene	0.500	0.584	116.75	80-120
3 Methylene Chloride	20.0	0.000	*	80-120
4 trans-1,2-Dichloro	0.500	0.571	114.14	80-120
5 cis-1,2-Dichloroet	0.500	0.533	106.67	80-120
6 Chloroform	0.500	0.000	0.00*	80-120
8 1,1,1-Trichloroeth	0.500	0.000	0.00*	80-120
9 Benzene	0.500	0.000	0.00*	80-120
12 1,2-Dichloroethane	0.500	0.000	0.00*	80-120
13 Trichloroethene	0.500	0.539	107.88	80-120
16 Tetrachloroethene	0.500	0.559	111.84	80-120
17 1,1,2-Trichloroeth	0.500	0.000	0.00*	80-120
21 1,1,2,2-Tetrachlor	0.500	0.000	0.00*	80-120
22 1,2,4-Trimethylben	0.500	0.000	0.00*	80-120
23 1,2,4-Trichloroben	0.500	0.000	0.00*	80-120
24 1,2,3-Trichloroben	0.500	0.000	0.00*	80-120

SURROGATE COMPOUND	AMOUNT ADDED ug/l	AMOUNT RECOVERED ug/l	% RECOVERED	LIMITS
$ 7 Dibromofluorometha	1.00	1.04	104.58	70-130
$ 11 1,2-Dichloroethane	1.00	1.02	101.89	70-130
$ 15 Toluene-D8	1.00	0.989	98.93	70-130
$ 20 P-Bromofluorobenze	1.00	1.02	102.54	70-130

Data File: \\target_server\gg\chem\gcms-d.i\D111623.b\D8867a.d
Report Date: 04-Dec-2023 12:54

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-d.i\D111623.b\D8867a.d
Lab Smp Id: WG345527-9 Client Smp ID: INDSOURCE
Inj Date : 16-NOV-2023 12:35
Operator : JSS Inst ID: gcms-d.i
Smp Info : WG345527-9
Misc Info : WG345527,WG345527-5
Comment : SW846 5030C
Method : \\target_server\gg\chem\gcms-d.i\D111623.b\DSIM(01)CR23.m
Meth Date : 04-Dec-2023 12:48 croy Quant Type: ISTD
Cal Date : 16-NOV-2023 10:22 Cal File: D8863.d
Als bottle: 11 QC Sample: INDSOURCE
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.12
Processing Host: ORGANICS2

Concentration Formula: Amt * DF * 25/Vo * CpndVariable

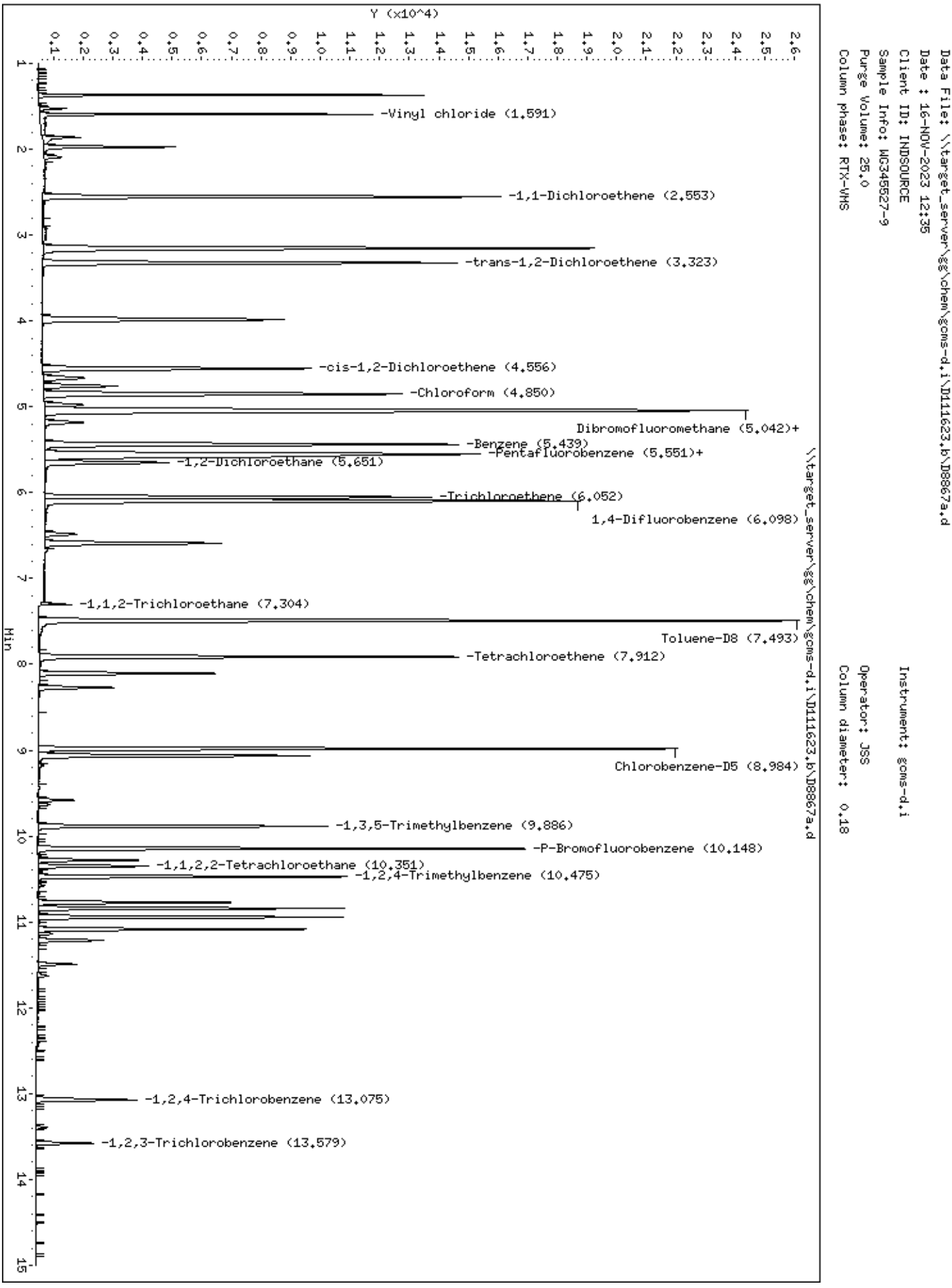
Name	Value	Description
DF	1.000	Dilution Factor
Vo	25.000	sample purged
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)	REVIEW CODE
1	Vinyl chloride	62	1.591	1.591	(0.287)	7004	0.53868	0.539	
2	1,1-Dichloroethene	96	2.554	2.553	(0.460)	6967	0.58374	0.584	
4	trans-1,2-Dichloroethene	96	3.324	3.323	(0.599)	7746	0.57069	0.571	
5	cis-1,2-Dichloroethene	96	4.553	4.558	(0.820)	5538	0.53337	0.533	
6	Chloroform	83	4.850	4.848	(0.874)	14428		(aR)	
$ 7	Dibromofluoromethane	113	5.038	5.037	(0.908)	15133	1.04575	1.04	
8	1,1,1-Trichloroethane	97	5.051	5.054	(0.910)	10761		(aR)	
9	Benzene	78	5.439	5.439	(0.980)	19844		(aR)	
* 10	Pentafluorobenzene	168	5.551	5.549	(1.000)	18530	1.00000		
$ 11	1,2-Dichloroethane-D4	65	5.581	5.582	(1.005)	8703	1.01894	1.02	
12	1,2-Dichloroethane	62	5.650	5.649	(0.927)	5230		(aR)	
13	Trichloroethene	130	6.054	6.052	(0.993)	6480	0.53941	0.539	
* 14	1,4-Difluorobenzene	114	6.097	6.096	(1.000)	27333	1.00000		
$ 15	Toluene-D8	98	7.492	7.491	(1.229)	24485	0.98931	0.989	
16	Tetrachloroethene	164	7.911	7.912	(1.298)	5697	0.55922	0.559	
17	1,1,2-Trichloroethane	83	7.312	7.310	(1.199)	568		(aR)	
* 18	Chlorobenzene-D5	117	8.983	8.984	(1.000)	24578	1.00000		
19	1,3,5-Trimethylbenzene	105	9.885	9.888	(1.100)	11238		(a)	
$ 20	P-Bromofluorobenzene	95	10.147	10.146	(1.130)	8428	1.02542	1.02	
21	1,1,2,2-Tetrachloroethane	83	10.350	10.351	(1.152)	2814		(aR)	
22	1,2,4-Trimethylbenzene	105	10.471	10.473	(1.166)	9255		(aR)	
23	1,2,4-Trichlorobenzene	180	13.074	13.075	(1.455)	1891		(aR)	
24	1,2,3-Trichlorobenzene	180	13.577	13.579	(1.511)	1086		(aR)	

Data File: \\target_server\gg\chem\gcms-d.i\D111623.b\D8867a.d
Report Date: 04-Dec-2023 12:54

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
R - Spike/Surrogate failed recovery limits.


Data File: \\target_server\gg\chem\gcms-d.i\D111623.b\D8867a.d
Date : 16-NOV-2023 12:35
Client ID: INDSOURCE
Sample Info: WG345527-9
Purge Volume: 25.0
Column phase: RTX-VMS
Instrument: gcms-d.i
Operator: JSS
Column diameter: 0.18
Y (x10^4)
Min
-Vinyl chloride (1.591)
-1,1-Dichloroethene (2.553)
-trans-1,2-Dichloroethene (3.323)
-cis-1,2-Dichloroethene (4.556)
-Chloroform (4.850)
Dibromofluoromethane (5.042)+
-Benzene (5.439)
-Pentafluorobenzene (5.551)+
-1,2-Dichloroethane (5.651)
-Trichloroethene (6.052)
1,4-Difluorobenzene (6.098)
-1,1,2-Trichloroethane (7.304)
Toluene-D8 (7.493)
-Tetrachloroethene (7.912)
Chlorobenzene-D5 (8.984)
-1,3,5-Trimethylbenzene (9.886)
-P-Bromofluorobenzene (10.148)
-1,1,2,2-Tetrachloroethane (10.351)
-1,2,4-Trimethylbenzene (10.475)
-1,2,4-Trichlorobenzene (13.075)
-1,2,3-Trichlorobenzene (13.579)
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Data File: \\target_server\gg\chem\gcms-d.i\D111623.b\D8857.d
Report Date: 04-Dec-2023 12:49

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-d.i\D111623.b\D8857.d
Lab Smp Id: WG345527-1
Inj Date : 16-NOV-2023 07:03
Operator : JSS   Inst ID: gcms-d.i
Smp Info : WG345527-1
Misc Info :
Comment   : SW846 5030C
Method   : \\target_server\gg\chem\gcms-d.i\D111623.b\DSIM(01)CR23.m
Meth Date : 04-Dec-2023 12:48 croy   Quant Type: ISTD
Cal Date : 16-NOV-2023 12:02   Cal File: D8866.d
Als bottle: 1   Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: Credere.sub
Target Version: 4.12

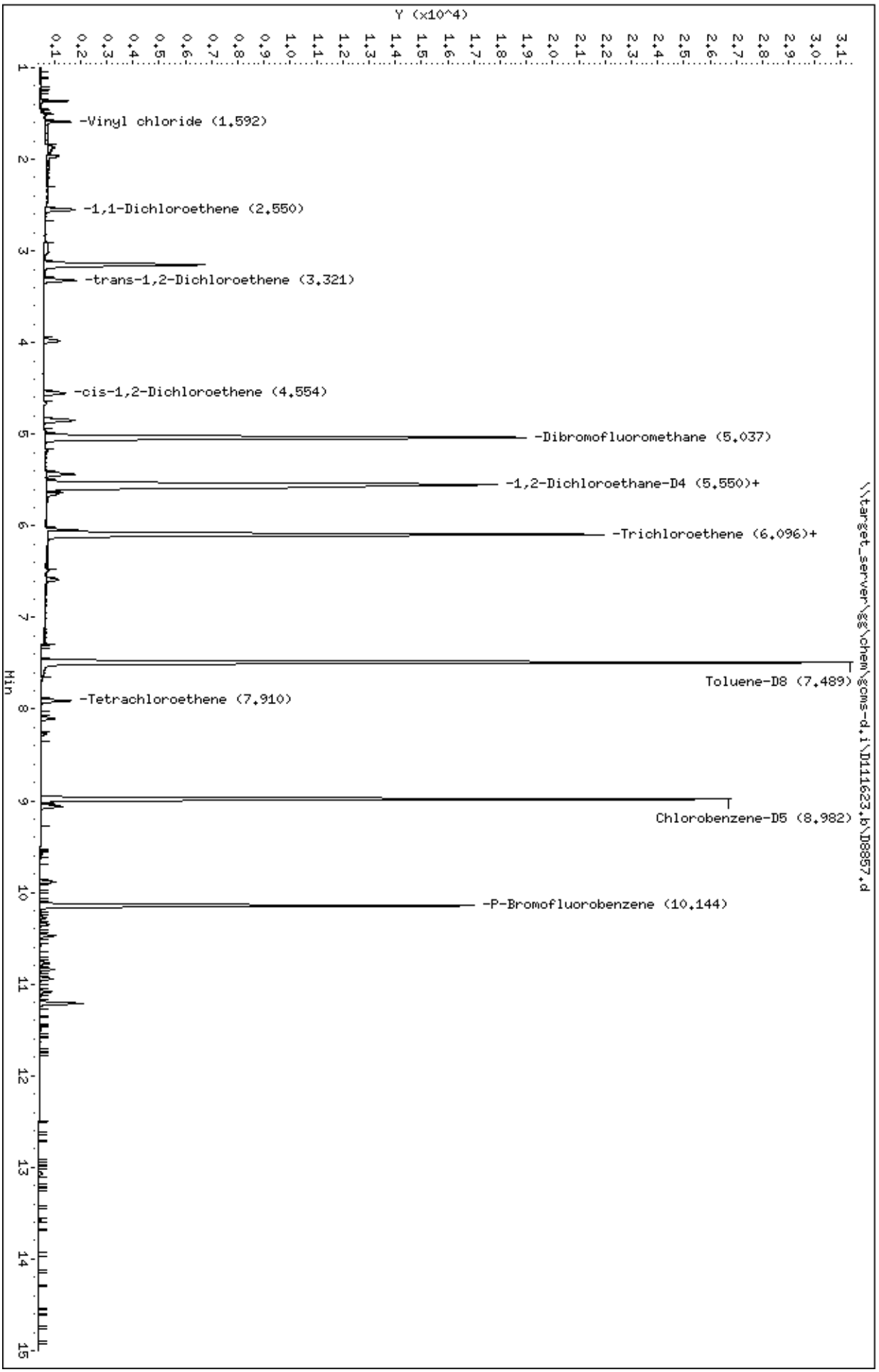
Concentration Formula: Amt * DF * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	25.000	sample purged
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)	REVIEW CODE
1	Vinyl chloride	62	1.591	1.591	(0.287)	577	0.05000	0.0346	
2	1,1-Dichloroethene	96	2.551	2.553	(0.460)	537	0.05000	0.0358	
4	trans-1,2-Dichloroethene	96	3.323	3.323	(0.599)	660	0.05000	0.0381(a)	
5	cis-1,2-Dichloroethene	96	4.554	4.558	(0.821)	604	0.05000	0.0464(a)	
13	Trichloroethene	130	6.048	6.052	(0.992)	636	0.05000	0.0436	
16	Tetrachloroethene	164	7.910	7.912	(1.298)	437	0.05000	0.0340	
$ 7	Dibromofluoromethane	113	5.036	5.037	(0.908)	18262	1.00000	1.08	
$ 11	1,2-Dichloroethane-D4	65	5.577	5.582	(1.005)	11439	1.00000	1.15	
$ 15	Toluene-D8	98	7.488	7.491	(1.229)	29933	1.00000	1.02	
$ 20	P-Bromofluorobenzene	95	10.144	10.146	(1.129)	8466	1.00000	0.832	
* 10	Pentafluorobenzene	168	5.549	5.549	(1.000)	21796	1.00000		
* 14	1,4-Difluorobenzene	114	6.095	6.096	(1.000)	32455	1.00000		
* 18	Chlorobenzene-D5	117	8.981	8.984	(1.000)	29570	1.00000		

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).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Client ID:
Sample Info: WG345527-1
Purge Volume: 25,0
Column phase: RTX-VMS
Instrument: gcms-d,i
Operator: JSS
Column diameter: 0,18
Y (x10^4)
-Vinyl chloride (1,592)
-1,1-Dichloroethene (2,550)
-trans-1,2-Dichloroethene (3,321)
-cis-1,2-Dichloroethene (4,554)
-Dibromofluoromethane (5,037)
-1,2-Dichloroethane-D4 (5,550)+
-Trichloroethene (6,096)+
Toluene-D8 (7,489)
-Tetrachloroethene (7,910)
Chlorobenzene-D5 (8,982)
-P-Bromofluorobenzene (10,144)
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Min

Data File: \\target_server\gg\chem\gcms-d.i\D111623.b\D8858.d
Report Date: 04-Dec-2023 12:49

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-d.i\D111623.b\D8858.d
Lab Smp Id: WG345527-2
Inj Date : 16-NOV-2023 07:36
Operator : JSS   Inst ID: gcms-d.i
Smp Info : WG345527-2
Misc Info :
Comment   : SW846 5030C
Method   : \\target_server\gg\chem\gcms-d.i\D111623.b\DSIM(01)CR23.m
Meth Date : 04-Dec-2023 12:48 croy   Quant Type: ISTD
Cal Date : 16-NOV-2023 07:36   Cal File: D8858.d
Als bottle: 2   Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: Credere.sub
Target Version: 4.12

Concentration Formula: Amt * DF * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	25.000	sample purged
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)	REVIEW CODE
	1 Vinyl chloride	62	1.593	1.591	(0.287)	1041	0.07500	0.0844	
	2 1,1-Dichloroethene	96	2.554	2.553	(0.460)	1030	0.07500	0.0913	
	4 trans-1,2-Dichloroethene	96	3.322	3.323	(0.599)	1087	0.07500	0.0814	
	5 cis-1,2-Dichloroethene	96	4.551	4.558	(0.820)	810	0.07500	0.0738	
	13 Trichloroethene	130	6.050	6.052	(0.992)	1002	0.07500	0.0844	
	16 Tetrachloroethene	164	7.911	7.912	(1.298)	818	0.07500	0.0871	
$	7 Dibromofluoromethane	113	5.040	5.037	(0.908)	15727	1.00000	1.02	
$	11 1,2-Dichloroethane-D4	65	5.581	5.582	(1.005)	9141	1.00000	0.978	
$	15 Toluene-D8	98	7.490	7.491	(1.228)	25918	1.00000	1.01	
$	20 P-Bromofluorobenzene	95	10.143	10.146	(1.129)	6903	1.00000	0.877	
*	10 Pentafluorobenzene	168	5.551	5.549	(1.000)	19081	1.00000		
*	14 1,4-Difluorobenzene	114	6.097	6.096	(1.000)	28228	1.00000		
*	18 Chlorobenzene-D5	117	8.981	8.984	(1.000)	24965	1.00000		

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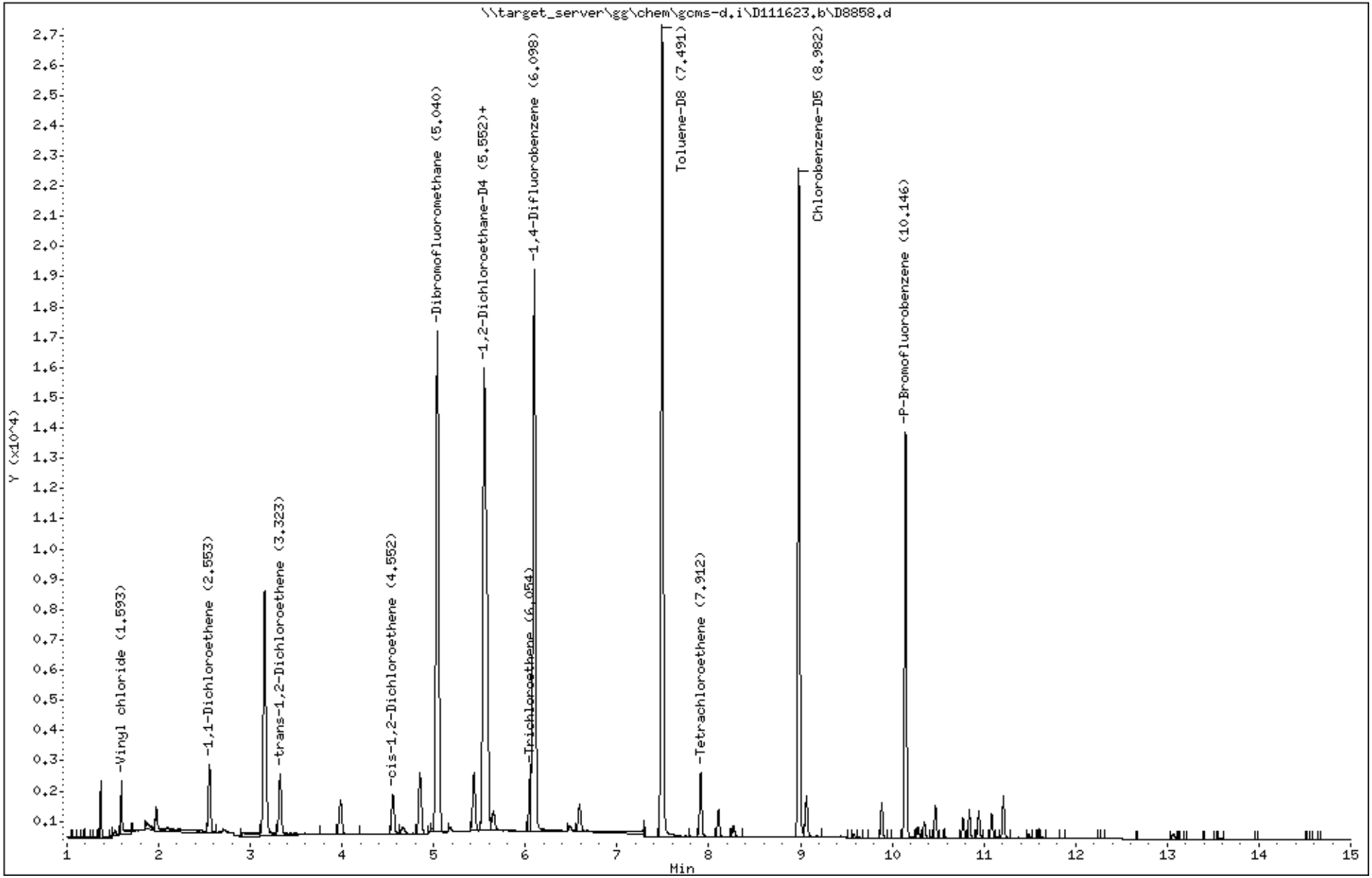
Date : 16-NOV-2023 07:36
Client ID:
Instrument: gcms-d.i
Sample Info: WG345527-2
Purge Volume: 25.0
Operator: JSS
Column phase: RTX-VMS
Column diameter: 0.18



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Report Date: 04-Dec-2023 12:49

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-d.i\D111623.b\D8859.d
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Inj Date : 16-NOV-2023 08:09
Operator : JSS   Inst ID: gcms-d.i
Smp Info : WG345527-3
Misc Info :
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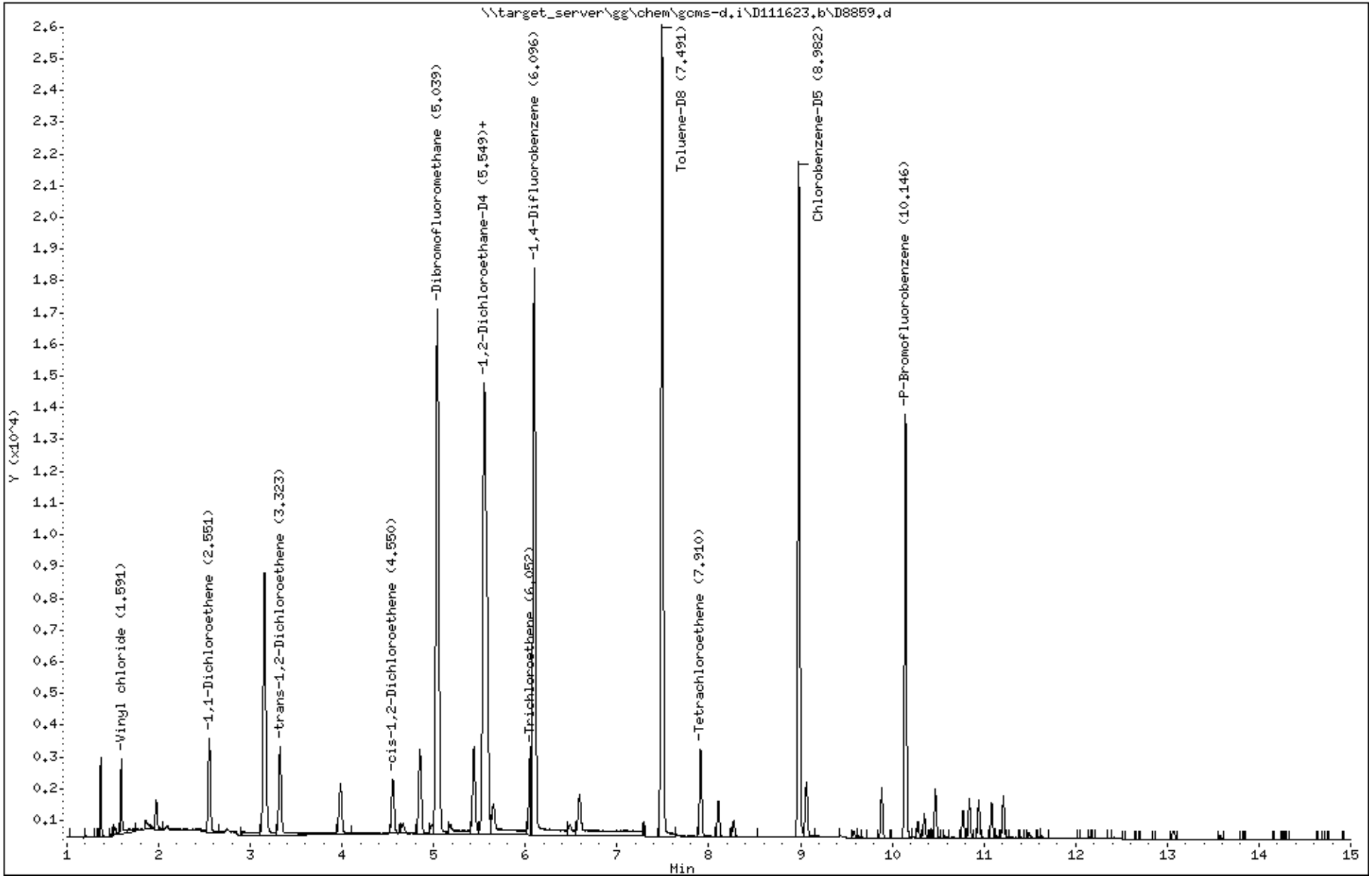
Method   : \\target_server\gg\chem\gcms-d.i\D111623.b\DSIM(01)CR23.m
Meth Date : 04-Dec-2023 12:48 croy   Quant Type: ISTD
Cal Date : 16-NOV-2023 08:09   Cal File: D8859.d
Als bottle: 3   Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: Credere.sub
Target Version: 4.12

Concentration Formula: Amt * DF * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	25.000	sample purged
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)	REVIEW CODE
	1 Vinyl chloride	62	1.591	1.591	(0.287)	1393	0.10000	0.114	
	2 1,1-Dichloroethene	96	2.553	2.553	(0.460)	1332	0.10000	0.116	
	4 trans-1,2-Dichloroethene	96	3.323	3.323	(0.599)	1465	0.10000	0.112	
	5 cis-1,2-Dichloroethene	96	4.553	4.558	(0.821)	1081	0.10000	0.104	
	13 Trichloroethene	130	6.050	6.052	(0.993)	1275	0.10000	0.108	
	16 Tetrachloroethene	164	7.909	7.912	(1.298)	1101	0.10000	0.116	
$	7 Dibromofluoromethane	113	5.038	5.037	(0.908)	15222	1.00000	1.03	
$	11 1,2-Dichloroethane-D4	65	5.579	5.582	(1.005)	8892	1.00000	1.01	
$	15 Toluene-D8	98	7.490	7.491	(1.229)	24634	1.00000	0.999	
$	20 P-Bromofluorobenzene	95	10.145	10.146	(1.130)	6756	1.00000	0.933	
*	10 Pentafluorobenzene	168	5.549	5.549	(1.000)	18125	1.00000		
*	14 1,4-Difluorobenzene	114	6.095	6.096	(1.000)	26967	1.00000		
*	18 Chlorobenzene-D5	117	8.981	8.984	(1.000)	23950	1.00000		

Data File: \\target_server\gg\chem\gcms-d.i\D111623.b\D8859.d
Date : 16-NOV-2023 08:09
Client ID:
Instrument: gcms-d.i
Sample Info: WG345527-3
Purge Volume: 25.0
Operator: JSS
Column phase: RTX-VMS
Column diameter: 0.18



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Data File: \\target_server\gg\chem\gcms-d.i\D111623.b\D8860.d
Report Date: 04-Dec-2023 12:49

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-d.i\D111623.b\D8860.d
Lab Smp Id: WG345527-4
Inj Date : 16-NOV-2023 08:42
Operator : JSS   Inst ID: gcms-d.i
Smp Info : WG345527-4
Misc Info :
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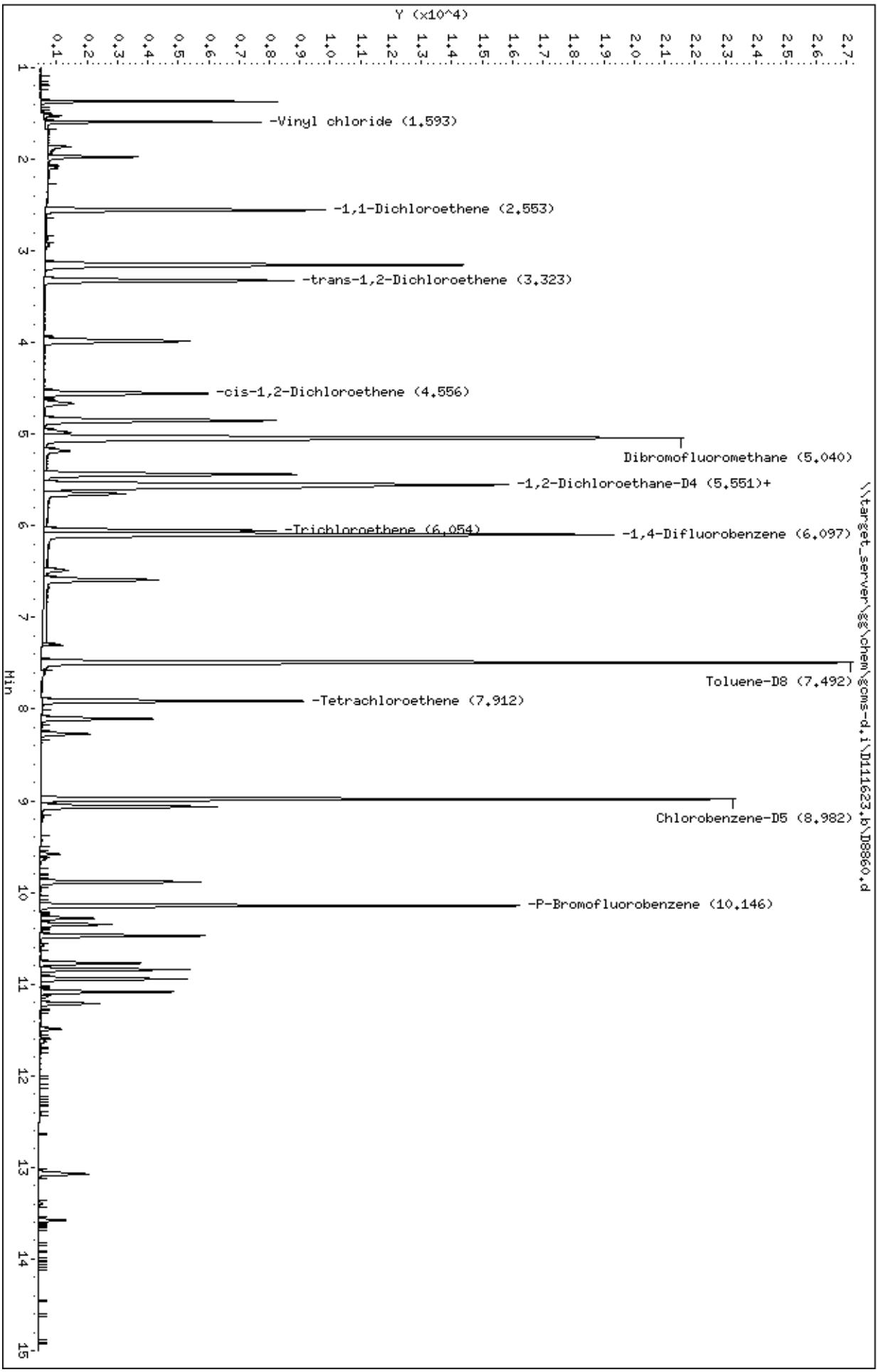
Method   : \\target_server\gg\chem\gcms-d.i\D111623.b\DSIM(01)CR23.m
Meth Date : 04-Dec-2023 12:48 croy   Quant Type: ISTD
Cal Date : 16-NOV-2023 08:42   Cal File: D8860.d
Als bottle: 4   Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: Credere.sub
Target Version: 4.12

Concentration Formula: Amt * DF * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	25.000	sample purged
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)	REVIEW CODE
	1 Vinyl chloride	62	1.593	1.591	(0.287)	4426	0.30000	0.333	
	2 1,1-Dichloroethene	96	2.552	2.553	(0.460)	4066	0.30000	0.324	
	4 trans-1,2-Dichloroethene	96	3.326	3.323	(0.599)	4612	0.30000	0.326	
	5 cis-1,2-Dichloroethene	96	4.553	4.558	(0.821)	3313	0.30000	0.301	
	13 Trichloroethene	130	6.054	6.052	(0.993)	3861	0.30000	0.303	
	16 Tetrachloroethene	164	7.909	7.912	(1.297)	3451	0.30000	0.332	
$	7 Dibromofluoromethane	113	5.040	5.037	(0.908)	16111	1.00000	1.03	
$	11 1,2-Dichloroethane-D4	65	5.581	5.582	(1.006)	9521	1.00000	1.02	
$	15 Toluene-D8	98	7.492	7.491	(1.229)	25854	1.00000	0.992	
$	20 P-Bromofluorobenzene	95	10.145	10.146	(1.130)	8169	1.00000	1.07	
*	10 Pentafluorobenzene	168	5.549	5.549	(1.000)	19041	1.00000		
*	14 1,4-Difluorobenzene	114	6.097	6.096	(1.000)	28506	1.00000		
*	18 Chlorobenzene-D5	117	8.981	8.984	(1.000)	25617	1.00000		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Client ID:
Sample Info: WG345527-4
Purge Volume: 25.0
Column phase: RTX-VMS
Instrument: gcms-d.i
Operator: JSS
Column diameter: 0.18
Y (x10^4)
Min
-Vinyl chloride (1.593)
-1,1-Dichloroethene (2.553)
-trans-1,2-Dichloroethene (3.323)
-cis-1,2-Dichloroethene (4.556)
Dibromofluoromethane (5.040)
-1,2-Dichloroethane-D4 (5.551)+
-Trichloroethene (6.054)
-1,4-Difluorobenzene (6.097)
Toluene-D8 (7.492)
-Tetrachloroethene (7.912)
Chlorobenzene-D5 (8.982)
-P-Bromofluorobenzene (10.146)
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Data File: \\target_server\gg\chem\gcms-d.i\D111623.b\D8861.d
Report Date: 04-Dec-2023 12:49

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-d.i\D111623.b\D8861.d
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Inj Date : 16-NOV-2023 09:15
Operator : JSS   Inst ID: gcms-d.i
Smp Info : WG345527-8
Misc Info :
Comment   : SW846 5030C
Method   : \\target_server\gg\chem\gcms-d.i\D111623.b\DSIM(01)CR23.m
Meth Date : 04-Dec-2023 12:48 croy   Quant Type: ISTD
Cal Date : 16-NOV-2023 09:15   Cal File: D8861.d
Als bottle: 5   Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: Credere.sub
Target Version: 4.12

Concentration Formula: Amt * DF * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	25.000	sample purged
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)	REVIEW CODE
	1 Vinyl chloride	62	1.593	1.591	(0.287)	29809	2.00000	1.78	
	2 1,1-Dichloroethene	96	2.553	2.553	(0.460)	26696	2.00000	1.70	
	4 trans-1,2-Dichloroethene	96	3.324	3.323	(0.599)	29939	2.00000	1.69	
	5 cis-1,2-Dichloroethene	96	4.553	4.558	(0.821)	23111	2.00000	1.70	
	13 Trichloroethene	130	6.052	6.052	(0.993)	27821	2.00000	1.84	
	16 Tetrachloroethene	164	7.911	7.912	(1.298)	24656	2.00000	1.96	
$	7 Dibromofluoromethane	113	5.038	5.037	(0.908)	15769	1.00000	0.815	
$	11 1,2-Dichloroethane-D4	65	5.581	5.582	(1.006)	9083	1.00000	0.790	
$	15 Toluene-D8	98	7.490	7.491	(1.228)	29687	1.00000	0.966	
$	20 P-Bromofluorobenzene	95	10.145	10.146	(1.130)	11950	1.00000	1.37	
*	10 Pentafluorobenzene	168	5.549	5.549	(1.000)	23465	1.00000		
*	14 1,4-Difluorobenzene	114	6.097	6.096	(1.000)	33674	1.00000		
*	18 Chlorobenzene-D5	117	8.981	8.984	(1.000)	28993	1.00000		

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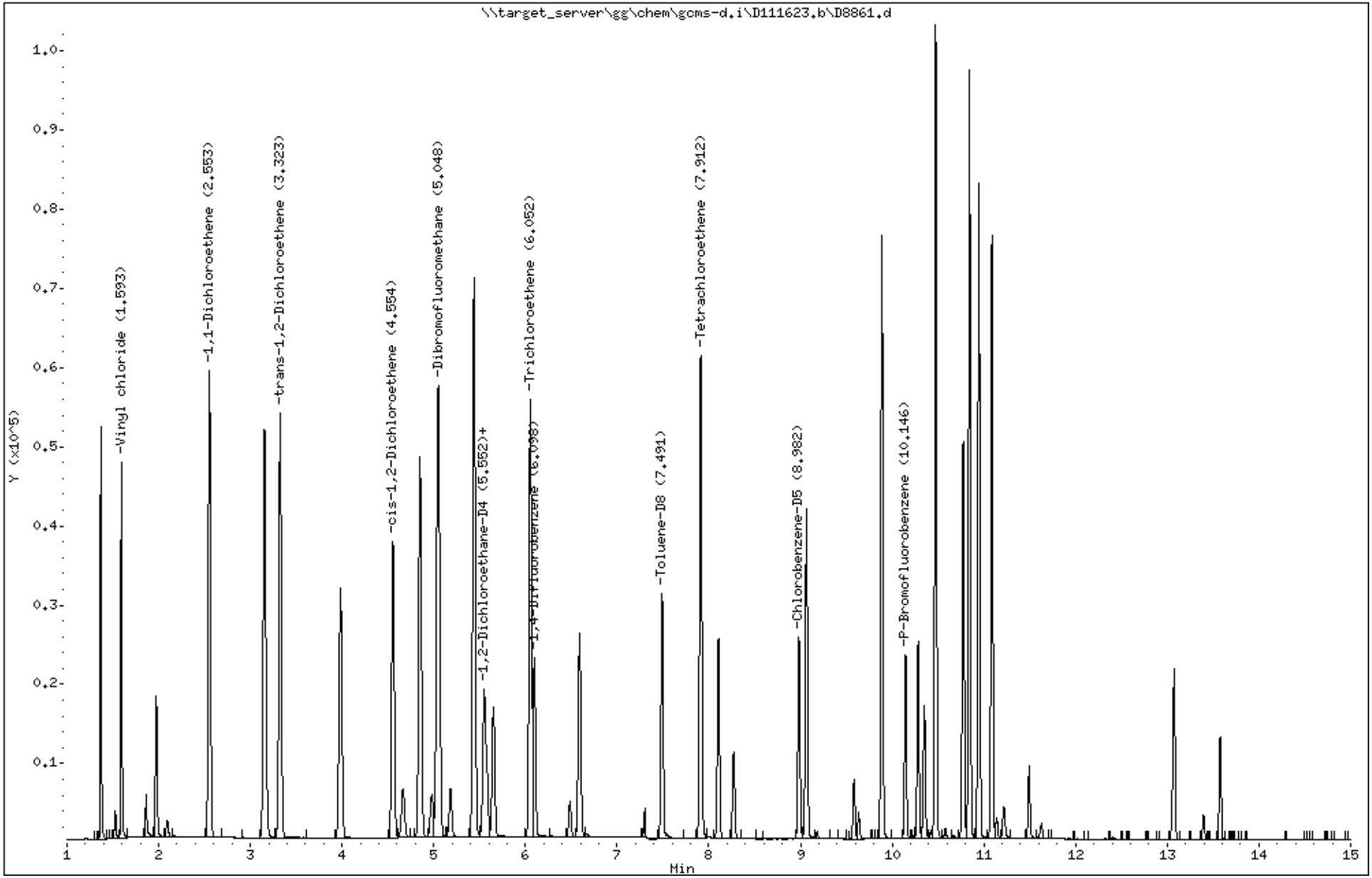
Date : 16-NOV-2023 09:15
Client ID:
Instrument: gcms-d.i
Sample Info: WG345527-8
Purge Volume: 25.0
Operator: JSS
Column phase: RTX-VMS
Column diameter: 0.18



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Report Date: 04-Dec-2023 12:49

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-d.i\D111623.b\D8862.d
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Inj Date : 16-NOV-2023 09:48
Operator : JSS   Inst ID: gcms-d.i
Smp Info : WG345527-7
Misc Info :
Comment   : SW846 5030C
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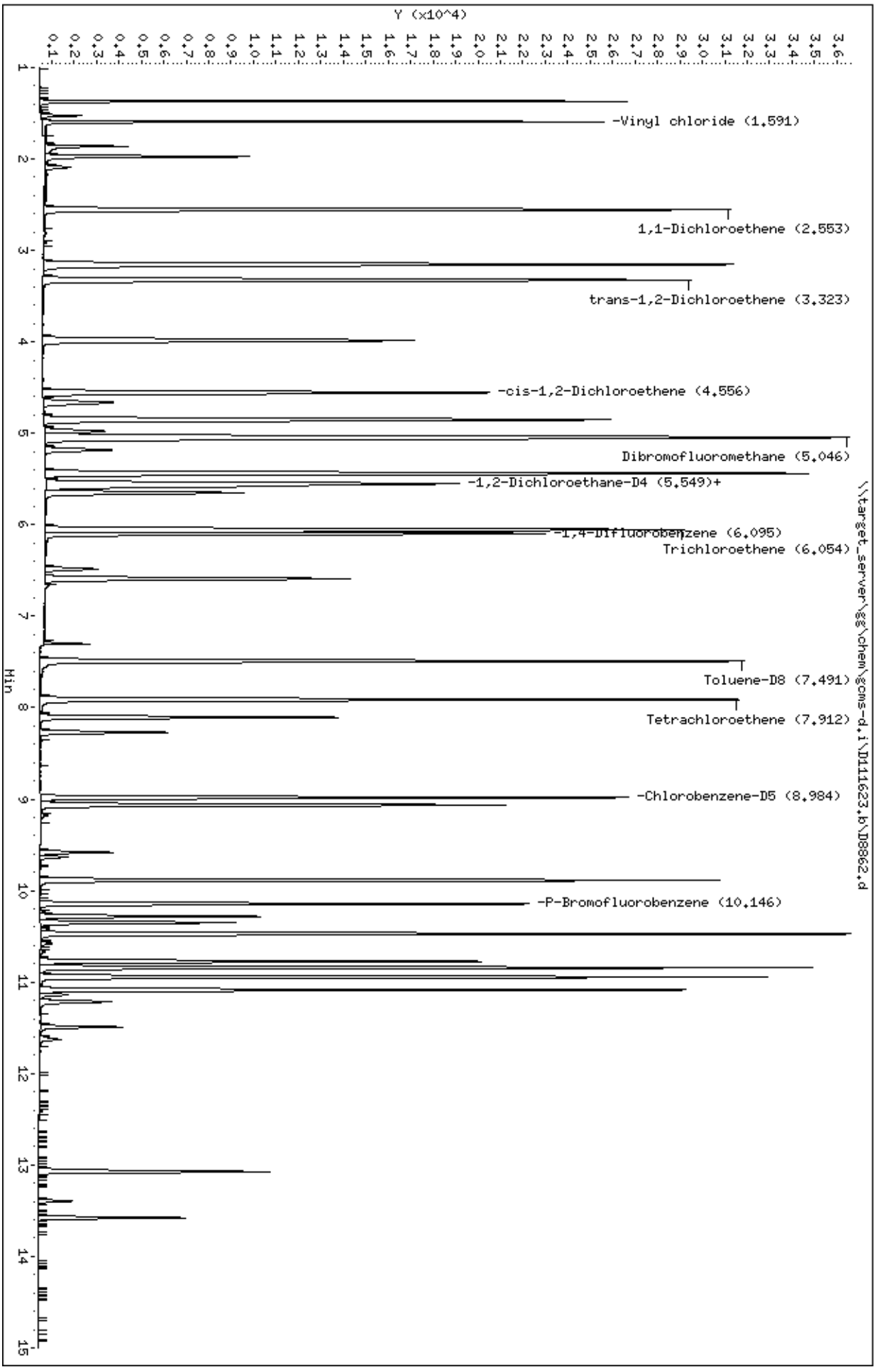
Meth Date : 04-Dec-2023 12:48 croy   Quant Type: ISTD
Cal Date : 16-NOV-2023 09:48   Cal File: D8862.d
Als bottle: 6   Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: Credere.sub
Target Version: 4.12

Concentration Formula: Amt * DF * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	25.000	sample purged
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)	REVIEW CODE
	1 Vinyl chloride	62	1.591	1.591	(0.287)	15729	1.00000	0.980	
	2 1,1-Dichloroethene	96	2.551	2.553	(0.460)	13675	1.00000	0.914	
	4 trans-1,2-Dichloroethene	96	3.322	3.323	(0.599)	16057	1.00000	0.952	
	5 cis-1,2-Dichloroethene	96	4.555	4.558	(0.821)	12318	1.00000	0.952	
	13 Trichloroethene	130	6.054	6.052	(0.993)	14351	1.00000	0.963	
	16 Tetrachloroethene	164	7.911	7.912	(1.298)	12457	1.00000	0.994	
$	7 Dibromofluoromethane	113	5.038	5.037	(0.908)	16459	1.00000	0.899	
$	11 1,2-Dichloroethane-D4	65	5.579	5.582	(1.005)	9681	1.00000	0.893	
$	15 Toluene-D8	98	7.490	7.491	(1.229)	30235	1.00000	0.988	
$	20 P-Bromofluorobenzene	95	10.143	10.146	(1.129)	11374	1.00000	1.20	
*	10 Pentafluorobenzene	168	5.549	5.549	(1.000)	22928	1.00000		
*	14 1,4-Difluorobenzene	114	6.095	6.096	(1.000)	33716	1.00000		
*	18 Chlorobenzene-D5	117	8.983	8.984	(1.000)	29507	1.00000		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Client ID:
Sample Info: WG345527-7
Purge Volume: 25,0
Column phase: RTX-VMS
Instrument: gcms-d,i
Operator: JSS
Column diameter: 0,18
Y (x10^4)
-Vinyl chloride (1,591)
1,1-Dichloroethene (2,553)
trans-1,2-Dichloroethene (3,323)
-cis-1,2-Dichloroethene (4,556)
Dibromofluoromethane (5,046)
-1,2-Dichloroethane-D4 (5,549)+
-1,4-Difluorobenzene (6,095)
Trichloroethene (6,054)
Toluene-D8 (7,491)
Tetrachloroethene (7,912)
-Chlorobenzene-D5 (8,984)
-P-Bromofluorobenzene (10,146)
\\target_server\gg\chem\gcms-d,i\D111623,b\D8862,d
Min

Data File: \\target_server\gg\chem\gcms-d.i\D111623.b\D8863.d
Report Date: 04-Dec-2023 12:49

Katahdin Analytical Services

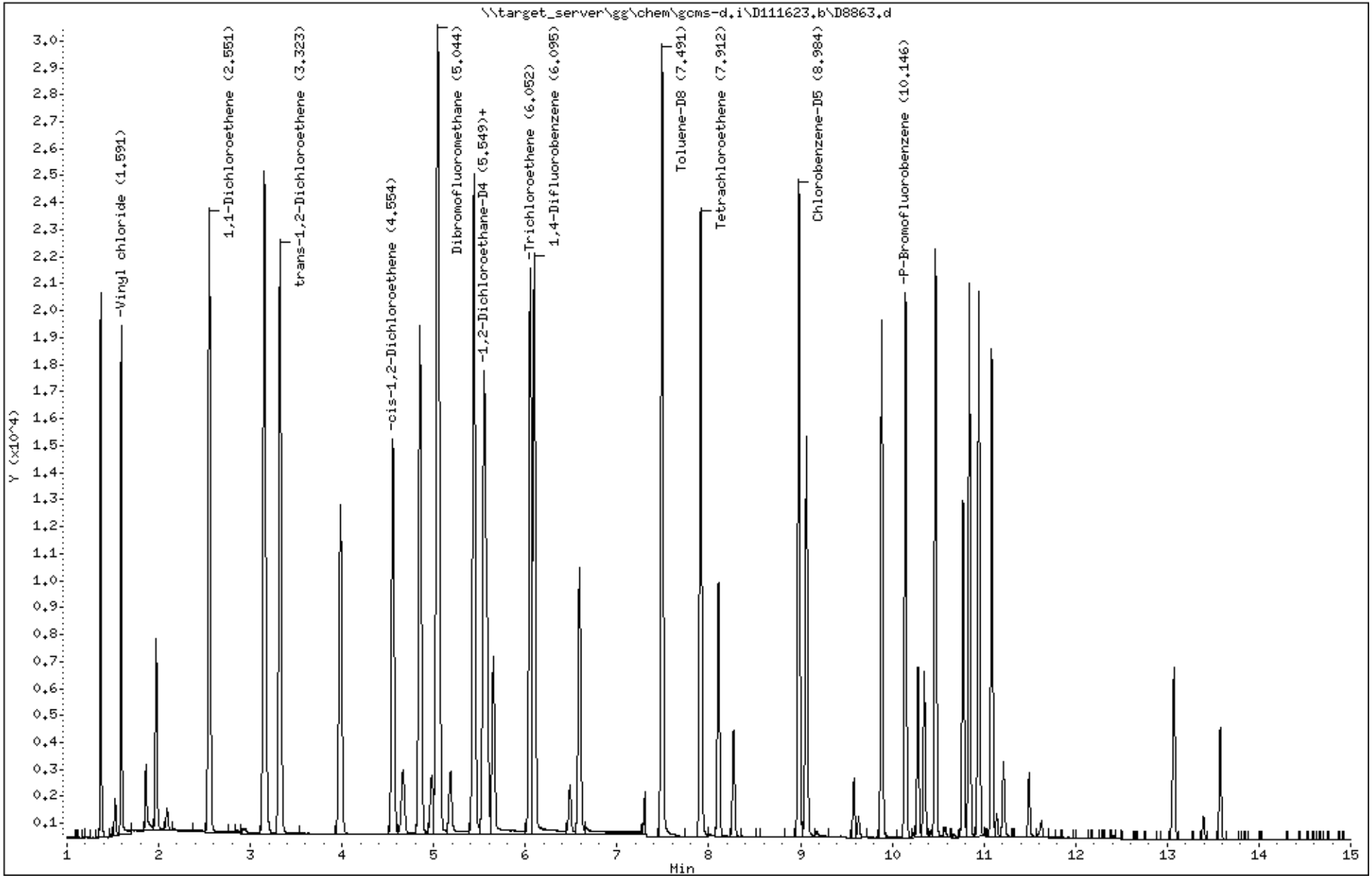
Data file : \\target_server\gg\chem\gcms-d.i\D111623.b\D8863.d
Lab Smp Id: WG345527-6
Inj Date : 16-NOV-2023 10:22
Operator : JSS   Inst ID: gcms-d.i
Smp Info : WG345527-6
Misc Info :
Comment   : SW846 5030C
Method   : \\target_server\gg\chem\gcms-d.i\D111623.b\DSIM(01)CR23.m
Meth Date : 04-Dec-2023 12:48 croy   Quant Type: ISTD
Cal Date : 16-NOV-2023 10:22   Cal File: D8863.d
Als bottle: 7   Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: Credere.sub
Target Version: 4.12

Concentration Formula: Amt * DF * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	25.000	sample purged
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)	REVIEW CODE
	1 Vinyl chloride	62	1.591	1.591	(0.287)	11724	0.75000	0.782	
	2 1,1-Dichloroethene	96	2.551	2.553	(0.460)	10293	0.75000	0.744	
	4 trans-1,2-Dichloroethene	96	3.322	3.323	(0.599)	12019	0.75000	0.766	
	5 cis-1,2-Dichloroethene	96	4.553	4.558	(0.821)	9015	0.75000	0.749	
	13 Trichloroethene	130	6.050	6.052	(0.993)	10419	0.75000	0.748	
	16 Tetrachloroethene	164	7.911	7.912	(1.298)	9090	0.75000	0.773	
$	7 Dibromofluoromethane	113	5.036	5.037	(0.908)	15830	1.00000	0.937	
$	11 1,2-Dichloroethane-D4	65	5.579	5.582	(1.006)	9203	1.00000	0.921	
$	15 Toluene-D8	98	7.490	7.491	(1.229)	28549	1.00000	0.995	
$	20 P-Bromofluorobenzene	95	10.143	10.146	(1.129)	10381	1.00000	1.12	
*	10 Pentafluorobenzene	168	5.547	5.549	(1.000)	21470	1.00000		
*	14 1,4-Difluorobenzene	114	6.095	6.096	(1.000)	31662	1.00000		
*	18 Chlorobenzene-D5	117	8.981	8.984	(1.000)	28069	1.00000		

Data File: \\target_server\gg\chem\gcms-d.i\D111623.b\D8863.d
Date : 16-NOV-2023 10:22
Client ID:
Instrument: gcms-d.i
Sample Info: WG345527-6
Purge Volume: 25.0
Operator: JSS
Column phase: RTX-VMS
Column diameter: 0.18



Data File: \\target_server\gg\chem\gcms-d.i\D111623.b\D8864.d
Report Date: 04-Dec-2023 12:49

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-d.i\D111623.b\D8864.d
Lab Smp Id: WG345527-5
Inj Date : 16-NOV-2023 10:55
Operator : JSS   Inst ID: gcms-d.i
Smp Info : WG345527-5
Misc Info :
Comment   : SW846 5030C
Method   : \\target_server\gg\chem\gcms-d.i\D111623.b\DSIM(01)CR23.m
Meth Date : 04-Dec-2023 12:48 croy   Quant Type: ISTD
Cal Date : 16-NOV-2023 10:55   Cal File: D8864.d
Als bottle: 8   Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: Credere.sub
Target Version: 4.12

Concentration Formula: Amt * DF * 25/Vo * CpndVariable

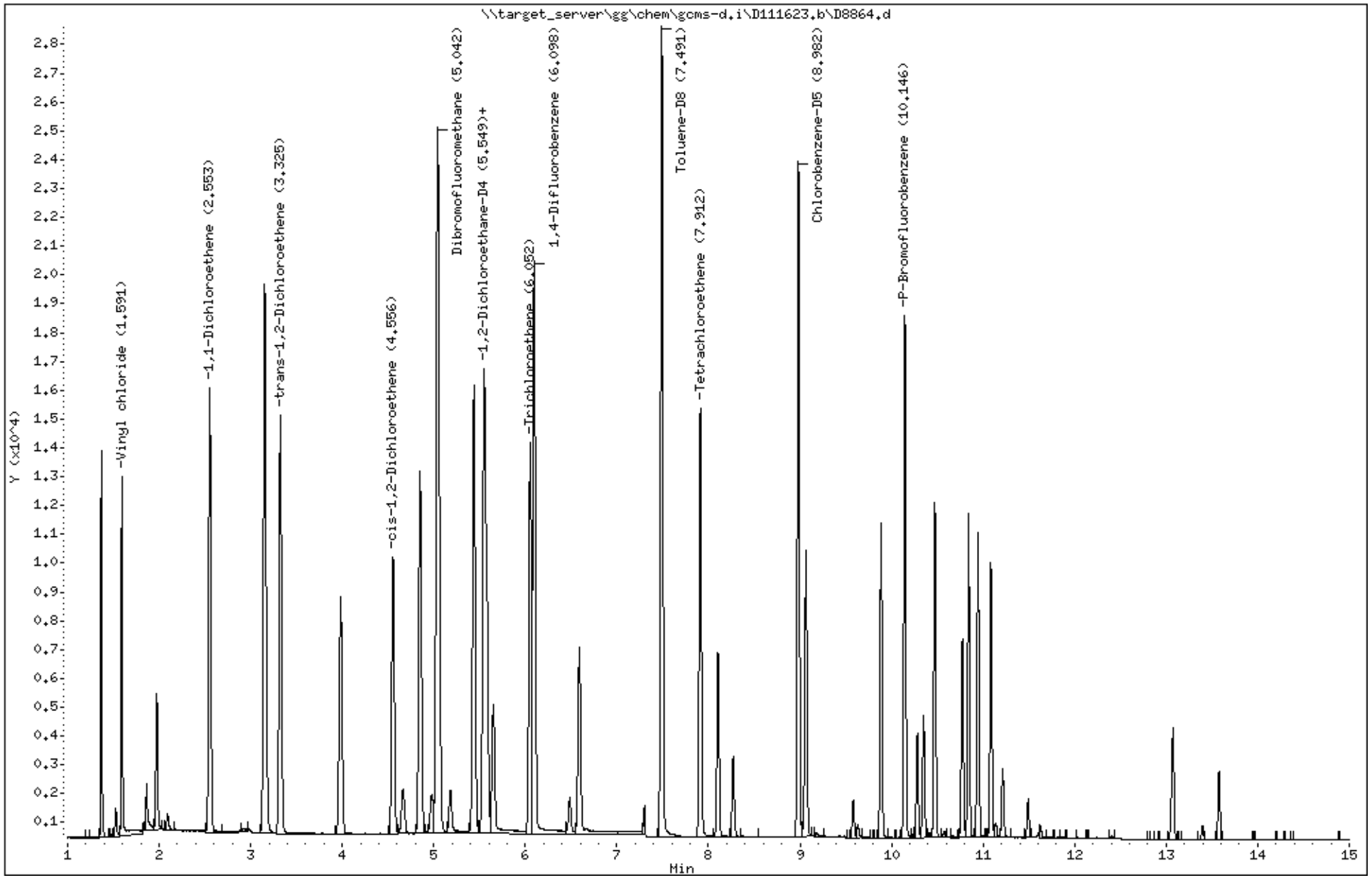
Name	Value	Description
DF	1.000	Dilution Factor
Vo	25.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)	REVIEW CODE
$ 7 Dibromofluoromethane	113	5.036	5.037	(0.908)	15594	1.00000	(a)	
$ 11 1,2-Dichloroethane-D4	65	5.581	5.582	(1.006)	9188	1.00000	(a)	
$ 15 Toluene-D8	98	7.490	7.491	(1.229)	27129	1.00000	(a)	
$ 20 P-Bromofluorobenzene	95	10.145	10.146	(1.129)	9219	1.00000	(a)	
* 10 Pentafluorobenzene	168	5.549	5.549	(1.000)	20191	1.00000		
* 14 1,4-Difluorobenzene	114	6.095	6.096	(1.000)	30045	1.00000		
* 18 Chlorobenzene-D5	117	8.983	8.984	(1.000)	26800	1.00000		

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\target_server\gg\chem\gcms-d.i\D111623.b\D8864.d
Date : 16-NOV-2023 10:55
Client ID:
Instrument: gcms-d.i
Sample Info: WG345527-5
Purge Volume: 25.0
Operator: JSS
Column phase: RTX-VMS
Column diameter: 0.18



Form 7
Calibration Verification Summary

Lab Name: Katahdin Analytical Services
SDG: SQ6112
Lab ID: WG345527-13
Analytical Date: 11/16/23 18:08
Lab File ID: D8877.d
Instrument ID: GCMS-D
Initial Calibration Date(s): 11/16/23 07:03 11/16/23 10:55
Column ID:

Compound	RRF/Amount	RF0.500	CCAL RRF0.500	Min RF	%D/ %Drift	Max %D/ %Drift	Curve Type	Qual
Vinyl chloride	0.70168	0.76959	0.76959	0.010	9.67857	50.000	Averaged	
1,1-Dichloroethene	0.64410	0.73850	0.73850	0.100	14.65627	50.000	Averaged	
trans-1,2-Dichloroethene	0.73249	0.71190	0.71190	0.010	-2.81159	50.000	Averaged	
cis-1,2-Dichloroethene	0.56034	0.55783	0.55783	0.010	-0.44739	50.000	Averaged	
Trichloroethene	0.43951	0.47547	0.47547	0.010	8.18232	50.000	Averaged	
Tetrachloroethene	0.37272	0.40038	0.40038	0.010	7.42109	50.000	Averaged	
Dibromofluoromethane	0.78094	0.78102	0.78102	0.010	0.01037	50.000	Averaged	
1,2-Dichloroethane-D4	0.46094	0.46685	0.46685	0.010	1.28245	50.000	Averaged	
Toluene-D8	0.90549	0.88222	0.88222	0.010	-2.56946	50.000	Averaged	
P-Bromofluorobenzene	0.33441	0.34536	0.34536	0.010	3.27657	50.000	Averaged	

*** = Compound out of QC criteria**

Data File: \\target_server\gg\chem\gcms-d.i\D111623.b\D8877.d
Report Date: 04-Dec-2023 13:09

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-d.i\D111623.b\D8877.d
Lab Smp Id: WG345527-13
Inj Date : 16-NOV-2023 18:08
Operator : JSS   Inst ID: gcms-d.i
Smp Info : WG345527-13,SQ6112
Misc Info : WG345527,WG345527-5,SQ6112-1
Comment   : SW846 5030C
Method   : \\target_server\gg\chem\gcms-d.i\D111623.b\DSIM(01)CR23.m
Meth Date : 04-Dec-2023 12:57 gcms-d.i   Quant Type: ISTD
Cal Date : 16-NOV-2023 10:22   Cal File: D8863.d
Als bottle: 21   Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: all.sub
Target Version: 4.12

Concentration Formula: Amt * DF * 25/Vo * CpndVariable

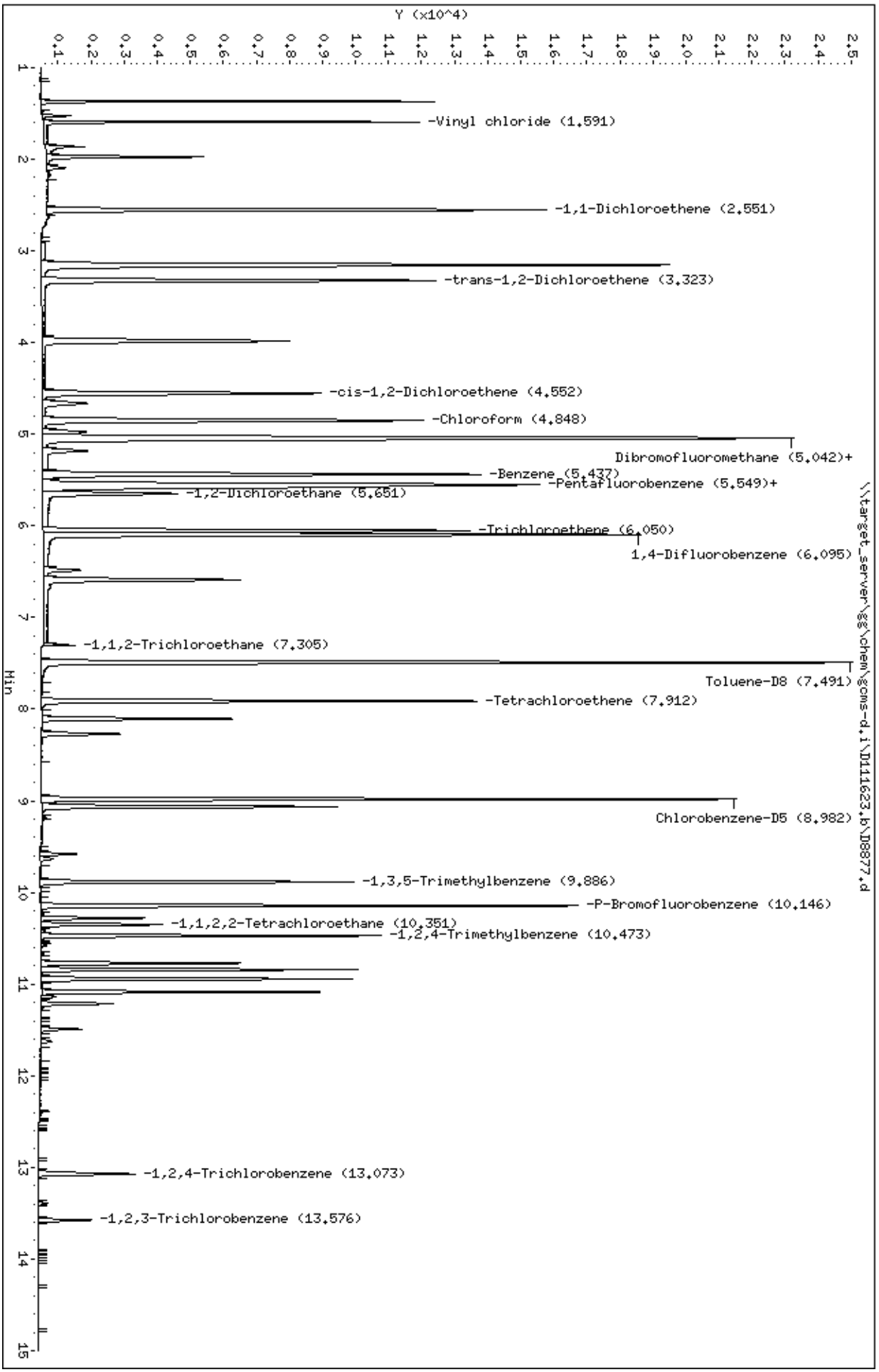
Name	Value	Description
DF	1.000	Dilution Factor
Vo	25.000	sample purged
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)	REVIEW CODE
	1 Vinyl chloride	62	1.591	1.591	(0.287)	7203	0.50000	0.548	
	2 1,1-Dichloroethene	96	2.553	2.553	(0.460)	6912	0.50000	0.573	
	4 trans-1,2-Dichloroethene	96	3.324	3.323	(0.599)	6663	0.50000	0.486	
	5 cis-1,2-Dichloroethene	96	4.553	4.558	(0.821)	5221	0.50000	0.498	
	6 Chloroform	83	4.848	4.848	(0.874)	13453	0.50000	(a)	
$	7 Dibromofluoromethane	113	5.036	5.037	(0.908)	14620	1.00000	1.00	
	8 1,1,1-Trichloroethane	97	5.050	5.054	(0.910)	9904	0.50000	(a)	
	9 Benzene	78	5.437	5.439	(0.980)	18385	0.50000	(a)	
*	10 Pentafluorobenzene	168	5.549	5.549	(1.000)	18719	1.00000		
$	11 1,2-Dichloroethane-D4	65	5.581	5.582	(1.006)	8739	1.00000	1.01	
	12 1,2-Dichloroethane	62	5.650	5.649	(0.927)	4983	0.50000	(a)	
	13 Trichloroethene	130	6.050	6.052	(0.993)	6338	0.50000	0.541	
*	14 1,4-Difluorobenzene	114	6.095	6.096	(1.000)	26660	1.00000		
$	15 Toluene-D8	98	7.490	7.491	(1.229)	23520	1.00000	0.974	
	16 Tetrachloroethene	164	7.911	7.912	(1.298)	5337	0.50000	0.537	
	17 1,1,2-Trichloroethane	83	7.308	7.310	(1.199)	461	0.50000	(a)	
*	18 Chlorobenzene-D5	117	8.981	8.984	(1.000)	23911	1.00000		
	19 1,3,5-Trimethylbenzene	105	9.885	9.888	(1.101)	10853	0.50000	(a)	
$	20 P-Bromofluorobenzene	95	10.145	10.146	(1.130)	8258	1.00000	1.03	
	21 1,1,2,2-Tetrachloroethane	83	10.349	10.351	(1.152)	2802	0.50000	(a)	
	22 1,2,4-Trimethylbenzene	105	10.472	10.473	(1.166)	8825	0.50000	(a)	
	23 1,2,4-Trichlorobenzene	180	13.072	13.075	(1.455)	1605	0.50000	(a)	
	24 1,2,3-Trichlorobenzene	180	13.575	13.579	(1.511)	900	0.50000	(a)	

Data File: \\target_server\gg\chem\gcms-d.i\D111623.b\D8877.d
Report Date: 04-Dec-2023 13:09

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).


Data File: \\target_server\gg\chem\gcms-d.i\D111623.b\D0877.d
Date : 16-NOV-2023 18:08
Client ID:
Sample Info: WG345527-13,SQ6112
Purge Volume: 25.0
Column phase: RTX-VMS
Instrument: gcms-d.i
Operator: JSS
Column diameter: 0.18
Y (x10^4)
Min
\\target_server\gg\chem\gcms-d.i\D111623.b\D0877.d
-Vinyl chloride (1.591)
-1,1-Dichloroethene (2.551)
-trans-1,2-Dichloroethene (3.323)
-cis-1,2-Dichloroethene (4.552)
-Chloroform (4.848)
Dibromofluoromethane (5.042)+
-Benzene (5.437)
-Pentafluorobenzene (5.549)+
-1,2-Dichloroethane (5.651)
-Trichloroethene (6.050)
1,4-Difluorobenzene (6.095)
-1,1,2-Trichloroethane (7.305)
Toluene-D8 (7.491)
-Tetrachloroethene (7.912)
Chlorobenzene-D5 (8.982)
-1,3,5-Trimethylbenzene (9.886)
-P-Bromofluorobenzene (10.146)
-1,1,2,2-Tetrachloroethane (10.351)
-1,2,4-Trimethylbenzene (10.473)
-1,2,4-Trichlorobenzene (13.073)
-1,2,3-Trichlorobenzene (13.576)

Data File: \\target_server\gg\chem\gcms-d.i\D111623.b\DB230a.d

Date : 16-NOV-2023 06:37

Client ID:

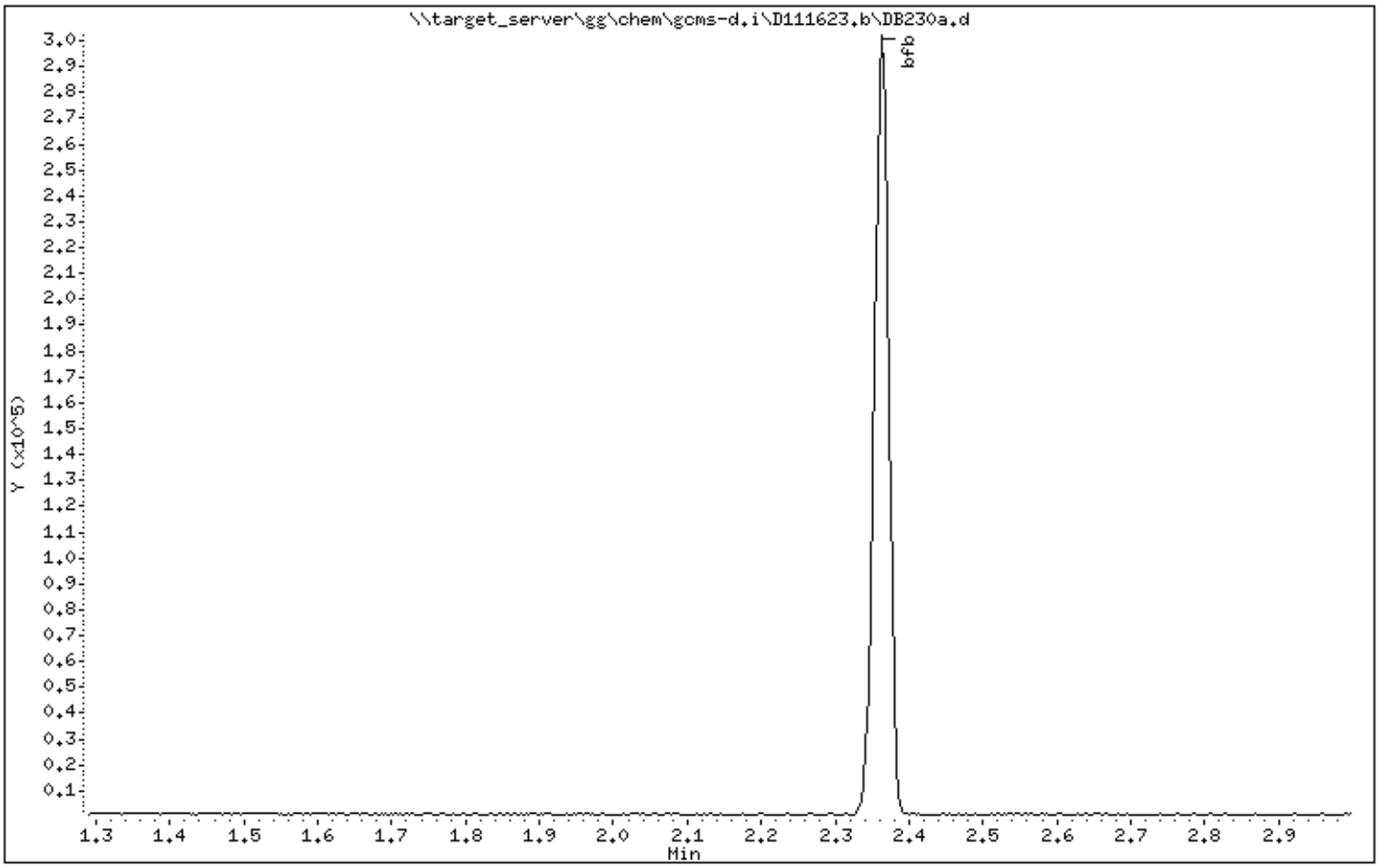
Instrument: gcms-d.i

Sample Info: WG345527-12,SQ6112

Operator: JSS

Column phase: RTX-VMS

Column diameter: 0.18



Data File: \\target_server\gg\chem\gcms-d.i\D111623.b\DB230a.d

Date : 16-NOV-2023 06:37

Client ID:

Instrument: gcms-d.i

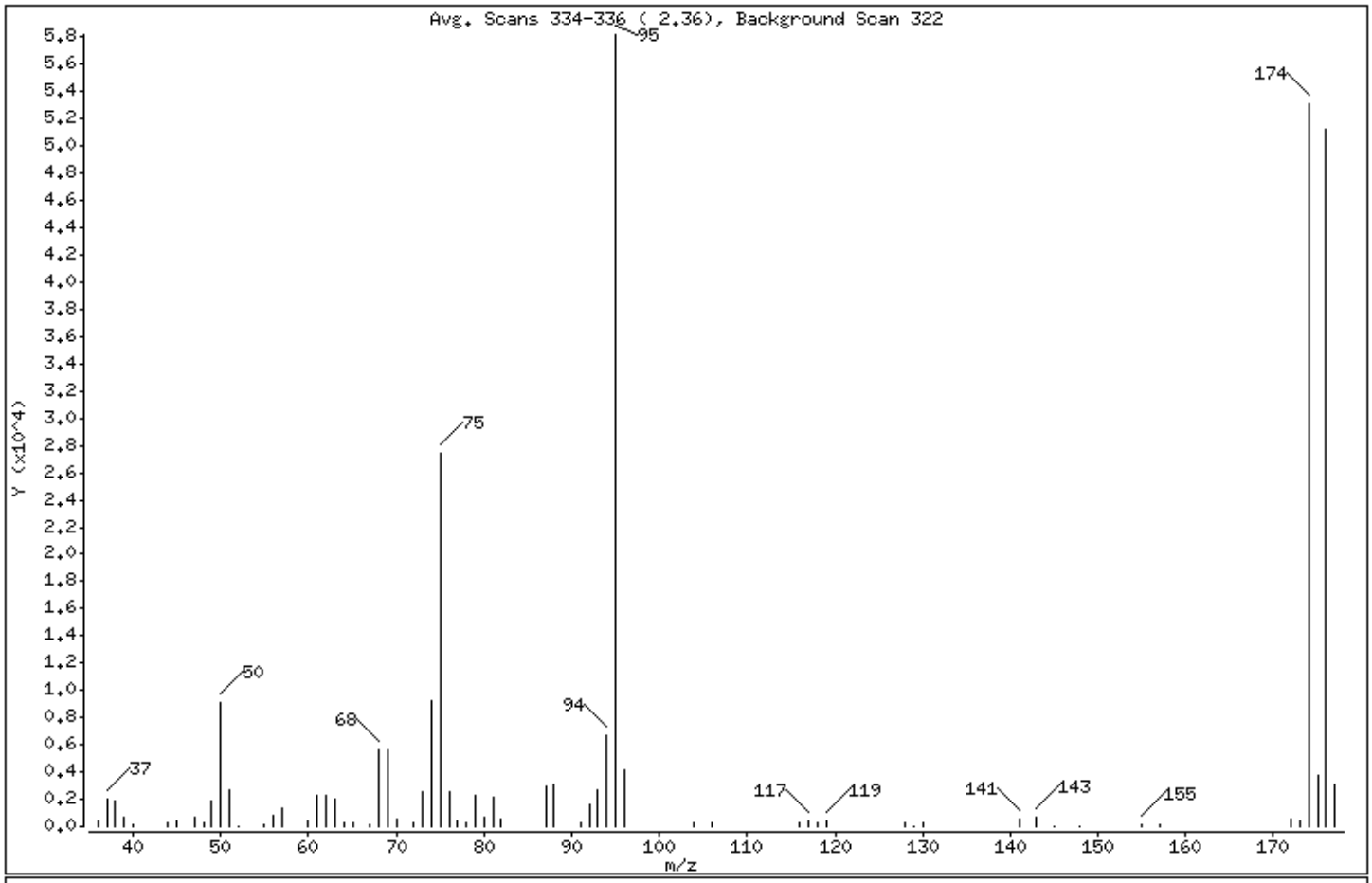
Sample Info: WG345527-12,SQ6112

Operator: JSS

Column phase: RTX-VMS

Column diameter: 0.18

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	15.56
75	30.00 - 60.00% of mass 95	47.16
96	5.00 - 9.00% of mass 95	7.03
173	Less than 2.00% of mass 174	0.72 (0.79)
174	Greater than 50.00% of mass 95	91.34
175	5.00 - 9.00% of mass 174	6.53 (7.14)
176	95.00 - 101.00% of mass 174	88.11 (96.46)
177	5.00 - 9.00% of mass 176	5.36 (6.08)

Date : 16-NOV-2023 06:37

Client ID: Instrument: gcms-d.i

Sample Info: WG345527-12,SQ6112

Operator: JSS

Column phase: RTX-VMS Column diameter: 0.18

Data File: DB230a.d
Spectrum: Avg. Scans 334-336 (2.36), Background Scan 322
Location of Maximum: 95.00
Number of points: 66

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	353	61.00	2340	80.00	713	128.00	221
37.00	1952	62.00	2331	81.00	2181	129.00	50
38.00	1881	63.00	2021	82.00	579	130.00	236
39.00	656	64.00	228	87.00	2900	141.00	567
40.00	113	65.00	316	88.00	3031	143.00	698
44.00	267	67.00	112	91.00	217	145.00	55
45.00	366	68.00	5605	92.00	1620	148.00	50
47.00	642	69.00	5582	93.00	2618	155.00	125
48.00	245	70.00	481	94.00	6677	157.00	73
49.00	1850	72.00	282	95.00	58184	172.00	571
50.00	9054	73.00	2500	96.00	4091	173.00	418
51.00	2728	74.00	9284	104.00	319	174.00	53144
52.00	50	75.00	27440	106.00	256	175.00	3797
55.00	82	76.00	2479	116.00	235	176.00	51264
56.00	742	77.00	395	117.00	438	177.00	3117
57.00	1346	78.00	290	118.00	249		
60.00	370	79.00	2269	119.00	376		

Raw QC Data Section

Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

SDG: SQ6112
Lab ID: WG345527-11
Client ID: Method Blank
Matrix: AQ
Lab File ID: D8870.D

Sample Date: N/A
Extract Date: 16-NOV-23
Extracted By: JSS
Extraction Method: SW846 5030C
Lab Prep Batch: WG345527

Report Date: 05-DEC-23
Analysis Date: 16-NOV-23
Analyst: JSS
Analysis Method: SW846 8260C SIM
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Vinyl Chloride	U	0.10	ug/L	1	.1	0.10	0.0037	0.050
1,1-Dichloroethene	U	0.050	ug/L	1	.05	0.050	0.0091	0.025
trans-1,2-Dichloroethene	U	0.050	ug/L	1	.05	0.050	0.0033	0.025
cis-1,2-Dichloroethene	U	0.050	ug/L	1	.05	0.050	0.0057	0.025
Trichloroethene	U	0.050	ug/L	1	.05	0.050	0.012	0.025
Tetrachloroethene	U	0.050	ug/L	1	.05	0.050	0.0091	0.025
Dibromofluoromethane		114.	%					
1,2-Dichloroethane-d4		115.	%					
Toluene-D8		102.	%					
p-Bromofluorobenzene		79.3	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029
http://www.katahdinlab.com

Data File: \\target_server\gg\chem\gcms-d.i\D111623.b\D8870.d
Report Date: 05-Dec-2023 10:38

Katahdin Analytical Services

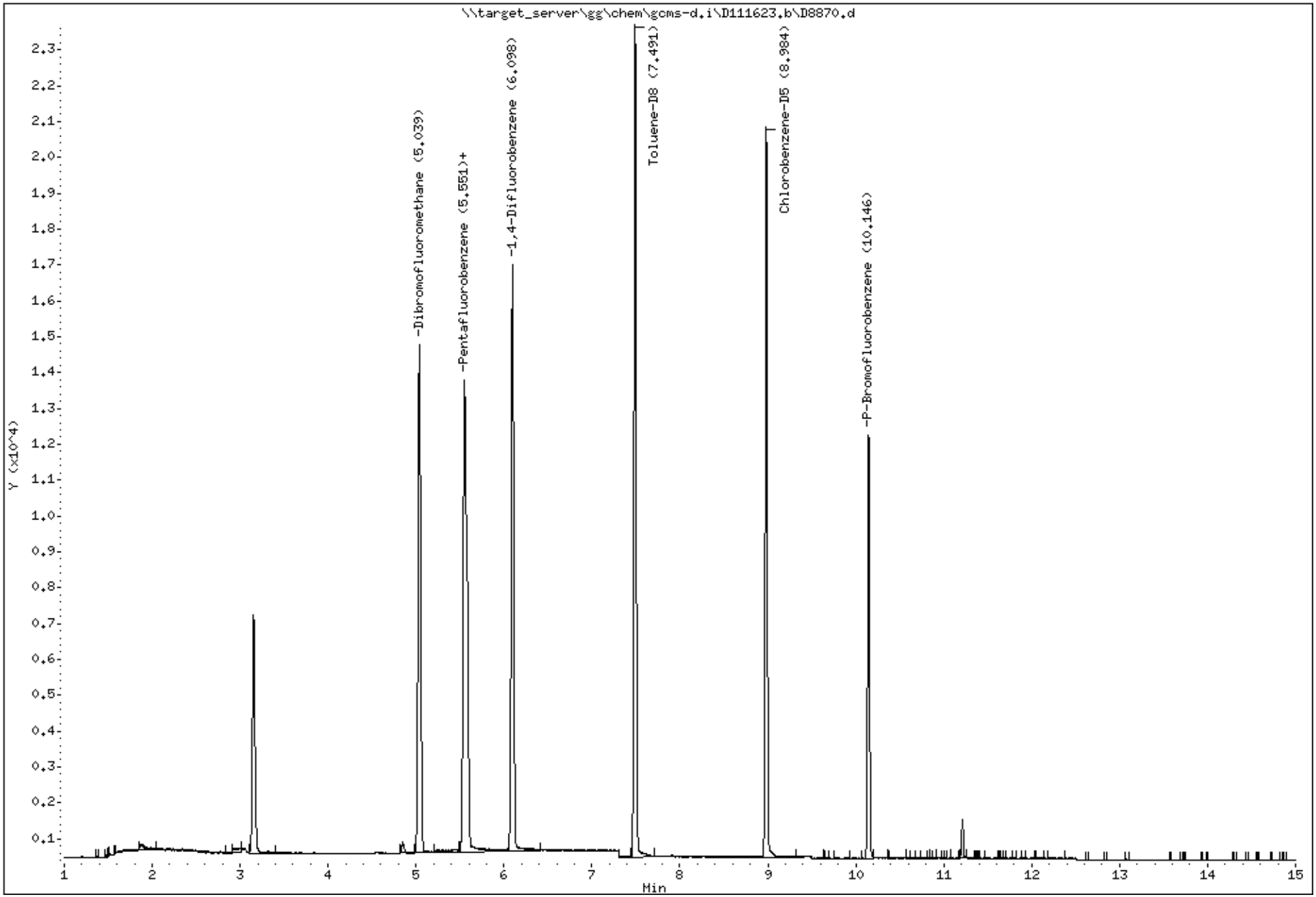
Data file : \\target_server\gg\chem\gcms-d.i\D111623.b\D8870.d
Lab Smp Id: WG345527-11 Client Smp ID: WG345527-Blank
Inj Date : 16-NOV-2023 14:15
Operator : JSS Inst ID: gcms-d.i
Smp Info : WG345527-11,SQ6112
Misc Info : WG345527,WG345527-5,SQ6112-1
Comment : SW846 5030C
Method : \\target_server\gg\chem\gcms-d.i\D111623.b\DSIM(01)CR23.m
Meth Date : 04-Dec-2023 12:57 gcms-d.i Quant Type: ISTD
Cal Date : 16-NOV-2023 10:22 Cal File: D8863.d
Als bottle: 14 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.12

Concentration Formula: Amt * DF * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	25.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)	REVIEW CODE
$ 7 Dibromofluoromethane	113	5.038	5.037	(0.908)	14584	1.14142	1.14	
* 10 Pentafluorobenzene	168	5.549	5.549	(1.000)	16361	1.00000		
$ 11 1,2-Dichloroethane-D4	65	5.579	5.582	(1.005)	8689	1.15217	1.15	
* 14 1,4-Difluorobenzene	114	6.097	6.096	(1.000)	24617	1.00000		
$ 15 Toluene-D8	98	7.490	7.491	(1.228)	22693	1.01806	1.02	
* 18 Chlorobenzene-D5	117	8.983	8.984	(1.000)	23024	1.00000		
$ 20 P-Bromofluorobenzene	95	10.144	10.146	(1.129)	6104	0.79279	0.793	

Data File: \\target_server\gg\chem\gcms-d.i\D111623.b\D8870.d
Date : 16-NOV-2023 14:15
Client ID: WG345527-Blank
Instrument: gcms-d.i
Sample Info: WG345527-11,SQ6112



Katahdin
ANALYTICAL SERVICES

LCS/LCSD Recovery Report

LCS ID: WG345527-10
LCSD ID: WG345527-14
SDG: SQ6112
LCS File ID: D8867.D

Extract Date: 16-NOV-23
Extracted By: JSS
Extraction Method: SW846 5030C
Lab Prep Batch: WG345527
LCSD File ID: D8868.D

Analysis Date: 16-NOV-23
Analyst: JSS
Analysis Method: SW846 8260C SIM
Matrix: AQ
Report Date: 04-DEC-23

Compound	Spike Amt	LCS Conc	LCS Rec (%)	LCSD Conc	LCSD Rec (%)	Conc Units	RPD (%)	RPD Limit	Limits
Vinyl Chloride	0.500	0.539	108.	0.517	103.	ug/L	4	20	70-130
1,1-Dichloroethene	0.500	0.584	117.	0.556	111.	ug/L	5	20	70-130
trans-1,2-Dichloroethene	0.500	0.571	114.	0.560	112.	ug/L	2	20	70-130
cis-1,2-Dichloroethene	0.500	0.533	107.	0.531	106.	ug/L	0	20	70-130
Trichloroethene	0.500	0.539	108.	0.513	103.	ug/L	5	20	70-130
Tetrachloroethene	0.500	0.559	112.	0.532	106.	ug/L	5	20	70-130
Dibromofluoromethane			104.		102.				70-130
1,2-Dichloroethane-d4			102.		100.				70-130
Toluene-D8			98.9		99.2				70-130
p-Bromofluorobenzene			102.		102.				70-130

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029
http://www.katahdinlab.com

Data File: \\target_server\gg\chem\gcms-d.i\D111623.b\D8867.d
Report Date: 04-Dec-2023 13:09

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-d.i\D111623.b\D8867.d
Lab Smp Id: WG345527-10 Client Smp ID: INDSOURCE
Inj Date : 16-NOV-2023 12:35
Operator : JSS Inst ID: gcms-d.i
Smp Info : WG345527-10,SQ6112
Misc Info : WG345527,WG345527-5,SQ6112-1
Comment : SW846 5030C
Method : \\target_server\gg\chem\gcms-d.i\D111623.b\DSIM(01)CR23.m
Meth Date : 04-Dec-2023 12:57 gcms-d.i Quant Type: ISTD
Cal Date : 16-NOV-2023 10:22 Cal File: D8863.d
Als bottle: 11 QC Sample: INDSOURCE
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.12

Concentration Formula: Amt * DF * 25/Vo * CpndVariable

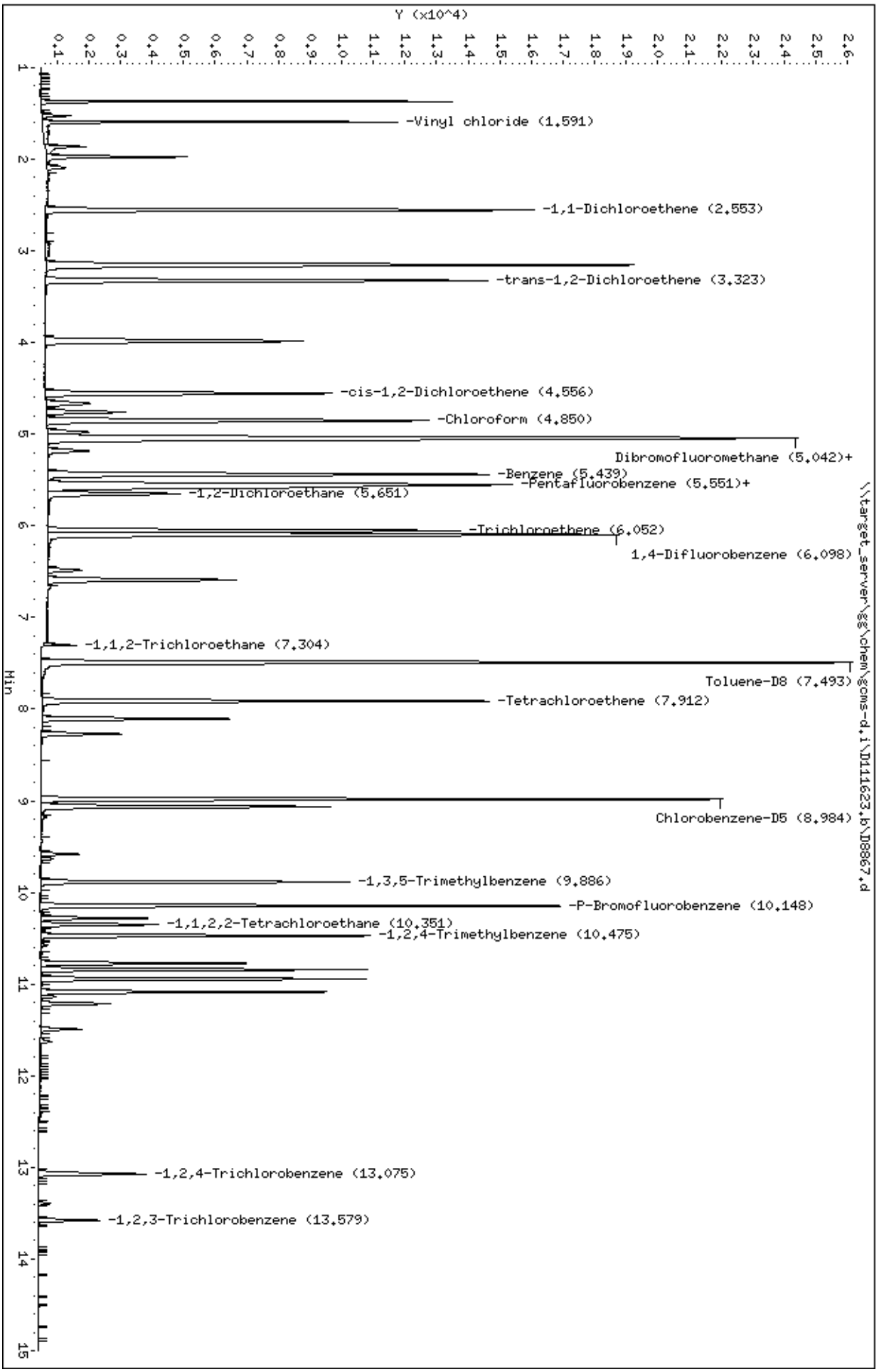
Name	Value	Description
DF	1.000	Dilution Factor
Vo	25.000	sample purged
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/l)	REVIEW CODE
	1 Vinyl chloride	62	1.591	1.591	(0.287)	7004	0.53868	0.539	
	2 1,1-Dichloroethene	96	2.554	2.553	(0.460)	6967	0.58374	0.584	
	4 trans-1,2-Dichloroethene	96	3.324	3.323	(0.599)	7746	0.57069	0.571	
	5 cis-1,2-Dichloroethene	96	4.553	4.558	(0.820)	5538	0.53337	0.533	
	6 Chloroform	83	4.850	4.848	(0.874)	14428		(a)	
$	7 Dibromofluoromethane	113	5.038	5.037	(0.908)	15133	1.04575	1.04	
	8 1,1,1-Trichloroethane	97	5.051	5.054	(0.910)	10761		(a)	
	9 Benzene	78	5.439	5.439	(0.980)	19844		(a)	
*	10 Pentafluorobenzene	168	5.551	5.549	(1.000)	18530	1.00000		
$	11 1,2-Dichloroethane-D4	65	5.581	5.582	(1.005)	8703	1.01894	1.02	
	12 1,2-Dichloroethane	62	5.650	5.649	(0.927)	5230		(a)	
	13 Trichloroethene	130	6.054	6.052	(0.993)	6480	0.53941	0.539	
*	14 1,4-Difluorobenzene	114	6.097	6.096	(1.000)	27333	1.00000		
$	15 Toluene-D8	98	7.492	7.491	(1.229)	24485	0.98931	0.989	
	16 Tetrachloroethene	164	7.911	7.912	(1.298)	5697	0.55922	0.559	
	17 1,1,2-Trichloroethane	83	7.312	7.310	(1.199)	568		(a)	
*	18 Chlorobenzene-D5	117	8.983	8.984	(1.000)	24578	1.00000		
	19 1,3,5-Trimethylbenzene	105	9.885	9.888	(1.100)	11238		(a)	
$	20 P-Bromofluorobenzene	95	10.147	10.146	(1.130)	8428	1.02542	1.02	
	21 1,1,2,2-Tetrachloroethane	83	10.350	10.351	(1.152)	2814		(a)	
	22 1,2,4-Trimethylbenzene	105	10.471	10.473	(1.166)	9255		(a)	
	23 1,2,4-Trichlorobenzene	180	13.074	13.075	(1.455)	1891		(a)	
	24 1,2,3-Trichlorobenzene	180	13.577	13.579	(1.511)	1086		(a)	

Data File: \\target_server\gg\chem\gcms-d.i\D111623.b\D8867.d
Report Date: 04-Dec-2023 13:09

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).


Data File: \\target_server\gg\chem\gcms-d.i\D111623.b\D0867.d
Date : 16-NOV-2023 12:35
Client ID: INDSOURCE
Sample Info: WG345527-10,SQ6112
Purge Volume: 25.0
Column phase: RTX-VMS
Instrument: gcms-d.i
Operator: JSS
Column diameter: 0.18
Y (x10^4)
Min
-Vinyl chloride (1.591)
-1,1-Dichloroethene (2.553)
-trans-1,2-Dichloroethene (3.323)
-cis-1,2-Dichloroethene (4.556)
-Chloroform (4.850)
Dibromofluoromethane (5.042)+
-Benzene (5.439)
-Pentafluorobenzene (5.551)+
-1,2-Dichloroethane (5.651)
-Trichloroethene (6.052)
1,4-Difluorobenzene (6.098)
-1,1,2-Trichloroethane (7.304)
Toluene-D8 (7.493)
-Tetrachloroethene (7.912)
Chlorobenzene-D5 (8.984)
-1,3,5-Trimethylbenzene (9.886)
-P-Bromofluorobenzene (10.148)
-1,1,2,2-Tetrachloroethane (10.351)
-1,2,4-Trimethylbenzene (10.475)
-1,2,4-Trichlorobenzene (13.075)
-1,2,3-Trichlorobenzene (13.579)
\\target_server\gg\chem\gcms-d.i\D111623.b\D0867.d

Data File: \\target_server\gg\chem\gcms-d.i\D111623.b\D8868.d
Report Date: 04-Dec-2023 13:09

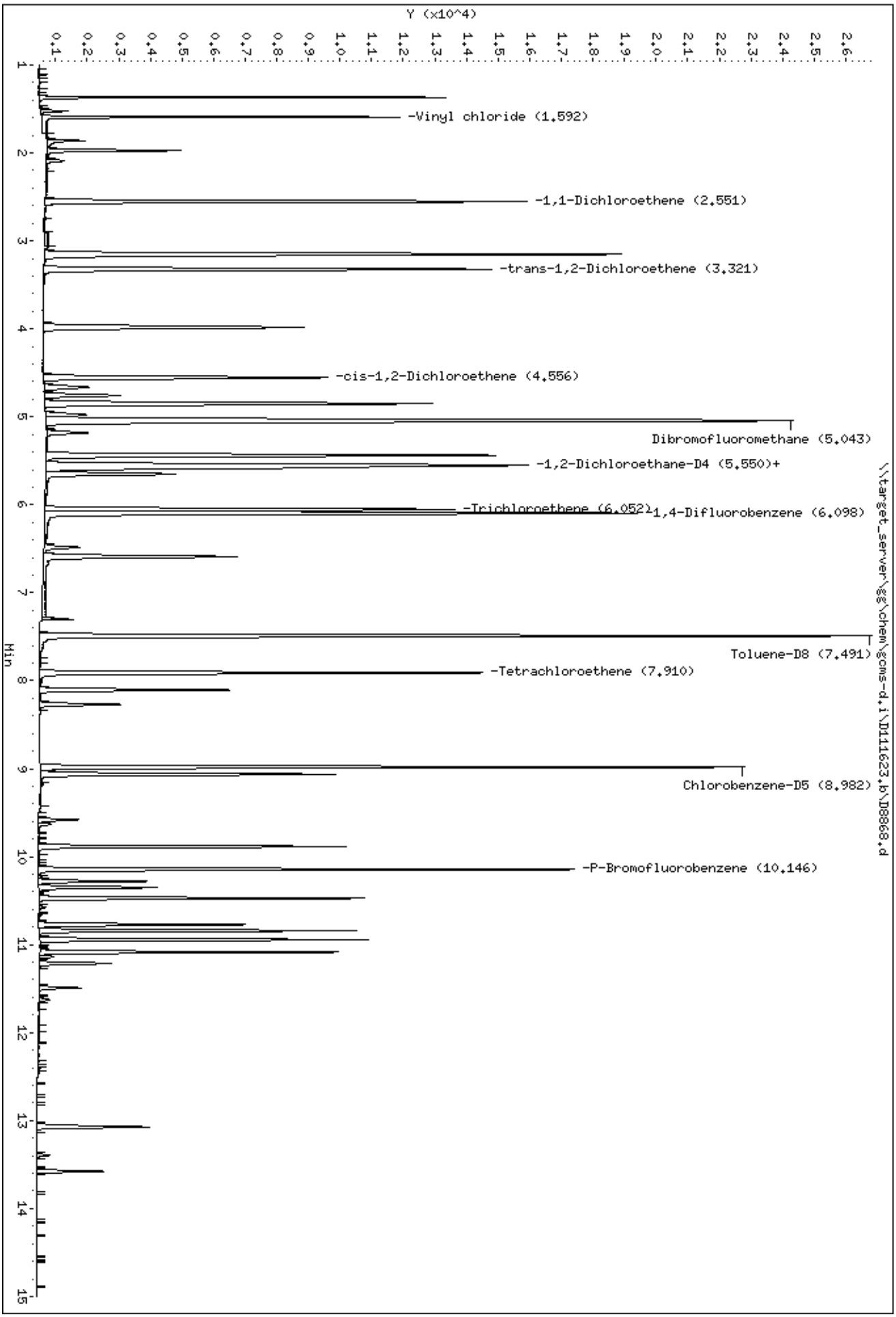
Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-d.i\D111623.b\D8868.d
Lab Smp Id: WG345527-14
Inj Date : 16-NOV-2023 13:08
Operator : JSS   Inst ID: gcms-d.i
Smp Info : WG345527-14,SQ6112
Misc Info : WG345527,WG345527-5,SQ6112-1
Comment   : SW846 5030C
Method   : \\target_server\gg\chem\gcms-d.i\D111623.b\DSIM(01)CR23.m
Meth Date : 04-Dec-2023 12:57 gcms-d.i   Quant Type: ISTD
Cal Date : 16-NOV-2023 10:22   Cal File: D8863.d
Als bottle: 12   QC Sample: LCSD
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: all.sub
Target Version: 4.12

Concentration Formula: Amt * DF * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	25.000	sample purged
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/l)	REVIEW CODE
	1 Vinyl chloride	62	1.591	1.591	(0.287)	6953	0.51672	0.517	
	2 1,1-Dichloroethene	96	2.553	2.553	(0.460)	6874	0.55651	0.556	
	4 trans-1,2-Dichloroethene	96	3.323	3.323	(0.599)	7864	0.55984	0.560	
	5 cis-1,2-Dichloroethene	96	4.554	4.558	(0.821)	5708	0.53120	0.531	
$	7 Dibromofluoromethane	113	5.036	5.037	(0.908)	15229	1.01688	1.02	
*	10 Pentafluorobenzene	168	5.549	5.549	(1.000)	19177	1.00000		
$	11 1,2-Dichloroethane-D4	65	5.577	5.582	(1.005)	8835	0.99950	0.999	
	13 Trichloroethene	130	6.052	6.052	(0.993)	6395	0.51288	0.513	
*	14 1,4-Difluorobenzene	114	6.097	6.096	(1.000)	28370	1.00000		
$	15 Toluene-D8	98	7.490	7.491	(1.228)	25483	0.99199	0.992	
	16 Tetrachloroethene	164	7.908	7.912	(1.297)	5629	0.53235	0.532	
*	18 Chlorobenzene-D5	117	8.981	8.984	(1.000)	25324	1.00000		
$	20 P-Bromofluorobenzene	95	10.145	10.146	(1.130)	8679	1.02485	1.02	


Y (x10^4)
Min
-Vinyl chloride (1.592)
-1,1-Dichloroethene (2.551)
-trans-1,2-Dichloroethene (3.321)
-cis-1,2-Dichloroethene (4.556)
Dibromofluoromethane (5.043)
-1,2-Dichloroethane-D4 (5.550)+
-Trichloroethene (6.052)
1,4-Difluorobenzene (6.098)
Toluene-D8 (7.491)
-Tetrachloroethene (7.910)
Chlorobenzene-D5 (8.982)
-P-Bromofluorobenzene (10.146)
\\target_server\gg\chem\gcms-d.i\D111623.b\D8868.d
Data File: \\target_server\gg\chem\gcms-d.i\D111623.b\D8868.d
Date : 16-NOV-2023 13:08
Client ID:
Sample Info: WG345527-14,SQ6112
Instrument: gcms-d.i

Logbooks and Supporting Documents

KATAHDIN ANALYTICAL SERVICES

GCMS- D INSTRUMENT RUNLOG

DATE: 11-16-23

BFB Injection Time: 6:37

Method:Check one	Standards	Std IDs *	pH paper Lot #	02102005	Criteria
8260 5mL O	BFB	V 2824	KI paper Lot #	—	K = Lab
8260 10mL O	IS / SS	V 2823	Vial Lot #	2795FL-PC-W	D = DOD
8260 SL O	CAL	V 2832	MeOH Lot #	—	Q = QUAPP
8260 SIM ✓	EXTRAs	~~V 2833~~	Work Grouped WG		
524 O	LCS	V 2833	11/16/23		
8260 25mL O					

Curve okay

RSF - averaged curve

SAMPLE NAME	DATA FILE	DF	ALS	METHOD	5030	5035	1311	Criteria	pH	TRC	Y/N	Initials	Comments
WG345527-12	DB830	1	-1	VOABFB	✓				NA	NA	Y	JJ	
VSTD 0.05 -1	D8857	1	1	DSIM(61)CR23							Y		
0.075 -2	58	1	2								Y		
0.10 -3	59	1	3								Y		
0.30 -4	60	1	4								Y		
2.00 -8	61	1	5								Y		
1.00 -7	62	1	6								Y		
0.75 -6	63	1	7								Y		
V0.50 -5	64	1	8								Y		
Rinse	65	1	9								N		
LOQ@0.05	66	1	10								Y		
LCS -10/-9	67	1	11								Y		IMS(-9)"A"
LCSD -14	68	1	12								Y		
VBLK	69	1	13								N		Target hits
WG345527-11	70	1	14								Y		
LOD@0.025	71	1	15						↓		—		
SQ6112-3A	72	1	16					D	12		Y		
SQ6133-11A	73	1	17								Y		
SQ6112-1C	74	1	18								Y		
↓ -2C	75	1	19								Y		
SQ6133-1B	76	1	20					↓	↓		Y		
CCV -13	77	1	21						NA		Y		18:06✓
CCV	78	1	22								N		not needed
CCV	79	1	23								N		↓
Rinse	V80	1	24	↓	↓				↓	↓	—	✓	
													OR 11/16/23

* Refer to page 1 for standard preparation instructions.

KATAHDIN ANALYTICAL SERVICES
GC/MS VOA STANDARD PREP LOG BOOK

CODE: V2823
STANDARD: 8260 SIM IS/SS
FINAL CONC (ug/mL): 5
FINAL VOLUME (mL): 10
PREP DATE: 10-31-23
EXPIRATION DATE: 11-28-23
MEOH VOLUME (uL): 9970
MEOH LOT #: EH084-US
INITIALS: JJ

STOCK NAME	STOCK	STOCK CONC ug/mL	VOLUME ADD uL
8260 IS	Amp 6412	5000	10
↓ SS	↓ 7258	2500	20

JJ 10-31-23

CODE: V2824
STANDARD: BFB TUNE
FINAL CONC (ug/mL): 50
FINAL VOLUME (mL): 3
PREP DATE: 11-2-23
EXPIRATION DATE: 11-30-23
MEOH VOLUME (uL): 2970
MEOH LOT #: EH084-US
INITIALS: JJ

STOCK NAME	STOCK	STOCK CONC ug/mL	VOLUME ADD uL
BFB TUNE	Amp 6738	5000	30

JJ 11-2-23

CODE: V2825
STANDARD: 8260 CAL
FINAL CONC (ug/mL): 100
FINAL VOLUME (mL): 4
PREP DATE: 11-7-23
EXPIRATION DATE: 11-21-23
MEOH VOLUME (uL): 2800
MEOH LOT #: EH084-US
INITIALS: JJ

STOCK NAME	STOCK		STOCK CONC ug/mL	VOLUME ADD uL
M-502A-R2-10X	AMP	7248	2000	200
M-601C-10X	AMP	7252	2000	↓
S-7920-R1	AMP	7204	2000	400
VOA CAL MIX #1	AMP	7295	5000	200
M-502B-10X (Gases)	AMP	7291	2000	

③

11-7-23 JJ

Reviewed by/Date:

KATAHDIN ANALYTICAL SERVICES
GC/MS VOA STANDARD PREP LOG BOOK

CODE: V2832	STOCK NAME	STOCK	STOCK CONC ug/mL	VOLUME ADD uL
STANDARD: SIM CAL	M-502A-R2-10X	AMP 7249	2000	10
FINAL CONC (ug/mL): 5	M-502B-10X	↓ 7302	↓	10
FINAL VOLUME (mL): 4				
PREP DATE: 11-15-23				
EXPIRATION DATE: 11-29-23				
MEOH VOLUME (uL): 3980				
MEOH LOT #: EH084-VS				
INITIALS:				
			11-15-23	

CODE: V2833	STOCK NAME	STOCK	STOCK CONC ug/mL	VOLUME ADD uL
STANDARD: SIM LCS	502.2 CAL 2000 Mega Mix	AMP 7221	2000	10
FINAL CONC (ug/mL): 5	502.2 CAL MIX #1	↓ 7283	↓	10
FINAL VOLUME (mL): 4				
PREP DATE: 11-15-23				
EXPIRATION DATE: 11-29-23				
MEOH VOLUME (uL): 3980				
MEOH LOT #: EH084-VS				
INITIALS:				
			11-15-23	

CODE: V2834	STOCK NAME	STOCK	STOCK CONC ug/mL	VOLUME ADD uL
STANDARD: 8260 LCS	502.2CAL MIX #1	AMP 7283	2000	150
FINAL CONC (ug/mL): 100	MTBE- (30402)	AMP 7144	2000	↓
FINAL VOLUME (mL): 3	502.2 CAL 2000 MEGA	AMP 7221	2000	
PREP DATE: 11-21-23	S-457S-10X	AMP 7218	2000	
EXPIRATION DATE: 12-6-23	M-8260-ADD-10X	AMP 7323	2000	
MEOH VOLUME (uL): 2100	CYCLOHEXANE	AMP 7231	2000	
MEOH LOT #: EH084-VS				
INITIALS:				
			11-21-23	

Reviewed by/Date:

KATAHDIN ANALYTICAL SERVICES

STOCK STANDARDS RECEIVED

GCMS VOLATILES LABORATORY

REVIEWED BY/DATE:

Amp 6904 — AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com — Rec'd 4-12-22
05 — TK-102-08S-10X — 1 mL
06 — Cyclohexane
2.0 mg/mL in Methanol
Lot: 219101390 — 1 comp(s)
Exp: Oct 25, 2029 — Storage: Ambient (>5 °C)
FOR LABORATORY USE ONLY H225 H370 H336 H320 H315 H311 H332 H301 H360 P338 P360 P331 Refer to SDS
Signal Word Danger

Amp 6907 — Restek Oxygenates Standard — Rec'd
08 — 30619 Lot# A0181864 — 4-13-22
09 — Varied Conc. X: 02/2025

Amp 6910 — 54577 — Rec'd 4-25-22
11 — Custom 8260 Internal Standard Mix — US/EN
12 — Lot# A0184289
Expire: 04/2025 Store: 0°C or colder
5000 µg/mL each in P&T Methanol — 1 mL
13 — RESTEK
14
15
16 —
17
18
19

Amp 6920 — AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com
21 — M-8260-ADD-10X — 1 mL
Method 8260 Additions
2.0 mg/mL in MeOH
Lot: 222031328 — 8 comp(s)
Exp: Jul 22, 2022 — Storage: Freeze (<-10 °C)
FOR LABORATORY USE ONLY H336 H225 H370 H320 H315 H311 H332 H301 H360, H350 H351 P338 Refer to SDS
Signal Word Danger

Amp 6922 — Agilent PVOC/GRO Standard — GJM
23 — @ 1000 µg/mL — Rec'd
Lot #000 654 6695 — 04/28/22
Exp 31-Aug-23

VOA-022 – Revision 1 – 10/15/2013

KATAHDIN ANALYTICAL SERVICES

STOCK STANDARDS RECEIVED

GCMS VOLATILES LABORATORY

REVIEWED BY/DATE:

Amp 7244
45
46

30402 US/EN
Methyl-tert- Butyl Ether Standard
Lot# A0192444
Expire: 12/2027 Store: 0°C or colder 1 mL
2000 µg/mL each in P&T Methanol
RESTEK

6-21-23

Amp 7247
48
49

AccuStandard® 125 Market St. New Haven, CT 06513 www.AccuStandard.com
M-502A-R2-10X 1 mL
VOC Liquid Mixture - Modified
2.0 mg/mL in Methanol
Lot: 221111385-02 53 comp(s)
Exp: Jun 18, 2025 Storage: Refrig (0-5 °C)
PRODUCT OF THE USA FOR LABORATORY USE ONLY
H336 H225 H370 H320 H315 H311 H332 H301 H360 H350 P308 Refer to SDS
Signal Word: Danger

Amp 7250
7251

AccuStandard® 125 Market St. New Haven, CT 06513 www.AccuStandard.com
GRH-004S-R2 1 mL
Volatile Petroleum Hydrocarbon without Surrogate Std.
10.0 mg/mL in Methanol
Lot: 221011092 15 comp(s)
Exp: Jan 11, 2031 Storage: Ambient (>5 °C)
PRODUCT OF THE USA FOR LABORATORY USE ONLY
H336 H225 H370 H320 H315 H311 H332 H301 H360 H350 P308 Refer to SDS
Signal Word: Danger

7/7/23

Amp 7252
53

AccuStandard® 125 Market St. New Haven, CT 06513 www.AccuStandard.com
M-601C-10X 1 mL
2-Chloroethylvinyl ether
2.0 mg/mL in MeOH
Lot: 223041132 1 comp(s)
Exp: Apr 11, 2026 Storage: Freeze (<-10 °C)
PRODUCT OF THE USA FOR LABORATORY USE ONLY
H225 H370 H336 H320 H315 H311 H332 H301 H360 P336 P360 P331 Refer to SDS
Signal Word: Danger

Rec'd 7/7/23

Amp 7254
55

AccuStandard® 125 Market St. New Haven, CT 06513 www.AccuStandard.com
M-603-M-5X 1 mL
Acrolein & Acrylonitrile
5.0 mg/mL in MeOH:Water 90:10
Lot: 223061381 2 comp(s)
Exp: Oct 21, 2023 Storage: Freeze (<-10 °C)
PRODUCT OF THE USA FOR LABORATORY USE ONLY
H336 H225 H370 H320 H315 H311 H332 H301 H360 H350 H351 P308 Refer to SDS
Signal Word: Danger

Recd 7/7/23

Amp 7256
57
58
59
60

30240 www.restek.com
8260A Surrogate Mix
Lot# A0197611
Expire: 05/2028 Store: 0°C or colder
2500 µg/mL each in P&T Methanol
1 mL US/EN
RESTEK

Rec 7/10/23

KATAHDIN ANALYTICAL SERVICES

STOCK STANDARDS RECEIVED

GCMS VOLATILES LABORATORY

REVIEWED BY/DATE:

Amp 6730 ↓ ↓ 37

Agilent 2,5-Dibromotoluene STD Rec'd 7-12
@5,000 ug/mL DL
Lot #0006464535
Ex: 6-30-2023

Amp 6738 ↓ 39

30003 US/EN
VOA Tuning Compound Mix
Lot# A0174371
Expire: 10/2026 Store: 0°C or colder 1 mL
5000 µg/mL each in P&T Methanol
RESTEK

Rec'd 9/9/21
CP

Amp 6740
41
42
43
44

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com
S-11160 1 mL
Custom GC Standard
2000 µg/mL in Methanol
Lot: 221091009
Exp: Sep 03, 2026
2 comp(s)
Storage: Ambient (>5 °C)
FOR LABORATORY USE ONLY
H225 H370 H336 H320 H315 H311 H332 H301 H360 P338 P360 P331 Refer to SDS
Signal Word Danger

9/21/21
RJC

Amp 6745 ↓ 46 ↓ 47

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com
TK-102-08S-10X 1 mL
Cyclohexane
2.0 mg/mL in Methanol
Lot: 219101390
Exp: Oct 25, 2029
1 comp(s)
Storage: Ambient (>5 °C)
FOR LABORATORY USE ONLY
H225 H370 H336 H320 H315 H311 H332 H301 H360 P338 P360 P331 Refer to SDS
Signal Word Danger

9-10-21
Rec'd

Amp 6748 ↓ 49 ↓ 50

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com
M-8260-ADD-10X 1 mL
Method 8260 Additions
2.0 mg/mL in MeOH
Lot: 221061336-01
Exp: Dec 18, 2021
8 comp(s)
Storage: Freeze (<-10 °C)
FOR LABORATORY USE ONLY
H336 H225 H370 H320 H315 H311 H332 H301 H360, H350 H351 P338 Refer to SDS
Signal Word Danger

Amp 6751
52

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com
S-457S-10X 1 mL
Tetrahydrofuran
2.0 mg/mL in MeOH
Lot: 221051701
Exp: Jun 01, 2031
1 comp(s)
Storage: Ambient (>5 °C)
FOR LABORATORY USE ONLY
H225 H370 H336 H320 H315 H311 H332 H301 H360 H351 P338 P360 Refer to SDS
Signal Word Danger

Rec'd
10-1-21
AJ

KATAHDIN ANALYTICAL SERVICES

STOCK STANDARDS RECEIVED

GCMS VOLATILES LABORATORY

REVIEWED BY/DATE:

Amp 7244
45
46

30402 US/EN
Methyl-tert- Butyl Ether Standard
Lot# A0192444
Expire: 12/2027 Store: 0°C or colder 1 mL
2000 µg/mL each in P&T Methanol
RESTEK

6/21/23

Amp 7247
48
49

AccuStandard® 125 Market St. New Haven, CT 06513 www.AccuStandard.com
M-502A-R2-10X 1 mL
VOC Liquid Mixture - Modified
2.0 mg/mL in Methanol
Lot: 221111385-02 53 comp(s)
Exp: Jun 18, 2025 Storage: Refrig (0-5 °C)
PRODUCT OF THE USA FOR LABORATORY USE ONLY
H336 H225 H370 H320 H315 H311 H332 H301 H360 H350 H350 P338 Refer to SDS
Signal Word: Danger

Amp 7250
7251

AccuStandard® 125 Market St. New Haven, CT 06513 www.AccuStandard.com
GRH-004S-R2 1 mL
Volatile Petroleum Hydrocarbon without Surrogate Std.
10.0 mg/mL in Methanol
Lot: 221011092 15 comp(s)
Exp: Jan 11, 2031 Storage: Ambient (>5 °C)
PRODUCT OF THE USA FOR LABORATORY USE ONLY
H336 H225 H370 H320 H315 H311 H332 H301 H360 H350 H350 P338 Refer to SDS
Signal Word: Danger

7/7/23

Amp 7252
53

AccuStandard® 125 Market St. New Haven, CT 06513 www.AccuStandard.com
M-601C-10X 1 mL
2-Chloroethylvinyl ether
2.0 mg/mL in MeOH
Lot: 223041132 1 comp(s)
Exp: Apr 11, 2026 Storage: Freeze (<-10 °C)
PRODUCT OF THE USA FOR LABORATORY USE ONLY
H225 H370 H336 H320 H315 H311 H332 H301 H360 P338 P360 P331 Refer to SDS
Signal Word: Danger

Rec 7/7/23

Amp 7254
55

AccuStandard® 125 Market St. New Haven, CT 06513 www.AccuStandard.com
M-603-M-5X 1 mL
Acrolein & Acrylonitrile
5.0 mg/mL in MeOH:Water 90:10
Lot: 223061381 2 comp(s)
Exp: Oct 21, 2023 Storage: Freeze (<-10 °C)
PRODUCT OF THE USA FOR LABORATORY USE ONLY
H336 H225 H370 H320 H315 H311 H332 H301 H360 H350 H351 P338 Refer to SDS
Signal Word: Danger

Recd 7/7/23

Amp 7256
57
58
59
60

30240 www.restek.com RESTEK
8260A Surrogate Mix
Lot# A0197611
Expire: 05/2028 Store: 0°C or colder
2500 µg/mL each in P&T Methanol
1 mL US/EN

Rec 7/10/23

KATAHDIN ANALYTICAL SERVICES

STOCK STANDARDS RECEIVED

GCMS VOLATILES LABORATORY

REVIEWED BY/DATE:

Rec'd 9/14/23 DL

Amp 7297
98
99

30605 www.restek.com
VPH Matrix Spike Mix w/Surrogate (revised)
Lot# A0200451
Expire: 07/2028 Store: 0°C or colder
50 µg/mL each in P&T Methanol
1 mL US/EN

RESTEK

Rec'd 9-14-23

Amp 7300
01

AccuStandard® 125 Market St. New Haven, CT 06513 www.AccuStandard.com
TK-102-08S-10X 1 mL
Cyclohexane
2.0 mg/mL in Methanol
Lot: 221101280
Exp: Oct 19, 2031
PRODUCT OF THE USA
1 comp(s)
Storage: Ambient (>5 °C)
FOR LABORATORY USE ONLY
H225 H370 H336 H320 H315 H311 H332 H301 H360 P308 P361 P331 Refer to SDS
Signal Word

Amp 7302
03
04

AccuStandard® 125 Market St. New Haven, CT 06513 www.AccuStandard.com
M-502B-10X 1 mL
Volatile Organic Cmpds - Gases
2.0 mg/mL in MeOH
Lot: 223061232
Exp: Jun 21, 2026
PRODUCT OF THE USA
6 comp(s)
Storage: Refrig (0-5 °C)
FOR LABORATORY USE ONLY
H336 H225 H370 H320 H315 H311 H332 H301 H360 H350 P308 Refer to SDS
Signal Word

Amp 7305
06

AccuStandard® 125 Market St. New Haven, CT 06513 www.AccuStandard.com
M-502A-R2-10X 1 mL
VOC Liquid Mixture - Modified
2.0 mg/mL in Methanol
Lot: 221111385-02
Exp: Jun 18, 2025
PRODUCT OF THE USA
53 comp(s)
Storage: Refrig (0-5 °C)
FOR LABORATORY USE ONLY
H336 H225 H370 H320 H315 H311 H332 H301 H350 H360 H350 P308 Refer to SDS
Signal Word

Amp 7307
08

AccuStandard® 125 Market St. New Haven, CT 06513 www.AccuStandard.com
M-8240C-R6 1 mL
Appendix IX Volatiles Mix
Varied conc. in MeOH
Lot: 222061040
Exp: Jun 06, 2025
PRODUCT OF THE USA
11 comp(s)
Storage: Refrig (0-5 °C)
FOR LABORATORY USE ONLY
H225 H370 H336 H320 H315 H311 H332 H301 H351 H360 H350 P308 Refer to SDS
Signal Word

Amp 7309
10
11
12
13

31081 www.restek.com
1,3,5-Trichlorobenzene Standard
Lot# A0194759
Expire: 02/2028 Store: 10°C or colder
1000 µg/mL each in P&T Methanol
1 mL US/EN

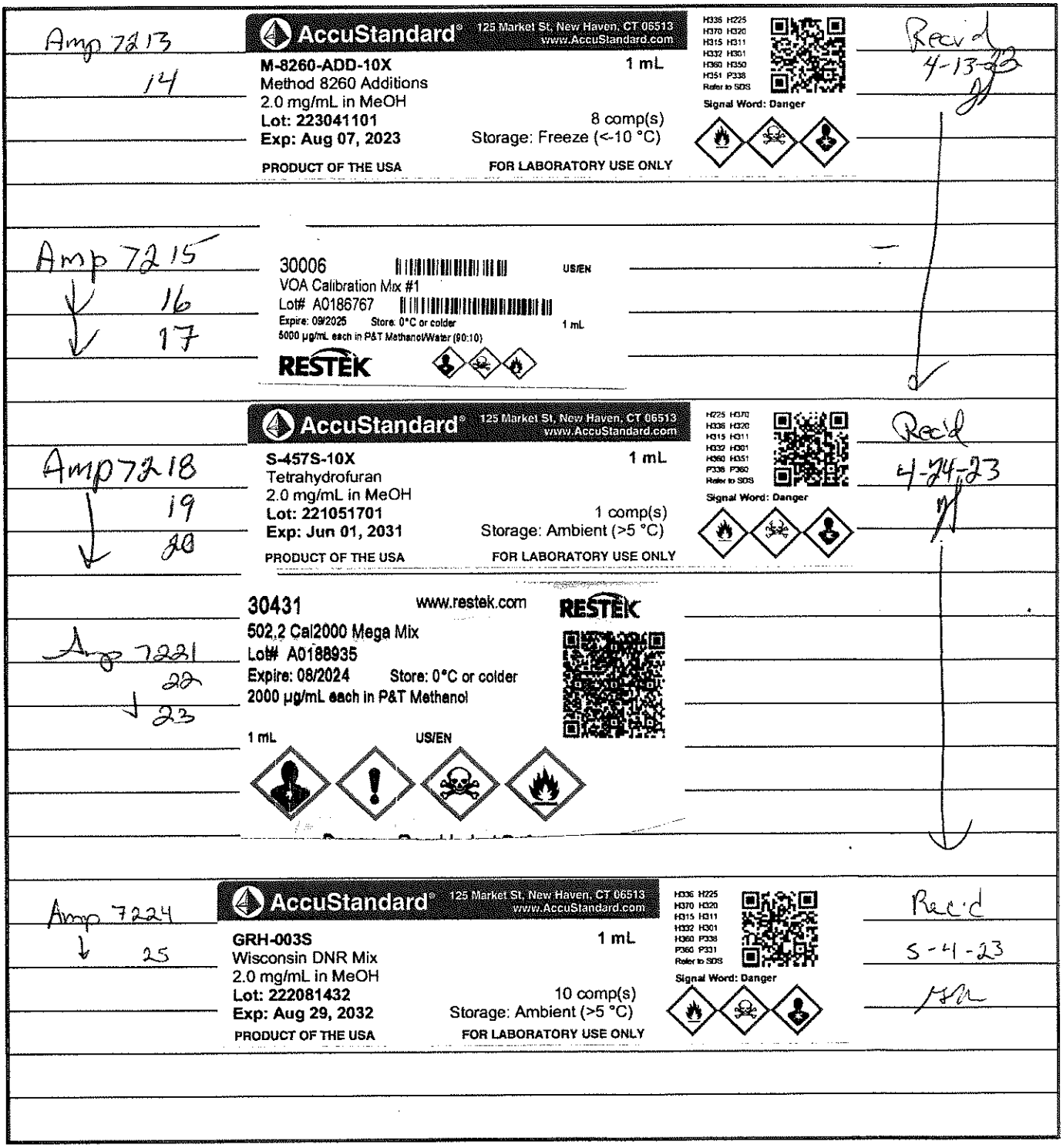
RESTEK

KATAHDIN ANALYTICAL SERVICES

STOCK STANDARDS RECEIVED

GCMS VOLATILES LABORATORY

REVIEWED BY/DATE:



Amp 7213
14

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com

M-8260-ADD-10X 1 mL
Method 8260 Additions
2.0 mg/mL in MeOH
Lot: 223041101
Exp: Aug 07, 2023 8 comp(s)
Storage: Freeze (<-10 °C)
PRODUCT OF THE USA FOR LABORATORY USE ONLY

H336 H225 H370 H320 H315 H311 H332 H301 H360 H350 H351 P338
Refer to SDS
Signal Word: Danger

Recv'd 4-13-23 JJ

Amp 7215
16
17

30006 US/EN
VOA Calibration Mix #1
Lot# A0186767
Expire: 09/2025 Store: 0°C or colder 1 mL
5000 µg/mL each in P&T Methanol/Water (90:10)
RESTEK

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com

S-457S-10X 1 mL
Tetrahydrofuran
2.0 mg/mL in MeOH
Lot: 221051701
Exp: Jun 01, 2031 1 comp(s)
Storage: Ambient (>5 °C)
PRODUCT OF THE USA FOR LABORATORY USE ONLY

H225 H370 H336 H320 H315 H311 H332 H301 H360 H351 P338 P360
Refer to SDS
Signal Word: Danger

Recd 4-24-23 JJ

Amp 7218
19
20

30431 www.restek.com RESTEK
502.2 Cal2000 Mega Mix
Lot# A0188935
Expire: 08/2024 Store: 0°C or colder
2000 µg/mL each in P&T Methanol
1 mL US/EN

Amp 7221
22
23

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com

GRH-003S 1 mL
Wisconsin DNR Mix
2.0 mg/mL in MeOH
Lot: 222081432
Exp: Aug 29, 2032 10 comp(s)
Storage: Ambient (>5 °C)
PRODUCT OF THE USA FOR LABORATORY USE ONLY

H336 H225 H370 H320 H315 H311 H332 H301 H360 P338 P360 P331
Refer to SDS
Signal Word: Danger

Amp 7224
25

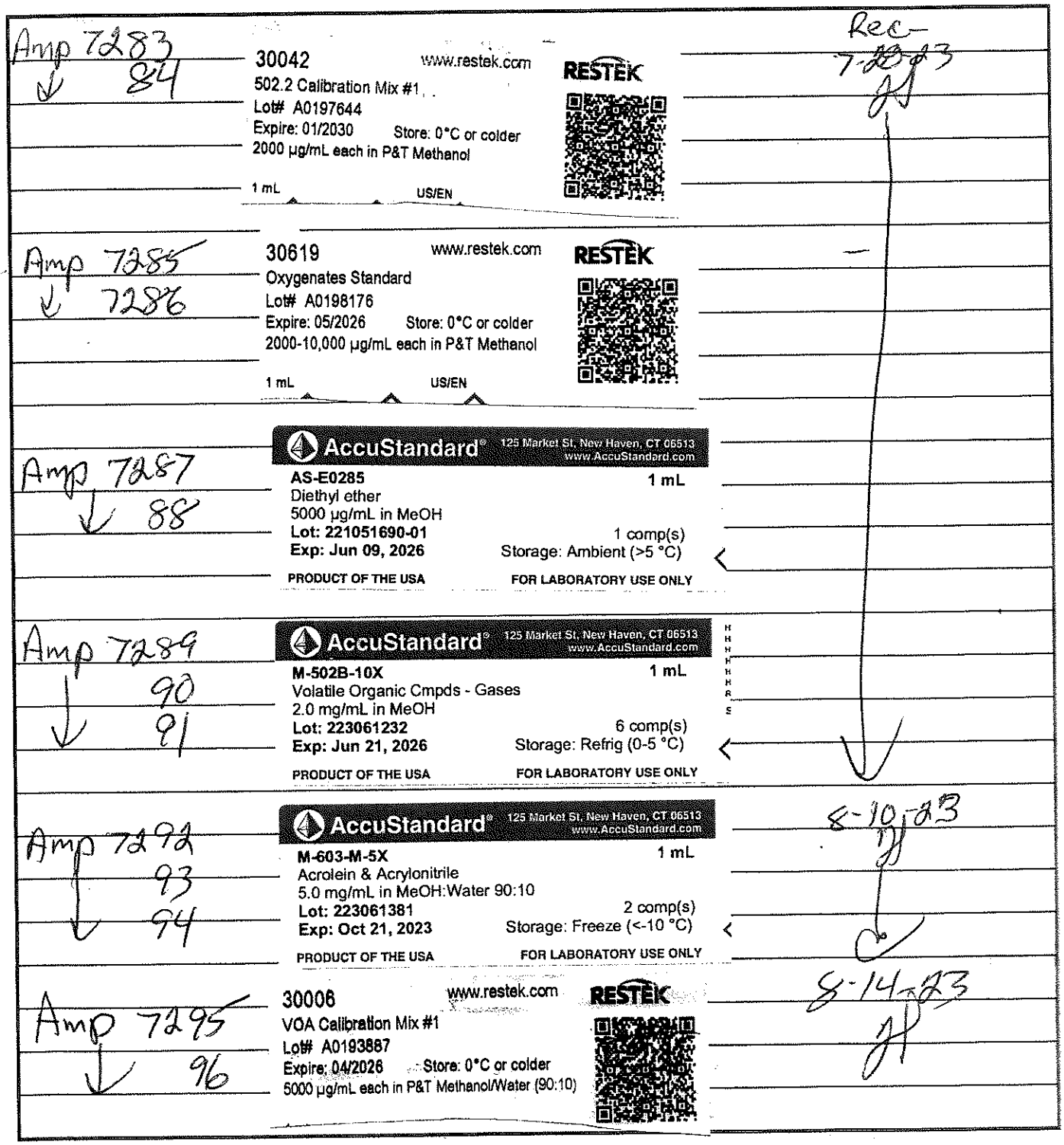
Recd 5-4-23 JJ

KATAHDIN ANALYTICAL SERVICES

STOCK STANDARDS RECEIVED

GCMS VOLATILES LABORATORY

REVIEWED BY/DATE:



Amp 7283 ↓ 84

30042 www.restek.com RESTEK
502.2 Calibration Mix #1
Lot# A0197644
Expire: 01/2030 Store: 0°C or colder
2000 µg/mL each in P&T Methanol
1 mL US/EN

Rec 7-20-23 JJ

Amp 7285 ↓ 7286

30619 www.restek.com RESTEK
Oxygenates Standard
Lot# A0198176
Expire: 05/2026 Store: 0°C or colder
2000-10,000 µg/mL each in P&T Methanol
1 mL US/EN

Amp 7287 ↓ 88

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com
AS-E0285 1 mL
Diethyl ether
5000 µg/mL in MeOH
Lot: 221051690-01 1 comp(s)
Exp: Jun 09, 2026 Storage: Ambient (>5 °C)
PRODUCT OF THE USA FOR LABORATORY USE ONLY

Amp 7289 ↓ 90 91

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com
M-502B-10X 1 mL
Volatile Organic Cmpds - Gases
2.0 mg/mL in MeOH
Lot: 223061232 6 comp(s)
Exp: Jun 21, 2026 Storage: Refrig (0-5 °C)
PRODUCT OF THE USA FOR LABORATORY USE ONLY

Amp 7292 ↓ 93 94

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com
M-603-M-5X 1 mL
Acrolein & Acrylonitrile
5.0 mg/mL in MeOH:Water 90:10
Lot: 223061381 2 comp(s)
Exp: Oct 21, 2023 Storage: Freeze (<-10 °C)
PRODUCT OF THE USA FOR LABORATORY USE ONLY

8-10-23 JJ

Amp 7295 ↓ 96

30006 www.restek.com RESTEK
VOA Calibration Mix #1
Lot# A0193887
Expire: 04/2026 Store: 0°C or colder
5000 µg/mL each in P&T Methanol/Water (90:10)

8-14-23 JJ

8270 SIM
POLYNUCLEAR AROMATIC HYDROCARBONS DATA

QC Summary Section

Form 2
System Monitoring Compound Recovery

Lab Name: Katahdin Analytical Services **SDG:** SQ6112 **Matrix:** AQ

Client Sample ID	Lab Sample ID	Col. ID	2MN	#	FLO	#	PYR	#
SY-OBMW7-110623	SQ6112-1		44.0		41.7		52.9	
SY-OBMW10-110623	SQ6112-2RA		39.1	*	37.4		44.2	*
Method Blank	WG345173-1		93.6	*	85.1		100.	
Laboratory Control S	WG345173-2RA		106.	*	94.8		94.1	

Abbr.	Surrogate Compound	QC Limits
2MN	2-Methylnaphthalene-D10	43-92
FLO	Fluorene-D10	29-101
PYR	Pyrene-D10	53-166

= Column to be used to flag recovery limits.
* = Values outside of contract required QC limits.
D= System Monitoring Compound diluted out.

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Method Blank Summary

Lab Name : Katahdin Analytical Services
SDG : SQ6112
Lab File ID : N0307.D
Lab Sample ID : WG345173-1
Instrument ID : GCMS-N
Date Extracted : 10-NOV-23
Matrix : AQ
Date Analyzed : 01-DEC-23
Extraction method : SW846 3510C
Time Analyzed : 14:24

This Method Blank applies to the following samples and QC samples:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
SY-OBMW7-110623	SQ6112-1	N0321.D	12/01/23	21:43
Laboratory Control S	WG345173-2RA	N0327.D	12/04/23	11:09
SY-OBMW10-110623	SQ6112-2RA	N0343.D	12/04/23	19:23

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Form 5
Semivolatile Organic Instrument Performance Check

Lab Name : Katahdin Analytical Services
SDG : SQ6112
Lab File ID : ND532.D
Date Analyzed : 01-DEC-23
Instrument ID : GCMS-N
Time Analyzed : 08:27

m/e	Ion Abundance Criteria	% Relative Abundance		
51	10.0 - 80.0% of mass 198	26.3		
68	Less than 2.0% of mass 69	0.8	1.72	1
69	Greater than 0.1% of mass 198	47.7		
70	Less than 2.0% of mass 69	0.2	0.47	1
127	10.0 - 80.0% of mass 198	62.4		
197	Less than 2.0% of mass 198	0.0		
198	Base Peak, 100% relative abundance	100		
199	5.0 - 9.0% of mass 198	6.8		
275	10.0 - 60.0% of mass 198	22.3		
365	Greater than 1.0% of mass 198	2.4		
441	0.01 - 100.0% of mass 443	12.4	70.80	2
442	Greater than 50.0% of mass 198	87.3		
443	15.0 - 24.0% of mass 442	17.5	20.01	3

1-Value is % mass 69
2-Value is % mass 443
3-Value is % mass 442

This check applies to the following samples, LCS, MS, MSD and standards:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Initial Calibration	WG346189-4	N0297.D	12/01/23	08:45
Initial Calibration	WG346189-3	N0298.D	12/01/23	09:15
Initial Calibration	WG346189-2	N0299.D	12/01/23	09:45
Initial Calibration	WG346189-5	N0300.D	12/01/23	10:15
Initial Calibration	WG346189-6	N0301.D	12/01/23	10:45
Initial Calibration	WG346189-7	N0302.D	12/01/23	11:15
Independent Source	WG346189-8	N0303.D	12/01/23	11:45

Form 5
Semivolatile Organic Instrument Performance Check

Lab Name : Katahdin Analytical Services
SDG : SQ6112
Lab File ID : ND533.D
Date Analyzed : 01-DEC-23
Instrument ID : GCMS-N
Time Analyzed : 12:36

m/e	Ion Abundance Criteria	% Relative Abundance		
51	10.0 - 80.0% of mass 198	27.1		
68	Less than 2.0% of mass 69	0.8	1.62	1
69	Greater than 0.1% of mass 198	47.8		
70	Less than 2.0% of mass 69	0.0	0.0	1
127	10.0 - 80.0% of mass 198	62.4		
197	Less than 2.0% of mass 198	0.0		
198	Base Peak, 100% relative abundance	100		
199	5.0 - 9.0% of mass 198	6.6		
275	10.0 - 60.0% of mass 198	21.8		
365	Greater than 1.0% of mass 198	2.6		
441	0.01 - 100.0% of mass 443	12.3	72.01	2
442	Greater than 50.0% of mass 198	86.7		
443	15.0 - 24.0% of mass 442	17.0	19.65	3

1-Value is % mass 69
2-Value is % mass 443
3-Value is % mass 442

This check applies to the following samples, LCS, MS, MSD and standards:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Continuing Calibrati	WG346280-2	N0304.D	12/01/23	12:54
Method Blank	WG345173-1	N0307.D	12/01/23	14:24
SY-OBMW7-110623	SQ6112-1	N0321.D	12/01/23	21:43
Continuing Calibrati	WG346280-3	N0323.D	12/01/23	22:47
Continuing Calibrati	WG346280-4	N0324.D	12/01/23	23:19
Continuing Calibrati	WG346280-5	N0325.D	12/01/23	23:51

Form 5
Semivolatile Organic Instrument Performance Check

Lab Name : Katahdin Analytical Services
SDG : SQ6112
Lab File ID : ND534.D
Date Analyzed : 04-DEC-23
Instrument ID : GCMS-N
Time Analyzed : 10:22

m/e	Ion Abundance Criteria	% Relative Abundance		
51	10.0 - 80.0% of mass 198	26.1		
68	Less than 2.0% of mass 69	0.7	1.54	1
69	Greater than 0.1% of mass 198	47.3		
70	Less than 2.0% of mass 69	0.2	0.46	1
127	10.0 - 80.0% of mass 198	61.8		
197	Less than 2.0% of mass 198	0.0		
198	Base Peak, 100% relative abundance	100		
199	5.0 - 9.0% of mass 198	6.8		
275	10.0 - 60.0% of mass 198	22.2		
365	Greater than 1.0% of mass 198	2.4		
441	0.01 - 100.0% of mass 443	12.5	71.23	2
442	Greater than 50.0% of mass 198	87.1		
443	15.0 - 24.0% of mass 442	17.5	20.10	3

1-Value is % mass 69
2-Value is % mass 443
3-Value is % mass 442

This check applies to the following samples, LCS, MS, MSD and standards:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Continuing Calibrati	WG346349-2	N0326.D	12/04/23	10:39
Laboratory Control S	WG345173-2RA	N0327.D	12/04/23	11:09
SY-OBMW10-110623	SQ6112-2RA	N0343.D	12/04/23	19:23
Continuing Calibrati	WG346349-3	N0344.D	12/04/23	19:56

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Form 8
Internal Standard Area and RT Summary

Lab Name : Katahdin Analytical Services
SDG: SQ6112
Lab ID : WG346189-4
Analytical Date: 12/01/23 08:45
Lab File ID : N0297.D
Instrument ID: GCMS-N

		1,4-DICHLOROBENZENE-D4				NAPHTHALENE-D8				ACENAPHTHENE-D10			
		Area	#	RT	#	Area	#	RT	#	Area	#	RT	#
	Std .	23433		6.61		89294		8.14		40164		10.26	
	Upper Limit	46866		6.78		178588		8.30		80328		10.43	
	Lower Limit	11716.5		6.45		44647		7.97		20082		10.10	
Client Sample ID	Lab Sample ID												
Continuing Calibrati	WG346280-2	21906		6.61		83816		8.14		37757		10.26	
Method Blank	WG345173-1	23082		6.61		80795		8.15		40296		10.28	
SY-OBMW7-110623	SQ6112-1	20332		6.61		78701		8.16		34938		10.28	
Continuing Calibrati	WG346280-3	19814		6.61		77109		8.14		31400		10.26	
Continuing Calibrati	WG346280-4	19796		6.62		76289		8.14		30927		10.26	
Continuing Calibrati	WG346280-5	19961		6.61		77704		8.14		31308		10.26	
Continuing Calibrati	WG346349-2	24893		6.61		95863		8.14		42304		10.26	
Laboratory Control S	WG345173-2RA	24749		6.61		92712		8.14		43403		10.25	
SY-OBMW10-110623	SQ6112-2RA	21083		6.63		83760		8.16		36301		10.28	
Continuing Calibrati	WG346349-3	25467		6.61		99404		8.14		39471		10.26	

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area
RT Upper Limit = + 10 seconds of internal standard RT
RT Lower Limit = - 10 seconds of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

Form 8
Internal Standard Area and RT Summary

Lab Name : Katahdin Analytical Services
SDG: SQ6112
Lab ID : WG346189-4
Analytical Date: 12/01/23 08:45
Lab File ID : N0297.D
Instrument ID: GCMS-N

		PHENANTHRENE-D10			CHRYSENE-D12			PERYLENE-D12		
		Area	#	RT	#	Area	#	RT	#	Area	#	RT	#
	Std .	49946		12.06		19501		15.50		12481		18.35	
	Upper Limit	99892		12.23		39002		15.66		24962		18.51	
	Lower Limit	24973		11.90		9750.5		15.33		6240.5		18.18	
Client Sample ID	Lab Sample ID												
Continuing Calibrati	WG346280-2	44435		12.06		15660		15.50		9064		18.36	
Method Blank	WG345173-1	55499		12.07		18976		15.50		12700		18.35	
SY-OBMW7-110623	SQ6112-1	41111		12.07		11835		15.50		7741		18.35	
Continuing Calibrati	WG346280-3	31451		12.06		8627	*	15.50		5317	*	18.35	
Continuing Calibrati	WG346280-4	31680		12.06		9653	*	15.50		5505	*	18.35	
Continuing Calibrati	WG346280-5	31476		12.06		9296	*	15.50		5426	*	18.35	
Continuing Calibrati	WG346349-2	49010		12.06		19093		15.50		11686		18.35	
Laboratory Control S	WG345173-2RA	56949		12.06		24437		15.49		16448		18.35	
SY-OBMW10-110623	SQ6112-2RA	42678		12.07		12781		15.50		6801		18.35	
Continuing Calibrati	WG346349-3	47100		12.06		14295		15.50		7195		18.35	

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area
RT Upper Limit = + 10 seconds of internal standard RT
RT Lower Limit = - 10 seconds of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

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Sample Data Section

KATAHDIN ANALYTICAL SERVICES - ORGANIC DATA QUALIFIERS

U Indicates the compound was analyzed for but not detected above the specified level. This level may be the Practical Quantitation Level (PQL) (also called Limit of Quantitation (LOQ)), the Limit of Detection (LOD) or Method Detection Limit (MDL) as required by the client.

Note: All results reported as "U" MDL have a 50% rate for false negatives compared to those results reported as "U" PQL, "U" LOQ or "U" LOD, where the rate of false negatives is <1%.

* Compound recovery or percent RPD (relative percent difference) was outside of quality control limits.

D Indicates the result was obtained from analysis of a diluted sample. Surrogate recoveries may not be calculable.

E Estimated value. This flag identifies compounds whose concentrations exceed the upper level of the calibration range of the instrument for that specific analysis.

J Estimated value. The analyte was detected in the sample at a concentration less than the laboratory Practical Quantitation Level (PQL) (also called Limit of Quantitation (LOQ)), but above the Method Detection Limit (MDL).

And/or

J Used for Dual Column analytes when there is a greater than 40% difference for detected concentrations between the two GC/HPLC columns.

B Indicates the analyte was detected in the laboratory method blank analyzed concurrently with the sample.

I Indicates that the flagged compound did not meet DoD criteria in the corresponding Initial Calibration (ICAL).

D Indicates that the flagged compound did not meet DoD criteria in the corresponding Initial Calibration Verification (ICV).

C Indicates that the flagged compound did not meet DoD criteria in the corresponding opening Calibration Verification (CV).

V Indicates that the flagged compound did not meet DoD criteria in the corresponding closing Calibration Verification (CV).

L/LL Indicates that the flagged compound did not meet DoD criteria in the corresponding Laboratory Control Sample (LCS) and/or Laboratory Control Sample Duplicate (LCSD) prepared and/or analyzed concurrently with the sample.

M/MM Indicates that the flagged compound did not meet DoD criteria in the Matrix Spike (MS) and/or Matrix Spike Duplicate MSD) prepared and/or analyzed concurrently with the native sample.

H Indicates the flagged compound was detected on the primary column but was not detected on the confirmation column therefore the compound is not reported as a positive detection. (SW846 8330A/B only)

Katahdin Analytical Services, Inc.

Manual Integration Codes For GC/MS, GC, HPLC and/or IC

M1	Peak splitting.
M2	Well defined peaks on the shoulders of the other peaks.
M3	There is additional area due to a coeluting interferant.
M4	There are negative spikes in the baseline.
M5	There are rising or falling baselines.
M6	The software has failed to detect a peak or misidentified a peak.
M7	Excessive peak tailing.
M8	Analysis such as GRO, DRO and TPH require a baseline hold.
M9	Peak was not completely integrated as in GC/MS.
M10	Primary ion was correctly integrated, but secondary or tertiary ion needed manual integration as in GC/MS.
M11	For GC analysis, when a sample is diluted by 1:10 or more, the surrogate is set to undetected and then the area under the surrogate is manually integrated.
M12	Manual integration saved in method due to TurboChrom floating point error.

Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

SDG: SQ6112
Lab ID: SQ6112-1
Client ID: SY-OBMW7-110623
Matrix: AQ
Lab File ID: N0321.D

Sample Date: 06-NOV-23
Extract Date: 10-NOV-23
Extracted By: AN/CMW
Extraction Method: SW846 3510C
Lab Prep Batch: WG345173

Report Date: 29-DEC-23
Analysis Date: 01-DEC-23
Analyst: EP
Analysis Method: SW846 8270D SIM
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	0.093	ug/L	1	.2	0.19	0.060	0.093
2-Methylnaphthalene	U	0.093	ug/L	1	.2	0.19	0.072	0.093
Acenaphthylene	U	0.093	ug/L	1	.2	0.19	0.050	0.093
Acenaphthene	U	0.093	ug/L	1	.2	0.19	0.060	0.093
Fluorene	U	0.093	ug/L	1	.2	0.19	0.057	0.093
Phenanthrene	U	0.093	ug/L	1	.2	0.19	0.048	0.093
Anthracene	U	0.093	ug/L	1	.2	0.19	0.041	0.093
Fluoranthene	U	0.093	ug/L	1	.2	0.19	0.068	0.093
Pyrene	U	0.093	ug/L	1	.2	0.19	0.055	0.093
Benzo(a)anthracene	U	0.093	ug/L	1	.2	0.19	0.043	0.093
Chrysene	U	0.093	ug/L	1	.2	0.19	0.034	0.093
Benzo(b)Fluoranthene	U	0.093	ug/L	1	.2	0.19	0.083	0.093
Benzo(k)fluoranthene	U	0.093	ug/L	1	.2	0.19	0.046	0.093
Benzo(a)pyrene	U	0.093	ug/L	1	.2	0.19	0.062	0.093
Indeno(1,2,3-cd)pyrene	U	0.093	ug/L	1	.2	0.19	0.048	0.093
Dibenzo(a,h)anthracene	U	0.093	ug/L	1	.2	0.19	0.065	0.093
Benzo(g,h,i)perylene	U	0.093	ug/L	1	.2	0.19	0.061	0.093
2-Methylnaphthalene-D10		44.0	%					
Fluorene-D10		41.7	%					
Pyrene-D10		52.9	%					

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Data File: \\target_server\gg\chem\gcms-n.i\N120123B.b\N0321.D
Report Date: 29-Dec-2023 07:37

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-n.i\N120123B.b\N0321.D
Lab Smp Id: SQ6112-1 Client Smp ID: SY-OBMW7-110623
Inj Date : 01-DEC-2023 21:43
Operator : EP Inst ID: gcms-n.i
Smp Info : SQ6112-1
Misc Info : WG346280,WG345173,WG346189-4
Comment :
Method : \\target_server\gg\chem\gcms-n.i\N120123B.b\NSPSIM93.m
Meth Date : 04-Dec-2023 07:52 epelletier Quant Type: ISTD
Cal Date : 01-DEC-2023 11:15 Cal File: N0302.D
Als bottle: 25
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pahplus.sub
Target Version: 4.12
Processing Host: INSPIRON1

Concentration Formula: Amt * DF * Uf*(Vt/Vo*Vi)*1000 * CpndVariable

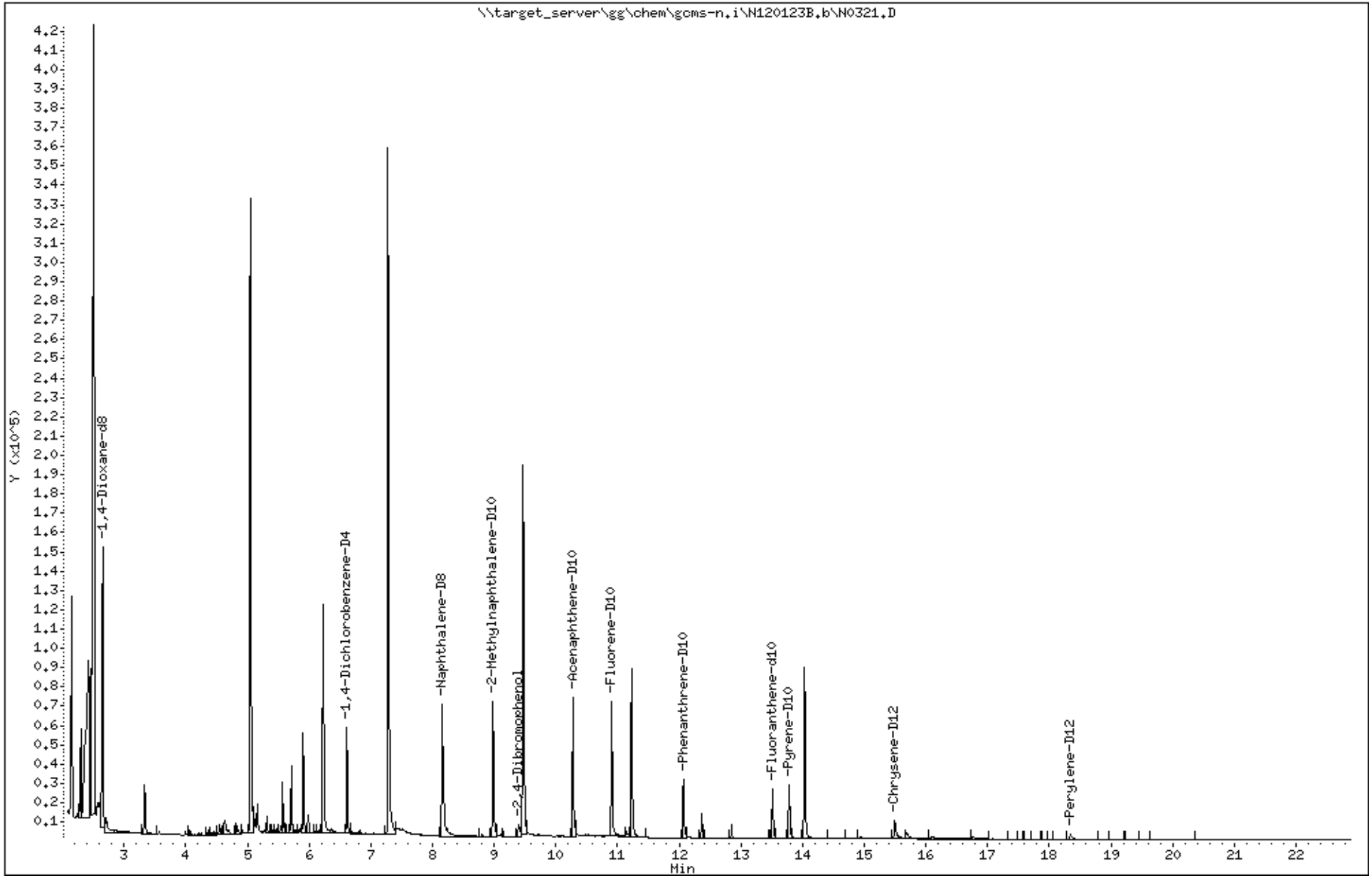
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.070	Sample Volume (L)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/L)	REVIEW CODE
$	1 1,4-Dioxane-d8	96	2.657	2.689	(0.259)	191984	13.6587	12.8(QR)	
*	10 1,4-Dichlorobenzene-D4	152	6.614	6.604	(1.000)	20332	0.80000	(aQ)	
*	27 Naphthalene-D8	136	8.159	8.125	(1.000)	78701	0.80000	(a)	
$	33 2-Methylnaphthalene-D10	152	8.985	8.964	(1.101)	44326	0.87970	0.822(a)	
$	38 2,4-Dibromophenol	252	9.398	9.346	(0.915)	8487	0.71180	0.665(a)	
*	48 Acenaphthene-D10	164	10.275	10.254	(1.000)	34938	0.80000	(a)	
$	56 Fluorene-D10	174	10.908	10.886	(1.062)	37156	0.83360	0.779(a)	
*	66 Phenanthrene-D10	188	12.073	12.062	(1.000)	41111	0.80000	(a)	
$	71 Fluoranthene-d10	212	13.512	13.512	(1.119)	24267	0.81058	0.758(R)	
$	73 Pyrene-D10	212	13.787	13.777	(0.890)	28139	1.05874	0.989(R)	
*	78 Chrysene-D12	240	15.498	15.498	(1.000)	11835	0.80000	(a)	
*	85 Perylene-D12	264	18.345	18.345	(1.000)	7741	0.80000	(a)	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.

Data File: \\target_server\gg\chem\gcms-n.i\N120123B.b\N0321.D
Date : 01-DEC-2023 21:43
Client ID: SY-OBMW7-110623
Instrument: gcms-n.i
Sample Info: SQ6112-1
Volume Injected (uL): 1.0
Operator: EP
Column phase: Rxi-SVOCms
Column diameter: 0.25



Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

SDG: SQ6112
Lab ID: SQ6112-2RA
Client ID: SY-OBMW10-110623
Matrix: AQ
Lab File ID: N0343.D

Sample Date: 06-NOV-23
Extract Date: 10-NOV-23
Extracted By: AN/CMW
Extraction Method: SW846 3510C
Lab Prep Batch: WG345173

Report Date: 29-DEC-23
Analysis Date: 04-DEC-23
Analyst: EP
Analysis Method: SW846 8270D SIM
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	0.093	ug/L	1	.2	0.19	0.060	0.093
2-Methylnaphthalene	U	0.093	ug/L	1	.2	0.19	0.072	0.093
Acenaphthylene	U	0.093	ug/L	1	.2	0.19	0.050	0.093
Acenaphthene	U	0.093	ug/L	1	.2	0.19	0.060	0.093
Fluorene	U	0.093	ug/L	1	.2	0.19	0.057	0.093
Phenanthrene	U	0.093	ug/L	1	.2	0.19	0.048	0.093
Anthracene	U	0.093	ug/L	1	.2	0.19	0.041	0.093
Fluoranthene	U	0.093	ug/L	1	.2	0.19	0.068	0.093
Pyrene	U	0.093	ug/L	1	.2	0.19	0.055	0.093
Benzo(a)anthracene	U	0.093	ug/L	1	.2	0.19	0.043	0.093
Chrysene	U	0.093	ug/L	1	.2	0.19	0.034	0.093
Benzo(b)Fluoranthene	U	0.093	ug/L	1	.2	0.19	0.083	0.093
Benzo(k)fluoranthene	U	0.093	ug/L	1	.2	0.19	0.046	0.093
Benzo(a)pyrene	U	0.093	ug/L	1	.2	0.19	0.062	0.093
Indeno(1,2,3-cd)pyrene	U	0.093	ug/L	1	.2	0.19	0.048	0.093
Dibenzo(a,h)anthracene	U	0.093	ug/L	1	.2	0.19	0.065	0.093
Benzo(g,h,i)perylene	U	0.093	ug/L	1	.2	0.19	0.061	0.093
2-Methylnaphthalene-D10	*	39.1	%					
Fluorene-D10		37.4	%					
Pyrene-D10	*	44.2	%					

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Data File: \\target_server\gg\chem\gcms-n.i\N120423.b\N0343.D
Report Date: 29-Dec-2023 07:37

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-n.i\N120423.b\N0343.D
Lab Smp Id: SQ6112-2RA Client Smp ID: SY-OBMW10-110623
Inj Date : 04-DEC-2023 19:23
Operator : EP Inst ID: gcms-n.i
Smp Info : SQ6112-2RA
Misc Info : WG346349,WG345173,WG346189-4
Comment :
Method : \\target_server\gg\chem\gcms-n.i\N120423.b\NSPSIM93.m
Meth Date : 05-Dec-2023 07:17 epelletier Quant Type: ISTD
Cal Date : 01-DEC-2023 11:15 Cal File: N0302.D
Als bottle: 19
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pahplus.sub
Target Version: 4.12
Processing Host: INSPIRON1

Concentration Formula: Amt * DF * Uf*(Vt/Vo*Vi)*1000 * CpndVariable

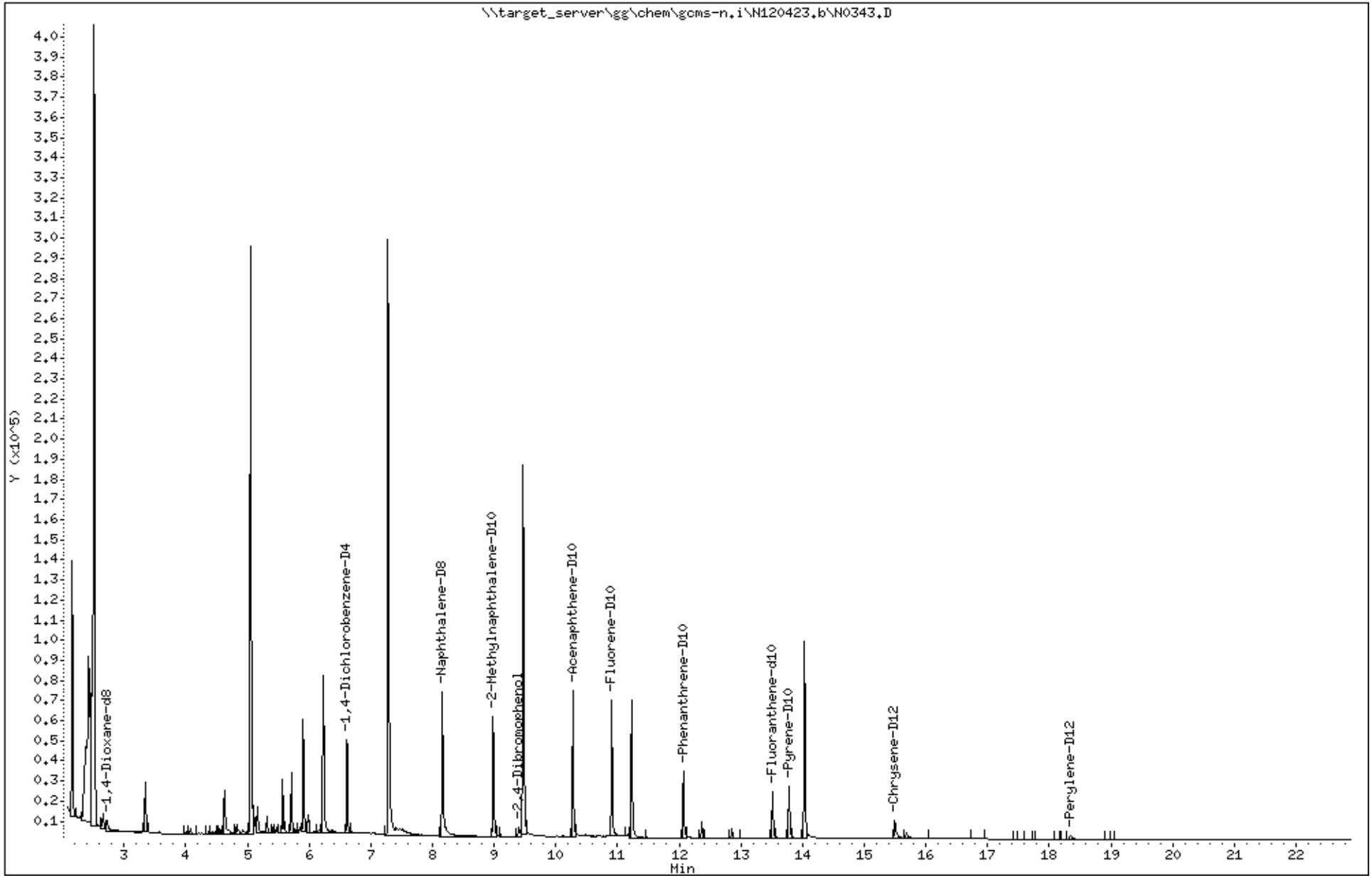
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.070	Sample Volume (L)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/L)	REVIEW CODE
$	1 1,4-Dioxane-d8	96	2.720	2.689	(0.265)	4997	0.34216	0.320(aR)	
*	10 1,4-Dichlorobenzene-D4	152	6.625	6.604	(1.000)	21083	0.80000	(aQ)	
*	27 Naphthalene-D8	136	8.159	8.125	(1.000)	83760	0.80000	(a)	
$	33 2-Methylnaphthalene-D10	152	8.985	8.964	(1.101)	41900	0.78133	0.730(aR)	
$	38 2,4-Dibromophenol	252	9.399	9.346	(0.915)	6016	0.48561	0.454(aQ)	
*	48 Acenaphthene-D10	164	10.275	10.254	(1.000)	36301	0.80000	(a)	
$	56 Fluorene-D10	174	10.908	10.886	(1.062)	34637	0.74791	0.699(a)	
*	66 Phenanthrene-D10	188	12.073	12.062	(1.000)	42678	0.80000	(a)	
$	71 Fluoranthene-d10	212	13.512	13.512	(1.119)	22504	0.72409	0.677(R)	
$	73 Pyrene-D10	212	13.787	13.777	(0.890)	25347	0.88311	0.825(aR)	
*	78 Chrysene-D12	240	15.498	15.498	(1.000)	12781	0.80000	(a)	
*	85 Perylene-D12	264	18.345	18.345	(1.000)	6801	0.80000	(a)	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.

Data File: \\target_server\gg\chem\gcms-n.i\N120423.b\N0343.D
Date : 04-DEC-2023 19:23
Client ID: SY-OBMW10-110623
Instrument: gcms-n.i
Sample Info: SQ6112-2RA
Volume Injected (uL): 1.0
Operator: EP
Column phase: Rxi-SVOCms
Column diameter: 0.25



Standards Data Section

Form 6
Initial Calibration Summary

Lab Name : Katahdin Analytical Services **SDG:** SQ6112

Instrument ID: GCMS-N **Column ID:**

Lab File IDs : N0299.D N0298.D N0297.D **Calibration Date(s):** 01-DEC-23 08:45
N0300.D N0301.D N0302.D 01-DEC-23 11:15

	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Curve				%RSD or R^2		
	0.200000(	0.500000(	2.0000	7.0000	10.0000	15.0000	Type	b	m1	m2	Result	Limit	
Naphthalene	1.02350	1.05490	1.06643	1.02503	1.13012	0.99117	AVG		1.04852		4.57119	20	O
2-Methylnaphthalene	0.76806	0.74974	0.64740	0.62874	0.68241	0.59874	AVG		0.67918		9.96699	20	O
Acenaphthylene	1.87261	2.01139	2.05293	1.83913	2.05629	1.87662	AVG		1.95150		5.08901	20	O
Acenaphthene	1.29896	1.29337	1.22350	1.11985	1.27990	1.11947	AVG		1.22251		6.87474	20	O
Fluorene	1.27410	1.40615	1.29278	1.19459	1.32347	1.18478	AVG		1.27931		6.47978	20	O
Phenanthrene	1.13603	1.17637	1.17566	1.01626	1.16025	1.04667	AVG		1.11854		6.22981	20	O
Anthracene	1.06868	1.13767	1.21185	1.01511	1.15666	1.03914	AVG		1.10485		6.87993	20	O
Fluoranthene	0.79631	0.86398	0.92096	0.78892	0.94734	0.80397	AVG		0.85358		8.00800	20	O
Pyrene	2.78251	2.78777	2.49507	2.01642	2.11948	2.10276	AVG		2.38400		14.75127	20	O
Benzo(a)anthracene	0.89911	1.11557	1.21883	1.19006	1.41375	1.30554	AVG		1.19048		14.76095	20	O
Chrysene	1.83777	1.75561	1.65768	1.40097	1.70625	1.57044	AVG		1.65479		9.27735	20	O
Benzo(b)fluoranthene	0.84610	0.99492	1.34226	1.27028	1.49100	1.41171	AVG		1.22605		20.56669	20	W
Benzo(k)fluoranthene	1.92601	2.36248	2.35555	2.06913	2.29697	2.16878	AVG		2.19649		7.96647	20	O
Benzo(a)pyrene	1594	6426	39434	217187	350365	348107	LNR	0.000e+00	1.55855		0.99474	0.99	O
Indeno(1,2,3-cd)pyrene	0.31871	0.39761	0.68879	0.79619	1.06250	0.92373	AVG		0.69792		41.90303	20	W
Dibenzo(a,h)anthracene	0.42779	0.59671	0.93637	0.97003	1.22212	1.08033	AVG		0.87223		34.50335	20	W
Benzo(g,h,i)perylene	1402	6018	38989	183815	309665	289083	LNR	0.000e+00	1.32519		0.99073	0.99	O
2-Methylnaphthalene-D10	0.49685	0.52729	0.52558	0.50091	0.54574	0.47680	AVG		0.51219		4.89882	20	
Fluorene-D10	1.04312	1.14207	1.05772	0.93548	1.04313	0.90216	AVG		1.02061		8.58891	20	
Pyrene-D10	2.02332	2.04753	1.86274	1.58635	1.63919	1.62017	AVG		1.79655		11.64525	20	

Legend: O = Acceptable; W = Failed %RSD Value; X = Failed R^2 Value; Y = Failed Minimum RF

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Data File: \\target_server\gg\chem\gcms-n.i\N120123.b\N0303.D
Report Date: 04-Dec-2023 07:38

Katahdin Analytical Services

RECOVERY REPORT

Client Name: Client SDG: 021497
Sample Matrix: LIQUID Fraction: SV
Lab Smp Id: WG346189-8
Level: LOW Operator: EP
Data Type: MS DATA SampleType: INDSOURCE
SpikeList File: SIM_IND_CHK5.spk Quant Type: ISTD
Sublist File: all.sub
Method File: \\target_server\gg\chem\gcms-n.i\N120123.b\NSPSIM93.m
Misc Info: WG346189,WG346189,WG346189-4

SPIKE	COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
2	1,4-Dioxane	5.00	5.17	103.45	80-120
3	N-Nitrosodimethyla	5.00	5.47	109.42	80-120
4	Pyridine	5.00	6.08	121.60*	80-120
5	Benzaldehyde	5.00	2.49	49.88*	80-120
6	Phenol	5.00	5.02	100.42	80-120
7	Bis(2-Chloroethyl)	5.00	4.95	99.08	80-120
8	2-Chlorophenol	5.00	5.08	101.63	80-120
9	1,3-Dichlorobenzen	5.00	4.89	97.87	80-120
11	1,4-Dichlorobenzen	5.00	4.96	99.13	80-120
12	1,2-Dichlorobenzen	5.00	4.83	96.56	80-120
13	2,2'-Oxybis(1-chlo	5.00	3.46	69.18*	80-120
14	2-Methylphenol	5.00	5.36	107.20	80-120
15	Acetophenone	5.00	5.23	104.58	80-120
16	N-Nitroso-di-n-pro	5.00	4.58	91.67	80-120
17	3&4-Methylphenol	5.00	4.78	95.56	80-120
18	Hexachloroethane	5.00	5.00	100.01	80-120
19	Nitrobenzene	5.00	5.15	103.09	80-120
20	Isophorone	5.00	4.70	93.96	80-120
21	2-Nitrophenol	5.00	4.86	97.32	80-120
22	2,4-Dimethylphenol	5.00	5.71	114.24	80-120
23	bis(2-Chloroethoxy	5.00	5.01	100.22	80-120
25	2,4-Dichlorophenol	5.00	5.23	104.68	80-120
26	1,2,4-Trichloroben	5.00	4.85	96.92	80-120
28	Naphthalene	5.00	5.09	101.86	80-120
29	4-Chloroaniline	5.00	4.92	98.51	80-120
30	Hexachlorobutadien	5.00	5.09	101.72	80-120
31	Caprolactam	5.00	5.27	105.37	80-120
32	4-Chloro-3-Methylp	5.00	4.88	97.70	80-120
34	2-Methylnaphthalen	5.00	5.01	100.26	80-120
35	1-Methylnaphthalen	5.00	4.94	98.77	80-120
36	1,2,4,5-Tetrachlor	5.00	4.81	96.27	80-120
37	Hexachlorocyclopen	5.00	4.93	98.54	80-120
39	2,4,6-Trichlorophe	5.00	4.80	96.11	80-120
40	2,4,5-Trichlorophe	5.00	4.24	84.90	80-120
41	1,1'-Biphenyl	5.00	5.13	102.58	80-120
42	2-Chloronaphthalen	5.00	4.69	93.79	80-120
43	2-Nitroaniline	5.00	5.03	100.67	80-120
44	Dimethyl Phthalate	5.00	4.56	91.22	80-120
45	2,6-Dinitrotoluene	5.00	4.88	97.56	80-120
46	Acenaphthylene	5.00	4.55	90.99	80-120

Data File: \\target_server\gg\chem\gcms-n.i\N120123.b\N0303.D
Report Date: 04-Dec-2023 07:38

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
47 3-Nitroaniline	5.00	4.78	95.53	80-120
49 Acenaphthene	5.00	4.67	93.45	80-120
50 2,4-Dinitrophenol	5.00	3.83	76.69*	80-120
51 Dibenzofuran	5.00	4.93	98.69	80-120
53 2,4-Dinitrotoluene	5.00	4.55	90.97	80-120
52 4-Nitrophenol	5.00	4.45	89.05	80-120
54 2,3,4,6-Tetrachlor	5.00	4.14	82.81	80-120
55 Diethylphthalate	5.00	4.70	94.03	80-120
57 Fluorene	5.00	4.59	91.87	80-120
58 4-Chlorophenyl-phe	5.00	4.74	94.77	80-120
59 4-Nitroaniline	5.00	5.64	112.86	80-120
60 4,6-Dinitro-2-Meth	5.00	5.02	100.46	80-120
61 N-Nitrosodiphenyla	5.00	3.76	75.22*	80-120
62 4-Bromophenyl-phen	5.00	5.10	101.96	80-120
63 Hexachlorobenzene	5.00	4.72	94.38	80-120
64 Atrazine	5.00	5.34	106.87	80-120
65 Pentachlorophenol	5.00	4.46	89.29	80-120
67 Phenanthrene	5.00	4.94	98.75	80-120
68 Anthracene	5.00	5.09	101.84	80-120
69 Carbazole	5.00	6.42	128.39*	80-120
70 Di-n-butylphthalat	5.00	5.29	105.82	80-120
72 Fluoranthene	5.00	4.84	96.82	80-120
74 Pyrene	5.00	4.68	93.56	80-120
75 Butylbenzylphthala	5.00	4.78	95.54	80-120
76 Benzo(a)anthracene	5.00	5.05	101.02	80-120
77 3,3'-Dichlorobenzi	5.00	4.30	85.93	80-120
79 Chrysene	5.00	4.49	89.74	80-120
80 bis(2-Ethylhexyl)p	5.00	4.28	85.66	80-120
81 Di-n-octylphthalat	5.00	4.14	82.72	80-120
82 Benzo(b)fluoranthe	5.00	5.93	118.65	80-120
83 Benzo(k)fluoranthe	5.00	5.08	101.59	80-120
84 Benzo(a)pyrene	5.00	4.36	87.21	80-120
86 Indeno(1,2,3-cd)py	5.00	5.03	100.67	80-120
87 Dibenzo(a,h)anthra	5.00	5.64	112.81	80-120
88 Benzo(g,h,i)peryle	5.00	5.00	100.00	80-120

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 1 1,4-Dioxane-d8	2.00	0.000	*	26-115
$ 33 2-Methylnaphthale	2.00	0.000	*	43-92
$ 38 2,4-Dibromophenol	4.00	0.000	*	10-130
$ 56 Fluorene-D10	2.00	0.000	*	29-101
$ 71 Fluoranthene-d10	2.00	0.000	*	50-150
$ 73 Pyrene-D10	2.00	0.000	*	53-166

ICAL Workgroup WG346189

Parameter	Curve Type	r^2	r^2 Limit	RSE	RSE limit	Column
1,4-Dioxane	LNR	0.99191	.99	33.98**	20/30	
Phenol	LNR	0.99106	.99	25.29*	20/30	
N-Nitroso-di-n-propylamine	LNR	0.99680	.99	31.47**	20/30	
3&4-Methylphenol	LNR	0.99488	.99	25.88*	20/30	
2-Nitrophenol	QUA	0.99114	.99	28.85*	20/30	
Hexachlorocyclopentadiene	LNR	0.99066	.99	28.21*	20/30	
2-Nitroaniline	LNR	0.99471	.99	25.98*	20/30	
2,4-Dinitrotoluene	LNR	0.99123	.99	26.31*	20/30	
bis(2-Ethylhexyl)phthalate	QUA	0.99131	.99	29*	20/30	
Benzo(a)pyrene	LNR	0.99474	.99	33.95**	20/30	
Benzo(g,h,i)perylene	LNR	0.99073	.99	30.72**	20/30	

*** = RSE over 20%**
**** = RSE over 30%**

Data File: \\target_server\gg\chem\gcms-n.i\N120123.b\N0297.D
Report Date: 04-Dec-2023 07:46

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-n.i\N120123.b\N0297.D
Lab Smp Id: WG346189-4
Inj Date : 01-DEC-2023 08:45
Operator : EP   Inst ID: gcms-n.i
Smp Info : WG346189-4
Misc Info :
Comment   :
Method   : \\target_server\gg\chem\gcms-n.i\N120123.b\NSPSIM93.m
Meth Date : 04-Dec-2023 07:39 gcms-n.i   Quant Type: ISTD
Cal Date : 01-DEC-2023 08:45   Cal File: N0297.D
Als bottle: 2   Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: all.sub
Target Version: 4.12

Concentration Formula: Amt * DF * Uf*(Vt/Vo*Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.000	Sample Volume (L)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
$	1 1,4-Dioxane-d8	96	2.710	2.689	(0.264)	31315	2.00000	1.94	
	2 1,4-Dioxane	88	2.741	2.731	(0.414)	36857	2.00000	2.22	
	3 N-Nitrosodimethylamine	74	3.195	3.164	(0.483)	42088	2.00000	2.08	
	4 Pyridine	79	3.269	3.196	(0.494)	69888	2.00000	2.18	
	5 Benzaldehyde	77	6.084	6.074	(0.920)	44165	2.00000	3.08	
	6 Phenol	94	6.240	6.230	(0.943)	196638	4.50000	4.18	
	7 Bis(2-Chloroethyl)ether	93	6.323	6.313	(0.956)	77130	2.00000	2.00	
	8 2-Chlorophenol	128	6.365	6.354	(0.962)	174646	4.50000	4.58	
	9 1,3-Dichlorobenzene	146	6.542	6.531	(0.989)	89887	2.00000	1.99	
*	10 1,4-Dichlorobenzene-D4	152	6.614	6.604	(1.000)	23433	0.80000	(aQ)	
	11 1,4-Dichlorobenzene	146	6.635	6.625	(1.003)	88574	2.00000	1.95	
	12 1,2-Dichlorobenzene	146	6.812	6.802	(1.030)	86390	2.00000	1.96	
	13 2,2'-Oxybis(1-chloropropane)	45	6.968	6.958	(1.053)	55015	2.00000	2.02(Q)	
	14 2-Methylphenol	108	6.958	6.958	(1.052)	159380	4.50000	4.84	
	15 Acetophenone	105	7.114	7.104	(0.874)	101982	2.00000	2.02	
	16 N-Nitroso-di-n-propylamine	70	7.135	7.124	(1.079)	50377	2.00000	2.00	
	17 3&4-Methylphenol	108	7.155	7.145	(1.082)	166907	4.50000	4.52	
	18 Hexachloroethane	117	7.207	7.197	(1.090)	34161	2.00000	2.00	
	19 Nitrobenzene	77	7.301	7.291	(0.897)	71526	2.00000	1.95	
	20 Isophorone	82	7.619	7.597	(0.936)	133497	2.00000	2.00	
	21 2-Nitrophenol	139	7.698	7.686	(0.946)	85014	4.50000	4.14	

Data File: \\target_server\gg\chem\gcms-n.i\N120123.b\N0297.D
Report Date: 04-Dec-2023 07:46

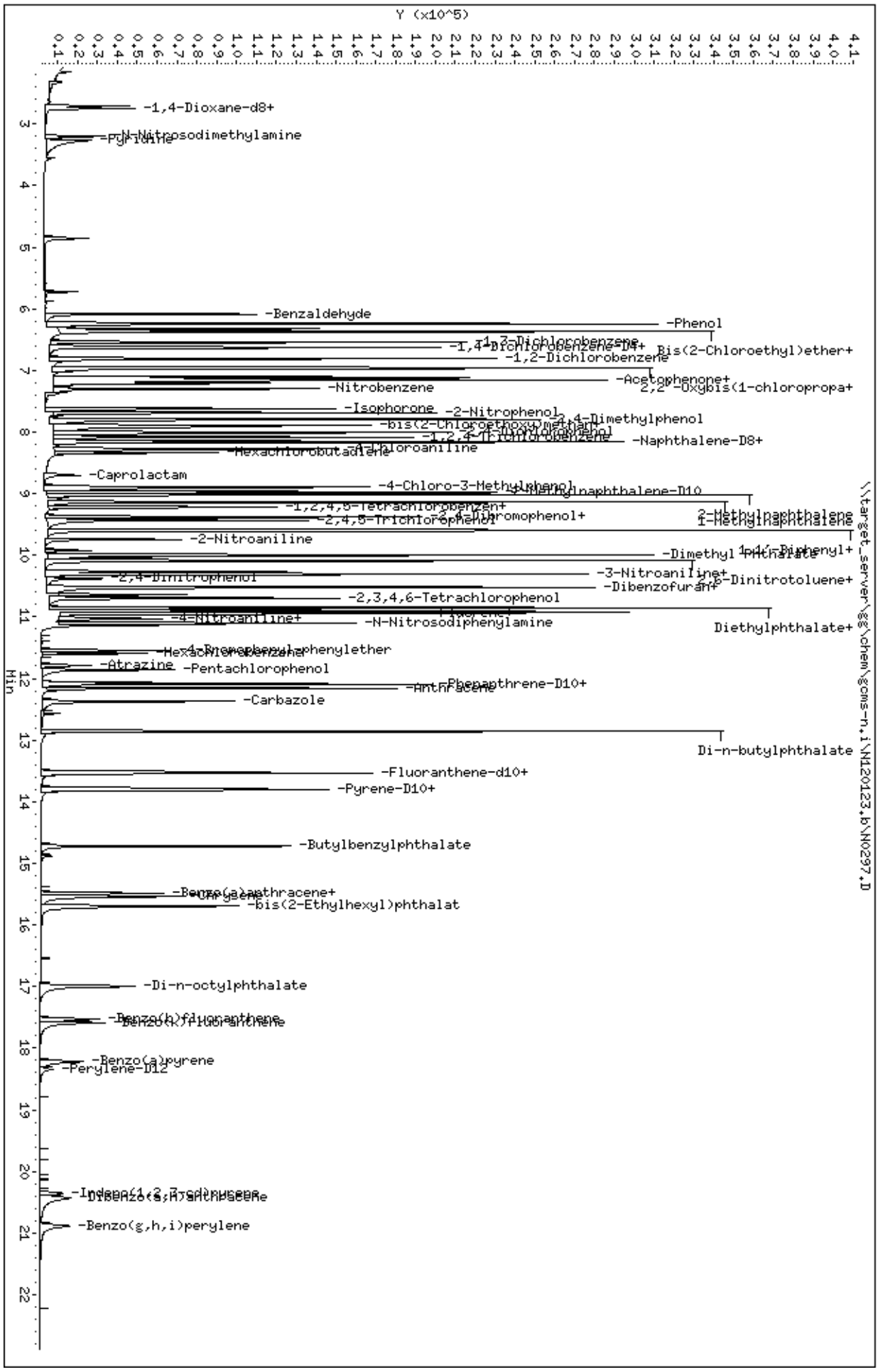
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
	22 2,4-Dimethylphenol	107	7.799	7.776	(0.959)	137324	4.50000	4.80	
	23 bis(2-Chloroethoxy)methane	93	7.900	7.878	(0.971)	87935	2.00000	2.12	
	24 Benzoic Acid	105	7.923	7.945	(0.974)	73670	2.00000	4.33	
	25 2,4-Dichlorophenol	162	8.001	7.990	(0.983)	138737	4.50000	4.88	
	26 1,2,4-Trichlorobenzene	180	8.080	8.069	(0.993)	66062	2.00000	2.01	
*	27 Naphthalene-D8	136	8.136	8.125	(1.000)	89294	0.80000	(a)	
	28 Naphthalene	128	8.159	8.148	(1.003)	238065	2.00000	2.03	
	29 4-Chloroaniline	127	8.282	8.283	(1.018)	58634	2.00000	2.80	
	30 Hexachlorobutadiene	225	8.339	8.328	(1.025)	27905	2.00000	2.06	
	31 Caprolactam	113	8.699	8.699	(1.069)	16791	2.00000	2.05	
	32 4-Chloro-3-Methylphenol	107	8.890	8.880	(1.093)	130282	4.50000	4.82	
$	33 2-Methylnaphthalene-D10	152	8.975	8.964	(1.103)	117327	2.00000	2.05	
	34 2-Methylnaphthalene	142	9.017	9.007	(1.108)	144522	2.00000	1.91	
	35 1-Methylnaphthalene	142	9.134	9.123	(1.123)	136522	2.00000	1.94	
	36 1,2,4,5-Tetrachlorobenzene	216	9.229	9.218	(0.899)	55173	2.00000	2.04	
	37 Hexachlorocyclopentadiene	237	9.218	9.197	(0.898)	20175	2.00000	1.66	
$	38 2,4-Dibromophenol	252	9.367	9.346	(0.913)	27859	2.00000	2.03	
	39 2,4,6-Trichlorophenol	196	9.377	9.367	(0.914)	77175	4.50000	4.67	
	40 2,4,5-Trichlorophenol	196	9.430	9.420	(0.919)	84298	4.50000	4.56	
	41 1,1'-Biphenyl	154	9.589	9.579	(0.934)	167111	2.00000	2.05	
	42 2-Chloronaphthalene	164	9.600	9.589	(0.935)	40893	2.00000	1.94	
	43 2-Nitroaniline	65	9.750	9.728	(0.950)	24419	2.00000	1.84	
	44 Dimethyl Phthalate	163	9.996	9.986	(0.974)	258469	4.50000	4.44	
	45 2,6-Dinitrotoluene	165	10.050	10.039	(0.979)	28213	2.00000	2.16	
	46 Acenaphthylene	152	10.093	10.082	(0.983)	206135	2.00000	2.10	
	47 3-Nitroaniline	138	10.254	10.243	(0.999)	16955	2.00000	2.52	
*	48 Acenaphthene-D10	164	10.264	10.254	(1.000)	40164	0.80000	(a)	
	49 Acenaphthene	153	10.307	10.297	(1.004)	122852	2.00000	2.00	
	50 2,4-Dinitrophenol	184	10.382	10.372	(1.011)	19909	4.50000	4.79	
	51 Dibenzofuran	168	10.522	10.511	(1.025)	172946	2.00000	2.08	
	52 4-Nitrophenol	109	10.511	10.490	(1.024)	17385	4.50000	4.78(Q)	
	53 2,4-Dinitrotoluene	165	10.532	10.522	(1.026)	31951	2.00000	1.98	
	54 2,3,4,6-Tetrachlorophenol	232	10.693	10.683	(1.042)	56170	4.50000	4.75	
	55 Diethylphthalate	149	10.854	10.844	(1.057)	241880	4.50000	4.52	
$	56 Fluorene-D10	174	10.897	10.886	(1.062)	106206	2.00000	2.07	
	57 Fluorene	166	10.929	10.929	(1.065)	129808	2.00000	2.02	
	58 4-Chlorophenyl-phenylether	204	10.961	10.951	(1.068)	52968	2.00000	2.02	
	59 4-Nitroaniline	138	11.004	11.015	(1.072)	12110	2.00000	2.01(Q)	
	60 4,6-Dinitro-2-Methylphenol	198	11.026	11.026	(0.914)	29061	4.50000	4.92	
	61 N-Nitrosodiphenylamine	169	11.111	11.101	(0.921)	96128	2.00000	2.15	
	62 4-Bromophenyl-phenylether	248	11.550	11.539	(0.958)	26272	2.00000	2.09	
	63 Hexachlorobenzene	284	11.592	11.593	(0.961)	27321	2.00000	2.08	
	64 Atrazine	200	11.795	11.785	(0.978)	18869	2.00000	2.14	
	65 Pentachlorophenol	266	11.859	11.849	(0.983)	32501	4.50000	5.07	
*	66 Phenanthrene-D10	188	12.062	12.062	(1.000)	49946	0.80000	(a)	
	67 Phenanthrene	178	12.094	12.084	(1.003)	146799	2.00000	2.10	
	68 Anthracene	178	12.158	12.148	(1.008)	151318	2.00000	2.19	
	69 Carbazole	167	12.372	12.361	(1.026)	105093	2.00000	2.38	
	70 Di-n-butylphthalate	149	12.852	12.842	(1.065)	317123	4.50000	4.66	
$	71 Fluoranthene-d10	212	13.512	13.512	(1.120)	78837	2.00000	2.17	
	72 Fluoranthene	202	13.532	13.532	(1.122)	114996	2.00000	2.16	
$	73 Pyrene-D10	212	13.787	13.777	(0.890)	90813	2.00000	2.07	
	74 Pyrene	202	13.807	13.797	(0.891)	121641	2.00000	2.09	
	75 Butylbenzylphthalate	149	14.714	14.714	(0.949)	98493	4.50000	4.57	

Data File: \\target_server\gg\chem\gcms-n.i\N120123.b\N0297.D
Report Date: 04-Dec-2023 07:46

			QUANT SIG					AMOUNTS		
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
	76	Benzo(a)anthracene	228	15.478	15.478	(0.999)	59421	2.00000	2.05	
	77	3,3'-Dichlorobenzidine	252	15.508	15.498	(1.001)	14322	2.00000	2.14	
*	78	Chrysene-D12	240	15.498	15.498	(1.000)	19501	0.80000	(a)	
	79	Chrysene	228	15.539	15.539	(1.003)	80816	2.00000	2.00	
	80	bis(2-Ethylhexyl)phthalate	149	15.692	15.692	(1.012)	119654	4.50000	4.34	
	81	Di-n-octylphthalate	149	16.996	16.986	(1.097)	135871	4.50000	4.76	
	82	Benzo(b)fluoranthene	252	17.531	17.531	(0.956)	41882	2.00000	2.19	
	83	Benzo(k)fluoranthene	252	17.593	17.583	(0.959)	73499	2.00000	2.14(H)	
	84	Benzo(a)pyrene	252	18.221	18.221	(0.993)	39434	2.00000	1.62	
*	85	Perylene-D12	264	18.345	18.345	(1.000)	12481	0.80000	(a)	
	86	Indeno(1,2,3-cd)pyrene	276	20.353	20.353	(1.109)	21492	2.00000	1.97	
	87	Dibenzo(a,h)anthracene	278	20.435	20.435	(1.114)	29217	2.00000	2.15	
	88	Benzo(g,h,i)perylene	276	20.888	20.889	(1.139)	38989	2.00000	1.88	
M	89	Total PAHs	100				1897408	36.0000	(a)	

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
H - Operator selected an alternate compound hit.


Data File: \\target_server\gg\chem\gcms-n,i\N120123,b\N0297.D
Date : 01-DEC-2023 08:45
Client ID:
Sample Info: WG346189-4
Volume Injected (uL): 1.0
Column phase: Rxi-5WOCms
Instrument: gcms-n,i
Operator: EP
Column diameter: 0.25
Y (x10^5)
Min
-1,4-Dioxane-d8+
-Pyridine
-N-Nitrosodimethylamine
-Benzaldehyde
-Phenol
-1,3-Dichlorobenzene
-1,4-Dichlorobenzene-D4+
Bis(2-Chloroethyl)ether+
-1,2-Dichlorobenzene
-Acetophenone+
-Nitrobenzene
2,2'-Oxybis(1-chloropropa+
-Isophorone
-2-Nitrophenol
-2,4-Dimethylphenol
-bis(2-Chloroethoxy)methan
-Naphthalene-D8+
-Hexachlorobutadiene
-Caprolactam
-4-Chloro-3-Methylphenol
-2-Methylnaphthalene-D10
-1,2,4,5-Tetrachlorobenzen+
-2,4,6-Tribromophenol+
2-Methylnaphthalene
1-Methylnaphthalene
-2,4,5-Trichlorophenol
-2-Nitroaniline
1,1'-Biphenyl+
-Dimethyl Phthalate
-2,4-Dinitrophenol
-3-Nitroaniline+
2,6-Dinitrotoluene+
-Dibenzofuran+
-2,3,4,6-Tetrachlorophenol
-4-Nitroaniline+
-N-Nitrosodiphenylamine
Diethylphthalate+
-4-Bromophenyl-phenylether
-Hexachlorobenzene
-Atrazine
-Pentachlorophenol
-Phenanthrene-D10+
-Anthracene
-Carbazole
Di-n-butylphthalate
-Fluoranthene-d10+
-Pyrene-D10+
-Butylbenzylphthalate
-Benzo(a)anthracene+
-Chrysene
-bis(2-Ethylhexyl)phthalat
-Di-n-octylphthalate
-Benzo(b)fluoranthene
-Benzo(k)fluoranthene
-Benzo(a)pyrene
-Perylene-D12
-Indeno(1,2,3-cd)pyrene
-Dibenzo(a,h)anthracene
-Benzo(g,h,i)perylene
\\target_server\gg\chem\gcms-n,i\N120123,b\N0297.D

Data File: \\target_server\gg\chem\gcms-n.i\N120123.b\N0298.D
Report Date: 04-Dec-2023 07:46

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-n.i\N120123.b\N0298.D
Lab Smp Id: WG346189-3
Inj Date : 01-DEC-2023 09:15
Operator : EP   Inst ID: gcms-n.i
Smp Info : WG346189-3
Misc Info :
Comment   :
Method   : \\target_server\gg\chem\gcms-n.i\N120123.b\NSPSIM93.m
Meth Date : 04-Dec-2023 07:39 gcms-n.i   Quant Type: ISTD
Cal Date : 01-DEC-2023 09:15   Cal File: N0298.D
Als bottle: 3   Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: all.sub
Target Version: 4.12

Concentration Formula: Amt * DF * Uf*(Vt/Vo*Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.000	Sample Volume (L)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

EP
8:07 am, Dec 29, 2023

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
$	1 1,4-Dioxane-d8	96	2.720	2.689	(0.265)	8032	0.50000	0.497(a)	
	2 1,4-Dioxane	88	2.752	2.731	(0.415)	9256	0.50000	0.565(a)	
	3 N-Nitrosodimethylamine	74	3.248	3.164	(0.490)	9071	0.50000	0.453(M)	M6
	4 Pyridine	79	3.438	3.196	(0.519)	13213	0.50000	0.417	
	5 Benzaldehyde	77	6.105	6.074	(0.921)	11318	0.50000	0.797	
	6 Phenol	94	6.261	6.230	(0.945)	88052	2.00000	1.89	
	7 Bis(2-Chloroethyl)ether	93	6.344	6.313	(0.958)	16605	0.50000	0.436	
	8 2-Chlorophenol	128	6.375	6.354	(0.962)	70814	2.00000	1.88	
	9 1,3-Dichlorobenzene	146	6.552	6.531	(0.989)	22915	0.50000	0.514	
*	10 1,4-Dichlorobenzene-D4	152	6.625	6.604	(1.000)	23185	0.80000	(a)	
	11 1,4-Dichlorobenzene	146	6.646	6.625	(1.003)	22810	0.50000	0.508	
	12 1,2-Dichlorobenzene	146	6.823	6.802	(1.030)	22885	0.50000	0.526	
	13 2,2'-Oxybis(1-chloropropane)	45	6.989	6.958	(1.055)	14567	0.50000	0.540(Q)	
	14 2-Methylphenol	108	6.979	6.958	(1.053)	64143	2.00000	1.97	
	15 Acetophenone	105	7.124	7.104	(0.874)	26785	0.50000	0.503	
	16 N-Nitroso-di-n-propylamine	70	7.166	7.124	(1.082)	9301	0.50000	0.373	
	17 3&4-Methylphenol	108	7.166	7.145	(1.082)	66001	2.00000	1.80	
	18 Hexachloroethane	117	7.218	7.197	(1.090)	8487	0.50000	0.502	
	19 Nitrobenzene	77	7.322	7.291	(0.899)	16452	0.50000	0.425	
	20 Isophorone	82	7.653	7.597	(0.939)	34237	0.50000	0.485	
	21 2-Nitrophenol	139	7.709	7.686	(0.946)	34486	2.00000	1.61	

Data File: \\target_server\gg\chem\gcms-n.i\N120123.b\N0298.D
Report Date: 04-Dec-2023 07:46

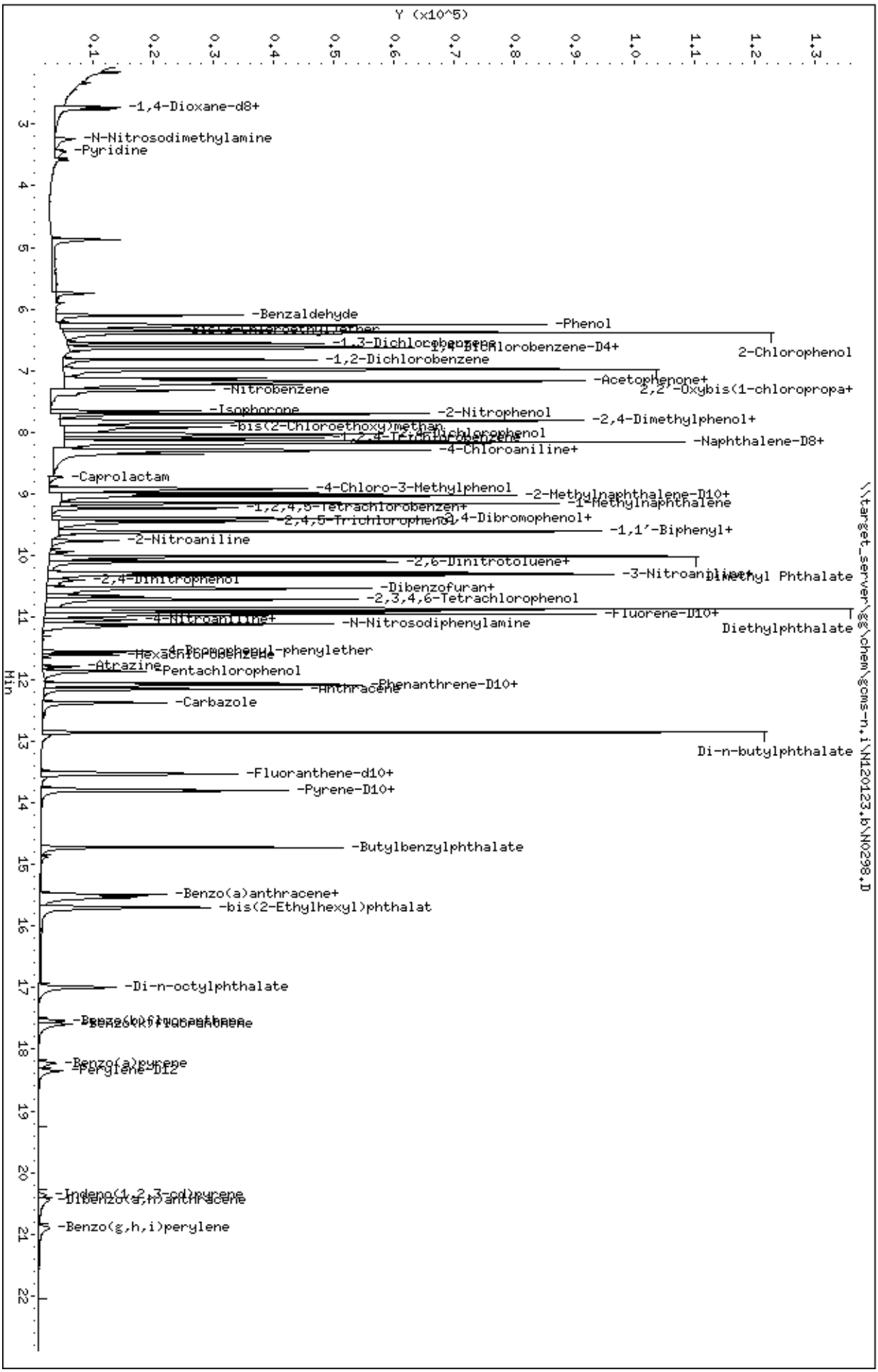
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
	22 2,4-Dimethylphenol	107	7.810	7.776	(0.959)	66702	2.00000	2.20	
	23 bis(2-Chloroethoxy)methane	93	7.923	7.878	(0.972)	21218	0.50000	0.484	
	24 Benzoic Acid	105	7.810	7.945	(0.959)	1894	0.50000	0.105(aQ)	
	25 2,4-Dichlorophenol	162	8.024	7.990	(0.985)	53391	2.00000	1.77	
	26 1,2,4-Trichlorobenzene	180	8.091	8.069	(0.993)	17380	0.50000	0.500	
*	27 Naphthalene-D8	136	8.148	8.125	(1.000)	94412	0.80000	(a)	
	28 Naphthalene	128	8.170	8.148	(1.003)	62247	0.50000	0.503	
	29 4-Chloroaniline	127	8.294	8.283	(1.018)	15215	0.50000	0.688(a)	
	30 Hexachlorobutadiene	225	8.350	8.328	(1.025)	7131	0.50000	0.498	
	31 Caprolactam	113	8.731	8.699	(1.072)	3909	0.50000	0.450	
	32 4-Chloro-3-Methylphenol	107	8.911	8.880	(1.094)	54744	2.00000	1.92	
$	33 2-Methylnaphthalene-D10	152	8.996	8.964	(1.104)	31114	0.50000	0.515(a)	
	34 2-Methylnaphthalene	142	9.028	9.007	(1.108)	44240	0.50000	0.552	
	35 1-Methylnaphthalene	142	9.144	9.123	(1.122)	39900	0.50000	0.535	
	36 1,2,4,5-Tetrachlorobenzene	216	9.240	9.218	(0.899)	14740	0.50000	0.543	
	37 Hexachlorocyclopentadiene	237	9.229	9.197	(0.898)	4369	0.50000	0.358	
$	38 2,4-Dibromophenol	252	9.377	9.346	(0.913)	6734	0.50000	0.491(a)	
	39 2,4,6-Trichlorophenol	196	9.388	9.367	(0.914)	33181	2.00000	2.01	
	40 2,4,5-Trichlorophenol	196	9.451	9.420	(0.920)	39645	2.00000	2.14	
	41 1,1'-Biphenyl	154	9.600	9.579	(0.934)	44088	0.50000	0.542	
	42 2-Chloronaphthalene	164	9.610	9.589	(0.935)	11372	0.50000	0.539(Q)	
	43 2-Nitroaniline	65	9.760	9.728	(0.950)	5016	0.50000	0.378	
	44 Dimethyl Phthalate	163	10.007	9.986	(0.974)	120666	2.00000	2.07	
	45 2,6-Dinitrotoluene	165	10.061	10.039	(0.979)	6215	0.50000	0.475	
	46 Acenaphthylene	152	10.104	10.082	(0.983)	50530	0.50000	0.515	
	47 3-Nitroaniline	138	10.264	10.243	(0.999)	3427	0.50000	0.508	
*	48 Acenaphthene-D10	164	10.275	10.254	(1.000)	40195	0.80000	(a)	
	49 Acenaphthene	153	10.307	10.297	(1.003)	32492	0.50000	0.529	
	50 2,4-Dinitrophenol	184	10.393	10.372	(1.011)	4780	2.00000	1.15(Q)	
	51 Dibenzofuran	168	10.533	10.511	(1.025)	45209	0.50000	0.544	
	52 4-Nitrophenol	109	10.543	10.490	(1.026)	5137	2.00000	1.41	
	53 2,4-Dinitrotoluene	165	10.543	10.522	(1.026)	6690	0.50000	0.415(Q)	
	54 2,3,4,6-Tetrachlorophenol	232	10.704	10.683	(1.042)	23423	2.00000	1.98	
	55 Diethylphthalate	149	10.865	10.844	(1.057)	111543	2.00000	2.08	
$	56 Fluorene-D10	174	10.908	10.886	(1.062)	28691	0.50000	0.560(a)	
	57 Fluorene	166	10.940	10.929	(1.065)	35325	0.50000	0.550	
	58 4-Chlorophenyl-phenylether	204	10.961	10.951	(1.067)	14073	0.50000	0.537	
	59 4-Nitroaniline	138	11.015	11.015	(1.072)	2629	0.50000	0.436	
	60 4,6-Dinitro-2-Methylphenol	198	11.037	11.026	(0.914)	9130	2.00000	1.42	
	61 N-Nitrosodiphenylamine	169	11.112	11.101	(0.920)	25274	0.50000	0.520	
	62 4-Bromophenyl-phenylether	248	11.550	11.539	(0.957)	6917	0.50000	0.507	
	63 Hexachlorobenzene	284	11.603	11.593	(0.961)	7850	0.50000	0.550	
	64 Atrazine	200	11.795	11.785	(0.977)	4236	0.50000	0.442	
	65 Pentachlorophenol	266	11.870	11.849	(0.983)	12472	2.00000	1.79	
*	66 Phenanthrene-D10	188	12.073	12.062	(1.000)	54281	0.80000	(a)	
	67 Phenanthrene	178	12.094	12.084	(1.002)	39909	0.50000	0.526	
	68 Anthracene	178	12.158	12.148	(1.007)	38596	0.50000	0.515	
	69 Carbazole	167	12.383	12.361	(1.026)	27762	0.50000	0.578	
	70 Di-n-butylphthalate	149	12.852	12.842	(1.065)	139872	2.00000	1.89	
$	71 Fluoranthene-d10	212	13.522	13.512	(1.120)	19474	0.50000	0.493	
	72 Fluoranthene	202	13.542	13.532	(1.122)	29311	0.50000	0.506	
$	73 Pyrene-D10	212	13.787	13.777	(0.890)	23027	0.50000	0.570(a)	
	74 Pyrene	202	13.807	13.797	(0.891)	31352	0.50000	0.585	
	75 Butylbenzylphthalate	149	14.724	14.714	(0.950)	38260	2.00000	1.92	

Data File: \\target_server\gg\chem\gcms-n.i\N120123.b\N0298.D
Report Date: 04-Dec-2023 07:46

			QUANT SIG					AMOUNTS		
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
	76	Benzo(a)anthracene	228	15.488	15.478	(0.999)	12546	0.50000	0.468	
	77	3,3'-Dichlorobenzidine	252	15.519	15.498	(1.001)	2483	0.50000	0.402	
*	78	Chrysene-D12	240	15.498	15.498	(1.000)	17994	0.80000	(a)	
	79	Chrysene	228	15.539	15.539	(1.003)	19744	0.50000	0.530	
	80	bis(2-Ethylhexyl)phthalate	149	15.702	15.692	(1.013)	40614	2.00000	1.63	
	81	Di-n-octylphthalate	149	16.996	16.986	(1.097)	37117	2.00000	1.41	
	82	Benzo(b)fluoranthene	252	17.541	17.531	(0.956)	6656	0.50000	0.406	
	83	Benzo(k)fluoranthene	252	17.593	17.583	(0.958)	15805	0.50000	0.538(H)	
	84	Benzo(a)pyrene	252	18.231	18.221	(0.993)	6426	0.50000	0.308	
*	85	Perylene-D12	264	18.355	18.345	(1.000)	10704	0.80000	(a)	
	86	Indeno(1,2,3-cd)pyrene	276	20.363	20.353	(1.109)	2660	0.50000	0.285	
	87	Dibenzo(a,h)anthracene	278	20.456	20.435	(1.114)	3992	0.50000	0.342	
	88	Benzo(g,h,i)perylene	276	20.899	20.889	(1.139)	6018	0.50000	0.339	
M	89	Total PAHs	100				477749	7.20000	(a)	

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.


Data File: \\target_server\gg\chem\gcms-n,i\N120123,b\N0298.D
Date : 01-DEC-2023 09:15
Client ID:
Sample Info: WG346189-3
Volume Injected (uL): 1.0
Column phase: Rxi-5ViOms
Instrument: gcms-n,i
Operator: EP
Column diameter: 0.25
\\target_server\gg\chem\gcms-n,i\N120123,b\N0298.D
Y (x10^5)
Min
-1,4-Dioxane-d8+
-N-Nitrosodimethylamine
-Pyridine
-Benzaldehyde
-Phenol
2-Chlorophenol
-1,3-Dichlorobenzene
-1,4-Dichlorobenzene-D4+
-1,2-Dichlorobenzene
-Acetophenone+
2,2'-Oxybis(1-chloropropa+
-Nitrobenzene
-Isophorone
-2-Nitrophenol
-2,4-Dimethylphenol+
-bis(2-Chloroethoxy)methan
-2,4-Dichlorophenol
-Naphthalene-D8+
-4-Chloroaniline+
-Caprolactam
-4-Chloro-3-Methylphenol
-2-Methylnaphthalene-D10+
-1-Methylnaphthalene
-1,2,4,5-Tetrachlorobenzen+
-2,4,5-Trichlorophenol
-2,4-Dibromophenol+
-1,1'-Biphenyl+
-2-Nitroaniline
-2,6-Dinitrotoluene+
-3-Nitroaniline+
Dimethyl Phthalate
-2,4-Dinitrophenol
-Dibenzofuran+
-2,3,4,6-Tetrachlorophenol
-Fluorene-D10+
Diethylphthalate
-4-Nitroaniline+
-N-Nitrosodiphenylamine
-4-Bromophenyl-phenylether
-Hexachlorobenzene
-Atrazine
-Pentachlorophenol
-Phenanthrene-D10+
-Anthracene
-Carbazole
Di-n-butylphthalate
-Fluoranthene-d10+
-Pyrene-D10+
-Butylbenzylphthalate
-Benzo(a)anthracene+
-bis(2-Ethylhexyl)phthalat
-Di-n-octylphthalate
-Benzo(b)fluoranthene
-Benzo(k)fluoranthene
-Benzo(a)pyrene
-Perylene-D12
-Indeno(1,2,3-cd)pyrene
-Dibenzo(a,h)anthracene
-Benzo(g,h,i)perylene

Data File: \\target_server\gg\chem\gcms-n.i\N120123.b\N0299.D
Report Date: 04-Dec-2023 07:46

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-n.i\N120123.b\N0299.D
Lab Smp Id: WG346189-2
Inj Date : 01-DEC-2023 09:45
Operator : EP   Inst ID: gcms-n.i
Smp Info : WG346189-2
Misc Info :
Comment   :
Method   : \\target_server\gg\chem\gcms-n.i\N120123.b\NSPSIM93.m
Meth Date : 04-Dec-2023 07:39 gcms-n.i   Quant Type: ISTD
Cal Date : 01-DEC-2023 09:45   Cal File: N0299.D
Als bottle: 4   Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: all.sub
Target Version: 4.12

Concentration Formula: Amt * DF * Uf*(Vt/Vo*Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.000	Sample Volume (L)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

EP
8:07 am, Dec 29, 2023

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
$	1 1,4-Dioxane-d8	96	2.720	2.689	(0.265)	3041	0.20000	0.182(a)	
	2 1,4-Dioxane	88	2.763	2.731	(0.417)	5523	0.20000	0.330(a)	
	3 N-Nitrosodimethylamine	74	3.301	3.164	(0.498)	2873	0.20000	0.140(aM)	M6
	4 Pyridine	79	3.777	3.196	(0.570)	3318	0.20000	0.102(aM)	M9
	5 Benzaldehyde	77	6.115	6.074	(0.923)	4019	0.20000	0.277	
	6 Phenol	94	6.271	6.230	(0.947)	24258	1.00000	0.510(a)	
	7 Bis(2-Chloroethyl)ether	93	6.354	6.313	(0.959)	8661	0.20000	0.222(Q)	
	8 2-Chlorophenol	128	6.386	6.354	(0.964)	29977	1.00000	0.779(a)	
	9 1,3-Dichlorobenzene	146	6.552	6.531	(0.989)	8740	0.20000	0.192(a)	
*	10 1,4-Dichlorobenzene-D4	152	6.625	6.604	(1.000)	23686	0.80000	(a)	
	11 1,4-Dichlorobenzene	146	6.646	6.625	(1.003)	9147	0.20000	0.199(a)	
	12 1,2-Dichlorobenzene	146	6.823	6.802	(1.030)	8847	0.20000	0.199(a)	
	13 2,2'-Oxybis(1-chloropropane)	45	7.010	6.958	(1.058)	5214	0.20000	0.189(a)	
	14 2-Methylphenol	108	6.989	6.958	(1.055)	26643	1.00000	0.801(a)	
	15 Acetophenone	105	7.145	7.104	(0.876)	8534	0.20000	0.163(a)	
	16 N-Nitroso-di-n-propylamine	70	7.249	7.124	(1.094)	2181	0.20000	0.0856(aM)	M6
	17 3&4-Methylphenol	108	7.187	7.145	(1.085)	18561	1.00000	0.497(a)	
	18 Hexachloroethane	117	7.228	7.197	(1.091)	3184	0.20000	0.184(a)	
	19 Nitrobenzene	77	7.332	7.291	(0.899)	8370	0.20000	0.220	
	20 Isophorone	82	7.686	7.597	(0.942)	12920	0.20000	0.186(a)	
	21 2-Nitrophenol	139	7.720	7.686	(0.946)	11689	1.00000	0.558(a)	

Data File: \\target_server\gg\chem\gcms-n.i\N120123.b\N0299.D
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8:07 am, Dec 29, 2023

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
	22 2,4-Dimethylphenol	107	7.833	7.776	(0.960)	28929	1.00000	0.975	
	23 bis(2-Chloroethoxy)methane	93	7.934	7.878	(0.972)	7826	0.20000	0.182(a)	
	24 Benzoic Acid	105	7.833	7.945	(0.960)	806	0.20000	0.0456(aQ)	
	25 2,4-Dichlorophenol	162	8.046	7.990	(0.986)	22158	1.00000	0.751	
	26 1,2,4-Trichlorobenzene	180	8.103	8.069	(0.993)	6646	0.20000	0.195(a)	
*	27 Naphthalene-D8	136	8.159	8.125	(1.000)	92592	0.80000	(a)	
	28 Naphthalene	128	8.181	8.148	(1.003)	23692	0.20000	0.195(a)	
	29 4-Chloroaniline	127	8.316	8.283	(1.019)	5193	0.20000	0.239(a)	
	30 Hexachlorobutadiene	225	8.361	8.328	(1.025)	2633	0.20000	0.187(a)	
	31 Caprolactam	113	8.763	8.699	(1.074)	1457	0.20000	0.171(aQ)	
	32 4-Chloro-3-Methylphenol	107	8.933	8.880	(1.095)	22975	1.00000	0.820(a)	
$	33 2-Methylnaphthalene-D10	152	9.007	8.964	(1.104)	11501	0.20000	0.194(a)	
	34 2-Methylnaphthalene	142	9.038	9.007	(1.108)	17779	0.20000	0.226	
	35 1-Methylnaphthalene	142	9.155	9.123	(1.122)	16401	0.20000	0.224	
	36 1,2,4,5-Tetrachlorobenzene	216	9.240	9.218	(0.899)	5544	0.20000	0.198(a)	
	37 Hexachlorocyclopentadiene	237	9.229	9.197	(0.898)	1443	0.20000	0.115(a)	
$	38 2,4-Dibromophenol	252	9.399	9.346	(0.915)	2381	0.20000	0.168(a)	
	39 2,4,6-Trichlorophenol	196	9.399	9.367	(0.915)	13262	1.00000	0.777(a)	
	40 2,4,5-Trichlorophenol	196	9.462	9.420	(0.921)	17889	1.00000	0.936(a)	
	41 1,1'-Biphenyl	154	9.610	9.579	(0.935)	16563	0.20000	0.197(a)	
	42 2-Chloronaphthalene	164	9.621	9.589	(0.936)	4391	0.20000	0.202	
	43 2-Nitroaniline	65	9.771	9.728	(0.951)	1538	0.20000	0.112(a)	
	44 Dimethyl Phthalate	163	10.007	9.986	(0.974)	58252	1.00000	0.969(a)	
	45 2,6-Dinitrotoluene	165	10.061	10.039	(0.979)	1862	0.20000	0.138(a)	
	46 Acenaphthylene	152	10.104	10.082	(0.983)	19433	0.20000	0.192(a)	
	47 3-Nitroaniline	138	10.286	10.243	(1.001)	1382	0.20000	0.198(aQ)	
*	48 Acenaphthene-D10	164	10.275	10.254	(1.000)	41510	0.80000	(a)	
	49 Acenaphthene	153	10.318	10.297	(1.004)	13480	0.20000	0.212	
	50 2,4-Dinitrophenol	184	10.425	10.372	(1.015)	1291	1.00000	0.301(aQ)	
	51 Dibenzofuran	168	10.533	10.511	(1.025)	17473	0.20000	0.204	
	52 4-Nitrophenol	109	10.651	10.490	(1.037)	1877	1.00000	0.500(aQM)	M6
	53 2,4-Dinitrotoluene	165	10.554	10.522	(1.027)	1715	0.20000	0.103(a)	
	54 2,3,4,6-Tetrachlorophenol	232	10.715	10.683	(1.043)	9489	1.00000	0.776(a)	
	55 Diethylphthalate	149	10.865	10.844	(1.057)	52689	1.00000	0.954(a)	
$	56 Fluorene-D10	174	10.908	10.886	(1.062)	10825	0.20000	0.204(a)	
	57 Fluorene	166	10.951	10.929	(1.066)	13222	0.20000	0.199(a)	
	58 4-Chlorophenyl-phenylether	204	10.972	10.951	(1.068)	5557	0.20000	0.205	
	59 4-Nitroaniline	138	11.037	11.015	(1.074)	844	0.20000	0.136(a)	
	60 4,6-Dinitro-2-Methylphenol	198	11.047	11.026	(0.915)	2618	1.00000	0.420(aQ)	
	61 N-Nitrosodiphenylamine	169	11.122	11.101	(0.921)	8999	0.20000	0.191(a)	
	62 4-Bromophenyl-phenylether	248	11.561	11.539	(0.958)	2500	0.20000	0.189(a)	
	63 Hexachlorobenzene	284	11.603	11.593	(0.961)	2955	0.20000	0.213	
	64 Atrazine	200	11.806	11.785	(0.978)	1255	0.20000	0.135(a)	
	65 Pentachlorophenol	266	11.881	11.849	(0.984)	4285	1.00000	0.634(a)	
*	66 Phenanthrene-D10	188	12.073	12.062	(1.000)	52678	0.80000	(a)	
	67 Phenanthrene	178	12.105	12.084	(1.003)	14961	0.20000	0.203	
	68 Anthracene	178	12.169	12.148	(1.008)	14074	0.20000	0.193(a)	
	69 Carbazole	167	12.393	12.361	(1.027)	9985	0.20000	0.214	
	70 Di-n-butylphthalate	149	12.863	12.842	(1.065)	56226	1.00000	0.783(a)	
$	71 Fluoranthene-d10	212	13.522	13.512	(1.120)	6913	0.20000	0.180	
	72 Fluoranthene	202	13.542	13.532	(1.122)	10487	0.20000	0.186(a)	
$	73 Pyrene-D10	212	13.787	13.777	(0.889)	7982	0.20000	0.225(a)	
	74 Pyrene	202	13.807	13.797	(0.890)	10977	0.20000	0.233	
	75 Butylbenzylphthalate	149	14.724	14.714	(0.949)	13259	1.00000	0.760(a)	

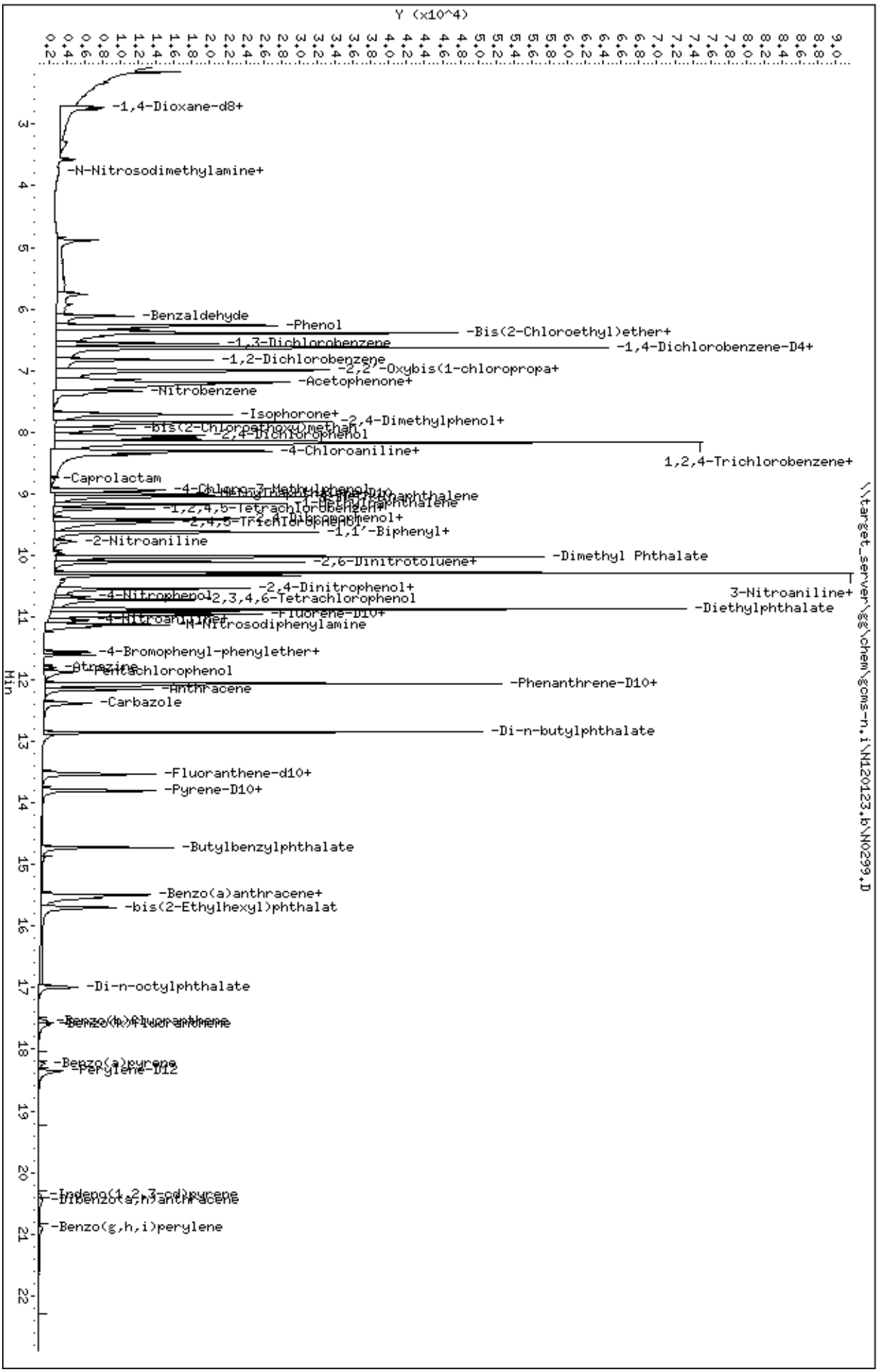
Data File: \\target_server\gg\chem\gcms-n.i\N120123.b\N0299.D
Report Date: 04-Dec-2023 07:46

EP
8:07 am, Dec 29, 2023

			QUANT SIG					AMOUNTS		
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
	76	Benzo(a)anthracene	228	15.488	15.478	(0.999)	3547	0.20000	0.151(a)	
	77	3,3'-Dichlorobenzidine	252	15.529	15.498	(1.001)	528	0.20000	0.0975(a)	
*	78	Chrysene-D12	240	15.508	15.498	(1.000)	15780	0.80000	(a)	
	79	Chrysene	228	15.549	15.539	(1.003)	7250	0.20000	0.222	
	80	bis(2-Ethylhexyl)phthalate	149	15.702	15.692	(1.012)	11911	1.00000	0.548(a)	
	81	Di-n-octylphthalate	149	16.996	16.986	(1.096)	10570	1.00000	0.458(a)	
	82	Benzo(b)fluoranthene	252	17.541	17.531	(0.956)	1784	0.20000	0.138(a)	
	83	Benzo(k)fluoranthene	252	17.603	17.583	(0.959)	4061	0.20000	0.175(aH)	
	84	Benzo(a)pyrene	252	18.231	18.221	(0.993)	1594	0.20000	0.0970(a)	
*	85	Perylene-D12	264	18.355	18.345	(1.000)	8434	0.80000	(a)	
	86	Indeno(1,2,3-cd)pyrene	276	20.363	20.353	(1.109)	672	0.20000	0.0913(a)	
	87	Dibenzo(a,h)anthracene	278	20.456	20.435	(1.114)	902	0.20000	0.0981(aM)	M6
	88	Benzo(g,h,i)perylene	276	20.909	20.889	(1.139)	1402	0.20000	0.100(a)	
M	89	Total PAHs	100				175718	3.60000	(a)	

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.


Y (x10^4)
Min
-1,4-Dioxane-d8+
-N-Nitrosodimethylamine+
-Benzaldehyde
-Phenol
-Bis(2-Chloroethyl)ether+
-1,4-Dichlorobenzene-D4+
-1,3-Dichlorobenzene
-1,2-Dichlorobenzene
-2,2'-Oxybis(1-chloropropa+
-Acetophenone+
-Nitrobenzene
-Isophorone+
-2,4-Dimethylphenol+
-bis(2-Chloroethoxy)methan
-2,4-Dichlorophenol
-4-Chloroaniline+
1,2,4-Trichlorobenzene+
-Caprolactam
-1,2,4,5-Tetrachlorobenzen
-2,4,6-Trichlorophenol+
-1,1'-Biphenyl+
-2-Nitroaniline
-2,6-Dinitrotoluene+
-Dimethyl Phthalate
-2,4-Dinitrophenol+
-4-Nitrophenol
2,3,4,6-Tetrachlorophenol
3-Nitroaniline+
-Diethylphthalate
-Fluorene-D10+
N-Nitrosodiphenylamine
-4-Bromophenyl-phenylether+
-Atrazine
Pentachlorophenol
-Phenanthrene-D10+
-Anthracene
-Carbazole
-Di-n-butylphthalate
-Fluoranthene-d10+
-Pyrene-D10+
-Butylbenzylphthalate
-Benzo(a)anthracene+
-bis(2-Ethylhexyl)phthalat
-Di-n-octylphthalate
-Benzo(b)fluoranthene
-Benzo(a)pyrene
Perylene-D12
-Indeno(1,2,3-cd)pyrene
Dibenzo(a,h)anthracene
-Benzo(g,h,i)perylene
Data File: \\target_server\gg\chem\gcms-n,i\N120123,b\N0299.D
Date : 01-DEC-2023 09:45
Client ID:
Sample Info: WG346189-2
Volume Injected (uL): 1.0
Column phase: Rxi-5VOCms
Instrument: gcms-n,i
Operator: EP
Column diameter: 0.25
\\target_server\gg\chem\gcms-n,i\N120123,b\N0299.D

Data File: \\target_server\gg\chem\gcms-n.i\N120123.b\N0300.D
Report Date: 04-Dec-2023 07:46

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-n.i\N120123.b\N0300.D
Lab Smp Id: WG346189-5
Inj Date : 01-DEC-2023 10:15
Operator : EP   Inst ID: gcms-n.i
Smp Info : WG346189-5
Misc Info :
Comment   :
Method   : \\target_server\gg\chem\gcms-n.i\N120123.b\NSPSIM93.m
Meth Date : 04-Dec-2023 07:39 gcms-n.i   Quant Type: ISTD
Cal Date : 01-DEC-2023 10:15   Cal File: N0300.D
Als bottle: 5   Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: all.sub
Target Version: 4.12

Concentration Formula: Amt * DF * Uf*(Vt/Vo*Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.000	Sample Volume (L)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

EP
8:07 am, Dec 29, 2023

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
$	1 1,4-Dioxane-d8	96	2.731	2.689	(0.266)	133695	7.00000	6.58	
	2 1,4-Dioxane	88	2.773	2.731	(0.419)	136752	7.00000	6.92	
	3 N-Nitrosodimethylamine	74	3.206	3.164	(0.485)	174221	7.00000	7.22	
	4 Pyridine	79	3.248	3.196	(0.491)	252221	7.00000	6.60(TM)	M6
	5 Benzaldehyde	77	6.084	6.074	(0.920)	58259	7.00000	3.40	
	6 Phenol	94	6.240	6.230	(0.943)	397805	7.00000	7.09	
	7 Bis(2-Chloroethyl)ether	93	6.323	6.313	(0.956)	316720	7.00000	6.89	
	8 2-Chlorophenol	128	6.365	6.354	(0.962)	327686	7.00000	7.21	
	9 1,3-Dichlorobenzene	146	6.542	6.531	(0.989)	362972	7.00000	6.76	
*	10 1,4-Dichlorobenzene-D4	152	6.615	6.604	(1.000)	27944	0.80000	(aQ)	
	11 1,4-Dichlorobenzene	146	6.625	6.625	(1.002)	360703	7.00000	6.66	
	12 1,2-Dichlorobenzene	146	6.802	6.802	(1.028)	348690	7.00000	6.64	
	13 2,2'-Oxybis(1-chloropropane)	45	6.958	6.958	(1.052)	214339	7.00000	6.59(Q)	
	14 2-Methylphenol	108	6.958	6.958	(1.052)	276678	7.00000	7.05	
	15 Acetophenone	105	7.104	7.104	(0.874)	423199	7.00000	7.01	
	16 N-Nitroso-di-n-propylamine	70	7.124	7.124	(1.077)	208457	7.00000	6.94	
	17 3&4-Methylphenol	108	7.156	7.145	(1.082)	299188	7.00000	6.79	
	18 Hexachloroethane	117	7.208	7.197	(1.090)	138489	7.00000	6.80	
	19 Nitrobenzene	77	7.301	7.291	(0.899)	300424	7.00000	6.84	
	20 Isophorone	82	7.596	7.597	(0.935)	569772	7.00000	7.12	
	21 2-Nitrophenol	139	7.686	7.686	(0.946)	168143	7.00000	6.76	

Data File: \\target_server\gg\chem\gcms-n.i\N120123.b\N0300.D
Report Date: 04-Dec-2023 07:46

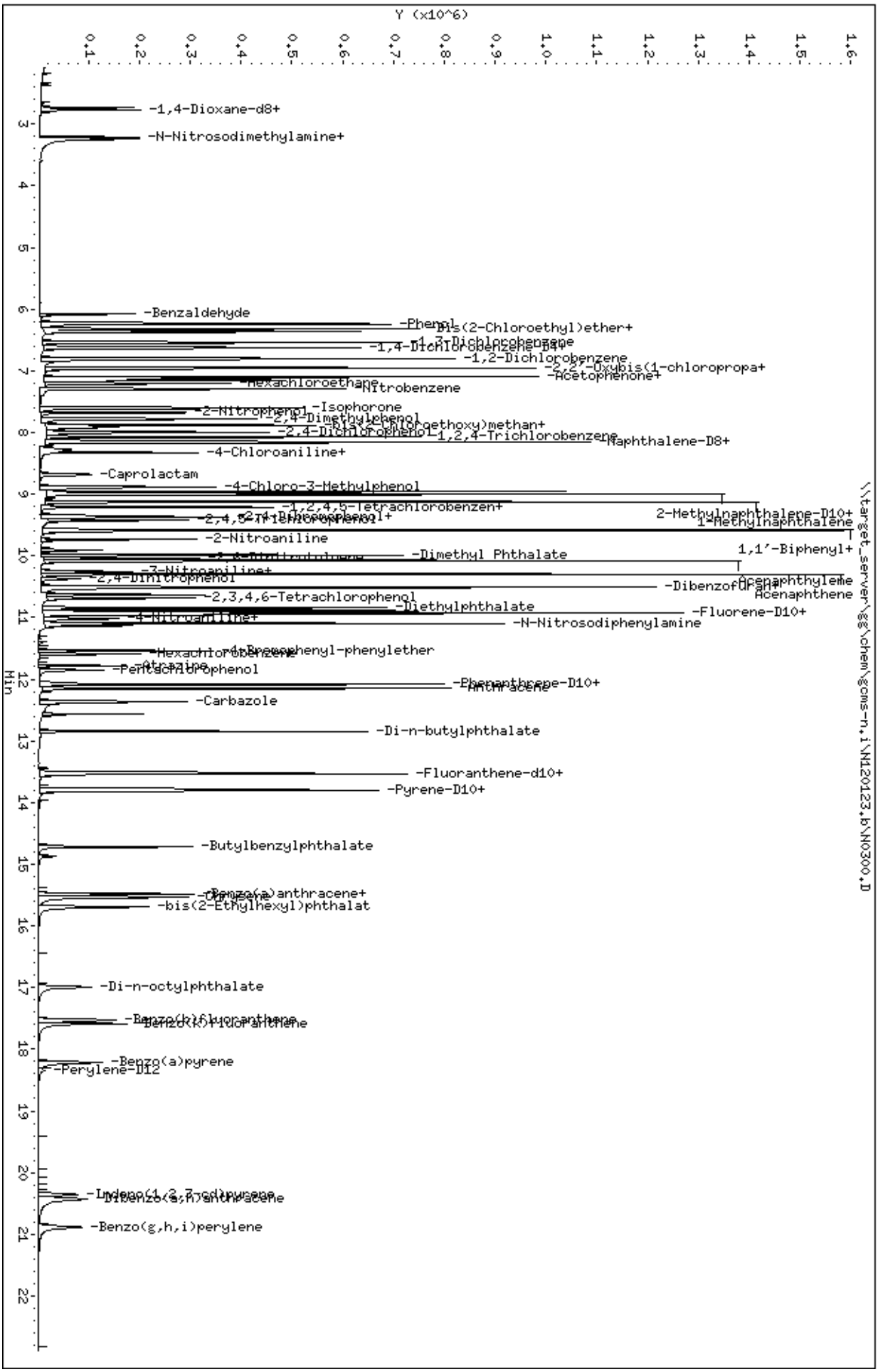
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
	22 2,4-Dimethylphenol	107	7.776	7.776	(0.957)	219354	7.00000	6.40	
	23 bis(2-Chloroethoxy)methane	93	7.889	7.878	(0.971)	344266	7.00000	6.93	
	24 Benzoic Acid	105	7.923	7.945	(0.975)	134479	7.00000	6.59(Q)	
	25 2,4-Dichlorophenol	162	7.990	7.990	(0.983)	251655	7.00000	7.38	
	26 1,2,4-Trichlorobenzene	180	8.069	8.069	(0.993)	262255	7.00000	6.65	
*	27 Naphthalene-D8	136	8.125	8.125	(1.000)	107054	0.80000	(a)	
	28 Naphthalene	128	8.159	8.148	(1.004)	960168	7.00000	6.84	
	29 4-Chloroaniline	127	8.283	8.283	(1.019)	119059	7.00000	4.75	
	30 Hexachlorobutadiene	225	8.328	8.328	(1.025)	111532	7.00000	6.87	
	31 Caprolactam	113	8.688	8.699	(1.069)	75037	7.00000	7.63	
	32 4-Chloro-3-Methylphenol	107	8.880	8.880	(1.093)	237492	7.00000	7.33	
$	33 2-Methylnaphthalene-D10	152	8.964	8.964	(1.103)	469213	7.00000	6.84	
	34 2-Methylnaphthalene	142	9.007	9.007	(1.108)	588954	7.00000	6.48	
	35 1-Methylnaphthalene	142	9.123	9.123	(1.123)	555233	7.00000	6.57	
	36 1,2,4,5-Tetrachlorobenzene	216	9.218	9.218	(0.899)	211951	7.00000	6.22	
	37 Hexachlorocyclopentadiene	237	9.197	9.197	(0.897)	90150	7.00000	5.88	
$	38 2,4-Dibromophenol	252	9.356	9.346	(0.912)	117495	7.00000	6.81(Q)	
	39 2,4,6-Trichlorophenol	196	9.367	9.367	(0.913)	141799	7.00000	6.82(H)	
	40 2,4,5-Trichlorophenol	196	9.420	9.420	(0.919)	150932	7.00000	6.48	
	41 1,1'-Biphenyl	154	9.579	9.579	(0.934)	659367	7.00000	6.44	
	42 2-Chloronaphthalene	164	9.589	9.589	(0.935)	168847	7.00000	6.37(Q)	
	43 2-Nitroaniline	65	9.728	9.728	(0.949)	109932	7.00000	6.60	
	44 Dimethyl Phthalate	163	9.986	9.986	(0.974)	492457	7.00000	6.73	
	45 2,6-Dinitrotoluene	165	10.039	10.039	(0.979)	120327	7.00000	7.32	
	46 Acenaphthylene	152	10.082	10.082	(0.983)	813037	7.00000	6.60	
	47 3-Nitroaniline	138	10.254	10.243	(1.000)	54142	7.00000	6.39	
*	48 Acenaphthene-D10	164	10.254	10.254	(1.000)	50523	0.80000	(a)	
	49 Acenaphthene	153	10.297	10.297	(1.004)	495061	7.00000	6.41	
	50 2,4-Dinitrophenol	184	10.372	10.372	(1.012)	43497	7.00000	8.33	
	51 Dibenzofuran	168	10.511	10.511	(1.025)	669857	7.00000	6.41	
	52 4-Nitrophenol	109	10.500	10.490	(1.024)	36830	7.00000	8.06(Q)	
	53 2,4-Dinitrotoluene	165	10.522	10.522	(1.026)	138794	7.00000	6.85(Q)	
	54 2,3,4,6-Tetrachlorophenol	232	10.683	10.683	(1.042)	107199	7.00000	7.20	
	55 Diethylphthalate	149	10.844	10.844	(1.058)	460975	7.00000	6.86	
$	56 Fluorene-D10	174	10.897	10.886	(1.063)	413555	7.00000	6.42	
	57 Fluorene	166	10.929	10.929	(1.066)	528099	7.00000	6.54	
	58 4-Chlorophenyl-phenylether	204	10.951	10.951	(1.068)	214106	7.00000	6.50	
	59 4-Nitroaniline	138	11.015	11.015	(1.074)	50485	7.00000	6.67(Q)	
	60 4,6-Dinitro-2-Methylphenol	198	11.026	11.026	(0.914)	61651	7.00000	7.80(Q)	
	61 N-Nitrosodiphenylamine	169	11.101	11.101	(0.920)	391171	7.00000	6.54	
	62 4-Bromophenyl-phenylether	248	11.539	11.539	(0.957)	110707	7.00000	6.59	
	63 Hexachlorobenzene	284	11.593	11.593	(0.961)	109256	7.00000	6.22	
	64 Atrazine	200	11.785	11.785	(0.977)	88662	7.00000	7.52	
	65 Pentachlorophenol	266	11.849	11.849	(0.982)	59774	7.00000	6.97	
*	66 Phenanthrene-D10	188	12.062	12.062	(1.000)	66807	0.80000	(a)	
	67 Phenanthrene	178	12.084	12.084	(1.002)	594068	7.00000	6.36	
	68 Anthracene	178	12.148	12.148	(1.007)	593396	7.00000	6.43	
	69 Carbazole	167	12.372	12.361	(1.026)	399903	7.00000	6.77	
	70 Di-n-butylphthalate	149	12.842	12.842	(1.065)	650581	7.00000	7.14	
$	71 Fluoranthene-d10	212	13.512	13.512	(1.120)	328581	7.00000	6.75	
	72 Fluoranthene	202	13.532	13.532	(1.122)	461172	7.00000	6.47	
$	73 Pyrene-D10	212	13.777	13.777	(0.889)	368542	7.00000	6.18	
	74 Pyrene	202	13.797	13.797	(0.890)	468457	7.00000	5.92	
	75 Butylbenzylphthalate	149	14.714	14.714	(0.949)	205910	7.00000	7.02	

Data File: \\target_server\gg\chem\gcms-n.i\N120123.b\N0300.D
Report Date: 04-Dec-2023 07:46

			QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
	76	Benzo(a)anthracene	228	15.478	15.478	(0.999)	276476	7.00000	7.00	
	77	3,3'-Dichlorobenzidine	252	15.498	15.498	(1.000)	69527	7.00000	7.63	
*	78	Chrysene-D12	240	15.498	15.498	(1.000)	26551	0.80000	(a)	
	79	Chrysene	228	15.539	15.539	(1.003)	325475	7.00000	5.93	
	80	bis(2-Ethylhexyl)phthalate	149	15.692	15.692	(1.012)	250596	7.00000	6.57	
	81	Di-n-octylphthalate	149	16.986	16.986	(1.096)	286947	7.00000	7.39	
	82	Benzo(b)fluoranthene	252	17.521	17.531	(0.955)	195145	7.00000	7.25	
	83	Benzo(k)fluoranthene	252	17.583	17.583	(0.958)	317868	7.00000	6.59(H)	
	84	Benzo(a)pyrene	252	18.221	18.221	(0.993)	217187	7.00000	6.35	
*	85	Perylene-D12	264	18.345	18.345	(1.000)	17557	0.80000	(a)	
	86	Indeno(1,2,3-cd)pyrene	276	20.353	20.353	(1.109)	122313	7.00000	7.98	
	87	Dibenzo(a,h)anthracene	278	20.435	20.435	(1.114)	149019	7.00000	7.78	
	88	Benzo(g,h,i)perylene	276	20.888	20.889	(1.139)	183815	7.00000	6.32	
M	89	Total PAHs	100				7844943	126.000	(a)	

QC Flag Legend

T - Target compound detected outside RT window.
a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.


Data File: \\target_server\gg\chem\gcms-n,i\N120123,b\N0300.D
Date : 01-DEC-2023 10:15
Client ID:
Sample Info: WG346189-5
Volume Injected (uL): 1.0
Column phase: Rxi-5ViMS
Instrument: gcms-n,i
Operator: EP
Column diameter: 0.25
\\target_server\gg\chem\gcms-n,i\N120123,b\N0300.D
Y (x10^6)
Min
-1,4-Dioxane-d8+
-N-Nitrosodimethylamine+
-Benzaldehyde
-Phenol
-bis(2-Chloroethyl)ether+
-1,4-Dichlorobenzene-D4
-1,2-Dichlorobenzene
-Acetophenone+
-Hexachloroethane
-Nitrobenzene
-2-Nitrophenol
-Isophorone
-2,4-Dimethylphenol
-bis(2-Chloroethoxy)methan+
-2,4-Dichlorophenol
-1,2,4-Trichlorobenzene
-Naphthalene-D8+
-4-Chloroaniline+
-Caprolactam
-4-Chloro-3-Methylphenol
-1,2,4,5-Tetrachlorobenzen+
-2,4,5-Trichlorophenol
-2-Nitroaniline
-Dimethyl Phthalate
-3-Nitroaniline+
-2,4-Dinitrophenol
-2,3,4,6-Tetrachlorophenol
-Diethylphthalate
-4-Nitroaniline+
-N-Nitrosodiphenylamine
-Hexachlorobenzene
-Atrazine
-Pentachlorophenol
-Carbazole
-Di-n-butylphthalate
-Fluoranthene-d10+
-Pyrene-D10+
-Butylbenzylphthalate
-Chrysene
-bis(2-Ethylhexyl)phthalat
-Di-n-octylphthalate
-Benzo(k)fluoranthene
-Benzo(a)pyrene
-Perylene-D12
-Indeno(1,2,3-cd)pyrene
-Benzo(g,h,i)perylene
2-Methylnaphthalene-D10+
1-Methylnaphthalene
1,1'-Biphenyl+
Acenaphthylene
Acenaphthene
-Dibenzofuran
-Fluorene-D10+
-4-Bromophenyl-phenylether
Anthracene
-Phenanthrene-D10+
-Benzo(a)anthracene+

Data File: \\target_server\gg\chem\gcms-n.i\N120123.b\N0301.D
Report Date: 04-Dec-2023 07:46

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-n.i\N120123.b\N0301.D
Lab Smp Id: WG346189-6
Inj Date : 01-DEC-2023 10:45
Operator : EP   Inst ID: gcms-n.i
Smp Info : WG346189-6
Misc Info :
Comment   :
Method   : \\target_server\gg\chem\gcms-n.i\N120123.b\NSPSIM93.m
Meth Date : 04-Dec-2023 07:39 gcms-n.i   Quant Type: ISTD
Cal Date : 01-DEC-2023 10:45   Cal File: N0301.D
Als bottle: 6   Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: all.sub
Target Version: 4.12

Concentration Formula: Amt * DF * Uf*(Vt/Vo*Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.000	Sample Volume (L)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
$	1 1,4-Dioxane-d8	96	2.731	2.689	(0.266)	175767	10.0000	11.1	
	2 1,4-Dioxane	88	2.762	2.731	(0.418)	187230	10.0000	10.9	
	3 N-Nitrosodimethylamine	74	3.196	3.164	(0.483)	250965	10.0000	12.0	
	4 Pyridine	79	3.238	3.196	(0.490)	443434	10.0000	13.4	
	5 Benzaldehyde	77	6.084	6.074	(0.920)	72271	10.0000	4.87	
	6 Phenol	94	6.240	6.230	(0.943)	525555	10.0000	10.8	
	7 Bis(2-Chloroethyl)ether	93	6.323	6.313	(0.956)	424738	10.0000	10.6	
	8 2-Chlorophenol	128	6.365	6.354	(0.962)	456001	10.0000	11.6	
	9 1,3-Dichlorobenzene	146	6.542	6.531	(0.989)	495893	10.0000	10.6	
*	10 1,4-Dichlorobenzene-D4	152	6.615	6.604	(1.000)	24250	0.80000	(aQ)	
	11 1,4-Dichlorobenzene	146	6.625	6.625	(1.002)	503980	10.0000	10.7	
	12 1,2-Dichlorobenzene	146	6.802	6.802	(1.028)	476562	10.0000	10.5	
	13 2,2'-Oxybis(1-chloropropane)	45	6.958	6.958	(1.052)	297660	10.0000	10.6	
	14 2-Methylphenol	108	6.958	6.958	(1.052)	377427	10.0000	11.1	
	15 Acetophenone	105	7.104	7.104	(0.874)	571341	10.0000	11.3	
	16 N-Nitroso-di-n-propylamine	70	7.124	7.124	(1.077)	276614	10.0000	10.6	
	17 3&4-Methylphenol	108	7.156	7.145	(1.082)	403597	10.0000	10.6	
	18 Hexachloroethane	117	7.197	7.197	(1.088)	193352	10.0000	10.9	
	19 Nitrobenzene	77	7.301	7.291	(0.899)	404069	10.0000	11.0	
	20 Isophorone	82	7.596	7.597	(0.935)	750538	10.0000	11.2	
	21 2-Nitrophenol	139	7.686	7.686	(0.946)	232967	10.0000	10.9	

Data File: \\target_server\gg\chem\gcms-n.i\N120123.b\N0301.D
Report Date: 04-Dec-2023 07:46

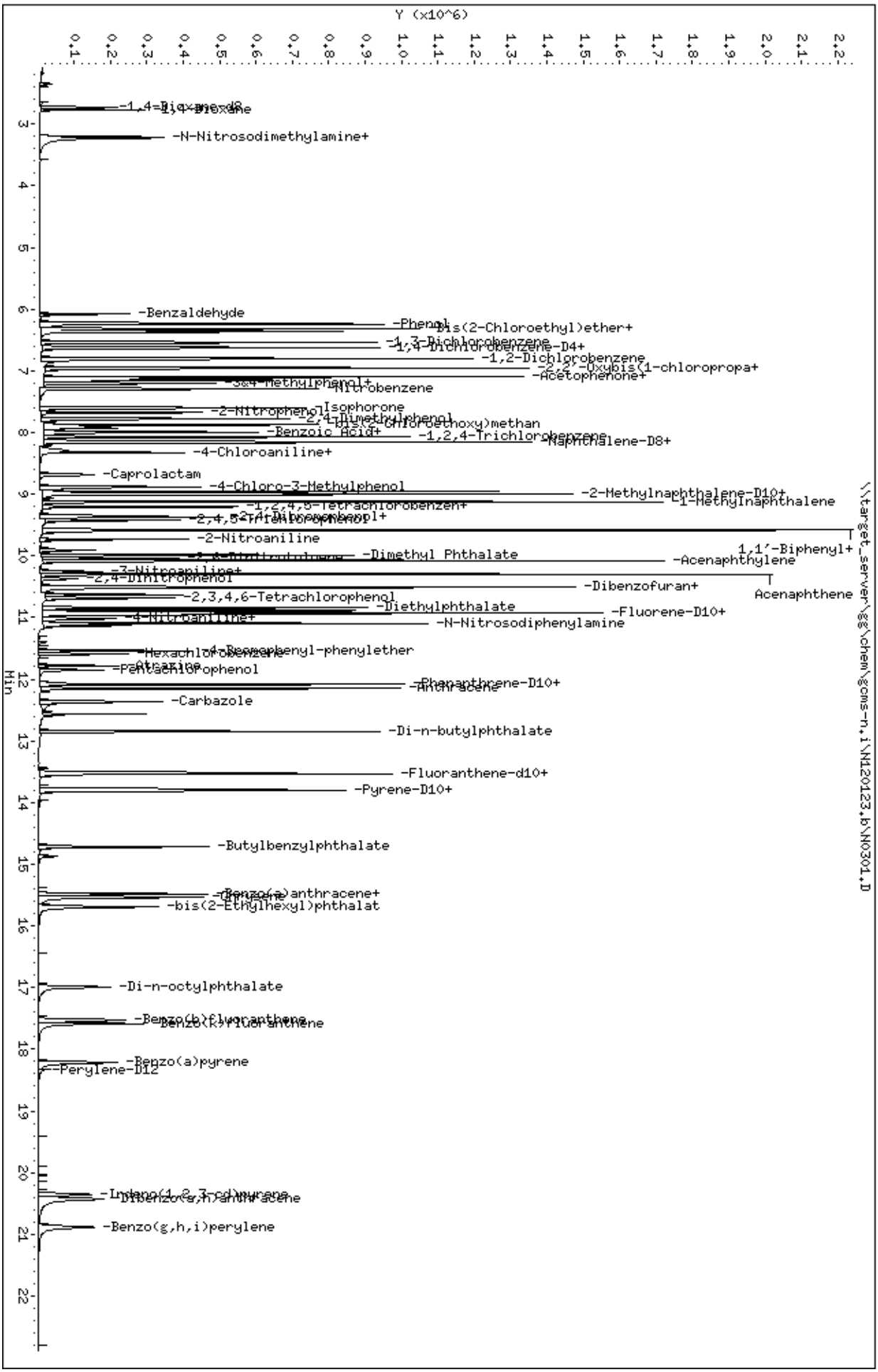
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
	22 2,4-Dimethylphenol	107	7.776	7.776	(0.957)	294032	10.0000	10.2	
	23 bis(2-Chloroethoxy)methane	93	7.878	7.878	(0.970)	459399	10.0000	11.0	
	24 Benzoic Acid	105	7.934	7.945	(0.976)	211197	10.0000	12.3	
	25 2,4-Dichlorophenol	162	7.990	7.990	(0.983)	334538	10.0000	11.7	
	26 1,2,4-Trichlorobenzene	180	8.069	8.069	(0.993)	358495	10.0000	10.8	
*	27 Naphthalene-D8	136	8.125	8.125	(1.000)	89801	0.80000	(a)	
	28 Naphthalene	128	8.159	8.148	(1.004)	1268570	10.0000	10.8	
	29 4-Chloroaniline	127	8.294	8.283	(1.021)	150278	10.0000	7.14	
	30 Hexachlorobutadiene	225	8.328	8.328	(1.025)	149083	10.0000	10.9	
	31 Caprolactam	113	8.688	8.699	(1.069)	96464	10.0000	11.7	
	32 4-Chloro-3-Methylphenol	107	8.880	8.880	(1.093)	303225	10.0000	11.2	
$	33 2-Methylnaphthalene-D10	152	8.964	8.964	(1.103)	612596	10.0000	10.6	
	34 2-Methylnaphthalene	142	9.007	9.007	(1.108)	766010	10.0000	10.0	
	35 1-Methylnaphthalene	142	9.123	9.123	(1.123)	716801	10.0000	10.1	
	36 1,2,4,5-Tetrachlorobenzene	216	9.218	9.218	(0.899)	279265	10.0000	10.6	
	37 Hexachlorocyclopentadiene	237	9.197	9.197	(0.897)	124790	10.0000	10.5	
$	38 2,4-Dibromophenol	252	9.346	9.346	(0.911)	152632	10.0000	11.4	
	39 2,4,6-Trichlorophenol	196	9.367	9.367	(0.913)	184937	10.0000	11.5	
	40 2,4,5-Trichlorophenol	196	9.420	9.420	(0.919)	192614	10.0000	10.7	
	41 1,1'-Biphenyl	154	9.579	9.579	(0.934)	832376	10.0000	10.5	
	42 2-Chloronaphthalene	164	9.589	9.589	(0.935)	219326	10.0000	10.7	
	43 2-Nitroaniline	65	9.728	9.728	(0.949)	139210	10.0000	10.8	
	44 Dimethyl Phthalate	163	9.986	9.986	(0.974)	624624	10.0000	11.0	
	45 2,6-Dinitrotoluene	165	10.039	10.039	(0.979)	151876	10.0000	11.9	
	46 Acenaphthylene	152	10.082	10.082	(0.983)	1007224	10.0000	10.5	
	47 3-Nitroaniline	138	10.254	10.243	(1.000)	60551	10.0000	9.21	
*	48 Acenaphthene-D10	164	10.254	10.254	(1.000)	39186	0.80000	(a)	
	49 Acenaphthene	153	10.297	10.297	(1.004)	626925	10.0000	10.5	
	50 2,4-Dinitrophenol	184	10.372	10.372	(1.012)	59466	10.0000	14.7	
	51 Dibenzofuran	168	10.511	10.511	(1.025)	832708	10.0000	10.3	
	52 4-Nitrophenol	109	10.490	10.490	(1.023)	48184	10.0000	13.6(Q)	
	53 2,4-Dinitrotoluene	165	10.522	10.522	(1.026)	173134	10.0000	11.0	
	54 2,3,4,6-Tetrachlorophenol	232	10.683	10.683	(1.042)	132597	10.0000	11.5	
	55 Diethylphthalate	149	10.844	10.844	(1.058)	574044	10.0000	11.0	
$	56 Fluorene-D10	174	10.886	10.886	(1.062)	510950	10.0000	10.2(A)	
	57 Fluorene	166	10.929	10.929	(1.066)	648271	10.0000	10.3	
	58 4-Chlorophenyl-phenylether	204	10.951	10.951	(1.068)	267341	10.0000	10.5	
	59 4-Nitroaniline	138	11.015	11.015	(1.074)	76684	10.0000	13.0	
	60 4,6-Dinitro-2-Methylphenol	198	11.026	11.026	(0.914)	82092	10.0000	13.7	
	61 N-Nitrosodiphenylamine	169	11.101	11.101	(0.920)	472597	10.0000	10.4	
	62 4-Bromophenyl-phenylether	248	11.539	11.539	(0.957)	138143	10.0000	10.8	
	63 Hexachlorobenzene	284	11.593	11.593	(0.961)	133154	10.0000	10.0	
	64 Atrazine	200	11.785	11.785	(0.977)	111252	10.0000	12.5	
	65 Pentachlorophenol	266	11.849	11.849	(0.982)	79517	10.0000	12.2	
*	66 Phenanthrene-D10	188	12.062	12.062	(1.000)	50585	0.80000	(a)	
	67 Phenanthrene	178	12.084	12.084	(1.002)	733640	10.0000	10.4	
	68 Anthracene	178	12.148	12.148	(1.007)	731372	10.0000	10.5	
	69 Carbazole	167	12.372	12.361	(1.026)	403285	10.0000	9.01	
	70 Di-n-butylphthalate	149	12.842	12.842	(1.065)	824137	10.0000	11.9	
$	71 Fluoranthene-d10	212	13.512	13.512	(1.120)	411363	10.0000	11.2	
	72 Fluoranthene	202	13.532	13.532	(1.122)	599017	10.0000	11.1	
$	73 Pyrene-D10	212	13.777	13.777	(0.889)	474567	10.0000	9.12	
	74 Pyrene	202	13.797	13.797	(0.890)	613617	10.0000	8.89	
	75 Butylbenzylphthalate	149	14.714	14.714	(0.949)	299578	10.0000	11.7	

Data File: \\target_server\gg\chem\gcms-n.i\N120123.b\N0301.D
Report Date: 04-Dec-2023 07:46

			QUANT SIG					AMOUNTS		
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
	76	Benzo(a)anthracene	228	15.478	15.478	(0.999)	409298	10.0000	11.9	
	77	3,3'-Dichlorobenzidine	252	15.498	15.498	(1.000)	107471	10.0000	13.5	
*	78	Chrysene-D12	240	15.498	15.498	(1.000)	23161	0.80000	(a)	
	79	Chrysene	228	15.539	15.539	(1.003)	493982	10.0000	10.3	
	80	bis(2-Ethylhexyl)phthalate	149	15.692	15.692	(1.012)	375490	10.0000	10.9	
	81	Di-n-octylphthalate	149	16.986	16.986	(1.096)	486473	10.0000	14.4	
	82	Benzo(b)fluoranthene	252	17.531	17.531	(0.956)	317360	10.0000	12.2	
	83	Benzo(k)fluoranthene	252	17.583	17.583	(0.958)	488911	10.0000	10.4(H)	
	84	Benzo(a)pyrene	252	18.221	18.221	(0.993)	350365	10.0000	10.6	
*	85	Perylene-D12	264	18.345	18.345	(1.000)	17028	0.80000	(a)	
	86	Indeno(1,2,3-cd)pyrene	276	20.353	20.353	(1.109)	226153	10.0000	15.2(A)	
	87	Dibenzo(a,h)anthracene	278	20.435	20.435	(1.114)	260129	10.0000	14.0	
	88	Benzo(g,h,i)perylene	276	20.888	20.889	(1.139)	309665	10.0000	11.0	
M	89	Total PAHs	100				10567310	180.000	(a)	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
A - Target compound detected but, quantitated amount
exceeded maximum amount.
Q - Qualifier signal failed the ratio test.
H - Operator selected an alternate compound hit.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Date : 01-DEC-2023 10:45
Client ID:
Sample Info: WG346189-6
Volume Injected (uL): 1.0
Column phase: Rxi-5ViMS
Instrument: gcms-n,i
Operator: EP
Column diameter: 0.25
\\target_server\gg\chem\gcms-n,i\N120123,b\N0301.D
Y (x10^6)
Min
-1,4-Dioxane
-N-Nitrosodimethylamine+
-Benzaldehyde
-Phenol
-Bis(2-Chloroethyl)ether+
-1,3-Dichlorobenzene
-1,4-Dichlorobenzene-D4+
-1,2-Dichlorobenzene
-2,2'-Oxybis(1-chloropropa+
-Acetophenone+
-3&4 Methylphenol+
-Nitrobenzene
-2-Nitrophenol
-Isophorone
-2,4-Dimethylphenol
-Benzoic Acid+
-1,2,4-Trichlorobenzene
-Naphthalene-D8+
-4-Chloroaniline+
-Caprolactam
-4-Chloro-3-Methylphenol
-2-Methylnaphthalene-D10+
-1-Methylnaphthalene
-2,4,5-Trichlorophenol
-2-Nitroaniline
1,1'-Biphenyl+
-Dimethyl Phthalate
-Acenaphthylene
-3-Nitroaniline+
-2,4-Dinitrophenol
-Dibenzofuran+
Acenaphthene
-2,3,4,6-Tetrachlorophenol
-Diethylphthalate
-Fluorene-D10+
-4-Nitroaniline+
-N-Nitrosodiphenylamine
-Hexachlorobenzene
-Atrazine
-Pentachlorophenol
-Phenanthrene-D10+
-Anthracene
-Carbazole
-Di-n-butylphthalate
-Fluoranthene-d10+
-Pyrene-D10+
-Butylbenzylphthalate
-Benzo(a)anthracene+
-Chrysene
-bis(2-Ethylhexyl)phthalat
-Di-n-octylphthalate
-Benzo(b)fluoranthene
Benzo(k)fluoranthene
-Benzo(a)pyrene
-Perylene-D12
-Indeno(1,2,3-cd)pyrene
Dibenzo(a,h)anthracene
-Benzo(g,h,i)perylene

Data File: \\target_server\gg\chem\gcms-n.i\N120123.b\N0302.D
Report Date: 04-Dec-2023 07:46

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-n.i\N120123.b\N0302.D
Lab Smp Id: WG346189-7
Inj Date : 01-DEC-2023 11:15
Operator : EP   Inst ID: gcms-n.i
Smp Info : WG346189-7
Misc Info :
Comment   :
Method   : \\target_server\gg\chem\gcms-n.i\N120123.b\NSPSIM93.m
Meth Date : 04-Dec-2023 07:39 gcms-n.i   Quant Type: ISTD
Cal Date : 01-DEC-2023 11:15   Cal File: N0302.D
Als bottle: 7   Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: all.sub
Target Version: 4.12

Concentration Formula: Amt * DF * Uf*(Vt/Vo*Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.000	Sample Volume (L)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)	REVIEW CODE
$	1 1,4-Dioxane-d8	96	2.689	2.689	(1.000)	243375	15.0000	16.1(A)	
	2 1,4-Dioxane	88	2.731	2.731	(0.414)	244854	15.0000	14.3	
	3 N-Nitrosodimethylamine	74	3.164	3.164	(0.479)	352585	15.0000	16.8(A)	
	4 Pyridine	79	3.196	3.196	(0.484)	636380	15.0000	19.2(A)	
	5 Benzaldehyde	77	6.074	6.074	(0.920)	112745	15.0000	7.60	
	6 Phenol	94	6.230	6.230	(0.943)	705773	15.0000	14.5	
	7 Bis(2-Chloroethyl)ether	93	6.313	6.313	(0.956)	577885	15.0000	14.5	
	8 2-Chlorophenol	128	6.354	6.354	(0.962)	635573	15.0000	16.1(A)	
	9 1,3-Dichlorobenzene	146	6.531	6.531	(0.989)	689951	15.0000	14.8	
*	10 1,4-Dichlorobenzene-D4	152	6.604	6.604	(1.000)	24244	0.80000	(aQ)	
	11 1,4-Dichlorobenzene	146	6.625	6.625	(1.003)	694998	15.0000	14.8	
	12 1,2-Dichlorobenzene	146	6.802	6.802	(1.030)	667239	15.0000	14.6	
	13 2,2'-Oxybis(1-chloropropane)	45	6.958	6.958	(1.054)	409447	15.0000	14.5	
	14 2-Methylphenol	108	6.958	6.958	(1.054)	523083	15.0000	15.4(A)	
	15 Acetophenone	105	7.104	7.104	(0.874)	799368	15.0000	15.5(A)	
	16 N-Nitroso-di-n-propylamine	70	7.124	7.124	(1.079)	380429	15.0000	14.6	
	17 3&4-Methylphenol	108	7.145	7.145	(1.082)	563318	15.0000	14.7	
	18 Hexachloroethane	117	7.197	7.197	(1.090)	267187	15.0000	15.1(A)	
	19 Nitrobenzene	77	7.291	7.291	(0.897)	560374	15.0000	14.9	
	20 Isophorone	82	7.597	7.597	(0.935)	989237	15.0000	14.5	
	21 2-Nitrophenol	139	7.686	7.686	(0.946)	321395	15.0000	14.6	

Data File: \\target_server\gg\chem\gcms-n.i\N120123.b\N0302.D
Report Date: 04-Dec-2023 07:46

EP
8:08 am, Dec 29, 2023

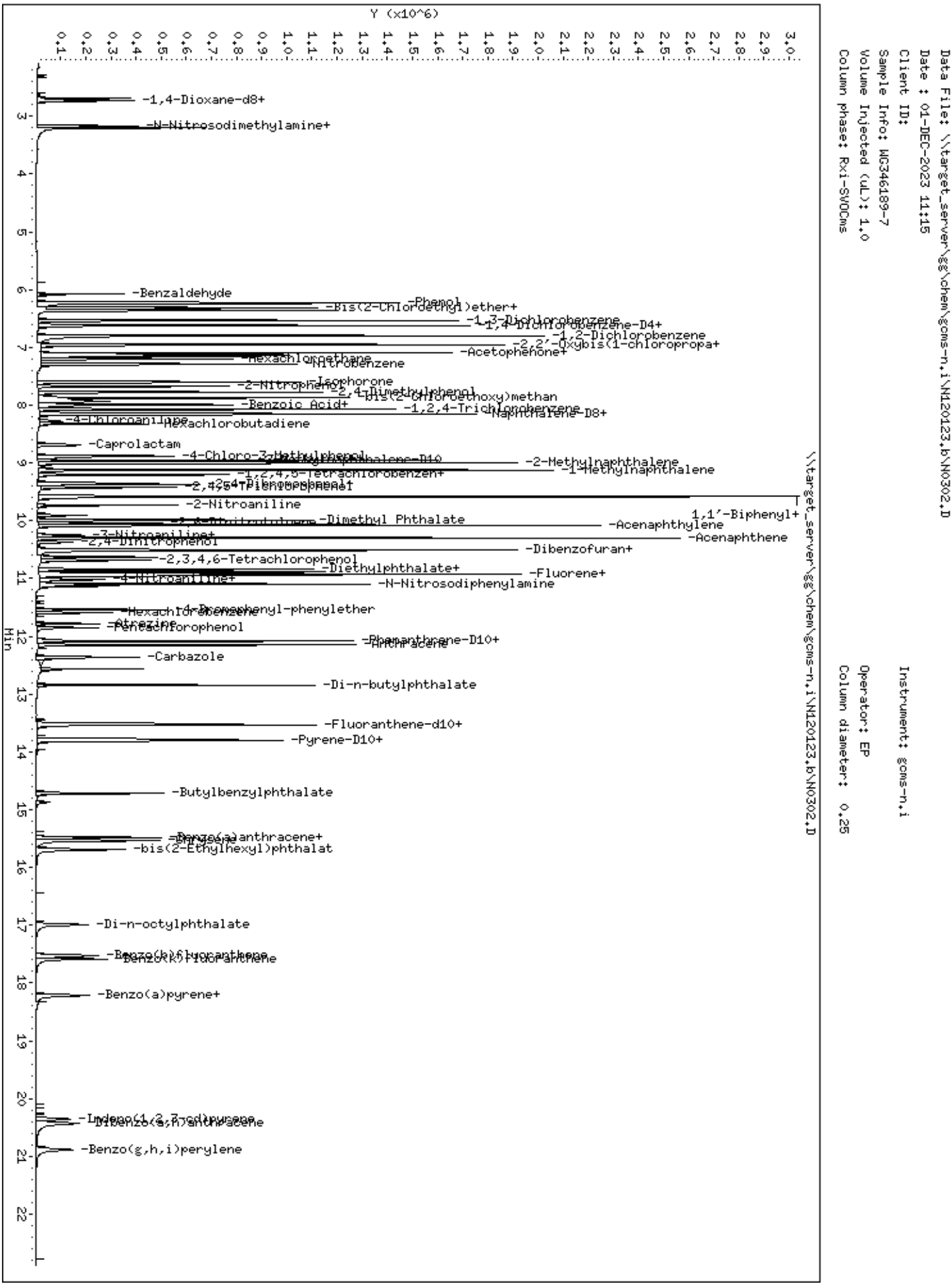
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
	22 2,4-Dimethylphenol	107	7.776	7.776	(0.957)	403721	15.0000	13.8	
	23 bis(2-Chloroethoxy)methane	93	7.878	7.878	(0.970)	617357	15.0000	14.5	
	24 Benzoic Acid	105	7.945	7.945	(0.978)	319730	15.0000	18.3(A)	
	25 2,4-Dichlorophenol	162	7.990	7.990	(0.983)	460774	15.0000	15.8(A)	
	26 1,2,4-Trichlorobenzene	180	8.069	8.069	(0.993)	499843	15.0000	14.8	
*	27 Naphthalene-D8	136	8.125	8.125	(1.000)	91409	0.80000	(a)	
	28 Naphthalene	128	8.148	8.148	(1.003)	1698783	15.0000	14.2	
	29 4-Chloroaniline	127	8.283	8.283	(1.019)	203348	15.0000	9.50	
	30 Hexachlorobutadiene	225	8.328	8.328	(1.025)	199767	15.0000	14.4	
	31 Caprolactam	113	8.699	8.699	(1.071)	121155	15.0000	14.4	
	32 4-Chloro-3-Methylphenol	107	8.880	8.880	(1.093)	408386	15.0000	14.8	
$	33 2-Methylnaphthalene-D10	152	8.964	8.964	(1.103)	817191	15.0000	14.0	
	34 2-Methylnaphthalene	142	9.007	9.007	(1.108)	1026196	15.0000	13.2	
	35 1-Methylnaphthalene	142	9.123	9.123	(1.123)	962068	15.0000	13.3	
	36 1,2,4,5-Tetrachlorobenzene	216	9.218	9.218	(1.000)	366104	15.0000	14.4	
	37 Hexachlorocyclopentadiene	237	9.197	9.197	(1.000)	172517	15.0000	15.1(A)	
$	38 2,4-Dibromophenol	252	9.346	9.346	(1.000)	201484	15.0000	15.7	
	39 2,4,6-Trichlorophenol	196	9.367	9.367	(1.000)	245942	15.0000	15.9(A)	
	40 2,4,5-Trichlorophenol	196	9.420	9.420	(1.000)	256630	15.0000	14.8	
	41 1,1'-Biphenyl	154	9.579	9.579	(1.000)	1066825	15.0000	14.0	
	42 2-Chloronaphthalene	164	9.589	9.589	(1.000)	285161	15.0000	14.5	
	43 2-Nitroaniline	65	9.728	9.728	(1.000)	181474	15.0000	14.6	
	44 Dimethyl Phthalate	163	9.986	9.986	(1.000)	772031	15.0000	14.2	
	45 2,6-Dinitrotoluene	165	10.039	10.039	(1.000)	190966	15.0000	15.6(A)	
	46 Acenaphthylene	152	10.082	10.082	(1.000)	1323125	15.0000	14.4	
	47 3-Nitroaniline	138	10.243	10.243	(1.000)	85045	15.0000	13.5	
*	48 Acenaphthene-D10	164	10.254	10.254	(1.000)	37603	0.80000	(aM)	M6
	49 Acenaphthene	153	10.297	10.297	(1.000)	789287	15.0000	13.7	
	50 2,4-Dinitrophenol	184	10.372	10.372	(1.000)	81752	15.0000	21.0(A)	
	51 Dibenzofuran	168	10.511	10.511	(1.000)	1059056	15.0000	13.6	
	52 4-Nitrophenol	109	10.490	10.490	(1.000)	62287	15.0000	18.3(A)	
	53 2,4-Dinitrotoluene	165	10.522	10.522	(1.000)	215715	15.0000	14.3	
	54 2,3,4,6-Tetrachlorophenol	232	10.683	10.683	(1.000)	166328	15.0000	15.0(A)	
	55 Diethylphthalate	149	10.844	10.844	(1.000)	688396	15.0000	13.8	
$	56 Fluorene-D10	174	10.886	10.886	(1.000)	636074	15.0000	13.2(A)	
	57 Fluorene	166	10.929	10.929	(1.000)	835339	15.0000	13.9	
	58 4-Chlorophenyl-phenylether	204	10.951	10.951	(1.000)	335940	15.0000	13.7	
	59 4-Nitroaniline	138	11.015	11.015	(1.000)	100078	15.0000	17.8(A)	
	60 4,6-Dinitro-2-Methylphenol	198	11.026	11.026	(0.914)	104505	15.0000	19.3(A)	
	61 N-Nitrosodiphenylamine	169	11.101	11.101	(0.920)	587596	15.0000	14.3	
	62 4-Bromophenyl-phenylether	248	11.539	11.539	(0.957)	167672	15.0000	14.6	
	63 Hexachlorobenzene	284	11.593	11.593	(0.961)	162696	15.0000	13.5	
	64 Atrazine	200	11.785	11.785	(0.977)	126963	15.0000	15.7(A)	
	65 Pentachlorophenol	266	11.849	11.849	(0.982)	98891	15.0000	16.8(A)	
*	66 Phenanthrene-D10	188	12.062	12.062	(1.000)	45798	0.80000	(a)	
	67 Phenanthrene	178	12.084	12.084	(1.002)	898788	15.0000	14.0	
	68 Anthracene	178	12.148	12.148	(1.007)	892320	15.0000	14.1	
	69 Carbazole	167	12.361	12.361	(1.025)	434190	15.0000	10.7	
	70 Di-n-butylphthalate	149	12.842	12.842	(1.065)	957413	15.0000	15.3(A)	
$	71 Fluoranthene-d10	212	13.512	13.512	(1.120)	474424	15.0000	14.2	
	72 Fluoranthene	202	13.532	13.532	(1.122)	690381	15.0000	14.1	
$	73 Pyrene-D10	212	13.777	13.777	(0.889)	545442	15.0000	13.5(A)	
	74 Pyrene	202	13.797	13.797	(0.890)	707907	15.0000	13.2	
	75 Butylbenzylphthalate	149	14.714	14.714	(0.949)	324393	15.0000	16.3(A)	

Data File: \\target_server\gg\chem\gcms-n.i\N120123.b\N0302.D
Report Date: 04-Dec-2023 07:46

								AMOUNTS		
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/ml)	ON-COL (ug/ml)		REVIEW CODE
	76 Benzo(a)anthracene	228	15.478	15.478	(0.999)	439518	15.0000	16.4	(A)	
	77 3,3'-Dichlorobenzidine	252	15.498	15.498	(1.000)	110358	15.0000	17.9	(A)	
*	78 Chrysene-D12	240	15.498	15.498	(1.000)	17955	0.80000		(a)	
	79 Chrysene	228	15.539	15.539	(1.003)	528698	15.0000	14.2		
	80 bis(2-Ethylhexyl)phthalate	149	15.692	15.692	(1.012)	401699	15.0000	14.6		
	81 Di-n-octylphthalate	149	16.986	16.986	(1.096)	507269	15.0000	19.3	(A)	
	82 Benzo(b)fluoranthene	252	17.531	17.531	(0.956)	316893	15.0000	17.3	(A)	
	83 Benzo(k)fluoranthene	252	17.583	17.583	(0.958)	486838	15.0000	14.8	(H)	
	84 Benzo(a)pyrene	252	18.221	18.221	(0.993)	348107	15.0000	14.9		
*	85 Perylene-D12	264	18.345	18.345	(1.000)	11972	0.80000		(a)	
	86 Indeno(1,2,3-cd)pyrene	276	20.353	20.353	(1.109)	207354	15.0000	19.8	(A)	
	87 Dibenzo(a,h)anthracene	278	20.435	20.435	(1.114)	242508	15.0000	18.6	(A)	
	88 Benzo(g,h,i)perylene	276	20.889	20.889	(1.139)	289083	15.0000	14.6		
M	89 Total PAHs	100				12683193	270.000		(a)	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
A - Target compound detected but, quantitated amount
exceeded maximum amount.
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.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Volume Injected (uL): 1.0
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Instrument: gcms-n,i
Operator: EP
Column diameter: 0.25
\\target_server\gg\chem\gcms-n,i\N120123,b\N0302.D
Y (x10^6)
Min
-1,4-Dioxane-d8+
-N-Nitrosodimethylamine+
-Benzaldehyde
-Phenol
-Bis(2-Chloroethyl)ether+
-1,3-Dichlorobenzene
-1,4-Dichlorobenzene-D4+
-1,2-Dichlorobenzene
-2,2'-Oxybis(1-chloropropa+
-Acetophenone+
-Hexachloroethane
-Nitrobenzene
-Isophorone
-2-Nitrophenol
-2,4-Dimethylphenol
-Bis(2-chloroethoxy)methan
-Benzoic Acid+
-1,2,4-Trichlorobenzene
-Naphthalene-D8+
-4-Chloroaniline
-Hexachlorobutadiene
-Caprolactam
-4-Chloro-3-Methylphenol
-2-Methylnaphthalene
-1-Methylnaphthalene
-1,2,4,5-Tetrachlorobenzen+
-2,4,5-Trichlorophenol
-2-Nitroaniline
1,1'-Biphenyl+
-Dimethyl Phthalate
-Acenaphthylene
-3-Nitroaniline+
-Acenaphthene
-2,4-Dinitrophenol
-Dibenzofuran+
-2,3,4,6-Tetrachlorophenol
-Diethylphthalate+
-Fluorene+
-4-Nitroaniline+
-N-Nitrosodiphenylamine
-Hexachlorobenzene
-4-Bromophenyl-phenylether
-Atrazine
-Pentachlorophenol
-Phenanthrene-D10+
-Anthracene
-Carbazole
-Di-n-butylphthalate
-Fluoranthene-d10+
-Pyrene-D10+
-Butylbenzylphthalate
-Benzo(a)anthracene+
-Chrysene
-bis(2-Ethylhexyl)phthalat
-Di-n-octylphthalate
-Benzo(b)fluoranthene
-Benzo(k)fluoranthene
-Benzo(a)pyrene+
-Indeno(1,2,3-cd)pyrene
-Dibenzo(a,h)anthracene
-Benzo(g,h,i)perylene

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Report Date: 04-Dec-2023 07:38

Katahdin Analytical Services

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Inj Date : 01-DEC-2023 11:45
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Comment   :
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Meth Date : 01-Dec-2023 11:44 gcms-n.i   Quant Type: ISTD
Cal Date : 01-DEC-2023 11:15   Cal File: N0302.D
Als bottle: 8   QC Sample: INDSOURCE
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: all.sub
Target Version: 4.12
Processing Host: INSPIRON1

Concentration Formula: Amt * DF * Uf*(Vt/Vo*Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.000	Sample Volume (L)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

EP
7:47 am, Dec 04, 2023

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	CONCENTRATIONS FINAL (ug/L)	REVIEW CODE
2	1,4-Dioxane	88	2.741	2.731	(0.414)	83031	5.17255	5.17	
3	N-Nitrosodimethylamine	74	3.185	3.164	(0.482)	107317	5.47086	5.47	
4	Pyridine	79	3.227	3.196	(0.488)	188706	6.07996	6.08(RM)	M6
5	Benzaldehyde	77	6.084	6.074	(0.920)	34677	2.49414	2.49(R)	
6	Phenol	94	6.240	6.230	(0.943)	229054	5.02105	5.02	
7	Bis(2-Chloroethyl)ether	93	6.323	6.313	(0.956)	185019	4.95408	4.95	
8	2-Chlorophenol	128	6.365	6.354	(0.962)	187590	5.08157	5.08	
9	1,3-Dichlorobenzene	146	6.541	6.531	(0.989)	213723	4.89372	4.89	
* 10	1,4-Dichlorobenzene-D4	152	6.614	6.604	(1.000)	22712	0.80000	(aQ)	
11	1,4-Dichlorobenzene	146	6.625	6.625	(1.002)	218040	4.95628	4.96	
12	1,2-Dichlorobenzene	146	6.812	6.802	(1.030)	205915	4.82783	4.83	
13	2,2'-Oxybis(1-chloropropane)	45	6.968	6.958	(1.053)	91395	3.45898	3.46(R)	
14	2-Methylphenol	108	6.958	6.958	(1.052)	171010	5.35983	5.36	
15	Acetophenone	105	7.103	7.104	(0.873)	252185	5.22886	5.23	
16	N-Nitroso-di-n-propylamine	70	7.135	7.124	(1.079)	111947	4.58364	4.58	
17	3&4-Methylphenol	108	7.155	7.145	(1.082)	171118	4.77800	4.78	
18	Hexachloroethane	117	7.207	7.197	(1.090)	82778	5.00050	5.00	
19	Nitrobenzene	77	7.301	7.291	(0.897)	180802	5.15457	5.15	
20	Isophorone	82	7.608	7.597	(0.935)	300572	4.69801	4.70	
21	2-Nitrophenol	139	7.686	7.686	(0.945)	95931	4.86594	4.86	

Data File: \\target_server\gg\chem\gcms-n.i\N120123.b\N0303.D
Report Date: 04-Dec-2023 07:38

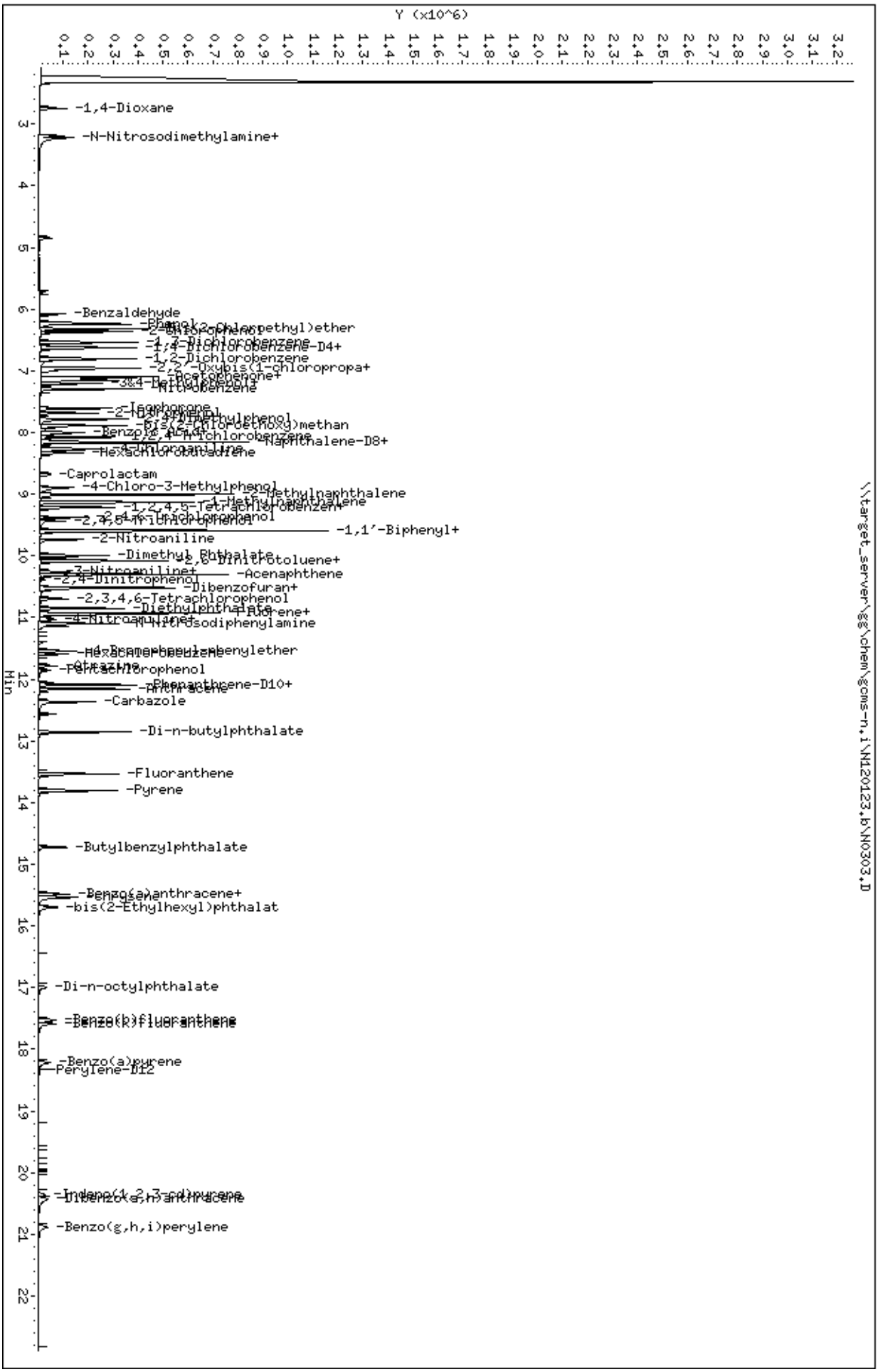
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	CONCENTRATIONS FINAL (ug/L)	REVIEW CODE
	22 2,4-Dimethylphenol	107	7.787	7.776	(0.957)	156507	5.71213	5.71	
	23 bis(2-Chloroethoxy)methane	93	7.889	7.878	(0.970)	198992	5.01099	5.01	
	24 Benzoic Acid	105	7.945	7.945	(0.976)	45559	2.79368	2.79	
	25 2,4-Dichlorophenol	162	8.001	7.990	(0.983)	142644	5.23417	5.23	
	26 1,2,4-Trichlorobenzene	180	8.080	8.069	(0.993)	152722	4.84614	4.85	
*	27 Naphthalene-D8	136	8.136	8.125	(1.000)	85532	0.80000	(a)	
	28 Naphthalene	128	8.159	8.148	(1.003)	570921	5.09282	5.09	
	29 4-Chloroaniline	127	8.271	8.283	(1.017)	98691	4.92542	4.92	
	30 Hexachlorobutadiene	225	8.327	8.328	(1.024)	65983	5.08621	5.09	
	31 Caprolactam	113	8.687	8.699	(1.068)	41414	5.26850	5.27	
	32 4-Chloro-3-Methylphenol	107	8.890	8.880	(1.093)	126369	4.88491	4.88	
	34 2-Methylnaphthalene	142	9.006	9.007	(1.107)	364003	5.01281	5.01	
	35 1-Methylnaphthalene	142	9.123	9.123	(1.121)	333417	4.93840	4.94	
	36 1,2,4,5-Tetrachlorobenzene	216	9.218	9.218	(0.898)	125715	4.81334	4.81	
	37 Hexachlorocyclopentadiene	237	9.208	9.197	(0.897)	57826	4.92680	4.93	
	39 2,4,6-Trichlorophenol	196	9.377	9.367	(0.914)	76504	4.80538	4.80	
	40 2,4,5-Trichlorophenol	196	9.430	9.420	(0.919)	75674	4.24478	4.24	
	41 1,1'-Biphenyl	154	9.589	9.579	(0.934)	401953	5.12920	5.13	
	42 2-Chloronaphthalene	164	9.600	9.589	(0.935)	95177	4.68942	4.69	
	43 2-Nitroaniline	65	9.739	9.728	(0.949)	64239	5.03355	5.03	
	44 Dimethyl Phthalate	163	9.996	9.986	(0.974)	255638	4.56083	4.56	
	45 2,6-Dinitrotoluene	165	10.050	10.039	(0.979)	61390	4.87788	4.88	
	46 Acenaphthylene	152	10.082	10.082	(0.982)	429500	4.54937	4.55	
	47 3-Nitroaniline	138	10.264	10.243	(1.000)	31007	4.77625	4.78	
*	48 Acenaphthene-D10	164	10.264	10.254	(1.000)	38702	0.80000	(a)	
	49 Acenaphthene	153	10.296	10.297	(1.003)	276328	4.67228	4.67	
	50 2,4-Dinitrophenol	184	10.382	10.372	(1.011)	15344	3.83430	3.83(R)	
	51 Dibenzofuran	168	10.522	10.511	(1.025)	394797	4.93441	4.93	
	52 4-Nitrophenol	109	10.511	10.490	(1.024)	15591	4.45268	4.45(Q)	
	53 2,4-Dinitrotoluene	165	10.532	10.522	(1.026)	70628	4.54866	4.55	
	54 2,3,4,6-Tetrachlorophenol	232	10.693	10.683	(1.042)	47196	4.14054	4.14	
	55 Diethylphthalate	149	10.854	10.844	(1.057)	242121	4.70146	4.70	
	57 Fluorene	166	10.929	10.929	(1.065)	284286	4.59341	4.59	
	58 4-Chlorophenyl-phenylether	204	10.961	10.951	(1.068)	119582	4.73872	4.74	
	59 4-Nitroaniline	138	11.004	11.015	(1.072)	32726	5.64289	5.64	
	60 4,6-Dinitro-2-Methylphenol	198	11.026	11.026	(0.914)	27835	5.02314	5.02	
	61 N-Nitrosodiphenylamine	169	11.101	11.101	(0.920)	157892	3.76113	3.76(R)	
	62 4-Bromophenyl-phenylether	248	11.550	11.539	(0.958)	60097	5.09785	5.10	
	63 Hexachlorobenzene	284	11.592	11.593	(0.961)	58130	4.71881	4.72	
	64 Atrazine	200	11.784	11.785	(0.977)	44184	5.34369	5.34	
	65 Pentachlorophenol	266	11.859	11.849	(0.983)	26849	4.46467	4.46	
*	66 Phenanthrene-D10	188	12.062	12.062	(1.000)	46872	0.80000	(a)	
	67 Phenanthrene	178	12.094	12.084	(1.003)	323586	4.93758	4.94	
	68 Anthracene	178	12.158	12.148	(1.008)	329618	5.09194	5.09	
	69 Carbazole	167	12.372	12.361	(1.026)	266157	6.41973	6.42(R)	
	70 Di-n-butylphthalate	149	12.852	12.842	(1.065)	338129	5.29085	5.29	
	72 Fluoranthene	202	13.532	13.532	(1.122)	242105	4.84100	4.84	
	74 Pyrene	202	13.807	13.797	(0.891)	254298	4.67793	4.68	
	75 Butylbenzylphthalate	149	14.724	14.714	(0.950)	96313	4.77692	4.78	
	76 Benzo(a)anthracene	228	15.478	15.478	(0.999)	137120	5.05123	5.05	
	77 3,3'-Dichlorobenzidine	252	15.508	15.498	(1.001)	26889	4.29668	4.30	
*	78 Chrysene-D12	240	15.498	15.498	(1.000)	18242	0.80000	(a)	
	79 Chrysene	228	15.539	15.539	(1.003)	169305	4.48689	4.49	
	80 bis(2-Ethylhexyl)phthalate	149	15.702	15.692	(1.013)	110370	4.28322	4.28	

Data File: \\target_server\gg\chem\gcms-n.i\N120123.b\N0303.D
Report Date: 04-Dec-2023 07:38

			QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/L)	REVIEW CODE
	81	Di-n-octylphthalate	149	16.996	16.986	(1.097)	110367	4.13577	4.14	
	82	Benzo(b)fluoranthene	252	17.531	17.531	(0.956)	96812	5.93259	5.93	
	83	Benzo(k)fluoranthene	252	17.593	17.583	(0.959)	148496	5.07934	5.08(H)	
	84	Benzo(a)pyrene	252	18.221	18.221	(0.993)	90460	4.36072	4.36	
*	85	Perylene-D12	264	18.345	18.345	(1.000)	10648	0.80000	(a)	
	86	Indeno(1,2,3-cd)pyrene	276	20.353	20.353	(1.109)	46757	5.03341	5.03	
	87	Dibenzo(a,h)anthracene	278	20.435	20.435	(1.114)	65480	5.64029	5.64	
	88	Benzo(g,h,i)perylene	276	20.888	20.889	(1.139)	88189	4.99986	5.00	
M	89	Total PAHs	100				4250681	88.9919	89.0	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.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Volume Injected (uL): 1.0
Column phase: Rxi-5ViOms
Instrument: gcms-n,i
Operator: EP
Column diameter: 0.25
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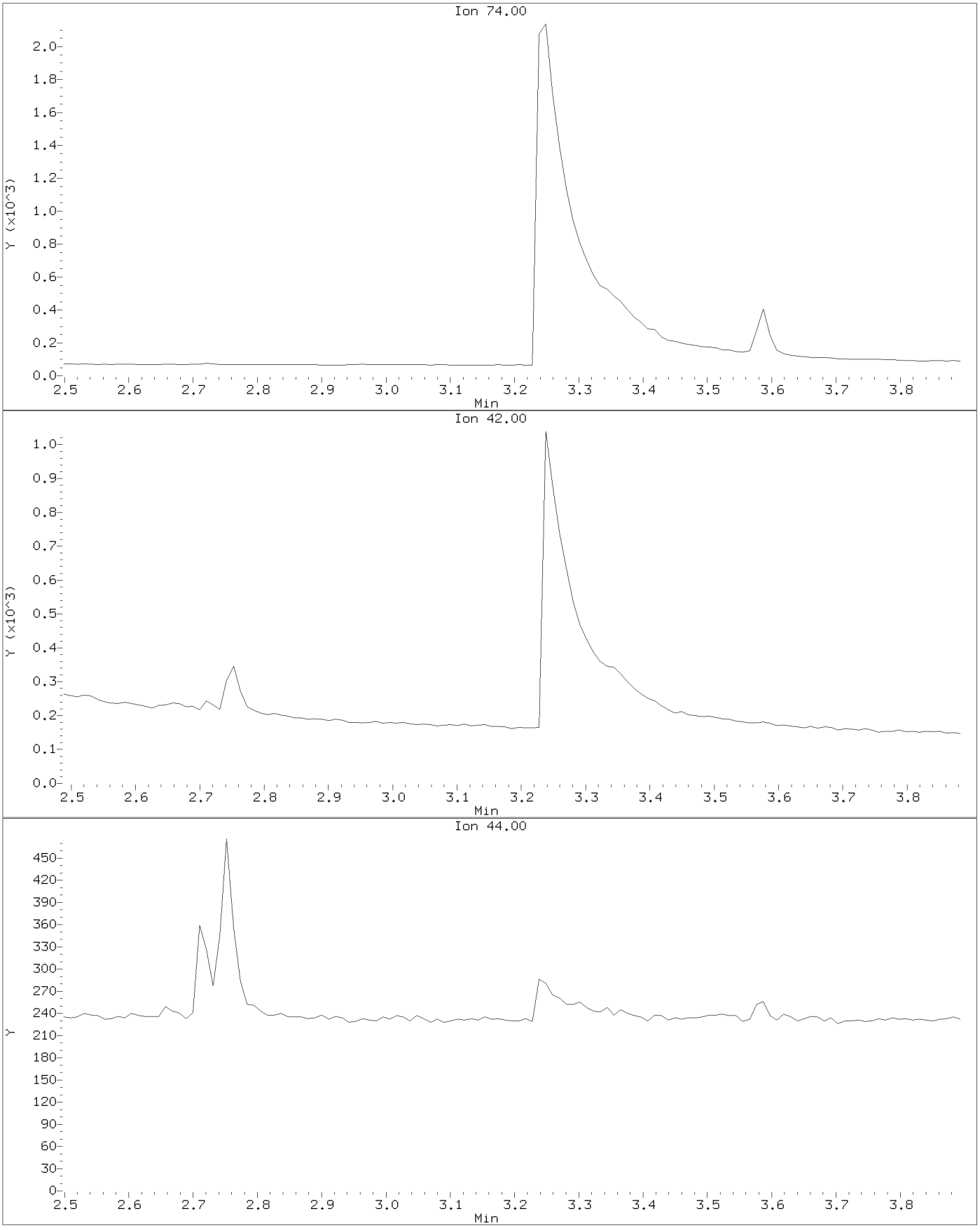
Y (x10^6)
Min
-1,4-Dioxane
-N-Nitrosodimethylamine+
-Benzaldehyde
-1,2-Dichlorobenzene
-Caprolactam
-4-Chloro-3-Methylphenol
-1,1'-Biphenyl+
-2-Nitroaniline
-Dimethyl Phthalate
-Acenaphthene
-Dibenzofuran+
-2,3,4,6-Tetrachlorophenol
-Fluorene+
-Carbazole
-Di-n-butylphthalate
-Fluoranthene
-Pyrene
-Butylbenzylphthalate
-Benzo(a)anthracene+
-bis(2-Ethylhexyl)phthalat
-Di-n-octylphthalate
-Benzo(b)fluoranthene
-Benzo(a)pyrene
Perylene-D12
-Benzo(g,h,i)perylene

Data File: \\target_server\gg\chem\gcms-n.i\N120123.b\N0298.D
Injection Date: 01-DEC-2023 09:15
Instrument: gcms-n.i
Client Sample ID:

Compound: N-Nitrosodimethylamine
CAS Number: 62-75-9

BEFORE MANUAL INTEGRATION



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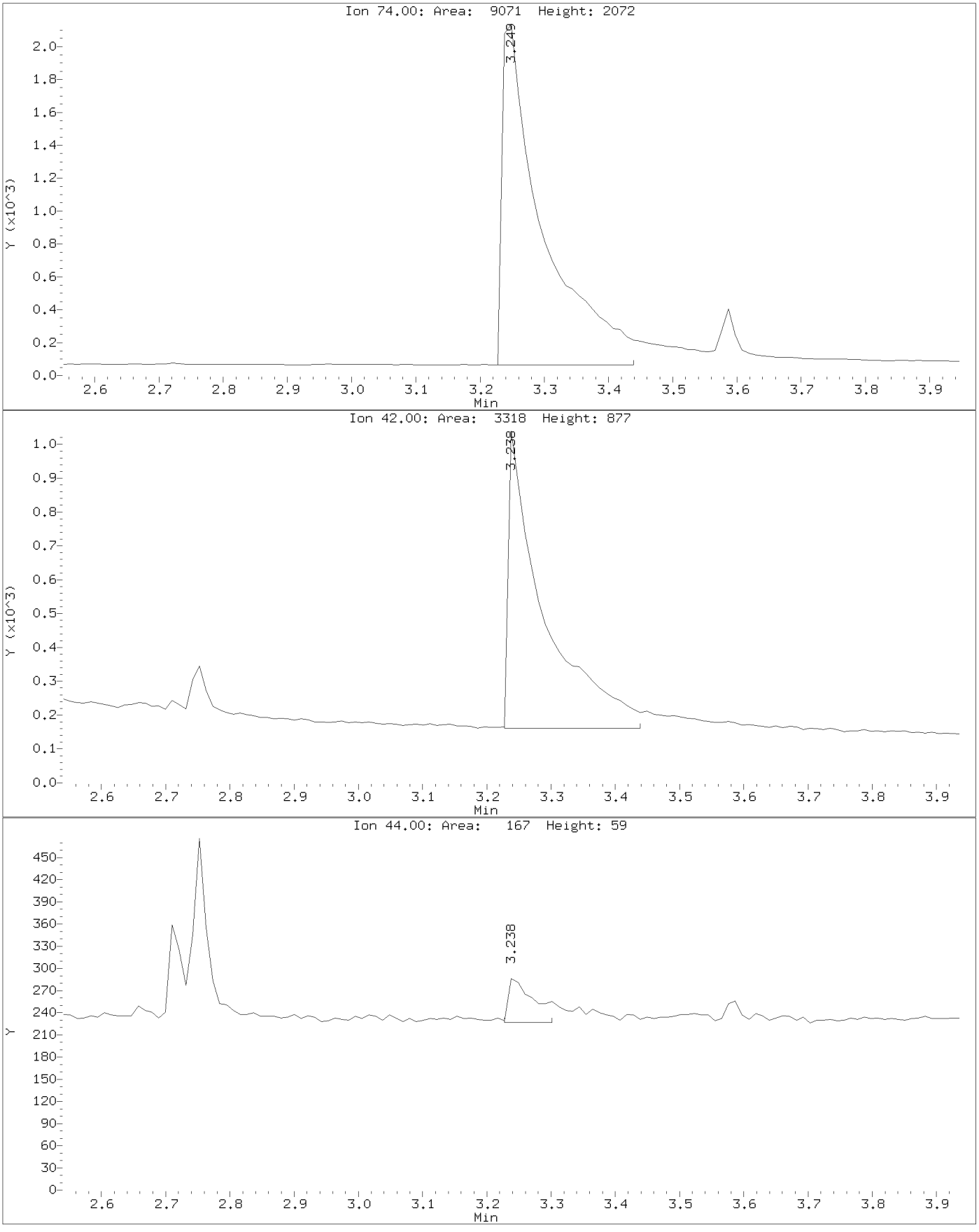
Client Sample ID:

Compound: N-Nitrosodimethylamine
CAS Number: 62-75-9

AFTER MANUAL INTEGRATION



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Client Sample ID:

Compound: N-Nitrosodimethylamine
CAS Number: 62-75-9

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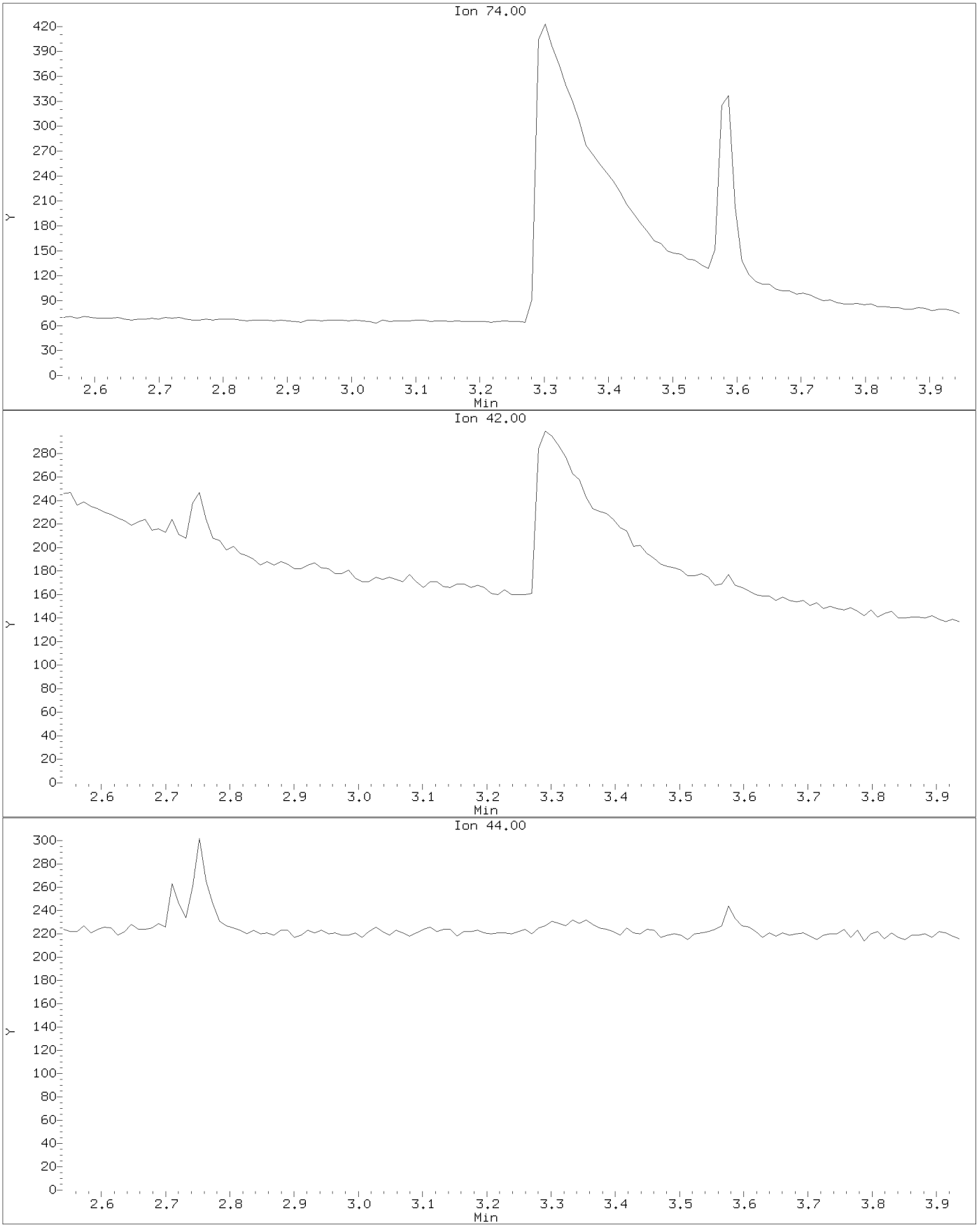

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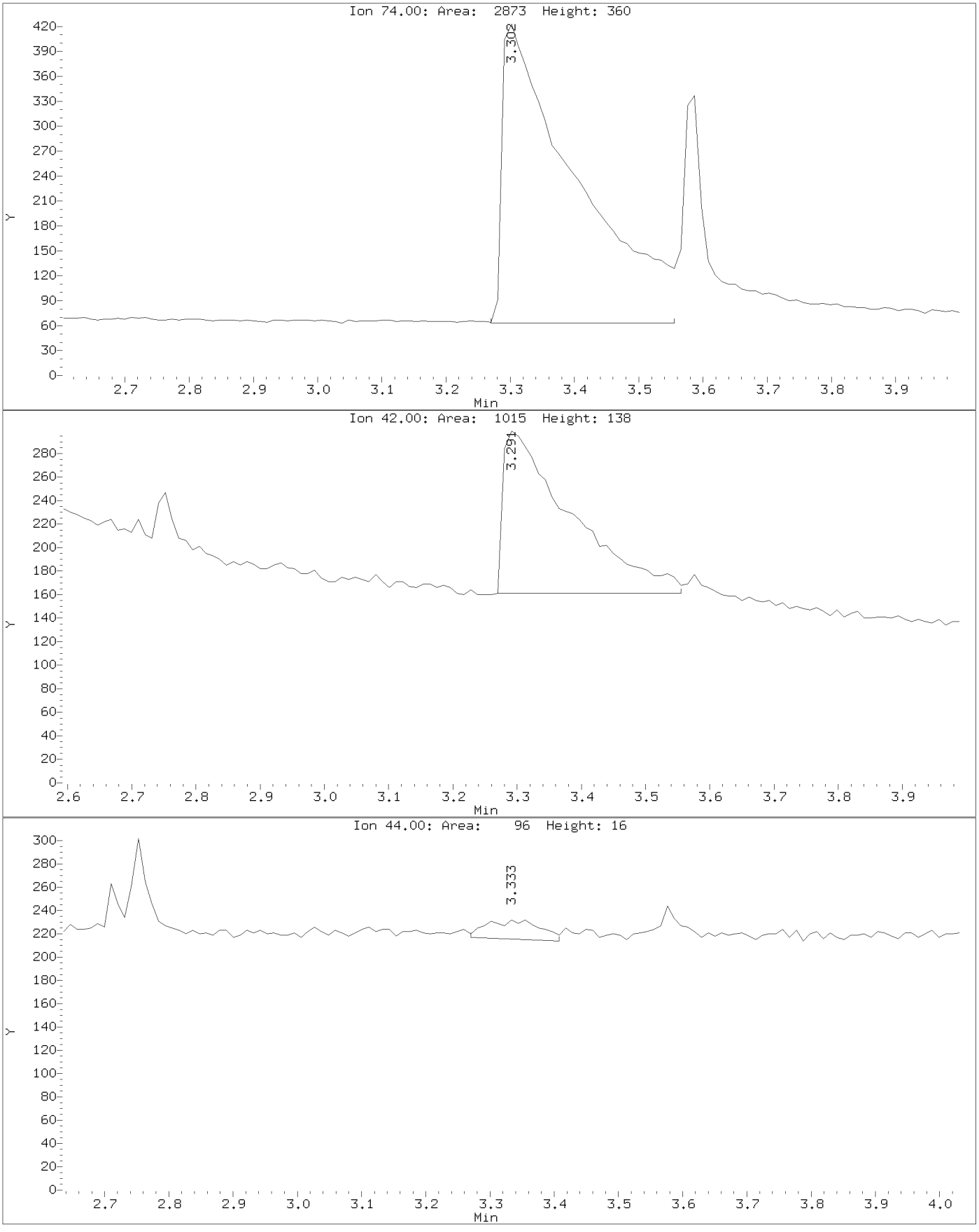
Client Sample ID:

Compound: N-Nitrosodimethylamine
CAS Number: 62-75-9



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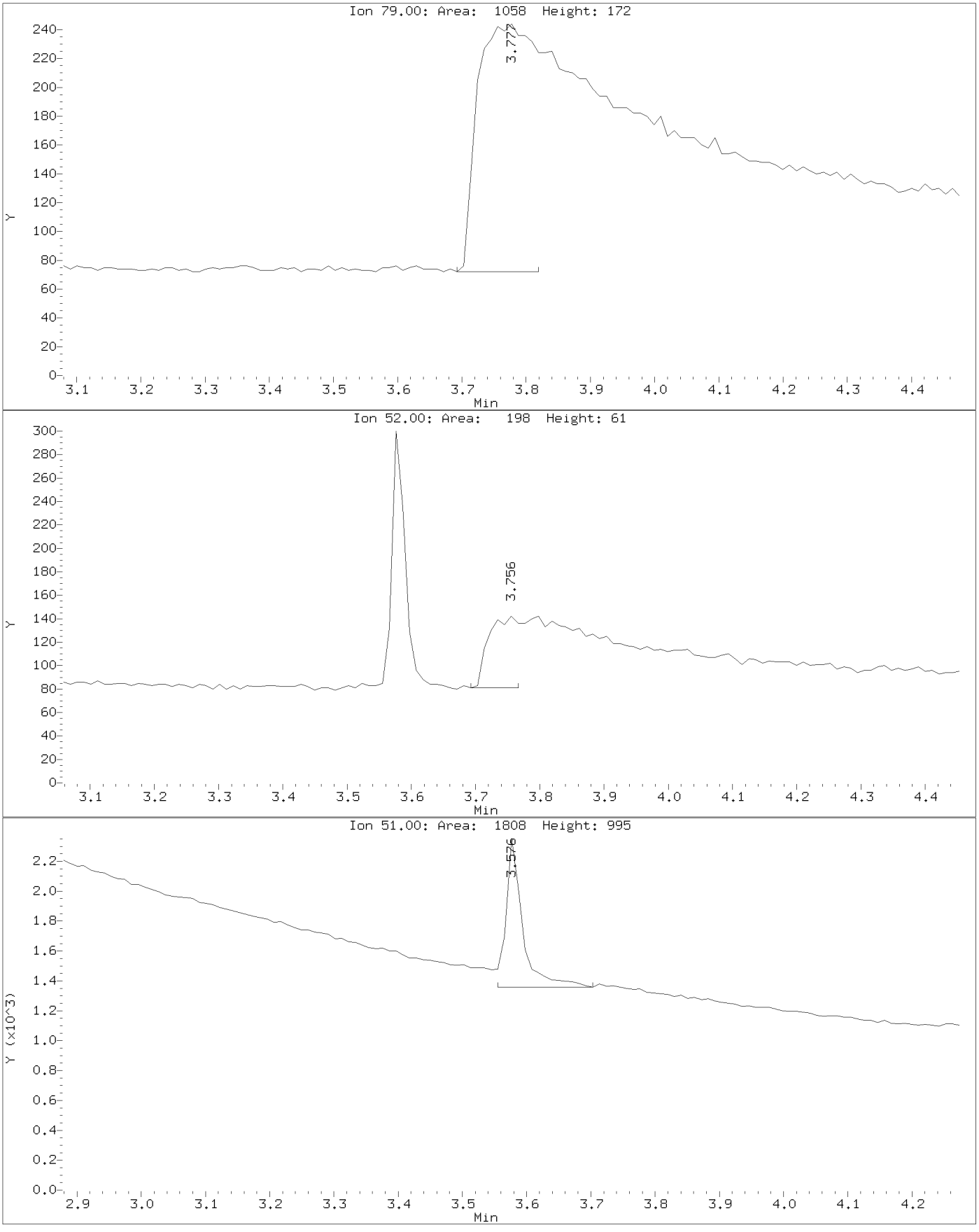
Injection Date: 01-DEC-2023 09:45
Instrument: gcms-n.i
Client Sample ID:

Compound: Pyridine
CAS Number: 110-86-1

BEFORE MANUAL INTEGRATION



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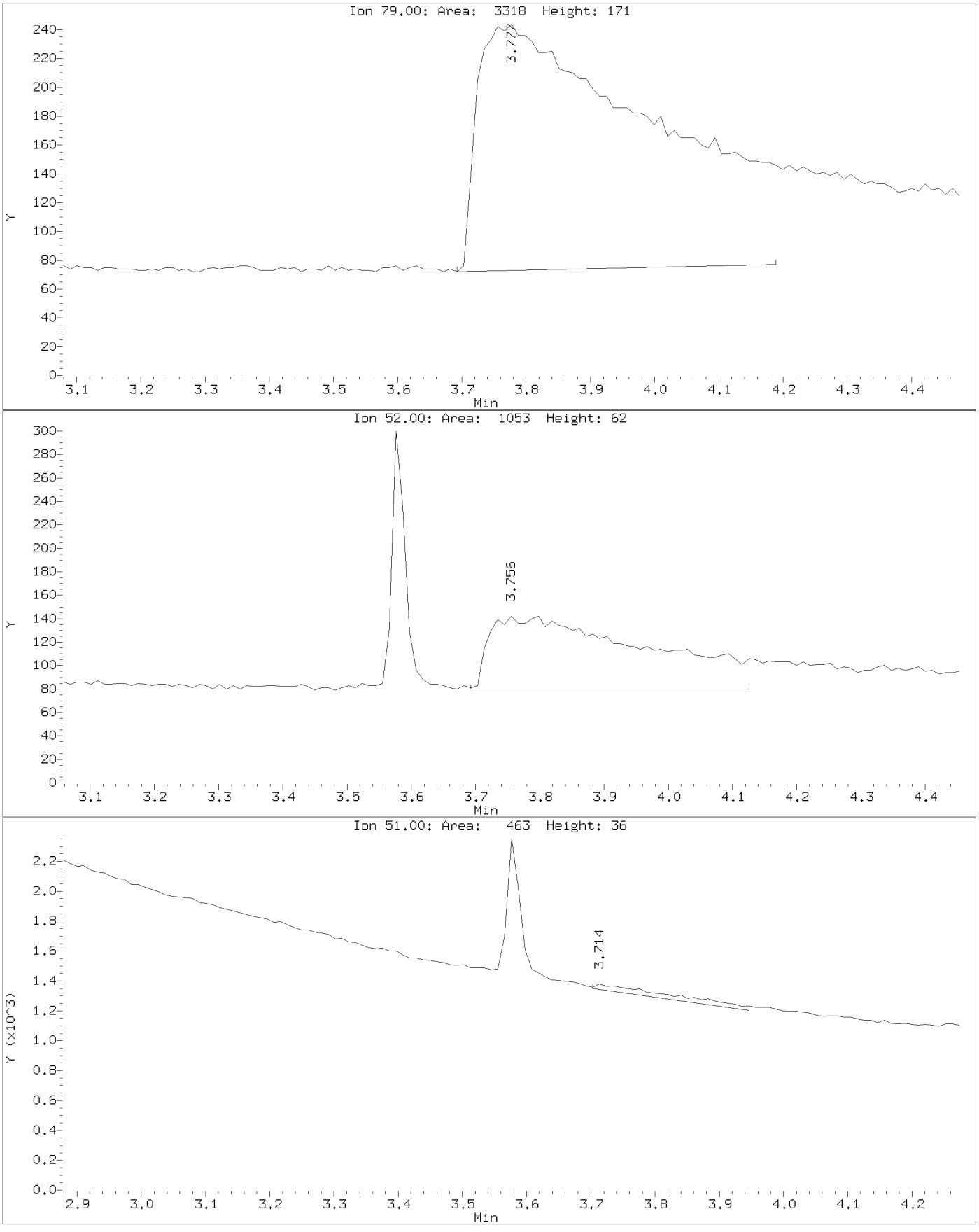
Client Sample ID:

Compound: Pyridine
CAS Number: 110-86-1

AFTER MANUAL INTEGRATION



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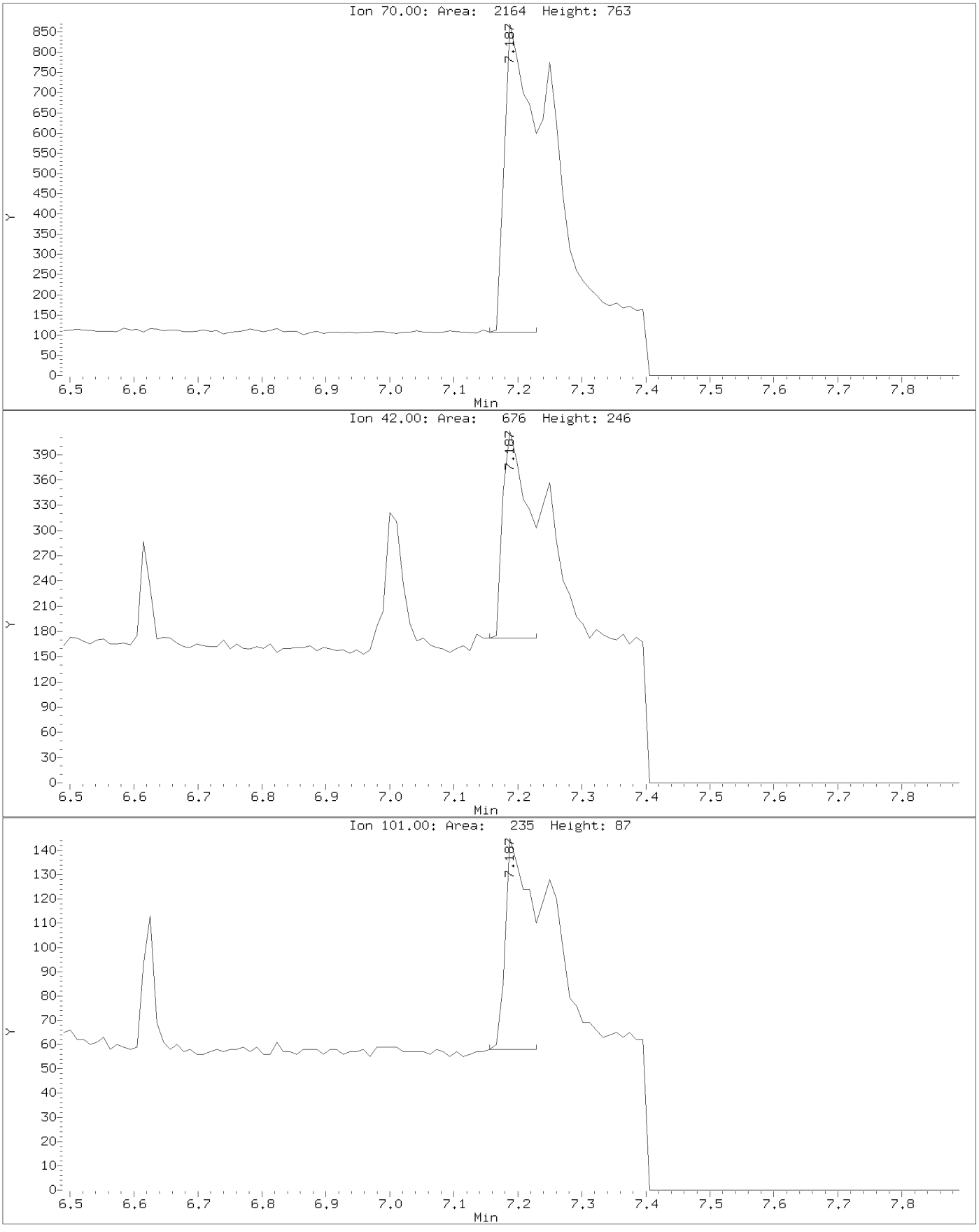
Injection Date: 01-DEC-2023 09:45
Instrument: gcms-n.i
Client Sample ID:

Compound: N-Nitroso-di-n-propylamine
CAS Number: 621-64-7

BEFORE MANUAL INTEGRATION



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Instrument: gcms-n.i
Client Sample ID:

Compound: N-Nitroso-di-n-propylamine
CAS Number: 621-64-7

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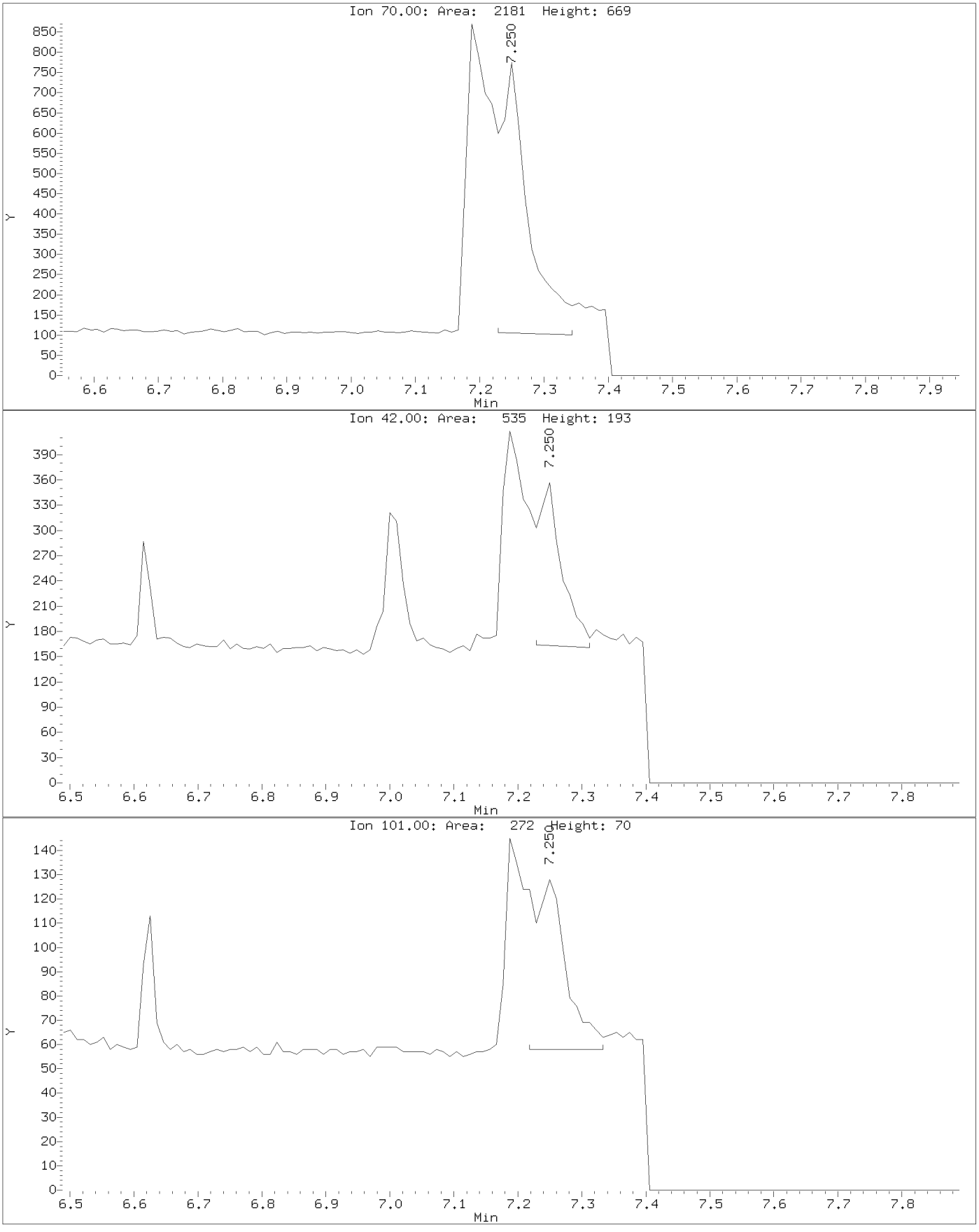

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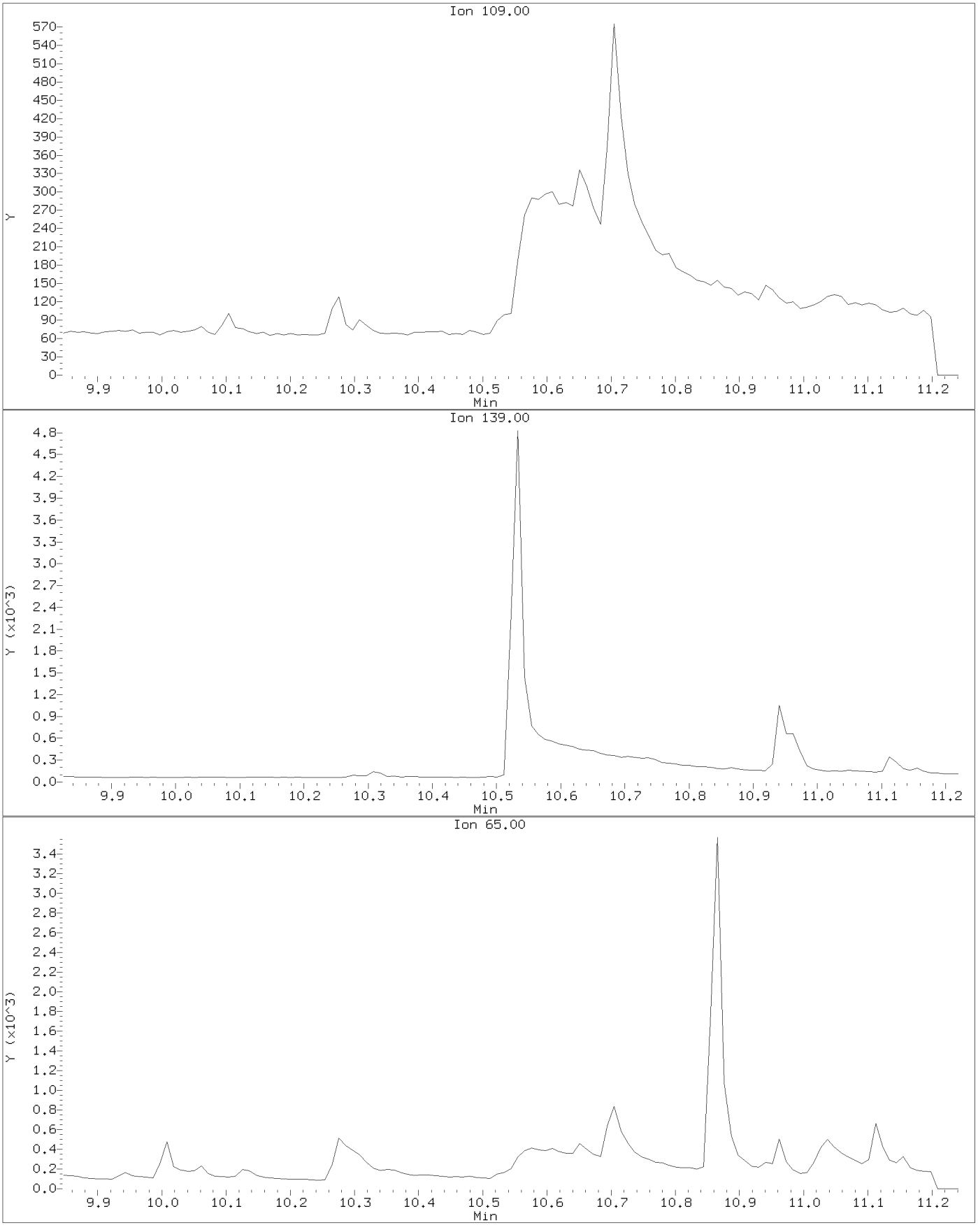
Instrument: gcms-n.i
Client Sample ID:

Compound: 4-Nitrophenol
CAS Number: 100-02-7



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Client Sample ID:

Compound: 4-Nitrophenol
CAS Number: 100-02-7

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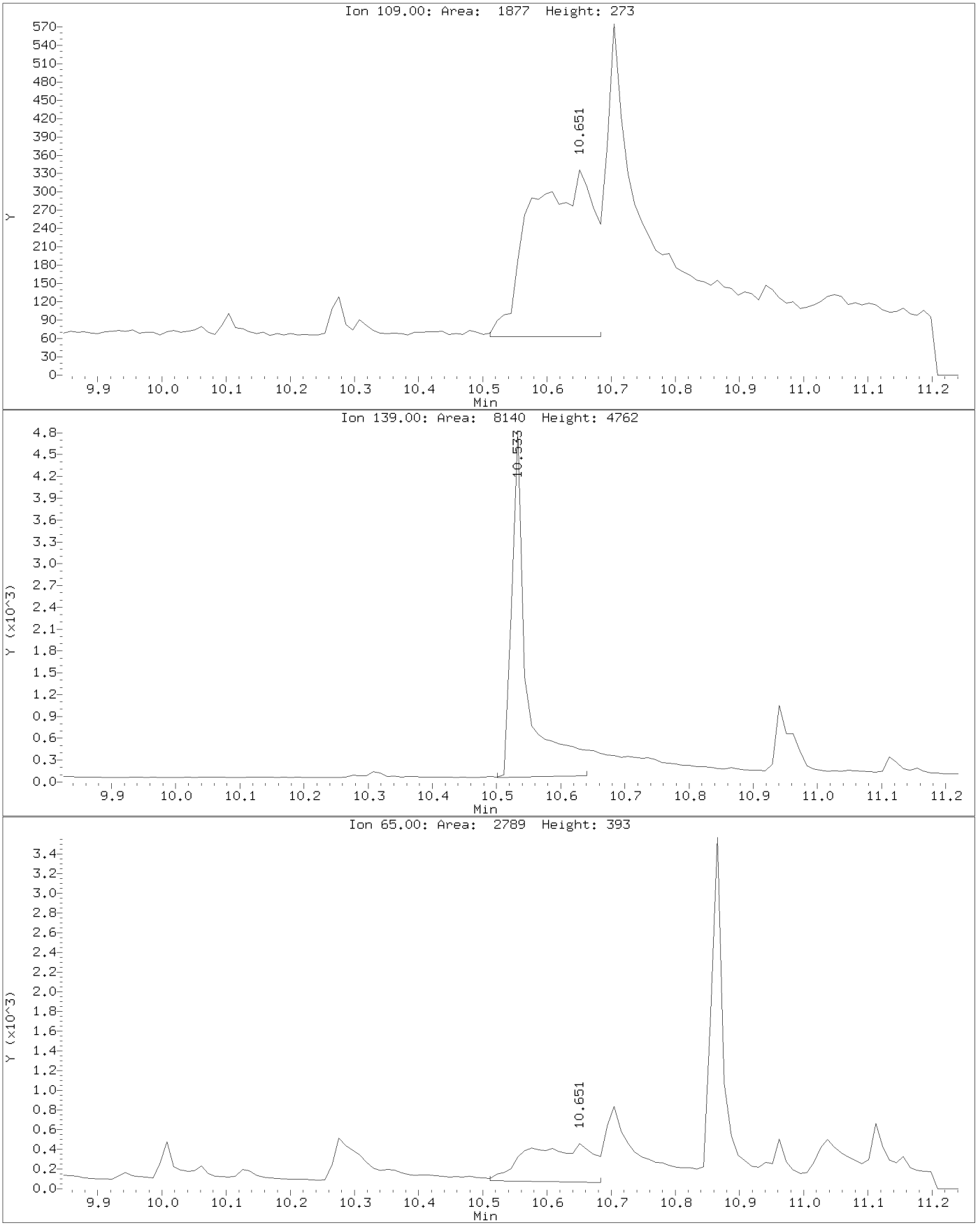

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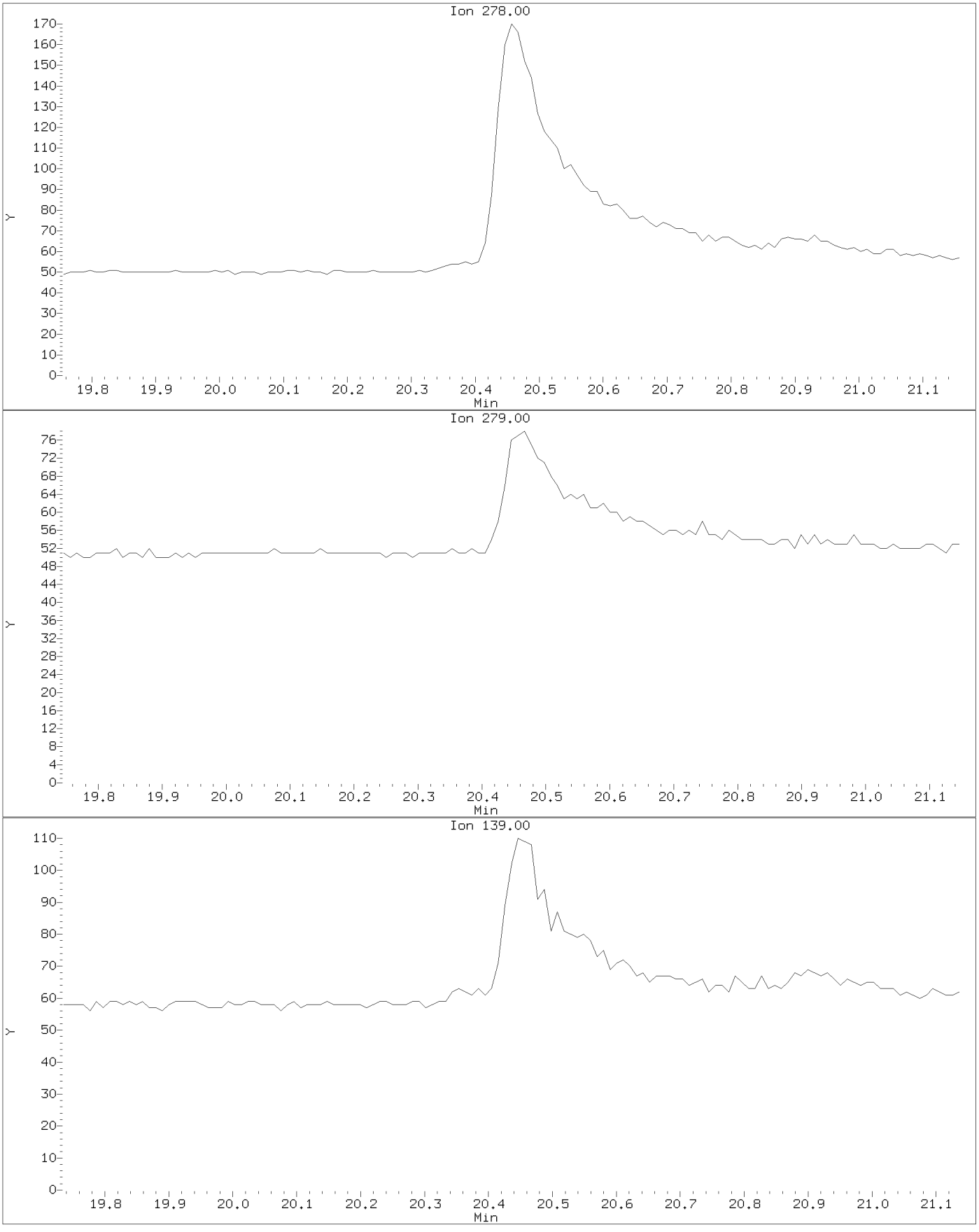
Injection Date: 01-DEC-2023 09:45
Instrument: gcms-n.i
Client Sample ID:

Compound: Dibenzo(a,h)anthracene
CAS Number: 53-70-3

BEFORE MANUAL INTEGRATION



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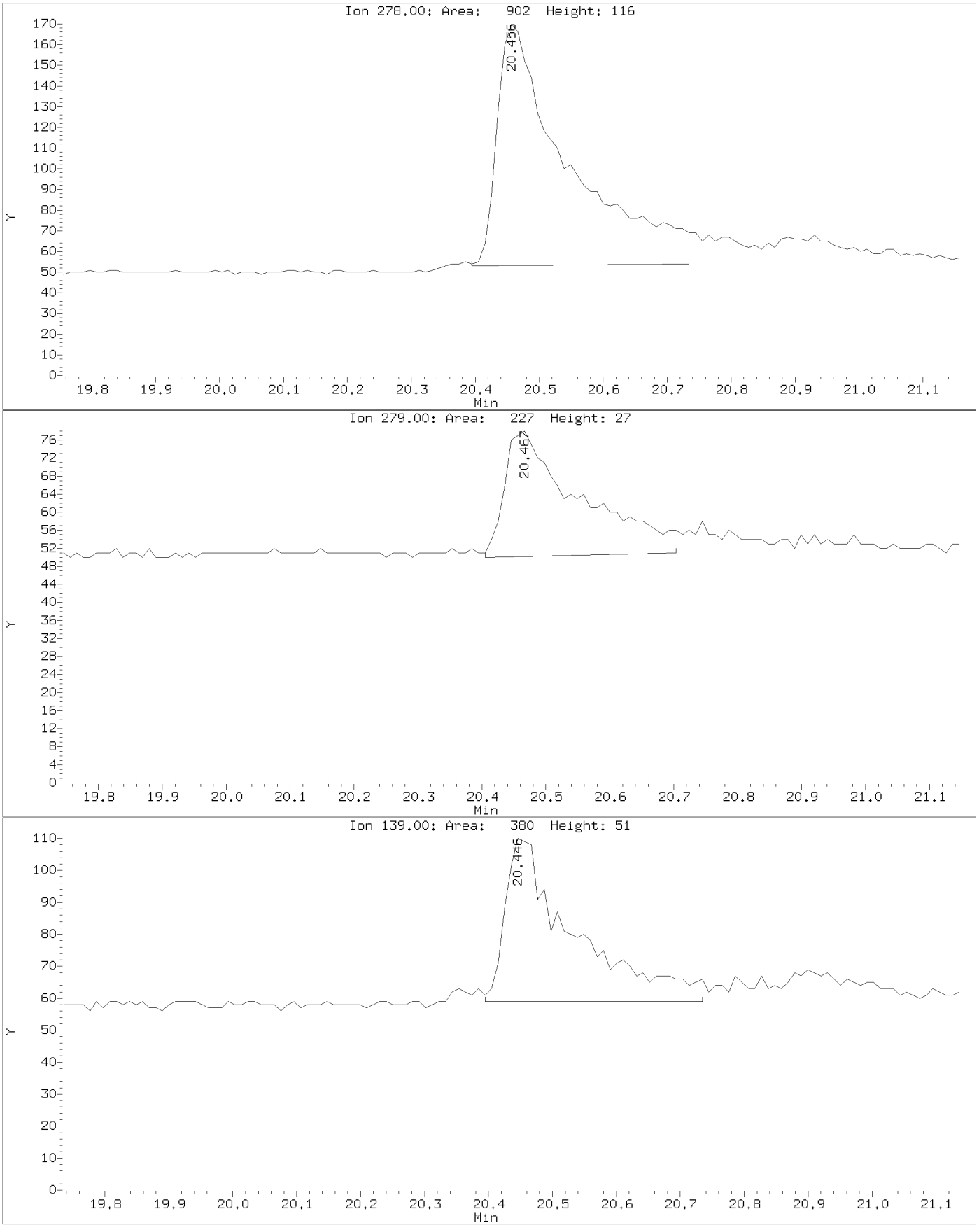
Injection Date: 01-DEC-2023 09:45
Instrument: gcms-n.i
Client Sample ID:

Compound: Dibenzo(a,h)anthracene
CAS Number: 53-70-3

AFTER MANUAL INTEGRATION



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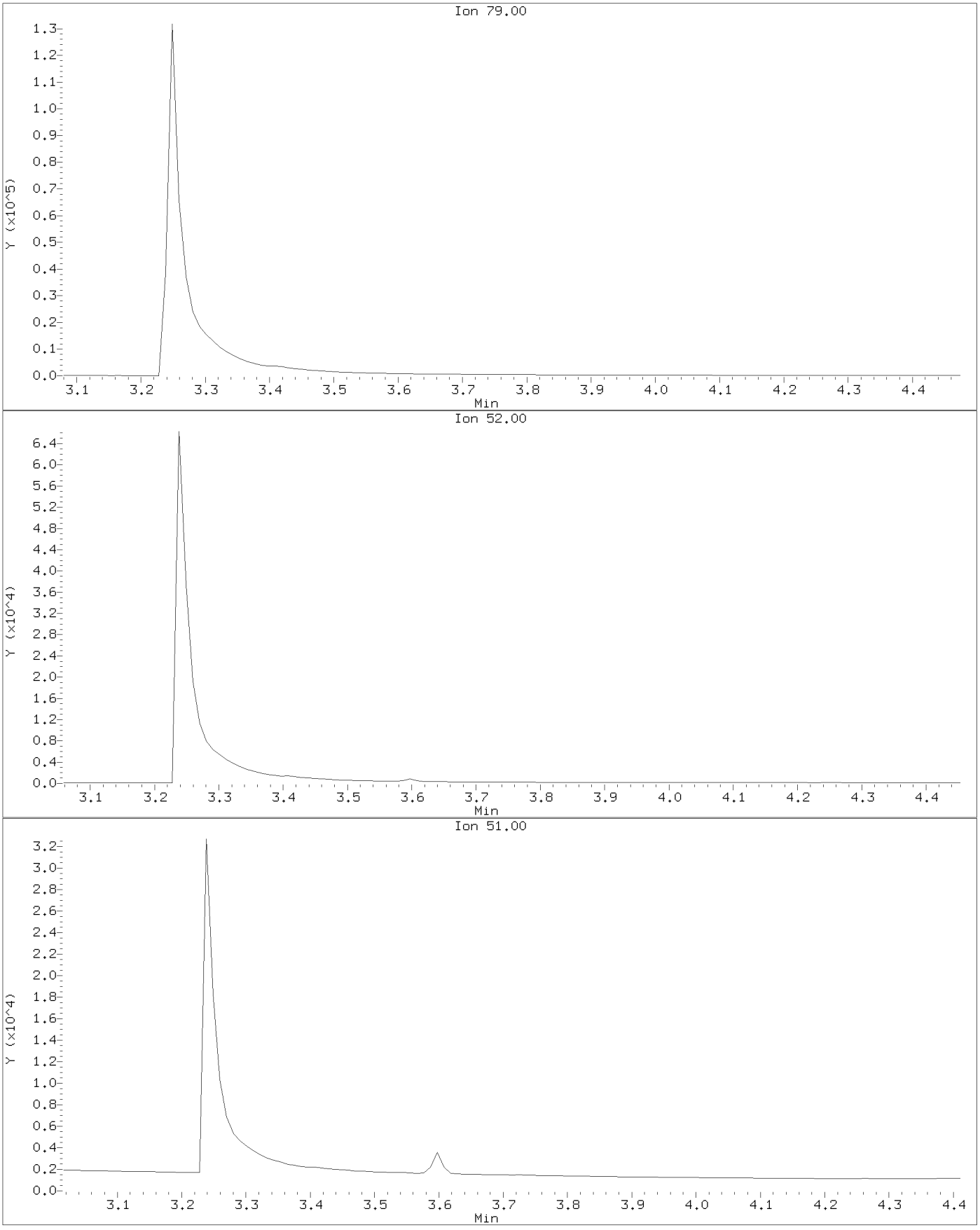
Injection Date: 01-DEC-2023 10:15
Instrument: gcms-n.i
Client Sample ID:

Compound: Pyridine
CAS Number: 110-86-1

BEFORE MANUAL INTEGRATION



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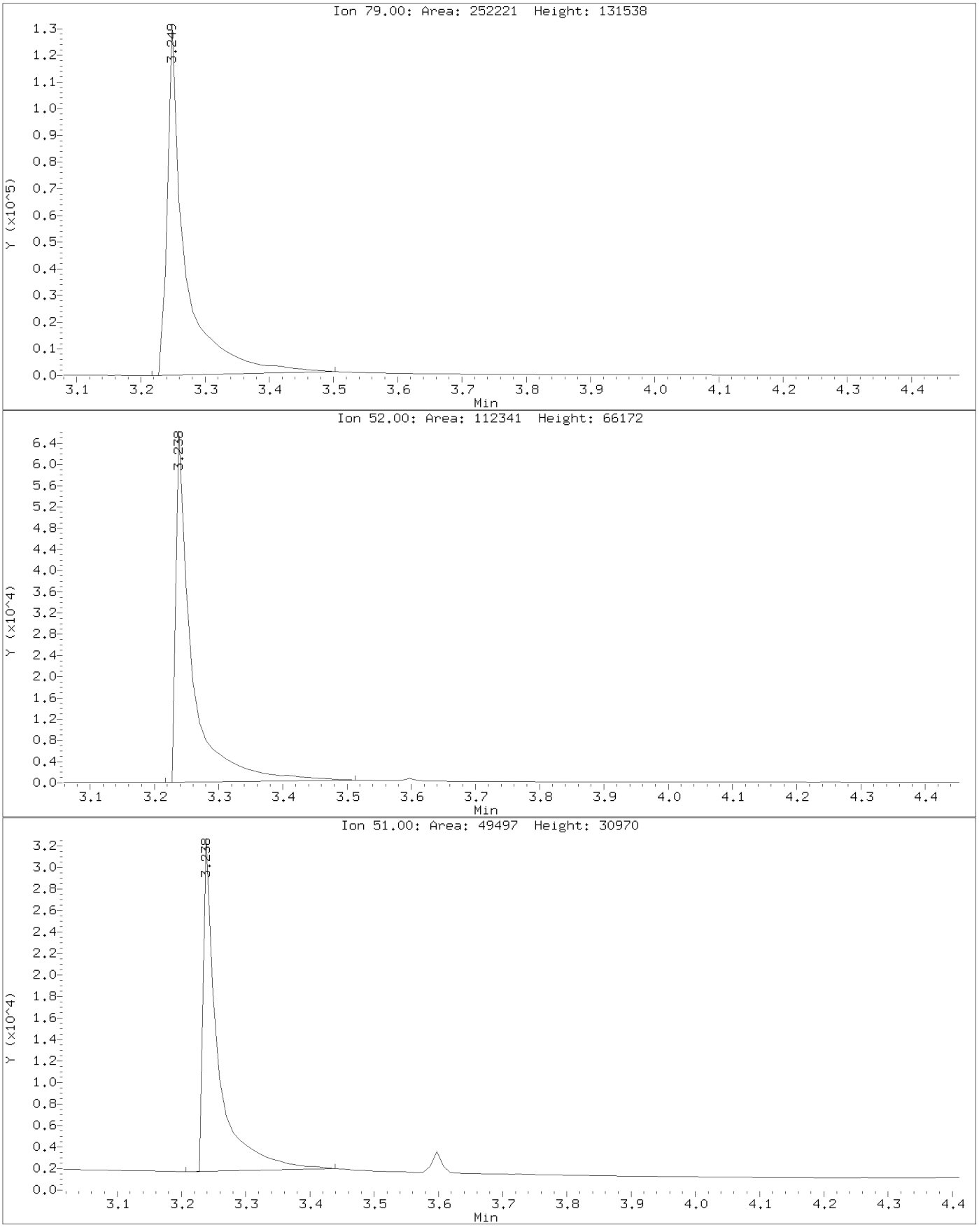
Injection Date: 01-DEC-2023 10:15
Instrument: gcms-n.i
Client Sample ID:

Compound: Pyridine
CAS Number: 110-86-1

AFTER MANUAL INTEGRATION



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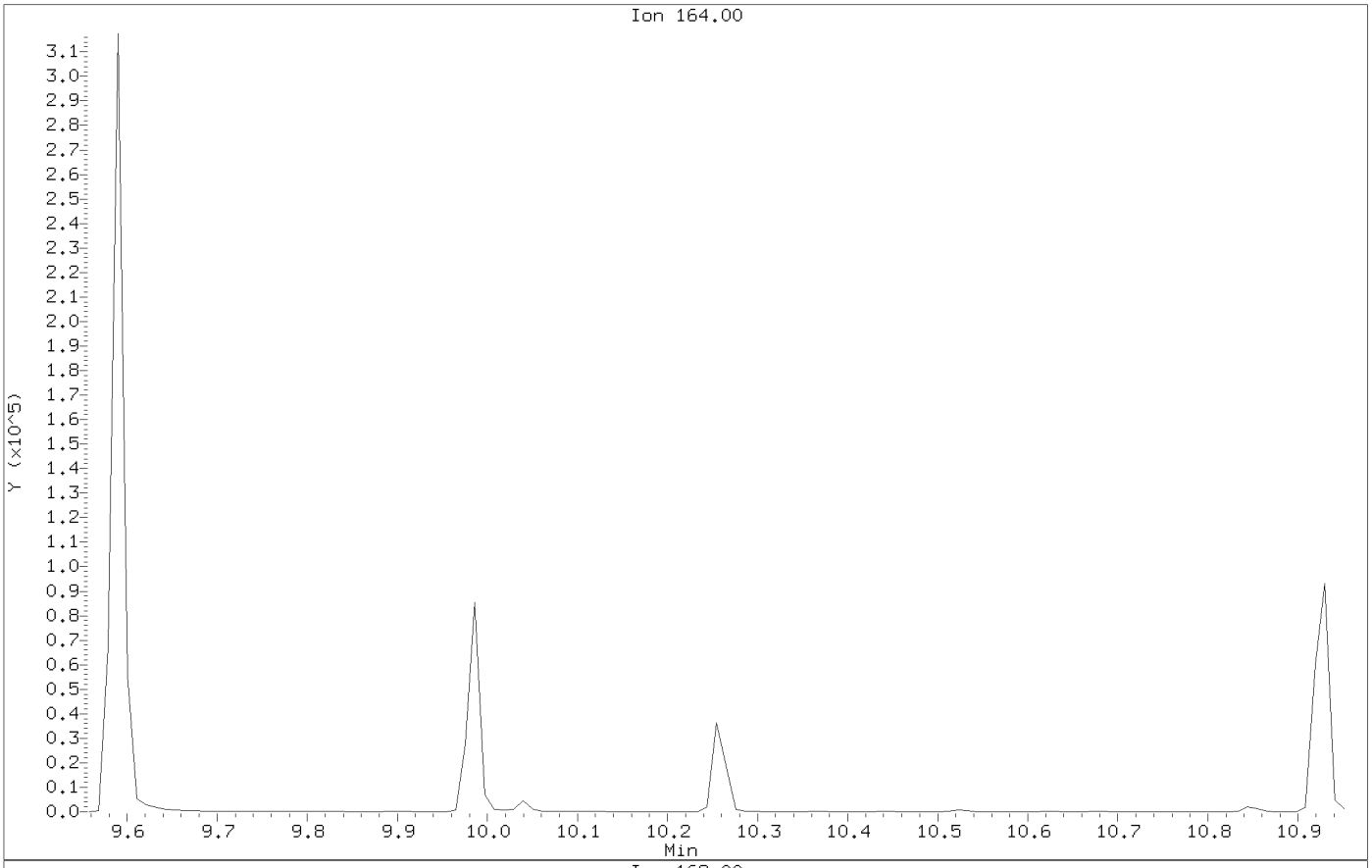
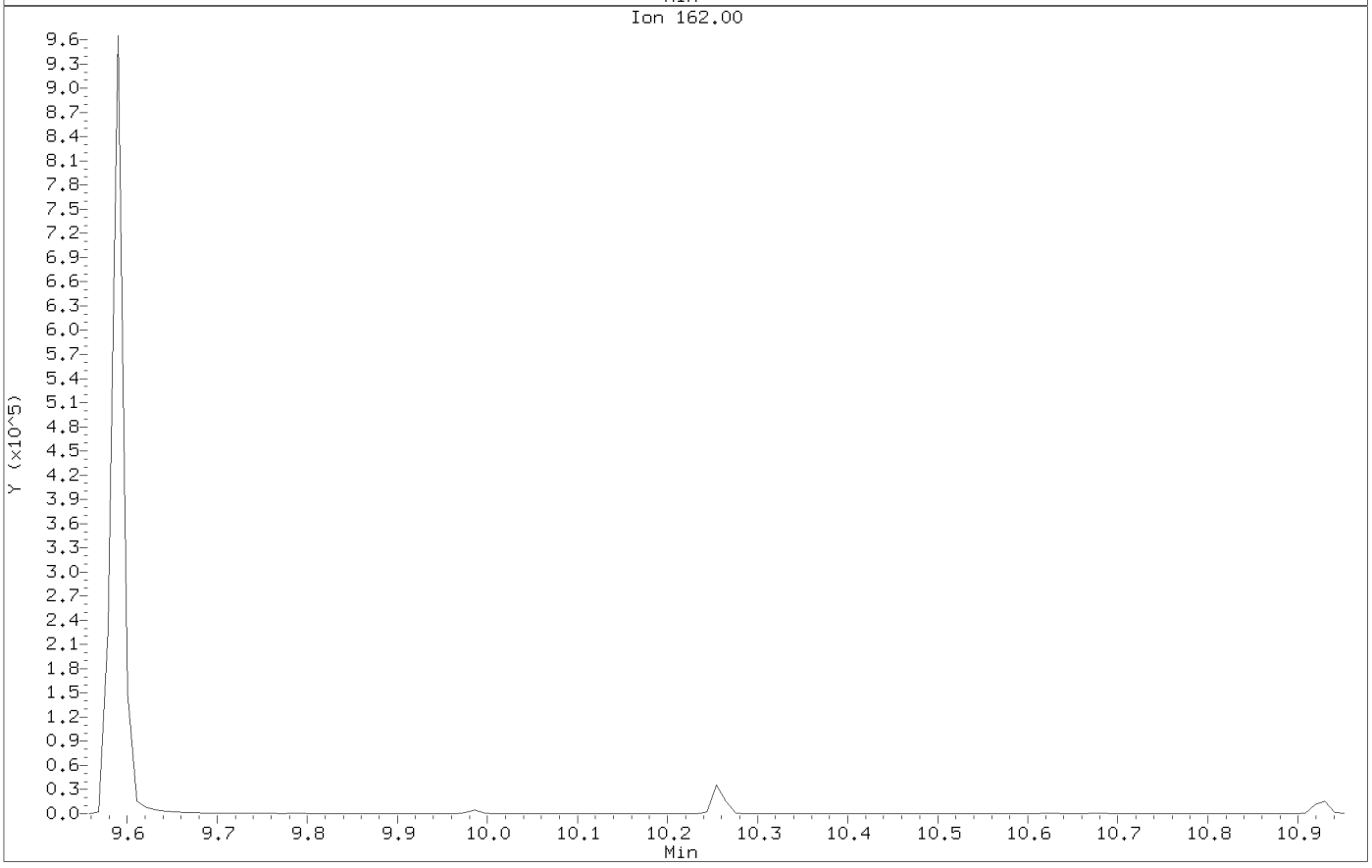
Injection Date: 01-DEC-2023 11:15
Instrument: gcms-n.i
Client Sample ID:

Compound: Acenaphthene-D10
CAS Number: 15067-26-2

BEFORE MANUAL INTEGRATION

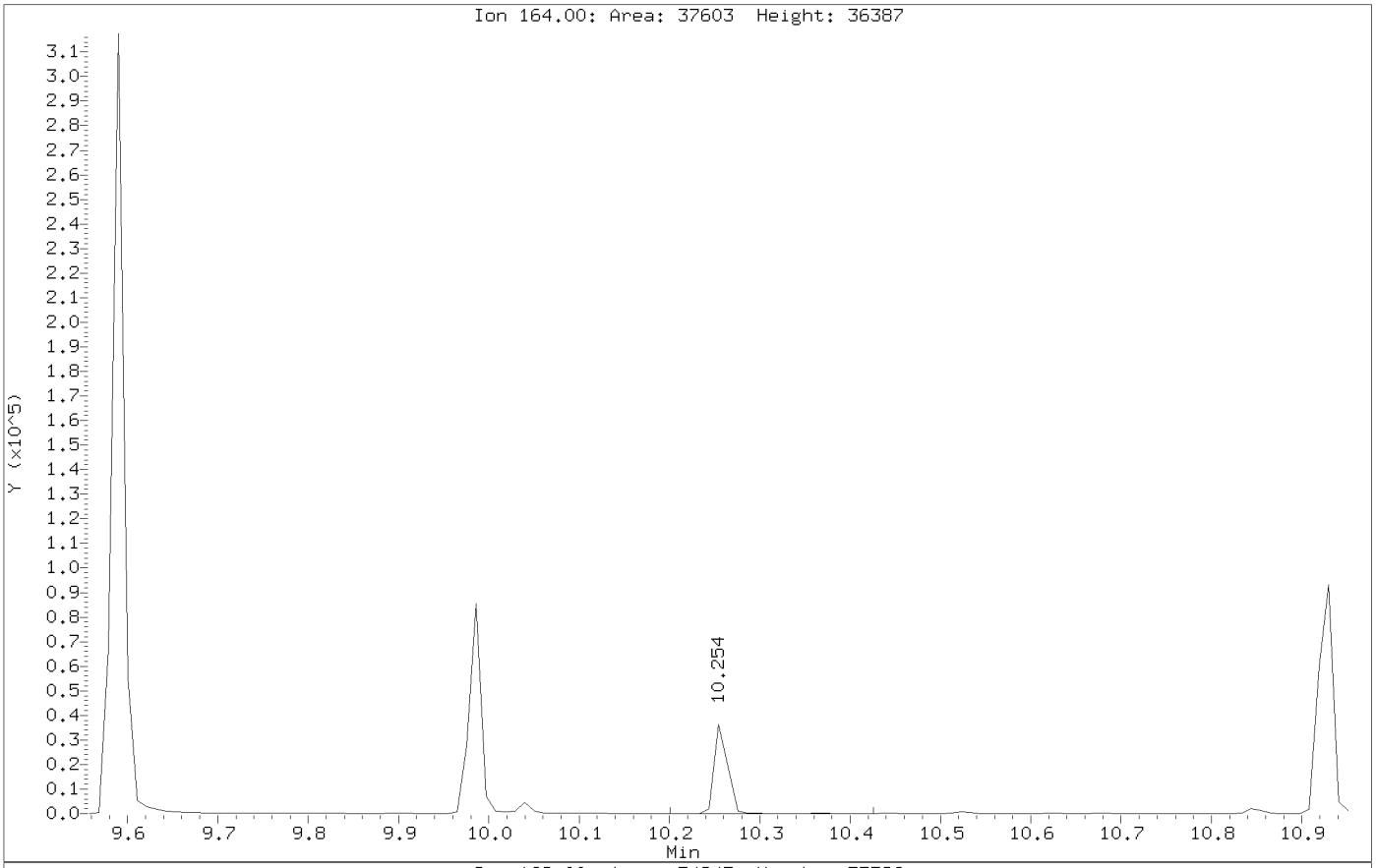


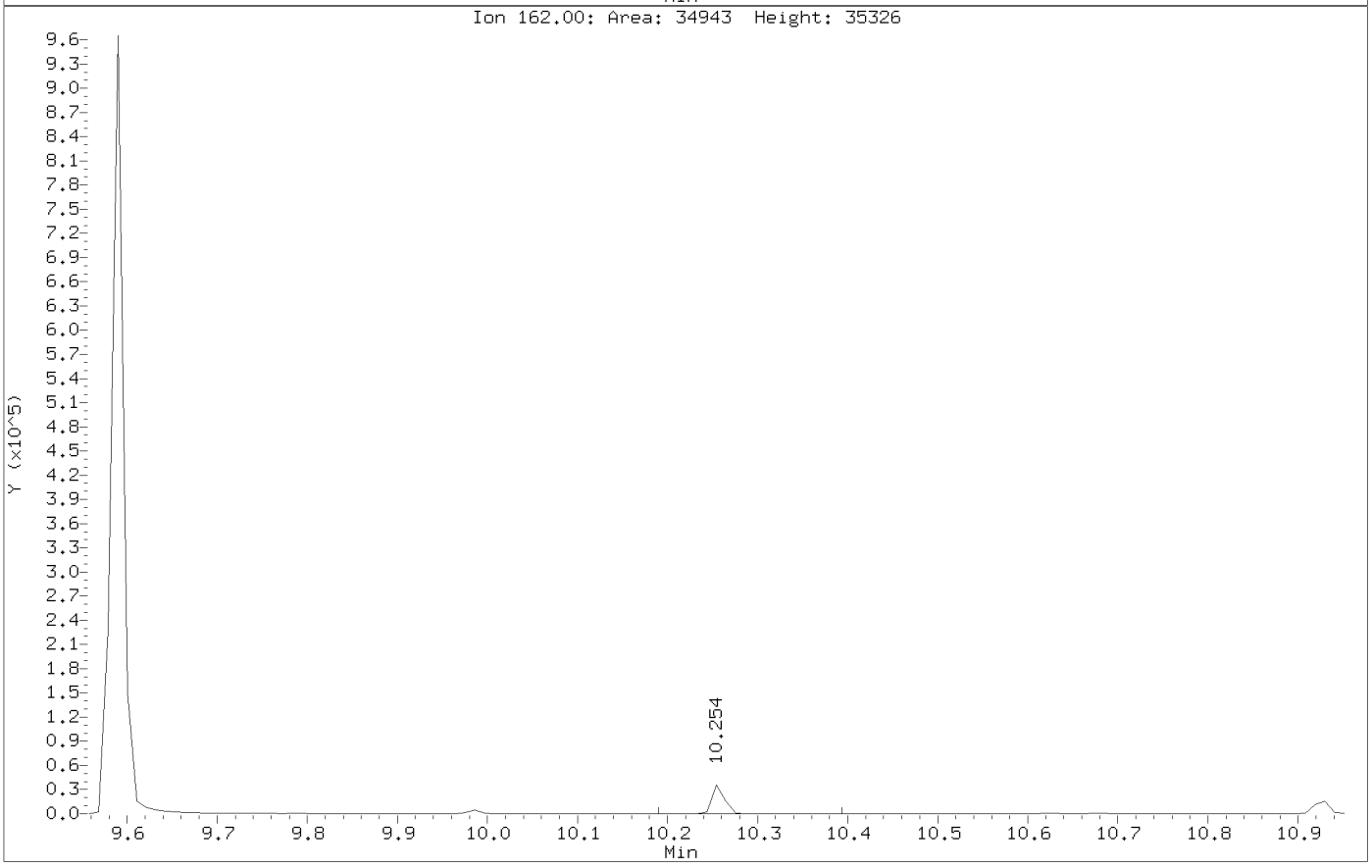


Data File: \\target_server\gg\chem\gcms-n.i\N120123.b\N0302.D
Injection Date: 01-DEC-2023 11:15
Instrument: gcms-n.i
Client Sample ID:

Compound: Acenaphthene-D10
CAS Number: 15067-26-2

AFTER MANUAL INTEGRATION

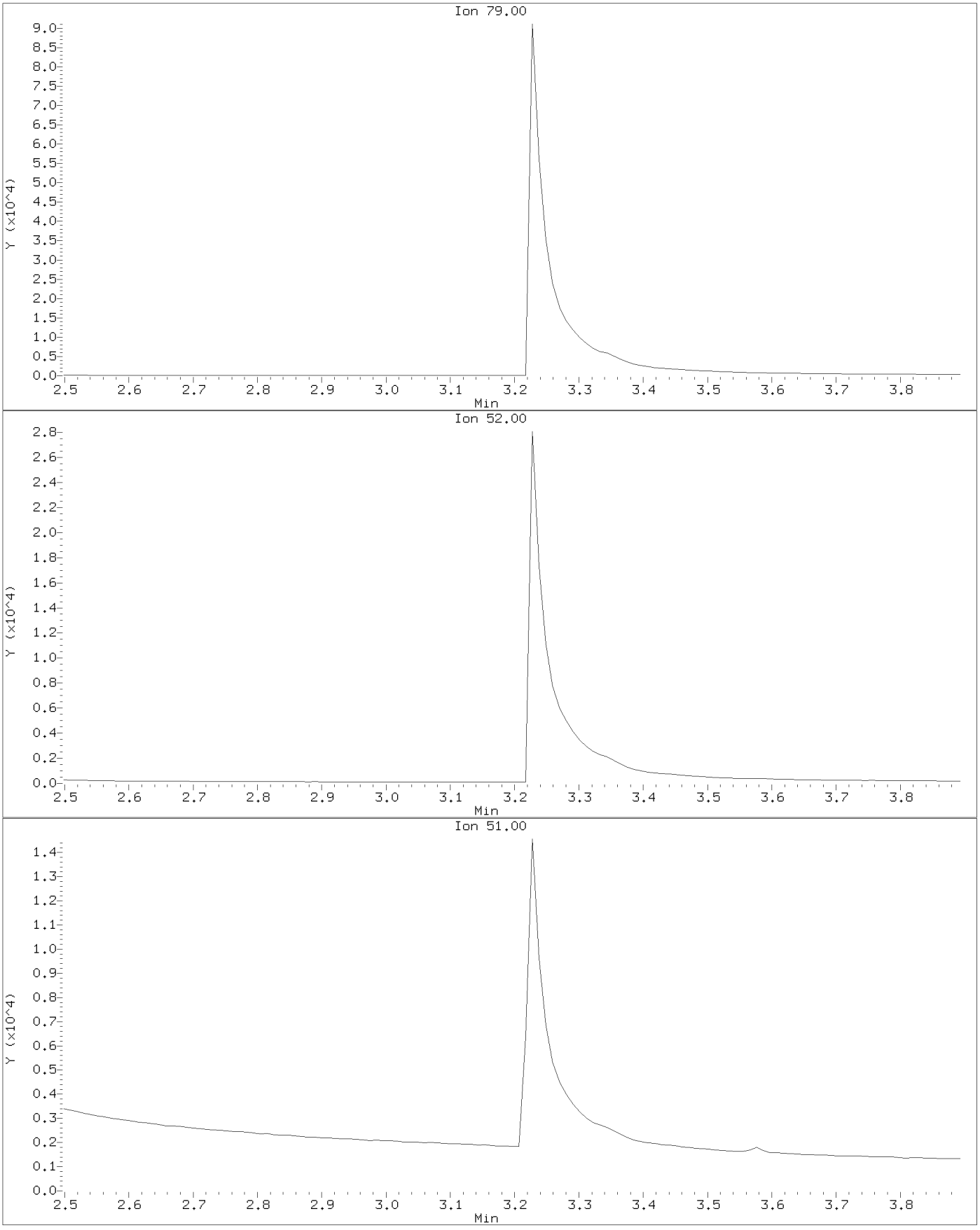




Data File: \\target_server\gg\chem\gcms-n.i\N120123.b\N0303.D
Injection Date: 01-DEC-2023 11:45
Instrument: gcms-n.i
Client Sample ID:

Compound: Pyridine
CAS Number: 110-86-1

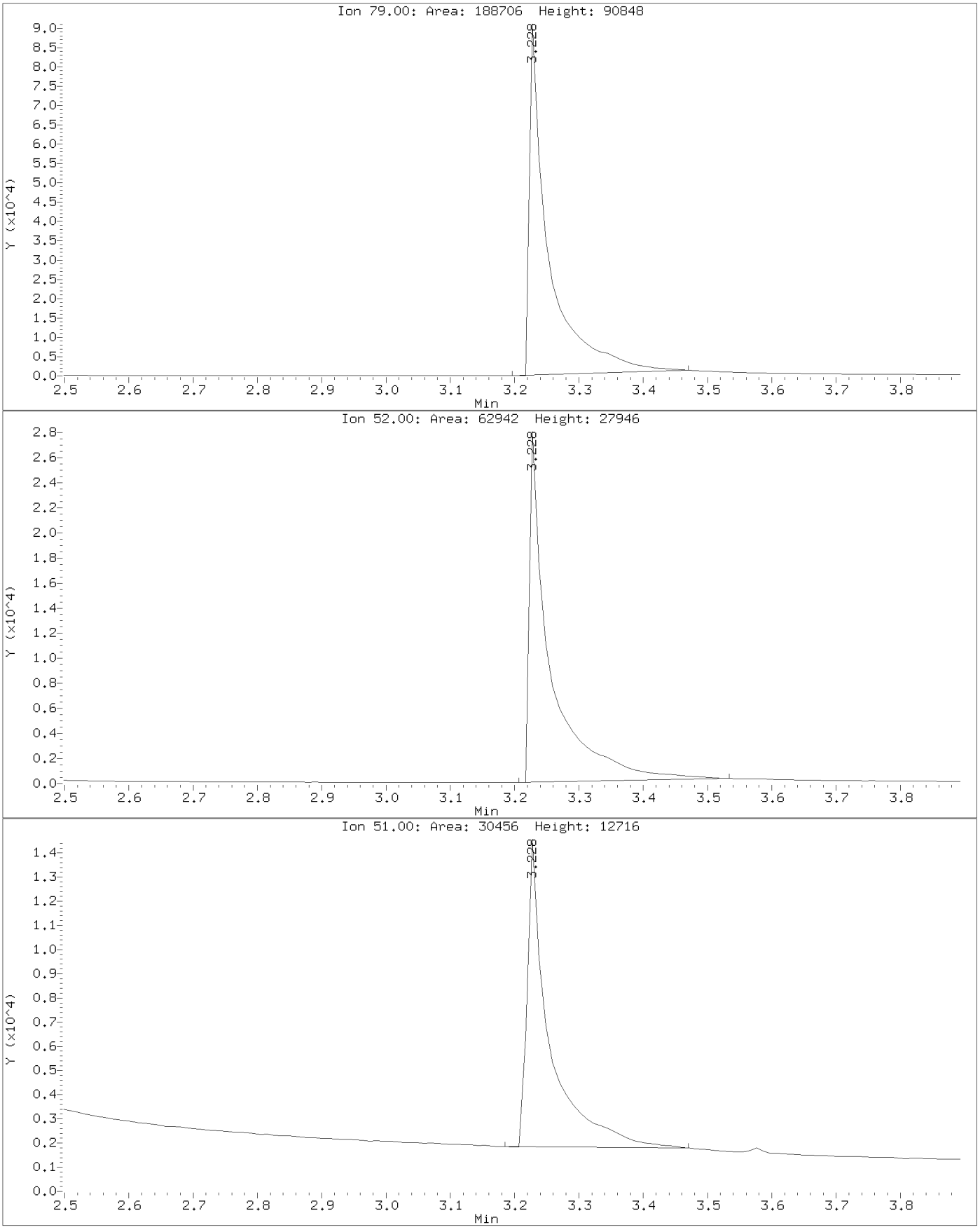
BEFORE MANUAL INTEGRATION



Data File: \\target_server\gg\chem\gcms-n.i\N120123.b\N0303.D
Injection Date: 01-DEC-2023 11:45
Instrument: gcms-n.i
Client Sample ID:

Compound: Pyridine
CAS Number: 110-86-1

AFTER MANUAL INTEGRATION



Form 7
Calibration Verification Summary

Lab Name: Katahdin Analytical Services **SDG:** SQ6112
Lab ID: WG346280-2 **Analytical Date:** 12/01/23 12:54
Lab File ID: N0304.D **Instrument ID:** GCMS-N
Initial Calibration Date(s): 12/01/23 08:45 12/01/23 11:15 **Column ID:**

Compound	$\overline{RRF}$/Amount	RF2	CCAL RRF2	Min RF	%D/ %Drift	Max %D/ %Drift	Curve Type	Qual
Naphthalene	1.04852	1.06499	1.06499	0.010	1.57033	20.000	Averaged	
2-Methylnaphthalene	0.67918	0.64576	0.64576	0.010	-4.92032	20.000	Averaged	
Acenaphthylene	1.95150	2.06408	2.06408	0.010	5.76920	20.000	Averaged	
Acenaphthene	1.22251	1.22412	1.22412	0.010	0.13192	20.010	Averaged	
Fluorene	1.27931	1.27672	1.27672	0.010	-0.20246	20.000	Averaged	
Phenanthrene	1.11854	1.20352	1.20352	0.010	7.59731	20.000	Averaged	
Anthracene	1.10485	1.20311	1.20311	0.010	8.89292	20.000	Averaged	
Fluoranthene	0.85358	0.90334	0.90334	0.010	5.82967	20.010	Averaged	
Pyrene	2.38400	2.65727	2.65727	0.010	11.46240	20.000	Averaged	
Benzo(a)anthracene	1.19048	1.22971	1.22971	0.010	3.29526	20.000	Averaged	
Chrysene	1.65479	1.62902	1.62902	0.010	-1.55729	20.000	Averaged	
Benzo(b)fluoranthene	1.22605	1.27705	1.27705	0.010	4.16029	20.000	Averaged	
Benzo(k)fluoranthene	2.19649	2.61955	2.61955	0.010	19.26076	20.000	Averaged	
Benzo(a)pyrene	2.00000	1.61164	1.25591	0.010	-19.41779	20.010	Linear	
Indeno(1,2,3-cd)pyrene	0.69792	0.62167	0.62167	0.010	-10.92565	20.000	Averaged	
Dibenzo(a,h)anthracene	0.87223	0.85238	0.85238	0.010	-2.27495	20.000	Averaged	
Benzo(g,h,i)perylene	2.00000	1.76464	1.16924	0.010	-11.76806	20.000	Linear	
2-Methylnaphthalene-D10	0.51219	0.52423	0.52423	0.010	2.35101	20.000	Averaged	
Fluorene-D10	1.02061	1.03244	1.03244	0.010	1.15904	20.000	Averaged	
Pyrene-D10	1.79655	1.99109	1.99109	0.010	10.82831	20.000	Averaged	

*** = Compound out of QC criteria**

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Data File: \\target_server\gg\chem\gcms-n.i\N120123B.b\N0304.D
Report Date: 29-Dec-2023 07:37

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-n.i\N120123B.b\N0304.D
Lab Smp Id: WG346280-2
Inj Date : 01-DEC-2023 12:54
Operator : EP   Inst ID: gcms-n.i
Smp Info : WG346280-2
Misc Info : WG346280,WG346280,WG346189-4,SQ6112-1
Comment   :
Method   : \\target_server\gg\chem\gcms-n.i\N120123B.b\NSPSIM93.m
Meth Date : 04-Dec-2023 07:52 epelletier Quant Type: ISTD
Cal Date : 01-DEC-2023 11:15   Cal File: N0302.D
Als bottle: 2   Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: pahplus.sub
Target Version: 4.12
Processing Host: INSPIRON1

Concentration Formula: Amt * DF * Uf*(Vt/Vo*Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.000	Sample Volume (L)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

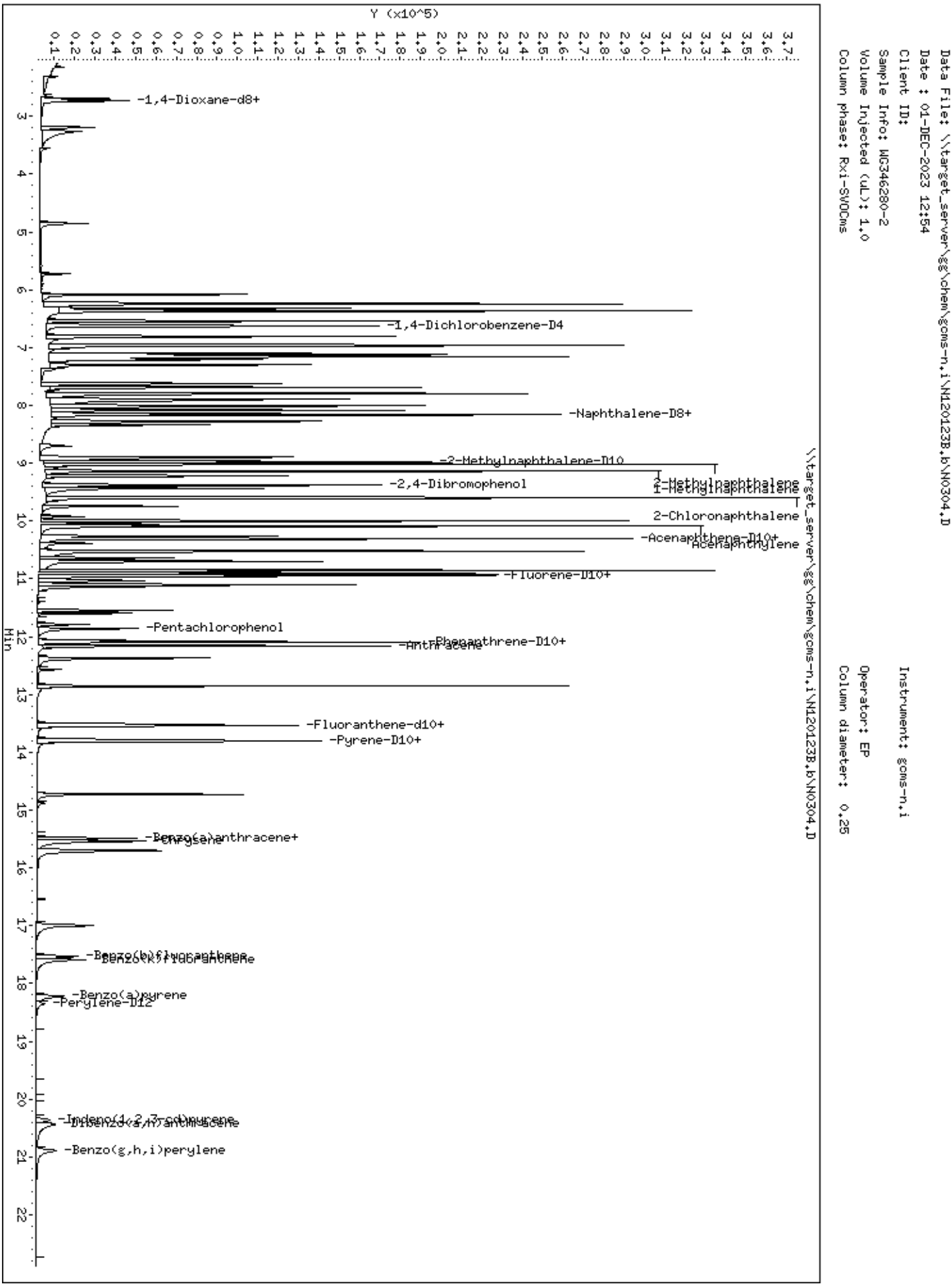
			QUANT SIG					AMOUNTS		
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
$	1	1,4-Dioxane-d8	96	2.699	2.689	(0.263)	30939	2.00000	2.04	
	2	1,4-Dioxane	88	2.731	2.731	(0.413)	32385	2.00000	2.09	
*	10	1,4-Dichlorobenzene-D4	152	6.614	6.604	(1.000)	21906	0.80000	(a)	
*	27	Naphthalene-D8	136	8.136	8.125	(1.000)	83816	0.80000	(a)	
	28	Naphthalene	128	8.159	8.148	(1.003)	223158	2.00000	2.03	
$	33	2-Methylnaphthalene-D10	152	8.975	8.964	(1.103)	109848	2.00000	2.05	
	34	2-Methylnaphthalene	142	9.017	9.007	(1.108)	135313	2.00000	1.90	
	35	1-Methylnaphthalene	142	9.134	9.123	(1.123)	128804	2.00000	1.95	
$	38	2,4-Dibromophenol	252	9.367	9.346	(0.913)	25979	2.00000	2.02	
	42	2-Chloronaphthalene	164	9.600	9.589	(0.935)	37999	2.00000	1.92	
	46	Acenaphthylene	152	10.093	10.082	(0.983)	194834	2.00000	2.12	
*	48	Acenaphthene-D10	164	10.264	10.254	(1.000)	37757	0.80000	(a)	
	49	Acenaphthene	153	10.307	10.297	(1.004)	115548	2.00000	2.00	
$	56	Fluorene-D10	174	10.897	10.886	(1.062)	97455	2.00000	2.02	
	57	Fluorene	166	10.940	10.929	(1.066)	120513	2.00000	2.00	
	65	Pentachlorophenol	266	11.859	11.849	(0.983)	27375	4.50000	4.80	
*	66	Phenanthrene-D10	188	12.062	12.062	(1.000)	44435	0.80000	(a)	
	67	Phenanthrene	178	12.094	12.084	(1.003)	133696	2.00000	2.15	
	68	Anthracene	178	12.158	12.148	(1.008)	133650	2.00000	2.18	
$	71	Fluoranthene-d10	212	13.512	13.512	(1.120)	66956	2.00000	2.07	

Data File: \\target_server\gg\chem\gcms-n.i\N120123B.b\N0304.D
Report Date: 29-Dec-2023 07:37

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
	72 Fluoranthene	202	13.532	13.532	(1.122)	100350	2.00000	2.12	
$	73 Pyrene-D10	212	13.787	13.777	(0.890)	77951	2.00000	2.22	
	74 Pyrene	202	13.807	13.797	(0.891)	104032	2.00000	2.23	
	76 Benzo(a)anthracene	228	15.488	15.478	(0.999)	48143	2.00000	2.06	
*	78 Chrysene-D12	240	15.498	15.498	(1.000)	15660	0.80000	(a)	
	79 Chrysene	228	15.539	15.539	(1.003)	63776	2.00000	1.97	
	82 Benzo(b)fluoranthene	252	17.531	17.531	(0.955)	28938	2.00000	2.08	
	83 Benzo(k)fluoranthene	252	17.593	17.583	(0.958)	59359	2.00000	2.38(H)	
	84 Benzo(a)pyrene	252	18.221	18.221	(0.993)	28459	2.00000	1.61	
*	85 Perylene-D12	264	18.355	18.345	(1.000)	9064	0.80000	(a)	
	86 Indeno(1,2,3-cd)pyrene	276	20.363	20.353	(1.109)	14087	2.00000	1.78	
	87 Dibenzo(a,h)anthracene	278	20.446	20.435	(1.114)	19315	2.00000	1.95	
	88 Benzo(g,h,i)perylene	276	20.888	20.889	(1.138)	26495	2.00000	1.76	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
H - Operator selected an alternate compound hit.


Data File: \\target_server\gg\chem\gcms-n,i\N120123B,b\N0304.D
Date : 01-DEC-2023 12:54
Client ID:
Sample Info: WG346280-2
Volume Injected (uL): 1.0
Column phase: Rxi-5ViOms
Instrument: gcms-n,i
Operator: EP
Column diameter: 0.25
\\target_server\gg\chem\gcms-n,i\N120123B,b\N0304.D
Y (x10^5)
Min
-1,4-Dioxane-d8+
-1,4-Dichlorobenzene-D4
-Naphthalene-D8+
-2-Methylnaphthalene-D10
-2,4-Dibromophenol
2-Methylnaphthalene
1-Methylnaphthalene
2-Chloronaphthalene
-Acenaphthene-D10+
Acenaphthylene
-Fluorene-D10+
-Pentachlorophenol
-Phenanthrene-D10+
-Anthracene
-Fluoranthene-d10+
-Pyrene-D10+
-Benzo(a)anthracene+
Chrysene
-Benzo(b)fluoranthene
Benzo(k)fluoranthene
-Benzo(a)pyrene
-Perylene-D12
-Indeno(1,2,3-cd)pyrene
Dibenz(a,h)anthracene
-Benzo(g,h,i)perylene

Form 7
Calibration Verification Summary

Lab Name: Katahdin Analytical Services **SDG:** SQ6112
Lab ID: WG346280-3 **Analytical Date:** 12/01/23 22:47
Lab File ID: N0323.D **Instrument ID:** GCMS-N
Initial Calibration Date(s): 12/01/23 08:45 12/01/23 11:15 **Column ID:**

Compound	$\overline{RRF}$/Amount	RF2	CCAL RRF2	Min RF	%D/ %Drift	Max %D/ %Drift	Curve Type	Qual
Naphthalene	1.04852	1.07115	1.07115	0.010	2.15819	20.000	Averaged	
2-Methylnaphthalene	0.67918	0.62616	0.62616	0.010	-7.80679	20.000	Averaged	
Acenaphthylene	1.95150	2.06089	2.06089	0.010	5.60564	20.000	Averaged	
Acenaphthene	1.22251	1.20591	1.20591	0.010	-1.35779	20.010	Averaged	
Fluorene	1.27931	1.20730	1.20730	0.010	-5.62903	20.000	Averaged	
Phenanthrene	1.11854	1.18359	1.18359	0.010	5.81586	20.000	Averaged	
Anthracene	1.10485	1.21992	1.21992	0.010	10.41449	20.000	Averaged	
Fluoranthene	0.85358	0.77473	0.77473	0.010	-9.23779	20.010	Averaged	
Pyrene	2.38400	2.85652	2.85652	0.010	19.82033	20.000	Averaged	
Benzo(a)anthracene	1.19048	1.19402	1.19402	0.010	0.29751	20.000	Averaged	
Chrysene	1.65479	1.84987	1.84987	0.010	11.78885	20.000	Averaged	
Benzo(b)fluoranthene	1.22605	1.28749	1.28749	0.010	5.01188	20.000	Averaged	
Benzo(k)fluoranthene	2.19649	2.36758	2.36758	0.010	7.78908	20.000	Averaged	
Benzo(a)pyrene	2.00000	1.86349	1.45217	0.010	-6.82539	20.010	Linear	
Indeno(1,2,3-cd)pyrene	0.69792	0.64390	0.64390	0.010	-7.74065	20.000	Averaged	
Dibenzo(a,h)anthracene	0.87223	0.93955	0.93955	0.010	7.71894	20.000	Averaged	
Benzo(g,h,i)perylene	2.00000	2.00680	1.32970	0.010	0.34010	20.000	Linear	
2-Methylnaphthalene-D10	0.51219	0.53021	0.53021	0.010	3.51785	20.000	Averaged	
Fluorene-D10	1.02061	0.96980	0.96980	0.010	-4.97923	20.000	Averaged	
Pyrene-D10	1.79655	2.20735	2.20735	0.010	22.86602	20.000	Averaged	*

*** = Compound out of QC criteria**

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Data File: \\target_server\gg\chem\gcms-n.i\N120123B.b\N0323.D
Report Date: 29-Dec-2023 07:37

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-n.i\N120123B.b\N0323.D
Lab Smp Id: WG346280-3 Client Smp ID: ontinuing Calibrati
Inj Date : 01-DEC-2023 22:47
Operator : EP Inst ID: gcms-n.i
Smp Info : WG346280-3
Misc Info : WG346280,WG346280,WG346189-4,SQ6112-1
Comment :
Method : \\target_server\gg\chem\gcms-n.i\N120123B.b\NSPSIM93.m
Meth Date : 04-Dec-2023 07:52 epelletier Quant Type: ISTD
Cal Date : 01-DEC-2023 11:15 Cal File: N0302.D
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pahplus.sub
Target Version: 4.12
Processing Host: INSPIRON1

Concentration Formula: Amt * DF * Uf*(Vt/Vo*Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.000	Sample Volume (L)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

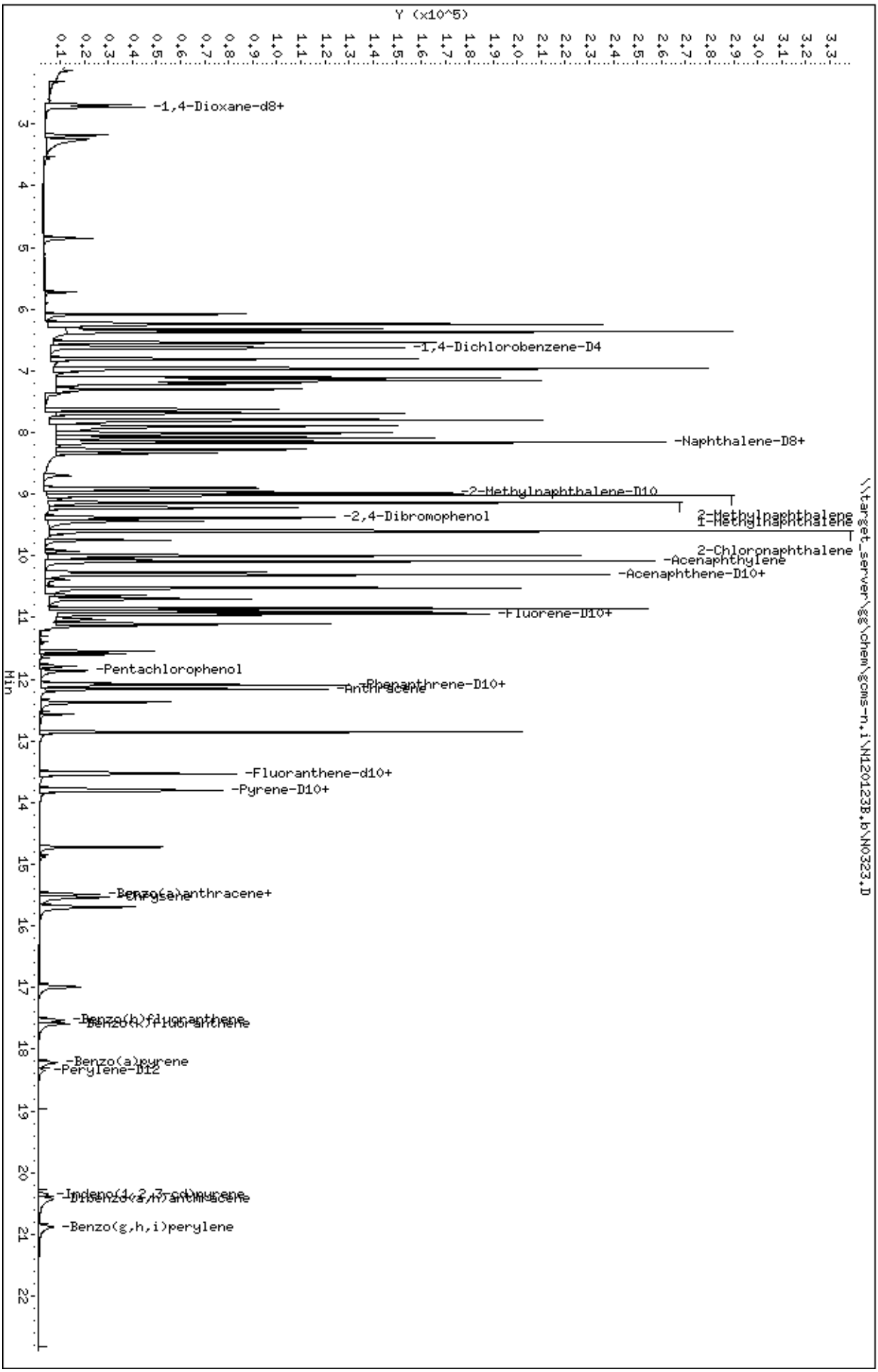
			QUANT SIG					AMOUNTS		
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
$	1	1,4-Dioxane-d8	96	2.688	2.689	(0.262)	28248	2.00000	2.24	
	2	1,4-Dioxane	88	2.720	2.731	(0.411)	30645	2.00000	2.19	
*	10	1,4-Dichlorobenzene-D4	152	6.614	6.604	(1.000)	19814	0.80000	(a)	
*	27	Naphthalene-D8	136	8.136	8.125	(1.000)	77109	0.80000	(a)	
	28	Naphthalene	128	8.159	8.148	(1.003)	206489	2.00000	2.04	
$	33	2-Methylnaphthalene-D10	152	8.975	8.964	(1.103)	102210	2.00000	2.07	
	34	2-Methylnaphthalene	142	9.017	9.007	(1.108)	120706	2.00000	1.84	
	35	1-Methylnaphthalene	142	9.134	9.123	(1.123)	113139	2.00000	1.86	
$	38	2,4-Dibromophenol	252	9.367	9.346	(0.913)	20501	2.00000	1.91	
	42	2-Chloronaphthalene	164	9.600	9.589	(0.935)	32138	2.00000	1.95	
	46	Acenaphthylene	152	10.093	10.082	(0.983)	161780	2.00000	2.11	
*	48	Acenaphthene-D10	164	10.264	10.254	(1.000)	31400	0.80000	(a)	
	49	Acenaphthene	153	10.307	10.297	(1.004)	94664	2.00000	1.97	
$	56	Fluorene-D10	174	10.897	10.886	(1.062)	76129	2.00000	1.90	
	57	Fluorene	166	10.940	10.929	(1.066)	94773	2.00000	1.89	
	65	Pentachlorophenol	266	11.870	11.849	(0.984)	14382	4.50000	3.56	
*	66	Phenanthrene-D10	188	12.062	12.062	(1.000)	31451	0.80000	(a)	
	67	Phenanthrene	178	12.094	12.084	(1.003)	93063	2.00000	2.12	
	68	Anthracene	178	12.158	12.148	(1.008)	95919	2.00000	2.21	
$	71	Fluoranthene-d10	212	13.511	13.512	(1.120)	41638	2.00000	1.82	

Data File: \\target_server\gg\chem\gcms-n.i\N120123B.b\N0323.D
Report Date: 29-Dec-2023 07:37

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
	72 Fluoranthene	202	13.532	13.532	(1.122)	60915	2.00000	1.82	
$	73 Pyrene-D10	212	13.787	13.777	(0.890)	47607	2.00000	2.46	
	74 Pyrene	202	13.807	13.797	(0.891)	61608	2.00000	2.40	
	76 Benzo(a)anthracene	228	15.488	15.478	(0.999)	25752	2.00000	2.00	
*	78 Chrysene-D12	240	15.498	15.498	(1.000)	8627	0.80000	(a)	
	79 Chrysene	228	15.539	15.539	(1.003)	39897	2.00000	2.24	
	82 Benzo(b)fluoranthene	252	17.531	17.531	(0.956)	17114	2.00000	2.10	
	83 Benzo(k)fluoranthene	252	17.582	17.583	(0.958)	31471	2.00000	2.16(H)	
	84 Benzo(a)pyrene	252	18.221	18.221	(0.993)	19303	2.00000	1.86	
*	85 Perylene-D12	264	18.345	18.345	(1.000)	5317	0.80000	(a)	
	86 Indeno(1,2,3-cd)pyrene	276	20.353	20.353	(1.109)	8559	2.00000	1.84	
	87 Dibenzo(a,h)anthracene	278	20.435	20.435	(1.114)	12489	2.00000	2.15	
	88 Benzo(g,h,i)perylene	276	20.888	20.889	(1.139)	17675	2.00000	2.01	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
H - Operator selected an alternate compound hit.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Date : 01-DEC-2023 22:47
Client ID: ontinuing Calibrati
Sample Info: WG346280-3
Volume Injected (uL): 1.0
Column phase: Rxi-5VOCms
Instrument: gcms-n,i
Operator: EP
Column diameter: 0.25
\\target_server\gg\chem\gcms-n,i\N120123B,b\N0323.D
Y (x10^5)
Min
-1,4-Dioxane-d8+
-1,4-Dichlorobenzene-D4
-Naphthalene-D8+
-2-Methylnaphthalene-D10
2-Methylnaphthalene
1-Methylnaphthalene
-2,4-Dibromophenol
2-Chloronaphthalene
-Acenaphthylene
-Acenaphthene-D10+
-Fluorene-D10+
-Pentachlorophenol
-Phenanthrene-D10+
-Anthracene
-Fluoranthene-d10+
-Pyrene-D10+
-Benzo(a)anthracene+
Chrysene
-Benzo(b)fluoranthene
Benzo(k)fluoranthene
-Benzo(a)pyrene
-Perylene-D12
-Indeno(1,2,3-cd)pyrene
Dibenzo(a,h)anthracene
-Benzo(g,h,i)perylene

Form 7
Calibration Verification Summary

Lab Name: Katahdin Analytical Services **SDG:** SQ6112
Lab ID: WG346280-4 **Analytical Date:** 12/01/23 23:19
Lab File ID: N0324.D **Instrument ID:** GCMS-N
Initial Calibration Date(s): 12/01/23 08:45 12/01/23 11:15 **Column ID:**

Compound	$\overline{RRF}$/Amount	RF2	CCAL RRF2	Min RF	%D/ %Drift	Max %D/ %Drift	Curve Type	Qual
Naphthalene	1.04852	1.05208	1.05208	0.010	0.33892	20.000	Averaged	
2-Methylnaphthalene	0.67918	0.66582	0.66582	0.010	-1.96773	20.000	Averaged	
Acenaphthylene	1.95150	2.08276	2.08276	0.010	6.72637	20.000	Averaged	
Acenaphthene	1.22251	1.21943	1.21943	0.010	-0.25223	20.010	Averaged	
Fluorene	1.27931	1.20038	1.20038	0.010	-6.17028	20.000	Averaged	
Phenanthrene	1.11854	1.20846	1.20846	0.010	8.03894	20.000	Averaged	
Anthracene	1.10485	1.21173	1.21173	0.010	9.67349	20.000	Averaged	
Fluoranthene	0.85358	0.81975	0.81975	0.010	-3.96372	20.010	Averaged	
Pyrene	2.38400	2.80746	2.80746	0.010	17.76239	20.000	Averaged	
Benzo(a)anthracene	1.19048	1.08157	1.08157	0.010	-9.14814	20.000	Averaged	
Chrysene	1.65479	1.70691	1.70691	0.010	3.14985	20.000	Averaged	
Benzo(b)fluoranthene	1.22605	1.29831	1.29831	0.010	5.89420	20.000	Averaged	
Benzo(k)fluoranthene	2.19649	2.43873	2.43873	0.010	11.02846	20.000	Averaged	
Benzo(a)pyrene	2.00000	1.84358	1.43666	0.010	-7.82085	20.010	Linear	
Indeno(1,2,3-cd)pyrene	0.69792	0.58332	0.58332	0.010	-16.41967	20.000	Averaged	
Dibenzo(a,h)anthracene	0.87223	0.86619	0.86619	0.010	-0.69150	20.000	Averaged	
Benzo(g,h,i)perylene	2.00000	1.87916	1.24512	0.010	-6.04197	20.000	Linear	
2-Methylnaphthalene-D10	0.51219	0.52383	0.52383	0.010	2.27298	20.000	Averaged	
Fluorene-D10	1.02061	0.97767	0.97767	0.010	-4.20775	20.000	Averaged	
Pyrene-D10	1.79655	2.09170	2.09170	0.010	16.42885	20.000	Averaged	

*** = Compound out of QC criteria**

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P.O. Box 540, Scarborough, ME 04070
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http://katahdinlab.com
sales@katahdinlab.com

Data File: \\target_server\gg\chem\gcms-n.i\N120123B.b\N0324.D
Report Date: 29-Dec-2023 07:37

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-n.i\N120123B.b\N0324.D
Lab Smp Id: WG346280-4 Client Smp ID: ontinuing Calibrati
Inj Date : 01-DEC-2023 23:19
Operator : EP Inst ID: gcms-n.i
Smp Info : WG346280-4
Misc Info : WG346280,WG346280,WG346189-4,SQ6112-1
Comment :
Method : \\target_server\gg\chem\gcms-n.i\N120123B.b\NSPSIM93.m
Meth Date : 04-Dec-2023 07:52 epelletier Quant Type: ISTD
Cal Date : 01-DEC-2023 11:15 Cal File: N0302.D
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pahplus.sub
Target Version: 4.12
Processing Host: INSPIRON1

Concentration Formula: Amt * DF * Uf*(Vt/Vo*Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.000	Sample Volume (L)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

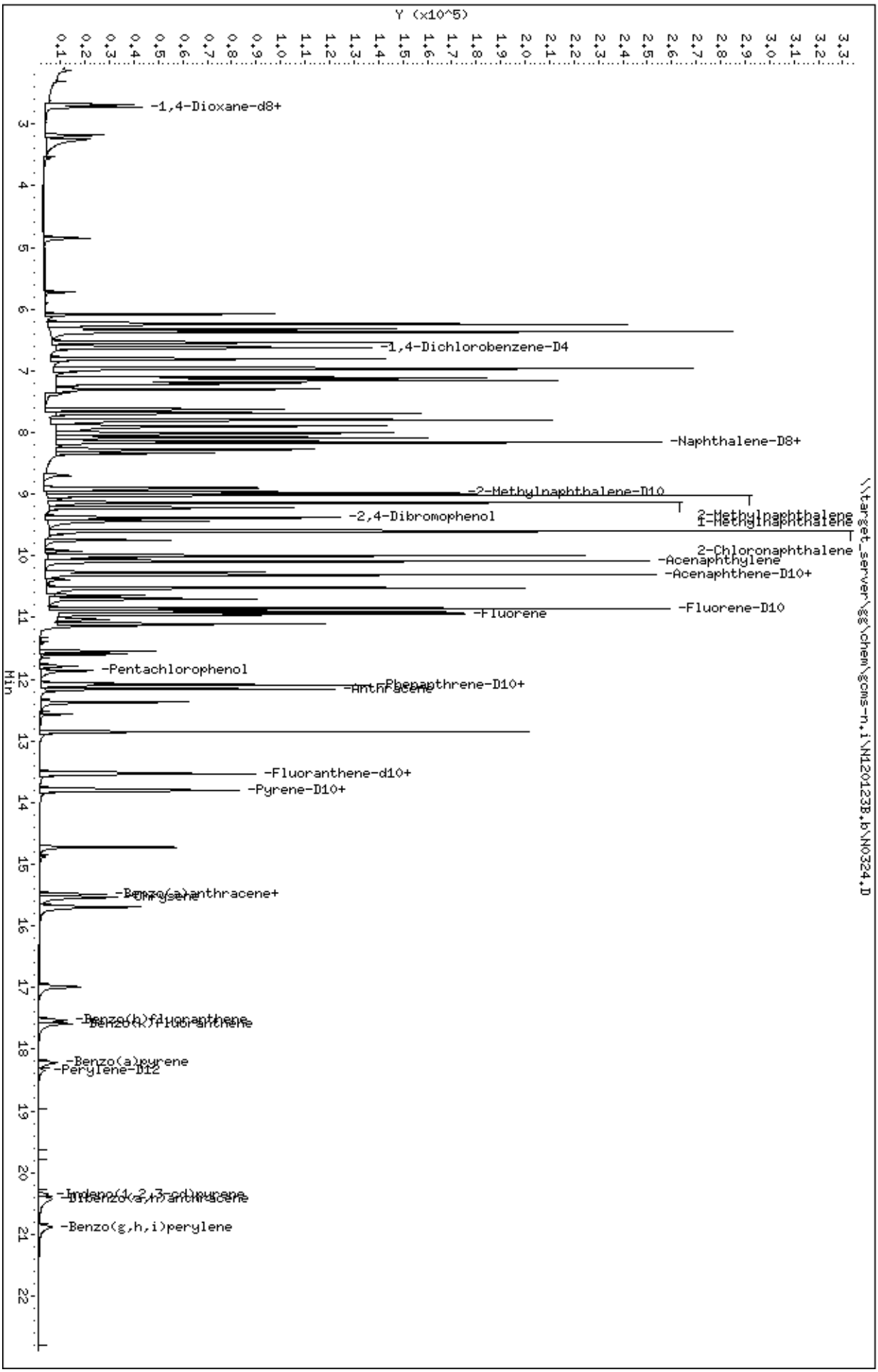
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)	REVIEW CODE
$	1 1,4-Dioxane-d8	96	2.678	2.689	(0.261)	29484	2.00000	2.37	
	2 1,4-Dioxane	88	2.720	2.731	(0.411)	31084	2.00000	2.22	
*	10 1,4-Dichlorobenzene-D4	152	6.615	6.604	(1.000)	19796	0.80000	(a)	
*	27 Naphthalene-D8	136	8.136	8.125	(1.000)	76289	0.80000	(a)	
	28 Naphthalene	128	8.159	8.148	(1.003)	200655	2.00000	2.01	
$	33 2-Methylnaphthalene-D10	152	8.975	8.964	(1.103)	99907	2.00000	2.04	
	34 2-Methylnaphthalene	142	9.017	9.007	(1.108)	126986	2.00000	1.96	
	35 1-Methylnaphthalene	142	9.134	9.123	(1.123)	110008	2.00000	1.83	
$	38 2,4-Dibromophenol	252	9.367	9.346	(0.913)	20110	2.00000	1.90	
	42 2-Chloronaphthalene	164	9.600	9.589	(0.935)	31836	2.00000	1.96	
	46 Acenaphthylene	152	10.093	10.082	(0.983)	161034	2.00000	2.13	
*	48 Acenaphthene-D10	164	10.264	10.254	(1.000)	30927	0.80000	(a)	
	49 Acenaphthene	153	10.307	10.297	(1.004)	94283	2.00000	1.99	
$	56 Fluorene-D10	174	10.897	10.886	(1.062)	75591	2.00000	1.92	
	57 Fluorene	166	10.940	10.929	(1.066)	92810	2.00000	1.88	
	65 Pentachlorophenol	266	11.859	11.849	(0.983)	15298	4.50000	3.76	
*	66 Phenanthrene-D10	188	12.062	12.062	(1.000)	31680	0.80000	(a)	
	67 Phenanthrene	178	12.094	12.084	(1.003)	95710	2.00000	2.16	
	68 Anthracene	178	12.158	12.148	(1.008)	95969	2.00000	2.19	
$	71 Fluoranthene-d10	212	13.512	13.512	(1.120)	44246	2.00000	1.92	

Data File: \\target_server\gg\chem\gcms-n.i\N120123B.b\N0324.D
Report Date: 29-Dec-2023 07:37

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
	72 Fluoranthene	202	13.532	13.532	(1.122)	64924	2.00000	1.92	
$	73 Pyrene-D10	212	13.787	13.777	(0.890)	50478	2.00000	2.33	
	74 Pyrene	202	13.807	13.797	(0.891)	67751	2.00000	2.36	
	76 Benzo(a)anthracene	228	15.478	15.478	(0.999)	26101	2.00000	1.82	
*	78 Chrysene-D12	240	15.498	15.498	(1.000)	9653	0.80000	(a)	
	79 Chrysene	228	15.539	15.539	(1.003)	41192	2.00000	2.06	
	82 Benzo(b)fluoranthene	252	17.531	17.531	(0.956)	17868	2.00000	2.12	
	83 Benzo(k)fluoranthene	252	17.583	17.583	(0.958)	33563	2.00000	2.22(H)	
	84 Benzo(a)pyrene	252	18.221	18.221	(0.993)	19772	2.00000	1.84	
*	85 Perylene-D12	264	18.345	18.345	(1.000)	5505	0.80000	(a)	
	86 Indeno(1,2,3-cd)pyrene	276	20.353	20.353	(1.109)	8028	2.00000	1.67	
	87 Dibenzo(a,h)anthracene	278	20.435	20.435	(1.114)	11921	2.00000	1.99	
	88 Benzo(g,h,i)perylene	276	20.888	20.889	(1.139)	17136	2.00000	1.88	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
H - Operator selected an alternate compound hit.


Data File: \\target_server\gg\chem\gcms-n,i\N120123B,b\N0324,D
Date : 01-DEC-2023 23:19
Client ID: ontinuing Calibrati
Sample Info: WG346280-4
Volume Injected (uL): 1.0
Column phase: Rxi-5VOCms
Instrument: gcms-n,i
Operator: EP
Column diameter: 0.25
\\target_server\gg\chem\gcms-n,i\N120123B,b\N0324,D
Y (x10^5)
Min
-1,4-Dioxane-d8+
-1,4-Dichlorobenzene-D4
-Naphthalene-D8+
-2-Methylnaphthalene-D10
2-Methylnaphthalene
1-Methylnaphthalene
-2,4-Dibromophenol
2-Chloronaphthalene
-Acenaphthylene
-Acenaphthene-D10+
-Fluorene-D10
-Fluorene
-Pentachlorophenol
-Phenanthrene-D10+
-Anthracene
-Fluoranthene-d10+
-Pyrene-D10+
-Benzo(a)anthracene+
Chrysene
-Benzo(b)fluoranthene
Benzo(k)fluoranthene
-Benzo(a)pyrene
-Perylene-D12
-Indeno(1,2,3-cd)pyrene
Dibenzo(a,h)anthracene
-Benzo(g,h,i)perylene

Form 7
Calibration Verification Summary

Lab Name: Katahdin Analytical Services
SDG: SQ6112
Lab ID: WG346280-5
Analytical Date: 12/01/23 23:51
Lab File ID: N0325.D
Instrument ID: GCMS-N
Initial Calibration Date(s): 12/01/23 08:45 12/01/23 11:15
Column ID:

Compound	RRF/Amount	RF2	CCAL RRF2	Min RF	%D/ %Drift	Max %D/ %Drift	Curve Type	Qual
Naphthalene	1.04852	1.05946	1.05946	0.010	1.04258	20.000	Averaged	
2-Methylnaphthalene	0.67918	0.67420	0.67420	0.010	-0.73254	20.000	Averaged	
Acenaphthylene	1.95150	2.08002	2.08002	0.010	6.58572	20.000	Averaged	
Acenaphthene	1.22251	1.22447	1.22447	0.010	0.16005	20.010	Averaged	
Fluorene	1.27931	1.20313	1.20313	0.010	-5.95492	20.000	Averaged	
Phenanthrene	1.11854	1.20090	1.20090	0.010	7.36330	20.000	Averaged	
Anthracene	1.10485	1.20355	1.20355	0.010	8.93274	20.000	Averaged	
Fluoranthene	0.85358	0.80649	0.80649	0.010	-5.51643	20.010	Averaged	
Pyrene	2.38400	2.86145	2.86145	0.010	20.02694	20.000	Averaged	*
Benzo(a)anthracene	1.19048	1.14854	1.14854	0.010	-3.52296	20.000	Averaged	
Chrysene	1.65479	1.62681	1.62681	0.010	-1.69081	20.000	Averaged	
Benzo(b)fluoranthene	1.22605	1.23524	1.23524	0.010	0.74978	20.000	Averaged	
Benzo(k)fluoranthene	2.19649	2.52230	2.52230	0.010	14.83325	20.000	Averaged	
Benzo(a)pyrene	2.00000	1.85273	1.44379	0.010	-7.36327	20.010	Linear	
Indeno(1,2,3-cd)pyrene	0.69792	0.56270	0.56270	0.010	-19.37504	20.000	Averaged	
Dibenzo(a,h)anthracene	0.87223	0.88640	0.88640	0.010	1.62493	20.000	Averaged	
Benzo(g,h,i)perylene	2.00000	1.86713	1.23715	0.010	-6.64325	20.000	Linear	
2-Methylnaphthalene-D10	0.51219	0.53156	0.53156	0.010	3.78047	20.000	Averaged	
Fluorene-D10	1.02061	0.97914	0.97914	0.010	-4.06408	20.000	Averaged	
Pyrene-D10	1.79655	2.09996	2.09996	0.010	16.88834	20.000	Averaged	

*** = Compound out of QC criteria**

Data File: \\target_server\gg\chem\gcms-n.i\N120123B.b\N0325.D
Report Date: 29-Dec-2023 07:37

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-n.i\N120123B.b\N0325.D
Lab Smp Id: WG346280-5 Client Smp ID: ontinuing Calibrati
Inj Date : 01-DEC-2023 23:51
Operator : EP Inst ID: gcms-n.i
Smp Info : WG346280-5
Misc Info : WG346280,WG346280,WG346189-4,SQ6112-1
Comment :
Method : \\target_server\gg\chem\gcms-n.i\N120123B.b\NSPSIM93.m
Meth Date : 04-Dec-2023 07:52 epelletier Quant Type: ISTD
Cal Date : 01-DEC-2023 11:15 Cal File: N0302.D
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pahplus.sub
Target Version: 4.12
Processing Host: INSPIRON1

Concentration Formula: Amt * DF * Uf*(Vt/Vo*Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.000	Sample Volume (L)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

			QUANT SIG					AMOUNTS		
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
$	1	1,4-Dioxane-d8	96	2.688	2.689	(0.262)	28152	2.00000	2.24	
	2	1,4-Dioxane	88	2.720	2.731	(0.411)	30014	2.00000	2.13	
*	10	1,4-Dichlorobenzene-D4	152	6.614	6.604	(1.000)	19961	0.80000	(a)	
*	27	Naphthalene-D8	136	8.136	8.125	(1.000)	77704	0.80000	(a)	
	28	Naphthalene	128	8.159	8.148	(1.003)	205810	2.00000	2.02	
$	33	2-Methylnaphthalene-D10	152	8.975	8.964	(1.103)	103260	2.00000	2.08	
	34	2-Methylnaphthalene	142	9.017	9.007	(1.108)	130971	2.00000	1.98	
	35	1-Methylnaphthalene	142	9.134	9.123	(1.123)	113394	2.00000	1.85	
$	38	2,4-Dibromophenol	252	9.367	9.346	(0.913)	20671	2.00000	1.93	
	42	2-Chloronaphthalene	164	9.600	9.589	(0.935)	31981	2.00000	1.95	
	46	Acenaphthylene	152	10.093	10.082	(0.983)	162803	2.00000	2.13	
*	48	Acenaphthene-D10	164	10.264	10.254	(1.000)	31308	0.80000	(a)	
	49	Acenaphthene	153	10.307	10.297	(1.004)	95839	2.00000	2.00	
$	56	Fluorene-D10	174	10.897	10.886	(1.062)	76637	2.00000	1.92	
	57	Fluorene	166	10.940	10.929	(1.066)	94169	2.00000	1.88	
	65	Pentachlorophenol	266	11.870	11.849	(0.984)	14798	4.50000	3.66	
*	66	Phenanthrene-D10	188	12.062	12.062	(1.000)	31476	0.80000	(a)	
	67	Phenanthrene	178	12.094	12.084	(1.003)	94499	2.00000	2.15	
	68	Anthracene	178	12.158	12.148	(1.008)	94707	2.00000	2.18	
$	71	Fluoranthene-d10	212	13.512	13.512	(1.120)	42617	2.00000	1.86	

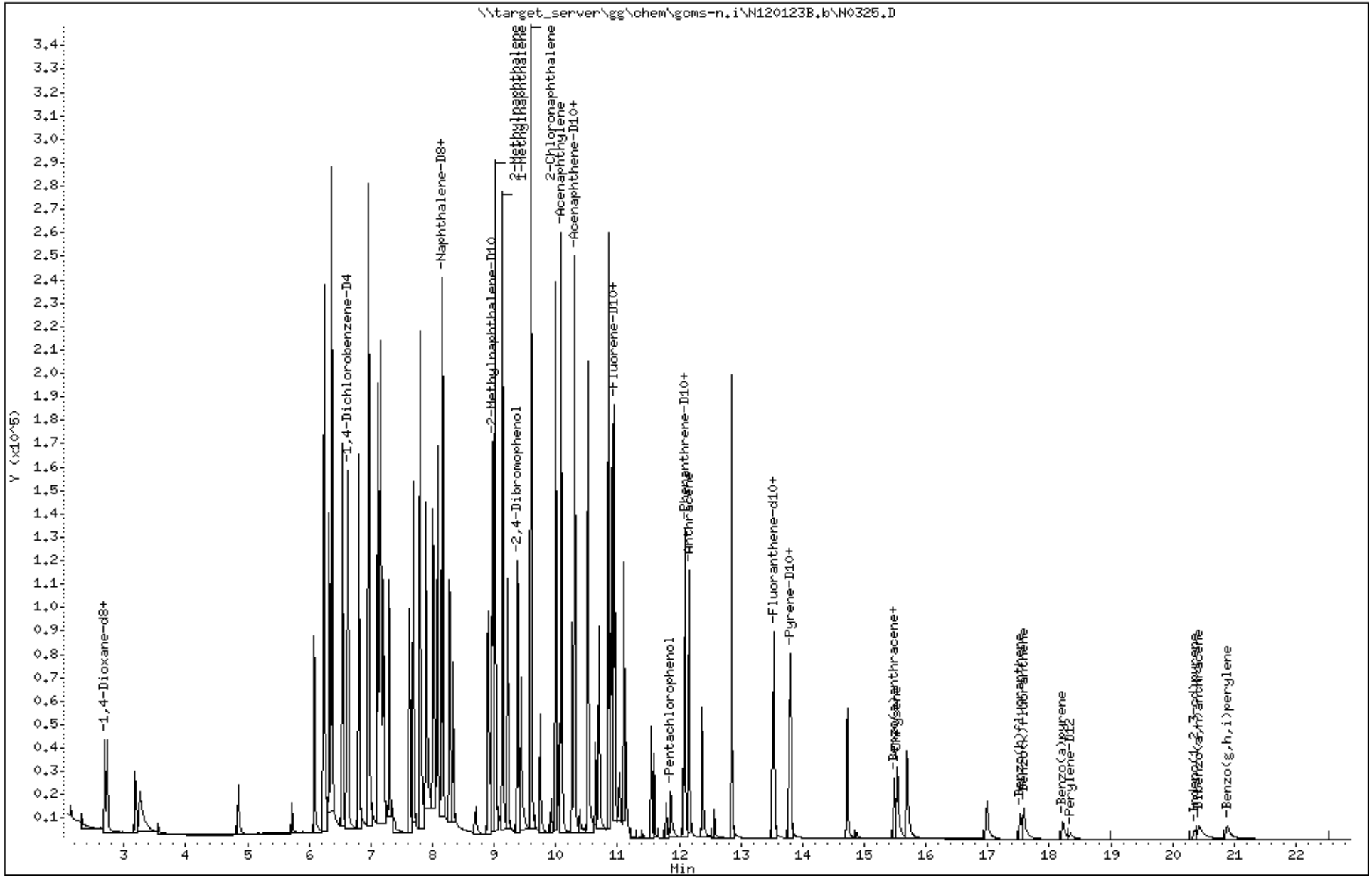
Data File: \\target_server\gg\chem\gcms-n.i\N120123B.b\N0325.D
Report Date: 29-Dec-2023 07:37

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)	REVIEW CODE
	72 Fluoranthene	202	13.532	13.532	(1.122)	63463	2.00000	1.89	
$	73 Pyrene-D10	212	13.787	13.777	(0.890)	48803	2.00000	2.34	
	74 Pyrene	202	13.807	13.797	(0.891)	66500	2.00000	2.40	
	76 Benzo(a)anthracene	228	15.488	15.478	(0.999)	26692	2.00000	1.93	
*	78 Chrysene-D12	240	15.498	15.498	(1.000)	9296	0.80000	(a)	
	79 Chrysene	228	15.539	15.539	(1.003)	37807	2.00000	1.97	
	82 Benzo(b)fluoranthene	252	17.531	17.531	(0.956)	16756	2.00000	2.01	
	83 Benzo(k)fluoranthene	252	17.593	17.583	(0.959)	34215	2.00000	2.30(H)	
	84 Benzo(a)pyrene	252	18.221	18.221	(0.993)	19585	2.00000	1.85	
*	85 Perylene-D12	264	18.345	18.345	(1.000)	5426	0.80000	(a)	
	86 Indeno(1,2,3-cd)pyrene	276	20.353	20.353	(1.109)	7633	2.00000	1.61	
	87 Dibenzo(a,h)anthracene	278	20.446	20.435	(1.115)	12024	2.00000	2.03	
	88 Benzo(g,h,i)perylene	276	20.888	20.889	(1.139)	16782	2.00000	1.87	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
H - Operator selected an alternate compound hit.

Data File: \\target_server\gg\chem\gcms-n.i\N120123B.b\N0325.D
Date : 01-DEC-2023 23:51
Client ID: ontinuing Calibrati
Instrument: gcms-n.i
Sample Info: WG346280-5
Volume Injected (uL): 1.0
Operator: EP
Column phase: Rxi-SVOCms
Column diameter: 0.25



Katahdin Analytical Services SQ6112 Page 175 of 454

Form 7
Calibration Verification Summary

Lab Name: Katahdin Analytical Services
SDG: SQ6112
Lab ID: WG346349-2
Analytical Date: 12/04/23 10:39
Lab File ID: N0326.D
Instrument ID: GCMS-N
Initial Calibration Date(s): 12/01/23 08:45 12/01/23 11:15
Column ID:

Compound	$\overline{RRF}$/Amount	RF2	CCAL RRF2	Min RF	%D/ %Drift	Max %D/ %Drift	Curve Type	Qual
Naphthalene	1.04852	1.06434	1.06434	0.010	1.50792	20.000	Averaged	
2-Methylnaphthalene	0.67918	0.65023	0.65023	0.010	-4.26279	20.000	Averaged	
Acenaphthylene	1.95150	1.99541	1.99541	0.010	2.25039	20.000	Averaged	
Acenaphthene	1.22251	1.20961	1.20961	0.010	-1.05547	20.010	Averaged	
Fluorene	1.27931	1.25849	1.25849	0.010	-1.62754	20.000	Averaged	
Phenanthrene	1.11854	1.20323	1.20323	0.010	7.57158	20.000	Averaged	
Anthracene	1.10485	1.24672	1.24672	0.010	12.84018	20.000	Averaged	
Fluoranthene	0.85358	0.93833	0.93833	0.010	9.92875	20.010	Averaged	
Pyrene	2.38400	2.54437	2.54437	0.010	6.72668	20.000	Averaged	
Benzo(a)anthracene	1.19048	1.23314	1.23314	0.010	3.58395	20.000	Averaged	
Chrysene	1.65479	1.71049	1.71049	0.010	3.36625	20.000	Averaged	
Benzo(b)fluoranthene	1.22605	1.44789	1.44789	0.010	18.09406	20.000	Averaged	
Benzo(k)fluoranthene	2.19649	2.44224	2.44224	0.010	11.18827	20.000	Averaged	
Benzo(a)pyrene	2.00000	1.68071	1.30974	0.010	-15.96428	20.010	Linear	
Indeno(1,2,3-cd)pyrene	0.69792	0.66541	0.66541	0.010	-4.65797	20.000	Averaged	
Dibenzo(a,h)anthracene	0.87223	0.91453	0.91453	0.010	4.85017	20.000	Averaged	
Benzo(g,h,i)perylene	2.00000	1.75005	1.15958	0.010	-12.49742	20.000	Linear	
2-Methylnaphthalene-D10	0.51219	0.52424	0.52424	0.010	2.35132	20.000	Averaged	
Fluorene-D10	1.02061	1.02679	1.02679	0.010	0.60475	20.000	Averaged	
Pyrene-D10	1.79655	1.91331	1.91331	0.010	6.49906	20.000	Averaged	

*** = Compound out of QC criteria**

Data File: \\target_server\gg\chem\gcms-n.i\N120423.b\N0326.D
Report Date: 29-Dec-2023 07:37

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-n.i\N120423.b\N0326.D
Lab Smp Id: WG346349-2
Inj Date : 04-DEC-2023 10:39
Operator : EP   Inst ID: gcms-n.i
Smp Info : WG346349-2
Misc Info : WG346349,WG346349,WG346189-4,SQ6112-2
Comment   :
Method   : \\target_server\gg\chem\gcms-n.i\N120423.b\NSPSIM93.m
Meth Date : 05-Dec-2023 07:17 epelletier Quant Type: ISTD
Cal Date : 01-DEC-2023 11:15   Cal File: N0302.D
Als bottle: 2   Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: all.sub
Target Version: 4.12
Processing Host: INSPIRON1

Concentration Formula: Amt * DF * Uf*(Vt/Vo*Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.000	Sample Volume (L)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)	REVIEW CODE
$	1 1,4-Dioxane-d8	96	2.699	2.689	(0.263)	34160	2.00000	2.01	
	2 1,4-Dioxane	88	2.731	2.731	(0.413)	37071	2.00000	2.11	
	3 N-Nitrosodimethylamine	74	3.185	3.164	(0.482)	42788	2.00000	1.99	
	4 Pyridine	79	3.259	3.196	(0.493)	74794	2.00000	2.20	
	5 Benzaldehyde	77	6.084	6.074	(0.920)	42430	2.00000	2.78	
	6 Phenol	94	6.240	6.230	(0.943)	190040	4.50000	3.80	
	7 Bis(2-Chloroethyl)ether	93	6.323	6.313	(0.956)	83054	2.00000	2.03	
	8 2-Chlorophenol	128	6.365	6.354	(0.962)	175727	4.50000	4.34	
	9 1,3-Dichlorobenzene	146	6.542	6.531	(0.989)	94527	2.00000	1.97	
*	10 1,4-Dichlorobenzene-D4	152	6.614	6.604	(1.000)	24893	0.80000	(a)	
	11 1,4-Dichlorobenzene	146	6.635	6.625	(1.003)	94342	2.00000	1.96	
	12 1,2-Dichlorobenzene	146	6.812	6.802	(1.030)	91532	2.00000	1.96	
	13 2,2'-Oxybis(1-chloropropane)	45	6.968	6.958	(1.053)	60356	2.00000	2.08	
	14 2-Methylphenol	108	6.958	6.958	(1.052)	162748	4.50000	4.65	
	15 Acetophenone	105	7.114	7.104	(0.874)	114283	2.00000	2.11	
	16 N-Nitroso-di-n-propylamine	70	7.135	7.124	(1.079)	54019	2.00000	2.02	
	17 3&4-Methylphenol	108	7.155	7.145	(1.082)	170203	4.50000	4.34	
	18 Hexachloroethane	117	7.207	7.197	(1.090)	36535	2.00000	2.01	
	19 Nitrobenzene	77	7.301	7.291	(0.897)	76565	2.00000	1.95	
	20 Isophorone	82	7.619	7.597	(0.936)	138879	2.00000	1.94	

Data File: \\target_server\gg\chem\gcms-n.i\N120423.b\N0326.D
Report Date: 29-Dec-2023 07:37

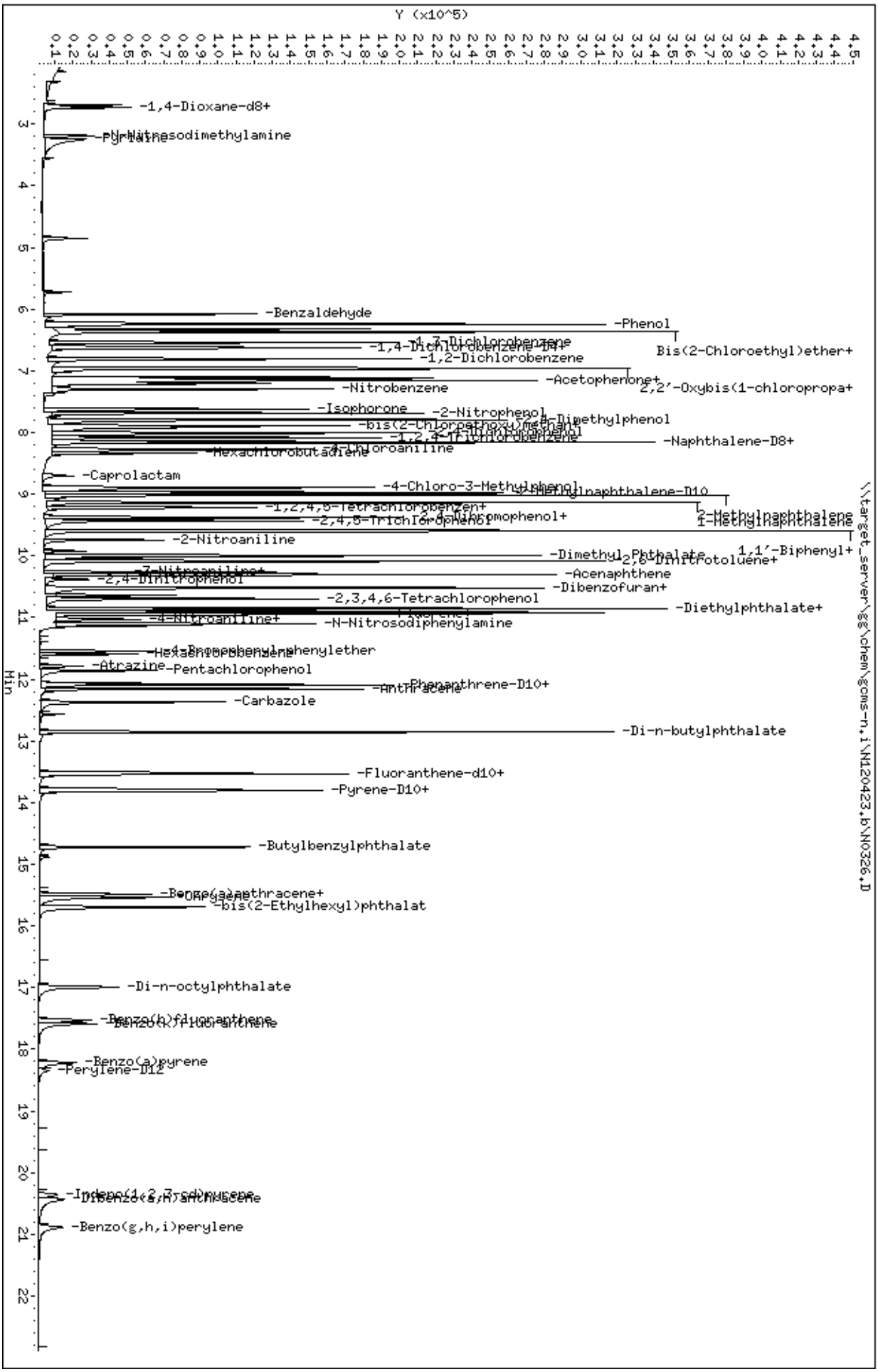
								AMOUNTS		
			QUANT SIG					CAL-AMT	ON-COL	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/ml)	(ug/ml)	REVIEW CODE
	21	2-Nitrophenol	139	7.686	7.686	(0.945)	88171	4.50000	4.00	
	22	2,4-Dimethylphenol	107	7.799	7.776	(0.959)	140923	4.50000	4.59	
	23	bis(2-Chloroethoxy)methane	93	7.900	7.878	(0.971)	85898	2.00000	1.93	
	24	Benzoic Acid	105	7.923	7.945	(0.974)	72394	2.00000	3.96	
	25	2,4-Dichlorophenol	162	8.001	7.990	(0.983)	143172	4.50000	4.69	
	26	1,2,4-Trichlorobenzene	180	8.080	8.069	(0.993)	70475	2.00000	2.00	
*	27	Naphthalene-D8	136	8.136	8.125	(1.000)	95863	0.80000	(a)	
	28	Naphthalene	128	8.159	8.148	(1.003)	255076	2.00000	2.03	
	29	4-Chloroaniline	127	8.282	8.283	(1.018)	58015	2.00000	2.58	
	30	Hexachlorobutadiene	225	8.339	8.328	(1.025)	30221	2.00000	2.08	
	31	Caprolactam	113	8.699	8.699	(1.069)	16533	2.00000	1.88	
	32	4-Chloro-3-Methylphenol	107	8.890	8.880	(1.093)	132085	4.50000	4.56	
$	33	2-Methylnaphthalene-D10	152	8.975	8.964	(1.103)	125637	2.00000	2.05	
	34	2-Methylnaphthalene	142	9.017	9.007	(1.108)	155832	2.00000	1.91	
	35	1-Methylnaphthalene	142	9.134	9.123	(1.123)	145942	2.00000	1.93	
	36	1,2,4,5-Tetrachlorobenzene	216	9.229	9.218	(0.899)	56354	2.00000	1.97	
	37	Hexachlorocyclopentadiene	237	9.218	9.197	(0.898)	21886	2.00000	1.70	
$	38	2,4-Dibromophenol	252	9.367	9.346	(0.913)	29798	2.00000	2.06	
	39	2,4,6-Trichlorophenol	196	9.377	9.367	(0.914)	80084	4.50000	4.60	
	40	2,4,5-Trichlorophenol	196	9.430	9.420	(0.919)	88049	4.50000	4.52	
	41	1,1'-Biphenyl	154	9.589	9.579	(0.934)	177557	2.00000	2.07	
	42	2-Chloronaphthalene	164	9.600	9.589	(0.935)	43564	2.00000	1.96	
	43	2-Nitroaniline	65	9.750	9.728	(0.950)	25045	2.00000	1.80	
	44	Dimethyl Phthalate	163	9.996	9.986	(0.974)	245080	4.50000	4.00	
	45	2,6-Dinitrotoluene	165	10.050	10.039	(0.979)	27265	2.00000	1.98	
	46	Acenaphthylene	152	10.093	10.082	(0.983)	211035	2.00000	2.04	
	47	3-Nitroaniline	138	10.254	10.243	(0.999)	17721	2.00000	2.50	
*	48	Acenaphthene-D10	164	10.264	10.254	(1.000)	42304	0.80000	(a)	
	49	Acenaphthene	153	10.296	10.297	(1.003)	127928	2.00000	1.98	
	50	2,4-Dinitrophenol	184	10.382	10.372	(1.011)	17642	4.50000	4.03	
	51	Dibenzofuran	168	10.522	10.511	(1.025)	171823	2.00000	1.96	
	52	4-Nitrophenol	109	10.511	10.490	(1.024)	16683	4.50000	4.36	
	53	2,4-Dinitrotoluene	165	10.532	10.522	(1.026)	31621	2.00000	1.86	
	54	2,3,4,6-Tetrachlorophenol	232	10.693	10.683	(1.042)	56969	4.50000	4.57	
	55	Diethylphthalate	149	10.854	10.844	(1.057)	229236	4.50000	4.07	
$	56	Fluorene-D10	174	10.897	10.886	(1.062)	108593	2.00000	2.01	
	57	Fluorene	166	10.929	10.929	(1.065)	133098	2.00000	1.97	
	58	4-Chlorophenyl-phenylether	204	10.961	10.951	(1.068)	54739	2.00000	1.98	
	59	4-Nitroaniline	138	11.004	11.015	(1.072)	11793	2.00000	1.86	
	60	4,6-Dinitro-2-Methylphenol	198	11.026	11.026	(0.914)	26060	4.50000	4.50	
	61	N-Nitrosodiphenylamine	169	11.111	11.101	(0.921)	97658	2.00000	2.22	
	62	4-Bromophenyl-phenylether	248	11.550	11.539	(0.958)	27319	2.00000	2.22	
	63	Hexachlorobenzene	284	11.592	11.593	(0.961)	27840	2.00000	2.16	
	64	Atrazine	200	11.795	11.785	(0.978)	18186	2.00000	2.10	
	65	Pentachlorophenol	266	11.859	11.849	(0.983)	31443	4.50000	5.00	
*	66	Phenanthrene-D10	188	12.062	12.062	(1.000)	49010	0.80000	(a)	
	67	Phenanthrene	178	12.094	12.084	(1.003)	147426	2.00000	2.15	
	68	Anthracene	178	12.158	12.148	(1.008)	152754	2.00000	2.26	
	69	Carbazole	167	12.372	12.361	(1.026)	108240	2.00000	2.50	
	70	Di-n-butylphthalate	149	12.852	12.842	(1.065)	294923	4.50000	4.41	
$	71	Fluoranthene-d10	212	13.512	13.512	(1.120)	78360	2.00000	2.20	
	72	Fluoranthene	202	13.532	13.532	(1.122)	114969	2.00000	2.20	
$	73	Pyrene-D10	212	13.787	13.777	(0.890)	91327	2.00000	2.13	
	74	Pyrene	202	13.807	13.797	(0.891)	121449	2.00000	2.13	

Data File: \\target_server\gg\chem\gcms-n.i\N120423.b\N0326.D
Report Date: 29-Dec-2023 07:37

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)	REVIEW CODE
	75 Butylbenzylphthalate	149	14.724	14.714	(0.950)	92789	4.50000	4.40	
	76 Benzo(a)anthracene	228	15.478	15.478	(0.999)	58861	2.00000	2.07	
	77 3,3'-Dichlorobenzidine	252	15.508	15.498	(1.001)	14708	2.00000	2.24	
*	78 Chrysene-D12	240	15.498	15.498	(1.000)	19093	0.80000	(a)	
	79 Chrysene	228	15.539	15.539	(1.003)	81646	2.00000	2.07	
	80 bis(2-Ethylhexyl)phthalate	149	15.692	15.692	(1.012)	108527	4.50000	4.03	
	81 Di-n-octylphthalate	149	16.985	16.986	(1.096)	116440	4.50000	4.17	
	82 Benzo(b)fluoranthene	252	17.531	17.531	(0.956)	42300	2.00000	2.36	
	83 Benzo(k)fluoranthene	252	17.593	17.583	(0.959)	71350	2.00000	2.22(H)	
	84 Benzo(a)pyrene	252	18.221	18.221	(0.993)	38264	2.00000	1.68	
*	85 Perylene-D12	264	18.345	18.345	(1.000)	11686	0.80000	(a)	
	86 Indeno(1,2,3-cd)pyrene	276	20.353	20.353	(1.109)	19440	2.00000	1.91	
	87 Dibenzo(a,h)anthracene	278	20.445	20.435	(1.115)	26718	2.00000	2.10	
	88 Benzo(g,h,i)perylene	276	20.888	20.889	(1.139)	33877	2.00000	1.75	
M	89 Total PAHs	100				1937965	36.0000	36.8	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
H - Operator selected an alternate compound hit.


Data File: \\target_server\gg\chem\gcms-n,i\N120423,b\N0326.D
Date : 04-DEC-2023 10:39
Client ID:
Sample Info: WG346349-2
Volume Injected (uL): 1.0
Column phase: Rxi-5ViOms
Instrument: gcms-n,i
Operator: EP
Column diameter: 0.25
\\target_server\gg\chem\gcms-n,i\N120423,b\N0326.D
Y (x10^5)
Min
-1,4-Dioxane-d8+
-Pyridine
-N-Nitrosodimethylamine
-Benzaldehyde
-Phenol
-1,3-Dichlorobenzene
-1,4-Dichlorobenzene-D4+
-1,2-Dichlorobenzene
Bis(2-Chloroethyl)ether+
-Acetophenone+
2,2'-Oxybis(1-chloropropa+
-Nitrobenzene
-Isophorone
-2-Nitrophenol
-2,4-Dimethylphenol
-bis(2-Chloroethoxy)methane
-2,4-Dichlorophenol
-1,2,4-Trichlorobenzene
-Naphthalene-D8+
-4-Chloroaniline
-Hexachlorobutadiene
-Caprolactam
-4-Chloro-3-Methylphenol
-2-Methylnaphthalene-D10
-1,2,4,5-Tetrachlorobenzen+
2,4,6-Tribromophenol+
2-Methylnaphthalene
-2,4,5-Trichlorophenol
1-Methylnaphthalene
-2-Nitroaniline
-Dimethyl Phthalate
1,1'-Biphenyl+
2,6-Dinitrotoluene+
3-Nitroaniline+
-Acenaphthene
-2,4-Dinitrophenol
-Dibenzofuran+
-2,3,4,6-Tetrachlorophenol
-Diethylphthalate+
-4-Nitroaniline+
-N-Nitrosodiphenylamine
-4-Bromophenyl-phenylether
-Hexachlorobenzene
-Atrazine
-Pentachlorophenol
-Phenanthrene-D10+
-Anthracene
-Carbazole
-Di-n-butylphthalate
-Fluoranthene-d10+
-Pyrene-D10+
-Butylbenzylphthalate
-Benzo(a)anthracene+
-Chrysene
-bis(2-Ethylhexyl)phthalat
-Di-n-octylphthalate
-Benzo(b)fluoranthene
-Benzo(k)fluoranthene
-Benzo(a)pyrene
-Perylene-D12
-Indeno(1,2,3-cd)pyrene
-Dibenz(a,h)anthracene
-Benzo(g,h,i)perylene

Form 7
Calibration Verification Summary

Lab Name: Katahdin Analytical Services **SDG:** SQ6112
Lab ID: WG346349-3 **Analytical Date:** 12/04/23 19:56
Lab File ID: N0344.D **Instrument ID:** GCMS-N
Initial Calibration Date(s): 12/01/23 08:45 12/01/23 11:15 **Column ID:**

Compound	$\overline{RRF}$/Amount	RF2	CCAL RRF2	Min RF	%D/ %Drift	Max %D/ %Drift	Curve Type	Qual
Naphthalene	1.04852	1.05495	1.05495	0.010	0.61256	20.000	Averaged	
2-Methylnaphthalene	0.67918	0.64970	0.64970	0.010	-4.34108	20.000	Averaged	
Acenaphthylene	1.95150	2.04638	2.04638	0.010	4.86220	20.000	Averaged	
Acenaphthene	1.22251	1.23160	1.23160	0.010	0.74338	20.010	Averaged	
Fluorene	1.27931	1.24213	1.24213	0.010	-2.90665	20.000	Averaged	
Phenanthrene	1.11854	1.13586	1.13586	0.010	1.54799	20.000	Averaged	
Anthracene	1.10485	1.16681	1.16681	0.010	5.60790	20.000	Averaged	
Fluoranthene	0.85358	0.85027	0.85027	0.010	-0.38819	20.010	Averaged	
Pyrene	2.38400	2.92295	2.92295	0.010	22.60690	20.000	Averaged	*
Benzo(a)anthracene	1.19048	1.19309	1.19309	0.010	0.21937	20.000	Averaged	
Chrysene	1.65479	1.84834	1.84834	0.010	11.69650	20.000	Averaged	
Benzo(b)fluoranthene	1.22605	1.25331	1.25331	0.010	2.22420	20.000	Averaged	
Benzo(k)fluoranthene	2.19649	2.62721	2.62721	0.010	19.60965	20.000	Averaged	
Benzo(a)pyrene	2.00000	1.90066	1.48114	0.010	-4.96678	20.010	Linear	
Indeno(1,2,3-cd)pyrene	0.69792	0.58213	0.58213	0.010	-16.59129	20.000	Averaged	
Dibenzo(a,h)anthracene	0.87223	0.81935	0.81935	0.010	-6.06254	20.000	Averaged	
Benzo(g,h,i)perylene	2.00000	1.88951	1.25198	0.010	-5.52446	20.000	Linear	
2-Methylnaphthalene-D10	0.51219	0.50804	0.50804	0.010	-0.81150	20.000	Averaged	
Fluorene-D10	1.02061	1.01791	1.01791	0.010	-0.26485	20.000	Averaged	
Pyrene-D10	1.79655	2.23544	2.23544	0.010	24.42957	20.000	Averaged	*

*** = Compound out of QC criteria**

Data File: \\target_server\gg\chem\gcms-n.i\N120423.b\N0344.D
Report Date: 29-Dec-2023 07:37

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-n.i\N120423.b\N0344.D
Lab Smp Id: WG346349-3
Inj Date : 04-DEC-2023 19:56
Operator : EP   Inst ID: gcms-n.i
Smp Info : WG346349-3
Misc Info : WG346349,WG346349,WG346189-4,SQ6112-2
Comment   :
Method   : \\target_server\gg\chem\gcms-n.i\N120423.b\NSPSIM93.m
Meth Date : 05-Dec-2023 07:17 epelletier Quant Type: ISTD
Cal Date : 01-DEC-2023 11:15   Cal File: N0302.D
Als bottle: 2   Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: all.sub
Target Version: 4.12
Processing Host: INSPIRON1

Concentration Formula: Amt * DF * Uf*(Vt/Vo*Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.000	Sample Volume (L)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

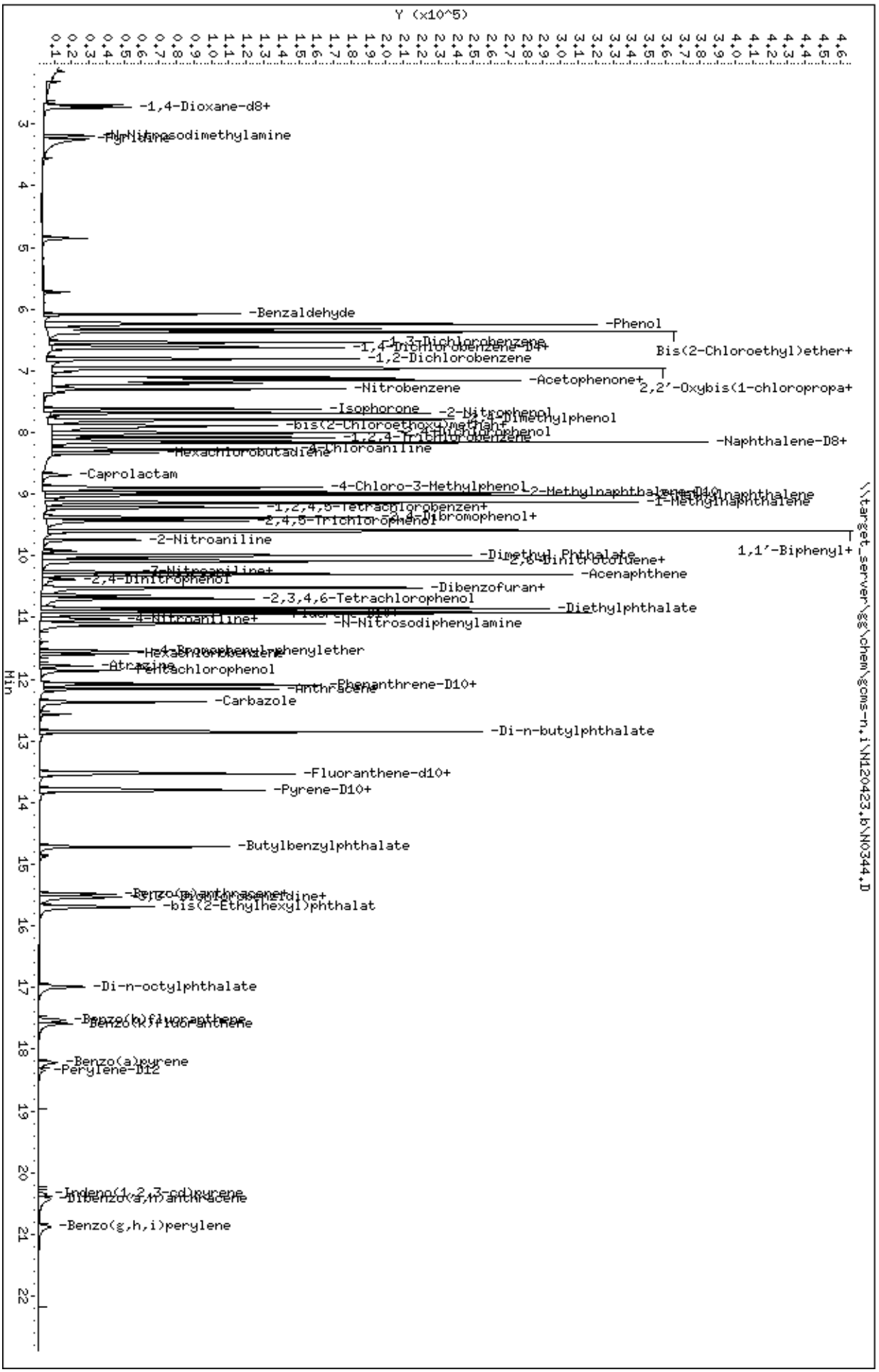
			QUANT SIG					AMOUNTS		
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
$	1	1,4-Dioxane-d8	96	2.688	2.689	(0.262)	35813	2.00000	2.26	
	2	1,4-Dioxane	88	2.731	2.731	(0.413)	37857	2.00000	2.10	
*	10	1,4-Dichlorobenzene-D4	152	6.614	6.604	(1.000)	25467	0.80000	(a)	
*	27	Naphthalene-D8	136	8.136	8.125	(1.000)	99404	0.80000	(a)	
	28	Naphthalene	128	8.159	8.148	(1.003)	262165	2.00000	2.01	
$	33	2-Methylnaphthalene-D10	152	8.975	8.964	(1.103)	126252	2.00000	1.98	
	34	2-Methylnaphthalene	142	9.017	9.007	(1.108)	161456	2.00000	1.91	
	35	1-Methylnaphthalene	142	9.134	9.123	(1.123)	145115	2.00000	1.85	
$	38	2,4-Dibromophenol	252	9.367	9.346	(0.913)	27655	2.00000	2.05	
	42	2-Chloronaphthalene	164	9.600	9.589	(0.935)	44316	2.00000	2.14	
	46	Acenaphthylene	152	10.093	10.082	(0.983)	201932	2.00000	2.10	
*	48	Acenaphthene-D10	164	10.264	10.254	(1.000)	39471	0.80000	(a)	
	49	Acenaphthene	153	10.297	10.297	(1.003)	121531	2.00000	2.01	
$	56	Fluorene-D10	174	10.897	10.886	(1.062)	100445	2.00000	1.99	
	57	Fluorene	166	10.929	10.929	(1.065)	122570	2.00000	1.94	
	65	Pentachlorophenol	266	11.859	11.849	(0.983)	24531	4.50000	4.06	
*	66	Phenanthrene-D10	188	12.062	12.062	(1.000)	47100	0.80000	(a)	
	67	Phenanthrene	178	12.094	12.084	(1.003)	133747	2.00000	2.03	
	68	Anthracene	178	12.158	12.148	(1.008)	137392	2.00000	2.11	
$	71	Fluoranthene-d10	212	13.512	13.512	(1.120)	69275	2.00000	2.02	

Data File: \\target_server\gg\chem\gcms-n.i\N120423.b\N0344.D
Report Date: 29-Dec-2023 07:37

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
	72 Fluoranthene	202	13.532	13.532	(1.122)	100119	2.00000	1.99	
$	73 Pyrene-D10	212	13.787	13.777	(0.890)	79889	2.00000	2.49	
	74 Pyrene	202	13.797	13.797	(0.890)	104459	2.00000	2.45	
	76 Benzo(a)anthracene	228	15.478	15.478	(0.999)	42638	2.00000	2.00	
*	78 Chrysene-D12	240	15.498	15.498	(1.000)	14295	0.80000	(a)	
	79 Chrysene	228	15.539	15.539	(1.003)	66055	2.00000	2.23	
	82 Benzo(b)fluoranthene	252	17.521	17.531	(0.955)	22544	2.00000	2.04	
	83 Benzo(k)fluoranthene	252	17.582	17.583	(0.958)	47257	2.00000	2.39(H)	
	84 Benzo(a)pyrene	252	18.221	18.221	(0.993)	26642	2.00000	1.90	
*	85 Perylene-D12	264	18.345	18.345	(1.000)	7195	0.80000	(a)	
	86 Indeno(1,2,3-cd)pyrene	276	20.353	20.353	(1.109)	10471	2.00000	1.67	
	87 Dibenzo(a,h)anthracene	278	20.435	20.435	(1.114)	14738	2.00000	1.88	
	88 Benzo(g,h,i)perylene	276	20.878	20.889	(1.138)	22520	2.00000	1.89	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
H - Operator selected an alternate compound hit.


Data File: \\target_server\gg\chem\gcms-n,i\N120423,b\N0344.D
Date : 04-DEC-2023 19:56
Client ID:
Sample Info: WG346349-3
Volume Injected (uL): 1.0
Column phase: Rxi-5ViOms
Instrument: gcms-n,i
Operator: EP
Column diameter: 0.25
\\target_server\gg\chem\gcms-n,i\N120423,b\N0344.D
Y (x10^5)
Min
-1,4-Dioxane-d8+
-N-Nitrosodimethylamine
-Pyridine
-Benzaldehyde
-Phenol
-1,3-Dichlorobenzene
-1,4-Dichlorobenzene-D4+
-1,2-Dichlorobenzene
Bis(2-Chloroethyl)ether+
-Acetophenone+
2,2'-Oxybis(1-chloropropa+
-Nitrobenzene
-Isophorone
-2-Nitrophenol
-2,4-Dimethylphenol
-bis(2-Chloroethoxy)methan+
-2,4-Dichlorophenol
-1,2,4-Trichlorobenzene
-Naphthalene-D8+
-4-Chloroaniline
-Hexachlorobutadiene
-Caprolactam
-4-Chloro-3-Methylphenol
-2-Methylnaphthalene-D10
-2-Methylnaphthalene
-1-Methylnaphthalene
-1,2,4,5-Tetrachlorobenzen+
-2,4,6-Tribromophenol+
-2,4,5-Trichlorophenol
-2-Nitroaniline
-Dimethyl Phthalate
1,1'-Biphenyl+
-2,6-Dinitrotoluene+
-3-Nitroaniline+
-Acenaphthene
-2,4-Dinitrophenol
-Dibenzofuran+
-2,3,4,6-Tetrachlorophenol
-Diethylphthalate
-Fluorene-D10+
-4-Nitroaniline+
-N-Nitrosodiphenylamine
-4-Bromophenyl-phenylether
-Hexachlorobenzene
-Atrazine
-Pentachlorophenol
-Phenanthrene-D10+
-Anthracene
-Carbazole
-Di-n-butylphthalate
-Fluoranthene-d10+
-Pyrene-D10+
-Butylbenzylphthalate
-Benzo(a)anthracene-D12
-3,3'-Dichlorobenzidine+
-bis(2-Ethylhexyl)phthalat
-Di-n-octylphthalate
-Benzo(b)fluoranthene
-Benzo(k)fluoranthene
-Benzo(a)pyrene
-Perylene-D12
-Indeno(1,2,3-cd)pyrene
-Dibenzo(a,h)anthracene
-Benzo(g,h,i)perylene

Data File: \\target_server\gg\chem\gcms-n.i\N120123.b\ND532.D

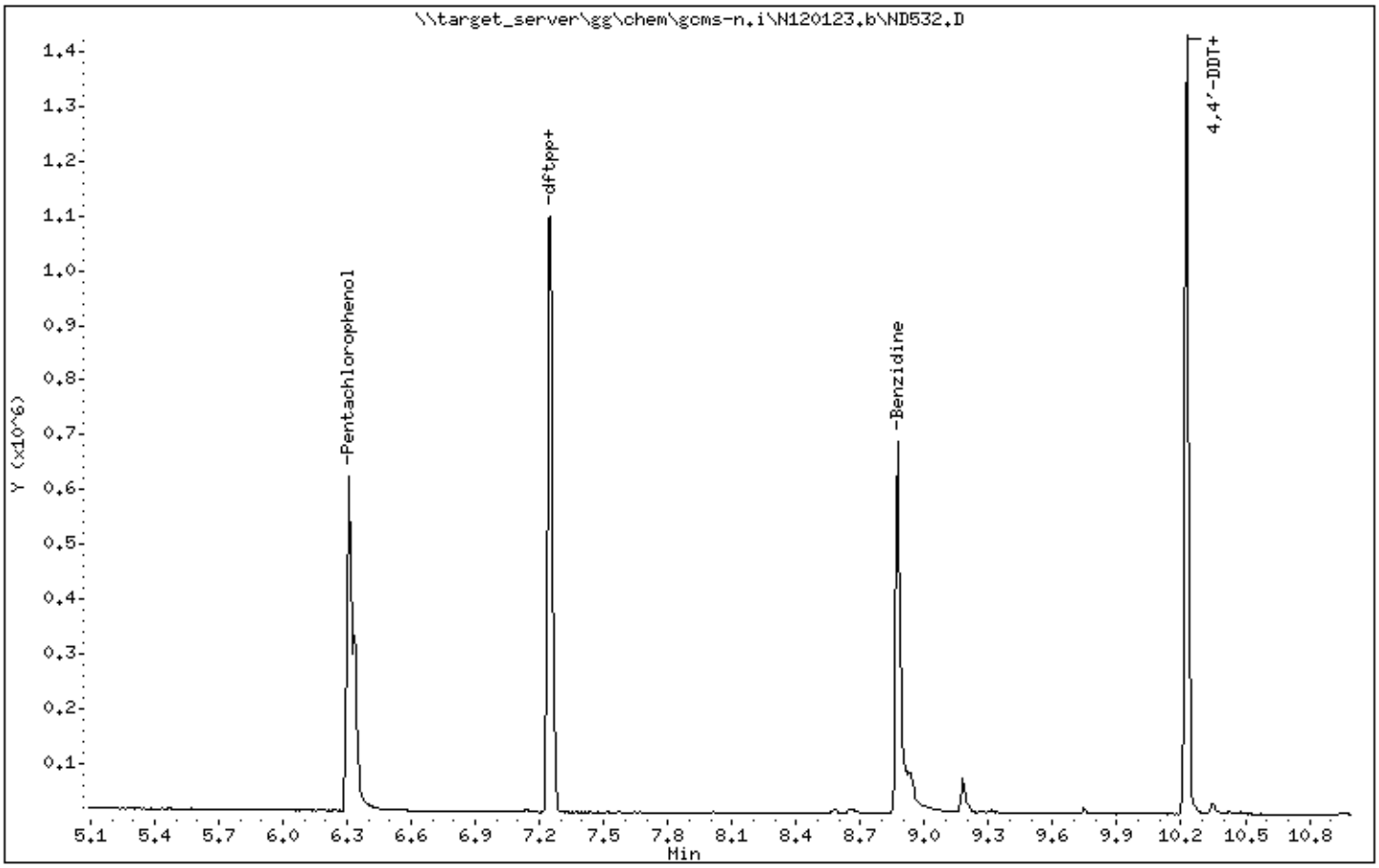
Date : 01-DEC-2023 08:27

Client ID: DFTPP02 Instrument: gcms-n.i

Sample Info: WG346189-1

Operator: EP

Column phase: Rxi-SVOCms Column diameter: 0.25



Data File: \\target_server\gg\chem\gcms-n.i\N120123.b\ND532.D

Date : 01-DEC-2023 08:27

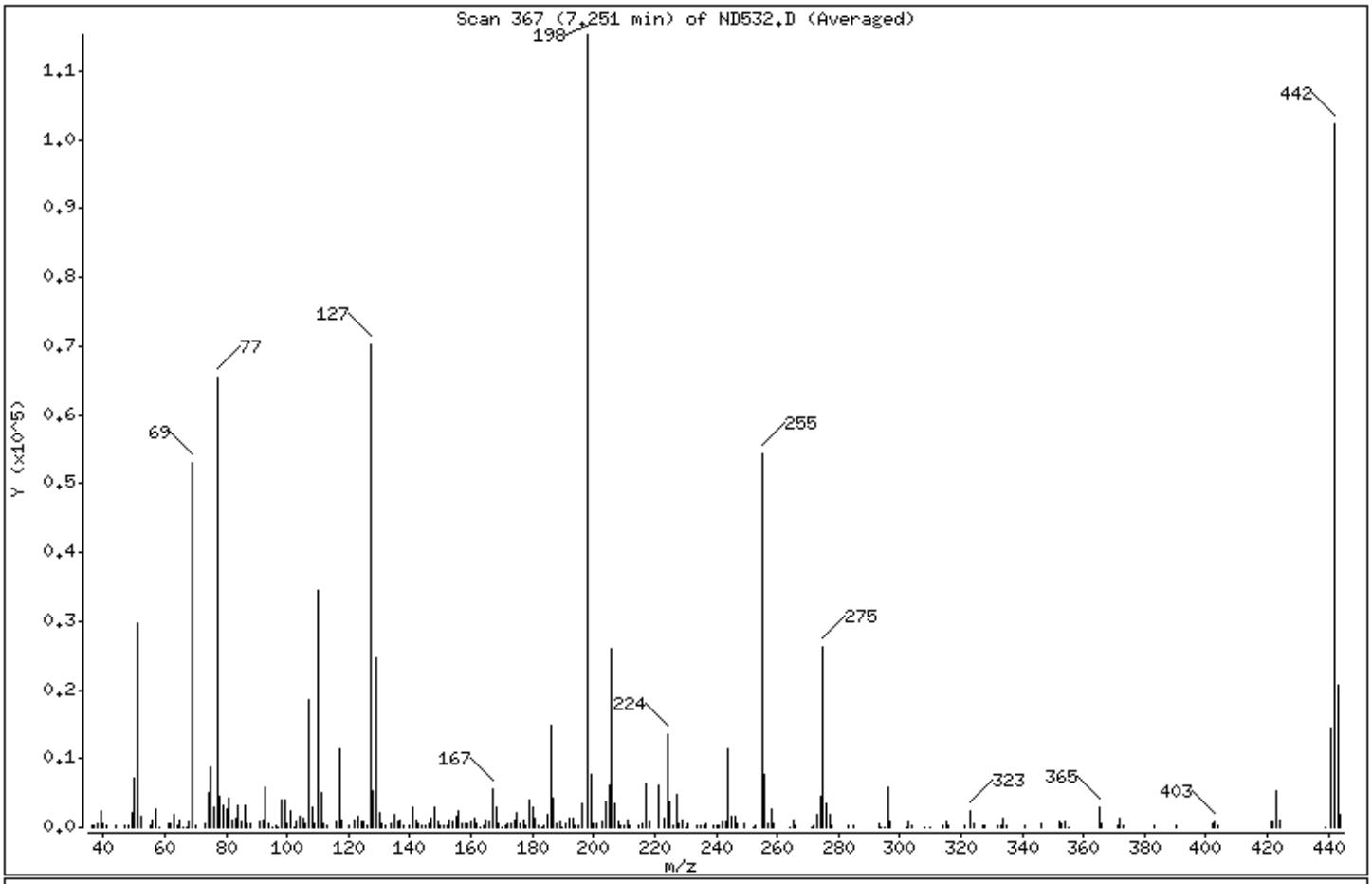
Client ID: DFTPP02 Instrument: gcms-n.i

Sample Info: WG346189-1

Operator: EP

Column phase: Rxi-SVOCms Column diameter: 0.25

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	10.00 - 80.00% of mass 198	26.29
68	Less than 2.00% of mass 69	0.82 (1.72)
69	Greater than 0.10% of mass 198	47.73
70	Less than 2.00% of mass 69	0.22 (0.47)
127	10.00 - 80.00% of mass 198	62.35
197	Less than 2.00% of mass 198	0.00
199	5.00 - 9.00% of mass 198	6.81
275	10.00 - 60.00% of mass 198	22.31
365	1.00 - 100.00% of mass 198	2.45
441	0.01 - 100.00% of mass 443	12.37 (70.80)
442	Greater than 50.00% of mass 442	87.30 (100.00)
443	15.00 - 24.00% of mass 442	17.47 (20.01)

Data File: \\target_server\gg\chem\gcms-n.i\N120123.b\ND532.D

Date : 01-DEC-2023 08:27

Client ID: DFTPP02 Instrument: gcms-n.i

Sample Info: WG346189-1

Operator: EP

Column phase: Rxi-SVOCms Column diameter: 0.25

Data File: ND532.D
Spectrum: Scans 367-369 (7.251 min), Subtraction Scan 361
Location of Maximum: 198.00
Number of points: 247

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	21	117.00	11412	183.00	60	259.00	398
37.00	180	118.00	938	184.00	307	264.00	61
38.00	423	120.00	244	185.00	1742	265.00	1071
39.00	2427	122.00	1008	186.00	14926	266.00	200
40.00	106	123.00	1683	187.00	4318	271.00	120
41.00	213	124.00	828	188.00	477	272.00	174
50.00	7166	125.00	817	189.00	854	273.00	1724
51.00	28908	126.00	166	190.00	122	274.00	4636
52.00	1535	127.00	70104	191.00	427	275.00	26130
55.00	205	128.00	5239	192.00	1317	276.00	3365
56.00	1039	129.00	24712	193.00	1227	277.00	1844
57.00	2709	130.00	2023	194.00	280	278.00	306
58.00	62	131.00	440	195.00	165	283.00	230
61.00	442	132.00	269	196.00	3325	285.00	351
62.00	612	134.00	641	198.00	115256	293.00	431
63.00	1836	135.00	1901	199.00	7776	294.00	50
64.00	264	136.00	731	200.00	568	295.00	57
65.00	1069	137.00	1061	201.00	632	296.00	5881
66.00	60	138.00	194	203.00	679	297.00	836
67.00	53	140.00	277	204.00	3603	302.00	68
68.00	885	141.00	2799	205.00	6164	303.00	768
69.00	52893	142.00	934	206.00	25984	304.00	189
70.00	334	143.00	657	207.00	3383	308.00	70
73.00	406	144.00	155	208.00	793	310.00	60
74.00	5062	145.00	185	209.00	282	314.00	300
75.00	8655	146.00	652	210.00	162	315.00	682
76.00	2902	147.00	1402	211.00	980	316.00	370
77.00	65450	148.00	2971	212.00	155	321.00	239
78.00	4436	149.00	684	215.00	285	323.00	2436
79.00	3192	150.00	207	216.00	570	324.00	427
80.00	2775	151.00	397	217.00	6228	327.00	378
81.00	4110	152.00	260	218.00	927	328.00	141
82.00	1074	153.00	945	221.00	5980	332.00	201
83.00	1292	154.00	669	223.00	1410	333.00	212
85.00	861	155.00	1642	224.00	13470	334.00	1401

Data File: \\target_server\gg\chem\gcms-n.i\N120123.b\ND532.D

Date : 01-DEC-2023 08:27

Client ID: DFTPP02 Instrument: gcms-n.i

Sample Info: WG346189-1

Operator: EP

Column phase: Rxi-SVOCms Column diameter: 0.25

Data File: ND532.D
Spectrum: Scans 367-369 (7.251 min), Subtraction Scan 361
Location of Maximum: 198.00
Number of points: 247

m/z	Y	m/z	Y	m/z	Y	m/z	Y
86.00	1022	156.00	2445	225.00	3596	335.00	383
87.00	557	157.00	516	226.00	384	341.00	264
88.00	251	158.00	488	227.00	4654	346.00	457
91.00	837	159.00	412	228.00	625	352.00	693
92.00	1013	160.00	828	229.00	1058	353.00	478
93.00	5759	161.00	1309	230.00	62	354.00	805
94.00	470	162.00	418	231.00	508	355.00	107
95.00	121	163.00	51	234.00	288	365.00	2941
96.00	349	164.00	141	235.00	365	366.00	452
97.00	56	165.00	1041	236.00	224	371.00	215
98.00	4098	166.00	789	237.00	437	372.00	1370
99.00	3850	167.00	5474	239.00	191	373.00	358
100.00	408	168.00	2887	240.00	203	383.00	387
101.00	2410	169.00	523	241.00	289	390.00	178
102.00	119	170.00	71	242.00	695	402.00	582
103.00	705	171.00	270	243.00	795	403.00	802
104.00	1485	172.00	440	244.00	11462	404.00	257
105.00	1265	173.00	618	245.00	1549	421.00	748
106.00	449	174.00	1140	246.00	1659	422.00	734
107.00	18488	175.00	2232	247.00	457	423.00	5344
108.00	2951	176.00	641	249.00	401	424.00	1045
109.00	518	177.00	951	252.00	124	439.00	112
110.00	34520	178.00	306	253.00	370	441.00	14317
111.00	5018	179.00	3948	255.00	54352	442.00	102152
112.00	640	180.00	2946	256.00	7799	443.00	20672
113.00	141	181.00	1384	257.00	645	444.00	1805
116.00	889	182.00	136	258.00	2698		

Data File: \\target_server\gg\chem\gcms-n.i\N120123B.b\ND533.D

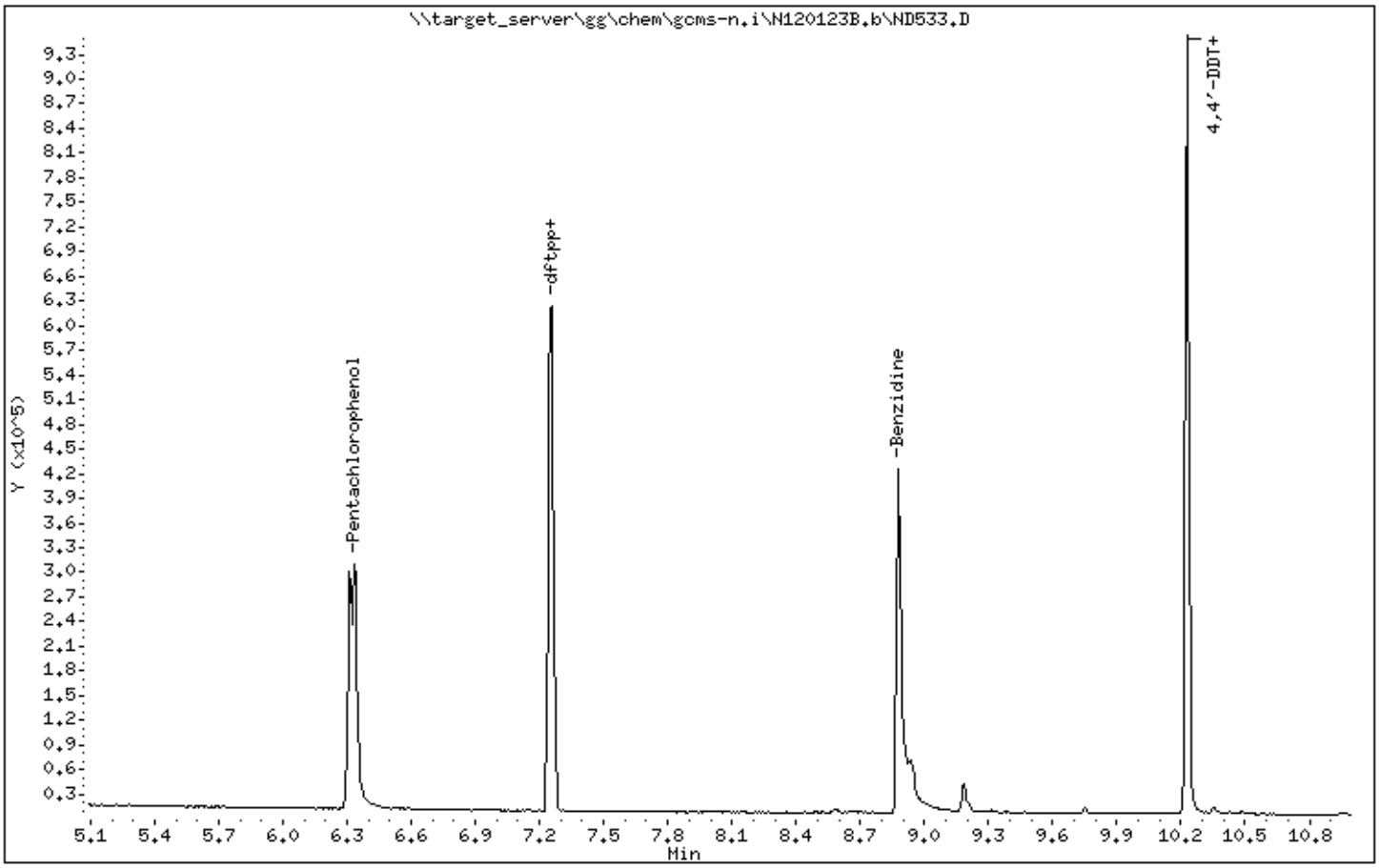
Date : 01-DEC-2023 12:36

Client ID: DFTPP02 Instrument: gcms-n.i

Sample Info: WG346280-1

Operator: EP

Column phase: Rxi-SVOCms Column diameter: 0.25



Data File: \\target_server\gg\chem\gcms-n.i\N120123B.b\ND533.D

Date : 01-DEC-2023 12:36

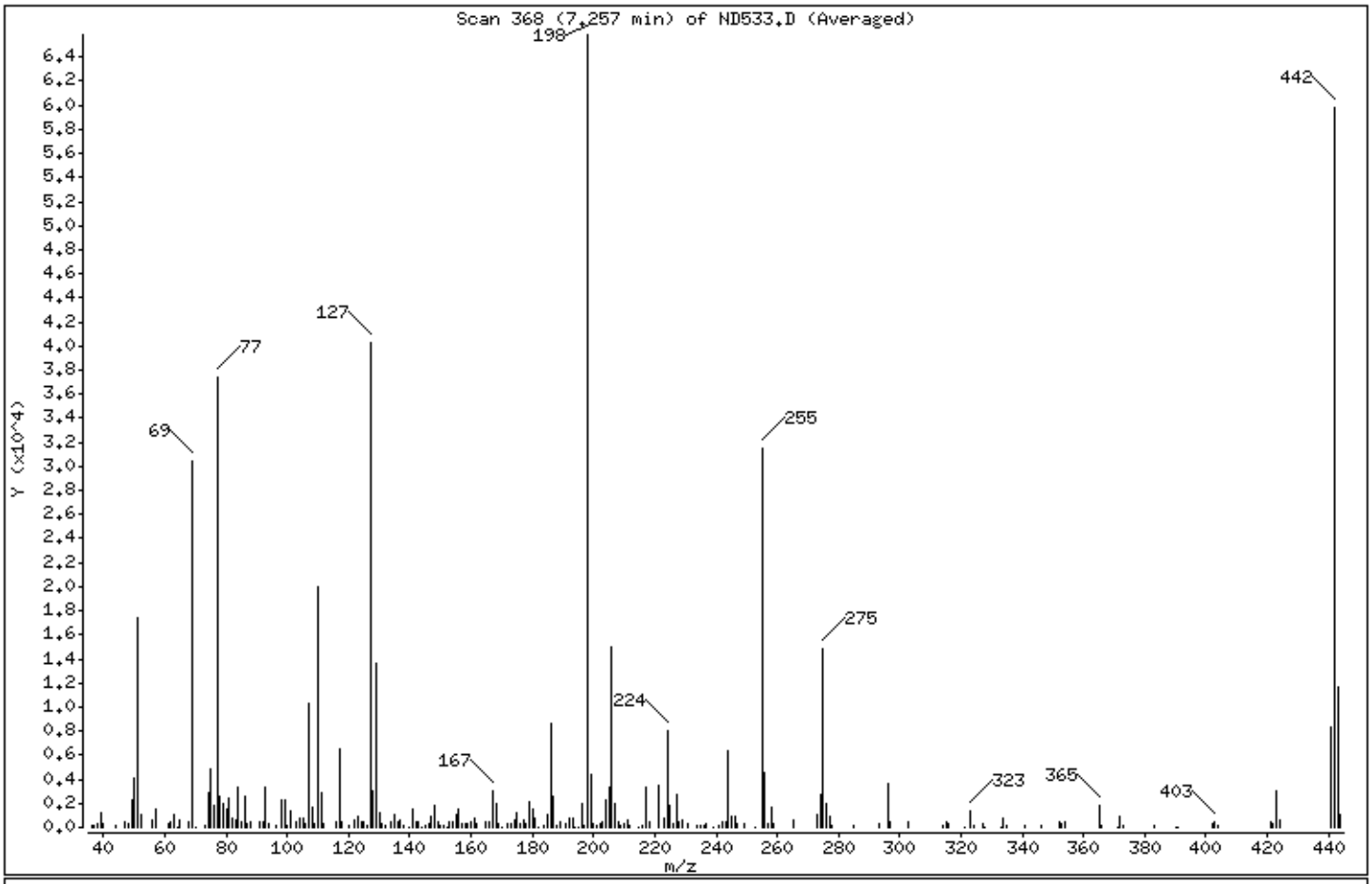
Client ID: DFTPP02 Instrument: gcms-n.i

Sample Info: WG346280-1

Operator: EP

Column phase: Rxi-SVOCms Column diameter: 0.25

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	10.00 - 80.00% of mass 198	27.06
68	Less than 2.00% of mass 69	0.77 (1.62)
69	Greater than 0.10% of mass 198	47.85
70	Less than 2.00% of mass 69	0.00 (0.00)
127	10.00 - 80.00% of mass 198	62.38
197	Less than 2.00% of mass 198	0.00
199	5.00 - 9.00% of mass 198	6.55
275	10.00 - 60.00% of mass 198	21.79
365	1.00 - 100.00% of mass 198	2.62
441	0.01 - 100.00% of mass 443	12.26 (72.01)
442	Greater than 50.00% of mass 442	86.66 (100.00)
443	15.00 - 24.00% of mass 442	17.02 (19.64)

Data File: \\target_server\gg\chem\gcms-n.i\N120123B.b\ND533.D

Date : 01-DEC-2023 12:36

Client ID: DFTPP02 Instrument: gcms-n.i

Sample Info: WG346280-1

Operator: EP

Column phase: Rxi-SVOCms Column diameter: 0.25

Data File: ND533.D
Spectrum: Scans 368-370 (7.257 min), Subtraction Scan 361
Location of Maximum: 198.00
Number of points: 222

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	41	117.00	6504	180.00	1574	249.00	250
37.00	194	118.00	509	181.00	801	253.00	68
38.00	249	120.00	141	182.00	58	255.00	31442
39.00	1261	122.00	627	184.00	183	256.00	4519
40.00	47	123.00	970	185.00	1042	257.00	364
44.00	6	124.00	435	186.00	8624	258.00	1677
48.00	49	125.00	411	187.00	2500	259.00	273
49.00	281	126.00	81	188.00	153	265.00	602
50.00	3996	127.00	40304	189.00	422	273.00	1002
51.00	16677	128.00	3010	191.00	270	274.00	2653
52.00	990	129.00	13627	192.00	698	275.00	14774
56.00	637	130.00	1209	193.00	712	276.00	2043
57.00	1520	131.00	250	194.00	70	277.00	969
61.00	286	132.00	76	195.00	52	278.00	219
62.00	384	134.00	394	196.00	1942	285.00	202
63.00	1039	135.00	1084	197.00	185	293.00	250
64.00	51	136.00	449	198.00	65856	296.00	3610
65.00	560	137.00	639	199.00	4319	297.00	480
68.00	491	138.00	121	200.00	327	303.00	497
69.00	30373	140.00	56	201.00	223	314.00	167
70.00	66	141.00	1524	202.00	253	315.00	397
73.00	167	142.00	493	203.00	380	316.00	239
74.00	2893	143.00	391	204.00	2228	321.00	56
75.00	4878	144.00	61	205.00	3405	323.00	1395
76.00	1814	145.00	103	206.00	14947	324.00	226
77.00	37328	146.00	299	207.00	1986	327.00	282
78.00	2498	147.00	867	208.00	424	328.00	54
79.00	1978	148.00	1823	209.00	123	333.00	51
80.00	1558	149.00	382	210.00	321	334.00	766
81.00	2456	150.00	112	211.00	541	335.00	220
82.00	704	151.00	200	212.00	84	341.00	121
83.00	517	152.00	52	215.00	56	346.00	222
85.00	497	153.00	481	216.00	207	352.00	411
86.00	496	154.00	408	217.00	3334	353.00	318
87.00	323	155.00	1015	218.00	484	354.00	433

Data File: \\target_server\gg\chem\gcms-n.i\N120123B.b\ND533.D

Date : 01-DEC-2023 12:36

Client ID: DFTPP02 Instrument: gcms-n.i

Sample Info: WG346280-1

Operator: EP

Column phase: Rxi-SVOCms Column diameter: 0.25

Data File: ND533.D
Spectrum: Scans 368-370 (7.257 min), Subtraction Scan 361
Location of Maximum: 198.00
Number of points: 222

m/z	Y	m/z	Y	m/z	Y	m/z	Y
88.00	51	156.00	1490	221.00	3487	365.00	1751
91.00	456	157.00	290	223.00	726	366.00	203
92.00	495	158.00	290	224.00	7994	371.00	68
93.00	3272	159.00	255	225.00	1888	372.00	870
94.00	252	160.00	492	226.00	243	373.00	180
96.00	226	161.00	717	227.00	2669	383.00	172
98.00	2329	162.00	228	228.00	428	390.00	61
99.00	2291	165.00	513	229.00	681	391.00	55
100.00	208	166.00	469	231.00	236	402.00	358
101.00	1352	167.00	2987	234.00	209	403.00	416
103.00	411	168.00	1952	235.00	193	404.00	207
104.00	811	169.00	299	236.00	120	421.00	467
105.00	797	170.00	56	237.00	255	422.00	339
106.00	294	172.00	315	239.00	53	423.00	3090
107.00	10288	173.00	372	241.00	83	424.00	542
108.00	1730	174.00	662	242.00	384	441.00	8258
109.00	270	175.00	1220	243.00	509	442.00	59842
110.00	19911	176.00	353	244.00	6343	443.00	11598
111.00	2938	177.00	538	245.00	889	444.00	1037
112.00	352	178.00	233	246.00	927		
116.00	521	179.00	2188	247.00	258		

Data File: \\target_server\gg\chem\gcms-n.i\N120423.b\ND534.D

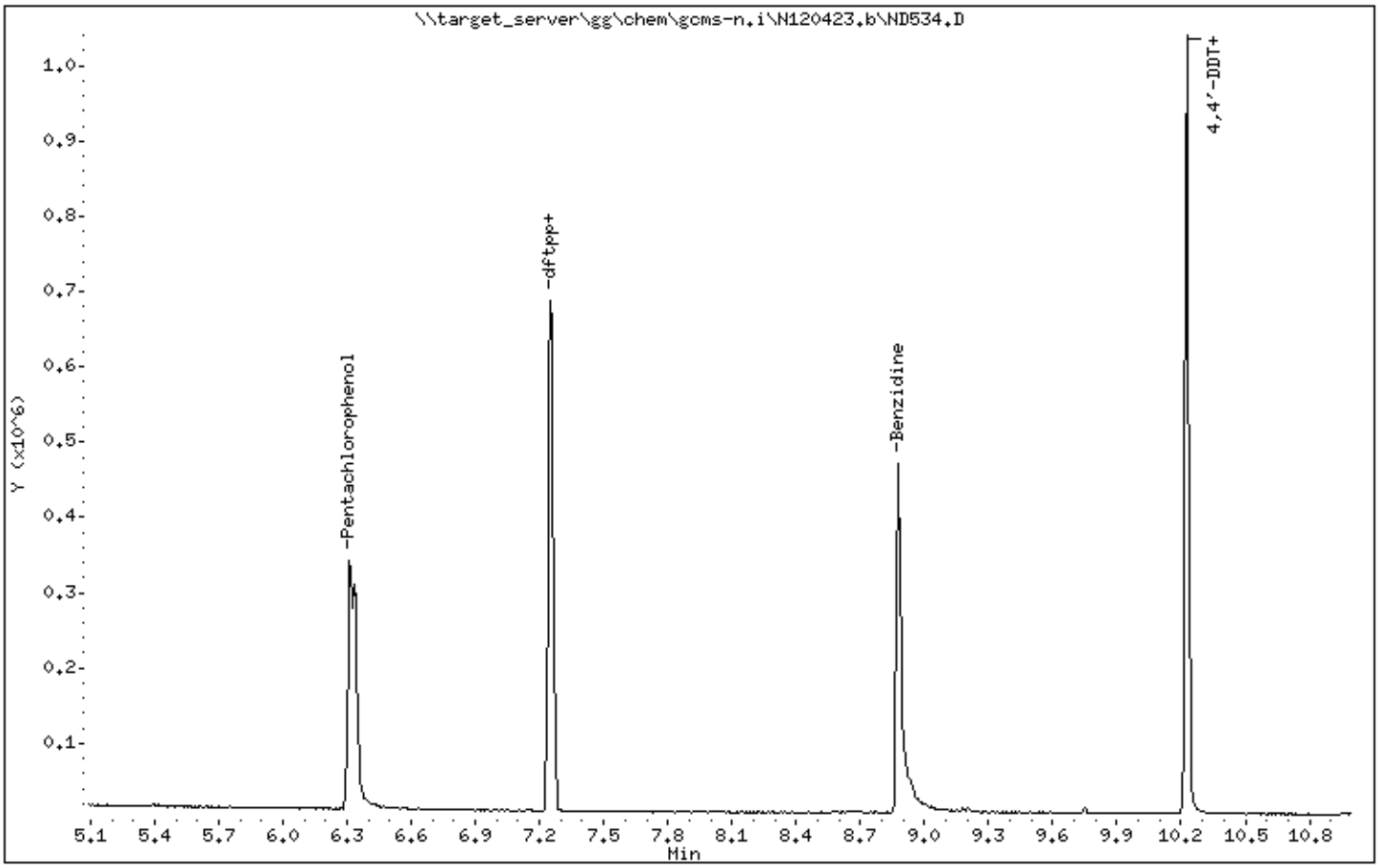
Date : 04-DEC-2023 10:22

Client ID: DFTPP02 Instrument: gcms-n.i

Sample Info: WG346349-1

Operator: EP

Column phase: Rxi-SVOCms Column diameter: 0.25



Data File: \\target_server\gg\chem\gcms-n.i\N120423.b\ND534.D

Date : 04-DEC-2023 10:22

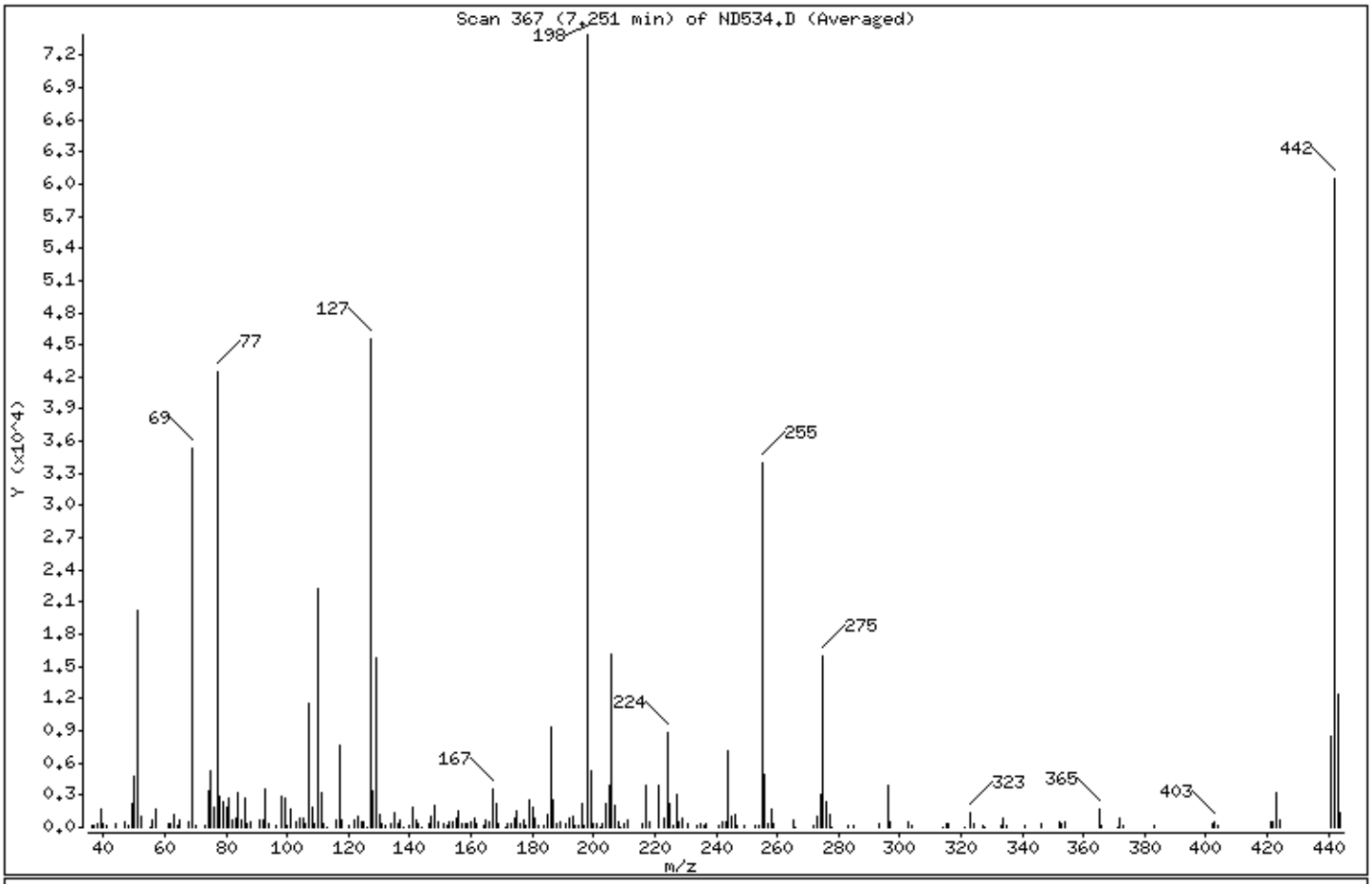
Client ID: DFTPP02 Instrument: gcms-n.i

Sample Info: WG346349-1

Operator: EP

Column phase: Rxi-SVOCms Column diameter: 0.25

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	10.00 - 80.00% of mass 198	26.06
68	Less than 2.00% of mass 69	0.73 (1.53)
69	Greater than 0.10% of mass 198	47.33
70	Less than 2.00% of mass 69	0.22 (0.46)
127	10.00 - 80.00% of mass 198	61.77
197	Less than 2.00% of mass 198	0.00
199	5.00 - 9.00% of mass 198	6.79
275	10.00 - 60.00% of mass 198	22.18
365	1.00 - 100.00% of mass 198	2.40
441	0.01 - 100.00% of mass 443	12.47 (71.23)
442	Greater than 50.00% of mass 442	87.11 (100.00)
443	15.00 - 24.00% of mass 442	17.50 (20.10)

Data File: \\target_server\gg\chem\gcms-n.i\N120423.b\ND534.D

Date : 04-DEC-2023 10:22

Client ID: DFTPP02 Instrument: gcms-n.i

Sample Info: WG346349-1

Operator: EP

Column phase: Rxi-SVOCms Column diameter: 0.25

Data File: ND534.D
Spectrum: Scans 367-369 (7.251 min), Subtraction Scan 361
Location of Maximum: 198.00
Number of points: 222

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	48	116.00	599	180.00	1797	255.00	34045
37.00	117	117.00	7613	181.00	879	256.00	4911
38.00	290	118.00	605	182.00	125	257.00	397
39.00	1720	120.00	105	184.00	215	258.00	1708
40.00	48	122.00	717	185.00	1119	259.00	259
41.00	110	123.00	1049	186.00	9407	265.00	692
44.00	30	124.00	500	187.00	2559	266.00	50
50.00	4678	125.00	478	188.00	268	272.00	114
51.00	19542	126.00	58	189.00	466	273.00	1089
52.00	1062	127.00	45626	191.00	265	274.00	3107
55.00	58	128.00	3317	192.00	805	275.00	16041
56.00	701	129.00	15806	193.00	944	276.00	2306
57.00	1617	130.00	1234	194.00	216	277.00	1193
61.00	356	131.00	273	195.00	129	278.00	68
62.00	324	132.00	177	196.00	2155	283.00	106
63.00	1235	134.00	355	197.00	217	285.00	196
64.00	196	135.00	1276	198.00	73920	293.00	299
65.00	679	136.00	420	199.00	5335	296.00	3902
68.00	503	137.00	669	200.00	374	297.00	490
69.00	35357	138.00	67	201.00	416	303.00	545
70.00	213	140.00	107	202.00	79	304.00	184
73.00	253	141.00	1817	203.00	415	314.00	62
74.00	3378	142.00	597	204.00	2256	315.00	372
75.00	5320	143.00	403	205.00	3918	316.00	258
76.00	1894	144.00	52	206.00	16210	321.00	50
77.00	42554	146.00	285	207.00	2071	323.00	1403
78.00	2812	147.00	947	208.00	471	324.00	311
79.00	2348	148.00	1962	209.00	61	327.00	208
80.00	1864	149.00	465	210.00	296	328.00	56
81.00	2651	151.00	374	211.00	694	333.00	164
82.00	712	152.00	111	216.00	335	334.00	932
83.00	818	153.00	505	217.00	3912	335.00	184
85.00	628	154.00	509	218.00	433	341.00	120
86.00	512	155.00	885	221.00	3967	346.00	336
87.00	361	156.00	1602	223.00	930	352.00	461

Data File: \\target_server\gg\chem\gcms-n.i\N120423.b\ND534.D

Date : 04-DEC-2023 10:22

Client ID: DFTPP02 Instrument: gcms-n.i

Sample Info: WG346349-1

Operator: EP

Column phase: Rxi-SVOCms Column diameter: 0.25

Data File: ND534.D
Spectrum: Scans 367-369 (7.251 min), Subtraction Scan 361
Location of Maximum: 198.00
Number of points: 222

m/z	Y	m/z	Y	m/z	Y	m/z	Y
88.00	185	157.00	290	224.00	8787	353.00	331
91.00	641	158.00	311	225.00	2159	354.00	464
92.00	634	159.00	269	226.00	226	365.00	1782
93.00	3626	160.00	573	227.00	3097	366.00	196
94.00	323	161.00	827	228.00	466	371.00	65
96.00	207	162.00	281	229.00	772	372.00	878
98.00	2807	164.00	126	231.00	272	373.00	174
99.00	2696	165.00	625	234.00	108	383.00	157
100.00	235	166.00	567	235.00	288	402.00	346
101.00	1669	167.00	3640	236.00	200	403.00	434
103.00	477	168.00	2209	237.00	261	404.00	136
104.00	907	169.00	353	241.00	191	421.00	444
105.00	886	171.00	59	242.00	501	422.00	456
106.00	373	172.00	296	243.00	528	423.00	3291
107.00	11605	173.00	378	244.00	7097	424.00	729
108.00	1856	174.00	780	245.00	936	441.00	8571
109.00	330	175.00	1455	246.00	1163	442.00	60576
110.00	22224	176.00	385	247.00	204	443.00	12435
111.00	3170	177.00	618	249.00	208	444.00	1301
112.00	371	178.00	200	253.00	189		
113.00	65	179.00	2616	254.00	141		

Raw QC Data Section

Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

SDG: SQ6112
Lab ID: WG345173-1
Client ID: Method Blank
Matrix: AQ
Lab File ID: N0307.D

Sample Date: N/A
Extract Date: 10-NOV-23
Extracted By: AN/CMW
Extraction Method: SW846 3510C
Lab Prep Batch: WG345173

Report Date: 29-DEC-23
Analysis Date: 01-DEC-23
Analyst: EP
Analysis Method: SW846 8270D SIM
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	0.10	ug/L	1	.2	0.20	0.064	0.10
2-Methylnaphthalene	U	0.10	ug/L	1	.2	0.20	0.077	0.10
Acenaphthylene	U	0.10	ug/L	1	.2	0.20	0.054	0.10
Acenaphthene	U	0.10	ug/L	1	.2	0.20	0.064	0.10
Fluorene	U	0.10	ug/L	1	.2	0.20	0.061	0.10
Phenanthrene	U	0.10	ug/L	1	.2	0.20	0.051	0.10
Anthracene	U	0.10	ug/L	1	.2	0.20	0.044	0.10
Fluoranthene	U	0.10	ug/L	1	.2	0.20	0.073	0.10
Pyrene	U	0.10	ug/L	1	.2	0.20	0.059	0.10
Benzo(a)anthracene	U	0.10	ug/L	1	.2	0.20	0.046	0.10
Chrysene	U	0.10	ug/L	1	.2	0.20	0.036	0.10
Benzo(b)Fluoranthene	U	0.10	ug/L	1	.2	0.20	0.089	0.10
Benzo(k)fluoranthene	U	0.10	ug/L	1	.2	0.20	0.049	0.10
Benzo(a)pyrene	U	0.10	ug/L	1	.2	0.20	0.066	0.10
Indeno(1,2,3-cd)pyrene	U	0.10	ug/L	1	.2	0.20	0.052	0.10
Dibenzo(a,h)anthracene	U	0.10	ug/L	1	.2	0.20	0.070	0.10
Benzo(g,h,i)perylene	U	0.10	ug/L	1	.2	0.20	0.065	0.10
2-Methylnaphthalene-D10	*	93.6	%					
Fluorene-D10		85.1	%					
Pyrene-D10		100.	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029
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Data File: \\target_server\gg\chem\gcms-n.i\N120123B.b\N0307.D
Report Date: 29-Dec-2023 07:37

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-n.i\N120123B.b\N0307.D
Lab Smp Id: WG345173-1 Client Smp ID: WG345173-Blank
Inj Date : 01-DEC-2023 14:24
Operator : EP Inst ID: gcms-n.i
Smp Info : WG345173-1
Misc Info : WG346280,WG345173,WG346189-4,SQ6112-1
Comment :
Method : \\target_server\gg\chem\gcms-n.i\N120123B.b\NSPSIM93.m
Meth Date : 04-Dec-2023 07:52 epelletier Quant Type: ISTD
Cal Date : 01-DEC-2023 11:15 Cal File: N0302.D
Als bottle: 11 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pahplus.sub
Target Version: 4.12
Processing Host: INSPIRON1

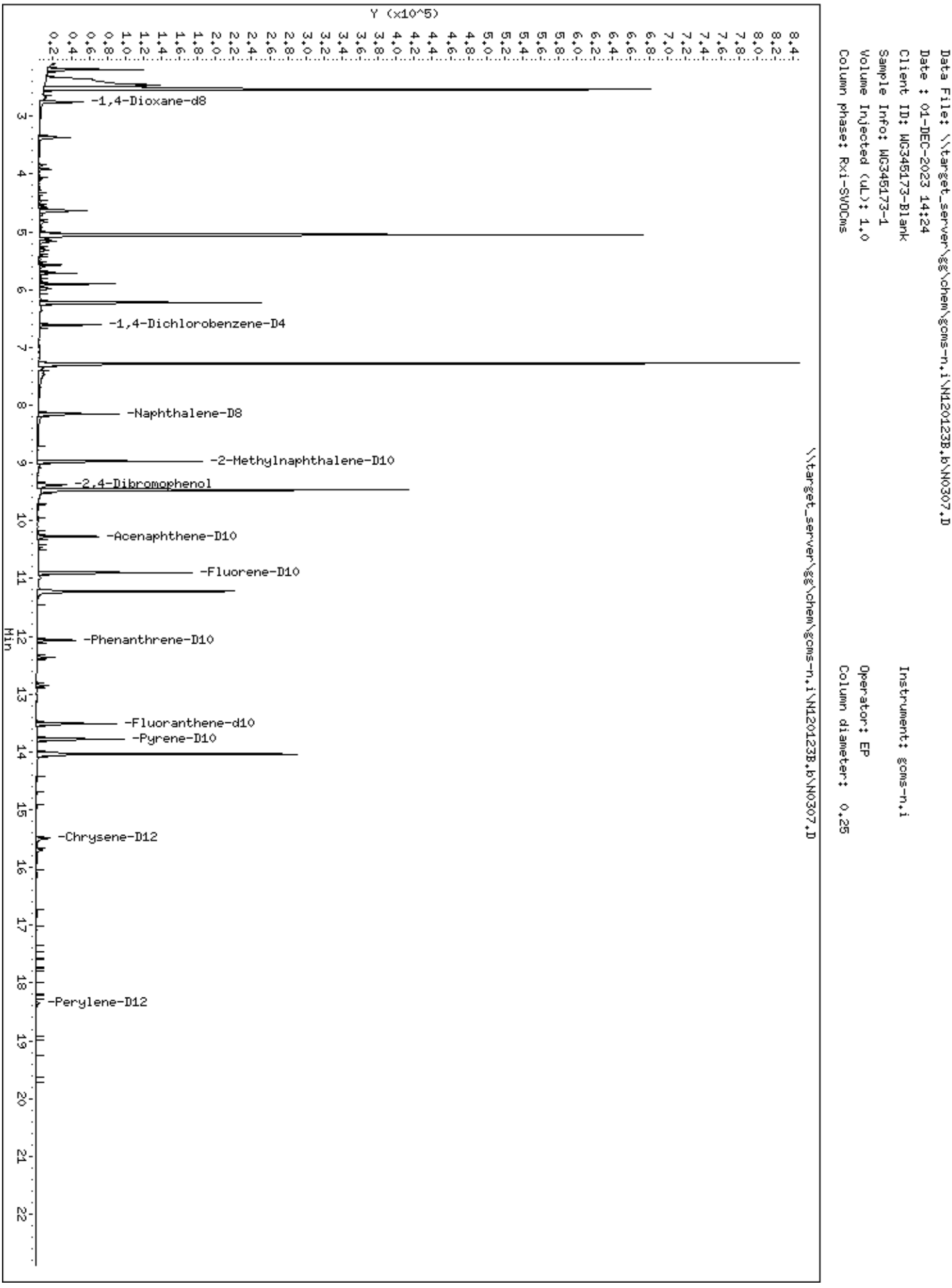
Concentration Formula: Amt * DF * Uf*(Vt/Vo*Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.000	Sample Volume (L)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/L)	REVIEW CODE
$	1 1,4-Dioxane-d8	96	2.752	2.689	(0.268)	40245	2.48251	2.48(QRH)	
*	10 1,4-Dichlorobenzene-D4	152	6.614	6.604	(1.000)	23082	0.80000	(aQ)	
*	27 Naphthalene-D8	136	8.148	8.125	(1.000)	80795	0.80000	(a)	
$	33 2-Methylnaphthalene-D10	152	8.975	8.964	(1.102)	96818	1.87167	1.87(R)	
$	38 2,4-Dibromophenol	252	9.377	9.346	(0.913)	33460	2.43313	2.43	
*	48 Acenaphthene-D10	164	10.275	10.254	(1.000)	40296	0.80000	(a)	
$	56 Fluorene-D10	174	10.897	10.886	(1.061)	87482	1.70171	1.70	
*	66 Phenanthrene-D10	188	12.073	12.062	(1.000)	55499	0.80000	(a)	
$	71 Fluoranthene-d10	212	13.512	13.512	(1.119)	75437	1.86653	1.87	
$	73 Pyrene-D10	212	13.776	13.777	(0.889)	85546	2.00745	2.01	
*	78 Chrysene-D12	240	15.498	15.498	(1.000)	18976	0.80000	(a)	
*	85 Perylene-D12	264	18.345	18.345	(1.000)	12700	0.80000	(a)	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.
H - Operator selected an alternate compound hit.


Data File: \\target_server\gg\chem\gcms-n,i\N120123B,b\N0307.D
Date : 01-DEC-2023 14:24
Client ID: WG345173-Blank
Sample Info: WG345173-1
Volume Injected (uL): 1.0
Column phase: Rxi-5VOCms
Instrument: gcms-n,i
Operator: EP
Column diameter: 0.25
\\target_server\gg\chem\gcms-n,i\N120123B,b\N0307.D
Y (x10^5)
Min
-1,4-Dioxane-d8
-1,4-Dichlorobenzene-D4
-Naphthalene-D8
-2-Methylnaphthalene-D10
-2,4-Dibromophenol
-Acenaphthene-D10
-Fluorene-D10
-Phenanthrene-D10
-Fluoranthene-d10
-Pyrene-D10
-Chrysene-D12
-Perylene-D12

Katahdin
ANALYTICAL SERVICES

LCS Recovery Report

Lab ID: WG345173-2RA
Client ID: LCS
SDG: SQ6112
LCS File ID: N0327.D
Report Date: 29-DEC-23

Extract Date: 10-NOV-23
Extracted By: AN/CMW
Extraction Method: SW846 3510C
Lab Prep Batch: WG345173

Analysis Date: 04-DEC-23
Analyst: EP
Analysis Method: SW846 8270D SIM
Matrix: AQ

Compound	Recovery (%)	Conc Added	Conc Recovered	Conc Units	Limits
Naphthalene	98.0	5.00	4.90	ug/L	43-114
2-Methylnaphthalene	94.8	5.00	4.74	ug/L	39-114
Acenaphthylene	91.8	5.00	4.59	ug/L	35-121
Acenaphthene	94.8	5.00	4.74	ug/L	48-114
Fluorene	97.8	5.00	4.89	ug/L	50-118
Phenanthrene	101.	5.00	5.07	ug/L	53-115
Anthracene	97.8	5.00	4.89	ug/L	53-119
Fluoranthene	111.	5.00	5.54	ug/L	58-120
Pyrene	91.8	5.00	4.59	ug/L	53-121
Benzo(a)anthracene	113.	5.00	5.65	ug/L	59-120
Chrysene	102.	5.00	5.10	ug/L	57-120
Benzo(b)Fluoranthene	112.	5.00	5.62	ug/L	53-126
Benzo(k)fluoranthene	89.2	5.00	4.46	ug/L	54-125
Benzo(a)pyrene	79.2	5.00	3.96	ug/L	53-120
Indeno(1,2,3-cd)pyrene	92.2	5.00	4.61	ug/L	48-130
Dibenzo(a,h)anthracene	93.6	5.00	4.68	ug/L	44-131
Benzo(g,h,i)perylene	78.6	5.00	3.93	ug/L	44-128
2-Methylnaphthalene-D10	* 106.				43-92
Fluorene-D10	94.8				29-101
Pyrene-D10	94.1				53-166

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
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Data File: \\target_server\gg\chem\gcms-n.i\N120423.b\N0327.D
Report Date: 29-Dec-2023 07:37

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-n.i\N120423.b\N0327.D
Lab Smp Id: WG345173-2RA Client Smp ID: WG345173-LCS
Inj Date : 04-DEC-2023 11:09
Operator : EP Inst ID: gcms-n.i
Smp Info : WG345173-2RA
Misc Info : WG346349,WG345173,WG346189-4,SQ6112-2
Comment :
Method : \\target_server\gg\chem\gcms-n.i\N120423.b\NSPSIM93.m
Meth Date : 05-Dec-2023 07:17 epelletier Quant Type: ISTD
Cal Date : 01-DEC-2023 11:15 Cal File: N0302.D
Als bottle: 3 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pahplus.sub
Target Version: 4.12
Processing Host: INSPIRON1

Concentration Formula: Amt * DF * Uf*(Vt/Vo*Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.000	Sample Volume (L)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

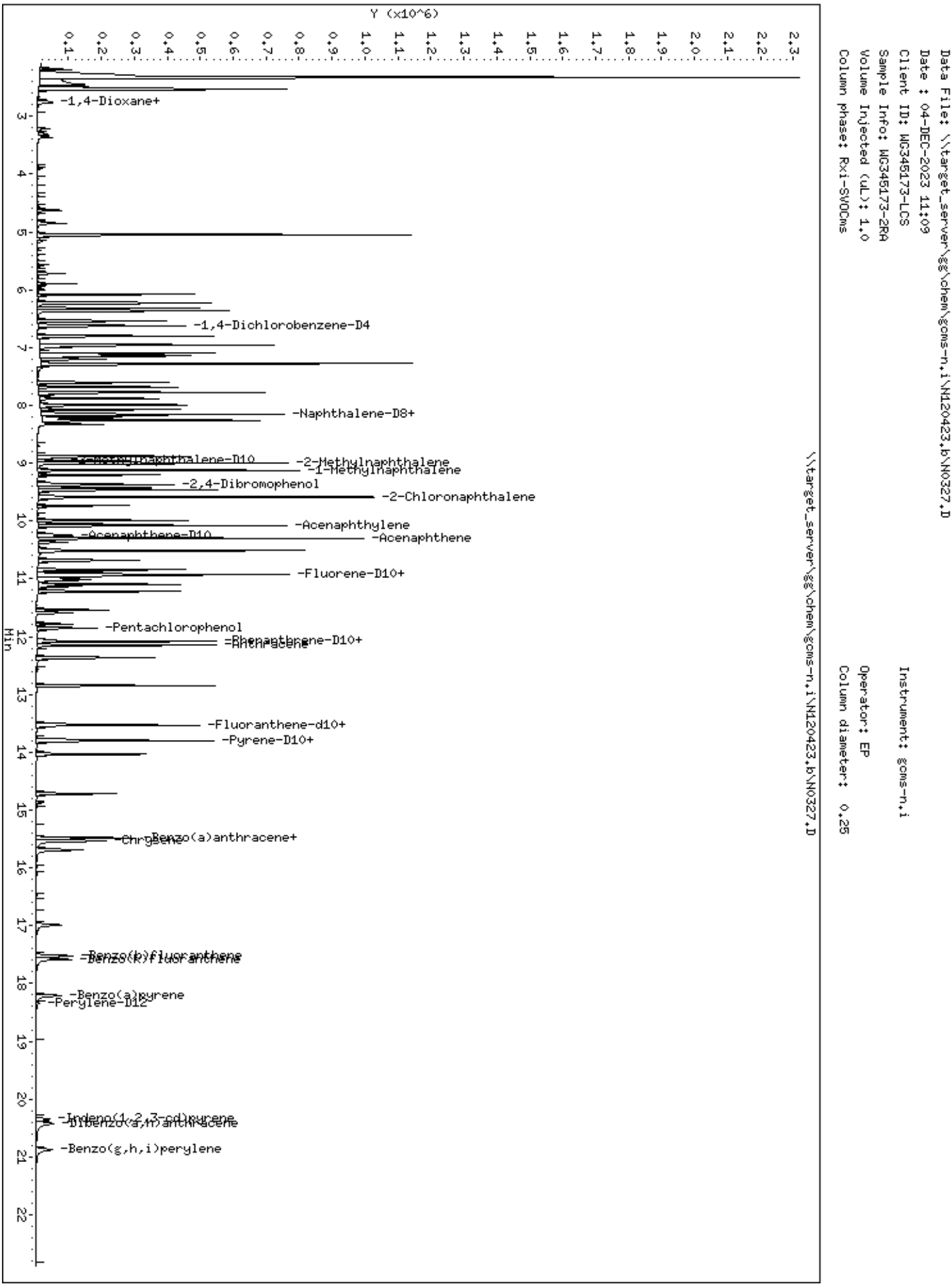
			QUANT SIG					CONCENTRATIONS		
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/ml)	FINAL (ug/L)	REVIEW CODE
$	1	1,4-Dioxane-d8	96	2.752	2.689	(0.268)	43339	2.48199	2.48(QRH)	
	2	1,4-Dioxane	88	2.773	2.731	(0.419)	33331	1.90551	1.90(Q)	
*	10	1,4-Dichlorobenzene-D4	152	6.614	6.604	(1.000)	24749	0.80000	(aQ)	
*	27	Naphthalene-D8	136	8.136	8.125	(1.000)	92712	0.80000	(a)	
	28	Naphthalene	128	8.159	8.148	(1.003)	595356	4.89950	4.90	
$	33	2-Methylnaphthalene-D10	152	8.964	8.964	(1.102)	125624	2.11638	2.12(R)	
	34	2-Methylnaphthalene	142	9.007	9.007	(1.107)	373443	4.74453	4.74	
	35	1-Methylnaphthalene	142	9.123	9.123	(1.121)	356435	4.87048	4.87	
$	38	2,4-Dibromophenol	252	9.356	9.346	(0.912)	53895	3.63856	3.64	
	42	2-Chloronaphthalene	164	9.589	9.589	(0.935)	106816	4.69286	4.69	
	46	Acenaphthylene	152	10.082	10.082	(0.983)	485597	4.58647	4.59	
*	48	Acenaphthene-D10	164	10.254	10.254	(1.000)	43403	0.80000	(a)	
	49	Acenaphthene	153	10.297	10.297	(1.004)	314056	4.73505	4.74	
$	56	Fluorene-D10	174	10.886	10.886	(1.062)	104995	1.89617	1.90	
	57	Fluorene	166	10.929	10.929	(1.066)	339168	4.88662	4.89	
	65	Pentachlorophenol	266	11.849	11.849	(0.982)	78737	10.7762	10.8	
*	66	Phenanthrene-D10	188	12.062	12.062	(1.000)	56949	0.80000	(a)	
	67	Phenanthrene	178	12.084	12.084	(1.002)	403652	5.06943	5.07	
	68	Anthracene	178	12.148	12.148	(1.007)	384795	4.89248	4.89	
$	71	Fluoranthene-d10	212	13.512	13.512	(1.120)	92431	2.22878	2.23	

Data File: \\target_server\gg\chem\gcms-n.i\N120423.b\N0327.D
Report Date: 29-Dec-2023 07:37

		QUANT SIG					CONCENTRATIONS ON-COLUMN	FINAL	
Compounds		MASS	RT	EXP RT	REL RT	RESPONSE	(ug/ml)	(ug/L)	REVIEW CODE
	72 Fluoranthene	202	13.532	13.532	(1.122)	336897	5.54442	5.54	
$	73 Pyrene-D10	212	13.776	13.777	(0.890)	103312	1.88258	1.88	
	74 Pyrene	202	13.797	13.797	(0.891)	334459	4.59281	4.59	
	76 Benzo(a)anthracene	228	15.478	15.478	(0.999)	205582	5.65335	5.65	
*	78 Chrysene-D12	240	15.488	15.498	(1.000)	24437	0.80000	(a)	
	79 Chrysene	228	15.539	15.539	(1.003)	257583	5.09586	5.10	
	82 Benzo(b)fluoranthene	252	17.521	17.531	(0.955)	141744	5.62309	5.62	
	83 Benzo(k)fluoranthene	252	17.583	17.583	(0.958)	201323	4.45801	4.46(H)	
	84 Benzo(a)pyrene	252	18.211	18.221	(0.993)	126793	3.95687	3.96	
*	85 Perylene-D12	264	18.345	18.345	(1.000)	16448	0.80000	(a)	
	86 Indeno(1,2,3-cd)pyrene	276	20.343	20.353	(1.109)	66183	4.61230	4.61	
	87 Dibenzo(a,h)anthracene	278	20.425	20.435	(1.113)	83885	4.67770	4.68	
	88 Benzo(g,h,i)perylene	276	20.878	20.889	(1.138)	106995	3.92701	3.93	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.
H - Operator selected an alternate compound hit.


Data File: \\target_server\gg\chem\gcms-n,i\N120423,b\N0327.D
Date : 04-DEC-2023 11:09
Client ID: WG345173-LCS
Sample Info: WG345173-2RA
Volume Injected (uL): 1.0
Column phase: Rxi-5ViMS
Instrument: gcms-n,i
Operator: EP
Column diameter: 0.25
\\target_server\gg\chem\gcms-n,i\N120423,b\N0327.D
Y (x10^6)
Min
-1,4-Dioxane+
-1,4-Dichlorobenzene-D4
-Naphthalene-D8+
-2-Methylnaphthalene-D10
-2-Methylnaphthalene
-1-Methylnaphthalene
-2,4-Dibromophenol
-2-Chloronaphthalene
-Acenaphthylene
-Acenaphthene-D10
-Acenaphthene
-Fluorene-D10+
-Pentachlorophenol
-Phenanthrene-D10+
-Anthracene
-Fluoranthene-d10+
-Pyrene-D10+
-Chrysene-D12
-Benzo(a)anthracene+
-Benzo(b)fluoranthene
-Benzo(k)fluoranthene
-Benzo(a)pyrene
-Perylene-D12
-Indeno(1,2,3-cd)pyrene
-Dibenzo(a,h)anthracene
-Benzo(g,h,i)perylene

Logbooks and Supporting Documents

SEP
S/S

KATAHDIN ANALYTICAL SERVICES, LLC.
ORGANIC EXTRACTIONS LOG - AQUEOUS SEMI-VOLATILES

Extraction Method: (check one)	SW846 3510 (SEP) ✓	SW846 3520 (CLLE)	
Analytical Method: (check one)	SW846 8270 ✓	SW846 8270 SIM ✓	Other:
Surrogate ID: SV3183	Surrogate ID: —	Spike ID: SV3182 (SIM)	Spike ID: SV3178 (SVOH)
Methylene Chloride Lot #: EH304-US	pH Paper Lot # 6306004	KI Starch Paper ID: 03/06/2023	If positive, note in comments and contact the PM, the client may need to resample.
pH (1st Extraction) <2	H_2SO_4 Lot # RE1036	pH (2nd Extraction) >11	NaOH Lot # UN1824
crew upper $NaSO_4$ Lot # ~~CX01~~ RE1078	Filter Paper Lot #: CX0206	Boiling Stones ID: —	Vial Lot #: ~~CX0206~~ AN 11/10/23 CX0164
Nitrogen Bath Temperature: 40°			Client ID vs KAS ID Verified: ✓
Prep Start Time: ~~[illegible]~~ 9:10 AN 11/10/23	Prep End Time: 12:40	CLLE Start Time: —	CLLE End Date & Time: —

Date Extracted	Ext. Init.	Sample ID	Initial Vol. mL	Surr. Vol.	Spike Vol.	Fraction SV	Fraction SIM	Final Vol. mL	Date Conc.	Tray Location SV978	Initials	Comments R626776 R626778
11/10/23	AN	WG345172-1	1000	1.0mL	N/A	✓	✓	1mL	11-10-23	D8	NG	MB
↓	↓	72-2	↓	↓	1.0mL	✓		↓	↓	D9	↓	LCS
↓	↓	↓-3	↓	↓	↓	✓		↓	↓	D10	↓	LCSD
↓	↓	73-2	↓	↓	↓		✓	↓	↓	E1	↓	LCS
↓	↓	↓-3	1060	↓	↓		✓	↓	↓	E2	↓	MS
↓	↓	↓-4	1060	↓	↓		✓	↓	↓	E3	↓	MSD

ASC 11-10-23

EX-007 – Revision 7– 09/22/2020

QAEX501 - 000803 0000146

Date Extracted	Ext. Init.	Sample ID	Initial Vol. mL	Surr. Vol.	Spike Vol.	Fraction SV	Fraction SIM	Final Vol. mL	Date Conc.	Tray Location SV978	Initials	Comments
11/10/23	AN	SQ5629-1	1020	1.0	NR	✓		1mL	11-10-23	E4	NG	
↓	↓	SQ5684-1	1060	↓	↓	✓		↓	↓	E5	↓	
↓	↓	-2	1040	↓	↓	✓		↓	↓	E6	↓	
↓	↓	-3	1070	↓	↓	✓		↓	↓	E7	↓	
↓	↓	-4	1050	↓	↓	✓		↓	↓	E8	↓	
↓	↓	-5	1070	↓	↓	✓		↓	↓	E9	↓	
↓	↓	SQ6136-22	1050	↓	↓	✓		↓	↓	E10	↓	ASC 11/10/23
↓	↓	SQ6108-5	1050	↓	↓		✓	↓	↓	SV979 A1	↓	New tray SV979
↓	↓	-6	1060	↓	↓		✓	↓	↓	A2	↓	
↓	↓	-12	1050	↓	↓		✓	↓	↓	A3	↓	
↓	↓	SQ6109-1	1010	↓	↓		✓	↓	↓	A4	↓	
↓	↓	-2	1030	↓	↓		✓	↓	↓	A5	↓	
↓	↓	-3	1020	↓	↓		✓	↓	↓	A6	↓	
↓	↓	-4	AN 11/10/23 ~~[illegible]~~ 1010	↓	↓		✓	↓	↓	A7	↓	
↓	↓	SQ6112-1	1070	↓	↓		✓	↓	↓	A8	↓	
↓	↓	-2	1070	↓	↓		✓	↓	↓	A9	↓	

ASC 11-10-23

Reviewed By_____ Date_____

EX-007 – Revision 7– 09/22/2020

QAEX501 - 000803

0000147

KATAHDIN ANALYTICAL SERVICES

GC/MS SVOA INJ LOG INSTRUMENT: 5975B - N

DATE OF DFTPP INJECTION: 07Dec23

WORKGROUP	SAMPLE	DATAFILE	DF	VIAL #	METHOD	UL INJ	CHEMIST	COMMENTS
W6346189-1	~~DSSTD 2.0~~ 50ng DFTPP	ND532	1	1	DFTPPSIM	2.0	EP	ok
-4	SSTD 20 N201	N0297		2	NSPSIM93			✓
-3	05	98		3				✓
-2	0.2	99		4				✓
-5	70	N0300		5				✓
-6	10	01		6				✓
-7	15	02		7				✓
-8	IND	03		8				ok
								EP 04Dec23

STANDARD	CODE	MeCl2 Lot #
DFTPP	54038	PH498-115
CAL. STD.	54039 54040	
ICV. STD.	54036	
IS MIX	54033	

(R)EP 04 Dec23

REVIEWED AND APPROVED BY: _____

DATE: _____

KATAHDIN ANALYTICAL SERVICES
GC/MS SVOA INJ LOG INSTRUMENT: 5975B - N

DATE OF DFTPP INJECTION: 01Dec23B

WORKGROUP	SAMPLE	DATAFILE	DF	VIAL #	METHOD	UL INJ	CHEMIST	COMMENTS
WG346280-1	50 ng DFTPP	ND533	1	1	DFTPPSIM	2.0	EP	ok
⊥ -2	SSTD 2.0 N1201B	NO304		2	NSPSIM93			ok
	WG345015-1RA	05		9				ok
	⊥ -2RA	06		10				ok
	WG345173-1	07		11				Surr 2↑ ok
	⊥ -2	08		12				IS 5,6↑ Surr 2↑ RR
	SQ6064-7	09		13				✓
	-8	10		14				✓
	⊥ -10	11		15				✓
	SQ6108-5	12		16				RRe 1:50
	WG345173-3	13		17				8↑ 9↓ ok
	⊥ -4	14		18				9↑ 7↓ ok
	SQ6108-6	15		19				RRe 1:50
	⊥ -12	16		20				✓
	SQ6109-1	17		21				✓
	-2	18		22				✓
	-3	19		23				✓
	⊥ -4	20		24				✓
	SQ6112-1	21		25				Surr 5,6↓
	⊥ -2	22		26				IS 5,6↓ Surr 2,5,6↓ RR
WG346280-3	SSTD 2.0 N1201B	23		2				IS 5,6↓ using all
⊥ -4	⊥	24		⊥				IS 5,6↓
⊥ -5		25						IS 5,6↓
								EP 04Dec23

STANDARD	CODE	MeCl2 Lot #
DFTPP	S4038	PH486-US
CAL. STD.	S4039 S4040	
ICV. STD.	—	
IS MIX	S4033	

EP 04Dec23

REVIEWED AND APPROVED BY:

DATE:

SVOA-005 – Revision 3 – 07/25/2023

QAMS794 - 000820

KATAHDIN ANALYTICAL SERVICES
GC/MS SVOA INJ LOG INSTRUMENT: 5975B - N

DATE OF DFTPP INJECTION: 04Dec23

WORKGROUP	SAMPLE	DATAFILE	DF	VIAL #	METHOD	UL INJ	CHEMIST	COMMENTS
WG346349-1	50ng DFTPP	ND634	1	1	DFTPPSIM	2.0	EP	OK
1 -2	SSTD 2.0 N1204	NO326		2	NSPSIM93			OK
	WG345173-2RA	27		3				surr 2T OK
	WG345378-1	28		4				OK
	-2	29		5				2x INR
	-3	30		6				3T INR 2x surr 2T
⊕	~~SQ6108~~ SQ6108-5DL	31	50	7				✓ 10/500
	SQ6108-6DL	32	1	8				ISOL ✓ 10/500
	SQ6164-1	33	1	9				✓
	-2	34		10				✓
	-3	35		11				✓
	-4	36		12				✓
	-5	37		13				✓
	-7	38		14				surr 2,4-6L
	-8	39		15				surr 2,5-6L
	-9	40		16				surr 2,5L
	-11	41		17				surr 2,5,6L
	-12	42		18				✓
	SQ6112-2RA	43		19				surr 2,5,6L
WG346349-3	SSTD 2.0 N1204	44		2				OK
-4	" "	45		1				not using
-5	" "	46		"				"
								EP 05Dec23

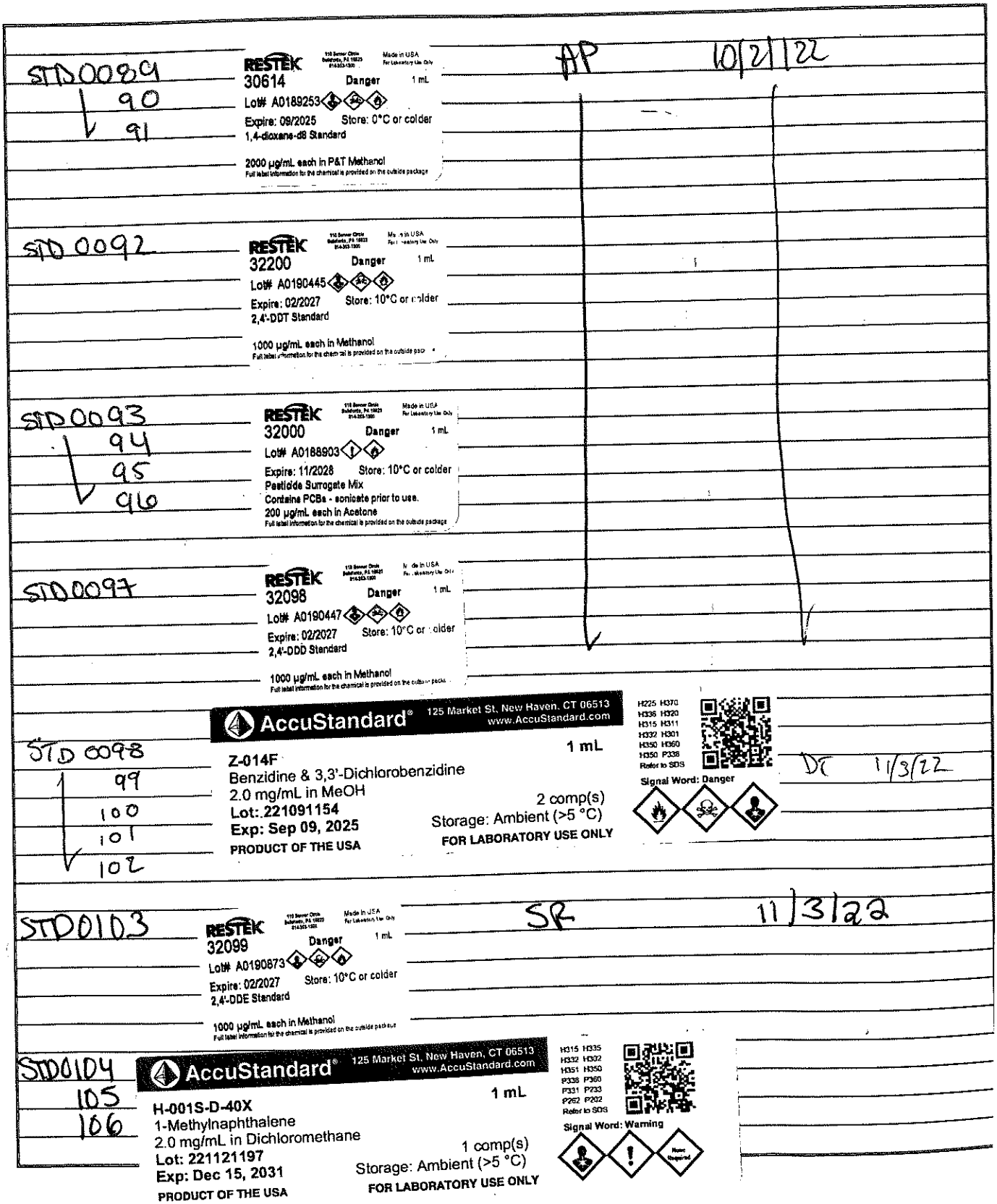
STANDARD	CODE	MeCl2 Lot #
DFTPP	54038	PH486-45
CAL. STD.	54039 54040	
ICV. STD.	—	
IS MIX	54033	

REVIEWED AND APPROVED BY: _____
DATE: _____

KATAHDIN ANALYTICAL SERVICES

STOCK STANDARDS RECEIVED

Extractions Laboratory



KATAHDIN ANALYTICAL SERVICES

STOCK STANDARDS RECEIVED

Extractions Laboratory

STD0107
108
109
110
111

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com

APP-9-191-10X 1 mL
1,2,4,5-Tetrachlorobenzene
1000 µg/mL in MeOH
Lot: 219041253 1 comp(s)
Exp: Apr 09, 2029 Storage: Ambient (>5 °C)
PRODUCT OF THE USA FOR LABORATORY USE ONLY

H336 H225 H370 H320 H315 H311 H332 H301 H360 P308 P360 P331 Refer to SDS
Signal Word: Danger

SR 11/3/22

STD0112
113
114
115
116

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com

CLP-HC-A-R 1 mL
Acid Composite Mixture
2.0 mg/mL in CH2Cl2
Lot: 222041590 19 comp(s)
Exp: May 03, 2025 Storage: Ambient (>5 °C)
PRODUCT OF THE USA FOR LABORATORY USE ONLY

H315 H335 H332 H302 H350 H350 P308 P360 P331 P233 P262 P202 Refer to SDS
Signal Word: Danger

SR 11/3/22

STD0117
118
119

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com

Z-014E-R3 1 mL
Composite Mix #3
2.0 mg/mL in CH2Cl2
Lot: 221111178 10 comp(s)
Exp: Dec 10, 2023 Storage: Freeze (<-10 °C)/Sonicate
PRODUCT OF THE USA FOR LABORATORY USE ONLY

H315 H335 H332 H302 H351 H350 P308 P360 P331 P233 P262 P202 Refer to SDS
Signal Word: Warning

SR 11/3/22

STD0120
121
122
123
124

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com

CLP-HC-BN-R 1 mL
Base/Neutral Composite Mixture
2.0 mg/mL in Benzene:Dichloromethane:AcCN (2:2:1)
Lot: 222011220 44 comp(s)
Exp: Feb 18, 2024 Storage: Freeze (<-10 °C)/Sonicate
PRODUCT OF THE USA FOR LABORATORY USE ONLY

H225 H315 H335 H332 H302 H350 H360 H350 P308 P360 P331 P233 Refer to SDS
Signal Word: Danger

SR 11/3/22

STD0125
126
127
128
129

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com

S-7226 1 ml
Custom Standard
5000 µg/mL in CH2Cl2
Lot: 222111144 5 comp(s)
Exp: Dec 14, 2024 Storage: Freeze (<-10 °C)
PRODUCT OF THE USA FOR LABORATORY USE ONLY

H315 H335 H337 H302 H351 H360 H350 P308 P360 P331 P233 P262 Refer to SDS
Signal Word: Warning

SR 11/21/22

STD0130
131
132
133
134

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com

P-233S-A-10X 1 mL
bis(2-Ethylhexyl)adipate
1000 µg/mL in Acetone
Lot: 219071483-01 1 comp(s)
Exp: Nov 21, 2024 Storage: Refrig (0-5 °C)
PRODUCT OF THE USA FOR LABORATORY USE ONLY

H225 H336 H335 H319 H315 P308 P360 P331 P233 P260 P262 P202 Refer to SDS
Signal Word: Danger

SR 11/21/22

~~STD0135~~
136

CMW 1/26/23

KATAHDIN ANALYTICAL SERVICES

STOCK STANDARDS RECEIVED

Extractions Laboratory

STD 0157

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com

H315 H335 H332 H302 H351 H350 P338 P360 P331 P233 P262 P202 Refer to SDS

Signal Word: Warning

H-001S-D-40X 1 mL
1-Methylnaphthalene
2.0 mg/mL in Dichloromethane
Lot: 221121197 1 comp(s)
Exp: Dec 15, 2031 Storage: Ambient (>5 °C)
PRODUCT OF THE USA **FOR LABORATORY USE ONLY**

11/30 YAP

STD 0158
9
60

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com

H315 H335 H332 H302 H351 H350 P338 P360 P331 P233 P262 P202 Refer to SDS

Signal Word: Warning

Z-014E-R3 1 mL
Composite Mix #3
2.0 mg/mL in CH2Cl2
Lot: 221111178 10 comp(s)
Exp: Dec 10, 2023 Storage: Freeze (<-10 °C)/Sonicate
PRODUCT OF THE USA **FOR LABORATORY USE ONLY**

STD 0161
62
3
4
5

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com

H315 H335 H332 H302 H351 H360 H350 P338 P360 P331 P233 P262 Refer to SDS

Signal Word: Warning

S-7226 1 ml
Custom Standard
5000 µg/mL in CH2Cl2
Lot: 222111144 5 comp(s)
Exp: Dec 14, 2024 Storage: Freeze (<-10 °C)
PRODUCT OF THE USA **FOR LABORATORY USE ONLY**

STD 0169
7
8
9
70

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com

H336 H225 H370 H320 H315 H311 H332 H301 H360 P338 P360 P331 Refer to SDS

Signal Word: Danger

APP-9-191-10X 1 mL
1,2,4,5-Tetrachlorobenzene
1000 µg/mL in MeOH
Lot: 219041253 1 comp(s)
Exp: Apr 09, 2029 Storage: Ambient (>5 °C)
PRODUCT OF THE USA **FOR LABORATORY USE ONLY**

STD 0171
2
3
4
5

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com

H315 H335 H332 H302 H350 H350 P338 P360 P331 P233 P262 P202 Refer to SDS

Signal Word: Danger

CLP-HC-A-R 1 mL
Acid Composite Mixture
2.0 mg/mL in CH2Cl2
Lot: 222041590 19 comp(s)
Exp: May 03, 2025 Storage: Ambient (>5 °C)
PRODUCT OF THE USA **FOR LABORATORY USE ONLY**

KATAHDIN ANALYTICAL SERVICES

STOCK STANDARDS RECEIVED

Extractions Laboratory

3/27/23 CMW

STD 0283
4
5
6
7

AccuStandard® 125 Market St. New Haven, CT 06513 www.AccuStandard.com

Z-014F 1 mL
Benzidine & 3,3'-Dichlorobenzidine
2.0 mg/mL in MeOH
Lot: 223021429
Exp: Feb 22, 2027
2 comp(s)
Storage: Ambient (>5 °C)
PRODUCT OF THE USA
FOR LABORATORY USE ONLY

H225 H370 H336 H320 H315 H311 H332 H301 H350 H360 H350 P336 Refer to SDS
Signal Word: Danger



STD 0288
89
90
1
2

AccuStandard® 125 Market St. New Haven, CT 06513 www.AccuStandard.com

CLP-HC-A-R 1 mL
Acid Composite Mixture
2.0 mg/mL in CH2Cl2
Lot: 222041590
Exp: May 03, 2025
19 comp(s)
Storage: Ambient (>5 °C)
PRODUCT OF THE USA
FOR LABORATORY USE ONLY

H315 H335 H332 H302 H350 H350 P338 P360 P331 P233 P262 P202 Refer to SDS
Signal Word: Danger



STD 0293
4
5
6
7

AccuStandard® 125 Market St. New Haven, CT 06513 www.AccuStandard.com

H-001S-D-40X 1 mL
1-Methylnaphthalene
2.0 mg/mL in Dichloromethane
Lot: 221121197
Exp: Dec 15, 2031
1 comp(s)
Storage: Ambient (>5 °C)
PRODUCT OF THE USA
FOR LABORATORY USE ONLY

H315 H335 H332 H302 H351 H350 P338 P360 P331 P233 P262 P202 Refer to SDS
Signal Word: Warning



STD 0298
9
300
01
02

AccuStandard® 125 Market St. New Haven, CT 06513 www.AccuStandard.com

P-233S-10X 1 mL
bis(2-Ethylhexyl)adipate STD 0
1000 µg/mL in MeOH
Lot: 222011504
Exp: Jan 25, 2032
1 comp(s)
Storage: Ambient (>5 °C)
PRODUCT OF THE USA
FOR LABORATORY USE ONLY

H336 H225 H370 H320 H315 H311 H332 H301 H360 P338 P360 P331 Refer to SDS
Signal Word: Danger



STD 0303
4
5
6
7

AccuStandard® 125 Market St. New Haven, CT 06513 www.AccuStandard.com

APP-9-191-10X 1 mL
1,2,4,5-Tetrachlorobenzene
1000 µg/mL in MeOH
Lot: 219041253
Exp: Apr 09, 2029
1 comp(s)
Storage: Ambient (>5 °C)
PRODUCT OF THE USA
FOR LABORATORY USE ONLY

H336 H225 H370 H320 H315 H311 H332 H301 H360 P338 P360 P331 Refer to SDS
Signal Word: Danger



STD 0308
9
10
11
12

AccuStandard® 125 Market St. New Haven, CT 06513 www.AccuStandard.com

APP-9-096-20X 1 mL
p-Dioxane Standard
2.0 mg/mL in MeOH
Lot: 222121106
Exp: Dec 20, 2032
1 comp(s)
Storage: Ambient (>5 °C)
PRODUCT OF THE USA
FOR LABORATORY USE ONLY

H225 H336 H370 H320 H315 H311 H332 H301 H351 H360 H350 P338 Refer to SDS
Signal Word: Danger



KATAHDIN ANALYTICAL SERVICES

STOCK STANDARDS RECEIVED

Extractions Laboratory

STD0333
334
335
336
337

AccuStandard® 125 Market St. New Haven, CT 06513 www.AccuStandard.com

M-8150B-SS-10X 1 mL
2,4-Dichlorophenylacetic acid
1000 µg/mL in Acetone
Lot: 221051049-01
Exp: Jun 17, 2025
PRODUCT OF THE USA

1 comp(s)
Storage: Ambient (>5 °C)
FOR LABORATORY USE ONLY

H225 H336 H335 H315 P338 P360 P233 P260 P262 P202 P264 P284
Refer to SDS
Signal Word: Danger

SR 5/4/23

STD0338 Silicic Acid ~80 Mesh SR 5/9/23
0339 3016363-25G

STD0340
341
342
343

31087 RESTEK
Acid Surrogate Mix (A89 SOW)
Lot# A0197037
Expire: 04/2031 Store: 10°C or colder
10000 µg/mL each in Methanol
Danger
Vial Label / Peel Here

SR 5/9/23

STD0344
345

RESTEK Made in USA
31889 Warning 5 mL
Lot# A0191955
Expire: 10/2028 Store: 10°C or colder
Revised B/N Surrogate Mix
Sonicate prior to use.
5000 µg/mL each in Methylene Chloride
Full label information for the chemical is provided on the outside package

SR 5/9/23

STD0346
347
348
349

32000 RESTEK
Pesticide Surrogate Mix
Lot# A0197094
Expire: 07/2029 Store: 10°C or colder
200 µg/mL each in Acetone
Contains PCBs - sonicate prior to use
Danger
Vial Label / Peel Here

SR 5/9/23

STD0350
351
352
353

31459 RESTEK
MA EPH Aliphatic Hydrocarbon Standard
Lot# A0195674
Expire: 04/2030 Store: 25°C nominal
1000 µg/mL each in Hexane
Danger
Vial Label / Peel Here

SR 5/9/23

STD 0354
355
356
357
358

1,2 Dibromoethane

KATAHDIN ANALYTICAL SERVICES

STOCK STANDARDS RECEIVED

Extractions Laboratory

STD 0359
34660
34761

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com

M-8240C-R6 1 mL
Appendix IX Volatiles Mix
Varied conc. in MeOH
Lot: 222061040
Exp: Jun 06, 2025 11 comp(s)
Storage: Refrig (0-5 °C)
PRODUCT OF THE USA FOR LABORATORY USE ONLY

H225 H370 H336 H320 H315 H311 H332 H301 H351 H360 H350 P336
Refer to SDS
Signal Word: Danger

STD 0362
63

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com

M-625-TS-20X 1 mL
GC/MS Tuning Std for EPA Method 624/625
1000 µg/mL in CH2Cl2
Lot: 222031198-01
Exp: May 28, 2025 4 comp(s)
Storage: Ambient (>5 °C)
PRODUCT OF THE USA FOR LABORATORY USE ONLY

H315 H335 H332 H302 H350 H360 H350 P308 P360 P331 P233 P262
Refer to SDS
Signal Word: Warning

STD 0364
65
66
67

RESTEK
33204
Danger 1 mL
Lot# A0191734
Expire: 11/2025 Store: 10°C or colder
8330B Nitroaromatics and Nitramine Mix
1000 µg/mL each in Acetonitrile

STD 0368
69
70
71
72

31086 RESTEK
B/N Surrogate Mix (4/09 SOW)
Store: 10°C or colder
ethylene Chloride

5/23

STD 0373

RESTEK
A0195206
Store: 0°C or colder
2000 µg/mL each in P&T Methanol
Danger

5/23

STD 0374 DRH-007-55
1-Chlorooctadecane

6/5/23

KATAHDIN ANALYTICAL SERVICES

STOCK STANDARDS RECEIVED

Extractions Laboratory

STD0375 Sodium Hexametaphosphate 1Kg, 65-70% 6/16/23 SR

STD0376

RESTEK
31601 Danger 1 mL
Lot# A0192460
Expire: 12/2027 Store: 10°C or colder
EGDN Standard
1000 µg/mL each in Methanol
Full label information for the chemicals is provided on the outside package

6/16/23 AL

STD0377

31498 RESTEK
Nitroglycerin Standard
Lot# A0197032
Expire 04/2028 Store 10°C or colder
1000 µg/mL each in Methanol
Danger
Vial Label
Peel Here

STD0378

31600 RESTEK
PETN Standard
Lot# A0194156
Expire 01/2028 Store 10°C or colder
1000 µg/mL each in Methanol
Sonicate prior to use
Danger
Peel Here

STD0379
0380
0381
0382

31480 RESTEK
MA Fractionation Surrogate Spike Mix
Lot# A0196246
Expire 02/2029 Store 10°C or colder
4000 µg/mL each in Hexane
Sonication required Mix is photosensitive
Danger
Vial Label
Peel Here

6/23/23 SR

STD0383
0384
0385

31087 RESTEK
Acid Surrogate Mix (4/89 SOW)
Lot# A0197037
Expire 04/2031 Store 10°C or colder
10000 µg/mL each in Methanol
Danger
Peel Here

STD0386
0387
0388

31086 RESTEK
B/N Surrogate Mix (4/89 SOW)
Lot# A0193606
Expire 12/2028 Store 10°C or colder
5000 µg/mL each in Methylene Chloride
Sonicate prior to use
Warning
Vial Label
Peel Here

STD0389
~~0390~~

Agilent Technologies
Calibration Standard 1 ML
Item: PPM-8082-1 Danger
Lot: 0006740524
Expires: 30-Nov 2029
Full safety on outer box
Contains 2,2,4-trimethylpentane, aroclor 1260

6/28/23 AL

KATAHDIN ANALYTICAL SERVICES

STOCK STANDARDS RECEIVED

Extractions Laboratory

STD 0416 0417 0418 0419	31086 RESTEK B/N Surrogate Mix (4/89 SOW) Lot# A0193806 Expire: 12/2028 Store: 10°C or colder 5000 µg/mL each in Methylene Chloride Sonicate prior to use Warning	SR/JS	7/12/23
STD 0420 0421 0422 0423 0424	APP-9-096-20X Lot: 222121106 Exp: Dec 20, 2032 Date Opened	SR/JS	7/12/23
STD 0425 0426 0427 0428 0429	31087 RESTEK Acid Surrogate Mix (4/89 SOW) Lot# A0197037 Expire: 04/2031 Store: 10°C or colder 10000 µg/mL each in Methanol Danger	JS	7/12/23
STD 0430 0431 0432 0433 0434 0435 0436 0437 0438 0439	33912 US/EN alpha-Terpineol Standard Lot# A0190441 Expire: 10/2025 Store: 10°C or colder 1 mL 2000 µg/mL each in Methylene Chloride RESTEK	JS	7/12/23
STD 0440 0441	30614 RESTEK 1,4-dioxane-d8 Standard Lot# A0195206 Expire: 02/2026 Store: 0°C or colder 2000 µg/mL each in P&T Methanol Danger	JS	7/12/23
STD 0442 0443 0444	APP-9-048-R1-20X Lot: 223071032 Exp: Aug 07, 2025 Date Opened	CMW	7/12/23

AJS 7/12/23

KATAHDIN ANALYTICAL SERVICES

STOCK STANDARDS RECEIVED

Extractions Laboratory

STD 0442	Z-014E-R3 Lot: 221111178-01 Exp: Jan 13, 2025 Date Opened	JS	7/12/23
0443			
0444			
0445			
0446			
0447			
0448			
0449			
~~0450~~			
0450			
0451			
STD 0452	CLP-HC-A-R Lot: 222111297 Exp: Nov 30, 2025 Date Opened	JS	7/12/23
0453			
0454			
0455			
0456			
0457			
0458			
0459			
0460			
0461			
STD 0462	CLP-HC-BN-R Lot: 222111137 Exp: Dec 11, 2024 Date Opened	JS	7/12/23
0463			
0464			
0465			
0466			
0467			
0468			
0469			
0470			
0471			

KATAHDIN ANALYTICAL SERVICES

STOCK STANDARDS RECEIVED

Extractions Laboratory

STD 0472	H-001S-D-40X Lot: 221121197 Exp: Dec 15, 2031 Date Opened	JS	7/12/23
0473			
0474			
0475			
0476			
0477			
0478			
0479			
STD 0480	Z-014F Lot: 223021429 Exp: Feb 22, 2027 Date Opened	JS	7/12/23
0481			
0482			
0483			
0484			
0485			
0486			
0487			
0488			
0489			
STD 0490	P-233S-10X Lot: 222011504 Exp: Jan 25, 2032 Date Opened	JS	7/12/23
0491			
0492			
0493			
0494			
0495			
0496			
0497			
0498			
0499			
0500			
0501			
0502			
0503			
0504			
0505			
0506			
0507			
0508			
0509			

KATAHDIN ANALYTICAL SERVICES

STOCK STANDARDS RECEIVED

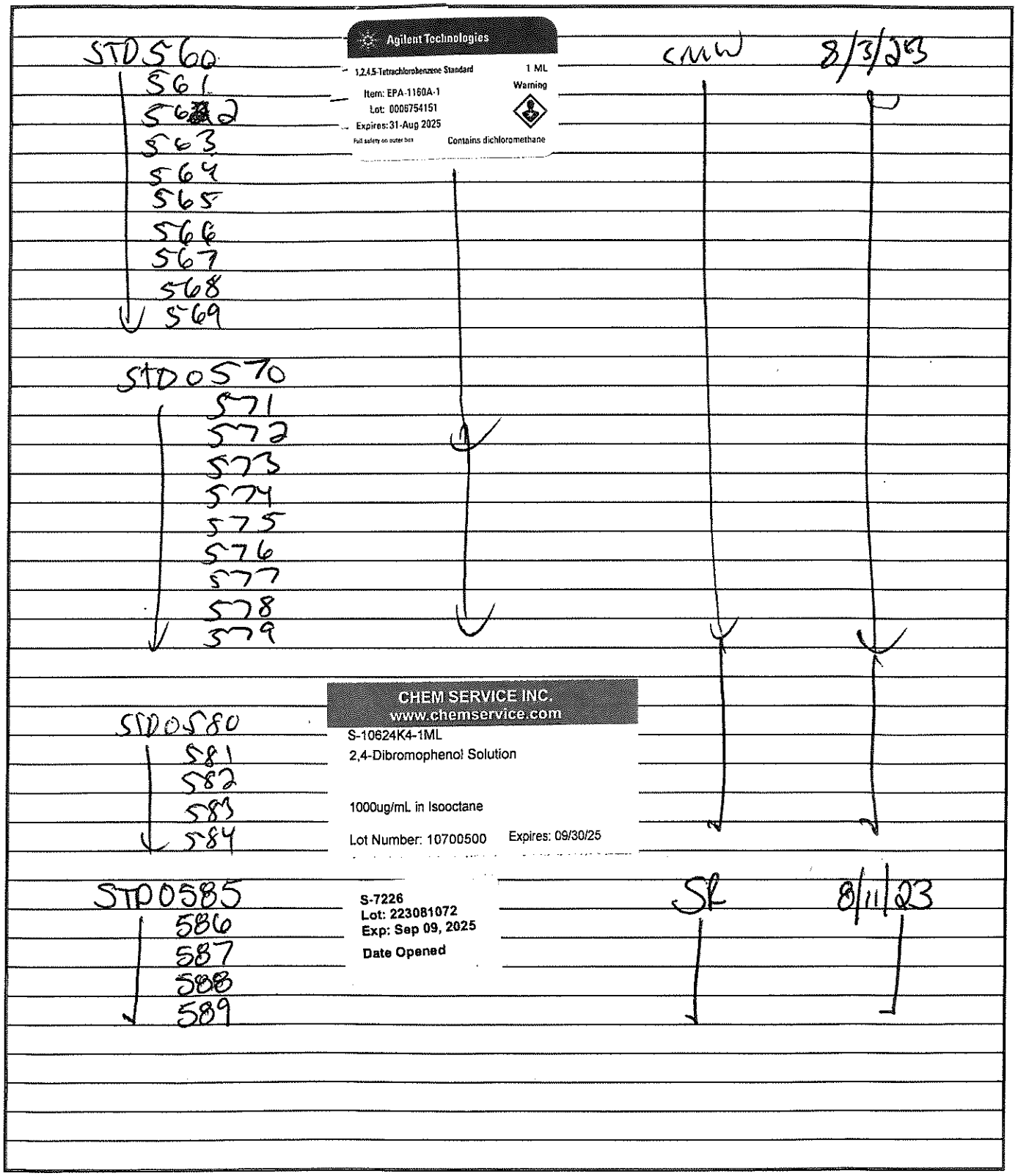
Extractions Laboratory

STD 0510 0511 0512 0513 0514	DRH-007-SS Lot: 223061651 Exp: Jul 10, 2033 Date Opened	CMW	7/13/23
STD 0515	BPA-A-S Lot: 221101223 Exp: Oct 14, 2025 Date Opened		
STD 0516 17 18 19	M-8330-SS Lot: 223031204 Exp: Mar 14, 2033 Date Opened	CMW	7/18/23
STD 0520 21 22 23 24	DRH-007S Lot: 223061309 Exp: Jun 19, 2033 Date Opened		
STD 0525 -26 -27 -28 -29	DRH-006S Lot: 223071038 Exp: Jul 12, 2033 Date Opened		
STD 0530 -31 -32 -33 -34	DRH-FTRPH Lot: 223011743 Exp: Feb 10, 2033 Date Opened		

KATAHDIN ANALYTICAL SERVICES

STOCK STANDARDS RECEIVED

Extractions Laboratory



KATAHDIN ANALYTICAL SERVICES

STOCK STANDARDS RECEIVED

Extractions Laboratory

10/24/23 CMM

STD0696
97
98
99

RESTEK 31459
110 Benner Circle Bellefonte, PA 16823
814-353-1300
www.restek.com
Danger
Lot# A0200172
Expire 09/2030 Store 25°C nominal
MA EPH Aliphatic Hydrocarbon Standard
1000 µg/mL each in Hexane
Receipt Date:
Opened Date:
Made in USA
1 mL
For Laboratory Use Only
Full label information for the chemical is provided on the outside package
Notebook Label

STD0700
701

RESTEK 31097
110 Benner Circle Bellefonte, PA 16823
814-353-1300
www.restek.com
Warning
Lot# A0201243
Expire 03/2027 Store 10°C or colder
o-Terphenyl Standard
10000 µg/mL each in Methylene Chloride
Sonicate prior to use
Receipt Date:
Opened Date:
Made in USA
1 mL
For Laboratory Use Only
Full label information for the chemical is provided on the outside package
Notebook Label

STD0702
703
704
705

RESTEK 30614
110 Benner Circle Bellefonte, PA 16823
814-353-1300
www.restek.com
Danger
Lot# A0199745
Expire 07/2026 Store 0°C or colder
1,4-dioxane-d8 Standard
2000 µg/mL each in P&T Methanol
Receipt Date:
Opened Date:
Made in USA
1 mL
For Laboratory Use Only
Full label information for the chemical is provided on the outside package
Notebook Label

STD0706

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com
1 mL
M-8270-09-ASL
Method 8270B - Organophosphorous Pesticide Mix
2.0 mg/mL in CH2Cl2
Lot: 218121268-03
Exp: Mar 21, 2025
PRODUCT OF THE USA
9 comp(s)
Storage: Refrig (0-5 °C)
FOR LABORATORY USE ONLY
H315 H335
H332 H302
H351 H350
P338 P360
P331 P233
P262 P202
Refer to SDS
Signal Word: Warning

STD0707
708

RESTEK 31661
110 Benner Circle Bellefonte, PA 16823
814-353-1300
www.restek.com
Danger
Lot# A0200245
Expire 02/2029 Store 10°C or colder
3,5-Dinitroaniline Standard
1000 µg/mL each in Acetonitrile
Receipt Date:
Opened Date:
Made in USA
1 mL
For Laboratory Use Only
Full label information for the chemical is provided on the outside package
Notebook Label

STD0709
710
711
712

RESTEK 31098
110 Benner Circle Bellefonte, PA 16823
814-353-1300
www.restek.com
Warning
Lot# A0201707
Expire 09/2030 Store 10°C or colder
1-Chlorooctadecane Standard
10000 µg/mL each in Methylene Chloride
Receipt Date:
Opened Date:
Made in USA
1 mL
For Laboratory Use Only
Full label information for the chemical is provided on the outside package
Notebook Label

0000082

KATAHDIN ANALYTICAL SERVICES

STOCK STANDARDS RECEIVED

GC and Semivolatile Extractables Laboratory

STK6340

33913 US/EN
SOM01.0 SIM Analysis Standard
Lot# A0186160
Expire. 05/2028 Store: 10°C or colder 1 mL
2000 µg/mL each in Methylene Chloride
RESTEK

STK6341
STK6342

33913 US/EN
SOM01.0 SIM Analysis Standard
Lot# A0186160
Expire. 05/2028 Store: 10°C or colder 1 mL
2000 µg/mL each in Methylene Chloride
RESTEK

STK6343 DLM-165-0 CAS 1718-52-1 Rec'd 9/6/22 DT
Pyrene-D10 Lot# PR-30304
CAMBRIDGE ISOTOPE

STK6344 DLM-1123-0 CAS 81103-79-9 Rec'd 9/6/22 DT
Fluorene-D10 Lot# PR-24453
CAMBRIDGE ISOTOPE

CHEM SERVICE INC.
PO Box 599, West Chester, PA 19381 800-452-9994

STK6345 N-10624-1G 2,4-Dibromophenol Rec'd 9/6 DT
Purity: 99.4%
DANGER
Lot Number: 13602300
Expires: 08/31/25
www.chemservice.com

31879 US/EN
Benzoic Acid Mix
Lot# A0180473
Expire: 01/2026 Store: 10°C or colder 1 ml
2000 µg/mL each in Methylene Chloride
RESTEK

STK6346 9/14

AccuStandard® 125 Market St. New Haven, CT 06513 www.AccuStandard.com

STK6347 AS-E0455 1 mL
Dinoseb
1000 µg/mL in AcCN
Lot: 221071576-01 1 comp(s)
Exp: Sep 12, 2026 Storage: Ambient (>5 °C)

FOR LABORATORY USE ONLY
H225 H315 H332 H319 H360 P338 P352 P340 P233 P260 P262 P202
Refer to SDS
Signal Word Danger

9/14

KATAHDIN ANALYTICAL SERVICES

STOCK STANDARDS RECEIVED

GC and Semivolatile Extractables Laboratory

STK6384

85
86
87
88

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com

Z-014J 1 mL
Internal Standard Mix
4.0 mg/mL in CH2Cl2
Lot: 222091463 6 comp(s)
Exp: Oct 03, 2032 Storage: Ambient (>5 °C)/Sonicate
PRODUCT OF THE USA FOR LABORATORY USE ONLY

H315 H335
H332 H302
H351 H350
P338 P260
P331 P233
P262 P202
Refer to SDS
Signal Word: Warning

11/29 DT

STK6389
L 90

31879 US/EN
Benzoic Acid Mix
Lot# A0183914
Expire: 04/2026 Store: 10°C or colder 1 mL
2000 µg/mL each in Methylene Chloride
RESTEK

R: 12/8/22 EP

STK6391

31850 US/EN
8270 MegaMix®
Lot# A0185274
Expire: 11/2023 Store: 0°C or colder 1 mL
500-1000 µg/mL each in Methylene Chloride
RESTEK

R: 12/21/22 EP

STK6392

31834 US/EN
Benzidine Mix
Lot# A0187252
Expire: 02/2027 Store: 10°C or colder 1 mL
2000 µg/mL each in Methylene Chloride
RESTEK

1/3/23 DT

STK6393

31031 US/EN
606 Phthalate Esters Calibration Mix
Lot# A0190160
Expire: 02/2027 Store: 10°C or colder 1 mL
2000 µg/mL each in Methanol
RESTEK

R: 1/6/23 EP

STK6394

32007 US/EN
Aroclor® 1221 Standard
Lot# A0187032
Expire: 10/2028 Store: 25°C nominal 1 mL
1000 µg/mL each in Hexane
RESTEK

This product contains PCBs

R: 1/12/23 MG

EX-012 – Revision 1 – 06/28/2010

KATAHDIN ANALYTICAL SERVICES

STOCK STANDARDS RECEIVED

GC and Semivolatile Extractables Laboratory

STK6452
53

31879 US/EN
Benzoic Acid Mix
Lot# A0187430
Expire. 07/2026 Store. 10°C or colder 1 mL
2000 µg/mL each in Methylene Chloride
RESTEK

4/19/23 DT

STK6454

31850 US/EN
8270 MegaMix®
Lot# A0189077
Expire. 02/2024 Store. 0°C or colder 1 mL
500-1000 µg/mL each in Methylene Chloride
RESTEK

STK6455

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com
APP-9-051-20X 1 mL
o-Cresol
2.0 mg/mL in Dichloromethane
Lot: 217051351
Exp: May 23, 2027
1 comp(s)
Storage: Ambient (>5 °C)
PRODUCT OF THE USA FOR LABORATORY USE ONLY
H315 H335 H332 H302 H351 H350 P338 P360 P331 P233 P262 P202 Refer to SDS
Signal Word: Warning

24
4/27/23 DT/JL
4/24/23 DT

STK6456

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com
APP-9-052-20X 1 mL
p-Cresol
2.0 mg/mL in Dichloromethane
Lot: 222081209
Exp: Aug 12, 2032
1 comp(s)
Storage: Ambient (>5 °C)
PRODUCT OF THE USA FOR LABORATORY USE ONLY
H315 H335 H332 H302 H351 H350 P338 P360 P331 P233 P262 P202 Refer to SDS
Signal Word: Warning

STK6457

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com
APP-9-179-20X 1 mL
Phenol
2.0 mg/mL in Dichloromethane
Lot: 221081278
Exp: Aug 19, 2031
1 comp(s)
Storage: Ambient (>5 °C)
PRODUCT OF THE USA FOR LABORATORY USE ONLY
H315 H335 H332 H302 H351 H350 P338 P360 P331 P233 P262 P202 Refer to SDS
Signal Word: Warning

5/1/23 MG
MG

STK6458

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com
C-262S-H 1 mL
Aroclor 1262
100 µg/mL in Hexane
Lot: 220091137
Exp: Sep 16, 2030
1 comp(s)
Storage: Ambient (>5 °C)
PRODUCT OF THE USA FOR LABORATORY USE ONLY
H304 H225 H336 H361 H315 H335 H332 H302 H360 P338 P352 P331 Refer to SDS
Signal Word: Danger

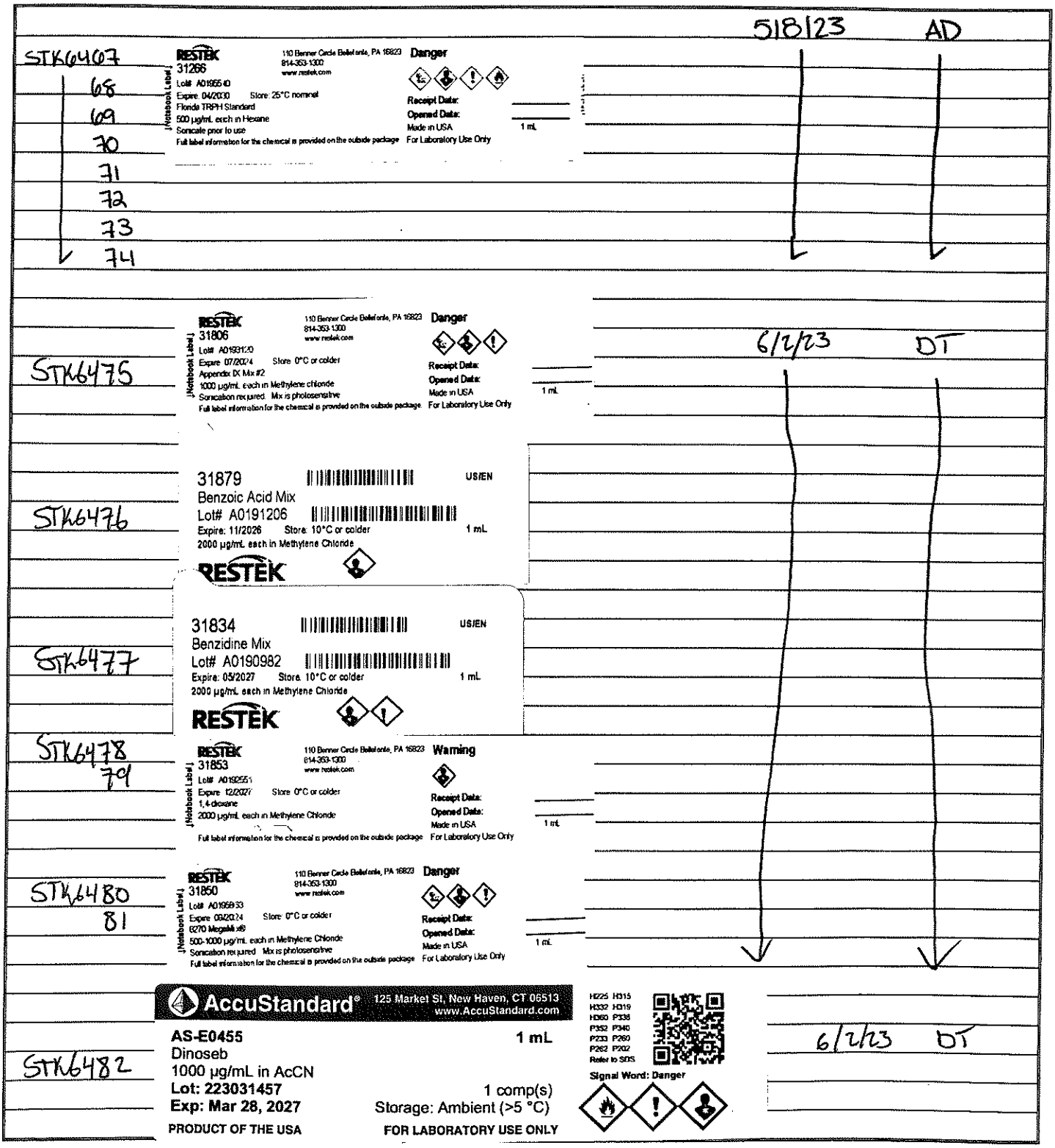
STK6459

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com
C-262S-H-10X 1 mL
Aroclor 1262
1000 µg/mL in Hexane
Lot: 219101505
Exp: Oct 30, 2029
1 comp(s)
Storage: Ambient (>5 °C)
PRODUCT OF THE USA FOR LABORATORY USE ONLY
H304 H225 H336 H361 H315 H335 H332 H302 H350 H360 H350 P338 Refer to SDS
Signal Word: Danger

KATAHDIN ANALYTICAL SERVICES

STOCK STANDARDS RECEIVED

GC and Semivolatile Extractables Laboratory



EX-012 – Revision 1 – 06/28/2010

KATAHDIN ANALYTICAL SERVICES

STOCK STANDARDS RECEIVED

GC and Semivolatile Extractables Laboratory

6/2/23 DT
STK6482
3

AccuStandard® 125 Market St. New Haven, CT 06513 www.AccuStandard.com

APP-9-191-10X
1,2,4,5-Tetrachlorobenzene
1000 µg/mL in MeOH
Lot: 219041253
Exp: Apr 09, 2029
PRODUCT OF THE USA

1 mL
1 comp(s)
Storage: Ambient (>5 °C)
FOR LABORATORY USE ONLY

H336 H225
H370 H320
H315 H311
H332 H301
H360 P338
P360 P331
Refer to SDS

Signal Word: Danger

6/2/23 DT

STK6484
15
16

spex® certiprep

Part # : S-3480
Lot # : MP221219006
Date Opened:

6/20/23 AD

n-Tetratetracontane
Contains the following in **Cyclohexane:Dichloromethane(1:1)**

Concentration	Compound
1000 µg/mL	n-Tetratetracontane

S-3480
MP221219006

Warning

Storage: **Freezer**

Harmful if swallowed. Suspected of causing cancer.

Wash thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection. IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell. IF exposed or concerned: Get medical advice/attention. Dispose of contents/container in accordance with local/regional/national/international regulations.

Phone: 732-549-7144

For Laboratory Use Only

RESTEK
33913
Lot# A0105662
Expire 02/2029 Store 10°C or colder
SOMDI 0 SIM Analysis Standard
2000 µg/mL each in Methylene Chloride
Sonication required Mix is photosensitive
Full label information for the chemical is provided on the outside package

110 Benner Circle Bellefonte, PA 16823
814-353-1300
www.restek.com

Warning

Receipt Date:
Opened Date:
Made in USA
For Laboratory Use Only

1 mL

STK6487
88
89

6/26/23 DT

STK6490
L 91

31097 RESTEK
o-Terphenyl Standard
Lot# A0197729
Expire 12/2026 Store 10°C or colder
10000 µg/mL each in Methylene Chloride
Sonicate prior to use
Warning

Peel Here

6/28/23 AD

KATAHDIN ANALYTICAL SERVICES

STOCK STANDARDS RECEIVED

GC and Semivolatile Extractables Laboratory

STK6525

26
27
28

31266 RESTEK
Florida TRPH Standard
Lot# A0195540
Expire: 04/2030 Store: 25°C nominal
2000 µg/mL each in Hexane
Sonicate prior to use
Danger

AD 8/11/23

STK6529

30
31
32
33

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com

M-625-TS-20X 1 mL
GC/MS Tuning Std for EPA Method 624/625
1000 µg/mL in CH2Cl2
Lot: 222031198-01 4 comp(s)
Exp: May 28, 2025 Storage: Ambient (>5 °C)
PRODUCT OF THE USA FOR LABORATORY USE ONLY

H315 H335
H332 H302
H350 H360
H350 P308
P360 P331
P233 P262
Refer to SDS
Signal Word: Warning

EP 8/11/23

STK6534

35
36
37
38

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com

Z-014J 1 mL
Internal Standard Mix
4.0 mg/mL in CH2Cl2
Lot: 223061537 6 comp(s)
Exp: Jun 28, 2033 Storage: Ambient (>5 °C)/Sonicate
PRODUCT OF THE USA FOR LABORATORY USE ONLY

H315 H335
H332 H302
H351 H350
P338 P360
P331 P233
P262 P202
Refer to SDS
Signal Word: Warning

STK6539

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com

M-8270-SS 1 mL
Method 8270 - Surrogate Standard
4.0 mg/mL in CH2Cl2
Lot: 223021323 6 comp(s)
Exp: Feb 15, 2033 Storage: Ambient (>5 °C)
PRODUCT OF THE USA FOR LABORATORY USE ONLY

H315 H335
H332 H302
H351 H350
P338 P360
P331 P233
P262 P202
Refer to SDS
Signal Word: Warning

STK6540

32419 US/EN
EPA 8270 Organophosphorous Pesticides Mix
Lot# A0189840
Expire: 03/2024 Store: 10°C or colder 1 mL
2000 µg/mL each in Methylene Chloride
RESTEK

STK6541

32460 US/EN
Methapyrilene Standard
Lot# A0191563
Expire: 05/2024 Store: 0°C or colder 1 mL
2000 µg/mL each in Methylene Chloride
RESTEK

KATAHDIN ANALYTICAL SERVICES

STOCK STANDARDS RECEIVED

GC and Semivolatile Extractables Laboratory

STK6547
48
49

RESTEK 110 Benner Circle Bellefonte, PA 16823 814-353-1300 www.restek.com
33913
Lot# A0199849
Expire 09/2029 Store 10°C or colder
SOM01.0 SIM Analysis Standard
2000 µg/mL each in Methylene Chloride
Sonication required Mix is photosensitive
Full label information for the chemical is provided on the outside package
JNotebook Label
Warning
Recept Date:
Opened Date:
Made in USA
For Laboratory Use Only
1 mL

Recieved: 9/11/23 DT

STK6550
51

RESTEK 110 Benner Circle Bellefonte, PA 16823 814-353-1300 www.restek.com
31834
Lot# A0197191
Expire 11/2027 Store 10°C or colder
Benzidine Mix
2000 µg/mL each in Methylene Chloride
Contains carcinogen/reproductive toxin
Full label information for the chemical is provided on the outside package
JNotebook Label
Danger
Recept Date:
Opened Date:
Made in USA
For Laboratory Use Only
1 mL

10/12/23
Recieved: 10/12/23 DT

STK6552
53

RESTEK 110 Benner Circle Bellefonte, PA 16823 814-353-1300 www.restek.com
31850
Lot# A0197902
Expire 11/2024 Store 0°C or colder
8270 MegaMix®
500-1000 µg/mL each in Methylene Chloride
Sonication required Mix is photosensitive
Full label information for the chemical is provided on the outside package
JNotebook Label
Warning Danger
Recept Date:
Opened Date:
Made in USA
For Laboratory Use Only
1 mL

Recieved: 10/12/23 DT

STK6554

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com

C-202S **1 mL**
2,2',3,3',5,5',6,6'-Octachlorobiphenyl
35 µg/mL in Isooctane
Lot: 105-271-01 1 comp(s)
Exp: May 20, 2025 Storage: Ambient (>5 °C)/Sonicate
PRODUCT OF THE USA **FOR LABORATORY USE ONLY**

H305 H225
H336 H315
H302 H319
P338 P352
P331 P233
P260 P262
Refer to SDS
Signal Word: Danger

10/24/23 CM

STK6555

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com

C-200S-R1 **1 mL**
2,2',3,3',4,5,6,6'-Octachlorobiphenyl
35 µg/mL in Isooctane
Lot: 222021273 1 comp(s)
Exp: Feb 15, 2032 Storage: Ambient (>5 °C)/Sonicate
PRODUCT OF THE USA **FOR LABORATORY USE ONLY**

H225 H336
H304 H400
H413 H319
H315 H335
H302 P338
P352 P331
Refer to SDS
Signal Word: Danger

STK6556

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com

C-201S-R1 **1 mL**
2,2',3,3',4,5',6,6'-Octachlorobiphenyl
35 µg/mL in Isooctane
Lot: B5020150-01 1 comp(s)
Exp: Dec 04, 2029 Storage: Ambient (>5 °C)/Sonicate
PRODUCT OF THE USA **FOR LABORATORY USE ONLY**

H305 H225
H336 H315
H302 H319
P338 P352
P331 P233
P260 P262
Refer to SDS
Signal Word: Danger

GC/MS SVOA STANDARD PREP LOGBOOK

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	Amt Added	Stock Exp Date	Total Vol	Final Conc
S3915	8270 Stock	2/28/23	8/28/23	EP	STK6402	8270 Mega Mix	220 mL	2/17/24	1.8 mL	125 ug/mL
					STK6405	APPIX Mix #2		2/17/24		
					STK6395	Dinoseb		2/17/24		
					STK6348	8270 Surr Mix	55 mL	10/14/23		
					STK6332	Methapyrilene	110 mL	11/7/23		
					STK6390	Benzoic Acid Mix		2/17/24		
					STK6392	Benzidine Mix		1/24/24		
					STK6374	Org Phos Pest		12/2/23		
					STK6377	APPIX Mix #1		11/15/23		
					STD0966	α-terpineol		11/2/23		
					EF820-US	MeCl2	355 mL	—		
S3916	Fluorene-Dio Stock	2/28/23	2/28/24	DT	STK6344	Fluorene-Dio	19.5 mg	—	10 mL	1950 ug/mL
					EF820-US	MeCl2	->10 mL	—		
S3917	1,4-Dioxane	3/1/23	3/31/23	EP	S3899	1,4-dioxane Pre-stock	180 mL	3/31/23	1.8 mL	20 ug/mL
					EF820-US	MeCl2	1620 mL	—		
S3918	SIM IND	3/2/23	5/7/23	CO	S3887	SIM IND Prestock	90 mL	5/7/23	1.8 mL	5 ug/mL
					EF820-US	MeCl	1710 mL			
S3919	SIM Stock B	3/3/23	7/6/23	CO	S3872	SIM Prestock B	180 mL	~~5/7~~ 7/6/23	1.8 mL	20 ug/mL
					EF820-US	MeCl2	1620 mL			

Reviewed by/Date:

S SVOA-00 Revision 1 11/10/10 QAMS755 - 000619 0000073

GC/MS SVOA STANDARD PREP LOGBOOK

Standard	Standard Name	Date Prep	Date Exp	Initials	Stock	Stock Name	Amt Added	Stock Exp Date	Total Vol	Final Conc
S4002	8270 Stock for PP	8/14/23	2/14/24	EP	STK6481	8270 MegaMix	220	8/14/24	1.8mL	125 ug/mL
					STK6424	8270 Surrogate	55	4/4/24		
					STK6476	Benzoic Acid Mix	210	6/27/24		
					STK6477	Benzidine Mix	1	6/27/24		
					S3951	o-toluene sulfonamide	113	4/17/24		
					S3952	p-toluene sulfonamide	106	4/17/24		
					S3953	2,6-dimethylphenol	111	4/17/24		
					EG266-US	$MeCl_2$	985	—		
S4003	SIM STOCK A	8/16/23	9/24/23	DT	STK6481	8270 Megamix	200 uL	8/14/24	10mL	20 ug/mL
					S3958	OLM COMPOUNDS		11/3/23		
					STD0555	1,2,4,5-TCB		7/31/24		
					STK6477	BENZIDINE MIX	100 uL	6/27/24		
					STK6478	1,4-dioxane		6/2/24		
					STK6476	Benz~~idine~~ oic acid Mix 9/19/23 DT		6/27/23		
					S3932	SIM SURR MIX	1 ML	9/24/23		
					EH197-US	$MeCl_2$	→10mL	—		
S4004	SIM IND	8/18/23	11/9/23	DT	S3963	SIM IND PRE-STOCK	90 uL	11/9/23	1.8mL	5 ug/mL
					EH197-US	$MeCl_2$	1710 uL	—		
S4005	Pyrene-D10	8/18/23	8/18/24	DT	STK6343	Pyrene-D10	0.0225 g	—	10mL	2250 ug/mL
					EH197-US	$MeCl_2$	→10mL	—		

Reviewed by/Date:

QA-004 – Revision 1 – 11/10/10

GC/MS SVOA STANDARD PREP LOGBOOK

Standard #	Standard Name	Date	Exp. Date	Initials	Stock #	Stock Name	Amt Added	Stock Exp Date	Total Vol	Final Conc
S4014	8270 STOCK	9/13/23	1/31/24	DT	STK6431	8270 ~~STOC~~ 9/15/23 DT MegaMIX	220 uL	8/14/24	4.8 mL	125 ug/mL
					STK6475	APPIX MIX #2	↓	6/23/24		
					STK6482	DINOSEB	↓	6/28/24		
					STK6424	8270 SURR	55 uL	4/4/24		
					STK6541	Methapyrilene	110 uL	5/31/24		
					STK6476	Benzoic ACID MIX	↓	6/27/24		
					STK6477	BENZIDINE MIX	↓	6/19/24		
					STK6440	ORG PHOS PEST	↓	1/31/24		
					STK6543	APPIX MIX #1	↓	9/13/24		
					STD0269	X-Terpineol	↓	5/31/24		
					EH197-US	$MeCl_2$	355 uL	—		
S4015	SIM IS	9/15/23	3/15/24	DT	STK6429	INTERNAL STD MIX	100 uL	8/22/24	5 mL	80 ug/mL
					EH197-US	$MeCl_2$	→ 5 mL	—		
S4016	2,4-dibromophenol	9/15/23	9/15/24	DT	STK3868	2,4-dibromophenol	⊛ 22.2 mg ~~220 mg~~	—	10 mL	2220 ug/mL
↓	↓	↓	↓	↓	EH197-US	$MeCl_2$	→ 10 mL	—	↓	↓
S4017	SIM Surr Mix (6)	9/15/23	2/28/24	DT	S4016	2,4-dibromophenol	⊛ 900 uL ~~1.68 mL~~	9/15/24	10 mL	200 ug/mL
↓	↓	↓	↓	↓	S4005	Pyrene-d10	↓ 990 uL ~~950 mL~~	8/18/24	↓	↓
↓	↓	↓	↓	↓	S3916	Fluorene-d10	1.0 mL	2/28/24	↓	↓
↓	↓	↓	↓	↓	STD0373	1,4-dioxane-d8	↓	5/27/24	↓	↓
↓	↓	↓	↓	↓	STK6489	SOM1.0 SIM Analysis Std	↓	9/15/24	↓	↓
↓	↓	↓	↓	↓	EH197-US	$MeCl_2$	→ 10 mL	—	↓	↓

Reviewed by/Date:

⊛ EP 15Sep23

GC/MS SVOA STANDARD PREP LOGBOOK

Standard	Standard Name	Date	Date	Initials	Stock #	Stock Name	Amt Added	Stock Exp Date	Total Vol	Final Conc
S4018	DFTPP	~~8~~ 9/15/23 (9/18/23 DT)	3/15/24	DT	STD0362	GCMS Tuning Std	250 µL	7/4/24	10 mL	25 µg/mL
↓	↓	↓	↓	↓	EH197-US	$MeCl_2$	→ 10 mL	—	↓	↓
S4019	Fluorene-D10	9/15/23	9/15/24	DT	STK6344	Fluorene-D10	21.0 mg	—	10 mL	2100 µg/mL
					EH197-US	$MeCl_2$	→ 10 mL	—		
S4020	SIM Stock A	9/18/23	11/3/23	DT	STK6481	8270 Mega Mix	200 µL	8/14/24	10 mL	20 µg/mL
					S3958	OLM Compounds	↓	11/3/23		
					STD0555	1,2,4,5-TCB	↓	7/31/24		
					STK6477	Benzidine Mix	100 µL	6/15/24		
					STK6478	1,4-Dioxane	↓	6/2/24		
					STK6476	Benzoic Acid Mix	↓	6/27/24		
					S4017	SIM Surr Mix	1 mL	2/28/24		
					EH197-US	$MeCl_2$	→ 10 mL	—		
S4021	SIM Stock B	9/22/23	12/5/23	EP	S3976	Prestock B	180 µL	12/5/23	1.8 mL	20 µg/mL
↓	↓	↓	↓	↓	EH206-US	$MeCl_2$	1620 mL	—	↓	↓
S4022	SIM IND	9/27/23	11/9/23	DT	S3963	SIM IND Pre-Stock	90 µL	11/~~9~~ 9/23 (10/2/23 DT)	1.8 mL	5 µg/mL
					EH206-US	$MeCl_2$	1710 µL	—		
S4023	SIM Prestock B	10/4/23	1/6/24	EP	STD0115	Acid Composite Mix	180 µL	1/6/24	1.8 mL	200 µg/mL
↓	↓	↓	↓	↓	STK6393	606 Phthalate Esters	180 µL	1/6/24	↓	↓
					EH206-US	$MeCl_2$	1440 µL	—		

Reviewed by/Date:

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	Amt Added	Stock Exp Date	Total Vol	Final Conc
S4030	OLM Compounds	10/12/23	4/12/24	DT	STD0164	S-7226 Custom	360	9/22/24	1.8 mL	1000 ug/mL
					EH206-US	$MeCl_2$	1440	—		
S4031	SIM STOCK A	10/12/23	2/28/24	DT	STK6552	8270 Megamix	200	10/12/24	10 mL	20 ug/mL
					S4030	OLM Compounds	↓	4/12/24		
					STD0555	10/12/23 DT ~~1,4~~ 1,2,4,5-TCB	↓	7/31/24		
					STK6550	Benzidine Mix	100	10/12/24		
					STK6478	1,4-Dioxane	↓	6/2/24		
					STK6453	Benzoic Acid Mix	↓	10/12/24		
					S4017	SIM Surr Mix	1 mL	2/28/24		
					EH206-US	$MeCl_2$	→ 10 mL	—		
S4032	SIM Stock B	10/18/23	1/6/24	EP	S4023	Pre-Stock B	180 mL	1/6/24	1.8 mL	20 ug/mL
⊥	⊥	⊥	⊥	⊥	EH206-US	$MeCl_2$	1620 mL	—	⊥	⊥
S4033	SIM IS	10/27/23	4/27/~~23~~ 24 10/27/23 DT	DT	STK6534	Internal Standard Mix	100 µL	10/10/24	5 mL	80 ug/mL
					EH206-US	$MeCl_2$	→ 5 mL	—		
S4034	SIM IND	11/1/23	11/9/23	EP	S3963	SIM IND Pre-stock	90 mL	11/9/23	1.8 mL	5 ug/mL
⊥	⊥	⊥	⊥	⊥	EH206-US	$MeCl_2$	1710 mL	—	⊥	⊥

Reviewed by/Date:

GC/MS SVOA STANDARD PREP LOGBOOK

Standard ID	Standard Name	Prep Date	Exp Date	Solvent	Add #	Stock Name	Amt Added	Stock Exp Date	Final Vol	Final Conc
S4035	SIM Pre-Stock IND	~~11/8~~ 11/10/23	01/06/24	EP	STD0115	Acid Composite Mix	90 mL	01/06/24	1.8mL	100 ug/mL
					STD0467	B/N Composite Mix		10/30/24		
					STD0446	Composite Mix #3		11/10/24		
					STD0489	Benzidine Mix		9/22/24		
					STD0473	1-Methylnaphthalene		9/22/24		
					STD0309	1,4-dioxane		11/10/2024		
					STD0164	Custom OLM	36 mL	9/22/24		
					STD0520	1,2,4,5 TCB	180 mL	11/10/24		
					EH304-US	MeCl2	1044 mL	—		
S4036	SIM IND	11/10/23	01/06/24	EP	S4035	SIM IND Pre-stock	90 mL	01/06/24	1.8mL	5 ug/mL
1	1	1	1	1	EH304-US	MeCl2	1710 mL	—	1	1
S4037	SIM Stock B	11/15/23	1/6/24	EP	S4033	Pre-Stock B	180 mL	1/6/24	1.8mL	20 ug/mL
1	1	1	1	1	EH362-US	MeCl2	1620 mL	—	1	1
S4038	DFTPP	11/17/23	5/17/24	EP	STD0362	GC/MS Tuning Mix	250 mL	7/4/24	10mL	25 ug/mL
1	1	1	1	1	EH362-US	MeCl2	→ 10mL	—	1	1

Reviewed by/Date:

GC/MS SVOA STANDARD PREP LOGBOOK

Standard ID	Standard Name	Prep Date	Exp Date	Initials	Stock #	Stock Name	Amt Added	Stock Exp Date	Total Vol	Final Conc
S4039	SIM Stock A	11/29/23	2/28/24	EP	STK6552	8270 Mega Mix	200 mL	10/12/24	10 mL	20 ug/mL
					S4030	OLM Compounds		4/12/24		
					STD0520	1.2.4.5 -TCB		11/10/24		
					STK6550	Benzidine Mix	100 mL	10/12/24		
					STK6478	1,4-Dioxane		6/2/24		
					STK6453	Benzoic Acid Mix		10/10/24		
					S4017	SIM Surr Mix	1 mL	2/28/24		
					PH486-US	$MeCl_2$	→ 10 mL	—		
S4040	SIM Stock B	12/1/23	1/6/24	EP	S4023	Pre-Stock B	180 mL	1/6/24	1.8 mL	20 ug/mL
					PH486-US	$MeCl_2$	1620 mL	—		
S4041	SIM IND	12/7/23	1/6/24	EP	S4035	SIM IND Pre-Stock	90 mL	1/6/24	1.8 mL	5 ug/mL
					PH486-US	$MeCl_2$	1710 mL	—		
S4042	SIM IS	12/15/23	6/14/24	DT	STK6534	Internal STD Mix	100 mL	10/10/24	5 mL	80 ug/mL
					PH486-US	$MeCl_2$	→ 5 mL			
S4043	DFTPP	12/20/23	6/20/24	DT	STK6529	GC/MS Tuning Mix	250 mL	12/20/24	10 mL	25 ug/mL
					PH486-US	$MeCl_2$	→ 10 mL			

Reviewed by/Date:

SVOA EXTRACTION SPIKE STANDARD PREPARATION

PREP INFO	STOCK NAME	AMT ADDED	STOCK CONC.	STOCK#
ID#: SV3174	**APP IX SPIKE**			
Prep Date: 9/5/23	CLP-HC-X1-R1	0.25 mL	2000 ug/mL ✓	STD0242 STD0622
Initials: JS	M-8270-07-R1	0.25 mL	2000 ug/mL ✓	STD0241
Exp. Date: ~~3/5/24~~	M-8270-08-R1	0.25 mL	2000 ug/mL ✓	STD9072, 617
X 2/3/24	M-8270-09-R1	0.25 mL	2000 ug/mL ✓	STD618,
JS 9/5/23	M-8270-10-R1	0.25 mL	2000 ug/mL ✓	STD620, 9074
	APP-9-014-D10X	0.25 mL	2000 ug/mL ✓	
	Diluted to 10mL in MeOH#		**F.C.: 50 ug/mL**	
	SIM SURR MIX			
ID#: SV3175	SOM 1.0 SIM	2 mL	2000ug/mL	STK6547, STK6548
Prep Date: 9/15/23	Pyrene-D10	1.78 mL	2250ug/mL	54005
Initials: DT	Fluorene-D10	1 mL	1950ug/mL	53916
Exp. Date: 3/15/24	Fluorene-D10	0.98 mL	2100ug/mL	54019
	Diluted to 10 mL in MeOH	#EG017-US		F.C. 400ug/mL BQ
	S/S SURR			
ID#: SV3176	SIM SURR Stock	2.5 mL	400 ug/mL	SV3175
Prep Date: 9/18/23	B/N Surr mix	5.0 mL	5000 ug/mL	STD0416
Initials: CMW	Acid Surr mix	5.0 mL	10,000 ug/mL	STD0383 340 428
Exp. Date: ~~3/18/24~~ 24	1,4-dioxane-D8	0.5 mL	2000 ug/mL	STD0441
9/19/23 DT	2,4-dibromphenol	2.0 mL	1000 ug/mL	STD0583 581
	Diluted to 500mL in acetone#		**F.C.: Various**	

SVOA EXTRACTION SPIKE STANDARD PREPARATION

PREP INFO	STOCK NAME	AMT ADDED	STOCK CONC.	STOCK#
ID#: SV3178		1,4 D SUM		
Prep Date: 10/11/23	1,4 Dioxane	0.25 mL	2000 ug/mL	STD0089
Initials: CMW	Diluted to	250 mL in	MeOH EG001-US	
Exp. Date: ~~10~~ 3/11/24			F.C 2 ug/mL	

SIM SPIKE	
SVOA SPIKE SV3178 5.0 mL	50/100 ug/mL
Diluted to 50 mL in MeOH#	**F.C.: 5/10 ug/mL**

ID#: SV3181
Prep Date: 10/18/23
Initials: SH/AC
Exp. Date: 4/18/23

SIM SPIKE	
SVOA SPIKE SV3178 5.0 mL	50/100 ug/mL
Diluted to 50 mL in MeOH# EG017-US	**F.C.: 5/10 ug/mL**

ID#: SV3182
Prep Date: 11/6/23
Initials: SH
Exp. Date: 5/6/24

SVOA EXTRACTION SPIKE STANDARD PREPARATION

PREP INFO	STOCK NAME	AMT ADDED	STOCK CONC	STOCK#
~~ID#:~~ SV3182				
Prep Date: 11/2/23				
Initials: SH				
Exp. Date: 5/2/24				
	SVOA SPIKE			
	CLP-HC-BN-R-PAK	2.5 mL	2000 ug/mL	
	Z-014E	2.5 mL	2000 ug/mL	
	CLP-HC-A-R-PAK	5.0 mL	2000 ug/mL	
	S-7226	1.0 mL	5000 ug/mL	
	H-001S-D40X	2.5 mL	2000 ug/mL	
		SH 11/2/23		
ID#:	APP-9-096-20X	2.5 mL	2000 ug/mL	
~~Prep Date:~~	P-233S-10X	5.0 mL	1000 ug/mL	
Initials:	APP-9-191-10X	5.0 mL	1000 ug/mL	
Exp. Date:	Z-014F-PAK	5.0 mL	2000 ug/mL	
	α- TERP	~~2.5 mL~~	2000 ug/mL	
	Diluted to 100 mL in MeOH#		**F.C.: 50/100 ug/mL**	
	S/S SURR			
ID#: SV3183	SIM SURR Stock	2.5 mL	400 ug/mL	SV3175
Prep Date: 11/6/23	B/N Surr mix	5.0 mL	5000 ug/mL	STD0371
Initials: SH	Acid Surr mix	5.0 mL	10,000 ug/mL	STD0384, 0425
Exp. Date: 5/6/24	1,4-dioxane-D8	0.5 mL	2000 ug/mL	STD0441, 0705
	2,4-dibromphenol	2.0 mL	1000 ug/mL	STD0584
	Diluted to 500mL in acetone# 225567		**F.C.: Various**	

METHANE ETHANE ETHYLENE DATA BY METHOD RSK SOP 175

QC Summary Section

Form 4
Method Blank Summary

Lab File ID : 5QK20190.D
Instrument ID : GC05
Heated Purge : No
Prep Temperature (C) : 19.9

SDG : SQ6112
Lab Sample ID : WG345521-1
Date Analyzed : 16-NOV-23
Time Analyzed : 07:23

This Method Blank applies to the following samples and QC samples:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Prep Temp (C)
Laboratory Control S	WG345521-2	5QK20191.	11/16/23	07:40	19.9
SY-OBMW7-110623	SQ6112-1	5QK20192.	11/16/23	09:29	20.2
SY-OBMW10-110623	SQ6112-2	5QK20193.	11/16/23	09:46	20.3

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Form 8
Analytical Sequence

Lab Name: Katahdin Analytical Services **SDG:** SQ6112
Instrument ID: GC05 **Column ID:** A

Client Sample ID	Lab Sample ID	Date Analyzed	Time Analyzed
Initial Calibration	WG344993-1	11/07/23	08:28
Initial Calibration	WG344993-2	11/07/23	08:46
Initial Calibration	WG344993-3	11/07/23	09:03
Initial Calibration	WG344993-4	11/07/23	09:20
Initial Calibration	WG344993-5	11/07/23	09:37
Initial Calibration	WG344993-6	11/07/23	09:54
Initial Calibration	WG344993-7	11/07/23	10:11
Independent Source	WG344993-8	11/07/23	11:39
Continuing Calibrati	WG345521-6	11/16/23	06:43
Method Blank	WG345521-1	11/16/23	07:23
Laboratory Control S	WG345521-2	11/16/23	07:40
SY-OBMW7-110623	SQ6112-1	11/16/23	09:29
SY-OBMW10-110623	SQ6112-2	11/16/23	09:46
Continuing Calibrati	WG345521-7	11/16/23	12:19

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Sample Data Section

KATAHDIN ANALYTICAL SERVICES - ORGANIC DATA QUALIFIERS

U Indicates the compound was analyzed for but not detected above the specified level. This level may be the Practical Quantitation Level (PQL) (also called Limit of Quantitation (LOQ)), the Limit of Detection (LOD) or Method Detection Limit (MDL) as required by the client.

Note: All results reported as "U" MDL have a 50% rate for false negatives compared to those results reported as "U" PQL, "U" LOQ or "U" LOD, where the rate of false negatives is <1%.

* Compound recovery or percent RPD (relative percent difference) was outside of quality control limits.

D Indicates the result was obtained from analysis of a diluted sample. Surrogate recoveries may not be calculable.

E Estimated value. This flag identifies compounds whose concentrations exceed the upper level of the calibration range of the instrument for that specific analysis.

J Estimated value. The analyte was detected in the sample at a concentration less than the laboratory Practical Quantitation Level (PQL) (also called Limit of Quantitation (LOQ)), but above the Method Detection Limit (MDL).

And/or

J Used for Dual Column analytes when there is a greater than 40% difference for detected concentrations between the two GC/HPLC columns.

B Indicates the analyte was detected in the laboratory method blank analyzed concurrently with the sample.

I Indicates that the flagged compound did not meet DoD criteria in the corresponding Initial Calibration (ICAL).

D Indicates that the flagged compound did not meet DoD criteria in the corresponding Initial Calibration Verification (ICV).

C Indicates that the flagged compound did not meet DoD criteria in the corresponding opening Calibration Verification (CV).

V Indicates that the flagged compound did not meet DoD criteria in the corresponding closing Calibration Verification (CV).

L/LL Indicates that the flagged compound did not meet DoD criteria in the corresponding Laboratory Control Sample (LCS) and/or Laboratory Control Sample Duplicate (LCSD) prepared and/or analyzed concurrently with the sample.

M/MM Indicates that the flagged compound did not meet DoD criteria in the Matrix Spike (MS) and/or Matrix Spike Duplicate MSD) prepared and/or analyzed concurrently with the native sample.

H Indicates the flagged compound was detected on the primary column but was not detected on the confirmation column therefore the compound is not reported as a positive detection. (SW846 8330A/B only)

Katahdin Analytical Services, Inc.

Manual Integration Codes For GC/MS, GC, HPLC and/or IC

M1	Peak splitting.
M2	Well defined peaks on the shoulders of the other peaks.
M3	There is additional area due to a coeluting interferant.
M4	There are negative spikes in the baseline.
M5	There are rising or falling baselines.
M6	The software has failed to detect a peak or misidentified a peak.
M7	Excessive peak tailing.
M8	Analysis such as GRO, DRO and TPH require a baseline hold.
M9	Peak was not completely integrated as in GC/MS.
M10	Primary ion was correctly integrated, but secondary or tertiary ion needed manual integration as in GC/MS.
M11	For GC analysis, when a sample is diluted by 1:10 or more, the surrogate is set to undetected and then the area under the surrogate is manually integrated.
M12	Manual integration saved in method due to TurboChrom floating point error.

Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

SDG: SQ6112
Lab ID: SQ6112-1
Client ID: SY-OBMW7-110623
Matrix: AQ
Lab File ID: 5QK20192.D

Sample Date: 06-NOV-23
Extract Date: 16-NOV-23
Extracted By: DL
Extraction Method: RSK SOP 175
Lab Prep Batch: WG345521

Report Date: 30-NOV-23
Analysis Date: 16-NOV-23
Analyst: DL
Analysis Method: RSK SOP 175 v.2
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Methane	J	7.2	ug/L	1	10.3	10.	2.6	5.2
Ethane	U	9.8	ug/L	1	13.1	13.	5.0	9.8
Ethene	U	9.8	ug/L	1	13.1	13.	5.0	9.8

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Data File: \\target_server\gg\chem\gc05.i\GC05QK16.b\5QK20192.D
Report Date: 30-Nov-2023 20:17

Katahdin Analytical Services

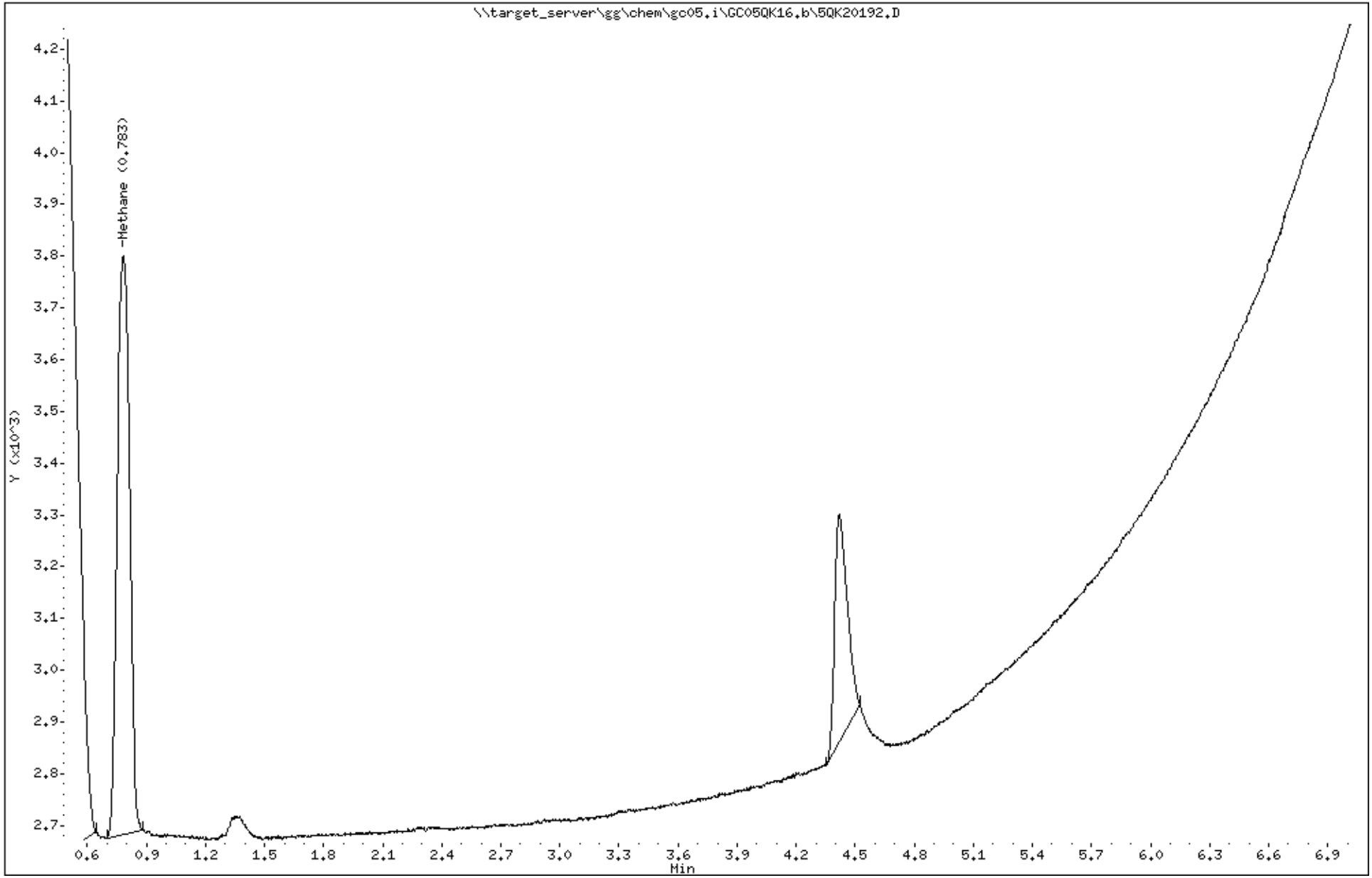
Data file : \\target_server\gg\chem\gc05.i\GC05QK16.b\5QK20192.D
Lab Smp Id: SQ6112-1 Client Smp ID: SY-OBMW7-110623
Inj Date : 16-NOV-2023 09:29
Operator : DL/SH Inst ID: gc05.i
Smp Info : SQ6112-1
Misc Info : WG345521,WG344993-4
Comment : RSK SOP 175
Method : \\target_server\gg\chem\gc05.i\GC05QK16.b\MEEB47A.m
Meth Date : 17-Nov-2023 05:58 dlewry Quant Type: ESTD
Cal Date : 07-NOV-2023 10:11 Cal File: 5QK20014.D
Als bottle: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSKSOP175-MEE.sub
Target Version: 4.12
Processing Host: V200T3

Concentration Formula: Amt * DF * 0.005/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	0.00500	sample purged (L)
Cpnd Variable		Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (PPM)	CONCENTRATIONS FINAL (PPM)	REVIEW CODE
1 Methane	0.783	0.760	0.023	4940	10.4115	10.4	

Data File: \\target_server\gg\chem\gc05.i\GC05QK16.b\5QK20192.D
Date : 16-NOV-2023 09:29
Client ID: SY-OBMW7-110623
Instrument: gc05.i
Sample Info: SQ6112-1
Purge Volume: 0.0
Operator: DL/SH
Column phase: Porapak Q
Column diameter: 0.00



Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

SDG: SQ6112
Lab ID: SQ6112-2
Client ID: SY-OBMW10-110623
Matrix: AQ
Lab File ID: 5QK20193.D

Sample Date: 06-NOV-23
Extract Date: 16-NOV-23
Extracted By: DL
Extraction Method: RSK SOP 175
Lab Prep Batch: WG345521

Report Date: 30-NOV-23
Analysis Date: 16-NOV-23
Analyst: DL
Analysis Method: RSK SOP 175 v.2
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Methane	J	4.5	ug/L	1	10.3	10.	2.6	5.2
Ethane	U	9.8	ug/L	1	13.1	13.	5.0	9.8
Ethene	U	9.8	ug/L	1	13.1	13.	5.0	9.8

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Data File: \\target_server\gg\chem\gc05.i\GC05QK16.b\5QK20193.D
Report Date: 30-Nov-2023 20:17

Katahdin Analytical Services

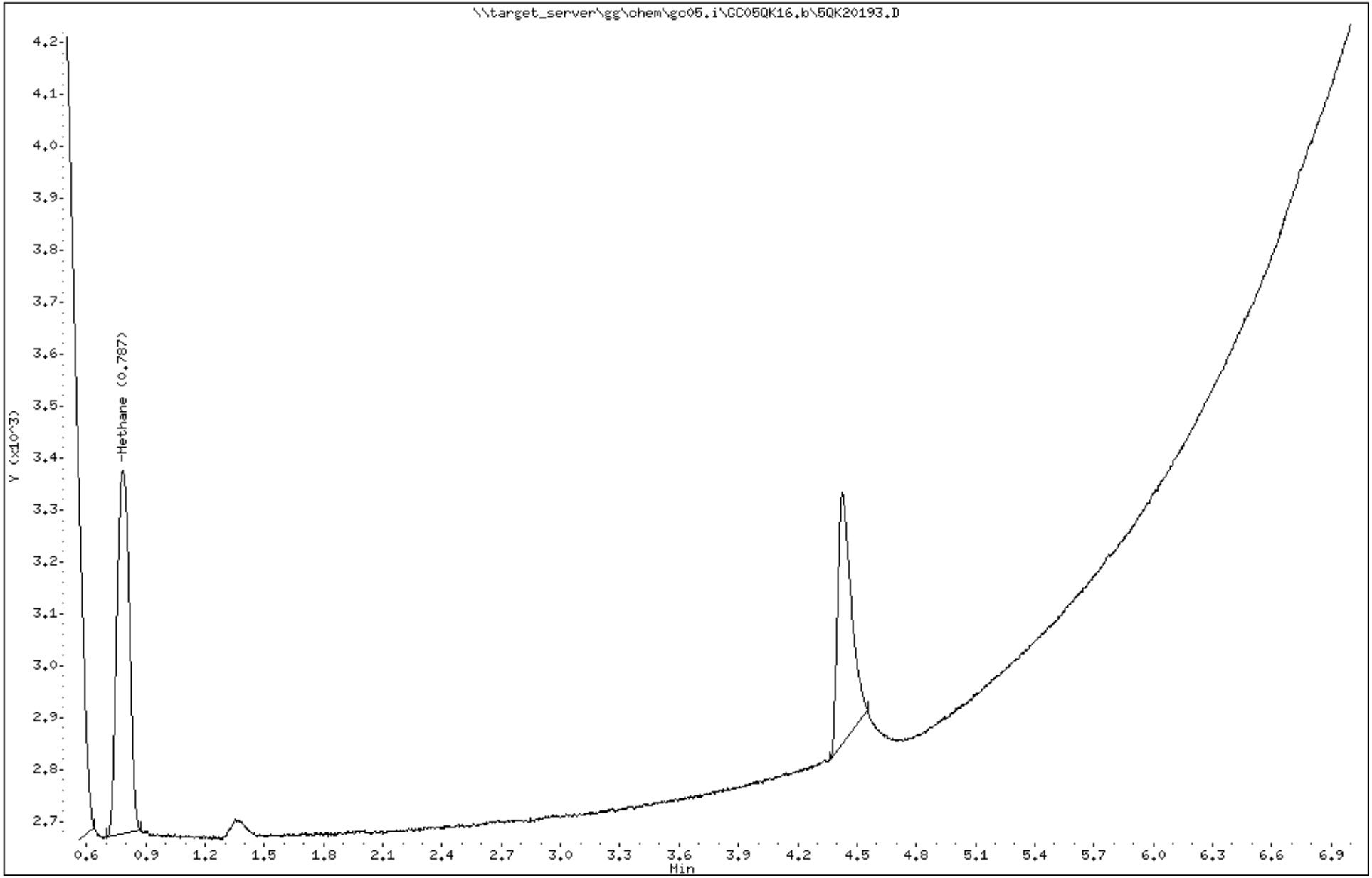
Data file : \\target_server\gg\chem\gc05.i\GC05QK16.b\5QK20193.D
Lab Smp Id: SQ6112-2 Client Smp ID: SY-OBMW10-110623
Inj Date : 16-NOV-2023 09:46
Operator : DL/SH Inst ID: gc05.i
Smp Info : SQ6112-2
Misc Info : WG345521,WG344993-4
Comment : RSK SOP 175
Method : \\target_server\gg\chem\gc05.i\GC05QK16.b\MEEB47A.m
Meth Date : 17-Nov-2023 05:58 dlewry Quant Type: ESTD
Cal Date : 07-NOV-2023 10:11 Cal File: 5QK20014.D
Als bottle: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSKSOP175-MEE.sub
Target Version: 4.12
Processing Host: V200T3

Concentration Formula: Amt * DF * 0.005/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	0.00500	sample purged (L)
Cpnd Variable		Local Compound Variable

					CONCENTRATIONS ON-COLUMN	FINAL	
Compounds	RT	EXP RT	DLT RT	RESPONSE	(PPM)	(PPM)	REVIEW CODE
1 Methane	0.786	0.760	0.026	3107	6.54829	6.55	

Data File: \\target_server\gg\chem\gc05.i\GC05QK16.b\5QK20193.D
Date : 16-NOV-2023 09:46
Client ID: SY-OBMW10-110623
Instrument: gc05.i
Sample Info: SQ6112-2
Purge Volume: 0.0
Operator: DL/SH
Column phase: Porapak Q
Column diameter: 0.00



Standards Data Section

Form 6
Initial Calibration Summary

Lab Name : Katahdin Analytical Services **SDG:** SQ6112

Instrument ID: GC05 **Column ID:** A

Lab File IDs : 5QK20008.D5QK20009.D5QK20010.D 5QK20011.D5QK20012.D5QK20013.D 5QK20014.D **Calibration Date(s):** 07-NOV-23 08:28 07-NOV-23 10:11

	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Level 7		Curve				%RSD or R^2		
	6.5000	10.0000	50.0000	100.0000	500.0000	1000.0000	1500.0000		Type	b	m1	m2	Result	Limit	
Methane	635	558	472	453	437	420	346		AVG		474		19.95879	25	O
Ethene	830	809	836	826	811	789	654		AVG		793		8.01360	25	O
Ethane	862	837	865	855	843	821	677		AVG		823		8.03115	25	O

Legend: O = Acceptable; W = Failed %RSD Value; X = Failed R^2 Value; Y = Failed Minimum RF

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Data File: \\target_server\gg\chem\gc05.i\GC05QK07.b\5QK20015.D
Report Date: 18-Nov-2023 10:15

Katahdin Analytical Services

RECOVERY REPORT

Client Name: Client SDG: SDGa00256
Sample Matrix: LIQUID Fraction: VOA
Lab Smp Id: WG344993-8
Level: LOW Operator: DL
Data Type: GC DATA SampleType: INDSOURCE
SpikeList File: ind.spk Quant Type: ESTD
Sublist File: all.sub
Method File: \\target_server\gg\chem\gc05.i\GC05QK07.b\MEEB47A.m
Misc Info: WG344993,WG344993-4

SPIKE COMPOUND	CONC ADDED PPM	CONC RECOVERED PPM	% RECOVERED	LIMITS
1 Methane	100	88.6	88.59	85-115
2 Ethene	100	96.0	96.05	85-115
3 Ethane	100	93.9	93.86	85-115

Data File: \\target_server\gg\chem\gc05.i\GC05QK07.b\5QK20008.D
Report Date: 18-Nov-2023 10:15

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gc05.i\GC05QK07.b\5QK20008.D
Lab Smp Id: WG344993-1
Inj Date : 07-NOV-2023 08:28
Operator : DL   Inst ID: gc05.i
Smp Info : WG344993-1
Misc Info :
Comment   : RSK SOP 175
Method   : \\target_server\gg\chem\gc05.i\GC05QK07.b\MEEB47A.m
Meth Date : 08-Nov-2023 06:10 dlewry   Quant Type: ESTD
Cal Date : 07-NOV-2023 08:28   Cal File: 5QK20008.D
Als bottle: 1   Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: Falcon   Compound Sublist: all.sub
Target Version: 4.12

Concentration Formula: Amt * DF * 0.005/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	0.00500	sample purged (L)
Cpnd Variable		Local Compound Variable

DL

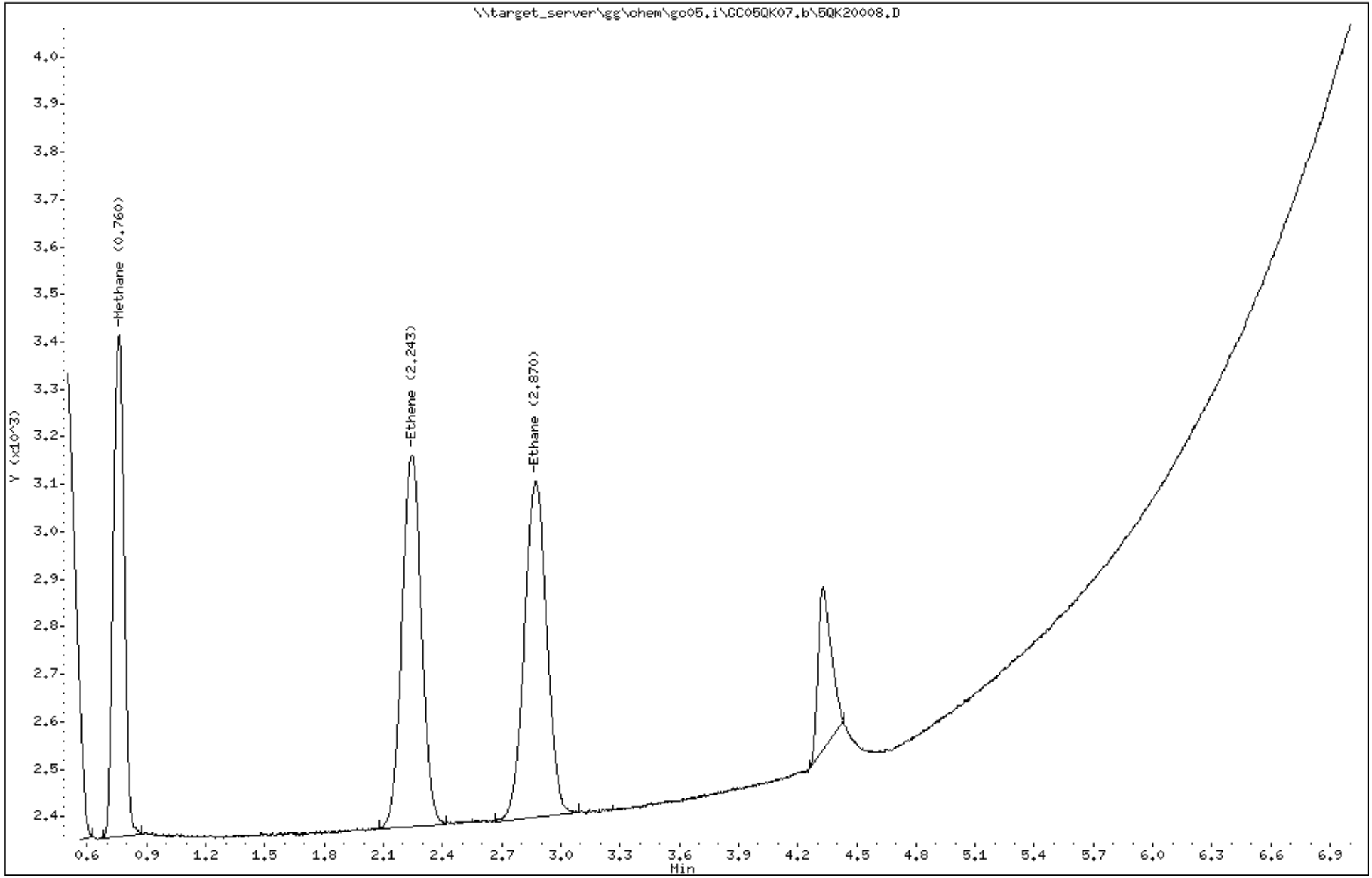
10:16 am, Nov 18, 2023

					AMOUNTS		
					CAL-AMT	ON-COL	
Compounds	RT	EXP RT	DLT RT	RESPONSE	(PPM)	(PPM)	REVIEW CODE
1 Methane	0.760	0.760	0.000	4126	6.50000	6.50(aM)	M9
2 Ethene	2.243	2.317	-0.074	5395	6.50000	6.50(aM)	M9
3 Ethane	2.870	2.957	-0.087	5600	6.50000	6.50(aM)	M9

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

Data File: \\target_server\gg\chem\gc05.i\GC05QK07.b\5QK20008.D
Date : 07-NOV-2023 08:28
Client ID:
Instrument: gc05.i
Sample Info: WG344993-1
Purge Volume: 0.0
Operator: DL
Column phase: Porapak Q
Column diameter: 0.00



Data File: \\target_server\gg\chem\gc05.i\GC05QK07.b\5QK20009.D
Report Date: 18-Nov-2023 10:15

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gc05.i\GC05QK07.b\5QK20009.D
Lab Smp Id: WG344993-2
Inj Date : 07-NOV-2023 08:46
Operator : DL   Inst ID: gc05.i
Smp Info : WG344993-2
Misc Info :
Comment   : RSK SOP 175
Method   : \\target_server\gg\chem\gc05.i\GC05QK07.b\MEEB47A.m
Meth Date : 08-Nov-2023 06:10 dlewry   Quant Type: ESTD
Cal Date : 07-NOV-2023 08:46   Cal File: 5QK20009.D
Als bottle: 1   Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: Falcon   Compound Sublist: all.sub
Target Version: 4.12
Processing Host: V200T3

Concentration Formula: Amt * DF * 0.005/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	0.00500	sample purged (L)
Cpnd Variable		Local Compound Variable

DL

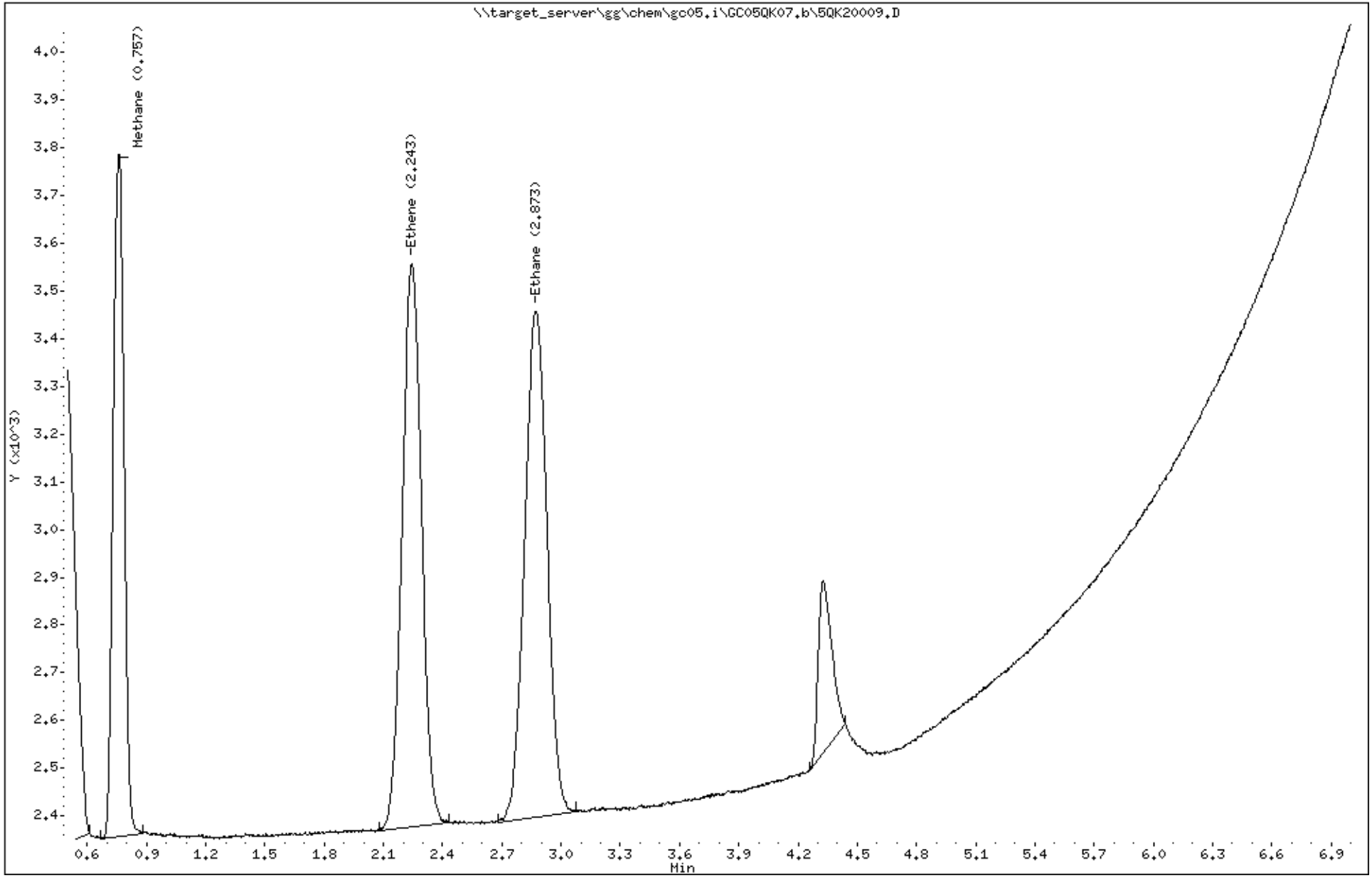
10:16 am, Nov 18, 2023

					AMOUNTS		
					CAL-AMT	ON-COL	
Compounds	RT	EXP RT	DLT RT	RESPONSE	(PPM)	(PPM)	REVIEW CODE
1 Methane	0.756	0.760	-0.004	5575	10.0000	12.2(M)	M9
2 Ethene	2.243	2.317	-0.074	8088	10.0000	13.1(M)	M9
3 Ethane	2.873	2.957	-0.084	8367	10.0000	13.1(M)	M9

QC Flag Legend

M - Compound response manually integrated.

Data File: \\target_server\gg\chem\gc05.i\GC05QK07.b\5QK20009.D
Date : 07-NOV-2023 08:46
Client ID:
Instrument: gc05.i
Sample Info: WG344993-2
Purge Volume: 0.0
Operator: DL
Column phase: Porapak Q
Column diameter: 0.00



Katahdin Analytical Services SQ6112 Page 259 of 454

Data File: \\target_server\gg\chem\gc05.i\GC05QK07.b\5QK20010.D
Report Date: 18-Nov-2023 10:15

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gc05.i\GC05QK07.b\5QK20010.D
Lab Smp Id: WG344993-3
Inj Date : 07-NOV-2023 09:03
Operator : DL   Inst ID: gc05.i
Smp Info : WG344993-3
Misc Info :
Comment   : RSK SOP 175
Method   : \\target_server\gg\chem\gc05.i\GC05QK07.b\MEEB47A.m
Meth Date : 08-Nov-2023 06:10 dlewry   Quant Type: ESTD
Cal Date : 07-NOV-2023 09:03   Cal File: 5QK20010.D
Als bottle: 1   Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: Falcon   Compound Sublist: all.sub
Target Version: 4.12
Processing Host: V200T3

Concentration Formula: Amt * DF * 0.005/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	0.00500	sample purged (L)
Cpnd Variable		Local Compound Variable

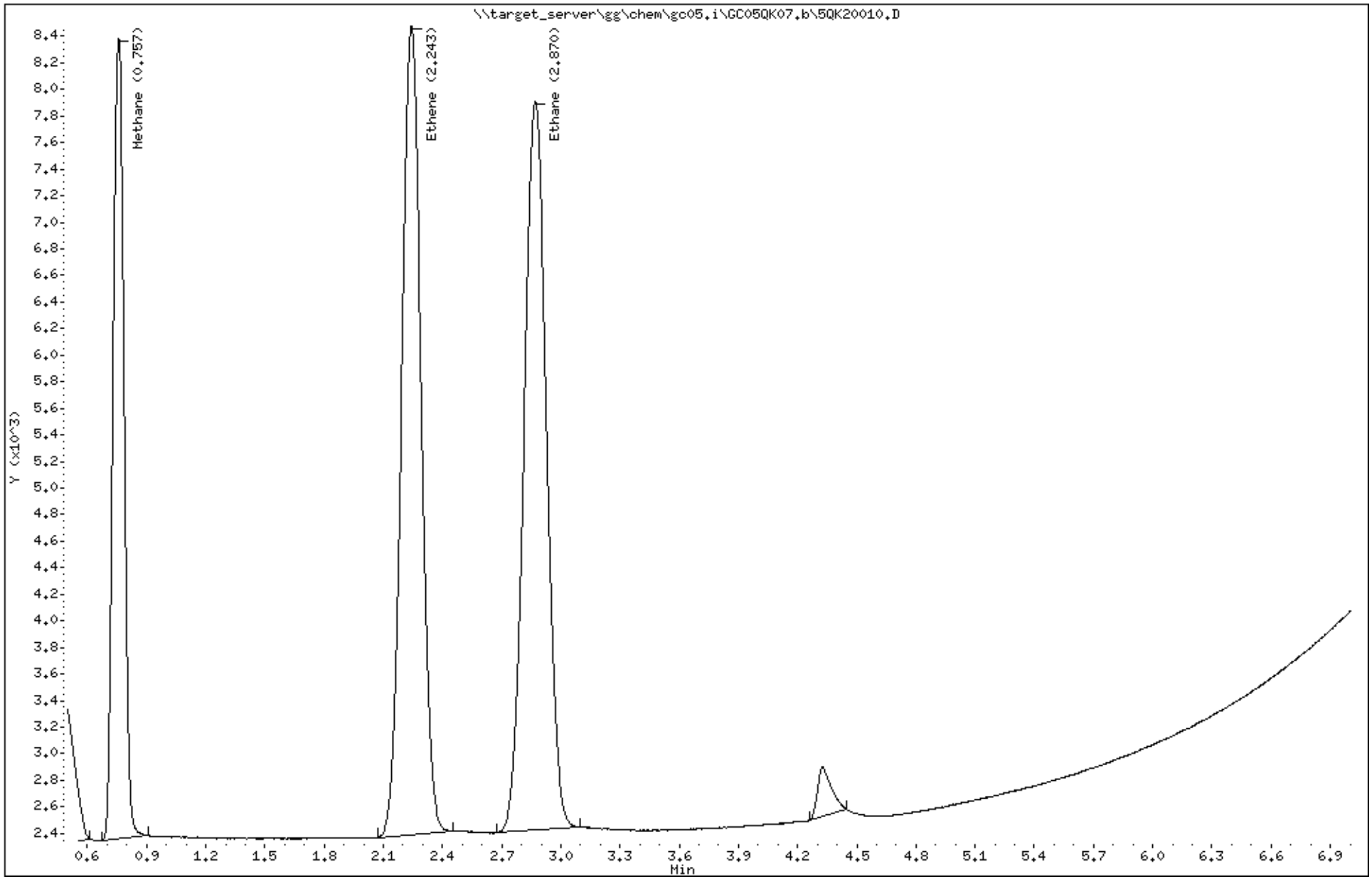
DL
10:16 am, Nov 18, 2023

					AMOUNTS		
					CAL-AMT	ON-COL	
Compounds	RT	EXP RT	DLT RT	RESPONSE	(PPM)	(PPM)	REVIEW CODE
1 Methane	0.756	0.760	-0.004	23588	50.0000	49.8(M)	M9
2 Ethene	2.243	2.317	-0.074	41800	50.0000	50.7(M)	M9
3 Ethane	2.870	2.957	-0.087	43269	50.0000	50.6(M)	M9

QC Flag Legend

M - Compound response manually integrated.

Data File: \\target_server\gg\chem\gc05.i\GC05QK07.b\5QK20010.D
Date : 07-NOV-2023 09:03
Client ID:
Instrument: gc05.i
Sample Info: WG344993-3
Purge Volume: 0.0
Operator: DL
Column phase: Porapak Q
Column diameter: 0.00



Data File: \\target_server\gg\chem\gc05.i\GC05QK07.b\5QK20011.D
Report Date: 18-Nov-2023 10:15

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gc05.i\GC05QK07.b\5QK20011.D
Lab Smp Id: WG344993-4
Inj Date : 07-NOV-2023 09:20
Operator : DL   Inst ID: gc05.i
Smp Info : WG344993-4
Misc Info :
Comment   : RSK SOP 175
Method   : \\target_server\gg\chem\gc05.i\GC05QK07.b\MEEB47A.m
Meth Date : 08-Nov-2023 06:10 dlewry   Quant Type: ESTD
Cal Date : 07-NOV-2023 09:20   Cal File: 5QK20011.D
Als bottle: 1   Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: Falcon   Compound Sublist: all.sub
Target Version: 4.12
Processing Host: V200T3

Concentration Formula: Amt * DF * 0.005/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	0.00500	sample purged (L)
Cpnd Variable		Local Compound Variable

DL

10:16 am, Nov 18, 2023

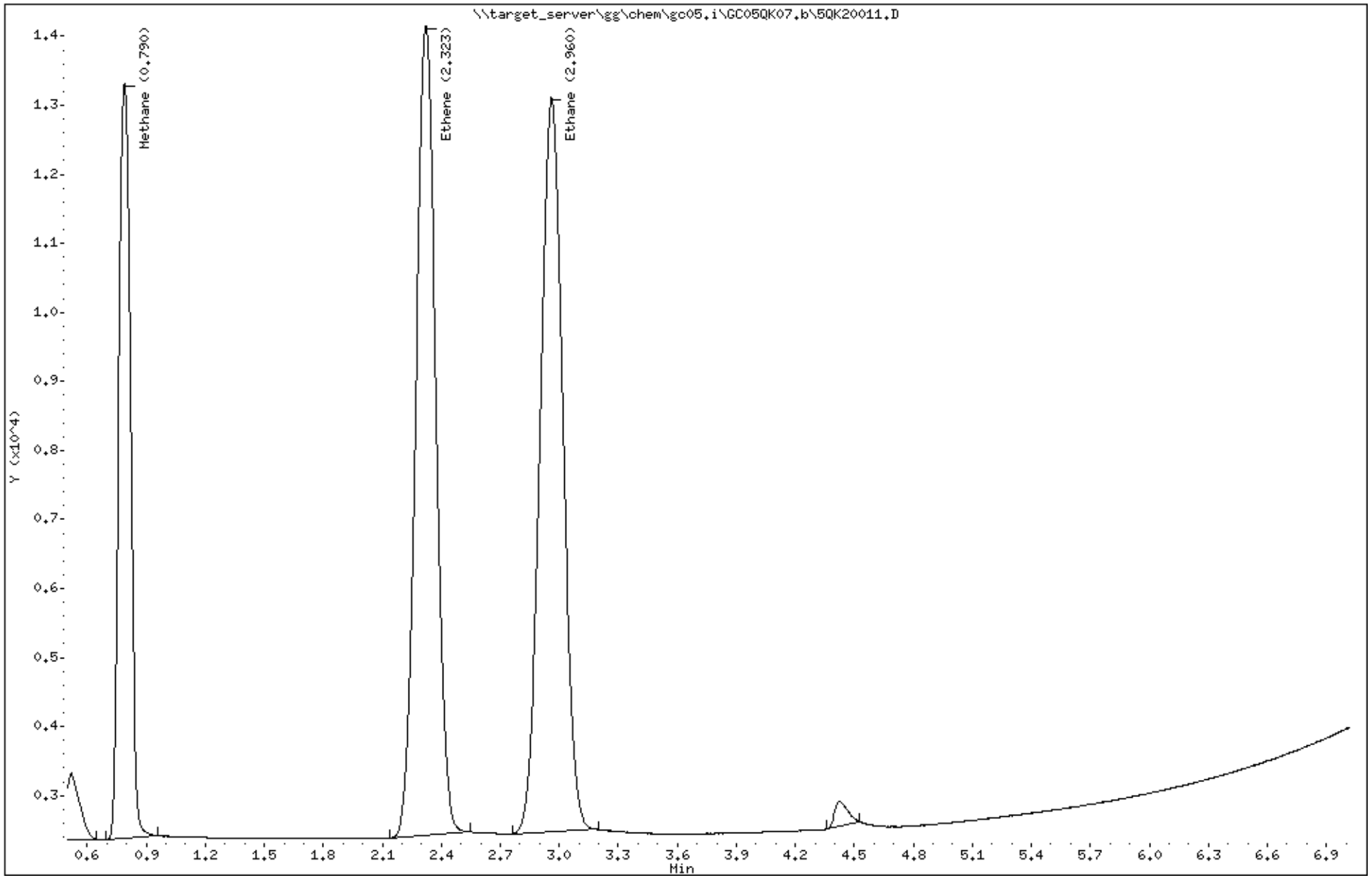
					AMOUNTS		
					CAL-AMT	ON-COL	
Compounds	RT	EXP RT	DLT RT	RESPONSE	(PPM)	(PPM)	REVIEW CODE
1 Methane	0.790	0.760	0.030	45348	100.000	95.6(M)	M9
2 Ethene	2.323	2.317	0.006	82636	100.000	100(M)	M9
3 Ethane	2.960	2.957	0.003	85497	100.000	100(M)	M9

QC Flag Legend

M - Compound response manually integrated.

Data File: \\target_server\gg\chem\gc05.i\GC05QK07.b\5QK20011.D
Date : 07-NOV-2023 09:20
Client ID:
Sample Info: WG344993-4
Purge Volume: 0.0
Column phase: Porapak Q

Instrument: gc05.i
Operator: DL
Column diameter: 0.00



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Report Date: 18-Nov-2023 10:15

Katahdin Analytical Services

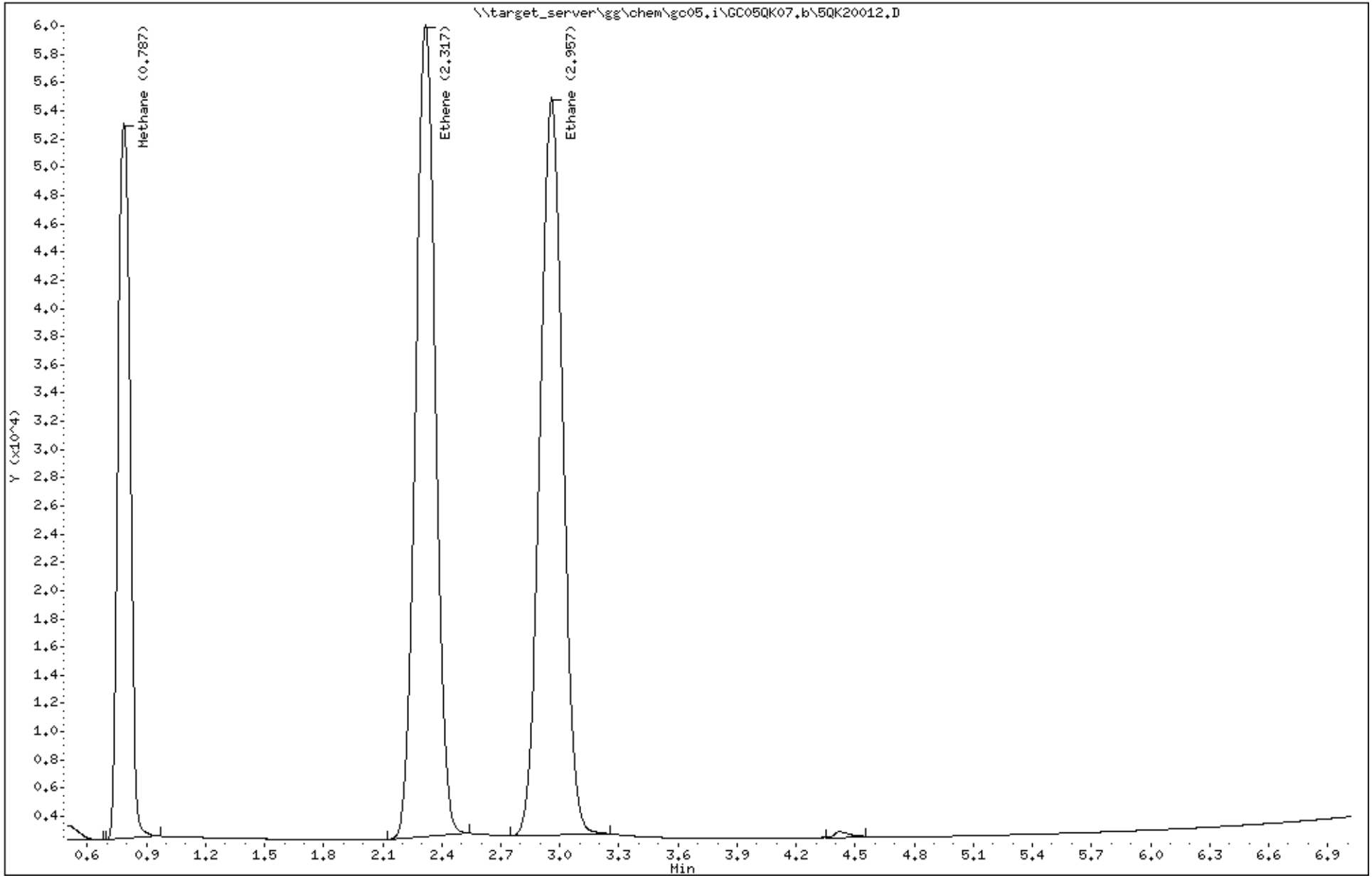
Data file : \\target_server\gg\chem\gc05.i\GC05QK07.b\5QK20012.D
Lab Smp Id: WG344993-5
Inj Date : 07-NOV-2023 09:37
Operator : DL   Inst ID: gc05.i
Smp Info : WG344993-5
Misc Info :
Comment   : RSK SOP 175
Method   : \\target_server\gg\chem\gc05.i\GC05QK07.b\MEEB47A.m
Meth Date : 08-Nov-2023 06:10 dlewry   Quant Type: ESTD
Cal Date : 07-NOV-2023 09:37   Cal File: 5QK20012.D
Als bottle: 1   Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: Falcon   Compound Sublist: all.sub
Target Version: 4.12
Processing Host: V200T3

Concentration Formula: Amt * DF * 0.005/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	0.00500	sample purged (L)
Cpnd Variable		Local Compound Variable

					AMOUNTS		
					CAL-AMT	ON-COL	
Compounds	RT	EXP RT	DLT RT	RESPONSE	(PPM)	(PPM)	REVIEW CODE
1 Methane	0.786	0.760	0.026	218681	500.000	461	
2 Ethene	2.316	2.317	-0.001	405356	500.000	493	
3 Ethane	2.956	2.957	-0.001	421667	500.000	495	

Data File: \\target_server\gg\chem\gc05.i\GC05QK07.b\5QK20012.D
Date : 07-NOV-2023 09:37
Client ID:
Instrument: gc05.i
Sample Info: WG344993-5
Purge Volume: 0.0
Operator: DL
Column phase: Porapak Q
Column diameter: 0.00



Data File: \\target_server\gg\chem\gc05.i\GC05QK07.b\5QK20013.D
Report Date: 18-Nov-2023 10:15

Katahdin Analytical Services

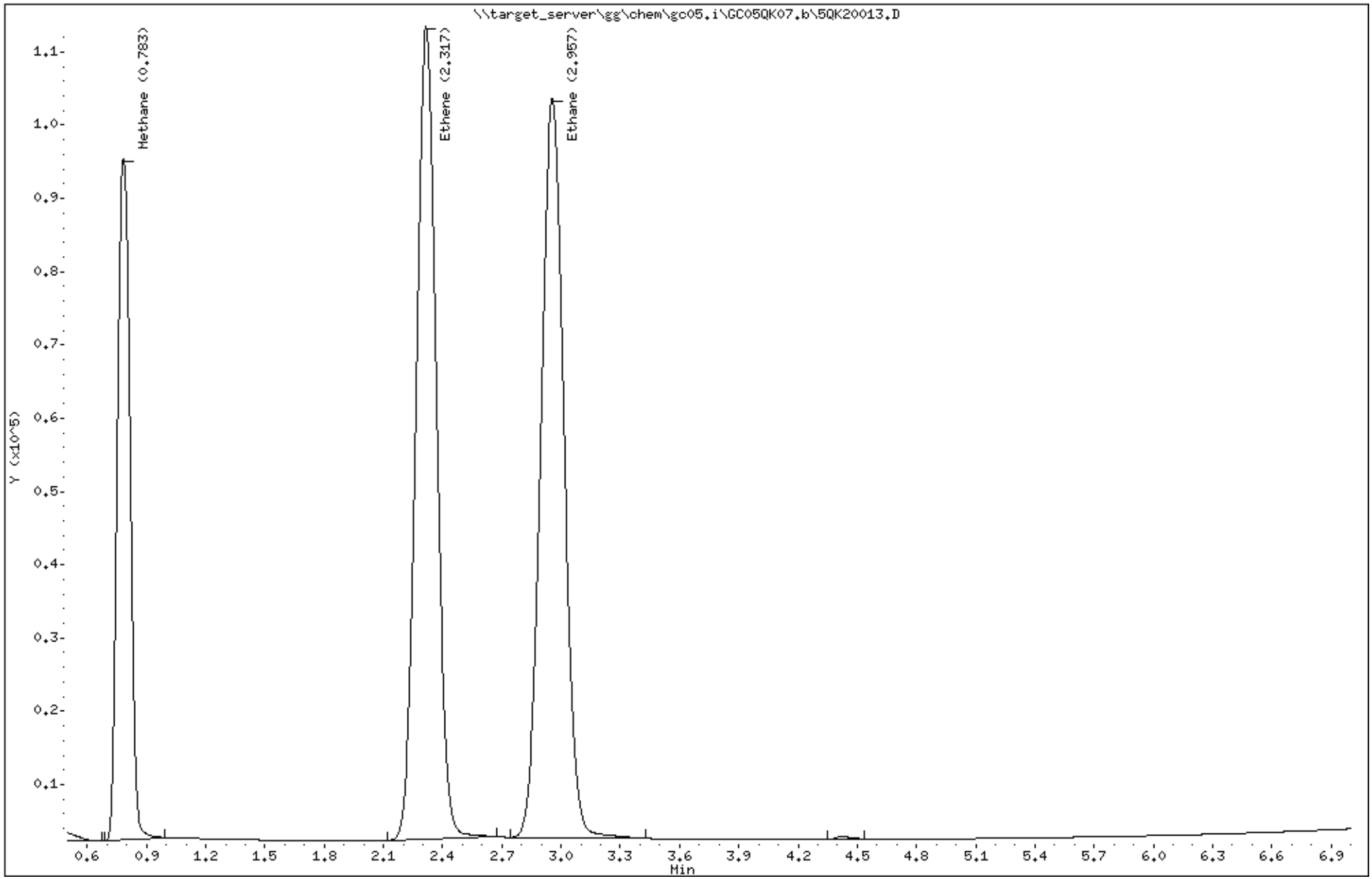
Data file : \\target_server\gg\chem\gc05.i\GC05QK07.b\5QK20013.D
Lab Smp Id: WG344993-6
Inj Date : 07-NOV-2023 09:54
Operator : DL   Inst ID: gc05.i
Smp Info : WG344993-6
Misc Info :
Comment   : RSK SOP 175
Method   : \\target_server\gg\chem\gc05.i\GC05QK07.b\MEEB47A.m
Meth Date : 08-Nov-2023 06:10 dlewry   Quant Type: ESTD
Cal Date : 07-NOV-2023 09:54   Cal File: 5QK20013.D
Als bottle: 1   Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: Falcon   Compound Sublist: all.sub
Target Version: 4.12
Processing Host: V200T3

Concentration Formula: Amt * DF * 0.005/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	0.00500	sample purged (L)
Cpnd Variable		Local Compound Variable

					AMOUNTS		
					CAL-AMT	ON-COL	
Compounds	RT	EXP RT	DLT RT	RESPONSE	(PPM)	(PPM)	REVIEW CODE
1 Methane	0.783	0.760	0.023	420262	1000.00	886	
2 Ethene	2.316	2.317	-0.001	788519	1000.00	965	
3 Ethane	2.956	2.957	-0.001	820746	1000.00	969	

Data File: \\target_server\gg\chem\gc05.i\GC05QK07.b\5QK20013.D
Date : 07-NOV-2023 09:54
Client ID:
Instrument: gc05.i
Sample Info: WG344993-6
Purge Volume: 0.0
Operator: DL
Column phase: Porapak Q
Column diameter: 0.00



Data File: \\target_server\gg\chem\gc05.i\GC05QK07.b\5QK20014.D
Report Date: 13-Dec-2023 12:30

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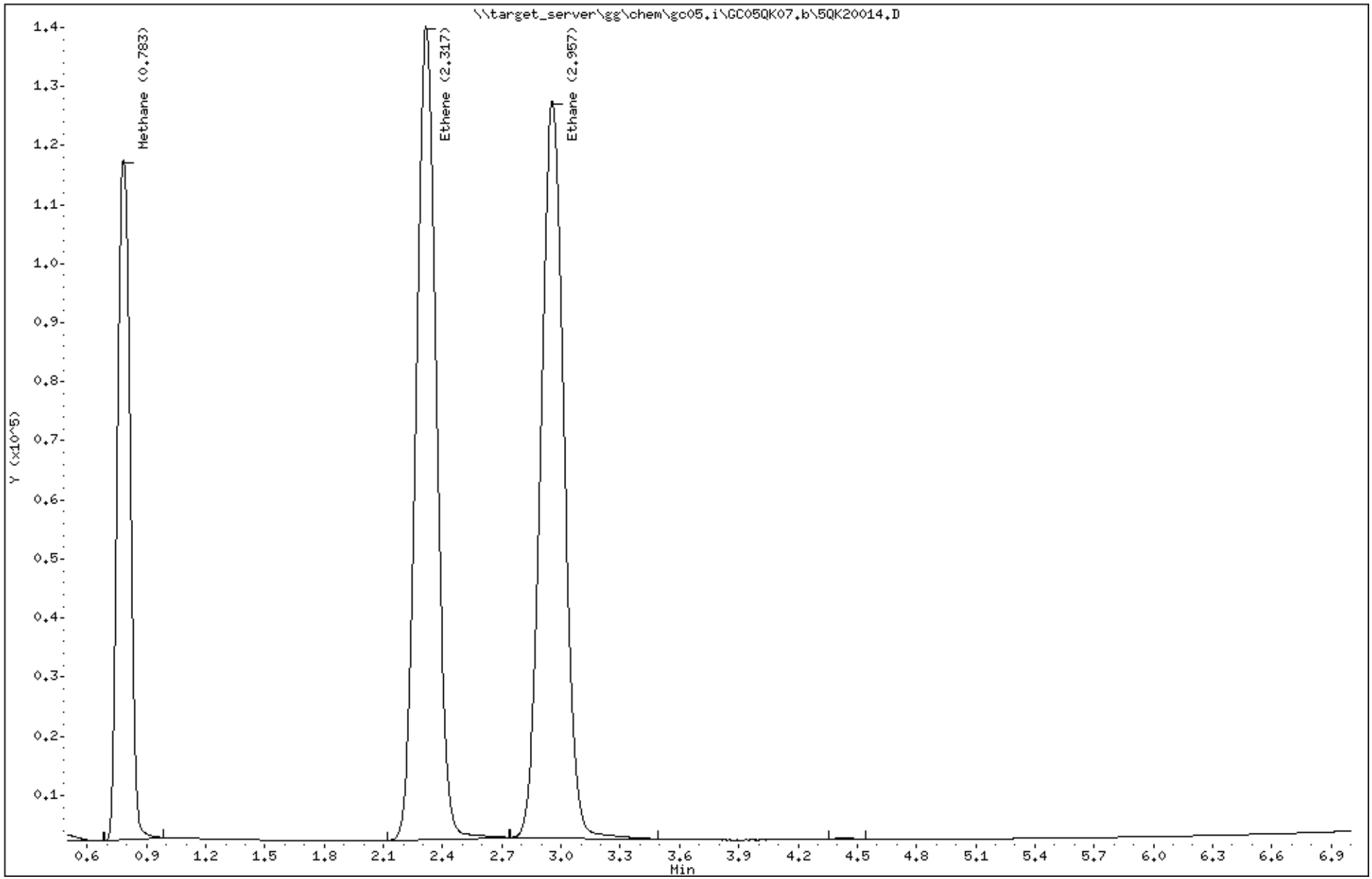
Data file : \\target_server\gg\chem\gc05.i\GC05QK07.b\5QK20014.D
Lab Smp Id: WG344993-7
Inj Date : 07-NOV-2023 10:11
Operator : DL   Inst ID: gc05.i
Smp Info : WG344993-7
Misc Info :
Comment   : RSK SOP 175
Method   : \\target_server\gg\chem\gc05.i\GC05QK07.b\MEEB47A.m
Meth Date : 08-Nov-2023 06:10 dlewry   Quant Type: ESTD
Cal Date : 07-NOV-2023 10:11   Cal File: 5QK20014.D
Als bottle: 1   Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: Falcon   Compound Sublist: all.sub
Target Version: 4.12
Processing Host: V200T3

Concentration Formula: Amt * DF * 0.005/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	0.00500	sample purged (L)
Cpnd Variable		Local Compound Variable

					AMOUNTS		
					CAL-AMT	ON-COL	
Compounds	RT	EXP RT	DLT RT	RESPONSE	(PPM)	(PPM)	REVIEW CODE
1 Methane	0.783	0.760	0.023	519291	1500.00	1090	
2 Ethene	2.316	2.317	-0.001	980865	1500.00	1240	
3 Ethane	2.956	2.957	-0.001	1015625	1500.00	1230	

Data File: \\target_server\gg\chem\gc05.i\GC05QK07.b\5QK20014.D
Date : 07-NOV-2023 10:11
Client ID:
Instrument: gc05.i
Sample Info: WG344993-7
Purge Volume: 0.0
Operator: DL
Column phase: Porapak Q
Column diameter: 0.00



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Report Date: 18-Nov-2023 10:15

Katahdin Analytical Services

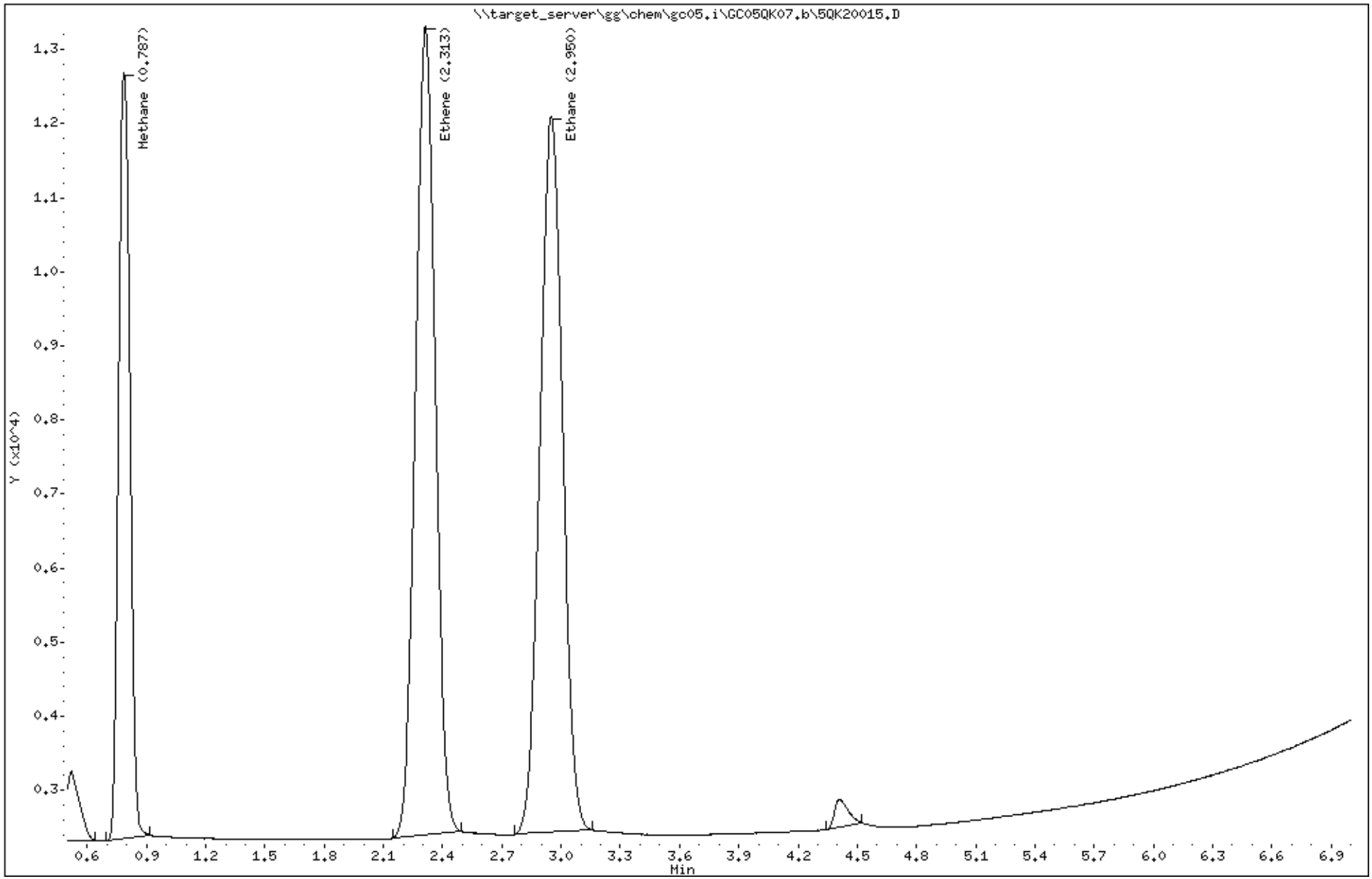
Data file : \\target_server\gg\chem\gc05.i\GC05QK07.b\5QK20015.D
Lab Smp Id: WG344993-8
Inj Date : 07-NOV-2023 11:39
Operator : DL   Inst ID: gc05.i
Smp Info : WG344993-8
Misc Info : WG344993,WG344993-4
Comment   : RSK SOP 175
Method   : \\target_server\gg\chem\gc05.i\GC05QK07.b\MEEB47A.m
Meth Date : 08-Nov-2023 06:10 dlewry   Quant Type: ESTD
Cal Date : 07-NOV-2023 10:11   Cal File: 5QK20014.D
Als bottle: 1   QC Sample: INDSOURCE
Dil Factor: 1.00000
Integrator: Falcon   Compound Sublist: all.sub
Target Version: 4.12
Processing Host: V200T3

Concentration Formula: Amt * DF * 0.005/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	0.00500	sample purged (L)
Cpnd Variable		Local Compound Variable

					CONCENTRATIONS ON-COLUMN (PPM)	CONCENTRATIONS FINAL (PPM)	
Compounds	RT	EXP RT	DLT RT	RESPONSE			REVIEW CODE
1 Methane	0.786	0.760	0.026	42036	88.5947	88.6	
2 Ethene	2.313	2.317	-0.004	76214	96.0513	96.0	
3 Ethane	2.950	2.957	-0.007	77231	93.8612	93.9	

Data File: \\target_server\gg\chem\gc05.i\GC05QK07.b\5QK20015.D
Date : 07-NOV-2023 11:39
Client ID:
Instrument: gc05.i
Sample Info: WG344993-8
Purge Volume: 0.0
Operator: DL
Column phase: Porapak Q
Column diameter: 0.00



Form 7
Calibration Verification Summary

Lab Name: Katahdin Analytical Services
SDG: SQ6112
Lab ID: WG345521-6
Analytical Date: 11/16/23 06:43
Lab File ID: 5QK20189.D
Instrument ID: GC05
Initial Calibration Date(s): 11/07/23 08:28 11/07/23 10:11
Column ID: A

Compound	RRF/Amount	RF100	CCAL RRF100	Min RF	%D/ %Drift	Max %D/ %Drift	Curve Type	Qual
Methane	474	431	431	0.100	-9.22394	15.000	Averaged	
Ethene	793	778	778	0.100	-1.92843	15.000	Averaged	
Ethane	823	810	810	0.100	-1.61416	15.000	Averaged	

*** = Compound out of QC criteria**

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sales@katahdinlab.com

Data File: \\target_server\gg\chem\gc05.i\GC05QK16.b\5QK20189.D
Report Date: 30-Nov-2023 20:17

Katahdin Analytical Services

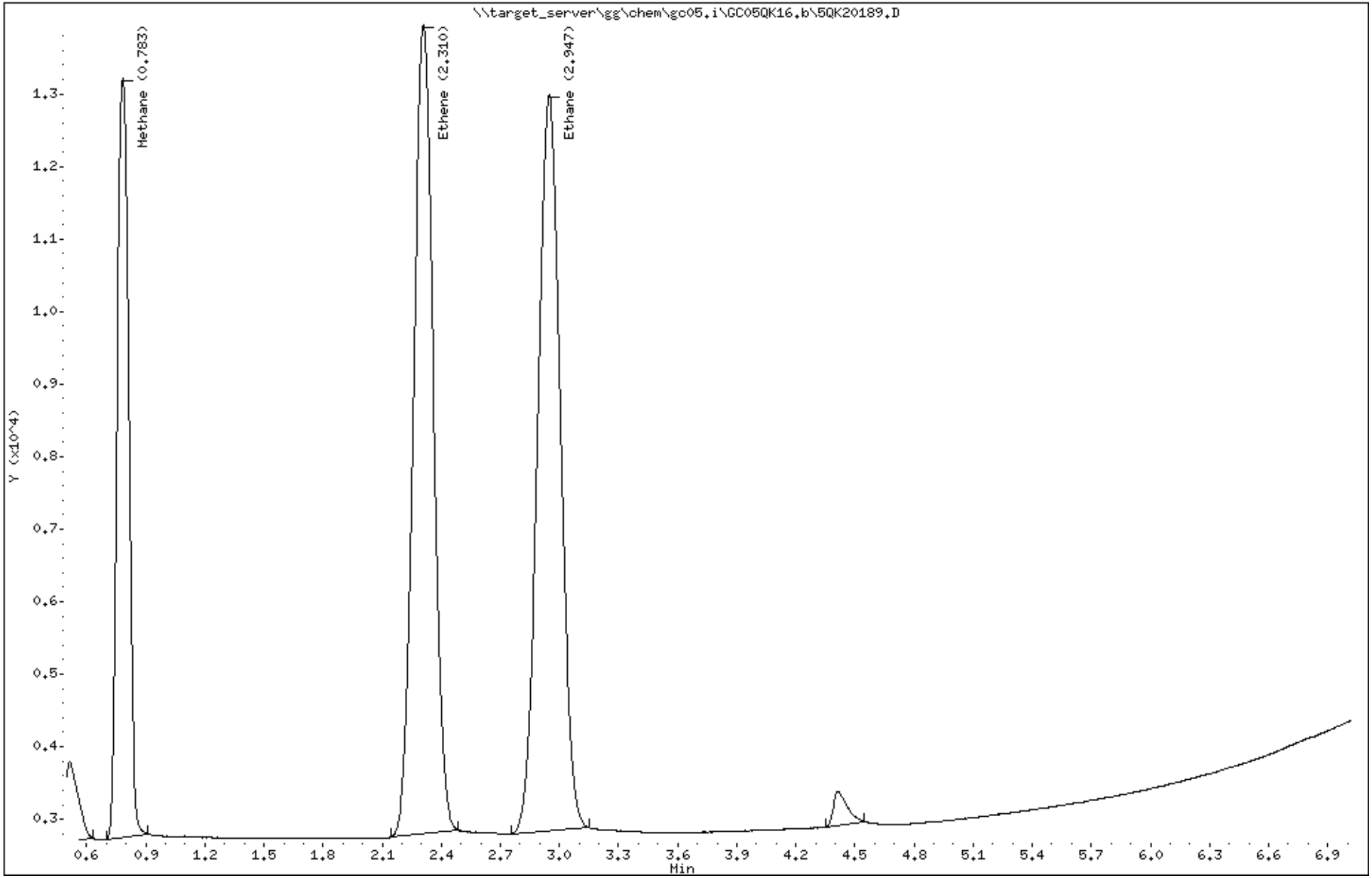
Data file : \\target_server\gg\chem\gc05.i\GC05QK16.b\5QK20189.D
Lab Smp Id: WG345521-6
Inj Date : 16-NOV-2023 06:43
Operator : DL/SH   Inst ID: gc05.i
Smp Info : WG345521-6
Misc Info : WG345521,WG344993-4,SQ6112-2
Comment   : RSK SOP 175
Method   : \\target_server\gg\chem\gc05.i\GC05QK16.b\MEEB47A.m
Meth Date : 17-Nov-2023 05:58 dlewry   Quant Type: ESTD
Cal Date : 07-NOV-2023 10:11   Cal File: 5QK20014.D
Als bottle: 1   Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon   Compound Sublist: all.sub
Target Version: 4.12
Processing Host: V200T3

Concentration Formula: Amt * DF * 0.005/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	0.00500	sample purged (L)
Cpnd Variable		Local Compound Variable

					AMOUNTS		
					CAL-AMT	ON-COL	
Compounds	RT	EXP RT	DLT RT	RESPONSE	(PPM)	(PPM)	REVIEW CODE
1 Methane	0.783	0.760	0.023	43071	100.000	90.8	
2 Ethene	2.310	2.317	-0.007	77817	100.000	98.1	
3 Ethane	2.946	2.957	-0.011	80954	100.000	98.4	

Data File: \\target_server\gg\chem\gc05.i\GC05QK16.b\5QK20189.D
Date : 16-NOV-2023 06:43
Client ID:
Instrument: gc05.i
Sample Info: WG345521-6
Purge Volume: 0.0
Operator: DL/SH
Column phase: Porapak Q
Column diameter: 0.00



Form 7
Calibration Verification Summary

Lab Name: Katahdin Analytical Services
SDG: SQ6112
Lab ID: WG345521-7
Analytical Date: 11/16/23 12:19
Lab File ID: 5QK20202.D
Instrument ID: GC05
Initial Calibration Date(s): 11/07/23 08:28 11/07/23 10:11
Column ID: A

Compound	RRF/Amount	RF100	CCAL RRF100	Min RF	%D/ %Drift	Max %D/ %Drift	Curve Type	Qual
Methane	474	430	430	0.100	-9.28717	15.000	Averaged	
Ethene	793	776	776	0.100	-2.25737	15.000	Averaged	
Ethane	823	803	803	0.100	-2.35551	15.000	Averaged	

*** = Compound out of QC criteria**

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Data File: \\target_server\gg\chem\gc05.i\GC05QK16.b\5QK20202.D
Report Date: 30-Nov-2023 20:17

Katahdin Analytical Services

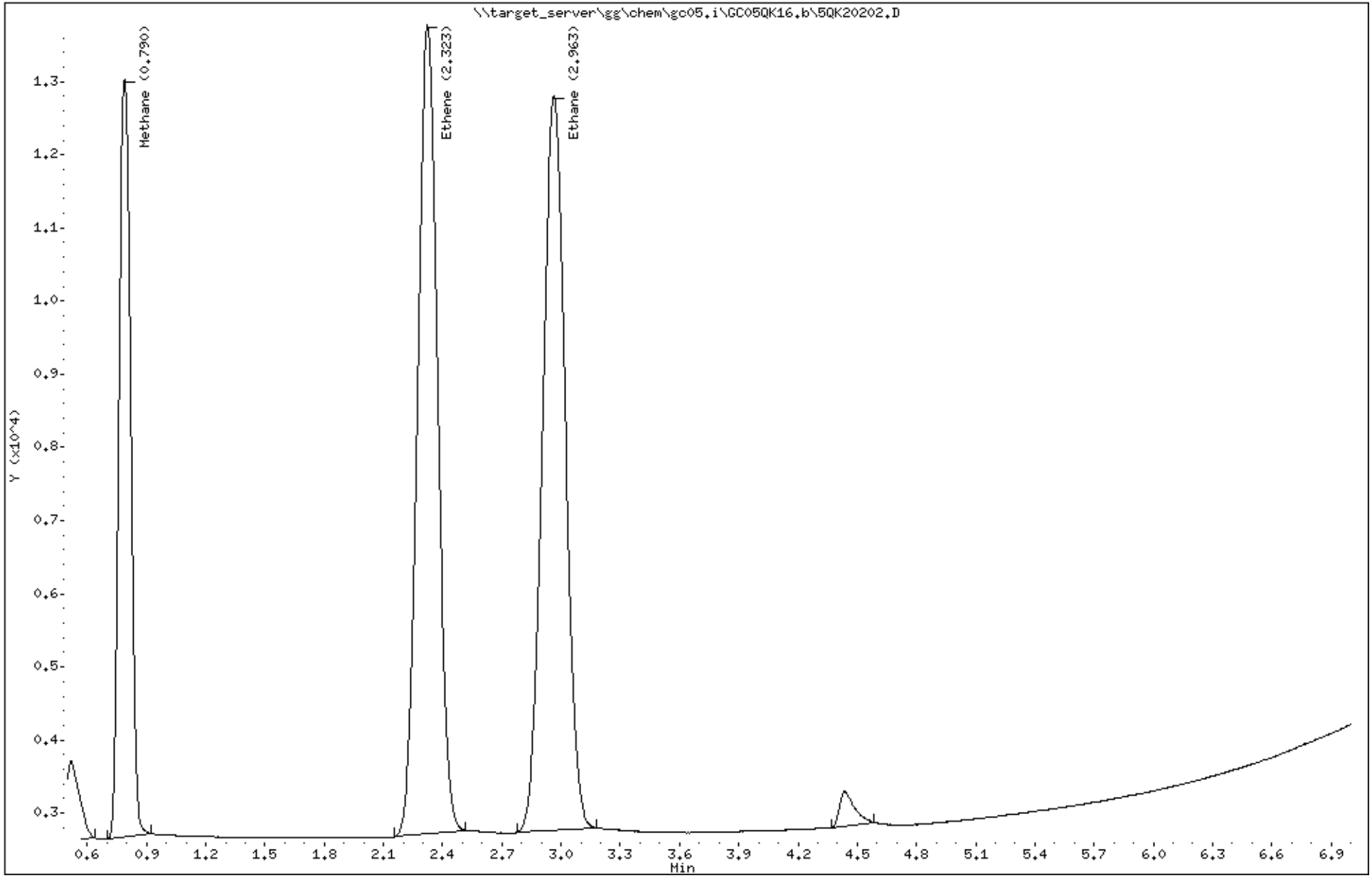
Data file : \\target_server\gg\chem\gc05.i\GC05QK16.b\5QK20202.D
Lab Smp Id: WG345521-7
Inj Date : 16-NOV-2023 12:19
Operator : DL/SH   Inst ID: gc05.i
Smp Info : WG345521-7
Misc Info : WG345521,WG344993-4,SQ6112-2
Comment   : RSK SOP 175
Method   : \\target_server\gg\chem\gc05.i\GC05QK16.b\MEEB47A.m
Meth Date : 17-Nov-2023 05:58 dlewry   Quant Type: ESTD
Cal Date : 07-NOV-2023 10:11   Cal File: 5QK20014.D
Als bottle: 1   Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon   Compound Sublist: all.sub
Target Version: 4.12
Processing Host: V200T3

Concentration Formula: Amt * DF * 0.005/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	0.00500	sample purged (L)
Cpnd Variable		Local Compound Variable

					AMOUNTS		
					CAL-AMT	ON-COL	
Compounds	RT	EXP RT	DLT RT	RESPONSE	(PPM)	(PPM)	REVIEW CODE
1 Methane	0.790	0.760	0.030	43041	100.000	90.7	
2 Ethene	2.323	2.317	0.006	77556	100.000	97.7	
3 Ethane	2.963	2.957	0.006	80344	100.000	97.6	

Data File: \\target_server\gg\chem\gc05.i\GC05QK16.b\5QK20202.D
Date : 16-NOV-2023 12:19
Client ID:
Instrument: gc05.i
Sample Info: WG345521-7
Purge Volume: 0.0
Operator: DL/SH
Column phase: Porapak Q
Column diameter: 0.00



Katahdin Analytical Services SQ6112 Page 277 of 454

Raw QC Data Section

Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

SDG: SQ6112
Lab ID: WG345521-1
Client ID: Method Blank
Matrix: AQ
Lab File ID: 5QK20190.D

Sample Date: N/A
Extract Date: 16-NOV-23
Extracted By: DL
Extraction Method: RSK SOP 175
Lab Prep Batch: WG345521

Report Date: 30-NOV-23
Analysis Date: 16-NOV-23
Analyst: DL
Analysis Method: RSK SOP 175 v.2
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Methane	J	3.4	ug/L	1	10.4	10.	2.6	5.2
Ethane	U	9.8	ug/L	1	13.1	13.	5.0	9.8
Ethene	U	9.9	ug/L	1	13.1	13.	5.0	9.9

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029
http://www.katahdinlab.com

Data File: \\target_server\gg\chem\gc05.i\GC05QK16.b\5QK20190.D
Report Date: 30-Nov-2023 20:17

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gc05.i\GC05QK16.b\5QK20190.D
Lab Smp Id: WG345521-1 Client Smp ID: WG345521-Blank
Inj Date : 16-NOV-2023 07:23
Operator : DL/SH Inst ID: gc05.i
Smp Info : WG345521-1
Misc Info : WG345521,WG344993-4,SQ6112-2
Comment : RSK SOP 175
Method : \\target_server\gg\chem\gc05.i\GC05QK16.b\MEEB47A.m
Meth Date : 17-Nov-2023 05:58 dlewry Quant Type: ESTD
Cal Date : 07-NOV-2023 10:11 Cal File: 5QK20014.D
Als bottle: 1 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSKSOP175-MEE.sub
Target Version: 4.12
Processing Host: V200T3

Concentration Formula: Amt * DF * 0.005/Vo * CpndVariable

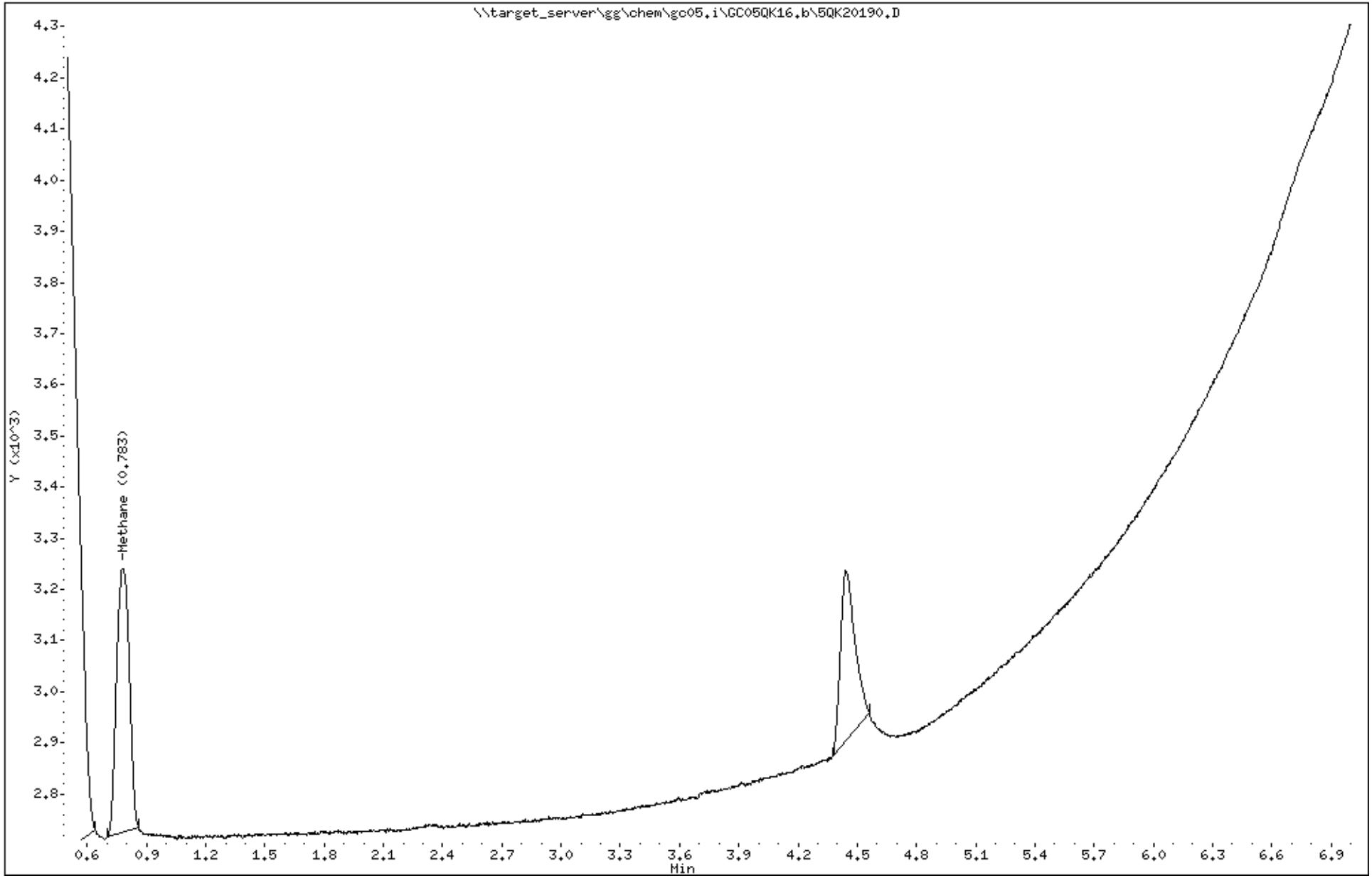
Name	Value	Description
DF	1.000	Dilution Factor
Vo	0.00500	sample purged (L)
Cpnd Variable		Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (PPM)	CONCENTRATIONS FINAL (PPM)	REVIEW CODE
1 Methane	0.783	0.760	0.023	2350	4.95284	4.95(a)	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: \\target_server\gg\chem\gc05.i\GC05QK16.b\5QK20190.D
Date : 16-NOV-2023 07:23
Client ID: WG345521-Blank
Instrument: gc05.i
Sample Info: WG345521-1
Purge Volume: 0.0
Operator: DL/SH
Column phase: Porapak Q
Column diameter: 0.00



Katahdin Analytical Services SQ6112 Page 281 of 454

Katahdin
ANALYTICAL SERVICES

LCS Recovery Report

Lab ID: WG345521-2
Client ID: LCS
SDG: SQ6112
LCS File ID: 5QK20191.D
Report Date: 30-NOV-23

Extract Date: 16-NOV-23
Extracted By: DL
Extraction Method: RSK SOP 175
Lab Prep Batch: WG345521

Analysis Date: 16-NOV-23
Analyst: DL
Analysis Method: RSK SOP 175 v.2
Matrix: AQ

Compound	Recovery (%)	Conc Added	Conc Recovered	Conc Units	Limits
Methane	87.4	69.0	60.3	ug/L	85-115
Ethane	91.6	131.	120.	ug/L	85-115
Ethene	93.9	131.	123.	ug/L	85-115

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029
http://www.katahdinlab.com

Data File: \\target_server\gg\chem\gc05.i\GC05QK16.b\5QK20191.D
Report Date: 30-Nov-2023 20:17

Katahdin Analytical Services

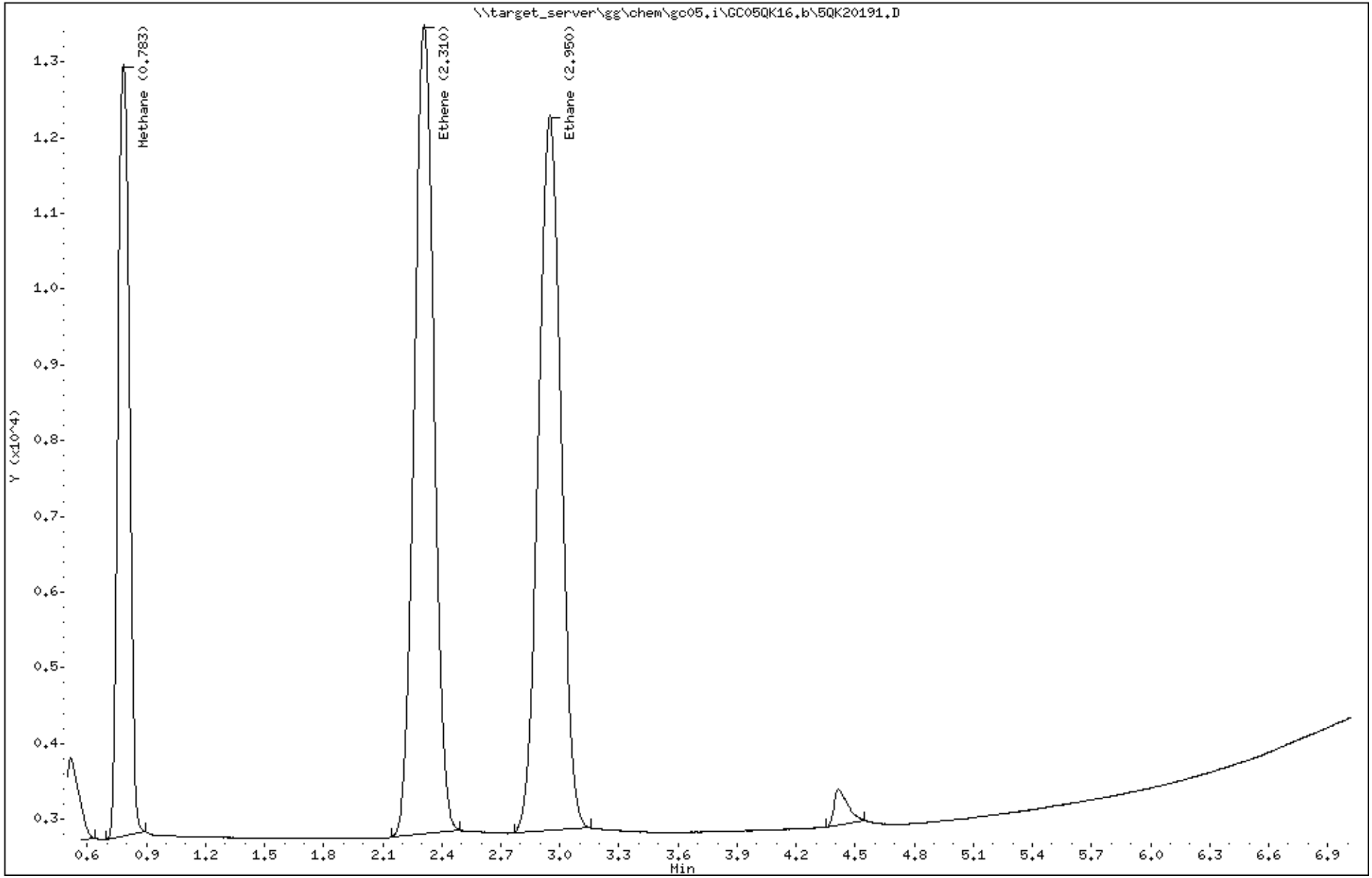
Data file : \\target_server\gg\chem\gc05.i\GC05QK16.b\5QK20191.D
Lab Smp Id: WG345521-2 Client Smp ID: WG345521-LCS
Inj Date : 16-NOV-2023 07:40
Operator : DL/SH Inst ID: gc05.i
Smp Info : WG345521-2
Misc Info : WG345521,WG344993-4,SQ6112-2
Comment : RSK SOP 175
Method : \\target_server\gg\chem\gc05.i\GC05QK16.b\MEEB47A.m
Meth Date : 17-Nov-2023 05:58 dlewry Quant Type: ESTD
Cal Date : 07-NOV-2023 10:11 Cal File: 5QK20014.D
Als bottle: 1 QC Sample: LCS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSKSOP175-MEE.sub
Target Version: 4.12
Processing Host: V200T3

Concentration Formula: Amt * DF * 0.005/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	0.00500	sample purged (L)
Cpnd Variable		Local Compound Variable

					CONCENTRATIONS ON-COLUMN (PPM)	CONCENTRATIONS FINAL (PPM)	
Compounds	RT	EXP RT	DLT RT	RESPONSE			REVIEW CODE
1 Methane	0.783	0.760	0.023	41449	87.3575	87.4	
2 Ethene	2.310	2.317	-0.007	74480	93.8660	93.9	
3 Ethane	2.950	2.957	-0.007	75291	91.5034	91.5	

Data File: \\target_server\gg\chem\gc05.i\GC05QK16.b\5QK20191.D
Date : 16-NOV-2023 07:40
Client ID: WG345521-LCS
Instrument: gc05.i
Sample Info: WG345521-2
Purge Volume: 0.0
Operator: DL/SH
Column phase: Porapak Q
Column diameter: 0.00



Logbooks and Supporting Documents

KATAHDIN ANALYTICAL SERVICES

STOCK STANDARDS RECEIVED

GCMS VOLATILES LABORATORY

REVIEWED BY/DATE:

Amp 6546

30201 US/EN
524 Internal Std / Surrogate Mix
Lot# A0163165
Expire: 08/2027 Store: 0°C or colder 1 mL
2000 µg/mL each in P&T Methanol
RESTEK

Rec'd 1-7-21

Amp 6547
48
49

AccuStandard® 125 Market St. New Haven, CT 06513 www.AccuStandard.com
M-8240C-R6 1 mL
Appendix IX Volatiles Mix
Varied conc. in MeOH
Lot: 219051809 11 comp(s)
Exp: Jun 05, 2022 Storage: Refrig (0-5 °C)
FOR LABORATORY USE ONLY
H336 H225 H370 H320 H315 H311 H332 H301 H360, H350 H351 P338 Refer to SDS
Signal Word Danger

1-12-21

AMP 6550 Airgas Specialty Gases - Scott Mini-Mix JHR
14 Liters @ 240PSIG 1.0 % Rec'd 1-12-2021
Cylinder #= ST0000228564
Ex: 12/29/23 Lot #= 160-401985759-1

AMP 6551 Airgas Specialty Gases - Scott Mini-Mix JHR
14 Liters @ 240PSIG 1000 ppm Rec'd 1-12-2021
Cylinder #= ST0000228565
Ex: 12/29/23 Lot #= 160-401987240-1

Amp 6552
53
54

30619 US/EN
Oxygenates Standard
Lot# A0167816
Expire: 01/2024 Store: 0°C or colder 1 mL
2000-10,000 µg/mL each in P&T Methanol
RESTEK

CR
Rec'd 1/19/21

Amp 6555
56
57

AccuStandard® 125 Market St. New Haven, CT 06513 www.AccuStandard.com
APP-9-048-R1-20X 1 mL
Chloroprene
2.0 mg/mL in MeOH
Lot: 220101123 1 comp(s)
Exp: Nov 09, 2022 Storage: Freeze (<-10 °C)
FOR LABORATORY USE ONLY
H225 H370 H336 H320 H315 H311 H332 H301 H360, H350 H351 P338 Refer to SDS
Signal Word Danger

1/20/21

KATAHDIN ANALYTICAL SERVICES

STOCK STANDARDS RECEIVED

GCMS VOLATILES LABORATORY

REVIEWED BY/DATE:

Amp 6832 Airgas Specialty Gases - Scott Mini-mix JM
1HL@2240 PSIG 1000ppm Recd 1-10-22
Cylinder #= ST0000235789
Ex: 12/22/24 Lot #: 160-402299623-1

Amp 6833
34
35

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com
M-603-M-5X 1 mL
Acrolein & Acrylonitrile
5.0 mg/mL in MeOH:Water 90:10
Lot: 222011130 2 comp(s)
Exp: May 13, 2022 Storage: Freeze (<-10 °C)
FOR LABORATORY USE ONLY
H336 H225 H370 H320 H315 H311 H332 H301 H360, H350 H351 P338 Refer to SDS
Signal Word Danger
Recd 2-2-22 JM

Amp 6836
37

30497 US/EN
Volatiles MegaMix(TM), EPA Method 624
Lot# A0171975
Expire: 05/2024 Store: 0°C or colder 1 mL
2000 µg/mL each in P&T Methanol
RESTEK
Recd 2-2-22 JM

Amp 6838
39
40

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com
S-457S-10X 1 mL
Tetrahydrofuran
2.0 mg/mL in MeOH
Lot: 221051701 1 comp(s)
Exp: Jun 01, 2031 Storage: Ambient (>5 °C)
FOR LABORATORY USE ONLY
H225 H370 H336 H320 H315 H311 H332 H301 H360 H351 P338 P360 Refer to SDS
Signal Word Danger
Recd. 2-8-22 JM

Amp 6841
42

30619 US/EN
Oxygenates Standard
Lot# A0176238
Expire: 09/2024 Store: 0°C or colder 1 mL
2000-10,000 µg/mL each in P&T Methanol
RESTEK

2-8-22

Katahdin Analytical Services

GC Laboratory Instrument Runlog

Instrument: GC05

pH Paper Lot#: 6303005

Date: 11/7/23

Method: RSK SOP-175

Sample Name	Data File	Sample Amt.	DF	Method	Y/N	pH	Temp °C	DoD Y/N	Analyst	Comments
prime	5QK20007	5mL	1	MEEB47A	N	—	—	N	DL	
WG344993-1	8	325uL			Y		20.5	Y		ICAL 6.5
-2	9	50uL			Y			Y		10
-3	5QK20010	250uL			Y		20.6	Y		50
-4	11	500uL			Y			Y		100
-5	12	2.5mL			Y			Y		500
-6	13	5mL			Y		20.7	Y		~~1000~~
-7	14	7.5mL			Y		20.8	Y		1500
-8/10	15	50uL			Y		20.3	Y		INVLCS
-9	16	5mL			Y		20.5	Y		
SQ5874-1D	17				Y	<2		Y		
-2D	18				Y		20.6	Y		
-3D	19				Y		20.8	Y		
-4G	20				Y		21.0	Y		
-6E	21				Y			Y		
SQ5899-1E	22				Y		21.1	Y		M overCon
-2D	23				Y			Y		
-3D	24				Y			Y		
-6E	25				Y			Y		
WG344993-11	26				Y			Y		DUP SQ5897-6
CV	27	500uL			Y	—	20.9	Y		WG344993-12
SQ5899-7L	28	5mL			Y	<2	21.0	Y		
LV	29	500uL			Y	—	20.9	Y		WG344993-13 2X Spike
										DL 11/7/23

STANDARD	STOCK #	CONC.		AMOUNT
ICAL	Amp 6832	1000 ug/mL		see comments
CV	Amp 6832	1000 ug/mL		500 uL
LCS	AMPC550	10 000 ug/mL		50 uL

Katahdin Analytical Services

GC Laboratory Instrument Runlog

Instrument: GC05

pH Paper Lot#: ~~8~~ 6308011 DL 11/16/23

Date: 11/16/23

Method: RSK SOP-175

★DL 11/16/23

Sample Name	Data File	Sample Amt.	DF	Method	Y/N	pH	Temp °C	DoD Y/N	Analyst	Comments
prime	SQK20188	5mL	1	MEEB47A	N	—	—	N	DL/SH	
CV	189	~~500~~ 500uL			Y		20.5	Y		WG-345521-6
WG-345521-1	190	5mL			Y		19.9	Y		
↓ -2	191	50uL			Y	↓	↓	Y		
SQ6112-1B	192	5mL			Y	<2	20.2	Y		
↓ -2B	193				Y		20.3	Y		
SQ6124-1A	194				Y		20.4	Y		
WG-345521-4	195				Y		20.5	Y		MS SQ6124-1B M↓
↓ -5	196				Y			Y		MSD ↓ -1C ↓
SQ6124-2A	197				Y			Y		
-3A	198				Y			Y		
-4A	199				Y			Y		
-5A	200				Y			Y		
↓ -6A	201	↓			Y	↓	↓	Y		
CV	202	500uL			Y	—	20.1	Y		WG-345521-7
SQ6124-7A	203	5mL			Y	<2	20.5	Y		
-8A	204				N			Y		M overcal
↓ -9A	205				N			Y		
SQ6137-1A	206				Y			Y		
-2A	207				Y			Y		↓
-3A	208				Y DL 11/16/23			Y		Methane overcal
↓ -4A	209				~~N~~ Y			Y		M overcal
WG-345521-3	210	↓			Y	↓	↓	Y		DLPSQ6137-4B
CV	211	500uL	↓	↓	Y	—	20.1	Y	↓	WG345521-8/345566-4

Graphite tee ordering

DL 11/16/23

STANDARD	STOCK #	CONC.		AMOUNT
ICAL		1000 ug/mL		see comments
CV	AMP 6832	1000 ug/mL		500 uL
LCS	AMP6550	10 000 ug/mL		50 uL

CONVENTIONAL AND PHYSICAL ANALYTICAL DATA

QC Summary Section

Katahdin
ANALYTICAL SERVICES

Quality Control Report

Blank Sample Summary Report

Alkalinity

QC Batch	Anal. Method	Anal. Date	Prep. Date	Result	Units	LOQ	MDL	LOD
WG345360	SM2320B	13-NOV-23	N/A	J2.0	mg/L	5.0	0.23	4.0

Chloride

QC Batch	Anal. Method	Anal. Date	Prep. Date	Result	Units	LOQ	MDL	LOD
WG345625	EPA 300.0	16-NOV-23	N/A	U1.0	mg/L	2.0	0.099	1.0

Chromium, Hexavalent

QC Batch	Anal. Method	Anal. Date	Prep. Date	Result	Units	LOQ	MDL	LOD
WG345009	SW846 7196A	07-NOV-23	N/A	U0.012	mg/L	0.025	0.00076	0.012

Ferrous Iron

QC Batch	Anal. Method	Anal. Date	Prep. Date	Result	Units	LOQ	MDL	LOD
WG344991	SM3500D	07-NOV-23	N/A	U0.050	mg/L	0.10	0.026	0.050

Nitrate as N

QC Batch	Anal. Method	Anal. Date	Prep. Date	Result	Units	LOQ	MDL	LOD
WG345075	EPA 300.0	07-NOV-23	N/A	U0.025	mg/L	0.050	0.017	0.025

Sulfate

QC Batch	Anal. Method	Anal. Date	Prep. Date	Result	Units	LOQ	MDL	LOD
WG345075	EPA 300.0	07-NOV-23	N/A	J0.073	mg/L	1.0	0.064	0.50
WG345625	EPA 300.0	16-NOV-23	N/A	U0.50	mg/L	1.0	0.064	0.50

Total Organic Carbon

QC Batch	Anal. Method	Anal. Date	Prep. Date	Result	Units	LOQ	MDL	LOD
WG346357	SM5310B	01-DEC-23	N/A	U0.70	mg/L	1.0	0.35	0.70

Quality Control Report

Laboratory Control Sample Summary Report

Alkalinity

Laboratory Sample ID	Sample Type	QC Batch	Analysis Date	Prep Date	Units	Spike Amount	Result	Recovery (%)	Acceptance Range	RPD
WG345360-2	LCS	WG345360	13-NOV-23	N/A	mg/L	120	130	106	80-120	
WG345360-3	LCSD	WG345360	13-NOV-23	N/A	mg/L	120	130	109	80-120	3

Chloride

Laboratory Sample ID	Sample Type	QC Batch	Analysis Date	Prep Date	Units	Spike Amount	Result	Recovery (%)	Acceptance Range	RPD
WG345625-2	LCS	WG345625	16-NOV-23	N/A	mg/L	3.75	3.63	96.8	90-110	

Chromium, Hexavalent

Laboratory Sample ID	Sample Type	QC Batch	Analysis Date	Prep Date	Units	Spike Amount	Result	Recovery (%)	Acceptance Range	RPD
WG345009-2	LCS	WG345009	07-NOV-23	N/A	mg/L	.5	0.50	99	85-115	
WG345009-3	LCSD	WG345009	07-NOV-23	N/A	mg/L	.5	0.50	99	85-115	0

Ferrous Iron

Laboratory Sample ID	Sample Type	QC Batch	Analysis Date	Prep Date	Units	Spike Amount	Result	Recovery (%)	Acceptance Range	RPD
WG344991-2	LCS	WG344991	07-NOV-23	N/A	mg/L	139.95	140	100	80-120	
WG344991-3	LCSD	WG344991	07-NOV-23	N/A	mg/L	139.95	140	100	80-120	0

Nitrate as N

Laboratory Sample ID	Sample Type	QC Batch	Analysis Date	Prep Date	Units	Spike Amount	Result	Recovery (%)	Acceptance Range	RPD
WG345075-2	LCS	WG345075	07-NOV-23	N/A	mg/L	0.845	0.808	95.6	90-110	

Sulfate

Laboratory Sample ID	Sample Type	QC Batch	Analysis Date	Prep Date	Units	Spike Amount	Result	Recovery (%)	Acceptance Range	RPD
WG345075-2	LCS	WG345075	07-NOV-23	N/A	mg/L	3.75	3.70	98.7	90-110	
WG345625-2	LCS	WG345625	16-NOV-23	N/A	mg/L	3.75	3.51	93.6	90-110	

Total Organic Carbon

Laboratory Sample ID	Sample Type	QC Batch	Analysis Date	Prep Date	Units	Spike Amount	Result	Recovery (%)	Acceptance Range	RPD
WG346357-2	LCS	WG346357	01-DEC-23	N/A	mg/L	50	52.4	105	80-120	
WG346357-3	LCSD	WG346357	01-DEC-23	N/A	mg/L	50	52.1	104	80-120	0

Quality Control Report

Duplicate Sample Summary Report

Chromium, Hexavalent

Duplicate Sample ID	Original Sample ID	QC Batch	Analysis Date	Units	Sample Result	Duplicate Result	RPD	RPD Limit
WG345009-4	SQ6112-2	WG345009	07-NOV-23	mg/L	U 0.012	U 0.012	NC	20

Quality Control Report

Matrix Spike Sample Summary Report

Chromium, Hexavalent

Matrix Spike Sample ID	Sample Type	Original Sample ID	QC Batch	Analysis Date	Units	Spike Amount	Sample Result	MS Result	Recovery (%)	Acceptance Range	RPD
WG345009-5	MS	SQ6112-2	WG345009	07-NOV-23	mg/L	.5	U 0.012	0.48	96	85 - 115	

Sample Data Section

KATAHDIN ANALYTICAL SERVICES – INORGANIC DATA QUALIFIERS

The sampled date indicated on the attached Report(s) of Analysis (ROA) is the date for which a grab sample was collected or the date for which a composite sample was completed. Beginning and start times for composite samples can be found on the Chain-of-Custody.

U Indicates the compound was analyzed for but not detected above the specified level. This level may be the Practical Quantitation Level (PQL) (also called Limit of Quantitation (LOQ)), the Limit of Detection (LOD) or Method Detection Limit (MDL) as required by the client. Note: All results reported as "U" MDL have a 50% rate for false negatives compared to those results reported as "U" PQL "U" LOQ or "U" LOD, where the rate of false negatives is <1%.

E Estimated value. This flag identifies compounds whose concentrations exceed the upper level of the calibration range of the instrument for that specific analysis.

J Estimated value. The analyte was detected in the sample at a concentration less than the laboratory Practical Quantitation Level (PQL) (also called Limit of Quantitation (LOQ)), but above the Method Detection Limit (MDL).

I-7 The laboratory's Practical Quantitation Level (PQL) or LOQ could not be achieved for this parameter due to sample composition, matrix effects, sample volume, or quantity used for analysis.

A-4 Please refer to cover letter or narrative for further information.

H_ Please note that the regulatory holding time for _____ is "analyze immediately". Ideally, this analysis must be performed in the field at the time of sample collection. _____ for this sample was not performed at the time of sample collection. The analysis was performed as soon as possible after receipt by the laboratory.

H1 - pH H2 - DO H3 - sulfite H4 - residual chlorine

T1 The client did not provide the full volume of at least one liter for analysis of TSS. Therefore, the PQL of 2.5 mg/L could not be achieved.

T2 The client provided the required volume of at least one liter for analysis of TSS, but the laboratory could not filter the full one liter volume due to the sample matrix. Therefore, the PQL of 2.5 mg/L could not be achieved.

M1 The matrix spike and/or matrix spike duplicate recovery performed on this sample was outside of the laboratory acceptance criteria. Sample matrix is suspected. The laboratory criteria was met for the Laboratory Control Sample (LCS) analyzed concurrently with this sample.

M2 The matrix spike and/or matrix spike duplicate recovery was outside of the laboratory acceptance criteria. The native sample concentration is greater than four times the spike added concentration so the spike added could not be distinguished from the native sample concentration.

R1 The relative percent difference (RPD) between the duplicate analyses performed on this sample was outside of the laboratory acceptance criteria (when both values are greater than ten times the PQL).

MCL	Maximum Contaminant Level	NL	No limit	NOD	No Odor Detected
NFL	No Free Liquid Present	FLP	Free Liquid Present	TON	Threshold Odor Number

D-1 As required by Method 5210B, APHA Standard Methods for the Examination of Water and Wastewater (21st edition), the BOD value reported for this sample is 'qualified' because the check standard run concurrently with the sample analysis did not meet the criteria specified in the method (198 +/- 30.5 mg/L). These results may not be reportable for compliance purposes.

D-2 The measured final dissolved oxygen concentrations of all dilutions were less than the method-specified limit of 1 mg/L. The reported BOD result was calculated assuming a final oxygen concentration equal to 1 mg/L. The reported value should be considered a minimum value.

D-3 The dilution water used to prepare this sample did not meet the method and/or regulatory criteria of less than 0.2 mg/L dissolved oxygen (DO) uptake over the five day period of incubation. These results may not be reportable for compliance purposes.

D-4 The dilution water used to prepare this sample did not meet the method and/or regulatory criteria of less than 0.4 mg/L dissolved oxygen (DO) uptake over the five day period of incubation. These results may not be reportable for compliance purposes.

D-5 The seed control factor did not meet the method criteria of greater than 2.0 mg/L of dissolved oxygen (DO) uptake over the five day period of incubation. The dilution closest to meeting the criteria was used to estimate the seed control factor.

Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

Lab Sample ID: SQ6112-1
Client ID: SY-OBMW7-110623
SDG: SQ6112
Report Date: 05-DEC-23

Matrix	Date Sampled	Date Received
AQ	06-NOV-23 16:10	07-NOV-23

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Alkalinity	210 mg/L	5.0	0.23	4.0	SM2320B	WG345360	13-NOV-23 13:54	N/A	N/A	
Chloride	760 mg/L	40.	2.0	20.	EPA 300.0	WG345625	16-NOV-23 19:27	N/A	N/A	
Chromium, Hexavalent	U0.012 mg/L	0.025	0.00076	0.012	SW846 7196A	WG345009	07-NOV-23 10:34	N/A	N/A	
Ferrous Iron	J0.096 mg/L	0.10	0.026	0.050	SM3500D	WG344991	07-NOV-23 11:26	N/A	N/A	
Nitrate as N	J0.018 mg/L	0.050	0.017	0.025	EPA 300.0	WG345075	07-NOV-23 19:07	N/A	N/A	
Sulfate	98 mg/L	2.0	0.13	1.0	EPA 300.0	WG345625	16-NOV-23 19:45	N/A	N/A	
Total Organic Carbon	2.0 mg/L	1.0	0.37	0.75	SM5310B	WG346357	01-DEC-23 15:14	N/A	N/A	

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
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ANALYTICAL SERVICES

Report of Analytical Results

Lab Sample ID: SQ6112-2
Client ID: SY-OBMW10-110623
SDG: SQ6112
Report Date: 05-DEC-23

Matrix	Date Sampled	Date Received
AQ	06-NOV-23 16:20	07-NOV-23

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Alkalinity	160 mg/L	5.0	0.23	4.0	SM2320B	WG345360	13-NOV-23 14:03	N/A	N/A	
Chloride	480 mg/L	40.	2.0	20.	EPA 300.0	WG345625	16-NOV-23 20:02	N/A	N/A	
Chromium, Hexavalent	U0.012 mg/L	0.025	0.00076	0.012	SW846 7196A	WG345009	07-NOV-23 10:34	N/A	N/A	
Ferrous Iron	U0.050 mg/L	0.10	0.026	0.050	SM3500D	WG344991	07-NOV-23 11:26	N/A	N/A	
Nitrate as N	J0.044 mg/L	0.050	0.017	0.025	EPA 300.0	WG345075	07-NOV-23 19:24	N/A	N/A	
Sulfate	77 mg/L	1.0	0.064	0.50	EPA 300.0	WG345075	07-NOV-23 19:24	N/A	N/A	
Total Organic Carbon	J0.78 mg/L	1.0	0.37	0.75	SM5310B	WG346357	01-DEC-23 15:39	N/A	N/A	

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Raw Data Section

WET CHEMISTRY BATCH REPORT
Nov 07 2023, 11:50 am
Batch: WG344991 Run ID 1: R626538 Run ID 2: NONE

Parameter: Ferrous Iron

Date Analyzed: 07-NOV-23

Analyst Initials: RAD

Prep Date: N/A

Prep Method: N/A

Prep Chemist: N/A

Sample	Samp Type	Method	Initial Amt.	Final Amt.	Rpt. DF	Result	Rpt Result	TS(%)	PQL	MDL	Adj PQL	RPD	%Rec
SQ5389-24	SAMP	SM3500D	50.000mL	50.000mL	1	.056	U0.10 mg/L	NA	.1	0.026	0.10		
SQ5389-25	SAMP	SM3500D	50.000mL	50.000mL	1	.106	0.11 mg/L	NA	.1	0.026	0.10		
SQ6112-1	SAMP	SM3500D	50.000mL	50.000mL	1	.096	J0.096 mg/L	NA	.1	0.026	0.10		
SQ6112-2	SAMP	SM3500D	50.000mL	50.000mL	1	.017	U0.050 mg/L	NA	.1	0.026	0.10		
WG344991-1	MBLANK	SM3500D	50.000mL	50.000mL	1	-.012	U0.050 mg/L	NA	.1	0.026	0.10		
WG344991-2	LCS	SM3500D	50.000mL	50.000mL	1	140.29	140 mg/L	NA	.1	0.026	0.10		100
WG344991-3	LCSD	SM3500D	50.000mL	50.000mL	1	139.55	140 mg/L	NA	.1	0.026	0.10	0	100

Comments:

SQ6112-1	Anions = NO3, SO4, Cl
SQ6112-2	Anions = NO3, SO4, Cl
WG344991-1	SQ5389-24
WG344991-2	SQ5389-24
WG344991-3	SQ5389-24

Entered by: RAD Date: 11/7/23 Accepted by: SS Date: 11/7/23

KATAHDIN ANALYTICAL SERVICES, INC.

Standard Stock Solution — formulas below on p2

Ferrous Ammonium Sulfate (Fe(NH4)2(SO4)2-6H2O) Stock ID: W22304

Salt Weight (g): 0.702 Final Volume(mL): 500 Concentration ug Fe++/mL: 199.9

FAS Working Standard : mLs of Stock 10 Final Volume(mL): 100 Concentration ug Fe++/mL: 19.99

CCV TV= 20.02 MG/L

LCS Stock Solution

Ferrous Ammonium Sulfate (Fe(NH4)2(SO4)2-6H2O) Stock ID: W22303

Salt Weight (g): 4.902 Final Volume(mL): 500 Concentration ug Fe++/mL: 1396.1

FAS Working Standard : mLs of Stock 10 Final Volume(mL): 100 Concentration ug Fe++/mL: 139.61

LCS TV= 139.95 MG/L

Matrix Spike Addition as Fe++ Total ug: 2 mL added to Sample 279.9

STANDARD CURVE Date: 11/07/23 **All standards and samples prepared to 100 mL final volume**

Standard	Fe++ Stock mL	Fe++ Con mg/L	510 nm Abs	Fe++ Total ug
Blank	0	0.00	0.001	0.0
10 ug	0.5	0.20	0.021	10.0
25ug	1.25	0.50	0.053	25.0
100ug	5	2.00	0.205	100.1
200ug	10	4.00	0.407	200.2
300ug	15	6.00	0.611	300.3
350ug	17.5	7.00	0.713	350.3

Linear Regression y=ax+b

Correlation Coefficient= 1.00000

Slope= 0.0020

Intercept= 0.0013

Client	Katahdin ID	Sample Vol(mLs)	Sample Blank	510 nm	Net Abs	Fe++ Total ug	Final Con. mg/L	Fe++ mg/L		
	ICV	2	0	0.563	0.563	276.64	138.32	5.533	98.8%	
	CCV	10	0	0.404	0.404	198.33	19.83	3.967	99.1%	
	CCB	50	0	0.000	0.000	-0.62	-0.01	-0.012		
	LCS	2	0	0.571	0.571	280.57	140.29	5.611	100.2%	
	LCSD	2	0	0.568	0.568	279.10	139.55	5.582	99.7%	
	SQ6112-1	50	0	0.011	0.011	4.79	0.10	0.096		
	SQ6112-2	50	0	0.003	0.003	0.85	0.02	0.017		
	SQ5389-24	50	0	0.007	0.007	2.82	0.06	0.056		
	SQ5389-25	50	0	0.012	0.012	5.29	0.11	0.106		
	CCV	10	0	0.403	0.403	197.84	19.78	3.957	98.8%	
	CCB	50	0	0.000	0.000	-0.62	-0.01	-0.012		

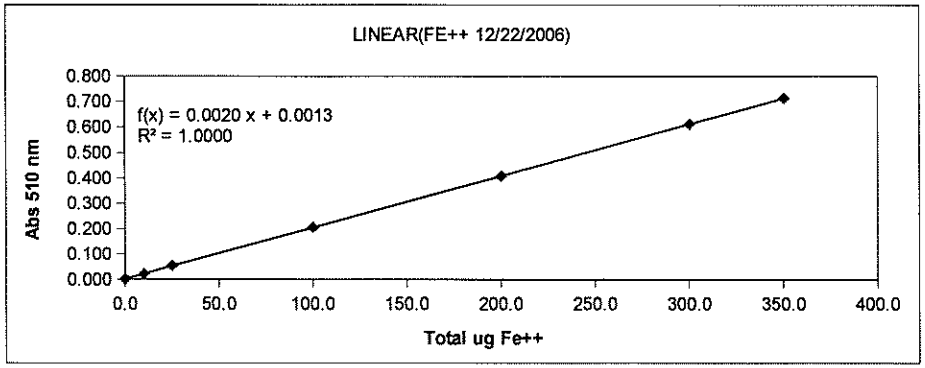
LCS RECOVERY (mg/L)

True Value	Measured Value	% Recovery
140.0	140.29	100.2%

ANALYST: RAD **DATE:** 11/7/2023

CHECKED BY: SS **DATE:** 11/7/23

KATAHDIN ANALYTICAL SERVICES, INC.



Fe++ ug	Abs
0.0	0.001
10.1	0.015
25.2	0.045
100.1	0.205
200.2	0.407
300.3	0.611
350.3	0.713
0.0	0.000

Fe++ ug	Abs
0.0	0.0012664
100.1	0.2045289
200.2	0.4077913
300.3	0.6110538
350.3	0.712685
0.0	0.0012664
	#VALUE!

FORMULAS

M3 STOCK	Concentration ug Fe++/ [g FAS /mw FAS]x mw Fe x10exp6 {REM ug/g}/ volume in ml
M6 WORKING	Concentration ug Fe++/mL: STOCK CONCENTRATION x DILUTION FACTOR
I12 LCS STOCK	LCS Stock Concentration as Fe++ mg/mL: [vol x . normality of K2CrO7/ vol FAS] x mw OF Fe
I14 LCS WORKING	Working LCS Stock Concentration as Fe++ ug/mL: STOCK CONCENTRATION x DILUTION FACTOR

KATAHDIN ANALYTICAL SERVICES

FERROUS IRON SM 3500-Fe B

Reagents Information:

Ammonium Acetate Buffer ID: W22302	Notes:
Phenanthroline Solution ID: W22301	WG344991 → R626538 RAD 11/7/23
Ferrous Ammonium Sulfate Stock ID: W22304	
Ferrous Ammonium Sulfate Working Standard/CCV ID: 110723 19.99 Conc (µg/mL)	
LCS/ICV/MS Stock Standard ID: W22303	
LCS/ICV/MS Working Standard ID: 110723 139.6 Conc (µg/mL)	
Spectronic 301: ——	
Spectronic 401: —— SPEC 1	

Distillation and Analysis Data:

KAS Sample ID	Initial Dilution	Prep Time	Phenanthroline Addition (V)	Sample Volume (mLs)	Abs 510nm	
Cal 0		10:36	✓	50	0.001	
10µg					0.021	
25µg					0.053	
100µg					0.205	
200µg					0.407	
300µg					0.611	
350µg					0.713	
ICV					0.563	
CCV		11:26	✓	50	0.404	
CCB					0.000	
LCS					0.571	
LCSD					0.568	
SQ6112-1					0.011	16:10
" -2					0.003	16:20
SQ5389-24					0.007	LOD
" -25					0.012	LOQ
CCV					0.403	
CCB					0.000	
					RAD 11/7/23	

Analyst: RAD Date: 11/7/23

Reviewed by: SS Date: 11/7/23

WET CHEMISTRY BATCH REPORT
Nov 07 2023, 04:25 pm
Batch: WG345009 Run ID 1: R626576 Run ID 2: NONE

Parameter: Chromium, Hexavalent
Prep Date: N/A

Date Analyzed: 07-NOV-23
Prep Method: N/A

Analyst Initials: SS
Prep Chemist: N/A

Sample	Samp Type	Method	Initial Amt.	Final Amt.	Rpt. DF	Result	Rpt Result	TS(%)	PQL	MDL	Adj PQL	RPD	%Rec
SQ6112-1	SAMP	SW846 7196A	95.000mL	95.000mL	1	-.00037	U0.012 mg/L	NA	.025	0.00076	0.025		
SQ6112-2	SAMP	SW846 7196A	95.000mL	95.000mL	1	-.00026	U0.012 mg/L	NA	.025	0.00076	0.025		
WG345009-1	MBLANK	SW846 7196A	95.000mL	95.000mL	1	-.0003	U0.012 mg/L	NA	.025	0.00076	0.025		
WG345009-2	LCS	SW846 7196A	95.000mL	95.000mL	1	.4957	0.50 mg/L	NA	.025	0.00076	0.025		99
WG345009-3	LCSD	SW846 7196A	95.000mL	95.000mL	1	.49708	0.50 mg/L	NA	.025	0.00076	0.025	0	99
WG345009-4	DUP	SW846 7196A	95.000mL	95.000mL	1	-.00029	U0.012 mg/L	NA	.025	0.00076	0.025	NC	
WG345009-5	MS	SW846 7196A	95.000mL	95.000mL	1	.47783	0.48 mg/L	NA	.025	0.00076	0.025		96

Comments:

SQ6112-1	Anions = NO3, SO4, Cl
SQ6112-2	Anions = NO3, SO4, Cl
WG345009-1	SQ6112-1
WG345009-2	SQ6112-1
WG345009-3	SQ6112-1
WG345009-4	SQ6112-2
WG345009-5	SQ6112-2

Entered by: SS Date: 11/7/23 Accepted by: RAD Date: 11/8/23

KATAHDIN ANALYTICAL SERVICES, LLC
Wet Chemistry Analysis Run Information Sheet

Analyte: HEXAVALENT CHROMIUM	**Analyst:** SS
Instrument: KONELAB 20	**Analysis Date:** 11/7/23

Analytical Method (Check all that apply): W6345009 → R626576

[√] SW846 7196A [ ] SM 3500-Cr B [ ] Other (list): _____

Reagent Information:

Reagent Name	Reagent ID	Expiration Date
Diphenylcarbazide Solution	**W22305**	**5/7/2024**
10% v/v Sulfuric Acid	**W21629**	**2/14/2024**

Standards Information:

Standard Name	Concentration (mg/L as Cr^6)	ID	Expiration Date
Cal. Standard / CCV Stock	1000.0	**SWL5065**	**4/28/2024**
Cal. Std. / CCV Intermediate	25.0	**W21820**	**11/28/2023**
1.0 mg/L Calibration Standard - (1.00 mL / 25.0 mL dilution of Cal. Standard / CCV Intermediate)	1.00	HC_Cal110723	Day of use only
CCV - (0.50 mL / 25.0 mL dilution of Cal. Standard / CCV Intermediate)	0.50	HC_CCV110723	Day of use only
LCS / MS Stock	1000.0	**SWL5048**	**12/31/2023**
LCS / MS Intermediate	25.0	**W21961**	**12/20/2023**
LCS - (0.50 mL / 25.0 mL dilution of LCS / MS Intermediate)	0.50	HC_LCS110723	Day of use only

Notes:

1) Additional calibration standards (0.50, 0.10, 0.050, 0.020, 0.010 mg/L) are automatically prepared by the instrument during analysis through dilution of the 1.0 mg/L Calibration Standard.
2) Matrix spikes are prepared prior to analysis by adding 0.5 mL of LCS / MS Intermediate to 25 mL of sample. Matrix spike added = 0.50 mg/L as Cr6.

Comments:

Pipettes: W7, W8, W10

Aquakem v. 7.2									
Results from time period:									
Tue Nov 07 09:38:22 2023									
Tue Nov 07 16:07:16 2023									
Sample Id	Test short name	Result	Result unit	Result date and time	Dil. Factor	Response	Blank init abs. (A)	Main abs. 1	Comments
CRVI-0	Chromium	-0.0000606	mg/l	11/7/23 9:38:22	1	0.00008	-0.00024	-0.00016	CAL POINT
CRVI-1.0	Chromium	0.0100138	mg/l	11/7/23 9:38:23	100	0.00654	-0.00052	0.00602	CAL POINT
CRVI-1.0	Chromium	0.020286	mg/l	11/7/23 9:38:24	50	0.01314	-0.00041	0.01272	CAL POINT
CRVI-1.0	Chromium	0.0504637	mg/l	11/7/23 9:38:25	20	0.03251	-0.00039	0.03211	CAL POINT
CRVI-1.0	Chromium	0.1014456	mg/l	11/7/23 9:38:26	10	0.06523	-0.00013	0.0651	CAL POINT
CRVI-1.0	Chromium	0.4960503	mg/l	11/7/23 9:38:27	2	0.31853	-0.00033	0.3182	CAL POINT
CRVI-1.0	Chromium	1.0018013	mg/l	11/7/23 9:38:28	1	0.64316	0.00046	0.64362	CAL POINT
CRVI-CCV	Chromium	0.5009953	mg/l	11/7/23 10:18:38	1	0.3217	0.00061	0.3223	100%
CRVI-CCB	Chromium	-0.0003035	mg/l	11/7/23 10:18:39	1	-0.00008	-0.00028	-0.00036	
CRVI LCS	Chromium	0.4957042	mg/l	11/7/23 10:18:40	1	0.3183	-0.00028	0.31802	ACCEPTED
CRIV LCSD	Chromium	0.4970888	mg/l	11/7/23 10:18:41	1	0.31919	-0.0004	0.31879	ACCEPTED
CRVI-CCV	Chromium	0.5088749	mg/l	11/7/23 10:20:38	1	0.32676	0.00078	0.32753	102%
CRVI-CCB	Chromium	-0.0000096	mg/l	11/7/23 10:20:39	1	0.00011	-0.00025	-0.00014	
CRVI-CCV	Chromium	0.5030493	mg/l	11/7/23 10:34:16	1	0.32302	-0.00052	0.3225	101%
CRVI-CCB	Chromium	-0.0000517	mg/l	11/7/23 10:34:17	1	0.00008	-0.00056	-0.00048	
SQ6112 1610	Chromium	-0.0003788	mg/l	11/7/23 10:34:18	1	-0.00013	-0.00005	-0.00018	ACCEPTED
SQ6112 1620	Chromium	-0.0002696	mg/l	11/7/23 10:34:19	1	-0.00006	-0.00036	-0.00042	ACCEPTED
SQ6112 1620 DUP	Chromium	-0.0002902	mg/l	11/7/23 10:34:20	1	-0.00007	-0.0001	-0.00017	ACCEPTED
SQ6112 1620 MS	Chromium	0.477836	mg/l	11/7/23 10:34:21	1	0.30683	-0.00038	0.30645	ACCEPTED
CRVI-CCV	Chromium	0.5054717	mg/l	11/7/23 10:36:28	1	0.32457	-0.00043	0.32415	101%
CRVI-CCB	Chromium	-0.0000788	mg/l	11/7/23 10:36:29	1	0.00007	-0.00068	-0.00062	

-1
-2
-2
-2

5_11/7/23

Laboratory
Analyzer User

Date : 11/7/2023
Time : 13:08

Test Chromium
Unit mg/l

Sample ID:	Result	Date and Time	Note
CRVI-CCV	0.500995	11/7/2023 10:18	
CRVI-CCB	-0.0003	11/7/2023 10:18	
CRVI LCS	0.495704	11/7/2023 10:18	
CRIV LCSD	0.497089	11/7/2023 10:18	
CRVI-CCV	0.508875	11/7/2023 10:20	
CRVI-CCB	-1e-005	11/7/2023 10:20	
CRVI-CCV	0.503049	11/7/2023 10:34	
CRVI-CCB	-5e-005	11/7/2023 10:34	
-1 SQ6112 1610	-0.0004	11/7/2023 10:34	
-2 SQ6112 1620	-0.0003	11/7/2023 10:34	
-2 SQ6112 1620 DUP	-0.0003	11/7/2023 10:34	
-2 SQ6112 1620 MS	0.477836	11/7/2023 10:34	
CRVI-CCV	0.505472	11/7/2023 10:36	
CRVI-CCB	-8e-005	11/7/2023 10:36	

SS
11/7/23

Laboratory
Analyzer User

11/7/2023 10:05

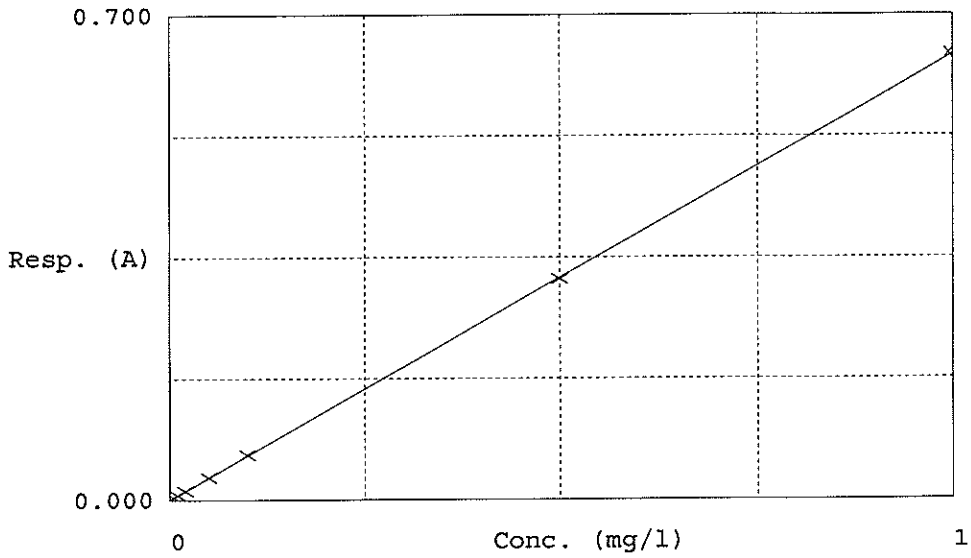
Test Chromium

Accepted 11/7/2023 10:05

Factor 1.558
Bias 0

Coeff. of det. 0.999975

Errors Meas. error



	Calibrator	Response	Calc. con.	Conc.	Errors
1	CRVI-0	0.000	-0.0000606	0.0000000	Init abs.
2	CRVI-1.0	0.007	0.0100138	0.0100000	
3	CRVI-1.0	0.013	0.0202860	0.0200000	
4	CRVI-1.0	0.033	0.0504637	0.0500000	
5	CRVI-1.0	0.065	0.1014456	0.1000000	
6	CRVI-1.0	0.319	0.4960503	0.5000000	
7	CRVI-1.0	0.643	1.0018013	1.0000000	

Katahdin
ANALYTICAL SERVICES

ACCREDITED IN ACCORDANCE WITH nelac
Cert No E87604

Wet Chemistry Batch Report

Analyst Initials: RAD
Date Analyzed: 07-NOV-23

Batch: WG345074
Prep Method: N/A
Prep Chemist: RAD

Sample	Samp Type	Method	Parameter	DF	Result	Rpt. Result	Units	PQL	Adj. PQL	MDL	Adj. MDL	RPD	Rec.
SQ6099-1	SAMP	EPA 300.0	Chloride	1	19.6704	20.	mg/L	2	2.0	.0993	0.099		
SQ6099-1	SAMP	EPA 300.0	Nitrate as N	1	.0017	U 0.050	mg/L	.05	0.050	.0174	0.017		
SQ6099-1	SAMP	EPA 300.0	Nitrite as N	1	.3764	0.38	mg/L	.05	0.050	.0092	0.0092		
WG345074-1	MBLANK	EPA 300.0	Chloride	1	.0174	U 1.0	mg/L	2	2.0	.0993	0.099		
WG345074-1	MBLANK	EPA 300.0	Nitrate as N	1	.0025	U 0.025	mg/L	.05	0.050	.0174	0.017		
WG345074-1	MBLANK	EPA 300.0	Nitrite as N	1	.0134	J 0.013	mg/L	.05	0.050	.0092	0.0092		
WG345074-2	LCS	EPA 300.0	Chloride	1	3.6483	3.65	mg/L	2	2.0	.0993	0.099		97.3
WG345074-2	LCS	EPA 300.0	Nitrate as N	1	.8075	0.808	mg/L	.05	0.050	.0174	0.017		95.6
WG345074-2	LCS	EPA 300.0	Nitrite as N	1	1.1164	1.12	mg/L	.05	0.050	.0092	0.0092		98.2

Comments:

WG345074-1	SQ6099-1
WG345074-2	SQ6099-1

Entered by: RAD Date: 11/8/23 Accepted by: SS Date: 11/8/23

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Wet Chemistry Batch Report

Analyst Initials: RAD
Date Analyzed: 07-NOV-23

Batch: WG345075
Prep Method: N/A
Prep Chemist: RAD

Sample	Samp Type	Method	Parameter	DF	Result	Rpt. Result	Units	PQL	Adj. PQL	MDL	Adj. MDL	RPD	Rec.
SQ6112-1	SAMP	EPA 300.0	Nitrate as N	1	.0185	J 0.018	mg/L	.05	0.050	.0174	0.017		
SQ6112-2	SAMP	EPA 300.0	Nitrate as N	1	.044	J 0.044	mg/L	.05	0.050	.0174	0.017		
SQ6112-2	SAMP	EPA 300.0	Sulfate	1	77.3454	77	mg/L	1	1.0	.0637	0.064		
WG345075-1	MBLANK	EPA 300.0	Nitrate as N	1	.0025	U 0.025	mg/L	.05	0.050	.0174	0.017		
WG345075-1	MBLANK	EPA 300.0	Sulfate	1	.0732	J 0.073	mg/L	1	1.0	.0637	0.064		
WG345075-2	LCS	EPA 300.0	Nitrate as N	1	.8075	0.808	mg/L	.05	0.050	.0174	0.017		95.6
WG345075-2	LCS	EPA 300.0	Sulfate	1	3.7055	3.70	mg/L	1	1.0	.0637	0.064		98.7

Comments:

SQ6112-1	VOA, PAHs, MEE, A
SQ6112-2	VOA, PAHs, MEE, A
WG345075-1	SQ6112-1
WG345075-2	SQ6112-1

Entered by: RAD Date: 11/8/23 Accepted by: SS Date: 11/8/23

Katahdin
ANALYTICAL SERVICES

ACCREDITED IN ACCORDANCE WITH
nelac
Cert No E87604

Wet Chemistry Batch Report

Analyst Initials: RAD
Date Analyzed: 07-NOV-23

Batch: WG345077
Prep Method: N/A
Prep Chemist: RAD

Sample	Samp Type	Method	Parameter	DF	Result	Rpt. Result	Units	PQL	Adj. PQL	MDL	Adj. MDL	RPD	Rec.
SQ6124-1	SAMP	SW846 9056A	Nitrate as N	1	.0102	U 0.025	mg/L	.05	0.050	.0174	0.017		
SQ6124-1	SAMP	SW846 9056A	Sulfate	1	26.8701	27	mg/L	1	1.0	.0637	0.064		
SQ6124-2	SAMP	SW846 9056A	Nitrate as N	1	.0099	U 0.025	mg/L	.05	0.050	.0174	0.017		
SQ6124-2	SAMP	SW846 9056A	Sulfate	1	37.2513	37	mg/L	1	1.0	.0637	0.064		
SQ6124-3	SAMP	SW846 9056A	Nitrate as N	1	.0056	U 0.025	mg/L	.05	0.050	.0174	0.017		
SQ6124-3	SAMP	SW846 9056A	Sulfate	1	29.6138	30	mg/L	1	1.0	.0637	0.064		
SQ6124-4	SAMP	SW846 9056A	Nitrate as N	1	.0046	U 0.025	mg/L	.05	0.050	.0174	0.017		
SQ6124-4	SAMP	SW846 9056A	Sulfate	1	28.5635	28	mg/L	1	1.0	.0637	0.064		
SQ6124-5	SAMP	SW846 9056A	Nitrate as N	1	.009	U 0.025	mg/L	.05	0.050	.0174	0.017		
SQ6124-5	SAMP	SW846 9056A	Sulfate	1	31.6929	32	mg/L	1	1.0	.0637	0.064		
SQ6124-6	SAMP	SW846 9056A	Nitrate as N	1	2.0514	2.0	mg/L	.05	0.050	.0174	0.017		
SQ6124-6	SAMP	SW846 9056A	Sulfate	1	17.3553	17	mg/L	1	1.0	.0637	0.064		
SQ6124-8	SAMP	SW846 9056A	Nitrate as N	1	.008	U 0.025	mg/L	.05	0.050	.0174	0.017		
SQ6124-8	SAMP	SW846 9056A	Sulfate	1	.4128	J 0.41	mg/L	1	1.0	.0637	0.064		
SQ6124-9	SAMP	SW846 9056A	Nitrate as N	1	.0045	U 0.025	mg/L	.05	0.050	.0174	0.017		
SQ6124-9	SAMP	SW846 9056A	Sulfate	1	.3521	J 0.35	mg/L	1	1.0	.0637	0.064		
WG345077-1	MBLANK	SW846 9056A	Nitrate as N	1	.0025	U 0.025	mg/L	.05	0.050	.0174	0.017		
WG345077-1	MBLANK	SW846 9056A	Sulfate	1	.0732	J 0.073	mg/L	1	1.0	.0637	0.064		
WG345077-2	LCS	SW846 9056A	Nitrate as N	1	.8075	0.808	mg/L	.05	0.050	.0174	0.017		95.6
WG345077-2	LCS	SW846 9056A	Sulfate	1	3.7055	3.70	mg/L	1	1.0	.0637	0.064		98.7
WG345077-3	MS	SW846 9056A	Nitrate as N	1	.784526	* 0.784	mg/L	.05	0.050	.0174	0.017		88.2
WG345077-3	MS	SW846 9056A	Sulfate	1	30.5656	30.6	mg/L	1	1.0	.0637	0.064		93.6
WG345077-4	MSD	SW846 9056A	Nitrate as N	1	.750632	* 0.751	mg/L	.05	0.050	.0174	0.017	4	84.4
WG345077-4	MSD	SW846 9056A	Sulfate	1	30.5938	30.6	mg/L	1	1.0	.0637	0.064	0	94.3

Comments:

SQ6124-1	MS/MSD. Anions: SO
SQ6124-2	Anions: SO4 + NO3.
SQ6124-3	Anions: SO4 + NO3.
SQ6124-4	Anions: SO4 + NO3.
SQ6124-5	Anions: SO4 + NO3.
SQ6124-6	Anions: SO4 + NO3.
SQ6124-8	Anions: SO4 + NO3.
SQ6124-9	Anions: SO4 + NO3.
WG345077-1	SQ6124-1
WG345077-2	SQ6124-1
WG345077-3	SQ6124-1
WG345077-4	SQ6124-1

Entered by: RAD Date: 11/8/23 Accepted by: SS Date: 11/9/23

IC STANDARDS PREPARATION

Fill sheet in completely and file with each batch of samples analyzed.

IC8 MIX ID:	EXPIRATION DATE:	ICAL DATE:	CCV STOCK ID:	EXPIRATION DATE:
W22233	10/23/23	10/12/23	W22268	11/07/23

ALALYTE	INITIAL AMOUNT (mL)	OF	STOCK CONC. (mg/L)	TO	FINAL VOLUME (mL)	=	FINAL CONC. (mg/L)
Cl	2.0	OF	1000	TO	100	=	20
NO2 (as N)	0.8		1000				8
NO3 (as N)	0.8		1000				8
Br	4.0		1000				40
SO4	4.0		1000				40
F	1.0		1000				10
PO4 (as P)	1.0		1000				10

WORKING STANDARDS

Standards prepared on each day of use.

STD.	INITIAL AMOUNT (mL)	OF	FINAL VOLUME (mL)	FINAL CONC. (mg/L)							STD ID*
				Cl	NO2	NO3	Br	SO4	PO4	F	
IC8	5	IC8	5	40	16	16	80	80	20	20	IC8-101223
IC7	2.5	IC8	5	20	8	8	40	40	10	10	IC7-101223
IC6	2.5	IC7	5	10	4	4	20	20	5	5	IC6-101223
IC5	1.25	IC7	5	5	2	2	10	10	2.5	2.5	IC5-101223
IC4	1.25	IC6	5	2.5	1	1	5	5	1.25	1.25	IC4-101223
IC3	0.5	IC6	5	1	0.4	0.4	2	2	0.5	0.5	IC3-101223
IC2	0.5	IC3	5	0.1	0.04	0.04	0.2	0.2	0.05	0.05	IC2-101223
CCV	2.5	IC7	5	10	4	4	20	20	5	5	CCV-110723

* STD ID is prefix followed by the date of preparation (ie. IC6-020216)

LCS/MATRIX SPIKE MIX ID: W22272	EXPIRATION DATE: 11/08/23

3.75 mL of High Purity Multi-Element IC Standard Solution "A" and 3.75 mL of High Purity Multi-Element IC Standard Solution "B" diluted to 50 mL. For MS, add 0.25 mL of mix to 4.75 mL of sample. For LCS, add 0.25 mL of mix to 4.75 mL of DI water.

FINAL CONCENTRATIONS (mg/L)

Cl	NO2 (as N)	NO3 (as N)	Br	SO4	PO4 (as P)	F	STD ID*
3.75	1.14	0.845	3.75	3.75	1.22	3.75	IC-LCS-110723

PIPETTES: W00, W16

2x dil = 2.5mL samp + 2.5mL DI	**5x dil** = 1.0mL samp + 4.0mL DI	**10x dil** = 0.5mL samp + 4.5mL DI
20x dil = 0.25mL samp + 4.75mL DI	**50x dil** = 0.1mL samp + 4.9mL DI	**100x dil** = 0.05mL samp + 4.95mL DI
200x dil = 0.025mL samp + 4.975mL DI	**500x dil** = 0.01mL samp + 4.99mL DI	**1000x dil** = 0.005mL samp + 4.995mL DI

Katahdin Analytical Services **ION CHROMATOGRAPHY RUNLOG** Dionex ICS-2100 (Instrument IC-3)

Analysis Date: 11/7/23	**Analytical Column S/N:** 2205031 94	**Calibration Date:** 10/12/23
Analysis Sequence: 110723 A	**Guard Column S/N:** 2204062 08	**Calibration Sequence:** 101223 CAL
Analyst: RAD	**Suppressor S/N:** 2211 7086	☐ If box at left is checked, continued from previous page. Refer to previous page for header information.

Reporting / Reanalysis Codes: ✓ Report without manipulation; S Report, peak automatically reintegrated with SmartPeak; M Report, peak manually integrated; A Report, peak manually assigned; R Do not report, reanalyze sample

Method Codes: E EPA 300.0; SW SW846 9056A

Katahdin Sample Number	Dilution Factor	Method Code	Report or Reanalyze (enter appropriate code): F	Cl	NO_2	SO_4	Br	NO_3	PO_4	Comments
CCV			✓	✓	✓	✓	✓	✓		
CCB			M	✓	✓	M	M	✓		
LCS			✓	✓	✓	✓	R	✓		
SQ 6099-1	1	DW		✓	✓			M		
6112-1		E		R		R		M		Cl = 20x SO4 = 2x
-2				R		✓		✓		Cl = 20x
6124-1		S				✓		M		
-1 MS						✓		✓		
-1 MSD						✓		✓		
-2						✓		M		
-3						✓		M		
-4						✓		M		
CCV			✓	✓	✓	✓	✓	✓		
CCB			M	✓	✓	M	M	✓		
6124-5	1	S				✓		M		
-6						✓		✓		
-8						✓		M		
-9						✓		M		
CCV			✓	✓	✓	✓	✓	✓		
CCB			M	✓	✓	M	M	✓		

RAD 11/8/23

Katahdin Analytical Services SQ6112 Page 314 of 454
6112-1 → 6112940
6112-2 → 6112941
6124-1 → 6124939
6124-5 → 6124940

Reviewed by: SS Review Date: 11/8/23

QAWL1104 - 000854

Sequence Overview

Sequence Details

Name:	**110723 A REPROC**	*Created On:*	**28/Dec/22 13:33:49**
Directory:	**2023\11-NOV**	*Created By:*	**wetlab**
Data Vault:	**ChromeleonLocal**	*Updated On:*	**08/Nov/23 14:45:24**
No. of Injections:	**20**	*Updated By:*	**wetlab**

Injection Details

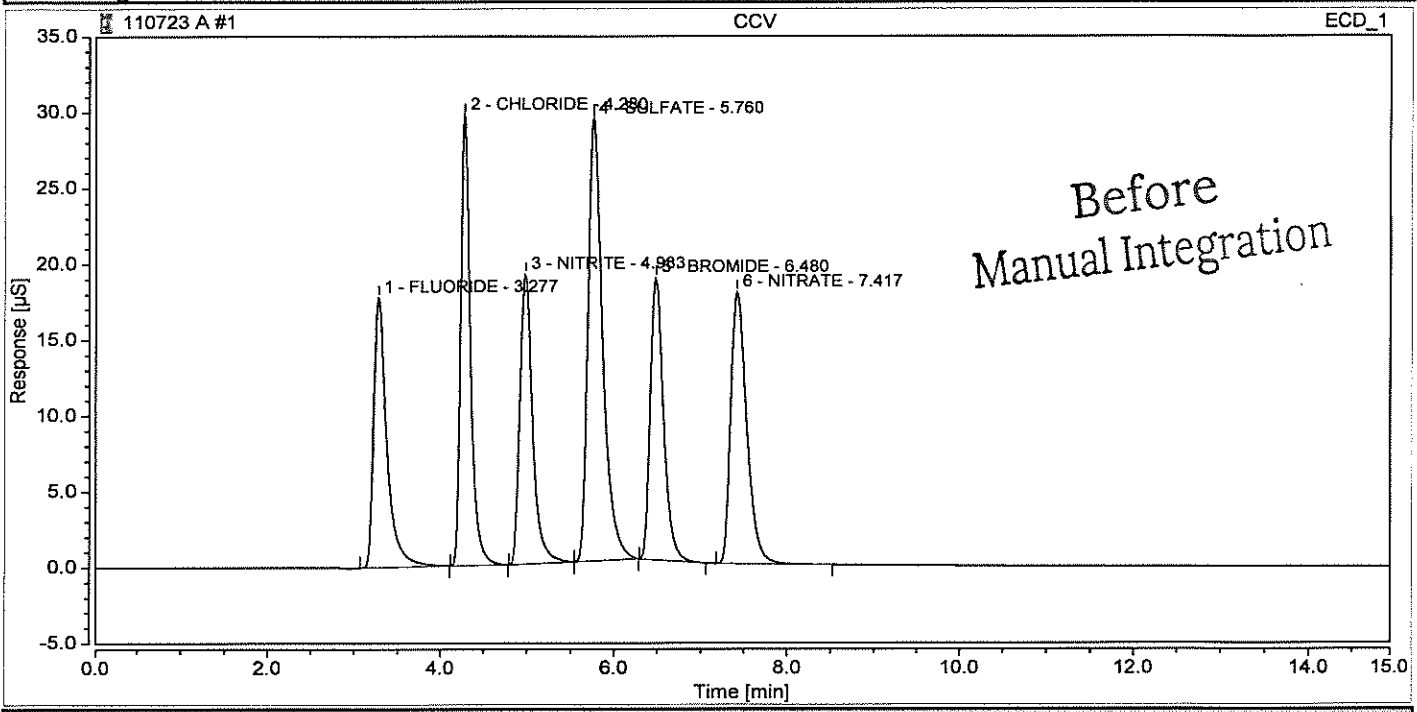
No.	Injection Name	Position	Type	Level	Inject Time	Status
1	CCV	1	Check Standard	06	07/Nov/23 17:58:46	Finished
2	CCB	2	Blank		07/Nov/23 18:15:32	Finished
3	LCS	3	Check Standard	09	07/Nov/23 18:32:48	Finished
4	SQ6099-1	4	Unknown		07/Nov/23 18:50:03	Finished
5	SQ6112-1	5	Unknown		07/Nov/23 19:07:18	Finished
6	SQ6112-2	6	Unknown		07/Nov/23 19:24:34	Finished
7	SQ6124-1	7	Unknown		07/Nov/23 19:41:49	Finished
8	SQ6124-1 MS	8	Unknown		07/Nov/23 19:59:04	Finished
9	SQ6124-1 MSD	9	Unknown		07/Nov/23 20:16:20	Finished
10	SQ6124-2	10	Unknown		07/Nov/23 20:33:35	Finished
11	SQ6124-3	11	Unknown		07/Nov/23 20:50:51	Finished
12	SQ6124-4	12	Unknown		07/Nov/23 21:08:06	Finished
13	CCV	13	Check Standard	06	07/Nov/23 21:25:22	Finished
14	CCB	14	Blank		07/Nov/23 21:42:37	Finished
15	SQ6124-5	15	Unknown		07/Nov/23 21:59:53	Finished
16	SQ6124-6	16	Unknown		07/Nov/23 22:17:08	Finished
17	SQ6124-8	17	Unknown		07/Nov/23 22:34:23	Finished
18	SQ6124-9	18	Unknown		07/Nov/23 22:51:39	Finished
19	CCV	25	Check Standard	06	07/Nov/23 23:08:54	Finished
20	CCB	26	Blank		07/Nov/23 23:26:12	Finished

Chromatogram and Results

Injection Details

Injection Name:	**CCV**	*Run Time (min):*	**14.95**
Vial Number:	**1**	*Injection Volume:*	**200.00**
Injection Type:	**Check Standard**	*Channel:*	**ECD_1**
Calibration Level:	**06**	*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**07/Nov/23 17:58**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

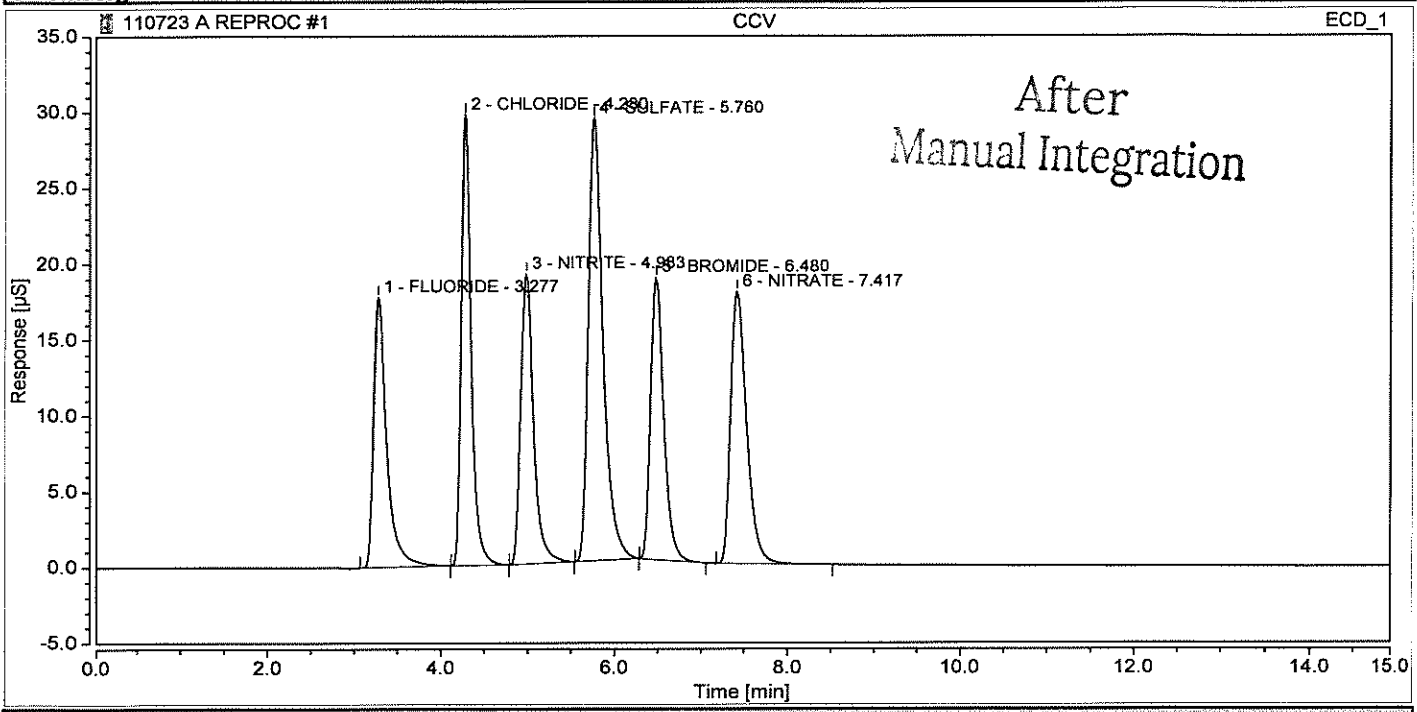
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.277	3.145	17.802	13.53	13.45	5.1082	2.1633
2	CHLORIDE	4.280	3.947	29.695	16.98	22.44	10.1277	1.2770
3	NITRITE	4.983	3.279	19.132	14.10	14.46	3.9478	-1.3059
4	SULFATE	5.760	5.729	29.157	24.64	22.04	20.1518	0.7592
5	BROMIDE	6.480	3.307	18.616	14.23	14.07	19.4534	-2.7332
6	NITRATE	7.417	3.841	17.913	16.52	13.54	3.9249	-1.8763
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**23.248**	**132.315**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**CCV**	*Run Time (min):*	**14.95**
Vial Number:	**1**	*Injection Volume:*	**200.00**
Injection Type:	**Check Standard**	*Channel:*	**ECD_1**
Calibration Level:	**06**	*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**07/Nov/23 17:58**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

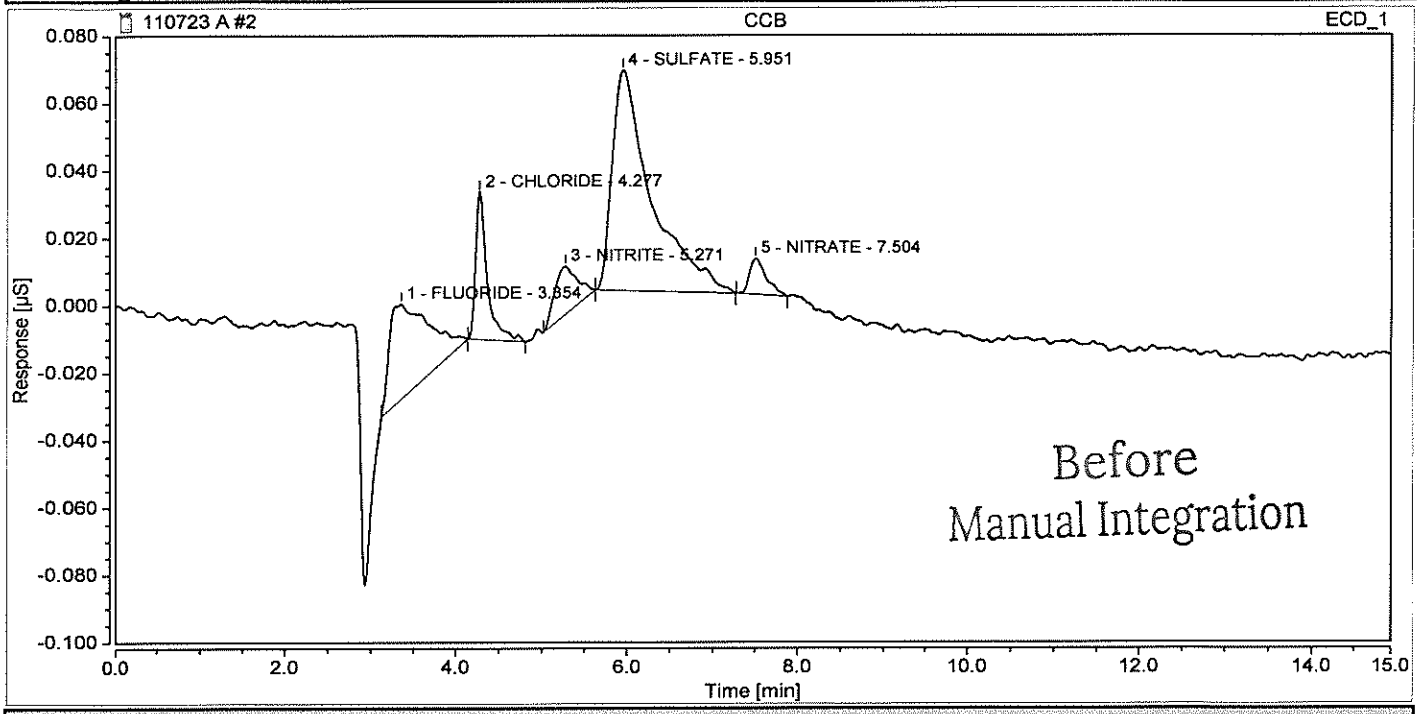
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.277	3.145	17.802	13.53	13.45	5.1082	2.1633
2	CHLORIDE	4.280	3.947	29.695	16.98	22.44	10.1277	1.2770
3	NITRITE	4.983	3.279	19.132	14.10	14.46	3.9478	-1.3059
4	SULFATE	5.760	5.729	29.157	24.64	22.04	20.1518	0.7592
5	BROMIDE	6.480	3.307	18.616	14.23	14.07	19.4534	-2.7332
6	NITRATE	7.417	3.841	17.913	16.52	13.54	3.9249	-1.8763
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**23.248**	**132.315**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**CCB**	*Run Time (min):*	**14.95**
Vial Number:	**2**	*Injection Volume:*	**200.00**
Injection Type:	**Blank**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**07/Nov/23 18:15**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

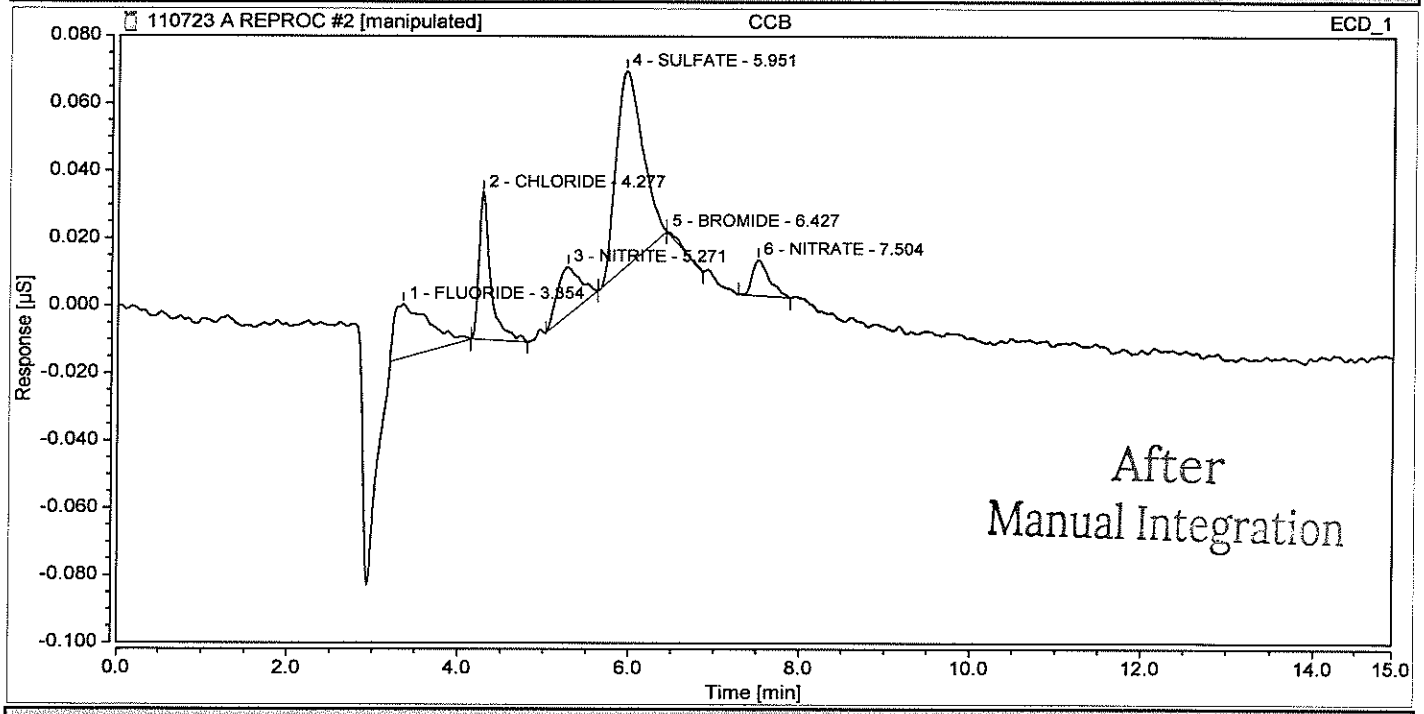
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.354	0.015	0.028	23.35	17.41	0.0399	n.a.
2	CHLORIDE	4.277	0.007	0.044	10.72	26.95	0.0174	n.a.
3	NITRITE	5.271	0.004	0.014	7.01	8.84	0.0134	n.a.
4	SULFATE	5.951	0.035	0.065	55.04	40.29	0.1224	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5	NITRATE	7.504	0.002	0.011	3.88	6.52	0.0025	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.063**	**0.162**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**CCB**	*Run Time (min):*	**14.95**
Vial Number:	**2**	*Injection Volume:*	**200.00**
Injection Type:	**Blank**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**07/Nov/23 18:15**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

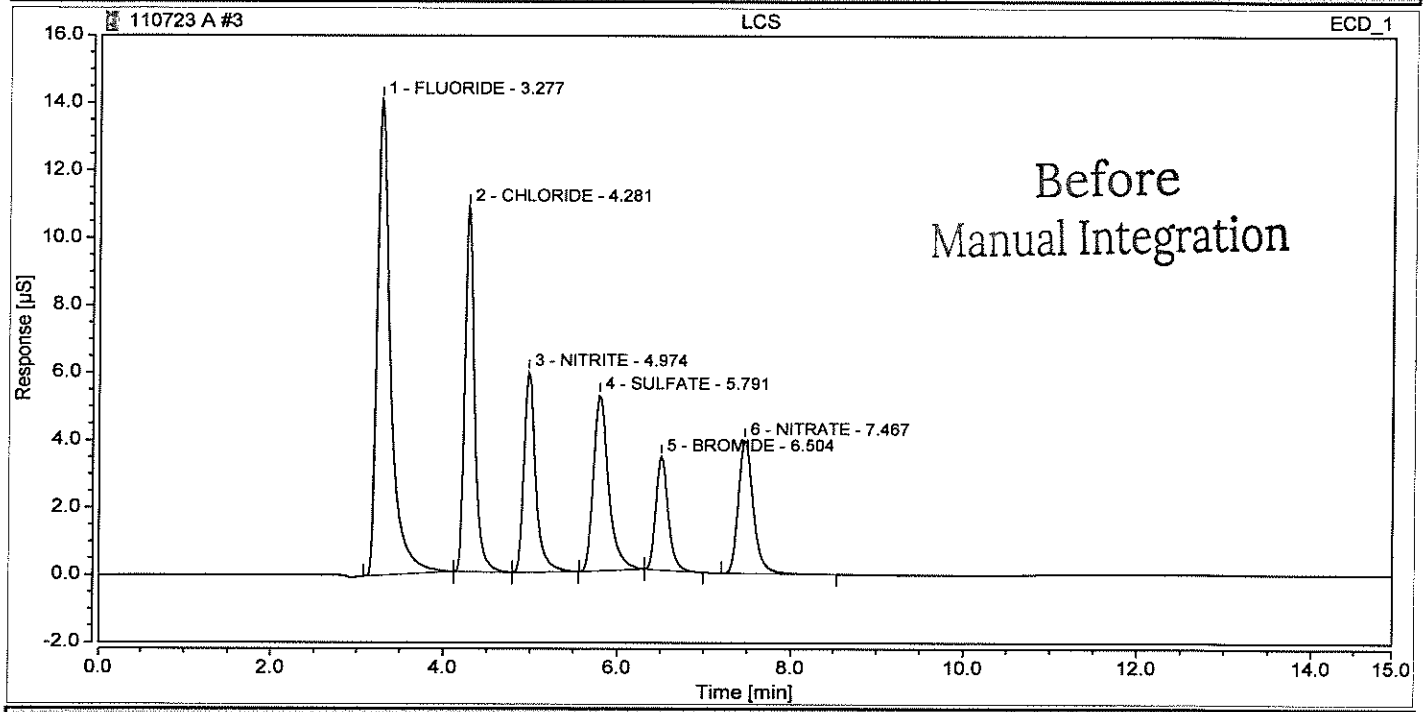
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.354	0.007	0.016	17.62	11.21	0.0283	n.a.
2	CHLORIDE	4.277	0.007	0.044	16.12	30.65	0.0174	n.a.
3	NITRITE	5.271	0.004	0.014	10.55	10.05	0.0134	n.a.
4	SULFATE	5.951	0.021	0.058	49.53	40.67	0.0732	n.a.
5	BROMIDE	6.427	0.000	0.000	0.34	0.00	0.0008	n.a.
6	NITRATE	7.504	0.002	0.011	5.84	7.41	0.0025	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.042**	**0.143**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**LCS**	*Run Time (min):*	**14.95**
Vial Number:	**3**	*Injection Volume:*	**200.00**
Injection Type:	**Check Standard**	*Channel:*	**ECD_1**
Calibration Level:	**09**	*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**07/Nov/23 18:32**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

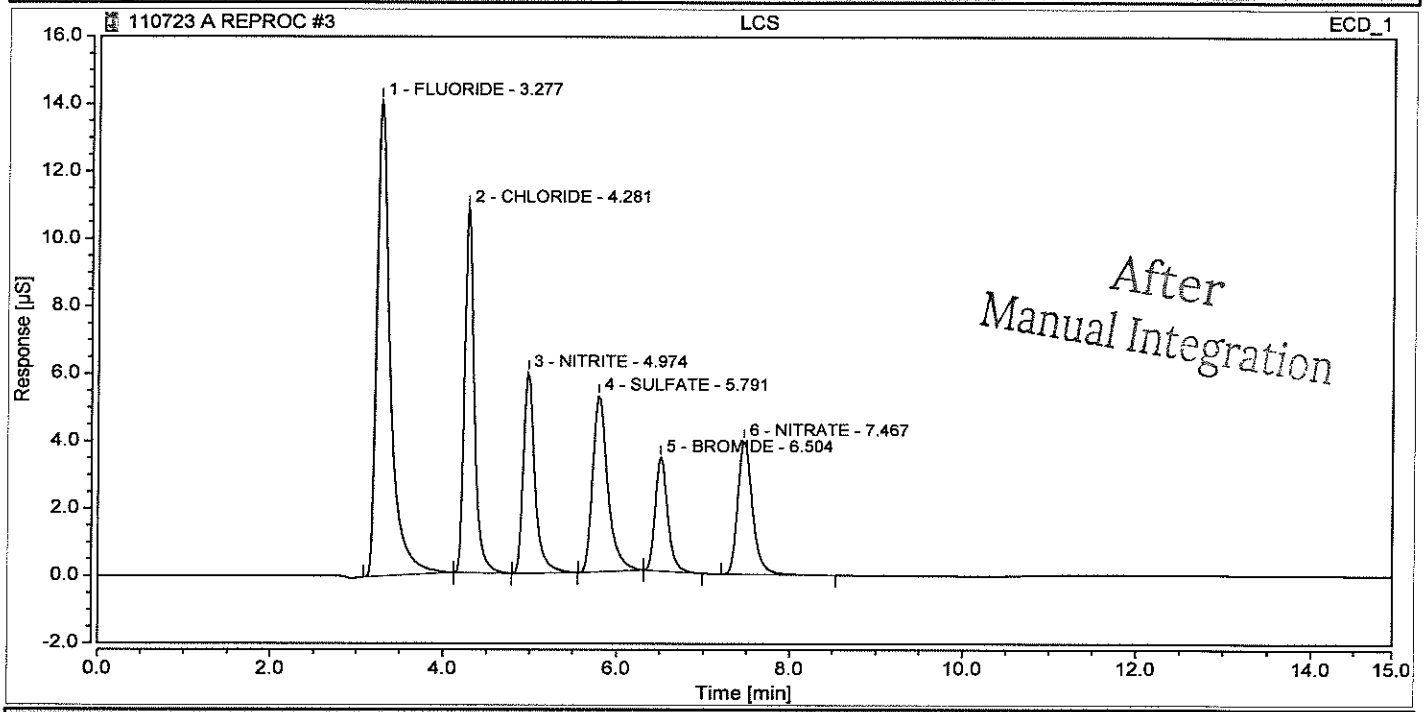
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.277	2.549	14.126	34.79	32.49	4.1181	9.8158
2	CHLORIDE	4.281	1.422	10.836	19.41	24.92	3.6483	-2.7116
3	NITRITE	4.974	0.944	5.964	12.88	13.72	1.1164	-2.0699
4	SULFATE	5.791	1.053	5.230	14.38	12.03	3.7055	-1.1864
5	BROMIDE	6.504	0.569	3.371	7.76	7.75	3.3461	-10.7697
6	NITRATE	7.467	0.790	3.956	10.79	9.10	0.8075	-4.4332
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**7.327**	**43.483**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**LCS**	*Run Time (min):*	**14.95**
Vial Number:	**3**	*Injection Volume:*	**200.00**
Injection Type:	**Check Standard**	*Channel:*	**ECD_1**
Calibration Level:	**09**	*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**07/Nov/23 18:32**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

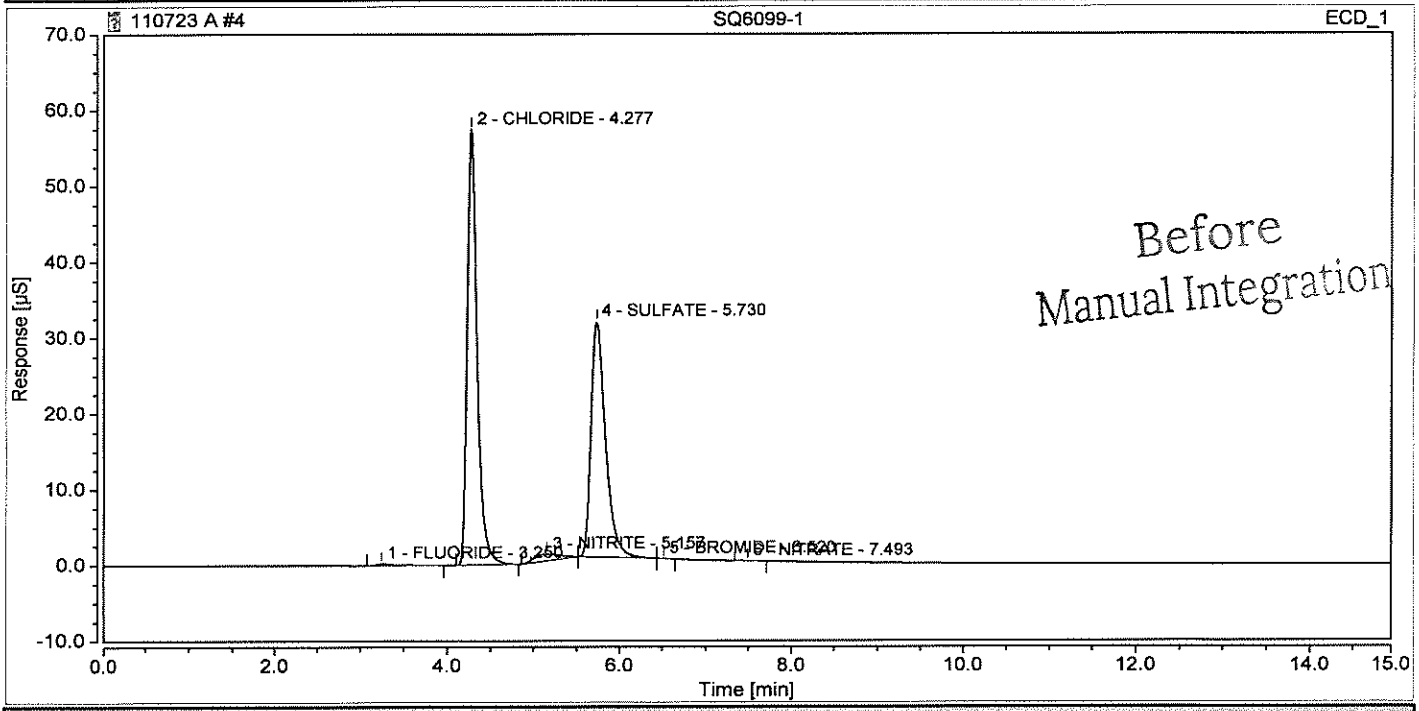
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.277	2.549	14.126	34.79	32.49	4.1181	9.8158
2	CHLORIDE	4.281	1.422	10.836	19.41	24.92	3.6483	-2.7116
3	NITRITE	4.974	0.944	5.964	12.88	13.72	1.1164	-2.0699
4	SULFATE	5.791	1.053	5.230	14.38	12.03	3.7055	-1.1864
5	BROMIDE	6.504	0.569	3.371	7.76	7.75	3.3461	-10.7697
6	NITRATE	7.467	0.790	3.956	10.79	9.10	0.8075	-4.4332
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**7.327**	**43.483**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6099-1**	*Run Time (min):*	**14.96**
Vial Number:	**4**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**07/Nov/23 18:50**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

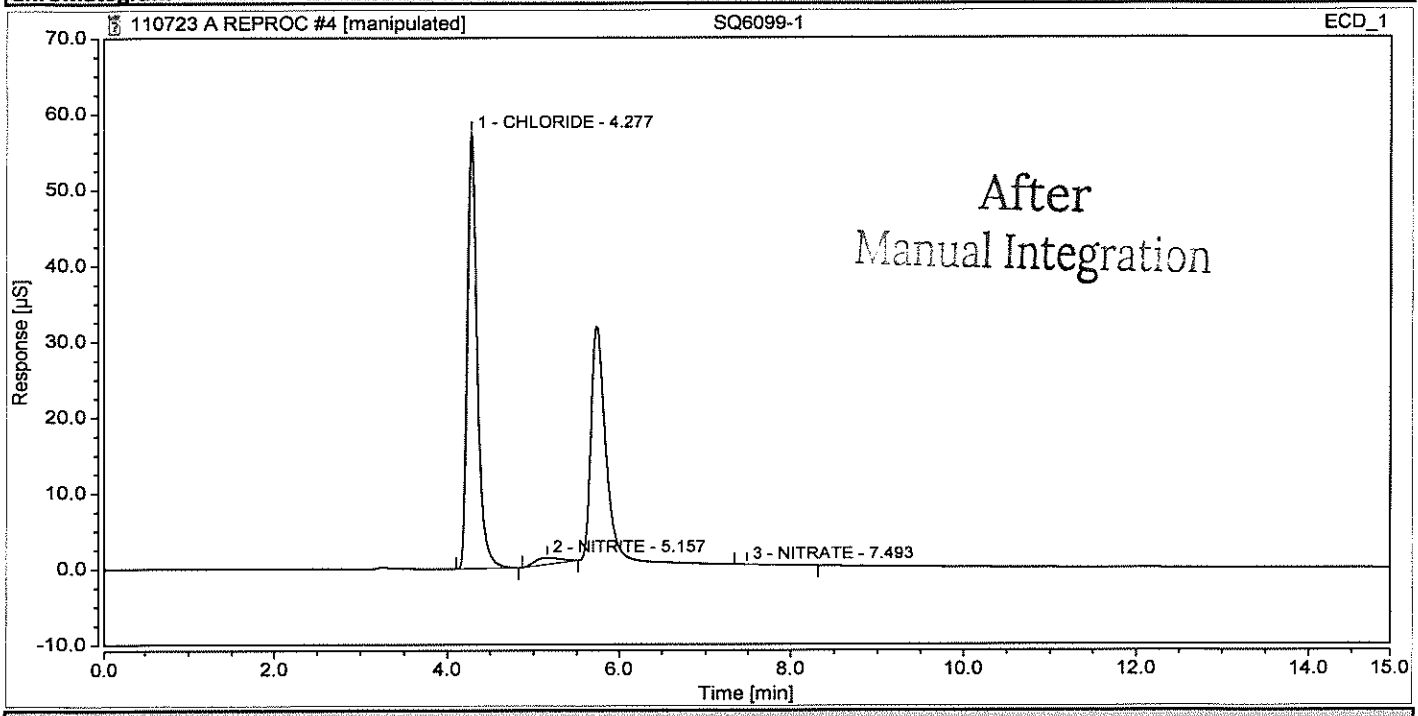
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.250	0.053	0.260	0.37	0.29	0.0997	n.a.
2	CHLORIDE	4.277	7.666	57.430	54.27	64.03	19.6704	n.a.
3	NITRITE	5.157	0.315	0.893	2.23	1.00	0.3764	n.a.
4	SULFATE	5.730	6.091	31.092	43.11	34.67	21.4260	n.a.
5	BROMIDE	6.520	0.001	0.007	0.00	0.01	0.0040	n.a.
6	NITRATE	7.493	0.001	0.007	0.01	0.01	0.0014	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**14.128**	**89.688**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6099-1**	*Run Time (min):*	**14.96**
Vial Number:	**4**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**07/Nov/23 18:50**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

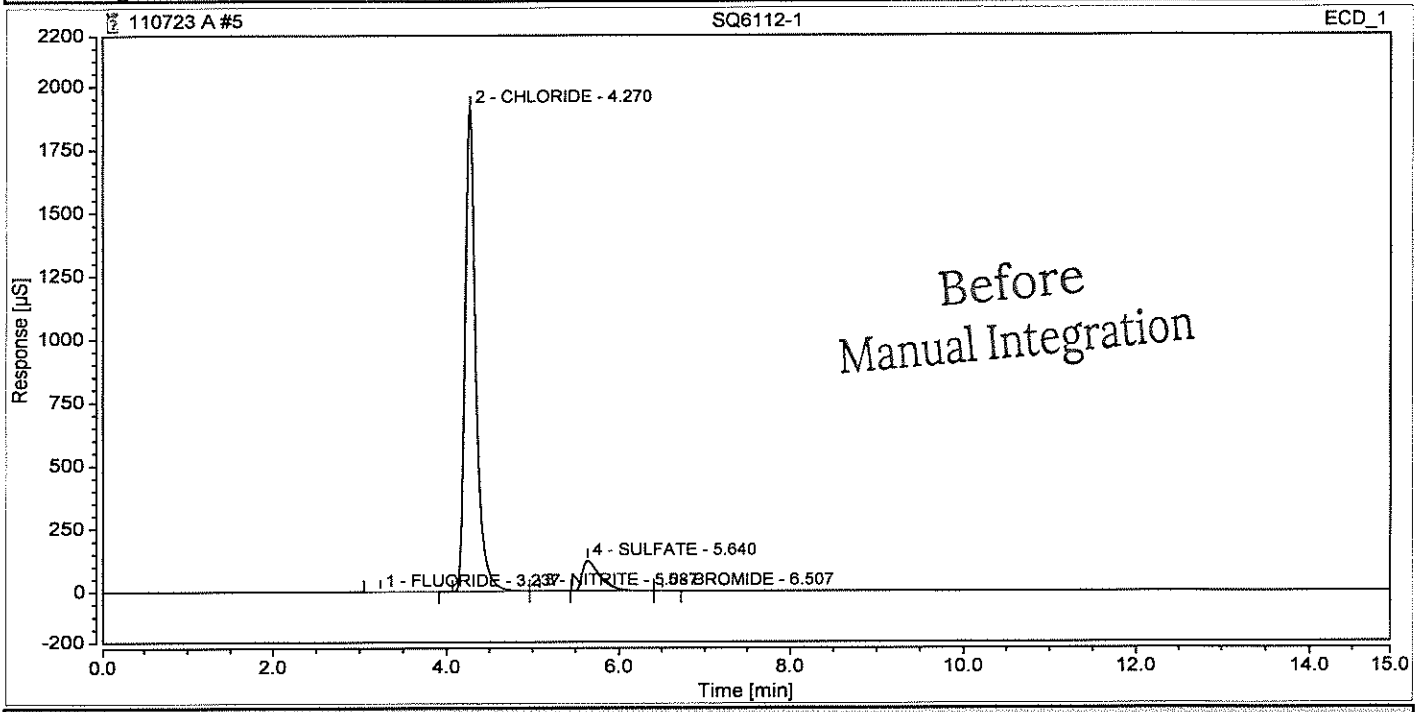
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.277	7.666	57.430	96.03	98.46	19.6704	n.a.
2	NITRITE	5.157	0.315	0.893	3.95	1.53	0.3764	n.a.
n.a.	SULFATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
3	NITRATE	7.493	0.002	0.006	0.02	0.01	0.0017	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**7.983**	**58.328**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6112-1**	*Run Time (min):*	**14.96**
Vial Number:	**5**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**07/Nov/23 19:07**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

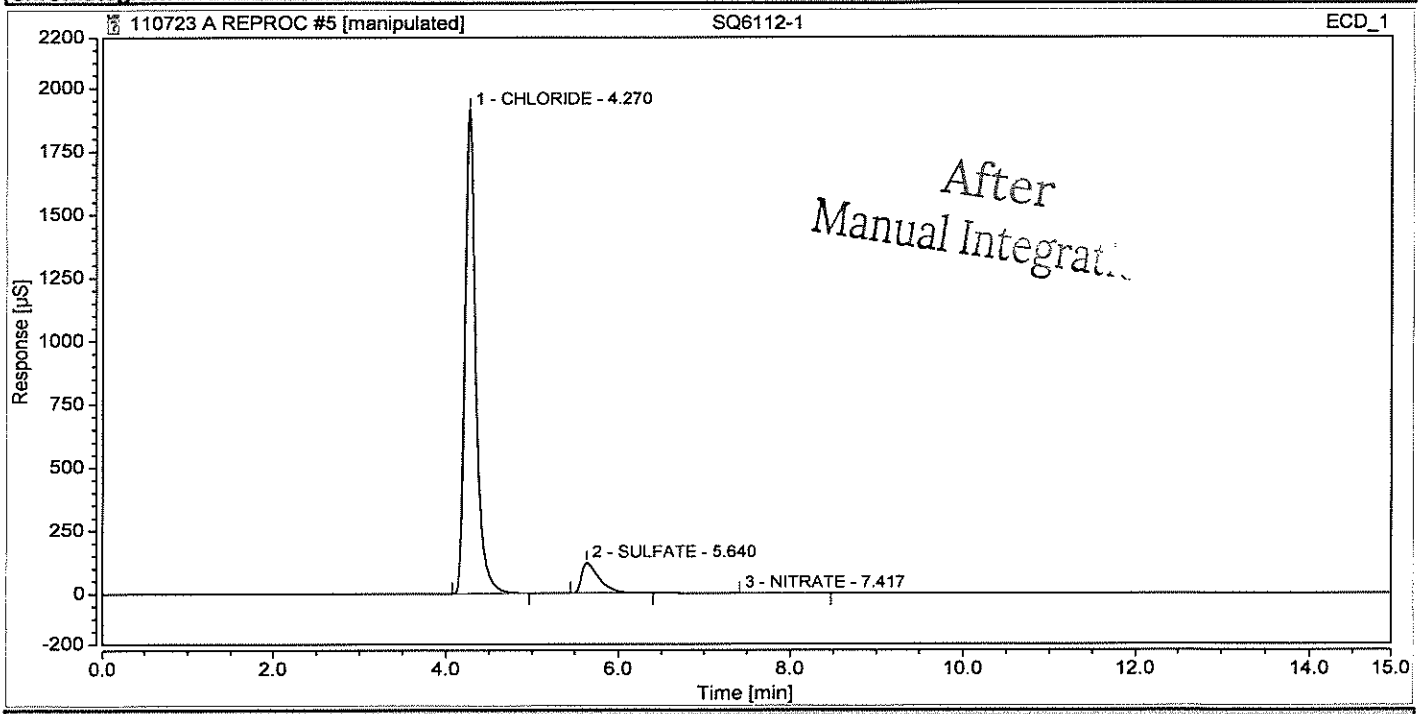
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.237	0.040	0.193	0.01	0.01	0.0790	n.a.
2	CHLORIDE	4.270	279.670	1914.168	90.91	94.11	717.5696	n.a.
3	NITRITE	5.087	0.086	0.325	0.03	0.02	0.1087	n.a.
4	SULFATE	5.640	27.839	119.110	9.05	5.86	97.9274	n.a.
5	BROMIDE	6.507	0.013	0.092	0.00	0.00	0.0758	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**307.648**	**2033.887**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6112-1**	*Run Time (min):*	**14.96**
Vial Number:	**5**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**07/Nov/23 19:07**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

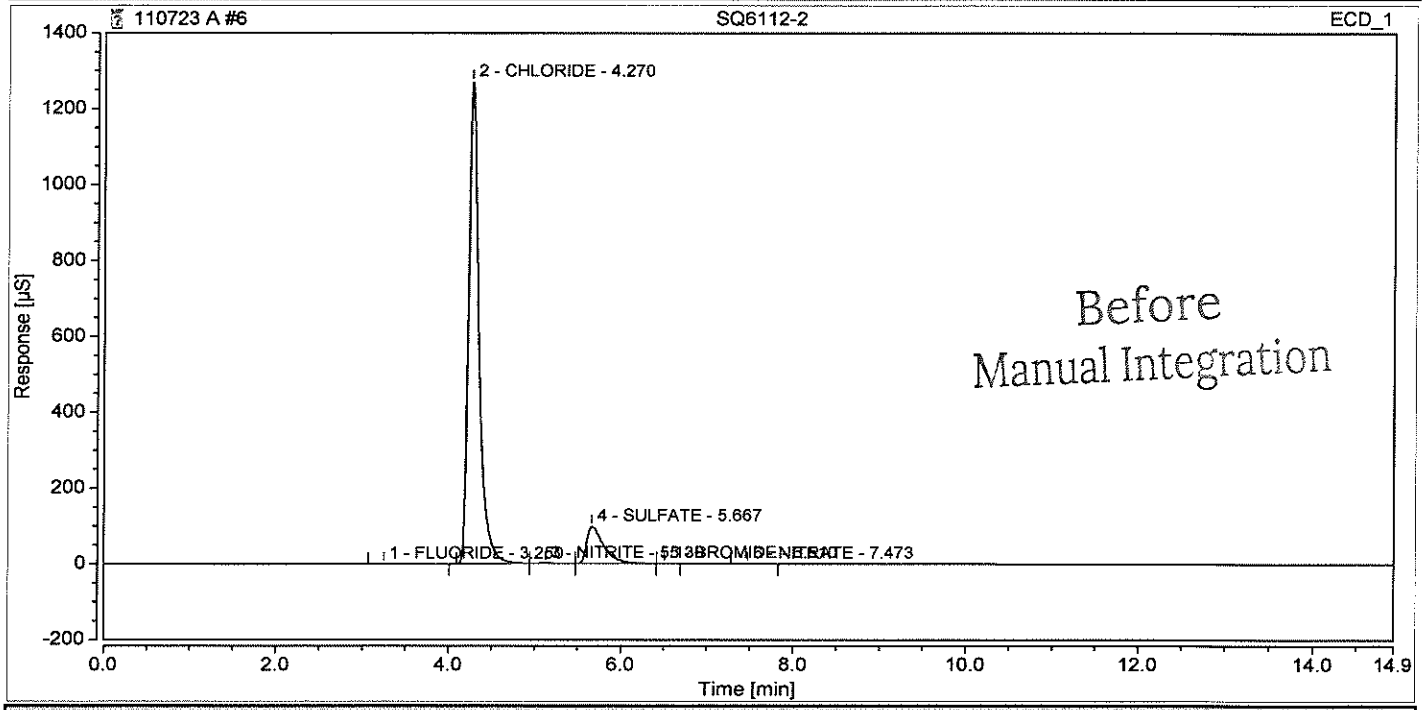
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.270	279.670	1914.168	90.94	94.14	717.5696	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2	SULFATE	5.640	27.839	119.110	9.05	5.86	97.9274	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
3	NITRATE	7.417	0.018	0.000	0.01	0.00	0.0185	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**307.527**	**2033.278**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6112-2**	*Run Time (min):*	**14.95**
Vial Number:	**6**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**07/Nov/23 19:24**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

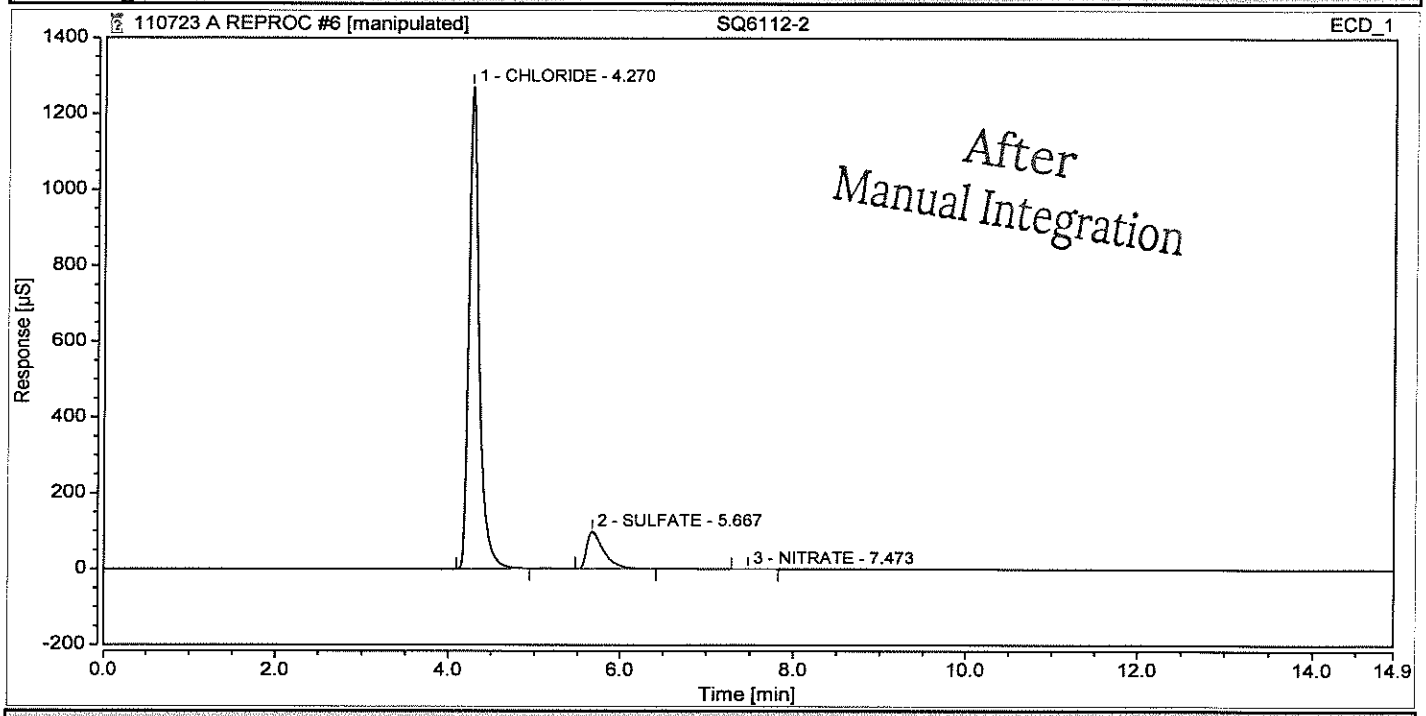
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.250	0.075	0.391	0.04	0.03	0.1343	n.a.
2	CHLORIDE	4.270	179.433	1271.323	88.97	92.78	460.3836	n.a.
3	NITRITE	5.130	0.138	0.483	0.07	0.04	0.1689	n.a.
4	SULFATE	5.667	21.988	97.766	10.90	7.13	77.3454	n.a.
5	BROMIDE	6.510	0.009	0.071	0.00	0.01	0.0527	n.a.
6	NITRATE	7.473	0.043	0.232	0.02	0.02	0.0440	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**201.685**	**1370.266**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6112-2**	*Run Time (min):*	**14.95**
Vial Number:	**6**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**07/Nov/23 19:24**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

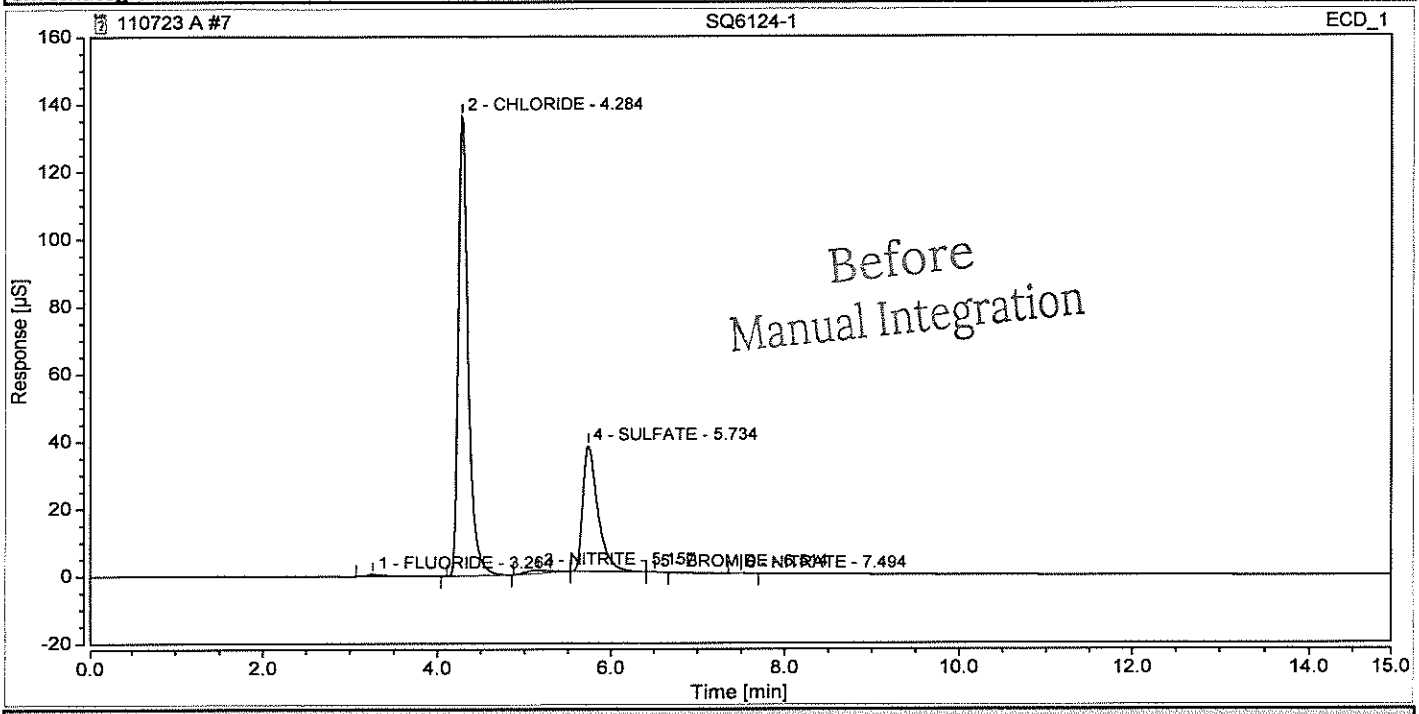
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.270	179.433	1271.323	89.06	92.84	460.3836	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2	SULFATE	5.667	21.988	97.766	10.91	7.14	77.3454	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
3	NITRATE	7.473	0.043	0.232	0.02	0.02	0.0440	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**201.464**	**1369.321**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6124-1**	*Run Time (min):*	**14.96**
Vial Number:	**7**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**07/Nov/23 19:41**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

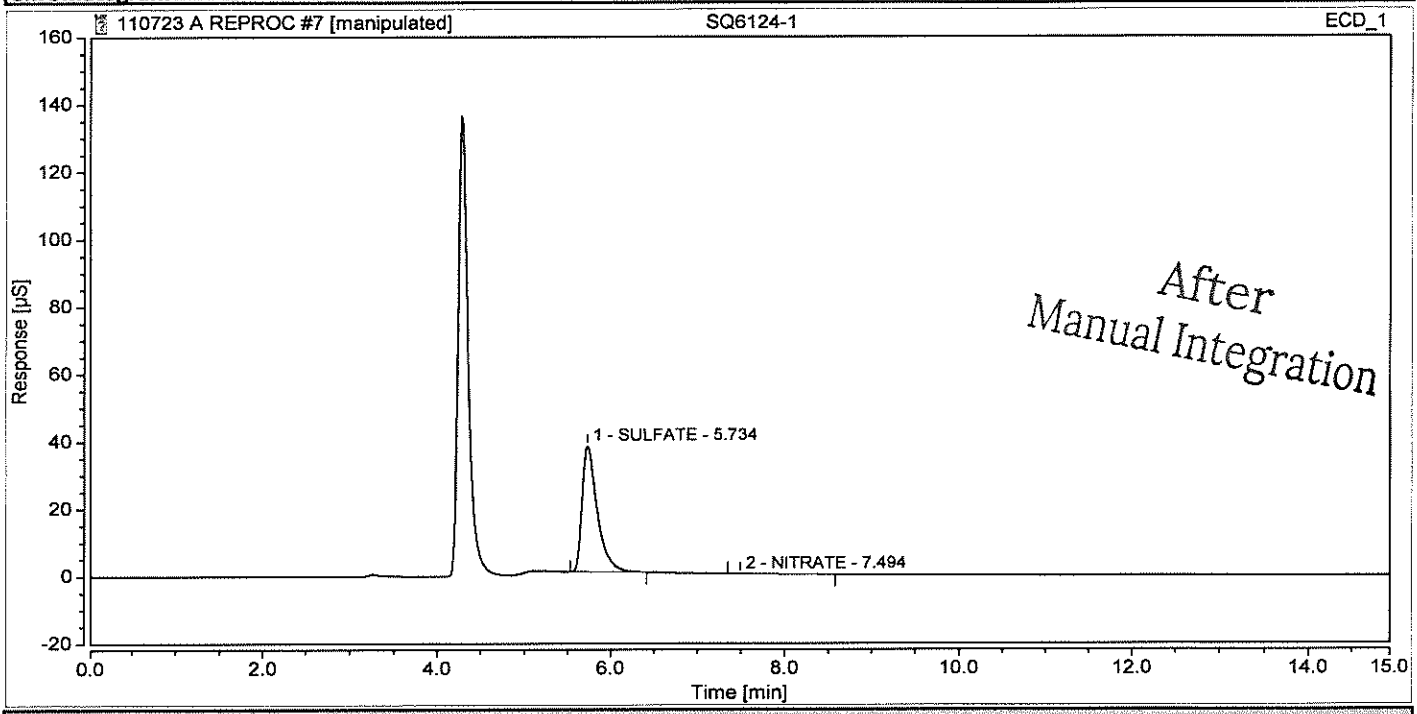
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.264	0.132	0.681	0.50	0.39	0.2248	n.a.
2	CHLORIDE	4.284	18.400	136.548	69.41	77.77	47.2097	n.a.
3	NITRITE	5.157	0.331	0.919	1.25	0.52	0.3950	n.a.
4	SULFATE	5.734	7.639	37.383	28.82	21.29	26.8701	n.a.
5	BROMIDE	6.514	0.006	0.047	0.02	0.03	0.0335	n.a.
6	NITRATE	7.494	0.001	0.007	0.00	0.00	0.0011	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**26.509**	**175.585**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6124-1**	*Run Time (min):*	**14.96**
Vial Number:	**7**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**07/Nov/23 19:41**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

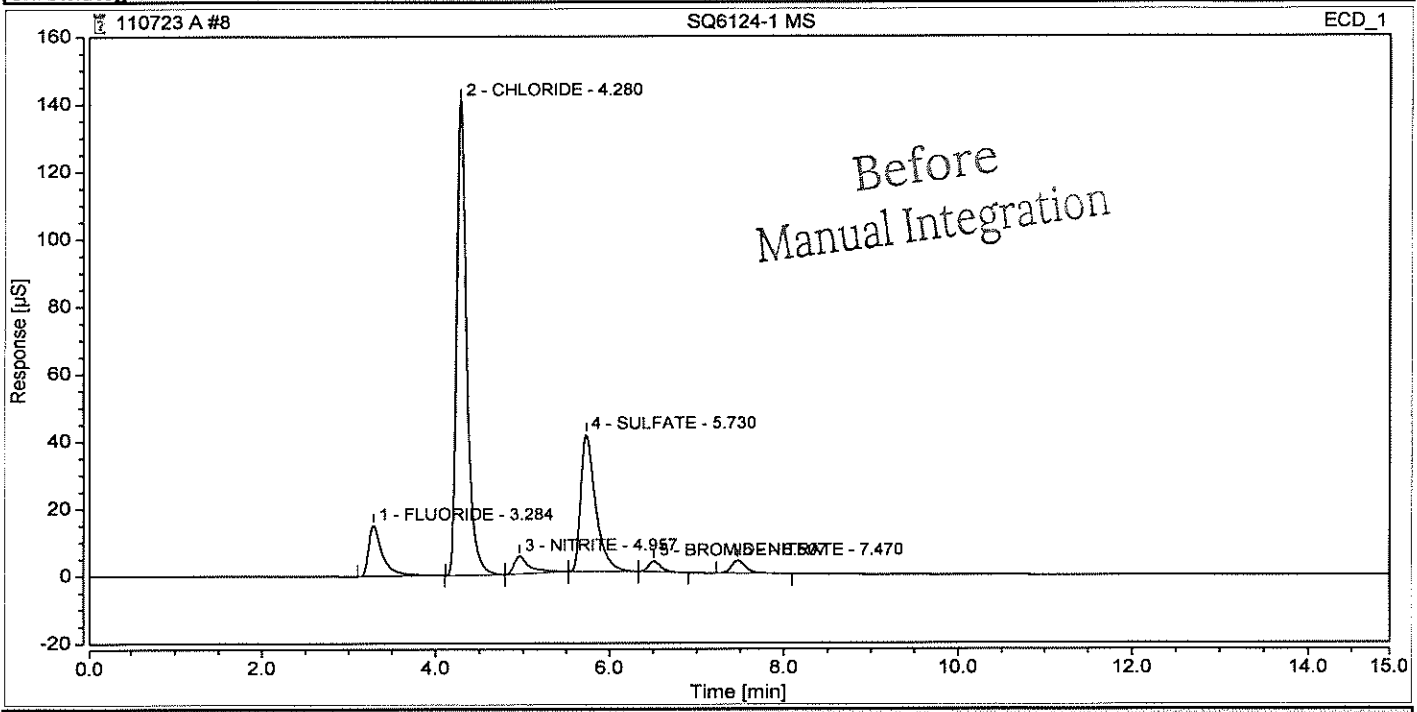
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	CHLORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	SULFATE	5.734	7.639	37.383	99.87	99.99	26.8701	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2	NITRATE	7.494	0.010	0.002	0.13	0.01	0.0102	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**7.649**	**37.385**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6124-1 MS**	*Run Time (min):*	**14.95**
Vial Number:	**8**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**07/Nov/23 19:59**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

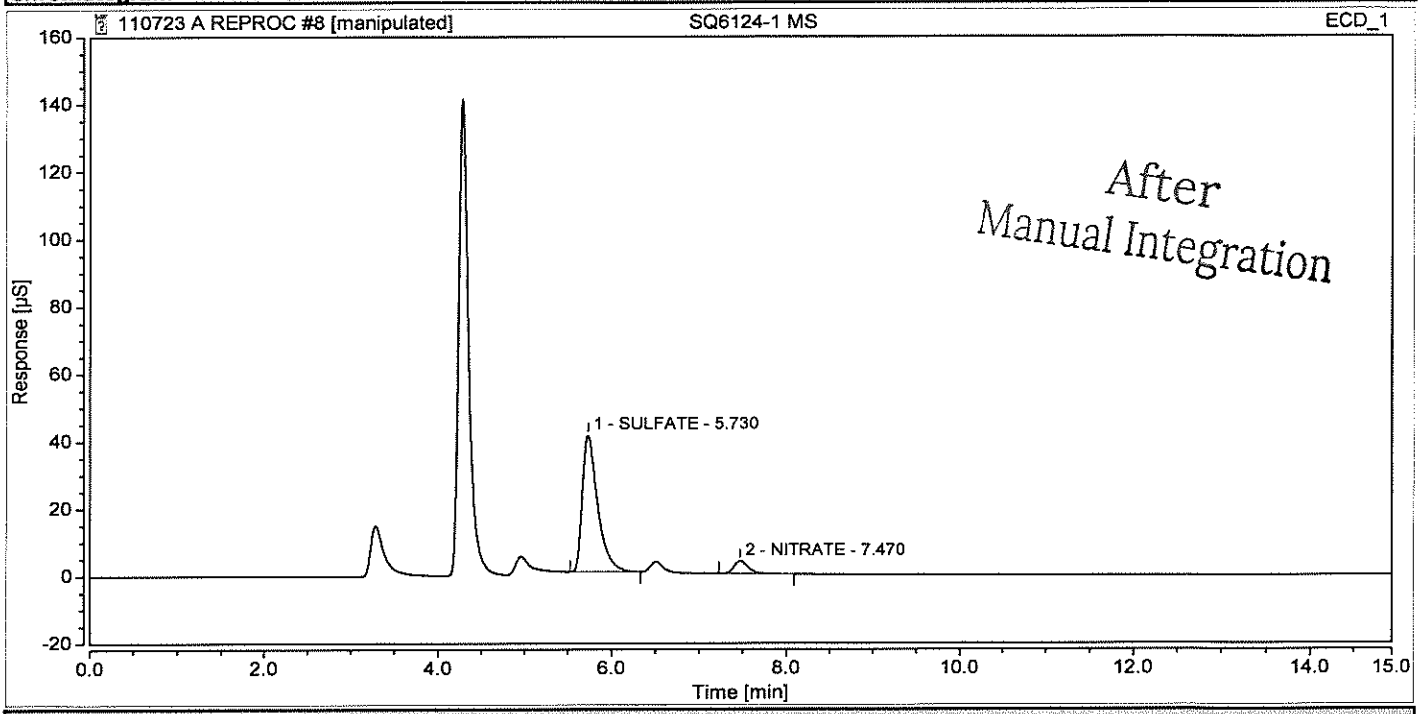
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.284	2.808	15.047	8.68	7.21	4.5474	n.a.
2	CHLORIDE	4.280	18.911	140.719	58.45	67.40	48.5224	n.a.
3	NITRITE	4.957	1.121	5.291	3.46	2.53	1.3269	n.a.
4	SULFATE	5.730	8.255	40.700	25.51	19.49	29.0373	n.a.
5	BROMIDE	6.507	0.529	3.227	1.63	1.55	3.1089	n.a.
6	NITRATE	7.470	0.729	3.790	2.25	1.82	0.7453	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**32.353**	**208.774**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6124-1 MS**	*Run Time (min):*	**14.95**
Vial Number:	**8**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**07/Nov/23 19:59**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

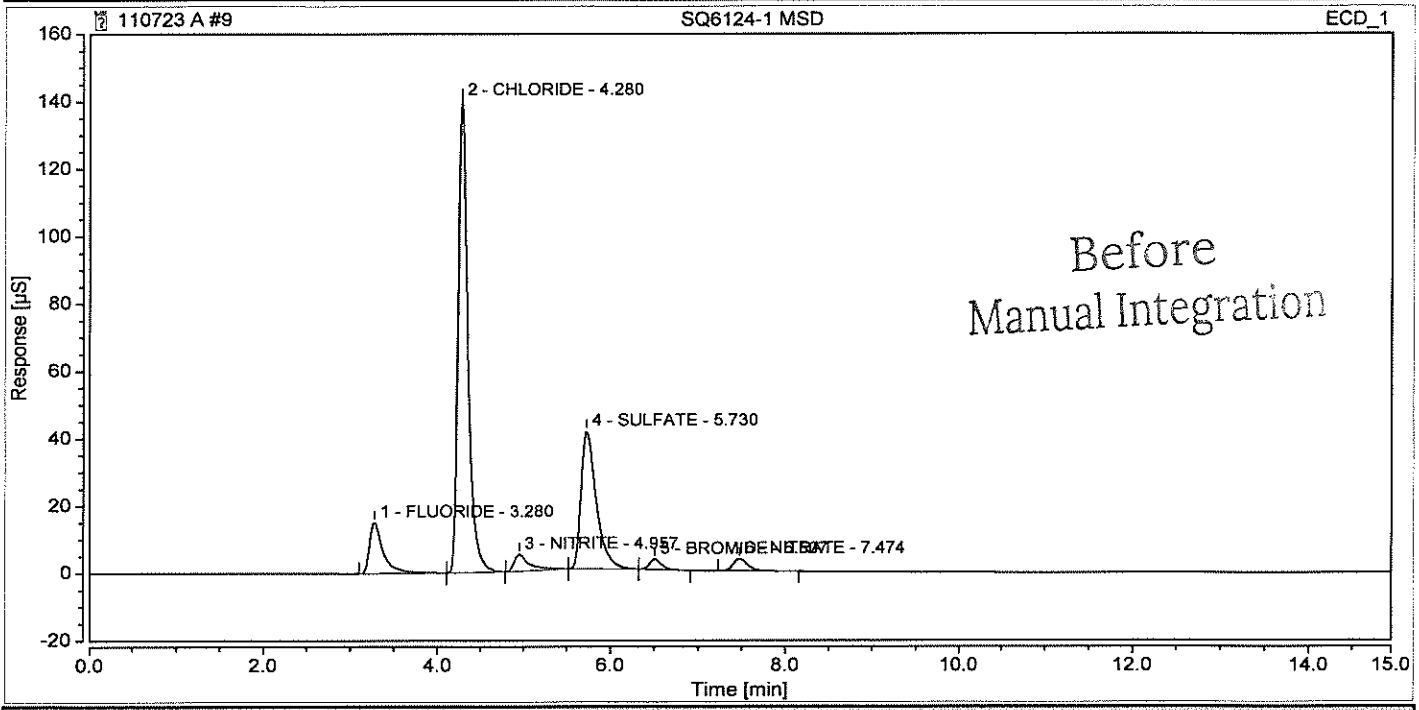
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	CHLORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	SULFATE	5.730	8.255	40.700	91.88	91.48	29.0373	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2	NITRATE	7.470	0.729	3.790	8.12	8.52	0.7453	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**8.984**	**44.490**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6124-1 MSD**	*Run Time (min):*	**14.96**
Vial Number:	**9**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**07/Nov/23 20:16**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

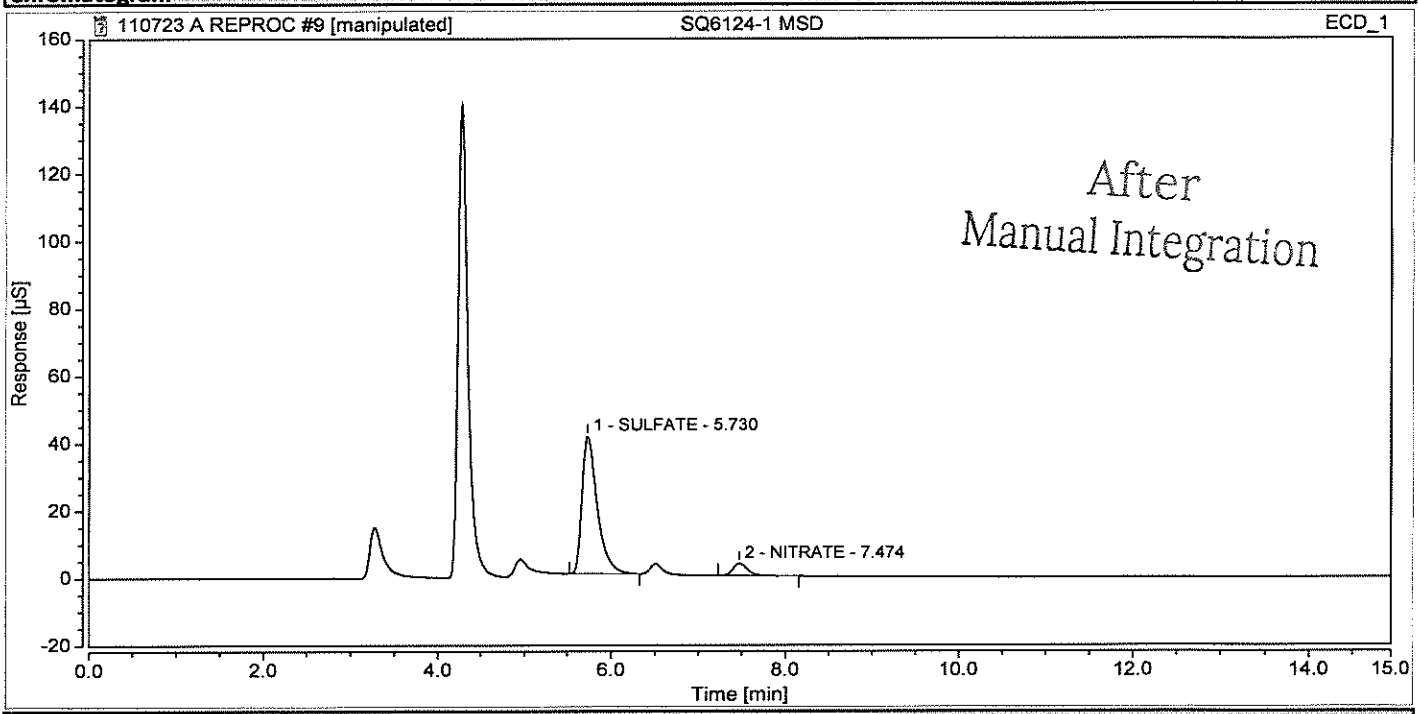
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.280	2.750	15.147	8.55	7.28	4.4509	n.a.
2	CHLORIDE	4.280	18.870	140.120	58.64	67.35	48.4161	n.a.
3	NITRITE	4.957	1.087	5.093	3.38	2.45	1.2866	n.a.
4	SULFATE	5.730	8.262	40.951	25.68	19.68	29.0641	n.a.
5	BROMIDE	6.507	0.511	3.113	1.59	1.50	3.0038	n.a.
6	NITRATE	7.474	0.698	3.627	2.17	1.74	0.7131	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**32.178**	**208.052**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6124-1 MSD**	*Run Time (min):*	**14.96**
Vial Number:	**9**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**07/Nov/23 20:16**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

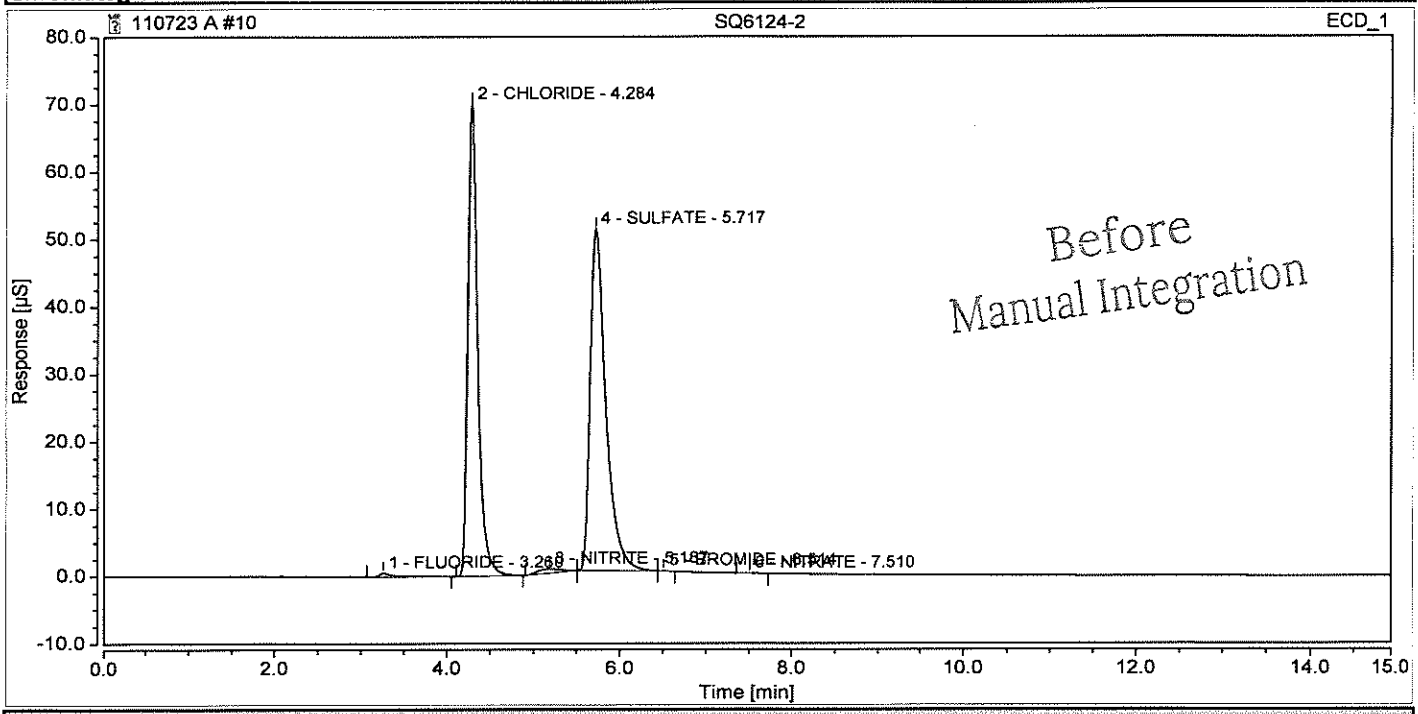
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	CHLORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	SULFATE	5.730	8.262	40.951	92.21	91.86	29.0641	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2	NITRATE	7.474	0.698	3.627	7.79	8.14	0.7131	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**8.960**	**44.578**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6124-2**	*Run Time (min):*	**14.95**
Vial Number:	**10**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**07/Nov/23 20:33**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

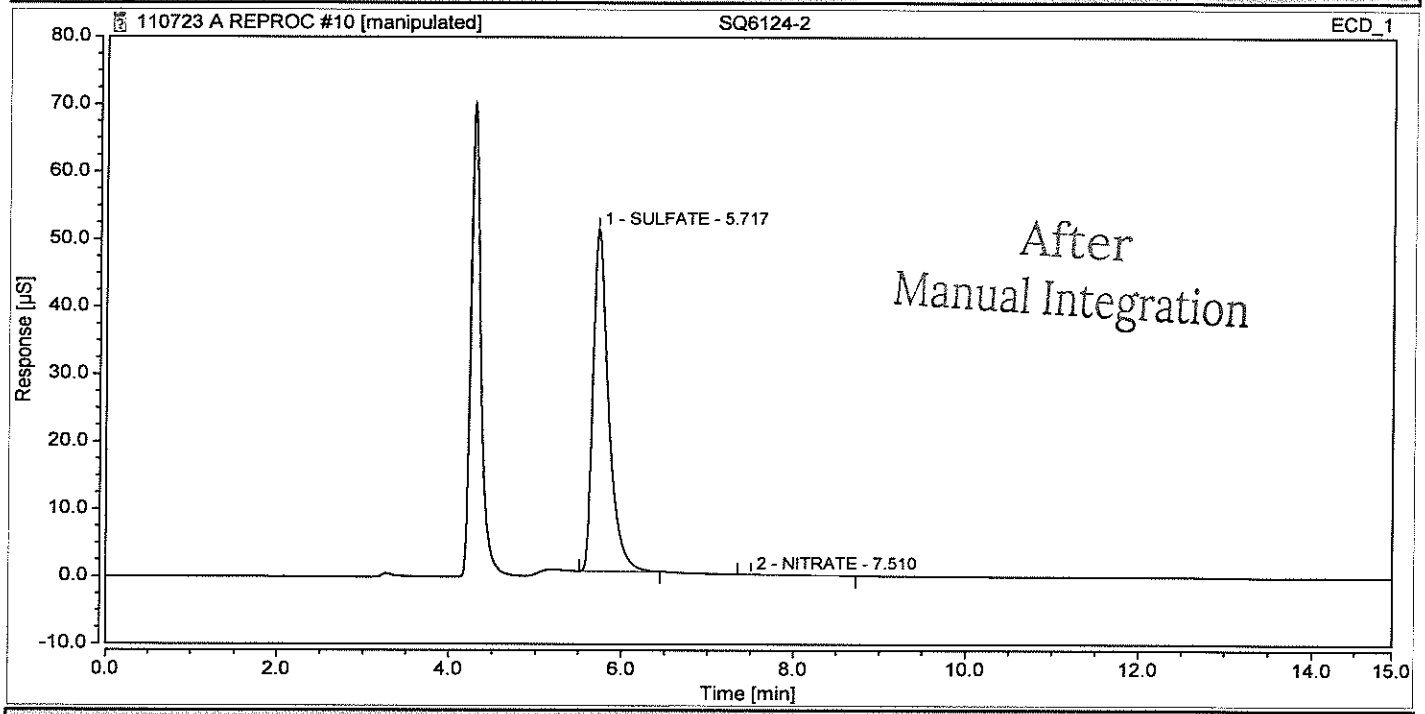
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.260	0.107	0.524	0.53	0.43	0.1843	n.a.
2	CHLORIDE	4.284	9.386	70.011	46.25	57.45	24.0814	n.a.
3	NITRITE	5.187	0.208	0.634	1.02	0.52	0.2503	n.a.
4	SULFATE	5.717	10.590	50.677	52.19	41.58	37.2513	n.a.
5	BROMIDE	6.514	0.002	0.019	0.01	0.02	0.0115	n.a.
6	NITRATE	7.510	0.001	0.006	0.01	0.01	0.0012	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**20.293**	**121.872**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6124-2**	*Run Time (min):*	**14.95**
Vial Number:	**10**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**07/Nov/23 20:33**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

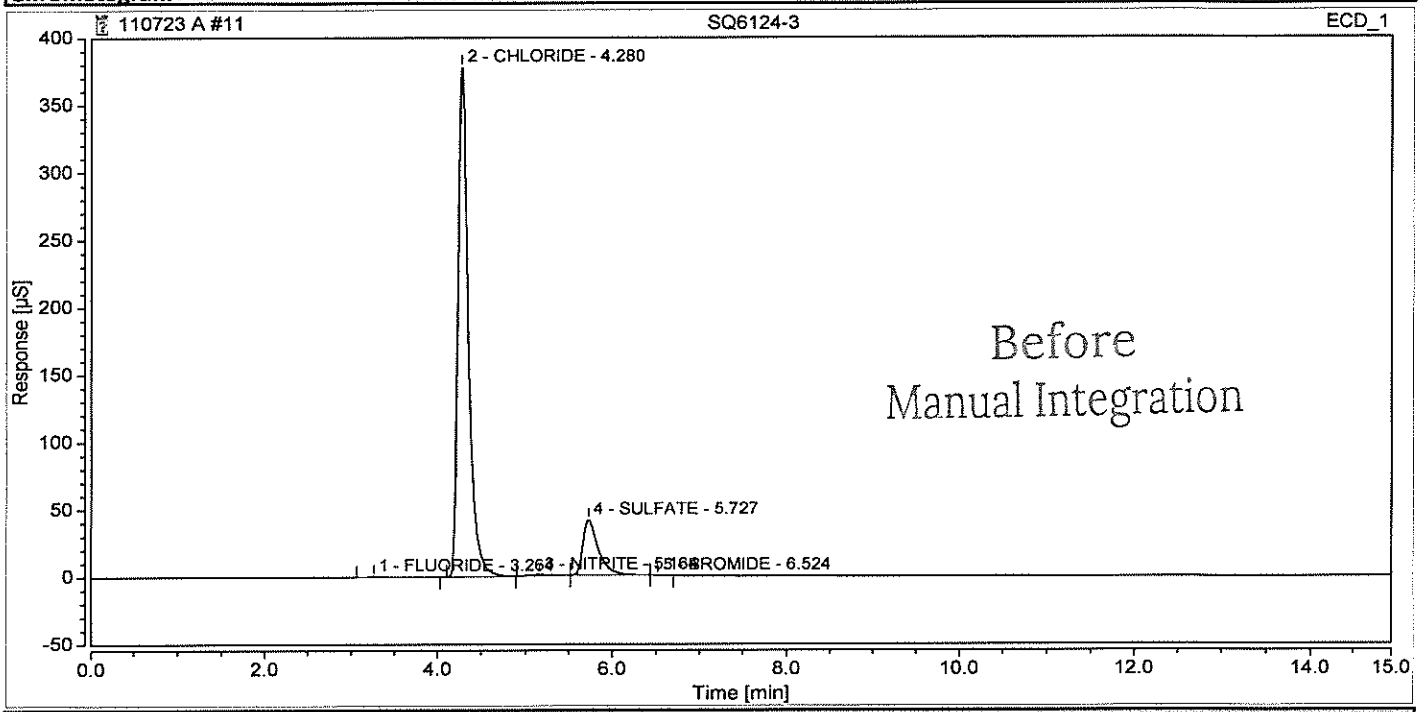
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	CHLORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	SULFATE	5.717	10.590	50.677	99.91	99.99	37.2513	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2	NITRATE	7.510	0.010	0.003	0.09	0.01	0.0099	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**10.599**	**50.680**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6124-3**	*Run Time (min):*	**14.96**
Vial Number:	**11**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**07/Nov/23 20:50**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

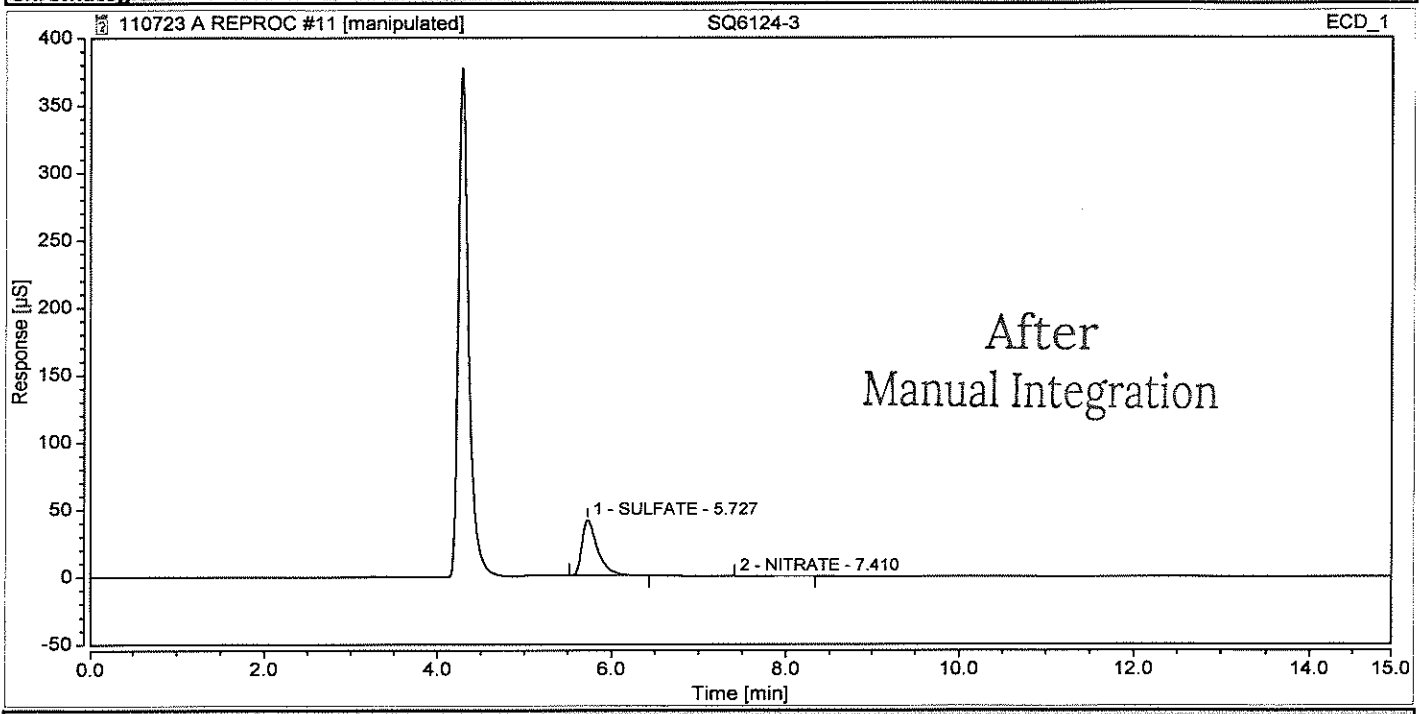
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.264	0.113	0.587	0.18	0.14	0.1948	n.a.
2	CHLORIDE	4.280	52.509	378.128	85.66	89.92	134.7263	n.a.
3	NITRITE	5.164	0.256	0.759	0.42	0.18	0.3075	n.a.
4	SULFATE	5.727	8.419	41.015	13.73	9.75	29.6138	n.a.
5	BROMIDE	6.524	0.004	0.032	0.01	0.01	0.0226	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**61.301**	**420.521**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6124-3**	*Run Time (min):*	**14.96**
Vial Number:	**11**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**07/Nov/23 20:50**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

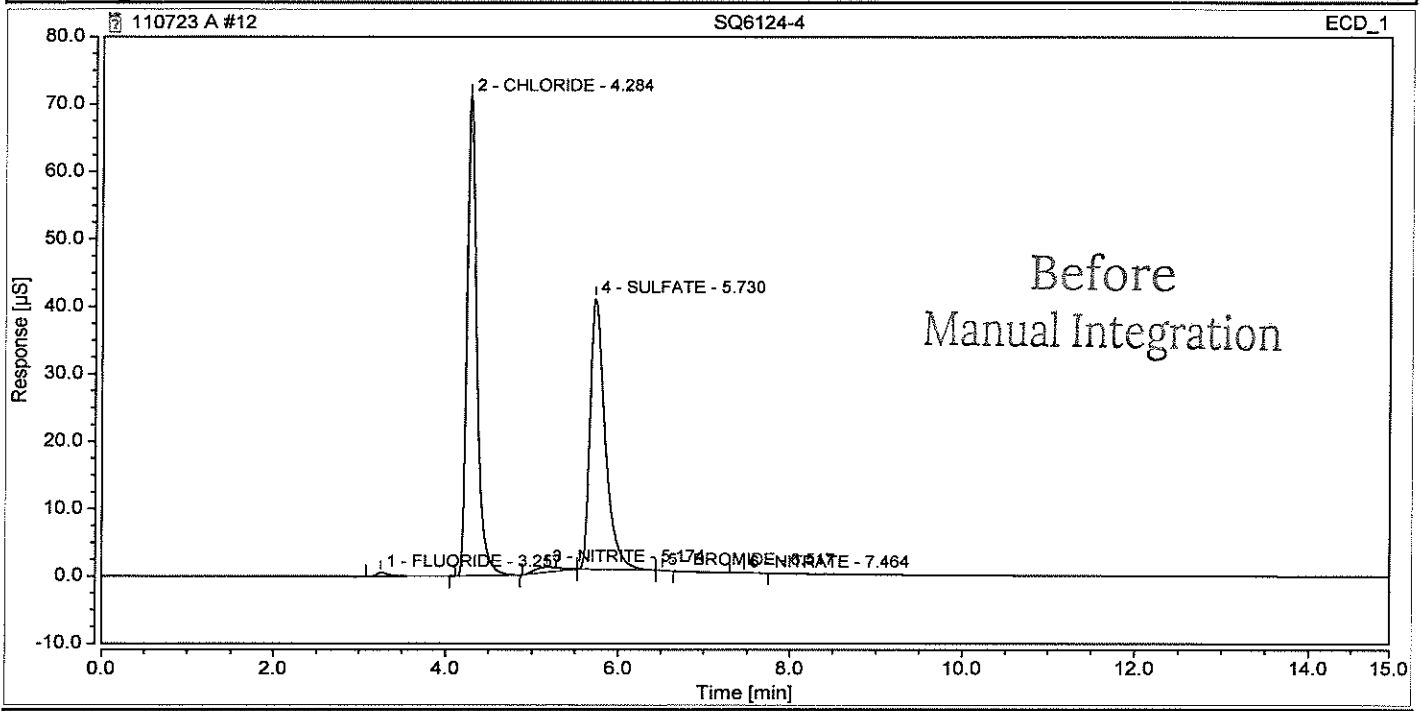
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	CHLORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	SULFATE	5.727	8.419	41.015	99.94	100.00	29.6138	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2	NITRATE	7.410	0.005	0.000	0.06	0.00	0.0056	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**8.424**	**41.015**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6124-4**	*Run Time (min):*	**14.95**
Vial Number:	**12**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**07/Nov/23 21:08**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

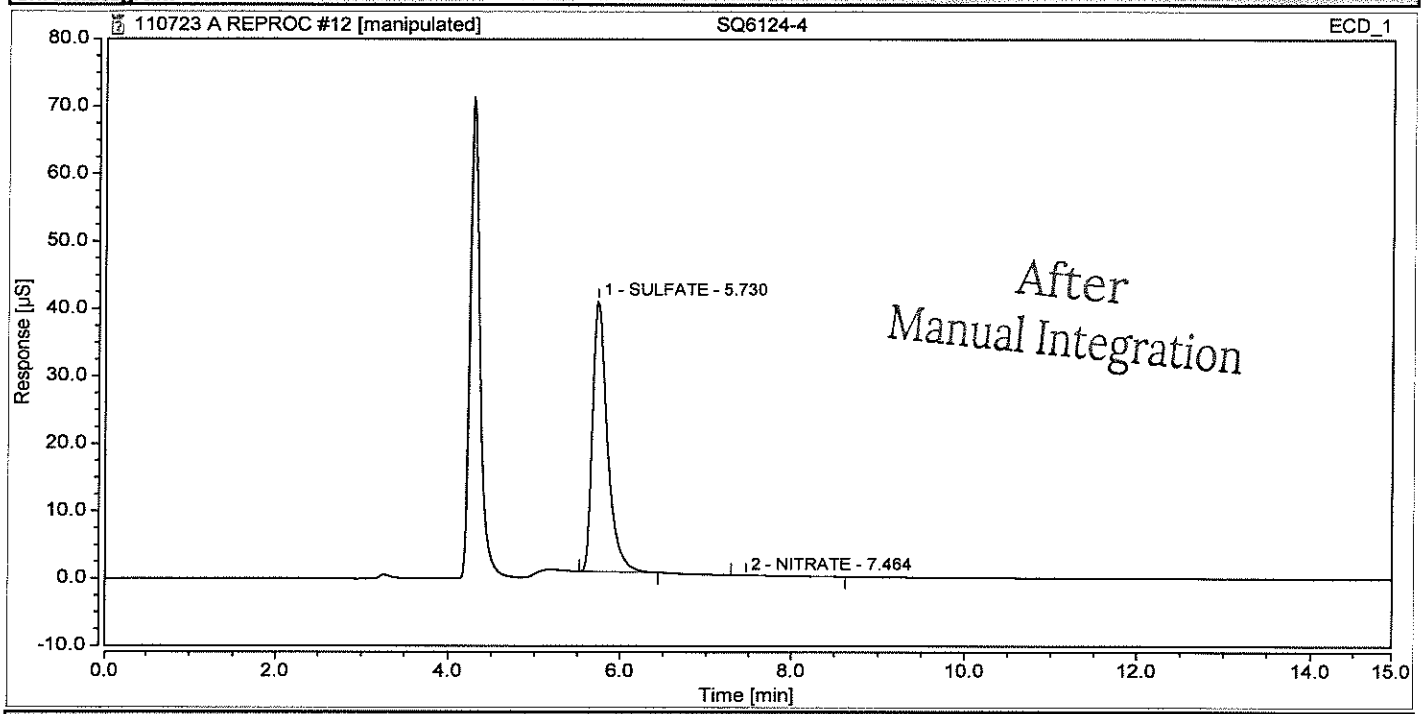
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.257	0.105	0.616	0.58	0.55	0.1811	n.a.
2	CHLORIDE	4.284	9.452	71.152	52.64	63.04	24.2507	n.a.
3	NITRITE	5.174	0.270	0.782	1.50	0.69	0.3229	n.a.
4	SULFATE	5.730	8.120	40.247	45.22	35.66	28.5635	n.a.
5	BROMIDE	6.517	0.003	0.024	0.01	0.02	0.0157	n.a.
6	NITRATE	7.464	0.007	0.039	0.04	0.03	0.0076	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**17.956**	**112.860**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6124-4**	*Run Time (min):*	**14.95**
Vial Number:	**12**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**07/Nov/23 21:08**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

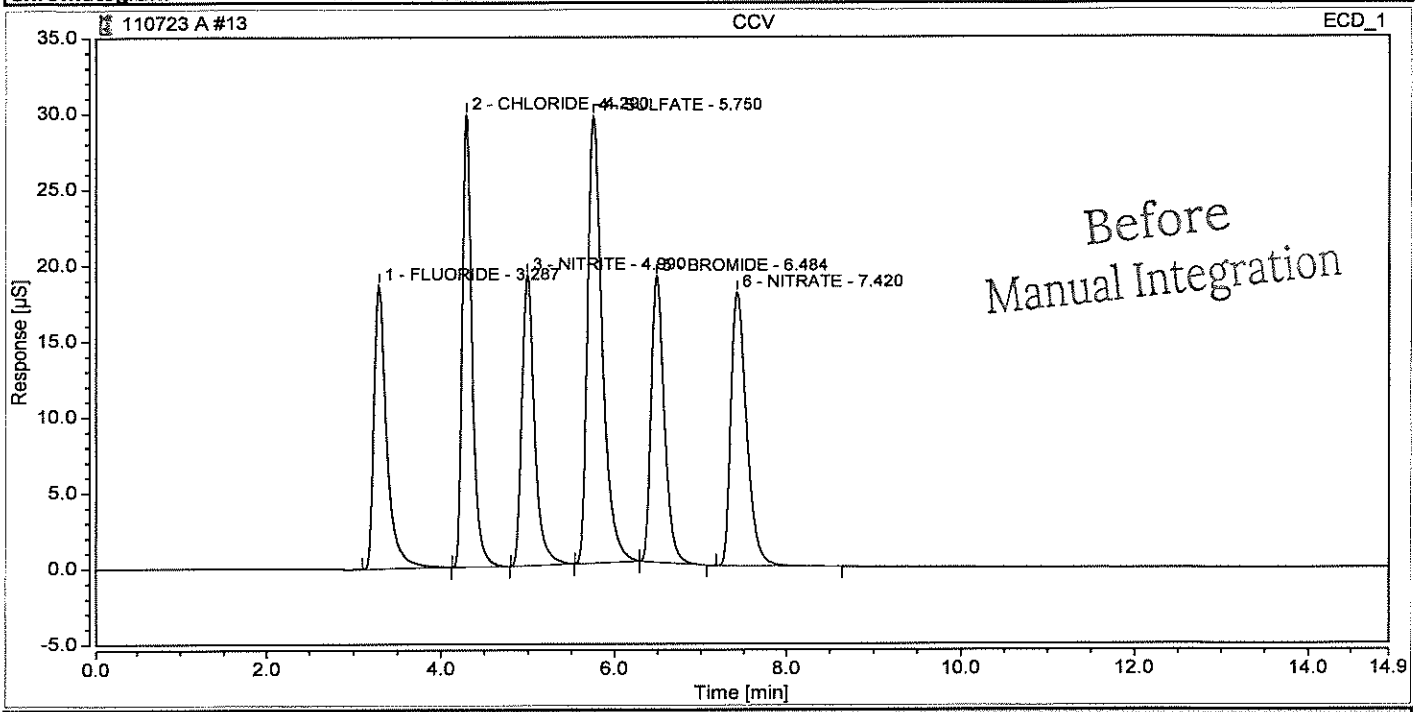
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	CHLORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	SULFATE	5.730	8.120	40.247	99.94	99.92	28.5635	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2	NITRATE	7.464	0.005	0.034	0.06	0.08	0.0046	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**8.125**	**40.281**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**CCV**	*Run Time (min):*	**14.95**
Vial Number:	**13**	*Injection Volume:*	**200.00**
Injection Type:	**Check Standard**	*Channel:*	**ECD_1**
Calibration Level:	**06**	*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**07/Nov/23 21:25**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

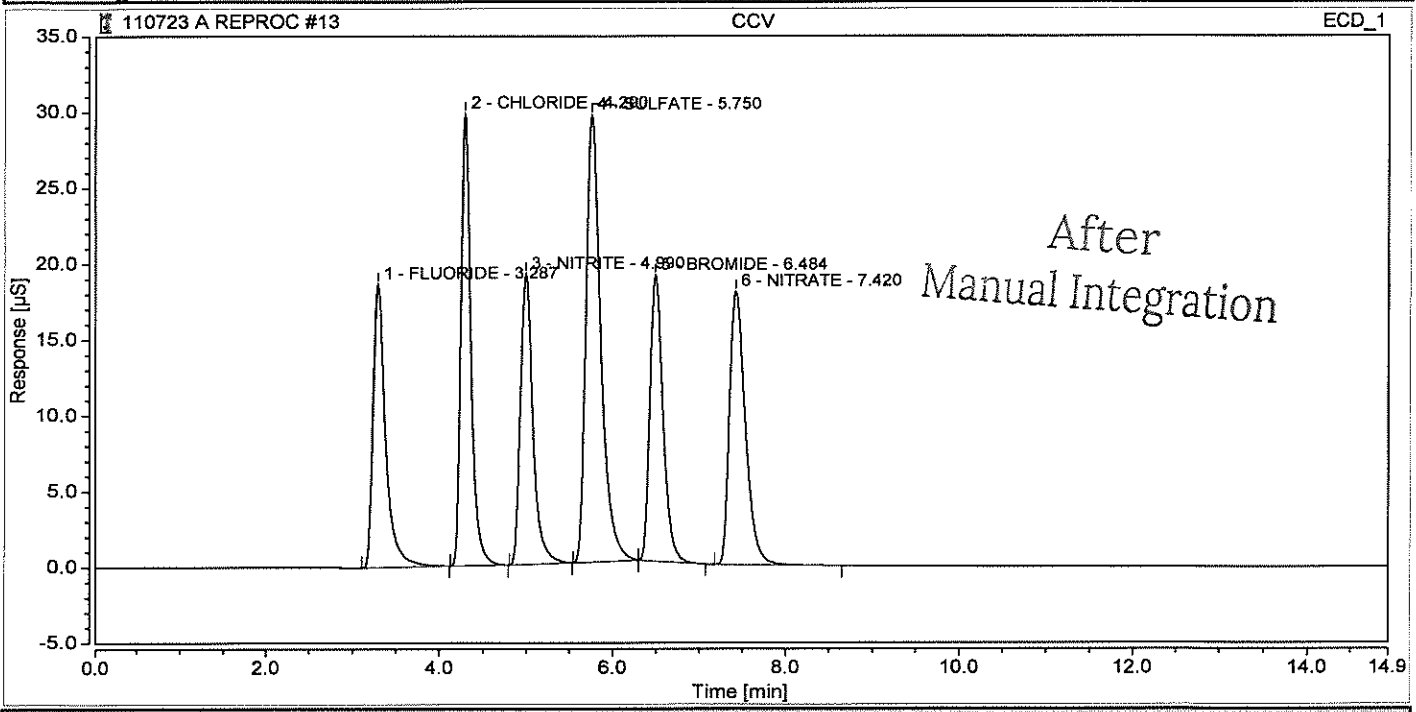
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.287	3.138	18.682	13.43	13.94	5.0961	1.9220
2	CHLORIDE	4.290	3.926	29.812	16.80	22.25	10.0740	0.7402
3	NITRITE	4.990	3.276	19.158	14.02	14.30	3.9440	-1.4005
4	SULFATE	5.750	5.832	29.498	24.95	22.01	20.5165	2.5826
5	BROMIDE	6.484	3.341	18.851	14.30	14.07	19.6542	-1.7292
6	NITRATE	7.420	3.859	18.009	16.51	13.44	3.9434	-1.4140
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**23.373**	**134.010**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**CCV**	*Run Time (min):*	**14.95**
Vial Number:	**13**	*Injection Volume:*	**200.00**
Injection Type:	**Check Standard**	*Channel:*	**ECD_1**
Calibration Level:	**06**	*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**07/Nov/23 21:25**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

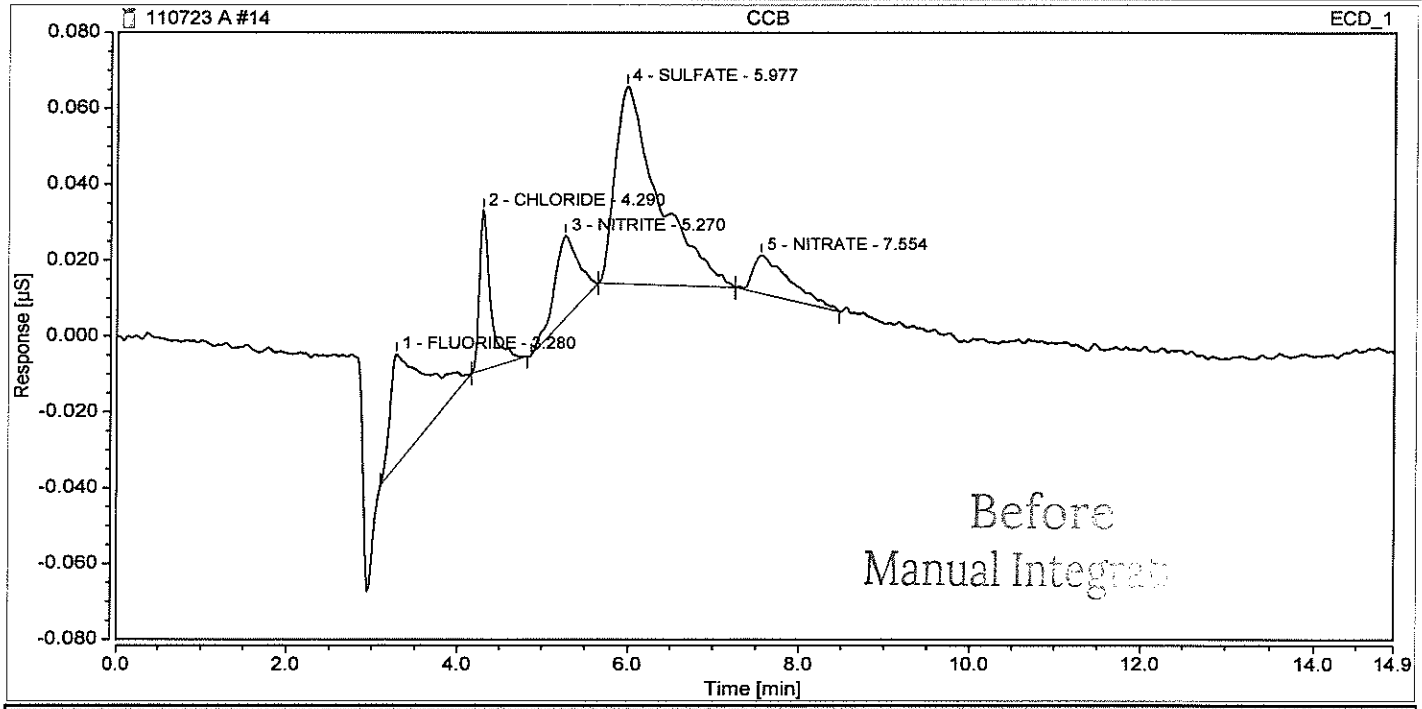
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.287	3.138	18.682	13.43	13.94	5.0961	1.9220
2	CHLORIDE	4.290	3.926	29.812	16.80	22.25	10.0740	0.7402
3	NITRITE	4.990	3.276	19.158	14.02	14.30	3.9440	-1.4005
4	SULFATE	5.750	5.832	29.498	24.95	22.01	20.5165	2.5826
5	BROMIDE	6.484	3.341	18.851	14.30	14.07	19.6542	-1.7292
6	NITRATE	7.420	3.859	18.009	16.51	13.44	3.9434	-1.4140
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**23.373**	**134.010**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**CCB**	*Run Time (min):*	**14.95**
Vial Number:	**14**	*Injection Volume:*	**200.00**
Injection Type:	**Blank**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**07/Nov/23 21:42**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

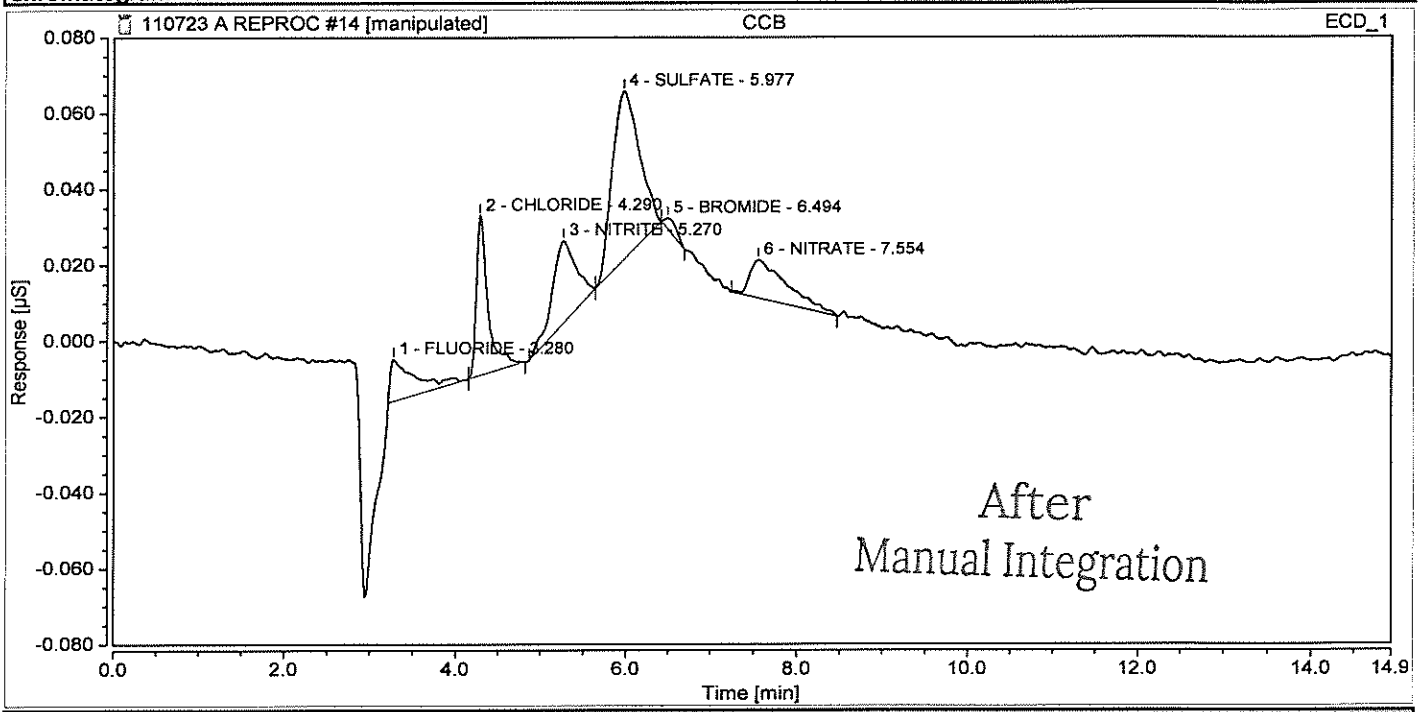
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.280	0.014	0.029	21.60	18.97	0.0381	n.a.
2	CHLORIDE	4.290	0.007	0.042	10.42	27.05	0.0169	n.a.
3	NITRITE	5.270	0.007	0.022	11.07	13.94	0.0164	n.a.
4	SULFATE	5.977	0.031	0.052	48.78	33.53	0.1085	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5	NITRATE	7.554	0.005	0.010	8.13	6.50	0.0053	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.063**	**0.155**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**CCB**	*Run Time (min):*	**14.95**
Vial Number:	**14**	*Injection Volume:*	**200.00**
Injection Type:	**Blank**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**07/Nov/23 21:42**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

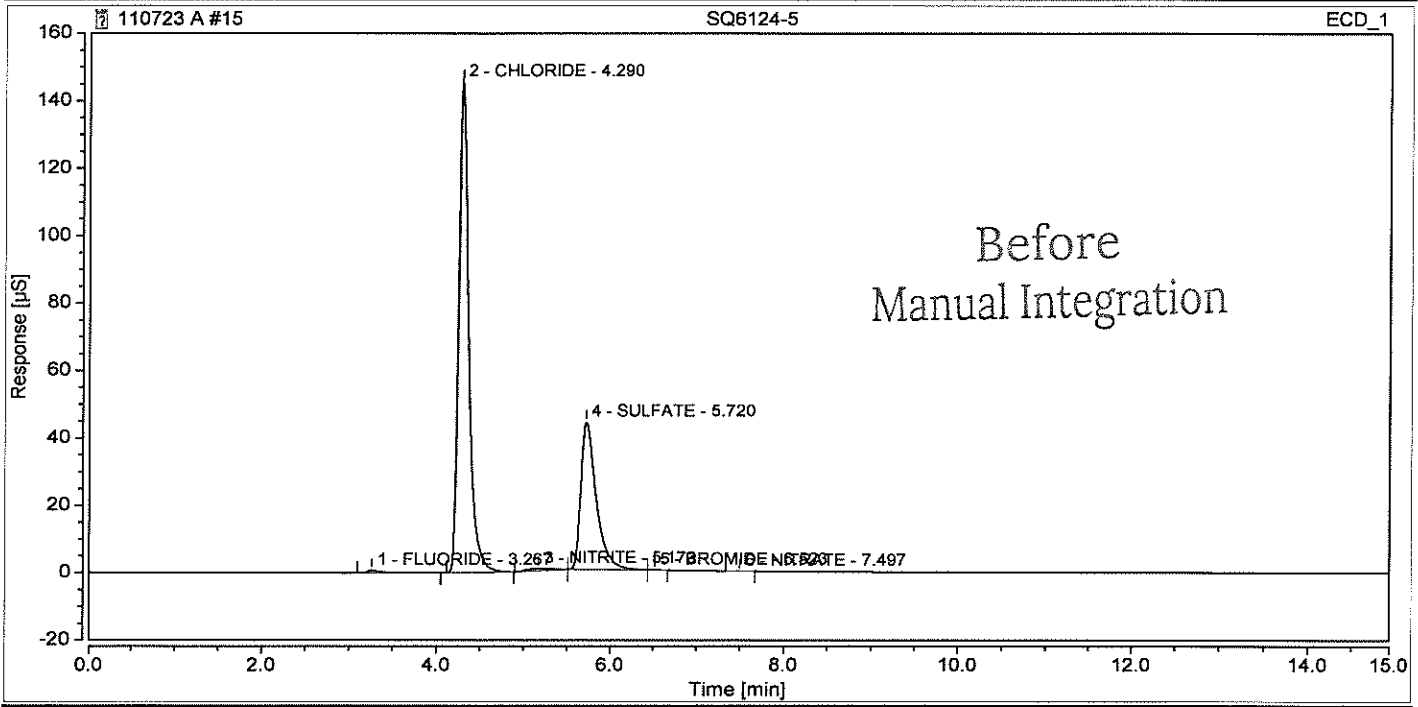
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.280	0.004	0.011	9.11	8.39	0.0223	n.a.
2	CHLORIDE	4.290	0.007	0.042	16.81	31.84	0.0169	n.a.
3	NITRITE	5.270	0.007	0.022	17.86	16.40	0.0164	n.a.
4	SULFATE	5.977	0.016	0.044	41.67	33.51	0.0574	n.a.
5	BROMIDE	6.494	0.001	0.003	1.42	2.21	0.0033	n.a.
6	NITRATE	7.554	0.005	0.010	13.12	7.66	0.0053	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.039**	**0.132**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6124-5**	*Run Time (min):*	**14.95**
Vial Number:	**15**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**07/Nov/23 21:59**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

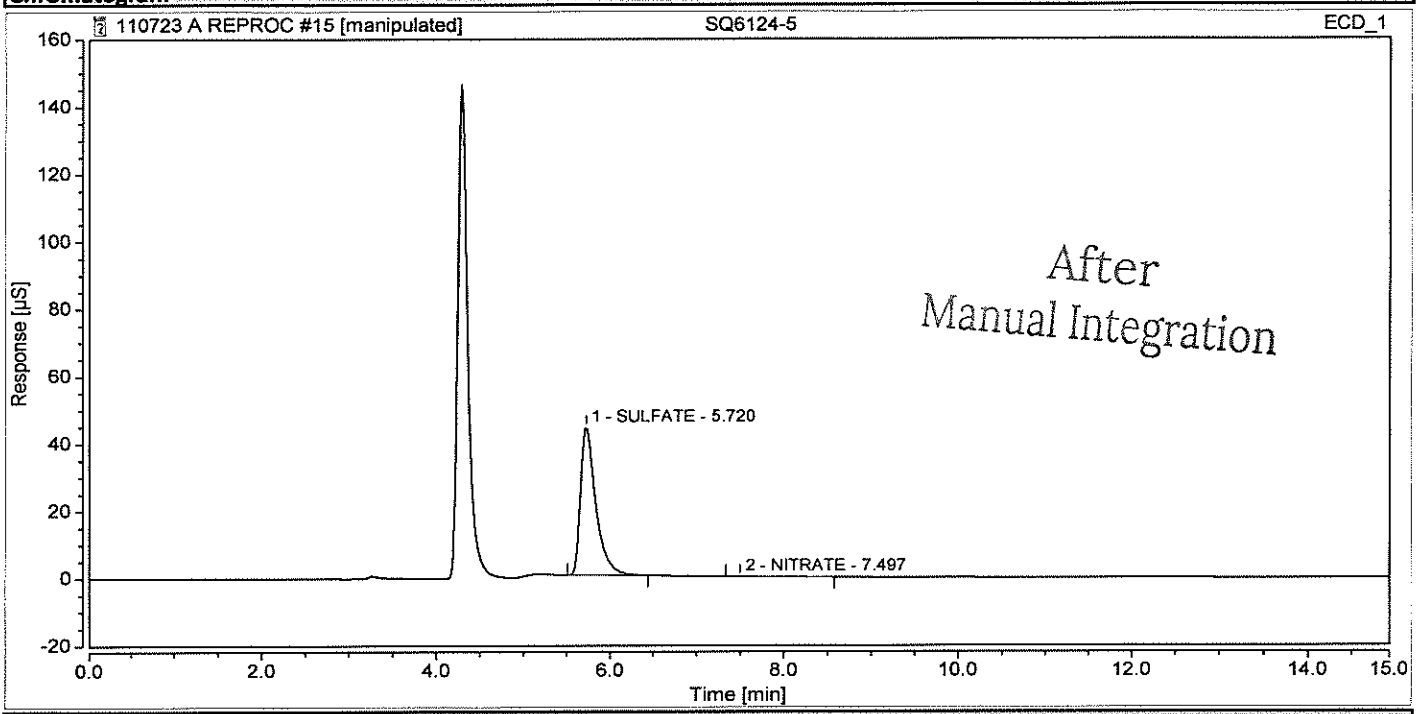
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.267	0.135	0.754	0.47	0.39	0.2294	n.a.
2	CHLORIDE	4.290	19.666	145.603	67.71	76.25	50.4588	n.a.
3	NITRITE	5.173	0.230	0.700	0.79	0.37	0.2767	n.a.
4	SULFATE	5.720	9.010	43.851	31.02	22.96	31.6929	n.a.
5	BROMIDE	6.523	0.004	0.035	0.01	0.02	0.0243	n.a.
6	NITRATE	7.497	0.001	0.008	0.00	0.00	0.0013	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**29.047**	**190.951**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6124-5**	*Run Time (min):*	**14.95**
Vial Number:	**15**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**07/Nov/23 21:59**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

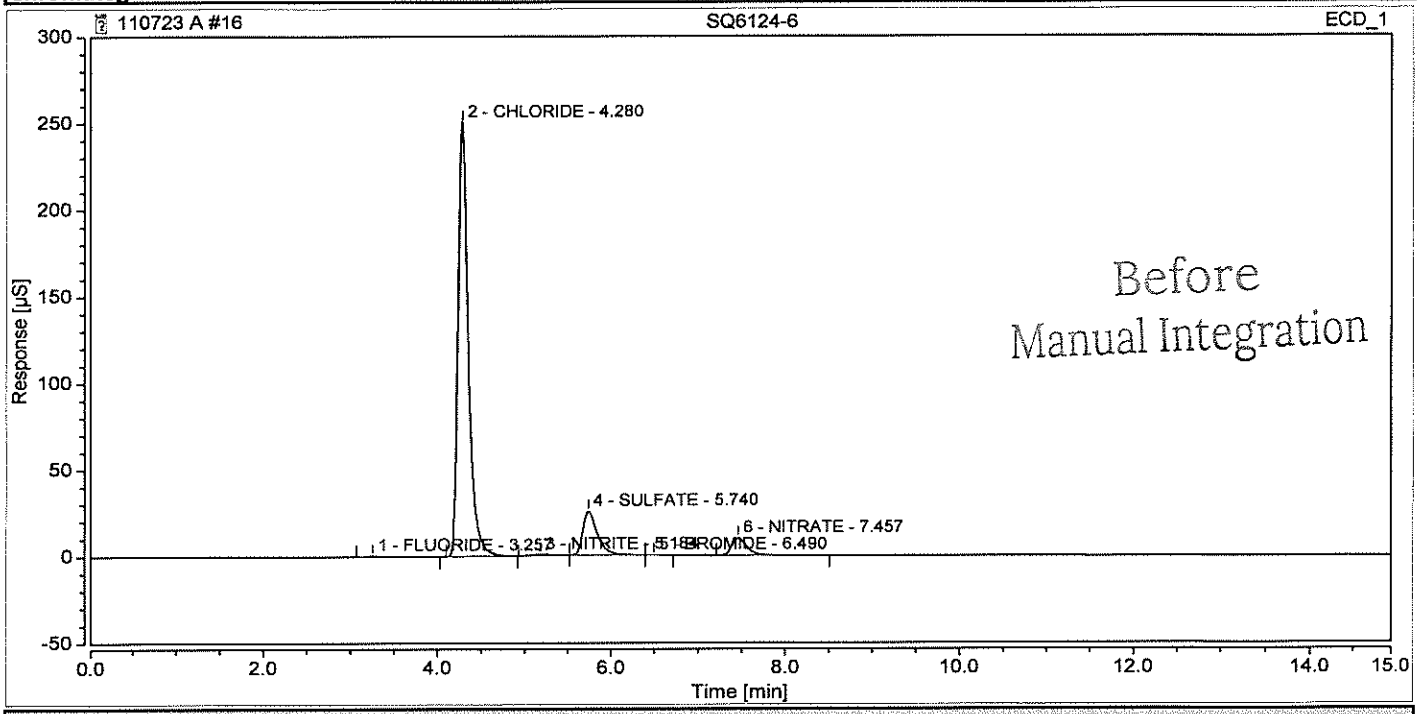
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	CHLORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	SULFATE	5.720	9.010	43.851	99.90	99.99	31.6929	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2	NITRATE	7.497	0.009	0.003	0.10	0.01	0.0090	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**9.018**	**43.855**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6124-6**	*Run Time (min):*	**14.95**
Vial Number:	**16**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**07/Nov/23 22:17**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

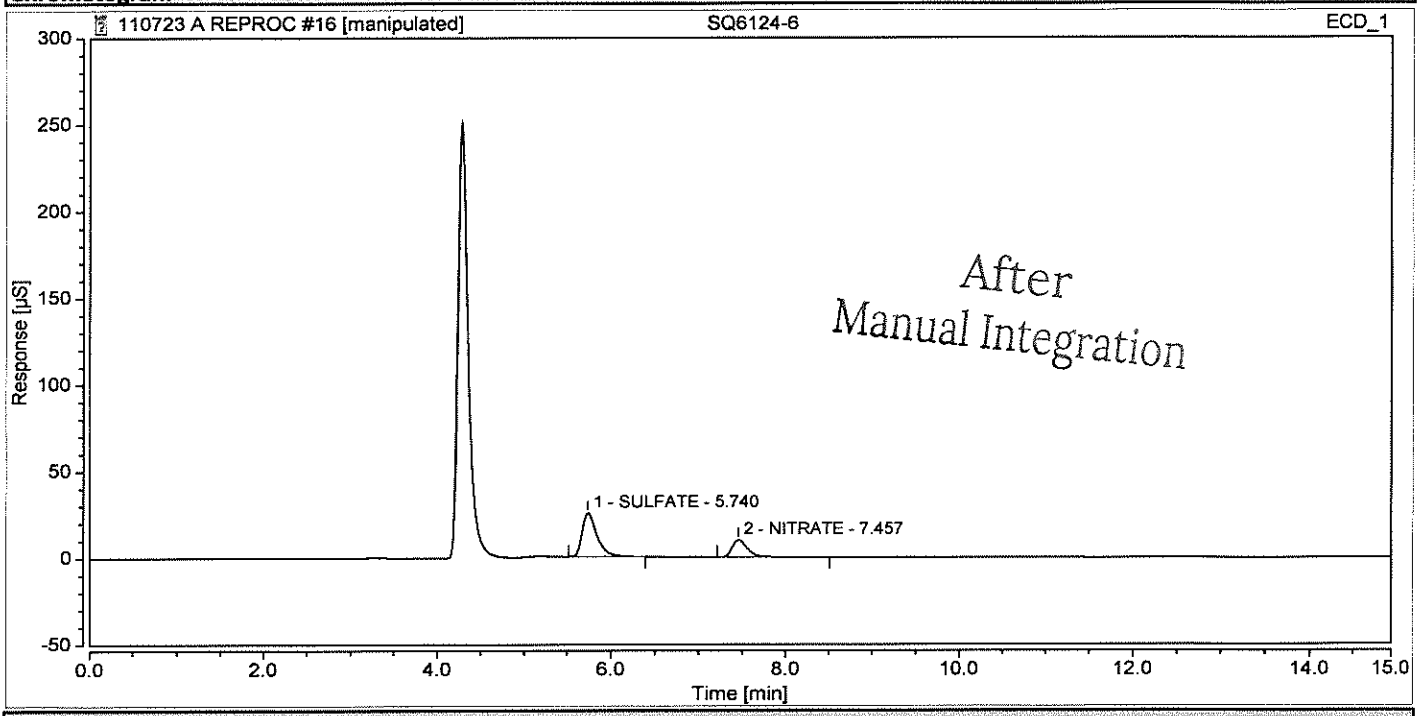
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.257	0.080	0.468	0.19	0.16	0.1426	n.a.
2	CHLORIDE	4.280	34.548	250.362	82.74	87.35	88.6423	n.a.
3	NITRITE	5.184	0.177	0.556	0.42	0.19	0.2144	n.a.
4	SULFATE	5.740	4.934	25.236	11.82	8.80	17.3553	n.a.
5	BROMIDE	6.490	0.007	0.045	0.02	0.02	0.0434	n.a.
6	NITRATE	7.457	2.008	9.956	4.81	3.47	2.0514	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**41.754**	**286.624**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6124-6**	*Run Time (min):*	**14.95**
Vial Number:	**16**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**07/Nov/23 22:17**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

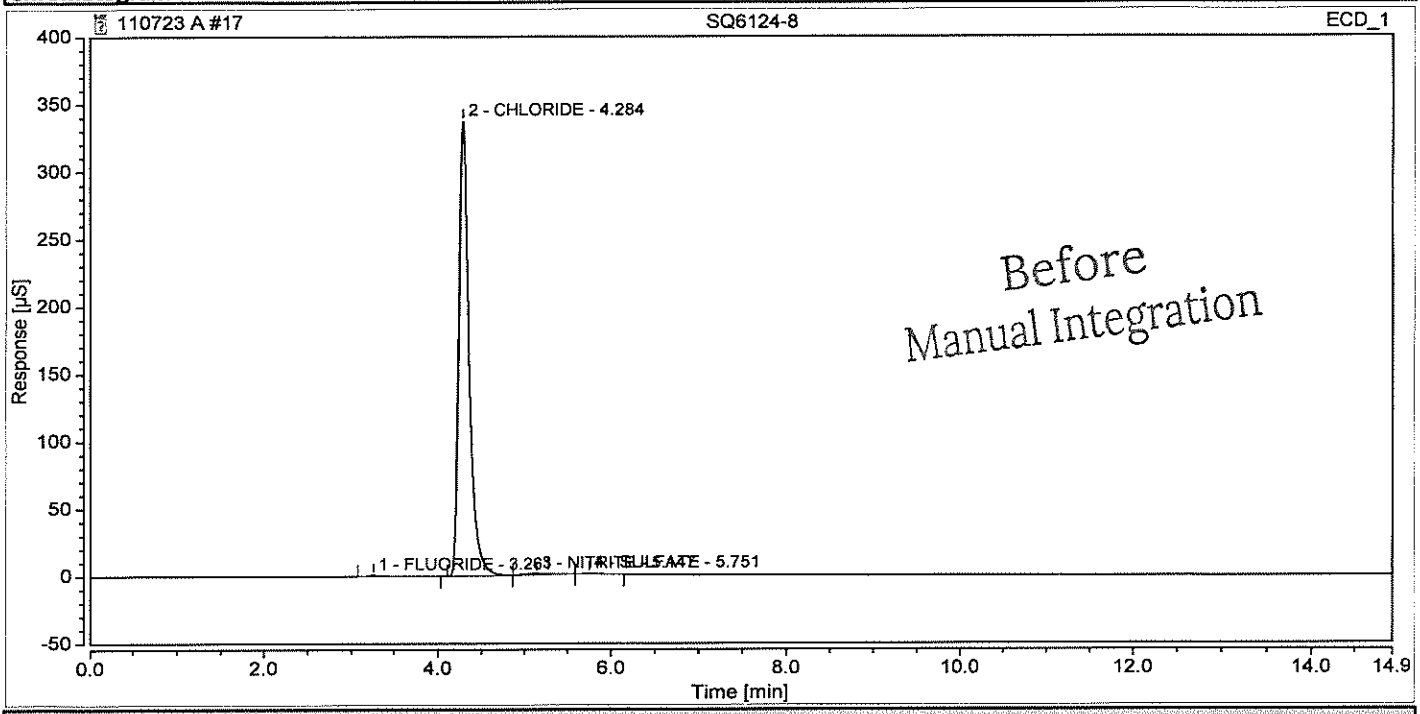
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	CHLORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	SULFATE	5.740	4.934	25.236	71.08	71.71	17.3553	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2	NITRATE	7.457	2.008	9.956	28.92	28.29	2.0514	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**6.941**	**35.192**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6124-8**	*Run Time (min):*	**14.94**
Vial Number:	**17**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**07/Nov/23 22:34**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

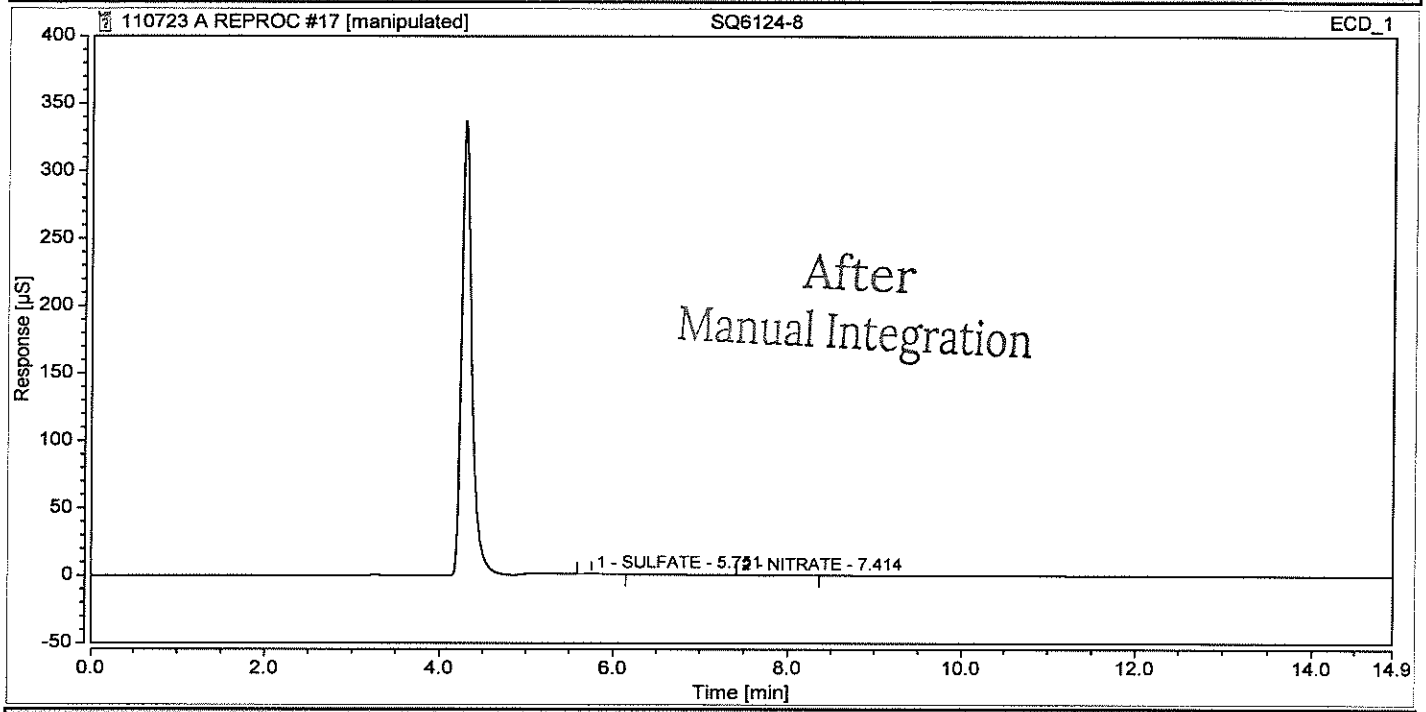
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.261	0.139	0.801	0.29	0.24	0.2358	n.a.
2	CHLORIDE	4.284	46.628	337.611	98.68	99.29	119.6360	n.a.
3	NITRITE	5.147	0.367	0.953	0.78	0.28	0.4364	n.a.
4	SULFATE	5.751	0.117	0.647	0.25	0.19	0.4128	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**47.251**	**340.013**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6124-8**	*Run Time (min):*	**14.94**
Vial Number:	**17**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**07/Nov/23 22:34**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

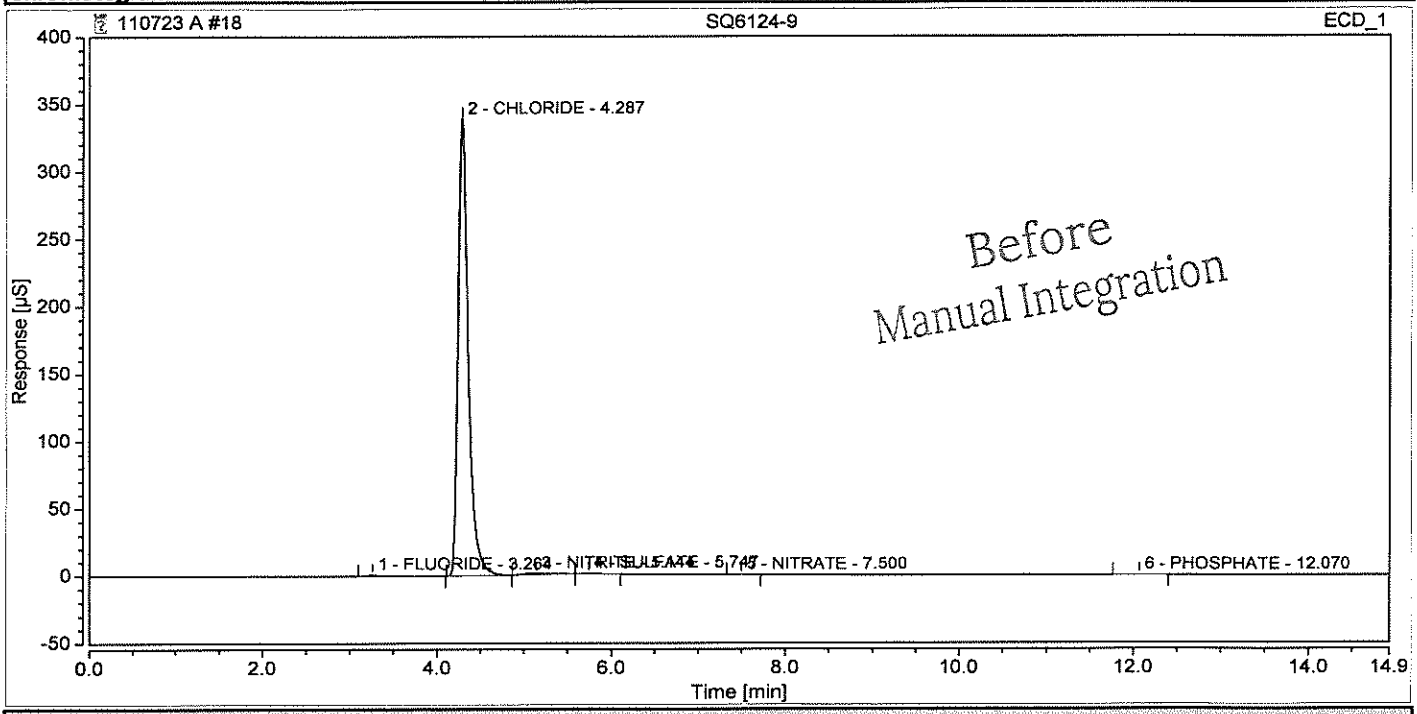
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	CHLORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	SULFATE	5.751	0.117	0.647	93.72	100.00	0.4128	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2	NITRATE	7.414	0.008	0.000	6.28	0.00	0.0080	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.125**	**0.647**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6124-9**	*Run Time (min):*	**14.94**
Vial Number:	**18**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**07/Nov/23 22:51**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

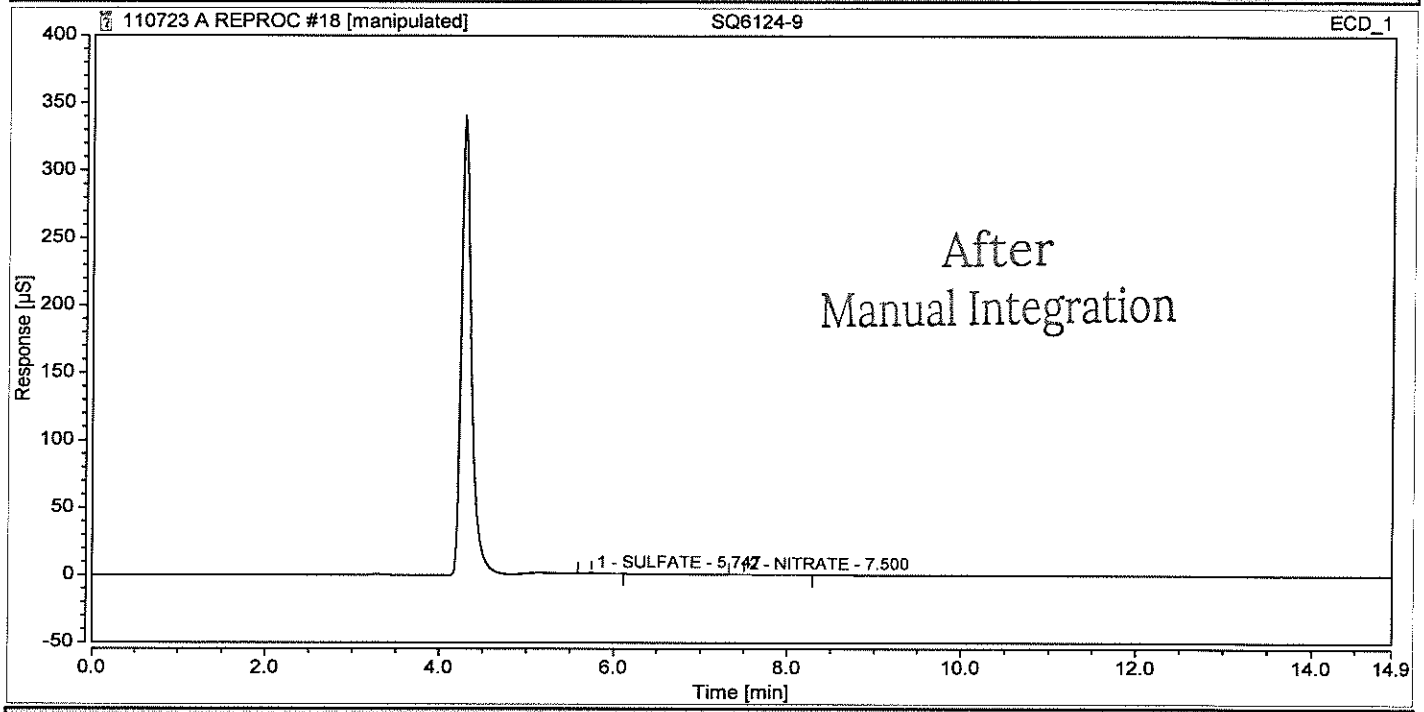
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.264	0.140	0.806	0.30	0.24	0.2375	n.a.
2	CHLORIDE	4.287	46.669	338.574	98.71	99.31	119.7425	n.a.
3	NITRITE	5.144	0.366	0.956	0.77	0.28	0.4361	n.a.
4	SULFATE	5.747	0.100	0.569	0.21	0.17	0.3521	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5	NITRATE	7.500	0.001	0.009	0.00	0.00	0.0015	n.a.
6	PHOSPHATE	12.070	0.001	0.005	0.00	0.00	n.a.	n.a.
Total:			**47.279**	**340.920**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6124-9**	*Run Time (min):*	**14.94**
Vial Number:	**18**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**07/Nov/23 22:51**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

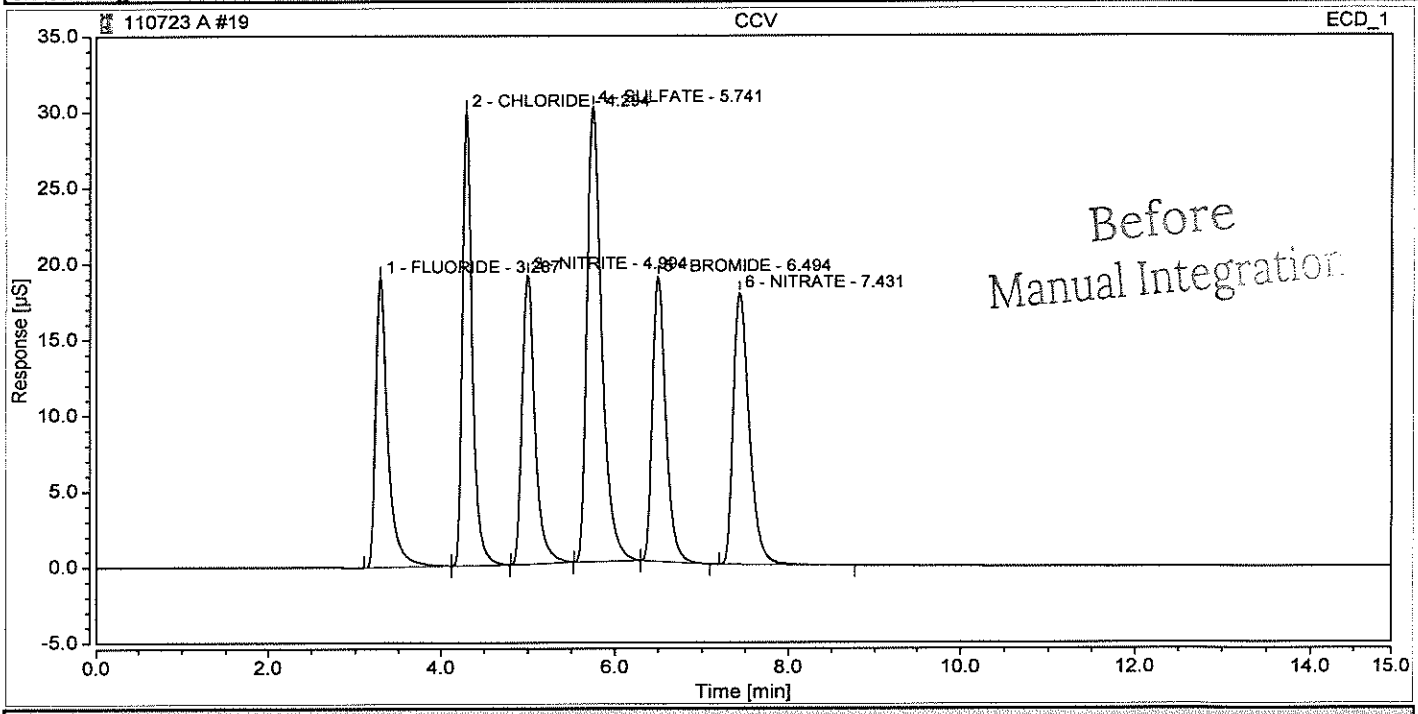
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	CHLORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	SULFATE	5.747	0.100	0.569	95.82	99.07	0.3521	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2	NITRATE	7.500	0.004	0.005	4.18	0.93	0.0045	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.104**	**0.575**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**CCV**	*Run Time (min):*	**14.95**
Vial Number:	**25**	*Injection Volume:*	**200.00**
Injection Type:	**Check Standard**	*Channel:*	**ECD_1**
Calibration Level:	**06**	*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**07/Nov/23 23:08**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

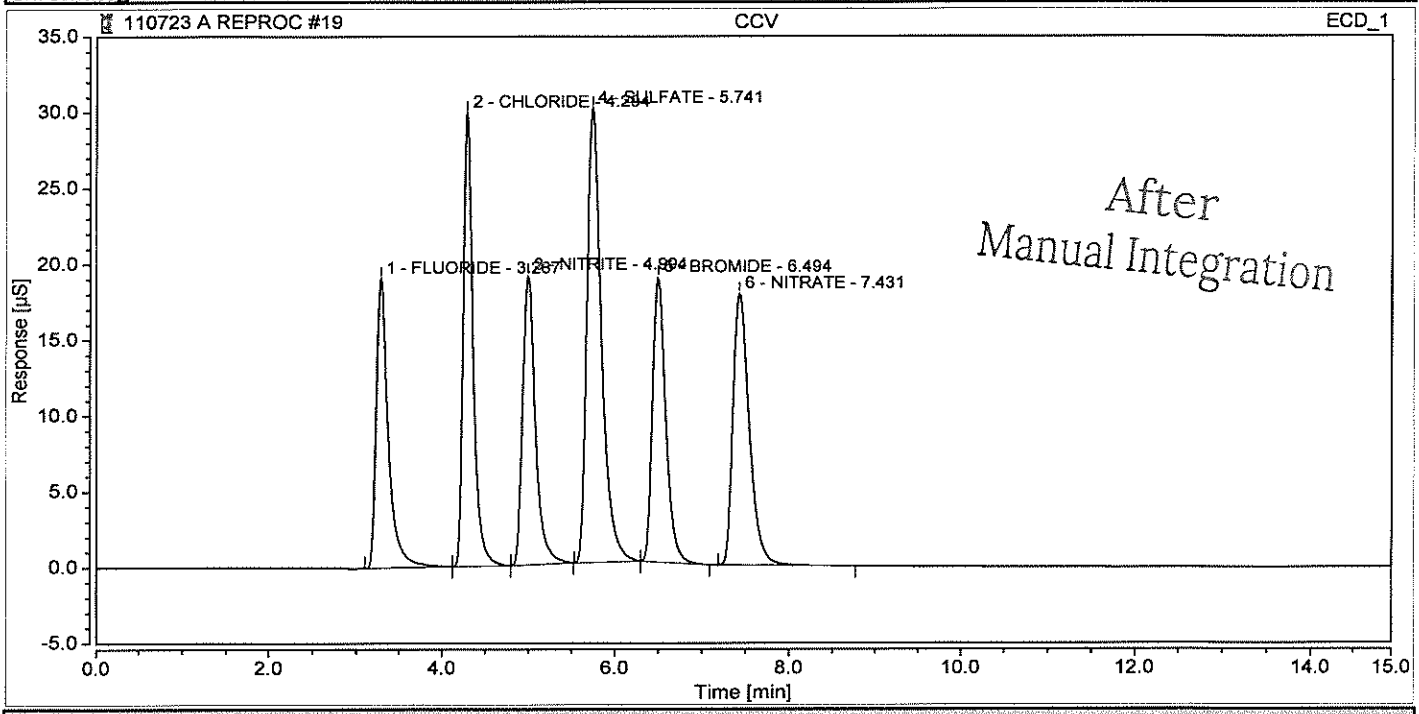
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.287	3.142	19.069	13.41	14.16	5.1026	2.0527
2	CHLORIDE	4.294	3.959	29.909	16.90	22.21	10.1580	1.5804
3	NITRITE	4.994	3.278	19.097	13.99	14.18	3.9462	-1.3455
4	SULFATE	5.741	5.828	29.930	24.88	22.23	20.5002	2.5012
5	BROMIDE	6.494	3.352	18.762	14.31	13.93	19.7149	-1.4256
6	NITRATE	7.431	3.870	17.898	16.52	13.29	3.9543	-1.1415
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**23.428**	**134.665**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**CCV**	*Run Time (min):*	**14.95**
Vial Number:	**25**	*Injection Volume:*	**200.00**
Injection Type:	**Check Standard**	*Channel:*	**ECD_1**
Calibration Level:	**06**	*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**07/Nov/23 23:08**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

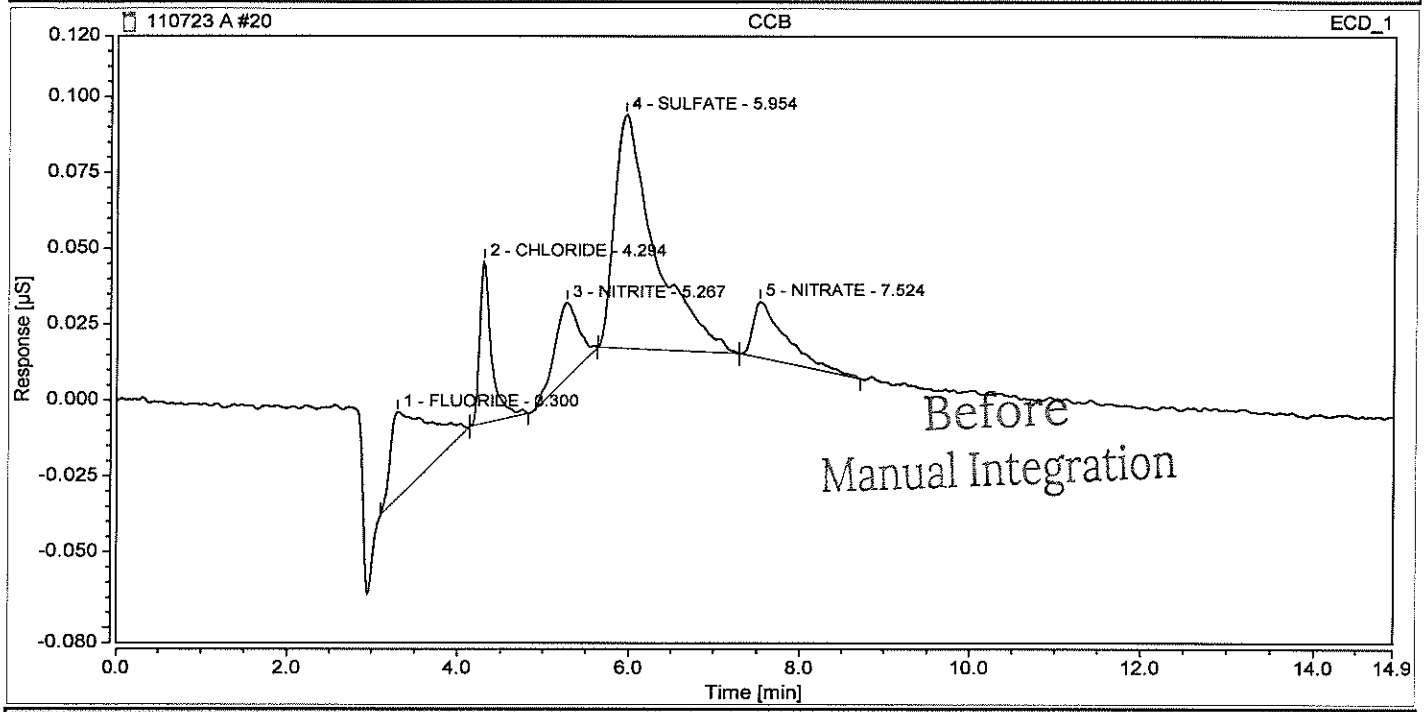
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.287	3.142	19.069	13.41	14.16	5.1026	2.0527
2	CHLORIDE	4.294	3.959	29.909	16.90	22.21	10.1580	1.5804
3	NITRITE	4.994	3.278	19.097	13.99	14.18	3.9462	-1.3455
4	SULFATE	5.741	5.828	29.930	24.88	22.23	20.5002	2.5012
5	BROMIDE	6.494	3.352	18.762	14.31	13.93	19.7149	-1.4256
6	NITRATE	7.431	3.870	17.898	16.52	13.29	3.9543	-1.1415
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**23.428**	**134.665**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**CCB**	*Run Time (min):*	**14.95**
Vial Number:	**26**	*Injection Volume:*	**200.00**
Injection Type:	**Blank**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**07/Nov/23 23:26**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

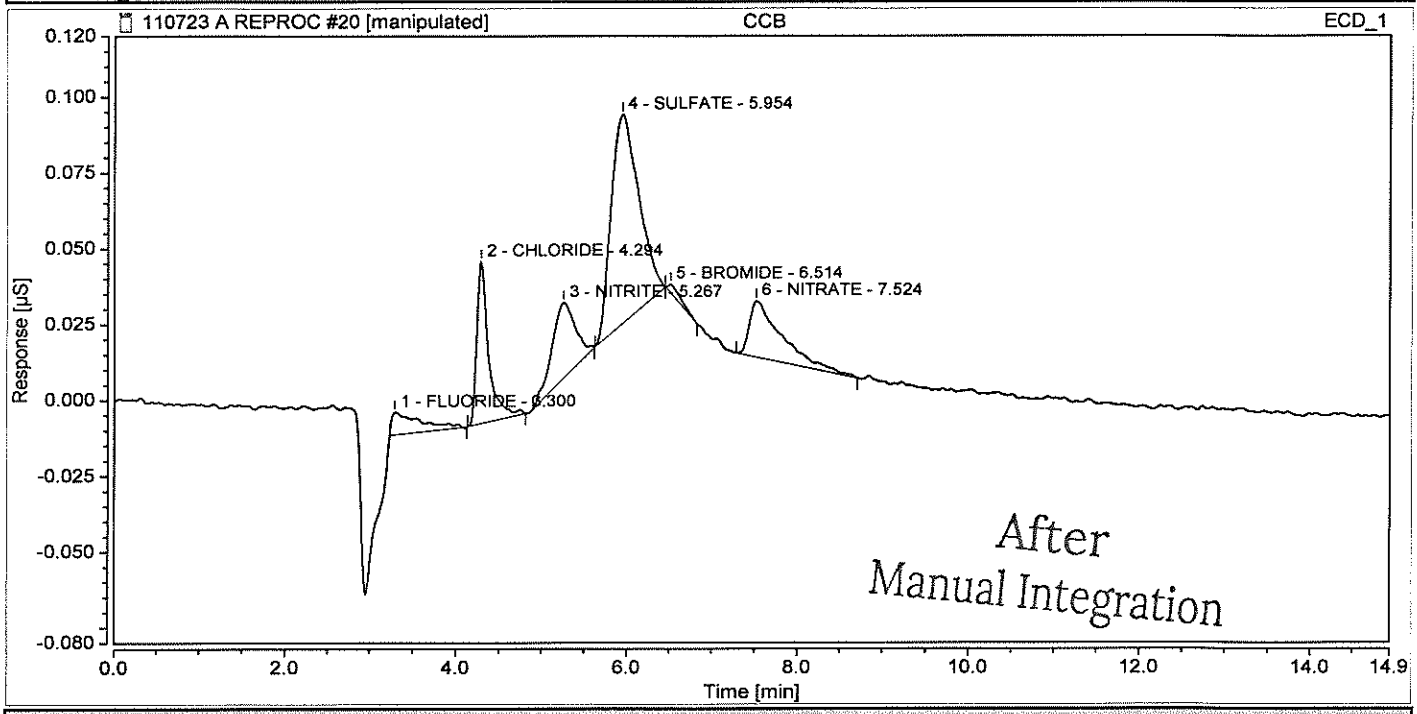
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.300	0.014	0.028	17.22	14.03	0.0387	n.a.
2	CHLORIDE	4.294	0.008	0.053	10.45	26.41	0.0218	n.a.
3	NITRITE	5.267	0.008	0.025	9.70	12.26	0.0174	n.a.
4	SULFATE	5.954	0.043	0.077	52.45	38.11	0.1501	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5	NITRATE	7.524	0.008	0.019	10.18	9.19	0.0085	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.081**	**0.202**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**CCB**	*Run Time (min):*	**14.95**
Vial Number:	**26**	*Injection Volume:*	**200.00**
Injection Type:	**Blank**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**07/Nov/23 23:26**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.300	0.003	0.007	5.22	4.26	0.0211	n.a.
2	CHLORIDE	4.294	0.008	0.053	15.71	30.34	0.0218	n.a.
3	NITRITE	5.267	0.008	0.025	14.59	14.09	0.0174	n.a.
4	SULFATE	5.954	0.026	0.069	48.14	39.07	0.0916	n.a.
5	BROMIDE	6.514	0.001	0.003	1.02	1.68	0.0032	n.a.
6	NITRATE	7.524	0.008	0.019	15.31	10.56	0.0085	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.054**	**0.176**	**100.00**	**100.00**		

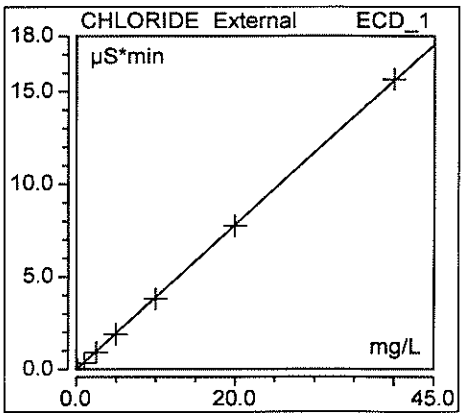
Calibration Batch Report

Sequence:	**101223 CAL REPROC**	*Injection Volume:*	**200.00**
Instrument Method:	**32mM80mA**	*Operator:*	**wetlab**
Inj. Date / Time:	**12-Oct-2023 / 13:07**	*Run Time:*	**14.946667**

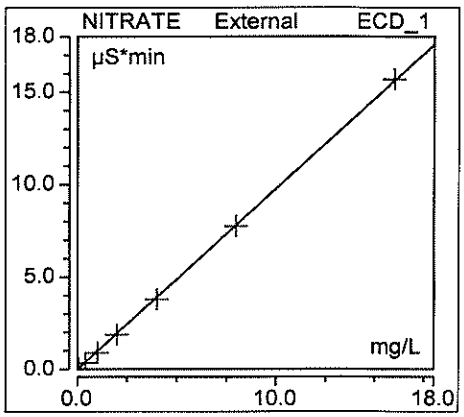
Calibration Summary

Peak Name	Eval.Type	Cal.Type	Points	Offset (C0)	Slope (C1)	Curve (C2)	Coeff.Det. %
FLUORIDE	Area	ly2, WithOffs	8.000	-0.011	0.637	-0.004	99.9990
CHLORIDE	Area	Lin	8.000	0.000	0.390	0.000	99.9875
NITRITE	Area	ly2, WithOffs	8.000	-0.007	0.859	-0.007	99.9990
SULFATE	Area	Lin	8.000	0.000	0.284	0.000	99.9981
BROMIDE	Area	Lin	8.000	0.000	0.170	0.000	99.9752
NITRATE	Area	Lin	8.000	0.000	0.976	0.000	99.9814
		AVERAGE:		-0.0029	0.5526	-0.0018	99.9900

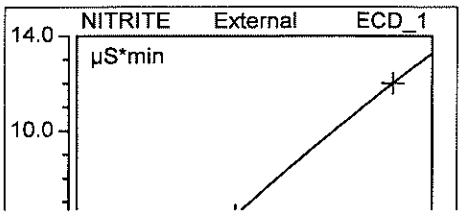
Injection Name **CHLORIDE**	Ret.Time min CHLORIDE	Area µS*min CHLORIDE	Height µS CHLORIDE	Amount mg/L CHLORIDE
	ECD_1	ECD_1	ECD_1	ECD_1
IC1	4.310	0.0013	0.007	0.003
IC2	4.290	0.0319	0.236	0.082
IC3	4.280	0.3373	2.649	0.865
IC4	4.277	0.9117	7.111	2.339
IC5	4.277	1.8945	14.718	4.861
IC6	4.280	3.7977	29.083	9.744
IC7	4.274	7.7443	58.666	19.870
IC8	4.273	15.6522	117.462	40.160
Average	4.283			
Rel. Std. Dev.	0.287 %			



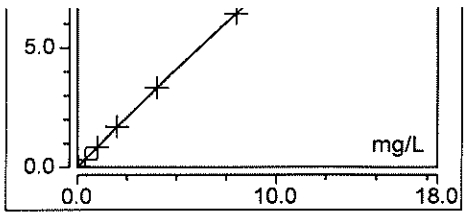
Injection Name **NITRATE**	Ret.Time min NITRATE	Area µS*min NITRATE	Height µS NITRATE	Amount mg/L NITRATE
	ECD_1	ECD_1	ECD_1	ECD_1
IC1	7.577	0.0011	0.005	0.001
IC2	7.557	0.0307	0.152	0.031
IC3	7.537	0.3315	1.685	0.340
IC4	7.521	0.8936	4.512	0.916
IC5	7.500	1.8681	9.167	1.915
IC6	7.470	3.7881	17.516	3.883
IC7	7.420	7.7471	32.517	7.941
IC8	7.347	15.6832	56.804	16.076
Average	7.491			
Rel. Std. Dev.	1.022 %			



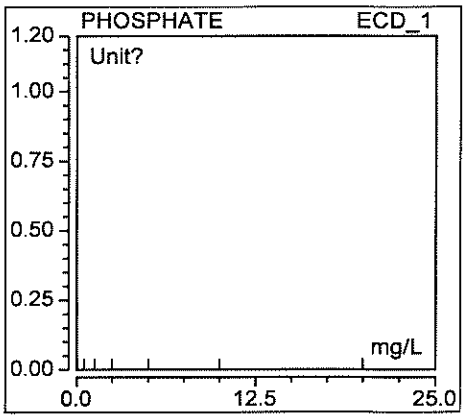
Injection Name **NITRITE**	Ret.Time min NITRITE	Area µS*min NITRITE	Height µS NITRITE	Amount mg/L NITRITE
	ECD_1	ECD_1	ECD_1	ECD_1
IC1	5.277	0.0081	0.032	0.018
IC2	4.990	0.0315	0.165	0.045



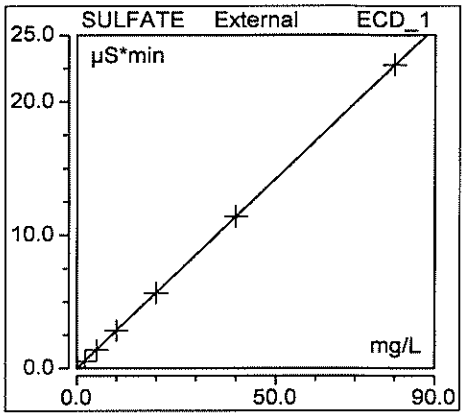
IC3	4.984	0.3130	1.968	0.374
IC4	4.984	0.8317	5.253	0.984
IC5	4.984	1.7014	10.467	2.021
IC6	4.990	3.3244	19.408	4.004
IC7	4.990	6.4268	34.736	7.994
IC8	4.990	12.0030	58.725	16.001
Average	5.024			
Rel. Std. Dev.	2.038 %			



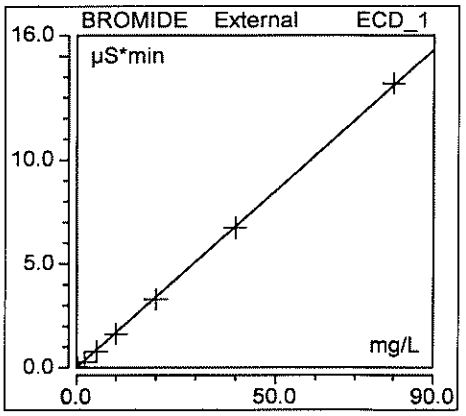
Injection Name	Ret.Time min	Area µS*min	Height µS	Amount mg/L
PHOSPHATE	PHOSPHATE	PHOSPHATE	PHOSPHATE	PHOSPHATE
	ECD_1	ECD_1	ECD_1	ECD_1
IC1	n.a.	n.a.	n.a.	n.a.
IC2	n.a.	n.a.	n.a.	n.a.
IC3	n.a.	n.a.	n.a.	n.a.
IC4	n.a.	n.a.	n.a.	n.a.
IC5	n.a.	n.a.	n.a.	n.a.
IC6	n.a.	n.a.	n.a.	n.a.
IC7	n.a.	n.a.	n.a.	n.a.
IC8	n.a.	n.a.	n.a.	n.a.
Average	#DIV/0!			
Rel. Std. Dev.	#DIV/0!			



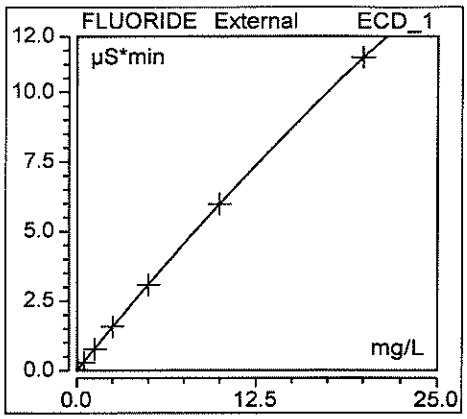
Injection Name	Ret.Time min	Area µS*min	Height µS	Amount mg/L
SULFATE	SULFATE	SULFATE	SULFATE	SULFATE
	ECD_1	ECD_1	ECD_1	ECD_1
IC1	5.844	0.0009	0.004	0.003
IC2	5.834	0.0454	0.229	0.160
IC3	5.820	0.5026	2.833	1.768
IC4	5.817	1.3714	7.732	4.824
IC5	5.797	2.8380	15.881	9.983
IC6	5.777	5.6533	31.045	19.887
IC7	5.744	11.3826	59.540	40.040
IC8	5.687	22.7500	108.379	80.027
Average	5.790			
Rel. Std. Dev.	0.911 %			



Injection Name	Ret.Time min	Area µS*min	Height µS	Amount mg/L
BROMIDE	BROMIDE	BROMIDE	BROMIDE	BROMIDE
	ECD_1	ECD_1	ECD_1	ECD_1
IC1	6.407	0.0004	0.001	0.002
IC2	6.560	0.0257	0.144	0.151
IC3	6.544	0.2814	1.655	1.655
IC4	6.537	0.7709	4.533	4.535
IC5	6.527	1.6186	9.363	9.521
IC6	6.514	3.2868	18.367	19.333
IC7	6.484	6.7353	35.656	39.616
IC8	6.433	13.6787	65.681	80.456
Average	6.501			
Rel. Std. Dev.	0.847 %			



Injection Name FLUORIDE	Ret.Time min FLUORIDE	Area µS*min FLUORIDE	Height µS FLUORIDE	Amount mg/L FLUORIDE
	ECD_1	ECD_1	ECD_1	ECD_1
IC1	3.524	0.0033	0.007	0.022
IC2	3.244	0.0233	0.162	0.053
IC3	3.240	0.2885	2.065	0.471
IC4	3.237	0.7656	5.555	1.228
IC5	3.244	1.5767	11.214	2.530
IC6	3.250	3.0811	21.013	5.001
IC7	3.254	5.9813	38.517	9.993
IC8	3.267	11.2370	67.145	20.001
Average	3.282			
Rel. Std. Dev.	2.982 %			



Anion Summary Report

No. CHLORIDE	Name CHLORIDE	Time min CHLORIDE ECD_1	Area µS*min CHLORIDE ECD_1	Rel.Area % CHLORIDE ECD_1	Height µS CHLORIDE ECD_1	Rel.Height % CHLORIDE ECD_1	Amount mg/L CHLORIDE ECD_1
1	IC1	4.310	0.0013	8.64	0.01	12.08	0.0033
2	IC2	4.290	0.0319	16.92	0.24	21.69	0.0818
3	IC3	4.280	0.3373	16.42	2.65	20.61	0.8653
4	IC4	4.277	0.9117	16.44	7.11	20.50	2.3392
5	IC5	4.277	1.8945	16.48	14.72	20.79	4.8610
6	IC6	4.280	3.7977	16.56	29.08	21.32	9.7441
7	IC7	4.274	7.7443	16.83	58.67	22.60	19.8700
8	IC8	4.273	15.6522	17.20	117.46	24.77	40.1598
	Sum:	34.262	30.371	125.488	229.932	164.342	77.924
	Average:	4.283	3.796	15.686	28.741	20.543	9.741
	Rel.Std.Dev:	0.287 %	143.802 %	18.229 %	142.552 %	17.997 %	143.802 %

No. NITRATE	Name NITRATE	Time min NITRATE ECD_1	Area µS*min NITRATE ECD_1	Rel.Area % NITRATE ECD_1	Height µS NITRATE ECD_1	Rel.Height % NITRATE ECD_1	Amount mg/L NITRATE ECD_1
1	IC1	7.577	0.0011	7.29	0.01	9.24	0.0011
2	IC2	7.557	0.0307	16.31	0.15	13.97	0.0315
3	IC3	7.537	0.3315	16.14	1.69	13.11	0.3398
4	IC4	7.521	0.8936	16.12	4.51	13.00	0.9160
5	IC5	7.500	1.8681	16.25	9.17	12.95	1.9149
6	IC6	7.470	3.7881	16.52	17.52	12.84	3.8830
7	IC7	7.420	7.7471	16.84	32.52	12.52	7.9412
8	IC8	7.347	15.6832	17.23	56.80	11.98	16.0761
	Sum:	59.929	30.344	122.694	122.358	99.612	31.104
	Average:	7.491	3.793	15.337	15.295	12.451	3.888
	Rel.Std.Dev:	1.022 %	144.282 %	21.338 %	131.385 %	11.350 %	144.282 %

No. NITRITE	Name NITRITE	Time min NITRITE ECD_1	Area µS*min NITRITE ECD_1	Rel.Area % NITRITE ECD_1	Height µS NITRITE ECD_1	Rel.Height % NITRITE ECD_1	Amount mg/L NITRITE ECD_1
1	IC1	5.277	0.0081	53.65	0.03	57.13	0.0176
2	IC2	4.990	0.0315	16.72	0.17	15.17	0.0449
3	IC3	4.984	0.3130	15.24	1.97	15.31	0.3737
4	IC4	4.984	0.8317	15.00	5.25	15.14	0.9839
5	IC5	4.984	1.7014	14.80	10.47	14.78	2.0208
6	IC6	4.990	3.3244	14.50	19.41	14.23	4.0043
7	IC7	4.990	6.4268	13.97	34.74	13.38	7.9935
8	IC8	4.990	12.0030	13.19	58.73	12.38	16.0012
	Sum:	40.189	24.640	157.051	130.754	157.526	31.440
	Average:	5.024	3.080	19.631	16.344	19.691	3.930
	Rel.Std.Dev:	2.038 %	136.774 %	70.208 %	127.418 %	77.003 %	141.871 %

No. PHOSPHATE	Name PHOSPHATE	Time min PHOSPHATE ECD_1	Area µS*min PHOSPHATE ECD_1	Rel.Area % PHOSPHATE ECD_1	Height µS PHOSPHATE ECD_1	Rel.Height % PHOSPHATE ECD_1	Amount mg/L PHOSPHATE ECD_1
1	IC1	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2	IC2	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

3	IC3	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
4	IC4	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5	IC5	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
6	IC6	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
7	IC7	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
8	IC8	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
	Sum:	0.000	0.000	0.000	0.000	0.000	0.000
	Average:	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
	Rel.Std.Dev:	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

No. SULFATE	Name SULFATE	Time min SULFATE ECD_1	Area µS*min SULFATE ECD_1	Rel.Area % SULFATE ECD_1	Height µS SULFATE ECD_1	Rel.Height % SULFATE ECD_1	Amount mg/L SULFATE ECD_1
1	IC1	5.844	0.0009	6.16	0.00	7.25	0.0033
2	IC2	5.834	0.0454	24.09	0.23	21.06	0.1596
3	IC3	5.820	0.5026	24.47	2.83	22.04	1.7679
4	IC4	5.817	1.3714	24.73	7.73	22.29	4.8243
5	IC5	5.797	2.8380	24.68	15.88	22.43	9.9833
6	IC6	5.777	5.6533	24.65	31.04	22.75	19.8866
7	IC7	5.744	11.3826	24.74	59.54	22.93	40.0405
8	IC8	5.687	22.7500	25.00	108.38	22.86	80.0271
	Sum:	46.319	44.544	178.521	225.643	163.599	156.693
	Average:	5.790	5.568	22.315	28.205	20.450	19.587
	Rel.Std.Dev:	0.911 %	142.591 %	29.274 %	135.408 %	26.248 %	142.591 %

No. BROMIDE	Name BROMIDE	Time min BROMIDE ECD_1	Area µS*min BROMIDE ECD_1	Rel.Area % BROMIDE ECD_1	Height µS BROMIDE ECD_1	Rel.Height % BROMIDE ECD_1	Amount mg/L BROMIDE ECD_1
1	IC1	6.407	0.0004	2.57	0.00	2.09	0.0023
2	IC2	6.560	0.0257	13.62	0.14	13.22	0.1509
3	IC3	6.544	0.2814	13.70	1.65	12.87	1.6554
4	IC4	6.537	0.7709	13.90	4.53	13.07	4.5345
5	IC5	6.527	1.6186	14.08	9.36	13.22	9.5207
6	IC6	6.514	3.2868	14.33	18.37	13.46	19.3328
7	IC7	6.484	6.7353	14.64	35.66	13.73	39.6161
8	IC8	6.433	13.6787	15.03	65.68	13.85	80.4565
	Sum:	52.006	26.398	101.871	135.400	95.522	155.269
	Average:	6.501	3.300	12.734	16.925	11.940	19.409
	Rel.Std.Dev:	0.847 %	144.644 %	32.456 %	136.608 %	33.434 %	144.644 %

No. FLUORIDE	Name FLUORIDE	Time min FLUORIDE ECD_1	Area µS*min FLUORIDE ECD_1	Rel.Area % FLUORIDE ECD_1	Height µS FLUORIDE ECD_1	Rel.Height % FLUORIDE ECD_1	Amount mg/L FLUORIDE ECD_1
1	IC1	3.524	0.0033	21.68	0.01	12.21	0.0218
2	IC2	3.244	0.0233	12.35	0.16	14.89	0.0532
3	IC3	3.240	0.2885	14.04	2.06	16.06	0.4710
4	IC4	3.237	0.7656	13.81	5.55	16.01	1.2278
5	IC5	3.244	1.5767	13.71	11.21	15.84	2.5301
6	IC6	3.250	3.0811	13.44	21.01	15.40	5.0014
7	IC7	3.254	5.9813	13.00	38.52	14.84	9.9933
8	IC8	3.267	11.2370	12.35	67.15	14.16	20.0014
	Sum:	26.259	22.957	114.375	145.677	119.399	39.300
	Average:	3.282	2.870	14.297	18.210	14.925	4.913
	Rel.Std.Dev:	2.982 %	137.399 %	21.345 %	130.315 %	8.595 %	141.871 %

WET CHEMISTRY BATCH REPORT
Nov 14 2023, 01:17 pm
Batch: WG345360 Run ID 1: R626990 Run ID 2: NONE

Parameter: Alkalinity
Prep Date: N/A

Date Analyzed: 13-NOV-23
Prep Method: N/A

Analyst Initials: BL
Prep Chemist: N/A

Sample	Samp Type	Method	Initial Amt.	Final Amt.	Rpt. DF	Result	Rpt Result	TS(%)	PQL	MDL	Adj PQL	RPD	%Rec
SQ6108-7	SAMP	SM2320B	50.0mL	50.0mL	1	453.652	450 mg/L	NA	5	0.23	5.0		
SQ6108-8	SAMP	SM2320B	50.0mL	50.0mL	1	82.159	82. mg/L	NA	5	0.23	5.0		
SQ6108-9	SAMP	SM2320B	50.0mL	50.0mL	1	290.44	290 mg/L	NA	5	0.23	5.0		
SQ6108-10	SAMP	SM2320B	50.0mL	50.0mL	1	151.733	150 mg/L	NA	5	0.23	5.0		
SQ6112-1	SAMP	SM2320B	50.0mL	50.0mL	1	206.44	210 mg/L	NA	5	0.23	5.0		
SQ6112-2	SAMP	SM2320B	50.0mL	50.0mL	1	164.884	160 mg/L	NA	5	0.23	5.0		
SQ6133-1	SAMP	SM2320B	50.0mL	50.0mL	1	103.788	100 mg/L	NA	5	0.23	5.0		
SQ6133-2	SAMP	SM2320B	50.0mL	50.0mL	1	209.748	210 mg/L	NA	5	0.23	5.0		
SQ6133-3	SAMP	SM2320B	50.0mL	50.0mL	1	201.574	200 mg/L	NA	5	0.23	5.0		
SQ6133-4	SAMP	SM2320B	50.0mL	50.0mL	1	102.879	100 mg/L	NA	5	0.23	5.0		
SQ6133-5	SAMP	SM2320B	50.0mL	50.0mL	1	136.451	140 mg/L	NA	5	0.23	5.0		
SQ6133-6	SAMP	SM2320B	50.0mL	50.0mL	1	115.348	120 mg/L	NA	5	0.23	5.0		
SQ6133-7	SAMP	SM2320B	50.0mL	50.0mL	1	219.497	220 mg/L	NA	5	0.23	5.0		
SQ6232-1	SAMP	SM2320B	50.0mL	50.0mL	1	1.935	U5.0 mg/L	NA	5	0.23	5.0		
SQ6232-2	SAMP	SM2320B	50.0mL	50.0mL	1	488.169	490 mg/L	NA	5	0.23	5.0		
SQ6232-3	SAMP	SM2320B	50.0mL	50.0mL	1	622.69	620 mg/L	NA	5	0.23	5.0		
SQ6232-4	SAMP	SM2320B	50.0mL	50.0mL	1	166.407	170 mg/L	NA	5	0.23	5.0		
SQ6232-6	SAMP	SM2320B	50.0mL	50.0mL	1	177.906	180 mg/L	NA	5	0.23	5.0		
WG345360-1	MBLANK	SM2320B	50.0mL	50.0mL	1	2.021	J2.0 mg/L	NA	5	0.23	5.0		
WG345360-2	LCS	SM2320B	50.0mL	50.0mL	1	126.772	130 mg/L	NA	5	0.23	5.0		106
WG345360-3	LCSD	SM2320B	50.0mL	50.0mL	1	131.16	130 mg/L	NA	5	0.23	5.0	3	109
WG345360-4	MS	SM2320B	50.0mL	50.0mL	1	303.518	300 mg/L	NA	5	0.23	5.0		105
WG345360-5	MSD	SM2320B	50.0mL	50.0mL	1	302.753	300 mg/L	NA	5	0.23	5.0	0	104

Comments:

SQ6112-1	Anions = NO3, SO4, Cl.
SQ6112-2	Anions = NO3, SO4, Cl.
SQ6133-1	Anions = NO3, SO4, Cl.
SQ6133-2	Anions = NO3, SO4, Cl.
SQ6133-3	MS/MSD. Anions = NO3, SO4, Cl.
SQ6133-4	Anions = NO3, SO4, Cl.
SQ6133-5	Anions = NO3, SO4, Cl.
SQ6133-6	Anions = NO3, SO4, Cl.
SQ6133-7	Anions = NO3, SO4, Cl.
WG345360-1	SQ6108-10
WG345360-2	SQ6108-10
WG345360-3	SQ6108-10
WG345360-4	SQ6133-3
WG345360-5	SQ6133-3

Entered by: BL Date: 11/14/23 Accepted by: CA Date: 11/14/23

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WET CHEMISTRY BATCH REPORT - BICARBONATE
Nov 14 2023, 01:17 pm
Batch: WG345361 Run ID 1: R626991 Run ID 2: NONE

Parameter: Bicarbonate (As CaCO3) Prep Date: N/A

Date Analyzed: 13-NOV-23 Prep Method: N/A

Analyst Initials: BL Prep Chemist: N/A

Sample	Samp Type	Method	Alkalinity	pH	Rpt. DF	Result	Rpt Result	TS(%)	PQL	MDL	Adj PQL	RPD	%Rec
SQ6232-1	SAMP	SM4500CO2 D	1.93500	5.567	1	1.93475	U5.0 mg/L	NA	5	.497	5		
SQ6232-2	SAMP	SM4500CO2 D	488.169	7.211	1	487.41609	490 mg/L	NA	5	.497	5		
SQ6232-3	SAMP	SM4500CO2 D	622.690	6.907	1	622.21383	620 mg/L	NA	5	.497	5		
SQ6232-4	SAMP	SM4500CO2 D	166.407	6.326	1	166.37281	170 mg/L	NA	5	.497	5		
SQ6232-6	SAMP	SM4500CO2 D	177.906	6.448	1	177.85769	180 mg/L	NA	5	.497	5		
WG345361-1	MBLANK	SM4500CO2 D	2.02100	5.082	1	2.02092	U5.0 mg/L	NA	5	.497	5		

Comments:

WG345361-1 SQ6232-1

Entered by: BL Date: 11/14/23 Accepted by: CA Date: 11/14/23

WET CHEMISTRY BATCH REPORT - CARBONATE
Nov 14 2023, 01:18 pm
Batch: WG345362 Run ID 1: R626992 Run ID 2: NONE

Parameter: Carbonate (As CaCO3) Prep Date: N/A

Date Analyzed: 13-NOV-23 Prep Method: N/A

Analyst Initials: BL Prep Chemist: N/A

Sample	Samp Type	Method	Bicarb	pH	Rpt. DF	Result	Rpt Result	TS(%)	PQL	MDL	Adj PQL	RPD	%Rec
SQ6232-1	SAMP	SM4500CO2 D	1.93475	5.567	1	.00007	U5.0 mg/L	NA	5	.497	5		
SQ6232-2	SAMP	SM4500CO2 D	487.416	7.211	1	.74478	U5.0 mg/L	NA	5	.497	5		
SQ6232-3	SAMP	SM4500CO2 D	622.214	6.907	1	.47214	U5.0 mg/L	NA	5	.497	5		
SQ6232-4	SAMP	SM4500CO2 D	166.373	6.326	1	.03313	U5.0 mg/L	NA	5	.497	5		
SQ6232-6	SAMP	SM4500CO2 D	177.858	6.448	1	.0469	U5.0 mg/L	NA	5	.497	5		
WG345362-1	MBLANK	SM4500CO2 D	2.02092	5.082	1	.00002	U5.0 mg/L	NA	5	.497	5		

Comments:

WG345362-1 SQ6232-1

Entered by: BL Date: 11/14/23 Accepted by: CA Date: 11/14/23

Start time: 11/13/2023 10:26
Results

No.	Comment / ID	Start time	Rx	Result	Unit	Name	
1/7	CCV	11/13/2023 10:27:23 AM	R1 =	0	mg/L	P Alkalinity- pH8.2	**99.63%**
			R2 =	124.54	mg/L	Total Alkalinity	
			R3 =	8.211	pH	pH	
			R4 =	18.8	oC	TEMPERATURE	
2/7	CCB	11/13/2023 10:31:03 AM	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	2.021	mg/L	Total Alkalinity	
			R3 =	5.082	pH	pH	
			R4 =	18.9	oC	TEMPERATURE	
3/7	LCS	11/13/2023 10:32:54 AM	R1 =	69.364	mg/L	P Alkalinity- pH8.2	**105.64%**
			R2 =	126.772	mg/L	Total Alkalinity	
			R3 =	10.643	pH	pH	
			R4 =	18.9	oC	TEMPERATURE	
4/7	LCSD	11/13/2023 10:36:43 AM	R1 =	70.654	mg/L	P Alkalinity- pH8.2	**109.30%**
			R2 =	131.16	mg/L	Total Alkalinity	
			R3 =	10.65	pH	pH	
			R4 =	18.7	oC	TEMPERATURE	
5/7	MDL	11/13/2023 10:40:22 AM	R1 =	1.445	mg/L	P Alkalinity- pH8.2	
			R2 =	6.669	mg/L	Total Alkalinity	
			R3 =	9.171	pH	pH	
			R4 =	18.7	oC	TEMPERATURE	
6/7	MDL	11/13/2023 10:42:45 AM	R1 =	1.652	mg/L	P Alkalinity- pH8.2	
			R2 =	6.462	mg/L	Total Alkalinity	
			R3 =	9.305	pH	pH	
			R4 =	18.6	oC	TEMPERATURE	
7/7	MDL	11/13/2023 10:45:12 AM	R1 =	1.941	mg/L	P Alkalinity- pH8.2	
			R2 =	6.968	mg/L	Total Alkalinity	
			R3 =	9.331	pH	pH	
			R4 =	18.5	oC	TEMPERATURE	

Start time: 11/13/2023 13:35
Results

No.	Comment / ID	Start time	Rx	Result	Unit	Name	
1/13	SQ6108-7	11/13/2023 1:36:34 PM	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	453.652	mg/L	Total Alkalinity	
			R3 =	6.609	pH	pH	
			R4 =	9.1	oC	TEMPERATURE	
2/13	SQ6108-8	11/13/2023 1:42:31 PM	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	82.159	mg/L	Total Alkalinity	
			R3 =	5.522	pH	pH	
			R4 =	9.4	oC	TEMPERATURE	
3/13	SQ6108-9	11/13/2023 1:45:59 PM	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	290.44	mg/L	Total Alkalinity	
			R3 =	6.099	pH	pH	
			R4 =	9.8	oC	TEMPERATURE	
4/13	SQ6108-10	11/13/2023 1:50:38 PM	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	151.733	mg/L	Total Alkalinity	
			R3 =	6.532	pH	pH	
			R4 =	10.3	oC	TEMPERATURE	
5/13	SQ6112-1	11/13/2023 1:54:04 PM	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	206.44	mg/L	Total Alkalinity	
			R3 =	7.126	pH	pH	
			R4 =	9.9	oC	TEMPERATURE	
6/13	CCV	11/13/2023 1:57:47 PM	R1 =	1.91	mg/L	P Alkalinity- pH8.2	**99.67%**
			R2 =	124.592	mg/L	Total Alkalinity	
			R3 =	8.384	pH	pH	
			R4 =	17.5	oC	TEMPERATURE	

7/13	CCB	11/13/2023 2:01:25 PM	R1 =	0	mg/L	P Alkalinity- pH8.2
			R2 =	1.925	mg/L	Total Alkalinity
			R3 =	5.523	pH	pH
			R4 =	18.1	oC	TEMPERATURE
8/13	SQ6112-2	11/13/2023 2:03:14 PM	R1 =	0	mg/L	P Alkalinity- pH8.2
			R2 =	164.884	mg/L	Total Alkalinity
			R3 =	7.576	pH	pH
			R4 =	11.4	oC	TEMPERATURE
9/13	SQ6133-1	11/13/2023 2:07:06 PM	R1 =	0	mg/L	P Alkalinity- pH8.2
			R2 =	103.788	mg/L	Total Alkalinity
			R3 =	7.737	pH	pH
			R4 =	11.6	oC	TEMPERATURE
10/13	SQ6133-2	11/13/2023 2:10:11 PM	R1 =	0	mg/L	P Alkalinity- pH8.2
			R2 =	209.748	mg/L	Total Alkalinity
			R3 =	7.563	pH	pH
			R4 =	11.9	oC	TEMPERATURE
11/13	SQ6133-3	11/13/2023 2:14:01 PM	R1 =	0	mg/L	P Alkalinity- pH8.2
			R2 =	201.574	mg/L	Total Alkalinity
			R3 =	7.746	pH	pH
			R4 =	12	oC	TEMPERATURE
12/13	SQ6133-3 MS	11/13/2023 2:18:03 PM	R1 =	83.247	mg/L	P Alkalinity- pH8.2
			R2 =	303.518	mg/L	Total Alkalinity
			R3 =	9.566	pH	pH
			R4 =	13.1	oC	TEMPERATURE
13/13	SQ6133-3 MSD	11/13/2023 2:22:55 PM	R1 =	84.372	mg/L	P Alkalinity- pH8.2
			R2 =	302.753	mg/L	Total Alkalinity
			R3 =	9.557	pH	pH
			R4 =	13.6	oC	TEMPERATURE

Start time: 11/13/2023 14:54

Results

No.	Comment / ID	Start time	Rx	Result	Unit	Name	
1/15	SQ6133-4	11/13/2023 2:55:36 PM	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	102.879	mg/L	Total Alkalinity	
			R3 =	7.883	pH	pH	
			R4 =	13.7	oC	TEMPERATURE	
2/15	SQ6133-5	11/13/2023 2:58:59 PM	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	136.451	mg/L	Total Alkalinity	
			R3 =	6.485	pH	pH	
			R4 =	13.3	oC	TEMPERATURE	
3/15	SQ6133-6	11/13/2023 3:02:24 PM	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	115.348	mg/L	Total Alkalinity	
			R3 =	7.871	pH	pH	
			R4 =	14	oC	TEMPERATURE	
4/15	SQ6133-7	11/13/2023 3:05:43 PM	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	219.497	mg/L	Total Alkalinity	
			R3 =	7.329	pH	pH	
			R4 =	14.3	oC	TEMPERATURE	
5/15	CCV	11/13/2023 3:09:39 PM	R1 =	1.709	mg/L	P Alkalinity- pH8.2	**98.91%**
			R2 =	123.632	mg/L	Total Alkalinity	
			R3 =	8.375	pH	pH	
			R4 =	17.6	oC	TEMPERATURE	
6/15	CCB	11/13/2023 3:13:21 PM	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	1.94	mg/L	Total Alkalinity	
			R3 =	5.669	pH	pH	
			R4 =	18	oC	TEMPERATURE	

7/15	SQ6232-1	11/13/2023 3:15:12 PM	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	1.935	mg/L	Total Alkalinity	
			R3 =	5.567	pH	pH	
			R4 =	14.6	oC	TEMPERATURE	
8/15	SQ6232-2	11/13/2023 3:17:04 PM	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	488.169	mg/L	Total Alkalinity	
			R3 =	7.211	pH	pH	
			R4 =	14.2	oC	TEMPERATURE	
9/15	SQ6232-3	11/13/2023 3:23:13 PM	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	622.69	mg/L	Total Alkalinity	
			R3 =	6.907	pH	pH	
			R4 =	14.6	oC	TEMPERATURE	
10/15	SQ6232-4	11/13/2023 3:30:23 PM	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	166.407	mg/L	Total Alkalinity	
			R3 =	6.326	pH	pH	
			R4 =	14.8	oC	TEMPERATURE	
11/15	SQ6232-5	11/13/2023 3:34:18 PM	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	NaN	mg/L	Total Alkalinity	
			R3 =	6.915	pH	pH	
			R4 =	14.9	oC	TEMPERATURE	
12/15	SQ6232-6	11/13/2023 3:43:54 PM	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	177.906	mg/L	Total Alkalinity	
			R3 =	6.448	pH	pH	
			R4 =	15.4	oC	TEMPERATURE	
13/15	SQ6232-7	11/13/2023 3:47:40 PM	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	NaN	mg/L	Total Alkalinity	
			R3 =	6.864	pH	pH	
			R4 =	16	oC	TEMPERATURE	
14/15	CCV	11/13/2023 3:57:17 PM	R1 =	0.751	mg/L	P Alkalinity- pH8.2	**101.34%**
			R2 =	126.674	mg/L	Total Alkalinity	
			R3 =	8.331	pH	pH	
			R4 =	17.6	oC	TEMPERATURE	
15/15	CCB	11/13/2023 4:01:47 PM	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	2.168	mg/L	Total Alkalinity	
			R3 =	5.622	pH	pH	
			R4 =	17.9	oC	TEMPERATURE	

Start time: 11/13/2023 8:35

Results

No.	Comment / ID	Start time	Rx	Result	Unit	Name

Calibration data

Number of segments		1
Slope	-57.81 mV/pH	
Zero point	7.057 pH	
Calibration temperature	25.0 oC	

(ALK) WG345360 → R626990
(TBICARB) WG345361 → R626991

(TCARB) WG345362 → R626992

KATAHDIN ANALYTICAL SERVICES

ALKALINITY, BICARBONATE, CARBONATE, FREE CO2 - DL 25 AUTOTITRATOR

Analysis: EPA 310.1 (SM2320B) **Calculations:** (SM 4500-CO2 D)

pH Probe ID:	DG171-SC		
Sulfuric Acid Titrant Reagent ID:	W22103	**Buffer pH 4 ID:**	SWL 5132
Sulfuric Acid Concentration:	0.02N	**Buffer pH 7 ID:**	5115
Alkalinity Check Standard (CCV):	W22277 TV= 125	**Buffer pH 10 ID:**	5094
Alkalinity LCS/MS ID:	W22326 TV= 120	**Pipette IDs:**	W3, W13

Sample ID	Run #	Sample Volume (mL)	Sample ID	Run #	Sample Volume (mL)	Comments - Must indicate which sample
CCV	1	50	CCV	5	50	
CCB	2		CCB	6		
LCS	3		SQ6232-1	7		
LCSD	4		-2	8		
MDL	5		-3	9		
MDL	6		-4	10		
MDL	7		-5	11		SQ6232-5 = HIGH LEVEL
SQ6108-7	1	50	-6	12		
-8	2		-7	13		SQ6232-7 = HIGH LEVEL
-9	3		CCV	14		
-10	4		CCB	15		
6112-1	5					
CCV	6					
CCB	7					
SQ6112-2	8					
6133-1	9					
-2	10					
-3	11					
6133-3 MS	12					
MSD	13					
SQ6133-4	1	50				
-5	2					
-6	3			BL	11/13/23	
-7	4					

Analyst: BL **Date:** 11/13/23

Checked By: CA **Date:** 11/14/23

Katahdin
ANALYTICAL SERVICES

ACCREDITED IN ACCORDANCE WITH nelac
Cert No E87604

Wet Chemistry Batch Report

Analyst Initials: RAD
Date Analyzed: 16-NOV-23

Batch: WG345625
Prep Method: N/A
Prep Chemist: RAD

Sample	Samp Type	Method	Parameter	DF	Result	Rpt. Result	Units	PQL	Adj. PQL	MDL	Adj. MDL	RPD	Rec.
SQ6052-2DL	SAMP	EPA 300.0	Sulfate	2	82.5489	82	mg/L	1	2.0	.25	0.50		
SQ6112-1DLA	SAMP	EPA 300.0	Chloride	20	758.0056	760	mg/L	2	40.	.0993	2.0		
SQ6112-1DLB	SAMP	EPA 300.0	Sulfate	2	98.3218	98	mg/L	1	2.0	.0637	0.13		
SQ6112-2DL	SAMP	EPA 300.0	Chloride	20	479.8632	480	mg/L	2	40.	.0993	2.0		
SQ6133-2DLA	SAMP	EPA 300.0	Chloride	50	1229.5682	1200	mg/L	2	100	.0993	5.0		
SQ6133-2DLB	SAMP	EPA 300.0	Sulfate	5	152.2084	150	mg/L	1	5.0	.0637	0.32		
SQ6133-5DL	SAMP	EPA 300.0	Chloride	10	220.0768	220	mg/L	2	20.	.0993	0.99		
SQ6133-5DL	SAMP	EPA 300.0	Sulfate	10	198.9099	200	mg/L	1	10.	.0637	0.64		
SQ6133-7DL	SAMP	EPA 300.0	Chloride	2	56.5219	56	mg/L	2	4.0	.0993	0.20		
SQ6133-9DL	SAMP	EPA 300.0	Chloride	5	99.2588	99	mg/L	2	10.	.0993	0.50		
WG345625-1	MBLANK	EPA 300.0	Chloride	1	.0463	U 1.0	mg/L	2	2.0	.0993	0.099		
WG345625-1	MBLANK	EPA 300.0	Sulfate	1	.043	U 0.50	mg/L	1	1.0	.0637	0.064		
WG345625-1	MBLANK	EPA 300.0	Sulfate	1	.043	U 0.50	mg/L	1	1.0	.25	0.25		
WG345625-2	LCS	EPA 300.0	Chloride	1	3.6269	3.63	mg/L	2	2.0	.0993	0.099		96.8
WG345625-2	LCS	EPA 300.0	Sulfate	1	3.513	3.51	mg/L	1	1.0	.0637	0.064		93.6
WG345625-2	LCS	EPA 300.0	Sulfate	1	3.513	3.51	mg/L	1	1.0	.25	0.25		93.6

Comments:

SQ6052-2	E300 list= Cl & SO4.
SQ6112-1	Anions = NO3, SO4, (
SQ6112-2	Anions = NO3, SO4, (
SQ6133-2	Anions = NO3, SO4, (
SQ6133-5	Anions = NO3, SO4, (
SQ6133-7	Anions = NO3, SO4, (
SQ6133-9	Anions = NO3, SO4, (
WG345625-1	SQ6052-2
WG345625-2	SQ6052-2

Entered by: RAD Date: 11/17/23 Accepted by: SS Date: 11/19/23

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Wet Chemistry Batch Report

Analyst Initials: RAD
Date Analyzed: 16-NOV-23

Batch: WG345627
Prep Method: N/A
Prep Chemist: RAD

Sample	Samp Type	Method	Parameter	DF	Result	Rpt. Result	Units	PQL	Adj. PQL	MDL	Adj. MDL	RPD	Rec.
SQ6310-1	SAMP	EPA 300.0	Nitrate as N	1	.6979	0.70	mg/L	.05	0.050	.0174	0.017		
SQ6310-1	SAMP	EPA 300.0	Nitrite as N	1	.1938	0.19	mg/L	.05	0.050	.0092	0.0092		
SQ6347-1	SAMP	EPA 300.0	Chloride	1	19.9149	20.	mg/L	2	2.0	.0993	0.099		
SQ6347-1	SAMP	EPA 300.0	Nitrate as N	1	1.1763	1.2	mg/L	.05	0.050	.0174	0.017		
SQ6347-1	SAMP	EPA 300.0	Nitrite as N	1	.1125	0.11	mg/L	.05	0.050	.0092	0.0092		
WG345627-1	MBLANK	EPA 300.0	Chloride	1	.0463	U 1.0	mg/L	2	2.0	.0993	0.099		
WG345627-1	MBLANK	EPA 300.0	Nitrate as N	1	.0184	J 0.018	mg/L	.05	0.050	.0174	0.017		
WG345627-1	MBLANK	EPA 300.0	Nitrite as N	1	.0167	J 0.017	mg/L	.05	0.050	.0092	0.0092		
WG345627-2	LCS	EPA 300.0	Chloride	1	3.6269	3.63	mg/L	2	2.0	.0993	0.099		96.8
WG345627-2	LCS	EPA 300.0	Nitrate as N	1	.824	0.824	mg/L	.05	0.050	.0174	0.017		97.5
WG345627-2	LCS	EPA 300.0	Nitrite as N	1	1.1333	1.13	mg/L	.05	0.050	.0092	0.0092		99.1
WG345627-3	DUP	EPA 300.0	Nitrate as N	1	.6829	0.68	mg/L	.05	0.050	.0174	0.017	2	
WG345627-3	DUP	EPA 300.0	Nitrite as N	1	.1983	0.20	mg/L	.05	0.050	.0092	0.0092	2	
WG345627-4	MS	EPA 300.0	Nitrate as N	1	1.56	1.6	mg/L	.05	0.050	.0174	0.017		97
WG345627-4	MS	EPA 300.0	Nitrite as N	1	1.20042	* 1.2	mg/L	.05	0.050	.0092	0.0092		83.9

Comments:

WG345627-1	SQ6310-1
WG345627-2	SQ6310-1
WG345627-3	SQ6310-1
WG345627-4	SQ6310-1

Entered by: RAD Date: 11/17/23 Accepted by: SS Date: 11/19/23

IC STANDARDS PREPARATION

Fill sheet in completely and file with each batch of samples analyzed.

IC8 MIX ID:	EXPIRATION DATE:	ICAL DATE:	CCV STOCK ID:	EXPIRATION DATE:
W22233	10/23/23	10/12/23	W22318	11/22/23

ALALYTE	INITIAL AMOUNT (mL)	OF	STOCK CONC. (mg/L)	TO	FINAL VOLUME (mL)	=	FINAL CONC. (mg/L)
Cl	2.0		1000				20
NO2 (as N)	0.8		1000				8
NO3 (as N)	0.8		1000				8
Br	4.0	OF	1000	TO	100	=	40
SO4	4.0		1000				40
F	1.0		1000				10
PO4 (as P)	1.0		1000				10

WORKING STANDARDS

Standards prepared on each day of use.

STD.	INITIAL AMOUNT (mL)	OF	FINAL VOLUME (mL)	FINAL CONC. (mg/L)							STD ID*
				Cl	NO2	NO3	Br	SO4	PO4	F	
IC8	5	IC8	5	40	16	16	80	80	20	20	IC8-101223
IC7	2.5	IC8	5	20	8	8	40	40	10	10	IC7-101223
IC6	2.5	IC7	5	10	4	4	20	20	5	5	IC6-101223
IC5	1.25	IC7	5	5	2	2	10	10	2.5	2.5	IC5-101223
IC4	1.25	IC6	5	2.5	1	1	5	5	1.25	1.25	IC4-101223
IC3	0.5	IC6	5	1	0.4	0.4	2	2	0.5	0.5	IC3-101223
IC2	0.5	IC3	5	0.1	0.04	0.04	0.2	0.2	0.05	0.05	IC2-101223
CCV	2.5	IC7	5	10	4	4	20	20	5	5	CCV-111623

* STD ID is prefix followed by the date of preparation (ie. IC6-020216)

LCS/MATRIX SPIKE MIX ID: W22324	EXPIRATION DATE: 11/23/23

3.75 mL of High Purity Multi-Element IC Standard Solution "A" and 3.75 mL of High Purity Multi-Element IC Standard Solution "B" diluted to 50 mL. For MS, add 0.25 mL of mix to 4.75 mL of sample. For LCS, add 0.25 mL of mix to 4.75 mL of DI water.

FINAL CONCENTRATIONS (mg/L)

Cl	NO2 (as N)	NO3 (as N)	Br	SO4	PO4 (as P)	F	STD ID*
3.75	1.14	0.845	3.75	3.75	1.22	3.75	IC-LCS-111623

PIPETTES: W00, W16

2x dil = 2.5mL samp + 2.5mL DI	**5x dil** = 1.0mL samp + 4.0mL DI	**10x dil** = 0.5mL samp + 4.5mL DI
20x dil = 0.25mL samp + 4.75mL DI	**50x dil** = 0.1mL samp + 4.9mL DI	**100x dil** = 0.05mL samp + 4.95mL DI
200x dil = 0.025mL samp + 4.975mL DI	**500x dil** = 0.01mL samp + 4.99mL DI	**1000x dil** = 0.005mL samp + 4.995mL DI

Katahdin Analytical Services **ION CHROMATOGRAPHY RUNLOG** Dionex ICS-2100 (Instrument IC-3)

Analysis Date: 11/16/23	**Analytical Column S/N:** 22050319 4	**Calibration Date:** 10/12/23
Analysis Sequence: 111623 A	**Guard Column S/N:** 2204D6208	**Calibration Sequence:** 101223 CAL
Analyst: RAD	**Suppressor S/N:** 2211177086	☐ If box at left is checked, continued from previous page. Refer to previous page for header information.

Reporting / Reanalysis Codes: ✓ Report without manipulation; **S** Report, peak automatically reintegrated with SmartPeak; **M** Report, peak manually integrated; **A** Report, peak manually assigned; **R** Do not report, reanalyze sample

Method Codes: **E** EPA 300.0; **SW** SW846 9056A

Katahdin Sample Number	Dilution Factor	Method Code	Report or Reanalyze (enter appropriate code): F	Cl	NO_2	SO_4	Br	NO_3	PO_4	Comments
CCV			✓	✓	✓	✓	✓	✓		
CCB			M	✓	✓	M	M	✓		
LCS			✓	✓	✓	✓	R	✓		
SQ 6310-1	1	DW		R	✓			✓		Cl=2x
-1 DUP				—	✓			✓		
-1 MS				—	✓			✓		
6347-1		DW		✓	✓			✓		
6112-1	20	E		✓						
-1	2					✓				
-2	20			✓						
6133-2	50	E		✓						
CCV			✓	✓	✓	✓	✓	✓		
CCB			M	✓	✓	M	M	✓		
6133-2	5	E				M				
-5	10			✓		M				
-7	2			✓						
-9	5			✓						
6052-2	2	E				✓				
CCV			✓	✓	✓	✓	✓	✓		
CCB			M	✓	✓	M	M	✓		
										RAD 11/17/23

E:WG345625 → R627380
DW:WG345627 → R627381

Katahdin Analytical Services SQ6112 Page 371 of 454

Reviewed by: SS Review Date: 11/19/23

Sequence Overview

Sequence Details

Name:	**111623 A REPROC**	*Created On:*	**28/Dec/22 13:33:49**
Directory:	**2023\11-NOV**	*Created By:*	**wetlab**
Data Vault:	**ChromeleonLocal**	*Updated On:*	**17/Nov/23 12:20:20**
No. of Injections:	**20**	*Updated By:*	**wetlab**

Injection Details

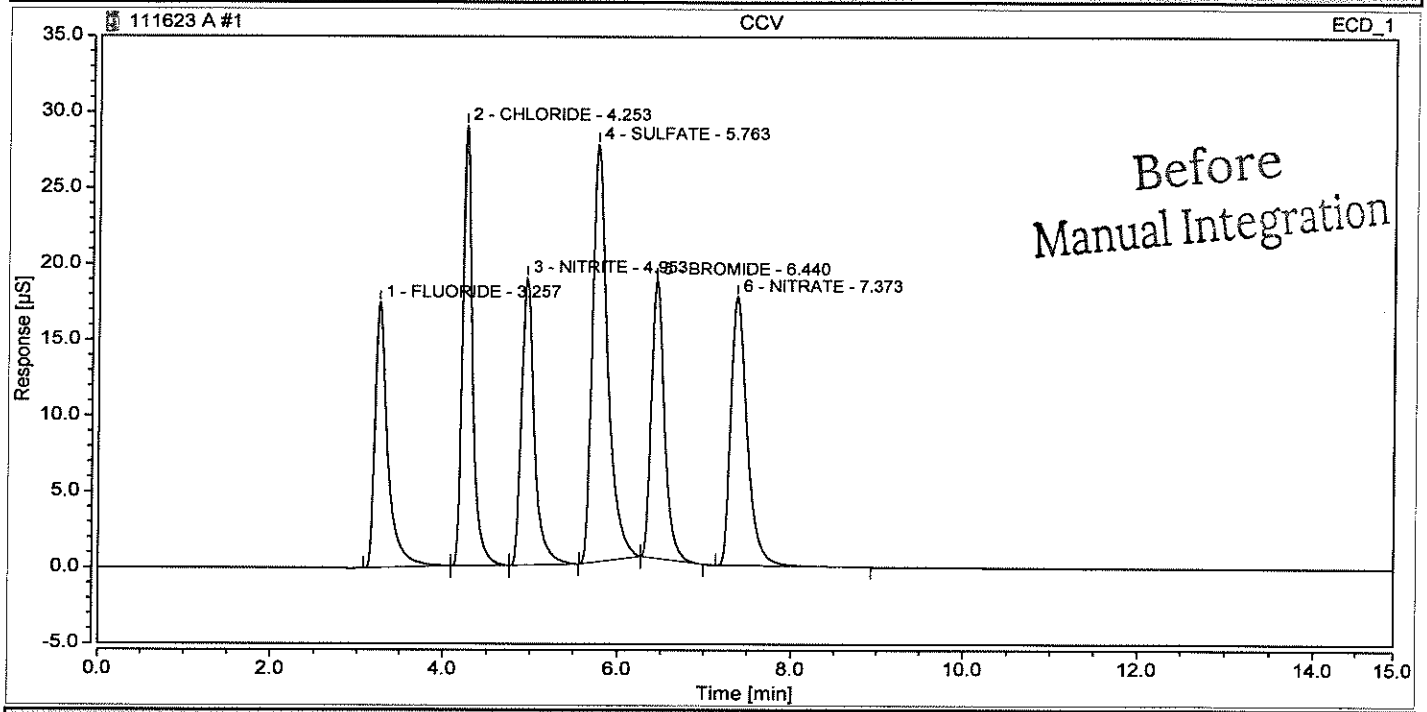
No.	Injection Name	Position	Type	Level	Inject Time	Status
1	CCV	1	Check Standard	06	16/Nov/23 17:27:37	Finished
2	CCB	2	Blank		16/Nov/23 17:44:23	Finished
3	LCS	3	Check Standard	09	16/Nov/23 18:01:38	Finished
4	SQ6310-1	4	Unknown		16/Nov/23 18:18:54	Finished
5	SQ6310-1 DUP	5	Unknown		16/Nov/23 18:36:09	Finished
6	SQ6310-1 MS	6	Unknown		16/Nov/23 18:53:25	Finished
7	SQ6347-1	7	Unknown		16/Nov/23 19:10:40	Finished
8	SQ6112-1DLA	8	Unknown		16/Nov/23 19:27:55	Finished
9	SQ6112-1DLB	9	Unknown		16/Nov/23 19:45:10	Finished
10	SQ6112-2DL	10	Unknown		16/Nov/23 20:02:26	Finished
11	SQ6133-2DLA	11	Unknown		16/Nov/23 20:19:42	Finished
12	CCV	13	Check Standard	06	16/Nov/23 20:36:57	Finished
13	CCB	14	Blank		16/Nov/23 20:54:12	Finished
14	SQ6133-2DLB	15	Unknown		16/Nov/23 21:11:27	Finished
15	SQ6133-5DL	16	Unknown		16/Nov/23 21:28:43	Finished
16	SQ6133-7DL	17	Unknown		16/Nov/23 21:45:58	Finished
17	SQ6133-9DL	18	Unknown		16/Nov/23 22:03:14	Finished
18	SQ6052-2DL	19	Unknown		16/Nov/23 22:20:29	Finished
19	CCV	25	Check Standard	06	16/Nov/23 22:37:45	Finished
20	CCB	26	Blank		16/Nov/23 22:55:02	Finished

Chromatogram and Results

Injection Details

Injection Name:	**CCV**	*Run Time (min):*	**14.95**
Vial Number:	**1**	*Injection Volume:*	**200.00**
Injection Type:	**Check Standard**	*Channel:*	**ECD_1**
Calibration Level:	**06**	*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**16/Nov/23 17:27**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

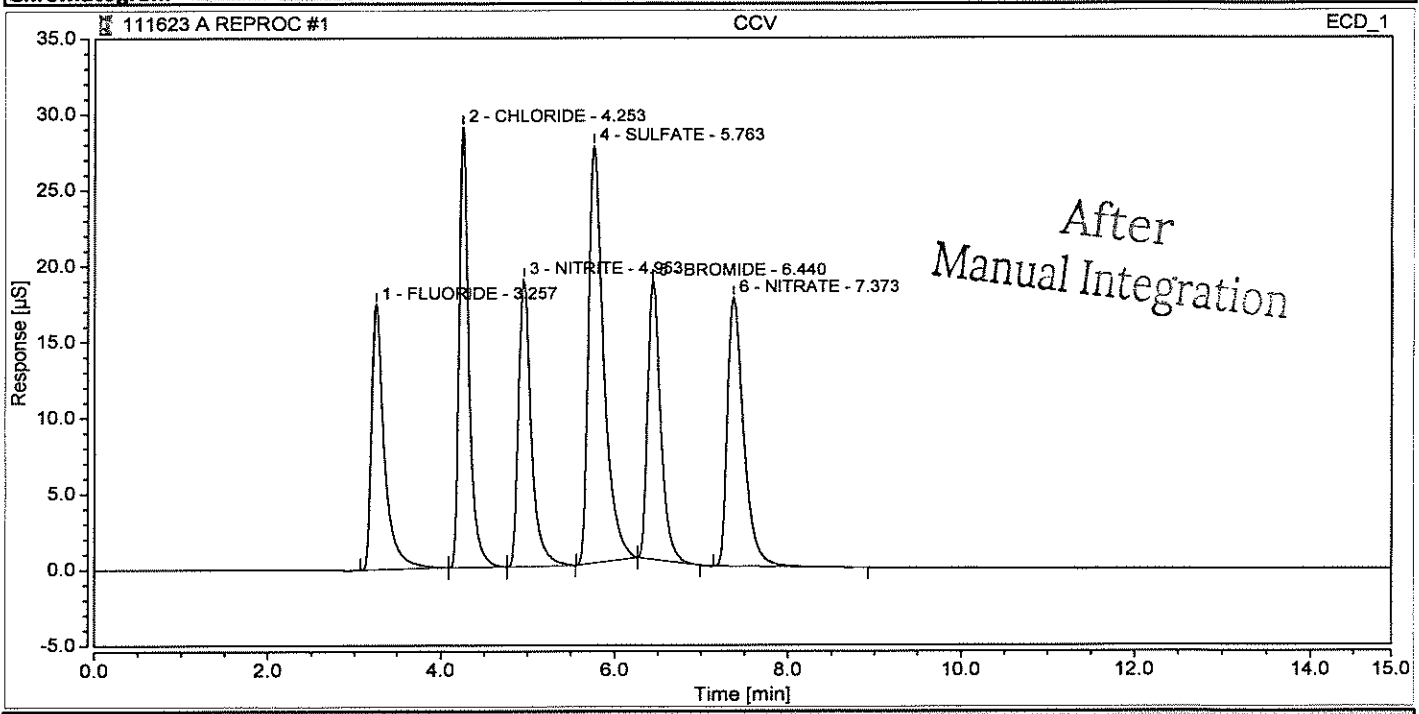
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.257	3.053	17.453	13.42	13.54	4.9549	-0.9021
2	CHLORIDE	4.253	3.801	29.010	16.71	22.51	9.7533	-2.4667
3	NITRITE	4.953	3.283	18.915	14.43	14.67	3.9525	-1.1866
4	SULFATE	5.763	5.536	27.480	24.33	21.32	19.4751	-2.6247
5	BROMIDE	6.440	3.241	18.341	14.24	14.23	19.0638	-4.6811
6	NITRATE	7.373	3.838	17.701	16.87	13.73	3.9219	-1.9534
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**22.753**	**128.900**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**CCV**	*Run Time (min):*	**14.95**
Vial Number:	**1**	*Injection Volume:*	**200.00**
Injection Type:	**Check Standard**	*Channel:*	**ECD_1**
Calibration Level:	**06**	*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**16/Nov/23 17:27**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

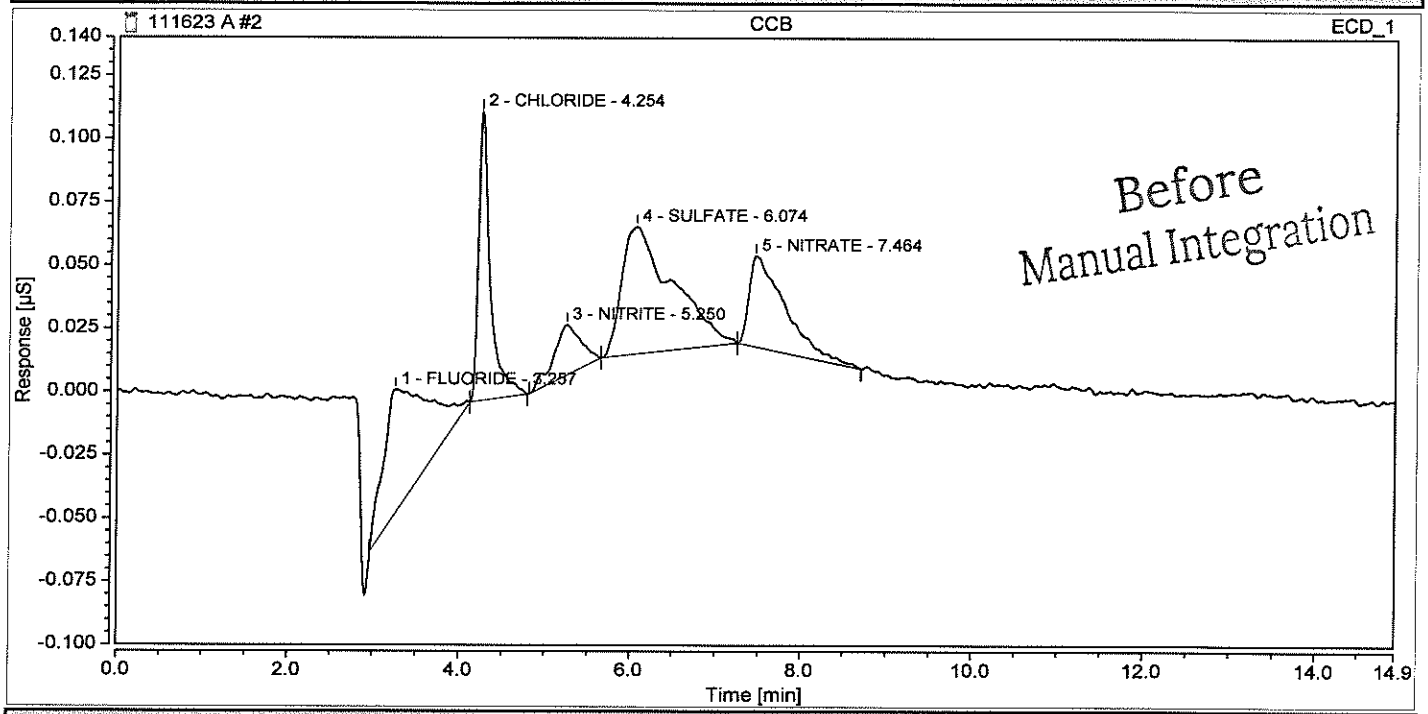
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.257	3.053	17.453	13.42	13.54	4.9549	-0.9021
2	CHLORIDE	4.253	3.801	29.010	16.71	22.51	9.7533	-2.4667
3	NITRITE	4.953	3.283	18.915	14.43	14.67	3.9525	-1.1866
4	SULFATE	5.763	5.536	27.480	24.33	21.32	19.4751	-2.6247
5	BROMIDE	6.440	3.241	18.341	14.24	14.23	19.0638	-4.6811
6	NITRATE	7.373	3.838	17.701	16.87	13.73	3.9219	-1.9534
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**22.753**	**128.900**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**CCB**	*Run Time (min):*	**14.95**
Vial Number:	**2**	*Injection Volume:*	**200.00**
Injection Type:	**Blank**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**16/Nov/23 17:44**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

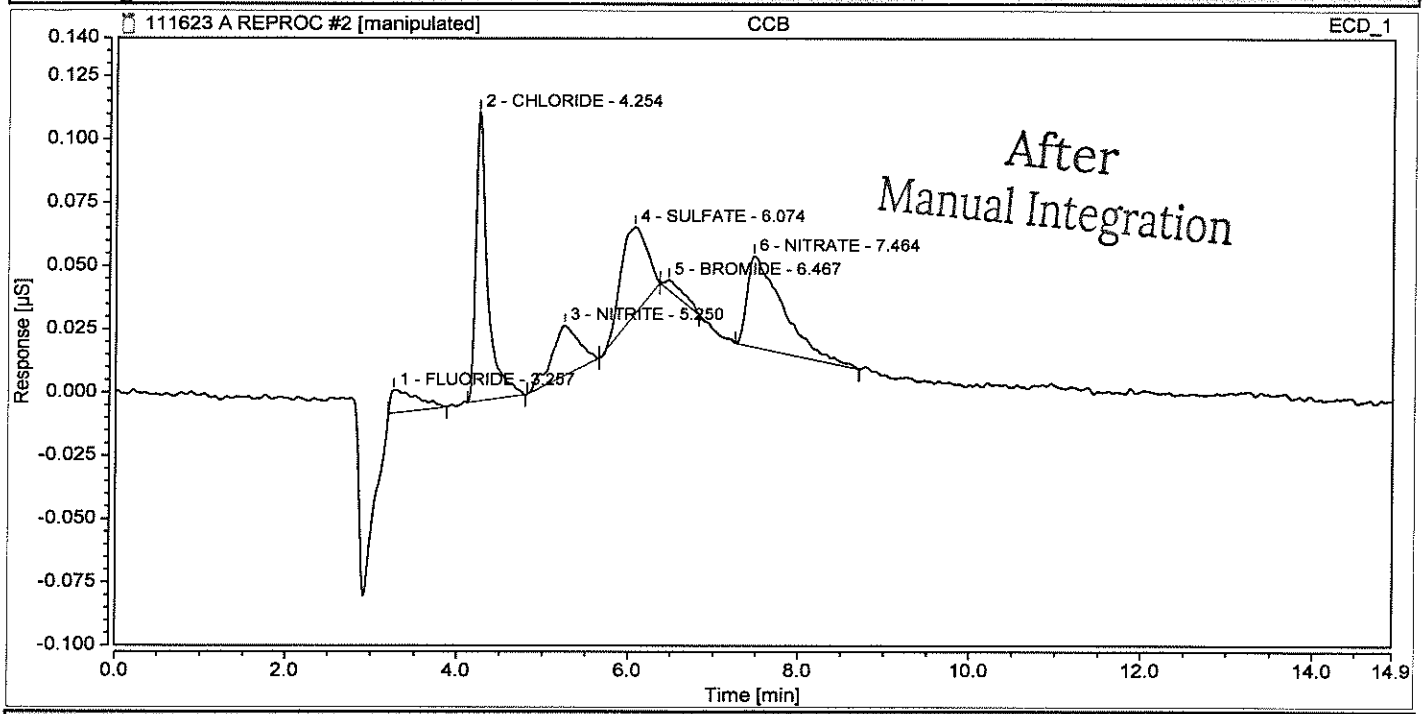
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.257	0.028	0.049	26.18	18.27	0.0603	n.a.
2	CHLORIDE	4.254	0.018	0.114	17.02	42.38	0.0463	n.a.
3	NITRITE	5.250	0.007	0.020	6.91	7.34	0.0167	n.a.
4	SULFATE	6.074	0.035	0.050	32.91	18.67	0.1227	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5	NITRATE	7.464	0.018	0.036	16.97	13.35	0.0184	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.106**	**0.270**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**CCB**	*Run Time (min):*	**14.95**
Vial Number:	**2**	*Injection Volume:*	**200.00**
Injection Type:	**Blank**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**16/Nov/23 17:44**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

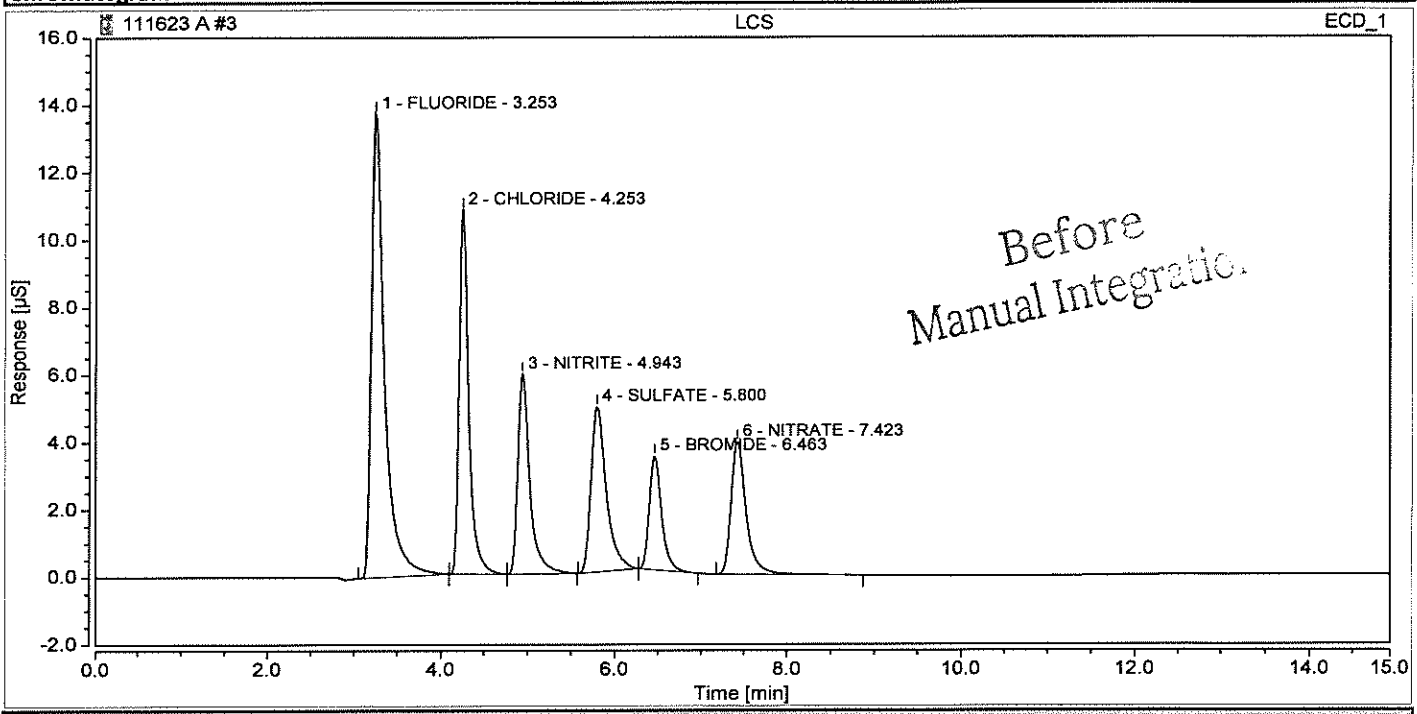
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.257	0.003	0.009	5.32	4.17	0.0217	n.a.
2	CHLORIDE	4.254	0.018	0.114	30.04	52.62	0.0463	n.a.
3	NITRITE	5.250	0.007	0.020	12.20	9.12	0.0167	n.a.
4	SULFATE	6.074	0.012	0.034	20.37	15.67	0.0430	n.a.
5	BROMIDE	6.467	0.001	0.004	2.14	1.85	0.0076	n.a.
6	NITRATE	7.464	0.018	0.036	29.94	16.57	0.0184	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.060**	**0.217**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**LCS**	*Run Time (min):*	**14.95**
Vial Number:	**3**	*Injection Volume:*	**200.00**
Injection Type:	**Check Standard**	*Channel:*	**ECD_1**
Calibration Level:	**09**	*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**16/Nov/23 18:01**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

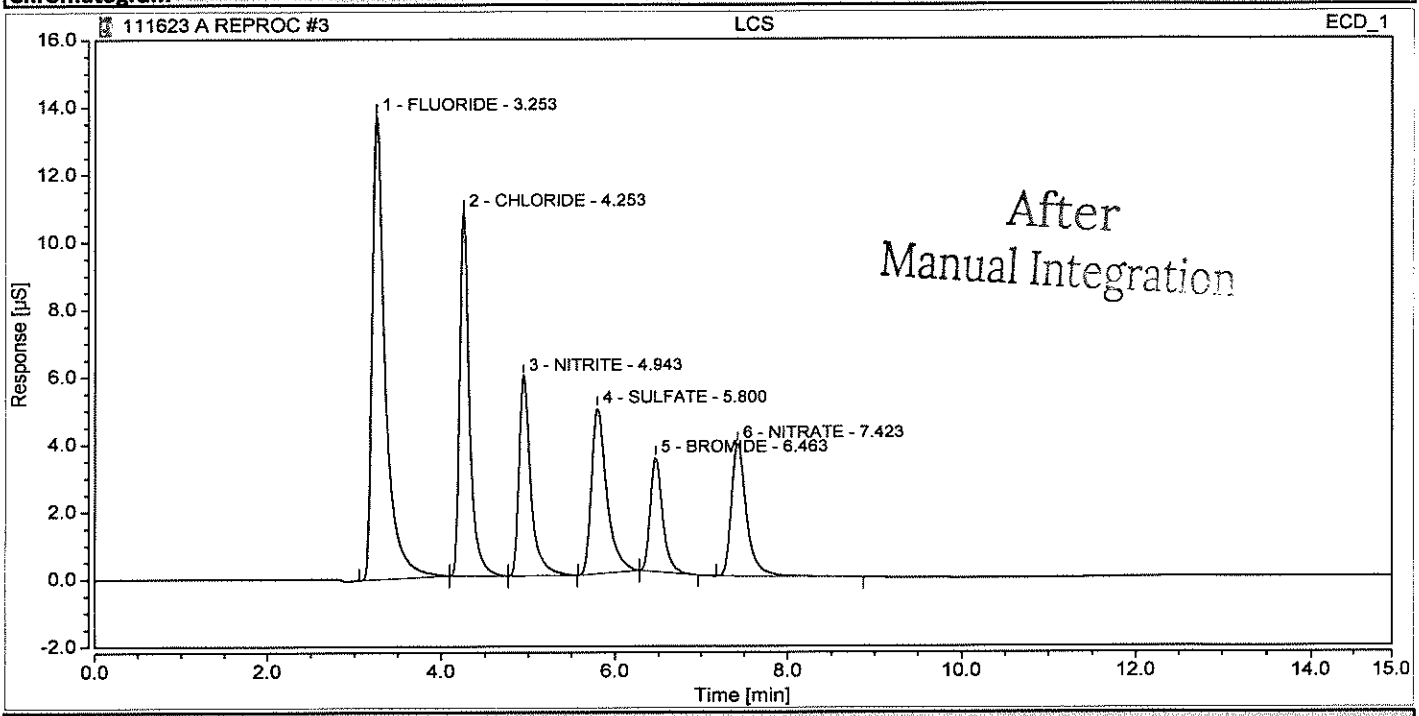
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.253	2.417	13.757	33.75	32.21	3.9015	4.0393
2	CHLORIDE	4.253	1.414	10.798	19.74	25.28	3.6269	-3.2835
3	NITRITE	4.943	0.958	5.927	13.38	13.88	1.1333	-0.5873
4	SULFATE	5.800	0.999	4.906	13.94	11.49	3.5130	-6.3196
5	BROMIDE	6.463	0.568	3.380	7.93	7.92	3.3406	-10.9185
6	NITRATE	7.423	0.806	3.939	11.26	9.22	0.8240	-2.4852
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**7.162**	**42.707**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**LCS**	*Run Time (min):*	**14.95**
Vial Number:	**3**	*Injection Volume:*	**200.00**
Injection Type:	**Check Standard**	*Channel:*	**ECD_1**
Calibration Level:	**09**	*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**16/Nov/23 18:01**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

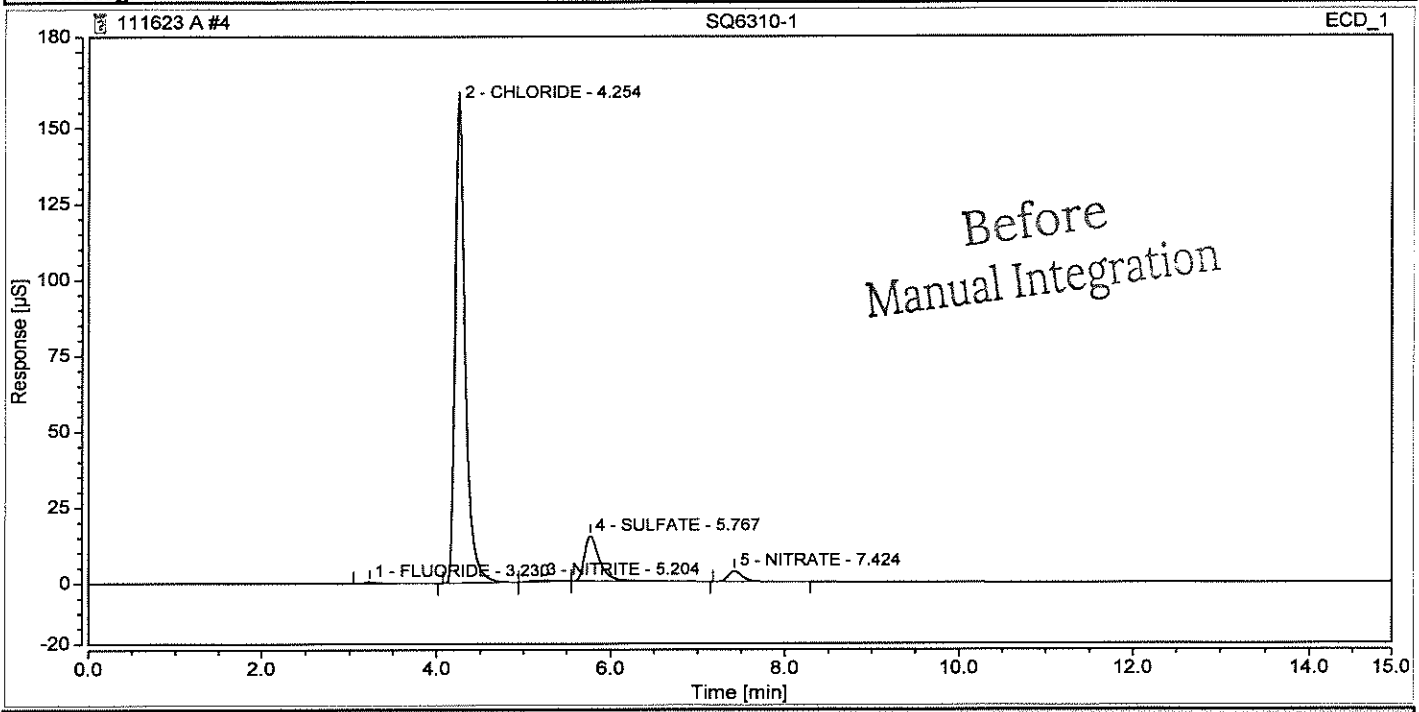
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.253	2.417	13.757	33.75	32.21	3.9015	4.0393
2	CHLORIDE	4.253	1.414	10.798	19.74	25.28	3.6269	-3.2835
3	NITRITE	4.943	0.958	5.927	13.38	13.88	1.1333	-0.5873
4	SULFATE	5.800	0.999	4.906	13.94	11.49	3.5130	-6.3196
5	BROMIDE	6.463	0.568	3.380	7.93	7.92	3.3406	-10.9185
6	NITRATE	7.423	0.806	3.939	11.26	9.22	0.8240	-2.4852
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**7.162**	**42.707**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6310-1**	*Run Time (min):*	**14.96**
Vial Number:	**4**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**16/Nov/23 18:18**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

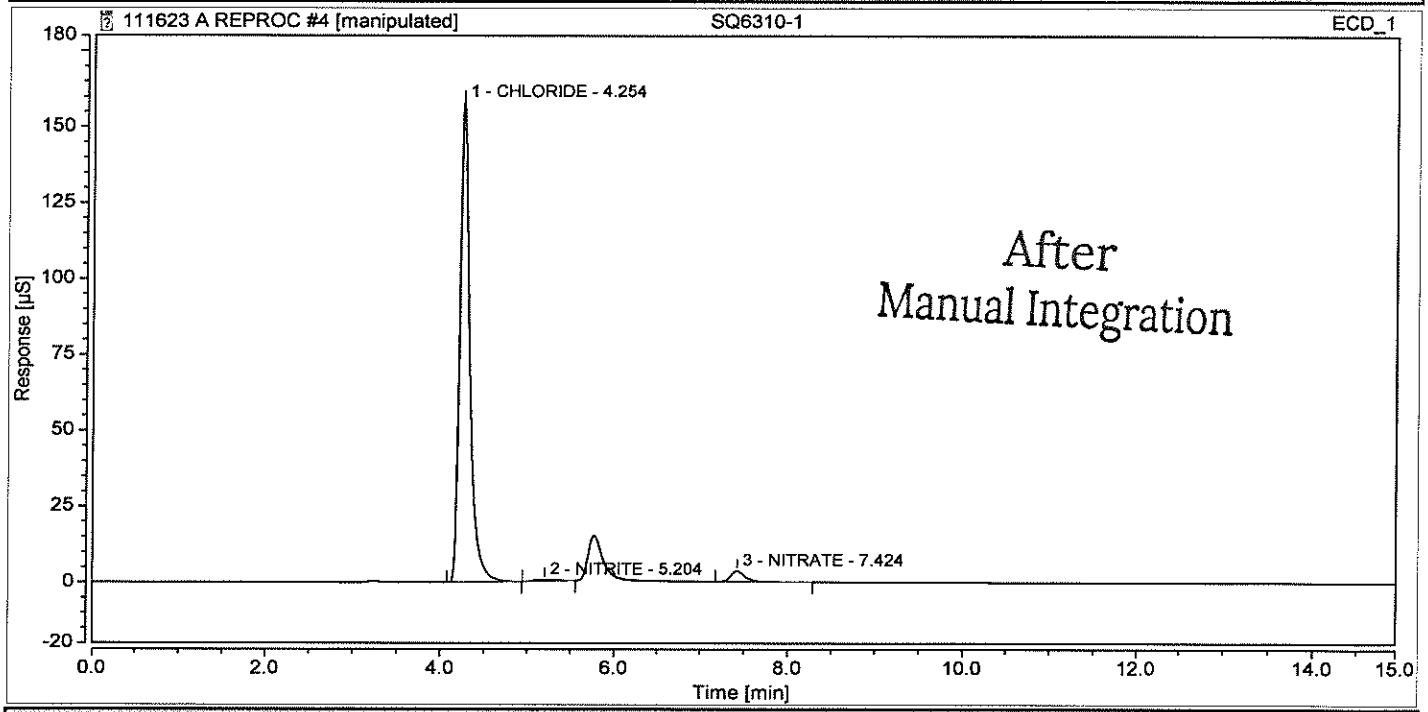
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.230	0.089	0.497	0.35	0.28	0.1561	n.a.
2	CHLORIDE	4.254	21.287	158.074	84.40	89.09	54.6188	n.a.
3	NITRITE	5.204	0.159	0.493	0.63	0.28	0.1938	n.a.
4	SULFATE	5.767	3.003	14.846	11.91	8.37	10.5646	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5	NITRATE	7.424	0.683	3.532	2.71	1.99	0.6979	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**25.222**	**177.442**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6310-1**	*Run Time (min):*	**14.96**
Vial Number:	**4**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**16/Nov/23 18:18**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

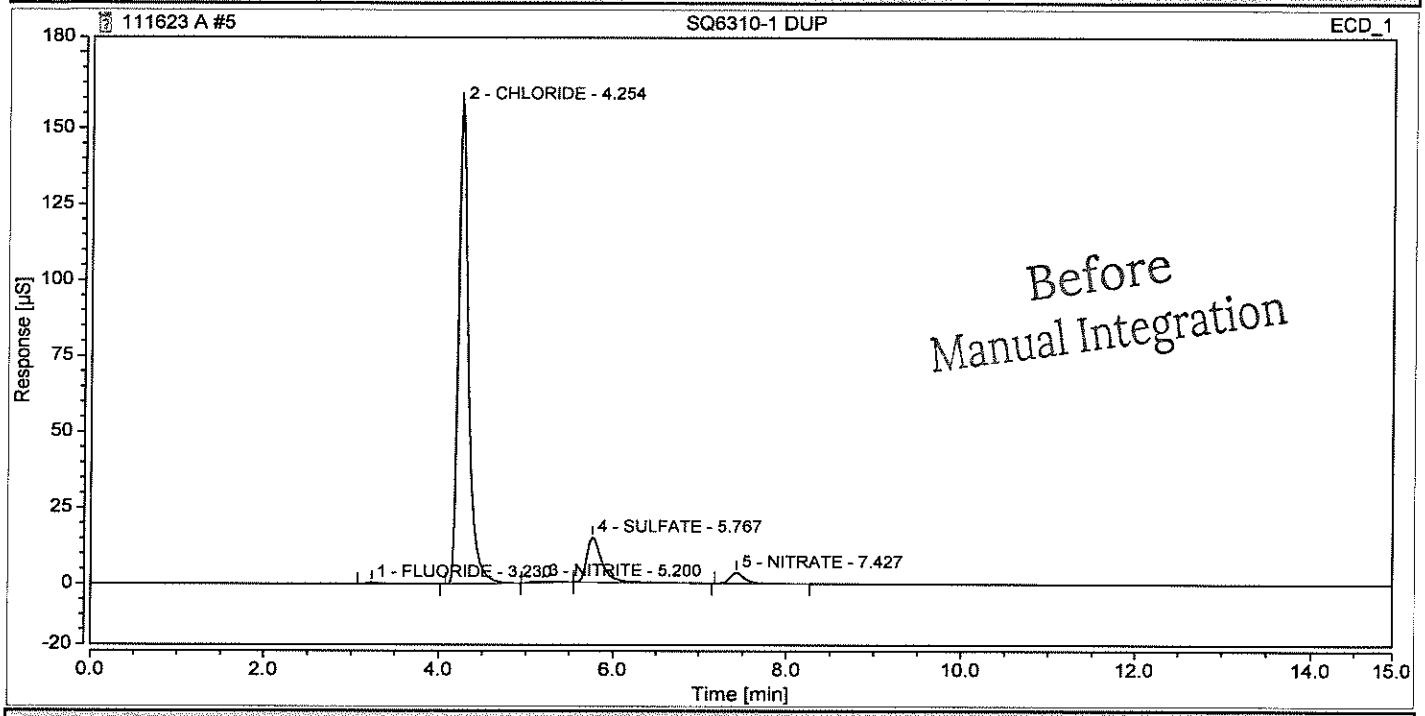
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.254	21.287	158.074	96.19	97.52	54.6188	n.a.
2	NITRITE	5.204	0.159	0.493	0.72	0.30	0.1938	n.a.
n.a.	SULFATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
3	NITRATE	7.424	0.683	3.532	3.09	2.18	0.6979	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**22.130**	**162.099**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6310-1 DUP**	*Run Time (min):*	**14.95**
Vial Number:	**5**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**16/Nov/23 18:36**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

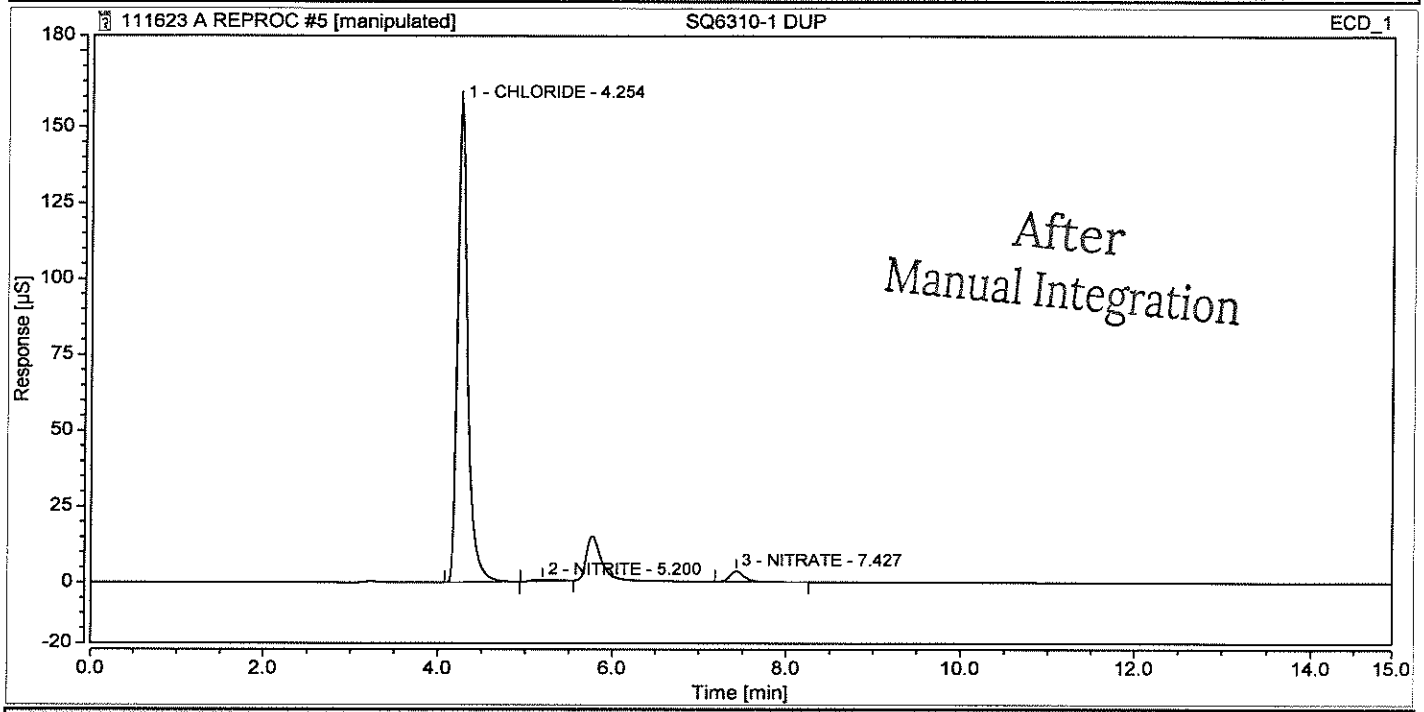
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.230	0.083	0.479	0.33	0.27	0.1464	n.a.
2	CHLORIDE	4.254	21.251	157.949	84.45	89.17	54.5263	n.a.
3	NITRITE	5.200	0.163	0.501	0.65	0.28	0.1983	n.a.
4	SULFATE	5.767	2.999	14.745	11.92	8.32	10.5494	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5	NITRATE	7.427	0.668	3.461	2.66	1.95	0.6829	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**25.164**	**177.135**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6310-1 DUP**	*Run Time (min):*	**14.95**
Vial Number:	**5**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**16/Nov/23 18:36**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

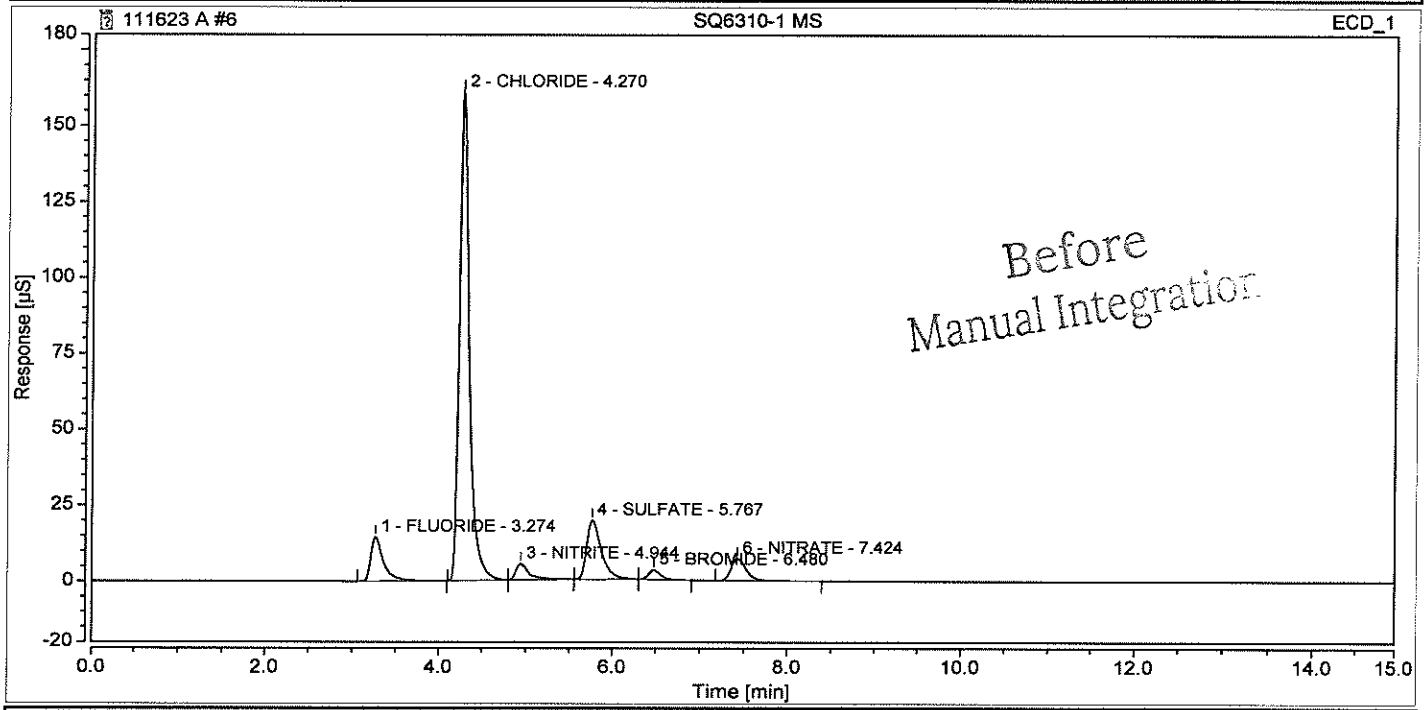
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.254	21.251	157.949	96.24	97.55	54.5263	n.a.
2	NITRITE	5.200	0.163	0.501	0.74	0.31	0.1983	n.a.
n.a.	SULFATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
3	NITRATE	7.427	0.668	3.461	3.03	2.14	0.6829	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**22.083**	**161.911**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6310-1 MS**	*Run Time (min):*	**14.96**
Vial Number:	**6**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**16/Nov/23 18:53**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

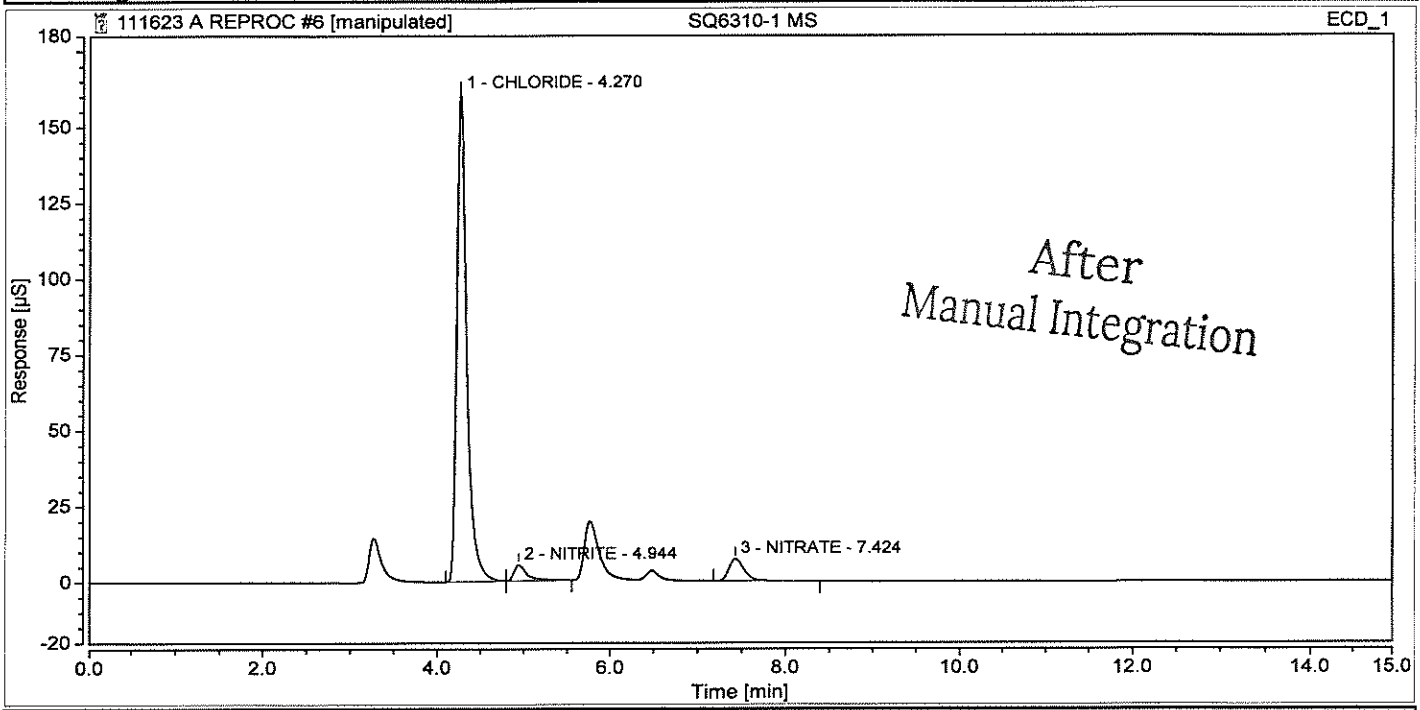
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.274	2.475	14.614	8.02	6.93	3.9964	n.a.
2	CHLORIDE	4.270	21.608	160.939	70.04	76.31	55.4422	n.a.
3	NITRITE	4.944	0.964	5.376	3.12	2.55	1.1404	n.a.
4	SULFATE	5.767	3.841	19.493	12.45	9.24	13.5129	n.a.
5	BROMIDE	6.480	0.515	3.174	1.67	1.50	3.0283	n.a.
6	NITRATE	7.424	1.450	7.317	4.70	3.47	1.4820	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**30.854**	**210.913**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6310-1 MS**	*Run Time (min):*	**14.96**
Vial Number:	**6**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**16/Nov/23 18:53**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

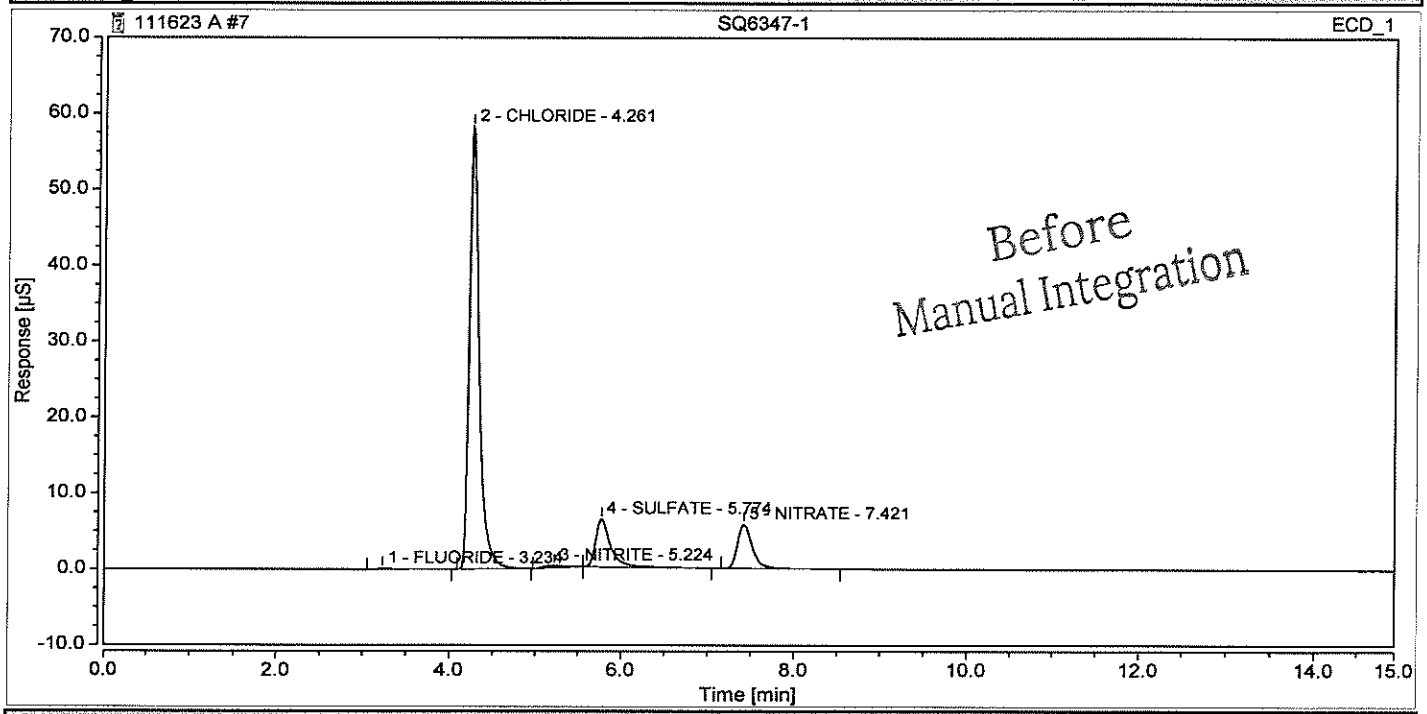
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.270	21.608	160.939	89.95	92.69	55.4422	n.a.
2	NITRITE	4.944	0.964	5.376	4.01	3.10	1.1404	n.a.
n.a.	SULFATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
3	NITRATE	7.424	1.450	7.317	6.04	4.21	1.4820	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**24.023**	**173.632**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6347-1**	*Run Time (min):*	**14.95**
Vial Number:	**7**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**16/Nov/23 19:10**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

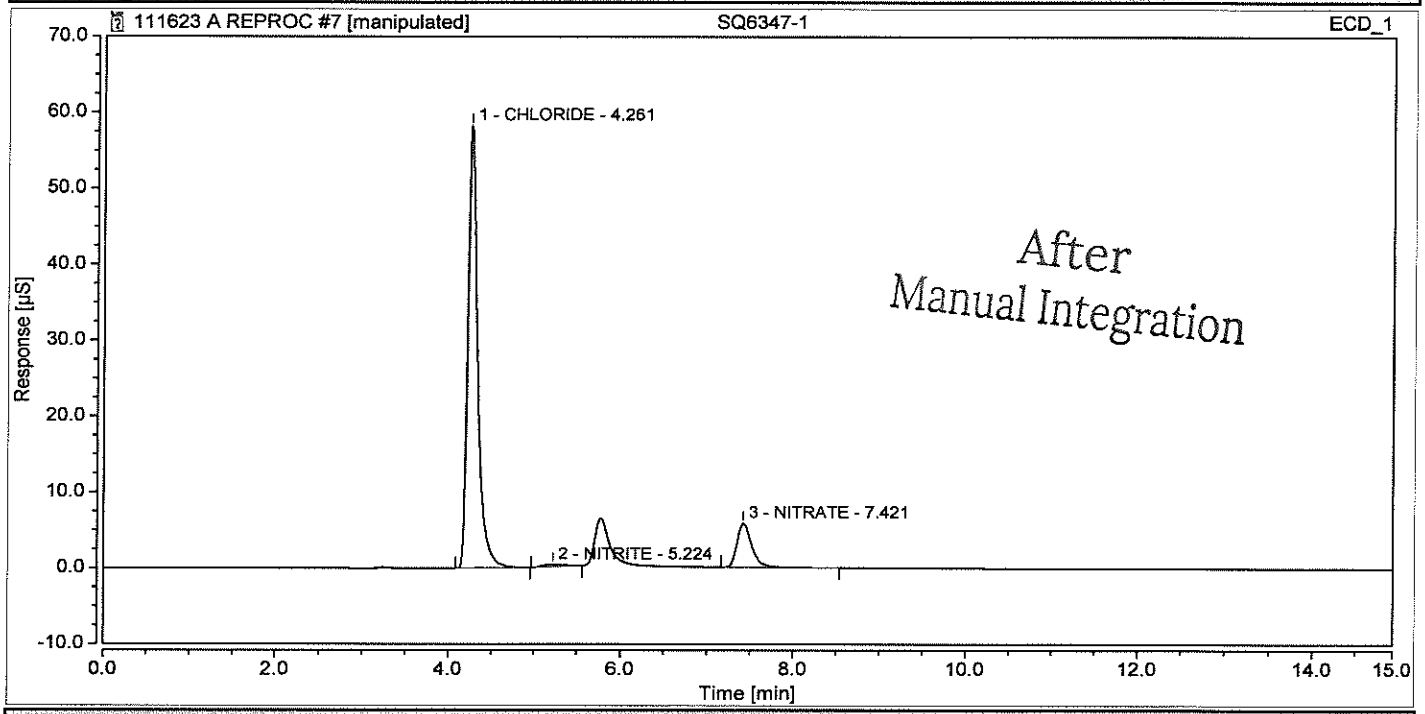
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.234	0.038	0.160	0.37	0.23	0.0763	n.a.
2	CHLORIDE	4.261	7.762	58.291	75.34	82.28	19.9149	n.a.
3	NITRITE	5.224	0.089	0.289	0.87	0.41	0.1125	n.a.
4	SULFATE	5.774	1.263	6.301	12.25	8.89	4.4411	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5	NITRATE	7.421	1.151	5.806	11.17	8.19	1.1763	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**10.303**	**70.847**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6347-1**	*Run Time (min):*	**14.95**
Vial Number:	**7**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**16/Nov/23 19:10**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

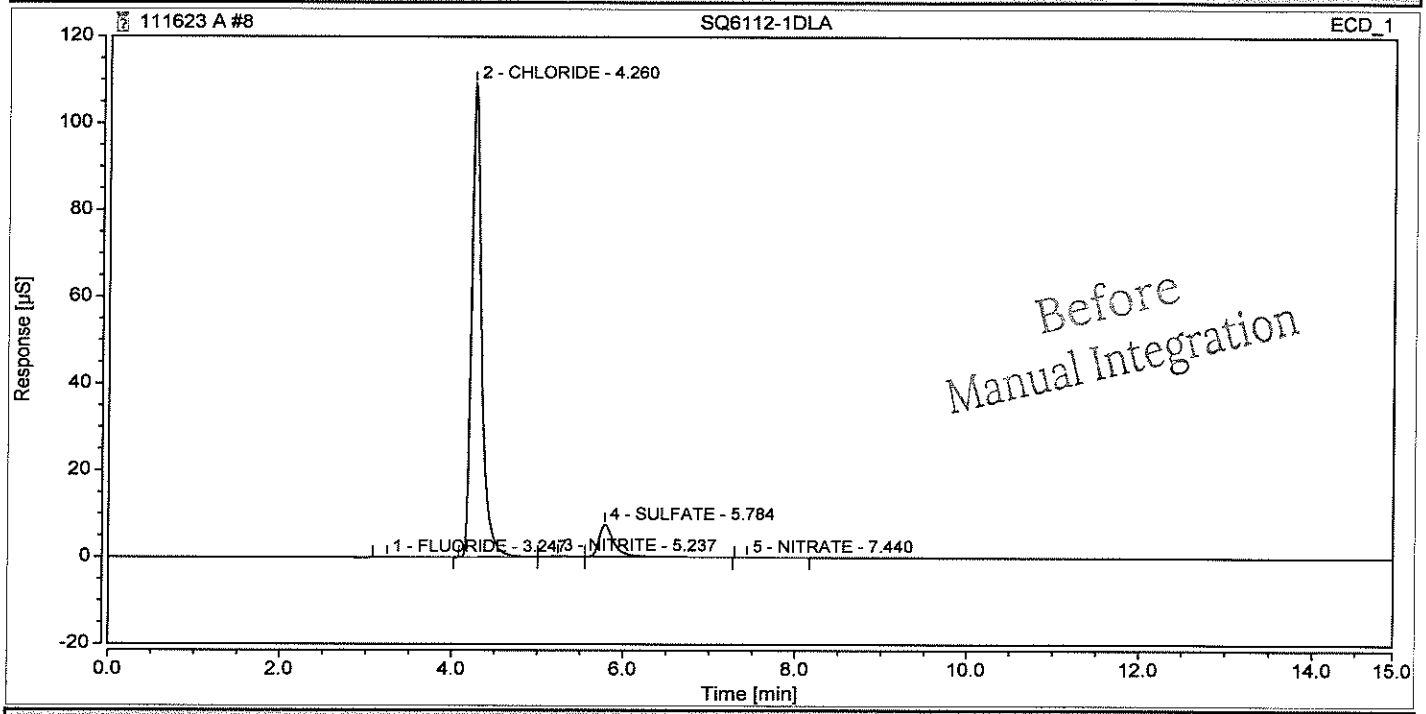
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.261	7.762	58.291	86.22	90.53	19.9149	n.a.
2	NITRITE	5.224	0.089	0.289	0.99	0.45	0.1125	n.a.
n.a.	SULFATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
3	NITRATE	7.421	1.151	5.806	12.79	9.02	1.1763	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**9.002**	**64.386**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6112-1DLA**	*Run Time (min):*	**14.95**
Vial Number:	**8**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**20.0000**
Injection Date/Time:	**16/Nov/23 19:27**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

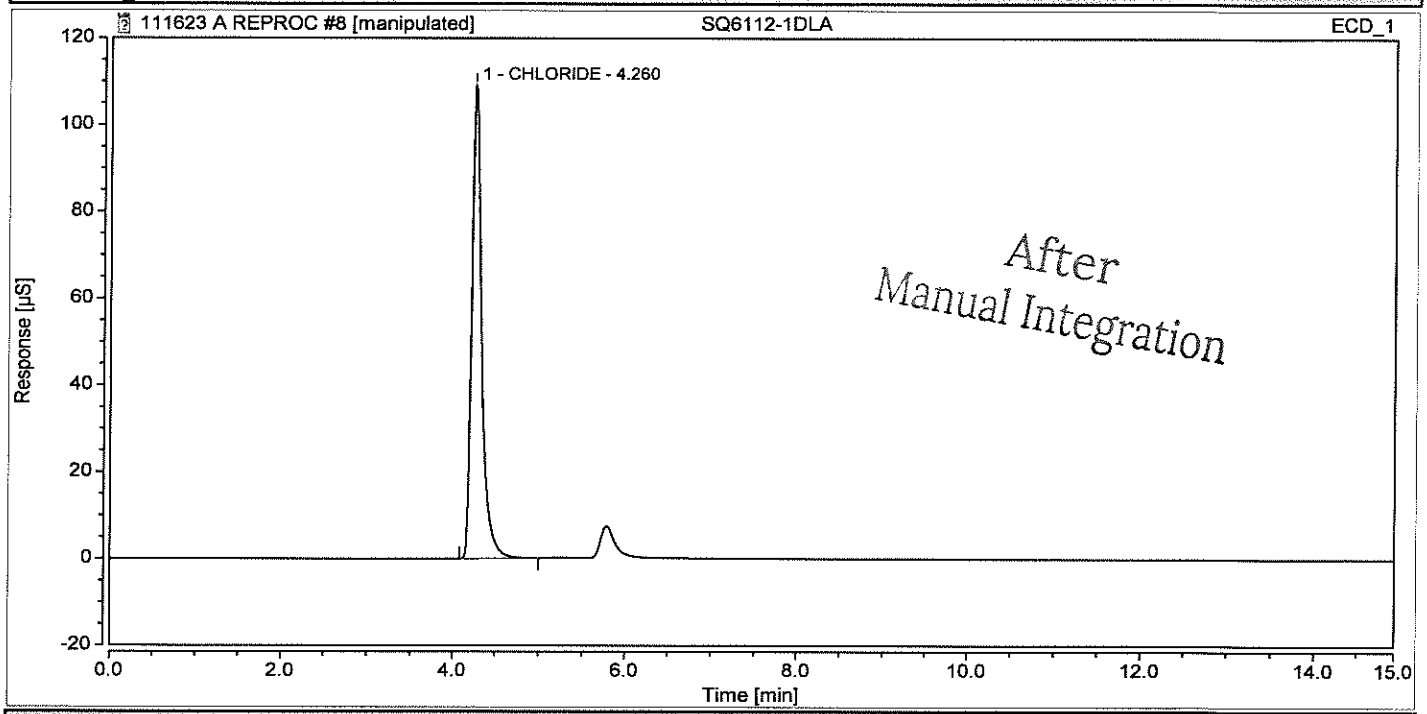
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.247	0.014	0.031	0.08	0.03	0.7613	n.a.
2	CHLORIDE	4.260	14.772	109.223	90.39	93.56	758.0056	n.a.
3	NITRITE	5.237	0.035	0.125	0.22	0.11	0.9909	n.a.
4	SULFATE	5.784	1.519	7.356	9.29	6.30	106.8614	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5	NITRATE	7.440	0.003	0.011	0.02	0.01	0.0658	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**16.343**	**116.745**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6112-1DLA**	*Run Time (min):*	**14.95**
Vial Number:	**8**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**20.0000**
Injection Date/Time:	**16/Nov/23 19:27**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

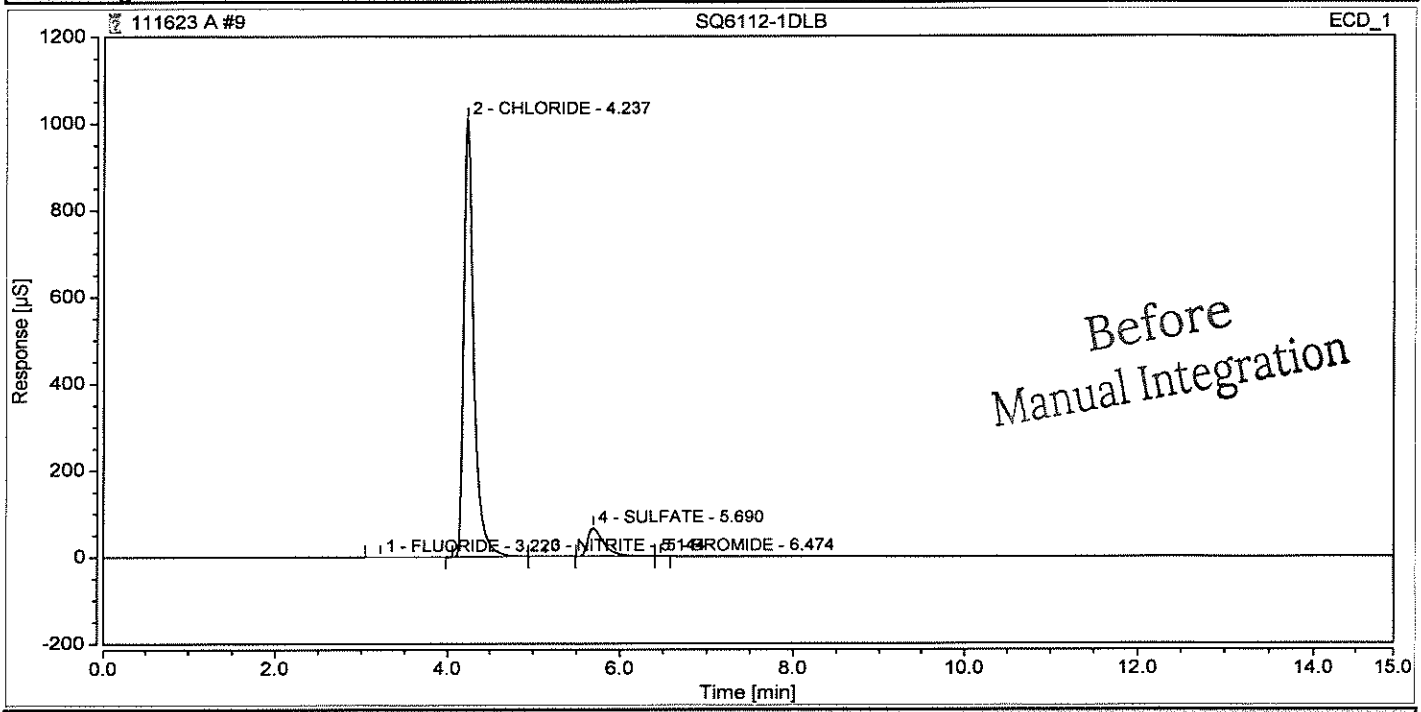
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.260	14.772	109.223	100.00	100.00	758.0056	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	SULFATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**14.772**	**109.223**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6112-1DLB**	*Run Time (min):*	**14.96**
Vial Number:	**9**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**2.0000**
Injection Date/Time:	**16/Nov/23 19:45**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

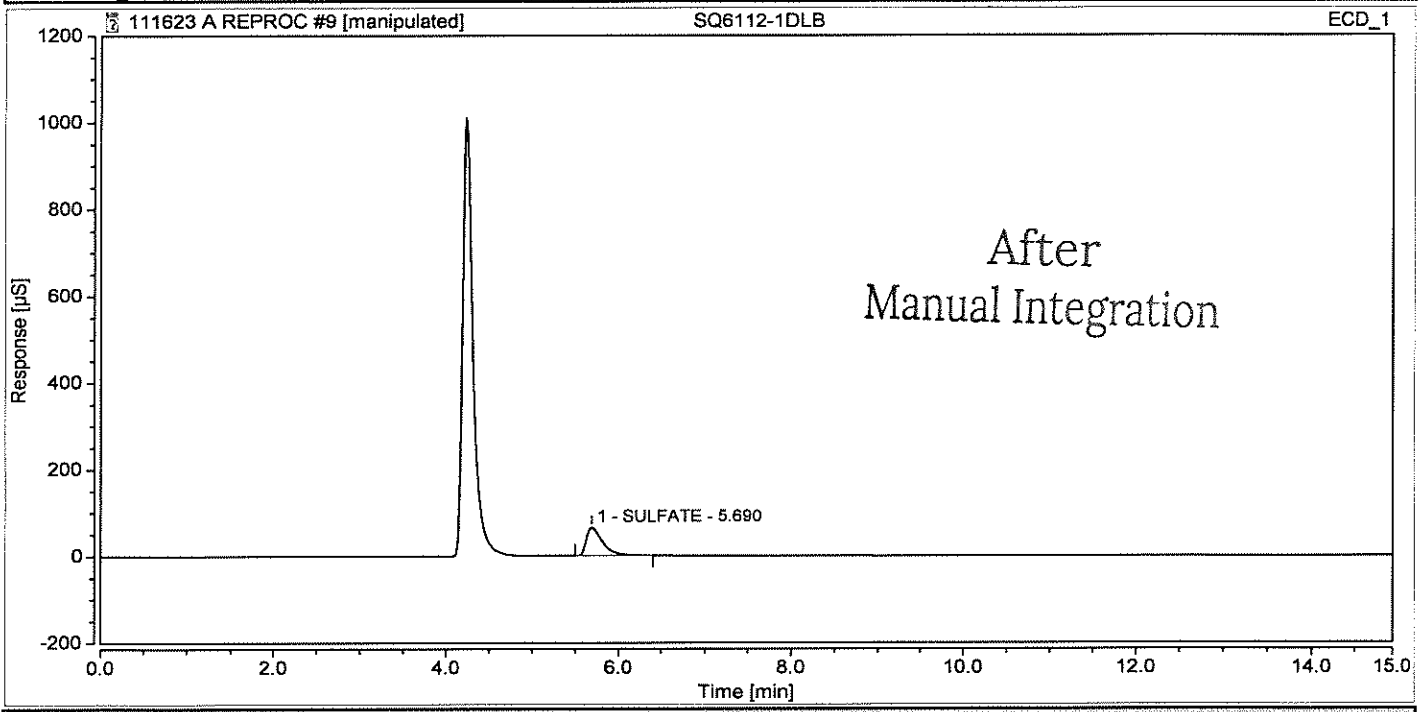
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.220	0.026	0.117	0.02	0.01	0.1160	n.a.
2	CHLORIDE	4.237	140.320	1008.757	90.86	93.87	720.0570	n.a.
3	NITRITE	5.144	0.116	0.409	0.08	0.04	0.2867	n.a.
4	SULFATE	5.690	13.975	65.353	9.05	6.08	98.3218	n.a.
5	BROMIDE	6.474	0.002	0.021	0.00	0.00	0.0249	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**154.440**	**1074.657**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6112-1DLB**	*Run Time (min):*	**14.96**
Vial Number:	**9**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**2.0000**
Injection Date/Time:	**16/Nov/23 19:45**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

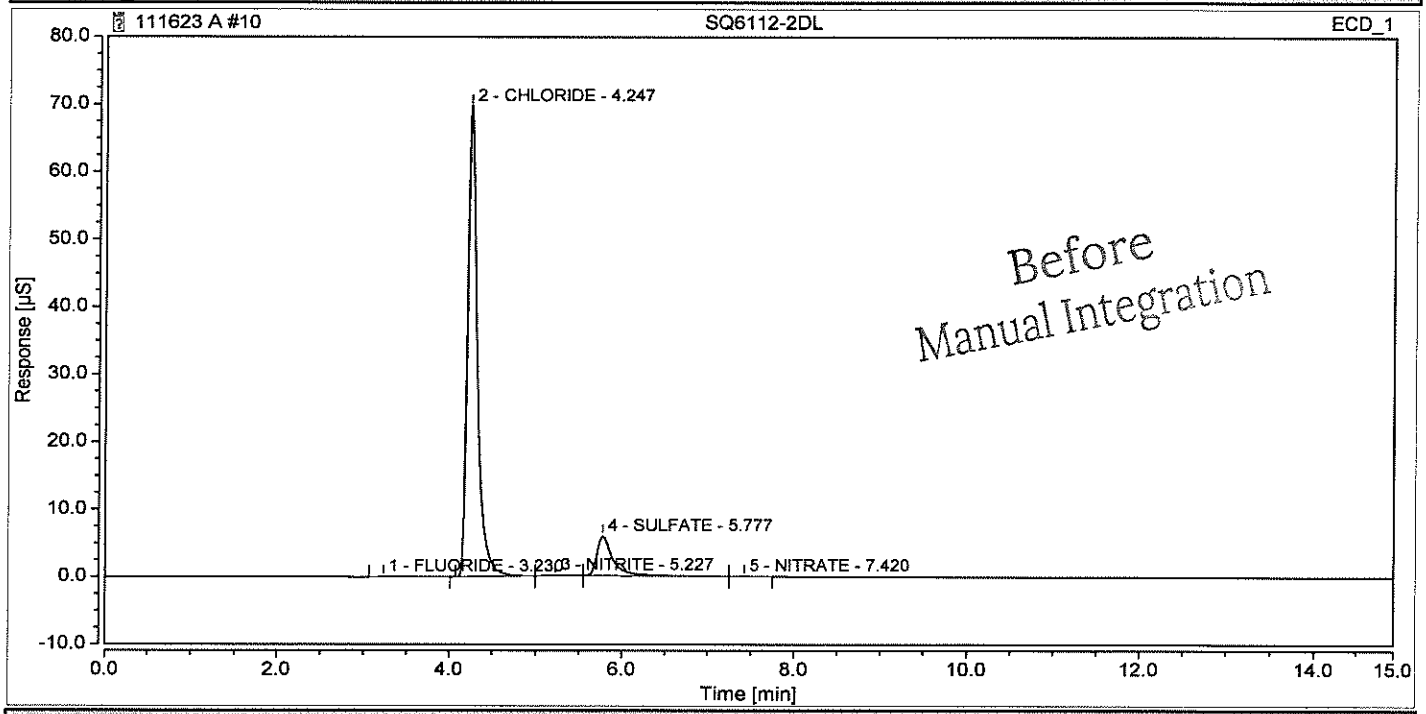
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	CHLORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	SULFATE	5.690	13.975	65.353	100.00	100.00	98.3218	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**13.975**	**65.353**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6112-2DL**	*Run Time (min):*	**14.95**
Vial Number:	**10**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**20.0000**
Injection Date/Time:	**16/Nov/23 20:02**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

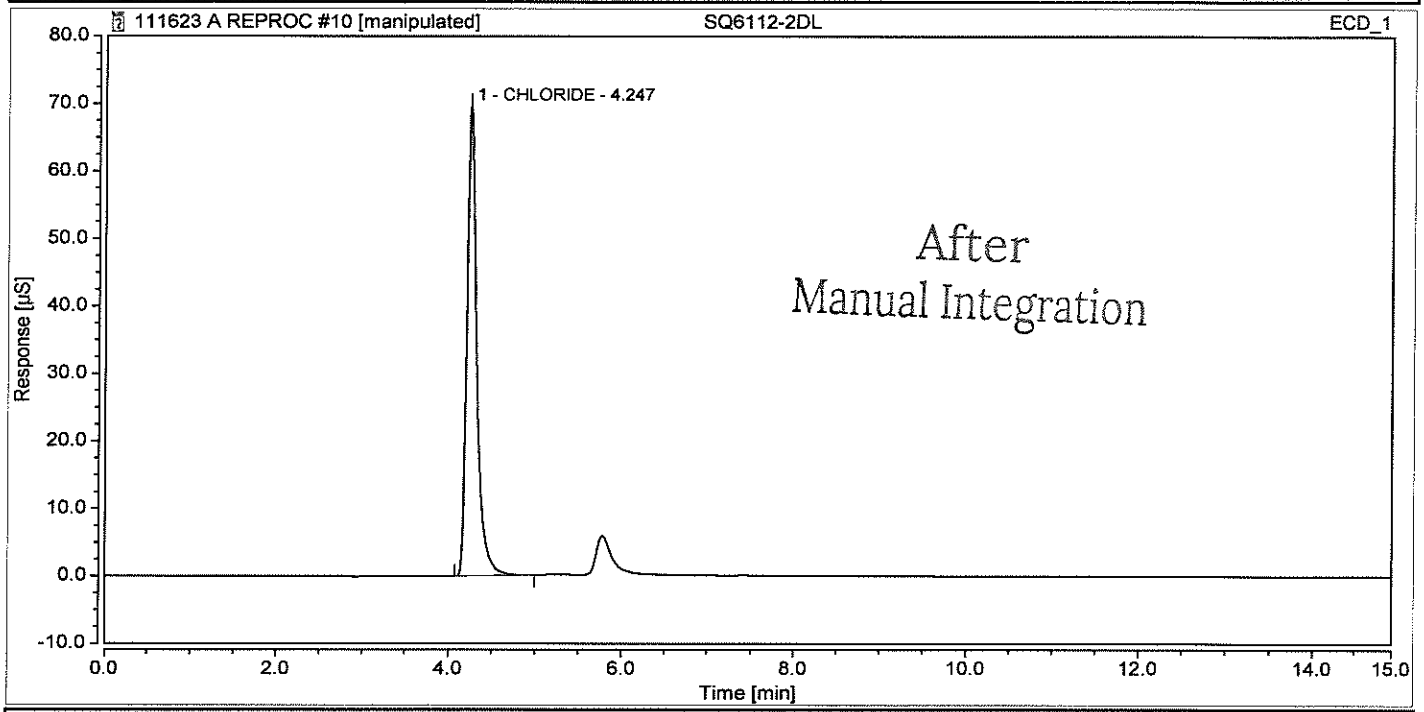
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.230	0.014	0.040	0.13	0.05	0.7819	n.a.
2	CHLORIDE	4.247	9.351	69.689	87.50	92.01	479.8632	n.a.
3	NITRITE	5.227	0.031	0.109	0.29	0.14	0.8953	n.a.
4	SULFATE	5.777	1.285	5.870	12.02	7.75	90.3871	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5	NITRATE	7.420	0.005	0.029	0.05	0.04	0.1081	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**10.687**	**75.738**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6112-2DL**	*Run Time (min):*	**14.95**
Vial Number:	**10**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**20.0000**
Injection Date/Time:	**16/Nov/23 20:02**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

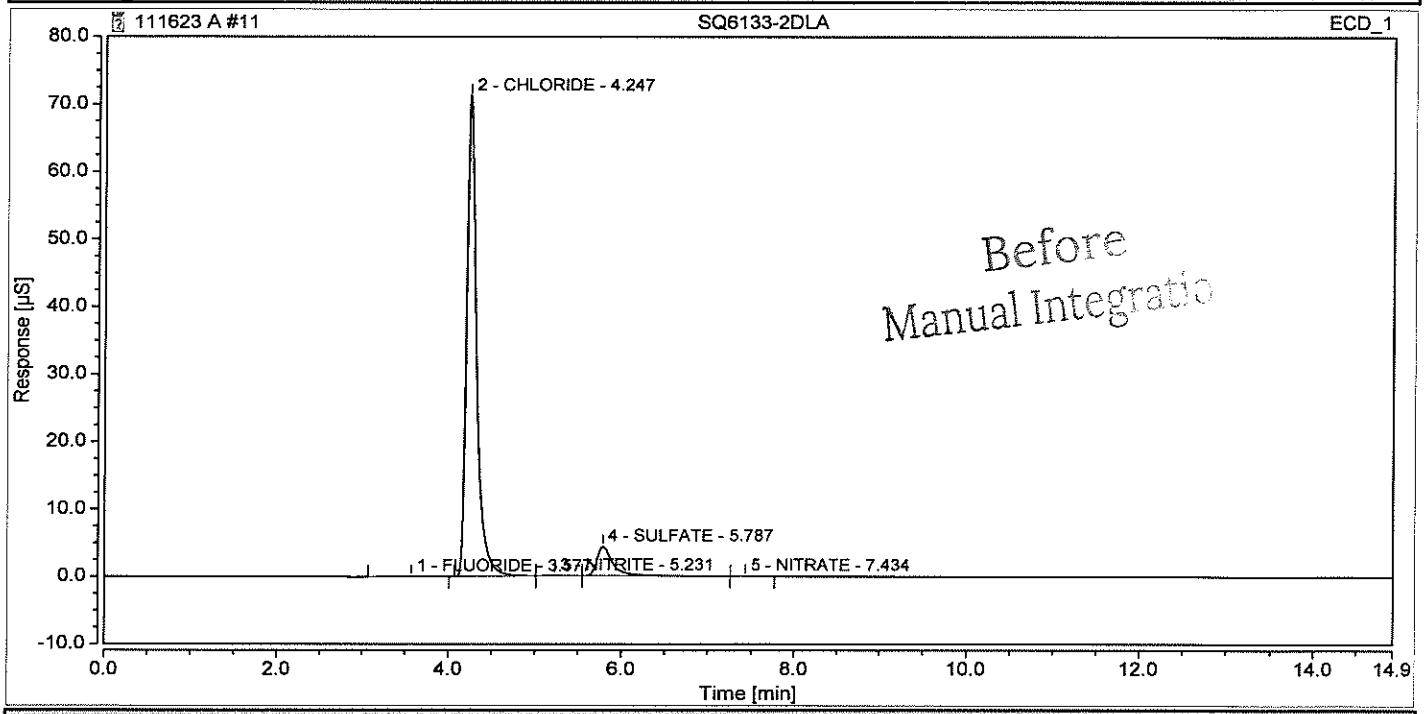
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.247	9.351	69.689	100.00	100.00	479.8632	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	SULFATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**9.351**	**69.689**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6133-2DLA**	*Run Time (min):*	**14.94**
Vial Number:	**11**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**50.0000**
Injection Date/Time:	**16/Nov/23 20:19**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

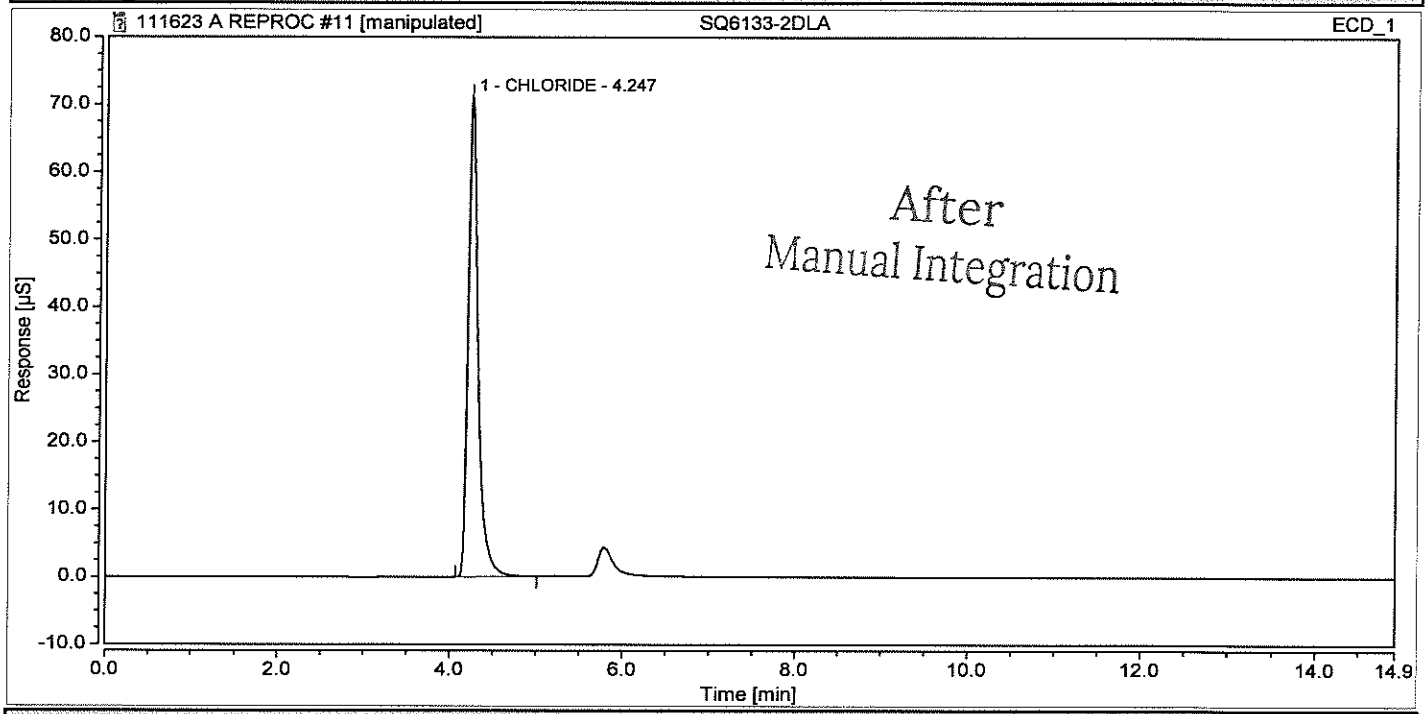
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.577	0.012	0.015	0.11	0.02	1.7674	n.a.
2	CHLORIDE	4.247	9.584	71.196	90.72	94.10	1229.5682	n.a.
3	NITRITE	5.231	0.018	0.066	0.17	0.09	1.4668	n.a.
4	SULFATE	5.787	0.947	4.364	8.96	5.77	166.4792	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5	NITRATE	7.434	0.004	0.021	0.04	0.03	0.2049	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**10.565**	**75.662**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6133-2DLA**	*Run Time (min):*	**14.94**
Vial Number:	**11**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**50.0000**
Injection Date/Time:	**16/Nov/23 20:19**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

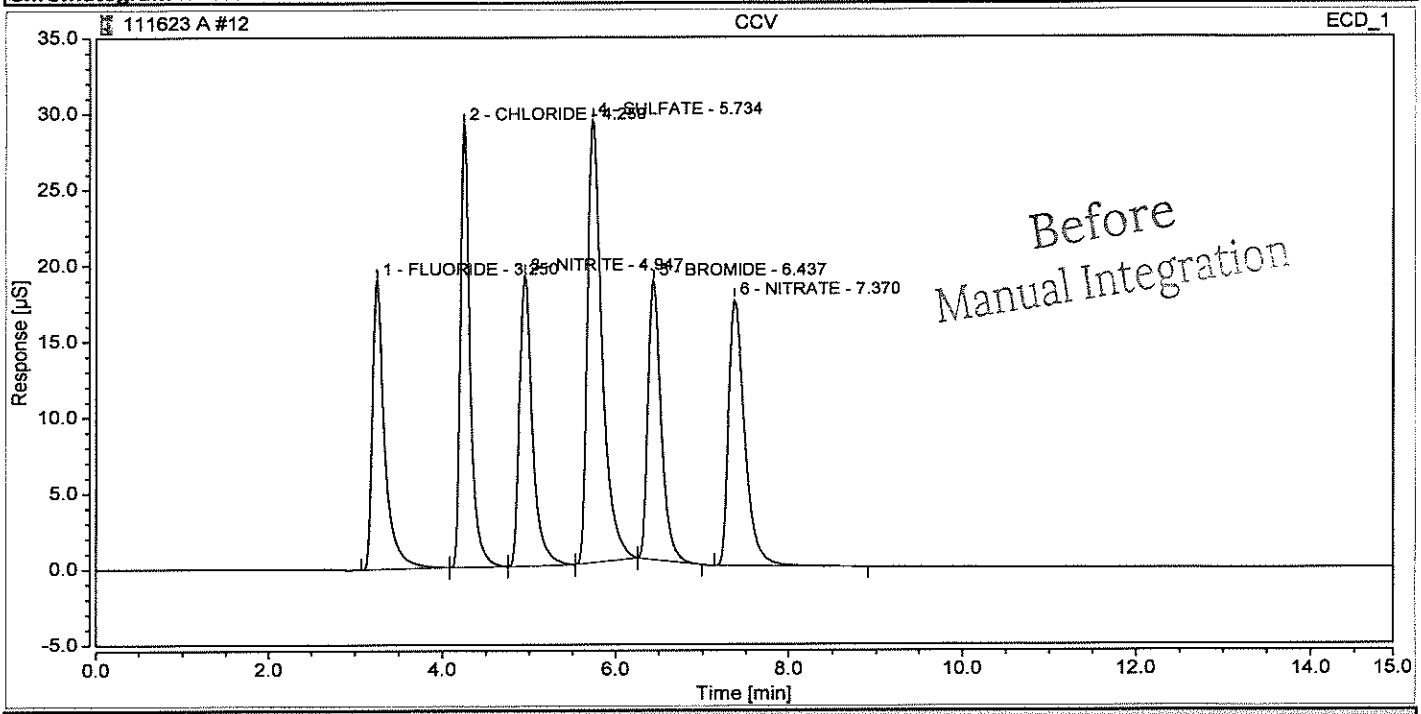
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.247	9.584	71.196	100.00	100.00	1229.5682	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	SULFATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**9.584**	**71.196**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**CCV**	*Run Time (min):*	**14.96**
Vial Number:	**13**	*Injection Volume:*	**200.00**
Injection Type:	**Check Standard**	*Channel:*	**ECD_1**
Calibration Level:	**06**	*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**16/Nov/23 20:36**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

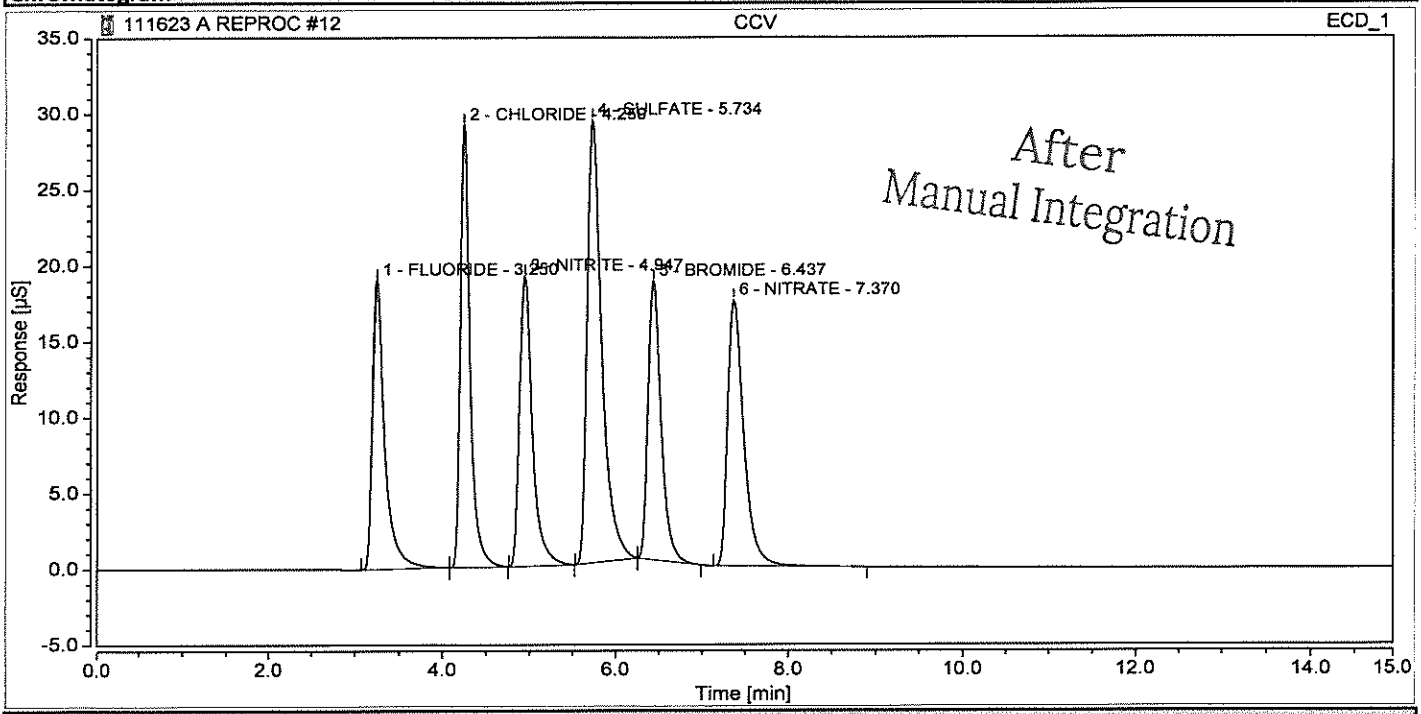
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.250	3.111	19.029	13.48	14.39	5.0520	1.0403
2	CHLORIDE	4.250	3.813	29.123	16.52	22.02	9.7825	-2.1746
3	NITRITE	4.947	3.302	19.126	14.31	14.46	3.9763	-0.5914
4	SULFATE	5.734	5.768	29.161	24.99	22.04	20.2907	1.4535
5	BROMIDE	6.437	3.249	18.345	14.08	13.87	19.1093	-4.4536
6	NITRATE	7.370	3.836	17.499	16.62	13.23	3.9200	-2.0000
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**23.079**	**132.284**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**CCV**	*Run Time (min):*	**14.96**
Vial Number:	**13**	*Injection Volume:*	**200.00**
Injection Type:	**Check Standard**	*Channel:*	**ECD_1**
Calibration Level:	**06**	*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**16/Nov/23 20:36**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

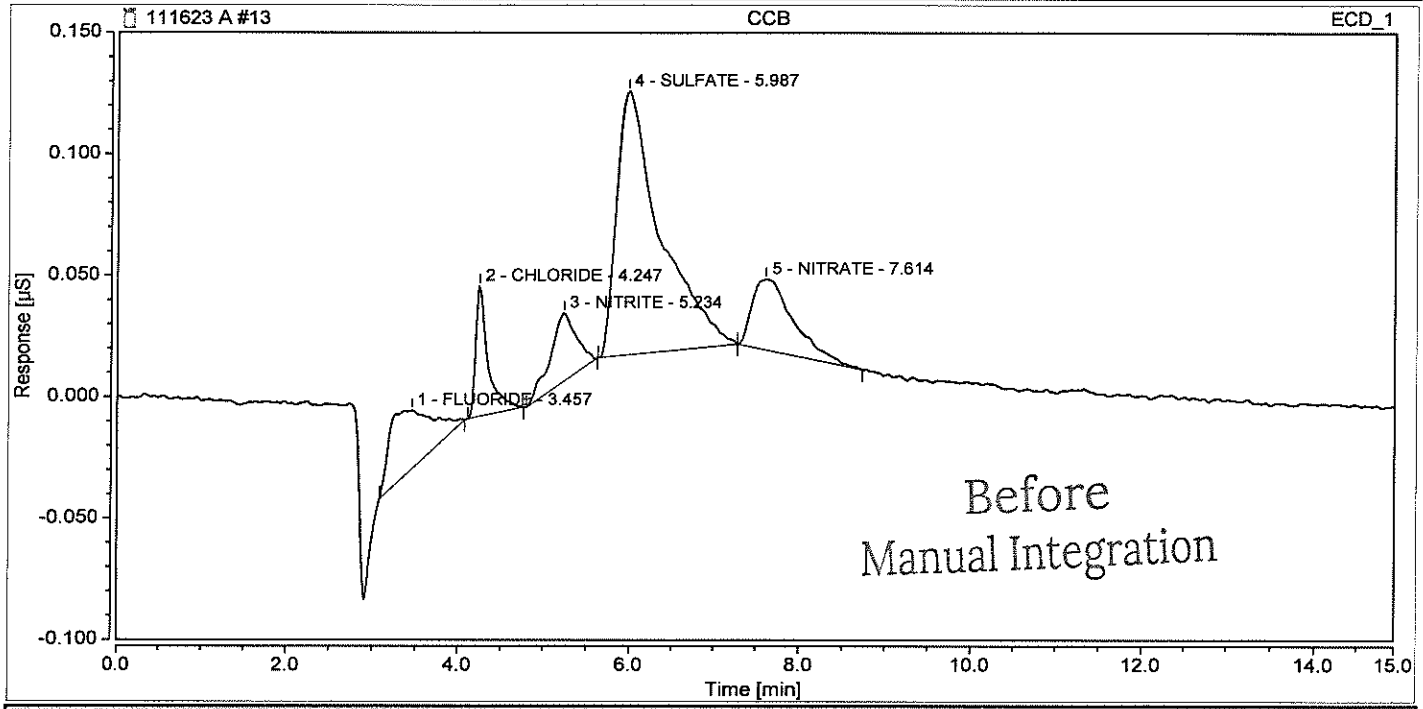
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.250	3.111	19.029	13.48	14.39	5.0520	1.0403
2	CHLORIDE	4.250	3.813	29.123	16.52	22.02	9.7825	-2.1746
3	NITRITE	4.947	3.302	19.126	14.31	14.46	3.9763	-0.5914
4	SULFATE	5.734	5.768	29.161	24.99	22.04	20.2907	1.4535
5	BROMIDE	6.437	3.249	18.345	14.08	13.87	19.1093	-4.4536
6	NITRATE	7.370	3.836	17.499	16.62	13.23	3.9200	-2.0000
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**23.079**	**132.284**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**CCB**	*Run Time (min):*	**14.96**
Vial Number:	**14**	*Injection Volume:*	**200.00**
Injection Type:	**Blank**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**16/Nov/23 20:54**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

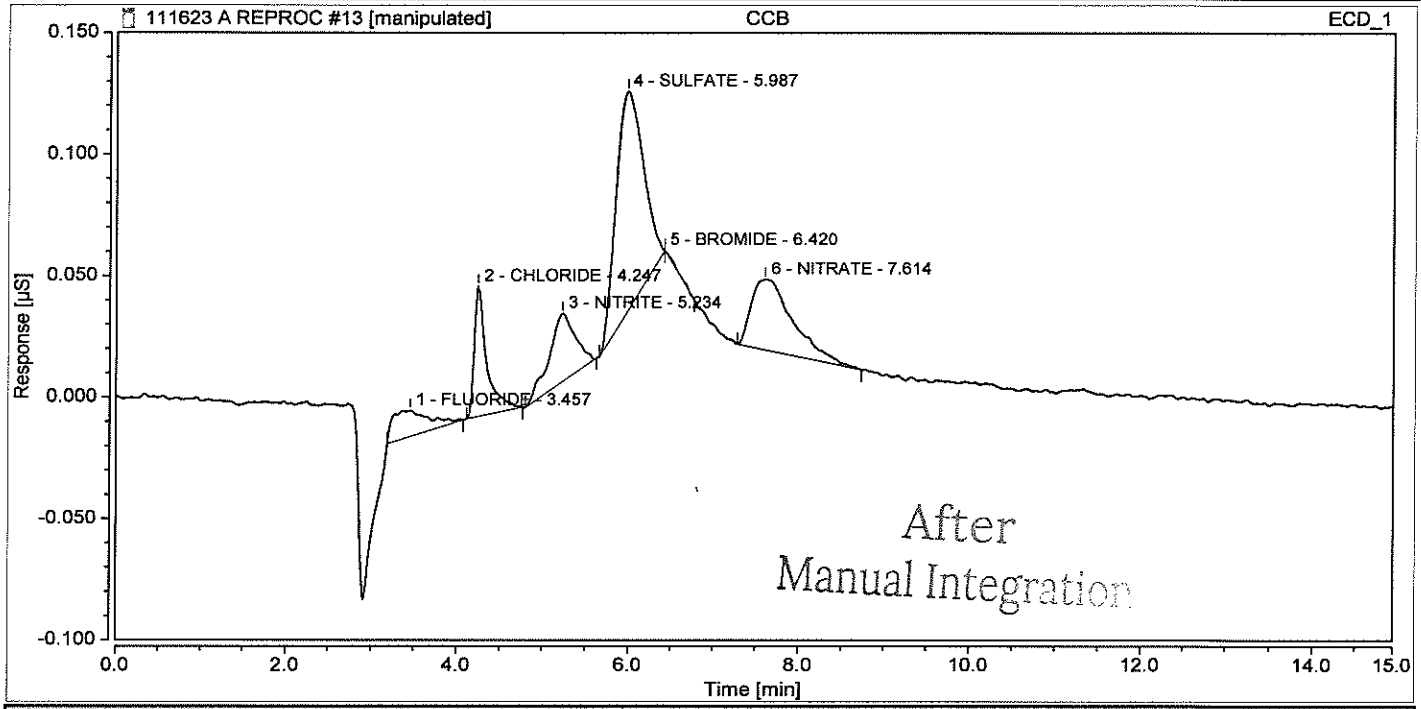
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.457	0.015	0.024	12.80	9.92	0.0397	n.a.
2	CHLORIDE	4.247	0.009	0.054	7.86	22.06	0.0231	n.a.
3	NITRITE	5.234	0.010	0.028	8.69	11.51	0.0198	n.a.
4	SULFATE	5.987	0.065	0.108	56.36	44.59	0.2272	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5	NITRATE	7.614	0.016	0.029	14.28	11.92	0.0167	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.115**	**0.243**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**CCB**	*Run Time (min):*	**14.96**
Vial Number:	**14**	*Injection Volume:*	**200.00**
Injection Type:	**Blank**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**16/Nov/23 20:54**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

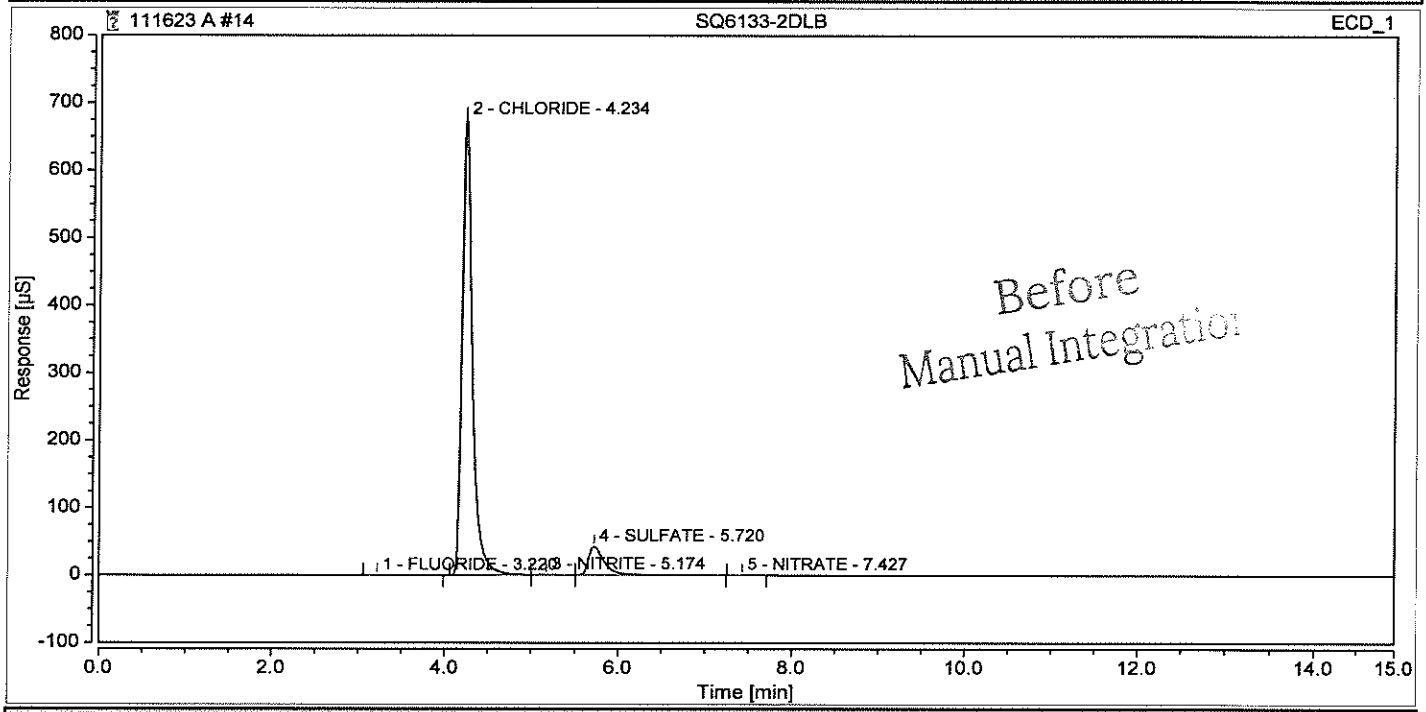
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.457	0.005	0.011	7.14	5.06	0.0250	n.a.
2	CHLORIDE	4.247	0.009	0.054	12.15	25.34	0.0231	n.a.
3	NITRITE	5.234	0.010	0.028	13.43	13.22	0.0198	n.a.
4	SULFATE	5.987	0.033	0.090	45.02	42.69	0.1174	n.a.
5	BROMIDE	6.420	0.000	0.000	0.19	0.00	0.0008	n.a.
6	NITRATE	7.614	0.016	0.029	22.07	13.70	0.0167	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.074**	**0.212**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6133-2DLB**	*Run Time (min):*	**14.95**
Vial Number:	**15**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**5.0000**
Injection Date/Time:	**16/Nov/23 21:11**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

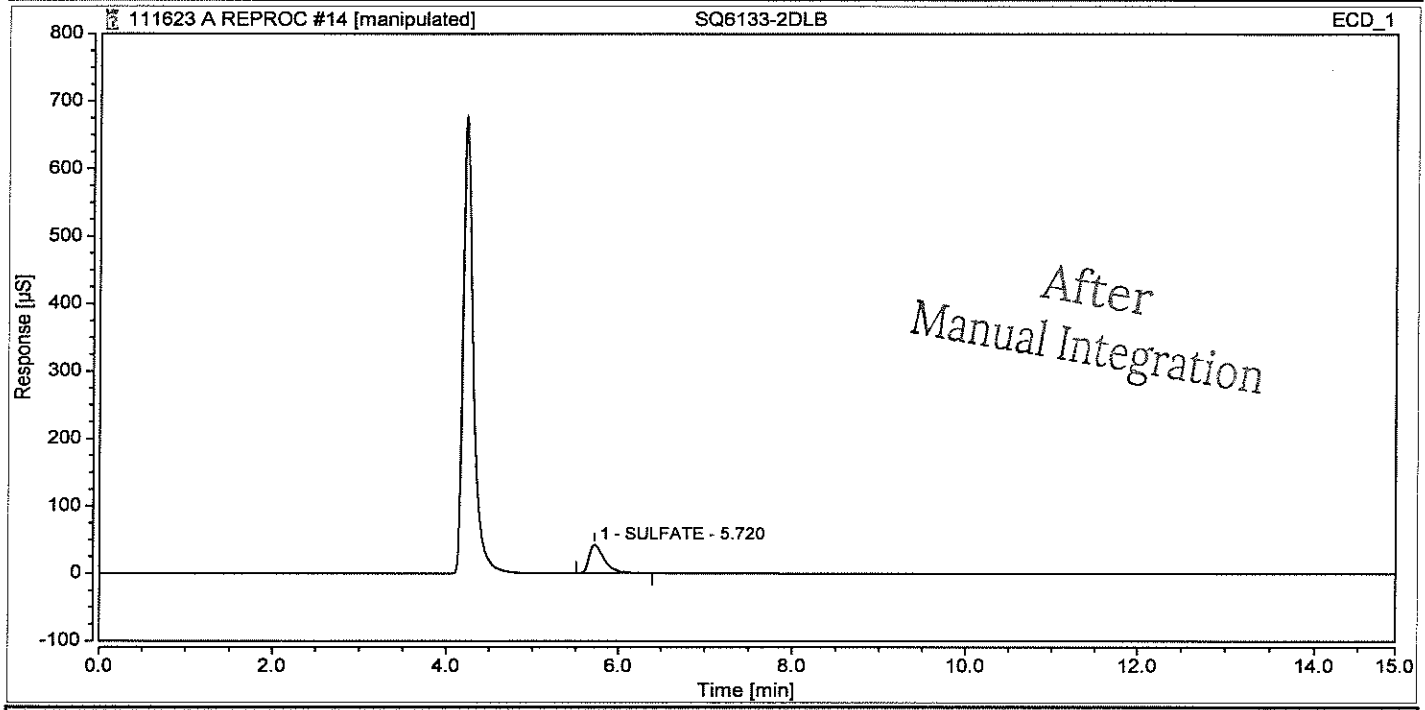
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.220	0.019	0.071	0.02	0.01	0.2328	n.a.
2	CHLORIDE	4.234	93.588	675.598	91.14	94.05	1200.6236	n.a.
3	NITRITE	5.174	0.060	0.231	0.06	0.03	0.3884	n.a.
4	SULFATE	5.720	9.001	42.392	8.77	5.90	158.3191	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5	NITRATE	7.427	0.014	0.078	0.01	0.01	0.0716	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**102.682**	**718.370**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6133-2DLB**	*Run Time (min):*	**14.95**
Vial Number:	**15**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**5.0000**
Injection Date/Time:	**16/Nov/23 21:11**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

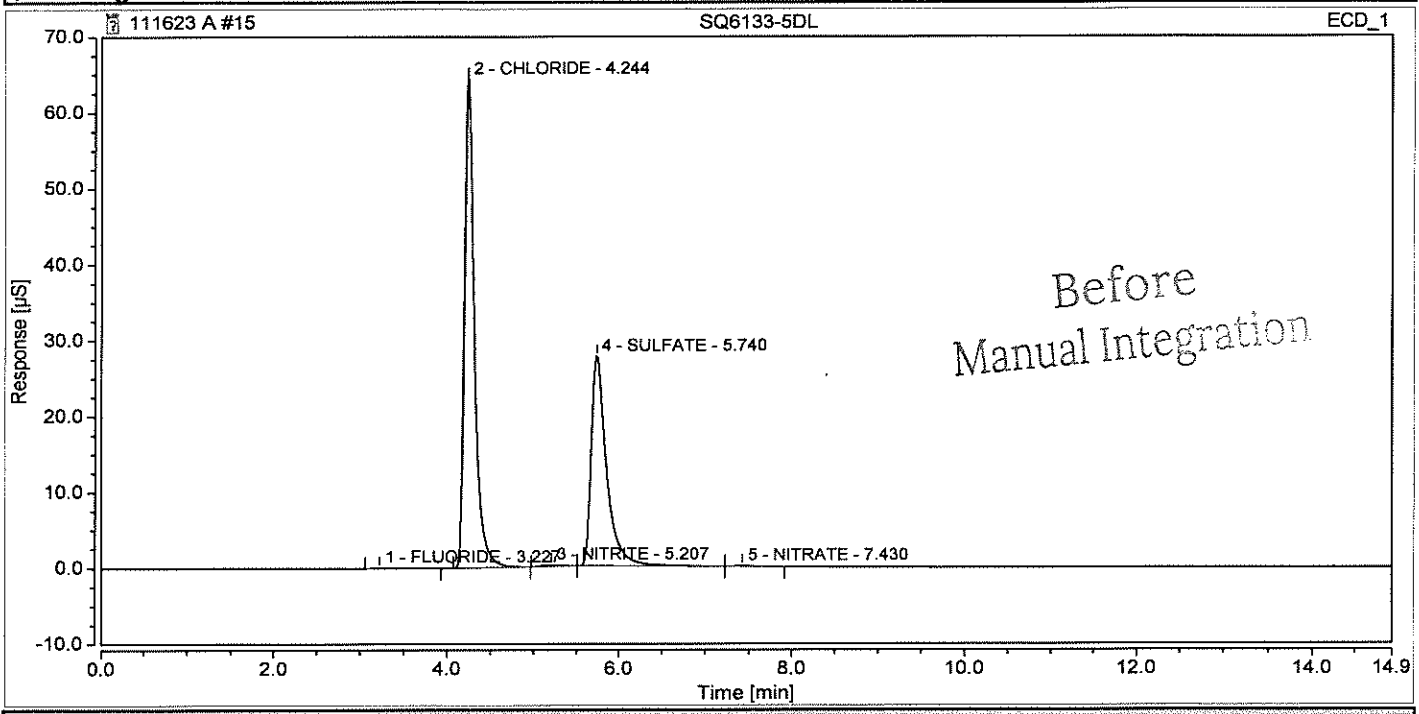
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	CHLORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	SULFATE	5.720	8.654	42.274	100.00	100.00	152.2084	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**8.654**	**42.274**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6133-5DL**	*Run Time (min):*	**14.95**
Vial Number:	**16**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**10.0000**
Injection Date/Time:	**16/Nov/23 21:28**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

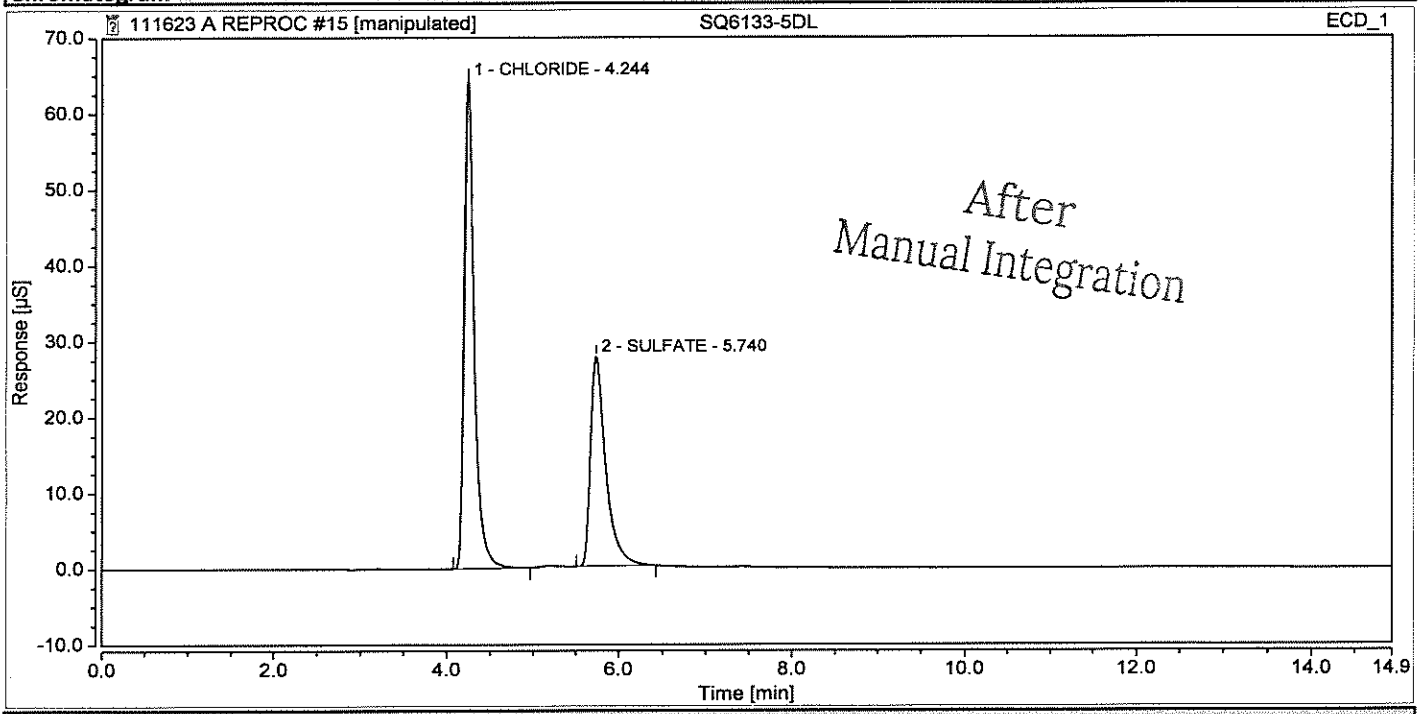
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.227	0.016	0.055	0.11	0.06	0.4135	n.a.
2	CHLORIDE	4.244	8.577	64.368	59.30	69.71	220.0768	n.a.
3	NITRITE	5.207	0.048	0.169	0.33	0.18	0.6391	n.a.
4	SULFATE	5.740	5.803	27.638	40.12	29.93	204.1477	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5	NITRATE	7.430	0.021	0.106	0.14	0.11	0.2130	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**14.465**	**92.336**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6133-5DL**	*Run Time (min):*	**14.95**
Vial Number:	**16**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**10.0000**
Injection Date/Time:	**16/Nov/23 21:28**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

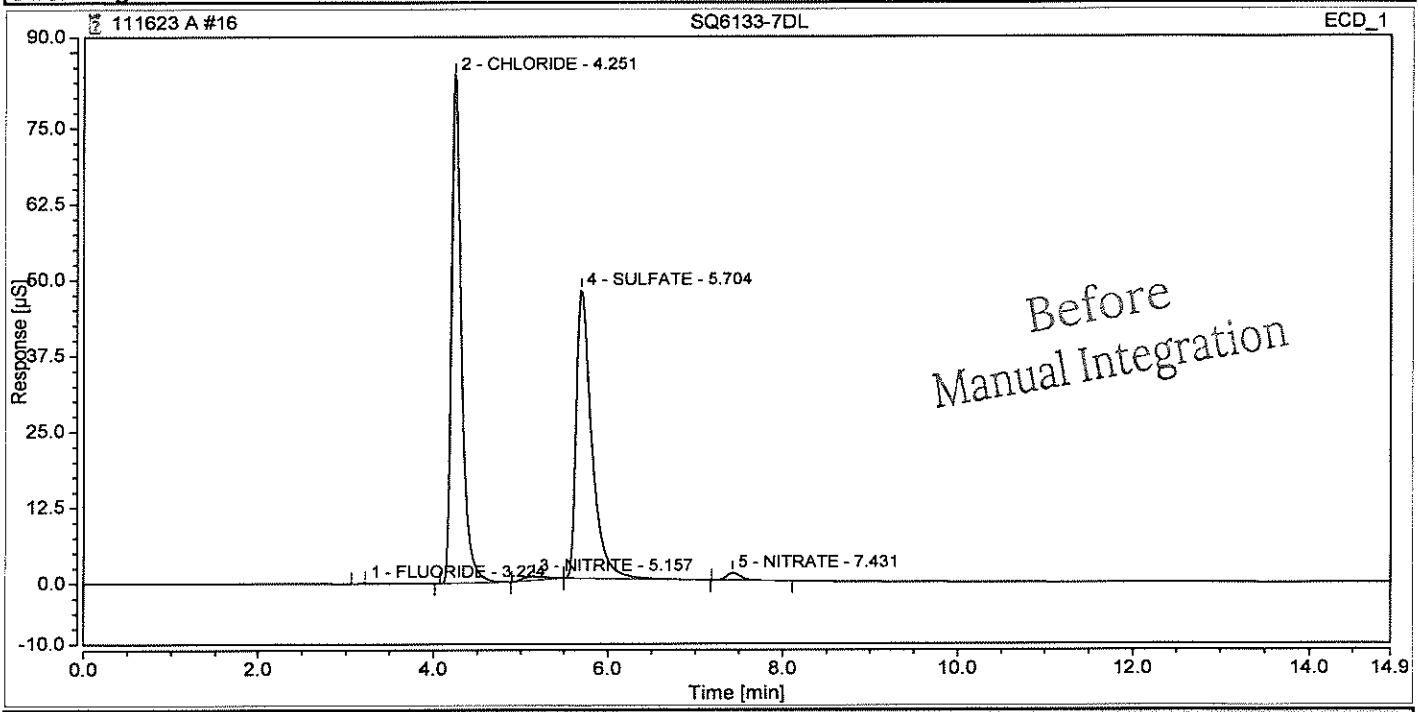
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.244	8.577	64.368	60.27	70.00	220.0768	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2	SULFATE	5.740	5.655	27.586	39.73	30.00	198.9099	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**14.232**	**91.954**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6133-7DL**	*Run Time (min):*	**14.94**
Vial Number:	**17**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**2.0000**
Injection Date/Time:	**16/Nov/23 21:45**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

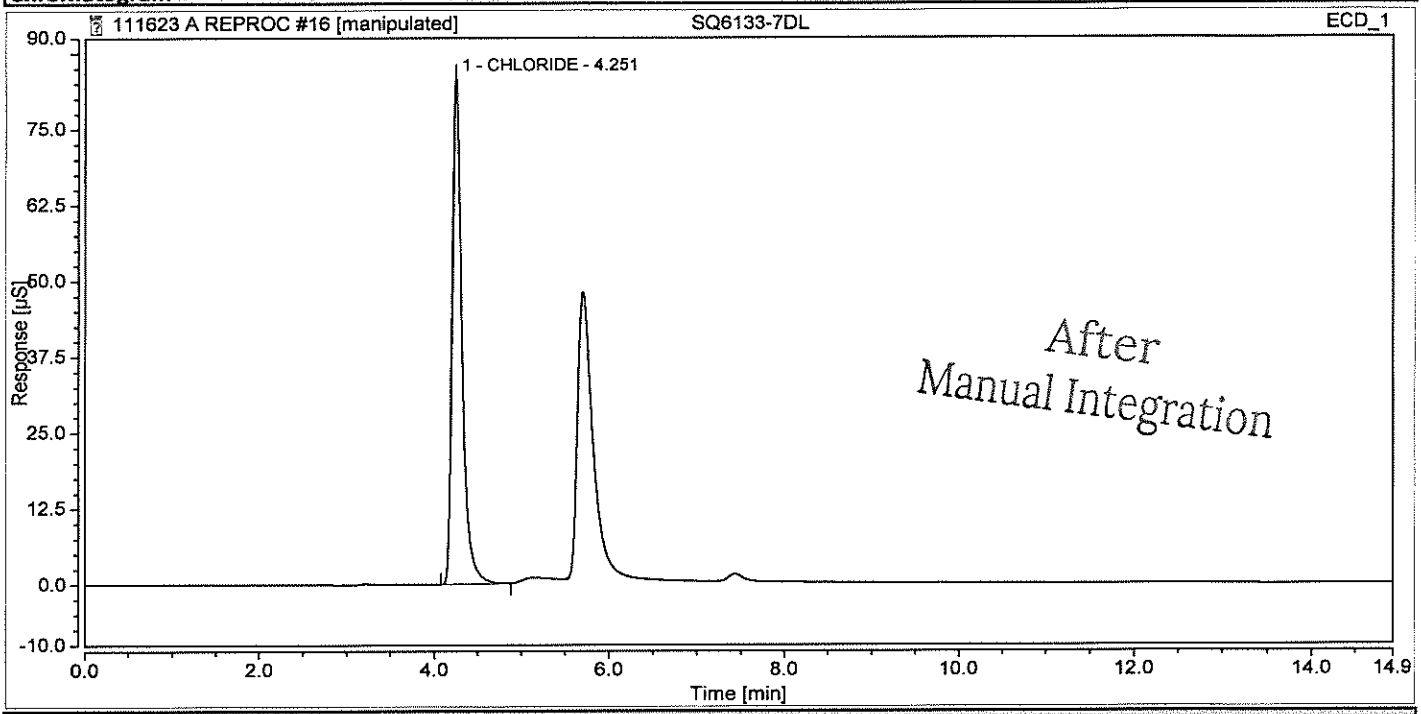
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.224	0.037	0.182	0.18	0.14	0.1508	n.a.
2	CHLORIDE	4.251	11.015	83.712	51.75	62.82	56.5219	n.a.
3	NITRITE	5.157	0.214	0.656	1.00	0.49	0.5148	n.a.
4	SULFATE	5.704	9.776	47.462	45.93	35.62	68.7810	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5	NITRATE	7.431	0.244	1.249	1.15	0.94	0.4982	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**21.286**	**133.261**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6133-7DL**	*Run Time (min):*	**14.94**
Vial Number:	**17**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**2.0000**
Injection Date/Time:	**16/Nov/23 21:45**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

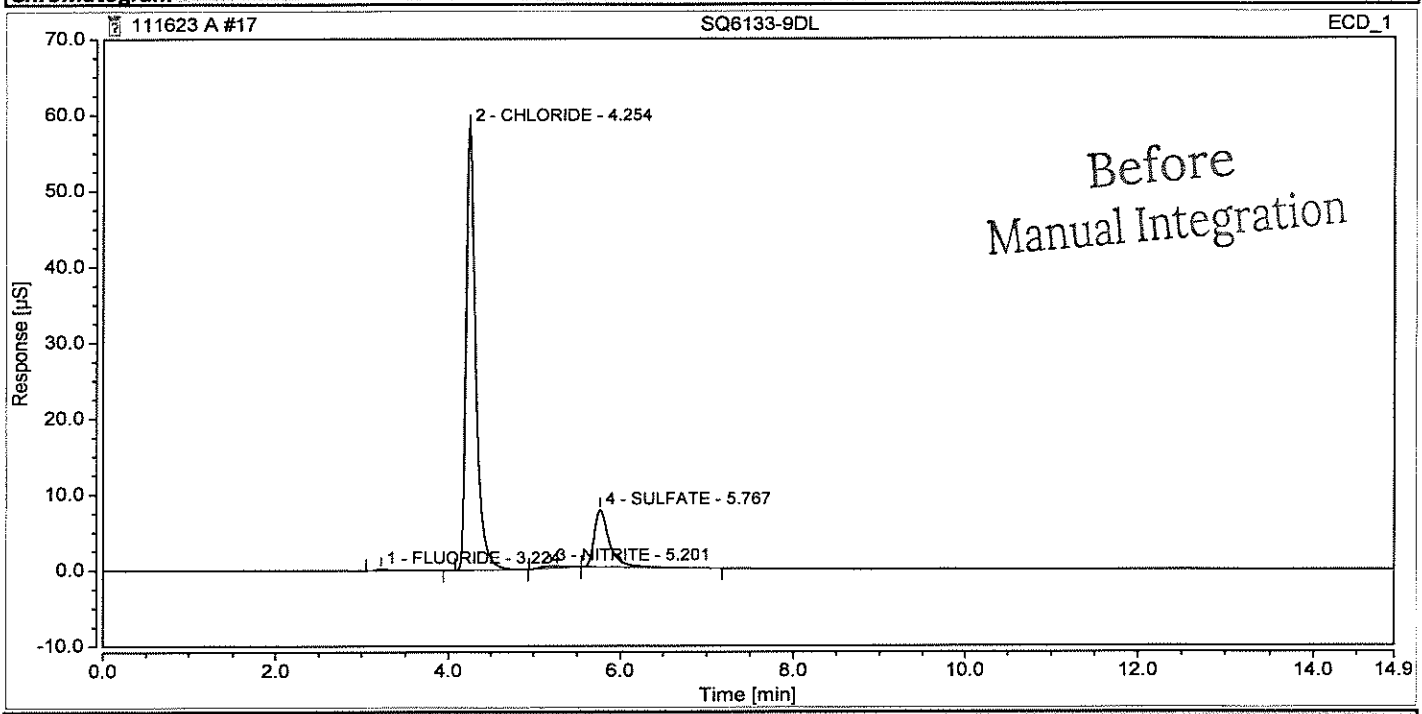
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.251	11.015	83.712	100.00	100.00	56.5219	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	SULFATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**11.015**	**83.712**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6133-9DL**	*Run Time (min):*	**14.95**
Vial Number:	**18**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**5.0000**
Injection Date/Time:	**16/Nov/23 22:03**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

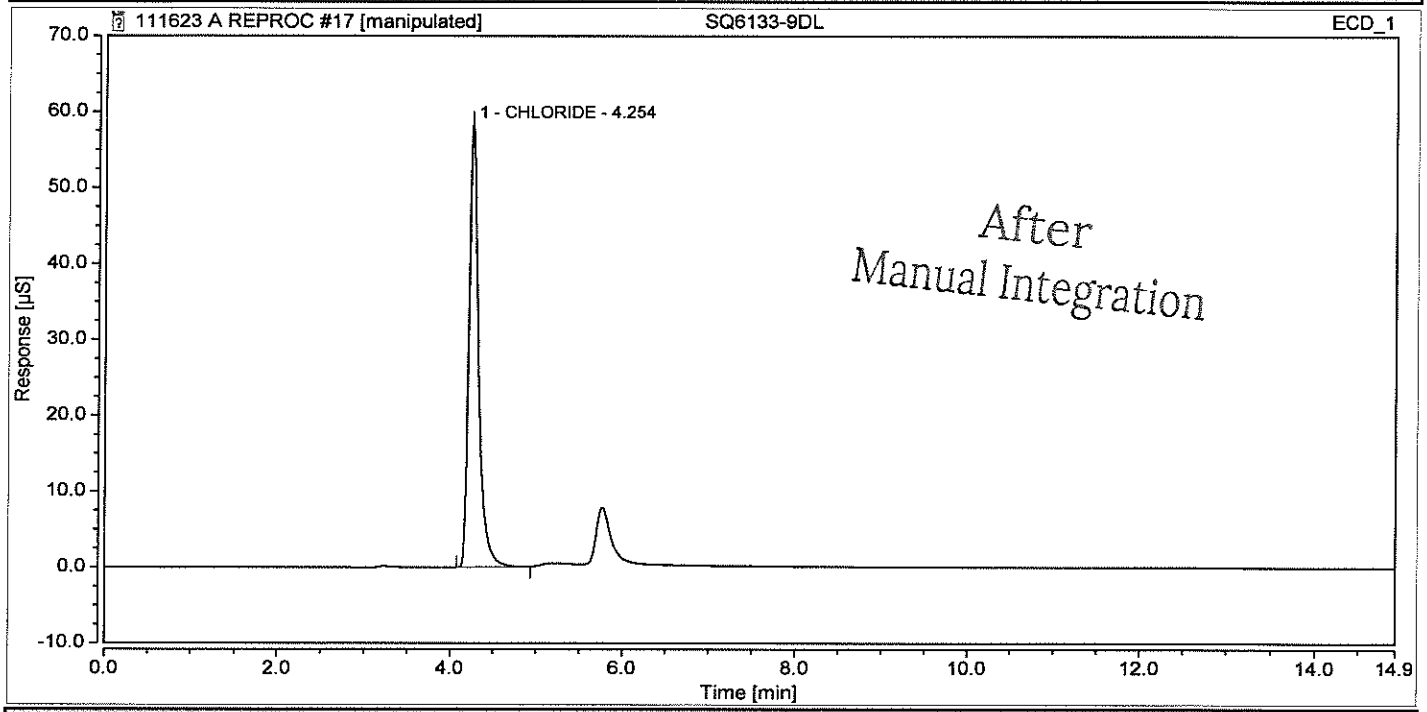
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.224	0.038	0.196	0.40	0.29	0.3785	n.a.
2	CHLORIDE	4.254	7.737	58.479	82.24	87.84	99.2588	n.a.
3	NITRITE	5.201	0.107	0.342	1.13	0.51	0.6626	n.a.
4	SULFATE	5.767	1.526	7.556	16.22	11.35	26.8432	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**9.408**	**66.573**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6133-9DL**	*Run Time (min):*	**14.95**
Vial Number:	**18**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**5.0000**
Injection Date/Time:	**16/Nov/23 22:03**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

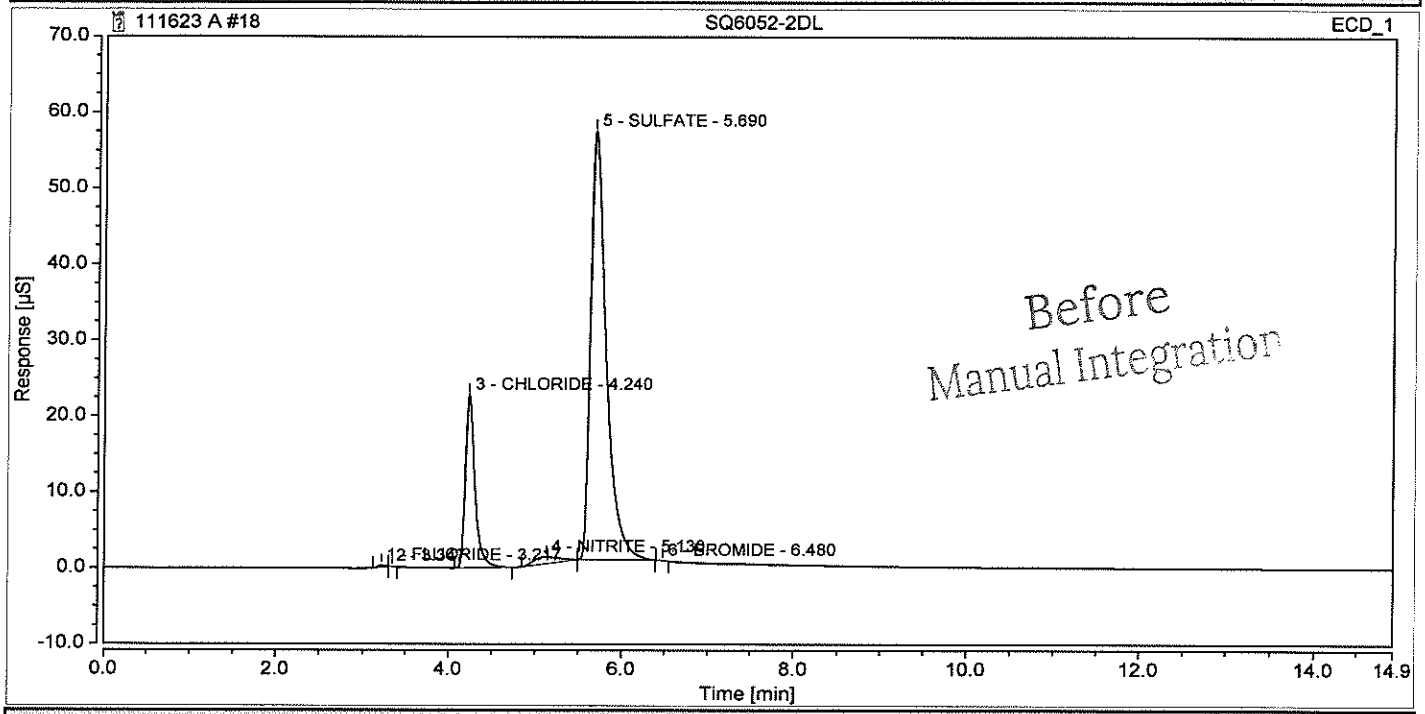
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.254	7.737	58.479	100.00	100.00	99.2588	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	SULFATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**7.737**	**58.479**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6052-2DL**	*Run Time (min):*	**14.94**
Vial Number:	**19**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**2.0000**
Injection Date/Time:	**16/Nov/23 22:20**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

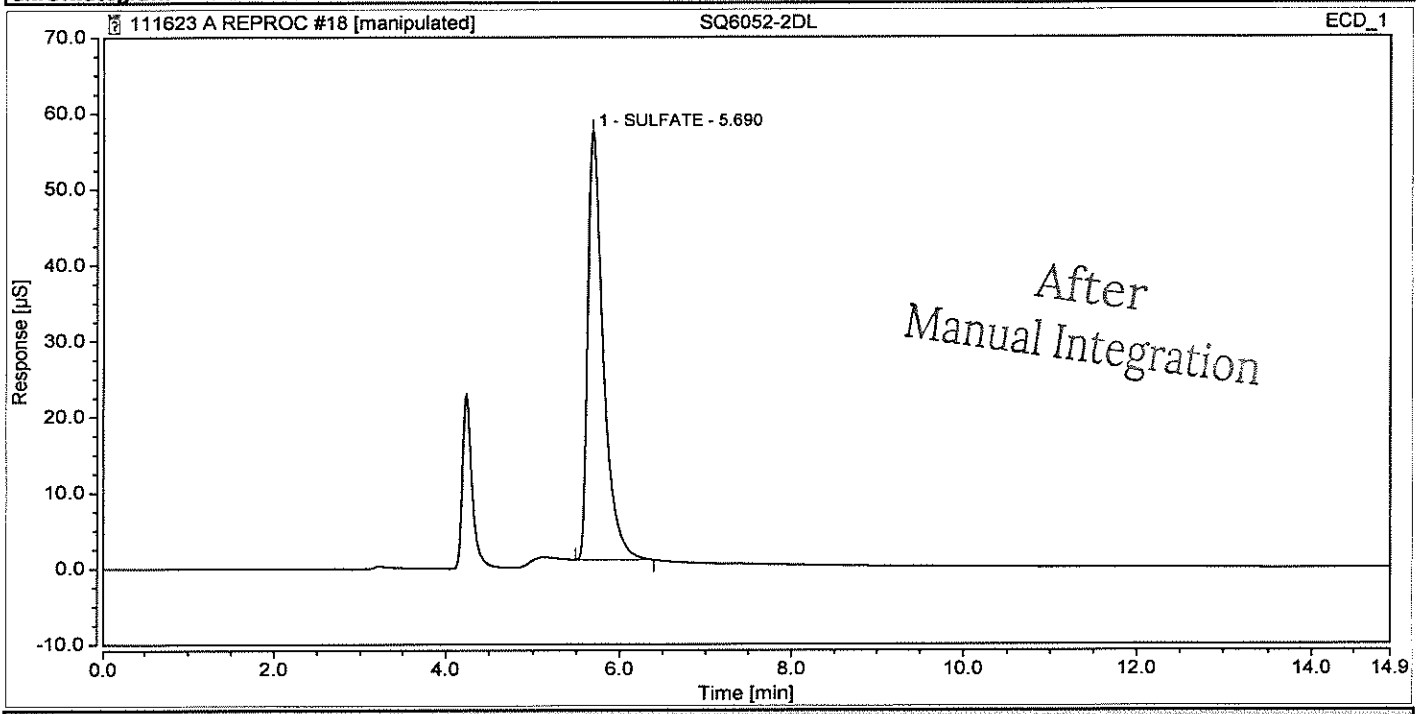
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.217	0.021	0.229	0.14	0.29	0.0978	n.a.
2		3.347	0.001	0.017	0.01	0.02	n.a.	n.a.
3	CHLORIDE	4.240	2.918	22.798	19.47	28.37	14.9726	n.a.
4	NITRITE	5.130	0.316	0.888	2.11	1.10	0.7543	n.a.
5	SULFATE	5.690	11.733	56.421	78.28	70.21	82.5489	n.a.
6	BROMIDE	6.480	0.001	0.009	0.00	0.01	0.0086	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**14.989**	**80.362**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6052-2DL**	*Run Time (min):*	**14.94**
Vial Number:	**19**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**2.0000**
Injection Date/Time:	**16/Nov/23 22:20**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

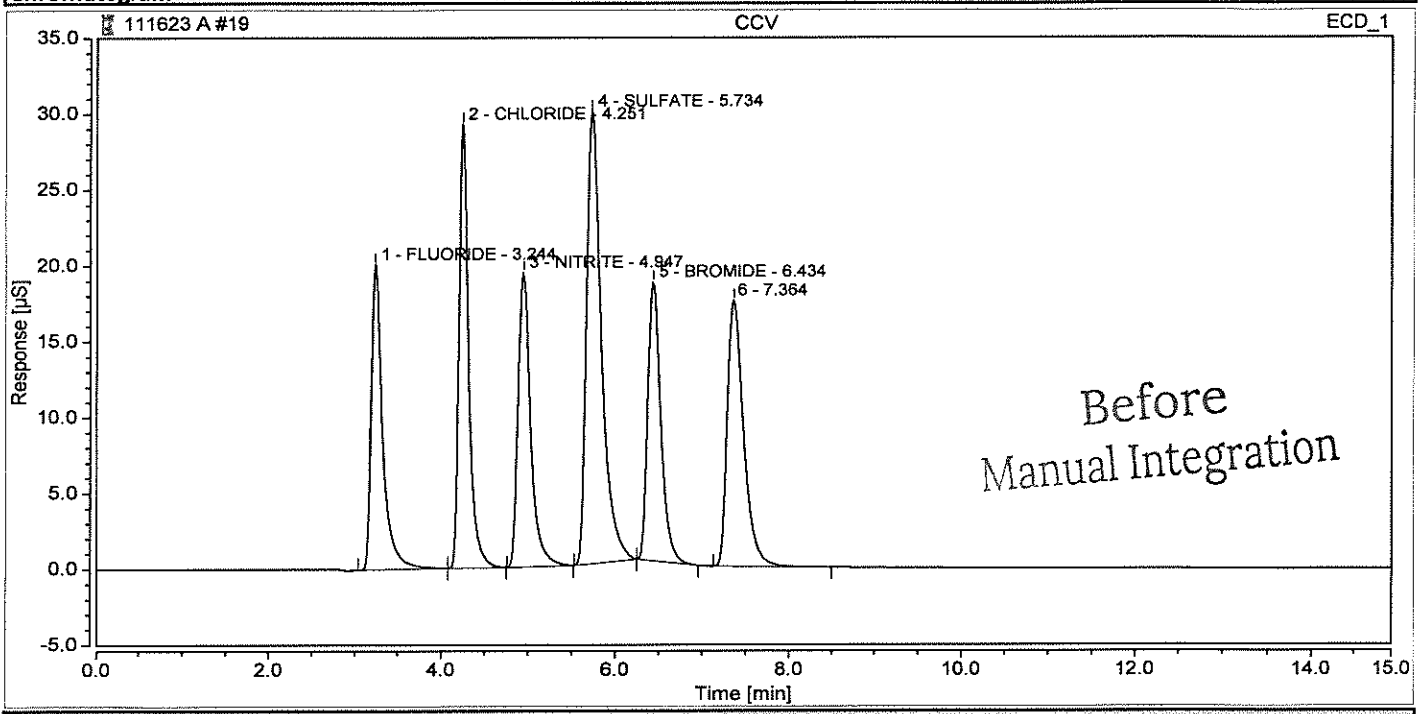
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	CHLORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	SULFATE	5.690	11.733	56.421	100.00	100.00	82.5489	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**11.733**	**56.421**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**CCV**	*Run Time (min):*	**14.95**
Vial Number:	**25**	*Injection Volume:*	**200.00**
Injection Type:	**Check Standard**	*Channel:*	**ECD_1**
Calibration Level:	**06**	*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**16/Nov/23 22:37**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

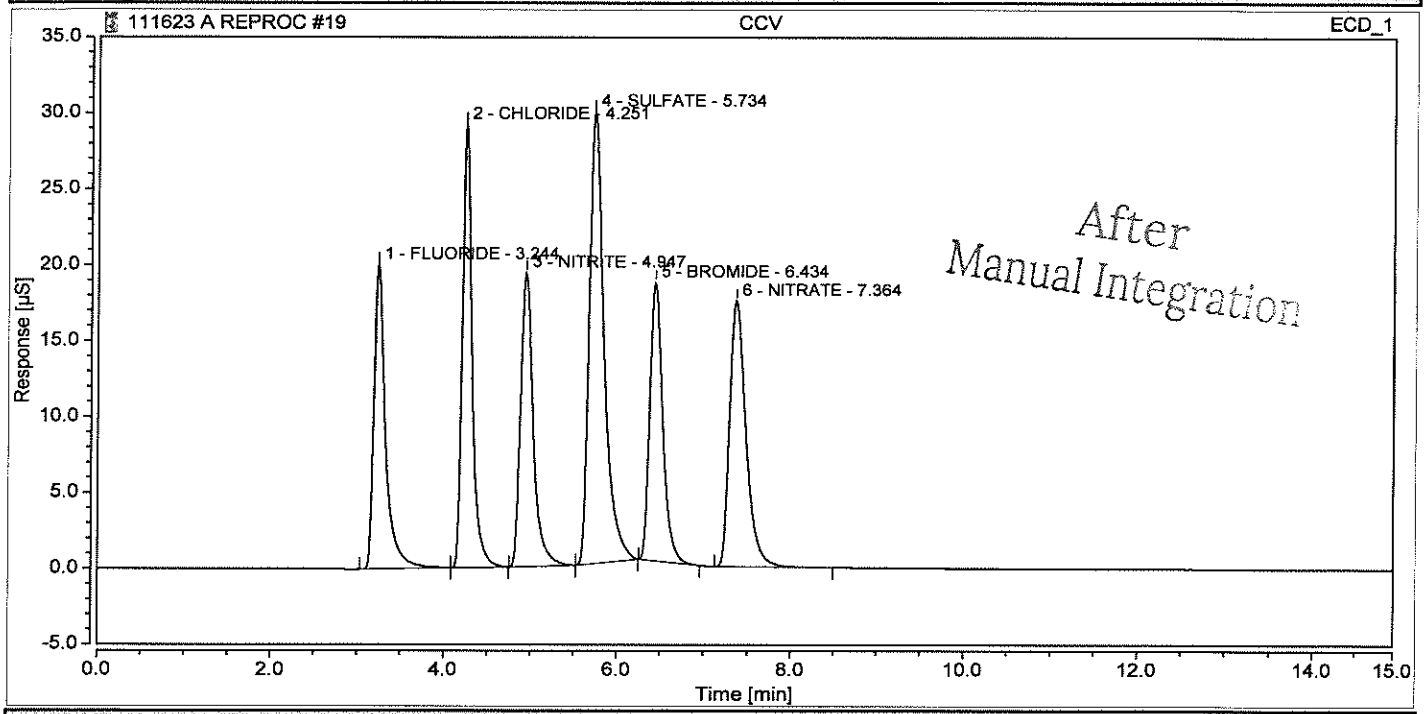
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.244	3.117	20.064	13.50	14.95	5.0611	1.2213
2	CHLORIDE	4.251	3.796	29.190	16.44	21.74	9.7407	-2.5934
3	NITRITE	4.947	3.295	19.371	14.27	14.43	3.9684	-0.7899
4	SULFATE	5.734	5.865	29.766	25.41	22.17	20.6319	3.1596
5	BROMIDE	6.434	3.232	18.358	14.00	13.68	19.0095	-4.9525
6		7.364	3.780	17.488	16.37	13.03	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**23.086**	**134.237**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**CCV**	*Run Time (min):*	**14.95**
Vial Number:	**25**	*Injection Volume:*	**200.00**
Injection Type:	**Check Standard**	*Channel:*	**ECD_1**
Calibration Level:	**06**	*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**16/Nov/23 22:37**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

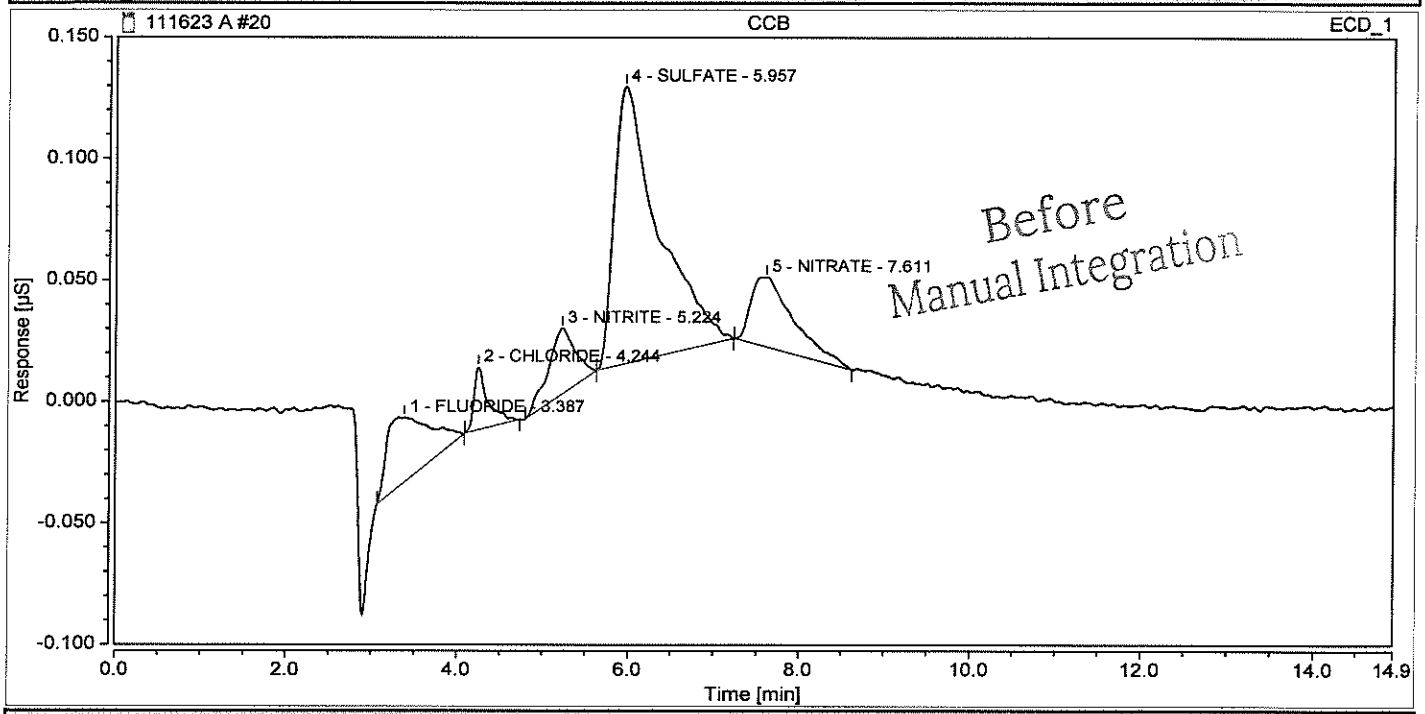
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.244	3.117	20.064	13.50	14.95	5.0611	1.2213
2	CHLORIDE	4.251	3.796	29.190	16.44	21.74	9.7407	-2.5934
3	NITRITE	4.947	3.295	19.371	14.27	14.43	3.9684	-0.7899
4	SULFATE	5.734	5.865	29.766	25.41	22.17	20.6319	3.1596
5	BROMIDE	6.434	3.232	18.358	14.00	13.68	19.0095	-4.9525
6	NITRATE	7.364	3.780	17.488	16.37	13.03	3.8628	-3.4308
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**23.086**	**134.237**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**CCB**	*Run Time (min):*	**14.95**
Vial Number:	**26**	*Injection Volume:*	**200.00**
Injection Type:	**Blank**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**16/Nov/23 22:55**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

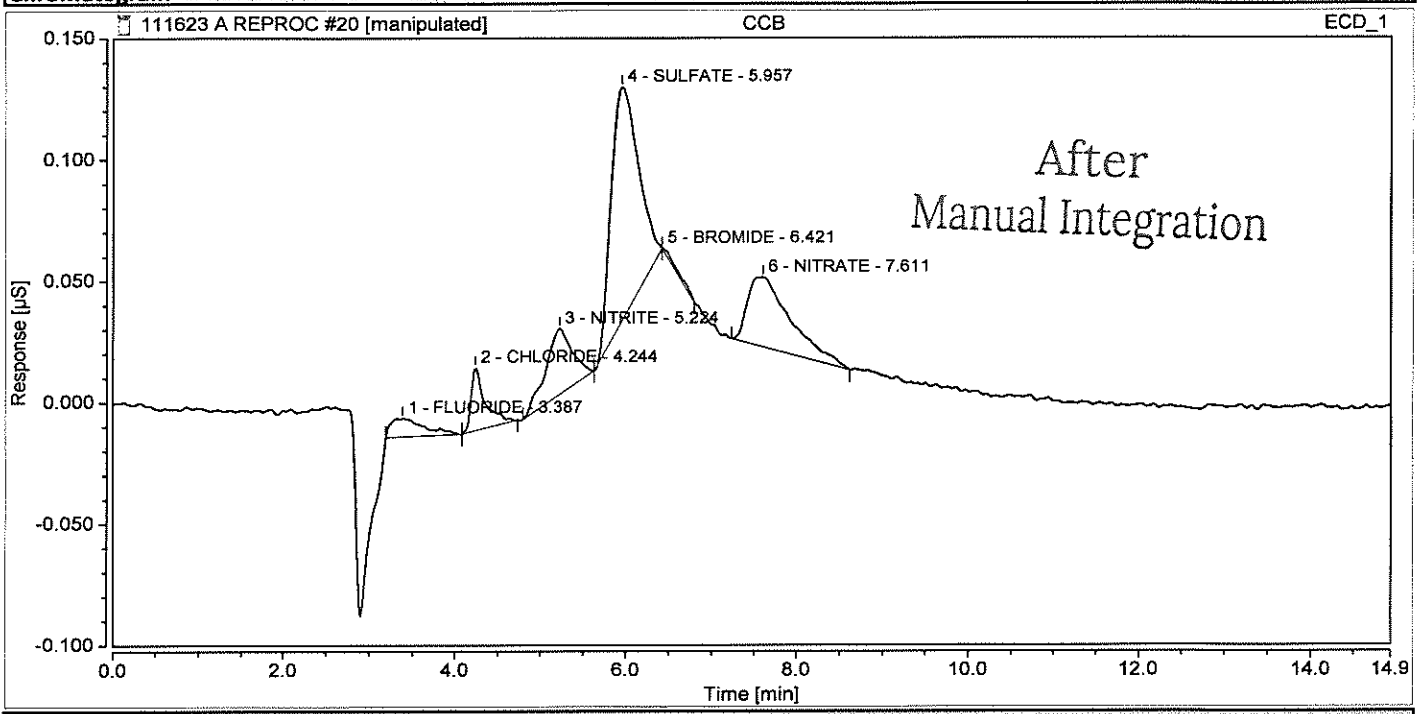
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.387	0.016	0.027	13.47	11.96	0.0411	n.a.
2	CHLORIDE	4.244	0.005	0.026	4.27	11.64	0.0126	n.a.
3	NITRITE	5.224	0.010	0.027	8.61	12.15	0.0198	n.a.
4	SULFATE	5.957	0.068	0.114	59.00	51.34	0.2396	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5	NITRATE	7.611	0.017	0.029	14.65	12.91	0.0173	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.115**	**0.222**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**CCB**	*Run Time (min):*	**14.95**
Vial Number:	**26**	*Injection Volume:*	**200.00**
Injection Type:	**Blank**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**16/Nov/23 22:55**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.387	0.003	0.008	4.87	4.08	0.0221	n.a.
2	CHLORIDE	4.244	0.005	0.026	6.95	13.98	0.0126	n.a.
3	NITRITE	5.224	0.010	0.027	14.01	14.59	0.0198	n.a.
4	SULFATE	5.957	0.035	0.096	49.54	51.84	0.1236	n.a.
5	BROMIDE	6.421	0.001	0.000	0.79	0.00	0.0033	n.a.
6	NITRATE	7.611	0.017	0.029	23.84	15.50	0.0173	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.071**	**0.185**	**100.00**	**100.00**		

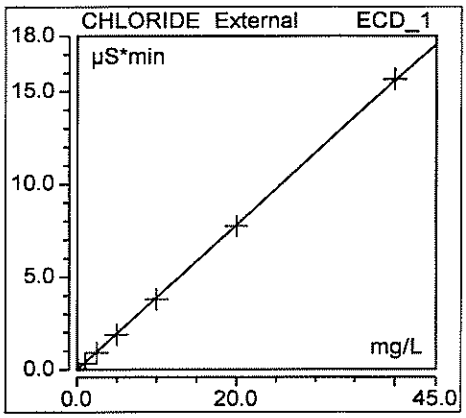
Calibration Batch Report

Sequence:	**101223 CAL REPROC**	*Injection Volume:*	**200.00**
Instrument Method:	**32mM80mA**	*Operator:*	**wetlab**
Inj. Date / Time:	**12-Oct-2023 / 13:07**	*Run Time:*	**14.946667**

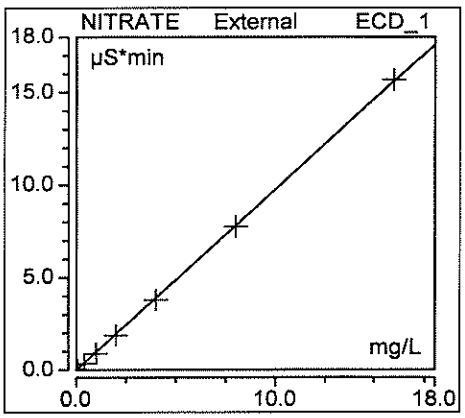
Calibration Summary

Peak Name	Eval.Type	Cal.Type	Points	Offset (C0)	Slope (C1)	Curve (C2)	Coeff.Det. %
FLUORIDE	Area	ly2, WithOffs	8.000	-0.011	0.637	-0.004	99.9990
CHLORIDE	Area	Lin	8.000	0.000	0.390	0.000	99.9875
NITRITE	Area	ly2, WithOffs	8.000	-0.007	0.859	-0.007	99.9990
SULFATE	Area	Lin	8.000	0.000	0.284	0.000	99.9981
BROMIDE	Area	Lin	8.000	0.000	0.170	0.000	99.9752
NITRATE	Area	Lin	8.000	0.000	0.976	0.000	99.9814
		AVERAGE:		-0.0029	0.5526	-0.0018	99.9900

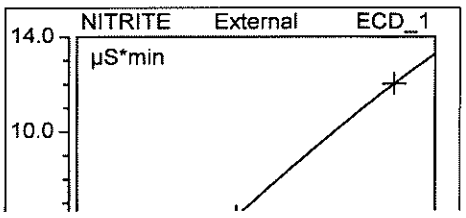
Injection Name **CHLORIDE**	Ret.Time min CHLORIDE	Area µS*min CHLORIDE	Height µS CHLORIDE	Amount mg/L CHLORIDE
	ECD_1	ECD_1	ECD_1	ECD_1
IC1	4.310	0.0013	0.007	0.003
IC2	4.290	0.0319	0.236	0.082
IC3	4.280	0.3373	2.649	0.865
IC4	4.277	0.9117	7.111	2.339
IC5	4.277	1.8945	14.718	4.861
IC6	4.280	3.7977	29.083	9.744
IC7	4.274	7.7443	58.666	19.870
IC8	4.273	15.6522	117.462	40.160
Average	4.283			
Rel. Std. Dev.	0.287 %			



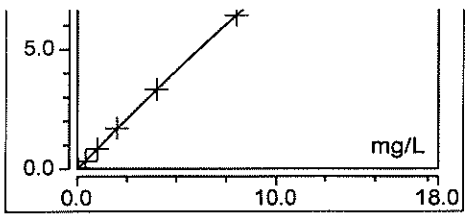
Injection Name **NITRATE**	Ret.Time min NITRATE	Area µS*min NITRATE	Height µS NITRATE	Amount mg/L NITRATE
	ECD_1	ECD_1	ECD_1	ECD_1
IC1	7.577	0.0011	0.005	0.001
IC2	7.557	0.0307	0.152	0.031
IC3	7.537	0.3315	1.685	0.340
IC4	7.521	0.8936	4.512	0.916
IC5	7.500	1.8681	9.167	1.915
IC6	7.470	3.7881	17.516	3.883
IC7	7.420	7.7471	32.517	7.941
IC8	7.347	15.6832	56.804	16.076
Average	7.491			
Rel. Std. Dev.	1.022 %			



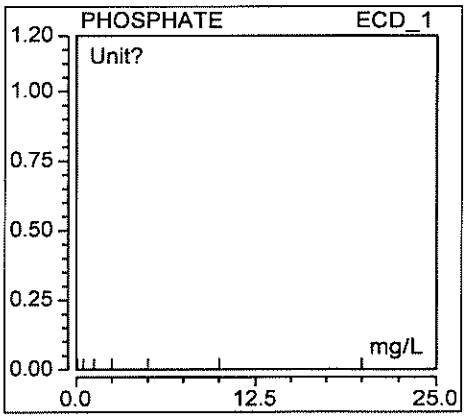
Injection Name **NITRITE**	Ret.Time min NITRITE	Area µS*min NITRITE	Height µS NITRITE	Amount mg/L NITRITE
	ECD_1	ECD_1	ECD_1	ECD_1
IC1	5.277	0.0081	0.032	0.018
IC2	4.990	0.0315	0.165	0.045



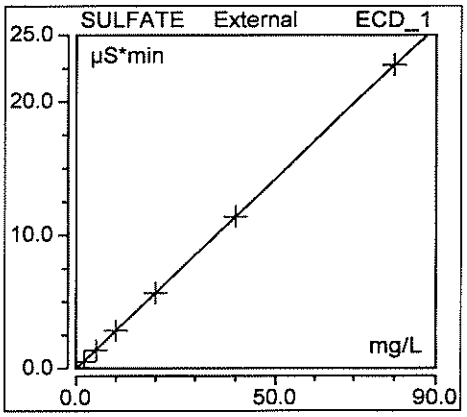
IC3	4.984	0.3130	1.968	0.374
IC4	4.984	0.8317	5.253	0.984
IC5	4.984	1.7014	10.467	2.021
IC6	4.990	3.3244	19.408	4.004
IC7	4.990	6.4268	34.736	7.994
IC8	4.990	12.0030	58.725	16.001
Average	5.024			
Rel. Std. Dev.	2.038 %			



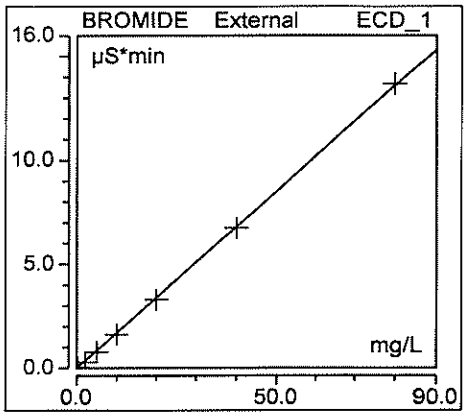
Injection Name **PHOSPHATE**	Ret.Time min PHOSPHATE	Area µS*min PHOSPHATE	Height µS PHOSPHATE	Amount mg/L PHOSPHATE
	ECD_1	ECD_1	ECD_1	ECD_1
IC1	n.a.	n.a.	n.a.	n.a.
IC2	n.a.	n.a.	n.a.	n.a.
IC3	n.a.	n.a.	n.a.	n.a.
IC4	n.a.	n.a.	n.a.	n.a.
IC5	n.a.	n.a.	n.a.	n.a.
IC6	n.a.	n.a.	n.a.	n.a.
IC7	n.a.	n.a.	n.a.	n.a.
IC8	n.a.	n.a.	n.a.	n.a.
Average	#DIV/0!			
Rel. Std. Dev.	#DIV/0!			



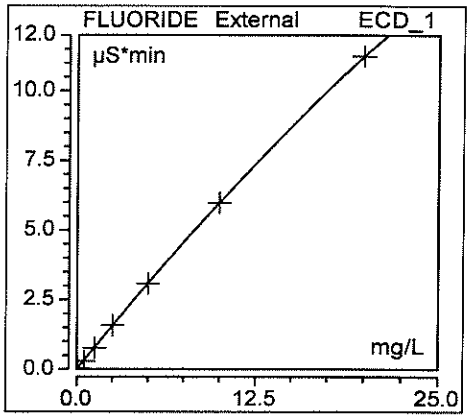
Injection Name **SULFATE**	Ret.Time min SULFATE	Area µS*min SULFATE	Height µS SULFATE	Amount mg/L SULFATE
	ECD_1	ECD_1	ECD_1	ECD_1
IC1	5.844	0.0009	0.004	0.003
IC2	5.834	0.0454	0.229	0.160
IC3	5.820	0.5026	2.833	1.768
IC4	5.817	1.3714	7.732	4.824
IC5	5.797	2.8380	15.881	9.983
IC6	5.777	5.6533	31.045	19.887
IC7	5.744	11.3826	59.540	40.040
IC8	5.687	22.7500	108.379	80.027
Average	5.790			
Rel. Std. Dev.	0.911 %			



Injection Name **BROMIDE**	Ret.Time min BROMIDE	Area µS*min BROMIDE	Height µS BROMIDE	Amount mg/L BROMIDE
	ECD_1	ECD_1	ECD_1	ECD_1
IC1	6.407	0.0004	0.001	0.002
IC2	6.560	0.0257	0.144	0.151
IC3	6.544	0.2814	1.655	1.655
IC4	6.537	0.7709	4.533	4.535
IC5	6.527	1.6186	9.363	9.521
IC6	6.514	3.2868	18.367	19.333
IC7	6.484	6.7353	35.656	39.616
IC8	6.433	13.6787	65.681	80.456
Average	6.501			
Rel. Std. Dev.	0.847 %			



Injection Name FLUORIDE	Ret.Time min FLUORIDE	Area µS*min FLUORIDE	Height µS FLUORIDE	Amount mg/L FLUORIDE
	ECD_1	ECD_1	ECD_1	ECD_1
IC1	3.524	0.0033	0.007	0.022
IC2	3.244	0.0233	0.162	0.053
IC3	3.240	0.2885	2.065	0.471
IC4	3.237	0.7656	5.555	1.228
IC5	3.244	1.5767	11.214	2.530
IC6	3.250	3.0811	21.013	5.001
IC7	3.254	5.9813	38.517	9.993
IC8	3.267	11.2370	67.145	20.001
Average	3.282			
Rel. Std. Dev.	2.982 %			



Anion Summary Report

No. CHLORIDE	Name CHLORIDE	Time min CHLORIDE ECD_1	Area µS*min CHLORIDE ECD_1	Rel.Area % CHLORIDE ECD_1	Height µS CHLORIDE ECD_1	Rel.Height % CHLORIDE ECD_1	Amount mg/L CHLORIDE ECD_1
1	IC1	4.310	0.0013	8.64	0.01	12.08	0.0033
2	IC2	4.290	0.0319	16.92	0.24	21.69	0.0818
3	IC3	4.280	0.3373	16.42	2.65	20.61	0.8653
4	IC4	4.277	0.9117	16.44	7.11	20.50	2.3392
5	IC5	4.277	1.8945	16.48	14.72	20.79	4.8610
6	IC6	4.280	3.7977	16.56	29.08	21.32	9.7441
7	IC7	4.274	7.7443	16.83	58.67	22.60	19.8700
8	IC8	4.273	15.6522	17.20	117.46	24.77	40.1598
	Sum:	34.262	30.371	125.488	229.932	164.342	77.924
	Average:	4.283	3.796	15.686	28.741	20.543	9.741
	Rel.Std.Dev:	0.287 %	143.802 %	18.229 %	142.552 %	17.997 %	143.802 %

No. NITRATE	Name NITRATE	Time min NITRATE ECD_1	Area µS*min NITRATE ECD_1	Rel.Area % NITRATE ECD_1	Height µS NITRATE ECD_1	Rel.Height % NITRATE ECD_1	Amount mg/L NITRATE ECD_1
1	IC1	7.577	0.0011	7.29	0.01	9.24	0.0011
2	IC2	7.557	0.0307	16.31	0.15	13.97	0.0315
3	IC3	7.537	0.3315	16.14	1.69	13.11	0.3398
4	IC4	7.521	0.8936	16.12	4.51	13.00	0.9160
5	IC5	7.500	1.8681	16.25	9.17	12.95	1.9149
6	IC6	7.470	3.7881	16.52	17.52	12.84	3.8830
7	IC7	7.420	7.7471	16.84	32.52	12.52	7.9412
8	IC8	7.347	15.6832	17.23	56.80	11.98	16.0761
	Sum:	59.929	30.344	122.694	122.358	99.612	31.104
	Average:	7.491	3.793	15.337	15.295	12.451	3.888
	Rel.Std.Dev:	1.022 %	144.282 %	21.338 %	131.385 %	11.350 %	144.282 %

No. NITRITE	Name NITRITE	Time min NITRITE ECD_1	Area µS*min NITRITE ECD_1	Rel.Area % NITRITE ECD_1	Height µS NITRITE ECD_1	Rel.Height % NITRITE ECD_1	Amount mg/L NITRITE ECD_1
1	IC1	5.277	0.0081	53.65	0.03	57.13	0.0176
2	IC2	4.990	0.0315	16.72	0.17	15.17	0.0449
3	IC3	4.984	0.3130	15.24	1.97	15.31	0.3737
4	IC4	4.984	0.8317	15.00	5.25	15.14	0.9839
5	IC5	4.984	1.7014	14.80	10.47	14.78	2.0208
6	IC6	4.990	3.3244	14.50	19.41	14.23	4.0043
7	IC7	4.990	6.4268	13.97	34.74	13.38	7.9935
8	IC8	4.990	12.0030	13.19	58.73	12.38	16.0012
	Sum:	40.189	24.640	157.051	130.754	157.526	31.440
	Average:	5.024	3.080	19.631	16.344	19.691	3.930
	Rel.Std.Dev:	2.038 %	136.774 %	70.208 %	127.418 %	77.003 %	141.871 %

No. PHOSPHATE	Name PHOSPHATE	Time min PHOSPHATE ECD_1	Area µS*min PHOSPHATE ECD_1	Rel.Area % PHOSPHATE ECD_1	Height µS PHOSPHATE ECD_1	Rel.Height % PHOSPHATE ECD_1	Amount mg/L PHOSPHATE ECD_1
1	IC1	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2	IC2	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

3	IC3	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
4	IC4	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5	IC5	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
6	IC6	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
7	IC7	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
8	IC8	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
	Sum:	0.000	0.000	0.000	0.000	0.000	0.000
	Average:	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
	Rel.Std.Dev:	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

No. SULFATE	Name SULFATE	Time min SULFATE ECD_1	Area µS*min SULFATE ECD_1	Rel.Area % SULFATE ECD_1	Height µS SULFATE ECD_1	Rel.Height % SULFATE ECD_1	Amount mg/L SULFATE ECD_1
1	IC1	5.844	0.0009	6.16	0.00	7.25	0.0033
2	IC2	5.834	0.0454	24.09	0.23	21.06	0.1596
3	IC3	5.820	0.5026	24.47	2.83	22.04	1.7679
4	IC4	5.817	1.3714	24.73	7.73	22.29	4.8243
5	IC5	5.797	2.8380	24.68	15.88	22.43	9.9833
6	IC6	5.777	5.6533	24.65	31.04	22.75	19.8866
7	IC7	5.744	11.3826	24.74	59.54	22.93	40.0405
8	IC8	5.687	22.7500	25.00	108.38	22.86	80.0271
	Sum:	46.319	44.544	178.521	225.643	163.599	156.693
	Average:	5.790	5.568	22.315	28.205	20.450	19.587
	Rel.Std.Dev:	0.911 %	142.591 %	29.274 %	135.408 %	26.248 %	142.591 %

No. BROMIDE	Name BROMIDE	Time min BROMIDE ECD_1	Area µS*min BROMIDE ECD_1	Rel.Area % BROMIDE ECD_1	Height µS BROMIDE ECD_1	Rel.Height % BROMIDE ECD_1	Amount mg/L BROMIDE ECD_1
1	IC1	6.407	0.0004	2.57	0.00	2.09	0.0023
2	IC2	6.560	0.0257	13.62	0.14	13.22	0.1509
3	IC3	6.544	0.2814	13.70	1.65	12.87	1.6554
4	IC4	6.537	0.7709	13.90	4.53	13.07	4.5345
5	IC5	6.527	1.6186	14.08	9.36	13.22	9.5207
6	IC6	6.514	3.2868	14.33	18.37	13.46	19.3328
7	IC7	6.484	6.7353	14.64	35.66	13.73	39.6161
8	IC8	6.433	13.6787	15.03	65.68	13.85	80.4565
	Sum:	52.006	26.398	101.871	135.400	95.522	155.269
	Average:	6.501	3.300	12.734	16.925	11.940	19.409
	Rel.Std.Dev:	0.847 %	144.644 %	32.456 %	136.608 %	33.434 %	144.644 %

No. FLUORIDE	Name FLUORIDE	Time min FLUORIDE ECD_1	Area µS*min FLUORIDE ECD_1	Rel.Area % FLUORIDE ECD_1	Height µS FLUORIDE ECD_1	Rel.Height % FLUORIDE ECD_1	Amount mg/L FLUORIDE ECD_1
1	IC1	3.524	0.0033	21.68	0.01	12.21	0.0218
2	IC2	3.244	0.0233	12.35	0.16	14.89	0.0532
3	IC3	3.240	0.2885	14.04	2.06	16.06	0.4710
4	IC4	3.237	0.7656	13.81	5.55	16.01	1.2278
5	IC5	3.244	1.5767	13.71	11.21	15.84	2.5301
6	IC6	3.250	3.0811	13.44	21.01	15.40	5.0014
7	IC7	3.254	5.9813	13.00	38.52	14.84	9.9933
8	IC8	3.267	11.2370	12.35	67.15	14.16	20.0014
	Sum:	26.259	22.957	114.375	145.677	119.399	39.300
	Average:	3.282	2.870	14.297	18.210	14.925	4.913
	Rel.Std.Dev:	2.982 %	137.399 %	21.345 %	130.315 %	8.595 %	141.871 %

WET CHEMISTRY BATCH REPORT - TOC
Dec 04 2023, 11:13 am
Batch: WG346357 Run ID 1: R628542 Run ID 2: NONE

Parameter: Total Organic Carbon
Prep Date: N/A

Date Analyzed: 01-DEC-23
Prep Method: N/A

Analyst Initials: CJB
Prep Chemist: N/A

Sample	Samp Type	Method	Initial Amt.	Final Amt.	Rpt. DF	Result	Rpt Result	TS(%)	PQL	MDL	Adj PQL	RPD	%Rec
SQ5971-9	SAMP	SM5310B	20mL	20mL	20	983.66912	980 mg/L	NA	1	7.0	20.		
SQ6086-1	SAMP	SM5310B	20mL	20mL	1	2.88131	2.9 mg/L	NA	1	0.35	1.0		
SQ6108-1	SAMP	SM5310B	20mL	20mL	1	5.13679	5.1 mg/L	NA	1	0.37	1.0		
SQ6108-2	SAMP	SM5310B	20mL	20mL	1	54.29437	54 mg/L	NA	1	0.37	1.0		
SQ6108-4	SAMP	SM5310B	20mL	20mL	1	11.24677	11 mg/L	NA	1	0.37	1.0		
SQ6108-5	SAMP	SM5310B	20mL	20mL	1	34.15789	34 mg/L	NA	1	0.37	1.0		
SQ6108-7	SAMP	SM5310B	20mL	20mL	1	6.50695	6.5 mg/L	NA	1	0.37	1.0		
SQ6108-8	SAMP	SM5310B	20mL	20mL	1	107.89797	110 mg/L	NA	1	0.37	1.0		
SQ6108-9	SAMP	SM5310B	20mL	20mL	1	34.61319	35 mg/L	NA	1	0.37	1.0		
SQ6108-10	SAMP	SM5310B	20mL	20mL	1	13.3491	13 mg/L	NA	1	0.37	1.0		
SQ6112-1	SAMP	SM5310B	20mL	20mL	1	2.0364	2.0 mg/L	NA	1	0.37	1.0		
SQ6112-2	SAMP	SM5310B	20mL	20mL	1	.78041	J0.78 mg/L	NA	1	0.37	1.0		
WG346357-1	MBLANK	SM5310B	20mL	20mL	1	0	U0.70 mg/L	NA	1	0.35	1.0		
WG346357-2	LCS	SM5310B	20mL	20mL	1	52.41112	52.4 mg/L	NA	1	0.350	1.00		105
WG346357-3	LCSD	SM5310B	20mL	20mL	1	52.10786	52.1 mg/L	NA	1	0.350	1.00	0	104
WG346357-4	DUP	SM5310B	20mL	20mL	1	2.99432	3.0 mg/L	NA	1	0.35	1.0	4	
WG346357-5	MS	SM5310B	20mL	20mL	1	53.82791	53.8 mg/L	NA	1	0.350	1.00		97
WG346357-6	MS	SM5310B	20mL	20mL	1	105.28055	105 mg/L	NA	1	0.350	1.00		102

Comments:

SQ6086-1	Anions E300 list= Cl & SO4.
SQ6108-5	MS/MSD on 8260&8270
SQ6112-1	Anions = NO3, SO4, Cl.
SQ6112-2	Anions = NO3, SO4, Cl.
WG346357-1	SQ5971-9
WG346357-2	SQ5971-9
WG346357-3	SQ5971-9
WG346357-4	SQ6086-1
WG346357-5	SQ6108-1
WG346357-6	SQ6108-2

Entered by: CJB Date: 12-4-23 Accepted by: RAM Date: 12/4/23

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KATAHDIN ANALYTICAL SERVICES, LLC
CARBON ANALYSIS RUN INFORMATION SHEET

INSTR. ID: analytikjena multi N/C **ANALYST:** CJB **DATE:** 12-01-23

FILE NAME: 120123 **METHOD(S):**

TOC	DOC	TIC
• EPA 415.1	• EPA 415.1	• EPA 415.1
• SM5310B	• SM5310B	• SM5310B
• SW9060	• SW9060	• SW9060

CALIBRATION DATE: 08/24/23 **CALIBRATION ANALYST:** CJB

Calibration standards were prepared by performing dilutions of the following standard on the day of calibration:

Calibration Source Standard ID	Prep Date	Expiration Date	Standard Conc. (mg/L)
W22102	08/24/23	11/24/23	1000

Note: Calibration must be performed quarterly or whenever a change in analysis conditions warrant. A copy of the associated calibration data is attached to this run.

STANDARDS USED:

Standard Name	Standard ID	Prep Date	Expiration Date	Standard Conc.
CCV #	W22343	11/16/23	2/16/24	1000 mg C/L
LCS	W22282	11/03/23	02/03/24	50 mg C/L
MS Stock Std. *	W22343	11/16/23	2/16/24	1000 mg C/L
Alkalinity Check	W22285	11/02/23	02/02/24	15 mg/L (Inorg. C)

CCV prepared by adding 4.0 mL of CCV Std. to 36 mL of DI.
* Matrix spikes are prepared by adding 2.0 mL of MS Stock Std. to 38 mL of sample.

Additional Comments and Notes:

SQ5971-9 was an aut of hold due to machine failures on previous runs. SQ5971-9 was ran with a dilution because it was extremely discolored and cloudy. -CJB 12/4/23

aj-Analyzer multi N/C 3100; multiWin 4.12; Serial No: N3-2320/AX

AnalysesTable

AnalysesTable: 120123

Sample ID	Time of analysis	Method	TC/NPOC/POC	Sample volume	Dilute
alk	12/1/2023 10:19:57	TOC_Method_101223	209.8µg/l ± 1.57%	500.0µl	1 in 1
CCV	12/1/2023 10:44:13	TOC_Method_101223	104.8mg/l ± 0.96%	105% 500.0µl	1 in 1
CCB	12/1/2023 10:59:25	TOC_Method_101223	0mg/l	500.0µl	1 in 1
LCS	12/1/2023 11:14:07	TOC_Method_101223	52.41mg/l ± 0.43%	105% 500.0µl	1 in 1
LCSD	12/1/2023 11:30:05	TOC_Method_101223	52.11mg/l ± 0.39%	104% 500.0µl	1 in 1
SQ6086-1	12/1/2023 11:46:00	TOC_Method_101223	2.88mg/l ± 0.33%	500.0µl	1 in 1
SQ6086-1DUP	12/1/2023 12:02:21 P	TOC_Method_101223	2.99mg/l ± 0.54%	500.0µl	1 in 1
SQ6108-1	12/1/2023 12:13:50 P	TOC_Method_101223	5.14mg/l ± 0.70%	500.0µl	1 in 1
SQ6108-1MS	12/1/2023 12:25:56 P	TOC_Method_101223	53.83mg/l ± 0.90%	500.0µl	1 in 1
SQ6108-2	12/1/2023 12:41:58 P	TOC_Method_101223	54.29mg/l ± 0.45%	500.0µl	1 in 1
SQ6108-2MS	12/1/2023 12:55:47 P	TOC_Method_101223	105.3mg/l ± 0.44%	500.0µl	1 in 1
SQ6108-4	12/1/2023 1:19:35 P	TOC_Method_101223	11.25mg/l ± 0.12%	500.0µl	1 in 1
SQ6108-5	12/1/2023 1:36:27 P	TOC_Method_101223	34.16mg/l ± 0.63%	500.0µl	1 in 1
CCV	12/1/2023 1:50:07 P	TOC_Method_101223	106.0mg/l ± 0.25%	106% 500.0µl	1 in 1
CCB	12/1/2023 2:06:08 P	TOC_Method_101223	0mg/l	500.0µl	1 in 1
SQ6108-7	12/1/2023 2:20:48 P	TOC_Method_101223	6.51mg/l ± 1.10%	500.0µl	1 in 1
SQ6108-8	12/1/2023 2:32:12 P	TOC_Method_101223	107.9mg/l ± 0.48%	500.0µl	1 in 1
SQ6108-9	12/1/2023 2:46:33 P	TOC_Method_101223	34.61mg/l ± 0.62%	500.0µl	1 in 1
SQ6108-10	12/1/2023 3:01:52 P	TOC_Method_101223	13.35mg/l ± 1.18%	500.0µl	1 in 1
SQ6112-1	12/1/2023 3:14:15 P	TOC_Method_101223	2.04mg/l ± 3.99%	500.0µl	1 in 1
SQ6112-2	12/1/2023 3:39:25 P	TOC_Method_101223	780.4µg/l ± 2.02%	500.0µl	1 in 1
SQ5971-9	12/1/2023 3:53:34 P	TOC_Method_101223	983.7mg/l ± 0.30%	500.0µl	1 in 20
CCV	12/1/2023 4:06:52 P	TOC_Method_101223	105.0mg/l ± 0.41%	105% 500.0µl	1 in 1
CCB	12/1/2023 4:22:53 P	TOC_Method_101223	0mg/l	500.0µl	1 in 1

AnalysisReport

Sample ID: alk

Time of analysis:	12/1/2023 10:19:57 AM -0500	**Method:**	TOC_Method_101223
Directory:	C:\ProgramData\IDC\multiWin\Analyses\2023\12		
File name:	231201101957.ajd		
User:	Admin	**Sample volume:**	500.0µl
Sample type:	Sample	**Dilution:**	1 in 1
Status:	Measurement completed successfully	**Determinations:**	2-3
		Furnace temperature:	800°C

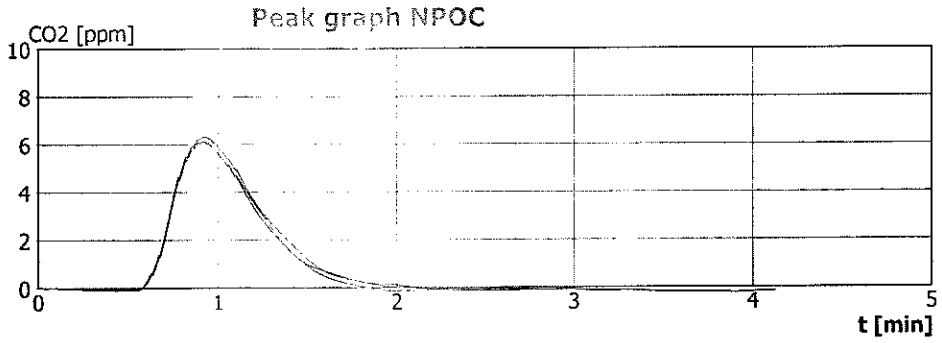
	c	I eff	SD	CV	k0	k1	k2	DF
NPOC	209.8µg/l	368.6AU B!	3.29µg/l	1.57%	-0.15993	7.184E-4	-	1

Blank values

NPOC	Diluent blank	0AU/ml

Single replicates:

	Rep.	1	2	3
NPOC	c [µg/l]	~~240.0~~	207.5	212.1
NPOC	I [AU]	~~389.7~~	367.0	370.3



AnalysisReport

Sample ID: CCV

Time of analysis:	12/1/2023 10:44:13 AM -0500	**Method:**	TOC_Method_101223
Directory:	C:\ProgramData\IDC\multiWin Analyses\2023\12		
File name:	231201104413.ajd		
User:	Admin	**Sample volume:**	500.0µl
Sample type:	Sample	**Dilution:**	1 in 1
Status:	Measurement completed successfully	**Determinations:**	2-3
		Furnace temperature:	800°C

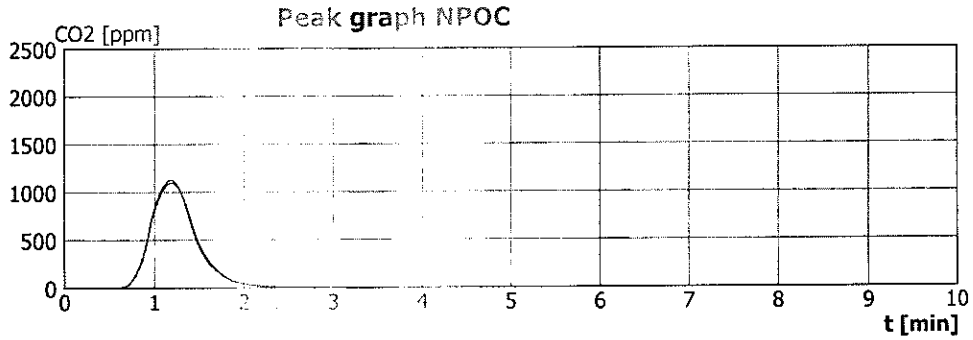
	c	I eff	SD	CV	k0	k1	k2	DF
NPOC	104.8mg/l	7.314E4AU	1.01mg/l	0.96%	-0.15993	7.184E-4	-	1

Blank values

NPOC	Diluent blank	0AU/ml

Single replicates:

	Rep.	1	2
NPOC	c [mg/l]	104.1	105.5
NPOC	I [AU]	7.265E4	7.364E4



AnalysisReport

Sample ID: CCB

Time of analysis: 12/1/2023 10:59:25 AM -0500
Directory: C:\ProgramData\IDC\multiWin\Analyses\2023\12
File name: 231201105925.ajd
User: Admin
Sample type: Sample
Status: Measurement completed successfully

Method: TOC_Method_101223
Sample volume: 500.0µl
Dilution: 1 in 1
Determinations: 2-3
Furnace temperature: 800°C

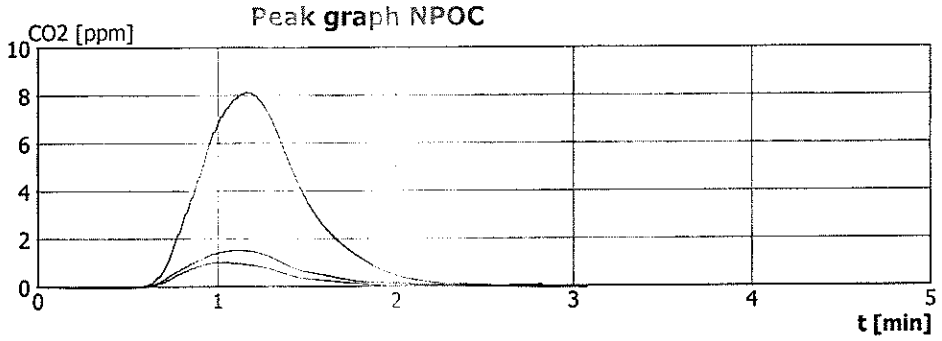
	c	I eff	SD	CV	k0	k1	k2	DF
NPOC	0mg/l	109.8AU B!			-0.15993	7.184E-4	-	1

Blank values

NPOC	Diluent blank	0AU/ml

Single replicates:

	Rep.	1	2	3
NPOC	c [mg/l]	~~0.572~~	0	0
NPOC	I [AU]	~~620.5~~	134.1	85.49



AnalysisReport

Sample ID:	LCS		
Time of analysis:	12/1/2023 11:14:07 AM -0500	**Method:**	TOC_Method_101223
Directory:	C:\ProgramData\IDC\multiWin\Analyses\2023\12		
File name:	231201111407.ajd		
User:	Admin	**Sample volume:**	500.0µl
Sample type:	Sample	**Dilution:**	1 in 1
Status:	Measurement completed successfully	**Determinations:**	2-3
		Furnace temperature:	800°C

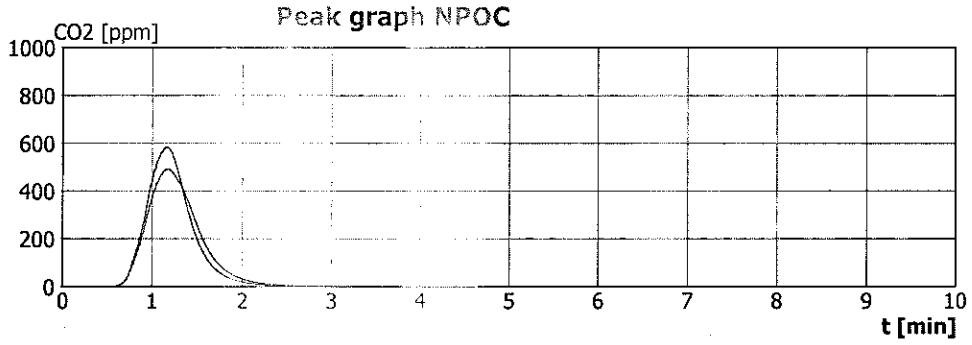
	c	I eff	SD	CV	k0	k1	k2	DF
NPOC	52.41mg/l	3.67E4AU	227.1µg/l	0.43%	-0.15993	7.184E-4	-	1

Blank values

NPOC	Diluent blank	0AU/ml

Single replicates:

	Rep.	1	2
NPOC	c [mg/l]	52.57	52.25
NPOC	I [AU]	3.681E4	3.659E4



AnalysisReport

Sample ID: LCSD

Time of analysis:	12/1/2023 11:30:05 AM -0500	**Method:**	TOC_Method_101223
Directory:	C:\ProgramData\IDC\multiWin\Analyses\2023\12		
File name:	231201113005.ajd		
User:	Admin	**Sample volume:**	500.0µl
Sample type:	Sample	**Dilution:**	1 in 1
Status:	Measurement completed successfully	**Determinations:**	2-3
		Furnace temperature:	800°C

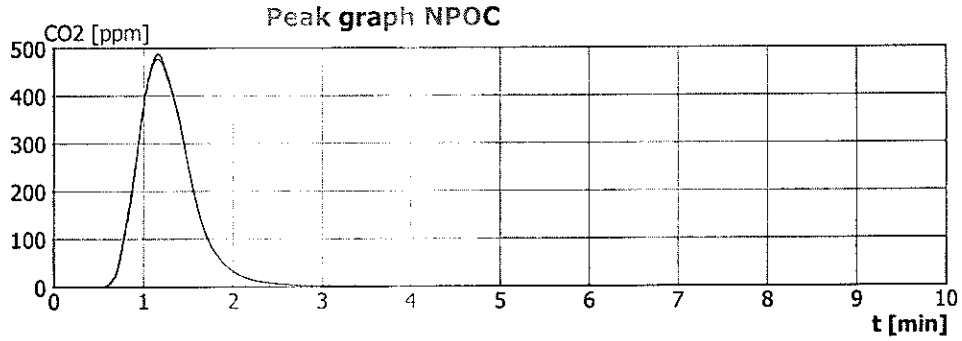
	c	I eff	SD	CV	k0	k1	k2	DF
NPOC	52.11mg/l	3.649E4AU	203.0µg/l	0.39%	-0.15993	7.184E-4	-	1

Blank values

NPOC	Diluent blank	0AU/ml

Single replicates:

	Rep.	1	2
NPOC	c [mg/l]	51.96	52.25
NPOC	I [AU]	3.639E4	3.659E4



AnalysisReport

Sample ID: SQ6086-1

Time of analysis:	12/1/2023 11:46:00 AM -0500	**Method:**	TOC_Method_101223
Directory:	C:\ProgramData\IDC\multiWin\Analyses\2023\12		
File name:	231201114600.ajd		
User:	Admin	**Sample volume:**	500.0µl
Sample type:	Sample	**Dilution:**	1 in 1
Status:	Measurement completed successfully	**Determinations:**	2-3
		Furnace temperature:	800°C

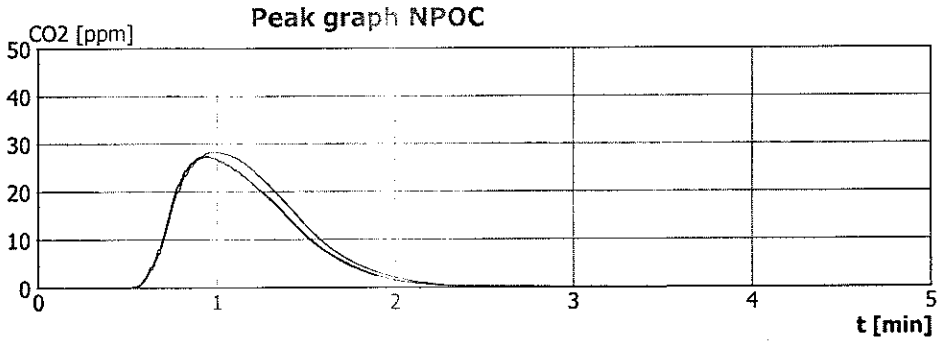
	c	I eff	SD	CV	k0	k1	k2	DF
NPOC	2.88mg/l	2.228AU	9.41µg/l	0.33%	-0.15993	7.184E-4	-	1

Blank values

NPOC	Diluent blank	0AU/ml

Single replicates:

	Rep.	1	2	3
NPOC	c [mg/l]	~~3.19~~	2.89	2.87
NPOC	I [AU]	~~2.441~~	2.233	2.223



AnalysisReport

Sample ID:	SQ6086-1DUP		
Time of analysis:	12/1/2023 12:02:21 PM -0500	**Method:**	TOC_Method_101223
Directory:	C:\ProgramData\IDC\multiWin\Analyses\2023\12		
File name:	231201120221.ajd		
User:	Admin	**Sample volume:**	500.0µl
Sample type:	Sample	**Dilution:**	1 in 1
Status:	Measurement completed successfully	**Determinations:**	2-3
		Furnace temperature:	800°C

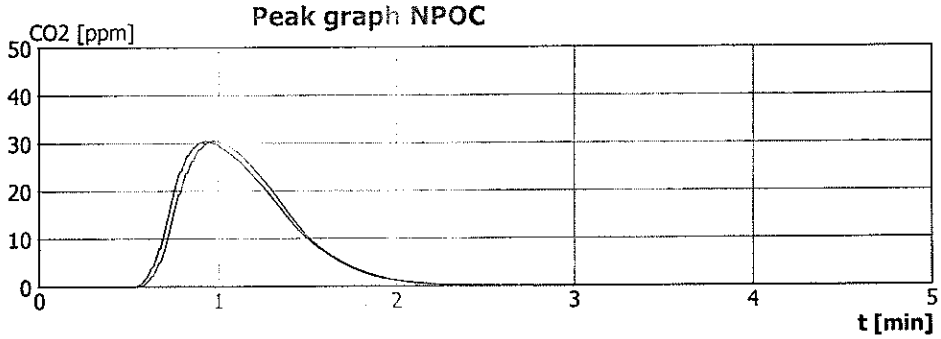
	c	I eff	SD	CV	k0	k1	k2	DF
NPOC	2.99mg/l	2,307AU	16.04µg/l	0.54%	-0.15993	7.184E-4	-	1

Blank values

NPOC	Diluent blank	0AU/ml

Single replicates:

	Rep.	1	2
NPOC	c [mg/l]	3.01	2.98
NPOC	I [AU]	2,315	2,299



AnalysisReport

Sample ID:	SQ6108-1		
Time of analysis:	12/1/2023 12:13:50 PM -0500	**Method:**	TOC_Method_101223
Directory:	C:\ProgramData\IDC\multiWin\Analyses\2023\12		
File name:	231201121350.ajd		
User:	Admin	**Sample volume:**	500.0µl
Sample type:	Sample	**Dilution:**	1 in 1
Status:	Measurement completed successfully	**Determinations:**	2-3
		Furnace temperature:	800°C

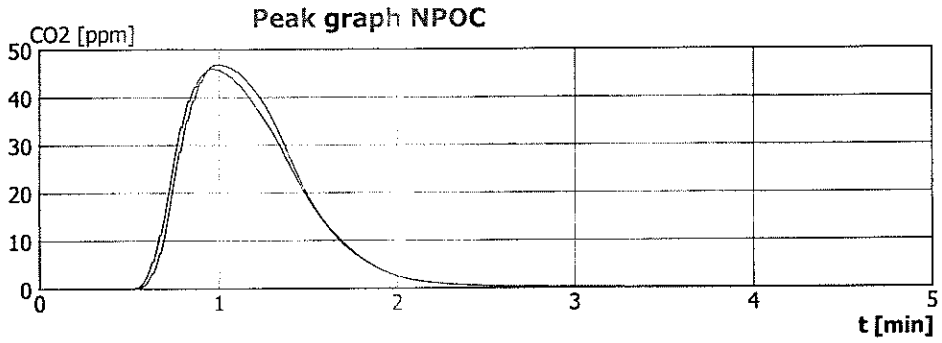
	c	I eff	SD	CV	k0	k1	k2	DF
NPOC	5.14mg/l	3,798AU	36.01µg/l	0.70%	-0.15993	7.184E-4	-	1

Blank values

NPOC	Diluent blank	0AU/ml

Single replicates:

	Rep.	1	2
NPOC	c [mg/l]	5.16	5.11
NPOC	I [AU]	3,816	3.780



AnalysisReport

Sample ID:	SQ6108-1MS		
Time of analysis:	12/1/2023 12:25:56 PM -0500	**Method:**	TOC_Method_101223
Directory:	C:\ProgramData\IDC\multiWin\Analyses\2023\12		
File name:	231201122556.ajd		
User:	Admin	**Sample volume:**	500.0µl
Sample type:	Sample	**Dilution:**	1 in 1
Status:	Measurement completed successfully	**Determinations:**	2-3
		Furnace temperature:	800°C

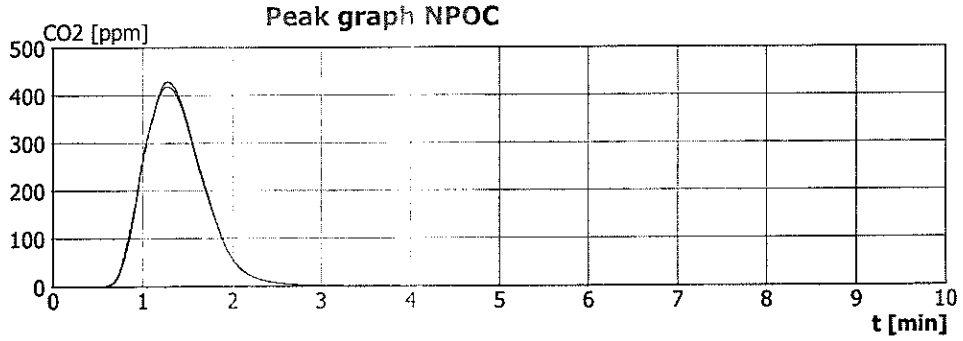
	c	I eff	SD	CV	k0	k1	k2	DF
NPOC	53.83mg/l	3.769E4AU	482.2µg/l	0.90%	-0.15993	7.184E-4	-	1

Blank values

NPOC	Diluent blank	0AU/ml

Single replicates:

	Rep.	1	2
NPOC	c [mg/l]	53.49	54.17
NPOC	I [AU]	3.745E4	3.792E4



AnalysisReport

Sample ID:	SQ6108-2		
Time of analysis:	12/1/2023 12:41:58 PM -0500	**Method:**	TOC_Method_101223
Directory:	C:\ProgramData\IDC\multiWin\Analyses\2023\12		
File name:	231201124158.ajd		
User:	Admin	**Sample volume:**	500.0µl
Sample type:	Sample	**Dilution:**	1 in 1
Status:	Measurement completed successfully	**Determinations:**	2-3
		Furnace temperature:	800°C

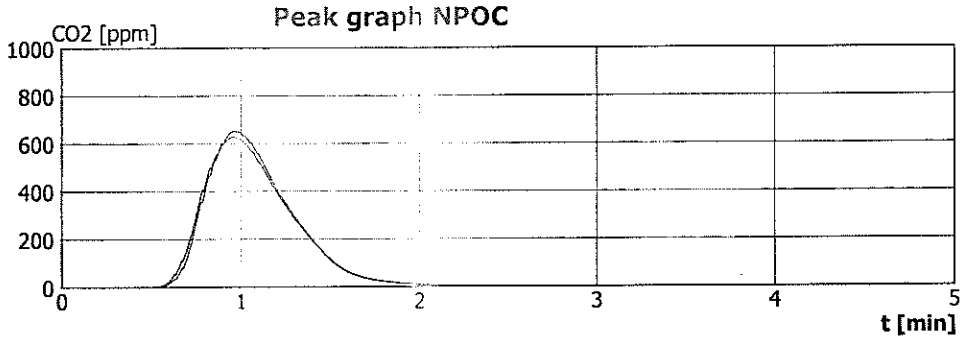
	c	I eff	SD	CV	k0	k1	k2	DF
NPOC	54.29mg/l	3.801E4AU	245.1µg/l	0.45%	-0.15993	7.184E-4	-	1

Blank values

NPOC	Diluent blank	0AU/ml

Single replicates:

	Rep.	1	2
NPOC	**c [mg/l]**	54.12	54.47
NPOC	**I [AU]**	3.789E4	3.813E4



AnalysisReport

Sample ID: SQ6108-2MS

Time of analysis:	12/1/2023 12:55:47 PM -0500	**Method:**	TOC_Method_101223
Directory:	C:\ProgramData\IDC\multiWin\Analyses\2023\12		
File name:	231201125547.ajd		
User:	Admin	**Sample volume:**	500.0µl
Sample type:	Sample	**Dilution:**	1 in 1
Status:	Measurement completed successfully	**Determinations:**	2-3
		Furnace temperature:	800°C

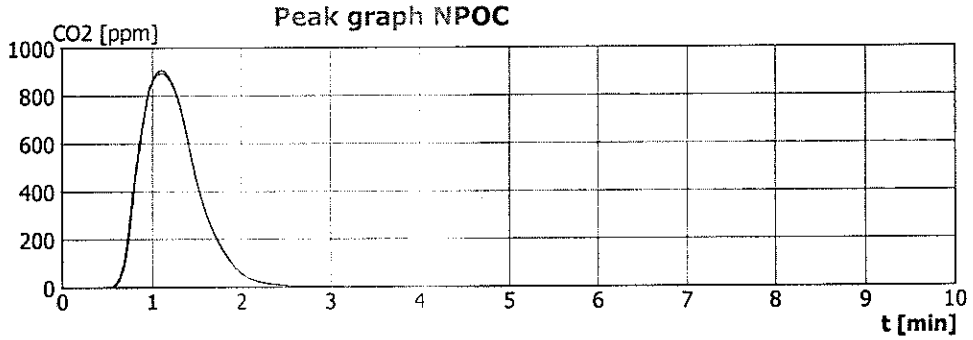
	c	I eff	SD	CV	k0	k1	k2	DF
NPOC	105.3mg/l	7.35E4AU	464.2µg/l	0.44%	-0.15993	7.184E-4	-	1

Blank values

NPOC	Diluent blank	0AU/ml

Single replicates:

	Rep.	1	2
NPOC	c [mg/l]	105.0	105.6
NPOC	I [AU]	7.327E4	7.373E4



AnalysisReport

Sample ID: SQ6108-4

Time of analysis: 12/1/2023 1:19:35 PM -0500
Directory: C:\ProgramData\IDC\multiWin\Analyses\2023\12
File name: 231201131935.ajd
User: Admin
Sample type: Sample
Status: Measurement completed successfully

Method: TOC_Method_101223
Sample volume: 500.0µl
Dilution: 1 in 1
Determinations: 2-3
Furnace temperature: 800°C

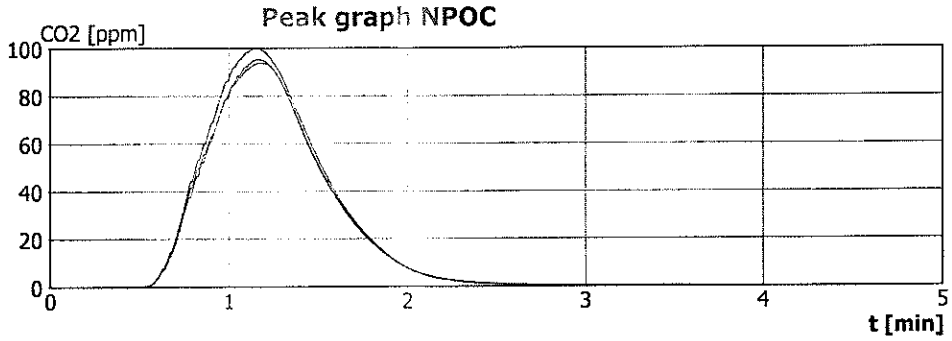
	c	I eff	SD	CV	k0	k1	k2	DF
NPOC	11.25mg/l	8,050AU	13.43µg/l	0.12%	-0.15993	7.184E-4	-	1

Blank values

NPOC	Diluent blank	0AU/ml

Single replicates:

Rep.		1	2	3
NPOC	c [mg/l]	~~11.90~~	11.26	11.24
NPOC	I [AU]	~~8,505~~	8,057	8,044



AnalysisReport

Sample ID: SQ6108-5

Time of analysis: 12/1/2023 1:36:27 PM -0500
Directory: C:\ProgramData\IDC\multiWin\Analyses\2023\12
File name: 231201133627.ajd
User: Admin
Sample type: Sample
Status: Measurement completed successfully

Method: TOC_Method_101223
Sample volume: 500.0µl
Dilution: 1 in 1
Determinations: 2-3
Furnace temperature: 800°C

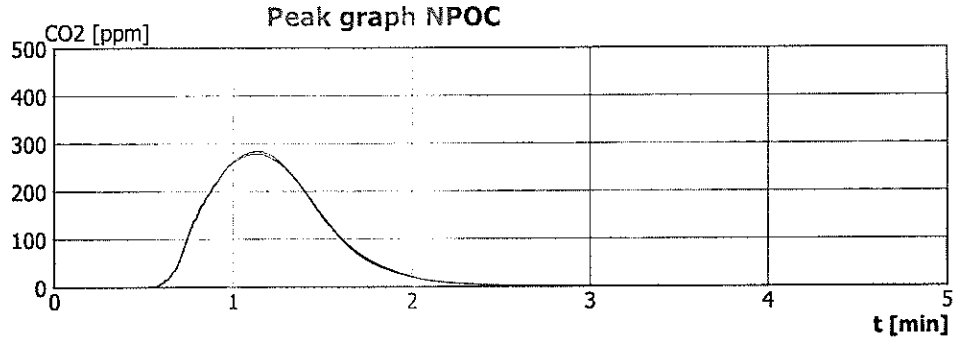
	c	I eff	SD	CV	k0	k1	k2	DF
NPOC	34.16mg/l	2.4E4AU	215.7µg/l	0.63%	-0.15993	7.184E-4	-	1

Blank values

NPOC	Diluent blank	0AU/ml

Single replicates:

	Rep.	1	2
NPOC	c [mg/l]	34.01	34.31
NPOC	I [AU]	2.389E4	2.41E4



AnalysisReport

Sample ID: CCV

Time of analysis:	12/1/2023 1:50:07 PM -0500	**Method:**	TOC_Method_101223
Directory:	C:\ProgramData\IDC\multiWin\Analyses\2023\12		
File name:	231201135007.ajd		
User:	Admin	**Sample volume:**	500.0µl
Sample type:	Sample	**Dilution:**	1 in 1
Status:	Measurement completed successfully	**Determinations:**	2-3
		Furnace temperature:	800°C

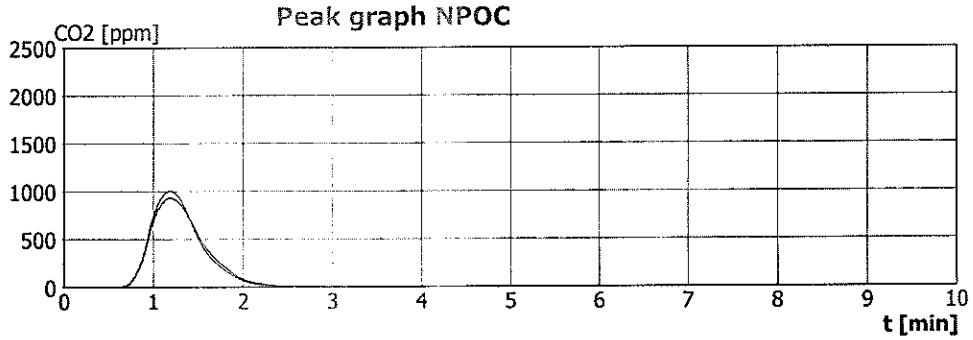
	c	I eff	SD	CV	k0	k1	k2	DF
NPOC	106.0mg/l	7.397E4AU	263.3µg/l	0.25%	-0.15993	7.184E-4	-	1

Blank values

NPOC	Diluent blank	0AU/ml

Single replicates:

	Rep.	1	2
NPOC	c [mg/l]	105.8	106.1
NPOC	I [AU]	7.384E4	7.41E4



aj-Analyzer multi N/C 3100; multiWin 4.12; Serial No: N3-2320/AX

AnalysisReport

Sample ID: CCB

Time of analysis: 12/1/2023 2:06:08 PM -0500
Directory: C:\ProgramData\IDC\multiWin\Analyses\2023\12
File name: 231201140608.ajd
User: Admin
Sample type: Sample
Status: Measurement completed successfully

Method: TOC_Method_101223
Sample volume: 500.0µl
Dilution: 1 in 1
Determinations: 2-3
Furnace temperature: 800°C

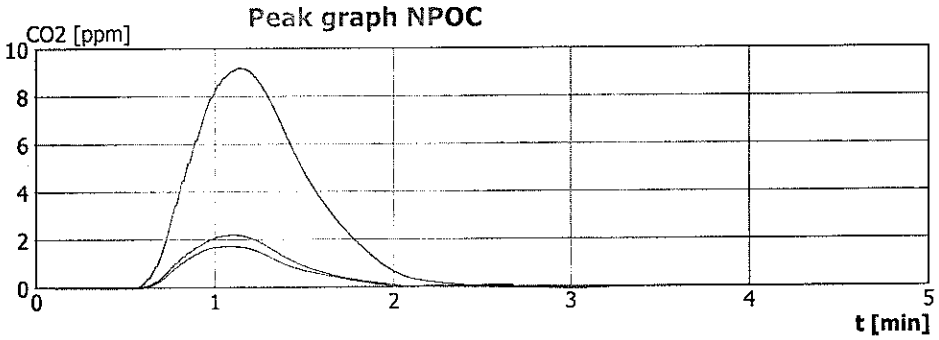
	c	I eff	SD	CV	k0	k1	k2	DF
NPOC	0mg/l	159.9AU B!			-0.15993	7.184E-4	-	1

Blank values

NPOC	Diluent blank	0AU/ml

Single replicates:

	Rep.	1	2	3
NPOC	c [mg/l]	~~0.794~~	0	0
NPOC	I [AU]	~~775.3~~	176.1	143.8



AnalysisReport

Sample ID: SQ6108-7

Time of analysis:	12/1/2023 2:20:48 PM -0500	**Method:**	TOC_Method_101223
Directory:	C:\ProgramData\IDC\multiWin\Analyses\2023\12		
File name:	231201142048.ajd		
User:	Admin	**Sample volume:**	500.0µl
Sample type:	Sample	**Dilution:**	1 in 1
Status:	Measurement completed successfully	**Determinations:**	2-3
		Furnace temperature:	800°C

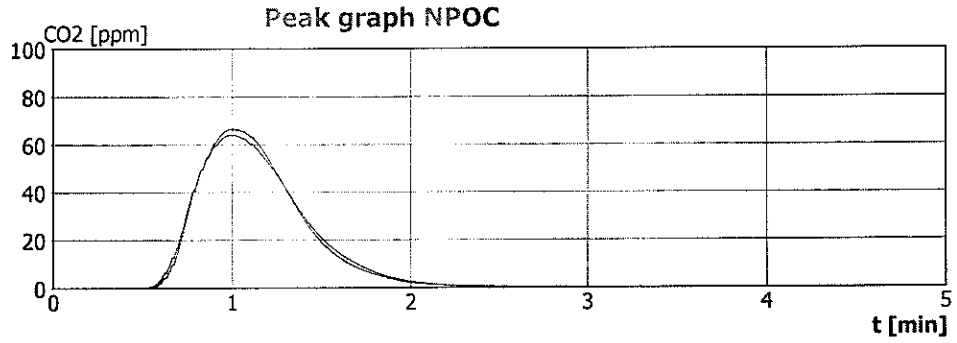
	c	I eff	SD	CV	k0	k1	k2	DF
NPOC	6.51mg/l	4,751AU	71.36µg/l	1.10%	-0.15993	7.184E-4	-	1

Blank values

NPOC	Diluent blank	0AU/ml

Single replicates:

	Rep.	1	2
NPOC	c [mg/l]	6.46	6.56
NPOC	I [AU]	4,716	4,787



AnalysisReport

Sample ID:	SQ6108-8		
Time of analysis:	12/1/2023 2:32:12 PM -0500	**Method:**	TOC_Method_101223
Directory:	C:\ProgramData\IDC\multiWin\Analyses\2023\12		
File name:	231201143212.ajd		
User:	Admin	**Sample volume:**	500.0µl
Sample type:	Sample	**Dilution:**	1 in 1
Status:	Measurement completed successfully	**Determinations:**	2-3
		Furnace temperature:	800°C

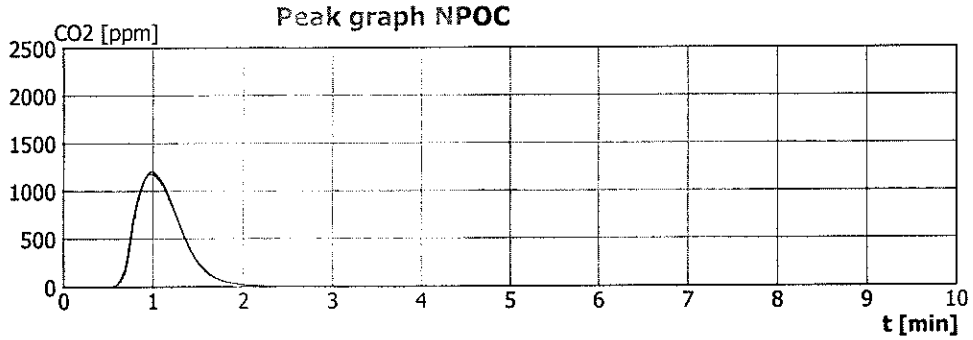
	c	I eff	SD	CV	k0	k1	k2	DF
NPOC	107.9mg/l	7.532E4AU	521.9µg/l	0.48%	-0.15993	7.184E-4	-	1

Blank values

NPOC	Diluent blank	0AU/ml

Single replicates:

	Rep.	1	2
NPOC	c [mg/l]	108.3	107.5
NPOC	I [AU]	7.558E4	7.506E4



AnalysisReport

Sample ID: SQ6108-9

Time of analysis:	12/1/2023 2:46:33 PM -0500	**Method:**	TOC_Method_101223
Directory:	C:\ProgramData\IDC\multiWin\Analyses\2023\12		
File name:	231201144633.ajd		
User:	Admin	**Sample volume:**	500.0µl
Sample type:	Sample	**Dilution:**	1 in 1
Status:	Measurement completed successfully	**Determinations:**	2-3
		Furnace temperature:	800°C

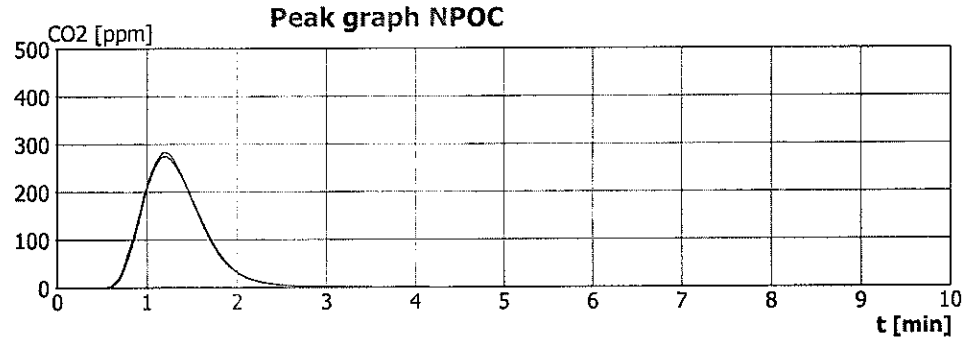
	c	I eff	SD	CV	k0	k1	k2	DF
NPOC	34.61mg/l	2.431E4AU	214.7µg/l	0.62%	-0.15993	7.184E-4	-	1

Blank values

NPOC	Diluent blank	0AU/ml

Single replicates:

	Rep.	1	2
NPOC	c [mg/l]	34.77	34.46
NPOC	I [AU]	2.442E4	2.421E4



AnalysisReport

Sample ID: SQ6108-10

Time of analysis:	12/1/2023 3:01:52 PM -0500	**Method:**	TOC_Method_101223
Directory:	C:\ProgramData\IDC\multiWin\Analyses\2023\12		
File name:	231201150152.ajd		
User:	Admin	**Sample volume:**	500.0µl
Sample type:	Sample	**Dilution:**	1 in 1
Status:	Measurement completed successfully	**Determinations:**	2-3
		Furnace temperature:	800°C

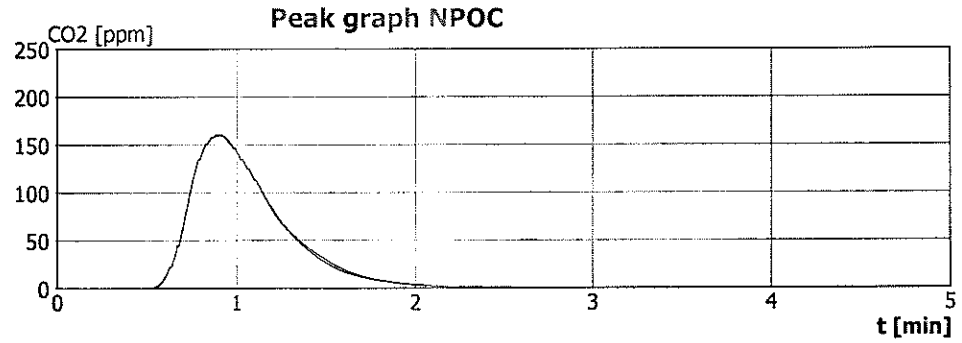
	c	I eff	SD	CV	k0	k1	k2	DF
NPOC	13.35mg/l	9,514AU	158.1µg/l	1.18%	-0.15993	7.184E-4	-	1

Blank values

NPOC	Diluent blank	0AU/ml

Single replicates:

	Rep.	1	2
NPOC	c [mg/l]	13.46	13.24
NPOC	I [AU]	9,591	9,436



AnalysisReport

Sample ID:	SQ6112-1		
Time of analysis:	12/1/2023 3:14:15 PM -0500	**Method:**	TOC_Method_101223
Directory:	C:\ProgramData\IDC\multiWin\Analyses\2023\12		
File name:	231201151415.ajd		
User:	Admin	**Sample volume:**	500.0µl
Sample type:	Sample	**Dilution:**	1 in 1
Status:	Measurement completed successfully	**Determinations:**	2-3
		Furnace temperature:	800°C

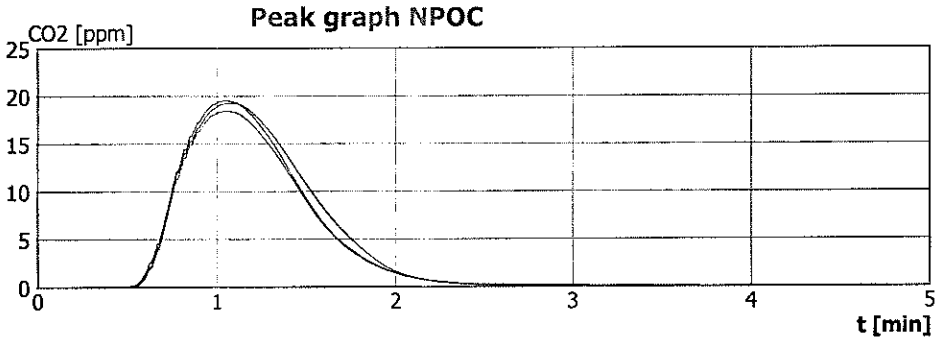
	c	I eff	SD	CV	k0	k1	k2	DF
NPOC	2.04mg/l	1,640AU	81.22µg/l SD!	3.99% CV!	-0.15993	7.184E-4	-	1

Blank values

NPOC	Diluent blank	0AU/ml

Single replicates:

	Rep.	1	2	3
NPOC	c [mg/l]	2.09	~~2.27~~	1.98
NPOC	I [AU]	1,680	~~1,801~~	1,600



AnalysisReport

Sample ID: SQ6112-2

Time of analysis:	12/1/2023 3:39:25 PM -0500	**Method:**	TOC_Method_101223
Directory:	C:\ProgramData\IDC\multiWin\Analyses\2023\12		
File name:	231201153925.ajd		
User:	Admin	**Sample volume:**	500.0µl
Sample type:	Sample	**Dilution:**	1 in 1
Status:	Measurement completed successfully	**Determinations:**	2-3
		Furnace temperature:	800°C

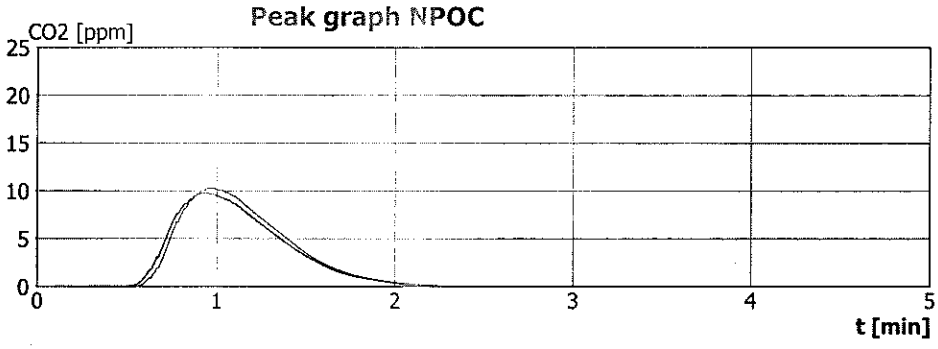
	c	I eff	SD	CV	k0	k1	k2	DF
NPOC	780.4µg/l	765.8AU B!	15.80µg/l	2.02%	-0.15993	7.184E-4	-	1

Blank values

NPOC	Diluent blank	0AU/ml

Single replicates:

	Rep.	1	2	3
NPOC	c [µg/l]	791.6	~~742.0~~	769.2
NPOC	I [AU]	773.6	~~739.1~~	758.0



aj-Analyzer multi N/C 3100; multiWin 4.12; Serial No: N3-2320/AX

AnalysisReport

Sample ID:	SQ5971-9		
Time of analysis:	12/1/2023 3:53:34 PM -0500	**Method:**	TOC_Method_101223
Directory:	C:\ProgramData\IDC\multiWin\Analyses\2023\12		
File name:	231201155334.ajd		
User:	Admin	**Sample volume:**	500.0µl
Sample type:	Sample	**Dilution:**	1 in 20
Status:	Measurement completed successfully	**Determinations:**	2-3
		Furnace temperature:	800°C

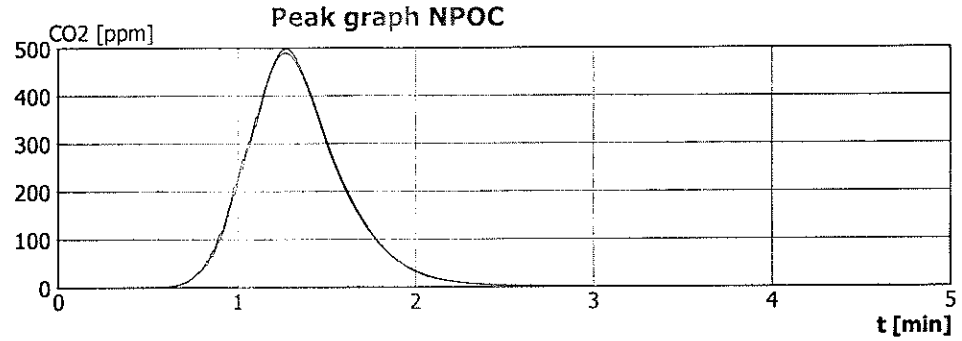
	c	I eff	SD	CV	k0	k1	k2	DF
NPOC	983.7mg/l	3.445E4AU	2.97mg/l	0.30%	-0.15993	7.184E-4	-	1

Blank values

NPOC	Diluent blank	0AU/ml

Single replicates:

	Rep.	1	2
NPOC	c [mg/l]	981.6	985.8
NPOC	I [AU]	3.438E4	3.453E4



AnalysisReport

Sample ID: CCV

Time of analysis:	12/1/2023 4:06:52 PM -0500	**Method:**	TOC_Method_101223
Directory:	C:\ProgramData\IDC\multiWin\Analyses\2023\12		
File name:	231201160652.ajd		
User:	Admin	**Sample volume:**	500.0µl
Sample type:	Sample	**Dilution:**	1 in 1
Status:	Measurement completed successfully	**Determinations:**	2-3
		Furnace temperature:	800°C

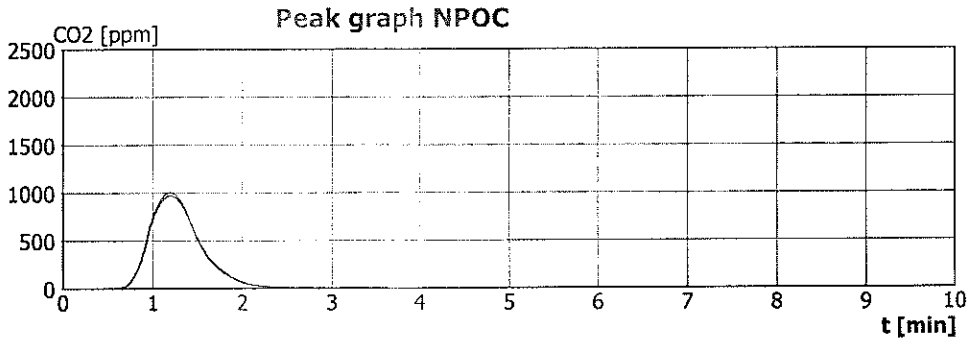
	c	I eff	SD	CV	k0	k1	k2	DF
NPOC	105.0mg/l	7.327E4AU	425.6µg/l	0.41%	-0.15993	7.184E-4	-	1

Blank values

NPOC	Diluent blank	0AU/ml

Single replicates:

	Rep.	1	2
NPOC	c [mg/l]	104.7	105.3
NPOC	I [AU]	7.306E4	7.348E4



AnalysisReport

Sample ID: CCB

Time of analysis:	12/1/2023 4:22:53 PM -0500	**Method:**	TOC_Method_101223
Directory:	C:\ProgramData\IDC\multiWin\Analyses\2023\12		
File name:	231201162253.ajd		
User:	Admin	**Sample volume:**	500.0µl
Sample type:	Sample	**Dilution:**	1 in 1
Status:	Measurement completed successfully	**Determinations:**	2-3
		Furnace temperature:	800°C

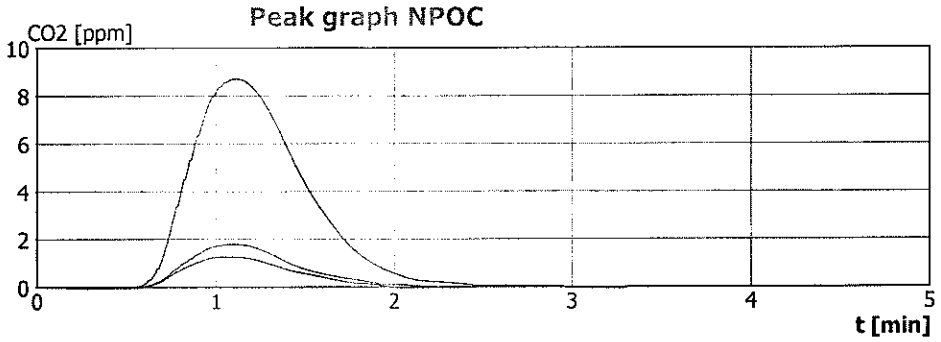
	c	I eff	SD	CV	k0	k1	k2	DF
NPOC	0mg/l	129.6AU B!			-0.15993	7.184E-4	-	1

Blank values

NPOC	Diluent blank	0AU/ml

Single replicates:

	Rep.	1	2	3
NPOC	c [mg/l]	~~0.716~~	0	0
NPOC	I [AU]	~~720.6~~	143.7	115.5



aj-Analyzer multi N/C 3100; multiWin 4.12; Serial No: N3-2320/AX

CalibrationReport

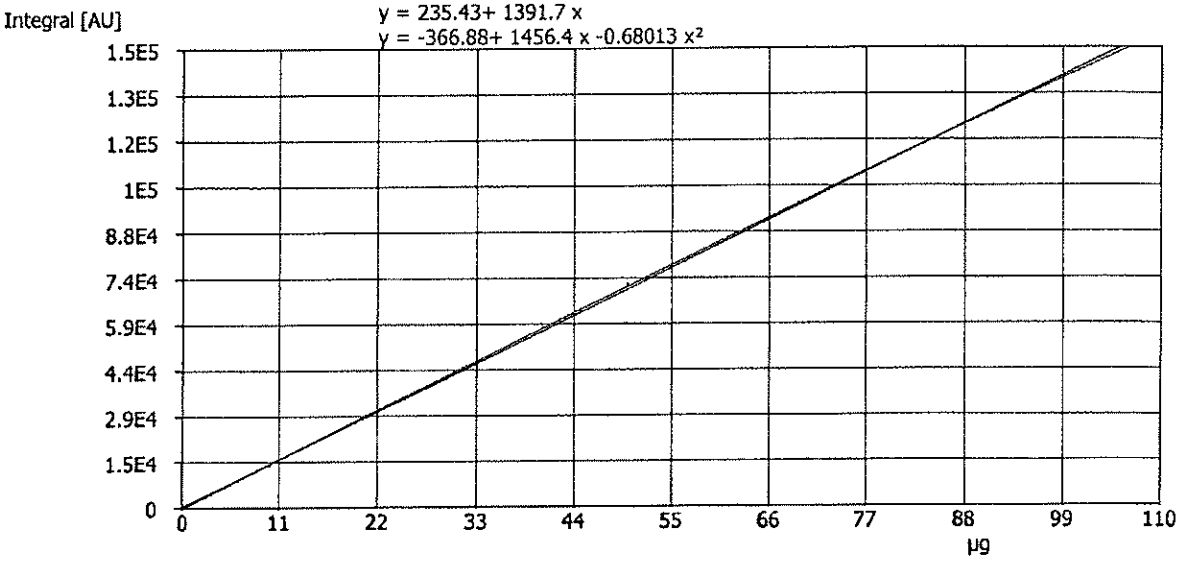
Calibration: Cal_NPOC_Test_8MAY2023_230824_1145
Calibration of: 8/24/2023 11:45:49 AM -0400 **Method:** NPOC_Test_8MAY2023
Directory: C:\ProgramData\IDC\multiWin\Calibration\2023\08
File name: 230824114549.ajc

User: Admin
Calibration channel: **NPOC**
Linear regression [µg]: c = (k1·leff + k0) / V
k0 = -0.15993 k1 = 7.184E-4

Residual standard deviation: 922.84AU
Method standard deviation: 1.33mg/l
Method variation coefficient: 1.765% **Detection limit:** 2.13mg/l
Quality of replicates: 0.99976 **Identification limit:** 4.25mg/l
Correlation coefficient: 0.99988 **Quantification limit:** 7.98mg/l

Calibration with fixed sample volume: 500.0µl

No.	Rep.	c-nom.	m-Nominal	I-Net	c-act.	c-delta
BV	3-3			491.4AU/ml		
1	3-3	1.000mg/l	0.500µg	814.0AU	0.850mg/l	-15.03%
2	3-3	5.000mg/l	2.50µg	3,299AU	4.420mg/l	-11.61%
3	3-3	20.000mg/l	10.00µg	1.379E4AU	19.499mg/l	-2.50%
4	3-3	50.000mg/l	25.00µg	3.493E4AU	49.868mg/l	-0.26%
5	3-3	100.000mg/l	50.00µg	7.154E4AU	102.480mg/l	2.48%
6	3-3	150.000mg/l	75.00µg	1.048E5AU	150.290mg/l	0.19%
7	3-3	200.000mg/l	100.0µg	1.384E5AU	198.600mg/l	-0.70%



CalibrationReport

Calibration: Cal_NPOC_Test_8MAY2023_230824_1145
Calibration of: 8/24/2023 11:45:49 AM -0400 **Method:** NPOC_Test_8MAY2023
Directory: C:\ProgramData\IDC\multiWin\Calibration\2023\08
File name: 230824114549.ajc

User: Admin
Calibration channel: NPOC
Linear regression [µg]: c = (k1·Ieff + k0) / V
k0 = -0.15993 k1 = 7.184E-4
Residual standard deviation: 922.84AU
Method standard deviation: 1.33mg/l
Method variation coefficient: 1.765% **Detection limit:** 2.13mg/l
Quality of replicates: 0.99976 **Identification limit:** 4.25mg/l
Correlation coefficient: 0.99988 **Quantification limit:** 7.98mg/l

Replicate area units

No.	Avg.	1	2	3	4	5
		6	7	8	9	10
H2O	245.7	277.8	242.2	217.2		
1	814.0	819.1	818.6	804.3		
2	3,299	3,257	3,351	3,288		
3	1.379E4	1.364E4	1.392E4	1.382E4		
4	3.493E4	3.459E4	3.519E4	3.501E4		
5	7.154E4	7.104E4	7.192E4	7.167E4		
6	1.048E5	1.047E5	1.053E5	1.045E5		
7	1.384E5	1.373E5	1.395E5	1.386E5		

aj-Analyzer multi N/C 3100; multiWin 4.12; Serial No: N3-2320/AX

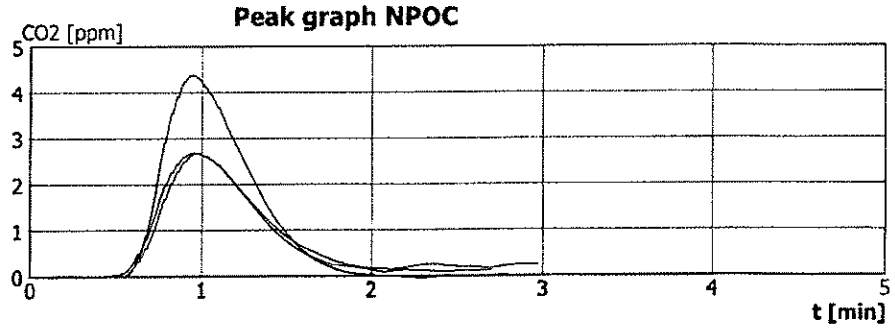
AnalysisReport

Sample ID:	Cal_NPOC_Test_8MAY2023_230824_1145_Konz00		
Time of analysis:	8/24/2023 12:03:41 PM -0400	**Method:**	NPOC_Test_8MAY20
Directory:	C:\ProgramData\JDC\multiWin\Analyses\2023\08		
File name:	230824120341.ajd		
User:	Admin	**Sample volume:**	500.0µl
Sample type:	Determination Preparation blank	**Dilution:**	1 in 1
Status:	Measurement completed successfully	**Determinations:**	3-3
		Furnace temperature:	800°C

	c	I eff	SD	CV
NPOC		245.7AU		

Single replicates:

	Rep.	1	2	3
NPOC	I [AU]	277.8	242.2	217.2



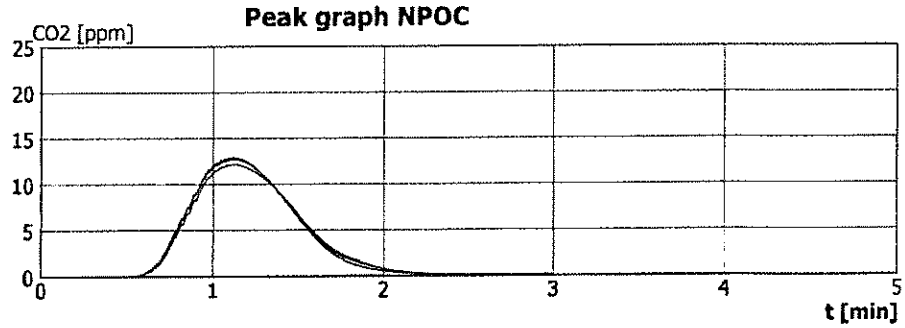
AnalysisReport

Sample ID:	Cal_NPOC_Test_8MAY2023_230824_1145_Konz01		
Time of analysis:	8/24/2023 12:24:21 PM -0400	**Method:**	NPOC_Test_8MAY20
Directory:	C:\ProgramData\IDC\multiWin\Analyses\2023\08		
File name:	230824122421.ajd		
User:	Admin	**Sample volume:**	500.0µl
Sample type:	Calibration measurement	**Dilution:**	1 in 1
Status:	Measurement completed successfully	**Determinations:**	3-3
		Furnace temperature:	800°C

	c	I eff	SD	CV
NPOC		1,060AU		

Single replicates:

	Rep.	1	2	3
NPOC	I [AU]	1,065	1,064	1,050



aj-Analyzer multi N/C 3100; multiWin 4.12; Serial No: N3-2320/AX

AnalysisReport

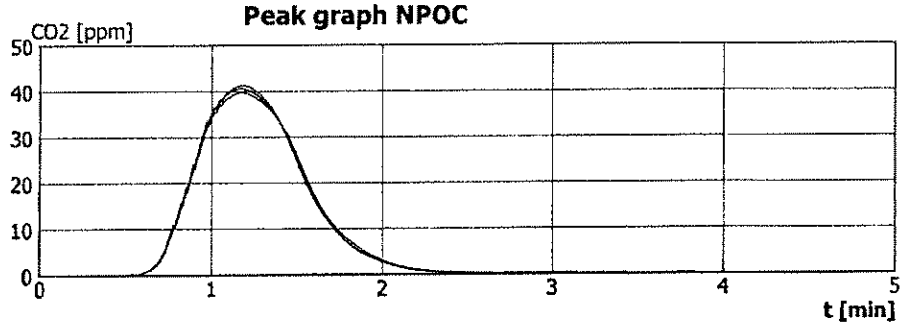
Sample ID:	Cal_NPOC_Test_8MAY2023_230824_1145_Konz02		
Time of analysis:	8/24/2023 12:39:12 PM -0400	**Method:**	NPOC_Test_8MAY20
Directory:	C:\ProgramData\IDC\multiWin\Analyses\2023\08		
File name:	230824123912.ajd		
User:	Admin	**Sample volume:**	500.0µl
Sample type:	Calibration measurement	**Dilution:**	1 in 1
Status:	Measurement completed successfully	**Determinations:**	3-3
		Furnace temperature:	800°C

	c	I eff	SD	CV
NPOC		3,544AU		

Single replicates:

	Rep.	1	2	3
NPOC	I [AU]	3,502	3,597	3,534

Peak graph NPOC



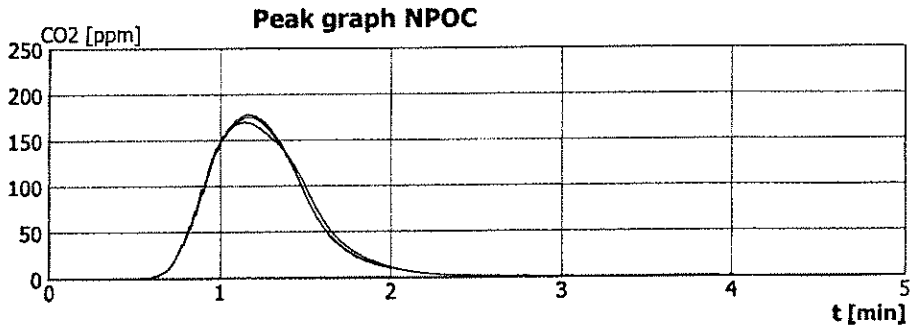
AnalysisReport

Sample ID:	Cal_NPOC_Test_8MAY2023_230824_1145_Konz03		
Time of analysis:	8/24/2023 12:55:21 PM -0400	**Method:**	NPOC_Test_8MAY20
Directory:	C:\ProgramData\IDC\multiWin\Analyses\2023\08		
File name:	230824125521.ajd		
User:	Admin	**Sample volume:**	500.0µl
Sample type:	Calibration measurement	**Dilution:**	1 in 1
Status:	Measurement completed successfully	**Determinations:**	3-3
		Furnace temperature:	800°C

	c	I eff	SD	CV
NPOC		1.404E4AU		

Single replicates:

	Rep.	1	2	3
NPOC	I [AU]	1.389E4	1.417E4	1.407E4



AnalysisReport

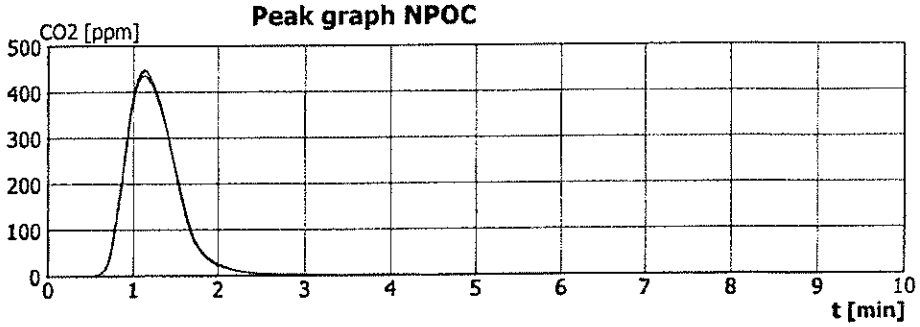
Sample ID:	Cal_NPOC_Test_8MAY2023_230824_1145_Konz04		
Time of analysis:	8/24/2023 1:13:55 PM -0400	**Method:**	NPOC_Test_8MAY20
Directory:	C:\ProgramData\IDC\multiWin\Analyses\2023\08		
File name:	230824131355.ajd		
User:	Admin	**Sample volume:**	500.0µl
Sample type:	Calibration measurement	**Dilution:**	1 in 1
Status:	Measurement completed successfully	**Determinations:**	3-3
		Furnace temperature:	800°C

	c	I eff	SD	CV
NPOC		3.518E4AU		

Single replicates:

	Rep.	1	2	3
NPOC	I [AU]	3.484E4	3.544E4	3.525E4

Peak graph NPOC



AnalysisReport

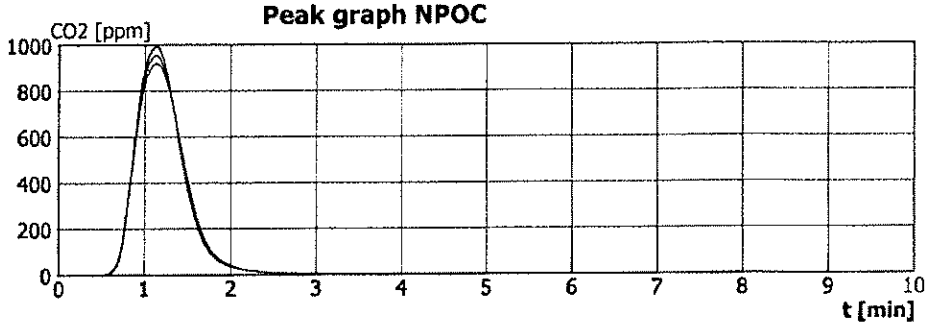
Sample ID:	Cal_NPOC_Test_8MAY2023_230824_1145_Konz05		
Time of analysis:	8/24/2023 1:36:32 PM -0400	**Method:**	NPOC_Test_8MAY20
Directory:	C:\ProgramData\IDC\multiWin\Analyses\2023\08		
File name:	230824133632.ajd		
User:	Admin	**Sample volume:**	500.0µl
Sample type:	Calibration measurement	**Dilution:**	1 in 1
Status:	Measurement completed successfully	**Determinations:**	3-3
		Furnace temperature:	800°C

	c	I eff	SD	CV
NPOC		7.179E4AU		

Single replicates:

	Rep.	1	2	3
NPOC	I [AU]	7.129E4	7.217E4	7.192E4

Peak graph NPOC



aj-Analyzer multi N/C 3100; multiWin 4.12; Serial No: N3-2320/AX

AnalysisReport

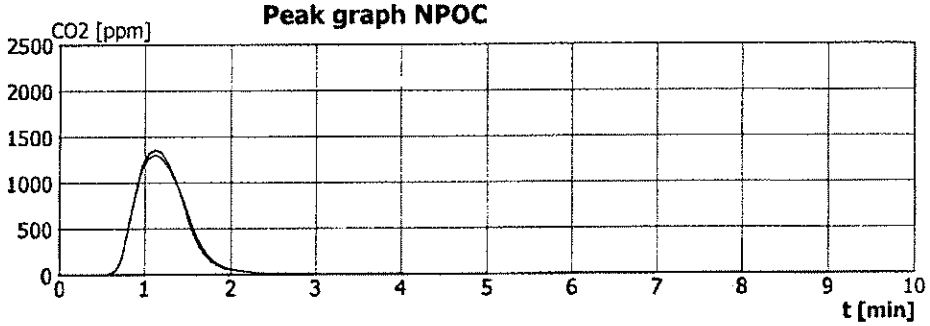
Sample ID:	Cal_NPOC_Test_8MAY2023_230824_1145_Konz06		
Time of analysis:	8/24/2023 1:59:18 PM -0400	**Method:**	NPOC_Test_8MAY20
Directory:	C:\ProgramData\IDC\multiWin\Analyses\2023\08		
File name:	230824135918.ajd		
User:	Admin	**Sample volume:**	500.0µl
Sample type:	Calibration measurement	**Dilution:**	1 in 1
Status:	Measurement completed successfully	**Determinations:**	3-3
		Furnace temperature:	800°C

	c	I eff	SD	CV
NPOC		1.051E5AU		

Single replicates:

	Rep.	1	2	3
NPOC	I [AU]	1.049E5	1.055E5	1.048E5

Peak graph NPOC



aj-Analyzer multi N/C 3100; multiWin 4.12; Serial No: N3-2320/AX

AnalysisReport

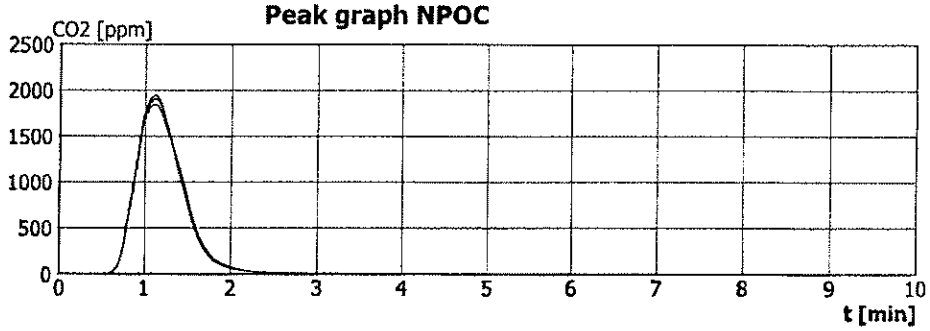
Sample ID:	Cal_NPOC_Test_8MAY2023_230824_1145_Konz07		
Time of analysis:	8/24/2023 2:22:02 PM -0400	**Method:**	NPOC_Test_8MAY20
Directory:	C:\ProgramData\IDC\multiWin\Analyses\2023\08		
File name:	230824142202.ajd		
User:	Admin	**Sample volume:**	500.0µl
Sample type:	Calibration measurement	**Dilution:**	1 in 1
Status:	Measurement completed successfully	**Determinations:**	3-3
		Furnace temperature:	800°C

	c	I eff	SD	CV
NPOC		1.387E5AU		

Single replicates:

	Rep.	1	2	3
NPOC	I [AU]	1.375E5	1.397E5	1.388E5

Peak graph NPOC



CREDERE ASSOCIATES

DOW MILITARY AIRFIELD
SALVAGE YARD

SQ6133

Jennifer Prescott
207-874-2400

KATAHDIN ANALYTICAL SERVICES
600 TECHNOLOGY WAY
SCARBOROUGH, ME 04074

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SAMPLE DATA PACKAGE

NARRATIVE
KATAHDIN ANALYTICAL SERVICES
CREDERE ASSOCIATES
DOW MILITARY AIRFIELD SALVAGE YARD
SQ6133

Sample Receipt

The following samples were received on November 08, 2023 and were logged in under Katahdin Analytical Services work order number SQ6133 for a hardcopy due date of November 29, 2023.

KATAHDIN Sample No.	CREDERE Sample Identification
SQ6133-1	SY-OBMW6-110723
SQ6133-2	SY-OBMW4R-110723
SQ6133-3	SY-OBMW12-110723
SQ6133-4	SY-BRMW2-60.5-70.5-110723
SQ6133-5	SY-OBMW15-110723
SQ6133-6	SY-OBMW5-110723
SQ6133-7	SY-OBMW13-110723
SQ6133-8	SY-BRMW2-80.5-95.5-110723
SQ6133-9	SY-OBMW14-110723
SQ6133-10	SY-BRMW2-252.5-262.5-110723
SQ6133-11	TB31-110723

The samples were logged in for the analyses specified on the chain of custody form. All problems encountered and resolved during sample receipt have been documented on the applicable chain of custody forms.

We certify that the test results provided in this report meet all the requirements of the NELAP standards unless otherwise noted in this narrative or in the Report of Analysis.

We certify that the test results provided in this report are accredited under the laboratory's ISO/IEC 17025:2017 and DoD-ELAP accreditation issued by the ANSI-ASQ National Accreditation Board. Refer to certificate and scope of accreditation L2223.

Analytes which are reported but not listed on our ANAB scope of accreditation will be "^" flagged and the following language will be included in the case narrative for all DoD compliant work: "^" Indicates this analyte is not included on Katahdin Analytical Services DoD-ELAP Scope of Accreditation.

Sample analyses have been performed by the methods as noted herein.

Should you have any questions or comments concerning this Report of Analysis, please do not hesitate to contact your Katahdin Analytical Services Project Manager, **Heather Manz**. This narrative is an integral part of the Report of Analysis.

Organics Analysis

The samples of Work Order SQ6133 were analyzed in accordance with Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, EPA publication SW-846, Third Edition, Final Updates I (1993), II (1995), IIA (1994), IIB (1995), III (1997), IIIA (1999), IIIB (2005), IV (2008), V (2015) and VI (2019), and/or "Analysis of Dissolved Methane, Ethane, and Ethylene in Water Samples Using a GC Headspace Equilibration Technique", EPA Method RSK175, Revision No.2, May 2004, and/or for the specific methods listed below or on the Report of Analysis.

Samples SQ6133-3 and 8 were used for the matrix spikes (MS) and matrix spike duplicates (MSD) per the client request.

RSK 175 Analysis

The target analyte methane was detected below ½ the LOQ in the method blank WG345593-1. According to the DoD QSM, a method blank is considered to be contaminated if the concentration of any target analyte in the blank exceeds ½ the reporting limit and is greater than 1/10 the amount measured in any sample. Since the method blank was acceptable, no further action was taken.

8260C SIM Analysis

The reported percent recovery acceptance limits for the Laboratory Control Samples (LCSs) were evaluated using DoD QSM acceptance limits. The recoveries of the spiked analytes in the LCS, LCSD, Matrix Spike (MS) and Matrix Spike Duplicate (MSD) are compared to these acceptance limits. Katahdin standard operating procedure is to take corrective action only if the number of spiked analytes in the LCS that are outside of the QC limits is greater than the DoD QSM allowable number of exceedances. If the associated MS/MSD has greater than the allowable number of exceedances, no corrective action is taken, as long as the LCS is acceptable.

8270D SIM Analysis

Due to a laboratory error, the MS/MSD WG345531-5 and 6 were extracted two days out of hold time.

The MS WG345301-5 and MS WG345531-5 had high recoveries for the extraction surrogate 2-methylnaphthalene-d10 that were outside of the DoD QSM acceptance limits.

Note: The Form VII has a column for %D that is set to 20%. The DoD QSM criterion for an opening CV is 20%D and a closing CV is 50%D. All of the compounds in the CV's were evaluated to either 20% criteria for opening CV's or 50% criteria for closing CV's.

The closing CV (file N0407) had low responses for the internal standards acenaphthene-d10, phenanthrene-d10, chrysene-d12, and perylene-d12, which were outside the DoD QSM acceptance limits of -50% to +100% of the responses of the internal standard of the mid-point level calibration standard from the initial calibration. If a closing CV fails, the DoD QSM allows for the analysis of two additional CV's which do not need to be within the 12-hour window. The two additional CV's (files N0408 and N0409) were analyzed, and all three CV's are reported.

The closing CV (file N0430) had low responses for the internal standards chrysene-d12 and perylene-d12, which were outside the DoD QSM acceptance limits of -50% to +100% of the responses of the

internal standard of the mid-point level calibration standard from the initial calibration. If a closing CV fails, the DoD QSM allows for the analysis of two additional CV's which do not need to be within the 12-hour window. The two additional CV's (files N0431 and N0432) were analyzed, and all three CV's are reported.

The closing CV (file N0453) had low responses for the internal standards chrysene-d12 and perylene-d12, which were outside the DoD QSM acceptance limits of -50% to +100% of the responses of the internal standard of the mid-point level calibration standard from the initial calibration. If a closing CV fails, the DoD QSM allows for the analysis of two additional CV's which do not need to be within the 12-hour window. The two additional CV's (files N0454 and N0455) were analyzed, and all three CV's are reported.

The reported percent recovery acceptance limits for the Laboratory Control Samples (LCSs) were evaluated using DoD QSM acceptance limits. The recoveries of the spiked analytes in the LCS, Matrix Spike (MS) and Matrix Spike Duplicate (MSD) are compared to these acceptance limits. Katahdin standard operating procedure is to take corrective action only if the number of spiked analytes in the LCS that are outside of the QC limits is greater than the DoD QSM allowable number of exceedances. If the associated MS/MSD has greater than the allowable number of exceedances, no corrective action is taken, as long as the LCS is acceptable.

There were no other protocol deviations or observations noted by the organics laboratory staff.

Wet Chemistry Analysis

The samples of Work Order SQ6133 were analyzed in accordance with the specific methods listed on the Report of Analysis.

Analyses for hexavalent chromium were performed according to Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, EPA publication SW-846, Third Edition, Final Updates I (1993), II (1995), IIA (1994), IIB (1995), III (1997), IIIA (1999), IIIB (2005), IV (2008), V (2015) and VI (2019).

Analyses for alkalinity, ferrous iron, and total organic carbon were performed according to "Standard Methods for the Examination of Water and Wastewater", 15th, 16th, 17th, 18th, 19th, and 20th editions, 1980, 1985, 1989, 1992, 1995, 1999. APHA-AWWA-WPCF.

Analyses for chloride, nitrate, and sulfate were performed according to "Methods for the Determination of Inorganic Substances in Environmental Samples", EPA 600/R-93/100, August 1993.

All Wet Chemistry results were evaluated to Katahdin Analytical Services' Method Detection Limits (MDL). Measured concentrations that fall between the MDL and Katahdin's Limit of Quantitation (LOQ) are flagged "J". Measured concentrations that are below the MDL are flagged "U" and reported as "U LOD", where "LOD" is the numerical value of the Limit of Detection.

All analyses were performed within analytical holding times. All quality control criteria were met with the following exceptions:

The nitrate matrix spike (WG345141-4) and matrix spike duplicate (WG345141-5) on sample SQ6133-3 both had low recoveries that were outside of the acceptance limits.

The sulfate matrix spike (WG345141-4) on sample SQ6133-3 had a low recovery that was outside of the acceptance limits.

Copies of all relevant standard receipt and preparation logbook pages are included in the report with the exception of the page containing the receipt information for Katahdin Standard SWL2104 used in the ferrous iron analysis. This page was unable to be located, but a scan of the "certificate of actual lot analysis" that is printed on the reagent bottle was included in the report.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package has been authorized by the Quality Assurance Officer, or their designee, as verified by the following signature.



01/03/2024

Jennifer Prescott
Quality Assurance Officer

Katahdin Analytical Services, Inc.

Manual Integration Codes For GC/MS, GC, HPLC and/or IC

M1	Peak splitting.
M2	Well defined peaks on the shoulders of the other peaks.
M3	There is additional area due to a coeluting interferant.
M4	There are negative spikes in the baseline.
M5	There are rising or falling baselines.
M6	The software has failed to detect a peak or misidentified a peak.
M7	Excessive peak tailing.
M8	Analysis such as GRO, DRO and TPH require a baseline hold.
M9	Peak was not completely integrated as in GC/MS.
M10	Primary ion was correctly integrated, but secondary or tertiary ion needed manual integration as in GC/MS.
M11	For GC analysis, when a sample is diluted by 1:10 or more, the surrogate is set to undetected and then the area under the surrogate is manually integrated.
M12	Manual integration saved in method due to TurboChrom floating point error.

Katahdin Analytical Services, LLC. **Sample Receipt Condition Report**

Client: Credere	KAS PM: HHM	Sampled By: Client	
Project:	KIMS Entry By: JCB	Delivered By: FedEx	
KAS Work Order#: SQ6133	KIMS Review By: HHM	Received By: JCB	
	Labeled By: EP		
SDG #:	Cooler: 1 of 2	Date/Time Rec.: 11/08/23 0740	

Receipt Criteria	Y	N	EX*	NA	Comments and/or Resolution
1. Custody seals present / intact?	/				
2. Chain of Custody present in cooler?	/				
3. Chain of Custody signed by client?	/				
4. Chain of Custody matches samples?			X		Below
5. Temperature Blanks present? If not, take temperature of any sample w/ IR gun.	/				Temp (°C): 0.1 — Thermometer ID: IR-1
Samples received at <6 °C w/o freezing?	/				Note: Not required for metals (except Hg soil) analysis.
Ice packs or ice present?	/				The lack of ice or ice packs (i.e. no attempt to begin cooling process) or insufficient ice may not meet certain regulatory requirements and may invalidate certain data.
If yes, was there sufficient ice to meet temperature requirements?	/				
If temp. out, has the cooling process begun (i.e. ice or packs present) and sample collection times <6hrs., but samples are not yet cool?				/	Note: No cooling process required for metals (except Hg soil) analysis.
6. Volatiles: **Aqueous:** No bubble larger than a pea?	JCB W			/	
Soil/Sediment: Received in airtight container?				/	
Received in methanol?				/	
Methanol covering soil?				/	
D.I. Water - Received within 48 hour HT?				/	
7. Trip Blank present in cooler?	JCB W			/	
8. Proper sample containers and volume?			X		Below.
9. Samples within hold time upon receipt?	/				
10. Aqueous samples properly preserved? Metals, COD, NH3, TKN, O/G, phenol, TPO4, N+N, TOC, DRO, TPH – pH <2	/				
Sulfide - >9				/	
Cyanide – pH >12				/	
11. Bottleware Prepped on:					

* Log-In Notes to Exceptions: document any problems with samples or discrepancies or pH adjustments.

SQ 6133-1F No volume

Katahdin Analytical Services, LLC. **Sample Receipt Condition Report**

Client:	Geodere	KAS PM:	HNM	Sampled By:	Client
Project:		KIMS Entry By:	JCB	Delivered By:	FedEx
KAS Work Order#:	SQ6133	KIMS Review By:	HNM	Received By:	JCB
		Labeled By:	EP		
SDG #:		Cooler: 2 of 2		Date/Time Rec.:	11/08/23 0740

Receipt Criteria	Y	N	EX*	NA	Comments and/or Resolution
1. Custody seals present / intact?	✓				
2. Chain of Custody present in cooler?	✓				
3. Chain of Custody signed by client?	✓				
4. Chain of Custody matches samples?			X		Pg 1
5. Temperature Blanks present? If not, take temperature of any sample w/ IR gun.	✓				Temp (°C): 0.0 – Thermometer ID: IR-1
Samples received at <6 °C w/o freezing?	✓				Note: Not required for metals (except Hg soil) analysis.
Ice packs or ice present?	✓				The lack of ice or ice packs (i.e. no attempt to begin cooling process) or insufficient ice may not meet certain regulatory requirements and may invalidate certain data.
If yes, was there sufficient ice to meet temperature requirements?	✓				
If temp. out, has the cooling process begun (i.e. ice or packs present) and sample collection times <6hrs., but samples are not yet cool?				✓	Note: No cooling process required for metals (except Hg soil) analysis.
6. Volatiles:					
Aqueous: No bubble larger than a pea?				✓	
Soil/Sediment:					
Received in airtight container?				✓	
Received in methanol?				✓	
Methanol covering soil?				✓	
D.I. Water - Received within 48 hour HT?				✓	
7. Trip Blank present in cooler?				✓	
8. Proper sample containers and volume?	✓				
9. Samples within hold time upon receipt?	✓				
10. Aqueous samples properly preserved? Metals, COD, NH3, TKN, O/G, phenol, TPO4, N+N, TOC, DRO, TPH – pH <2	✓				
Sulfide - >9				✓	
Cyanide – pH >12				✓	
11. Bottleware Prepped on:					

* Log-In Notes to Exceptions: document any problems with samples or discrepancies or pH adjustments.

Katahdin Analytical Services, LLC. **Sample Receipt Condition Report**

Client: Credere	KAS PM: HHM	Sampled By: Client
Project:	KIMS Entry By: JCB	Delivered By: UniShip
KAS Work Order#: SQ 6133	KIMS Review By: HHM	Received By: EP
	Labeled By: EP	
SDG #:	Cooler: 1 of 3	Date/Time Rec.: 11-8-23 0950

Receipt Criteria	Y	N	EX*	NA	Comments and/or Resolution
1. Custody seals present / intact?	/				
2. Chain of Custody present in cooler?	/				
3. Chain of Custody signed by client?	/				
4. Chain of Custody matches samples?			X		Pg 1
5. Temperature Blanks present? If not, take temperature of any sample w/ IR gun.	/				Temp (°C): 3.1 — Thermometer ID: IR-1
Samples received at <6 °C w/o freezing?	/				Note: Not required for metals (except Hg soil) analysis.
Ice packs or ice present?	/				The lack of ice or ice packs (i.e. no attempt to begin cooling process) or insufficient ice may not meet certain regulatory requirements and may invalidate certain data.
If yes, was there sufficient ice to meet temperature requirements?	/				
If temp. out, has the cooling process begun (i.e. ice or packs present) and sample collection times <6hrs., but samples are not yet cool?				/	Note: No cooling process required for metals (except Hg soil) analysis.
6. Volatiles: **Aqueous:** No bubble larger than a pea?	/				
Soil/Sediment: Received in airtight container?				/	
Received in methanol?				/	
Methanol covering soil?				/	
D.I. Water - Received within 48 hour HT?				/	
7. Trip Blank present in cooler?	/				
8. Proper sample containers and volume?			X		Pg 1
9. Samples within hold time upon receipt?	/				
10. Aqueous samples properly preserved? Metals, COD, NH3, TKN, O/G, phenol, TPO4, N+N, TOC, DRO, TPH – pH <2	/				
Sulfide - >9				/	
Cyanide – pH >12				/	
11. Bottleware Prepped on:					

* Log-In Notes to Exceptions: document any problems with samples or discrepancies or pH adjustments.

Katahdin Analytical Services, LLC. **Sample Receipt Condition Report**

Client: Credere	KAS PM: HHM	Sampled By: Client	
Project:	KIMS Entry By: JCB	Delivered By: UniShip	
KAS Work Order#: SQ 6133	KIMS Review By: HHM	Received By: EP	
	Labeled By: EP		
SDG #:	Cooler: 2 of 3	Date/Time Rec.: 11-8-23 0950	

Receipt Criteria	Y	N	EX*	NA	Comments and/or Resolution
1. Custody seals present / intact?	/				
2. Chain of Custody present in cooler?	/				
3. Chain of Custody signed by client?	/				
4. Chain of Custody matches samples?			x		PO 1
5. Temperature Blanks present? If not, take temperature of any sample w/ IR gun.	/				Temp (°C): 2.3 — Thermometer ID: IR-1
Samples received at <6 °C w/o freezing?	/				Note: Not required for metals (except Hg soil) analysis.
Ice packs or ice present?	/				The lack of ice or ice packs (i.e. no attempt to begin cooling process) or insufficient ice may not meet certain regulatory requirements and may invalidate certain data.
If yes, was there sufficient ice to meet temperature requirements?	/				
If temp. out, has the cooling process begun (i.e. ice or packs present) and sample collection times <6hrs., but samples are not yet cool?				/	Note: No cooling process required for metals (except Hg soil) analysis.
6. Volatiles:					
Aqueous: No bubble larger than a pea?				/	
Soil/Sediment:					
Received in airtight container?				/	
Received in methanol?				/	
Methanol covering soil?				/	
D.I. Water - Received within 48 hour HT?				/	
7. Trip Blank present in cooler?				/	
8. Proper sample containers and volume?	/				
9. Samples within hold time upon receipt?	/				
10. Aqueous samples properly preserved? Metals, COD, NH3, TKN, O/G, phenol, TPO4, N+N, TOC, DRO, TPH – pH <2	/				
Sulfide - >9				/	
Cyanide – pH >12				/	
11. Bottleware Prepped on:					

* Log-In Notes to Exceptions: document any problems with samples or discrepancies or pH adjustments.

Katahdin Analytical Services, LLC. **Sample Receipt Condition Report**

Client:	Credere	KAS PM:	HMM	Sampled By:	Client
Project:		KIMS Entry By:	JCB	Delivered By:	UniShip
KAS Work Order#:	SQ 6133	KIMS Review By:	HMM	Received By:	EP
		Labeled By:	EP		
SDG #:		Cooler: 3 of 3		Date/Time Rec.:	11-8-23 0950

Receipt Criteria	Y	N	EX*	NA	Comments and/or Resolution
1. Custody seals present / intact?	/				
2. Chain of Custody present in cooler?	/				
3. Chain of Custody signed by client?	/				
4. Chain of Custody matches samples?			X		pg 1
5. Temperature Blanks present? If not, take temperature of any sample w/ IR gun.	/				Temp (°C): 4.1 — Thermometer ID: IR-1
Samples received at <6 °C w/o freezing?	/				Note: Not required for metals (except Hg soil) analysis.
Ice packs or ice present?	/				The lack of ice or ice packs (i.e. no attempt to begin cooling process) or insufficient ice may not meet certain regulatory requirements and may invalidate certain data.
If yes, was there sufficient ice to meet temperature requirements?	/				
If temp. out, has the cooling process begun (i.e. ice or packs present) and sample collection times <6hrs., but samples are not yet cool?				/	Note: No cooling process required for metals (except Hg soil) analysis.
6. Volatiles:					
Aqueous: No bubble larger than a pea?				/	
Soil/Sediment:					
Received in airtight container?				/	
Received in methanol?				/	
Methanol covering soil?				/	
D.I. Water - Received within 48 hour HT?				/	
7. Trip Blank present in cooler?				/	
8. Proper sample containers and volume?	/				
9. Samples within hold time upon receipt?	/				
10. Aqueous samples properly preserved? Metals, COD, NH3, TKN, O/G, phenol, TPO4, N+N, TOC, DRO, TPH – pH <2	/				
Sulfide - >9				/	
Cyanide – pH >12				/	
11. Bottleware Prepped on:					

* Log-In Notes to Exceptions: document any problems with samples or discrepancies or pH adjustments.

Katahdin ANALYTICAL SERVICES
600 Technology Way
P.O. Box 540
Scarborough, ME 04070
Tel: (207) 874-2400
Fax: (207) 775-4029

Chain of Custody

Client:	Contact:	Phone #:	Fax #:
Credere Associates	Allison Drouin	207-749-1141	( )
Address: 776 Main Street	City: Westbrook	State: ME	Zip Code: 04092
Purchase Order #:	Proj. Name/No.: Dow/18001468		Katahdin Quote #:
Bill (if different than above):	Address:		
Sampler (Print/Sign): Gannon			Copies To: adrouin@crederellc.com

LAB USE ONLY — Work Order #: SQ6133 (Katahdin Project Number)

Remarks:

Shipping Info: FEDEX UPS CLIENT
Airbill No:
Temp C Temp Blank Intact Not Intact

*	Sample Description	Date/Time Collected	Matrix	No. of Containers	Filt. Y/N CVOC SIM	Filt. Y/N BNA SIM	Filt. Y/N TOC	Filt. Y/N Dissolved Gasses	Filt. Y/N Anions	Filt. Y/N Alkalinity	Filt. Y/N Hex. Chromium	Filt. Y/N Ferrous Iron	Filt. Y/N	Filt. Y/N
	SY-OBMW6-110723	11.7/1030	W	10	X	X	X	X	X	X	X	X		
	SY-OBMW4R-110723	11.7/1105		10										
	SY-OBMW12-110723	11.7/1007		10										
	SY-BRMW2-60.5-70.5-110723	11.7/1225		10										
	SY-OBMW15-110723	11.7/1250		12					X	X	X	X		
	SY-OBMW5-110723	11.7/1325		12										
	SY-OBMW13-110723	11.7/~~1340~~ 1425		12										
	SY-BRMW2-80.5-95.5-110723	11.7/1340		36										
	SY-OBMW14-110723	11.7/1400		12										
	SY-BRMW2-252.5-262.5-110723	11.7/1535		12										
	TB31-110723	11.7/1630												

* COMMENTS: SY-OBMW12-110723 Includes Volume For MS/MSD and SY-BRMW2-80.5-95.5-110723 | Bottles for SY-BRMW2 include parantheses in the sample ID - do not include these, use ID as written here

Relinquished By:	Date/Time	Received By:	Relinquished By:	Date/Time	Received By:
	11.8/0735			11-8	07:35
Relinquished By:	Date/Time	Received By:	Relinquished By:	Date/Time	Received By:
	11/08/23 1160				

The terms and conditions on the following page hereof shall govern services, except when a signed contractual agreement exists.

* HOLD all Samples beginning "SY-OB..." (except Short holds - hex ~~chrom~~, anions, Ferrous iron can be analyzed so as not to exceed hold time). "SY-BR..." Samples ~~can be analyzed~~.

Katahdin ANALYTICAL SERVICES
600 Technology Way
P.O. Box 540
Scarborough, ME 04070
Tel: (207) 874-2400
Fax: (207) 775-4029

Chain of Custody

Client:	Contact:	Phone #:	Fax #:
Credere Associates	Allison Drouin	207-749-1141	( )
Address: 776 Main Street	City: Westbrook	State: ME	Zip Code: 04092
Purchase Order #:	Proj. Name/No.: Dow/18001468		Katahdin Quote #:
Bill (if different than above):		Address:	
Sampler (Print/Sign): Gannon			Copies To: adrouin@crederellc.com

LAB USE ONLY
Work Order #: SQ6133
Katahdin Project Number
Remarks:

Shipping Info: FEDEX UPS CLIENT
Airbill No:
Temp C Temp Blank Intact Not Intact

*	Sample Description	Date/Time Collected	Matrix	No. of Containers	Analysis and Container Type Preservatives									
					Filt. Y/N CVOC SIM	Filt. Y/N BNA SIM	Filt. Y/N TOC	Filt. Y/N Dissolved Gasses	Filt. Y/N Anions	Filt. Y/N Alkalinity	Filt. Y/N Hex. Chromium	Filt. Y/N Ferrous Iron	Filt. Y/N	Filt. Y/N
	SY-OBMW6-110723	11.7/1030	W	2					X	X	X	X		
	SY-OBMW4R-110723	11.7/1105		2										
	SY-OBMW12-110723	11.7/1027		2										
	SY-BRMW2-60.5-70.5-110723	11.7/1225		2										

COMMENTS:

Relinquished By:	Date/Time	Received By:	Relinquished By:	Date/Time	Received By:
[signature]	11.7/1720	[signature]			
Relinquished By:	Date/Time	Received By:	Relinquished By:	Date/Time	Received By:
		11/08/23 0740			

The terms and conditions on the following page hereof shall govern services, except when a signed contractual agreement exists.

Katahdin ANALYTICAL SERVICES
600 Technology Way
P.O. Box 540
Scarborough, ME 04070
Tel: (207) 874-2400
Fax: (207) 775-4029

Chain of Custody

Client:	Contact:	Phone #:	Fax #:
Credere Associates	Allison Drouin	207-749-1141	( )
Address: 776 Main Street	City: Westbrook	State: ME	Zip Code: 04092
Purchase Order #:	Proj. Name/No.: Dow/18001468		Katahdin Quote #:
Bill (if different than above):		Address:	
Sampler (Print/Sign): Gannon			Copies To: adrouin@crederellc.com

LAB USE ONLY
Work Order #: SQ6133
Katahdin Project Number
Remarks:
Shipping Info: FEDEX UPS CLIENT
Airbill No:
Temp C Temp Blank Intact Not Intact

*	Sample Description	Date/Time Collected	Matrix	No. of Containers	Analysis and Container Type Preservatives									
					Filt. Y/N CVOC SIM	Filt. Y/N BNA SIM	Filt. Y/N TOC	Filt. Y/N Dissolved Gasses	Filt. Y/N Anions	Filt. Y/N Alkalinity	Filt. Y/N Hex. Chromium	Filt. Y/N Ferrous Iron	Filt. Y/N	Filt. Y/N
	SY-08MW6-110723	11.7/1030	W	2					X	X	X	X		
	SY-08MW4R-110723	11.7/1105		2										
	SY-08MW12-110723	11.7/1007		6										
	SY-BRMW2-60.5-70.5-110723	11.7/1225		2										

COMMENTS:

Relinquished By:	Date/Time	Received By:	Relinquished By:	Date/Time	Received By:
[signature]	11.7/1720	[signature]	11/08/23 0740		
Relinquished By:	Date/Time	Received By:	Relinquished By:	Date/Time	Received By:

The terms and conditions on the following page hereof shall govern services, except when a signed contractual agreement exists.

Nov. 10, 2023
02:15 PM

Login Number: SQ6133

Account: CREDEREASSOC001
Credere Associates

Project: CREDERE-DOW

Quote/Incoming: CREDERE-DOW

Primary Report Address:
Allison Drouin
Credere Associates, LLC
776 Main Street

Westbrook, ME 04092

adrouin@crederellc.com

Primary Invoice Address:
Accounts Payable
Credere Associates, LLC
776 main Street

Westbrook,ME 04092

jenn@crederellc.com (also, cc PM)

Report CC Addresses:
Invoice CC Addresses:

Login Information

ANALYSIS INSTRUCTIONS	:	DOD 5.1. ND to LOD with J-flags. SVOA use 3550C/3510C/8270D mg/kg. Anions = NO3, SO4, Cl. When hex Cr MS/MSD fail, perform pH & ORP, include this data in the case narrative. Need to include copies of standard receipt and standard prep logbooks in final report.
CHECK NO.	:	
CLIENT PO#	:	18001468
CLIENT PROJECT MANAGE	:	Peter Thompson
CONTRACT	:	W912WJ-18-C-0019
COOLER TEMPERATURE	:	0.1, 0.0, 3.1, 2.3, 4.1
DELIVERY SERVICES	:	FedEx
EDD FORMAT	:	FUDSCHEM
ISM INSTRUCTIONS	:	
LOGIN INITIALS	:	JCB
PM	:	HHM
PROJECT NAME	:	Dow Military Airfield Salvage Yard
QC LEVEL	:	IV
REPORT INSTRUCTIONS	:	Upload to FUDSChem. Report to adrouin@crederellc.com and apollom@crederellc.com. Invoices to pthompson@crederellc.com and jenn@crederellc.com.
SDG ID	:	
SDG STATUS	:	
TEMPLATE	:	
VERBAL TAT	:	

2:16 pm, Nov 10, 2023

Run Reports: Logindetail

Login Number: SQ6133

Account: CREDEREASSOC001
Credere Associates

Project: CREDERE-DOW

Quote/Incoming: CREDERE-DOW

Laboratory Sample ID	Client Sample Number	Collect Date/Time	Receive Date	PR	Due Date	Verbal Due Date	Mailed
SQ6133-1	SY-OBMW6-110723	07-NOV-23 10:30	08-NOV-23		29-NOV-23		

Sample Comments: Anions = NO3, SO4, Cl.

Matrix		Product	Hold Date (shortest)		Notes	Bottle Type
Aqueous	S	E300.0-ANIONS	10-NOV-23	SHORT		250mL Plastic
Service	S	EDD-CHARGE				
Service	S	REPORTING				
Aqueous	S	RSKSOP175-MEE	21-NOV-23			40mL Vial+HCl
Aqueous	S	SM2320B-ALKALINITY	21-NOV-23			500mL Plastic
Aqueous	S	SM3500D-FERROUS IRON	08-NOV-23	SHORT	Rec. on Holddate	250mL Plastic+HCl
Aqueous	S	SM5310B-TOC	05-DEC-23			40mL Vial+HCl
Aqueous	S	SW7196A-CRVI-AQ	08-NOV-23	SHORT	Rec. on Holddate	250mL Plastic
Aqueous	S	SW8260SIM-S	21-NOV-23			40mL Vial+HCl
Aqueous	S	SW8270SIMPAH-S	14-NOV-23			1L N-Amber Glass
Service	S	WASTE-DISPOSAL				

SQ6133-2	SY-OBMW4R-110723	07-NOV-23 11:05	08-NOV-23		29-NOV-23		

Sample Comments: Anions = NO3, SO4, Cl.

Matrix		Product	Hold Date (shortest)		Notes	Bottle Type
Aqueous	S	E300.0-ANIONS	10-NOV-23	SHORT		250mL Plastic
Aqueous	S	RSKSOP175-MEE	21-NOV-23			40mL Vial+HCl
Aqueous	S	SM2320B-ALKALINITY	21-NOV-23			500mL Plastic
Aqueous	S	SM3500D-FERROUS IRON	08-NOV-23	SHORT	Rec. on Holddate	250mL Plastic+HCl
Aqueous	S	SM5310B-TOC	05-DEC-23			40mL Vial+HCl
Aqueous	S	SW7196A-CRVI-AQ	08-NOV-23	SHORT	Rec. on Holddate	250mL Plastic
Aqueous	S	SW8260SIM-S	21-NOV-23			40mL Vial+HCl
Aqueous	S	SW8270SIMPAH-S	14-NOV-23			1L N-Amber Glass

SQ6133-3	SY-OBMW12-110723	07-NOV-23 10:07	08-NOV-23		29-NOV-23		

Sample Comments: MS/MSD. Anions = NO3, SO4, Cl.

Matrix		Product	Hold Date (shortest)		Notes	Bottle Type
Aqueous	S	E300.0-ANIONS	10-NOV-23	SHORT		250mL Plastic
Aqueous	S	RSKSOP175-MEE	21-NOV-23			40mL Vial+HCl
Aqueous	S	SM2320B-ALKALINITY	21-NOV-23			500mL Plastic
Aqueous	S	SM3500D-FERROUS IRON	08-NOV-23	SHORT	Rec. on Holddate	250mL Plastic+HCl
Aqueous	S	SM5310B-TOC	05-DEC-23			40mL Vial+HCl
Aqueous	S	SW7196A-CRVI-AQ	08-NOV-23	SHORT	Rec. on Holddate	
Aqueous	S	SW8260SIM-S	21-NOV-23			40mL Vial+HCl
Aqueous	S	SW8270SIMPAH-S	14-NOV-23			1L N-Amber Glass

SQ6133-4	SY-BRMW2-60.5-70.5-110723	07-NOV-23 12:25	08-NOV-23		29-NOV-23		

Sample Comments: Anions = NO3, SO4, Cl.

Matrix		Product	Hold Date (shortest)		Notes	Bottle Type
Aqueous	S	E300.0-ANIONS	10-NOV-23	SHORT		250mL Plastic
Aqueous	S	RSKSOP175-MEE	21-NOV-23			40mL Vial+HCl
Aqueous	S	SM2320B-ALKALINITY	21-NOV-23			500mL Plastic
Aqueous	S	SM3500D-FERROUS IRON	08-NOV-23	SHORT	Rec. on Holddate	250mL Plastic+HCl
Aqueous	S	SM5310B-TOC	05-DEC-23			40mL Vial+HCl
Aqueous	S	SW7196A-CRVI-AQ	08-NOV-23	SHORT	Rec. on Holddate	250mL Plastic
Aqueous	S	SW8260SIM-S	21-NOV-23			40mL Vial+HCl
Aqueous	S	SW8270SIMPAH-S	14-NOV-23			1L N-Amber Glass

Run Reports: Logindetail

2:16 pm, Nov 10, 2023

Login Number: SQ6133

Account: CREDEREASSOC001
Credere Associates

Project: CREDERE-DOW

Quote/Incoming: CREDERE-DOW

Laboratory Sample ID	Client Sample Number	Collect Date/Time	Receive Date	PR	Due Date	Verbal Due Date	Mailed
SQ6133-5	SY-OBMW15-110723	07-NOV-23 12:50	08-NOV-23		29-NOV-23		

Sample Comments: Anions = NO3, SO4, Cl.

Matrix		Product	Hold Date (shortest)		Notes	Bottle Type
Aqueous	S	E300.0-ANIONS	10-NOV-23	SHORT		250mL Plastic
Aqueous	S	RSKSOP175-MEE	21-NOV-23			40mL Vial+HCl
Aqueous	S	SM2320B-ALKALINITY	21-NOV-23			500mL Plastic
Aqueous	S	SM3500D-FERROUS IRON	08-NOV-23	SHORT	Rec. on Holddate	250mL Plastic+HCl
Aqueous	S	SM5310B-TOC	05-DEC-23			40mL Vial+HCl
Aqueous	S	SW7196A-CRVI-AQ	08-NOV-23	SHORT	Rec. on Holddate	250mL Plastic
Aqueous	S	SW8260SIM-S	21-NOV-23			40mL Vial+HCl
Aqueous	S	SW8270SIMPAH-S	14-NOV-23			1L N-Amber Glass

SQ6133-6	SY-OBMW5-110723	07-NOV-23 13:25	08-NOV-23		29-NOV-23		

Sample Comments: Anions = NO3, SO4, Cl.

Matrix		Product	Hold Date (shortest)		Notes	Bottle Type
Aqueous	S	E300.0-ANIONS	10-NOV-23	SHORT		250mL Plastic
Aqueous	S	RSKSOP175-MEE	21-NOV-23			40mL Vial+HCl
Aqueous	S	SM2320B-ALKALINITY	21-NOV-23			500mL Plastic
Aqueous	S	SM3500D-FERROUS IRON	08-NOV-23	SHORT	Rec. on Holddate	250mL Plastic+HCl
Aqueous	S	SM5310B-TOC	05-DEC-23			40mL Vial+HCl
Aqueous	S	SW7196A-CRVI-AQ	08-NOV-23	SHORT	Rec. on Holddate	250mL Plastic
Aqueous	S	SW8260SIM-S	21-NOV-23			40mL Vial+HCl
Aqueous	S	SW8270SIMPAH-S	14-NOV-23			1L N-Amber Glass

SQ6133-7	SY-OBMW13-110723	07-NOV-23 14:25	08-NOV-23		29-NOV-23		

Sample Comments: Anions = NO3, SO4, Cl.

Matrix		Product	Hold Date (shortest)		Notes	Bottle Type
Aqueous	S	E300.0-ANIONS	10-NOV-23	SHORT		250mL Plastic
Aqueous	S	RSKSOP175-MEE	21-NOV-23			40mL Vial+HCl
Aqueous	S	SM2320B-ALKALINITY	21-NOV-23			500mL Plastic
Aqueous	S	SM3500D-FERROUS IRON	08-NOV-23	SHORT	Rec. on Holddate	250mL Plastic+HCl
Aqueous	S	SM5310B-TOC	05-DEC-23			40mL Vial+HCl
Aqueous	S	SW7196A-CRVI-AQ	08-NOV-23	SHORT	Rec. on Holddate	250mL Plastic
Aqueous	S	SW8260SIM-S	21-NOV-23			40mL Vial+HCl
Aqueous	S	SW8270SIMPAH-S	14-NOV-23			1L N-Amber Glass

SQ6133-8	SY-BRMW2-80.5-95.5-110723	07-NOV-23 13:40	08-NOV-23		29-NOV-23		

Sample Comments: MS/MSD. Anions = NO3, SO4, Cl.

Matrix		Product	Hold Date (shortest)		Notes	Bottle Type
Aqueous	S	E300.0-ANIONS	10-NOV-23	SHORT		250mL Plastic
Aqueous	S	RSKSOP175-MEE	21-NOV-23			40mL Vial+HCl
Aqueous	S	SM2320B-ALKALINITY	21-NOV-23			500mL Plastic
Aqueous	S	SM3500D-FERROUS IRON	08-NOV-23	SHORT	Rec. on Holddate	250mL Plastic+HCl
Aqueous	S	SM5310B-TOC	05-DEC-23			40mL Vial+HCl
Aqueous	S	SW7196A-CRVI-AQ	08-NOV-23	SHORT	Rec. on Holddate	
Aqueous	S	SW8260SIM-S	21-NOV-23			40mL Vial+HCl
Aqueous	S	SW8270SIMPAH-S	14-NOV-23			1L N-Amber Glass

Run Reports: Logindetail

2:16 pm, Nov 10, 2023

Login Number: SQ6133

Account: CREDEREASSOC001
Credere Associates

Project: CREDERE-DOW

Quote/Incoming: CREDERE-DOW

Laboratory Sample ID	Client Sample Number	Collect Date/Time	Receive Date	PR	Due Date	Verbal Due Date	Mailed
SQ6133-9	SY-OBMW14-110723	07-NOV-23 14:00	08-NOV-23		29-NOV-23		

Sample Comments: Anions = NO3, SO4, Cl.

Matrix		Product	Hold Date (shortest)		Notes	Bottle Type
Aqueous	S	E300.0-ANIONS	10-NOV-23	SHORT		250mL Plastic
Aqueous	S	RSKSOP175-MEE	21-NOV-23			40mL Vial+HCl
Aqueous	S	SM2320B-ALKALINITY	21-NOV-23			500mL Plastic
Aqueous	S	SM3500D-FERROUS IRON	08-NOV-23	SHORT	Rec. on Holddate	250mL Plastic+HCl
Aqueous	S	SM5310B-TOC	05-DEC-23			40mL Vial+HCl
Aqueous	S	SW7196A-CRVI-AQ	08-NOV-23	SHORT	Rec. on Holddate	250mL Plastic
Aqueous	S	SW8260SIM-S	21-NOV-23			40mL Vial+HCl
Aqueous	S	SW8270SIMPAH-S	14-NOV-23			1L N-Amber Glass

SQ6133-10	SY-BRMW2-252.5-262.5-110723	07-NOV-23 15:35	08-NOV-23		29-NOV-23		

Sample Comments: Anions = NO3, SO4, Cl.

Matrix		Product	Hold Date (shortest)		Notes	Bottle Type
Aqueous	S	E300.0-ANIONS	10-NOV-23	SHORT		250mL Plastic
Aqueous	S	RSKSOP175-MEE	21-NOV-23			40mL Vial+HCl
Aqueous	S	SM2320B-ALKALINITY	21-NOV-23			500mL Plastic
Aqueous	S	SM3500D-FERROUS IRON	08-NOV-23	SHORT	Rec. on Holddate	250mL Plastic+HCl
Aqueous	S	SM5310B-TOC	05-DEC-23			40mL Vial+HCl
Aqueous	S	SW7196A-CRVI-AQ	08-NOV-23	SHORT	Rec. on Holddate	250mL Plastic
Aqueous	S	SW8260SIM-S	21-NOV-23			40mL Vial+HCl
Aqueous	S	SW8270SIMPAH-S	14-NOV-23			1L N-Amber Glass

SQ6133-11	TB31-110723	07-NOV-23 16:30	08-NOV-23		29-NOV-23		

Sample Comments:

Matrix		Product	Hold Date (shortest)		Notes	Bottle Type
Aqueous	S	SW8260SIM-S	21-NOV-23			40mL Vial+HCl

SQ6133-12	MS CHARGE SY-0BMW12-110723	07-NOV-23 10:07	08-NOV-23		29-NOV-23		

Sample Comments: Not a sample, MS charge for SQ6133-3.

Matrix		Product	Hold Date (shortest)		Notes	Bottle Type
Aqueous	S	E300.0-ANIONS	10-NOV-23	SHORT		250mL Plastic
Aqueous	S	RSKSOP175-MEE	21-NOV-23			40mL Vial+HCl
Aqueous	S	SM2320B-ALKALINITY	21-NOV-23			500mL Plastic
Aqueous	S	SM3500D-FERROUS IRON	08-NOV-23	SHORT	Rec. on Holddate	250mL Plastic+HCl
Aqueous	S	SM5310B-TOC	05-DEC-23			40mL Vial+HCl
Aqueous	S	SW7196A-CRVI-AQ	08-NOV-23	SHORT	Rec. on Holddate	
Aqueous	S	SW8260SIM-S	21-NOV-23			40mL Vial+HCl
Aqueous	S	SW8270SIMPAH-S	14-NOV-23			1L N-Amber Glass

SQ6133-13	MSD CHARGE SY-0BMW12-110723	07-NOV-23 10:07	08-NOV-23		29-NOV-23		

Sample Comments: Not a sample, MSD charge for SQ6133-3.

Matrix		Product	Hold Date (shortest)		Notes	Bottle Type
Aqueous	S	E300.0-ANIONS	10-NOV-23	SHORT		250mL Plastic
Aqueous	S	RSKSOP175-MEE	21-NOV-23			40mL Vial+HCl
Aqueous	S	SM2320B-ALKALINITY	21-NOV-23			500mL Plastic
Aqueous	S	SM3500D-FERROUS IRON	08-NOV-23	SHORT	Rec. on Holddate	250mL Plastic+HCl
Aqueous	S	SM5310B-TOC	05-DEC-23			40mL Vial+HCl
Aqueous	S	SW7196A-CRVI-AQ	08-NOV-23	SHORT	Rec. on Holddate	250mL Plastic
Aqueous	S	SW8260SIM-S	21-NOV-23			40mL Vial+HCl
Aqueous	S	SW8270SIMPAH-S	14-NOV-23			1L N-Amber Glass

Run Reports: Logindetail

2:16 pm, Nov 10, 2023

Login Number: SQ6133

Account: CREDEREASSOC001
Credere Associates

Project: CREDERE-DOW

Quote/Incoming: CREDERE-DOW

Laboratory Sample ID	Client Sample Number	Collect Date/Time	Receive Date	PR	Due Date	Verbal Due Date	Mailed
SQ6133-14	MS CHARGE SY-BRMW2-80.5-95.5	07-NOV-23 13:40	08-NOV-23		29-NOV-23		

Sample Comments: Not a sample, MS charge for SQ6133-8.

Matrix		Product	Hold Date (shortest)		Notes	Bottle Type
Aqueous	S	E300.0-ANIONS	10-NOV-23	SHORT		250mL Plastic
Aqueous	S	RSKSOP175-MEE	21-NOV-23			40mL Vial+HCl
Aqueous	S	SM2320B-ALKALINITY	21-NOV-23			500mL Plastic
Aqueous	S	SM3500D-FERROUS IRON	08-NOV-23	SHORT	Rec. on Holddate	250mL Plastic+HCl
Aqueous	S	SM5310B-TOC	05-DEC-23			40mL Vial+HCl
Aqueous	S	SW7196A-CRVI-AQ	08-NOV-23	SHORT	Rec. on Holddate	
Aqueous	S	SW8260SIM-S	21-NOV-23			40mL Vial+HCl
Aqueous	S	SW8270SIMPAH-S	14-NOV-23			1L N-Amber Glass

SQ6133-15	MSD CHARGE SY-BRMW2-80.5-95.5	07-NOV-23 13:40	08-NOV-23		29-NOV-23		

Sample Comments: Not a sample, MSD charge for SQ6133-8.

Matrix		Product	Hold Date (shortest)		Notes	Bottle Type
Aqueous	S	E300.0-ANIONS	10-NOV-23	SHORT		250mL Plastic
Aqueous	S	RSKSOP175-MEE	21-NOV-23			40mL Vial+HCl
Aqueous	S	SM2320B-ALKALINITY	21-NOV-23			500mL Plastic
Aqueous	S	SM3500D-FERROUS IRON	08-NOV-23	SHORT	Rec. on Holddate	250mL Plastic+HCl
Aqueous	S	SM5310B-TOC	05-DEC-23			40mL Vial+HCl
Aqueous	S	SW7196A-CRVI-AQ	08-NOV-23	SHORT	Rec. on Holddate	
Aqueous	S	SW8260SIM-S	21-NOV-23			40mL Vial+HCl
Aqueous	S	SW8270SIMPAH-S	14-NOV-23			1L N-Amber Glass

Total Samples: 15 ***Total Analyses: 116***



2:17 pm, Nov 10, 2023

Run Reports: Logindetail

SAMPLE DATA SUMMARY PACKAGE

KATAHDIN ANALYTICAL SERVICES - ORGANIC DATA QUALIFIERS

U Indicates the compound was analyzed for but not detected above the specified level. This level may be the Practical Quantitation Level (PQL) (also called Limit of Quantitation (LOQ)), the Limit of Detection (LOD) or Method Detection Limit (MDL) as required by the client.

Note: All results reported as "U" MDL have a 50% rate for false negatives compared to those results reported as "U" PQL, "U" LOQ or "U" LOD, where the rate of false negatives is <1%.

* Compound recovery or percent RPD (relative percent difference) was outside of quality control limits.

D Indicates the result was obtained from analysis of a diluted sample. Surrogate recoveries may not be calculable.

E Estimated value. This flag identifies compounds whose concentrations exceed the upper level of the calibration range of the instrument for that specific analysis.

J Estimated value. The analyte was detected in the sample at a concentration less than the laboratory Practical Quantitation Level (PQL) (also called Limit of Quantitation (LOQ)), but above the Method Detection Limit (MDL).

And/or

J Used for Dual Column analytes when there is a greater than 40% difference for detected concentrations between the two GC/HPLC columns.

B Indicates the analyte was detected in the laboratory method blank analyzed concurrently with the sample.

I Indicates that the flagged compound did not meet DoD criteria in the corresponding Initial Calibration (ICAL).

D Indicates that the flagged compound did not meet DoD criteria in the corresponding Initial Calibration Verification (ICV).

C Indicates that the flagged compound did not meet DoD criteria in the corresponding opening Calibration Verification (CV).

V Indicates that the flagged compound did not meet DoD criteria in the corresponding closing Calibration Verification (CV).

L/LL Indicates that the flagged compound did not meet DoD criteria in the corresponding Laboratory Control Sample (LCS) and/or Laboratory Control Sample Duplicate (LCSD) prepared and/or analyzed concurrently with the sample.

M/MM Indicates that the flagged compound did not meet DoD criteria in the Matrix Spike (MS) and/or Matrix Spike Duplicate MSD) prepared and/or analyzed concurrently with the native sample.

H Indicates the flagged compound was detected on the primary column but was not detected on the confirmation column therefore the compound is not reported as a positive detection. (SW846 8330A/B only)

KATAHDIN ANALYTICAL SERVICES – INORGANIC DATA QUALIFIERS

The sampled date indicated on the attached Report(s) of Analysis (ROA) is the date for which a grab sample was collected or the date for which a composite sample was completed. Beginning and start times for composite samples can be found on the Chain-of-Custody.

U Indicates the compound was analyzed for but not detected above the specified level. This level may be the Practical Quantitation Level (PQL) (also called Limit of Quantitation (LOQ)), the Limit of Detection (LOD) or Method Detection Limit (MDL) as required by the client.

Note: All results reported as "U" MDL have a 50% rate for false negatives compared to those results reported as "U" PQL "U" LOQ or "U" LOD, where the rate of false negatives is <1%.

E Estimated value. This flag identifies compounds whose concentrations exceed the upper level of the calibration range of the instrument for that specific analysis.

J Estimated value. The analyte was detected in the sample at a concentration less than the laboratory Practical Quantitation Level (PQL) (also called Limit of Quantitation (LOQ)), but above the Method Detection Limit (MDL).

I-7 The laboratory's Practical Quantitation Level (PQL) or LOQ could not be achieved for this parameter due to sample composition, matrix effects, sample volume, or quantity used for analysis.

A-4 Please refer to cover letter or narrative for further information.

H_ Please note that the regulatory holding time for _____ is "analyze immediately". Ideally, this analysis must be performed in the field at the time of sample collection. _____ for this sample was not performed at the time of sample collection. The analysis was performed as soon as possible after receipt by the laboratory.

H1 - pH H2 - DO H3 - sulfite H4 - residual chlorine

T1 The client did not provide the full volume of at least one liter for analysis of TSS. Therefore, the PQL of 2.5 mg/L could not be achieved.

T2 The client provided the required volume of at least one liter for analysis of TSS, but the laboratory could not filter the full one liter volume due to the sample matrix. Therefore, the PQL of 2.5 mg/L could not be achieved.

M1 The matrix spike and/or matrix spike duplicate recovery performed on this sample was outside of the laboratory acceptance criteria. Sample matrix is suspected. The laboratory criteria was met for the Laboratory Control Sample (LCS) analyzed concurrently with this sample.

M2 The matrix spike and/or matrix spike duplicate recovery was outside of the laboratory acceptance criteria. The native sample concentration is greater than four times the spike added concentration so the spike added could not be distinguished from the native sample concentration.

R1 The relative percent difference (RPD) between the duplicate analyses performed on this sample was outside of the laboratory acceptance criteria (when both values are greater than ten times the PQL).

MCL	Maximum Contaminant Level	NL	No limit
NFL	No Free Liquid Present	FLP	Free Liquid Present
NOD	No Odor Detected	TON	Threshold Odor Number

D-1 As required by Method 5210B, APHA Standard Methods for the Examination of Water and Wastewater (21st edition), the BOD value reported for this sample is 'qualified' because the check standard run concurrently with the sample analysis did not meet the criteria specified in the method (198 +/- 30.5 mg/L). These results may not be reportable for compliance purposes.

D-2 The measured final dissolved oxygen concentrations of all dilutions were less than the method-specified limit of 1 mg/L. The reported BOD result was calculated assuming a final oxygen concentration equal to 1 mg/L. The reported value should be considered a minimum value.

D-3 The dilution water used to prepare this sample did not meet the method and/or regulatory criteria of less than 0.2 or 0.4 mg/L dissolved oxygen (DO) uptake over the five day period of incubation. These results may not be reportable for compliance purposes.

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Report of Analytical Results

SDG: SQ6133
Lab ID: SQ6133-1
Client ID: SY-OBMW6-110723
Matrix: AQ
Lab File ID: D8876.D

Sample Date: 07-NOV-23
Extract Date: 16-NOV-23
Extracted By: JSS
Extraction Method: SW846 5030C
Lab Prep Batch: WG345527

Report Date: 12-DEC-23
Analysis Date: 16-NOV-23
Analyst: JSS
Analysis Method: SW846 8260C SIM
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Vinyl Chloride	U	0.050	ug/L	1	.1	0.10	0.0037	0.050
1,1-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0091	0.025
trans-1,2-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0033	0.025
cis-1,2-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0057	0.025
Trichloroethene	U	0.025	ug/L	1	.05	0.050	0.012	0.025
Tetrachloroethene	U	0.025	ug/L	1	.05	0.050	0.0091	0.025
Dibromofluoromethane		110.	%					
1,2-Dichloroethane-d4		113.	%					
Toluene-D8		98.5	%					
p-Bromofluorobenzene		79.4	%					

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Report of Analytical Results

SDG: SQ6133
Lab ID: SQ6133-2
Client ID: SY-OBMW4R-110723
Matrix: AQ
Lab File ID: S7213.D

Sample Date: 07-NOV-23
Extract Date: 16-NOV-23
Extracted By: JSS
Extraction Method: SW846 5030C
Lab Prep Batch: WG345525

Report Date: 12-DEC-23
Analysis Date: 16-NOV-23
Analyst: JSS
Analysis Method: SW846 8260C SIM
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Vinyl Chloride	U	0.050	ug/L	1	.1	0.10	0.0037	0.050
1,1-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0091	0.025
trans-1,2-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0033	0.025
cis-1,2-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0057	0.025
Trichloroethene	U	0.025	ug/L	1	.05	0.050	0.012	0.025
Tetrachloroethene	U	0.025	ug/L	1	.05	0.050	0.0091	0.025
Dibromofluoromethane		124.	%					
1,2-Dichloroethane-d4		122.	%					
Toluene-D8		101.	%					
p-Bromofluorobenzene		84.3	%					

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Report of Analytical Results

SDG: SQ6133
Lab ID: SQ6133-3
Client ID: SY-OBMW12-110723
Matrix: AQ
Lab File ID: D8898.D

Sample Date: 07-NOV-23
Extract Date: 17-NOV-23
Extracted By: JSS
Extraction Method: SW846 5030C
Lab Prep Batch: WG345599

Report Date: 12-DEC-23
Analysis Date: 17-NOV-23
Analyst: JSS
Analysis Method: SW846 8260C SIM
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Vinyl Chloride	MM	0.15	ug/L	1	.1	0.10	0.0037	0.050
1,1-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0091	0.025
trans-1,2-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0033	0.025
cis-1,2-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0057	0.025
Trichloroethene		0.29	ug/L	1	.05	0.050	0.012	0.025
Tetrachloroethene	U	0.025	ug/L	1	.05	0.050	0.0091	0.025
Dibromofluoromethane		101.	%					
1,2-Dichloroethane-d4		102.	%					
Toluene-D8		97.8	%					
p-Bromofluorobenzene		81.6	%					

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Report of Analytical Results

SDG: SQ6133
Lab ID: SQ6133-4
Client ID: SY-BRMW2-60.5-70.5-110723
Matrix: AQ
Lab File ID: S7214.D

Sample Date: 07-NOV-23
Extract Date: 16-NOV-23
Extracted By: JSS
Extraction Method: SW846 5030C
Lab Prep Batch: WG345525

Report Date: 12-DEC-23
Analysis Date: 16-NOV-23
Analyst: JSS
Analysis Method: SW846 8260C SIM
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Vinyl Chloride	U	0.050	ug/L	1	.1	0.10	0.0037	0.050
1,1-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0091	0.025
trans-1,2-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0033	0.025
cis-1,2-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0057	0.025
Trichloroethene	U	0.025	ug/L	1	.05	0.050	0.012	0.025
Tetrachloroethene	U	0.025	ug/L	1	.05	0.050	0.0091	0.025
Dibromofluoromethane		119.	%					
1,2-Dichloroethane-d4		120.	%					
Toluene-D8		98.9	%					
p-Bromofluorobenzene		75.8	%					

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Report of Analytical Results

SDG: SQ6133
Lab ID: SQ6133-5
Client ID: SY-OBMW15-110723
Matrix: AQ
Lab File ID: S7215.D

Sample Date: 07-NOV-23
Extract Date: 16-NOV-23
Extracted By: JSS
Extraction Method: SW846 5030C
Lab Prep Batch: WG345525

Report Date: 12-DEC-23
Analysis Date: 16-NOV-23
Analyst: JSS
Analysis Method: SW846 8260C SIM
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Vinyl Chloride	U	0.050	ug/L	1	.1	0.10	0.0037	0.050
1,1-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0091	0.025
trans-1,2-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0033	0.025
cis-1,2-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0057	0.025
Trichloroethene	U	0.025	ug/L	1	.05	0.050	0.012	0.025
Tetrachloroethene	U	0.025	ug/L	1	.05	0.050	0.0091	0.025
Dibromofluoromethane		122.	%					
1,2-Dichloroethane-d4		126.	%					
Toluene-D8		101.	%					
p-Bromofluorobenzene		83.0	%					

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Report of Analytical Results

SDG: SQ6133
Lab ID: SQ6133-6
Client ID: SY-OBMW5-110723
Matrix: AQ
Lab File ID: S7216.D

Sample Date: 07-NOV-23
Extract Date: 16-NOV-23
Extracted By: JSS
Extraction Method: SW846 5030C
Lab Prep Batch: WG345525

Report Date: 12-DEC-23
Analysis Date: 16-NOV-23
Analyst: JSS
Analysis Method: SW846 8260C SIM
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Vinyl Chloride	U	0.050	ug/L	1	.1	0.10	0.0037	0.050
1,1-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0091	0.025
trans-1,2-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0033	0.025
cis-1,2-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0057	0.025
Trichloroethene	U	0.025	ug/L	1	.05	0.050	0.012	0.025
Tetrachloroethene	U	0.025	ug/L	1	.05	0.050	0.0091	0.025
Dibromofluoromethane		124.	%					
1,2-Dichloroethane-d4		126.	%					
Toluene-D8		99.4	%					
p-Bromofluorobenzene		82.4	%					

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Report of Analytical Results

SDG: SQ6133
Lab ID: SQ6133-7
Client ID: SY-OBMW13-110723
Matrix: AQ
Lab File ID: S7217.D

Sample Date: 07-NOV-23
Extract Date: 16-NOV-23
Extracted By: JSS
Extraction Method: SW846 5030C
Lab Prep Batch: WG345525

Report Date: 12-DEC-23
Analysis Date: 16-NOV-23
Analyst: JSS
Analysis Method: SW846 8260C SIM
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Vinyl Chloride	U	0.050	ug/L	1	.1	0.10	0.0037	0.050
1,1-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0091	0.025
trans-1,2-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0033	0.025
cis-1,2-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0057	0.025
Trichloroethene	U	0.025	ug/L	1	.05	0.050	0.012	0.025
Tetrachloroethene	U	0.025	ug/L	1	.05	0.050	0.0091	0.025
Dibromofluoromethane		126.	%					
1,2-Dichloroethane-d4		128.	%					
Toluene-D8		101.	%					
p-Bromofluorobenzene		84.7	%					

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Report of Analytical Results

SDG: SQ6133
Lab ID: SQ6133-8
Client ID: SY-BRMW2-80.5-95.5-110723
Matrix: AQ
Lab File ID: S7239.D

Sample Date: 07-NOV-23
Extract Date: 17-NOV-23
Extracted By: JSS
Extraction Method: SW846 5030C
Lab Prep Batch: WG345597

Report Date: 12-DEC-23
Analysis Date: 17-NOV-23
Analyst: JSS
Analysis Method: SW846 8260C SIM
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Vinyl Chloride	U	0.050	ug/L	1	.1	0.10	0.0037	0.050
1,1-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0091	0.025
trans-1,2-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0033	0.025
cis-1,2-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0057	0.025
Trichloroethene	U	0.025	ug/L	1	.05	0.050	0.012	0.025
Tetrachloroethene	U	0.025	ug/L	1	.05	0.050	0.0091	0.025
Dibromofluoromethane		121.	%					
1,2-Dichloroethane-d4		122.	%					
Toluene-D8		99.9	%					
p-Bromofluorobenzene		82.7	%					

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Report of Analytical Results

SDG: SQ6133
Lab ID: SQ6133-9
Client ID: SY-OBMW14-110723
Matrix: AQ
Lab File ID: S7218.D

Sample Date: 07-NOV-23
Extract Date: 16-NOV-23
Extracted By: JSS
Extraction Method: SW846 5030C
Lab Prep Batch: WG345525

Report Date: 12-DEC-23
Analysis Date: 16-NOV-23
Analyst: JSS
Analysis Method: SW846 8260C SIM
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Vinyl Chloride	J	0.026	ug/L	1	.1	0.10	0.0037	0.050
1,1-Dichloroethene	J	0.024	ug/L	1	.05	0.050	0.0091	0.025
trans-1,2-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0033	0.025
cis-1,2-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0057	0.025
Trichloroethene		0.46	ug/L	1	.05	0.050	0.012	0.025
Tetrachloroethene	U	0.025	ug/L	1	.05	0.050	0.0091	0.025
Dibromofluoromethane		128.	%					
1,2-Dichloroethane-d4		129.	%					
Toluene-D8		99.7	%					
p-Bromofluorobenzene		84.2	%					

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Report of Analytical Results

SDG: SQ6133
Lab ID: SQ6133-10
Client ID: SY-BRMW2-252.5-262.5-110723
Matrix: AQ
Lab File ID: S7219.D

Sample Date: 07-NOV-23
Extract Date: 16-NOV-23
Extracted By: JSS
Extraction Method: SW846 5030C
Lab Prep Batch: WG345525

Report Date: 12-DEC-23
Analysis Date: 16-NOV-23
Analyst: JSS
Analysis Method: SW846 8260C SIM
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Vinyl Chloride	U	0.050	ug/L	1	.1	0.10	0.0037	0.050
1,1-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0091	0.025
trans-1,2-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0033	0.025
cis-1,2-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0057	0.025
Trichloroethene	U	0.025	ug/L	1	.05	0.050	0.012	0.025
Tetrachloroethene	U	0.025	ug/L	1	.05	0.050	0.0091	0.025
Dibromofluoromethane		130.	%					
1,2-Dichloroethane-d4		127.	%					
Toluene-D8		101.	%					
p-Bromofluorobenzene		81.9	%					

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Report of Analytical Results

SDG: SQ6133
Lab ID: SQ6133-11
Client ID: TB31-110723
Matrix: AQ
Lab File ID: D8873.D

Sample Date: 07-NOV-23
Extract Date: 16-NOV-23
Extracted By: JSS
Extraction Method: SW846 5030C
Lab Prep Batch: WG345527

Report Date: 12-DEC-23
Analysis Date: 16-NOV-23
Analyst: JSS
Analysis Method: SW846 8260C SIM
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Vinyl Chloride	U	0.050	ug/L	1	.1	0.10	0.0037	0.050
1,1-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0091	0.025
trans-1,2-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0033	0.025
cis-1,2-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0057	0.025
Trichloroethene	U	0.025	ug/L	1	.05	0.050	0.012	0.025
Tetrachloroethene	U	0.025	ug/L	1	.05	0.050	0.0091	0.025
Dibromofluoromethane		113.	%					
1,2-Dichloroethane-d4		114.	%					
Toluene-D8		99.9	%					
p-Bromofluorobenzene		79.5	%					

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Report of Analytical Results

SDG: SQ6133
Lab ID: SQ6133-1
Client ID: SY-OBMW6-110723
Matrix: AQ
Lab File ID: N0418.D

Sample Date: 07-NOV-23
Extract Date: 13-NOV-23
Extracted By: SH/NG/AC
Extraction Method: SW846 3510C
Lab Prep Batch: WG345301

Report Date: 29-DEC-23
Analysis Date: 08-DEC-23
Analyst: EP
Analysis Method: SW846 8270D SIM
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	0.093	ug/L	1	.2	0.19	0.060	0.093
2-Methylnaphthalene	U	0.093	ug/L	1	.2	0.19	0.072	0.093
Acenaphthylene	U	0.093	ug/L	1	.2	0.19	0.050	0.093
Acenaphthene	U	0.093	ug/L	1	.2	0.19	0.060	0.093
Fluorene	U	0.093	ug/L	1	.2	0.19	0.057	0.093
Phenanthrene	U	0.093	ug/L	1	.2	0.19	0.048	0.093
Anthracene	U	0.093	ug/L	1	.2	0.19	0.041	0.093
Fluoranthene	U	0.093	ug/L	1	.2	0.19	0.068	0.093
Pyrene	U	0.093	ug/L	1	.2	0.19	0.055	0.093
Benzo(a)anthracene	U	0.093	ug/L	1	.2	0.19	0.043	0.093
Chrysene	U	0.093	ug/L	1	.2	0.19	0.034	0.093
Benzo(b)Fluoranthene	U	0.093	ug/L	1	.2	0.19	0.083	0.093
Benzo(k)fluoranthene	U	0.093	ug/L	1	.2	0.19	0.046	0.093
Benzo(a)pyrene	U	0.093	ug/L	1	.2	0.19	0.062	0.093
Indeno(1,2,3-cd)pyrene	U	0.093	ug/L	1	.2	0.19	0.048	0.093
Dibenzo(a,h)anthracene	U	0.093	ug/L	1	.2	0.19	0.065	0.093
Benzo(g,h,i)perylene	U	0.093	ug/L	1	.2	0.19	0.061	0.093
2-Methylnaphthalene-D10		77.2	%					
Fluorene-D10		80.5	%					
Pyrene-D10		89.7	%					

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Report of Analytical Results

SDG: SQ6133
Lab ID: SQ6133-2
Client ID: SY-OBMW4R-110723
Matrix: AQ
Lab File ID: N0419.D

Sample Date: 07-NOV-23
Extract Date: 13-NOV-23
Extracted By: SH/NG/AC
Extraction Method: SW846 3510C
Lab Prep Batch: WG345301

Report Date: 29-DEC-23
Analysis Date: 08-DEC-23
Analyst: EP
Analysis Method: SW846 8270D SIM
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	0.094	ug/L	1	.2	0.19	0.060	0.094
2-Methylnaphthalene	U	0.094	ug/L	1	.2	0.19	0.073	0.094
Acenaphthylene	U	0.094	ug/L	1	.2	0.19	0.051	0.094
Acenaphthene	U	0.094	ug/L	1	.2	0.19	0.060	0.094
Fluorene	U	0.094	ug/L	1	.2	0.19	0.058	0.094
Phenanthrene	U	0.094	ug/L	1	.2	0.19	0.048	0.094
Anthracene	U	0.094	ug/L	1	.2	0.19	0.042	0.094
Fluoranthene	U	0.094	ug/L	1	.2	0.19	0.069	0.094
Pyrene	U	0.094	ug/L	1	.2	0.19	0.056	0.094
Benzo(a)anthracene	U	0.094	ug/L	1	.2	0.19	0.043	0.094
Chrysene	U	0.094	ug/L	1	.2	0.19	0.034	0.094
Benzo(b)Fluoranthene	U	0.094	ug/L	1	.2	0.19	0.084	0.094
Benzo(k)fluoranthene	U	0.094	ug/L	1	.2	0.19	0.046	0.094
Benzo(a)pyrene	U	0.094	ug/L	1	.2	0.19	0.062	0.094
Indeno(1,2,3-cd)pyrene	U	0.094	ug/L	1	.2	0.19	0.049	0.094
Dibenzo(a,h)anthracene	U	0.094	ug/L	1	.2	0.19	0.066	0.094
Benzo(g,h,i)perylene	U	0.094	ug/L	1	.2	0.19	0.061	0.094
2-Methylnaphthalene-D10		81.5	%					
Fluorene-D10		79.6	%					
Pyrene-D10		87.6	%					

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Report of Analytical Results

SDG: SQ6133
Lab ID: SQ6133-3
Client ID: SY-OBMW12-110723
Matrix: AQ
Lab File ID: N0420.D

Sample Date: 07-NOV-23
Extract Date: 13-NOV-23
Extracted By: SH/NG/AC
Extraction Method: SW846 3510C
Lab Prep Batch: WG345301

Report Date: 29-DEC-23
Analysis Date: 08-DEC-23
Analyst: EP
Analysis Method: SW846 8270D SIM
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	0.094	ug/L	1	.2	0.19	0.060	0.094
2-Methylnaphthalene	U	0.094	ug/L	1	.2	0.19	0.073	0.094
Acenaphthylene	U	0.094	ug/L	1	.2	0.19	0.051	0.094
Acenaphthene	U	0.094	ug/L	1	.2	0.19	0.060	0.094
Fluorene	U	0.094	ug/L	1	.2	0.19	0.058	0.094
Phenanthrene	U	0.094	ug/L	1	.2	0.19	0.048	0.094
Anthracene	U	0.094	ug/L	1	.2	0.19	0.042	0.094
Fluoranthene	U	0.094	ug/L	1	.2	0.19	0.069	0.094
Pyrene	U	0.094	ug/L	1	.2	0.19	0.056	0.094
Benzo(a)anthracene	U	0.094	ug/L	1	.2	0.19	0.043	0.094
Chrysene	U	0.094	ug/L	1	.2	0.19	0.034	0.094
Benzo(b)Fluoranthene	U	0.094	ug/L	1	.2	0.19	0.084	0.094
Benzo(k)fluoranthene	U	0.094	ug/L	1	.2	0.19	0.046	0.094
Benzo(a)pyrene	U	0.094	ug/L	1	.2	0.19	0.062	0.094
Indeno(1,2,3-cd)pyrene	UMM	0.094	ug/L	1	.2	0.19	0.049	0.094
Dibenzo(a,h)anthracene	UMM	0.094	ug/L	1	.2	0.19	0.066	0.094
Benzo(g,h,i)perylene	UMM	0.094	ug/L	1	.2	0.19	0.061	0.094
2-Methylnaphthalene-D10		69.5	%					
Fluorene-D10		71.1	%					
Pyrene-D10		86.7	%					

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Report of Analytical Results

SDG: SQ6133
Lab ID: SQ6133-4
Client ID: SY-BRMW2-60.5-70.5-110723
Matrix: AQ
Lab File ID: N0423.D

Sample Date: 07-NOV-23
Extract Date: 13-NOV-23
Extracted By: SH/NG/AC
Extraction Method: SW846 3510C
Lab Prep Batch: WG345301

Report Date: 29-DEC-23
Analysis Date: 08-DEC-23
Analyst: EP
Analysis Method: SW846 8270D SIM
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	0.093	ug/L	1	.2	0.19	0.060	0.093
2-Methylnaphthalene	U	0.093	ug/L	1	.2	0.19	0.072	0.093
Acenaphthylene	U	0.093	ug/L	1	.2	0.19	0.050	0.093
Acenaphthene	U	0.093	ug/L	1	.2	0.19	0.060	0.093
Fluorene	U	0.093	ug/L	1	.2	0.19	0.057	0.093
Phenanthrene	U	0.093	ug/L	1	.2	0.19	0.048	0.093
Anthracene	U	0.093	ug/L	1	.2	0.19	0.041	0.093
Fluoranthene	U	0.093	ug/L	1	.2	0.19	0.068	0.093
Pyrene	U	0.093	ug/L	1	.2	0.19	0.055	0.093
Benzo(a)anthracene	U	0.093	ug/L	1	.2	0.19	0.043	0.093
Chrysene	U	0.093	ug/L	1	.2	0.19	0.034	0.093
Benzo(b)Fluoranthene	U	0.093	ug/L	1	.2	0.19	0.083	0.093
Benzo(k)fluoranthene	U	0.093	ug/L	1	.2	0.19	0.046	0.093
Benzo(a)pyrene	U	0.093	ug/L	1	.2	0.19	0.062	0.093
Indeno(1,2,3-cd)pyrene	U	0.093	ug/L	1	.2	0.19	0.048	0.093
Dibenzo(a,h)anthracene	U	0.093	ug/L	1	.2	0.19	0.065	0.093
Benzo(g,h,i)perylene	U	0.093	ug/L	1	.2	0.19	0.061	0.093
2-Methylnaphthalene-D10		84.8	%					
Fluorene-D10		84.2	%					
Pyrene-D10		98.2	%					

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Report of Analytical Results

SDG: SQ6133
Lab ID: SQ6133-5
Client ID: SY-OBMW15-110723
Matrix: AQ
Lab File ID: N0424.D

Sample Date: 07-NOV-23
Extract Date: 13-NOV-23
Extracted By: SH/NG/AC
Extraction Method: SW846 3510C
Lab Prep Batch: WG345301

Report Date: 29-DEC-23
Analysis Date: 08-DEC-23
Analyst: EP
Analysis Method: SW846 8270D SIM
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	0.095	ug/L	1	.2	0.19	0.061	0.095
2-Methylnaphthalene	U	0.095	ug/L	1	.2	0.19	0.073	0.095
Acenaphthylene	U	0.095	ug/L	1	.2	0.19	0.051	0.095
Acenaphthene	U	0.095	ug/L	1	.2	0.19	0.061	0.095
Fluorene	U	0.095	ug/L	1	.2	0.19	0.058	0.095
Phenanthrene	U	0.095	ug/L	1	.2	0.19	0.048	0.095
Anthracene	U	0.095	ug/L	1	.2	0.19	0.042	0.095
Fluoranthene	U	0.095	ug/L	1	.2	0.19	0.070	0.095
Pyrene	U	0.095	ug/L	1	.2	0.19	0.056	0.095
Benzo(a)anthracene	U	0.095	ug/L	1	.2	0.19	0.044	0.095
Chrysene	U	0.095	ug/L	1	.2	0.19	0.034	0.095
Benzo(b)Fluoranthene	U	0.095	ug/L	1	.2	0.19	0.085	0.095
Benzo(k)fluoranthene	U	0.095	ug/L	1	.2	0.19	0.047	0.095
Benzo(a)pyrene	U	0.095	ug/L	1	.2	0.19	0.063	0.095
Indeno(1,2,3-cd)pyrene	U	0.095	ug/L	1	.2	0.19	0.050	0.095
Dibenzo(a,h)anthracene	U	0.095	ug/L	1	.2	0.19	0.067	0.095
Benzo(g,h,i)perylene	U	0.095	ug/L	1	.2	0.19	0.062	0.095
2-Methylnaphthalene-D10		78.7	%					
Fluorene-D10		81.8	%					
Pyrene-D10		97.0	%					

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Report of Analytical Results

SDG: SQ6133
Lab ID: SQ6133-6
Client ID: SY-OBMW5-110723
Matrix: AQ
Lab File ID: N0425.D

Sample Date: 07-NOV-23
Extract Date: 13-NOV-23
Extracted By: SH/NG/AC
Extraction Method: SW846 3510C
Lab Prep Batch: WG345301

Report Date: 29-DEC-23
Analysis Date: 08-DEC-23
Analyst: EP
Analysis Method: SW846 8270D SIM
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	0.093	ug/L	1	.2	0.19	0.060	0.093
2-Methylnaphthalene	U	0.093	ug/L	1	.2	0.19	0.072	0.093
Acenaphthylene	U	0.093	ug/L	1	.2	0.19	0.050	0.093
Acenaphthene	U	0.093	ug/L	1	.2	0.19	0.060	0.093
Fluorene	U	0.093	ug/L	1	.2	0.19	0.057	0.093
Phenanthrene	U	0.093	ug/L	1	.2	0.19	0.048	0.093
Anthracene	U	0.093	ug/L	1	.2	0.19	0.041	0.093
Fluoranthene	U	0.093	ug/L	1	.2	0.19	0.068	0.093
Pyrene	U	0.093	ug/L	1	.2	0.19	0.055	0.093
Benzo(a)anthracene	U	0.093	ug/L	1	.2	0.19	0.043	0.093
Chrysene	U	0.093	ug/L	1	.2	0.19	0.034	0.093
Benzo(b)Fluoranthene	U	0.093	ug/L	1	.2	0.19	0.083	0.093
Benzo(k)fluoranthene	U	0.093	ug/L	1	.2	0.19	0.046	0.093
Benzo(a)pyrene	U	0.093	ug/L	1	.2	0.19	0.062	0.093
Indeno(1,2,3-cd)pyrene	U	0.093	ug/L	1	.2	0.19	0.048	0.093
Dibenzo(a,h)anthracene	U	0.093	ug/L	1	.2	0.19	0.065	0.093
Benzo(g,h,i)perylene	U	0.093	ug/L	1	.2	0.19	0.061	0.093
2-Methylnaphthalene-D10		79.9	%					
Fluorene-D10		84.1	%					
Pyrene-D10		103.	%					

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Report of Analytical Results

SDG: SQ6133
Lab ID: SQ6133-7
Client ID: SY-OBMW13-110723
Matrix: AQ
Lab File ID: N0426.D

Sample Date: 07-NOV-23
Extract Date: 13-NOV-23
Extracted By: SH/NG/AC
Extraction Method: SW846 3510C
Lab Prep Batch: WG345301

Report Date: 29-DEC-23
Analysis Date: 08-DEC-23
Analyst: EP
Analysis Method: SW846 8270D SIM
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	0.094	ug/L	1	.2	0.19	0.060	0.094
2-Methylnaphthalene	U	0.094	ug/L	1	.2	0.19	0.073	0.094
Acenaphthylene	U	0.094	ug/L	1	.2	0.19	0.051	0.094
Acenaphthene	U	0.094	ug/L	1	.2	0.19	0.060	0.094
Fluorene	U	0.094	ug/L	1	.2	0.19	0.058	0.094
Phenanthrene	U	0.094	ug/L	1	.2	0.19	0.048	0.094
Anthracene	U	0.094	ug/L	1	.2	0.19	0.042	0.094
Fluoranthene	U	0.094	ug/L	1	.2	0.19	0.069	0.094
Pyrene	U	0.094	ug/L	1	.2	0.19	0.056	0.094
Benzo(a)anthracene	U	0.094	ug/L	1	.2	0.19	0.043	0.094
Chrysene	U	0.094	ug/L	1	.2	0.19	0.034	0.094
Benzo(b)Fluoranthene	U	0.094	ug/L	1	.2	0.19	0.084	0.094
Benzo(k)fluoranthene	U	0.094	ug/L	1	.2	0.19	0.046	0.094
Benzo(a)pyrene	U	0.094	ug/L	1	.2	0.19	0.062	0.094
Indeno(1,2,3-cd)pyrene	U	0.094	ug/L	1	.2	0.19	0.049	0.094
Dibenzo(a,h)anthracene	U	0.094	ug/L	1	.2	0.19	0.066	0.094
Benzo(g,h,i)perylene	U	0.094	ug/L	1	.2	0.19	0.061	0.094
2-Methylnaphthalene-D10		82.9	%					
Fluorene-D10		80.2	%					
Pyrene-D10		102.	%					

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Report of Analytical Results

SDG: SQ6133
Lab ID: SQ6133-8
Client ID: SY-BRMW2-80.5-95.5-110723
Matrix: AQ
Lab File ID: N0436.D

Sample Date: 07-NOV-23
Extract Date: 13-NOV-23
Extracted By: SH/NG/AC
Extraction Method: SW846 3510C
Lab Prep Batch: WG345301

Report Date: 29-DEC-23
Analysis Date: 11-DEC-23
Analyst: EP
Analysis Method: SW846 8270D SIM
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	0.094	ug/L	1	.2	0.19	0.060	0.094
2-Methylnaphthalene	U	0.094	ug/L	1	.2	0.19	0.073	0.094
Acenaphthylene	U	0.094	ug/L	1	.2	0.19	0.051	0.094
Acenaphthene	U	0.094	ug/L	1	.2	0.19	0.060	0.094
Fluorene	U	0.094	ug/L	1	.2	0.19	0.058	0.094
Phenanthrene	U	0.094	ug/L	1	.2	0.19	0.048	0.094
Anthracene	U	0.094	ug/L	1	.2	0.19	0.042	0.094
Fluoranthene	U	0.094	ug/L	1	.2	0.19	0.069	0.094
Pyrene	U	0.094	ug/L	1	.2	0.19	0.056	0.094
Benzo(a)anthracene	U	0.094	ug/L	1	.2	0.19	0.043	0.094
Chrysene	U	0.094	ug/L	1	.2	0.19	0.034	0.094
Benzo(b)Fluoranthene	U	0.094	ug/L	1	.2	0.19	0.084	0.094
Benzo(k)fluoranthene	UM	0.094	ug/L	1	.2	0.19	0.046	0.094
Benzo(a)pyrene	UM	0.094	ug/L	1	.2	0.19	0.062	0.094
Indeno(1,2,3-cd)pyrene	UM	0.094	ug/L	1	.2	0.19	0.049	0.094
Dibenzo(a,h)anthracene	UM	0.094	ug/L	1	.2	0.19	0.066	0.094
Benzo(g,h,i)perylene	UM	0.094	ug/L	1	.2	0.19	0.061	0.094
2-Methylnaphthalene-D10		58.6	%					
Fluorene-D10		62.8	%					
Pyrene-D10		65.5	%					

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Report of Analytical Results

SDG: SQ6133
Lab ID: SQ6133-9
Client ID: SY-OBMW14-110723
Matrix: AQ
Lab File ID: N0427.D

Sample Date: 07-NOV-23
Extract Date: 13-NOV-23
Extracted By: SH/NG/AC
Extraction Method: SW846 3510C
Lab Prep Batch: WG345301

Report Date: 29-DEC-23
Analysis Date: 08-DEC-23
Analyst: EP
Analysis Method: SW846 8270D SIM
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	0.095	ug/L	1	.2	0.19	0.061	0.095
2-Methylnaphthalene	U	0.095	ug/L	1	.2	0.19	0.073	0.095
Acenaphthylene	U	0.095	ug/L	1	.2	0.19	0.051	0.095
Acenaphthene	U	0.095	ug/L	1	.2	0.19	0.061	0.095
Fluorene	U	0.095	ug/L	1	.2	0.19	0.058	0.095
Phenanthrene	U	0.095	ug/L	1	.2	0.19	0.048	0.095
Anthracene	U	0.095	ug/L	1	.2	0.19	0.042	0.095
Fluoranthene	U	0.095	ug/L	1	.2	0.19	0.070	0.095
Pyrene	U	0.095	ug/L	1	.2	0.19	0.056	0.095
Benzo(a)anthracene	U	0.095	ug/L	1	.2	0.19	0.044	0.095
Chrysene	U	0.095	ug/L	1	.2	0.19	0.034	0.095
Benzo(b)Fluoranthene	U	0.095	ug/L	1	.2	0.19	0.085	0.095
Benzo(k)fluoranthene	U	0.095	ug/L	1	.2	0.19	0.047	0.095
Benzo(a)pyrene	U	0.095	ug/L	1	.2	0.19	0.063	0.095
Indeno(1,2,3-cd)pyrene	U	0.095	ug/L	1	.2	0.19	0.050	0.095
Dibenzo(a,h)anthracene	U	0.095	ug/L	1	.2	0.19	0.067	0.095
Benzo(g,h,i)perylene	U	0.095	ug/L	1	.2	0.19	0.062	0.095
2-Methylnaphthalene-D10		58.4	%					
Fluorene-D10		62.6	%					
Pyrene-D10		75.9	%					

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Report of Analytical Results

SDG: SQ6133
Lab ID: SQ6133-10
Client ID: SY-BRMW2-252.5-262.5-110723
Matrix: AQ
Lab File ID: N0428.D

Sample Date: 07-NOV-23
Extract Date: 13-NOV-23
Extracted By: SH/NG/AC
Extraction Method: SW846 3510C
Lab Prep Batch: WG345301

Report Date: 29-DEC-23
Analysis Date: 08-DEC-23
Analyst: EP
Analysis Method: SW846 8270D SIM
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	0.093	ug/L	1	.2	0.19	0.060	0.093
2-Methylnaphthalene	U	0.093	ug/L	1	.2	0.19	0.072	0.093
Acenaphthylene	U	0.093	ug/L	1	.2	0.19	0.050	0.093
Acenaphthene	U	0.093	ug/L	1	.2	0.19	0.060	0.093
Fluorene	U	0.093	ug/L	1	.2	0.19	0.057	0.093
Phenanthrene	U	0.093	ug/L	1	.2	0.19	0.048	0.093
Anthracene	U	0.093	ug/L	1	.2	0.19	0.041	0.093
Fluoranthene	U	0.093	ug/L	1	.2	0.19	0.068	0.093
Pyrene	U	0.093	ug/L	1	.2	0.19	0.055	0.093
Benzo(a)anthracene	U	0.093	ug/L	1	.2	0.19	0.043	0.093
Chrysene	U	0.093	ug/L	1	.2	0.19	0.034	0.093
Benzo(b)Fluoranthene	U	0.093	ug/L	1	.2	0.19	0.083	0.093
Benzo(k)fluoranthene	U	0.093	ug/L	1	.2	0.19	0.046	0.093
Benzo(a)pyrene	U	0.093	ug/L	1	.2	0.19	0.062	0.093
Indeno(1,2,3-cd)pyrene	U	0.093	ug/L	1	.2	0.19	0.048	0.093
Dibenzo(a,h)anthracene	U	0.093	ug/L	1	.2	0.19	0.065	0.093
Benzo(g,h,i)perylene	U	0.093	ug/L	1	.2	0.19	0.061	0.093
2-Methylnaphthalene-D10		66.3	%					
Fluorene-D10		66.0	%					
Pyrene-D10		75.9	%					

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Report of Analytical Results

SDG: SQ6133
Lab ID: SQ6133-1
Client ID: SY-OBMW6-110723
Matrix: AQ
Lab File ID: 5QK20239.D

Sample Date: 07-NOV-23
Extract Date: 17-NOV-23
Extracted By: DL/SH
Extraction Method: RSK SOP 175
Lab Prep Batch: WG345593

Report Date: 30-NOV-23
Analysis Date: 17-NOV-23
Analyst: DL/SH
Analysis Method: RSK SOP 175 v.2
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Methane	J	3.7	ug/L	1	10.3	10.	2.6	5.2
Ethane	U	9.8	ug/L	1	13.1	13.	5.0	9.8
Ethene	U	9.8	ug/L	1	13.1	13.	5.0	9.8

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Report of Analytical Results

SDG: SQ6133
Lab ID: SQ6133-2
Client ID: SY-OBMW4R-110723
Matrix: AQ
Lab File ID: 5QK20240.D

Sample Date: 07-NOV-23
Extract Date: 17-NOV-23
Extracted By: DL/SH
Extraction Method: RSK SOP 175
Lab Prep Batch: WG345593

Report Date: 30-NOV-23
Analysis Date: 17-NOV-23
Analyst: DL/SH
Analysis Method: RSK SOP 175 v.2
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Methane	J	4.6	ug/L	1	10.3	10.	2.6	5.2
Ethane	U	9.8	ug/L	1	13.1	13.	5.0	9.8
Ethene	U	9.8	ug/L	1	13.1	13.	5.0	9.8

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Report of Analytical Results

SDG: SQ6133
Lab ID: SQ6133-3
Client ID: SY-OBMW12-110723
Matrix: AQ
Lab File ID: 5QK20241.D

Sample Date: 07-NOV-23
Extract Date: 17-NOV-23
Extracted By: DL/SH
Extraction Method: RSK SOP 175
Lab Prep Batch: WG345593

Report Date: 30-NOV-23
Analysis Date: 17-NOV-23
Analyst: DL/SH
Analysis Method: RSK SOP 175 v.2
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Methane		17	ug/L	1	10.3	10.	2.6	5.2
Ethane	U	9.8	ug/L	1	13.1	13.	5.0	9.8
Ethene	U	9.8	ug/L	1	13.1	13.	5.0	9.8

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Report of Analytical Results

SDG: SQ6133
Lab ID: SQ6133-4
Client ID: SY-BRMW2-60.5-70.5-110723
Matrix: AQ
Lab File ID: 5QK20244.D

Sample Date: 07-NOV-23
Extract Date: 17-NOV-23
Extracted By: DL/SH
Extraction Method: RSK SOP 175
Lab Prep Batch: WG345593

Report Date: 30-NOV-23
Analysis Date: 17-NOV-23
Analyst: DL/SH
Analysis Method: RSK SOP 175 v.2
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Methane	J	3.4	ug/L	1	10.3	10.	2.6	5.2
Ethane	U	9.8	ug/L	1	13.1	13.	5.0	9.8
Ethene	U	9.8	ug/L	1	13.1	13.	5.0	9.8

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Report of Analytical Results

SDG: SQ6133
Lab ID: SQ6133-5
Client ID: SY-OBMW15-110723
Matrix: AQ
Lab File ID: 5QK20245.D

Sample Date: 07-NOV-23
Extract Date: 17-NOV-23
Extracted By: DL/SH
Extraction Method: RSK SOP 175
Lab Prep Batch: WG345593

Report Date: 30-NOV-23
Analysis Date: 17-NOV-23
Analyst: DL/SH
Analysis Method: RSK SOP 175 v.2
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Methane	J	9.1	ug/L	1	10.3	10.	2.6	5.2
Ethane	U	9.8	ug/L	1	13.1	13.	5.0	9.8
Ethene	U	9.8	ug/L	1	13.1	13.	5.0	9.8

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Report of Analytical Results

SDG: SQ6133
Lab ID: SQ6133-6
Client ID: SY-OBMW5-110723
Matrix: AQ
Lab File ID: 5QK20246.D

Sample Date: 07-NOV-23
Extract Date: 17-NOV-23
Extracted By: DL/SH
Extraction Method: RSK SOP 175
Lab Prep Batch: WG345593

Report Date: 30-NOV-23
Analysis Date: 17-NOV-23
Analyst: DL/SH
Analysis Method: RSK SOP 175 v.2
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Methane	J	3.6	ug/L	1	10.3	10.	2.6	5.2
Ethane	U	9.8	ug/L	1	13.1	13.	5.0	9.8
Ethene	U	9.8	ug/L	1	13.1	13.	5.0	9.8

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Report of Analytical Results

SDG: SQ6133
Lab ID: SQ6133-7
Client ID: SY-OBMW13-110723
Matrix: AQ
Lab File ID: 5QK20247.D

Sample Date: 07-NOV-23
Extract Date: 17-NOV-23
Extracted By: DL/SH
Extraction Method: RSK SOP 175
Lab Prep Batch: WG345593

Report Date: 30-NOV-23
Analysis Date: 17-NOV-23
Analyst: DL/SH
Analysis Method: RSK SOP 175 v.2
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Methane	J	3.2	ug/L	1	10.3	10.	2.6	5.2
Ethane	U	9.8	ug/L	1	13.1	13.	5.0	9.8
Ethene	U	9.8	ug/L	1	13.1	13.	5.0	9.8

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Report of Analytical Results

SDG: SQ6133
Lab ID: SQ6133-8
Client ID: SY-BRMW2-80.5-95.5-110723
Matrix: AQ
Lab File ID: 5QK20249.D

Sample Date: 07-NOV-23
Extract Date: 17-NOV-23
Extracted By: DL/SH
Extraction Method: RSK SOP 175
Lab Prep Batch: WG345593

Report Date: 30-NOV-23
Analysis Date: 17-NOV-23
Analyst: DL/SH
Analysis Method: RSK SOP 175 v.2
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Methane	J	3.4	ug/L	1	10.3	10.	2.6	5.2
Ethane	U	9.8	ug/L	1	13.1	13.	5.0	9.8
Ethene	U	9.8	ug/L	1	13.1	13.	5.0	9.8

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Report of Analytical Results

SDG: SQ6133
Lab ID: SQ6133-9
Client ID: SY-OBMW14-110723
Matrix: AQ
Lab File ID: 5QK20252.D

Sample Date: 07-NOV-23
Extract Date: 17-NOV-23
Extracted By: DL/SH
Extraction Method: RSK SOP 175
Lab Prep Batch: WG345593

Report Date: 30-NOV-23
Analysis Date: 17-NOV-23
Analyst: DL/SH
Analysis Method: RSK SOP 175 v.2
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Methane		18	ug/L	1	10.3	10.	2.6	5.2
Ethane	U	9.8	ug/L	1	13.1	13.	5.0	9.8
Ethene	U	9.8	ug/L	1	13.1	13.	5.0	9.8

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Report of Analytical Results

SDG: SQ6133
Lab ID: SQ6133-10
Client ID: SY-BRMW2-252.5-262.5-110723
Matrix: AQ
Lab File ID: 5QK20253.D

Sample Date: 07-NOV-23
Extract Date: 17-NOV-23
Extracted By: DL/SH
Extraction Method: RSK SOP 175
Lab Prep Batch: WG345593

Report Date: 30-NOV-23
Analysis Date: 17-NOV-23
Analyst: DL/SH
Analysis Method: RSK SOP 175 v.2
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Methane	J	3.4	ug/L	1	10.3	10.	2.6	5.2
Ethane	U	9.8	ug/L	1	13.1	13.	5.0	9.8
Ethene	U	9.8	ug/L	1	13.1	13.	5.0	9.8

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Report of Analytical Results

Lab Sample ID: SQ6133-1
Client ID: SY-OBMW6-110723
SDG: SQ6133
Report Date: 11-DEC-23

Matrix	Date Sampled	Date Received
AQ	07-NOV-23 10:30	08-NOV-23

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Alkalinity	100 mg/L	5.0	0.23	4.0	SM2320B	WG345360	13-NOV-23 14:07	N/A	N/A	
Chloride	25 mg/L	2.0	0.099	1.0	EPA 300.0	WG345141	08-NOV-23 18:46	N/A	N/A	
Chromium, Hexavalent	U0.012 mg/L	0.025	0.00076	0.012	SW846 7196A	WG345042	08-NOV-23 09:08	N/A	N/A	
Ferrous Iron	U0.050 mg/L	0.10	0.026	0.050	SM3500D	WG345050	08-NOV-23 09:42	N/A	N/A	
Nitrate as N	0.073 mg/L	0.050	0.017	0.025	EPA 300.0	WG345141	08-NOV-23 18:46	N/A	N/A	
Sulfate	13 mg/L	1.0	0.064	0.50	EPA 300.0	WG345141	08-NOV-23 18:46	N/A	N/A	
Total Organic Carbon	J0.63 mg/L	1.0	0.37	0.75	SM5310B	WG346583	05-DEC-23 18:17	N/A	N/A	

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Report of Analytical Results

Lab Sample ID: SQ6133-2
Client ID: SY-OBMW4R-110723
SDG: SQ6133
Report Date: 11-DEC-23

Matrix	Date Sampled	Date Received
AQ	07-NOV-23 11:05	08-NOV-23

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Alkalinity	210 mg/L	5.0	0.23	4.0	SM2320B	WG345360	13-NOV-23 14:10	N/A	N/A	
Chloride	1200 mg/L	100	5.0	50.	EPA 300.0	WG345625	16-NOV-23 20:19	N/A	N/A	
Chromium, Hexavalent	U0.012 mg/L	0.025	0.00076	0.012	SW846 7196A	WG345042	08-NOV-23 09:08	N/A	N/A	
Ferrous Iron	J0.076 mg/L	0.10	0.026	0.050	SM3500D	WG345050	08-NOV-23 09:42	N/A	N/A	
Nitrate as N	0.056 mg/L	0.050	0.017	0.025	EPA 300.0	WG345141	08-NOV-23 19:04	N/A	N/A	
Sulfate	150 mg/L	5.0	0.32	2.5	EPA 300.0	WG345625	16-NOV-23 21:11	N/A	N/A	
Total Organic Carbon	1.5 mg/L	1.0	0.37	0.75	SM5310B	WG346583	05-DEC-23 18:44	N/A	N/A	

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Report of Analytical Results

Lab Sample ID: SQ6133-3
Client ID: SY-OBMW12-110723
SDG: SQ6133
Report Date: 11-DEC-23

Matrix	Date Sampled	Date Received
AQ	07-NOV-23 10:07	08-NOV-23

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Alkalinity	200 mg/L	5.0	0.23	4.0	SM2320B	WG345360	13-NOV-23 14:14	N/A	N/A	
Chloride	27 mg/L	2.0	0.099	1.0	EPA 300.0	WG345141	08-NOV-23 19:21	N/A	N/A	
Chromium, Hexavalent	U0.012 mg/L	0.025	0.00076	0.012	SW846 7196A	WG345042	08-NOV-23 09:08	N/A	N/A	
Ferrous Iron	U0.050 mg/L	0.10	0.026	0.050	SM3500D	WG345050	08-NOV-23 09:42	N/A	N/A	
Nitrate as N	U0.025 mg/L	0.050	0.017	0.025	EPA 300.0	WG345141	08-NOV-23 19:21	N/A	N/A	M1
Sulfate	12 mg/L	1.0	0.064	0.50	EPA 300.0	WG345141	08-NOV-23 19:21	N/A	N/A	M1
Total Organic Carbon	1.5 mg/L	1.0	0.37	0.75	SM5310B	WG346583	05-DEC-23 19:00	N/A	N/A	

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Report of Analytical Results

Lab Sample ID: SQ6133-4
Client ID: SY-BRMW2-60.5-70.5-110723
SDG: SQ6133
Report Date: 11-DEC-23

Matrix	Date Sampled	Date Received
AQ	07-NOV-23 12:25	08-NOV-23

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Alkalinity	100 mg/L	5.0	0.23	4.0	SM2320B	WG345360	13-NOV-23 14:55	N/A	N/A	
Chloride	17 mg/L	2.0	0.099	1.0	EPA 300.0	WG345141	08-NOV-23 20:13	N/A	N/A	
Chromium, Hexavalent	U0.012 mg/L	0.025	0.00076	0.012	SW846 7196A	WG345042	08-NOV-23 09:08	N/A	N/A	
Ferrous Iron	U0.050 mg/L	0.10	0.026	0.050	SM3500D	WG345050	08-NOV-23 09:42	N/A	N/A	
Nitrate as N	0.16 mg/L	0.050	0.017	0.025	EPA 300.0	WG345141	08-NOV-23 20:13	N/A	N/A	
Sulfate	9.3 mg/L	1.0	0.064	0.50	EPA 300.0	WG345141	08-NOV-23 20:13	N/A	N/A	
Total Organic Carbon	2.1 mg/L	1.0	0.37	0.75	SM5310B	WG346583	05-DEC-23 19:55	N/A	N/A	

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Report of Analytical Results

Lab Sample ID: SQ6133-5
Client ID: SY-OBMW15-110723
SDG: SQ6133
Report Date: 11-DEC-23

Matrix	Date Sampled	Date Received
AQ	07-NOV-23 12:50	08-NOV-23

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Alkalinity	140 mg/L	5.0	0.23	4.0	SM2320B	WG345360	13-NOV-23 14:58	N/A	N/A	
Chloride	220 mg/L	20.	0.99	10.	EPA 300.0	WG345625	16-NOV-23 21:28	N/A	N/A	
Chromium, Hexavalent	U0.012 mg/L	0.025	0.00076	0.012	SW846 7196A	WG345042	08-NOV-23 10:49	N/A	N/A	
Ferrous Iron	U0.050 mg/L	0.10	0.026	0.050	SM3500D	WG345050	08-NOV-23 10:58	N/A	N/A	
Nitrate as N	0.20 mg/L	0.050	0.017	0.025	EPA 300.0	WG345141	08-NOV-23 20:30	N/A	N/A	
Sulfate	200 mg/L	10.	0.64	5.0	EPA 300.0	WG345625	16-NOV-23 21:28	N/A	N/A	
Total Organic Carbon	2.7 mg/L	1.0	0.37	0.75	SM5310B	WG346583	05-DEC-23 20:10	N/A	N/A	

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Report of Analytical Results

Lab Sample ID: SQ6133-6
Client ID: SY-OBMW5-110723
SDG: SQ6133
Report Date: 11-DEC-23

Matrix	Date Sampled	Date Received
AQ	07-NOV-23 13:25	08-NOV-23

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Alkalinity	120 mg/L	5.0	0.23	4.0	SM2320B	WG345360	13-NOV-23 15:02	N/A	N/A	
Chloride	18 mg/L	2.0	0.099	1.0	EPA 300.0	WG345141	08-NOV-23 20:47	N/A	N/A	
Chromium, Hexavalent	U0.012 mg/L	0.025	0.00076	0.012	SW846 7196A	WG345042	08-NOV-23 10:49	N/A	N/A	
Ferrous Iron	U0.050 mg/L	0.10	0.026	0.050	SM3500D	WG345050	08-NOV-23 10:58	N/A	N/A	
Nitrate as N	0.062 mg/L	0.050	0.017	0.025	EPA 300.0	WG345141	08-NOV-23 20:47	N/A	N/A	
Sulfate	12 mg/L	1.0	0.064	0.50	EPA 300.0	WG345141	08-NOV-23 20:47	N/A	N/A	
Total Organic Carbon	J0.50 mg/L	1.0	0.37	0.75	SM5310B	WG346583	05-DEC-23 20:54	N/A	N/A	

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Report of Analytical Results

Lab Sample ID: SQ6133-7
Client ID: SY-OBMW13-110723
SDG: SQ6133
Report Date: 11-DEC-23

Matrix	Date Sampled	Date Received
AQ	07-NOV-23 14:25	08-NOV-23

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Alkalinity	220 mg/L	5.0	0.23	4.0	SM2320B	WG345360	13-NOV-23 15:05	N/A	N/A	
Chloride	56 mg/L	4.0	0.20	2.0	EPA 300.0	WG345625	16-NOV-23 21:45	N/A	N/A	
Chromium, Hexavalent	U0.012 mg/L	0.025	0.00076	0.012	SW846 7196A	WG345042	08-NOV-23 10:49	N/A	N/A	
Ferrous Iron	U0.050 mg/L	0.10	0.026	0.050	SM3500D	WG345050	08-NOV-23 10:58	N/A	N/A	
Nitrate as N	0.51 mg/L	0.050	0.017	0.025	EPA 300.0	WG345141	08-NOV-23 21:04	N/A	N/A	
Sulfate	68 mg/L	1.0	0.064	0.50	EPA 300.0	WG345141	08-NOV-23 21:04	N/A	N/A	
Total Organic Carbon	1.7 mg/L	1.0	0.37	0.75	SM5310B	WG346583	05-DEC-23 21:08	N/A	N/A	

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Report of Analytical Results

Lab Sample ID: SQ6133-8
Client ID: SY-BRMW2-80.5-95.5-110723
SDG: SQ6133
Report Date: 11-DEC-23

Matrix	Date Sampled	Date Received
AQ	07-NOV-23 13:40	08-NOV-23

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Alkalinity	100 mg/L	5.0	0.23	4.0	SM2320B	WG345462	14-NOV-23 14:23	N/A	N/A	
Chloride	5.8 mg/L	2.0	0.099	1.0	EPA 300.0	WG345141	08-NOV-23 21:56	N/A	N/A	
Chromium, Hexavalent	U0.012 mg/L	0.025	0.00076	0.012	SW846 7196A	WG345042	08-NOV-23 10:49	N/A	N/A	
Ferrous Iron	U0.050 mg/L	0.10	0.026	0.050	SM3500D	WG345050	08-NOV-23 10:58	N/A	N/A	
Nitrate as N	0.30 mg/L	0.050	0.017	0.025	EPA 300.0	WG345141	08-NOV-23 21:56	N/A	N/A	
Sulfate	7.7 mg/L	1.0	0.064	0.50	EPA 300.0	WG345141	08-NOV-23 21:56	N/A	N/A	
Total Organic Carbon	J0.57 mg/L	1.0	0.37	0.75	SM5310B	WG346583	05-DEC-23 21:19	N/A	N/A	

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Report of Analytical Results

Lab Sample ID: SQ6133-9
Client ID: SY-OBMW14-110723
SDG: SQ6133
Report Date: 11-DEC-23

Matrix	Date Sampled	Date Received
AQ	07-NOV-23 14:00	08-NOV-23

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Alkalinity	180 mg/L	5.0	0.23	4.0	SM2320B	WG345462	14-NOV-23 14:35	N/A	N/A	
Chloride	99 mg/L	10.	0.50	5.0	EPA 300.0	WG345625	16-NOV-23 22:03	N/A	N/A	
Chromium, Hexavalent	U0.012 mg/L	0.025	0.00076	0.012	SW846 7196A	WG345042	08-NOV-23 10:49	N/A	N/A	
Ferrous Iron	U0.050 mg/L	0.10	0.026	0.050	SM3500D	WG345050	08-NOV-23 10:58	N/A	N/A	
Nitrate as N	U0.025 mg/L	0.050	0.017	0.025	EPA 300.0	WG345141	08-NOV-23 22:48	N/A	N/A	
Sulfate	25 mg/L	1.0	0.064	0.50	EPA 300.0	WG345141	08-NOV-23 22:48	N/A	N/A	
Total Organic Carbon	1.2 mg/L	1.0	0.37	0.75	SM5310B	WG346583	05-DEC-23 22:08	N/A	N/A	

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Report of Analytical Results

Lab Sample ID: SQ6133-10
Client ID: SY-BRMW2-252.5-262.5-110723
SDG: SQ6133
Report Date: 11-DEC-23

Matrix	Date Sampled	Date Received
AQ	07-NOV-23 15:35	08-NOV-23

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Alkalinity	110 mg/L	5.0	0.23	4.0	SM2320B	WG345462	14-NOV-23 14:39	N/A	N/A	
Chloride	3.3 mg/L	2.0	0.099	1.0	EPA 300.0	WG345141	08-NOV-23 23:05	N/A	N/A	
Chromium, Hexavalent	U0.012 mg/L	0.025	0.00076	0.012	SW846 7196A	WG345042	08-NOV-23 10:49	N/A	N/A	
Ferrous Iron	U0.050 mg/L	0.10	0.026	0.050	SM3500D	WG345050	08-NOV-23 10:58	N/A	N/A	
Nitrate as N	0.10 mg/L	0.050	0.017	0.025	EPA 300.0	WG345141	08-NOV-23 23:05	N/A	N/A	
Sulfate	7.9 mg/L	1.0	0.064	0.50	EPA 300.0	WG345141	08-NOV-23 23:05	N/A	N/A	
Total Organic Carbon	1.3 mg/L	1.0	0.37	0.75	SM5310B	WG346583	05-DEC-23 22:23	N/A	N/A	

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SIM VOLATILES DATA

QC Summary Section

Form 2
System Monitoring Compound Recovery

Lab Name: Katahdin Analytical Services **SDG:** SQ6133 **Matrix:** AQ

Client Sample ID	Lab Sample ID	Col. ID	BFB	#	DBF	#	DCA	#	TOL	#
SY-OBMW6-110723	SQ6133-1		79.4		110.		113.		98.5	
SY-OBMW4R-110723	SQ6133-2		84.3		124.		122.		101.	
SY-OBMW12-110723	SQ6133-3		81.6		101.		102.		97.8	
SY-BRMW2-60.5-70.5-110	SQ6133-4		75.8		119.		120.		98.9	
SY-OBMW15-110723	SQ6133-5		83.0		122.		126.		101.	
SY-OBMW5-110723	SQ6133-6		82.4		124.		126.		99.4	
SY-OBMW13-110723	SQ6133-7		84.7		126.		128.		101.	
SY-BRMW2-80.5-95.5-110	SQ6133-8		82.7		121.		122.		99.9	
SY-OBMW14-110723	SQ6133-9		84.2		128.		129.		99.7	
SY-BRMW2-252.5-262.5-1	SQ6133-10		81.9		130.		127.		101.	
TB31-110723	SQ6133-11		79.5		113.		114.		99.9	
Laboratory Control S	WG345525-10		101.		101.		103.		101.	
Method Blank	WG345525-11		82.0		116.		117.		101.	
Laboratory Control S	WG345525-14		101.		103.		104.		98.4	
Laboratory Control S	WG345527-10		102.		104.		102.		98.9	
Method Blank	WG345527-11		79.3		114.		115.		102.	
Laboratory Control S	WG345527-14		102.		102.		100.		99.2	
Laboratory Control S	WG345597-1		99.9		101.		98.4		96.6	
Method Blank	WG345597-2		82.3		115.		114.		102.	
Matrix Spike	WG345597-6		95.8		113.		115.		98.0	
Matrix Spike Duplica	WG345597-7		97.9		104.		107.		96.2	
Laboratory Control S	WG345599-1		101.		87.0		84.5		97.7	
Method Blank	WG345599-2		78.1		96.3		94.4		99.9	
Laboratory Control S	WG345748-1		104.		86.6		87.2		99.1	
Method Blank	WG345748-2		79.8		98.3		101.		99.1	
Laboratory Control S	WG345748-6		103.		86.5		85.8		97.9	
Matrix Spike	WG345748-9		104.		77.2		77.7		95.0	
Matrix Spike Duplica	WG345748-10		104.		78.4		77.7		95.2	

Abbr.	Surrogate Compound	QC Limits
BFB	p-Bromofluorobenzene	70-130
DBF	Dibromofluoromethane	70-130
DCA	1,2-Dichloroethane-d4	70-130
TOL	Toluene-D8	70-130

= Column to be used to flag recovery limits.
* = Values outside of contract required QC limits.
D= System Monitoring Compound diluted out.

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Form 4
Method Blank Summary

Lab File ID : D8870.D
Instrument ID : GCMS-D
Heated Purge : No
Prep Temperature (C) : N/A

SDG : SQ6133
Lab Sample ID : WG345527-11
Date Analyzed : 16-NOV-23
Time Analyzed : 14:15

This Method Blank applies to the following samples and QC samples:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	
Laboratory Control S	WG345527-10	D8867.D	11/16/23	12:35	
Laboratory Control S	WG345527-14	D8868.D	11/16/23	13:08	
TB31-110723	SQ6133-11	D8873.D	11/16/23	15:54	
SY-OBMW6-110723	SQ6133-1	D8876.D	11/16/23	17:35	

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Form 4
Method Blank Summary

Lab File ID : D8885.D
Instrument ID : GCMS-D
Heated Purge : No
Prep Temperature (C) : N/A

SDG : SQ6133
Lab Sample ID : WG345599-2
Date Analyzed : 17-NOV-23
Time Analyzed : 10:03

This Method Blank applies to the following samples and QC samples:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	
Laboratory Control S	WG345599-1	D8883.D	11/17/23	08:52	
SY-OBMW12-110723	SQ6133-3	D8898.D	11/17/23	17:16	

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Form 4
Method Blank Summary

Lab File ID : D8911.D
Instrument ID : GCMS-D
Heated Purge : No
Prep Temperature (C) : N/A

SDG : SQ6133
Lab Sample ID : WG345748-2
Date Analyzed : 18-NOV-23
Time Analyzed : 12:57

This Method Blank applies to the following samples and QC samples:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	
Laboratory Control S	WG345748-1	D8908.D	11/18/23	11:17	
Laboratory Control S	WG345748-6	D8909.D	11/18/23	11:50	
Matrix Spike	WG345748-9	D8923.D	11/18/23	19:37	
Matrix Spike Duplica	WG345748-10	D8924.D	11/18/23	20:10	

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Form 4
Method Blank Summary

Lab File ID : S7210.D
Instrument ID : GCMS-S
Heated Purge : No
Prep Temperature (C) : N/A

SDG : SQ6133
Lab Sample ID : WG345525-11
Date Analyzed : 16-NOV-23
Time Analyzed : 17:38

This Method Blank applies to the following samples and QC samples:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	
Laboratory Control S	WG345525-10	S7207.D	11/16/23	16:15	
Laboratory Control S	WG345525-14	S7208.D	11/16/23	16:43	
SY-OBMW4R-110723	SQ6133-2	S7213.D	11/16/23	19:00	
SY-BRMW2-60.5-70.5-110723	SQ6133-4	S7214.D	11/16/23	19:28	
SY-OBMW15-110723	SQ6133-5	S7215.D	11/16/23	19:56	
SY-OBMW5-110723	SQ6133-6	S7216.D	11/16/23	20:23	
SY-OBMW13-110723	SQ6133-7	S7217.D	11/16/23	20:51	
SY-OBMW14-110723	SQ6133-9	S7218.D	11/16/23	21:19	
SY-BRMW2-252.5-262.5-110723	SQ6133-10	S7219.D	11/16/23	21:46	

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Form 4
Method Blank Summary

Lab File ID : S7228.D
Instrument ID : GCMS-S
Heated Purge : No
Prep Temperature (C) : N/A

SDG : SQ6133
Lab Sample ID : WG345597-2
Date Analyzed : 17-NOV-23
Time Analyzed : 11:16

This Method Blank applies to the following samples and QC samples:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	
Laboratory Control S	WG345597-1	S7226.D	11/17/23	10:21	
SY-BRMW2-80.5-95.5-110723	SQ6133-8	S7239.D	11/17/23	16:19	
Matrix Spike	WG345597-6	S7247.D	11/17/23	20:00	
Matrix Spike Duplica	WG345597-7	S7248.D	11/17/23	20:27	

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Form 5
Volatile Organic Instrument Performance Check

Lab Name : Katahdin Analytical Services
Lab File ID : DB230A.D
Instrument ID : GCMS-D

SDG : SQ6133
Date Analyzed : 16-NOV-23
Time Analyzed : 06:37
Heated Purge : No

m/e	Ion Abundance Criteria	% Relative Abundance		
50	15.0 - 40.0% of mass 95	15.6		
75	30.0 - 60.0% of mass 95	47.2		
95	Base Peak, 100% relative abundance	100		
96	5.0 - 9.0% of mass 95	7.0		
173	Less than 2.0% of mass 174	0.7	0.79	1
174	Greater than 50.0% of mass 95	91.3		
175	5.0 - 9.0% of mass 174	6.5	7.14	1
176	95.0 - 101.0% of mass 174	88.1	96.46	1
177	5.0 - 9.0% of mass 176	5.4	6.08	2

1-Value is % mass 174 2-Value is % mass 176

This check applies to the following samples, LCS, MS, MSD and standards:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Initial Calibration	WG345527-1	D8857.D	11/16/23	07:03
Initial Calibration	WG345527-2	D8858.D	11/16/23	07:36
Initial Calibration	WG345527-3	D8859.D	11/16/23	08:09
Initial Calibration	WG345527-4	D8860.D	11/16/23	08:42
Initial Calibration	WG345527-8	D8861.D	11/16/23	09:15
Initial Calibration	WG345527-7	D8862.D	11/16/23	09:48
Initial Calibration	WG345527-6	D8863.D	11/16/23	10:22
Initial Calibration	WG345527-5	D8864.D	11/16/23	10:55
Laboratory Control S	WG345527-10	D8867.D	11/16/23	12:35
Independent Source	WG345527-9	D8867A.D	11/16/23	12:35
Laboratory Control S	WG345527-14	D8868.D	11/16/23	13:08
Method Blank	WG345527-11	D8870.D	11/16/23	14:15
TB31-110723	SQ6133-11	D8873.D	11/16/23	15:54
SY-OBMW6-110723	SQ6133-1	D8876.D	11/16/23	17:35
Continuing Calibrati	WG345527-13	D8877.D	11/16/23	18:08

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Form 5
Volatile Organic Instrument Performance Check

Lab Name : Katahdin Analytical Services
Lab File ID : DB231A.D
Instrument ID : GCMS-D

SDG : SQ6133
Date Analyzed : 17-NOV-23
Time Analyzed : 07:54
Heated Purge : No

m/e	Ion Abundance Criteria	% Relative Abundance		
50	15.0 - 40.0% of mass 95	15.5		
75	30.0 - 60.0% of mass 95	46.1		
95	Base Peak, 100% relative abundance	100		
96	5.0 - 9.0% of mass 95	7.6		
173	Less than 2.0% of mass 174	0.6	0.71	1
174	Greater than 50.0% of mass 95	90.7		
175	5.0 - 9.0% of mass 174	6.3	6.90	1
176	95.0 - 101.0% of mass 174	86.6	95.52	1
177	5.0 - 9.0% of mass 176	5.5	6.35	2

1-Value is % mass 174 2-Value is % mass 176

This check applies to the following samples, LCS, MS, MSD and standards:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Continuing Calibrati	WG345599-4	D8882.D	11/17/23	08:19
Laboratory Control S	WG345599-1	D8883.D	11/17/23	08:52
Method Blank	WG345599-2	D8885.D	11/17/23	10:03
SY-OBMW12-110723	SQ6133-3	D8898.D	11/17/23	17:16
Continuing Calibrati	WG345599-5	D8901.D	11/17/23	18:56

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Form 5
Volatile Organic Instrument Performance Check

Lab Name : Katahdin Analytical Services
Lab File ID : DB232A.D
Instrument ID : GCMS-D

SDG : SQ6133
Date Analyzed : 18-NOV-23
Time Analyzed : 09:43
Heated Purge : No

m/e	Ion Abundance Criteria	% Relative Abundance		
50	15.0 - 40.0% of mass 95	16.0		
75	30.0 - 60.0% of mass 95	46.7		
95	Base Peak, 100% relative abundance	100		
96	5.0 - 9.0% of mass 95	6.8		
173	Less than 2.0% of mass 174	0.2	0.22	1
174	Greater than 50.0% of mass 95	88.5		
175	5.0 - 9.0% of mass 174	6.5	7.30	1
176	95.0 - 101.0% of mass 174	84.2	95.05	1
177	5.0 - 9.0% of mass 176	5.6	6.64	2

1-Value is % mass 174 2-Value is % mass 176

This check applies to the following samples, LCS, MS, MSD and standards:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Continuing Calibrati	WG345748-4	D8907.D	11/18/23	10:42
Laboratory Control S	WG345748-1	D8908.D	11/18/23	11:17
Laboratory Control S	WG345748-6	D8909.D	11/18/23	11:50
Method Blank	WG345748-2	D8911.D	11/18/23	12:57
Matrix Spike	WG345748-9	D8923.D	11/18/23	19:37
Matrix Spike Duplica	WG345748-10	D8924.D	11/18/23	20:10
Continuing Calibrati	WG345748-5	D8925.D	11/18/23	20:43

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Form 5
Volatile Organic Instrument Performance Check

Lab Name : Katahdin Analytical Services
Lab File ID : SB923A.D
Instrument ID : GCMS-S

SDG : SQ6133
Date Analyzed : 16-NOV-23
Time Analyzed : 12:12
Heated Purge : No

m/e	Ion Abundance Criteria	% Relative Abundance		
50	15.0 - 40.0% of mass 95	15.0		
75	30.0 - 60.0% of mass 95	49.4		
95	Base Peak, 100% relative abundance	100		
96	5.0 - 9.0% of mass 95	7.6		
173	Less than 2.0% of mass 174	0.3	0.47	1
174	Greater than 50.0% of mass 95	72.5		
175	5.0 - 9.0% of mass 174	5.2	7.18	1
176	95.0 - 101.0% of mass 174	69.2	95.34	1
177	5.0 - 9.0% of mass 176	4.8	6.94	2

1-Value is % mass 174 2-Value is % mass 176

This check applies to the following samples, LCS, MS, MSD and standards:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Initial Calibration	WG345525-1	S7199.D	11/16/23	12:35
Initial Calibration	WG345525-2	S7200.D	11/16/23	13:02
Initial Calibration	WG345525-3	S7201.D	11/16/23	13:30
Initial Calibration	WG345525-4	S7202.D	11/16/23	13:57
Initial Calibration	WG345525-5	S7203.D	11/16/23	14:25
Initial Calibration	WG345525-6	S7204.D	11/16/23	14:52
Initial Calibration	WG345525-7	S7205.D	11/16/23	15:20
Initial Calibration	WG345525-8	S7206.D	11/16/23	15:48
Laboratory Control S	WG345525-10	S7207.D	11/16/23	16:15
Independent Source	WG345525-9	S7207A.D	11/16/23	16:15
Laboratory Control S	WG345525-14	S7208.D	11/16/23	16:43
Method Blank	WG345525-11	S7210.D	11/16/23	17:38
SY-OBMW4R-110723	SQ6133-2	S7213.D	11/16/23	19:00
SY-BRMW2-60.5-70.5-110723	SQ6133-4	S7214.D	11/16/23	19:28
SY-OBMW15-110723	SQ6133-5	S7215.D	11/16/23	19:56
SY-OBMW5-110723	SQ6133-6	S7216.D	11/16/23	20:23
SY-OBMW13-110723	SQ6133-7	S7217.D	11/16/23	20:51
SY-OBMW14-110723	SQ6133-9	S7218.D	11/16/23	21:19
SY-BRMW2-252.5-262.5-110723	SQ6133-10	S7219.D	11/16/23	21:46
Continuing Calibrati	WG345525-13	S7220.D	11/16/23	22:14

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Form 5
Volatile Organic Instrument Performance Check

Lab Name : Katahdin Analytical Services
Lab File ID : SB923B.D
Instrument ID : GCMS-S

SDG : SQ6133
Date Analyzed : 17-NOV-23
Time Analyzed : 09:10
Heated Purge : No

m/e	Ion Abundance Criteria	% Relative Abundance		
50	15.0 - 40.0% of mass 95	16.6		
75	30.0 - 60.0% of mass 95	51.9		
95	Base Peak, 100% relative abundance	100		
96	5.0 - 9.0% of mass 95	7.7		
173	Less than 2.0% of mass 174	0.4	0.49	1
174	Greater than 50.0% of mass 95	74.3		
175	5.0 - 9.0% of mass 174	5.4	7.32	1
176	95.0 - 101.0% of mass 174	73.4	98.76	1
177	5.0 - 9.0% of mass 176	4.0	5.40	2

1-Value is % mass 174 2-Value is % mass 176

This check applies to the following samples, LCS, MS, MSD and standards:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Continuing Calibrati	WG345597-4	S7225.D	11/17/23	09:43
Laboratory Control S	WG345597-1	S7226.D	11/17/23	10:21
Method Blank	WG345597-2	S7228.D	11/17/23	11:16
SY-BRMW2-80.5-95.5-110723	SQ6133-8	S7239.D	11/17/23	16:19
Matrix Spike	WG345597-6	S7247.D	11/17/23	20:00
Matrix Spike Duplica	WG345597-7	S7248.D	11/17/23	20:27
Continuing Calibrati	WG345597-5	S7249.D	11/17/23	20:55

Form 8
Internal Standard Area and RT Summary

Lab Name : Katahdin Analytical Services
Lab ID : WG345527-5
Lab File ID : D8864.d

SDG: SQ6133
Analytical Date: 11/16/23 10:55
Instrument ID: GCMS-D

		PENTAFLUOROBENZENE			1,4-DIFLUOROBENZENE			CHLOROBENZENE-D5		
		Area	#	RT	#	Area	#	RT	#	Area	#	RT	#
	Std .	20191		5.55		30045		6.10		26800		8.98	
	Upper Limit	40382		5.72		60090		6.26		53600		9.15	
	Lower Limit	10095.5		5.38		15022.5		5.93		13400		8.82	
Client Sample ID	Lab Sample ID												
Laboratory Control S	WG345527-10	18530		5.55		27333		6.10		24578		8.98	
Laboratory Control S	WG345527-14	19177		5.55		28370		6.10		25324		8.98	
Method Blank	WG345527-11	16361		5.55		24617		6.10		23024		8.98	
TB31-110723	SQ6133-11	15902		5.55		23582		6.10		21423		8.98	
SY-OBMW6-110723	SQ6133-1	16176		5.55		24069		6.10		21380		8.98	
Continuing Calibrati	WG345527-13	18719		5.55		26660		6.10		23911		8.98	
Continuing Calibrati	WG345599-4	24267		5.55		32822		6.10		27732		8.98	
Laboratory Control S	WG345599-1	22710		5.55		30970		6.10		26803		8.98	
Method Blank	WG345599-2	18740		5.55		26001		6.10		22745		8.98	
SY-OBMW12-110723	SQ6133-3	17436		5.55		24259		6.10		21199		8.98	
Continuing Calibrati	WG345599-5	19692		5.55		26661		6.10		23878		8.98	
Continuing Calibrati	WG345748-4	24042		5.55		32455		6.10		28474		8.98	
Laboratory Control S	WG345748-1	23254		5.55		31686		6.10		28091		8.98	
Laboratory Control S	WG345748-6	22542		5.55		30794		6.10		27131		8.98	
Method Blank	WG345748-2	18568		5.55		26214		6.10		23696		8.98	
Matrix Spike	WG345748-9	25692		5.55		36259		6.10		30667		8.98	
Matrix Spike Duplica	WG345748-10	24367		5.55		34181		6.10		28953		8.98	
Continuing Calibrati	WG345748-5	23332		5.55		32365		6.10		27804		8.98	

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area
RT Upper Limit = + 10 seconds of internal standard RT
RT Lower Limit = - 10 seconds of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

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Form 8
Internal Standard Area and RT Summary

Lab Name : Katahdin Analytical Services
Lab ID : WG345525-5
Lab File ID : S7203.D

SDG: SQ6133
Analytical Date: 11/16/23 14:25
Instrument ID: GCMS-S

		PENTAFLUOROBENZENE				1,4-DIFLUOROBENZENE				CHLOROBENZENE-D5			
		Area	#	RT	#	Area	#	RT	#	Area	#	RT	#
	Std .	13752		6.16		21842		6.85		20133		10.24	
	Upper Limit	27504		6.33		43684		7.02		40266		10.40	
	Lower Limit	6876		5.99		10921		6.69		10066.5		10.07	
Client Sample ID	Lab Sample ID												
Laboratory Control S	WG345525-10	15461		6.16		24676		6.85		23193		10.23	
Laboratory Control S	WG345525-14	14952		6.16		23809		6.86		22159		10.24	
Method Blank	WG345525-11	11604		6.16		18588		6.85		16968		10.24	
SY-OBMW4R-110723	SQ6133-2	11195		6.15		17746		6.86		16633		10.24	
SY-BRMW2-60.5-70.5	SQ6133-4	11891		6.15		18264		6.86		19945		10.23	
SY-OBMW15-110723	SQ6133-5	11074		6.15		17620		6.85		16579		10.23	
SY-OBMW5-110723	SQ6133-6	10888		6.15		17041		6.85		16168		10.23	
SY-OBMW13-110723	SQ6133-7	10887		6.15		17260		6.85		16318		10.23	
SY-OBMW14-110723	SQ6133-9	11211		6.15		18023		6.85		16698		10.23	
SY-BRMW2-252.5-262	SQ6133-10	10290		6.15		16302		6.85		15750		10.23	
Continuing Calibrati	WG345525-13	10740		6.16		16941		6.85		16164		10.23	
Continuing Calibrati	WG345597-4	14535		6.16		20541		6.85		17720		10.23	
Laboratory Control S	WG345597-1	13027		6.15		19967		6.85		17742		10.23	
Method Blank	WG345597-2	11089		6.16		16920		6.85		15814		10.23	
SY-BRMW2-80.5-95.5	SQ6133-8	10664		6.16		16206		6.85		15902		10.24	
Matrix Spike	WG345597-6	11691		6.15		17496		6.85		17833		10.23	
Matrix Spike Duplica	WG345597-7	12725		6.16		18926		6.85		18675		10.23	
Continuing Calibrati	WG345597-5	12577		6.16		18747		6.85		17879		10.23	

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area
RT Upper Limit = + 10 seconds of internal standard RT
RT Lower Limit = - 10 seconds of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

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Sample Data Section

KATAHDIN ANALYTICAL SERVICES - ORGANIC DATA QUALIFIERS

U Indicates the compound was analyzed for but not detected above the specified level. This level may be the Practical Quantitation Level (PQL) (also called Limit of Quantitation (LOQ)), the Limit of Detection (LOD) or Method Detection Limit (MDL) as required by the client.

Note: All results reported as "U" MDL have a 50% rate for false negatives compared to those results reported as "U" PQL, "U" LOQ or "U" LOD, where the rate of false negatives is <1%.

* Compound recovery or percent RPD (relative percent difference) was outside of quality control limits.

D Indicates the result was obtained from analysis of a diluted sample. Surrogate recoveries may not be calculable.

E Estimated value. This flag identifies compounds whose concentrations exceed the upper level of the calibration range of the instrument for that specific analysis.

J Estimated value. The analyte was detected in the sample at a concentration less than the laboratory Practical Quantitation Level (PQL) (also called Limit of Quantitation (LOQ)), but above the Method Detection Limit (MDL).

And/or

J Used for Dual Column analytes when there is a greater than 40% difference for detected concentrations between the two GC/HPLC columns.

B Indicates the analyte was detected in the laboratory method blank analyzed concurrently with the sample.

I Indicates that the flagged compound did not meet DoD criteria in the corresponding Initial Calibration (ICAL).

D Indicates that the flagged compound did not meet DoD criteria in the corresponding Initial Calibration Verification (ICV).

C Indicates that the flagged compound did not meet DoD criteria in the corresponding opening Calibration Verification (CV).

V Indicates that the flagged compound did not meet DoD criteria in the corresponding closing Calibration Verification (CV).

L/LL Indicates that the flagged compound did not meet DoD criteria in the corresponding Laboratory Control Sample (LCS) and/or Laboratory Control Sample Duplicate (LCSD) prepared and/or analyzed concurrently with the sample.

M/MM Indicates that the flagged compound did not meet DoD criteria in the Matrix Spike (MS) and/or Matrix Spike Duplicate MSD) prepared and/or analyzed concurrently with the native sample.

H Indicates the flagged compound was detected on the primary column but was not detected on the confirmation column therefore the compound is not reported as a positive detection. (SW846 8330A/B only)

Katahdin Analytical Services, Inc.

Manual Integration Codes For GC/MS, GC, HPLC and/or IC

M1	Peak splitting.
M2	Well defined peaks on the shoulders of the other peaks.
M3	There is additional area due to a coeluting interferant.
M4	There are negative spikes in the baseline.
M5	There are rising or falling baselines.
M6	The software has failed to detect a peak or misidentified a peak.
M7	Excessive peak tailing.
M8	Analysis such as GRO, DRO and TPH require a baseline hold.
M9	Peak was not completely integrated as in GC/MS.
M10	Primary ion was correctly integrated, but secondary or tertiary ion needed manual integration as in GC/MS.
M11	For GC analysis, when a sample is diluted by 1:10 or more, the surrogate is set to undetected and then the area under the surrogate is manually integrated.
M12	Manual integration saved in method due to TurboChrom floating point error.

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Report of Analytical Results

SDG: SQ6133
Lab ID: SQ6133-1
Client ID: SY-OBMW6-110723
Matrix: AQ
Lab File ID: D8876.D

Sample Date: 07-NOV-23
Extract Date: 16-NOV-23
Extracted By: JSS
Extraction Method: SW846 5030C
Lab Prep Batch: WG345527

Report Date: 12-DEC-23
Analysis Date: 16-NOV-23
Analyst: JSS
Analysis Method: SW846 8260C SIM
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Vinyl Chloride	U	0.050	ug/L	1	.1	0.10	0.0037	0.050
1,1-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0091	0.025
trans-1,2-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0033	0.025
cis-1,2-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0057	0.025
Trichloroethene	U	0.025	ug/L	1	.05	0.050	0.012	0.025
Tetrachloroethene	U	0.025	ug/L	1	.05	0.050	0.0091	0.025
Dibromofluoromethane		110.	%					
1,2-Dichloroethane-d4		113.	%					
Toluene-D8		98.5	%					
p-Bromofluorobenzene		79.4	%					

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Data File: \\target_server\gg\chem\gcms-d.i\D111623.b\D8876.d
Report Date: 12-Dec-2023 10:22

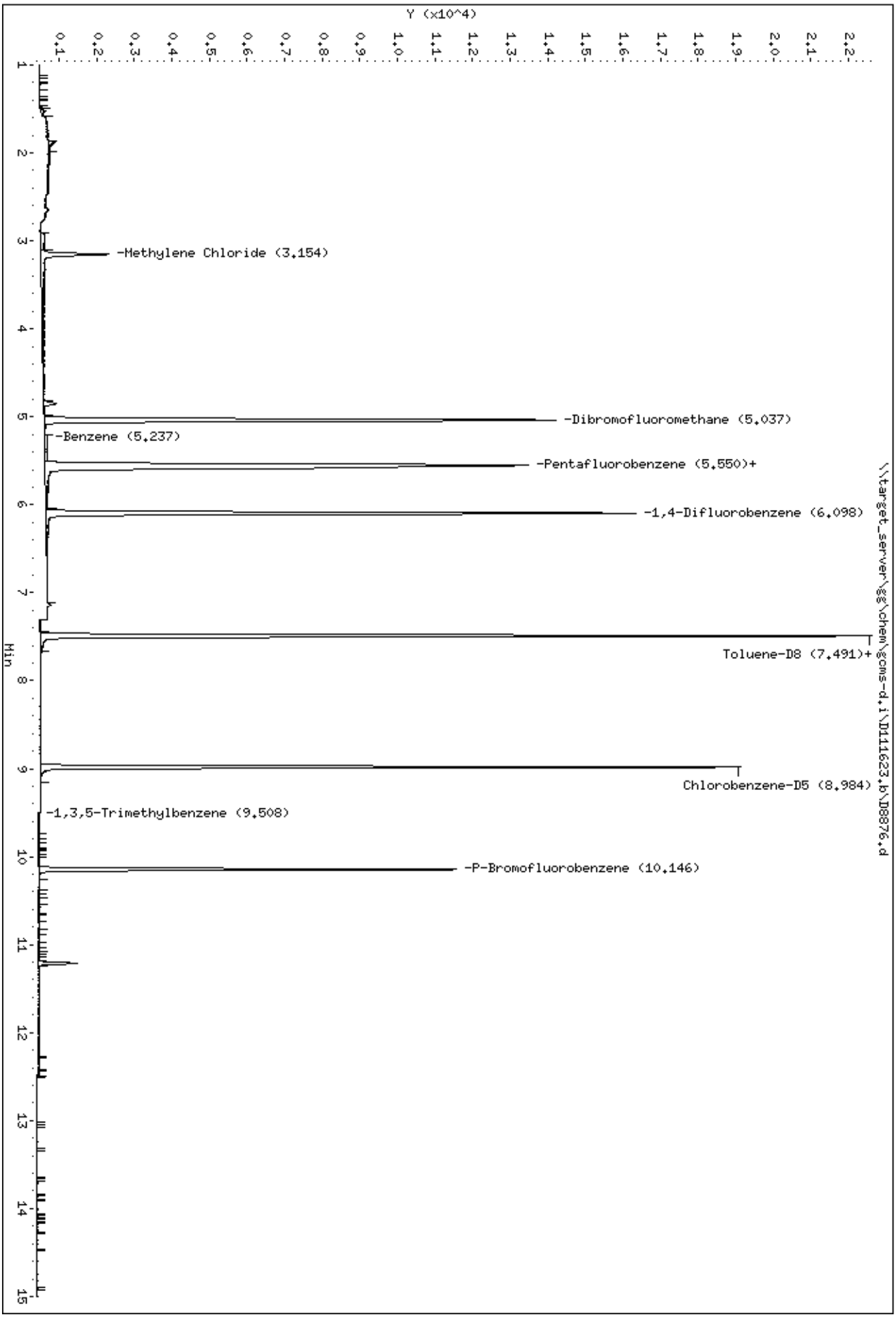
Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-d.i\D111623.b\D8876.d
Lab Smp Id: SQ6133-1 Client Smp ID: SY-0BMW6-110723
Inj Date : 16-NOV-2023 17:35
Operator : JSS Inst ID: gcms-d.i
Smp Info : SQ6133-1
Misc Info : WG345527,WG345527-5
Comment : SW846 5030C
Method : \\target_server\gg\chem\gcms-d.i\D111623.b\DSIM(01)CR23.m
Meth Date : 04-Dec-2023 12:57 gcms-d.i Quant Type: ISTD
Cal Date : 16-NOV-2023 10:22 Cal File: D8863.d
Als bottle: 20
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: Credere.sub
Target Version: 4.12

Concentration Formula: Amt * DF * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	25.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)	REVIEW CODE
$ 7 Dibromofluoromethane	113	5.036	5.037	(0.908)	13938	1.10334	1.10	
$ 11 1,2-Dichloroethane-D4	65	5.581	5.582	(1.006)	8439	1.13181	1.13	
$ 15 Toluene-D8	98	7.488	7.491	(1.228)	21472	0.98522	0.985	
$ 20 P-Bromofluorobenzene	95	10.145	10.146	(1.129)	5678	0.79417	0.794	
* 10 Pentafluorobenzene	168	5.549	5.549	(1.000)	16176	1.00000		
* 14 1,4-Difluorobenzene	114	6.097	6.096	(1.000)	24069	1.00000		
* 18 Chlorobenzene-D5	117	8.983	8.984	(1.000)	21380	1.00000		


Y (x10^4)
Min
-Methylene Chloride (3.154)
-Dibromofluoromethane (5.037)
-Benzene (5.237)
-Pentafluorobenzene (5.550)+
-1,4-Difluorobenzene (6.098)
Toluene-D8 (7.491)+
Chlorobenzene-D5 (8.984)
-1,3,5-Trimethylbenzene (9.508)
-P-Bromofluorobenzene (10.146)
\\target_server\gg\chem\gcms-d.i\D111623.b\D8876.d
Data File: \\target_server\gg\chem\gcms-d.i\D111623.b\D8876.d
Date : 16-NOV-2023 17:35
Client ID: SY-0BMW6-110723
Sample Info: SQ6133-1
Instrument: gcms-d.i

Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

SDG: SQ6133
Lab ID: SQ6133-2
Client ID: SY-OBMW4R-110723
Matrix: AQ
Lab File ID: S7213.D

Sample Date: 07-NOV-23
Extract Date: 16-NOV-23
Extracted By: JSS
Extraction Method: SW846 5030C
Lab Prep Batch: WG345525

Report Date: 12-DEC-23
Analysis Date: 16-NOV-23
Analyst: JSS
Analysis Method: SW846 8260C SIM
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Vinyl Chloride	U	0.050	ug/L	1	.1	0.10	0.0037	0.050
1,1-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0091	0.025
trans-1,2-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0033	0.025
cis-1,2-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0057	0.025
Trichloroethene	U	0.025	ug/L	1	.05	0.050	0.012	0.025
Tetrachloroethene	U	0.025	ug/L	1	.05	0.050	0.0091	0.025
Dibromofluoromethane		124.	%					
1,2-Dichloroethane-d4		122.	%					
Toluene-D8		101.	%					
p-Bromofluorobenzene		84.3	%					

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Data File: \\target_server\gg\chem\gcms-s.i\S111623.b\S7213.D
Report Date: 12-Dec-2023 10:42

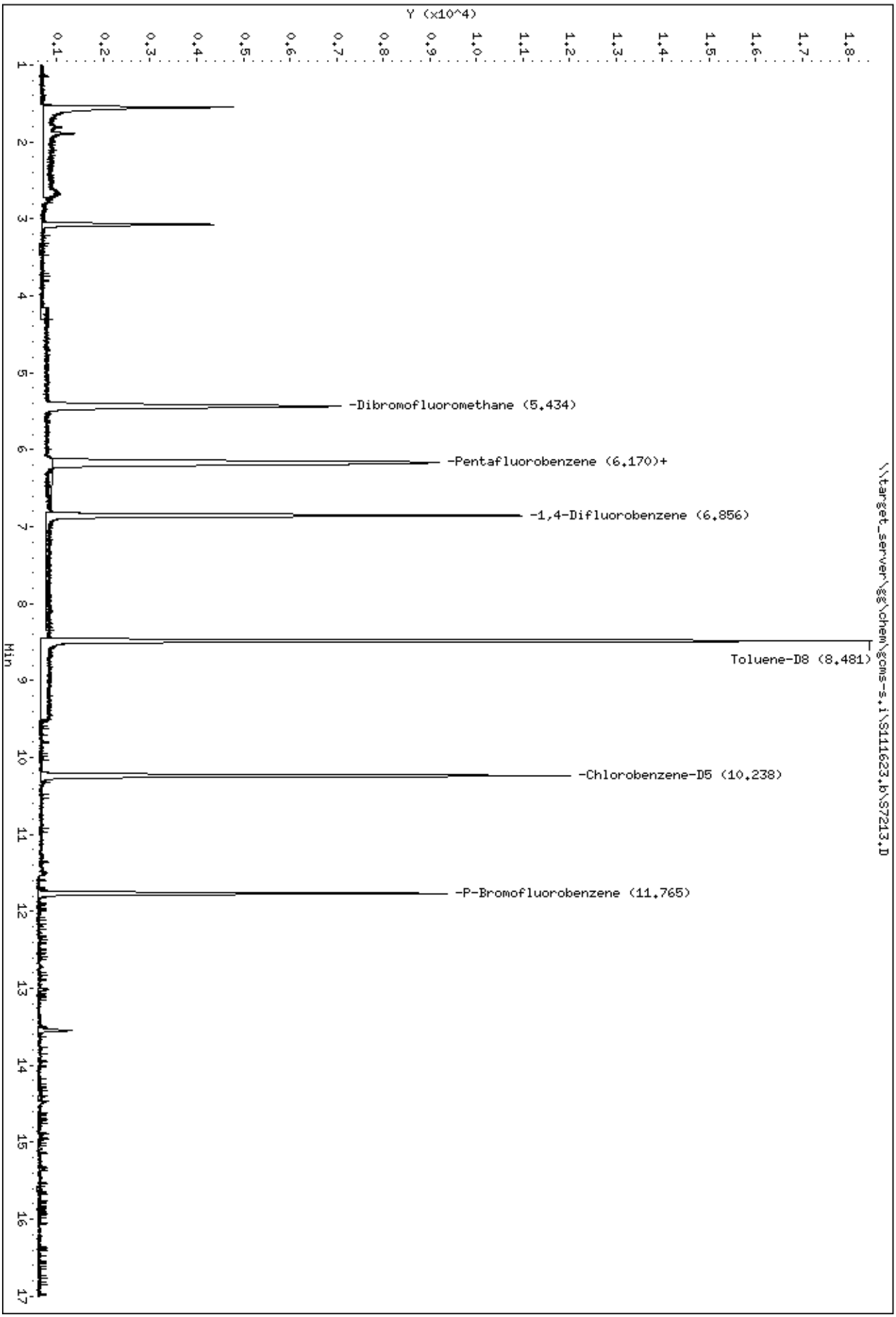
Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-s.i\S111623.b\S7213.D
Lab Smp Id: SQ6133-2 Client Smp ID: SY-0BMW4R-110723
Inj Date : 16-NOV-2023 19:00
Operator : JSS Inst ID: gcms-s.i
Smp Info : SQ6133-2
Misc Info : WG345525,WG345525-5
Comment : SW846 5030C
Method : \\target_server\gg\chem\gcms-s.i\S111623.b\SSIM(01)CR23.m
Meth Date : 12-Dec-2023 10:34 croy Quant Type: ISTD
Cal Date : 16-NOV-2023 15:48 Cal File: S7206.D
Als bottle: 15
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.12
Processing Host: T7-O360

Concentration Formula: Amt * DF * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	25.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)	REVIEW CODE
$ 7 Dibromofluoromethane	113	5.433	5.440	(0.883)	9300	1.24041	1.24	
* 9 Pentafluorobenzene	168	6.154	6.163	(1.000)	11195	1.00000		
$ 10 1,2-Dichloroethane-D4	65	6.191	6.193	(1.006)	8294	1.22438	1.22	
* 13 1,4-Difluorobenzene	114	6.856	6.854	(1.000)	17746	1.00000		
$ 14 Toluene-D8	98	8.484	8.482	(1.237)	18783	1.00782	1.01	
* 17 Chlorobenzene-D5	117	10.238	10.238	(1.000)	16633	1.00000		
$ 18 P-Bromofluorobenzene	95	11.766	11.768	(1.149)	5908	0.84344	0.843	


Data File: \\target_server\gg\chem\gcms-s.i\S111623.b\S7213.D
Date : 16-NOV-2023 19:00
Client ID: SY-OBW4R-110723
Sample Info: SQ6133-2
Instrument: gcms-s.i
Y (x10^4)
Min
-Dibromofluoromethane (5.434)
-Pentafluorobenzene (6.170)+
-1,4-Difluorobenzene (6.856)
Toluene-D8 (8.481)
-Chlorobenzene-D5 (10.238)
-P-Bromofluorobenzene (11.765)
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Report of Analytical Results

SDG: SQ6133
Lab ID: SQ6133-3
Client ID: SY-OBMW12-110723
Matrix: AQ
Lab File ID: D8898.D

Sample Date: 07-NOV-23
Extract Date: 17-NOV-23
Extracted By: JSS
Extraction Method: SW846 5030C
Lab Prep Batch: WG345599

Report Date: 12-DEC-23
Analysis Date: 17-NOV-23
Analyst: JSS
Analysis Method: SW846 8260C SIM
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Vinyl Chloride	MM	0.15	ug/L	1	.1	0.10	0.0037	0.050
1,1-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0091	0.025
trans-1,2-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0033	0.025
cis-1,2-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0057	0.025
Trichloroethene		0.29	ug/L	1	.05	0.050	0.012	0.025
Tetrachloroethene	U	0.025	ug/L	1	.05	0.050	0.0091	0.025
Dibromofluoromethane		101.	%					
1,2-Dichloroethane-d4		102.	%					
Toluene-D8		97.8	%					
p-Bromofluorobenzene		81.6	%					

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Data File: \\target_server\gg\chem\gcms-d.i\D111723.b\D8898.d
Report Date: 12-Dec-2023 10:24

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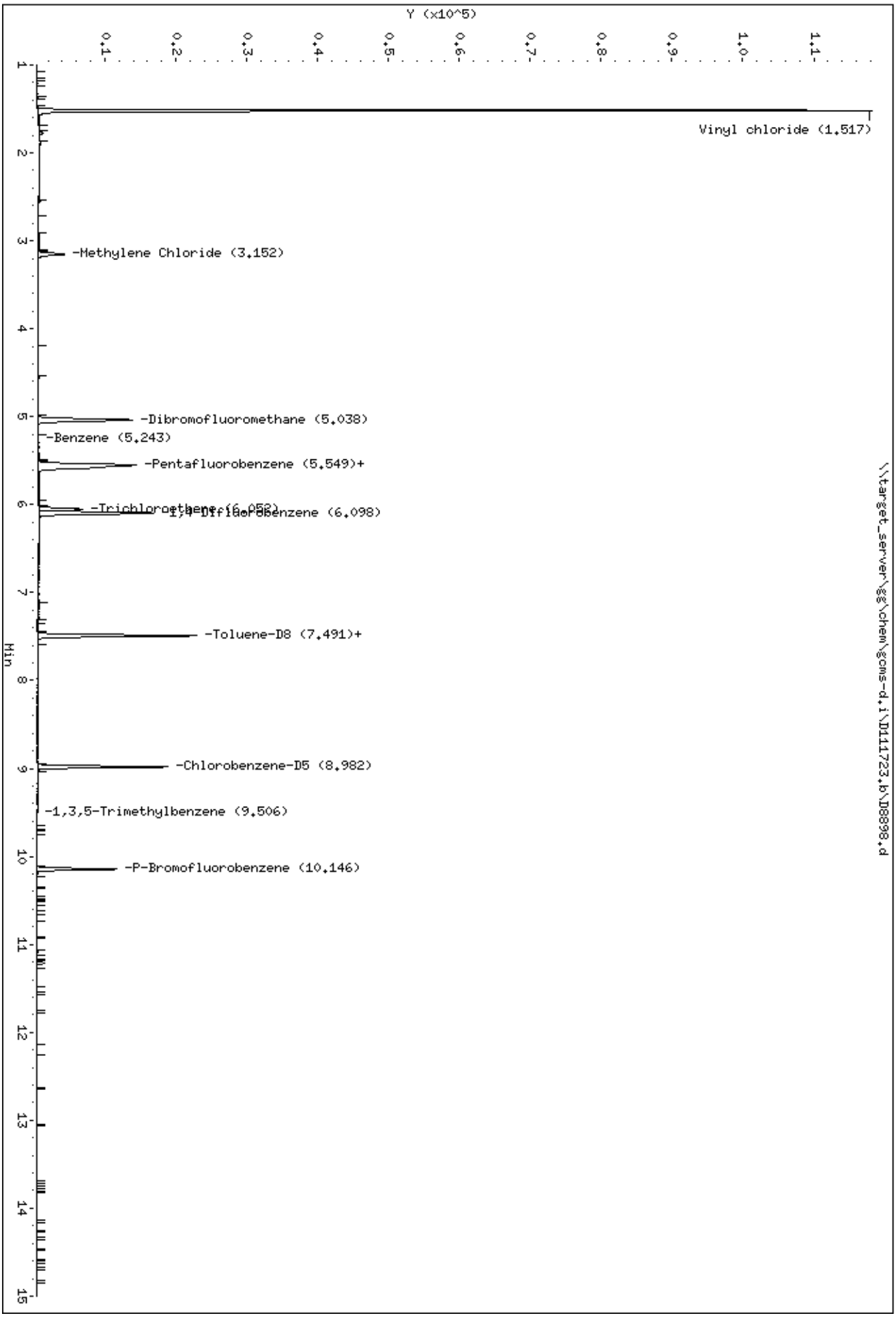
Data file : \\target_server\gg\chem\gcms-d.i\D111723.b\D8898.d
Lab Smp Id: SQ6133-3 Client Smp ID: SY-0BMW12-110723
Inj Date : 17-NOV-2023 17:16
Operator : JSS Inst ID: gcms-d.i
Smp Info : SQ6133-3
Misc Info : WG345599,WG345527-5
Comment : SW846 5030C
Method : \\target_server\gg\chem\gcms-d.i\D111723.b\DSIM(01)CR23.m
Meth Date : 11-Dec-2023 10:56 CROY Quant Type: ISTD
Cal Date : 16-NOV-2023 10:22 Cal File: D8863.d
Als bottle: 17
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: Credere.sub
Target Version: 4.12

Concentration Formula: Amt * DF * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	25.000	sample purged
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)	REVIEW CODE
	1 Vinyl chloride	62	1.517	1.591	(0.273)	1864	0.15236	0.152	
	13 Trichloroethene	130	6.050	6.052	(0.992)	3109	0.29160	0.292	
$	7 Dibromofluoromethane	113	5.038	5.037	(0.908)	13798	1.01333	1.01	
$	11 1,2-Dichloroethane-D4	65	5.577	5.582	(1.005)	8242	1.02551	1.02	
$	15 Toluene-D8	98	7.490	7.491	(1.228)	21472	0.97750	0.978	
$	20 P-Bromofluorobenzene	95	10.143	10.146	(1.129)	5786	0.81618	0.816	
*	10 Pentafluorobenzene	168	5.549	5.549	(1.000)	17436	1.00000		
*	14 1,4-Difluorobenzene	114	6.097	6.096	(1.000)	24259	1.00000		
*	18 Chlorobenzene-D5	117	8.981	8.984	(1.000)	21199	1.00000		



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Date : 17-NOV-2023 17:16
Client ID: SY-0BW12-110723
Sample Info: SQ6133-3

Instrument: gcms-d.i

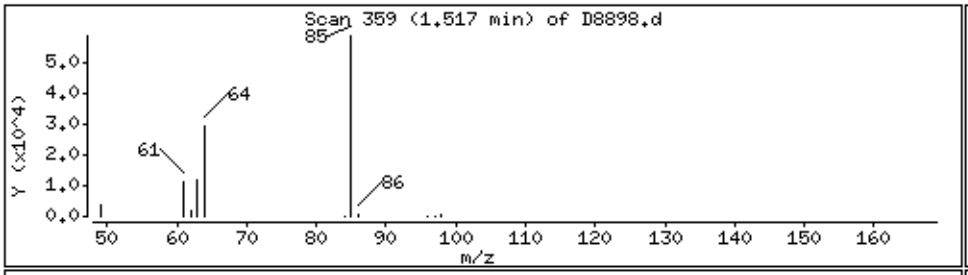
Data File: \\target_server\gg\chem\gcms-d.i\D111723.b\D8898.d

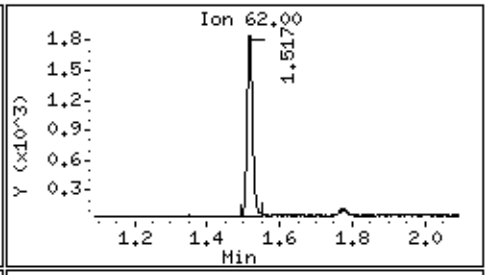
Date : 17-NOV-2023 17:16

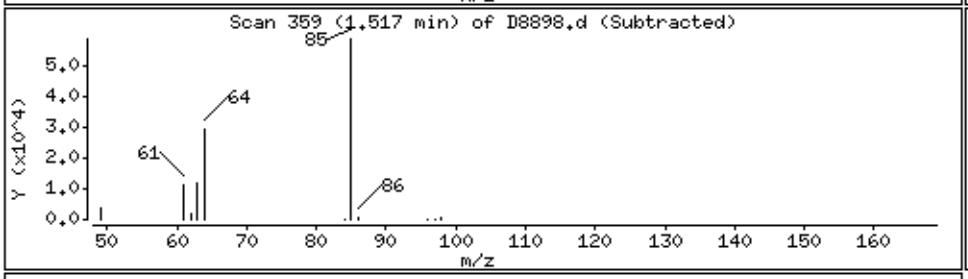
Client ID: SY-OBMW12-110723 Instrument: gcms-d.i

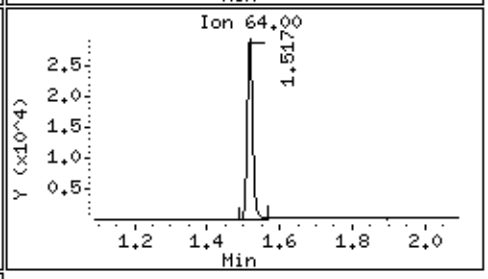
Sample Info: SQ6133-3

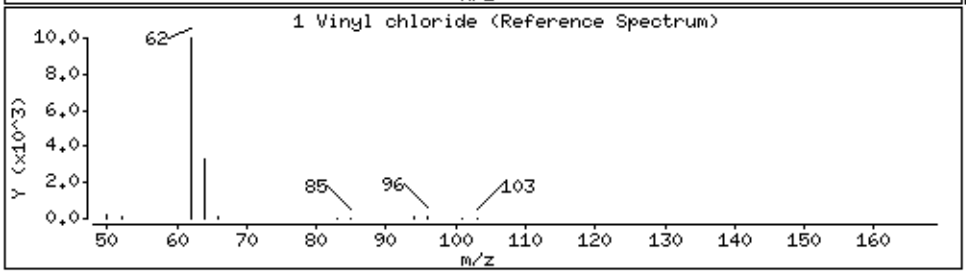
1 Vinyl chloride Concentration: 0.152 ug/l



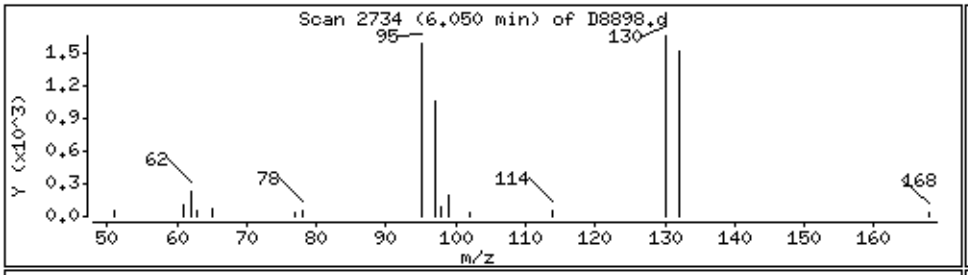


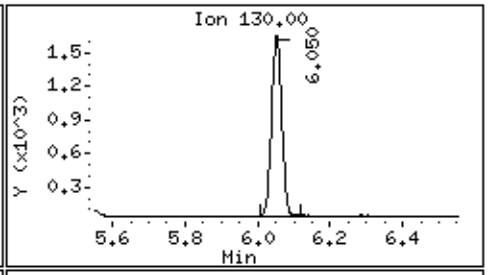


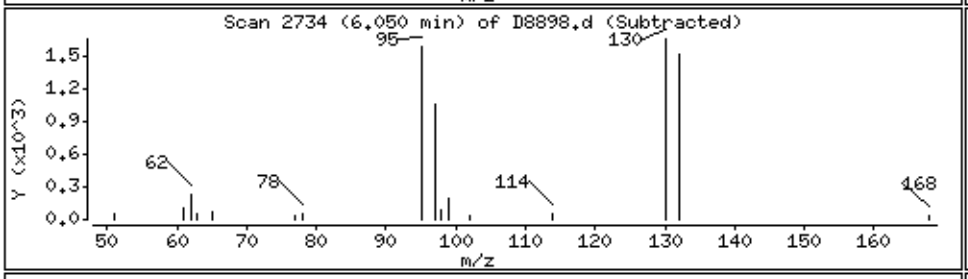


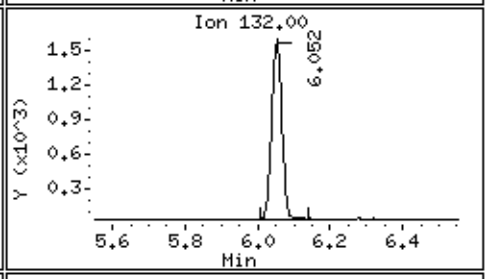


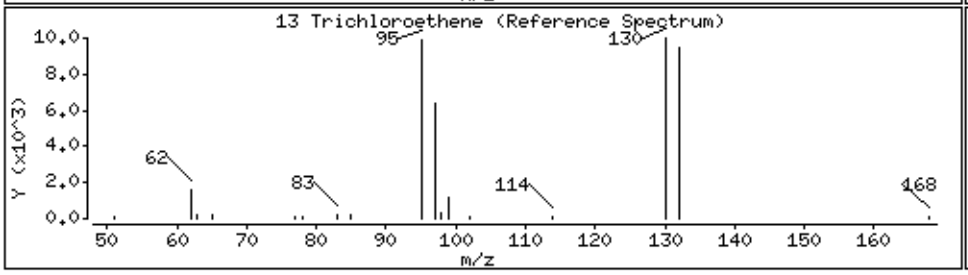
13 Trichloroethene Concentration: 0.292 ug/l

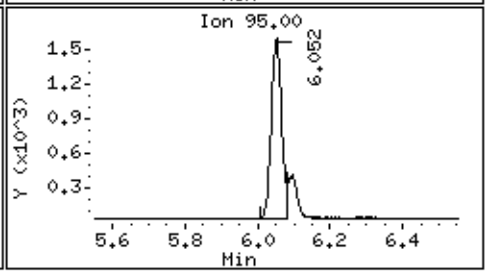












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Report of Analytical Results

SDG: SQ6133
Lab ID: SQ6133-4
Client ID: SY-BRMW2-60.5-70.5-110723
Matrix: AQ
Lab File ID: S7214.D

Sample Date: 07-NOV-23
Extract Date: 16-NOV-23
Extracted By: JSS
Extraction Method: SW846 5030C
Lab Prep Batch: WG345525

Report Date: 12-DEC-23
Analysis Date: 16-NOV-23
Analyst: JSS
Analysis Method: SW846 8260C SIM
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Vinyl Chloride	U	0.050	ug/L	1	.1	0.10	0.0037	0.050
1,1-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0091	0.025
trans-1,2-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0033	0.025
cis-1,2-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0057	0.025
Trichloroethene	U	0.025	ug/L	1	.05	0.050	0.012	0.025
Tetrachloroethene	U	0.025	ug/L	1	.05	0.050	0.0091	0.025
Dibromofluoromethane		119.	%					
1,2-Dichloroethane-d4		120.	%					
Toluene-D8		98.9	%					
p-Bromofluorobenzene		75.8	%					

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Data File: \\target_server\gg\chem\gcms-s.i\S111623.b\S7214.D
Report Date: 12-Dec-2023 10:42

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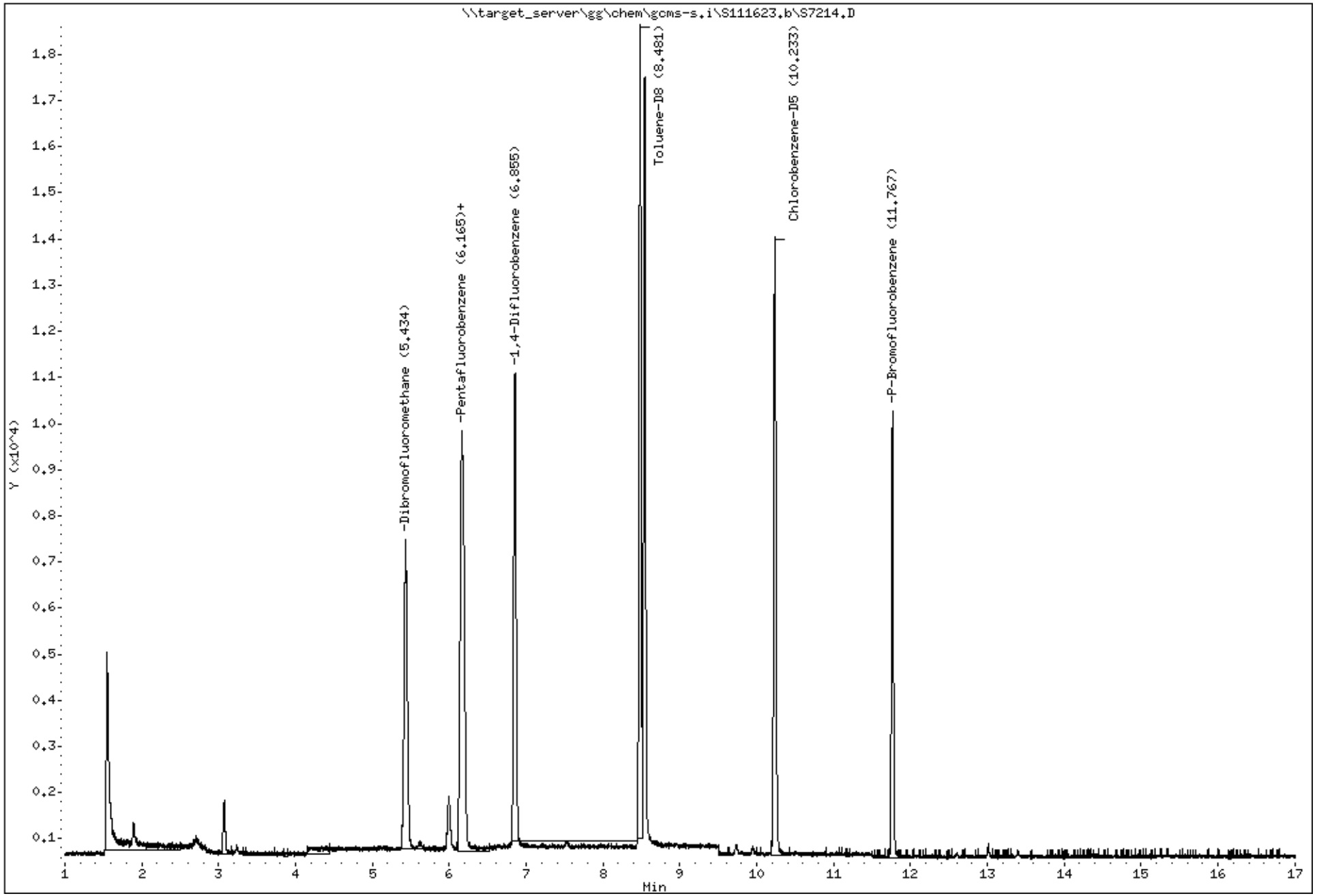
Data file : \\target_server\gg\chem\gcms-s.i\S111623.b\S7214.D
Lab Smp Id: SQ6133-4 Client Smp ID: Y-BRMW2-60.5-70.5-1
Inj Date : 16-NOV-2023 19:28
Operator : JSS Inst ID: gcms-s.i
Smp Info : SQ6133-4
Misc Info : WG345525,WG345525-5
Comment : SW846 5030C
Method : \\target_server\gg\chem\gcms-s.i\S111623.b\SSIM(01)CR23.m
Meth Date : 12-Dec-2023 10:34 croy Quant Type: ISTD
Cal Date : 16-NOV-2023 15:48 Cal File: S7206.D
Als bottle: 16
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.12
Processing Host: T7-O360

Concentration Formula: Amt * DF * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	25.000	sample purged
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)	REVIEW CODE
$	7 Dibromofluoromethane	113	5.433	5.440	(0.883)	9451	1.18677	1.19	
*	9 Pentafluorobenzene	168	6.154	6.163	(1.000)	11891	1.00000		
$	10 1,2-Dichloroethane-D4	65	6.186	6.193	(1.005)	8604	1.19580	1.20	
*	13 1,4-Difluorobenzene	114	6.856	6.854	(1.000)	18264	1.00000		
$	14 Toluene-D8	98	8.480	8.482	(1.237)	18965	0.98873	0.989	
*	17 Chlorobenzene-D5	117	10.233	10.238	(1.000)	19945	1.00000		
$	18 P-Bromofluorobenzene	95	11.766	11.768	(1.150)	6370	0.75838	0.758	

Data File: \\target_server\gg\chem\gcms-s.i\S111623.b\S7214.D
Date : 16-NOV-2023 19:28
Client ID: Y-BRMW2-60.5-70.5-1
Instrument: gcms-s.i
Sample Info: SQ6133-4



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Report of Analytical Results

SDG: SQ6133
Lab ID: SQ6133-5
Client ID: SY-OBMW15-110723
Matrix: AQ
Lab File ID: S7215.D

Sample Date: 07-NOV-23
Extract Date: 16-NOV-23
Extracted By: JSS
Extraction Method: SW846 5030C
Lab Prep Batch: WG345525

Report Date: 12-DEC-23
Analysis Date: 16-NOV-23
Analyst: JSS
Analysis Method: SW846 8260C SIM
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Vinyl Chloride	U	0.050	ug/L	1	.1	0.10	0.0037	0.050
1,1-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0091	0.025
trans-1,2-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0033	0.025
cis-1,2-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0057	0.025
Trichloroethene	U	0.025	ug/L	1	.05	0.050	0.012	0.025
Tetrachloroethene	U	0.025	ug/L	1	.05	0.050	0.0091	0.025
Dibromofluoromethane		122.	%					
1,2-Dichloroethane-d4		126.	%					
Toluene-D8		101.	%					
p-Bromofluorobenzene		83.0	%					

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Data File: \\target_server\gg\chem\gcms-s.i\S111623.b\S7215.D
Report Date: 12-Dec-2023 10:42

Katahdin Analytical Services

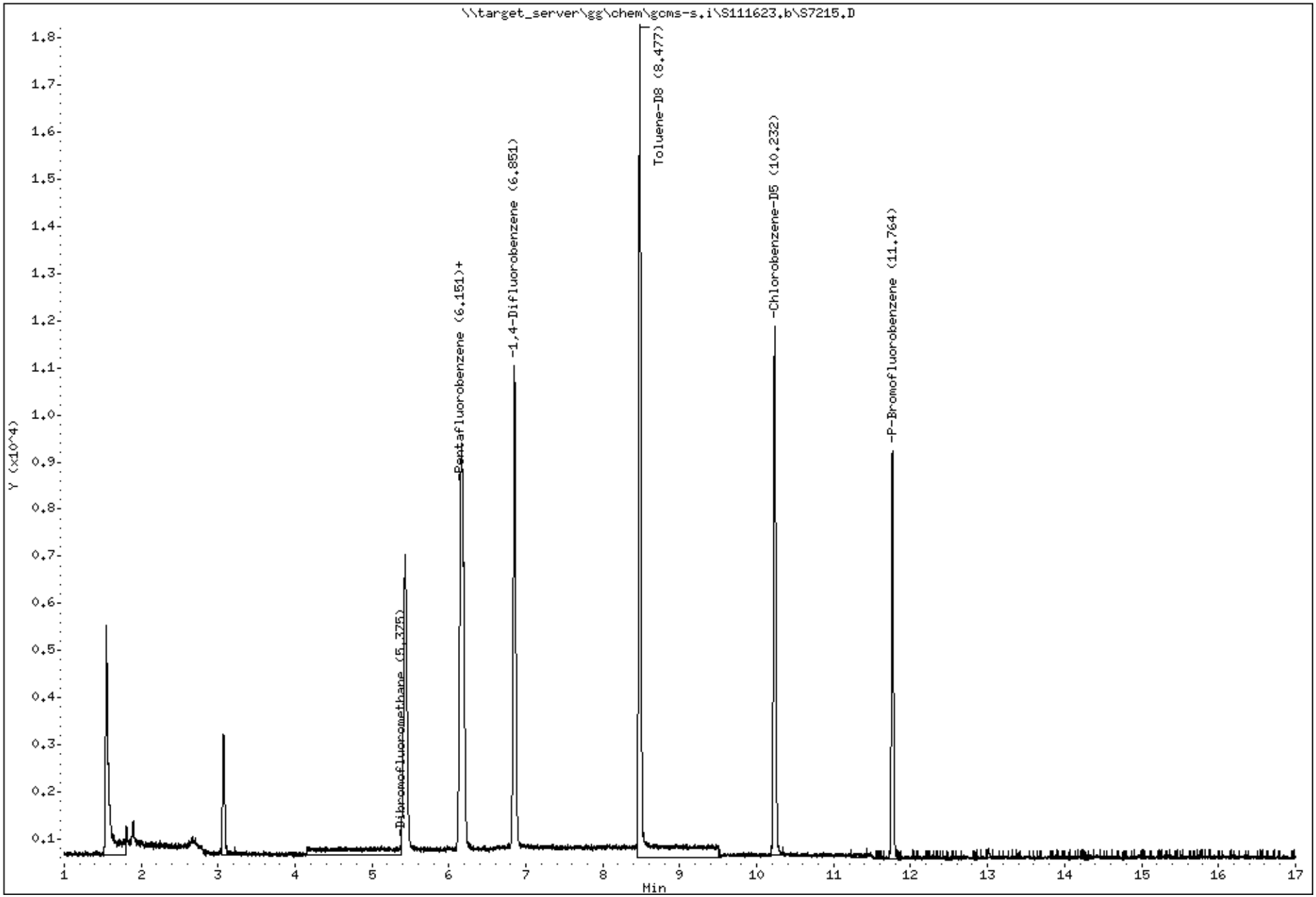
Data file : \\target_server\gg\chem\gcms-s.i\S111623.b\S7215.D
Lab Smp Id: SQ6133-5 Client Smp ID: SY-0BMW15-110723
Inj Date : 16-NOV-2023 19:56
Operator : JSS Inst ID: gcms-s.i
Smp Info : SQ6133-5
Misc Info : WG345525,WG345525-5
Comment : SW846 5030C
Method : \\target_server\gg\chem\gcms-s.i\S111623.b\SSIM(01)CR23.m
Meth Date : 12-Dec-2023 10:34 croy Quant Type: ISTD
Cal Date : 16-NOV-2023 15:48 Cal File: S7206.D
Als bottle: 17
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.12
Processing Host: T7-O360

Concentration Formula: Amt * DF * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	25.000	sample purged
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)	REVIEW CODE
$	7 Dibromofluoromethane	113	5.428	5.440	(0.883)	9084	1.22484	1.22	
*	9 Pentafluorobenzene	168	6.151	6.163	(1.000)	11074	1.00000		
$	10 1,2-Dichloroethane-D4	65	6.185	6.193	(1.006)	8428	1.25775	1.26	
*	13 1,4-Difluorobenzene	114	6.851	6.854	(1.000)	17620	1.00000		
$	14 Toluene-D8	98	8.480	8.482	(1.238)	18720	1.01162	1.01	
*	17 Chlorobenzene-D5	117	10.233	10.238	(1.000)	16579	1.00000		
$	18 P-Bromofluorobenzene	95	11.763	11.768	(1.150)	5795	0.83000	0.830	

Data File: \\target_server\gg\chem\gcms-s.i\S111623.b\S7215.D
Date : 16-NOV-2023 19:56
Client ID: SY-0BMW15-110723 Instrument: gcms-s.i
Sample Info: SQ6133-5



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ANALYTICAL SERVICES

Report of Analytical Results

SDG: SQ6133
Lab ID: SQ6133-6
Client ID: SY-OBMW5-110723
Matrix: AQ
Lab File ID: S7216.D

Sample Date: 07-NOV-23
Extract Date: 16-NOV-23
Extracted By: JSS
Extraction Method: SW846 5030C
Lab Prep Batch: WG345525

Report Date: 12-DEC-23
Analysis Date: 16-NOV-23
Analyst: JSS
Analysis Method: SW846 8260C SIM
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Vinyl Chloride	U	0.050	ug/L	1	.1	0.10	0.0037	0.050
1,1-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0091	0.025
trans-1,2-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0033	0.025
cis-1,2-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0057	0.025
Trichloroethene	U	0.025	ug/L	1	.05	0.050	0.012	0.025
Tetrachloroethene	U	0.025	ug/L	1	.05	0.050	0.0091	0.025
Dibromofluoromethane		124.	%					
1,2-Dichloroethane-d4		126.	%					
Toluene-D8		99.4	%					
p-Bromofluorobenzene		82.4	%					

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Data File: \\target_server\gg\chem\gcms-s.i\S111623.b\S7216.D
Report Date: 12-Dec-2023 10:42

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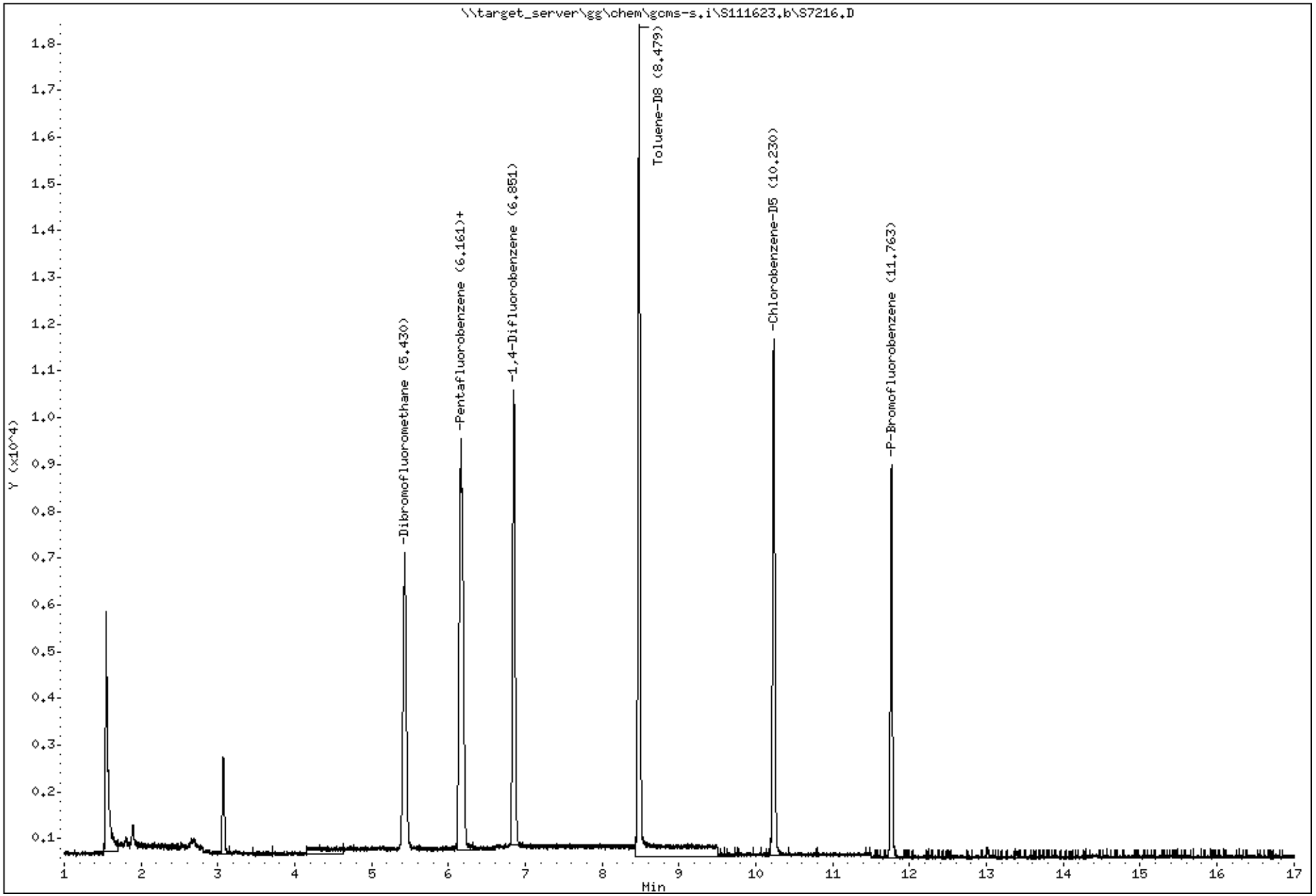
Data file : \\target_server\gg\chem\gcms-s.i\S111623.b\S7216.D
Lab Smp Id: SQ6133-6 Client Smp ID: SY-0BMW5-110723
Inj Date : 16-NOV-2023 20:23
Operator : JSS Inst ID: gcms-s.i
Smp Info : SQ6133-6
Misc Info : WG345525,WG345525-5
Comment : SW846 5030C
Method : \\target_server\gg\chem\gcms-s.i\S111623.b\SSIM(01)CR23.m
Meth Date : 12-Dec-2023 10:34 croy Quant Type: ISTD
Cal Date : 16-NOV-2023 15:48 Cal File: S7206.D
Als bottle: 18
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.12
Processing Host: T7-O360

Concentration Formula: Amt * DF * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	25.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)	REVIEW CODE
$ 7 Dibromofluoromethane	113	5.430	5.440	(0.882)	9073	1.24426	1.24	
* 9 Pentafluorobenzene	168	6.154	6.163	(1.000)	10888	1.00000		
$ 10 1,2-Dichloroethane-D4	65	6.186	6.193	(1.005)	8273	1.25571	1.26	
* 13 1,4-Difluorobenzene	114	6.852	6.854	(1.000)	17041	1.00000		
$ 14 Toluene-D8	98	8.478	8.482	(1.237)	17790	0.99403	0.994	
* 17 Chlorobenzene-D5	117	10.229	10.238	(1.000)	16168	1.00000		
$ 18 P-Bromofluorobenzene	95	11.761	11.768	(1.150)	5611	0.82407	0.824	

Data File: \\target_server\gg\chem\gcms-s.i\S111623.b\S7216.D
Date : 16-NOV-2023 20:23
Client ID: SY-0BMW5-110723 Instrument: gcms-s.i
Sample Info: SQ6133-6



Katahdin Analytical Services SQ6133 Page 100 of 855

Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

SDG: SQ6133
Lab ID: SQ6133-7
Client ID: SY-OBMW13-110723
Matrix: AQ
Lab File ID: S7217.D

Sample Date: 07-NOV-23
Extract Date: 16-NOV-23
Extracted By: JSS
Extraction Method: SW846 5030C
Lab Prep Batch: WG345525

Report Date: 12-DEC-23
Analysis Date: 16-NOV-23
Analyst: JSS
Analysis Method: SW846 8260C SIM
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Vinyl Chloride	U	0.050	ug/L	1	.1	0.10	0.0037	0.050
1,1-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0091	0.025
trans-1,2-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0033	0.025
cis-1,2-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0057	0.025
Trichloroethene	U	0.025	ug/L	1	.05	0.050	0.012	0.025
Tetrachloroethene	U	0.025	ug/L	1	.05	0.050	0.0091	0.025
Dibromofluoromethane		126.	%					
1,2-Dichloroethane-d4		128.	%					
Toluene-D8		101.	%					
p-Bromofluorobenzene		84.7	%					

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Data File: \\target_server\gg\chem\gcms-s.i\S111623.b\S7217.D
Report Date: 12-Dec-2023 10:42

Katahdin Analytical Services

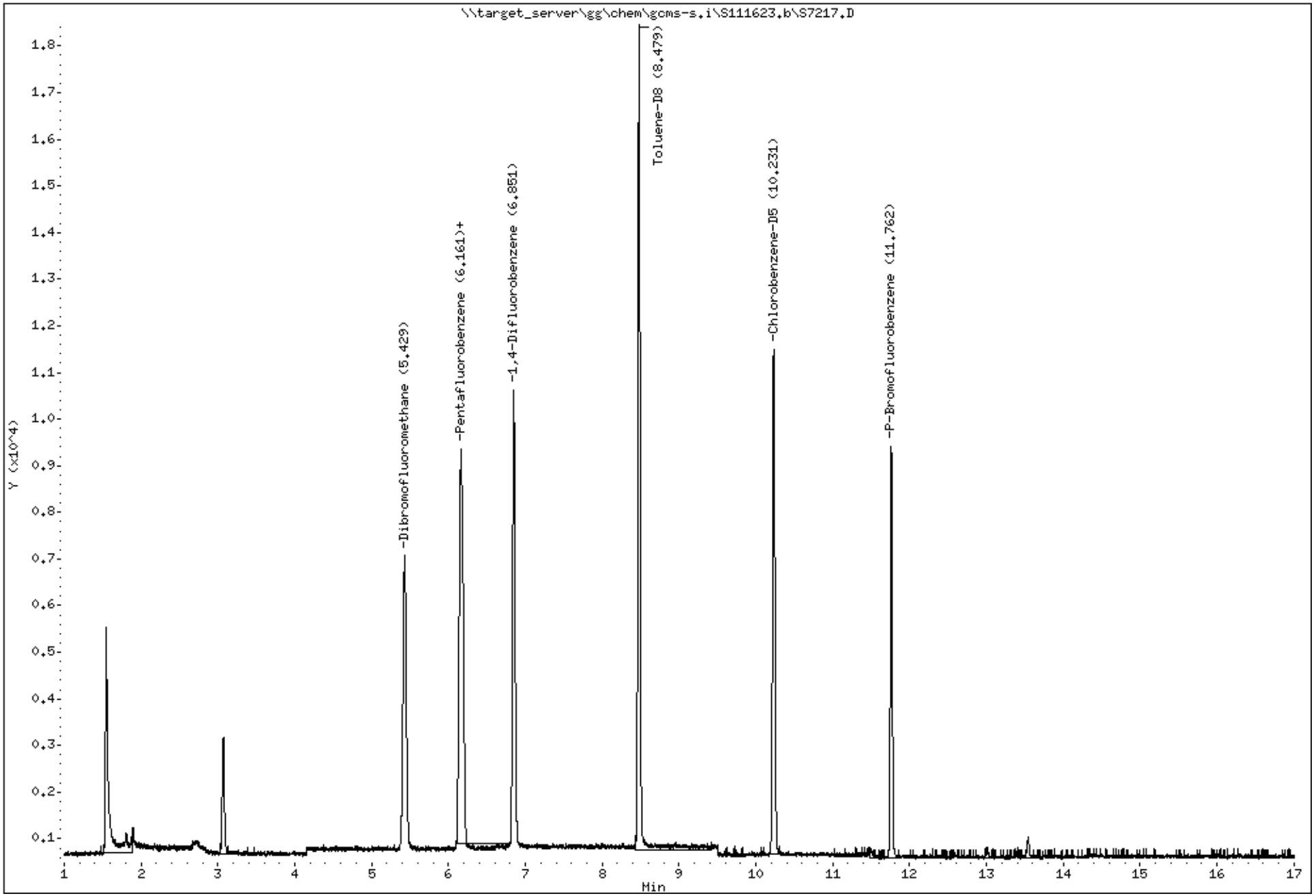
Data file : \\target_server\gg\chem\gcms-s.i\S111623.b\S7217.D
Lab Smp Id: SQ6133-7 Client Smp ID: SY-0BMW13-110723
Inj Date : 16-NOV-2023 20:51
Operator : JSS Inst ID: gcms-s.i
Smp Info : SQ6133-7
Misc Info : WG345525,WG345525-5
Comment : SW846 5030C
Method : \\target_server\gg\chem\gcms-s.i\S111623.b\SSIM(01)CR23.m
Meth Date : 12-Dec-2023 10:34 croy Quant Type: ISTD
Cal Date : 16-NOV-2023 15:48 Cal File: S7206.D
Als bottle: 19
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.12
Processing Host: T7-O360

Concentration Formula: Amt * DF * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	25.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)	REVIEW CODE
$ 7 Dibromofluoromethane	113	5.428	5.440	(0.882)	9213	1.26357	1.26	
* 9 Pentafluorobenzene	168	6.152	6.163	(1.000)	10887	1.00000		
$ 10 1,2-Dichloroethane-D4	65	6.183	6.193	(1.005)	8407	1.27617	1.28	
* 13 1,4-Difluorobenzene	114	6.851	6.854	(1.000)	17260	1.00000		
$ 14 Toluene-D8	98	8.479	8.482	(1.238)	18309	1.01005	1.01	
* 17 Chlorobenzene-D5	117	10.231	10.238	(1.000)	16318	1.00000		
$ 18 P-Bromofluorobenzene	95	11.761	11.768	(1.150)	5821	0.84706	0.847	

Data File: \\target_server\gg\chem\gcms-s.i\S111623.b\S7217.D
Date : 16-NOV-2023 20:51
Client ID: SY-0BMW13-110723 Instrument: gcms-s.i
Sample Info: SQ6133-7



Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

SDG: SQ6133
Lab ID: SQ6133-8
Client ID: SY-BRMW2-80.5-95.5-110723
Matrix: AQ
Lab File ID: S7239.D

Sample Date: 07-NOV-23
Extract Date: 17-NOV-23
Extracted By: JSS
Extraction Method: SW846 5030C
Lab Prep Batch: WG345597

Report Date: 12-DEC-23
Analysis Date: 17-NOV-23
Analyst: JSS
Analysis Method: SW846 8260C SIM
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Vinyl Chloride	U	0.050	ug/L	1	.1	0.10	0.0037	0.050
1,1-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0091	0.025
trans-1,2-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0033	0.025
cis-1,2-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0057	0.025
Trichloroethene	U	0.025	ug/L	1	.05	0.050	0.012	0.025
Tetrachloroethene	U	0.025	ug/L	1	.05	0.050	0.0091	0.025
Dibromofluoromethane		121.	%					
1,2-Dichloroethane-d4		122.	%					
Toluene-D8		99.9	%					
p-Bromofluorobenzene		82.7	%					

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Data File: \\target_server\gg\chem\gcms-s.i\S111723.b\S7239.D
Report Date: 12-Dec-2023 10:52

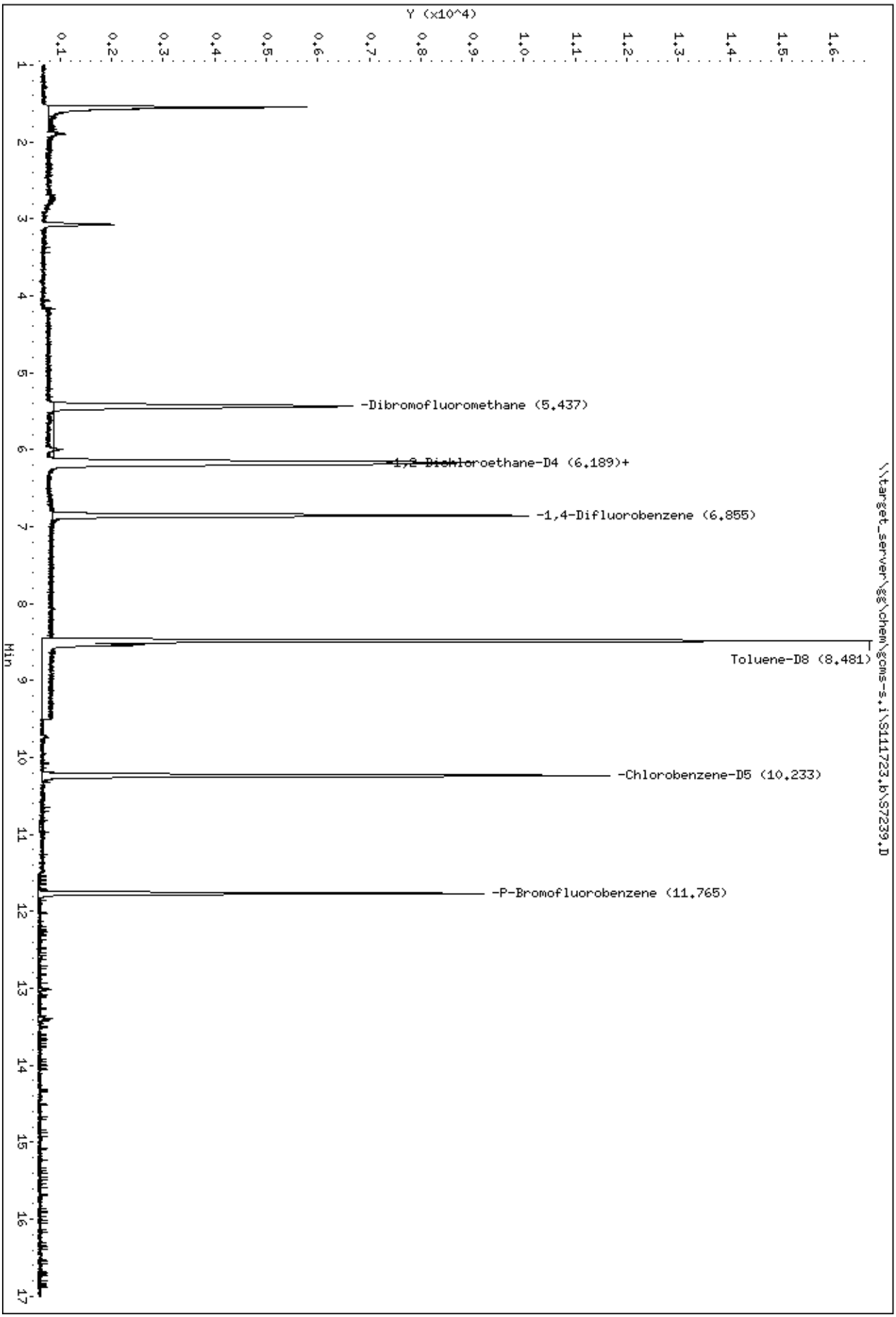
Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-s.i\S111723.b\S7239.D
Lab Smp Id: SQ6133-8 Client Smp ID: Y-BRMW2-80.5-95.5-1
Inj Date : 17-NOV-2023 16:19
Operator : JSS Inst ID: gcms-s.i
Smp Info : SQ6133-8
Misc Info : WG345597,WG345525-5
Comment : SW846 5030C
Method : \\target_server\gg\chem\gcms-s.i\S111723.b\SSIM(01)CR23.m
Meth Date : 08-Dec-2023 14:53 croy Quant Type: ISTD
Cal Date : 16-NOV-2023 15:48 Cal File: S7206.D
Als bottle: 15
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: credere.sub
Target Version: 4.12
Processing Host: ORGANICS2

Concentration Formula: Amt * DF * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	25.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)	REVIEW CODE
$ 7 Dibromofluoromethane	113	5.435	5.441	(0.882)	8669	1.21383	1.21	
$ 10 1,2-Dichloroethane-D4	65	6.188	6.194	(1.004)	7880	1.22118	1.22	
$ 14 Toluene-D8	98	8.484	8.483	(1.238)	17000	0.99883	0.999	
$ 18 P-Bromofluorobenzene	95	11.765	11.768	(1.149)	5538	0.82696	0.827	
* 9 Pentafluorobenzene	168	6.161	6.163	(1.000)	10664	1.00000		
* 13 1,4-Difluorobenzene	114	6.854	6.855	(1.000)	16206	1.00000		
* 17 Chlorobenzene-D5	117	10.236	10.238	(1.000)	15902	1.00000		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Date : 17-NOV-2023 16:19
Client ID: Y-BRMW2-80.5-95.5-1
Sample Info: SQ6133-8
Instrument: gcms-s.i
\\target_server\gg\chem\gcms-s.i\S111723.b\S7239.D
Y (x10^4)
Min
-Dibromofluoromethane (5.437)
1,2 Dichloroethane-D4 (6.189)+
-1,4-Difluorobenzene (6.855)
Toluene-D8 (8.481)
-Chlorobenzene-D5 (10.233)
-P-Bromofluorobenzene (11.765)

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ANALYTICAL SERVICES

Report of Analytical Results

SDG: SQ6133
Lab ID: SQ6133-9
Client ID: SY-OBMW14-110723
Matrix: AQ
Lab File ID: S7218.D

Sample Date: 07-NOV-23
Extract Date: 16-NOV-23
Extracted By: JSS
Extraction Method: SW846 5030C
Lab Prep Batch: WG345525

Report Date: 12-DEC-23
Analysis Date: 16-NOV-23
Analyst: JSS
Analysis Method: SW846 8260C SIM
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Vinyl Chloride	J	0.026	ug/L	1	.1	0.10	0.0037	0.050
1,1-Dichloroethene	J	0.024	ug/L	1	.05	0.050	0.0091	0.025
trans-1,2-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0033	0.025
cis-1,2-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0057	0.025
Trichloroethene		0.46	ug/L	1	.05	0.050	0.012	0.025
Tetrachloroethene	U	0.025	ug/L	1	.05	0.050	0.0091	0.025
Dibromofluoromethane		128.	%					
1,2-Dichloroethane-d4		129.	%					
Toluene-D8		99.7	%					
p-Bromofluorobenzene		84.2	%					

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Data File: \\target_server\gg\chem\gcms-s.i\S111623.b\S7218.D
Report Date: 12-Dec-2023 10:42

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-s.i\S111623.b\S7218.D
Lab Smp Id: SQ6133-9 Client Smp ID: SY-0BMW14-110723
Inj Date : 16-NOV-2023 21:19
Operator : JSS Inst ID: gcms-s.i
Smp Info : SQ6133-9
Misc Info : WG345525,WG345525-5
Comment : SW846 5030C
Method : \\target_server\gg\chem\gcms-s.i\S111623.b\SSIM(01)CR23.m
Meth Date : 12-Dec-2023 10:34 croy Quant Type: ISTD
Cal Date : 16-NOV-2023 15:48 Cal File: S7206.D
Als bottle: 20
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.12
Processing Host: T7-O360

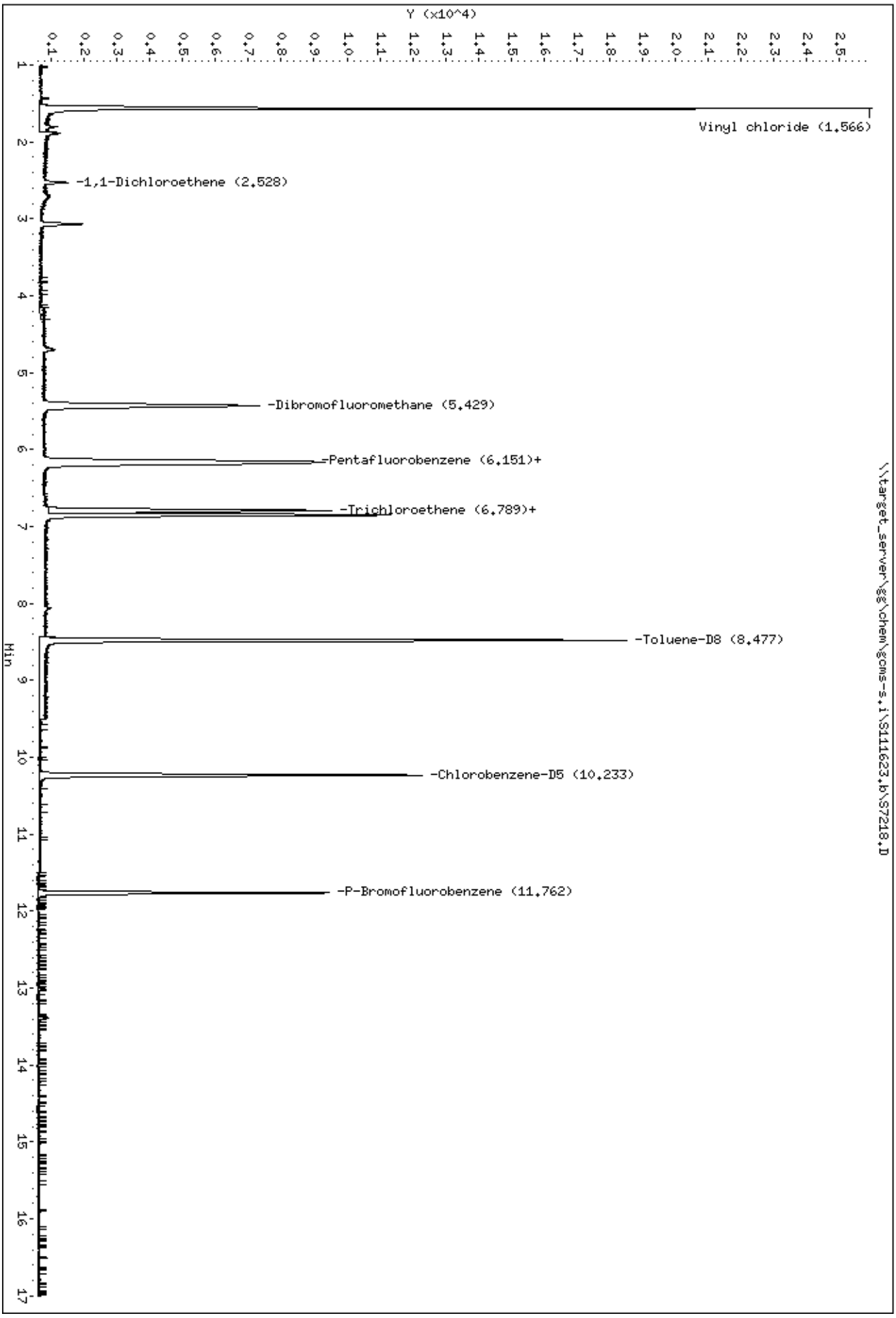
Concentration Formula: Amt * DF * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	25.000	sample purged
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)	REVIEW CODE
	1 Vinyl chloride	62	1.566	1.640	(0.255)	429	0.02618	0.0262	
	2 1,1-Dichloroethene	96	2.527	2.532	(0.411)	304	0.02370	0.0237(a)	
$	7 Dibromofluoromethane	113	5.428	5.440	(0.883)	9588	1.27700	1.28	
*	9 Pentafluorobenzene	168	6.151	6.163	(1.000)	11211	1.00000		
$	10 1,2-Dichloroethane-D4	65	6.186	6.193	(1.006)	8726	1.28631	1.29	
	12 Trichloroethene	130	6.788	6.793	(0.991)	4757	0.46143	0.461	
*	13 1,4-Difluorobenzene	114	6.853	6.854	(1.000)	18023	1.00000		
$	14 Toluene-D8	98	8.479	8.482	(1.237)	18869	0.99688	0.997	
*	17 Chlorobenzene-D5	117	10.233	10.238	(1.000)	16698	1.00000		
$	18 P-Bromofluorobenzene	95	11.761	11.768	(1.149)	5923	0.84229	0.842	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).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Date : 16-NOV-2023 21:19
Client ID: SY-0BW14-110723
Sample Info: SQ6133-9
Instrument: gcms-s.i
\\target_server\gg\chem\gcms-s.i\S111623.b\S7218.D
Y (x10^4)
Min
Vinyl chloride (1.566)
-1,1-Dichloroethene (2.528)
-Dibromofluoromethane (5.429)
-Pentafluorobenzene (6.151)+
-Trichloroethene (6.789)+
-Toluene-D8 (8.477)
-Chlorobenzene-D5 (10.233)
-P-Bromofluorobenzene (11.762)

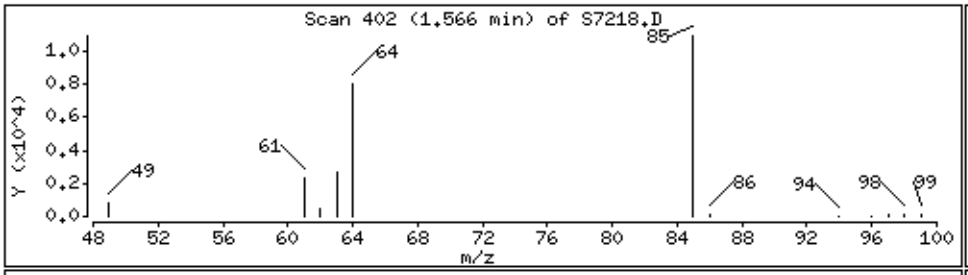
Data File: \\target_server\gg\chem\gcms-s.i\S111623.b\S7218.D

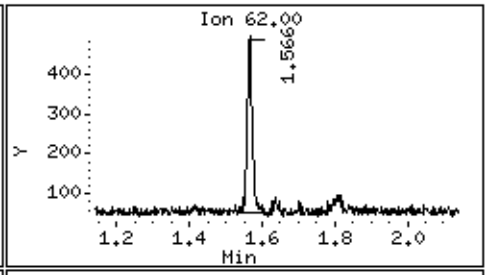
Date : 16-NOV-2023 21:19

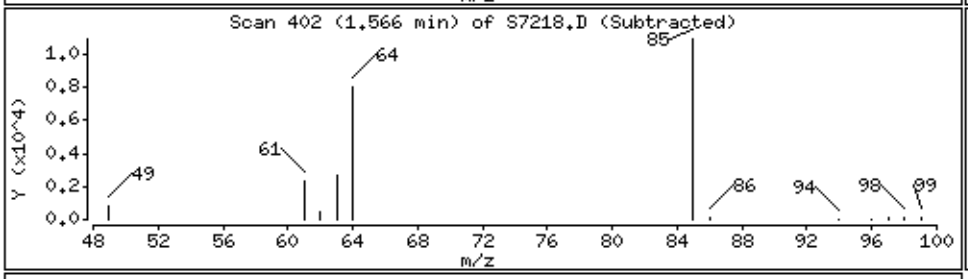
Client ID: SY-OBMW14-110723 Instrument: gcms-s.i

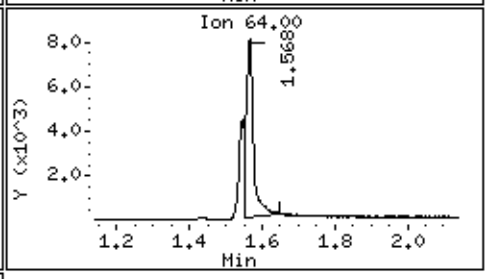
Sample Info: SQ6133-9

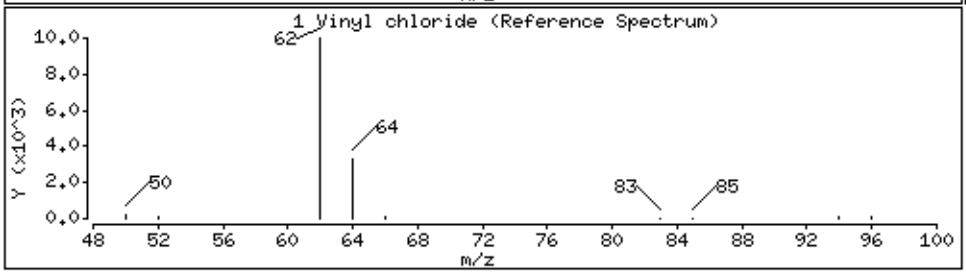
1 Vinyl chloride Concentration: 0.0262 ug/l



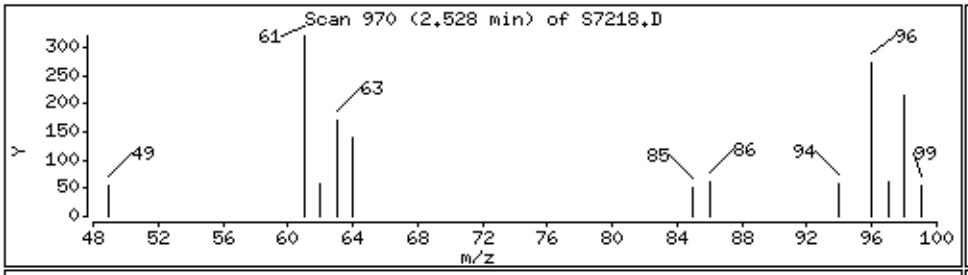


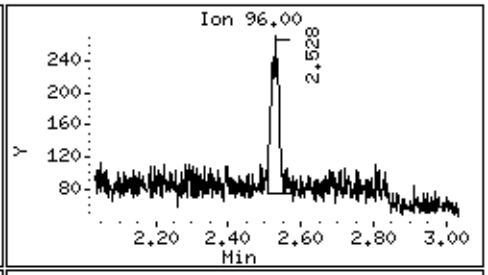


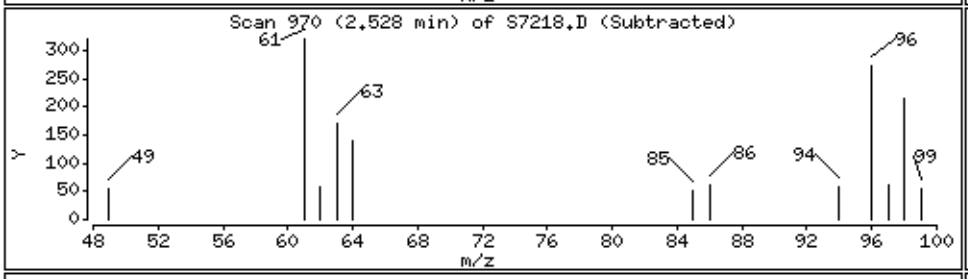


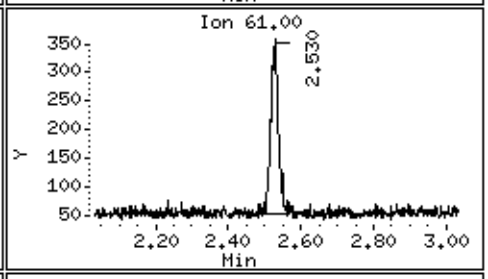


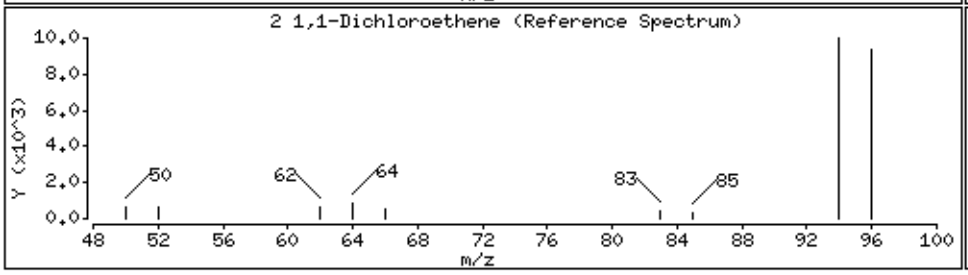
2 1,1-Dichloroethene Concentration: 0.0237 ug/l

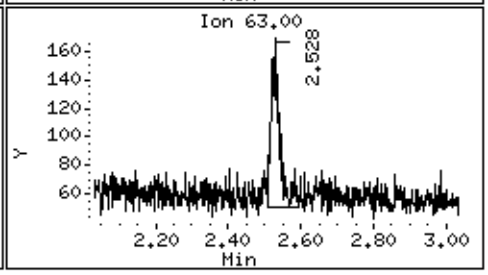












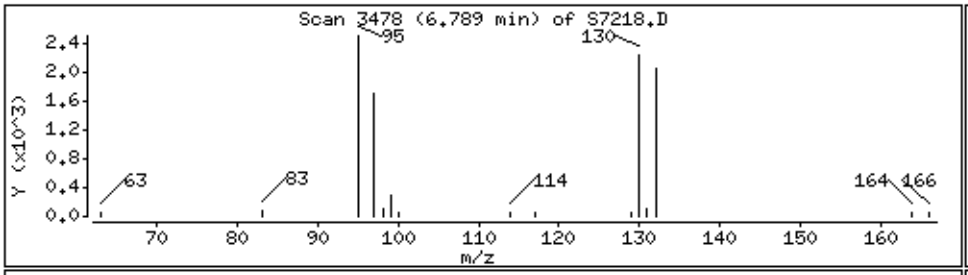
Data File: \\target_server\gg\chem\gcms-s.i\S111623.b\S7218.D

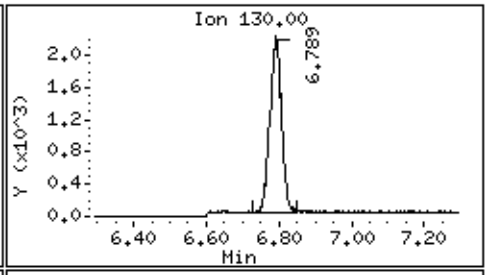
Date : 16-NOV-2023 21:19

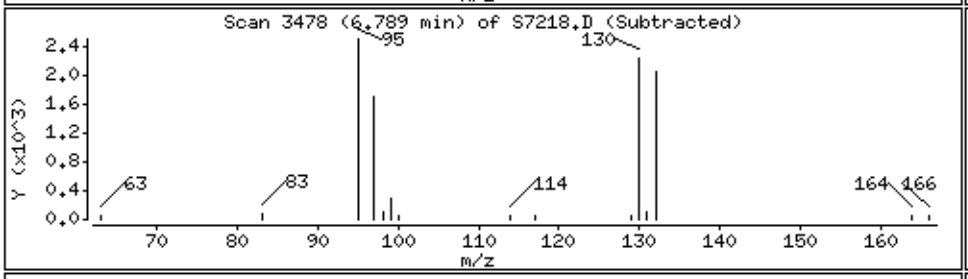
Client ID: SY-OBMW14-110723 Instrument: gcms-s.i

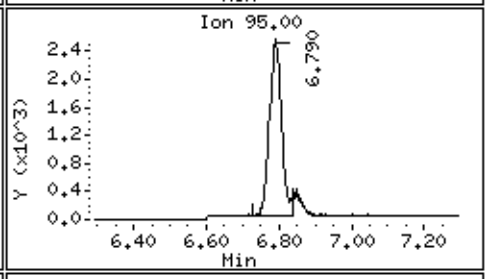
Sample Info: SQ6133-9

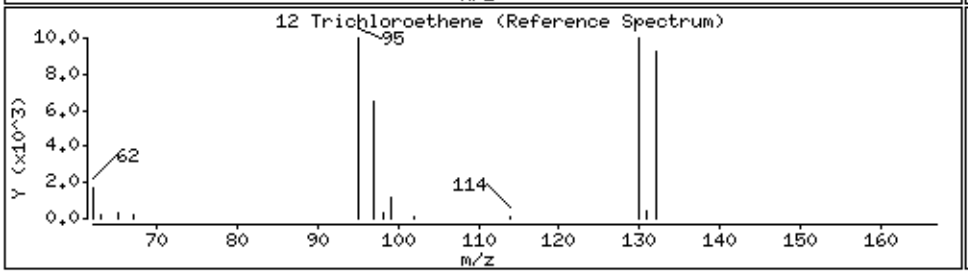
12 Trichloroethene Concentration: 0.461 ug/l

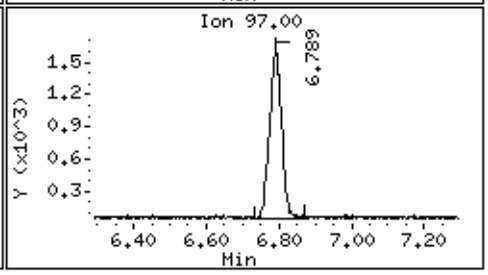












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ANALYTICAL SERVICES

Report of Analytical Results

SDG: SQ6133
Lab ID: SQ6133-10
Client ID: SY-BRMW2-252.5-262.5-110723
Matrix: AQ
Lab File ID: S7219.D

Sample Date: 07-NOV-23
Extract Date: 16-NOV-23
Extracted By: JSS
Extraction Method: SW846 5030C
Lab Prep Batch: WG345525

Report Date: 12-DEC-23
Analysis Date: 16-NOV-23
Analyst: JSS
Analysis Method: SW846 8260C SIM
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Vinyl Chloride	U	0.050	ug/L	1	.1	0.10	0.0037	0.050
1,1-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0091	0.025
trans-1,2-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0033	0.025
cis-1,2-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0057	0.025
Trichloroethene	U	0.025	ug/L	1	.05	0.050	0.012	0.025
Tetrachloroethene	U	0.025	ug/L	1	.05	0.050	0.0091	0.025
Dibromofluoromethane		130.	%					
1,2-Dichloroethane-d4		127.	%					
Toluene-D8		101.	%					
p-Bromofluorobenzene		81.9	%					

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Data File: \\target_server\gg\chem\gcms-s.i\S111623.b\S7219.D
Report Date: 12-Dec-2023 10:42

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-s.i\S111623.b\S7219.D
Lab Smp Id: SQ6133-10 Client Smp ID: Y-BRMW2-252.5-262.5
Inj Date : 16-NOV-2023 21:46
Operator : JSS Inst ID: gcms-s.i
Smp Info : SQ6133-10
Misc Info : WG345525,WG345525-5
Comment : SW846 5030C
Method : \\target_server\gg\chem\gcms-s.i\S111623.b\SSIM(01)CR23.m
Meth Date : 12-Dec-2023 10:34 croy Quant Type: ISTD
Cal Date : 16-NOV-2023 15:48 Cal File: S7206.D
Als bottle: 21
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.12
Processing Host: T7-O360

Concentration Formula: Amt * DF * 25/Vo * CpndVariable

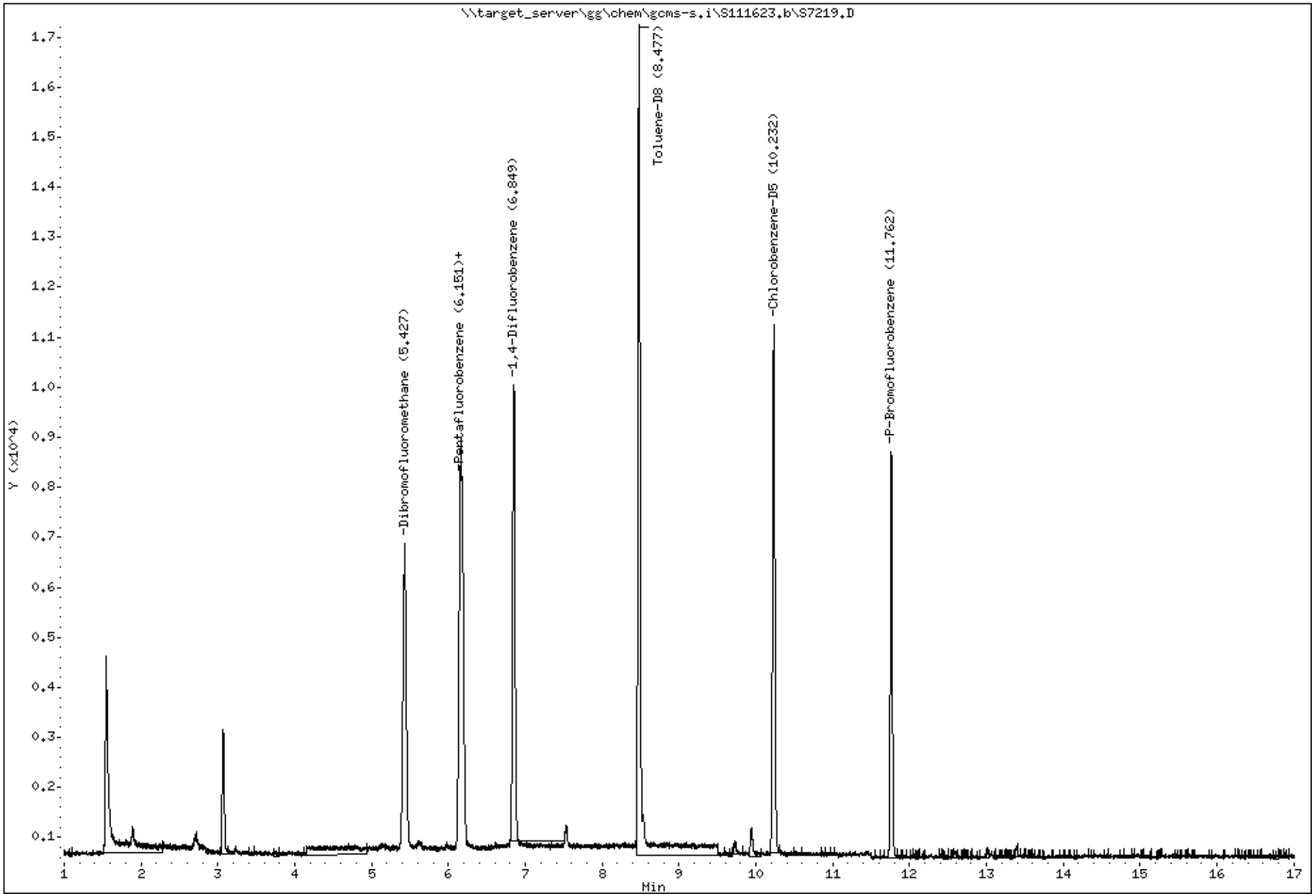
Name	Value	Description
DF	1.000	Dilution Factor
Vo	25.000	sample purged
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)	REVIEW CODE
$	7 Dibromofluoromethane	113	5.427	5.440	(0.882)	8973	1.30206	1.30(R)	
*	9 Pentafluorobenzene	168	6.151	6.163	(1.000)	10290	1.00000		
$	10 1,2-Dichloroethane-D4	65	6.183	6.193	(1.005)	7906	1.26975	1.27	
*	13 1,4-Difluorobenzene	114	6.849	6.854	(1.000)	16302	1.00000		
$	14 Toluene-D8	98	8.479	8.482	(1.238)	17283	1.00948	1.01	
*	17 Chlorobenzene-D5	117	10.231	10.238	(1.000)	15750	1.00000		
$	18 P-Bromofluorobenzene	95	11.760	11.768	(1.149)	5433	0.81911	0.819	

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Data File: \\target_server\gg\chem\gcms-s.i\S111623.b\S7219.D
Date : 16-NOV-2023 21:46
Client ID: Y-BRMW2-252.5-262.5 Instrument: gcms-s.i
Sample Info: SQ6133-10



Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

SDG: SQ6133
Lab ID: SQ6133-11
Client ID: TB31-110723
Matrix: AQ
Lab File ID: D8873.D

Sample Date: 07-NOV-23
Extract Date: 16-NOV-23
Extracted By: JSS
Extraction Method: SW846 5030C
Lab Prep Batch: WG345527

Report Date: 12-DEC-23
Analysis Date: 16-NOV-23
Analyst: JSS
Analysis Method: SW846 8260C SIM
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Vinyl Chloride	U	0.050	ug/L	1	.1	0.10	0.0037	0.050
1,1-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0091	0.025
trans-1,2-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0033	0.025
cis-1,2-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0057	0.025
Trichloroethene	U	0.025	ug/L	1	.05	0.050	0.012	0.025
Tetrachloroethene	U	0.025	ug/L	1	.05	0.050	0.0091	0.025
Dibromofluoromethane		113.	%					
1,2-Dichloroethane-d4		114.	%					
Toluene-D8		99.9	%					
p-Bromofluorobenzene		79.5	%					

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Data File: \\target_server\gg\chem\gcms-d.i\D111623.b\D8873.d
Report Date: 12-Dec-2023 10:22

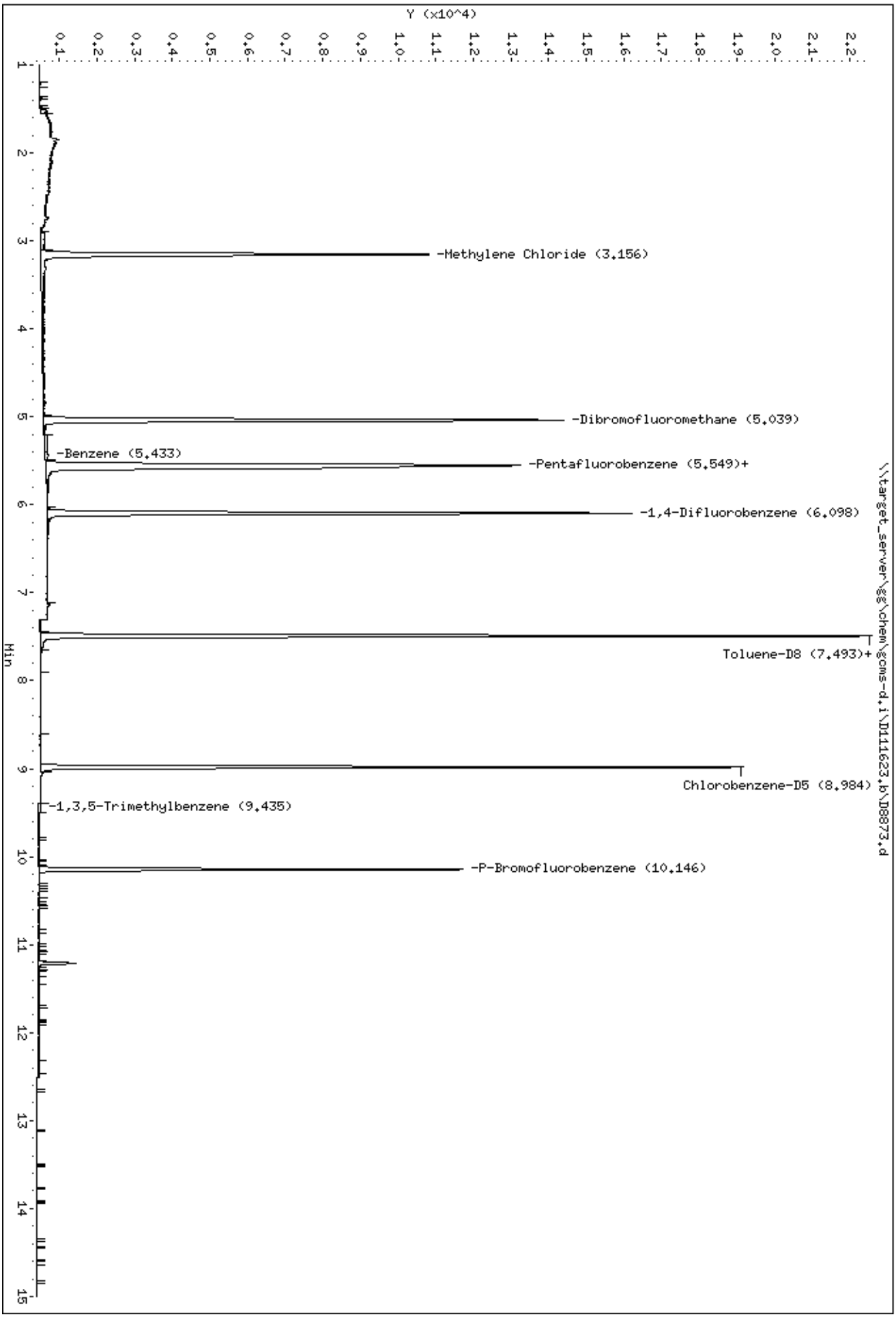
Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-d.i\D111623.b\D8873.d
Lab Smp Id: SQ6133-11 Client Smp ID: TB31-110723
Inj Date : 16-NOV-2023 15:54
Operator : JSS Inst ID: gcms-d.i
Smp Info : SQ6133-11
Misc Info : WG345527,WG345527-5
Comment : SW846 5030C
Method : \\target_server\gg\chem\gcms-d.i\D111623.b\DSIM(01)CR23.m
Meth Date : 04-Dec-2023 12:57 gcms-d.i Quant Type: ISTD
Cal Date : 16-NOV-2023 10:22 Cal File: D8863.d
Als bottle: 17
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: Credere.sub
Target Version: 4.12

Concentration Formula: Amt * DF * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	25.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)	REVIEW CODE
$ 7 Dibromofluoromethane	113	5.038	5.037	(0.908)	14084	1.13411	1.13	
$ 11 1,2-Dichloroethane-D4	65	5.579	5.582	(1.006)	8399	1.14586	1.14	
$ 15 Toluene-D8	98	7.492	7.491	(1.229)	21328	0.99882	0.999	
$ 20 P-Bromofluorobenzene	95	10.145	10.146	(1.130)	5697	0.79523	0.795	
* 10 Pentafluorobenzene	168	5.547	5.549	(1.000)	15902	1.00000		
* 14 1,4-Difluorobenzene	114	6.097	6.096	(1.000)	23582	1.00000		
* 18 Chlorobenzene-D5	117	8.981	8.984	(1.000)	21423	1.00000		


Y (x10^4)
Min
-Methylene Chloride (3.156)
-Dibromofluoromethane (5.039)
-Benzene (5.433)
-Pentafluorobenzene (5.549)+
-1,4-Difluorobenzene (6.098)
Toluene-D8 (7.493)+
Chlorobenzene-D5 (8.984)
-1,3,5-Trimethylbenzene (9.435)
-P-Bromofluorobenzene (10.146)
\\target_server\gg\chem\gcms-d.i\D111623.b\D8873.d
Data File: \\target_server\gg\chem\gcms-d.i\D111623.b\D8873.d
Date : 16-NOV-2023 15:54
Client ID: TB31-110723
Sample Info: SQ6133-11
Instrument: gcms-d.i

Standards Data Section

Form 6
Initial Calibration Summary

Lab Name : Katahdin Analytical Services **SDG:** SQ6133

Instrument ID: GCMS-D **Column ID:**

Lab File IDs : D8857.d D8858.d D8859.d D8860.d D8864.d D8863.d D8862.d D8861.d

Calibration Date(s): 16-NOV-23 07:03 16-NOV-23 10:55

	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Level 7	Level 8	Curve				%RSD or R^2		
	0.0500000	0.0750000	0.1000000	0.3000000	0.5000000	0.7500000	1.0000	2.0000	Type	b	m1	m2	Result	Limit	
Vinyl chloride	0.52945	0.72743	0.76855	0.77482	0.76390	0.72809	0.68602	0.63518	AVG		0.70168		11.97008	15	O
1,1-Dichloroethene	0.49275	0.71974	0.73490	0.71180	0.68912	0.63922	0.59643	0.56885	AVG		0.64410		13.30914	15	O
trans-1,2-Dichloroethene	0.60562	0.75957	0.80828	0.80738	0.79441	0.74641	0.70032	0.63795	AVG		0.73249		10.59785	15	O
cis-1,2-Dichloroethene	0.55423	0.56601	0.59641	0.57998	0.59650	0.55985	0.53725	0.49246	AVG		0.56034		6.11031	15	O
Trichloroethene	0.39193	0.47329	0.47280	0.45148	0.44906	0.43876	0.42564	0.41309	AVG		0.43951		6.45761	15	O
Tetrachloroethene	0.26930	0.38638	0.40828	0.40354	0.39587	0.38279	0.36947	0.36610	AVG		0.37272		11.90812	15	O
Dibromofluoromethane	0.83786	0.82422	0.83983	0.84612	0.77232	0.73731	0.71786	0.67202	AVG		0.78094		8.47335	15	
1,2-Dichloroethane-D4	0.52482	0.47906	0.49059	0.50003	0.45505	0.42864	0.42223	0.38709	AVG		0.46094		9.99112	15	
Toluene-D8	0.92229	0.91817	0.91349	0.90697	0.90295	0.90168	0.89676	0.88160	AVG		0.90549		1.43214	15	
P-Bromofluorobenzene	0.28630	0.27651	0.28209	0.31889	0.34399	0.36984	0.38547	0.41217	AVG		0.33441		15.4335	15	

Legend: O = Acceptable; W = Failed %RSD Value; X = Failed R^2 Value; Y = Failed Minimum RF

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Data File: \\target_server\gg\chem\gcms-d.i\D111623.b\D8867a.d
Report Date: 04-Dec-2023 12:54

Katahdin Analytical Services

RECOVERY REPORT

Client Name: Client SDG: SDGa02236
Sample Matrix: LIQUID Fraction: VOA
Lab Smp Id: WG345527-9 Client Smp ID: INDSOURCE
Level: LOW Operator: JSS
Data Type: MS DATA SampleType: INDSOURCE
SpikeList File: IND_CHECKsim.spk Quant Type: ISTD
Sublist File: all.sub
Method File: \\target_server\gg\chem\gcms-d.i\D111623.b\DSIM(01)CR23.m
Misc Info: WG345527,WG345527-5

SPIKE COMPOUND	CONC ADDED ug/l	CONC RECOVERED ug/l	% RECOVERED	LIMITS
1 Vinyl chloride	0.500	0.539	107.74	80-120
2 1,1-Dichloroethene	0.500	0.584	116.75	80-120
3 Methylene Chloride	20.0	0.000	*	80-120
4 trans-1,2-Dichloro	0.500	0.571	114.14	80-120
5 cis-1,2-Dichloroet	0.500	0.533	106.67	80-120
6 Chloroform	0.500	0.000	0.00*	80-120
8 1,1,1-Trichloroeth	0.500	0.000	0.00*	80-120
9 Benzene	0.500	0.000	0.00*	80-120
12 1,2-Dichloroethane	0.500	0.000	0.00*	80-120
13 Trichloroethene	0.500	0.539	107.88	80-120
16 Tetrachloroethene	0.500	0.559	111.84	80-120
17 1,1,2-Trichloroeth	0.500	0.000	0.00*	80-120
21 1,1,2,2-Tetrachlor	0.500	0.000	0.00*	80-120
22 1,2,4-Trimethylben	0.500	0.000	0.00*	80-120
23 1,2,4-Trichloroben	0.500	0.000	0.00*	80-120
24 1,2,3-Trichloroben	0.500	0.000	0.00*	80-120

SURROGATE COMPOUND	AMOUNT ADDED ug/l	AMOUNT RECOVERED ug/l	% RECOVERED	LIMITS
$ 7 Dibromofluorometha	1.00	1.04	104.58	70-130
$ 11 1,2-Dichloroethane	1.00	1.02	101.89	70-130
$ 15 Toluene-D8	1.00	0.989	98.93	70-130
$ 20 P-Bromofluorobenze	1.00	1.02	102.54	70-130

Data File: \\target_server\gg\chem\gcms-d.i\D111623.b\D8867a.d
Report Date: 04-Dec-2023 12:54

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-d.i\D111623.b\D8867a.d
Lab Smp Id: WG345527-9 Client Smp ID: INDSOURCE
Inj Date : 16-NOV-2023 12:35
Operator : JSS Inst ID: gcms-d.i
Smp Info : WG345527-9
Misc Info : WG345527,WG345527-5
Comment : SW846 5030C
Method : \\target_server\gg\chem\gcms-d.i\D111623.b\DSIM(01)CR23.m
Meth Date : 04-Dec-2023 12:48 croy Quant Type: ISTD
Cal Date : 16-NOV-2023 10:22 Cal File: D8863.d
Als bottle: 11 QC Sample: INDSOURCE
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.12
Processing Host: ORGANICS2

Concentration Formula: Amt * DF * 25/Vo * CpndVariable

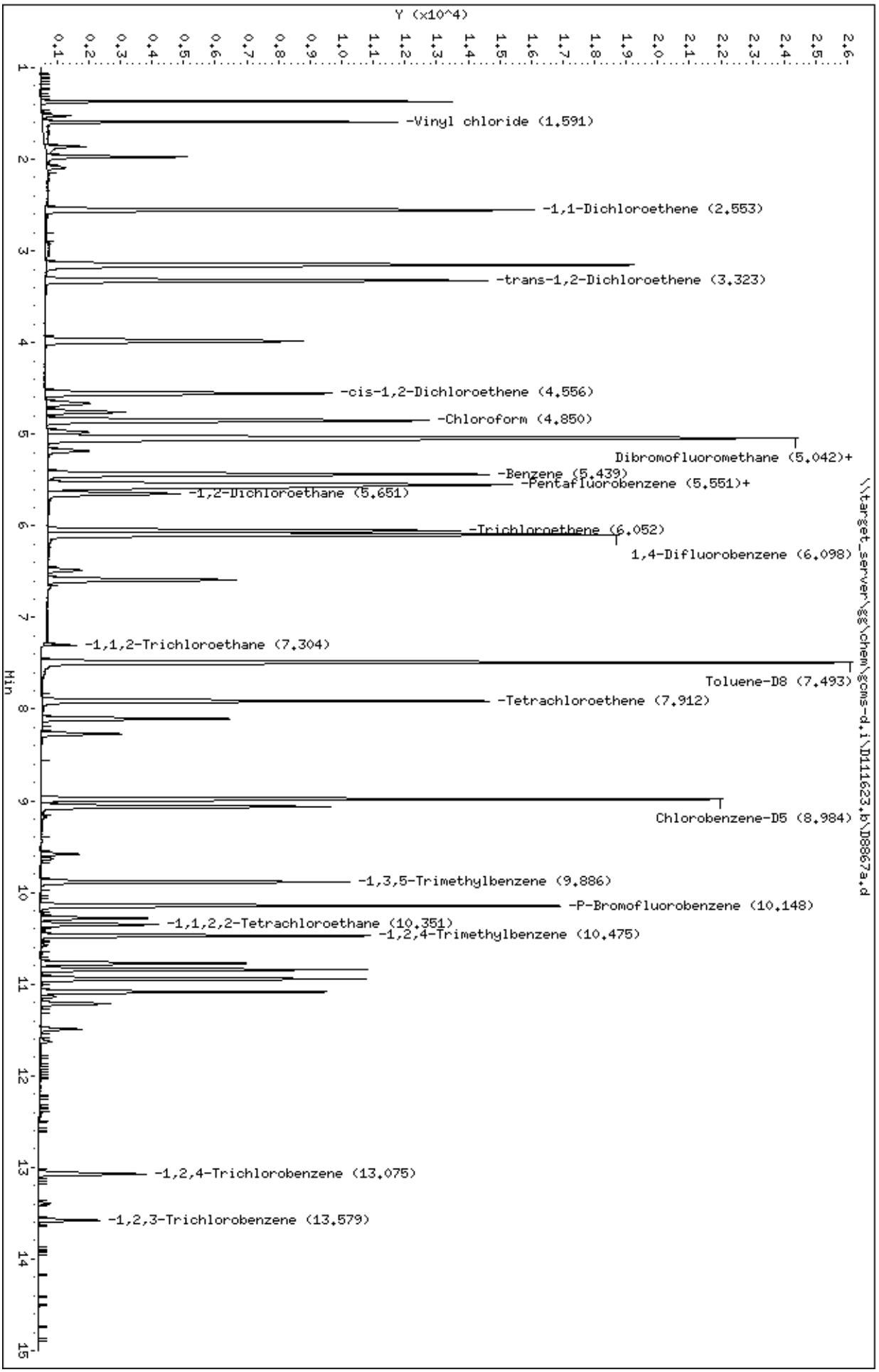
Name	Value	Description
DF	1.000	Dilution Factor
Vo	25.000	sample purged
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)	REVIEW CODE
1	Vinyl chloride	62	1.591	1.591	(0.287)	7004	0.53868	0.539	
2	1,1-Dichloroethene	96	2.554	2.553	(0.460)	6967	0.58374	0.584	
4	trans-1,2-Dichloroethene	96	3.324	3.323	(0.599)	7746	0.57069	0.571	
5	cis-1,2-Dichloroethene	96	4.553	4.558	(0.820)	5538	0.53337	0.533	
6	Chloroform	83	4.850	4.848	(0.874)	14428		(aR)	
$ 7	Dibromofluoromethane	113	5.038	5.037	(0.908)	15133	1.04575	1.04	
8	1,1,1-Trichloroethane	97	5.051	5.054	(0.910)	10761		(aR)	
9	Benzene	78	5.439	5.439	(0.980)	19844		(aR)	
* 10	Pentafluorobenzene	168	5.551	5.549	(1.000)	18530	1.00000		
$ 11	1,2-Dichloroethane-D4	65	5.581	5.582	(1.005)	8703	1.01894	1.02	
12	1,2-Dichloroethane	62	5.650	5.649	(0.927)	5230		(aR)	
13	Trichloroethene	130	6.054	6.052	(0.993)	6480	0.53941	0.539	
* 14	1,4-Difluorobenzene	114	6.097	6.096	(1.000)	27333	1.00000		
$ 15	Toluene-D8	98	7.492	7.491	(1.229)	24485	0.98931	0.989	
16	Tetrachloroethene	164	7.911	7.912	(1.298)	5697	0.55922	0.559	
17	1,1,2-Trichloroethane	83	7.312	7.310	(1.199)	568		(aR)	
* 18	Chlorobenzene-D5	117	8.983	8.984	(1.000)	24578	1.00000		
19	1,3,5-Trimethylbenzene	105	9.885	9.888	(1.100)	11238		(a)	
$ 20	P-Bromofluorobenzene	95	10.147	10.146	(1.130)	8428	1.02542	1.02	
21	1,1,2,2-Tetrachloroethane	83	10.350	10.351	(1.152)	2814		(aR)	
22	1,2,4-Trimethylbenzene	105	10.471	10.473	(1.166)	9255		(aR)	
23	1,2,4-Trichlorobenzene	180	13.074	13.075	(1.455)	1891		(aR)	
24	1,2,3-Trichlorobenzene	180	13.577	13.579	(1.511)	1086		(aR)	

Data File: \\target_server\gg\chem\gcms-d.i\D111623.b\D8867a.d
Report Date: 04-Dec-2023 12:54

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
R - Spike/Surrogate failed recovery limits.


Data File: \\target_server\gg\chem\gcms-d.i\D111623.b\D8867a.d
Date : 16-NOV-2023 12:35
Client ID: INDSOURCE
Sample Info: WG345527-9
Purge Volume: 25.0
Column phase: RTX-VMS
Instrument: gcms-d.i
Operator: JSS
Column diameter: 0.18
Y (x10^4)
Min
-Vinyl chloride (1.591)
-1,1-Dichloroethene (2.553)
-trans-1,2-Dichloroethene (3.323)
-cis-1,2-Dichloroethene (4.556)
-Chloroform (4.850)
Dibromofluoromethane (5.042)+
-Benzene (5.439)
-Pentafluorobenzene (5.551)+
-1,2-Dichloroethane (5.651)
-Trichloroethene (6.052)
1,4-Difluorobenzene (6.098)
-1,1,2-Trichloroethane (7.304)
Toluene-D8 (7.493)
-Tetrachloroethene (7.912)
Chlorobenzene-D5 (8.984)
-1,3,5-Trimethylbenzene (9.886)
-P-Bromofluorobenzene (10.148)
-1,1,2,2-Tetrachloroethane (10.351)
-1,2,4-Trimethylbenzene (10.475)
-1,2,4-Trichlorobenzene (13.075)
-1,2,3-Trichlorobenzene (13.579)
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Data File: \\target_server\gg\chem\gcms-d.i\D111623.b\D8857.d
Report Date: 04-Dec-2023 12:49

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-d.i\D111623.b\D8857.d
Lab Smp Id: WG345527-1
Inj Date : 16-NOV-2023 07:03
Operator : JSS   Inst ID: gcms-d.i
Smp Info : WG345527-1
Misc Info :
Comment   : SW846 5030C
Method   : \\target_server\gg\chem\gcms-d.i\D111623.b\DSIM(01)CR23.m
Meth Date : 04-Dec-2023 12:48 croy   Quant Type: ISTD
Cal Date : 16-NOV-2023 12:02   Cal File: D8866.d
Als bottle: 1   Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: Credere.sub
Target Version: 4.12

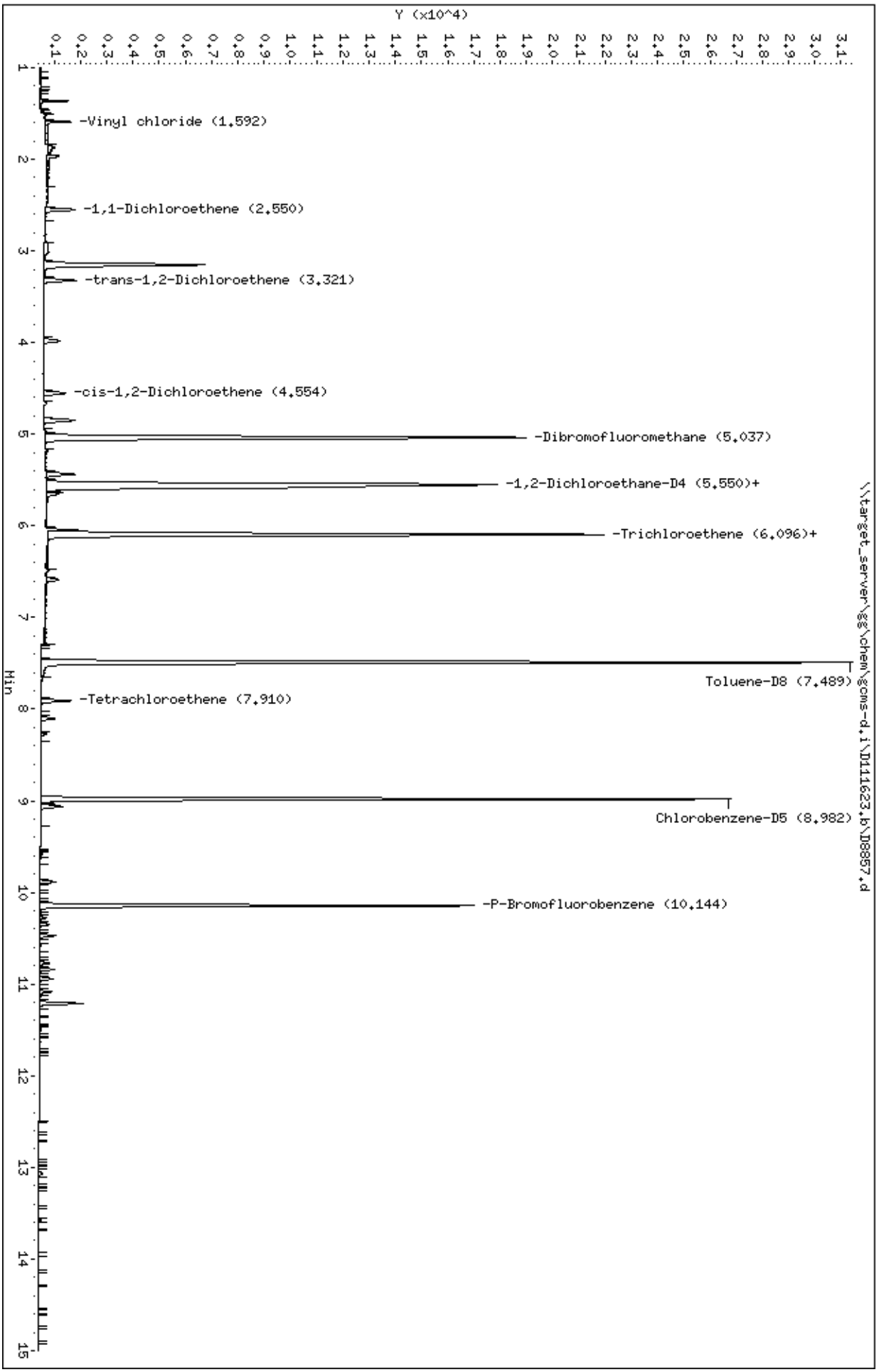
Concentration Formula: Amt * DF * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	25.000	sample purged
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)	REVIEW CODE
1	Vinyl chloride	62	1.591	1.591	(0.287)	577	0.05000	0.0346	
2	1,1-Dichloroethene	96	2.551	2.553	(0.460)	537	0.05000	0.0358	
4	trans-1,2-Dichloroethene	96	3.323	3.323	(0.599)	660	0.05000	0.0381(a)	
5	cis-1,2-Dichloroethene	96	4.554	4.558	(0.821)	604	0.05000	0.0464(a)	
13	Trichloroethene	130	6.048	6.052	(0.992)	636	0.05000	0.0436	
16	Tetrachloroethene	164	7.910	7.912	(1.298)	437	0.05000	0.0340	
$ 7	Dibromofluoromethane	113	5.036	5.037	(0.908)	18262	1.00000	1.08	
$ 11	1,2-Dichloroethane-D4	65	5.577	5.582	(1.005)	11439	1.00000	1.15	
$ 15	Toluene-D8	98	7.488	7.491	(1.229)	29933	1.00000	1.02	
$ 20	P-Bromofluorobenzene	95	10.144	10.146	(1.129)	8466	1.00000	0.832	
* 10	Pentafluorobenzene	168	5.549	5.549	(1.000)	21796	1.00000		
* 14	1,4-Difluorobenzene	114	6.095	6.096	(1.000)	32455	1.00000		
* 18	Chlorobenzene-D5	117	8.981	8.984	(1.000)	29570	1.00000		

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).


Data File: \\target_server\gg\chem\gcms-d.i\D111623.b\D8857.d
Date : 16-NOV-2023 07:03
Client ID:
Sample Info: WG345527-1
Purge Volume: 25.0
Column phase: RTX-VMS
Instrument: gcms-d.i
Operator: JSS
Column diameter: 0.18
Y (x10^4)
Min
-Vinyl chloride (1.592)
-1,1-Dichloroethene (2.550)
-trans-1,2-Dichloroethene (3.321)
-cis-1,2-Dichloroethene (4.554)
-Dibromofluoromethane (5.037)
-1,2-Dichloroethane-D4 (5.550)+
-Trichloroethene (6.096)+
Toluene-D8 (7.489)
-Tetrachloroethene (7.910)
Chlorobenzene-D5 (8.982)
-P-Bromofluorobenzene (10.144)
\\target_server\gg\chem\gcms-d.i\D111623.b\D8857.d

Data File: \\target_server\gg\chem\gcms-d.i\D111623.b\D8858.d
Report Date: 04-Dec-2023 12:49

Katahdin Analytical Services

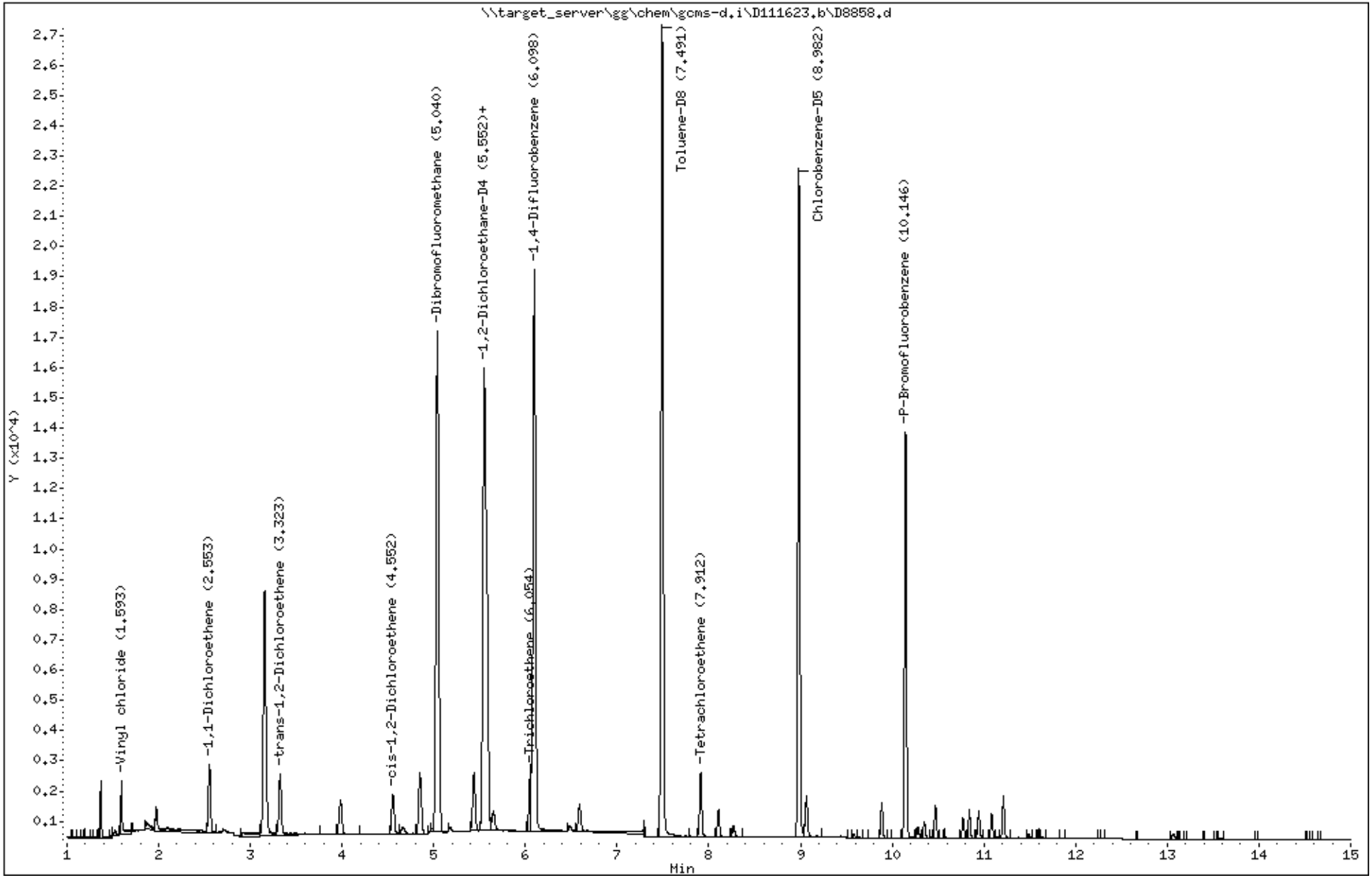
Data file : \\target_server\gg\chem\gcms-d.i\D111623.b\D8858.d
Lab Smp Id: WG345527-2
Inj Date : 16-NOV-2023 07:36
Operator : JSS   Inst ID: gcms-d.i
Smp Info : WG345527-2
Misc Info :
Comment   : SW846 5030C
Method   : \\target_server\gg\chem\gcms-d.i\D111623.b\DSIM(01)CR23.m
Meth Date : 04-Dec-2023 12:48 croy   Quant Type: ISTD
Cal Date : 16-NOV-2023 07:36   Cal File: D8858.d
Als bottle: 2   Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: Credere.sub
Target Version: 4.12

Concentration Formula: Amt * DF * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	25.000	sample purged
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)	REVIEW CODE
1	Vinyl chloride	62	1.593	1.591	(0.287)	1041	0.07500	0.0844	
2	1,1-Dichloroethene	96	2.554	2.553	(0.460)	1030	0.07500	0.0913	
4	trans-1,2-Dichloroethene	96	3.322	3.323	(0.599)	1087	0.07500	0.0814	
5	cis-1,2-Dichloroethene	96	4.551	4.558	(0.820)	810	0.07500	0.0738	
13	Trichloroethene	130	6.050	6.052	(0.992)	1002	0.07500	0.0844	
16	Tetrachloroethene	164	7.911	7.912	(1.298)	818	0.07500	0.0871	
$ 7	Dibromofluoromethane	113	5.040	5.037	(0.908)	15727	1.00000	1.02	
$ 11	1,2-Dichloroethane-D4	65	5.581	5.582	(1.005)	9141	1.00000	0.978	
$ 15	Toluene-D8	98	7.490	7.491	(1.228)	25918	1.00000	1.01	
$ 20	P-Bromofluorobenzene	95	10.143	10.146	(1.129)	6903	1.00000	0.877	
* 10	Pentafluorobenzene	168	5.551	5.549	(1.000)	19081	1.00000		
* 14	1,4-Difluorobenzene	114	6.097	6.096	(1.000)	28228	1.00000		
* 18	Chlorobenzene-D5	117	8.981	8.984	(1.000)	24965	1.00000		

Data File: \\target_server\gg\chem\gcms-d.i\D111623.b\D8858.d
Date : 16-NOV-2023 07:36
Client ID:
Instrument: gcms-d.i
Sample Info: WG345527-2
Purge Volume: 25.0
Operator: JSS
Column phase: RTX-VMS
Column diameter: 0.18



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Data File: \\target_server\gg\chem\gcms-d.i\D111623.b\D8859.d
Report Date: 04-Dec-2023 12:49

Katahdin Analytical Services

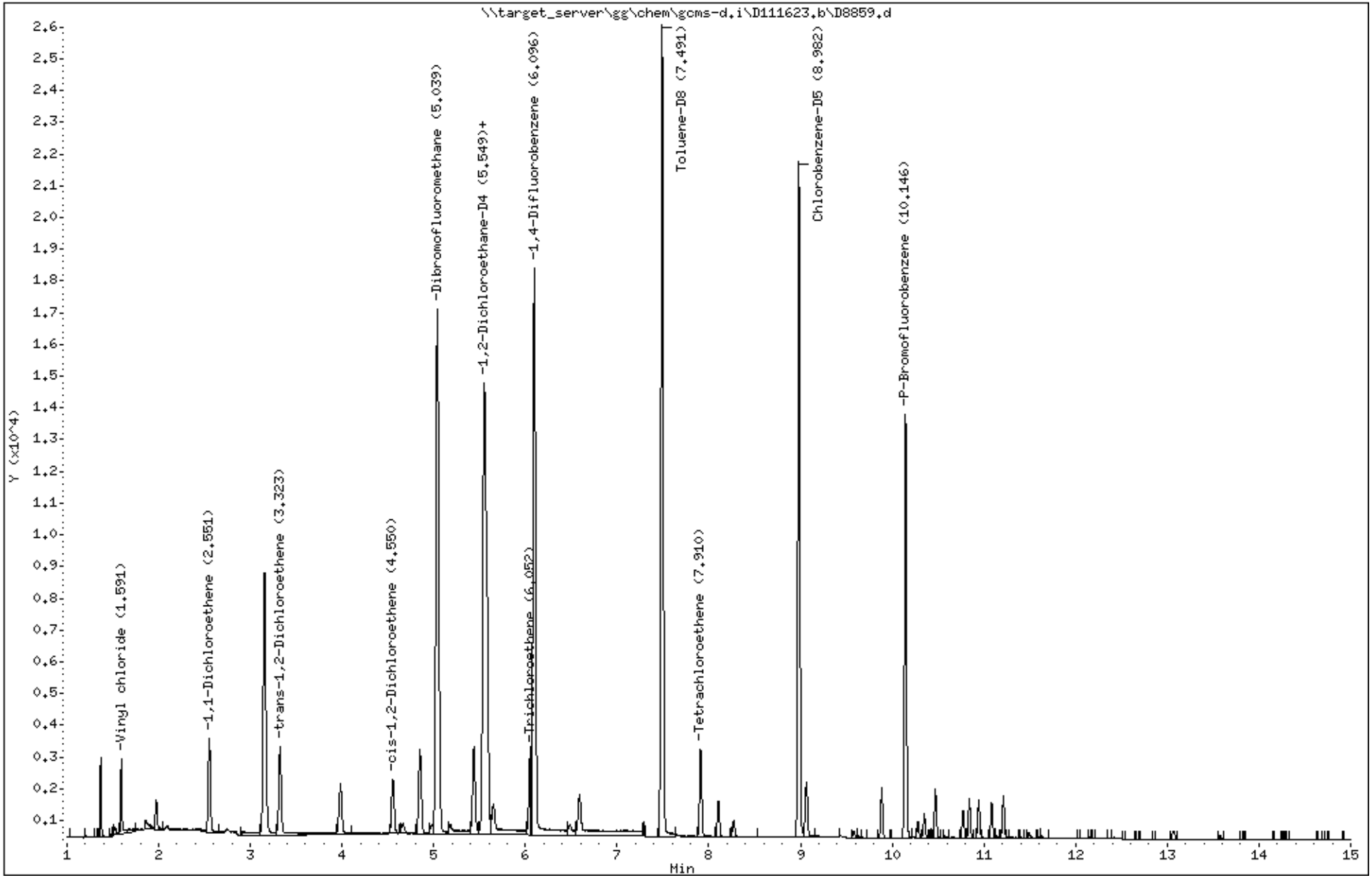
Data file : \\target_server\gg\chem\gcms-d.i\D111623.b\D8859.d
Lab Smp Id: WG345527-3
Inj Date : 16-NOV-2023 08:09
Operator : JSS   Inst ID: gcms-d.i
Smp Info : WG345527-3
Misc Info :
Comment   : SW846 5030C
Method   : \\target_server\gg\chem\gcms-d.i\D111623.b\DSIM(01)CR23.m
Meth Date : 04-Dec-2023 12:48 croy   Quant Type: ISTD
Cal Date : 16-NOV-2023 08:09   Cal File: D8859.d
Als bottle: 3   Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: Credere.sub
Target Version: 4.12

Concentration Formula: Amt * DF * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	25.000	sample purged
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)	REVIEW CODE
	1 Vinyl chloride	62	1.591	1.591	(0.287)	1393	0.10000	0.114	
	2 1,1-Dichloroethene	96	2.553	2.553	(0.460)	1332	0.10000	0.116	
	4 trans-1,2-Dichloroethene	96	3.323	3.323	(0.599)	1465	0.10000	0.112	
	5 cis-1,2-Dichloroethene	96	4.553	4.558	(0.821)	1081	0.10000	0.104	
	13 Trichloroethene	130	6.050	6.052	(0.993)	1275	0.10000	0.108	
	16 Tetrachloroethene	164	7.909	7.912	(1.298)	1101	0.10000	0.116	
$	7 Dibromofluoromethane	113	5.038	5.037	(0.908)	15222	1.00000	1.03	
$	11 1,2-Dichloroethane-D4	65	5.579	5.582	(1.005)	8892	1.00000	1.01	
$	15 Toluene-D8	98	7.490	7.491	(1.229)	24634	1.00000	0.999	
$	20 P-Bromofluorobenzene	95	10.145	10.146	(1.130)	6756	1.00000	0.933	
*	10 Pentafluorobenzene	168	5.549	5.549	(1.000)	18125	1.00000		
*	14 1,4-Difluorobenzene	114	6.095	6.096	(1.000)	26967	1.00000		
*	18 Chlorobenzene-D5	117	8.981	8.984	(1.000)	23950	1.00000		

Data File: \\target_server\gg\chem\gcms-d.i\D111623.b\D8859.d
Date : 16-NOV-2023 08:09
Client ID:
Instrument: gcms-d.i
Sample Info: WG345527-3
Purge Volume: 25.0
Operator: JSS
Column phase: RTX-VMS
Column diameter: 0.18



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Data File: \\target_server\gg\chem\gcms-d.i\D111623.b\D8860.d
Report Date: 04-Dec-2023 12:49

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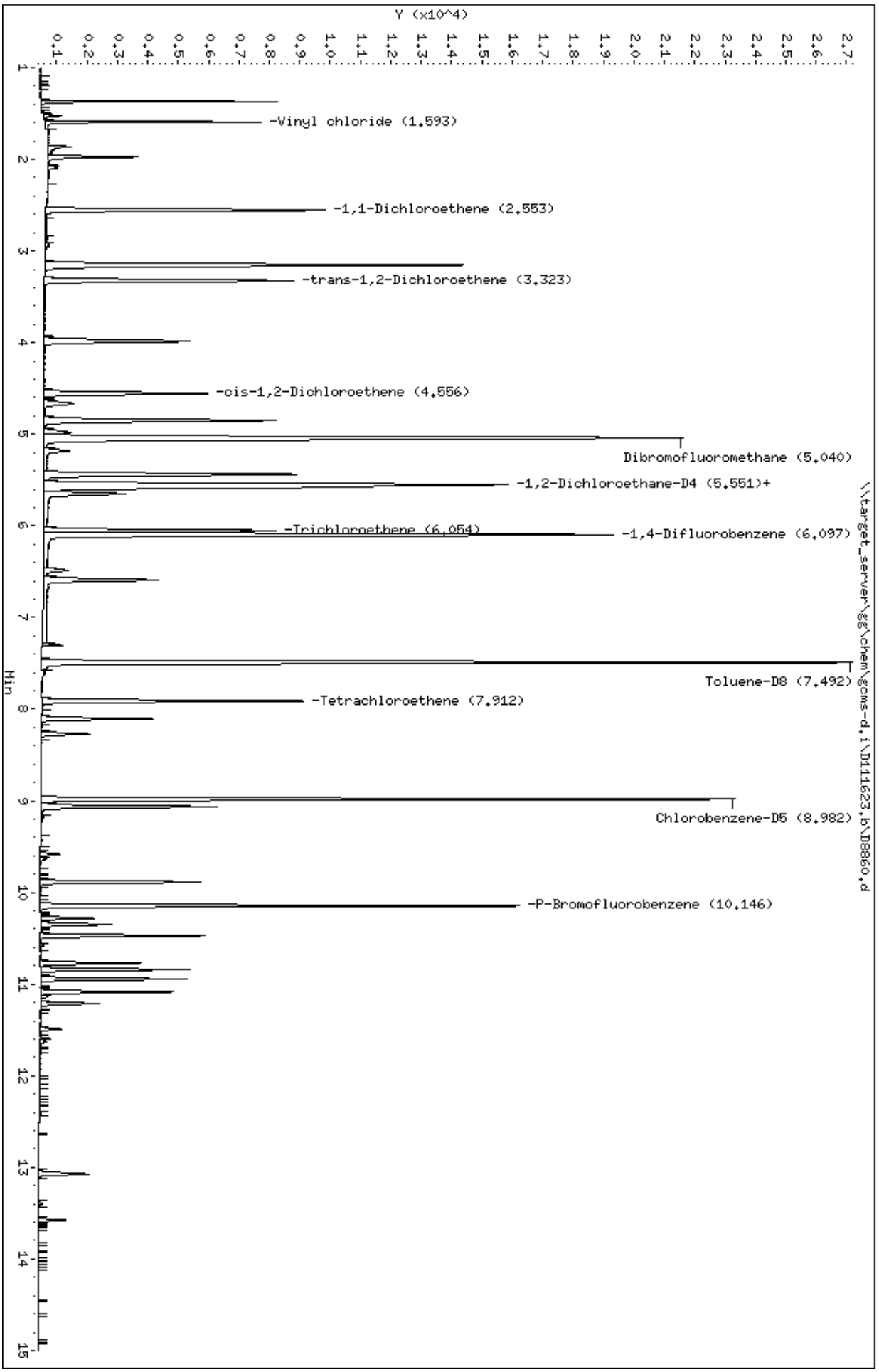
Data file : \\target_server\gg\chem\gcms-d.i\D111623.b\D8860.d
Lab Smp Id: WG345527-4
Inj Date : 16-NOV-2023 08:42
Operator : JSS   Inst ID: gcms-d.i
Smp Info : WG345527-4
Misc Info :
Comment   : SW846 5030C
Method   : \\target_server\gg\chem\gcms-d.i\D111623.b\DSIM(01)CR23.m
Meth Date : 04-Dec-2023 12:48 croy   Quant Type: ISTD
Cal Date : 16-NOV-2023 08:42   Cal File: D8860.d
Als bottle: 4   Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: Credere.sub
Target Version: 4.12

Concentration Formula: Amt * DF * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	25.000	sample purged
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)	REVIEW CODE
	1 Vinyl chloride	62	1.593	1.591	(0.287)	4426	0.30000	0.333	
	2 1,1-Dichloroethene	96	2.552	2.553	(0.460)	4066	0.30000	0.324	
	4 trans-1,2-Dichloroethene	96	3.326	3.323	(0.599)	4612	0.30000	0.326	
	5 cis-1,2-Dichloroethene	96	4.553	4.558	(0.821)	3313	0.30000	0.301	
	13 Trichloroethene	130	6.054	6.052	(0.993)	3861	0.30000	0.303	
	16 Tetrachloroethene	164	7.909	7.912	(1.297)	3451	0.30000	0.332	
$	7 Dibromofluoromethane	113	5.040	5.037	(0.908)	16111	1.00000	1.03	
$	11 1,2-Dichloroethane-D4	65	5.581	5.582	(1.006)	9521	1.00000	1.02	
$	15 Toluene-D8	98	7.492	7.491	(1.229)	25854	1.00000	0.992	
$	20 P-Bromofluorobenzene	95	10.145	10.146	(1.130)	8169	1.00000	1.07	
*	10 Pentafluorobenzene	168	5.549	5.549	(1.000)	19041	1.00000		
*	14 1,4-Difluorobenzene	114	6.097	6.096	(1.000)	28506	1.00000		
*	18 Chlorobenzene-D5	117	8.981	8.984	(1.000)	25617	1.00000		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Date : 16-NOV-2023 08:42
Client ID:
Sample Info: WG345527-4
Purge Volume: 25.0
Column phase: RTX-VMS
Instrument: gcms-d.i
Operator: JSS
Column diameter: 0.18
Y (x10^4)
Min
-Vinyl chloride (1.593)
-1,1-Dichloroethene (2.553)
-trans-1,2-Dichloroethene (3.323)
-cis-1,2-Dichloroethene (4.556)
Dibromofluoromethane (5.040)
-1,2-Dichloroethane-D4 (5.551)+
-Trichloroethene (6.054)
-1,4-Difluorobenzene (6.097)
Toluene-D8 (7.492)
-Tetrachloroethene (7.912)
Chlorobenzene-D5 (8.982)
-P-Bromofluorobenzene (10.146)
\\target_server\gg\chem\gcms-d.i\D111623.b\D8860.d

Data File: \\target_server\gg\chem\gcms-d.i\D111623.b\D8861.d
Report Date: 04-Dec-2023 12:49

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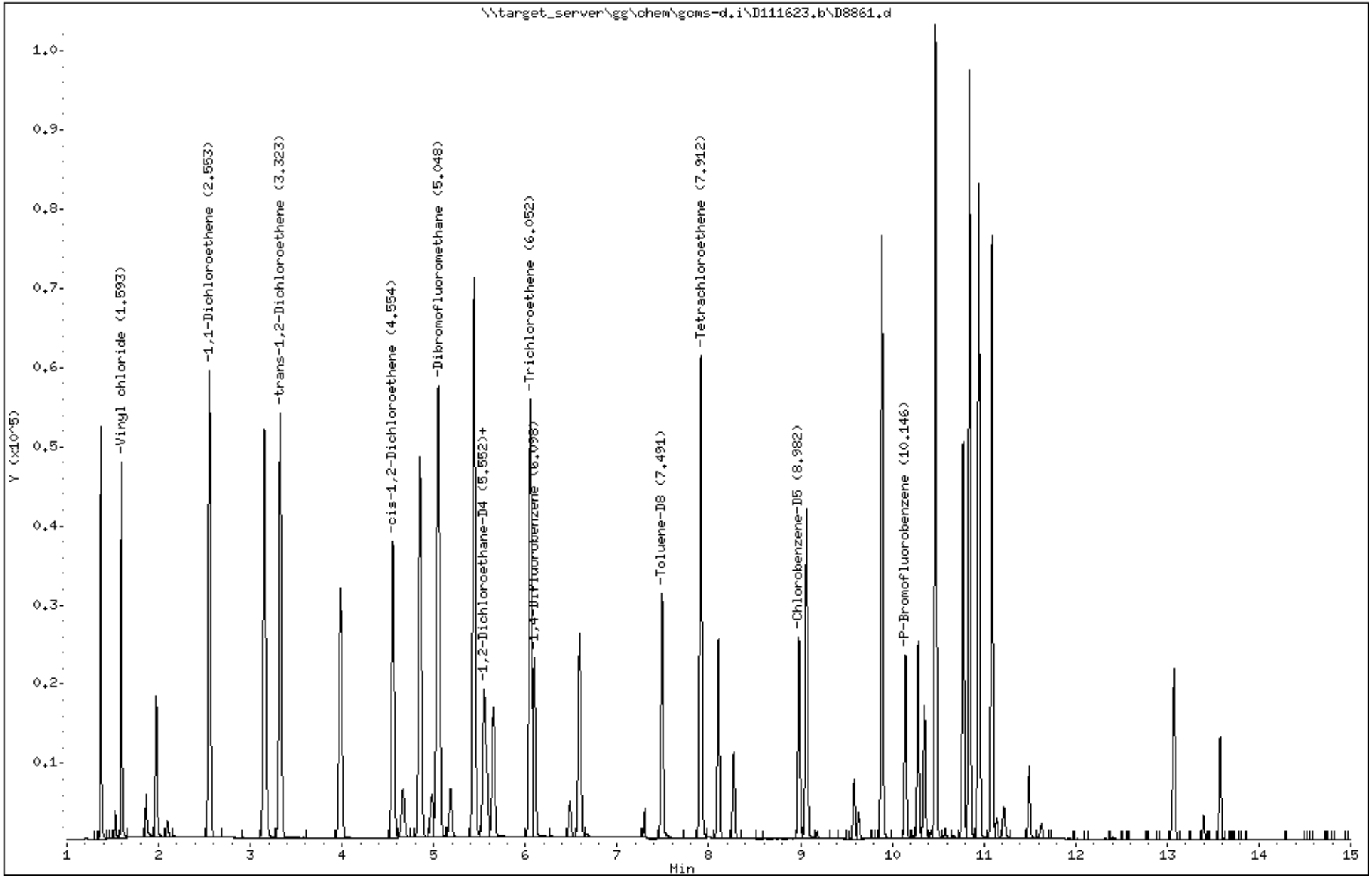
Data file : \\target_server\gg\chem\gcms-d.i\D111623.b\D8861.d
Lab Smp Id: WG345527-8
Inj Date : 16-NOV-2023 09:15
Operator : JSS   Inst ID: gcms-d.i
Smp Info : WG345527-8
Misc Info :
Comment   : SW846 5030C
Method   : \\target_server\gg\chem\gcms-d.i\D111623.b\DSIM(01)CR23.m
Meth Date : 04-Dec-2023 12:48 croy   Quant Type: ISTD
Cal Date : 16-NOV-2023 09:15   Cal File: D8861.d
Als bottle: 5   Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: Credere.sub
Target Version: 4.12

Concentration Formula: Amt * DF * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	25.000	sample purged
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)	REVIEW CODE
	1 Vinyl chloride	62	1.593	1.591	(0.287)	29809	2.00000	1.78	
	2 1,1-Dichloroethene	96	2.553	2.553	(0.460)	26696	2.00000	1.70	
	4 trans-1,2-Dichloroethene	96	3.324	3.323	(0.599)	29939	2.00000	1.69	
	5 cis-1,2-Dichloroethene	96	4.553	4.558	(0.821)	23111	2.00000	1.70	
	13 Trichloroethene	130	6.052	6.052	(0.993)	27821	2.00000	1.84	
	16 Tetrachloroethene	164	7.911	7.912	(1.298)	24656	2.00000	1.96	
$	7 Dibromofluoromethane	113	5.038	5.037	(0.908)	15769	1.00000	0.815	
$	11 1,2-Dichloroethane-D4	65	5.581	5.582	(1.006)	9083	1.00000	0.790	
$	15 Toluene-D8	98	7.490	7.491	(1.228)	29687	1.00000	0.966	
$	20 P-Bromofluorobenzene	95	10.145	10.146	(1.130)	11950	1.00000	1.37	
*	10 Pentafluorobenzene	168	5.549	5.549	(1.000)	23465	1.00000		
*	14 1,4-Difluorobenzene	114	6.097	6.096	(1.000)	33674	1.00000		
*	18 Chlorobenzene-D5	117	8.981	8.984	(1.000)	28993	1.00000		

Data File: \\target_server\gg\chem\gcms-d.i\D111623.b\D8861.d
Date : 16-NOV-2023 09:15
Client ID:
Instrument: gcms-d.i
Sample Info: WG345527-8
Purge Volume: 25.0
Operator: JSS
Column phase: RTX-VMS
Column diameter: 0.18



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Data File: \\target_server\gg\chem\gcms-d.i\D111623.b\D8862.d
Report Date: 04-Dec-2023 12:49

Katahdin Analytical Services

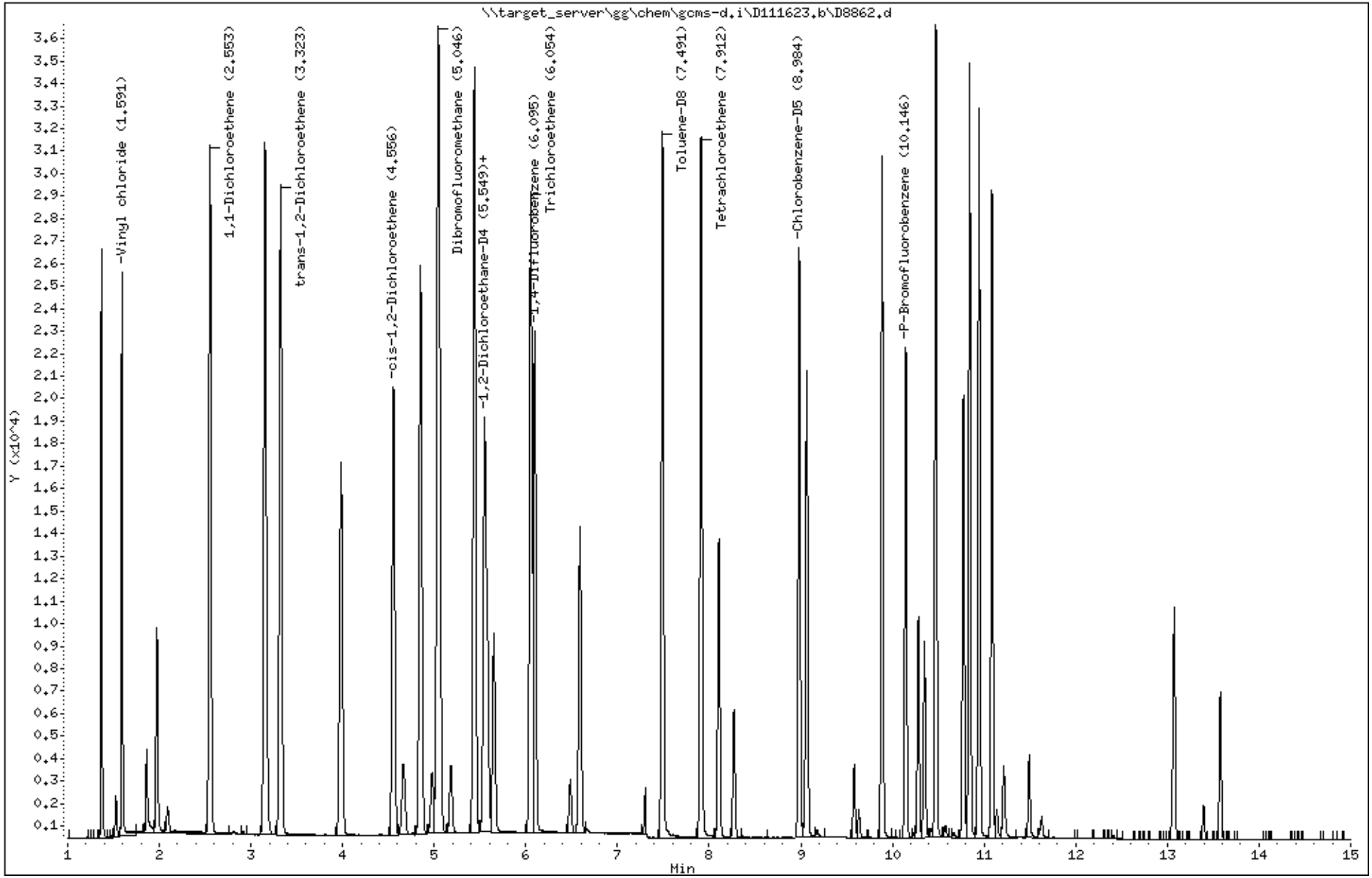
Data file : \\target_server\gg\chem\gcms-d.i\D111623.b\D8862.d
Lab Smp Id: WG345527-7
Inj Date : 16-NOV-2023 09:48
Operator : JSS   Inst ID: gcms-d.i
Smp Info : WG345527-7
Misc Info :
Comment   : SW846 5030C
Method   : \\target_server\gg\chem\gcms-d.i\D111623.b\DSIM(01)CR23.m
Meth Date : 04-Dec-2023 12:48 croy   Quant Type: ISTD
Cal Date : 16-NOV-2023 09:48   Cal File: D8862.d
Als bottle: 6   Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: Credere.sub
Target Version: 4.12

Concentration Formula: Amt * DF * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	25.000	sample purged
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)	REVIEW CODE
	1 Vinyl chloride	62	1.591	1.591	(0.287)	15729	1.00000	0.980	
	2 1,1-Dichloroethene	96	2.551	2.553	(0.460)	13675	1.00000	0.914	
	4 trans-1,2-Dichloroethene	96	3.322	3.323	(0.599)	16057	1.00000	0.952	
	5 cis-1,2-Dichloroethene	96	4.555	4.558	(0.821)	12318	1.00000	0.952	
	13 Trichloroethene	130	6.054	6.052	(0.993)	14351	1.00000	0.963	
	16 Tetrachloroethene	164	7.911	7.912	(1.298)	12457	1.00000	0.994	
$	7 Dibromofluoromethane	113	5.038	5.037	(0.908)	16459	1.00000	0.899	
$	11 1,2-Dichloroethane-D4	65	5.579	5.582	(1.005)	9681	1.00000	0.893	
$	15 Toluene-D8	98	7.490	7.491	(1.229)	30235	1.00000	0.988	
$	20 P-Bromofluorobenzene	95	10.143	10.146	(1.129)	11374	1.00000	1.20	
*	10 Pentafluorobenzene	168	5.549	5.549	(1.000)	22928	1.00000		
*	14 1,4-Difluorobenzene	114	6.095	6.096	(1.000)	33716	1.00000		
*	18 Chlorobenzene-D5	117	8.983	8.984	(1.000)	29507	1.00000		

Data File: \\target_server\gg\chem\gcms-d.i\D111623.b\D8862.d
Date : 16-NOV-2023 09:48
Client ID:
Instrument: gcms-d.i
Sample Info: WG345527-7
Purge Volume: 25.0
Operator: JSS
Column phase: RTX-VMS
Column diameter: 0.18



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Data File: \\target_server\gg\chem\gcms-d.i\D111623.b\D8863.d
Report Date: 04-Dec-2023 12:49

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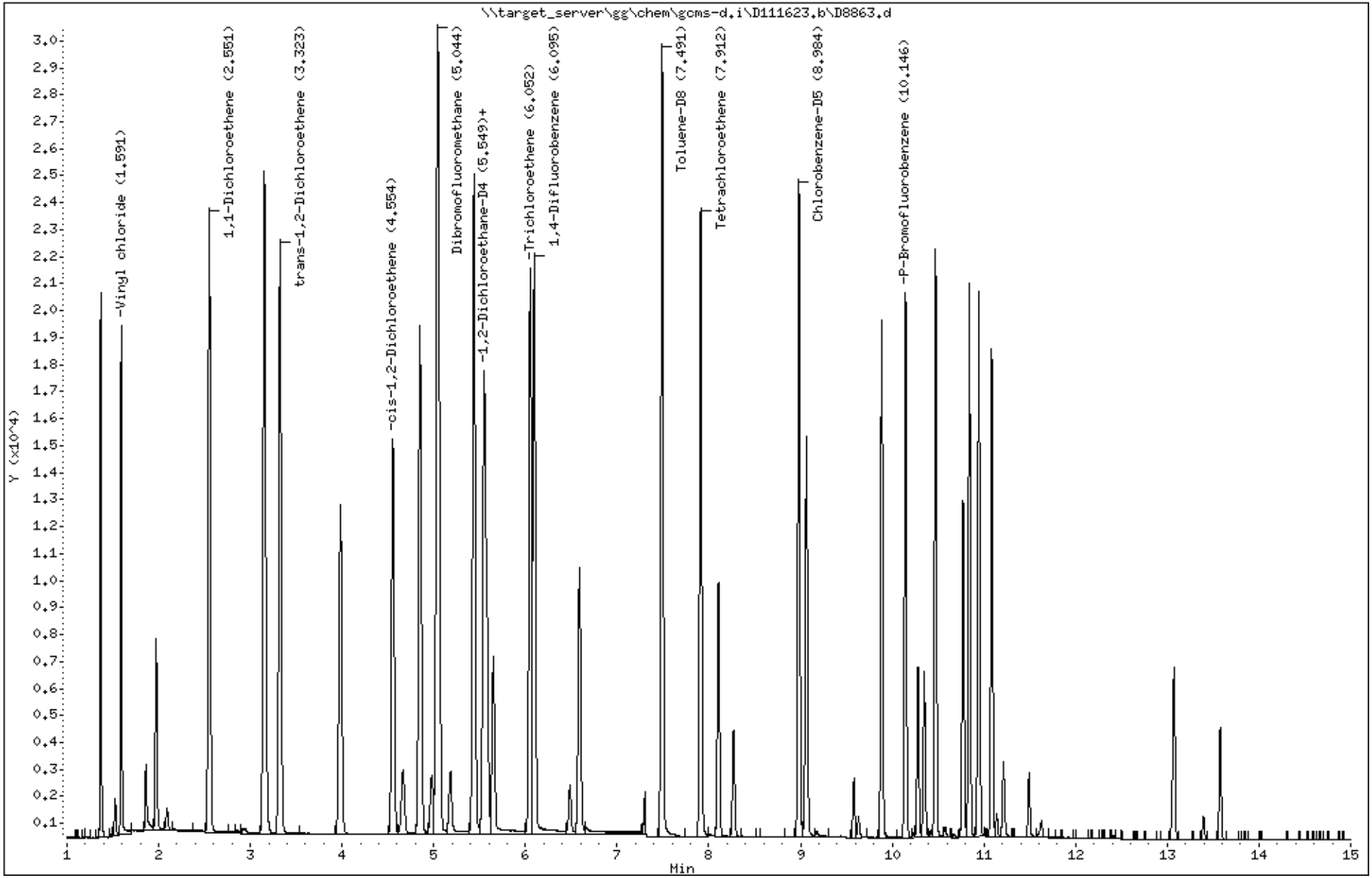
Data file : \\target_server\gg\chem\gcms-d.i\D111623.b\D8863.d
Lab Smp Id: WG345527-6
Inj Date : 16-NOV-2023 10:22
Operator : JSS   Inst ID: gcms-d.i
Smp Info : WG345527-6
Misc Info :
Comment   : SW846 5030C
Method   : \\target_server\gg\chem\gcms-d.i\D111623.b\DSIM(01)CR23.m
Meth Date : 04-Dec-2023 12:48 croy   Quant Type: ISTD
Cal Date : 16-NOV-2023 10:22   Cal File: D8863.d
Als bottle: 7   Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: Credere.sub
Target Version: 4.12

Concentration Formula: Amt * DF * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	25.000	sample purged
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)	REVIEW CODE
	1 Vinyl chloride	62	1.591	1.591	(0.287)	11724	0.75000	0.782	
	2 1,1-Dichloroethene	96	2.551	2.553	(0.460)	10293	0.75000	0.744	
	4 trans-1,2-Dichloroethene	96	3.322	3.323	(0.599)	12019	0.75000	0.766	
	5 cis-1,2-Dichloroethene	96	4.553	4.558	(0.821)	9015	0.75000	0.749	
	13 Trichloroethene	130	6.050	6.052	(0.993)	10419	0.75000	0.748	
	16 Tetrachloroethene	164	7.911	7.912	(1.298)	9090	0.75000	0.773	
$	7 Dibromofluoromethane	113	5.036	5.037	(0.908)	15830	1.00000	0.937	
$	11 1,2-Dichloroethane-D4	65	5.579	5.582	(1.006)	9203	1.00000	0.921	
$	15 Toluene-D8	98	7.490	7.491	(1.229)	28549	1.00000	0.995	
$	20 P-Bromofluorobenzene	95	10.143	10.146	(1.129)	10381	1.00000	1.12	
*	10 Pentafluorobenzene	168	5.547	5.549	(1.000)	21470	1.00000		
*	14 1,4-Difluorobenzene	114	6.095	6.096	(1.000)	31662	1.00000		
*	18 Chlorobenzene-D5	117	8.981	8.984	(1.000)	28069	1.00000		

Data File: \\target_server\gg\chem\gcms-d.i\D111623.b\D8863.d
Date : 16-NOV-2023 10:22
Client ID:
Instrument: gcms-d.i
Sample Info: WG345527-6
Purge Volume: 25.0
Operator: JSS
Column phase: RTX-VMS
Column diameter: 0.18



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Data File: \\target_server\gg\chem\gcms-d.i\D111623.b\D8864.d
Report Date: 04-Dec-2023 12:49

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-d.i\D111623.b\D8864.d
Lab Smp Id: WG345527-5
Inj Date : 16-NOV-2023 10:55
Operator : JSS   Inst ID: gcms-d.i
Smp Info : WG345527-5
Misc Info :
Comment   : SW846 5030C
Method   : \\target_server\gg\chem\gcms-d.i\D111623.b\DSIM(01)CR23.m
Meth Date : 04-Dec-2023 12:48 croy   Quant Type: ISTD
Cal Date : 16-NOV-2023 10:55   Cal File: D8864.d
Als bottle: 8   Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: Credere.sub
Target Version: 4.12

Concentration Formula: Amt * DF * 25/Vo * CpndVariable

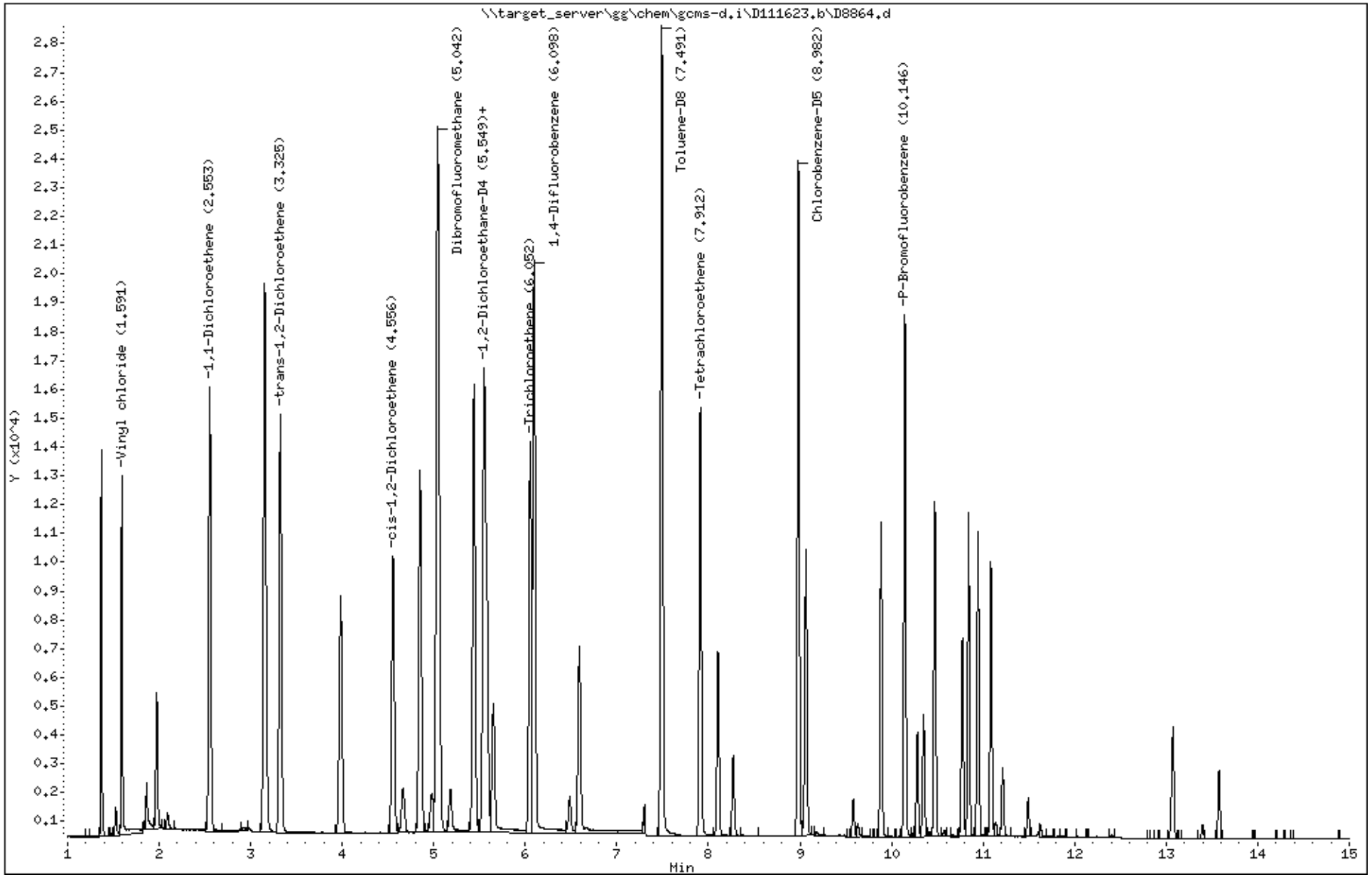
Name	Value	Description
DF	1.000	Dilution Factor
Vo	25.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)	REVIEW CODE
$ 7 Dibromofluoromethane	113	5.036	5.037	(0.908)	15594	1.00000	(a)	
$ 11 1,2-Dichloroethane-D4	65	5.581	5.582	(1.006)	9188	1.00000	(a)	
$ 15 Toluene-D8	98	7.490	7.491	(1.229)	27129	1.00000	(a)	
$ 20 P-Bromofluorobenzene	95	10.145	10.146	(1.129)	9219	1.00000	(a)	
* 10 Pentafluorobenzene	168	5.549	5.549	(1.000)	20191	1.00000		
* 14 1,4-Difluorobenzene	114	6.095	6.096	(1.000)	30045	1.00000		
* 18 Chlorobenzene-D5	117	8.983	8.984	(1.000)	26800	1.00000		

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\target_server\gg\chem\gcms-d.i\D111623.b\D8864.d
Date : 16-NOV-2023 10:55
Client ID:
Instrument: gcms-d.i
Sample Info: WG345527-5
Purge Volume: 25.0
Operator: JSS
Column phase: RTX-VMS
Column diameter: 0.18



Katahdin Analytical Services SQ6133 Page 139 of 855

Form 6
Initial Calibration Summary

Lab Name : Katahdin Analytical Services **SDG:** SQ6133

Instrument ID: GCMS-S **Column ID:**

Lab File IDs : S7199.D S7200.D S7201.D S7202.D S7203.D S7204.D S7205.D S7206.D

Calibration Date(s): 16-NOV-23 12:35, 16-NOV-23 15:48

	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Level 7	Level 8	Curve				%RSD or R^2		
	0.0500000	0.0750000	0.1000000	0.3000000	0.5000000	0.7500000	1.0000	2.0000	Type	b	m1	m2	Result	Limit	
Vinyl chloride	1.45744	1.43582	1.53357	1.56289	1.54567	1.46020	1.42173	1.27659	AVG		1.46174		6.28123	15	O
1,1-Dichloroethene	1.11563	1.17283	1.20831	1.25031	1.20259	1.14195	1.10061	0.96005	AVG		1.14404		7.83429	15	O
trans-1,2-Dichloroethene	1.42181	1.25018	1.32122	1.30119	1.29610	1.22294	1.19504	1.07798	AVG		1.26081		8.02973	15	O
cis-1,2-Dichloroethene	1.11563	0.99299	1.00493	0.98887	0.95404	0.92542	0.92812	0.85550	AVG		0.97069		7.82796	15	O
Trichloroethene	0.72437	0.56633	0.56893	0.54584	0.56964	0.54928	0.54296	0.50870	AVG		0.57201		11.31309	15	O
Tetrachloroethene	0.56986	0.53287	0.51877	0.53001	0.51882	0.49882	0.49004	0.44927	AVG		0.51356		6.89257	15	O
Dibromofluoromethane	0.55197	0.70428	0.71482	0.71891	0.69844	0.68422	0.66339	0.62172	AVG		0.66972		8.53895	15	
1,2-Dichloroethane-D4	0.48232	0.61095	0.66525	0.65332	0.64849	0.63339	0.58798	0.55908	AVG		0.60510		10.0998	15	
Toluene-D8	1.04704	1.05885	1.07237	1.04617	1.05315	1.04847	1.04754	1.02817	AVG		1.05022		1.19185	15	
P-Bromofluorobenzene	0.35751	0.35464	0.36499	0.39414	0.42905	0.46951	0.48385	0.51536	AVG		0.42113		14.9005	15	

Legend: O = Acceptable; W = Failed %RSD Value; X = Failed R^2 Value; Y = Failed Minimum RF

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Data File: \\target_server\gg\chem\gcms-s.i\S111623.b\S7207A.D
Report Date: 08-Dec-2023 14:22

Katahdin Analytical Services

RECOVERY REPORT

Client Name: Client SDG: SDGa02236
Sample Matrix: LIQUID Fraction: VOA
Lab Smp Id: WG345525-9 Client Smp ID: INDSOURCE
Level: LOW Operator: JSS
Data Type: MS DATA SampleType: INDSOURCE
SpikeList File: 826SIMLCSAQ.spk Quant Type: ISTD
Sublist File: all.sub
Method File: \\target_server\gg\chem\gcms-s.i\S111623.b\SSIM(01)CR23.m
Misc Info: WG345525,WG345525-5

SPIKE COMPOUND	CONC ADDED ug/l	CONC RECOVERED ug/l	% RECOVERED	LIMITS
1 Vinyl chloride	0.500	0.476	95.26	70-130
2 1,1-Dichloroethene	0.500	0.495	99.10	70-130
5 Methylene Chloride	2.00	0.000	*	70-130
6 1,1,1-Trichloroeth	0.500	0.485	97.03	70-130
11 1,2-Dichloroethane	0.500	0.495	98.94	70-130
12 Trichloroethene	0.500	0.474	94.86	70-130
15 Tetrachloroethene	0.500	0.474	94.85	70-130
16 1,1,2-Trichloroeth	0.500	0.511	102.21	70-130
19 1,1,2,2-Tetrachlor	0.500	0.461	92.14	70-130
21 1,2,4-Trimethylben	0.500	0.454	90.87	70-130
22 1,2,4-Trichloroben	0.500	0.493	98.66	70-130
23 1,2,3-Trichloroben	0.500	0.511	102.23	70-130

SURROGATE COMPOUND	AMOUNT ADDED ug/l	AMOUNT RECOVERED ug/l	% RECOVERED	LIMITS
$ 7 Dibromofluorometha	1.00	1.01	100.66	70-130
$ 10 1,2-Dichloroethane	1.00	1.03	102.79	70-130
$ 14 Toluene-D8	1.00	1.01	100.60	70-130
$ 18 P-Bromofluorobenze	1.00	1.01	100.69	70-130

Data File: \\target_server\gg\chem\gcms-s.i\S111623.b\S7207A.D
Report Date: 08-Dec-2023 14:22

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-s.i\S111623.b\S7207A.D
Lab Smp Id: WG345525-9 Client Smp ID: INDSOURCE
Inj Date : 16-NOV-2023 16:15
Operator : JSS Inst ID: gcms-s.i
Smp Info : WG345525-9
Misc Info : WG345525,WG345525-5
Comment : SW846 5030C
Method : \\target_server\gg\chem\gcms-s.i\S111623.b\SSIM(01)CR23.m
Meth Date : 17-Nov-2023 10:03 jsampson Quant Type: ISTD
Cal Date : 16-NOV-2023 15:48 Cal File: S7206.D
Als bottle: 9 QC Sample: INDSOURCE
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.12
Processing Host: VOA-WS

Concentration Formula: Amt * DF * 25/Vo * CpndVariable

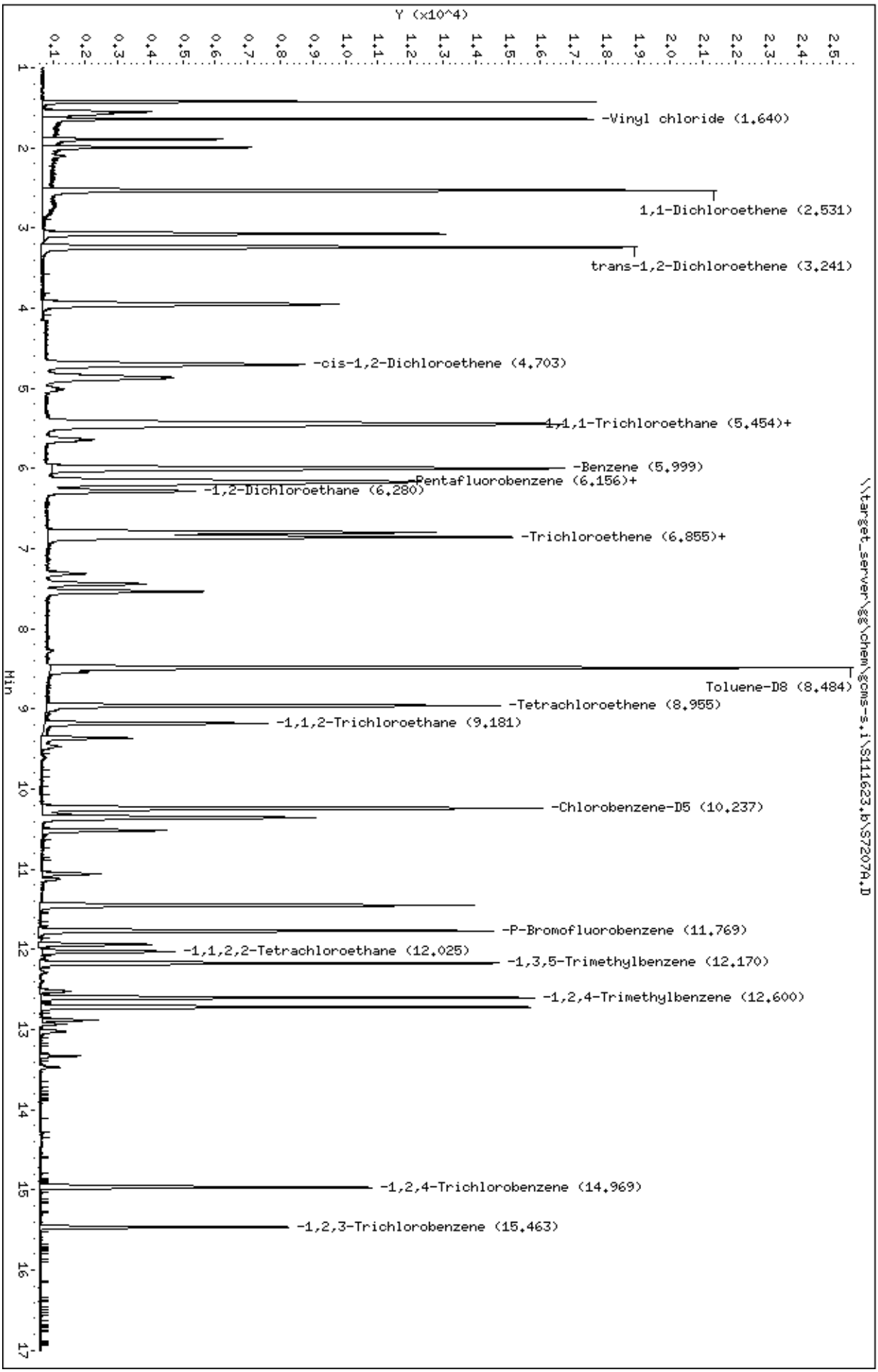
Name	Value	Description
DF	1.000	Dilution Factor
Vo	25.000	sample purged
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)	REVIEW CODE
1	Vinyl chloride	62	1.640	1.640	(0.266)	10764	0.47628	0.476	
2	1,1-Dichloroethene	96	2.531	2.532	(0.411)	8764	0.49548	0.495	
3	trans-1,2-Dichloroethene	96	3.240	3.238	(0.526)	9391	0.48175	0.482	
4	cis-1,2-Dichloroethene	96	4.702	4.702	(0.764)	7489	0.49901	0.499	
6	1,1,1-Trichloroethane	97	5.454	5.454	(0.886)	15113	0.48513	0.485	
$ 7	Dibromofluoromethane	113	5.433	5.440	(0.883)	10423	1.00661	1.01	
8	Benzene	78	5.998	6.000	(0.974)	30462	0.49306	0.493	
* 9	Pentafluorobenzene	168	6.156	6.163	(1.000)	15461	1.00000		
$ 10	1,2-Dichloroethane-D4	65	6.186	6.193	(1.005)	9616	1.02786	1.03	
11	1,2-Dichloroethane	62	6.280	6.285	(0.916)	8667	0.49471	0.495	
12	Trichloroethene	130	6.799	6.793	(0.992)	6695	0.47432	0.474	
* 13	1,4-Difluorobenzene	114	6.854	6.854	(1.000)	24676	1.00000		
$ 14	Toluene-D8	98	8.484	8.482	(1.238)	26072	1.00605	1.01	
15	Tetrachloroethene	164	8.962	8.957	(1.307)	6010	0.47425	0.474	
16	1,1,2-Trichloroethane	83	9.182	9.181	(1.340)	3395	0.51107	0.511	
* 17	Chlorobenzene-D5	117	10.234	10.238	(1.000)	23193	1.00000		
$ 18	P-Bromofluorobenzene	95	11.768	11.768	(1.150)	9835	1.00693	1.01	
19	1,1,2,2-Tetrachloroethane	83	12.025	12.027	(1.175)	3794	0.46072	0.461	
20	1,3,5-Trimethylbenzene	105	12.170	12.172	(1.189)	16325	0.42513	0.425(a)	
21	1,2,4-Trimethylbenzene	105	12.602	12.600	(1.231)	17175	0.45435	0.454	
22	1,2,4-Trichlorobenzene	180	14.969	14.968	(1.463)	5902	0.49332	0.493	
23	1,2,3-Trichlorobenzene	180	15.461	15.465	(1.511)	4744	0.51116	0.511	

Data File: \\target_server\gg\chem\gcms-s.i\S111623.b\S7207A.D
Report Date: 08-Dec-2023 14:22

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).


Data File: \\target_server\gg\chem\gcms-s.i\S111623.b\S7207A.D
Date : 16-NOV-2023 16:15
Client ID: INDSOURCE
Sample Info: WG345525-9
Purge Volume: 25.0
Column phase: RTX-VMS
Instrument: gcms-s.i
Operator: JSS
Column diameter: 0.18
Y (x10^4)
Min
-Vinyl chloride (1.640)
1,1-Dichloroethene (2.531)
trans-1,2-Dichloroethene (3.241)
-cis-1,2-Dichloroethene (4.703)
1,1,1-Trichloroethane (5.454)+
-Benzene (5.999)
Pentafluorobenzene (6.156)+
-1,2-Dichloroethane (6.280)
-Trichloroethene (6.855)+
Toluene-D8 (8.484)
-Tetrachloroethene (8.955)
-1,1,2-Trichloroethane (9.181)
-Chlorobenzene-D5 (10.237)
-P-Bromofluorobenzene (11.769)
-1,1,2,2-Tetrachloroethane (12.025)
-1,3,5-Trimethylbenzene (12.170)
-1,2,4-Trimethylbenzene (12.600)
-1,2,4-Trichlorobenzene (14.969)
-1,2,3-Trichlorobenzene (15.463)
\\target_server\gg\chem\gcms-s.i\S111623.b\S7207A.D

Data File: \\target_server\gg\chem\gcms-s.i\S111623.b\S7199.D
Report Date: 08-Dec-2023 14:45

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-s.i\S111623.b\S7199.D
Lab Smp Id: WG345525-1
Inj Date : 16-NOV-2023 12:35
Operator : JSS   Inst ID: gcms-s.i
Smp Info : WG345525-1
Misc Info :
Comment   : SW846 5030C
Method   : \\target_server\gg\chem\gcms-s.i\S111623.b\SSIM(01)CR23.m
Meth Date : 17-Nov-2023 10:03 jsampson   Quant Type: ISTD
Cal Date : 16-NOV-2023 12:35   Cal File: S7199.D
Als bottle: 1   Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: all.sub
Target Version: 4.12

Concentration Formula: Amt * DF * 25/Vo * CpndVariable

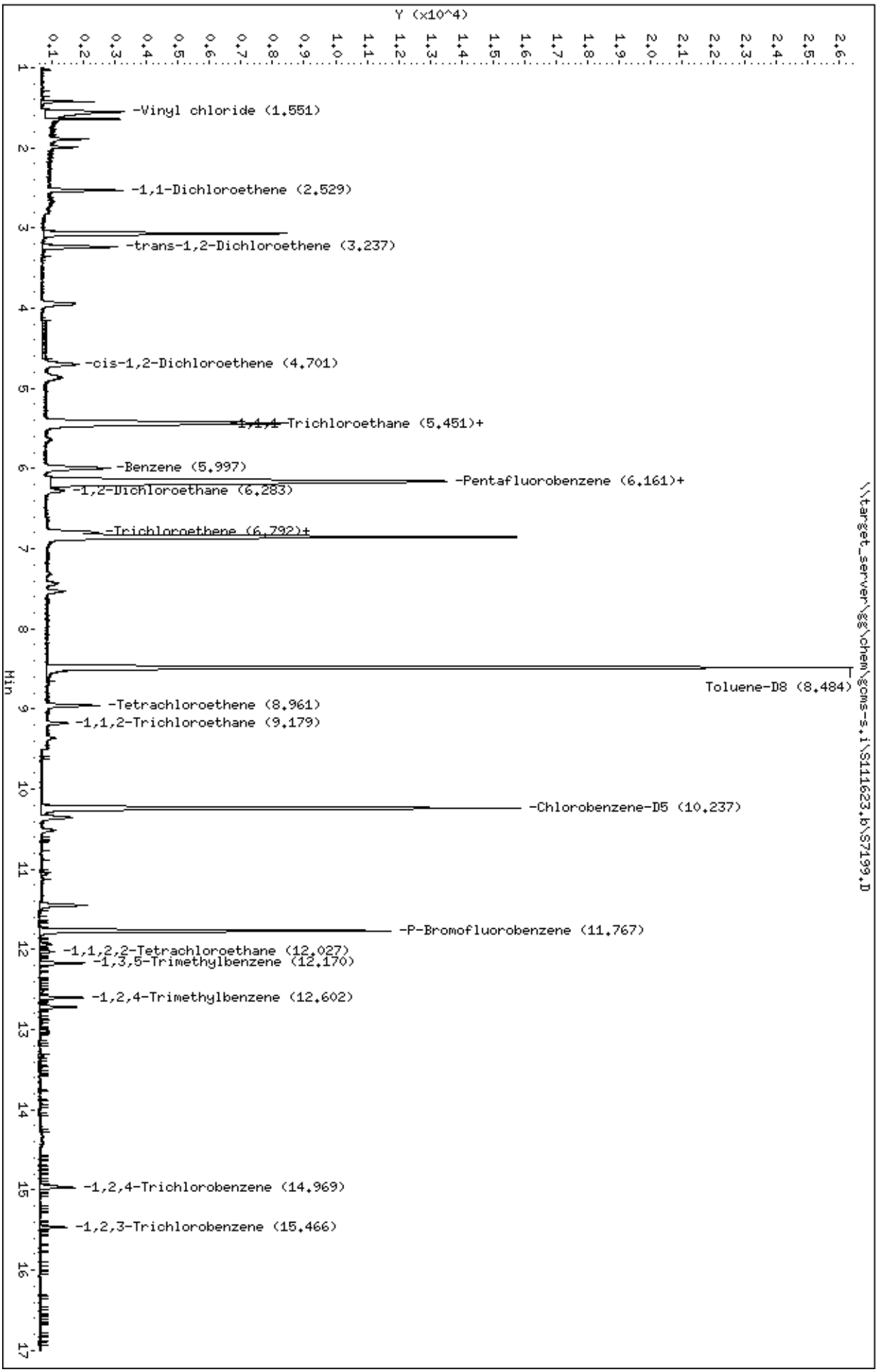
Name	Value	Description
DF	1.000	Dilution Factor
Vo	25.000	sample purged
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)	REVIEW CODE
	1 Vinyl chloride	62	1.640	1.640	(0.267)	1309	0.05000	(a)	
	2 1,1-Dichloroethene	96	2.529	2.532	(0.411)	1002	0.05000	(a)	
	3 trans-1,2-Dichloroethene	96	3.235	3.238	(0.526)	1277	0.05000	(a)	
	4 cis-1,2-Dichloroethene	96	4.701	4.702	(0.764)	1002	0.05000	(a)	
	6 1,1,1-Trichloroethane	97	5.450	5.454	(0.886)	1791	0.05000	(a)	
$	7 Dibromofluoromethane	113	5.435	5.440	(0.883)	9915	1.00000	(a)	
	8 Benzene	78	5.996	6.000	(0.974)	3936	0.05000	(a)	
*	9 Pentafluorobenzene	168	6.154	6.163	(1.000)	17963	1.00000		
$	10 1,2-Dichloroethane-D4	65	6.188	6.193	(1.006)	8664	1.00000	(a)	
	11 1,2-Dichloroethane	62	6.283	6.285	(0.916)	950	0.05000	(a)	
	12 Trichloroethene	130	6.792	6.793	(0.991)	947	0.05000	(a)	
*	13 1,4-Difluorobenzene	114	6.856	6.854	(1.000)	26147	1.00000		
$	14 Toluene-D8	98	8.484	8.482	(1.237)	27377	1.00000	(a)	
	15 Tetrachloroethene	164	8.960	8.957	(1.307)	745	0.05000	(a)	
	16 1,1,2-Trichloroethane	83	9.179	9.181	(1.339)	295	0.05000	(a)	
*	17 Chlorobenzene-D5	117	10.236	10.238	(1.000)	21974	1.00000		
$	18 P-Bromofluorobenzene	95	11.766	11.768	(1.150)	7856	1.00000	(a)	
	19 1,1,2,2-Tetrachloroethane	83	12.028	12.027	(1.175)	386	0.05000	(a)	
	20 1,3,5-Trimethylbenzene	105	12.170	12.172	(1.189)	1612	0.05000	(a)	
	21 1,2,4-Trimethylbenzene	105	12.602	12.600	(1.231)	1494	0.05000	(a)	
	22 1,2,4-Trichlorobenzene	180	14.967	14.968	(1.462)	688	0.05000	(a)	
	23 1,2,3-Trichlorobenzene	180	15.466	15.465	(1.511)	519	0.05000	(a)	

Data File: \\target_server\gg\chem\gcms-s.i\S111623.b\S7199.D
Report Date: 08-Dec-2023 14:45

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).


Data File: \\target_server\gg\chem\gcms-s.i\S111623.b\S7199.D
Date : 16-NOV-2023 12:35
Client ID:
Sample Info: WG345525-1
Purge Volume: 25.0
Column phase: RTX-VMS
Instrument: gcms-s.i
Operator: JSS
Column diameter: 0.18
\\target_server\gg\chem\gcms-s.i\S111623.b\S7199.D
Y (x10^4)
Min
-Vinyl chloride (1.551)
-1,1-Dichloroethene (2.529)
-trans-1,2-Dichloroethene (3.237)
-cis-1,2-Dichloroethene (4.701)
~~1,1,1~~-Trichloroethane (5.451)+
-Benzene (5.997)
-Pentafluorobenzene (6.161)+
-1,2-Dichloroethane (6.283)
-Trichloroethene (6.792)+
Toluene-D8 (8.484)
-Tetrachloroethene (8.961)
-1,1,2-Trichloroethane (9.179)
-Chlorobenzene-D5 (10.237)
-P-Bromofluorobenzene (11.767)
-1,1,2,2-Tetrachloroethane (12.027)
-1,3,5-Trimethylbenzene (12.170)
-1,2,4-Trimethylbenzene (12.602)
-1,2,4-Trichlorobenzene (14.969)
-1,2,3-Trichlorobenzene (15.466)

Data File: \\target_server\gg\chem\gcms-s.i\S111623.b\S7200.D
Report Date: 08-Dec-2023 14:45

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-s.i\S111623.b\S7200.D
Lab Smp Id: WG345525-2
Inj Date : 16-NOV-2023 13:02
Operator : JSS   Inst ID: gcms-s.i
Smp Info : WG345525-2
Misc Info :
Comment   : SW846 5030C
Method   : \\target_server\gg\chem\gcms-s.i\S111623.b\SSIM(01)CR23.m
Meth Date : 17-Nov-2023 10:03 jsampson   Quant Type: ISTD
Cal Date : 16-NOV-2023 13:02   Cal File: S7200.D
Als bottle: 2   Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: all.sub
Target Version: 4.12

Concentration Formula: Amt * DF * 25/Vo * CpndVariable

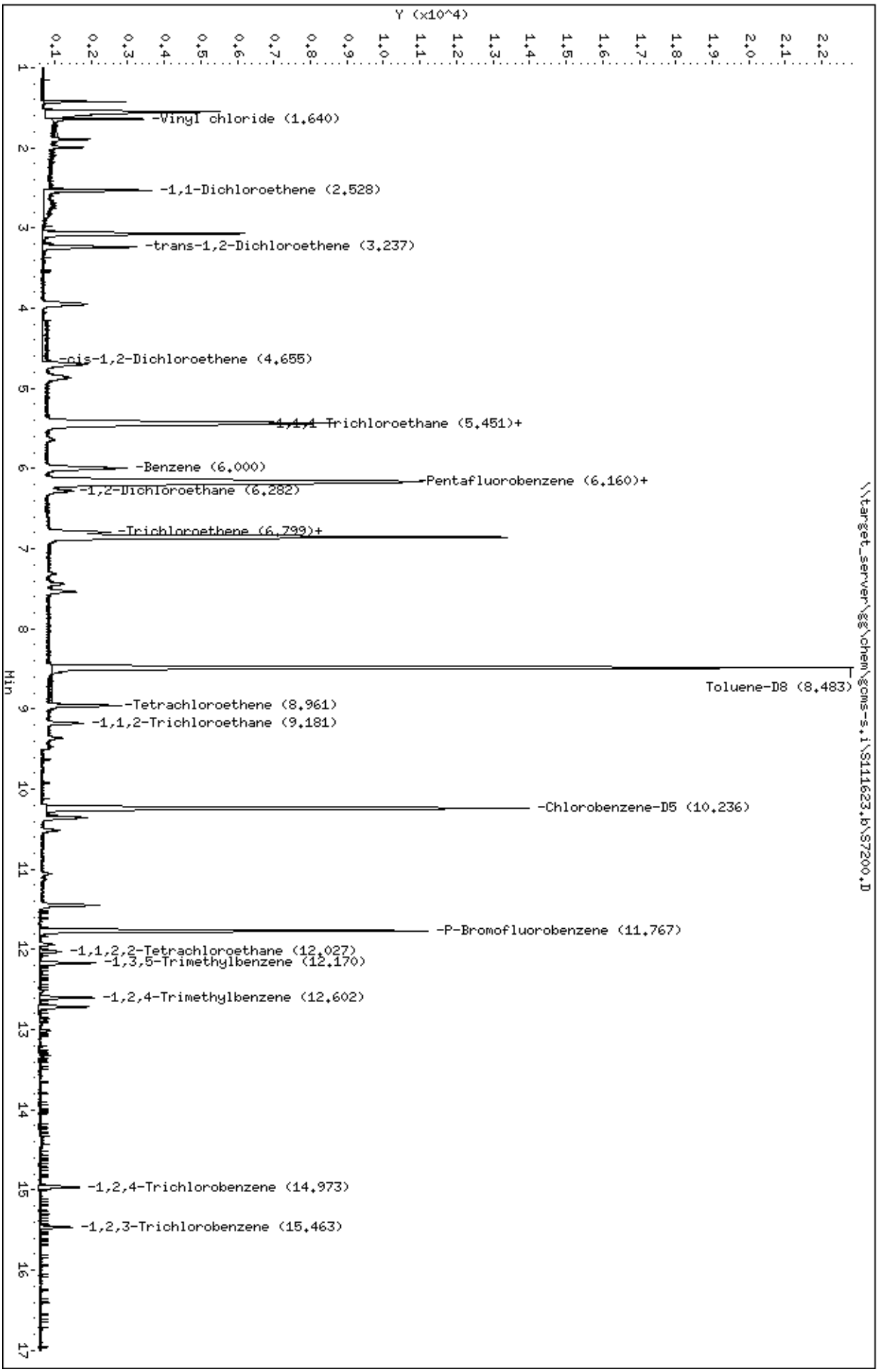
Name	Value	Description
DF	1.000	Dilution Factor
Vo	25.000	sample purged
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)	REVIEW CODE
	1 Vinyl chloride	62	1.638	1.640	(0.266)	1485	0.07500	0.0739	
	2 1,1-Dichloroethene	96	2.534	2.532	(0.411)	1213	0.07500	0.0788	
	3 trans-1,2-Dichloroethene	96	3.235	3.238	(0.525)	1293	0.07500	0.0659	
	4 cis-1,2-Dichloroethene	96	4.699	4.702	(0.763)	1027	0.07500	0.0668	
	6 1,1,1-Trichloroethane	97	5.450	5.454	(0.885)	2151	0.07500	0.0782	
$	7 Dibromofluoromethane	113	5.437	5.440	(0.883)	9712	1.00000	1.28	
	8 Benzene	78	6.000	6.000	(0.974)	4037	0.07500	0.0668	
*	9 Pentafluorobenzene	168	6.159	6.163	(1.000)	13790	1.00000		
$	10 1,2-Dichloroethane-D4	65	6.190	6.193	(1.005)	8425	1.00000	1.27	
	11 1,2-Dichloroethane	62	6.281	6.285	(0.916)	1252	0.07500	0.0786	
	12 Trichloroethene	130	6.799	6.793	(0.992)	931	0.07500	0.0586	
*	13 1,4-Difluorobenzene	114	6.854	6.854	(1.000)	21919	1.00000		
$	14 Toluene-D8	98	8.482	8.482	(1.237)	23209	1.00000	1.01	
	15 Tetrachloroethene	164	8.960	8.957	(1.307)	876	0.07500	0.0701	
	16 1,1,2-Trichloroethane	83	9.181	9.181	(1.339)	422	0.07500	0.0853	
*	17 Chlorobenzene-D5	117	10.236	10.238	(1.000)	19950	1.00000		
$	18 P-Bromofluorobenzene	95	11.766	11.768	(1.150)	7075	1.00000	0.992	
	19 1,1,2,2-Tetrachloroethane	83	12.027	12.027	(1.175)	493	0.07500	0.0703	
	20 1,3,5-Trimethylbenzene	105	12.170	12.172	(1.189)	1710	0.07500	0.0584(a)	
	21 1,2,4-Trimethylbenzene	105	12.602	12.600	(1.231)	1614	0.07500	0.0595	
	22 1,2,4-Trichlorobenzene	180	14.972	14.968	(1.463)	709	0.07500	0.0568	
	23 1,2,3-Trichlorobenzene	180	15.464	15.465	(1.511)	515	0.07500	0.0546	

Data File: \\target_server\gg\chem\gcms-s.i\S111623.b\S7200.D
Report Date: 08-Dec-2023 14:45

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).


Data File: \\target_server\gg\chem\gcms-s,i\S111623,b\S7200,D
Date : 16-NOV-2023 13:02
Client ID:
Sample Info: WG345525-2
Purge Volume: 25,0
Column phase: RTX-VMS
Instrument: gcms-s,i
Operator: JSS
Column diameter: 0,18
\\target_server\gg\chem\gcms-s,i\S111623,b\S7200,D
Y (x10^4)
Min
-Vinyl chloride (1,640)
-1,1-Dichloroethene (2,528)
-trans-1,2-Dichloroethene (3,237)
-cis-1,2-Dichloroethene (4,655)
1,1,1 Trichloroethane (5,451)+
-Benzene (6,000)
Pentafluorobenzene (6,160)+
-1,2-Dichloroethane (6,282)
-Trichloroethene (6,799)+
Toluene-D8 (8,483)
-Tetrachloroethene (8,961)
-1,1,2-Trichloroethane (9,181)
-Chlorobenzene-D5 (10,236)
-P-Bromofluorobenzene (11,767)
-1,1,2,2-Tetrachloroethane (12,027)
-1,3,5-Trimethylbenzene (12,170)
-1,2,4-Trimethylbenzene (12,602)
-1,2,4-Trichlorobenzene (14,973)
-1,2,3-Trichlorobenzene (15,463)

Data File: \\target_server\gg\chem\gcms-s.i\S111623.b\S7201.D
Report Date: 08-Dec-2023 14:45

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-s.i\S111623.b\S7201.D
Lab Smp Id: WG345525-3
Inj Date : 16-NOV-2023 13:30
Operator : JSS   Inst ID: gcms-s.i
Smp Info : WG345525-3
Misc Info :
Comment   : SW846 5030C
Method   : \\target_server\gg\chem\gcms-s.i\S111623.b\SSIM(01)CR23.m
Meth Date : 17-Nov-2023 10:03 jsampson   Quant Type: ISTD
Cal Date : 16-NOV-2023 13:30   Cal File: S7201.D
Als bottle: 3   Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: all.sub
Target Version: 4.12

Concentration Formula: Amt * DF * 25/Vo * CpndVariable

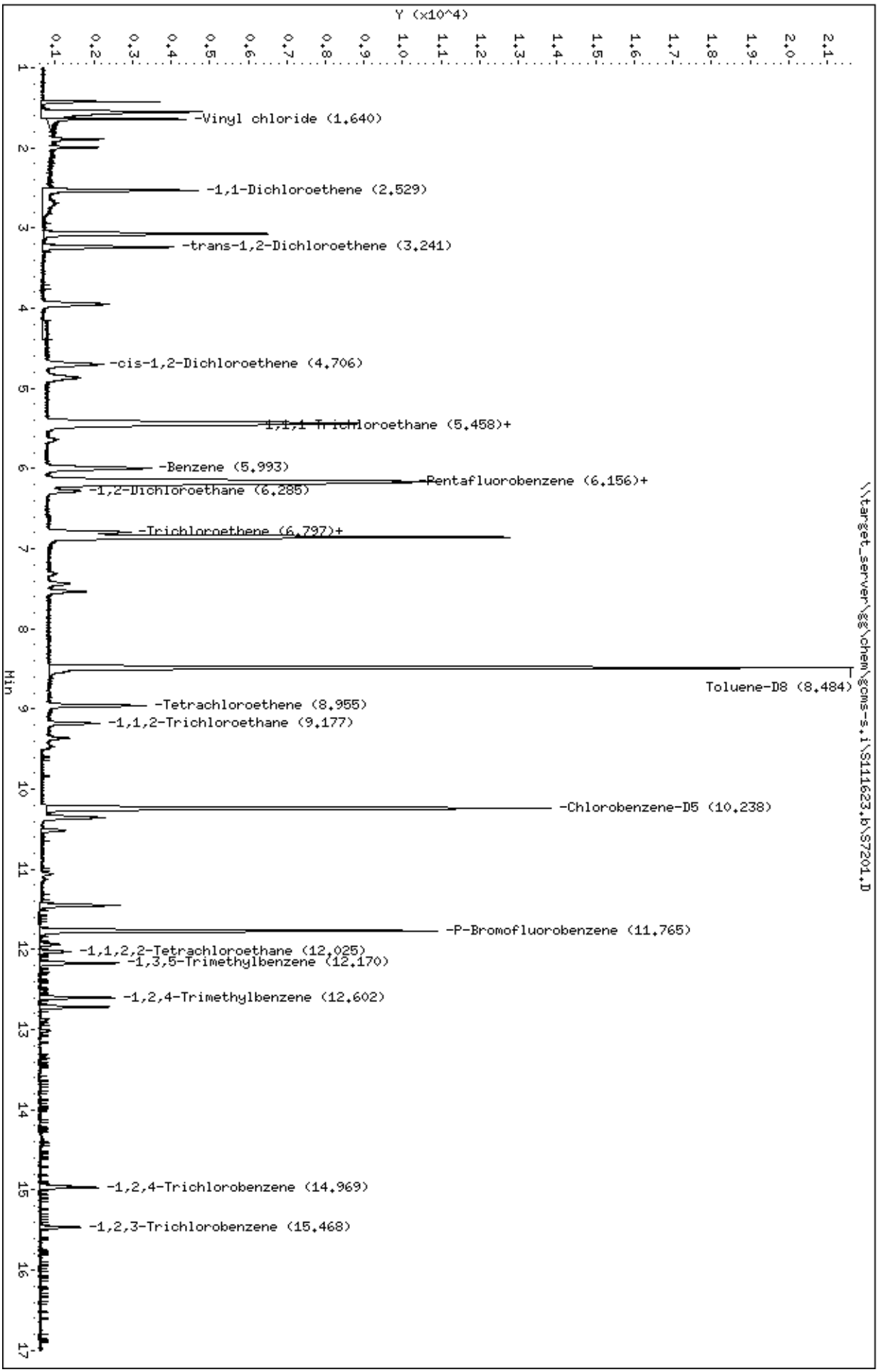
Name	Value	Description
DF	1.000	Dilution Factor
Vo	25.000	sample purged
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)	REVIEW CODE
	1 Vinyl chloride	62	1.640	1.640	(0.266)	2051	0.10000	0.106	
	2 1,1-Dichloroethene	96	2.532	2.532	(0.411)	1616	0.10000	0.106	
	3 trans-1,2-Dichloroethene	96	3.240	3.238	(0.526)	1767	0.10000	0.0989	
	4 cis-1,2-Dichloroethene	96	4.706	4.702	(0.764)	1344	0.10000	0.0953	
	6 1,1,1-Trichloroethane	97	5.457	5.454	(0.887)	2760	0.10000	0.101	
$	7 Dibromofluoromethane	113	5.430	5.440	(0.882)	9560	1.00000	1.14	
	8 Benzene	78	5.993	6.000	(0.974)	5198	0.10000	0.0938	
*	9 Pentafluorobenzene	168	6.156	6.163	(1.000)	13374	1.00000		
$	10 1,2-Dichloroethane-D4	65	6.193	6.193	(1.006)	8897	1.00000	1.22	
	11 1,2-Dichloroethane	62	6.285	6.285	(0.917)	1606	0.10000	0.103	
	12 Trichloroethene	130	6.797	6.793	(0.992)	1191	0.10000	0.0882	
*	13 1,4-Difluorobenzene	114	6.854	6.854	(1.000)	20934	1.00000		
$	14 Toluene-D8	98	8.484	8.482	(1.238)	22449	1.00000	1.02	
	15 Tetrachloroethene	164	8.955	8.957	(1.306)	1086	0.10000	0.0941	
	16 1,1,2-Trichloroethane	83	9.177	9.181	(1.339)	606	0.10000	0.120	
*	17 Chlorobenzene-D5	117	10.238	10.238	(1.000)	19499	1.00000		
$	18 P-Bromofluorobenzene	95	11.765	11.768	(1.149)	7117	1.00000	1.02	
	19 1,1,2,2-Tetrachloroethane	83	12.025	12.027	(1.175)	720	0.10000	0.108	
	20 1,3,5-Trimethylbenzene	105	12.170	12.172	(1.189)	2323	0.10000	0.0913(a)	
	21 1,2,4-Trimethylbenzene	105	12.602	12.600	(1.231)	2096	0.10000	0.0882	
	22 1,2,4-Trichlorobenzene	180	14.967	14.968	(1.462)	898	0.10000	0.0837	
	23 1,2,3-Trichlorobenzene	180	15.461	15.465	(1.510)	705	0.10000	0.0886	

Data File: \\target_server\gg\chem\gcms-s.i\S111623.b\S7201.D
Report Date: 08-Dec-2023 14:45

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).


Data File: \\target_server\gg\chem\gcms-s,i\S111623,b\S7201.D
Date : 16-NOV-2023 13:30
Client ID:
Sample Info: WG345525-3
Purge Volume: 25.0
Column phase: RTX-VMS
Instrument: gcms-s,i
Operator: JSS
Column diameter: 0.18
\\target_server\gg\chem\gcms-s,i\S111623,b\S7201.D
Y (x10^4)
Min
-Vinyl chloride (1,640)
-1,1-Dichloroethene (2,529)
-trans-1,2-Dichloroethene (3,241)
-cis-1,2-Dichloroethene (4,706)
1,1,1-Trichloroethane (5,458)+
-Benzene (5,993)
Pentafluorobenzene (6,156)+
-1,2-Dichloroethane (6,285)
-Trichloroethene (6,797)+
Toluene-D8 (8,484)
-Tetrachloroethene (8,955)
-1,1,2-Trichloroethane (9,177)
-Chlorobenzene-D5 (10,238)
-P-Bromofluorobenzene (11,765)
-1,1,2,2-Tetrachloroethane (12,025)
-1,3,5-Trimethylbenzene (12,170)
-1,2,4-Trimethylbenzene (12,602)
-1,2,4-Trichlorobenzene (14,969)
-1,2,3-Trichlorobenzene (15,468)

Data File: \\target_server\gg\chem\gcms-s.i\S111623.b\S7202.D
Report Date: 08-Dec-2023 14:45

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-s.i\S111623.b\S7202.D
Lab Smp Id: WG345525-4
Inj Date : 16-NOV-2023 13:57
Operator : JSS   Inst ID: gcms-s.i
Smp Info : WG345525-4
Misc Info :
Comment   : SW846 5030C
Method   : \\target_server\gg\chem\gcms-s.i\S111623.b\SSIM(01)CR23.m
Meth Date : 17-Nov-2023 10:03 jsampson   Quant Type: ISTD
Cal Date : 16-NOV-2023 13:57   Cal File: S7202.D
Als bottle: 4   Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: all.sub
Target Version: 4.12

Concentration Formula: Amt * DF * 25/Vo * CpndVariable

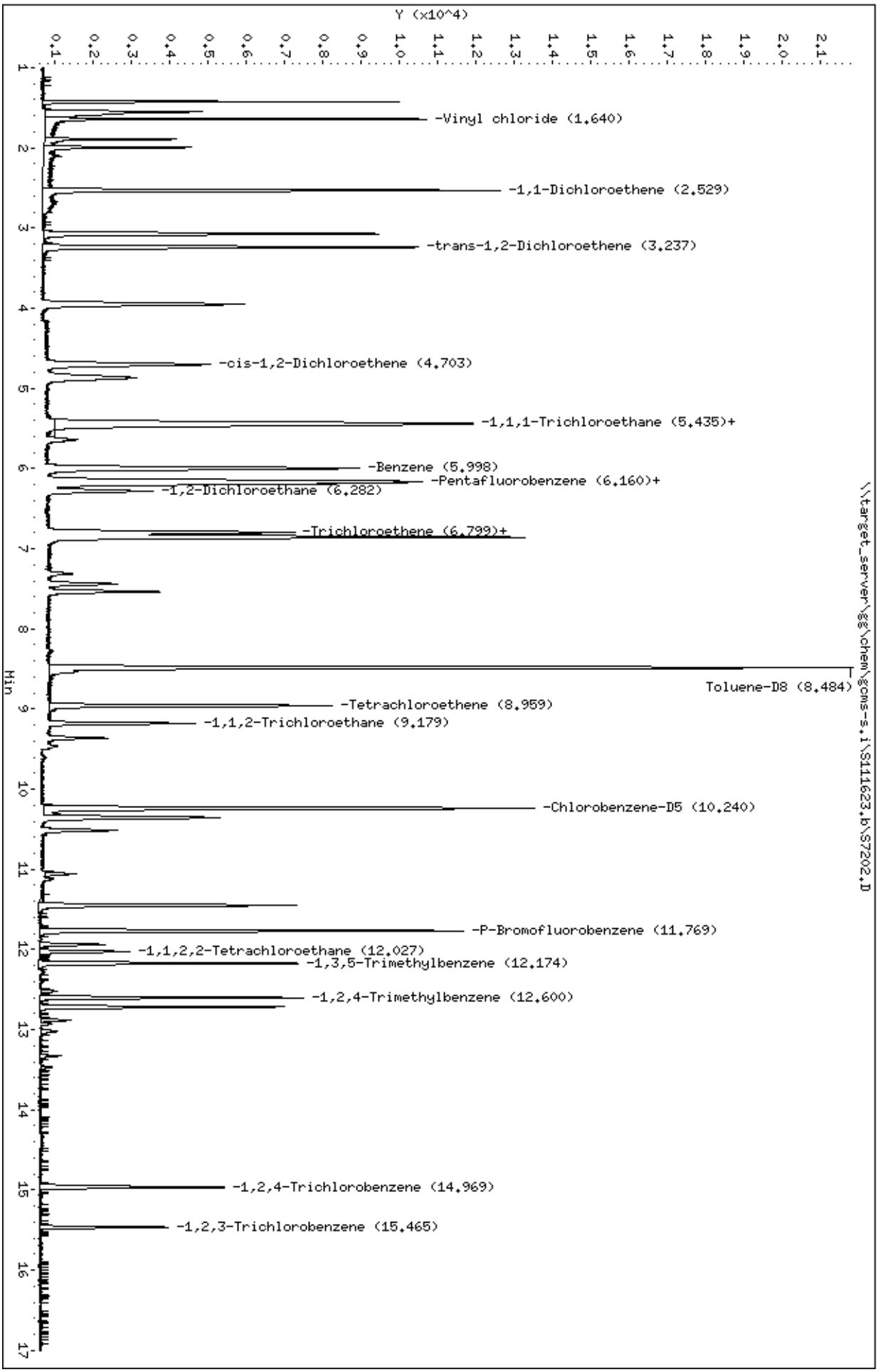
Name	Value	Description
DF	1.000	Dilution Factor
Vo	25.000	sample purged
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)	REVIEW CODE
	1 Vinyl chloride	62	1.642	1.640	(0.267)	6205	0.30000	0.318	
	2 1,1-Dichloroethene	96	2.531	2.532	(0.411)	4964	0.30000	0.322	
	3 trans-1,2-Dichloroethene	96	3.237	3.238	(0.526)	5166	0.30000	0.293	
	4 cis-1,2-Dichloroethene	96	4.702	4.702	(0.763)	3926	0.30000	0.286	
	6 1,1,1-Trichloroethane	97	5.460	5.454	(0.887)	8454	0.30000	0.312	
$	7 Dibromofluoromethane	113	5.437	5.440	(0.883)	9514	1.00000	1.09	
	8 Benzene	78	5.998	6.000	(0.974)	15515	0.30000	0.289	
*	9 Pentafluorobenzene	168	6.159	6.163	(1.000)	13234	1.00000		
$	10 1,2-Dichloroethane-D4	65	6.190	6.193	(1.005)	8646	1.00000	1.11	
	11 1,2-Dichloroethane	62	6.281	6.285	(0.916)	4661	0.30000	0.291	
	12 Trichloroethene	130	6.799	6.793	(0.992)	3483	0.30000	0.264	
*	13 1,4-Difluorobenzene	114	6.854	6.854	(1.000)	21270	1.00000		
$	14 Toluene-D8	98	8.484	8.482	(1.238)	22252	1.00000	0.987	
	15 Tetrachloroethene	164	8.957	8.957	(1.307)	3382	0.30000	0.294	
	16 1,1,2-Trichloroethane	83	9.179	9.181	(1.339)	1904	0.30000	0.348	
*	17 Chlorobenzene-D5	117	10.239	10.238	(1.000)	19503	1.00000		
$	18 P-Bromofluorobenzene	95	11.768	11.768	(1.149)	7687	1.00000	1.10	
	19 1,1,2,2-Tetrachloroethane	83	12.025	12.027	(1.174)	2152	0.30000	0.315	
	20 1,3,5-Trimethylbenzene	105	12.173	12.172	(1.189)	7721	0.30000	0.312(a)	
	21 1,2,4-Trimethylbenzene	105	12.600	12.600	(1.231)	7418	0.30000	0.325	
	22 1,2,4-Trichlorobenzene	180	14.971	14.968	(1.462)	2687	0.30000	0.265	
	23 1,2,3-Trichlorobenzene	180	15.462	15.465	(1.510)	2133	0.30000	0.278	

Data File: \\target_server\gg\chem\gcms-s.i\S111623.b\S7202.D
Report Date: 08-Dec-2023 14:45

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).


Data File: \\target_server\gg\chem\gcms-s,i\S111623,b\S7202.D
Date : 16-NOV-2023 13:57
Client ID:
Sample Info: WG345525-4
Purge Volume: 25.0
Column phase: RTX-VMS
Instrument: gcms-s,i
Operator: JSS
Column diameter: 0.18
\\target_server\gg\chem\gcms-s,i\S111623,b\S7202.D
Y (x10^4)
Min
-Vinyl chloride (1,640)
-1,1-Dichloroethene (2,529)
-trans-1,2-Dichloroethene (3,237)
-cis-1,2-Dichloroethene (4,703)
-1,1,1-Trichloroethane (5,435)+
-Benzene (5,998)
-Pentafluorobenzene (6,160)+
-1,2-Dichloroethane (6,282)
-Trichloroethene (6,799)+
Toluene-D8 (8,484)
-Tetrachloroethene (8,959)
-1,1,2-Trichloroethane (9,179)
-Chlorobenzene-D5 (10,240)
-P-Bromofluorobenzene (11,769)
-1,1,2,2-Tetrachloroethane (12,027)
-1,3,5-Trimethylbenzene (12,174)
-1,2,4-Trimethylbenzene (12,600)
-1,2,4-Trichlorobenzene (14,969)
-1,2,3-Trichlorobenzene (15,465)

Data File: \\target_server\gg\chem\gcms-s.i\S111623.b\S7203.D
Report Date: 08-Dec-2023 14:45

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Data file : \\target_server\gg\chem\gcms-s.i\S111623.b\S7203.D
Lab Smp Id: WG345525-5
Inj Date : 16-NOV-2023 14:25
Operator : JSS   Inst ID: gcms-s.i
Smp Info : WG345525-5
Misc Info :
Comment   : SW846 5030C
Method   : \\target_server\gg\chem\gcms-s.i\S111623.b\SSIM(01)CR23.m
Meth Date : 17-Nov-2023 10:03 jsampson   Quant Type: ISTD
Cal Date : 16-NOV-2023 14:25   Cal File: S7203.D
Als bottle: 5   Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: all.sub
Target Version: 4.12
Processing Host: T7-O360

Concentration Formula: Amt * DF * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	25.000	sample purged
Cpnd Variable		Local Compound Variable

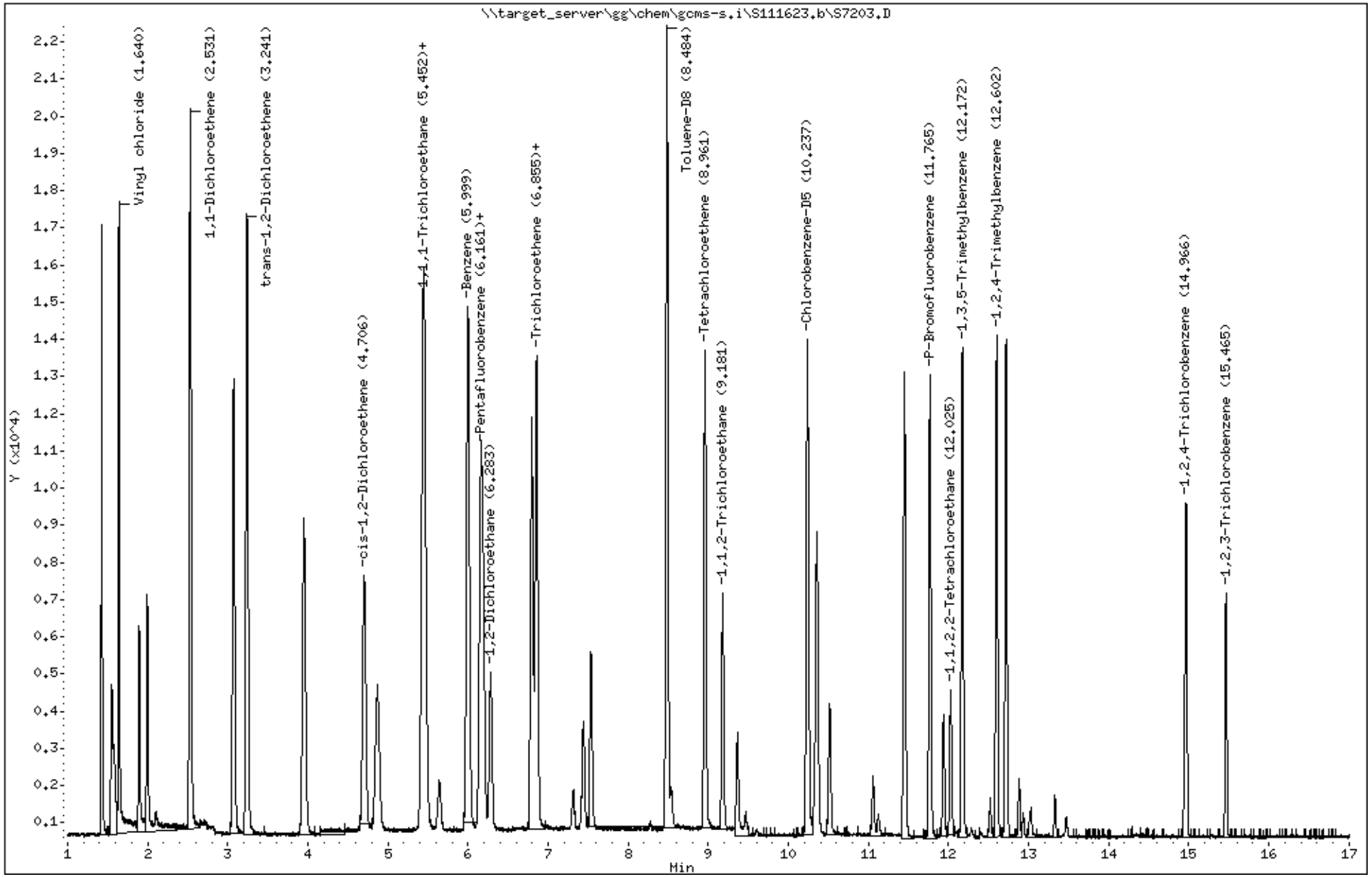
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)	REVIEW CODE
	1 Vinyl chloride	62	1.642	1.640	(0.267)	10727	0.50000	0.523	
	2 1,1-Dichloroethene	96	2.532	2.532	(0.411)	8404	0.50000	0.521	
	3 trans-1,2-Dichloroethene	96	3.242	3.238	(0.526)	8878	0.50000	0.502	
	4 cis-1,2-Dichloroethene	96	4.701	4.702	(0.763)	6560	0.50000	0.483	
	6 1,1,1-Trichloroethane	97	5.452	5.454	(0.885)	14468	0.50000	0.514	
$	7 Dibromofluoromethane	113	5.437	5.440	(0.882)	9601	1.00000	1.03	
	8 Benzene	78	5.998	6.000	(0.974)	27034	0.50000	0.493	
*	9 Pentafluorobenzene	168	6.161	6.163	(1.000)	13752	1.00000		
$	10 1,2-Dichloroethane-D4	65	6.188	6.193	(1.004)	8815	1.00000	1.05	
	11 1,2-Dichloroethane	62	6.283	6.285	(0.917)	7841	0.50000	0.495	
	12 Trichloroethene	130	6.797	6.793	(0.992)	6221	0.50000	0.490	
*	13 1,4-Difluorobenzene	114	6.854	6.854	(1.000)	21842	1.00000		
$	14 Toluene-D8	98	8.482	8.482	(1.237)	22933	1.00000	0.997	
	15 Tetrachloroethene	164	8.958	8.957	(1.307)	5666	0.50000	0.496	
	16 1,1,2-Trichloroethane	83	9.179	9.181	(1.339)	3170	0.50000	0.532	
*	17 Chlorobenzene-D5	117	10.236	10.238	(1.000)	20133	1.00000		
$	18 P-Bromofluorobenzene	95	11.765	11.768	(1.149)	8638	1.00000	1.05	
	19 1,1,2,2-Tetrachloroethane	83	12.025	12.027	(1.175)	3719	0.50000	0.515	
	20 1,3,5-Trimethylbenzene	105	12.173	12.172	(1.189)	15379	0.50000	0.506(a)	
	21 1,2,4-Trimethylbenzene	105	12.602	12.600	(1.231)	15318	0.50000	0.515	
	22 1,2,4-Trichlorobenzene	180	14.969	14.968	(1.462)	5128	0.50000	0.496	
	23 1,2,3-Trichlorobenzene	180	15.462	15.465	(1.511)	3970	0.50000	0.498	

Data File: \\target_server\gg\chem\gcms-s.i\S111623.b\S7203.D
Report Date: 08-Dec-2023 14:45

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\target_server\gg\chem\gcms-s.i\S111623.b\S7203.D
Date : 16-NOV-2023 14:25
Client ID:
Instrument: gcms-s.i
Sample Info: WG345525-5
Purge Volume: 25.0
Operator: JSS
Column phase: RTX-VMS
Column diameter: 0.18



Data File: \\target_server\gg\chem\gcms-s.i\S111623.b\S7204.D
Report Date: 08-Dec-2023 14:45

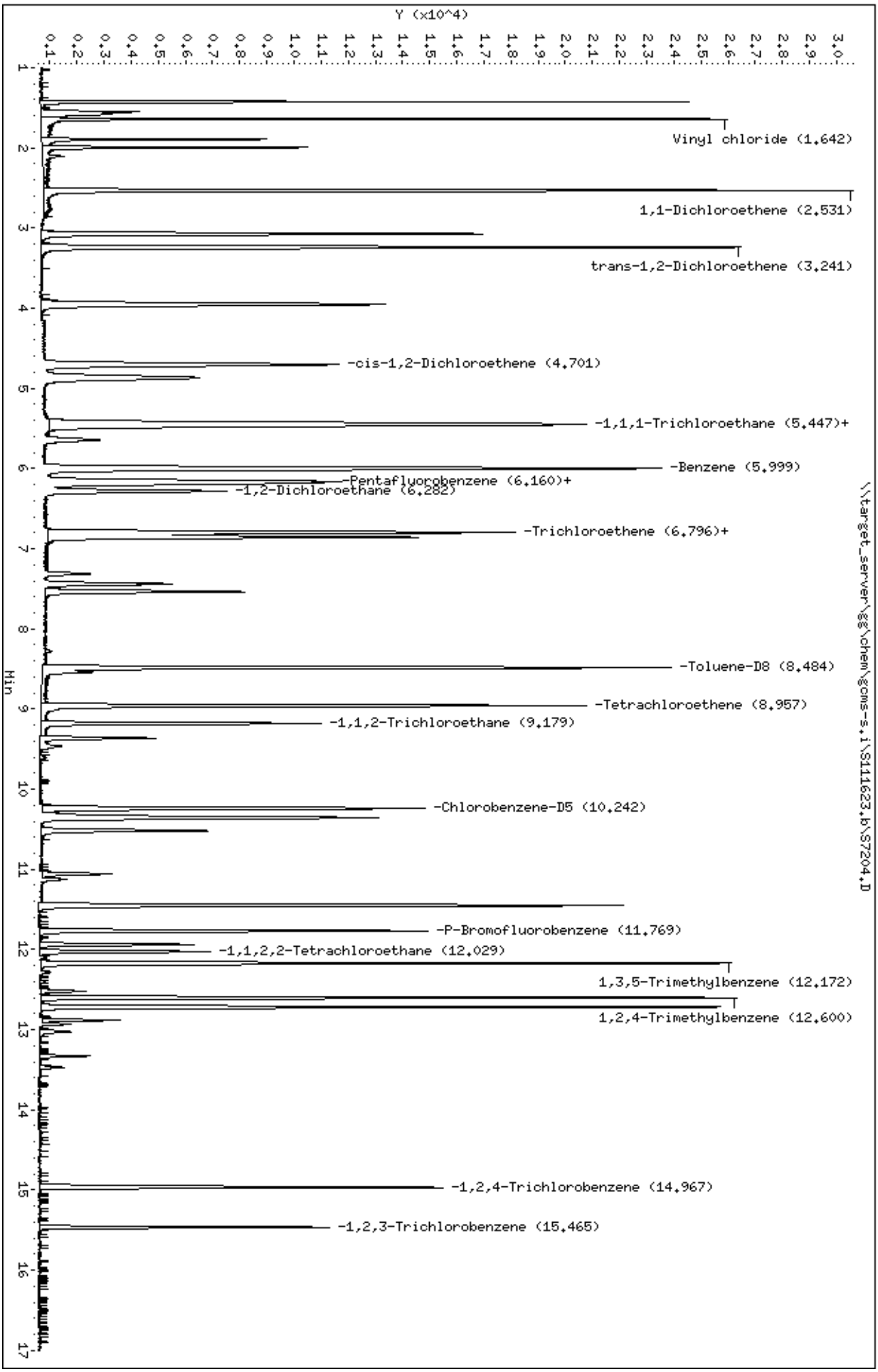
Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-s.i\S111623.b\S7204.D
Lab Smp Id: WG345525-6
Inj Date : 16-NOV-2023 14:52
Operator : JSS   Inst ID: gcms-s.i
Smp Info : WG345525-6
Misc Info :
Comment   : SW846 5030C
Method   : \\target_server\gg\chem\gcms-s.i\S111623.b\SSIM(01)CR23.m
Meth Date : 17-Nov-2023 10:03 jsampson   Quant Type: ISTD
Cal Date : 16-NOV-2023 14:52   Cal File: S7204.D
Als bottle: 6   Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: all.sub
Target Version: 4.12

Concentration Formula: Amt * DF * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	25.000	sample purged
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)	REVIEW CODE
	1 Vinyl chloride	62	1.642	1.640	(0.267)	16137	0.75000	0.727	
	2 1,1-Dichloroethene	96	2.531	2.532	(0.411)	12620	0.75000	0.720	
	3 trans-1,2-Dichloroethene	96	3.240	3.238	(0.526)	13515	0.75000	0.696	
	4 cis-1,2-Dichloroethene	96	4.701	4.702	(0.763)	10227	0.75000	0.686	
	6 1,1,1-Trichloroethane	97	5.454	5.454	(0.885)	21923	0.75000	0.719	
$	7 Dibromofluoromethane	113	5.440	5.440	(0.883)	10082	1.00000	1.01	
	8 Benzene	78	5.998	6.000	(0.974)	43159	0.75000	0.731	
*	9 Pentafluorobenzene	168	6.159	6.163	(1.000)	14735	1.00000		
$	10 1,2-Dichloroethane-D4	65	6.188	6.193	(1.005)	9333	1.00000	1.03	
	11 1,2-Dichloroethane	62	6.281	6.285	(0.916)	12218	0.75000	0.714	
	12 Trichloroethene	130	6.793	6.793	(0.991)	9536	0.75000	0.692	
*	13 1,4-Difluorobenzene	114	6.854	6.854	(1.000)	23148	1.00000		
$	14 Toluene-D8	98	8.482	8.482	(1.237)	24270	1.00000	0.993	
	15 Tetrachloroethene	164	8.958	8.957	(1.307)	8660	0.75000	0.700	
	16 1,1,2-Trichloroethane	83	9.177	9.181	(1.339)	4896	0.75000	0.780	
*	17 Chlorobenzene-D5	117	10.238	10.238	(1.000)	21414	1.00000		
$	18 P-Bromofluorobenzene	95	11.765	11.768	(1.149)	10054	1.00000	1.24	
	19 1,1,2,2-Tetrachloroethane	83	12.025	12.027	(1.175)	5772	0.75000	0.754	
	20 1,3,5-Trimethylbenzene	105	12.172	12.172	(1.189)	28521	0.75000	1.00	
	21 1,2,4-Trimethylbenzene	105	12.601	12.600	(1.231)	29320	0.75000	1.09	
	22 1,2,4-Trichlorobenzene	180	14.967	14.968	(1.462)	8224	0.75000	0.759	
	23 1,2,3-Trichlorobenzene	180	15.464	15.465	(1.510)	6474	0.75000	0.780	


Data File: \\target_server\gg\chem\gcms-s,i\S111623,b\S7204.D
Date : 16-NOV-2023 14:52
Client ID:
Sample Info: WG345525-6
Purge Volume: 25.0
Column phase: RTX-VMS
Instrument: gcms-s,i
Operator: JSS
Column diameter: 0.18
Y (x10^4)
Min
\\target_server\gg\chem\gcms-s,i\S111623,b\S7204.D
Vinyl chloride (1.642)
1,1-Dichloroethene (2.531)
trans-1,2-Dichloroethene (3.241)
-cis-1,2-Dichloroethene (4.701)
-1,1,1-Trichloroethane (5.447)+
-Benzene (5.999)
-Pentafluorobenzene (6.160)+
-1,2-Dichloroethane (6.282)
-Trichloroethene (6.796)+
-Toluene-D8 (8.484)
-Tetrachloroethene (8.957)
-1,1,2-Trichloroethane (9.179)
-Chlorobenzene-D5 (10.242)
-P-Bromofluorobenzene (11.769)
-1,1,2,2-Tetrachloroethane (12.029)
1,3,5-Trimethylbenzene (12.172)
1,2,4-Trimethylbenzene (12.600)
-1,2,4-Trichlorobenzene (14.967)
-1,2,3-Trichlorobenzene (15.465)

Data File: \\target_server\gg\chem\gcms-s.i\S111623.b\S7205.D
Report Date: 08-Dec-2023 14:45

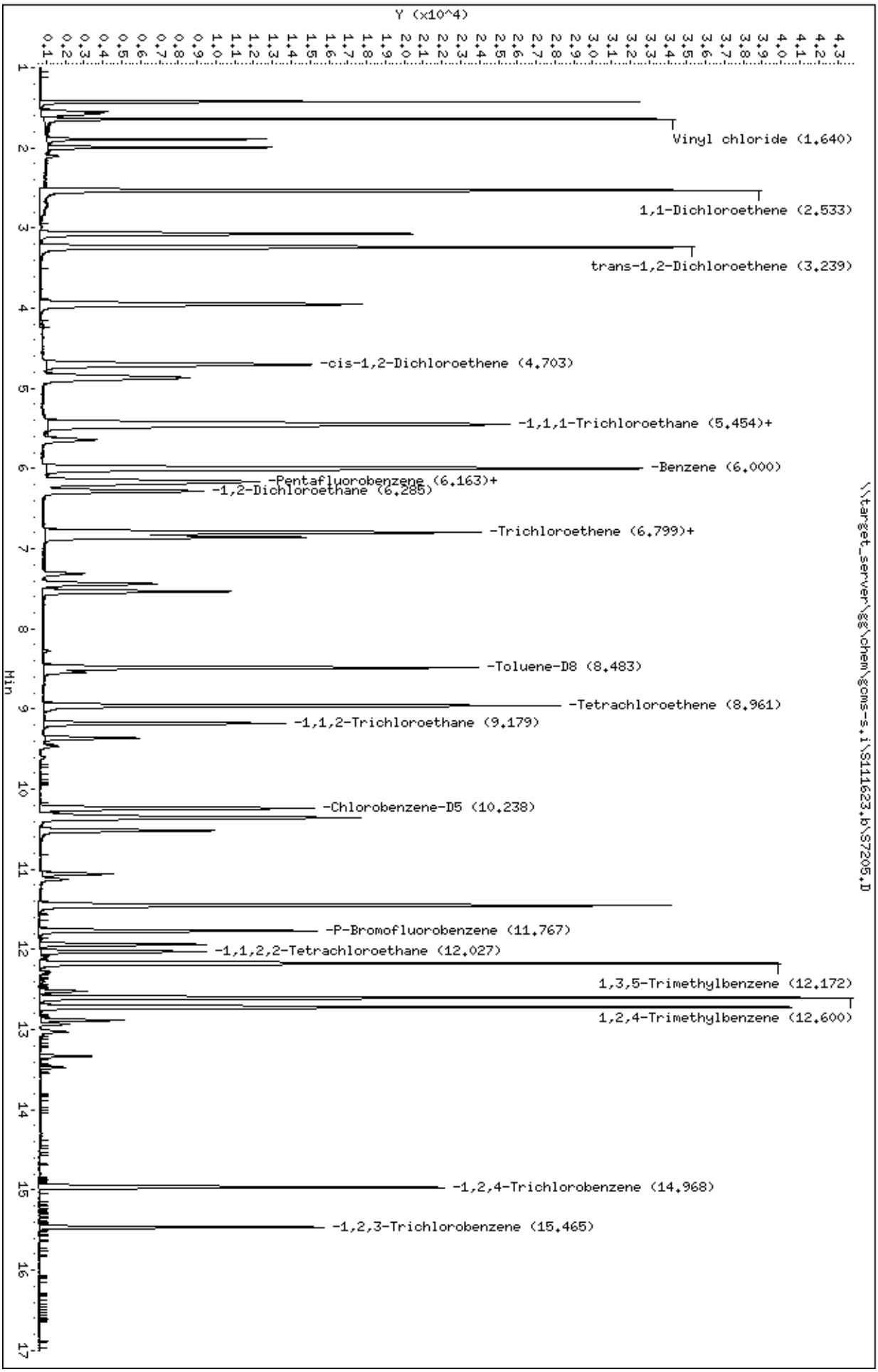
Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-s.i\S111623.b\S7205.D
Lab Smp Id: WG345525-7
Inj Date : 16-NOV-2023 15:20
Operator : JSS   Inst ID: gcms-s.i
Smp Info : WG345525-7
Misc Info :
Comment   : SW846 5030C
Method   : \\target_server\gg\chem\gcms-s.i\S111623.b\SSIM(01)CR23.m
Meth Date : 17-Nov-2023 10:03 jsampson   Quant Type: ISTD
Cal Date : 16-NOV-2023 15:20   Cal File: S7205.D
Als bottle: 7   Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: all.sub
Target Version: 4.12

Concentration Formula: Amt * DF * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	25.000	sample purged
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)	REVIEW CODE
	1 Vinyl chloride	62	1.640	1.640	(0.266)	21380	1.00000	0.948	
	2 1,1-Dichloroethene	96	2.532	2.532	(0.411)	16551	1.00000	0.931	
	3 trans-1,2-Dichloroethene	96	3.238	3.238	(0.526)	17971	1.00000	0.918	
	4 cis-1,2-Dichloroethene	96	4.702	4.702	(0.763)	13957	1.00000	0.931	
	6 1,1,1-Trichloroethane	97	5.454	5.454	(0.885)	29816	1.00000	0.965	
$	7 Dibromofluoromethane	113	5.440	5.440	(0.883)	9976	1.00000	0.977	
	8 Benzene	78	6.000	6.000	(0.974)	60395	1.00000	1.01	
*	9 Pentafluorobenzene	168	6.163	6.163	(1.000)	15038	1.00000		
$	10 1,2-Dichloroethane-D4	65	6.193	6.193	(1.005)	8842	1.00000	0.955	
	11 1,2-Dichloroethane	62	6.285	6.285	(0.917)	16021	1.00000	0.910	
	12 Trichloroethene	130	6.793	6.793	(0.991)	13031	1.00000	0.924	
*	13 1,4-Difluorobenzene	114	6.854	6.854	(1.000)	24000	1.00000		
$	14 Toluene-D8	98	8.482	8.482	(1.237)	25141	1.00000	0.994	
	15 Tetrachloroethene	164	8.957	8.957	(1.307)	11761	1.00000	0.928	
	16 1,1,2-Trichloroethane	83	9.181	9.181	(1.339)	6389	1.00000	0.976	
*	17 Chlorobenzene-D5	117	10.238	10.238	(1.000)	21862	1.00000		
$	18 P-Bromofluorobenzene	95	11.768	11.768	(1.149)	10578	1.00000	1.22	
	19 1,1,2,2-Tetrachloroethane	83	12.027	12.027	(1.175)	7958	1.00000	1.02	
	20 1,3,5-Trimethylbenzene	105	12.172	12.172	(1.189)	46718	1.00000	1.52	
	21 1,2,4-Trimethylbenzene	105	12.600	12.600	(1.231)	48270	1.00000	1.63	
	22 1,2,4-Trichlorobenzene	180	14.967	14.968	(1.462)	12034	1.00000	1.08	
	23 1,2,3-Trichlorobenzene	180	15.464	15.465	(1.510)	9398	1.00000	1.10	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Date : 16-NOV-2023 15:20
Client ID:
Sample Info: WG345525-7
Purge Volume: 25.0
Column phase: RTX-VMS
Instrument: gcms-s.i
Operator: JSS
Column diameter: 0.18
\\target_server\gg\chem\gcms-s.i\S111623.b\S7205.D
Y (x10^4)
Min
Vinyl chloride (1.640)
1,1-Dichloroethene (2.533)
trans-1,2-Dichloroethene (3.239)
-cis-1,2-Dichloroethene (4.703)
-1,1,1-Trichloroethane (5.454)+
-Benzene (6.000)
-Pentafluorobenzene (6.163)+
-1,2-Dichloroethane (6.285)
-Trichloroethene (6.799)+
-Toluene-D8 (8.483)
-Tetrachloroethene (8.961)
-1,1,2-Trichloroethane (9.179)
-Chlorobenzene-D5 (10.238)
-P-Bromofluorobenzene (11.767)
-1,1,2,2-Tetrachloroethane (12.027)
1,3,5-Trimethylbenzene (12.172)
1,2,4-Trimethylbenzene (12.600)
-1,2,4-Trichlorobenzene (14.968)
-1,2,3-Trichlorobenzene (15.465)

Data File: \\target_server\gg\chem\gcms-s.i\S111623.b\S7206.D
Report Date: 08-Dec-2023 14:45

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-s.i\S111623.b\S7206.D
Lab Smp Id: WG345525-8
Inj Date : 16-NOV-2023 15:48
Operator : JSS   Inst ID: gcms-s.i
Smp Info : WG345525-8
Misc Info :
Comment   : SW846 5030C
Method   : \\target_server\gg\chem\gcms-s.i\S111623.b\SSIM(01)CR23.m
Meth Date : 17-Nov-2023 10:03 jsampson   Quant Type: ISTD
Cal Date : 16-NOV-2023 15:48   Cal File: S7206.D
Als bottle: 8   Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: all.sub
Target Version: 4.12
Processing Host: T7-O360

Concentration Formula: Amt * DF * 25/Vo * CpndVariable

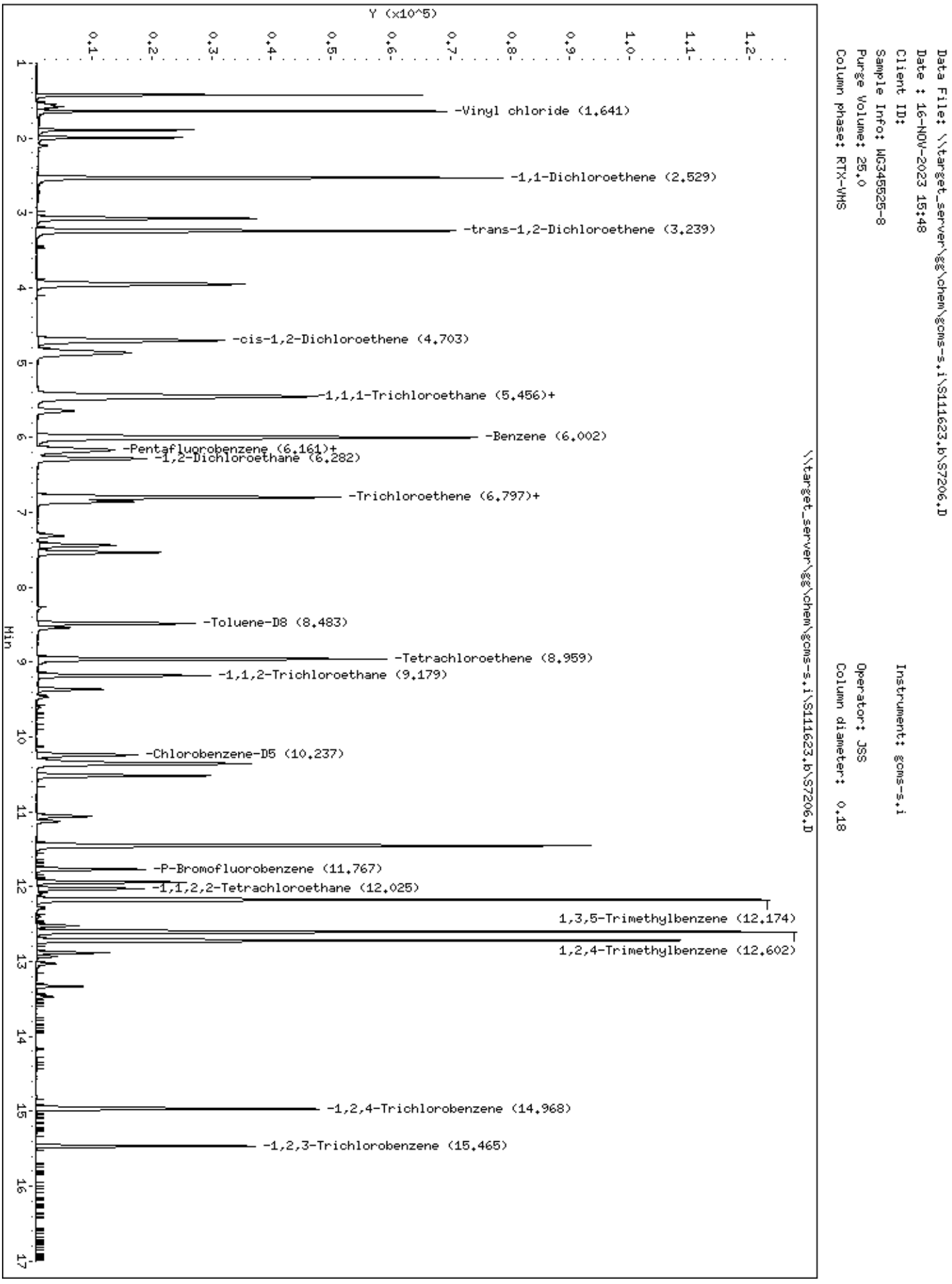
Name	Value	Description
DF	1.000	Dilution Factor
Vo	25.000	sample purged
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)	REVIEW CODE
	1 Vinyl chloride	62	1.640	1.640	(0.266)	44101	2.00000	1.75	
	2 1,1-Dichloroethene	96	2.531	2.532	(0.411)	33166	2.00000	1.68	
	3 trans-1,2-Dichloroethene	96	3.239	3.238	(0.526)	37240	2.00000	1.71	
	4 cis-1,2-Dichloroethene	96	4.702	4.702	(0.763)	29554	2.00000	1.76	
	6 1,1,1-Trichloroethane	97	5.455	5.454	(0.886)	62311	2.00000	1.79	
$	7 Dibromofluoromethane	113	5.435	5.440	(0.882)	10739	1.00000	0.928	
	8 Benzene	78	6.002	6.000	(0.974)	138568	2.00000	2.01(A)	
*	9 Pentafluorobenzene	168	6.161	6.163	(1.000)	17273	1.00000		
$	10 1,2-Dichloroethane-D4	65	6.191	6.193	(1.005)	9657	1.00000	0.924	
	11 1,2-Dichloroethane	62	6.281	6.285	(0.916)	34266	2.00000	1.72	
	12 Trichloroethene	130	6.797	6.793	(0.991)	28460	2.00000	1.78	
*	13 1,4-Difluorobenzene	114	6.856	6.854	(1.000)	27973	1.00000		
$	14 Toluene-D8	98	8.480	8.482	(1.237)	28761	1.00000	0.979	
	15 Tetrachloroethene	164	8.960	8.957	(1.307)	25135	2.00000	1.75	
	16 1,1,2-Trichloroethane	83	9.179	9.181	(1.339)	14016	2.00000	1.86	
*	17 Chlorobenzene-D5	117	10.236	10.238	(1.000)	25332	1.00000		
$	18 P-Bromofluorobenzene	95	11.767	11.768	(1.150)	13055	1.00000	1.22	
	19 1,1,2,2-Tetrachloroethane	83	12.025	12.027	(1.175)	16641	2.00000	1.85	
	20 1,3,5-Trimethylbenzene	105	12.172	12.172	(1.189)	136091	2.00000	3.24(A)	
	21 1,2,4-Trimethylbenzene	105	12.602	12.600	(1.231)	136920	2.00000	3.32(A)	
	22 1,2,4-Trichlorobenzene	180	14.967	14.968	(1.462)	27106	2.00000	2.07(A)	
	23 1,2,3-Trichlorobenzene	180	15.464	15.465	(1.511)	21861	2.00000	2.16(A)	

Data File: \\target_server\gg\chem\gcms-s.i\S111623.b\S7206.D
Report Date: 08-Dec-2023 14:45

QC Flag Legend

A - Target compound detected but, quantitated amount
    exceeded maximum amount.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Date : 16-NOV-2023 15:48
Client ID:
Sample Info: WG345525-8
Purge Volume: 25.0
Column phase: RTX-VMS
Instrument: gcms-s.i
Operator: JSS
Column diameter: 0.18
\\target_server\gg\chem\gcms-s.i\S111623.b\S7206.D
Y (x10^5)
Min
-Vinyl chloride (1.641)
-1,1-Dichloroethene (2.529)
-trans-1,2-Dichloroethene (3.239)
-cis-1,2-Dichloroethene (4.703)
-1,1,1-Trichloroethane (5.456)+
-Benzene (6.002)
-Pentafluorobenzene (6.161)+
-1,2-Dichloroethane (6.282)
-Trichloroethene (6.797)+
-Toluene-D8 (8.483)
-Tetrachloroethene (8.959)
-1,1,2-Trichloroethane (9.179)
-Chlorobenzene-D5 (10.237)
-P-Bromofluorobenzene (11.767)
-1,1,2,2-Tetrachloroethane (12.025)
1,3,5-Trimethylbenzene (12.174)
1,2,4-Trimethylbenzene (12.602)
-1,2,4-Trichlorobenzene (14.968)
-1,2,3-Trichlorobenzene (15.465)

Form 7
Calibration Verification Summary

Lab Name: Katahdin Analytical Services
SDG: SQ6133
Lab ID: WG345527-13
Analytical Date: 11/16/23 18:08
Lab File ID: D8877.d
Instrument ID: GCMS-D
Initial Calibration Date(s): 11/16/23 07:03 11/16/23 10:55
Column ID:

Compound	$\overline{RRF}$/Amount	RF0.500	CCAL RRF0.500	Min RF	%D/ %Drift	Max %D/ %Drift	Curve Type	Qual
Vinyl chloride	0.70168	0.76959	0.76959	0.010	9.67857	50.000	Averaged	
1,1-Dichloroethene	0.64410	0.73850	0.73850	0.100	14.65627	50.000	Averaged	
trans-1,2-Dichloroethene	0.73249	0.71190	0.71190	0.010	-2.81159	50.000	Averaged	
cis-1,2-Dichloroethene	0.56034	0.55783	0.55783	0.010	-0.44739	50.000	Averaged	
Trichloroethene	0.43951	0.47547	0.47547	0.010	8.18232	50.000	Averaged	
Tetrachloroethene	0.37272	0.40038	0.40038	0.010	7.42109	50.000	Averaged	
Dibromofluoromethane	0.78094	0.78102	0.78102	0.010	0.01037	50.000	Averaged	
1,2-Dichloroethane-D4	0.46094	0.46685	0.46685	0.010	1.28245	50.000	Averaged	
Toluene-D8	0.90549	0.88222	0.88222	0.010	-2.56946	50.000	Averaged	
P-Bromofluorobenzene	0.33441	0.34536	0.34536	0.010	3.27657	50.000	Averaged	

*** = Compound out of QC criteria**

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sales@katahdinlab.com

Data File: \\target_server\gg\chem\gcms-d.i\D111623.b\D8877.d
Report Date: 12-Dec-2023 10:21

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-d.i\D111623.b\D8877.d
Lab Smp Id: WG345527-13
Inj Date : 16-NOV-2023 18:08
Operator : JSS   Inst ID: gcms-d.i
Smp Info : WG345527-13,SQ6133
Misc Info : WG345527,WG345527-5,SQ6133-1
Comment   : SW846 5030C
Method   : \\target_server\gg\chem\gcms-d.i\D111623.b\DSIM(01)CR23.m
Meth Date : 04-Dec-2023 12:57 gcms-d.i   Quant Type: ISTD
Cal Date : 16-NOV-2023 10:22   Cal File: D8863.d
Als bottle: 21   Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: all.sub
Target Version: 4.12

Concentration Formula: Amt * DF * 25/Vo * CpndVariable

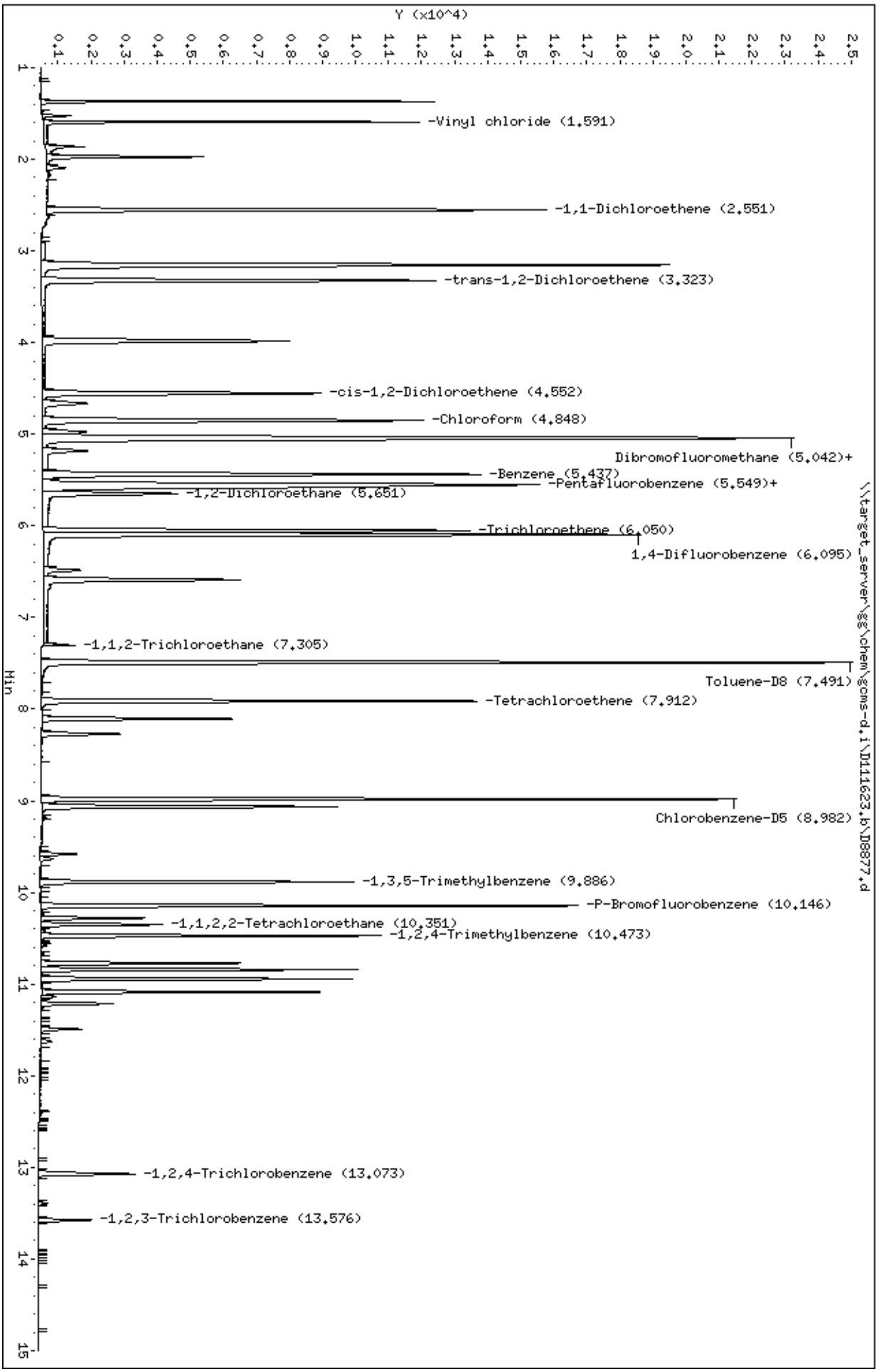
Name	Value	Description
DF	1.000	Dilution Factor
Vo	25.000	sample purged
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)	REVIEW CODE
	1 Vinyl chloride	62	1.591	1.591	(0.287)	7203	0.50000	0.548	
	2 1,1-Dichloroethene	96	2.553	2.553	(0.460)	6912	0.50000	0.573	
	4 trans-1,2-Dichloroethene	96	3.324	3.323	(0.599)	6663	0.50000	0.486	
	5 cis-1,2-Dichloroethene	96	4.553	4.558	(0.821)	5221	0.50000	0.498	
	6 Chloroform	83	4.848	4.848	(0.874)	13453	0.50000	(a)	
$	7 Dibromofluoromethane	113	5.036	5.037	(0.908)	14620	1.00000	1.00	
	8 1,1,1-Trichloroethane	97	5.050	5.054	(0.910)	9904	0.50000	(a)	
	9 Benzene	78	5.437	5.439	(0.980)	18385	0.50000	(a)	
*	10 Pentafluorobenzene	168	5.549	5.549	(1.000)	18719	1.00000		
$	11 1,2-Dichloroethane-D4	65	5.581	5.582	(1.006)	8739	1.00000	1.01	
	12 1,2-Dichloroethane	62	5.650	5.649	(0.927)	4983	0.50000	(a)	
	13 Trichloroethene	130	6.050	6.052	(0.993)	6338	0.50000	0.541	
*	14 1,4-Difluorobenzene	114	6.095	6.096	(1.000)	26660	1.00000		
$	15 Toluene-D8	98	7.490	7.491	(1.229)	23520	1.00000	0.974	
	16 Tetrachloroethene	164	7.911	7.912	(1.298)	5337	0.50000	0.537	
	17 1,1,2-Trichloroethane	83	7.308	7.310	(1.199)	461	0.50000	(a)	
*	18 Chlorobenzene-D5	117	8.981	8.984	(1.000)	23911	1.00000		
	19 1,3,5-Trimethylbenzene	105	9.885	9.888	(1.101)	10853	0.50000	(a)	
$	20 P-Bromofluorobenzene	95	10.145	10.146	(1.130)	8258	1.00000	1.03	
	21 1,1,2,2-Tetrachloroethane	83	10.349	10.351	(1.152)	2802	0.50000	(a)	
	22 1,2,4-Trimethylbenzene	105	10.472	10.473	(1.166)	8825	0.50000	(a)	
	23 1,2,4-Trichlorobenzene	180	13.072	13.075	(1.455)	1605	0.50000	(a)	
	24 1,2,3-Trichlorobenzene	180	13.575	13.579	(1.511)	900	0.50000	(a)	

Data File: \\target_server\gg\chem\gcms-d.i\D111623.b\D8877.d
Report Date: 12-Dec-2023 10:21

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).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Date : 16-NOV-2023 18:08
Client ID:
Sample Info: WG345527-13,SQ6133
Purge Volume: 25.0
Column phase: RTX-VMS
Instrument: gcms-d.i
Operator: JSS
Column diameter: 0.18
Y (x10^4)
Min
\\target_server\gg\chem\gcms-d.i\D111623.b\D8877.d
-Vinyl chloride (1.591)
-1,1-Dichloroethene (2.551)
-trans-1,2-Dichloroethene (3.323)
-cis-1,2-Dichloroethene (4.552)
-Chloroform (4.848)
Dibromofluoromethane (5.042)+
-Benzene (5.437)
-Pentafluorobenzene (5.549)+
-1,2-Dichloroethane (5.651)
-Trichloroethene (6.050)
1,4-Difluorobenzene (6.095)
-1,1,2-Trichloroethane (7.305)
Toluene-D8 (7.491)
-Tetrachloroethene (7.912)
Chlorobenzene-D5 (8.982)
-1,3,5-Trimethylbenzene (9.886)
-P-Bromofluorobenzene (10.146)
-1,1,2,2-Tetrachloroethane (10.351)
-1,2,4-Trimethylbenzene (10.473)
-1,2,4-Trichlorobenzene (13.073)
-1,2,3-Trichlorobenzene (13.576)

Form 7
Calibration Verification Summary

Lab Name: Katahdin Analytical Services
SDG: SQ6133
Lab ID: WG345599-4
Analytical Date: 11/17/23 08:19
Lab File ID: D8882.d
Instrument ID: GCMS-D
Initial Calibration Date(s): 11/16/23 07:03 11/16/23 10:55
Column ID:

Compound	$\overline{RRF}$/Amount	RF0.500	CCAL RRF0.500	Min RF	%D/ %Drift	Max %D/ %Drift	Curve Type	Qual
Vinyl chloride	0.70168	0.65018	0.65018	0.010	-7.33902	20.000	Averaged	
1,1-Dichloroethene	0.64410	0.57222	0.57222	0.100	-11.16015	20.000	Averaged	
trans-1,2-Dichloroethene	0.73249	0.70870	0.70870	0.010	-3.24817	20.000	Averaged	
cis-1,2-Dichloroethene	0.56034	0.48535	0.48535	0.010	-13.38222	20.000	Averaged	
Trichloroethene	0.43951	0.40820	0.40820	0.010	-7.12280	20.000	Averaged	
Tetrachloroethene	0.37272	0.35842	0.35842	0.010	-3.83601	20.000	Averaged	
Dibromofluoromethane	0.78094	0.66432	0.66432	0.010	-14.93397	20.000	Averaged	
1,2-Dichloroethane-D4	0.46094	0.38851	0.38851	0.010	-15.71339	20.000	Averaged	
Toluene-D8	0.90549	0.86509	0.86509	0.010	-4.46127	20.000	Averaged	
P-Bromofluorobenzene	0.33441	0.34325	0.34325	0.010	2.64430	20.000	Averaged	

*** = Compound out of QC criteria**

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Data File: \\target_server\gg\chem\gcms-d.i\D111723.b\D8882.d
Report Date: 12-Dec-2023 10:24

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-d.i\D111723.b\D8882.d
Lab Smp Id: WG345599-4
Inj Date : 17-NOV-2023 08:19
Operator : JSS   Inst ID: gcms-d.i
Smp Info : WG345599-4,SQ6133
Misc Info : WG345599,WG345527-5,SQ6133-3
Comment   : SW846 5030C
Method   : \\target_server\gg\chem\gcms-d.i\D111723.b\DSIM(01)CR23.m
Meth Date : 11-Dec-2023 10:56 CROY   Quant Type: ISTD
Cal Date : 16-NOV-2023 10:22   Cal File: D8863.d
Als bottle: 1   Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: all.sub
Target Version: 4.12
Processing Host: T6-O360

Concentration Formula: Amt * DF * 25/Vo * CpndVariable

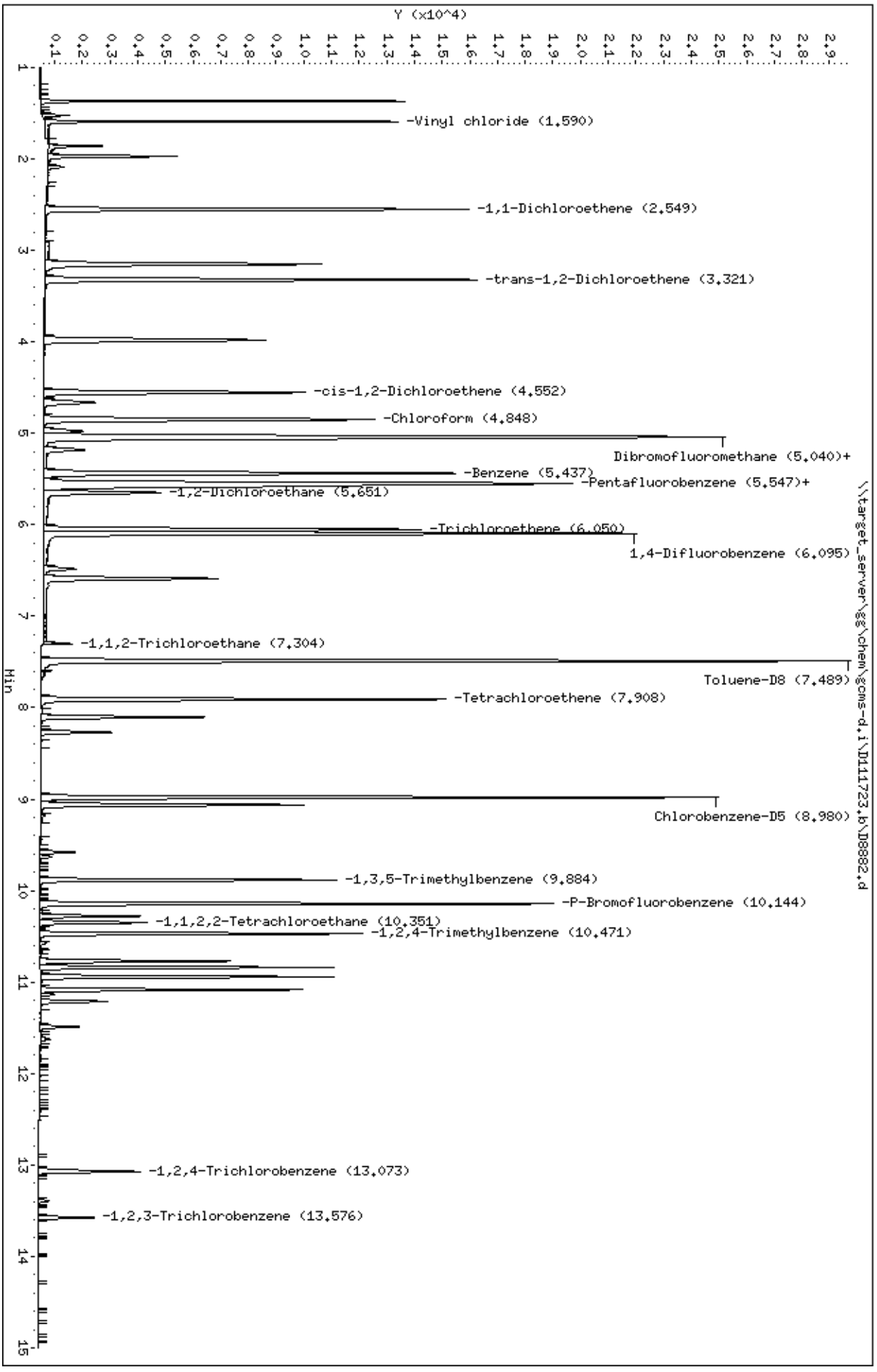
Name	Value	Description
DF	1.000	Dilution Factor
Vo	25.000	sample purged
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)	REVIEW CODE
	1 Vinyl chloride	62	1.589	1.591	(0.287)	7889	0.50000	0.463	
	2 1,1-Dichloroethene	96	2.551	2.553	(0.460)	6943	0.50000	0.444	
	4 trans-1,2-Dichloroethene	96	3.320	3.323	(0.599)	8599	0.50000	0.484	
	5 cis-1,2-Dichloroethene	96	4.551	4.558	(0.821)	5889	0.50000	0.433	
	6 Chloroform	83	4.848	4.848	(0.874)	14082	0.50000	(a)	
$	7 Dibromofluoromethane	113	5.036	5.037	(0.908)	16121	1.00000	0.851	
	8 1,1,1-Trichloroethane	97	5.048	5.054	(0.910)	10940	0.50000	(a)	
	9 Benzene	78	5.437	5.439	(0.980)	21131	0.50000	(a)	
*	10 Pentafluorobenzene	168	5.547	5.549	(1.000)	24267	1.00000		
$	11 1,2-Dichloroethane-D4	65	5.577	5.582	(1.005)	9428	1.00000	0.843	
	12 1,2-Dichloroethane	62	5.650	5.649	(0.927)	5147	0.50000	(a)	
	13 Trichloroethene	130	6.050	6.052	(0.993)	6699	0.50000	0.464	
*	14 1,4-Difluorobenzene	114	6.095	6.096	(1.000)	32822	1.00000		
$	15 Toluene-D8	98	7.488	7.491	(1.229)	28394	1.00000	0.955	
	16 Tetrachloroethene	164	7.909	7.912	(1.298)	5882	0.50000	0.481	
	17 1,1,2-Trichloroethane	83	7.306	7.310	(1.199)	469	0.50000	(a)	
*	18 Chlorobenzene-D5	117	8.981	8.984	(1.000)	27732	1.00000		
	19 1,3,5-Trimethylbenzene	105	9.884	9.888	(1.100)	12368	0.50000	(a)	
$	20 P-Bromofluorobenzene	95	10.143	10.146	(1.129)	9519	1.00000	1.03	
	21 1,1,2,2-Tetrachloroethane	83	10.350	10.351	(1.152)	2929	0.50000	(a)	
	22 1,2,4-Trimethylbenzene	105	10.471	10.473	(1.166)	10133	0.50000	(a)	
	23 1,2,4-Trichlorobenzene	180	13.072	13.075	(1.455)	2018	0.50000	(a)	
	24 1,2,3-Trichlorobenzene	180	13.575	13.579	(1.511)	1209	0.50000	(a)	

Data File: \\target_server\gg\chem\gcms-d.i\D111723.b\D8882.d
Report Date: 12-Dec-2023 10:24

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).


Data File: \\target_server\gg\chem\gcms-d,i\D111723,b\D8882,d
Date : 17-NOV-2023 08:19
Client ID:
Sample Info: WG345599-4,SQ6133
Purge Volume: 25,0
Column phase: RTX-VMS
Instrument: gcms-d,i
Operator: JSS
Column diameter: 0,18
Y (x10^4)
Min
-Vinyl chloride (1,590)
-1,1-Dichloroethene (2,549)
-trans-1,2-Dichloroethene (3,321)
-cis-1,2-Dichloroethene (4,552)
-Chloroform (4,848)
Dibromofluoromethane (5,040)+
-Benzene (5,437)
-Pentafluorobenzene (5,547)+
-1,2-Dichloroethane (5,651)
-Trichloroethene (6,050)
1,4-Difluorobenzene (6,095)
-1,1,2-Trichloroethane (7,304)
Toluene-D8 (7,489)
-Tetrachloroethene (7,908)
Chlorobenzene-D5 (8,980)
-1,3,5-Trimethylbenzene (9,884)
-P-Bromofluorobenzene (10,144)
-1,1,2,2-Tetrachloroethane (10,351)
-1,2,4-Trimethylbenzene (10,471)
-1,2,4-Trichlorobenzene (13,073)
-1,2,3-Trichlorobenzene (13,576)
\\target_server\gg\chem\gcms-d,i\D111723,b\D8882,d

Form 7
Calibration Verification Summary

Lab Name: Katahdin Analytical Services
SDG: SQ6133
Lab ID: WG345599-5
Analytical Date: 11/17/23 18:56
Lab File ID: D8901.d
Instrument ID: GCMS-D
Initial Calibration Date(s): 11/16/23 07:03 11/16/23 10:55
Column ID:

Compound	$\overline{RRF}$/Amount	RF0.500	CCAL RRF0.500	Min RF	%D/ %Drift	Max %D/ %Drift	Curve Type	Qual
Vinyl chloride	0.70168	0.72720	0.72720	0.010	3.63685	50.000	Averaged	
1,1-Dichloroethene	0.64410	0.69277	0.69277	0.100	7.55608	50.000	Averaged	
trans-1,2-Dichloroethene	0.73249	0.69602	0.69602	0.010	-4.97930	50.000	Averaged	
cis-1,2-Dichloroethene	0.56034	0.52895	0.52895	0.010	-5.60201	50.000	Averaged	
Trichloroethene	0.43951	0.44252	0.44252	0.010	0.68532	50.000	Averaged	
Tetrachloroethene	0.37272	0.38378	0.38378	0.010	2.96903	50.000	Averaged	
Dibromofluoromethane	0.78094	0.72009	0.72009	0.010	-7.79241	50.000	Averaged	
1,2-Dichloroethane-D4	0.46094	0.43779	0.43779	0.010	-5.02202	50.000	Averaged	
Toluene-D8	0.90549	0.87814	0.87814	0.010	-3.02049	50.000	Averaged	
P-Bromofluorobenzene	0.33441	0.34814	0.34814	0.010	4.10810	50.000	Averaged	

*** = Compound out of QC criteria**

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Data File: \\target_server\gg\chem\gcms-d.i\D111723.b\D8901.d
Report Date: 12-Dec-2023 10:25

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-d.i\D111723.b\D8901.d
Lab Smp Id: WG345599-5
Inj Date : 17-NOV-2023 18:56
Operator : JSS   Inst ID: gcms-d.i
Smp Info : WG345599-5,SQ6133
Misc Info : WG345599,WG345527-5,SQ6133-3
Comment   : SW846 5030C
Method   : \\target_server\gg\chem\gcms-d.i\D111723.b\DSIM(01)CR23.m
Meth Date : 12-Dec-2023 10:25 croy   Quant Type: ISTD
Cal Date : 16-NOV-2023 10:22   Cal File: D8863.d
Als bottle: 20   Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: all.sub
Target Version: 4.12
Processing Host: ORGANICS2

Concentration Formula: Amt * DF * 25/Vo * CpndVariable

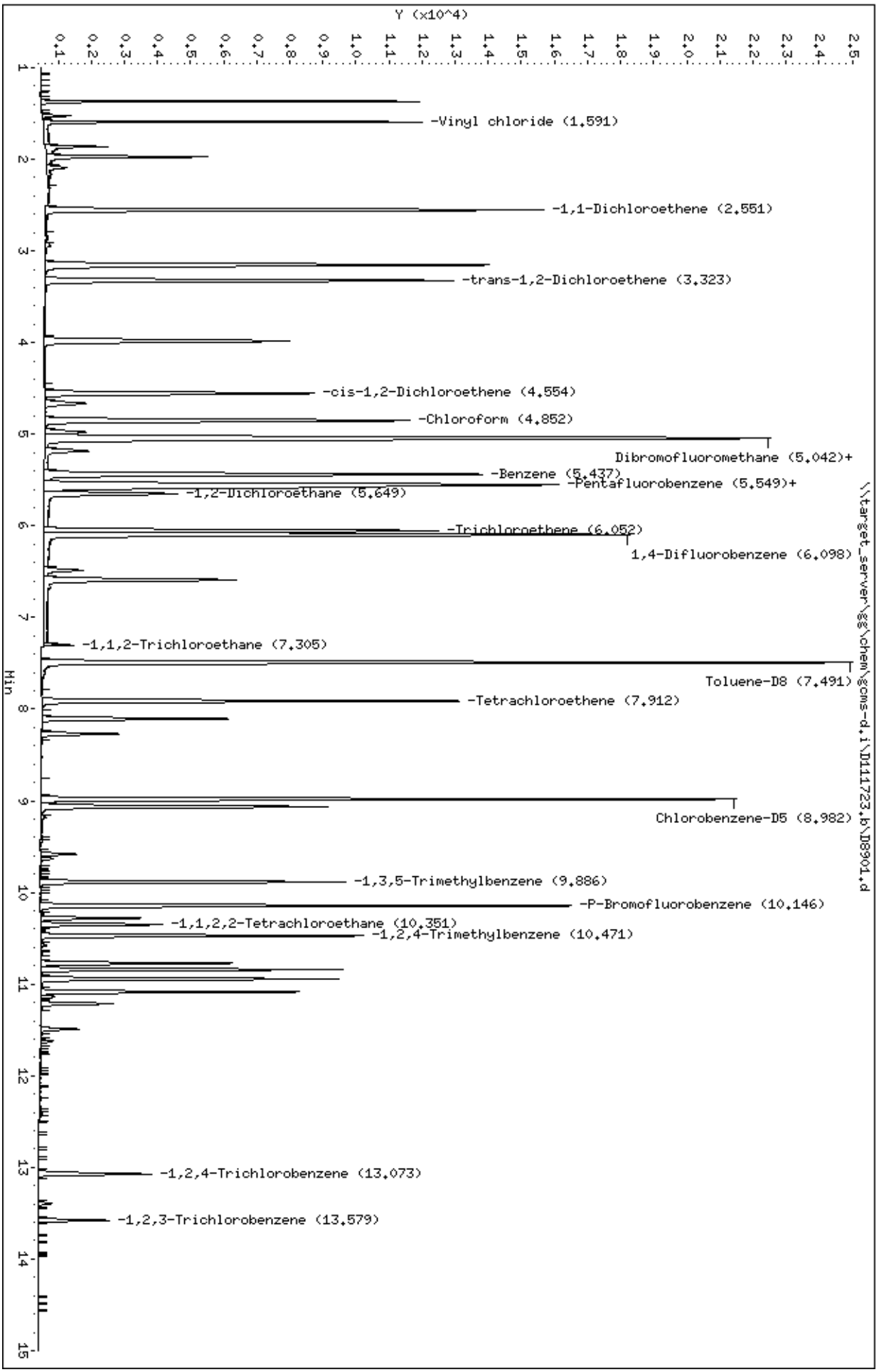
Name	Value	Description
DF	1.000	Dilution Factor
Vo	25.000	sample purged
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)	REVIEW CODE
	1 Vinyl chloride	62	1.591	1.591	(0.287)	7160	0.50000	0.518	
	2 1,1-Dichloroethene	96	2.551	2.553	(0.460)	6821	0.50000	0.538	
	4 trans-1,2-Dichloroethene	96	3.322	3.323	(0.599)	6853	0.50000	0.475	
	5 cis-1,2-Dichloroethene	96	4.555	4.558	(0.821)	5208	0.50000	0.472	
	6 Chloroform	83	4.851	4.848	(0.875)	13060	0.50000	(a)	
$	7 Dibromofluoromethane	113	5.036	5.037	(0.908)	14180	1.00000	0.922	
	8 1,1,1-Trichloroethane	97	5.048	5.054	(0.910)	10491	0.50000	(a)	
	9 Benzene	78	5.439	5.439	(0.981)	18747	0.50000	(a)	
*	10 Pentafluorobenzene	168	5.547	5.549	(1.000)	19692	1.00000		
$	11 1,2-Dichloroethane-D4	65	5.579	5.582	(1.006)	8621	1.00000	0.950	
	12 1,2-Dichloroethane	62	5.648	5.649	(0.926)	4961	0.50000	(a)	
	13 Trichloroethene	130	6.052	6.052	(0.993)	5899	0.50000	0.503	
*	14 1,4-Difluorobenzene	114	6.097	6.096	(1.000)	26661	1.00000		
$	15 Toluene-D8	98	7.490	7.491	(1.228)	23412	1.00000	0.970	
	16 Tetrachloroethene	164	7.911	7.912	(1.298)	5116	0.50000	0.515	
	17 1,1,2-Trichloroethane	83	7.306	7.310	(1.198)	308	0.50000	(a)	
*	18 Chlorobenzene-D5	117	8.981	8.984	(1.000)	23878	1.00000		
	19 1,3,5-Trimethylbenzene	105	9.885	9.888	(1.101)	10574	0.50000	(a)	
$	20 P-Bromofluorobenzene	95	10.144	10.146	(1.129)	8313	1.00000	1.04	
	21 1,1,2,2-Tetrachloroethane	83	10.350	10.351	(1.152)	2825	0.50000	(a)	
	22 1,2,4-Trimethylbenzene	105	10.471	10.473	(1.166)	8546	0.50000	(a)	
	23 1,2,4-Trichlorobenzene	180	13.072	13.075	(1.456)	1912	0.50000	(a)	
	24 1,2,3-Trichlorobenzene	180	13.579	13.579	(1.512)	1265	0.50000	(a)	

Data File: \\target_server\gg\chem\gcms-d.i\D111723.b\D8901.d
Report Date: 12-Dec-2023 10:25

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).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Date : 17-NOV-2023 18:56
Client ID:
Sample Info: WG345599-5,SQ6133
Purge Volume: 25.0
Column phase: RTX-VMS
Instrument: gcms-d.i
Operator: JSS
Column diameter: 0.18
Y (x10^4)
Min
-Vinyl chloride (1.591)
-1,1-Dichloroethene (2.551)
-trans-1,2-Dichloroethene (3.323)
-cis-1,2-Dichloroethene (4.554)
-Chloroform (4.852)
Dibromofluoromethane (5.042)+
-Benzene (5.437)
-Pentafluorobenzene (5.549)+
-1,2-Dichloroethane (5.649)
-Trichloroethene (6.052)
1,4-Difluorobenzene (6.098)
-1,1,2-Trichloroethane (7.305)
Toluene-D8 (7.491)
-Tetrachloroethene (7.912)
Chlorobenzene-D5 (8.982)
-1,3,5-Trimethylbenzene (9.886)
-P-Bromofluorobenzene (10.146)
-1,1,2,2-Tetrachloroethane (10.351)
-1,2,4-Trimethylbenzene (10.471)
-1,2,4-Trichlorobenzene (13.073)
-1,2,3-Trichlorobenzene (13.579)
\\target_server\gg\chem\gcms-d.i\D111723.b\D8901.d

Form 7
Calibration Verification Summary

Lab Name: Katahdin Analytical Services
SDG: SQ6133
Lab ID: WG345748-4
Analytical Date: 11/18/23 10:42
Lab File ID: D8907.d
Instrument ID: GCMS-D
Initial Calibration Date(s): 11/16/23 07:03 11/16/23 10:55
Column ID:

Compound	$\overline{RRF}$/Amount	RF0.500	CCAL RRF0.500	Min RF	%D/ %Drift	Max %D/ %Drift	Curve Type	Qual
Vinyl chloride	0.70168	0.60519	0.60519	0.010	-13.75113	20.000	Averaged	
1,1-Dichloroethene	0.64410	0.57000	0.57000	0.100	-11.50403	20.000	Averaged	
trans-1,2-Dichloroethene	0.73249	0.61467	0.61467	0.010	-16.08446	20.000	Averaged	
cis-1,2-Dichloroethene	0.56034	0.48107	0.48107	0.010	-14.14528	20.000	Averaged	
Trichloroethene	0.43951	0.40678	0.40678	0.010	-7.44662	20.000	Averaged	
Tetrachloroethene	0.37272	0.35668	0.35668	0.010	-4.30276	20.000	Averaged	
Dibromofluoromethane	0.78094	0.65623	0.65623	0.010	-15.97005	20.000	Averaged	
1,2-Dichloroethane-D4	0.46094	0.38911	0.38911	0.010	-15.58331	20.000	Averaged	
Toluene-D8	0.90549	0.89777	0.89777	0.010	-0.85264	20.000	Averaged	
P-Bromofluorobenzene	0.33441	0.34316	0.34316	0.010	2.61603	20.000	Averaged	

*** = Compound out of QC criteria**

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Data File: \\target_server\gg\chem\gcms-d.i\D111823.b\D8907.d
Report Date: 12-Dec-2023 10:30

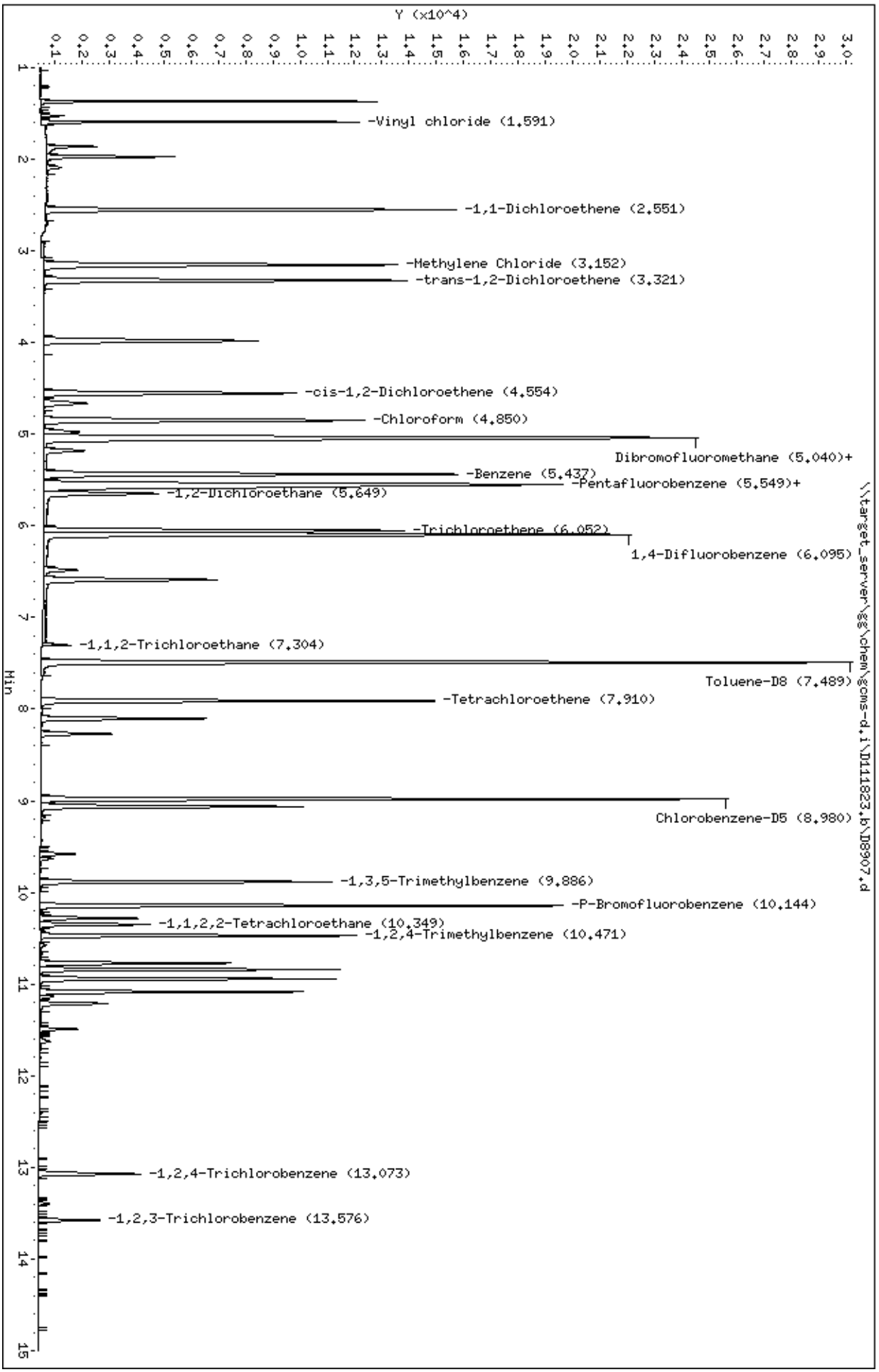
Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-d.i\D111823.b\D8907.d
Lab Smp Id: WG345748-4
Inj Date : 18-NOV-2023 10:42
Operator : JSS   Inst ID: gcms-d.i
Smp Info : WG345748-4,SQ6133
Misc Info : WG345748,WG345527-5,SQ6133-3
Comment   : SW846 5030C
Method   : \\target_server\gg\chem\gcms-d.i\D111823.b\DSIM(01)CR23.m
Meth Date : 20-Nov-2023 06:32 gcms-d.i   Quant Type: ISTD
Cal Date : 16-NOV-2023 10:22   Cal File: D8863.d
Als bottle: 2   Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: Credere.sub
Target Version: 4.12

Concentration Formula: Amt * DF * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	25.000	sample purged
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)	REVIEW CODE
	1 Vinyl chloride	62	1.591	1.591	(0.287)	7275	0.50000	0.431	
	2 1,1-Dichloroethene	96	2.549	2.553	(0.460)	6852	0.50000	0.442	
	4 trans-1,2-Dichloroethene	96	3.320	3.323	(0.599)	7389	0.50000	0.420	
	5 cis-1,2-Dichloroethene	96	4.553	4.558	(0.821)	5783	0.50000	0.429	
	13 Trichloroethene	130	6.050	6.052	(0.993)	6601	0.50000	0.463	
	16 Tetrachloroethene	164	7.909	7.912	(1.298)	5788	0.50000	0.478	
$	7 Dibromofluoromethane	113	5.034	5.037	(0.908)	15777	1.00000	0.840	
$	11 1,2-Dichloroethane-D4	65	5.577	5.582	(1.005)	9355	1.00000	0.844	
$	15 Toluene-D8	98	7.488	7.491	(1.229)	29137	1.00000	0.991	
$	20 P-Bromofluorobenzene	95	10.143	10.146	(1.130)	9771	1.00000	1.03	
*	10 Pentafluorobenzene	168	5.547	5.549	(1.000)	24042	1.00000		
*	14 1,4-Difluorobenzene	114	6.095	6.096	(1.000)	32455	1.00000		
*	18 Chlorobenzene-D5	117	8.979	8.984	(1.000)	28474	1.00000		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Date : 18-NOV-2023 10:42
Client ID:
Sample Info: WG345748-4,SQ6133
Purge Volume: 25.0
Column phase: RTX-VMS
Instrument: gcms-d.i
Operator: JSS
Column diameter: 0.18
Y (x10^4)
Min
-Vinyl chloride (1.591)
-1,1-Dichloroethene (2.551)
-Methylene Chloride (3.152)
-trans-1,2-Dichloroethene (3.321)
-cis-1,2-Dichloroethene (4.554)
-Chloroform (4.850)
Dibromofluoromethane (5.040)+
-Benzene (5.437)
-Pentafluorobenzene (5.549)+
-1,2-Dichloroethane (5.649)
-Trichloroethene (6.052)
1,4-Difluorobenzene (6.095)
-1,1,2-Trichloroethane (7.304)
Toluene-D8 (7.489)
-Tetrachloroethene (7.910)
Chlorobenzene-D5 (8.980)
-1,3,5-Trimethylbenzene (9.886)
-P-Bromofluorobenzene (10.144)
-1,1,2,2-Tetrachloroethane (10.349)
-1,2,4-Trimethylbenzene (10.471)
-1,2,4-Trichlorobenzene (13.073)
-1,2,3-Trichlorobenzene (13.576)
\\target_server\gg\chem\gcms-d.i\D111823.b\D8907.d

Form 7
Calibration Verification Summary

Lab Name: Katahdin Analytical Services
SDG: SQ6133
Lab ID: WG345748-5
Analytical Date: 11/18/23 20:43
Lab File ID: D8925.d
Instrument ID: GCMS-D
Initial Calibration Date(s): 11/16/23 07:03 11/16/23 10:55
Column ID:

Compound	$\overline{RRF}$/Amount	RF0.500	CCAL RRF0.500	Min RF	%D/ %Drift	Max %D/ %Drift	Curve Type	Qual
Vinyl chloride	0.70168	0.60218	0.60218	0.010	-14.18062	50.000	Averaged	
1,1-Dichloroethene	0.64410	0.63338	0.63338	0.100	-1.66448	50.000	Averaged	
trans-1,2-Dichloroethene	0.73249	0.62789	0.62789	0.010	-14.27984	50.000	Averaged	
cis-1,2-Dichloroethene	0.56034	0.50437	0.50437	0.010	-9.98761	50.000	Averaged	
Trichloroethene	0.43951	0.42991	0.42991	0.010	-2.18385	50.000	Averaged	
Tetrachloroethene	0.37272	0.35711	0.35711	0.010	-4.18586	50.000	Averaged	
Dibromofluoromethane	0.78094	0.63376	0.63376	0.010	-18.84629	50.000	Averaged	
1,2-Dichloroethane-D4	0.46094	0.36786	0.36786	0.010	-20.19277	50.000	Averaged	
Toluene-D8	0.90549	0.87366	0.87366	0.010	-3.51489	50.000	Averaged	
P-Bromofluorobenzene	0.33441	0.34060	0.34060	0.010	1.85149	50.000	Averaged	

*** = Compound out of QC criteria**

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Data File: \\target_server\gg\chem\gcms-d.i\D111823.b\D8925.d
Report Date: 12-Dec-2023 10:32

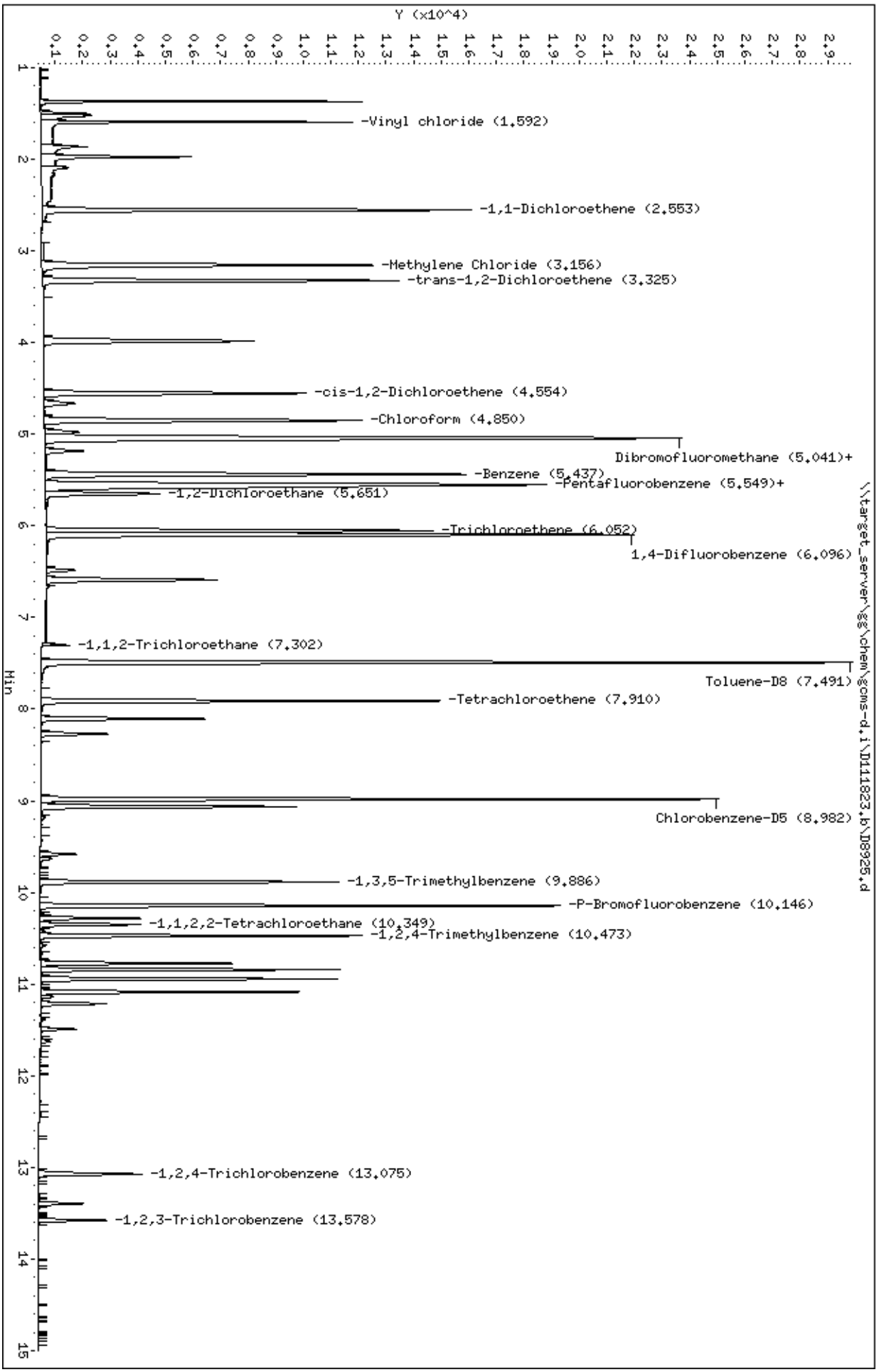
Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-d.i\D111823.b\D8925.d
Lab Smp Id: WG345748-5
Inj Date : 18-NOV-2023 20:43
Operator : JSS   Inst ID: gcms-d.i
Smp Info : WG345748-5,SQ6133
Misc Info : WG345748,WG345527-5,SQ6133-3
Comment   : SW846 5030C
Method   : \\target_server\gg\chem\gcms-d.i\D111823.b\DSIM(01)CR23.m
Meth Date : 12-Dec-2023 10:31 croy   Quant Type: ISTD
Cal Date : 16-NOV-2023 10:22   Cal File: D8863.d
Als bottle: 20   Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: Credere.sub
Target Version: 4.12

Concentration Formula: Amt * DF * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	25.000	sample purged
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)	REVIEW CODE
	1 Vinyl chloride	62	1.591	1.591	(0.287)	7025	0.50000	0.429	
	2 1,1-Dichloroethene	96	2.553	2.553	(0.460)	7389	0.50000	0.492	
	4 trans-1,2-Dichloroethene	96	3.323	3.323	(0.599)	7325	0.50000	0.429	
	5 cis-1,2-Dichloroethene	96	4.555	4.558	(0.821)	5884	0.50000	0.450	
	13 Trichloroethene	130	6.052	6.052	(0.993)	6957	0.50000	0.489	
	16 Tetrachloroethene	164	7.910	7.912	(1.298)	5779	0.50000	0.479	
$	7 Dibromofluoromethane	113	5.036	5.037	(0.908)	14787	1.00000	0.812	
$	11 1,2-Dichloroethane-D4	65	5.579	5.582	(1.006)	8583	1.00000	0.798	
$	15 Toluene-D8	98	7.490	7.491	(1.229)	28276	1.00000	0.965	
$	20 P-Bromofluorobenzene	95	10.144	10.146	(1.129)	9470	1.00000	1.02	
*	10 Pentafluorobenzene	168	5.547	5.549	(1.000)	23332	1.00000		
*	14 1,4-Difluorobenzene	114	6.095	6.096	(1.000)	32365	1.00000		
*	18 Chlorobenzene-D5	117	8.981	8.984	(1.000)	27804	1.00000		


Data File: \\target_server\gg\chem\gcms-d.i\D111823.b\D8925.d
Date : 18-NOV-2023 20:43
Client ID:
Sample Info: WG345748-5,SQ6133
Purge Volume: 25.0
Column phase: RTX-VMS
Instrument: gcms-d.i
Operator: JSS
Column diameter: 0.18
Y (x10^4)
Min
\\target_server\gg\chem\gcms-d.i\D111823.b\D8925.d
-Vinyl chloride (1.592)
-1,1-Dichloroethene (2.553)
-Methylene Chloride (3.156)
-trans-1,2-Dichloroethene (3.325)
-cis-1,2-Dichloroethene (4.554)
-Chloroform (4.850)
Dibromofluoromethane (5.041)+
-Benzene (5.437)
-Pentafluorobenzene (5.549)+
-1,2-Dichloroethane (5.651)
-Trichloroethene (6.052)
1,4-Difluorobenzene (6.096)
-1,1,2-Trichloroethane (7.302)
Toluene-D8 (7.491)
-Tetrachloroethene (7.910)
Chlorobenzene-D5 (8.982)
-1,3,5-Trimethylbenzene (9.886)
-P-Bromofluorobenzene (10.146)
-1,1,2,2-Tetrachloroethane (10.349)
-1,2,4-Trimethylbenzene (10.473)
-1,2,4-Trichlorobenzene (13.075)
-1,2,3-Trichlorobenzene (13.578)

Form 7
Calibration Verification Summary

Lab Name: Katahdin Analytical Services
SDG: SQ6133
Lab ID: WG345525-13
Analytical Date: 11/16/23 22:14
Lab File ID: S7220.D
Instrument ID: GCMS-S
Initial Calibration Date(s): 11/16/23 12:35 11/16/23 15:48
Column ID:

Compound	RRF/Amount	RF0.500	CCAL RRF0.500	Min RF	%D/ %Drift	Max %D/ %Drift	Curve Type	Qual
Vinyl chloride	1.46174	1.75512	1.75512	0.010	20.07076	50.000	Averaged	
1,1-Dichloroethene	1.14404	1.45251	1.45251	0.100	26.96394	50.000	Averaged	
trans-1,2-Dichloroethene	1.26081	1.49162	1.49162	0.010	18.30661	50.000	Averaged	
cis-1,2-Dichloroethene	0.97069	1.05028	1.05028	0.010	8.19967	50.000	Averaged	
Trichloroethene	0.57201	0.65817	0.65817	0.010	15.06307	50.000	Averaged	
Tetrachloroethene	0.51356	0.57057	0.57057	0.010	11.10116	50.000	Averaged	
Dibromofluoromethane	0.66972	0.80838	0.80838	0.010	20.70450	50.000	Averaged	
1,2-Dichloroethane-D4	0.60510	0.72812	0.72812	0.010	20.33106	50.000	Averaged	
Toluene-D8	1.05022	1.04463	1.04463	0.010	-0.53282	50.000	Averaged	
P-Bromofluorobenzene	0.42113	0.43288	0.43288	0.010	2.78875	50.000	Averaged	

*** = Compound out of QC criteria**

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Data File: \\target_server\gg\chem\gcms-s.i\S111623.b\S7220.D
Report Date: 12-Dec-2023 10:42

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-s.i\S111623.b\S7220.D
Lab Smp Id: WG345525-13
Inj Date : 16-NOV-2023 22:14
Operator : JSS   Inst ID: gcms-s.i
Smp Info : WG345525-13,SQ6133
Misc Info : WG345525,WG345525-5,SQ6133-2
Comment   : SW846 5030C
Method   : \\target_server\gg\chem\gcms-s.i\S111623.b\SSIM(01)CR23.m
Meth Date : 12-Dec-2023 10:34 croy   Quant Type: ISTD
Cal Date : 16-NOV-2023 15:48   Cal File: S7206.D
Als bottle: 22   Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: all.sub
Target Version: 4.12
Processing Host: T7-O360

Concentration Formula: Amt * DF * 25/Vo * CpndVariable

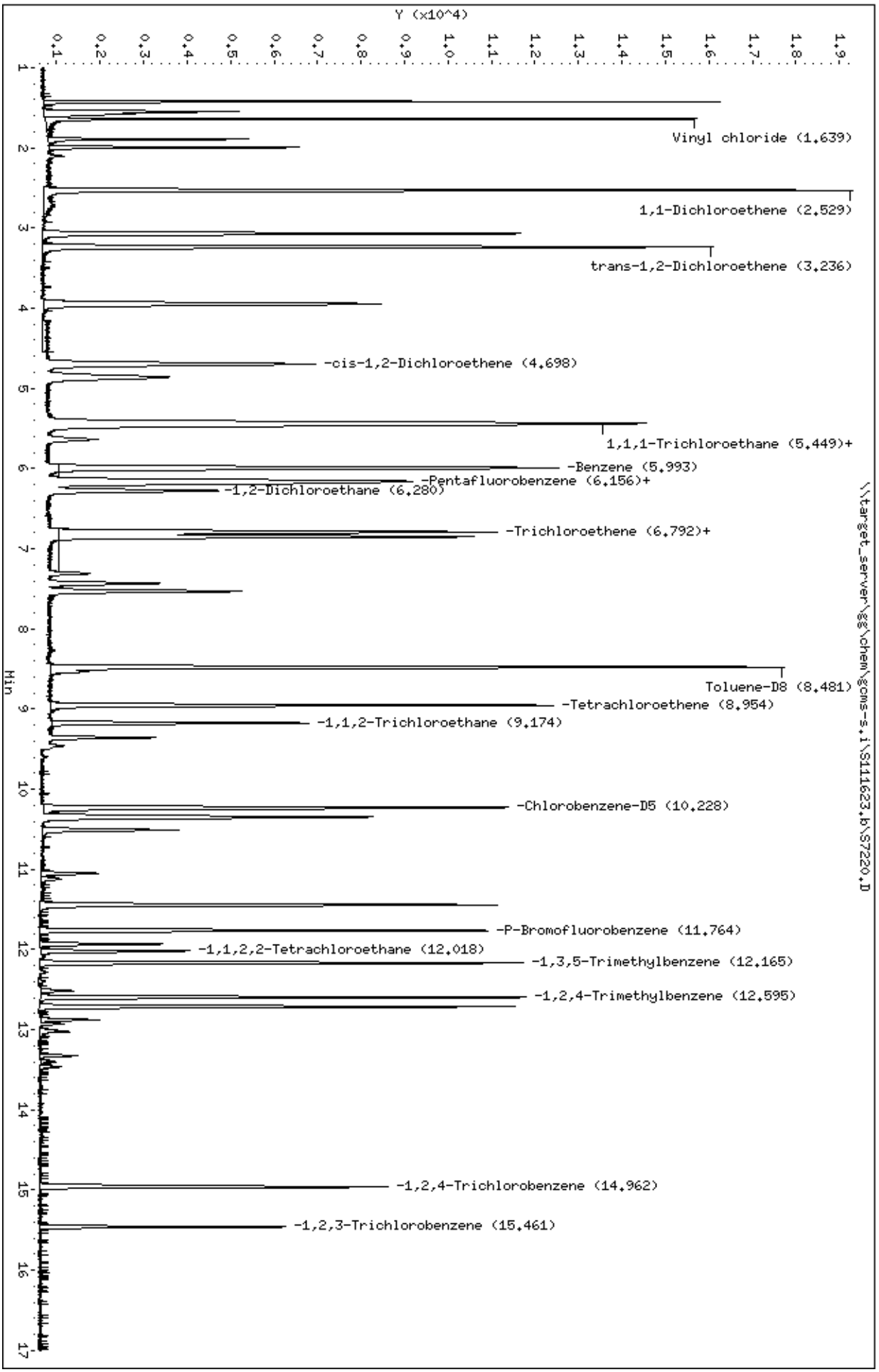
Name	Value	Description
DF	1.000	Dilution Factor
Vo	25.000	sample purged
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)	REVIEW CODE
	1 Vinyl chloride	62	1.640	1.640	(0.266)	9425	0.50000	0.600	
	2 1,1-Dichloroethene	96	2.529	2.532	(0.411)	7800	0.50000	0.635	
	3 trans-1,2-Dichloroethene	96	3.235	3.238	(0.526)	8010	0.50000	0.592	
	4 cis-1,2-Dichloroethene	96	4.697	4.702	(0.763)	5640	0.50000	0.541	
	6 1,1,1-Trichloroethane	97	5.449	5.454	(0.885)	13466	0.50000	0.622	
$	7 Dibromofluoromethane	113	5.430	5.440	(0.882)	8682	1.00000	1.21	
	8 Benzene	78	5.993	6.000	(0.974)	22567	0.50000	0.526	
*	9 Pentafluorobenzene	168	6.156	6.163	(1.000)	10740	1.00000		
$	10 1,2-Dichloroethane-D4	65	6.186	6.193	(1.005)	7820	1.00000	1.20	
	11 1,2-Dichloroethane	62	6.280	6.285	(0.917)	7435	0.50000	0.618	
	12 Trichloroethene	130	6.792	6.793	(0.992)	5575	0.50000	0.575	
*	13 1,4-Difluorobenzene	114	6.849	6.854	(1.000)	16941	1.00000		
$	14 Toluene-D8	98	8.480	8.482	(1.238)	17697	1.00000	0.995	
	15 Tetrachloroethene	164	8.951	8.957	(1.307)	4833	0.50000	0.556	
	16 1,1,2-Trichloroethane	83	9.175	9.181	(1.340)	2871	0.50000	0.630	
*	17 Chlorobenzene-D5	117	10.228	10.238	(1.000)	16164	1.00000		
$	18 P-Bromofluorobenzene	95	11.760	11.768	(1.150)	6997	1.00000	1.03	
	19 1,1,2,2-Tetrachloroethane	83	12.018	12.027	(1.175)	3124	0.50000	0.544	
	20 1,3,5-Trimethylbenzene	105	12.165	12.172	(1.189)	12470	0.50000	(a)	
	21 1,2,4-Trimethylbenzene	105	12.595	12.600	(1.231)	12708	0.50000	(a)	
	22 1,2,4-Trichlorobenzene	180	14.964	14.968	(1.463)	4438	0.50000	0.532	
	23 1,2,3-Trichlorobenzene	180	15.461	15.465	(1.512)	3468	0.50000	0.536	

Data File: \\target_server\gg\chem\gcms-s.i\S111623.b\S7220.D
Report Date: 12-Dec-2023 10:42

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).


Data File: \\target_server\gg\chem\gcms-s.i\S111623.b\S7220.D
Date : 16-NOV-2023 22:14
Client ID:
Sample Info: WG345525-13,SQ6133
Purge Volume: 25.0
Column phase: RTX-VMS
Instrument: gcms-s.i
Operator: JSS
Column diameter: 0.18
Y (x10^4)
Min
\\target_server\gg\chem\gcms-s.i\S111623.b\S7220.D
Vinyl chloride (1.639)
1,1-Dichloroethene (2.529)
trans-1,2-Dichloroethene (3.236)
-cis-1,2-Dichloroethene (4.698)
1,1,1-Trichloroethane (5.449)+
-Benzene (5.993)
-Pentafluorobenzene (6.156)+
-1,2-Dichloroethane (6.280)
-Trichloroethene (6.792)+
Toluene-D8 (8.481)
-Tetrachloroethene (8.954)
-1,1,2-Trichloroethane (9.174)
-Chlorobenzene-D5 (10.228)
-P-Bromofluorobenzene (11.764)
-1,1,2,2-Tetrachloroethane (12.018)
-1,3,5-Trimethylbenzene (12.165)
-1,2,4-Trimethylbenzene (12.595)
-1,2,4-Trichlorobenzene (14.962)
-1,2,3-Trichlorobenzene (15.461)

Form 7
Calibration Verification Summary

Lab Name: Katahdin Analytical Services
SDG: SQ6133
Lab ID: WG345597-4
Analytical Date: 11/17/23 09:43
Lab File ID: S7225.D
Instrument ID: GCMS-S
Initial Calibration Date(s): 11/16/23 12:35 11/16/23 15:48
Column ID:

Compound	RRF/Amount	RF0.500	CCAL RRF0.500	Min RF	%D/ %Drift	Max %D/ %Drift	Curve Type	Qual
Vinyl chloride	1.46174	1.40516	1.40516	0.010	-3.87066	20.000	Averaged	
1,1-Dichloroethene	1.14404	1.10850	1.10850	0.100	-3.10653	20.000	Averaged	
trans-1,2-Dichloroethene	1.26081	1.15941	1.15941	0.010	-8.04249	20.000	Averaged	
cis-1,2-Dichloroethene	0.97069	0.83179	0.83179	0.010	-14.30956	20.000	Averaged	
Trichloroethene	0.57201	0.55187	0.55187	0.010	-3.51976	20.000	Averaged	
Tetrachloroethene	0.51356	0.51818	0.51818	0.010	0.90069	20.000	Averaged	
Dibromofluoromethane	0.66972	0.60585	0.60585	0.010	-9.53687	20.000	Averaged	
1,2-Dichloroethane-D4	0.60510	0.54241	0.54241	0.010	-10.35897	20.000	Averaged	
Toluene-D8	1.05022	1.00501	1.00501	0.010	-4.30451	20.000	Averaged	
P-Bromofluorobenzene	0.42113	0.40660	0.40660	0.010	-3.44988	20.000	Averaged	

*** = Compound out of QC criteria**

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Data File: \\target_server\gg\chem\gcms-s.i\S111723.b\S7225.D
Report Date: 12-Dec-2023 10:52

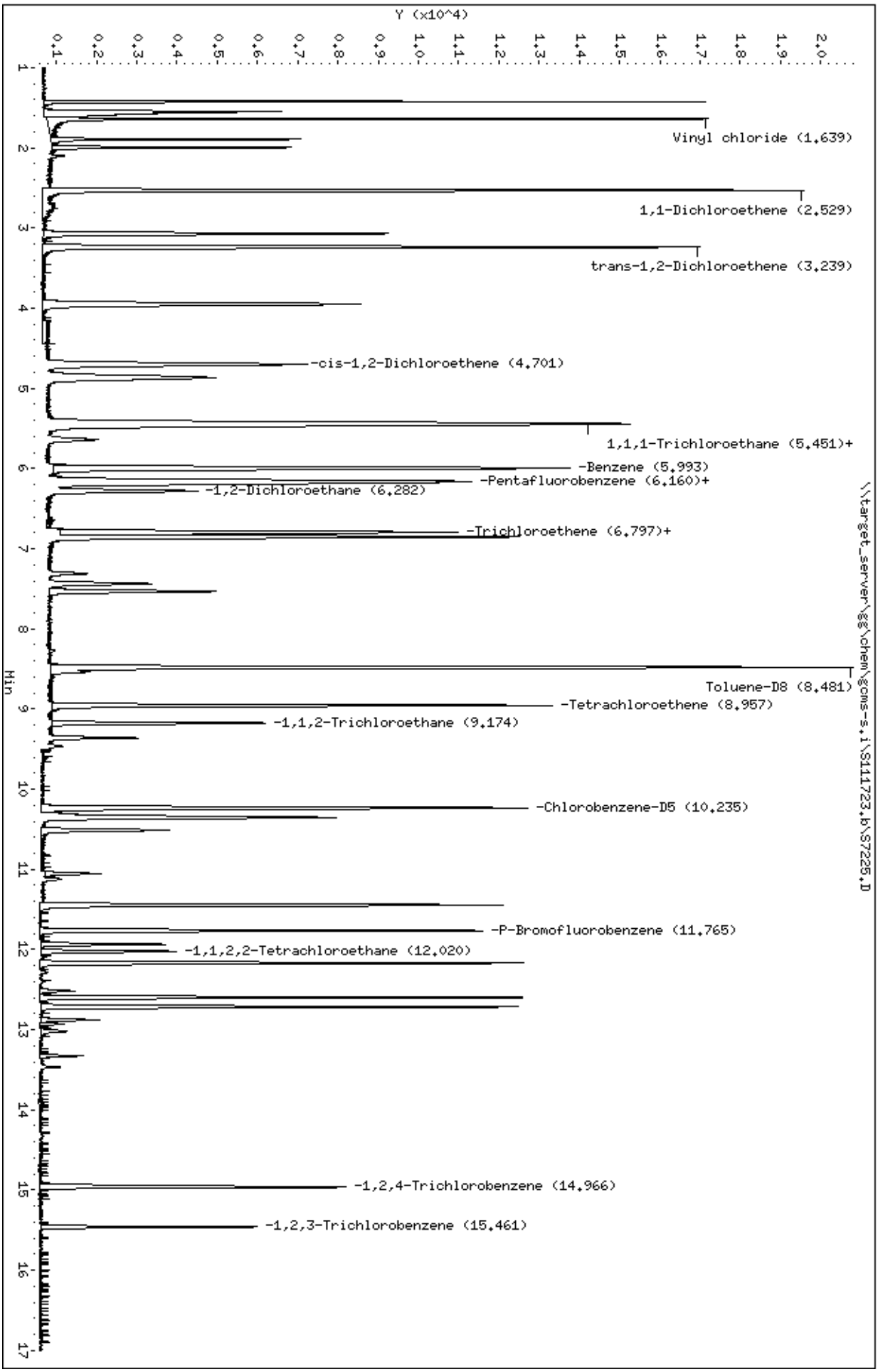
Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-s.i\S111723.b\S7225.D
Lab Smp Id: WG345597-4
Inj Date : 17-NOV-2023 09:43
Operator : JSS   Inst ID: gcms-s.i
Smp Info : WG345597-4,SQ6133
Misc Info : WG345597,WG345525-5,SQ6133-8
Comment   : SW846 5030C
Method   : \\target_server\gg\chem\gcms-s.i\S111723.b\SSIM(01)CR23.m
Meth Date : 08-Dec-2023 14:53 croy   Quant Type: ISTD
Cal Date : 16-NOV-2023 15:48   Cal File: S7206.D
Als bottle: 1   Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: all.sub
Target Version: 4.12
Processing Host: T7-O360

Concentration Formula: Amt * DF * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	25.000	sample purged
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)	REVIEW CODE
	1 Vinyl chloride	62	1.638	1.640	(0.266)	10212	0.50000	0.481	
	2 1,1-Dichloroethene	96	2.531	2.532	(0.411)	8056	0.50000	0.484	
	3 trans-1,2-Dichloroethene	96	3.238	3.238	(0.526)	8426	0.50000	0.460	
	4 cis-1,2-Dichloroethene	96	4.701	4.703	(0.763)	6045	0.50000	0.428	
	6 1,1,1-Trichloroethane	97	5.450	5.454	(0.885)	14015	0.50000	0.478	
$	7 Dibromofluoromethane	113	5.435	5.441	(0.882)	8806	1.00000	0.905	
	8 Benzene	78	5.993	6.000	(0.973)	24294	0.50000	0.418	
*	9 Pentafluorobenzene	168	6.159	6.163	(1.000)	14535	1.00000		
$	10 1,2-Dichloroethane-D4	65	6.188	6.194	(1.005)	7884	1.00000	0.896	
	11 1,2-Dichloroethane	62	6.281	6.285	(0.917)	7071	0.50000	0.485	
	12 Trichloroethene	130	6.795	6.794	(0.992)	5668	0.50000	0.482	
*	13 1,4-Difluorobenzene	114	6.852	6.855	(1.000)	20541	1.00000		
$	14 Toluene-D8	98	8.480	8.483	(1.238)	20644	1.00000	0.957	
	15 Tetrachloroethene	164	8.953	8.957	(1.307)	5322	0.50000	0.504	
	16 1,1,2-Trichloroethane	83	9.173	9.181	(1.339)	2557	0.50000	0.462	
*	17 Chlorobenzene-D5	117	10.234	10.238	(1.000)	17720	1.00000		
$	18 P-Bromofluorobenzene	95	11.763	11.768	(1.149)	7205	1.00000	0.966	
	19 1,1,2,2-Tetrachloroethane	83	12.019	12.027	(1.174)	3164	0.50000	0.503	
	22 1,2,4-Trichlorobenzene	180	14.965	14.968	(1.462)	4356	0.50000	0.476	
	23 1,2,3-Trichlorobenzene	180	15.461	15.465	(1.511)	3249	0.50000	0.458	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Date : 17-NOV-2023 09:43
Client ID:
Sample Info: WG345597-4,SQ6133
Purge Volume: 25.0
Column phase: RTX-VMS
Instrument: gcms-s,i
Operator: JSS
Column diameter: 0.18
Y (x10^4)
Min
\\target_server\gg\chem\gcms-s,i\S111723,b\S7225.D
Vinyl chloride (1.639)
1,1-Dichloroethene (2.529)
trans-1,2-Dichloroethene (3.239)
-cis-1,2-Dichloroethene (4.701)
1,1,1-Trichloroethane (5.451)+
-Benzene (5.993)
-Pentafluorobenzene (6.160)+
-1,2-Dichloroethane (6.282)
-Trichloroethene (6.797)+
Toluene-D8 (8.481)
-Tetrachloroethene (8.957)
-1,1,2-Trichloroethane (9.174)
-Chlorobenzene-D5 (10.235)
-P-Bromofluorobenzene (11.765)
-1,1,2,2-Tetrachloroethane (12.020)
-1,2,4-Trichlorobenzene (14.966)
-1,2,3-Trichlorobenzene (15.461)

Form 7
Calibration Verification Summary

Lab Name: Katahdin Analytical Services
SDG: SQ6133
Lab ID: WG345597-5
Analytical Date: 11/17/23 20:55
Lab File ID: S7249.D
Instrument ID: GCMS-S
Initial Calibration Date(s): 11/16/23 12:35 11/16/23 15:48
Column ID:

Compound	RRF/Amount	RF0.500	CCAL RRF0.500	Min RF	%D/ %Drift	Max %D/ %Drift	Curve Type	Qual
Vinyl chloride	1.46174	1.46700	1.46700	0.010	0.36830	50.000	Averaged	
1,1-Dichloroethene	1.14404	1.24418	1.24418	0.100	8.75316	50.000	Averaged	
trans-1,2-Dichloroethene	1.26081	1.27773	1.27773	0.010	1.34203	50.000	Averaged	
cis-1,2-Dichloroethene	0.97069	0.96060	0.96060	0.010	-1.03471	50.000	Averaged	
Trichloroethene	0.57201	0.59890	0.59890	0.010	4.70580	50.000	Averaged	
Tetrachloroethene	0.51356	0.53982	0.53982	0.010	5.11376	50.000	Averaged	
Dibromofluoromethane	0.66972	0.71030	0.71030	0.010	6.05428	50.000	Averaged	
1,2-Dichloroethane-D4	0.60510	0.64750	0.64750	0.010	6.99972	50.000	Averaged	
Toluene-D8	1.05022	1.04800	1.04800	0.010	-0.24125	50.000	Averaged	
P-Bromofluorobenzene	0.42113	0.42301	0.42301	0.010	0.44619	50.000	Averaged	

*** = Compound out of QC criteria**

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Data File: \\target_server\gg\chem\gcms-s.i\S111723.b\S7249.D
Report Date: 12-Dec-2023 10:54

Katahdin Analytical Services

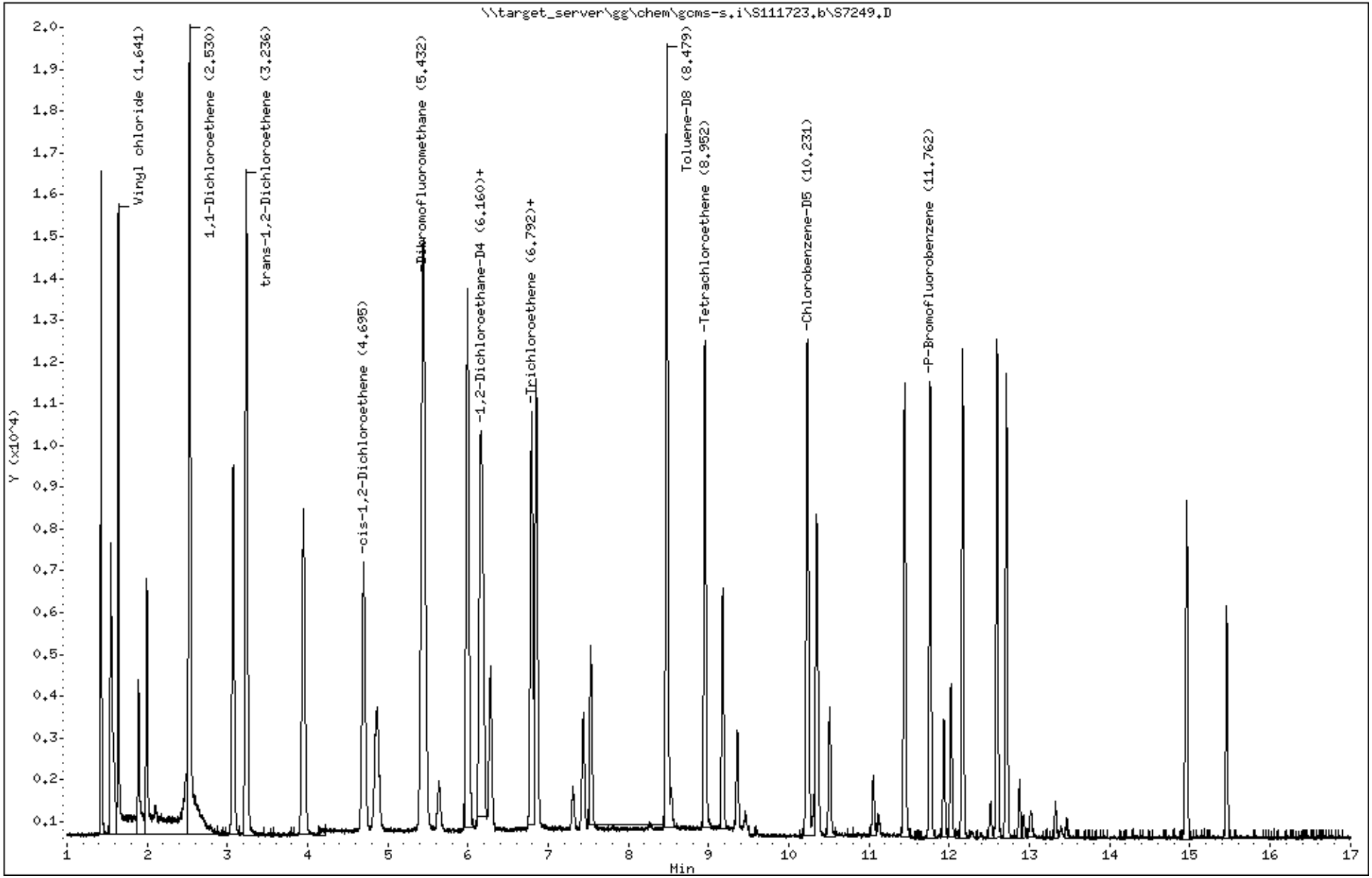
Data file : \\target_server\gg\chem\gcms-s.i\S111723.b\S7249.D
Lab Smp Id: WG345597-5
Inj Date : 17-NOV-2023 20:55
Operator : JSS   Inst ID: gcms-s.i
Smp Info : WG345597-5,SQ6133
Misc Info : WG345597,WG345525-5,SQ6133-8
Comment   : SW846 5030C
Method   : \\target_server\gg\chem\gcms-s.i\S111723.b\SSIM(01)CR23.m
Meth Date : 12-Dec-2023 10:54 croy   Quant Type: ISTD
Cal Date : 16-NOV-2023 15:48   Cal File: S7206.D
Als bottle: 25   Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: credere.sub
Target Version: 4.12
Processing Host: ORGANICS2

Concentration Formula: Amt * DF * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	25.000	sample purged
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)	REVIEW CODE
	1 Vinyl chloride	62	1.640	1.640	(0.266)	9226	0.50000	0.502	
	2 1,1-Dichloroethene	96	2.529	2.532	(0.411)	7824	0.50000	0.544	
	4 cis-1,2-Dichloroethene	96	4.694	4.703	(0.763)	6041	0.50000	0.495	
	3 trans-1,2-Dichloroethene	96	3.235	3.238	(0.526)	8035	0.50000	0.507	
	12 Trichloroethene	130	6.793	6.794	(0.992)	5614	0.50000	0.524	
	15 Tetrachloroethene	164	8.951	8.957	(1.307)	5060	0.50000	0.526	
$	7 Dibromofluoromethane	113	5.432	5.441	(0.882)	8933	1.00000	1.06	
$	10 1,2-Dichloroethane-D4	65	6.186	6.194	(1.005)	8143	1.00000	1.07	
$	14 Toluene-D8	98	8.479	8.483	(1.238)	19641	1.00000	0.998	
$	18 P-Bromofluorobenzene	95	11.763	11.768	(1.150)	7563	1.00000	1.00	
*	9 Pentafluorobenzene	168	6.156	6.163	(1.000)	12577	1.00000		
*	13 1,4-Difluorobenzene	114	6.851	6.855	(1.000)	18747	1.00000		
*	17 Chlorobenzene-D5	117	10.231	10.238	(1.000)	17879	1.00000		

Data File: \\target_server\gg\chem\gcms-s.i\S111723.b\S7249.D
Date : 17-NOV-2023 20:55
Client ID:
Instrument: gcms-s.i
Sample Info: WG345597-5,SQ6133
Purge Volume: 25.0
Operator: JSS
Column phase: RTX-VMS
Column diameter: 0.18



Katahdin Analytical Services SQ6133 Page 194 of 855

Data File: \\target_server\gg\chem\gcms-d.i\D111623.b\DB230a.d

Date : 16-NOV-2023 06:37

Client ID:

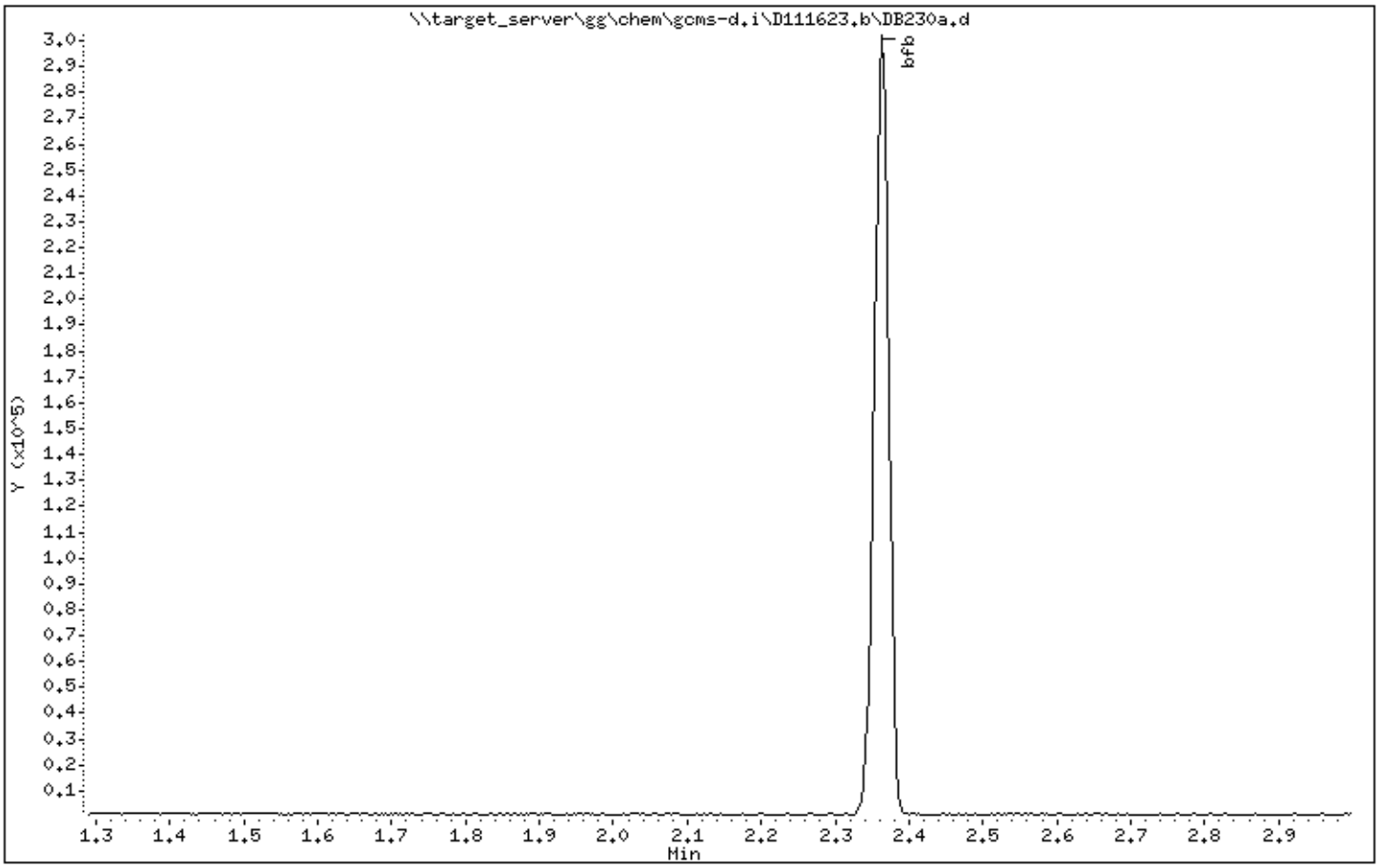
Instrument: gcms-d.i

Sample Info: WG345527-12,SQ6112

Operator: JSS

Column phase: RTX-VMS

Column diameter: 0.18



Data File: \\target_server\gg\chem\gcms-d.i\D111623.b\DB230a.d

Date : 16-NOV-2023 06:37

Client ID:

Instrument: gcms-d.i

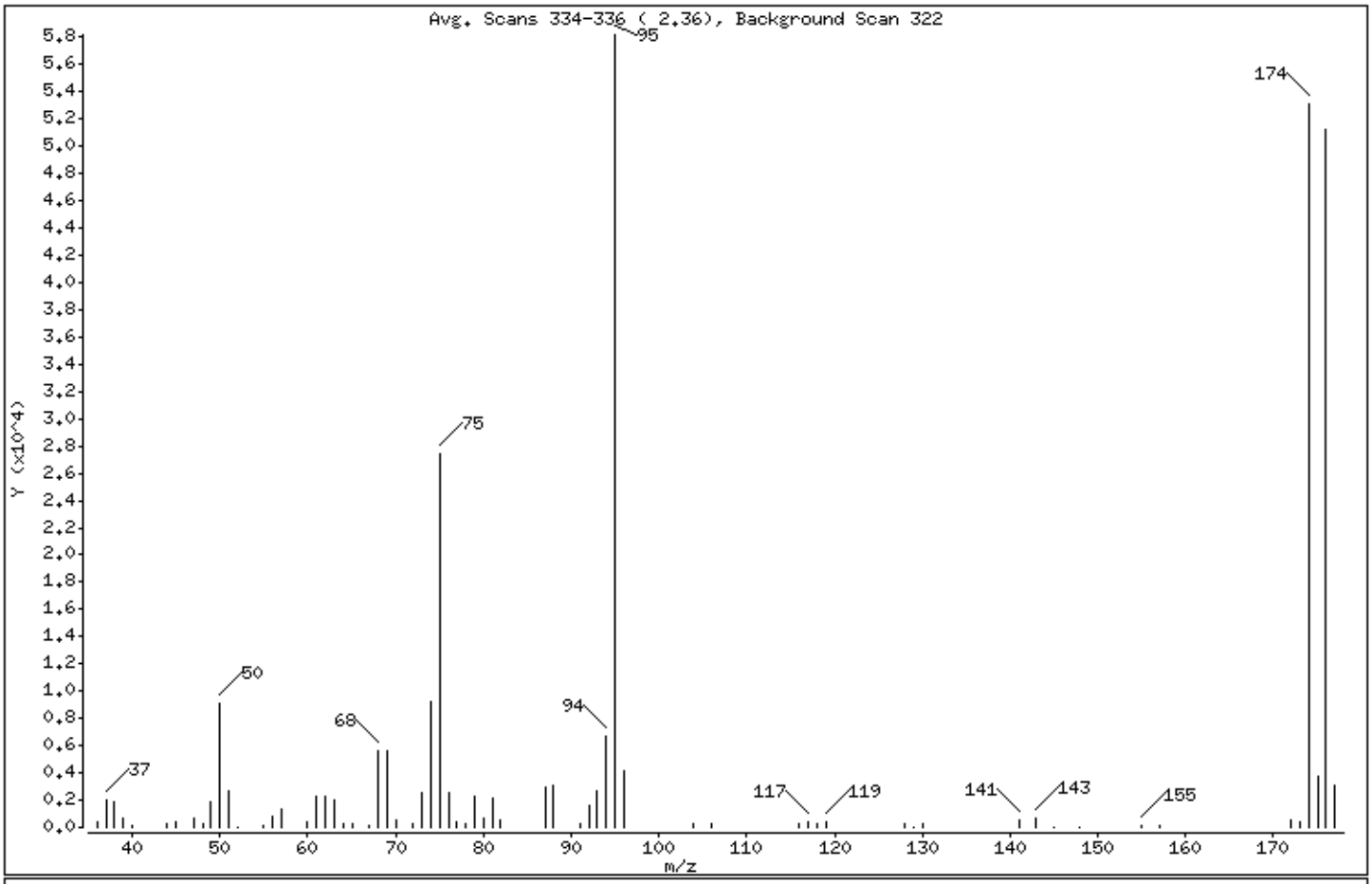
Sample Info: WG345527-12,SQ6112

Operator: JSS

Column phase: RTX-VMS

Column diameter: 0.18

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	15.56
75	30.00 - 60.00% of mass 95	47.16
96	5.00 - 9.00% of mass 95	7.03
173	Less than 2.00% of mass 174	0.72 (0.79)
174	Greater than 50.00% of mass 95	91.34
175	5.00 - 9.00% of mass 174	6.53 (7.14)
176	95.00 - 101.00% of mass 174	88.11 (96.46)
177	5.00 - 9.00% of mass 176	5.36 (6.08)

Data File: \\target_server\gg\chem\gcms-d.i\D111623.b\DB230a.d

Date : 16-NOV-2023 06:37

Client ID:

Instrument: gcms-d.i

Sample Info: WG345527-12,SQ6112

Operator: JSS

Column phase: RTX-VMS

Column diameter: 0.18

Data File: DB230a.d
Spectrum: Avg. Scans 334-336 (2.36), Background Scan 322
Location of Maximum: 95.00
Number of points: 66

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36.00	353	61.00	2340	80.00	713	128.00	221
37.00	1952	62.00	2331	81.00	2181	129.00	50
38.00	1881	63.00	2021	82.00	579	130.00	236
39.00	656	64.00	228	87.00	2900	141.00	567
40.00	113	65.00	316	88.00	3031	143.00	698
44.00	267	67.00	112	91.00	217	145.00	55
45.00	366	68.00	5605	92.00	1620	148.00	50
47.00	642	69.00	5582	93.00	2618	155.00	125
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49.00	1850	72.00	282	95.00	58184	172.00	571
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51.00	2728	74.00	9284	104.00	319	174.00	53144
52.00	50	75.00	27440	106.00	256	175.00	3797
55.00	82	76.00	2479	116.00	235	176.00	51264
56.00	742	77.00	395	117.00	438	177.00	3117
57.00	1346	78.00	290	118.00	249		
60.00	370	79.00	2269	119.00	376		

Data File: \\target_server\gg\chem\gcms-d.i\D111723.b\DB231a.d

Date : 17-NOV-2023 07:54

Client ID:

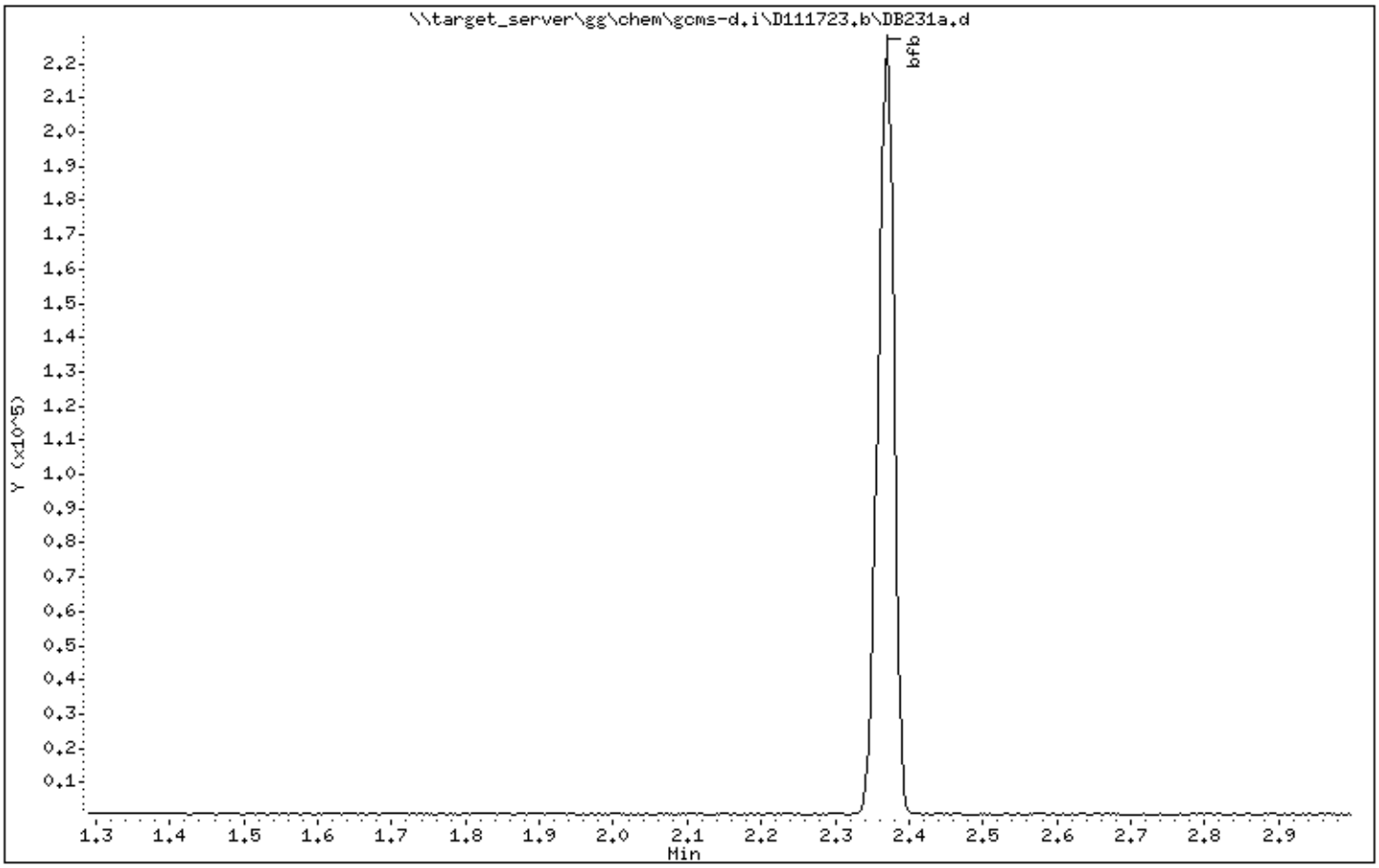
Instrument: gcms-d.i

Sample Info: WG345599-3,SQ6133

Operator: JSS

Column phase: RTX-VMS

Column diameter: 0.18



Data File: \\target_server\gg\chem\gcms-d.i\D111723.b\DB231a.d

Date : 17-NOV-2023 07:54

Client ID:

Instrument: gcms-d.i

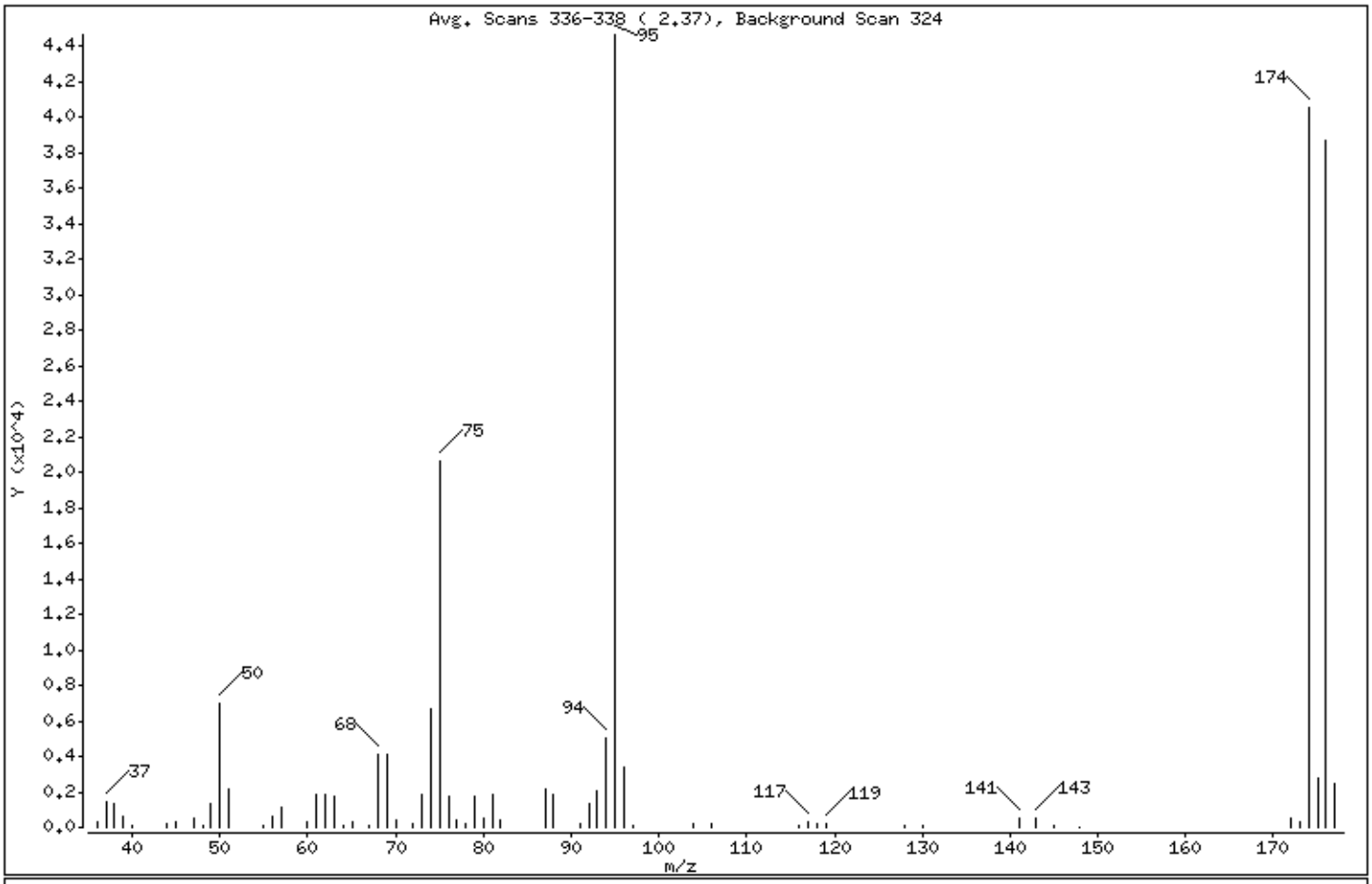
Sample Info: WG345599-3,SQ6133

Operator: JSS

Column phase: RTX-VMS

Column diameter: 0.18

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	15.53
75	30.00 - 60.00% of mass 95	46.13
96	5.00 - 9.00% of mass 95	7.62
173	Less than 2.00% of mass 174	0.65 (0.71)
174	Greater than 50.00% of mass 95	90.70
175	5.00 - 9.00% of mass 174	6.26 (6.90)
176	95.00 - 101.00% of mass 174	86.64 (95.52)
177	5.00 - 9.00% of mass 176	5.50 (6.35)

Date : 17-NOV-2023 07:54

Client ID:

Instrument: gcms-d.i

Sample Info: WG345599-3,SQ6133

Operator: JSS

Column phase: RTX-VMS

Column diameter: 0.18

Data File: DB231a.d
Spectrum: Avg. Scans 336-338 (2.37), Background Scan 324
Location of Maximum: 95.00
Number of points: 63

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	335	61.00	1891	79.00	1715	117.00	329
37.00	1453	62.00	1846	80.00	484	118.00	213
38.00	1308	63.00	1713	81.00	1880	119.00	217
39.00	597	64.00	147	82.00	433	128.00	104
40.00	67	65.00	289	87.00	2183	130.00	144
44.00	227	67.00	63	88.00	1831	141.00	512
45.00	293	68.00	4155	91.00	201	143.00	556
47.00	555	69.00	4154	92.00	1327	145.00	75
48.00	135	70.00	449	93.00	2053	148.00	51
49.00	1359	72.00	214	94.00	5012	172.00	502
50.00	6934	73.00	1822	95.00	44656	173.00	289
51.00	2109	74.00	6633	96.00	3405	174.00	40504
55.00	104	75.00	20600	97.00	52	175.00	2794
56.00	637	76.00	1774	104.00	253	176.00	38688
57.00	1157	77.00	404	106.00	233	177.00	2456
60.00	316	78.00	159	116.00	136		

Data File: \\target_server\gg\chem\gcms-d.i\D111823.b\DB232a.d

Date : 18-NOV-2023 09:43

Client ID:

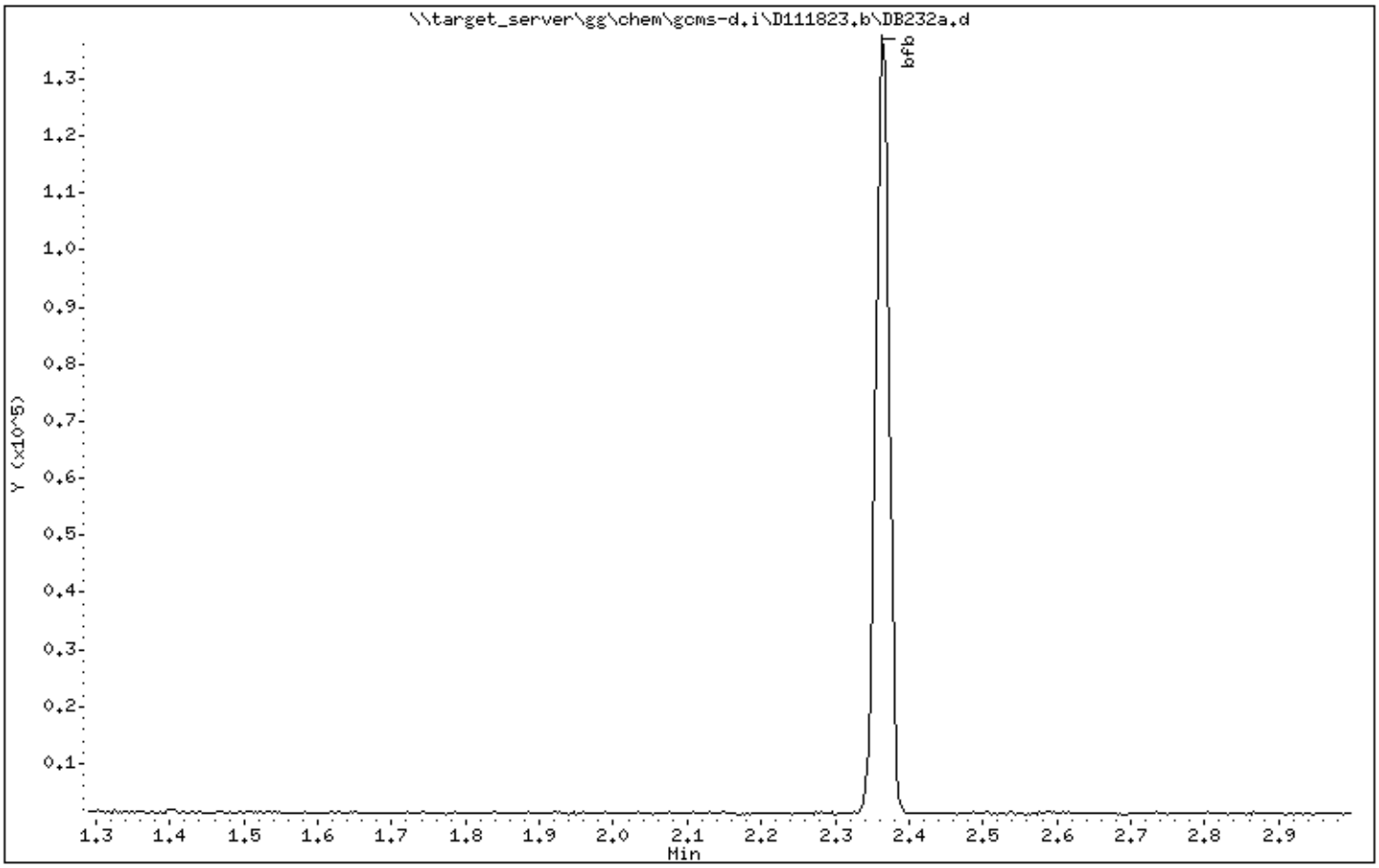
Instrument: gcms-d.i

Sample Info: WG345748-3,SQ6133

Operator: JSS

Column phase: RTX-VMS

Column diameter: 0.18



Data File: \\target_server\gg\chem\gcms-d.i\D111823.b\DB232a.d

Date : 18-NOV-2023 09:43

Client ID:

Instrument: gcms-d.i

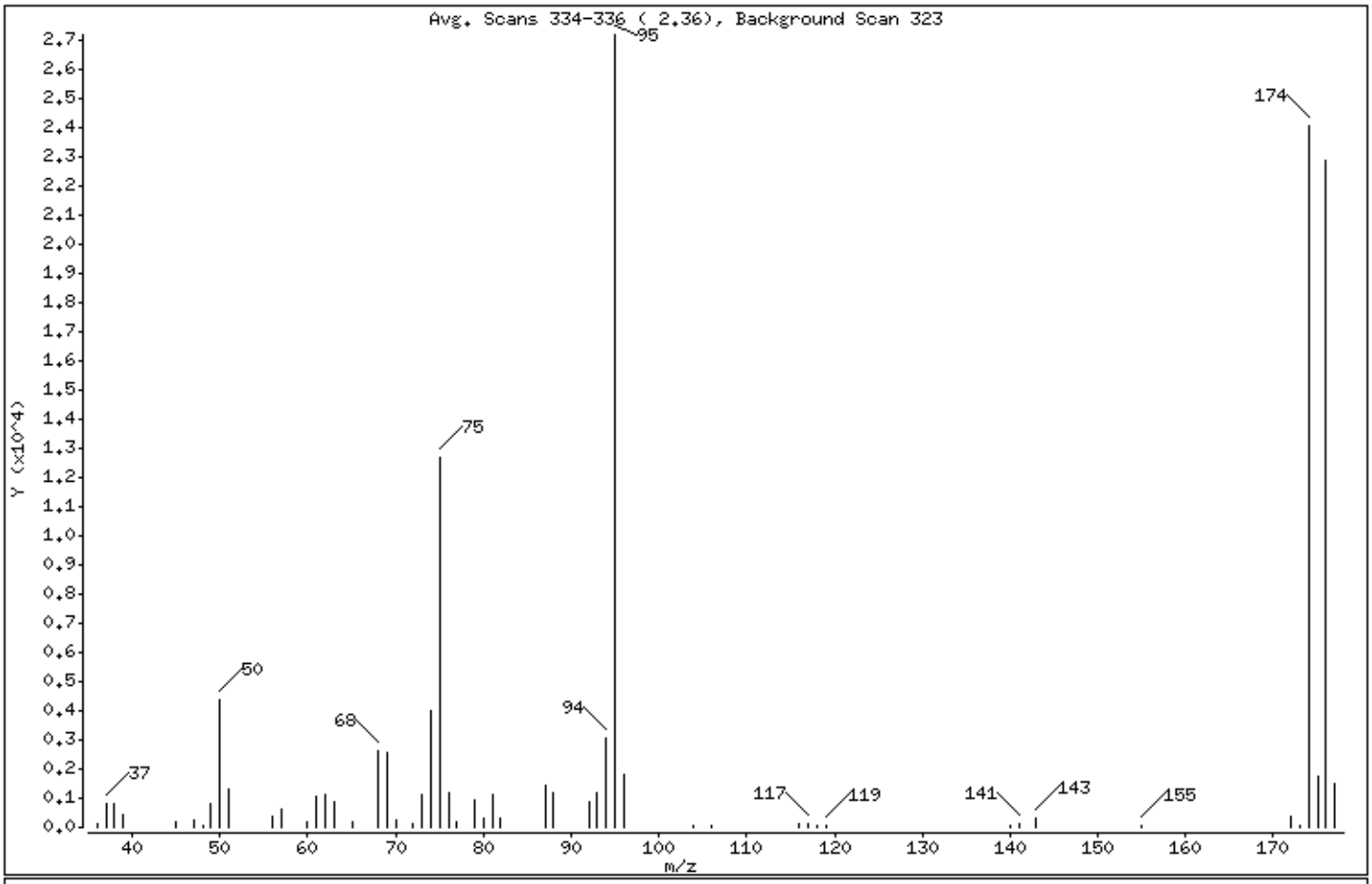
Sample Info: WG345748-3,SQ6133

Operator: JSS

Column phase: RTX-VMS

Column diameter: 0.18

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	16.01
75	30.00 - 60.00% of mass 95	46.68
96	5.00 - 9.00% of mass 95	6.77
173	Less than 2.00% of mass 174	0.19 (0.22)
174	Greater than 50.00% of mass 95	88.53
175	5.00 - 9.00% of mass 174	6.47 (7.30)
176	95.00 - 101.00% of mass 174	84.15 (95.05)
177	5.00 - 9.00% of mass 176	5.59 (6.64)

Data File: \\target_server\gg\chem\gcms-d.i\D111823.b\DB232a.d

Date : 18-NOV-2023 09:43

Client ID:

Instrument: gcms-d.i

Sample Info: WG345748-3,SQ6133

Operator: JSS

Column phase: RTX-VMS

Column diameter: 0.18

Data File: DB232a.d
Spectrum: Avg. Scans 334-336 (2.36), Background Scan 323
Location of Maximum: 95.00
Number of points: 53

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	123	62.00	1148	81.00	1105	119.00	55
37.00	820	63.00	872	82.00	287	140.00	63
38.00	802	65.00	183	87.00	1418	141.00	131
39.00	454	68.00	2632	88.00	1207	143.00	289
45.00	187	69.00	2571	92.00	845	155.00	56
47.00	247	70.00	268	93.00	1217	172.00	370
48.00	57	72.00	120	94.00	3072	173.00	52
49.00	825	73.00	1096	95.00	27208	174.00	24088
50.00	4355	74.00	3991	96.00	1842	175.00	1759
51.00	1333	75.00	12700	104.00	58	176.00	22896
56.00	381	76.00	1162	106.00	59	177.00	1521
57.00	639	77.00	168	116.00	114		
60.00	185	79.00	940	117.00	116		
61.00	1091	80.00	312	118.00	62		

Data File: \\target_server\gg\chem\gcms-s.i\S111623.b\SB923a.D

Date : 16-NOV-2023 12:12

Client ID:

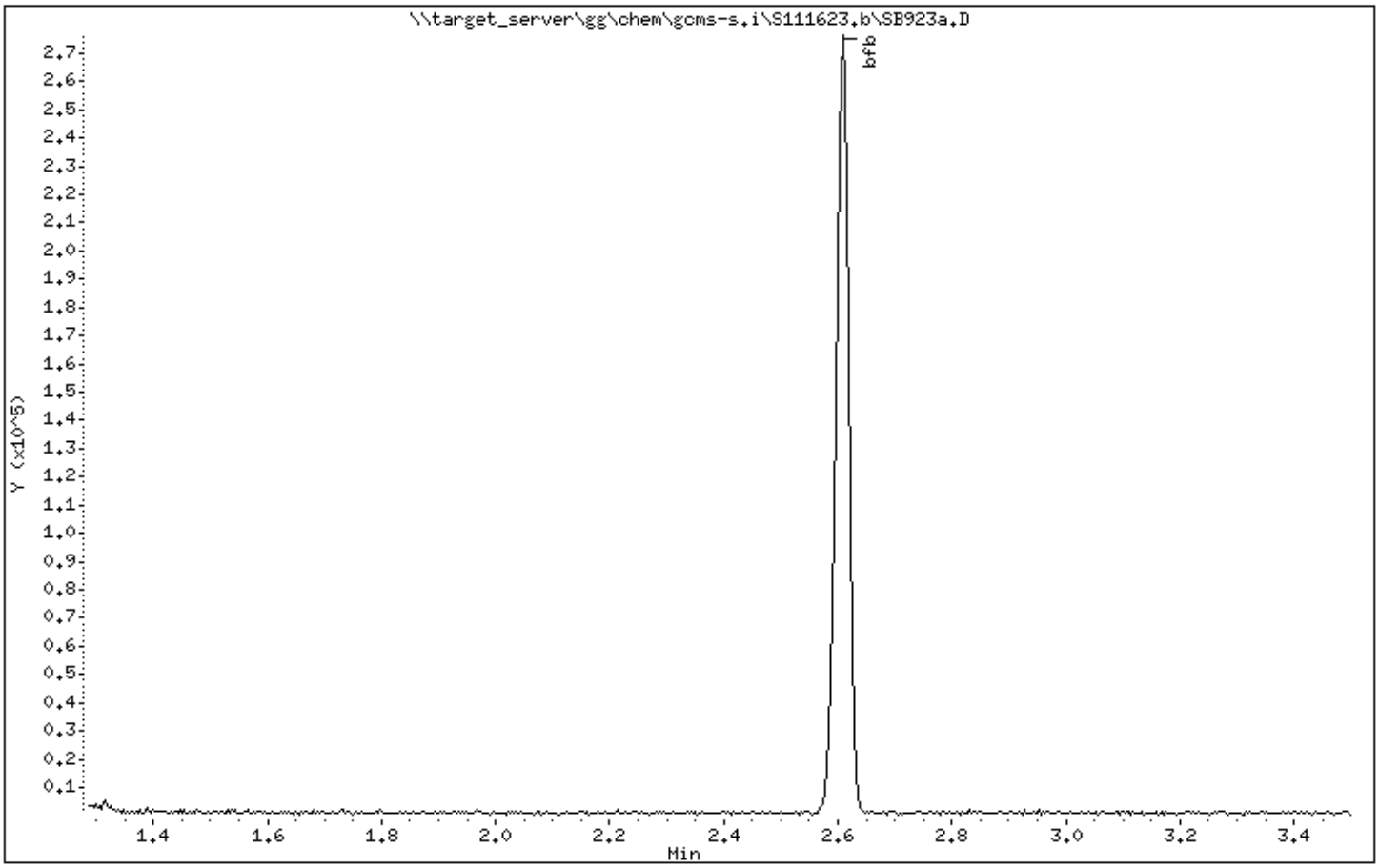
Instrument: gcms-s.i

Sample Info: WG345525-12,SQ6133

Operator: JSS

Column phase: RTX-VMS

Column diameter: 0.18



Data File: \\target_server\gg\chem\gcms-s.i\S111623.b\SB923a.D

Date : 16-NOV-2023 12:12

Client ID:

Instrument: gcms-s.i

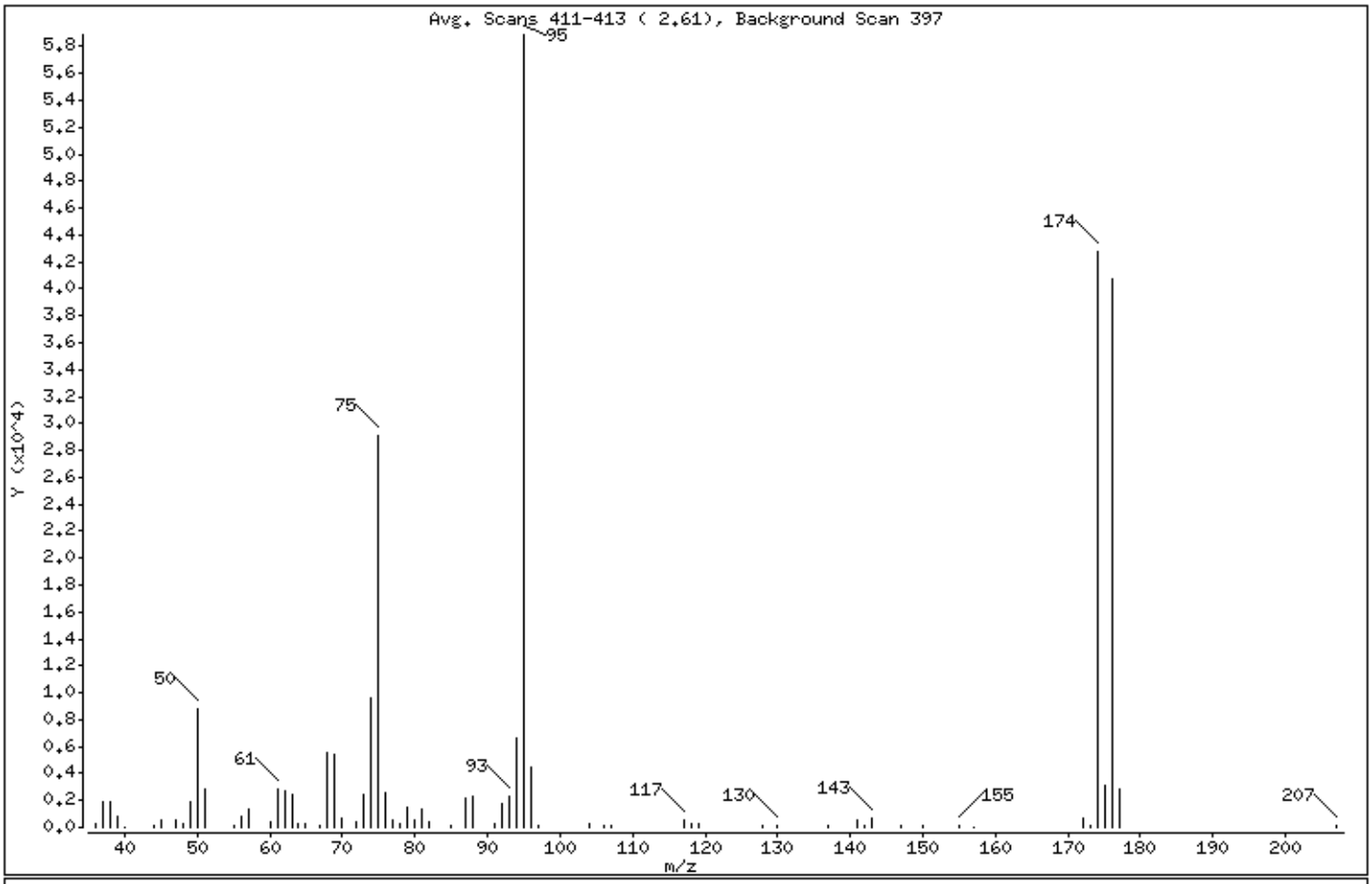
Sample Info: WG345525-12,SQ6133

Operator: JSS

Column phase: RTX-VMS

Column diameter: 0.18

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	15.02
75	30.00 - 60.00% of mass 95	49.37
96	5.00 - 9.00% of mass 95	7.63
173	Less than 2.00% of mass 174	0.34 (0.47)
174	Greater than 50.00% of mass 95	72.55
175	5.00 - 9.00% of mass 174	5.21 (7.18)
176	95.00 - 101.00% of mass 174	69.16 (95.34)
177	5.00 - 9.00% of mass 176	4.80 (6.94)

Date : 16-NOV-2023 12:12

Client ID: Instrument: gcms-s.i

Sample Info: WG345525-12,SQ6133

Operator: JSS

Column phase: RTX-VMS Column diameter: 0.18

Data File: SB923a.D
Spectrum: Avg. Scans 411-413 (2.61), Background Scan 397
Location of Maximum: 95.00
Number of points: 69

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	257	63.00	2457	85.00	105	137.00	72
37.00	1829	64.00	256	87.00	2162	141.00	534
38.00	1842	65.00	301	88.00	2295	142.00	68
39.00	785	67.00	179	91.00	317	143.00	635
40.00	60	68.00	5606	92.00	1796	147.00	159
44.00	126	69.00	5442	93.00	2331	150.00	69
45.00	519	70.00	699	94.00	6656	155.00	75
47.00	593	72.00	385	95.00	58864	157.00	66
48.00	287	73.00	2401	96.00	4489	172.00	673
49.00	1867	74.00	9549	97.00	116	173.00	199
50.00	8840	75.00	29064	104.00	279	174.00	42704
51.00	2805	76.00	2525	106.00	194	175.00	3067
55.00	85	77.00	578	107.00	155	176.00	40712
56.00	752	78.00	223	117.00	571	177.00	2826
57.00	1311	79.00	1455	118.00	307	207.00	98
60.00	426	80.00	583	119.00	315		
61.00	2818	81.00	1309	128.00	93		
62.00	2729	82.00	340	130.00	176		

Data File: \\target_server\gg\chem\gcms-s.i\S111723.b\SB923b.D

Date : 17-NOV-2023 09:10

Client ID:

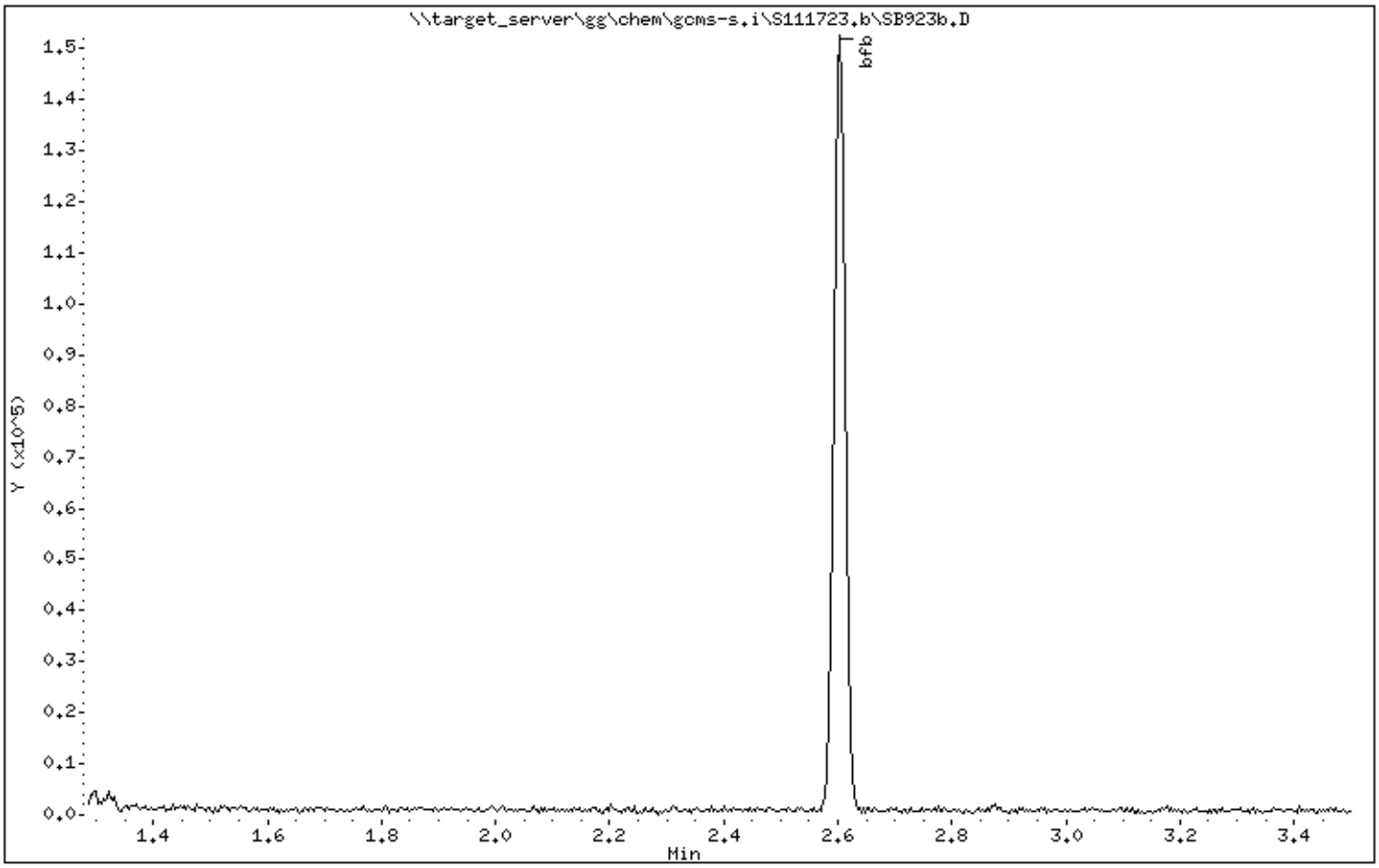
Instrument: gcms-s.i

Sample Info: WG345597-3,SQ6179

Operator: JSS

Column phase: RTX-VMS

Column diameter: 0.18



Data File: \\target_server\gg\chem\gcms-s.i\S111723.b\SB923b.D

Date : 17-NOV-2023 09:10

Client ID:

Instrument: gcms-s.i

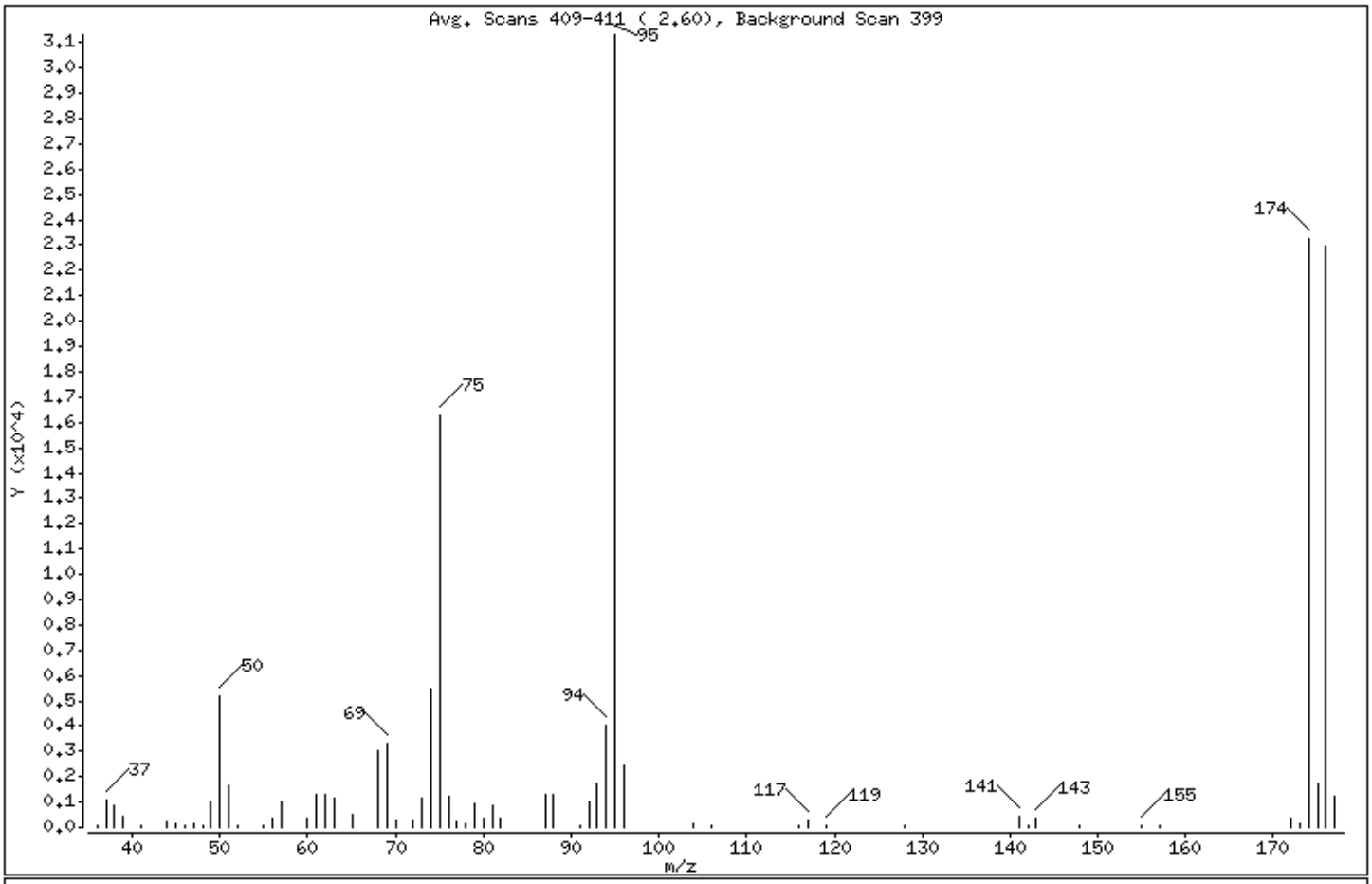
Sample Info: WG345597-3,SQ6179

Operator: JSS

Column phase: RTX-VMS

Column diameter: 0.18

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	16.59
75	30.00 - 60.00% of mass 95	51.94
96	5.00 - 9.00% of mass 95	7.72
173	Less than 2.00% of mass 174	0.36 (0.49)
174	Greater than 50.00% of mass 95	74.27
175	5.00 - 9.00% of mass 174	5.44 (7.32)
176	95.00 - 101.00% of mass 174	73.35 (98.76)
177	5.00 - 9.00% of mass 176	3.96 (5.40)

Date : 17-NOV-2023 09:10

Client ID:

Instrument: gcms-s.i

Sample Info: WG345597-3,SQ6179

Operator: JSS

Column phase: RTX-VMS

Column diameter: 0.18

Data File: SB923b.D
Spectrum: Avg. Scans 409-411 (2.60), Background Scan 399
Location of Maximum: 95.00
Number of points: 62

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	81	57.00	991	79.00	914	119.00	101
37.00	1093	60.00	392	80.00	364	128.00	73
38.00	890	61.00	1293	81.00	876	141.00	461
39.00	425	62.00	1321	82.00	357	142.00	83
41.00	68	63.00	1160	87.00	1323	143.00	375
44.00	185	65.00	476	88.00	1294	148.00	84
45.00	110	68.00	3006	91.00	66	155.00	84
46.00	67	69.00	3333	92.00	978	157.00	68
47.00	118	70.00	311	93.00	1707	172.00	333
48.00	83	72.00	252	94.00	3995	173.00	114
49.00	1023	73.00	1116	95.00	31312	174.00	23256
50.00	5195	74.00	5463	96.00	2416	175.00	1702
51.00	1684	75.00	16263	104.00	168	176.00	22968
52.00	78	76.00	1202	106.00	93	177.00	1240
55.00	78	77.00	190	116.00	67		
56.00	379	78.00	120	117.00	272		

Raw QC Data Section

Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

SDG: SQ6133
Lab ID: WG345527-11
Client ID: Method Blank
Matrix: AQ
Lab File ID: D8870.D

Sample Date: N/A
Extract Date: 16-NOV-23
Extracted By: JSS
Extraction Method: SW846 5030C
Lab Prep Batch: WG345527

Report Date: 12-DEC-23
Analysis Date: 16-NOV-23
Analyst: JSS
Analysis Method: SW846 8260C SIM
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Vinyl Chloride	U	0.050	ug/L	1	.1	0.10	0.0037	0.050
1,1-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0091	0.025
trans-1,2-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0033	0.025
cis-1,2-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0057	0.025
Trichloroethene	U	0.025	ug/L	1	.05	0.050	0.012	0.025
Tetrachloroethene	U	0.025	ug/L	1	.05	0.050	0.0091	0.025
Dibromofluoromethane		114.	%					
1,2-Dichloroethane-d4		115.	%					
Toluene-D8		102.	%					
p-Bromofluorobenzene		79.3	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029
http://www.katahdinlab.com

Data File: \\target_server\gg\chem\gcms-d.i\D111623.b\D8870.d
Report Date: 12-Dec-2023 10:21

Katahdin Analytical Services

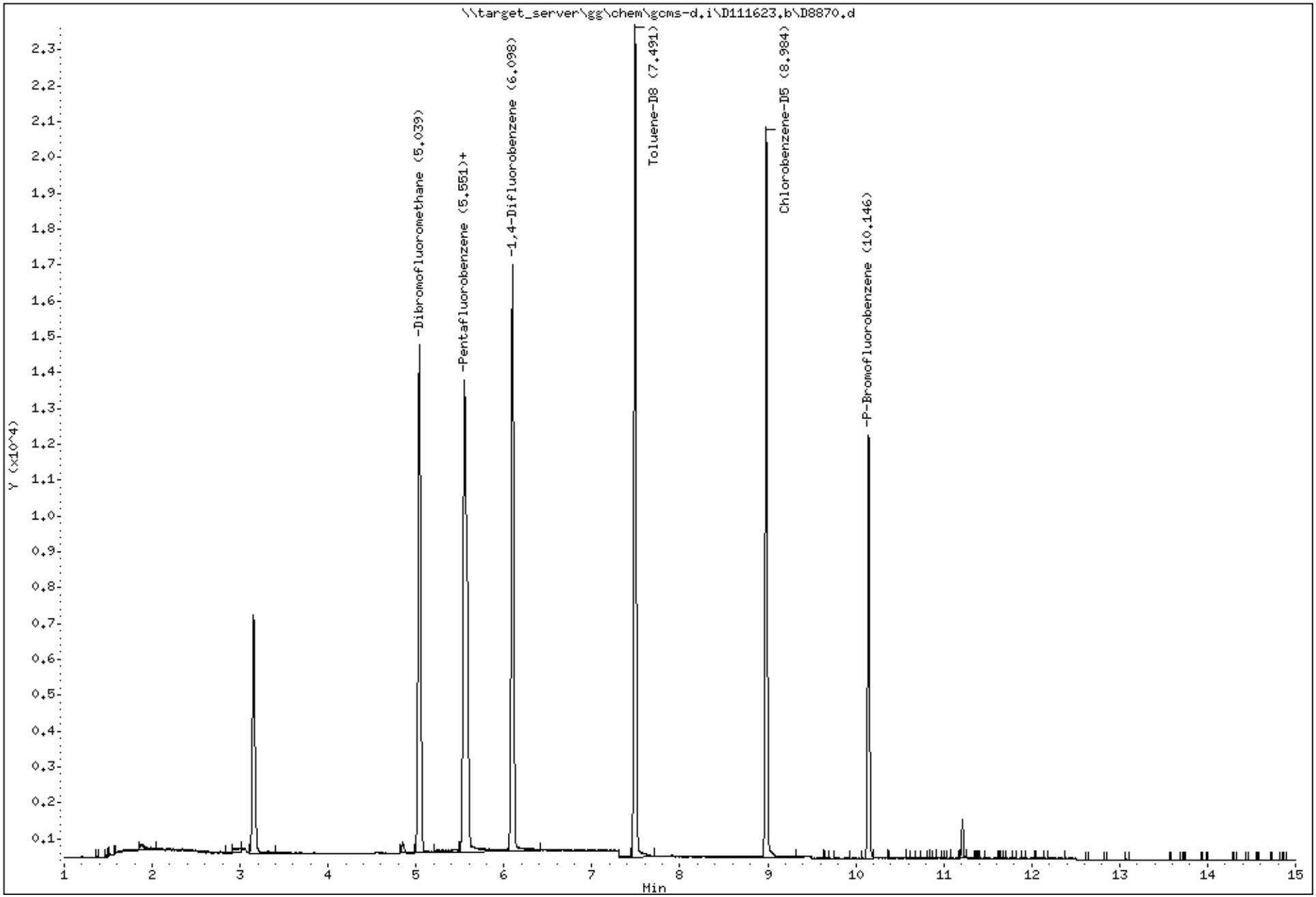
Data file : \\target_server\gg\chem\gcms-d.i\D111623.b\D8870.d
Lab Smp Id: WG345527-11 Client Smp ID: WG345527-Blank
Inj Date : 16-NOV-2023 14:15
Operator : JSS Inst ID: gcms-d.i
Smp Info : WG345527-11,SQ6133
Misc Info : WG345527,WG345527-5,SQ6133-1
Comment : SW846 5030C
Method : \\target_server\gg\chem\gcms-d.i\D111623.b\DSIM(01)CR23.m
Meth Date : 04-Dec-2023 12:57 gcms-d.i Quant Type: ISTD
Cal Date : 16-NOV-2023 10:22 Cal File: D8863.d
Als bottle: 14 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.12

Concentration Formula: Amt * DF * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	25.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)	REVIEW CODE
$ 7 Dibromofluoromethane	113	5.038	5.037	(0.908)	14584	1.14142	1.14	
* 10 Pentafluorobenzene	168	5.549	5.549	(1.000)	16361	1.00000		
$ 11 1,2-Dichloroethane-D4	65	5.579	5.582	(1.005)	8689	1.15217	1.15	
* 14 1,4-Difluorobenzene	114	6.097	6.096	(1.000)	24617	1.00000		
$ 15 Toluene-D8	98	7.490	7.491	(1.228)	22693	1.01806	1.02	
* 18 Chlorobenzene-D5	117	8.983	8.984	(1.000)	23024	1.00000		
$ 20 P-Bromofluorobenzene	95	10.144	10.146	(1.129)	6104	0.79279	0.793	

Data File: \\target_server\gg\chem\gcms-d.i\D111623.b\D8870.d
Date : 16-NOV-2023 14:15
Client ID: WG345527-Blank
Instrument: gcms-d.i
Sample Info: WG345527-11,SQ6133



Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

SDG: SQ6133
Lab ID: WG345599-2
Client ID: Method Blank
Matrix: AQ
Lab File ID: D8885.D

Sample Date: N/A
Extract Date: 17-NOV-23
Extracted By: JSS
Extraction Method: SW846 5030C
Lab Prep Batch: WG345599

Report Date: 12-DEC-23
Analysis Date: 17-NOV-23
Analyst: JSS
Analysis Method: SW846 8260C SIM
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Vinyl Chloride	U	0.050	ug/L	1	.1	0.10	0.0037	0.050
1,1-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0091	0.025
trans-1,2-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0033	0.025
cis-1,2-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0057	0.025
Trichloroethene	U	0.025	ug/L	1	.05	0.050	0.012	0.025
Tetrachloroethene	U	0.025	ug/L	1	.05	0.050	0.0091	0.025
Dibromofluoromethane		96.3	%					
1,2-Dichloroethane-d4		94.4	%					
Toluene-D8		99.9	%					
p-Bromofluorobenzene		78.1	%					

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Data File: \\target_server\gg\chem\gcms-d.i\D111723.b\D8885.d
Report Date: 12-Dec-2023 10:24

Katahdin Analytical Services

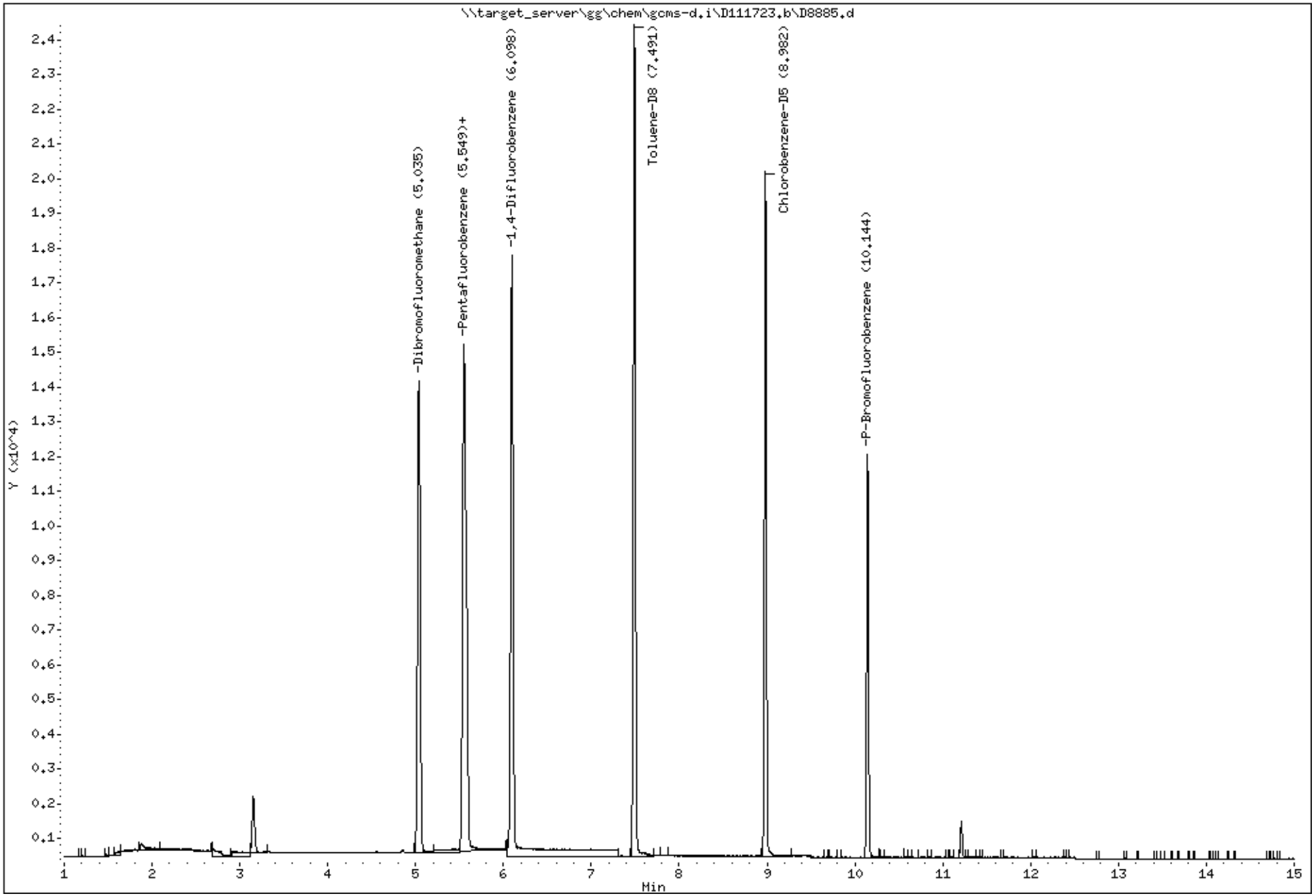
Data file : \\target_server\gg\chem\gcms-d.i\D111723.b\D8885.d
Lab Smp Id: WG345599-2
Inj Date : 17-NOV-2023 10:03
Operator : JSS   Inst ID: gcms-d.i
Smp Info : WG345599-2,SQ6133
Misc Info : WG345599,WG345527-5,SQ6133-3
Comment   : SW846 5030C
Method   : \\target_server\gg\chem\gcms-d.i\D111723.b\DSIM(01)CR23.m
Meth Date : 11-Dec-2023 10:56 CROY   Quant Type: ISTD
Cal Date : 16-NOV-2023 10:22   Cal File: D8863.d
Als bottle: 4
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: all.sub
Target Version: 4.12
Processing Host: T6-O360

Concentration Formula: Amt * DF * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	25.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)	REVIEW CODE
$ 7 Dibromofluoromethane	113	5.036	5.037	(0.908)	14100	0.96345	0.963	
* 10 Pentafluorobenzene	168	5.549	5.549	(1.000)	18740	1.00000		
$ 11 1,2-Dichloroethane-D4	65	5.579	5.582	(1.005)	8152	0.94373	0.944	
* 14 1,4-Difluorobenzene	114	6.097	6.096	(1.000)	26001	1.00000		
$ 15 Toluene-D8	98	7.490	7.491	(1.228)	23512	0.99866	0.999	
* 18 Chlorobenzene-D5	117	8.981	8.984	(1.000)	22745	1.00000		
$ 20 P-Bromofluorobenzene	95	10.144	10.146	(1.129)	5940	0.78095	0.781	

Data File: \\target_server\gg\chem\gcms-d.i\D111723.b\D8885.d
Date : 17-NOV-2023 10:03
Client ID:
Instrument: gcms-d.i
Sample Info: WG345599-2,SQ6133



Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

SDG: SQ6133
Lab ID: WG345748-2
Client ID: Method Blank
Matrix: AQ
Lab File ID: D8911.D

Sample Date: N/A
Extract Date: 18-NOV-23
Extracted By: JSS
Extraction Method: SW846 5030C
Lab Prep Batch: WG345748

Report Date: 12-DEC-23
Analysis Date: 18-NOV-23
Analyst: JSS
Analysis Method: SW846 8260C SIM
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Vinyl Chloride	U	0.050	ug/L	1	.1	0.10	0.0037	0.050
1,1-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0091	0.025
trans-1,2-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0033	0.025
cis-1,2-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0057	0.025
Trichloroethene	U	0.025	ug/L	1	.05	0.050	0.012	0.025
Tetrachloroethene	U	0.025	ug/L	1	.05	0.050	0.0091	0.025
Dibromofluoromethane		98.3	%					
1,2-Dichloroethane-d4		101.	%					
Toluene-D8		99.1	%					
p-Bromofluorobenzene		79.8	%					

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Data File: \\target_server\gg\chem\gcms-d.i\D111823.b\D8911.d
Report Date: 12-Dec-2023 10:30

Katahdin Analytical Services

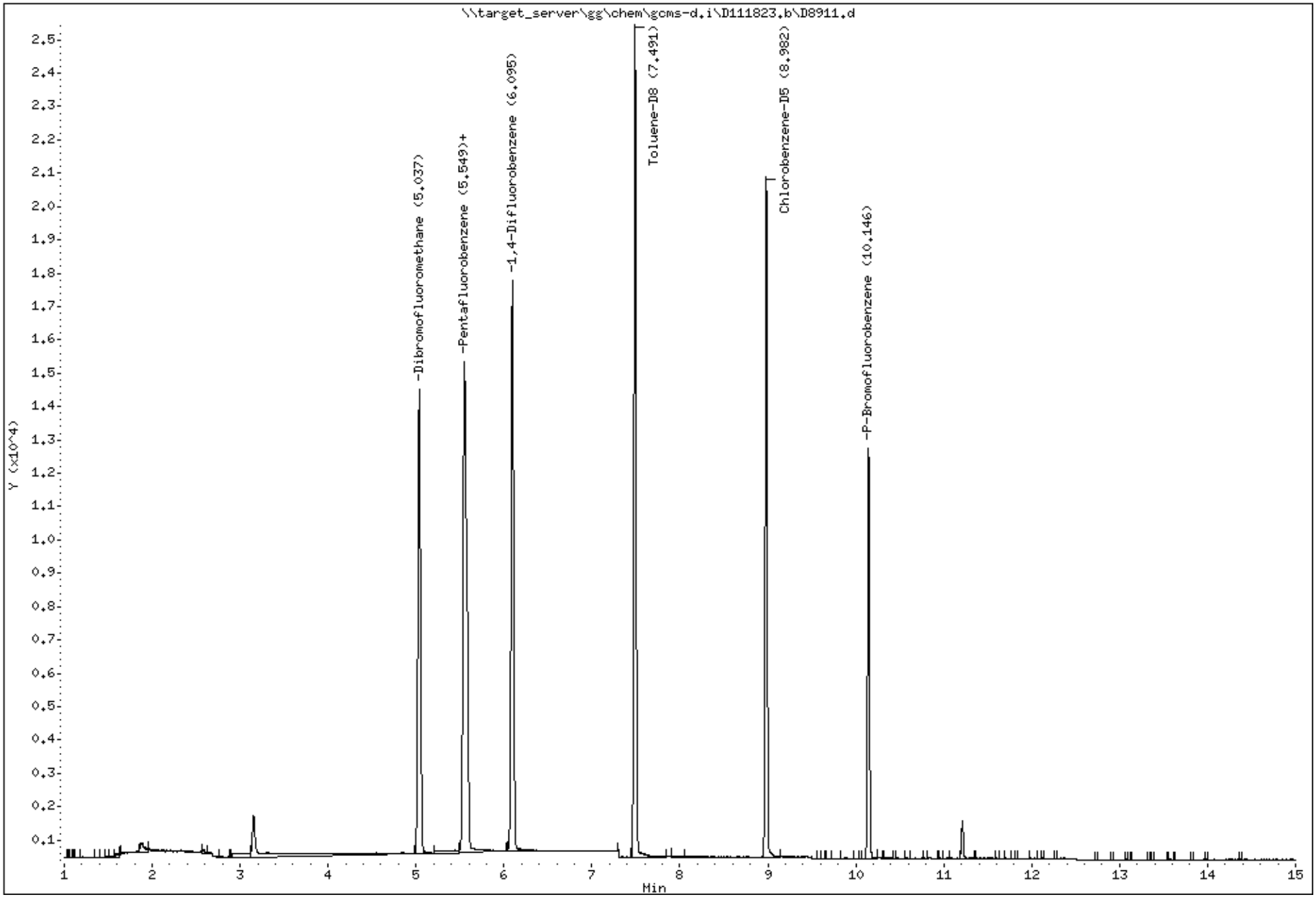
Data file : \\target_server\gg\chem\gcms-d.i\D111823.b\D8911.d
Lab Smp Id: WG345748-2
Inj Date : 18-NOV-2023 12:57
Operator : JSS   Inst ID: gcms-d.i
Smp Info : WG345748-2,SQ6133
Misc Info : WG345748,WG345527-5,SQ6133-3
Comment   : SW846 5030C
Method   : \\target_server\gg\chem\gcms-d.i\D111823.b\DSIM(01)CR23.m
Meth Date : 20-Nov-2023 06:32 gcms-d.i   Quant Type: ISTD
Cal Date : 16-NOV-2023 10:22   Cal File: D8863.d
Als bottle: 6   QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: all.sub
Target Version: 4.12
Processing Host: T7-O360

Concentration Formula: Amt * DF * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	25.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)	REVIEW CODE
$ 7 Dibromofluoromethane	113	5.036	5.037	(0.908)	14249	0.98265	0.983	
$ 11 1,2-Dichloroethane-D4	65	5.579	5.582	(1.005)	8631	1.00844	1.01	
$ 15 Toluene-D8	98	7.490	7.491	(1.229)	23525	0.99109	0.991	
$ 20 P-Bromofluorobenzene	95	10.143	10.146	(1.129)	6321	0.79769	0.798	
* 10 Pentafluorobenzene	168	5.549	5.549	(1.000)	18568	1.00000		
* 14 1,4-Difluorobenzene	114	6.095	6.096	(1.000)	26214	1.00000		
* 18 Chlorobenzene-D5	117	8.981	8.984	(1.000)	23696	1.00000		

Data File: \\target_server\gg\chem\gcms-d.i\D111823.b\D8911.d
Date : 18-NOV-2023 12:57
Client ID:
Instrument: gcms-d.i
Sample Info: WG345748-2,SQ6133



Katahdin Analytical Services SQ6133 Page 219 of 855

Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

SDG: SQ6133
Lab ID: WG345525-11
Client ID: Method Blank
Matrix: AQ
Lab File ID: S7210.D

Sample Date: N/A
Extract Date: 16-NOV-23
Extracted By: JSS
Extraction Method: SW846 5030C
Lab Prep Batch: WG345525

Report Date: 12-DEC-23
Analysis Date: 16-NOV-23
Analyst: JSS
Analysis Method: SW846 8260C SIM
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Vinyl Chloride	U	0.050	ug/L	1	.1	0.10	0.0037	0.050
1,1-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0091	0.025
trans-1,2-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0033	0.025
cis-1,2-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0057	0.025
Trichloroethene	U	0.025	ug/L	1	.05	0.050	0.012	0.025
Tetrachloroethene	U	0.025	ug/L	1	.05	0.050	0.0091	0.025
Dibromofluoromethane		116.	%					
1,2-Dichloroethane-d4		117.	%					
Toluene-D8		101.	%					
p-Bromofluorobenzene		82.0	%					

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Data File: \\target_server\gg\chem\gcms-s.i\S111623.b\S7210.D
Report Date: 12-Dec-2023 10:42

Katahdin Analytical Services

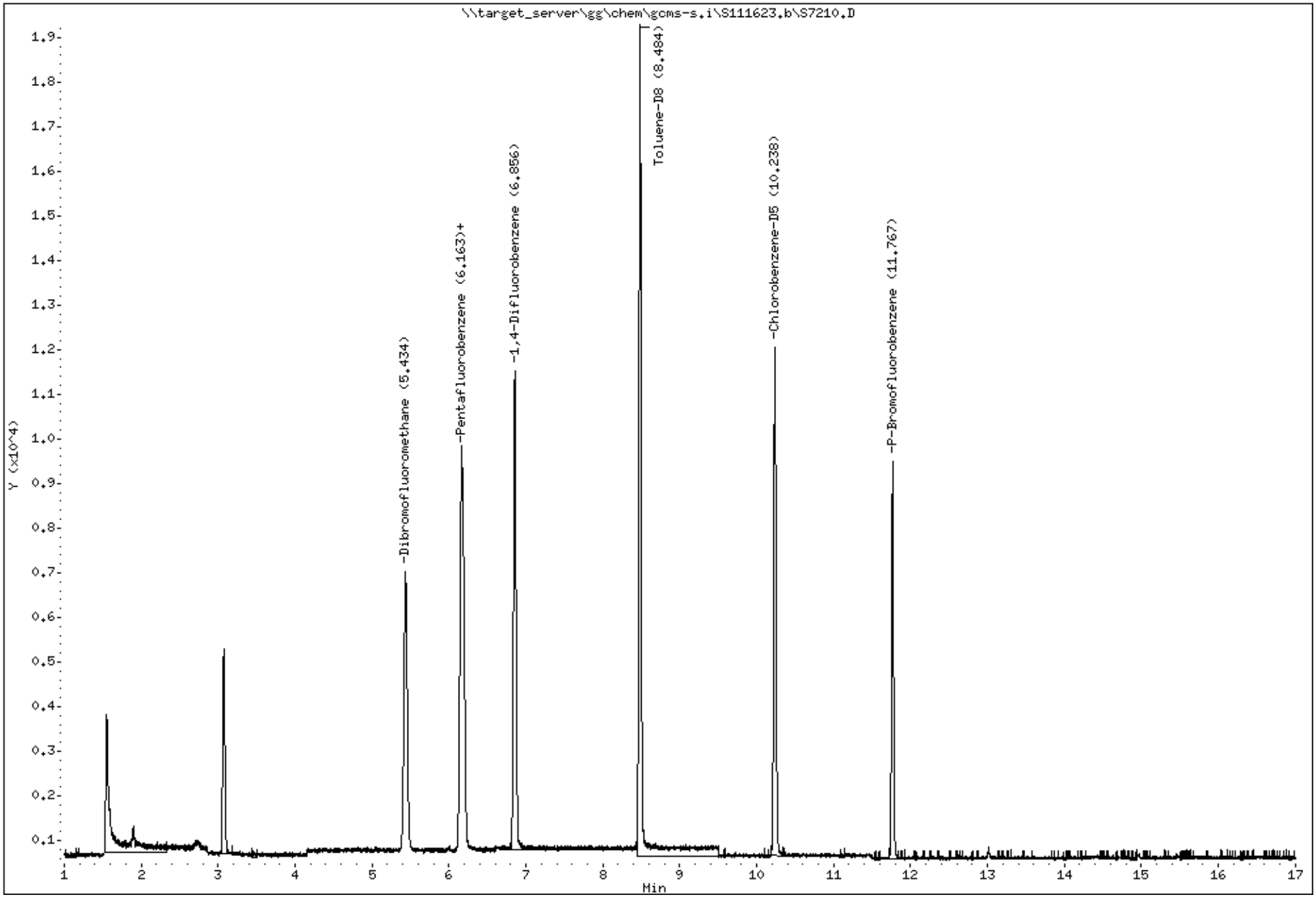
Data file : \\target_server\gg\chem\gcms-s.i\S111623.b\S7210.D
Lab Smp Id: WG345525-11
Inj Date : 16-NOV-2023 17:38
Operator : JSS   Inst ID: gcms-s.i
Smp Info : WG345525-11,SQ6133
Misc Info : WG345525,WG345525-5,SQ6133-2
Comment   : SW846 5030C
Method   : \\target_server\gg\chem\gcms-s.i\S111623.b\SSIM(01)CR23.m
Meth Date : 12-Dec-2023 10:34 croy   Quant Type: ISTD
Cal Date : 16-NOV-2023 15:48   Cal File: S7206.D
Als bottle: 12   QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: all.sub
Target Version: 4.12
Processing Host: T7-O360

Concentration Formula: Amt * DF * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	25.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)	REVIEW CODE
$ 7 Dibromofluoromethane	113	5.433	5.440	(0.882)	8989	1.15668	1.16	
* 9 Pentafluorobenzene	168	6.162	6.163	(1.000)	11604	1.00000		
$ 10 1,2-Dichloroethane-D4	65	6.191	6.193	(1.005)	8214	1.16983	1.17	
* 13 1,4-Difluorobenzene	114	6.854	6.854	(1.000)	18588	1.00000		
$ 14 Toluene-D8	98	8.484	8.482	(1.238)	19661	1.00715	1.01	
* 17 Chlorobenzene-D5	117	10.238	10.238	(1.000)	16968	1.00000		
$ 18 P-Bromofluorobenzene	95	11.765	11.768	(1.149)	5862	0.82035	0.820	

Data File: \\target_server\gg\chem\gcms-s.i\S111623.b\S7210.D
Date : 16-NOV-2023 17:38
Client ID:
Instrument: gcms-s.i
Sample Info: WG345525-11,SQ6133



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Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

SDG: SQ6133
Lab ID: WG345597-2
Client ID: Method Blank
Matrix: AQ
Lab File ID: S7228.D

Sample Date: N/A
Extract Date: 17-NOV-23
Extracted By: JSS
Extraction Method: SW846 5030C
Lab Prep Batch: WG345597

Report Date: 12-DEC-23
Analysis Date: 17-NOV-23
Analyst: JSS
Analysis Method: SW846 8260C SIM
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Vinyl Chloride	U	0.050	ug/L	1	.1	0.10	0.0037	0.050
1,1-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0091	0.025
trans-1,2-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0033	0.025
cis-1,2-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0057	0.025
Trichloroethene	U	0.025	ug/L	1	.05	0.050	0.012	0.025
Tetrachloroethene	U	0.025	ug/L	1	.05	0.050	0.0091	0.025
Dibromofluoromethane		115.	%					
1,2-Dichloroethane-d4		114.	%					
Toluene-D8		102.	%					
p-Bromofluorobenzene		82.3	%					

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Data File: \\target_server\gg\chem\gcms-s.i\S111723.b\S7228.D
Report Date: 12-Dec-2023 10:52

Katahdin Analytical Services

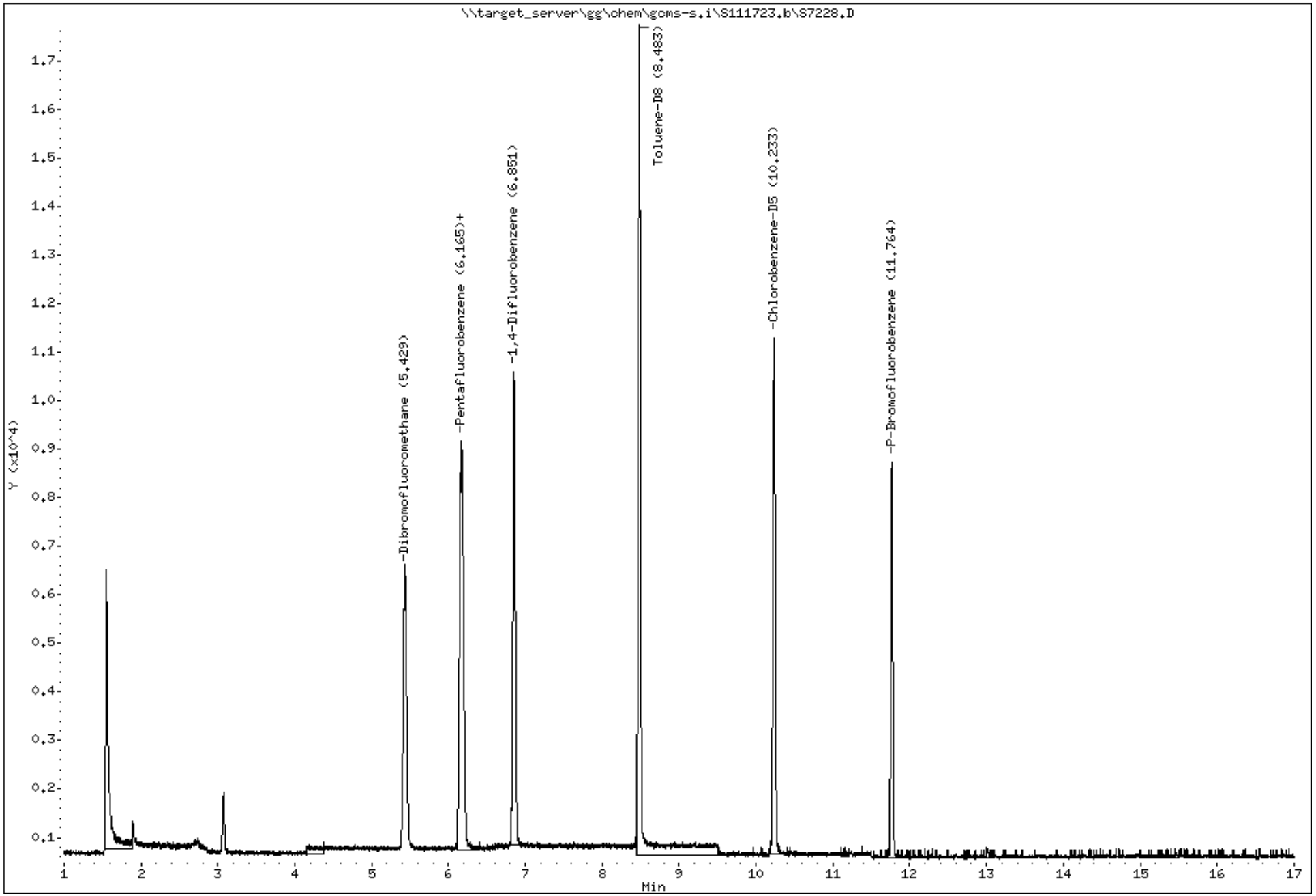
Data file : \\target_server\gg\chem\gcms-s.i\S111723.b\S7228.D
Lab Smp Id: WG345597-2
Inj Date : 17-NOV-2023 11:16
Operator : JSS   Inst ID: gcms-s.i
Smp Info : WG345597-2,SQ6133
Misc Info : WG345597,WG345525-5,SQ6133-8
Comment   : SW846 5030C
Method   : \\target_server\gg\chem\gcms-s.i\S111723.b\SSIM(01)CR23.m
Meth Date : 08-Dec-2023 14:53 croy   Quant Type: ISTD
Cal Date : 16-NOV-2023 15:48   Cal File: S7206.D
Als bottle: 4
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: all.sub
Target Version: 4.12
Processing Host: T6-O360

Concentration Formula: Amt * DF * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	25.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)	REVIEW CODE
$ 7 Dibromofluoromethane	113	5.428	5.441	(0.881)	8538	1.14967	1.15	
* 9 Pentafluorobenzene	168	6.161	6.163	(1.000)	11089	1.00000		
$ 10 1,2-Dichloroethane-D4	65	6.191	6.194	(1.005)	7683	1.14502	1.14	
* 13 1,4-Difluorobenzene	114	6.851	6.855	(1.000)	16920	1.00000		
$ 14 Toluene-D8	98	8.482	8.483	(1.238)	18204	1.02444	1.02	
* 17 Chlorobenzene-D5	117	10.233	10.238	(1.000)	15814	1.00000		
$ 18 P-Bromofluorobenzene	95	11.763	11.768	(1.150)	5484	0.82345	0.823	

Data File: \\target_server\gg\chem\gcms-s.i\S111723.b\S7228.D
Date : 17-NOV-2023 11:16
Client ID:
Instrument: gcms-s.i
Sample Info: WG345597-2,SQ6133



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ANALYTICAL SERVICES

LCS/LCSD Recovery Report

LCS ID: WG345527-10
LCSD ID: WG345527-14
SDG: SQ6133
LCS File ID: D8867.D

Extract Date: 16-NOV-23
Extracted By: JSS
Extraction Method: SW846 5030C
Lab Prep Batch: WG345527
LCSD File ID: D8868.D

Analysis Date: 16-NOV-23
Analyst: JSS
Analysis Method: SW846 8260C SIM
Matrix: AQ
Report Date: 12-DEC-23

Compound	Spike Amt	LCS Conc	LCS Rec (%)	LCSD Conc	LCSD Rec (%)	Conc Units	RPD (%)	RPD Limit	Limits
Vinyl Chloride	0.500	0.539	108.	0.517	103.	ug/L	4	20	70-130
1,1-Dichloroethene	0.500	0.584	117.	0.556	111.	ug/L	5	20	70-130
trans-1,2-Dichloroethene	0.500	0.571	114.	0.560	112.	ug/L	2	20	70-130
cis-1,2-Dichloroethene	0.500	0.533	107.	0.531	106.	ug/L	0	20	70-130
Trichloroethene	0.500	0.539	108.	0.513	103.	ug/L	5	20	70-130
Tetrachloroethene	0.500	0.559	112.	0.532	106.	ug/L	5	20	70-130
Dibromofluoromethane			104.		102.				70-130
1,2-Dichloroethane-d4			102.		100.				70-130
Toluene-D8			98.9		99.2				70-130
p-Bromofluorobenzene			102.		102.				70-130

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Data File: \\target_server\gg\chem\gcms-d.i\D111623.b\D8867.d
Report Date: 12-Dec-2023 10:21

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Data file : \\target_server\gg\chem\gcms-d.i\D111623.b\D8867.d
Lab Smp Id: WG345527-10 Client Smp ID: INDSOURCE
Inj Date : 16-NOV-2023 12:35
Operator : JSS Inst ID: gcms-d.i
Smp Info : WG345527-10,SQ6133
Misc Info : WG345527,WG345527-5,SQ6133-1
Comment : SW846 5030C
Method : \\target_server\gg\chem\gcms-d.i\D111623.b\DSIM(01)CR23.m
Meth Date : 04-Dec-2023 12:57 gcms-d.i Quant Type: ISTD
Cal Date : 16-NOV-2023 10:22 Cal File: D8863.d
Als bottle: 11 QC Sample: INDSOURCE
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.12

Concentration Formula: Amt * DF * 25/Vo * CpndVariable

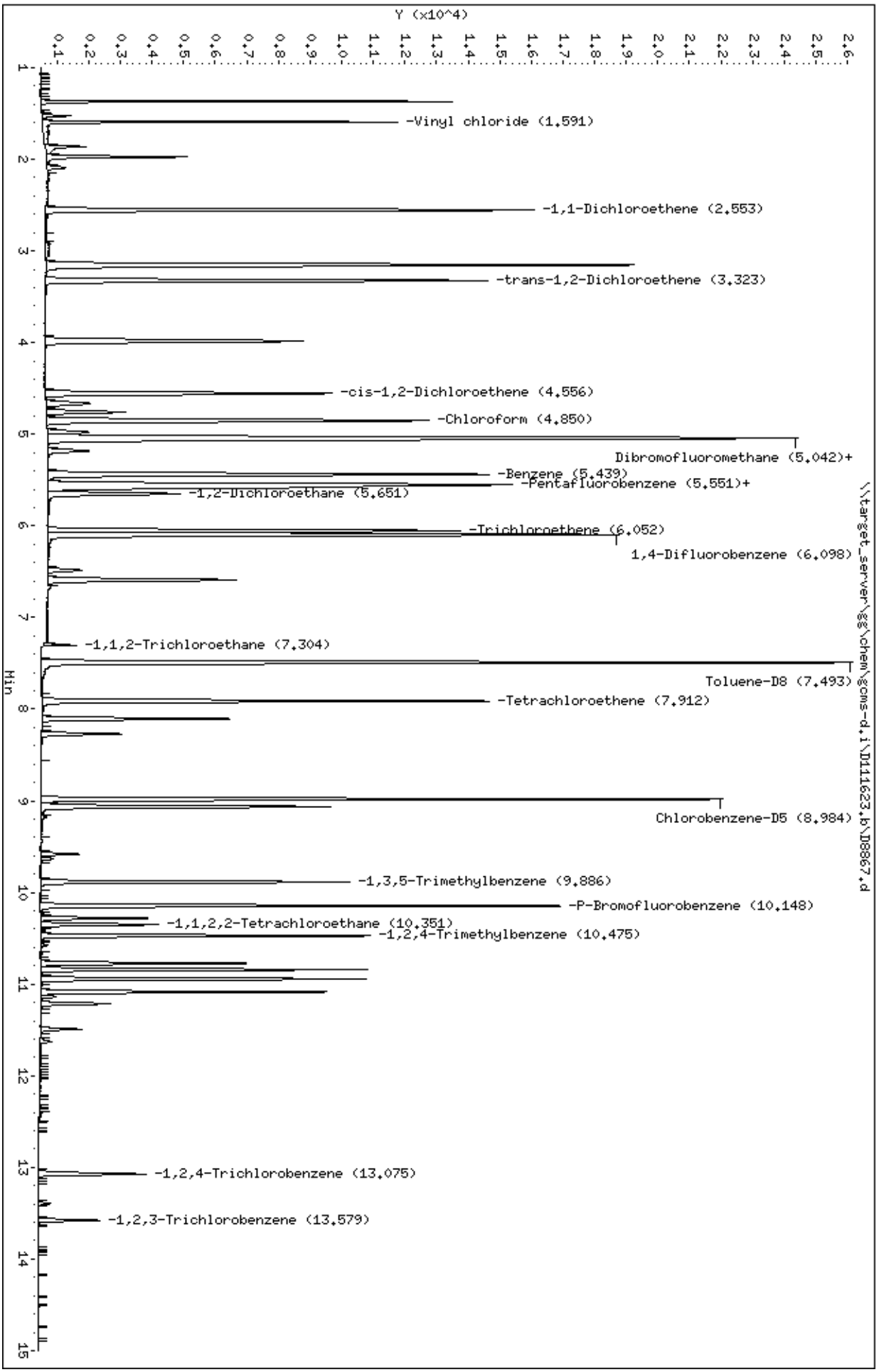
Name	Value	Description
DF	1.000	Dilution Factor
Vo	25.000	sample purged
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/l)	REVIEW CODE
	1 Vinyl chloride	62	1.591	1.591	(0.287)	7004	0.53868	0.539	
	2 1,1-Dichloroethene	96	2.554	2.553	(0.460)	6967	0.58374	0.584	
	4 trans-1,2-Dichloroethene	96	3.324	3.323	(0.599)	7746	0.57069	0.571	
	5 cis-1,2-Dichloroethene	96	4.553	4.558	(0.820)	5538	0.53337	0.533	
	6 Chloroform	83	4.850	4.848	(0.874)	14428		(a)	
$	7 Dibromofluoromethane	113	5.038	5.037	(0.908)	15133	1.04575	1.04	
	8 1,1,1-Trichloroethane	97	5.051	5.054	(0.910)	10761		(a)	
	9 Benzene	78	5.439	5.439	(0.980)	19844		(a)	
*	10 Pentafluorobenzene	168	5.551	5.549	(1.000)	18530	1.00000		
$	11 1,2-Dichloroethane-D4	65	5.581	5.582	(1.005)	8703	1.01894	1.02	
	12 1,2-Dichloroethane	62	5.650	5.649	(0.927)	5230		(a)	
	13 Trichloroethene	130	6.054	6.052	(0.993)	6480	0.53941	0.539	
*	14 1,4-Difluorobenzene	114	6.097	6.096	(1.000)	27333	1.00000		
$	15 Toluene-D8	98	7.492	7.491	(1.229)	24485	0.98931	0.989	
	16 Tetrachloroethene	164	7.911	7.912	(1.298)	5697	0.55922	0.559	
	17 1,1,2-Trichloroethane	83	7.312	7.310	(1.199)	568		(a)	
*	18 Chlorobenzene-D5	117	8.983	8.984	(1.000)	24578	1.00000		
	19 1,3,5-Trimethylbenzene	105	9.885	9.888	(1.100)	11238		(a)	
$	20 P-Bromofluorobenzene	95	10.147	10.146	(1.130)	8428	1.02542	1.02	
	21 1,1,2,2-Tetrachloroethane	83	10.350	10.351	(1.152)	2814		(a)	
	22 1,2,4-Trimethylbenzene	105	10.471	10.473	(1.166)	9255		(a)	
	23 1,2,4-Trichlorobenzene	180	13.074	13.075	(1.455)	1891		(a)	
	24 1,2,3-Trichlorobenzene	180	13.577	13.579	(1.511)	1086		(a)	

Data File: \\target_server\gg\chem\gcms-d.i\D111623.b\D8867.d
Report Date: 12-Dec-2023 10:21

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).


Data File: \\target_server\gg\chem\gcms-d,i\D111623,b\D8867,d
Date : 16-NOV-2023 12:35
Client ID: INDSOURCE
Sample Info: WG345527-10,SQ6133
Purge Volume: 25,0
Column phase: RTX-VMS
Instrument: gcms-d,i
Operator: JSS
Column diameter: 0,18
Y (x10^4)
0,1 0,2 0,3 0,4 0,5 0,6 0,7 0,8 0,9 1,0 1,1 1,2 1,3 1,4 1,5 1,6 1,7 1,8 1,9 2,0 2,1 2,2 2,3 2,4 2,5 2,6
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
Min
-Vinyl chloride (1,591)
-1,1-Dichloroethene (2,553)
-trans-1,2-Dichloroethene (3,323)
-cis-1,2-Dichloroethene (4,556)
-Chloroform (4,850)
Dibromofluoromethane (5,042)+
-Benzene (5,439)
-Pentafluorobenzene (5,551)+
-1,2-Dichloroethane (5,651)
-Trichloroethene (6,052)
1,4-Difluorobenzene (6,098)
-1,1,2-Trichloroethane (7,304)
Toluene-D8 (7,493)
-Tetrachloroethene (7,912)
Chlorobenzene-D5 (8,984)
-1,3,5-Trimethylbenzene (9,886)
-P-Bromofluorobenzene (10,148)
-1,1,2,2-Tetrachloroethane (10,351)
-1,2,4-Trimethylbenzene (10,475)
-1,2,4-Trichlorobenzene (13,075)
-1,2,3-Trichlorobenzene (13,579)
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Data File: \\target_server\gg\chem\gcms-d.i\D111623.b\D8868.d
Report Date: 12-Dec-2023 10:21

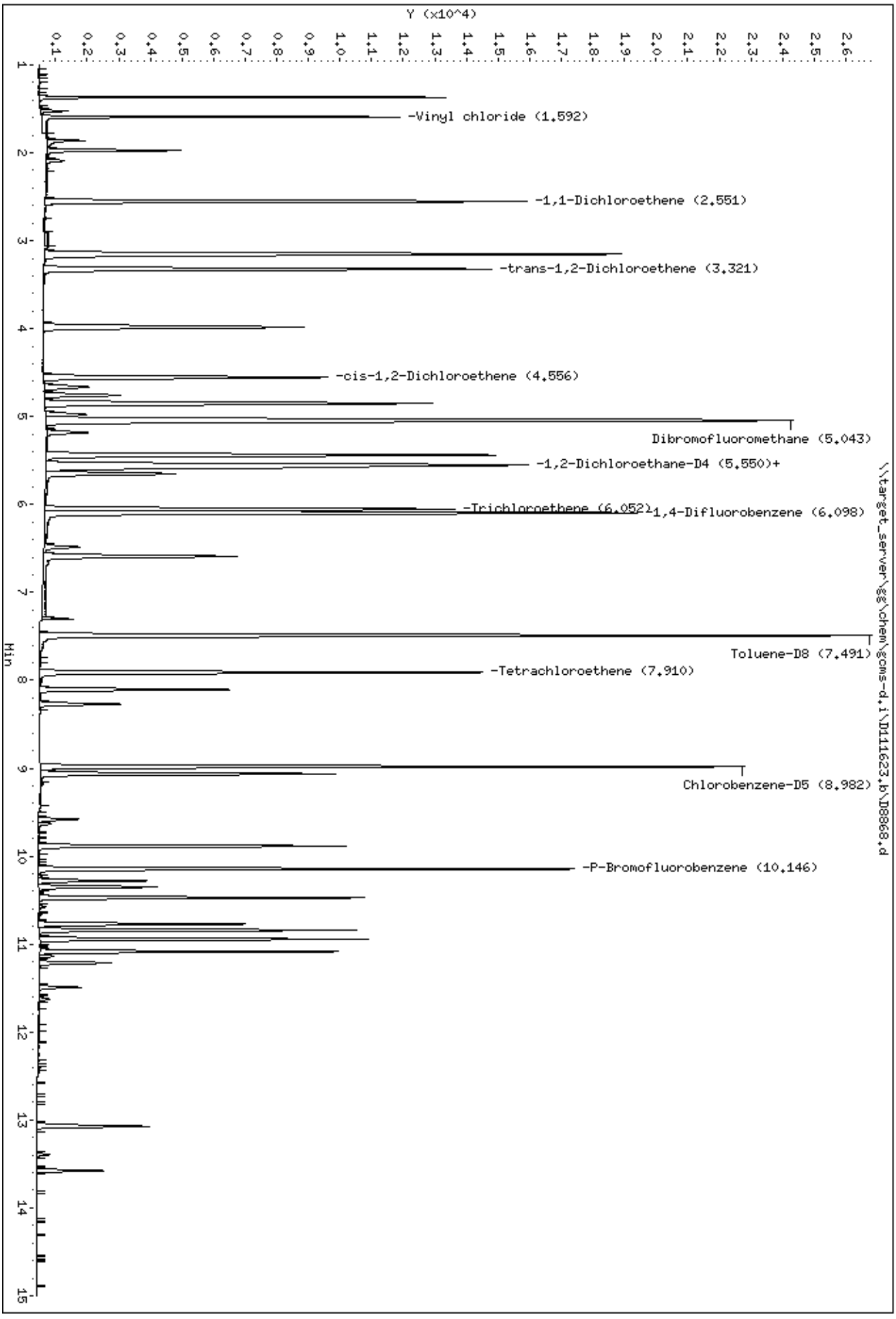
Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-d.i\D111623.b\D8868.d
Lab Smp Id: WG345527-14
Inj Date : 16-NOV-2023 13:08
Operator : JSS   Inst ID: gcms-d.i
Smp Info : WG345527-14,SQ6133
Misc Info : WG345527,WG345527-5,SQ6133-1
Comment   : SW846 5030C
Method   : \\target_server\gg\chem\gcms-d.i\D111623.b\DSIM(01)CR23.m
Meth Date : 04-Dec-2023 12:57 gcms-d.i   Quant Type: ISTD
Cal Date : 16-NOV-2023 10:22   Cal File: D8863.d
Als bottle: 12   QC Sample: LCSD
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: all.sub
Target Version: 4.12

Concentration Formula: Amt * DF * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	25.000	sample purged
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/l)	REVIEW CODE
	1 Vinyl chloride	62	1.591	1.591	(0.287)	6953	0.51672	0.517	
	2 1,1-Dichloroethene	96	2.553	2.553	(0.460)	6874	0.55651	0.556	
	4 trans-1,2-Dichloroethene	96	3.323	3.323	(0.599)	7864	0.55984	0.560	
	5 cis-1,2-Dichloroethene	96	4.554	4.558	(0.821)	5708	0.53120	0.531	
$	7 Dibromofluoromethane	113	5.036	5.037	(0.908)	15229	1.01688	1.02	
*	10 Pentafluorobenzene	168	5.549	5.549	(1.000)	19177	1.00000		
$	11 1,2-Dichloroethane-D4	65	5.577	5.582	(1.005)	8835	0.99950	0.999	
	13 Trichloroethene	130	6.052	6.052	(0.993)	6395	0.51288	0.513	
*	14 1,4-Difluorobenzene	114	6.097	6.096	(1.000)	28370	1.00000		
$	15 Toluene-D8	98	7.490	7.491	(1.228)	25483	0.99199	0.992	
	16 Tetrachloroethene	164	7.908	7.912	(1.297)	5629	0.53235	0.532	
*	18 Chlorobenzene-D5	117	8.981	8.984	(1.000)	25324	1.00000		
$	20 P-Bromofluorobenzene	95	10.145	10.146	(1.130)	8679	1.02485	1.02	


Y (x10^4)
Min
-Vinyl chloride (1.592)
-1,1-Dichloroethene (2.551)
-trans-1,2-Dichloroethene (3.321)
-cis-1,2-Dichloroethene (4.556)
Dibromofluoromethane (5.043)
-1,2-Dichloroethane-D4 (5.550)+
-Trichloroethene (6.052)
1,4-Difluorobenzene (6.098)
Toluene-D8 (7.491)
-Tetrachloroethene (7.910)
Chlorobenzene-D5 (8.982)
-P-Bromofluorobenzene (10.146)
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Date : 16-NOV-2023 13:08
Client ID:
Sample Info: WG345527-14,SQ6133
Instrument: gcms-d.i

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ANALYTICAL SERVICES

LCS Recovery Report

Lab ID: WG345599-1
Client ID: LCS
SDG: SQ6133
LCS File ID: D8883.D
Report Date: 12-DEC-23

Extract Date: 17-NOV-23
Extracted By: JSS
Extraction Method: SW846 5030C
Lab Prep Batch: WG345599

Analysis Date: 17-NOV-23
Analyst: JSS
Analysis Method: SW846 8260C SIM
Matrix: AQ

Compound	Recovery (%)	Conc Added	Conc Recovered	Conc Units	Limits
Vinyl Chloride	88.6	0.500	0.443	ug/L	70-130
1,1-Dichloroethene	101.	0.500	0.506	ug/L	70-130
trans-1,2-Dichloroethene	93.8	0.500	0.469	ug/L	70-130
cis-1,2-Dichloroethene	95.8	0.500	0.479	ug/L	70-130
Trichloroethene	98.8	0.500	0.494	ug/L	70-130
Tetrachloroethene	104.	0.500	0.522	ug/L	70-130
Dibromofluoromethane	87.0				70-130
1,2-Dichloroethane-d4	84.5				70-130
Toluene-D8	97.7				70-130
p-Bromofluorobenzene	101.				70-130

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Data File: \\target_server\gg\chem\gcms-d.i\D111723.b\D8883.d
Report Date: 12-Dec-2023 10:24

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-d.i\D111723.b\D8883.d
Lab Smp Id: WG345599-1
Inj Date : 17-NOV-2023 08:52
Operator : JSS   Inst ID: gcms-d.i
Smp Info : WG345599-1,SQ6133
Misc Info : WG345599,WG345527-5,SQ6133-3
Comment   : SW846 5030C
Method   : \\target_server\gg\chem\gcms-d.i\D111723.b\DSIM(01)CR23.m
Meth Date : 11-Dec-2023 10:56 CROY   Quant Type: ISTD
Cal Date : 16-NOV-2023 10:22   Cal File: D8863.d
Als bottle: 2   QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: all.sub
Target Version: 4.12
Processing Host: VOA-WS

Concentration Formula: Amt * DF * 25/Vo * CpndVariable

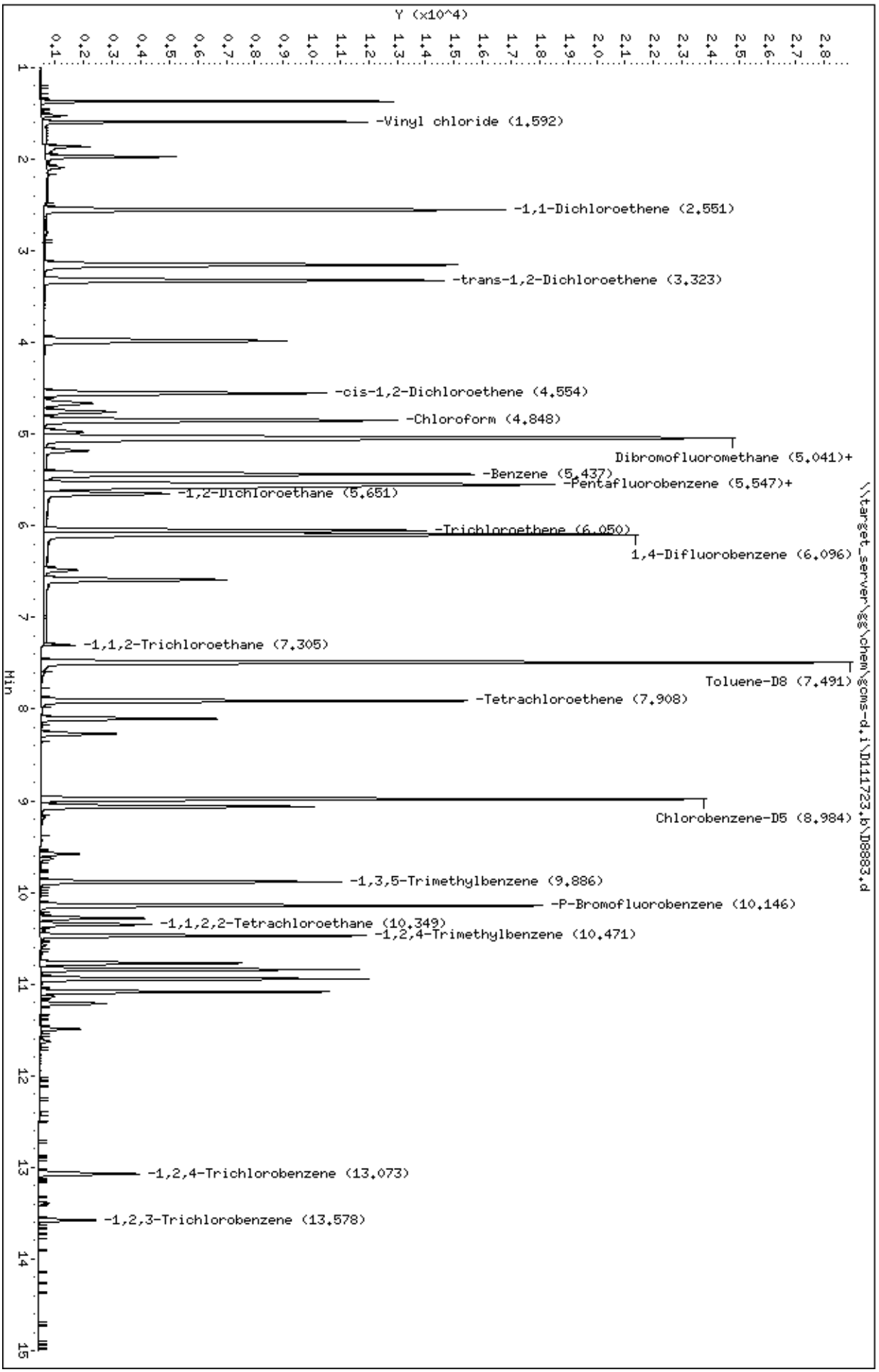
Name	Value	Description
DF	1.000	Dilution Factor
Vo	25.000	sample purged
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)	REVIEW CODE
1	Vinyl chloride	62	1.591	1.591	(0.287)	7056	0.44279	0.443	
2	1,1-Dichloroethene	96	2.551	2.553	(0.460)	7406	0.50631	0.506	
4	trans-1,2-Dichloroethene	96	3.323	3.323	(0.599)	7809	0.46944	0.469	
5	cis-1,2-Dichloroethene	96	4.554	4.558	(0.821)	6096	0.47905	0.479	
6	Chloroform	83	4.848	4.848	(0.874)	14500		(a)	
$ 7	Dibromofluoromethane	113	5.036	5.037	(0.908)	15436	0.87036	0.870	
8	1,1,1-Trichloroethane	97	5.050	5.054	(0.910)	11315		(a)	
9	Benzene	78	5.437	5.439	(0.980)	21610		(a)	
* 10	Pentafluorobenzene	168	5.547	5.549	(1.000)	22710	1.00000		
$ 11	1,2-Dichloroethane-D4	65	5.577	5.582	(1.005)	8843	0.84477	0.845	
12	1,2-Dichloroethane	62	5.650	5.649	(0.927)	5354		(a)	
13	Trichloroethene	130	6.050	6.052	(0.993)	6730	0.49443	0.494	
* 14	1,4-Difluorobenzene	114	6.095	6.096	(1.000)	30970	1.00000		
$ 15	Toluene-D8	98	7.490	7.491	(1.229)	27391	0.97675	0.977	
16	Tetrachloroethene	164	7.910	7.912	(1.298)	6029	0.52231	0.522	
17	1,1,2-Trichloroethane	83	7.312	7.310	(1.200)	491		(a)	
* 18	Chlorobenzene-D5	117	8.980	8.984	(1.000)	26803	1.00000		
19	1,3,5-Trimethylbenzene	105	9.885	9.888	(1.101)	12306		(a)	
$ 20	P-Bromofluorobenzene	95	10.142	10.146	(1.129)	9079	1.01293	1.01	
21	1,1,2,2-Tetrachloroethane	83	10.349	10.351	(1.152)	2946		(a)	
22	1,2,4-Trimethylbenzene	105	10.471	10.473	(1.166)	10155		(a)	
23	1,2,4-Trichlorobenzene	180	13.073	13.075	(1.456)	1996		(a)	
24	1,2,3-Trichlorobenzene	180	13.579	13.579	(1.512)	1171		(a)	

Data File: \\target_server\gg\chem\gcms-d.i\D111723.b\D8883.d
Report Date: 12-Dec-2023 10:24

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).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Date : 17-NOV-2023 08:52
Client ID:
Sample Info: WG345599-1,SQ6133
Purge Volume: 25,0
Column phase: RTX-VMS
Instrument: gcms-d,i
Operator: JSS
Column diameter: 0,18
Y (x10^4)
Min
-Vinyl chloride (1,592)
-1,1-Dichloroethene (2,551)
-trans-1,2-Dichloroethene (3,323)
-cis-1,2-Dichloroethene (4,554)
-Chloroform (4,848)
Dibromofluoromethane (5,041)+
-Benzene (5,437)
-Pentafluorobenzene (5,547)+
-1,2-Dichloroethane (5,651)
-Trichloroethene (6,050)
1,4-Difluorobenzene (6,096)
-1,1,2-Trichloroethane (7,305)
Toluene-D8 (7,491)
-Tetrachloroethene (7,908)
Chlorobenzene-D5 (8,984)
-1,3,5-Trimethylbenzene (9,886)
-P-Bromofluorobenzene (10,146)
-1,1,2,2-Tetrachloroethane (10,349)
-1,2,4-Trimethylbenzene (10,471)
-1,2,4-Trichlorobenzene (13,073)
-1,2,3-Trichlorobenzene (13,578)
\\target_server\gg\chem\gcms-d,i\D111723,b\D8883,d

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ANALYTICAL SERVICES

LCS/LCSD Recovery Report

LCS ID: WG345748-1
LCSD ID: WG345748-6
SDG: SQ6133
LCS File ID: D8908.D

Extract Date: 18-NOV-23
Extracted By: JSS
Extraction Method: SW846 5030C
Lab Prep Batch: WG345748
LCSD File ID: D8909.D

Analysis Date: 18-NOV-23
Analyst: JSS
Analysis Method: SW846 8260C SIM
Matrix: AQ
Report Date: 12-DEC-23

Compound	Spike Amt	LCS Conc	LCS Rec (%)	LCSD Conc	LCSD Rec (%)	Conc Units	RPD (%)	RPD Limit	Limits
Vinyl Chloride	0.500	0.417	83.4	0.412	82.4	ug/L	1	20	70-130
1,1-Dichloroethene	0.500	0.488	97.6	0.494	98.8	ug/L	1	20	70-130
trans-1,2-Dichloroethene	0.500	0.446	89.2	0.435	87.0	ug/L	2	20	70-130
cis-1,2-Dichloroethene	0.500	0.457	91.4	0.450	90.0	ug/L	2	20	70-130
Trichloroethene	0.500	0.482	96.4	0.480	96.0	ug/L	0	20	70-130
Tetrachloroethene	0.500	0.510	102.	0.497	99.4	ug/L	2	20	70-130
Dibromofluoromethane			86.6		86.5				70-130
1,2-Dichloroethane-d4			87.2		85.8				70-130
Toluene-D8			99.1		97.9				70-130
p-Bromofluorobenzene			104.		103.				70-130

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Data File: \\target_server\gg\chem\gcms-d.i\D111823.b\D8908.d
Report Date: 12-Dec-2023 10:30

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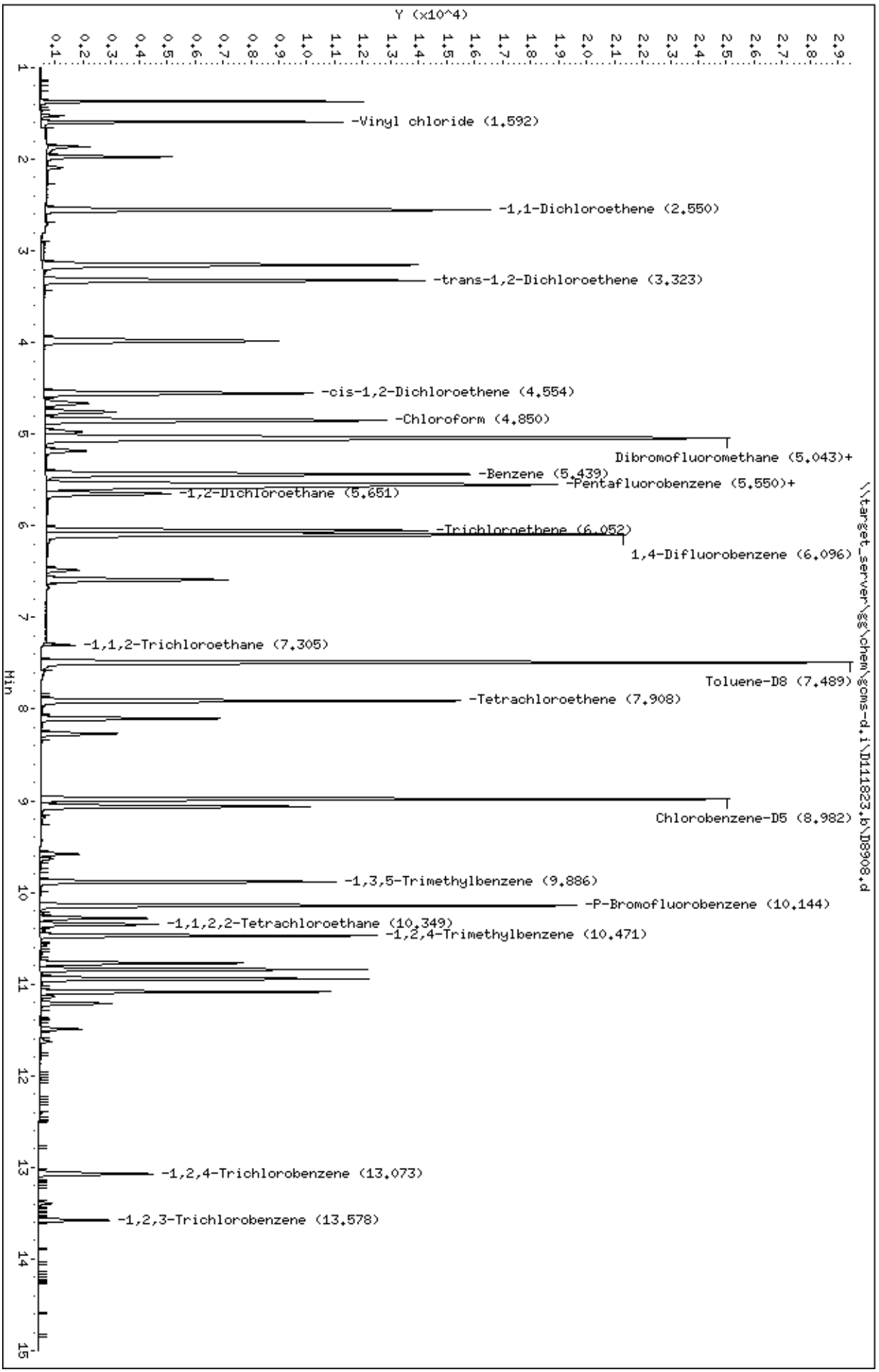
Data file : \\target_server\gg\chem\gcms-d.i\D111823.b\D8908.d
Lab Smp Id: WG345748-1
Inj Date : 18-NOV-2023 11:17
Operator : JSS   Inst ID: gcms-d.i
Smp Info : WG345748-1,SQ6133
Misc Info : WG345748,WG345527-5,SQ6133-3
Comment   : SW846 5030C
Method   : \\target_server\gg\chem\gcms-d.i\D111823.b\DSIM(01)CR23.m
Meth Date : 20-Nov-2023 06:32 gcms-d.i   Quant Type: ISTD
Cal Date : 16-NOV-2023 10:22   Cal File: D8863.d
Als bottle: 3   QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: all.sub
Target Version: 4.12
Processing Host: T7-O360

Concentration Formula: Amt * DF * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	25.000	sample purged
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)	REVIEW CODE
1	Vinyl chloride	62	1.591	1.591	(0.287)	6807	0.41718	0.417	
2	1,1-Dichloroethene	96	2.551	2.553	(0.460)	7313	0.48825	0.488	
4	trans-1,2-Dichloroethene	96	3.321	3.323	(0.599)	7591	0.44565	0.446	
5	cis-1,2-Dichloroethene	96	4.555	4.558	(0.821)	5954	0.45694	0.457	
13	Trichloroethene	130	6.050	6.052	(0.992)	6710	0.48182	0.482	
16	Tetrachloroethene	164	7.910	7.912	(1.297)	6027	0.51034	0.510	
$ 7	Dibromofluoromethane	113	5.036	5.037	(0.908)	15732	0.86630	0.866	
$ 11	1,2-Dichloroethane-D4	65	5.579	5.582	(1.006)	9343	0.87165	0.872	
$ 15	Toluene-D8	98	7.488	7.491	(1.228)	28423	0.99065	0.991	
$ 20	P-Bromofluorobenzene	95	10.142	10.146	(1.129)	9780	1.04111	1.04	
* 10	Pentafluorobenzene	168	5.547	5.549	(1.000)	23254	1.00000		
* 14	1,4-Difluorobenzene	114	6.097	6.096	(1.000)	31686	1.00000		
* 18	Chlorobenzene-D5	117	8.981	8.984	(1.000)	28091	1.00000		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Date : 18-NOV-2023 11:17
Client ID:
Sample Info: WG345748-1,SQ6133
Purge Volume: 25.0
Column phase: RTX-VMS
Instrument: gcms-d.i
Operator: JSS
Column diameter: 0.18
Y (x10^4)
Min
-Vinyl chloride (1.592)
-1,1-Dichloroethene (2.550)
-trans-1,2-Dichloroethene (3.323)
-cis-1,2-Dichloroethene (4.554)
-Chloroform (4.850)
Dibromofluoromethane (5.043)+
-Benzene (5.439)
-Pentafluorobenzene (5.550)+
-1,2-Dichloroethane (5.651)
-Trichloroethene (6.052)
1,4-Difluorobenzene (6.096)
-1,1,2-Trichloroethane (7.305)
Toluene-D8 (7.489)
-Tetrachloroethene (7.908)
Chlorobenzene-D5 (8.982)
-1,3,5-Trimethylbenzene (9.886)
-P-Bromofluorobenzene (10.144)
-1,1,2,2-Tetrachloroethane (10.349)
-1,2,4-Trimethylbenzene (10.471)
-1,2,4-Trichlorobenzene (13.073)
-1,2,3-Trichlorobenzene (13.578)
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Data File: \\target_server\gg\chem\gcms-d.i\D111823.b\D8909.d
Report Date: 12-Dec-2023 10:30

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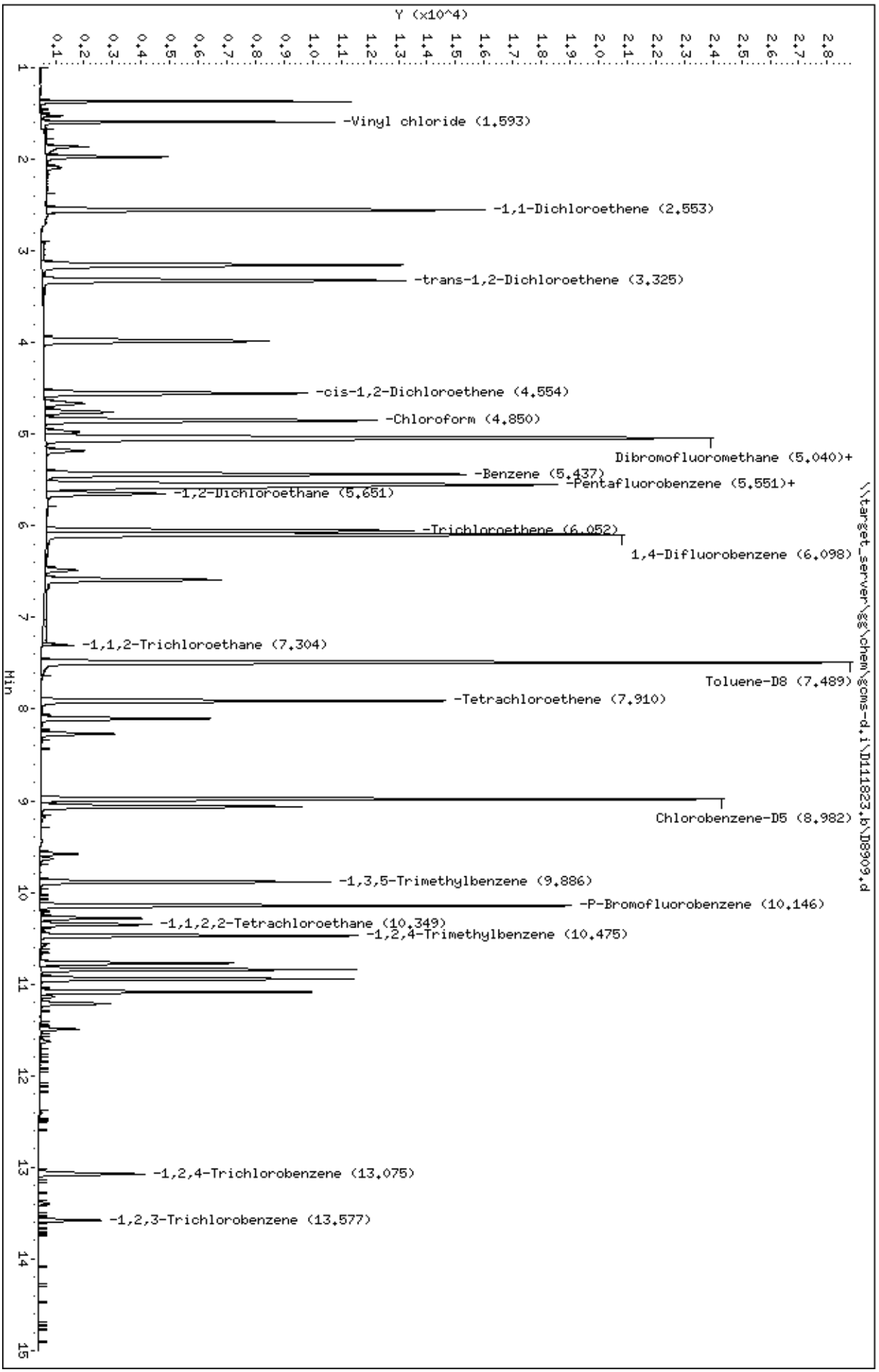
Data file : \\target_server\gg\chem\gcms-d.i\D111823.b\D8909.d
Lab Smp Id: WG345748-6
Inj Date : 18-NOV-2023 11:50
Operator : JSS   Inst ID: gcms-d.i
Smp Info : WG345748-6,SQ6133
Misc Info : WG345748,WG345527-5,SQ6133-3
Comment   : SW846 5030C
Method   : \\target_server\gg\chem\gcms-d.i\D111823.b\DSIM(01)CR23.m
Meth Date : 20-Nov-2023 06:32 gcms-d.i   Quant Type: ISTD
Cal Date : 16-NOV-2023 10:22   Cal File: D8863.d
Als bottle: 4   QC Sample: LCSD
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: all.sub
Target Version: 4.12
Processing Host: T7-O360

Concentration Formula: Amt * DF * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	25.000	sample purged
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)	REVIEW CODE
1	Vinyl chloride	62	1.593	1.591	(0.287)	6520	0.41221	0.412	
2	1,1-Dichloroethene	96	2.552	2.553	(0.460)	7172	0.49396	0.494	
4	trans-1,2-Dichloroethene	96	3.324	3.323	(0.599)	7190	0.43545	0.435	
5	cis-1,2-Dichloroethene	96	4.553	4.558	(0.821)	5680	0.44968	0.450	
13	Trichloroethene	130	6.052	6.052	(0.993)	6496	0.47997	0.480	
16	Tetrachloroethene	164	7.911	7.912	(1.298)	5710	0.49750	0.497	
$ 7	Dibromofluoromethane	113	5.038	5.037	(0.908)	15221	0.86463	0.865	
$ 11	1,2-Dichloroethane-D4	65	5.579	5.582	(1.005)	8911	0.85761	0.858	
$ 15	Toluene-D8	98	7.488	7.491	(1.228)	27287	0.97861	0.979	
$ 20	P-Bromofluorobenzene	95	10.145	10.146	(1.130)	9371	1.03287	1.03	
* 10	Pentafluorobenzene	168	5.549	5.549	(1.000)	22542	1.00000		
* 14	1,4-Difluorobenzene	114	6.097	6.096	(1.000)	30794	1.00000		
* 18	Chlorobenzene-D5	117	8.981	8.984	(1.000)	27131	1.00000		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Date : 18-NOV-2023 11:50
Client ID:
Sample Info: WG345748-6,SQ6133
Purge Volume: 25,0
Column phase: RTX-VMS
Instrument: gcms-d,i
Operator: JSS
Column diameter: 0,18
Y (x10^4)
0,1 0,2 0,3 0,4 0,5 0,6 0,7 0,8 0,9 1,0 1,1 1,2 1,3 1,4 1,5 1,6 1,7 1,8 1,9 2,0 2,1 2,2 2,3 2,4 2,5 2,6 2,7 2,8
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
Min
-Vinyl chloride (1,593)
-1,1-Dichloroethene (2,553)
-trans-1,2-Dichloroethene (3,325)
-cis-1,2-Dichloroethene (4,554)
-Chloroform (4,850)
Dibromofluoromethane (5,040)+
-Benzene (5,437)
-Pentafluorobenzene (5,551)+
-1,2-Dichloroethane (5,651)
-Trichloroethene (6,052)
1,4-Difluorobenzene (6,098)
-1,1,2-Trichloroethane (7,304)
Toluene-D8 (7,489)
-Tetrachloroethene (7,910)
Chlorobenzene-D5 (8,982)
-1,3,5-Trimethylbenzene (9,886)
-P-Bromofluorobenzene (10,146)
-1,1,2,2-Tetrachloroethane (10,349)
-1,2,4-Trimethylbenzene (10,475)
-1,2,4-Trichlorobenzene (13,075)
-1,2,3-Trichlorobenzene (13,577)
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ANALYTICAL SERVICES

LCS/LCSD Recovery Report

LCS ID: WG345525-10
LCSD ID: WG345525-14
SDG: SQ6133
LCS File ID: S7207.D

Extract Date: 16-NOV-23
Extracted By: JSS
Extraction Method: SW846 5030C
Lab Prep Batch: WG345525
LCSD File ID: S7208.D

Analysis Date: 16-NOV-23
Analyst: JSS
Analysis Method: SW846 8260C SIM
Matrix: AQ
Report Date: 12-DEC-23

Compound	Spike Amt	LCS Conc	LCS Rec (%)	LCSD Conc	LCSD Rec (%)	Conc Units	RPD (%)	RPD Limit	Limits
Vinyl Chloride	0.500	0.476	95.2	0.481	96.2	ug/L	1	20	70-130
1,1-Dichloroethene	0.500	0.495	99.0	0.510	102.	ug/L	3	20	70-130
trans-1,2-Dichloroethene	0.500	0.482	96.4	0.486	97.2	ug/L	1	20	70-130
cis-1,2-Dichloroethene	0.500	0.499	99.8	0.505	101.	ug/L	1	20	70-130
Trichloroethene	0.500	0.474	94.8	0.476	95.2	ug/L	0	20	70-130
Tetrachloroethene	0.500	0.474	94.8	0.487	97.4	ug/L	3	20	70-130
Dibromofluoromethane			101.		103.				70-130
1,2-Dichloroethane-d4			103.		104.				70-130
Toluene-D8			101.		98.4				70-130
p-Bromofluorobenzene			101.		101.				70-130

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Data File: \\target_server\gg\chem\gcms-s.i\S111623.b\S7207.D
Report Date: 12-Dec-2023 10:42

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Data file : \\target_server\gg\chem\gcms-s.i\S111623.b\S7207.D
Lab Smp Id: WG345525-10 Client Smp ID: INDSOURCE
Inj Date : 16-NOV-2023 16:15
Operator : JSS Inst ID: gcms-s.i
Smp Info : WG345525-10,SQ6133
Misc Info : WG345525,WG345525-5,SQ6133-2
Comment : SW846 5030C
Method : \\target_server\gg\chem\gcms-s.i\S111623.b\SSIM(01)CR23.m
Meth Date : 12-Dec-2023 10:34 croy Quant Type: ISTD
Cal Date : 16-NOV-2023 15:48 Cal File: S7206.D
Als bottle: 9 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.12
Processing Host: VOA-WS

Concentration Formula: Amt * DF * 25/Vo * CpndVariable

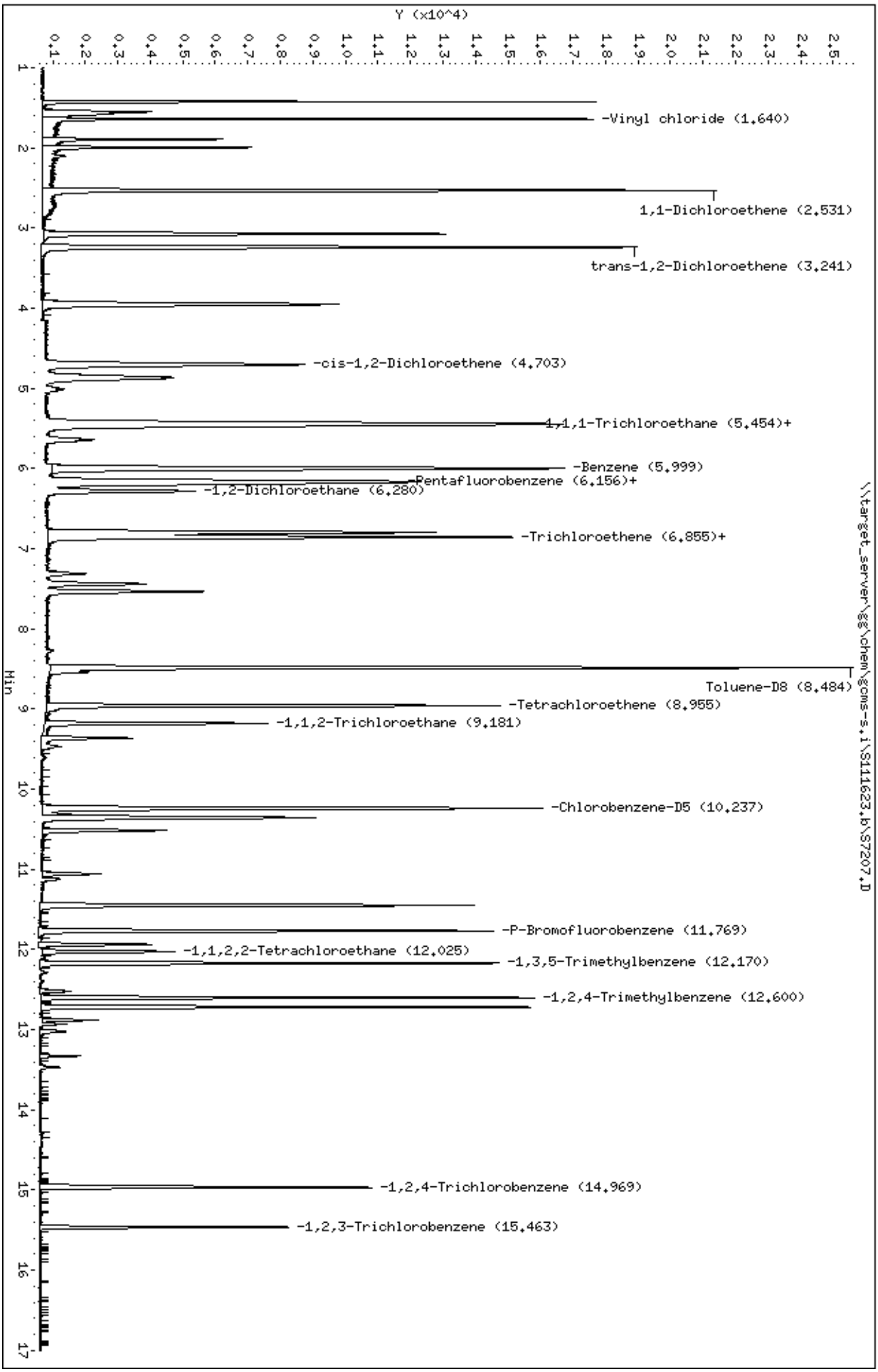
Name	Value	Description
DF	1.000	Dilution Factor
Vo	25.000	sample purged
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)	REVIEW CODE
	1 Vinyl chloride	62	1.640	1.640	(0.266)	10764	0.47628	0.476	
	2 1,1-Dichloroethene	96	2.531	2.532	(0.411)	8764	0.49548	0.495	
	3 trans-1,2-Dichloroethene	96	3.240	3.238	(0.526)	9391	0.48175	0.482	
	4 cis-1,2-Dichloroethene	96	4.702	4.702	(0.764)	7489	0.49901	0.499	
	6 1,1,1-Trichloroethane	97	5.454	5.454	(0.886)	15113	0.48513	0.485	
$	7 Dibromofluoromethane	113	5.433	5.440	(0.883)	10423	1.00661	1.01	
	8 Benzene	78	5.998	6.000	(0.974)	30462	0.49306	0.493	
*	9 Pentafluorobenzene	168	6.156	6.163	(1.000)	15461	1.00000		
$	10 1,2-Dichloroethane-D4	65	6.186	6.193	(1.005)	9616	1.02786	1.03	
	11 1,2-Dichloroethane	62	6.280	6.285	(0.916)	8667	0.49471	0.495	
	12 Trichloroethene	130	6.799	6.793	(0.992)	6695	0.47432	0.474	
*	13 1,4-Difluorobenzene	114	6.854	6.854	(1.000)	24676	1.00000		
$	14 Toluene-D8	98	8.484	8.482	(1.238)	26072	1.00605	1.01	
	15 Tetrachloroethene	164	8.962	8.957	(1.307)	6010	0.47425	0.474	
	16 1,1,2-Trichloroethane	83	9.182	9.181	(1.340)	3395	0.51107	0.511	
*	17 Chlorobenzene-D5	117	10.234	10.238	(1.000)	23193	1.00000		
$	18 P-Bromofluorobenzene	95	11.768	11.768	(1.150)	9835	1.00693	1.01	
	19 1,1,2,2-Tetrachloroethane	83	12.025	12.027	(1.175)	3794	0.46072	0.461	
	20 1,3,5-Trimethylbenzene	105	12.170	12.172	(1.189)	16325			(a)
	21 1,2,4-Trimethylbenzene	105	12.602	12.600	(1.231)	17175			(aR)
	22 1,2,4-Trichlorobenzene	180	14.969	14.968	(1.463)	5902	0.49332	0.493	
	23 1,2,3-Trichlorobenzene	180	15.461	15.465	(1.511)	4744	0.51116	0.511	

Data File: \\target_server\gg\chem\gcms-s.i\S111623.b\S7207.D
Report Date: 12-Dec-2023 10:42

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
R - Spike/Surrogate failed recovery limits.


Data File: \\target_server\gg\chem\gcms-s,i\S111623,b\S7207,D
Date : 16-NOV-2023 16:15
Client ID: INDSOURCE
Sample Info: WG345525-10,SQ6133
Purge Volume: 25,0
Column phase: RTX-VMS
Instrument: gcms-s,i
Operator: JSS
Column diameter: 0,18
Y (x10^4)
Min
-Vinyl chloride (1,640)
1,1-Dichloroethene (2,531)
trans-1,2-Dichloroethene (3,241)
-cis-1,2-Dichloroethene (4,703)
1,1,1-Trichloroethane (5,454)+
-Benzene (5,999)
Pentafluorobenzene (6,156)+
-1,2-Dichloroethane (6,280)
-Trichloroethene (6,855)+
Toluene-D8 (8,484)
-Tetrachloroethene (8,955)
-1,1,2-Trichloroethane (9,181)
-Chlorobenzene-D5 (10,237)
-P-Bromofluorobenzene (11,769)
-1,1,2,2-Tetrachloroethane (12,025)
-1,3,5-Trimethylbenzene (12,170)
-1,2,4-Trimethylbenzene (12,600)
-1,2,4-Trichlorobenzene (14,969)
-1,2,3-Trichlorobenzene (15,463)
\\target_server\gg\chem\gcms-s,i\S111623,b\S7207,D

Data File: \\target_server\gg\chem\gcms-s.i\S111623.b\S7208.D
Report Date: 12-Dec-2023 10:42

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-s.i\S111623.b\S7208.D
Lab Smp Id: WG345525-14
Inj Date : 16-NOV-2023 16:43
Operator : JSS   Inst ID: gcms-s.i
Smp Info : WG345525-14,SQ6133
Misc Info : WG345525,WG345525-5,SQ6133-2
Comment   : SW846 5030C
Method   : \\target_server\gg\chem\gcms-s.i\S111623.b\SSIM(01)CR23.m
Meth Date : 12-Dec-2023 10:34 croy   Quant Type: ISTD
Cal Date : 16-NOV-2023 15:48   Cal File: S7206.D
Als bottle: 10   QC Sample: LCSD
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: all.sub
Target Version: 4.12
Processing Host: T7-O360

Concentration Formula: Amt * DF * 25/Vo * CpndVariable

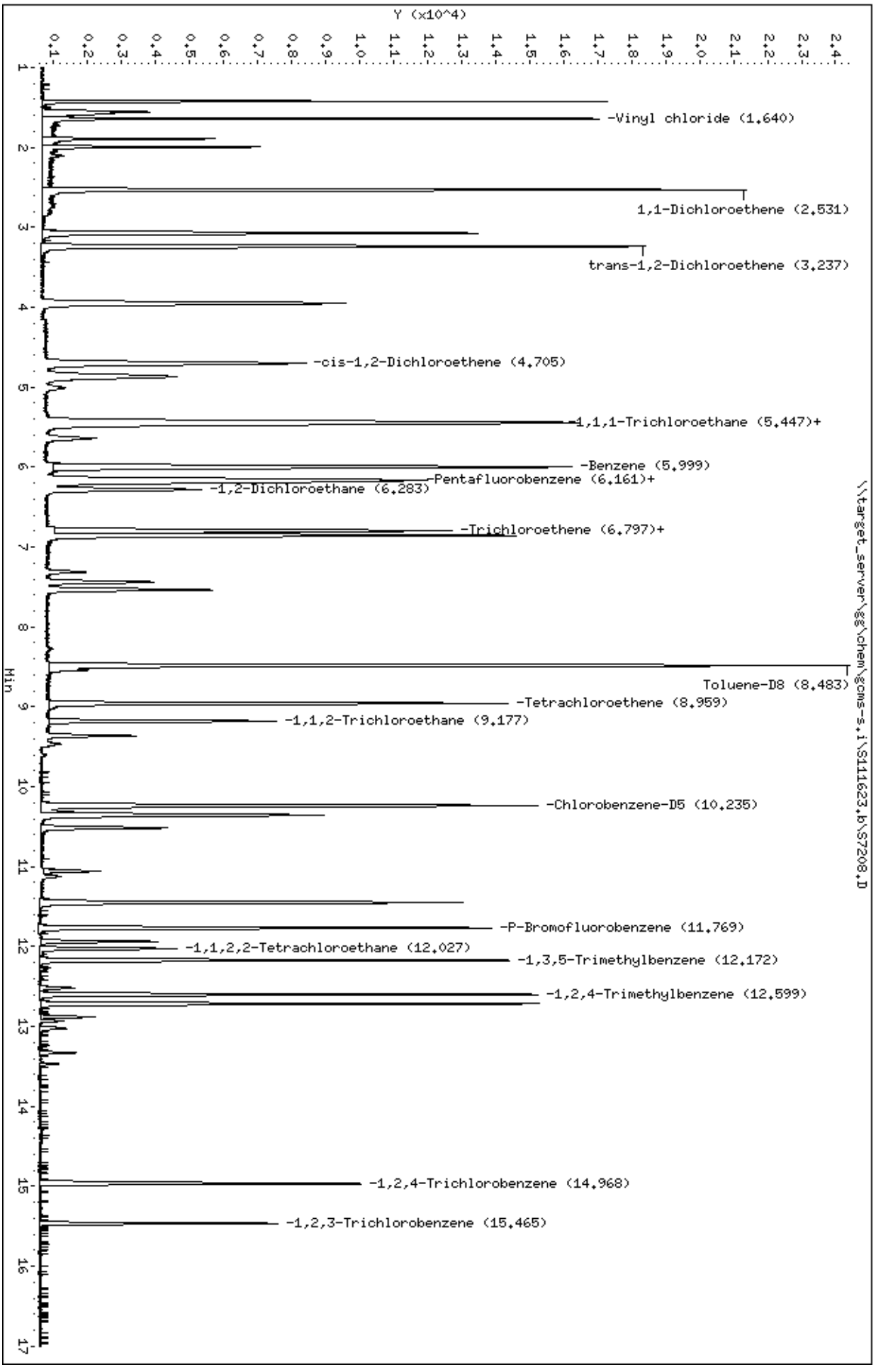
Name	Value	Description
DF	1.000	Dilution Factor
Vo	25.000	sample purged
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)	REVIEW CODE
	1 Vinyl chloride	62	1.640	1.640	(0.266)	10507	0.48074	0.481	
	2 1,1-Dichloroethene	96	2.531	2.532	(0.411)	8723	0.50995	0.510	
	3 trans-1,2-Dichloroethene	96	3.238	3.238	(0.526)	9162	0.48601	0.486	
	4 cis-1,2-Dichloroethene	96	4.704	4.702	(0.764)	7336	0.50545	0.505	
	6 1,1,1-Trichloroethane	97	5.447	5.454	(0.884)	14827	0.49216	0.492	
$	7 Dibromofluoromethane	113	5.435	5.440	(0.882)	10306	1.02920	1.03	
	8 Benzene	78	5.998	6.000	(0.974)	29249	0.48954	0.490	
*	9 Pentafluorobenzene	168	6.161	6.163	(1.000)	14952	1.00000		
$	10 1,2-Dichloroethane-D4	65	6.190	6.193	(1.005)	9428	1.04207	1.04	
	11 1,2-Dichloroethane	62	6.283	6.285	(0.916)	8390	0.49634	0.496	
	12 Trichloroethene	130	6.792	6.793	(0.991)	6489	0.47647	0.476	
*	13 1,4-Difluorobenzene	114	6.856	6.854	(1.000)	23809	1.00000		
$	14 Toluene-D8	98	8.482	8.482	(1.237)	24612	0.98429	0.984	
	15 Tetrachloroethene	164	8.958	8.957	(1.307)	5950	0.48662	0.487	
	16 1,1,2-Trichloroethane	83	9.177	9.181	(1.339)	3342	0.52141	0.521	
*	17 Chlorobenzene-D5	117	10.236	10.238	(1.000)	22159	1.00000		
$	18 P-Bromofluorobenzene	95	11.768	11.768	(1.150)	9413	1.00870	1.01	
	19 1,1,2,2-Tetrachloroethane	83	12.027	12.027	(1.175)	3666	0.46595	0.466	
	20 1,3,5-Trimethylbenzene	105	12.172	12.172	(1.189)	15681		(a)	
	21 1,2,4-Trimethylbenzene	105	12.602	12.600	(1.231)	16512		(aR)	
	22 1,2,4-Trichlorobenzene	180	14.969	14.968	(1.462)	5408	0.47313	0.473	
	23 1,2,3-Trichlorobenzene	180	15.466	15.465	(1.511)	4418	0.49825	0.498	

Data File: \\target_server\gg\chem\gcms-s.i\S111623.b\S7208.D
Report Date: 12-Dec-2023 10:42

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
R - Spike/Surrogate failed recovery limits.


Data File: \\target_server\gg\chem\gcms-s.i\S111623.b\S7208.D
Date : 16-NOV-2023 16:43
Client ID:
Sample Info: WG345525-14,SQ6133
Purge Volume: 25.0
Column phase: RTX-VMS
Instrument: gcms-s.i
Operator: JSS
Column diameter: 0.18
Y (x10^4)
Min
\\target_server\gg\chem\gcms-s.i\S111623.b\S7208.D
-Vinyl chloride (1,640)
1,1-Dichloroethene (2,531)
trans-1,2-Dichloroethene (3,237)
-cis-1,2-Dichloroethene (4,705)
-1,1,1-Trichloroethane (5,447)+
-Benzene (5,999)
Pentafluorobenzene (6,161)+
-1,2-Dichloroethane (6,283)
-Trichloroethene (6,797)+
Toluene-D8 (8,483)
-Tetrachloroethene (8,959)
-1,1,2-Trichloroethane (9,177)
-Chlorobenzene-D5 (10,235)
-P-Bromofluorobenzene (11,769)
-1,1,2,2-Tetrachloroethane (12,027)
-1,3,5-Trimethylbenzene (12,172)
-1,2,4-Trimethylbenzene (12,599)
-1,2,4-Trichlorobenzene (14,968)
-1,2,3-Trichlorobenzene (15,465)

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ANALYTICAL SERVICES

LCS Recovery Report

Lab ID: WG345597-1
Client ID: LCS
SDG: SQ6133
LCS File ID: S7226.D
Report Date: 12-DEC-23

Extract Date: 17-NOV-23
Extracted By: JSS
Extraction Method: SW846 5030C
Lab Prep Batch: WG345597

Analysis Date: 17-NOV-23
Analyst: JSS
Analysis Method: SW846 8260C SIM
Matrix: AQ

Compound	Recovery (%)	Conc Added	Conc Recovered	Conc Units	Limits
Vinyl Chloride	99.2	0.500	0.496	ug/L	70-130
1,1-Dichloroethene	112.	0.500	0.559	ug/L	70-130
trans-1,2-Dichloroethene	106.	0.500	0.529	ug/L	70-130
cis-1,2-Dichloroethene	101.	0.500	0.505	ug/L	70-130
Trichloroethene	101.	0.500	0.504	ug/L	70-130
Tetrachloroethene	107.	0.500	0.533	ug/L	70-130
Dibromofluoromethane	101.				70-130
1,2-Dichloroethane-d4	98.4				70-130
Toluene-D8	96.6				70-130
p-Bromofluorobenzene	99.9				70-130

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Data File: \\target_server\gg\chem\gcms-s.i\S111723.b\S7226.D
Report Date: 12-Dec-2023 10:52

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-s.i\S111723.b\S7226.D
Lab Smp Id: WG345597-1
Inj Date : 17-NOV-2023 10:21
Operator : JSS   Inst ID: gcms-s.i
Smp Info : WG345597-1,SQ6133
Misc Info : WG345597,WG345525-5,SQ6133-8
Comment   : SW846 5030C
Method   : \\target_server\gg\chem\gcms-s.i\S111723.b\SSIM(01)CR23.m
Meth Date : 08-Dec-2023 14:53 croy   Quant Type: ISTD
Cal Date : 16-NOV-2023 15:48   Cal File: S7206.D
Als bottle: 2   QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: all.sub
Target Version: 4.12
Processing Host: T7-O360

Concentration Formula: Amt * DF * 25/Vo * CpndVariable

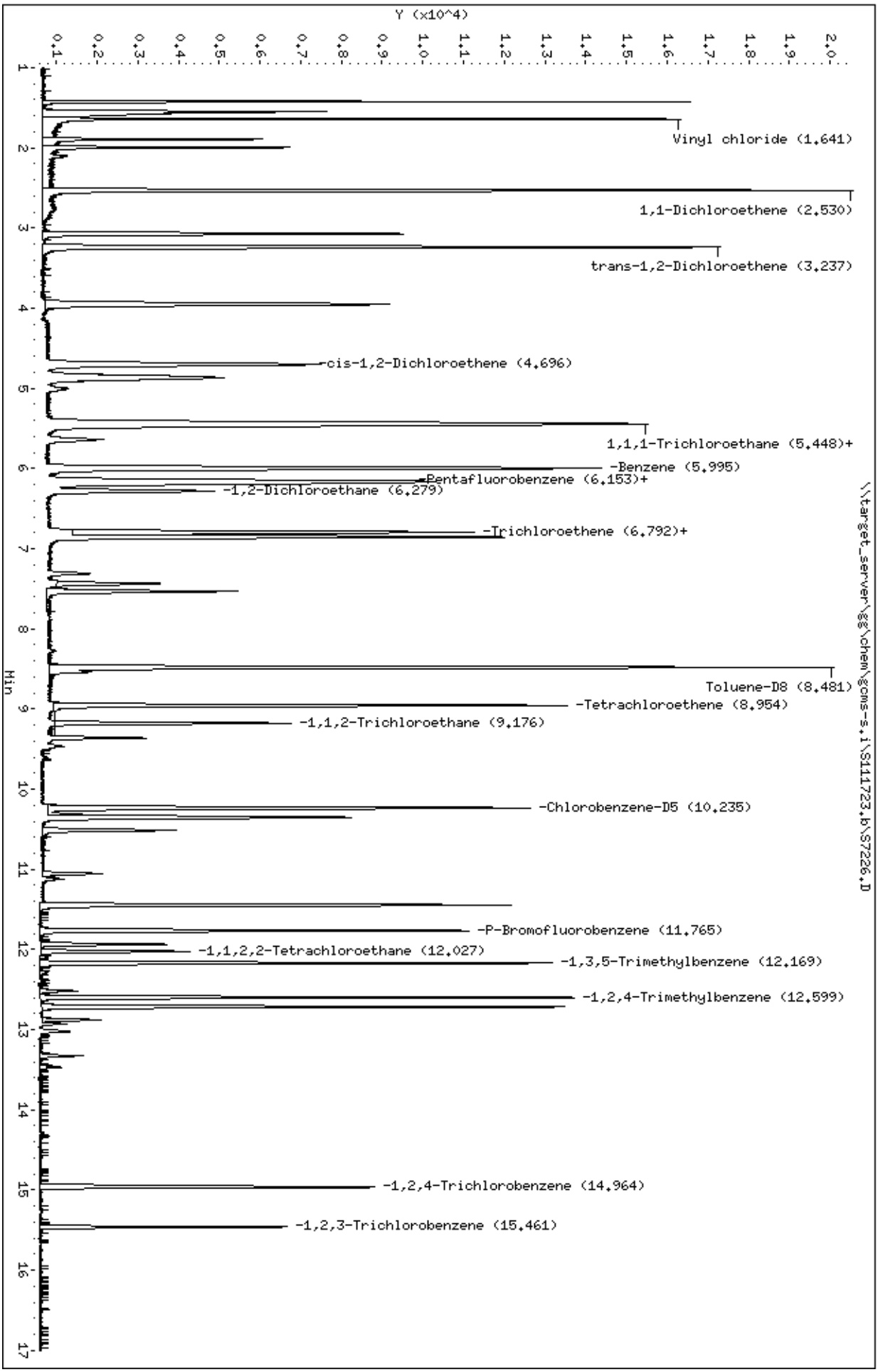
Name	Value	Description
DF	1.000	Dilution Factor
Vo	25.000	sample purged
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)	REVIEW CODE
	1 Vinyl chloride	62	1.640	1.640	(0.267)	9439	0.49569	0.496	
	2 1,1-Dichloroethene	96	2.529	2.532	(0.411)	8338	0.55947	0.559	
	3 trans-1,2-Dichloroethene	96	3.239	3.238	(0.526)	8690	0.52909	0.529	
	4 cis-1,2-Dichloroethene	96	4.696	4.703	(0.763)	6383	0.50478	0.505	
	6 1,1,1-Trichloroethane	97	5.447	5.454	(0.885)	14483	0.55178	0.552	
$	7 Dibromofluoromethane	113	5.430	5.441	(0.883)	8850	1.01439	1.01	
	8 Benzene	78	5.995	6.000	(0.974)	25705	0.49380	0.494	
*	9 Pentafluorobenzene	168	6.153	6.163	(1.000)	13027	1.00000		
$	10 1,2-Dichloroethane-D4	65	6.190	6.194	(1.006)	7761	0.98457	0.984	
	11 1,2-Dichloroethane	62	6.278	6.285	(0.916)	7462	0.52638	0.526	
	12 Trichloroethene	130	6.794	6.794	(0.991)	5756	0.50397	0.504	
*	13 1,4-Difluorobenzene	114	6.854	6.855	(1.000)	19967	1.00000		
$	14 Toluene-D8	98	8.480	8.483	(1.237)	20248	0.96558	0.966	
	15 Tetrachloroethene	164	8.955	8.957	(1.306)	5470	0.53344	0.533	
	16 1,1,2-Trichloroethane	83	9.174	9.181	(1.338)	2891	0.53784	0.538	
*	17 Chlorobenzene-D5	117	10.234	10.238	(1.000)	17742	1.00000		
$	18 P-Bromofluorobenzene	95	11.765	11.768	(1.150)	7464	0.99897	0.999	
	19 1,1,2,2-Tetrachloroethane	83	12.023	12.027	(1.175)	3342	0.53052	0.530	
	20 1,3,5-Trimethylbenzene	105	12.168	12.172	(1.189)	14056		(a)	
	21 1,2,4-Trimethylbenzene	105	12.598	12.600	(1.231)	14726		(aR)	
	22 1,2,4-Trichlorobenzene	180	14.967	14.968	(1.462)	4828	0.52754	0.528	
	23 1,2,3-Trichlorobenzene	180	15.461	15.465	(1.511)	3633	0.51172	0.512	

Data File: \\target_server\gg\chem\gcms-s.i\S111723.b\S7226.D
Report Date: 12-Dec-2023 10:52

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
R - Spike/Surrogate failed recovery limits.


Data File: \\target_server\gg\chem\gcms-s.i\S111723.b\S7226.D
Date : 17-NOV-2023 10:21
Client ID:
Sample Info: WG345597-1,SQ6133
Purge Volume: 25.0
Column phase: RTX-VMS
Instrument: gcms-s.i
Operator: JSS
Column diameter: 0.18
\\target_server\gg\chem\gcms-s.i\S111723.b\S7226.D
Y (x10^4)
Min
Vinyl chloride (1.641)
1,1-Dichloroethene (2.530)
trans-1,2-Dichloroethene (3.237)
cis-1,2-Dichloroethene (4.696)
1,1,1-Trichloroethane (5.448)+
-Benzene (5.995)
Pentafluorobenzene (6.153)+
-1,2-Dichloroethane (6.279)
-Trichloroethene (6.792)+
Toluene-D8 (8.481)
-Tetrachloroethene (8.954)
-1,1,2-Trichloroethane (9.176)
-Chlorobenzene-D5 (10.235)
-P-Bromofluorobenzene (11.765)
-1,1,2,2-Tetrachloroethane (12.027)
-1,3,5-Trimethylbenzene (12.169)
-1,2,4-Trimethylbenzene (12.599)
-1,2,4-Trichlorobenzene (14.964)
-1,2,3-Trichlorobenzene (15.461)

Katahdin
ANALYTICAL SERVICES

MS/MSD Recovery Report

MS ID: WG345597-6
MSD ID: WG345597-7
Sample ID: SQ6133-8
Client ID: SY-BRMW2-80.5-95.5-110723
SDG: SQ6133
MS File ID: S7247.D

Extract Date: 17-NOV-23
Extracted By: JSS
Extraction Method: SW846 5030C
Lab Prep Batch: WG345597
Report Date: 12-DEC-23
MSD File ID: S7248.D

Analysis Date: 17-NOV-23
Analyst: JSS
Analysis Method: SW846 8260C SIM
Matrix: AQ
% Solids: N/A
Sample File ID: S7239.D

Compound	MS Spike	MSD Spike	Conc Units	Samp Conc	MS Conc	MSD Conc	MS Rec (%)	MSD Rec (%)	RPD (%)	RPD Limit	Limits
Vinyl Chloride	0.500	0.500	ug/L	U0.050	0.484	0.495	96.8	99.0	2	20	70-130
1,1-Dichloroethene	0.500	0.500	ug/L	U0.025	0.610	0.602	122.	120.	1	20	70-130
trans-1,2-Dichloroethene	0.500	0.500	ug/L	U0.025	0.532	0.551	106.	110.	4	20	70-130
cis-1,2-Dichloroethene	0.500	0.500	ug/L	U0.025	0.493	0.523	98.6	105.	6	20	70-130
Trichloroethene	0.500	0.500	ug/L	U0.025	0.518	0.537	104.	107.	4	20	70-130
Tetrachloroethene	0.500	0.500	ug/L	U0.025	0.573	0.578	115.	116.	1	20	70-130
Dibromofluoromethane							113.	104.			70-130
1,2-Dichloroethane-d4							115.	107.			70-130
Toluene-D8							98.0	96.2			70-130
p-Bromofluorobenzene							95.8	97.9			70-130

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Data File: \\target_server\gg\chem\gcms-s.i\S111723.b\S7247.D
Report Date: 12-Dec-2023 10:52

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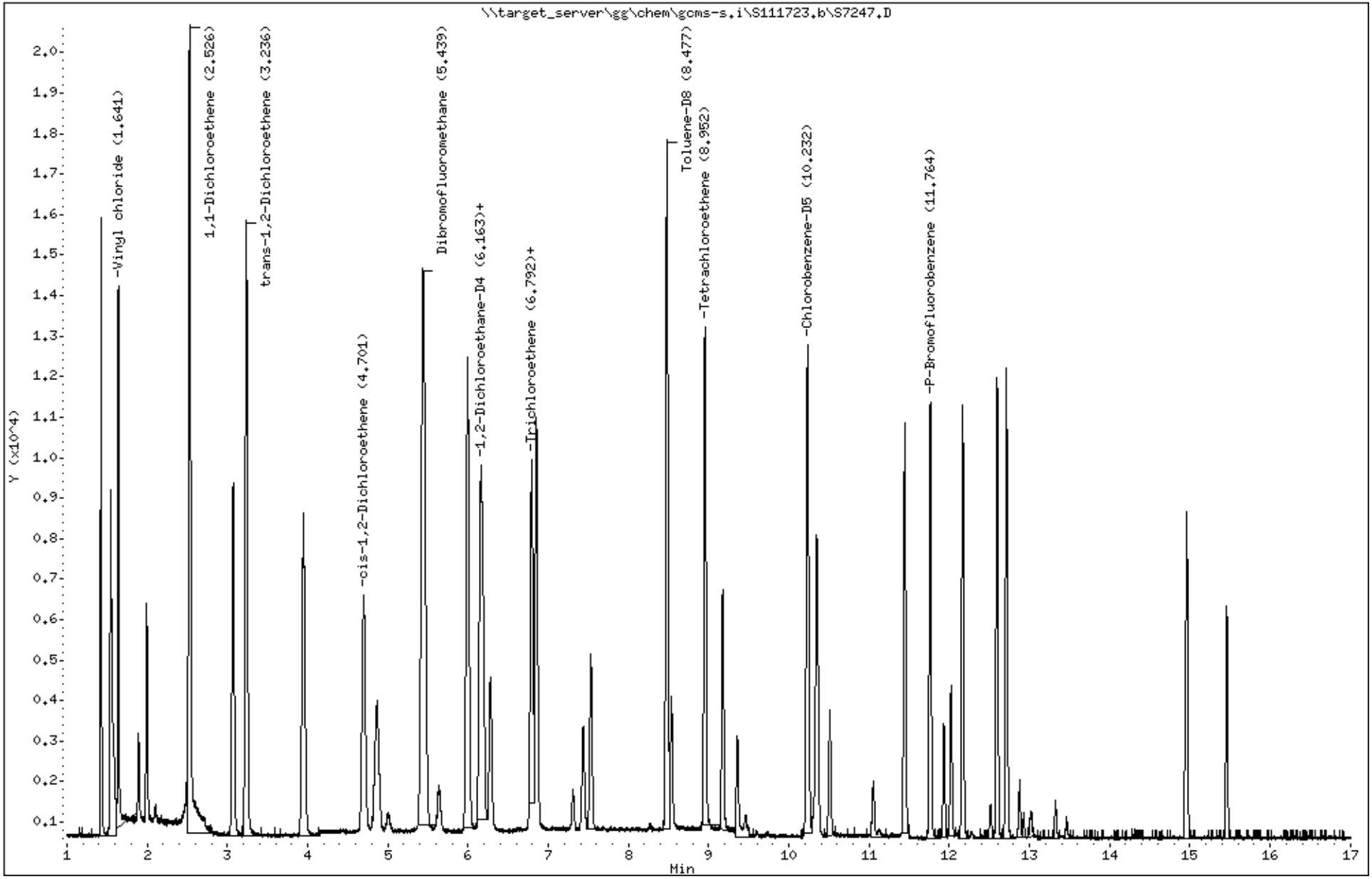
Data file : \\target_server\gg\chem\gcms-s.i\S111723.b\S7247.D
Lab Smp Id: WG345597-6
Inj Date : 17-NOV-2023 20:00
Operator : JSS   Inst ID: gcms-s.i
Smp Info : WG345597-6,SQ6133
Misc Info : WG345597,WG345525-5,SQ6133-8
Comment   : SW846 5030C
Method   : \\target_server\gg\chem\gcms-s.i\S111723.b\SSIM(01)CR23.m
Meth Date : 08-Dec-2023 14:53 croy   Quant Type: ISTD
Cal Date : 16-NOV-2023 15:48   Cal File: S7206.D
Als bottle: 23   QC Sample: MS
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: credere.sub
Target Version: 4.12
Processing Host: ORGANICS2

Concentration Formula: Amt * DF * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	25.000	sample purged
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)	REVIEW CODE
1	Vinyl chloride	62	1.640	1.640	(0.267)	8272	0.48405	0.484	
2	1,1-Dichloroethene	96	2.527	2.532	(0.411)	8163	0.61032	0.610	
4	cis-1,2-Dichloroethene	96	4.701	4.703	(0.764)	5598	0.49329	0.493	
3	trans-1,2-Dichloroethene	96	3.235	3.238	(0.526)	7849	0.53249	0.532	
12	Trichloroethene	130	6.790	6.794	(0.991)	5182	0.51780	0.518	
15	Tetrachloroethene	164	8.957	8.957	(1.307)	5149	0.57305	0.573	
$ 7	Dibromofluoromethane	113	5.430	5.441	(0.883)	8848	1.13006	1.13	
$ 10	1,2-Dichloroethane-D4	65	6.183	6.194	(1.005)	8163	1.15391	1.15	
$ 14	Toluene-D8	98	8.477	8.483	(1.237)	18018	0.98059	0.980	
$ 18	P-Bromofluorobenzene	95	11.763	11.768	(1.150)	7199	0.95858	0.958	
* 9	Pentafluorobenzene	168	6.153	6.163	(1.000)	11691	1.00000		
* 13	1,4-Difluorobenzene	114	6.853	6.855	(1.000)	17496	1.00000		
* 17	Chlorobenzene-D5	117	10.231	10.238	(1.000)	17833	1.00000		

Data File: \\target_server\gg\chem\gcms-s.i\S111723.b\S7247.D
Date : 17-NOV-2023 20:00
Client ID:
Instrument: gcms-s.i
Sample Info: WG345597-6,SQ6133
Purge Volume: 25.0
Operator: JSS
Column phase: RTX-VMS
Column diameter: 0.18



Katahdin Analytical Services SQ6133 Page 254 of 855

Data File: \\target_server\gg\chem\gcms-s.i\S111723.b\S7248.D
Report Date: 12-Dec-2023 10:52

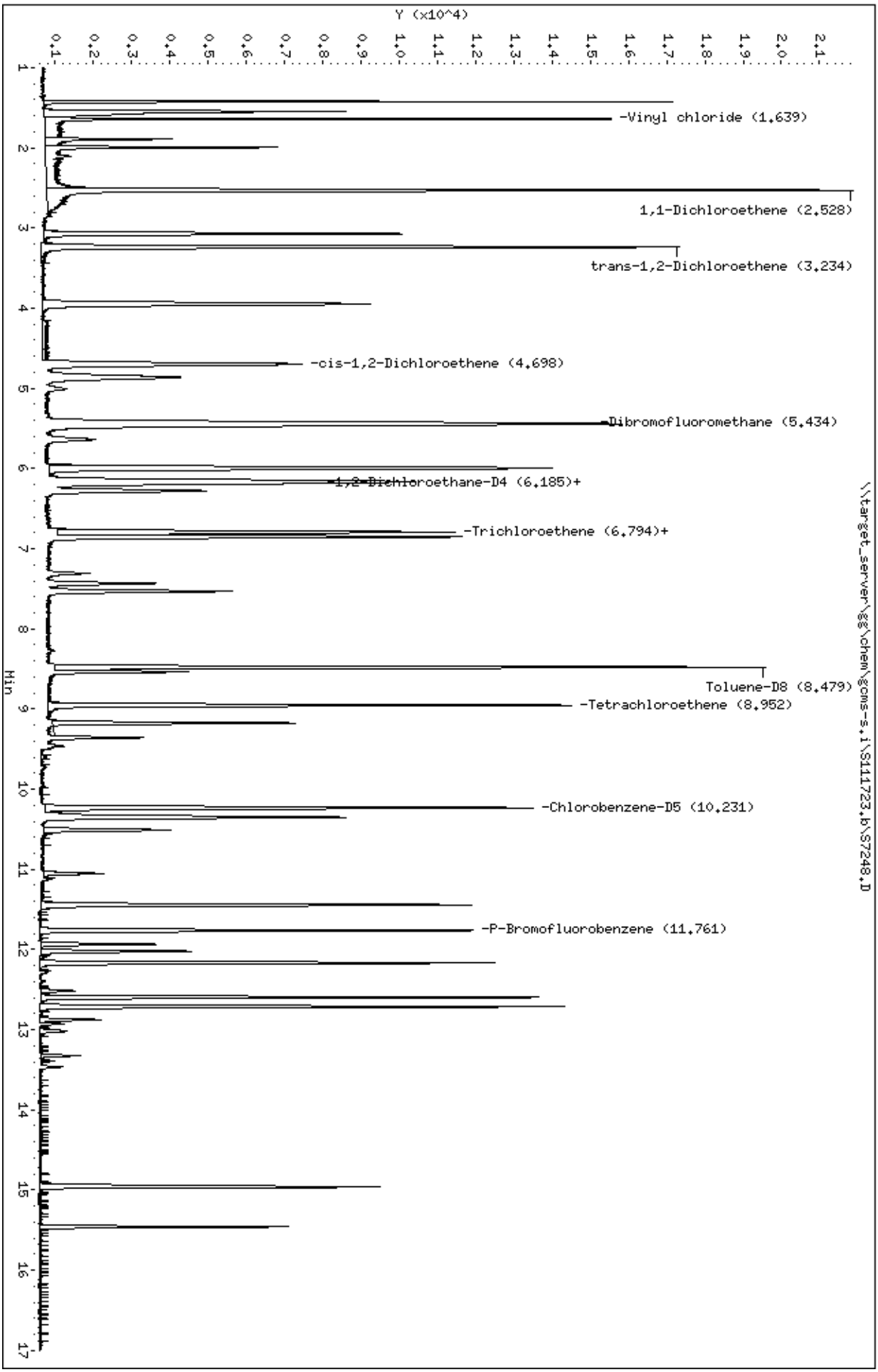
Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-s.i\S111723.b\S7248.D
Lab Smp Id: WG345597-7
Inj Date : 17-NOV-2023 20:27
Operator : JSS   Inst ID: gcms-s.i
Smp Info : WG345597-7,SQ6133
Misc Info : WG345597,WG345525-5,SQ6133-8
Comment   : SW846 5030C
Method   : \\target_server\gg\chem\gcms-s.i\S111723.b\SSIM(01)CR23.m
Meth Date : 08-Dec-2023 14:53 croy   Quant Type: ISTD
Cal Date : 16-NOV-2023 15:48   Cal File: S7206.D
Als bottle: 24   QC Sample: MSD
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: credere.sub
Target Version: 4.12
Processing Host: ORGANICS2

Concentration Formula: Amt * DF * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	25.000	sample purged
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/l)	REVIEW CODE
1	Vinyl chloride	62	1.640	1.640	(0.266)	9205	0.49488	0.495	
2	1,1-Dichloroethene	96	2.530	2.532	(0.411)	8767	0.60222	0.602	
4	cis-1,2-Dichloroethene	96	4.697	4.703	(0.763)	6463	0.52324	0.523	
3	trans-1,2-Dichloroethene	96	3.235	3.238	(0.525)	8842	0.55112	0.551	
12	Trichloroethene	130	6.793	6.794	(0.991)	5816	0.53724	0.537	
15	Tetrachloroethene	164	8.953	8.957	(1.307)	5623	0.57852	0.578	
$ 7	Dibromofluoromethane	113	5.433	5.441	(0.882)	8905	1.04492	1.04	
$ 10	1,2-Dichloroethane-D4	65	6.184	6.194	(1.004)	8231	1.06898	1.07	
$ 14	Toluene-D8	98	8.478	8.483	(1.237)	19112	0.96154	0.962	
$ 18	P-Bromofluorobenzene	95	11.761	11.768	(1.150)	7702	0.97932	0.979	
* 9	Pentafluorobenzene	168	6.159	6.163	(1.000)	12725	1.00000		
* 13	1,4-Difluorobenzene	114	6.852	6.855	(1.000)	18926	1.00000		
* 17	Chlorobenzene-D5	117	10.231	10.238	(1.000)	18675	1.00000		


Data File: \\target_server\gg\chem\gcms-s.i\S111723.b\S7248.D
Date : 17-NOV-2023 20:27
Client ID:
Sample Info: WG345597-7,SQ6133
Purge Volume: 25.0
Column phase: RTX-VMS
Instrument: gcms-s.i
Operator: JSS
Column diameter: 0.18
\\target_server\gg\chem\gcms-s.i\S111723.b\S7248.D
Y (x10^4)
Min
-Vinyl chloride (1.639)
1,1-Dichloroethene (2.528)
trans-1,2-Dichloroethene (3.234)
-cis-1,2-Dichloroethene (4.698)
Dibromofluoromethane (5.434)
1,2-Dichloroethane-D4 (6.185)+
-Trichloroethene (6.794)+
Toluene-D8 (8.479)
-Tetrachloroethene (8.952)
-Chlorobenzene-D5 (10.231)
-P-Bromofluorobenzene (11.761)

Katahdin
ANALYTICAL SERVICES

MS/MSD Recovery Report

MS ID: WG345748-9
MSD ID: WG345748-10
Sample ID: SQ6133-3
Client ID: SY-OBMW12-110723
SDG: SQ6133
MS File ID: D8923.D

Extract Date: 18-NOV-23
Extracted By: JSS
Extraction Method: SW846 5030C
Lab Prep Batch: WG345748
Report Date: 12-DEC-23
MSD File ID: D8924.D

Analysis Date: 18-NOV-23
Analyst: JSS
Analysis Method: SW846 8260C SIM
Matrix: AQ
% Solids: N/A
Sample File ID: D8898.d

Compound	MS Spike	MSD Spike	Conc Units	Samp Conc	MS Conc	MSD Conc	MS Rec (%)	MSD Rec (%)	RPD (%)	RPD Limit	Limits
Vinyl Chloride	0.500	0.500	ug/L	MM0.15	0.393	0.413	* 48.2	* 52.2	5	20	70-130
1,1-Dichloroethene	0.500	0.500	ug/L	U0.025	0.491	0.546	98.2	109.	11	20	70-130
trans-1,2-Dichloroethene	0.500	0.500	ug/L	U0.025	0.441	0.468	88.2	93.6	6	20	70-130
cis-1,2-Dichloroethene	0.500	0.500	ug/L	U0.025	0.489	0.508	97.8	102.	4	20	70-130
Trichloroethene	0.500	0.500	ug/L	0.29	0.733	0.780	88.2	97.6	6	20	70-130
Tetrachloroethene	0.500	0.500	ug/L	U0.025	0.492	0.538	98.4	108.	9	20	70-130
Dibromofluoromethane							77.2	78.4			70-130
1,2-Dichloroethane-d4							77.7	77.7			70-130
Toluene-D8							95.0	95.2			70-130
p-Bromofluorobenzene							104.	104.			70-130

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029
http://www.katahdinlab.com

Data File: \\target_server\gg\chem\gcms-d.i\D111823.b\D8923.d
Report Date: 12-Dec-2023 10:30

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-d.i\D111823.b\D8923.d
Lab Smp Id: WG345748-9
Inj Date : 18-NOV-2023 19:37
Operator : JSS   Inst ID: gcms-d.i
Smp Info : WG345748-9,SQ6133
Misc Info : WG345748,WG345527-5,SQ6133-3
Comment   : SW846 5030C
Method   : \\target_server\gg\chem\gcms-d.i\D111823.b\DSIM(01)CR23.m
Meth Date : 20-Nov-2023 06:32 gcms-d.i   Quant Type: ISTD
Cal Date : 16-NOV-2023 10:22   Cal File: D8863.d
Als bottle: 18   QC Sample: MS
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: all.sub
Target Version: 4.12
Processing Host: T7-O360

Concentration Formula: Amt * DF * 25/Vo * CpndVariable

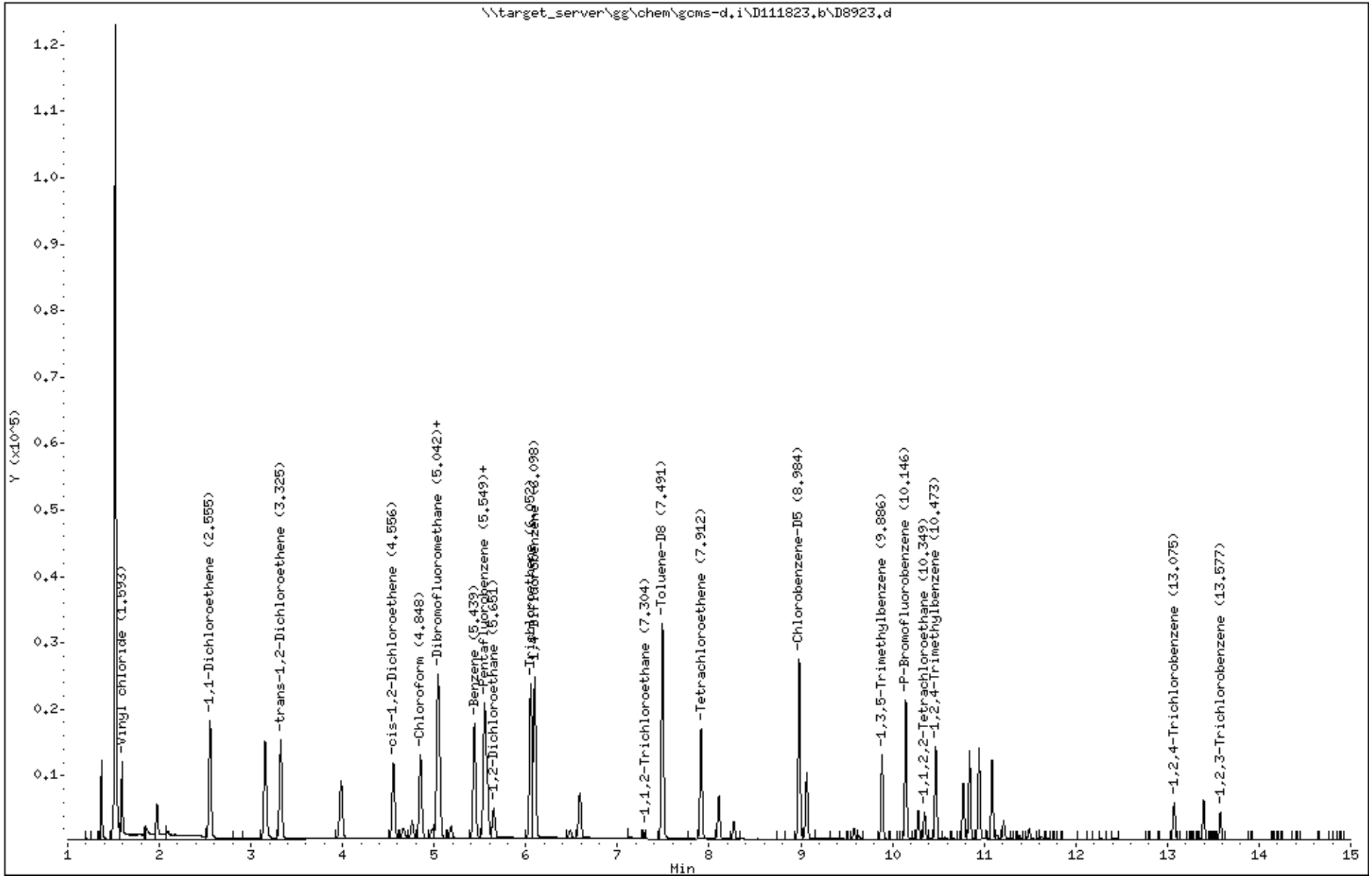
Name	Value	Description
DF	1.000	Dilution Factor
Vo	25.000	sample purged
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)	REVIEW CODE
1	Vinyl chloride	62	1.593	1.591	(0.287)	7091	0.39334	0.393	
2	1,1-Dichloroethene	96	2.552	2.553	(0.460)	8122	0.49081	0.491	
4	trans-1,2-Dichloroethene	96	3.324	3.323	(0.599)	8307	0.44141	0.441	
5	cis-1,2-Dichloroethene	96	4.555	4.558	(0.821)	7039	0.48895	0.489	
13	Trichloroethene	130	6.054	6.052	(0.993)	11681	0.73299	0.733(R)	
16	Tetrachloroethene	164	7.911	7.912	(1.298)	6647	0.49185	0.492	
$ 7	Dibromofluoromethane	113	5.036	5.037	(0.908)	15481	0.77158	0.772	
$ 11	1,2-Dichloroethane-D4	65	5.579	5.582	(1.005)	9200	0.77686	0.777	
$ 15	Toluene-D8	98	7.490	7.491	(1.228)	31201	0.95032	0.950	
$ 20	P-Bromofluorobenzene	95	10.145	10.146	(1.129)	10650	1.03849	1.04	
* 10	Pentafluorobenzene	168	5.549	5.549	(1.000)	25692	1.00000		
* 14	1,4-Difluorobenzene	114	6.097	6.096	(1.000)	36259	1.00000		
* 18	Chlorobenzene-D5	117	8.983	8.984	(1.000)	30667	1.00000		

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Data File: \\target_server\gg\chem\gcms-d.i\D111823.b\D8923.d
Date : 18-NOV-2023 19:37
Client ID:
Instrument: gcms-d.i
Sample Info: WG345748-9,SQ6133
Purge Volume: 25.0
Operator: JSS
Column phase: RTX-VMS
Column diameter: 0.18



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Data File: \\target_server\gg\chem\gcms-d.i\D111823.b\D8924.d
Report Date: 12-Dec-2023 10:30

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-d.i\D111823.b\D8924.d
Lab Smp Id: WG345748-10
Inj Date : 18-NOV-2023 20:10
Operator : JSS   Inst ID: gcms-d.i
Smp Info : WG345748-10,SQ6133
Misc Info : WG345748,WG345527-5,SQ6133-3
Comment   : SW846 5030C
Method   : \\target_server\gg\chem\gcms-d.i\D111823.b\DSIM(01)CR23.m
Meth Date : 20-Nov-2023 06:32 gcms-d.i   Quant Type: ISTD
Cal Date : 16-NOV-2023 10:22   Cal File: D8863.d
Als bottle: 19   QC Sample: MSD
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: all.sub
Target Version: 4.12
Processing Host: T7-O360

Concentration Formula: Amt * DF * 25/Vo * CpndVariable

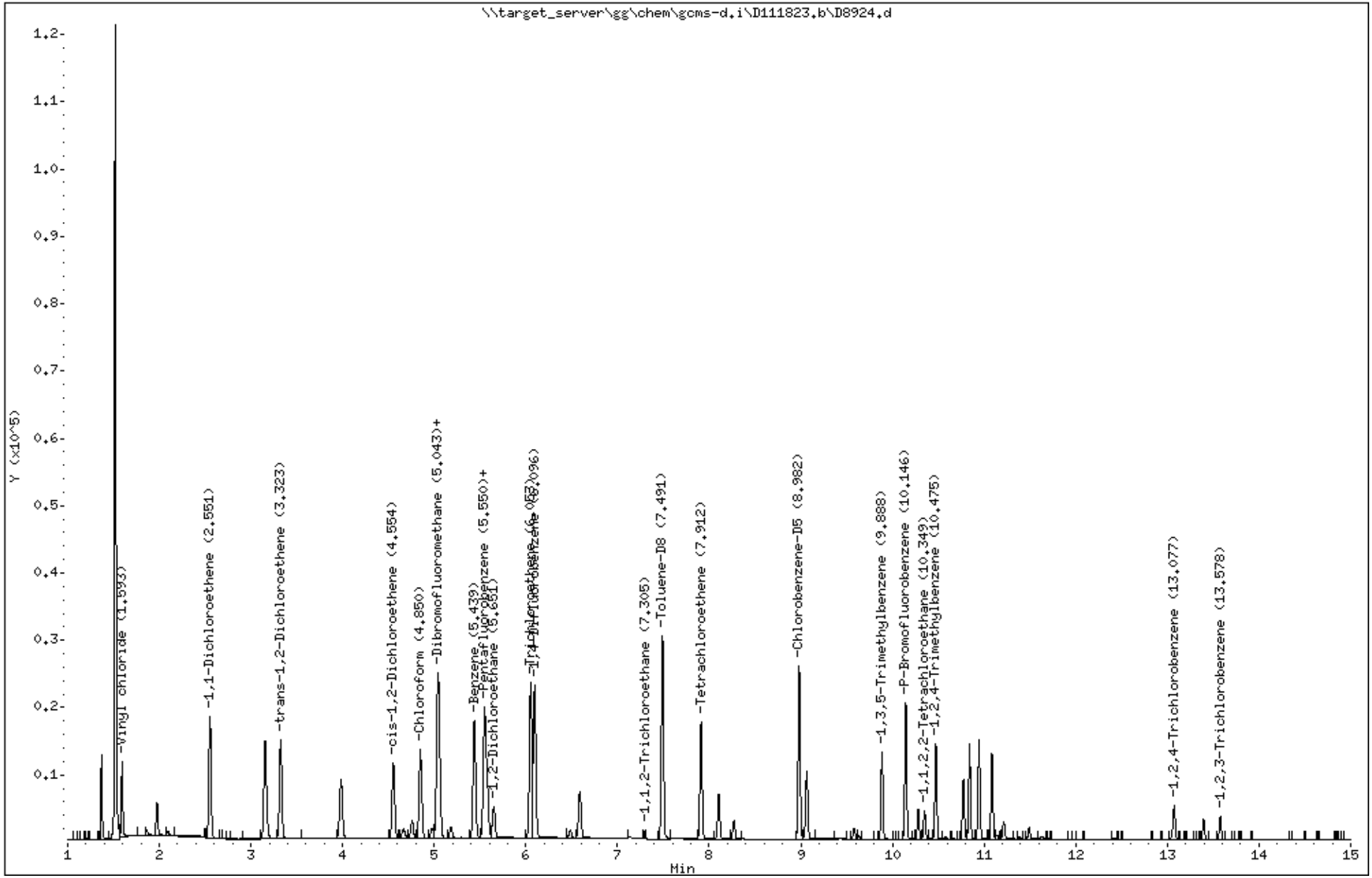
Name	Value	Description
DF	1.000	Dilution Factor
Vo	25.000	sample purged
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)	REVIEW CODE
1	Vinyl chloride	62	1.593	1.591	(0.287)	7068	0.41339	0.413	
2	1,1-Dichloroethene	96	2.553	2.553	(0.460)	8563	0.54560	0.546	
4	trans-1,2-Dichloroethene	96	3.325	3.323	(0.599)	8359	0.46833	0.468	
5	cis-1,2-Dichloroethene	96	4.554	4.558	(0.821)	6931	0.50763	0.508	
13	Trichloroethene	130	6.050	6.052	(0.993)	11718	0.78001	0.780(R)	
16	Tetrachloroethene	164	7.912	7.912	(1.298)	6848	0.53753	0.538	
$ 7	Dibromofluoromethane	113	5.038	5.037	(0.908)	14923	0.78421	0.784	
$ 11	1,2-Dichloroethane-D4	65	5.577	5.582	(1.005)	8728	0.77708	0.777	
$ 15	Toluene-D8	98	7.490	7.491	(1.229)	29476	0.95236	0.952	
$ 20	P-Bromofluorobenzene	95	10.144	10.146	(1.129)	10113	1.04451	1.04	
* 10	Pentafluorobenzene	168	5.549	5.549	(1.000)	24367	1.00000		
* 14	1,4-Difluorobenzene	114	6.095	6.096	(1.000)	34181	1.00000		
* 18	Chlorobenzene-D5	117	8.981	8.984	(1.000)	28953	1.00000		

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Data File: \\target_server\gg\chem\gcms-d.i\D111823.b\D8924.d
Date : 18-NOV-2023 20:10
Client ID:
Instrument: gcms-d.i
Sample Info: WG345748-10,SQ6133
Purge Volume: 25.0
Operator: JSS
Column phase: RTX-VMS
Column diameter: 0.18



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Logbooks and Supporting Documents

KATAHDIN ANALYTICAL SERVICES

GCMS- D INSTRUMENT RUNLOG

DATE: 11-16-23
BFB Injection Time: 6:37

Method:Check one	Standards	Std IDs *	pH paper Lot #	6210005	Criteria
8260 5mL O	BFB	V 2824	KI paper Lot #	—	K = Lab
8260 10mL O	IS / SS	V 2823	Vial Lot #	2795FL-PC-W	D = DOD
8260 SL O	CAL	V 2832	MeOH Lot #	—	Q = QUAPP
8260 SIM ✓	EXTRAs	~~V 2833~~ 11/16/23	Work Grouped WG		Curve okay
524 O	LCS	V 2833			
8260 25mL O					Curve Average - NORSE

SAMPLE NAME	DATA FILE	DF	ALS	METHOD	5030	5035	1311	Criteria	pH	TRC	Y/N	Initials	Comments
WG345527-12	DB230	1	-1	VOA BFB	✓				NA	NA	Y	[illegible]	
VSTD 0.05 -1	D8857	1	1	DSIM(01)CR23							Y		
0.075 -2	58	1	2								Y		
0.10 -3	59	1	3								Y		
0.30 -4	60	1	4								Y		
2.00 -8	61	1	5								Y		
1.00 -7	62	1	6								Y		
0.75 -6	63	1	7								Y		
0.50 -5	64	1	8								Y		
Rinse	65	1	9								N		
LOQ @ 0.05	66	1	10								Y		
LCS -10 / -9	67	1	11								Y		IND(-9)"A"
LCSD -14	68	1	12								Y		
VBLK	69	1	13								N		Target Hits
WG345527-11	70	1	14								Y		
LOD @ 0.025	71	1	15						↓		—		
SQ6112-3A	72	1	16					D	<2		Y		
SQ6133-11A	73	1	17								Y		
SQ6112-1C	74	1	18								Y		
↓ -2C	75	1	19								Y		
SQ6133-1B	76	1	20					↓	↓		Y		
CCV -13	77	1	21						NA		Y		18:08 ✓
CCV	78	1	22								N		Not needed
CCV	79	1	23								N		↓
Rinse	80	1	24	↓	—				↓	↓	—	↓	
													OR 11/16/23

* Refer to page 1 for standard preparation instructions.

KATAHDIN ANALYTICAL SERVICES

GCMS- D INSTRUMENT RUNLOG

DATE: 11-17-23

BFB Injection Time: 7:54

Method:Check one	Standards	Std IDs *	pH paper Lot #	60210005	Criteria
8260 5mL O	BFB	V2824	KI paper Lot #	—	K = Lab
8260 10mL O	IS / SS	V2823	Vial Lot #	2795FL-PC-W	D = DOD
8260 SL O	CAL	V2832	MeOH Lot #	—	Q = QUAPP
8260 SIM ⊗	EXTRAs	V —	Work Grouped	✓	
524 O	LCS	V2833			
8260 25mL O					

*CR 11/17/23

SAMPLE NAME	DATA FILE	DF	ALS	METHOD	5030	5035	1311	Criteria	pH	TRC	Y/N	Initials	Comments
WG345599-3	D8831	—	—	VOABSB	✓				NA	NA	Y	CR	
VStd 050 -4	D8832	1	1	DSIM(01)CR23							Y		
LCS -1	83	1	2								Y		
VBlank	84	1	3								N		Target Hits
VBlank -2	85	1	4								Y		
SQ6238-12A	86	1	5					D	<2		Y		
-1B	87	1	6								Y		
-2B	88	1	7								Y		
-3B	89	1	8								Y		
-4B	90	1	9								Y		
-5B	91	1	10								Y		
-6B	92	1	11								Y		
-7B	93	1	12								Y		
-8B	94	1	13								Y		
-9B	95	1	14								Y		
-10B	96	1	15								Y		
-11C	97	1	16								Y		
SQ6133-3I	98	1	17								Y		
-3MS G	99	1	18								N		1,R2 Y
-3MSD H	D8900	1	19								N		Y
CCV -5	01	1	20						NA		Y		18:56
CCV	02	1	21								N		manual
CCV	03	1	22								Y		
Rinse	04	1	23								—		
													CR 11/17/23

* Refer to page 1 for standard preparation instructions.

KATAHDIN ANALYTICAL SERVICES

GCMS- D INSTRUMENT RUNLOG

DATE: 11-18-23

BFB Injection Time: 9:43

Method:Check one	Standards	Std IDs *	pH paper Lot #	6210005	Criteria
8260 5mL O	BFB	V 2824	KI paper Lot #	—	K = Lab
8260 10mL O	IS / SS	V 2823	Vial Lot #	2795FL-PC-W	D = DOD
8260 SL O	CAL	V 2832	MeOH Lot #	—	Q = QUAPP
8260 SIM O	EXTRAs	V —	Work Grouped ✓		
524 O	LCS	V 2833			
8260 25mL O			WG ~~345~~ 345748		* CR 11/20/23

SAMPLE NAME	DATA FILE	DF	ALS	METHOD	5030	5035	1311	Criteria	pH	TRC	Y/N	Initials	Comments
WG 345677-3	DB232	1	—	VOA BFB	✓				NA	NA	Y	DS	
VStd 0.50 *4	D8906	1	1	DSIM(01)CR23							N		% D
VStd 0.50 -4	07	1	2								Y		
LCS -1	08	1	3								Y		
LCSD -6	09	1	4								Y		
VBLK *2	10	1	5								N		Rinsethrite
WG 345677 -2	11	1	6								Y		
SQ6352-22A	12	1	7					D	<2		Y		
-2 B	13	1	8								Y		RR 1:10
-8 A	14	1	9								Y		RR 1:20
-9 A	15	1	10								Y		
-10 A	16	1	11								Y		
-11 A	17	1	12								Y		RR 1:20
-12 A	18	1	13								Y		
-15 A	19	1	14								Y		
-16 A	20	1	15										ISS↓ ISS↑ RR 1:10
-7 -11MS B	21	1	16										% Rec ↑↓ RR 1:20
-8 -11MSD C	22	1	17										↓ ↓
of 11/19/23 SQ ~~6133~~ -3MSRA	23	1	18								Y		SQ6133-3MSRA
-9 -10 6133 -3MSDRA	24	1	19								Y		-3MSDRA
CCV -5	25	1	20						N/A		Y		20:43 ✓
	26	1	21								N		not needed
	27	1	22								N		
Rinse	28	1	23								N		
													CR 11/20/23

* Refer to page 1 for standard preparation instructions.

WG

12D

KATAHDIN ANALYTICAL SERVICES

GCMS-S INSTRUMENT RUNLOG

DATE/TIME OF BFB INJECTION: 11-16-23

Method - Check One:	8260	8260 - 10 mL	8260 SIM ✓	624	524
STD IDs: * BFB STD: V2824	CAL STD: V2832	XTRAs STD: —	LCS/MS STD: V2833	Vial Lot # 2795FL-PC-W	
SURR & IS STD: V2823	MeOH Lot #: —			pH Paper Lot #: 0210005	KI Paper Lot # —

SAMPLE NAME	DATAFILE	DF	ALS #	METHOD	Prep Method 5030	5035	1311	Criteria KAS	DoD	QAPP	Y/N	ANALYST	pH	TRC	COMMENTS
WG345525 - 12	SB923	1	-1	VOABFB	✓						Y	ZJ	NA	NA	
VSTD 0.05 -1	S7199	1	1	SSIM(01)QR23							Y				
0.075 -2	S7200	1	2								Y				Curve Average
0.10 -3	01	1	3								Y				- NO RSE
0.30 -4	02	1	4								Y				
0.50 -5	03	1	5								Y				
0.75 -6	04	1	6								Y				
1.00 -7	05	1	7								Y				
2.00 -8	06	1	8								Y				
LCS/Ind -10/-9	07	1	9								Y				IND(-9) "A"
LCSD -14	08	1	10								Y				
VBLK	09	1	11								N				Target hits
WG345525 -11	10	1	12								Y				
~~LOD~~ LOQ -13	11	1	13								—				
LOD	12	1	14								—		↓		
SQ6133-2B	13	1	15						X		Y		4.2		
-4B	14	1	16								Y				
-5B	15	1	17								Y				
-6B	16	1	18								Y				
-7B	17	1	19								Y				
-9B	18	1	20								Y				
-10B	19	1	21						↓		Y		↓		
CCV -15	20	1	22								Y		N/A		22:14 ✓
	21	1	23								N				not needed
	22	1	24								N				↓
RINSE	23	1	25								—				

* Refer to page 1 for standard preparation instructions.

WG

KATAHDIN ANALYTICAL SERVICES

9:10

GCMS-S INSTRUMENT RUNLOG

DATE/TIME OF BFB INJECTION: 11-17-23

Method - Check One:	8260	8260 - 10 mL	8260 SIM ✓	624	524

STD IDs: *	BFB STD: V2824	CAL STD: V2832	XTRAs STD: —	LCS/MS STD: V2833	Vial Lot # 2795FL-PC-W
SURR & IS STD: V2823	MeOH Lot #: —	Prep Method	Criteria	pH Paper Lot #: 6210005	KI Paper Lot # —

SAMPLE NAME	DATAFILE	DF	ALS #	METHOD	5030	5035	1311	KAS	DoD	QAPP	Y/N	ANALYST	pH	TRC	COMMENTS
WG345597-3	SB923	—	—	VOABFB	✓						Y	CR	N/A	N/A	
VStd 050 -4	S7225	1	1	SSIM(01)CR23							Y				
LCS -1	26	1	2								Y				
VBlank	27	1	3								N				Target Hits
VBlank -2	28	1	4								Y				
SQ6179-1 G	29	1	5						✓		Y		<2		
-2 H	30	1	6								Y				
-3 G	31	1	7								Y				
-4 G	32	1	8								Y				
-5 G	33	1	9								Y				
-6 G	34	1	10								Y				
-7 G	35	1	11								Y				
-8 G	36	1	12								Y				ocl RR 1:10
-9 G	37	1	13								Y				↓ ↓
-10 G	38	1	14								Y				
SQ6133-8 F	39	1	15								Y				
SQ6348-2 A	40	1	16								Y				ocl RR 1:10
-3 A	41	1	17								N				RRCO
-4 A	42	1	18								Y				
-7 A	43	1	19								Y				
-8 A	44	1	20								Y				
-12 A	45	1	21								N				1SSV 1 IS↑ RR-cl 1:20 + str.
-13 A	46	1	22								N				RRCO
SQ6133-8MS G	47	1	23								Y				
-8MSD H	48	1	24								Y				
CCV -5	49	1	25								Y		N/A		20:55 ✓

* Refer to page 1 for standard preparation instructions.

QAMS784 - 000404

VOA-008 - Revision 4 - 03/31/2023

VOA-008 - Revision 4 - 03/31/2023

KATAHDIN ANALYTICAL SERVICES
GC/MS VOA STANDARD PREP LOG BOOK

CODE: V2823
STANDARD: 8260 SIM IS/SS
FINAL CONC (ug/mL): 5
FINAL VOLUME (mL): 10
PREP DATE: 10-31-23
EXPIRATION DATE: 11-28-23
MEOH VOLUME (uL): 9970
MEOH LOT #: EH084-VS
INITIALS: JJ

STOCK NAME	STOCK	STOCK CONC ug/mL	VOLUME ADD uL
8260 IS	Amp 6412	5000	10
SS	7258	2500	20

JJ 10-31-23

CODE: V2824
STANDARD: BFB TUNE
FINAL CONC (ug/mL): 50
FINAL VOLUME (mL): 3
PREP DATE: 11-2-23
EXPIRATION DATE: 11-30-23
MEOH VOLUME (uL): 2970
MEOH LOT #: EH084-VS
INITIALS: JJ

STOCK NAME	STOCK	STOCK CONC ug/mL	VOLUME ADD uL
BFB TUNE	Amp 6738	5000	30

JJ 11-2-23

CODE: V2825
STANDARD: 8260 CAL
FINAL CONC (ug/mL): 100
FINAL VOLUME (mL): 4
PREP DATE: 11-7-23
EXPIRATION DATE: 11-21-23
MEOH VOLUME (uL): 2800
MEOH LOT #: EH084-VS
INITIALS: JJ

STOCK NAME	STOCK		STOCK CONC ug/mL	VOLUME ADD uL
M-502A-R2-10X	AMP	7248	2000	200
M-601C-10X	AMP	7252	2000	↓
S-7920-R1	AMP	7204	2000	↓
VOA CAL MIX #1	AMP	7295	5000	400
M-502B-10X (Gases)	AMP	7291	2000	200

11-7-23 JJ

Reviewed by/Date:

CODE: V2832	STOCK NAME	STOCK	STOCK CONC ug/mL	VOLUME ADD uL
STANDARD: SIM CAL	M-502A-R2-10X	AMP 7249	2000	10
FINAL CONC (ug/mL): 5	M-502B-10X	↓ 7302	↓	10
FINAL VOLUME (mL): 4				
PREP DATE: 11-15-23				
EXPIRATION DATE: 11-29-23				
MEOH VOLUME (uL): 3980				
MEOH LOT #: EH084-VS				
INITIALS: JH			JH 11-15-23	

CODE: V2833	STOCK NAME	STOCK	STOCK CONC ug/mL	VOLUME ADD uL
STANDARD: SIM LCS	502.2 CAL 2000 Mega Mix	AMP 7221	2000	10
FINAL CONC (ug/mL): 5	502.2 CAL MIX #1	↓ 7283	↓	10
FINAL VOLUME (mL): 4				
PREP DATE: 11-15-23				
EXPIRATION DATE: 11-29-23				
MEOH VOLUME (uL): 3980				
MEOH LOT #: EH084-VS				
INITIALS: JH			JH 11-15-23	

CODE: V2834	STOCK NAME	STOCK	STOCK CONC ug/mL	VOLUME ADD uL
STANDARD: 8260 LCS	502.2CAL MIX #1	AMP 7283	2000	150
FINAL CONC (ug/mL): 100	MTBE- (30402)	AMP 7144	2000	↓
FINAL VOLUME (mL): 3	502.2 CAL 2000 MEGA	AMP 7221	2000	
PREP DATE: 11-21-23	S-457S-10X	AMP 7218	2000	
EXPIRATION DATE: 12-6-23	M-8260-ADD-10X	AMP 7323	2000	
MEOH VOLUME (uL): 2100	CYCLOHEXANE	AMP 7231	2000	
MEOH LOT #: EH084-VS				
INITIALS: JH			JH 11-21-23	

Reviewed by/Date:

KATAHDIN ANALYTICAL SERVICES

STOCK STANDARDS RECEIVED

GCMS VOLATILES LABORATORY

REVIEWED BY/DATE:

Amp 6904 ↓ 05 ↓ 06

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com
TK-102-08S-10X 1 mL
Cyclohexane
2.0 mg/mL in Methanol
Lot: 219101390 1 comp(s)
Exp: Oct 25, 2029 Storage: Ambient (>5 °C)
FOR LABORATORY USE ONLY
H225 H370 H336 H320 H315 H311 H332 H301 H360 P338 P360 P331 Refer to SDS
Signal Word Danger

Rec'd 4-12-22 JJ

Amp 6907 ↓ 08 ↓ 09

Restek Oxygenates Standard
30619 Lot# A0181864
Varied Conc. X: 02/2025

Rec'd — JJ 4-13-22

Amp 6910 ↓ 11 ↓ 12 ↓ 13 ↓ 14 ↓ 15 ↓ 16 ↓ 17 ↓ 18 ↓ 19

54577
Custom 8260 Internal Standard Mix
Lot# A0184289
Expire: 04/2025 Store: 0°C or colder
5000 µg/mL each in P&T Methanol
US/EN
1 mL
RESTEK

Rec'd 4-25-22 JJ

Amp 6920 ↓ 21

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com
M-8260-ADD-10X 1 mL
Method 8260 Additions
2.0 mg/mL in MeOH
Lot: 222031328 8 comp(s)
Exp: Jul 22, 2022 Storage: Freeze (<-10 °C)
FOR LABORATORY USE ONLY
H336 H225 H370 H320 H315 H311 H332 H301 H360, H350 H351 P338 Refer to SDS
Signal Word Danger

Amp 6922 ↓ 23

Agilent PVOC/GRO Standard
@ 1000 µg/mL
Lot # 0002654695
Exp 31-Aug-23

EJM Rec'd 04/28/22

KATAHDIN ANALYTICAL SERVICES

STOCK STANDARDS RECEIVED

GCMS VOLATILES LABORATORY

REVIEWED BY/DATE:

Amp 7244
45
46

30402 US/EN
Methyl-tert- Butyl Ether Standard
Lot# A0192444
Expire: 12/2027 Store: 0°C or colder 1 mL
2000 µg/mL each in P&T Methanol
RESTEK

6/21/23

Amp 7247
48
49

AccuStandard® 125 Market St. New Haven, CT 06513 www.AccuStandard.com
M-502A-R2-10X 1 mL
VOC Liquid Mixture - Modified
2.0 mg/mL in Methanol
Lot: 221111385-02 53 comp(s)
Exp: Jun 18, 2025 Storage: Refrig (0-5 °C)
PRODUCT OF THE USA FOR LABORATORY USE ONLY
H336 H225 H370 H320 H315 H311 H332 H301 H360 H350 H350 P338 Refer to SDS
Signal Word: Danger

Amp 7250
7251

AccuStandard® 125 Market St. New Haven, CT 06513 www.AccuStandard.com
GRH-004S-R2 1 mL
Volatile Petroleum Hydrocarbon without Surrogate Std.
10.0 mg/mL in Methanol
Lot: 221011092 15 comp(s)
Exp: Jan 11, 2031 Storage: Ambient (>5 °C)
PRODUCT OF THE USA FOR LABORATORY USE ONLY
H336 H225 H370 H320 H315 H311 H332 H301 H360 H350 H350 P338 Refer to SDS
Signal Word: Danger

7/7/23

Amp 7252
53

AccuStandard® 125 Market St. New Haven, CT 06513 www.AccuStandard.com
M-601C-10X 1 mL
2-Chloroethylvinyl ether
2.0 mg/mL in MeOH
Lot: 223041132 1 comp(s)
Exp: Apr 11, 2026 Storage: Freeze (<-10 °C)
PRODUCT OF THE USA FOR LABORATORY USE ONLY
H225 H370 H336 H320 H315 H311 H332 H301 H360 P338 H360 P331 Refer to SDS
Signal Word: Danger

Rec'd 7/7/23

Amp 7254
55

AccuStandard® 125 Market St. New Haven, CT 06513 www.AccuStandard.com
M-603-M-5X 1 mL
Acrolein & Acrylonitrile
5.0 mg/mL in MeOH:Water 90:10
Lot: 223061381 2 comp(s)
Exp: Oct 21, 2023 Storage: Freeze (<-10 °C)
PRODUCT OF THE USA FOR LABORATORY USE ONLY
H336 H225 H370 H320 H315 H311 H332 H301 H360 H350 H351 P338 Refer to SDS
Signal Word: Danger

Rec'd 7/7/23

Amp 7256
57
58
59
60

30240 www.restek.com RESTEK
8260A Surrogate Mix
Lot# A0197611
Expire: 05/2028 Store: 0°C or colder
2500 µg/mL each in P&T Methanol
1 mL US/EN

Rec 7/10/23

VOA-022 – Revision 1 – 10/15/2013

QAMS-000336

0000025

KATAHDIN ANALYTICAL SERVICES

STOCK STANDARDS RECEIVED

GCMS VOLATILES LABORATORY

REVIEWED BY/DATE:

Amp 6730 → 37

Agilent 2,5-Dibromotoluene STD Rec'd 9-7-21 DL
@5,000 ug/mL
Lot #0006464535
Ex: 6-30-2023

Amp 6738 → 39

30003 US/EN
VOA Tuning Compound Mix
Lot# A0174371
Expire: 10/2026 Store: 0°C or colder 1 mL
5000 µg/mL each in P&T Methanol
RESTEK

Rec'd 9/9/21 CE

Amp 6740
41
42
43
44

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com
S-11160 1 mL
Custom GC Standard
2000 µg/mL in Methanol
Lot: 221091009 2 comp(s)
Exp: Sep 03, 2026 Storage: Ambient (>5 °C)
FOR LABORATORY USE ONLY
H225 H370
H336 H320
H315 H311
H332 H301
H360 P338
P360 P331
Refer to SDS
Signal Word Danger

9/12/21 RL

Amp 6745 → 46 → 47

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com
TK-102-08S-10X 1 mL
Cyclohexane
2.0 mg/mL in Methanol
Lot: 219101390 1 comp(s)
Exp: Oct 25, 2029 Storage: Ambient (>5 °C)
FOR LABORATORY USE ONLY
H225 H370
H336 H320
H315 H311
H332 H301
H360 P338
P360 P331
Refer to SDS
Signal Word Danger

9-9-21 Rec'd

Amp 6748 → 49 → 50

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com
M-8260-ADD-10X 1 mL
Method 8260 Additions
2.0 mg/mL in MeOH
Lot: 221061336-01 8 comp(s)
Exp: Dec 18, 2021 Storage: Freeze (<-10 °C)
FOR LABORATORY USE ONLY
H336 H225
H370 H320
H315 H311
H332 H301
H360, H350
H351 P338
Refer to SDS
Signal Word Danger

Amp 6751 → 52

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com
S-457S-10X 1 mL
Tetrahydrofuran
2.0 mg/mL in MeOH
Lot: 221051701 1 comp(s)
Exp: Jun 01, 2031 Storage: Ambient (>5 °C)
FOR LABORATORY USE ONLY
H225 H370
H336 H320
H315 H311
H332 H301
H360 H351
P338 P360
Refer to SDS
Signal Word Danger

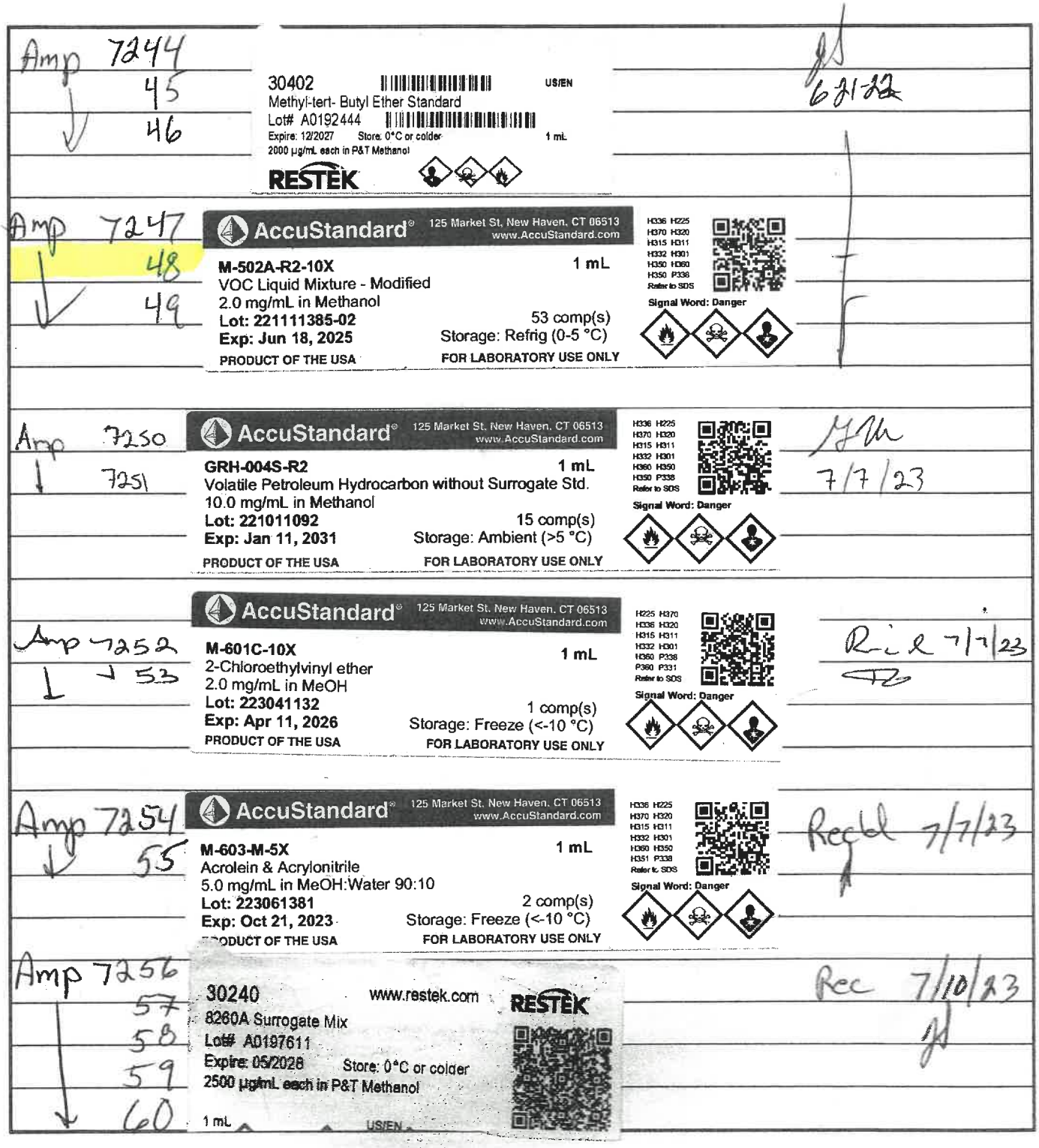
Rec'd 10-1-21 RL

KATAHDIN ANALYTICAL SERVICES

STOCK STANDARDS RECEIVED

GCMS VOLATILES LABORATORY

REVIEWED BY/DATE:



Amp 7244
45
46

30402 US/EN
Methyl-tert- Butyl Ether Standard
Lot# A0192444
Expire: 12/2027 Store: 0°C or colder 1 mL
2000 µg/mL each in P&T Methanol
RESTEK

6-21-22

Amp 7247
48
49

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com
M-502A-R2-10X 1 mL
VOC Liquid Mixture - Modified
2.0 mg/mL in Methanol
Lot: 221111385-02 53 comp(s)
Exp: Jun 18, 2025 Storage: Refrig (0-5 °C)
PRODUCT OF THE USA FOR LABORATORY USE ONLY
H336 H225 H370 H320 H315 H311 H332 H301 H360 H350 H350 P338 Refer to SDS
Signal Word: Danger

Amp 7250
7251

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com
GRH-004S-R2 1 mL
Volatile Petroleum Hydrocarbon without Surrogate Std.
10.0 mg/mL in Methanol
Lot: 221011092 15 comp(s)
Exp: Jan 11, 2031 Storage: Ambient (>5 °C)
PRODUCT OF THE USA FOR LABORATORY USE ONLY
H336 H225 H370 H320 H315 H311 H332 H301 H360 H350 H350 P338 Refer to SDS
Signal Word: Danger

7/7/23

Amp 7252
53

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com
M-601C-10X 1 mL
2-Chloroethylvinyl ether
2.0 mg/mL in MeOH
Lot: 223041132 1 comp(s)
Exp: Apr 11, 2026 Storage: Freeze (<-10 °C)
PRODUCT OF THE USA FOR LABORATORY USE ONLY
H225 H370 H336 H320 H315 H311 H332 H301 H360 P338 P331 Refer to SDS
Signal Word: Danger

Rec'd 7/7/23

Amp 7254
55

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com
M-603-M-5X 1 mL
Acrolein & Acrylonitrile
5.0 mg/mL in MeOH:Water 90:10
Lot: 223061381 2 comp(s)
Exp: Oct 21, 2023 Storage: Freeze (<-10 °C)
PRODUCT OF THE USA FOR LABORATORY USE ONLY
H336 H225 H370 H320 H315 H311 H332 H301 H360 H350 H351 P338 Refer to SDS
Signal Word: Danger

Rec'd 7/7/23

Amp 7256
57
58
59
60

30240 www.restek.com
8260A Surrogate Mix
Lot# A0197611
Expire: 05/2026 Store: 0°C or colder
2500 µg/mL each in P&T Methanol
1 mL US/EN
RESTEK

Rec 7/10/23

KATAHDIN ANALYTICAL SERVICES

STOCK STANDARDS RECEIVED

GCMS VOLATILES LABORATORY

REVIEWED BY/DATE:

Rec'd 9/14/23 DL

Amp 7297
98
99

30605 www.restek.com
VPH Matrix Spike Mix w/Surrogate (revised)
Lot# A0200451
Expire: 07/2028 Store: 0°C or colder
50 µg/mL each in P&T Methanol
1 mL US/EN

RESTEK

Rec'd 9-14-23

Amp 7300
01

AccuStandard® 125 Market St. New Haven, CT 06513 www.AccuStandard.com
TK-102-08S-10X 1 mL
Cyclohexane
2.0 mg/mL in Methanol
Lot: 221101280 1 comp(s)
Exp: Oct 19, 2031 Storage: Ambient (>5 °C)
PRODUCT OF THE USA FOR LABORATORY USE ONLY
H225 H370 H336 H320 H315 H311 H332 H301 H360 P338 P360 P331 Refer to SDS
Signal Word

Amp 7302
03
04

AccuStandard® 125 Market St. New Haven, CT 06513 www.AccuStandard.com
M-502B-10X 1 mL
Volatile Organic Cmpds - Gases
2.0 mg/mL in MeOH
Lot: 223061232 6 comp(s)
Exp: Jun 21, 2026 Storage: Refrig (0-5 °C)
PRODUCT OF THE USA FOR LABORATORY USE ONLY
H336 H225 H370 H320 H315 H311 H332 H301 H360 H350 P338 Refer to SDS
Signal Word

Amp 7305
06

AccuStandard® 125 Market St. New Haven, CT 06513 www.AccuStandard.com
M-502A-R2-10X 1 mL
VOC Liquid Mixture - Modified
2.0 mg/mL in Methanol
Lot: 221111385-02 53 comp(s)
Exp: Jun 18, 2025 Storage: Refrig (0-5 °C)
PRODUCT OF THE USA FOR LABORATORY USE ONLY
H336 H225 H370 H320 H315 H311 H332 H301 H350 H360 H350 P338 Refer to SDS
Signal Word

Amp 7307
08

AccuStandard® 125 Market St. New Haven, CT 06513 www.AccuStandard.com
M-8240C-R6 1 mL
Appendix IX Volatiles Mix
Varied conc. in MeOH
Lot: 222061040 11 comp(s)
Exp: Jun 06, 2025 Storage: Refrig (0-5 °C)
PRODUCT OF THE USA FOR LABORATORY USE ONLY
H225 H370 H336 H320 H315 H311 H332 H301 H351 H360 H350 P338 Refer to SDS
Signal Word

Amp 7309
10
11
12
13

31081 www.restek.com
1,3,5-Trichlorobenzene Standard
Lot# A0194759
Expire: 02/2028 Store: 10°C or colder
1000 µg/mL each in P&T Methanol
1 mL US/EN

RESTEK

KATAHDIN ANALYTICAL SERVICES

STOCK STANDARDS RECEIVED

GCMS VOLATILES LABORATORY

REVIEWED BY/DATE:

Amp 7213 ↓ 14

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com

M-8260-ADD-10X
Method 8260 Additions
2.0 mg/mL in MeOH
Lot: 223041101
Exp: Aug 07, 2023
PRODUCT OF THE USA

1 mL
8 comp(s)
Storage: Freeze (<-10 °C)
FOR LABORATORY USE ONLY

H336 H225 H370 H320 H315 H311 H332 H301 H360 H350 H351 P338 Refer to SDS
Signal Word: Danger

Recv'd 4-13-23 JJ

Amp 7215 ↓ 16 ↓ 17

30006 US/EN
VOA Calibration Mix #1
Lot# A0186767
Expire: 09/2025 Store: 0°C or colder 1 mL
5000 µg/mL each in P&T Methanol/Water (90:10)
RESTEK

Amp 7218 ↓ 19 ↓ 20

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com

S-457S-10X
Tetrahydrofuran
2.0 mg/mL in MeOH
Lot: 221051701
Exp: Jun 01, 2031
PRODUCT OF THE USA

1 mL
1 comp(s)
Storage: Ambient (>5 °C)
FOR LABORATORY USE ONLY

H225 H370 H336 H320 H315 H311 H332 H301 H360 H351 P338 P360 Refer to SDS
Signal Word: Danger

Recd 4-24-23 JJ

Amp 7221 ↓ 22 ↓ 23

30431 www.restek.com RESTEK
502.2 Cal2000 Mega Mix
Lot# A0188935
Expire: 08/2024 Store: 0°C or colder
2000 µg/mL each in P&T Methanol
1 mL US/EN

Amp 7224 ↓ 25

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com

GRH-003S
Wisconsin DNR Mix
2.0 mg/mL in MeOH
Lot: 222081432
Exp: Aug 29, 2032
PRODUCT OF THE USA

1 mL
10 comp(s)
Storage: Ambient (>5 °C)
FOR LABORATORY USE ONLY

H336 H225 H370 H320 H315 H311 H332 H301 H360 P338 P331 Refer to SDS
Signal Word: Danger

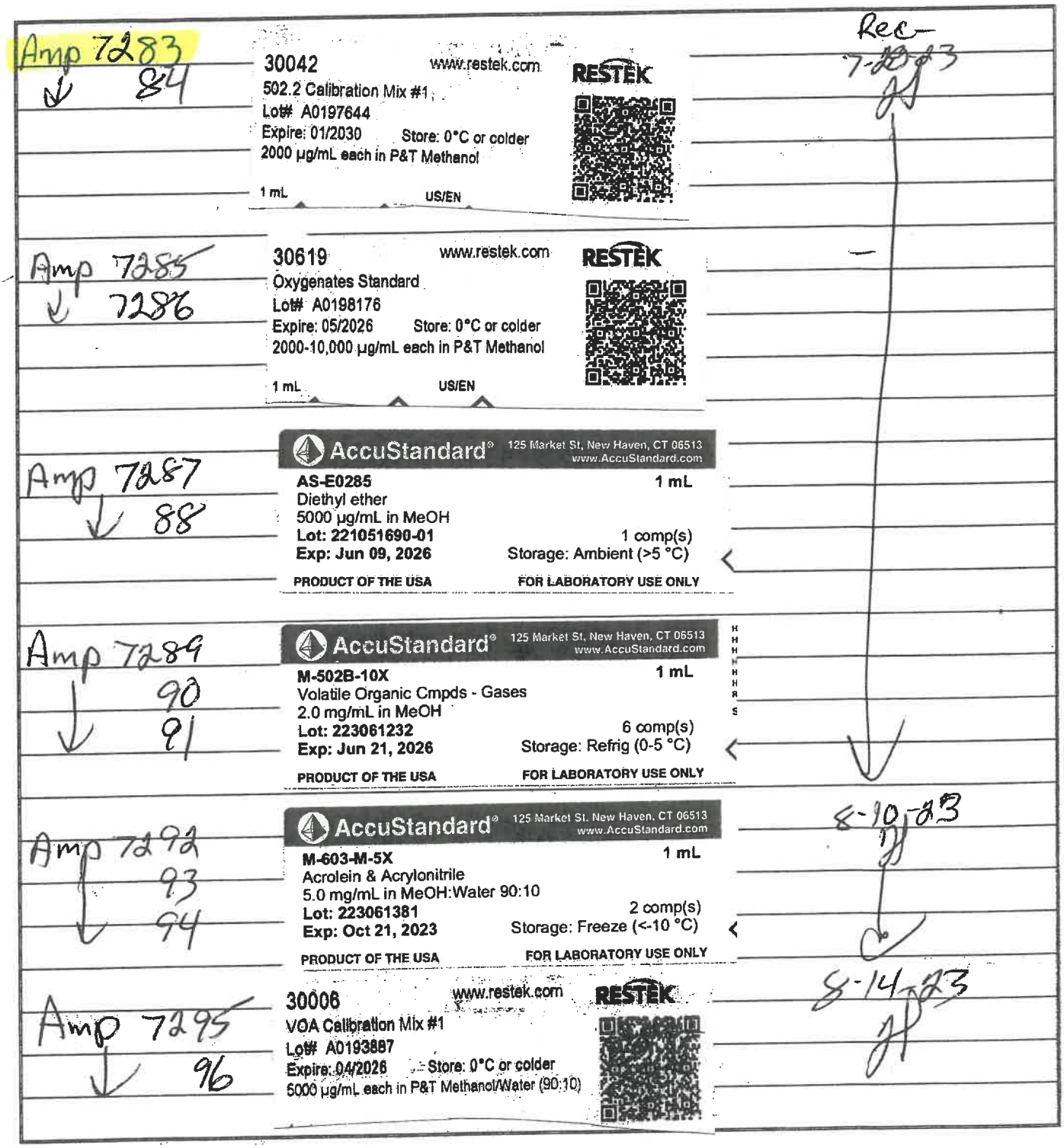
Recd 5-4-23 JJ

KATAHDIN ANALYTICAL SERVICES

STOCK STANDARDS RECEIVED

GCMS VOLATILES LABORATORY

REVIEWED BY/DATE:



8270 SIM
POLYNUCLEAR AROMATIC HYDROCARBONS DATA

QC Summary Section

Form 2
System Monitoring Compound Recovery

Lab Name: Katahdin Analytical Services **SDG:** SQ6133 **Matrix:** AQ

Client Sample ID	Lab Sample ID	Col. ID	2MN	#	FLO	#	PYR	#
SY-OBMW6-110723	SQ6133-1		77.2		80.5		89.7	
SY-OBMW4R-110723	SQ6133-2		81.5		79.6		87.6	
SY-OBMW12-110723	SQ6133-3		69.5		71.1		86.7	
SY-BRMW2-60.5-70.5-110	SQ6133-4		84.8		84.2		98.2	
SY-OBMW15-110723	SQ6133-5		78.7		81.8		97.0	
SY-OBMW5-110723	SQ6133-6		79.9		84.1		103.	
SY-OBMW13-110723	SQ6133-7		82.9		80.2		102.	
SY-BRMW2-80.5-95.5-110	SQ6133-8		58.6		62.8		65.5	
SY-OBMW14-110723	SQ6133-9		58.4		62.6		75.9	
SY-BRMW2-252.5-262.5-1	SQ6133-10		66.3		66.0		75.9	
Method Blank	WG345301-1		77.7		84.8		90.3	
Laboratory Control S	WG345301-2		85.4		75.6		78.0	
Matrix Spike	WG345301-5		94.4	*	81.7		90.8	
Matrix Spike Duplica	WG345301-6		89.8		77.0		86.1	
Laboratory Control S	WG345301-7		85.1		78.1		82.3	
Method Blank	WG345531-1		75.2		73.5		79.8	
Matrix Spike	WG345531-5		96.6	*	92.5		89.0	
Matrix Spike Duplica	WG345531-6		78.2		78.7		84.2	

Abbr.	Surrogate Compound	QC Limits
2MN	2-Methylnaphthalene-D10	43-92
FLO	Fluorene-D10	29-101
PYR	Pyrene-D10	53-166

= Column to be used to flag recovery limits.
* = Values outside of contract required QC limits.
D= System Monitoring Compound diluted out.

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Method Blank Summary

Lab Name : Katahdin Analytical Services
SDG : SQ6133
Lab File ID : N0388.D
Lab Sample ID : WG345301-1
Instrument ID : GCMS-N
Date Extracted : 13-NOV-23
Matrix : AQ
Date Analyzed : 07-DEC-23
Extraction method : SW846 3510C
Time Analyzed : 16:51

This Method Blank applies to the following samples and QC samples:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Laboratory Control S	WG345301-2	N0389.D	12/07/23	17:23
Laboratory Control S	WG345301-7	N0390.D	12/07/23	17:55
SY-OBMW6-110723	SQ6133-1	N0418.D	12/08/23	16:18
SY-OBMW4R-110723	SQ6133-2	N0419.D	12/08/23	16:48
SY-OBMW12-110723	SQ6133-3	N0420.D	12/08/23	17:20
Matrix Spike	WG345301-5	N0421.D	12/08/23	17:52
Matrix Spike Duplica	WG345301-6	N0422.D	12/08/23	18:24
SY-BRMW2-60.5-70.5-110723	SQ6133-4	N0423.D	12/08/23	18:57
SY-OBMW15-110723	SQ6133-5	N0424.D	12/08/23	19:29
SY-OBMW5-110723	SQ6133-6	N0425.D	12/08/23	20:01
SY-OBMW13-110723	SQ6133-7	N0426.D	12/08/23	20:33
SY-OBMW14-110723	SQ6133-9	N0427.D	12/08/23	21:06
SY-BRMW2-252.5-262.5-110723	SQ6133-10	N0428.D	12/08/23	21:38
SY-BRMW2-80.5-95.5-110723	SQ6133-8	N0436.D	12/11/23	13:47

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029
http://katahdinlab.com
sales@katahdinlab.com

Method Blank Summary

Lab Name : Katahdin Analytical Services
Lab File ID : N0434.D
Instrument ID : GCMS-N
Matrix : AQ
Extraction method : SW846 3510C

SDG : SQ6133
Lab Sample ID : WG345531-1
Date Extracted : 16-NOV-23
Date Analyzed : 11-DEC-23
Time Analyzed : 12:46

This Method Blank applies to the following samples and QC samples:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Matrix Spike	WG345531-5	N0437.D	12/11/23	14:17
Matrix Spike Duplica	WG345531-6	N0438.D	12/11/23	14:47

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

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Form 5
Semivolatile Organic Instrument Performance Check

Lab Name : Katahdin Analytical Services
SDG : SQ6133
Lab File ID : ND537.D
Date Analyzed : 07-DEC-23
Instrument ID : GCMS-N
Time Analyzed : 11:53

m/e	Ion Abundance Criteria	% Relative Abundance		
51	10.0 - 80.0% of mass 198	22.2		
68	Less than 2.0% of mass 69	0.7	1.73	1
69	Greater than 0.1% of mass 198	42.9		
70	Less than 2.0% of mass 69	0.3	0.79	1
127	10.0 - 80.0% of mass 198	61.3		
197	Less than 2.0% of mass 198	0.2		
198	Base Peak, 100% relative abundance	100		
199	5.0 - 9.0% of mass 198	6.8		
275	10.0 - 60.0% of mass 198	22.0		
365	Greater than 1.0% of mass 198	3.0		
441	0.01 - 100.0% of mass 443	13.1	74.52	2
442	Greater than 50.0% of mass 198	88.6		
443	15.0 - 24.0% of mass 442	17.5	19.80	3

1-Value is % mass 69
2-Value is % mass 443
3-Value is % mass 442

This check applies to the following samples, LCS, MS, MSD and standards:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Initial Calibration	WG346503-4	N0380.D	12/07/23	12:11
Initial Calibration	WG346503-3	N0381.D	12/07/23	12:41
Initial Calibration	WG346503-2	N0382.D	12/07/23	13:11
Initial Calibration	WG346503-5	N0383.D	12/07/23	13:41
Initial Calibration	WG346503-6	N0384.D	12/07/23	14:12
Initial Calibration	WG346503-7	N0385.D	12/07/23	14:42
Independent Source	WG346503-8	N0386.D	12/07/23	15:12

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Form 5
Semivolatile Organic Instrument Performance Check

Lab Name : Katahdin Analytical Services
SDG : SQ6133
Lab File ID : ND538.D
Date Analyzed : 07-DEC-23
Instrument ID : GCMS-N
Time Analyzed : 16:03

m/e	Ion Abundance Criteria	% Relative Abundance		
51	10.0 - 80.0% of mass 198	22.4		
68	Less than 2.0% of mass 69	0.6	1.43	1
69	Greater than 0.1% of mass 198	43.2		
70	Less than 2.0% of mass 69	0.5	1.06	1
127	10.0 - 80.0% of mass 198	61.8		
197	Less than 2.0% of mass 198	0.2		
198	Base Peak, 100% relative abundance	100		
199	5.0 - 9.0% of mass 198	6.5		
275	10.0 - 60.0% of mass 198	22.1		
365	Greater than 1.0% of mass 198	2.9		
441	0.01 - 100.0% of mass 443	13.1	74.02	2
442	Greater than 50.0% of mass 198	91.9		
443	15.0 - 24.0% of mass 442	17.7	19.29	3

1-Value is % mass 69
2-Value is % mass 443
3-Value is % mass 442

This check applies to the following samples, LCS, MS, MSD and standards:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Continuing Calibrati	WG346504-2	N0387.D	12/07/23	16:21
Method Blank	WG345301-1	N0388.D	12/07/23	16:51
Laboratory Control S	WG345301-2	N0389.D	12/07/23	17:23
Laboratory Control S	WG345301-7	N0390.D	12/07/23	17:55
Continuing Calibrati	WG346504-3	N0407.D	12/08/23	03:04
Continuing Calibrati	WG346504-4	N0408.D	12/08/23	03:37
Continuing Calibrati	WG346504-5	N0409.D	12/08/23	04:09

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Form 5
Semivolatile Organic Instrument Performance Check

Lab Name : Katahdin Analytical Services
SDG : SQ6133
Lab File ID : ND539.D
Date Analyzed : 08-DEC-23
Instrument ID : GCMS-N
Time Analyzed : 12:00

m/e	Ion Abundance Criteria	% Relative Abundance		
51	10.0 - 80.0% of mass 198	20.9		
68	Less than 2.0% of mass 69	0.7	1.69	1
69	Greater than 0.1% of mass 198	39.1		
70	Less than 2.0% of mass 69	0.3	0.80	1
127	10.0 - 80.0% of mass 198	59.0		
197	Less than 2.0% of mass 198	0.1		
198	Base Peak, 100% relative abundance	100		
199	5.0 - 9.0% of mass 198	6.7		
275	10.0 - 60.0% of mass 198	22.0		
365	Greater than 1.0% of mass 198	2.9		
441	0.01 - 100.0% of mass 443	14.2	74.28	2
442	Greater than 50.0% of mass 198	97.8		
443	15.0 - 24.0% of mass 442	19.0	19.49	3

1-Value is % mass 69
2-Value is % mass 443
3-Value is % mass 442

This check applies to the following samples, LCS, MS, MSD and standards:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Continuing Calibrati	WG346646-2	N0410.D	12/08/23	12:17
SY-OBMW6-110723	SQ6133-1	N0418.D	12/08/23	16:18
SY-OBMW4R-110723	SQ6133-2	N0419.D	12/08/23	16:48
SY-OBMW12-110723	SQ6133-3	N0420.D	12/08/23	17:20
Matrix Spike	WG345301-5	N0421.D	12/08/23	17:52
Matrix Spike Duplica	WG345301-6	N0422.D	12/08/23	18:24
SY-BRMW2-60.5-70.5-110723	SQ6133-4	N0423.D	12/08/23	18:57
SY-OBMW15-110723	SQ6133-5	N0424.D	12/08/23	19:29
SY-OBMW5-110723	SQ6133-6	N0425.D	12/08/23	20:01
SY-OBMW13-110723	SQ6133-7	N0426.D	12/08/23	20:33
SY-OBMW14-110723	SQ6133-9	N0427.D	12/08/23	21:06
SY-BRMW2-252.5-262.5-110723	SQ6133-10	N0428.D	12/08/23	21:38
Continuing Calibrati	WG346646-3	N0430.D	12/08/23	22:43
Continuing Calibrati	WG346646-4	N0431.D	12/08/23	23:15
Continuing Calibrati	WG346646-5	N0432.D	12/08/23	23:48

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Form 5
Semivolatile Organic Instrument Performance Check

Lab Name : Katahdin Analytical Services
SDG : SQ6133
Lab File ID : ND540.D
Date Analyzed : 11-DEC-23
Instrument ID : GCMS-N
Time Analyzed : 11:58

m/e	Ion Abundance Criteria	% Relative Abundance		
51	10.0 - 80.0% of mass 198	22.0		
68	Less than 2.0% of mass 69	0.6	1.62	1
69	Greater than 0.1% of mass 198	39.5		
70	Less than 2.0% of mass 69	0.3	0.78	1
127	10.0 - 80.0% of mass 198	58.5		
197	Less than 2.0% of mass 198	0.1		
198	Base Peak, 100% relative abundance	100		
199	5.0 - 9.0% of mass 198	6.5		
275	10.0 - 60.0% of mass 198	22.1		
365	Greater than 1.0% of mass 198	2.9		
441	0.01 - 100.0% of mass 443	13.9	76.27	2
442	Greater than 50.0% of mass 198	93.6		
443	15.0 - 24.0% of mass 442	18.2	19.50	3

1-Value is % mass 69
2-Value is % mass 443
3-Value is % mass 442

This check applies to the following samples, LCS, MS, MSD and standards:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Continuing Calibrati	WG346778-2	N0433.D	12/11/23	12:16
Method Blank	WG345531-1	N0434.D	12/11/23	12:46
SY-BRMW2-80.5-95.5-110723	SQ6133-8	N0436.D	12/11/23	13:47
Matrix Spike	WG345531-5	N0437.D	12/11/23	14:17
Matrix Spike Duplica	WG345531-6	N0438.D	12/11/23	14:47
Continuing Calibrati	WG346778-3	N0453.D	12/11/23	22:43
Continuing Calibrati	WG346778-4	N0454.D	12/11/23	23:16
Continuing Calibrati	WG346778-5	N0455.D	12/11/23	23:48

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Form 8
Internal Standard Area and RT Summary

Lab Name : Katahdin Analytical Services
Lab ID : WG346503-4
Lab File ID : N0380.D

SDG: SQ6133
Analytical Date: 12/07/23 12:11
Instrument ID: GCMS-N

		1,4-DICHLOROBENZENE-D4			NAPHTHALENE-D8			ACENAPHTHENE-D10		
		Area	#	RT	#	Area	#	RT	#	Area	#	RT	#
	Std .	52277		6.61		180916		8.14		80047		10.25	
	Upper Limit	104554		6.78		361832		8.30		160094		10.42	
	Lower Limit	26138.5		6.45		90458		7.97		40023.5		10.09	
Client Sample ID	Lab Sample ID												
Continuing Calibrati	WG346504-2	48720		6.61		175031		8.14		73429		10.25	
Method Blank	WG345301-1	60242		6.61		211731		8.15		87242		10.26	
Laboratory Control S	WG345301-2	58089		6.61		209586		8.13		92673		10.25	
Laboratory Control S	WG345301-7	53207		6.61		191306		8.13		81354		10.25	
Continuing Calibrati	WG346504-3	38762		6.61		112983		8.14		39144	*	10.26	
Continuing Calibrati	WG346504-4	40934		6.61		117094		8.14		39774	*	10.26	
Continuing Calibrati	WG346504-5	38970		6.61		115784		8.14		40047		10.26	
Continuing Calibrati	WG346646-2	43300		6.61		158299		8.14		69592		10.25	
SY-OBMW6-110723	SQ6133-1	59965		6.61		222734		8.15		102720		10.26	
SY-OBMW4R-110723	SQ6133-2	53925		6.61		179670		8.14		86206		10.26	
SY-OBMW12-110723	SQ6133-3	54090		6.61		200169		8.15		94411		10.26	
Matrix Spike	WG345301-5	53520		6.60		198135		8.13		88831		10.25	
Matrix Spike Duplica	WG345301-6	58450		6.60		213566		8.13		96453		10.25	
SY-BRMW2-60.5-70.5	SQ6133-4	56053		6.61		204766		8.15		90192		10.25	
SY-OBMW15-110723	SQ6133-5	53746		6.61		200018		8.15		89828		10.26	
SY-OBMW5-110723	SQ6133-6	55387		6.61		201178		8.15		91206		10.26	
SY-OBMW13-110723	SQ6133-7	58803		6.61		200843		8.14		97499		10.26	
SY-OBMW14-110723	SQ6133-9	58808		6.61		212496		8.15		93949		10.26	
SY-BRMW2-252.5-262	SQ6133-10	51740		6.61		191776		8.15		91478		10.26	
Continuing Calibrati	WG346646-3	49659		6.61		153137		8.14		50712		10.26	
Continuing Calibrati	WG346646-4	49666		6.61		156398		8.14		50960		10.26	
Continuing Calibrati	WG346646-5	51152		6.61		160523		8.14		52787		10.26	
Continuing Calibrati	WG346778-2	32554		6.60		131703		8.14		54093		10.26	
Method Blank	WG345531-1	34555		6.61		129082		8.15		57527		10.26	
SY-BRMW2-80.5-95.5	SQ6133-8	41654		6.61		156769		8.16		65516		10.26	
Matrix Spike	WG345531-5	43026		6.60		156839		8.13		66732		10.25	
Matrix Spike Duplica	WG345531-6	50396		6.61		182385		8.13		80931		10.25	
Continuing Calibrati	WG346778-3	40451		6.60		147350		8.13		63563		10.25	
Continuing Calibrati	WG346778-4	43723		6.60		156449		8.13		68694		10.25	
Continuing Calibrati	WG346778-5	42245		6.60		149958		8.13		65041		10.25	

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area
RT Upper Limit = + 10 seconds of internal standard RT
RT Lower Limit = - 10 seconds of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

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Form 8
Internal Standard Area and RT Summary

Lab Name : Katahdin Analytical Services
Lab ID : WG346503-4
Lab File ID : N0380.D

SDG: SQ6133
Analytical Date: 12/07/23 12:11
Instrument ID: GCMS-N

		PHENANTHRENE-D10			CHRYSENE-D12			PERYLENE-D12		
		Area	#	RT	#	Area	#	RT	#	Area	#	RT	#
	Std .	104080		12.05		43517		15.48		31178		18.33	
	Upper Limit	208160		12.22		87034		15.64		62356		18.50	
	Lower Limit	52040		11.88		21758.5		15.31		15589		18.17	
Client Sample ID	Lab Sample ID												
Continuing Calibrati	WG346504-2	91494		12.05		37950		15.49		25744		18.33	
Method Blank	WG345301-1	117611		12.06		43699		15.49		34882		18.32	
Laboratory Control S	WG345301-2	110035		12.05		44527		15.48		32813		18.32	
Laboratory Control S	WG345301-7	95596		12.05		38276		15.48		25770		18.32	
Continuing Calibrati	WG346504-3	46167	*	12.06		12985	*	15.49		12805	*	18.33	
Continuing Calibrati	WG346504-4	44659	*	12.06		14276	*	15.50		13271	*	18.34	
Continuing Calibrati	WG346504-5	45258	*	12.06		15031	*	15.50		12758	*	18.34	
Continuing Calibrati	WG346646-2	89558		12.06		33302		15.49		25217		18.33	
SY-OBMW6-110723	SQ6133-1	140224		12.06		51558		15.49		36255		18.32	
SY-OBMW4R-110723	SQ6133-2	122141		12.05		41412		15.48		31326		18.32	
SY-OBMW12-110723	SQ6133-3	128673		12.06		41449		15.48		29668		18.32	
Matrix Spike	WG345301-5	109449		12.05		37708		15.48		26243		18.32	
Matrix Spike Duplica	WG345301-6	118652		12.05		41150		15.48		28866		18.31	
SY-BRMW2-60.5-70.5	SQ6133-4	109611		12.05		35880		15.48		27251		18.32	
SY-OBMW15-110723	SQ6133-5	119085		12.05		35882		15.48		25933		18.31	
SY-OBMW5-110723	SQ6133-6	124778		12.05		37712		15.48		25213		18.32	
SY-OBMW13-110723	SQ6133-7	133568		12.05		40456		15.48		28114		18.32	
SY-OBMW14-110723	SQ6133-9	131164		12.05		37194		15.49		24784		18.32	
SY-BRMW2-252.5-262	SQ6133-10	123148		12.05		36210		15.48		24987		18.32	
Continuing Calibrati	WG346646-3	53285		12.06		13934	*	15.49		11992	*	18.33	
Continuing Calibrati	WG346646-4	50265	*	12.06		14353	*	15.49		12070	*	18.34	
Continuing Calibrati	WG346646-5	51368	*	12.06		14367	*	15.49		11493	*	18.34	
Continuing Calibrati	WG346778-2	68403		12.06		27333		15.49		21078		18.34	
Method Blank	WG345531-1	75979		12.06		28437		15.50		22116		18.34	
SY-BRMW2-80.5-95.5	SQ6133-8	87349		12.06		32021		15.49		24374		18.33	
Matrix Spike	WG345531-5	79886		12.05		34242		15.49		26767		18.33	
Matrix Spike Duplica	WG345531-6	102148		12.05		40339		15.49		30529		18.33	
Continuing Calibrati	WG346778-3	70637		12.05		20592	*	15.48		14075	*	18.32	
Continuing Calibrati	WG346778-4	76362		12.05		21772		15.48		14501	*	18.32	
Continuing Calibrati	WG346778-5	72425		12.05		23333		15.48		14581	*	18.32	

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area
RT Upper Limit = + 10 seconds of internal standard RT
RT Lower Limit = - 10 seconds of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

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Sample Data Section

KATAHDIN ANALYTICAL SERVICES - ORGANIC DATA QUALIFIERS

U Indicates the compound was analyzed for but not detected above the specified level. This level may be the Practical Quantitation Level (PQL) (also called Limit of Quantitation (LOQ)), the Limit of Detection (LOD) or Method Detection Limit (MDL) as required by the client.

Note: All results reported as "U" MDL have a 50% rate for false negatives compared to those results reported as "U" PQL, "U" LOQ or "U" LOD, where the rate of false negatives is <1%.

* Compound recovery or percent RPD (relative percent difference) was outside of quality control limits.

D Indicates the result was obtained from analysis of a diluted sample. Surrogate recoveries may not be calculable.

E Estimated value. This flag identifies compounds whose concentrations exceed the upper level of the calibration range of the instrument for that specific analysis.

J Estimated value. The analyte was detected in the sample at a concentration less than the laboratory Practical Quantitation Level (PQL) (also called Limit of Quantitation (LOQ)), but above the Method Detection Limit (MDL).

And/or

J Used for Dual Column analytes when there is a greater than 40% difference for detected concentrations between the two GC/HPLC columns.

B Indicates the analyte was detected in the laboratory method blank analyzed concurrently with the sample.

I Indicates that the flagged compound did not meet DoD criteria in the corresponding Initial Calibration (ICAL).

D Indicates that the flagged compound did not meet DoD criteria in the corresponding Initial Calibration Verification (ICV).

C Indicates that the flagged compound did not meet DoD criteria in the corresponding opening Calibration Verification (CV).

V Indicates that the flagged compound did not meet DoD criteria in the corresponding closing Calibration Verification (CV).

L/LL Indicates that the flagged compound did not meet DoD criteria in the corresponding Laboratory Control Sample (LCS) and/or Laboratory Control Sample Duplicate (LCSD) prepared and/or analyzed concurrently with the sample.

M/MM Indicates that the flagged compound did not meet DoD criteria in the Matrix Spike (MS) and/or Matrix Spike Duplicate MSD) prepared and/or analyzed concurrently with the native sample.

H Indicates the flagged compound was detected on the primary column but was not detected on the confirmation column therefore the compound is not reported as a positive detection. (SW846 8330A/B only)

Katahdin Analytical Services, Inc.

Manual Integration Codes For GC/MS, GC, HPLC and/or IC

M1	Peak splitting.
M2	Well defined peaks on the shoulders of the other peaks.
M3	There is additional area due to a coeluting interferant.
M4	There are negative spikes in the baseline.
M5	There are rising or falling baselines.
M6	The software has failed to detect a peak or misidentified a peak.
M7	Excessive peak tailing.
M8	Analysis such as GRO, DRO and TPH require a baseline hold.
M9	Peak was not completely integrated as in GC/MS.
M10	Primary ion was correctly integrated, but secondary or tertiary ion needed manual integration as in GC/MS.
M11	For GC analysis, when a sample is diluted by 1:10 or more, the surrogate is set to undetected and then the area under the surrogate is manually integrated.
M12	Manual integration saved in method due to TurboChrom floating point error.

Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

SDG: SQ6133
Lab ID: SQ6133-1
Client ID: SY-OBMW6-110723
Matrix: AQ
Lab File ID: N0418.D

Sample Date: 07-NOV-23
Extract Date: 13-NOV-23
Extracted By: SH/NG/AC
Extraction Method: SW846 3510C
Lab Prep Batch: WG345301

Report Date: 29-DEC-23
Analysis Date: 08-DEC-23
Analyst: EP
Analysis Method: SW846 8270D SIM
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	0.093	ug/L	1	.2	0.19	0.060	0.093
2-Methylnaphthalene	U	0.093	ug/L	1	.2	0.19	0.072	0.093
Acenaphthylene	U	0.093	ug/L	1	.2	0.19	0.050	0.093
Acenaphthene	U	0.093	ug/L	1	.2	0.19	0.060	0.093
Fluorene	U	0.093	ug/L	1	.2	0.19	0.057	0.093
Phenanthrene	U	0.093	ug/L	1	.2	0.19	0.048	0.093
Anthracene	U	0.093	ug/L	1	.2	0.19	0.041	0.093
Fluoranthene	U	0.093	ug/L	1	.2	0.19	0.068	0.093
Pyrene	U	0.093	ug/L	1	.2	0.19	0.055	0.093
Benzo(a)anthracene	U	0.093	ug/L	1	.2	0.19	0.043	0.093
Chrysene	U	0.093	ug/L	1	.2	0.19	0.034	0.093
Benzo(b)Fluoranthene	U	0.093	ug/L	1	.2	0.19	0.083	0.093
Benzo(k)fluoranthene	U	0.093	ug/L	1	.2	0.19	0.046	0.093
Benzo(a)pyrene	U	0.093	ug/L	1	.2	0.19	0.062	0.093
Indeno(1,2,3-cd)pyrene	U	0.093	ug/L	1	.2	0.19	0.048	0.093
Dibenzo(a,h)anthracene	U	0.093	ug/L	1	.2	0.19	0.065	0.093
Benzo(g,h,i)perylene	U	0.093	ug/L	1	.2	0.19	0.061	0.093
2-Methylnaphthalene-D10		77.2	%					
Fluorene-D10		80.5	%					
Pyrene-D10		89.7	%					

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Data File: \\target_server\gg\chem\gcms-n.i\N120823.b\N0418.D
Report Date: 29-Dec-2023 09:54

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-n.i\N120823.b\N0418.D
Lab Smp Id: SQ6133-1 Client Smp ID: SY-OBMW6-110723
Inj Date : 08-DEC-2023 16:18
Operator : EP Inst ID: gcms-n.i
Smp Info : SQ6133-1
Misc Info : WG346646,WG345301,WG346503-4
Comment :
Method : \\target_server\gg\chem\gcms-n.i\N120823.b\NSPSIM95.m
Meth Date : 11-Dec-2023 07:09 epelletier Quant Type: ISTD
Cal Date : 07-DEC-2023 14:42 Cal File: N0385.D
Als bottle: 10
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pahplus.sub
Target Version: 4.12
Processing Host: INSPIRON1

Concentration Formula: Amt * DF * Uf*(Vt/Vo*Vi)*1000 * CpndVariable

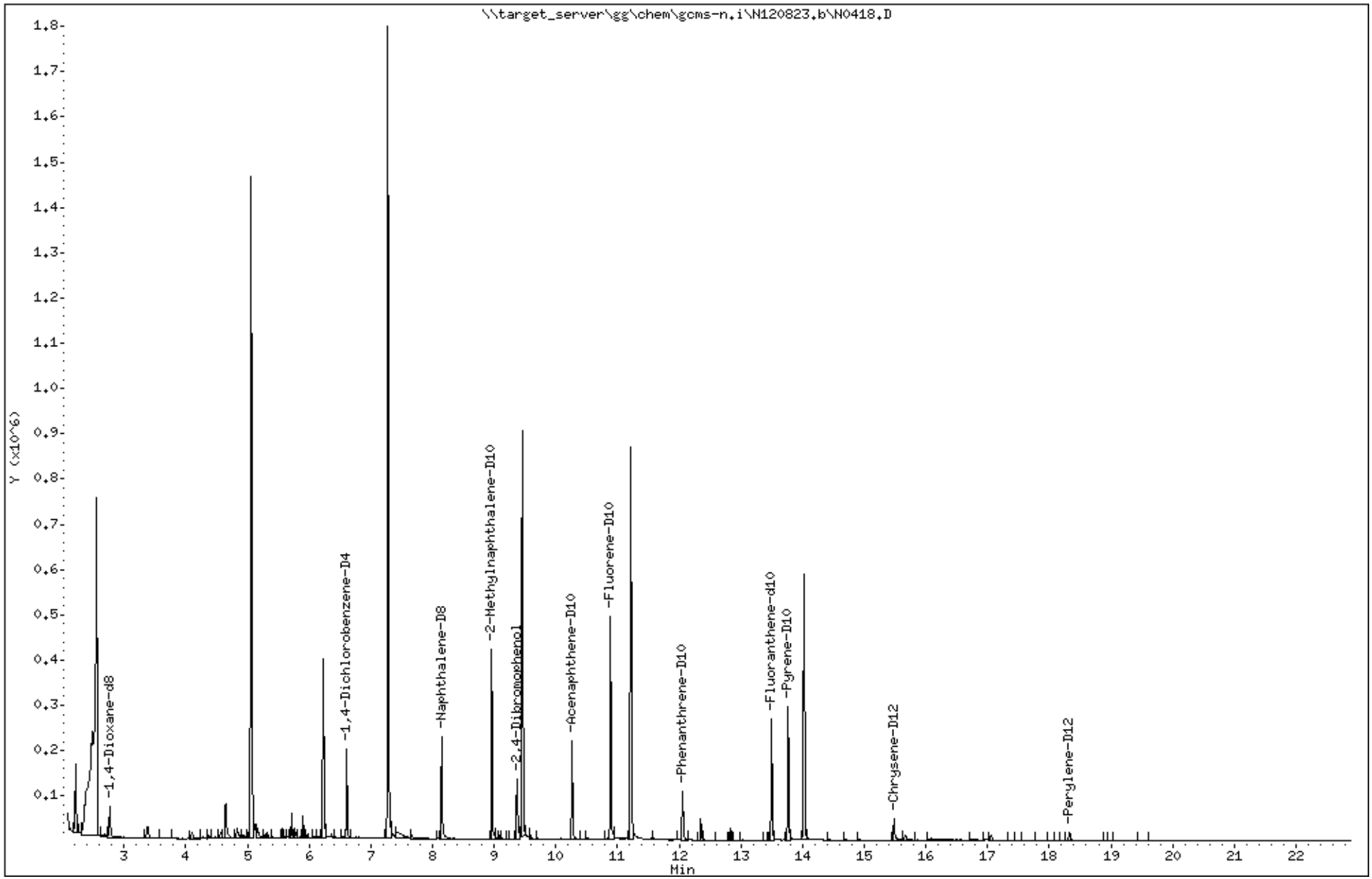
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.070	Sample Volume (L)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/L)	REVIEW CODE
$	1 1,4-Dioxane-d8	96	2.773	2.742	(0.270)	84671	1.78849	1.67(Q)	
*	10 1,4-Dichlorobenzene-D4	152	6.614	6.604	(1.000)	59965	0.80000	(aQ)	
*	27 Naphthalene-D8	136	8.147	8.125	(1.000)	222734	0.80000	(a)	
$	33 2-Methylnaphthalene-D10	152	8.964	8.954	(1.100)	225666	1.54364	1.44	
$	38 2,4-Dibromophenol	252	9.366	9.346	(0.913)	128328	3.55857	3.32	
*	48 Acenaphthene-D10	164	10.264	10.254	(1.000)	102720	0.80000	(a)	
$	56 Fluorene-D10	174	10.886	10.887	(1.061)	216375	1.60962	1.50	
*	66 Phenanthrene-D10	188	12.062	12.052	(1.000)	140224	0.80000	(a)	
$	71 Fluoranthene-d10	212	13.501	13.502	(1.119)	193478	1.69753	1.59	
$	73 Pyrene-D10	212	13.766	13.777	(0.889)	216362	1.79352	1.68	
*	78 Chrysene-D12	240	15.488	15.478	(1.000)	51558	0.80000	(a)	
*	85 Perylene-D12	264	18.324	18.324	(1.000)	36255	0.80000	(a)	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.

Data File: \\target_server\gg\chem\gcms-n.i\N120823.b\N0418.D
Date : 08-DEC-2023 16:18
Client ID: SY-OBMW6-110723
Instrument: gcms-n.i
Sample Info: SQ6133-1
Volume Injected (uL): 1.0
Operator: EP
Column phase: Rxi-SVOCms
Column diameter: 0.25



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ANALYTICAL SERVICES

Report of Analytical Results

SDG: SQ6133
Lab ID: SQ6133-2
Client ID: SY-OBMW4R-110723
Matrix: AQ
Lab File ID: N0419.D

Sample Date: 07-NOV-23
Extract Date: 13-NOV-23
Extracted By: SH/NG/AC
Extraction Method: SW846 3510C
Lab Prep Batch: WG345301

Report Date: 29-DEC-23
Analysis Date: 08-DEC-23
Analyst: EP
Analysis Method: SW846 8270D SIM
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	0.094	ug/L	1	.2	0.19	0.060	0.094
2-Methylnaphthalene	U	0.094	ug/L	1	.2	0.19	0.073	0.094
Acenaphthylene	U	0.094	ug/L	1	.2	0.19	0.051	0.094
Acenaphthene	U	0.094	ug/L	1	.2	0.19	0.060	0.094
Fluorene	U	0.094	ug/L	1	.2	0.19	0.058	0.094
Phenanthrene	U	0.094	ug/L	1	.2	0.19	0.048	0.094
Anthracene	U	0.094	ug/L	1	.2	0.19	0.042	0.094
Fluoranthene	U	0.094	ug/L	1	.2	0.19	0.069	0.094
Pyrene	U	0.094	ug/L	1	.2	0.19	0.056	0.094
Benzo(a)anthracene	U	0.094	ug/L	1	.2	0.19	0.043	0.094
Chrysene	U	0.094	ug/L	1	.2	0.19	0.034	0.094
Benzo(b)Fluoranthene	U	0.094	ug/L	1	.2	0.19	0.084	0.094
Benzo(k)fluoranthene	U	0.094	ug/L	1	.2	0.19	0.046	0.094
Benzo(a)pyrene	U	0.094	ug/L	1	.2	0.19	0.062	0.094
Indeno(1,2,3-cd)pyrene	U	0.094	ug/L	1	.2	0.19	0.049	0.094
Dibenzo(a,h)anthracene	U	0.094	ug/L	1	.2	0.19	0.066	0.094
Benzo(g,h,i)perylene	U	0.094	ug/L	1	.2	0.19	0.061	0.094
2-Methylnaphthalene-D10		81.5	%					
Fluorene-D10		79.6	%					
Pyrene-D10		87.6	%					

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Data File: \\target_server\gg\chem\gcms-n.i\N120823.b\N0419.D
Report Date: 29-Dec-2023 09:54

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Data file : \\target_server\gg\chem\gcms-n.i\N120823.b\N0419.D
Lab Smp Id: SQ6133-2 Client Smp ID: SY-OBMW4R-110723
Inj Date : 08-DEC-2023 16:48
Operator : EP Inst ID: gcms-n.i
Smp Info : SQ6133-2
Misc Info : WG346646,WG345301,WG346503-4
Comment :
Method : \\target_server\gg\chem\gcms-n.i\N120823.b\NSPSIM95.m
Meth Date : 11-Dec-2023 07:09 epelletier Quant Type: ISTD
Cal Date : 07-DEC-2023 14:42 Cal File: N0385.D
Als bottle: 11
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pahplus.sub
Target Version: 4.12
Processing Host: INSPIRON1

Concentration Formula: Amt * DF * Uf*(Vt/Vo*Vi)*1000 * CpndVariable

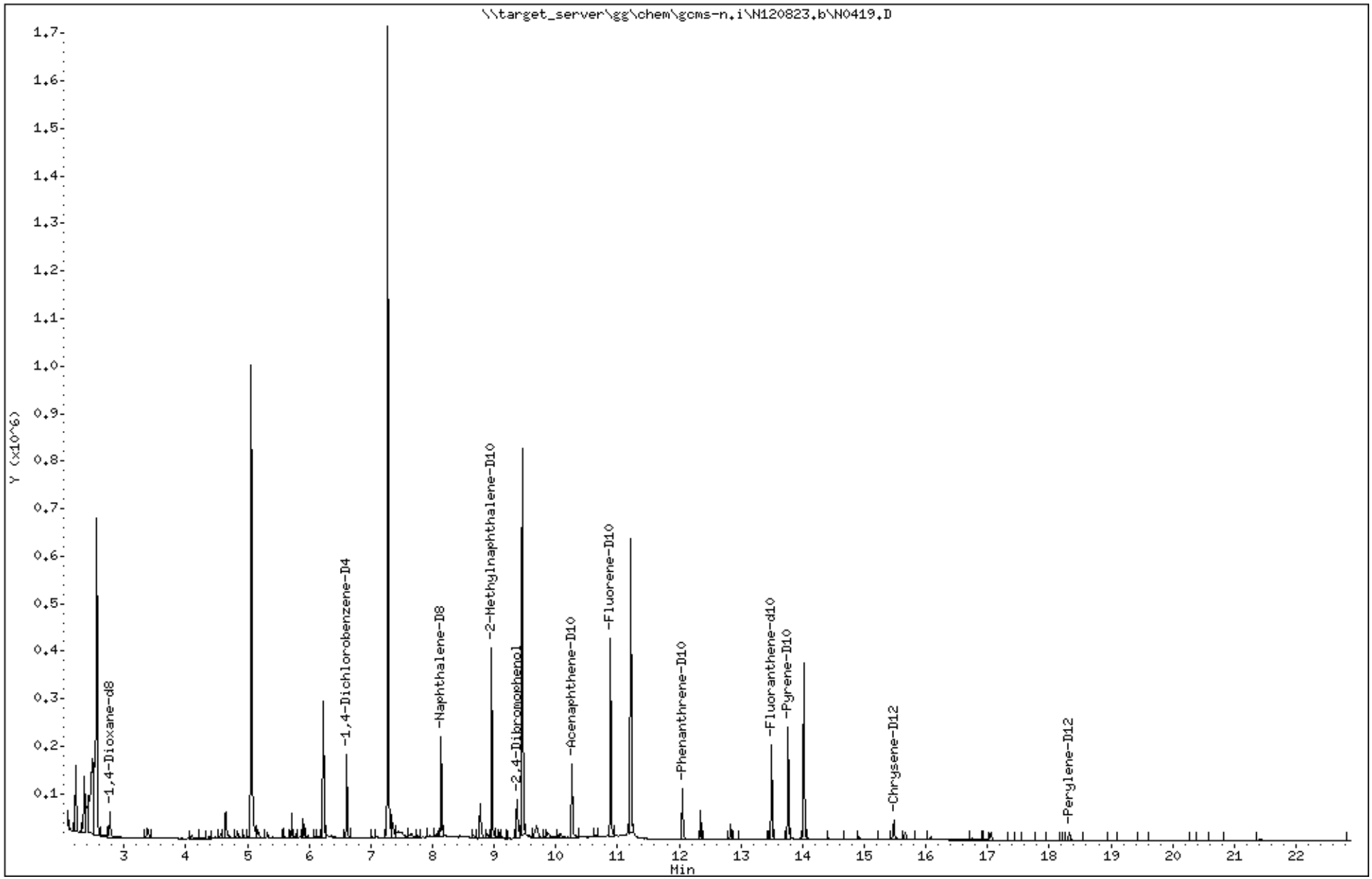
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.060	Sample Volume (L)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/L)	REVIEW CODE
$	1 1,4-Dioxane-d8	96	2.773	2.742	(0.270)	57145	1.43829	1.36(Q)	
*	10 1,4-Dichlorobenzene-D4	152	6.614	6.604	(1.000)	53925	0.80000	(aQ)	
*	27 Naphthalene-D8	136	8.136	8.125	(1.000)	179670	0.80000	(a)	
$	33 2-Methylnaphthalene-D10	152	8.964	8.954	(1.102)	192235	1.63013	1.54	
$	38 2,4-Dibromophenol	252	9.366	9.346	(0.913)	77534	2.56191	2.42	
*	48 Acenaphthene-D10	164	10.264	10.254	(1.000)	86206	0.80000	(a)	
$	56 Fluorene-D10	174	10.886	10.887	(1.061)	179575	1.59177	1.50	
*	66 Phenanthrene-D10	188	12.051	12.052	(1.000)	122141	0.80000	(a)	
$	71 Fluoranthene-d10	212	13.501	13.502	(1.120)	148807	1.49889	1.41	
$	73 Pyrene-D10	212	13.766	13.777	(0.889)	169667	1.75103	1.65	
*	78 Chrysene-D12	240	15.477	15.478	(1.000)	41412	0.80000	(a)	
*	85 Perylene-D12	264	18.324	18.324	(1.000)	31326	0.80000	(a)	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.

Data File: \\target_server\gg\chem\gcms-n.i\N120823.b\N0419.D
Date : 08-DEC-2023 16:48
Client ID: SY-OBMW4R-110723
Instrument: gcms-n.i
Sample Info: SQ6133-2
Volume Injected (uL): 1.0
Operator: EP
Column phase: Rxi-SVOCms
Column diameter: 0.25



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ANALYTICAL SERVICES

Report of Analytical Results

SDG: SQ6133
Lab ID: SQ6133-3
Client ID: SY-OBMW12-110723
Matrix: AQ
Lab File ID: N0420.D

Sample Date: 07-NOV-23
Extract Date: 13-NOV-23
Extracted By: SH/NG/AC
Extraction Method: SW846 3510C
Lab Prep Batch: WG345301

Report Date: 29-DEC-23
Analysis Date: 08-DEC-23
Analyst: EP
Analysis Method: SW846 8270D SIM
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	0.094	ug/L	1	.2	0.19	0.060	0.094
2-Methylnaphthalene	U	0.094	ug/L	1	.2	0.19	0.073	0.094
Acenaphthylene	U	0.094	ug/L	1	.2	0.19	0.051	0.094
Acenaphthene	U	0.094	ug/L	1	.2	0.19	0.060	0.094
Fluorene	U	0.094	ug/L	1	.2	0.19	0.058	0.094
Phenanthrene	U	0.094	ug/L	1	.2	0.19	0.048	0.094
Anthracene	U	0.094	ug/L	1	.2	0.19	0.042	0.094
Fluoranthene	U	0.094	ug/L	1	.2	0.19	0.069	0.094
Pyrene	U	0.094	ug/L	1	.2	0.19	0.056	0.094
Benzo(a)anthracene	U	0.094	ug/L	1	.2	0.19	0.043	0.094
Chrysene	U	0.094	ug/L	1	.2	0.19	0.034	0.094
Benzo(b)Fluoranthene	U	0.094	ug/L	1	.2	0.19	0.084	0.094
Benzo(k)fluoranthene	U	0.094	ug/L	1	.2	0.19	0.046	0.094
Benzo(a)pyrene	U	0.094	ug/L	1	.2	0.19	0.062	0.094
Indeno(1,2,3-cd)pyrene	UMM	0.094	ug/L	1	.2	0.19	0.049	0.094
Dibenzo(a,h)anthracene	UMM	0.094	ug/L	1	.2	0.19	0.066	0.094
Benzo(g,h,i)perylene	UMM	0.094	ug/L	1	.2	0.19	0.061	0.094
2-Methylnaphthalene-D10		69.5	%					
Fluorene-D10		71.1	%					
Pyrene-D10		86.7	%					

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Data File: \\target_server\gg\chem\gcms-n.i\N120823.b\N0420.D
Report Date: 29-Dec-2023 09:54

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Data file : \\target_server\gg\chem\gcms-n.i\N120823.b\N0420.D
Lab Smp Id: SQ6133-3 Client Smp ID: SY-OBMW12-110723
Inj Date : 08-DEC-2023 17:20
Operator : EP Inst ID: gcms-n.i
Smp Info : SQ6133-3
Misc Info : WG346646,WG345301,WG346503-4
Comment :
Method : \\target_server\gg\chem\gcms-n.i\N120823.b\NSPSIM95.m
Meth Date : 11-Dec-2023 07:09 epelletier Quant Type: ISTD
Cal Date : 07-DEC-2023 14:42 Cal File: N0385.D
Als bottle: 12
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pahplus.sub
Target Version: 4.12
Processing Host: INSPIRON1

Concentration Formula: Amt * DF * Uf*(Vt/Vo*Vi)*1000 * CpndVariable

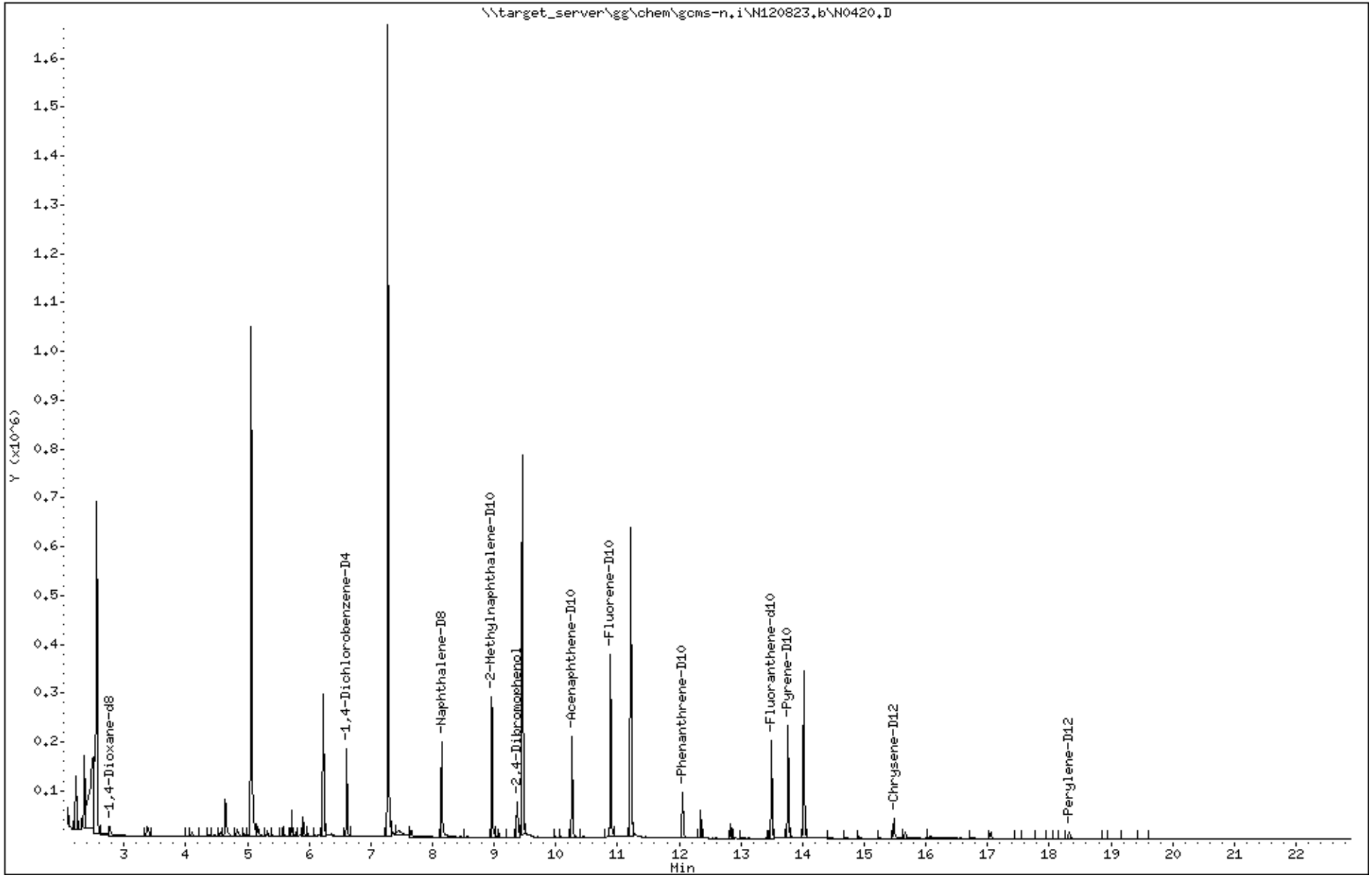
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.060	Sample Volume (L)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/L)	REVIEW CODE
$	1 1,4-Dioxane-d8	96	2.773	2.742	(0.270)	21707	0.49887	0.471(aR)	
*	10 1,4-Dichlorobenzene-D4	152	6.614	6.604	(1.000)	54090	0.80000	(aQ)	
*	27 Naphthalene-D8	136	8.147	8.125	(1.000)	200169	0.80000	(a)	
$	33 2-Methylnaphthalene-D10	152	8.964	8.954	(1.100)	182663	1.39034	1.31	
$	38 2,4-Dibromophenol	252	9.377	9.346	(0.914)	79440	2.39676	2.26	
*	48 Acenaphthene-D10	164	10.264	10.254	(1.000)	94411	0.80000	(a)	
$	56 Fluorene-D10	174	10.886	10.887	(1.061)	175813	1.42298	1.34	
*	66 Phenanthrene-D10	188	12.062	12.052	(1.000)	128673	0.80000	(a)	
$	71 Fluoranthene-d10	212	13.501	13.502	(1.119)	151115	1.44486	1.36	
$	73 Pyrene-D10	212	13.766	13.777	(0.889)	168124	1.73355	1.64	
*	78 Chrysene-D12	240	15.477	15.478	(1.000)	41449	0.80000	(a)	
*	85 Perylene-D12	264	18.324	18.324	(1.000)	29668	0.80000	(a)	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.

Data File: \\target_server\gg\chem\gcms-n.i\N120823.b\N0420.D
Date : 08-DEC-2023 17:20
Client ID: SY-OBMW12-110723
Instrument: gcms-n.i
Sample Info: SQ6133-3
Volume Injected (uL): 1.0
Operator: EP
Column phase: Rxi-SVOCms
Column diameter: 0.25



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ANALYTICAL SERVICES

Report of Analytical Results

SDG: SQ6133
Lab ID: SQ6133-4
Client ID: SY-BRMW2-60.5-70.5-110723
Matrix: AQ
Lab File ID: N0423.D

Sample Date: 07-NOV-23
Extract Date: 13-NOV-23
Extracted By: SH/NG/AC
Extraction Method: SW846 3510C
Lab Prep Batch: WG345301

Report Date: 29-DEC-23
Analysis Date: 08-DEC-23
Analyst: EP
Analysis Method: SW846 8270D SIM
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	0.093	ug/L	1	.2	0.19	0.060	0.093
2-Methylnaphthalene	U	0.093	ug/L	1	.2	0.19	0.072	0.093
Acenaphthylene	U	0.093	ug/L	1	.2	0.19	0.050	0.093
Acenaphthene	U	0.093	ug/L	1	.2	0.19	0.060	0.093
Fluorene	U	0.093	ug/L	1	.2	0.19	0.057	0.093
Phenanthrene	U	0.093	ug/L	1	.2	0.19	0.048	0.093
Anthracene	U	0.093	ug/L	1	.2	0.19	0.041	0.093
Fluoranthene	U	0.093	ug/L	1	.2	0.19	0.068	0.093
Pyrene	U	0.093	ug/L	1	.2	0.19	0.055	0.093
Benzo(a)anthracene	U	0.093	ug/L	1	.2	0.19	0.043	0.093
Chrysene	U	0.093	ug/L	1	.2	0.19	0.034	0.093
Benzo(b)Fluoranthene	U	0.093	ug/L	1	.2	0.19	0.083	0.093
Benzo(k)fluoranthene	U	0.093	ug/L	1	.2	0.19	0.046	0.093
Benzo(a)pyrene	U	0.093	ug/L	1	.2	0.19	0.062	0.093
Indeno(1,2,3-cd)pyrene	U	0.093	ug/L	1	.2	0.19	0.048	0.093
Dibenzo(a,h)anthracene	U	0.093	ug/L	1	.2	0.19	0.065	0.093
Benzo(g,h,i)perylene	U	0.093	ug/L	1	.2	0.19	0.061	0.093
2-Methylnaphthalene-D10		84.8	%					
Fluorene-D10		84.2	%					
Pyrene-D10		98.2	%					

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Data File: \\target_server\gg\chem\gcms-n.i\N120823.b\N0423.D
Report Date: 29-Dec-2023 09:54

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Data file : \\target_server\gg\chem\gcms-n.i\N120823.b\N0423.D
Lab Smp Id: SQ6133-4 Client Smp ID: Y-BRMW2-60.5-70.5-1
Inj Date : 08-DEC-2023 18:57
Operator : EP Inst ID: gcms-n.i
Smp Info : SQ6133-4
Misc Info : WG346646,WG345301,WG346503-4
Comment :
Method : \\target_server\gg\chem\gcms-n.i\N120823.b\NSPSIM95.m
Meth Date : 11-Dec-2023 07:09 epelletier Quant Type: ISTD
Cal Date : 07-DEC-2023 14:42 Cal File: N0385.D
Als bottle: 15
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pahplus.sub
Target Version: 4.12
Processing Host: INSPIRON1

Concentration Formula: Amt * DF * Uf*(Vt/Vo*Vi)*1000 * CpndVariable

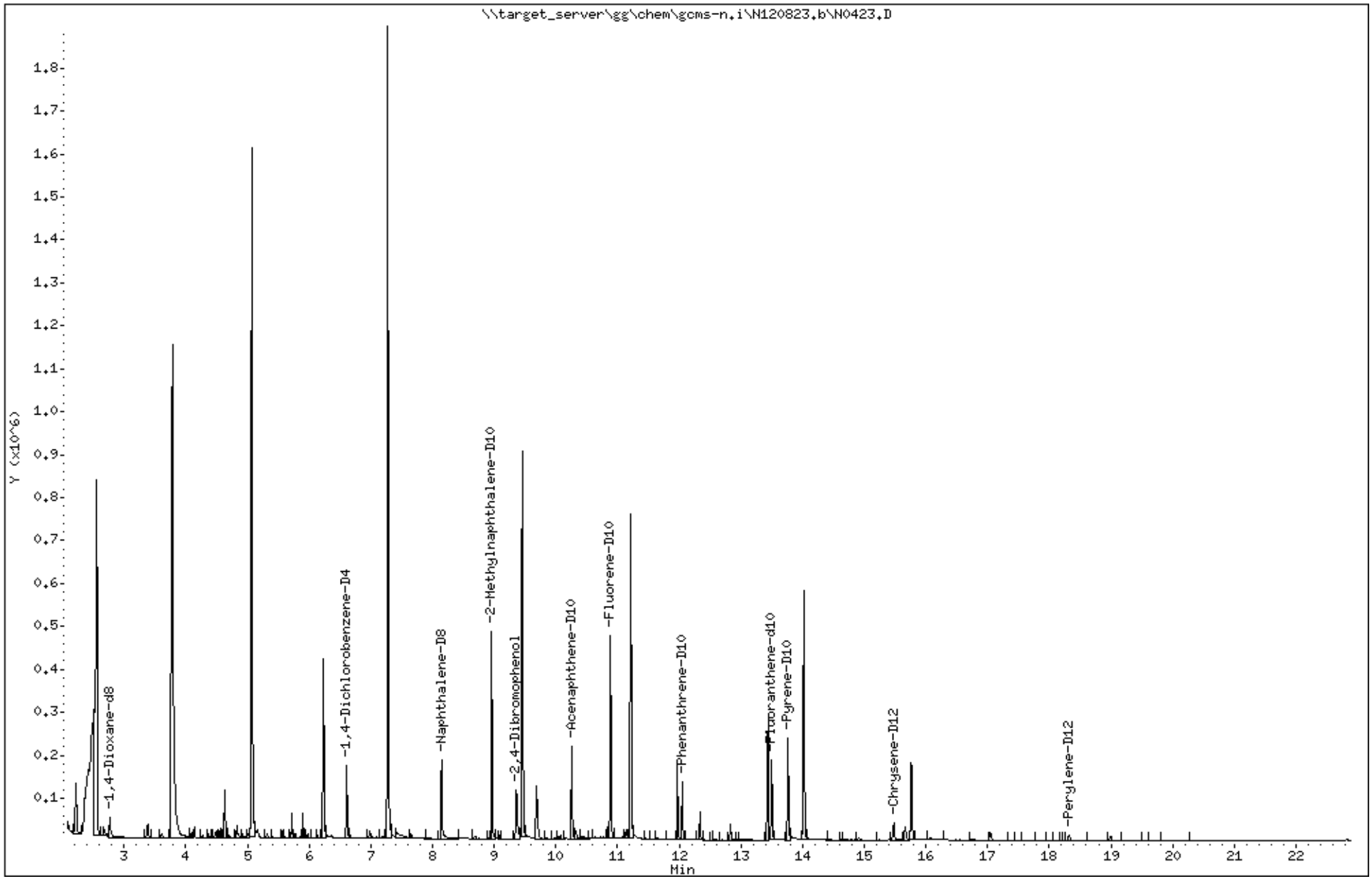
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.070	Sample Volume (L)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/L)	REVIEW CODE
$	1 1,4-Dioxane-d8	96	2.773	2.742	(0.270)	52819	1.27066	1.19(Q)	
*	10 1,4-Dichlorobenzene-D4	152	6.614	6.604	(1.000)	56053	0.80000	(aQ)	
*	27 Naphthalene-D8	136	8.147	8.125	(1.000)	204766	0.80000	(a)	
$	33 2-Methylnaphthalene-D10	152	8.964	8.954	(1.100)	227890	1.69564	1.58	
$	38 2,4-Dibromophenol	252	9.366	9.346	(0.913)	117686	3.71677	3.47	
*	48 Acenaphthene-D10	164	10.253	10.254	(1.000)	90192	0.80000	(a)	
$	56 Fluorene-D10	174	10.886	10.887	(1.062)	198869	1.68488	1.57	
*	66 Phenanthrene-D10	188	12.051	12.052	(1.000)	109611	0.80000	(a)	
$	71 Fluoranthene-d10	212	13.501	13.502	(1.120)	153288	1.72052	1.61	
$	73 Pyrene-D10	212	13.766	13.777	(0.889)	164802	1.96305	1.83	
*	78 Chrysene-D12	240	15.477	15.478	(1.000)	35880	0.80000	(a)	
*	85 Perylene-D12	264	18.324	18.324	(1.000)	27251	0.80000	(a)	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.

Data File: \\target_server\gg\chem\gcms-n.i\N120823.b\N0423.D
Date : 08-DEC-2023 18:57
Client ID: Y-BRMW2-60.5-70.5-1
Instrument: gcms-n.i
Sample Info: SQ6133-4
Volume Injected (uL): 1.0
Operator: EP
Column phase: Rxi-SVOCms
Column diameter: 0.25



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Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

SDG: SQ6133
Lab ID: SQ6133-5
Client ID: SY-OBMW15-110723
Matrix: AQ
Lab File ID: N0424.D

Sample Date: 07-NOV-23
Extract Date: 13-NOV-23
Extracted By: SH/NG/AC
Extraction Method: SW846 3510C
Lab Prep Batch: WG345301

Report Date: 29-DEC-23
Analysis Date: 08-DEC-23
Analyst: EP
Analysis Method: SW846 8270D SIM
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	0.095	ug/L	1	.2	0.19	0.061	0.095
2-Methylnaphthalene	U	0.095	ug/L	1	.2	0.19	0.073	0.095
Acenaphthylene	U	0.095	ug/L	1	.2	0.19	0.051	0.095
Acenaphthene	U	0.095	ug/L	1	.2	0.19	0.061	0.095
Fluorene	U	0.095	ug/L	1	.2	0.19	0.058	0.095
Phenanthrene	U	0.095	ug/L	1	.2	0.19	0.048	0.095
Anthracene	U	0.095	ug/L	1	.2	0.19	0.042	0.095
Fluoranthene	U	0.095	ug/L	1	.2	0.19	0.070	0.095
Pyrene	U	0.095	ug/L	1	.2	0.19	0.056	0.095
Benzo(a)anthracene	U	0.095	ug/L	1	.2	0.19	0.044	0.095
Chrysene	U	0.095	ug/L	1	.2	0.19	0.034	0.095
Benzo(b)Fluoranthene	U	0.095	ug/L	1	.2	0.19	0.085	0.095
Benzo(k)fluoranthene	U	0.095	ug/L	1	.2	0.19	0.047	0.095
Benzo(a)pyrene	U	0.095	ug/L	1	.2	0.19	0.063	0.095
Indeno(1,2,3-cd)pyrene	U	0.095	ug/L	1	.2	0.19	0.050	0.095
Dibenzo(a,h)anthracene	U	0.095	ug/L	1	.2	0.19	0.067	0.095
Benzo(g,h,i)perylene	U	0.095	ug/L	1	.2	0.19	0.062	0.095
2-Methylnaphthalene-D10		78.7	%					
Fluorene-D10		81.8	%					
Pyrene-D10		97.0	%					

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Data File: \\target_server\gg\chem\gcms-n.i\N120823.b\N0424.D
Report Date: 29-Dec-2023 09:54

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-n.i\N120823.b\N0424.D
Lab Smp Id: SQ6133-5 Client Smp ID: SY-OBMW15-110723
Inj Date : 08-DEC-2023 19:29
Operator : EP Inst ID: gcms-n.i
Smp Info : SQ6133-5
Misc Info : WG346646,WG345301,WG346503-4
Comment :
Method : \\target_server\gg\chem\gcms-n.i\N120823.b\NSPSIM95.m
Meth Date : 11-Dec-2023 07:09 epelletier Quant Type: ISTD
Cal Date : 07-DEC-2023 14:42 Cal File: N0385.D
Als bottle: 16
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pahplus.sub
Target Version: 4.12
Processing Host: INSPIRON1

Concentration Formula: Amt * DF * Uf*(Vt/Vo*Vi)*1000 * CpndVariable

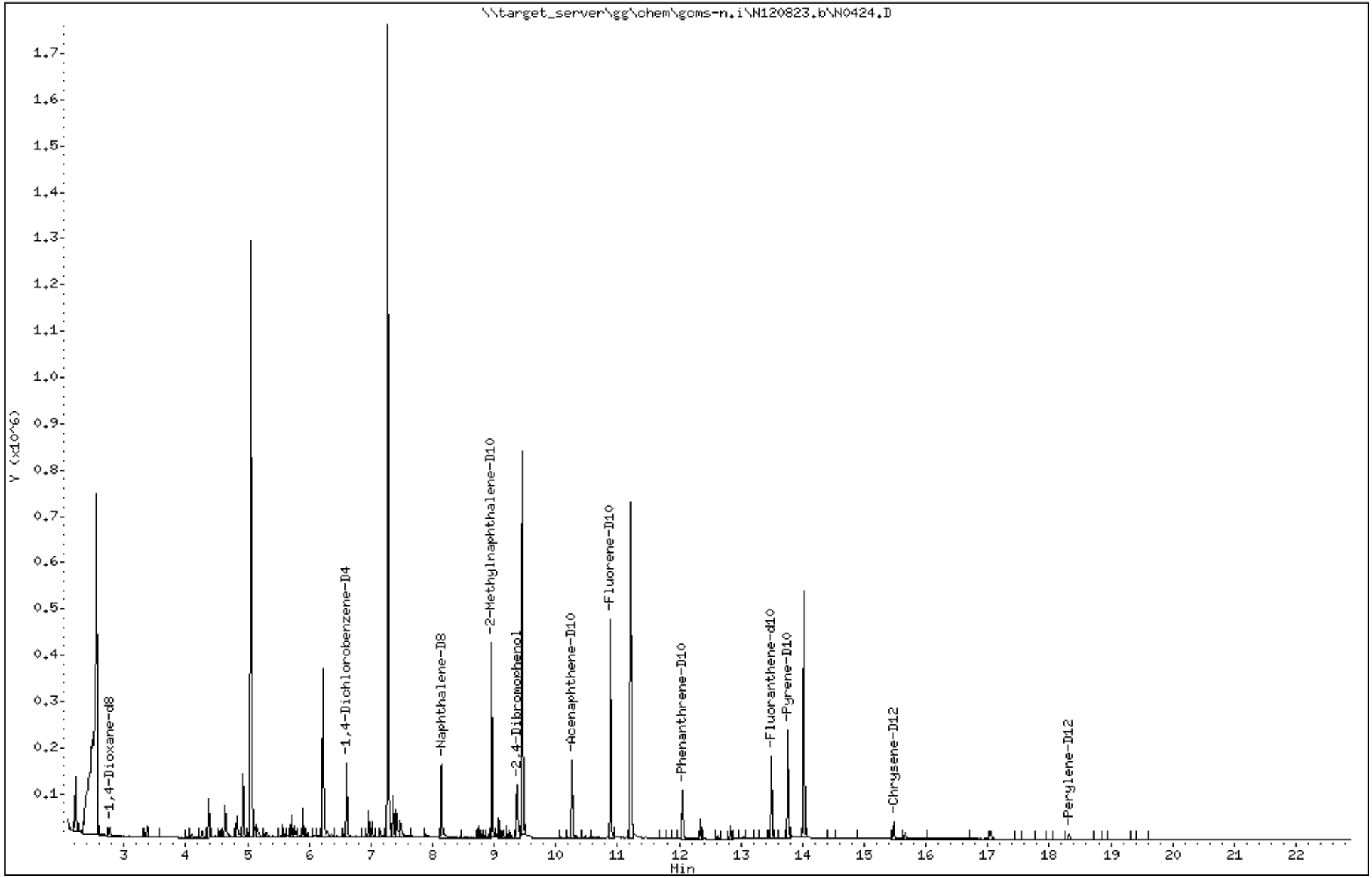
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.050	Sample Volume (L)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/L)	REVIEW CODE
$	1 1,4-Dioxane-d8	96	2.762	2.742	(0.269)	24006	0.57985	0.552(a)	
*	10 1,4-Dichlorobenzene-D4	152	6.614	6.604	(1.000)	53746	0.80000	(aQ)	
*	27 Naphthalene-D8	136	8.147	8.125	(1.000)	200018	0.80000	(a)	
$	33 2-Methylnaphthalene-D10	152	8.964	8.954	(1.100)	206576	1.57354	1.50	
$	38 2,4-Dibromophenol	252	9.366	9.346	(0.913)	112272	3.56015	3.39	
*	48 Acenaphthene-D10	164	10.264	10.254	(1.000)	89828	0.80000	(a)	
$	56 Fluorene-D10	174	10.886	10.887	(1.061)	192291	1.63576	1.56	
*	66 Phenanthrene-D10	188	12.051	12.052	(1.000)	119085	0.80000	(a)	
$	71 Fluoranthene-d10	212	13.501	13.502	(1.120)	146705	1.51564	1.44	
$	73 Pyrene-D10	212	13.766	13.777	(0.889)	162812	1.93924	1.85	
*	78 Chrysene-D12	240	15.477	15.478	(1.000)	35882	0.80000	(a)	
*	85 Perylene-D12	264	18.313	18.324	(1.000)	25933	0.80000	(a)	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.

Data File: \\target_server\gg\chem\gcms-n.i\N120823.b\N0424.D
Date : 08-DEC-2023 19:29
Client ID: SY-OBMW15-110723
Instrument: gcms-n.i
Sample Info: SQ6133-5
Volume Injected (uL): 1.0
Operator: EP
Column phase: Rxi-SVOCms
Column diameter: 0.25



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ANALYTICAL SERVICES

Report of Analytical Results

SDG: SQ6133
Lab ID: SQ6133-6
Client ID: SY-OBMW5-110723
Matrix: AQ
Lab File ID: N0425.D

Sample Date: 07-NOV-23
Extract Date: 13-NOV-23
Extracted By: SH/NG/AC
Extraction Method: SW846 3510C
Lab Prep Batch: WG345301

Report Date: 29-DEC-23
Analysis Date: 08-DEC-23
Analyst: EP
Analysis Method: SW846 8270D SIM
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	0.093	ug/L	1	.2	0.19	0.060	0.093
2-Methylnaphthalene	U	0.093	ug/L	1	.2	0.19	0.072	0.093
Acenaphthylene	U	0.093	ug/L	1	.2	0.19	0.050	0.093
Acenaphthene	U	0.093	ug/L	1	.2	0.19	0.060	0.093
Fluorene	U	0.093	ug/L	1	.2	0.19	0.057	0.093
Phenanthrene	U	0.093	ug/L	1	.2	0.19	0.048	0.093
Anthracene	U	0.093	ug/L	1	.2	0.19	0.041	0.093
Fluoranthene	U	0.093	ug/L	1	.2	0.19	0.068	0.093
Pyrene	U	0.093	ug/L	1	.2	0.19	0.055	0.093
Benzo(a)anthracene	U	0.093	ug/L	1	.2	0.19	0.043	0.093
Chrysene	U	0.093	ug/L	1	.2	0.19	0.034	0.093
Benzo(b)Fluoranthene	U	0.093	ug/L	1	.2	0.19	0.083	0.093
Benzo(k)fluoranthene	U	0.093	ug/L	1	.2	0.19	0.046	0.093
Benzo(a)pyrene	U	0.093	ug/L	1	.2	0.19	0.062	0.093
Indeno(1,2,3-cd)pyrene	U	0.093	ug/L	1	.2	0.19	0.048	0.093
Dibenzo(a,h)anthracene	U	0.093	ug/L	1	.2	0.19	0.065	0.093
Benzo(g,h,i)perylene	U	0.093	ug/L	1	.2	0.19	0.061	0.093
2-Methylnaphthalene-D10		79.9	%					
Fluorene-D10		84.1	%					
Pyrene-D10		103.	%					

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Data File: \\target_server\gg\chem\gcms-n.i\N120823.b\N0425.D
Report Date: 29-Dec-2023 09:54

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Data file : \\target_server\gg\chem\gcms-n.i\N120823.b\N0425.D
Lab Smp Id: SQ6133-6 Client Smp ID: SY-OBMW5-110723
Inj Date : 08-DEC-2023 20:01
Operator : EP Inst ID: gcms-n.i
Smp Info : SQ6133-6
Misc Info : WG346646,WG345301,WG346503-4
Comment :
Method : \\target_server\gg\chem\gcms-n.i\N120823.b\NSPSIM95.m
Meth Date : 11-Dec-2023 07:09 epelletier Quant Type: ISTD
Cal Date : 07-DEC-2023 14:42 Cal File: N0385.D
Als bottle: 17
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pahplus.sub
Target Version: 4.12
Processing Host: INSPIRON1

Concentration Formula: Amt * DF * Uf*(Vt/Vo*Vi)*1000 * CpndVariable

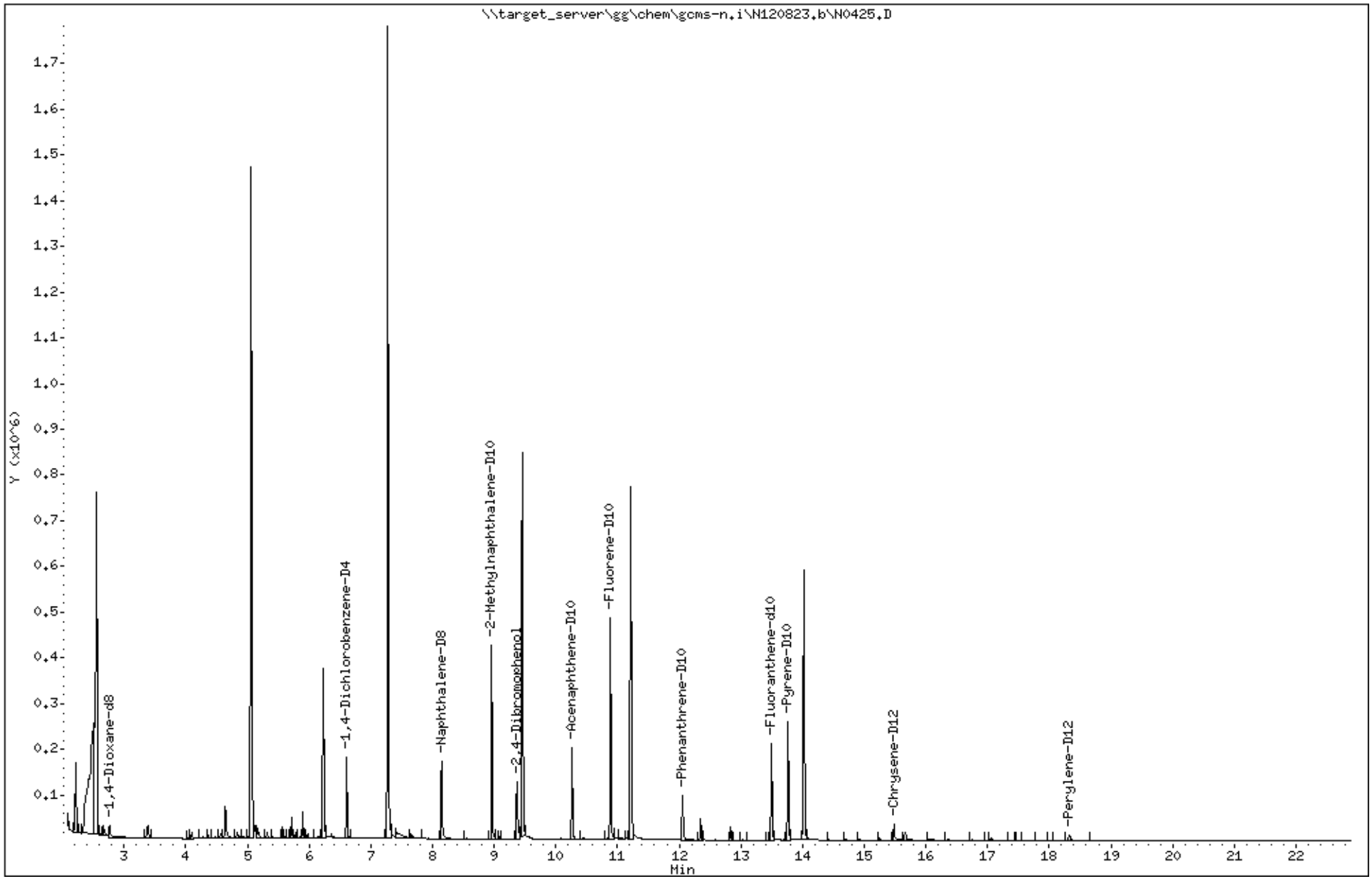
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.070	Sample Volume (L)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/L)	REVIEW CODE
$	1 1,4-Dioxane-d8	96	2.762	2.742	(0.269)	27017	0.64272	0.601(a)	
*	10 1,4-Dichlorobenzene-D4	152	6.614	6.604	(1.000)	55387	0.80000	(aQ)	
*	27 Naphthalene-D8	136	8.147	8.125	(1.000)	201178	0.80000	(a)	
$	33 2-Methylnaphthalene-D10	152	8.964	8.954	(1.100)	211024	1.59815	1.49	
$	38 2,4-Dibromophenol	252	9.366	9.346	(0.913)	119789	3.74112	3.50	
*	48 Acenaphthene-D10	164	10.264	10.254	(1.000)	91206	0.80000	(a)	
$	56 Fluorene-D10	174	10.886	10.887	(1.061)	200857	1.68281	1.57	
*	66 Phenanthrene-D10	188	12.051	12.052	(1.000)	124778	0.80000	(a)	
$	71 Fluoranthene-d10	212	13.501	13.502	(1.120)	163765	1.61469	1.51	
$	73 Pyrene-D10	212	13.766	13.777	(0.889)	182437	2.06754	1.93	
*	78 Chrysene-D12	240	15.477	15.478	(1.000)	37712	0.80000	(a)	
*	85 Perylene-D12	264	18.324	18.324	(1.000)	25213	0.80000	(a)	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.

Data File: \\target_server\gg\chem\gcms-n.i\N120823.b\N0425.D
Date : 08-DEC-2023 20:01
Client ID: SY-OBMW5-110723
Instrument: gcms-n.i
Sample Info: SQ6133-6
Volume Injected (uL): 1.0
Operator: EP
Column phase: Rxi-SVOCms
Column diameter: 0.25



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ANALYTICAL SERVICES

Report of Analytical Results

SDG: SQ6133
Lab ID: SQ6133-7
Client ID: SY-OBMW13-110723
Matrix: AQ
Lab File ID: N0426.D

Sample Date: 07-NOV-23
Extract Date: 13-NOV-23
Extracted By: SH/NG/AC
Extraction Method: SW846 3510C
Lab Prep Batch: WG345301

Report Date: 29-DEC-23
Analysis Date: 08-DEC-23
Analyst: EP
Analysis Method: SW846 8270D SIM
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	0.094	ug/L	1	.2	0.19	0.060	0.094
2-Methylnaphthalene	U	0.094	ug/L	1	.2	0.19	0.073	0.094
Acenaphthylene	U	0.094	ug/L	1	.2	0.19	0.051	0.094
Acenaphthene	U	0.094	ug/L	1	.2	0.19	0.060	0.094
Fluorene	U	0.094	ug/L	1	.2	0.19	0.058	0.094
Phenanthrene	U	0.094	ug/L	1	.2	0.19	0.048	0.094
Anthracene	U	0.094	ug/L	1	.2	0.19	0.042	0.094
Fluoranthene	U	0.094	ug/L	1	.2	0.19	0.069	0.094
Pyrene	U	0.094	ug/L	1	.2	0.19	0.056	0.094
Benzo(a)anthracene	U	0.094	ug/L	1	.2	0.19	0.043	0.094
Chrysene	U	0.094	ug/L	1	.2	0.19	0.034	0.094
Benzo(b)Fluoranthene	U	0.094	ug/L	1	.2	0.19	0.084	0.094
Benzo(k)fluoranthene	U	0.094	ug/L	1	.2	0.19	0.046	0.094
Benzo(a)pyrene	U	0.094	ug/L	1	.2	0.19	0.062	0.094
Indeno(1,2,3-cd)pyrene	U	0.094	ug/L	1	.2	0.19	0.049	0.094
Dibenzo(a,h)anthracene	U	0.094	ug/L	1	.2	0.19	0.066	0.094
Benzo(g,h,i)perylene	U	0.094	ug/L	1	.2	0.19	0.061	0.094
2-Methylnaphthalene-D10		82.9	%					
Fluorene-D10		80.2	%					
Pyrene-D10		102.	%					

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Data File: \\target_server\gg\chem\gcms-n.i\N120823.b\N0426.D
Report Date: 29-Dec-2023 09:54

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Data file : \\target_server\gg\chem\gcms-n.i\N120823.b\N0426.D
Lab Smp Id: SQ6133-7 Client Smp ID: SY-OBMW13-110723
Inj Date : 08-DEC-2023 20:33
Operator : EP Inst ID: gcms-n.i
Smp Info : SQ6133-7
Misc Info : WG346646,WG345301,WG346503-4
Comment :
Method : \\target_server\gg\chem\gcms-n.i\N120823.b\NSPSIM95.m
Meth Date : 11-Dec-2023 07:09 epelletier Quant Type: ISTD
Cal Date : 07-DEC-2023 14:42 Cal File: N0385.D
Als bottle: 18
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pahplus.sub
Target Version: 4.12
Processing Host: INSPIRON1

Concentration Formula: Amt * DF * Uf*(Vt/Vo*Vi)*1000 * CpndVariable

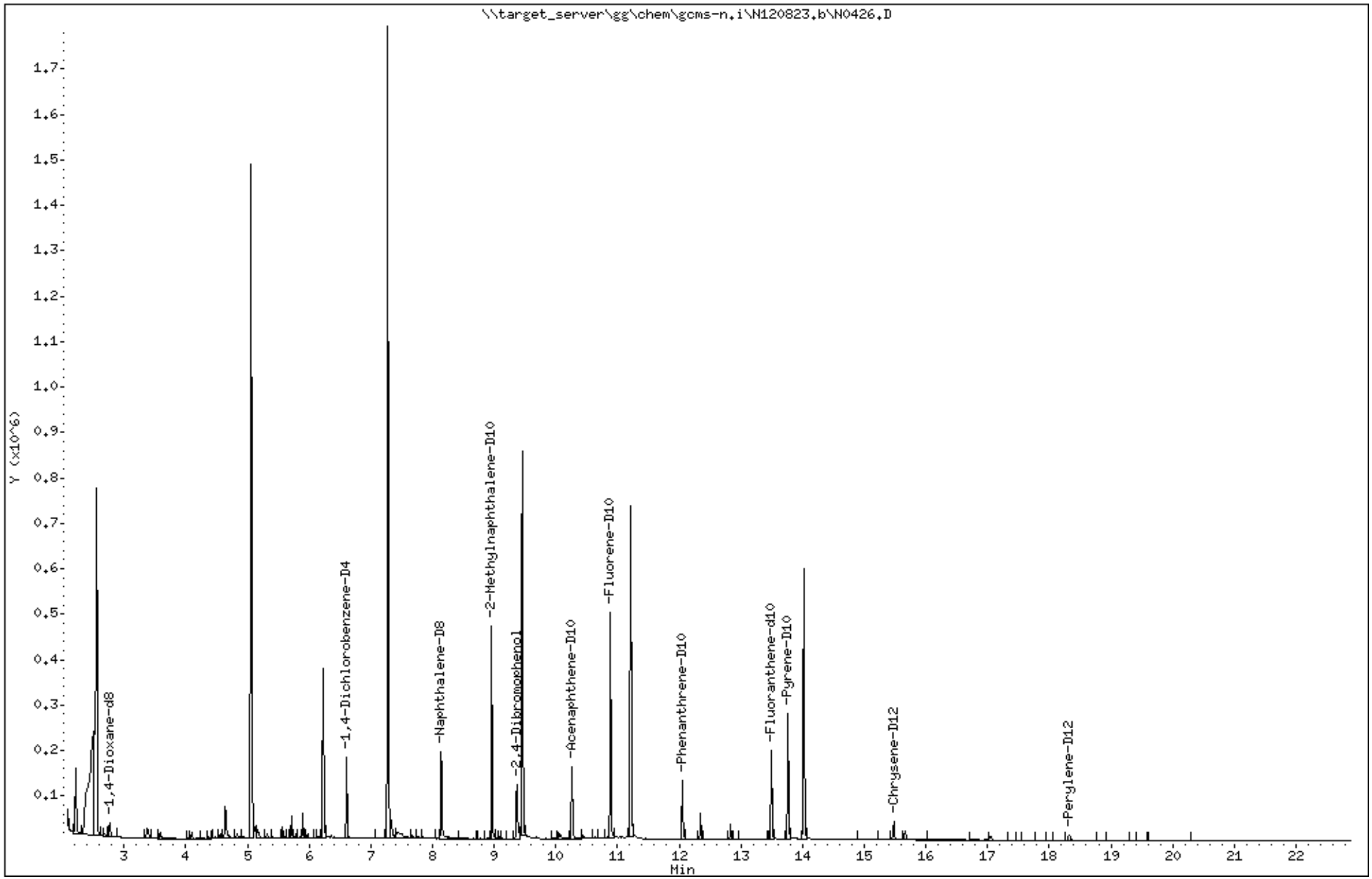
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.060	Sample Volume (L)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/L)	REVIEW CODE
$	1 1,4-Dioxane-d8	96	2.773	2.742	(0.270)	40921	0.91065	0.859(aQ)	
*	10 1,4-Dichlorobenzene-D4	152	6.614	6.604	(1.000)	58803	0.80000	(aQ)	
*	27 Naphthalene-D8	136	8.136	8.125	(1.000)	200843	0.80000	(a)	
$	33 2-Methylnaphthalene-D10	152	8.964	8.954	(1.102)	218530	1.65775	1.56	
$	38 2,4-Dibromophenol	252	9.366	9.346	(0.913)	119734	3.49805	3.30	
*	48 Acenaphthene-D10	164	10.264	10.254	(1.000)	97499	0.80000	(a)	
$	56 Fluorene-D10	174	10.886	10.887	(1.061)	204589	1.60344	1.51	
*	66 Phenanthrene-D10	188	12.051	12.052	(1.000)	133568	0.80000	(a)	
$	71 Fluoranthene-d10	212	13.501	13.502	(1.120)	178160	1.64102	1.55	
$	73 Pyrene-D10	212	13.766	13.777	(0.889)	194007	2.04954	1.93	
*	78 Chrysene-D12	240	15.478	15.478	(1.000)	40456	0.80000	(a)	
*	85 Perylene-D12	264	18.324	18.324	(1.000)	28114	0.80000	(a)	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.

Data File: \\target_server\gg\chem\gcms-n.i\N120823.b\N0426.D
Date : 08-DEC-2023 20:33
Client ID: SY-OBMW13-110723
Instrument: gcms-n.i
Sample Info: SQ6133-7
Volume Injected (uL): 1.0
Operator: EP
Column phase: Rxi-SVOCms
Column diameter: 0.25



Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

SDG: SQ6133
Lab ID: SQ6133-8
Client ID: SY-BRMW2-80.5-95.5-110723
Matrix: AQ
Lab File ID: N0436.D

Sample Date: 07-NOV-23
Extract Date: 13-NOV-23
Extracted By: SH/NG/AC
Extraction Method: SW846 3510C
Lab Prep Batch: WG345301

Report Date: 29-DEC-23
Analysis Date: 11-DEC-23
Analyst: EP
Analysis Method: SW846 8270D SIM
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	0.094	ug/L	1	.2	0.19	0.060	0.094
2-Methylnaphthalene	U	0.094	ug/L	1	.2	0.19	0.073	0.094
Acenaphthylene	U	0.094	ug/L	1	.2	0.19	0.051	0.094
Acenaphthene	U	0.094	ug/L	1	.2	0.19	0.060	0.094
Fluorene	U	0.094	ug/L	1	.2	0.19	0.058	0.094
Phenanthrene	U	0.094	ug/L	1	.2	0.19	0.048	0.094
Anthracene	U	0.094	ug/L	1	.2	0.19	0.042	0.094
Fluoranthene	U	0.094	ug/L	1	.2	0.19	0.069	0.094
Pyrene	U	0.094	ug/L	1	.2	0.19	0.056	0.094
Benzo(a)anthracene	U	0.094	ug/L	1	.2	0.19	0.043	0.094
Chrysene	U	0.094	ug/L	1	.2	0.19	0.034	0.094
Benzo(b)Fluoranthene	U	0.094	ug/L	1	.2	0.19	0.084	0.094
Benzo(k)fluoranthene	UM	0.094	ug/L	1	.2	0.19	0.046	0.094
Benzo(a)pyrene	UM	0.094	ug/L	1	.2	0.19	0.062	0.094
Indeno(1,2,3-cd)pyrene	UM	0.094	ug/L	1	.2	0.19	0.049	0.094
Dibenzo(a,h)anthracene	UM	0.094	ug/L	1	.2	0.19	0.066	0.094
Benzo(g,h,i)perylene	UM	0.094	ug/L	1	.2	0.19	0.061	0.094
2-Methylnaphthalene-D10		58.6	%					
Fluorene-D10		62.8	%					
Pyrene-D10		65.5	%					

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Data File: \\target_server\gg\chem\gcms-n.i\N121123.b\N0436.D
Report Date: 29-Dec-2023 09:55

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-n.i\N121123.b\N0436.D
Lab Smp Id: SQ6133-8 Client Smp ID: Y-BRMW2-80.5-95.5-1
Inj Date : 11-DEC-2023 13:47
Operator : EP Inst ID: gcms-n.i
Smp Info : SQ6133-8
Misc Info : WG346778,WG345301,WG346503-4
Comment :
Method : \\target_server\gg\chem\gcms-n.i\N121123.b\NSPSIM95.m
Meth Date : 12-Dec-2023 08:48 epelletier Quant Type: ISTD
Cal Date : 07-DEC-2023 14:42 Cal File: N0385.D
Als bottle: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pahplus.sub
Target Version: 4.12
Processing Host: INSPIRON1

Concentration Formula: Amt * DF * Uf*(Vt/Vo*Vi)*1000 * CpndVariable

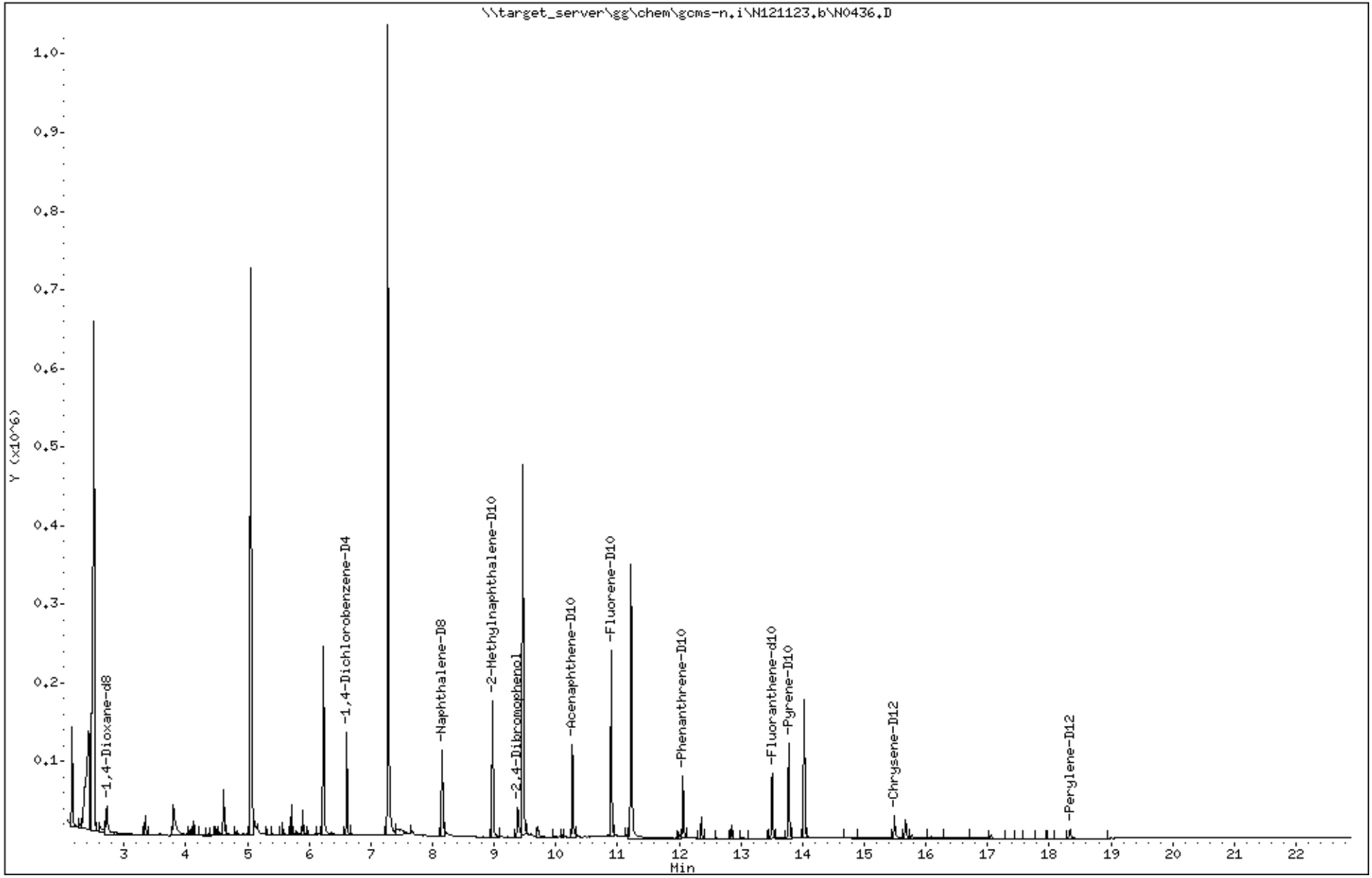
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.060	Sample Volume (L)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/L)	REVIEW CODE
$	1 1,4-Dioxane-d8	96	2.720	2.742	(0.265)	35672	1.18137	1.11(Q)	
*	10 1,4-Dichlorobenzene-D4	152	6.614	6.604	(1.000)	41654	0.80000	(aQ)	
*	27 Naphthalene-D8	136	8.158	8.125	(1.000)	156769	0.80000	(a)	
$	33 2-Methylnaphthalene-D10	152	8.974	8.954	(1.100)	120659	1.17264	1.11	
$	38 2,4-Dibromophenol	252	9.388	9.346	(0.915)	45932	1.99699	1.88	
*	48 Acenaphthene-D10	164	10.264	10.254	(1.000)	65516	0.80000	(a)	
$	56 Fluorene-D10	174	10.897	10.887	(1.062)	107677	1.25588	1.18	
*	66 Phenanthrene-D10	188	12.062	12.052	(1.000)	87349	0.80000	(a)	
$	71 Fluoranthene-d10	212	13.511	13.502	(1.120)	86213	1.21429	1.14	
$	73 Pyrene-D10	212	13.776	13.777	(0.889)	98105	1.30942	1.24	
*	78 Chrysene-D12	240	15.488	15.478	(1.000)	32021	0.80000	(a)	
*	85 Perylene-D12	264	18.334	18.324	(1.000)	24374	0.80000	(a)	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.

Data File: \\target_server\gg\chem\gcms-n.i\N121123.b\N0436.D
Date : 11-DEC-2023 13:47
Client ID: Y-BRMW2-80.5-95.5-1
Instrument: gcms-n.i
Sample Info: SQ6133-8
Volume Injected (uL): 1.0
Operator: EP
Column phase: Rxi-SVOCms
Column diameter: 0.25



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ANALYTICAL SERVICES

Report of Analytical Results

SDG: SQ6133
Lab ID: SQ6133-9
Client ID: SY-OBMW14-110723
Matrix: AQ
Lab File ID: N0427.D

Sample Date: 07-NOV-23
Extract Date: 13-NOV-23
Extracted By: SH/NG/AC
Extraction Method: SW846 3510C
Lab Prep Batch: WG345301

Report Date: 29-DEC-23
Analysis Date: 08-DEC-23
Analyst: EP
Analysis Method: SW846 8270D SIM
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	0.095	ug/L	1	.2	0.19	0.061	0.095
2-Methylnaphthalene	U	0.095	ug/L	1	.2	0.19	0.073	0.095
Acenaphthylene	U	0.095	ug/L	1	.2	0.19	0.051	0.095
Acenaphthene	U	0.095	ug/L	1	.2	0.19	0.061	0.095
Fluorene	U	0.095	ug/L	1	.2	0.19	0.058	0.095
Phenanthrene	U	0.095	ug/L	1	.2	0.19	0.048	0.095
Anthracene	U	0.095	ug/L	1	.2	0.19	0.042	0.095
Fluoranthene	U	0.095	ug/L	1	.2	0.19	0.070	0.095
Pyrene	U	0.095	ug/L	1	.2	0.19	0.056	0.095
Benzo(a)anthracene	U	0.095	ug/L	1	.2	0.19	0.044	0.095
Chrysene	U	0.095	ug/L	1	.2	0.19	0.034	0.095
Benzo(b)Fluoranthene	U	0.095	ug/L	1	.2	0.19	0.085	0.095
Benzo(k)fluoranthene	U	0.095	ug/L	1	.2	0.19	0.047	0.095
Benzo(a)pyrene	U	0.095	ug/L	1	.2	0.19	0.063	0.095
Indeno(1,2,3-cd)pyrene	U	0.095	ug/L	1	.2	0.19	0.050	0.095
Dibenzo(a,h)anthracene	U	0.095	ug/L	1	.2	0.19	0.067	0.095
Benzo(g,h,i)perylene	U	0.095	ug/L	1	.2	0.19	0.062	0.095
2-Methylnaphthalene-D10		58.4	%					
Fluorene-D10		62.6	%					
Pyrene-D10		75.9	%					

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Data File: \\target_server\gg\chem\gcms-n.i\N120823.b\N0427.D
Report Date: 29-Dec-2023 09:54

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Data file : \\target_server\gg\chem\gcms-n.i\N120823.b\N0427.D
Lab Smp Id: SQ6133-9 Client Smp ID: SY-OBMW14-110723
Inj Date : 08-DEC-2023 21:06
Operator : EP Inst ID: gcms-n.i
Smp Info : SQ6133-9
Misc Info : WG346646,WG345301,WG346503-4
Comment :
Method : \\target_server\gg\chem\gcms-n.i\N120823.b\NSPSIM95.m
Meth Date : 11-Dec-2023 07:09 epelletier Quant Type: ISTD
Cal Date : 07-DEC-2023 14:42 Cal File: N0385.D
Als bottle: 19
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pahplus.sub
Target Version: 4.12
Processing Host: INSPIRON1

Concentration Formula: Amt * DF * Uf*(Vt/Vo*Vi)*1000 * CpndVariable

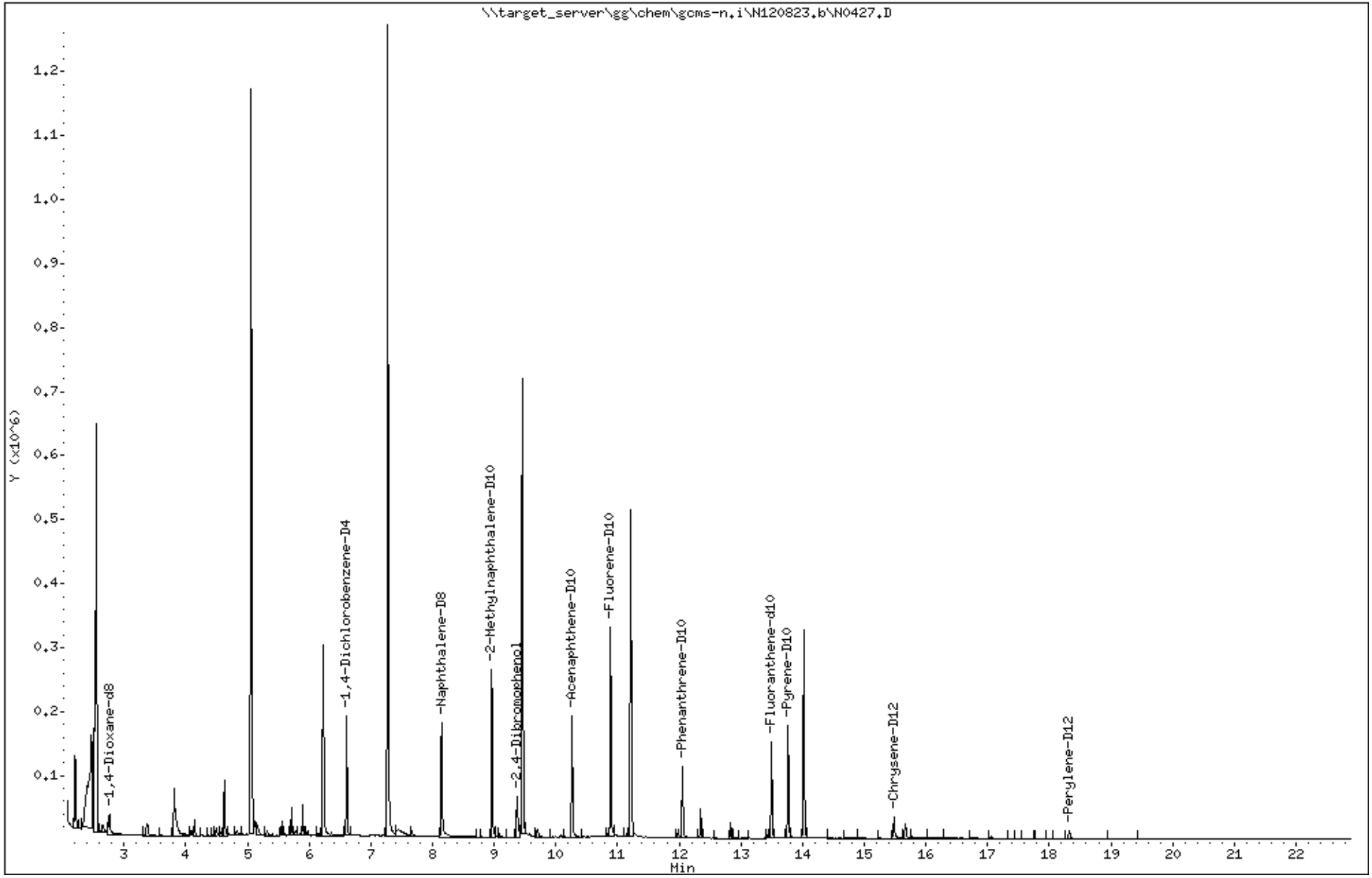
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.050	Sample Volume (L)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/L)	REVIEW CODE
$	1 1,4-Dioxane-d8	96	2.762	2.742	(0.269)	36206	0.83617	0.796(aQ)	
*	10 1,4-Dichlorobenzene-D4	152	6.614	6.604	(1.000)	58808	0.80000	(aQ)	
*	27 Naphthalene-D8	136	8.147	8.125	(1.000)	212496	0.80000	(a)	
$	33 2-Methylnaphthalene-D10	152	8.964	8.954	(1.100)	162983	1.16858	1.11	
$	38 2,4-Dibromophenol	252	9.366	9.346	(0.913)	66273	2.00934	1.91	
*	48 Acenaphthene-D10	164	10.264	10.254	(1.000)	93949	0.80000	(a)	
$	56 Fluorene-D10	174	10.886	10.887	(1.061)	154068	1.25312	1.19	
*	66 Phenanthrene-D10	188	12.051	12.052	(1.000)	131164	0.80000	(a)	
$	71 Fluoranthene-d10	212	13.501	13.502	(1.120)	124350	1.16637	1.11	
$	73 Pyrene-D10	212	13.766	13.777	(0.889)	132140	1.51839	1.45	
*	78 Chrysene-D12	240	15.488	15.478	(1.000)	37194	0.80000	(a)	
*	85 Perylene-D12	264	18.324	18.324	(1.000)	24784	0.80000	(a)	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.

Data File: \\target_server\gg\chem\gcms-n.i\N120823.b\N0427.D
Date : 08-DEC-2023 21:06
Client ID: SY-OBMW14-110723
Instrument: gcms-n.i
Sample Info: SQ6133-9
Volume Injected (uL): 1.0
Operator: EP
Column phase: Rxi-SVOCms
Column diameter: 0.25



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ANALYTICAL SERVICES

Report of Analytical Results

SDG: SQ6133
Lab ID: SQ6133-10
Client ID: SY-BRMW2-252.5-262.5-110723
Matrix: AQ
Lab File ID: N0428.D

Sample Date: 07-NOV-23
Extract Date: 13-NOV-23
Extracted By: SH/NG/AC
Extraction Method: SW846 3510C
Lab Prep Batch: WG345301

Report Date: 29-DEC-23
Analysis Date: 08-DEC-23
Analyst: EP
Analysis Method: SW846 8270D SIM
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	0.093	ug/L	1	.2	0.19	0.060	0.093
2-Methylnaphthalene	U	0.093	ug/L	1	.2	0.19	0.072	0.093
Acenaphthylene	U	0.093	ug/L	1	.2	0.19	0.050	0.093
Acenaphthene	U	0.093	ug/L	1	.2	0.19	0.060	0.093
Fluorene	U	0.093	ug/L	1	.2	0.19	0.057	0.093
Phenanthrene	U	0.093	ug/L	1	.2	0.19	0.048	0.093
Anthracene	U	0.093	ug/L	1	.2	0.19	0.041	0.093
Fluoranthene	U	0.093	ug/L	1	.2	0.19	0.068	0.093
Pyrene	U	0.093	ug/L	1	.2	0.19	0.055	0.093
Benzo(a)anthracene	U	0.093	ug/L	1	.2	0.19	0.043	0.093
Chrysene	U	0.093	ug/L	1	.2	0.19	0.034	0.093
Benzo(b)Fluoranthene	U	0.093	ug/L	1	.2	0.19	0.083	0.093
Benzo(k)fluoranthene	U	0.093	ug/L	1	.2	0.19	0.046	0.093
Benzo(a)pyrene	U	0.093	ug/L	1	.2	0.19	0.062	0.093
Indeno(1,2,3-cd)pyrene	U	0.093	ug/L	1	.2	0.19	0.048	0.093
Dibenzo(a,h)anthracene	U	0.093	ug/L	1	.2	0.19	0.065	0.093
Benzo(g,h,i)perylene	U	0.093	ug/L	1	.2	0.19	0.061	0.093
2-Methylnaphthalene-D10		66.3	%					
Fluorene-D10		66.0	%					
Pyrene-D10		75.9	%					

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Data File: \\target_server\gg\chem\gcms-n.i\N120823.b\N0428.D
Report Date: 29-Dec-2023 09:54

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-n.i\N120823.b\N0428.D
Lab Smp Id: SQ6133-10 Client Smp ID: Y-BRMW2-252.5-262.5
Inj Date : 08-DEC-2023 21:38
Operator : EP Inst ID: gcms-n.i
Smp Info : SQ6133-10
Misc Info : WG346646,WG345301,WG346503-4
Comment :
Method : \\target_server\gg\chem\gcms-n.i\N120823.b\NSPSIM95.m
Meth Date : 11-Dec-2023 07:09 epelletier Quant Type: ISTD
Cal Date : 07-DEC-2023 14:42 Cal File: N0385.D
Als bottle: 20
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pahplus.sub
Target Version: 4.12
Processing Host: INSPIRON1

Concentration Formula: Amt * DF * Uf*(Vt/Vo*Vi)*1000 * CpndVariable

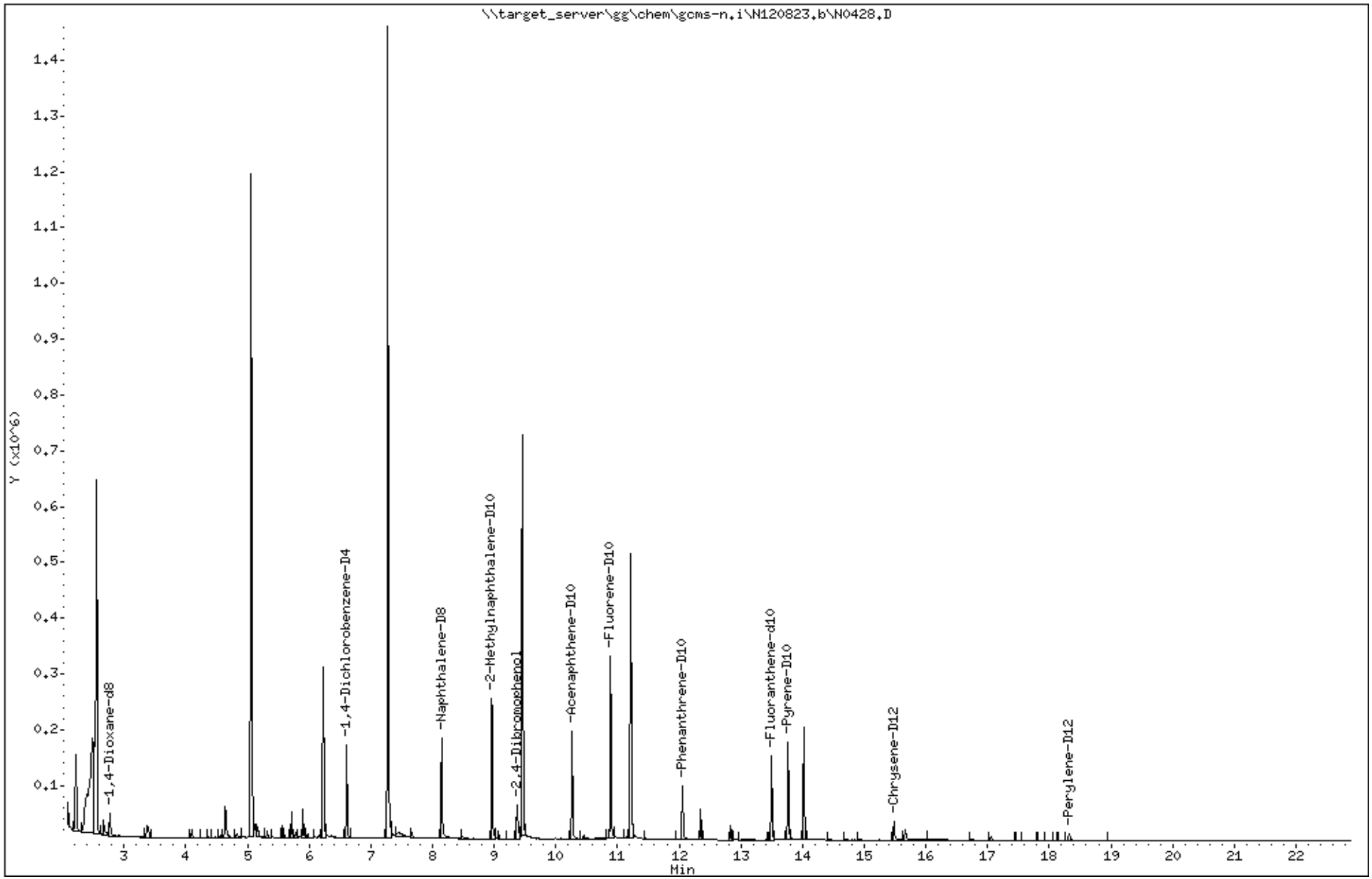
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.070	Sample Volume (L)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/L)	REVIEW CODE
$	1 1,4-Dioxane-d8	96	2.773	2.742	(0.270)	48180	1.14276	1.07(Q)	
*	10 1,4-Dichlorobenzene-D4	152	6.614	6.604	(1.000)	51740	0.80000	(aQ)	
*	27 Naphthalene-D8	136	8.147	8.125	(1.000)	191776	0.80000	(a)	
$	33 2-Methylnaphthalene-D10	152	8.964	8.954	(1.100)	166874	1.32575	1.24	
$	38 2,4-Dibromophenol	252	9.377	9.346	(0.914)	66011	2.05546	1.92	
*	48 Acenaphthene-D10	164	10.264	10.254	(1.000)	91478	0.80000	(a)	
$	56 Fluorene-D10	174	10.886	10.887	(1.061)	157972	1.31958	1.23	
*	66 Phenanthrene-D10	188	12.051	12.052	(1.000)	123148	0.80000	(a)	
$	71 Fluoranthene-d10	212	13.501	13.502	(1.120)	122092	1.21974	1.14	
$	73 Pyrene-D10	212	13.766	13.777	(0.889)	128646	1.51841	1.42	
*	78 Chrysene-D12	240	15.477	15.478	(1.000)	36210	0.80000	(a)	
*	85 Perylene-D12	264	18.324	18.324	(1.000)	24987	0.80000	(a)	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.

Data File: \\target_server\gg\chem\gcms-n.i\N120823.b\N0428.D
Date : 08-DEC-2023 21:38
Client ID: Y-BRMW2-252.5-262.5
Instrument: gcms-n.i
Sample Info: SQ6133-10
Volume Injected (uL): 1.0
Operator: EP
Column phase: Rxi-SVOCms
Column diameter: 0.25



Standards Data Section

Form 6
Initial Calibration Summary

Lab Name : Katahdin Analytical Services **SDG:** SQ6133

Instrument ID: GCMS-N **Column ID:**

Lab File IDs : N0382.D N0381.D N0380.D **Calibration Date(s):** 07-DEC-23 12:11
N0383.D N0384.D N0385.D 07-DEC-23 14:42

	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Curve				%RSD or R^2		
	0.200000(	0.500000(	2.0000	7.0000	10.0000	15.0000	Type	b	m1	m2	Result	Limit	
Naphthalene	1.05063	1.07884	1.22387	1.05107	1.10624	1.05411	AVG		1.09413		6.13937	20	O
2-Methylnaphthalene	0.82651	0.71862	0.75497	0.66058	0.70938	0.66901	AVG		0.72318		8.46834	20	O
Acenaphthylene	2.21627	2.16727	2.41218	2.13226	2.29341	2.14127	AVG		2.22711		4.86552	20	O
Acenaphthene	1.41236	1.26165	1.39111	1.24625	1.33203	1.29225	AVG		1.32261		5.16190	20	O
Fluorene	1.30160	1.22909	1.45593	1.30288	1.35643	1.28380	AVG		1.32162		5.86044	20	O
Phenanthrene	1.18338	1.08322	1.33965	1.18197	1.24158	1.22822	AVG		1.20967		6.98569	20	O
Anthracene	1.20771	1.14818	1.30739	1.18305	1.22382	1.21976	AVG		1.21499		4.38242	20	O
Fluoranthene	0.84554	0.82244	1.07243	0.95178	0.96181	0.97974	AVG		0.93896		9.81551	20	O
Pyrene	2.88179	2.51272	2.74421	2.28233	2.27577	2.14147	AVG		2.47305		11.8222	20	O
Benzo(a)anthracene	1.24217	1.23448	1.51637	1.42425	1.42767	1.46429	AVG		1.38487		8.54168	20	O
Chrysene	1.93770	1.62496	1.73929	1.55761	1.54502	1.55382	AVG		1.65973		9.31875	20	O
Benzo(b)fluoranthene	1.28612	1.24062	1.57248	1.50583	1.59031	1.55970	AVG		1.45918		10.6184	20	O
Benzo(k)fluoranthene	1.84414	1.83211	1.98355	1.84142	1.91469	1.90583	AVG		1.88696		3.12366	20	O
Benzo(a)pyrene	1.30903	1.28129	1.47097	1.44259	1.52961	1.53150	AVG		1.42750		7.59499	20	O
Indeno(1,2,3-cd)pyrene	0.85477	0.85717	1.07209	1.13004	1.19777	1.09455	AVG		1.03440		13.9797	20	O
Dibenzo(a,h)anthracene	0.87746	0.93361	1.10760	1.14548	1.20771	1.12644	AVG		1.06638		12.2163	20	O
Benzo(g,h,i)perylene	1.13609	1.04648	1.19148	1.23585	1.28221	1.10453	AVG		1.16611		7.47533	20	O
2-Methylnaphthalene-D10	0.51866	0.50023	0.57974	0.50149	0.54254	0.50780	AVG		0.52508		5.90412	20	
Fluorene-D10	1.06416	0.98001	1.12411	1.02369	1.06321	1.02641	AVG		1.04693		4.67136	20	
Pyrene-D10	2.09645	1.90385	2.06850	1.77300	1.75535	1.63390	AVG		1.87184		9.85375	20	

Legend: O = Acceptable; W = Failed %RSD Value; X = Failed R^2 Value; Y = Failed Minimum RF

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sales@katahdinlab.com

Data File: \\target_server\gg\chem\gcms-n.i\N120723.b\N0386.D
Report Date: 08-Dec-2023 07:19

Katahdin Analytical Services

RECOVERY REPORT

Client Name: Client SDG: 021497
Sample Matrix: LIQUID Fraction: SV
Lab Smp Id: WG346503-8
Level: LOW Operator: EP
Data Type: MS DATA SampleType: INDSOURCE
SpikeList File: SIM_IND_CHK5.spk Quant Type: ISTD
Sublist File: all.sub
Method File: \\target_server\gg\chem\gcms-n.i\N120723.b\NSPSIM95.m
Misc Info: WG346503,WG346503,WG346503-4

SPIKE	COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
2	1,4-Dioxane	5.00	4.96	99.27	80-120
3	N-Nitrosodimethyla	5.00	5.76	115.32	80-120
4	Pyridine	5.00	4.45	89.08	80-120
5	Benzaldehyde	5.00	0.430	8.61*	80-120
6	Phenol	5.00	5.48	109.67	80-120
7	Bis(2-Chloroethyl)	5.00	4.73	94.64	80-120
8	2-Chlorophenol	5.00	5.13	102.55	80-120
9	1,3-Dichlorobenzen	5.00	4.92	98.43	80-120
11	1,4-Dichlorobenzen	5.00	5.05	100.98	80-120
12	1,2-Dichlorobenzen	5.00	4.90	98.02	80-120
13	2,2'-Oxybis(1-chlo	5.00	3.73	74.60*	80-120
14	2-Methylphenol	5.00	4.80	96.09	80-120
15	Acetophenone	5.00	5.03	100.69	80-120
16	N-Nitroso-di-n-pro	5.00	4.72	94.45	80-120
17	3&4-Methylphenol	5.00	4.87	97.50	80-120
18	Hexachloroethane	5.00	4.96	99.23	80-120
19	Nitrobenzene	5.00	5.08	101.68	80-120
20	Isophorone	5.00	4.24	84.74	80-120
21	2-Nitrophenol	5.00	5.44	108.83	80-120
22	2,4-Dimethylphenol	5.00	5.54	110.86	80-120
23	bis(2-Chloroethoxy	5.00	4.70	94.06	80-120
25	2,4-Dichlorophenol	5.00	4.54	90.92	80-120
26	1,2,4-Trichloroben	5.00	4.76	95.20	80-120
28	Naphthalene	5.00	4.90	97.92	80-120
29	4-Chloroaniline	5.00	8.30	166.06*	80-120
30	Hexachlorobutadien	5.00	4.77	95.39	80-120
31	Caprolactam	5.00	5.51	110.22	80-120
32	4-Chloro-3-Methylp	5.00	4.89	97.87	80-120
34	2-Methylnaphthalen	5.00	4.98	99.58	80-120
35	1-Methylnaphthalen	5.00	5.00	100.07	80-120
36	1,2,4,5-Tetrachlor	5.00	4.67	93.36	80-120
37	Hexachlorocyclopen	5.00	5.67	113.44	80-120
39	2,4,6-Trichlorophe	5.00	4.92	98.30	80-120
40	2,4,5-Trichlorophe	5.00	4.98	99.55	80-120
41	1,1'-Biphenyl	5.00	4.91	98.25	80-120
42	2-Chloronaphthalen	5.00	4.85	97.10	80-120
43	2-Nitroaniline	5.00	4.86	97.11	80-120
44	Dimethyl Phthalate	5.00	5.05	100.95	80-120
45	2,6-Dinitrotoluene	5.00	4.30	86.06	80-120
46	Acenaphthylene	5.00	4.42	88.39	80-120

Data File: \\target_server\gg\chem\gcms-n.i\N120723.b\N0386.D
Report Date: 08-Dec-2023 07:19

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
47 3-Nitroaniline	5.00	5.98	119.62	80-120
49 Acenaphthene	5.00	4.73	94.65	80-120
50 2,4-Dinitrophenol	5.00	4.12	82.40	80-120
51 Dibenzofuran	5.00	5.02	100.36	80-120
53 2,4-Dinitrotoluene	5.00	4.29	85.77	80-120
52 4-Nitrophenol	5.00	4.60	92.03	80-120
54 2,3,4,6-Tetrachlor	5.00	4.14	82.90	80-120
55 Diethylphthalate	5.00	5.07	101.50	80-120
57 Fluorene	5.00	4.80	96.05	80-120
58 4-Chlorophenyl-phe	5.00	4.82	96.30	80-120
59 4-Nitroaniline	5.00	4.34	86.72	80-120
60 4,6-Dinitro-2-Meth	5.00	4.58	91.52	80-120
61 N-Nitrosodiphenyla	5.00	3.72	74.35*	80-120
62 4-Bromophenyl-phen	5.00	4.87	97.47	80-120
63 Hexachlorobenzene	5.00	4.56	91.31	80-120
64 Atrazine	5.00	4.82	96.30	80-120
65 Pentachlorophenol	5.00	5.47	109.38	80-120
67 Phenanthrene	5.00	4.84	96.88	80-120
68 Anthracene	5.00	4.69	93.83	80-120
69 Carbazole	5.00	6.02	120.40*	80-120
70 Di-n-butylphthalat	5.00	4.82	96.46	80-120
72 Fluoranthene	5.00	4.56	91.31	80-120
74 Pyrene	5.00	4.87	97.35	80-120
75 Butylbenzylphthala	5.00	4.63	92.54	80-120
76 Benzo(a)anthracene	5.00	4.66	93.31	80-120
77 3,3'-Dichlorobenzi	5.00	3.02	60.45*	80-120
79 Chrysene	5.00	4.54	90.91	80-120
80 bis(2-Ethylhexyl)p	5.00	4.33	86.62	80-120
81 Di-n-octylphthalat	5.00	4.42	88.31	80-120
82 Benzo(b)fluoranthe	5.00	5.01	100.14	80-120
83 Benzo(k)fluoranthe	5.00	4.67	93.37	80-120
84 Benzo(a)pyrene	5.00	4.58	91.64	80-120
86 Indeno(1,2,3-cd)py	5.00	4.62	92.35	80-120
87 Dibenzo(a,h)anthra	5.00	4.84	96.90	80-120
88 Benzo(g,h,i)peryle	5.00	4.83	96.69	80-120

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 1 1,4-Dioxane-d8	2.00	0.000	*	26-115
$ 33 2-Methylnaphthale	2.00	0.000	*	43-92
$ 38 2,4-Dibromophenol	4.00	0.000	*	10-130
$ 56 Fluorene-D10	2.00	0.000	*	29-101
$ 71 Fluoranthene-d10	2.00	0.000	*	50-150
$ 73 Pyrene-D10	2.00	0.000	*	53-166

Data File: \\target_server\gg\chem\gcms-n.i\N120723.b\N0380.D
Report Date: 08-Dec-2023 07:21

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-n.i\N120723.b\N0380.D
Lab Smp Id: WG346503-4
Inj Date : 07-DEC-2023 12:11
Operator : EP   Inst ID: gcms-n.i
Smp Info : WG346503-4
Misc Info :
Comment   :
Method   : \\target_server\gg\chem\gcms-n.i\N120723.b\NSPSIM95.m
Meth Date : 08-Dec-2023 07:21 gcms-n.i   Quant Type: ISTD
Cal Date : 07-DEC-2023 12:11   Cal File: N0380.D
Als bottle: 2   Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: all.sub
Target Version: 4.12

Concentration Formula: Amt * DF * Uf*(Vt/Vo*Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.000	Sample Volume (L)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
$	1 1,4-Dioxane-d8	96	2.741	2.741	(0.267)	78150	2.00000	2.12	
	2 1,4-Dioxane	88	2.773	2.783	(0.419)	90932	2.00000	2.36	
	3 N-Nitrosodimethylamine	74	3.216	3.216	(0.486)	113792	2.00000	2.40	
	4 Pyridine	79	3.280	3.237	(0.496)	164613	2.00000	1.81	
	5 Benzaldehyde	77	6.084	6.084	(0.920)	73658	2.00000	3.01	
	6 Phenol	94	6.240	6.240	(0.943)	449642	4.50000	4.40	
	7 Bis(2-Chloroethyl)ether	93	6.323	6.323	(0.956)	187038	2.00000	2.09	
	8 2-Chlorophenol	128	6.364	6.365	(0.962)	403294	4.50000	4.67	
	9 1,3-Dichlorobenzene	146	6.541	6.531	(0.989)	214991	2.00000	2.06	
*	10 1,4-Dichlorobenzene-D4	152	6.614	6.604	(1.000)	52277	0.80000	(aQ)	
	11 1,4-Dichlorobenzene	146	6.635	6.625	(1.003)	214380	2.00000	2.03	
	12 1,2-Dichlorobenzene	146	6.812	6.802	(1.030)	205663	2.00000	2.01	
	13 2,2'-Oxybis(1-chloropropane)	45	6.968	6.958	(1.053)	124184	2.00000	2.22(Q)	
	14 2-Methylphenol	108	6.958	6.958	(1.052)	385078	4.50000	4.80	
	15 Acetophenone	105	7.103	7.103	(0.873)	240486	2.00000	2.16	
	16 N-Nitroso-di-n-propylamine	70	7.124	7.124	(1.077)	117037	2.00000	2.14	
	17 3&4-Methylphenol	108	7.155	7.145	(1.082)	376767	4.50000	4.54	
	18 Hexachloroethane	117	7.207	7.197	(1.090)	85121	2.00000	2.06	
	19 Nitrobenzene	77	7.301	7.291	(0.897)	162090	2.00000	2.22	
	20 Isophorone	82	7.607	7.596	(0.935)	321019	2.00000	2.18	
	21 2-Nitrophenol	139	7.686	7.675	(0.945)	140337	4.50000	4.74	

Data File: \\target_server\gg\chem\gcms-n.i\N120723.b\N0380.D
Report Date: 08-Dec-2023 07:21

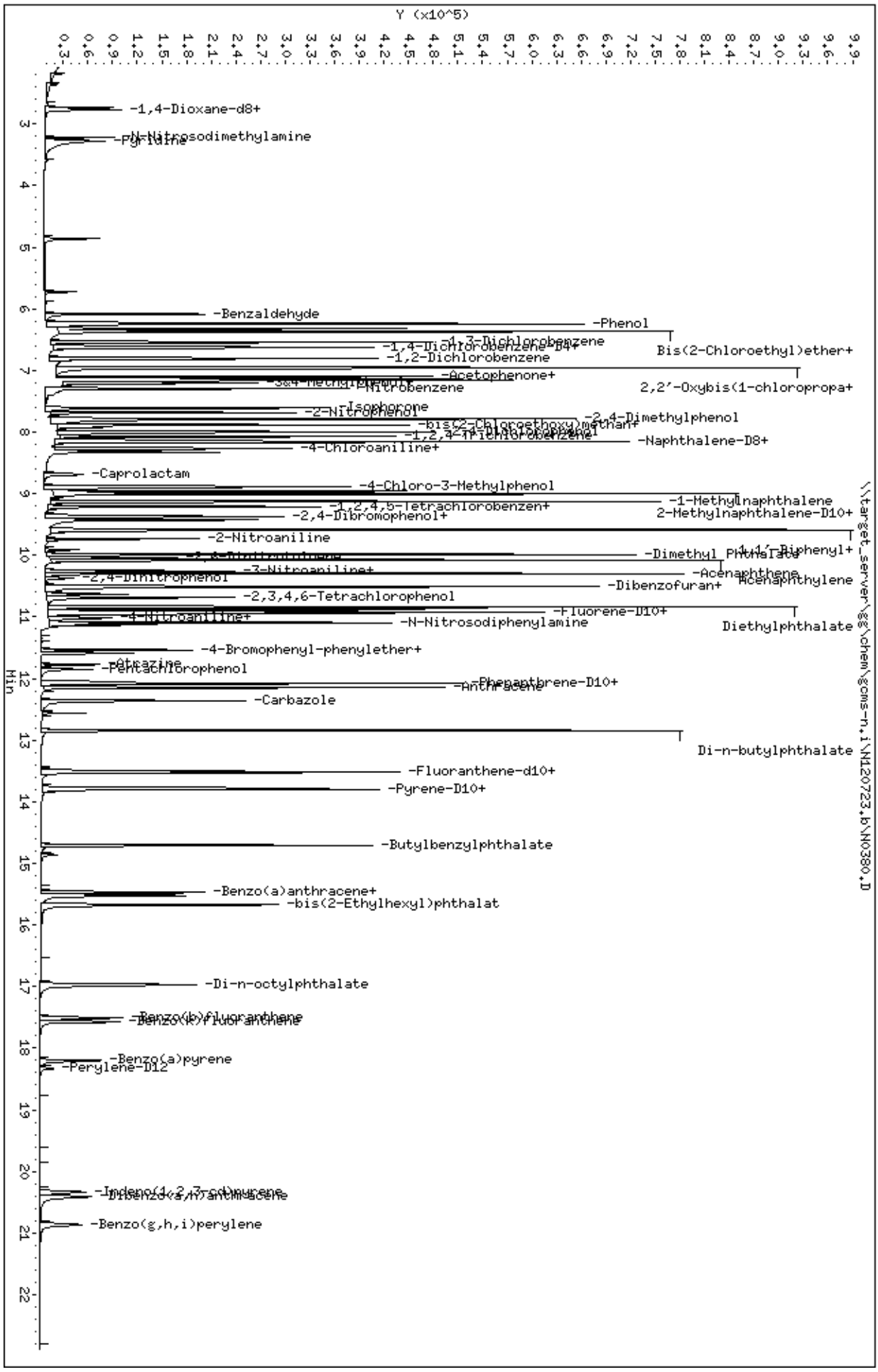
							AMOUNTS		
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
	22 2,4-Dimethylphenol	107	7.787	7.776	(0.957)	322104	4.50000	5.21	
	23 bis(2-Chloroethoxy)methane	93	7.889	7.877	(0.970)	203214	2.00000	2.22	
	24 Benzoic Acid	105	7.934	7.956	(0.975)	40700	2.00000	2.58(Q)	
	25 2,4-Dichlorophenol	162	7.990	7.979	(0.982)	306499	4.50000	4.43	
	26 1,2,4-Trichlorobenzene	180	8.069	8.069	(0.992)	157225	2.00000	2.13	
*	27 Naphthalene-D8	136	8.136	8.125	(1.000)	180916	0.80000	(a)	
	28 Naphthalene	128	8.159	8.147	(1.003)	553545	2.00000	2.24	
	29 4-Chloroaniline	127	8.271	8.282	(1.017)	124138	2.00000	2.71	
	30 Hexachlorobutadiene	225	8.327	8.316	(1.024)	70721	2.00000	2.22	
	31 Caprolactam	113	8.687	8.699	(1.068)	39697	2.00000	2.24	
	32 4-Chloro-3-Methylphenol	107	8.879	8.869	(1.091)	288900	4.50000	5.16	
$	33 2-Methylnaphthalene-D10	152	8.964	8.953	(1.102)	262209	2.00000	2.21	
	34 2-Methylnaphthalene	142	9.006	8.996	(1.107)	341464	2.00000	2.09	
	35 1-Methylnaphthalene	142	9.123	9.112	(1.121)	316841	2.00000	2.12	
	36 1,2,4,5-Tetrachlorobenzene	216	9.218	9.208	(0.899)	132768	2.00000	2.08	
	37 Hexachlorocyclopentadiene	237	9.208	9.186	(0.898)	56804	2.00000	2.12	
$	38 2,4-Dibromophenol	252	9.356	9.345	(0.912)	55751	2.00000	1.98	
	39 2,4,6-Trichlorophenol	196	9.366	9.356	(0.913)	137422	4.50000	4.45	
	40 2,4,5-Trichlorophenol	196	9.419	9.419	(0.919)	172270	4.50000	5.07	
	41 1,1'-Biphenyl	154	9.578	9.578	(0.934)	377526	2.00000	2.11	
	42 2-Chloronaphthalene	164	9.589	9.578	(0.935)	100253	2.00000	2.13	
	43 2-Nitroaniline	65	9.739	9.728	(0.950)	53050	2.00000	1.85	
	44 Dimethyl Phthalate	163	9.985	9.975	(0.974)	602863	4.50000	4.96	
	45 2,6-Dinitrotoluene	165	10.039	10.039	(0.979)	61268	2.00000	1.96	
	46 Acenaphthylene	152	10.082	10.082	(0.983)	482719	2.00000	2.17	
	47 3-Nitroaniline	138	10.243	10.243	(0.999)	34493	2.00000	2.46	
*	48 Acenaphthene-D10	164	10.253	10.253	(1.000)	80047	0.80000	(a)	
	49 Acenaphthene	153	10.296	10.286	(1.004)	278386	2.00000	2.10	
	50 2,4-Dinitrophenol	184	10.371	10.371	(1.012)	15353	4.50000	4.00	
	51 Dibenzofuran	168	10.511	10.500	(1.025)	387282	2.00000	2.18	
	52 4-Nitrophenol	109	10.500	10.489	(1.024)	33470	4.50000	4.35(Q)	
	53 2,4-Dinitrotoluene	165	10.522	10.522	(1.026)	65739	2.00000	1.85	
	54 2,3,4,6-Tetrachlorophenol	232	10.682	10.672	(1.042)	85431	4.50000	4.18	
	55 Diethylphthalate	149	10.843	10.833	(1.058)	582306	4.50000	5.09	
$	56 Fluorene-D10	174	10.886	10.886	(1.062)	224955	2.00000	2.15	
	57 Fluorene	166	10.929	10.918	(1.066)	291357	2.00000	2.20	
	58 4-Chlorophenyl-phenylether	204	10.950	10.940	(1.068)	129019	2.00000	2.20	
	59 4-Nitroaniline	138	10.993	10.983	(1.072)	31780	2.00000	2.33	
	60 4,6-Dinitro-2-Methylphenol	198	11.026	11.015	(0.915)	27073	4.50000	3.79	
	61 N-Nitrosodiphenylamine	169	11.101	11.090	(0.921)	227518	2.00000	2.21	
	62 4-Bromophenyl-phenylether	248	11.539	11.528	(0.957)	67657	2.00000	2.18	
	63 Hexachlorobenzene	284	11.592	11.582	(0.962)	71068	2.00000	2.09	
	64 Atrazine	200	11.784	11.774	(0.978)	47299	2.00000	2.08	
	65 Pentachlorophenol	266	11.848	11.848	(0.983)	34313	4.50000	4.68	
*	66 Phenanthrene-D10	188	12.051	12.051	(1.000)	104080	0.80000	(a)	
	67 Phenanthrene	178	12.083	12.073	(1.003)	348576	2.00000	2.21	
	68 Anthracene	178	12.147	12.137	(1.008)	340184	2.00000	2.15	
	69 Carbazole	167	12.361	12.361	(1.026)	264220	2.00000	2.38	
	70 Di-n-butylphthalate	149	12.841	12.831	(1.066)	810361	4.50000	4.46	
$	71 Fluoranthene-d10	212	13.501	13.501	(1.120)	190959	2.00000	2.26	
	72 Fluoranthene	202	13.522	13.522	(1.122)	279047	2.00000	2.28	
$	73 Pyrene-D10	212	13.776	13.776	(0.890)	225037	2.00000	2.21	
	74 Pyrene	202	13.797	13.797	(0.891)	298549	2.00000	2.22	
	75 Butylbenzylphthalate	149	14.703	14.703	(0.950)	244351	4.50000	4.36	

Data File: \\target_server\gg\chem\gcms-n.i\N120723.b\N0380.D
Report Date: 08-Dec-2023 07:21

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)	REVIEW CODE
	76 Benzo(a)anthracene	228	15.467	15.467	(0.999)	164970	2.00000	2.19	
	77 3,3'-Dichlorobenzidine	252	15.488	15.488	(1.001)	42189	2.00000	2.17	
*	78 Chrysene-D12	240	15.477	15.478	(1.000)	43517	0.80000	(a)	
	79 Chrysene	228	15.528	15.528	(1.003)	189222	2.00000	2.10	
	80 bis(2-Ethylhexyl)phthalate	149	15.671	15.671	(1.013)	305579	4.50000	4.23	
	81 Di-n-octylphthalate	149	16.965	16.965	(1.096)	387911	4.50000	4.47	
	82 Benzo(b)fluoranthene	252	17.510	17.521	(0.955)	122567	2.00000	2.16	
	83 Benzo(k)fluoranthene	252	17.572	17.572	(0.958)	154608	2.00000	2.10(H)	
	84 Benzo(a)pyrene	252	18.211	18.211	(0.993)	114655	2.00000	2.06	
*	85 Perylene-D12	264	18.334	18.324	(1.000)	31178	0.80000	(a)	
	86 Indeno(1,2,3-cd)pyrene	276	20.332	20.342	(1.109)	83564	2.00000	2.07	
	87 Dibenzo(a,h)anthracene	278	20.414	20.414	(1.113)	86332	2.00000	2.08	
	88 Benzo(g,h,i)perylene	276	20.868	20.878	(1.138)	92870	2.00000	2.04	
M	89 Total PAHs	100				4539456	36.0000	(a)	

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
H - Operator selected an alternate compound hit.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Date : 07-DEC-2023 12:11
Client ID:
Sample Info: WG346503-4
Volume Injected (uL): 1.0
Column phase: Rxi-5MSCms
Instrument: gcms-n,i
Operator: EP
Column diameter: 0.25
\\target_server\gg\chem\gcms-n,i\N120723,b\N0380.D
Y (x10^5)
Min
-1,4-Dioxane-d8+
-N-Nitrosodimethylamine
-Pyridine
-Benzaldehyde
-Phenol
-1,3-Dichlorobenzene
-1,4-Dichlorobenzene-D4+
-1,2-Dichlorobenzene
Bis(2-Chloroethyl)ether+
-Acetophenone+
-3&4-Methylphenol+
-Nitrobenzene
2,2'-Oxybis(1-chloropropa+
-Isophorone
-2-Nitrophenol
-2,4-Dimethylphenol
-bis(2-Chloroethoxy)methan+
-2,4-Dichlorophenol
-1,2,4-Trichlorobenzene
-Naphthalene-D8+
-4-Chloroaniline+
-Caprolactam
-4-Chloro-3-Methylphenol
-1-Methylnaphthalene
-1,2,4,5-Tetrachlorobenzen+
2-Methylnaphthalene-D10+
-2,4-Dibromophenol+
-2-Nitroaniline
-Dimethyl Phthalate
-1,1'-Biphenyl+
-2,6-Dinitrotoluene
-3-Nitroaniline+
-Acenaphthene
-2,4-Dinitrophenol
Acenaphthylene
-Dibenzofuran+
-2,3,4,6-Tetrachlorophenol
-Fluorene-D10+
-4-Nitroaniline+
-N-Nitrosodiphenylamine
Diethylphthalate
-4-Bromophenyl-phenylether+
-Atrazine
-Pentachlorophenol
-Phenanthrene-D10+
-Anthracene
-Carbazole
Di-n-butylphthalate
-Fluoranthene-d10+
-Pyrene-D10+
-Butylbenzylphthalate
-Benzo(a)anthracene+
-bis(2-Ethylhexyl)phthalat
-Di-n-octylphthalate
-Benzo(b)fluoranthene
-Benzo(k)fluoranthene
-Benzo(a)pyrene
-Perylene-D12
-Indeno(1,2,3-cd)pyrene
-Dibenz(a,h)anthracene
-Benzo(g,h,i)perylene

Data File: \\target_server\gg\chem\gcms-n.i\N120723.b\N0381.D
Report Date: 08-Dec-2023 07:21

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-n.i\N120723.b\N0381.D
Lab Smp Id: WG346503-3
Inj Date : 07-DEC-2023 12:41
Operator : EP   Inst ID: gcms-n.i
Smp Info : WG346503-3
Misc Info :
Comment   :
Method   : \\target_server\gg\chem\gcms-n.i\N120723.b\NSPSIM95.m
Meth Date : 08-Dec-2023 07:21 gcms-n.i   Quant Type: ISTD
Cal Date : 07-DEC-2023 12:41   Cal File: N0381.D
Als bottle: 3   Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: all.sub
Target Version: 4.12

Concentration Formula: Amt * DF * Uf*(Vt/Vo*Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.000	Sample Volume (L)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

EP
10:20 am, Dec 29, 2023

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
$	1 1,4-Dioxane-d8	96	2.709	2.741	(0.264)	13507	0.50000	0.450(a)	
	2 1,4-Dioxane	88	2.752	2.783	(0.416)	16668	0.50000	0.584(a)	
	3 N-Nitrosodimethylamine	74	3.237	3.216	(0.490)	13062	0.50000	0.371(M)	M6
	4 Pyridine	79	3.417	3.237	(0.517)	20271	0.50000	0.300(M)	M6
	5 Benzaldehyde	77	6.094	6.084	(0.921)	15500	0.50000	0.855	
	6 Phenol	94	6.260	6.240	(0.947)	137714	2.00000	1.82	
	7 Bis(2-Chloroethyl)ether	93	6.333	6.323	(0.958)	30336	0.50000	0.458	
	8 2-Chlorophenol	128	6.375	6.365	(0.964)	114402	2.00000	1.79	
	9 1,3-Dichlorobenzene	146	6.541	6.531	(0.989)	36459	0.50000	0.472	
*	10 1,4-Dichlorobenzene-D4	152	6.614	6.604	(1.000)	38753	0.80000	(a)	
	11 1,4-Dichlorobenzene	146	6.635	6.625	(1.003)	36449	0.50000	0.465	
	12 1,2-Dichlorobenzene	146	6.812	6.802	(1.030)	35834	0.50000	0.472	
	13 2,2'-Oxybis(1-chloropropane)	45	6.978	6.958	(1.055)	23390	0.50000	0.563(Q)	
	14 2-Methylphenol	108	6.978	6.958	(1.055)	118928	2.00000	2.00	
	15 Acetophenone	105	7.124	7.103	(0.874)	45397	0.50000	0.490	
	16 N-Nitroso-di-n-propylamine	70	7.155	7.124	(1.082)	17630	0.50000	0.434	
	17 3&4-Methylphenol	108	7.176	7.145	(1.085)	115999	2.00000	1.89	
	18 Hexachloroethane	117	7.207	7.197	(1.090)	14891	0.50000	0.487	
	19 Nitrobenzene	77	7.311	7.291	(0.897)	27650	0.50000	0.454	
	20 Isophorone	82	7.652	7.596	(0.939)	60272	0.50000	0.490	
	21 2-Nitrophenol	139	7.697	7.675	(0.945)	34686	2.00000	1.48	

Data File: \\target_server\gg\chem\gcms-n.i\N120723.b\N0381.D
Report Date: 08-Dec-2023 07:21

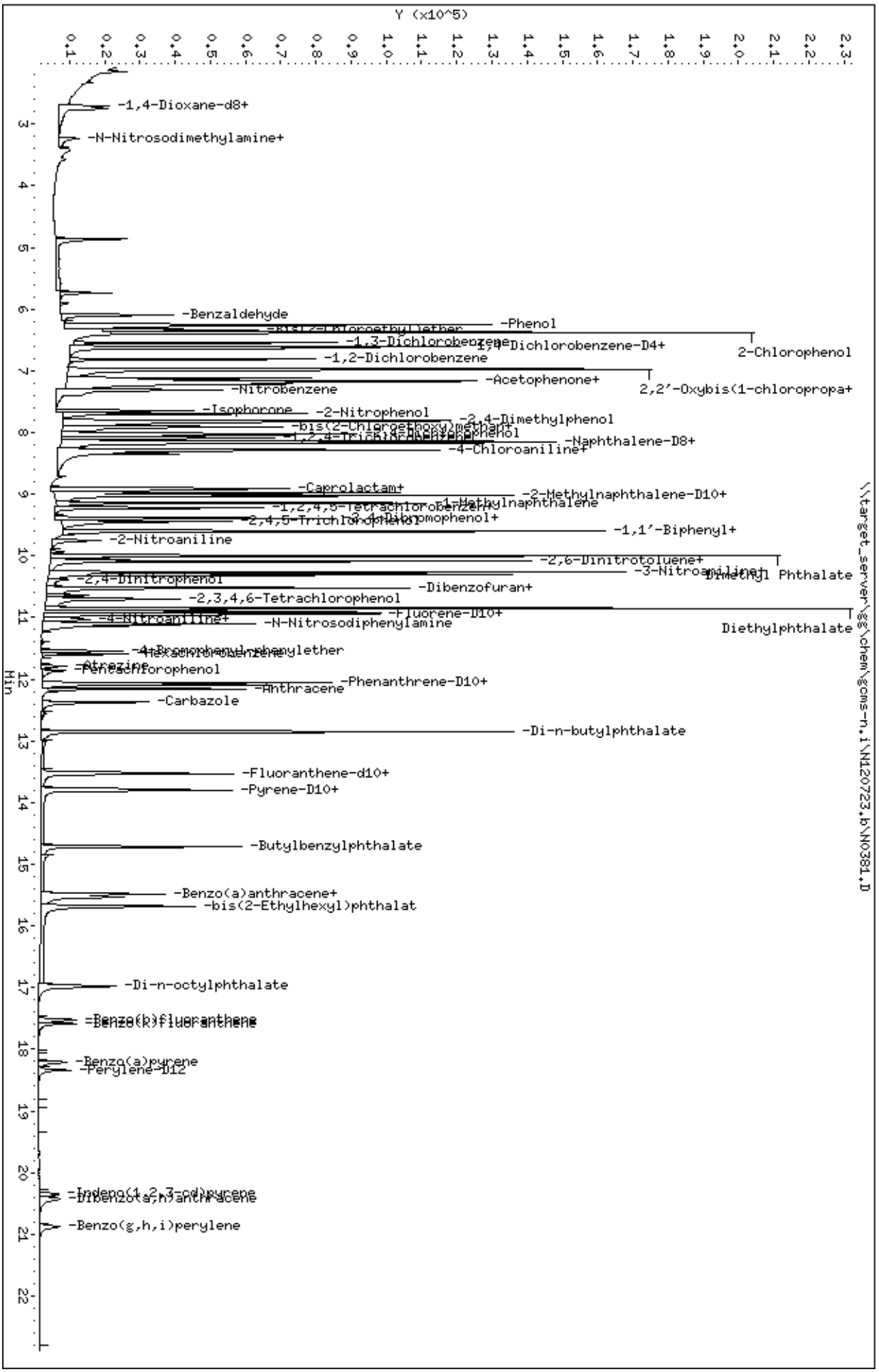
							AMOUNTS		
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
	22 2,4-Dimethylphenol	107	7.810	7.776	(0.959)	110983	2.00000	2.16	
	23 bis(2-Chloroethoxy)methane	93	7.911	7.877	(0.971)	37711	0.50000	0.494	
	24 Benzoic Acid	105	7.922	7.956	(0.972)	7140	0.50000	0.543(Q)	
	25 2,4-Dichlorophenol	162	8.024	7.979	(0.985)	81482	2.00000	1.41	
	26 1,2,4-Trichlorobenzene	180	8.080	8.069	(0.992)	28191	0.50000	0.458	
*	27 Naphthalene-D8	136	8.147	8.125	(1.000)	150720	0.80000	(a)	
	28 Naphthalene	128	8.170	8.147	(1.003)	101627	0.50000	0.493	
	29 4-Chloroaniline	127	8.293	8.282	(1.018)	23216	0.50000	0.608(a)	
	30 Hexachlorobutadiene	225	8.350	8.316	(1.025)	12267	0.50000	0.462	
	31 Caprolactam	113	8.720	8.699	(1.070)	6192	0.50000	0.419(Q)	
	32 4-Chloro-3-Methylphenol	107	8.900	8.869	(1.092)	84679	2.00000	1.82	
$	33 2-Methylnaphthalene-D10	152	8.985	8.953	(1.103)	47122	0.50000	0.476(a)	
	34 2-Methylnaphthalene	142	9.027	8.996	(1.108)	67694	0.50000	0.497	
	35 1-Methylnaphthalene	142	9.144	9.112	(1.122)	58466	0.50000	0.471	
	36 1,2,4,5-Tetrachlorobenzene	216	9.229	9.208	(0.899)	26132	0.50000	0.503	
	37 Hexachlorocyclopentadiene	237	9.218	9.186	(0.898)	9226	0.50000	0.423	
$	38 2,4-Dibromophenol	252	9.377	9.345	(0.914)	10184	0.50000	0.446(a)	
	39 2,4,6-Trichlorophenol	196	9.388	9.356	(0.915)	36861	2.00000	1.52	
	40 2,4,5-Trichlorophenol	196	9.440	9.419	(0.920)	46146	2.00000	1.67	
	41 1,1'-Biphenyl	154	9.599	9.578	(0.935)	71913	0.50000	0.495	
	42 2-Chloronaphthalene	164	9.610	9.578	(0.936)	17720	0.50000	0.463(Q)	
	43 2-Nitroaniline	65	9.749	9.728	(0.950)	6774	0.50000	0.291	
	44 Dimethyl Phthalate	163	9.996	9.975	(0.974)	179930	2.00000	1.82	
	45 2,6-Dinitrotoluene	165	10.050	10.039	(0.979)	7845	0.50000	0.309	
	46 Acenaphthylene	152	10.092	10.082	(0.983)	88132	0.50000	0.486	
	47 3-Nitroaniline	138	10.264	10.243	(1.000)	5569	0.50000	0.488	
*	48 Acenaphthene-D10	164	10.264	10.253	(1.000)	65064	0.80000	(a)	
	49 Acenaphthene	153	10.307	10.286	(1.004)	51305	0.50000	0.477	
	50 2,4-Dinitrophenol	184	10.393	10.371	(1.013)	2572	2.00000	0.875(a)	
	51 Dibenzofuran	168	10.521	10.500	(1.025)	71761	0.50000	0.496	
	52 4-Nitrophenol	109	10.554	10.489	(1.028)	3529	2.00000	0.595(aQ)	
	53 2,4-Dinitrotoluene	165	10.543	10.522	(1.027)	6143	0.50000	0.213(Q)	
	54 2,3,4,6-Tetrachlorophenol	232	10.693	10.672	(1.042)	17740	2.00000	1.11	
	55 Diethylphthalate	149	10.854	10.833	(1.057)	159197	2.00000	1.71	
$	56 Fluorene-D10	174	10.897	10.886	(1.062)	39852	0.50000	0.468(a)	
	57 Fluorene	166	10.940	10.918	(1.066)	49981	0.50000	0.465	
	58 4-Chlorophenyl-phenylether	204	10.961	10.940	(1.068)	23388	0.50000	0.492	
	59 4-Nitroaniline	138	11.015	10.983	(1.073)	3498	0.50000	0.325	
	60 4,6-Dinitro-2-Methylphenol	198	11.036	11.015	(0.915)	4158	2.00000	0.790(aQ)	
	61 N-Nitrosodiphenylamine	169	11.111	11.090	(0.921)	36493	0.50000	0.456	
	62 4-Bromophenyl-phenylether	248	11.549	11.528	(0.958)	10858	0.50000	0.450	
	63 Hexachlorobenzene	284	11.592	11.582	(0.961)	12507	0.50000	0.474	
	64 Atrazine	200	11.795	11.774	(0.978)	5906	0.50000	0.335	
	65 Pentachlorophenol	266	11.859	11.848	(0.983)	5841	2.00000	1.02	
*	66 Phenanthrene-D10	188	12.062	12.051	(1.000)	80907	0.80000	(a)	
	67 Phenanthrene	178	12.094	12.073	(1.003)	54775	0.50000	0.448	
	68 Anthracene	178	12.158	12.137	(1.008)	58060	0.50000	0.472	
	69 Carbazole	167	12.371	12.361	(1.026)	42710	0.50000	0.496	
	70 Di-n-butylphthalate	149	12.841	12.831	(1.065)	188171	2.00000	1.33	
$	71 Fluoranthene-d10	212	13.511	13.501	(1.120)	28575	0.50000	0.434	
	72 Fluoranthene	202	13.532	13.522	(1.122)	41588	0.50000	0.438	
$	73 Pyrene-D10	212	13.776	13.776	(0.889)	32413	0.50000	0.508(a)	
	74 Pyrene	202	13.797	13.797	(0.891)	42779	0.50000	0.508	
	75 Butylbenzylphthalate	149	14.713	14.703	(0.950)	43620	2.00000	1.24	

Data File: \\target_server\gg\chem\gcms-n.i\N120723.b\N0381.D
Report Date: 08-Dec-2023 07:21

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)	REVIEW CODE
	76 Benzo(a)anthracene	228	15.477	15.467	(0.999)	21017	0.50000	0.446	
	77 3,3'-Dichlorobenzidine	252	15.508	15.488	(1.001)	5524	0.50000	0.453	
*	78 Chrysene-D12	240	15.488	15.478	(1.000)	27240	0.80000	(a)	
	79 Chrysene	228	15.528	15.528	(1.003)	27665	0.50000	0.490	
	80 bis(2-Ethylhexyl)phthalate	149	15.681	15.671	(1.012)	54203	2.00000	1.20	
	81 Di-n-octylphthalate	149	16.975	16.965	(1.096)	58218	2.00000	1.12	
	82 Benzo(b)fluoranthene	252	17.520	17.521	(0.956)	15158	0.50000	0.425	
	83 Benzo(k)fluoranthene	252	17.582	17.572	(0.959)	22385	0.50000	0.485(H)	
	84 Benzo(a)pyrene	252	18.210	18.211	(0.993)	15655	0.50000	0.449	
*	85 Perylene-D12	264	18.334	18.324	(1.000)	19549	0.80000	(a)	
	86 Indeno(1,2,3-cd)pyrene	276	20.353	20.342	(1.110)	10473	0.50000	0.414	
	87 Dibenzo(a,h)anthracene	278	20.435	20.414	(1.115)	11407	0.50000	0.438	
	88 Benzo(g,h,i)perylene	276	20.878	20.878	(1.139)	12786	0.50000	0.449	
M	89 Total PAHs	100				750953	7.20000	(a)	

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.


Data File: \\target_server\gg\chem\gcms-n,i\N120723,b\N0381.D
Date : 07-DEC-2023 12:41
Client ID:
Sample Info: WG346503-3
Volume Injected (uL): 1.0
Column phase: Rxi-5ViOms
Instrument: gcms-n,i
Operator: EP
Column diameter: 0.25
\\target_server\gg\chem\gcms-n,i\N120723,b\N0381.D
Y (x10^5)
Min
-1,4-Dioxane-d8+
-N-Nitrosodimethylamine+
-Benzaldehyde
-Phenol
-1,3-Dichlorobenzene
-1,4-Dichlorobenzene-D4+
2-Chlorophenol
-1,2-Dichlorobenzene
-Acetophenone+
2,2'-Oxybis(1-chloropropa+
-Nitrobenzene
-Isophorone
-2-Nitrophenol
-2,4-Dimethylphenol
-bis(2-Chloroethoxy)methan+
-Naphthalene-D8+
-4-Chloroaniline+
-Caprolactam+
-2-Methylnaphthalene-D10+
-1-Methylnaphthalene
-1,2,4,5-Tetrachlorobenzen+
-2,4-Dibromophenol+
-2,4,5-Trichlorophenol
-1,1'-Biphenyl+
-2-Nitroaniline
-2,6-Dinitrotoluene+
-3-Nitroaniline+
Dimethyl Phthalate
-2,4-Dinitrophenol
-Dibenzofuran+
-2,3,4,6-Tetrachlorophenol
-Fluorene-D10+
-4-Nitroaniline+
-N-Nitrosodiphenylamine
Diethylphthalate
-4-Bromophenyl-phenylether
-Hexachlorobenzene
-Atrazine
-Pentachlorophenol
-Phenanthrene-D10+
-Anthracene
-Carbazole
-Di-n-butylphthalate
-Fluoranthene-d10+
-Pyrene-D10+
-Butylbenzylphthalate
-Benzo(a)anthracene+
-bis(2-Ethylhexyl)phthalat
-Di-n-octylphthalate
-Benzo(b)fluoranthene
-Benzo(k)fluoranthene
-Benzo(a)pyrene
-Perylene-D12
-Indeno(1,2,3-cd)pyrene
-Dibenz[a,h]anthracene
-Benzo(g,h,i)perylene

Data File: \\target_server\gg\chem\gcms-n.i\N120723.b\N0382.D
Report Date: 08-Dec-2023 07:21

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-n.i\N120723.b\N0382.D
Lab Smp Id: WG346503-2
Inj Date : 07-DEC-2023 13:11
Operator : EP   Inst ID: gcms-n.i
Smp Info : WG346503-2
Misc Info :
Comment   :
Method   : \\target_server\gg\chem\gcms-n.i\N120723.b\NSPSIM95.m
Meth Date : 08-Dec-2023 07:21 gcms-n.i   Quant Type: ISTD
Cal Date : 07-DEC-2023 13:11   Cal File: N0382.D
Als bottle: 4   Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: all.sub
Target Version: 4.12

Concentration Formula: Amt * DF * Uf*(Vt/Vo*Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.000	Sample Volume (L)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

EP
10:20 am, Dec 29, 2023

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
$	1 1,4-Dioxane-d8	96	2.709	2.741	(0.264)	5480	0.20000	0.174(a)	
	2 1,4-Dioxane	88	2.741	2.783	(0.414)	10962	0.20000	0.380(a)	
	3 N-Nitrosodimethylamine	74	3.280	3.216	(0.495)	5429	0.20000	0.152(aM)	M6
	4 Pyridine	79	3.702	3.237	(0.559)	6353	0.20000	0.0930(aM)	M6
	5 Benzaldehyde	77	6.104	6.084	(0.921)	6413	0.20000	0.349	
	6 Phenol	94	6.271	6.240	(0.947)	64659	1.00000	0.843(a)	
	7 Bis(2-Chloroethyl)ether	93	6.354	6.323	(0.959)	15380	0.20000	0.229	
	8 2-Chlorophenol	128	6.385	6.365	(0.964)	50679	1.00000	0.781(a)	
	9 1,3-Dichlorobenzene	146	6.552	6.531	(0.989)	15438	0.20000	0.197(a)	
*	10 1,4-Dichlorobenzene-D4	152	6.625	6.604	(1.000)	39255	0.80000	(a)	
	11 1,4-Dichlorobenzene	146	6.645	6.625	(1.003)	16006	0.20000	0.202	
	12 1,2-Dichlorobenzene	146	6.822	6.802	(1.030)	15502	0.20000	0.202	
	13 2,2'-Oxybis(1-chloropropane)	45	6.999	6.958	(1.057)	9461	0.20000	0.225	
	14 2-Methylphenol	108	6.989	6.958	(1.055)	48397	1.00000	0.804(a)	
	15 Acetophenone	105	7.145	7.103	(0.877)	16028	0.20000	0.165(a)	
	16 N-Nitroso-di-n-propylamine	70	7.176	7.124	(1.083)	8868	0.20000	0.216	
	17 3&4-Methylphenol	108	7.197	7.145	(1.086)	30129	1.00000	0.484(a)	
	18 Hexachloroethane	117	7.218	7.197	(1.090)	6034	0.20000	0.195(a)	
	19 Nitrobenzene	77	7.322	7.291	(0.899)	11317	0.20000	0.177(a)	
	20 Isophorone	82	7.675	7.596	(0.942)	26577	0.20000	0.206	
	21 2-Nitrophenol	139	7.709	7.675	(0.946)	13095	1.00000	0.541(a)	

Data File: \\target_server\gg\chem\gcms-n.i\N120723.b\N0382.D
Report Date: 08-Dec-2023 07:21

EP
10:20 am, Dec 29, 2023

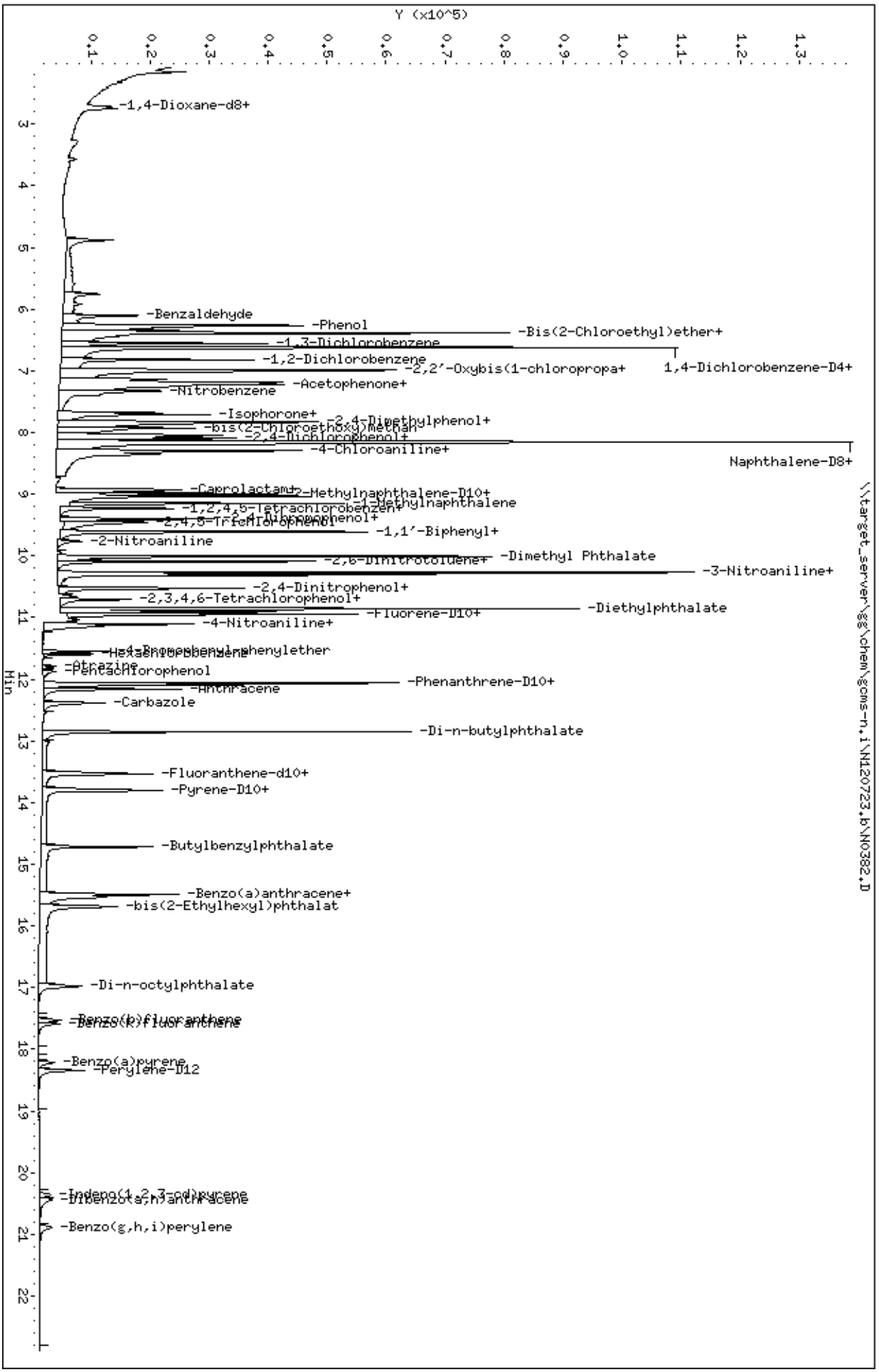
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
	22 2,4-Dimethylphenol	107	7.832	7.776	(0.961)	50775	1.00000	0.938	
	23 bis(2-Chloroethoxy)methane	93	7.934	7.877	(0.974)	14618	0.20000	0.182(a)	
	24 Benzoic Acid	105	7.832	7.956	(0.961)	1399	0.20000	0.101(aQ)	
	25 2,4-Dichlorophenol	162	8.046	7.979	(0.988)	35130	1.00000	0.580	
	26 1,2,4-Trichlorobenzene	180	8.091	8.069	(0.993)	12182	0.20000	0.188(a)	
*	27 Naphthalene-D8	136	8.147	8.125	(1.000)	158430	0.80000	(a)	
	28 Naphthalene	128	8.181	8.147	(1.004)	41613	0.20000	0.192(a)	
	29 4-Chloroaniline	127	8.305	8.282	(1.019)	10728	0.20000	0.267(a)	
	30 Hexachlorobutadiene	225	8.361	8.316	(1.026)	5229	0.20000	0.187(a)	
	31 Caprolactam	113	8.752	8.699	(1.074)	2518	0.20000	0.162(aQ)	
	32 4-Chloro-3-Methylphenol	107	8.922	8.869	(1.095)	37248	1.00000	0.760(a)	
$	33 2-Methylnaphthalene-D10	152	8.996	8.953	(1.104)	20543	0.20000	0.198(a)	
	34 2-Methylnaphthalene	142	9.038	8.996	(1.109)	32736	0.20000	0.228	
	35 1-Methylnaphthalene	142	9.144	9.112	(1.122)	29470	0.20000	0.226	
	36 1,2,4,5-Tetrachlorobenzene	216	9.239	9.208	(0.900)	11263	0.20000	0.206	
	37 Hexachlorocyclopentadiene	237	9.229	9.186	(0.899)	3504	0.20000	0.153(a)	
$	38 2,4-Dibromophenol	252	9.398	9.345	(0.916)	3836	0.20000	0.160(a)	
	39 2,4,6-Trichlorophenol	196	9.398	9.356	(0.916)	14696	1.00000	0.583(a)	
	40 2,4,5-Trichlorophenol	196	9.462	9.419	(0.922)	23805	1.00000	0.820(a)	
	41 1,1'-Biphenyl	154	9.600	9.578	(0.935)	29590	0.20000	0.194(a)	
	42 2-Chloronaphthalene	164	9.610	9.578	(0.936)	7825	0.20000	0.194(aQ)	
	43 2-Nitroaniline	65	9.771	9.728	(0.952)	2459	0.20000	0.100(a)	
	44 Dimethyl Phthalate	163	10.007	9.975	(0.975)	91809	1.00000	0.883(a)	
	45 2,6-Dinitrotoluene	165	10.060	10.039	(0.980)	2544	0.20000	0.0953(a)	
	46 Acenaphthylene	152	10.093	10.082	(0.983)	37896	0.20000	0.199(a)	
	47 3-Nitroaniline	138	10.275	10.243	(1.001)	1621	0.20000	0.135(aQ)	
*	48 Acenaphthene-D10	164	10.264	10.253	(1.000)	68396	0.80000	(a)	
	49 Acenaphthene	153	10.307	10.286	(1.004)	24150	0.20000	0.214	
	50 2,4-Dinitrophenol	184	10.404	10.371	(1.014)	907	1.00000	0.296(a)	
	51 Dibenzofuran	168	10.532	10.500	(1.026)	31420	0.20000	0.207	
	52 4-Nitrophenol	109	10.650	10.489	(1.038)	1172	1.00000	0.189(aQM)	M6
	53 2,4-Dinitrotoluene	165	10.554	10.522	(1.028)	1889	0.20000	0.0623(a)	
	54 2,3,4,6-Tetrachlorophenol	232	10.704	10.672	(1.043)	7262	1.00000	0.436(a)	
	55 Diethylphthalate	149	10.854	10.833	(1.057)	78439	1.00000	0.803(a)	
$	56 Fluorene-D10	174	10.908	10.886	(1.063)	18196	0.20000	0.203(a)	
	57 Fluorene	166	10.940	10.918	(1.066)	22256	0.20000	0.197(a)	
	58 4-Chlorophenyl-phenylether	204	10.961	10.940	(1.068)	9889	0.20000	0.198(a)	
	59 4-Nitroaniline	138	11.036	10.983	(1.075)	1426	0.20000	0.126(a)	
	60 4,6-Dinitro-2-Methylphenol	198	11.036	11.015	(0.915)	1471	1.00000	0.283(aQ)	
	61 N-Nitrosodiphenylamine	169	11.111	11.090	(0.921)	15531	0.20000	0.195(a)	
	62 4-Bromophenyl-phenylether	248	11.550	11.528	(0.958)	4683	0.20000	0.195(a)	
	63 Hexachlorobenzene	284	11.603	11.582	(0.962)	5849	0.20000	0.222	
	64 Atrazine	200	11.795	11.774	(0.978)	2163	0.20000	0.123(a)	
	65 Pentachlorophenol	266	11.870	11.848	(0.984)	2427	1.00000	0.428(a)	
*	66 Phenanthrene-D10	188	12.062	12.051	(1.000)	80569	0.80000	(a)	
	67 Phenanthrene	178	12.094	12.073	(1.003)	23836	0.20000	0.196(a)	
	68 Anthracene	178	12.158	12.137	(1.008)	24326	0.20000	0.199(a)	
	69 Carbazole	167	12.382	12.361	(1.027)	17760	0.20000	0.207	
	70 Di-n-butylphthalate	149	12.852	12.831	(1.065)	82670	1.00000	0.588(a)	
$	71 Fluoranthene-d10	212	13.511	13.501	(1.120)	11537	0.20000	0.176	
	72 Fluoranthene	202	13.532	13.522	(1.122)	17031	0.20000	0.180(a)	
$	73 Pyrene-D10	212	13.786	13.776	(0.890)	12955	0.20000	0.224(a)	
	74 Pyrene	202	13.807	13.797	(0.891)	17808	0.20000	0.233	
	75 Butylbenzylphthalate	149	14.714	14.703	(0.949)	15731	1.00000	0.495(a)	

Data File: \\target_server\gg\chem\gcms-n.i\N120723.b\N0382.D
Report Date: 08-Dec-2023 07:21

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)	REVIEW CODE
	76 Benzo(a)anthracene	228	15.478	15.467	(0.999)	7676	0.20000	0.179(a)	
	77 3,3'-Dichlorobenzidine	252	15.518	15.488	(1.001)	1625	0.20000	0.147(a)	
*	78 Chrysene-D12	240	15.498	15.478	(1.000)	24718	0.80000	(a)	
	79 Chrysene	228	15.539	15.528	(1.003)	11974	0.20000	0.233	
	80 bis(2-Ethylhexyl)phthalate	149	15.681	15.671	(1.012)	19587	1.00000	0.477(a)	
	81 Di-n-octylphthalate	149	16.975	16.965	(1.095)	18597	1.00000	0.400(a)	
	82 Benzo(b)fluoranthene	252	17.531	17.521	(0.956)	5838	0.20000	0.176(a)	
	83 Benzo(k)fluoranthene	252	17.593	17.572	(0.959)	8371	0.20000	0.195(aH)	
	84 Benzo(a)pyrene	252	18.221	18.211	(0.993)	5942	0.20000	0.183(a)	
*	85 Perylene-D12	264	18.344	18.324	(1.000)	18157	0.80000	(a)	
	86 Indeno(1,2,3-cd)pyrene	276	20.363	20.342	(1.110)	3880	0.20000	0.165(a)	
	87 Dibenzo(a,h)anthracene	278	20.445	20.414	(1.115)	3983	0.20000	0.164(a)	
	88 Benzo(g,h,i)perylene	276	20.888	20.878	(1.139)	5157	0.20000	0.195(a)	
M	89 Total PAHs	100				323943	3.60000	(a)	

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.


Data File: \\target_server\gg\chem\gcms-n,i\N120723,b\N0382.D
Date : 07-DEC-2023 13:11
Client ID:
Sample Info: WG346503-2
Volume Injected (uL): 1.0
Column phase: Rxi-5VOCms
Instrument: gcms-n,i
Operator: EP
Column diameter: 0.25
\\target_server\gg\chem\gcms-n,i\N120723,b\N0382.D
Y (x10^5)
Min
-1,4-Dioxane-d8+
-Benzaldehyde
-Phenol
-Bis(2-Chloroethyl)ether+
-1,3-Dichlorobenzene
-1,2-Dichlorobenzene
1,4-Dichlorobenzene-D4+
-2,2'-Oxybis(1-chloropropa+
-Acetophenone+
-Nitrobenzene
-Isophorone+
-2,4-Dimethylphenol+
-bis(2-Chloroethoxy)methan
-2,4-Dichlorophenol+
-4-Chloroaniline+
Naphthalene-D8+
-Caprolactam+
2-Methylnaphthalene-D10+
-2-Methylnaphthalene
-1,2,4,5-Tetrachlorobenzen+
-2,4,5-Trichlorophenol
-1,1'-Biphenyl+
-2-Nitroaniline
-2,6-Dinitrotoluene+
-Dimethyl Phthalate
-3-Nitroaniline+
-2,4-Dinitrophenol+
-2,3,4,6-Tetrachlorophenol+
-Diethylphthalate
-Fluorene-D10+
-4-Nitroaniline+
-Atrazine
-Pentachlorophenol
-Anthracene
-Phenanthrene-D10+
-Carbazole
-Di-n-butylphthalate
-Fluoranthene-d10+
-Pyrene-D10+
-Butylbenzylphthalate
-Benzo(a)anthracene+
-bis(2-Ethylhexyl)phthalat
-Di-n-octylphthalate
-Benzo(b)fluoranthene
-Benzo(k)fluoranthene
-Benzo(a)pyrene
-Perylene-D12
-Indeno(1,2,3-cd)pyrene
-Dibenzo(a,h)anthracene
-Benzo(g,h,i)perylene

Data File: \\target_server\gg\chem\gcms-n.i\N120723.b\N0383.D
Report Date: 08-Dec-2023 07:21

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-n.i\N120723.b\N0383.D
Lab Smp Id: WG346503-5
Inj Date : 07-DEC-2023 13:41
Operator : EP   Inst ID: gcms-n.i
Smp Info : WG346503-5
Misc Info :
Comment   :
Method   : \\target_server\gg\chem\gcms-n.i\N120723.b\NSPSIM95.m
Meth Date : 08-Dec-2023 07:21 gcms-n.i   Quant Type: ISTD
Cal Date : 07-DEC-2023 13:41   Cal File: N0383.D
Als bottle: 5   Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: all.sub
Target Version: 4.12

Concentration Formula: Amt * DF * Uf*(Vt/Vo*Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.000	Sample Volume (L)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

EP
10:20 am, Dec 29, 2023

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
$	1 1,4-Dioxane-d8	96	2.741	2.741	(0.267)	283641	7.00000	6.91	
	2 1,4-Dioxane	88	2.773	2.783	(0.420)	291732	7.00000	6.64	
	3 N-Nitrosodimethylamine	74	3.216	3.216	(0.487)	407133	7.00000	7.51	
	4 Pyridine	79	3.248	3.237	(0.492)	614738	7.00000	5.91(TM)	M6
	5 Benzaldehyde	77	6.084	6.084	(0.921)	70281	7.00000	2.52	
	6 Phenol	94	6.240	6.240	(0.945)	888930	7.00000	7.62	
	7 Bis(2-Chloroethyl)ether	93	6.323	6.323	(0.957)	674342	7.00000	6.61	
	8 2-Chlorophenol	128	6.365	6.365	(0.964)	714225	7.00000	7.24	
	9 1,3-Dichlorobenzene	146	6.531	6.531	(0.989)	814380	7.00000	6.84	
*	10 1,4-Dichlorobenzene-D4	152	6.604	6.604	(1.000)	59705	0.80000	(a)	
	11 1,4-Dichlorobenzene	146	6.625	6.625	(1.003)	833185	7.00000	6.90	
	12 1,2-Dichlorobenzene	146	6.802	6.802	(1.030)	804441	7.00000	6.88	
	13 2,2'-Oxybis(1-chloropropane)	45	6.958	6.958	(1.054)	408801	7.00000	6.39(Q)	
	14 2-Methylphenol	108	6.958	6.958	(1.054)	661055	7.00000	7.22	
	15 Acetophenone	105	7.103	7.103	(0.874)	903173	7.00000	6.92	
	16 N-Nitroso-di-n-propylamine	70	7.124	7.124	(1.079)	433931	7.00000	6.93	
	17 3&4-Methylphenol	108	7.155	7.145	(1.083)	636883	7.00000	6.72	
	18 Hexachloroethane	117	7.197	7.197	(1.090)	322067	7.00000	6.84	
	19 Nitrobenzene	77	7.291	7.291	(0.897)	590046	7.00000	6.87	
	20 Isophorone	82	7.596	7.596	(0.935)	1149065	7.00000	6.63	
	21 2-Nitrophenol	139	7.686	7.675	(0.946)	230782	7.00000	6.43	

Data File: \\target_server\gg\chem\gcms-n.i\N120723.b\N0383.D
Report Date: 08-Dec-2023 07:21

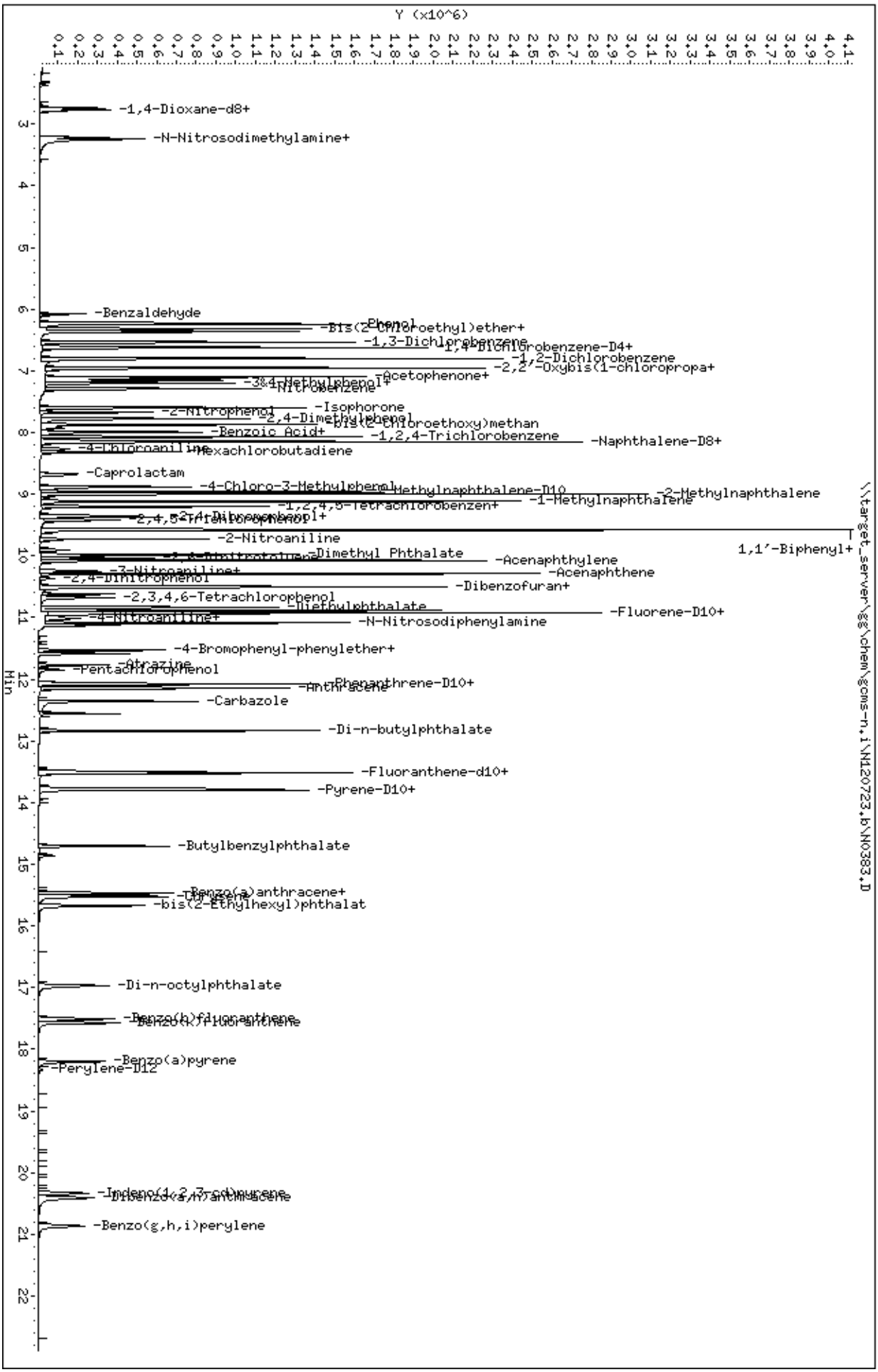
							AMOUNTS		
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
	22 2,4-Dimethylphenol	107	7.776	7.776	(0.957)	460067	7.00000	6.34	
	23 bis(2-Chloroethoxy)methane	93	7.877	7.877	(0.970)	714858	7.00000	6.64	
	24 Benzoic Acid	105	7.934	7.956	(0.976)	92774	7.00000	5.00(Q)	
	25 2,4-Dichlorophenol	162	7.990	7.979	(0.983)	504817	7.00000	6.21	
	26 1,2,4-Trichlorobenzene	180	8.069	8.069	(0.993)	598510	7.00000	6.90	
*	27 Naphthalene-D8	136	8.125	8.125	(1.000)	212506	0.80000	(a)	
	28 Naphthalene	128	8.147	8.147	(1.003)	1954386	7.00000	6.72	
	29 4-Chloroaniline	127	8.260	8.282	(1.017)	264125	7.00000	4.90	
	30 Hexachlorobutadiene	225	8.316	8.316	(1.024)	249815	7.00000	6.67	
	31 Caprolactam	113	8.687	8.699	(1.069)	151994	7.00000	7.29(Q)	
	32 4-Chloro-3-Methylphenol	107	8.879	8.869	(1.093)	460363	7.00000	7.00	
$	33 2-Methylnaphthalene-D10	152	8.953	8.953	(1.102)	932492	7.00000	6.68	
	34 2-Methylnaphthalene	142	8.996	8.996	(1.107)	1228294	7.00000	6.39	
	35 1-Methylnaphthalene	142	9.112	9.112	(1.122)	1144640	7.00000	6.54	
	36 1,2,4,5-Tetrachlorobenzene	216	9.208	9.208	(0.898)	461306	7.00000	6.50	
	37 Hexachlorocyclopentadiene	237	9.197	9.186	(0.897)	216344	7.00000	7.25	
$	38 2,4-Dibromophenol	252	9.345	9.345	(0.911)	218934	7.00000	7.00	
	39 2,4,6-Trichlorophenol	196	9.366	9.356	(0.913)	246254	7.00000	6.92(H)	
	40 2,4,5-Trichlorophenol	196	9.419	9.419	(0.919)	278269	7.00000	7.36	
	41 1,1'-Biphenyl	154	9.578	9.578	(0.934)	1366161	7.00000	6.88	
	42 2-Chloronaphthalene	164	9.589	9.578	(0.935)	363068	7.00000	6.93(Q)	
	43 2-Nitroaniline	65	9.728	9.728	(0.949)	209698	7.00000	6.59	
	44 Dimethyl Phthalate	163	9.975	9.975	(0.973)	958599	7.00000	7.09	
	45 2,6-Dinitrotoluene	165	10.039	10.039	(0.979)	225535	7.00000	6.49	
	46 Acenaphthylene	152	10.082	10.082	(0.983)	1660831	7.00000	6.70	
	47 3-Nitroaniline	138	10.243	10.243	(0.999)	117890	7.00000	7.55(Q)	
*	48 Acenaphthene-D10	164	10.253	10.253	(1.000)	89018	0.80000	(a)	
	49 Acenaphthene	153	10.286	10.286	(1.003)	970715	7.00000	6.60	
	50 2,4-Dinitrophenol	184	10.371	10.371	(1.012)	29188	7.00000	6.48	
	51 Dibenzofuran	168	10.500	10.500	(1.024)	1284614	7.00000	6.49	
	52 4-Nitrophenol	109	10.489	10.489	(1.023)	60374	7.00000	6.79(Q)	
	53 2,4-Dinitrotoluene	165	10.522	10.522	(1.026)	256670	7.00000	6.50(Q)	
	54 2,3,4,6-Tetrachlorophenol	232	10.672	10.672	(1.041)	162937	7.00000	6.90	
	55 Diethylphthalate	149	10.833	10.833	(1.056)	937029	7.00000	7.37	
$	56 Fluorene-D10	174	10.886	10.886	(1.062)	797363	7.00000	6.84	
	57 Fluorene	166	10.918	10.918	(1.065)	1014826	7.00000	6.90	
	58 4-Chlorophenyl-phenylether	204	10.940	10.940	(1.067)	432596	7.00000	6.65	
	59 4-Nitroaniline	138	11.004	10.983	(1.073)	109845	7.00000	6.74	
	60 4,6-Dinitro-2-Methylphenol	198	11.015	11.015	(0.914)	54694	7.00000	6.70(Q)	
	61 N-Nitrosodiphenylamine	169	11.090	11.090	(0.920)	747062	7.00000	6.74	
	62 4-Bromophenyl-phenylether	248	11.528	11.528	(0.957)	227909	7.00000	6.83	
	63 Hexachlorobenzene	284	11.582	11.582	(0.961)	238297	7.00000	6.52	
	64 Atrazine	200	11.774	11.774	(0.977)	166913	7.00000	6.84	
	65 Pentachlorophenol	266	11.848	11.848	(0.983)	65453	7.00000	8.30	
*	66 Phenanthrene-D10	188	12.051	12.051	(1.000)	111963	0.80000	(a)	
	67 Phenanthrene	178	12.083	12.073	(1.003)	1157948	7.00000	6.84	
	68 Anthracene	178	12.147	12.137	(1.008)	1159008	7.00000	6.82	
	69 Carbazole	167	12.361	12.361	(1.026)	842679	7.00000	7.06	
	70 Di-n-butylphthalate	149	12.831	12.831	(1.065)	1298562	7.00000	6.65	
$	71 Fluoranthene-d10	212	13.501	13.501	(1.120)	652524	7.00000	7.17	
	72 Fluoranthene	202	13.522	13.522	(1.122)	932436	7.00000	7.10	
$	73 Pyrene-D10	212	13.776	13.776	(0.890)	742364	7.00000	6.63	
	74 Pyrene	202	13.797	13.797	(0.891)	955625	7.00000	6.46	
	75 Butylbenzylphthalate	149	14.703	14.703	(0.950)	420090	7.00000	6.83	

Data File: \\target_server\gg\chem\gcms-n.i\N120723.b\N0383.D
Report Date: 08-Dec-2023 07:21

			QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
	76	Benzo(a)anthracene	228	15.467	15.467	(0.999)	596342	7.00000	7.20	
	77	3,3'-Dichlorobenzidine	252	15.488	15.488	(1.001)	158550	7.00000	7.40	
*	78	Chrysene-D12	240	15.478	15.478	(1.000)	47852	0.80000	(a)	
	79	Chrysene	228	15.528	15.528	(1.003)	652181	7.00000	6.57	
	80	bis(2-Ethylhexyl)phthalate	149	15.671	15.671	(1.013)	537768	7.00000	6.77	
	81	Di-n-octylphthalate	149	16.965	16.965	(1.096)	710411	7.00000	7.12	
	82	Benzo(b)fluoranthene	252	17.510	17.521	(0.956)	471228	7.00000	7.22	
	83	Benzo(k)fluoranthene	252	17.572	17.572	(0.959)	576245	7.00000	6.83(H)	
	84	Benzo(a)pyrene	252	18.200	18.211	(0.993)	451438	7.00000	7.07	
*	85	Perylene-D12	264	18.324	18.324	(1.000)	35764	0.80000	(a)	
	86	Indeno(1,2,3-cd)pyrene	276	20.332	20.342	(1.110)	353629	7.00000	7.65	
	87	Dibenzo(a,h)anthracene	278	20.414	20.414	(1.114)	358461	7.00000	7.52	
	88	Benzo(g,h,i)perylene	276	20.868	20.878	(1.139)	386742	7.00000	7.42	
M	89	Total PAHs	100				16024975	126.000	(a)	

QC Flag Legend

T - Target compound detected outside RT window.
a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.



Data File: \\target_server\gg\chem\gcms-n,i\N120723,b\N0383.D
Date : 07-DEC-2023 13:41
Client ID:
Sample Info: WG346503-5
Volume Injected (uL): 1.0
Column phase: Rxi-5ViOms

Instrument: gcms-n,i
Operator: EP
Column diameter: 0.25

\\target_server\gg\chem\gcms-n,i\N120723,b\N0383.D

Data File: \\target_server\gg\chem\gcms-n.i\N120723.b\N0384.D
Report Date: 08-Dec-2023 07:21

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-n.i\N120723.b\N0384.D
Lab Smp Id: WG346503-6
Inj Date : 07-DEC-2023 14:12
Operator : EP   Inst ID: gcms-n.i
Smp Info : WG346503-6
Misc Info :
Comment   :
Method   : \\target_server\gg\chem\gcms-n.i\N120723.b\NSPSIM95.m
Meth Date : 08-Dec-2023 07:21 gcms-n.i   Quant Type: ISTD
Cal Date : 07-DEC-2023 14:12   Cal File: N0384.D
Als bottle: 6   Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: all.sub
Target Version: 4.12

Concentration Formula: Amt * DF * Uf*(Vt/Vo*Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.000	Sample Volume (L)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
$	1 1,4-Dioxane-d8	96	2.741	2.741	(1.000)	380896	10.0000	10.6	
	2 1,4-Dioxane	88	2.773	2.783	(0.420)	399154	10.0000	10.2	
	3 N-Nitrosodimethylamine	74	3.216	3.216	(0.487)	569121	10.0000	11.8	
	4 Pyridine	79	3.248	3.237	(0.492)	930482	10.0000	10.0	
	5 Benzaldehyde	77	6.084	6.084	(0.921)	84896	10.0000	3.41	
	6 Phenol	94	6.240	6.240	(0.945)	1150502	10.0000	11.1	
	7 Bis(2-Chloroethyl)ether	93	6.323	6.323	(0.957)	883200	10.0000	9.71	
	8 2-Chlorophenol	128	6.364	6.365	(0.964)	998184	10.0000	11.4	
	9 1,3-Dichlorobenzene	146	6.531	6.531	(0.989)	1109919	10.0000	10.5	
*	10 1,4-Dichlorobenzene-D4	152	6.604	6.604	(1.000)	53196	0.80000	(aQ)	
	11 1,4-Dichlorobenzene	146	6.625	6.625	(1.003)	1120518	10.0000	10.4	
	12 1,2-Dichlorobenzene	146	6.801	6.802	(1.030)	1089926	10.0000	10.4	
	13 2,2'-Oxybis(1-chloropropane)	45	6.957	6.958	(1.054)	519258	10.0000	9.11	
	14 2-Methylphenol	108	6.957	6.958	(1.054)	882572	10.0000	10.8	
	15 Acetophenone	105	7.103	7.103	(0.874)	1216240	10.0000	10.7	
	16 N-Nitroso-di-n-propylamine	70	7.124	7.124	(1.079)	581661	10.0000	10.4	
	17 3&4-Methylphenol	108	7.155	7.145	(1.083)	872723	10.0000	10.3	
	18 Hexachloroethane	117	7.197	7.197	(1.090)	432116	10.0000	10.3	
	19 Nitrobenzene	77	7.290	7.291	(0.897)	801512	10.0000	10.7	
	20 Isophorone	82	7.596	7.596	(0.935)	1520033	10.0000	10.1	
	21 2-Nitrophenol	139	7.675	7.675	(0.945)	362047	10.0000	10.5	

Data File: \\target_server\gg\chem\gcms-n.i\N120723.b\N0384.D
Report Date: 08-Dec-2023 07:21

EP
10:20 am, Dec 29, 2023

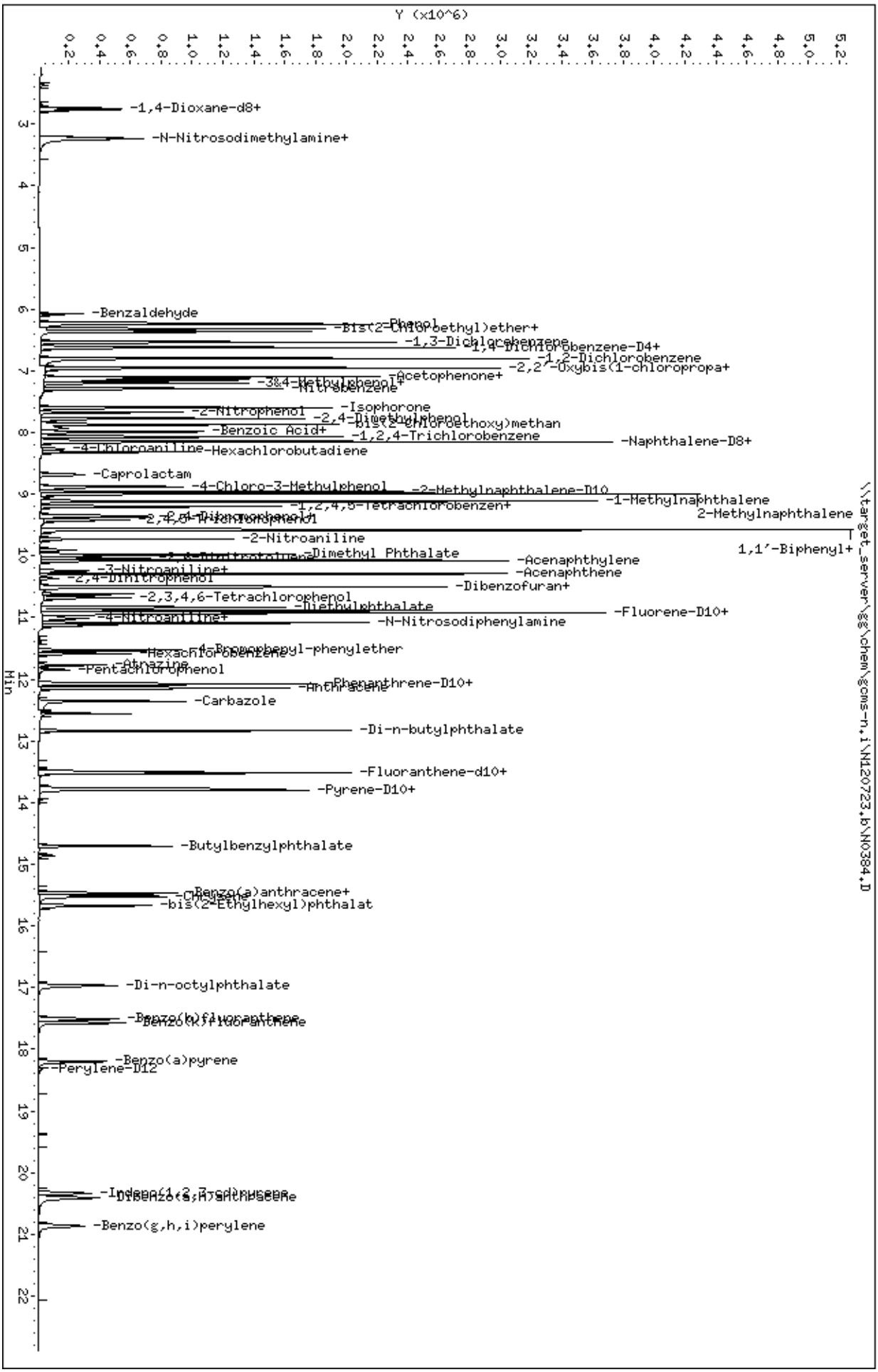
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
	22 2,4-Dimethylphenol	107	7.776	7.776	(0.957)	624702	10.0000	9.90	
	23 bis(2-Chloroethoxy)methane	93	7.877	7.877	(0.970)	967339	10.0000	10.3	
	24 Benzoic Acid	105	7.945	7.956	(0.978)	185174	10.0000	11.5	
	25 2,4-Dichlorophenol	162	7.990	7.979	(0.983)	705878	10.0000	9.99	
	26 1,2,4-Trichlorobenzene	180	8.069	8.069	(0.993)	799137	10.0000	10.6	
*	27 Naphthalene-D8	136	8.125	8.125	(1.000)	184763	0.80000	(a)	
	28 Naphthalene	128	8.147	8.147	(1.003)	2554908	10.0000	10.1	
	29 4-Chloroaniline	127	8.282	8.282	(1.019)	349141	10.0000	7.46	
	30 Hexachlorobutadiene	225	8.316	8.316	(1.024)	332407	10.0000	10.2	
	31 Caprolactam	113	8.687	8.699	(1.069)	207027	10.0000	11.4	
	32 4-Chloro-3-Methylphenol	107	8.879	8.869	(1.093)	635978	10.0000	11.1	
$	33 2-Methylnaphthalene-D10	152	8.953	8.953	(1.102)	1253013	10.0000	10.3	
	34 2-Methylnaphthalene	142	8.996	8.996	(1.107)	1638338	10.0000	9.81	
	35 1-Methylnaphthalene	142	9.112	9.112	(1.122)	1521038	10.0000	9.99	
	36 1,2,4,5-Tetrachlorobenzene	216	9.207	9.208	(1.000)	613041	10.0000	9.83	
	37 Hexachlorocyclopentadiene	237	9.197	9.186	(1.000)	294500	10.0000	11.2	
$	38 2,4-Dibromophenol	252	9.345	9.345	(1.000)	313155	10.0000	11.4	
	39 2,4,6-Trichlorophenol	196	9.366	9.356	(1.000)	340514	10.0000	10.3	
	40 2,4,5-Trichlorophenol	196	9.419	9.419	(1.000)	395455	10.0000	11.9	
	41 1,1'-Biphenyl	154	9.578	9.578	(1.000)	1786201	10.0000	10.2	
	42 2-Chloronaphthalene	164	9.589	9.578	(1.000)	477844	10.0000	10.4	
	43 2-Nitroaniline	65	9.728	9.728	(1.000)	292397	10.0000	10.5	
	44 Dimethyl Phthalate	163	9.975	9.975	(1.000)	1260199	10.0000	10.6	
	45 2,6-Dinitrotoluene	165	10.039	10.039	(1.000)	311274	10.0000	10.2	
	46 Acenaphthylene	152	10.082	10.082	(1.000)	2240772	10.0000	10.3	
	47 3-Nitroaniline	138	10.243	10.243	(1.000)	147430	10.0000	10.8	
*	48 Acenaphthene-D10	164	10.253	10.253	(1.000)	78164	0.80000	(aM)	M6
	49 Acenaphthene	153	10.286	10.286	(1.000)	1301457	10.0000	10.1	
	50 2,4-Dinitrophenol	184	10.371	10.371	(1.000)	49572	10.0000	10.9	
	51 Dibenzofuran	168	10.500	10.500	(1.000)	1729720	10.0000	9.95	
	52 4-Nitrophenol	109	10.489	10.489	(1.000)	88592	10.0000	10.5(Q)	
	53 2,4-Dinitrotoluene	165	10.521	10.522	(1.000)	352149	10.0000	10.2	
	54 2,3,4,6-Tetrachlorophenol	232	10.672	10.672	(1.000)	234473	10.0000	10.6	
	55 Diethylphthalate	149	10.832	10.833	(1.000)	1237817	10.0000	11.1	
$	56 Fluorene-D10	174	10.886	10.886	(1.000)	1038814	10.0000	10.2(A)	
	57 Fluorene	166	10.918	10.918	(1.000)	1325304	10.0000	10.3	
	58 4-Chlorophenyl-phenylether	204	10.940	10.940	(1.000)	580086	10.0000	10.2	
	59 4-Nitroaniline	138	11.004	10.983	(1.000)	155778	10.0000	10.1(Q)	
	60 4,6-Dinitro-2-Methylphenol	198	11.015	11.015	(0.914)	88850	10.0000	10.9	
	61 N-Nitrosodiphenylamine	169	11.090	11.090	(0.920)	1012741	10.0000	10.3	
	62 4-Bromophenyl-phenylether	248	11.528	11.528	(0.957)	304299	10.0000	10.3	
	63 Hexachlorobenzene	284	11.581	11.582	(0.961)	317309	10.0000	9.82	
	64 Atrazine	200	11.774	11.774	(0.977)	214800	10.0000	9.95	
	65 Pentachlorophenol	266	11.848	11.848	(0.983)	102590	10.0000	14.7	
*	66 Phenanthrene-D10	188	12.051	12.051	(1.000)	98970	0.80000	(a)	
	67 Phenanthrene	178	12.083	12.073	(1.003)	1535993	10.0000	10.3	
	68 Anthracene	178	12.147	12.137	(1.008)	1514017	10.0000	10.1	
	69 Carbazole	167	12.361	12.361	(1.026)	988896	10.0000	9.38	
	70 Di-n-butylphthalate	149	12.831	12.831	(1.065)	1707837	10.0000	9.90	
$	71 Fluoranthene-d10	212	13.501	13.501	(1.120)	830696	10.0000	10.3	
	72 Fluoranthene	202	13.521	13.522	(1.122)	1189885	10.0000	10.2	
$	73 Pyrene-D10	212	13.776	13.776	(0.889)	945824	10.0000	9.38	
	74 Pyrene	202	13.797	13.797	(0.891)	1226242	10.0000	9.20	
	75 Butylbenzylphthalate	149	14.703	14.703	(0.949)	552004	10.0000	9.96	

Data File: \\target_server\gg\chem\gcms-n.i\N120723.b\N0384.D
Report Date: 08-Dec-2023 07:21

							AMOUNTS		
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
	76 Benzo(a)anthracene	228	15.467	15.467	(0.999)	769265	10.0000	10.3	
	77 3,3'-Dichlorobenzidine	252	15.488	15.488	(1.000)	206923	10.0000	10.7	
*	78 Chrysene-D12	240	15.488	15.478	(1.000)	43106	0.80000	(a)	
	79 Chrysene	228	15.528	15.528	(1.003)	832495	10.0000	9.31	
	80 bis(2-Ethylhexyl)phthalate	149	15.671	15.671	(1.012)	706187	10.0000	9.86	
	81 Di-n-octylphthalate	149	16.965	16.965	(1.095)	970258	10.0000	10.1	
	82 Benzo(b)fluoranthene	252	17.510	17.521	(0.956)	639006	10.0000	10.9	
	83 Benzo(k)fluoranthene	252	17.572	17.572	(0.959)	769347	10.0000	10.1(H)	
	84 Benzo(a)pyrene	252	18.200	18.211	(0.993)	614618	10.0000	10.7	
*	85 Perylene-D12	264	18.324	18.324	(1.000)	32145	0.80000	(a)	
	86 Indeno(1,2,3-cd)pyrene	276	20.332	20.342	(1.110)	481280	10.0000	11.6	
	87 Dibenzo(a,h)anthracene	278	20.414	20.414	(1.114)	485273	10.0000	11.3	
	88 Benzo(g,h,i)perylene	276	20.867	20.878	(1.139)	515210	10.0000	11.0	
M	89 Total PAHs	100				21154448	180.000	(a)	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
A - Target compound detected but, quantitated amount
exceeded maximum amount.
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.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Sample Info: WG346503-6
Volume Injected (uL): 1.0
Column phase: Rxi-5ViOms
Instrument: gcms-n,i
Operator: EP
Column diameter: 0.25
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Y (x10^6)
Min
-1,4-Dioxane-d8+
-N-Nitrosodimethylamine+
-Benzaldehyde
-Phenol
-Bis(2-Chloroethyl)ether+
-1,3-Dichlorobenzene
-1,4-Dichlorobenzene-D4+
-1,2-Dichlorobenzene
-2,2'-Oxybis(1-chloropropa+
-Acetophenone+
-3&4-Methylphenol+
-Nitrobenzene
-2-Nitrophenol
-Isophorone
-2,4-Dimethylphenol
-bis(2-Chloroethoxy)methan
-Benzoic Acid+
-1,2,4-Trichlorobenzene
-Naphthalene-D8+
-4-Chloroaniline
-Hexachlorobutadiene
-Caprolactam
-4-Chloro-3-Methylphenol
-2-Methylnaphthalene-D10
-1-Methylnaphthalene
2-Methylnaphthalene
-1,2,4,5-Tetrachlorobenzen+
-2,4,6-Trichlorophenol
-2-Nitroaniline
1,1'-Biphenyl+
-Dimethyl Phthalate
-Acenaphthylene
-3-Nitroaniline+
-Acenaphthene
-2,4-Dinitrophenol
-Dibenzofuran+
-2,3,4,6-Tetrachlorophenol
-Diethylphthalate
-Fluorene-D10+
-4-Nitroaniline+
-N-Nitrosodiphenylamine
-4-Bromophenyl-phenylether
-Hexachlorobenzene
-Atrazine
-Pentachlorophenol
-Phenanthrene-D10+
-Anthracene
-Carbazole
-Di-n-butylphthalate
-Fluoranthene-d10+
-Pyrene-D10+
-Butylbenzylphthalate
-Benzo(a)anthracene+
-Chrysene
-bis(2-Ethylhexyl)phthalat
-Di-n-octylphthalate
-Benzo(b)fluoranthene
-Benzo(k)fluoranthene
-Benzo(a)pyrene
-Perylene-D12
-Indeno(1,2,3-cd)pyrene
-Dibenz(a,h)anthracene
-Benzo(g,h,i)perylene

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Report Date: 08-Dec-2023 07:21

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Data file : \\target_server\gg\chem\gcms-n.i\N120723.b\N0385.D
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Inj Date : 07-DEC-2023 14:42
Operator : EP   Inst ID: gcms-n.i
Smp Info : WG346503-7
Misc Info :
Comment   :
Method   : \\target_server\gg\chem\gcms-n.i\N120723.b\NSPSIM95.m
Meth Date : 08-Dec-2023 07:21 gcms-n.i   Quant Type: ISTD
Cal Date : 07-DEC-2023 14:42   Cal File: N0385.D
Als bottle: 7   Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: all.sub
Target Version: 4.12

Concentration Formula: Amt * DF * Uf*(Vt/Vo*Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.000	Sample Volume (L)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
$	1 1,4-Dioxane-d8	96	2.741	2.741	(1.000)	553479	15.0000	16.9(A)	
	2 1,4-Dioxane	88	2.783	2.783	(0.422)	574707	15.0000	15.0	
	3 N-Nitrosodimethylamine	74	3.216	3.216	(0.487)	742767	15.0000	15.7(A)	
	4 Pyridine	79	3.237	3.237	(0.490)	1400900	15.0000	15.4(A)	
	5 Benzaldehyde	77	6.084	6.084	(0.921)	124001	15.0000	5.08	
	6 Phenol	94	6.240	6.240	(0.945)	1641450	15.0000	16.1(A)	
	7 Bis(2-Chloroethyl)ether	93	6.323	6.323	(0.957)	1307623	15.0000	14.6	
	8 2-Chlorophenol	128	6.365	6.365	(0.964)	1445431	15.0000	16.8(A)	
	9 1,3-Dichlorobenzene	146	6.531	6.531	(0.989)	1580391	15.0000	15.2(A)	
*	10 1,4-Dichlorobenzene-D4	152	6.604	6.604	(1.000)	52211	0.80000	(aQ)	
	11 1,4-Dichlorobenzene	146	6.625	6.625	(1.003)	1618608	15.0000	15.3(A)	
	12 1,2-Dichlorobenzene	146	6.802	6.802	(1.030)	1558822	15.0000	15.2(A)	
	13 2,2'-Oxybis(1-chloropropane)	45	6.958	6.958	(1.054)	684542	15.0000	12.2	
	14 2-Methylphenol	108	6.958	6.958	(1.054)	1218746	15.0000	15.2(A)	
	15 Acetophenone	105	7.103	7.103	(0.874)	1697573	15.0000	15.8(A)	
	16 N-Nitroso-di-n-propylamine	70	7.124	7.124	(1.079)	781831	15.0000	14.3	
	17 3&4-Methylphenol	108	7.145	7.145	(1.082)	1235344	15.0000	14.9	
	18 Hexachloroethane	117	7.197	7.197	(1.090)	623814	15.0000	15.2(A)	
	19 Nitrobenzene	77	7.291	7.291	(0.897)	1111558	15.0000	15.7(A)	
	20 Isophorone	82	7.596	7.596	(0.935)	2026482	15.0000	14.2	
	21 2-Nitrophenol	139	7.675	7.675	(0.945)	567923	15.0000	14.8	

Data File: \\target_server\gg\chem\gcms-n.i\N120723.b\N0385.D
Report Date: 08-Dec-2023 07:21

EP
10:20 am, Dec 29, 2023

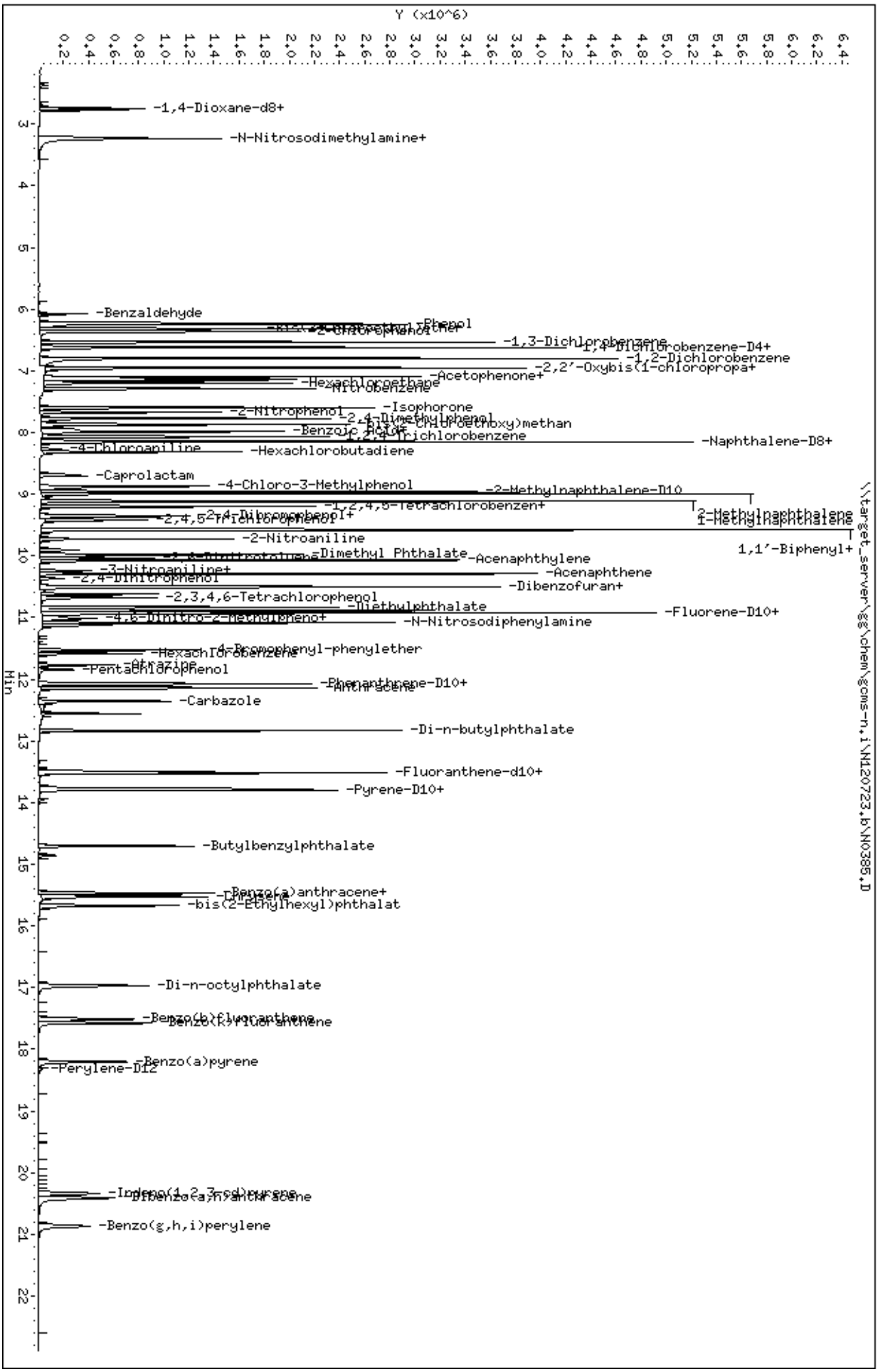
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
	22 2,4-Dimethylphenol	107	7.776	7.776	(0.957)	834808	15.0000	14.0	
	23 bis(2-Chloroethoxy)methane	93	7.877	7.877	(0.970)	1350793	15.0000	15.2(A)	
	24 Benzoic Acid	105	7.956	7.956	(0.979)	287414	15.0000	18.8(A)	
	25 2,4-Dichlorophenol	162	7.979	7.979	(0.982)	1032462	15.0000	15.4(A)	
	26 1,2,4-Trichlorobenzene	180	8.069	8.069	(0.993)	1102819	15.0000	15.4(A)	
*	27 Naphthalene-D8	136	8.125	8.125	(1.000)	175091	0.80000	(a)	
	28 Naphthalene	128	8.147	8.147	(1.003)	3460608	15.0000	14.4	
	29 4-Chloroaniline	127	8.282	8.282	(1.019)	432258	15.0000	9.74(M)	M6
	30 Hexachlorobutadiene	225	8.316	8.316	(1.024)	489560	15.0000	15.9(A)	
	31 Caprolactam	113	8.699	8.699	(1.071)	269741	15.0000	15.7(A)	
	32 4-Chloro-3-Methylphenol	107	8.869	8.869	(1.092)	869666	15.0000	16.0(A)	
$	33 2-Methylnaphthalene-D10	152	8.953	8.953	(1.102)	1667098	15.0000	14.5	
	34 2-Methylnaphthalene	142	8.996	8.996	(1.107)	2196331	15.0000	13.9	
	35 1-Methylnaphthalene	142	9.112	9.112	(1.122)	2021064	15.0000	14.0	
	36 1,2,4,5-Tetrachlorobenzene	216	9.208	9.208	(1.000)	860406	15.0000	15.2(A)	
	37 Hexachlorocyclopentadiene	237	9.186	9.186	(1.000)	417905	15.0000	17.5(A)	
$	38 2,4-Dibromophenol	252	9.345	9.345	(1.000)	440238	15.0000	17.6	
	39 2,4,6-Trichlorophenol	196	9.356	9.356	(1.000)	489612	15.0000	14.9	
	40 2,4,5-Trichlorophenol	196	9.419	9.419	(1.000)	442336	15.0000	14.6	
	41 1,1'-Biphenyl	154	9.578	9.578	(1.000)	2326443	15.0000	14.6	
	42 2-Chloronaphthalene	164	9.578	9.578	(1.000)	632503	15.0000	15.1(A)	
	43 2-Nitroaniline	65	9.728	9.728	(1.000)	378210	15.0000	14.9	
	44 Dimethyl Phthalate	163	9.975	9.975	(1.000)	1671306	15.0000	15.5(A)	
	45 2,6-Dinitrotoluene	165	10.039	10.039	(1.000)	419062	15.0000	15.1(A)	
	46 Acenaphthylene	152	10.082	10.082	(1.000)	2855097	15.0000	14.4	
	47 3-Nitroaniline	138	10.243	10.243	(1.000)	180394	15.0000	14.5	
*	48 Acenaphthene-D10	164	10.253	10.253	(1.000)	71113	0.80000	(aM)	M6
	49 Acenaphthene	153	10.286	10.286	(1.000)	1723050	15.0000	14.6	
	50 2,4-Dinitrophenol	184	10.371	10.371	(1.000)	79571	15.0000	14.8	
	51 Dibenzofuran	168	10.500	10.500	(1.000)	2285738	15.0000	14.4	
	52 4-Nitrophenol	109	10.489	10.489	(1.000)	127205	15.0000	14.8(Q)	
	53 2,4-Dinitrotoluene	165	10.522	10.522	(1.000)	476688	15.0000	15.1(A)	
	54 2,3,4,6-Tetrachlorophenol	232	10.672	10.672	(1.000)	323661	15.0000	14.8	
	55 Diethylphthalate	149	10.833	10.833	(1.000)	1597681	15.0000	15.7(A)	
$	56 Fluorene-D10	174	10.886	10.886	(1.000)	1368584	15.0000	14.7(A)	
	57 Fluorene	166	10.918	10.918	(1.000)	1711783	15.0000	14.6	
	58 4-Chlorophenyl-phenylether	204	10.940	10.940	(1.000)	749428	15.0000	14.4	
	59 4-Nitroaniline	138	10.983	10.983	(1.071)	244967	15.0000	15.0(M)	M9
	60 4,6-Dinitro-2-Methylphenol	198	11.015	11.015	(0.914)	127092	15.0000	14.7	
	61 N-Nitrosodiphenylamine	169	11.090	11.090	(0.920)	1291702	15.0000	15.2(A)	
	62 4-Bromophenyl-phenylether	248	11.528	11.528	(0.957)	395013	15.0000	15.4(A)	
	63 Hexachlorobenzene	284	11.582	11.582	(0.961)	413205	15.0000	14.7	
	64 Atrazine	200	11.774	11.774	(0.977)	283449	15.0000	15.1(A)	
	65 Pentachlorophenol	266	11.848	11.848	(0.983)	124134	15.0000	20.5(A)	
*	66 Phenanthrene-D10	188	12.051	12.051	(1.000)	86104	0.80000	(a)	
	67 Phenanthrene	178	12.073	12.073	(1.002)	1982899	15.0000	15.2(A)	
	68 Anthracene	178	12.137	12.137	(1.007)	1969246	15.0000	15.0(A)	
	69 Carbazole	167	12.361	12.361	(1.026)	1148837	15.0000	12.5	
	70 Di-n-butylphthalate	149	12.831	12.831	(1.065)	2297023	15.0000	15.3(A)	
$	71 Fluoranthene-d10	212	13.501	13.501	(1.120)	1117567	15.0000	16.0(A)	
	72 Fluoranthene	202	13.522	13.522	(1.122)	1581736	15.0000	15.6(A)	
$	73 Pyrene-D10	212	13.776	13.776	(0.890)	1275638	15.0000	13.1(A)	
	74 Pyrene	202	13.797	13.797	(0.891)	1671911	15.0000	13.0	
	75 Butylbenzylphthalate	149	14.703	14.703	(0.950)	815208	15.0000	15.2(A)	

Data File: \\target_server\gg\chem\gcms-n.i\N120723.b\N0385.D
Report Date: 08-Dec-2023 07:21

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
	76 Benzo(a)anthracene	228	15.467	15.467	(0.999)	1143219	15.0000	15.9(A)	
	77 3,3'-Dichlorobenzidine	252	15.488	15.488	(1.001)	320123	15.0000	17.2(A)	
*	78 Chrysene-D12	240	15.478	15.478	(1.000)	41639	0.80000	(a)	
	79 Chrysene	228	15.528	15.528	(1.003)	1213113	15.0000	14.0	
	80 bis(2-Ethylhexyl)phthalate	149	15.671	15.671	(1.013)	1061127	15.0000	15.3(A)	
	81 Di-n-octylphthalate	149	16.965	16.965	(1.096)	1581730	15.0000	14.9	
	82 Benzo(b)fluoranthene	252	17.521	17.521	(0.956)	1003315	15.0000	16.0(A)	
	83 Benzo(k)fluoranthene	252	17.572	17.572	(0.959)	1225972	15.0000	15.2(AH)	
	84 Benzo(a)pyrene	252	18.211	18.211	(0.994)	985174	15.0000	16.1(A)	
*	85 Perylene-D12	264	18.324	18.324	(1.000)	34308	0.80000	(a)	
	86 Indeno(1,2,3-cd)pyrene	276	20.342	20.342	(1.110)	704094	15.0000	15.9(A)	
	87 Dibenzo(a,h)anthracene	278	20.414	20.414	(1.114)	724610	15.0000	15.8(A)	
	88 Benzo(g,h,i)perylene	276	20.878	20.878	(1.139)	710516	15.0000	14.2	
M	89 Total PAHs	100				28883738	270.000	(a)	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
A - Target compound detected but, quantitated amount
exceeded maximum amount.
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.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Instrument: gcms-n,i
Operator: EP
Column diameter: 0.25
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Y (x10^6)
Min
-1,4-Dioxane-d8+
-N-Nitrosodimethylamine+
-Benzaldehyde
-1,3-Dichlorobenzene
-1,2-Dichlorobenzene
-2,2'-Oxybis(1-chloropropa+
-Acetophenone+
-Hexachloroethane
-Nitrobenzene
-2-Nitrophenol
-Isophorone
-2,4-Dimethylphenol
-Naphthalene-D8+
-4-Chloroaniline
-Hexachlorobutadiene
-Caprolactam
-4-Chloro-3-Methylphenol
-2-Methylnaphthalene-D10
-1,2,4,5-Tetrachlorobenzen+
2-Methylnaphthalene
1-Methylnaphthalene
-2,4,5-Trichlorophenol
-2-Nitroaniline
1,1'-Biphenyl+
-Dimethyl Phthalate
-Acenaphthylene
-3-Nitroaniline+
-Acenaphthene
-2,4-Dinitrophenol
-Dibenzofuran+
-2,3,4,6-Tetrachlorophenol
-Diethylphthalate
-Fluorene-D10+
-N-Nitrosodiphenylamine
-Hexachlorobenzene
-Atrazine
-Pentachlorophenol
-Phenanthrene-D10+
-Carbazole
-Di-n-butylphthalate
-Fluoranthene-d10+
-Pyrene-D10+
-Butylbenzylphthalate
-Benzo(a)anthracene+
-bis(2-Ethylhexyl)phthalat
-Di-n-octylphthalate
-Benzo(b)fluoranthene
-Benzo(a)pyrene
-Perylene-D12
-Benzo(g,h,i)perylene

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Report Date: 08-Dec-2023 07:19

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Lab Smp Id: WG346503-8
Inj Date : 07-DEC-2023 15:12
Operator : EP   Inst ID: gcms-n.i
Smp Info : WG346503-8
Misc Info : WG346503,WG346503,WG346503-4
Comment   :
Method   : \\target_server\gg\chem\gcms-n.i\N120723.b\NSPSIM95.m
Meth Date : 07-Dec-2023 15:12 epelletier Quant Type: ISTD
Cal Date : 07-DEC-2023 14:42   Cal File: N0385.D
Als bottle: 8   QC Sample: INDSOURCE
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: all.sub
Target Version: 4.12
Processing Host: INSPIRON1

Concentration Formula: Amt * DF * Uf*(Vt/Vo*Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.000	Sample Volume (L)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

EP
7:24 am, Dec 08, 2023

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/L)	REVIEW CODE
2	1,4-Dioxane	88	2.773	2.784	(0.420)	201574	4.96336	4.96	
3	N-Nitrosodimethylamine	74	3.216	3.217	(0.487)	288885	5.76600	5.76	
4	Pyridine	79	3.248	3.238	(0.492)	427986	4.45418	4.45(M)	M6
5	Benzaldehyde	77	6.219	6.084	(0.942)	11115	0.43040	0.430(QR)	
6	Phenol	94	6.240	6.240	(0.945)	591252	5.48363	5.48	
7	Bis(2-Chloroethyl)ether	93	6.323	6.323	(0.957)	446480	4.73198	4.73	
8	2-Chlorophenol	128	6.364	6.365	(0.964)	467537	5.12739	5.13	
9	1,3-Dichlorobenzene	146	6.531	6.531	(0.989)	541326	4.92138	4.92	
* 10	1,4-Dichlorobenzene-D4	152	6.604	6.604	(1.000)	55194	0.80000	(aQ)	
11	1,4-Dichlorobenzene	146	6.625	6.625	(1.003)	563690	5.04882	5.05	
12	1,2-Dichlorobenzene	146	6.801	6.802	(1.030)	529978	4.90110	4.90	
13	2,2'-Oxybis(1-chloropropane)	45	6.968	6.958	(1.055)	220584	3.73025	3.73(R)	
14	2-Methylphenol	108	6.958	6.958	(1.054)	406671	4.80459	4.80	
15	Acetophenone	105	7.103	7.104	(0.874)	632510	5.03469	5.03	
16	N-Nitroso-di-n-propylamine	70	7.124	7.125	(1.079)	273201	4.72252	4.72	
17	3&4-Methylphenol	108	7.145	7.145	(1.082)	426984	4.87482	4.87	
18	Hexachloroethane	117	7.197	7.197	(1.090)	215901	4.96126	4.96	
19	Nitrobenzene	77	7.290	7.291	(0.897)	420499	5.08423	5.08	
20	Isophorone	82	7.596	7.597	(0.935)	706822	4.23723	4.24	
21	2-Nitrophenol	139	7.686	7.675	(0.946)	184468	5.44133	5.44	

Data File: \\target_server\gg\chem\gcms-n.i\N120723.b\N0386.D
Report Date: 08-Dec-2023 07:19

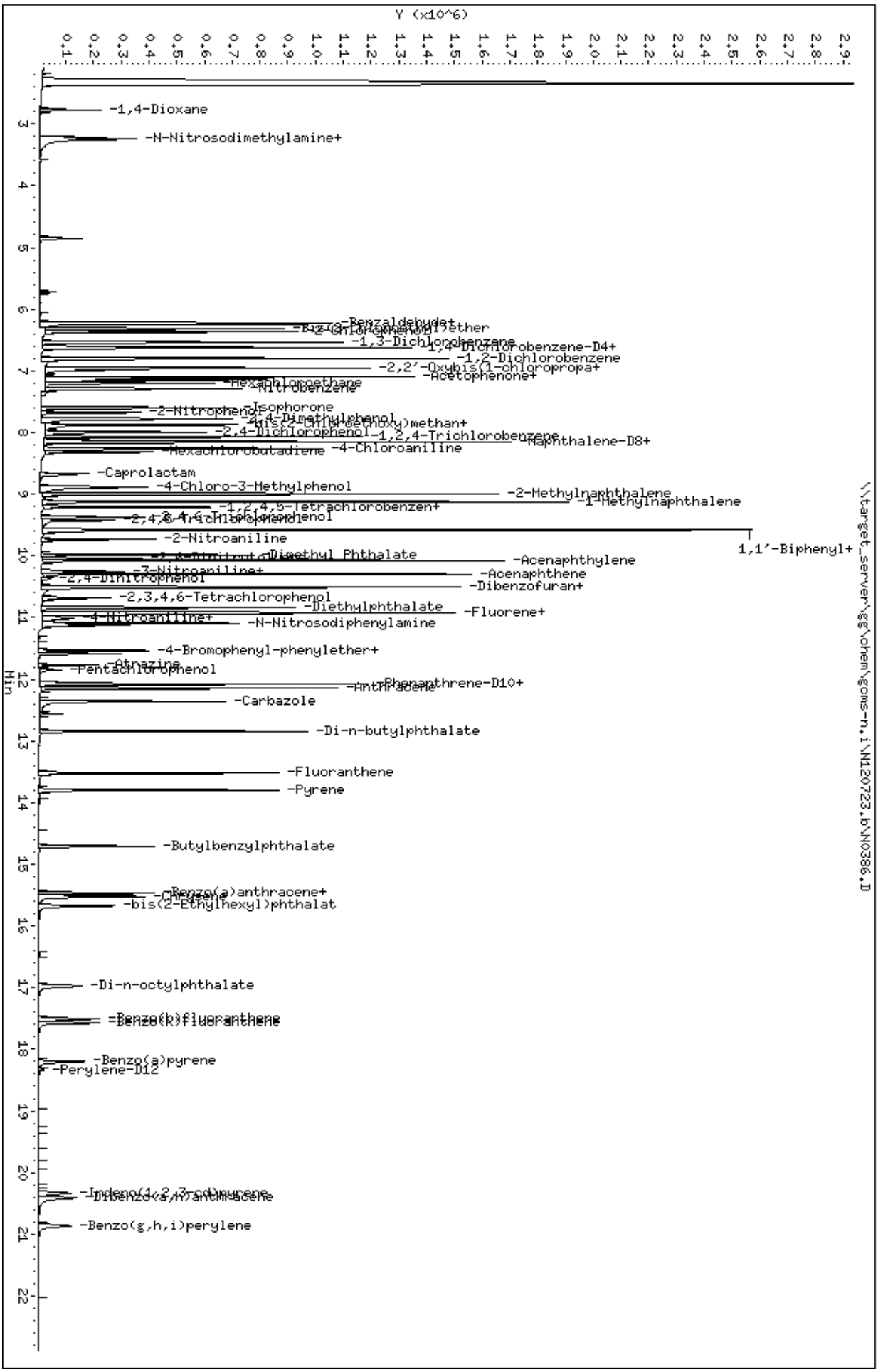
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	CONCENTRATIONS FINAL (ug/L)	REVIEW CODE
	22 2,4-Dimethylphenol	107	7.776	7.777	(0.957)	387346	5.54296	5.54	
	23 bis(2-Chloroethoxy)methane	93	7.877	7.878	(0.970)	487773	4.70314	4.70	
	24 Benzoic Acid	105	7.922	7.957	(0.975)	64619	3.62098	3.62	
	25 2,4-Dichlorophenol	162	7.990	7.979	(0.983)	355716	4.54584	4.54	
	26 1,2,4-Trichlorobenzene	180	8.069	8.069	(0.993)	397278	4.76008	4.76	
*	27 Naphthalene-D8	136	8.125	8.125	(1.000)	204573	0.80000	(a)	
	28 Naphthalene	128	8.147	8.148	(1.003)	1369796	4.89586	4.90	
	29 4-Chloroaniline	127	8.260	8.282	(1.017)	430527	8.30276	8.30(R)	
	30 Hexachlorobutadiene	225	8.316	8.317	(1.024)	171967	4.76941	4.77	
	31 Caprolactam	113	8.676	8.699	(1.068)	110541	5.51118	5.51	
	32 4-Chloro-3-Methylphenol	107	8.879	8.869	(1.093)	309626	4.89364	4.89	
	34 2-Methylnaphthalene	142	9.006	8.996	(1.108)	920774	4.97909	4.98	
	35 1-Methylnaphthalene	142	9.123	9.113	(1.123)	843359	5.00328	5.00	
	36 1,2,4,5-Tetrachlorobenzene	216	9.218	9.208	(0.899)	329346	4.66810	4.67	
	37 Hexachlorocyclopentadiene	237	9.197	9.187	(0.897)	168050	5.67208	5.67	
	39 2,4,6-Trichlorophenol	196	9.366	9.356	(0.913)	168853	4.91515	4.92	
	40 2,4,5-Trichlorophenol	196	9.419	9.420	(0.919)	186930	4.97772	4.98	
	41 1,1'-Biphenyl	154	9.578	9.579	(0.934)	969478	4.91258	4.91	
	42 2-Chloronaphthalene	164	9.589	9.579	(0.935)	252569	4.85495	4.85	
	43 2-Nitroaniline	65	9.728	9.728	(0.949)	153490	4.85570	4.86	
	44 Dimethyl Phthalate	163	9.985	9.975	(0.974)	678153	5.04760	5.05	
	45 2,6-Dinitrotoluene	165	10.039	10.039	(0.979)	148562	4.30324	4.30	
	46 Acenaphthylene	152	10.082	10.082	(0.983)	1087945	4.41948	4.42	
	47 3-Nitroaniline	138	10.243	10.243	(0.999)	92739	5.98118	5.98	
*	48 Acenaphthene-D10	164	10.253	10.254	(1.000)	88427	0.80000	(a)	
	49 Acenaphthene	153	10.296	10.286	(1.004)	691864	4.73254	4.73	
	50 2,4-Dinitrophenol	184	10.371	10.372	(1.012)	17488	4.11982	4.12	
	51 Dibenzofuran	168	10.511	10.501	(1.025)	986473	5.01790	5.02	
	52 4-Nitrophenol	109	10.500	10.490	(1.024)	39243	4.60157	4.60(Q)	
	53 2,4-Dinitrotoluene	165	10.522	10.522	(1.026)	168077	4.28859	4.29	
	54 2,3,4,6-Tetrachlorophenol	232	10.682	10.672	(1.042)	93437	4.14506	4.14	
	55 Diethylphthalate	149	10.843	10.833	(1.058)	641133	5.07499	5.07	
	57 Fluorene	166	10.918	10.919	(1.065)	701561	4.80245	4.80	
	58 4-Chlorophenyl-phenylether	204	10.950	10.940	(1.068)	311301	4.81516	4.82	
	59 4-Nitroaniline	138	11.004	10.983	(1.073)	67317	4.33622	4.34	
	60 4,6-Dinitro-2-Methylphenol	198	11.026	11.015	(0.915)	35790	4.57623	4.58	
	61 N-Nitrosodiphenylamine	169	11.101	11.090	(0.921)	412918	3.71756	3.72(R)	
	62 4-Bromophenyl-phenylether	248	11.539	11.529	(0.957)	163083	4.87367	4.87	
	63 Hexachlorobenzene	284	11.592	11.582	(0.962)	167286	4.56527	4.56	
	64 Atrazine	200	11.774	11.774	(0.977)	117888	4.81521	4.82	
	65 Pentachlorophenol	266	11.848	11.849	(0.983)	43266	5.46890	5.47	
*	66 Phenanthrene-D10	188	12.051	12.052	(1.000)	112279	0.80000	(a)	
	67 Phenanthrene	178	12.083	12.073	(1.003)	822423	4.84417	4.84	
	68 Anthracene	178	12.147	12.137	(1.008)	799993	4.69144	4.69	
	69 Carbazole	167	12.361	12.361	(1.026)	719996	6.02011	6.02(R)	
	70 Di-n-butylphthalate	149	12.841	12.831	(1.066)	944140	4.82307	4.82	
	72 Fluoranthene	202	13.522	13.522	(1.122)	601679	4.56574	4.56	
	74 Pyrene	202	13.797	13.797	(0.891)	647531	4.86739	4.87	
	75 Butylbenzylphthalate	149	14.703	14.704	(0.949)	256091	4.62698	4.63	
	76 Benzo(a)anthracene	228	15.467	15.468	(0.999)	347562	4.66542	4.66	
	77 3,3'-Dichlorobenzidine	252	15.488	15.488	(1.000)	58206	3.02248	3.02(R)	
*	78 Chrysene-D12	240	15.488	15.478	(1.000)	43035	0.80000	(a)	
	79 Chrysene	228	15.528	15.529	(1.003)	405829	4.54541	4.54	
	80 bis(2-Ethylhexyl)phthalate	149	15.671	15.672	(1.012)	309560	4.33110	4.33	

Data File: \\target_server\gg\chem\gcms-n.i\N120723.b\N0386.D
Report Date: 08-Dec-2023 07:19

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	CONCENTRATIONS FINAL (ug/L)	REVIEW CODE
	81 Di-n-octylphthalate	149	16.965	16.965	(1.095)	378598	4.41552	4.42	
	82 Benzo(b)fluoranthene	252	17.510	17.521	(0.955)	274156	5.00691	5.01	
	83 Benzo(k)fluoranthene	252	17.572	17.573	(0.958)	330580	4.66868	4.67(H)	
	84 Benzo(a)pyrene	252	18.211	18.211	(0.993)	245431	4.58176	4.58	
*	85 Perylene-D12	264	18.334	18.324	(1.000)	30020	0.80000	(a)	
	86 Indeno(1,2,3-cd)pyrene	276	20.332	20.343	(1.109)	179229	4.61743	4.62	
	87 Dibenzo(a,h)anthracene	278	20.414	20.415	(1.113)	193877	4.84498	4.84	
	88 Benzo(g,h,i)perylene	276	20.868	20.878	(1.138)	211549	4.83450	4.83	
M	89 Total PAHs	100				10675138	85.5665	85.6	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.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Client ID:
Sample Info: WG346503-8
Volume Injected (uL): 1.0
Column phase: Rxi-5ViOms
Instrument: gcms-n,i
Operator: EP
Column diameter: 0.25
\\target_server\gg\chem\gcms-n,i\N120723,b\N0386.D
Y (x10^6)
Min
-1,4-Dioxane
-N-Nitrosodimethylamine+
-Benzaldehyde
-1,3-Dichlorobenzene
-1,4-Dichlorobenzene-D4+
-1,2-Dichlorobenzene
-2,2'-Oxybis(1-chloropropa+
-Acetophenone+
-Hexachloroethane
-Nitrobenzene
-Isophorone
-2-Nitrophenol
-2,4-Dimethylphenol
-2,4-Dichlorophenol
-1,2,4-Trichlorobenzene
-Naphthalene-D8+
-Hexachlorobutadiene
-4-Chloroaniline
-Caprolactam
-4-Chloro-3-Methylphenol
-2-Methylnaphthalene
-1-Methylnaphthalene
-2,4,6-Trichlorophenol
-2-Nitroaniline
1,1'-Biphenyl+
-Dimethyl Phthalate
-Acenaphthylene
-3-Nitroaniline+
-Acenaphthene
-2,4-Dinitrophenol
-Dibenzofuran+
-2,3,4,6-Tetrachlorophenol
-Diethylphthalate
-Fluorene+
-4-Nitroaniline+
-N-Nitrosodiphenylamine
-4-Bromophenyl-phenylether+
-Atrazine
-Pentachlorophenol
-Phenanthrene-D10+
-Anthracene
-Carbazole
-Di-n-butylphthalate
-Fluoranthene
-Pyrene
-Butylbenzylphthalate
-Benzo(a)anthracene+
-Chrysene
-bis(2-Ethylhexyl)phthalat
-Di-n-octylphthalate
-Benzo(b)fluoranthene
-Benzo(k)fluoranthene
-Benzo(a)pyrene
-Perylene-D12
-Indeno(1,2,3-cd)pyrene
-Dibenz(a,h)anthracene
-Benzo(g,h,i)perylene

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Instrument: gcms-n.i
Client Sample ID:

Compound: N-Nitrosodimethylamine
CAS Number: 62-75-9

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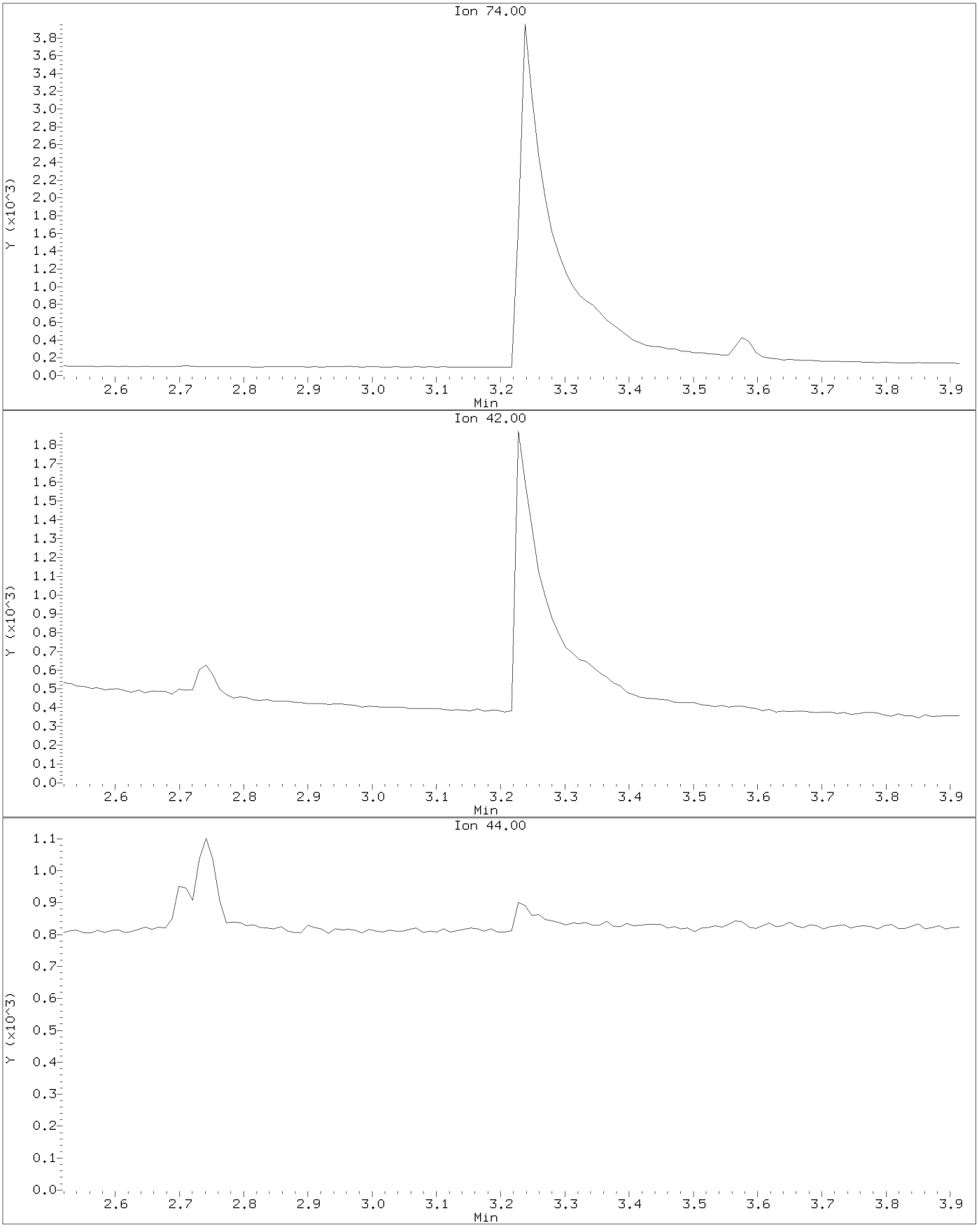

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Compound: N-Nitrosodimethylamine
CAS Number: 62-75-9

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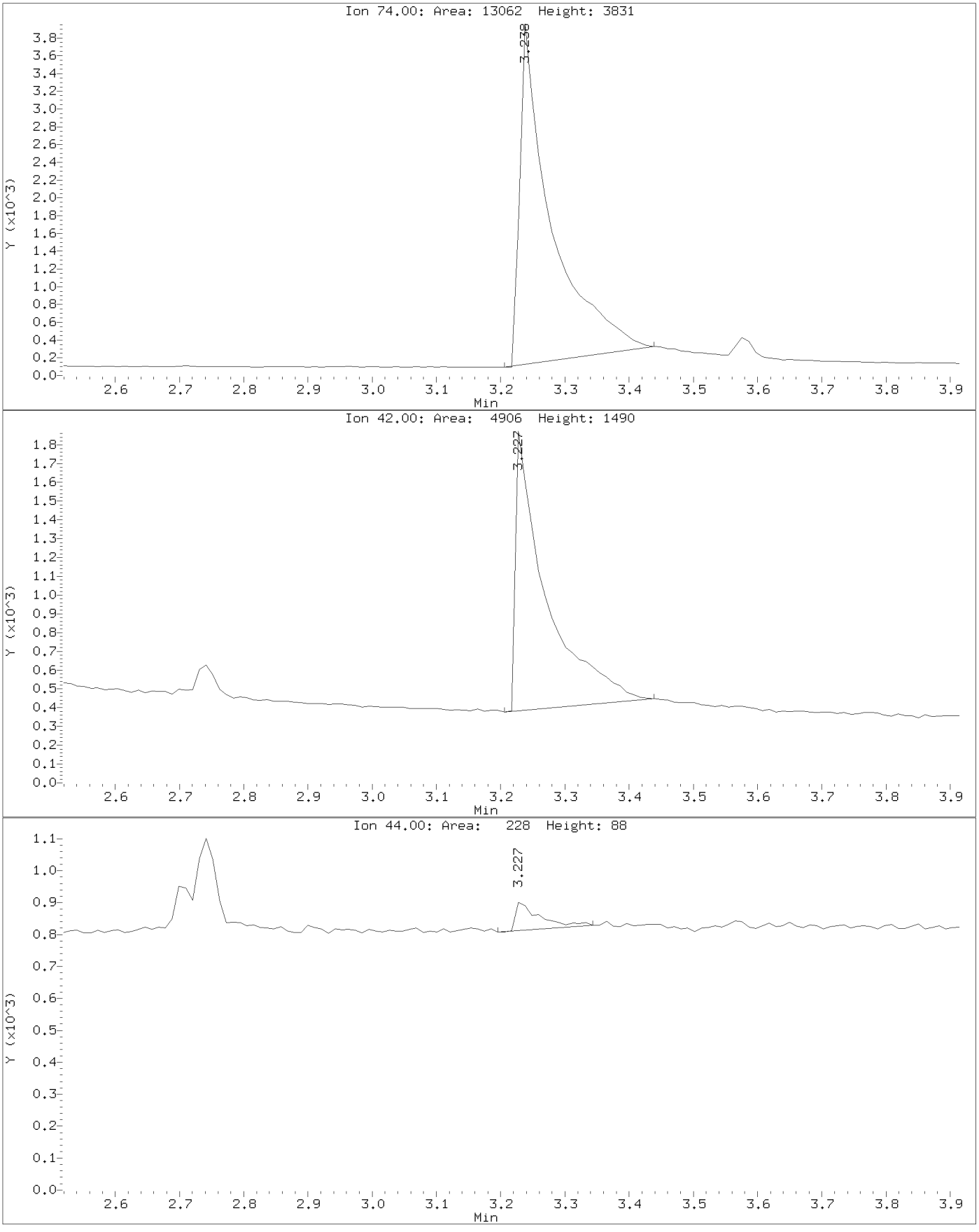

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Instrument: gcms-n.i
Client Sample ID:

Compound: Pyridine
CAS Number: 110-86-1

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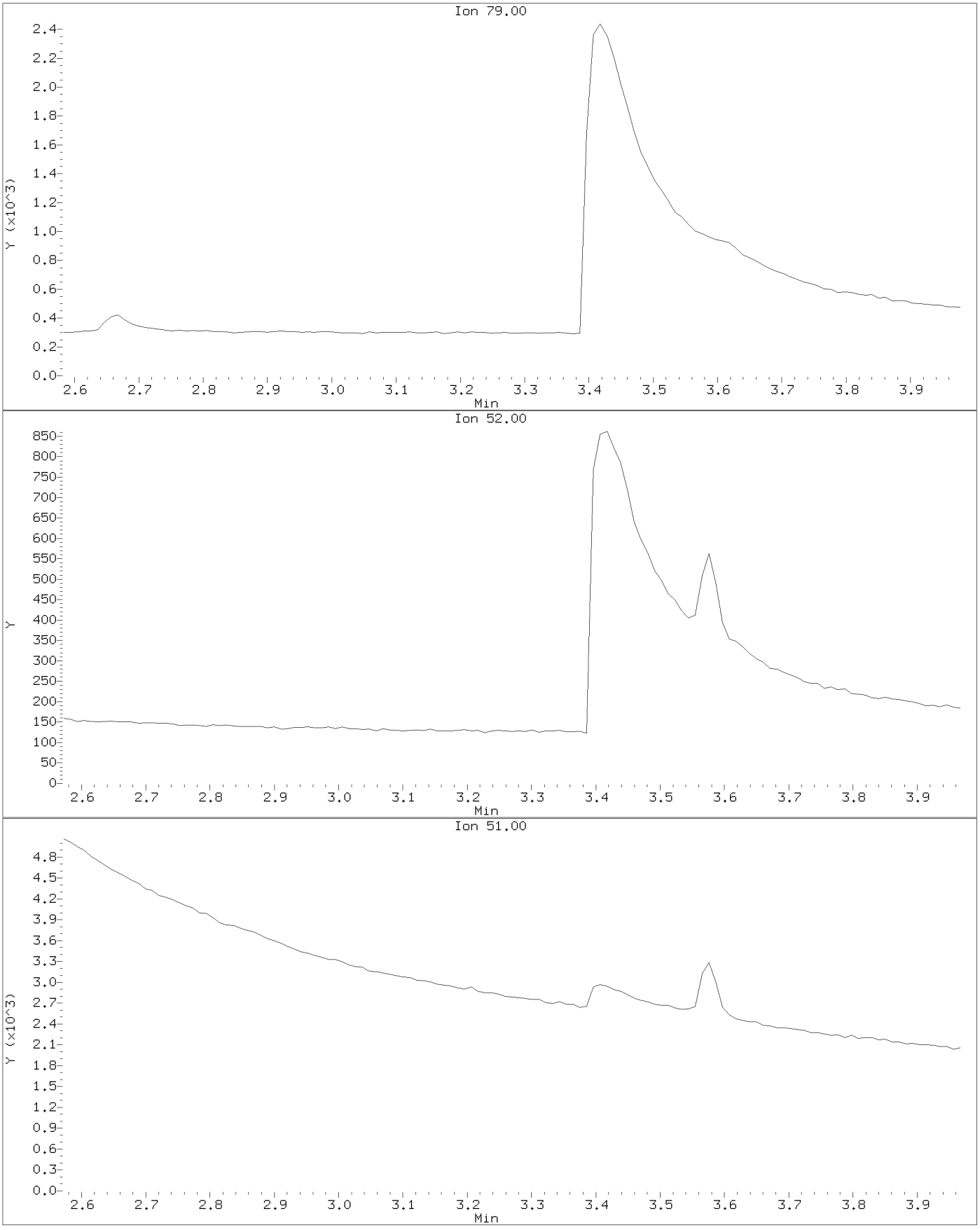

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Client Sample ID:

Compound: Pyridine
CAS Number: 110-86-1

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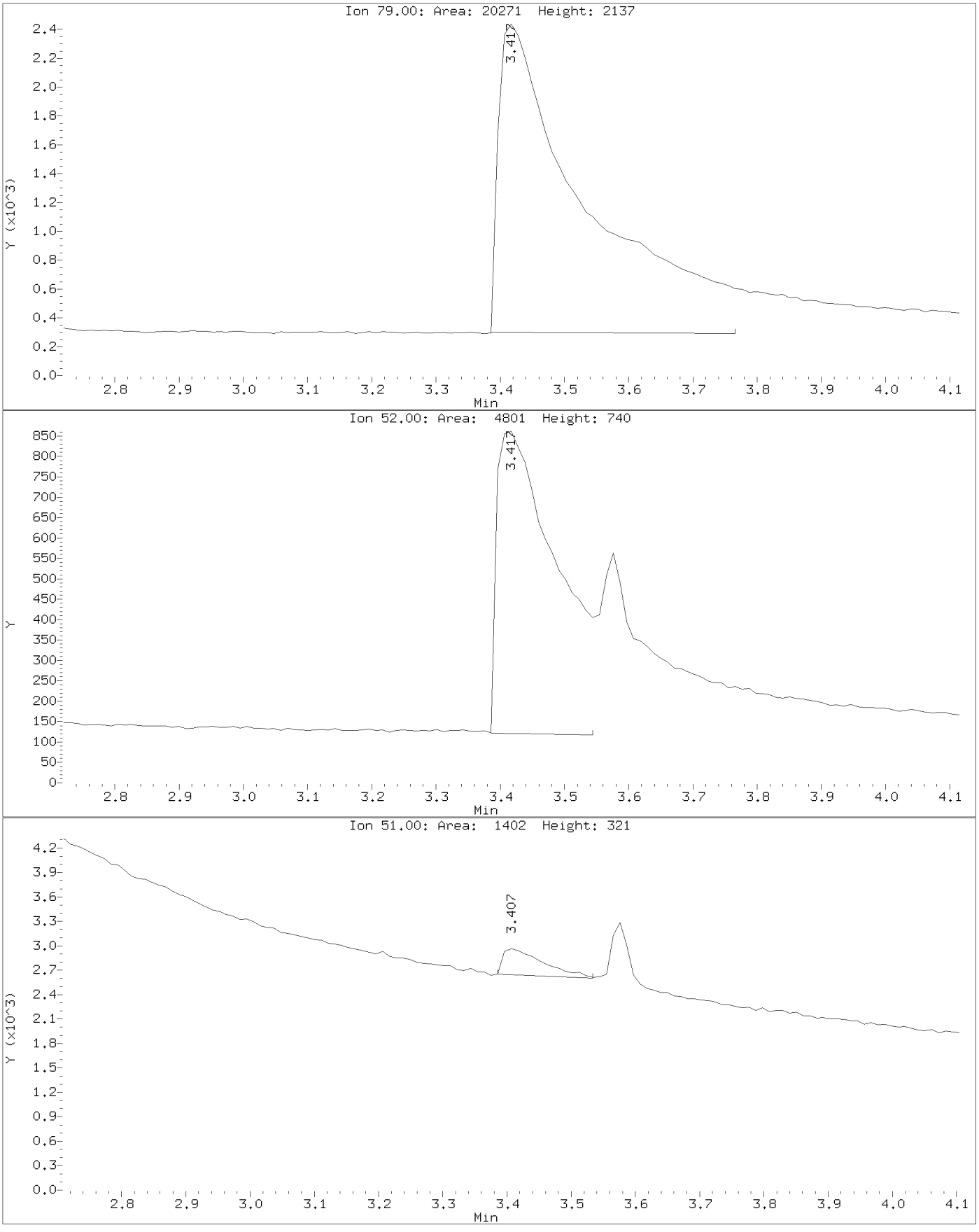

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Injection Date: 07-DEC-2023 13:11
Instrument: gcms-n.i
Client Sample ID:

Compound: N-Nitrosodimethylamine
CAS Number: 62-75-9

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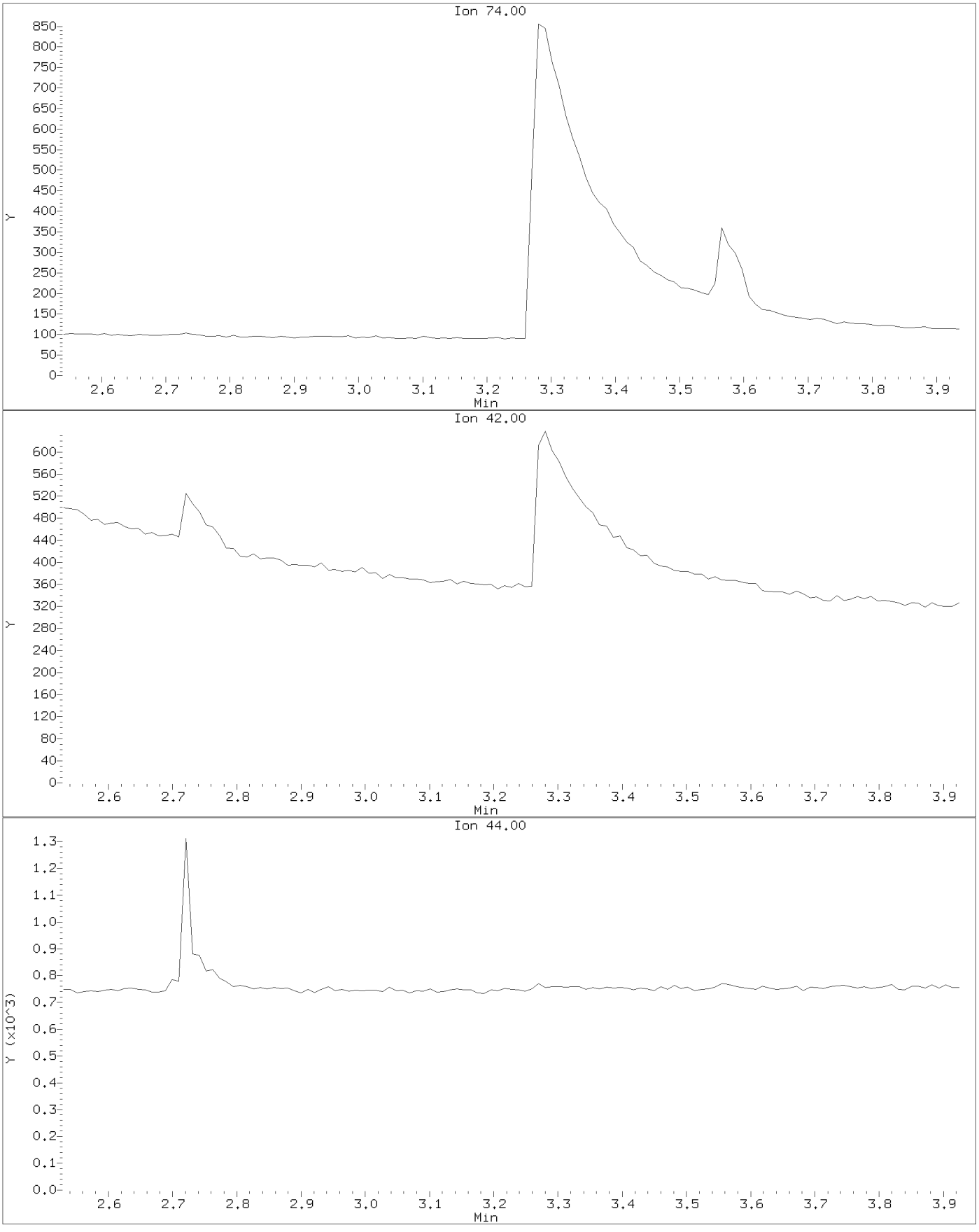

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Client Sample ID:

Compound: N-Nitrosodimethylamine
CAS Number: 62-75-9

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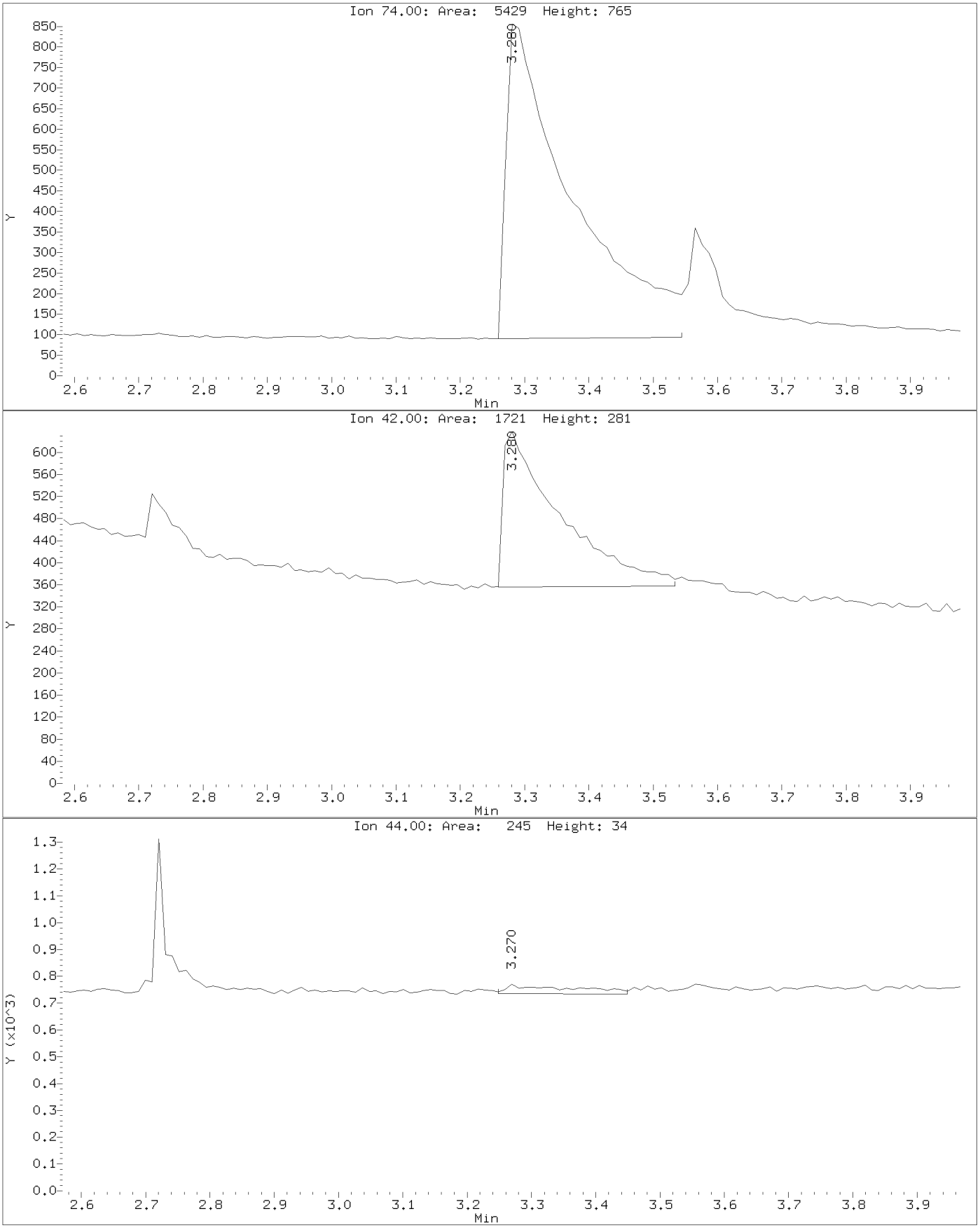

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Instrument: gcms-n.i
Client Sample ID:

Compound: Pyridine
CAS Number: 110-86-1

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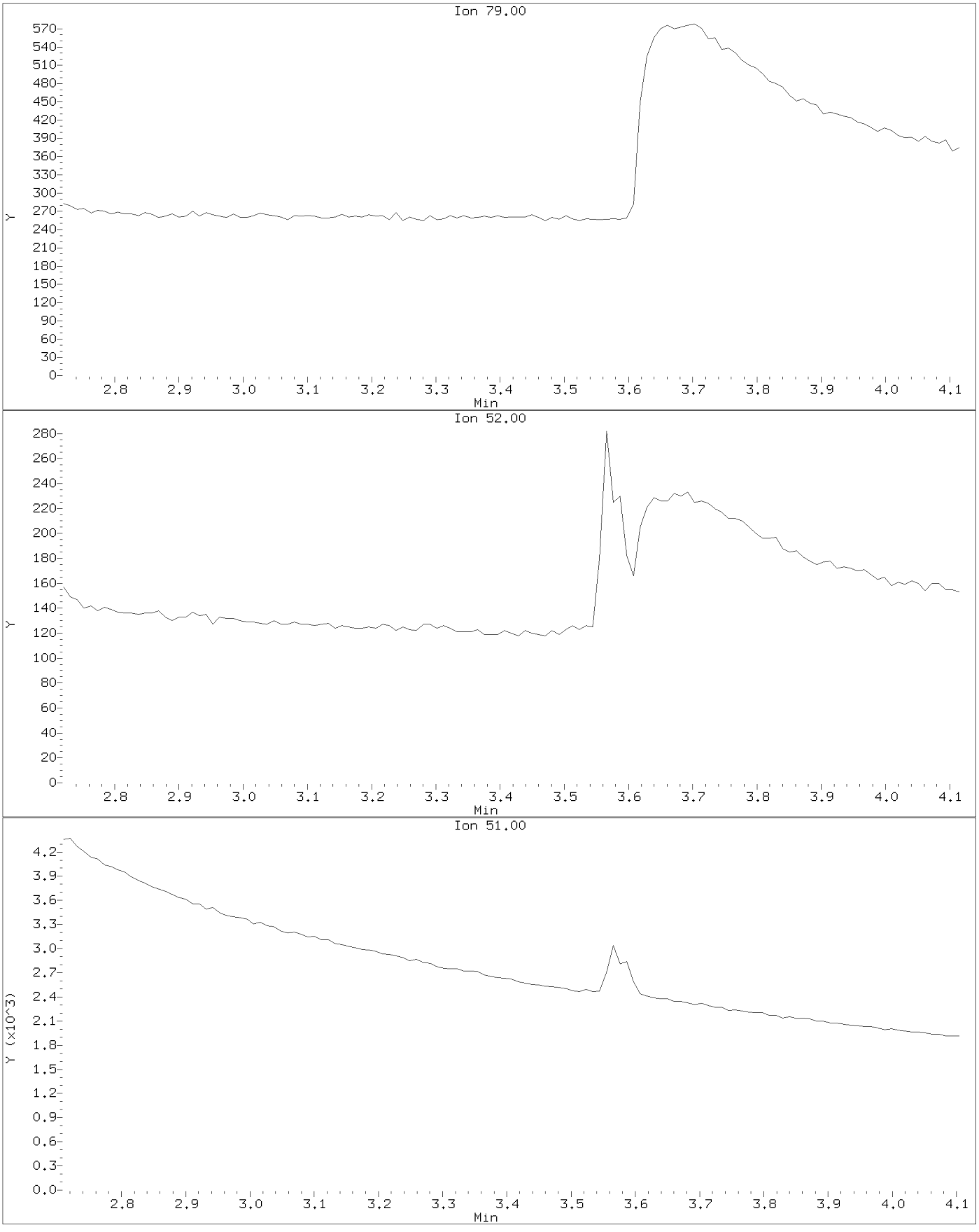

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Client Sample ID:

Compound: Pyridine
CAS Number: 110-86-1

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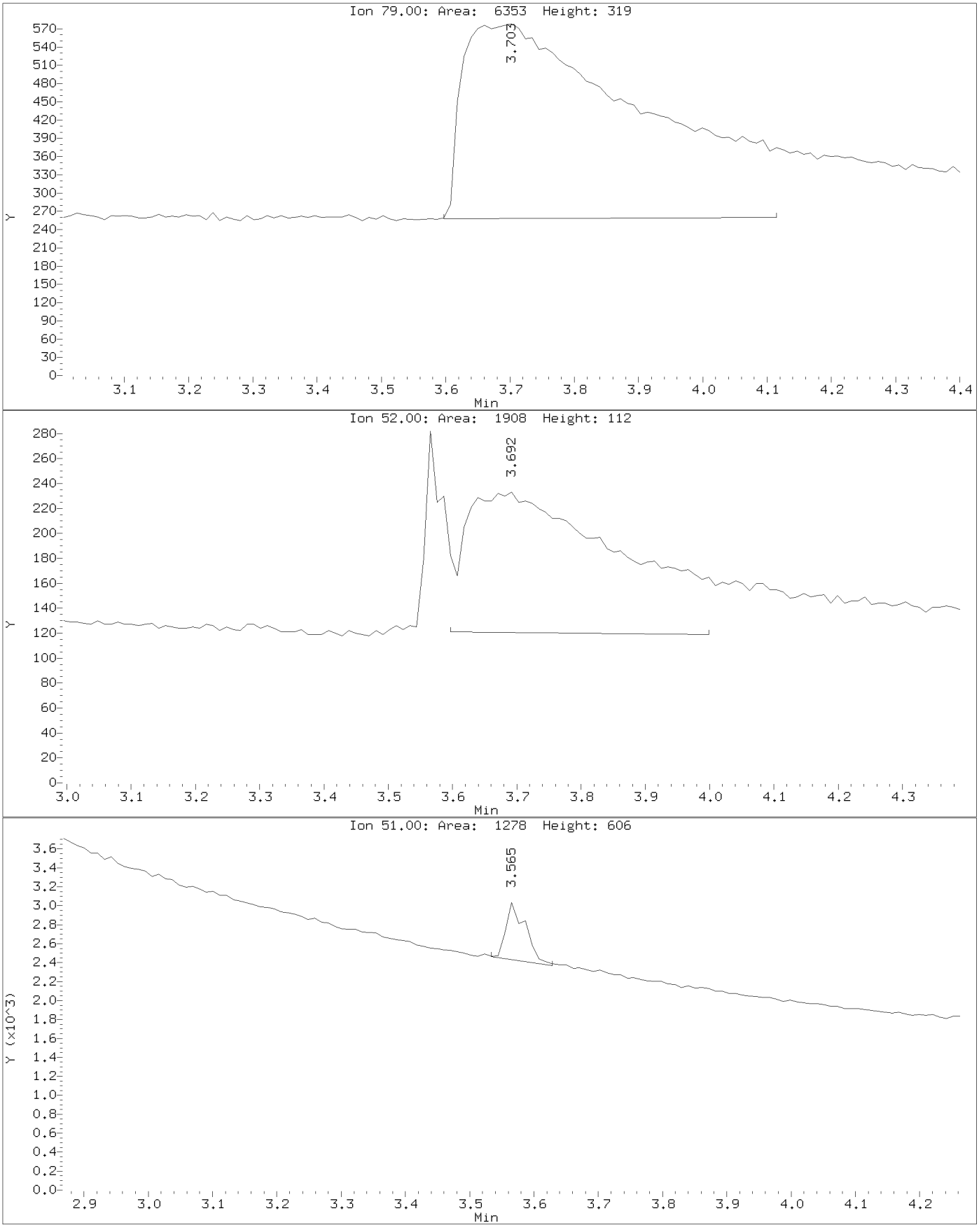

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Injection Date: 07-DEC-2023 13:11
Instrument: gcms-n.i
Client Sample ID:

Compound: 4-Nitrophenol
CAS Number: 100-02-7

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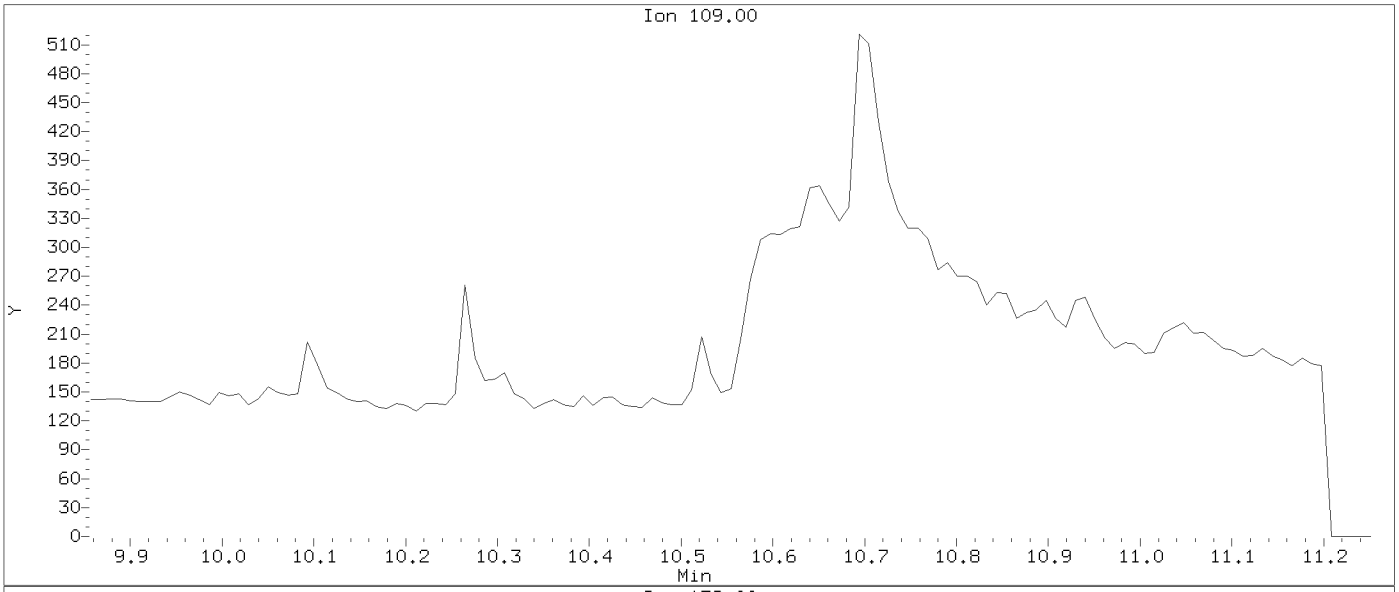

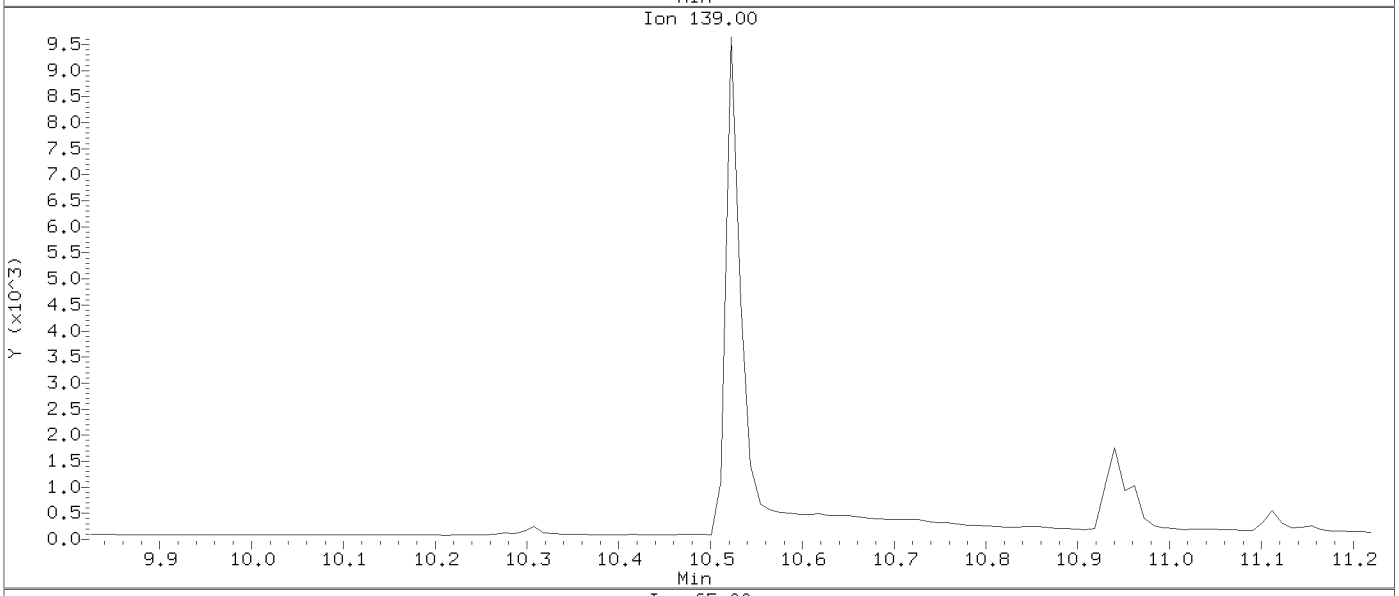

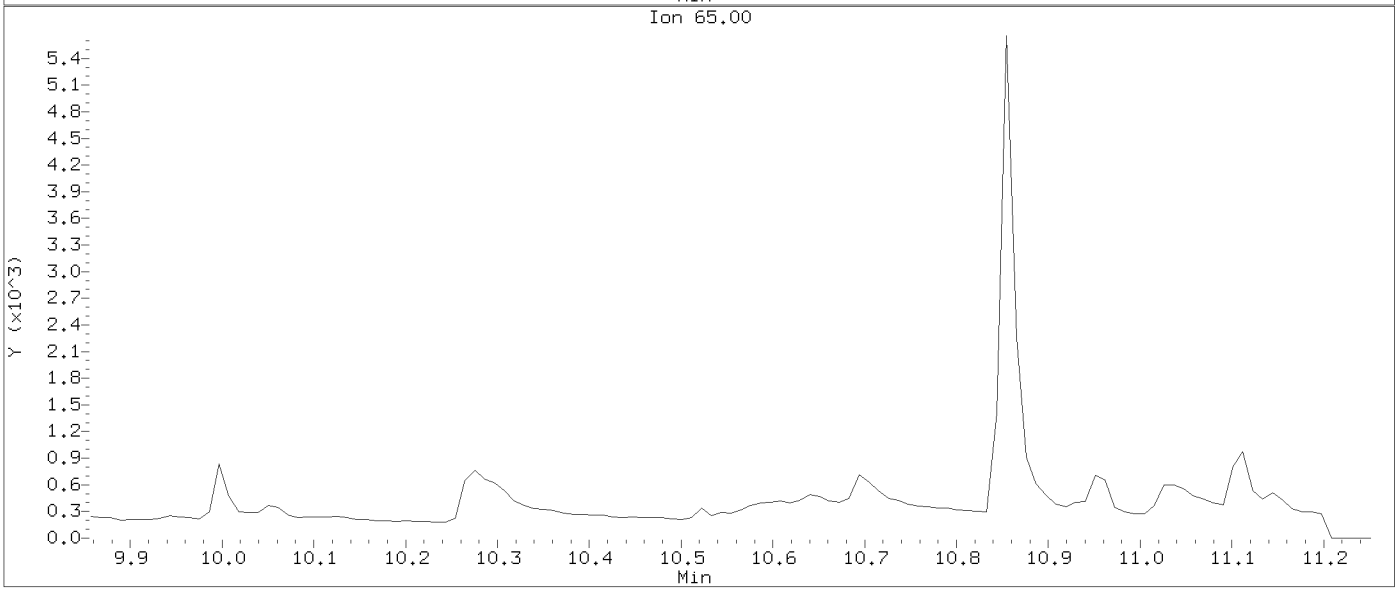

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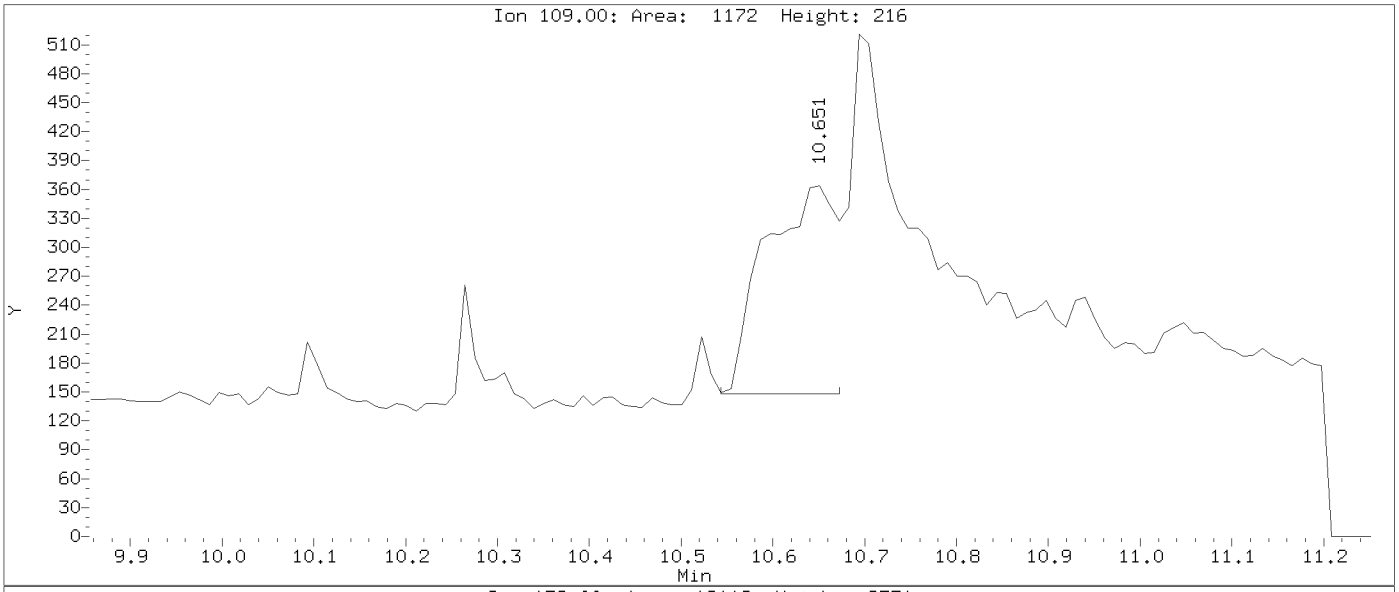
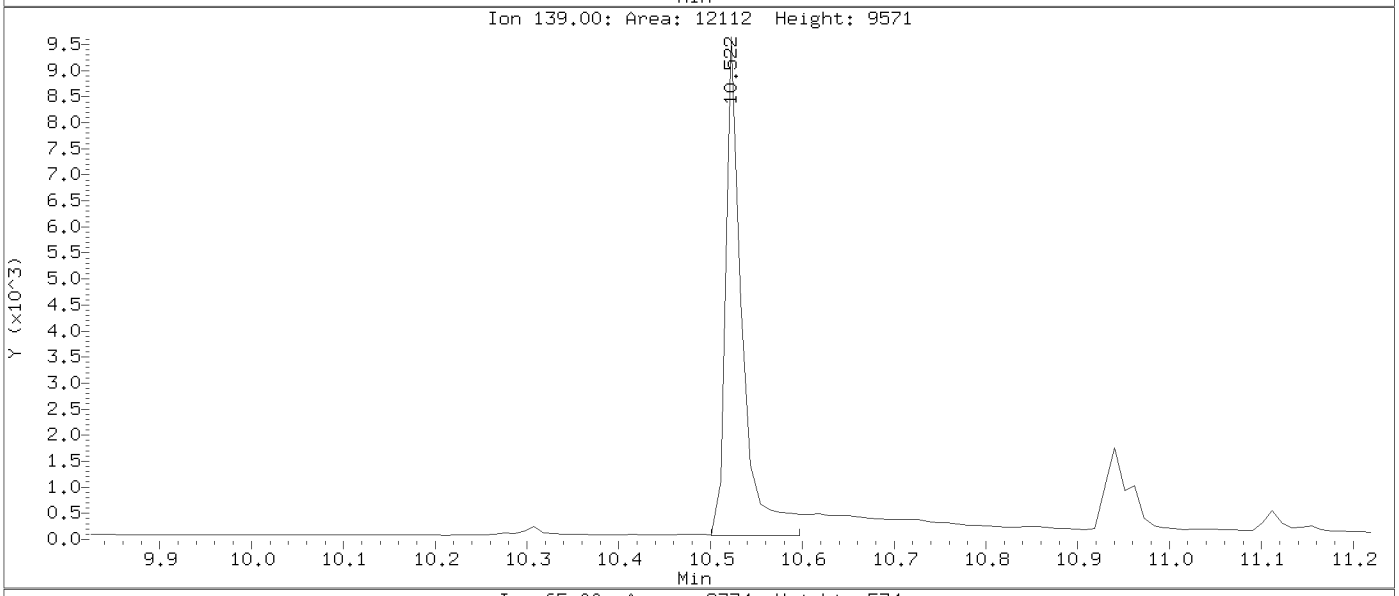
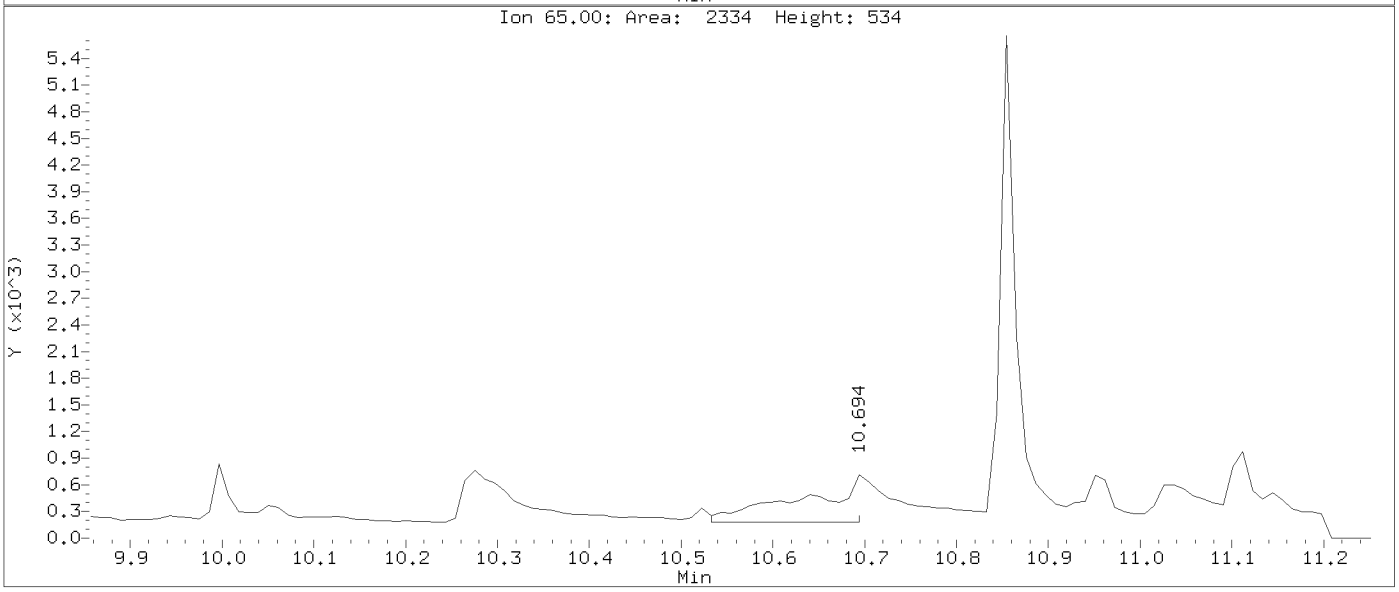
Injection Date: 07-DEC-2023 13:11
Instrument: gcms-n.i
Client Sample ID:

Compound: 4-Nitrophenol
CAS Number: 100-02-7

AFTER MANUAL INTEGRATION







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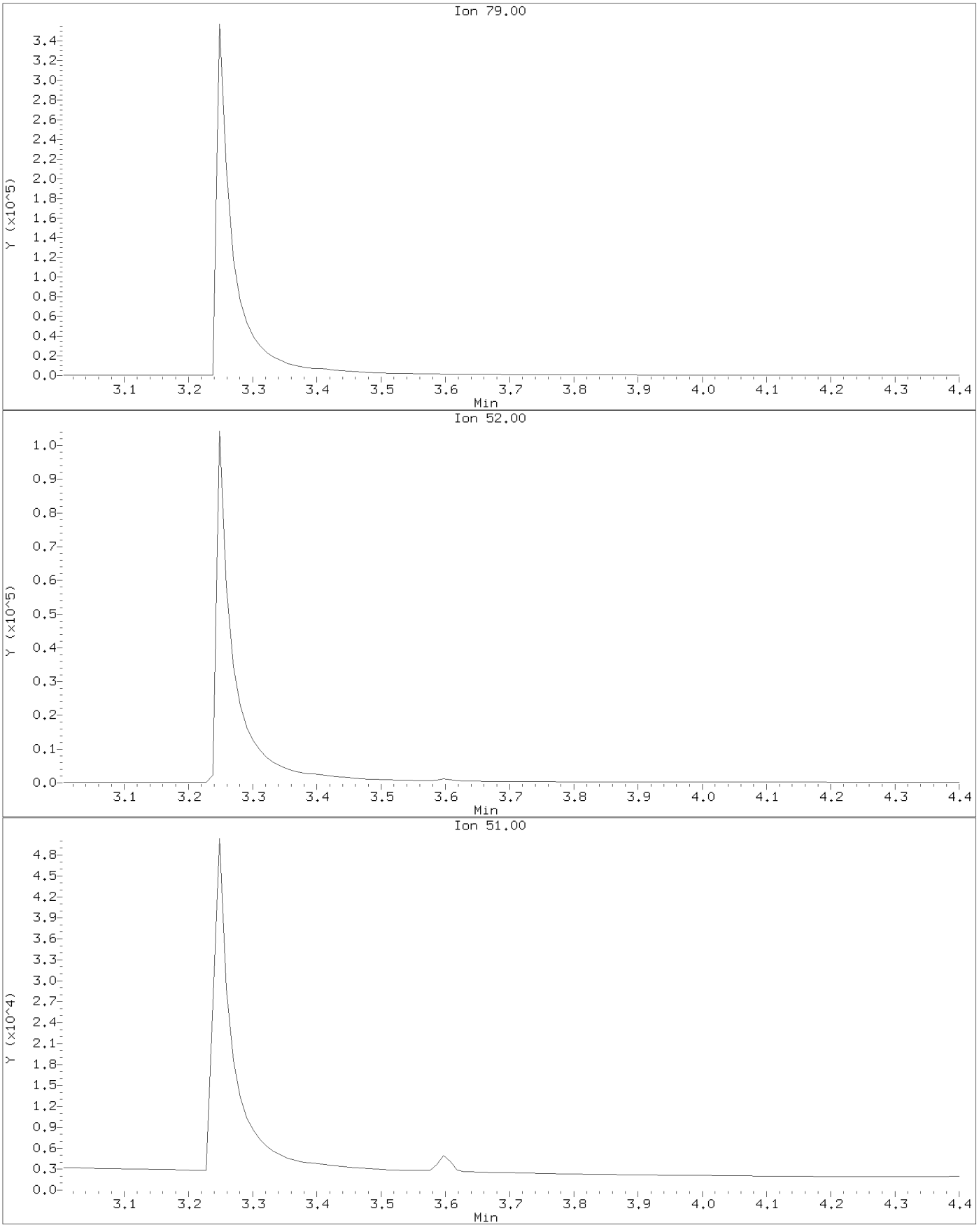
Injection Date: 07-DEC-2023 13:41
Instrument: gcms-n.i
Client Sample ID:

Compound: Pyridine
CAS Number: 110-86-1

BEFORE MANUAL INTEGRATION



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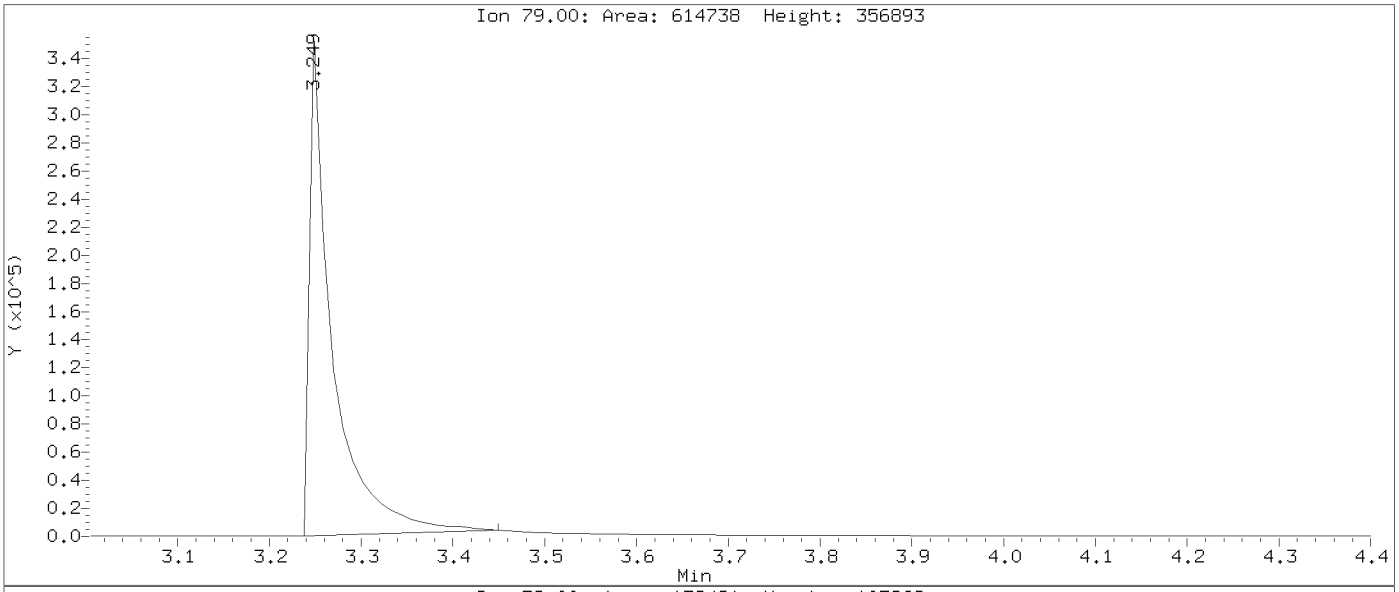
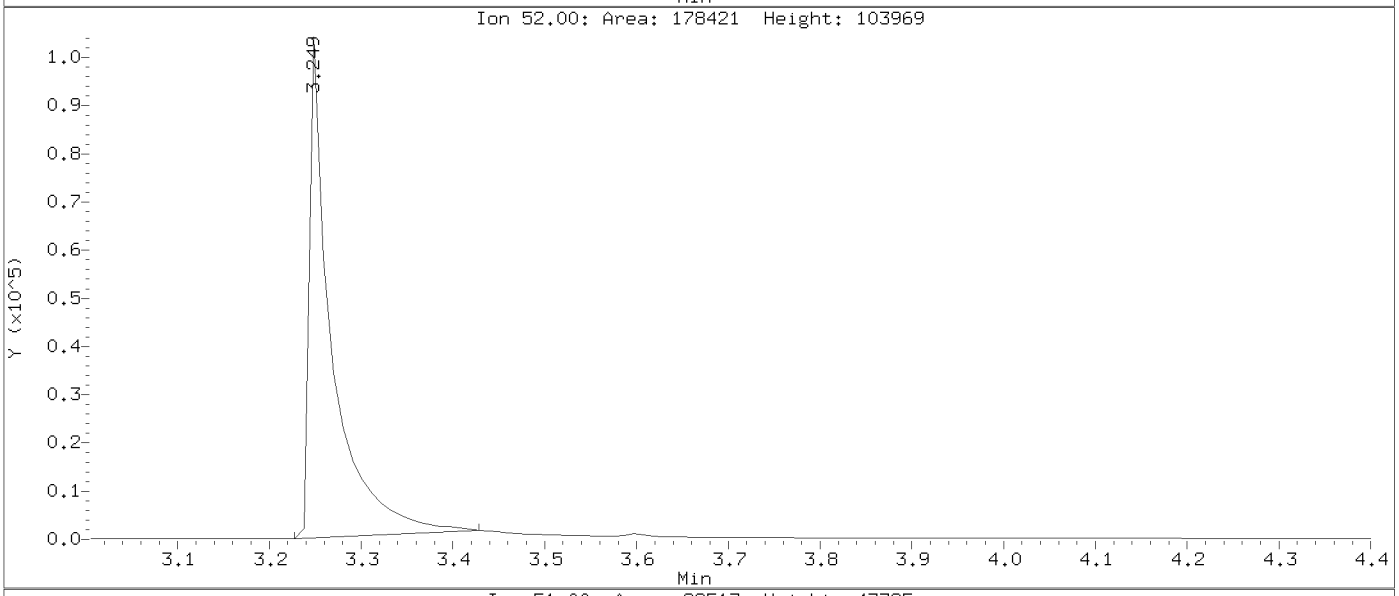
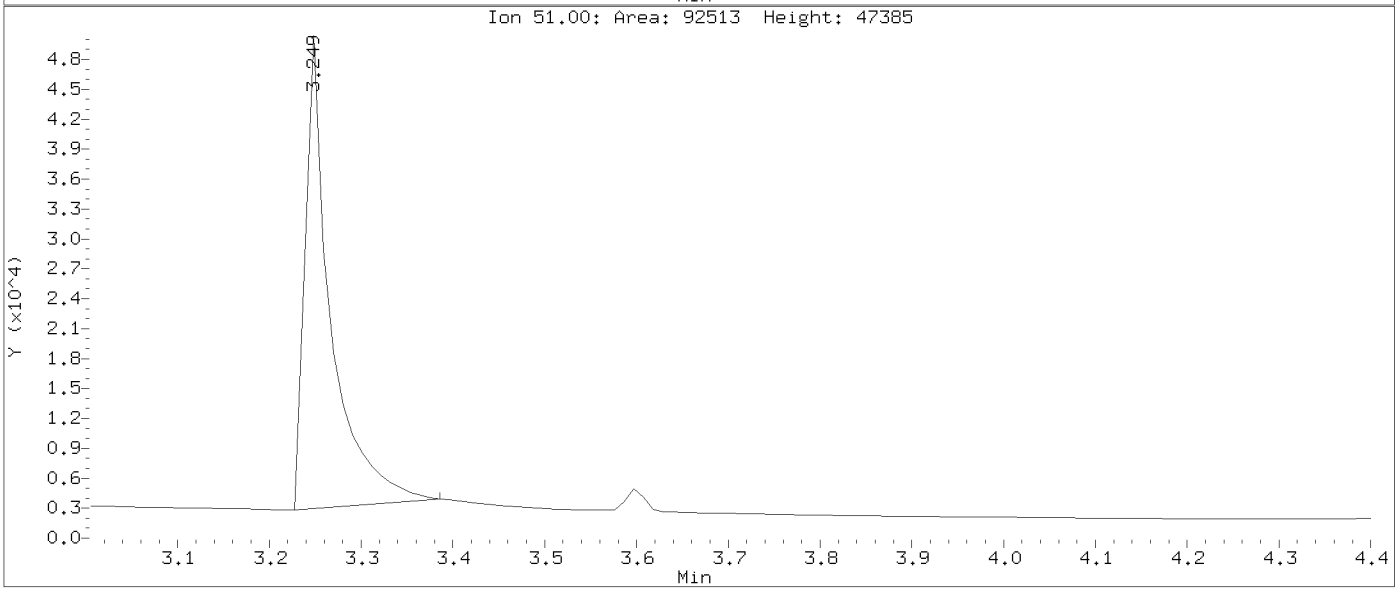
Injection Date: 07-DEC-2023 13:41
Instrument: gcms-n.i
Client Sample ID:

Compound: Pyridine
CAS Number: 110-86-1

AFTER MANUAL INTEGRATION







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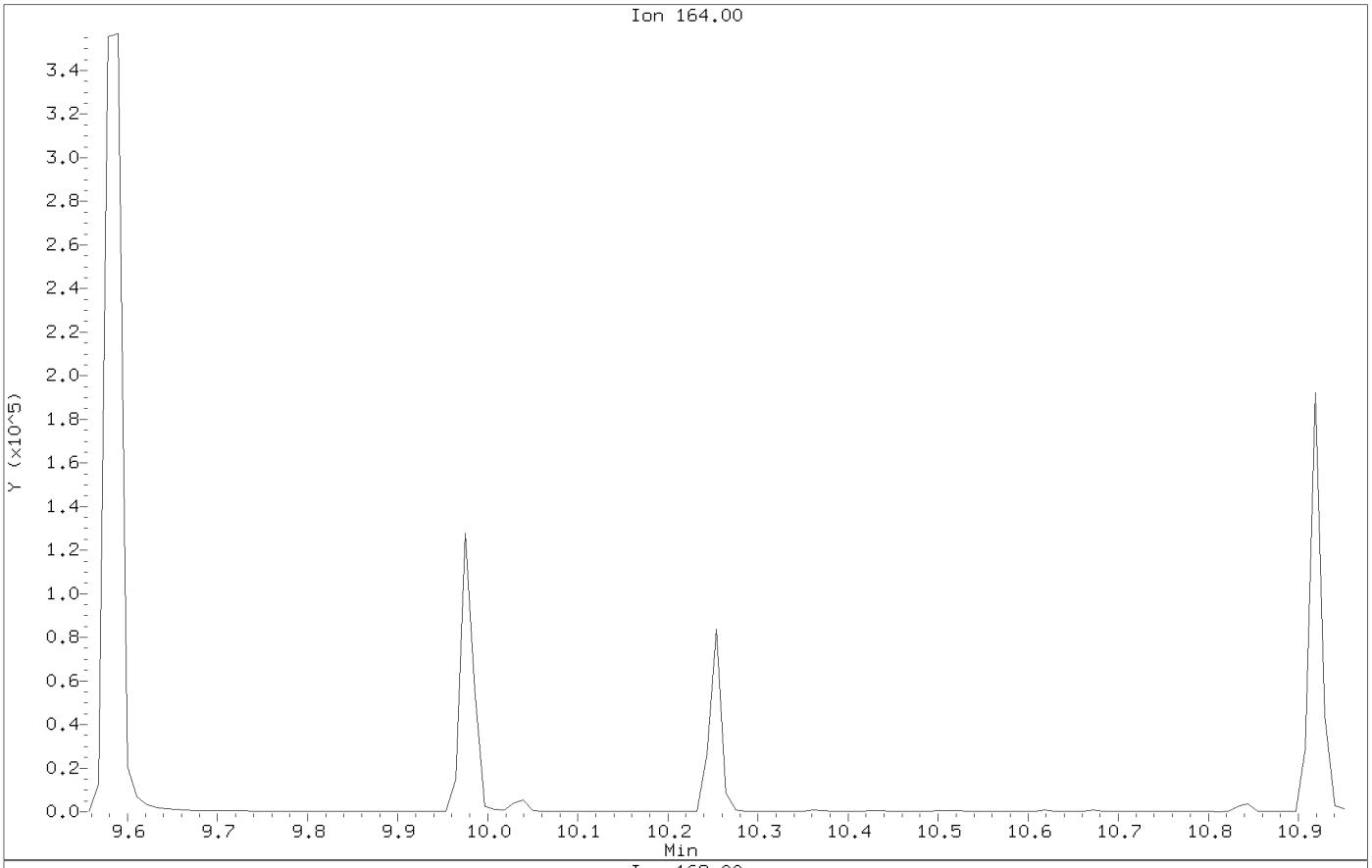
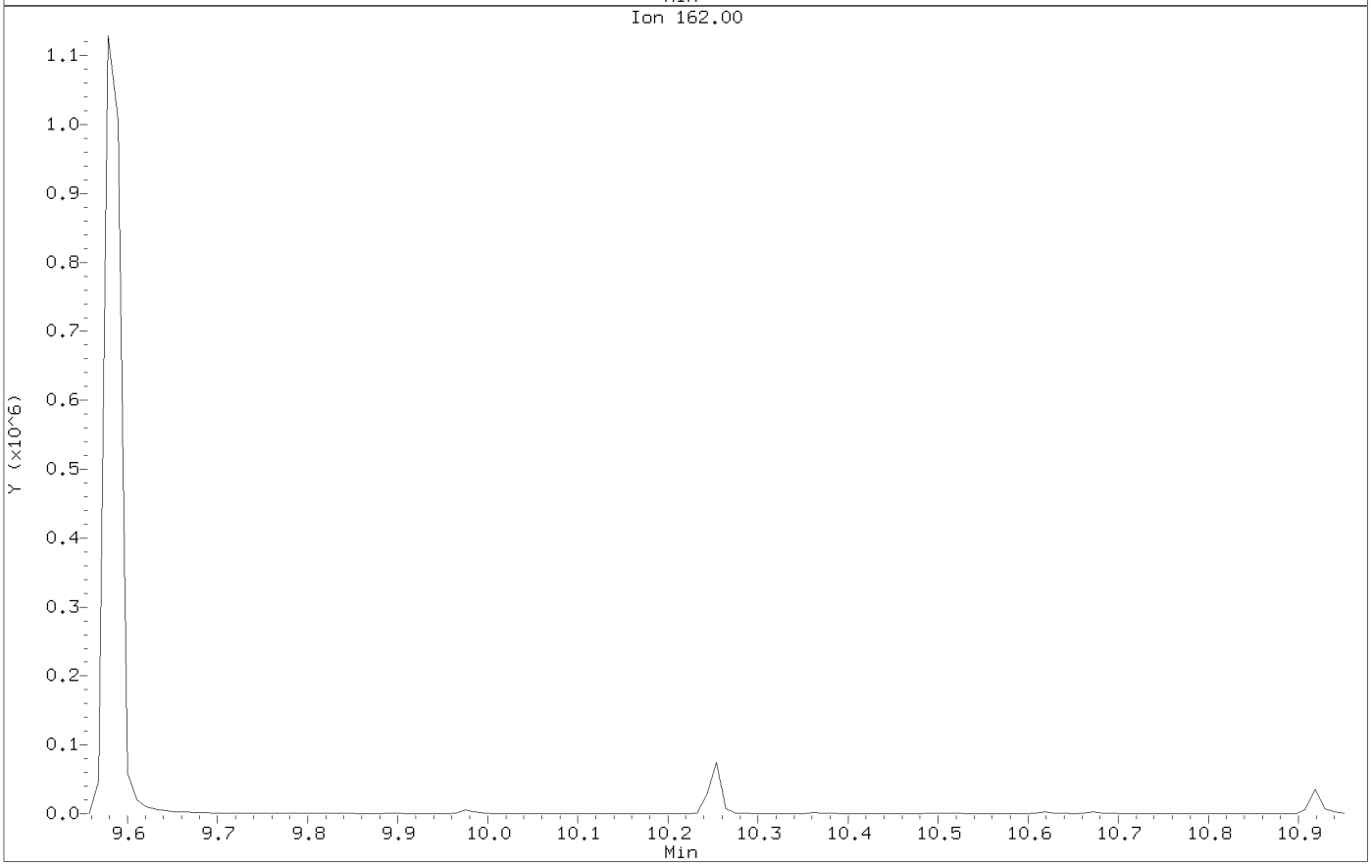
Injection Date: 07-DEC-2023 14:12
Instrument: gcms-n.i
Client Sample ID:

Compound: Acenaphthene-D10
CAS Number: 15067-26-2

BEFORE MANUAL INTEGRATION





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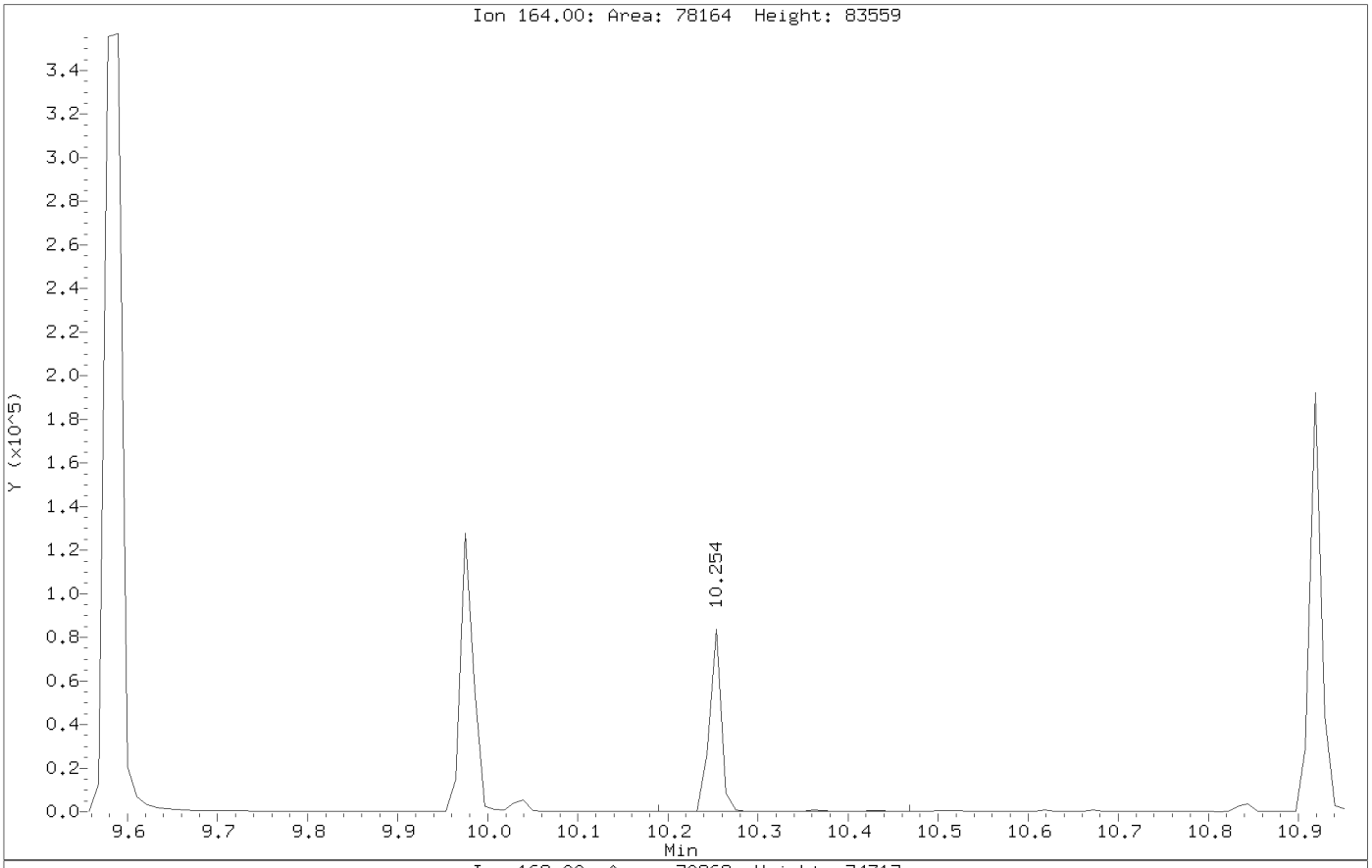
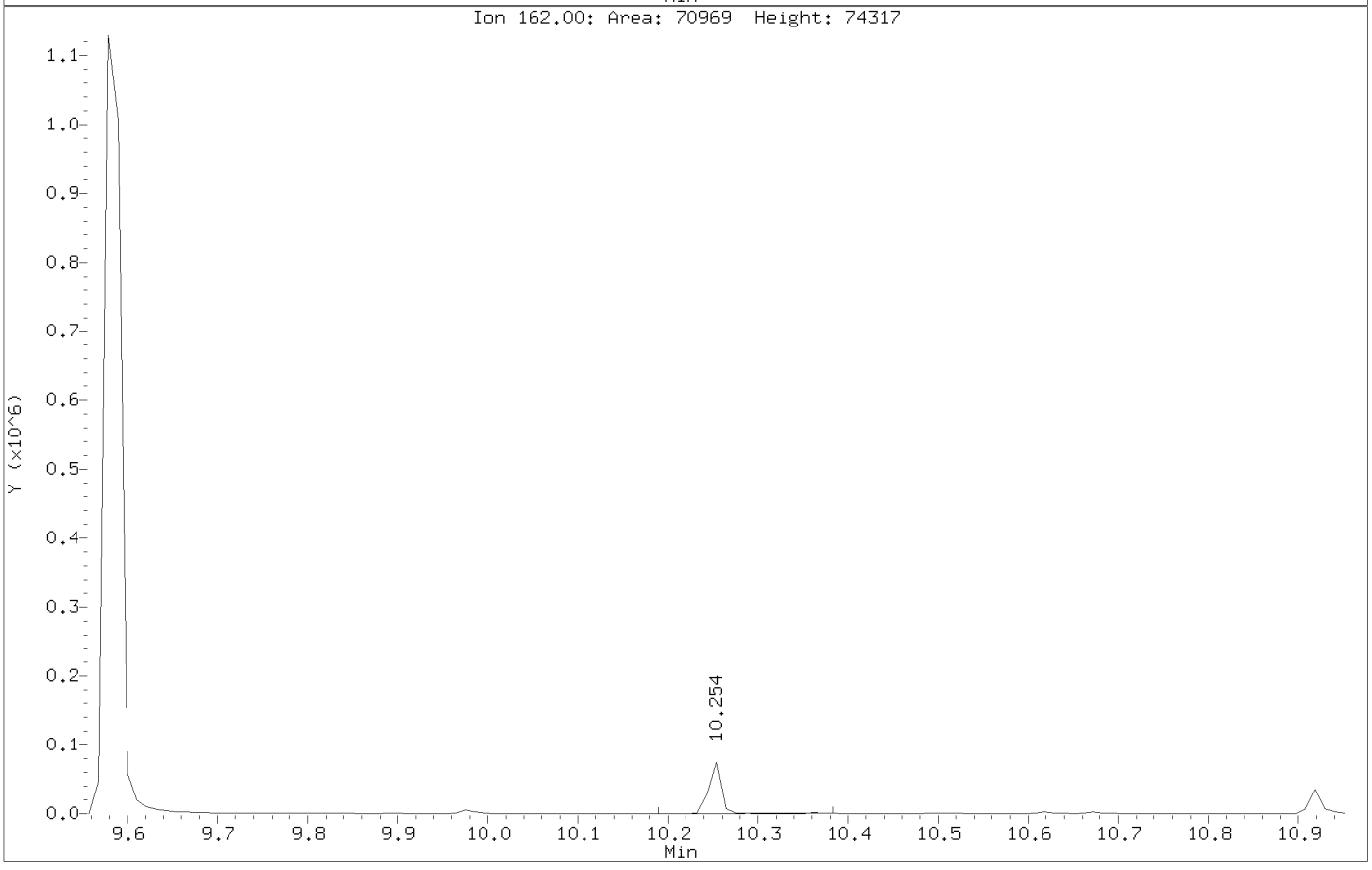
Injection Date: 07-DEC-2023 14:12
Instrument: gcms-n.i
Client Sample ID:

Compound: Acenaphthene-D10
CAS Number: 15067-26-2

AFTER MANUAL INTEGRATION





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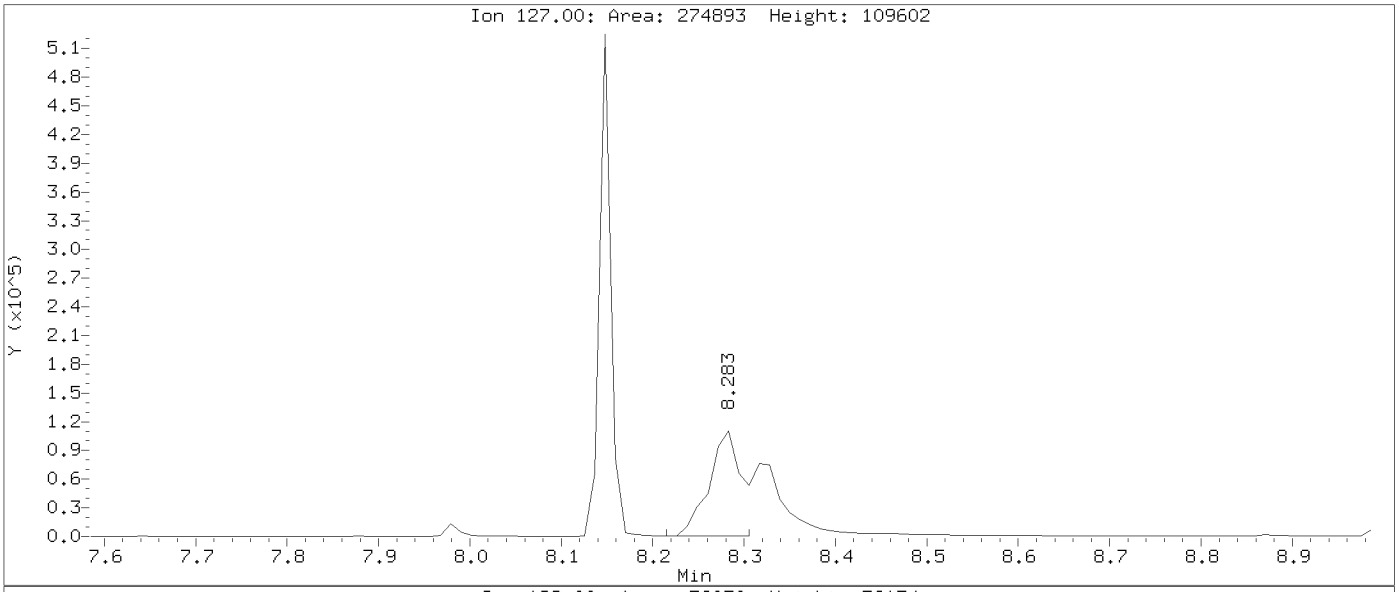
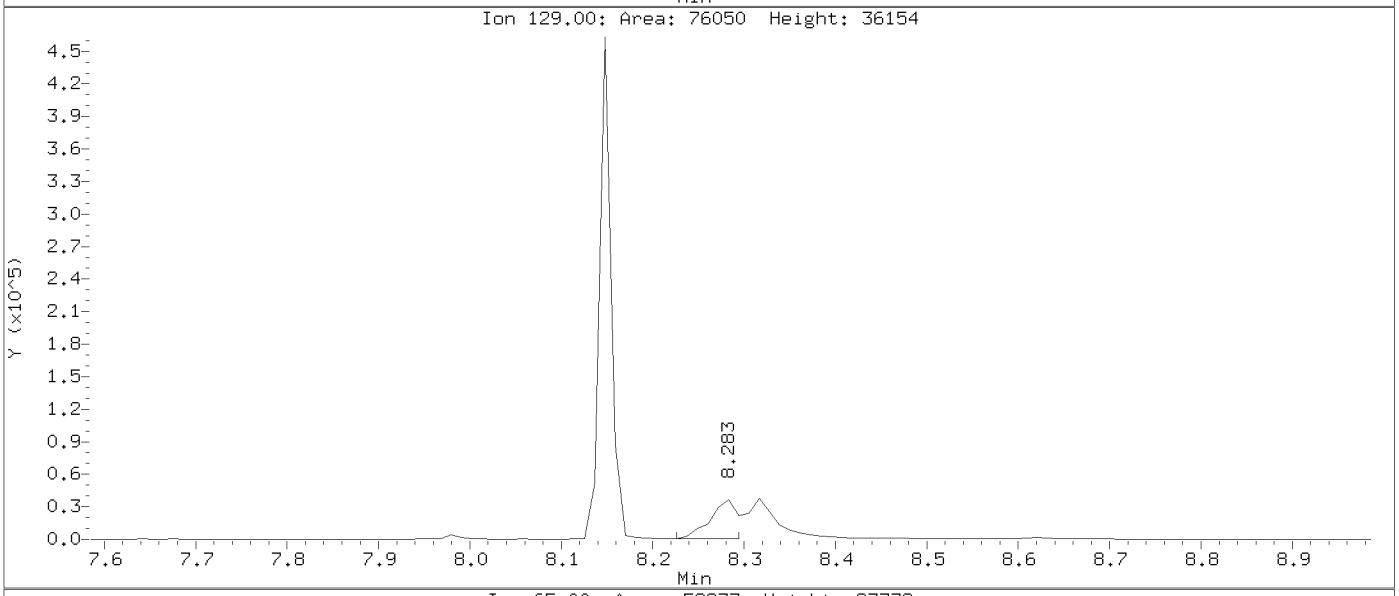
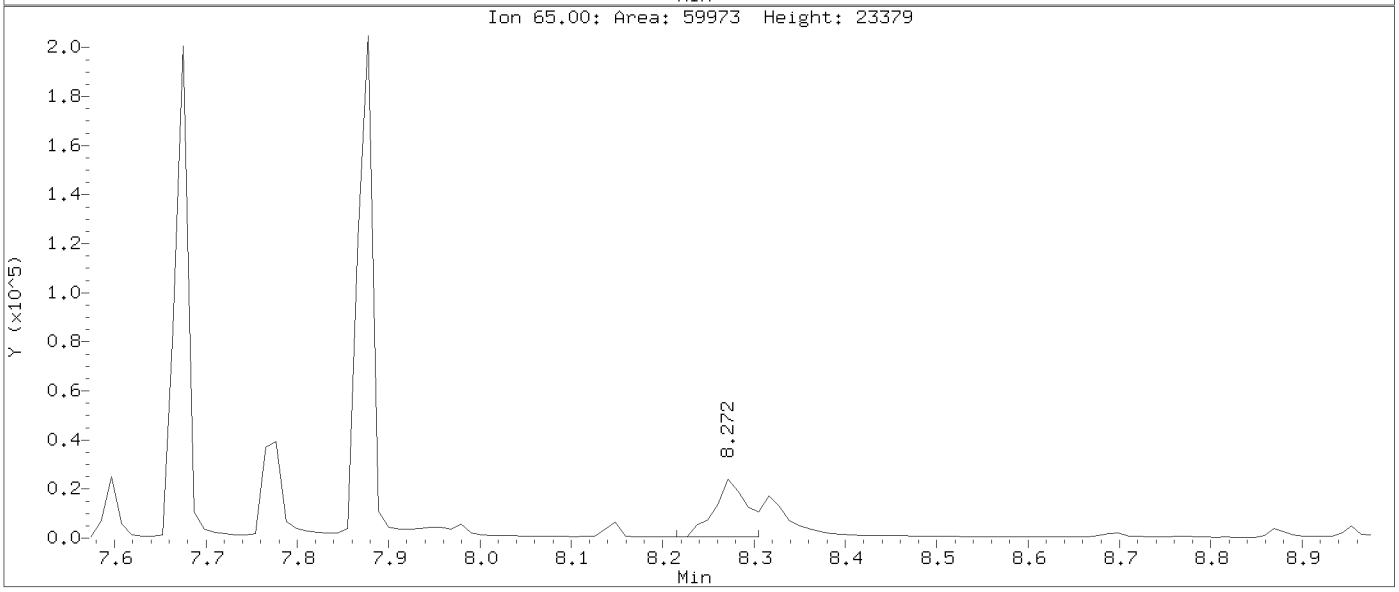
Injection Date: 07-DEC-2023 14:42
Instrument: gcms-n.i
Client Sample ID:

Compound: 4-Chloroaniline
CAS Number: 106-47-8

BEFORE MANUAL INTEGRATION







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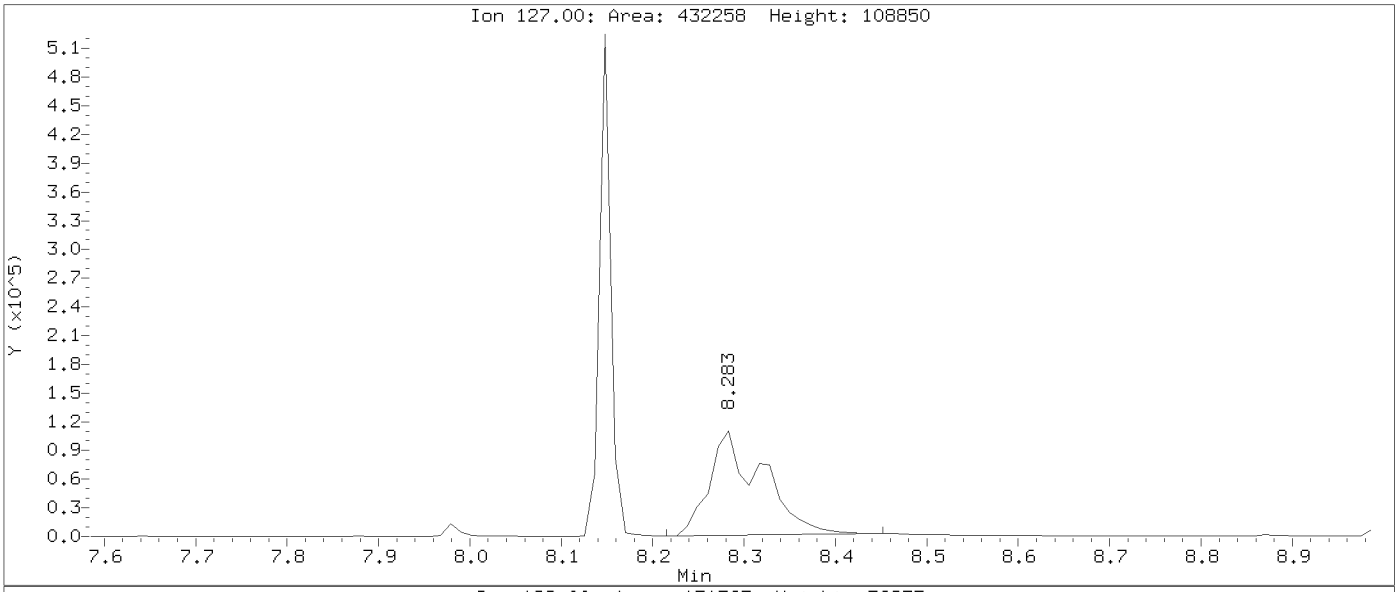
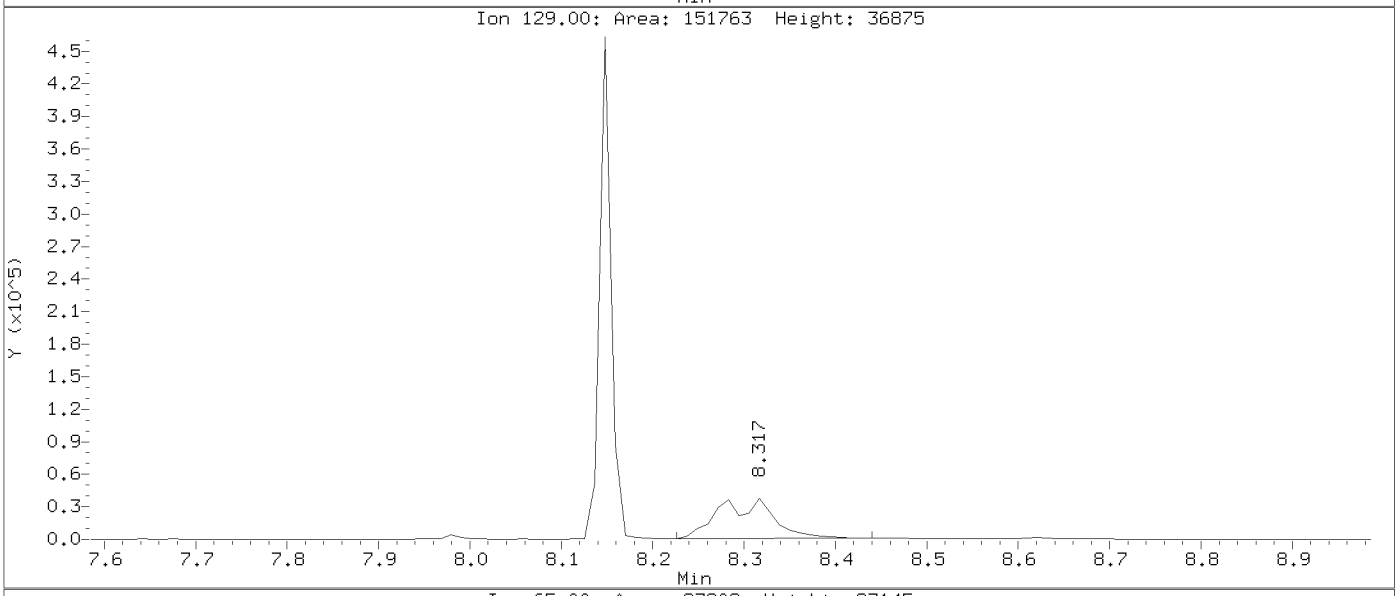
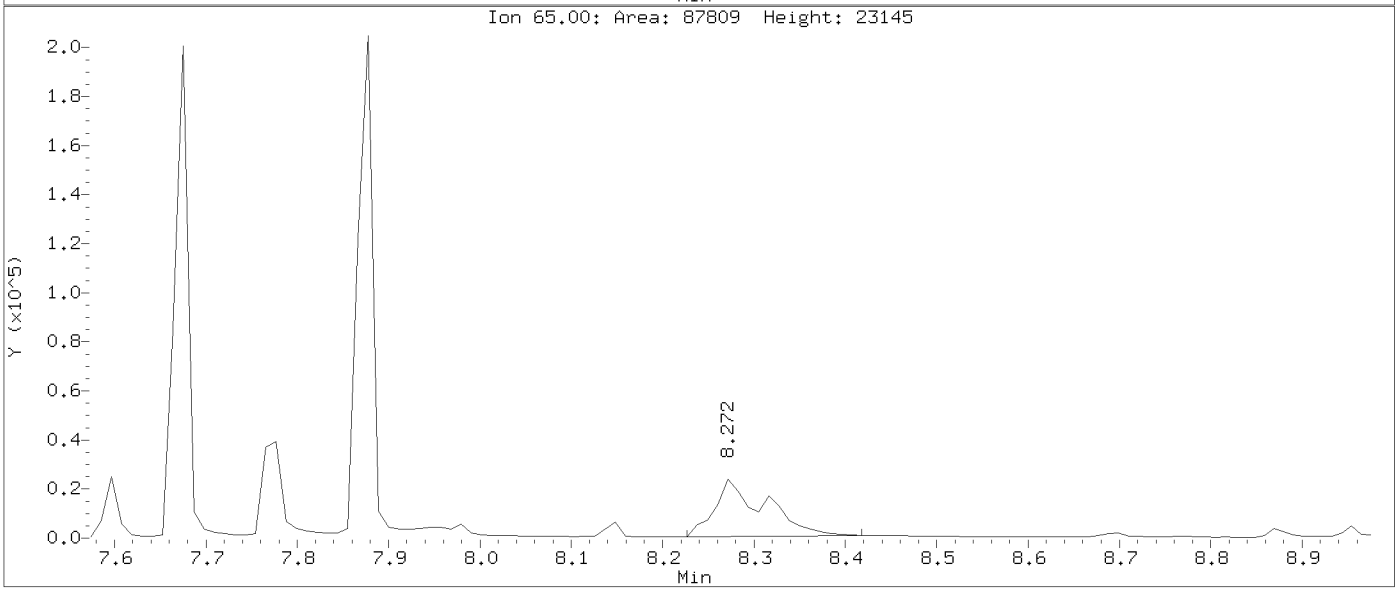
Injection Date: 07-DEC-2023 14:42
Instrument: gcms-n.i
Client Sample ID:

Compound: 4-Chloroaniline
CAS Number: 106-47-8

AFTER MANUAL INTEGRATION



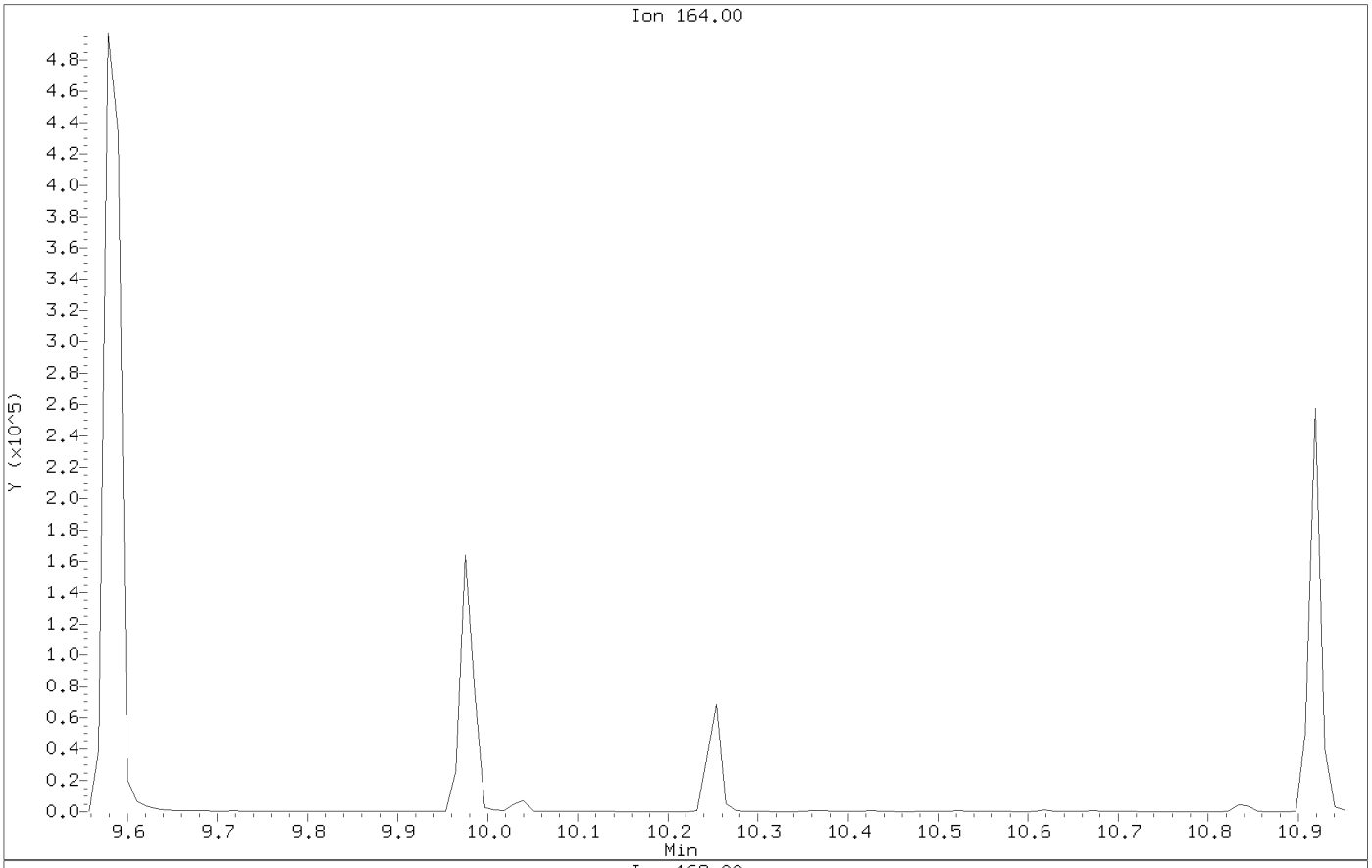


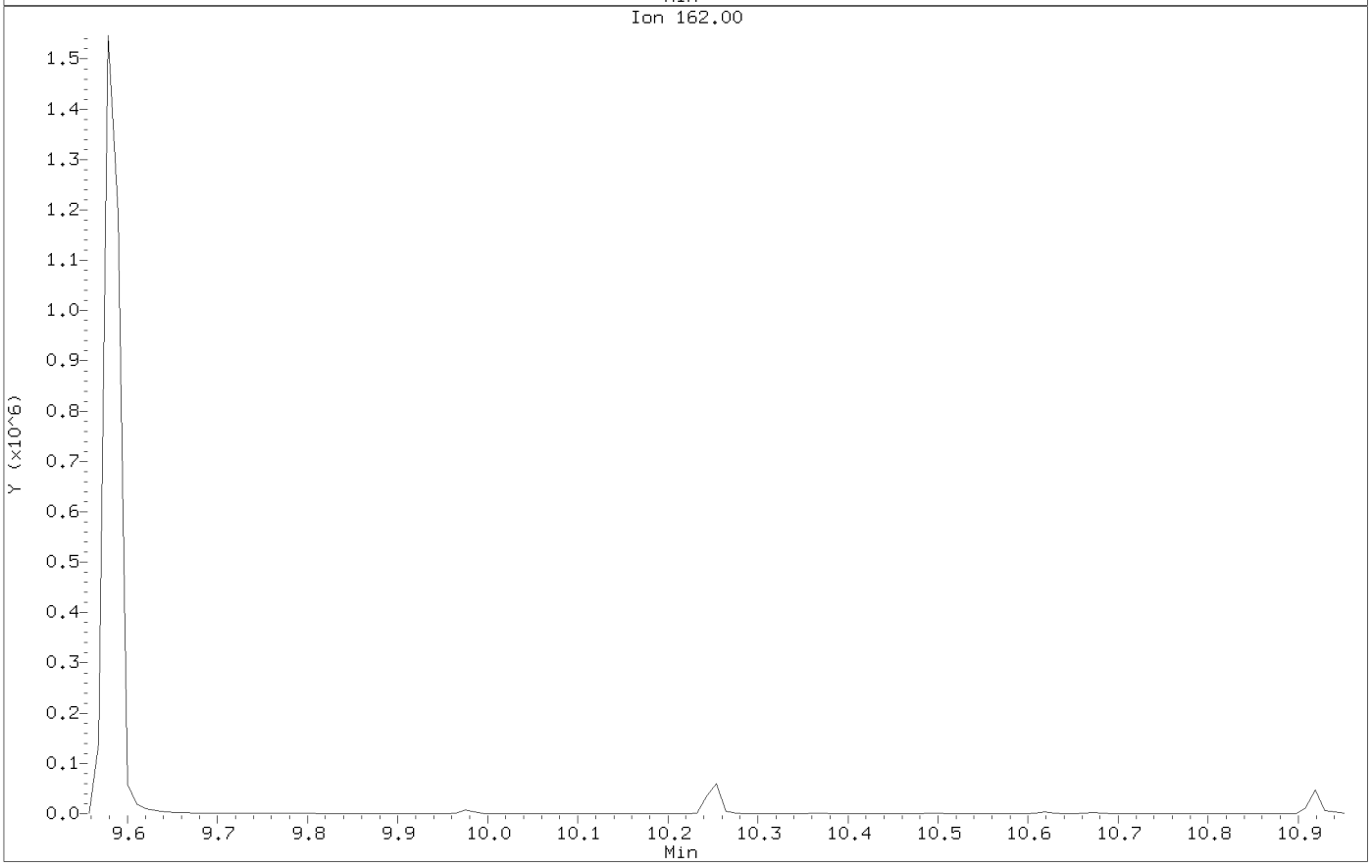


Data File: \\target_server\gg\chem\gcms-n.i\N120723.b\N0385.D
Injection Date: 07-DEC-2023 14:42
Instrument: gcms-n.i
Client Sample ID:

Compound: Acenaphthene-D10
CAS Number: 15067-26-2

BEFORE MANUAL INTEGRATION





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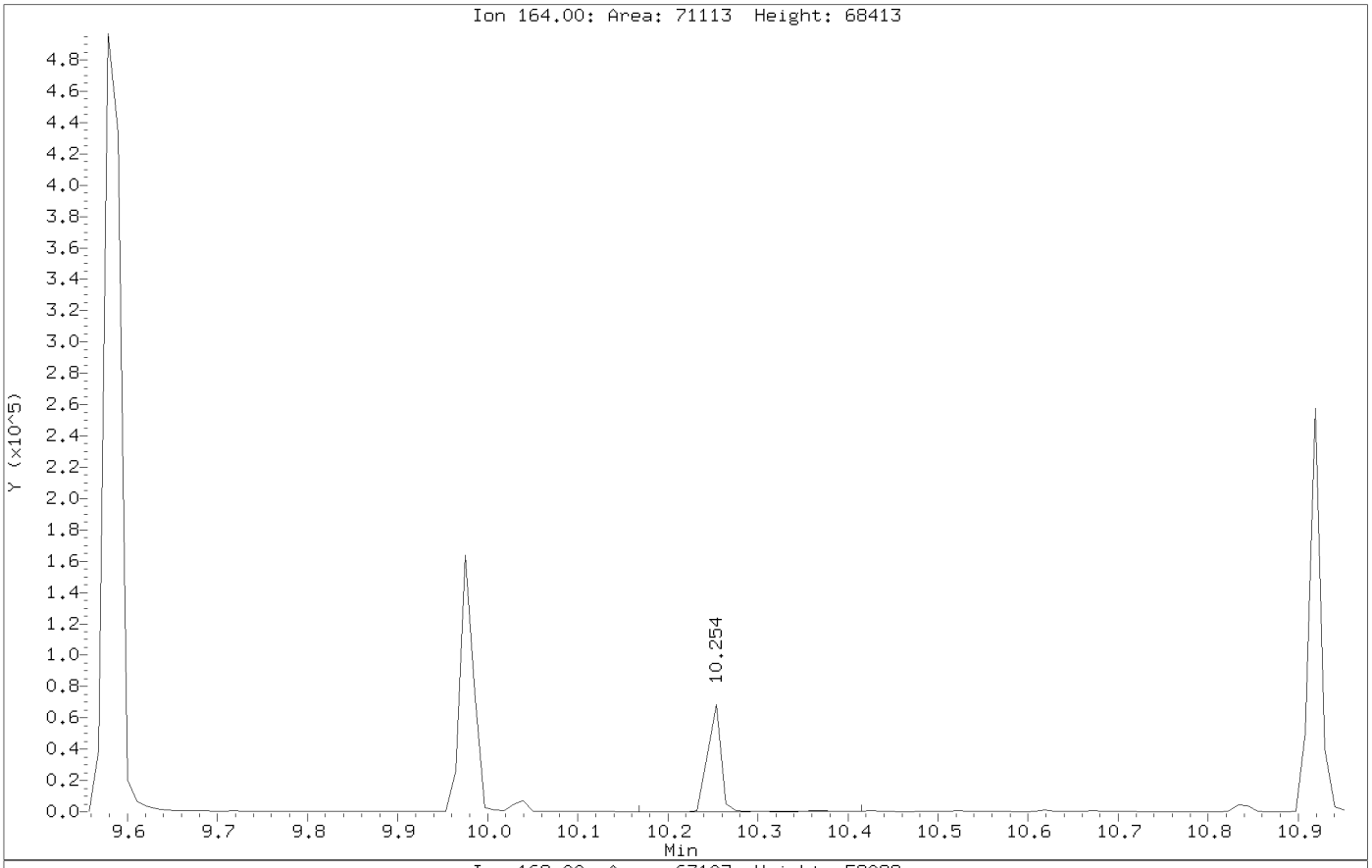
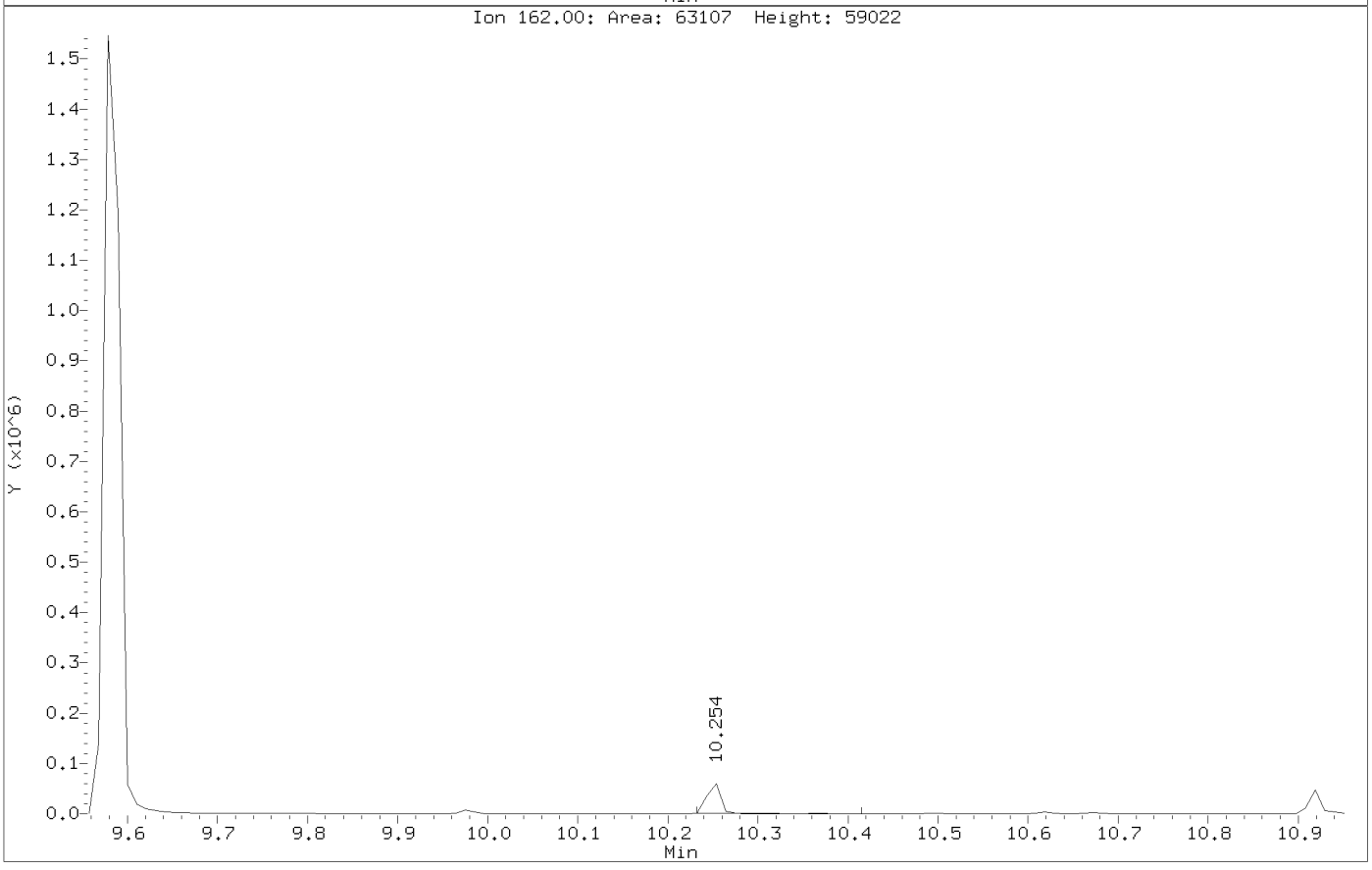
Client Sample ID:

Compound: Acenaphthene-D10
CAS Number: 15067-26-2

AFTER MANUAL INTEGRATION





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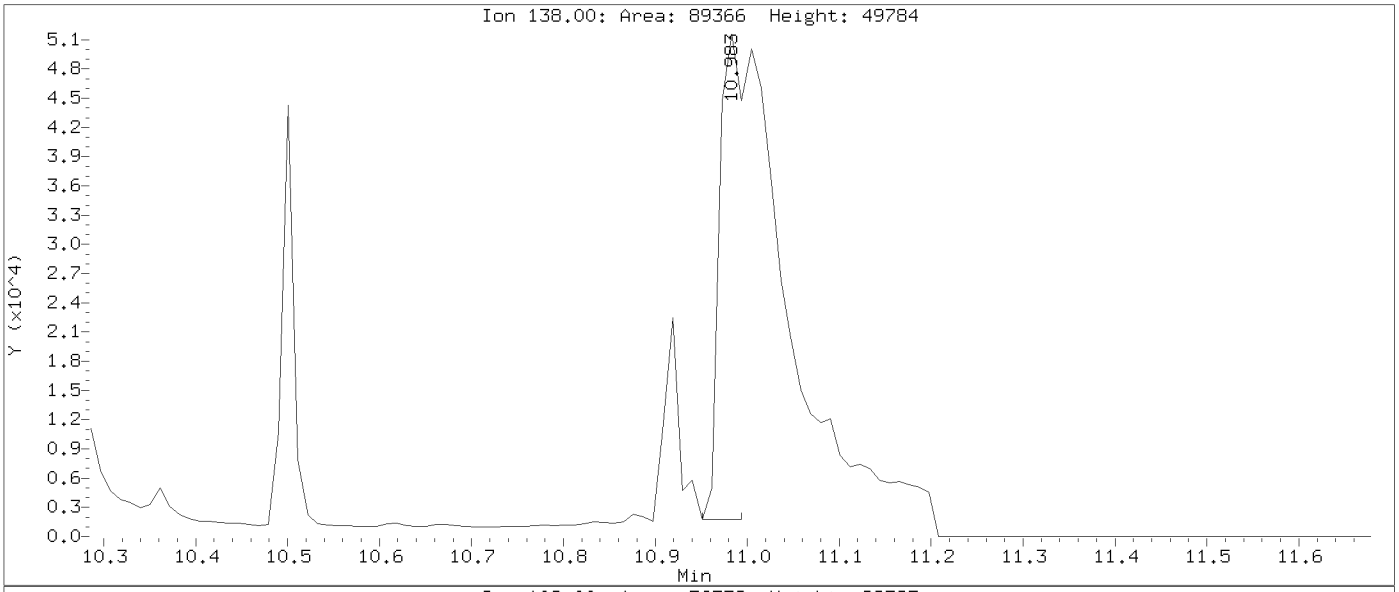
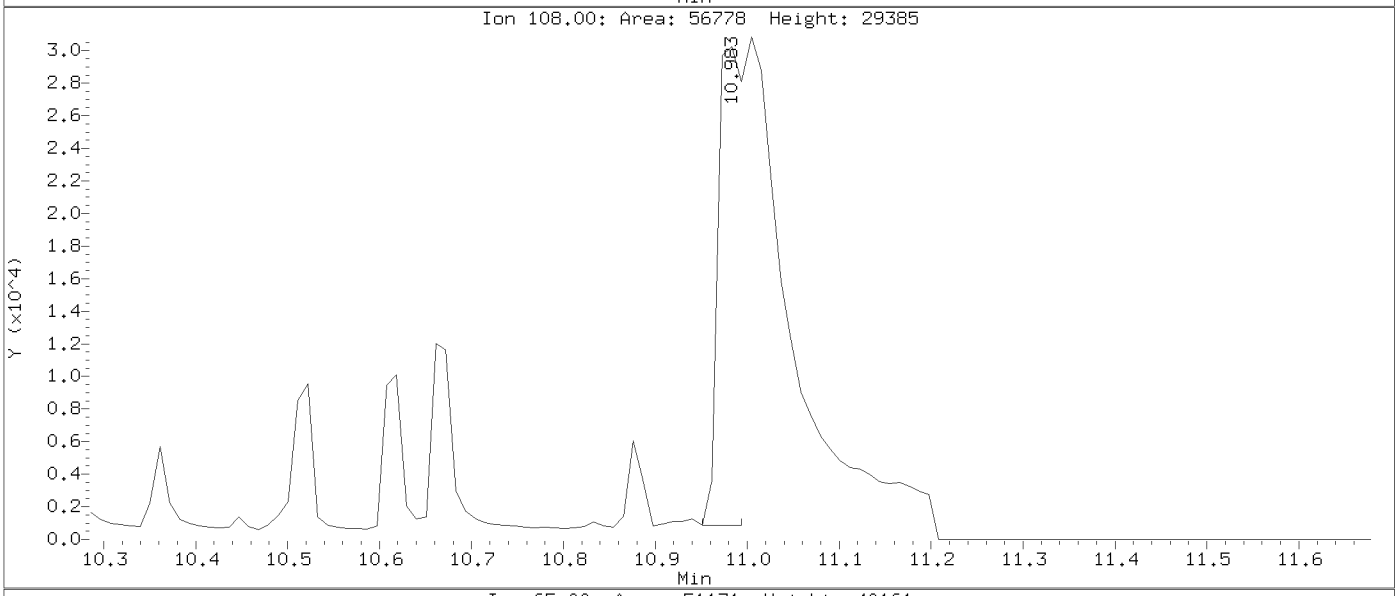
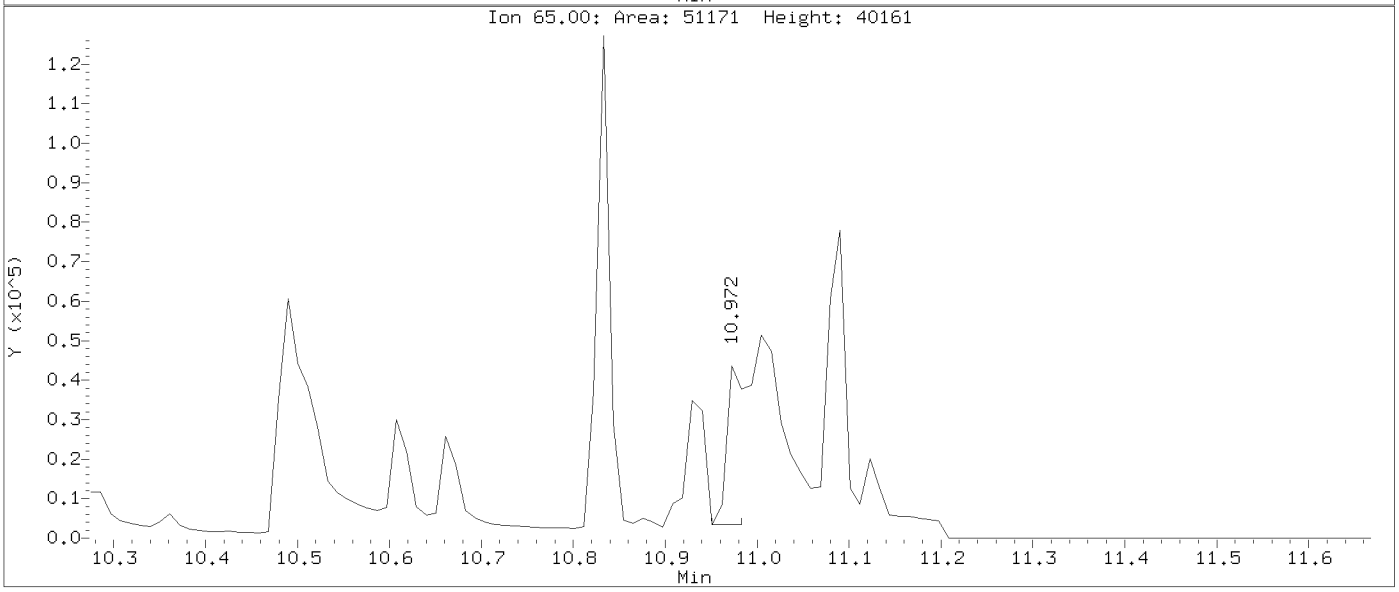
Injection Date: 07-DEC-2023 14:42
Instrument: gcms-n.i
Client Sample ID:

Compound: 4-Nitroaniline
CAS Number: 100-01-6

BEFORE MANUAL INTEGRATION







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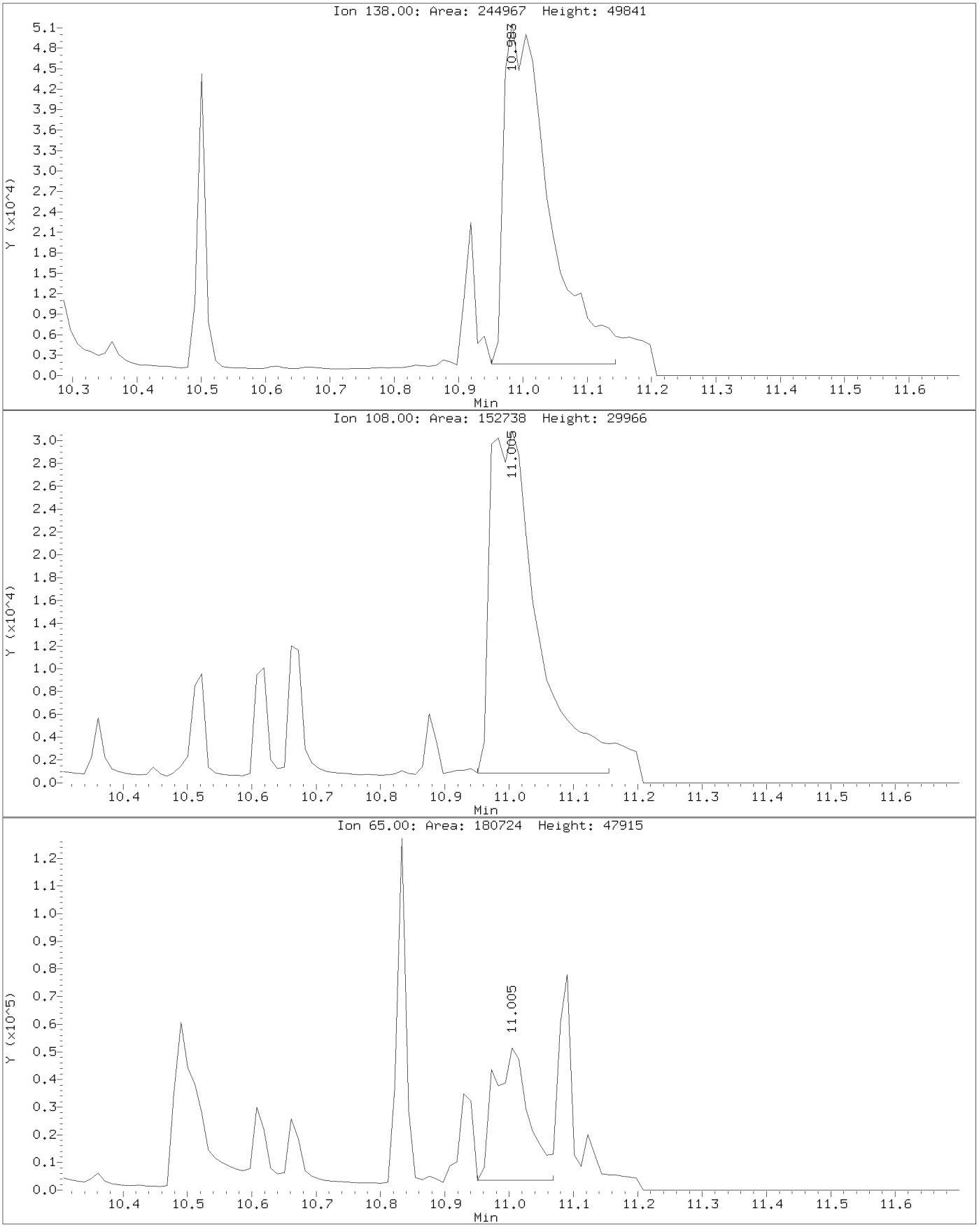
Client Sample ID:

Compound: 4-Nitroaniline
CAS Number: 100-01-6

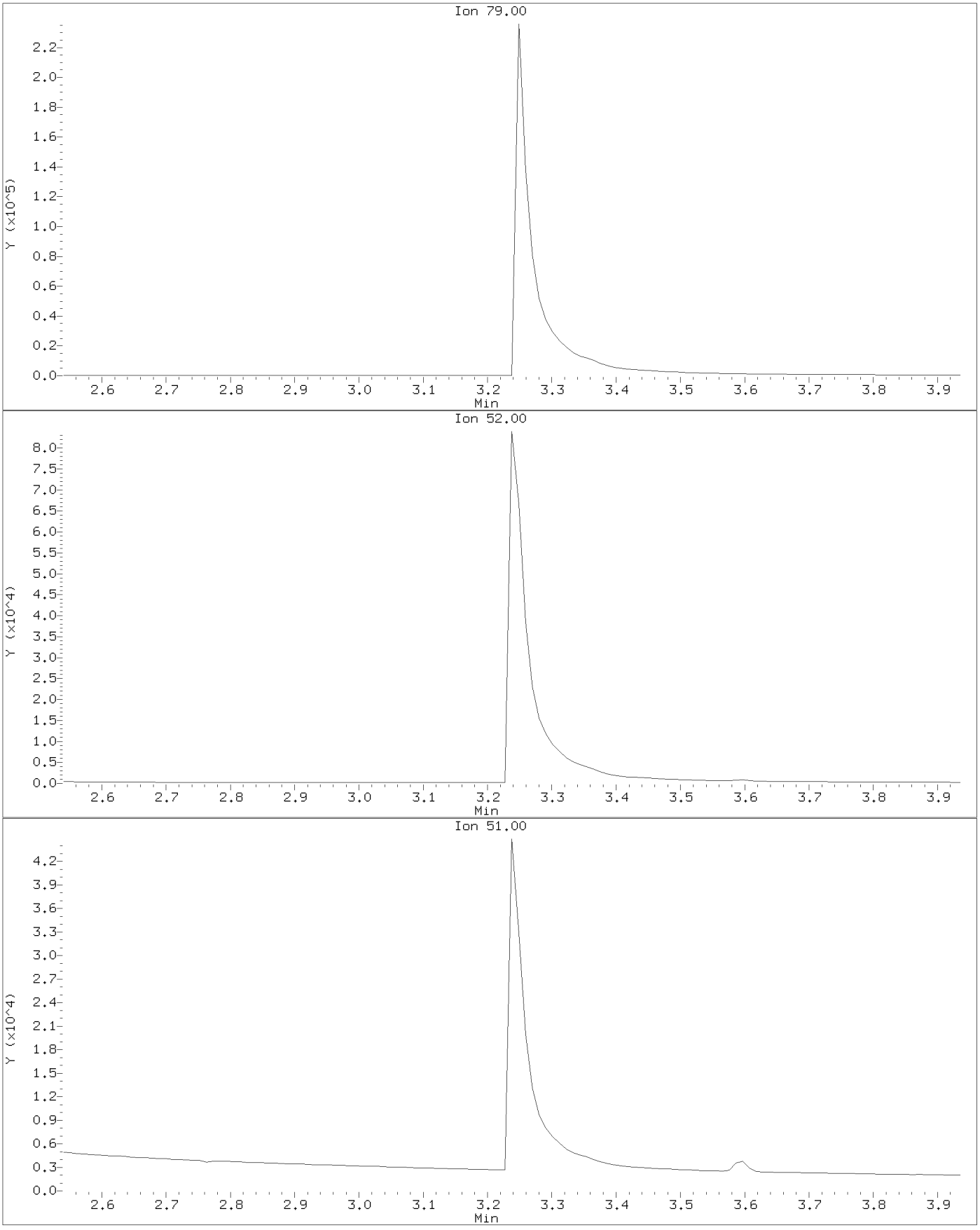
AFTER MANUAL INTEGRATION



Data File: \\target_server\gg\chem\gcms-n.i\N120723.b\N0386.D
Injection Date: 07-DEC-2023 15:12
Instrument: gcms-n.i
Client Sample ID:

Compound: Pyridine
CAS Number: 110-86-1

BEFORE MANUAL INTEGRATION



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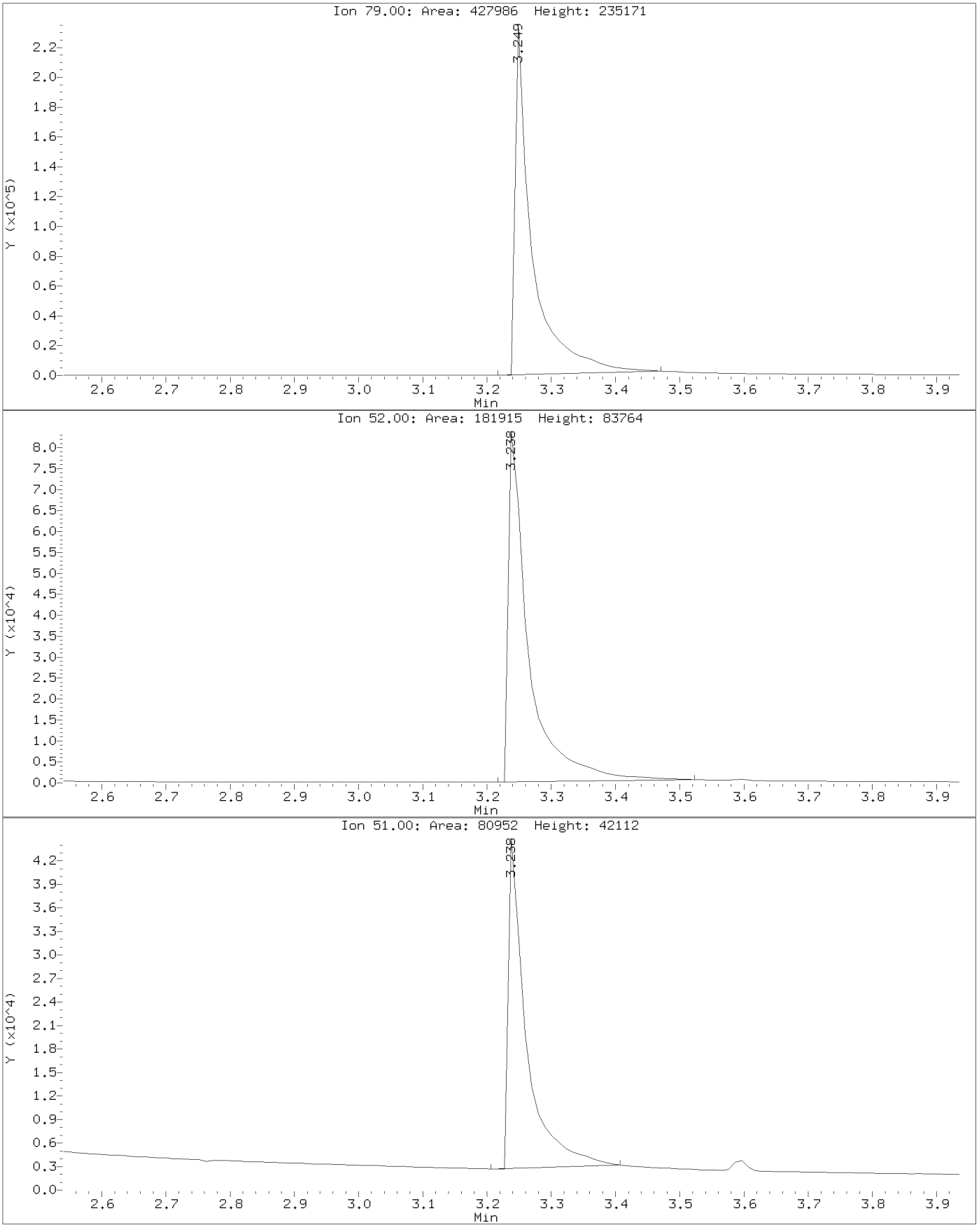
Client Sample ID:

Compound: Pyridine
CAS Number: 110-86-1

AFTER MANUAL INTEGRATION



Form 7
Calibration Verification Summary

Lab Name: Katahdin Analytical Services
SDG: SQ6133
Lab ID: WG346504-2
Analytical Date: 12/07/23 16:21
Lab File ID: N0387.D
Instrument ID: GCMS-N
Initial Calibration Date(s): 12/07/23 12:11 12/07/23 14:42
Column ID:

Compound	RRF/Amount	RF2	CCAL RRF2	Min RF	%D/ %Drift	Max %D/ %Drift	Curve Type	Qual
Naphthalene	1.09413	1.19191	1.19191	0.010	8.93710	20.000	Averaged	
2-Methylnaphthalene	0.72318	0.72017	0.72017	0.010	-0.41525	20.000	Averaged	
Acenaphthylene	2.22711	2.42724	2.42724	0.010	8.98608	20.000	Averaged	
Acenaphthene	1.32261	1.43168	1.43168	0.010	8.24656	20.010	Averaged	
Fluorene	1.32162	1.45355	1.45355	0.010	9.98226	20.000	Averaged	
Phenanthrene	1.20967	1.34735	1.34735	0.010	11.38156	20.000	Averaged	
Anthracene	1.21499	1.38338	1.38338	0.010	13.85988	20.000	Averaged	
Fluoranthene	0.93896	1.09012	1.09012	0.010	16.09888	20.010	Averaged	
Pyrene	2.47305	2.74125	2.74125	0.010	10.84500	20.000	Averaged	
Benzo(a)anthracene	1.38487	1.41985	1.41985	0.010	2.52541	20.000	Averaged	
Chrysene	1.65973	1.74816	1.74816	0.010	5.32793	20.000	Averaged	
Benzo(b)fluoranthene	1.45918	1.50631	1.50631	0.010	3.23010	20.000	Averaged	
Benzo(k)fluoranthene	1.88696	2.18957	2.18957	0.010	16.03728	20.000	Averaged	
Benzo(a)pyrene	1.42750	1.52438	1.52438	0.010	6.78661	20.010	Averaged	
Indeno(1,2,3-cd)pyrene	1.03440	0.99549	0.99549	0.010	-3.76095	20.000	Averaged	
Dibenzo(a,h)anthracene	1.06638	1.07303	1.07303	0.010	0.62295	20.000	Averaged	
Benzo(g,h,i)perylene	1.16611	1.17087	1.17087	0.010	0.40810	20.000	Averaged	
2-Methylnaphthalene-D10	0.52508	0.55435	0.55435	0.010	5.57422	20.000	Averaged	
Fluorene-D10	1.04693	1.11486	1.11486	0.010	6.48787	20.000	Averaged	
Pyrene-D10	1.87184	2.06496	2.06496	0.010	10.31708	20.000	Averaged	

*** = Compound out of QC criteria**

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Data File: \\target_server\gg\chem\gcms-n.i\N120723B.b\N0387.D
Report Date: 29-Dec-2023 09:52

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-n.i\N120723B.b\N0387.D
Lab Smp Id: WG346504-2
Inj Date : 07-DEC-2023 16:21
Operator : EP   Inst ID: gcms-n.i
Smp Info : WG346504-2
Misc Info : WG346504,WG346504,WG346503-4,SQ6133-1
Comment   :
Method   : \\target_server\gg\chem\gcms-n.i\N120723B.b\NSPSIM95.m
Meth Date : 08-Dec-2023 07:51 epelletier Quant Type: ISTD
Cal Date : 07-DEC-2023 14:42   Cal File: N0385.D
Als bottle: 2   Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: all.sub
Target Version: 4.12
Processing Host: INSPIRON1

Concentration Formula: Amt * DF * Uf*(Vt/Vo*Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.000	Sample Volume (L)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
$	1 1,4-Dioxane-d8	96	2.741	2.742	(0.267)	70758	2.00000	2.09	
	2 1,4-Dioxane	88	2.773	2.784	(0.419)	77089	2.00000	2.15	
	3 N-Nitrosodimethylamine	74	3.227	3.217	(0.488)	94679	2.00000	2.14	
	4 Pyridine	79	3.290	3.238	(0.497)	147867	2.00000	1.74	
	5 Benzaldehyde	77	6.084	6.084	(0.920)	61886	2.00000	2.71	
	6 Phenol	94	6.240	6.240	(0.943)	422014	4.50000	4.43	
	7 Bis(2-Chloroethyl)ether	93	6.323	6.323	(0.956)	170107	2.00000	2.04	
	8 2-Chlorophenol	128	6.365	6.365	(0.962)	385176	4.50000	4.78	
	9 1,3-Dichlorobenzene	146	6.541	6.531	(0.989)	202484	2.00000	2.08	
*	10 1,4-Dichlorobenzene-D4	152	6.614	6.604	(1.000)	48720	0.80000	(a)	
	11 1,4-Dichlorobenzene	146	6.635	6.625	(1.003)	199410	2.00000	2.02	
	12 1,2-Dichlorobenzene	146	6.812	6.802	(1.030)	196167	2.00000	2.06	
	13 2,2'-Oxybis(1-chloropropane)	45	6.968	6.958	(1.053)	112597	2.00000	2.16	
	14 2-Methylphenol	108	6.958	6.958	(1.052)	358430	4.50000	4.80	
	15 Acetophenone	105	7.103	7.104	(0.873)	220759	2.00000	2.05	
	16 N-Nitroso-di-n-propylamine	70	7.124	7.125	(1.077)	104484	2.00000	2.05	
	17 3&4-Methylphenol	108	7.155	7.145	(1.082)	366391	4.50000	4.74	
	18 Hexachloroethane	117	7.207	7.197	(1.090)	78470	2.00000	2.04	
	19 Nitrobenzene	77	7.301	7.291	(0.897)	152291	2.00000	2.15	
	20 Isophorone	82	7.607	7.597	(0.935)	291266	2.00000	2.04	

Data File: \\target_server\gg\chem\gcms-n.i\N120723B.b\N0387.D
Report Date: 29-Dec-2023 09:52

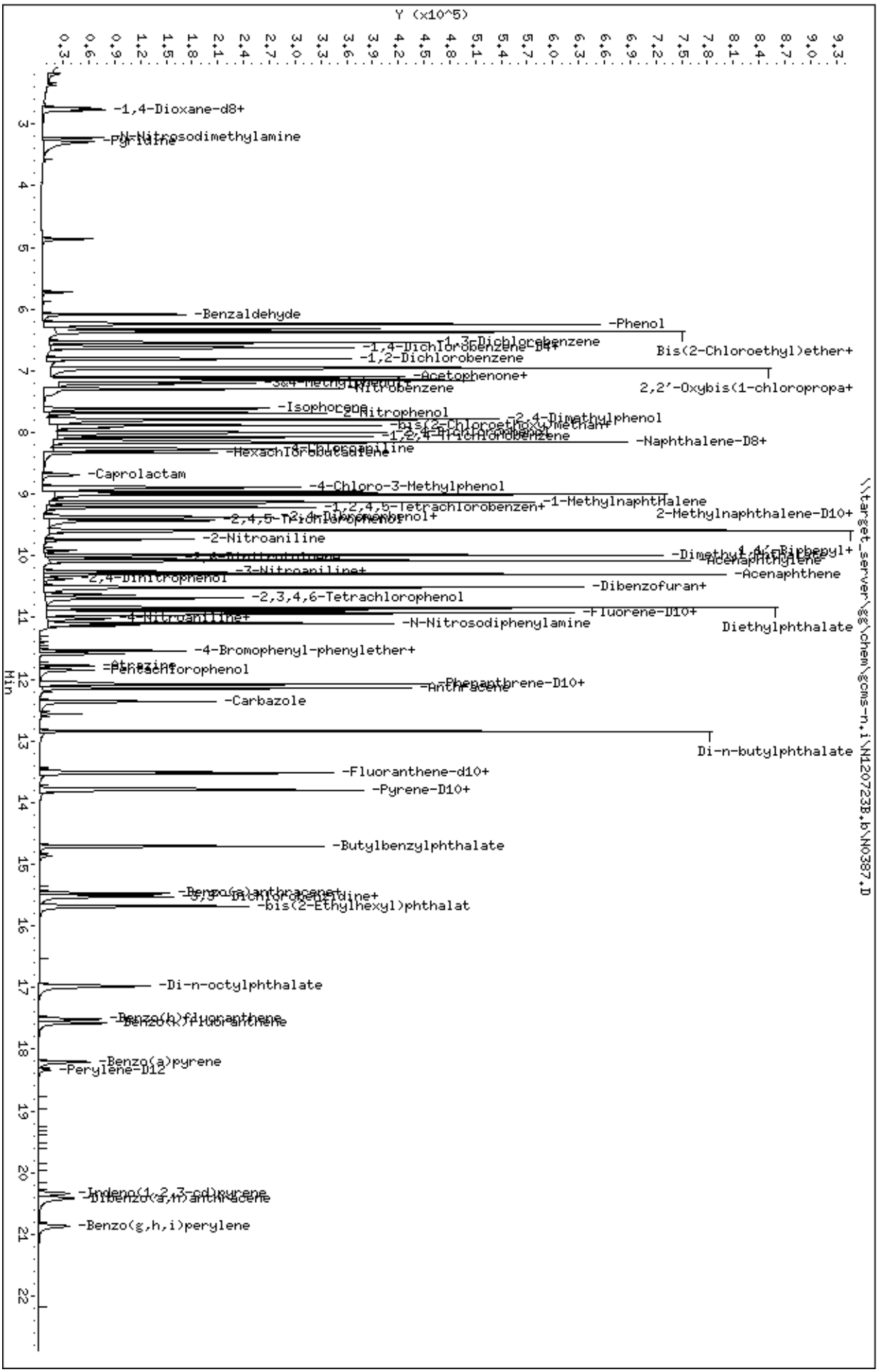
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)	REVIEW CODE
	21 2-Nitrophenol	139	7.686	7.675	(0.945)	159249	4.50000	5.48	
	22 2,4-Dimethylphenol	107	7.787	7.777	(0.957)	288115	4.50000	4.82	
	23 bis(2-Chloroethoxy)methane	93	7.889	7.878	(0.970)	182330	2.00000	2.05	
	24 Benzoic Acid	105	7.922	7.957	(0.974)	58455	2.00000	3.83	
	25 2,4-Dichlorophenol	162	8.001	7.979	(0.983)	294442	4.50000	4.40	
	26 1,2,4-Trichlorobenzene	180	8.069	8.069	(0.992)	145846	2.00000	2.04	
*	27 Naphthalene-D8	136	8.136	8.125	(1.000)	175031	0.80000	(a)	
	28 Naphthalene	128	8.159	8.148	(1.003)	521554	2.00000	2.18	
	29 4-Chloroaniline	127	8.271	8.282	(1.017)	111474	2.00000	2.51	
	30 Hexachlorobutadiene	225	8.327	8.317	(1.024)	66808	2.00000	2.16	
	31 Caprolactam	113	8.687	8.699	(1.068)	37109	2.00000	2.16	
	32 4-Chloro-3-Methylphenol	107	8.890	8.869	(1.093)	269685	4.50000	4.98	
$	33 2-Methylnaphthalene-D10	152	8.975	8.954	(1.103)	242570	2.00000	2.11	
	34 2-Methylnaphthalene	142	9.006	8.996	(1.107)	315132	2.00000	1.99	
	35 1-Methylnaphthalene	142	9.123	9.113	(1.121)	294111	2.00000	2.04	
	36 1,2,4,5-Tetrachlorobenzene	216	9.218	9.208	(0.899)	122155	2.00000	2.08	
	37 Hexachlorocyclopentadiene	237	9.208	9.187	(0.898)	51431	2.00000	2.09	
$	38 2,4-Dibromophenol	252	9.356	9.346	(0.912)	62603	2.00000	2.43	
	39 2,4,6-Trichlorophenol	196	9.377	9.356	(0.915)	140485	4.50000	4.92	
	40 2,4,5-Trichlorophenol	196	9.419	9.420	(0.919)	165526	4.50000	5.31	
	41 1,1'-Biphenyl	154	9.578	9.579	(0.934)	346722	2.00000	2.12	
	42 2-Chloronaphthalene	164	9.589	9.579	(0.935)	90903	2.00000	2.10	
	43 2-Nitroaniline	65	9.739	9.728	(0.950)	49968	2.00000	1.90	
	44 Dimethyl Phthalate	163	9.985	9.975	(0.974)	549197	4.50000	4.92	
	45 2,6-Dinitrotoluene	165	10.039	10.039	(0.979)	56605	2.00000	1.97	
	46 Acenaphthylene	152	10.082	10.082	(0.983)	445574	2.00000	2.18	
	47 3-Nitroaniline	138	10.253	10.243	(1.000)	34218	2.00000	2.66	
*	48 Acenaphthene-D10	164	10.253	10.254	(1.000)	73429	0.80000	(a)	
	49 Acenaphthene	153	10.296	10.286	(1.004)	262817	2.00000	2.16	
	50 2,4-Dinitrophenol	184	10.371	10.372	(1.012)	16162	4.50000	4.54	
	51 Dibenzofuran	168	10.511	10.501	(1.025)	354229	2.00000	2.17	
	52 4-Nitrophenol	109	10.511	10.490	(1.025)	26343	4.50000	3.77	
	53 2,4-Dinitrotoluene	165	10.532	10.522	(1.027)	62128	2.00000	1.91	
	54 2,3,4,6-Tetrachlorophenol	232	10.682	10.672	(1.042)	93185	4.50000	4.92	
	55 Diethylphthalate	149	10.843	10.833	(1.058)	532657	4.50000	5.08	
$	56 Fluorene-D10	174	10.886	10.887	(1.062)	204657	2.00000	2.13	
	57 Fluorene	166	10.929	10.919	(1.066)	266832	2.00000	2.20	
	58 4-Chlorophenyl-phenylether	204	10.951	10.940	(1.068)	116784	2.00000	2.18	
	59 4-Nitroaniline	138	10.993	10.983	(1.072)	27523	2.00000	2.21	
	60 4,6-Dinitro-2-Methylphenol	198	11.026	11.015	(0.915)	30548	4.50000	4.77	
	61 N-Nitrosodiphenylamine	169	11.101	11.090	(0.921)	202457	2.00000	2.24	
	62 4-Bromophenyl-phenylether	248	11.539	11.529	(0.957)	60186	2.00000	2.21	
	63 Hexachlorobenzene	284	11.592	11.582	(0.962)	65362	2.00000	2.19	
	64 Atrazine	200	11.784	11.774	(0.978)	42181	2.00000	2.11	
	65 Pentachlorophenol	266	11.848	11.849	(0.983)	39292	4.50000	6.09	
*	66 Phenanthrene-D10	188	12.051	12.052	(1.000)	91494	0.80000	(a)	
	67 Phenanthrene	178	12.083	12.073	(1.003)	308186	2.00000	2.23	
	68 Anthracene	178	12.147	12.137	(1.008)	316428	2.00000	2.28	
	69 Carbazole	167	12.361	12.361	(1.026)	232874	2.00000	2.39	
	70 Di-n-butylphthalate	149	12.841	12.831	(1.066)	701595	4.50000	4.40	
$	71 Fluoranthene-d10	212	13.501	13.502	(1.120)	169018	2.00000	2.27	
	72 Fluoranthene	202	13.522	13.522	(1.122)	249348	2.00000	2.32	
$	73 Pyrene-D10	212	13.776	13.777	(0.889)	195913	2.00000	2.21	
	74 Pyrene	202	13.797	13.797	(0.891)	260076	2.00000	2.22	

Data File: \\target_server\gg\chem\gcms-n.i\N120723B.b\N0387.D
Report Date: 29-Dec-2023 09:52

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
	75 Butylbenzylphthalate	149	14.703	14.704	(0.949)	212718	4.50000	4.36	
	76 Benzo(a)anthracene	228	15.467	15.468	(0.999)	134708	2.00000	2.05	
	77 3,3'-Dichlorobenzidine	252	15.498	15.488	(1.001)	36650	2.00000	2.16	
*	78 Chrysene-D12	240	15.488	15.478	(1.000)	37950	0.80000	(a)	
	79 Chrysene	228	15.528	15.529	(1.003)	165857	2.00000	2.11	
	80 bis(2-Ethylhexyl)phthalate	149	15.681	15.672	(1.012)	258897	4.50000	4.11	
	81 Di-n-octylphthalate	149	16.975	16.965	(1.096)	305692	4.50000	4.06	
	82 Benzo(b)fluoranthene	252	17.510	17.521	(0.955)	96946	2.00000	2.06	
	83 Benzo(k)fluoranthene	252	17.572	17.573	(0.958)	140921	2.00000	2.32(H)	
	84 Benzo(a)pyrene	252	18.211	18.211	(0.993)	98109	2.00000	2.14	
*	85 Perylene-D12	264	18.334	18.324	(1.000)	25744	0.80000	(a)	
	86 Indeno(1,2,3-cd)pyrene	276	20.342	20.343	(1.110)	64070	2.00000	1.92	
	87 Dibenzo(a,h)anthracene	278	20.425	20.415	(1.114)	69060	2.00000	2.01	
	88 Benzo(g,h,i)perylene	276	20.868	20.878	(1.138)	75357	2.00000	2.01	
M	89 Total PAHs	100				4085086	36.0000	38.4	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
H - Operator selected an alternate compound hit.


Data File: \\target_server\gg\chem\gcms-n,i\N120723B,b\N0387.D
Date : 07-DEC-2023 16:21
Client ID:
Sample Info: WG346504-2
Volume Injected (uL): 1.0
Column phase: Rxi-5ViOms
Instrument: gcms-n,i
Operator: EP
Column diameter: 0.25
\\target_server\gg\chem\gcms-n,i\N120723B,b\N0387.D
Y (x10^5)
Min
-1,4-Dioxane-d8+
-N-Nitrosodimethylamine
-Pyridine
-Benzaldehyde
-Phenol
-1,3-Dichlorobenzene
-1,4-Dichlorobenzene-D4+
-1,2-Dichlorobenzene
Bis(2-Chloroethyl)ether+
-Acetophenone+
-3&4-Methylphenol+
-Nitrobenzene
2,2'-Oxybis(1-chloropropa+
-Isophorone
-2-Nitrophenol
-2,4-Dimethylphenol
-bis(2-Chloroethoxy)methan+
-1,2,4-Trichlorobenzene
-Naphthalene-D8+
-4-Chloroaniline
-HexachlorobutadieNe
-Caprolactam
-4-Chloro-3-Methylphenol
-1-MethylnaphthaLene
-1,2,4,5-Tetrachlorobenzen+
-2,4,5-Trichlorophenol
2-Methylnaphthalene-D10+
-2-Nitroaniline
-Dimethylphthalate
-2,6-Dinitrotoluene
Acenaphthylene
-3-Nitroaniline+
-Acenaphthene
-2,4-Dinitrophenol
-Dibenzofuran+
-2,3,4,6-Tetrachlorophenol
-Fluorene-D10+
-4-Nitroaniline+
-N-Nitrosodiphenylamine
Diethylphthalate
-4-Bromophenyl-phenylether+
-Atrazine
-Pentachlorophenol
-Phenanthrene-D10+
-Anthracene
-Carbazole
Di-n-butylphthalate
-Fluoranthene-d10+
-Pyrene-D10+
-Butylbenzylphthalate
-Benzo(a)anthracene+
-3,3'-Dichlorobenzidine+
-bis(2-Ethylhexyl)phthalat
-Di-n-octylphthalate
-Benzo(b)fluoranthene
-Benzo(k)fluoranthene
-Benzo(a)pyrene
-Perylene-D12
-Indeno(1,2,3-cd)pyrene
-Dibenzo(a,h)anthracene
-Benzo(g,h,i)perylene

Form 7
Calibration Verification Summary

Lab Name: Katahdin Analytical Services
SDG: SQ6133
Lab ID: WG346504-3
Analytical Date: 12/08/23 03:04
Lab File ID: N0407.D
Instrument ID: GCMS-N
Initial Calibration Date(s): 12/07/23 12:11 12/07/23 14:42
Column ID:

Compound	$\overline{RRF}$/Amount	RF2	CCAL RRF2	Min RF	%D/ %Drift	Max %D/ %Drift	Curve Type	Qual
Naphthalene	1.09413	1.15928	1.15928	0.010	5.95450	20.000	Averaged	
2-Methylnaphthalene	0.72318	0.69416	0.69416	0.010	-4.01280	20.000	Averaged	
Acenaphthylene	2.22711	2.37063	2.37063	0.010	6.44441	20.000	Averaged	
Acenaphthene	1.32261	1.38535	1.38535	0.010	4.74340	20.010	Averaged	
Fluorene	1.32162	1.43725	1.43725	0.010	8.74863	20.000	Averaged	
Phenanthrene	1.20967	1.28586	1.28586	0.010	6.29858	20.000	Averaged	
Anthracene	1.21499	1.22930	1.22930	0.010	1.17824	20.000	Averaged	
Fluoranthene	0.93896	0.82490	0.82490	0.010	-12.14701	20.010	Averaged	
Pyrene	2.47305	2.85668	2.85668	0.010	15.51259	20.000	Averaged	
Benzo(a)anthracene	1.38487	1.58836	1.58836	0.010	14.69321	20.000	Averaged	
Chrysene	1.65973	1.71185	1.71185	0.010	3.14015	20.000	Averaged	
Benzo(b)fluoranthene	1.45918	1.42285	1.42285	0.010	-2.48942	20.000	Averaged	
Benzo(k)fluoranthene	1.88696	1.80542	1.80542	0.010	-4.32112	20.000	Averaged	
Benzo(a)pyrene	1.42750	1.44041	1.44041	0.010	0.90413	20.010	Averaged	
Indeno(1,2,3-cd)pyrene	1.03440	1.26816	1.26816	0.010	22.59902	20.000	Averaged	*
Dibenzo(a,h)anthracene	1.06638	1.22727	1.22727	0.010	15.08715	20.000	Averaged	
Benzo(g,h,i)perylene	1.16611	1.42572	1.42572	0.010	22.26348	20.000	Averaged	*
2-Methylnaphthalene-D10	0.52508	0.50486	0.50486	0.010	-3.85023	20.000	Averaged	
Fluorene-D10	1.04693	1.14061	1.14061	0.010	8.94767	20.000	Averaged	
Pyrene-D10	1.87184	2.17901	2.17901	0.010	16.40987	20.000	Averaged	

*** = Compound out of QC criteria**

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sales@katahdinlab.com

Data File: \\target_server\gg\chem\gcms-n.i\N120723B.b\N0407.D
Report Date: 29-Dec-2023 09:52

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-n.i\N120723B.b\N0407.D
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Inj Date : 08-DEC-2023 03:04
Operator : EP   Inst ID: gcms-n.i
Smp Info : WG346504-3
Misc Info : WG346504,WG346504,WG346503-4,SQ6133-1
Comment   :
Method   : \\target_server\gg\chem\gcms-n.i\N120723B.b\NSPSIM95.m
Meth Date : 08-Dec-2023 07:51 epelletier Quant Type: ISTD
Cal Date : 07-DEC-2023 14:42   Cal File: N0385.D
Als bottle: 2   Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: all.sub
Target Version: 4.12
Processing Host: INSPIRON1

Concentration Formula: Amt * DF * Uf*(Vt/Vo*Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.000	Sample Volume (L)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
$	1 1,4-Dioxane-d8	96	2.752	2.742	(0.268)	69209	2.00000	3.84	
	2 1,4-Dioxane	88	2.783	2.784	(0.421)	74009	2.00000	2.59	
	3 N-Nitrosodimethylamine	74	3.237	3.217	(0.490)	92057	2.00000	2.62	
	4 Pyridine	79	3.290	3.238	(0.497)	147004	2.00000	2.18	
	5 Benzaldehyde	77	6.094	6.084	(0.921)	52252	2.00000	2.88	
	6 Phenol	94	6.250	6.240	(0.945)	304049	4.50000	4.02	
	7 Bis(2-Chloroethyl)ether	93	6.333	6.323	(0.958)	126697	2.00000	1.91	
	8 2-Chlorophenol	128	6.375	6.365	(0.964)	311589	4.50000	4.86	
	9 1,3-Dichlorobenzene	146	6.541	6.531	(0.989)	159505	2.00000	2.06	
*	10 1,4-Dichlorobenzene-D4	152	6.614	6.604	(1.000)	38762	0.80000	(a)	
	11 1,4-Dichlorobenzene	146	6.635	6.625	(1.003)	160302	2.00000	2.04	
	12 1,2-Dichlorobenzene	146	6.812	6.802	(1.030)	148544	2.00000	1.96	
	13 2,2'-Oxybis(1-chloropropane)	45	6.968	6.958	(1.053)	80250	2.00000	1.93	
	14 2-Methylphenol	108	6.968	6.958	(1.053)	269686	4.50000	4.54	
	15 Acetophenone	105	7.114	7.104	(0.874)	154707	2.00000	2.23	
	16 N-Nitroso-di-n-propylamine	70	7.134	7.125	(1.079)	76652	2.00000	1.89	
	17 3&4-Methylphenol	108	7.166	7.145	(1.083)	279847	4.50000	4.55	
	18 Hexachloroethane	117	7.207	7.197	(1.090)	50492	2.00000	1.65	
	19 Nitrobenzene	77	7.301	7.291	(0.897)	102620	2.00000	2.25	
	20 Isophorone	82	7.619	7.597	(0.936)	175072	2.00000	1.90	

Data File: \\target_server\gg\chem\gcms-n.i\N120723B.b\N0407.D
Report Date: 29-Dec-2023 09:52

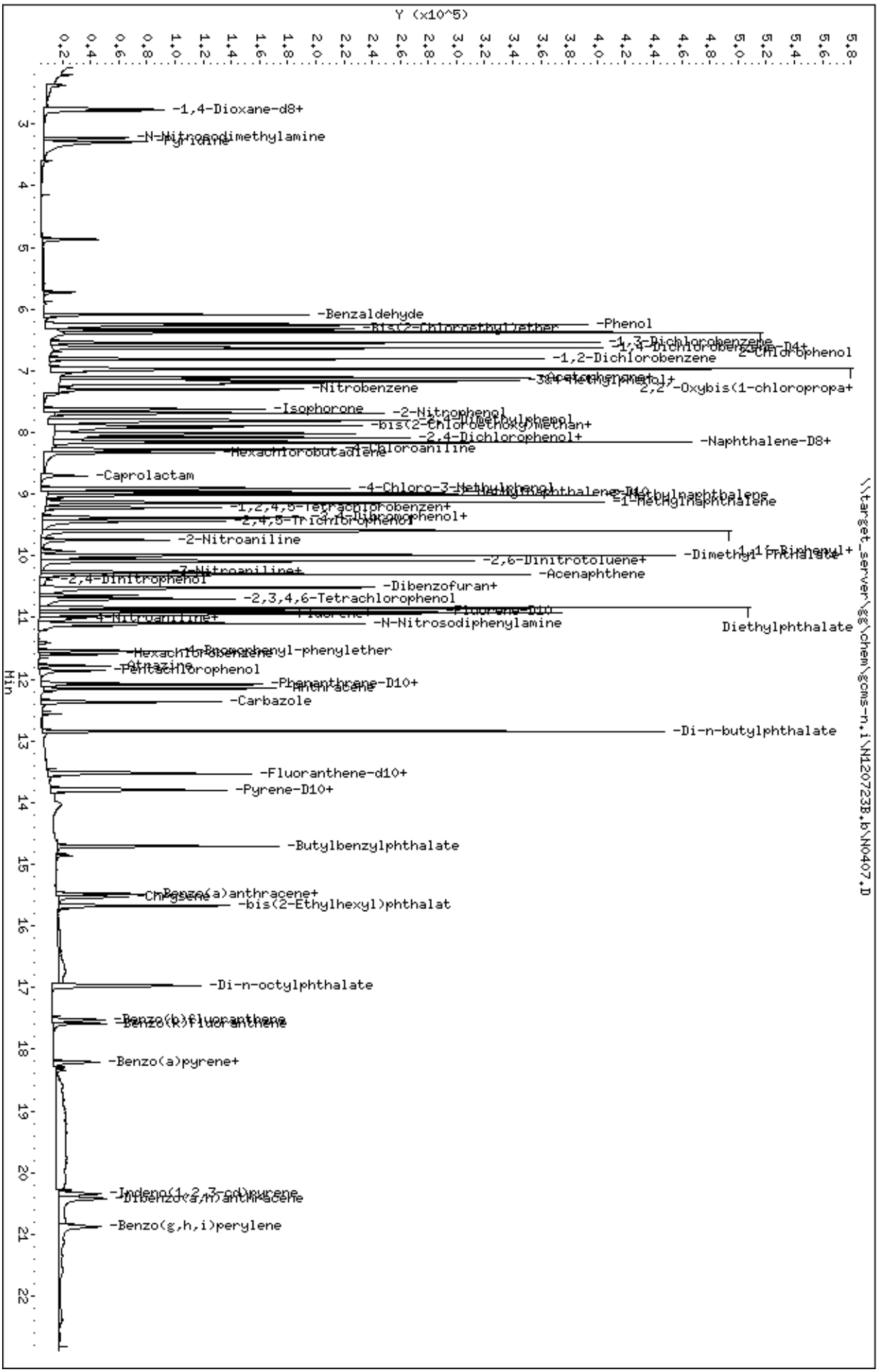
							AMOUNTS		
		QUANT SIG					CAL-AMT	ON-COL	
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/ml)	(ug/ml)	REVIEW CODE
	21 2-Nitrophenol	139	7.697	7.675	(0.946)	116318	4.50000	6.13	
	22 2,4-Dimethylphenol	107	7.810	7.777	(0.960)	202202	4.50000	5.24	
	23 bis(2-Chloroethoxy)methane	93	7.900	7.878	(0.971)	115817	2.00000	2.02	
	24 Benzoic Acid	105	7.934	7.957	(0.975)	82943	2.00000	8.42	
	25 2,4-Dichlorophenol	162	8.012	7.979	(0.985)	185763	4.50000	4.30	
	26 1,2,4-Trichlorobenzene	180	8.080	8.069	(0.993)	94440	2.00000	2.05	
*	27 Naphthalene-D8	136	8.136	8.125	(1.000)	112983	0.80000	(a)	
	28 Naphthalene	128	8.159	8.148	(1.003)	327447	2.00000	2.12	
	29 4-Chloroaniline	127	8.282	8.282	(1.018)	70012	2.00000	2.44	
	30 Hexachlorobutadiene	225	8.327	8.317	(1.024)	42953	2.00000	2.16	
	31 Caprolactam	113	8.698	8.699	(1.069)	26012	2.00000	2.35	
	32 4-Chloro-3-Methylphenol	107	8.900	8.869	(1.094)	151451	4.50000	4.33	
$	33 2-Methylnaphthalene-D10	152	8.974	8.954	(1.103)	142602	2.00000	1.92	
	34 2-Methylnaphthalene	142	9.017	8.996	(1.108)	196070	2.00000	1.92	
	35 1-Methylnaphthalene	142	9.133	9.113	(1.123)	181775	2.00000	1.95	
	36 1,2,4,5-Tetrachlorobenzene	216	9.229	9.208	(0.899)	65247	2.00000	2.09	
	37 Hexachlorocyclopentadiene	237	9.208	9.187	(0.897)	9056	2.00000	0.690	
$	38 2,4-Dibromophenol	252	9.366	9.346	(0.913)	36685	2.00000	2.67	
	39 2,4,6-Trichlorophenol	196	9.377	9.356	(0.914)	88549	4.50000	5.76	
	40 2,4,5-Trichlorophenol	196	9.441	9.420	(0.920)	99338	4.50000	5.98	
	41 1,1'-Biphenyl	154	9.589	9.579	(0.934)	193435	2.00000	2.21	
	42 2-Chloronaphthalene	164	9.599	9.579	(0.935)	49689	2.00000	2.16	
	43 2-Nitroaniline	65	9.749	9.728	(0.950)	29766	2.00000	2.13	
	44 Dimethyl Phthalate	163	9.985	9.975	(0.973)	334805	4.50000	5.63	
	45 2,6-Dinitrotoluene	165	10.050	10.039	(0.979)	31798	2.00000	2.08	
	46 Acenaphthylene	152	10.093	10.082	(0.983)	231990	2.00000	2.13	
	47 3-Nitroaniline	138	10.253	10.243	(0.999)	28455	2.00000	4.14	
*	48 Acenaphthene-D10	164	10.264	10.254	(1.000)	39144	0.80000	(a)	
	49 Acenaphthene	153	10.296	10.286	(1.003)	135570	2.00000	2.09	
	50 2,4-Dinitrophenol	184	10.393	10.372	(1.013)	3624	4.50000	2.01	
	51 Dibenzofuran	168	10.521	10.501	(1.025)	184835	2.00000	2.12	
	52 4-Nitrophenol	109	10.532	10.490	(1.026)	21808	4.50000	5.68	
	53 2,4-Dinitrotoluene	165	10.543	10.522	(1.027)	34524	2.00000	1.99	
	54 2,3,4,6-Tetrachlorophenol	232	10.693	10.672	(1.042)	59293	4.50000	5.81	
	55 Diethylphthalate	149	10.843	10.833	(1.056)	310425	4.50000	5.55	
$	56 Fluorene-D10	174	10.897	10.887	(1.062)	111620	2.00000	2.18	
	57 Fluorene	166	10.929	10.919	(1.065)	140649	2.00000	2.17	
	58 4-Chlorophenyl-phenylether	204	10.950	10.940	(1.067)	62571	2.00000	2.19	
	59 4-Nitroaniline	138	10.993	10.983	(1.071)	23704	2.00000	3.50	
	60 4,6-Dinitro-2-Methylphenol	198	11.036	11.015	(0.915)	5848	4.50000	1.91	
	61 N-Nitrosodiphenylamine	169	11.101	11.090	(0.920)	109424	2.00000	2.40	
	62 4-Bromophenyl-phenylether	248	11.539	11.529	(0.957)	31981	2.00000	2.32	
	63 Hexachlorobenzene	284	11.592	11.582	(0.961)	30179	2.00000	2.00	
	64 Atrazine	200	11.784	11.774	(0.977)	26171	2.00000	2.60	
	65 Pentachlorophenol	266	11.859	11.849	(0.983)	29050	4.50000	8.93	
*	66 Phenanthrene-D10	188	12.062	12.052	(1.000)	46167	0.80000	(a)	
	67 Phenanthrene	178	12.083	12.073	(1.002)	148411	2.00000	2.12	
	68 Anthracene	178	12.147	12.137	(1.007)	141883	2.00000	2.02	
	69 Carbazole	167	12.372	12.361	(1.026)	129817	2.00000	2.64	
	70 Di-n-butylphthalate	149	12.841	12.831	(1.065)	409600	4.50000	5.09	
$	71 Fluoranthene-d10	212	13.511	13.502	(1.120)	67326	2.00000	1.79	
	72 Fluoranthene	202	13.532	13.522	(1.122)	95208	2.00000	1.76	
$	73 Pyrene-D10	212	13.776	13.777	(0.889)	70736	2.00000	2.33	
	74 Pyrene	202	13.797	13.797	(0.891)	92735	2.00000	2.31	

Data File: \\target_server\gg\chem\gcms-n.i\N120723B.b\N0407.D
Report Date: 29-Dec-2023 09:52

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
	75 Butylbenzylphthalate	149	14.703	14.704	(0.949)	100846	4.50000	6.04	
	76 Benzo(a)anthracene	228	15.477	15.468	(0.999)	51562	2.00000	2.29	
	77 3,3'-Dichlorobenzidine	252	15.488	15.488	(1.000)	12928	2.00000	2.22	
*	78 Chrysene-D12	240	15.488	15.478	(1.000)	12985	0.80000	(a)	
	79 Chrysene	228	15.528	15.529	(1.003)	55571	2.00000	2.06	
	80 bis(2-Ethylhexyl)phthalate	149	15.671	15.672	(1.012)	123710	4.50000	5.74	
	81 Di-n-octylphthalate	149	16.965	16.965	(1.095)	179994	4.50000	6.70	
	82 Benzo(b)fluoranthene	252	17.520	17.521	(0.956)	45549	2.00000	1.95	
	83 Benzo(k)fluoranthene	252	17.582	17.573	(0.959)	57796	2.00000	1.91(H)	
	84 Benzo(a)pyrene	252	18.210	18.211	(0.993)	46111	2.00000	2.02	
*	85 Perylene-D12	264	18.334	18.324	(1.000)	12805	0.80000	(a)	
	86 Indeno(1,2,3-cd)pyrene	276	20.342	20.343	(1.110)	40597	2.00000	2.45	
	87 Dibenzo(a,h)anthracene	278	20.425	20.415	(1.114)	39288	2.00000	2.30	
	88 Benzo(g,h,i)perylene	276	20.878	20.878	(1.139)	45641	2.00000	2.44	
M	89 Total PAHs	100				2073853	36.0000	38.0	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
H - Operator selected an alternate compound hit.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Date : 08-DEC-2023 03:04
Client ID:
Sample Info: WG346504-3
Volume Injected (uL): 1.0
Column phase: Rxi-5ViOms
Instrument: gcms-n,i
Operator: EP
Column diameter: 0.25
\\target_server\gg\chem\gcms-n,i\N120723B,b\N0407,D
Y (x10^5)
Min
-1,4-Dioxane-d8+
-N-Nitrosodimethylamine
Pyridine
-Benzaldehyde
-Phenol
-Bis(2-Chloroethyl)ether
-1,3-Dichlorobenzene
-1,4-Dichlorobenzene-D4+
2-Chlorophenol
-1,2-Dichlorobenzene
-Nitrobenzene
-Isophorone
-2-Nitrophenol
-bis(2-Chloroethoxy)Methan+
-2,4-Dichlorophenol+
-Naphthalene-D8+
-Hexachlorobutadiene
-Caprolactam
-1,2,4,5-Tetrachlorobenzen+
-2,4,5-Trichlorophenol
-2-Nitroaniline
-2,6-Dinitrotoluene+
-Acenaphthene
-2,4-Dinitrophenol
-Dibenzofuran+
-2,3,4,6-Tetrachlorophenol
Fluorene
Fluorene-D10
Diethylphthalate
-N-Nitrosodiphenylamine
-Hexachlorobenzene
-Atrazine
-Pentachlorophenol
-Phenanthrene-D10+
Anthracene
-Carbazole
-Di-n-butylphthalate
-Fluoranthene-d10+
-Pyrene-D10+
-Butylbenzylphthalate
-Benzo(a)anthracene+
Chrysene
-bis(2-Ethylhexyl)phthalat
-Di-n-octylphthalate
-Benzo(b)fluoranthene
Benzo(k)fluoranthene
-Benzo(a)pyrene+
-Indeno(1,2,3-cd)pyrene
Dibenzo(a,h)anthracene
-Benzo(g,h,i)perylene

Form 7
Calibration Verification Summary

Lab Name: Katahdin Analytical Services **SDG:** SQ6133
Lab ID: WG346504-4 **Analytical Date:** 12/08/23 03:37
Lab File ID: N0408.D **Instrument ID:** GCMS-N
Initial Calibration Date(s): 12/07/23 12:11 12/07/23 14:42 **Column ID:**

Compound	RRF/Amount	RF2	CCAL RRF2	Min RF	%D/ %Drift	Max %D/ %Drift	Curve Type	Qual
Naphthalene	1.09413	1.17966	1.17966	0.010	7.81704	20.000	Averaged	
2-Methylnaphthalene	0.72318	0.62827	0.62827	0.010	-13.12346	20.000	Averaged	
Acenaphthylene	2.22711	2.30942	2.30942	0.010	3.69585	20.000	Averaged	
Acenaphthene	1.32261	1.35092	1.35092	0.010	2.14069	20.010	Averaged	
Fluorene	1.32162	1.33151	1.33151	0.010	0.74832	20.000	Averaged	
Phenanthrene	1.20967	1.30920	1.30920	0.010	8.22792	20.000	Averaged	
Anthracene	1.21499	1.39959	1.39959	0.010	15.19405	20.000	Averaged	
Fluoranthene	0.93896	0.92581	0.92581	0.010	-1.40042	20.010	Averaged	
Pyrene	2.47305	2.85240	2.85240	0.010	15.33932	20.000	Averaged	
Benzo(a)anthracene	1.38487	1.50163	1.50163	0.010	8.43049	20.000	Averaged	
Chrysene	1.65973	1.76957	1.76957	0.010	6.61777	20.000	Averaged	
Benzo(b)fluoranthene	1.45918	1.43202	1.43202	0.010	-1.86069	20.000	Averaged	
Benzo(k)fluoranthene	1.88696	1.71845	1.71845	0.010	-8.92992	20.000	Averaged	
Benzo(a)pyrene	1.42750	1.40535	1.40535	0.010	-1.55164	20.010	Averaged	
Indeno(1,2,3-cd)pyrene	1.03440	1.23879	1.23879	0.010	19.75973	20.000	Averaged	
Dibenzo(a,h)anthracene	1.06638	1.23231	1.23231	0.010	15.55982	20.000	Averaged	
Benzo(g,h,i)perylene	1.16611	1.36457	1.36457	0.010	17.01912	20.000	Averaged	
2-Methylnaphthalene-D10	0.52508	0.52385	0.52385	0.010	-0.23411	20.000	Averaged	
Fluorene-D10	1.04693	1.05967	1.05967	0.010	1.21633	20.000	Averaged	
Pyrene-D10	1.87184	2.17977	2.17977	0.010	16.45067	20.000	Averaged	

*** = Compound out of QC criteria**

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sales@katahdinlab.com

Data File: \\target_server\gg\chem\gcms-n.i\N120723B.b\N0408.D
Report Date: 29-Dec-2023 09:52

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-n.i\N120723B.b\N0408.D
Lab Smp Id: WG346504-4
Inj Date : 08-DEC-2023 03:37
Operator : EP   Inst ID: gcms-n.i
Smp Info : WG346504-4
Misc Info : WG346504,WG346504,WG346503-4,SQ6133-1
Comment   :
Method   : \\target_server\gg\chem\gcms-n.i\N120723B.b\NSPSIM95.m
Meth Date : 08-Dec-2023 07:51 epelletier Quant Type: ISTD
Cal Date : 07-DEC-2023 14:42   Cal File: N0385.D
Als bottle: 2   Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: all.sub
Target Version: 4.12
Processing Host: INSPIRON1

Concentration Formula: Amt * DF * Uf*(Vt/Vo*Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.000	Sample Volume (L)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
$	1 1,4-Dioxane-d8	96	2.741	2.742	(0.267)	70652	2.00000	3.85	
	2 1,4-Dioxane	88	2.783	2.784	(0.421)	70921	2.00000	2.35	
	3 N-Nitrosodimethylamine	74	3.227	3.217	(0.488)	94534	2.00000	2.54	
	4 Pyridine	79	3.290	3.238	(0.497)	142193	2.00000	2.00	
	5 Benzaldehyde	77	6.094	6.084	(0.921)	58052	2.00000	3.03	
	6 Phenol	94	6.250	6.240	(0.945)	310213	4.50000	3.88	
	7 Bis(2-Chloroethyl)ether	93	6.333	6.323	(0.958)	132286	2.00000	1.89	
	8 2-Chlorophenol	128	6.375	6.365	(0.964)	311045	4.50000	4.60	
	9 1,3-Dichlorobenzene	146	6.541	6.531	(0.989)	167349	2.00000	2.05	
*	10 1,4-Dichlorobenzene-D4	152	6.614	6.604	(1.000)	40934	0.80000	(a)	
	11 1,4-Dichlorobenzene	146	6.635	6.625	(1.003)	168883	2.00000	2.04	
	12 1,2-Dichlorobenzene	146	6.812	6.802	(1.030)	155480	2.00000	1.94	
	13 2,2'-Oxybis(1-chloropropane)	45	6.968	6.958	(1.053)	84562	2.00000	1.93	
	14 2-Methylphenol	108	6.968	6.958	(1.053)	265539	4.50000	4.23	
	15 Acetophenone	105	7.114	7.104	(0.874)	158491	2.00000	2.20	
	16 N-Nitroso-di-n-propylamine	70	7.134	7.125	(1.079)	79334	2.00000	1.85	
	17 3&4-Methylphenol	108	7.166	7.145	(1.083)	250152	4.50000	3.85	
	18 Hexachloroethane	117	7.207	7.197	(1.090)	54273	2.00000	1.68	
	19 Nitrobenzene	77	7.301	7.291	(0.897)	107554	2.00000	2.27	
	20 Isophorone	82	7.619	7.597	(0.936)	182906	2.00000	1.92	

Data File: \\target_server\gg\chem\gcms-n.i\N120723B.b\N0408.D
Report Date: 29-Dec-2023 09:52

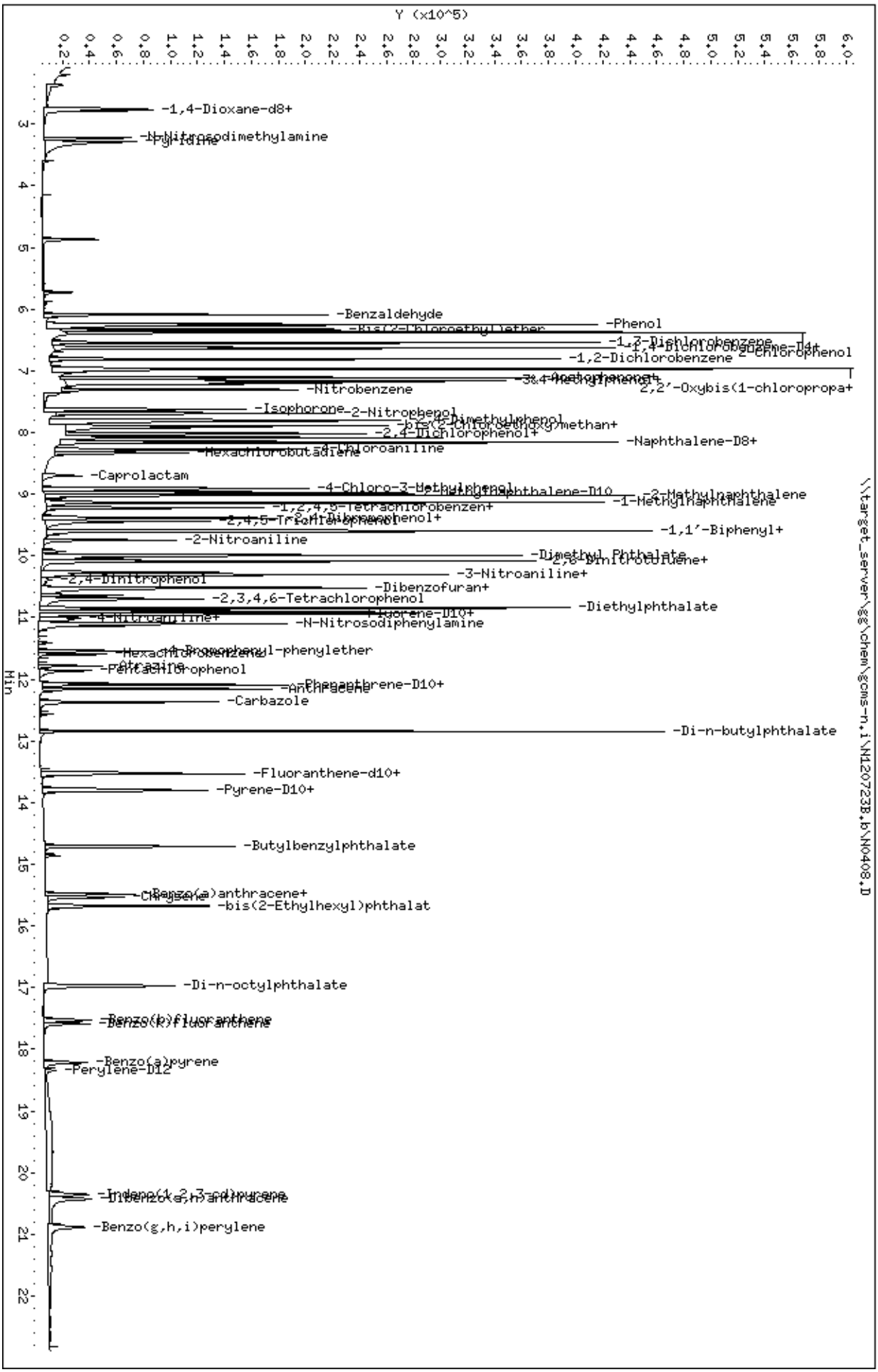
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
	21 2-Nitrophenol	139	7.697	7.675	(0.946)	121332	4.50000	6.17	
	22 2,4-Dimethylphenol	107	7.810	7.777	(0.960)	213121	4.50000	5.33	
	23 bis(2-Chloroethoxy)methane	93	7.900	7.878	(0.971)	130571	2.00000	2.20	
	24 Benzoic Acid	105	7.934	7.957	(0.975)	75336	2.00000	7.38	
	25 2,4-Dichlorophenol	162	8.012	7.979	(0.985)	194744	4.50000	4.35	
	26 1,2,4-Trichlorobenzene	180	8.080	8.069	(0.993)	105696	2.00000	2.21	
*	27 Naphthalene-D8	136	8.136	8.125	(1.000)	117094	0.80000	(a)	
	28 Naphthalene	128	8.158	8.148	(1.003)	345327	2.00000	2.16	
	29 4-Chloroaniline	127	8.282	8.282	(1.018)	72629	2.00000	2.45	
	30 Hexachlorobutadiene	225	8.327	8.317	(1.024)	45100	2.00000	2.18	
	31 Caprolactam	113	8.698	8.699	(1.069)	25867	2.00000	2.25	
	32 4-Chloro-3-Methylphenol	107	8.900	8.869	(1.094)	152094	4.50000	4.20	
$	33 2-Methylnaphthalene-D10	152	8.974	8.954	(1.103)	153349	2.00000	2.00	
	34 2-Methylnaphthalene	142	9.017	8.996	(1.108)	183917	2.00000	1.74	
	35 1-Methylnaphthalene	142	9.133	9.113	(1.123)	172074	2.00000	1.78	
	36 1,2,4,5-Tetrachlorobenzene	216	9.229	9.208	(0.899)	72642	2.00000	2.29	
	37 Hexachlorocyclopentadiene	237	9.207	9.187	(0.897)	11066	2.00000	0.830	
$	38 2,4-Dibromophenol	252	9.377	9.346	(0.914)	36367	2.00000	2.60	
	39 2,4,6-Trichlorophenol	196	9.388	9.356	(0.915)	86137	4.50000	5.53	
	40 2,4,5-Trichlorophenol	196	9.440	9.420	(0.920)	95879	4.50000	5.68	
	41 1,1'-Biphenyl	154	9.589	9.579	(0.934)	196174	2.00000	2.21	
	42 2-Chloronaphthalene	164	9.599	9.579	(0.935)	46279	2.00000	1.98	
	43 2-Nitroaniline	65	9.749	9.728	(0.950)	29178	2.00000	2.05	
	44 Dimethyl Phthalate	163	9.985	9.975	(0.973)	319110	4.50000	5.28	
	45 2,6-Dinitrotoluene	165	10.050	10.039	(0.979)	31122	2.00000	2.00	
	46 Acenaphthylene	152	10.093	10.082	(0.983)	229637	2.00000	2.07	
	47 3-Nitroaniline	138	10.253	10.243	(0.999)	26498	2.00000	3.80	
*	48 Acenaphthene-D10	164	10.264	10.254	(1.000)	39774	0.80000	(a)	
	49 Acenaphthene	153	10.307	10.286	(1.004)	134329	2.00000	2.04	
	50 2,4-Dinitrophenol	184	10.393	10.372	(1.013)	4209	4.50000	2.28	
	51 Dibenzofuran	168	10.521	10.501	(1.025)	183710	2.00000	2.08	
	52 4-Nitrophenol	109	10.543	10.490	(1.027)	17796	4.50000	4.64	
	53 2,4-Dinitrotoluene	165	10.543	10.522	(1.027)	32054	2.00000	1.82	
	54 2,3,4,6-Tetrachlorophenol	232	10.693	10.672	(1.042)	55928	4.50000	5.42	
	55 Diethylphthalate	149	10.843	10.833	(1.056)	294125	4.50000	5.18	
$	56 Fluorene-D10	174	10.897	10.887	(1.062)	105368	2.00000	2.02	
	57 Fluorene	166	10.929	10.919	(1.065)	132399	2.00000	2.01	
	58 4-Chlorophenyl-phenylether	204	10.961	10.940	(1.068)	59602	2.00000	2.05	
	59 4-Nitroaniline	138	11.004	10.983	(1.072)	23114	2.00000	3.36	
	60 4,6-Dinitro-2-Methylphenol	198	11.036	11.015	(0.915)	6841	4.50000	2.30	
	61 N-Nitrosodiphenylamine	169	11.101	11.090	(0.920)	109379	2.00000	2.48	
	62 4-Bromophenyl-phenylether	248	11.539	11.529	(0.957)	30153	2.00000	2.26	
	63 Hexachlorobenzene	284	11.603	11.582	(0.962)	29811	2.00000	2.04	
	64 Atrazine	200	11.784	11.774	(0.977)	24523	2.00000	2.52	
	65 Pentachlorophenol	266	11.859	11.849	(0.983)	26431	4.50000	8.40	
*	66 Phenanthrene-D10	188	12.062	12.052	(1.000)	44659	0.80000	(a)	
	67 Phenanthrene	178	12.094	12.073	(1.003)	146169	2.00000	2.16	
	68 Anthracene	178	12.158	12.137	(1.008)	156261	2.00000	2.30	
	69 Carbazole	167	12.372	12.361	(1.026)	128812	2.00000	2.71	
	70 Di-n-butylphthalate	149	12.841	12.831	(1.065)	390288	4.50000	5.01	
$	71 Fluoranthene-d10	212	13.511	13.502	(1.120)	68372	2.00000	1.88	
	72 Fluoranthene	202	13.532	13.522	(1.122)	103364	2.00000	1.97	
$	73 Pyrene-D10	212	13.786	13.777	(0.890)	77796	2.00000	2.33	
	74 Pyrene	202	13.807	13.797	(0.891)	101802	2.00000	2.31	

Data File: \\target_server\gg\chem\gcms-n.i\N120723B.b\N0408.D
Report Date: 29-Dec-2023 09:52

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
	75 Butylbenzylphthalate	149	14.703	14.704	(0.949)	106938	4.50000	5.82	
	76 Benzo(a)anthracene	228	15.477	15.468	(0.999)	53593	2.00000	2.17	
	77 3,3'-Dichlorobenzidine	252	15.498	15.488	(1.000)	21732	2.00000	3.40	
*	78 Chrysene-D12	240	15.498	15.478	(1.000)	14276	0.80000	(a)	
	79 Chrysene	228	15.539	15.529	(1.003)	63156	2.00000	2.13	
	80 bis(2-Ethylhexyl)phthalate	149	15.681	15.672	(1.012)	129998	4.50000	5.48	
	81 Di-n-octylphthalate	149	16.965	16.965	(1.095)	187313	4.50000	6.37	
	82 Benzo(b)fluoranthene	252	17.531	17.521	(0.956)	47511	2.00000	1.96	
	83 Benzo(k)fluoranthene	252	17.593	17.573	(0.959)	57014	2.00000	1.82(H)	
	84 Benzo(a)pyrene	252	18.221	18.211	(0.993)	46626	2.00000	1.97	
*	85 Perylene-D12	264	18.344	18.324	(1.000)	13271	0.80000	(a)	
	86 Indeno(1,2,3-cd)pyrene	276	20.353	20.343	(1.109)	41100	2.00000	2.40	
	87 Dibenzo(a,h)anthracene	278	20.435	20.415	(1.114)	40885	2.00000	2.31	
	88 Benzo(g,h,i)perylene	276	20.888	20.878	(1.139)	45273	2.00000	2.34	
M	89 Total PAHs	100				2100437	36.0000	37.6	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
H - Operator selected an alternate compound hit.


Data File: \\target_server\gg\chem\gcms-n,i\N120723B,b\N0408.D
Date : 08-DEC-2023 03:37
Client ID:
Sample Info: WG346504-4
Volume Injected (uL): 1.0
Column phase: Rxi-5ViOms
Instrument: gcms-n,i
Operator: EP
Column diameter: 0.25
\\target_server\gg\chem\gcms-n,i\N120723B,b\N0408.D
Y (x10^5)
Min
-1,4-Dioxane-d8+
-N-Nitrosodimethylamine
-Pyridine
-Benzaldehyde
-Phenol
-Bis(2-Chloroethyl)ether
-1,3-Dichlorobenzene
-1,4-Dichlorobenzene-D4+
-1,2-Dichlorobenzene
-2-Chlorophenol
-3&4-Methylphenol
-Nitrobenzene
-2,2'-Oxybis(1-chloropropa+
-Isophorone
-2-Nitrophenol
-2,4-Dimethylphenol
-bis(2-Chloroethoxy)methan+
-2,4-Dichlorophenol+
-Naphthalene-D8+
-4-Chloroaniline
-Hexachlorobutadiene
-Caprolactam
-4-Chloro-3-Methylphenol
-2-Methylnaphthalene-D10
-2-Methylnaphthalene
-1-Methylnaphthalene
-1,2,4,5-Tetrachlorobenzen+
-2,4,5-Trichlorophenol
-2,4-Dibromophenol+
-1,1'-Biphenyl+
-2-Nitroaniline
-Dimethyl Phthalate
-2,6-Dinitrotoluene+
-3-Nitroaniline+
-2,4-Dinitrophenol
-Dibenzofuran+
-2,3,4,6-Tetrachlorophenol
-Diethylphthalate
-Fluorene-D10+
-4-Nitroaniline+
-N-Nitrosodiphenylamine
-4-Bromophenyl-phenylether
-Hexachlorobenzene
-Atrazine
-Pentachlorophenol
-Phenanthrene-D10+
-Anthracene
-Carbazole
-Di-n-butylphthalate
-Fluoranthene-d10+
-Pyrene-D10+
-Butylbenzylphthalate
-Benzo(a)anthracene+
-Chrysene
-bis(2-Ethylhexyl)phthalat
-Di-n-octylphthalate
-Benzo(b)fluoranthene
-Benzo(k)fluoranthene
-Benzo(a)pyrene
-Perylene-D12
-Indeno(1,2,3-cd)pyrene
-Dibenzo(a,h)anthracene
-Benzo(g,h,i)perylene

Form 7
Calibration Verification Summary

Lab Name: Katahdin Analytical Services
SDG: SQ6133
Lab ID: WG346504-5
Analytical Date: 12/08/23 04:09
Lab File ID: N0409.D
Instrument ID: GCMS-N
Initial Calibration Date(s): 12/07/23 12:11 12/07/23 14:42
Column ID:

Compound	$\overline{RRF}$/Amount	RF2	CCAL RRF2	Min RF	%D/ %Drift	Max %D/ %Drift	Curve Type	Qual
Naphthalene	1.09413	1.15148	1.15148	0.010	5.24159	20.000	Averaged	
2-Methylnaphthalene	0.72318	0.64021	0.64021	0.010	-11.47316	20.000	Averaged	
Acenaphthylene	2.22711	2.35186	2.35186	0.010	5.60139	20.000	Averaged	
Acenaphthene	1.32261	1.33941	1.33941	0.010	1.26995	20.010	Averaged	
Fluorene	1.32162	1.34469	1.34469	0.010	1.74534	20.000	Averaged	
Phenanthrene	1.20967	1.29271	1.29271	0.010	6.86491	20.000	Averaged	
Anthracene	1.21499	1.38279	1.38279	0.010	13.81128	20.000	Averaged	
Fluoranthene	0.93896	0.93734	0.93734	0.010	-0.17242	20.010	Averaged	
Pyrene	2.47305	2.82217	2.82217	0.010	14.11702	20.000	Averaged	
Benzo(a)anthracene	1.38487	1.50505	1.50505	0.010	8.67777	20.000	Averaged	
Chrysene	1.65973	1.80353	1.80353	0.010	8.66356	20.000	Averaged	
Benzo(b)fluoranthene	1.45918	1.49447	1.49447	0.010	2.41854	20.000	Averaged	
Benzo(k)fluoranthene	1.88696	1.87396	1.87396	0.010	-0.68873	20.000	Averaged	
Benzo(a)pyrene	1.42750	1.47061	1.47061	0.010	3.01976	20.010	Averaged	
Indeno(1,2,3-cd)pyrene	1.03440	1.23681	1.23681	0.010	19.56802	20.000	Averaged	
Dibenzo(a,h)anthracene	1.06638	1.24784	1.24784	0.010	17.01647	20.000	Averaged	
Benzo(g,h,i)perylene	1.16611	1.37993	1.37993	0.010	18.33673	20.000	Averaged	
2-Methylnaphthalene-D10	0.52508	0.53278	0.53278	0.010	1.46706	20.000	Averaged	
Fluorene-D10	1.04693	1.07108	1.07108	0.010	2.30660	20.000	Averaged	
Pyrene-D10	1.87184	2.15065	2.15065	0.010	14.89490	20.000	Averaged	

*** = Compound out of QC criteria**

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Data File: \\target_server\gg\chem\gcms-n.i\N120723B.b\N0409.D
Report Date: 29-Dec-2023 09:52

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-n.i\N120723B.b\N0409.D
Lab Smp Id: WG346504-5
Inj Date : 08-DEC-2023 04:09
Operator : EP   Inst ID: gcms-n.i
Smp Info : WG346504-5
Misc Info : WG346504,WG346504,WG346503-4,SQ6133-1
Comment   :
Method   : \\target_server\gg\chem\gcms-n.i\N120723B.b\NSPSIM95.m
Meth Date : 08-Dec-2023 07:51 epelletier Quant Type: ISTD
Cal Date : 07-DEC-2023 14:42   Cal File: N0385.D
Als bottle: 2   Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: all.sub
Target Version: 4.12
Processing Host: INSPIRON1

Concentration Formula: Amt * DF * Uf*(Vt/Vo*Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.000	Sample Volume (L)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
$	1 1,4-Dioxane-d8	96	2.730	2.742	(0.266)	62302	2.00000	3.38	
	2 1,4-Dioxane	88	2.762	2.784	(0.418)	69901	2.00000	2.44	
	3 N-Nitrosodimethylamine	74	3.227	3.217	(0.488)	85721	2.00000	2.42	
	4 Pyridine	79	3.280	3.238	(0.496)	139234	2.00000	2.05	
	5 Benzaldehyde	77	6.094	6.084	(0.921)	54696	2.00000	3.00	
	6 Phenol	94	6.250	6.240	(0.945)	292712	4.50000	3.84	
	7 Bis(2-Chloroethyl)ether	93	6.333	6.323	(0.958)	122476	2.00000	1.84	
	8 2-Chlorophenol	128	6.375	6.365	(0.964)	291595	4.50000	4.53	
	9 1,3-Dichlorobenzene	146	6.541	6.531	(0.989)	158261	2.00000	2.04	
*	10 1,4-Dichlorobenzene-D4	152	6.614	6.604	(1.000)	38970	0.80000	(a)	
	11 1,4-Dichlorobenzene	146	6.635	6.625	(1.003)	158282	2.00000	2.01	
	12 1,2-Dichlorobenzene	146	6.812	6.802	(1.030)	147347	2.00000	1.93	
	13 2,2'-Oxybis(1-chloropropane)	45	6.968	6.958	(1.053)	80023	2.00000	1.92	
	14 2-Methylphenol	108	6.968	6.958	(1.053)	255243	4.50000	4.27	
	15 Acetophenone	105	7.114	7.104	(0.874)	154008	2.00000	2.16	
	16 N-Nitroso-di-n-propylamine	70	7.134	7.125	(1.079)	75350	2.00000	1.84	
	17 3&4-Methylphenol	108	7.166	7.145	(1.083)	240874	4.50000	3.89	
	18 Hexachloroethane	117	7.207	7.197	(1.090)	51907	2.00000	1.69	
	19 Nitrobenzene	77	7.311	7.291	(0.899)	103231	2.00000	2.20	
	20 Isophorone	82	7.630	7.597	(0.938)	175530	2.00000	1.86	

Data File: \\target_server\gg\chem\gcms-n.i\N120723B.b\N0409.D
Report Date: 29-Dec-2023 09:52

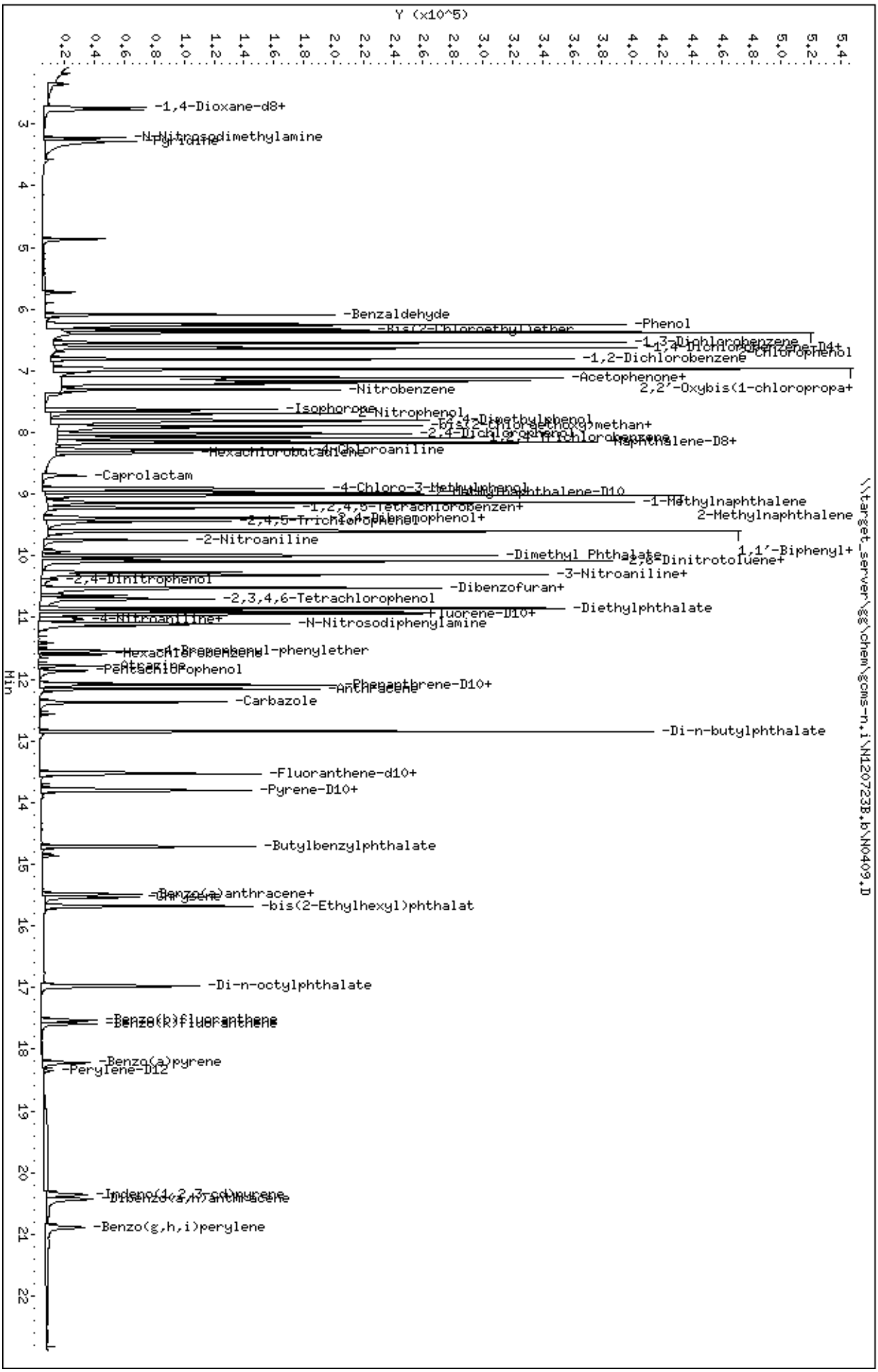
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
	21 2-Nitrophenol	139	7.697	7.675	(0.946)	116339	4.50000	6.00	
	22 2,4-Dimethylphenol	107	7.810	7.777	(0.960)	194556	4.50000	4.92	
	23 bis(2-Chloroethoxy)methane	93	7.900	7.878	(0.971)	128101	2.00000	2.18	
	24 Benzoic Acid	105	7.934	7.957	(0.975)	70686	2.00000	7.00	
	25 2,4-Dichlorophenol	162	8.012	7.979	(0.985)	191828	4.50000	4.33	
	26 1,2,4-Trichlorobenzene	180	8.080	8.069	(0.993)	102874	2.00000	2.18	
*	27 Naphthalene-D8	136	8.136	8.125	(1.000)	115784	0.80000	(a)	
	28 Naphthalene	128	8.159	8.148	(1.003)	333307	2.00000	2.10	
	29 4-Chloroaniline	127	8.282	8.282	(1.018)	74102	2.00000	2.52	
	30 Hexachlorobutadiene	225	8.338	8.317	(1.025)	43468	2.00000	2.13	
	31 Caprolactam	113	8.698	8.699	(1.069)	24740	2.00000	2.18	
	32 4-Chloro-3-Methylphenol	107	8.900	8.869	(1.094)	150665	4.50000	4.21	
$	33 2-Methylnaphthalene-D10	152	8.974	8.954	(1.103)	154219	2.00000	2.03	
	34 2-Methylnaphthalene	142	9.017	8.996	(1.108)	185314	2.00000	1.77	
	35 1-Methylnaphthalene	142	9.133	9.113	(1.123)	168994	2.00000	1.77	
	36 1,2,4,5-Tetrachlorobenzene	216	9.229	9.208	(0.899)	72974	2.00000	2.28	
	37 Hexachlorocyclopentadiene	237	9.218	9.187	(0.898)	13202	2.00000	0.984	
$	38 2,4-Dibromophenol	252	9.377	9.346	(0.914)	36060	2.00000	2.56	
	39 2,4,6-Trichlorophenol	196	9.388	9.356	(0.915)	86573	4.50000	5.52	
	40 2,4,5-Trichlorophenol	196	9.440	9.420	(0.920)	94888	4.50000	5.58	
	41 1,1'-Biphenyl	154	9.589	9.579	(0.934)	193299	2.00000	2.16	
	42 2-Chloronaphthalene	164	9.599	9.579	(0.935)	45810	2.00000	1.94	
	43 2-Nitroaniline	65	9.749	9.728	(0.950)	28882	2.00000	2.02	
	44 Dimethyl Phthalate	163	9.996	9.975	(0.974)	318519	4.50000	5.23	
	45 2,6-Dinitrotoluene	165	10.050	10.039	(0.979)	31331	2.00000	2.00	
	46 Acenaphthylene	152	10.093	10.082	(0.983)	235462	2.00000	2.11	
	47 3-Nitroaniline	138	10.264	10.243	(1.000)	25255	2.00000	3.60	
*	48 Acenaphthene-D10	164	10.264	10.254	(1.000)	40047	0.80000	(a)	
	49 Acenaphthene	153	10.307	10.286	(1.004)	134098	2.00000	2.02	
	50 2,4-Dinitrophenol	184	10.393	10.372	(1.013)	5648	4.50000	3.00	
	51 Dibenzofuran	168	10.521	10.501	(1.025)	186745	2.00000	2.10	
	52 4-Nitrophenol	109	10.543	10.490	(1.027)	16463	4.50000	4.28	
	53 2,4-Dinitrotoluene	165	10.543	10.522	(1.027)	32177	2.00000	1.81	
	54 2,3,4,6-Tetrachlorophenol	232	10.693	10.672	(1.042)	54987	4.50000	5.30	
	55 Diethylphthalate	149	10.843	10.833	(1.056)	286706	4.50000	5.01	
$	56 Fluorene-D10	174	10.897	10.887	(1.062)	107234	2.00000	2.05	
	57 Fluorene	166	10.940	10.919	(1.066)	134627	2.00000	2.03	
	58 4-Chlorophenyl-phenylether	204	10.961	10.940	(1.068)	60213	2.00000	2.06	
	59 4-Nitroaniline	138	11.004	10.983	(1.072)	21700	2.00000	3.15	
	60 4,6-Dinitro-2-Methylphenol	198	11.036	11.015	(0.915)	9357	4.50000	3.06	
	61 N-Nitrosodiphenylamine	169	11.111	11.090	(0.921)	106944	2.00000	2.39	
	62 4-Bromophenyl-phenylether	248	11.549	11.529	(0.958)	30151	2.00000	2.24	
	63 Hexachlorobenzene	284	11.603	11.582	(0.962)	28996	2.00000	1.96	
	64 Atrazine	200	11.784	11.774	(0.977)	23486	2.00000	2.38	
	65 Pentachlorophenol	266	11.870	11.849	(0.984)	25584	4.50000	8.02	
*	66 Phenanthrene-D10	188	12.062	12.052	(1.000)	45258	0.80000	(a)	
	67 Phenanthrene	178	12.094	12.073	(1.003)	146264	2.00000	2.14	
	68 Anthracene	178	12.158	12.137	(1.008)	156456	2.00000	2.28	
	69 Carbazole	167	12.372	12.361	(1.026)	127051	2.00000	2.64	
	70 Di-n-butylphthalate	149	12.841	12.831	(1.065)	373809	4.50000	4.74	
$	71 Fluoranthene-d10	212	13.511	13.502	(1.120)	70034	2.00000	1.90	
	72 Fluoranthene	202	13.532	13.522	(1.122)	106055	2.00000	2.00	
$	73 Pyrene-D10	212	13.786	13.777	(0.890)	80816	2.00000	2.30	
	74 Pyrene	202	13.807	13.797	(0.891)	106050	2.00000	2.28	

Data File: \\target_server\gg\chem\gcms-n.i\N120723B.b\N0409.D
Report Date: 29-Dec-2023 09:52

							AMOUNTS		
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
	75 Butylbenzylphthalate	149	14.713	14.704	(0.949)	108401	4.50000	5.61	
	76 Benzo(a)anthracene	228	15.477	15.468	(0.999)	56556	2.00000	2.17	
	77 3,3'-Dichlorobenzidine	252	15.498	15.488	(1.000)	23765	2.00000	3.53	
*	78 Chrysene-D12	240	15.498	15.478	(1.000)	15031	0.80000	(a)	
	79 Chrysene	228	15.539	15.529	(1.003)	67772	2.00000	2.17	
	80 bis(2-Ethylhexyl)phthalate	149	15.681	15.672	(1.012)	134232	4.50000	5.38	
	81 Di-n-octylphthalate	149	16.975	16.965	(1.095)	193480	4.50000	6.26	
	82 Benzo(b)fluoranthene	252	17.531	17.521	(0.956)	47666	2.00000	2.05	
	83 Benzo(k)fluoranthene	252	17.593	17.573	(0.959)	59770	2.00000	1.99(H)	
	84 Benzo(a)pyrene	252	18.221	18.211	(0.993)	46905	2.00000	2.06	
*	85 Perylene-D12	264	18.344	18.324	(1.000)	12758	0.80000	(a)	
	86 Indeno(1,2,3-cd)pyrene	276	20.353	20.343	(1.109)	39448	2.00000	2.39	
	87 Dibenzo(a,h)anthracene	278	20.435	20.415	(1.114)	39800	2.00000	2.34	
	88 Benzo(g,h,i)perylene	276	20.888	20.878	(1.139)	44013	2.00000	2.37	
M	89 Total PAHs	100				2108557	36.0000	38.0	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
H - Operator selected an alternate compound hit.


Data File: \\target_server\gg\chem\gcms-n,i\N120723B,b\N0409.D
Date : 08-DEC-2023 04:09
Client ID:
Sample Info: WG346504-5
Volume Injected (uL): 1.0
Column phase: Rxi-5ViOms
Instrument: gcms-n,i
Operator: EP
Column diameter: 0.25
\\target_server\gg\chem\gcms-n,i\N120723B,b\N0409.D
Y (x10^5)
Min
-1,4-Dioxane-d8+
-N-Nitrosodimethylamine
-Benzaldehyde
-Phenol
-1,3-Dichlorobenzene
-1,4-Dichlorobenzene-D4+
-1,2-Dichlorobenzene
-Acetophenone+
-Nitrobenzene
2,2'-Oxybis(1-chloropropa+
-Isophorone
-Naphthalene-D8+
-Caprolactam
-1-Methylnaphthalene
2-Methylnaphthalene
-2-Nitroaniline
-Dimethyl Phthalate
1,1'-Biphenyl+
-2,4-Dinitrophenol
-3-Nitroaniline+
-Dibenzofuran+
-2,3,4,6-Tetrachlorophenol
-Diethylphthalate
-4-Nitroaniline+
-N-Nitrosodiphenylamine
-Pentachlorophenol
-Carbazole
-Di-n-butylphthalate
-Fluoranthene-d10+
-Pyrene-D10+
-Butylbenzylphthalate
-bis(2-Ethylhexyl)phthalat
-Di-n-octylphthalate
-Benzo(b)fluoranthene
-Benzo(a)pyrene
-Perylene-D12
-Benzo(g,h,i)perylene

Form 7
Calibration Verification Summary

Lab Name: Katahdin Analytical Services
SDG: SQ6133
Lab ID: WG346646-2
Analytical Date: 12/08/23 12:17
Lab File ID: N0410.D
Instrument ID: GCMS-N
Initial Calibration Date(s): 12/07/23 12:11 12/07/23 14:42
Column ID:

Compound	RRF/Amount	RF2	CCAL RRF2	Min RF	%D/ %Drift	Max %D/ %Drift	Curve Type	Qual
Naphthalene	1.09413	1.18449	1.18449	0.010	8.25873	20.000	Averaged	
2-Methylnaphthalene	0.72318	0.71443	0.71443	0.010	-1.20916	20.000	Averaged	
Acenaphthylene	2.22711	2.36236	2.36236	0.010	6.07290	20.000	Averaged	
Acenaphthene	1.32261	1.43394	1.43394	0.010	8.41752	20.010	Averaged	
Fluorene	1.32162	1.47043	1.47043	0.010	11.25966	20.000	Averaged	
Phenanthrene	1.20967	1.33818	1.33818	0.010	10.62361	20.000	Averaged	
Anthracene	1.21499	1.30176	1.30176	0.010	7.14207	20.000	Averaged	
Fluoranthene	0.93896	1.05462	1.05462	0.010	12.31830	20.010	Averaged	
Pyrene	2.47305	2.92936	2.92936	0.010	18.45151	20.000	Averaged	
Benzo(a)anthracene	1.38487	1.51043	1.51043	0.010	9.06641	20.000	Averaged	
Chrysene	1.65973	1.78998	1.78998	0.010	7.84756	20.000	Averaged	
Benzo(b)fluoranthene	1.45918	1.57027	1.57027	0.010	7.61379	20.000	Averaged	
Benzo(k)fluoranthene	1.88696	1.92937	1.92937	0.010	2.24741	20.000	Averaged	
Benzo(a)pyrene	1.42750	1.49352	1.49352	0.010	4.62463	20.010	Averaged	
Indeno(1,2,3-cd)pyrene	1.03440	1.16014	1.16014	0.010	12.15594	20.000	Averaged	
Dibenzo(a,h)anthracene	1.06638	1.14583	1.14583	0.010	7.45009	20.000	Averaged	
Benzo(g,h,i)perylene	1.16611	1.27155	1.27155	0.010	9.04263	20.000	Averaged	
2-Methylnaphthalene-D10	0.52508	0.56939	0.56939	0.010	8.43870	20.000	Averaged	
Fluorene-D10	1.04693	1.13934	1.13934	0.010	8.82680	20.000	Averaged	
Pyrene-D10	1.87184	2.10045	2.10045	0.010	12.21314	20.000	Averaged	

*** = Compound out of QC criteria**

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Data File: \\target_server\gg\chem\gcms-n.i\N120823.b\N0410.D
Report Date: 29-Dec-2023 09:54

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-n.i\N120823.b\N0410.D
Lab Smp Id: WG346646-2
Inj Date : 08-DEC-2023 12:17
Operator : EP   Inst ID: gcms-n.i
Smp Info : WG346646-2
Misc Info : WG346646,WG346646,WG346503-4,SQ6133-1
Comment   :
Method   : \\target_server\gg\chem\gcms-n.i\N120823.b\NSPSIM95.m
Meth Date : 11-Dec-2023 07:09 epelletier Quant Type: ISTD
Cal Date : 07-DEC-2023 14:42   Cal File: N0385.D
Als bottle: 2   Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: all.sub
Target Version: 4.12
Processing Host: INSPIRON1

Concentration Formula: Amt * DF * Uf*(Vt/Vo*Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.000	Sample Volume (L)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)	REVIEW CODE
$	1 1,4-Dioxane-d8	96	2.709	2.742	(0.264)	59892	2.00000	1.87	
	2 1,4-Dioxane	88	2.751	2.784	(0.416)	64471	2.00000	2.02	
	3 N-Nitrosodimethylamine	74	3.206	3.217	(0.485)	74778	2.00000	1.90	
	4 Pyridine	79	3.269	3.238	(0.494)	125287	2.00000	1.66	
	5 Benzaldehyde	77	6.083	6.084	(0.920)	66989	2.00000	3.31	
	6 Phenol	94	6.250	6.240	(0.945)	359713	4.50000	4.25	
	7 Bis(2-Chloroethyl)ether	93	6.323	6.323	(0.956)	148125	2.00000	2.00	
	8 2-Chlorophenol	128	6.364	6.365	(0.962)	338933	4.50000	4.74	
	9 1,3-Dichlorobenzene	146	6.541	6.531	(0.989)	174148	2.00000	2.02	
*	10 1,4-Dichlorobenzene-D4	152	6.614	6.604	(1.000)	43300	0.80000	(a)	
	11 1,4-Dichlorobenzene	146	6.635	6.625	(1.003)	172017	2.00000	1.96	
	12 1,2-Dichlorobenzene	146	6.812	6.802	(1.030)	166601	2.00000	1.96	
	13 2,2'-Oxybis(1-chloropropane)	45	6.968	6.958	(1.053)	99974	2.00000	2.16	
	14 2-Methylphenol	108	6.968	6.958	(1.053)	337764	4.50000	5.09	
	15 Acetophenone	105	7.113	7.104	(0.874)	194225	2.00000	2.00	
	16 N-Nitroso-di-n-propylamine	70	7.134	7.125	(1.079)	97122	2.00000	2.14	
	17 3&4-Methylphenol	108	7.155	7.145	(1.082)	329154	4.50000	4.79	
	18 Hexachloroethane	117	7.207	7.197	(1.090)	68657	2.00000	2.01	
	19 Nitrobenzene	77	7.301	7.291	(0.897)	136270	2.00000	2.13	
	20 Isophorone	82	7.618	7.597	(0.936)	258473	2.00000	2.00	

Data File: \\target_server\gg\chem\gcms-n.i\N120823.b\N0410.D
Report Date: 29-Dec-2023 09:54

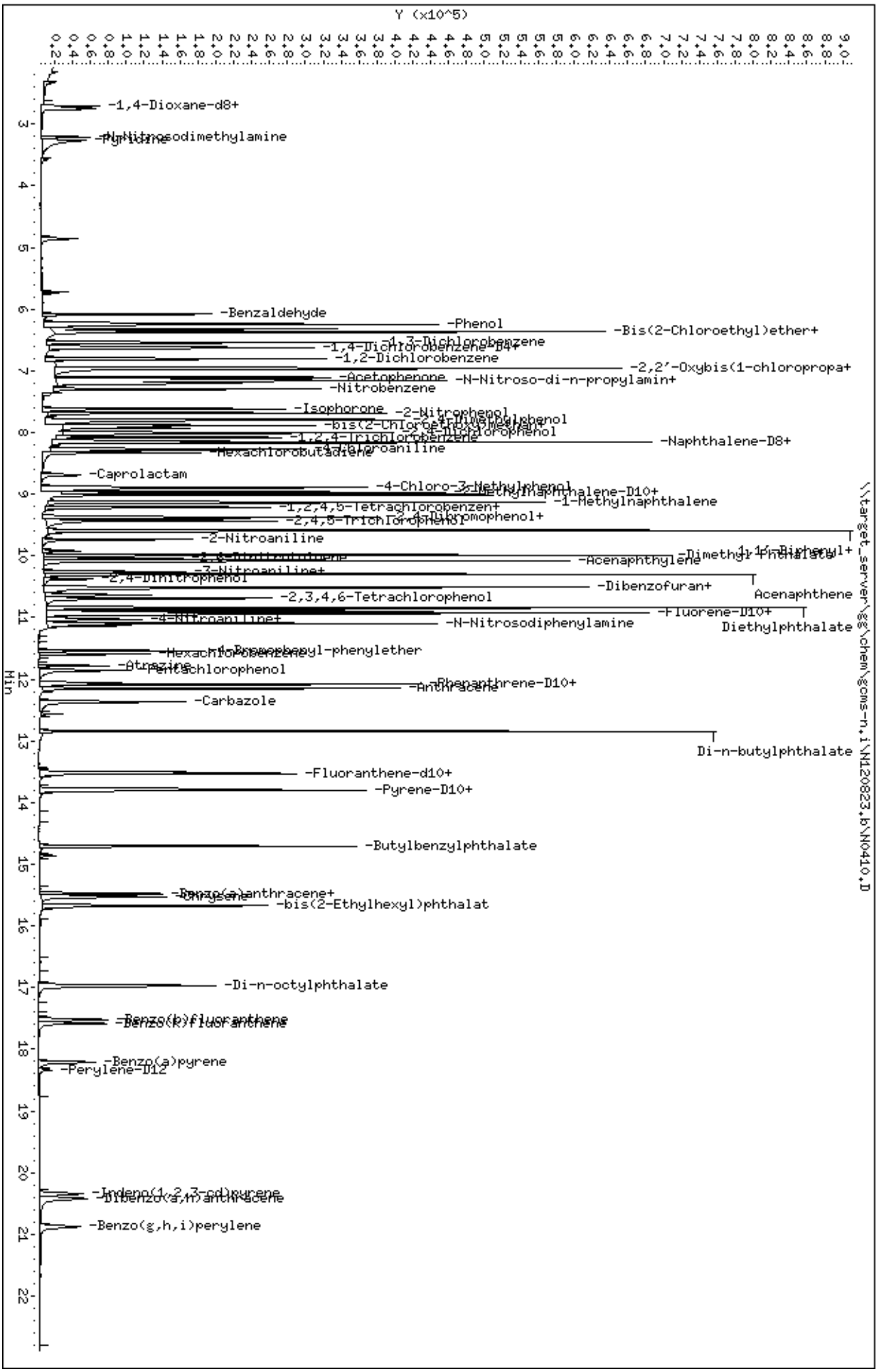
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
	21 2-Nitrophenol	139	7.686	7.675	(0.945)	163721	4.50000	6.16	
	22 2,4-Dimethylphenol	107	7.798	7.777	(0.959)	272421	4.50000	5.04	
	23 bis(2-Chloroethoxy)methane	93	7.888	7.878	(0.970)	159534	2.00000	1.99	
	24 Benzoic Acid	105	7.933	7.957	(0.975)	98486	2.00000	7.13	
	25 2,4-Dichlorophenol	162	8.001	7.979	(0.983)	276827	4.50000	4.57	
	26 1,2,4-Trichlorobenzene	180	8.080	8.069	(0.993)	130162	2.00000	2.02	
*	27 Naphthalene-D8	136	8.136	8.125	(1.000)	158299	0.80000	(a)	
	28 Naphthalene	128	8.158	8.148	(1.003)	468759	2.00000	2.16	
	29 4-Chloroaniline	127	8.282	8.282	(1.018)	103163	2.00000	2.57	
	30 Hexachlorobutadiene	225	8.327	8.317	(1.024)	59240	2.00000	2.12	
	31 Caprolactam	113	8.687	8.699	(1.068)	37629	2.00000	2.42	
	32 4-Chloro-3-Methylphenol	107	8.890	8.869	(1.093)	258830	4.50000	5.29	
$	33 2-Methylnaphthalene-D10	152	8.974	8.954	(1.103)	225334	2.00000	2.17	
	34 2-Methylnaphthalene	142	9.017	8.996	(1.108)	282735	2.00000	1.98	
	35 1-Methylnaphthalene	142	9.133	9.113	(1.123)	267585	2.00000	2.05	
	36 1,2,4,5-Tetrachlorobenzene	216	9.218	9.208	(0.899)	111062	2.00000	2.00	
	37 Hexachlorocyclopentadiene	237	9.207	9.187	(0.898)	53279	2.00000	2.28	
$	38 2,4-Dibromophenol	252	9.356	9.346	(0.912)	66211	2.00000	2.71	
	39 2,4,6-Trichlorophenol	196	9.377	9.356	(0.915)	156741	4.50000	5.73	
	40 2,4,5-Trichlorophenol	196	9.430	9.420	(0.920)	176212	4.50000	5.96	
	41 1,1'-Biphenyl	154	9.589	9.579	(0.935)	321145	2.00000	2.07	
	42 2-Chloronaphthalene	164	9.599	9.579	(0.936)	83622	2.00000	2.04	
	43 2-Nitroaniline	65	9.739	9.728	(0.950)	50079	2.00000	2.01	
	44 Dimethyl Phthalate	163	9.985	9.975	(0.974)	530071	4.50000	5.01	
	45 2,6-Dinitrotoluene	165	10.039	10.039	(0.979)	56802	2.00000	2.09	
	46 Acenaphthylene	152	10.082	10.082	(0.983)	411003	2.00000	2.12	
	47 3-Nitroaniline	138	10.253	10.243	(1.000)	28600	2.00000	2.34	
*	48 Acenaphthene-D10	164	10.253	10.254	(1.000)	69592	0.80000	(a)	
	49 Acenaphthene	153	10.296	10.286	(1.004)	249477	2.00000	2.17	
	50 2,4-Dinitrophenol	184	10.382	10.372	(1.013)	31576	4.50000	8.49	
	51 Dibenzofuran	168	10.511	10.501	(1.025)	335801	2.00000	2.17	
	52 4-Nitrophenol	109	10.511	10.490	(1.025)	37133	4.50000	5.46	
	53 2,4-Dinitrotoluene	165	10.532	10.522	(1.027)	66921	2.00000	2.17	
	54 2,3,4,6-Tetrachlorophenol	232	10.693	10.672	(1.043)	111832	4.50000	6.13	
	55 Diethylphthalate	149	10.843	10.833	(1.058)	513964	4.50000	5.17	
$	56 Fluorene-D10	174	10.897	10.887	(1.063)	198223	2.00000	2.18	
	57 Fluorene	166	10.929	10.919	(1.066)	255826	2.00000	2.22	
	58 4-Chlorophenyl-phenylether	204	10.950	10.940	(1.068)	113896	2.00000	2.24	
	59 4-Nitroaniline	138	11.004	10.983	(1.073)	23962	2.00000	2.03	
	60 4,6-Dinitro-2-Methylphenol	198	11.025	11.015	(0.914)	49147	4.50000	7.40	
	61 N-Nitrosodiphenylamine	169	11.100	11.090	(0.920)	200429	2.00000	2.26	
	62 4-Bromophenyl-phenylether	248	11.539	11.529	(0.957)	59533	2.00000	2.23	
	63 Hexachlorobenzene	284	11.592	11.582	(0.961)	64854	2.00000	2.22	
	64 Atrazine	200	11.784	11.774	(0.977)	42817	2.00000	2.19	
	65 Pentachlorophenol	266	11.859	11.849	(0.983)	62396	4.50000	9.89	
*	66 Phenanthrene-D10	188	12.062	12.052	(1.000)	89558	0.80000	(a)	
	67 Phenanthrene	178	12.083	12.073	(1.002)	299612	2.00000	2.21	
	68 Anthracene	178	12.147	12.137	(1.007)	291458	2.00000	2.14	
	69 Carbazole	167	12.371	12.361	(1.026)	226786	2.00000	2.38	
	70 Di-n-butylphthalate	149	12.841	12.831	(1.065)	689457	4.50000	4.42	
$	71 Fluoranthene-d10	212	13.511	13.502	(1.120)	160254	2.00000	2.20	
	72 Fluoranthene	202	13.532	13.522	(1.122)	236124	2.00000	2.25	
$	73 Pyrene-D10	212	13.776	13.777	(0.889)	174873	2.00000	2.24	
	74 Pyrene	202	13.796	13.797	(0.891)	243884	2.00000	2.37	

Data File: \\target_server\gg\chem\gcms-n.i\N120823.b\N0410.D
Report Date: 29-Dec-2023 09:54

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
	75 Butylbenzylphthalate	149	14.703	14.704	(0.949)	211154	4.50000	4.93	
	76 Benzo(a)anthracene	228	15.467	15.468	(0.999)	125751	2.00000	2.18	
	77 3,3'-Dichlorobenzidine	252	15.498	15.488	(1.001)	33712	2.00000	2.26	
*	78 Chrysene-D12	240	15.488	15.478	(1.000)	33302	0.80000	(a)	
	79 Chrysene	228	15.528	15.529	(1.003)	149025	2.00000	2.16	
	80 bis(2-Ethylhexyl)phthalate	149	15.671	15.672	(1.012)	250629	4.50000	4.53	
	81 Di-n-octylphthalate	149	16.965	16.965	(1.095)	359026	4.50000	5.33	
	82 Benzo(b)fluoranthene	252	17.520	17.521	(0.956)	98994	2.00000	2.15	
	83 Benzo(k)fluoranthene	252	17.582	17.573	(0.959)	121632	2.00000	2.04(H)	
	84 Benzo(a)pyrene	252	18.210	18.211	(0.993)	94155	2.00000	2.09	
*	85 Perylene-D12	264	18.334	18.324	(1.000)	25217	0.80000	(a)	
	86 Indeno(1,2,3-cd)pyrene	276	20.342	20.343	(1.110)	73138	2.00000	2.24	
	87 Dibenzo(a,h)anthracene	278	20.425	20.415	(1.114)	72236	2.00000	2.15	
	88 Benzo(g,h,i)perylene	276	20.878	20.878	(1.139)	80162	2.00000	2.18	
M	89 Total PAHs	100				3821556	36.0000	38.9	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
H - Operator selected an alternate compound hit.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Date : 08-DEC-2023 12:17
Client ID:
Sample Info: WG346646-2
Volume Injected (uL): 1.0
Column phase: Rxi-5ViMS
Instrument: gcms-n,i
Operator: EP
Column diameter: 0.25
\\target_server\gg\chem\gcms-n,i\N120823,b\N0410.D
Y (x10^5)
Min
-1,4-Dioxane-d8+
-N-Nitrosodimethylamine
-Pyridine
-Benzaldehyde
-Phenol
-Bis(2-Chloroethyl)ether+
-1,3-Dichlorobenzene
-1,4-Dichlorobenzene-D4+
-1,2-Dichlorobenzene
-2,2'-Oxybis(1-chloropropa+
-Acetophenone
-N-Nitroso-di-n-propylamin+
-Nitrobenzene
-Isophorone
-2-Nitrophenol
-bis(2-Chloroethoxy)methan
-2,4-Dichlorophenol
-1,2,4-Trichlorobenzene
-Naphthalene-D8+
-4-Chloroaniline
-Hexachlorobutadiene
-Caprolactam
-4-Chloro-3-Methylphenol
-2-Methylnaphthalene-D10+
-1-Methylnaphthalene
-1,2,4,5-Tetrachlorobenzen+
-2,4,5-Trichlorophenol
-4-Bromophenol+
-2-Nitroaniline
-1,4'-Biphenyl+
-Dimethyl Phthalate
-Acenaphthylene
-3-Nitroaniline+
-2,4-Dinitrophenol
-Dibenzofuran+
Acenaphthene
-2,3,4,6-Tetrachlorophenol
-Fluorene-D10+
-4-Nitroaniline+
-N-Nitrosodiphenylamine
Diethylphthalate
-4-Bromophenyl-phenylether
-Hexachlorobenzene
-Atrazine
-Pentachlorophenol
-Phenanthrene-D10+
-Anthracene
-Carbazole
Di-n-butylphthalate
-Fluoranthene-d10+
-Pyrene-D10+
-Butylbenzylphthalate
-Benzo(a)anthracene+
-Chrysene
-bis(2-Ethylhexyl)phthalat
-Di-n-octylphthalate
-Benzo(b)fluoranthene
-Benzo(k)fluoranthene
-Benzo(a)pyrene
-Perylene-D12
-Indeno(1,2,3-cd)pyrene
-Dibenz(a,h)anthracene
-Benzo(g,h,i)perylene

Form 7
Calibration Verification Summary

Lab Name: Katahdin Analytical Services
SDG: SQ6133
Lab ID: WG346646-3
Analytical Date: 12/08/23 22:43
Lab File ID: N0430.D
Instrument ID: GCMS-N
Initial Calibration Date(s): 12/07/23 12:11 12/07/23 14:42
Column ID:

Compound	$\overline{RRF}$/Amount	RF2	CCAL RRF2	Min RF	%D/ %Drift	Max %D/ %Drift	Curve Type	Qual
Naphthalene	1.09413	1.15292	1.15292	0.010	5.37362	20.000	Averaged	
2-Methylnaphthalene	0.72318	0.65160	0.65160	0.010	-9.89730	20.000	Averaged	
Acenaphthylene	2.22711	2.36163	2.36163	0.010	6.04042	20.000	Averaged	
Acenaphthene	1.32261	1.37902	1.37902	0.010	4.26498	20.010	Averaged	
Fluorene	1.32162	1.33476	1.33476	0.010	0.99407	20.000	Averaged	
Phenanthrene	1.20967	1.31744	1.31744	0.010	8.90873	20.000	Averaged	
Anthracene	1.21499	1.28506	1.28506	0.010	5.76737	20.000	Averaged	
Fluoranthene	0.93896	0.86379	0.86379	0.010	-8.00577	20.010	Averaged	
Pyrene	2.47305	3.16397	3.16397	0.010	27.93825	20.000	Averaged	*
Benzo(a)anthracene	1.38487	1.57698	1.57698	0.010	13.87157	20.000	Averaged	
Chrysene	1.65973	1.73558	1.73558	0.010	4.56990	20.000	Averaged	
Benzo(b)fluoranthene	1.45918	1.50033	1.50033	0.010	2.82064	20.000	Averaged	
Benzo(k)fluoranthene	1.88696	1.79209	1.79209	0.010	-5.02729	20.000	Averaged	
Benzo(a)pyrene	1.42750	1.48476	1.48476	0.010	4.01099	20.010	Averaged	
Indeno(1,2,3-cd)pyrene	1.03440	1.30781	1.30781	0.010	26.43162	20.000	Averaged	*
Dibenzo(a,h)anthracene	1.06638	1.24863	1.24863	0.010	17.09035	20.000	Averaged	
Benzo(g,h,i)perylene	1.16611	1.44937	1.44937	0.010	24.29090	20.000	Averaged	*
2-Methylnaphthalene-D10	0.52508	0.53473	0.53473	0.010	1.83892	20.000	Averaged	
Fluorene-D10	1.04693	1.04932	1.04932	0.010	0.22817	20.000	Averaged	
Pyrene-D10	1.87184	2.48592	2.48592	0.010	32.80619	20.000	Averaged	*

*** = Compound out of QC criteria**

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Data File: \\target_server\gg\chem\gcms-n.i\N120823.b\N0430.D
Report Date: 29-Dec-2023 09:54

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-n.i\N120823.b\N0430.D
Lab Smp Id: WG346646-3
Inj Date : 08-DEC-2023 22:43
Operator : EP   Inst ID: gcms-n.i
Smp Info : WG346646-3
Misc Info : WG346646,WG346646,WG346503-4,SQ6133-1
Comment   :
Method   : \\target_server\gg\chem\gcms-n.i\N120823.b\NSPSIM95.m
Meth Date : 11-Dec-2023 07:09 epelletier Quant Type: ISTD
Cal Date : 07-DEC-2023 14:42   Cal File: N0385.D
Als bottle: 2   Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: all.sub
Target Version: 4.12
Processing Host: INSPIRON1

Concentration Formula: Amt * DF * Uf*(Vt/Vo*Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.000	Sample Volume (L)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

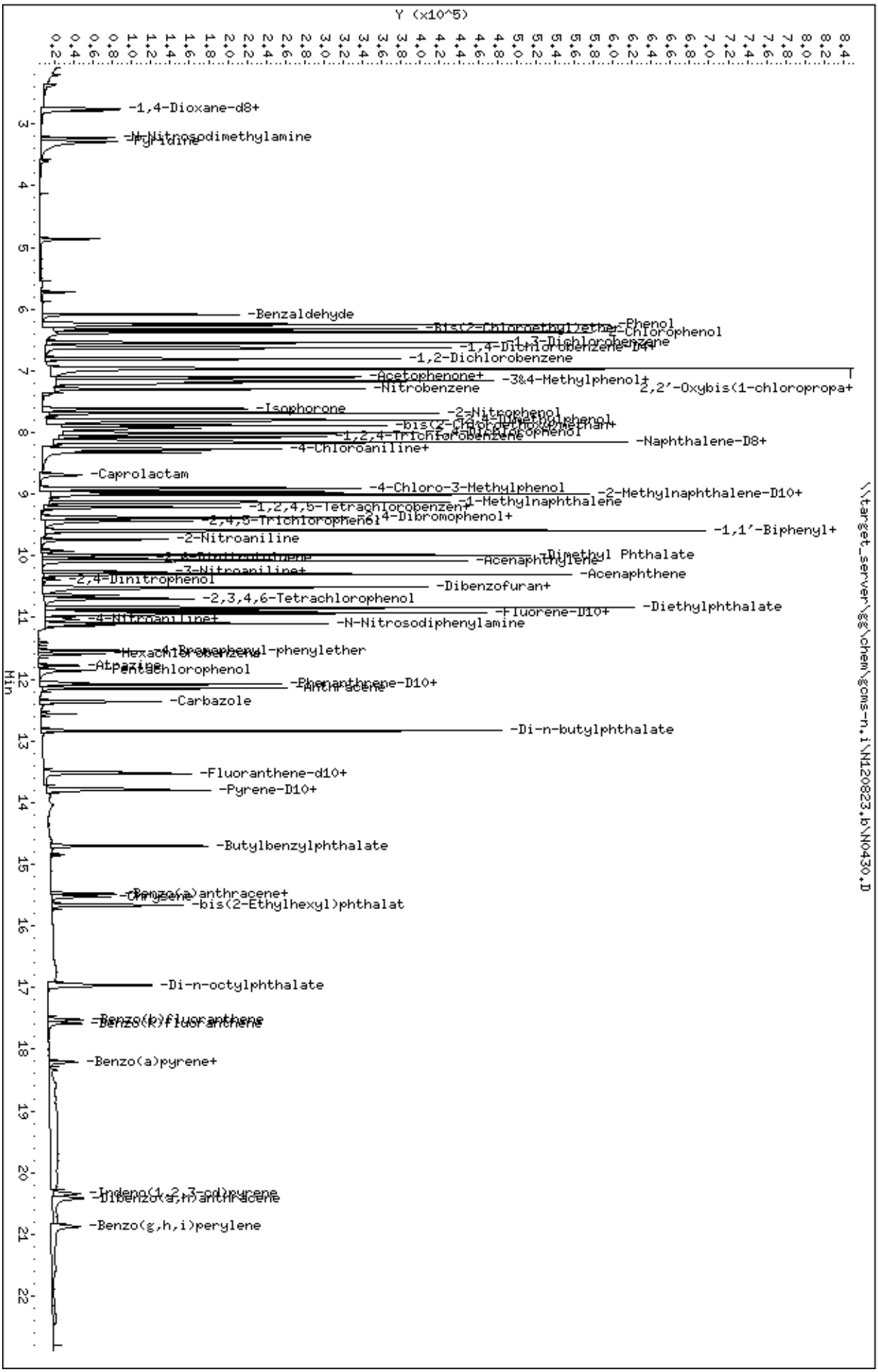
			QUANT SIG					AMOUNTS		
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
$	1	1,4-Dioxane-d8	96	2.741	2.742	(0.267)	74746	2.00000	3.20	
	2	1,4-Dioxane	88	2.783	2.784	(0.421)	79267	2.00000	2.17	
*	10	1,4-Dichlorobenzene-D4	152	6.614	6.604	(1.000)	49659	0.80000	(a)	
*	27	Naphthalene-D8	136	8.136	8.125	(1.000)	153137	0.80000	(a)	
	28	Naphthalene	128	8.159	8.148	(1.003)	441388	2.00000	2.11	
$	33	2-Methylnaphthalene-D10	152	8.975	8.954	(1.103)	204719	2.00000	2.04	
	34	2-Methylnaphthalene	142	9.006	8.996	(1.107)	249461	2.00000	1.80	
	35	1-Methylnaphthalene	142	9.123	9.113	(1.121)	226108	2.00000	1.79	
$	38	2,4-Dibromophenol	252	9.366	9.346	(0.913)	50510	2.00000	2.84	
	42	2-Chloronaphthalene	164	9.599	9.579	(0.935)	65819	2.00000	2.21	
	46	Acenaphthylene	152	10.082	10.082	(0.982)	299408	2.00000	2.12	
*	48	Acenaphthene-D10	164	10.264	10.254	(1.000)	50712	0.80000	(a)	
	49	Acenaphthene	153	10.296	10.286	(1.003)	174832	2.00000	2.08	
$	56	Fluorene-D10	174	10.897	10.887	(1.062)	133033	2.00000	2.00	
	57	Fluorene	166	10.929	10.919	(1.065)	169221	2.00000	2.02	
	65	Pentachlorophenol	266	11.859	11.849	(0.983)	40309	4.50000	10.7	
*	66	Phenanthrene-D10	188	12.062	12.052	(1.000)	53285	0.80000	(a)	
	67	Phenanthrene	178	12.083	12.073	(1.002)	175499	2.00000	2.18	
	68	Anthracene	178	12.147	12.137	(1.007)	171186	2.00000	2.12	
$	71	Fluoranthene-d10	212	13.511	13.502	(1.120)	82835	2.00000	1.91	

Data File: \\target_server\gg\chem\gcms-n.i\N120823.b\N0430.D
Report Date: 29-Dec-2023 09:54

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)	REVIEW CODE
	72 Fluoranthene	202	13.532	13.522	(1.122)	115067	2.00000	1.84	
$	73 Pyrene-D10	212	13.776	13.777	(0.889)	86597	2.00000	2.66	
	74 Pyrene	202	13.797	13.797	(0.891)	110217	2.00000	2.56	
	76 Benzo(a)anthracene	228	15.467	15.468	(0.999)	54934	2.00000	2.28	
*	78 Chrysene-D12	240	15.488	15.478	(1.000)	13934	0.80000	(a)	
	79 Chrysene	228	15.528	15.529	(1.003)	60459	2.00000	2.09	
	82 Benzo(b)fluoranthene	252	17.521	17.521	(0.956)	44980	2.00000	2.06	
	83 Benzo(k)fluoranthene	252	17.582	17.573	(0.959)	53727	2.00000	1.90(H)	
	84 Benzo(a)pyrene	252	18.211	18.211	(0.993)	44513	2.00000	2.08	
*	85 Perylene-D12	264	18.334	18.324	(1.000)	11992	0.80000	(a)	
	86 Indeno(1,2,3-cd)pyrene	276	20.342	20.343	(1.110)	39208	2.00000	2.53	
	87 Dibenzo(a,h)anthracene	278	20.425	20.415	(1.114)	37434	2.00000	2.34	
	88 Benzo(g,h,i)perylene	276	20.878	20.878	(1.139)	43452	2.00000	2.48	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
H - Operator selected an alternate compound hit.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Sample Info: WG346646-3
Volume Injected (uL): 1.0
Column phase: Rxi-5ViMS
Instrument: gcms-n,i
Operator: EP
Column diameter: 0.25
\\target_server\gg\chem\gcms-n,i\N120823,b\N0430.D
Y (x10^5)
Min
-1,4-Dioxane-d8+
-N-Nitrosodimethylamine
-Pyridine
-Benzaldehyde
-Phenol
-2-Chlorophenol
-1,3-Dichlorobenzene
-1,4-Dichlorobenzene-D4+
-1,2-Dichlorobenzene
-Acetophenone+
-3&4-Methylphenol+
-Nitrobenzene
2,2'-Oxybis(1-chloropropa+
-Isophorone
-2-Nitrophenol
-2,4-Dimethylphenol
-bis(2-Chloroethoxy)methan+
-2,4-Dichlorophenol
-1,2,4-Trichlorobenzene
-Naphthalene-D8+
-4-Chloroaniline+
-Caprolactam
-4-Chloro-3-Methylphenol
-2-Methylnaphthalene-D10+
-1-Methylnaphthalene
-1,2,4,5-Tetrachlorobenzen+
-2,4-Dibromophenol+
-2,4,5-Trichlorophenol
-1,1'-Biphenyl+
-2-Nitroaniline
-Dimethyl Phthalate
-Acenaphthylene
-3-Nitroaniline+
-Acenaphthene
-2,4-Dinitrophenol
-Dibenzofuran+
-2,3,4,6-Tetrachlorophenol
-Fluorene-D10+
-Diethylphthalate
-4-Nitroaniline+
-N-Nitrosodiphenylamine
-4-Bromophenyl-phenylether
-Hexachlorobenzene
-Atrazine
-Pentachlorophenol
-Phenanthrene-D10+
-Anthracene
-Carbazole
-Di-n-butylphthalate
-Fluoranthene-d10+
-Pyrene-D10+
-Butylbenzylphthalate
-Benzo(a)anthracene+
-Chrysene
-bis(2-Ethylhexyl)phthalat
-Di-n-octylphthalate
-Benzo(b)fluoranthene
-Benzo(k)fluoranthene
-Benzo(a)pyrene+
-Indeno(1,2,3-cd)pyrene
-Dibenzo(a,h)anthracene
-Benzo(g,h,i)perylene

Form 7
Calibration Verification Summary

Lab Name: Katahdin Analytical Services
SDG: SQ6133
Lab ID: WG346646-4
Analytical Date: 12/08/23 23:15
Lab File ID: N0431.D
Instrument ID: GCMS-N
Initial Calibration Date(s): 12/07/23 12:11 12/07/23 14:42
Column ID:

Compound	$\overline{RRF}$/Amount	RF2	CCAL RRF2	Min RF	%D/ %Drift	Max %D/ %Drift	Curve Type	Qual
Naphthalene	1.09413	1.17710	1.17710	0.010	7.58348	20.000	Averaged	
2-Methylnaphthalene	0.72318	0.68098	0.68098	0.010	-5.83524	20.000	Averaged	
Acenaphthylene	2.22711	2.31224	2.31224	0.010	3.82242	20.000	Averaged	
Acenaphthene	1.32261	1.34782	1.34782	0.010	1.90594	20.010	Averaged	
Fluorene	1.32162	1.28403	1.28403	0.010	-2.84412	20.000	Averaged	
Phenanthrene	1.20967	1.27726	1.27726	0.010	5.58767	20.000	Averaged	
Anthracene	1.21499	1.24078	1.24078	0.010	2.12324	20.000	Averaged	
Fluoranthene	0.93896	0.91947	0.91947	0.010	-2.07519	20.010	Averaged	
Pyrene	2.47305	3.19777	3.19777	0.010	29.30488	20.000	Averaged	*
Benzo(a)anthracene	1.38487	1.58498	1.58498	0.010	14.44936	20.000	Averaged	
Chrysene	1.65973	1.77203	1.77203	0.010	6.76613	20.000	Averaged	
Benzo(b)fluoranthene	1.45918	1.40146	1.40146	0.010	-3.95548	20.000	Averaged	
Benzo(k)fluoranthene	1.88696	1.81998	1.81998	0.010	-3.54932	20.000	Averaged	
Benzo(a)pyrene	1.42750	1.42598	1.42598	0.010	-0.10633	20.010	Averaged	
Indeno(1,2,3-cd)pyrene	1.03440	1.24113	1.24113	0.010	19.98550	20.000	Averaged	
Dibenzo(a,h)anthracene	1.06638	1.24553	1.24553	0.010	16.79984	20.000	Averaged	
Benzo(g,h,i)perylene	1.16611	1.36418	1.36418	0.010	16.98535	20.000	Averaged	
2-Methylnaphthalene-D10	0.52508	0.51663	0.51663	0.010	-1.60985	20.000	Averaged	
Fluorene-D10	1.04693	1.02124	1.02124	0.010	-2.45409	20.000	Averaged	
Pyrene-D10	1.87184	2.32264	2.32264	0.010	24.08306	20.000	Averaged	*

*** = Compound out of QC criteria**

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
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Data File: \\target_server\gg\chem\gcms-n.i\N120823.b\N0431.D
Report Date: 29-Dec-2023 09:54

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-n.i\N120823.b\N0431.D
Lab Smp Id: WG346646-4
Inj Date : 08-DEC-2023 23:15
Operator : EP   Inst ID: gcms-n.i
Smp Info : WG346646-4
Misc Info : WG346646,WG346646,WG346503-4,SQ6133-1
Comment   :
Method   : \\target_server\gg\chem\gcms-n.i\N120823.b\NSPSIM95.m
Meth Date : 11-Dec-2023 07:09 epelletier Quant Type: ISTD
Cal Date : 07-DEC-2023 14:42   Cal File: N0385.D
Als bottle: 2   Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: all.sub
Target Version: 4.12
Processing Host: INSPIRON1

Concentration Formula: Amt * DF * Uf*(Vt/Vo*Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.000	Sample Volume (L)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

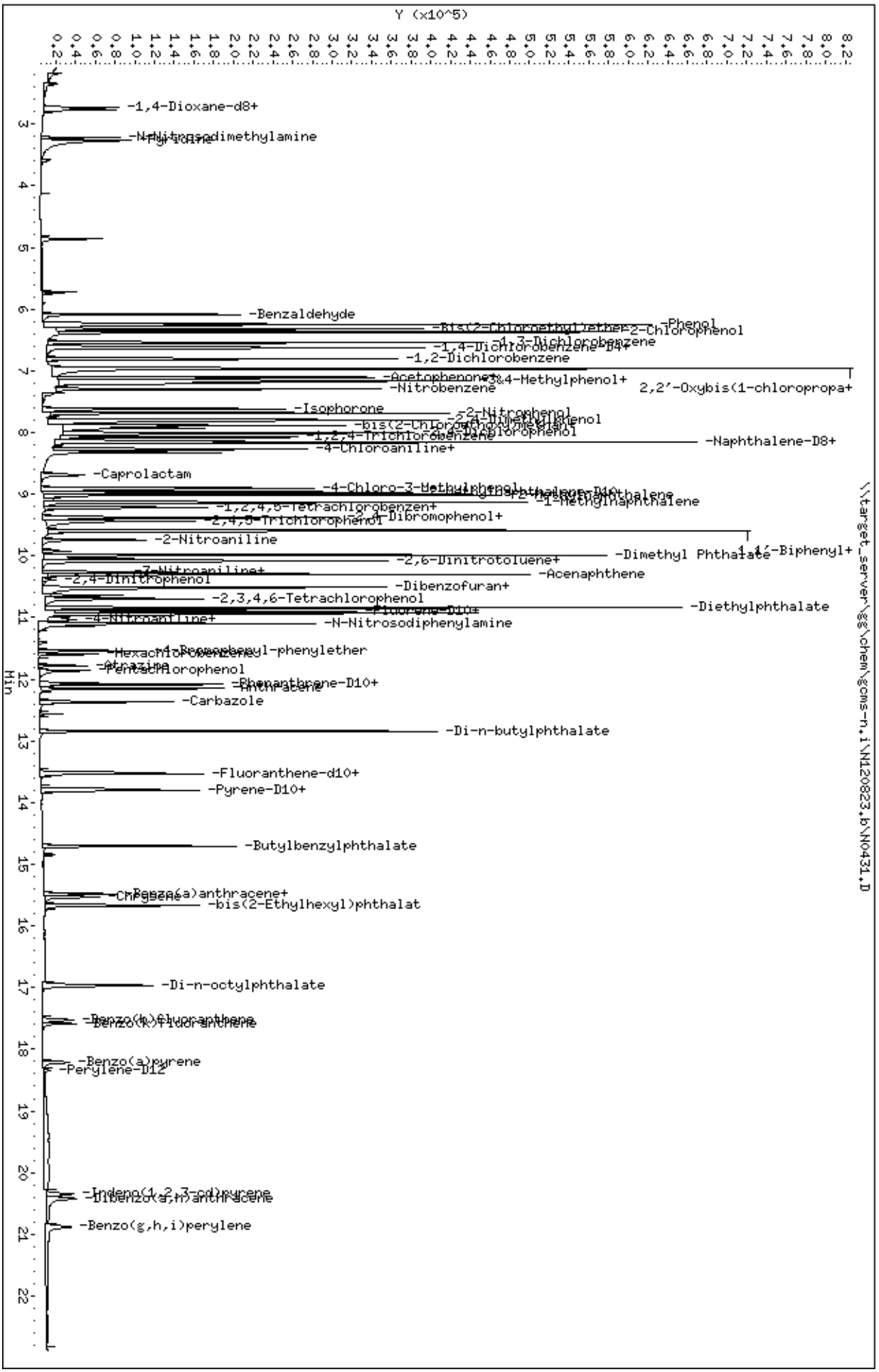
			QUANT SIG					AMOUNTS		
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
$	1	1,4-Dioxane-d8	96	2.730	2.742	(0.266)	70266	2.00000	2.99	
	2	1,4-Dioxane	88	2.762	2.784	(0.418)	76951	2.00000	2.10	
*	10	1,4-Dichlorobenzene-D4	152	6.614	6.604	(1.000)	49666	0.80000	(a)	
*	27	Naphthalene-D8	136	8.136	8.125	(1.000)	156398	0.80000	(a)	
	28	Naphthalene	128	8.158	8.148	(1.003)	460241	2.00000	2.15	
$	33	2-Methylnaphthalene-D10	152	8.974	8.954	(1.103)	201998	2.00000	1.97	
	34	2-Methylnaphthalene	142	9.017	8.996	(1.108)	266259	2.00000	1.88	
	35	1-Methylnaphthalene	142	9.133	9.113	(1.123)	228360	2.00000	1.77	
$	38	2,4-Dibromophenol	252	9.366	9.346	(0.913)	50287	2.00000	2.81	
	42	2-Chloronaphthalene	164	9.599	9.579	(0.935)	65584	2.00000	2.19	
	46	Acenaphthylene	152	10.082	10.082	(0.982)	294579	2.00000	2.08	
*	48	Acenaphthene-D10	164	10.264	10.254	(1.000)	50960	0.80000	(a)	
	49	Acenaphthene	153	10.296	10.286	(1.003)	171712	2.00000	2.04	
$	56	Fluorene-D10	174	10.897	10.887	(1.062)	130106	2.00000	1.95	
	57	Fluorene	166	10.929	10.919	(1.065)	163586	2.00000	1.94	
	65	Pentachlorophenol	266	11.859	11.849	(0.983)	35201	4.50000	9.94	
*	66	Phenanthrene-D10	188	12.062	12.052	(1.000)	50265	0.80000	(a)	
	67	Phenanthrene	178	12.083	12.073	(1.002)	160504	2.00000	2.11	
	68	Anthracene	178	12.147	12.137	(1.007)	155920	2.00000	2.04	
$	71	Fluoranthene-d10	212	13.511	13.502	(1.120)	81071	2.00000	1.98	

Data File: \\target_server\gg\chem\gcms-n.i\N120823.b\N0431.D
Report Date: 29-Dec-2023 09:54

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
	72 Fluoranthene	202	13.532	13.522	(1.122)	115543	2.00000	1.96	
$	73 Pyrene-D10	212	13.776	13.777	(0.889)	83342	2.00000	2.48	
	74 Pyrene	202	13.796	13.797	(0.891)	114744	2.00000	2.59	
	76 Benzo(a)anthracene	228	15.477	15.468	(0.999)	56873	2.00000	2.29	
*	78 Chrysene-D12	240	15.488	15.478	(1.000)	14353	0.80000	(a)	
	79 Chrysene	228	15.528	15.529	(1.003)	63585	2.00000	2.14	
	82 Benzo(b)fluoranthene	252	17.520	17.521	(0.955)	42289	2.00000	1.92	
	83 Benzo(k)fluoranthene	252	17.582	17.573	(0.958)	54918	2.00000	1.93(H)	
	84 Benzo(a)pyrene	252	18.221	18.211	(0.993)	43029	2.00000	2.00	
*	85 Perylene-D12	264	18.344	18.324	(1.000)	12070	0.80000	(a)	
	86 Indeno(1,2,3-cd)pyrene	276	20.342	20.343	(1.109)	37451	2.00000	2.40	
	87 Dibenzo(a,h)anthracene	278	20.425	20.415	(1.113)	37584	2.00000	2.34	
	88 Benzo(g,h,i)perylene	276	20.888	20.878	(1.139)	41164	2.00000	2.34	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
H - Operator selected an alternate compound hit.


Data File: \\target_server\gg\chem\gcms-n,i\N120823,b\N0431.D
Date : 08-DEC-2023 23:15
Client ID:
Sample Info: WG346646-4
Volume Injected (uL): 1.0
Column phase: Rxi-5ViOms
Instrument: gcms-n,i
Operator: EP
Column diameter: 0.25
\\target_server\gg\chem\gcms-n,i\N120823,b\N0431.D
Y (x10^5)
Min
-1,4-Dioxane-d8+
-N-Nitrosodimethylamine
-Pyridine
-Benzaldehyde
-Phenol
-2-Chlorophenol
-1,4-Dichlorobenzene-D4+
-1,2-Dichlorobenzene
-Acetophenone
-Nitrobenzene
-Isophorone
-2-Nitrophenol
-2,4-Dimethylphenol
-bis(2-Chloroethoxy)methane
-2,4-Dichlorophenol
-1,2,4-Trichlorobenzene
-4-Chloroaniline+
-Naphthalene-D8+
-Caprolactam
-4-Chloro-3-Methylphenol
-1-Methylnaphthalene
-1,2,4,5-Tetrachlorobenzen+
-2,4-Dibromophenol+
-2,4,5-Trichlorophenol
-2-Nitroaniline
-Dimethyl Phthalate
-2,6-Dinitrotoluene+
-3-Nitroaniline+
-Acenaphthene
-2,4-Dinitrophenol
-Dibenzofuran+
-2,3,4,6-Tetrachlorophenol
-Diethylphthalate
-4-Nitroaniline+
-N-Nitrosodiphenylamine
-Hexachlorobenzene
-Atrazine
-Pentachlorophenol
-Phenanthrene-D10+
-Anthracene
-Carbazole
-Di-n-butylphthalate
-Fluoranthene-d10+
-Pyrene-D10+
-Butylbenzylphthalate
-Benzo(a)anthracene+
-Chrysene
-bis(2-Ethylhexyl)phthalat
-Di-n-octylphthalate
-Benzo(b)fluoranthene
-Benzo(k)fluoranthene
-Benzo(a)pyrene
-Perylene-D12
-Indeno(1,2,3-cd)pyrene
-Dibenzo(a,h)anthracene
-Benzo(g,h,i)perylene

Form 7
Calibration Verification Summary

Lab Name: Katahdin Analytical Services
SDG: SQ6133
Lab ID: WG346646-5
Analytical Date: 12/08/23 23:48
Lab File ID: N0432.D
Instrument ID: GCMS-N
Initial Calibration Date(s): 12/07/23 12:11 12/07/23 14:42
Column ID:

Compound	RRF/Amount	RF2	CCAL RRF2	Min RF	%D/ %Drift	Max %D/ %Drift	Curve Type	Qual
Naphthalene	1.09413	1.16733	1.16733	0.010	6.69029	20.000	Averaged	
2-Methylnaphthalene	0.72318	0.71038	0.71038	0.010	-1.77020	20.000	Averaged	
Acenaphthylene	2.22711	2.30901	2.30901	0.010	3.67743	20.000	Averaged	
Acenaphthene	1.32261	1.32931	1.32931	0.010	0.50676	20.010	Averaged	
Fluorene	1.32162	1.28354	1.28354	0.010	-2.88129	20.000	Averaged	
Phenanthrene	1.20967	1.28532	1.28532	0.010	6.25389	20.000	Averaged	
Anthracene	1.21499	1.23517	1.23517	0.010	1.66085	20.000	Averaged	
Fluoranthene	0.93896	0.91828	0.91828	0.010	-2.20162	20.010	Averaged	
Pyrene	2.47305	3.25387	3.25387	0.010	31.57345	20.000	Averaged	*
Benzo(a)anthracene	1.38487	1.57845	1.57845	0.010	13.97797	20.000	Averaged	
Chrysene	1.65973	1.76699	1.76699	0.010	6.46247	20.000	Averaged	
Benzo(b)fluoranthene	1.45918	1.44895	1.44895	0.010	-0.70067	20.000	Averaged	
Benzo(k)fluoranthene	1.88696	1.90582	1.90582	0.010	0.99967	20.000	Averaged	
Benzo(a)pyrene	1.42750	1.45783	1.45783	0.010	2.12447	20.010	Averaged	
Indeno(1,2,3-cd)pyrene	1.03440	1.29512	1.29512	0.010	25.20516	20.000	Averaged	*
Dibenzo(a,h)anthracene	1.06638	1.24660	1.24660	0.010	16.89998	20.000	Averaged	
Benzo(g,h,i)perylene	1.16611	1.42278	1.42278	0.010	22.01091	20.000	Averaged	*
2-Methylnaphthalene-D10	0.52508	0.53564	0.53564	0.010	2.01077	20.000	Averaged	
Fluorene-D10	1.04693	1.02560	1.02560	0.010	-2.03756	20.000	Averaged	
Pyrene-D10	1.87184	2.46690	2.46690	0.010	31.79029	20.000	Averaged	*

*** = Compound out of QC criteria**

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Data File: \\target_server\gg\chem\gcms-n.i\N120823.b\N0432.D
Report Date: 29-Dec-2023 09:54

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-n.i\N120823.b\N0432.D
Lab Smp Id: WG346646-5
Inj Date : 08-DEC-2023 23:48
Operator : EP   Inst ID: gcms-n.i
Smp Info : WG346646-5
Misc Info : WG346646,WG346646,WG346503-4,SQ6133-1
Comment   :
Method   : \\target_server\gg\chem\gcms-n.i\N120823.b\NSPSIM95.m
Meth Date : 11-Dec-2023 07:09 epelletier Quant Type: ISTD
Cal Date : 07-DEC-2023 14:42   Cal File: N0385.D
Als bottle: 2   Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: all.sub
Target Version: 4.12
Processing Host: INSPIRON1

Concentration Formula: Amt * DF * Uf*(Vt/Vo*Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.000	Sample Volume (L)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

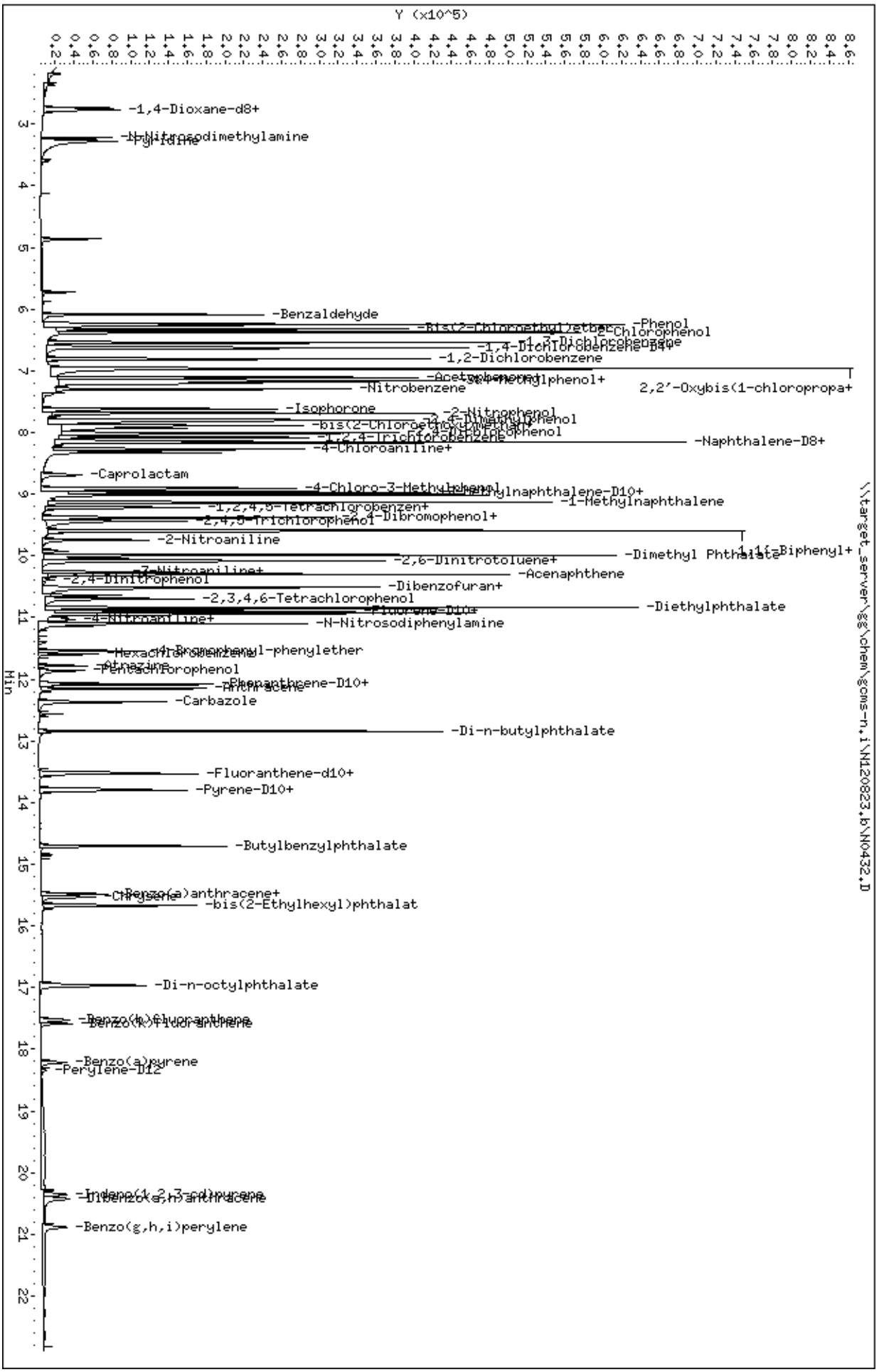
			QUANT SIG					AMOUNTS		
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
$	1	1,4-Dioxane-d8	96	2.741	2.742	(0.267)	75049	2.00000	3.08	
	2	1,4-Dioxane	88	2.773	2.784	(0.419)	79774	2.00000	2.12	
*	10	1,4-Dichlorobenzene-D4	152	6.614	6.604	(1.000)	51152	0.80000	(a)	
*	27	Naphthalene-D8	136	8.136	8.125	(1.000)	160523	0.80000	(a)	
	28	Naphthalene	128	8.159	8.148	(1.003)	468458	2.00000	2.13	
$	33	2-Methylnaphthalene-D10	152	8.975	8.954	(1.103)	214955	2.00000	2.04	
	34	2-Methylnaphthalene	142	9.017	8.996	(1.108)	285079	2.00000	1.96	
	35	1-Methylnaphthalene	142	9.133	9.113	(1.123)	256085	2.00000	1.94	
$	38	2,4-Dibromophenol	252	9.366	9.346	(0.913)	51424	2.00000	2.77	
	42	2-Chloronaphthalene	164	9.599	9.579	(0.935)	66472	2.00000	2.14	
	46	Acenaphthylene	152	10.082	10.082	(0.982)	304714	2.00000	2.07	
*	48	Acenaphthene-D10	164	10.264	10.254	(1.000)	52787	0.80000	(a)	
	49	Acenaphthene	153	10.296	10.286	(1.003)	175426	2.00000	2.01	
$	56	Fluorene-D10	174	10.897	10.887	(1.062)	135346	2.00000	1.96	
	57	Fluorene	166	10.929	10.919	(1.065)	169386	2.00000	1.94	
	65	Pentachlorophenol	266	11.859	11.849	(0.983)	34674	4.50000	9.58	
*	66	Phenanthrene-D10	188	12.062	12.052	(1.000)	51368	0.80000	(a)	
	67	Phenanthrene	178	12.083	12.073	(1.002)	165061	2.00000	2.12	
	68	Anthracene	178	12.147	12.137	(1.007)	158620	2.00000	2.03	
$	71	Fluoranthene-d10	212	13.511	13.502	(1.120)	82947	2.00000	1.99	

Data File: \\target_server\gg\chem\gcms-n.i\N120823.b\N0432.D
Report Date: 29-Dec-2023 09:54

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
	72 Fluoranthene	202	13.532	13.522	(1.122)	117926	2.00000	1.96	
$	73 Pyrene-D10	212	13.776	13.777	(0.889)	88605	2.00000	2.64	
	74 Pyrene	202	13.797	13.797	(0.891)	116871	2.00000	2.63	
	76 Benzo(a)anthracene	228	15.478	15.468	(0.999)	56694	2.00000	2.28	
*	78 Chrysene-D12	240	15.488	15.478	(1.000)	14367	0.80000	(a)	
	79 Chrysene	228	15.528	15.529	(1.003)	63466	2.00000	2.13	
	82 Benzo(b)fluoranthene	252	17.521	17.521	(0.955)	41632	2.00000	1.98	
	83 Benzo(k)fluoranthene	252	17.582	17.573	(0.958)	54759	2.00000	2.02(H)	
	84 Benzo(a)pyrene	252	18.221	18.211	(0.993)	41887	2.00000	2.04	
*	85 Perylene-D12	264	18.344	18.324	(1.000)	11493	0.80000	(a)	
	86 Indeno(1,2,3-cd)pyrene	276	20.353	20.343	(1.109)	37212	2.00000	2.50	
	87 Dibenzo(a,h)anthracene	278	20.435	20.415	(1.114)	35818	2.00000	2.34	
	88 Benzo(g,h,i)perylene	276	20.888	20.878	(1.139)	40880	2.00000	2.44	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
H - Operator selected an alternate compound hit.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Date : 08-DEC-2023 23:48
Client ID:
Sample Info: WG346646-5
Volume Injected (uL): 1.0
Column phase: Rxi-5ViMS
Instrument: gcms-n,i
Operator: EP
Column diameter: 0.25
\\target_server\gg\chem\gcms-n,i\N120823,b\N0432.D
Y (x10^5)
Min
-1,4-Dioxane-d8+
-N-Nitrosodimethylamine
-Pyridine
-Benzaldehyde
-Phenol
-2-Chlorophenol
-1,4-Dichlorobenzene-D4+
-1,2-Dichlorobenzene
-Nitrobenzene
-Isophorone
-2-Nitrophenol
-2,4-Dimethylphenol
-bis(2-Chloroethoxy)methane
-2,4-Dichlorophenol
-1,2,4-Trichlorobenzene
-4-Chloroaniline+
-Naphthalene-D8+
-Caprolactam
-1-Methylnaphthalene-D10+
-1-Methylnaphthalene
-1,2,4,5-Tetrachlorobenzen+
-2,4,5-Trichlorophenol
-2,4-Dibromophenol+
-2-Nitroaniline
-Dimethyl Phthalate
-2,6-Dinitrotoluene+
-Acenaphthene
-2,4-Dinitrophenol
-Dibenzofuran+
-2,3,4,6-Tetrachlorophenol
-Diethylphthalate
-4-Nitroaniline+
-N-Nitrosodiphenylamine
-Hexachlorobenzene
-Atrazine
-Pentachlorophenol
-Phenanthrene-D10+
-Anthracene
-Carbazole
-Di-n-butylphthalate
-Fluoranthene-d10+
-Pyrene-D10+
-Butylbenzylphthalate
-Benzo(a)anthracene+
-Chrysene
-bis(2-Ethylhexyl)phthalat
-Di-n-octylphthalate
-Benzo(b)fluoranthene
-Benzo(k)fluoranthene
-Benzo(a)pyrene
-Perylene-D12
-Indeno(1,2,3-cd)pyrene
-Dibenzo(a,h)anthracene
-Benzo(g,h,i)perylene

Form 7
Calibration Verification Summary

Lab Name: Katahdin Analytical Services
SDG: SQ6133
Lab ID: WG346778-2
Analytical Date: 12/11/23 12:16
Lab File ID: N0433.D
Instrument ID: GCMS-N
Initial Calibration Date(s): 12/07/23 12:11 12/07/23 14:42
Column ID:

Compound	RRF/Amount	RF2	CCAL RRF2	Min RF	%D/ %Drift	Max %D/ %Drift	Curve Type	Qual
Naphthalene	1.09413	1.06806	1.06806	0.010	-2.38228	20.000	Averaged	
2-Methylnaphthalene	0.72318	0.68605	0.68605	0.010	-5.13394	20.000	Averaged	
Acenaphthylene	2.22711	2.20676	2.20676	0.010	-0.91386	20.000	Averaged	
Acenaphthene	1.32261	1.32850	1.32850	0.010	0.44514	20.010	Averaged	
Fluorene	1.32162	1.36329	1.36329	0.010	3.15264	20.000	Averaged	
Phenanthrene	1.20967	1.20547	1.20547	0.010	-0.34693	20.000	Averaged	
Anthracene	1.21499	1.31114	1.31114	0.010	7.91356	20.000	Averaged	
Fluoranthene	0.93896	0.99220	0.99220	0.010	5.67078	20.010	Averaged	
Pyrene	2.47305	2.59127	2.59127	0.010	4.78048	20.000	Averaged	
Benzo(a)anthracene	1.38487	1.50100	1.50100	0.010	8.38527	20.000	Averaged	
Chrysene	1.65973	1.72324	1.72324	0.010	3.82602	20.000	Averaged	
Benzo(b)fluoranthene	1.45918	1.46391	1.46391	0.010	0.32481	20.000	Averaged	
Benzo(k)fluoranthene	1.88696	1.95043	1.95043	0.010	3.36384	20.000	Averaged	
Benzo(a)pyrene	1.42750	1.42668	1.42668	0.010	-0.05729	20.010	Averaged	
Indeno(1,2,3-cd)pyrene	1.03440	1.05245	1.05245	0.010	1.74551	20.000	Averaged	
Dibenzo(a,h)anthracene	1.06638	1.04405	1.04405	0.010	-2.09472	20.000	Averaged	
Benzo(g,h,i)perylene	1.16611	1.15134	1.15134	0.010	-1.26621	20.000	Averaged	
2-Methylnaphthalene-D10	0.52508	0.52309	0.52309	0.010	-0.37888	20.000	Averaged	
Fluorene-D10	1.04693	1.06675	1.06675	0.010	1.89268	20.000	Averaged	
Pyrene-D10	1.87184	1.95788	1.95788	0.010	4.59668	20.000	Averaged	

*** = Compound out of QC criteria**

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Data File: \\target_server\gg\chem\gcms-n.i\N121123.b\N0433.D
Report Date: 29-Dec-2023 09:55

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-n.i\N121123.b\N0433.D
Lab Smp Id: WG346778-2
Inj Date : 11-DEC-2023 12:16
Operator : EP   Inst ID: gcms-n.i
Smp Info : WG346778-2
Misc Info : WG346778,WG346778,WG346503-4,SQ6133-8
Comment   :
Method   : \\target_server\gg\chem\gcms-n.i\N121123.b\NSPSIM95.m
Meth Date : 12-Dec-2023 08:48 epelletier Quant Type: ISTD
Cal Date : 07-DEC-2023 14:42   Cal File: N0385.D
Als bottle: 2   Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: all.sub
Target Version: 4.12
Processing Host: INSPIRON1

Concentration Formula: Amt * DF * Uf*(Vt/Vo*Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.000	Sample Volume (L)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
$	1 1,4-Dioxane-d8	96	2.667	2.742	(0.260)	48259	2.00000	1.94	
	2 1,4-Dioxane	88	2.709	2.784	(0.410)	50488	2.00000	2.11	
	3 N-Nitrosodimethylamine	74	3.164	3.217	(0.479)	64392	2.00000	2.18	
	4 Pyridine	79	3.237	3.238	(0.490)	101816	2.00000	1.80	
	5 Benzaldehyde	77	6.084	6.084	(0.921)	50677	2.00000	3.33	
	6 Phenol	94	6.250	6.240	(0.946)	252562	4.50000	3.97	
	7 Bis(2-Chloroethyl)ether	93	6.323	6.323	(0.957)	109705	2.00000	1.97	
	8 2-Chlorophenol	128	6.364	6.365	(0.964)	248233	4.50000	4.62	
	9 1,3-Dichlorobenzene	146	6.531	6.531	(0.989)	127095	2.00000	1.96	
*	10 1,4-Dichlorobenzene-D4	152	6.604	6.604	(1.000)	32554	0.80000	(a)	
	11 1,4-Dichlorobenzene	146	6.625	6.625	(1.003)	127751	2.00000	1.94	
	12 1,2-Dichlorobenzene	146	6.801	6.802	(1.030)	124963	2.00000	1.96	
	13 2,2'-Oxybis(1-chloropropane)	45	6.968	6.958	(1.055)	77976	2.00000	2.24	
	14 2-Methylphenol	108	6.968	6.958	(1.055)	243958	4.50000	4.89	
	15 Acetophenone	105	7.114	7.104	(0.874)	155394	2.00000	1.92	
	16 N-Nitroso-di-n-propylamine	70	7.134	7.125	(1.080)	74229	2.00000	2.18	
	17 3&4-Methylphenol	108	7.166	7.145	(1.085)	234257	4.50000	4.53	
	18 Hexachloroethane	117	7.197	7.197	(1.090)	50997	2.00000	1.99	
	19 Nitrobenzene	77	7.301	7.291	(0.897)	103758	2.00000	1.95	
	20 Isophorone	82	7.630	7.597	(0.938)	191613	2.00000	1.78	

Data File: \\target_server\gg\chem\gcms-n.i\N121123.b\N0433.D
Report Date: 29-Dec-2023 09:55

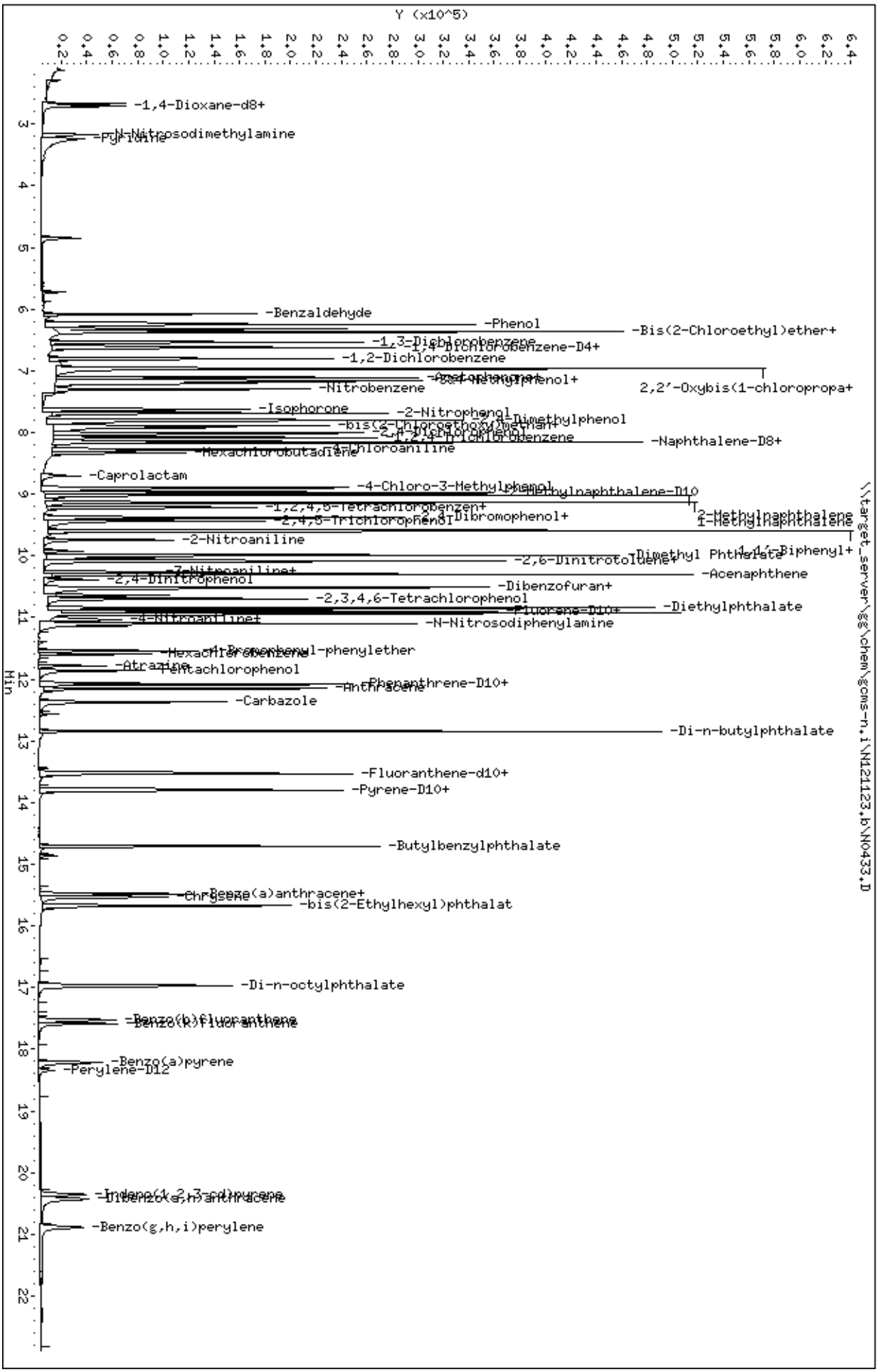
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
	21 2-Nitrophenol	139	7.697	7.675	(0.946)	123514	4.50000	5.64	
	22 2,4-Dimethylphenol	107	7.799	7.777	(0.959)	204317	4.50000	4.54	
	23 bis(2-Chloroethoxy)methane	93	7.900	7.878	(0.971)	117888	2.00000	1.76	
	24 Benzoic Acid	105	7.934	7.957	(0.975)	93427	2.00000	8.13	
	25 2,4-Dichlorophenol	162	8.012	7.979	(0.985)	198801	4.50000	3.95	
	26 1,2,4-Trichlorobenzene	180	8.080	8.069	(0.993)	100172	2.00000	1.86	
*	27 Naphthalene-D8	136	8.136	8.125	(1.000)	131703	0.80000	(a)	
	28 Naphthalene	128	8.159	8.148	(1.003)	351668	2.00000	1.95	
	29 4-Chloroaniline	127	8.282	8.282	(1.018)	85980	2.00000	2.58	
	30 Hexachlorobutadiene	225	8.327	8.317	(1.024)	45288	2.00000	1.95	
	31 Caprolactam	113	8.698	8.699	(1.069)	25780	2.00000	2.00	
	32 4-Chloro-3-Methylphenol	107	8.890	8.869	(1.093)	189150	4.50000	4.64	
$	33 2-Methylnaphthalene-D10	152	8.975	8.954	(1.103)	172231	2.00000	1.99	
	34 2-Methylnaphthalene	142	9.017	8.996	(1.108)	225887	2.00000	1.90	
	35 1-Methylnaphthalene	142	9.133	9.113	(1.123)	201723	2.00000	1.86	
	36 1,2,4,5-Tetrachlorobenzene	216	9.229	9.208	(0.899)	85436	2.00000	1.98	
	37 Hexachlorocyclopentadiene	237	9.208	9.187	(0.897)	39615	2.00000	2.18	
$	38 2,4-Dibromophenol	252	9.366	9.346	(0.913)	49738	2.00000	2.62	
	39 2,4,6-Trichlorophenol	196	9.377	9.356	(0.914)	118280	4.50000	5.58	
	40 2,4,5-Trichlorophenol	196	9.430	9.420	(0.919)	133876	4.50000	5.83	
	41 1,1'-Biphenyl	154	9.589	9.579	(0.934)	243782	2.00000	2.02	
	42 2-Chloronaphthalene	164	9.599	9.579	(0.935)	66041	2.00000	2.08	
	43 2-Nitroaniline	65	9.749	9.728	(0.950)	36140	2.00000	1.87	
	44 Dimethyl Phthalate	163	9.985	9.975	(0.973)	359439	4.50000	4.37	
	45 2,6-Dinitrotoluene	165	10.050	10.039	(0.979)	38817	2.00000	1.84	
	46 Acenaphthylene	152	10.093	10.082	(0.983)	298425	2.00000	1.98	
	47 3-Nitroaniline	138	10.253	10.243	(0.999)	25084	2.00000	2.64	
*	48 Acenaphthene-D10	164	10.264	10.254	(1.000)	54093	0.80000	(a)	
	49 Acenaphthene	153	10.296	10.286	(1.003)	179656	2.00000	2.01	
	50 2,4-Dinitrophenol	184	10.382	10.372	(1.011)	23683	4.50000	8.25	
	51 Dibenzofuran	168	10.511	10.501	(1.024)	242294	2.00000	2.01	
	52 4-Nitrophenol	109	10.522	10.490	(1.025)	24848	4.50000	4.75	
	53 2,4-Dinitrotoluene	165	10.532	10.522	(1.026)	45257	2.00000	1.89	
	54 2,3,4,6-Tetrachlorophenol	232	10.693	10.672	(1.042)	83044	4.50000	5.88	
	55 Diethylphthalate	149	10.843	10.833	(1.056)	338363	4.50000	4.38	
$	56 Fluorene-D10	174	10.897	10.887	(1.062)	144259	2.00000	2.04	
	57 Fluorene	166	10.929	10.919	(1.065)	184361	2.00000	2.06	
	58 4-Chlorophenyl-phenylether	204	10.950	10.940	(1.067)	81267	2.00000	2.05	
	59 4-Nitroaniline	138	11.004	10.983	(1.072)	17815	2.00000	1.95	
	60 4,6-Dinitro-2-Methylphenol	198	11.036	11.015	(0.915)	34427	4.50000	6.87	
	61 N-Nitrosodiphenylamine	169	11.101	11.090	(0.920)	138339	2.00000	2.04	
	62 4-Bromophenyl-phenylether	248	11.539	11.529	(0.957)	41364	2.00000	2.03	
	63 Hexachlorobenzene	284	11.592	11.582	(0.961)	44642	2.00000	2.00	
	64 Atrazine	200	11.784	11.774	(0.977)	29199	2.00000	1.96	
	65 Pentachlorophenol	266	11.859	11.849	(0.983)	46408	4.50000	9.63	
*	66 Phenanthrene-D10	188	12.062	12.052	(1.000)	68403	0.80000	(a)	
	67 Phenanthrene	178	12.083	12.073	(1.002)	206145	2.00000	1.99	
	68 Anthracene	178	12.147	12.137	(1.007)	224214	2.00000	2.16	
	69 Carbazole	167	12.372	12.361	(1.026)	162668	2.00000	2.23	
	70 Di-n-butylphthalate	149	12.841	12.831	(1.065)	461399	4.50000	3.87	
$	71 Fluoranthene-d10	212	13.511	13.502	(1.120)	117204	2.00000	2.11	
	72 Fluoranthene	202	13.532	13.522	(1.122)	169674	2.00000	2.11	
$	73 Pyrene-D10	212	13.776	13.777	(0.889)	133787	2.00000	2.09	
	74 Pyrene	202	13.797	13.797	(0.891)	177068	2.00000	2.10	

Data File: \\target_server\gg\chem\gcms-n.i\N121123.b\N0433.D
Report Date: 29-Dec-2023 09:55

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
	75 Butylbenzylphthalate	149	14.703	14.704	(0.949)	161179	4.50000	4.58	
	76 Benzo(a)anthracene	228	15.477	15.468	(0.999)	102567	2.00000	2.17	
	77 3,3'-Dichlorobenzidine	252	15.498	15.488	(1.001)	31866	2.00000	2.60	
*	78 Chrysene-D12	240	15.488	15.478	(1.000)	27333	0.80000	(a)	
	79 Chrysene	228	15.539	15.529	(1.003)	117753	2.00000	2.08	
	80 bis(2-Ethylhexyl)phthalate	149	15.671	15.672	(1.012)	191169	4.50000	4.21	
	81 Di-n-octylphthalate	149	16.965	16.965	(1.095)	279781	4.50000	5.08	
	82 Benzo(b)fluoranthene	252	17.520	17.521	(0.955)	77141	2.00000	2.01	
	83 Benzo(k)fluoranthene	252	17.582	17.573	(0.958)	102778	2.00000	2.07(H)	
	84 Benzo(a)pyrene	252	18.221	18.211	(0.993)	75179	2.00000	2.00	
*	85 Perylene-D12	264	18.344	18.324	(1.000)	21078	0.80000	(a)	
	86 Indeno(1,2,3-cd)pyrene	276	20.353	20.343	(1.109)	55459	2.00000	2.03	
	87 Dibenzo(a,h)anthracene	278	20.435	20.415	(1.114)	55016	2.00000	1.96	
	88 Benzo(g,h,i)perylene	276	20.888	20.878	(1.139)	60670	2.00000	1.97	
M	89 Total PAHs	100				2865384	36.0000	36.4	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
H - Operator selected an alternate compound hit.


Data File: \\target_server\gg\chem\gcms-n,i\N121123,b\N0433,D
Date : 11-DEC-2023 12:16
Client ID:
Sample Info: WG346778-2
Volume Injected (uL): 1.0
Column phase: Rxi-5ViOms
Instrument: gcms-n,i
Operator: EP
Column diameter: 0.25
\\target_server\gg\chem\gcms-n,i\N121123,b\N0433,D
Y (x10^5)
Min
-1,4-Dioxane-d8+
-N-Nitrosodimethylamine
-Pyridine
-Benzaldehyde
-Phenol
-Bis(2-Chloroethyl)ether+
-1,3-Dichlorobenzene
-1,4-Dichlorobenzene-D4+
-1,2-Dichlorobenzene
-Nitrobenzene
2,2'-Oxybis(1-chloropropa+
-Isophorone
-2-Nitrophenol
-2,4-Dimethylphenol
-Naphthalene-D8+
-Hexachlorobutadiene
-Caprolactam
-4-Chloro-3-Methylphenol
-1,2,4,5-Tetrachlorobenzen+
-2,4,6-Tribromophenol+
-2,4,6-Trichlorophenol
2-Methylnaphthalene
1-Methylnaphthalene
-2-Nitroaniline
-2,6-Dinitrotoluene+
Dimethyl Phthalate
4,4'-Biphenyl+
-3-Nitroaniline+
-Acenaphthene
-2,4-Dinitrophenol
-Dibenzofuran+
-2,3,4,6-Tetrachlorophenol
-Fluorene-D10+
-Diethylphthalate
-4-Nitroaniline+
-N-Nitrosodiphenylamine
-4-Bromophenyl-phenylether
-Hexachlorobenzene
-Atrazine
-Pentachlorophenol
-Phenanthrene-D10+
-Anthracene
-Carbazole
-Di-n-butylphthalate
-Fluoranthene-d10+
-Pyrene-D10+
-Butylbenzylphthalate
-Benzo(a)anthracene+
-Chrysene
-bis(2-Ethylhexyl)phthalat
-Di-n-octylphthalate
-Benzo(b)fluoranthene
-Benzo(k)fluoranthene
-Benzo(a)pyrene
-Perylene-D12
-Indeno(1,2,3-cd)pyrene
-Dibenzo(a,h)anthracene
-Benzo(g,h,i)perylene

Form 7
Calibration Verification Summary

Lab Name: Katahdin Analytical Services
SDG: SQ6133
Lab ID: WG346778-3
Analytical Date: 12/11/23 22:43
Lab File ID: N0453.D
Instrument ID: GCMS-N
Initial Calibration Date(s): 12/07/23 12:11 12/07/23 14:42
Column ID:

Compound	RRF/Amount	RF2	CCAL RRF2	Min RF	%D/ %Drift	Max %D/ %Drift	Curve Type	Qual
Naphthalene	1.09413	1.11397	1.11397	0.010	1.81324	20.000	Averaged	
2-Methylnaphthalene	0.72318	0.67802	0.67802	0.010	-6.24488	20.000	Averaged	
Acenaphthylene	2.22711	2.24147	2.24147	0.010	0.64478	20.000	Averaged	
Acenaphthene	1.32261	1.31323	1.31323	0.010	-0.70923	20.010	Averaged	
Fluorene	1.32162	1.29439	1.29439	0.010	-2.06072	20.000	Averaged	
Phenanthrene	1.20967	1.28848	1.28848	0.010	6.51503	20.000	Averaged	
Anthracene	1.21499	1.36374	1.36374	0.010	12.24354	20.000	Averaged	
Fluoranthene	0.93896	0.90140	0.90140	0.010	-4.00005	20.010	Averaged	
Pyrene	2.47305	3.15111	3.15111	0.010	27.41800	20.000	Averaged	*
Benzo(a)anthracene	1.38487	1.45789	1.45789	0.010	5.27219	20.000	Averaged	
Chrysene	1.65973	1.74897	1.74897	0.010	5.37656	20.000	Averaged	
Benzo(b)fluoranthene	1.45918	1.43844	1.43844	0.010	-1.42125	20.000	Averaged	
Benzo(k)fluoranthene	1.88696	2.14431	2.14431	0.010	13.63863	20.000	Averaged	
Benzo(a)pyrene	1.42750	1.48257	1.48257	0.010	3.85795	20.010	Averaged	
Indeno(1,2,3-cd)pyrene	1.03440	0.90853	0.90853	0.010	-12.16790	20.000	Averaged	
Dibenzo(a,h)anthracene	1.06638	0.98765	0.98765	0.010	-7.38307	20.000	Averaged	
Benzo(g,h,i)perylene	1.16611	1.09152	1.09152	0.010	-6.39598	20.000	Averaged	
2-Methylnaphthalene-D10	0.52508	0.54531	0.54531	0.010	3.85378	20.000	Averaged	
Fluorene-D10	1.04693	1.04641	1.04641	0.010	-0.05019	20.000	Averaged	
Pyrene-D10	1.87184	2.33234	2.33234	0.010	24.60161	20.000	Averaged	*

*** = Compound out of QC criteria**

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Data File: \\target_server\gg\chem\gcms-n.i\N121123.b\N0453.D
Report Date: 29-Dec-2023 09:56

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-n.i\N121123.b\N0453.D
Lab Smp Id: WG346778-3
Inj Date : 11-DEC-2023 22:43
Operator : EP   Inst ID: gcms-n.i
Smp Info : WG346778-3
Misc Info : WG346778,WG346778,WG346503-4,SQ6133-8
Comment   :
Method   : \\target_server\gg\chem\gcms-n.i\N121123.b\NSPSIM95.m
Meth Date : 12-Dec-2023 08:48 epelletier Quant Type: ISTD
Cal Date : 07-DEC-2023 14:42   Cal File: N0385.D
Als bottle: 2   Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: all.sub
Target Version: 4.12
Processing Host: INSPIRON1

Concentration Formula: Amt * DF * Uf*(Vt/Vo*Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.000	Sample Volume (L)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

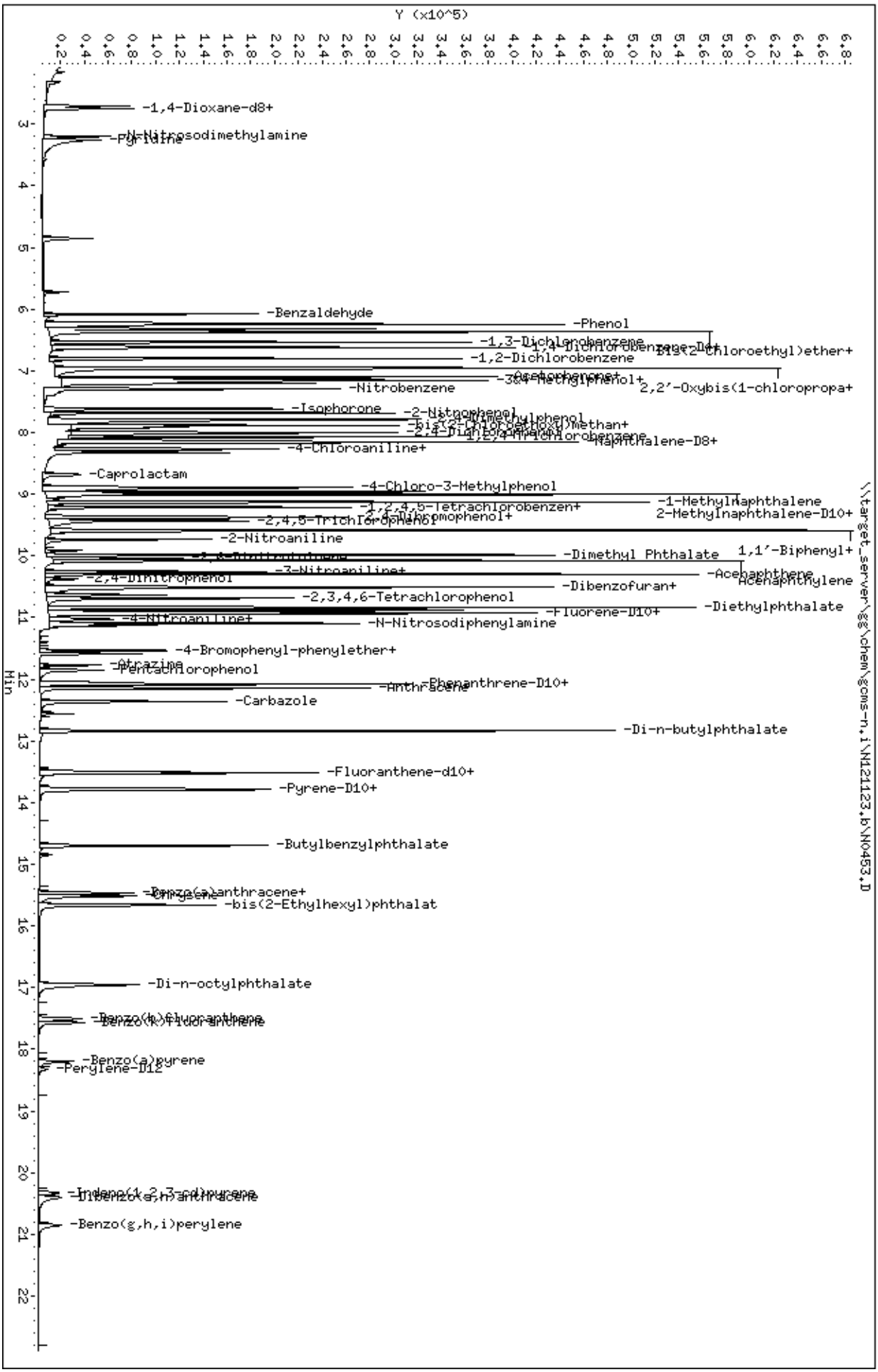
			QUANT SIG					AMOUNTS		
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
$	1	1,4-Dioxane-d8	96	2.709	2.742	(0.264)	56180	2.00000	1.92	
	2	1,4-Dioxane	88	2.741	2.784	(0.415)	61102	2.00000	2.05	
*	10	1,4-Dichlorobenzene-D4	152	6.604	6.604	(1.000)	40451	0.80000	(a)	
*	27	Naphthalene-D8	136	8.125	8.125	(1.000)	147350	0.80000	(a)	
	28	Naphthalene	128	8.159	8.148	(1.004)	410358	2.00000	2.04	
$	33	2-Methylnaphthalene-D10	152	8.964	8.954	(1.103)	200880	2.00000	2.08	
	34	2-Methylnaphthalene	142	9.006	8.996	(1.108)	249764	2.00000	1.88	
	35	1-Methylnaphthalene	142	9.123	9.113	(1.123)	234605	2.00000	1.93	
$	38	2,4-Dibromophenol	252	9.356	9.346	(0.912)	56792	2.00000	2.54	
	42	2-Chloronaphthalene	164	9.589	9.579	(0.935)	74442	2.00000	1.99	
	46	Acenaphthylene	152	10.082	10.082	(0.983)	356186	2.00000	2.01	
*	48	Acenaphthene-D10	164	10.254	10.254	(1.000)	63563	0.80000	(a)	
	49	Acenaphthene	153	10.296	10.286	(1.004)	208682	2.00000	1.98	
$	56	Fluorene-D10	174	10.886	10.887	(1.062)	166282	2.00000	2.00	
	57	Fluorene	166	10.929	10.919	(1.066)	205688	2.00000	1.96	
	65	Pentachlorophenol	266	11.859	11.849	(0.984)	38843	4.50000	7.80	
*	66	Phenanthrene-D10	188	12.051	12.052	(1.000)	70637	0.80000	(a)	
	67	Phenanthrene	178	12.083	12.073	(1.003)	227536	2.00000	2.13	
	68	Anthracene	178	12.147	12.137	(1.008)	240827	2.00000	2.24	
$	71	Fluoranthene-d10	212	13.501	13.502	(1.120)	107697	2.00000	1.88	

Data File: \\target_server\gg\chem\gcms-n.i\N121123.b\N0453.D
Report Date: 29-Dec-2023 09:56

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
	72 Fluoranthene	202	13.522	13.522	(1.122)	159180	2.00000	1.92	
$	73 Pyrene-D10	212	13.776	13.777	(0.890)	120069	2.00000	2.49	
	74 Pyrene	202	13.786	13.797	(0.891)	162219	2.00000	2.55	
	76 Benzo(a)anthracene	228	15.467	15.468	(0.999)	75052	2.00000	2.10	
*	78 Chrysene-D12	240	15.478	15.478	(1.000)	20592	0.80000	(a)	
	79 Chrysene	228	15.518	15.529	(1.003)	90037	2.00000	2.11	
	82 Benzo(b)fluoranthene	252	17.510	17.521	(0.956)	50615	2.00000	1.97	
	83 Benzo(k)fluoranthene	252	17.562	17.573	(0.958)	75453	2.00000	2.27(H)	
	84 Benzo(a)pyrene	252	18.200	18.211	(0.993)	52168	2.00000	2.08	
*	85 Perylene-D12	264	18.324	18.324	(1.000)	14075	0.80000	(a)	
	86 Indeno(1,2,3-cd)pyrene	276	20.332	20.343	(1.110)	31969	2.00000	1.76	
	87 Dibenzo(a,h)anthracene	278	20.415	20.415	(1.114)	34753	2.00000	1.85	
	88 Benzo(g,h,i)perylene	276	20.857	20.878	(1.138)	38408	2.00000	1.87	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
H - Operator selected an alternate compound hit.


Data File: \\target_server\gg\chem\gcms-n,i\N121123,b\N0453.D
Date : 11-DEC-2023 22:43
Client ID:
Sample Info: WG346778-3
Volume Injected (uL): 1.0
Column phase: Rxi-5ViOms
Instrument: gcms-n,i
Operator: EP
Column diameter: 0.25
\\target_server\gg\chem\gcms-n,i\N121123,b\N0453.D
Y (x10^5)
Min
-1,4-Dioxane-d8+
-N-Nitrosodimethylamine
-Pyridine
-Benzaldehyde
-Phenol
-1,3-Dichlorobenzene
-1,4-Dichlorobenzene-D4+
Bis(2-chloroethyl)ether+
-1,2-Dichlorobenzene
-Acetophenone+
-3&4-Methylphenol+
2,2'-Oxybis(1-chloropropa+
-Nitrobenzene
-Isophorone
-2-Nitrophenol
-2,4-Dimethylphenol
-bis(2-Chloroethoxy)Methan+
-2,4-Dichlorophenol
-1,2,4-Trichlorobenzene
-Naphthalene-D8+
-4-Chloroaniline+
-Caprolactam
-4-Chloro-3-Methylphenol
-1-Methylnaphthalene
-1,2,4,5-Tetrachlorobenzen+
2-Methylnaphthalene-D10+
-2,4-Dibromophenol+
-2,4,5-Trichlorophenol
-2-Nitroaniline
-Dimethyl Phthalate
1,1'-Biphenyl+
-2,6-Dinitrotoluene
-3-Nitroaniline+
-Acenaphthene
-2,4-Dinitrophenol
Acenaphthylene
-Dibenzofuran+
-2,3,4,6-Tetrachlorophenol
-Diethylphthalate
-Fluorene-D10+
-4-Nitroaniline+
-N-Nitrosodiphenylamine
-4-Bromophenyl-phenylether+
-Atrazine
-Pentachlorophenol
-Phenanthrene-D10+
-Anthracene
-Carbazole
-Di-n-butylphthalate
-Fluoranthene-d10+
-Pyrene-D10+
-Butylbenzylphthalate
-Benzo(a)anthracene+
-Chrysene
-bis(2-Ethylhexyl)phthalat
-Di-n-octylphthalate
-Benzo(b)fluoranthene
-Benzo(k)fluoranthene
-Benzo(a)pyrene
-Perylene-D12
-Indeno(1,2,3-cd)pyrene
-Dibenzo(a,h)anthracene
-Benzo(g,h,i)perylene

Form 7
Calibration Verification Summary

Lab Name: Katahdin Analytical Services
SDG: SQ6133
Lab ID: WG346778-4
Analytical Date: 12/11/23 23:16
Lab File ID: N0454.D
Instrument ID: GCMS-N
Initial Calibration Date(s): 12/07/23 12:11 12/07/23 14:42
Column ID:

Compound	RRF/Amount	RF2	CCAL RRF2	Min RF	%D/ %Drift	Max %D/ %Drift	Curve Type	Qual
Naphthalene	1.09413	1.10398	1.10398	0.010	0.90026	20.000	Averaged	
2-Methylnaphthalene	0.72318	0.69013	0.69013	0.010	-4.56950	20.000	Averaged	
Acenaphthylene	2.22711	2.20148	2.20148	0.010	-1.15076	20.000	Averaged	
Acenaphthene	1.32261	1.29183	1.29183	0.010	-2.32738	20.010	Averaged	
Fluorene	1.32162	1.31920	1.31920	0.010	-0.18326	20.000	Averaged	
Phenanthrene	1.20967	1.28874	1.28874	0.010	6.53608	20.000	Averaged	
Anthracene	1.21499	1.35082	1.35082	0.010	11.18011	20.000	Averaged	
Fluoranthene	0.93896	0.90291	0.90291	0.010	-3.83896	20.010	Averaged	
Pyrene	2.47305	3.10869	3.10869	0.010	25.70283	20.000	Averaged	*
Benzo(a)anthracene	1.38487	1.43081	1.43081	0.010	3.31704	20.000	Averaged	
Chrysene	1.65973	1.79094	1.79094	0.010	7.90540	20.000	Averaged	
Benzo(b)fluoranthene	1.45918	1.56433	1.56433	0.010	7.20667	20.000	Averaged	
Benzo(k)fluoranthene	1.88696	2.05390	2.05390	0.010	8.84716	20.000	Averaged	
Benzo(a)pyrene	1.42750	1.48586	1.48586	0.010	4.08802	20.010	Averaged	
Indeno(1,2,3-cd)pyrene	1.03440	0.83327	0.83327	0.010	-19.44423	20.000	Averaged	
Dibenzo(a,h)anthracene	1.06638	0.90948	0.90948	0.010	-14.71343	20.000	Averaged	
Benzo(g,h,i)perylene	1.16611	1.02205	1.02205	0.010	-12.35344	20.000	Averaged	
2-Methylnaphthalene-D10	0.52508	0.54031	0.54031	0.010	2.90061	20.000	Averaged	
Fluorene-D10	1.04693	1.04757	1.04757	0.010	0.06061	20.000	Averaged	
Pyrene-D10	1.87184	2.35684	2.35684	0.010	25.91053	20.000	Averaged	*

*** = Compound out of QC criteria**

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
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http://katahdinlab.com
sales@katahdinlab.com

Data File: \\target_server\gg\chem\gcms-n.i\N121123.b\N0454.D
Report Date: 29-Dec-2023 09:56

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-n.i\N121123.b\N0454.D
Lab Smp Id: WG346778-4
Inj Date : 11-DEC-2023 23:16
Operator : EP   Inst ID: gcms-n.i
Smp Info : WG346778-4
Misc Info : WG346778,WG346778,WG346503-4,SQ6133-8
Comment   :
Method   : \\target_server\gg\chem\gcms-n.i\N121123.b\NSPSIM95.m
Meth Date : 12-Dec-2023 08:48 epelletier Quant Type: ISTD
Cal Date : 07-DEC-2023 14:42   Cal File: N0385.D
Als bottle: 2   Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: all.sub
Target Version: 4.12
Processing Host: INSPIRON1

Concentration Formula: Amt * DF * Uf*(Vt/Vo*Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.000	Sample Volume (L)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

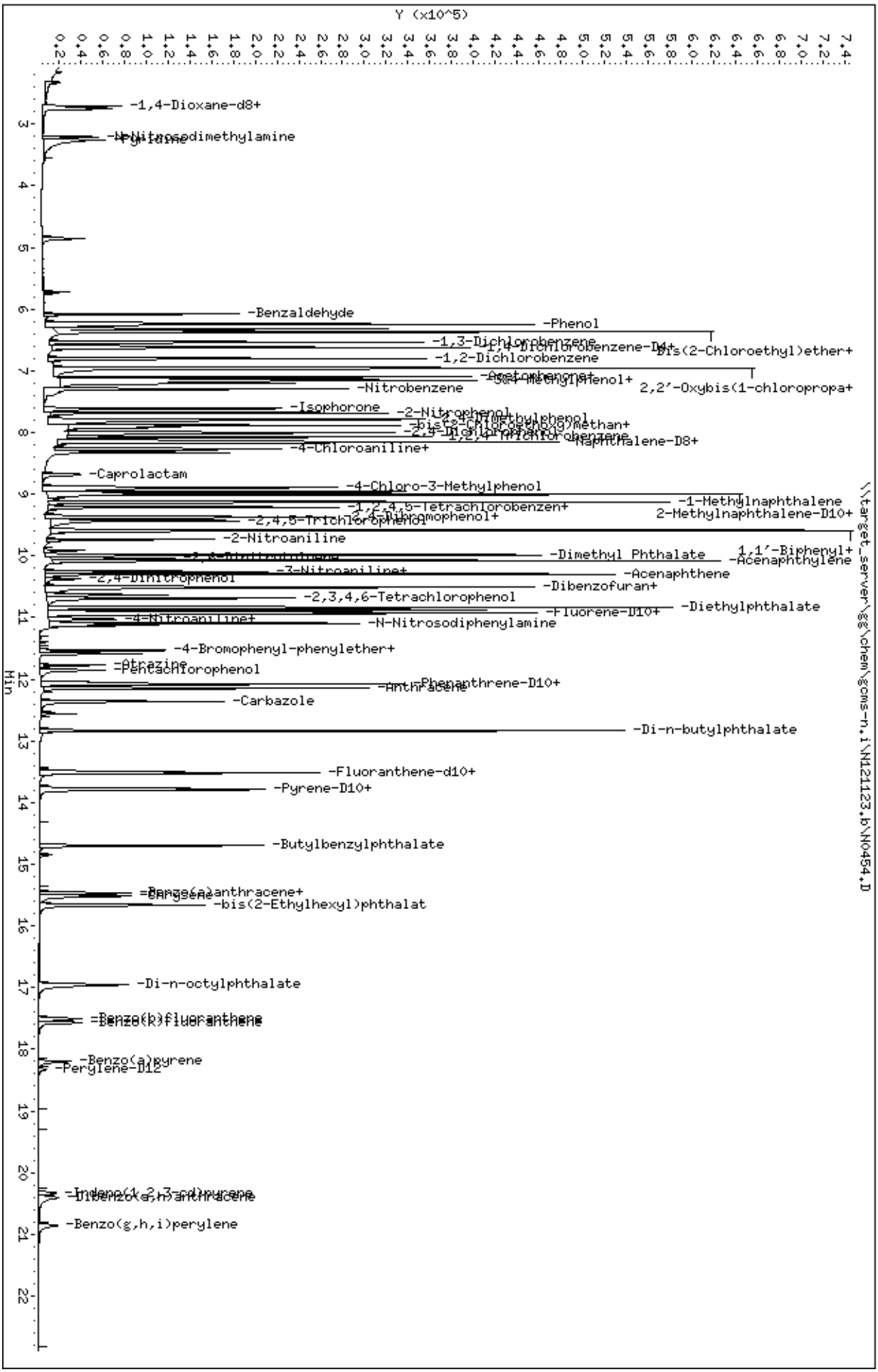
			QUANT SIG					AMOUNTS		
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
$	1	1,4-Dioxane-d8	96	2.709	2.742	(0.264)	60519	2.00000	1.91	
	2	1,4-Dioxane	88	2.752	2.784	(0.417)	67820	2.00000	2.11	
*	10	1,4-Dichlorobenzene-D4	152	6.604	6.604	(1.000)	43723	0.80000	(a)	
*	27	Naphthalene-D8	136	8.125	8.125	(1.000)	156449	0.80000	(a)	
	28	Naphthalene	128	8.159	8.148	(1.004)	431791	2.00000	2.02	
$	33	2-Methylnaphthalene-D10	152	8.975	8.954	(1.105)	211327	2.00000	2.06	
	34	2-Methylnaphthalene	142	9.006	8.996	(1.108)	269926	2.00000	1.91	
	35	1-Methylnaphthalene	142	9.123	9.113	(1.123)	254118	2.00000	1.97	
$	38	2,4-Dibromophenol	252	9.356	9.346	(0.912)	59529	2.00000	2.47	
	42	2-Chloronaphthalene	164	9.589	9.579	(0.935)	79407	2.00000	1.96	
	46	Acenaphthylene	152	10.082	10.082	(0.983)	378071	2.00000	1.98	
*	48	Acenaphthene-D10	164	10.254	10.254	(1.000)	68694	0.80000	(a)	
	49	Acenaphthene	153	10.296	10.286	(1.004)	221852	2.00000	1.95	
$	56	Fluorene-D10	174	10.886	10.887	(1.062)	179904	2.00000	2.00	
	57	Fluorene	166	10.918	10.919	(1.065)	226553	2.00000	2.00	
	65	Pentachlorophenol	266	11.849	11.849	(0.983)	43086	4.50000	8.01	
*	66	Phenanthrene-D10	188	12.051	12.052	(1.000)	76362	0.80000	(a)	
	67	Phenanthrene	178	12.083	12.073	(1.003)	246026	2.00000	2.13	
	68	Anthracene	178	12.147	12.137	(1.008)	257879	2.00000	2.22	
$	71	Fluoranthene-d10	212	13.501	13.502	(1.120)	116785	2.00000	1.88	

Data File: \\target_server\gg\chem\gcms-n.i\N121123.b\N0454.D
Report Date: 29-Dec-2023 09:56

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
	72 Fluoranthene	202	13.522	13.522	(1.122)	172370	2.00000	1.92	
$	73 Pyrene-D10	212	13.766	13.777	(0.889)	128283	2.00000	2.52	
	74 Pyrene	202	13.786	13.797	(0.891)	169206	2.00000	2.51	
	76 Benzo(a)anthracene	228	15.467	15.468	(0.999)	77879	2.00000	2.07	
*	78 Chrysene-D12	240	15.478	15.478	(1.000)	21772	0.80000	(a)	
	79 Chrysene	228	15.518	15.529	(1.003)	97481	2.00000	2.16	
	82 Benzo(b)fluoranthene	252	17.510	17.521	(0.956)	56711	2.00000	2.14	
	83 Benzo(k)fluoranthene	252	17.562	17.573	(0.958)	74459	2.00000	2.18(H)	
	84 Benzo(a)pyrene	252	18.200	18.211	(0.993)	53866	2.00000	2.08	
*	85 Perylene-D12	264	18.324	18.324	(1.000)	14501	0.80000	(a)	
	86 Indeno(1,2,3-cd)pyrene	276	20.332	20.343	(1.110)	30208	2.00000	1.61	
	87 Dibenzo(a,h)anthracene	278	20.414	20.415	(1.114)	32971	2.00000	1.70	
	88 Benzo(g,h,i)perylene	276	20.868	20.878	(1.139)	37052	2.00000	1.75	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
H - Operator selected an alternate compound hit.


Data File: \\target_server\gg\chem\gcms-n,i\N121123,b\N0454.D
Date : 11-DEC-2023 23:16
Client ID:
Sample Info: WG346778-4
Volume Injected (uL): 1.0
Column phase: Rxi-5ViOms
Instrument: gcms-n,i
Operator: EP
Column diameter: 0.25
\\target_server\gg\chem\gcms-n,i\N121123,b\N0454.D
Y (x10^5)
Min
-1,4-Dioxane-d8+
-N-Nitrosodimethylamine
-Pyridine
-Benzaldehyde
-Phenol
-1,3-Dichlorobenzene
-1,4-Dichlorobenzene-D4+
Bis(2-Chloroethyl)ether+
-1,2-Dichlorobenzene
-Acetophenone+
-2&4-Methylphenol+
2,2'-Oxybis(1-chloropropa+
-Nitrobenzene
-Isophorone
-2-Nitrophenol
-bis(2-Chloroethoxy)methan+
-2,4-Dichlorophenol+
-1,2,4-Trichlorobenzene
-Naphthalene-D8+
-4-Chloroaniline+
-Caprolactam
-4-Chloro-3-Methylphenol
-1-Methylnaphthalene
-1,2,4,5-Tetrachlorobenzen+
2-Methylnaphthalene-D10+
2,4-Dibromophenol+
-2,4,5-Trichlorophenol
-2-Nitroaniline
-Dimethyl Phthalate
1,1'-Biphenyl+
-Acenaphthylene
-3-Nitroaniline+
-Acenaphthene
-2,4-Dinitrophenol
-Dibenzofuran+
-2,3,4,6-Tetrachlorophenol
-Fluorene-D10+
-Diethylphthalate
-4-Nitroaniline+
-N-Nitrosodiphenylamine
-4-Bromophenyl-phenylether+
-Atrazine
-Pentachlorophenol
-Phenanthrene-D10+
-Anthracene
-Carbazole
-Di-n-butylphthalate
-Fluoranthene-d10+
-Pyrene-D10+
-Butylbenzylphthalate
-Benzo(a)anthracene+
-Chrysene
-bis(2-Ethylhexyl)phthalat
-Di-n-octylphthalate
-Benzo(k)fluoranthene
-Benzo(a)pyrene
-Perylene-D12
-Indeno(1,2,3-cd)pyrene
-Dibenzo(a,h)anthracene
-Benzo(g,h,i)perylene

Form 7
Calibration Verification Summary

Lab Name: Katahdin Analytical Services
SDG: SQ6133
Lab ID: WG346778-5
Analytical Date: 12/11/23 23:48
Lab File ID: N0455.D
Instrument ID: GCMS-N
Initial Calibration Date(s): 12/07/23 12:11 12/07/23 14:42
Column ID:

Compound	$\overline{RRF}$/Amount	RF2	CCAL RRF2	Min RF	%D/ %Drift	Max %D/ %Drift	Curve Type	Qual
Naphthalene	1.09413	1.10833	1.10833	0.010	1.29833	20.000	Averaged	
2-Methylnaphthalene	0.72318	0.69172	0.69172	0.010	-4.34962	20.000	Averaged	
Acenaphthylene	2.22711	2.20671	2.20671	0.010	-0.91576	20.000	Averaged	
Acenaphthene	1.32261	1.29620	1.29620	0.010	-1.99649	20.010	Averaged	
Fluorene	1.32162	1.30821	1.30821	0.010	-1.01500	20.000	Averaged	
Phenanthrene	1.20967	1.28102	1.28102	0.010	5.89798	20.000	Averaged	
Anthracene	1.21499	1.36876	1.36876	0.010	12.65632	20.000	Averaged	
Fluoranthene	0.93896	0.94816	0.94816	0.010	0.98011	20.010	Averaged	
Pyrene	2.47305	3.01830	3.01830	0.010	22.04783	20.000	Averaged	*
Benzo(a)anthracene	1.38487	1.41897	1.41897	0.010	2.46199	20.000	Averaged	
Chrysene	1.65973	1.77390	1.77390	0.010	6.87855	20.000	Averaged	
Benzo(b)fluoranthene	1.45918	1.56779	1.56779	0.010	7.44381	20.000	Averaged	
Benzo(k)fluoranthene	1.88696	2.09604	2.09604	0.010	11.08055	20.000	Averaged	
Benzo(a)pyrene	1.42750	1.41998	1.41998	0.010	-0.52643	20.010	Averaged	
Indeno(1,2,3-cd)pyrene	1.03440	0.82897	0.82897	0.010	-19.85969	20.000	Averaged	
Dibenzo(a,h)anthracene	1.06638	0.92455	0.92455	0.010	-13.30084	20.000	Averaged	
Benzo(g,h,i)perylene	1.16611	1.07680	1.07680	0.010	-7.65877	20.000	Averaged	
2-Methylnaphthalene-D10	0.52508	0.56764	0.56764	0.010	8.10605	20.000	Averaged	
Fluorene-D10	1.04693	1.05401	1.05401	0.010	0.67618	20.000	Averaged	
Pyrene-D10	1.87184	2.21587	2.21587	0.010	18.37903	20.000	Averaged	

*** = Compound out of QC criteria**

Data File: \\target_server\gg\chem\gcms-n.i\N121123.b\N0455.D
Report Date: 29-Dec-2023 09:56

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-n.i\N121123.b\N0455.D
Lab Smp Id: WG346778-5
Inj Date : 11-DEC-2023 23:48
Operator : EP   Inst ID: gcms-n.i
Smp Info : WG346778-5
Misc Info : WG346778,WG346778,WG346503-4,SQ6133-8
Comment   :
Method   : \\target_server\gg\chem\gcms-n.i\N121123.b\NSPSIM95.m
Meth Date : 12-Dec-2023 08:48 epelletier Quant Type: ISTD
Cal Date : 07-DEC-2023 14:42   Cal File: N0385.D
Als bottle: 2   Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: all.sub
Target Version: 4.12
Processing Host: INSPIRON1

Concentration Formula: Amt * DF * Uf*(Vt/Vo*Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.000	Sample Volume (L)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

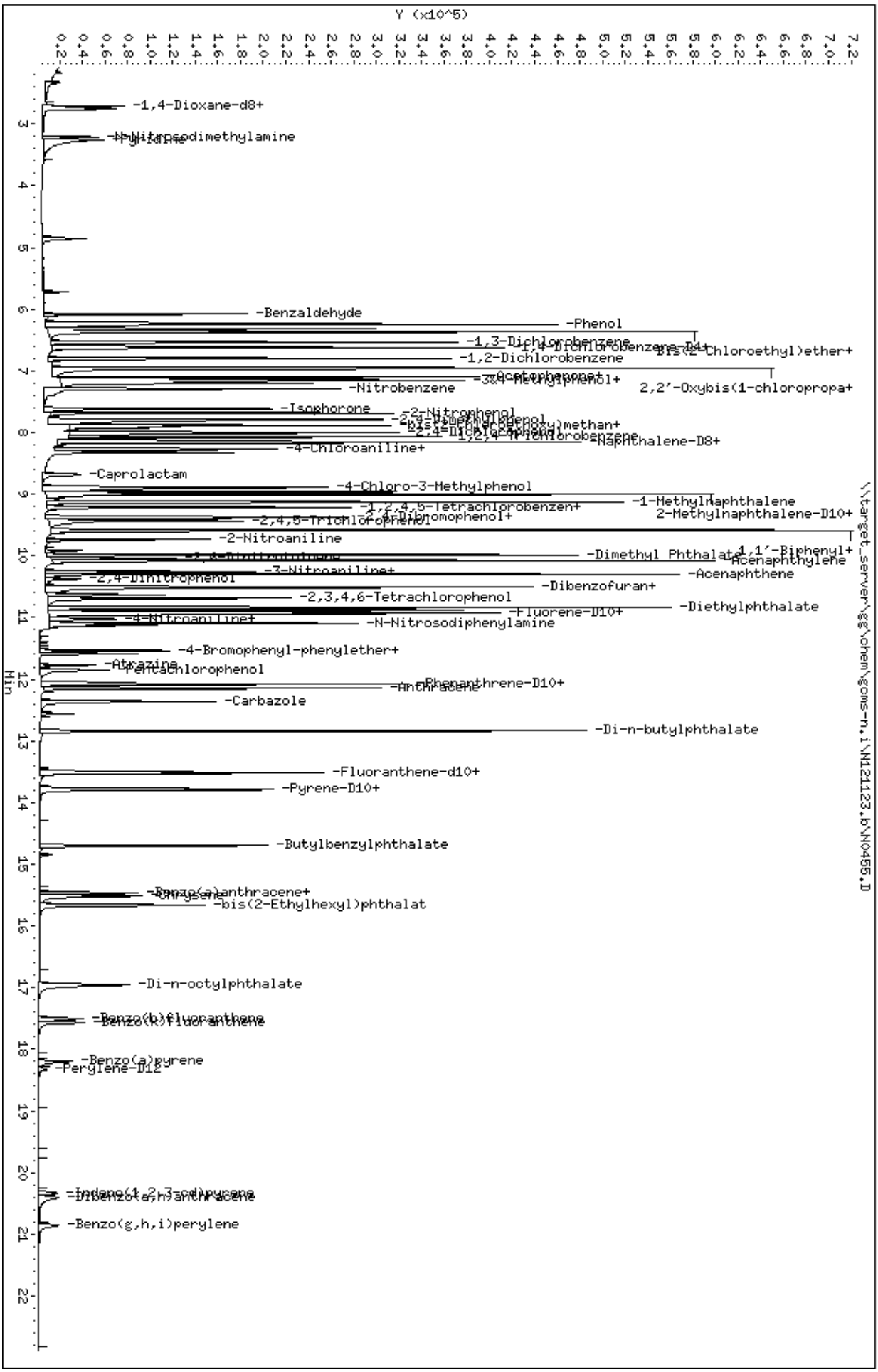
			QUANT SIG					AMOUNTS		
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
$	1	1,4-Dioxane-d8	96	2.709	2.742	(0.264)	60109	2.00000	2.00	
	2	1,4-Dioxane	88	2.751	2.784	(0.417)	64501	2.00000	2.08	
*	10	1,4-Dichlorobenzene-D4	152	6.604	6.604	(1.000)	42245	0.80000	(a)	
*	27	Naphthalene-D8	136	8.125	8.125	(1.000)	149958	0.80000	(a)	
	28	Naphthalene	128	8.158	8.148	(1.004)	415509	2.00000	2.02	
$	33	2-Methylnaphthalene-D10	152	8.974	8.954	(1.105)	212806	2.00000	2.16	
	34	2-Methylnaphthalene	142	9.006	8.996	(1.108)	259323	2.00000	1.91	
	35	1-Methylnaphthalene	142	9.123	9.113	(1.123)	241145	2.00000	1.95	
$	38	2,4-Dibromophenol	252	9.356	9.346	(0.912)	57392	2.00000	2.51	
	42	2-Chloronaphthalene	164	9.589	9.579	(0.935)	76251	2.00000	1.99	
	46	Acenaphthylene	152	10.082	10.082	(0.983)	358817	2.00000	1.98	
*	48	Acenaphthene-D10	164	10.253	10.254	(1.000)	65041	0.80000	(a)	
	49	Acenaphthene	153	10.296	10.286	(1.004)	210766	2.00000	1.96	
$	56	Fluorene-D10	174	10.886	10.887	(1.062)	171385	2.00000	2.01	
	57	Fluorene	166	10.929	10.919	(1.066)	212718	2.00000	1.98	
	65	Pentachlorophenol	266	11.848	11.849	(0.983)	43267	4.50000	8.48	
*	66	Phenanthrene-D10	188	12.051	12.052	(1.000)	72425	0.80000	(a)	
	67	Phenanthrene	178	12.083	12.073	(1.003)	231944	2.00000	2.12	
	68	Anthracene	178	12.147	12.137	(1.008)	247831	2.00000	2.25	
$	71	Fluoranthene-d10	212	13.501	13.502	(1.120)	116513	2.00000	1.98	

Data File: \\target_server\gg\chem\gcms-n.i\N121123.b\N0455.D
Report Date: 29-Dec-2023 09:56

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
	72 Fluoranthene	202	13.521	13.522	(1.122)	171676	2.00000	2.02	
$	73 Pyrene-D10	212	13.776	13.777	(0.890)	129257	2.00000	2.37	
	74 Pyrene	202	13.796	13.797	(0.891)	176065	2.00000	2.44	
	76 Benzo(a)anthracene	228	15.467	15.468	(0.999)	82772	2.00000	2.05	
*	78 Chrysene-D12	240	15.477	15.478	(1.000)	23333	0.80000	(a)	
	79 Chrysene	228	15.518	15.529	(1.003)	103476	2.00000	2.14	
	82 Benzo(b)fluoranthene	252	17.510	17.521	(0.956)	57150	2.00000	2.15	
	83 Benzo(k)fluoranthene	252	17.572	17.573	(0.959)	76406	2.00000	2.22(H)	
	84 Benzo(a)pyrene	252	18.200	18.211	(0.993)	51762	2.00000	1.99	
*	85 Perylene-D12	264	18.324	18.324	(1.000)	14581	0.80000	(a)	
	86 Indeno(1,2,3-cd)pyrene	276	20.332	20.343	(1.110)	30218	2.00000	1.60	
	87 Dibenzo(a,h)anthracene	278	20.414	20.415	(1.114)	33702	2.00000	1.73	
	88 Benzo(g,h,i)perylene	276	20.867	20.878	(1.139)	39252	2.00000	1.85	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
H - Operator selected an alternate compound hit.


Data File: \\target_server\gg\chem\gcms-n,i\N121123,b\N0455,D
Date : 11-DEC-2023 23:48
Client ID:
Sample Info: WG346778-5
Volume Injected (uL): 1.0
Column phase: Rxi-5ViOms
Instrument: gcms-n,i
Operator: EP
Column diameter: 0.25
\\target_server\gg\chem\gcms-n,i\N121123,b\N0455,D
Y (x10^5)
Min
-1,4-Dioxane-d8+
-Benzaldehyde
-Phenol
-1,3-Dichlorobenzene
-1,2-Dichlorobenzene
-Nitrobenzene
-Isophorone
-2-Nitrophenol
-4-Chloroaniline+
-Caprolactam
-4-Chloro-3-Methylphenol
-2,4,5-Trichlorophenol
-2-Nitroaniline
-2,4-Dinitrophenol
-2,3,4,6-Tetrachlorophenol
-4-Nitroaniline+
-N-Nitrosodiphenylamine
-4-Bromophenyl-phenylether+
-Carbazole
-Di-n-butylphthalate
-Fluoranthene-d10+
-Pyrene-D10+
-Butylbenzylphthalate
-bis(2-Ethylhexyl)phthalat
-Di-n-octylphthalate
-Benzo(a)pyrene
-Perylene-D12
-Benzo(g,h,i)perylene
-Dimethyl Phthalate
-Acenaphthylene
-Acenaphthene
-Dibenzofuran+
-Fluorene-D10+
-Diethylphthalate
-Phenanthrene-D10+
-Anthracene
-Chrysene
-Fluorene
-Pyrene
2-Methylnaphthalene-D10+
-Naphthalene-D8+
-1,4-Dichlorobenzene-D4+
-1,2-Dichlorobenzene
-1-Methylnaphthalene
-1,1'-Biphenyl+
-Benzo(b)fluoranthene
-Benzo(k)fluoranthene
-Indeno(1,2,3-cd)pyrene
-Dibenz(a,h)anthracene
-Benzo(a)anthracene+
-Atrazine
-Pentachlorophenol
-Phenol-d6
-Nitrobenzene-d5
-Isophorone-d8
-2-Fluorophenol
-Phenol-d6
-2-Nitrophenol-d4
-2,4-Dichlorophenol
-Naphthalene-d8
-Acenaphthene-d10
-Phenanthrene-d10
-Chrysene-d12
-Perylene-d12

Data File: \\target_server\gg\chem\gcms-n.i\N120723.b\ND537.D

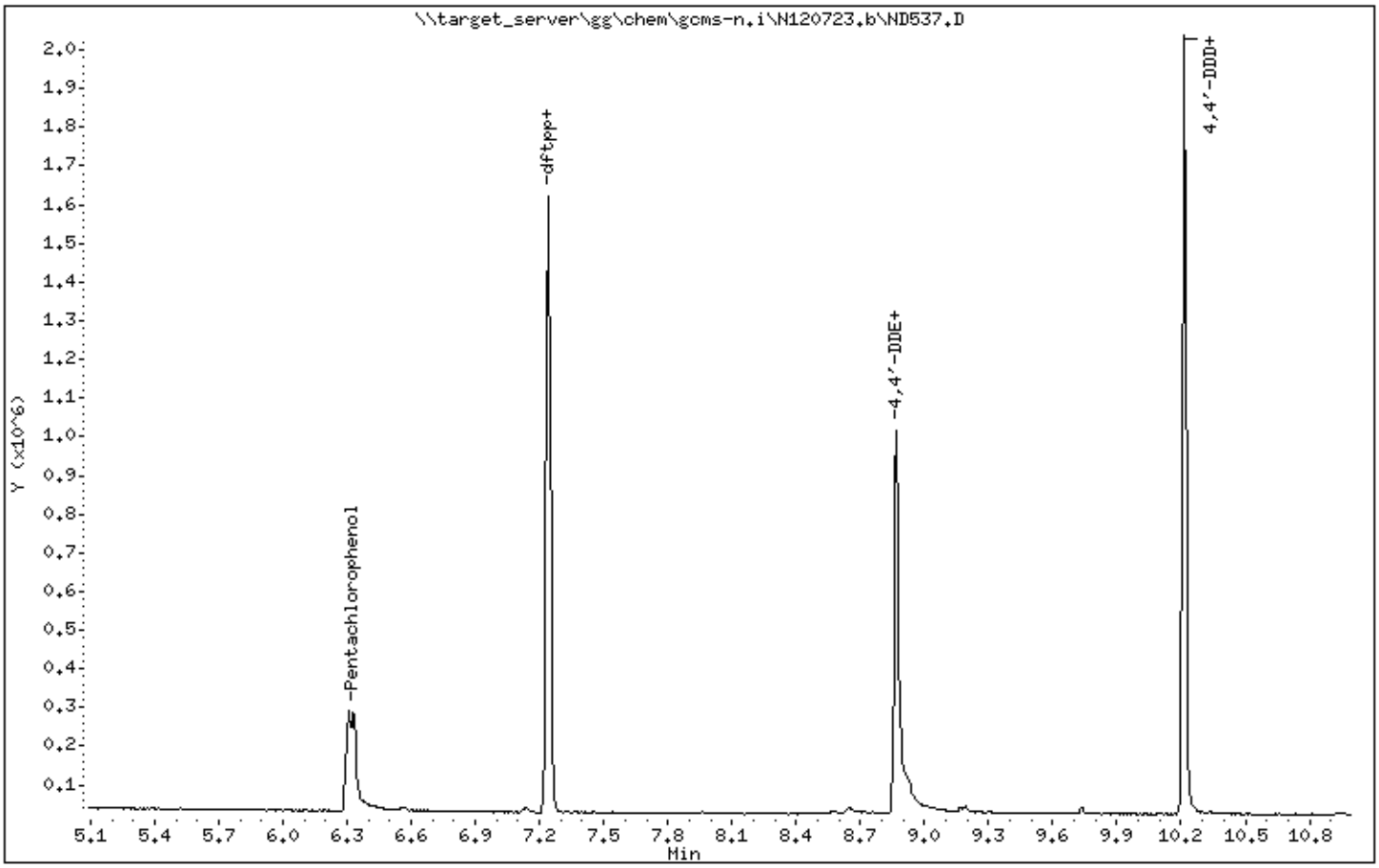
Date : 07-DEC-2023 11:53

Client ID: DFTPP02 Instrument: gcms-n.i

Sample Info: WG346503-1

Operator: EP

Column phase: Rxi-SVOCms Column diameter: 0.25



Data File: \\target_server\gg\chem\gcms-n.i\N120723.b\ND537.D

Date : 07-DEC-2023 11:53

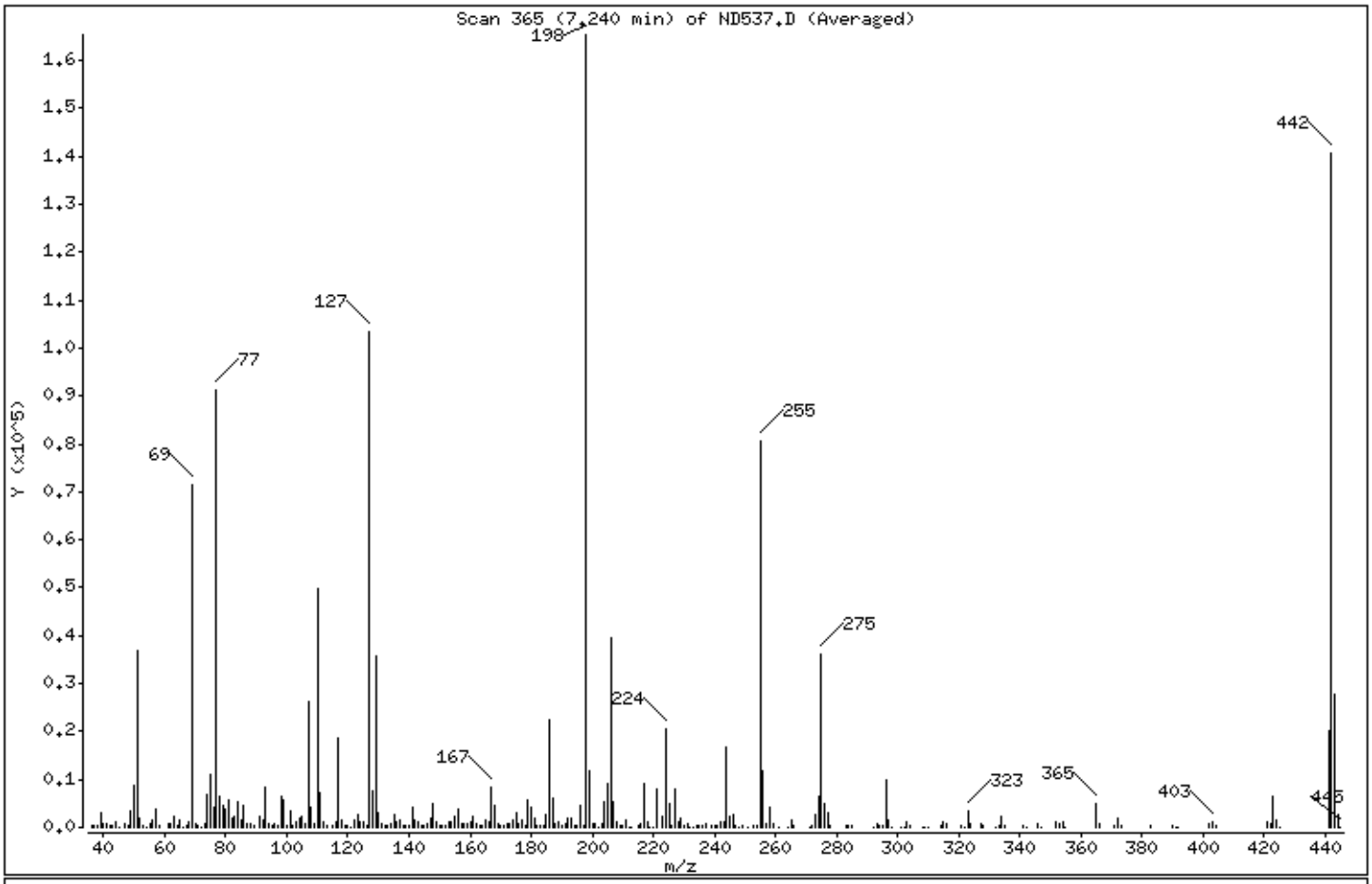
Client ID: DFTPP02 Instrument: gcms-n.i

Sample Info: WG346503-1

Operator: EP

Column phase: Rxi-SVOCms Column diameter: 0.25

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	10.00 - 80.00% of mass 198	22.22
68	Less than 2.00% of mass 69	0.74 (1.72)
69	Greater than 0.10% of mass 198	42.88
70	Less than 2.00% of mass 69	0.34 (0.79)
127	10.00 - 80.00% of mass 198	61.30
197	Less than 2.00% of mass 198	0.15
199	5.00 - 9.00% of mass 198	6.78
275	10.00 - 60.00% of mass 198	21.99
365	Greater than 1.00% of mass 198	2.99
441	0.01 - 100.00% of mass 443	13.07 (74.52)
442	Greater than 50.00% of mass 442	88.57 (100.00)
443	15.00 - 24.00% of mass 442	17.54 (19.80)

Data File: \\target_server\gg\chem\gcms-n.i\N120723.b\ND537.D

Date : 07-DEC-2023 11:53

Client ID: DFTPP02 Instrument: gcms-n.i

Sample Info: WG346503-1

Operator: EP

Column phase: Rxi-SVOCms Column diameter: 0.25

Data File: ND537.D
Spectrum: Scans 365-367 (7.240 min), Subtraction Scan 359
Location of Maximum: 198.00
Number of points: 279

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	88	118.00	1536	188.00	667	266.00	396
37.00	117	119.00	96	189.00	1262	271.00	168
38.00	531	120.00	426	190.00	235	272.00	281
39.00	2810	121.00	124	191.00	606	273.00	2571
40.00	30	122.00	1447	192.00	1793	274.00	6524
41.00	35	123.00	2602	193.00	2064	275.00	36074
45.00	50	124.00	1056	194.00	480	276.00	4935
48.00	21	125.00	1077	195.00	244	277.00	2915
50.00	8344	126.00	337	196.00	4551	278.00	464
51.00	35654	127.00	103280	197.00	407	283.00	303
52.00	1959	128.00	7597	198.00	165397	284.00	248
53.00	218	129.00	35704	199.00	11632	285.00	507
55.00	136	130.00	3053	200.00	835	292.00	67
56.00	1132	131.00	636	201.00	780	293.00	695
57.00	3196	132.00	320	202.00	109	294.00	201
58.00	208	133.00	130	203.00	942	295.00	222
61.00	683	134.00	899	204.00	5280	296.00	9951
62.00	776	135.00	2781	205.00	9166	297.00	1418
63.00	2200	136.00	1212	206.00	39437	298.00	110
64.00	422	137.00	1680	207.00	5279	301.00	153
65.00	1568	138.00	352	208.00	1208	302.00	132
66.00	105	139.00	204	209.00	367	303.00	1218
67.00	173	140.00	422	210.00	512	304.00	337
68.00	904	141.00	4046	211.00	1346	308.00	55
69.00	70940	142.00	1490	212.00	133	309.00	112
70.00	402	143.00	1033	213.00	108	310.00	64
71.00	17	144.00	265	215.00	363	314.00	499
72.00	67	145.00	337	216.00	720	315.00	1110
73.00	610	146.00	818	217.00	9250	316.00	656
74.00	6667	147.00	2041	218.00	1324	321.00	335
75.00	11188	148.00	4926	219.00	169	322.00	124
76.00	4000	149.00	1046	220.00	71	323.00	3572
77.00	91175	150.00	304	221.00	8125	324.00	713
78.00	6385	151.00	568	223.00	2167	327.00	629
79.00	4331	152.00	402	224.00	20416	328.00	317

Data File: \\target_server\gg\chem\gcms-n.i\N120723.b\ND537.D

Date : 07-DEC-2023 11:53

Client ID: DFTPP02 Instrument: gcms-n.i

Sample Info: WG346503-1

Operator: EP

Column phase: Rxi-SVOCms Column diameter: 0.25

Data File: ND537.D
Spectrum: Scans 365-367 (7.240 min), Subtraction Scan 359
Location of Maximum: 198.00
Number of points: 279

m/z	Y	m/z	Y	m/z	Y	m/z	Y
80.00	3637	153.00	1164	225.00	5047	332.00	140
81.00	5517	154.00	962	226.00	448	333.00	332
82.00	1596	155.00	2399	227.00	8049	334.00	2252
83.00	1597	156.00	3631	228.00	1206	335.00	524
85.00	992	157.00	873	229.00	1731	341.00	370
86.00	1042	158.00	731	230.00	312	342.00	51
87.00	777	159.00	687	231.00	766	346.00	917
88.00	263	160.00	1301	232.00	124	347.00	124
89.00	208	161.00	2093	233.00	50	352.00	1067
91.00	1329	162.00	663	234.00	533	353.00	798
92.00	1210	163.00	220	235.00	560	354.00	1047
93.00	8287	164.00	291	236.00	436	355.00	160
94.00	663	165.00	1385	237.00	656	365.00	4878
95.00	221	166.00	1098	239.00	297	366.00	697
96.00	532	167.00	8377	240.00	199	371.00	289
97.00	224	168.00	4718	241.00	431	372.00	2037
98.00	6135	169.00	805	242.00	1050	373.00	461
99.00	5615	170.00	273	243.00	1131	383.00	502
100.00	457	171.00	332	244.00	16916	390.00	314
101.00	3426	172.00	636	245.00	2236	391.00	165
102.00	197	173.00	938	246.00	2665	392.00	122
103.00	1039	174.00	1541	247.00	530	402.00	763
104.00	1974	175.00	3085	248.00	57	403.00	1175
105.00	1805	176.00	846	249.00	550	404.00	400
106.00	619	177.00	1384	251.00	52	421.00	1066
107.00	25951	178.00	475	253.00	310	422.00	914
108.00	4243	179.00	5663	254.00	331	423.00	6620
109.00	535	180.00	4254	255.00	80512	424.00	1426
110.00	49890	181.00	1987	256.00	11806	425.00	72
111.00	7066	182.00	290	257.00	854	441.00	20307
112.00	1016	183.00	222	258.00	4286	442.00	140704
113.00	375	184.00	479	259.00	689	443.00	27805
115.00	28	185.00	2743	261.00	115	444.00	2656
116.00	1247	186.00	22602	264.00	103	445.00	62
117.00	18618	187.00	6154	265.00	1668		

Data File: \\target_server\gg\chem\gcms-n.i\N120723B.b\ND538.D

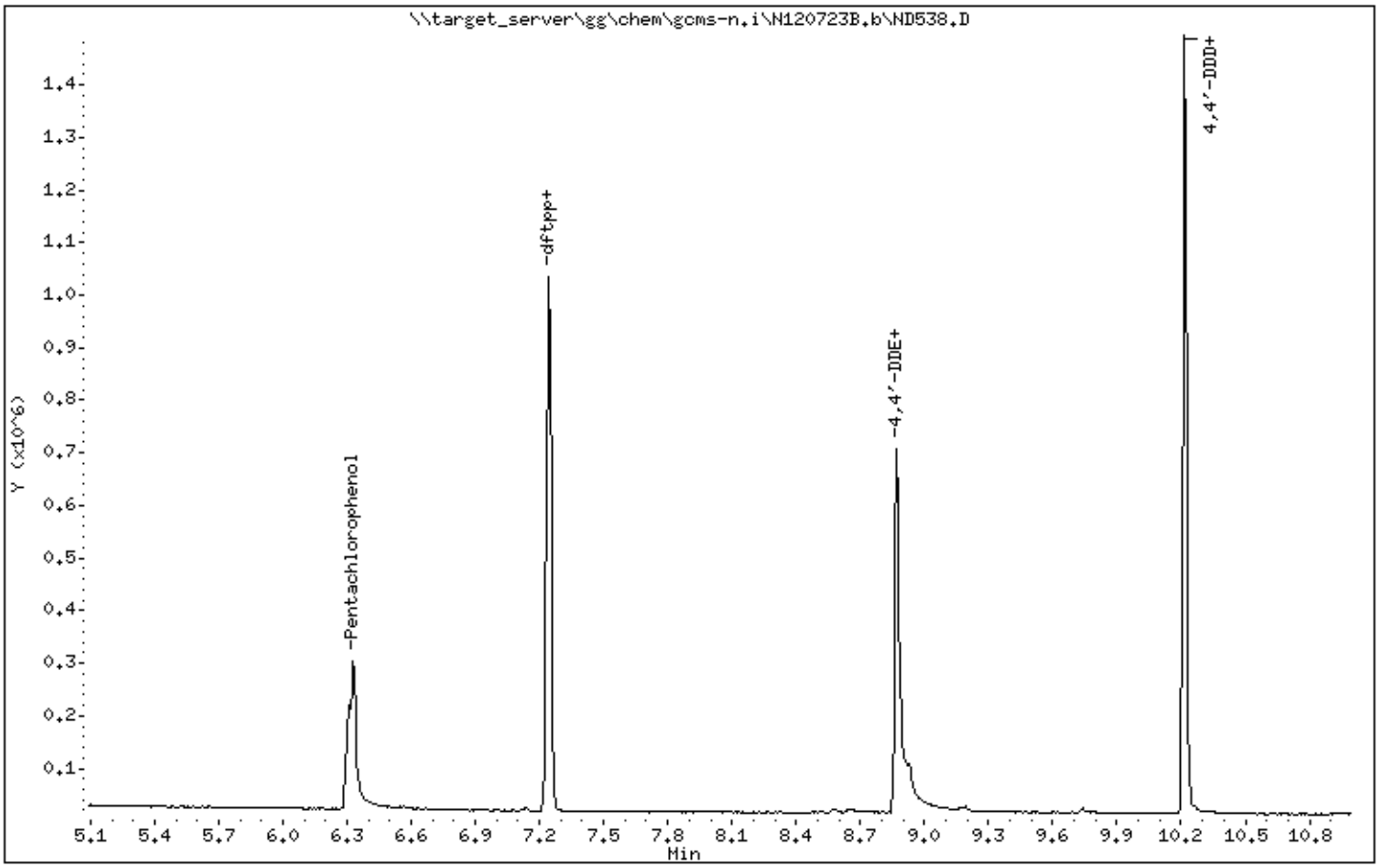
Date : 07-DEC-2023 16:03

Client ID: DFTPP02 Instrument: gcms-n.i

Sample Info: WG346504-1

Operator: EP

Column phase: Rxi-SVOCms Column diameter: 0.25



Data File: \\target_server\gg\chem\gcms-n.i\N120723B.b\ND538.D

Date : 07-DEC-2023 16:03

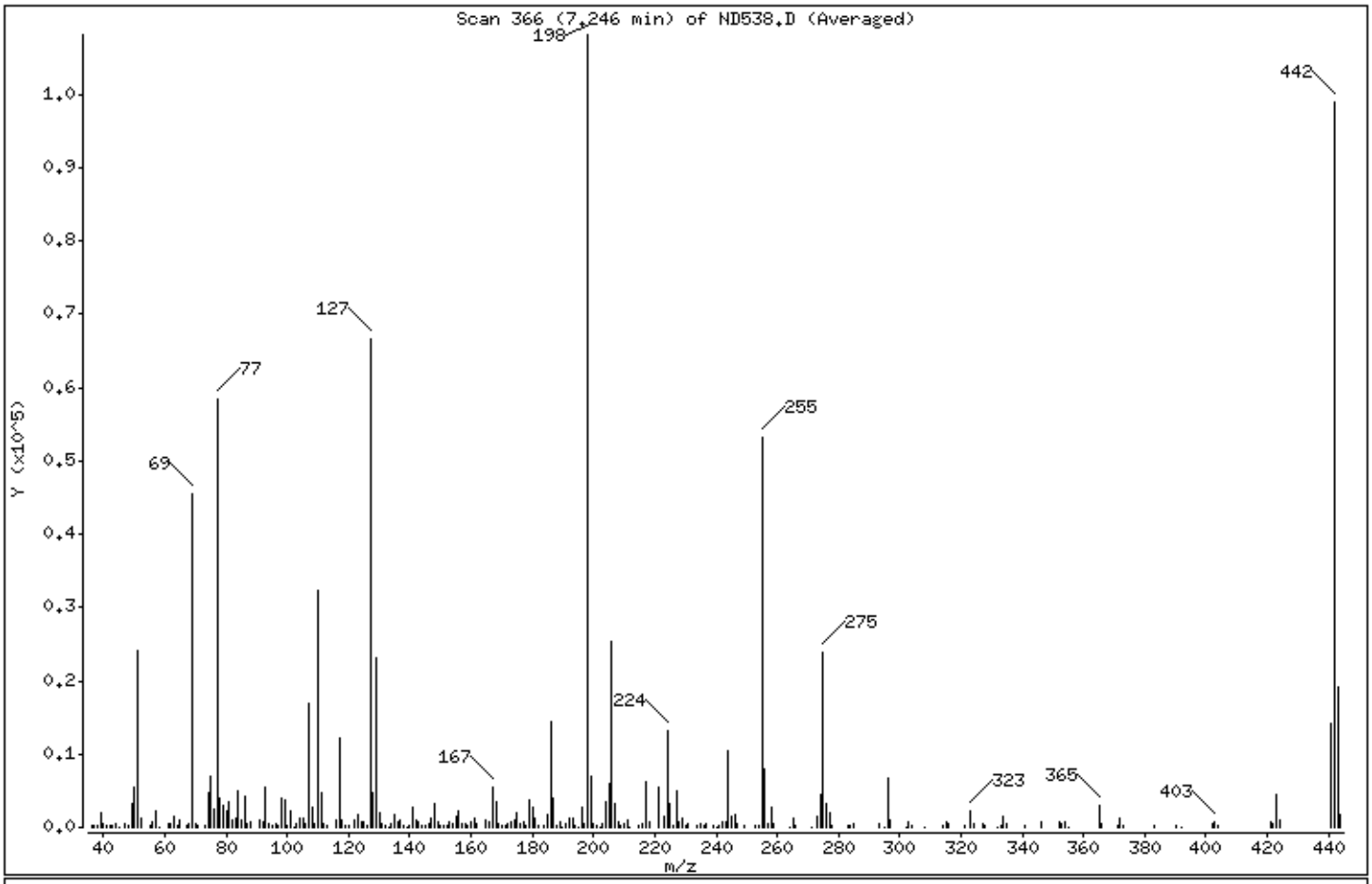
Client ID: DFTPP02 Instrument: gcms-n.i

Sample Info: WG346504-1

Operator: EP

Column phase: Rxi-SVOCms Column diameter: 0.25

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	10.00 - 80.00% of mass 198	22.41
68	Less than 2.00% of mass 69	0.62 (1.43)
69	Greater than 0.10% of mass 198	43.24
70	Less than 2.00% of mass 69	0.46 (1.06)
127	10.00 - 80.00% of mass 198	61.75
197	Less than 2.00% of mass 198	0.22
199	5.00 - 9.00% of mass 198	6.46
275	10.00 - 60.00% of mass 198	22.14
365	Greater than 1.00% of mass 198	2.92
441	0.01 - 100.00% of mass 443	13.12 (74.02)
442	Greater than 50.00% of mass 442	91.85 (100.00)
443	15.00 - 24.00% of mass 442	17.72 (19.29)

Data File: \\target_server\gg\chem\gcms-n.i\N120723B.b\ND538.D

Date : 07-DEC-2023 16:03

Client ID: DFTPP02 Instrument: gcms-n.i

Sample Info: WG346504-1

Operator: EP

Column phase: Rxi-SVOCms Column diameter: 0.25

Data File: ND538.D
Spectrum: Scans 366-368 (7.246 min), Subtraction Scan 359
Location of Maximum: 198.00
Number of points: 249

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	30	116.00	902	182.00	198	258.00	2632
37.00	61	117.00	12057	184.00	297	259.00	467
38.00	300	118.00	1053	185.00	1772	264.00	51
39.00	1799	119.00	132	186.00	14493	265.00	1213
41.00	14	120.00	270	187.00	4084	266.00	277
43.00	58	122.00	1044	188.00	368	271.00	53
45.00	50	123.00	1631	189.00	793	273.00	1505
50.00	5305	124.00	788	190.00	51	274.00	4552
51.00	23095	125.00	748	191.00	403	275.00	23874
52.00	1201	126.00	190	192.00	1178	276.00	3333
55.00	103	127.00	66605	193.00	1292	277.00	1926
56.00	685	128.00	4827	194.00	269	278.00	349
57.00	2018	129.00	23101	195.00	86	283.00	249
58.00	107	130.00	1918	196.00	2803	284.00	163
61.00	417	131.00	473	197.00	390	285.00	391
62.00	500	132.00	253	198.00	108117	293.00	418
63.00	1465	133.00	54	199.00	6971	295.00	113
64.00	257	134.00	541	200.00	523	296.00	6624
65.00	1013	135.00	1760	201.00	303	297.00	981
67.00	55	136.00	750	202.00	114	302.00	51
68.00	617	137.00	1085	203.00	583	303.00	680
69.00	45384	138.00	259	204.00	3430	304.00	227
70.00	374	139.00	120	205.00	6005	308.00	51
71.00	12	140.00	223	206.00	25320	314.00	341
73.00	350	141.00	2678	207.00	3353	315.00	820
74.00	4602	142.00	931	208.00	685	316.00	480
75.00	6986	143.00	651	209.00	226	321.00	190
76.00	2557	144.00	214	210.00	399	323.00	2347
77.00	58186	145.00	202	211.00	961	324.00	424
78.00	3917	146.00	445	212.00	77	327.00	436
79.00	3011	147.00	1366	215.00	250	328.00	241
80.00	2282	148.00	3143	216.00	490	332.00	86
81.00	3461	149.00	788	217.00	6095	333.00	226
82.00	987	150.00	144	218.00	846	334.00	1439
83.00	812	151.00	342	221.00	5377	335.00	394

Data File: \\target_server\gg\chem\gcms-n.i\N120723B.b\ND538.D

Date : 07-DEC-2023 16:03

Client ID: DFTPP02 Instrument: gcms-n.i

Sample Info: WG346504-1

Operator: EP

Column phase: Rxi-SVOCms Column diameter: 0.25

Data File: ND538.D
Spectrum: Scans 366-368 (7.246 min), Subtraction Scan 359
Location of Maximum: 198.00
Number of points: 249

m/z	Y	m/z	Y	m/z	Y	m/z	Y
84.00	203	152.00	256	223.00	1438	341.00	291
85.00	685	153.00	784	224.00	13162	346.00	658
86.00	1253	154.00	599	225.00	3338	352.00	761
87.00	575	155.00	1548	226.00	330	353.00	518
88.00	172	156.00	2320	227.00	4869	354.00	791
91.00	838	157.00	446	228.00	696	355.00	53
92.00	827	158.00	487	229.00	1171	365.00	3037
93.00	5386	159.00	368	230.00	211	366.00	487
94.00	461	160.00	804	231.00	455	371.00	145
95.00	195	161.00	1254	234.00	325	372.00	1326
96.00	429	162.00	414	235.00	441	373.00	359
97.00	225	165.00	970	236.00	304	383.00	300
98.00	3871	166.00	809	237.00	534	390.00	206
99.00	3750	167.00	5474	239.00	200	392.00	56
100.00	347	168.00	3495	240.00	58	402.00	487
101.00	2146	169.00	538	241.00	281	403.00	711
102.00	120	170.00	182	242.00	685	404.00	275
103.00	586	171.00	247	243.00	759	421.00	727
104.00	1175	172.00	429	244.00	10509	422.00	600
105.00	1243	173.00	670	245.00	1482	423.00	4498
106.00	401	174.00	1065	246.00	1811	424.00	872
107.00	16932	175.00	2089	247.00	375	441.00	14174
108.00	2806	176.00	564	249.00	311	442.00	99037
109.00	446	177.00	822	253.00	191	443.00	19256
110.00	32322	178.00	302	254.00	292	444.00	1743
111.00	4840	179.00	3850	255.00	53117		
112.00	621	180.00	2706	256.00	7958		
113.00	240	181.00	1250	257.00	557		

Data File: \\target_server\gg\chem\gcms-n.i\N120823.b\ND539.D

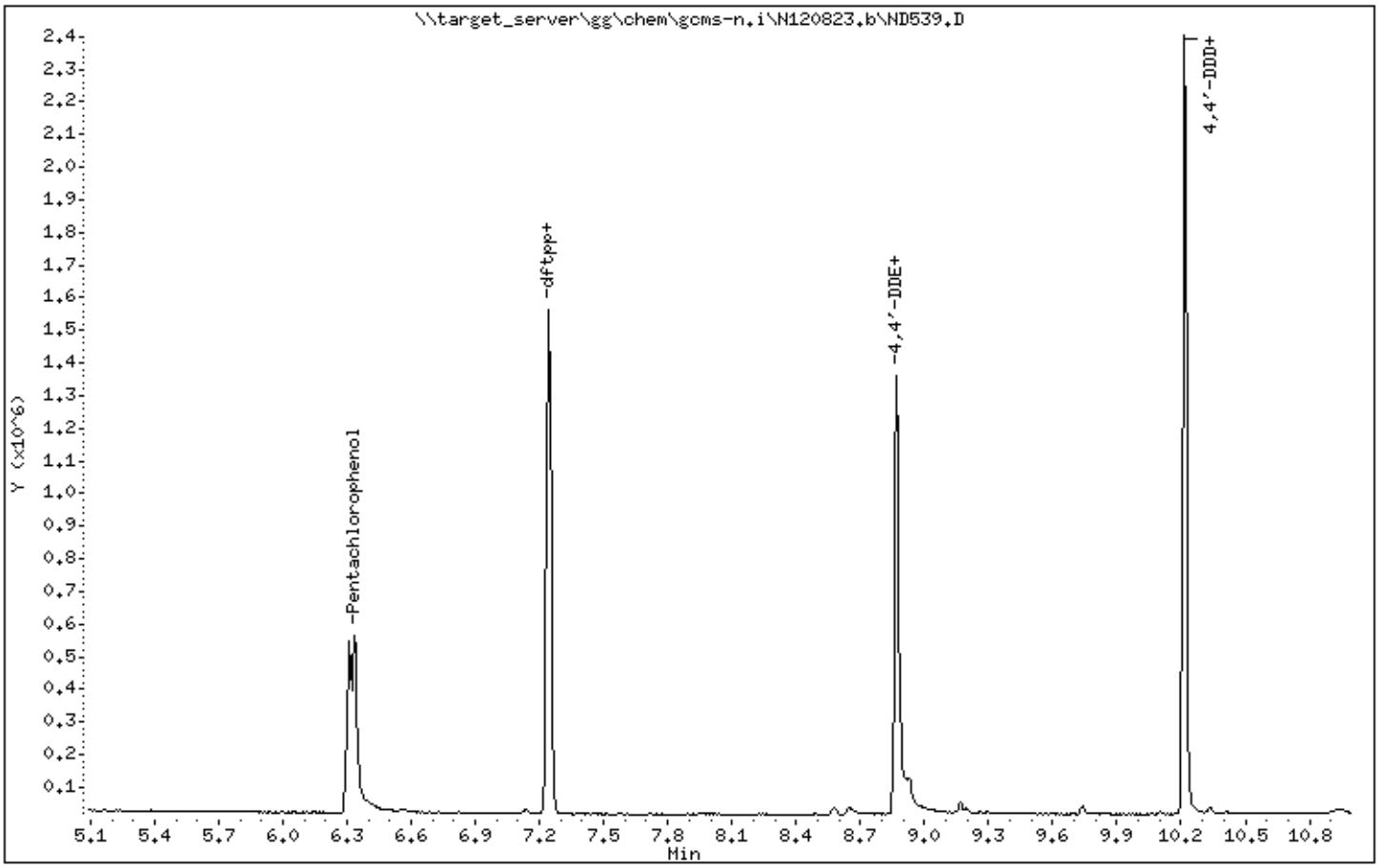
Date : 08-DEC-2023 12:00

Client ID: DFTPP02 Instrument: gcms-n.i

Sample Info: WG346646-1

Operator: EP

Column phase: Rxi-SVOCms Column diameter: 0.25



Data File: \\target_server\gg\chem\gcms-n.i\N120823.b\ND539.D

Date : 08-DEC-2023 12:00

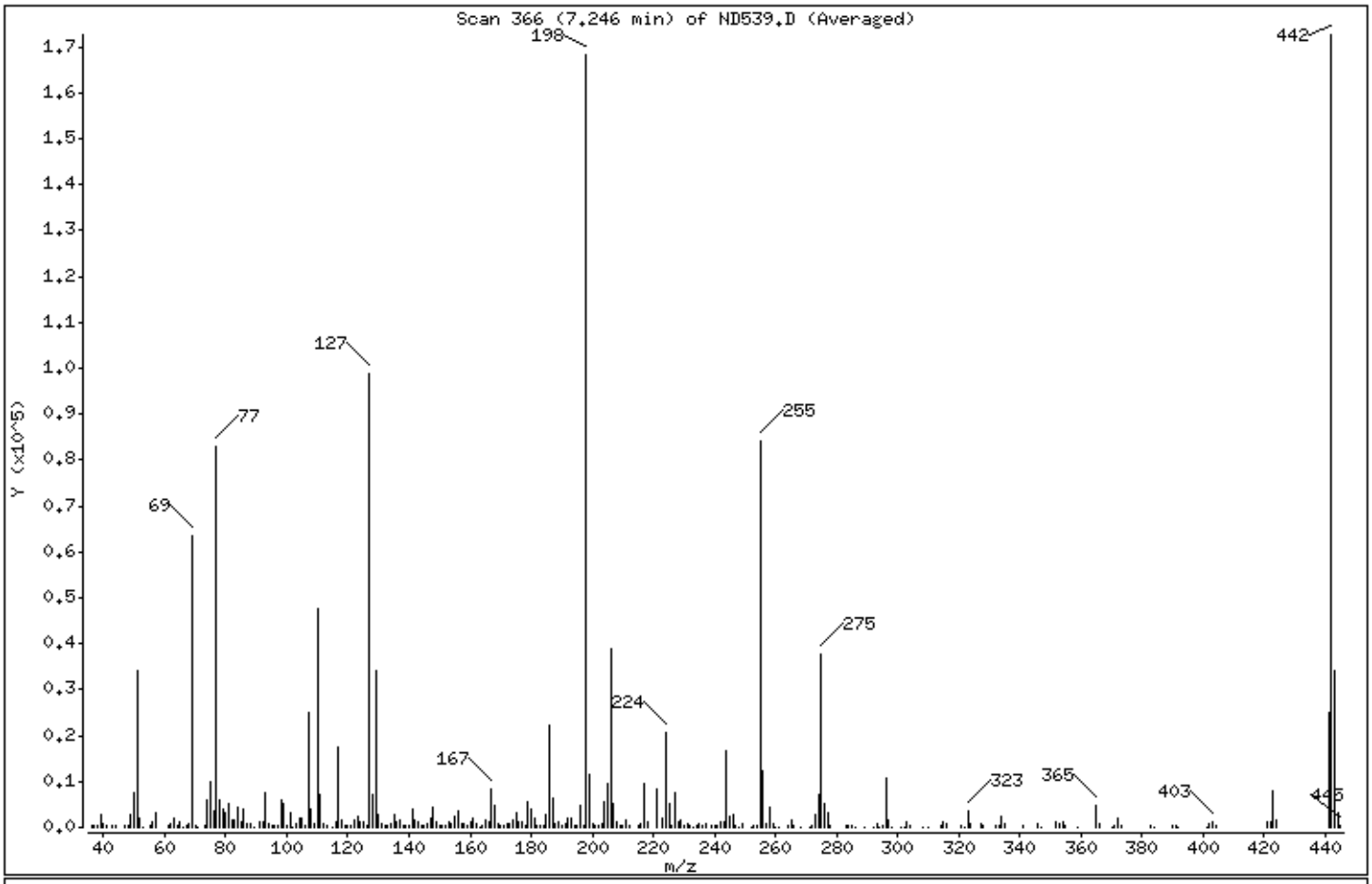
Client ID: DFTPP02 Instrument: gcms-n.i

Sample Info: WG346646-1

Operator: EP

Column phase: Rxi-SVOCms Column diameter: 0.25

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	10.00 - 80.00% of mass 198	20.87
68	Less than 2.00% of mass 69	0.66 (1.69)
69	Greater than 0.10% of mass 198	39.06
70	Less than 2.00% of mass 69	0.31 (0.80)
127	10.00 - 80.00% of mass 198	58.99
197	Less than 2.00% of mass 198	0.08
199	5.00 - 9.00% of mass 198	6.71
275	10.00 - 60.00% of mass 198	22.02
365	Greater than 1.00% of mass 198	2.92
441	0.01 - 100.00% of mass 443	14.15 (74.28)
442	Greater than 50.00% of mass 442	97.76 (100.00)
443	15.00 - 24.00% of mass 442	19.05 (19.49)

Data File: \\target_server\gg\chem\gcms-n.i\N120823.b\ND539.D

Date : 08-DEC-2023 12:00

Client ID: DFTPP02 Instrument: gcms-n.i

Sample Info: WG346646-1

Operator: EP

Column phase: Rxi-SVOCms Column diameter: 0.25

Data File: ND539.D
Spectrum: Scans 366-368 (7.246 min), Subtraction Scan 359
Location of Maximum: 442.00
Number of points: 278

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	22	121.00	199	191.00	600	274.00	7031
37.00	248	122.00	1550	192.00	1816	275.00	37789
38.00	472	123.00	2289	193.00	2130	276.00	5299
39.00	2378	124.00	1102	194.00	442	277.00	2995
41.00	56	125.00	1040	195.00	266	278.00	484
43.00	62	126.00	221	196.00	4679	283.00	365
47.00	60	127.00	98986	197.00	224	284.00	268
50.00	7701	128.00	7334	198.00	168426	285.00	562
51.00	33010	129.00	34226	199.00	11404	286.00	60
52.00	1790	130.00	2861	200.00	859	289.00	60
53.00	109	131.00	622	201.00	458	292.00	71
55.00	213	132.00	370	202.00	210	293.00	644
56.00	1004	133.00	202	203.00	928	294.00	87
57.00	2801	134.00	878	204.00	5404	295.00	217
61.00	544	135.00	2835	205.00	9329	296.00	10542
62.00	626	136.00	1130	206.00	38738	297.00	1525
63.00	1882	137.00	1651	207.00	4939	298.00	112
64.00	311	138.00	283	208.00	1123	301.00	53
65.00	1276	139.00	231	209.00	472	302.00	75
66.00	129	140.00	381	210.00	432	303.00	1287
67.00	113	141.00	3929	211.00	1400	304.00	342
68.00	976	142.00	1391	212.00	254	308.00	103
69.00	63432	143.00	1115	215.00	356	310.00	139
70.00	483	144.00	317	216.00	778	314.00	559
71.00	42	145.00	334	217.00	9363	315.00	1116
73.00	425	146.00	794	218.00	1250	316.00	722
74.00	6115	147.00	2072	221.00	8253	321.00	377
75.00	10066	148.00	4542	223.00	2032	322.00	151
76.00	3694	149.00	1062	224.00	20634	323.00	3707
77.00	82848	150.00	366	225.00	5180	324.00	740
78.00	5926	151.00	554	226.00	518	327.00	697
79.00	3914	152.00	338	227.00	7678	328.00	353
80.00	3212	153.00	1207	228.00	1222	332.00	304
81.00	5084	154.00	905	229.00	1625	333.00	356
82.00	1275	155.00	2325	230.00	261	334.00	2473

Data File: \\target_server\gg\chem\gcms-n.i\N120823.b\ND539.D

Date : 08-DEC-2023 12:00

Client ID: DFTPP02 Instrument: gcms-n.i

Sample Info: WG346646-1

Operator: EP

Column phase: Rxi-SVOCms Column diameter: 0.25

Data File: ND539.D
Spectrum: Scans 366-368 (7.246 min), Subtraction Scan 359
Location of Maximum: 442.00
Number of points: 278

m/z	Y	m/z	Y	m/z	Y	m/z	Y
83.00	1347	156.00	3644	231.00	747	335.00	629
85.00	1053	157.00	757	232.00	208	341.00	443
86.00	1020	158.00	612	233.00	50	346.00	922
87.00	653	159.00	576	234.00	476	347.00	58
88.00	297	160.00	1330	235.00	601	352.00	1088
89.00	58	161.00	1961	236.00	424	353.00	859
91.00	967	162.00	605	237.00	690	354.00	1320
92.00	1201	163.00	125	239.00	319	355.00	223
93.00	7715	164.00	217	240.00	245	359.00	52
94.00	636	165.00	1420	241.00	465	365.00	4945
95.00	220	166.00	1120	242.00	1024	366.00	792
96.00	541	167.00	8205	243.00	1139	370.00	54
97.00	295	168.00	4753	244.00	16827	371.00	316
98.00	5858	169.00	858	245.00	2399	372.00	2015
99.00	5007	170.00	259	246.00	2621	373.00	579
100.00	485	171.00	388	247.00	551	383.00	531
101.00	3103	172.00	724	248.00	153	384.00	138
102.00	185	173.00	940	249.00	627	390.00	284
103.00	893	174.00	1749	252.00	72	391.00	222
104.00	1790	175.00	3266	253.00	296	392.00	138
105.00	1674	176.00	1083	254.00	407	401.00	108
106.00	582	177.00	1319	255.00	84157	402.00	960
107.00	24955	178.00	501	256.00	12405	403.00	1231
108.00	4025	179.00	5431	257.00	961	404.00	451
109.00	684	180.00	4078	258.00	4444	421.00	1092
110.00	47722	181.00	1874	259.00	691	422.00	1035
111.00	7064	182.00	389	260.00	131	423.00	8085
112.00	737	183.00	206	261.00	65	424.00	1547
113.00	300	184.00	492	264.00	199	441.00	25136
115.00	55	185.00	2826	265.00	1697	442.00	172608
116.00	1091	186.00	22245	266.00	400	443.00	33989
117.00	17435	187.00	6280	268.00	53	444.00	3037
118.00	1454	188.00	667	271.00	116	445.00	211
119.00	271	189.00	1232	272.00	247		
120.00	322	190.00	232	273.00	2733		

Data File: \\target_server\gg\chem\gcms-n.i\N121123.b\ND540.D

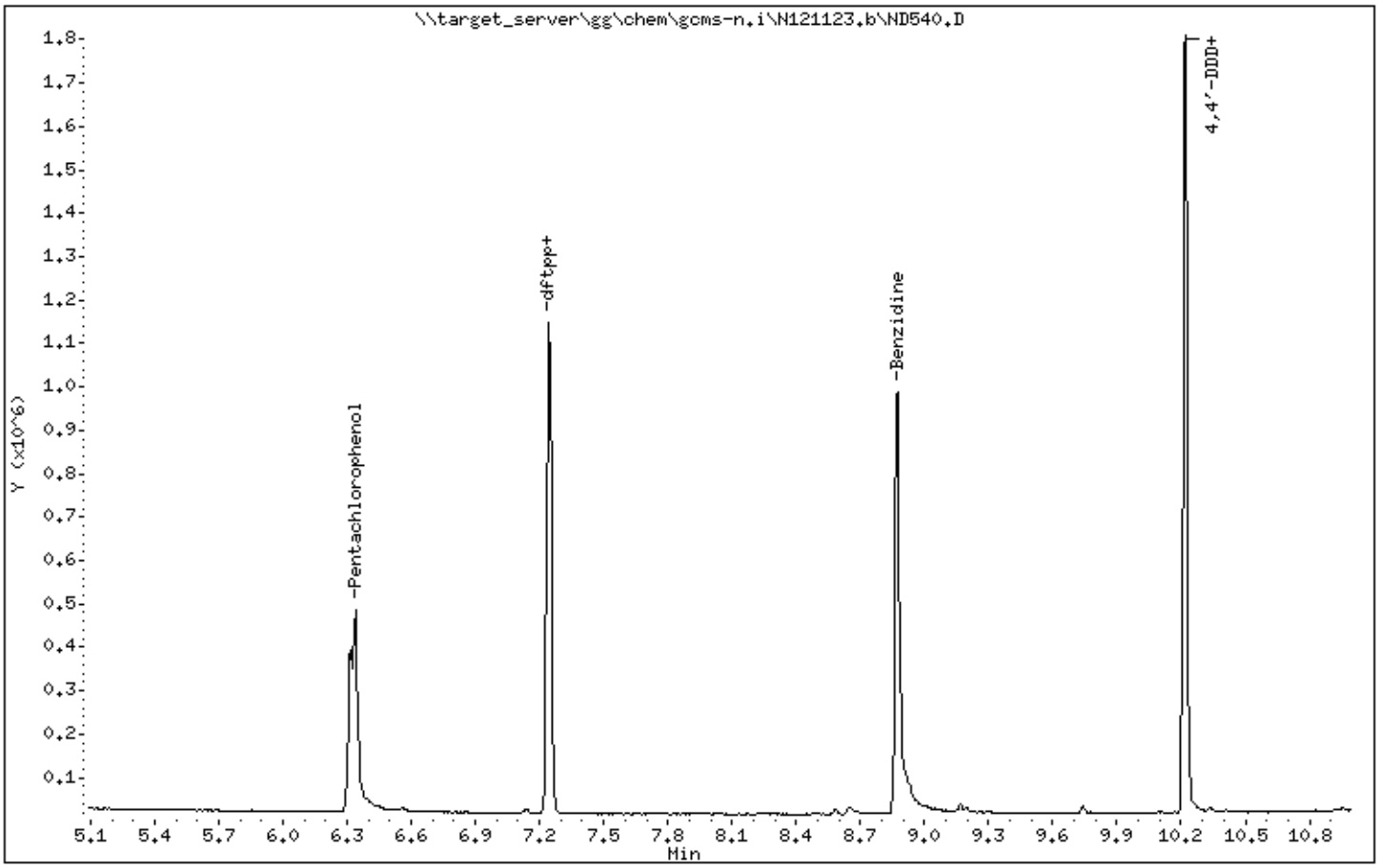
Date : 11-DEC-2023 11:58

Client ID: DFTPP02 Instrument: gcms-n.i

Sample Info: WG346778-1

Operator: EP

Column phase: Rxi-SVOCms Column diameter: 0.25



Data File: \\target_server\gg\chem\gcms-n.i\N121123.b\ND540.D

Date : 11-DEC-2023 11:58

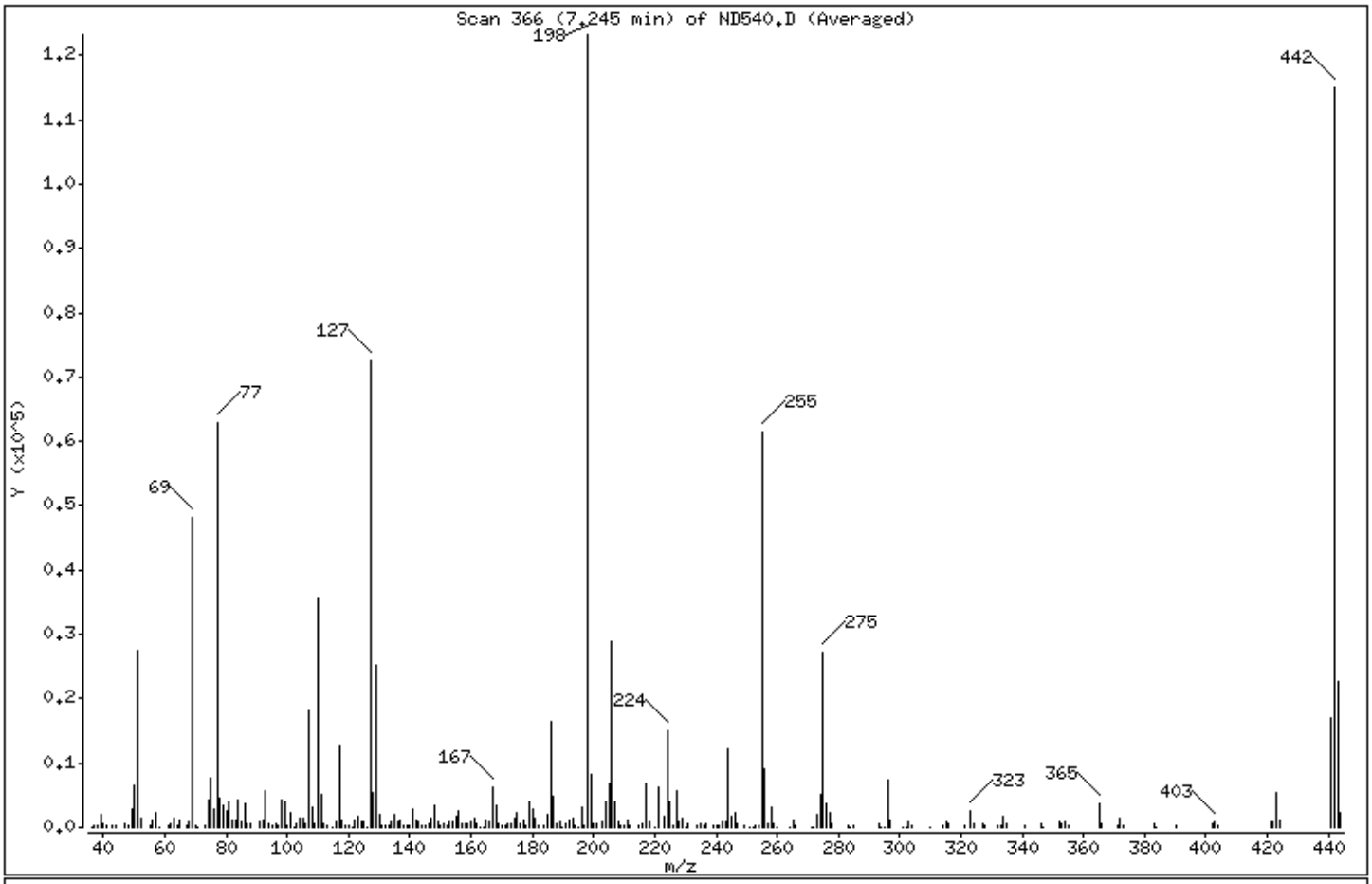
Client ID: DFTPP02 Instrument: gcms-n.i

Sample Info: WG346778-1

Operator: EP

Column phase: Rxi-SVOCms Column diameter: 0.25

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	10.00 - 80.00% of mass 198	21.97
68	Less than 2.00% of mass 69	0.64 (1.62)
69	Greater than 0.10% of mass 198	39.52
70	Less than 2.00% of mass 69	0.31 (0.78)
127	10.00 - 80.00% of mass 198	58.53
197	Less than 2.00% of mass 198	0.14
199	5.00 - 9.00% of mass 198	6.52
275	10.00 - 60.00% of mass 198	22.14
365	Greater than 1.00% of mass 198	2.94
441	0.01 - 100.00% of mass 443	13.92 (76.27)
442	Greater than 50.00% of mass 442	93.56 (100.00)
443	15.00 - 24.00% of mass 442	18.25 (19.50)

Data File: \\target_server\gg\chem\gcms-n.i\N121123.b\ND540.D

Date : 11-DEC-2023 11:58

Client ID: DFTPP02 Instrument: gcms-n.i

Sample Info: WG346778-1

Operator: EP

Column phase: Rxi-SVOCms Column diameter: 0.25

Data File: ND540.D
Spectrum: Scans 366-368 (7.245 min), Subtraction Scan 360
Location of Maximum: 198.00
Number of points: 259

m/z	Y	m/z	Y	m/z	Y	m/z	Y
37.00	122	118.00	1073	184.00	370	259.00	440
38.00	314	119.00	186	185.00	2021	260.00	107
39.00	1794	120.00	249	186.00	16499	264.00	124
41.00	23	121.00	51	187.00	4681	265.00	1237
43.00	18	122.00	1103	188.00	466	266.00	295
44.00	13	123.00	1783	189.00	867	271.00	105
48.00	25	124.00	832	190.00	60	272.00	121
50.00	6381	125.00	759	191.00	480	273.00	1917
51.00	26462	126.00	89	192.00	1263	274.00	5105
52.00	1384	127.00	72426	193.00	1549	275.00	27306
55.00	208	128.00	5306	194.00	321	276.00	3601
56.00	1020	129.00	25170	195.00	137	277.00	2191
57.00	2318	130.00	2057	196.00	3150	278.00	448
58.00	51	131.00	403	197.00	280	283.00	261
61.00	423	132.00	269	198.00	123192	284.00	71
62.00	541	133.00	192	199.00	8163	285.00	409
63.00	1533	134.00	718	200.00	645	293.00	587
64.00	289	135.00	2066	201.00	565	294.00	133
65.00	1047	136.00	867	203.00	834	295.00	54
67.00	67	137.00	1112	204.00	3990	296.00	7351
68.00	748	138.00	248	205.00	6819	297.00	1054
69.00	47786	139.00	168	206.00	29013	301.00	53
70.00	359	140.00	264	207.00	3767	302.00	68
71.00	81	141.00	2737	208.00	877	303.00	987
73.00	378	142.00	994	209.00	216	304.00	210
74.00	4309	143.00	746	210.00	394	310.00	50
75.00	7602	144.00	184	211.00	1095	314.00	364
76.00	2769	145.00	231	212.00	177	315.00	926
77.00	62952	146.00	512	215.00	243	316.00	571
78.00	4421	147.00	1502	216.00	546	321.00	279
79.00	3326	148.00	3375	217.00	6774	323.00	2683
80.00	2657	149.00	805	218.00	890	324.00	502
81.00	3682	150.00	246	220.00	72	327.00	478
82.00	1020	151.00	432	221.00	6171	328.00	308
83.00	1034	152.00	270	223.00	1580	332.00	209

Data File: \\target_server\gg\chem\gcms-n.i\N121123.b\ND540.D

Date : 11-DEC-2023 11:58

Client ID: DFTPP02 Instrument: gcms-n.i

Sample Info: WG346778-1

Operator: EP

Column phase: Rxi-SVOCms Column diameter: 0.25

Data File: ND540.D
Spectrum: Scans 366-368 (7.245 min), Subtraction Scan 360
Location of Maximum: 198.00
Number of points: 259

m/z	Y	m/z	Y	m/z	Y	m/z	Y
85.00	703	153.00	932	224.00	15143	333.00	260
86.00	572	154.00	736	225.00	3841	334.00	1705
87.00	519	155.00	1700	226.00	352	335.00	462
88.00	234	156.00	2668	227.00	5536	341.00	287
91.00	722	157.00	528	228.00	816	346.00	695
92.00	1017	158.00	441	229.00	1332	347.00	52
93.00	5768	159.00	484	230.00	83	352.00	823
94.00	477	160.00	980	231.00	597	353.00	590
95.00	176	161.00	1425	234.00	290	354.00	889
96.00	281	162.00	434	235.00	431	355.00	188
97.00	258	163.00	75	236.00	330	365.00	3656
98.00	4307	164.00	118	237.00	529	366.00	672
99.00	3835	165.00	1028	239.00	171	371.00	243
100.00	317	166.00	961	240.00	229	372.00	1556
101.00	2336	167.00	6221	241.00	291	373.00	377
102.00	108	168.00	3355	242.00	768	383.00	467
103.00	708	169.00	581	243.00	863	384.00	52
104.00	1289	170.00	231	244.00	12231	390.00	223
105.00	1341	171.00	260	245.00	1692	402.00	607
106.00	427	172.00	471	246.00	2171	403.00	774
107.00	18154	173.00	671	247.00	447	404.00	389
108.00	2978	174.00	1367	249.00	403	421.00	771
109.00	559	175.00	2383	251.00	51	422.00	712
110.00	35637	176.00	707	252.00	56	423.00	5370
111.00	5207	177.00	994	253.00	254	424.00	1140
112.00	658	178.00	345	254.00	258	441.00	17081
113.00	232	179.00	3881	255.00	61333	442.00	114914
115.00	72	180.00	2828	256.00	9106	443.00	22709
116.00	988	181.00	1453	257.00	570	444.00	2143
117.00	12863	182.00	269	258.00	3246		

Raw QC Data Section

Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

SDG: SQ6133
Lab ID: WG345301-1
Client ID: Method Blank
Matrix: AQ
Lab File ID: N0388.D

Sample Date: N/A
Extract Date: 13-NOV-23
Extracted By: SH/NG/AC
Extraction Method: SW846 3510C
Lab Prep Batch: WG345301

Report Date: 29-DEC-23
Analysis Date: 07-DEC-23
Analyst: EP
Analysis Method: SW846 8270D SIM
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	0.10	ug/L	1	.2	0.20	0.064	0.10
2-Methylnaphthalene	U	0.10	ug/L	1	.2	0.20	0.077	0.10
Acenaphthylene	U	0.10	ug/L	1	.2	0.20	0.054	0.10
Acenaphthene	U	0.10	ug/L	1	.2	0.20	0.064	0.10
Fluorene	U	0.10	ug/L	1	.2	0.20	0.061	0.10
Phenanthrene	U	0.10	ug/L	1	.2	0.20	0.051	0.10
Anthracene	U	0.10	ug/L	1	.2	0.20	0.044	0.10
Fluoranthene	U	0.10	ug/L	1	.2	0.20	0.073	0.10
Pyrene	U	0.10	ug/L	1	.2	0.20	0.059	0.10
Benzo(a)anthracene	U	0.10	ug/L	1	.2	0.20	0.046	0.10
Chrysene	U	0.10	ug/L	1	.2	0.20	0.036	0.10
Benzo(b)Fluoranthene	U	0.10	ug/L	1	.2	0.20	0.089	0.10
Benzo(k)fluoranthene	U	0.10	ug/L	1	.2	0.20	0.049	0.10
Benzo(a)pyrene	U	0.10	ug/L	1	.2	0.20	0.066	0.10
Indeno(1,2,3-cd)pyrene	U	0.10	ug/L	1	.2	0.20	0.052	0.10
Dibenzo(a,h)anthracene	U	0.10	ug/L	1	.2	0.20	0.070	0.10
Benzo(g,h,i)perylene	U	0.10	ug/L	1	.2	0.20	0.065	0.10
2-Methylnaphthalene-D10		77.7	%					
Fluorene-D10		84.8	%					
Pyrene-D10		90.3	%					

600 Technology Way
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Data File: \\target_server\gg\chem\gcms-n.i\N120723B.b\N0388.D
Report Date: 29-Dec-2023 09:52

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-n.i\N120723B.b\N0388.D
Lab Smp Id: WG345301-1 Client Smp ID: WG345301-Blank
Inj Date : 07-DEC-2023 16:51
Operator : EP Inst ID: gcms-n.i
Smp Info : WG345301-1
Misc Info : WG346504,WG345301,WG346503-4,SQ6133-1
Comment :
Method : \\target_server\gg\chem\gcms-n.i\N120723B.b\NSPSIM95.m
Meth Date : 08-Dec-2023 07:51 epelletier Quant Type: ISTD
Cal Date : 07-DEC-2023 14:42 Cal File: N0385.D
Als bottle: 9 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.12
Processing Host: INSPIRON1

Concentration Formula: Amt * DF * Uf*(Vt/Vo*Vi)*1000 * CpndVariable

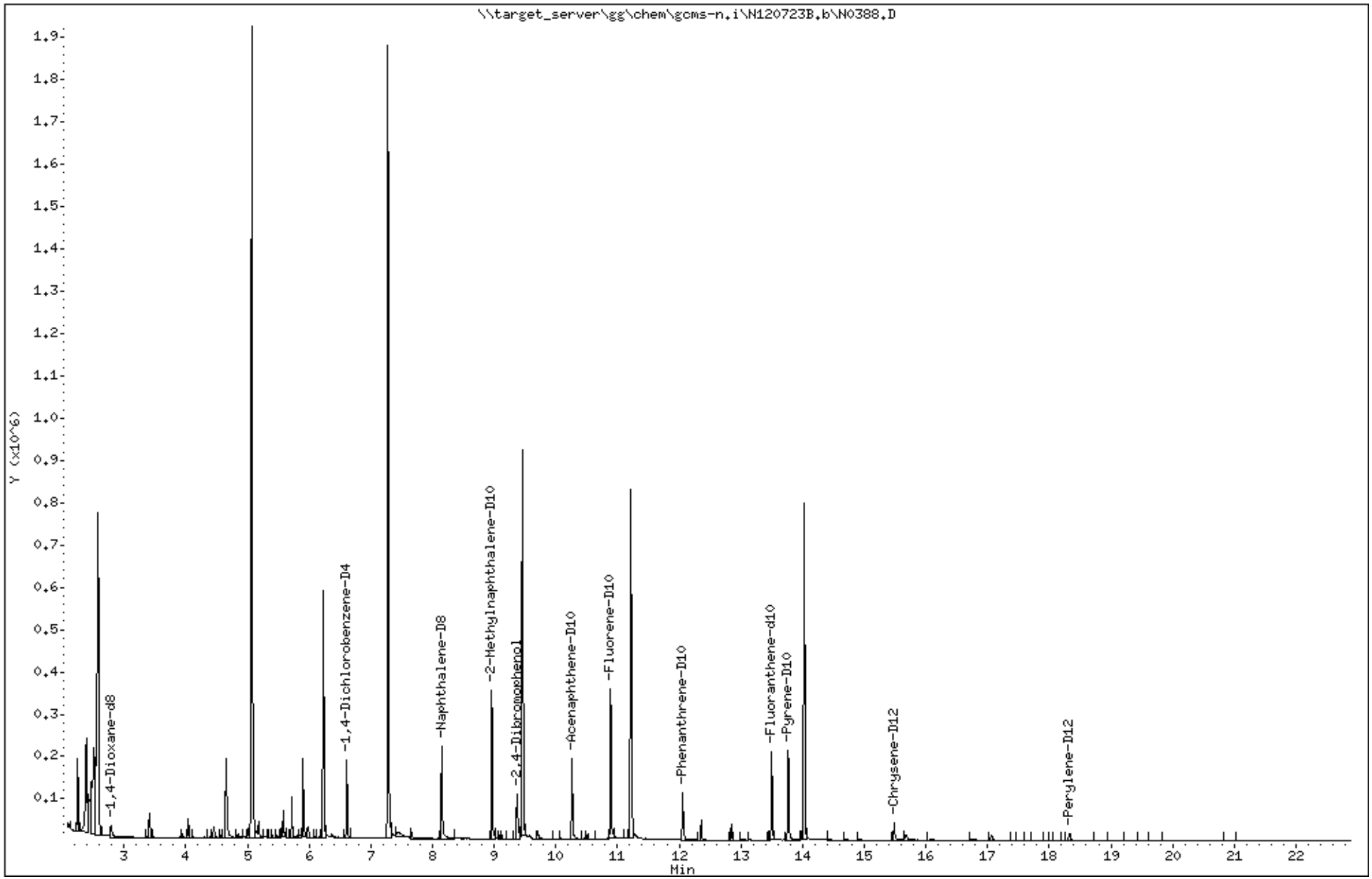
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.000	Sample Volume (L)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/L)	REVIEW CODE
$	1 1,4-Dioxane-d8	96	2.794	2.742	(0.272)	22257	0.55354	0.554(aH)	
*	10 1,4-Dichlorobenzene-D4	152	6.614	6.604	(1.000)	60242	0.80000	(aQ)	
*	27 Naphthalene-D8	136	8.147	8.125	(1.000)	211731	0.80000	(a)	
$	33 2-Methylnaphthalene-D10	152	8.964	8.954	(1.100)	215882	1.55345	1.55	
$	38 2,4-Dibromophenol	252	9.366	9.346	(0.913)	106002	3.46096	3.46	
*	48 Acenaphthene-D10	164	10.264	10.254	(1.000)	87242	0.80000	(a)	
$	56 Fluorene-D10	174	10.886	10.887	(1.061)	193714	1.69671	1.70	
*	66 Phenanthrene-D10	188	12.062	12.052	(1.000)	117611	0.80000	(a)	
$	71 Fluoranthene-d10	212	13.501	13.502	(1.119)	160949	1.68363	1.68	
$	73 Pyrene-D10	212	13.776	13.777	(0.889)	184723	1.80664	1.81	
*	78 Chrysene-D12	240	15.488	15.478	(1.000)	43699	0.80000	(a)	
*	85 Perylene-D12	264	18.324	18.324	(1.000)	34882	0.80000	(a)	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
H - Operator selected an alternate compound hit.

Data File: \\target_server\gg\chem\gcms-n.i\N120723B.b\N0388.D
Date : 07-DEC-2023 16:51
Client ID: WG345301-Blank
Instrument: gcms-n.i
Sample Info: WG345301-1
Volume Injected (uL): 1.0
Operator: EP
Column phase: Rxi-SVOCms
Column diameter: 0.25



Katahdin Analytical Services SQ6133 Page 448 of 855

Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

SDG: SQ6133
Lab ID: WG345531-1
Client ID: Method Blank
Matrix: AQ
Lab File ID: N0434.D

Sample Date: N/A
Extract Date: 16-NOV-23
Extracted By: AN/CMW
Extraction Method: SW846 3510C
Lab Prep Batch: WG345531

Report Date: 29-DEC-23
Analysis Date: 11-DEC-23
Analyst: EP
Analysis Method: SW846 8270D SIM
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	0.10	ug/L	1	.2	0.20	0.064	0.10
2-Methylnaphthalene	U	0.10	ug/L	1	.2	0.20	0.077	0.10
Acenaphthylene	U	0.10	ug/L	1	.2	0.20	0.054	0.10
Acenaphthene	U	0.10	ug/L	1	.2	0.20	0.064	0.10
Fluorene	U	0.10	ug/L	1	.2	0.20	0.061	0.10
Phenanthrene	U	0.10	ug/L	1	.2	0.20	0.051	0.10
Anthracene	U	0.10	ug/L	1	.2	0.20	0.044	0.10
Fluoranthene	U	0.10	ug/L	1	.2	0.20	0.073	0.10
Pyrene	U	0.10	ug/L	1	.2	0.20	0.059	0.10
Benzo(a)anthracene	U	0.10	ug/L	1	.2	0.20	0.046	0.10
Chrysene	U	0.10	ug/L	1	.2	0.20	0.036	0.10
Benzo(b)Fluoranthene	U	0.10	ug/L	1	.2	0.20	0.089	0.10
Benzo(k)fluoranthene	U	0.10	ug/L	1	.2	0.20	0.049	0.10
Benzo(a)pyrene	U	0.10	ug/L	1	.2	0.20	0.066	0.10
Indeno(1,2,3-cd)pyrene	U	0.10	ug/L	1	.2	0.20	0.052	0.10
Dibenzo(a,h)anthracene	U	0.10	ug/L	1	.2	0.20	0.070	0.10
Benzo(g,h,i)perylene	U	0.10	ug/L	1	.2	0.20	0.065	0.10
2-Methylnaphthalene-D10		75.2	%					
Fluorene-D10		73.5	%					
Pyrene-D10		79.8	%					

600 Technology Way
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Data File: \\target_server\gg\chem\gcms-n.i\N121123.b\N0434.D
Report Date: 29-Dec-2023 09:55

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-n.i\N121123.b\N0434.D
Lab Smp Id: WG345531-1 Client Smp ID: WG345531-Blank
Inj Date : 11-DEC-2023 12:46
Operator : EP Inst ID: gcms-n.i
Smp Info : WG345531-1
Misc Info : WG346778,WG345531,WG346503-4,SQ6133-8
Comment :
Method : \\target_server\gg\chem\gcms-n.i\N121123.b\NSPSIM95.m
Meth Date : 12-Dec-2023 08:48 epelletier Quant Type: ISTD
Cal Date : 07-DEC-2023 14:42 Cal File: N0385.D
Als bottle: 3 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.12
Processing Host: INSPIRON1

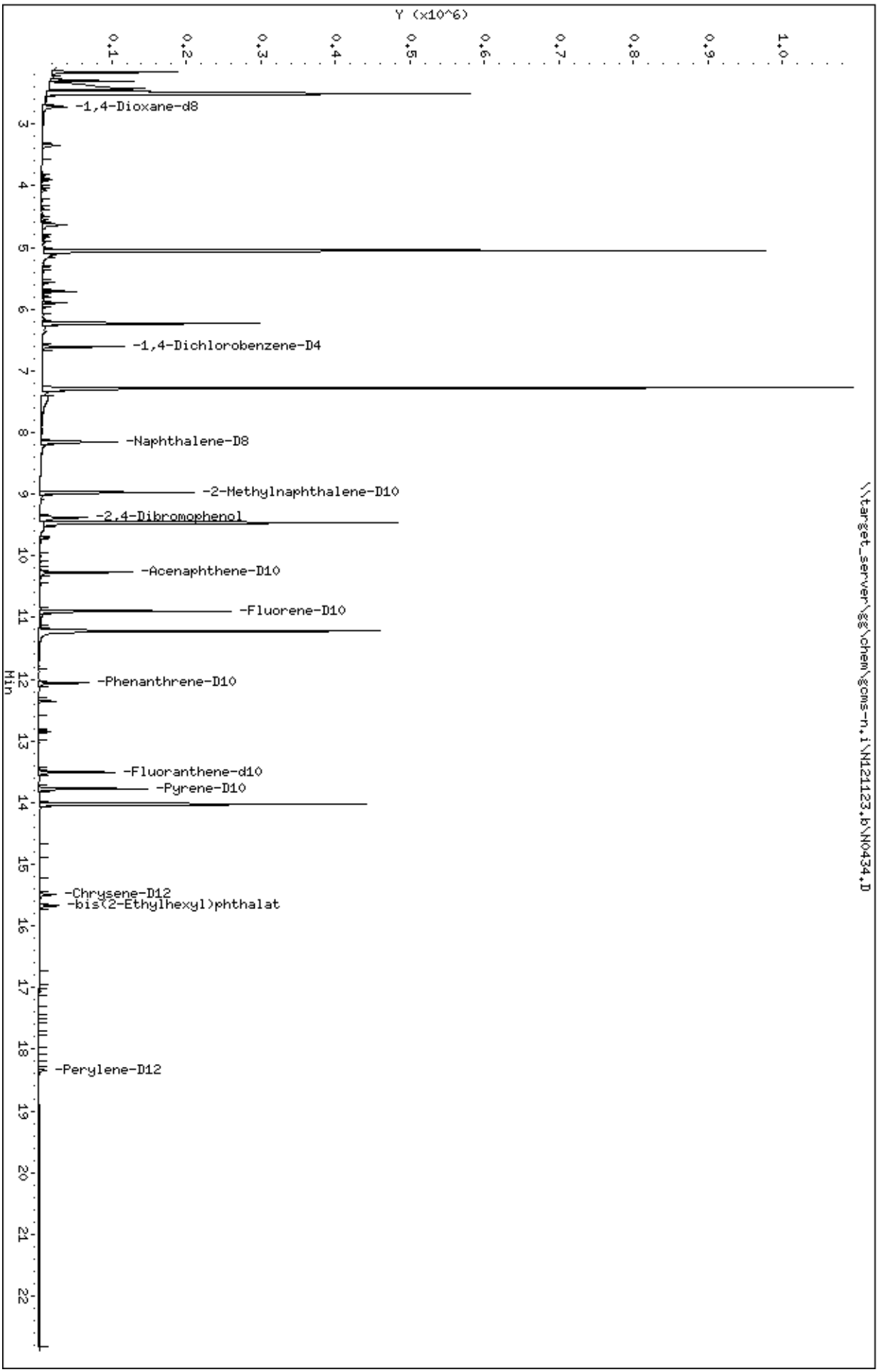
Concentration Formula: Amt * DF * Uf*(Vt/Vo*Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.000	Sample Volume (L)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/L)	REVIEW CODE
$	1 1,4-Dioxane-d8	96	2.720	2.742	(0.265)	31262	1.17910	1.18(Q)	
*	10 1,4-Dichlorobenzene-D4	152	6.614	6.604	(1.000)	34555	0.80000	(aQ)	
*	27 Naphthalene-D8	136	8.147	8.125	(1.000)	129082	0.80000	(a)	
$	33 2-Methylnaphthalene-D10	152	8.975	8.954	(1.102)	127350	1.50314	1.50	
$	38 2,4-Dibromophenol	252	9.377	9.346	(0.914)	66420	3.28879	3.29	
*	48 Acenaphthene-D10	164	10.264	10.254	(1.000)	57527	0.80000	(a)	
$	56 Fluorene-D10	174	10.897	10.887	(1.062)	110622	1.46940	1.47	
*	66 Phenanthrene-D10	188	12.062	12.052	(1.000)	75979	0.80000	(a)	
$	71 Fluoranthene-d10	212	13.511	13.502	(1.120)	96167	1.55718	1.56	
$	73 Pyrene-D10	212	13.776	13.777	(0.889)	106184	1.59587	1.60	
*	78 Chrysene-D12	240	15.498	15.478	(1.000)	28437	0.80000	(a)	
	80 bis(2-Ethylhexyl)phthalate	149	15.671	15.672	(1.011)	27297	0.57797	0.578(a)	
*	85 Perylene-D12	264	18.344	18.324	(1.000)	22116	0.80000	(a)	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.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Date : 11-DEC-2023 12:46
Client ID: WG345531-Blank
Sample Info: WG345531-1
Volume Injected (uL): 1.0
Column phase: Rxi-5VOCms
Instrument: gcms-n,i
Operator: EP
Column diameter: 0.25
\\target_server\gg\chem\gcms-n,i\N121123,b\N0434.D
Y (x10^6)
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1.0
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
Min
-1,4-Dioxane-d8
-1,4-Dichlorobenzene-D4
-Naphthalene-D8
-2-Methylnaphthalene-D10
-2,4-Dibromophenol
-Acenaphthene-D10
-Fluorene-D10
-Phenanthrene-D10
-Fluoranthene-d10
-Pyrene-D10
-Chrysene-D12
-bis(2-Ethylhexyl)phthalat
-Perylene-D12

Data File: \\target_server\gg\chem\gcms-n.i\N121123.b\N0434.D

Date : 11-DEC-2023 12:46

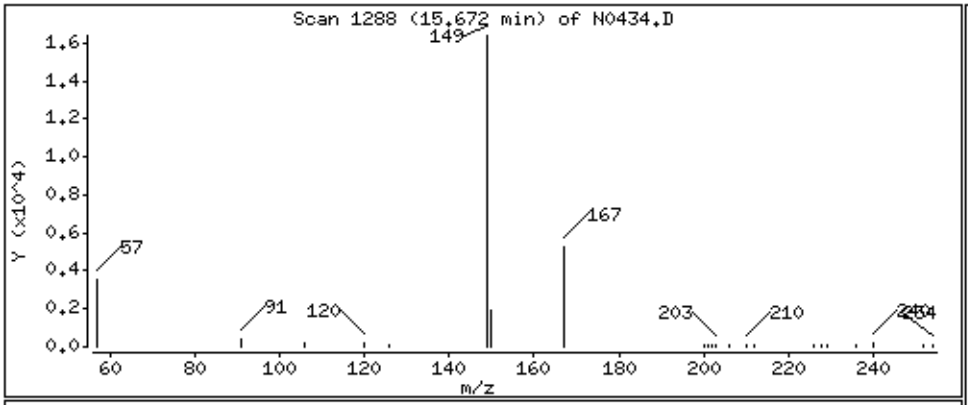
Client ID: WG345531-Blank | Instrument: gcms-n.i

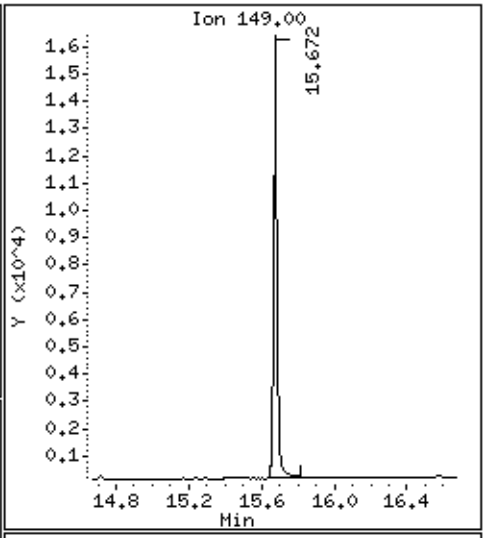
Sample Info: WG345531-1

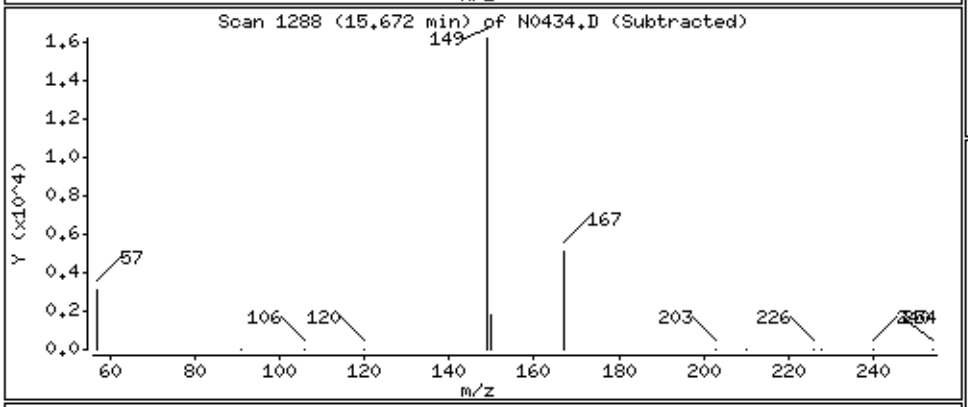
Volume Injected (uL): 1.0 | Operator: EP

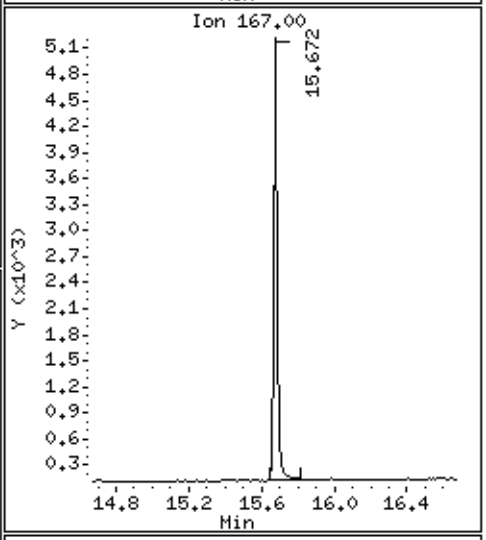
Column phase: Rxi-SVOCms | Column diameter: 0.25

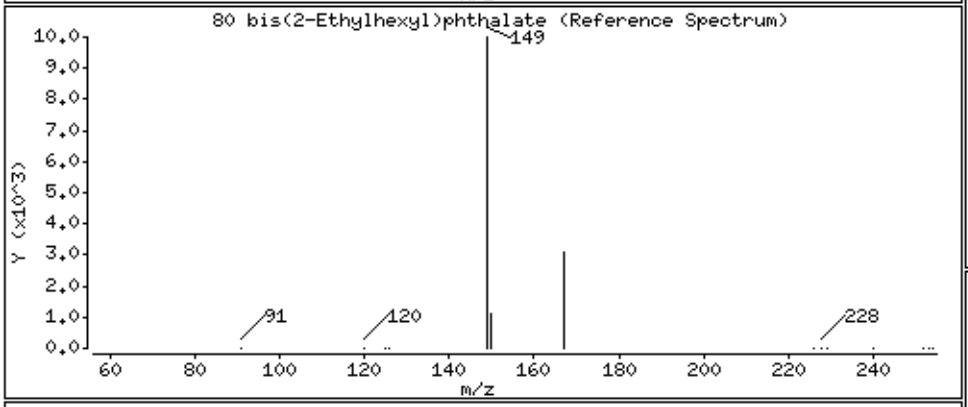
80 bis(2-Ethylhexyl)phthalate | Concentration: 0.578 ug/L

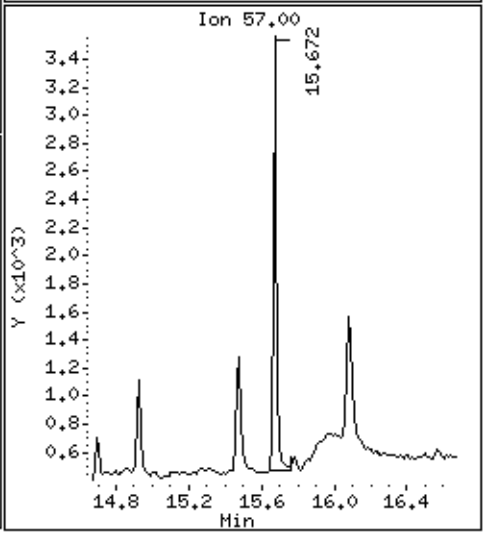


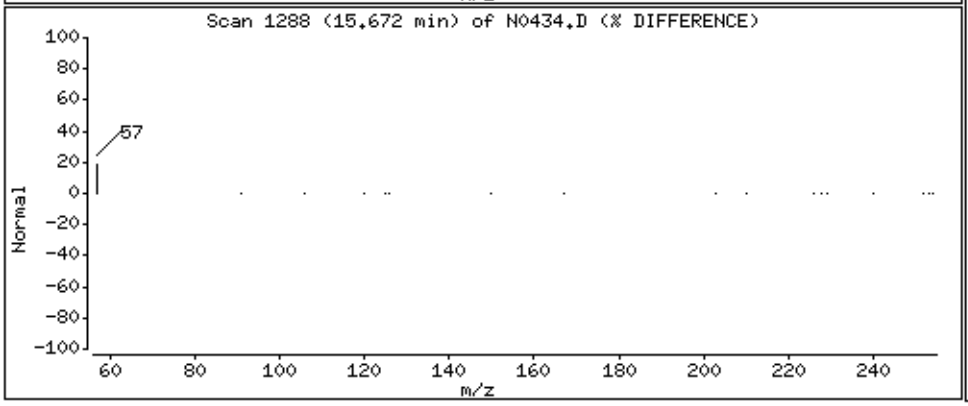












Katahdin
ANALYTICAL SERVICES

LCS/LCSD Recovery Report

LCS ID: WG345301-2
LCSD ID: WG345301-7
SDG: SQ6133
LCS File ID: N0389.D

Extract Date: 13-NOV-23
Extracted By: SH/NG/AC
Extraction Method: SW846 3510C
Lab Prep Batch: WG345301
LCSD File ID: N0390.D

Analysis Date: 07-DEC-23
Analyst: EP
Analysis Method: SW846 8270D SIM
Matrix: AQ
Report Date: 29-DEC-23

Compound	Spike Amt	LCS Conc	LCS Rec (%)	LCSD Conc	LCSD Rec (%)	Conc Units	RPD (%)	RPD Limit	Limits
Naphthalene	5.00	3.83	76.6	3.84	76.8	ug/L	0	20	43-114
2-Methylnaphthalene	5.00	3.75	75.0	3.80	76.0	ug/L	1	20	39-114
Acenaphthylene	5.00	3.60	72.0	3.70	74.0	ug/L	3	20	35-121
Acenaphthene	5.00	3.78	75.6	3.95	79.0	ug/L	4	20	48-114
Fluorene	5.00	4.00	80.0	4.10	82.0	ug/L	2	20	50-118
Phenanthrene	5.00	4.23	84.6	4.42	88.4	ug/L	4	20	53-115
Anthracene	5.00	3.97	79.4	4.16	83.2	ug/L	5	20	53-119
Fluoranthene	5.00	4.08	81.6	4.32	86.4	ug/L	6	20	58-120
Pyrene	5.00	3.91	78.2	4.10	82.0	ug/L	5	20	53-121
Benzo(a)anthracene	5.00	4.19	83.8	4.35	87.0	ug/L	4	20	59-120
Chrysene	5.00	3.98	79.6	4.17	83.4	ug/L	5	20	57-120
Benzo(b)Fluoranthene	5.00	4.36	87.2	4.58	91.6	ug/L	5	20	53-126
Benzo(k)fluoranthene	5.00	3.70	74.0	3.94	78.8	ug/L	6	20	54-125
Benzo(a)pyrene	5.00	3.66	73.2	3.75	75.0	ug/L	2	20	53-120
Indeno(1,2,3-cd)pyrene	5.00	2.55	51.0	2.50	50.0	ug/L	2	20	48-130
Dibenzo(a,h)anthracene	5.00	2.71	54.2	2.59	51.8	ug/L	4	20	44-131
Benzo(g,h,i)perylene	5.00	2.62	52.4	2.56	51.2	ug/L	2	20	44-128
2-Methylnaphthalene-D10			85.4		85.1				43-92
Fluorene-D10			75.6		78.1				29-101
Pyrene-D10			78.0		82.3				53-166

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Data File: \\target_server\gg\chem\gcms-n.i\N120723B.b\N0389.D
Report Date: 29-Dec-2023 09:52

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-n.i\N120723B.b\N0389.D
Lab Smp Id: WG345301-2 Client Smp ID: WG345301-LCS
Inj Date : 07-DEC-2023 17:23
Operator : EP Inst ID: gcms-n.i
Smp Info : WG345301-2
Misc Info : WG346504,WG345301,WG346503-4,SQ6133-1
Comment :
Method : \\target_server\gg\chem\gcms-n.i\N120723B.b\NSPSIM95.m
Meth Date : 08-Dec-2023 07:51 epelletier Quant Type: ISTD
Cal Date : 07-DEC-2023 14:42 Cal File: N0385.D
Als bottle: 10 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.12
Processing Host: INSPIRON1

Concentration Formula: Amt * DF * Uf*(Vt/Vo*Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.000	Sample Volume (L)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

EP
10:21 am, Dec 29, 2023

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/L)	REVIEW CODE
$	1 1,4-Dioxane-d8	96	2.783	2.742	(0.271)	19877	0.46538	0.465(aR)	
	2 1,4-Dioxane	88	2.815	2.784	(0.426)	58504	1.36875	1.37(Q)	
	3 N-Nitrosodimethylamine	74	3.259	3.217	(0.493)	76200	1.44512	1.44	
	4 Pyridine	79	3.333	3.238	(0.504)	105788	1.04610	1.05(M)	M6
	5 Benzaldehyde	77	6.084	6.084	(0.920)	227670	8.37655	8.38(R)	
	6 Phenol	94	6.240	6.240	(0.943)	237667	2.09441	2.09(Q)	
	7 Bis(2-Chloroethyl)ether	93	6.323	6.323	(0.956)	382065	3.84748	3.85	
	8 2-Chlorophenol	128	6.365	6.365	(0.962)	745513	7.76844	7.77	
	9 1,3-Dichlorobenzene	146	6.541	6.531	(0.989)	411053	3.55078	3.55	
*	10 1,4-Dichlorobenzene-D4	152	6.614	6.604	(1.000)	58089	0.80000	(aQ)	
	11 1,4-Dichlorobenzene	146	6.635	6.625	(1.003)	420735	3.58060	3.58	
	12 1,2-Dichlorobenzene	146	6.802	6.802	(1.028)	399780	3.51281	3.51	
	13 2,2'-Oxybis(1-chloropropane)	45	6.968	6.958	(1.053)	168495	2.70738	2.71	
	14 2-Methylphenol	108	6.958	6.958	(1.052)	504333	5.66147	5.66	
	15 Acetophenone	105	7.103	7.104	(0.874)	516299	4.01137	4.01	
	16 N-Nitroso-di-n-propylamine	70	7.124	7.125	(1.077)	233227	3.83062	3.83	
	17 3&4-Methylphenol	108	7.145	7.145	(1.080)	454732	4.93288	4.93	
	18 Hexachloroethane	117	7.197	7.197	(1.088)	149319	3.26025	3.26	
	19 Nitrobenzene	77	7.301	7.291	(0.899)	351547	4.14887	4.15	
	20 Isophorone	82	7.596	7.597	(0.935)	599478	3.50777	3.51	

Data File: \\target_server\gg\chem\gcms-n.i\N120723B.b\N0389.D
Report Date: 29-Dec-2023 09:52

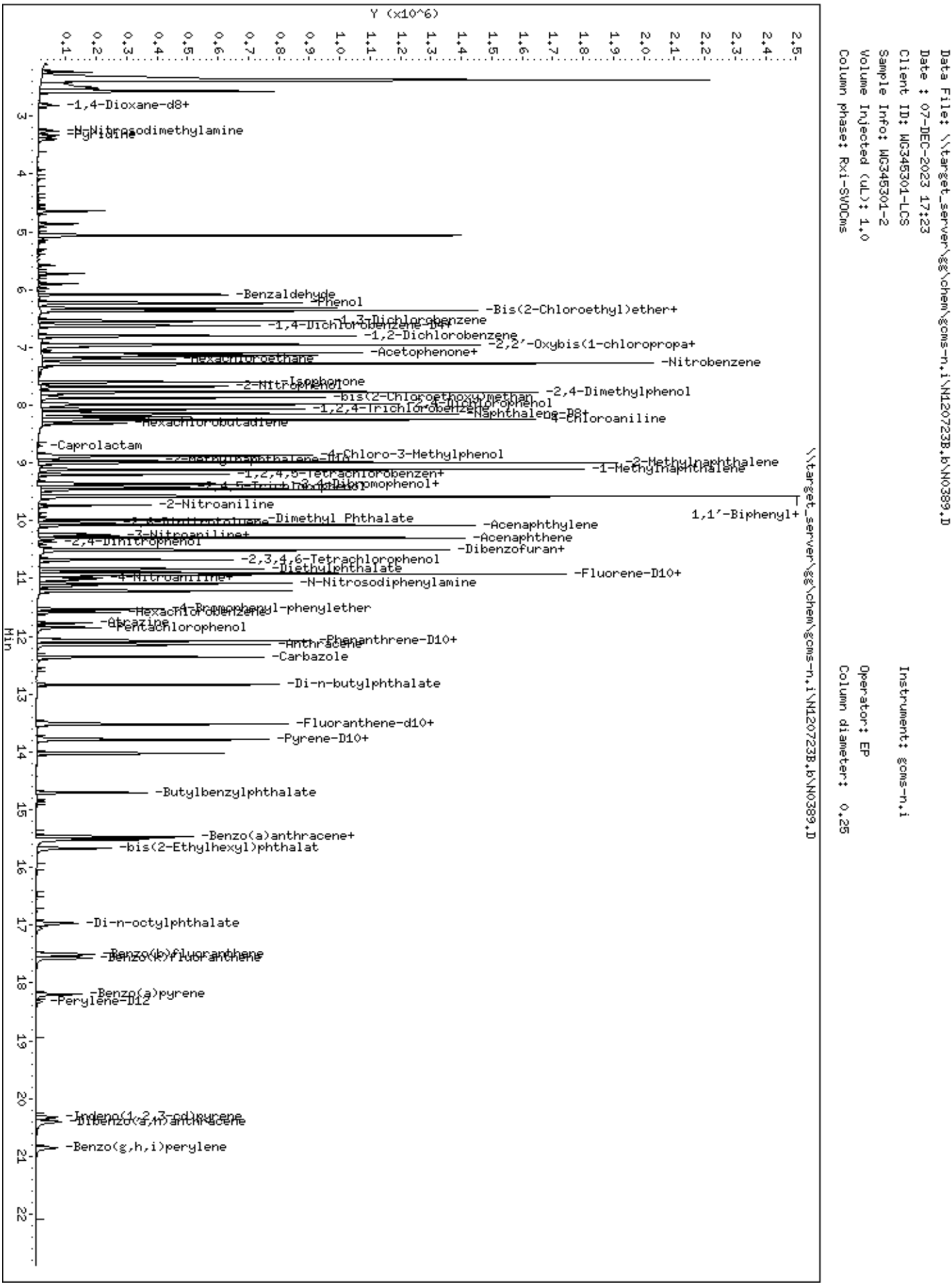
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	CONCENTRATIONS FINAL (ug/L)	REVIEW CODE
	21 2-Nitrophenol	139	7.686	7.675	(0.946)	359849	9.49170	9.49	
	22 2,4-Dimethylphenol	107	7.776	7.777	(0.957)	623648	8.71101	8.71	
	23 bis(2-Chloroethoxy)methane	93	7.877	7.878	(0.970)	438858	4.13028	4.13	
	25 2,4-Dichlorophenol	162	7.979	7.979	(0.982)	603087	7.52275	7.52	
	26 1,2,4-Trichlorobenzene	180	8.069	8.069	(0.993)	306129	3.58022	3.58	
*	27 Naphthalene-D8	136	8.125	8.125	(1.000)	209586	0.80000	(a)	
	28 Naphthalene	128	8.147	8.148	(1.003)	1098915	3.83375	3.83	
	29 4-Chloroaniline	127	8.249	8.282	(1.015)	326778	6.15121	6.15(R)	
	30 Hexachlorobutadiene	225	8.316	8.317	(1.024)	116750	3.16055	3.16	
	31 Caprolactam	113	8.699	8.699	(1.071)	11871	0.57769	0.578	
	32 4-Chloro-3-Methylphenol	107	8.869	8.869	(1.092)	532475	8.21447	8.21	
$	33 2-Methylnaphthalene-D10	152	8.953	8.954	(1.102)	234910	1.70767	1.71	
	34 2-Methylnaphthalene	142	8.996	8.996	(1.107)	709812	3.74651	3.75	
	35 1-Methylnaphthalene	142	9.112	9.113	(1.122)	662910	3.83869	3.84	
	36 1,2,4,5-Tetrachlorobenzene	216	9.208	9.208	(0.898)	249977	3.38080	3.38	
	37 Hexachlorocyclopentadiene	237	9.197	9.187	(0.897)	110274	3.55147	3.55	
$	38 2,4-Dibromophenol	252	9.345	9.346	(0.911)	104120	3.20029	3.20	
	39 2,4,6-Trichlorophenol	196	9.366	9.356	(0.913)	322109	8.49607	8.50	
	40 2,4,5-Trichlorophenol	196	9.409	9.420	(0.918)	359134	9.12514	9.12	
	41 1,1'-Biphenyl	154	9.578	9.579	(0.934)	803321	3.88412	3.88	
	42 2-Chloronaphthalene	164	9.589	9.579	(0.935)	201476	3.69539	3.70	
	43 2-Nitroaniline	65	9.728	9.728	(0.949)	124516	3.75862	3.76	
	44 Dimethyl Phthalate	163	9.975	9.975	(0.973)	597555	4.24392	4.24	
	45 2,6-Dinitrotoluene	165	10.039	10.039	(0.979)	132533	3.66305	3.66	
	46 Acenaphthylene	152	10.082	10.082	(0.983)	928131	3.59753	3.60	
	47 3-Nitroaniline	138	10.232	10.243	(0.998)	90884	5.59298	5.59(R)	
*	48 Acenaphthene-D10	164	10.253	10.254	(1.000)	92673	0.80000	(a)	
	49 Acenaphthene	153	10.296	10.286	(1.004)	578593	3.77640	3.78	
	50 2,4-Dinitrophenol	184	10.361	10.372	(1.010)	24249	5.31228	5.31	
	51 Dibenzofuran	168	10.511	10.501	(1.025)	802466	3.89489	3.89	
	52 4-Nitrophenol	109	10.500	10.490	(1.024)	29122	3.32137	3.32(Q)	
	53 2,4-Dinitrotoluene	165	10.522	10.522	(1.026)	150931	3.67465	3.67	
	54 2,3,4,6-Tetrachlorophenol	232	10.672	10.672	(1.041)	182396	7.37185	7.37	
	55 Diethylphthalate	149	10.833	10.833	(1.056)	583073	4.40394	4.40	
$	56 Fluorene-D10	174	10.886	10.887	(1.062)	183384	1.51210	1.51	
	57 Fluorene	166	10.918	10.919	(1.065)	612886	4.00321	4.00	
	58 4-Chlorophenyl-phenylether	204	10.940	10.940	(1.067)	262711	3.87739	3.88	
	59 4-Nitroaniline	138	10.983	10.983	(1.071)	104616	6.22212	6.22	
	60 4,6-Dinitro-2-Methylphenol	198	11.015	11.015	(0.914)	79692	9.28454	9.28	
	61 N-Nitrosodiphenylamine	169	11.090	11.090	(0.920)	383608	3.52411	3.52	
	62 4-Bromophenyl-phenylether	248	11.528	11.529	(0.957)	139082	4.24117	4.24	
	63 Hexachlorobenzene	284	11.582	11.582	(0.961)	137613	3.83207	3.83	
	64 Atrazine	200	11.774	11.774	(0.977)	90470	3.77067	3.77	
	65 Pentachlorophenol	266	11.848	11.849	(0.983)	98662	12.7254	12.7	
*	66 Phenanthrene-D10	188	12.051	12.052	(1.000)	110035	0.80000	(a)	
	67 Phenanthrene	178	12.083	12.073	(1.003)	704302	4.23303	4.23	
	68 Anthracene	178	12.147	12.137	(1.008)	663318	3.96926	3.97	
	69 Carbazole	167	12.361	12.361	(1.026)	620643	5.29522	5.30	
	70 Di-n-butylphthalate	149	12.831	12.831	(1.065)	843476	4.39671	4.40	
$	71 Fluoranthene-d10	212	13.501	13.502	(1.120)	143313	1.60237	1.60	
	72 Fluoranthene	202	13.522	13.522	(1.122)	527377	4.08352	4.08	
$	73 Pyrene-D10	212	13.766	13.777	(0.889)	162470	1.55945	1.56	
	74 Pyrene	202	13.786	13.797	(0.891)	537885	3.90772	3.91	
	75 Butylbenzylphthalate	149	14.703	14.704	(0.950)	235850	4.11848	4.12	

Data File: \\target_server\gg\chem\gcms-n.i\N120723B.b\N0389.D
Report Date: 29-Dec-2023 09:52

			QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	CONCENTRATIONS FINAL (ug/L)	REVIEW CODE
	76	Benzo(a)anthracene	228	15.467	15.468	(0.999)	322974	4.19010	4.19	
	77	3,3'-Dichlorobenzidine	252	15.478	15.488	(1.000)	214793	10.7799	10.8	
*	78	Chrysene-D12	240	15.478	15.478	(1.000)	44527	0.80000	(a)	
	79	Chrysene	228	15.518	15.529	(1.003)	367535	3.97857	3.98	
	80	bis(2-Ethylhexyl)phthalate	149	15.671	15.672	(1.013)	245430	3.31878	3.32	
	81	Di-n-octylphthalate	149	16.965	16.965	(1.096)	281425	3.23056	3.23	
	82	Benzo(b)fluoranthene	252	17.510	17.521	(0.956)	261023	4.36129	4.36	
	83	Benzo(k)fluoranthene	252	17.562	17.573	(0.958)	286714	3.70451	3.70(H)	
	84	Benzo(a)pyrene	252	18.200	18.211	(0.993)	214375	3.66136	3.66	
*	85	Perylene-D12	264	18.324	18.324	(1.000)	32813	0.80000	(a)	
	86	Indeno(1,2,3-cd)pyrene	276	20.322	20.343	(1.109)	108076	2.54733	2.55	
	87	Dibenzo(a,h)anthracene	278	20.404	20.415	(1.114)	118602	2.71158	2.71	
	88	Benzo(g,h,i)perylene	276	20.857	20.878	(1.138)	125479	2.62347	2.62	
M	89	Total PAHs	100				8828907	66.7678	66.8	

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.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Date : 07-DEC-2023 17:23
Client ID: WG345301-LCS
Sample Info: WG345301-2
Volume Injected (uL): 1.0
Column phase: Rxi-5ViOms
Instrument: gcms-n,i
Operator: EP
Column diameter: 0.25
\\target_server\gg\chem\gcms-n,i\N120723B,b\N0389.D
Y (x10^6)
Min
-1,4-Dioxane-d8+
-Pyridine
-Benzaldehyde
-Phenol
-Bis(2-Chloroethyl)ether+
-1,3-Dichlorobenzene
-1,4-Dichlorobenzene-D4+
-1,2-Dichlorobenzene
-2,2'-Oxybis(1-chloropropa+
-Acetophenone+
-Nitrobenzene
-Hexachloroethane
-Isophorone
-2-Nitrophenol
-2,4-Dimethylphenol
-bis(2-Chloroethoxy)methan
-2,4-Dichlorophenol
-1,2,4-Trichlorobenzene
-Naphthalene-D8+
-4-Chloroaniline
-Hexachlorobutadiene
-Caprolactam
-4-Chloro-3-Methylphenol
-2-Methylnaphthalene
-1-Methylnaphthalene
-1,2,4,5-Tetrachlorobenzen+
-2,4-Dibromophenol+
-2-Nitroaniline
1,1'-Biphenyl+
-Dimethyl Phthalate
-Acenaphthylene
-3-Nitroaniline+
-Acenaphthene
-2,4-Dinitrophenol
-Dibenzofuran+
-2,3,4,6-Tetrachlorophenol
-Diethylphthalate
-Fluorene-D10+
-4-Nitroaniline+
-N-Nitrosodiphenylamine
-4-Bromophenyl-phenylether
-Hexachlorobenzene
-Atrazine
-Pentachlorophenol
-Phenanthrene-D10+
-Anthracene
-Carbazole
-Di-n-butylphthalate
-Fluoranthene-d10+
-Pyrene-D10+
-Butylbenzylphthalate
-Benzo(a)anthracene+
-bis(2-Ethylhexyl)phthalat
-Di-n-octylphthalate
-Benzo(b)fluoranthene
-Benzo(k)fluoranthene
-Benzo(a)pyrene
-Perylene-D12
-Indeno(1,2,3-cd)pyrene
-Dibenzo(a,h)anthracene
-Benzo(g,h,i)perylene

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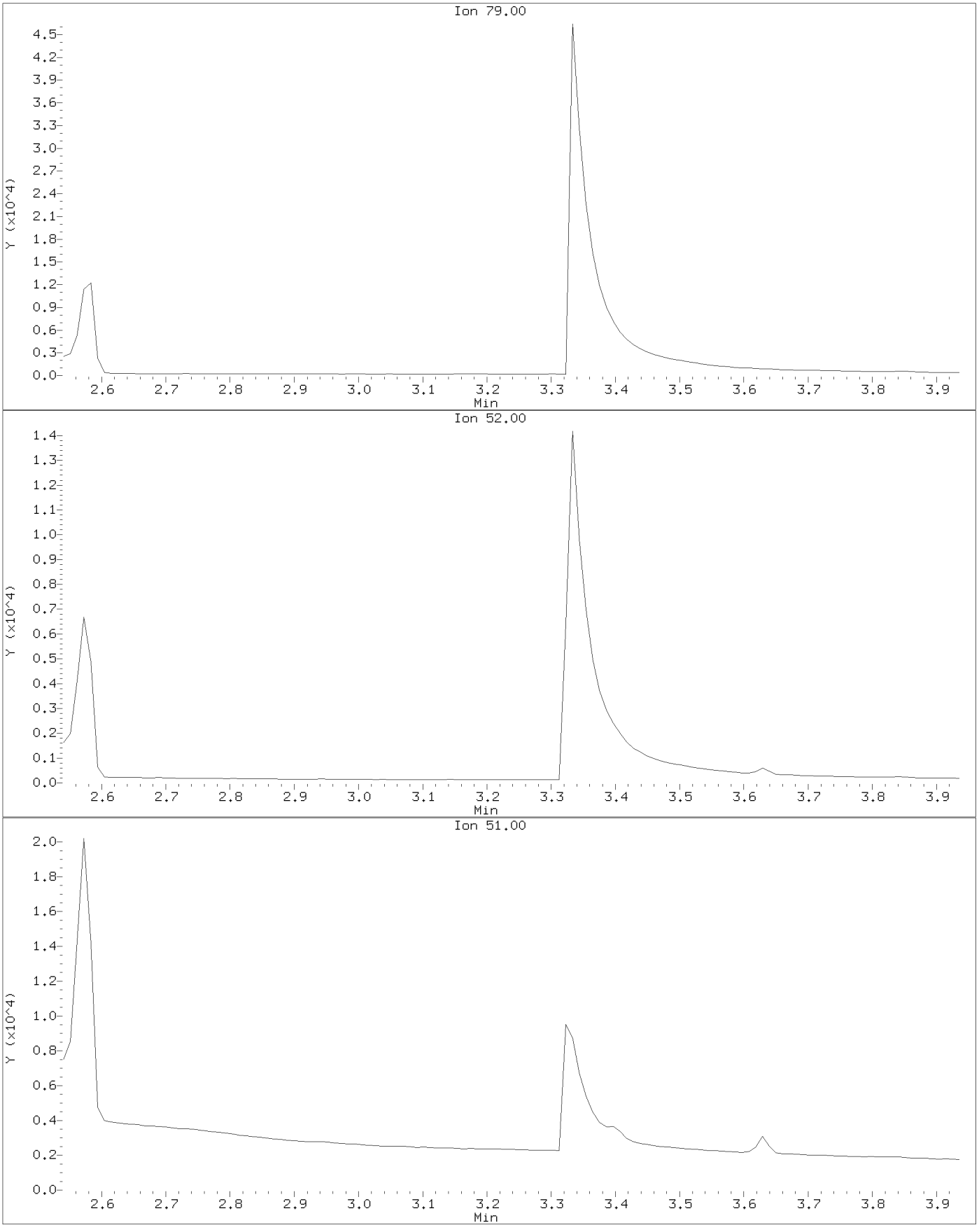
Injection Date: 07-DEC-2023 17:23
Instrument: gcms-n.i
Client Sample ID: WG345301-LCS

Compound: Pyridine
CAS Number: 110-86-1

BEFORE MANUAL INTEGRATION



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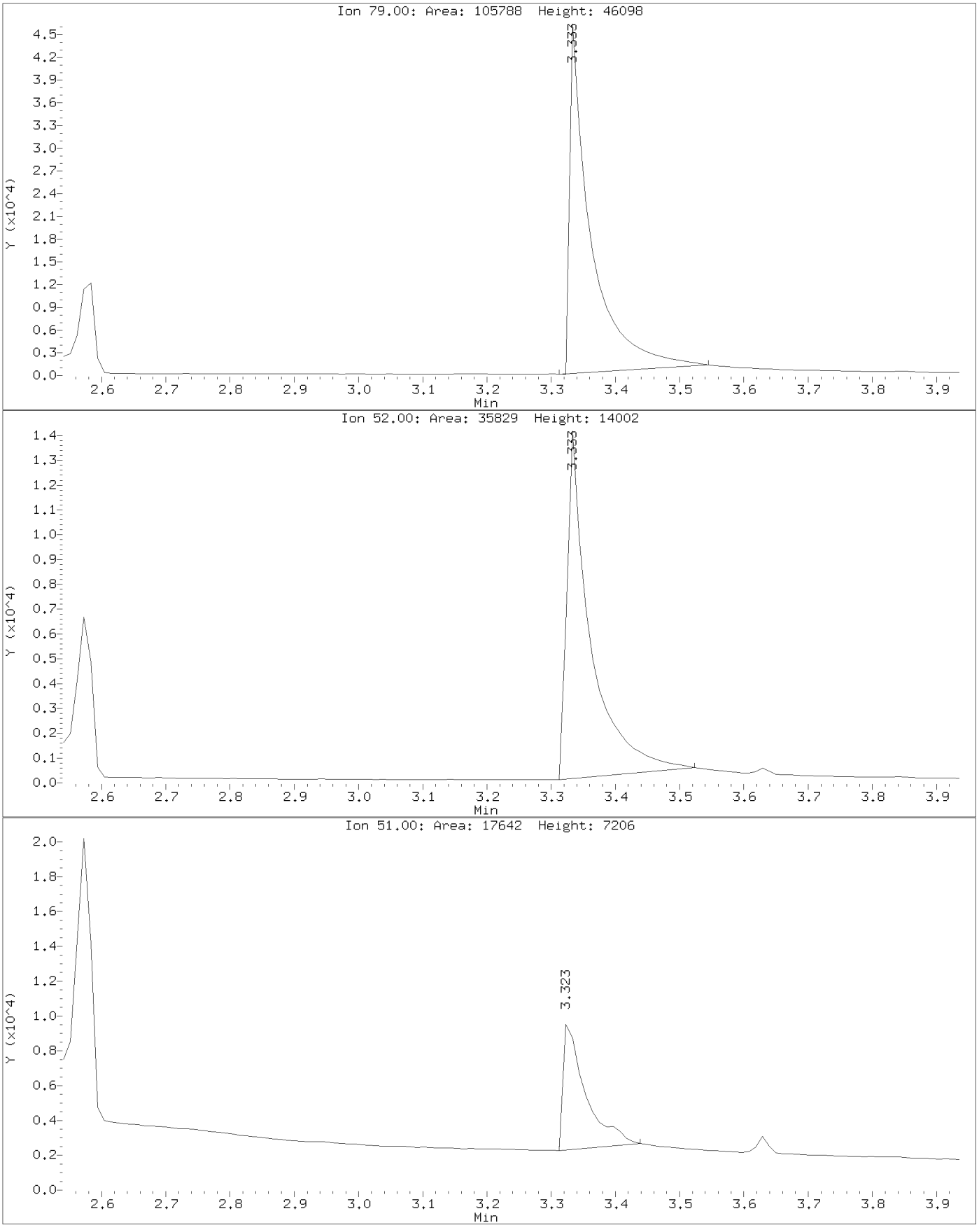
Instrument: gcms-n.i
Client Sample ID: WG345301-LCS

Compound: Pyridine
CAS Number: 110-86-1

AFTER MANUAL INTEGRATION



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Report Date: 29-Dec-2023 09:52

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-n.i\N120723B.b\N0390.D
Lab Smp Id: WG345301-7 Client Smp ID: WG345301-LCSD
Inj Date : 07-DEC-2023 17:55
Operator : EP Inst ID: gcms-n.i
Smp Info : WG345301-7
Misc Info : WG346504,WG345301,WG346503-4,SQ6133-1
Comment :
Method : \\target_server\gg\chem\gcms-n.i\N120723B.b\NSPSIM95.m
Meth Date : 08-Dec-2023 07:51 epelletier Quant Type: ISTD
Cal Date : 07-DEC-2023 14:42 Cal File: N0385.D
Als bottle: 11 QC Sample: LCSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.12
Processing Host: INSPIRON1

Concentration Formula: Amt * DF * Uf*(Vt/Vo*Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.000	Sample Volume (L)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

EP
10:22 am, Dec 29, 2023

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/L)	REVIEW CODE
$	1 1,4-Dioxane-d8	96	2.773	2.742	(0.270)	17931	0.47822	0.478(aR)	
	2 1,4-Dioxane	88	2.815	2.784	(0.426)	53096	1.35621	1.36(Q)	
	3 N-Nitrosodimethylamine	74	3.248	3.217	(0.491)	81526	1.68799	1.69	
	4 Pyridine	79	3.332	3.238	(0.504)	81007	0.87455	0.874(M)	M6
	5 Benzaldehyde	77	6.083	6.084	(0.920)	202876	8.14920	8.15(R)	
	6 Phenol	94	6.239	6.240	(0.943)	245359	2.36059	2.36(Q)	
	7 Bis(2-Chloroethyl)ether	93	6.323	6.323	(0.956)	345447	3.79792	3.80	
	8 2-Chlorophenol	128	6.364	6.365	(0.962)	678388	7.71759	7.72	
	9 1,3-Dichlorobenzene	146	6.541	6.531	(0.989)	372599	3.51393	3.51	
*	10 1,4-Dichlorobenzene-D4	152	6.614	6.604	(1.000)	53207	0.80000	(aQ)	
	11 1,4-Dichlorobenzene	146	6.624	6.625	(1.002)	381813	3.54751	3.55	
	12 1,2-Dichlorobenzene	146	6.801	6.802	(1.028)	367527	3.52572	3.52	
	13 2,2'-Oxybis(1-chloropropane)	45	6.968	6.958	(1.053)	152881	2.68189	2.68	
	14 2-Methylphenol	108	6.957	6.958	(1.052)	509813	6.24809	6.25	
	15 Acetophenone	105	7.103	7.104	(0.874)	469072	3.99268	3.99	
	16 N-Nitroso-di-n-propylamine	70	7.124	7.125	(1.077)	210528	3.77507	3.78	
	17 3&4-Methylphenol	108	7.145	7.145	(1.080)	429116	5.08212	5.08	
	18 Hexachloroethane	117	7.197	7.197	(1.088)	139826	3.33310	3.33	
	19 Nitrobenzene	77	7.290	7.291	(0.897)	318595	4.11926	4.12	
	20 Isophorone	82	7.596	7.597	(0.935)	546664	3.50439	3.50	

Data File: \\target_server\gg\chem\gcms-n.i\N120723B.b\N0390.D
Report Date: 29-Dec-2023 09:52

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	CONCENTRATIONS FINAL (ug/L)	REVIEW CODE
	21 2-Nitrophenol	139	7.686	7.675	(0.946)	334766	9.63804	9.64	
	22 2,4-Dimethylphenol	107	7.776	7.777	(0.957)	606968	9.28813	9.29	
	23 bis(2-Chloroethoxy)methane	93	7.877	7.878	(0.970)	399057	4.11457	4.11	
	24 Benzoic Acid	105	7.900	7.957	(0.972)	29339	1.75805	1.76(Q)	
	25 2,4-Dichlorophenol	162	7.978	7.979	(0.982)	559545	7.64655	7.65	
	26 1,2,4-Trichlorobenzene	180	8.068	8.069	(0.993)	280474	3.59362	3.59	
*	27 Naphthalene-D8	136	8.125	8.125	(1.000)	191306	0.80000	(a)	
	28 Naphthalene	128	8.147	8.148	(1.003)	1004669	3.83986	3.84	
	29 4-Chloroaniline	127	8.248	8.282	(1.015)	253078	5.21911	5.22(R)	
	30 Hexachlorobutadiene	225	8.316	8.317	(1.024)	110327	3.27206	3.27	
	31 Caprolactam	113	8.698	8.699	(1.071)	10280	0.54807	0.548	
	32 4-Chloro-3-Methylphenol	107	8.868	8.869	(1.092)	484031	8.18064	8.18	
$	33 2-Methylnaphthalene-D10	152	8.953	8.954	(1.102)	213804	1.70276	1.70	
	34 2-Methylnaphthalene	142	8.996	8.996	(1.107)	656503	3.79624	3.80	
	35 1-Methylnaphthalene	142	9.112	9.113	(1.122)	616500	3.91107	3.91	
	36 1,2,4,5-Tetrachlorobenzene	216	9.207	9.208	(0.898)	234982	3.62016	3.62	
	37 Hexachlorocyclopentadiene	237	9.197	9.187	(0.897)	102872	3.77404	3.77	
$	38 2,4-Dibromophenol	252	9.345	9.346	(0.911)	95225	3.33412	3.33	
	39 2,4,6-Trichlorophenol	196	9.366	9.356	(0.913)	309545	9.19699	9.20	
	40 2,4,5-Trichlorophenol	196	9.419	9.420	(0.919)	324720	9.39867	9.40	
	41 1,1'-Biphenyl	154	9.578	9.579	(0.934)	732781	4.03601	4.04	
	42 2-Chloronaphthalene	164	9.578	9.579	(0.934)	188124	3.93057	3.93	
	43 2-Nitroaniline	65	9.728	9.728	(0.949)	113896	3.91639	3.92	
	44 Dimethyl Phthalate	163	9.974	9.975	(0.973)	549324	4.44418	4.44	
	45 2,6-Dinitrotoluene	165	10.039	10.039	(0.979)	117424	3.69701	3.70	
	46 Acenaphthylene	152	10.082	10.082	(0.983)	838411	3.70192	3.70	
	47 3-Nitroaniline	138	10.232	10.243	(0.998)	82234	5.76477	5.76(R)	
*	48 Acenaphthene-D10	164	10.253	10.254	(1.000)	81354	0.80000	(a)	
	49 Acenaphthene	153	10.296	10.286	(1.004)	531106	3.94876	3.95	
	50 2,4-Dinitrophenol	184	10.361	10.372	(1.010)	46641	10.1585	10.2	
	51 Dibenzofuran	168	10.511	10.501	(1.025)	727061	4.01989	4.02	
	52 4-Nitrophenol	109	10.500	10.490	(1.024)	27280	3.53323	3.53(Q)	
	53 2,4-Dinitrotoluene	165	10.521	10.522	(1.026)	139738	3.87549	3.88	
	54 2,3,4,6-Tetrachlorophenol	232	10.671	10.672	(1.041)	177279	8.07254	8.07	
	55 Diethylphthalate	149	10.832	10.833	(1.056)	525070	4.51762	4.52	
$	56 Fluorene-D10	174	10.886	10.887	(1.062)	166268	1.56171	1.56	
	57 Fluorene	166	10.918	10.919	(1.065)	550842	4.09855	4.10	
	58 4-Chlorophenyl-phenylether	204	10.940	10.940	(1.067)	236681	3.97923	3.98	
	59 4-Nitroaniline	138	10.982	10.983	(1.071)	93103	6.29888	6.30	
	60 4,6-Dinitro-2-Methylphenol	198	11.015	11.015	(0.914)	83220	10.6774	10.7	
	61 N-Nitrosodiphenylamine	169	11.090	11.090	(0.920)	349583	3.69661	3.70	
	62 4-Bromophenyl-phenylether	248	11.528	11.529	(0.957)	127439	4.47310	4.47	
	63 Hexachlorobenzene	284	11.581	11.582	(0.961)	127491	4.08644	4.09	
	64 Atrazine	200	11.774	11.774	(0.977)	82673	3.96614	3.97	
	65 Pentachlorophenol	266	11.848	11.849	(0.983)	96359	14.3056	14.3(R)	
*	66 Phenanthrene-D10	188	12.051	12.052	(1.000)	95596	0.80000	(a)	
	67 Phenanthrene	178	12.083	12.073	(1.003)	638940	4.42021	4.42	
	68 Anthracene	178	12.147	12.137	(1.008)	604672	4.16484	4.16	
	69 Carbazole	167	12.361	12.361	(1.026)	564632	5.54497	5.54	
	70 Di-n-butylphthalate	149	12.831	12.831	(1.065)	772945	4.63762	4.64	
$	71 Fluoranthene-d10	212	13.501	13.502	(1.120)	131165	1.68805	1.69	
	72 Fluoranthene	202	13.521	13.522	(1.122)	484301	4.31639	4.32	
$	73 Pyrene-D10	212	13.766	13.777	(0.889)	147398	1.64584	1.64	
	74 Pyrene	202	13.786	13.797	(0.891)	485269	4.10123	4.10	

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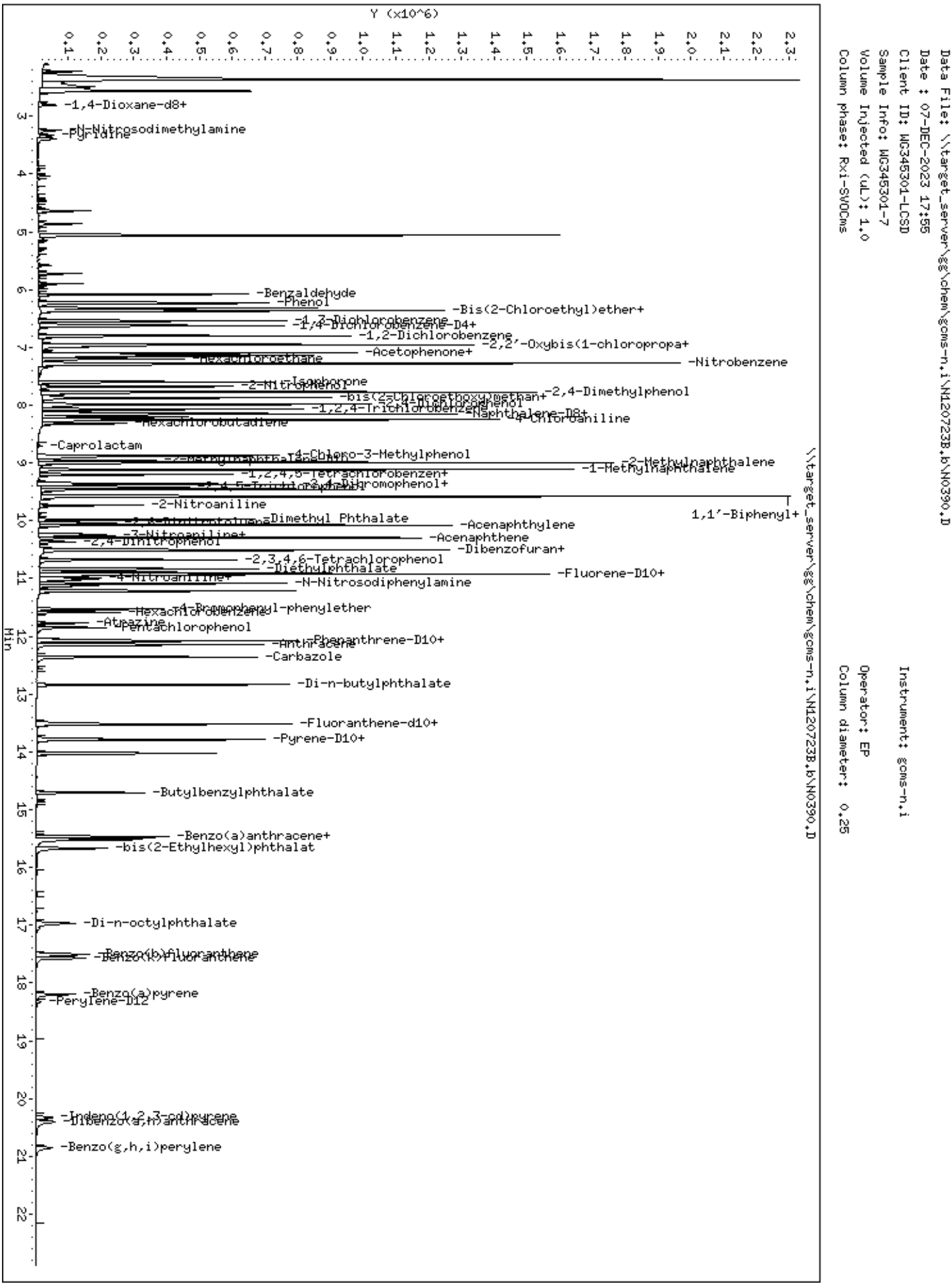
Report Date: 29-Dec-2023 09:52

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	CONCENTRATIONS FINAL (ug/L)	REVIEW CODE
	75 Butylbenzylphthalate	149	14.703	14.704	(0.950)	215241	4.37243	4.37	
	76 Benzo(a)anthracene	228	15.467	15.468	(0.999)	288026	4.34695	4.35	
	77 3,3'-Dichlorobenzidine	252	15.477	15.488	(1.000)	161489	9.42831	9.43	
*	78 Chrysene-D12	240	15.477	15.478	(1.000)	38276	0.80000	(a)	
	79 Chrysene	228	15.518	15.529	(1.003)	331224	4.17106	4.17	
	80 bis(2-Ethylhexyl)phthalate	149	15.671	15.672	(1.013)	223831	3.52102	3.52	
	81 Di-n-octylphthalate	149	16.965	16.965	(1.096)	247249	3.29841	3.30	
	82 Benzo(b)fluoranthene	252	17.510	17.521	(0.956)	215463	4.58396	4.58	
	83 Benzo(k)fluoranthene	252	17.562	17.573	(0.958)	239565	3.94128	3.94(H)	
	84 Benzo(a)pyrene	252	18.200	18.211	(0.993)	172373	3.74860	3.75	
*	85 Perylene-D12	264	18.324	18.324	(1.000)	25770	0.80000	(a)	
	86 Indeno(1,2,3-cd)pyrene	276	20.332	20.343	(1.110)	83483	2.50545	2.50	
	87 Dibenzo(a,h)anthracene	278	20.414	20.415	(1.114)	88857	2.58675	2.59	
	88 Benzo(g,h,i)perylene	276	20.857	20.878	(1.138)	96367	2.56546	2.56	
M	89 Total PAHs	100				7926571	68.7486	68.7	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.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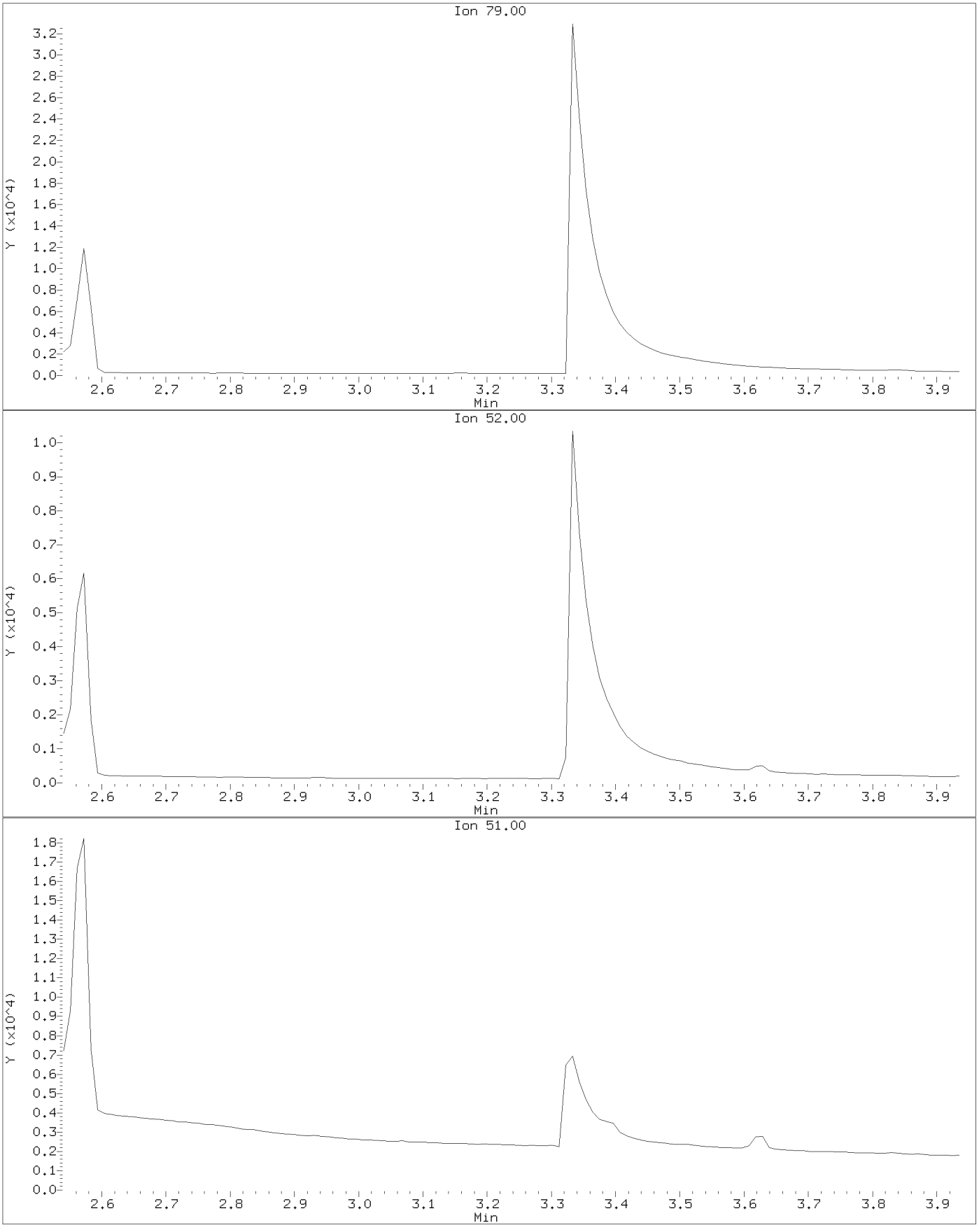
Date : 07-DEC-2023 17:55
Client ID: WG345301-LCSD
Sample Info: WG345301-7
Volume Injected (uL): 1.0
Column phase: Rxi-5ViOms
Instrument: gcms-n,i
Operator: EP
Column diameter: 0.25
\\target_server\gg\chem\gcms-n,i\N120723B,b\N0390.D
Y (x10^6)
Min
-1,4-Dioxane-d8+
-N-Nitrosodimethylamine
-Pyridine
-Benzaldehyde
-Phenol
-Bis(2-Chloroethyl)ether+
-1,3-Dichlorobenzene
-1,4-Dichlorobenzene-D4+
-1,2-Dichlorobenzene
-2,2'-Oxybis(1-chloropropa+
-Acetophenone+
-Hexachloroethane
-Nitrobenzene
-Isophorone
-2-Nitrophenol
-bis(2-Chloroethoxy)methan+
-2,4-Dimethylphenol
-1,2,4-Trichlorobenzene
-Naphthalene-D8+
-4-Chloroaniline
-Hexachlorobutadiene
-Caprolactam
-4-Chloro-3-Methylphenol
-2-Methylnaphthalene
-1-Methylnaphthalene
-1,2,4,5-Tetrachlorobenzen+
-2,4-Dibromophenol+
-2-Nitroaniline
1,1'-Biphenyl+
-Dimethyl Phthalate
-Acenaphthylene
-3-Nitroaniline+
-Acenaphthene
-2,4-Dinitrophenol
-Dibenzofuran+
-2,3,4,6-Tetrachlorophenol
-Diethylphthalate
-Fluorene-D10+
-4-Nitroaniline+
-N-Nitrosodiphenylamine
-4-Bromophenyl-phenylether
-Hexachlorobenzene
-Atrazine
-Pentachlorophenol
-Phenanthrene-D10+
-Anthracene
-Carbazole
-Di-n-butylphthalate
-Fluoranthene-d10+
-Pyrene-D10+
-Butylbenzylphthalate
-Benzo(a)anthracene+
-bis(2-Ethylhexyl)phthalat
-Di-n-octylphthalate
-Benzo(b)fluoranthene
-Benzo(k)fluoranthene
-Benzo(a)pyrene
-Perylene-D12
-Indeno(1,2,3-cd)pyrene
-Dibenzo(a,h)anthracene
-Benzo(g,h,i)perylene

Data File: \\target_server\gg\chem\gcms-n.i\N120723B.b\N0390.D
Injection Date: 07-DEC-2023 17:55
Instrument: gcms-n.i
Client Sample ID: WG345301-LCSD

Compound: Pyridine
CAS Number: 110-86-1

BEFORE MANUAL INTEGRATION



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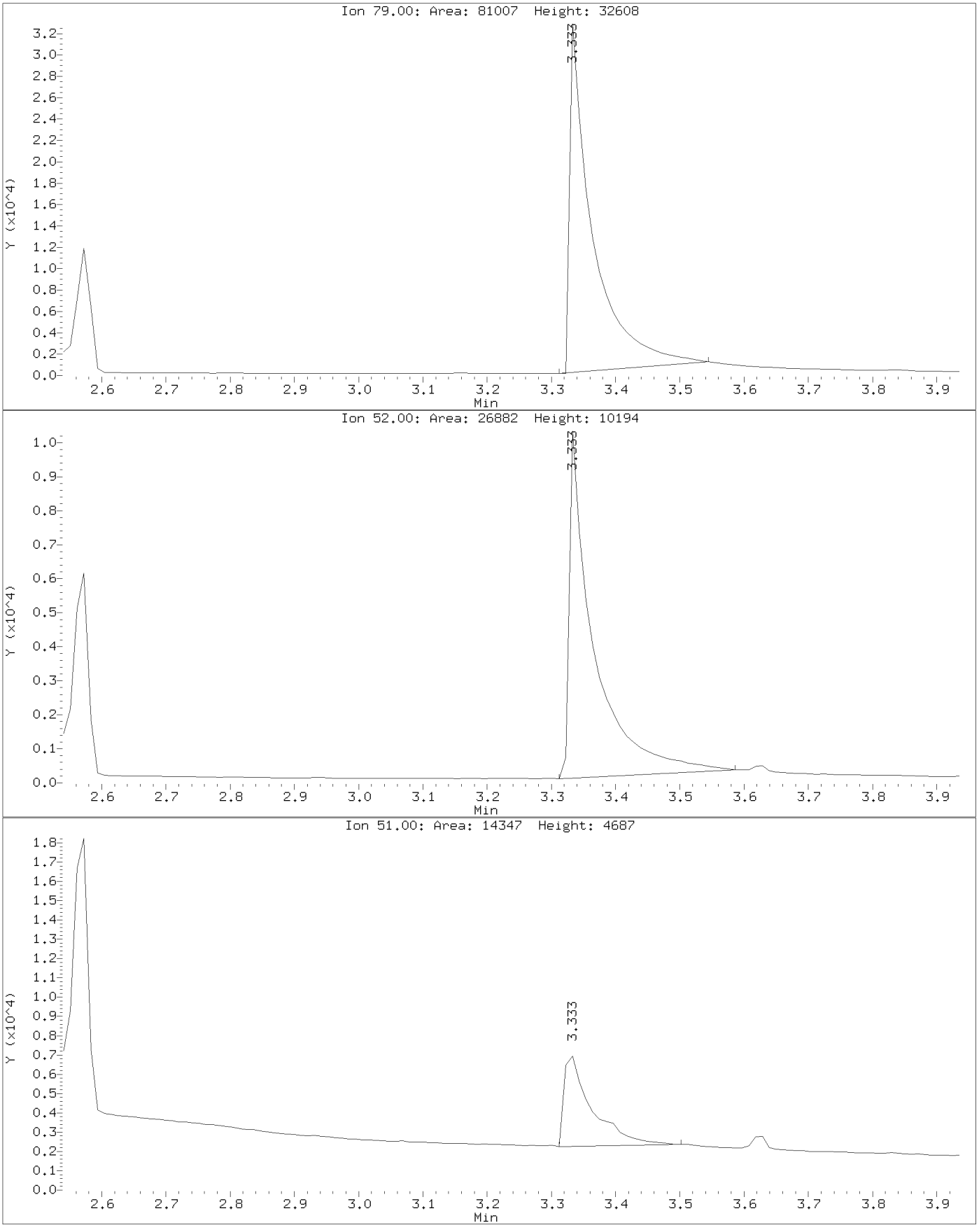
Injection Date: 07-DEC-2023 17:55
Instrument: gcms-n.i
Client Sample ID: WG345301-LCSD

Compound: Pyridine
CAS Number: 110-86-1

AFTER MANUAL INTEGRATION



Katahdin
ANALYTICAL SERVICES

MS/MSD Recovery Report

MS ID: WG345301-5
MSD ID: WG345301-6
Sample ID: SQ6133-3
Client ID: SY-OBMW12-110723
SDG: SQ6133
MS File ID: N0421.D

Extract Date: 13-NOV-23
Extracted By: SH/NG/AC
Extraction Method: SW846 3510C
Lab Prep Batch: WG345301
Report Date: 29-DEC-23
MSD File ID: N0422.D

Analysis Date: 08-DEC-23
Analyst: EP
Analysis Method: SW846 8270D SIM
Matrix: AQ
% Solids: N/A
Sample File ID: N0420.D

Compound	MS Spike	MSD Spike	Conc Units	Samp Conc	MS Conc	MSD Conc	MS Rec (%)	MSD Rec (%)	RPD (%)	RPD Limit	Limits
Naphthalene	4.72	4.72	ug/L	U0.094	3.88	3.67	82.2	77.8	6	20	43-114
2-Methylnaphthalene	4.72	4.72	ug/L	U0.094	3.82	3.65	81.0	77.4	4	20	39-114
Acenaphthylene	4.72	4.72	ug/L	U0.094	3.56	3.45	75.5	73.1	3	20	35-121
Acenaphthene	4.72	4.72	ug/L	U0.094	3.81	3.65	80.8	77.4	4	20	48-114
Fluorene	4.72	4.72	ug/L	U0.094	4.10	3.90	86.9	82.7	5	20	50-118
Phenanthrene	4.72	4.72	ug/L	U0.094	4.08	3.89	86.5	82.5	5	20	53-115
Anthracene	4.72	4.72	ug/L	U0.094	3.86	3.72	81.8	78.9	4	20	53-119
Fluoranthene	4.72	4.72	ug/L	U0.094	3.85	3.71	81.6	78.6	4	20	58-120
Pyrene	4.72	4.72	ug/L	U0.094	4.23	4.05	89.7	85.9	4	20	53-121
Benzo(a)anthracene	4.72	4.72	ug/L	U0.094	3.78	3.74	80.1	79.3	1	20	59-120
Chrysene	4.72	4.72	ug/L	U0.094	3.48	3.48	73.8	73.8	0	20	57-120
Benzo(b)Fluoranthene	4.72	4.72	ug/L	U0.094	3.10	3.23	65.7	68.5	4	20	53-126
Benzo(k)fluoranthene	4.72	4.72	ug/L	U0.094	2.62	2.76	55.5	58.5	5	20	54-125
Benzo(a)pyrene	4.72	4.72	ug/L	U0.094	2.63	2.72	55.8	57.7	3	20	53-120
Indeno(1,2,3-cd)pyrene	4.72	4.72	ug/L	UMM0.094	1.97	2.02	* 41.8	* 42.8	2	20	48-130
Dibenzo(a,h)anthracene	4.72	4.72	ug/L	UMM0.094	1.86	1.92	* 39.4	* 40.7	3	20	44-131
Benzo(g,h,i)perylene	4.72	4.72	ug/L	UMM0.094	1.91	1.92	* 40.5	* 40.7	0	20	44-128
2-Methylnaphthalene-D10							* 94.4	89.8			43-92
Fluorene-D10							81.7	77.0			29-101
Pyrene-D10							90.8	86.1			53-166

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
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http://www.katahdinlab.com

Data File: \\target_server\gg\chem\gcms-n.i\N120823.b\N0421.D
Report Date: 29-Dec-2023 09:54

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-n.i\N120823.b\N0421.D
Lab Smp Id: WG345301-5 Client Smp ID: SY-OBMW12-110723MS
Inj Date : 08-DEC-2023 17:52
Operator : EP Inst ID: gcms-n.i
Smp Info : WG345301-5
Misc Info : WG346646,WG345301,WG346503-4,SQ6133-3
Comment :
Method : \\target_server\gg\chem\gcms-n.i\N120823.b\NSPSIM95.m
Meth Date : 11-Dec-2023 07:09 epelletier Quant Type: ISTD
Cal Date : 07-DEC-2023 14:42 Cal File: N0385.D
Als bottle: 13 QC Sample: MS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pahplus.sub
Target Version: 4.12
Processing Host: INSPIRON1

Concentration Formula: Amt * DF * Uf*(Vt/Vo*Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.060	Sample Volume (L)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

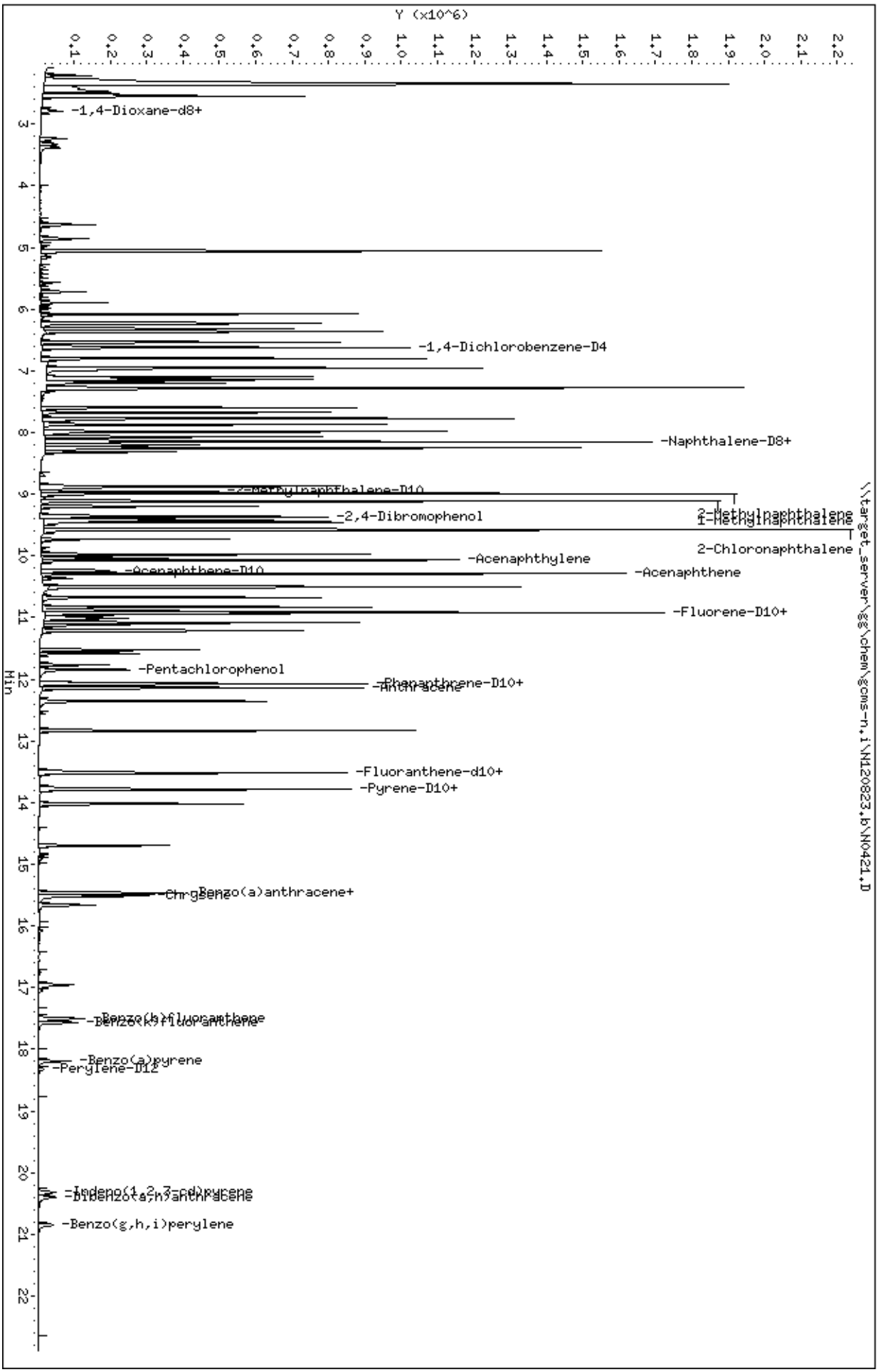
			QUANT SIG					CONCENTRATIONS		
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/ml)	FINAL (ug/L)	REVIEW CODE
$	1	1,4-Dioxane-d8	96	2.762	2.742	(0.269)	24568	0.60008	0.566(a)	
	2	1,4-Dioxane	88	2.794	2.784	(0.423)	53988	1.37093	1.29(Q)	
*	10	1,4-Dichlorobenzene-D4	152	6.604	6.604	(1.000)	53520	0.80000	(aQ)	
*	27	Naphthalene-D8	136	8.125	8.125	(1.000)	198135	0.80000	(a)	
	28	Naphthalene	128	8.147	8.148	(1.003)	1115038	4.11481	3.88	
$	33	2-Methylnaphthalene-D10	152	8.953	8.954	(1.102)	245401	1.88704	1.78(R)	
	34	2-Methylnaphthalene	142	8.996	8.996	(1.107)	726170	4.05436	3.82	
	35	1-Methylnaphthalene	142	9.112	9.113	(1.122)	696394	4.26564	4.02	
$	38	2,4-Dibromophenol	252	9.345	9.346	(0.911)	122355	3.92343	3.70	
	42	2-Chloronaphthalene	164	9.578	9.579	(0.934)	209157	4.00219	3.78	
	46	Acenaphthylene	152	10.071	10.082	(0.982)	933186	3.77357	3.56	
*	48	Acenaphthene-D10	164	10.253	10.254	(1.000)	88831	0.80000	(a)	
	49	Acenaphthene	153	10.286	10.286	(1.003)	593617	4.04203	3.81	
$	56	Fluorene-D10	174	10.886	10.887	(1.062)	189929	1.63380	1.54	
	57	Fluorene	166	10.918	10.919	(1.065)	637835	4.34636	4.10	
	65	Pentachlorophenol	266	11.848	11.849	(0.983)	142644	18.4967	17.4(AR)	
*	66	Phenanthrene-D10	188	12.051	12.052	(1.000)	109449	0.80000	(a)	
	67	Phenanthrene	178	12.073	12.073	(1.002)	716347	4.32847	4.08	
	68	Anthracene	178	12.137	12.137	(1.007)	680757	4.09542	3.86	
$	71	Fluoranthene-d10	212	13.501	13.502	(1.120)	144357	1.62268	1.53	

Data File: \\target_server\gg\chem\gcms-n.i\N120823.b\N0421.D
Report Date: 29-Dec-2023 09:54

								CONCENTRATIONS		
			QUANT SIG					ON-COLUMN	FINAL	
	Compounds		MASS	RT	EXP RT	REL RT	RESPONSE	(ug/ml)	(ug/L)	REVIEW CODE
	72	Fluoranthene	202	13.522	13.522	(1.122)	524858	4.08578	3.85	
$	73	Pyrene-D10	212	13.766	13.777	(0.889)	160316	1.81704	1.71	
	74	Pyrene	202	13.786	13.797	(0.891)	522584	4.48312	4.23	
	76	Benzo(a)anthracene	228	15.457	15.468	(0.999)	261424	4.00490	3.78	
*	78	Chrysene-D12	240	15.477	15.478	(1.000)	37708	0.80000	(a)	
	79	Chrysene	228	15.518	15.529	(1.003)	288574	3.68872	3.48	
	82	Benzo(b)fluoranthene	252	17.500	17.521	(0.955)	157248	3.28514	3.10	
	83	Benzo(k)fluoranthene	252	17.562	17.573	(0.958)	172029	2.77918	2.62(H)	
	84	Benzo(a)pyrene	252	18.190	18.211	(0.993)	130502	2.78688	2.63	
*	85	Perylene-D12	264	18.324	18.324	(1.000)	26243	0.80000	(a)	
	86	Indeno(1,2,3-cd)pyrene	276	20.322	20.343	(1.109)	70931	2.09038	1.97(R)	
	87	Dibenzo(a,h)anthracene	278	20.404	20.415	(1.114)	68787	1.96639	1.86(R)	
	88	Benzo(g,h,i)perylene	276	20.857	20.878	(1.138)	77609	2.02885	1.91(R)	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
A - Target compound detected but, quantitated amount
exceeded maximum amount.
Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.
H - Operator selected an alternate compound hit.


Data File: \\target_server\gg\chem\gcms-n,i\N120823,b\N0421.D
Date : 08-DEC-2023 17:52
Client ID: SY-OBMW12-110723MS
Sample Info: WG345301-5
Volume Injected (uL): 1.0
Column phase: Rxi-5VOCms
Instrument: gcms-n,i
Operator: EP
Column diameter: 0.25
\\target_server\gg\chem\gcms-n,i\N120823,b\N0421.D
Y (x10^6)
Min
-1,4-Dioxane-d8+
-1,4-Dichlorobenzene-D4
-Naphthalene-D8+
-2-Methylnaphthalene-D10
-2,4-Dibromophenol
2-Methylnaphthalene
1-Methylnaphthalene
2-Chloronaphthalene
-Acenaphthylene
-Acenaphthene-D10
-Acenaphthene
-Fluorene-D10+
-Pentachlorophenol
-Phenanthrene-D10+
-Anthracene
-Fluoranthene-d10+
-Pyrene-D10+
-Chrysene
-Benzo(a)anthracene+
-Benzo(b)fluoranthene
-Benzo(k)fluoranthene
-Benzo(a)pyrene
-Perylene-D12
-Indeno(1,2,3-cd)pyrene
-Dibenz(a,h)anthracene
-Benzo(g,h,i)perylene

Data File: \\target_server\gg\chem\gcms-n.i\N120823.b\N0422.D
Report Date: 29-Dec-2023 09:54

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-n.i\N120823.b\N0422.D
Lab Smp Id: WG345301-6 Client Smp ID: SY-OBMW12-110723MSD
Inj Date : 08-DEC-2023 18:24
Operator : EP Inst ID: gcms-n.i
Smp Info : WG345301-6
Misc Info : WG346646,WG345301,WG346503-4,SQ6133-3
Comment :
Method : \\target_server\gg\chem\gcms-n.i\N120823.b\NSPSIM95.m
Meth Date : 11-Dec-2023 07:09 epelletier Quant Type: ISTD
Cal Date : 07-DEC-2023 14:42 Cal File: N0385.D
Als bottle: 14 QC Sample: MSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pahplus.sub
Target Version: 4.12
Processing Host: INSPIRON1

Concentration Formula: Amt * DF * Uf*(Vt/Vo*Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.060	Sample Volume (L)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

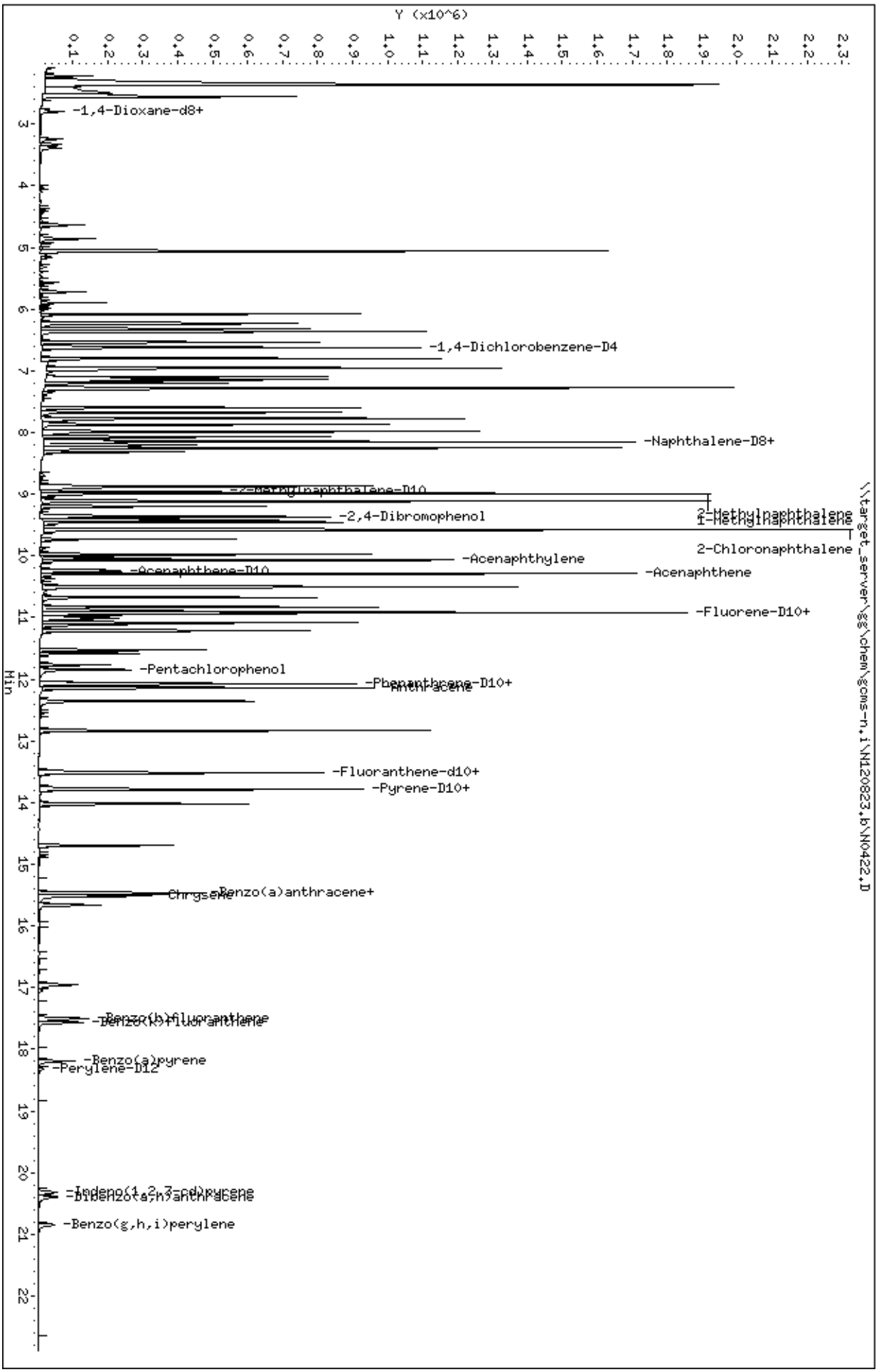
			QUANT SIG					CONCENTRATIONS		
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/ml)	FINAL (ug/L)	REVIEW CODE
$	1	1,4-Dioxane-d8	96	2.773	2.742	(0.270)	18193	0.40926	0.386(aR)	
	2	1,4-Dioxane	88	2.804	2.784	(0.425)	56424	1.31194	1.24(Q)	
*	10	1,4-Dichlorobenzene-D4	152	6.604	6.604	(1.000)	58450	0.80000	(aQ)	
*	27	Naphthalene-D8	136	8.125	8.125	(1.000)	213566	0.80000	(a)	
	28	Naphthalene	128	8.147	8.148	(1.003)	1137742	3.89523	3.67	
$	33	2-Methylnaphthalene-D10	152	8.953	8.954	(1.102)	251678	1.79547	1.69	
	34	2-Methylnaphthalene	142	8.996	8.996	(1.107)	747178	3.87023	3.65	
	35	1-Methylnaphthalene	142	9.112	9.113	(1.122)	707243	4.01909	3.79	
$	38	2,4-Dibromophenol	252	9.345	9.346	(0.911)	128580	3.79722	3.58	
	42	2-Chloronaphthalene	164	9.578	9.579	(0.934)	216955	3.82335	3.61	
	46	Acenaphthylene	152	10.071	10.082	(0.982)	982158	3.65775	3.45	
*	48	Acenaphthene-D10	164	10.253	10.254	(1.000)	96453	0.80000	(a)	
	49	Acenaphthene	153	10.286	10.286	(1.003)	617774	3.87411	3.65	
$	56	Fluorene-D10	174	10.886	10.887	(1.062)	194517	1.54104	1.45	
	57	Fluorene	166	10.918	10.919	(1.065)	658498	4.13258	3.90	
	65	Pentachlorophenol	266	11.848	11.849	(0.983)	138709	16.5913	15.6(AR)	
*	66	Phenanthrene-D10	188	12.051	12.052	(1.000)	118652	0.80000	(a)	
	67	Phenanthrene	178	12.073	12.073	(1.002)	740604	4.12795	3.89	
	68	Anthracene	178	12.137	12.137	(1.007)	711473	3.94822	3.72	
$	71	Fluoranthene-d10	212	13.501	13.502	(1.120)	151805	1.57405	1.48	

Data File: \\target_server\gg\chem\gcms-n.i\N120823.b\N0422.D
Report Date: 29-Dec-2023 09:54

		QUANT SIG					CONCENTRATIONS ON-COLUMN	FINAL	
Compounds		MASS	RT	EXP RT	REL RT	RESPONSE	(ug/ml)	(ug/L)	REVIEW CODE
	72 Fluoranthene	202	13.522	13.522	(1.122)	548143	3.93608	3.71	
$	73 Pyrene-D10	212	13.766	13.777	(0.889)	165852	1.72255	1.62	
	74 Pyrene	202	13.786	13.797	(0.891)	545950	4.29181	4.05	
	76 Benzo(a)anthracene	228	15.457	15.468	(0.999)	282301	3.96299	3.74	
*	78 Chrysene-D12	240	15.477	15.478	(1.000)	41150	0.80000	(a)	
	79 Chrysene	228	15.518	15.529	(1.003)	315448	3.69496	3.48	
	82 Benzo(b)fluoranthene	252	17.500	17.521	(0.956)	180173	3.42204	3.23	
	83 Benzo(k)fluoranthene	252	17.562	17.573	(0.959)	198939	2.92187	2.76(H)	
	84 Benzo(a)pyrene	252	18.190	18.211	(0.993)	148673	2.88642	2.72	
*	85 Perylene-D12	264	18.313	18.324	(1.000)	28866	0.80000	(a)	
	86 Indeno(1,2,3-cd)pyrene	276	20.322	20.343	(1.110)	79945	2.14194	2.02(R)	
	87 Dibenzo(a,h)anthracene	278	20.404	20.415	(1.114)	78383	2.03710	1.92(R)	
	88 Benzo(g,h,i)perylene	276	20.857	20.878	(1.139)	85524	2.03260	1.92(R)	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
A - Target compound detected but, quantitated amount
exceeded maximum amount.
Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.
H - Operator selected an alternate compound hit.


Data File: \\target_server\gg\chem\gcms-n,i\N120823,b\N0422.D
Date : 08-DEC-2023 18:24
Client ID: SY-OBMW12-110723MSD
Sample Info: WG345301-6
Volume Injected (uL): 1.0
Column phase: Rxi-5VOCms
Instrument: gcms-n,i
Operator: EP
Column diameter: 0.25
\\target_server\gg\chem\gcms-n,i\N120823,b\N0422.D
Y (x10^6)
Min
-1,4-Dioxane-d8+
-1,4-Dichlorobenzene-D4
-Naphthalene-D8+
-2,4-Dibromophenol
2-Methylnaphthalene
1-Methylnaphthalene
2-Chloronaphthalene
-Acenaphthylene
-Acenaphthene-D10
-Acenaphthene
-Fluorene-D10+
-Pentachlorophenol
-Phenanthrene-D10+
Anthracene
-Fluoranthene-d10+
-Pyrene-D10+
Chrysene
-Benzo(a)anthracene+
-Benzo(b)fluoranthene
-Benzo(k)fluoranthene
-Benzo(a)pyrene
-Perylene-D12
-Indeno(1,2,3-cd)pyrene
-Dibenz(a,h)anthracene
-Benzo(g,h,i)perylene

Katahdin
ANALYTICAL SERVICES

MS/MSD Recovery Report

MS ID: WG345531-5
MSD ID: WG345531-6
Sample ID: SQ6133-8
Client ID: SY-BRMW2-80.5-95.5-110723
SDG: SQ6133
MS File ID: N0437.D

Extract Date: 16-NOV-23
Extracted By: AN/CMW
Extraction Method: SW846 3510C
Lab Prep Batch: WG345531
Report Date: 03-JAN-24
MSD File ID: N0438.D

Analysis Date: 11-DEC-23
Analyst: EP
Analysis Method: SW846 8270D SIM
Matrix: AQ
% Solids: N/A
Sample File ID: N0436.D

Compound	MS Spike	MSD Spike	Conc Units	Samp Conc	MS Conc	MSD Conc	MS Rec (%)	MSD Rec (%)	RPD (%)	RPD Limit	Limits
Naphthalene	4.72	4.67	ug/L	U0.094	4.17	3.40	88.4	72.8	20	20	43-114
2-Methylnaphthalene	4.72	4.67	ug/L	U0.094	4.13	3.41	87.6	73.0	19	20	39-114
Acenaphthylene	4.72	4.67	ug/L	U0.094	4.11	3.32	87.1	71.0	* 21	20	35-121
Acenaphthene	4.72	4.67	ug/L	U0.094	4.34	3.50	92.0	74.9	* 21	20	48-114
Fluorene	4.72	4.67	ug/L	U0.094	4.47	3.83	94.8	82.0	15	20	50-118
Phenanthrene	4.72	4.67	ug/L	U0.094	4.73	4.05	100.	86.7	15	20	53-115
Anthracene	4.72	4.67	ug/L	U0.094	4.85	3.85	103.	82.4	* 23	20	53-119
Fluoranthene	4.72	4.67	ug/L	U0.094	4.56	4.03	96.7	86.2	12	20	58-120
Pyrene	4.72	4.67	ug/L	U0.094	4.12	3.87	87.3	82.8	6	20	53-121
Benzo(a)anthracene	4.72	4.67	ug/L	U0.094	4.35	3.51	92.2	75.1	* 21	20	59-120
Chrysene	4.72	4.67	ug/L	U0.094	3.92	3.07	83.1	65.7	* 24	20	57-120
Benzo(b)Fluoranthene	4.72	4.67	ug/L	U0.094	3.65	2.76	77.4	59.1	* 28	20	53-126
Benzo(k)fluoranthene	4.72	4.67	ug/L	UM0.094	3.18	2.31	67.4	* 49.4	* 32	20	54-125
Benzo(a)pyrene	4.72	4.67	ug/L	UM0.094	3.17	2.36	67.2	* 50.5	* 29	20	53-120
Indeno(1,2,3-cd)pyrene	4.72	4.67	ug/L	UM0.094	2.79	1.89	59.1	* 40.4	* 38	20	48-130
Dibenzo(a,h)anthracene	4.72	4.67	ug/L	UM0.094	2.67	1.80	56.6	* 38.5	* 39	20	44-131
Benzo(g,h,i)perylene	4.72	4.67	ug/L	UM0.094	2.75	1.80	58.3	* 38.5	* 42	20	44-128
2-Methylnaphthalene-D10							* 96.6	78.2			43-92
Fluorene-D10							92.5	78.7			29-101
Pyrene-D10							89.0	84.2			53-166

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029
http://www.katahdinlab.com

Data File: \\target_server\gg\chem\gcms-n.i\N121123.b\N0437.D
Report Date: 29-Dec-2023 09:56

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-n.i\N121123.b\N0437.D
Lab Smp Id: WG345531-5 Client Smp ID: Y-BRMW2-80.5-95.5-1
Inj Date : 11-DEC-2023 14:17
Operator : EP Inst ID: gcms-n.i
Smp Info : WG345531-5
Misc Info : WG346778,WG345301,WG346503-4,SQ6133-8
Comment :
Method : \\target_server\gg\chem\gcms-n.i\N121123.b\NSPSIM95.m
Meth Date : 12-Dec-2023 08:48 epelletier Quant Type: ISTD
Cal Date : 07-DEC-2023 14:42 Cal File: N0385.D
Als bottle: 6 QC Sample: MS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pahplus.sub
Target Version: 4.12
Processing Host: INSPIRON1

Concentration Formula: Amt * DF * Uf*(Vt/Vo*Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.060	Sample Volume (L)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

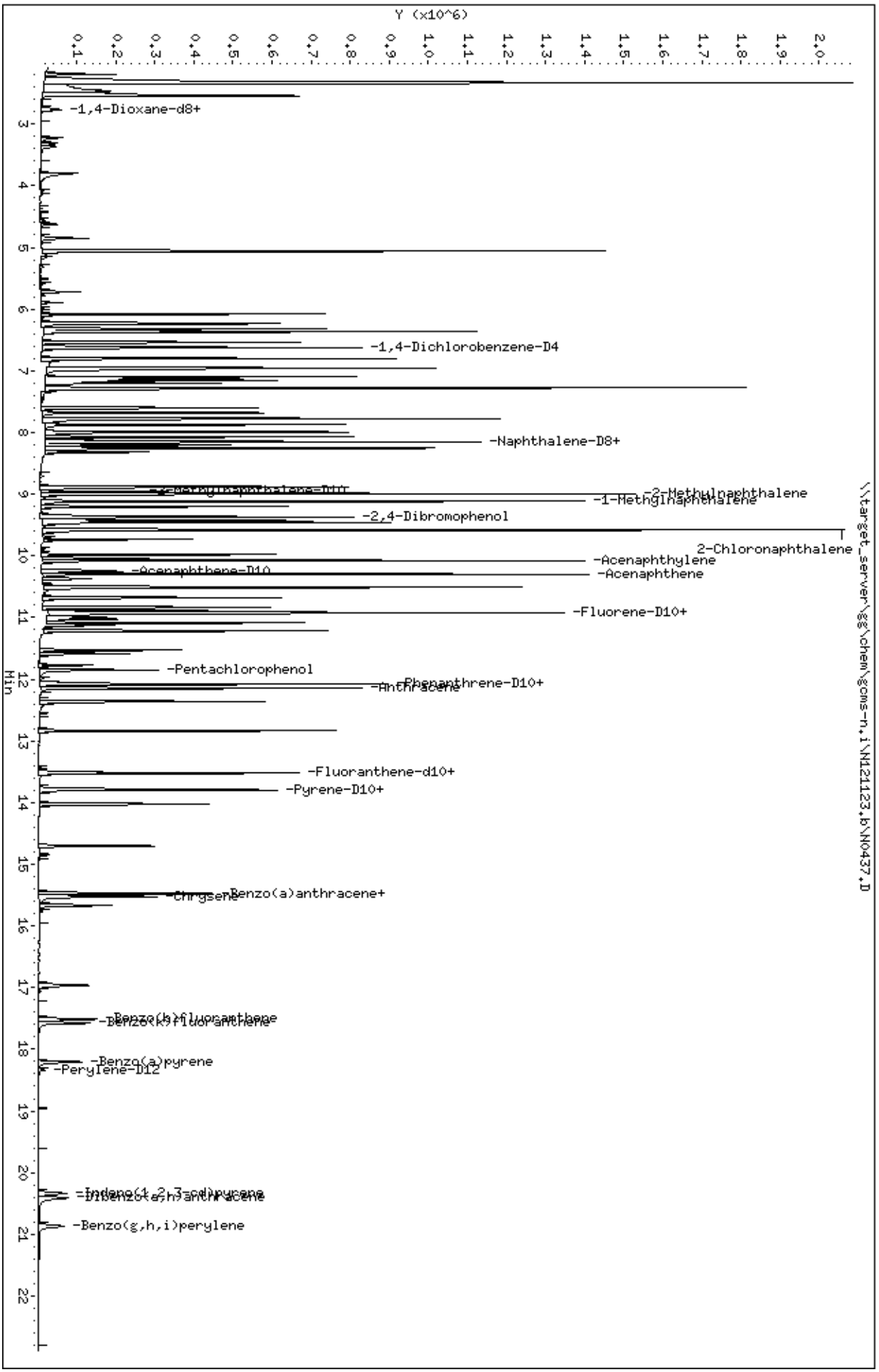
			QUANT SIG					CONCENTRATIONS		
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/ml)	FINAL (ug/L)	REVIEW CODE
$	1	1,4-Dioxane-d8	96	2.752	2.742	(0.268)	39929	1.29826	1.22(Q)	
	2	1,4-Dioxane	88	2.783	2.784	(0.422)	49447	1.56186	1.47(Q)	
*	10	1,4-Dichlorobenzene-D4	152	6.604	6.604	(1.000)	43026	0.80000	(aQ)	
*	27	Naphthalene-D8	136	8.125	8.125	(1.000)	156839	0.80000	(a)	
	28	Naphthalene	128	8.147	8.148	(1.003)	948667	4.42264	4.17	
$	33	2-Methylnaphthalene-D10	152	8.964	8.954	(1.103)	198836	1.93155	1.82(R)	
	34	2-Methylnaphthalene	142	8.996	8.996	(1.107)	620926	4.37957	4.13	
	35	1-Methylnaphthalene	142	9.112	9.113	(1.122)	584903	4.52606	4.27	
$	38	2,4-Dibromophenol	252	9.356	9.346	(0.912)	105949	4.52242	4.27	
	42	2-Chloronaphthalene	164	9.589	9.579	(0.935)	180508	4.59782	4.34	
	46	Acenaphthylene	152	10.082	10.082	(0.983)	809781	4.35895	4.11	
*	48	Acenaphthene-D10	164	10.253	10.254	(1.000)	66732	0.80000	(a)	
	49	Acenaphthene	153	10.296	10.286	(1.004)	508104	4.60550	4.34	
$	56	Fluorene-D10	174	10.886	10.887	(1.062)	161622	1.85071	1.74	
	57	Fluorene	166	10.918	10.919	(1.065)	522299	4.73770	4.47	
	65	Pentachlorophenol	266	11.848	11.849	(0.983)	133378	23.6955	22.4(AR)	
*	66	Phenanthrene-D10	188	12.051	12.052	(1.000)	79886	0.80000	(a)	
	67	Phenanthrene	178	12.083	12.073	(1.003)	606129	5.01785	4.73	
	68	Anthracene	178	12.147	12.137	(1.008)	624368	5.14622	4.85	
$	71	Fluoranthene-d10	212	13.501	13.502	(1.120)	125879	1.93861	1.83	

Data File: \\target_server\gg\chem\gcms-n.i\N121123.b\N0437.D
Report Date: 29-Dec-2023 09:56

							CONCENTRATIONS		
		QUANT SIG					ON-COLUMN	FINAL	
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/ml)	(ug/L)	REVIEW CODE
	72 Fluoranthene	202	13.522	13.522	(1.122)	453103	4.83249	4.56	
$	73 Pyrene-D10	212	13.776	13.777	(0.889)	142633	1.78025	1.68	
	74 Pyrene	202	13.797	13.797	(0.891)	462891	4.37298	4.12	
	76 Benzo(a)anthracene	228	15.467	15.468	(0.999)	273274	4.61019	4.35	
*	78 Chrysene-D12	240	15.488	15.478	(1.000)	34242	0.80000	(a)	
	79 Chrysene	228	15.528	15.529	(1.003)	294867	4.15067	3.92	
	82 Benzo(b)fluoranthene	252	17.510	17.521	(0.955)	188863	3.86838	3.65	
	83 Benzo(k)fluoranthene	252	17.572	17.573	(0.958)	213044	3.37441	3.18(H)	
	84 Benzo(a)pyrene	252	18.210	18.211	(0.993)	160605	3.36259	3.17	
*	85 Perylene-D12	264	18.334	18.324	(1.000)	26767	0.80000	(a)	
	86 Indeno(1,2,3-cd)pyrene	276	20.332	20.343	(1.109)	102321	2.95643	2.79	
	87 Dibenzo(a,h)anthracene	278	20.414	20.415	(1.113)	101141	2.83468	2.67	
	88 Benzo(g,h,i)perylene	276	20.868	20.878	(1.138)	113621	2.91213	2.75	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
A - Target compound detected but, quantitated amount
exceeded maximum amount.
Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.
H - Operator selected an alternate compound hit.


Data File: \\target_server\gg\chem\gcms-n,i\N121123,b\N0437.D
Date : 11-DEC-2023 14:17
Client ID: Y-BRM2-80,5-95,5-1
Sample Info: WG345531-5
Volume Injected (uL): 1.0
Column phase: Rxi-5ViOms
Instrument: gcms-n,i
Operator: EP
Column diameter: 0.25
\\target_server\gg\chem\gcms-n,i\N121123,b\N0437.D
Y (x10^6)
Min
-1,4-Dioxane-d8+
-1,4-Dichlorobenzene-D4
-Naphthalene-D8+
-2-Methylnaphthalene
-1-Methylnaphthalene
-2,4-Dibromophenol
2-Chloronaphthalene
-Acenaphthylene
-Acenaphthene
-Fluorene-D10+
-Pentachlorophenol
-Phenanthrene-D10+
-Fluoranthene-d10+
-Pyrene-D10+
-Benzo(a)anthracene+
-Benzo(b)fluoranthene
-Benzo(a)pyrene
-Perylene-D12
-Benzo(g,h,i)perylene

Data File: \\target_server\gg\chem\gcms-n.i\N121123.b\N0438.D
Report Date: 29-Dec-2023 09:56

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-n.i\N121123.b\N0438.D
Lab Smp Id: WG345531-6 Client Smp ID: Y-BRMW2-80.5-95.5-1
Inj Date : 11-DEC-2023 14:47
Operator : EP Inst ID: gcms-n.i
Smp Info : WG345531-6
Misc Info : WG346778,WG345301,WG346503-4,SQ6133-8
Comment :
Method : \\target_server\gg\chem\gcms-n.i\N121123.b\NSPSIM95.m
Meth Date : 12-Dec-2023 08:48 epelletier Quant Type: ISTD
Cal Date : 07-DEC-2023 14:42 Cal File: N0385.D
Als bottle: 7 QC Sample: MSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pahplus.sub
Target Version: 4.12
Processing Host: INSPIRON1

Concentration Formula: Amt * DF * Uf*(Vt/Vo*Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.070	Sample Volume (L)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

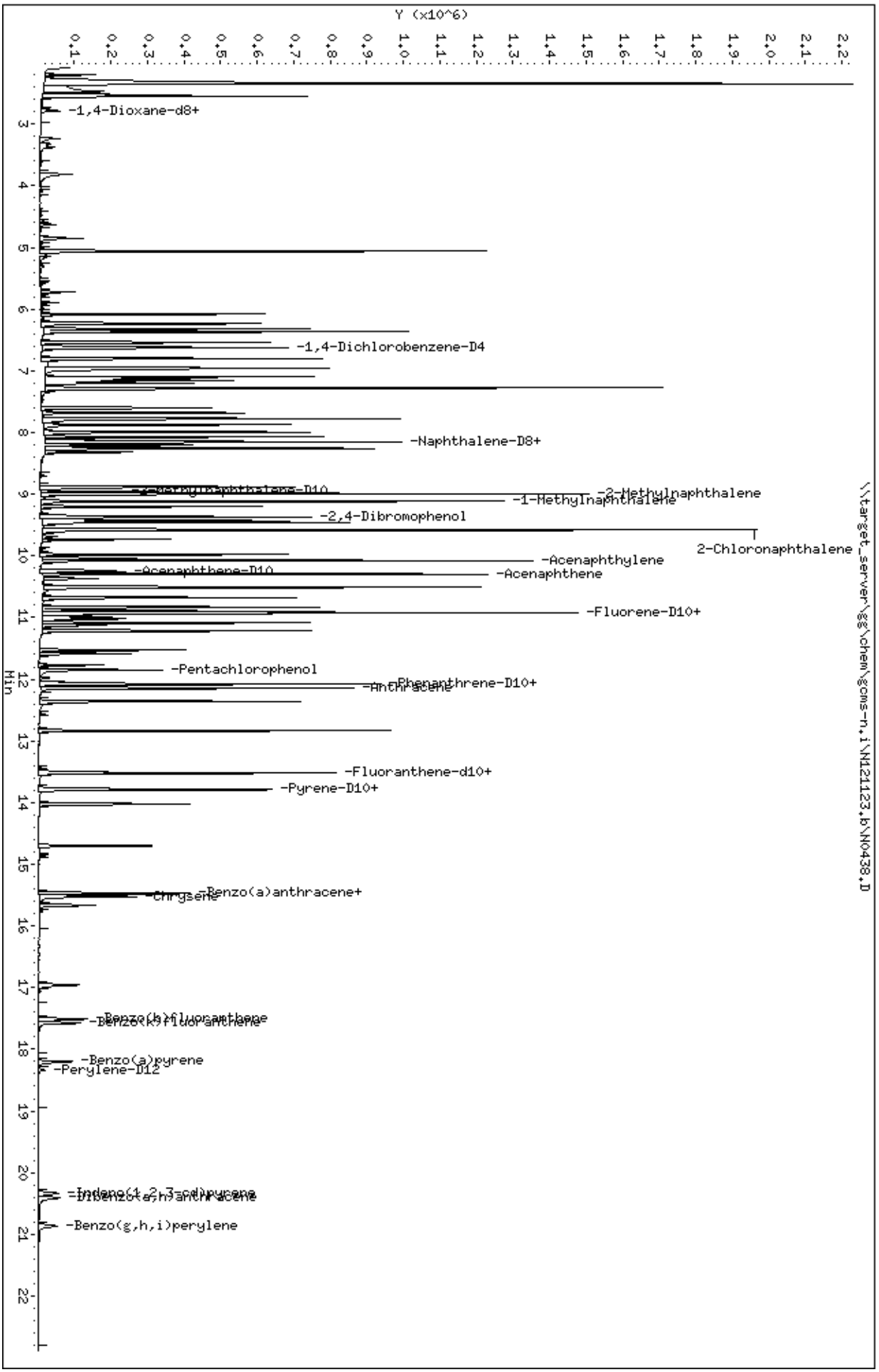
			QUANT SIG					CONCENTRATIONS		
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/ml)	FINAL (ug/L)	REVIEW CODE
$	1	1,4-Dioxane-d8	96	2.762	2.742	(0.269)	24823	0.66550	0.622(a)	
	2	1,4-Dioxane	88	2.794	2.784	(0.422)	44808	1.20835	1.13(QR)	
*	10	1,4-Dichlorobenzene-D4	152	6.614	6.604	(1.000)	50396	0.80000	(aQ)	
*	27	Naphthalene-D8	136	8.125	8.125	(1.000)	182385	0.80000	(a)	
	28	Naphthalene	128	8.147	8.148	(1.003)	906541	3.63429	3.40	
$	33	2-Methylnaphthalene-D10	152	8.964	8.954	(1.103)	187193	1.56375	1.46	
	34	2-Methylnaphthalene	142	8.996	8.996	(1.107)	601616	3.64901	3.41	
	35	1-Methylnaphthalene	142	9.112	9.113	(1.122)	553550	3.68348	3.44	
$	38	2,4-Dibromophenol	252	9.356	9.346	(0.912)	97133	3.41870	3.20	
	42	2-Chloronaphthalene	164	9.589	9.579	(0.935)	176468	3.70630	3.46	
	46	Acenaphthylene	152	10.082	10.082	(0.983)	800206	3.55170	3.32	
*	48	Acenaphthene-D10	164	10.253	10.254	(1.000)	80931	0.80000	(a)	
	49	Acenaphthene	153	10.296	10.286	(1.004)	501648	3.74923	3.50	
$	56	Fluorene-D10	174	10.886	10.887	(1.062)	166759	1.57451	1.47	
	57	Fluorene	166	10.918	10.919	(1.065)	548156	4.09988	3.83	
	65	Pentachlorophenol	266	11.848	11.849	(0.983)	144289	20.0473	18.7(AR)	
*	66	Phenanthrene-D10	188	12.051	12.052	(1.000)	102148	0.80000	(a)	
	67	Phenanthrene	178	12.083	12.073	(1.003)	670112	4.33851	4.05	
	68	Anthracene	178	12.147	12.137	(1.008)	639223	4.12041	3.85	
$	71	Fluoranthene-d10	212	13.501	13.502	(1.120)	142481	1.71607	1.60	

Data File: \\target_server\gg\chem\gcms-n.i\N121123.b\N0438.D
Report Date: 29-Dec-2023 09:56

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	CONCENTRATIONS FINAL (ug/L)	REVIEW CODE
	72 Fluoranthene	202	13.521	13.522	(1.122)	517153	4.31354	4.03	
$	73 Pyrene-D10	212	13.766	13.777	(0.889)	158854	1.68304	1.57	
	74 Pyrene	202	13.796	13.797	(0.891)	516084	4.13859	3.87	
	76 Benzo(a)anthracene	228	15.467	15.468	(0.999)	262445	3.75831	3.51	
*	78 Chrysene-D12	240	15.488	15.478	(1.000)	40339	0.80000	(a)	
	79 Chrysene	228	15.528	15.529	(1.003)	274735	3.28277	3.07	
	82 Benzo(b)fluoranthene	252	17.510	17.521	(0.955)	164332	2.95115	2.76	
	83 Benzo(k)fluoranthene	252	17.572	17.573	(0.958)	177832	2.46959	2.31(RH)	
	84 Benzo(a)pyrene	252	18.210	18.211	(0.993)	137438	2.52295	2.36(R)	
*	85 Perylene-D12	264	18.334	18.324	(1.000)	30529	0.80000	(a)	
	86 Indeno(1,2,3-cd)pyrene	276	20.332	20.343	(1.109)	79887	2.02379	1.89(R)	
	87 Dibenzo(a,h)anthracene	278	20.414	20.415	(1.113)	78406	1.92670	1.80(R)	
	88 Benzo(g,h,i)perylene	276	20.867	20.878	(1.138)	85944	1.93132	1.80(R)	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
A - Target compound detected but, quantitated amount
exceeded maximum amount.
Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.
H - Operator selected an alternate compound hit.


Data File: \\target_server\gg\chem\gcms-n,i\N121123,b\N0438.D
Date : 11-DEC-2023 14:47
Client ID: Y-BRM2-80,5-95,5-1
Sample Info: WG345531-6
Volume Injected (uL): 1.0
Column phase: Rxi-5VOCms
Instrument: gcms-n,i
Operator: EP
Column diameter: 0.25
\\target_server\gg\chem\gcms-n,i\N121123,b\N0438.D
Y (x10^6)
Min
-1,4-Dioxane-d8+
-1,4-Dichlorobenzene-D4
-Naphthalene-D8+
-2-Methylnaphthalene
-1-MethylNaphthalene
-2,4-Dibromophenol
2-Chloronaphthalene
-Acenaphthylene
-Acenaphthene
-Fluorene-D10+
-Pentachlorophenol
-Phenanthrene-D10+
-Fluoranthene-d10+
-Pyrene-D10+
-Chrysene
-Benzo(a)anthracene+
-Benzo(b)fluoranthene
-Benzo(k)fluoranthene
-Benzo(a)pyrene
-Perylene-D12
-Indeno(1,2,3-cd)pyrene
-Dibenzo(a,h)anthracene
-Benzo(g,h,i)perylene

Logbooks and Supporting Documents

SIM
SEP

KATAHDIN ANALYTICAL SERVICES, LLC.
ORGANIC EXTRACTIONS LOG - AQUEOUS SEMI-VOLATILES

Extraction Method: (check one)	SW846 3510 (SEP) X	SW846 3520 (CLLE)		
Analytical Method:(check one)	SW846 8270	SW846 8270 SIM X	Other:	
Surrogate ID: SV3176	Surrogate ID: SV3183	Spike ID: SV3182	Spike ID: ———	
Methylene Chloride Lot #: EH3362-US	pH Paper Lot # 63060b4	KI Starch Paper ID: 03/06/2023	If positive, note in comments and contact the PM, the client may need to resample.	
pH (1st Extraction) ≤2	H_2SO_4 Lot # RE1036	pH (2nd Extraction) ≥11	NaOH Lot # UH1824	
$NaSO_4$ Lot # RE1042	Filter Paper Lot #: CR0206	Boiling Stones ID: ———	Vial Lot #: CR0177	
Nitrogen Bath Temperature: 40C			Client ID vs KAS ID Verified: ✓	
Prep Start Time: 10:00	Prep End Time: 10:30	CLLE Start Time: ———	CLLE End Date & Time: ———	

Date Extracted	Ext. Init.	Sample ID	Initial Vol. mL	Surr. Vol.	Spike Vol.	Fraction SV	Fraction SIM	Final Vol. mL	Date Conc.	Tray Location	Initials	Comments
11/13/23	SH AC NG	WG345301-1	1000	1.0	N/A		✓	1.0	11/14/23	~~A1~~ C4	NG	MB
		-2	1000		1.0					~~A2~~ C5		LCS
		-3	1050							~~3~~ C6		MS SQ6124-1B
		-4	1040							~~4~~ C7		MSD
		-5	1060							5 C8		MS SQ6133-3
		-6	1060							~~6~~ C9		MSD
		-7	1000							C10		LCSD

EX-007 – Revision 7– 09/22/2020

QAEX501 - 000802

0000150

Date Extracted	Ext. Init.	Sample ID	Initial Vol. mL	Surr. Vol.	Spike Vol.	Fraction SV	Fraction SIM	Final Vol. mL	Date Conc.	Tray Location	Initials	Comments
11/13/23	SH AC NG	SQ6124-1	1030	1.0	N/A		✓	1.0	11/14/23	A8 D1	NG	
		-2	1060							~~B~~ D2		
		-3	1030							~~C~~ D3		
		-4	1040							~~B #1~~ D4		
		-5	1000							~~B #2~~ D5		
		-6	1070							~~B #3~~ D6		
		-7										no -7 ☆SH 11/13/23
		-8	1060							~~B #4~~ D7		
		-9	1060							~~B5~~ D8		
		SQ6133-1	1070							~~B6~~ D9		
		-2	1060							~~7~~ D10		
		-3	1060							~~8~~ E1		
		-4	1070							~~9~~ E2		
		-5	1050							~~10~~ E3		
		-6	1070							C11 E4		
		-7	1060							~~2~~ E5		
		-8	1060							~~3~~ E6		
		-9	1050							~~4~~ E7		
		-10	1070				✓			C12 E8		

Reviewed By_____ Date_____

SIS
SEP

KATAHDIN ANALYTICAL SERVICES, LLC.
ORGANIC EXTRACTIONS LOG - AQUEOUS SEMI-VOLATILES

Extraction Method: (check one)	SW846 3510 (SEP) ✓	SW846 3520 (CLLE)	
Analytical Method:(check one)	SW846 8270	SW846 8270 SIM ✓	Other:
Surrogate ID: SV3183	Surrogate ID: —	Spike ID: SV3178 SVOA	Spike ID: SV3182 SIM
Methylene Chloride Lot #: EH362-US	pH Paper Lot # 02100005	KI Starch Paper ID: 03/06/2023	If positive, note in comments and contact the PM, the client may need to resample.
pH (1st Extraction) ≤ 2	H_2SO_4 Lot # RE1036	pH (2nd Extraction) 11 2	NaOH Lot # UN1824
$NaSO_4$ Lot # RE1044	Filter Paper Lot #: CX0206	Boiling Stones ID: —	Vial Lot #: CX0173
Nitrogen Bath Temperature: 40°			Client ID vs KAS ID Verified: ✓
Prep Start Time: 9:30	Prep End Time: 10:15	CLLE Start Time: —	CLLE End Date & Time: —

Date Extracted	Ext. Init.	Sample ID	Initial Vol. mL	Surr. Vol.	Spike Vol.	Fraction SV	Fraction SIM	Final Vol. mL	Date Conc.	SV182 Tray Location	Initials	R627302 Comments R627304
11/16/23	AN (MW)	~~WG345532-1~~ WG345531-1	1000	1.0mL	NR	X	X	1.0	11/17/23	A3	DG	
		-2	1000		1.0mL					A4		LCS SIM
		-3	1070							A5		MS SQ6260-2
		-4	1010							A6		MSD SQ6260-2
		-5	1060							A7		MS SQ6133-8
		-6	1070							A8		MSD SQ6133-8
		SQ6238-1	1070		NR					A9		
		-2	1060							A10		
		-3	1060							B1		
		-4	1070							B2		
		-5	1060							B3		
		-6	1060							B4		

EX-007 – Revision 7– 09/22/2020

QAEX501_000003 0000160

Date Extracted	Ext. Init.	Sample ID	Initial Vol. mL	Surr. Vol.	Spike Vol.	Fraction SV	Fraction SIM	Final Vol. mL	Date Conc.	Tray, Location	Initials	Comments
11/16/23	AN (MW)	-7	1060	1.0mL	NR		X	1.0	11/17/23	B5	DG	
		-8	1060							B6		
		-9	1050							B7		
		-10	1050							B8		
		-11	1050							B9		
		SQ6259-1	1060							B10		
		-2	1060							C1		
		-3	1060							C2		
		SQ6260-2	970			X				C3		MS/MSD
		-3	950							C4		
		-4	950							C5		
		-5	920							C6		
		WG345532-2	1000		1.0mL	X				C7		SVOA LCS
		-3	970							C8		MS SQ6260-2
		-4	1070							C9		MSD

SH
MG 11/17/23

Reviewed By_____ Date_____

DATE OF DFTPP INJECTION: 07Dec23

KATAHDIN ANALYTICAL SERVICES

GC/MS SVOA INJ LOG INSTRUMENT: 5975B - N

WORKGROUP	SAMPLE	DATAFILE	DF	VIAL #	METHOD	UL INJ	CHEMIST	COMMENTS
W6346503-1	50ng DFTPP	ND537	1	1	DFTPPSIM	2.0	EP	ok
-4	SSTD 20 NB07	N0380		2	NSPSIM95			✓
-3	05	81		3				✓
-2	0.2	82		4				✓
-5	7.0	83		5				✓
-6	10	84		6				✓
-7	15	85		7				✓
-8	IND	86		8				ok
								EP 08Dec23

STANDARD	CODE	MeCl2 Lot #
DFTPP	S4038	PH486-VS
CAL. STD.	S4039 S4040	
ICV. STD.	S4041	
IS MIX	S4033	

REVIEWED AND APPROVED BY: _____

DATE: _____

KATAHDIN ANALYTICAL SERVICES

GC/MS SVOA INJ LOG INSTRUMENT: 5975B - N

DATE OF DFTPP INJECTION: 07Dec23B

WORKGROUP	SAMPLE	DATAFILE	DF	VIAL #	METHOD	UL INJ	CHEMIST	COMMENTS
W6346504-1	50 ng DFTPP	ND538	1	1	DFTPPSIM	2.0	EP	OK
1 -2	SSTD 2.0 N1207B	N0387	1	2	NSPSIM95	1	1	OK
	W6345301-1	88	1	9	1	1	1	OK
	1 -2	89	1	10	1	1	1	OK
	1 -3 (*)	90	1	11	1	1	1	OK
	SQ6163-8DL	91	5	12	1	1	1	50/250 IS6L
	1 -9RA	92	1	13	1	1	1	✓
	1 -10RA	93	1	14	1	1	1	Surr 5↓
	1 -12RA	94	1	15	1	1	1	✓
	1 -13DL	95	5	16	1	1	1	50/250 IS6L Surr 3↓
	1 -14	96	1	17	1	1	1	✓
	1 -15	97	1	18	1	1	1	IS6L RRF1.10
	SQ6124-1	98	1	19	1	1	1	✓
	W6345301-3	99	1	20	1	1	1	9↓ OK
	1 -4	N0400	1	21	1	1	1	7↓ OK
	SQ6124-2	01	1	22	1	1	1	Surr 5↓
	1 -3	02	1	23	1	1	1	IS6L Surr 2.5.6L (RR)
	1 -4	03	1	24	1	1	1	IS6L Surr 2.5.6L (RR)
	1 -5	04	1	25	1	1	1	IS6L Surr 2↓ (RR)
	1 -6	05	1	26	1	1	1	IS6L (RR)
	SQ6163-16	06	1	27	1	1	1	IS 3-6L (RR)
W6346504-3	~~W6346504~~ SSTD2.0 N1207B	07	1	2	1	1	1	IS 3-6L 2.5Di. using all
1 -4	SSTD 2.0 (*) ~~N1207B~~	08	1	1	1	1	1	IS3-6L
1 -5	1	09	1	1	1	1	1	IS4-6L
								EP 08Dec23

STANDARD	CODE	MeCl2 Lot #
DFTPP	54038	PH486-US
CAL. STD.	54039 54040	
ICV. STD.	—	
IS MIX	54033	

(*) EP 08Dec23

REVIEWED AND APPROVED BY:

DATE:

KATAHDIN ANALYTICAL SERVICES
GC/MS SVOA INJ LOG INSTRUMENT: 5975B - N

DATE OF DFTPP INJECTION: 08Dec23

WORKGROUP	SAMPLE	DATAFILE	DF	VIAL #	METHOD	UL INJ	CHEMIST	COMMENTS
W6346646-1	50ng DFTPP	ND539	1	1	DFTPSIM	2.0	EP	ok
1 -2	SSTD 2.0 N1208	ND410	1	2	NSPSIM95	1	1	ok
	SQ6124-3RA	11	1	3	1	1	1	Surr 5,6↓
	-4RA	12	1	4	1	1	1	Surr 2,5,6↓
	-5RA	13	1	5	1	1	1	✓
	-6RA	14	1	6	1	1	1	✓
	-8	15	1	7	1	1	1	✓
	-9	16	1	8	1	1	1	✓
	SQ6163-15DL	17	10	9	1	1	1	50/500 ✓
	SQ6133-1	18	1	10	1	1	1	✓
	-2	19	1	11	1	1	1	✓
	-3	20	1	12	1	1	1	✓
	W6345301-5	21	1	13	1	1	1	3↓ Surr 2↑ ok
	1 -6	22	1	14	1	1	1	3↓ ok
	SQ6133-4	23	1	15	1	1	1	✓
	-5	24	1	16	1	1	1	✓
	-6	25	1	17	1	1	1	✓
	-7	26	1	18	1	1	1	✓
	-9	27	1	19	1	1	1	✓
	-10	28	1	20	1	1	1	✓
	SQ6163-16RA	29	1	21	1	1	1	IS4-6↓
W6346646-3	SSTD 2.0 N1208	30	1	2	1	1	1	IS5,6↓ using all
1 -4	1	31	1	1	1	1	1	IS4-6↓
1 -5	1	32	1	1	1	1	1	IS4-6↓
								EP 11Dec23

STANDARD	CODE	MeCl2 Lot #
DFTPP	S4038	PH486-45
CAL. STD.	S4039 S4040	
ICV. STD.	—	
IS MIX	S4039	

REVIEWED AND APPROVED BY: _____
DATE: _____

KATAHDIN ANALYTICAL SERVICES
GC/MS SVOA INJ LOG INSTRUMENT: 5975B - N

DATE OF DFTPP INJECTION: 11Dec23

WORKGROUP	SAMPLE	DATAFILE	DF	VIAL #	METHOD	UL INJ	CHEMIST	COMMENTS
W6346778-1	50ng DFTPP	ND540	1	1	DFTPPSIM	2.0	(R) 2.0-EP	Ok
1 -2	SSTD 2.0 N1211	N0433	|	2	NSPSIM95	|	|	Ok
	W6345539-1	34	|	3	|	|	|	Ok
	1 -2	35	|	4	|	|	|	Surr2↑ Ok
	SQ6133-8	36	|	5	|	|	|	✓
	W6345531-5	37	|	6	|	|	|	Surr2↑ Ok
	1 -6	38	|	7	|	|	|	SL ok
	SQ6238-1	39	|	8	|	|	|	✓
|	-2	40	|	9	|	|	|	✓
|	-3	41	|	10	|	|	|	Surr2.6↓
|	-4	42	|	11	|	|	|	✓
|	-5	43	|	12	|	|	|	✓
|	-6	44	|	13	|	|	|	✓
|	-7	45	|	14	|	|	|	✓
|	-8	46	|	15	|	|	|	✓
|	-9	47	|	16	|	|	|	IS5.6↓ (RL)
|	-10	48	|	17	|	|	|	Surr6↓
|	-11	49	|	18	|	|	|	✓
	SQ6259-1	50	|	19	|	|	|	IS5.6↓ (RL)
	1 -2	51	|	20	|	|	|	IS5.6↓ (RL)
	1 -3	52	|	21	|	|	|	IS5.6↓ (RL)
W6346778-3	SSTD 2.0 N1211	53	|	2	|	|	|	IS5.6↓ using all
1 -4	|	54	|	|	|	|	|	IS6↓
1 -5	|	55	|	|	|	|	|	IS6↓ |
								EP 12Dec23

STANDARD	CODE	MeCl2 Lot #
DFTPP	54038	PH486-US
CAL. STD.	54039 54040	
ICV. STD.	—	
IS MIX	54039	

(R) EP 11Dec23

REVIEWED AND APPROVED BY: _____

DATE: _____

KATAHDIN ANALYTICAL SERVICES

STOCK STANDARDS RECEIVED

Extractions Laboratory

STD0089
90
91

RESTEK
30614 Danger 1 mL
Lot# A0189253
Expire: 09/2025 Store: 0°C or colder
1,4-dioxane-d8 Standard
2000 µg/mL each in P&T Methanol
Full label information for the chemical is provided on the outside package

AP 10/2/22

STD0092

RESTEK
32200 Danger 1 mL
Lot# A0190445
Expire: 02/2027 Store: 10°C or colder
2,4'-DDT Standard
1000 µg/mL each in Methanol
Full label information for the chemical is provided on the outside pack

STD0093
94
95
96

RESTEK
32000 Danger 1 mL
Lot# A0188903
Expire: 11/2028 Store: 10°C or colder
Pesticide Surrogate Mix
Contains PCBs - sonicate prior to use.
200 µg/mL each in Acetone
Full label information for the chemical is provided on the outside package

STD0097

RESTEK
32098 Danger 1 mL
Lot# A0190447
Expire: 02/2027 Store: 10°C or colder
2,4'-DDD Standard
1000 µg/mL each in Methanol
Full label information for the chemical is provided on the outside pack

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com
Z-014F 1 mL
Benzidine & 3,3'-Dichlorobenzidine
2.0 mg/mL in MeOH
Lot: 221091154
Exp: Sep 09, 2025
PRODUCT OF THE USA
2 comp(s)
Storage: Ambient (>5 °C)
FOR LABORATORY USE ONLY
H225 H370 H336 H320 H315 H311 H332 H301 H350 H360 H350 P338 Refer to SDS
Signal Word: Danger

STD0098
99
100
101
102

DT 11/3/22

STD0103

SR 11/3/22

RESTEK
32099 Danger 1 mL
Lot# A0190873
Expire: 02/2027 Store: 10°C or colder
2,4'-DDE Standard
1000 µg/mL each in Methanol
Full label information for the chemical is provided on the outside package

STD0104
105
106

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com
H-001S-D-40X 1 mL
1-Methylnaphthalene
2.0 mg/mL in Dichloromethane
Lot: 221121197
Exp: Dec 15, 2031
PRODUCT OF THE USA
1 comp(s)
Storage: Ambient (>5 °C)
FOR LABORATORY USE ONLY
H315 H335 H332 H302 H351 H350 P338 P360 P331 P233 P262 P202 Refer to SDS
Signal Word: Warning

KATAHDIN ANALYTICAL SERVICES

STOCK STANDARDS RECEIVED

Extractions Laboratory

STD0107
108
109
110
111

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com

APP-9-191-10X — 1 mL
1,2,4,5-Tetrachlorobenzene
1000 µg/mL in MeOH
Lot: 219041253 — 1 comp(s)
Exp: Apr 09, 2029 — Storage: Ambient (>5 °C)
PRODUCT OF THE USA — FOR LABORATORY USE ONLY

H336 H225 H370 H320 H315 H311 H332 H301 H360 P308 P360 P331 Refer to SDS
Signal Word: Danger

SR 11/3/22

STD0112
113
114
115
116

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com

CLP-HC-A-R — 1 mL
Acid Composite Mixture
2.0 mg/mL in CH2Cl2
Lot: 222041590 — 19 comp(s)
Exp: May 03, 2025 — Storage: Ambient (>5 °C)
PRODUCT OF THE USA — FOR LABORATORY USE ONLY

H315 H335 H332 H302 H350 H350 P308 P360 P331 P233 P262 P202 Refer to SDS
Signal Word: Danger

SR 11/3/22

STD0117
118
119

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com

Z-014E-R3 — 1 mL
Composite Mix #3
2.0 mg/mL in CH2Cl2
Lot: 221111178 — 10 comp(s)
Exp: Dec 10, 2023 Storage: Freeze (<-10 °C)/Sonicate
PRODUCT OF THE USA — FOR LABORATORY USE ONLY

H315 H335 H332 H302 H351 H350 P308 P360 P331 P233 P262 P202 Refer to SDS
Signal Word: Warning

SR 11/3/22

STD0120
121
122
123
124

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com

CLP-HC-BN-R — 1 mL
Base/Neutral Composite Mixture
2.0 mg/mL in Benzene:Dichloromethane:AcCN (2:2:1)
Lot: 222011220 — 44 comp(s)
Exp: Feb 18, 2024 Storage: Freeze (<-10 °C)/Sonicate
PRODUCT OF THE USA — FOR LABORATORY USE ONLY

H225 H315 H335 H332 H302 H350 H360 H350 P308 P360 P331 P233 Refer to SDS
Signal Word: Danger

SR 11/3/22

STD0125
126
127
128
129

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com

S-7226 — 1 ml
Custom Standard
5000 µg/mL in CH2Cl2
Lot: 222111144 — 5 comp(s)
Exp: Dec 14, 2024 — Storage: Freeze (<-10 °C)
PRODUCT OF THE USA — FOR LABORATORY USE ONLY

H315 H335 H332 H302 H351 H360 H350 P308 P360 P331 P233 P262 Refer to SDS
Signal Word: Warning

SR 11/21/22

STD0130
131
132
133
134

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com

P-233S-A-10X — 1 mL
bis(2-Ethylhexyl)adipate
1000 µg/mL in Acetone
Lot: 219071483-01 — 1 comp(s)
Exp: Nov 21, 2024 — Storage: Refrig (0-5 °C)
PRODUCT OF THE USA — FOR LABORATORY USE ONLY

H225 H336 H335 H319 H315 P308 P360 P331 P233 P260 P262 P202 Refer to SDS
Signal Word: Danger

SR 11/21/22

~~STD0135~~
136

CMW 1/26/23

KATAHDIN ANALYTICAL SERVICES

STOCK STANDARDS RECEIVED

Extractions Laboratory

STD 0157

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com

H315 H335 H332 H302 H351 H350 P338 P360 P331 P233 P262 P202 Refer to SDS

Signal Word: Warning

H-001S-D-40X 1 mL
1-Methylnaphthalene
2.0 mg/mL in Dichloromethane
Lot: 221121197 1 comp(s)
Exp: Dec 15, 2031 Storage: Ambient (>5 °C)
PRODUCT OF THE USA **FOR LABORATORY USE ONLY**

11/30 YAP

STD 0158
9
60

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com

H315 H335 H332 H302 H351 H350 P338 P360 P331 P233 P262 P202 Refer to SDS

Signal Word: Warning

Z-014E-R3 1 mL
Composite Mix #3
2.0 mg/mL in CH2Cl2
Lot: 221111178 10 comp(s)
Exp: Dec 10, 2023 Storage: Freeze (<-10 °C)/Sonicate
PRODUCT OF THE USA **FOR LABORATORY USE ONLY**

STD 0161
62
3
4
5

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com

H315 H335 H332 H302 H351 H360 H350 P338 P360 P331 P233 P262 Refer to SDS

Signal Word: Warning

S-7226 1 ml
Custom Standard
5000 µg/mL in CH2Cl2
Lot: 222111144 5 comp(s)
Exp: Dec 14, 2024 Storage: Freeze (<-10 °C)
PRODUCT OF THE USA **FOR LABORATORY USE ONLY**

STD 0169
7
8
9
70

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com

H336 H225 H370 H320 H315 H311 H332 H301 H360 P338 P360 P331 Refer to SDS

Signal Word: Danger

APP-9-191-10X 1 mL
1,2,4,5-Tetrachlorobenzene
1000 µg/mL in MeOH
Lot: 219041253 1 comp(s)
Exp: Apr 09, 2029 Storage: Ambient (>5 °C)
PRODUCT OF THE USA **FOR LABORATORY USE ONLY**

STD 0171
2
3
4
5

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com

H315 H335 H332 H302 H350 H350 P338 P360 P331 P233 P262 P202 Refer to SDS

Signal Word: Danger

CLP-HC-A-R 1 mL
Acid Composite Mixture
2.0 mg/mL in CH2Cl2
Lot: 222041590 19 comp(s)
Exp: May 03, 2025 Storage: Ambient (>5 °C)
PRODUCT OF THE USA **FOR LABORATORY USE ONLY**

KATAHDIN ANALYTICAL SERVICES

STOCK STANDARDS RECEIVED

Extractions Laboratory

3/27/23 CMW

STD 0283 4 5 6 7

AccuStandard® 125 Market St. New Haven, CT 06513 www.AccuStandard.com

Z-014F 1 mL
Benzidine & 3,3'-Dichlorobenzidine
2.0 mg/mL in MeOH
Lot: 223021429
Exp: Feb 22, 2027
2 comp(s)
Storage: Ambient (>5 °C)
PRODUCT OF THE USA
FOR LABORATORY USE ONLY

H225 H370 H336 H320 H315 H311 H332 H301 H350 H360 H350 P338 Refer to SDS
Signal Word: Danger

STD 0288 89 90 1 2

AccuStandard® 125 Market St. New Haven, CT 06513 www.AccuStandard.com

CLP-HC-A-R 1 mL
Acid Composite Mixture
2.0 mg/mL in CH2Cl2
Lot: 222041590
Exp: May 03, 2025
19 comp(s)
Storage: Ambient (>5 °C)
PRODUCT OF THE USA
FOR LABORATORY USE ONLY

H315 H335 H332 H302 H350 H350 P338 P360 P331 P233 P262 P202 Refer to SDS
Signal Word: Danger

STD 0293 4 5 6 7

AccuStandard® 125 Market St. New Haven, CT 06513 www.AccuStandard.com

H-001S-D-40X 1 mL
1-Methylnaphthalene
2.0 mg/mL in Dichloromethane
Lot: 221121197
Exp: Dec 15, 2031
1 comp(s)
Storage: Ambient (>5 °C)
PRODUCT OF THE USA
FOR LABORATORY USE ONLY

H315 H335 H332 H302 H351 H350 P338 P360 P331 P233 P262 P202 Refer to SDS
Signal Word: Warning

STD 0298 9 300 01 02

AccuStandard® 125 Market St. New Haven, CT 06513 www.AccuStandard.com

P-233S-10X 1 mL
bis(2-Ethylhexyl)adipate STD
1000 µg/mL in MeOH
Lot: 222011504
Exp: Jan 25, 2032
1 comp(s)
Storage: Ambient (>5 °C)
PRODUCT OF THE USA
FOR LABORATORY USE ONLY

H336 H225 H370 H320 H315 H311 H332 H301 H360 P338 P360 P331 Refer to SDS
Signal Word: Danger

STD 0303 4 5 6 7

AccuStandard® 125 Market St. New Haven, CT 06513 www.AccuStandard.com

APP-9-191-10X 1 mL
1,2,4,5-Tetrachlorobenzene
1000 µg/mL in MeOH
Lot: 219041253
Exp: Apr 09, 2029
1 comp(s)
Storage: Ambient (>5 °C)
PRODUCT OF THE USA
FOR LABORATORY USE ONLY

H336 H225 H370 H320 H315 H311 H332 H301 H360 P338 P360 P331 Refer to SDS
Signal Word: Danger

STD 0308 9 10 11 12

AccuStandard® 125 Market St. New Haven, CT 06513 www.AccuStandard.com

APP-9-096-20X 1 mL
p-Dioxane Standard
2.0 mg/mL in MeOH
Lot: 222121106
Exp: Dec 20, 2032
1 comp(s)
Storage: Ambient (>5 °C)
PRODUCT OF THE USA
FOR LABORATORY USE ONLY

H225 H336 H370 H320 H315 H311 H332 H301 H351 H360 H350 P338 Refer to SDS
Signal Word: Danger

KATAHDIN ANALYTICAL SERVICES

STOCK STANDARDS RECEIVED

Extractions Laboratory

STD0333
334
335
336
337

AccuStandard® 125 Market St. New Haven, CT 06513 www.AccuStandard.com

M-8150B-SS-10X 1 mL
2,4-Dichlorophenylacetic acid
1000 µg/mL in Acetone
Lot: 221051049-01
Exp: Jun 17, 2025
PRODUCT OF THE USA

1 comp(s)
Storage: Ambient (>5 °C)
FOR LABORATORY USE ONLY

H225 H336 H335 H315 P338 P360 P233 P260 P262 P202 P264 P284
Refer to SDS
Signal Word: Danger

SR 5/4/23

STD0338 Silicic Acid ~80 Mesh SR 5/9/23
0339 30e3e3-25G

STD0340
341
342
343

31087 RESTEK
Acid Surrogate Mix (A89 SOW)
Lot# A0197037
Expire: 04/2031 Store: 10°C or colder
10000 µg/mL each in Methanol
Danger
Vial Label / Peel Here

SR 5/9/23

STD0344
345

RESTEK
31889 Warning 5 mL
Lot# A0191955
Expire: 10/2028 Store: 10°C or colder
Revised B/N Surrogate Mix
Sonicate prior to use.
5000 µg/mL each in Methylene Chloride
Full label information for the chemical is provided on the outside package

SR 5/9/23

STD0346
347
348
349

32000 RESTEK
Pesticide Surrogate Mix
Lot# A0197094
Expire: 07/2029 Store: 10°C or colder
200 µg/mL each in Acetone
Contains PCBs - sonicate prior to use
Danger
Vial Label / Peel Here

SR 5/9/23

STD0350
351
352
353

31459 RESTEK
MA EPH Aliphatic Hydrocarbon Standard
Lot# A0195674
Expire: 04/2030 Store: 25°C nominal
1000 µg/mL each in Hexane
Danger
Vial Label / Peel Here

SR 5/9/23

STD 0354
355
356
357
358

1,2 Dibromoethane

KATAHDIN ANALYTICAL SERVICES

STOCK STANDARDS RECEIVED

Extractions Laboratory

STD 0359
34660
34761

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com

M-8240C-R6 1 mL
Appendix IX Volatiles Mix
Varied conc. in MeOH
Lot: 222061040
Exp: Jun 06, 2025 11 comp(s)
Storage: Refrig (0-5 °C)
PRODUCT OF THE USA FOR LABORATORY USE ONLY

H225 H370 H336 H320 H315 H311 H332 H301 H351 H360 H350 P336 Refer to SDS
Signal Word: Danger

STD 0362
63

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com

M-625-TS-20X 1 mL
GC/MS Tuning Std for EPA Method 624/625
1000 µg/mL in CH2Cl2
Lot: 222031198-01
Exp: May 28, 2025 4 comp(s)
Storage: Ambient (>5 °C)
PRODUCT OF THE USA FOR LABORATORY USE ONLY

H315 H335 H332 H302 H350 H360 H350 P308 P360 P331 P233 P262 Refer to SDS
Signal Word: Warning

STD 0364
65
66
67

RESTEK
33204
Danger 1 mL
Lot# A0191734
Expire: 11/2025 Store: 10°C or colder
8330B Nitroaromatics and Nitramine Mix
1000 µg/mL each in Acetonitrile
Full label information for the chemical is provided on the ... label package

STD 0368
69
70
71
72

31086 RESTEK
B/N Surrogate Mix (4/09 SOW)
Lot# A0193806
Store: 10°C or colder
Methylene Chloride

5/23

STD 0373

14 RESTEK
A0195206
Expire: 02/2025 Store: 0°C or colder
2000 µg/mL each in P&T Methanol
Danger
Peel Here

5/23

STD 0374 DRH-007-55
1-Chlorooctadecane

6/5/23

KATAHDIN ANALYTICAL SERVICES

STOCK STANDARDS RECEIVED

Extractions Laboratory

STD0375 Sodium Hexametaphosphate 1Kg, 65-70% 6/16/23 SR

STD0376

RESTEK
31601 Danger 1 mL
Lot# A0192460
Expire: 12/2027 Store: 10°C or colder
EGDN Standard
1000 µg/mL each in Methanol
Full label information for the chemicals is provided on the outside package

6/16/23 AL

STD0377

31498 RESTEK
Nitroglycerin Standard
Lot# A0197032
Expire 04/2028 Store 10°C or colder
1000 µg/mL each in Methanol
Danger
Peel Here

STD0378

31600 RESTEK
PETN Standard
Lot# A0194156
Expire 01/2028 Store 10°C or colder
1000 µg/mL each in Methanol
Sonicate prior to use
Danger
Peel Here

STD0379 0380 0381 0382

31480 RESTEK
MA Fractionation Surrogate Spike Mix
Lot# A0196246
Expire 02/2029 Store 10°C or colder
4000 µg/mL each in Hexane
Sonication required Mix is photosensitive
Danger
Peel Here

6/23/23 SR

STD0383 0384 0385

31087 RESTEK
Acid Surrogate Mix (4/89 SOW)
Lot# A0197037
Expire 04/2031 Store 10°C or colder
10000 µg/mL each in Methanol
Danger
Peel Here

STD0386 0387 0388

31086 RESTEK
B/N Surrogate Mix (4/89 SOW)
Lot# A0193606
Expire 12/2028 Store 10°C or colder
5000 µg/mL each in Methylene Chloride
Sonicate prior to use
Warning
Peel Here

STD0389 ~~0390~~

Agilent Technologies
Calibration Standard 1 ML
Item: PPM-8082-1 Danger
Lot: 0006740524
Expires: 30-Nov 2029
Full safety on outer box
Contains 2,2,4-trimethylpentane, aroclor 1260

6/28/23 AL

KATAHDIN ANALYTICAL SERVICES

STOCK STANDARDS RECEIVED

Extractions Laboratory

STD 0416 0417 0418 0419	31086 RESTEK BN Surrogate Mix (4/89 SOW) Lot# A0193806 Expire: 12/2028 Store: 10°C or colder 5000 µg/mL each in Methylene Chloride Sonicate prior to use Warning	SR/JS	7/12/23
STD 0420 0421 0422 0423 0424	APP-9-096-20X Lot: 222121106 Exp: Dec 20, 2032 Date Opened	SR/JS	7/12/23
STD 0425 0426 0427 0428 0429	31087 RESTEK Acid Surrogate Mix (4/89 SOW) Lot# A0197037 Expire: 04/2031 Store: 10°C or colder 10000 µg/mL each in Methanol Danger	JS	7/12/23
STD 0430 0431 0432 0433 0434 0435 0436 0437 0438 0439	33912 US/EN alpha-Terpineol Standard Lot# A0190441 Expire: 10/2025 Store: 10°C or colder 1 mL 2000 µg/mL each in Methylene Chloride RESTEK	JS	7/12/23
STD 0440 0441	30614 RESTEK 1,4-dioxane-d8 Standard Lot# A0195206 Expire: 02/2026 Store: 0°C or colder 2000 µg/mL each in P&T Methanol Danger	JS	7/12/23
STD 0442 0443 0444	APP-9-048-R1-20X Lot: 223071032 Exp: Aug 07, 2025 Date Opened	CMW	7/12/23

A JS 7/12/23

KATAHDIN ANALYTICAL SERVICES

STOCK STANDARDS RECEIVED

Extractions Laboratory

STD 0442	Z-014E-R3 Lot: 221111178-01 Exp: Jan 13, 2025 Date Opened	JS	7/12/23
0443			
0444			
0445			
0446			
0447			
0448			
0449			
~~0450~~			
0450			
0451			
STD 0452	CLP-HC-A-R Lot: 222111297 Exp: Nov 30, 2025 Date Opened	JS	7/12/23
0453			
0454			
0455			
0456			
0457			
0458			
0459			
0460			
0461			
STD 0462	CLP-HC-BN-R Lot: 222111137 Exp: Dec 11, 2024 Date Opened	JS	7/12/23
0463			
0464			
0465			
0466			
0467			
0468			
0469			
0470			
0471			

KATAHDIN ANALYTICAL SERVICES

STOCK STANDARDS RECEIVED

Extractions Laboratory

STD 0472	H-001S-D-40X Lot: 221121197 Exp: Dec 15, 2031 Date Opened	JS	7/12/23
0473			
0474			
0475			
0476			
0477			
0478			
0479			
STD 0480	Z-014F Lot: 223021429 Exp: Feb 22, 2027 Date Opened	JS	7/12/23
0481			
0482			
0483			
0484			
0485			
0486			
0487			
0488			
0489			
STD 0490	P-233S-10X Lot: 222011504 Exp: Jan 25, 2032 Date Opened	JS	7/12/23
0491			
0492			
0493			
0494			
0495			
0496			
0497			
0498			
0499			
0500			
0501			
0502			
0503			
0504			
0505			
0506			
0507			
0508			
0509			

KATAHDIN ANALYTICAL SERVICES

STOCK STANDARDS RECEIVED

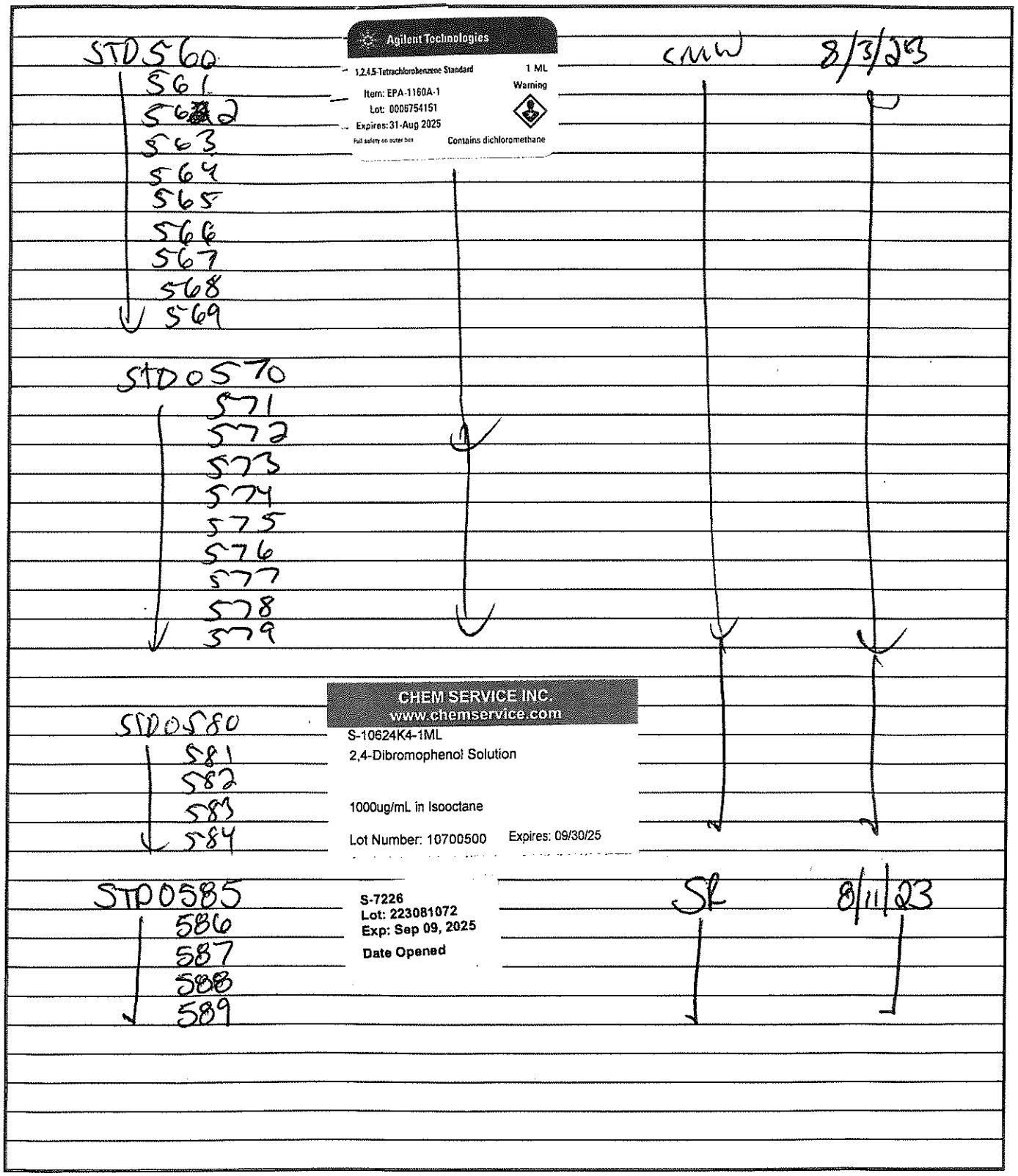
Extractions Laboratory

STD 0510 0511 0512 0513 0514	DRH-007-SS Lot: 223061651 Exp: Jul 10, 2033 Date Opened	CMW	7/13/23
STD 0515	BPA-A-S Lot: 221101223 Exp: Oct 14, 2025 Date Opened		
STD 0516 17 18 19	M-8330-SS Lot: 223031204 Exp: Mar 14, 2033 Date Opened	CMW	7/18/23
STD 0520 21 22 23 24	DRH-007S Lot: 223061309 Exp: Jun 19, 2033 Date Opened		
STD 0525 -26 -27 -28 -29	DRH-006S Lot: 223071038 Exp: Jul 12, 2033 Date Opened		
STD 0530 -31 -32 -33 -34	DRH-FTRPH Lot: 223011743 Exp: Feb 10, 2033 Date Opened		

KATAHDIN ANALYTICAL SERVICES

STOCK STANDARDS RECEIVED

Extractions Laboratory



KATAHDIN ANALYTICAL SERVICES

STOCK STANDARDS RECEIVED

Extractions Laboratory

10/24/23 CMM

STD0696
97
98
99

RESTEK 31459
110 Benner Circle Bellefonte, PA 16823
814-353-1300
www.restek.com
Danger
Lot# A0200172
Expire 09/2030 Store 25°C nominal
MA EPH Aliphatic Hydrocarbon Standard
1000 µg/mL each in Hexane
Notebook Label
Receipt Date:
Opened Date:
Made in USA
For Laboratory Use Only
1 mL
Full label information for the chemical is provided on the outside package

STD0700
701

RESTEK 31097
110 Benner Circle Bellefonte, PA 16823
814-353-1300
www.restek.com
Warning
Lot# A0201243
Expire 03/2027 Store 10°C or colder
o-Terphenyl Standard
10000 µg/mL each in Methylene Chloride
Sonicate prior to use
Full label information for the chemical is provided on the outside package
Notebook Label
Receipt Date:
Opened Date:
Made in USA
For Laboratory Use Only
1 mL

STD0702
703
704
705

RESTEK 30614
110 Benner Circle Bellefonte, PA 16823
814-353-1300
www.restek.com
Danger
Lot# A0199745
Expire 07/2026 Store 0°C or colder
1,4-dioxane-d8 Standard
2000 µg/mL each in P&T Methanol
Full label information for the chemical is provided on the outside package
Notebook Label
Receipt Date:
Opened Date:
Made in USA
For Laboratory Use Only
1 mL

STD0706

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com
1 mL
M-8270-09-ASL
Method 8270B - Organophosphorous Pesticide Mix
2.0 mg/mL in CH2Cl2
9 comp(s)
Lot: 218121268-03
Exp: Mar 21, 2025
Storage: Refrig (0-5 °C)
PRODUCT OF THE USA
FOR LABORATORY USE ONLY
H315 H335
H312 H302
H351 H350
P338 P360
P331 P233
P262 P202
Refer to SDS
Signal Word: Warning

STD0707
708

RESTEK 31661
110 Benner Circle Bellefonte, PA 16823
814-353-1300
www.restek.com
Danger
Lot# A0200245
Expire 02/2029 Store 10°C or colder
3,5-Dinitroaniline Standard
1000 µg/mL each in Acetonitrile
Full label information for the chemical is provided on the outside package
Notebook Label
Receipt Date:
Opened Date:
Made in USA
For Laboratory Use Only
1 mL

STD0709
710
711
712

RESTEK 31098
110 Benner Circle Bellefonte, PA 16823
814-353-1300
www.restek.com
Warning
Lot# A0201707
Expire 09/2030 Store 10°C or colder
1-Chlorooctadecane Standard
10000 µg/mL each in Methylene Chloride
Full label information for the chemical is provided on the outside package
Notebook Label
Receipt Date:
Opened Date:
Made in USA
For Laboratory Use Only
1 mL

KATAHDIN ANALYTICAL SERVICES

STOCK STANDARDS RECEIVED

GC and Semivolatile Extractables Laboratory

STK6340

33913 US/EN
SOM01.0 SIM Analysis Standard
Lot# A0186160
Expire. 05/2028 Store: 10°C or colder 1 mL
2000 µg/mL each in Methylene Chloride
RESTEK

STK6341
STK6342

33913 US/EN
SOM01.0 SIM Analysis Standard
Lot# A0186160
Expire. 05/2028 Store: 10°C or colder 1 mL
2000 µg/mL each in Methylene Chloride
RESTEK

STK6343 DLM-165-0 CAS 1718-52-1 Rec'd 9/6/22 DT
Pyrene-D10 Lot# PR-30304
CAMBRIDGE ISOTOPE

STK6344 DLM-1123-0 CAS 81103-79-9 Rec'd 9/6/22 DT
Fluorene-D10 Lot# PR-24453
CAMBRIDGE ISOTOPE

CHEM SERVICE INC.
PO Box 599, West Chester, PA 19381 800-452-9994

STK6345 N-10624-1G 2,4-Dibromophenol Rec'd 9/6 DT
Purity: 99.4%
DANGER
Lot Number: 13602300
Expires: 08/31/25
www.chemservice.com

31879 US/EN
Benzoic Acid Mix
Lot# A0180473
Expire: 01/2026 Store: 10°C or colder 1 ml
2000 µg/mL each in Methylene Chloride
RESTEK

STK6346 9/14

AccuStandard® 125 Market St. New Haven, CT 06513 www.AccuStandard.com

STK6347 AS-E0455 1 mL
Dinoseb
1000 µg/mL in AcCN
Lot: 221071576-01 1 comp(s)
Exp: Sep 12, 2026 Storage: Ambient (>5 °C)

FOR LABORATORY USE ONLY
H225 H315 H332 H319 H360 P338 P352 P340 P233 P260 P262 P202
Refer to SDS
Signal Word Danger

9/14

KATAHDIN ANALYTICAL SERVICES

STOCK STANDARDS RECEIVED

GC and Semivolatile Extractables Laboratory

STK6384
85
86
87
88

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com

Z-014J 1 mL
Internal Standard Mix
4.0 mg/mL in CH2Cl2
Lot: 222091463 6 comp(s)
Exp: Oct 03, 2032 Storage: Ambient (>5 °C)/Sonicate
PRODUCT OF THE USA FOR LABORATORY USE ONLY

H315 H335
H332 H302
H351 H350
P338 P260
P331 P233
P262 P202
Refer to SDS
Signal Word: Warning

11/29 DT

STK6389
L 90

31879 US/EN
Benzoic Acid Mix
Lot# A0183914
Expire: 04/2026 Store: 10°C or colder 1 mL
2000 µg/mL each in Methylene Chloride
RESTEK

R: 12/8/22 EP

STK6391

31850 US/EN
8270 MegaMix®
Lot# A0185274
Expire: 11/2023 Store: 0°C or colder 1 mL
500-1000 µg/mL each in Methylene Chloride
RESTEK

R: 12/21/22 EP

STK6392

31834 US/EN
Benzidine Mix
Lot# A0187252
Expire: 02/2027 Store: 10°C or colder 1 mL
2000 µg/mL each in Methylene Chloride
RESTEK

1/3/23 DT

STK6393

31031 US/EN
606 Phthalate Esters Calibration Mix
Lot# A0190160
Expire: 02/2027 Store: 10°C or colder 1 mL
2000 µg/mL each in Methanol
RESTEK

R: 1/6/23 EP

STK6394

32007 US/EN
Aroclor® 1221 Standard
Lot# A0187032
Expire: 10/2028 Store: 25°C nominal 1 mL
1000 µg/mL each in Hexane
RESTEK

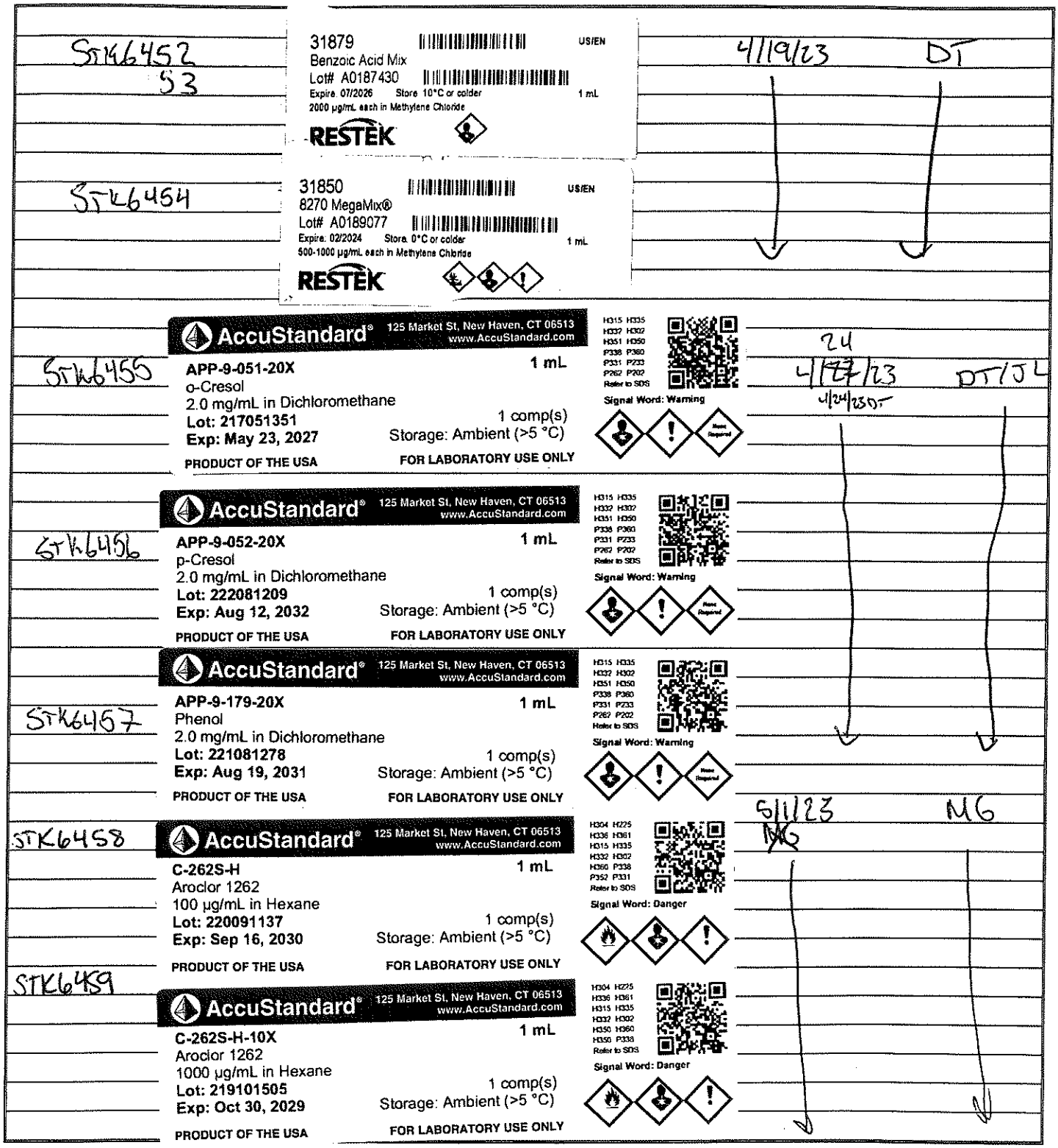
This product contains PCBs

R: 1/12/23 MG

KATAHDIN ANALYTICAL SERVICES

STOCK STANDARDS RECEIVED

GC and Semivolatile Extractables Laboratory



STK6452
53

31879 US/EN
Benzoic Acid Mix
Lot# A0187430
Expire. 07/2026 Store. 10°C or colder 1 mL
2000 µg/mL each in Methylene Chloride
RESTEK

4/19/23 DT

STK6454

31850 US/EN
8270 MegaMix®
Lot# A0189077
Expire. 02/2024 Store. 0°C or colder 1 mL
500-1000 µg/mL each in Methylene Chloride
RESTEK

STK6455

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com
APP-9-051-20X 1 mL
o-Cresol
2.0 mg/mL in Dichloromethane
Lot: 217051351
Exp: May 23, 2027
1 comp(s)
Storage: Ambient (>5 °C)
PRODUCT OF THE USA FOR LABORATORY USE ONLY
Signal Word: Warning

24
4/27/23 DT/JL
4/24/23 DT

STK6456

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com
APP-9-052-20X 1 mL
p-Cresol
2.0 mg/mL in Dichloromethane
Lot: 222081209
Exp: Aug 12, 2032
1 comp(s)
Storage: Ambient (>5 °C)
PRODUCT OF THE USA FOR LABORATORY USE ONLY
Signal Word: Warning

STK6457

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com
APP-9-179-20X 1 mL
Phenol
2.0 mg/mL in Dichloromethane
Lot: 221081278
Exp: Aug 19, 2031
1 comp(s)
Storage: Ambient (>5 °C)
PRODUCT OF THE USA FOR LABORATORY USE ONLY
Signal Word: Warning

5/1/23 MG
MG

STK6458

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com
C-262S-H 1 mL
Aroclor 1262
100 µg/mL in Hexane
Lot: 220091137
Exp: Sep 16, 2030
1 comp(s)
Storage: Ambient (>5 °C)
PRODUCT OF THE USA FOR LABORATORY USE ONLY
Signal Word: Danger

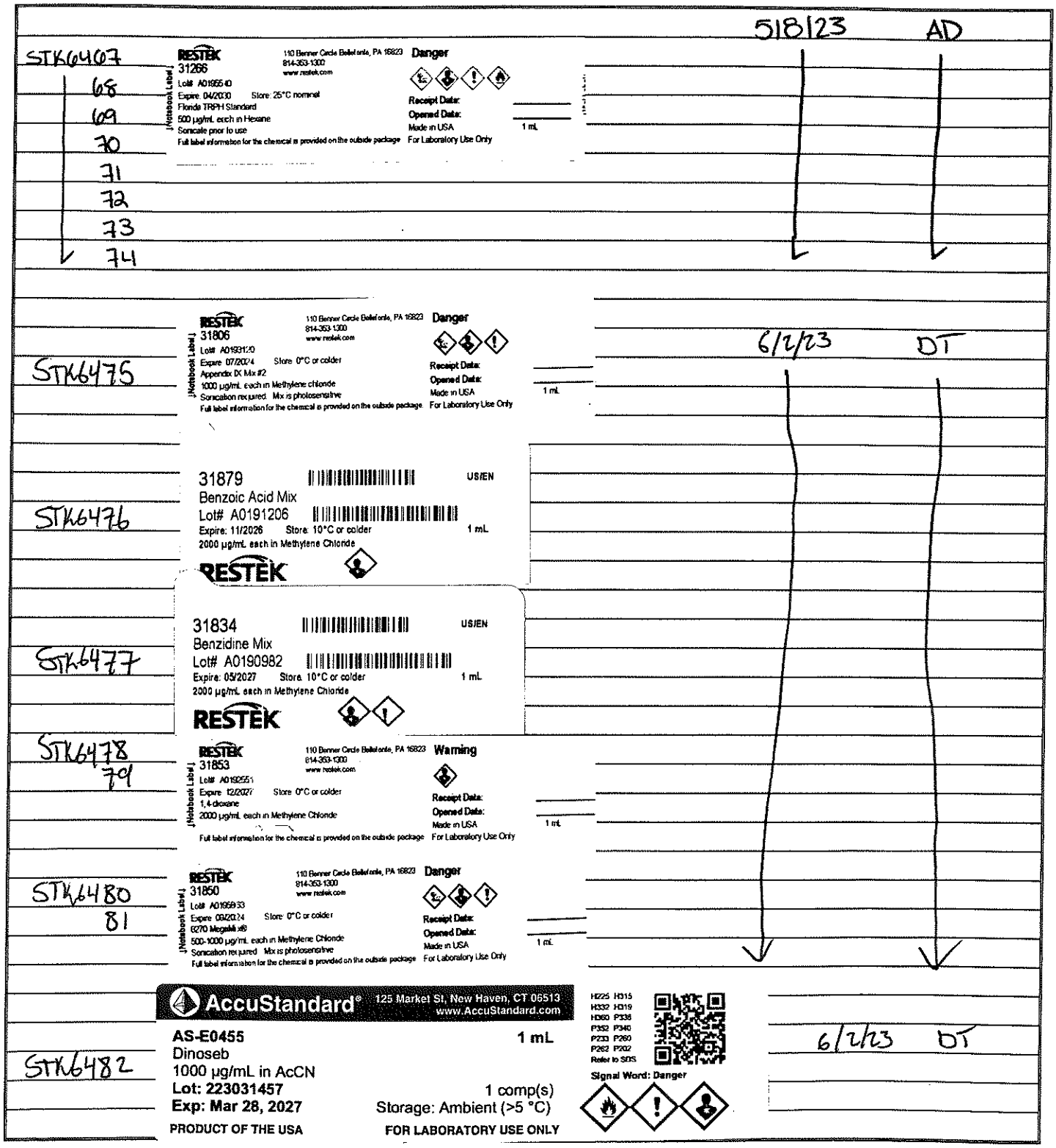
STK6459

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com
C-262S-H-10X 1 mL
Aroclor 1262
1000 µg/mL in Hexane
Lot: 219101505
Exp: Oct 30, 2029
1 comp(s)
Storage: Ambient (>5 °C)
PRODUCT OF THE USA FOR LABORATORY USE ONLY
Signal Word: Danger

KATAHDIN ANALYTICAL SERVICES

STOCK STANDARDS RECEIVED

GC and Semivolatile Extractables Laboratory



EX-012 – Revision 1 – 06/28/2010

KATAHDIN ANALYTICAL SERVICES

STOCK STANDARDS RECEIVED

GC and Semivolatile Extractables Laboratory

6/6/23 DT
STK6482
3

AccuStandard® 125 Market St. New Haven, CT 06513 www.AccuStandard.com

APP-9-191-10X
1,2,4,5-Tetrachlorobenzene
1000 µg/mL in MeOH
Lot: 219041253
Exp: Apr 09, 2029
PRODUCT OF THE USA

1 mL
1 comp(s)
Storage: Ambient (>5 °C)
FOR LABORATORY USE ONLY

H336 H225
H370 H320
H315 H311
H332 H301
H360 P308
P360 P331
Refer to SDS
Signal Word: Danger

6/2/23 DT

STK6484
15
16

spex® certiprep

Part # : S-3480
Lot # : MP221219006
Date Opened:

6/20/23 AD

n-Tetratetracontane
Contains the following in **Cyclohexane:Dichloromethane(1:1)**

Concentration	Compound
1000 µg/mL	n-Tetratetracontane

S-3480
MP221219006

Warning

Storage: **Freezer**

Harmful if swallowed. Suspected of causing cancer.
Wash thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection. IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell. IF exposed or concerned: Get medical advice/attention. Dispose of contents/container in accordance with local/regional/national/international regulations.
Phone: 732-549-7144

For Laboratory Use Only

STK6487
88
89

RESTEK
33913
Lot# A0105662
Expire 02/2029 Store 10°C or colder
SOM01.0 SIM Analysis Standard
2000 µg/mL each in Methylene Chloride
Sonication required Mix is photosensitive
Full label information for the chemical is provided on the outside package

110 Benner Circle Bellefonte, PA 16823
814-353-1300
www.restek.com

Warning

Receipt Date:
Opened Date:
Made in USA
For Laboratory Use Only

1 mL

6/26/23 DT

STK6490
91

31097 RESTEK
o-Terphenyl Standard
Lot# A0197729
Expire 12/2026 Store 10°C or colder
10000 µg/mL each in Methylene Chloride
Sonicate prior to use
Warning

Peel Here

6/28/23 AD

KATAHDIN ANALYTICAL SERVICES

STOCK STANDARDS RECEIVED

GC and Semivolatile Extractables Laboratory

STK6525

26
27
28

31266 RESTEK
Florida TRPH Standard
Lot# A0195540
Expire: 04/2030 Store: 25°C nominal
2000 µg/mL each in Hexane
Sonicate prior to use
Danger

AD 8/11/23

STK6529

30
31
32
33

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com

M-625-TS-20X 1 mL
GC/MS Tuning Std for EPA Method 624/625
1000 µg/mL in CH2Cl2
Lot: 222031198-01 4 comp(s)
Exp: May 28, 2025 Storage: Ambient (>5 °C)
PRODUCT OF THE USA FOR LABORATORY USE ONLY

H315 H335
H332 H302
H350 H360
H350 P308
P360 P331
P233 P262
Refer to SDS
Signal Word: Warning

EP 8/11/23

STK6534

35
36
37
38

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com

Z-014J 1 mL
Internal Standard Mix
4.0 mg/mL in CH2Cl2
Lot: 223061537 6 comp(s)
Exp: Jun 28, 2033 Storage: Ambient (>5 °C)/Sonicate
PRODUCT OF THE USA FOR LABORATORY USE ONLY

H315 H335
H332 H302
H351 H350
P338 P360
P331 P233
P262 P202
Refer to SDS
Signal Word: Warning

STK6539

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com

M-8270-SS 1 mL
Method 8270 - Surrogate Standard
4.0 mg/mL in CH2Cl2
Lot: 223021323 6 comp(s)
Exp: Feb 15, 2033 Storage: Ambient (>5 °C)
PRODUCT OF THE USA FOR LABORATORY USE ONLY

H315 H335
H332 H302
H351 H350
P338 P360
P331 P233
P262 P202
Refer to SDS
Signal Word: Warning

STK6540

32419 US/EN
EPA 8270 Organophosphorous Pesticides Mix
Lot# A0189840
Expire: 03/2024 Store: 10°C or colder 1 mL
2000 µg/mL each in Methylene Chloride
RESTEK

STK6541

32460 US/EN
Methapyrilene Standard
Lot# A0191563
Expire: 05/2024 Store: 0°C or colder 1 mL
2000 µg/mL each in Methylene Chloride
RESTEK

KATAHDIN ANALYTICAL SERVICES

STOCK STANDARDS RECEIVED

GC and Semivolatile Extractables Laboratory

STK6547
48
49

RESTEK 110 Benner Circle Bellefonte, PA 16823 814-353-1300 www.restek.com
33913
Lot# A0199849
Expire 09/2029 Store 10°C or colder
SOM01.0 SIM Analysis Standard
2000 µg/mL each in Methylene Chloride
Sonication required Mix is photosensitive
Full label information for the chemical is provided on the outside package
Warning
Receipt Date:
Opened Date:
Made in USA
For Laboratory Use Only
1 mL
Notebook Label

Recieved: 9/11/23 DT

STK6550
51

RESTEK 110 Benner Circle Bellefonte, PA 16823 814-353-1300 www.restek.com
31834
Lot# A0197191
Expire 11/2027 Store 10°C or colder
Benzidine Mix
2000 µg/mL each in Methylene Chloride
Contains carcinogen/reproductive toxin
Full label information for the chemical is provided on the outside package
Danger
Receipt Date:
Opened Date:
Made in USA
For Laboratory Use Only
1 mL
Notebook Label

10/12/23
Recieved: 10/12/23 DT

STK6552
53

RESTEK 110 Benner Circle Bellefonte, PA 16823 814-353-1300 www.restek.com
31850
Lot# A0197902
Expire 11/2024 Store 0°C or colder
8270 MegaMix®
500-1000 µg/mL each in Methylene Chloride
Sonication required Mix is photosensitive
Full label information for the chemical is provided on the outside package
Warning Danger
Receipt Date:
Opened Date:
Made in USA
For Laboratory Use Only
1 mL
Notebook Label

Recieved: 10/12/23 DT

STK6554

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com

C-202S 1 mL
2,2',3,3',5,5',6,6'-Octachlorobiphenyl
35 µg/mL in Isooctane
Lot: 105-271-01 1 comp(s)
Exp: May 20, 2025 Storage: Ambient (>5 °C)/Sonicate
PRODUCT OF THE USA FOR LABORATORY USE ONLY

H305 H225 H336 H315 H302 H319 P338 P352 P331 P233 P260 P262 Refer to SDS
Signal Word: Danger

10/24/23 (MW)

STK6555

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com

C-200S-R1 1 mL
2,2',3,3',4,5,6,6'-Octachlorobiphenyl
35 µg/mL in Isooctane
Lot: 222021273 1 comp(s)
Exp: Feb 15, 2032 Storage: Ambient (>5 °C)/Sonicate
PRODUCT OF THE USA FOR LABORATORY USE ONLY

H225 H336 H304 H400 H413 H319 H315 H335 H302 P338 P352 P331 Refer to SDS
Signal Word: Danger

STK6556

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com

C-201S-R1 1 mL
2,2',3,3',4,5',6,6'-Octachlorobiphenyl
35 µg/mL in Isooctane
Lot: B5020150-01 1 comp(s)
Exp: Dec 04, 2029 Storage: Ambient (>5 °C)/Sonicate
PRODUCT OF THE USA FOR LABORATORY USE ONLY

H305 H225 H336 H315 H302 H319 P338 P352 P331 P233 P260 P262 Refer to SDS
Signal Word: Danger

GC/MS SVOA STANDARD PREP LOGBOOK

Standard ID	Description/Type of Std	Date Received	Date Opened	Prepared By	Stock #	Component	Amt Added	Stock Exp Date	Final Vol	Final Conc.
S3915	8270 Stock	2/28/23	8/28/23	EP	STK6402	8270 Mega Mix	220mL	2/17/24	1.8mL	125 ug/mL
					STK6405	APPIX Mix #2		2/17/24		
					STK6395	Dinoseb		2/17/24		
					STK6348	8270 Surr Mix	55mL	10/14/23		
					STK6332	Methapyrilene	110mL	11/7/23		
					STK6390	Benzoic Acid Mix		2/17/24		
					STK6392	Benzidine Mix		1/24/24		
					STK6374	Org Phos Pest		12/7/23		
					STK6377	APPIX Mix #1		11/15/23		
					STD0966	α-terpineol		11/7/23		
					EF820-US	MeCl2	355mL	—		
S3916	Fluorene-D10 Stock	2/23/23	2/28/24	DT	STK6344	Fluorene-D10	19.5mg	—	10mL	1950 ug/mL
					EF820-US	MeCl2	->10mL	—		
S3917	1,4-Dioxane	3/1/23	3/31/23	EP	S3899	1,4-dioxane Pre-stock	180mL	3/31/23	1.8mL	20 ug/mL
〃	〃	〃	〃	〃	EF820-US	MeCl2	1620mL	—	〃	
S3918	SIM IND	3/2/23	5/7/23	CO	S3887	SIM IND Prestock	90mL	5/7/23	1.8mL	5ug/mL
					EF820-US	MeCl	1710mL			
S3919	SIM Stock B	3/3/23	7/6/23	CO	S3872	SIM Prestock B	18mL	~~5/7~~ 7/6/23	1.8mL	10ug/mL
					EF820-US	MeCl2	1620mL			

Reviewed by/Date:

GC/MS SVOA STANDARD PREP LOGBOOK

Standard	Standard Name	Date Prep	Date Exp	Initials	Stock	Stock Name	Amt Added	Stock Exp Date	Total Vol	Final Conc
S4002	8270 Stock for PP	8/14/23	2/14/24	EP	STK6481	8270 MegaMix	220	8/14/24	1.8mL	125 µg/mL
					STK6424	8270 Surrogate	55	4/4/24		
					STK6476	Benzoic Acid Mix	210	6/27/24		
					STK6477	Benzidine Mix	1	6/27/24		
					S3951	o-toluene sulfonamide	113	4/17/24		
					S3952	p-toluene sulfonamide	106	4/17/24		
					S3953	2,6-dimethylphenol	111	4/17/24		
					EG266-US	$MeCl_2$	985	—		
S4003	SIM STOCK A	8/16/23	9/24/23	DT	STK6481	8270 Megamix	200µL	8/14/24	10mL	20µg/mL
					S3958	OLM COMPOUNDS		11/3/23		
					STD0555	1,2,4,5-TCB		7/31/24		
					STK6477	BENZIDINE MIX	100µL	6/27/24		
					STK6478	1,4-dioxane		6/2/24		
					STK6476	Benz~~idine~~ oic acid Mix 9/19/23 DT		6/27/23		
					S3932	SIM SURR MIX	1 ML	9/24/23		
					EH197-US	$MeCl_2$	→10mL	—		
S4004	SIM IND	8/18/23	11/9/23	DT	S3963	SIM IND PRE-STOCK	90µL	11/9/23	1.8mL	5µg/mL
					EH197-US	$MeCl_2$	1710µL	—		
S4005	Pyrene-D10	8/18/23	8/18/24	DT	STK6343	Pyrene-D10	0.0225g	—	10mL	2250 µg/mL
					EH197-US	$MeCl_2$	→10mL	—		

Reviewed by/Date:

QA-004 – Revision 1 – 11/10/10

GC/MS SVOA STANDARD PREP LOGBOOK

Standard #	Standard Name	Prep Date	Exp Date	Initials	Stock #	Stock Name	Amt Added	Stock Exp Date	Total Vol	Final Conc
S4014	8270 STOCK	9/13/23	1/31/24	DT	STK6431	8270 ~~STOC~~ 9/15/23 DT MegaMIX	220 uL	8/14/24	4.8 mL	125 ug/mL
					STK6475	APPIX MIX #2	↓	6/23/24		
					STK6482	DINOSEB	↓	6/28/24		
					STK6424	8270 SURR	55 uL	4/4/24		
					STK6541	Methapyrilene	110 uL	5/31/24		
					STK6476	Benzoic ACID MIX	↓	6/27/24		
					STK6477	BENZIDINE MIX	↓	6/19/24		
					STK6440	ORG PHOS PEST	↓	1/31/24		
					STK6543	APPIX MIX #1	↓	9/13/24		
					STD0269	X-Terpineol	↓	5/31/24		
					EH197-US	$MeCl_2$	355 uL	—		
S4015	SIM IS	9/15/23	3/15/24	DT	STK6429	INTERNAL STD MIX	100 uL	8/22/24	5 mL	80 ug/mL
					EH197-US	$MeCl_2$	→ 5 mL	—		
S4016	2,4-dibromophenol	9/15/23	9/15/24	DT	STK3868	2,4-dibromophenol	⊛ 22.2 mg ~~220 mg~~	—	10 mL	2220 ug/mL
⊥	⊥	⊥	⊥	⊥	EH197-US	$MeCl_2$	→ 10 mL	—	⊥	⊥
S4017	SIM Surr Mix (6)	9/15/23	2/28/24	DT	S4016	2,4-dibromophenol	⊛ 900 uL ~~1.68 mL~~	9/15/24	10 mL	200 ug/mL
↓	↓	↓	↓	↓	S4005	Pyrene-d10	⊥ 990 uL ~~950 mL~~	8/18/24	↓	↓
↓	↓	↓	↓	↓	S3916	Fluorene-d10	1.0 mL	2/28/24	↓	↓
↓	↓	↓	↓	↓	STD0373	1,4-dioxane-d8	↓	5/27/24	↓	↓
↓	↓	↓	↓	↓	STK6489	SOM1.0 SIM Analysis Std	↓	9/15/24	↓	↓
⊥	⊥	⊥	⊥	⊥	EH197-US	$MeCl_2$	→ 10 mL	—	⊥	⊥

Reviewed by/Date:

⊛ EP 15Sep23

GC/MS SVOA STANDARD PREP LOGBOOK

•9/18/23 DT

Standard	Standard Name	Date	Date	Initials	Stock #	Stock Name	Amt Added	Stock Exp Date	Total Vol	Final Conc
S4018	DFTPP	~~8~~/15/23 9	3/15/24	DT	STD0362	GCMS Tuning Std	250 mL	7/4/24	10 mL	25 mg/mL
↓	↓	↓	↓	↓	EH197-US	$MeCl_2$	→ 10 mL	—	↓	↓
S4019	Fluorene-D10	9/15/23	9/15/24	DT	STK6344	Fluorene-D10	21.0 mg	—	10 mL	2100 µg/mL
					EH197-US	$MeCl_2$	→ 10 mL	—		
S4020	SIM Stock A	9/18/23	11/3/23	DT	STK6481	8270 Mega Mix	200 µL	8/14/24	10 mL	20 µg/mL
					S3958	OLM Compounds	↓	11/3/23		
					STD0555	1,2,4,5-TCB	↓	7/31/24		
					STK6477	Benzidine Mix	100 µL	6/15/24		
					STK6478	1,4-Dioxane	↓	6/2/24		
					STK6476	Benzoic Acid Mix	↓	6/27/24		
					S4017	SIM Surr Mix	1 mL	2/28/24		
					EH197-US	$MeCl_2$	→ 10 mL	—		
S4021	SIM Stock B	9/22/23	12/5/23	EP	S3976	Prestock B	180 µL	12/5/23	1.8 mL	20 mg/mL
↓	↓	↓	↓	↓	EH206-US	$MeCl_2$	1620 mL	—	↓	↓
S4022	SIM IND	9/27/23	11/9/23	DT	S3963	SIM IND PRE-STOCK	90 µL	11/~~9~~ 9/23	1.8 mL	5 µg/mL
					EH206-US	$MeCl_2$	1710 µL	•10/2/23 DT —		
S4023	SIM Prestock B	10/4/23	1/6/24	EP	STD0115	Acid Composite Mix	180 mL	1/6/24	1.8 mL	200 mg/mL
↓	↓	↓	↓	↓	STK6393	606 Phthalate Esters	180 µL	1/6/24	↓	↓
					EH206-US	$MeCl_2$	1440 mL	—		

Reviewed by/Date:

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	Amt Added	Stock Exp Date	Total Vol	Final Conc
S4030	OLM Compounds	10/12/23	4/12/24	DT	STD0164	S-7226 Custom	360	9/22/24	1.8 mL	1000 ug/mL
					EH206-US	$MeCl_2$	1440	—		
S4031	SIM STOCK A	10/12/23	2/28/24	DT	STK6552	8270 Megamix	200	10/12/24	10 mL	20 ug/mL
					S4030	OLM Compounds	↓	4/12/24		
					STD0555	10/12/23 DT ~~1,4~~ 1,2,4,5-TCB	↓	7/31/24		
					STK6550	Benzidine Mix	100	10/12/24		
					STK6478	1,4-Dioxane	↓	6/2/24		
					STK6453	Benzoic Acid Mix	↓	10/12/24		
					S4017	SIM Surr Mix	1 mL	2/28/24		
					EH206-US	$MeCl_2$	→ 10 mL	—		
S4032	SIM Stock B	10/18/23	1/6/24	EP	S4023	Pre-Stock B	180 mL	1/6/24	1.8 mL	20 ug/mL
⊥	⊥	⊥	⊥	⊥	EH206-US	$MeCl_2$	1620 mL	—	⊥	⊥
S4033	SIM IS	10/27/23	4/27/24 ~~23~~ 10/27/23 DT	DT	STK6534	Internal Standard Mix	100 µL	10/10/24	5 mL	80 ug/mL
					EH206-US	$MeCl_2$	→ 5 mL	—		
S4034	SIM IND	11/1/23	11/9/23	EP	S3963	SIM IND Pre-stock	90 mL	11/9/23	1.8 mL	5 ug/mL
⊥	⊥	⊥	⊥	⊥	EH206-US	$MeCl_2$	1710 mL	—	⊥	⊥

Reviewed by/Date:

⊛EP 10NOV23

GC/MS SVOA STANDARD PREP LOGBOOK

Standard #	Standard Name	Prep Date	Exp Date	Initials	Stock #	Stock Name	Amt Added	Stock Exp Date	Total Vol	Final Conc
S4035	SIM Pre-stock IND	~~11/10~~ 11/10/23	01/06/24	EP	STD0115	Acid Composite Mix	90 uL	01/06/24	1.8mL	100 ug/mL
					STD0467	B/N Composite Mix		10/30/24		
					STD0446	Composite Mix #3		11/10/24		
					STD0489	Benzidine Mix		9/22/24		
					STD0473	1-Methylnaphthalene		9/22/24		
					STD0309	1,4-dioxane		11/10/23 ⊛		
					STD0164	Custom OLM	36 uL	9/22/24		
					STD0520	1,2,4,5 TCB	180 uL	11/10/24		
					EH304-US	MeCl2	1044 uL	—		
S4036	SIM IND	11/10/23	01/06/24	EP	S4035	SIM IND Pre-stock	90 uL	01/06/24	1.8mL	5 ug/mL
					EH304-US	MeCl2	1710 uL	—		
S4037	SIM Stock B	11/15/23	1/6/24	EP	S4023	Pre-stock B	180 uL	1/6/24	1.8mL	20 ug/mL
					EH362-US	MeCl2	1620 uL	—		
S4038	DFTPP	11/17/23	5/17/24	EP	STD0362	GC/MS Tuning Mix	250 uL	7/4/24	10mL	25 ug/mL
					EH362-US	MeCl2	→ 10mL	—		

Reviewed by/Date:

GC/MS SVOA STANDARD PREP LOGBOOK

Standard ID	Standard Name	Prep Date	Exp Date	Initials	Stock #	Stock Name	Amt Added	Stock Exp Date	Total Vol	Final Conc
S4039	SIM Stock A	11/29/23	2/28/24	EP	STK6552	8270 Mega Mix	200 mL	10/12/24	10 mL	20 ug/mL
					S4030	OLM Compounds		4/12/24		
					STD0520	1.2.4.5 -TCB		11/10/24		
					STK6550	Benzidine Mix	100 mL	10/12/24		
					STK6478	1,4-Dioxane		6/2/24		
					STK6453	Benzoic Acid Mix		10/10/24		
					S4017	SIM Surr Mix	1 mL	2/28/24		
					PH486-US	$MeCl_2$	→ 10 mL	—		
S4040	SIM Stock B	12/1/23	1/6/24	EP	S4023	Pre-Stock B	180 mL	1/6/24	1.8 mL	20 ug/mL
					PH486-US	$MeCl_2$	1620 mL	—		
S4041	SIM IND	12/7/23	1/6/24	EP	S4035	SIM IND Pre-Stock	90 mL	1/6/24	1.8 mL	5 ug/mL
					PH486-US	$MeCl_2$	1710 mL	—		
S4042	SIM IS	12/15/23	6/14/24	DT	STK6534	INTERNAL STD MIX	100 mL	10/10/24	5 mL	80 ug/mL
					PH486-US	$MeCl_2$	→ 5 mL			
S4043	DFTPP	12/20/23	6/20/24	DT	STK6529	GC/MS Tuning MIX	250 mL	12/20/24	10 mL	25 ug/mL
					PH486-US	$MeCl_2$	→ 10 mL			

Reviewed by/Date:

SVOA EXTRACTION SPIKE STANDARD PREPARATION

PREP INFO	STOCK NAME	AMT ADDED	STOCK CONC.	STOCK#
ID#: SV3174	**APP IX SPIKE**			
Prep Date: 9/5/23	CLP-HC-X1-R1	0.25 mL	2000 ug/mL ✓	STD0242 STD0622
Initials: JS	M-8270-07-R1	0.25 mL	2000 ug/mL ✓	STD0241
Exp. Date: ~~3/5/24~~	M-8270-08-R1	0.25 mL	2000 ug/mL ✓	STD9072, 617
X 2/3/24	M-8270-09-R1	0.25 mL	2000 ug/mL ✓	STD618,
JS 9/5/23	M-8270-10-R1	0.25 mL	2000 ug/mL ✓	STD620, 9074
	APP-9-014-D10X	0.25 mL	2000 ug/mL ✓	
	Diluted to 10mL in MeOH#		**F.C.: 50 ug/mL**	
	SIM SURR MIX			
ID#: SV3175	SOM 1.0 SIM	2 mL	2000ug/mL	STK6547, STK6548
Prep Date: 9/15/23	Pyrene-D10	1.78 mL	2250ug/mL	54005
Initials: DT	Fluorene-D10	1 mL	1950ug/mL	53916
Exp. Date: 3/15/24	Fluorene-D10	0.98 mL	2100ug/mL	54019
	Diluted to 10 mL in MeOH	#EG017-US		F.C. 400ug/mL BQ
	S/S SURR			
ID#: SV3176	SIM SURR Stock	2.5 mL	400 ug/mL	SV3175
Prep Date: 9/18/23	B/N Surr mix	5.0 mL	5000 ug/mL	STD0416
Initials: CMW	Acid Surr mix	5.0 mL	10,000 ug/mL	STD0383 340 428
Exp. Date: ~~3/18/24~~ 24	1,4-dioxane-D8	0.5 mL	2000 ug/mL	STD0441
9/19/23 DT	2,4-dibromphenol	2.0 mL	1000 ug/mL	STD0583 581
	Diluted to 500mL in acetone#		**F.C.: Various**	

SVOA EXTRACTION SPIKE STANDARD PREPARATION

PREP INFO	STOCK NAME	AMT ADDED	STOCK CONC.	STOCK#
ID#: SV3178		1,4 D SUM		
Prep Date: 10/11/23	1,4 Dioxane	0.25 mL	2000 ug/mL	STD0089
Initials: CMW	Diluted to	250 mL in	MeOH EG001-US	
Exp. Date: ~~10~~ 3/11/24			F.C 2ug/mL	

SIM SPIKE	
SVOA SPIKE SV3178 5.0 mL	50/100 ug/mL
Diluted to 50 mL in MeOH#	**F.C.: 5/10 ug/mL**

ID#: SV3181
Prep Date: 10/18/23
Initials: SH/AC
Exp. Date: 4/18/23

SIM SPIKE	
SVOA SPIKE SV3178 5.0 mL	50/100 ug/mL
Diluted to 50 mL in MeOH# EG017-US	**F.C.: 5/10 ug/mL**

ID#: SV3182
Prep Date: 11/6/23
Initials: SH
Exp. Date: 5/6/24

SVOA EXTRACTION SPIKE STANDARD PREPARATION

PREP INFO	STOCK NAME	AMT ADDED	STOCK CONC	STOCK#
~~ID#:~~ SV3182				
Prep Date: 11/2/23				
Initials: SH				
Exp. Date: 5/2/24				

SVOA SPIKE		
CLP-HC-BN-R-PAK	2.5 mL	2000 ug/mL
Z-014E	2.5 mL	2000 ug/mL
CLP-HC-A-R-PAK	5.0 mL	2000 ug/mL
S-7226	1.0 mL	5000 ug/mL
H-001S-D40X	2.5 mL	2000 ug/mL

SH 11/2/23

~~ID#:~~	APP-9-096-20X	2.5 mL	2000 ug/mL
~~Prep Date:~~	P-233S-10X	5.0 mL	1000 ug/mL
Initials:	APP-9-191-10X	5.0 mL	1000 ug/mL
Exp. Date:	Z-014F-PAK	5.0 mL	2000 ug/mL
	α- TERP	~~2.5 mL~~	2000 ug/mL
	Diluted to 100 mL in MeOH#		**F.C.: 50/100 ug/mL**

S/S SURR			
SIM SURR Stock	2.5 mL	400 ug/mL	SV3175
B/N Surr mix	5.0 mL	5000 ug/mL	STD0371
Acid Surr mix	5.0 mL	10,000 ug/mL	STD0384, 0425
1,4-dioxane-D8	0.5 mL	2000 ug/mL	STD0441, 0705
2,4-dibromphenol	2.0 mL	1000 ug/mL	STD0584
Diluted to 500mL in acetone# 225567		**F.C.: Various**	

ID#: SV3183
Prep Date: 11/6/23
Initials: SH
Exp. Date: 5/6/24

METHANE ETHANE ETHYLENE DATA BY METHOD RSK SOP 175

QC Summary Section

Form 4
Method Blank Summary

Lab File ID : 5QK20237.D
Instrument ID : GC05
Heated Purge : No
Prep Temperature (C) : 19.4

SDG : SQ6133
Lab Sample ID : WG345593-1
Date Analyzed : 17-NOV-23
Time Analyzed : 07:47

This Method Blank applies to the following samples and QC samples:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Prep Temp (C)
Laboratory Control S	WG345593-2	5QK20238.	11/17/23	08:04	19.4
SY-OBMW6-110723	SQ6133-1	5QK20239.	11/17/23	09:14	20.5
SY-OBMW4R-110723	SQ6133-2	5QK20240.	11/17/23	09:32	20.6
SY-OBMW12-110723	SQ6133-3	5QK20241.	11/17/23	09:49	20.7
Matrix Spike	WG345593-4	5QK20242.	11/17/23	10:06	20.7
Matrix Spike Duplica	WG345593-5	5QK20243.	11/17/23	10:23	20.8
SY-BRMW2-60.5-70.5-110723	SQ6133-4	5QK20244.	11/17/23	10:40	20.8
SY-OBMW15-110723	SQ6133-5	5QK20245.	11/17/23	10:57	20.8
SY-OBMW5-110723	SQ6133-6	5QK20246.	11/17/23	11:14	20.8
SY-OBMW13-110723	SQ6133-7	5QK20247.	11/17/23	11:31	20.8
SY-BRMW2-80.5-95.5-110723	SQ6133-8	5QK20249.	11/17/23	12:05	20.8
Matrix Spike	WG345593-6	5QK20250.	11/17/23	12:22	20.9
Matrix Spike Duplica	WG345593-7	5QK20251.	11/17/23	12:39	20.9
SY-OBMW14-110723	SQ6133-9	5QK20252.	11/17/23	12:56	20.9
SY-BRMW2-252.5-262.5-110723	SQ6133-10	5QK20253.	11/17/23	13:13	20.9

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Form 8
Analytical Sequence

Lab Name: Katahdin Analytical Services **SDG:** SQ6133
Instrument ID: GC05 **Column ID:** A

Client Sample ID	Lab Sample ID	Date Analyzed	Time Analyzed
Initial Calibration	WG344993-1	11/07/23	08:28
Initial Calibration	WG344993-2	11/07/23	08:46
Initial Calibration	WG344993-3	11/07/23	09:03
Initial Calibration	WG344993-4	11/07/23	09:20
Initial Calibration	WG344993-5	11/07/23	09:37
Initial Calibration	WG344993-6	11/07/23	09:54
Initial Calibration	WG344993-7	11/07/23	10:11
Independent Source	WG344993-8	11/07/23	11:39
Continuing Calibrati	WG345593-8	11/17/23	07:08
Method Blank	WG345593-1	11/17/23	07:47
Laboratory Control S	WG345593-2	11/17/23	08:04
SY-OBMW6-110723	SQ6133-1	11/17/23	09:14
SY-OBMW4R-110723	SQ6133-2	11/17/23	09:32
SY-OBMW12-110723	SQ6133-3	11/17/23	09:49
Matrix Spike	WG345593-4	11/17/23	10:06
Matrix Spike Duplica	WG345593-5	11/17/23	10:23
SY-BRMW2-60.5-70.5-110723	SQ6133-4	11/17/23	10:40
SY-OBMW15-110723	SQ6133-5	11/17/23	10:57
SY-OBMW5-110723	SQ6133-6	11/17/23	11:14
SY-OBMW13-110723	SQ6133-7	11/17/23	11:31
Continuing Calibrati	WG345593-9	11/17/23	11:48
SY-BRMW2-80.5-95.5-110723	SQ6133-8	11/17/23	12:05
Matrix Spike	WG345593-6	11/17/23	12:22
Matrix Spike Duplica	WG345593-7	11/17/23	12:39
SY-OBMW14-110723	SQ6133-9	11/17/23	12:56
SY-BRMW2-252.5-262.5-1107	SQ6133-10	11/17/23	13:13
Continuing Calibrati	WG345593-10	11/17/23	14:55

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Sample Data Section

KATAHDIN ANALYTICAL SERVICES - ORGANIC DATA QUALIFIERS

U Indicates the compound was analyzed for but not detected above the specified level. This level may be the Practical Quantitation Level (PQL) (also called Limit of Quantitation (LOQ)), the Limit of Detection (LOD) or Method Detection Limit (MDL) as required by the client.

Note: All results reported as "U" MDL have a 50% rate for false negatives compared to those results reported as "U" PQL, "U" LOQ or "U" LOD, where the rate of false negatives is <1%.

* Compound recovery or percent RPD (relative percent difference) was outside of quality control limits.

D Indicates the result was obtained from analysis of a diluted sample. Surrogate recoveries may not be calculable.

E Estimated value. This flag identifies compounds whose concentrations exceed the upper level of the calibration range of the instrument for that specific analysis.

J Estimated value. The analyte was detected in the sample at a concentration less than the laboratory Practical Quantitation Level (PQL) (also called Limit of Quantitation (LOQ)), but above the Method Detection Limit (MDL).

And/or

J Used for Dual Column analytes when there is a greater than 40% difference for detected concentrations between the two GC/HPLC columns.

B Indicates the analyte was detected in the laboratory method blank analyzed concurrently with the sample.

I Indicates that the flagged compound did not meet DoD criteria in the corresponding Initial Calibration (ICAL).

D Indicates that the flagged compound did not meet DoD criteria in the corresponding Initial Calibration Verification (ICV).

C Indicates that the flagged compound did not meet DoD criteria in the corresponding opening Calibration Verification (CV).

V Indicates that the flagged compound did not meet DoD criteria in the corresponding closing Calibration Verification (CV).

L/LL Indicates that the flagged compound did not meet DoD criteria in the corresponding Laboratory Control Sample (LCS) and/or Laboratory Control Sample Duplicate (LCSD) prepared and/or analyzed concurrently with the sample.

M/MM Indicates that the flagged compound did not meet DoD criteria in the Matrix Spike (MS) and/or Matrix Spike Duplicate MSD) prepared and/or analyzed concurrently with the native sample.

H Indicates the flagged compound was detected on the primary column but was not detected on the confirmation column therefore the compound is not reported as a positive detection. (SW846 8330A/B only)

Katahdin Analytical Services, Inc.

Manual Integration Codes For GC/MS, GC, HPLC and/or IC

M1	Peak splitting.
M2	Well defined peaks on the shoulders of the other peaks.
M3	There is additional area due to a coeluting interferant.
M4	There are negative spikes in the baseline.
M5	There are rising or falling baselines.
M6	The software has failed to detect a peak or misidentified a peak.
M7	Excessive peak tailing.
M8	Analysis such as GRO, DRO and TPH require a baseline hold.
M9	Peak was not completely integrated as in GC/MS.
M10	Primary ion was correctly integrated, but secondary or tertiary ion needed manual integration as in GC/MS.
M11	For GC analysis, when a sample is diluted by 1:10 or more, the surrogate is set to undetected and then the area under the surrogate is manually integrated.
M12	Manual integration saved in method due to TurboChrom floating point error.

Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

SDG: SQ6133
Lab ID: SQ6133-1
Client ID: SY-OBMW6-110723
Matrix: AQ
Lab File ID: 5QK20239.D

Sample Date: 07-NOV-23
Extract Date: 17-NOV-23
Extracted By: DL/SH
Extraction Method: RSK SOP 175
Lab Prep Batch: WG345593

Report Date: 30-NOV-23
Analysis Date: 17-NOV-23
Analyst: DL/SH
Analysis Method: RSK SOP 175 v.2
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Methane	J	3.7	ug/L	1	10.3	10.	2.6	5.2
Ethane	U	9.8	ug/L	1	13.1	13.	5.0	9.8
Ethene	U	9.8	ug/L	1	13.1	13.	5.0	9.8

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Data File: \\target_server\gg\chem\gc05.i\GC05QK17.b\5QK20239.D
Report Date: 30-Nov-2023 21:10

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gc05.i\GC05QK17.b\5QK20239.D
Lab Smp Id: SQ6133-1 Client Smp ID: SY-0BMW6-110723
Inj Date : 17-NOV-2023 09:14
Operator : DL/SH Inst ID: gc05.i
Smp Info : SQ6133-1
Misc Info : WG345593,WG344993-4
Comment : RSK SOP 175
Method : \\target_server\gg\chem\gc05.i\GC05QK17.b\MEEB47A.m
Meth Date : 18-Nov-2023 06:37 dlewry Quant Type: ESTD
Cal Date : 07-NOV-2023 10:11 Cal File: 5QK20014.D
Als bottle: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSKSOP175-MEE.sub
Target Version: 4.12
Processing Host: V200T3

Concentration Formula: Amt * DF * 0.005/Vo * CpndVariable

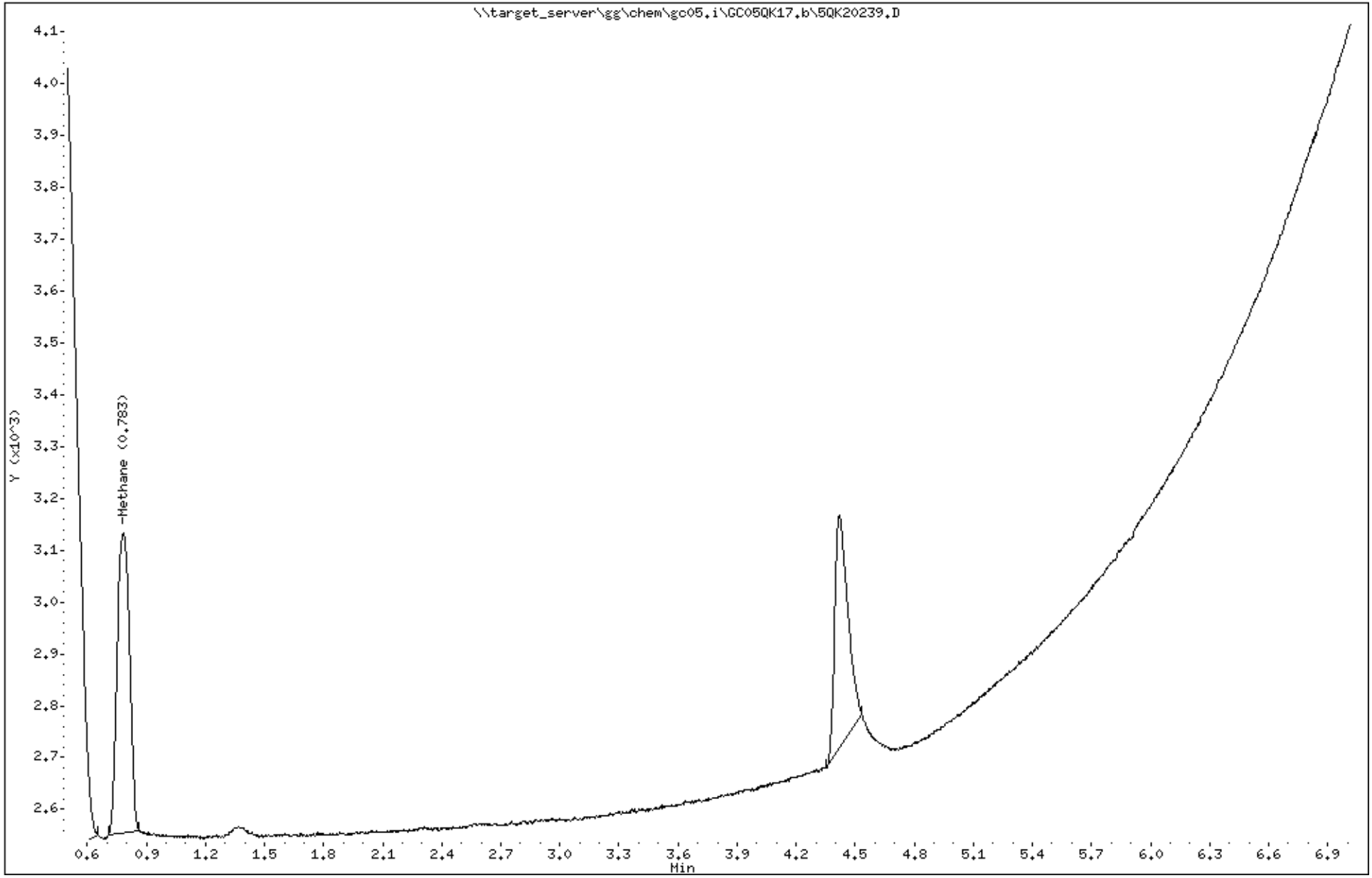
Name	Value	Description
DF	1.000	Dilution Factor
Vo	0.00500	sample purged (L)
Cpnd Variable		Local Compound Variable

					CONCENTRATIONS ON-COLUMN (PPM)	CONCENTRATIONS FINAL (PPM)	
Compounds	RT	EXP RT	DLT RT	RESPONSE			REVIEW CODE
1 Methane	0.783	0.760	0.023	2552	5.37857	5.38(a)	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: \\target_server\gg\chem\gc05.i\GC05QK17.b\5QK20239.D
Date : 17-NOV-2023 09:14
Client ID: SY-0BMW6-110723
Instrument: gc05.i
Sample Info: SQ6133-1
Purge Volume: 0.0
Operator: DL/SH
Column phase: Porapak Q
Column diameter: 0.00



Katahdin Analytical Services SQ6133 Page 526 of 855

Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

SDG: SQ6133
Lab ID: SQ6133-2
Client ID: SY-OBMW4R-110723
Matrix: AQ
Lab File ID: 5QK20240.D

Sample Date: 07-NOV-23
Extract Date: 17-NOV-23
Extracted By: DL/SH
Extraction Method: RSK SOP 175
Lab Prep Batch: WG345593

Report Date: 30-NOV-23
Analysis Date: 17-NOV-23
Analyst: DL/SH
Analysis Method: RSK SOP 175 v.2
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Methane	J	4.6	ug/L	1	10.3	10.	2.6	5.2
Ethane	U	9.8	ug/L	1	13.1	13.	5.0	9.8
Ethene	U	9.8	ug/L	1	13.1	13.	5.0	9.8

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Data File: \\target_server\gg\chem\gc05.i\GC05QK17.b\5QK20240.D
Report Date: 30-Nov-2023 21:10

Katahdin Analytical Services

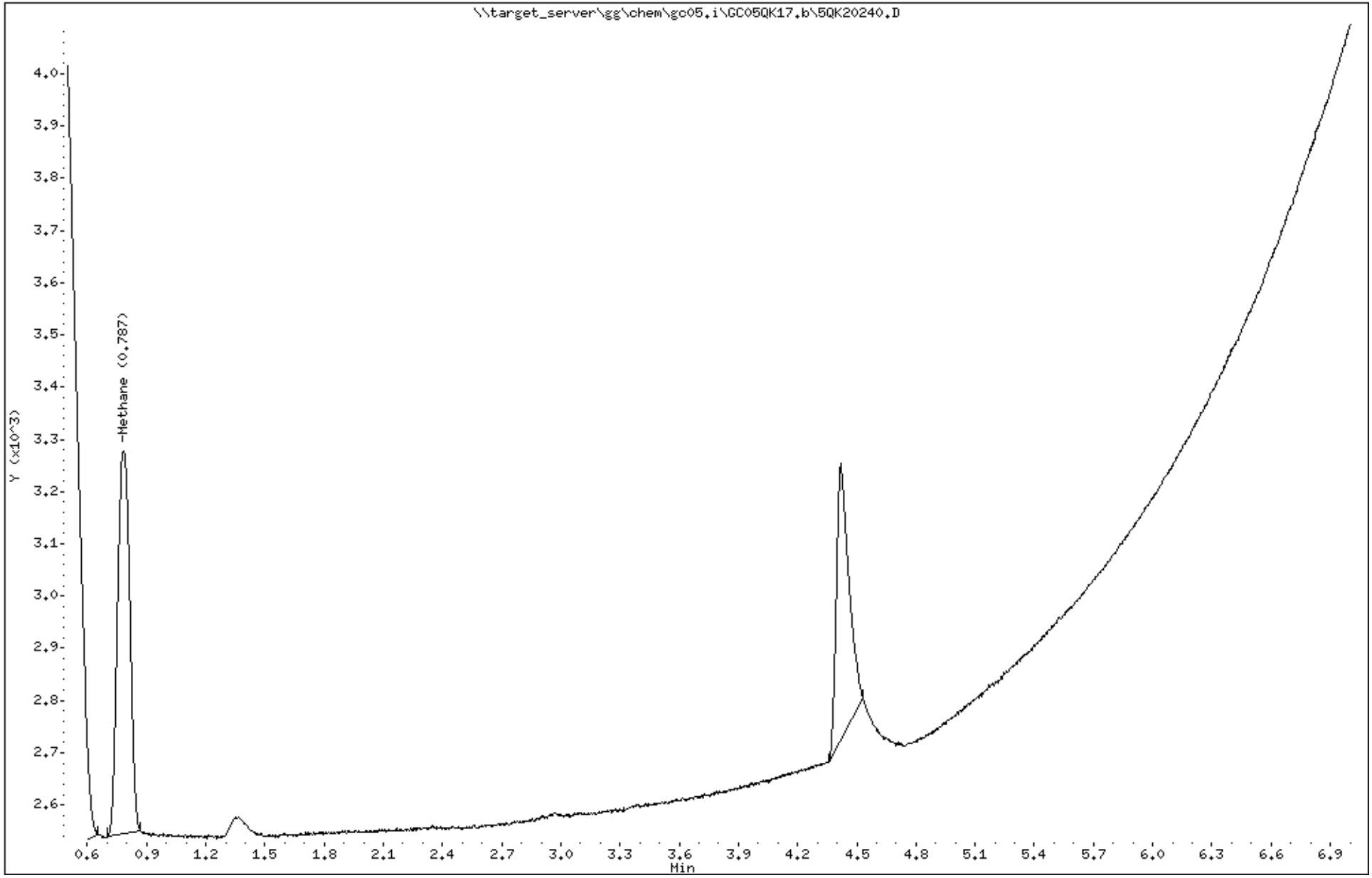
Data file : \\target_server\gg\chem\gc05.i\GC05QK17.b\5QK20240.D
Lab Smp Id: SQ6133-2 Client Smp ID: SY-0BMW4R-110723
Inj Date : 17-NOV-2023 09:32
Operator : DL/SH Inst ID: gc05.i
Smp Info : SQ6133-2
Misc Info : WG345593,WG344993-4
Comment : RSK SOP 175
Method : \\target_server\gg\chem\gc05.i\GC05QK17.b\MEEB47A.m
Meth Date : 18-Nov-2023 06:37 dlewry Quant Type: ESTD
Cal Date : 07-NOV-2023 10:11 Cal File: 5QK20014.D
Als bottle: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSKSOP175-MEE.sub
Target Version: 4.12
Processing Host: V200T3

Concentration Formula: Amt * DF * 0.005/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	0.00500	sample purged (L)
Cpnd Variable		Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (PPM)	CONCENTRATIONS FINAL (PPM)	REVIEW CODE
1 Methane	0.786	0.760	0.026	3208	6.76115	6.76	

Data File: \\target_server\gg\chem\gc05.i\GC05QK17.b\5QK20240.D
Date : 17-NOV-2023 09:32
Client ID: SY-0BMW4R-110723
Instrument: gc05.i
Sample Info: SQ6133-2
Purge Volume: 0.0
Operator: DL/SH
Column phase: Porapak Q
Column diameter: 0.00



Katahdin Analytical Services SQ6133 Page 529 of 855

Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

SDG: SQ6133
Lab ID: SQ6133-3
Client ID: SY-OBMW12-110723
Matrix: AQ
Lab File ID: 5QK20241.D

Sample Date: 07-NOV-23
Extract Date: 17-NOV-23
Extracted By: DL/SH
Extraction Method: RSK SOP 175
Lab Prep Batch: WG345593

Report Date: 30-NOV-23
Analysis Date: 17-NOV-23
Analyst: DL/SH
Analysis Method: RSK SOP 175 v.2
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Methane		17	ug/L	1	10.3	10.	2.6	5.2
Ethane	U	9.8	ug/L	1	13.1	13.	5.0	9.8
Ethene	U	9.8	ug/L	1	13.1	13.	5.0	9.8

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Data File: \\target_server\gg\chem\gc05.i\GC05QK17.b\5QK20241.D
Report Date: 30-Nov-2023 21:10

Katahdin Analytical Services

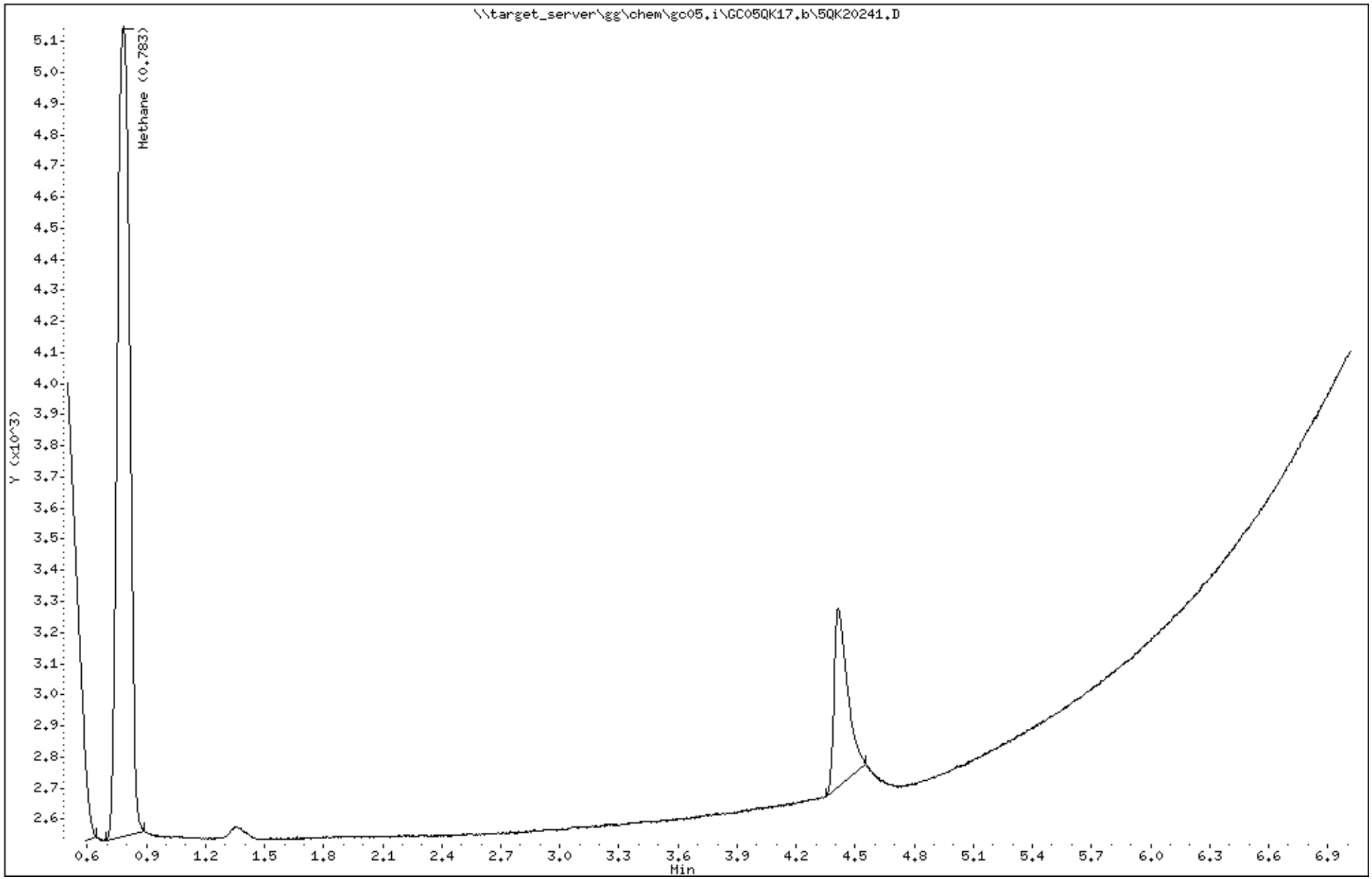
Data file : \\target_server\gg\chem\gc05.i\GC05QK17.b\5QK20241.D
Lab Smp Id: SQ6133-3 Client Smp ID: SY-0BMW12-110723
Inj Date : 17-NOV-2023 09:49
Operator : DL/SH Inst ID: gc05.i
Smp Info : SQ6133-3
Misc Info : WG345593,WG344993-4
Comment : RSK SOP 175
Method : \\target_server\gg\chem\gc05.i\GC05QK17.b\MEEB47A.m
Meth Date : 18-Nov-2023 06:37 dlewry Quant Type: ESTD
Cal Date : 07-NOV-2023 10:11 Cal File: 5QK20014.D
Als bottle: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSKSOP175-MEE.sub
Target Version: 4.12
Processing Host: V200T3

Concentration Formula: Amt * DF * 0.005/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	0.00500	sample purged (L)
Cpnd Variable		Local Compound Variable

					CONCENTRATIONS ON-COLUMN	CONCENTRATIONS FINAL	
Compounds	RT	EXP RT	DLT RT	RESPONSE	(PPM)	(PPM)	REVIEW CODE
1 Methane	0.783	0.760	0.023	11486	24.2078	24.2	

Data File: \\target_server\gg\chem\gc05.i\GC05QK17.b\5QK20241.D
Date : 17-NOV-2023 09:49
Client ID: SY-0BMW12-110723
Instrument: gc05.i
Sample Info: SQ6133-3
Purge Volume: 0.0
Operator: DL/SH
Column phase: Porapak Q
Column diameter: 0.00



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Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

SDG: SQ6133
Lab ID: SQ6133-4
Client ID: SY-BRMW2-60.5-70.5-110723
Matrix: AQ
Lab File ID: 5QK20244.D

Sample Date: 07-NOV-23
Extract Date: 17-NOV-23
Extracted By: DL/SH
Extraction Method: RSK SOP 175
Lab Prep Batch: WG345593

Report Date: 30-NOV-23
Analysis Date: 17-NOV-23
Analyst: DL/SH
Analysis Method: RSK SOP 175 v.2
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Methane	J	3.4	ug/L	1	10.3	10.	2.6	5.2
Ethane	U	9.8	ug/L	1	13.1	13.	5.0	9.8
Ethene	U	9.8	ug/L	1	13.1	13.	5.0	9.8

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Data File: \\target_server\gg\chem\gc05.i\GC05QK17.b\5QK20244.D
Report Date: 30-Nov-2023 21:10

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gc05.i\GC05QK17.b\5QK20244.D
Lab Smp Id: SQ6133-4 Client Smp ID: Y-BRMW2-60.5-70.5-1
Inj Date : 17-NOV-2023 10:40
Operator : DL/SH Inst ID: gc05.i
Smp Info : SQ6133-4
Misc Info : WG345593,WG344993-4
Comment : RSK SOP 175
Method : \\target_server\gg\chem\gc05.i\GC05QK17.b\MEEB47A.m
Meth Date : 18-Nov-2023 06:37 dlewry Quant Type: ESTD
Cal Date : 07-NOV-2023 10:11 Cal File: 5QK20014.D
Als bottle: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSKSOP175-MEE.sub
Target Version: 4.12
Processing Host: V200T3

Concentration Formula: Amt * DF * 0.005/Vo * CpndVariable

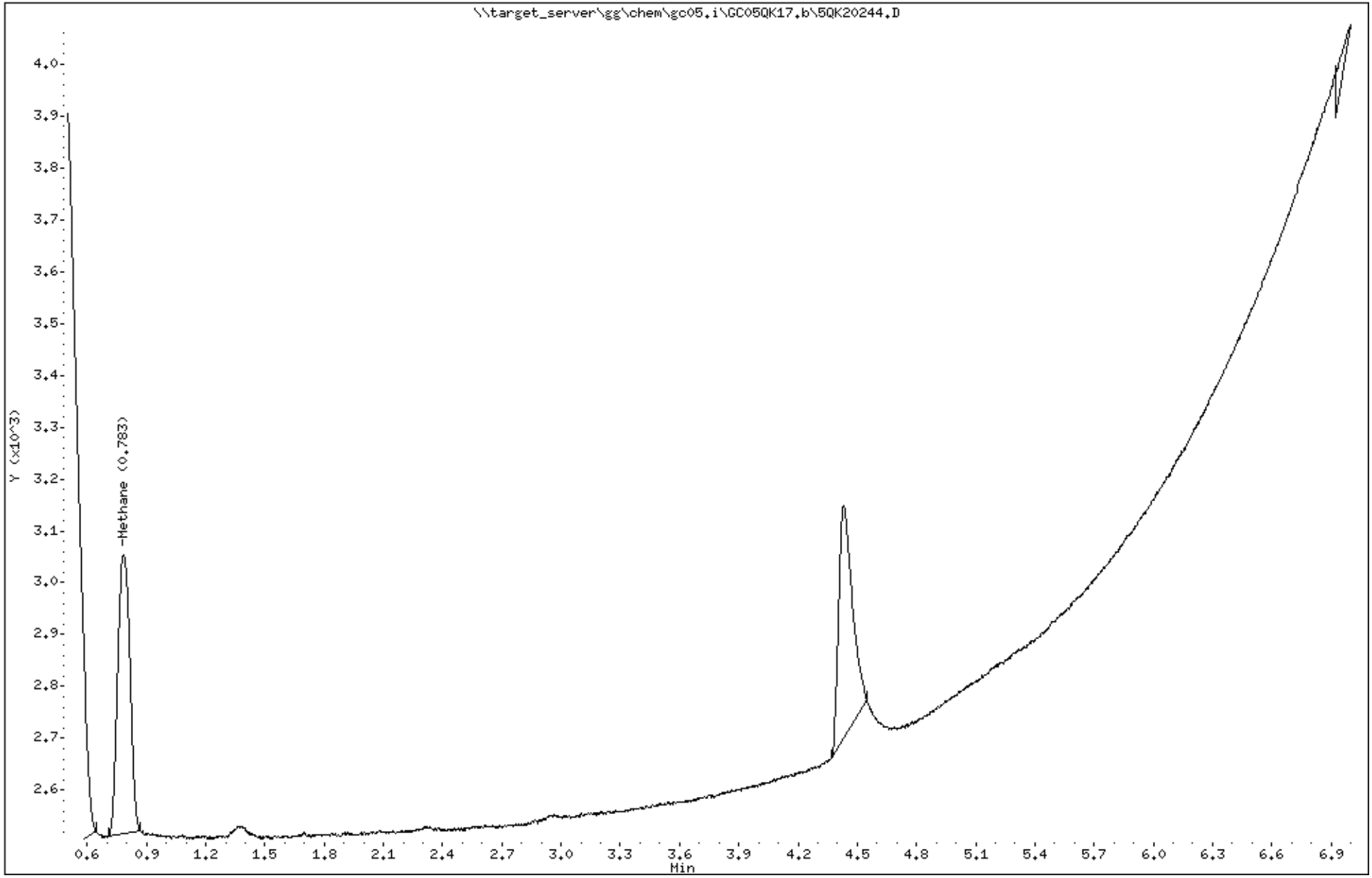
Name	Value	Description
DF	1.000	Dilution Factor
Vo	0.00500	sample purged (L)
Cpnd Variable		Local Compound Variable

					CONCENTRATIONS ON-COLUMN (PPM)	CONCENTRATIONS FINAL (PPM)	
Compounds	RT	EXP RT	DLT RT	RESPONSE			REVIEW CODE
1 Methane	0.783	0.760	0.023	2337	4.92544	4.92(a)	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: \\target_server\gg\chem\gc05.i\GC05QK17.b\5QK20244.D
Date : 17-NOV-2023 10:40
Client ID: Y-BRMW2-60.5-70.5-1
Instrument: gc05.i
Sample Info: SQ6133-4
Purge Volume: 0.0
Operator: DL/SH
Column phase: Porapak Q
Column diameter: 0.00



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ANALYTICAL SERVICES

Report of Analytical Results

SDG: SQ6133
Lab ID: SQ6133-5
Client ID: SY-OBMW15-110723
Matrix: AQ
Lab File ID: 5QK20245.D

Sample Date: 07-NOV-23
Extract Date: 17-NOV-23
Extracted By: DL/SH
Extraction Method: RSK SOP 175
Lab Prep Batch: WG345593

Report Date: 30-NOV-23
Analysis Date: 17-NOV-23
Analyst: DL/SH
Analysis Method: RSK SOP 175 v.2
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Methane	J	9.1	ug/L	1	10.3	10.	2.6	5.2
Ethane	U	9.8	ug/L	1	13.1	13.	5.0	9.8
Ethene	U	9.8	ug/L	1	13.1	13.	5.0	9.8

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Data File: \\target_server\gg\chem\gc05.i\GC05QK17.b\5QK20245.D
Report Date: 30-Nov-2023 21:10

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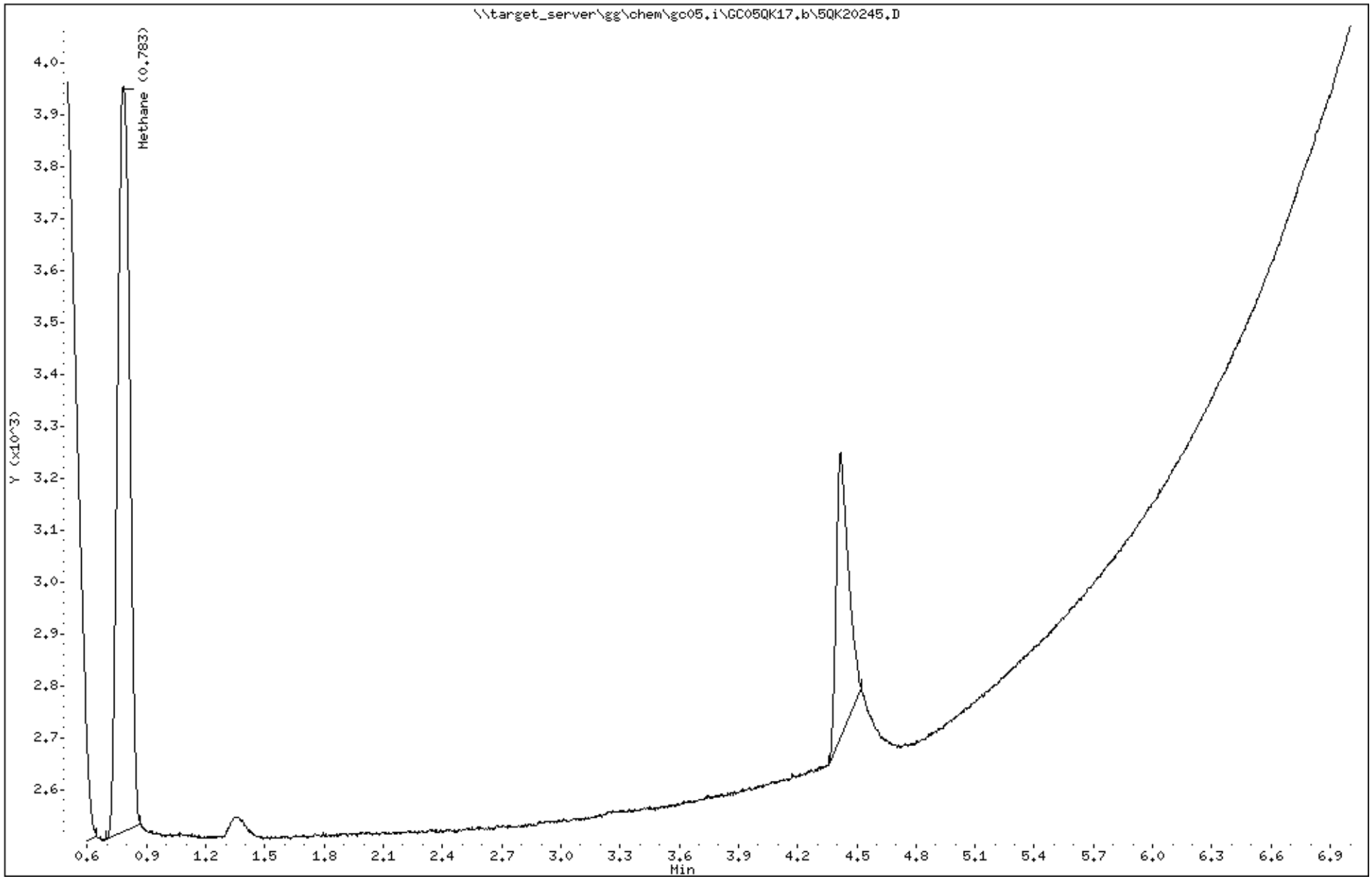
Data file : \\target_server\gg\chem\gc05.i\GC05QK17.b\5QK20245.D
Lab Smp Id: SQ6133-5 Client Smp ID: SY-0BMW15-110723
Inj Date : 17-NOV-2023 10:57
Operator : DL/SH Inst ID: gc05.i
Smp Info : SQ6133-5
Misc Info : WG345593,WG344993-4
Comment : RSK SOP 175
Method : \\target_server\gg\chem\gc05.i\GC05QK17.b\MEEB47A.m
Meth Date : 18-Nov-2023 06:37 dlewry Quant Type: ESTD
Cal Date : 07-NOV-2023 10:11 Cal File: 5QK20014.D
Als bottle: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSKSOP175-MEE.sub
Target Version: 4.12
Processing Host: V200T3

Concentration Formula: Amt * DF * 0.005/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	0.00500	sample purged (L)
Cpnd Variable		Local Compound Variable

					CONCENTRATIONS ON-COLUMN	CONCENTRATIONS FINAL	
Compounds	RT	EXP RT	DLT RT	RESPONSE	(PPM)	(PPM)	REVIEW CODE
1 Methane	0.783	0.760	0.023	6272	13.2188	13.2	

Data File: \\target_server\gg\chem\gc05.i\GC05QK17.b\5QK20245.D
Date : 17-NOV-2023 10:57
Client ID: SY-0BMW15-110723
Instrument: gc05.i
Sample Info: SQ6133-5
Purge Volume: 0.0
Operator: DL/SH
Column phase: Porapak Q
Column diameter: 0.00



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ANALYTICAL SERVICES

Report of Analytical Results

SDG: SQ6133
Lab ID: SQ6133-6
Client ID: SY-OBMW5-110723
Matrix: AQ
Lab File ID: 5QK20246.D

Sample Date: 07-NOV-23
Extract Date: 17-NOV-23
Extracted By: DL/SH
Extraction Method: RSK SOP 175
Lab Prep Batch: WG345593

Report Date: 30-NOV-23
Analysis Date: 17-NOV-23
Analyst: DL/SH
Analysis Method: RSK SOP 175 v.2
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Methane	J	3.6	ug/L	1	10.3	10.	2.6	5.2
Ethane	U	9.8	ug/L	1	13.1	13.	5.0	9.8
Ethene	U	9.8	ug/L	1	13.1	13.	5.0	9.8

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Data File: \\target_server\gg\chem\gc05.i\GC05QK17.b\5QK20246.D
Report Date: 30-Nov-2023 21:10

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Data file : \\target_server\gg\chem\gc05.i\GC05QK17.b\5QK20246.D
Lab Smp Id: SQ6133-6 Client Smp ID: SY-0BMW5-110723
Inj Date : 17-NOV-2023 11:14
Operator : DL/SH Inst ID: gc05.i
Smp Info : SQ6133-6
Misc Info : WG345593,WG344993-4
Comment : RSK SOP 175
Method : \\target_server\gg\chem\gc05.i\GC05QK17.b\MEEB47A.m
Meth Date : 18-Nov-2023 06:37 dlewry Quant Type: ESTD
Cal Date : 07-NOV-2023 10:11 Cal File: 5QK20014.D
Als bottle: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSKSOP175-MEE.sub
Target Version: 4.12
Processing Host: V200T3

Concentration Formula: Amt * DF * 0.005/Vo * CpndVariable

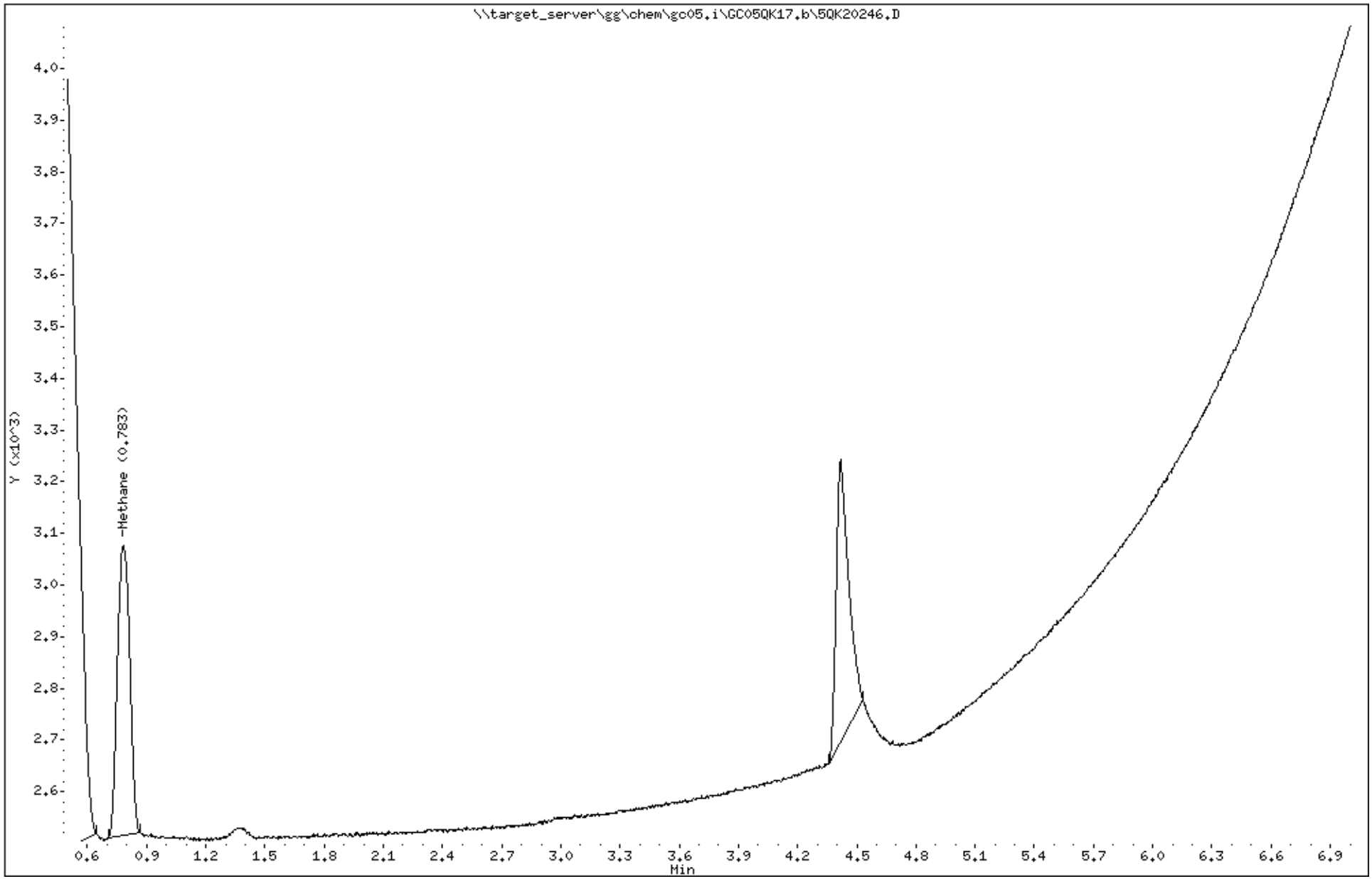
Name	Value	Description
DF	1.000	Dilution Factor
Vo	0.00500	sample purged (L)
Cpnd Variable		Local Compound Variable

					CONCENTRATIONS ON-COLUMN	CONCENTRATIONS FINAL	
Compounds	RT	EXP RT	DLT RT	RESPONSE	(PPM)	(PPM)	REVIEW CODE
1 Methane	0.783	0.760	0.023	2485	5.23736	5.24(a)	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: \\target_server\gg\chem\gc05.i\GC05QK17.b\5QK20246.D
Date : 17-NOV-2023 11:14
Client ID: SY-0BMW5-110723
Instrument: gc05.i
Sample Info: SQ6133-6
Purge Volume: 0.0
Operator: DL/SH
Column phase: Porapak Q
Column diameter: 0.00



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ANALYTICAL SERVICES

Report of Analytical Results

SDG: SQ6133
Lab ID: SQ6133-7
Client ID: SY-OBMW13-110723
Matrix: AQ
Lab File ID: 5QK20247.D

Sample Date: 07-NOV-23
Extract Date: 17-NOV-23
Extracted By: DL/SH
Extraction Method: RSK SOP 175
Lab Prep Batch: WG345593

Report Date: 30-NOV-23
Analysis Date: 17-NOV-23
Analyst: DL/SH
Analysis Method: RSK SOP 175 v.2
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Methane	J	3.2	ug/L	1	10.3	10.	2.6	5.2
Ethane	U	9.8	ug/L	1	13.1	13.	5.0	9.8
Ethene	U	9.8	ug/L	1	13.1	13.	5.0	9.8

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Data File: \\target_server\gg\chem\gc05.i\GC05QK17.b\5QK20247.D
Report Date: 30-Nov-2023 21:10

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Data file : \\target_server\gg\chem\gc05.i\GC05QK17.b\5QK20247.D
Lab Smp Id: SQ6133-7 Client Smp ID: SY-0BMW13-110723
Inj Date : 17-NOV-2023 11:31
Operator : DL/SH Inst ID: gc05.i
Smp Info : SQ6133-7
Misc Info : WG345593,WG344993-4
Comment : RSK SOP 175
Method : \\target_server\gg\chem\gc05.i\GC05QK17.b\MEEB47A.m
Meth Date : 18-Nov-2023 06:37 dlewry Quant Type: ESTD
Cal Date : 07-NOV-2023 10:11 Cal File: 5QK20014.D
Als bottle: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSKSOP175-MEE.sub
Target Version: 4.12
Processing Host: V200T3

Concentration Formula: Amt * DF * 0.005/Vo * CpndVariable

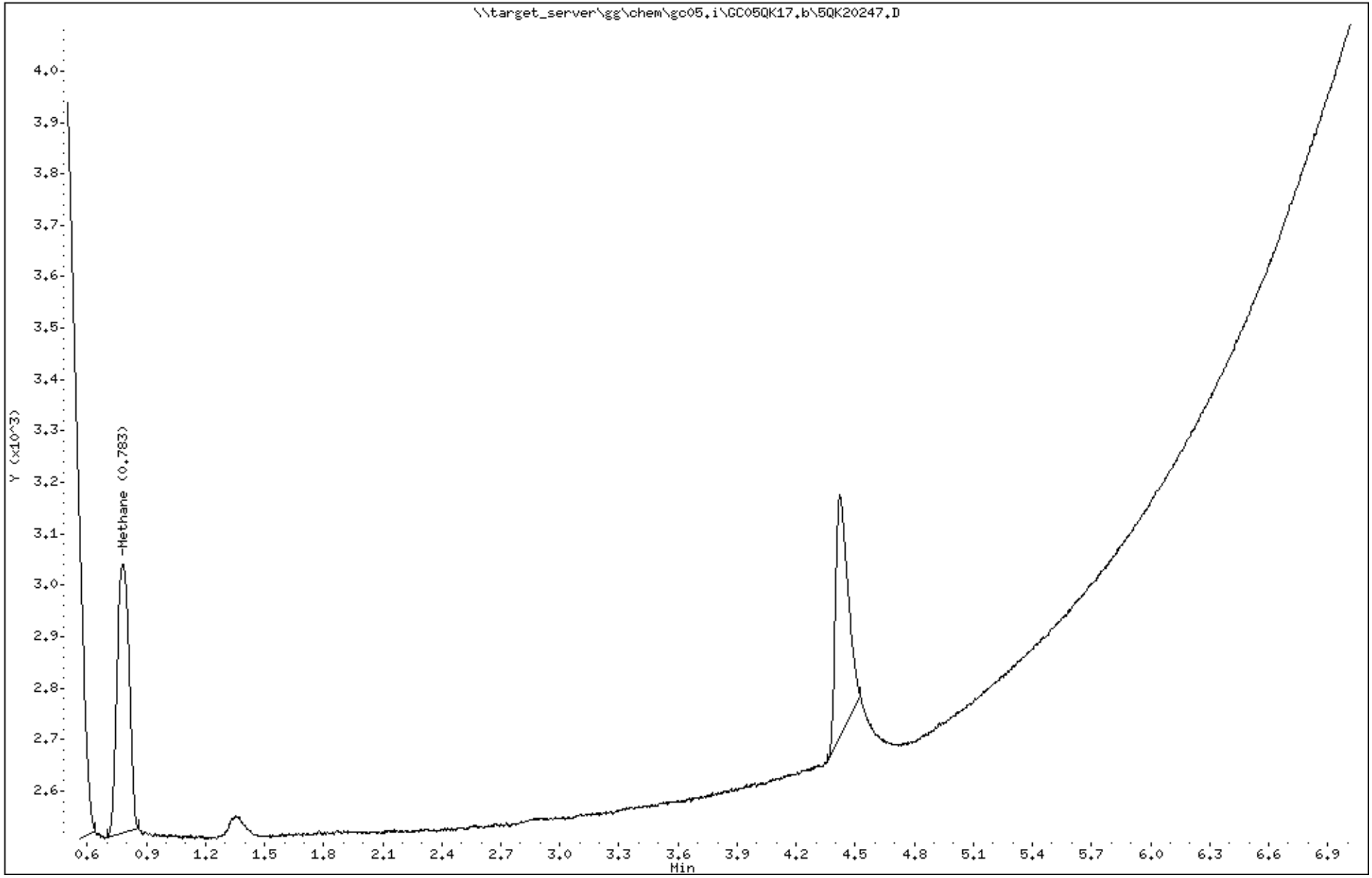
Name	Value	Description
DF	1.000	Dilution Factor
Vo	0.00500	sample purged (L)
Cpnd Variable		Local Compound Variable

					CONCENTRATIONS ON-COLUMN (PPM)	CONCENTRATIONS FINAL (PPM)	
Compounds	RT	EXP RT	DLT RT	RESPONSE			REVIEW CODE
1 Methane	0.783	0.760	0.023	2244	4.72943	4.73(a)	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: \\target_server\gg\chem\gc05.i\GC05QK17.b\5QK20247.D
Date : 17-NOV-2023 11:31
Client ID: SY-0BMW13-110723
Instrument: gc05.i
Sample Info: SQ6133-7
Purge Volume: 0.0
Operator: DL/SH
Column phase: Porapak Q
Column diameter: 0.00



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Report of Analytical Results

SDG: SQ6133
Lab ID: SQ6133-8
Client ID: SY-BRMW2-80.5-95.5-110723
Matrix: AQ
Lab File ID: 5QK20249.D

Sample Date: 07-NOV-23
Extract Date: 17-NOV-23
Extracted By: DL/SH
Extraction Method: RSK SOP 175
Lab Prep Batch: WG345593

Report Date: 30-NOV-23
Analysis Date: 17-NOV-23
Analyst: DL/SH
Analysis Method: RSK SOP 175 v.2
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Methane	J	3.4	ug/L	1	10.3	10.	2.6	5.2
Ethane	U	9.8	ug/L	1	13.1	13.	5.0	9.8
Ethene	U	9.8	ug/L	1	13.1	13.	5.0	9.8

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Data File: \\target_server\gg\chem\gc05.i\GC05QK17.b\5QK20249.D
Report Date: 30-Nov-2023 21:10

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Data file : \\target_server\gg\chem\gc05.i\GC05QK17.b\5QK20249.D
Lab Smp Id: SQ6133-8 Client Smp ID: Y-BRMW2-80.5-95.5-1
Inj Date : 17-NOV-2023 12:05
Operator : DL/SH Inst ID: gc05.i
Smp Info : SQ6133-8
Misc Info : WG345593,WG344993-4
Comment : RSK SOP 175
Method : \\target_server\gg\chem\gc05.i\GC05QK17.b\MEEB47A.m
Meth Date : 18-Nov-2023 06:37 dlewry Quant Type: ESTD
Cal Date : 07-NOV-2023 10:11 Cal File: 5QK20014.D
Als bottle: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSKSOP175-MEE.sub
Target Version: 4.12
Processing Host: V200T3

Concentration Formula: Amt * DF * 0.005/Vo * CpndVariable

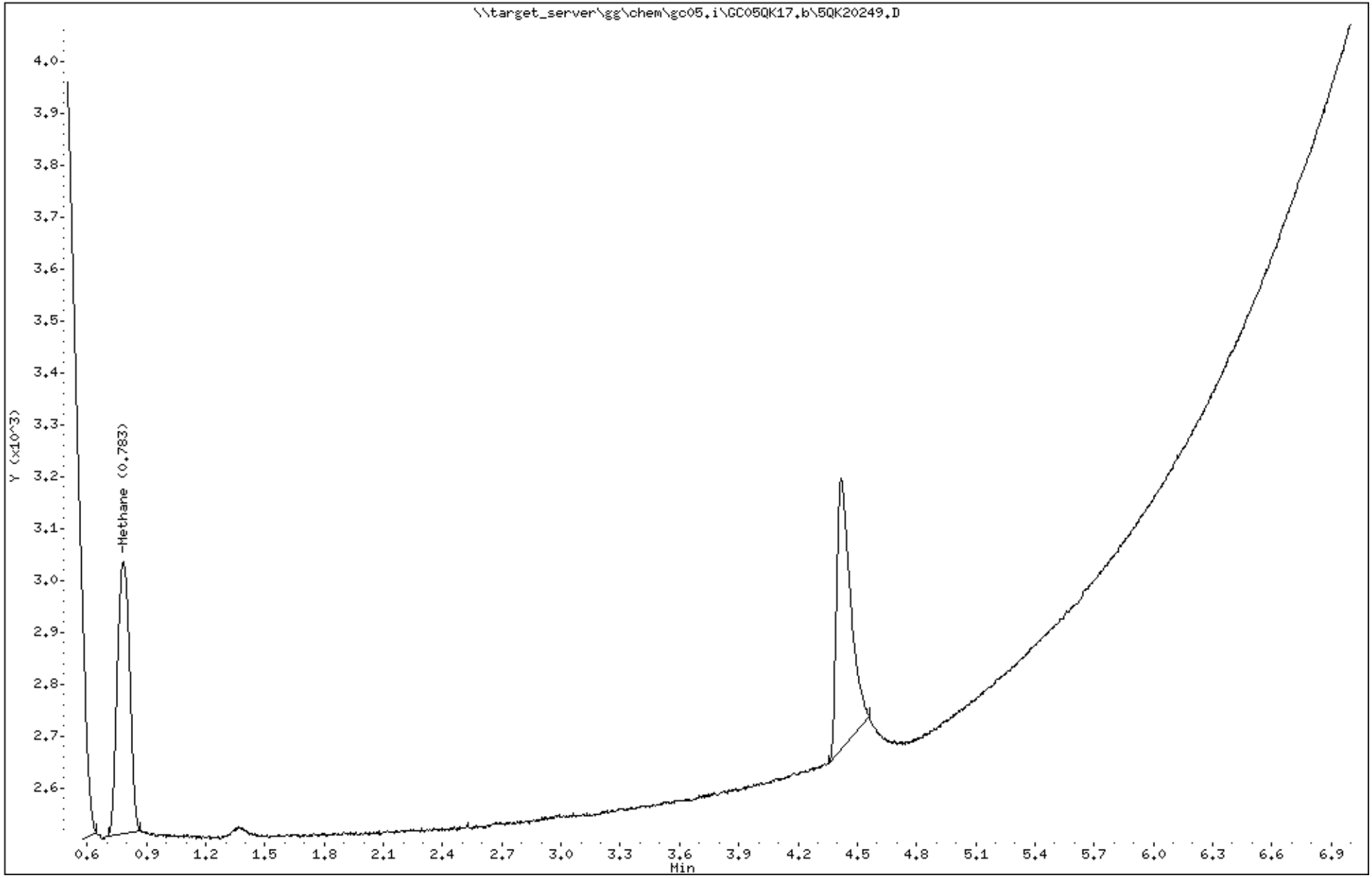
Name	Value	Description
DF	1.000	Dilution Factor
Vo	0.00500	sample purged (L)
Cpnd Variable		Local Compound Variable

					CONCENTRATIONS ON-COLUMN (PPM)	CONCENTRATIONS FINAL (PPM)	
Compounds	RT	EXP RT	DLT RT	RESPONSE			REVIEW CODE
1 Methane	0.783	0.760	0.023	2316	4.88118	4.88(a)	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: \\target_server\gg\chem\gc05.i\GC05QK17.b\5QK20249.D
Date : 17-NOV-2023 12:05
Client ID: Y-BRMW2-80.5-95.5-1
Instrument: gc05.i
Sample Info: SQ6133-8
Purge Volume: 0.0
Operator: DL/SH
Column phase: Porapak Q
Column diameter: 0.00



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ANALYTICAL SERVICES

Report of Analytical Results

SDG: SQ6133
Lab ID: SQ6133-9
Client ID: SY-OBMW14-110723
Matrix: AQ
Lab File ID: 5QK20252.D

Sample Date: 07-NOV-23
Extract Date: 17-NOV-23
Extracted By: DL/SH
Extraction Method: RSK SOP 175
Lab Prep Batch: WG345593

Report Date: 30-NOV-23
Analysis Date: 17-NOV-23
Analyst: DL/SH
Analysis Method: RSK SOP 175 v.2
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Methane		18	ug/L	1	10.3	10.	2.6	5.2
Ethane	U	9.8	ug/L	1	13.1	13.	5.0	9.8
Ethene	U	9.8	ug/L	1	13.1	13.	5.0	9.8

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Data File: \\target_server\gg\chem\gc05.i\GC05QK17.b\5QK20252.D
Report Date: 30-Nov-2023 21:10

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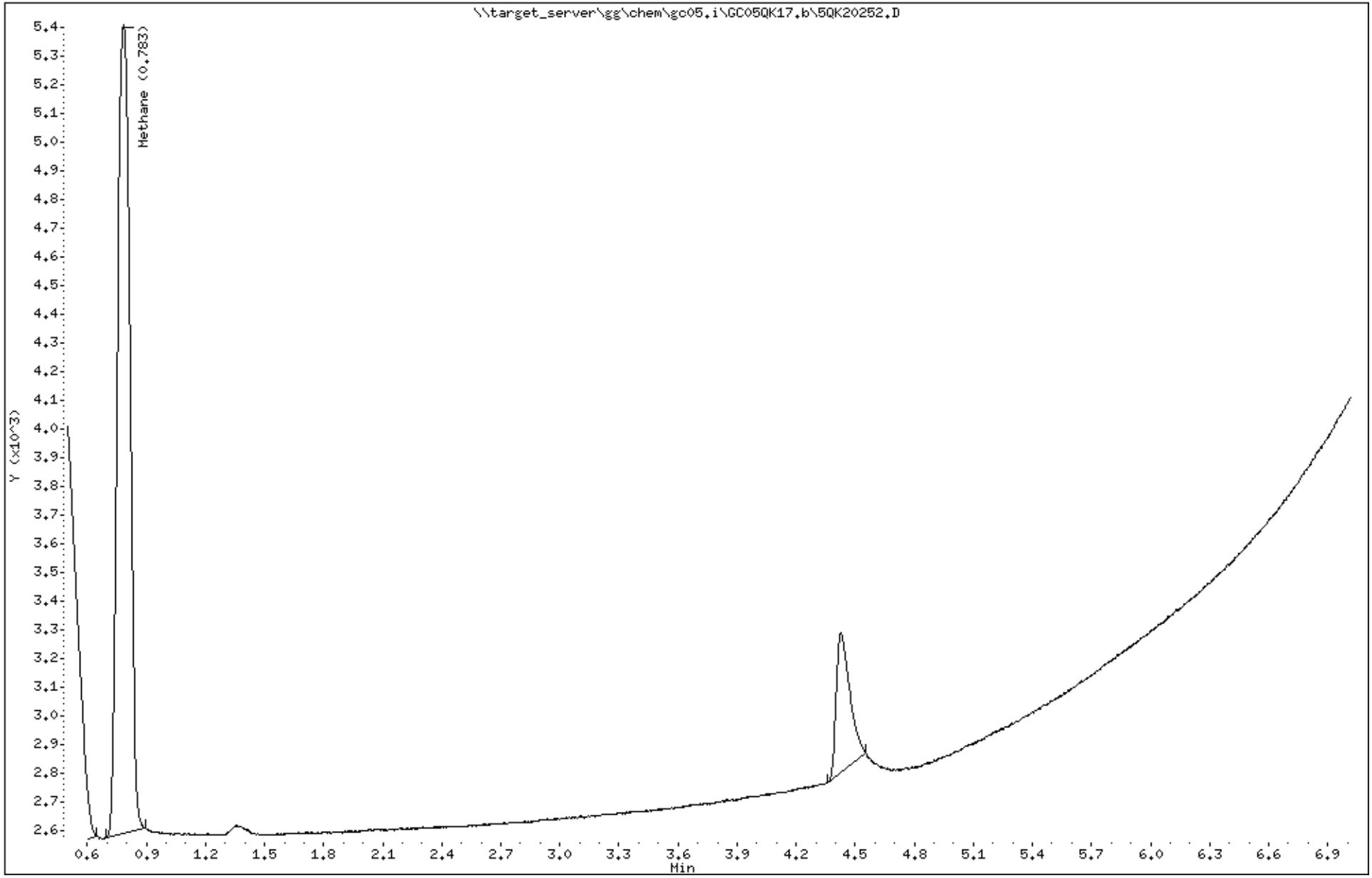
Data file : \\target_server\gg\chem\gc05.i\GC05QK17.b\5QK20252.D
Lab Smp Id: SQ6133-9 Client Smp ID: SY-0BMW14-110723
Inj Date : 17-NOV-2023 12:56
Operator : DL/SH Inst ID: gc05.i
Smp Info : SQ6133-9
Misc Info : WG345593,WG344993-4
Comment : RSK SOP 175
Method : \\target_server\gg\chem\gc05.i\GC05QK17.b\MEEB47A.m
Meth Date : 18-Nov-2023 06:37 dlewry Quant Type: ESTD
Cal Date : 07-NOV-2023 10:11 Cal File: 5QK20014.D
Als bottle: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSKSOP175-MEE.sub
Target Version: 4.12
Processing Host: V200T3

Concentration Formula: Amt * DF * 0.005/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	0.00500	sample purged (L)
Cpnd Variable		Local Compound Variable

					CONCENTRATIONS ON-COLUMN	CONCENTRATIONS FINAL	
Compounds	RT	EXP RT	DLT RT	RESPONSE	(PPM)	(PPM)	REVIEW CODE
1 Methane	0.783	0.760	0.023	12549	26.4482	26.4	

Data File: \\target_server\gg\chem\gc05.i\GC05QK17.b\5QK20252.D
Date : 17-NOV-2023 12:56
Client ID: SY-0BMW14-110723
Instrument: gc05.i
Sample Info: SQ6133-9
Purge Volume: 0.0
Operator: DL/SH
Column phase: Porapak Q
Column diameter: 0.00



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ANALYTICAL SERVICES

Report of Analytical Results

SDG: SQ6133
Lab ID: SQ6133-10
Client ID: SY-BRMW2-252.5-262.5-110723
Matrix: AQ
Lab File ID: 5QK20253.D

Sample Date: 07-NOV-23
Extract Date: 17-NOV-23
Extracted By: DL/SH
Extraction Method: RSK SOP 175
Lab Prep Batch: WG345593

Report Date: 30-NOV-23
Analysis Date: 17-NOV-23
Analyst: DL/SH
Analysis Method: RSK SOP 175 v.2
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Methane	J	3.4	ug/L	1	10.3	10.	2.6	5.2
Ethane	U	9.8	ug/L	1	13.1	13.	5.0	9.8
Ethene	U	9.8	ug/L	1	13.1	13.	5.0	9.8

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Data File: \\target_server\gg\chem\gc05.i\GC05QK17.b\5QK20253.D
Report Date: 30-Nov-2023 21:10

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Data file : \\target_server\gg\chem\gc05.i\GC05QK17.b\5QK20253.D
Lab Smp Id: SQ6133-10 Client Smp ID: Y-BRMW2-252.5-262.5
Inj Date : 17-NOV-2023 13:13
Operator : DL/SH Inst ID: gc05.i
Smp Info : SQ6133-10
Misc Info : WG345593,WG344993-4
Comment : RSK SOP 175
Method : \\target_server\gg\chem\gc05.i\GC05QK17.b\MEEB47A.m
Meth Date : 18-Nov-2023 06:37 dlewry Quant Type: ESTD
Cal Date : 07-NOV-2023 10:11 Cal File: 5QK20014.D
Als bottle: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSKSOP175-MEE.sub
Target Version: 4.12
Processing Host: V200T3

Concentration Formula: Amt * DF * 0.005/Vo * CpndVariable

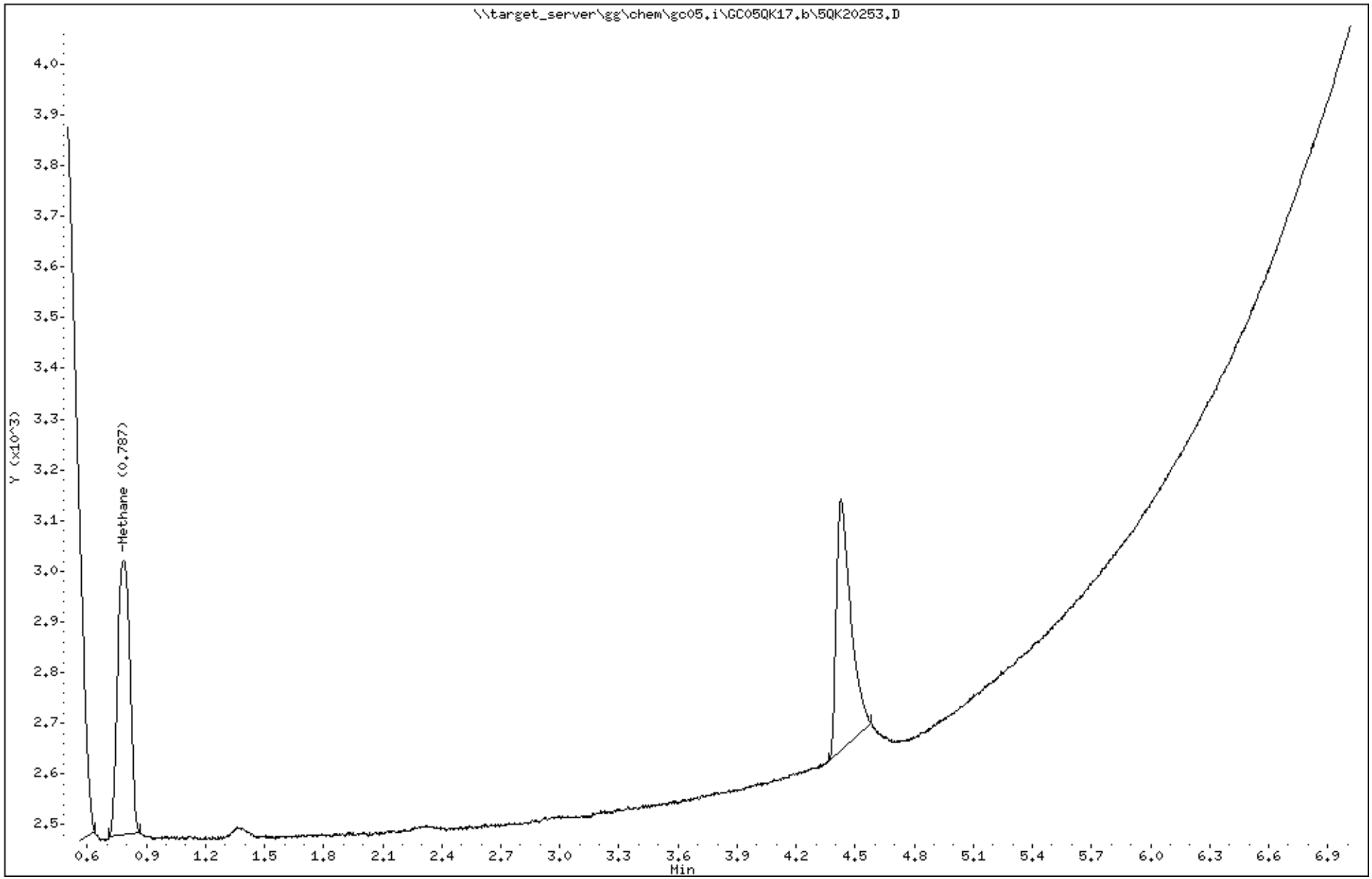
Name	Value	Description
DF	1.000	Dilution Factor
Vo	0.00500	sample purged (L)
Cpnd Variable		Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (PPM)	CONCENTRATIONS FINAL (PPM)	REVIEW CODE
1 Methane	0.786	0.760	0.026	2374	5.00342	5.00(a)	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: \\target_server\gg\chem\gc05.i\GC05QK17.b\5QK20253.D
Date : 17-NOV-2023 13:13
Client ID: Y-BRMW2-252.5-262.5
Instrument: gc05.i
Sample Info: SQ6133-10
Purge Volume: 0.0
Operator: DL/SH
Column phase: Porapak Q
Column diameter: 0.00



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Standards Data Section

Form 6
Initial Calibration Summary

Lab Name : Katahdin Analytical Services **SDG:** SQ6133

Instrument ID: GC05 **Column ID:** A

Lab File IDs : 5QK20008.D5QK20009.D5QK20010.D 5QK20011.D5QK20012.D5QK20013.D 5QK20014.D **Calibration Date(s):** 07-NOV-23 08:28 07-NOV-23 10:11

	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Level 7		Curve				%RSD or R^2		
	6.5000	10.0000	50.0000	100.0000	500.0000	1000.0000	1500.0000		Type	b	m1	m2	Result	Limit	
Methane	635	558	472	453	437	420	346		AVG		474		19.95879	25	O
Ethene	830	809	836	826	811	789	654		AVG		793		8.01360	25	O
Ethane	862	837	865	855	843	821	677		AVG		823		8.03115	25	O

Legend: O = Acceptable; W = Failed %RSD Value; X = Failed R^2 Value; Y = Failed Minimum RF

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Data File: \\target_server\gg\chem\gc05.i\GC05QK07.b\5QK20015.D
Report Date: 18-Nov-2023 10:15

Katahdin Analytical Services

RECOVERY REPORT

Client Name: Client SDG: SDGa00256
Sample Matrix: LIQUID Fraction: VOA
Lab Smp Id: WG344993-8
Level: LOW Operator: DL
Data Type: GC DATA SampleType: INDSOURCE
SpikeList File: ind.spk Quant Type: ESTD
Sublist File: all.sub
Method File: \\target_server\gg\chem\gc05.i\GC05QK07.b\MEEB47A.m
Misc Info: WG344993,WG344993-4

SPIKE COMPOUND	CONC ADDED PPM	CONC RECOVERED PPM	% RECOVERED	LIMITS
1 Methane	100	88.6	88.59	85-115
2 Ethene	100	96.0	96.05	85-115
3 Ethane	100	93.9	93.86	85-115

Data File: \\target_server\gg\chem\gc05.i\GC05QK07.b\5QK20008.D
Report Date: 18-Nov-2023 10:15

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gc05.i\GC05QK07.b\5QK20008.D
Lab Smp Id: WG344993-1
Inj Date : 07-NOV-2023 08:28
Operator : DL   Inst ID: gc05.i
Smp Info : WG344993-1
Misc Info :
Comment   : RSK SOP 175
Method   : \\target_server\gg\chem\gc05.i\GC05QK07.b\MEEB47A.m
Meth Date : 08-Nov-2023 06:10 dlewry   Quant Type: ESTD
Cal Date : 07-NOV-2023 08:28   Cal File: 5QK20008.D
Als bottle: 1   Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: Falcon   Compound Sublist: all.sub
Target Version: 4.12

Concentration Formula: Amt * DF * 0.005/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	0.00500	sample purged (L)
Cpnd Variable		Local Compound Variable

DL

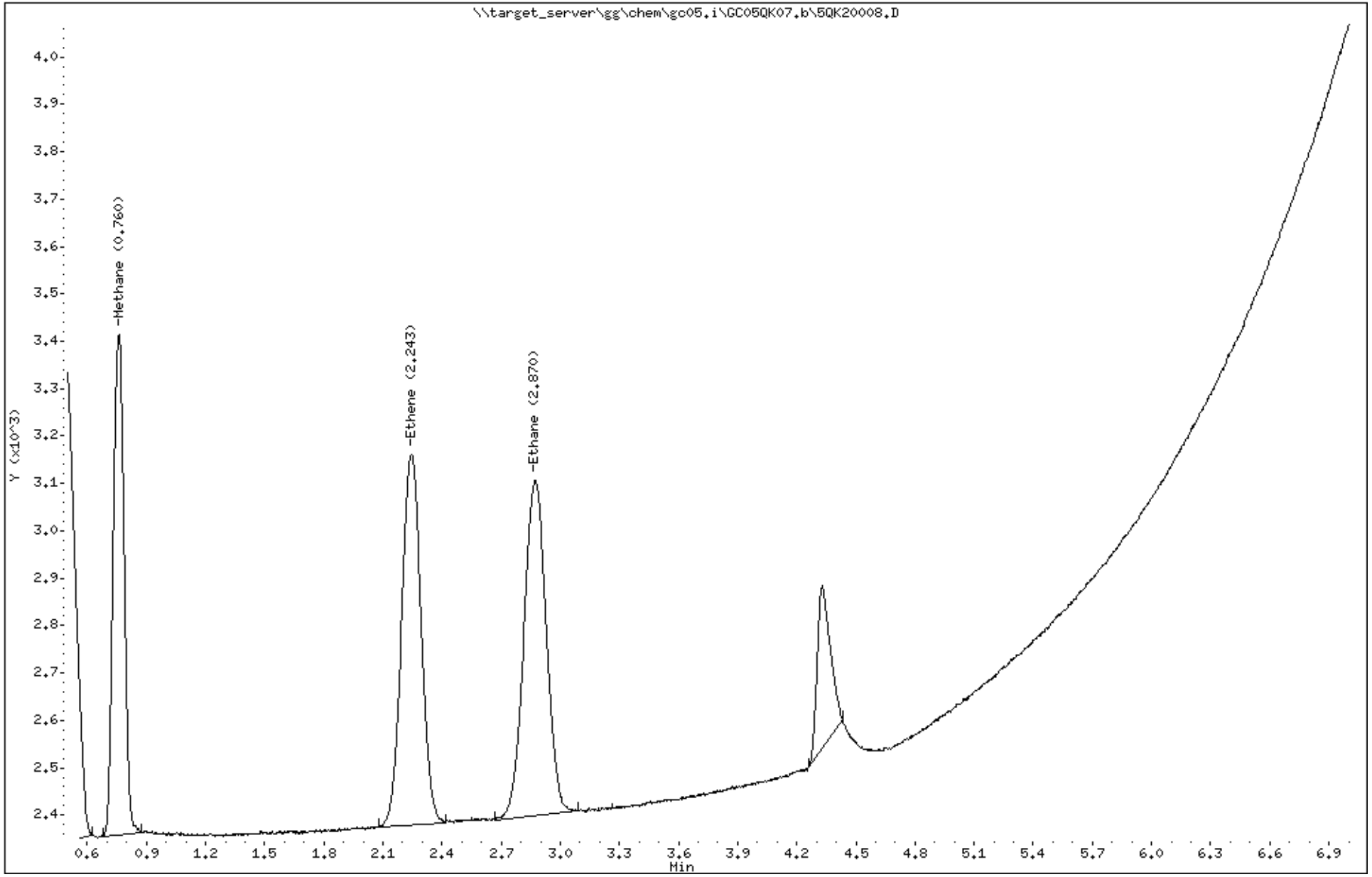
10:16 am, Nov 18, 2023

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (PPM)	ON-COL (PPM)	REVIEW CODE
1 Methane	0.760	0.760	0.000	4126	6.50000	6.50(aM)	M9
2 Ethene	2.243	2.317	-0.074	5395	6.50000	6.50(aM)	M9
3 Ethane	2.870	2.957	-0.087	5600	6.50000	6.50(aM)	M9

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

Data File: \\target_server\gg\chem\gc05.i\GC05QK07.b\5QK20008.D
Date : 07-NOV-2023 08:28
Client ID:
Instrument: gc05.i
Sample Info: WG344993-1
Purge Volume: 0.0
Operator: DL
Column phase: Porapak Q
Column diameter: 0.00



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Data File: \\target_server\gg\chem\gc05.i\GC05QK07.b\5QK20009.D
Report Date: 18-Nov-2023 10:15

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gc05.i\GC05QK07.b\5QK20009.D
Lab Smp Id: WG344993-2
Inj Date : 07-NOV-2023 08:46
Operator : DL   Inst ID: gc05.i
Smp Info : WG344993-2
Misc Info :
Comment   : RSK SOP 175
Method   : \\target_server\gg\chem\gc05.i\GC05QK07.b\MEEB47A.m
Meth Date : 08-Nov-2023 06:10 dlewry   Quant Type: ESTD
Cal Date : 07-NOV-2023 08:46   Cal File: 5QK20009.D
Als bottle: 1   Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: Falcon   Compound Sublist: all.sub
Target Version: 4.12
Processing Host: V200T3

Concentration Formula: Amt * DF * 0.005/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	0.00500	sample purged (L)
Cpnd Variable		Local Compound Variable

DL

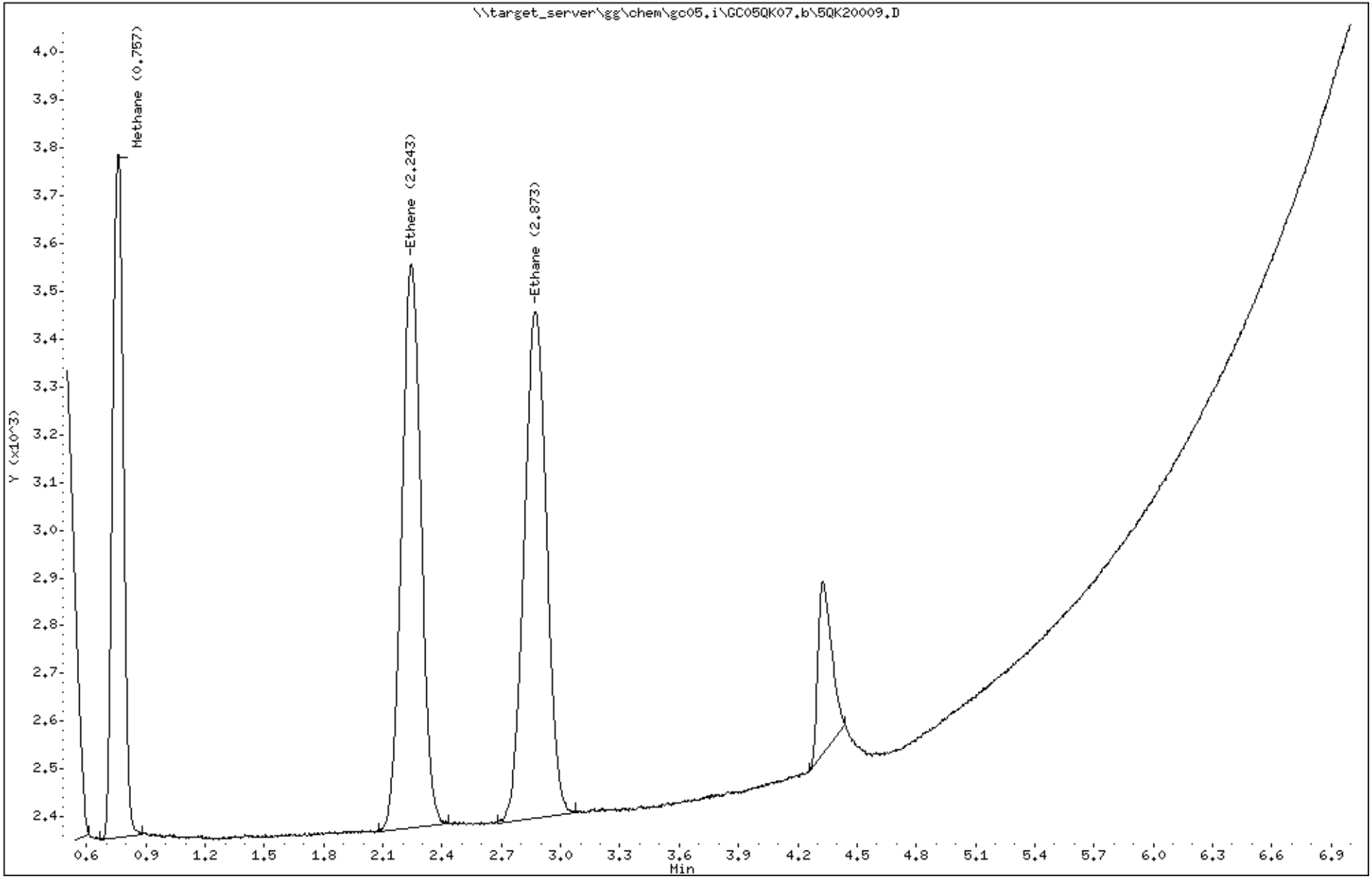
10:16 am, Nov 18, 2023

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (PPM)	AMOUNTS ON-COL (PPM)	REVIEW CODE
1 Methane	0.756	0.760	-0.004	5575	10.0000	12.2(M)	M9
2 Ethene	2.243	2.317	-0.074	8088	10.0000	13.1(M)	M9
3 Ethane	2.873	2.957	-0.084	8367	10.0000	13.1(M)	M9

QC Flag Legend

M - Compound response manually integrated.

Data File: \\target_server\gg\chem\gc05.i\GC05QK07.b\5QK20009.D
Date : 07-NOV-2023 08:46
Client ID:
Instrument: gc05.i
Sample Info: WG344993-2
Purge Volume: 0.0
Operator: DL
Column phase: Porapak Q
Column diameter: 0.00



Katahdin Analytical Services SQ6133 Page 560 of 855

Data File: \\target_server\gg\chem\gc05.i\GC05QK07.b\5QK20010.D
Report Date: 18-Nov-2023 10:15

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gc05.i\GC05QK07.b\5QK20010.D
Lab Smp Id: WG344993-3
Inj Date : 07-NOV-2023 09:03
Operator : DL   Inst ID: gc05.i
Smp Info : WG344993-3
Misc Info :
Comment   : RSK SOP 175
Method   : \\target_server\gg\chem\gc05.i\GC05QK07.b\MEEB47A.m
Meth Date : 08-Nov-2023 06:10 dlewry   Quant Type: ESTD
Cal Date : 07-NOV-2023 09:03   Cal File: 5QK20010.D
Als bottle: 1   Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: Falcon   Compound Sublist: all.sub
Target Version: 4.12
Processing Host: V200T3

Concentration Formula: Amt * DF * 0.005/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	0.00500	sample purged (L)
Cpnd Variable		Local Compound Variable

DL

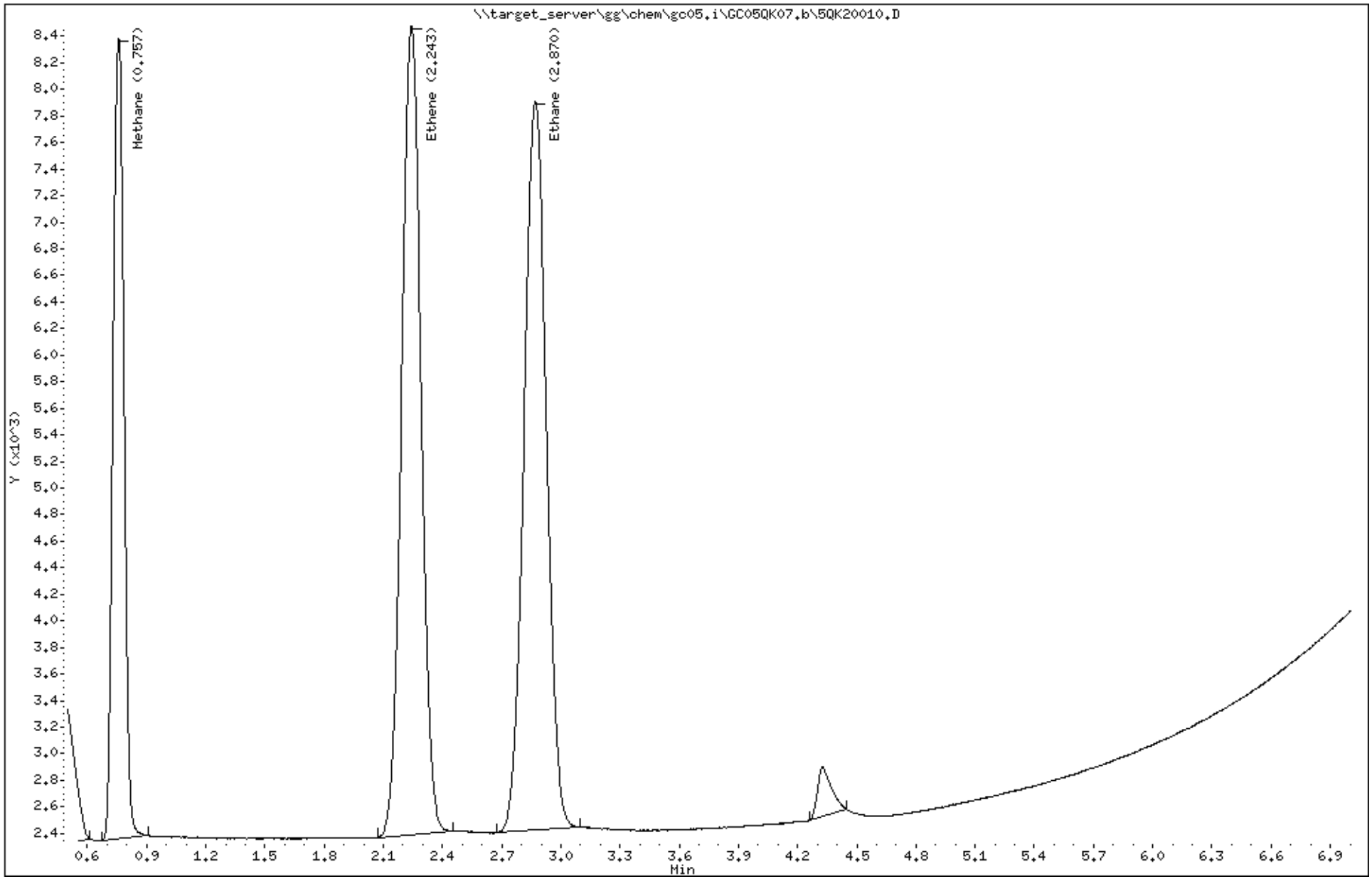
10:16 am, Nov 18, 2023

					AMOUNTS		
					CAL-AMT	ON-COL	
Compounds	RT	EXP RT	DLT RT	RESPONSE	(PPM)	(PPM)	REVIEW CODE
1 Methane	0.756	0.760	-0.004	23588	50.0000	49.8(M)	M9
2 Ethene	2.243	2.317	-0.074	41800	50.0000	50.7(M)	M9
3 Ethane	2.870	2.957	-0.087	43269	50.0000	50.6(M)	M9

QC Flag Legend

M - Compound response manually integrated.

Data File: \\target_server\gg\chem\gc05.i\GC05QK07.b\5QK20010.D
Date : 07-NOV-2023 09:03
Client ID:
Instrument: gc05.i
Sample Info: WG344993-3
Purge Volume: 0.0
Operator: DL
Column phase: Porapak Q
Column diameter: 0.00



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Data File: \\target_server\gg\chem\gc05.i\GC05QK07.b\5QK20011.D
Report Date: 18-Nov-2023 10:15

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gc05.i\GC05QK07.b\5QK20011.D
Lab Smp Id: WG344993-4
Inj Date : 07-NOV-2023 09:20
Operator : DL   Inst ID: gc05.i
Smp Info : WG344993-4
Misc Info :
Comment   : RSK SOP 175
Method   : \\target_server\gg\chem\gc05.i\GC05QK07.b\MEEB47A.m
Meth Date : 08-Nov-2023 06:10 dlewry   Quant Type: ESTD
Cal Date : 07-NOV-2023 09:20   Cal File: 5QK20011.D
Als bottle: 1   Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: Falcon   Compound Sublist: all.sub
Target Version: 4.12
Processing Host: V200T3

Concentration Formula: Amt * DF * 0.005/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	0.00500	sample purged (L)
Cpnd Variable		Local Compound Variable

DL

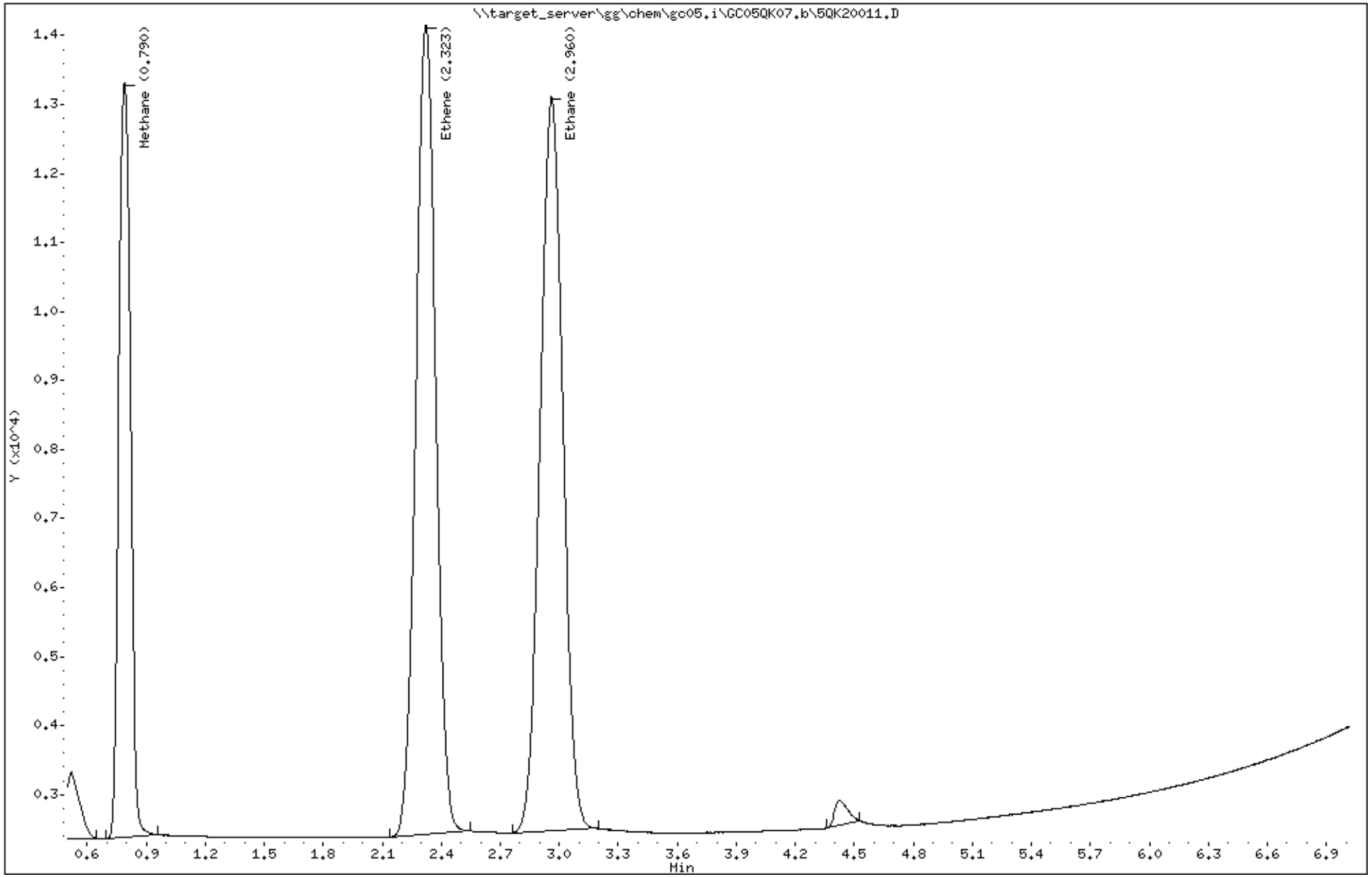
10:16 am, Nov 18, 2023

					AMOUNTS		
					CAL-AMT	ON-COL	
Compounds	RT	EXP RT	DLT RT	RESPONSE	(PPM)	(PPM)	REVIEW CODE
1 Methane	0.790	0.760	0.030	45348	100.000	95.6(M)	M9
2 Ethene	2.323	2.317	0.006	82636	100.000	100(M)	M9
3 Ethane	2.960	2.957	0.003	85497	100.000	100(M)	M9

QC Flag Legend

M - Compound response manually integrated.

Data File: \\target_server\gg\chem\gc05.i\GC05QK07.b\5QK20011.D
Date : 07-NOV-2023 09:20
Client ID:
Instrument: gc05.i
Sample Info: WG344993-4
Purge Volume: 0.0
Operator: DL
Column phase: Porapak Q
Column diameter: 0.00



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Data File: \\target_server\gg\chem\gc05.i\GC05QK07.b\5QK20012.D
Report Date: 18-Nov-2023 10:15

Katahdin Analytical Services

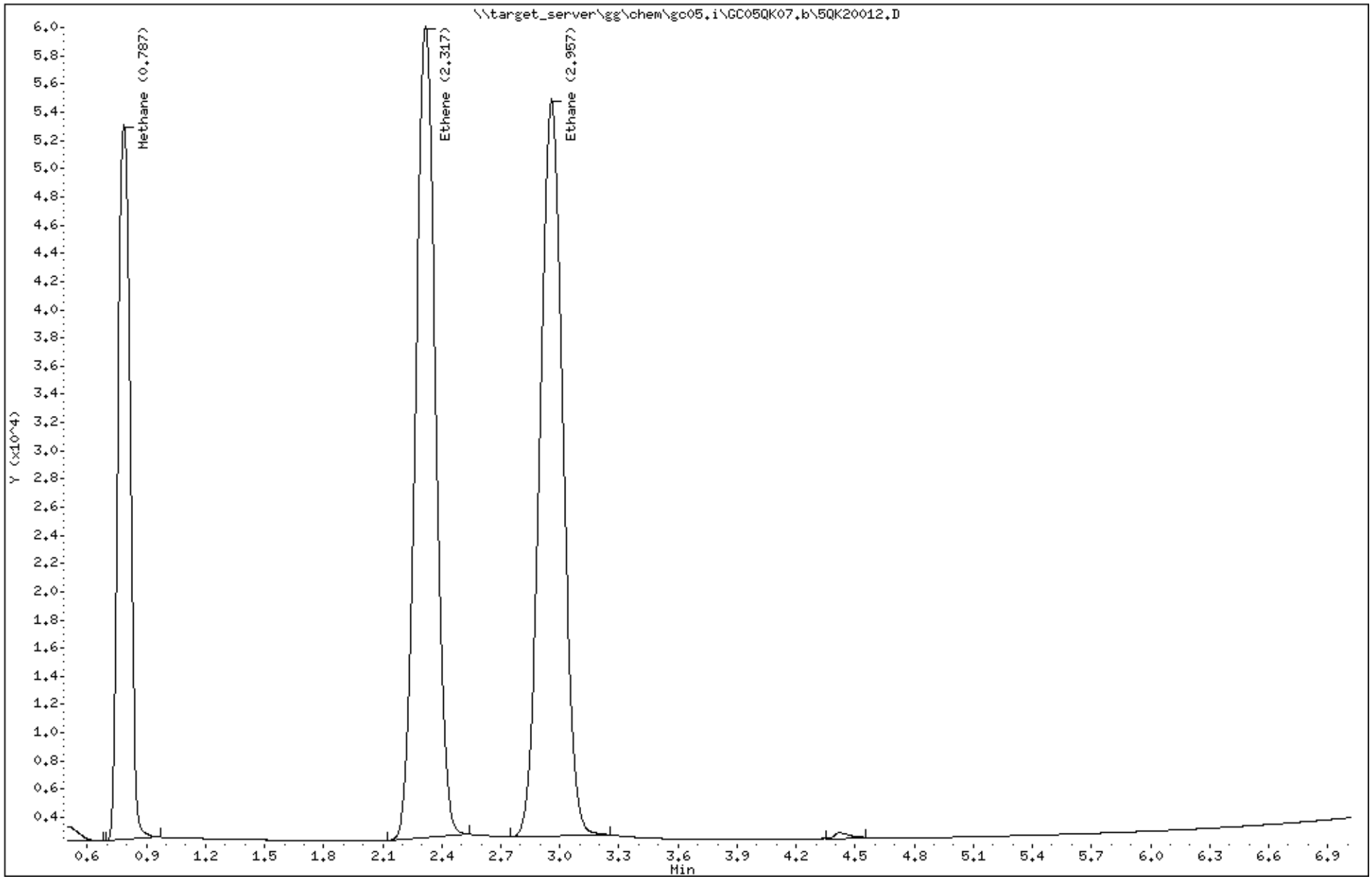
Data file : \\target_server\gg\chem\gc05.i\GC05QK07.b\5QK20012.D
Lab Smp Id: WG344993-5
Inj Date : 07-NOV-2023 09:37
Operator : DL   Inst ID: gc05.i
Smp Info : WG344993-5
Misc Info :
Comment   : RSK SOP 175
Method   : \\target_server\gg\chem\gc05.i\GC05QK07.b\MEEB47A.m
Meth Date : 08-Nov-2023 06:10 dlewry   Quant Type: ESTD
Cal Date : 07-NOV-2023 09:37   Cal File: 5QK20012.D
Als bottle: 1   Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: Falcon   Compound Sublist: all.sub
Target Version: 4.12
Processing Host: V200T3

Concentration Formula: Amt * DF * 0.005/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	0.00500	sample purged (L)
Cpnd Variable		Local Compound Variable

					AMOUNTS		
					CAL-AMT	ON-COL	
Compounds	RT	EXP RT	DLT RT	RESPONSE	(PPM)	(PPM)	REVIEW CODE
1 Methane	0.786	0.760	0.026	218681	500.000	461	
2 Ethene	2.316	2.317	-0.001	405356	500.000	493	
3 Ethane	2.956	2.957	-0.001	421667	500.000	495	

Data File: \\target_server\gg\chem\gc05.i\GC05QK07.b\5QK20012.D
Date : 07-NOV-2023 09:37
Client ID:
Instrument: gc05.i
Sample Info: WG344993-5
Purge Volume: 0.0
Operator: DL
Column phase: Porapak Q
Column diameter: 0.00



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Data File: \\target_server\gg\chem\gc05.i\GC05QK07.b\5QK20013.D
Report Date: 18-Nov-2023 10:15

Katahdin Analytical Services

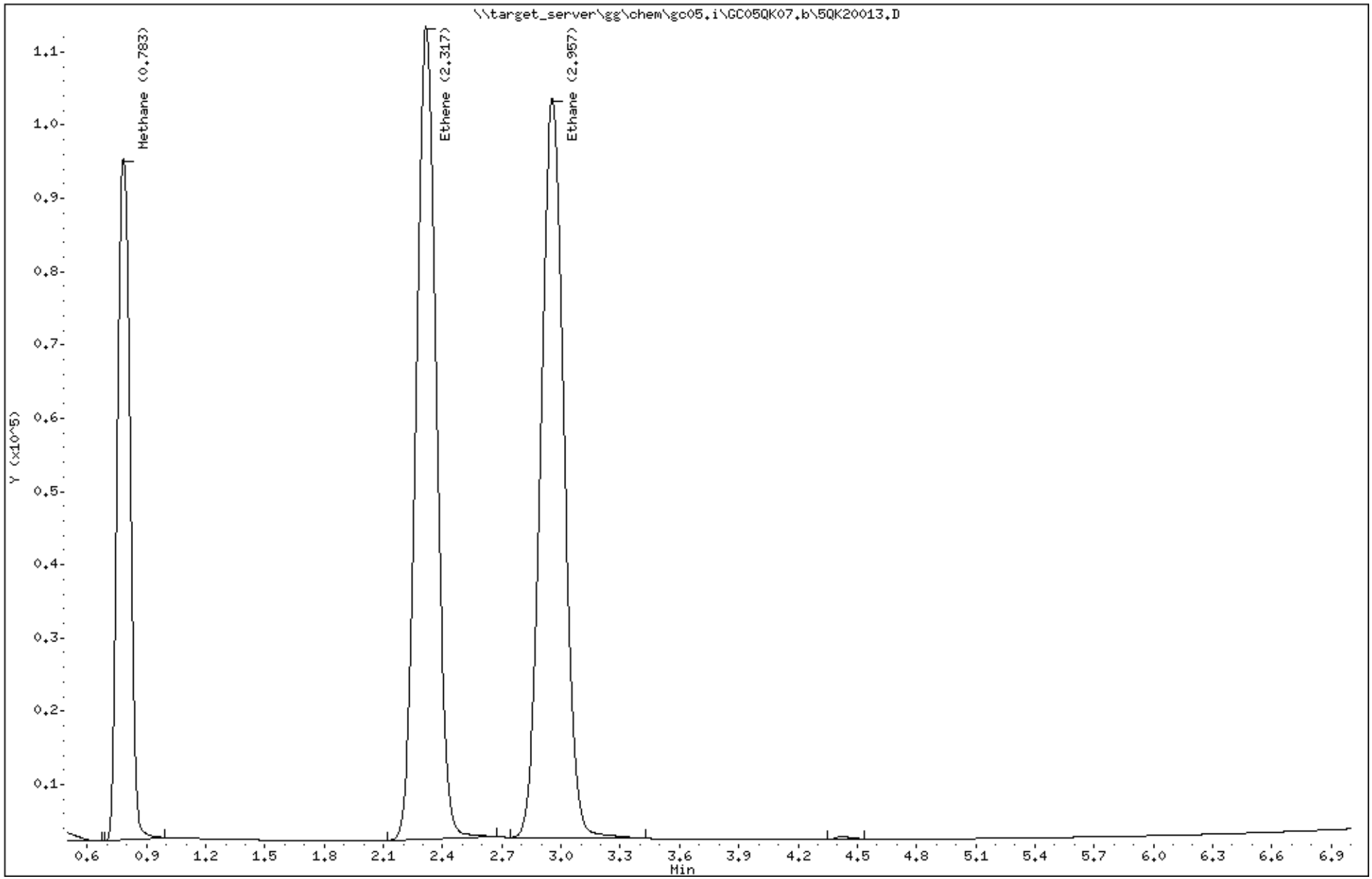
Data file : \\target_server\gg\chem\gc05.i\GC05QK07.b\5QK20013.D
Lab Smp Id: WG344993-6
Inj Date : 07-NOV-2023 09:54
Operator : DL   Inst ID: gc05.i
Smp Info : WG344993-6
Misc Info :
Comment   : RSK SOP 175
Method   : \\target_server\gg\chem\gc05.i\GC05QK07.b\MEEB47A.m
Meth Date : 08-Nov-2023 06:10 dlewry   Quant Type: ESTD
Cal Date : 07-NOV-2023 09:54   Cal File: 5QK20013.D
Als bottle: 1   Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: Falcon   Compound Sublist: all.sub
Target Version: 4.12
Processing Host: V200T3

Concentration Formula: Amt * DF * 0.005/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	0.00500	sample purged (L)
Cpnd Variable		Local Compound Variable

					AMOUNTS		
					CAL-AMT	ON-COL	
Compounds	RT	EXP RT	DLT RT	RESPONSE	(PPM)	(PPM)	REVIEW CODE
1 Methane	0.783	0.760	0.023	420262	1000.00	886	
2 Ethene	2.316	2.317	-0.001	788519	1000.00	965	
3 Ethane	2.956	2.957	-0.001	820746	1000.00	969	

Data File: \\target_server\gg\chem\gc05.i\GC05QK07.b\5QK20013.D
Date : 07-NOV-2023 09:54
Client ID:
Instrument: gc05.i
Sample Info: WG344993-6
Purge Volume: 0.0
Operator: DL
Column phase: Porapak Q
Column diameter: 0.00



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Data File: \\target_server\gg\chem\gc05.i\GC05QK07.b\5QK20014.D
Report Date: 04-Dec-2023 08:06

Katahdin Analytical Services

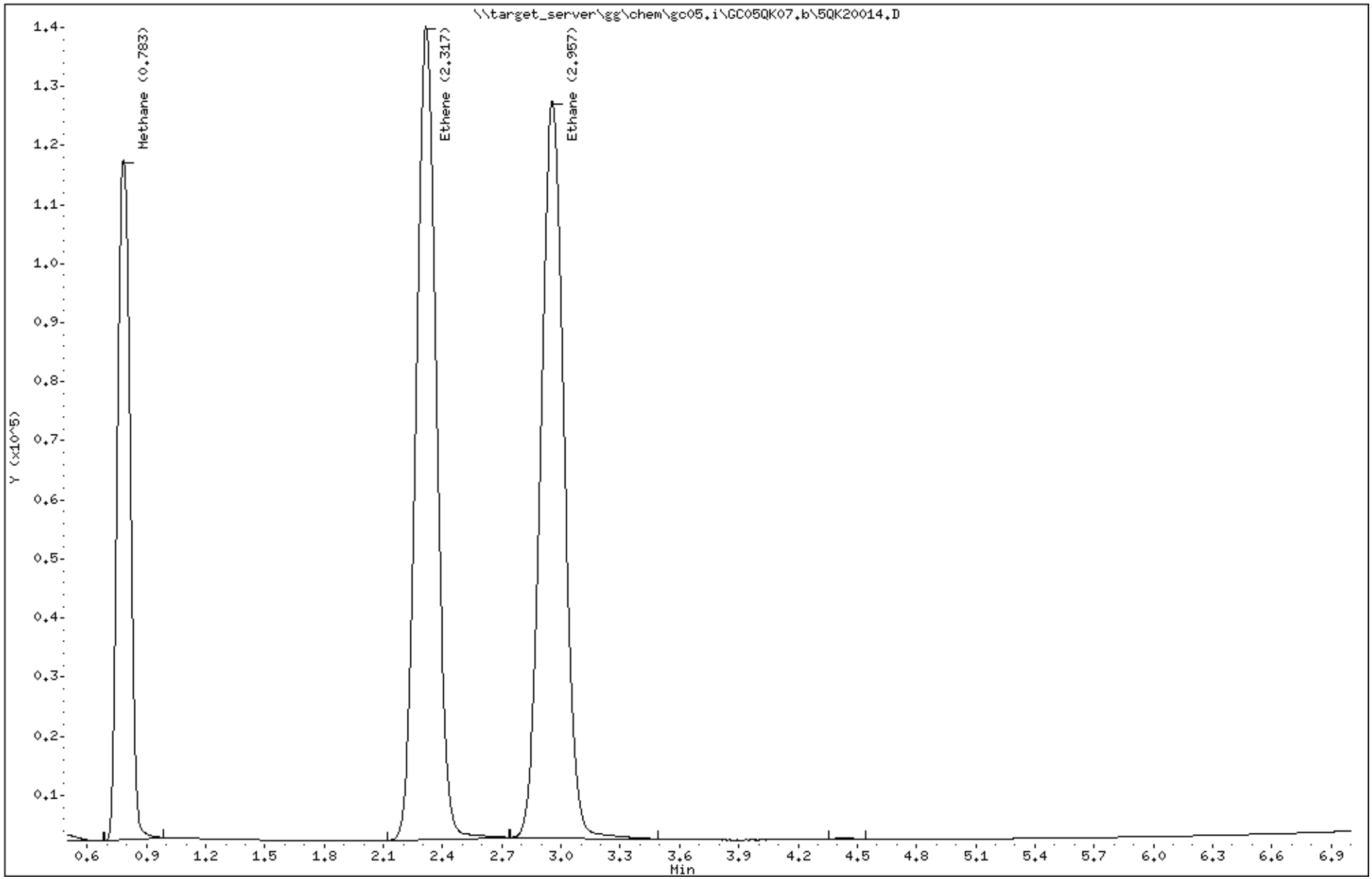
Data file : \\target_server\gg\chem\gc05.i\GC05QK07.b\5QK20014.D
Lab Smp Id: WG344993-7
Inj Date : 07-NOV-2023 10:11
Operator : DL   Inst ID: gc05.i
Smp Info : WG344993-7
Misc Info : WG344604,WG338790-4
Comment   : RSK SOP 175
Method   : \\target_server\gg\chem\gc05.i\GC05QK07.b\MEEB47A.m
Meth Date : 08-Nov-2023 06:10 dlewry   Quant Type: ESTD
Cal Date : 07-NOV-2023 10:11   Cal File: 5QK20014.D
Als bottle: 1   Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: Falcon   Compound Sublist: all.sub
Target Version: 4.12
Processing Host: V200T3

Concentration Formula: Amt * DF * 0.005/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	0.00500	sample purged (L)
Cpnd Variable		Local Compound Variable

					AMOUNTS		
					CAL-AMT	ON-COL	
Compounds	RT	EXP RT	DLT RT	RESPONSE	(PPM)	(PPM)	REVIEW CODE
1 Methane	0.783	0.760	0.023	519291	1500.00	1090	
2 Ethene	2.316	2.317	-0.001	980865	1500.00	1240	
3 Ethane	2.956	2.957	-0.001	1015625	1500.00	1230	

Data File: \\target_server\gg\chem\gc05.i\GC05QK07.b\5QK20014.D
Date : 07-NOV-2023 10:11
Client ID:
Instrument: gc05.i
Sample Info: WG344993-7
Purge Volume: 0.0
Operator: DL
Column phase: Porapak Q
Column diameter: 0.00



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Data File: \\target_server\gg\chem\gc05.i\GC05QK07.b\5QK20015.D
Report Date: 18-Nov-2023 10:15

Katahdin Analytical Services

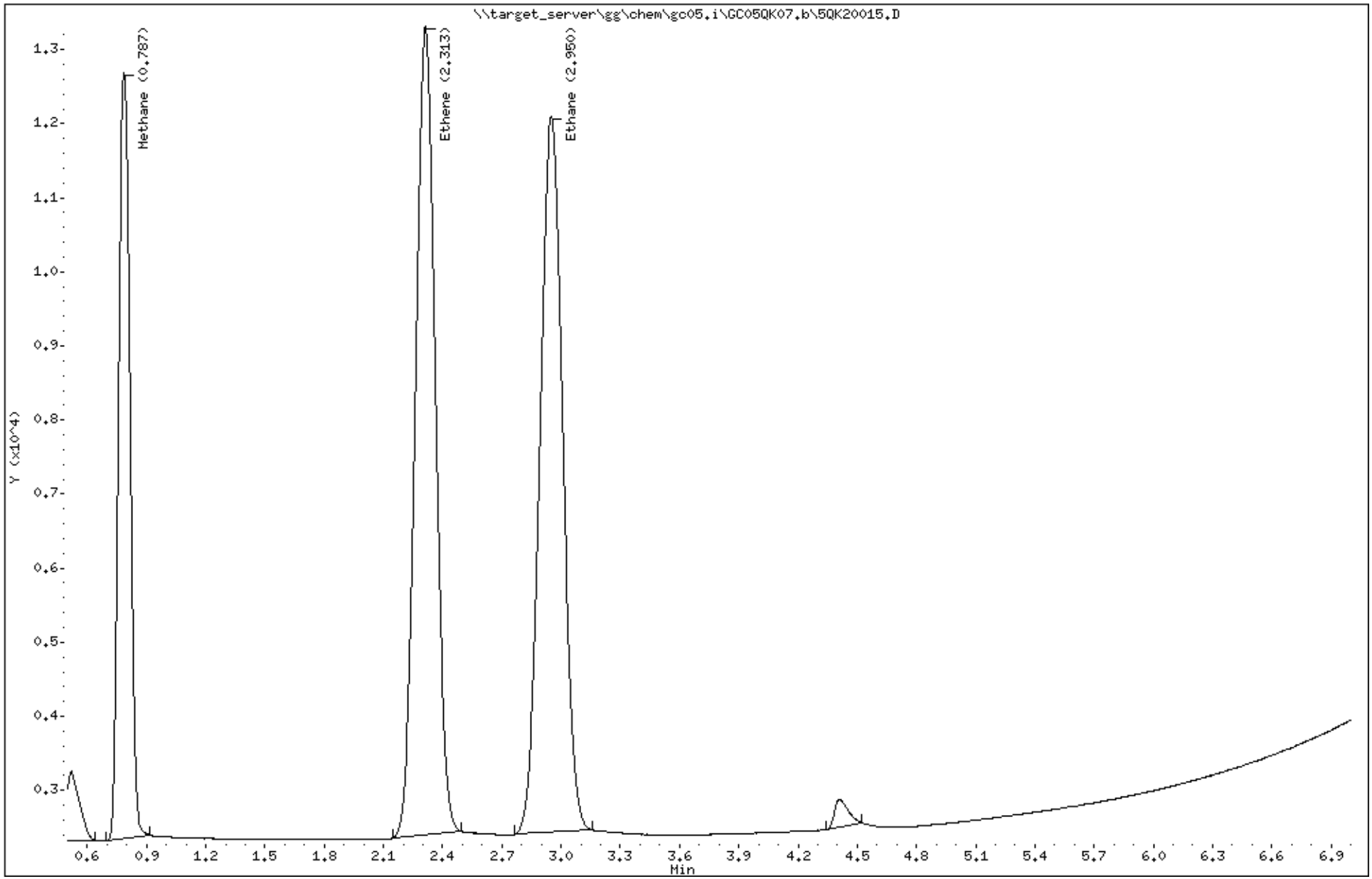
Data file : \\target_server\gg\chem\gc05.i\GC05QK07.b\5QK20015.D
Lab Smp Id: WG344993-8
Inj Date : 07-NOV-2023 11:39
Operator : DL   Inst ID: gc05.i
Smp Info : WG344993-8
Misc Info : WG344993,WG344993-4
Comment   : RSK SOP 175
Method   : \\target_server\gg\chem\gc05.i\GC05QK07.b\MEEB47A.m
Meth Date : 08-Nov-2023 06:10 dlewry   Quant Type: ESTD
Cal Date : 07-NOV-2023 10:11   Cal File: 5QK20014.D
Als bottle: 1   QC Sample: INDSOURCE
Dil Factor: 1.00000
Integrator: Falcon   Compound Sublist: all.sub
Target Version: 4.12
Processing Host: V200T3

Concentration Formula: Amt * DF * 0.005/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	0.00500	sample purged (L)
Cpnd Variable		Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (PPM)	CONCENTRATIONS FINAL (PPM)	REVIEW CODE
1 Methane	0.786	0.760	0.026	42036	88.5947	88.6	
2 Ethene	2.313	2.317	-0.004	76214	96.0513	96.0	
3 Ethane	2.950	2.957	-0.007	77231	93.8612	93.9	

Data File: \\target_server\gg\chem\gc05.i\GC05QK07.b\5QK20015.D
Date : 07-NOV-2023 11:39
Client ID:
Instrument: gc05.i
Sample Info: WG344993-8
Purge Volume: 0.0
Operator: DL
Column phase: Porapak Q
Column diameter: 0.00



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Form 7
Calibration Verification Summary

Lab Name: Katahdin Analytical Services
SDG: SQ6133
Lab ID: WG345593-8
Analytical Date: 11/17/23 07:08
Lab File ID: 5QK20236.D
Instrument ID: GC05
Initial Calibration Date(s): 11/07/23 08:28 11/07/23 10:11
Column ID: A

Compound	RRF/Amount	RF100	CCAL RRF100	Min RF	%D/ %Drift	Max %D/ %Drift	Curve Type	Qual
Methane	474	416	416	0.100	-12.40219	15.000	Averaged	
Ethene	793	760	760	0.100	-4.23097	15.000	Averaged	
Ethane	823	789	789	0.100	-4.07399	15.000	Averaged	

*** = Compound out of QC criteria**

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P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029
http://katahdinlab.com
sales@katahdinlab.com

Data File: \\target_server\gg\chem\gc05.i\GC05QK17.b\5QK20236.D
Report Date: 30-Nov-2023 21:10

Katahdin Analytical Services

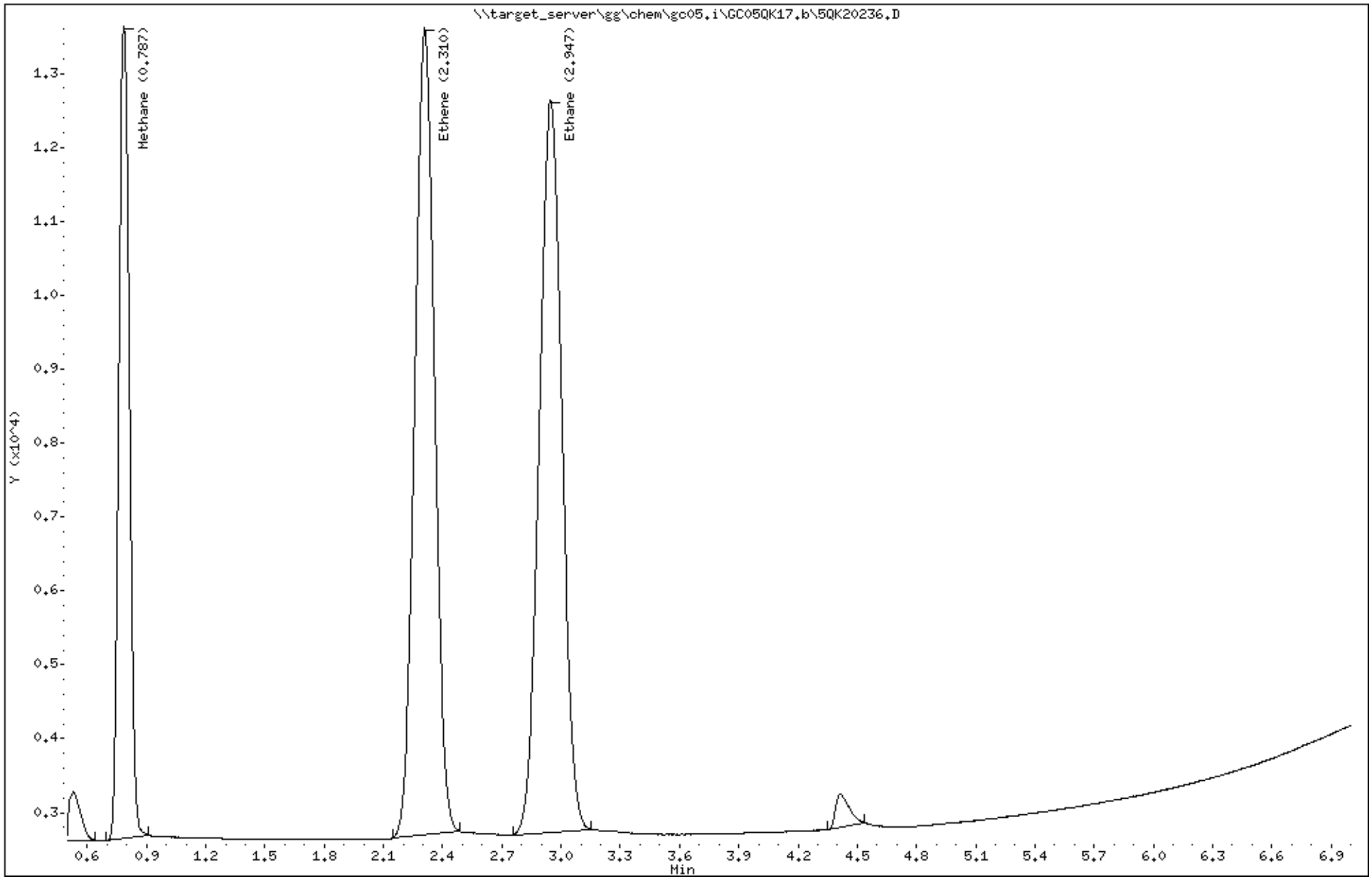
Data file : \\target_server\gg\chem\gc05.i\GC05QK17.b\5QK20236.D
Lab Smp Id: WG345593-8
Inj Date : 17-NOV-2023 07:08
Operator : DL/SH   Inst ID: gc05.i
Smp Info : WG345593-8
Misc Info : WG345593,WG344993-4,SQ6133-1
Comment   : RSK SOP 175
Method   : \\target_server\gg\chem\gc05.i\GC05QK17.b\MEEB47A.m
Meth Date : 18-Nov-2023 06:37 dlewry   Quant Type: ESTD
Cal Date : 07-NOV-2023 10:11   Cal File: 5QK20014.D
Als bottle: 1   Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon   Compound Sublist: all.sub
Target Version: 4.12
Processing Host: V200T3

Concentration Formula: Amt * DF * 0.005/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	0.00500	sample purged (L)
Cpnd Variable		Local Compound Variable

					AMOUNTS		
					CAL-AMT	ON-COL	
Compounds	RT	EXP RT	DLT RT	RESPONSE	(PPM)	(PPM)	REVIEW CODE
1 Methane	0.786	0.760	0.026	41563	100.000	87.6	
2 Ethene	2.310	2.317	-0.007	75990	100.000	95.8	
3 Ethane	2.946	2.957	-0.011	78930	100.000	95.9	

Data File: \\target_server\gg\chem\gc05.i\GC05QK17.b\5QK20236.D
Date : 17-NOV-2023 07:08
Client ID:
Instrument: gc05.i
Sample Info: WG345593-8
Purge Volume: 0.0
Operator: DL/SH
Column phase: Porapak Q
Column diameter: 0.00



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Form 7
Calibration Verification Summary

Lab Name: Katahdin Analytical Services
SDG: SQ6133
Lab ID: WG345593-9
Analytical Date: 11/17/23 11:48
Lab File ID: 5QK20248.D
Instrument ID: GC05
Initial Calibration Date(s): 11/07/23 08:28 11/07/23 10:11
Column ID: A

Compound	RRF/Amount	RF100	CCAL RRF100	Min RF	%D/ %Drift	Max %D/ %Drift	Curve Type	Qual
Methane	474	435	435	0.100	-8.32611	15.000	Averaged	
Ethene	793	785	785	0.100	-1.06010	15.000	Averaged	
Ethane	823	815	815	0.100	-0.89347	15.000	Averaged	

*** = Compound out of QC criteria**

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Data File: \\target_server\gg\chem\gc05.i\GC05QK17.b\5QK20248.D
Report Date: 30-Nov-2023 21:10

Katahdin Analytical Services

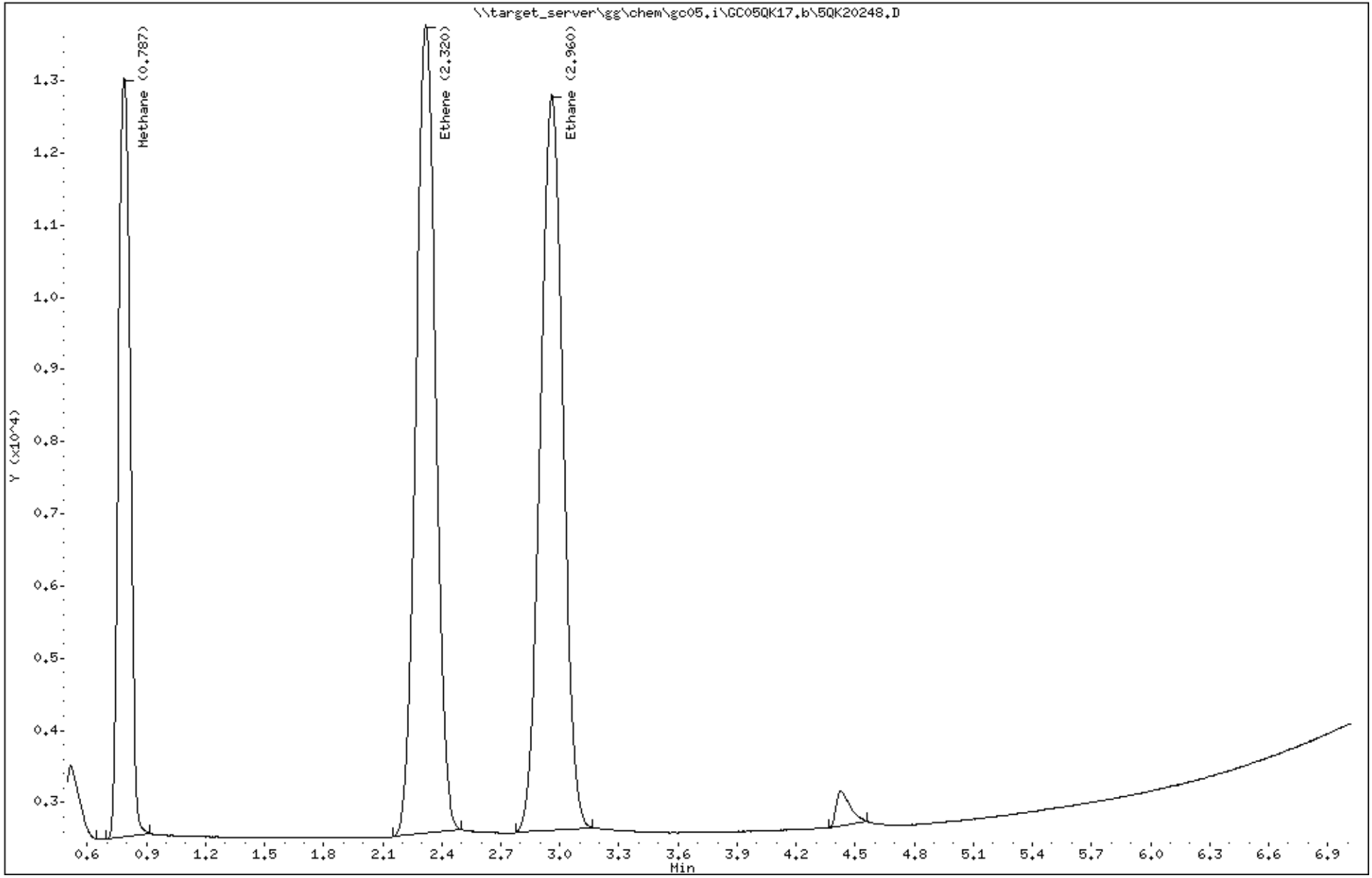
Data file : \\target_server\gg\chem\gc05.i\GC05QK17.b\5QK20248.D
Lab Smp Id: WG345593-9
Inj Date : 17-NOV-2023 11:48
Operator : DL/SH   Inst ID: gc05.i
Smp Info : WG345593-9
Misc Info : WG345593,WG344993-4,SQ6133-1
Comment   : RSK SOP 175
Method   : \\target_server\gg\chem\gc05.i\GC05QK17.b\MEEB47A.m
Meth Date : 18-Nov-2023 06:37 dlewry   Quant Type: ESTD
Cal Date : 07-NOV-2023 10:11   Cal File: 5QK20014.D
Als bottle: 1   Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon   Compound Sublist: all.sub
Target Version: 4.12
Processing Host: V200T3

Concentration Formula: Amt * DF * 0.005/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	0.00500	sample purged (L)
Cpnd Variable		Local Compound Variable

					AMOUNTS		
					CAL-AMT	ON-COL	
Compounds	RT	EXP RT	DLT RT	RESPONSE	(PPM)	(PPM)	REVIEW CODE
1 Methane	0.786	0.760	0.026	43497	100.000	91.7	
2 Ethene	2.320	2.317	0.003	78506	100.000	98.9	
3 Ethane	2.960	2.957	0.003	81547	100.000	99.1	

Data File: \\target_server\gg\chem\gc05.i\GC05QK17.b\5QK20248.D
Date : 17-NOV-2023 11:48
Client ID:
Instrument: gc05.i
Sample Info: WG345593-9
Purge Volume: 0.0
Operator: DL/SH
Column phase: Porapak Q
Column diameter: 0.00



Katahdin Analytical Services SQ6133 Page 578 of 855

Form 7
Calibration Verification Summary

Lab Name: Katahdin Analytical Services
SDG: SQ6133
Lab ID: WG345593-10
Analytical Date: 11/17/23 14:55
Lab File ID: 5QK20259.D
Instrument ID: GC05
Initial Calibration Date(s): 11/07/23 08:28 11/07/23 10:11
Column ID: A

Compound	RRF/Amount	RF100	CCAL RRF100	Min RF	%D/ %Drift	Max %D/ %Drift	Curve Type	Qual
Methane	474	445	445	0.100	-6.20376	15.000	Averaged	
Ethene	793	804	804	0.100	1.31050	15.000	Averaged	
Ethane	823	836	836	0.100	1.64292	15.000	Averaged	

*** = Compound out of QC criteria**

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Data File: \\target_server\gg\chem\gc05.i\GC05QK17.b\5QK20259.D
Report Date: 30-Nov-2023 21:10

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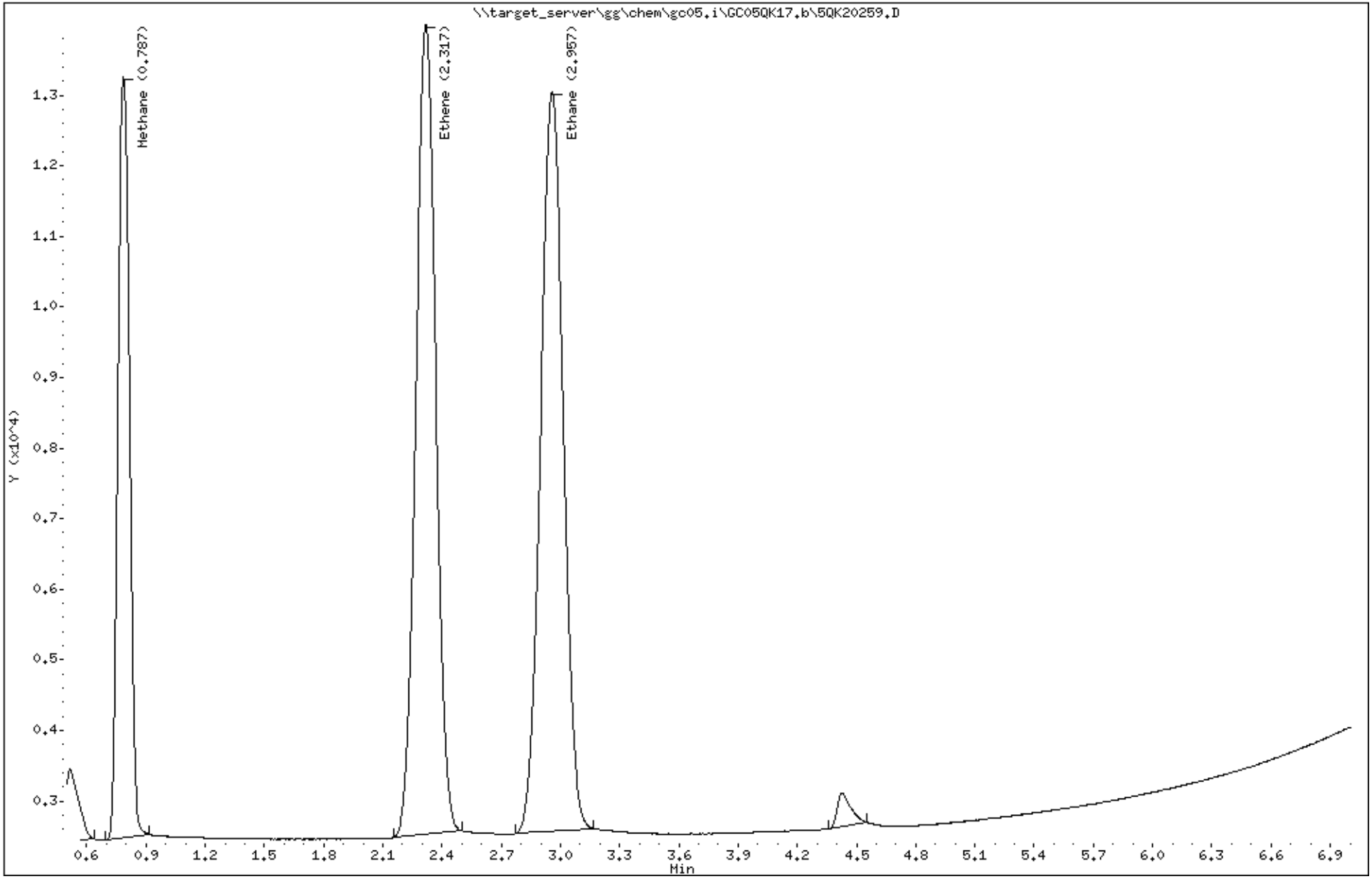
Data file : \\target_server\gg\chem\gc05.i\GC05QK17.b\5QK20259.D
Lab Smp Id: WG345593-10
Inj Date : 17-NOV-2023 14:55
Operator : DL/SH   Inst ID: gc05.i
Smp Info : WG345593-10
Misc Info : WG345593,WG344993-4,SQ6133-1
Comment   : RSK SOP 175
Method   : \\target_server\gg\chem\gc05.i\GC05QK17.b\MEEB47A.m
Meth Date : 18-Nov-2023 06:37 dlewry   Quant Type: ESTD
Cal Date : 07-NOV-2023 10:11   Cal File: 5QK20014.D
Als bottle: 1   Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon   Compound Sublist: all.sub
Target Version: 4.12
Processing Host: V200T3

Concentration Formula: Amt * DF * 0.005/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	0.00500	sample purged (L)
Cpnd Variable		Local Compound Variable

					AMOUNTS		
					CAL-AMT	ON-COL	
Compounds	RT	EXP RT	DLT RT	RESPONSE	(PPM)	(PPM)	REVIEW CODE
1 Methane	0.786	0.760	0.026	44504	100.000	93.8	
2 Ethene	2.316	2.317	-0.001	80387	100.000	101	
3 Ethane	2.956	2.957	-0.001	83634	100.000	102	

Data File: \\target_server\gg\chem\gc05.i\GC05QK17.b\5QK20259.D
Date : 17-NOV-2023 14:55
Client ID:
Instrument: gc05.i
Sample Info: WG345593-10
Purge Volume: 0.0
Operator: DL/SH
Column phase: Porapak Q
Column diameter: 0.00



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Raw QC Data Section

Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

SDG: SQ6133
Lab ID: WG345593-1
Client ID: Method Blank
Matrix: AQ
Lab File ID: 5QK20237.D

Sample Date: N/A
Extract Date: 17-NOV-23
Extracted By: DL/SH
Extraction Method: RSK SOP 175
Lab Prep Batch: WG345593

Report Date: 30-NOV-23
Analysis Date: 17-NOV-23
Analyst: DL/SH
Analysis Method: RSK SOP 175 v.2
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Methane	J	3.1	ug/L	1	10.4	10.	2.6	5.2
Ethane	U	9.9	ug/L	1	13.2	13.	5.0	9.9
Ethene	U	9.9	ug/L	1	13.2	13.	5.0	9.9

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Data File: \\target_server\gg\chem\gc05.i\GC05QK17.b\5QK20237.D
Report Date: 30-Nov-2023 21:10

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gc05.i\GC05QK17.b\5QK20237.D
Lab Smp Id: WG345593-1 Client Smp ID: WG345593-Blank
Inj Date : 17-NOV-2023 07:47
Operator : DL/SH Inst ID: gc05.i
Smp Info : WG345593-1
Misc Info : WG345593,WG344993-4,SQ6133-1
Comment : RSK SOP 175
Method : \\target_server\gg\chem\gc05.i\GC05QK17.b\MEEB47A.m
Meth Date : 18-Nov-2023 06:37 dlewry Quant Type: ESTD
Cal Date : 07-NOV-2023 10:11 Cal File: 5QK20014.D
Als bottle: 1 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSKSOP175-MEE.sub
Target Version: 4.12
Processing Host: V200T3

Concentration Formula: Amt * DF * 0.005/Vo * CpndVariable

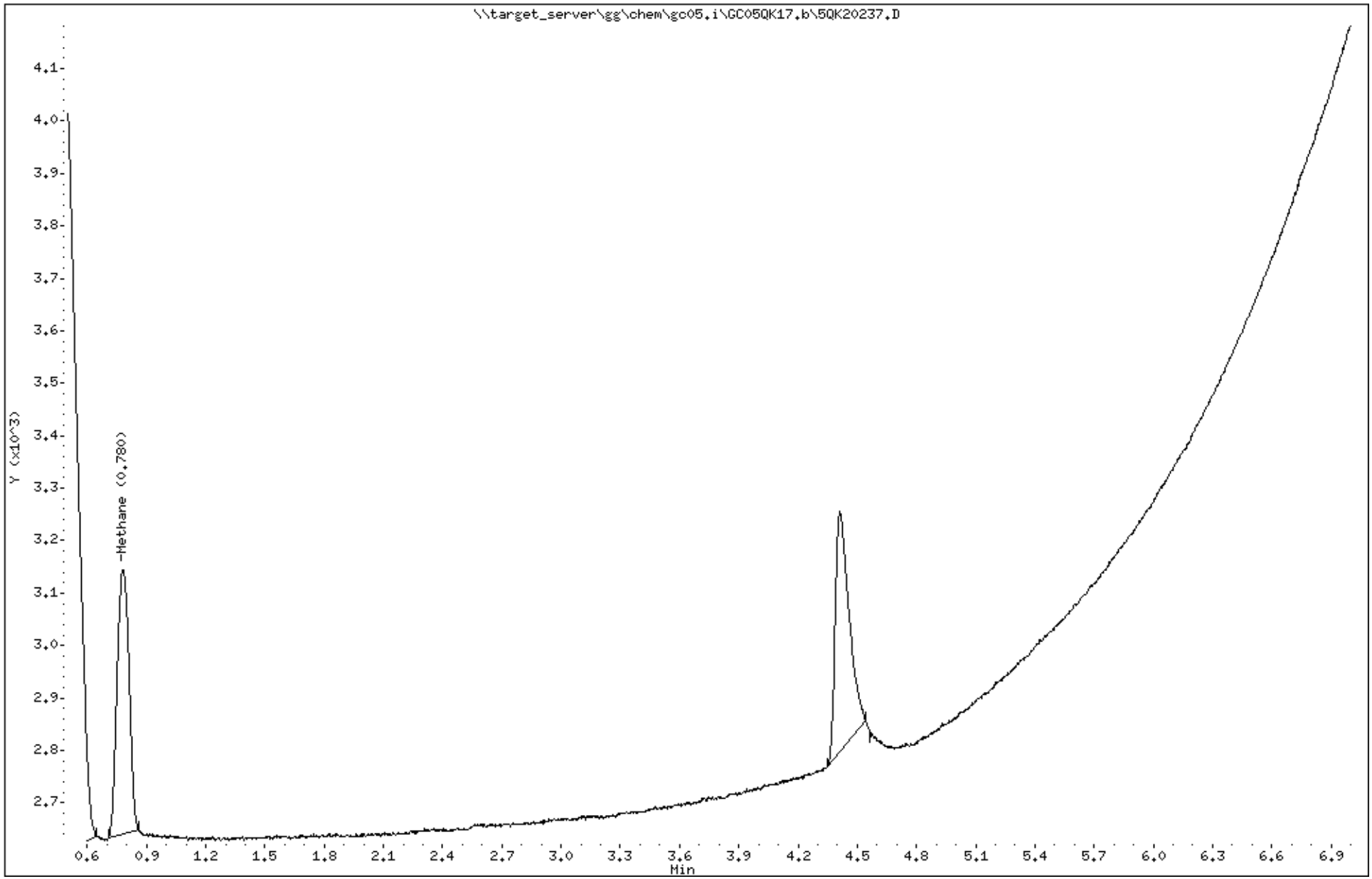
Name	Value	Description
DF	1.000	Dilution Factor
Vo	0.00500	sample purged (L)
Cpnd Variable		Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (PPM)	CONCENTRATIONS FINAL (PPM)	REVIEW CODE
1 Methane	0.780	0.760	0.020	2150	4.53132	4.53(a)	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: \\target_server\gg\chem\gc05.i\GC05QK17.b\5QK20237.D
Date : 17-NOV-2023 07:47
Client ID: WG345593-Blank
Instrument: gc05.i
Sample Info: WG345593-1
Purge Volume: 0.0
Operator: DL/SH
Column phase: Porapak Q
Column diameter: 0.00



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Katahdin
ANALYTICAL SERVICES

LCS Recovery Report

Lab ID: WG345593-2
Client ID: LCS
SDG: SQ6133
LCS File ID: 5QK20238.D
Report Date: 30-NOV-23

Extract Date: 17-NOV-23
Extracted By: DL/SH
Extraction Method: RSK SOP 175
Lab Prep Batch: WG345593

Analysis Date: 17-NOV-23
Analyst: DL/SH
Analysis Method: RSK SOP 175 v.2
Matrix: AQ

Compound	Recovery (%)	Conc Added	Conc Recovered	Conc Units	Limits
Methane	88.4	69.2	61.2	ug/L	85-115
Ethane	92.4	132.	122.	ug/L	85-115
Ethene	94.7	132.	125.	ug/L	85-115

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Data File: \\target_server\gg\chem\gc05.i\GC05QK17.b\5QK20238.D
Report Date: 30-Nov-2023 21:10

Katahdin Analytical Services

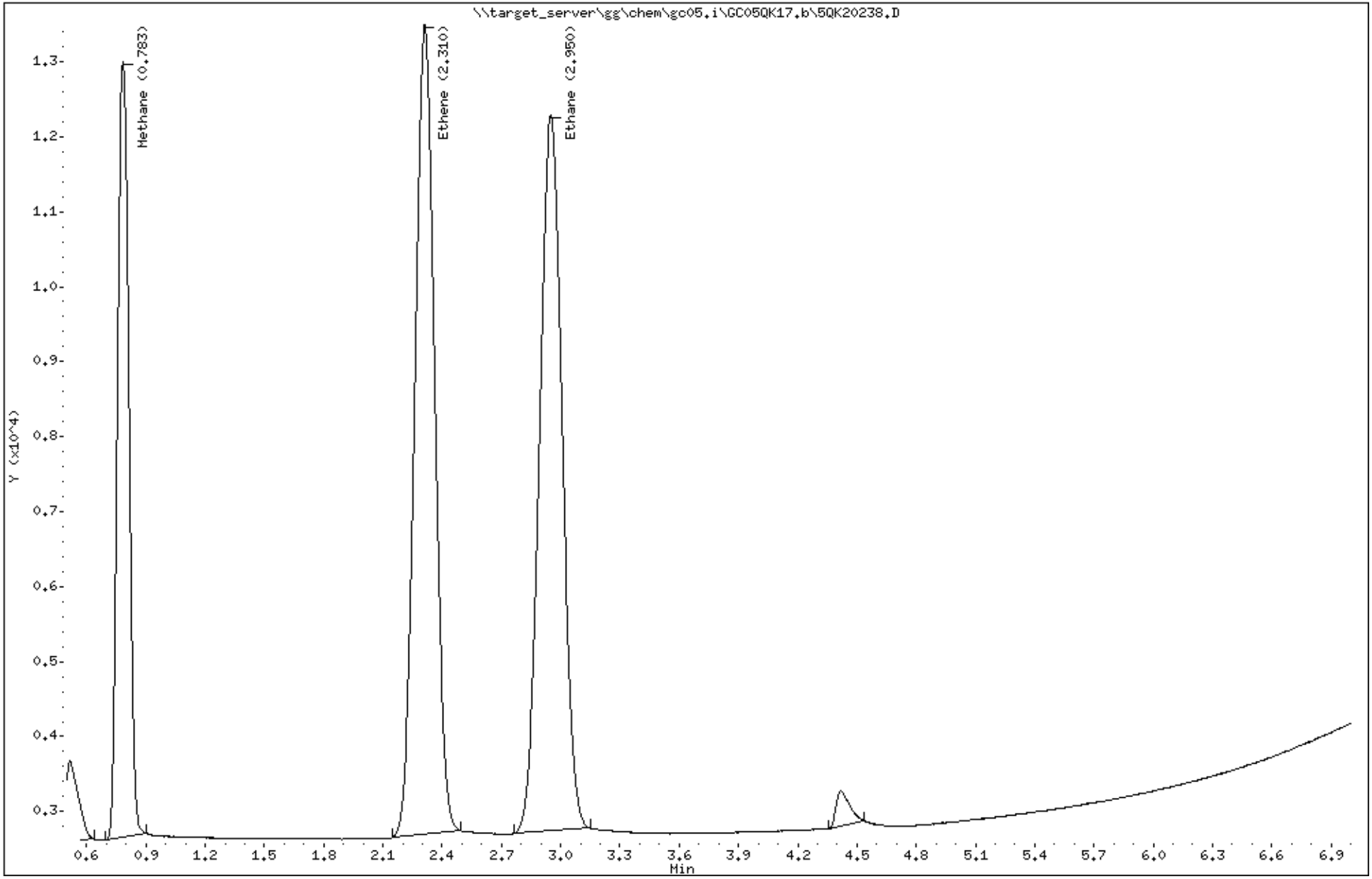
Data file : \\target_server\gg\chem\gc05.i\GC05QK17.b\5QK20238.D
Lab Smp Id: WG345593-2 Client Smp ID: WG345593-LCS
Inj Date : 17-NOV-2023 08:04
Operator : DL/SH Inst ID: gc05.i
Smp Info : WG345593-2
Misc Info : WG345593,WG344993-4,SQ6133-1
Comment : RSK SOP 175
Method : \\target_server\gg\chem\gc05.i\GC05QK17.b\MEEB47A.m
Meth Date : 18-Nov-2023 06:37 dlewry Quant Type: ESTD
Cal Date : 07-NOV-2023 10:11 Cal File: 5QK20014.D
Als bottle: 1 QC Sample: LCS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSKSOP175-MEE.sub
Target Version: 4.12
Processing Host: V200T3

Concentration Formula: Amt * DF * 0.005/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	0.00500	sample purged (L)
Cpnd Variable		Local Compound Variable

					CONCENTRATIONS ON-COLUMN (PPM)	CONCENTRATIONS FINAL (PPM)	
Compounds	RT	EXP RT	DLT RT	RESPONSE			REVIEW CODE
1 Methane	0.783	0.760	0.023	41951	88.4156	88.4	
2 Ethene	2.310	2.317	-0.007	75328	94.9347	94.9	
3 Ethane	2.950	2.957	-0.007	76002	92.3675	92.4	

Data File: \\target_server\gg\chem\gc05.i\GC05QK17.b\5QK20238.D
Date : 17-NOV-2023 08:04
Client ID: WG345593-LCS
Instrument: gc05.i
Sample Info: WG345593-2
Purge Volume: 0.0
Operator: DL/SH
Column phase: Porapak Q
Column diameter: 0.00



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Katahdin
ANALYTICAL SERVICES

MS/MSD Recovery Report

MS ID: WG345593-4
MSD ID: WG345593-5
Sample ID: SQ6133-3
Client ID: SY-OBMW12-110723
SDG: SQ6133
MS File ID: 5QK20242.D

Extract Date: 17-NOV-23
Extracted By: DL/SH
Extraction Method: RSK SOP 175
Lab Prep Batch: WG345593
Report Date: 30-NOV-23
MSD File ID: 5QK20243.D

Analysis Date: 17-NOV-23
Analyst: DL/SH
Analysis Method: RSK SOP 175 v.2
Matrix: AQ
% Solids: N/A
Sample File ID: 5QK20241.D

Compound	MS Spike	MSD Spike	Conc Units	Samp Conc	MS Conc	MSD Conc	MS Rec (%)	MSD Rec (%)	RPD (%)	RPD Limit	Limits
Methane	68.8	68.8	ug/L	17	86.7	85.3	102.	99.8	2	30	85-115
Ethane	131.	131.	ug/L	U9.8	146	142	111.	108.	3	30	85-115
Ethene	131.	131.	ug/L	U9.8	150	146	114.	111.	3	30	85-115

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Data File: \\target_server\gg\chem\gc05.i\GC05QK17.b\5QK20242.D
Report Date: 30-Nov-2023 21:10

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gc05.i\GC05QK17.b\5QK20242.D
Lab Smp Id: WG345593-4 Client Smp ID: SY-OBMW12-110723MS
Inj Date : 17-NOV-2023 10:06
Operator : DL/SH Inst ID: gc05.i
Smp Info : WG345593-4
Misc Info : WG345593,WG344993-4,SQ6133-3
Comment : RSK SOP 175
Method : \\target_server\gg\chem\gc05.i\GC05QK17.b\MEEB47A.m
Meth Date : 18-Nov-2023 06:37 dlewry Quant Type: ESTD
Cal Date : 07-NOV-2023 10:11 Cal File: 5QK20014.D
Als bottle: 1 QC Sample: MS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSKSOP175-MEE.sub
Target Version: 4.12
Processing Host: V200T3

Concentration Formula: Amt * DF * 0.005/Vo * CpndVariable

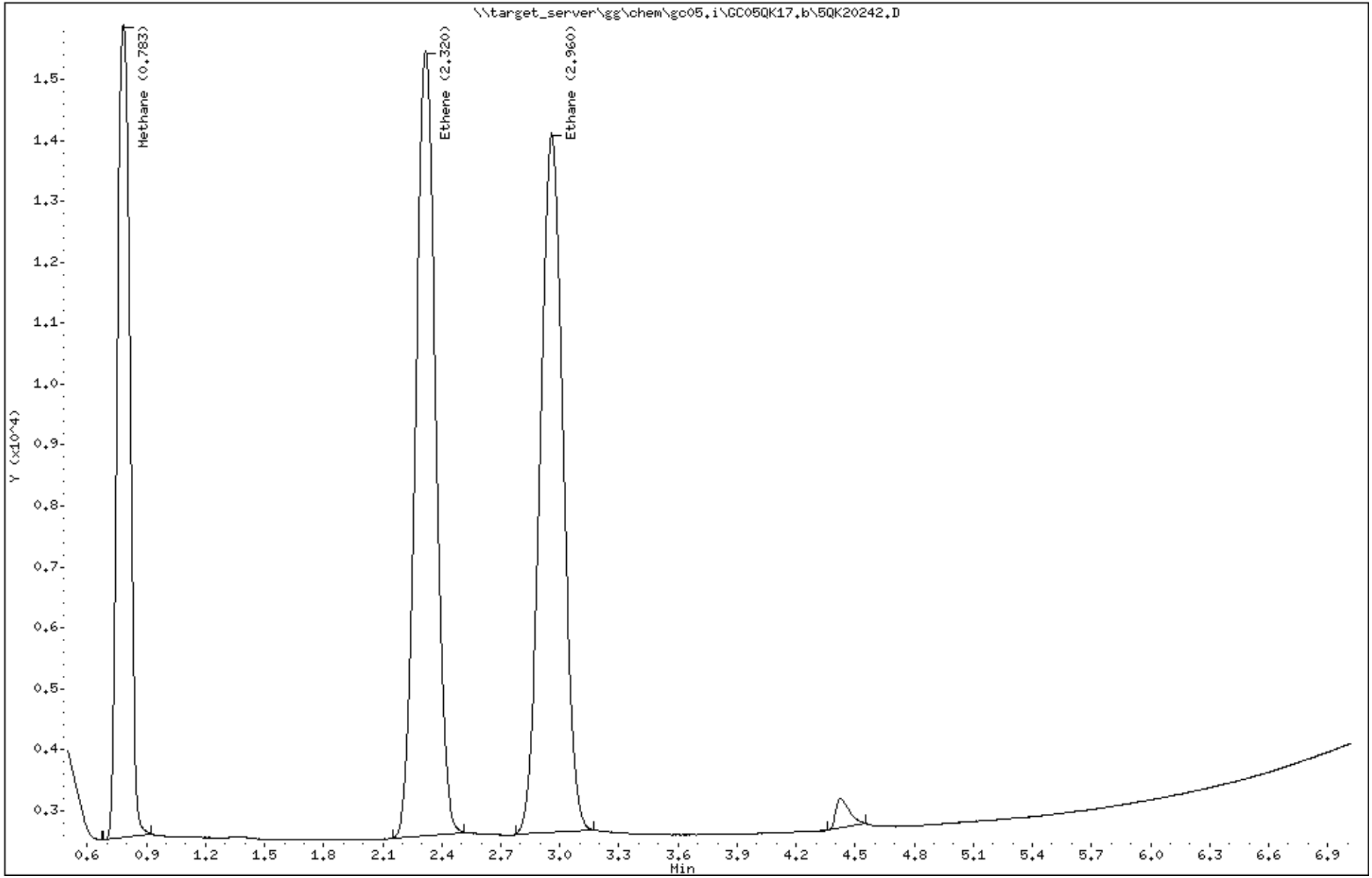
Name	Value	Description
DF	1.000	Dilution Factor
Vo	0.00500	sample purged (L)
Cpnd Variable		Local Compound Variable

					CONCENTRATIONS ON-COLUMN (PPM)	CONCENTRATIONS FINAL (PPM)	
Compounds	RT	EXP RT	DLT RT	RESPONSE			REVIEW CODE
1 Methane	0.783	0.760	0.023	59742	125.912	126(R)	
2 Ethene	2.320	2.317	0.003	91046	114.744	115	
3 Ethane	2.960	2.957	0.003	92171	112.018	112	

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Data File: \\target_server\gg\chem\gc05.i\GC05QK17.b\5QK20242.D
Date : 17-NOV-2023 10:06
Client ID: SY-OBMW12-110723MS
Instrument: gc05.i
Sample Info: WG345593-4
Purge Volume: 0.0
Operator: DL/SH
Column phase: Porapak Q
Column diameter: 0.00



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Data File: \\target_server\gg\chem\gc05.i\GC05QK17.b\5QK20243.D
Report Date: 30-Nov-2023 21:10

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gc05.i\GC05QK17.b\5QK20243.D
Lab Smp Id: WG345593-5 Client Smp ID: SY-OBMW12-110723MSD
Inj Date : 17-NOV-2023 10:23
Operator : DL/SH Inst ID: gc05.i
Smp Info : WG345593-5
Misc Info : WG345593,WG344993-4,SQ6133-3
Comment : RSK SOP 175
Method : \\target_server\gg\chem\gc05.i\GC05QK17.b\MEEB47A.m
Meth Date : 18-Nov-2023 06:37 dlewry Quant Type: ESTD
Cal Date : 07-NOV-2023 10:11 Cal File: 5QK20014.D
Als bottle: 1 QC Sample: MSD
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSKSOP175-MEE.sub
Target Version: 4.12
Processing Host: V200T3

Concentration Formula: Amt * DF * 0.005/Vo * CpndVariable

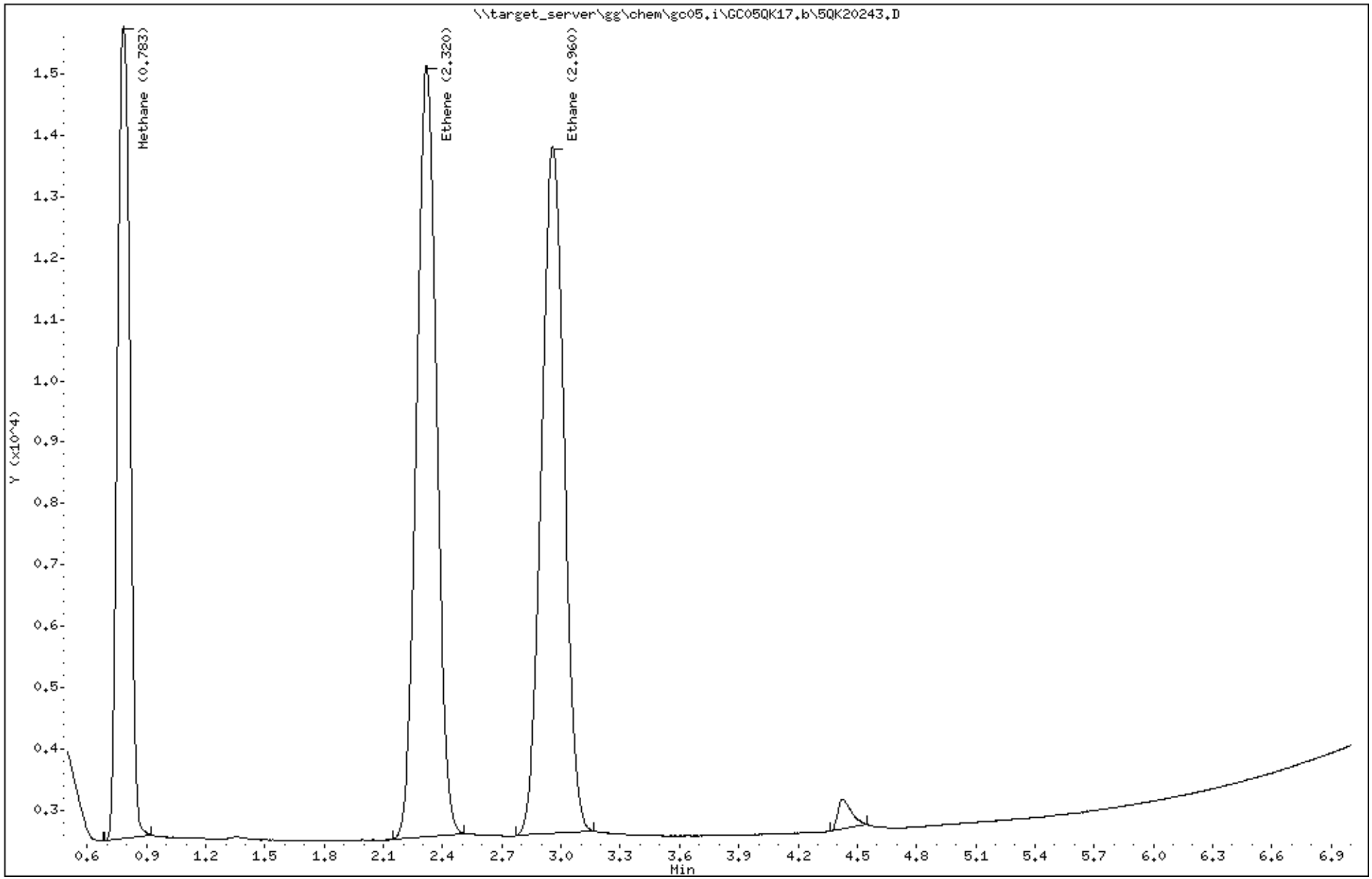
Name	Value	Description
DF	1.000	Dilution Factor
Vo	0.00500	sample purged (L)
Cpnd Variable		Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (PPM)	CONCENTRATIONS FINAL (PPM)	REVIEW CODE
1 Methane	0.783	0.760	0.023	58824	123.977	124(R)	
2 Ethene	2.320	2.317	0.003	88643	111.715	112	
3 Ethane	2.960	2.957	0.003	89794	109.129	109	

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Data File: \\target_server\gg\chem\gc05.i\GC05QK17.b\5QK20243.D
Date : 17-NOV-2023 10:23
Client ID: SY-OBMW12-110723MSD
Instrument: gc05.i
Sample Info: WG345593-5
Purge Volume: 0.0
Operator: DL/SH
Column phase: Porapak Q
Column diameter: 0.00



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Katahdin
ANALYTICAL SERVICES

MS/MSD Recovery Report

MS ID: WG345593-6
MSD ID: WG345593-7
Sample ID: SQ6133-8
Client ID: SY-BRMW2-80.5-95.5-110723
SDG: SQ6133
MS File ID: 5QK20250.D

Extract Date: 17-NOV-23
Extracted By: DL/SH
Extraction Method: RSK SOP 175
Lab Prep Batch: WG345593
Report Date: 30-NOV-23
MSD File ID: 5QK20251.D

Analysis Date: 17-NOV-23
Analyst: DL/SH
Analysis Method: RSK SOP 175 v.2
Matrix: AQ
% Solids: N/A
Sample File ID: 5QK20249.D

Compound	MS Spike	MSD Spike	Conc Units	Samp Conc	MS Conc	MSD Conc	MS Rec (%)	MSD Rec (%)	RPD (%)	RPD Limit	Limits
Methane	68.8	68.8	ug/L	J3.4	65.5	68.6	90.3	94.8	5	30	85-115
Ethane	131.	131.	ug/L	U9.8	128	134	97.7	102.	4	30	85-115
Ethene	131.	131.	ug/L	U9.8	130	137	99.2	104.	5	30	85-115

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Data File: \\target_server\gg\chem\gc05.i\GC05QK17.b\5QK20250.D
Report Date: 30-Nov-2023 21:10

Katahdin Analytical Services

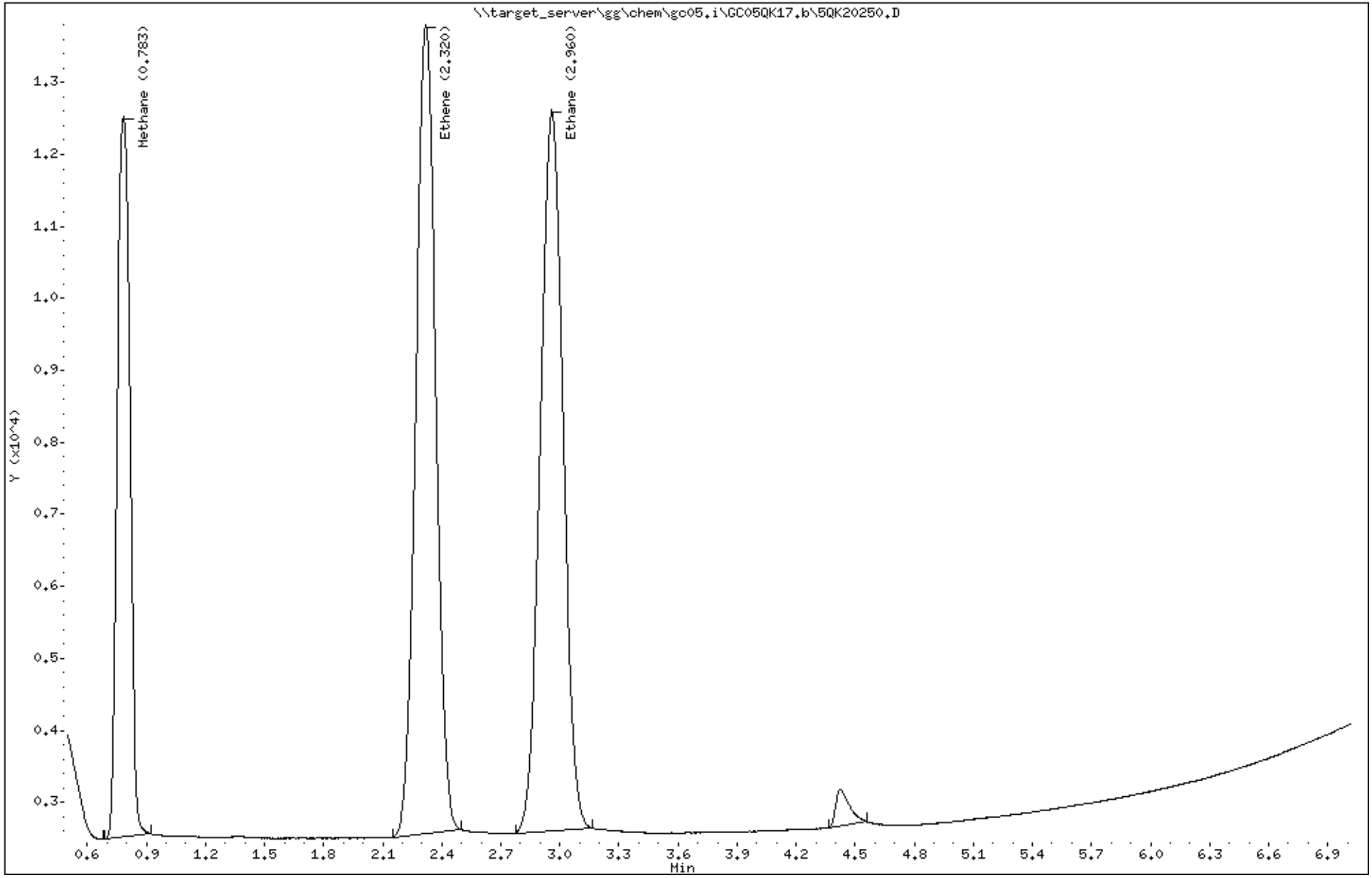
Data file : \\target_server\gg\chem\gc05.i\GC05QK17.b\5QK20250.D
Lab Smp Id: WG345593-6 Client Smp ID: Y-BRMW2-80.5-95.5-1
Inj Date : 17-NOV-2023 12:22
Operator : DL/SH Inst ID: gc05.i
Smp Info : WG345593-6
Misc Info : WG345593,WG344993-4,SQ6133-8
Comment : RSK SOP 175
Method : \\target_server\gg\chem\gc05.i\GC05QK17.b\MEEB47A.m
Meth Date : 18-Nov-2023 06:37 dlewry Quant Type: ESTD
Cal Date : 07-NOV-2023 10:11 Cal File: 5QK20014.D
Als bottle: 1 QC Sample: MS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSKSOP175-MEE.sub
Target Version: 4.12
Processing Host: V200T3

Concentration Formula: Amt * DF * 0.005/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	0.00500	sample purged (L)
Cpnd Variable		Local Compound Variable

					CONCENTRATIONS ON-COLUMN (PPM)	CONCENTRATIONS FINAL (PPM)	
Compounds	RT	EXP RT	DLT RT	RESPONSE			REVIEW CODE
1 Methane	0.783	0.760	0.023	45239	95.3453	95.3	
2 Ethene	2.320	2.317	0.003	79152	99.7540	99.8	
3 Ethane	2.960	2.957	0.003	80314	97.6080	97.6	

Data File: \\target_server\gg\chem\gc05.i\GC05QK17.b\5QK20250.D
Date : 17-NOV-2023 12:22
Client ID: Y-BRMW2-80.5-95.5-1
Instrument: gc05.i
Sample Info: WG345593-6
Purge Volume: 0.0
Operator: DL/SH
Column phase: Porapak Q
Column diameter: 0.00



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Data File: \\target_server\gg\chem\gc05.i\GC05QK17.b\5QK20251.D
Report Date: 30-Nov-2023 21:10

Katahdin Analytical Services

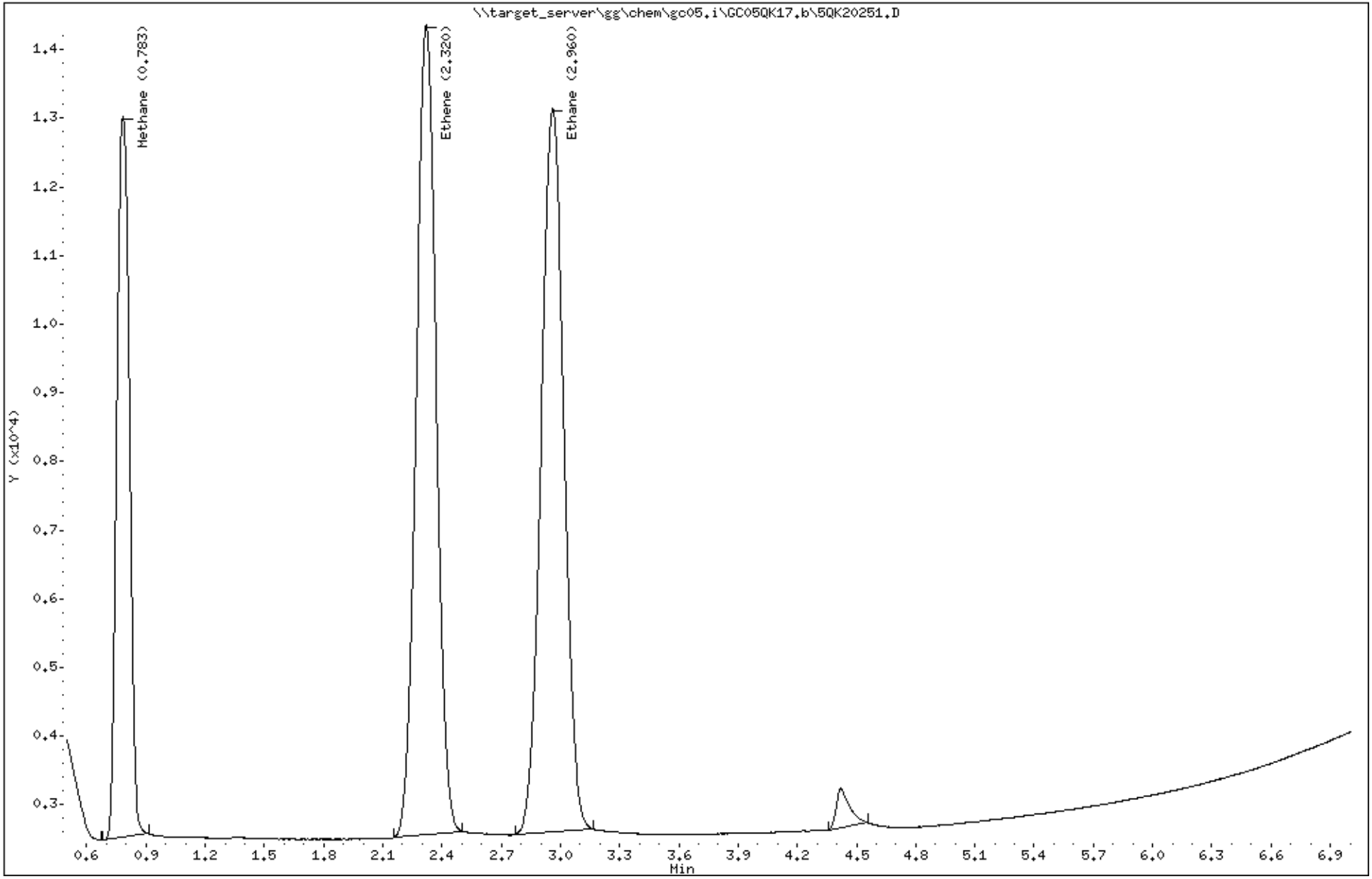
Data file : \\target_server\gg\chem\gc05.i\GC05QK17.b\5QK20251.D
Lab Smp Id: WG345593-7 Client Smp ID: Y-BRMW2-80.5-95.5-1
Inj Date : 17-NOV-2023 12:39
Operator : DL/SH Inst ID: gc05.i
Smp Info : WG345593-7
Misc Info : WG345593,WG344993-4,SQ6133-8
Comment : RSK SOP 175
Method : \\target_server\gg\chem\gc05.i\GC05QK17.b\MEEB47A.m
Meth Date : 18-Nov-2023 06:37 dlewry Quant Type: ESTD
Cal Date : 07-NOV-2023 10:11 Cal File: 5QK20014.D
Als bottle: 1 QC Sample: MSD
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSKSOP175-MEE.sub
Target Version: 4.12
Processing Host: V200T3

Concentration Formula: Amt * DF * 0.005/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	0.00500	sample purged (L)
Cpnd Variable		Local Compound Variable

					CONCENTRATIONS ON-COLUMN (PPM)	CONCENTRATIONS FINAL (PPM)	
Compounds	RT	EXP RT	DLT RT	RESPONSE			REVIEW CODE
1 Methane	0.783	0.760	0.023	47310	99.7101	99.7	
2 Ethene	2.320	2.317	0.003	83124	104.760	105	
3 Ethane	2.960	2.957	0.003	84502	102.698	103	

Data File: \\target_server\gg\chem\gc05.i\GC05QK17.b\5QK20251.D
Date : 17-NOV-2023 12:39
Client ID: Y-BRMW2-80.5-95.5-1
Instrument: gc05.i
Sample Info: WG345593-7
Purge Volume: 0.0
Operator: DL/SH
Column phase: Porapak Q
Column diameter: 0.00



Katahdin Analytical Services SQ6133 Page 598 of 855

Logbooks and Supporting Documents

KATAHDIN ANALYTICAL SERVICES

STOCK STANDARDS RECEIVED

GCMS VOLATILES LABORATORY

REVIEWED BY/DATE:

Amp 6546

30201 US/EN
524 Internal Std / Surrogate Mix
Lot# A0163165
Expire: 09/2027 Store: 0°C or colder 1 mL
2000 µg/mL each in P&T Methanol
RESTEK

Rec'd 1-7-21 R

Amp 6547
45
↓ 49

AccuStandard® 125 Market St. New Haven, CT 06513 www.AccuStandard.com
M-8240C-R6 1 mL
Appendix IX Volatiles Mix
Varied conc. in MeOH
Lot: 219051809 11 comp(s)
Exp: Jun 05, 2022 Storage: Refrig (0-5 °C)
FOR LABORATORY USE ONLY
H336 H225
H370 H320
H315 H311
H332 H301
H360, H350
H351 P338
Refer to SDS
Signal Word Danger
1-12-21

AMP 6550 Airgas Specialty Gases - Scott Mini-Mix JHR
14 Liters @ 240PSIG 1.0 %
Rec'd 1-12-2021
Cylinder #: ST0000228564
Ex: 12/29/23 Lot #: 160-401985759-1

AMP 6551 Airgas Specialty Gases - Scott Mini-Mix JHR
14 Liters @ 240PSIG 1000 ppm
Rec'd 1-12-2021
Cylinder #: ST0000228565
Ex: 12/29/23 Lot #: 160-401987240-1

Amp 6552
53
↓ 54

30619 US/EN
Oxygenates Standard
Lot# A0167816
Expire: 01/2024 Store: 0°C or colder 1 mL
2000-10,000 µg/mL each in P&T Methanol
RESTEK

CR
Rec'd 1/19/21

Amp 6555
54
55

AccuStandard® 125 Market St. New Haven, CT 06513 www.AccuStandard.com
APP-9-048-R1-20X 1 mL
Chloroprene
2.0 mg/mL in MeOH
Lot: 220101123 1 comp(s)
Exp: Nov 09, 2022 Storage: Freeze (<-10 °C)
FOR LABORATORY USE ONLY
H225 H370
H336 H320
H315 H311
H332 H301
H360, H350
H351 P338
Refer to SDS
Signal Word Danger
1/20/21

KATAHDIN ANALYTICAL SERVICES

STOCK STANDARDS RECEIVED

GCMS VOLATILES LABORATORY

REVIEWED BY/DATE:

Amp 6832 Airgas Specialty Gases - Scott Mini-mix JM
1HL@2240 PSIG 1000ppm Recd 1-10-22
Cylinder #= ST0000235789
Ex: 12/22/24 Lot #: 160-402299623-1

Amp 6833
34
35

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com
M-603-M-5X 1 mL
Acrolein & Acrylonitrile
5.0 mg/mL in MeOH:Water 90:10
Lot: 222011130 2 comp(s)
Exp: May 13, 2022 Storage: Freeze (<-10 °C)
FOR LABORATORY USE ONLY
H336 H225
H370 H320
H315 H311
H332 H301
H360, H350
H351 P338
Refer to SDS
Signal Word Danger

Recd 2-2-22 JJ

Amp 6836
37

30497 US/EN
Volatiles MegaMix(TM), EPA Method 624
Lot# A0171975
Expire: 05/2024 Store: 0°C or colder 1 mL
2000 µg/mL each in P&T Methanol
RESTEK

Recd 2-2-22 JJ

Amp 6838
39
40

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com
S-457S-10X 1 mL
Tetrahydrofuran
2.0 mg/mL in MeOH
Lot: 221051701 1 comp(s)
Exp: Jun 01, 2031 Storage: Ambient (>5 °C)
FOR LABORATORY USE ONLY
H225 H370
H336 H320
H315 H311
H332 H301
H360 H351
P338 P360
Refer to SDS
Signal Word Danger

Recd. 2-8-22 JJ

Amp 6841
42

30619 US/EN
Oxygenates Standard
Lot# A0176238
Expire: 09/2024 Store: 0°C or colder 1 mL
2000-10,000 µg/mL each in P&T Methanol
RESTEK

2-8-22

Katahdin Analytical Services

GC Laboratory Instrument Runlog

Instrument: GC05

pH Paper Lot#: 6303005

Date: 11/7/23

Method: RSK SOP-175

Sample Name	Data File	Sample Amt.	DF	Method	Y/N	pH	Temp °C	DoD Y/N	Analyst	Comments
prime	5QK20007	5mL	1	MEEBUA	N	—	—	N	DL	
WG344993-1	8	32.5uL			Y		20.5	Y		ICV 6.5
-2	9	50uL			Y		↓	Y		10
-3	5QK20010	250uL			Y		20.6	Y		50
-4	11	500uL			Y			Y		100
-5	12	2.5mL			Y		↓	Y		500
-6	13	5mL			Y		20.7	Y		1000
-7	14	7.5mL			Y		20.8	Y		↓ 1500
-8/10	15	50uL			Y		20.3	Y		INVLCS
↓ -9	16	5mL			Y	↓	20.5	Y		
SQ5874-1D	17				Y	<2	↓	Y		
-2D	18				Y		20.6	Y		
-3D	19				Y		20.8	Y		
-4G	20				Y		21.0	Y		
↓ -6E	21				Y		↓	Y		
SQ5899-1E	22				Y		21.1	Y		MOVERCAL
-2D	23				Y			Y		
-3D	24				Y			Y		
↓ -6E	25				Y			Y		
WG344993-11	26	↓			Y	↓	↓	Y		DUP SQ5877-6
CV	27	500uL			Y	—	20.9	Y		WG344993-12
SQ5899-7L	28	5mL			Y	<2	21.0	Y		
CV	↓ 29	500uL	↓	↓	Y	—	20.9	Y	↓	WG344993-13 2X SPIKE
										DL 11/7/23

STANDARD	STOCK #	CONC.		AMOUNT
ICAL	Amp 6832	1000 ug/mL		see comments
CV	Amp 6832	1000 ug/mL		500 uL
LCS	Amp 6550	10 000 ug/mL		50 uL

Katahdin Analytical Services

GC Laboratory Instrument Runlog

Instrument: GC05

pH Paper Lot#: 630801

Date: 11/17/23

Method: RSK SOP-175

Sample Name	Data File	Sample Amt.	DF	Method	Y/N	pH	Temp °C	DoD Y/N	Analyst	Comments
Prime	SQK20234	5mL	1	MEEB47A	N	—	—	N	DLSH	
CV	235	500uL			N		20.1	Y		NoSpike
CV	236	↓			Y		19.8	Y		
WG345593-1	237	5mL			Y		19.4	Y		WG345593-B
↓ -2	238	5mL			Y	↓	↓	Y		
SQ6133-1C	239	5mL			Y	12	20.5	Y		
↓ -2C	240				Y		20.6	Y		
↓ -3C	241				Y		20.7	Y		
WG345593-4	242				Y		↓	Y		MS SQ6133-3D
↓ -5	243				Y		20.8	X		MSD ↓ →E
SQ6133-4C	244				Y			Y		
↓ -5C	245				Y			Y		
↓ -6C	246				Y			Y		
↓ -7C	247	↓			Y	↓	↓	Y		
CV	248	500uL			Y	—	20.1	Y		WG345593-9
SQ6133-8C	249	5mL			Y	12	20.8	Y		
WG345593-6	250				Y		20.9	Y		MS SQ6133-8D
↓ -7	251				Y			Y		MSD ↓ →E
SQ6133-9C	252				Y			Y		
↓ -10C	253				Y		↓	Y		
SQ6259-1A	254				Y		21	Y		
↓ -2A	255				Y			X		
↓ -3A	256				Y		↓	Y		
↓ -4A	257				Y		21.1	Y		
WG345593-3	258	↓	↓	↓	Y	↓	↓	Y		DUP SQ6259-4B
CV	↓ 259	500uL			Y	—	20.1	Y	↓	WG345593-10/WG345593-11
										DL 11/17/23

STANDARD	STOCK #	CONC.		AMOUNT
ICAL		1000 ug/mL		see comments
CV	AMP 6832	1000 ug/mL		500 uL
LCS	AMP 6550	10 000 ug/mL		50 uL

CONVENTIONAL AND PHYSICAL ANALYTICAL DATA

QC Summary Section

Katahdin
ANALYTICAL SERVICES

Quality Control Report

Blank Sample Summary Report

Alkalinity

QC Batch	Anal. Method	Anal. Date	Prep. Date	Result	Units	LOQ	MDL	LOD
WG345360	SM2320B	13-NOV-23	N/A	J2.0	mg/L	5.0	0.23	4.0
WG345462	SM2320B	14-NOV-23	N/A	J2.8	mg/L	5.0	0.23	4.0

Chloride

QC Batch	Anal. Method	Anal. Date	Prep. Date	Result	Units	LOQ	MDL	LOD
WG345141	EPA 300.0	08-NOV-23	N/A	U1.0	mg/L	2.0	0.099	1.0
WG345625	EPA 300.0	16-NOV-23	N/A	U1.0	mg/L	2.0	0.099	1.0

Chromium, Hexavalent

QC Batch	Anal. Method	Anal. Date	Prep. Date	Result	Units	LOQ	MDL	LOD
WG345042	SW846 7196A	08-NOV-23	N/A	U0.012	mg/L	0.025	0.00076	0.012

Ferrous Iron

QC Batch	Anal. Method	Anal. Date	Prep. Date	Result	Units	LOQ	MDL	LOD
WG345050	SM3500D	08-NOV-23	N/A	U0.050	mg/L	0.10	0.026	0.050

Nitrate as N

QC Batch	Anal. Method	Anal. Date	Prep. Date	Result	Units	LOQ	MDL	LOD
WG345141	EPA 300.0	08-NOV-23	N/A	U0.025	mg/L	0.050	0.017	0.025

Sulfate

QC Batch	Anal. Method	Anal. Date	Prep. Date	Result	Units	LOQ	MDL	LOD
WG345141	EPA 300.0	08-NOV-23	N/A	J0.068	mg/L	1.0	0.064	0.50
WG345625	EPA 300.0	16-NOV-23	N/A	U0.50	mg/L	1.0	0.064	0.50

Total Organic Carbon

QC Batch	Anal. Method	Anal. Date	Prep. Date	Result	Units	LOQ	MDL	LOD
WG346583	SM5310B	05-DEC-23	N/A	U0.70	mg/L	1.0	0.35	0.70

Quality Control Report

Laboratory Control Sample Summary Report

Alkalinity

Laboratory Sample ID	Sample Type	QC Batch	Analysis Date	Prep Date	Units	Spike Amount	Result	Recovery (%)	Acceptance Range	RPD
WG345360-2	LCS	WG345360	13-NOV-23	N/A	mg/L	120	130	106	80-120	
WG345360-3	LCSD	WG345360	13-NOV-23	N/A	mg/L	120	130	109	80-120	3
WG345462-2	LCS	WG345462	14-NOV-23	N/A	mg/L	120	130	108	80-120	
WG345462-3	LCSD	WG345462	14-NOV-23	N/A	mg/L	120	140	114	80-120	6

Chloride

Laboratory Sample ID	Sample Type	QC Batch	Analysis Date	Prep Date	Units	Spike Amount	Result	Recovery (%)	Acceptance Range	RPD
WG345141-2	LCS	WG345141	08-NOV-23	N/A	mg/L	3.75	3.64	97.1	90-110	
WG345141-3	LCSD	WG345141	09-NOV-23	N/A	mg/L	3.75	3.70	98.7	90-110	1
WG345625-2	LCS	WG345625	16-NOV-23	N/A	mg/L	3.75	3.63	96.8	90-110	

Chromium, Hexavalent

Laboratory Sample ID	Sample Type	QC Batch	Analysis Date	Prep Date	Units	Spike Amount	Result	Recovery (%)	Acceptance Range	RPD
WG345042-2	LCS	WG345042	08-NOV-23	N/A	mg/L	.5	0.49	99	85-115	
WG345042-3	LCSD	WG345042	08-NOV-23	N/A	mg/L	.5	0.50	100	85-115	1

Ferrous Iron

Laboratory Sample ID	Sample Type	QC Batch	Analysis Date	Prep Date	Units	Spike Amount	Result	Recovery (%)	Acceptance Range	RPD
WG345050-2	LCS	WG345050	08-NOV-23	N/A	mg/L	139.95	140	99	80-120	

Nitrate as N

Laboratory Sample ID	Sample Type	QC Batch	Analysis Date	Prep Date	Units	Spike Amount	Result	Recovery (%)	Acceptance Range	RPD
WG345141-2	LCS	WG345141	08-NOV-23	N/A	mg/L	0.845	0.801	94.8	90-110	
WG345141-3	LCSD	WG345141	09-NOV-23	N/A	mg/L	0.845	0.792	93.7	90-110	1

Sulfate

Laboratory Sample ID	Sample Type	QC Batch	Analysis Date	Prep Date	Units	Spike Amount	Result	Recovery (%)	Acceptance Range	RPD
WG345141-2	LCS	WG345141	08-NOV-23	N/A	mg/L	3.75	3.62	96.5	90-110	
WG345141-3	LCSD	WG345141	09-NOV-23	N/A	mg/L	3.75	4.01	107.	90-110	10
WG345625-2	LCS	WG345625	16-NOV-23	N/A	mg/L	3.75	3.51	93.6	90-110	

Total Organic Carbon

Laboratory Sample ID	Sample Type	QC Batch	Analysis Date	Prep Date	Units	Spike Amount	Result	Recovery (%)	Acceptance Range	RPD
WG346583-2	LCS	WG346583	05-DEC-23	N/A	mg/L	50	51.8	104	80-120	
WG346583-3	LCSD	WG346583	05-DEC-23	N/A	mg/L	50	52.0	104	80-120	0

Quality Control Report

Duplicate Sample Summary Report

Total Organic Carbon

Duplicate Sample ID	Original Sample ID	QC Batch	Analysis Date	Units	Sample Result	Duplicate Result	RPD	RPD Limit
WG346583-4	SQ6133-1	WG346583	05-DEC-23	mg/L	J 0.63	U 1.0	NC	30

Quality Control Report

Matrix Spike Sample Summary Report

Alkalinity

Matrix Spike Sample ID	Sample Type	Original Sample ID	QC Batch	Analysis Date	Units	Spike Amount	Sample Result	MS Result	Recovery (%)	Acceptance Range	RPD
WG345360-4	MS	SQ6133-3	WG345360	13-NOV-23	mg/L	120	200	300	105	75 - 125	
WG345360-5	MSD	SQ6133-3	WG345360	13-NOV-23	mg/L	120	200	300	104	75 - 125	0
WG345462-4	MS	SQ6133-8	WG345462	14-NOV-23	mg/L	120	100	220	110	75 - 125	
WG345462-5	MSD	SQ6133-8	WG345462	14-NOV-23	mg/L	120	100	220	107	75 - 125	2

Chloride

Matrix Spike Sample ID	Sample Type	Original Sample ID	QC Batch	Analysis Date	Units	Spike Amount	Sample Result	MS Result	Recovery (%)	Acceptance Range	RPD
WG345141-4	MS	SQ6133-3	WG345141	08-NOV-23	mg/L	3.95	27	30.8	94.4	90 - 110	
WG345141-5	MSD	SQ6133-3	WG345141	08-NOV-23	mg/L	3.95	27	30.8	94	90 - 110	0
WG345141-6	MS	SQ6133-8	WG345141	08-NOV-23	mg/L	3.95	5.8	9.81	102	90 - 110	
WG345141-7	MSD	SQ6133-8	WG345141	08-NOV-23	mg/L	3.95	5.8	9.76	101	90 - 110	0

Chromium, Hexavalent

Matrix Spike Sample ID	Sample Type	Original Sample ID	QC Batch	Analysis Date	Units	Spike Amount	Sample Result	MS Result	Recovery (%)	Acceptance Range	RPD
WG345042-4	MS	SQ6133-3	WG345042	08-NOV-23	mg/L	.5	U 0.012	0.46	93	85 - 115	
WG345042-5	MSD	SQ6133-3	WG345042	08-NOV-23	mg/L	.5	U 0.012	0.49	98	85 - 115	6
WG345042-6	MS	SQ6133-8	WG345042	08-NOV-23	mg/L	.5	U 0.012	0.47	94	85 - 115	
WG345042-7	MSD	SQ6133-8	WG345042	08-NOV-23	mg/L	.5	U 0.012	0.49	99	85 - 115	4

Ferrous Iron

Matrix Spike Sample ID	Sample Type	Original Sample ID	QC Batch	Analysis Date	Units	Spike Amount	Sample Result	MS Result	Recovery (%)	Acceptance Range	RPD
WG345050-3	MS	SQ6133-3	WG345050	08-NOV-23	mg/L	139.95	U 0.050	140	101	75 - 125	
WG345050-4	MSD	SQ6133-3	WG345050	08-NOV-23	mg/L	139.95	U 0.050	140	100	75 - 125	1
WG345050-5	MS	SQ6133-8	WG345050	08-NOV-23	mg/L	139.95	U 0.050	140	102	75 - 125	
WG345050-6	MSD	SQ6133-8	WG345050	08-NOV-23	mg/L	139.95	U 0.050	140	102	75 - 125	0

Nitrate as N

Matrix Spike Sample ID	Sample Type	Original Sample ID	QC Batch	Analysis Date	Units	Spike Amount	Sample Result	MS Result	Recovery (%)	Acceptance Range	RPD
WG345141-4	MS	SQ6133-3	WG345141	08-NOV-23	mg/L	0.889	U 0.025	* 0.748	84.2*	90 - 110	
WG345141-5	MSD	SQ6133-3	WG345141	08-NOV-23	mg/L	0.889	U 0.025	* 0.746	83.9*	90 - 110	0
WG345141-6	MS	SQ6133-8	WG345141	08-NOV-23	mg/L	0.889	0.30	1.18	98.8	90 - 110	
WG345141-7	MSD	SQ6133-8	WG345141	08-NOV-23	mg/L	0.889	0.30	1.14	94.8	90 - 110	3

Sulfate

Matrix Spike Sample ID	Sample Type	Original Sample ID	QC Batch	Analysis Date	Units	Spike Amount	Sample Result	MS Result	Recovery (%)	Acceptance Range	RPD
WG345141-4	MS	SQ6133-3	WG345141	08-NOV-23	mg/L	3.95	12	* 15.2	87.7*	90 - 110	
WG345141-5	MSD	SQ6133-3	WG345141	08-NOV-23	mg/L	3.95	12	15.2	90.1	90 - 110	1
WG345141-6	MS	SQ6133-8	WG345141	08-NOV-23	mg/L	3.95	7.7	11.8	105	90 - 110	
WG345141-7	MSD	SQ6133-8	WG345141	08-NOV-23	mg/L	3.95	7.7	11.8	105	90 - 110	0

Quality Control Report

Matrix Spike Sample Summary Report (Cont.)

Total Organic Carbon

Matrix Spike Sample ID	Sample Type	Original Sample ID	QC Batch	Analysis Date	Units	Spike Amount	Sample Result	MS Result	Recovery (%)	Acceptance Range	RPD
WG346583-5	MS	SQ6133-3	WG346583	05-DEC-23	mg/L	50	1.5	51.1	99	75 - 125	
WG346583-6	MSD	SQ6133-3	WG346583	05-DEC-23	mg/L	50	1.5	51.6	100	75 - 125	1
WG346583-7	MS	SQ6133-8	WG346583	05-DEC-23	mg/L	50	J 0.57	51.0	101	75 - 125	
WG346583-8	MSD	SQ6133-8	WG346583	05-DEC-23	mg/L	50	J 0.57	51.6	102	75 - 125	1

Sample Data Section

KATAHDIN ANALYTICAL SERVICES – INORGANIC DATA QUALIFIERS

The sampled date indicated on the attached Report(s) of Analysis (ROA) is the date for which a grab sample was collected or the date for which a composite sample was completed. Beginning and start times for composite samples can be found on the Chain-of-Custody.

U Indicates the compound was analyzed for but not detected above the specified level. This level may be the Practical Quantitation Level (PQL) (also called Limit of Quantitation (LOQ)), the Limit of Detection (LOD) or Method Detection Limit (MDL) as required by the client. Note: All results reported as "U" MDL have a 50% rate for false negatives compared to those results reported as "U" PQL "U" LOQ or "U" LOD, where the rate of false negatives is <1%.

E Estimated value. This flag identifies compounds whose concentrations exceed the upper level of the calibration range of the instrument for that specific analysis.

J Estimated value. The analyte was detected in the sample at a concentration less than the laboratory Practical Quantitation Level (PQL) (also called Limit of Quantitation (LOQ)), but above the Method Detection Limit (MDL).

I-7 The laboratory's Practical Quantitation Level (PQL) or LOQ could not be achieved for this parameter due to sample composition, matrix effects, sample volume, or quantity used for analysis.

A-4 Please refer to cover letter or narrative for further information.

H_ Please note that the regulatory holding time for _____ is "analyze immediately". Ideally, this analysis must be performed in the field at the time of sample collection. _____ for this sample was not performed at the time of sample collection. The analysis was performed as soon as possible after receipt by the laboratory.

H1 - pH H2 - DO H3 - sulfite H4 - residual chlorine

T1 The client did not provide the full volume of at least one liter for analysis of TSS. Therefore, the PQL of 2.5 mg/L could not be achieved.

T2 The client provided the required volume of at least one liter for analysis of TSS, but the laboratory could not filter the full one liter volume due to the sample matrix. Therefore, the PQL of 2.5 mg/L could not be achieved.

M1 The matrix spike and/or matrix spike duplicate recovery performed on this sample was outside of the laboratory acceptance criteria. Sample matrix is suspected. The laboratory criteria was met for the Laboratory Control Sample (LCS) analyzed concurrently with this sample.

M2 The matrix spike and/or matrix spike duplicate recovery was outside of the laboratory acceptance criteria. The native sample concentration is greater than four times the spike added concentration so the spike added could not be distinguished from the native sample concentration.

R1 The relative percent difference (RPD) between the duplicate analyses performed on this sample was outside of the laboratory acceptance criteria (when both values are greater than ten times the PQL).

MCL	Maximum Contaminant Level	NL	No limit	NOD	No Odor Detected
NFL	No Free Liquid Present	FLP	Free Liquid Present	TON	Threshold Odor Number

D-1 As required by Method 5210B, APHA Standard Methods for the Examination of Water and Wastewater (21st edition), the BOD value reported for this sample is 'qualified' because the check standard run concurrently with the sample analysis did not meet the criteria specified in the method (198 +/- 30.5 mg/L). These results may not be reportable for compliance purposes.

D-2 The measured final dissolved oxygen concentrations of all dilutions were less than the method-specified limit of 1 mg/L. The reported BOD result was calculated assuming a final oxygen concentration equal to 1 mg/L. The reported value should be considered a minimum value.

D-3 The dilution water used to prepare this sample did not meet the method and/or regulatory criteria of less than 0.2 mg/L dissolved oxygen (DO) uptake over the five day period of incubation. These results may not be reportable for compliance purposes.

D-4 The dilution water used to prepare this sample did not meet the method and/or regulatory criteria of less than 0.4 mg/L dissolved oxygen (DO) uptake over the five day period of incubation. These results may not be reportable for compliance purposes.

D-5 The seed control factor did not meet the method criteria of greater than 2.0 mg/L of dissolved oxygen (DO) uptake over the five day period of incubation. The dilution closest to meeting the criteria was used to estimate the seed control factor.

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ANALYTICAL SERVICES

Report of Analytical Results

Lab Sample ID: SQ6133-1
Client ID: SY-OBMW6-110723
SDG: SQ6133
Report Date: 11-DEC-23

Matrix	Date Sampled	Date Received
AQ	07-NOV-23 10:30	08-NOV-23

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Alkalinity	100 mg/L	5.0	0.23	4.0	SM2320B	WG345360	13-NOV-23 14:07	N/A	N/A	
Chloride	25 mg/L	2.0	0.099	1.0	EPA 300.0	WG345141	08-NOV-23 18:46	N/A	N/A	
Chromium, Hexavalent	U0.012 mg/L	0.025	0.00076	0.012	SW846 7196A	WG345042	08-NOV-23 09:08	N/A	N/A	
Ferrous Iron	U0.050 mg/L	0.10	0.026	0.050	SM3500D	WG345050	08-NOV-23 09:42	N/A	N/A	
Nitrate as N	0.073 mg/L	0.050	0.017	0.025	EPA 300.0	WG345141	08-NOV-23 18:46	N/A	N/A	
Sulfate	13 mg/L	1.0	0.064	0.50	EPA 300.0	WG345141	08-NOV-23 18:46	N/A	N/A	
Total Organic Carbon	J0.63 mg/L	1.0	0.37	0.75	SM5310B	WG346583	05-DEC-23 18:17	N/A	N/A	

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Report of Analytical Results

Lab Sample ID: SQ6133-2
Client ID: SY-OBMW4R-110723
SDG: SQ6133
Report Date: 11-DEC-23

Matrix	Date Sampled	Date Received
AQ	07-NOV-23 11:05	08-NOV-23

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Alkalinity	210 mg/L	5.0	0.23	4.0	SM2320B	WG345360	13-NOV-23 14:10	N/A	N/A	
Chloride	1200 mg/L	100	5.0	50.	EPA 300.0	WG345625	16-NOV-23 20:19	N/A	N/A	
Chromium, Hexavalent	U0.012 mg/L	0.025	0.00076	0.012	SW846 7196A	WG345042	08-NOV-23 09:08	N/A	N/A	
Ferrous Iron	J0.076 mg/L	0.10	0.026	0.050	SM3500D	WG345050	08-NOV-23 09:42	N/A	N/A	
Nitrate as N	0.056 mg/L	0.050	0.017	0.025	EPA 300.0	WG345141	08-NOV-23 19:04	N/A	N/A	
Sulfate	150 mg/L	5.0	0.32	2.5	EPA 300.0	WG345625	16-NOV-23 21:11	N/A	N/A	
Total Organic Carbon	1.5 mg/L	1.0	0.37	0.75	SM5310B	WG346583	05-DEC-23 18:44	N/A	N/A	

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Report of Analytical Results

Lab Sample ID: SQ6133-3
Client ID: SY-OBMW12-110723
SDG: SQ6133
Report Date: 11-DEC-23

Matrix	Date Sampled	Date Received
AQ	07-NOV-23 10:07	08-NOV-23

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Alkalinity	200 mg/L	5.0	0.23	4.0	SM2320B	WG345360	13-NOV-23 14:14	N/A	N/A	
Chloride	27 mg/L	2.0	0.099	1.0	EPA 300.0	WG345141	08-NOV-23 19:21	N/A	N/A	
Chromium, Hexavalent	U0.012 mg/L	0.025	0.00076	0.012	SW846 7196A	WG345042	08-NOV-23 09:08	N/A	N/A	
Ferrous Iron	U0.050 mg/L	0.10	0.026	0.050	SM3500D	WG345050	08-NOV-23 09:42	N/A	N/A	
Nitrate as N	U0.025 mg/L	0.050	0.017	0.025	EPA 300.0	WG345141	08-NOV-23 19:21	N/A	N/A	M1
Sulfate	12 mg/L	1.0	0.064	0.50	EPA 300.0	WG345141	08-NOV-23 19:21	N/A	N/A	M1
Total Organic Carbon	1.5 mg/L	1.0	0.37	0.75	SM5310B	WG346583	05-DEC-23 19:00	N/A	N/A	

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Report of Analytical Results

Lab Sample ID: SQ6133-4
Client ID: SY-BRMW2-60.5-70.5-110723
SDG: SQ6133
Report Date: 11-DEC-23

Matrix	Date Sampled	Date Received
AQ	07-NOV-23 12:25	08-NOV-23

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Alkalinity	100 mg/L	5.0	0.23	4.0	SM2320B	WG345360	13-NOV-23 14:55	N/A	N/A	
Chloride	17 mg/L	2.0	0.099	1.0	EPA 300.0	WG345141	08-NOV-23 20:13	N/A	N/A	
Chromium, Hexavalent	U0.012 mg/L	0.025	0.00076	0.012	SW846 7196A	WG345042	08-NOV-23 09:08	N/A	N/A	
Ferrous Iron	U0.050 mg/L	0.10	0.026	0.050	SM3500D	WG345050	08-NOV-23 09:42	N/A	N/A	
Nitrate as N	0.16 mg/L	0.050	0.017	0.025	EPA 300.0	WG345141	08-NOV-23 20:13	N/A	N/A	
Sulfate	9.3 mg/L	1.0	0.064	0.50	EPA 300.0	WG345141	08-NOV-23 20:13	N/A	N/A	
Total Organic Carbon	2.1 mg/L	1.0	0.37	0.75	SM5310B	WG346583	05-DEC-23 19:55	N/A	N/A	

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Report of Analytical Results

Lab Sample ID: SQ6133-5
Client ID: SY-OBMW15-110723
SDG: SQ6133
Report Date: 11-DEC-23

Matrix	Date Sampled	Date Received
AQ	07-NOV-23 12:50	08-NOV-23

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Alkalinity	140 mg/L	5.0	0.23	4.0	SM2320B	WG345360	13-NOV-23 14:58	N/A	N/A	
Chloride	220 mg/L	20.	0.99	10.	EPA 300.0	WG345625	16-NOV-23 21:28	N/A	N/A	
Chromium, Hexavalent	U0.012 mg/L	0.025	0.00076	0.012	SW846 7196A	WG345042	08-NOV-23 10:49	N/A	N/A	
Ferrous Iron	U0.050 mg/L	0.10	0.026	0.050	SM3500D	WG345050	08-NOV-23 10:58	N/A	N/A	
Nitrate as N	0.20 mg/L	0.050	0.017	0.025	EPA 300.0	WG345141	08-NOV-23 20:30	N/A	N/A	
Sulfate	200 mg/L	10.	0.64	5.0	EPA 300.0	WG345625	16-NOV-23 21:28	N/A	N/A	
Total Organic Carbon	2.7 mg/L	1.0	0.37	0.75	SM5310B	WG346583	05-DEC-23 20:10	N/A	N/A	

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Report of Analytical Results

Lab Sample ID: SQ6133-6
Client ID: SY-OBMW5-110723
SDG: SQ6133
Report Date: 11-DEC-23

Matrix	Date Sampled	Date Received
AQ	07-NOV-23 13:25	08-NOV-23

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Alkalinity	120 mg/L	5.0	0.23	4.0	SM2320B	WG345360	13-NOV-23 15:02	N/A	N/A	
Chloride	18 mg/L	2.0	0.099	1.0	EPA 300.0	WG345141	08-NOV-23 20:47	N/A	N/A	
Chromium, Hexavalent	U0.012 mg/L	0.025	0.00076	0.012	SW846 7196A	WG345042	08-NOV-23 10:49	N/A	N/A	
Ferrous Iron	U0.050 mg/L	0.10	0.026	0.050	SM3500D	WG345050	08-NOV-23 10:58	N/A	N/A	
Nitrate as N	0.062 mg/L	0.050	0.017	0.025	EPA 300.0	WG345141	08-NOV-23 20:47	N/A	N/A	
Sulfate	12 mg/L	1.0	0.064	0.50	EPA 300.0	WG345141	08-NOV-23 20:47	N/A	N/A	
Total Organic Carbon	J0.50 mg/L	1.0	0.37	0.75	SM5310B	WG346583	05-DEC-23 20:54	N/A	N/A	

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Report of Analytical Results

Lab Sample ID: SQ6133-7
Client ID: SY-OBMW13-110723
SDG: SQ6133
Report Date: 11-DEC-23

Matrix	Date Sampled	Date Received
AQ	07-NOV-23 14:25	08-NOV-23

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Alkalinity	220 mg/L	5.0	0.23	4.0	SM2320B	WG345360	13-NOV-23 15:05	N/A	N/A	
Chloride	56 mg/L	4.0	0.20	2.0	EPA 300.0	WG345625	16-NOV-23 21:45	N/A	N/A	
Chromium, Hexavalent	U0.012 mg/L	0.025	0.00076	0.012	SW846 7196A	WG345042	08-NOV-23 10:49	N/A	N/A	
Ferrous Iron	U0.050 mg/L	0.10	0.026	0.050	SM3500D	WG345050	08-NOV-23 10:58	N/A	N/A	
Nitrate as N	0.51 mg/L	0.050	0.017	0.025	EPA 300.0	WG345141	08-NOV-23 21:04	N/A	N/A	
Sulfate	68 mg/L	1.0	0.064	0.50	EPA 300.0	WG345141	08-NOV-23 21:04	N/A	N/A	
Total Organic Carbon	1.7 mg/L	1.0	0.37	0.75	SM5310B	WG346583	05-DEC-23 21:08	N/A	N/A	

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Report of Analytical Results

Lab Sample ID: SQ6133-8
Client ID: SY-BRMW2-80.5-95.5-110723
SDG: SQ6133
Report Date: 11-DEC-23

Matrix	Date Sampled	Date Received
AQ	07-NOV-23 13:40	08-NOV-23

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Alkalinity	100 mg/L	5.0	0.23	4.0	SM2320B	WG345462	14-NOV-23 14:23	N/A	N/A	
Chloride	5.8 mg/L	2.0	0.099	1.0	EPA 300.0	WG345141	08-NOV-23 21:56	N/A	N/A	
Chromium, Hexavalent	U0.012 mg/L	0.025	0.00076	0.012	SW846 7196A	WG345042	08-NOV-23 10:49	N/A	N/A	
Ferrous Iron	U0.050 mg/L	0.10	0.026	0.050	SM3500D	WG345050	08-NOV-23 10:58	N/A	N/A	
Nitrate as N	0.30 mg/L	0.050	0.017	0.025	EPA 300.0	WG345141	08-NOV-23 21:56	N/A	N/A	
Sulfate	7.7 mg/L	1.0	0.064	0.50	EPA 300.0	WG345141	08-NOV-23 21:56	N/A	N/A	
Total Organic Carbon	J0.57 mg/L	1.0	0.37	0.75	SM5310B	WG346583	05-DEC-23 21:19	N/A	N/A	

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Report of Analytical Results

Lab Sample ID: SQ6133-9
Client ID: SY-OBMW14-110723
SDG: SQ6133
Report Date: 11-DEC-23

Matrix	Date Sampled	Date Received
AQ	07-NOV-23 14:00	08-NOV-23

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Alkalinity	180 mg/L	5.0	0.23	4.0	SM2320B	WG345462	14-NOV-23 14:35	N/A	N/A	
Chloride	99 mg/L	10.	0.50	5.0	EPA 300.0	WG345625	16-NOV-23 22:03	N/A	N/A	
Chromium, Hexavalent	U0.012 mg/L	0.025	0.00076	0.012	SW846 7196A	WG345042	08-NOV-23 10:49	N/A	N/A	
Ferrous Iron	U0.050 mg/L	0.10	0.026	0.050	SM3500D	WG345050	08-NOV-23 10:58	N/A	N/A	
Nitrate as N	U0.025 mg/L	0.050	0.017	0.025	EPA 300.0	WG345141	08-NOV-23 22:48	N/A	N/A	
Sulfate	25 mg/L	1.0	0.064	0.50	EPA 300.0	WG345141	08-NOV-23 22:48	N/A	N/A	
Total Organic Carbon	1.2 mg/L	1.0	0.37	0.75	SM5310B	WG346583	05-DEC-23 22:08	N/A	N/A	

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Report of Analytical Results

Lab Sample ID: SQ6133-10
Client ID: SY-BRMW2-252.5-262.5-110723
SDG: SQ6133
Report Date: 11-DEC-23

Matrix	Date Sampled	Date Received
AQ	07-NOV-23 15:35	08-NOV-23

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Alkalinity	110 mg/L	5.0	0.23	4.0	SM2320B	WG345462	14-NOV-23 14:39	N/A	N/A	
Chloride	3.3 mg/L	2.0	0.099	1.0	EPA 300.0	WG345141	08-NOV-23 23:05	N/A	N/A	
Chromium, Hexavalent	U0.012 mg/L	0.025	0.00076	0.012	SW846 7196A	WG345042	08-NOV-23 10:49	N/A	N/A	
Ferrous Iron	U0.050 mg/L	0.10	0.026	0.050	SM3500D	WG345050	08-NOV-23 10:58	N/A	N/A	
Nitrate as N	0.10 mg/L	0.050	0.017	0.025	EPA 300.0	WG345141	08-NOV-23 23:05	N/A	N/A	
Sulfate	7.9 mg/L	1.0	0.064	0.50	EPA 300.0	WG345141	08-NOV-23 23:05	N/A	N/A	
Total Organic Carbon	1.3 mg/L	1.0	0.37	0.75	SM5310B	WG346583	05-DEC-23 22:23	N/A	N/A	

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Raw Data Section

WET CHEMISTRY BATCH REPORT
Nov 08 2023, 02:44 pm
Batch: WG345042 Run ID 1: R626636 Run ID 2: NONE

Parameter: Chromium, Hexavalent
Prep Date: N/A

Date Analyzed: 08-NOV-23
Prep Method: N/A

Analyst Initials: SS
Prep Chemist: N/A

Sample	Samp Type	Method	Initial Amt.	Final Amt.	Rpt. DF	Result	Rpt Result	TS(%)	PQL	MDL	Adj PQL	RPD	%Rec
SQ6132-1	SAMP	SW846 7196A	95.000mL	95.000mL	1	-.00015	U0.025 mg/L	NA	.025	0.00076	0.025		
SQ6133-1	SAMP	SW846 7196A	95.000mL	95.000mL	1	-.00019	U0.012 mg/L	NA	.025	0.00076	0.025		
SQ6133-2	SAMP	SW846 7196A	95.000mL	95.000mL	1	-.00036	U0.012 mg/L	NA	.025	0.00076	0.025		
SQ6133-3	SAMP	SW846 7196A	95.000mL	95.000mL	1	-.00007	U0.012 mg/L	NA	.025	0.00076	0.025		
SQ6133-4	SAMP	SW846 7196A	95.000mL	95.000mL	1	-.00002	U0.012 mg/L	NA	.025	0.00076	0.025		
SQ6133-5	SAMP	SW846 7196A	95.000mL	95.000mL	1	.00037	U0.012 mg/L	NA	.025	0.00076	0.025		
SQ6133-6	SAMP	SW846 7196A	95.000mL	95.000mL	1	-.00019	U0.012 mg/L	NA	.025	0.00076	0.025		
SQ6133-7	SAMP	SW846 7196A	95.000mL	95.000mL	1	-.00022	U0.012 mg/L	NA	.025	0.00076	0.025		
SQ6133-8	SAMP	SW846 7196A	95.000mL	95.000mL	1	.00014	U0.012 mg/L	NA	.025	0.00076	0.025		
SQ6133-9	SAMP	SW846 7196A	95.000mL	95.000mL	1	-.00026	U0.012 mg/L	NA	.025	0.00076	0.025		
SQ6133-10	SAMP	SW846 7196A	95.000mL	95.000mL	1	.00025	U0.012 mg/L	NA	.025	0.00076	0.025		
WG345042-1	MBLANK	SW846 7196A	95.000mL	95.000mL	1	-.0002	U0.012 mg/L	NA	.025	0.00076	0.025		
WG345042-2	LCS	SW846 7196A	95.000mL	95.000mL	1	.49372	0.49 mg/L	NA	.025	0.00076	0.025		99
WG345042-3	LCSD	SW846 7196A	95.000mL	95.000mL	1	.50095	0.50 mg/L	NA	.025	0.00076	0.025	1	100
WG345042-4	MS	SW846 7196A	95.000mL	95.000mL	1	.46346	0.46 mg/L	NA	.025	0.00076	0.025		93
WG345042-5	MSD	SW846 7196A	95.000mL	95.000mL	1	.49092	0.49 mg/L	NA	.025	0.00076	0.025	6	98
WG345042-6	MS	SW846 7196A	95.000mL	95.000mL	1	.47196	0.47 mg/L	NA	.025	0.00076	0.025		94
WG345042-7	MSD	SW846 7196A	95.000mL	95.000mL	1	.49381	0.49 mg/L	NA	.025	0.00076	0.025	4	99

Comments:

SQ6133-1	Anions = NO3, SO4, Cl.
SQ6133-2	Anions = NO3, SO4, Cl.
SQ6133-3	MS/MSD Anions = NO3, SO4, Cl.
SQ6133-4	Anions = NO3, SO4, Cl.
SQ6133-5	Anions = NO3, SO4, Cl.
SQ6133-6	Anions = NO3, SO4, Cl.
SQ6133-7	Anions = NO3, SO4, Cl.
SQ6133-8	MS/MSD Anions = NO3, SO4, Cl.
SQ6133-9	Anions = NO3, SO4, Cl.
SQ6133-10	Anions = NO3, SO4, Cl.
WG345042-1	SQ6132-1
WG345042-2	SQ6132-1
WG345042-3	SQ6132-1
WG345042-4	SQ6133-3
WG345042-5	SQ6133-3
WG345042-6	SQ6133-8
WG345042-7	SQ6133-8

Entered by: SS Date: 11/8/23 Accepted by: RAS Date: 11/8/23

Katahdin Analytical Services SQ6133 Page 624 of 855

WET CHEMISTRY BATCH REPORT
Nov 08 2023, 02:44 pm
Batch: WG345043 Run ID 1: R626637 Run ID 2: NONE

Parameter: Chromium, Hexavalent
Prep Date: N/A

Date Analyzed: 08-NOV-23
Prep Method: N/A

Analyst Initials: SS
Prep Chemist: N/A

Sample	Samp Type	Method	Initial Amt.	Final Amt.	Rpt. DF	Result	Rpt Result	TS(%)	PQL	MDL	Adj PQL	RPD	%Rec
SQ5389-30	SAMP	SM3500-CR B	95.000mL	95.000mL	1	.01269	U0.025 mg/L	NA	.025	0.0054	0.025		
SQ5389-31	SAMP	SM3500-CR B	95.000mL	95.000mL	1	.0243	U0.025 mg/L	NA	.025	0.0054	0.025		

Entered by: SS Date: 11/8/23 Accepted by: RAD Date: 11/8/23

KATAHDIN ANALYTICAL SERVICES, LLC
Wet Chemistry Analysis Run Information Sheet

Analyte: HEXAVALENT CHROMIUM	**Analyst:** SS
Instrument: KONELAB 20	**Analysis Date:** 11/8/23

~~WG5340~~ WG345042 → R626636

Analytical Method (Check all that apply): SS 11/8/23 WG345043 → R626637

☐ SW846 7196 ☐ SM 3500-Cr B ☐ Other (list): _____

Reagent Information:

Reagent Name	Reagent ID	Expiration Date
Diphenylcarbazide Solution	**W22305**	**5/7/2024**
10% v/v Sulfuric Acid	**W21629**	**2/14/2024**

Standards Information:

Standard Name	Concentration (mg/L as Cr^6)	ID	Expiration Date
Cal. Standard / CCV Stock	1000.0	**SWL5065**	**4/28/2024**
Cal. Std. / CCV Intermediate	25.0	**W21820**	**11/28/2023**
1.0 mg/L Calibration Standard - (1.00 mL / 25.0 mL dilution of Cal. Standard / CCV Intermediate)	1.00	HC_Cal110823	Day of use only
CCV - (0.50 mL / 25.0 mL dilution of Cal. Standard / CCV Intermediate)	0.50	HC_CCV110823	Day of use only
LCS / MS Stock	1000.0	**SWL5048**	**12/31/2023**
LCS / MS Intermediate	25.0	**W21961**	**12/20/2023**
LCS - (0.50 mL / 25.0 mL dilution of LCS / MS Intermediate)	0.50	HC_LCS110823	Day of use only

Notes:

1) Additional calibration standards (0.50, 0.10, 0.050, 0.020, 0.010 mg/L) are automatically prepared by the instrument during analysis through dilution of the 1.0 mg/L Calibration Standard.
2) Matrix spikes are prepared prior to analysis by adding 0.5 mL of LCS / MS Intermediate to 25 mL of sample. Matrix spike added = 0.50 mg/L as Cr6.

Comments:

Pipettes: W7, W8, W10

Aquakem v. 7.2									
Results from time period:									
Wed Nov 08 08:45:18 2023									
Wed Nov 08 14:09:02 2023									
Sample Id	Test short name	Result	Result unit	Result date and time	Dil. Factor	Response	Blank init abs. (A)	Main abs. 1	Comments
CRVI-0	Chromium	-0.0000471	mg/l	11/8/23 8:45:18	1	0.00018	-0.00019	-0.00001	CAL POINT
CRVI-1.0	Chromium	0.0101656	mg/l	11/8/23 8:45:19	100	0.00683	-0.0006	0.00623	CAL POINT
CRVI-1.0	Chromium	0.0205621	mg/l	11/8/23 8:45:20	50	0.0136	-0.0005	0.0131	CAL POINT
CRVI-1.0	Chromium	0.0505192	mg/l	11/8/23 8:45:21	20	0.03312	-0.0005	0.03262	CAL POINT
CRVI-1.0	Chromium	0.1014059	mg/l	11/8/23 8:45:22	10	0.06626	-0.0003	0.06596	CAL POINT
CRVI-1.0	Chromium	0.4951474	mg/l	11/8/23 8:45:23	2	0.32272	-0.00039	0.32233	CAL POINT
CRVI-1.0	Chromium	1.0022469	mg/l	11/8/23 8:45:24	1	0.65301	0.00044	0.65344	CAL POINT
CRVI-CCV	Chromium	0.5100794	mg/l	11/8/23 9:08:32	1	0.33244	0.00037	0.33281	102%
CRVI-CCB	Chromium	-0.0002086	mg/l	11/8/23 9:08:33	1	0.00007	-0.00056	-0.00049	
CRVI LCS	Chromium	0.4937254	mg/l	11/8/23 9:08:34	1	0.32179	-0.00061	0.32118	ACCEPTED
CRVI LCSD	Chromium	0.5009544	mg/l	11/8/23 9:08:35	1	0.3265	-0.00074	0.32576	ACCEPTED
SQ6133 1007	Chromium	-0.000071	mg/l	11/8/23 9:08:36	1	0.00016	-0.00063	-0.00046	ACCEPTED
SQ6133 1007 MS	Chromium	0.4634629	mg/l	11/8/23 9:08:37	1	0.30208	-0.00066	0.30142	ACCEPTED
SQ6133 1007 MSD	Chromium	0.4909266	mg/l	11/8/23 9:08:38	1	0.31997	-0.00053	0.31943	ACCEPTED
SQ6133 1030	Chromium	-0.0001959	mg/l	11/8/23 9:08:39	1	0.00008	-0.00055	-0.00047	ACCEPTED
SQ6133 1105	Chromium	-0.0003619	mg/l	11/8/23 9:08:40	1	-0.00003	0.0005	0.00048	ACCEPTED
SQ6133 1225	Chromium	-0.0000216	mg/l	11/8/23 9:08:41	1	0.0002	-0.00046	-0.00027	ACCEPTED
SQ6132	Chromium	-0.0001557	mg/l	11/8/23 9:08:42	1	0.00011	-0.00041	-0.0003	ACCEPTED
CRVI LOD	Chromium	0.0126986	mg/l	11/8/23 9:08:43	1	0.00848	0.0002	0.00868	ACCEPTED
CRVI-CCV	Chromium	0.5026137	mg/l	11/8/23 9:12:30	1	0.32758	0.00058	0.32816	101%
CRVI-CCB	Chromium	-0.0004298	mg/l	11/8/23 9:12:31	1	-0.00007	-0.00038	-0.00045	
CRVI LOQ	Chromium	0.024309	mg/l	11/8/23 9:12:32	1	0.01604	-0.00057	0.01547	ACCEPTED
CRVI-CCV	Chromium	0.5012155	mg/l	11/8/23 9:14:24	1	0.32667	0.00065	0.32731	100%
CRVI-CCB	Chromium	-0.0003109	mg/l	11/8/23 9:14:25	1	0.00001	-0.00038	-0.00037	
CRVI-CCV	Chromium	0.5110832	mg/l	11/8/23 10:49:48	1	0.33309	-0.00037	0.33273	102%
CRVI-CCB	Chromium	-0.0002721	mg/l	11/8/23 10:49:49	1	0.00003	-0.00032	-0.00028	
SQ6133 1250	Chromium	0.0003729	mg/l	11/8/23 10:49:50	1	0.00045	-0.00005	0.0004	ACCEPTED
SQ6133 1325	Chromium	-0.0001962	mg/l	11/8/23 10:49:51	1	0.00008	-0.00004	0.00004	ACCEPTED
SQ6133 1340	Chromium	0.000144	mg/l	11/8/23 10:49:52	1	0.0003	0.00002	0.00032	ACCEPTED
SQ6133 1340 MS	Chromium	0.4719626	mg/l	11/8/23 10:49:53	1	0.30761	0.00043	0.30805	ACCEPTED
SQ6133 1340 MSD	Chromium	0.4938156	mg/l	11/8/23 10:49:54	1	0.32185	-0.00002	0.32183	ACCEPTED
SQ6133 1400	Chromium	-0.0002651	mg/l	11/8/23 10:49:55	1	0.00004	-0.0003	-0.00027	ACCEPTED
SQ6133 1425	Chromium	-0.000226	mg/l	11/8/23 10:49:56	1	0.00006	-0.0003	-0.00023	ACCEPTED
SQ6133 1535	Chromium	0.0002597	mg/l	11/8/23 10:49:57	1	0.00038	0.00045	0.00083	ACCEPTED
CRVI-CCV	Chromium	0.5107006	mg/l	11/8/23 10:52:24	1	0.33285	-0.00057	0.33227	102%
CRVI-CCB	Chromium	-0.0003476	mg/l	11/8/23 10:52:25	1	-0.00002	-0.00063	-0.00065	

Katahdin Analytical Services SQ6133 Page 627 of 855

Result Report | Aquakem 7.2 | Page: 1

Laboratory
Analyzer User

Date : 11/8/2023
Time : 11:36

Test: Chromium
Unit: mg/l

	Sample ID:	Result	Date and Time	Note
	CRVI-CCV	0.510079	11/8/2023 9:08	
	CRVI-CCB	-0.0002	11/8/2023 9:08	
	CRVI LCS	0.493725	11/8/2023 9:08	
	CRVI LCSD	0.500954	11/8/2023 9:08	
-3	SQ6133 1007	-7e-005	11/8/2023 9:08	
-3	SQ6133 1007 MS	0.463463	11/8/2023 9:08	
-3	SQ6133 1007 MSD	0.490927	11/8/2023 9:08	
-1	SQ6133 1030	-0.0002	11/8/2023 9:08	
-2	SQ6133 1105	-0.0004	11/8/2023 9:08	
-4	SQ6133 1225	-2e-005	11/8/2023 9:08	
-1	SQ6132	-0.0002	11/8/2023 9:08	
Q5389-30	CRVI LOD	0.012699	11/8/2023 9:08	
	CRVI-CCV	0.502614	11/8/2023 9:12	
Q5389-31	CRVI-CCB	-0.0004	11/8/2023 9:12	
	CRVI LOQ	0.024309	11/8/2023 9:12	
	CRVI-CCV	0.501216	11/8/2023 9:14	
	CRVI-CCB	-0.0003	11/8/2023 9:14	
	CRVI-CCV	0.511083	11/8/2023 10:49	
	CRVI-CCB	-0.0003	11/8/2023 10:49	
-5	SQ6133 1250	0.000373	11/8/2023 10:49	
-6	SQ6133 1325	-0.0002	11/8/2023 10:49	
-8	SQ6133 1340	0.000144	11/8/2023 10:49	
-8	SQ6133 1340 MS	0.471963	11/8/2023 10:49	
-8	SQ6133 1340 MSD	0.493816	11/8/2023 10:49	
-9	SQ6133 1400	-0.0003	11/8/2023 10:49	
-7	SQ6133 1425	-0.0002	11/8/2023 10:49	
-10	SQ6133 1535	0.000260	11/8/2023 10:49	
	CRVI-CCV	0.510701	11/8/2023 10:52	
	CRVI-CCB	-0.0003	11/8/2023 10:52	

SS 11/8/23

Laboratory
Analyzer User

11/8/2023 8:45

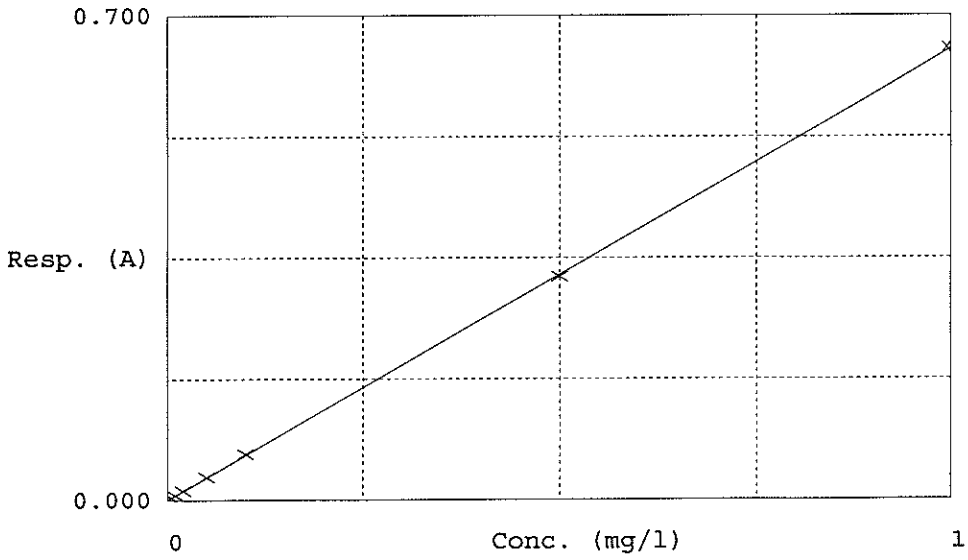
Test Chromium

Accepted 11/8/2023 8:45

Factor 1.535
Bias 0

Coeff. of det. 0.999964

Errors Meas. error



	Calibrator	Response	Calc. con.	Conc.	Errors
1	CRVI-0	0.000	-0.0000471	0.0000000	Init abs.
2	CRVI-1.0	0.007	0.0101656	0.0100000	
3	CRVI-1.0	0.014	0.0205621	0.0200000	
4	CRVI-1.0	0.033	0.0505192	0.0500000	
5	CRVI-1.0	0.066	0.1014059	0.1000000	
6	CRVI-1.0	0.323	0.4951474	0.5000000	
7	CRVI-1.0	0.653	1.0022469	1.0000000	

WET CHEMISTRY BATCH REPORT
Nov 08 2023, 11:44 am
Batch: WG345050 Run ID 1: R626608 Run ID 2: NONE

Parameter: Ferrous Iron

Date Analyzed: 08-NOV-23

Analyst Initials: RAD

Prep Date: N/A

Prep Method: N/A

Prep Chemist: N/A

Sample	Samp Type	Method	Initial Amt.	Final Amt.	Rpt. DF	Result	Rpt Result	TS(%)	PQL	MDL	Adj PQL	RPD	%Rec
SQ6133-1	SAMP	SM3500D	50.000mL	50.000mL	1	-.003	U0.050 mg/L	NA	.1	0.026	0.10		
SQ6133-2	SAMP	SM3500D	50.000mL	50.000mL	1	.076	J0.076 mg/L	NA	.1	0.026	0.10		
SQ6133-3	SAMP	SM3500D	50.000mL	50.000mL	1	.017	U0.050 mg/L	NA	.1	0.026	0.10		
SQ6133-4	SAMP	SM3500D	50.000mL	50.000mL	1	-.003	U0.050 mg/L	NA	.1	0.026	0.10		
SQ6133-5	SAMP	SM3500D	50.000mL	50.000mL	1	-.003	U0.050 mg/L	NA	.1	0.026	0.10		
SQ6133-6	SAMP	SM3500D	50.000mL	50.000mL	1	.007	U0.050 mg/L	NA	.1	0.026	0.10		
SQ6133-7	SAMP	SM3500D	50.000mL	50.000mL	1	.007	U0.050 mg/L	NA	.1	0.026	0.10		
SQ6133-8	SAMP	SM3500D	50.000mL	50.000mL	1	.007	U0.050 mg/L	NA	.1	0.026	0.10		
SQ6133-9	SAMP	SM3500D	50.000mL	50.000mL	1	.017	U0.050 mg/L	NA	.1	0.026	0.10		
SQ6133-10	SAMP	SM3500D	50.000mL	50.000mL	1	.007	U0.050 mg/L	NA	.1	0.026	0.10		
WG345050-1	MBLANK	SM3500D	50.000mL	50.000mL	1	-.012	U0.050 mg/L	NA	.1	0.026	0.10		
WG345050-2	LCS	SM3500D	50.000mL	50.000mL	1	139.06	140 mg/L	NA	.1	0.026	0.10		99
WG345050-3	MS	SM3500D	50.000mL	50.000mL	1	141.76	140 mg/L	NA	.1	0.026	0.10		101
WG345050-4	MSD	SM3500D	50.000mL	50.000mL	1	140.78	140 mg/L	NA	.1	0.026	0.10	1	100
WG345050-5	MS	SM3500D	50.000mL	50.000mL	1	143	140 mg/L	NA	.1	0.026	0.10		102
WG345050-6	MSD	SM3500D	50.000mL	50.000mL	1	142.5	140 mg/L	NA	.1	0.026	0.10	0	102

Comments:

SQ6133-1	Anions = NO3, SO4, Cl.
SQ6133-2	Anions = NO3, SO4, Cl.
SQ6133-3	MS/MSD Anions = NO3, SO4, Cl.
SQ6133-4	Anions = NO3, SO4, Cl.
SQ6133-5	Anions = NO3, SO4, Cl.
SQ6133-6	Anions = NO3, SO4, Cl.
SQ6133-7	Anions = NO3, SO4, Cl.
SQ6133-8	MS/MSD Anions = NO3, SO4, Cl.
SQ6133-9	Anions = NO3, SO4, Cl.
SQ6133-10	Anions = NO3, SO4, Cl.
WG345050-1	SQ6133-1
WG345050-2	SQ6133-1
WG345050-3	SQ6133-3
WG345050-4	SQ6133-3
WG345050-5	SQ6133-8
WG345050-6	SQ6133-8

Entered by: RAD Date: 11/8/23 Accepted by: SS Date: 11/8/23

Katahdin Analytical Services SQ6133 Page 630 of 855

KATAHDIN ANALYTICAL SERVICES, INC.

Standard Stock Solution — formulas below on p2

Ferrous Ammonium Sulfate (Fe(NH4)2(SO4)2-6H2O) Stock ID: W22304

Salt Weight (g): 0.702 Final Volume(mL): 500 Concentration ug Fe++/mL: 199.9

FAS Working Standard : mLs of Stock 10 Final Volume(mL): 100 Concentration ug Fe++/mL: 19.99

CCV TV= 20.02 MG/L

LCS Stock Solution

Ferrous Ammonium Sulfate (Fe(NH4)2(SO4)2-6H2O) Stock ID: W22303

Salt Weight (g): 4.902 Final Volume(mL): 500 Concentration ug Fe++/mL: 1396.1

FAS Working Standard : mLs of Stock 10 Final Volume(mL): 100 Concentration ug Fe++/mL: 139.61

LCS TV= 139.95 MG/L

Matrix Spike Addition as Fe++ Total ug: 2 mL added to Sample 279.9

STANDARD CURVE Date: 11/07/23 — All standards and samples prepared to 100 mL final volume

Standard	Fe++ Stock mL	Fe++ Con mg/L	510 nm Abs	Fe++ Total ug
Blank	0	0.00	0.001	0.0
10 ug	0.5	0.20	0.021	10.0
25ug	1.25	0.50	0.053	25.0
100ug	5	2.00	0.205	100.1
200ug	10	4.00	0.407	200.2
300ug	15	6.00	0.611	300.3
350ug	17.5	7.00	0.713	350.3

Linear Regression y=ax+b

Correlation Coefficient= 1.00000

Slope= 0.0020

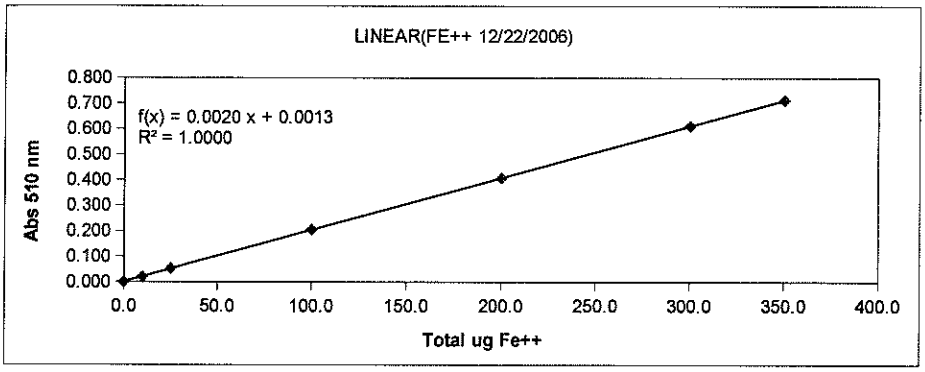
Intercept= 0.0013

Client	Katahdin ID	Sample Vol(mLs)	Sample Blank	510 nm	Net Abs	Fe++ Total ug	Final Con. mg/L	Fe++ mg/L	
	CCV	10	0	0.404	0.404	198.33	19.83	3.967	99.1%
	CCB	50	0	0.000	0.000	-0.62	-0.01	-0.012	
	LCS	2	0	0.566	0.566	278.11	139.06	5.562	99.4%
	SQ6133-3	50	0	0.003	0.003	0.85	0.02	0.017	
	SQ6133-3 MS	2	0	0.577	0.577	283.53	141.76	5.671	101.3%
	SQ6133-3 MSD	2	0	0.573	0.573	281.56	140.78	5.631	100.6%
	SQ6133-1	50	0	0.001	0.001	-0.13	0.00	-0.003	
	SQ6133-2	50	0	0.009	0.009	3.81	0.08	0.076	
	SQ6133-4	50	0	0.001	0.001	-0.13	0.00	-0.003	
	CCV	10	0	0.404	0.404	198.33	19.83	3.967	99.1%
	CCB	50	0	0.001	0.001	-0.13	0.00	-0.003	
	CCV	10	0	0.399	0.399	195.87	19.59	3.917	97.8%
	CCB	50	0	0.001	0.001	-0.13	0.00	-0.003	
	SQ6133-5	50	0	0.001	0.001	-0.13	0.00	-0.003	
	SQ6133-6	50	0	0.002	0.002	0.36	0.01	0.007	
	QS6133-8	50	0	0.002	0.002	0.36	0.01	0.007	
	SQ6133-8 MS	2	0	0.582	0.582	285.99	143.00	5.720	102.2%
	SQ6133-8 MSD	2	0	0.580	0.580	285.01	142.50	5.700	101.8%
	SQ6133-9	50	0	0.003	0.003	0.85	0.02	0.017	
	SQ6133-7	50	0	0.002	0.002	0.36	0.01	0.007	
	SQ6133-10	50	0	0.002	0.002	0.36	0.01	0.007	
	CCV	10	0	0.400	0.400	196.36	19.64	3.927	98.1%
	CCB	50	0	0.000	0.000	-0.62	-0.01	-0.012	

LCS RECOVERY (mg/L)		
True Value	Measured Value	% Recovery
140.0	139.06	99.4%

ANALYST: RAD **DATE:** 11/8/2023

CHECKED BY: SS **DATE:** 11/8/23



Fe++ ug	Abs
0.0	0.001
10.1	0.015
25.2	0.045
100.1	0.205
200.2	0.407
300.3	0.611
350.3	0.713
0.0	0.000

Fe++ ug	Abs
0.0	0.0012664
100.1	0.2045289
200.2	0.4077913
300.3	0.6110538
350.3	0.712685
0.0	0.0012664
	#VALUE!

FORMULAS

M3 STOCK Concentration ug Fe++/ [g FAS /mw FAS]x mw Fe x10exp6 {REM ug/g}/ volume in ml

M6 WORKING Concentration ug Fe++/mL: STOCK CONCENTRATION x DILUTION FACTOR

I12 LCS STOCK LCS Stock Concentration as Fe++ mg/mL: [vol x . normality of K2CrO7/ vol FAS] x mw OF Fe

I14 LCS WORKING Working LCS Stock Concentration as Fe++ ug/mL: STOCK CONCENTRATION x DILUTION FACTOR

KATAHDIN ANALYTICAL SERVICES

FERROUS IRON SM 3500-Fe B

Reagents Information:

Ammonium Acetate Buffer ID: W22302	Notes:
Phenanthroline Solution ID: W22301	
Ferrous Ammonium Sulfate Stock ID: W22304 19.99	WG345050 →
Ferrous Ammonium Sulfate Working Standard/CCV ID: 110823 ↳ Conc (µg/mL)	R626608
LCS/ICV/MS Stock Standard ID: W22303	
LCS/ICV/MS Working Standard ID: 110823 139.61 Conc (µg/mL)	
Spectronic 301: —	
Spectronic 401: — SPEC 1	

Distillation and Analysis Data:

KAS Sample ID	Initial Dilution	Prep Time	Phenanthroline Addition (V)	Sample Volume (mLs)	Abs 510nm	
CCV		9:42	✓	50	0.404	RAD 11/8/23
CCB					0.000	
LCS					0.566	
SQ6133 -3					0.003	10:07
-3 MS					0.577	10:07
-3 MSD					0.573	10:07
-1					0.001	10:30
-2					0.009	11:05
-4					0.001	12:25
CCV					0.404	
CCB					0.001	
CCV		10:58	✓	50	0.399	
CCB					0.001	
SQ6133-5					0.001	12:50
-6					0.002	13:25
-8					0.002	13:40
-8 MS					0.582	13:40
-8 MSD					0.580	13:40
-9					0.003	14:00
-7					0.002	14:25
-10					0.002	15:35
CCV					0.400	
CCB					0.000	
						RAD 11/8/23

Analyst: RAD Date: 11/8/23

Reviewed by: SS Date: 11/8/23

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Wet Chemistry Batch Report

Analyst Initials: RAD
Date Analyzed: 09-NOV-23
08-NOV-23

Batch: WG345141
Prep Method: N/A
Prep Chemist: RAD

Sample	Samp Type	Method	Parameter	DF	Result	Rpt. Result	Units	PQL	Adj. PQL	MDL	Adj. MDL	RPD	Rec.
SQ6133-1	SAMP	EPA 300.0	Chloride	1	25.2117	25	mg/L	2	2.0	.0993	0.099		
SQ6133-1	SAMP	EPA 300.0	Nitrate as N	1	.0731	0.073	mg/L	.05	0.050	.0174	0.017		
SQ6133-1	SAMP	EPA 300.0	Sulfate	1	12.9376	13	mg/L	1	1.0	.0637	0.064		
SQ6133-10	SAMP	EPA 300.0	Chloride	1	3.3412	3.3	mg/L	2	2.0	.0993	0.099		
SQ6133-10	SAMP	EPA 300.0	Nitrate as N	1	.1017	0.10	mg/L	.05	0.050	.0174	0.017		
SQ6133-10	SAMP	EPA 300.0	Sulfate	1	7.9118	7.9	mg/L	1	1.0	.0637	0.064		
SQ6133-2	SAMP	EPA 300.0	Nitrate as N	1	.0562	0.056	mg/L	.05	0.050	.0174	0.017		
SQ6133-3	SAMP	EPA 300.0	Chloride	1	27.0786	27	mg/L	2	2.0	.0993	0.099		
SQ6133-3	SAMP	EPA 300.0	Nitrate as N	1	.0064	U 0.025	mg/L	.05	0.050	.0174	0.017		
SQ6133-3	SAMP	EPA 300.0	Sulfate	1	11.6862	12	mg/L	1	1.0	.0637	0.064		
SQ6133-4	SAMP	EPA 300.0	Chloride	1	17.1049	17	mg/L	2	2.0	.0993	0.099		
SQ6133-4	SAMP	EPA 300.0	Nitrate as N	1	.1649	0.16	mg/L	.05	0.050	.0174	0.017		
SQ6133-4	SAMP	EPA 300.0	Sulfate	1	9.278	9.3	mg/L	1	1.0	.0637	0.064		
SQ6133-5	SAMP	EPA 300.0	Nitrate as N	1	.1954	0.20	mg/L	.05	0.050	.0174	0.017		
SQ6133-6	SAMP	EPA 300.0	Chloride	1	17.629	18	mg/L	2	2.0	.0993	0.099		
SQ6133-6	SAMP	EPA 300.0	Nitrate as N	1	.0615	0.062	mg/L	.05	0.050	.0174	0.017		
SQ6133-6	SAMP	EPA 300.0	Sulfate	1	12.1196	12	mg/L	1	1.0	.0637	0.064		
SQ6133-7	SAMP	EPA 300.0	Nitrate as N	1	.5123	0.51	mg/L	.05	0.050	.0174	0.017		
SQ6133-7	SAMP	EPA 300.0	Sulfate	1	67.823	68	mg/L	1	1.0	.0637	0.064		
SQ6133-8	SAMP	EPA 300.0	Chloride	1	5.7692	5.8	mg/L	2	2.0	.0993	0.099		
SQ6133-8	SAMP	EPA 300.0	Nitrate as N	1	.303	0.30	mg/L	.05	0.050	.0174	0.017		
SQ6133-8	SAMP	EPA 300.0	Sulfate	1	7.6778	7.7	mg/L	1	1.0	.0637	0.064		
SQ6133-9	SAMP	EPA 300.0	Nitrate as N	1	.0022	U 0.025	mg/L	.05	0.050	.0174	0.017		
SQ6133-9	SAMP	EPA 300.0	Sulfate	1	25.4915	25	mg/L	1	1.0	.0637	0.064		
WG345141-1	MBLANK	EPA 300.0	Chloride	1	.0117	U 1.0	mg/L	2	2.0	.0993	0.099		
WG345141-1	MBLANK	EPA 300.0	Nitrate as N	1	.0097	U 0.025	mg/L	.05	0.050	.0174	0.017		
WG345141-1	MBLANK	EPA 300.0	Sulfate	1	.0683	J 0.068	mg/L	1	1.0	.0637	0.064		
WG345141-2	LCS	EPA 300.0	Chloride	1	3.6433	3.64	mg/L	2	2.0	.0993	0.099		97.1
WG345141-2	LCS	EPA 300.0	Nitrate as N	1	.8011	0.801	mg/L	.05	0.050	.0174	0.017		94.8
WG345141-2	LCS	EPA 300.0	Sulfate	1	3.6187	3.62	mg/L	1	1.0	.0637	0.064		96.5
WG345141-3	LCSD	EPA 300.0	Chloride	1	3.6961	3.70	mg/L	2	2.0	.0993	0.099	1	98.7
WG345141-3	LCSD	EPA 300.0	Nitrate as N	1	.7918	0.792	mg/L	.05	0.050	.0174	0.017	1	93.7
WG345141-3	LCSD	EPA 300.0	Sulfate	1	4.0065	4.01	mg/L	1	1.0	.0637	0.064	10	107.
WG345141-4	MS	EPA 300.0	Chloride	1	30.8055	30.8	mg/L	2	2.0	.0993	0.099		94.4
WG345141-4	MS	EPA 300.0	Nitrate as N	1	.748105	* 0.748	mg/L	.05	0.050	.0174	0.017		84.2
WG345141-4	MS	EPA 300.0	Sulfate	1	15.1507	* 15.2	mg/L	1	1.0	.0637	0.064		87.7
WG345141-5	MSD	EPA 300.0	Chloride	1	30.7912	30.8	mg/L	2	2.0	.0993	0.099	0	94
WG345141-5	MSD	EPA 300.0	Nitrate as N	1	.74621	* 0.746	mg/L	.05	0.050	.0174	0.017	0	83.9
WG345141-5	MSD	EPA 300.0	Sulfate	1	15.2446	15.2	mg/L	1	1.0	.0637	0.064	1	90.1
WG345141-6	MS	EPA 300.0	Chloride	1	9.81484	9.81	mg/L	2	2.0	.0993	0.099		102
WG345141-6	MS	EPA 300.0	Nitrate as N	1	1.18168	1.18	mg/L	.05	0.050	.0174	0.017		98.8
WG345141-6	MS	EPA 300.0	Sulfate	1	11.8232	11.8	mg/L	1	1.0	.0637	0.064		105
WG345141-7	MSD	EPA 300.0	Chloride	1	9.76221	9.76	mg/L	2	2.0	.0993	0.099	0	101
WG345141-7	MSD	EPA 300.0	Nitrate as N	1	1.14558	1.14	mg/L	.05	0.050	.0174	0.017	3	94.8
WG345141-7	MSD	EPA 300.0	Sulfate	1	11.824	11.8	mg/L	1	1.0	.0637	0.064	0	105

Entered by: RAD Date: 11/10/23 Accepted by: SS Date: 11/15/23

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Wet Chemistry Batch Report

Analyst Initials: RAD
Date Analyzed: 09-NOV-23
08-NOV-23

Batch: WG345141
Prep Method: N/A
Prep Chemist: RAD

Sample	Samp Type	Method	Parameter	DF	Result	Rpt. Result	Units	PQL	Adj. PQL	MDL	Adj. MDL	RPD	Rec.

Comments:

SQ6133-1	Anions = NO3, SO4,
SQ6133-10	Anions = NO3, SO4,
SQ6133-2	Anions = NO3, SO4,
SQ6133-3	MS/MSD. Anions =
SQ6133-4	Anions = NO3, SO4,
SQ6133-5	Anions = NO3, SO4,
SQ6133-6	Anions = NO3, SO4,
SQ6133-7	Anions = NO3, SO4,
SQ6133-8	MS/MSD. Anions =
SQ6133-9	Anions = NO3, SO4,
WG345141-1	SQ6133-1
WG345141-2	SQ6133-1
WG345141-3	SQ6133-1
WG345141-4	SQ6133-3
WG345141-5	SQ6133-3
WG345141-6	SQ6133-8
WG345141-7	SQ6133-8

Entered by: RAD Date: 11/10/23 Accepted by: SS Date: 11/15/23

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Wet Chemistry Batch Report

Analyst Initials: RAD
Date Analyzed: 09-NOV-23
08-NOV-23

Batch: WG345143
Prep Method: N/A
Prep Chemist: RAD

Sample	Samp Type	Method	Parameter	DF	Result	Rpt. Result	Units	PQL	Adj. PQL	MDL	Adj. MDL	RPD	Rec.
SQ6164-1	SAMP	SW846 9056A	Nitrate as N	1	.0053	U 0.025	mg/L	.05	0.050	.0174	0.017		
SQ6164-1	SAMP	SW846 9056A	Sulfate	1	.001	U 0.50	mg/L	1	1.0	.0637	0.064		
SQ6164-11	SAMP	SW846 9056A	Nitrate as N	1	1.8124	1.8	mg/L	.05	0.050	.0174	0.017		
SQ6164-11	SAMP	SW846 9056A	Sulfate	1	10.4972	10	mg/L	1	1.0	.0637	0.064		
SQ6164-12	SAMP	SW846 9056A	Nitrate as N	1	.0048	U 0.025	mg/L	.05	0.050	.0174	0.017		
SQ6164-12	SAMP	SW846 9056A	Sulfate	1	38.7014	39	mg/L	1	1.0	.0637	0.064		
SQ6164-2	SAMP	SW846 9056A	Nitrate as N	1	.0006	U 0.025	mg/L	.05	0.050	.0174	0.017		
SQ6164-2	SAMP	SW846 9056A	Sulfate	1	33.1089	33	mg/L	1	1.0	.0637	0.064		
SQ6164-3	SAMP	SW846 9056A	Nitrate as N	1	.0057	U 0.025	mg/L	.05	0.050	.0174	0.017		
SQ6164-3	SAMP	SW846 9056A	Sulfate	1	32.8217	33	mg/L	1	1.0	.0637	0.064		
SQ6164-4	SAMP	SW846 9056A	Nitrate as N	1	.0032	U 0.025	mg/L	.05	0.050	.0174	0.017		
SQ6164-4	SAMP	SW846 9056A	Sulfate	1	17.8198	18	mg/L	1	1.0	.0637	0.064		
SQ6164-5	SAMP	SW846 9056A	Nitrate as N	1	.0795	0.080	mg/L	.05	0.050	.0174	0.017		
SQ6164-5	SAMP	SW846 9056A	Sulfate	1	.1134	J 0.11	mg/L	1	1.0	.0637	0.064		
SQ6164-7	SAMP	SW846 9056A	Nitrate as N	1	.0032	U 0.025	mg/L	.05	0.050	.0174	0.017		
SQ6164-7	SAMP	SW846 9056A	Sulfate	1	.3113	J 0.31	mg/L	1	1.0	.0637	0.064		
SQ6164-8	SAMP	SW846 9056A	Nitrate as N	1	.0117	U 0.025	mg/L	.05	0.050	.0174	0.017		
SQ6164-8	SAMP	SW846 9056A	Sulfate	1	50.7038	51	mg/L	1	1.0	.0637	0.064		
SQ6164-9	SAMP	SW846 9056A	Nitrate as N	1	.1093	0.11	mg/L	.05	0.050	.0174	0.017		
SQ6164-9	SAMP	SW846 9056A	Sulfate	1	10.0914	10	mg/L	1	1.0	.0637	0.064		
WG345143-1	MBLANK	SW846 9056A	Nitrate as N	1	.0097	U 0.025	mg/L	.05	0.050	.0174	0.017		
WG345143-1	MBLANK	SW846 9056A	Sulfate	1	.0683	J 0.068	mg/L	1	1.0	.0637	0.064		
WG345143-2	LCS	SW846 9056A	Nitrate as N	1	.8011	0.801	mg/L	.05	0.050	.0174	0.017		94.8
WG345143-2	LCS	SW846 9056A	Sulfate	1	3.6187	3.62	mg/L	1	1.0	.0637	0.064		96.5
WG345143-3	LCSD	SW846 9056A	Nitrate as N	1	.7918	0.792	mg/L	.05	0.050	.0174	0.017	1	93.7
WG345143-3	LCSD	SW846 9056A	Sulfate	1	4.0065	4.01	mg/L	1	1.0	.0637	0.064	10	107.

Comments:

SQ6164-1	Anions: SO4 + NO3.
SQ6164-11	Anions: SO4 + NO3.
SQ6164-12	Anions: SO4 + NO3.
SQ6164-2	Anions: SO4 + NO3.
SQ6164-3	Anions: SO4 + NO3.
SQ6164-4	Anions: SO4 + NO3.
SQ6164-5	Anions: SO4 + NO3.
SQ6164-7	Anions: SO4 + NO3.
SQ6164-8	Anions: SO4 + NO3.
SQ6164-9	Anions: SO4 + NO3.
WG345143-1	SQ6164-1
WG345143-2	SQ6164-1
WG345143-3	SQ6164-1

Entered by: RAD Date: 11/10/23 Accepted by: SS Date: 11/15/23

IC STANDARDS PREPARATION

Fill sheet in completely and file with each batch of samples analyzed.

IC8 MIX ID:	EXPIRATION DATE:	ICAL DATE:	CCV STOCK ID:	EXPIRATION DATE:
W22233	10/23/23	10/12/23	W22318	11/22/23

ALALYTE	INITIAL AMOUNT (mL)	OF	STOCK CONC. (mg/L)	TO	FINAL VOLUME (mL)	=	FINAL CONC. (mg/L)
Cl	2.0	OF	1000	TO	100	=	20
NO2 (as N)	0.8		1000				8
NO3 (as N)	0.8		1000				8
Br	4.0		1000				40
SO4	4.0		1000				40
F	1.0		1000				10
PO4 (as P)	1.0		1000				10

WORKING STANDARDS

Standards prepared on each day of use.

STD.	INITIAL AMOUNT (mL)	OF	FINAL VOLUME (mL)	FINAL CONC. (mg/L)							STD ID*
				Cl	NO2	NO3	Br	SO4	PO4	F	
IC8	5	IC8	5	40	16	16	80	80	20	20	IC8-101223
IC7	2.5	IC8	5	20	8	8	40	40	10	10	IC7-101223
IC6	2.5	IC7	5	10	4	4	20	20	5	5	IC6-101223
IC5	1.25	IC7	5	5	2	2	10	10	2.5	2.5	IC5-101223
IC4	1.25	IC6	5	2.5	1	1	5	5	1.25	1.25	IC4-101223
IC3	0.5	IC6	5	1	0.4	0.4	2	2	0.5	0.5	IC3-101223
IC2	0.5	IC3	5	0.1	0.04	0.04	0.2	0.2	0.05	0.05	IC2-101223
CCV	2.5	IC7	5	10	4	4	20	20	5	5	CCV-110823

* STD ID is prefix followed by the date of preparation (ie. IC6-020216)

LCS/MATRIX SPIKE MIX ID: W22272	EXPIRATION DATE: 11/08/23

3.75 mL of High Purity Multi-Element IC Standard Solution "A" and 3.75 mL of High Purity Multi-Element IC Standard Solution "B" diluted to 50 mL. For MS, add 0.25 mL of mix to 4.75 mL of sample. For LCS, add 0.25 mL of mix to 4.75 mL of DI water.

FINAL CONCENTRATIONS (mg/L)

Cl	NO2 (as N)	NO3 (as N)	Br	SO4	PO4 (as P)	F	STD ID*
3.75	1.14	0.845	3.75	3.75	1.22	3.75	IC-LCS-110823

PIPETTES: W00, W16

2x dil = 2.5mL samp + 2.5mL DI	**5x dil** = 1.0mL samp + 4.0mL DI	**10x dil** = 0.5mL samp + 4.5mL DI
20x dil = 0.25mL samp + 4.75mL DI	**50x dil** = 0.1mL samp + 4.9mL DI	**100x dil** = 0.05mL samp + 4.95mL DI
200x dil = 0.025mL samp + 4.975mL DI	**500x dil** = 0.01mL samp + 4.99mL DI	**1000x dil** = 0.005mL samp + 4.995mL DI

Katahdin Analytical Services **ION CHROMATOGRAPHY RUNLOG** Dionex ICS-2100 (Instrument IC-3)

Analysis Date: 11/8/23	**Analytical Column S/N:** 220503194	**Calibration Date:** 10/12/23
Analysis Sequence: 110823 A	**Guard Column S/N:** 220406208	**Calibration Sequence:** 101223 CAL
Analyst: RAD	**Suppressor S/N:** 221117086	☐ If box at left is checked, continued from previous page. Refer to previous page for header information.

Reporting / Reanalysis Codes: ✓ Report without manipulation; S Report, peak automatically reintegrated with SmartPeak; M Report, peak manually integrated; A Report, peak manually assigned; R Do not report, reanalyze sample

Method Codes: E EPA 300.0; SW SW846 9056A

E: W63451141 → R624769
S: W63451143 → R624770

Katahdin Sample Number	Dilution Factor	Method Code	Report or Reanalyze (enter appropriate code): F	Cl	NO_2	SO_4	Br	NO_3	PO_4	Comments
CCV			✓	✓	✓	✓	✓	✓		
CCB			M	✓	✓	M	M	✓		
LCS			✓	✓	✓	✓	R	✓		
SQ 6133 -1	1	E		✓		✓		✓		
-2				R		R		✓		Cl=50X SO4=5X
-3				✓		✓		M		
-3 MS				✓		✓		✓		
-3 MSD				✓		✓		✓		
-4				✓		✓		✓		
-5				R		R		✓		Cl & SO4=10x
-6				✓		✓		✓		
-7				R		✓		✓		Cl=2x
CCV			✓	✓	✓	✓	✓	✓		
CCB			M	✓	✓	M	M	✓		
6133 -8	1	E		✓		✓		✓		
-8 MS				✓		✓		✓		
-8 MSD				✓		✓		✓		
-9				R		✓		M		Cl=5X
-10				✓		✓		✓		
6164 -1		S				M		M		
-2						M		M		
-3						✓		M		

Reviewed by: SS QAWL 1104 - 000854

Review Date: 11/15/23

Katahdin Analytical Services

ION CHROMATOGRAPHY RUNLOG

Dionex ICS-2100 (Instrument IC-3)

Analysis Date:	**Analytical Column S/N:**	**Calibration Date:**
Analysis Sequence:	**Guard Column S/N:**	**Calibration Sequence:**
Analyst:	**Suppressor S/N:**	☑ If box at left is checked, continued from previous page. Refer to previous page for header information.

Reporting / Reanalysis Codes:
✓ Report without manipulation
S Report, peak automatically reintegrated with SmartPeak
M Report, peak manually integrated
A Report, peak manually assigned
R Do not report, reanalyze sample

Method Codes:
E EPA 300.0
SW SW846 9056A

Katahdin Sample Number	Dilution Factor	Method Code	Report or Reanalyze (enter appropriate code): F	Cl	NO_2	SO_4	Br	NO_3	PO_4	Comments
61164-4	1	S				✓		M		
61164-5	1	1				✓		✓		
CCV			✓	✓	✓	✓	✓	✓		
CCB			M	✓	✓	M	M	✓		
61164-8	1	S				✓		✓		
61164-7	1	1				M		✓		
61164-9	1	1				✓		✓		
61164-11	1	1				✓		✓		
61164-12	1	1				✓		M		
LCS			✓	✓	✓	✓	R	✓		
CCV			✓	✓	✓	✓	✓	✓		
CCB			M	✓	✓	✓	✓	✓		

RAD 11/9/23

Reviewed by: SS

Review Date: 11/15/23

Sequence Overview

Sequence Details

Name:	**110823 A REPROC**	*Created On:*	**28/Dec/22 13:33:49**
Directory:	**2023\11-NOV**	*Created By:*	**wetlab**
Data Vault:	**ChromeleonLocal**	*Updated On:*	**09/Nov/23 15:57:04**
No. of Injections:	**34**	*Updated By:*	**wetlab**

Injection Details

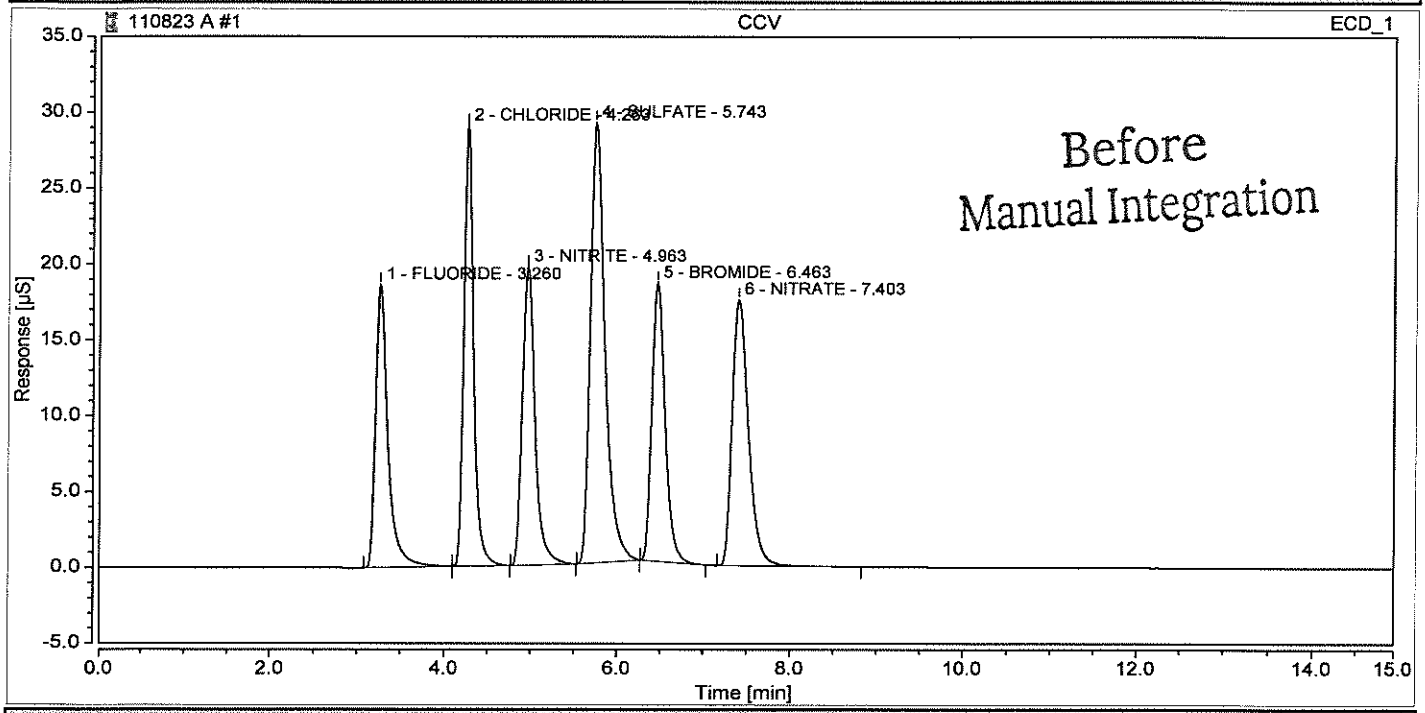
No.	Injection Name	Position	Type	Level	Inject Time	Status
1	CCV	1	Check Standard	06	08/Nov/23 17:55:37	Finished
2	CCB	2	Blank		08/Nov/23 18:12:24	Finished
3	LCS	3	Check Standard	09	08/Nov/23 18:29:38	Finished
4	SQ6133-1	4	Unknown		08/Nov/23 18:46:54	Finished
5	SQ6133-2	5	Unknown		08/Nov/23 19:04:09	Finished
6	SQ6133-3	6	Unknown		08/Nov/23 19:21:24	Finished
7	SQ6133-3 MS	7	Unknown		08/Nov/23 19:38:39	Finished
8	SQ6133-3 MSD	8	Unknown		08/Nov/23 19:55:54	Finished
9	SQ6133-4	9	Unknown		08/Nov/23 20:13:09	Finished
10	SQ6133-5	10	Unknown		08/Nov/23 20:30:25	Finished
11	SQ6133-6	11	Unknown		08/Nov/23 20:47:40	Finished
12	SQ6133-7	12	Unknown		08/Nov/23 21:04:56	Finished
13	CCV	13	Check Standard	06	08/Nov/23 21:22:11	Finished
14	CCB	14	Blank		08/Nov/23 21:39:27	Finished
15	SQ6133-8	15	Unknown		08/Nov/23 21:56:42	Finished
16	SQ6133-8 MS	16	Unknown		08/Nov/23 22:13:57	Finished
17	SQ6133-8 MSD	17	Unknown		08/Nov/23 22:31:13	Finished
18	SQ6133-9	18	Unknown		08/Nov/23 22:48:29	Finished
19	SQ6133-10	19	Unknown		08/Nov/23 23:05:44	Finished
20	SQ6164-1	20	Unknown		08/Nov/23 23:22:59	Finished
21	SQ6164-2	21	Unknown		08/Nov/23 23:40:15	Finished
22	SQ6164-3	22	Unknown		08/Nov/23 23:57:30	Finished
23	SQ6164-4	23	Unknown		09/Nov/23 00:14:45	Finished
24	SQ6164-5	24	Unknown		09/Nov/23 00:32:00	Finished
25	CCV	25	Check Standard	06	09/Nov/23 00:49:15	Finished
26	CCB	26	Blank		09/Nov/23 01:06:30	Finished
27	SQ6164-8	27	Unknown		09/Nov/23 01:23:45	Finished
28	SQ6164-7	28	Unknown		09/Nov/23 01:41:01	Finished
29	SQ6164-9	29	Unknown		09/Nov/23 01:58:16	Finished
30	SQ6164-11	30	Unknown		09/Nov/23 02:15:32	Finished
31	SQ6164-12	31	Unknown		09/Nov/23 02:32:47	Finished
32	LCS	36	Check Standard	09	09/Nov/23 02:50:03	Finished
33	CCV	37	Check Standard	06	09/Nov/23 03:07:20	Finished
34	CCB	38	Blank		09/Nov/23 03:24:35	Finished

Chromatogram and Results

Injection Details

Injection Name:	**CCV**	*Run Time (min):*	**14.95**
Vial Number:	**1**	*Injection Volume:*	**200.00**
Injection Type:	**Check Standard**	*Channel:*	**ECD_1**
Calibration Level:	**06**	*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**08/Nov/23 17:55**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

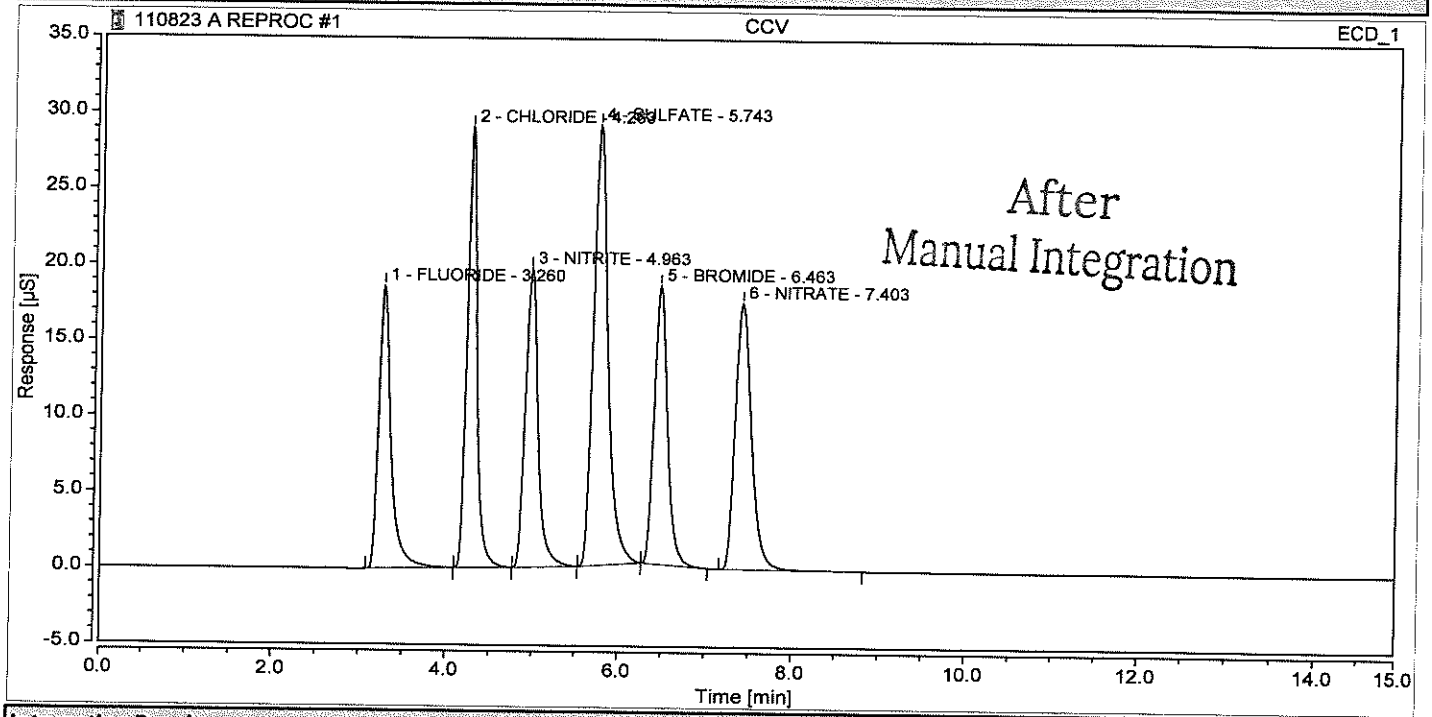
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.260	3.107	18.649	13.45	14.10	5.0443	0.8851
2	CHLORIDE	4.263	3.823	29.032	16.55	21.95	9.8096	-1.9036
3	NITRITE	4.963	3.365	19.690	14.57	14.89	4.0554	1.3855
4	SULFATE	5.743	5.708	29.017	24.71	21.94	20.0781	0.3904
5	BROMIDE	6.463	3.291	18.346	14.24	13.87	19.3555	-3.2226
6	NITRATE	7.403	3.809	17.526	16.49	13.25	3.8925	-2.6887
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**23.103**	**132.261**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**CCV**	*Run Time (min):*	**14.95**
Vial Number:	**1**	*Injection Volume:*	**200.00**
Injection Type:	**Check Standard**	*Channel:*	**ECD_1**
Calibration Level:	**06**	*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**08/Nov/23 17:55**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

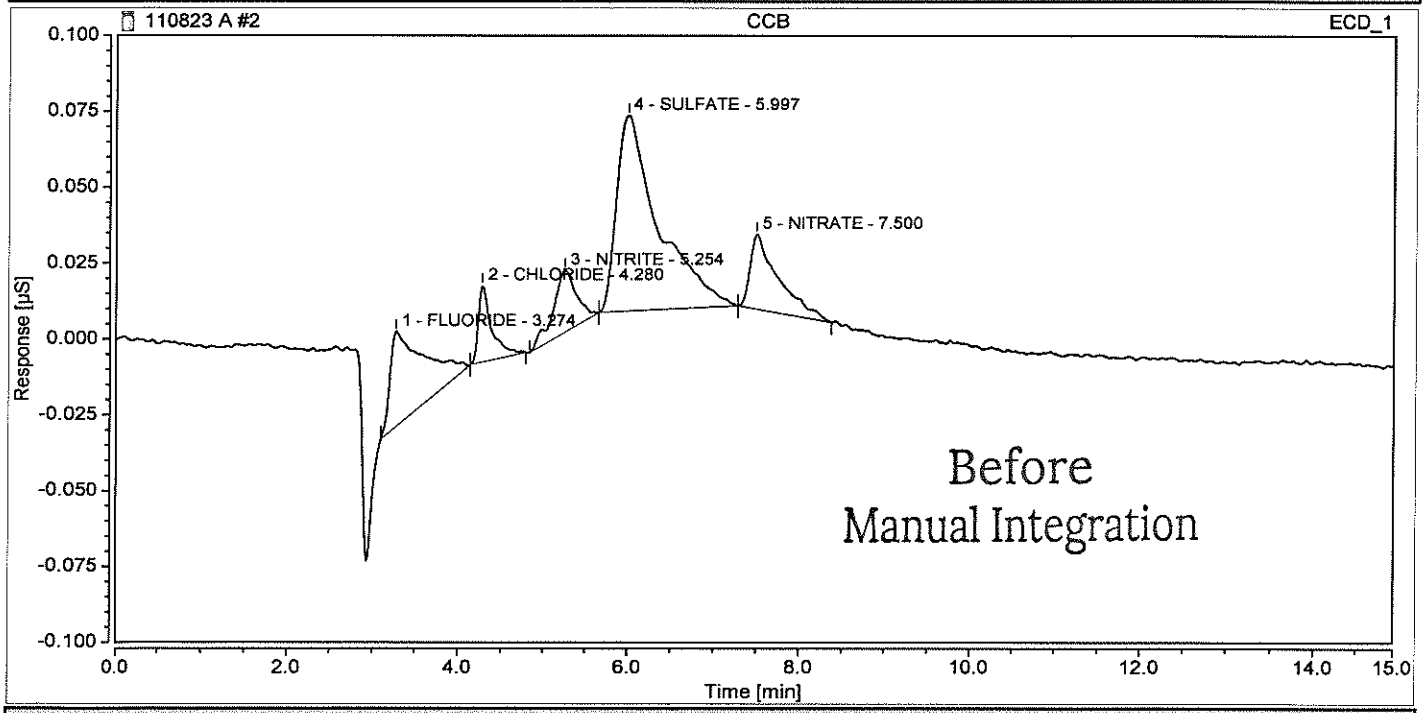
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.260	3.107	18.649	13.45	14.10	5.0443	0.8851
2	CHLORIDE	4.263	3.823	29.032	16.55	21.95	9.8096	-1.9036
3	NITRITE	4.963	3.365	19.690	14.57	14.89	4.0554	1.3855
4	SULFATE	5.743	5.708	29.017	24.71	21.94	20.0781	0.3904
5	BROMIDE	6.463	3.291	18.346	14.24	13.87	19.3555	-3.2226
6	NITRATE	7.403	3.809	17.526	16.49	13.25	3.8925	-2.6887
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**23.103**	**132.261**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**CCB**	*Run Time (min):*	**14.95**
Vial Number:	**2**	*Injection Volume:*	**200.00**
Injection Type:	**Blank**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**08/Nov/23 18:12**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

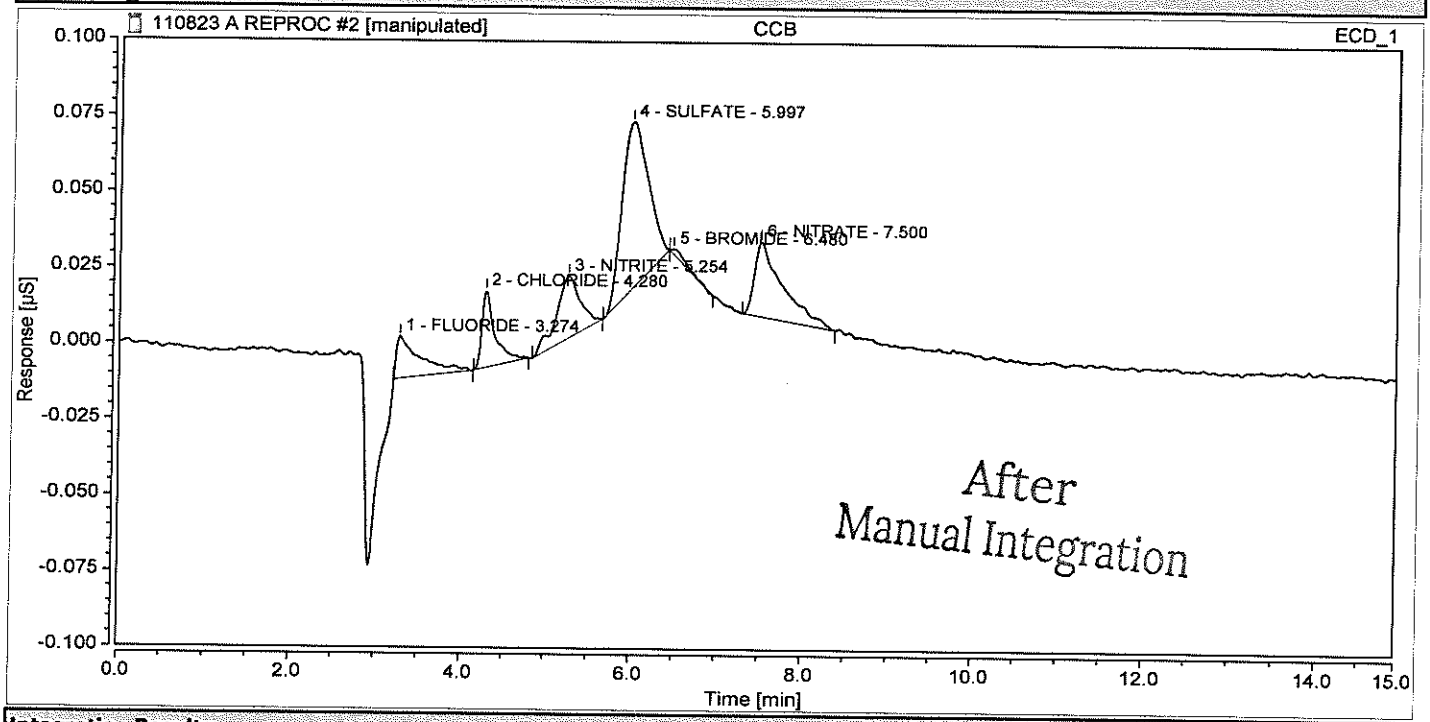
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.274	0.014	0.031	19.60	18.83	0.0385	n.a.
2	CHLORIDE	4.280	0.005	0.025	6.41	15.20	0.0117	n.a.
3	NITRITE	5.254	0.007	0.020	9.26	12.29	0.0159	n.a.
4	SULFATE	5.997	0.036	0.064	51.37	38.79	0.1281	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5	NITRATE	7.500	0.009	0.025	13.36	14.88	0.0097	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.071**	**0.166**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**CCB**	*Run Time (min):*	**14.95**
Vial Number:	**2**	*Injection Volume:*	**200.00**
Injection Type:	**Blank**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**08/Nov/23 18:12**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

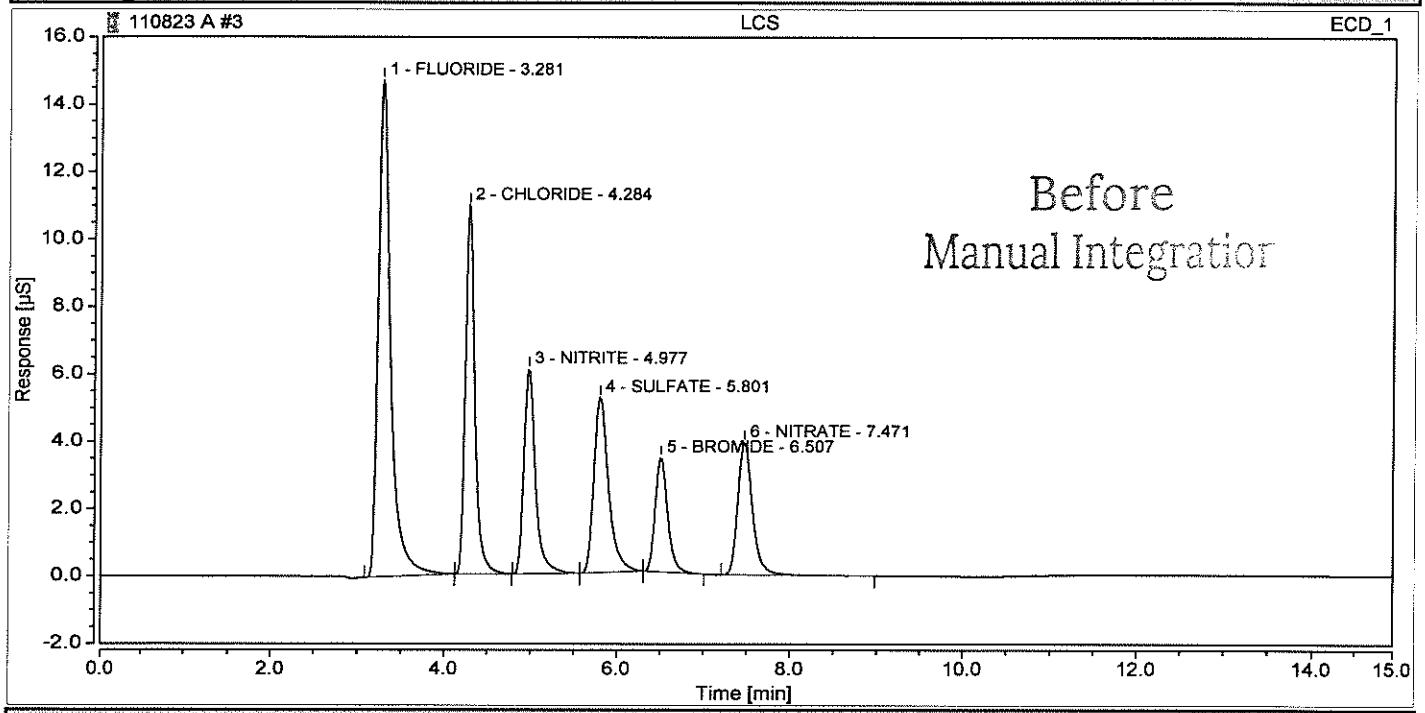
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.274	0.004	0.014	9.94	9.89	0.0237	n.a.
2	CHLORIDE	4.280	0.005	0.025	10.14	17.94	0.0117	n.a.
3	NITRITE	5.254	0.007	0.020	14.64	14.51	0.0159	n.a.
4	SULFATE	5.997	0.019	0.055	43.32	38.92	0.0683	n.a.
5	BROMIDE	6.480	0.000	0.002	0.83	1.19	0.0022	n.a.
6	NITRATE	7.500	0.009	0.025	21.13	17.56	0.0097	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.045**	**0.141**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**LCS**	*Run Time (min):*	**14.95**
Vial Number:	**3**	*Injection Volume:*	**200.00**
Injection Type:	**Check Standard**	*Channel:*	**ECD_1**
Calibration Level:	**09**	*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**08/Nov/23 18:29**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

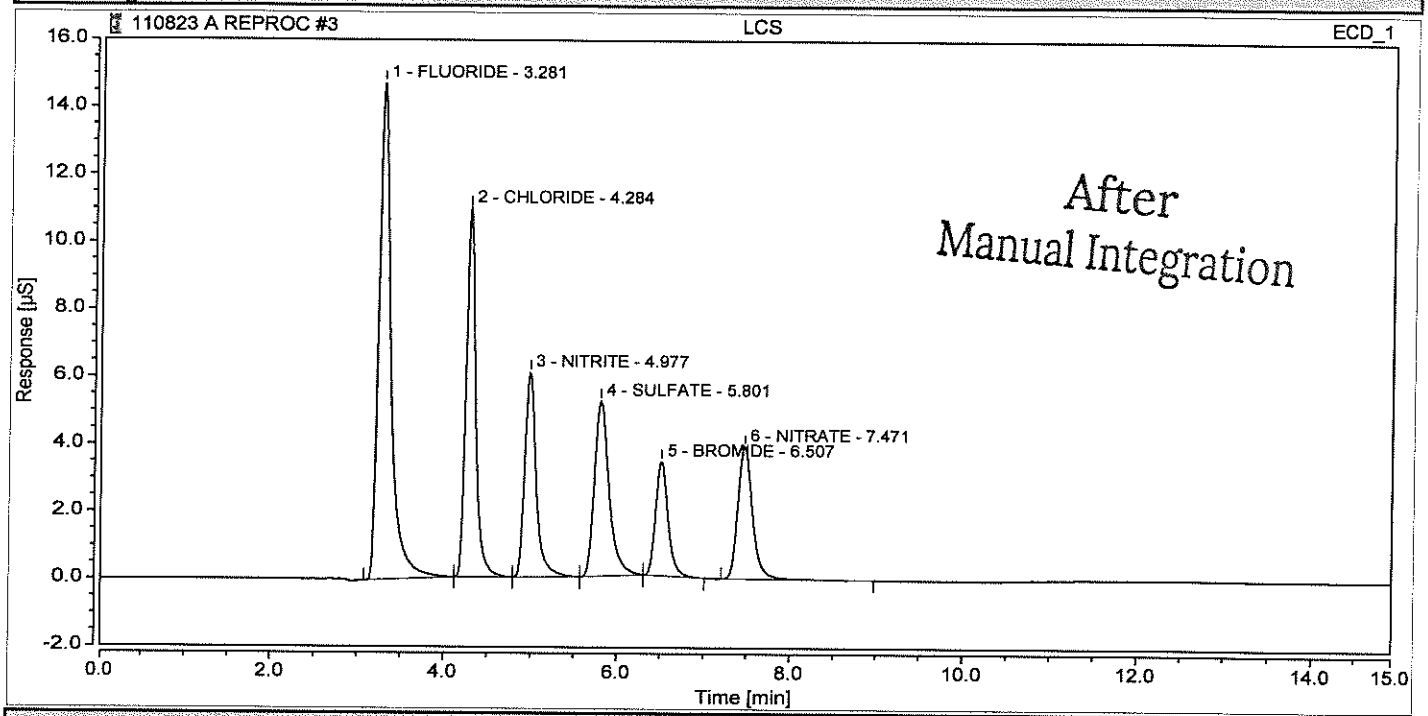
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.281	2.438	14.735	33.88	33.27	3.9352	4.9379
2	CHLORIDE	4.284	1.420	10.946	19.74	24.71	3.6433	-2.8449
3	NITRITE	4.977	0.951	6.085	13.22	13.74	1.1256	-1.2648
4	SULFATE	5.801	1.029	5.201	14.30	11.74	3.6187	-3.5012
5	BROMIDE	6.507	0.574	3.399	7.97	7.67	3.3737	-10.0359
6	NITRATE	7.471	0.784	3.930	10.90	8.87	0.8011	-5.1999
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**7.195**	**44.296**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**LCS**	*Run Time (min):*	**14.95**
Vial Number:	**3**	*Injection Volume:*	**200.00**
Injection Type:	**Check Standard**	*Channel:*	**ECD_1**
Calibration Level:	**09**	*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**08/Nov/23 18:29**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

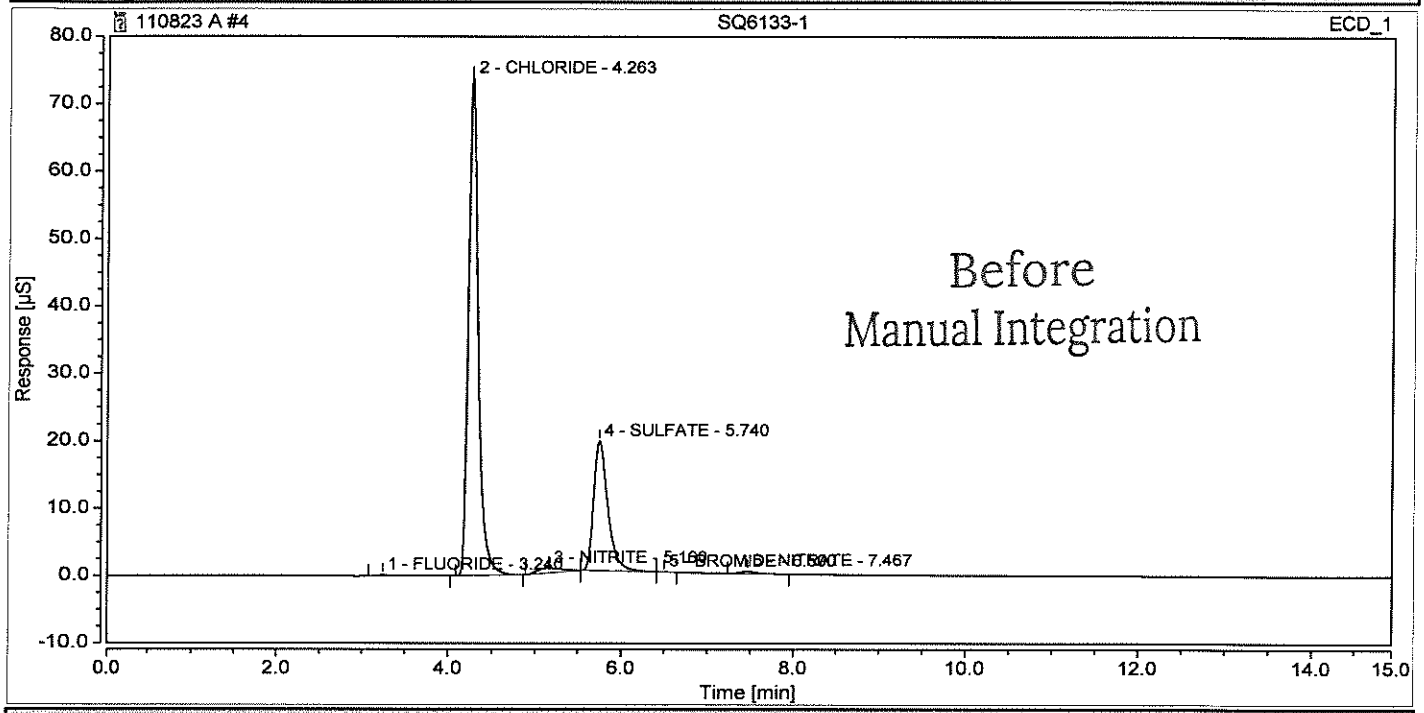
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.281	2.438	14.735	33.88	33.27	3.9352	4.9379
2	CHLORIDE	4.284	1.420	10.946	19.74	24.71	3.6433	-2.8449
3	NITRITE	4.977	0.951	6.085	13.22	13.74	1.1256	-1.2648
4	SULFATE	5.801	1.029	5.201	14.30	11.74	3.6187	-3.5012
5	BROMIDE	6.507	0.574	3.399	7.97	7.67	3.3737	-10.0359
6	NITRATE	7.471	0.784	3.930	10.90	8.87	0.8011	-5.1999
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**7.195**	**44.296**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6133-1**	*Run Time (min):*	**14.95**
Vial Number:	**4**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**08/Nov/23 18:46**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

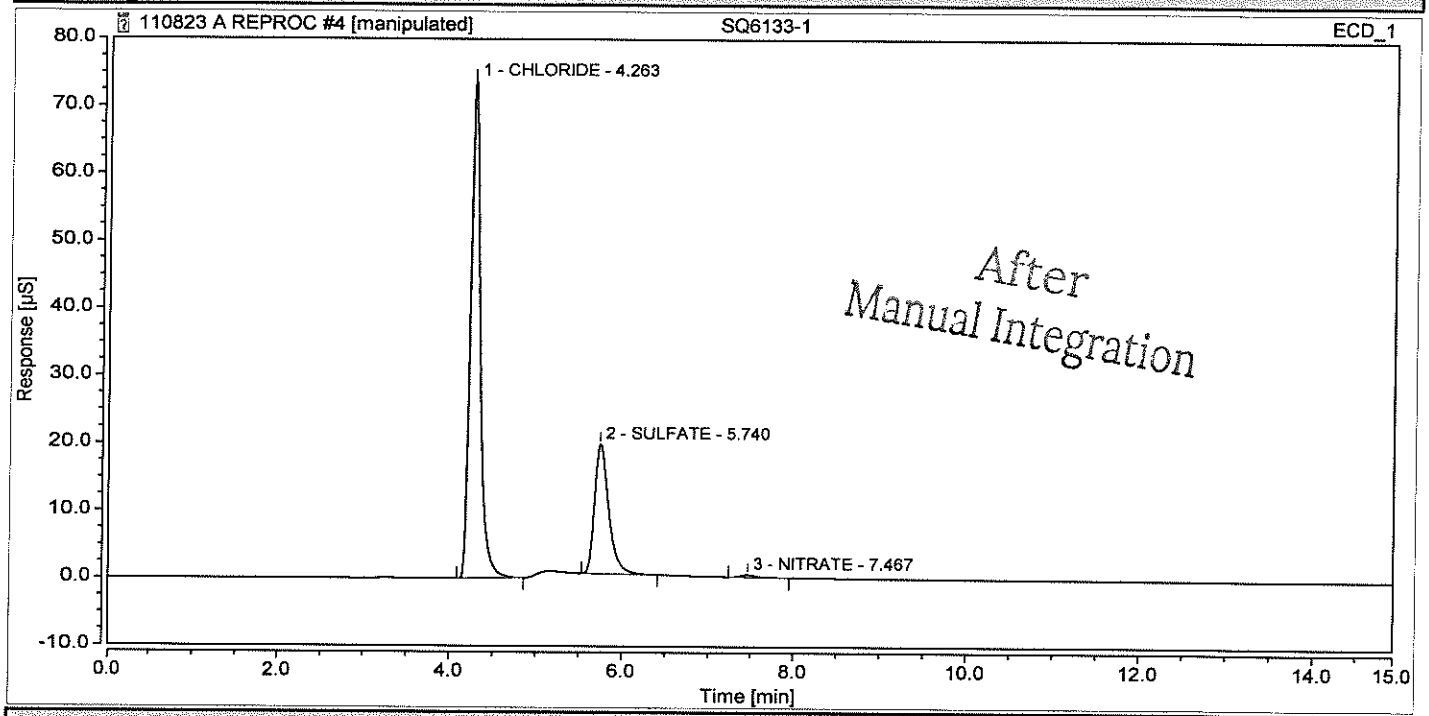
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.240	0.035	0.166	0.25	0.18	0.0721	n.a.
2	CHLORIDE	4.263	9.826	73.788	70.92	78.29	25.2117	n.a.
3	NITRITE	5.160	0.242	0.719	1.75	0.76	0.2911	n.a.
4	SULFATE	5.740	3.678	19.199	26.55	20.37	12.9376	n.a.
5	BROMIDE	6.500	0.001	0.011	0.01	0.01	0.0075	n.a.
6	NITRATE	7.467	0.072	0.365	0.52	0.39	0.0731	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**13.855**	**94.248**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6133-1**	*Run Time (min):*	**14.95**
Vial Number:	**4**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**08/Nov/23 18:46**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

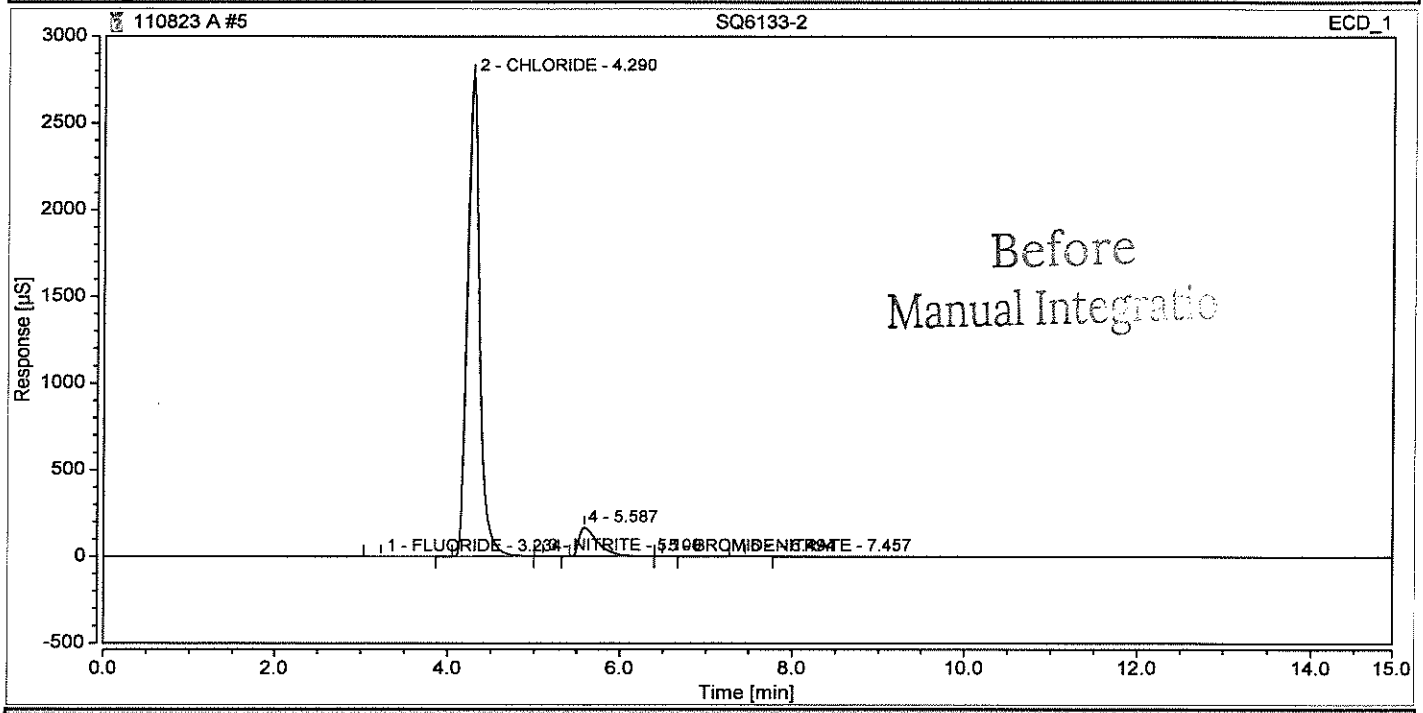
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.263	9.826	73.788	72.38	79.04	25.2117	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2	SULFATE	5.740	3.678	19.199	27.09	20.57	12.9376	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
3	NITRATE	7.467	0.072	0.365	0.53	0.39	0.0731	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**13.576**	**93.352**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6133-2**	*Run Time (min):*	**14.95**
Vial Number:	**5**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**08/Nov/23 19:04**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

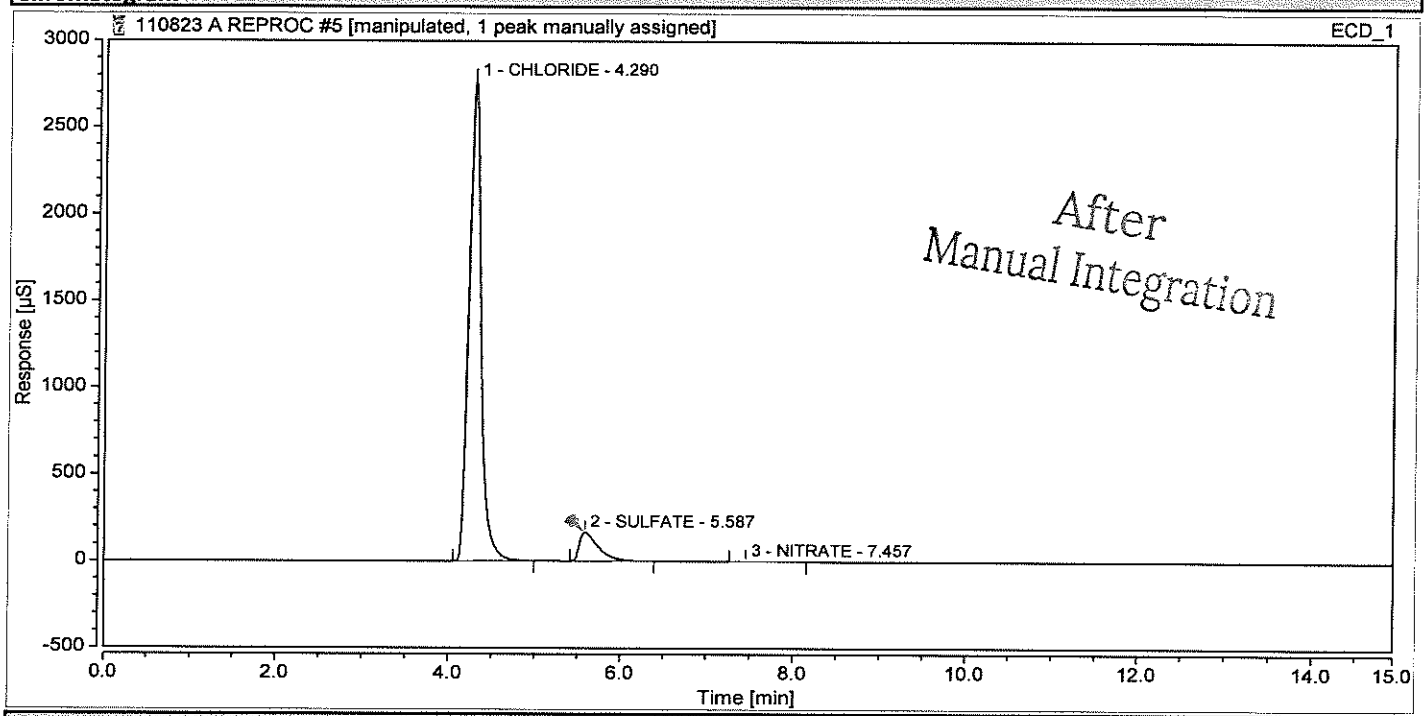
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.234	0.044	0.228	0.01	0.01	0.0863	n.a.
2	CHLORIDE	4.290	454.999	2770.283	91.53	94.31	1167.4220	n.a.
3	NITRITE	5.100	0.018	0.096	0.00	0.00	0.0290	n.a.
4		5.587	41.941	166.336	8.44	5.66	n.a.	n.a.
n.a.	SULFATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5	BROMIDE	6.494	0.017	0.132	0.00	0.00	0.1002	n.a.
6	NITRATE	7.457	0.069	0.368	0.01	0.01	0.0705	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**497.088**	**2937.443**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6133-2**	*Run Time (min):*	**14.95**
Vial Number:	**5**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**08/Nov/23 19:04**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

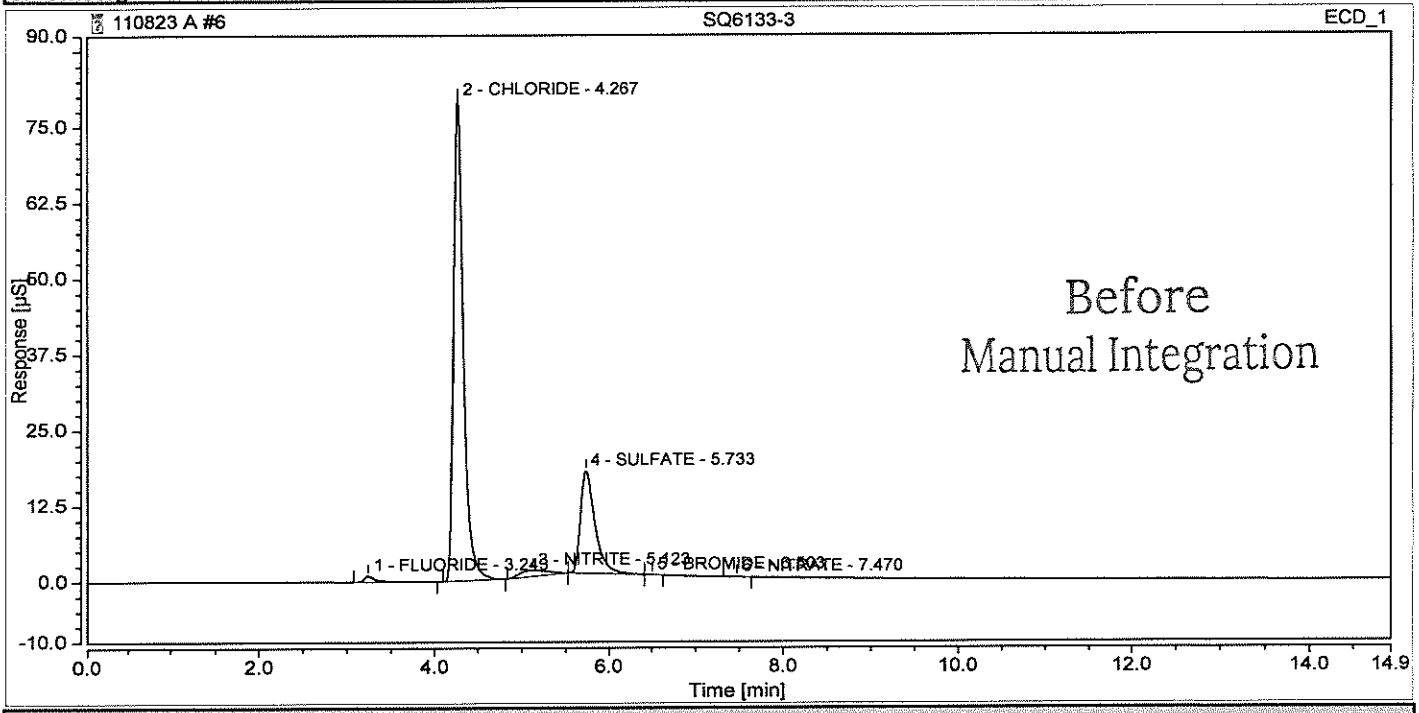
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.290	454.999	2770.283	91.55	94.32	1167.4220	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2	SULFATE	5.587	41.941	166.336	8.44	5.66	147.5334	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
3	NITRATE	7.457	0.055	0.358	0.01	0.01	0.0562	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**496.994**	**2936.977**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6133-3**	*Run Time (min):*	**14.95**
Vial Number:	**6**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**08/Nov/23 19:21**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

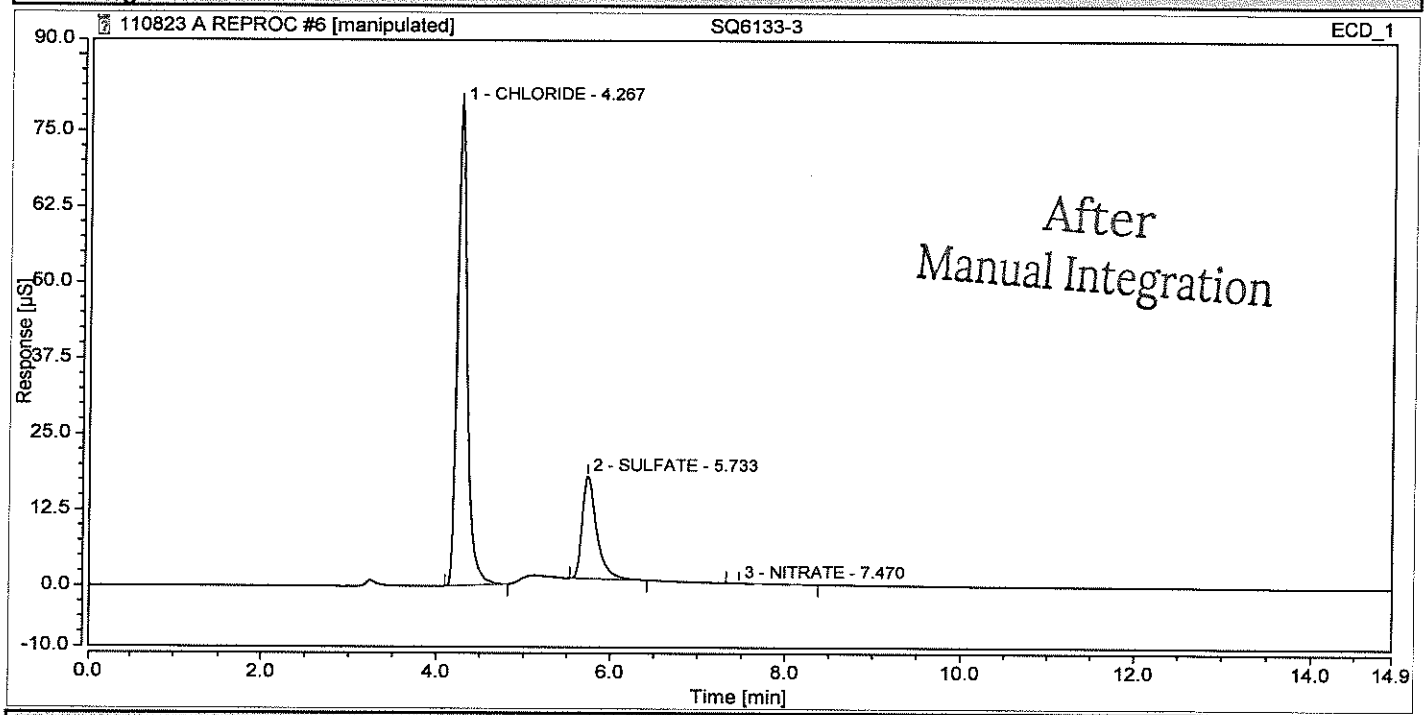
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.243	0.160	1.005	1.11	1.02	0.2688	n.a.
2	CHLORIDE	4.267	10.554	79.281	73.17	80.71	27.0786	n.a.
3	NITRITE	5.123	0.386	1.034	2.68	1.05	0.4590	n.a.
4	SULFATE	5.733	3.322	16.892	23.03	17.20	11.6862	n.a.
5	BROMIDE	6.503	0.002	0.015	0.01	0.02	0.0103	n.a.
6	NITRATE	7.470	0.001	0.006	0.01	0.01	0.0008	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**14.425**	**98.233**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6133-3**	*Run Time (min):*	**14.95**
Vial Number:	**6**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**08/Nov/23 19:21**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

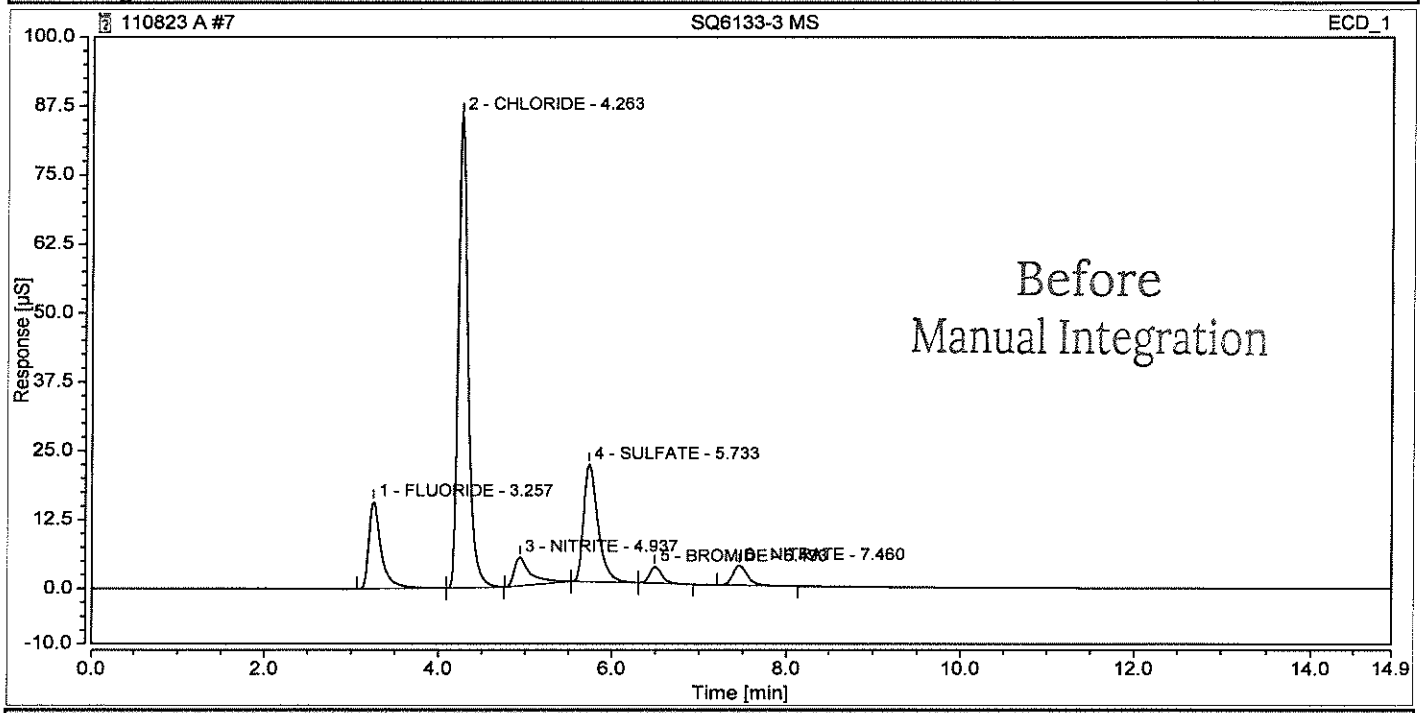
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.267	10.554	79.281	76.02	82.43	27.0786	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2	SULFATE	5.733	3.322	16.892	23.93	17.56	11.6862	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
3	NITRATE	7.470	0.006	0.002	0.05	0.00	0.0064	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**13.882**	**96.176**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6133-3 MS**	*Run Time (min):*	**14.95**
Vial Number:	**7**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**08/Nov/23 19:38**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

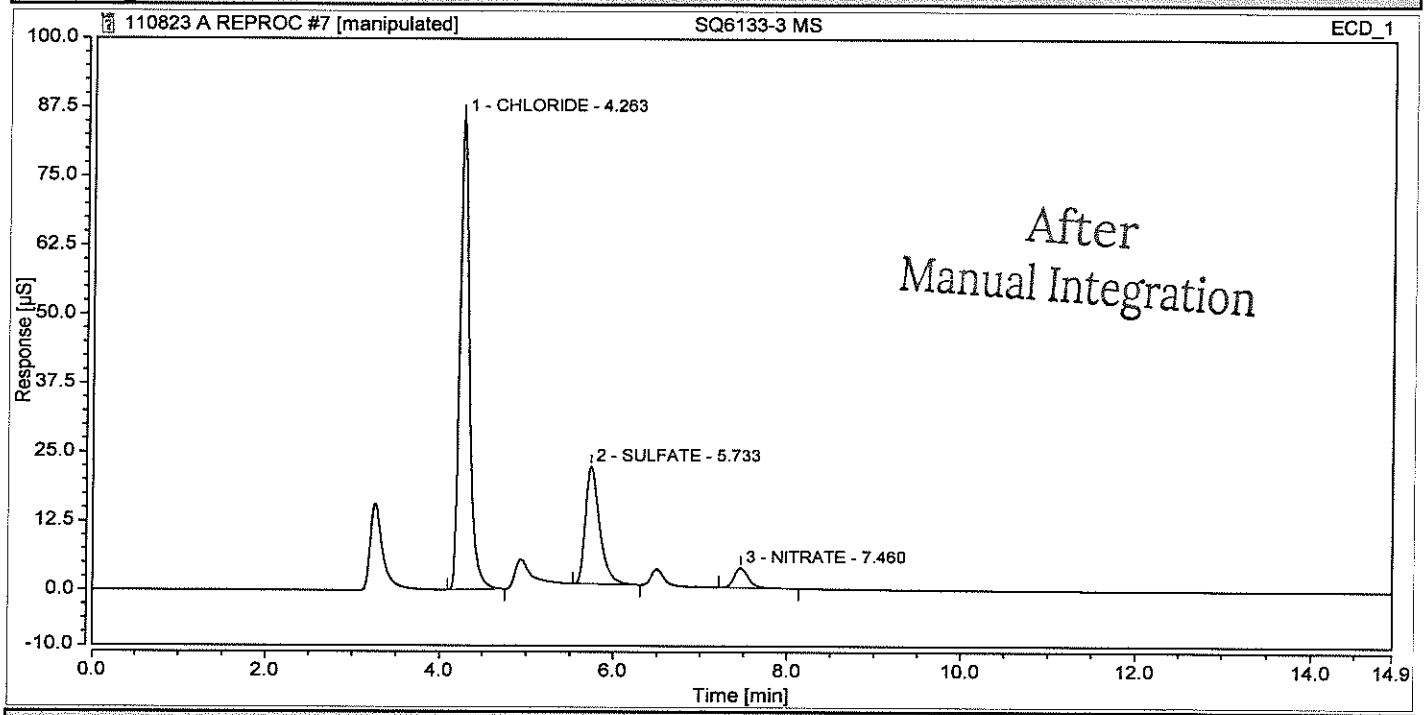
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.257	2.593	15.812	12.68	11.74	4.1920	n.a.
2	CHLORIDE	4.263	11.406	85.782	55.78	63.67	29.2652	n.a.
3	NITRITE	4.937	1.162	5.210	5.68	3.87	1.3752	n.a.
4	SULFATE	5.733	4.092	21.317	20.01	15.82	14.3932	n.a.
5	BROMIDE	6.493	0.501	3.016	2.45	2.24	2.9481	n.a.
6	NITRATE	7.460	0.696	3.585	3.40	2.66	0.7107	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**20.449**	**134.720**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6133-3 MS**	*Run Time (min):*	**14.95**
Vial Number:	**7**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**08/Nov/23 19:38**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

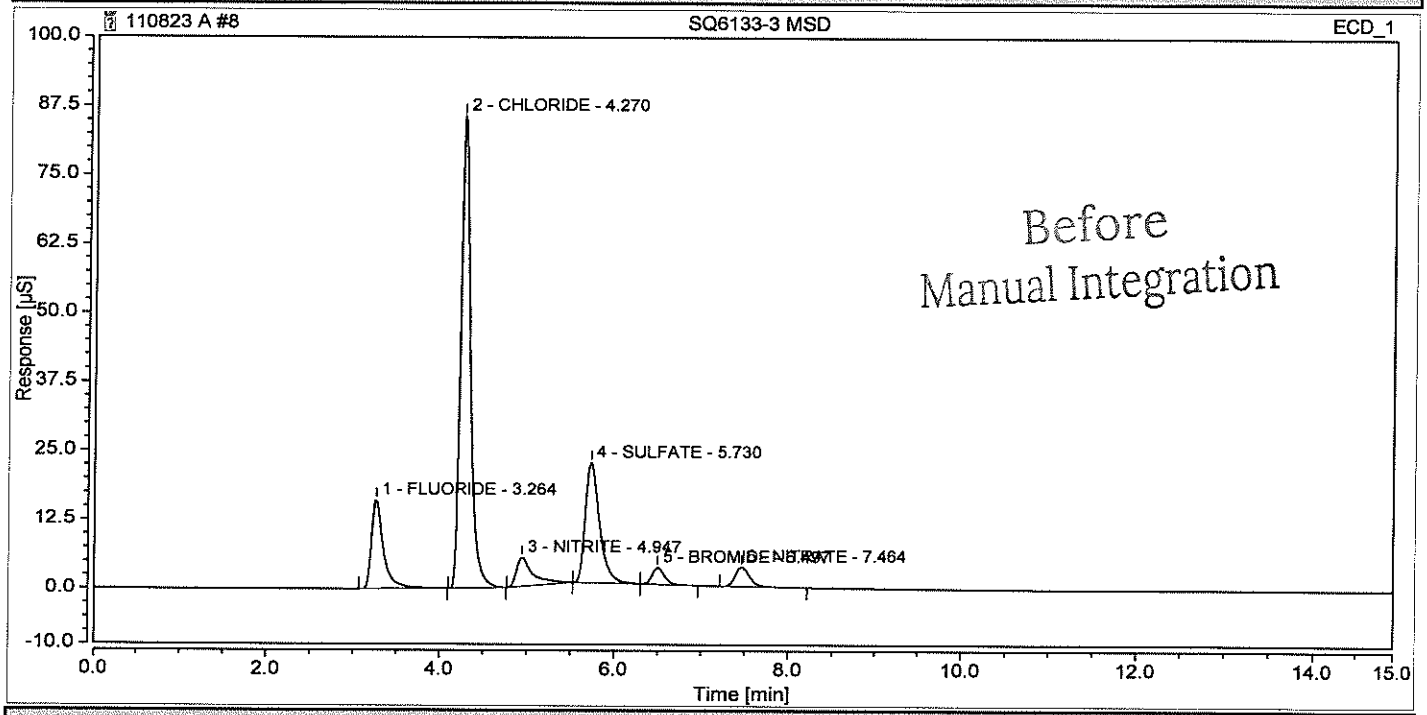
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.263	11.406	85.782	70.44	77.50	29.2652	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2	SULFATE	5.733	4.092	21.317	25.27	19.26	14.3932	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
3	NITRATE	7.460	0.696	3.585	4.30	3.24	0.7107	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**16.193**	**110.683**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6133-3 MSD**	*Run Time (min):*	**14.95**
Vial Number:	**8**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**08/Nov/23 19:55**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

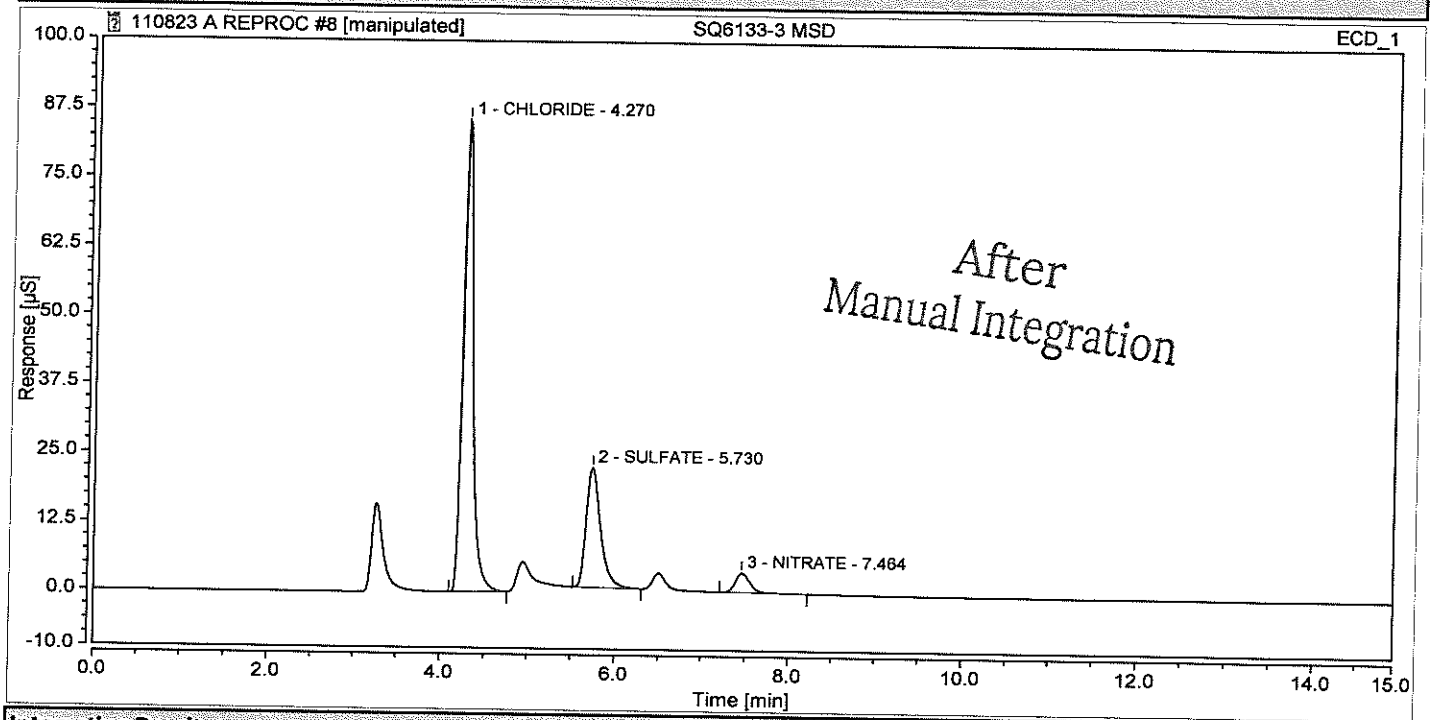
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.264	2.605	16.161	12.72	11.94	4.2118	n.a.
2	CHLORIDE	4.270	11.401	85.627	55.68	63.25	29.2516	n.a.
3	NITRITE	4.947	1.155	5.244	5.64	3.87	1.3674	n.a.
4	SULFATE	5.730	4.117	21.750	20.11	16.07	14.4824	n.a.
5	BROMIDE	6.497	0.504	3.027	2.46	2.24	2.9669	n.a.
6	NITRATE	7.464	0.694	3.564	3.39	2.63	0.7089	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**20.476**	**135.372**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6133-3 MSD**	*Run Time (min):*	**14.95**
Vial Number:	**8**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**08/Nov/23 19:55**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

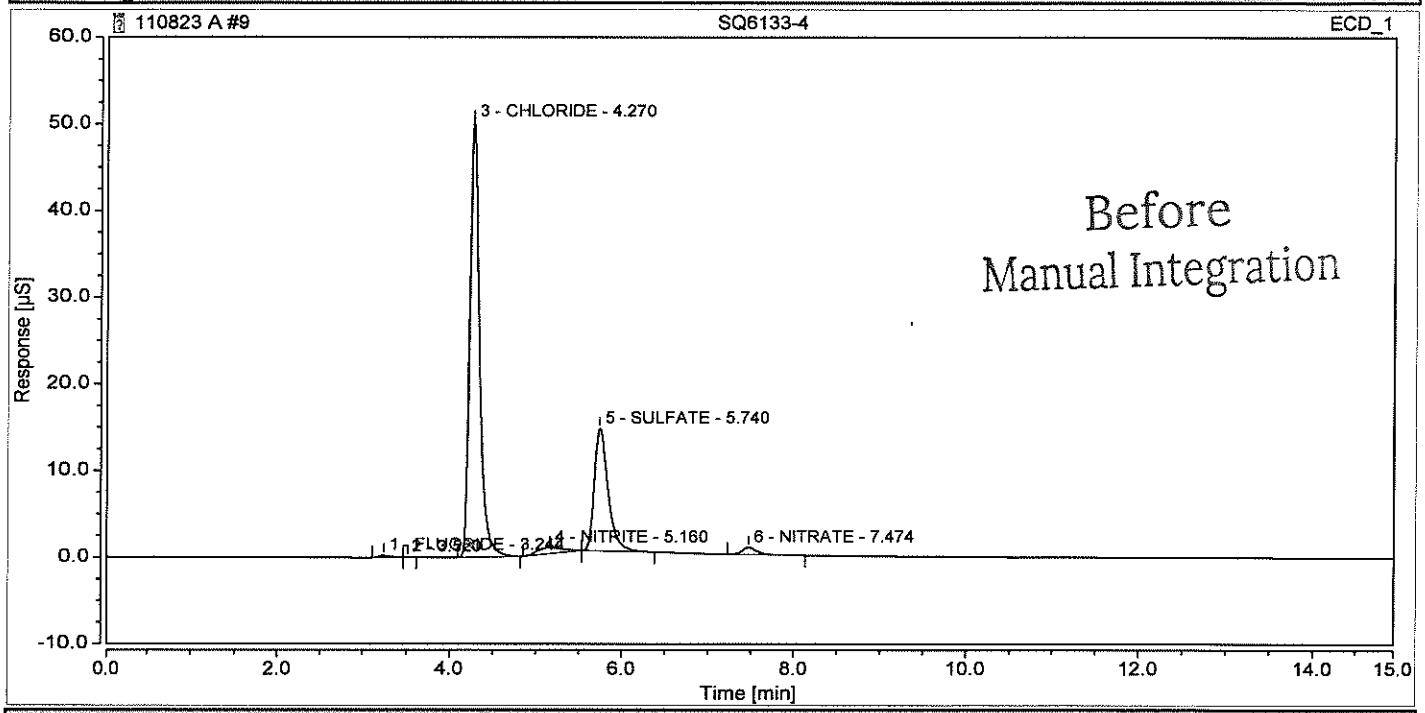
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.270	11.401	85.627	70.32	77.18	29.2516	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2	SULFATE	5.730	4.117	21.750	25.40	19.60	14.4824	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
3	NITRATE	7.464	0.694	3.564	4.28	3.21	0.7089	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**16.212**	**110.941**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6133-4**	*Run Time (min):*	**14.95**
Vial Number:	**9**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**08/Nov/23 20:13**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

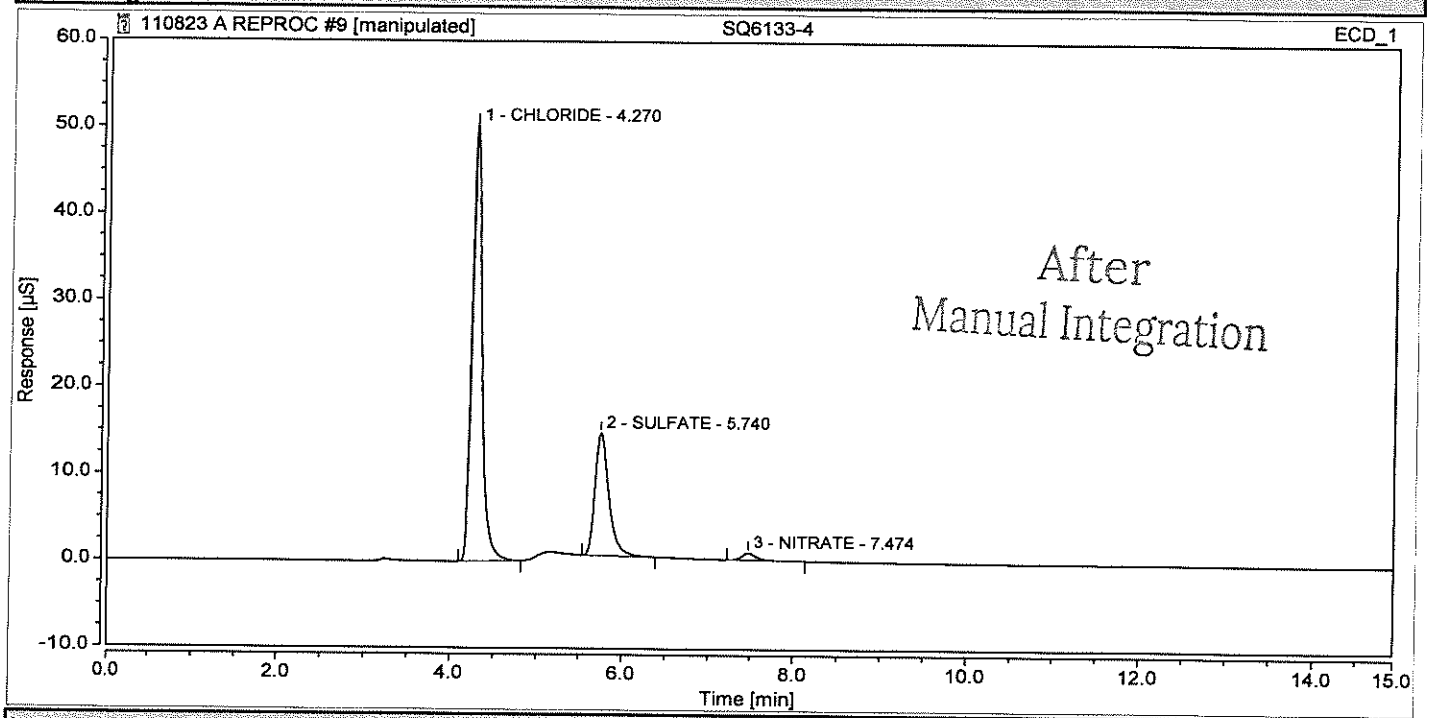
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.244	0.033	0.248	0.34	0.38	0.0684	n.a.
2		3.520	0.000	0.004	0.00	0.01	n.a.	n.a.
3	CHLORIDE	4.270	6.667	50.229	68.44	75.98	17.1049	n.a.
4	NITRITE	5.160	0.242	0.696	2.48	1.05	0.2902	n.a.
5	SULFATE	5.740	2.638	14.109	27.08	21.34	9.2780	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
6	NITRATE	7.474	0.161	0.818	1.66	1.24	0.1649	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**9.740**	**66.105**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6133-4**	*Run Time (min):*	**14.95**
Vial Number:	**9**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**08/Nov/23 20:13**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

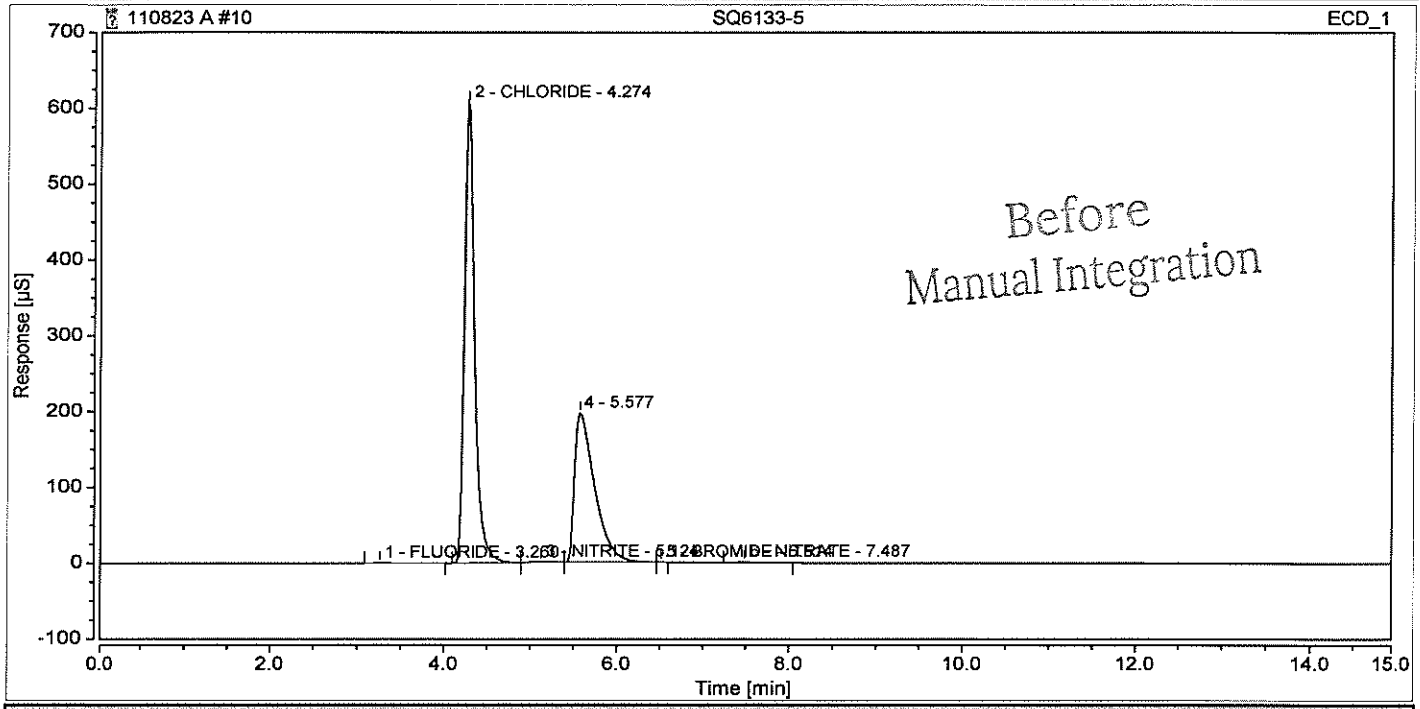
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.270	6.667	50.229	70.43	77.09	17.1049	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2	SULFATE	5.740	2.638	14.109	27.86	21.65	9.2780	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
3	NITRATE	7.474	0.161	0.818	1.71	1.26	0.1649	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**9.465**	**65.156**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6133-5**	*Run Time (min):*	**14.95**
Vial Number:	**10**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**08/Nov/23 20:30**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

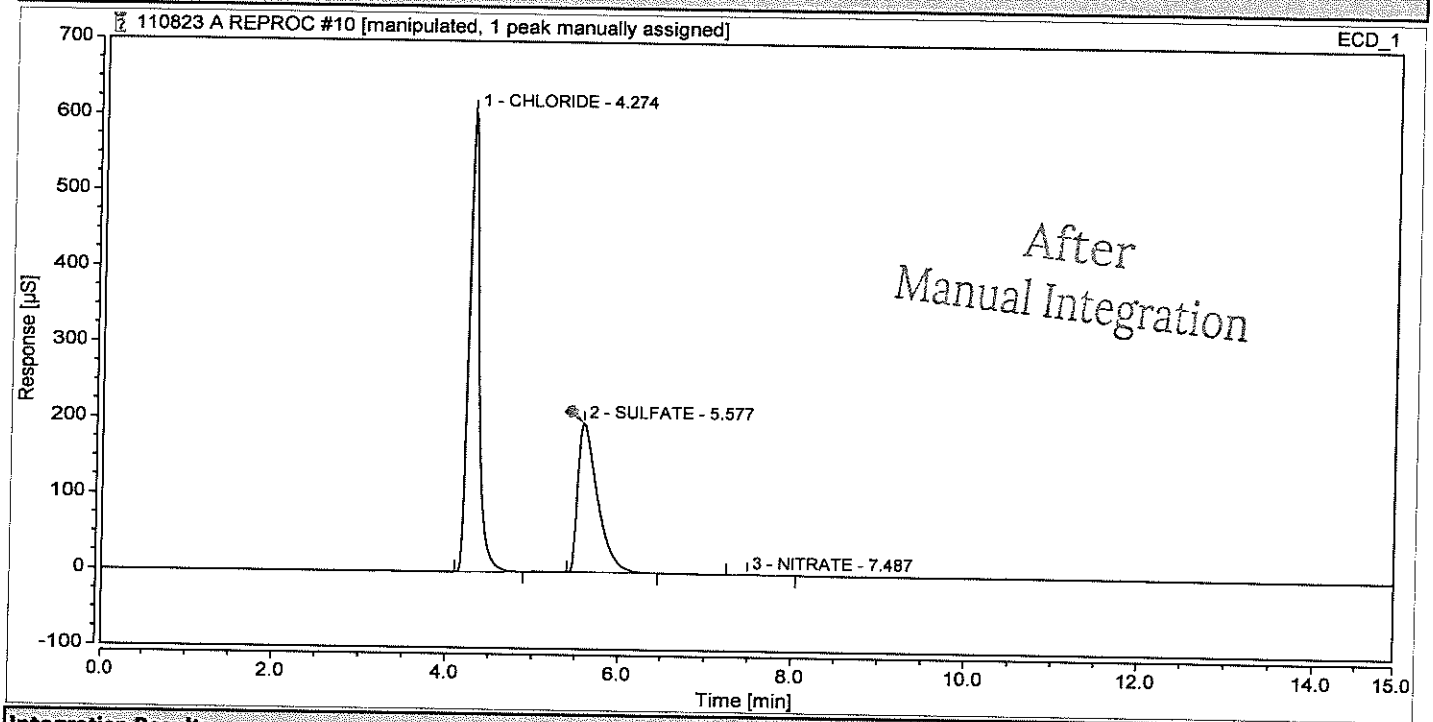
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.260	0.074	0.413	0.05	0.05	0.1334	n.a.
2	CHLORIDE	4.274	84.414	606.870	61.38	75.31	216.5877	n.a.
3	NITRITE	5.124	0.183	0.650	0.13	0.08	0.2213	n.a.
4		5.577	52.660	196.886	38.29	24.43	n.a.	n.a.
n.a.	SULFATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5	BROMIDE	6.514	0.001	0.011	0.00	0.00	0.0047	n.a.
6	NITRATE	7.487	0.191	0.969	0.14	0.12	0.1954	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**137.524**	**805.799**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6133-5**	*Run Time (min):*	**14.95**
Vial Number:	**10**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**08/Nov/23 20:30**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

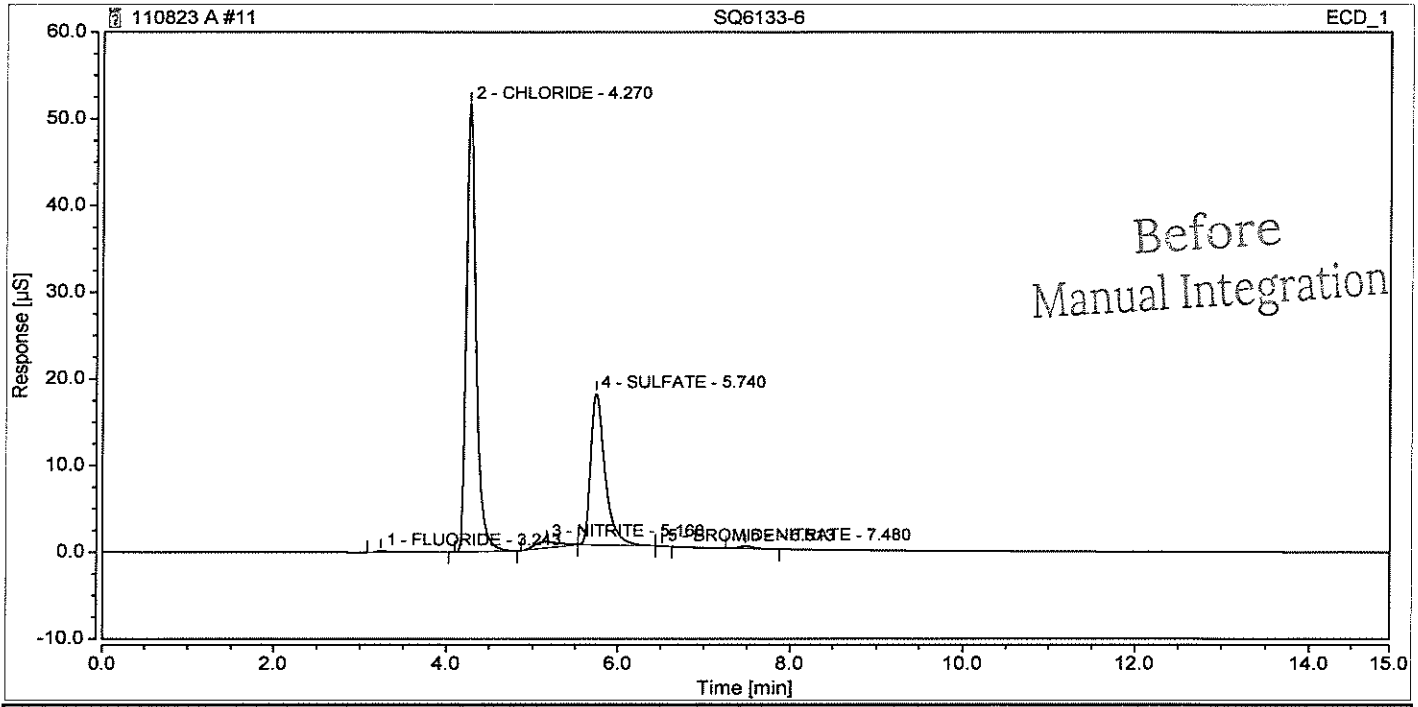
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.274	84.414	606.870	61.50	75.41	216.5877	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2	SULFATE	5.577	52.660	196.886	38.36	24.47	185.2416	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
3	NITRATE	7.487	0.191	0.969	0.14	0.12	0.1954	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**137.266**	**804.725**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6133-6**	*Run Time (min):*	**14.95**
Vial Number:	**11**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**08/Nov/23 20:47**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

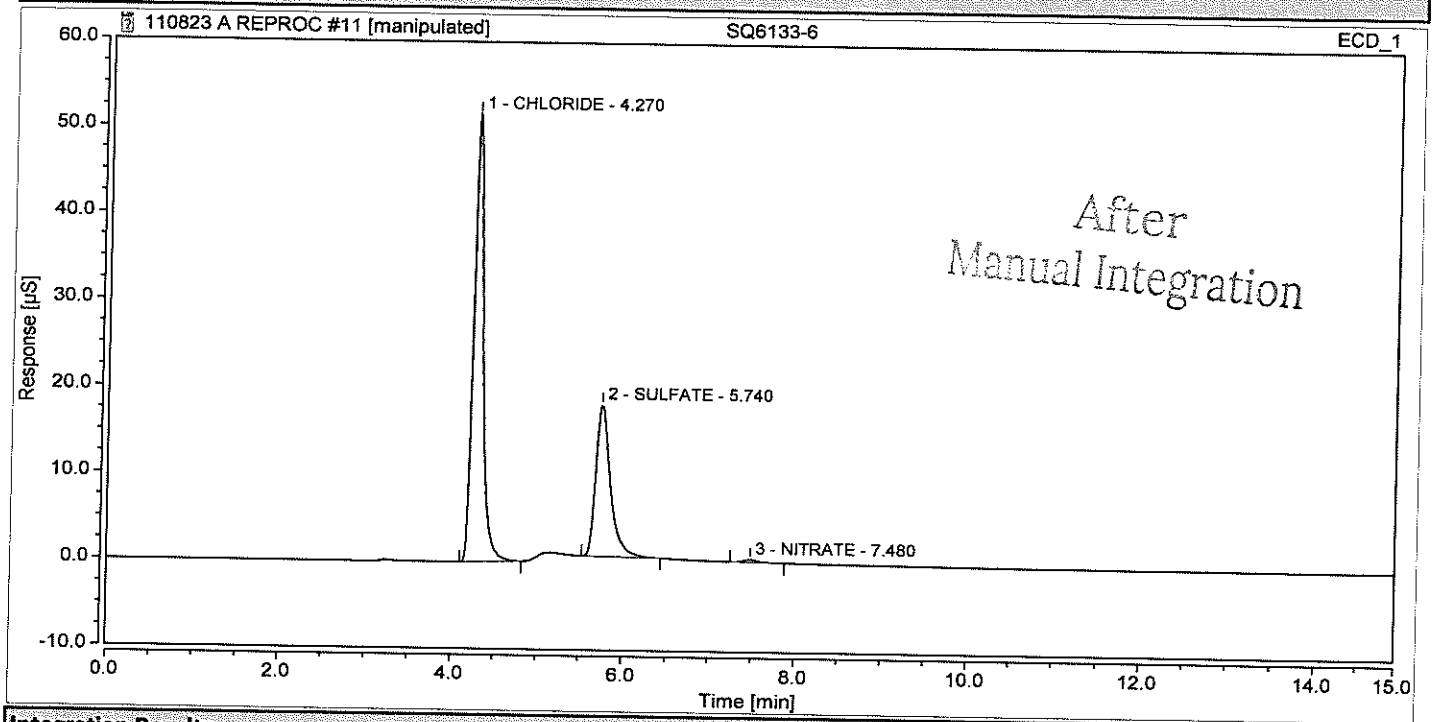
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.243	0.037	0.189	0.35	0.27	0.0755	n.a.
2	CHLORIDE	4.270	6.871	51.663	64.43	73.38	17.6290	n.a.
3	NITRITE	5.160	0.250	0.720	2.34	1.02	0.2996	n.a.
4	SULFATE	5.740	3.445	17.519	32.31	24.88	12.1196	n.a.
5	BROMIDE	6.513	0.001	0.008	0.01	0.01	0.0045	n.a.
6	NITRATE	7.480	0.060	0.310	0.56	0.44	0.0615	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**10.664**	**70.409**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6133-6**	*Run Time (min):*	**14.95**
Vial Number:	**11**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**08/Nov/23 20:47**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

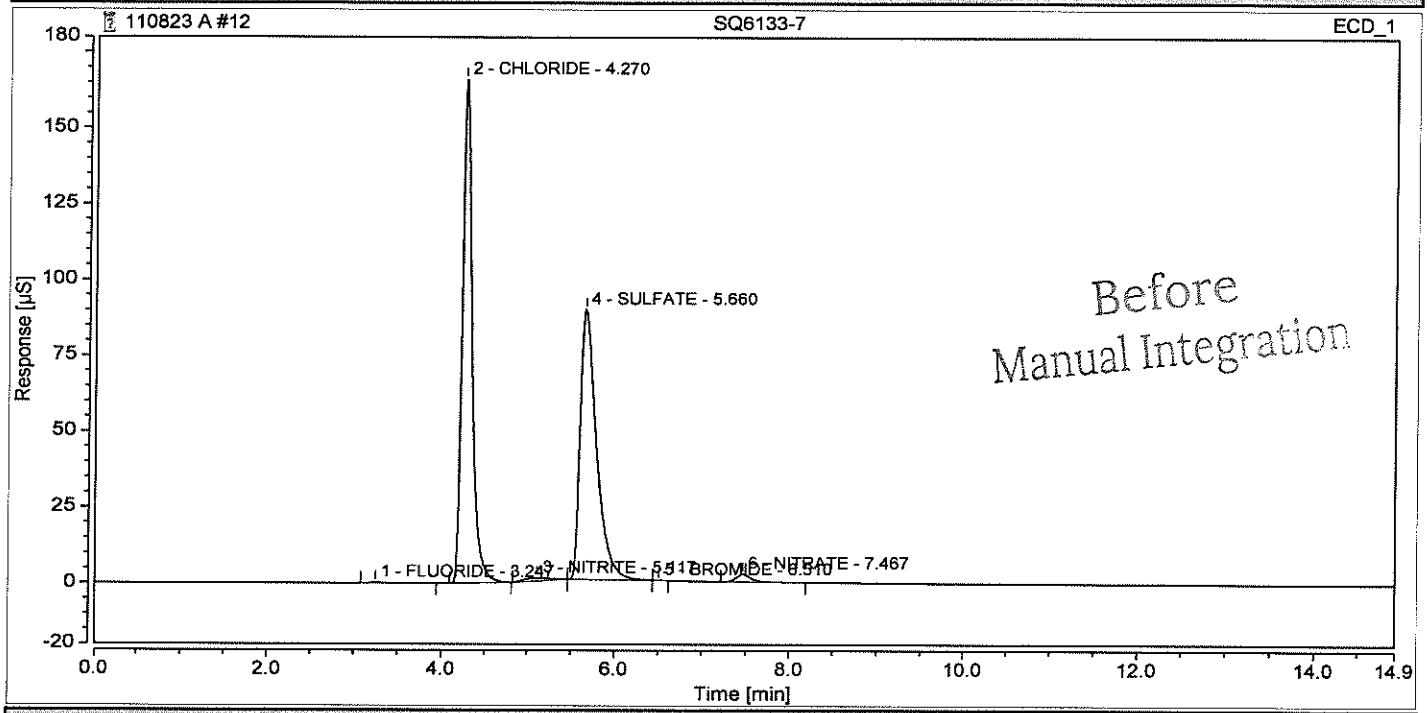
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.270	6.871	51.663	66.22	74.34	17.6290	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2	SULFATE	5.740	3.445	17.519	33.20	25.21	12.1196	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
3	NITRATE	7.480	0.060	0.310	0.58	0.45	0.0615	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**10.376**	**69.492**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6133-7**	*Run Time (min):*	**14.95**
Vial Number:	**12**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**08/Nov/23 21:04**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

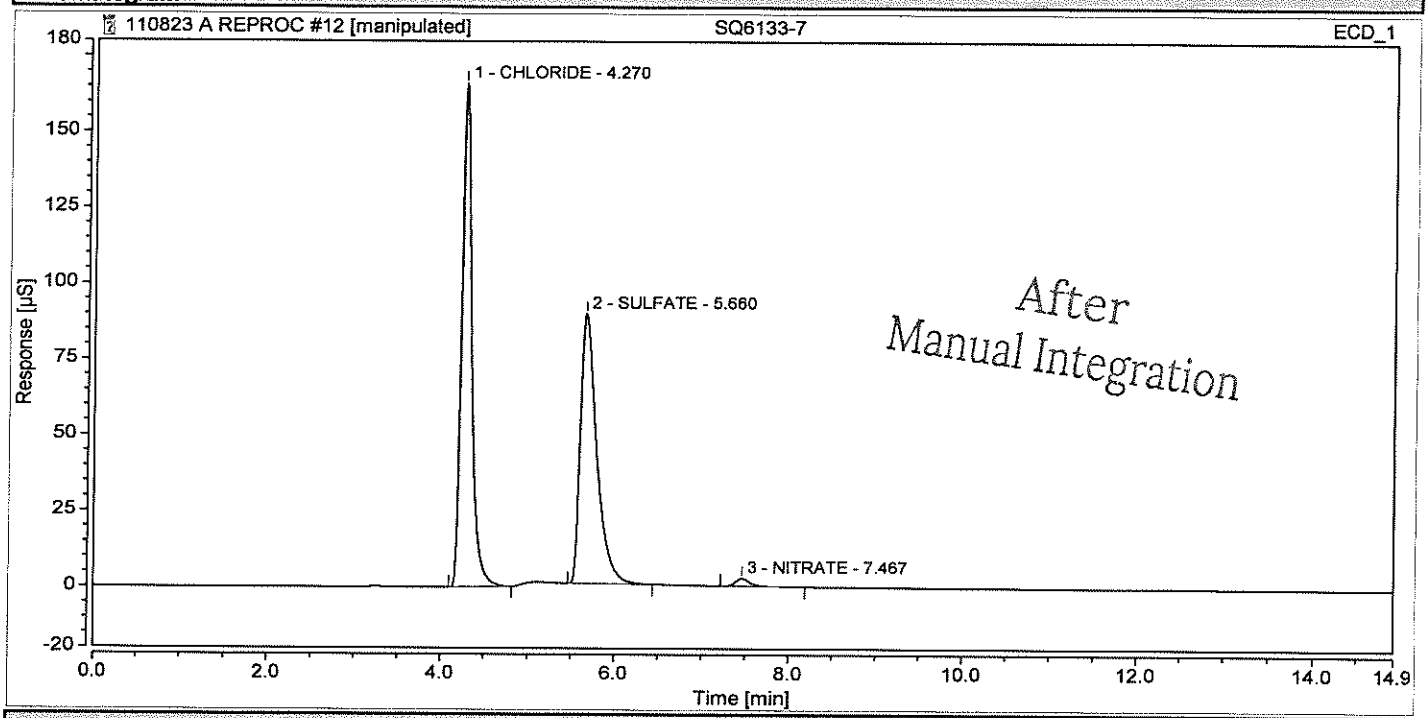
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.247	0.062	0.360	0.15	0.14	0.1144	n.a.
2	CHLORIDE	4.270	22.371	166.049	52.56	64.12	57.3997	n.a.
3	NITRITE	5.117	0.351	0.991	0.82	0.38	0.4179	n.a.
4	SULFATE	5.660	19.281	88.966	45.29	34.36	67.8230	n.a.
5	BROMIDE	6.510	0.001	0.010	0.00	0.00	0.0060	n.a.
6	NITRATE	7.467	0.501	2.580	1.18	1.00	0.5123	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**42.567**	**258.957**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6133-7**	*Run Time (min):*	**14.95**
Vial Number:	**12**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**08/Nov/23 21:04**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

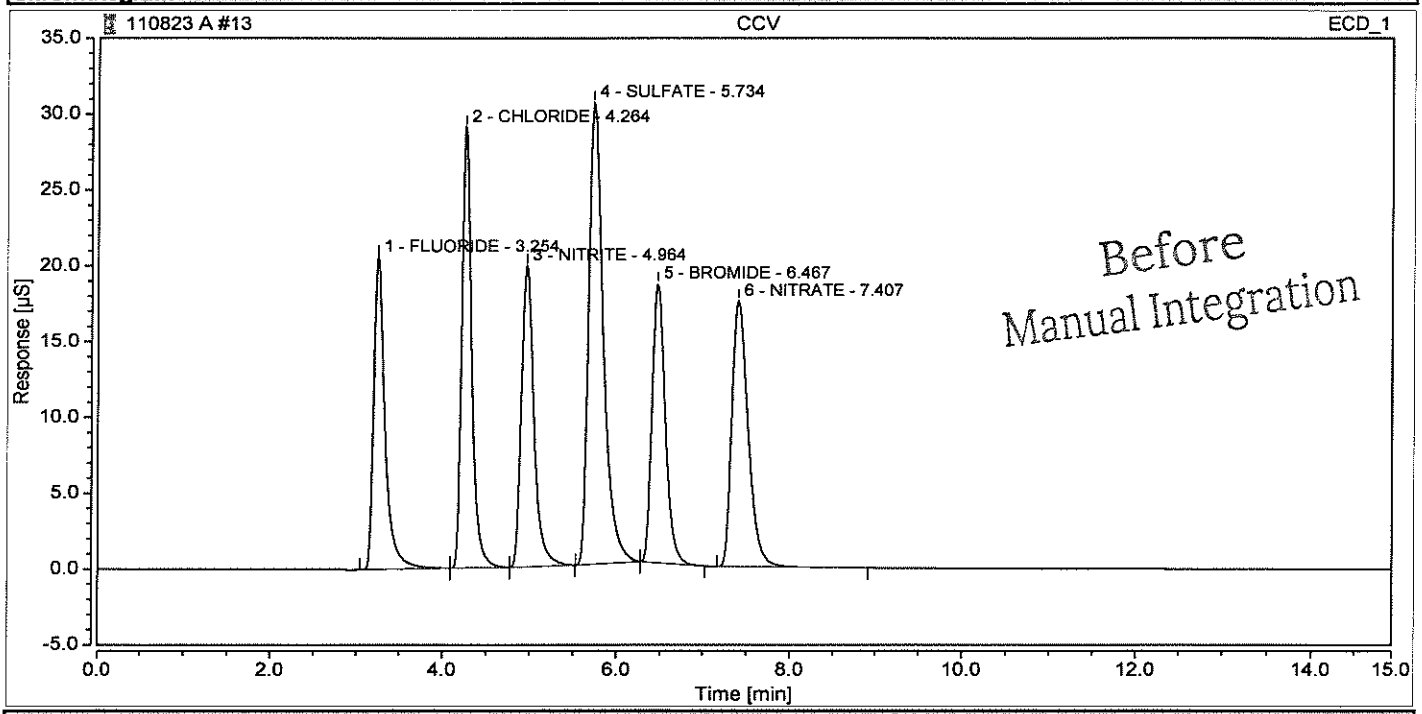
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.270	22.371	166.049	53.07	64.46	57.3997	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2	SULFATE	5.660	19.281	88.966	45.74	34.54	67.8230	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
3	NITRATE	7.467	0.501	2.580	1.19	1.00	0.5123	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**42.153**	**257.595**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**CCV**	*Run Time (min):*	**14.95**
Vial Number:	**13**	*Injection Volume:*	**200.00**
Injection Type:	**Check Standard**	*Channel:*	**ECD_1**
Calibration Level:	**06**	*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**08/Nov/23 21:22**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

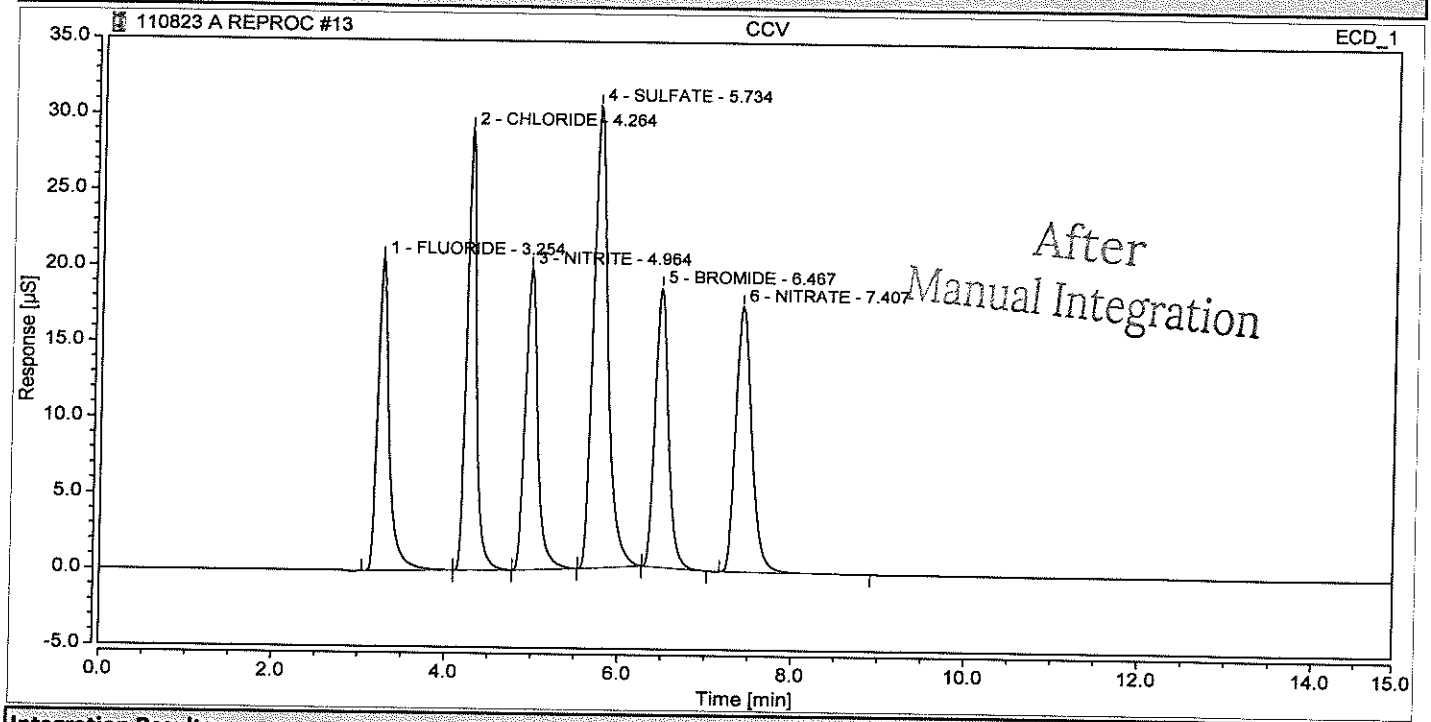
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.254	3.167	20.592	13.51	15.16	5.1454	2.9073
2	CHLORIDE	4.264	3.841	29.058	16.38	21.39	9.8554	-1.4460
3	NITRITE	4.964	3.376	19.839	14.40	14.60	4.0687	1.7165
4	SULFATE	5.734	5.972	30.444	25.47	22.41	21.0083	5.0417
5	BROMIDE	6.467	3.297	18.396	14.06	13.54	19.3943	-3.0286
6	NITRATE	7.407	3.797	17.514	16.19	12.89	3.8803	-2.9922
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**23.451**	**135.843**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**CCV**	*Run Time (min):*	**14.95**
Vial Number:	**13**	*Injection Volume:*	**200.00**
Injection Type:	**Check Standard**	*Channel:*	**ECD_1**
Calibration Level:	**06**	*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**08/Nov/23 21:22**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

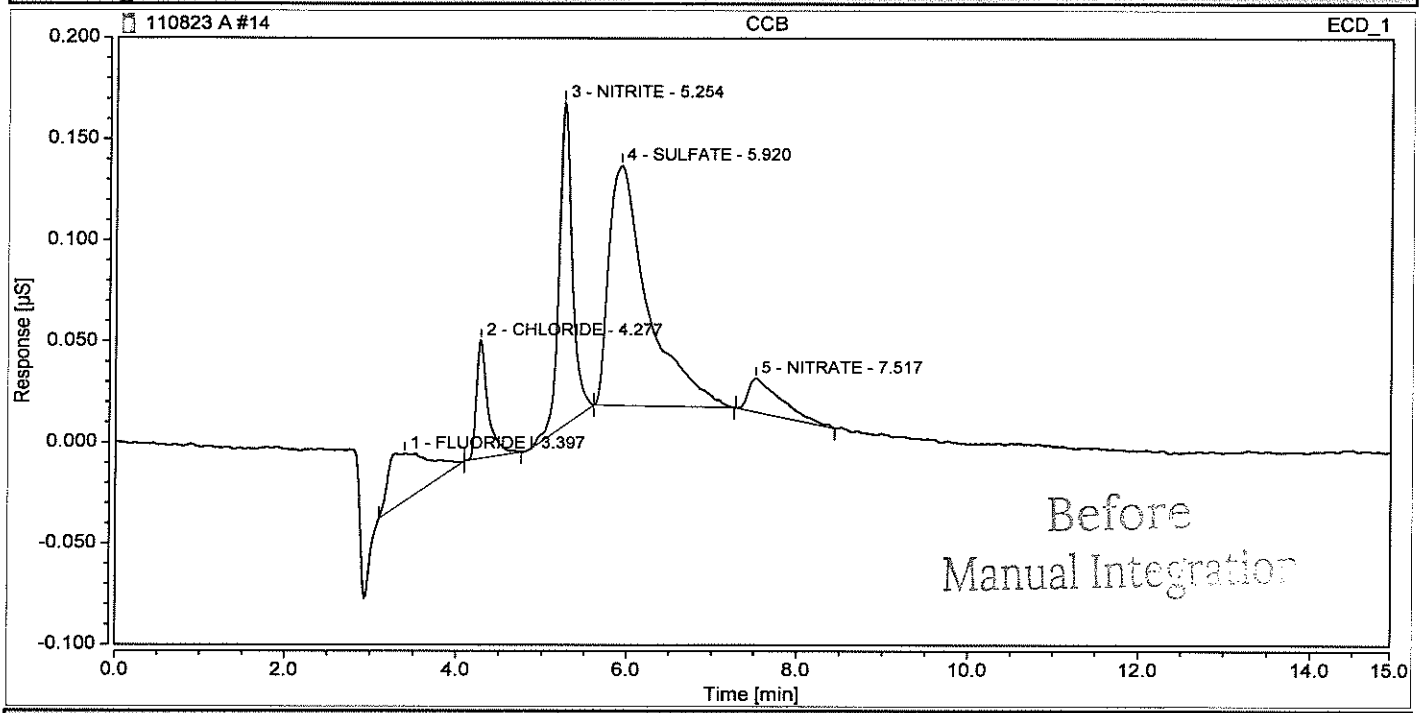
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.254	3.167	20.592	13.51	15.16	5.1454	2.9073
2	CHLORIDE	4.264	3.841	29.058	16.38	21.39	9.8554	-1.4460
3	NITRITE	4.964	3.376	19.839	14.40	14.60	4.0687	1.7165
4	SULFATE	5.734	5.972	30.444	25.47	22.41	21.0083	5.0417
5	BROMIDE	6.467	3.297	18.396	14.06	13.54	19.3943	-3.0286
6	NITRATE	7.407	3.797	17.514	16.19	12.89	3.8803	-2.9922
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**23.451**	**135.843**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**CCB**	*Run Time (min):*	**14.95**
Vial Number:	**14**	*Injection Volume:*	**200.00**
Injection Type:	**Blank**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**08/Nov/23 21:39**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

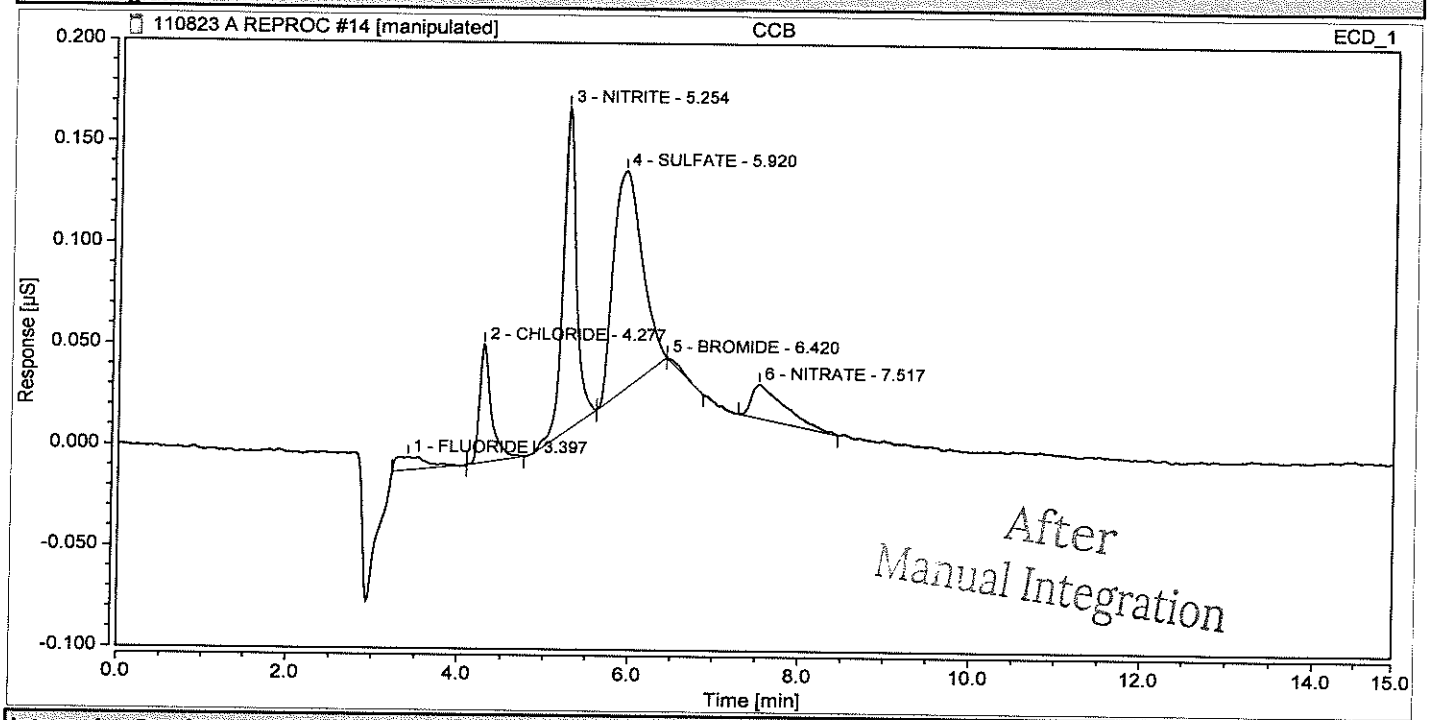
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.397	0.013	0.023	10.77	6.21	0.0372	n.a.
2	CHLORIDE	4.277	0.009	0.058	7.53	15.48	0.0234	n.a.
3	NITRITE	5.254	0.029	0.160	23.74	42.40	0.0417	n.a.
4	SULFATE	5.920	0.063	0.119	51.59	31.47	0.2200	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5	NITRATE	7.517	0.008	0.017	6.37	4.44	0.0079	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.121**	**0.377**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**CCB**	*Run Time (min):*	**14.95**
Vial Number:	**14**	*Injection Volume:*	**200.00**
Injection Type:	**Blank**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**08/Nov/23 21:39**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

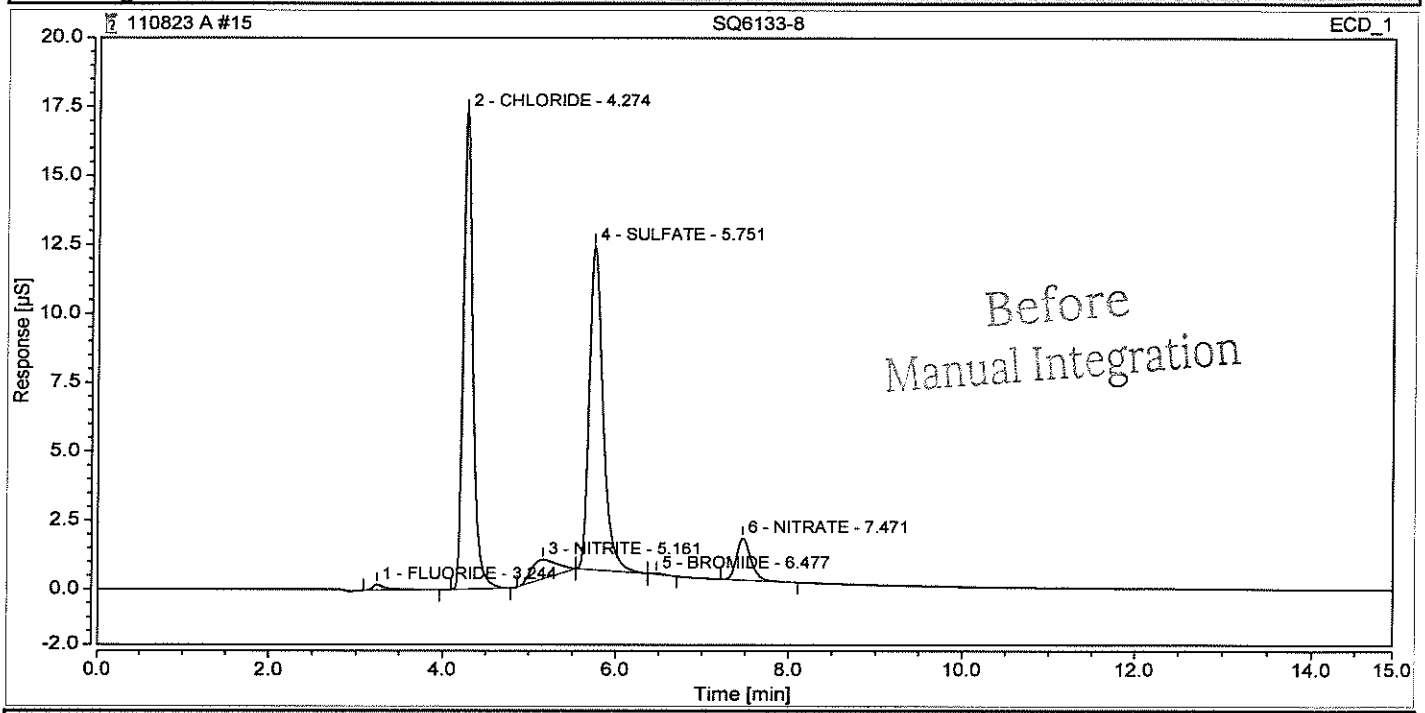
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.397	0.003	0.006	2.93	1.82	0.0208	n.a.
2	CHLORIDE	4.277	0.009	0.058	10.09	16.70	0.0234	n.a.
3	NITRITE	5.254	0.029	0.160	31.81	45.73	0.0417	n.a.
4	SULFATE	5.920	0.042	0.108	46.32	30.96	0.1474	n.a.
5	BROMIDE	6.420	0.000	0.000	0.32	0.00	0.0017	n.a.
6	NITRATE	7.517	0.008	0.017	8.53	4.79	0.0079	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.090**	**0.349**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6133-8**	*Run Time (min):*	**14.95**
Vial Number:	**15**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**08/Nov/23 21:56**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

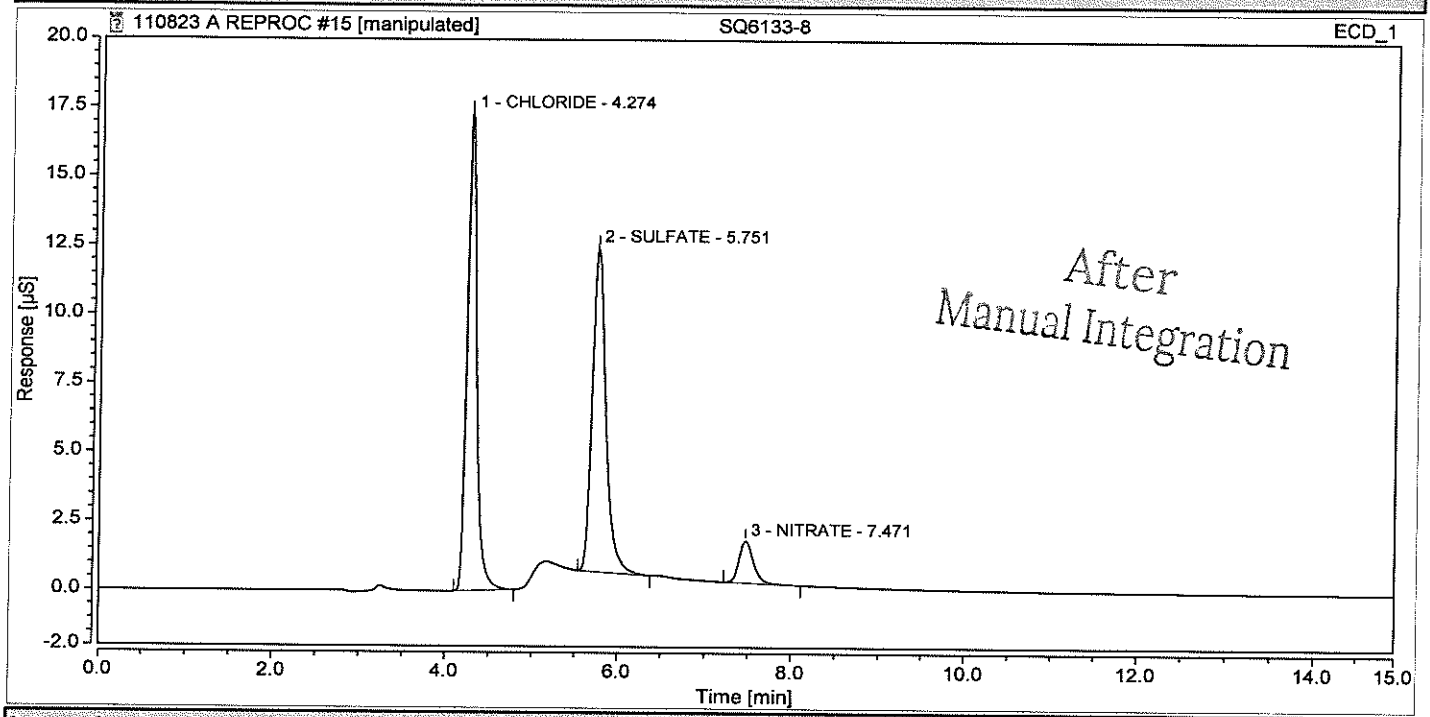
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.244	0.039	0.212	0.78	0.67	0.0780	n.a.
2	CHLORIDE	4.274	2.249	17.325	44.85	54.87	5.7692	n.a.
3	NITRITE	5.161	0.241	0.702	4.81	2.22	0.2897	n.a.
4	SULFATE	5.751	2.183	11.767	43.53	37.27	7.6778	n.a.
5	BROMIDE	6.477	0.006	0.034	0.11	0.11	0.0330	n.a.
6	NITRATE	7.471	0.296	1.532	5.91	4.85	0.3030	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**5.014**	**31.572**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6133-8**	*Run Time (min):*	**14.95**
Vial Number:	**15**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**08/Nov/23 21:56**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

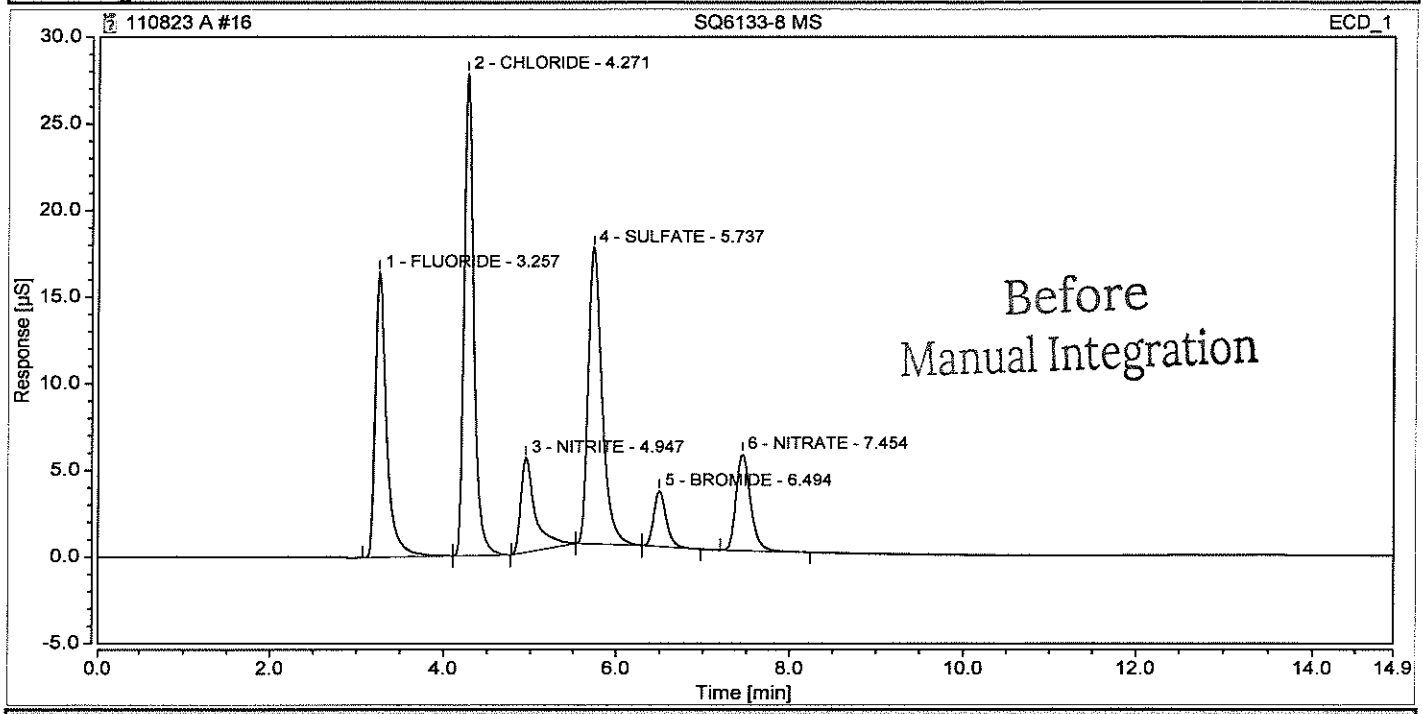
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.274	2.249	17.325	47.56	56.57	5.7692	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2	SULFATE	5.751	2.183	11.767	46.17	38.42	7.6778	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
3	NITRATE	7.471	0.296	1.532	6.27	5.00	0.3030	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**4.728**	**30.623**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6133-8 MS**	*Run Time (min):*	**14.95**
Vial Number:	**16**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**08/Nov/23 22:13**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

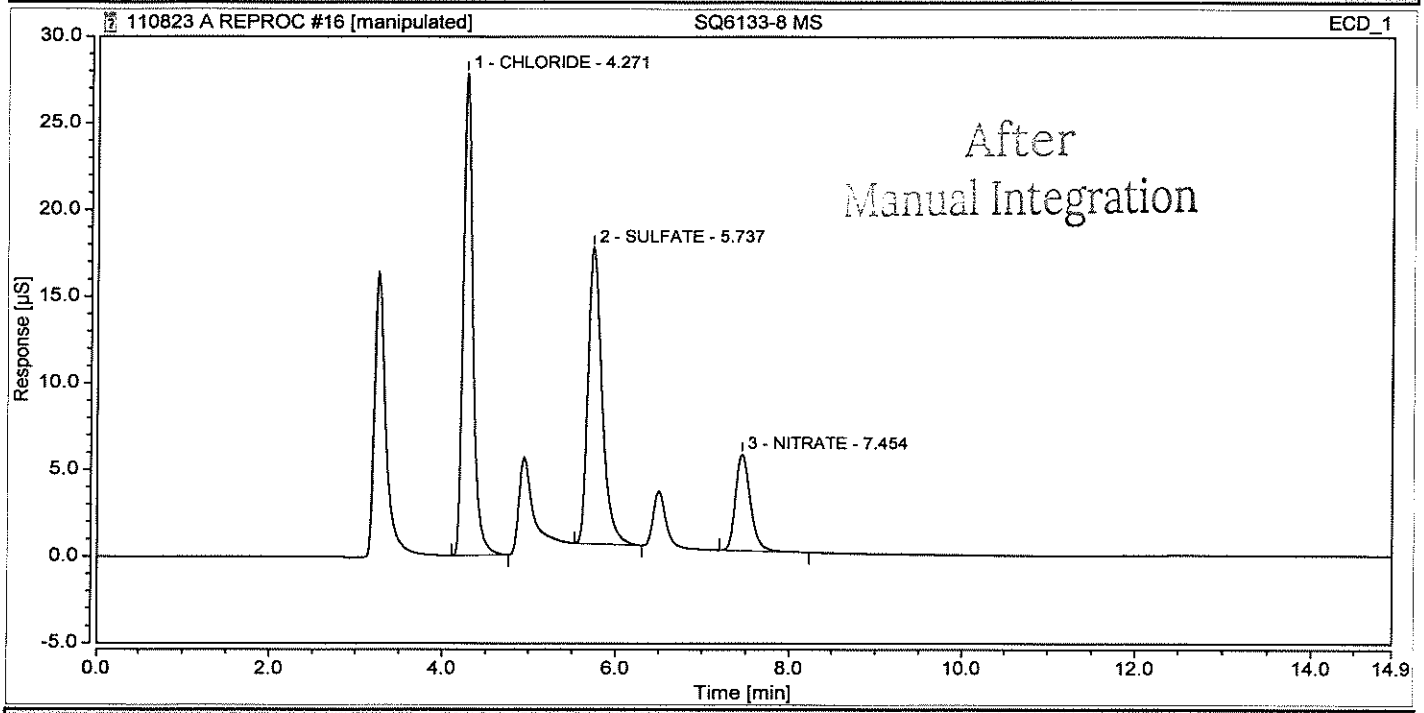
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.257	2.494	16.438	20.73	21.75	4.0281	n.a.
2	CHLORIDE	4.271	3.634	27.817	30.20	36.81	9.3241	n.a.
3	NITRITE	4.947	1.080	5.453	8.97	7.22	1.2777	n.a.
4	SULFATE	5.737	3.193	17.092	26.54	22.62	11.2320	n.a.
5	BROMIDE	6.494	0.532	3.202	4.43	4.24	3.1319	n.a.
6	NITRATE	7.454	1.099	5.570	9.13	7.37	1.1226	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**12.032**	**75.571**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6133-8 MS**	*Run Time (min):*	**14.95**
Vial Number:	**16**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**08/Nov/23 22:13**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

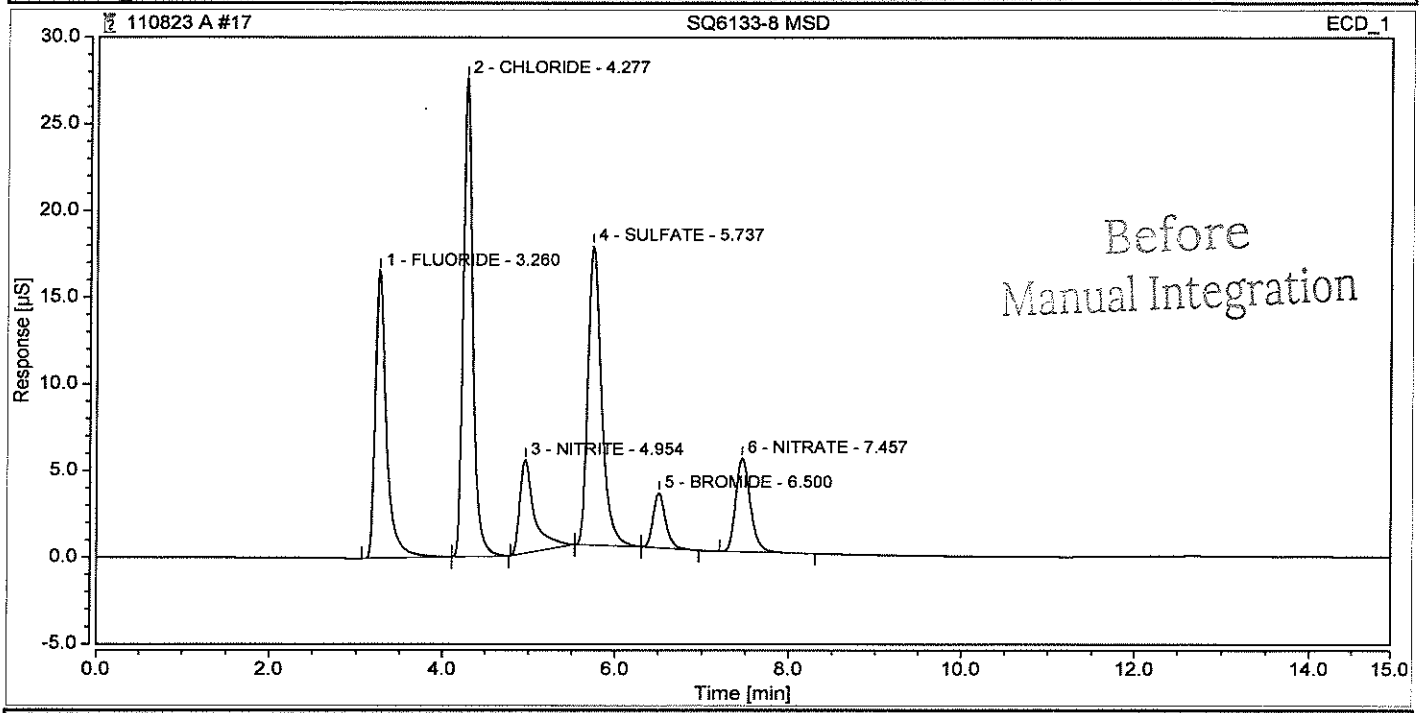
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.271	3.634	27.817	45.85	55.11	9.3241	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2	SULFATE	5.737	3.193	17.092	40.29	33.86	11.2320	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
3	NITRATE	7.454	1.099	5.570	13.86	11.03	1.1226	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**7.926**	**50.479**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6133-8 MSD**	*Run Time (min):*	**14.95**
Vial Number:	**17**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**08/Nov/23 22:31**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

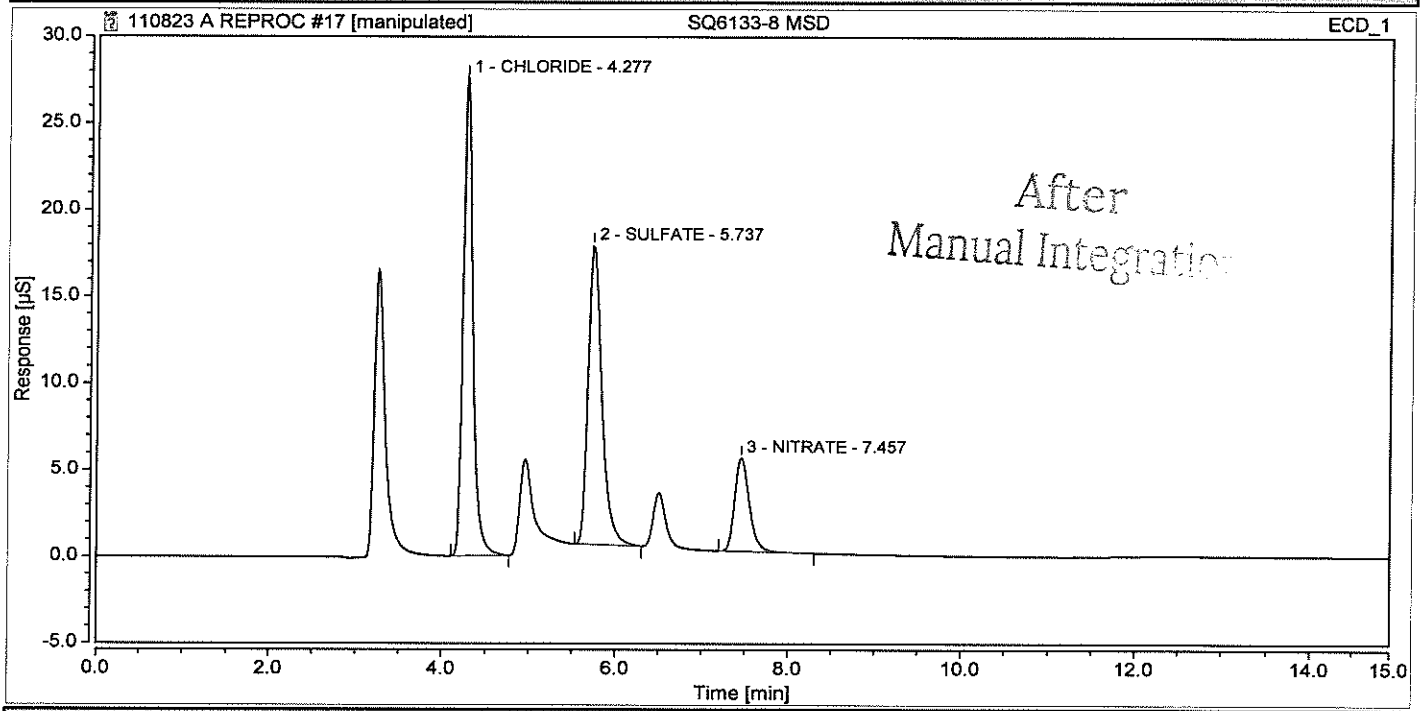
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.260	2.482	16.584	20.78	21.99	4.0084	n.a.
2	CHLORIDE	4.277	3.615	27.601	30.25	36.60	9.2741	n.a.
3	NITRITE	4.954	1.065	5.388	8.91	7.14	1.2602	n.a.
4	SULFATE	5.737	3.193	17.273	26.73	22.90	11.2328	n.a.
5	BROMIDE	6.500	0.527	3.165	4.41	4.20	3.1020	n.a.
6	NITRATE	7.457	1.065	5.407	8.91	7.17	1.0883	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**11.947**	**75.417**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6133-8 MSD**	*Run Time (min):*	**14.95**
Vial Number:	**17**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**08/Nov/23 22:31**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

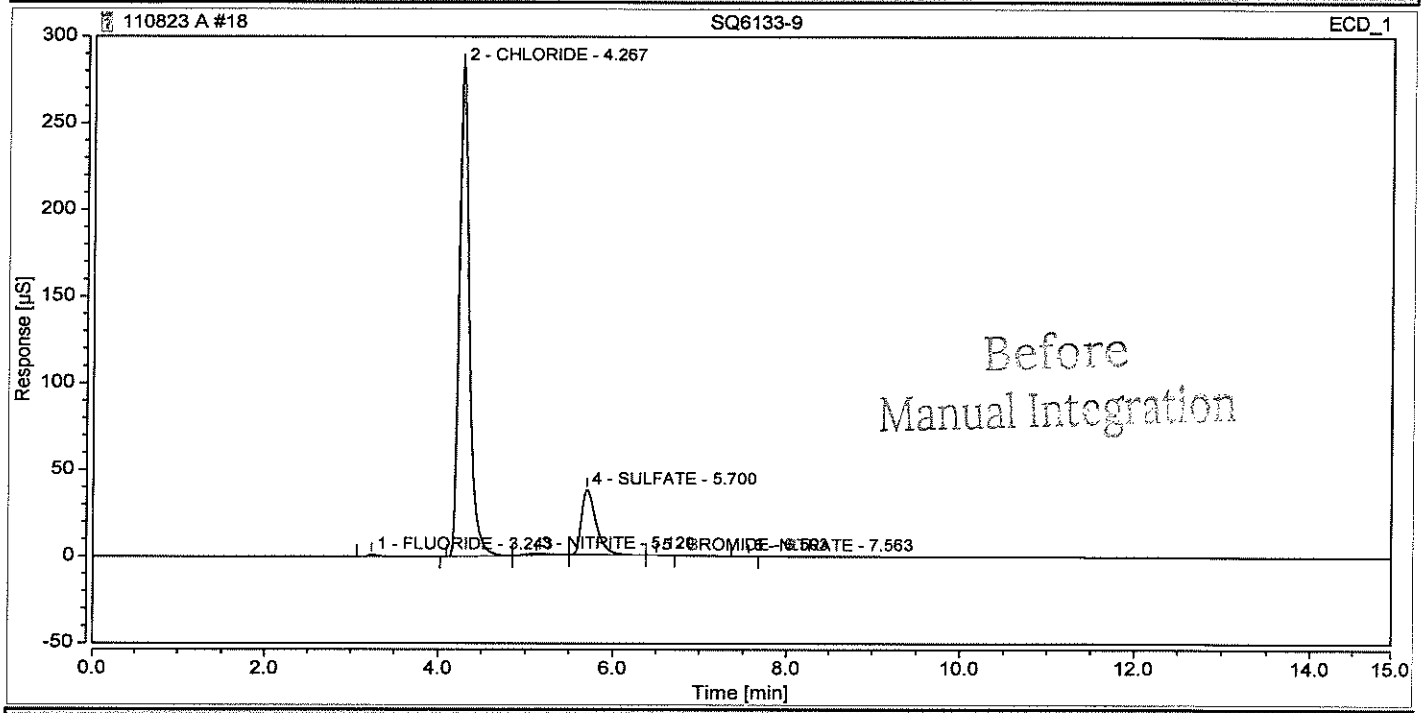
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.277	3.615	27.601	45.91	54.89	9.2741	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2	SULFATE	5.737	3.193	17.273	40.56	34.35	11.2328	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
3	NITRATE	7.457	1.065	5.407	13.53	10.75	1.0883	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**7.873**	**50.281**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6133-9**	*Run Time (min):*	**14.95**
Vial Number:	**18**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**08/Nov/23 22:48**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

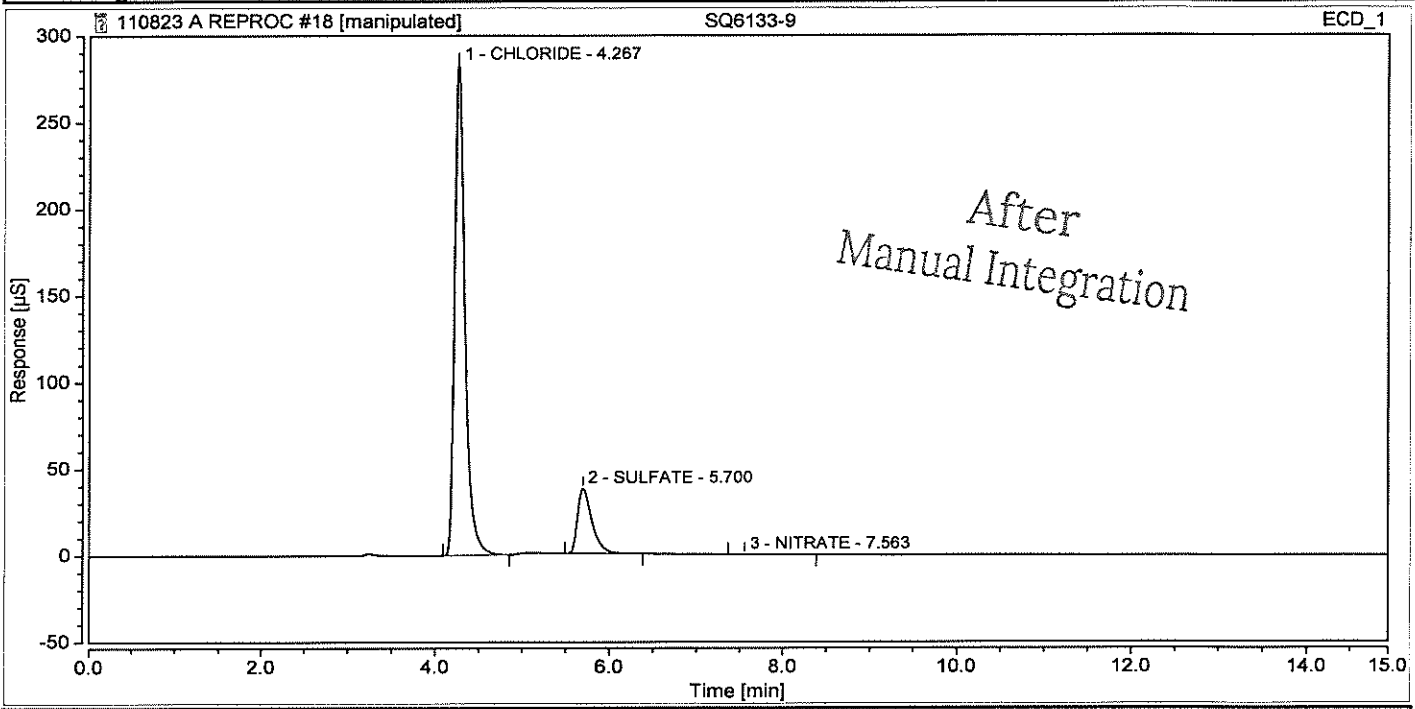
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.243	0.170	1.105	0.37	0.34	0.2847	n.a.
2	CHLORIDE	4.267	38.732	283.079	83.37	87.74	99.3767	n.a.
3	NITRITE	5.120	0.302	0.869	0.65	0.27	0.3604	n.a.
4	SULFATE	5.700	7.247	37.521	15.60	11.63	25.4915	n.a.
5	BROMIDE	6.503	0.007	0.047	0.01	0.01	0.0404	n.a.
6	NITRATE	7.563	0.001	0.004	0.00	0.00	0.0007	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**46.458**	**322.626**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6133-9**	*Run Time (min):*	**14.95**
Vial Number:	**18**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**08/Nov/23 22:48**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

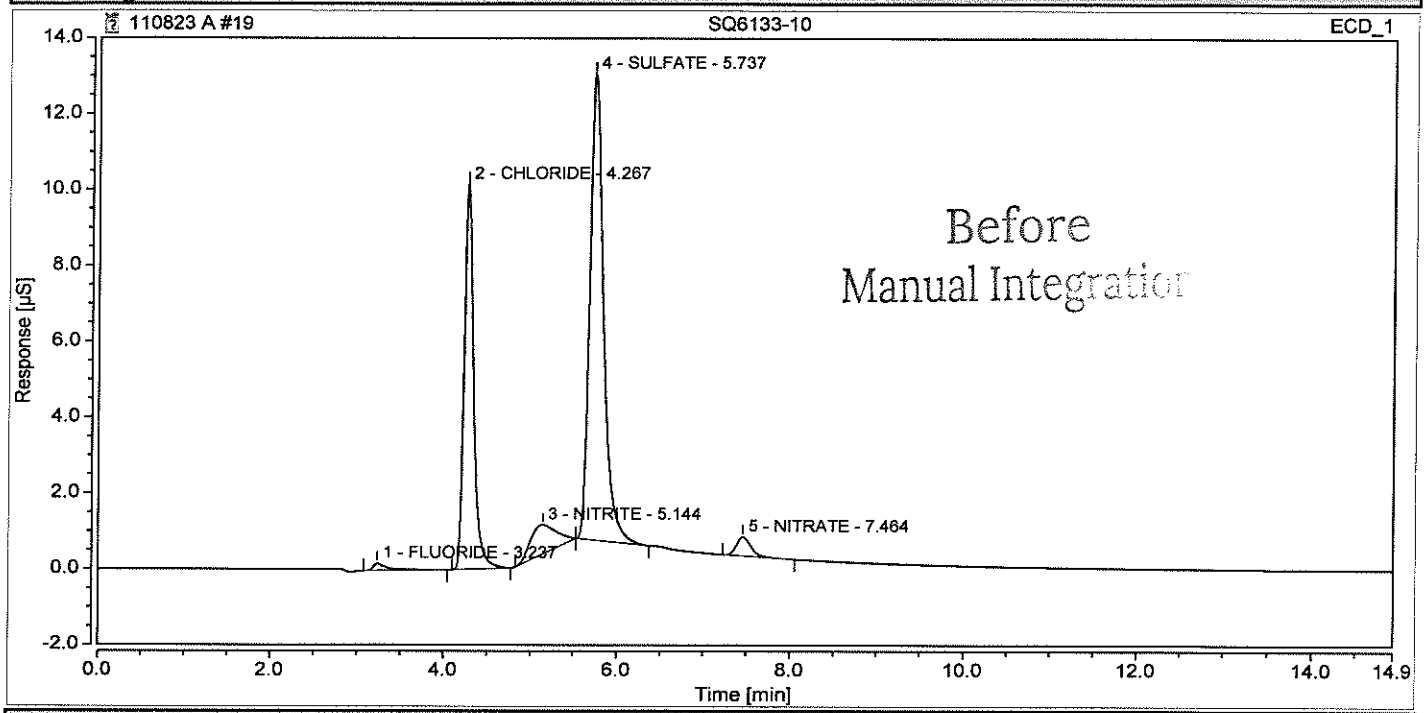
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.267	38.732	283.079	84.23	88.30	99.3767	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2	SULFATE	5.700	7.247	37.521	15.76	11.70	25.4915	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
3	NITRATE	7.563	0.002	0.002	0.00	0.00	0.0022	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**45.981**	**320.602**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6133-10**	*Run Time (min):*	**14.95**
Vial Number:	**19**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**08/Nov/23 23:05**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

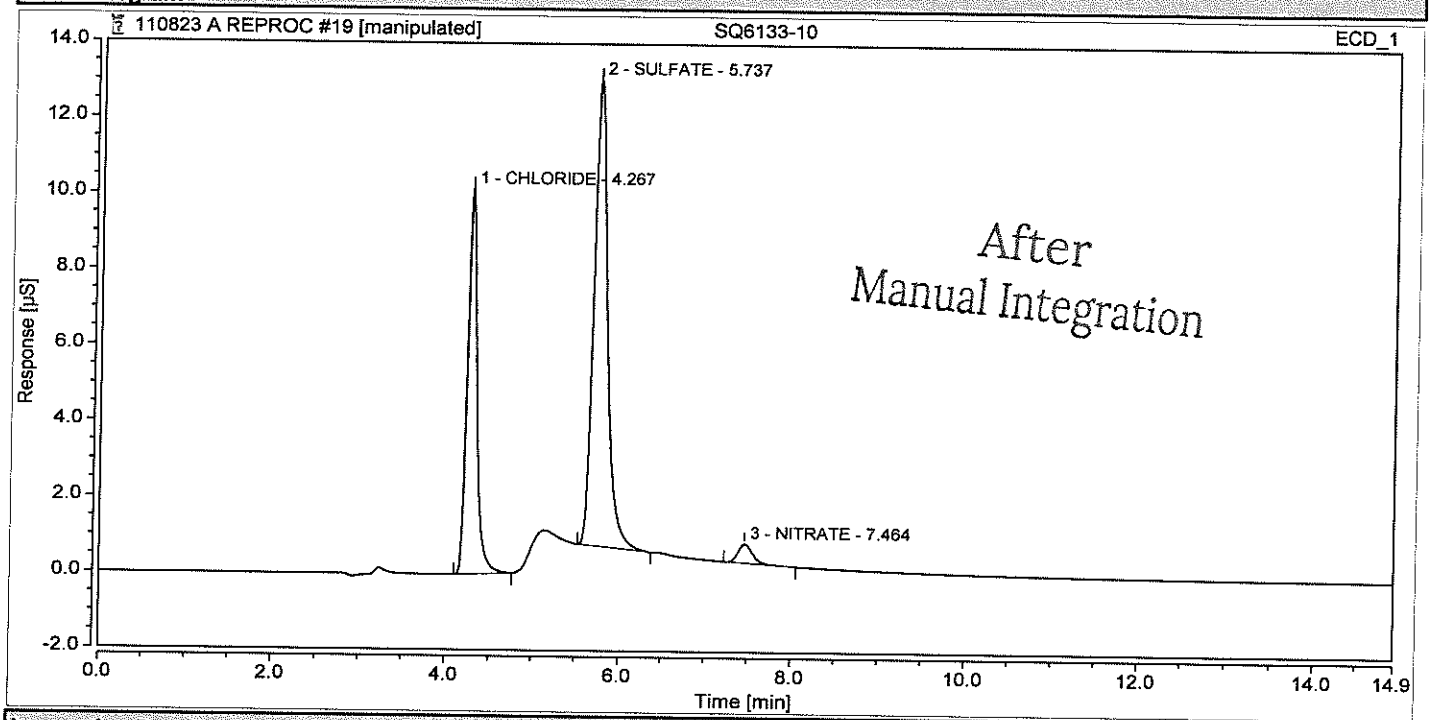
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.237	0.038	0.190	0.95	0.79	0.0758	n.a.
2	CHLORIDE	4.267	1.302	10.164	32.88	42.49	3.3412	n.a.
3	NITRITE	5.144	0.272	0.765	6.87	3.20	0.3255	n.a.
4	SULFATE	5.737	2.249	12.301	56.79	51.42	7.9118	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5	NITRATE	7.464	0.100	0.503	2.51	2.10	0.1017	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**3.960**	**23.923**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6133-10**	*Run Time (min):*	**14.95**
Vial Number:	**19**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**08/Nov/23 23:05**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

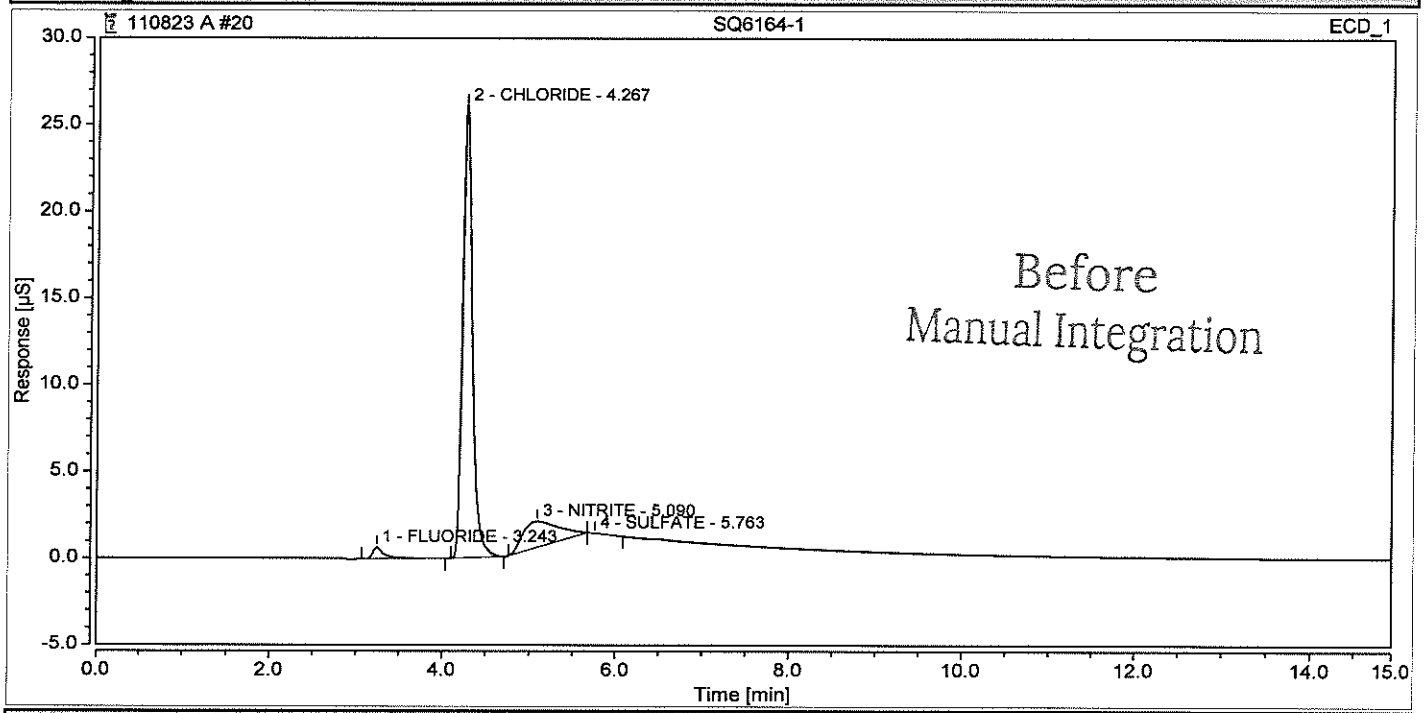
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.267	1.302	10.164	35.67	44.25	3.3412	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2	SULFATE	5.737	2.249	12.301	61.61	53.56	7.9118	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
3	NITRATE	7.464	0.100	0.503	2.73	2.19	0.1017	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**3.651**	**22.968**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6164-1**	*Run Time (min):*	**14.95**
Vial Number:	**20**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**08/Nov/23 23:22**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

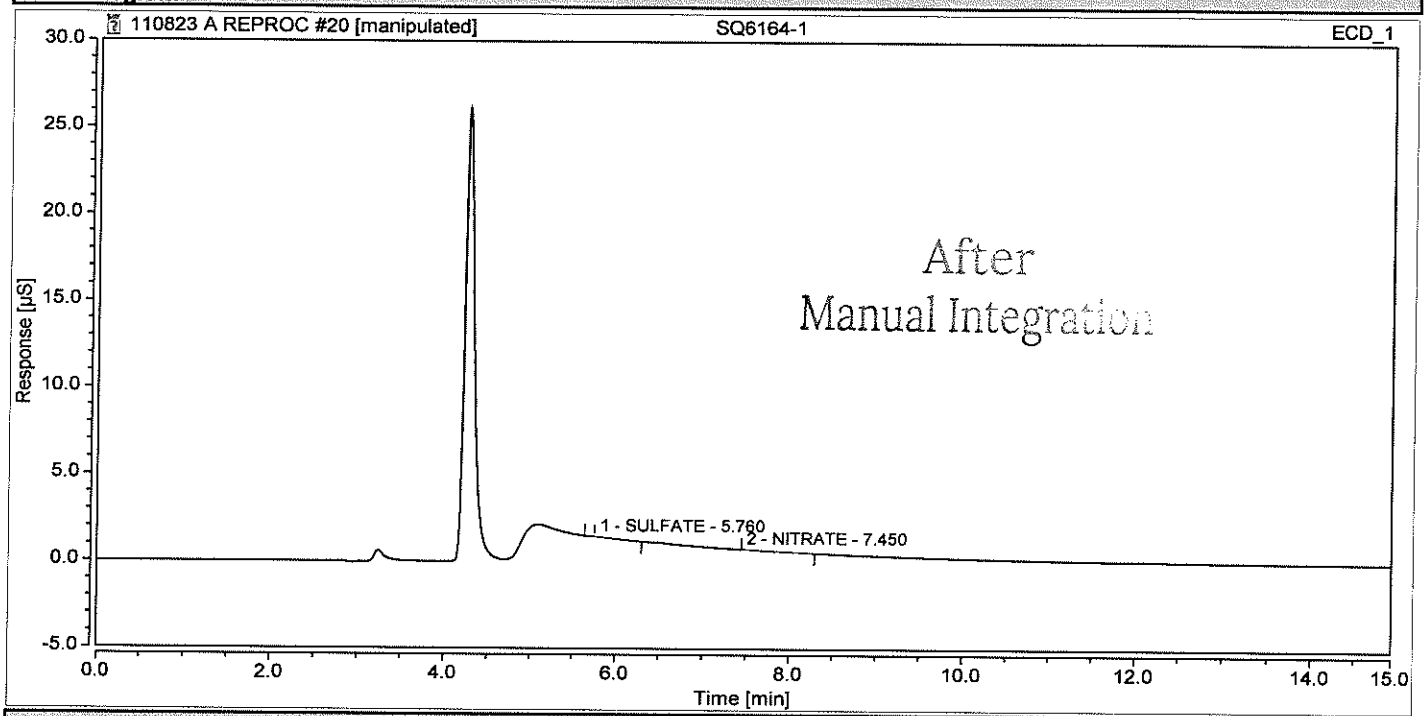
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.243	0.107	0.663	2.57	2.35	0.1856	n.a.
2	CHLORIDE	4.267	3.356	26.088	80.36	92.33	8.6098	n.a.
3	NITRITE	5.090	0.710	1.496	17.02	5.30	0.8408	n.a.
4	SULFATE	5.763	0.002	0.009	0.05	0.03	0.0070	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**4.176**	**28.256**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6164-1**	*Run Time (min):*	**14.95**
Vial Number:	**20**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**08/Nov/23 23:22**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

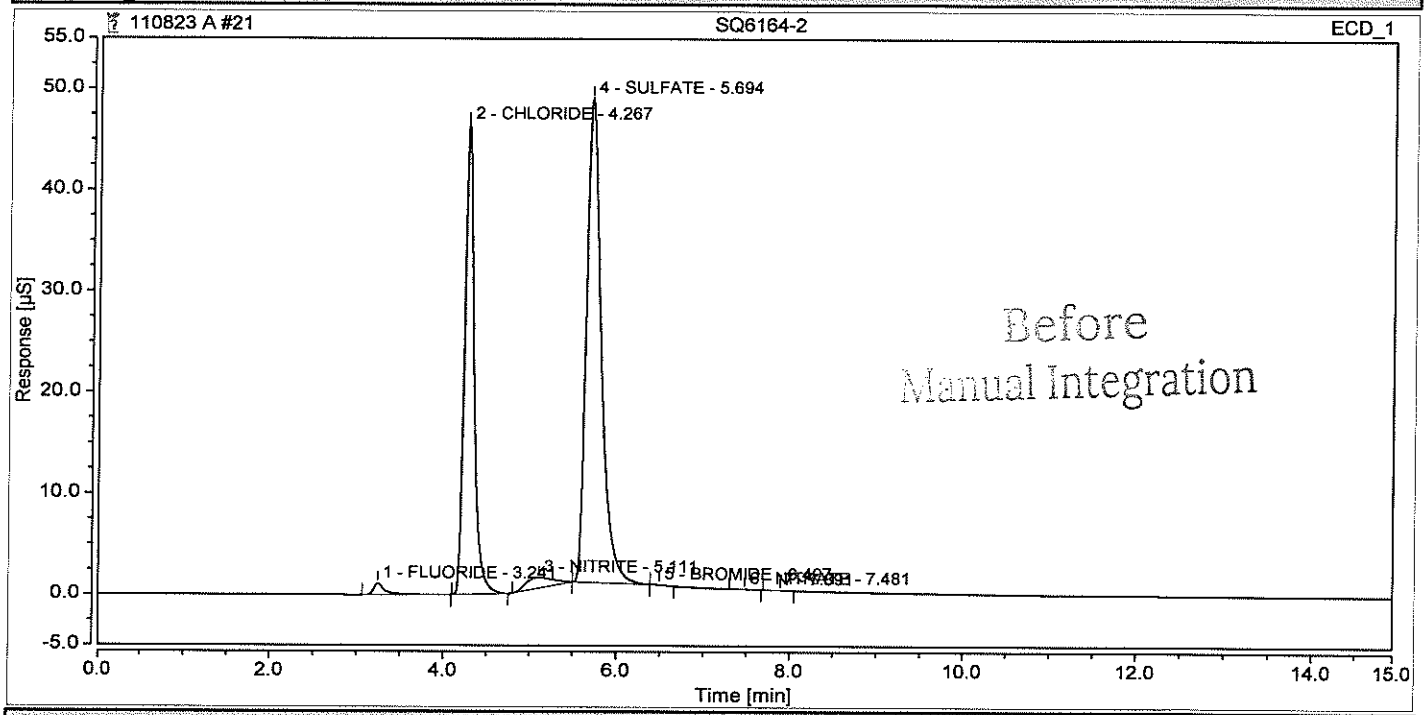
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	CHLORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	SULFATE	5.760	0.000	0.009	4.96	100.00	0.0010	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2	NITRATE	7.450	0.005	0.000	95.04	0.00	0.0053	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.006**	**0.009**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6164-2**	*Run Time (min):*	**14.95**
Vial Number:	**21**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**08/Nov/23 23:40**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

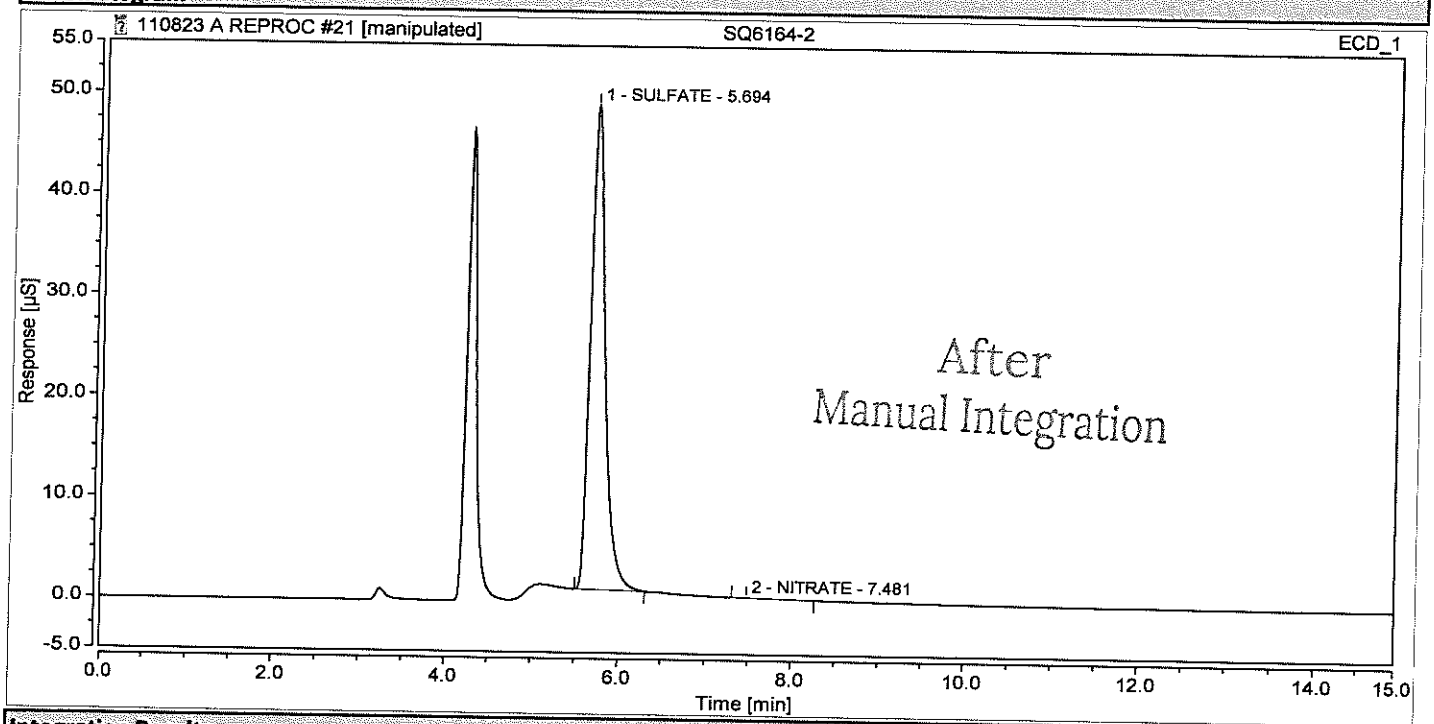
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.241	0.179	1.154	1.12	1.19	0.2987	n.a.
2	CHLORIDE	4.267	6.053	46.487	37.67	48.11	15.5315	n.a.
3	NITRITE	5.111	0.393	1.058	2.45	1.09	0.4676	n.a.
4	SULFATE	5.694	9.436	47.878	58.72	49.55	33.1912	n.a.
5	BROMIDE	6.497	0.006	0.045	0.04	0.05	0.0346	n.a.
6	NITRATE	7.481	0.001	0.008	0.01	0.01	0.0012	n.a.
7		7.891	0.000	0.003	0.00	0.00	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**16.069**	**96.634**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6164-2**	*Run Time (min):*	**14.95**
Vial Number:	**21**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**08/Nov/23 23:40**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

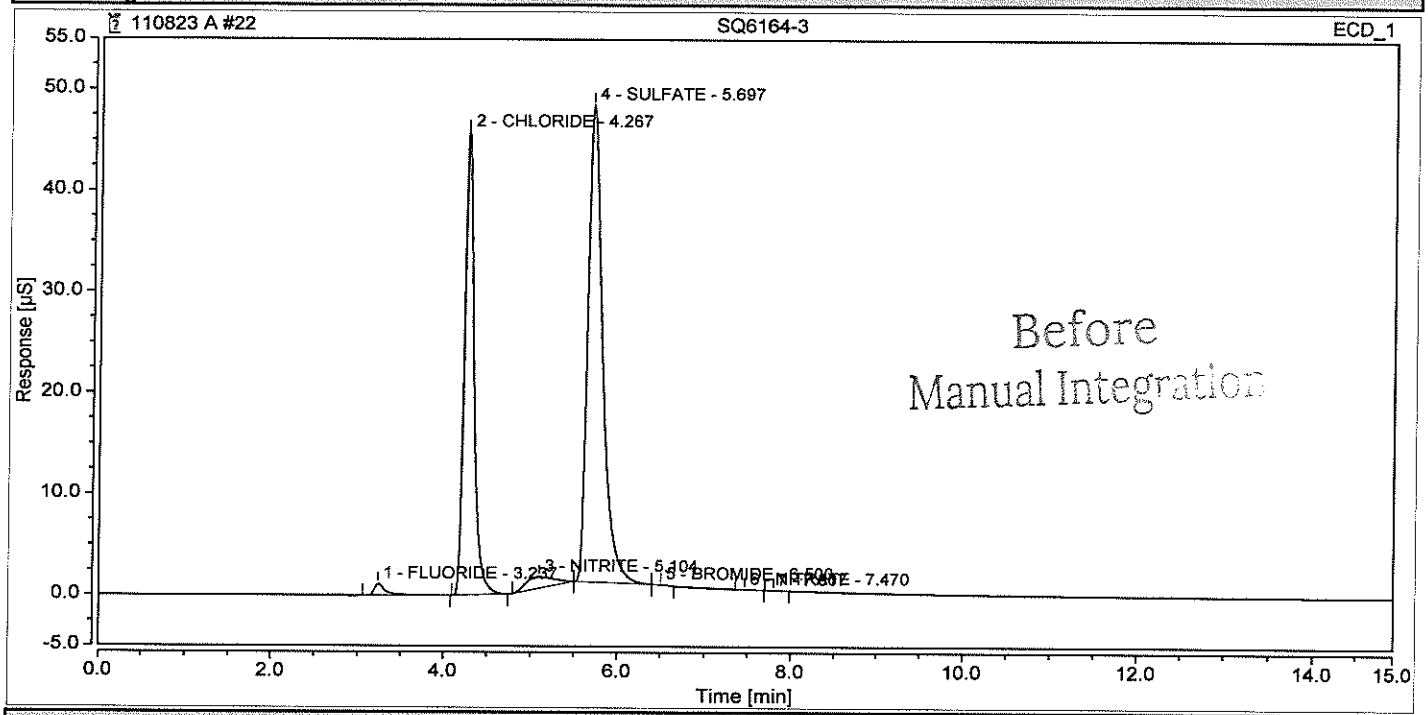
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	CHLORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	SULFATE	5.694	9.412	47.865	99.99	99.99	33.1089	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2	NITRATE	7.481	0.001	0.006	0.01	0.01	0.0006	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**9.413**	**47.871**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6164-3**	*Run Time (min):*	**14.95**
Vial Number:	**22**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**08/Nov/23 23:57**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

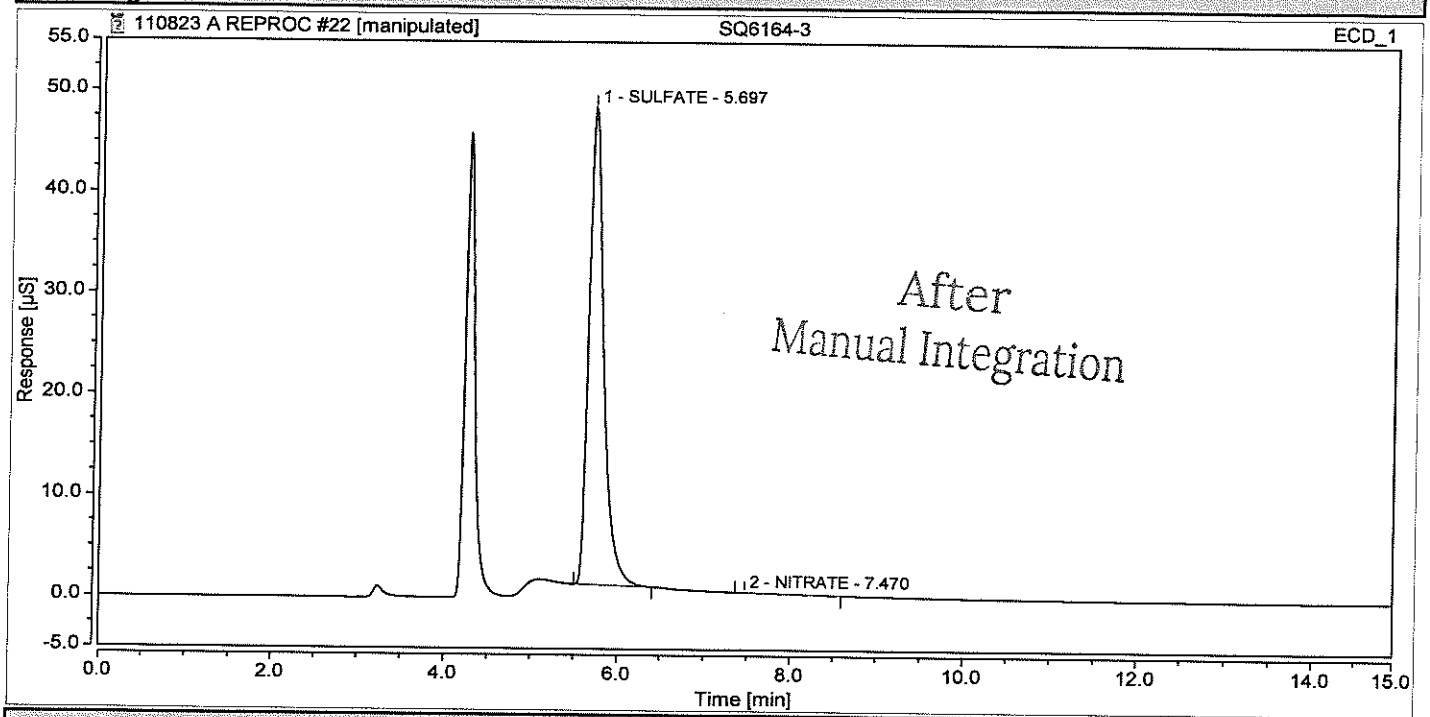
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.237	0.180	1.160	1.13	1.22	0.3002	n.a.
2	CHLORIDE	4.267	5.970	45.788	37.49	48.03	15.3174	n.a.
3	NITRITE	5.104	0.436	1.138	2.74	1.19	0.5174	n.a.
4	SULFATE	5.697	9.331	47.195	58.60	49.51	32.8217	n.a.
5	BROMIDE	6.500	0.005	0.041	0.03	0.04	0.0299	n.a.
6	NITRATE	7.470	0.001	0.004	0.00	0.00	0.0007	n.a.
7		7.807	0.000	0.003	0.00	0.00	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**15.922**	**95.328**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6164-3**	*Run Time (min):*	**14.95**
Vial Number:	**22**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**08/Nov/23 23:57**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

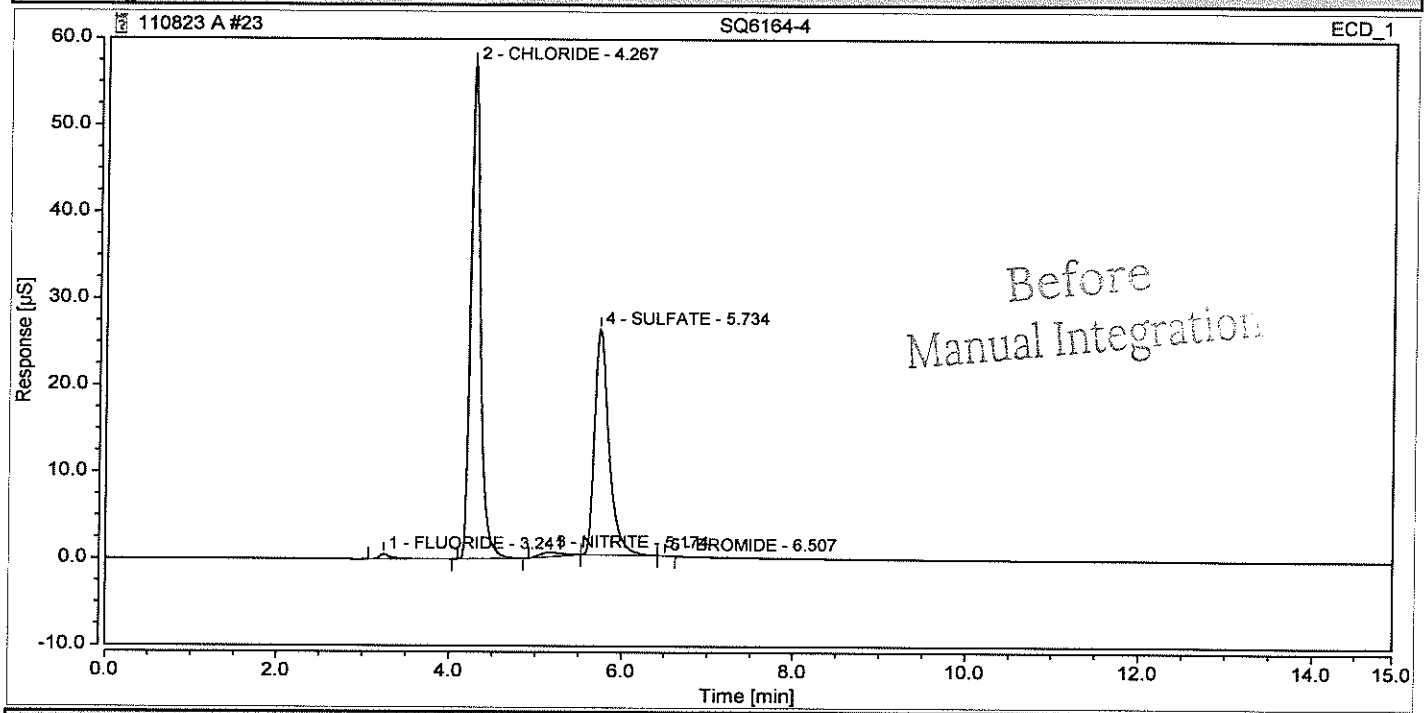
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	CHLORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	SULFATE	5.697	9.331	47.195	99.94	100.00	32.8217	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2	NITRATE	7.470	0.006	0.002	0.06	0.00	0.0057	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**9.336**	**47.197**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6164-4**	*Run Time (min):*	**14.95**
Vial Number:	**23**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**09/Nov/23 00:14**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

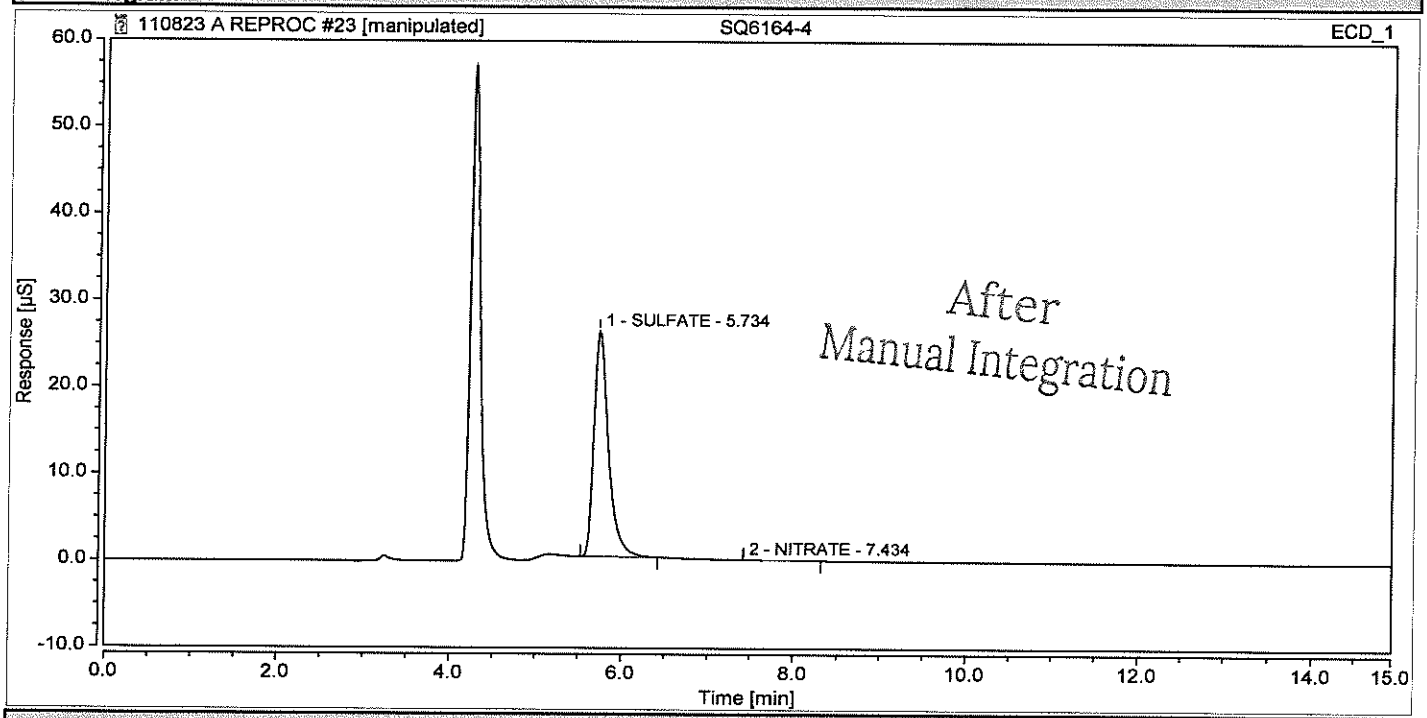
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.241	0.098	0.587	0.76	0.70	0.1709	n.a.
2	CHLORIDE	4.267	7.552	57.051	58.67	67.77	19.3775	n.a.
3	NITRITE	5.174	0.155	0.490	1.21	0.58	0.1891	n.a.
4	SULFATE	5.734	5.066	26.045	39.35	30.94	17.8198	n.a.
5	BROMIDE	6.507	0.001	0.012	0.01	0.01	0.0073	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**12.873**	**84.185**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6164-4**	*Run Time (min):*	**14.95**
Vial Number:	**23**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**09/Nov/23 00:14**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

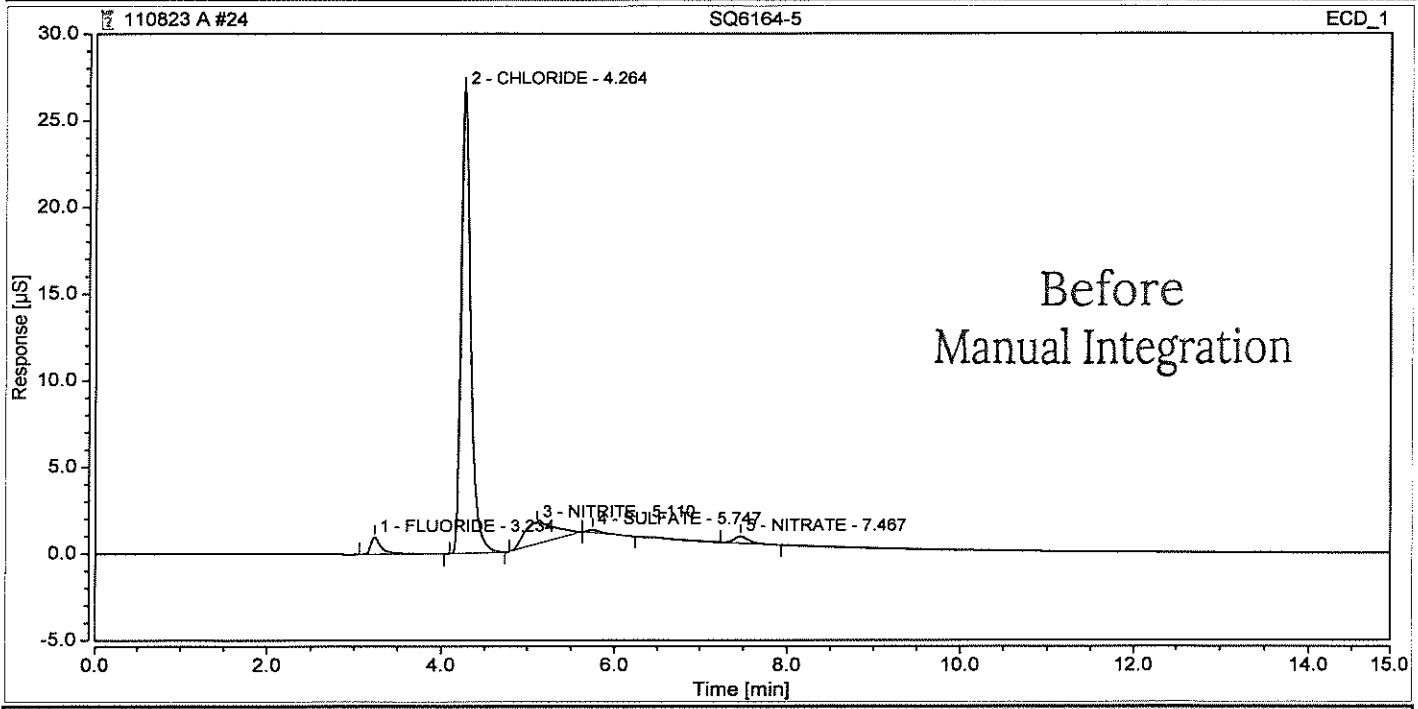
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	CHLORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	SULFATE	5.734	5.066	26.045	99.94	99.99	17.8198	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2	NITRATE	7.434	0.003	0.001	0.06	0.01	0.0032	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**5.069**	**26.047**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6164-5**	*Run Time (min):*	**14.95**
Vial Number:	**24**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**09/Nov/23 00:32**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

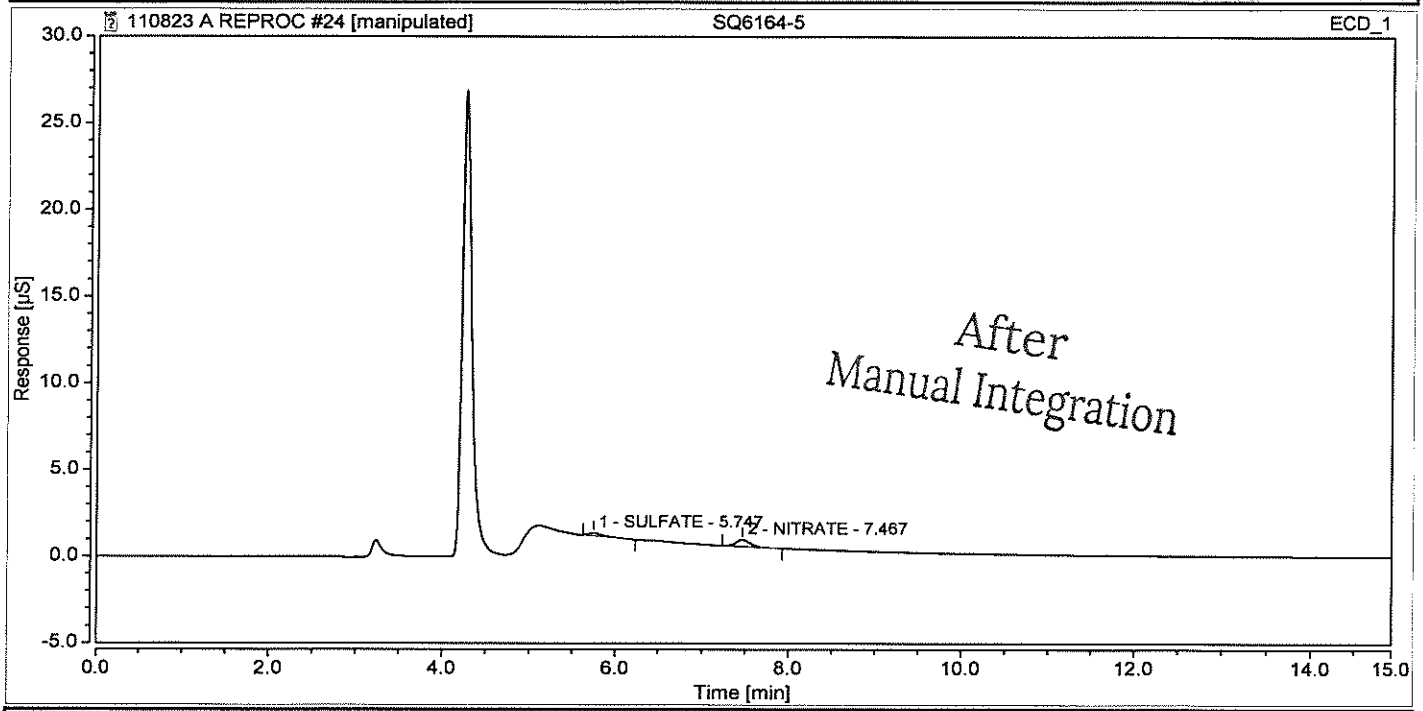
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.234	0.147	0.989	3.47	3.35	0.2480	n.a.
2	CHLORIDE	4.264	3.462	26.773	81.63	90.60	8.8830	n.a.
3	NITRITE	5.110	0.522	1.218	12.31	4.12	0.6189	n.a.
4	SULFATE	5.747	0.032	0.172	0.76	0.58	0.1134	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5	NITRATE	7.467	0.078	0.399	1.83	1.35	0.0795	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**4.241**	**29.551**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6164-5**	*Run Time (min):*	**14.95**
Vial Number:	**24**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**09/Nov/23 00:32**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

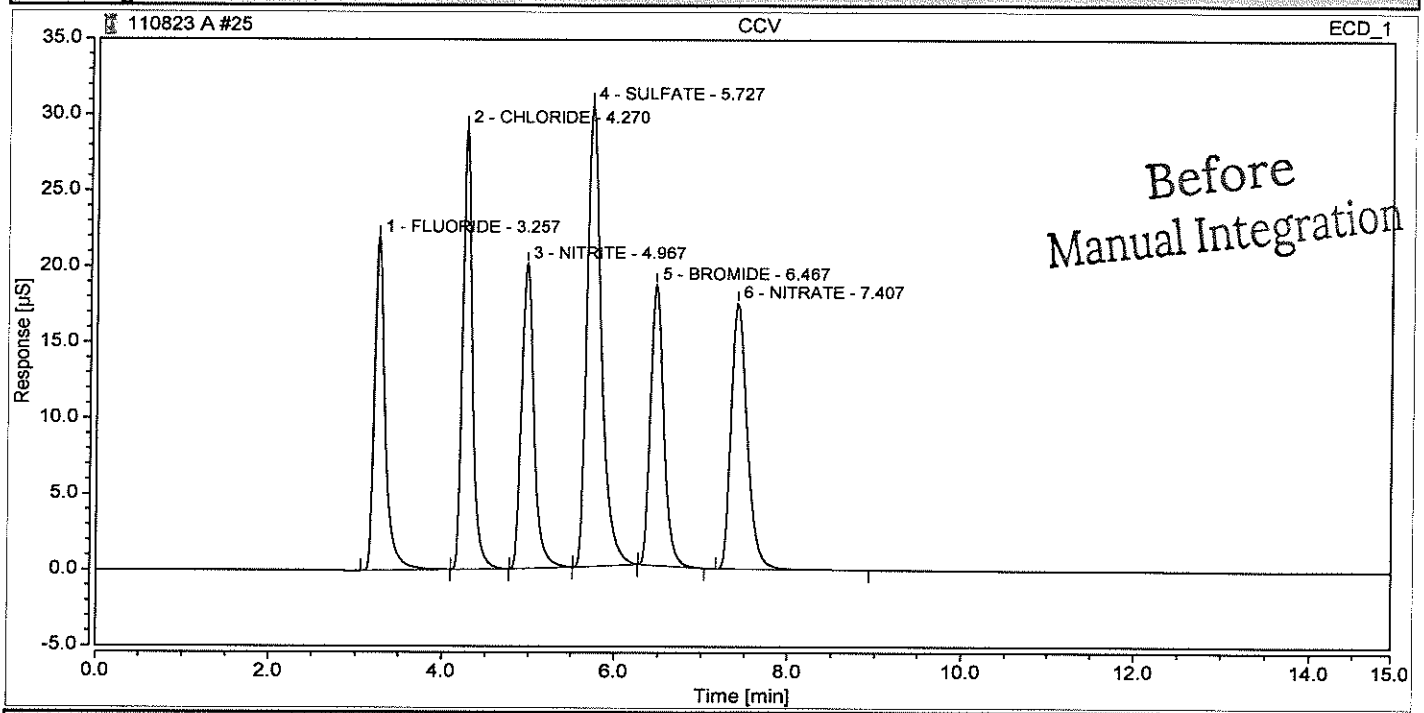
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	CHLORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	SULFATE	5.747	0.032	0.172	29.29	30.10	0.1134	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2	NITRATE	7.467	0.078	0.399	70.71	69.90	0.0795	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.110**	**0.571**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**CCV**	*Run Time (min):*	**14.96**
Vial Number:	**25**	*Injection Volume:*	**200.00**
Injection Type:	**Check Standard**	*Channel:*	**ECD_1**
Calibration Level:	**06**	*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**09/Nov/23 00:49**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

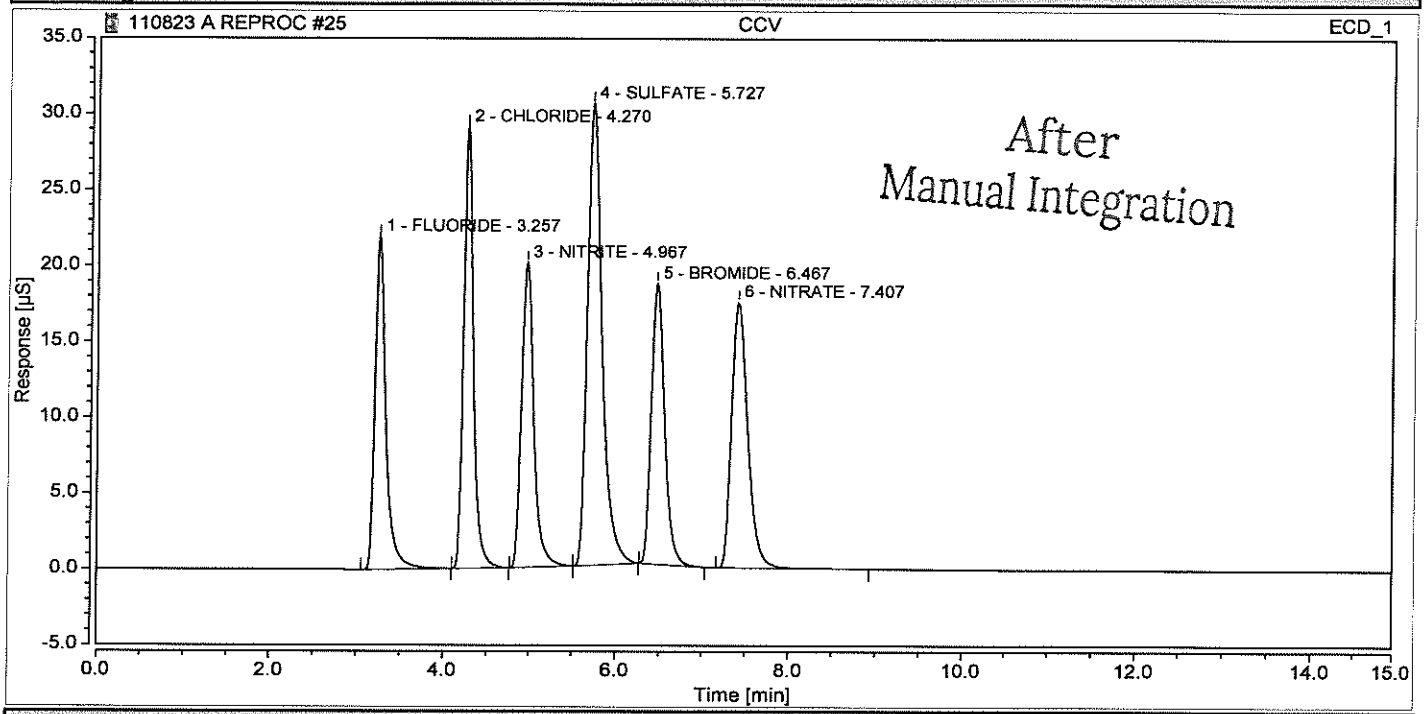
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.257	3.186	21.960	13.61	15.96	5.1773	3.5453
2	CHLORIDE	4.270	3.824	29.105	16.34	21.15	9.8119	-1.8810
3	NITRITE	4.967	3.382	20.096	14.45	14.60	4.0764	1.9101
4	SULFATE	5.727	5.910	30.437	25.25	22.12	20.7909	3.9544
5	BROMIDE	6.467	3.300	18.495	14.10	13.44	19.4102	-2.9492
6	NITRATE	7.407	3.802	17.514	16.24	12.73	3.8850	-2.8741
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**23.405**	**137.607**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**CCV**	*Run Time (min):*	**14.96**
Vial Number:	**25**	*Injection Volume:*	**200.00**
Injection Type:	**Check Standard**	*Channel:*	**ECD_1**
Calibration Level:	**06**	*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**09/Nov/23 00:49**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

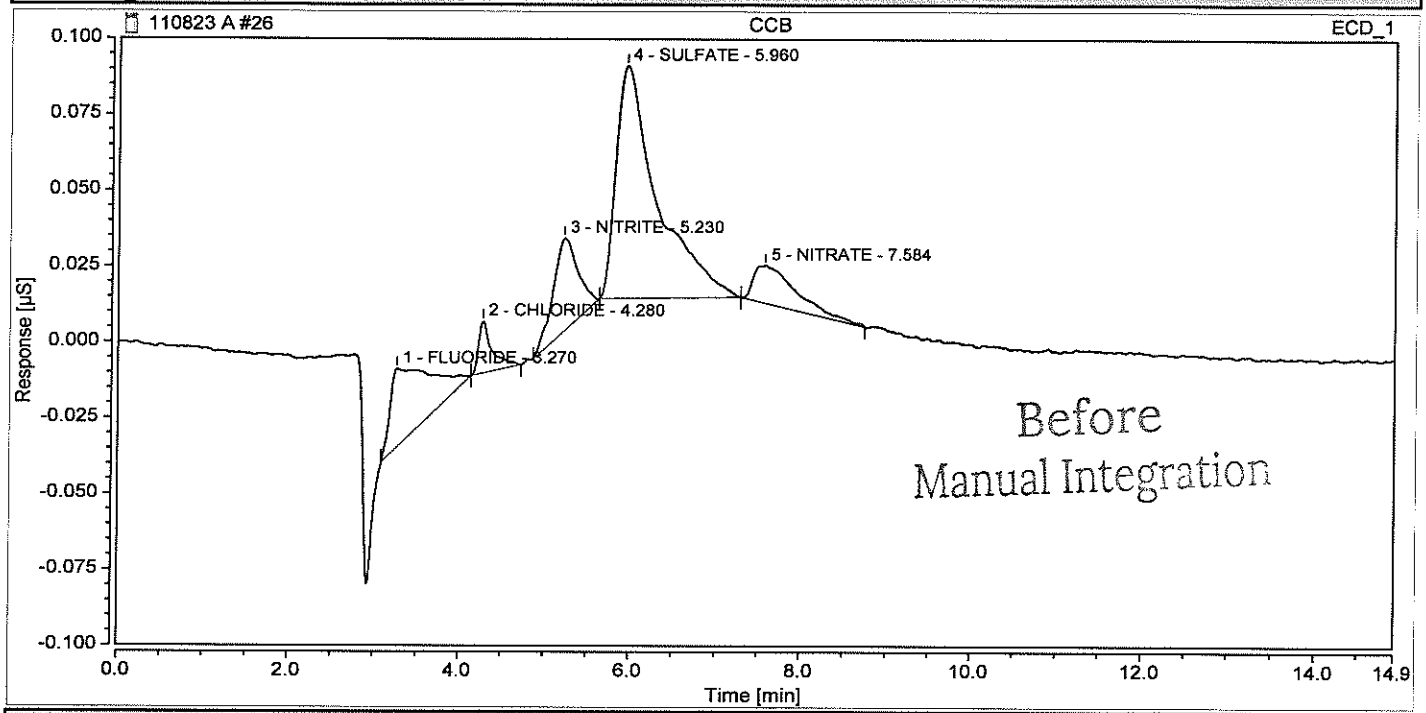
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.257	3.186	21.960	13.61	15.96	5.1773	3.5453
2	CHLORIDE	4.270	3.824	29.105	16.34	21.15	9.8119	-1.8810
3	NITRITE	4.967	3.382	20.096	14.45	14.60	4.0764	1.9101
4	SULFATE	5.727	5.910	30.437	25.25	22.12	20.7909	3.9544
5	BROMIDE	6.467	3.300	18.495	14.10	13.44	19.4102	-2.9492
6	NITRATE	7.407	3.802	17.514	16.24	12.73	3.8850	-2.8741
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**23.405**	**137.607**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**CCB**	*Run Time (min):*	**14.95**
Vial Number:	**26**	*Injection Volume:*	**200.00**
Injection Type:	**Blank**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**09/Nov/23 01:06**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

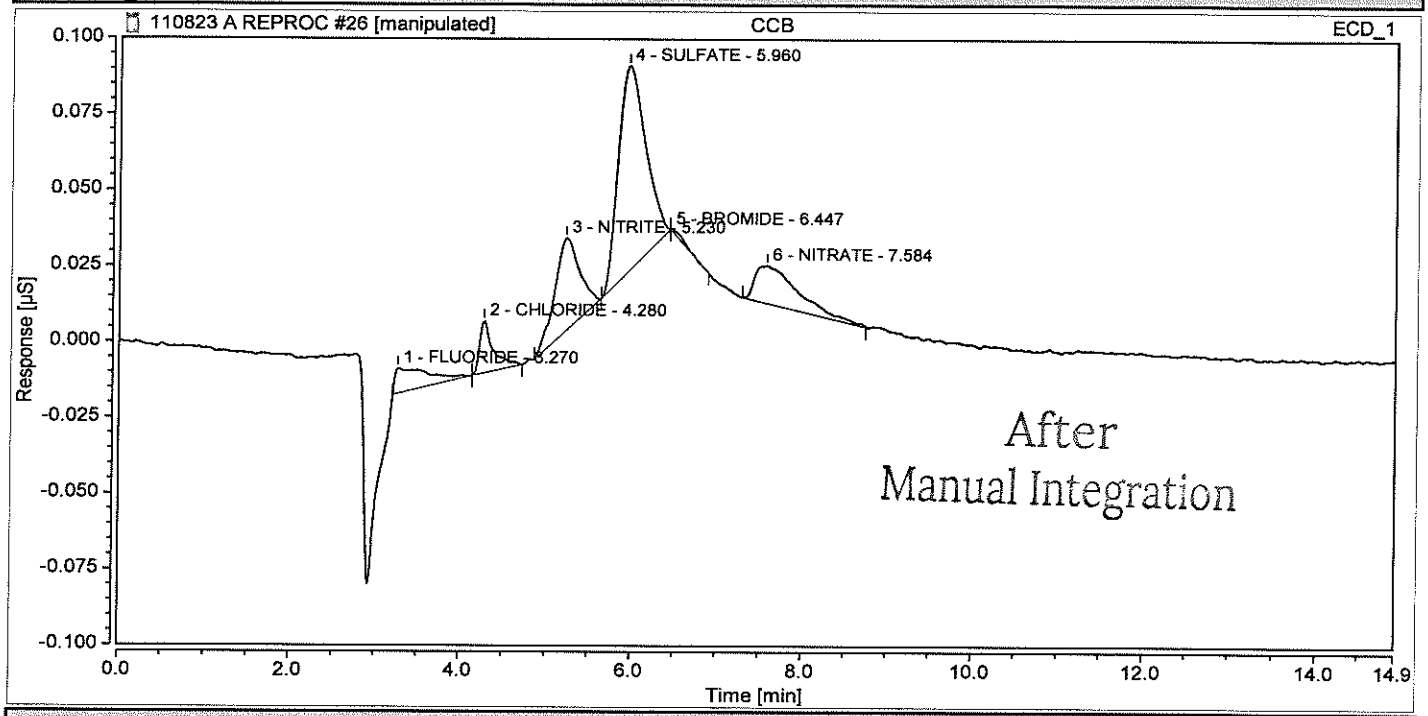
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.270	0.013	0.026	17.33	15.95	0.0375	n.a.
2	CHLORIDE	4.280	0.003	0.017	4.09	10.52	0.0080	n.a.
3	NITRITE	5.230	0.010	0.031	13.39	18.77	0.0202	n.a.
4	SULFATE	5.960	0.042	0.077	55.45	47.09	0.1494	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5	NITRATE	7.584	0.007	0.012	9.75	7.68	0.0076	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.077**	**0.163**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**CCB**	*Run Time (min):*	**14.95**
Vial Number:	**26**	*Injection Volume:*	**200.00**
Injection Type:	**Blank**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**09/Nov/23 01:06**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

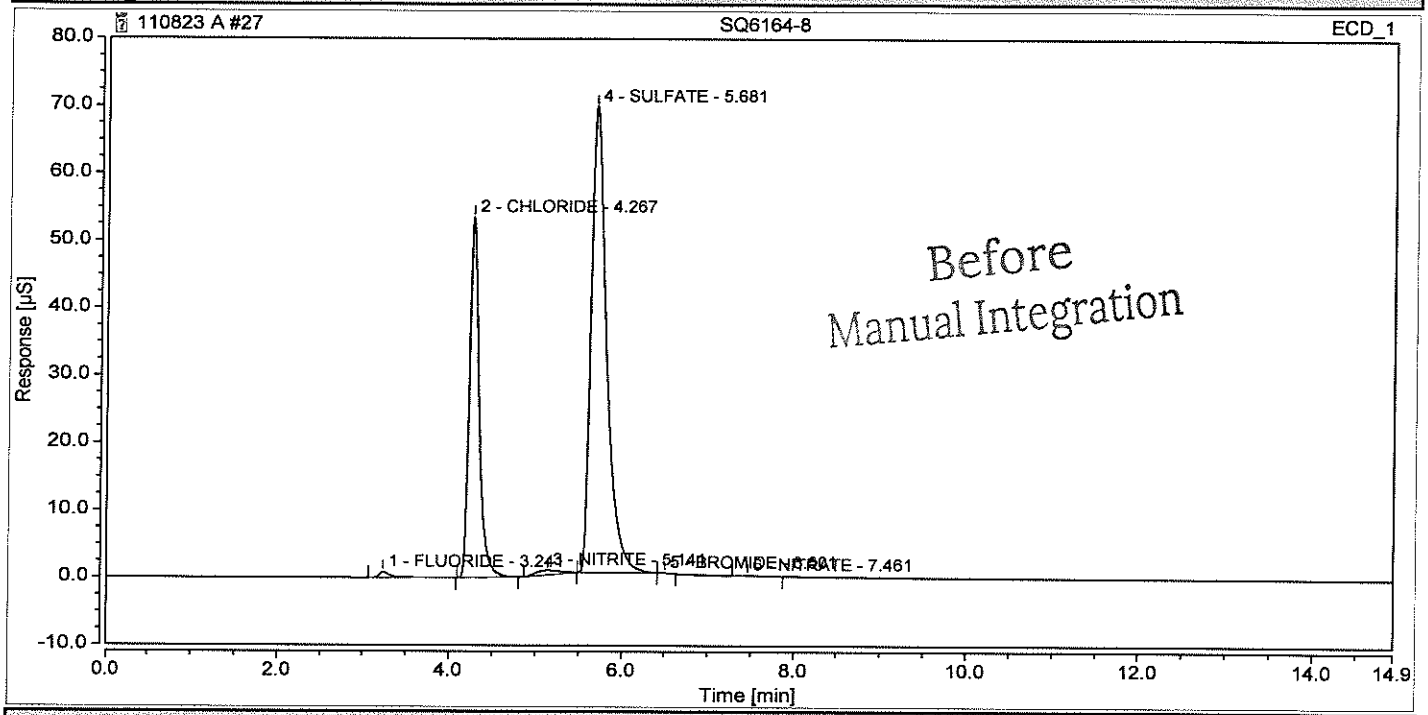
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.270	0.004	0.008	7.13	6.14	0.0222	n.a.
2	CHLORIDE	4.280	0.003	0.017	6.34	12.57	0.0080	n.a.
3	NITRITE	5.230	0.010	0.031	20.73	22.42	0.0202	n.a.
4	SULFATE	5.960	0.025	0.068	50.23	49.70	0.0874	n.a.
5	BROMIDE	6.447	0.000	0.000	0.47	0.00	0.0014	n.a.
6	NITRATE	7.584	0.007	0.012	15.10	9.17	0.0076	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.049**	**0.136**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6164-8**	*Run Time (min):*	**14.95**
Vial Number:	**27**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**09/Nov/23 01:23**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

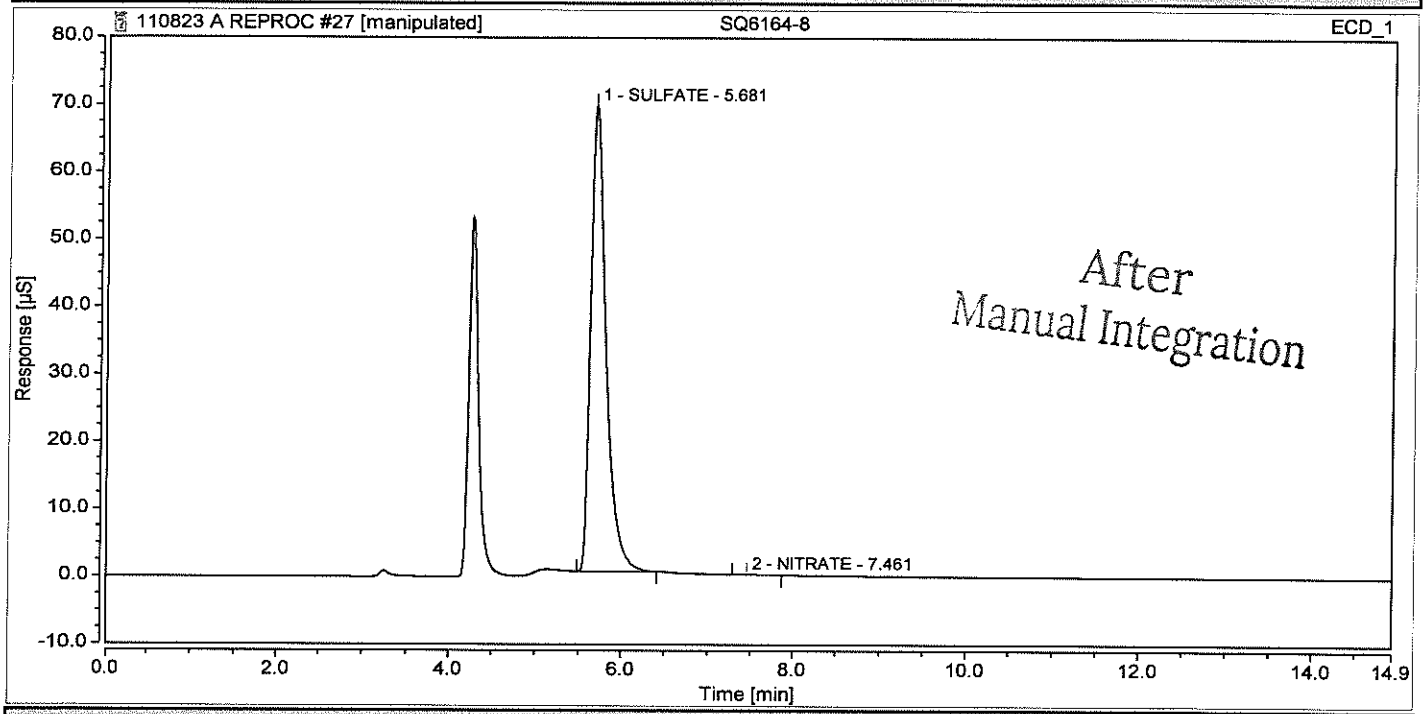
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.241	0.136	0.868	0.62	0.70	0.2301	n.a.
2	CHLORIDE	4.267	7.067	53.464	32.34	43.05	18.1322	n.a.
3	NITRITE	5.141	0.221	0.678	1.01	0.55	0.2663	n.a.
4	SULFATE	5.681	14.414	69.082	65.96	55.63	50.7038	n.a.
5	BROMIDE	6.501	0.004	0.039	0.02	0.03	0.0257	n.a.
6	NITRATE	7.461	0.011	0.060	0.05	0.05	0.0117	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**21.854**	**124.191**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6164-8**	*Run Time (min):*	**14.95**
Vial Number:	**27**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**09/Nov/23 01:23**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

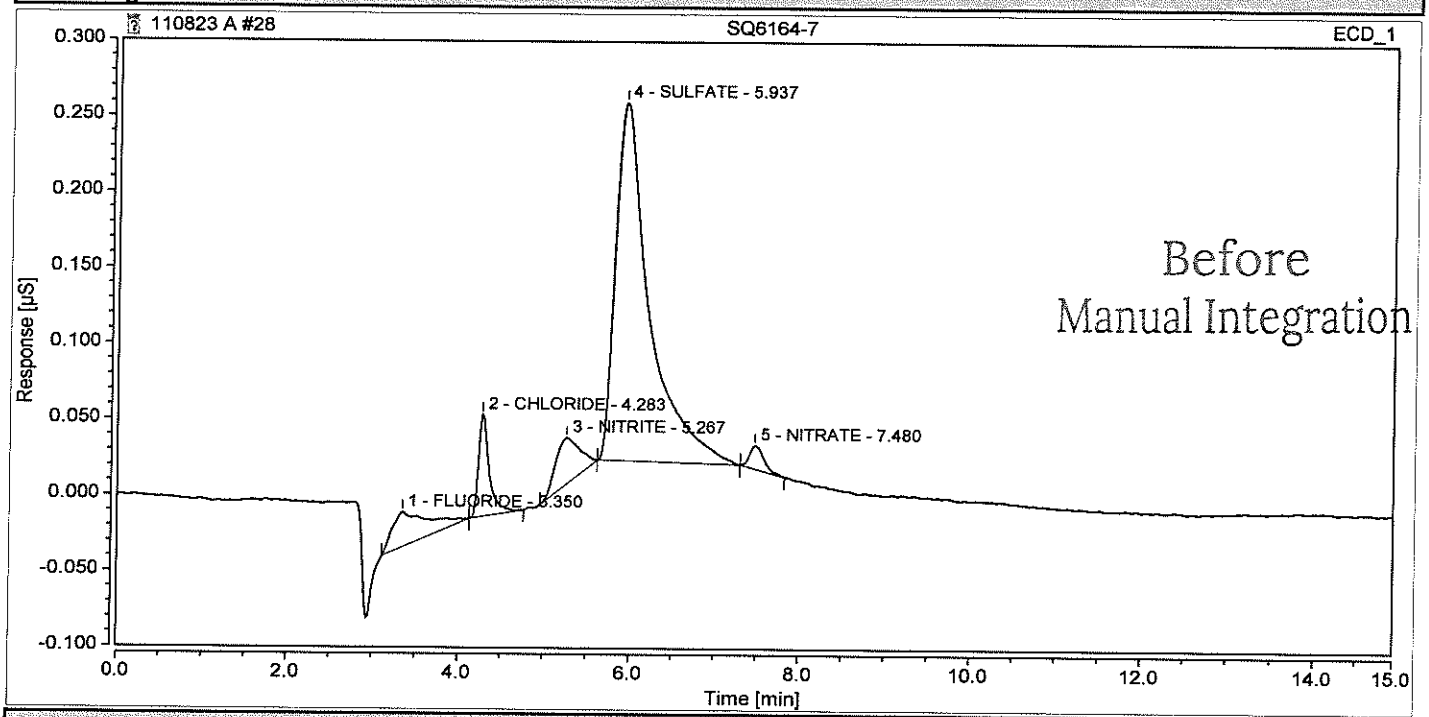
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	CHLORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	SULFATE	5.681	14.414	69.082	99.92	99.91	50.7038	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2	NITRATE	7.461	0.011	0.060	0.08	0.09	0.0117	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**14.425**	**69.141**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6164-7**	*Run Time (min):*	**14.95**
Vial Number:	**28**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**09/Nov/23 01:41**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

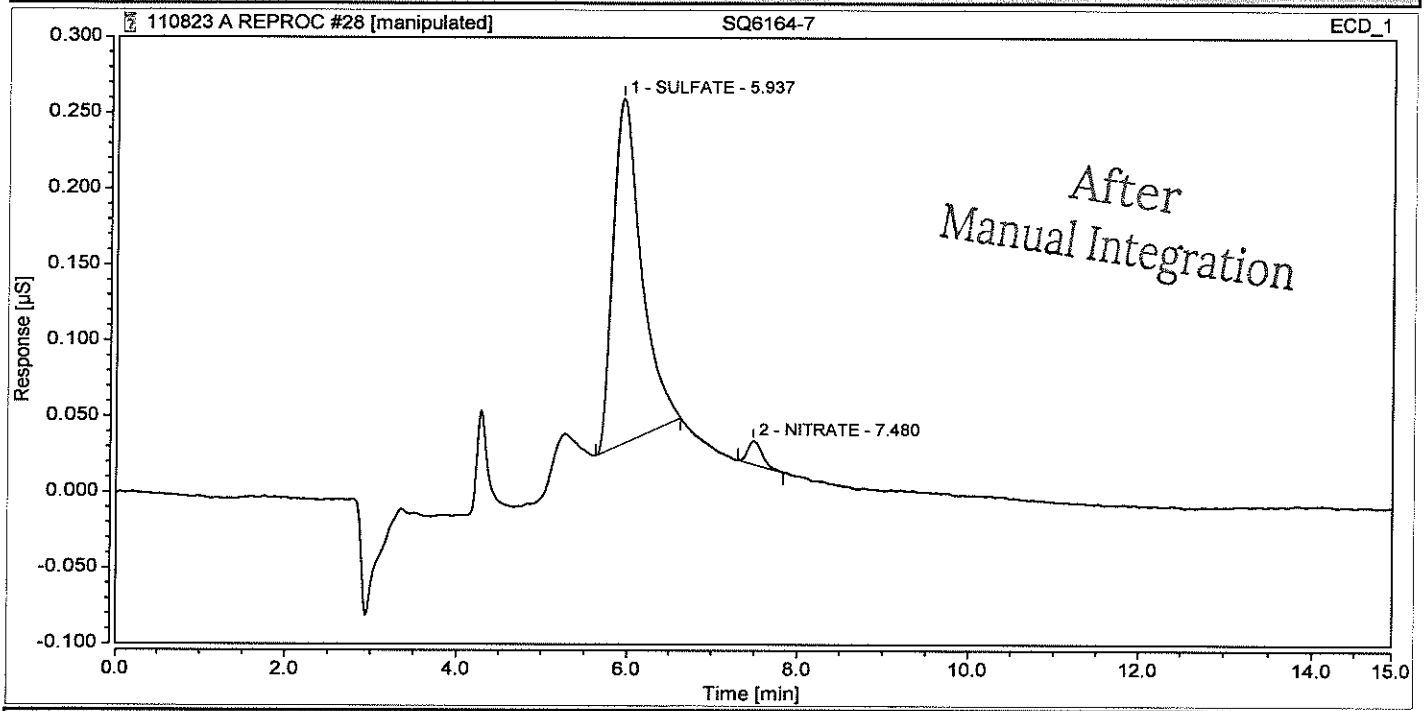
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.350	0.011	0.023	7.53	6.21	0.0335	n.a.
2	CHLORIDE	4.283	0.010	0.067	6.92	18.05	0.0253	n.a.
3	NITRITE	5.267	0.010	0.030	6.84	8.15	0.0196	n.a.
4	SULFATE	5.937	0.109	0.236	76.54	63.39	0.3833	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5	NITRATE	7.480	0.003	0.016	2.17	4.20	0.0032	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.142**	**0.373**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6164-7**	*Run Time (min):*	**14.95**
Vial Number:	**28**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**09/Nov/23 01:41**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

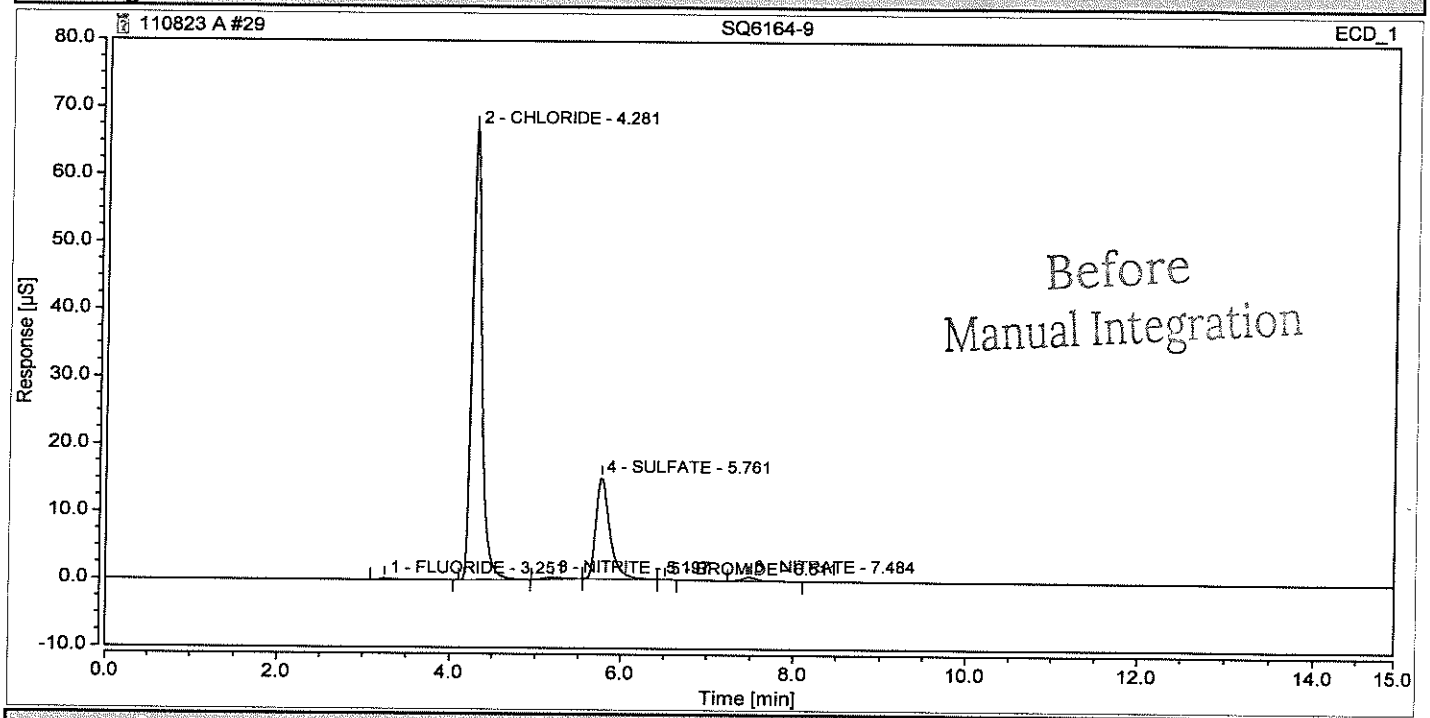
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	CHLORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	SULFATE	5.937	0.089	0.228	96.62	93.57	0.3113	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2	NITRATE	7.480	0.003	0.016	3.38	6.43	0.0032	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.092**	**0.244**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6164-9**	*Run Time (min):*	**14.95**
Vial Number:	**29**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**09/Nov/23 01:58**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

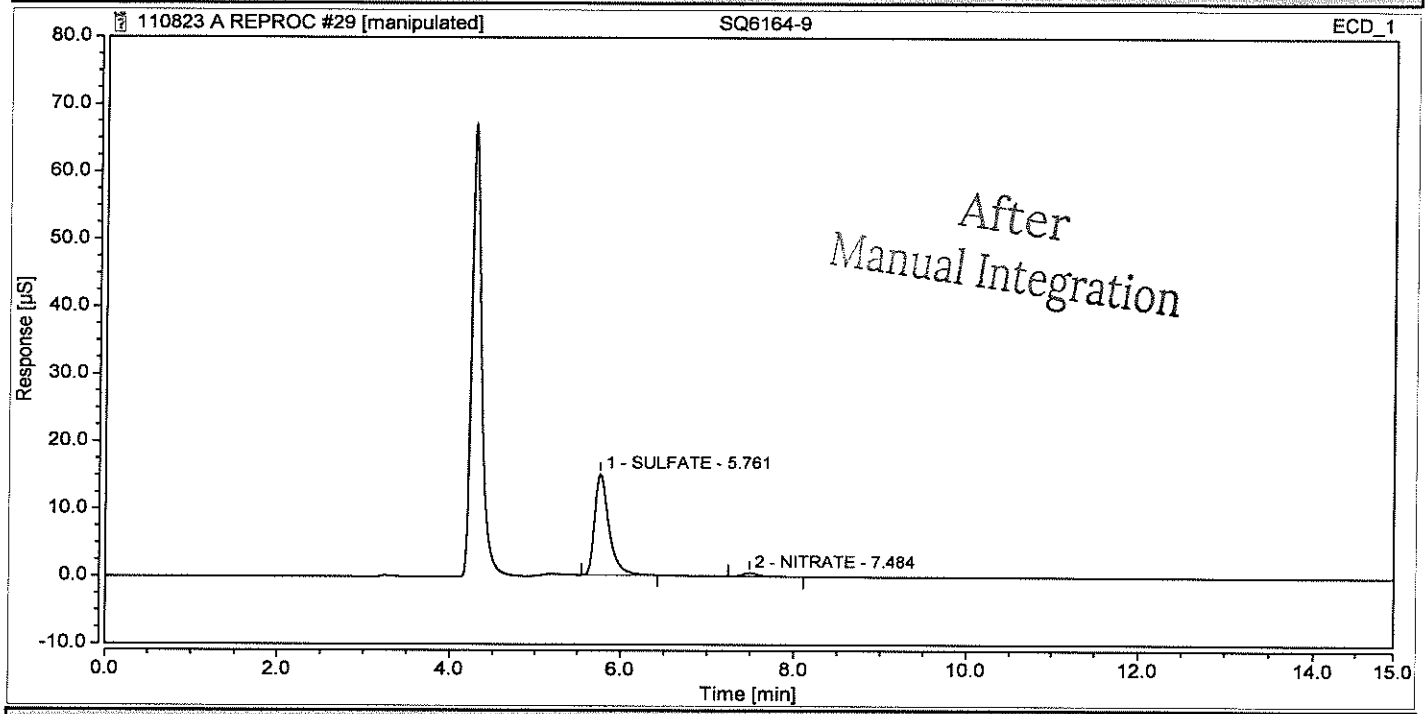
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.251	0.041	0.234	0.34	0.28	0.0818	n.a.
2	CHLORIDE	4.281	8.942	66.965	74.27	80.65	22.9441	n.a.
3	NITRITE	5.197	0.079	0.267	0.66	0.32	0.1003	n.a.
4	SULFATE	5.761	2.869	15.018	23.83	18.09	10.0914	n.a.
5	BROMIDE	6.511	0.001	0.013	0.01	0.02	0.0086	n.a.
6	NITRATE	7.484	0.107	0.540	0.89	0.65	0.1093	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**12.040**	**83.036**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6164-9**	*Run Time (min):*	**14.95**
Vial Number:	**29**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**09/Nov/23 01:58**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

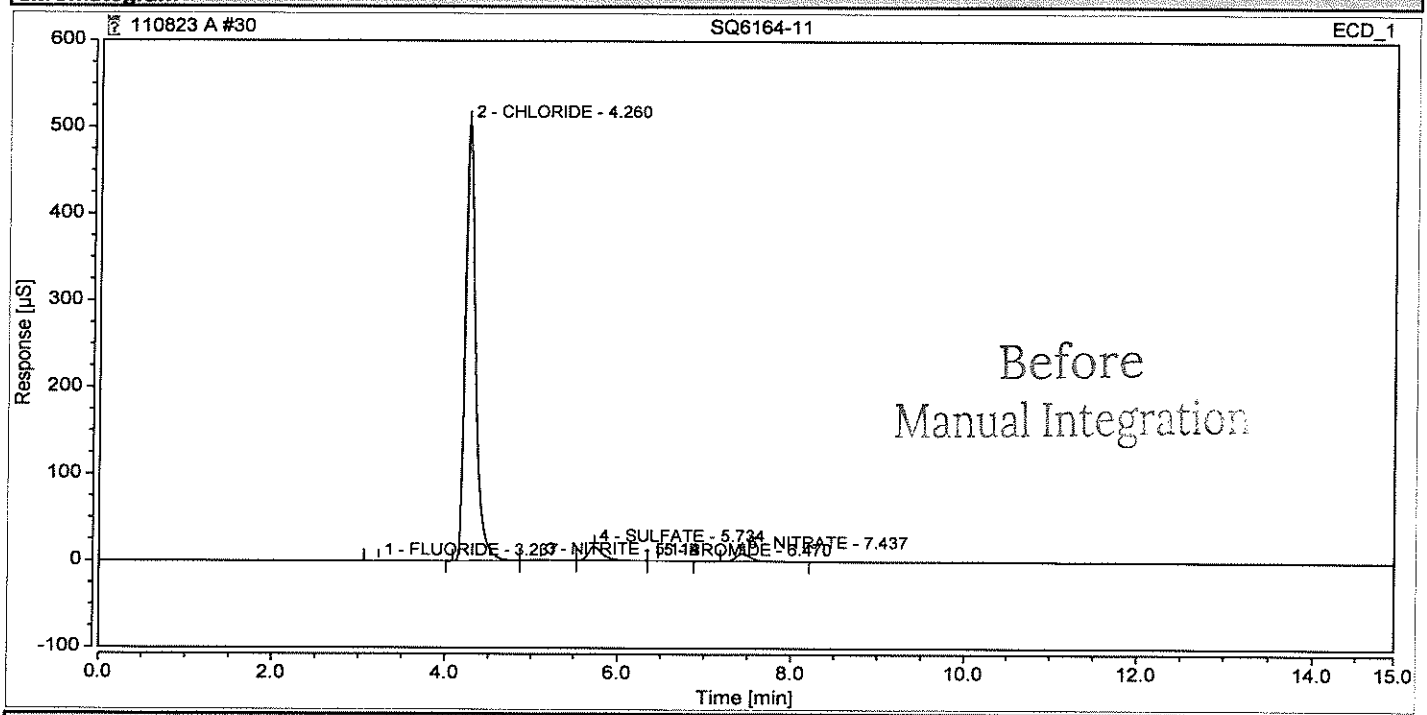
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	CHLORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	SULFATE	5.761	2.869	15.018	96.40	96.53	10.0914	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2	NITRATE	7.484	0.107	0.540	3.60	3.47	0.1093	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**2.976**	**15.557**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6164-11**	*Run Time (min):*	**14.95**
Vial Number:	**30**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**09/Nov/23 02:15**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

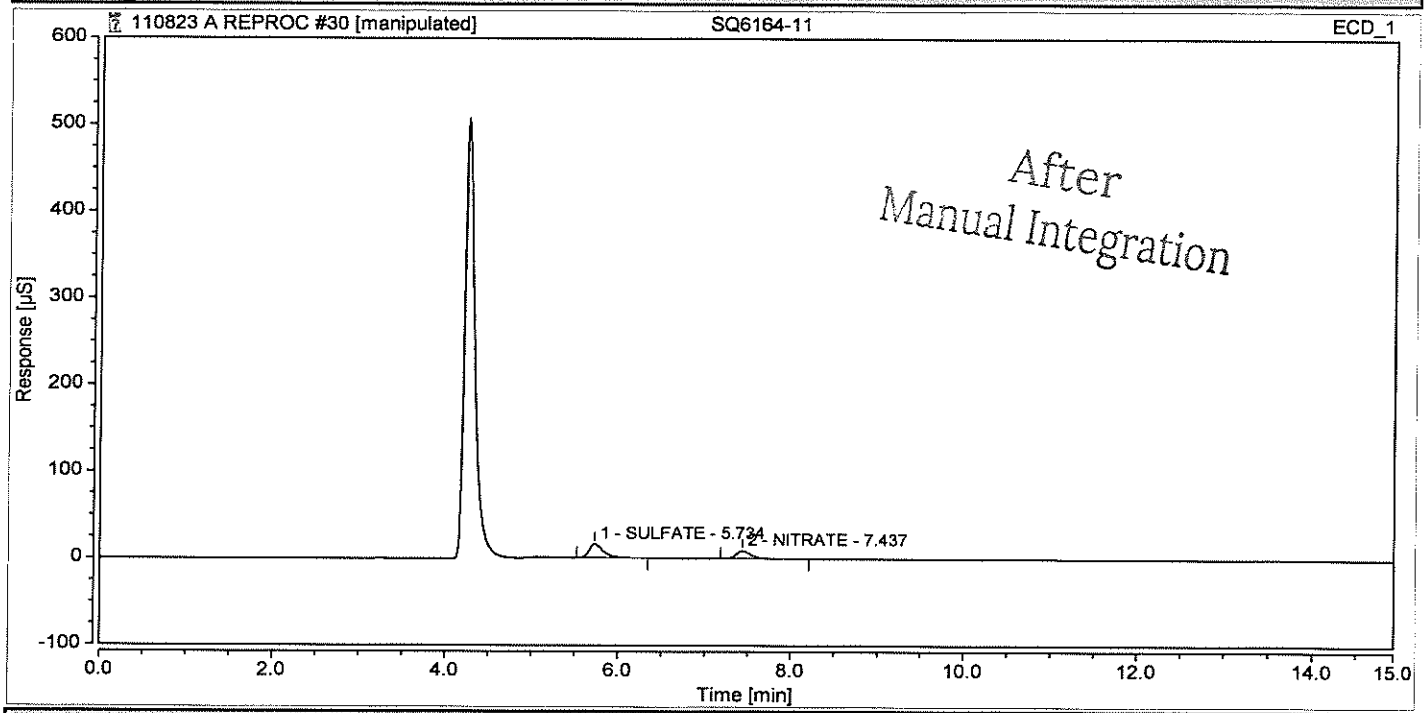
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.237	0.046	0.246	0.06	0.05	0.0884	n.a.
2	CHLORIDE	4.260	70.070	505.552	93.24	95.12	179.7822	n.a.
3	NITRITE	5.114	0.266	0.774	0.35	0.15	0.3190	n.a.
4	SULFATE	5.734	2.984	16.004	3.97	3.01	10.4972	n.a.
5	BROMIDE	6.470	0.013	0.071	0.02	0.01	0.0791	n.a.
6	NITRATE	7.437	1.774	8.864	2.36	1.67	1.8124	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**75.153**	**531.510**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6164-11**	*Run Time (min):*	**14.95**
Vial Number:	**30**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**09/Nov/23 02:15**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

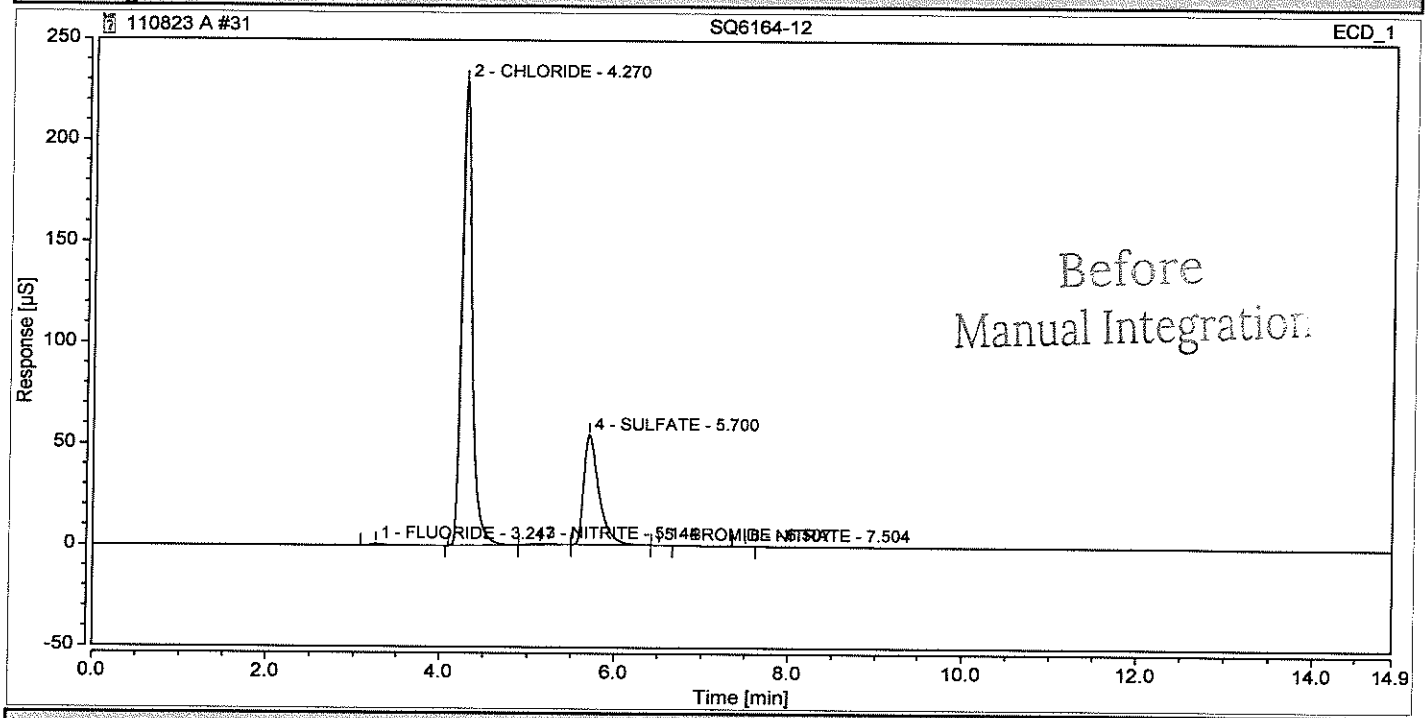
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	CHLORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	SULFATE	5.734	2.984	16.004	62.72	64.36	10.4972	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2	NITRATE	7.437	1.774	8.864	37.28	35.64	1.8124	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**4.758**	**24.868**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6164-12**	*Run Time (min):*	**14.94**
Vial Number:	**31**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**09/Nov/23 02:32**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

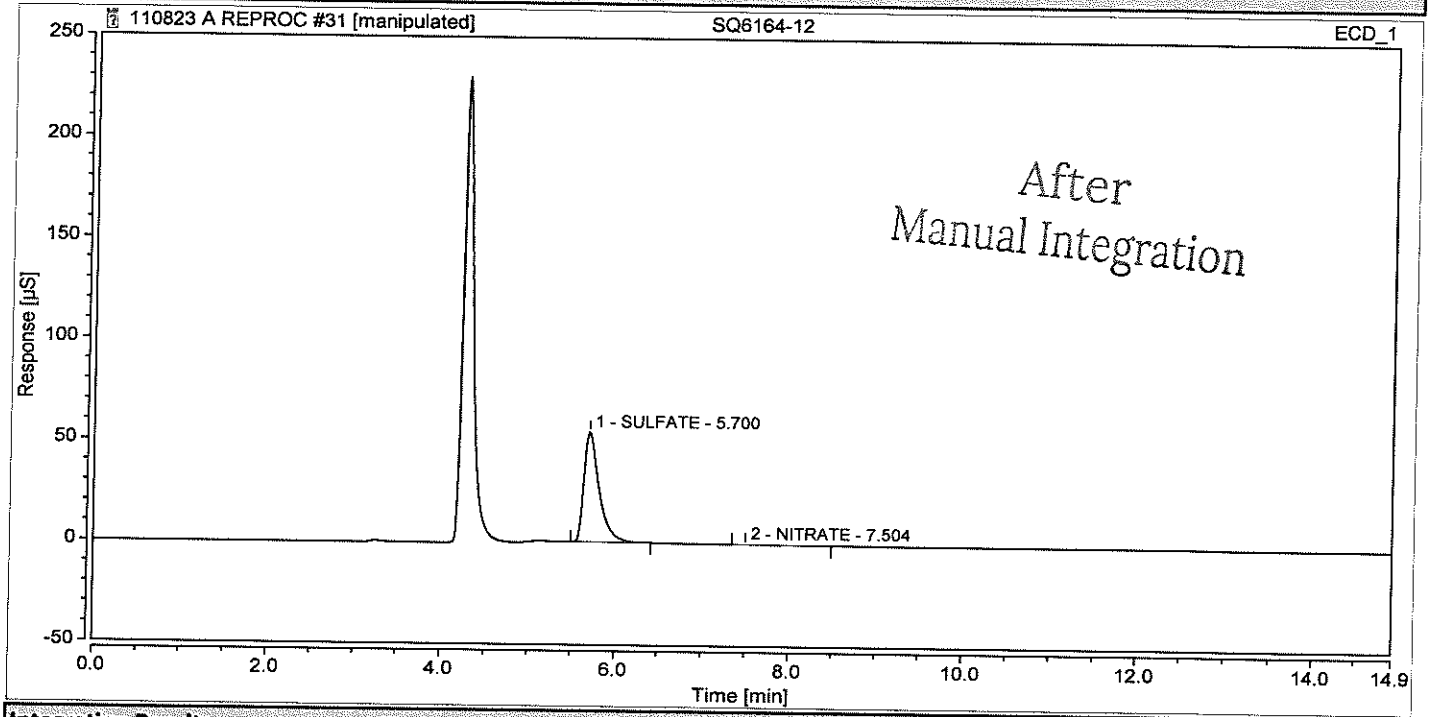
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.247	0.137	0.833	0.32	0.29	0.2325	n.a.
2	CHLORIDE	4.270	31.331	229.236	73.43	80.47	80.3886	n.a.
3	NITRITE	5.144	0.193	0.609	0.45	0.21	0.2329	n.a.
4	SULFATE	5.700	11.002	54.160	25.79	19.01	38.7014	n.a.
5	BROMIDE	6.507	0.004	0.037	0.01	0.01	0.0253	n.a.
6	NITRATE	7.504	0.000	0.003	0.00	0.00	0.0004	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**42.668**	**284.877**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6164-12**	*Run Time (min):*	**14.94**
Vial Number:	**31**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**09/Nov/23 02:32**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

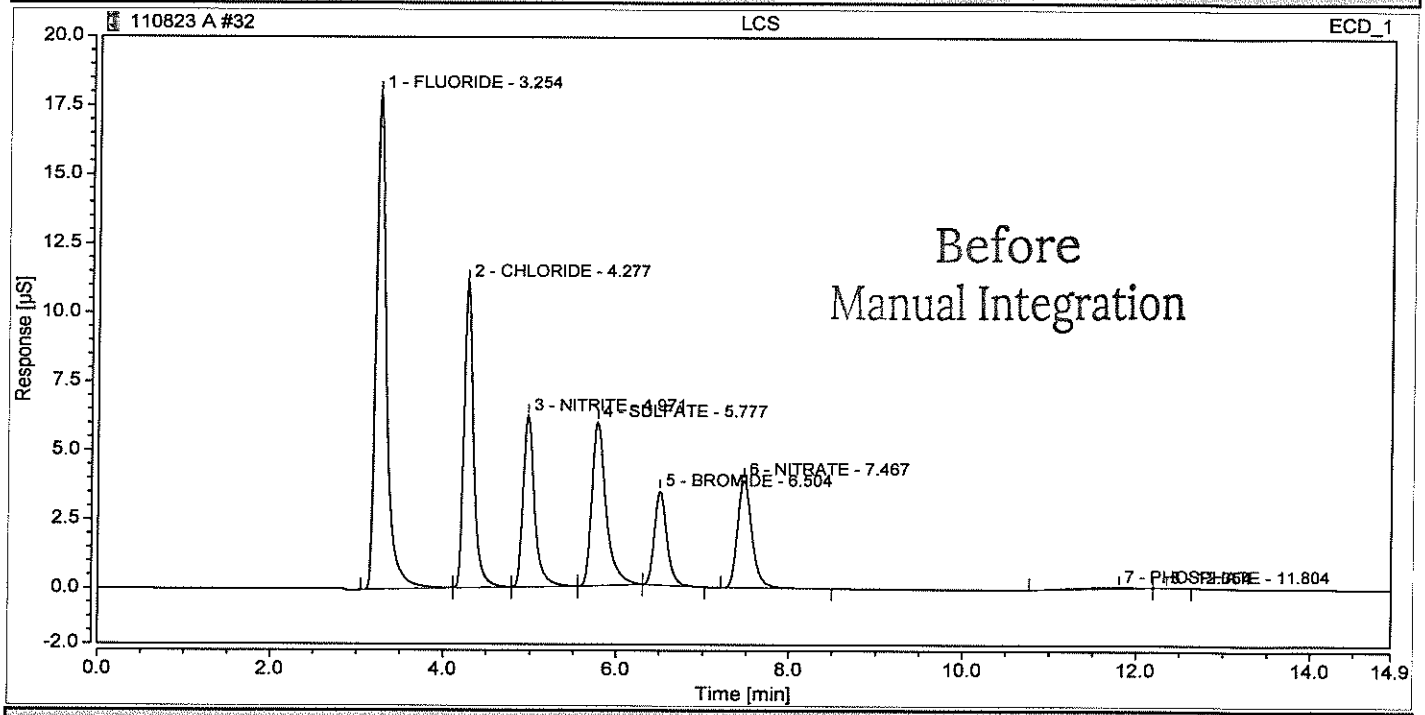
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	CHLORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	SULFATE	5.700	11.002	54.160	99.96	100.00	38.7014	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2	NITRATE	7.504	0.005	0.001	0.04	0.00	0.0048	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**11.007**	**54.160**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**LCS**	*Run Time (min):*	**14.95**
Vial Number:	**36**	*Injection Volume:*	**200.00**
Injection Type:	**Check Standard**	*Channel:*	**ECD_1**
Calibration Level:	**09**	*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**09/Nov/23 02:50**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

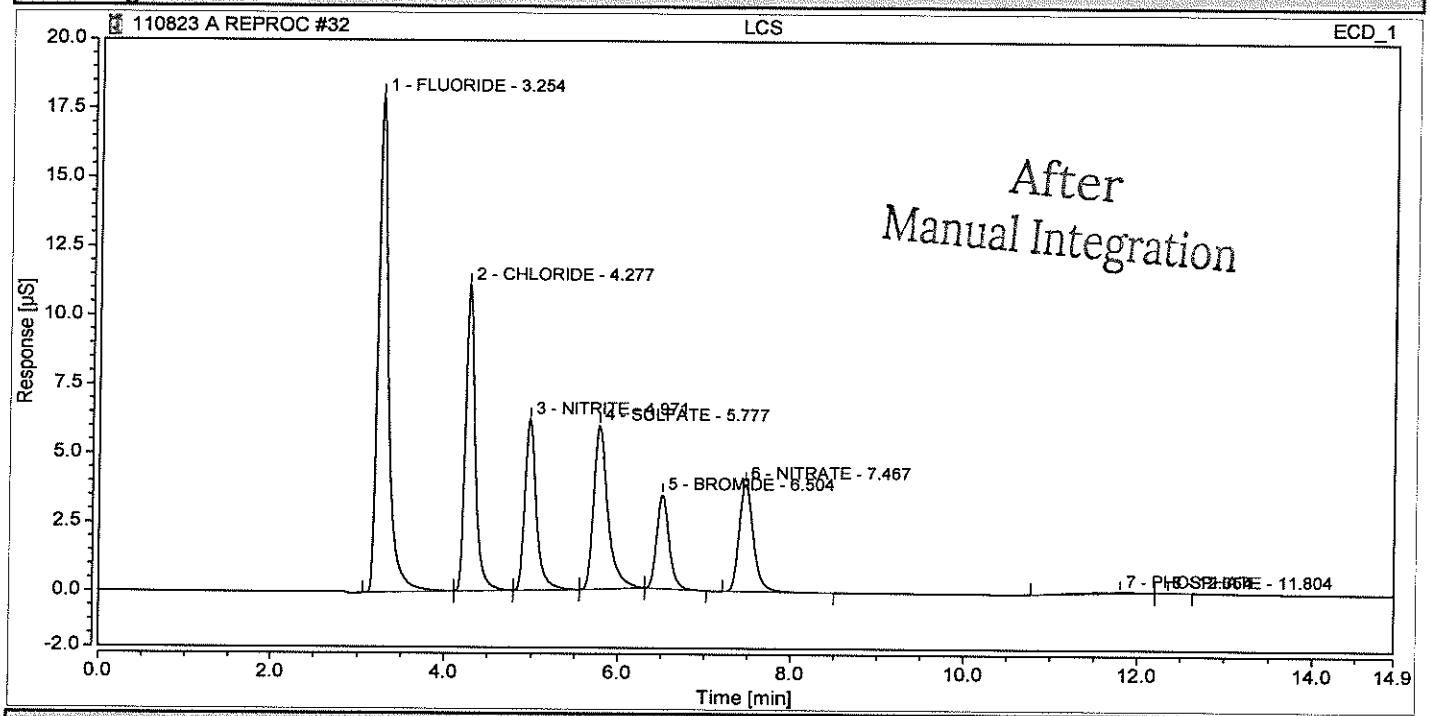
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.254	2.520	17.992	33.89	37.05	4.0716	8.5765
2	CHLORIDE	4.277	1.441	11.091	19.37	22.84	3.6961	-1.4382
3	NITRITE	4.971	0.958	6.199	12.88	12.77	1.1337	-0.5495
4	SULFATE	5.777	1.139	5.932	15.31	12.22	4.0065	6.8407
5	BROMIDE	6.504	0.570	3.402	7.67	7.01	3.3539	-10.5623
6	NITRATE	7.467	0.775	3.908	10.42	8.05	0.7918	-6.3002
7	PHOSPHATE	11.804	0.034	0.033	0.45	0.07	n.a.	n.a.
8		12.354	0.000	0.001	0.00	0.00	n.a.	n.a.
Total:			**7.437**	**48.558**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**LCS**	*Run Time (min):*	**14.95**
Vial Number:	**36**	*Injection Volume:*	**200.00**
Injection Type:	**Check Standard**	*Channel:*	**ECD_1**
Calibration Level:	**09**	*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**09/Nov/23 02:50**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

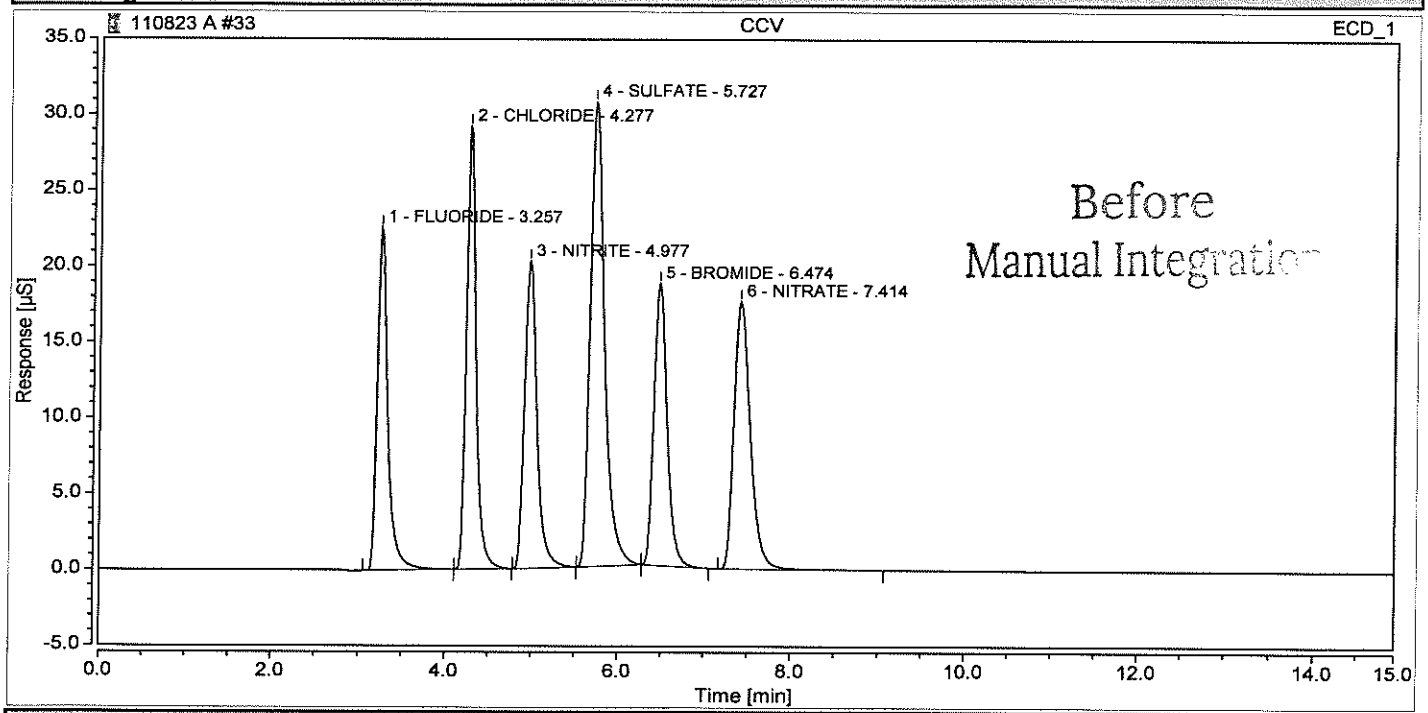
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.254	2.520	17.992	33.89	37.05	4.0716	8.5765
2	CHLORIDE	4.277	1.441	11.091	19.37	22.84	3.6961	-1.4382
3	NITRITE	4.971	0.958	6.199	12.88	12.77	1.1337	-0.5495
4	SULFATE	5.777	1.139	5.932	15.31	12.22	4.0065	6.8407
5	BROMIDE	6.504	0.570	3.402	7.67	7.01	3.3539	-10.5623
6	NITRATE	7.467	0.775	3.908	10.42	8.05	0.7918	-6.3002
7	PHOSPHATE	11.804	0.034	0.033	0.45	0.07	n.a.	n.a.
8		12.354	0.000	0.001	0.00	0.00	n.a.	n.a.
Total:			**7.437**	**48.558**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**CCV**	*Run Time (min):*	**14.95**
Vial Number:	**37**	*Injection Volume:*	**200.00**
Injection Type:	**Check Standard**	*Channel:*	**ECD_1**
Calibration Level:	**06**	*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**09/Nov/23 03:07**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

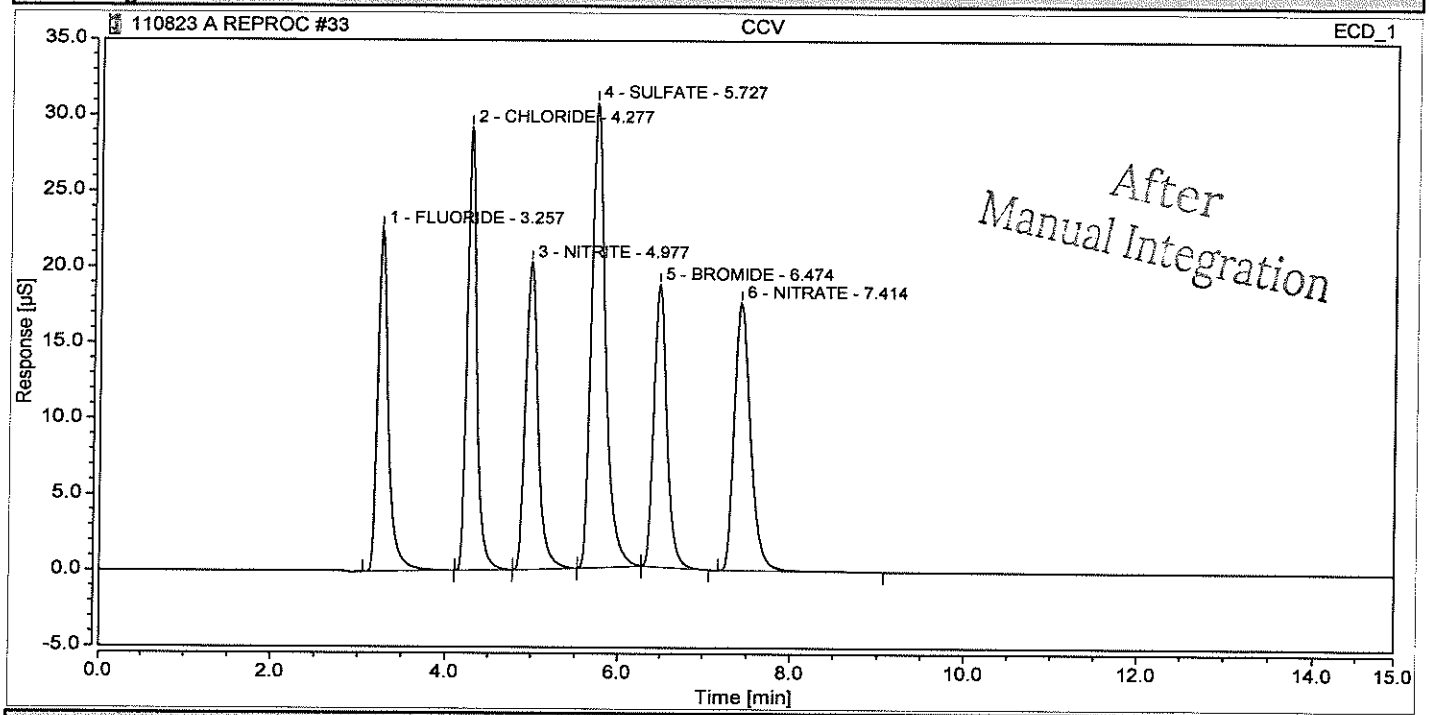
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.257	3.194	22.603	13.63	16.28	5.1904	3.8076
2	CHLORIDE	4.277	3.849	29.209	16.42	21.03	9.8746	-1.2537
3	NITRITE	4.977	3.401	20.232	14.51	14.57	4.0995	2.4883
4	SULFATE	5.727	5.847	30.633	24.94	22.06	20.5686	2.8430
5	BROMIDE	6.474	3.320	18.589	14.16	13.39	19.5271	-2.3646
6	NITRATE	7.414	3.833	17.613	16.35	12.68	3.9168	-2.0810
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**23.444**	**138.878**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**CCV**	*Run Time (min):*	**14.95**
Vial Number:	**37**	*Injection Volume:*	**200.00**
Injection Type:	**Check Standard**	*Channel:*	**ECD_1**
Calibration Level:	**06**	*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**09/Nov/23 03:07**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

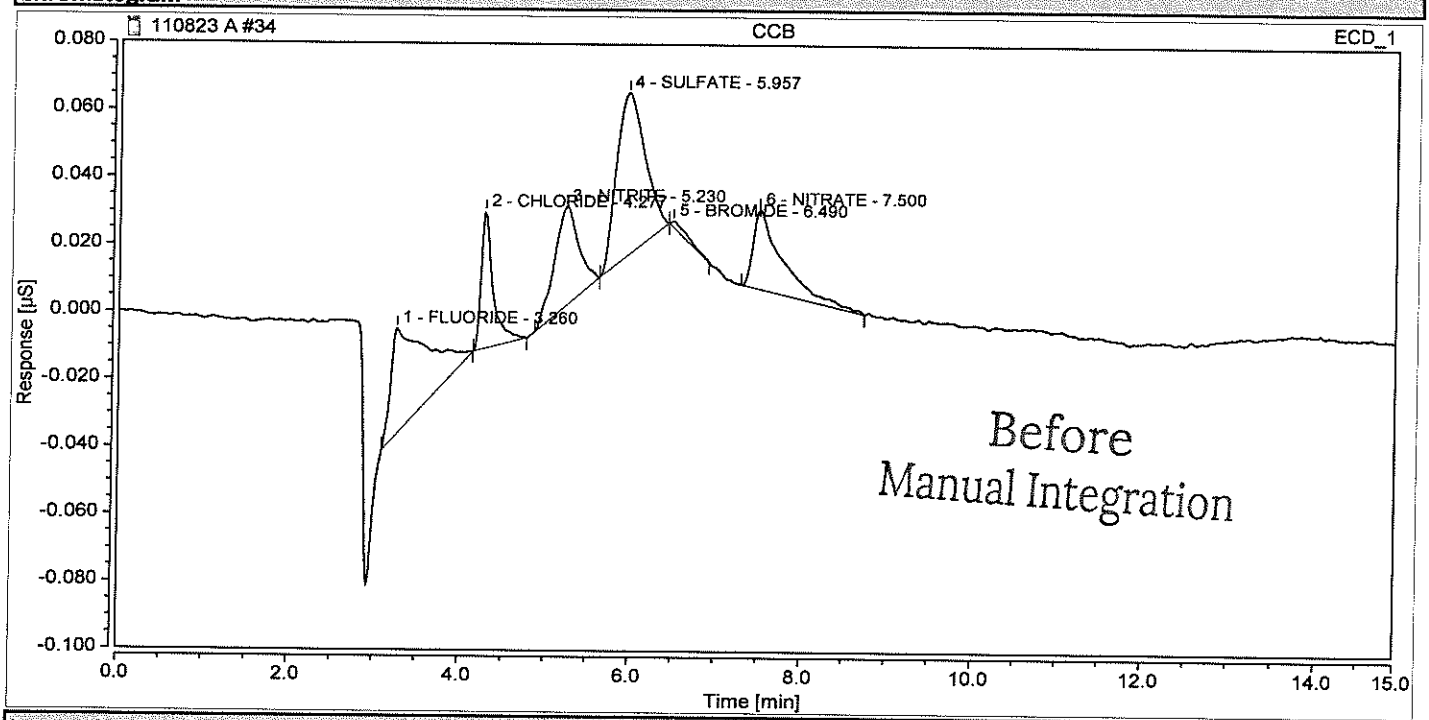
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.257	3.194	22.603	13.63	16.28	5.1904	3.8076
2	CHLORIDE	4.277	3.849	29.209	16.42	21.03	9.8746	-1.2537
3	NITRITE	4.977	3.401	20.232	14.51	14.57	4.0995	2.4883
4	SULFATE	5.727	5.847	30.633	24.94	22.06	20.5686	2.8430
5	BROMIDE	6.474	3.320	18.589	14.16	13.39	19.5271	-2.3646
6	NITRATE	7.414	3.833	17.613	16.35	12.68	3.9168	-2.0810
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**23.444**	**138.878**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**CCB**	*Run Time (min):*	**14.95**
Vial Number:	**38**	*Injection Volume:*	**200.00**
Injection Type:	**Blank**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**09/Nov/23 03:24**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

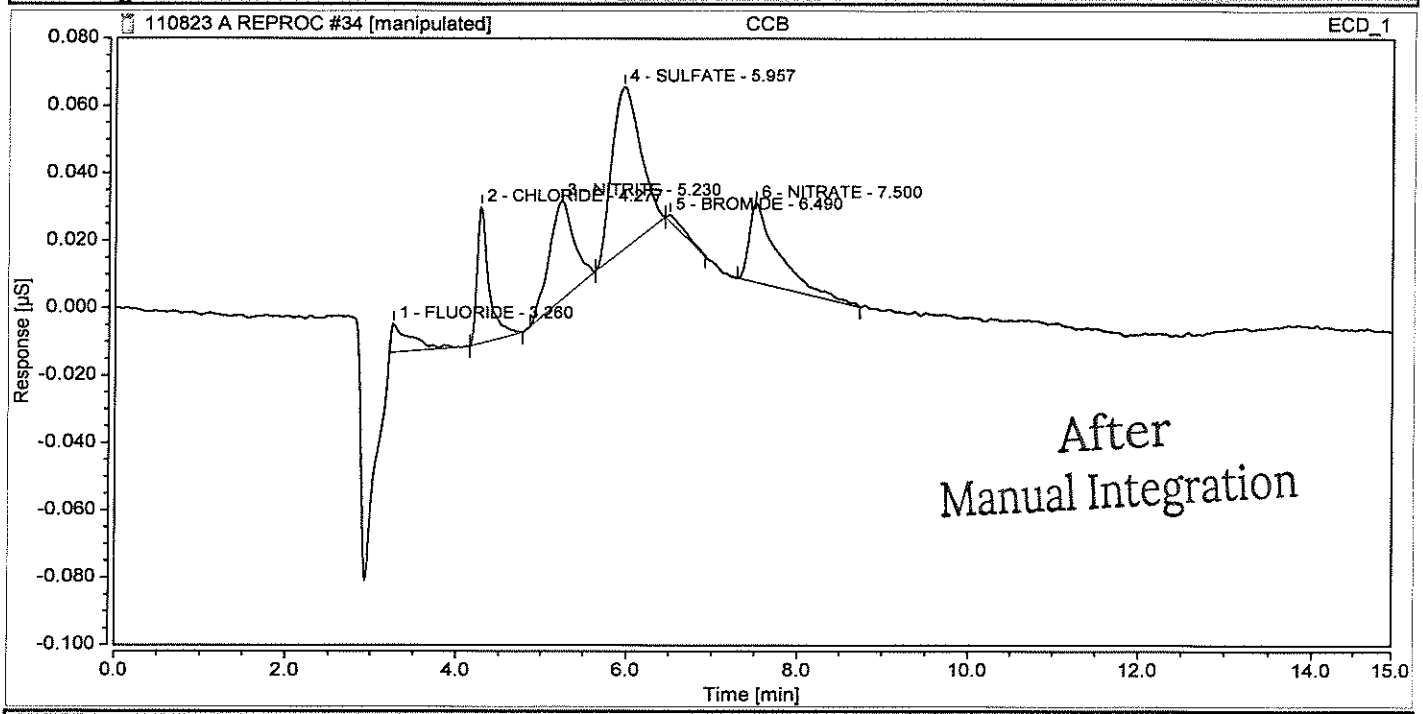
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.260	0.015	0.031	24.65	17.96	0.0396	n.a.
2	CHLORIDE	4.277	0.006	0.041	10.93	23.18	0.0166	n.a.
3	NITRITE	5.230	0.010	0.029	16.59	16.81	0.0197	n.a.
4	SULFATE	5.957	0.018	0.048	31.08	27.49	0.0648	n.a.
5	BROMIDE	6.490	0.001	0.002	0.87	1.10	0.0030	n.a.
6	NITRATE	7.500	0.009	0.024	15.89	13.45	0.0096	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.059**	**0.175**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**CCB**	*Run Time (min):*	**14.95**
Vial Number:	**38**	*Injection Volume:*	**200.00**
Injection Type:	**Blank**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**09/Nov/23 03:24**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.260	0.002	0.009	4.65	5.61	0.0201	n.a.
2	CHLORIDE	4.277	0.006	0.041	13.83	26.67	0.0166	n.a.
3	NITRITE	5.230	0.010	0.029	20.99	19.34	0.0197	n.a.
4	SULFATE	5.957	0.018	0.048	39.32	31.64	0.0648	n.a.
5	BROMIDE	6.490	0.001	0.002	1.10	1.26	0.0030	n.a.
6	NITRATE	7.500	0.009	0.024	20.11	15.48	0.0096	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.047**	**0.152**	**100.00**	**100.00**		

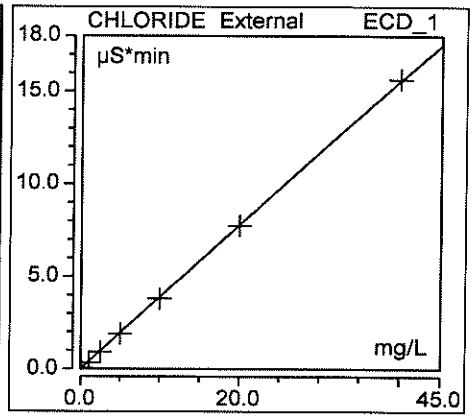
Calibration Batch Report

Sequence:	**101223 CAL REPROC**	*Injection Volume:*	**200.00**
Instrument Method:	**32mM80mA**	*Operator:*	**wetlab**
Inj. Date / Time:	**12-Oct-2023 / 13:07**	*Run Time:*	**14.946667**

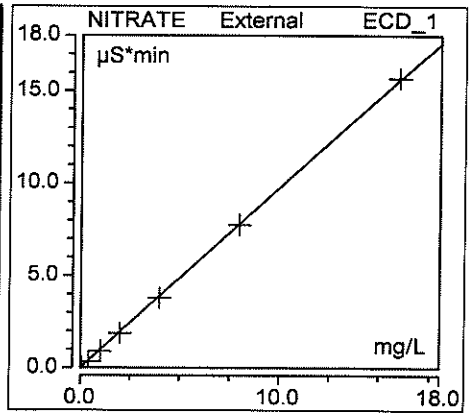
Calibration Summary

Peak Name	Eval.Type	Cal.Type	Points	Offset (C0)	Slope (C1)	Curve (C2)	Coeff.Det. %
FLUORIDE	Area	ly2, WithOff	8.000	-0.011	0.637	-0.004	99.9990
CHLORIDE	Area	Lin	8.000	0.000	0.390	0.000	99.9875
NITRITE	Area	ly2, WithOff	8.000	-0.007	0.859	-0.007	99.9990
SULFATE	Area	Lin	8.000	0.000	0.284	0.000	99.9981
BROMIDE	Area	Lin	8.000	0.000	0.170	0.000	99.9752
NITRATE	Area	Lin	8.000	0.000	0.976	0.000	99.9814
		AVERAGE:		-0.0029	0.5526	-0.0018	99.9900

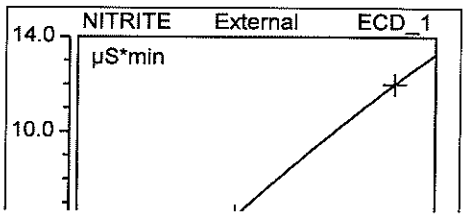
Injection Name **CHLORIDE**	Ret.Time min CHLORIDE	Area µS*min CHLORIDE	Height µS CHLORIDE	Amount mg/L CHLORIDE
	ECD_1	ECD_1	ECD_1	ECD_1
IC1	4.310	0.0013	0.007	0.003
IC2	4.290	0.0319	0.236	0.082
IC3	4.280	0.3373	2.649	0.865
IC4	4.277	0.9117	7.111	2.339
IC5	4.277	1.8945	14.718	4.861
IC6	4.280	3.7977	29.083	9.744
IC7	4.274	7.7443	58.666	19.870
IC8	4.273	15.6522	117.462	40.160
Average	4.283			
Rel. Std. Dev.	0.287 %			



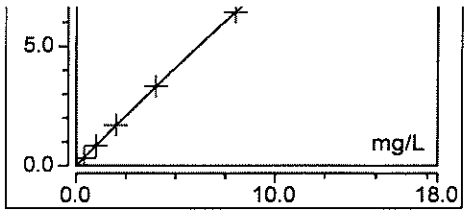
Injection Name **NITRATE**	Ret.Time min NITRATE	Area µS*min NITRATE	Height µS NITRATE	Amount mg/L NITRATE
	ECD_1	ECD_1	ECD_1	ECD_1
IC1	7.577	0.0011	0.005	0.001
IC2	7.557	0.0307	0.152	0.031
IC3	7.537	0.3315	1.685	0.340
IC4	7.521	0.8936	4.512	0.916
IC5	7.500	1.8681	9.167	1.915
IC6	7.470	3.7881	17.516	3.883
IC7	7.420	7.7471	32.517	7.941
IC8	7.347	15.6832	56.804	16.076
Average	7.491			
Rel. Std. Dev.	1.022 %			



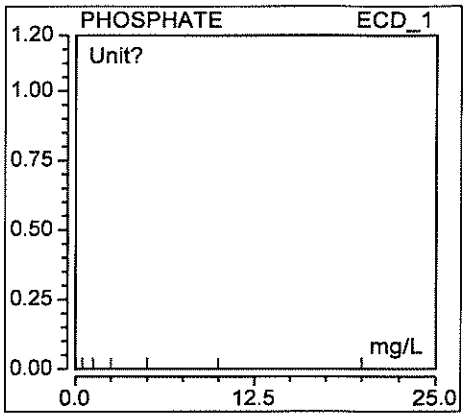
Injection Name **NITRITE**	Ret.Time min NITRITE	Area µS*min NITRITE	Height µS NITRITE	Amount mg/L NITRITE
	ECD_1	ECD_1	ECD_1	ECD_1
IC1	5.277	0.0081	0.032	0.018
IC2	4.990	0.0315	0.165	0.045



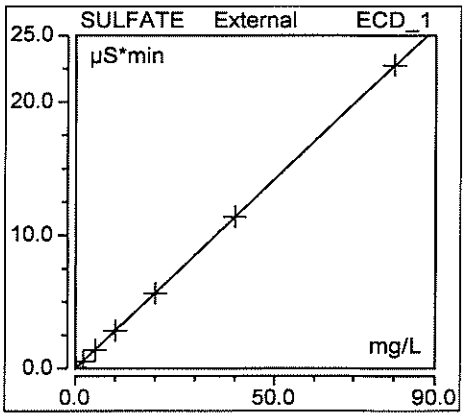
IC3	4.984	0.3130	1.968	0.374
IC4	4.984	0.8317	5.253	0.984
IC5	4.984	1.7014	10.467	2.021
IC6	4.990	3.3244	19.408	4.004
IC7	4.990	6.4268	34.736	7.994
IC8	4.990	12.0030	58.725	16.001
Average	5.024			
Rel. Std. Dev.	2.038 %			



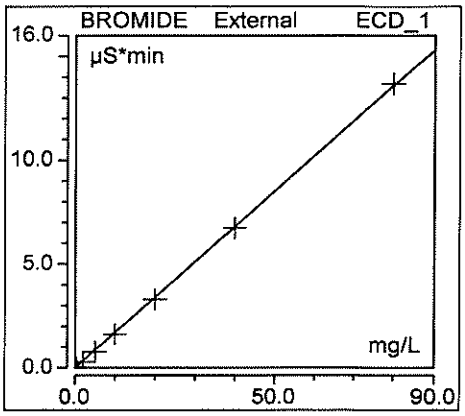
Injection Name **PHOSPHATE**	Ret.Time min PHOSPHATE	Area µS*min PHOSPHATE	Height µS PHOSPHATE	Amount mg/L PHOSPHATE
	ECD_1	ECD_1	ECD_1	ECD_1
IC1	n.a.	n.a.	n.a.	n.a.
IC2	n.a.	n.a.	n.a.	n.a.
IC3	n.a.	n.a.	n.a.	n.a.
IC4	n.a.	n.a.	n.a.	n.a.
IC5	n.a.	n.a.	n.a.	n.a.
IC6	n.a.	n.a.	n.a.	n.a.
IC7	n.a.	n.a.	n.a.	n.a.
IC8	n.a.	n.a.	n.a.	n.a.
Average	#DIV/0!			
Rel. Std. Dev.	#DIV/0!			



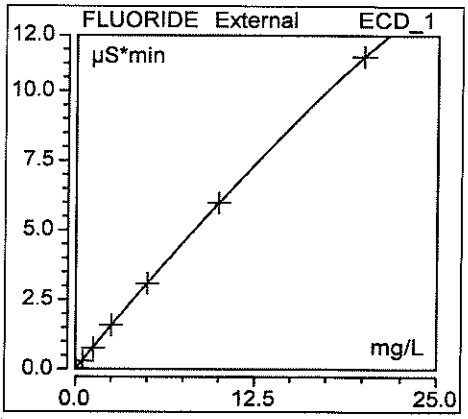
Injection Name **SULFATE**	Ret.Time min SULFATE	Area µS*min SULFATE	Height µS SULFATE	Amount mg/L SULFATE
	ECD_1	ECD_1	ECD_1	ECD_1
IC1	5.844	0.0009	0.004	0.003
IC2	5.834	0.0454	0.229	0.160
IC3	5.820	0.5026	2.833	1.768
IC4	5.817	1.3714	7.732	4.824
IC5	5.797	2.8380	15.881	9.983
IC6	5.777	5.6533	31.045	19.887
IC7	5.744	11.3826	59.540	40.040
IC8	5.687	22.7500	108.379	80.027
Average	5.790			
Rel. Std. Dev.	0.911 %			



Injection Name **BROMIDE**	Ret.Time min BROMIDE	Area µS*min BROMIDE	Height µS BROMIDE	Amount mg/L BROMIDE
	ECD_1	ECD_1	ECD_1	ECD_1
IC1	6.407	0.0004	0.001	0.002
IC2	6.560	0.0257	0.144	0.151
IC3	6.544	0.2814	1.655	1.655
IC4	6.537	0.7709	4.533	4.535
IC5	6.527	1.6186	9.363	9.521
IC6	6.514	3.2868	18.367	19.333
IC7	6.484	6.7353	35.656	39.616
IC8	6.433	13.6787	65.681	80.456
Average	6.501			
Rel. Std. Dev.	0.847 %			



Injection Name FLUORIDE	Ret.Time min FLUORIDE	Area µS*min FLUORIDE	Height µS FLUORIDE	Amount mg/L FLUORIDE
	ECD_1	ECD_1	ECD_1	ECD_1
IC1	3.524	0.0033	0.007	0.022
IC2	3.244	0.0233	0.162	0.053
IC3	3.240	0.2885	2.065	0.471
IC4	3.237	0.7656	5.555	1.228
IC5	3.244	1.5767	11.214	2.530
IC6	3.250	3.0811	21.013	5.001
IC7	3.254	5.9813	38.517	9.993
IC8	3.267	11.2370	67.145	20.001
Average	3.282			
Rel. Std. Dev.	2.982 %			



Anion Summary Report

No. CHLORIDE	Name CHLORIDE	Time min CHLORIDE ECD_1	Area µS*min CHLORIDE ECD_1	Rel.Area % CHLORIDE ECD_1	Height µS CHLORIDE ECD_1	Rel.Height % CHLORIDE ECD_1	Amount mg/L CHLORIDE ECD_1
1	IC1	4.310	0.0013	8.64	0.01	12.08	0.0033
2	IC2	4.290	0.0319	16.92	0.24	21.69	0.0818
3	IC3	4.280	0.3373	16.42	2.65	20.61	0.8653
4	IC4	4.277	0.9117	16.44	7.11	20.50	2.3392
5	IC5	4.277	1.8945	16.48	14.72	20.79	4.8610
6	IC6	4.280	3.7977	16.56	29.08	21.32	9.7441
7	IC7	4.274	7.7443	16.83	58.67	22.60	19.8700
8	IC8	4.273	15.6522	17.20	117.46	24.77	40.1598
	Sum:	34.262	30.371	125.488	229.932	164.342	77.924
	Average:	4.283	3.796	15.686	28.741	20.543	9.741
	Rel.Std.Dev:	0.287 %	143.802 %	18.229 %	142.552 %	17.997 %	143.802 %

No. NITRATE	Name NITRATE	Time min NITRATE ECD_1	Area µS*min NITRATE ECD_1	Rel.Area % NITRATE ECD_1	Height µS NITRATE ECD_1	Rel.Height % NITRATE ECD_1	Amount mg/L NITRATE ECD_1
1	IC1	7.577	0.0011	7.29	0.01	9.24	0.0011
2	IC2	7.557	0.0307	16.31	0.15	13.97	0.0315
3	IC3	7.537	0.3315	16.14	1.69	13.11	0.3398
4	IC4	7.521	0.8936	16.12	4.51	13.00	0.9160
5	IC5	7.500	1.8681	16.25	9.17	12.95	1.9149
6	IC6	7.470	3.7881	16.52	17.52	12.84	3.8830
7	IC7	7.420	7.7471	16.84	32.52	12.52	7.9412
8	IC8	7.347	15.6832	17.23	56.80	11.98	16.0761
	Sum:	59.929	30.344	122.694	122.358	99.612	31.104
	Average:	7.491	3.793	15.337	15.295	12.451	3.888
	Rel.Std.Dev:	1.022 %	144.282 %	21.338 %	131.385 %	11.350 %	144.282 %

No. NITRITE	Name NITRITE	Time min NITRITE ECD_1	Area µS*min NITRITE ECD_1	Rel.Area % NITRITE ECD_1	Height µS NITRITE ECD_1	Rel.Height % NITRITE ECD_1	Amount mg/L NITRITE ECD_1
1	IC1	5.277	0.0081	53.65	0.03	57.13	0.0176
2	IC2	4.990	0.0315	16.72	0.17	15.17	0.0449
3	IC3	4.984	0.3130	15.24	1.97	15.31	0.3737
4	IC4	4.984	0.8317	15.00	5.25	15.14	0.9839
5	IC5	4.984	1.7014	14.80	10.47	14.78	2.0208
6	IC6	4.990	3.3244	14.50	19.41	14.23	4.0043
7	IC7	4.990	6.4268	13.97	34.74	13.38	7.9935
8	IC8	4.990	12.0030	13.19	58.73	12.38	16.0012
	Sum:	40.189	24.640	157.051	130.754	157.526	31.440
	Average:	5.024	3.080	19.631	16.344	19.691	3.930
	Rel.Std.Dev:	2.038 %	136.774 %	70.208 %	127.418 %	77.003 %	141.871 %

No. PHOSPHATE	Name PHOSPHATE	Time min PHOSPHATE ECD_1	Area µS*min PHOSPHATE ECD_1	Rel.Area % PHOSPHATE ECD_1	Height µS PHOSPHATE ECD_1	Rel.Height % PHOSPHATE ECD_1	Amount mg/L PHOSPHATE ECD_1
1	IC1	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2	IC2	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

3	IC3	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
4	IC4	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5	IC5	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
6	IC6	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
7	IC7	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
8	IC8	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
	Sum:	0.000	0.000	0.000	0.000	0.000	0.000
	Average:	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
	Rel.Std.Dev:	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

No. SULFATE	Name SULFATE	Time min SULFATE ECD_1	Area µS*min SULFATE ECD_1	Rel.Area % SULFATE ECD_1	Height µS SULFATE ECD_1	Rel.Height % SULFATE ECD_1	Amount mg/L SULFATE ECD_1
1	IC1	5.844	0.0009	6.16	0.00	7.25	0.0033
2	IC2	5.834	0.0454	24.09	0.23	21.06	0.1596
3	IC3	5.820	0.5026	24.47	2.83	22.04	1.7679
4	IC4	5.817	1.3714	24.73	7.73	22.29	4.8243
5	IC5	5.797	2.8380	24.68	15.88	22.43	9.9833
6	IC6	5.777	5.6533	24.65	31.04	22.75	19.8866
7	IC7	5.744	11.3826	24.74	59.54	22.93	40.0405
8	IC8	5.687	22.7500	25.00	108.38	22.86	80.0271
	Sum:	46.319	44.544	178.521	225.643	163.599	156.693
	Average:	5.790	5.568	22.315	28.205	20.450	19.587
	Rel.Std.Dev:	0.911 %	142.591 %	29.274 %	135.408 %	26.248 %	142.591 %

No. BROMIDE	Name BROMIDE	Time min BROMIDE ECD_1	Area µS*min BROMIDE ECD_1	Rel.Area % BROMIDE ECD_1	Height µS BROMIDE ECD_1	Rel.Height % BROMIDE ECD_1	Amount mg/L BROMIDE ECD_1
1	IC1	6.407	0.0004	2.57	0.00	2.09	0.0023
2	IC2	6.560	0.0257	13.62	0.14	13.22	0.1509
3	IC3	6.544	0.2814	13.70	1.65	12.87	1.6554
4	IC4	6.537	0.7709	13.90	4.53	13.07	4.5345
5	IC5	6.527	1.6186	14.08	9.36	13.22	9.5207
6	IC6	6.514	3.2868	14.33	18.37	13.46	19.3328
7	IC7	6.484	6.7353	14.64	35.66	13.73	39.6161
8	IC8	6.433	13.6787	15.03	65.68	13.85	80.4565
	Sum:	52.006	26.398	101.871	135.400	95.522	155.269
	Average:	6.501	3.300	12.734	16.925	11.940	19.409
	Rel.Std.Dev:	0.847 %	144.644 %	32.456 %	136.608 %	33.434 %	144.644 %

No. FLUORIDE	Name FLUORIDE	Time min FLUORIDE ECD_1	Area µS*min FLUORIDE ECD_1	Rel.Area % FLUORIDE ECD_1	Height µS FLUORIDE ECD_1	Rel.Height % FLUORIDE ECD_1	Amount mg/L FLUORIDE ECD_1
1	IC1	3.524	0.0033	21.68	0.01	12.21	0.0218
2	IC2	3.244	0.0233	12.35	0.16	14.89	0.0532
3	IC3	3.240	0.2885	14.04	2.06	16.06	0.4710
4	IC4	3.237	0.7656	13.81	5.55	16.01	1.2278
5	IC5	3.244	1.5767	13.71	11.21	15.84	2.5301
6	IC6	3.250	3.0811	13.44	21.01	15.40	5.0014
7	IC7	3.254	5.9813	13.00	38.52	14.84	9.9933
8	IC8	3.267	11.2370	12.35	67.15	14.16	20.0014
	Sum:	26.259	22.957	114.375	145.677	119.399	39.300
	Average:	3.282	2.870	14.297	18.210	14.925	4.913
	Rel.Std.Dev:	2.982 %	137.399 %	21.345 %	130.315 %	8.595 %	141.871 %

WET CHEMISTRY BATCH REPORT
Nov 14 2023, 01:17 pm
Batch: WG345360 Run ID 1: R626990 Run ID 2: NONE

Parameter: Alkalinity
Prep Date: N/A

Date Analyzed: 13-NOV-23
Prep Method: N/A

Analyst Initials: BL
Prep Chemist: N/A

Sample	Samp Type	Method	Initial Amt.	Final Amt.	Rpt. DF	Result	Rpt Result	TS(%)	PQL	MDL	Adj PQL	RPD	%Rec
SQ6108-7	SAMP	SM2320B	50.0mL	50.0mL	1	453.652	450 mg/L	NA	5	0.23	5.0		
SQ6108-8	SAMP	SM2320B	50.0mL	50.0mL	1	82.159	82. mg/L	NA	5	0.23	5.0		
SQ6108-9	SAMP	SM2320B	50.0mL	50.0mL	1	290.44	290 mg/L	NA	5	0.23	5.0		
SQ6108-10	SAMP	SM2320B	50.0mL	50.0mL	1	151.733	150 mg/L	NA	5	0.23	5.0		
SQ6112-1	SAMP	SM2320B	50.0mL	50.0mL	1	206.44	210 mg/L	NA	5	0.23	5.0		
SQ6112-2	SAMP	SM2320B	50.0mL	50.0mL	1	164.884	160 mg/L	NA	5	0.23	5.0		
SQ6133-1	SAMP	SM2320B	50.0mL	50.0mL	1	103.788	100 mg/L	NA	5	0.23	5.0		
SQ6133-2	SAMP	SM2320B	50.0mL	50.0mL	1	209.748	210 mg/L	NA	5	0.23	5.0		
SQ6133-3	SAMP	SM2320B	50.0mL	50.0mL	1	201.574	200 mg/L	NA	5	0.23	5.0		
SQ6133-4	SAMP	SM2320B	50.0mL	50.0mL	1	102.879	100 mg/L	NA	5	0.23	5.0		
SQ6133-5	SAMP	SM2320B	50.0mL	50.0mL	1	136.451	140 mg/L	NA	5	0.23	5.0		
SQ6133-6	SAMP	SM2320B	50.0mL	50.0mL	1	115.348	120 mg/L	NA	5	0.23	5.0		
SQ6133-7	SAMP	SM2320B	50.0mL	50.0mL	1	219.497	220 mg/L	NA	5	0.23	5.0		
SQ6232-1	SAMP	SM2320B	50.0mL	50.0mL	1	1.935	U5.0 mg/L	NA	5	0.23	5.0		
SQ6232-2	SAMP	SM2320B	50.0mL	50.0mL	1	488.169	490 mg/L	NA	5	0.23	5.0		
SQ6232-3	SAMP	SM2320B	50.0mL	50.0mL	1	622.69	620 mg/L	NA	5	0.23	5.0		
SQ6232-4	SAMP	SM2320B	50.0mL	50.0mL	1	166.407	170 mg/L	NA	5	0.23	5.0		
SQ6232-6	SAMP	SM2320B	50.0mL	50.0mL	1	177.906	180 mg/L	NA	5	0.23	5.0		
WG345360-1	MBLANK	SM2320B	50.0mL	50.0mL	1	2.021	J2.0 mg/L	NA	5	0.23	5.0		
WG345360-2	LCS	SM2320B	50.0mL	50.0mL	1	126.772	130 mg/L	NA	5	0.23	5.0		106
WG345360-3	LCSD	SM2320B	50.0mL	50.0mL	1	131.16	130 mg/L	NA	5	0.23	5.0	3	109
WG345360-4	MS	SM2320B	50.0mL	50.0mL	1	303.518	300 mg/L	NA	5	0.23	5.0		105
WG345360-5	MSD	SM2320B	50.0mL	50.0mL	1	302.753	300 mg/L	NA	5	0.23	5.0	0	104

Comments:

SQ6112-1	Anions = NO3, SO4, Cl.
SQ6112-2	Anions = NO3, SO4, Cl.
SQ6133-1	Anions = NO3, SO4, Cl.
SQ6133-2	Anions = NO3, SO4, Cl.
SQ6133-3	MS/MSD. Anions = NO3, SO4, Cl.
SQ6133-4	Anions = NO3, SO4, Cl.
SQ6133-5	Anions = NO3, SO4, Cl.
SQ6133-6	Anions = NO3, SO4, Cl.
SQ6133-7	Anions = NO3, SO4, Cl.
WG345360-1	SQ6108-10
WG345360-2	SQ6108-10
WG345360-3	SQ6108-10
WG345360-4	SQ6133-3
WG345360-5	SQ6133-3

Entered by: BL Date: 11/14/23 Accepted by: CA Date: 11/14/23

Katahdin Analytical Services SQ6133 Page 714 of 855

WET CHEMISTRY BATCH REPORT - BICARBONATE
Nov 14 2023, 01:17 pm
Batch: WG345361 Run ID 1: R626991 Run ID 2: NONE

Parameter: Bicarbonate (As CaCO3) Prep Date: N/A

Date Analyzed: 13-NOV-23 Prep Method: N/A

Analyst Initials: BL Prep Chemist: N/A

Sample	Samp Type	Method	Alkalinity	pH	Rpt. DF	Result	Rpt Result	TS(%)	PQL	MDL	Adj PQL	RPD	%Rec
SQ6232-1	SAMP	SM4500CO2 D	1.93500	5.567	1	1.93475	U5.0 mg/L	NA	5	.497	5		
SQ6232-2	SAMP	SM4500CO2 D	488.169	7.211	1	487.41609	490 mg/L	NA	5	.497	5		
SQ6232-3	SAMP	SM4500CO2 D	622.690	6.907	1	622.21383	620 mg/L	NA	5	.497	5		
SQ6232-4	SAMP	SM4500CO2 D	166.407	6.326	1	166.37281	170 mg/L	NA	5	.497	5		
SQ6232-6	SAMP	SM4500CO2 D	177.906	6.448	1	177.85769	180 mg/L	NA	5	.497	5		
WG345361-1	MBLANK	SM4500CO2 D	2.02100	5.082	1	2.02092	U5.0 mg/L	NA	5	.497	5		

Comments:

WG345361-1 SQ6232-1

Entered by: BL Date: 11/14/23 Accepted by: CA Date: 11/14/23

WET CHEMISTRY BATCH REPORT - CARBONATE
Nov 14 2023, 01:18 pm
Batch: WG345362 Run ID 1: R626992 Run ID 2: NONE

Parameter: Carbonate (As CaCO3) Prep Date: N/A

Date Analyzed: 13-NOV-23 Prep Method: N/A

Analyst Initials: BL Prep Chemist: N/A

Sample	Samp Type	Method	Bicarb	pH	Rpt. DF	Result	Rpt Result	TS(%)	PQL	MDL	Adj PQL	RPD	%Rec
SQ6232-1	SAMP	SM4500CO2 D	1.93475	5.567	1	.00007	U5.0 mg/L	NA	5	.497	5		
SQ6232-2	SAMP	SM4500CO2 D	487.416	7.211	1	.74478	U5.0 mg/L	NA	5	.497	5		
SQ6232-3	SAMP	SM4500CO2 D	622.214	6.907	1	.47214	U5.0 mg/L	NA	5	.497	5		
SQ6232-4	SAMP	SM4500CO2 D	166.373	6.326	1	.03313	U5.0 mg/L	NA	5	.497	5		
SQ6232-6	SAMP	SM4500CO2 D	177.858	6.448	1	.0469	U5.0 mg/L	NA	5	.497	5		
WG345362-1	MBLANK	SM4500CO2 D	2.02092	5.082	1	.00002	U5.0 mg/L	NA	5	.497	5		

Comments:

WG345362-1 SQ6232-1

Entered by: BL Date: 11/14/23 Accepted by: CA Date: 11/14/23

Start time: 11/13/2023 10:26

Results

No.	Comment / ID	Start time	Rx	Result	Unit	Name	
1/7	CCV	11/13/2023 10:27:23 AM	R1 =	0	mg/L	P Alkalinity- pH8.2	**99.63%**
			R2 =	124.54	mg/L	Total Alkalinity	
			R3 =	8.211	pH	pH	
			R4 =	18.8	oC	TEMPERATURE	
2/7	CCB	11/13/2023 10:31:03 AM	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	2.021	mg/L	Total Alkalinity	
			R3 =	5.082	pH	pH	
			R4 =	18.9	oC	TEMPERATURE	
3/7	LCS	11/13/2023 10:32:54 AM	R1 =	69.364	mg/L	P Alkalinity- pH8.2	**105.64%**
			R2 =	126.772	mg/L	Total Alkalinity	
			R3 =	10.643	pH	pH	
			R4 =	18.9	oC	TEMPERATURE	
4/7	LCSD	11/13/2023 10:36:43 AM	R1 =	70.654	mg/L	P Alkalinity- pH8.2	**109.30%**
			R2 =	131.16	mg/L	Total Alkalinity	
			R3 =	10.65	pH	pH	
			R4 =	18.7	oC	TEMPERATURE	
5/7	MDL	11/13/2023 10:40:22 AM	R1 =	1.445	mg/L	P Alkalinity- pH8.2	
			R2 =	6.669	mg/L	Total Alkalinity	
			R3 =	9.171	pH	pH	
			R4 =	18.7	oC	TEMPERATURE	
6/7	MDL	11/13/2023 10:42:45 AM	R1 =	1.652	mg/L	P Alkalinity- pH8.2	
			R2 =	6.462	mg/L	Total Alkalinity	
			R3 =	9.305	pH	pH	
			R4 =	18.6	oC	TEMPERATURE	
7/7	MDL	11/13/2023 10:45:12 AM	R1 =	1.941	mg/L	P Alkalinity- pH8.2	
			R2 =	6.968	mg/L	Total Alkalinity	
			R3 =	9.331	pH	pH	
			R4 =	18.5	oC	TEMPERATURE	

Start time: 11/13/2023 13:35

Results

No.	Comment / ID	Start time	Rx	Result	Unit	Name	
1/13	SQ6108-7	11/13/2023 1:36:34 PM	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	453.652	mg/L	Total Alkalinity	
			R3 =	6.609	pH	pH	
			R4 =	9.1	oC	TEMPERATURE	
2/13	SQ6108-8	11/13/2023 1:42:31 PM	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	82.159	mg/L	Total Alkalinity	
			R3 =	5.522	pH	pH	
			R4 =	9.4	oC	TEMPERATURE	
3/13	SQ6108-9	11/13/2023 1:45:59 PM	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	290.44	mg/L	Total Alkalinity	
			R3 =	6.099	pH	pH	
			R4 =	9.8	oC	TEMPERATURE	
4/13	SQ6108-10	11/13/2023 1:50:38 PM	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	151.733	mg/L	Total Alkalinity	
			R3 =	6.532	pH	pH	
			R4 =	10.3	oC	TEMPERATURE	
5/13	SQ6112-1	11/13/2023 1:54:04 PM	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	206.44	mg/L	Total Alkalinity	
			R3 =	7.126	pH	pH	
			R4 =	9.9	oC	TEMPERATURE	
6/13	CCV	11/13/2023 1:57:47 PM	R1 =	1.91	mg/L	P Alkalinity- pH8.2	**99.67%**
			R2 =	124.592	mg/L	Total Alkalinity	
			R3 =	8.384	pH	pH	
			R4 =	17.5	oC	TEMPERATURE	

7/13	CCB	11/13/2023 2:01:25 PM	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	1.925	mg/L	Total Alkalinity	
			R3 =	5.523	pH	pH	
			R4 =	18.1	oC	TEMPERATURE	
8/13	SQ6112-2	11/13/2023 2:03:14 PM	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	164.884	mg/L	Total Alkalinity	
			R3 =	7.576	pH	pH	
			R4 =	11.4	oC	TEMPERATURE	
9/13	SQ6133-1	11/13/2023 2:07:06 PM	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	103.788	mg/L	Total Alkalinity	
			R3 =	7.737	pH	pH	
			R4 =	11.6	oC	TEMPERATURE	
10/13	SQ6133-2	11/13/2023 2:10:11 PM	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	209.748	mg/L	Total Alkalinity	
			R3 =	7.563	pH	pH	
			R4 =	11.9	oC	TEMPERATURE	
11/13	SQ6133-3	11/13/2023 2:14:01 PM	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	201.574	mg/L	Total Alkalinity	
			R3 =	7.746	pH	pH	
			R4 =	12	oC	TEMPERATURE	
12/13	SQ6133-3 MS	11/13/2023 2:18:03 PM	R1 =	83.247	mg/L	P Alkalinity- pH8.2	
			R2 =	303.518	mg/L	Total Alkalinity	
			R3 =	9.566	pH	pH	
			R4 =	13.1	oC	TEMPERATURE	
13/13	SQ6133-3 MSD	11/13/2023 2:22:55 PM	R1 =	84.372	mg/L	P Alkalinity- pH8.2	
			R2 =	302.753	mg/L	Total Alkalinity	
			R3 =	9.557	pH	pH	
			R4 =	13.6	oC	TEMPERATURE	

Start time: 11/13/2023 14:54

Results

No.	Comment / ID	Start time	Rx	Result	Unit	Name	
1/15	SQ6133-4	11/13/2023 2:55:36 PM	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	102.879	mg/L	Total Alkalinity	
			R3 =	7.883	pH	pH	
			R4 =	13.7	oC	TEMPERATURE	
2/15	SQ6133-5	11/13/2023 2:58:59 PM	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	136.451	mg/L	Total Alkalinity	
			R3 =	6.485	pH	pH	
			R4 =	13.3	oC	TEMPERATURE	
3/15	SQ6133-6	11/13/2023 3:02:24 PM	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	115.348	mg/L	Total Alkalinity	
			R3 =	7.871	pH	pH	
			R4 =	14	oC	TEMPERATURE	
4/15	SQ6133-7	11/13/2023 3:05:43 PM	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	219.497	mg/L	Total Alkalinity	
			R3 =	7.329	pH	pH	
			R4 =	14.3	oC	TEMPERATURE	
5/15	CCV	11/13/2023 3:09:39 PM	R1 =	1.709	mg/L	P Alkalinity- pH8.2	**98.91%**
			R2 =	123.632	mg/L	Total Alkalinity	
			R3 =	8.375	pH	pH	
			R4 =	17.6	oC	TEMPERATURE	
6/15	CCB	11/13/2023 3:13:21 PM	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	1.94	mg/L	Total Alkalinity	
			R3 =	5.669	pH	pH	
			R4 =	18	oC	TEMPERATURE	

7/15	SQ6232-1	11/13/2023 3:15:12 PM	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	1.935	mg/L	Total Alkalinity	
			R3 =	5.567	pH	pH	
			R4 =	14.6	oC	TEMPERATURE	
8/15	SQ6232-2	11/13/2023 3:17:04 PM	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	488.169	mg/L	Total Alkalinity	
			R3 =	7.211	pH	pH	
			R4 =	14.2	oC	TEMPERATURE	
9/15	SQ6232-3	11/13/2023 3:23:13 PM	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	622.69	mg/L	Total Alkalinity	
			R3 =	6.907	pH	pH	
			R4 =	14.6	oC	TEMPERATURE	
10/15	SQ6232-4	11/13/2023 3:30:23 PM	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	166.407	mg/L	Total Alkalinity	
			R3 =	6.326	pH	pH	
			R4 =	14.8	oC	TEMPERATURE	
11/15	SQ6232-5	11/13/2023 3:34:18 PM	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	NaN	mg/L	Total Alkalinity	
			R3 =	6.915	pH	pH	
			R4 =	14.9	oC	TEMPERATURE	
12/15	SQ6232-6	11/13/2023 3:43:54 PM	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	177.906	mg/L	Total Alkalinity	
			R3 =	6.448	pH	pH	
			R4 =	15.4	oC	TEMPERATURE	
13/15	SQ6232-7	11/13/2023 3:47:40 PM	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	NaN	mg/L	Total Alkalinity	
			R3 =	6.864	pH	pH	
			R4 =	16	oC	TEMPERATURE	
14/15	CCV	11/13/2023 3:57:17 PM	R1 =	0.751	mg/L	P Alkalinity- pH8.2	**101.34%**
			R2 =	126.674	mg/L	Total Alkalinity	
			R3 =	8.331	pH	pH	
			R4 =	17.6	oC	TEMPERATURE	
15/15	CCB	11/13/2023 4:01:47 PM	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	2.168	mg/L	Total Alkalinity	
			R3 =	5.622	pH	pH	
			R4 =	17.9	oC	TEMPERATURE	

Start time: 11/13/2023 8:35

Results

No.	Comment / ID	Start time	Rx	Result	Unit	Name

Calibration data

	Number of segments	1
	Slope	-57.81 mV/pH
	Zero point	7.057 pH
	Calibration temperature	25.0 oC

(ALK) WG345360 → R626990
(TBICARB) WG345361 → R626991

(TCARB) WG345362 → R626992

KATAHDIN ANALYTICAL SERVICES

ALKALINITY, BICARBONATE, CARBONATE, FREE CO2 - DL 25 AUTOTITRATOR

Analysis: EPA 310.1 (SM2320B) **Calculations:** (SM 4500-CO2 D)

pH Probe ID:	DG171-SC		
Sulfuric Acid Titrant Reagent ID:	W22103	**Buffer pH 4 ID:**	SWL 5132
Sulfuric Acid Concentration:	0.02N	**Buffer pH 7 ID:**	5115
Alkalinity Check Standard (CCV):	W22277 TV= 125	**Buffer pH 10 ID:**	5094
Alkalinity LCS/MS ID:	W22326 TV= 120	**Pipette IDs:**	W3, W13

Sample ID	Run #	Sample Volume (mL)	Sample ID	Run #	Sample Volume (mL)	Comments - Must indicate which sample
CCV	1	50	CCV	5	50	
CCB	2		CCB	6		
LCS	3		SQ6232-1	7		
LCSD	4		-2	8		
MDL	5		-3	9		
MDL	6		-4	10		
MDL	7		-5	11		SQ6232-5 = HIGH LEVEL
SQ6108-7	1	50	-6	12		
-8	2		-7	13		SQ6232-7 = HIGH LEVEL
-9	3		CCV	14		
-10	4		CCB	15		
6112-1	5					
CCV	6					
CCB	7					
SQ6112-2	8					
6133-1	9					
-2	10					
-3	11					
6133-3 MS	12					
MSD	13					
SQ6133-4	1	50				
-5	2					
-6	3			BL	11/13/23	
-7	4					

Analyst: BL **Date:** 11/13/23

Checked By: CA **Date:** 11/14/23

WET CHEMISTRY BATCH REPORT
Nov 15 2023, 10:02 am
Batch: WG345462 Run ID 1: R627175 Run ID 2: NONE

Parameter: Alkalinity
Prep Date: N/A

Date Analyzed: 14-NOV-23
Prep Method: N/A

Analyst Initials: BL
Prep Chemist: N/A

Sample	Samp Type	Method	Initial Amt.	Final Amt.	Rpt. DF	Result	Rpt Result	TS(%)	PQL	MDL	Adj PQL	RPD	%Rec
SQ6133-8	SAMP	SM2320B	50.0mL	50.0mL	1	101.139	100 mg/L	NA	5	0.23	5.0		
SQ6133-9	SAMP	SM2320B	50.0mL	50.0mL	1	185.261	180 mg/L	NA	5	0.23	5.0		
SQ6133-10	SAMP	SM2320B	50.0mL	50.0mL	1	114.165	110 mg/L	NA	5	0.23	5.0		
SQ6137-1	SAMP	SM2320B	50.0mL	50.0mL	1	418	420 mg/L	NA	5	0.23	5.0		
SQ6137-2	SAMP	SM2320B	50.0mL	50.0mL	1	307.342	310 mg/L	NA	5	0.23	5.0		
SQ6137-3	SAMP	SM2320B	50.0mL	50.0mL	1	258.36	260 mg/L	NA	5	0.23	5.0		
SQ6137-4	SAMP	SM2320B	50.0mL	50.0mL	1	380.232	380 mg/L	NA	5	0.23	5.0		
SQ6179-1	SAMP	SM2320B	50.0mL	50.0mL	1	150.206	150 mg/L	NA	5	0.23	5.0		
SQ6179-2	SAMP	SM2320B	50.0mL	50.0mL	1	193.261	190 mg/L	NA	5	0.23	5.0		
SQ6179-3	SAMP	SM2320B	50.0mL	50.0mL	1	312.195	310 mg/L	NA	5	0.23	5.0		
SQ6179-4	SAMP	SM2320B	50.0mL	50.0mL	1	191.102	190 mg/L	NA	5	0.23	5.0		
SQ6179-5	SAMP	SM2320B	50.0mL	50.0mL	1	154.882	150 mg/L	NA	5	0.23	5.0		
SQ6179-6	SAMP	SM2320B	50.0mL	50.0mL	1	139.822	140 mg/L	NA	5	0.23	5.0		
SQ6179-7	SAMP	SM2320B	50.0mL	50.0mL	1	164.45	160 mg/L	NA	5	0.23	5.0		
SQ6179-8	SAMP	SM2320B	50.0mL	50.0mL	1	202.271	200 mg/L	NA	5	0.23	5.0		
SQ6179-9	SAMP	SM2320B	50.0mL	50.0mL	1	203.829	200 mg/L	NA	5	0.23	5.0		
SQ6179-10	SAMP	SM2320B	50.0mL	50.0mL	1	163.59	160 mg/L	NA	5	0.23	5.0		
SQ6233-1	SAMP	SM2320B	50.0mL	50.0mL	1	68.466	68. mg/L	NA	5	0.23	5.0		
SQ6233-2	SAMP	SM2320B	50.0mL	50.0mL	1	44.101	44. mg/L	NA	5	0.23	5.0		
WG345462-1	MBLANK	SM2320B	50.0mL	50.0mL	1	2.758	J2.8 mg/L	NA	5	0.23	5.0		
WG345462-2	LCS	SM2320B	50.0mL	50.0mL	1	129.053	130 mg/L	NA	5	0.23	5.0		108
WG345462-3	LCSD	SM2320B	50.0mL	50.0mL	1	136.483	140 mg/L	NA	5	0.23	5.0	6	114
WG345462-4	MS	SM2320B	50.0mL	50.0mL	1	221.263	220 mg/L	NA	5	0.23	5.0		110
WG345462-5	MSD	SM2320B	50.0mL	50.0mL	1	217.186	220 mg/L	NA	5	0.23	5.0	2	107

Comments:

SQ6133-8	MS/MSD. Anions = NO3, SO4, Cl.
SQ6133-9	Anions = NO3, SO4, Cl.
SQ6133-10	Anions = NO3, SO4, Cl.
SQ6179-1	Anions = NO3, SO4, Cl.
SQ6179-2	Anions = NO3, SO4, Cl.
SQ6179-3	Anions = NO3, SO4, Cl.
SQ6179-4	Anions = NO3, SO4, Cl.
SQ6179-5	Anions = NO3, SO4, Cl.
SQ6179-6	Anions = NO3, SO4, Cl.
SQ6179-7	Anions = NO3, SO4, Cl.
SQ6179-8	Anions = NO3, SO4, Cl.
SQ6179-9	Anions = NO3, SO4, Cl.
SQ6179-10	Anions = NO3, SO4, Cl.
WG345462-1	SQ6133-10
WG345462-2	SQ6133-10
WG345462-3	SQ6133-10

Entered by: BL Date: 11/15/23 Accepted by: RAD Date: 11/15/23

Katahdin Analytical Services SQ6133 Page 721 of 855

WET CHEMISTRY BATCH REPORT
Nov 15 2023, 10:02 am
Batch: WG345462 Run ID 1: R627175 Run ID 2: NONE

WG345462-4	SQ6133-8
WG345462-5	SQ6133-8

Entered by: BL Date: 11/15/23 Accepted by: RAD Date: 11/15/23

WET CHEMISTRY BATCH REPORT - BICARBONATE
Nov 15 2023, 10:02 am
Batch: WG345463 Run ID 1: R627176 Run ID 2: NONE

Parameter: Bicarbonate (As CaCO3)

Date Analyzed: 14-NOV-23

Analyst Initials: BL

Prep Date: N/A

Prep Method: N/A

Prep Chemist: N/A

Sample	Samp Type	Method	Alkalinity	pH	Rpt. DF	Result	Rpt Result	TS(%)	PQL	MDL	Adj PQL	RPD	%Rec
SQ6233-1	SAMP	SM4500CO2 D	68.4660	6.506	1	68.44377	68. mg/L	NA	5	.497	5		
SQ6233-2	SAMP	SM4500CO2 D	44.1010	9.809	1	25.46226	25. mg/L	NA	5	.497	5		
WG345463-1	MBLANK	SM4500CO2 D	2.75800	5.967	1	2.7573	U5.0 mg/L	NA	5	.497	5		

Comments:

WG345463-1 SQ6233-1

Entered by: BL Date: 11/15/23 Accepted by: RAD Date: 11/15/23

WET CHEMISTRY BATCH REPORT - CARBONATE
Nov 15 2023, 10:02 am
Batch: WG345464 Run ID 1: R627177 Run ID 2: NONE

Parameter: Carbonate (As CaCO3)

Date Analyzed: 14-NOV-23

Analyst Initials: BL

Prep Date: N/A

Prep Method: N/A

Prep Chemist: N/A

Sample	Samp Type	Method	Bicarb	pH	Rpt. DF	Result	Rpt Result	TS(%)	PQL	MDL	Adj PQL	RPD	%Rec
SQ6233-1	SAMP	SM4500CO2 D	68.4438	6.506	1	.02063	U5.0 mg/L	NA	5	.497	5		
SQ6233-2	SAMP	SM4500CO2 D	25.4623	9.809	1	15.41789	15. mg/L	NA	5	.497	5		
WG345464-1	MBLANK	SM4500CO2 D	2.75730	5.967	1	.00024	U5.0 mg/L	NA	5	.497	5		

Comments:

WG345464-1 SQ6233-1

Entered by: BL Date: 11/15/23 Accepted by: RAD Date: 11/15/23

(ALK) WG345462 → R627175
(TBICARB) WG345463 → R627176
(TCARB) WG345464 → R627177

KATAHDIN ANALYTICAL SERVICES

ALKALINITY, BICARBONATE, CARBONATE, FREE CO2 - DL 25 AUTOTITRATOR

Analysis: EPA 310.1 (SM2320B) Calculations: (SM 4500-CO2 D)

pH Probe ID: DA111-SC	
Sulfuric Acid Titrant Reagent ID: W22103	Buffer pH 4 ID: SWLS132
Sulfuric Acid Concentration: 0.02N	Buffer pH 7 ID: S115
Alkalinity Check Standard (CCV): W22333 TV= 125	Buffer pH 10 ID: 5094
Alkalinity LCS/MS ID: W22326 TV=170	Pipette IDs: W00

Sample ID	Run #	Sample Volume (mL)	Sample ID	Run #	Sample Volume (mL)	Comments - Must indicate which sample
CCV	1	50	CCV	11	50	
CCB	2	"	CCB	12	1	
LCS	3	"	SQ6179-10	1	50	
LCSD	4	"	6232-9	2	"	SQ6232-9 = HIGH LEVEL
SQ6133-8	1	50	6233-1	3	"	
MS	2	"	-2	4	"	
MSD	3	"	CCV	5	"	
SQ6133-9	4	"	CCB	6	"	
-10	5	"				
6137-1	6	"				
-2	7	"				
-3	8	"				
CCV	9	"				
CCB	10	"				
SQ6137-4	1	50				
6179-1	2	"				
-2	3	"				
-3	4	"				
-4	5	"				
-5	6	"				
-6	7	"				
-7	8	"				
-8	9	"		BL	11/14/23	
-9	10	"				

Analyst: BL Date: 11/14/23

Checked By: RAD Date: 11/15/23

Start time: 11/14/2023 14:04

Results

No.	Comment / ID	Start time	Rx	Result	Unit	Name	
1/4	CCV	11/14/2023 2:05:21 PM	R1 =	4.325	mg/L	P Alkalinity- pH8.2	**98.82%**
			R2 =	123.524	mg/L	Total Alkalinity	
			R3 =	8.6	pH	pH	
			R4 =	19.5	oC	TEMPERATURE	
2/4	CCB	11/14/2023 2:09:21 PM	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	2.758	mg/L	Total Alkalinity	
			R3 =	5.967	pH	pH	
			R4 =	20.2	oC	TEMPERATURE	
3/4	LCS	11/14/2023 2:11:28 PM	R1 =	73.152	mg/L	P Alkalinity- pH8.2	**107.54%**
			R2 =	129.053	mg/L	Total Alkalinity	
			R3 =	10.721	pH	pH	
			R4 =	20.1	oC	TEMPERATURE	
4/4	LCSD	11/14/2023 2:15:18 PM	R1 =	77.312	mg/L	P Alkalinity- pH8.2	**113.74%**
			R2 =	136.483	mg/L	Total Alkalinity	
			R3 =	10.726	pH	pH	
			R4 =	20	oC	TEMPERATURE	

Start time: 11/14/2023 14:21

Results

No.	Comment / ID	Start time	Rx	Result	Unit	Name	
1/10	SQ6133-8	11/14/2023 2:23:02 PM	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	101.139	mg/L	Total Alkalinity	
			R3 =	7.074	pH	pH	
			R4 =	9	oC	TEMPERATURE	
2/10	SQ6133-8 MS	11/14/2023 2:26:41 PM	R1 =	93.404	mg/L	P Alkalinity- pH8.2	
			R2 =	221.263	mg/L	Total Alkalinity	
			R3 =	10.169	pH	pH	
			R4 =	10.4	oC	TEMPERATURE	
3/10	SQ6133-8 MSD	11/14/2023 2:31:10 PM	R1 =	92.341	mg/L	P Alkalinity- pH8.2	
			R2 =	217.186	mg/L	Total Alkalinity	
			R3 =	10.151	pH	pH	
			R4 =	11	oC	TEMPERATURE	
4/10	SQ6133-9	11/14/2023 2:35:23 PM	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	185.261	mg/L	Total Alkalinity	
			R3 =	7.769	pH	pH	
			R4 =	10.4	oC	TEMPERATURE	
5/10	SQ6133-10	11/14/2023 2:39:33 PM	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	114.165	mg/L	Total Alkalinity	
			R3 =	7.543	pH	pH	
			R4 =	10.6	oC	TEMPERATURE	
6/10	SQ6137-1	11/14/2023 2:43:11 PM	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	418	mg/L	Total Alkalinity	
			R3 =	6.467	pH	pH	
			R4 =	11.1	oC	TEMPERATURE	
7/10	SQ6137-2	11/14/2023 2:48:53 PM	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	307.342	mg/L	Total Alkalinity	
			R3 =	6.255	pH	pH	
			R4 =	12	oC	TEMPERATURE	
8/10	SQ6137-3	11/14/2023 2:54:43 PM	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	258.36	mg/L	Total Alkalinity	
			R3 =	5.914	pH	pH	
			R4 =	12.8	oC	TEMPERATURE	
9/10	CCV	11/14/2023 3:00:03 PM	R1 =	7.587	mg/L	P Alkalinity- pH8.2	**102.95%**
			R2 =	128.686	mg/L	Total Alkalinity	
			R3 =	8.681	pH	pH	
			R4 =	18.6	oC	TEMPERATURE	

10/10	CCB	11/14/2023 3:04:09 PM	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	2.227	mg/L	Total Alkalinity	
			R3 =	5.621	pH	pH	
			R4 =	19.3	oC	TEMPERATURE	

Start time: 11/14/2023 15:17

Results

No.	Comment / ID	Start time	Rx	Result	Unit	Name	
1/12	SQ6137-4	11/14/2023 3:19:09 PM	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	380.232	mg/L	Total Alkalinity	
			R3 =	6.585	pH	pH	
			R4 =	12.2	oC	TEMPERATURE	
2/12	SQ6179-1	11/14/2023 3:24:43 PM	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	150.206	mg/L	Total Alkalinity	
			R3 =	7.685	pH	pH	
			R4 =	12.1	oC	TEMPERATURE	
3/12	SQ6179-2	11/14/2023 3:28:33 PM	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	193.261	mg/L	Total Alkalinity	
			R3 =	7.928	pH	pH	
			R4 =	12.1	oC	TEMPERATURE	
4/12	SQ6179-3	11/14/2023 3:32:38 PM	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	312.195	mg/L	Total Alkalinity	
			R3 =	7.96	pH	pH	
			R4 =	12.5	oC	TEMPERATURE	
5/12	SQ6179-4	11/14/2023 3:37:35 PM	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	191.102	mg/L	Total Alkalinity	
			R3 =	7.404	pH	pH	
			R4 =	13.2	oC	TEMPERATURE	
6/12	SQ6179-5	11/14/2023 3:41:40 PM	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	154.882	mg/L	Total Alkalinity	
			R3 =	7.439	pH	pH	
			R4 =	13.5	oC	TEMPERATURE	
7/12	SQ6179-6	11/14/2023 3:45:34 PM	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	139.822	mg/L	Total Alkalinity	
			R3 =	7.459	pH	pH	
			R4 =	14.4	oC	TEMPERATURE	
8/12	SQ6179-7	11/14/2023 3:49:29 PM	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	164.45	mg/L	Total Alkalinity	
			R3 =	7.549	pH	pH	
			R4 =	14.4	oC	TEMPERATURE	
9/12	SQ6179-8	11/14/2023 3:53:13 PM	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	202.271	mg/L	Total Alkalinity	
			R3 =	7.367	pH	pH	
			R4 =	14.5	oC	TEMPERATURE	
10/12	SQ6179-9	11/14/2023 3:57:41 PM	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	203.829	mg/L	Total Alkalinity	
			R3 =	7.471	pH	pH	
			R4 =	15	oC	TEMPERATURE	
11/12	CCV	11/14/2023 4:02:23 PM	R1 =	8.061	mg/L	P Alkalinity- pH8.2	**100.21%**
			R2 =	125.26	mg/L	Total Alkalinity	
			R3 =	8.704	pH	pH	
			R4 =	18.6	oC	TEMPERATURE	
12/12	CCB	11/14/2023 4:06:31 PM	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	2.34	mg/L	Total Alkalinity	
			R3 =	5.905	pH	pH	
			R4 =	19.2	oC	TEMPERATURE	

Start time: 11/14/2023 16:11

Results

No.	Comment / ID	Start time	Rx	Result	Unit	Name	
1/6	SQ6179-10	11/14/2023 4:12:38 PM	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	163.59	mg/L	Total Alkalinity	
			R3 =	7.504	pH	pH	
			R4 =	13	oC	TEMPERATURE	
2/6	SQ6232-9	11/14/2023 4:16:50 PM	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	NaN	mg/L	Total Alkalinity	
			R3 =	6.825	pH	pH	
			R4 =	13.5	oC	TEMPERATURE	
3/6	SQ6233-1	11/14/2023 4:26:27 PM	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	68.466	mg/L	Total Alkalinity	
			R3 =	6.506	pH	pH	
			R4 =	15	oC	TEMPERATURE	
4/6	SQ6233-2	11/14/2023 4:29:28 PM	R1 =	19.416	mg/L	P Alkalinity- pH8.2	
			R2 =	44.101	mg/L	Total Alkalinity	
			R3 =	9.809	pH	pH	
			R4 =	15.9	oC	TEMPERATURE	
5/6	CCV	11/14/2023 4:32:37 PM	R1 =	7.174	mg/L	P Alkalinity- pH8.2	**106.90%**
			R2 =	133.622	mg/L	Total Alkalinity	
			R3 =	8.714	pH	pH	
			R4 =	18.9	oC	TEMPERATURE	
6/6	CCB	11/14/2023 4:36:50 PM	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	2.585	mg/L	Total Alkalinity	
			R3 =	5.922	pH	pH	
			R4 =	19.8	oC	TEMPERATURE	

Start time: 11/14/2023 9:15

Results

No.	Comment / ID	Start time	Rx	Result	Unit	Name

Calibration data

Number of segments	1	
Slope	-58.53 mV/pH	
Zero point	7.060 pH	
Calibration temperature	25.0 oC	

Katahdin
ANALYTICAL SERVICES

Accredited in accordance with nelac
Cert No E87604

Wet Chemistry Batch Report

Analyst Initials: RAD
Date Analyzed: 16-NOV-23

Batch: WG345625
Prep Method: N/A
Prep Chemist: RAD

Sample	Samp Type	Method	Parameter	DF	Result	Rpt. Result	Units	PQL	Adj. PQL	MDL	Adj. MDL	RPD	Rec.
SQ6052-2DL	SAMP	EPA 300.0	Sulfate	2	82.5489	82	mg/L	1	2.0	.25	0.50		
SQ6112-1DLA	SAMP	EPA 300.0	Chloride	20	758.0056	760	mg/L	2	40.	.0993	2.0		
SQ6112-1DLB	SAMP	EPA 300.0	Sulfate	2	98.3218	98	mg/L	1	2.0	.0637	0.13		
SQ6112-2DL	SAMP	EPA 300.0	Chloride	20	479.8632	480	mg/L	2	40.	.0993	2.0		
SQ6133-2DLA	SAMP	EPA 300.0	Chloride	50	1229.5682	1200	mg/L	2	100	.0993	5.0		
SQ6133-2DLB	SAMP	EPA 300.0	Sulfate	5	152.2084	150	mg/L	1	5.0	.0637	0.32		
SQ6133-5DL	SAMP	EPA 300.0	Chloride	10	220.0768	220	mg/L	2	20.	.0993	0.99		
SQ6133-5DL	SAMP	EPA 300.0	Sulfate	10	198.9099	200	mg/L	1	10.	.0637	0.64		
SQ6133-7DL	SAMP	EPA 300.0	Chloride	2	56.5219	56	mg/L	2	4.0	.0993	0.20		
SQ6133-9DL	SAMP	EPA 300.0	Chloride	5	99.2588	99	mg/L	2	10.	.0993	0.50		
WG345625-1	MBLANK	EPA 300.0	Chloride	1	.0463	U 1.0	mg/L	2	2.0	.0993	0.099		
WG345625-1	MBLANK	EPA 300.0	Sulfate	1	.043	U 0.50	mg/L	1	1.0	.0637	0.064		
WG345625-1	MBLANK	EPA 300.0	Sulfate	1	.043	U 0.50	mg/L	1	1.0	.25	0.25		
WG345625-2	LCS	EPA 300.0	Chloride	1	3.6269	3.63	mg/L	2	2.0	.0993	0.099		96.8
WG345625-2	LCS	EPA 300.0	Sulfate	1	3.513	3.51	mg/L	1	1.0	.0637	0.064		93.6
WG345625-2	LCS	EPA 300.0	Sulfate	1	3.513	3.51	mg/L	1	1.0	.25	0.25		93.6

Comments:

SQ6052-2	E300 list= Cl & SO4.
SQ6112-1	Anions = NO3, SO4, (
SQ6112-2	Anions = NO3, SO4, (
SQ6133-2	Anions = NO3, SO4, (
SQ6133-5	Anions = NO3, SO4, (
SQ6133-7	Anions = NO3, SO4, (
SQ6133-9	Anions = NO3, SO4, (
WG345625-1	SQ6052-2
WG345625-2	SQ6052-2

Entered by: RAD Date: 11/17/23 Accepted by: SS Date: 11/19/23

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Wet Chemistry Batch Report

Analyst Initials: RAD
Date Analyzed: 16-NOV-23

Batch: WG345627
Prep Method: N/A
Prep Chemist: RAD

Sample	Samp Type	Method	Parameter	DF	Result		Rpt. Result	Units	PQL	Adj. PQL	MDL	Adj. MDL	RPD	Rec.
SQ6310-1	SAMP	EPA 300.0	Nitrate as N	1	.6979		0.70	mg/L	.05	0.050	.0174	0.017		
SQ6310-1	SAMP	EPA 300.0	Nitrite as N	1	.1938		0.19	mg/L	.05	0.050	.0092	0.0092		
SQ6347-1	SAMP	EPA 300.0	Chloride	1	19.9149		20.	mg/L	2	2.0	.0993	0.099		
SQ6347-1	SAMP	EPA 300.0	Nitrate as N	1	1.1763		1.2	mg/L	.05	0.050	.0174	0.017		
SQ6347-1	SAMP	EPA 300.0	Nitrite as N	1	.1125		0.11	mg/L	.05	0.050	.0092	0.0092		
WG345627-1	MBLANK	EPA 300.0	Chloride	1	.0463	U	1.0	mg/L	2	2.0	.0993	0.099		
WG345627-1	MBLANK	EPA 300.0	Nitrate as N	1	.0184	J	0.018	mg/L	.05	0.050	.0174	0.017		
WG345627-1	MBLANK	EPA 300.0	Nitrite as N	1	.0167	J	0.017	mg/L	.05	0.050	.0092	0.0092		
WG345627-2	LCS	EPA 300.0	Chloride	1	3.6269		3.63	mg/L	2	2.0	.0993	0.099		96.8
WG345627-2	LCS	EPA 300.0	Nitrate as N	1	.824		0.824	mg/L	.05	0.050	.0174	0.017		97.5
WG345627-2	LCS	EPA 300.0	Nitrite as N	1	1.1333		1.13	mg/L	.05	0.050	.0092	0.0092		99.1
WG345627-3	DUP	EPA 300.0	Nitrate as N	1	.6829		0.68	mg/L	.05	0.050	.0174	0.017	2	
WG345627-3	DUP	EPA 300.0	Nitrite as N	1	.1983		0.20	mg/L	.05	0.050	.0092	0.0092	2	
WG345627-4	MS	EPA 300.0	Nitrate as N	1	1.56		1.6	mg/L	.05	0.050	.0174	0.017		97
WG345627-4	MS	EPA 300.0	Nitrite as N	1	1.20042	*	1.2	mg/L	.05	0.050	.0092	0.0092		83.9

Comments:

WG345627-1	SQ6310-1
WG345627-2	SQ6310-1
WG345627-3	SQ6310-1
WG345627-4	SQ6310-1

Entered by: RAD Date: 11/17/23 Accepted by: SS Date: 11/19/23

IC STANDARDS PREPARATION

Fill sheet in completely and file with each batch of samples analyzed.

IC8 MIX ID:	EXPIRATION DATE:	ICAL DATE:	CCV STOCK ID:	EXPIRATION DATE:
W22233	10/23/23	10/12/23	W22318	11/22/23

ALALYTE	INITIAL AMOUNT (mL)	OF	STOCK CONC. (mg/L)	TO	FINAL VOLUME (mL)	=	FINAL CONC. (mg/L)
Cl	2.0	OF	1000	TO	100	=	20
NO2 (as N)	0.8		1000				8
NO3 (as N)	0.8		1000				8
Br	4.0		1000				40
SO4	4.0		1000				40
F	1.0		1000				10
PO4 (as P)	1.0		1000				10

WORKING STANDARDS

Standards prepared on each day of use.

STD.	INITIAL AMOUNT (mL)	OF	FINAL VOLUME (mL)	FINAL CONC. (mg/L)							STD ID*
				Cl	NO2	NO3	Br	SO4	PO4	F	
IC8	5	IC8	5	40	16	16	80	80	20	20	IC8-101223
IC7	2.5	IC8	5	20	8	8	40	40	10	10	IC7-101223
IC6	2.5	IC7	5	10	4	4	20	20	5	5	IC6-101223
IC5	1.25	IC7	5	5	2	2	10	10	2.5	2.5	IC5-101223
IC4	1.25	IC6	5	2.5	1	1	5	5	1.25	1.25	IC4-101223
IC3	0.5	IC6	5	1	0.4	0.4	2	2	0.5	0.5	IC3-101223
IC2	0.5	IC3	5	0.1	0.04	0.04	0.2	0.2	0.05	0.05	IC2-101223
CCV	2.5	IC7	5	10	4	4	20	20	5	5	CCV-111623

* STD ID is prefix followed by the date of preparation (ie. IC6-020216)

LCS/MATRIX SPIKE MIX ID: W22324	EXPIRATION DATE: 11/23/23

3.75 mL of High Purity Multi-Element IC Standard Solution "A" and 3.75 mL of High Purity Multi-Element IC Standard Solution "B" diluted to 50 mL. For MS, add 0.25 mL of mix to 4.75 mL of sample. For LCS, add 0.25 mL of mix to 4.75 mL of DI water.

FINAL CONCENTRATIONS (mg/L)

Cl	NO2 (as N)	NO3 (as N)	Br	SO4	PO4 (as P)	F	STD ID*
3.75	1.14	0.845	3.75	3.75	1.22	3.75	IC-LCS-111623

PIPETTES: W00, W16

2x dil = 2.5mL samp + 2.5mL DI	**5x dil** = 1.0mL samp + 4.0mL DI	**10x dil** = 0.5mL samp + 4.5mL DI
20x dil = 0.25mL samp + 4.75mL DI	**50x dil** = 0.1mL samp + 4.9mL DI	**100x dil** = 0.05mL samp + 4.95mL DI
200x dil = 0.025mL samp + 4.975mL DI	**500x dil** = 0.01mL samp + 4.99mL DI	**1000x dil** = 0.005mL samp + 4.995mL DI

Katahdin Analytical Services **ION CHROMATOGRAPHY RUNLOG** Dionex ICS-2100 (Instrument IC-3)

Analysis Date: 11/16/23	**Analytical Column S/N:** 22050319 4	**Calibration Date:** 10/12/23
Analysis Sequence: 111623 A	**Guard Column S/N:** 2204D6208	**Calibration Sequence:** 101223 CAL
Analyst: RAD	**Suppressor S/N:** 2211177086	☐ If box at left is checked, continued from previous page. Refer to previous page for header information.

Reporting / Reanalysis Codes: ✓ Report without manipulation; S Report, peak automatically reintegrated with SmartPeak; M Report, peak manually integrated; A Report, peak manually assigned; R Do not report, reanalyze sample

Method Codes: E EPA 300.0; SW SW846 9056A

Katahdin Sample Number	Dilution Factor	Method Code	Report or Reanalyze (enter appropriate code): F	Cl	NO_2	SO_4	Br	NO_3	PO_4	Comments
CCV			✓	✓	✓	✓	✓	✓		
CCB			M	✓	✓	M	M	✓		
LCS			✓	✓	✓	✓	R	✓		
SQ 6310-1	1	DW		R	✓			✓		Cl=2x
-1 DUP				—	✓			✓		
-1 MS				—	✓			✓		
6347-1		DW		✓	✓			✓		
6112-1	20	E		✓						
-1	2					✓				
-2	20			✓						
6133-2	50	E		✓						
CCV			✓	✓	✓	✓	✓	✓		
CCB			M	✓	✓	M	M	✓		
6133-2	5	E				M				
-5	10			✓		M				
-7	2			✓						
-9	5			✓						
6052-2	2	E				✓				
CCV			✓	✓	✓	✓	✓	✓		
CCB			M	✓	✓	M	M	✓		
										RAD 11/17/23

E:ws345625 → R627380
DW:ws345627 → R627381

Reviewed by: SS Review Date: 11/19/23

Sequence Overview

Sequence Details

Name:	**111623 A REPROC**	*Created On:*	**28/Dec/22 13:33:49**
Directory:	**2023\11-NOV**	*Created By:*	**wetlab**
Data Vault:	**ChromeleonLocal**	*Updated On:*	**17/Nov/23 12:20:20**
No. of Injections:	**20**	*Updated By:*	**wetlab**

Injection Details

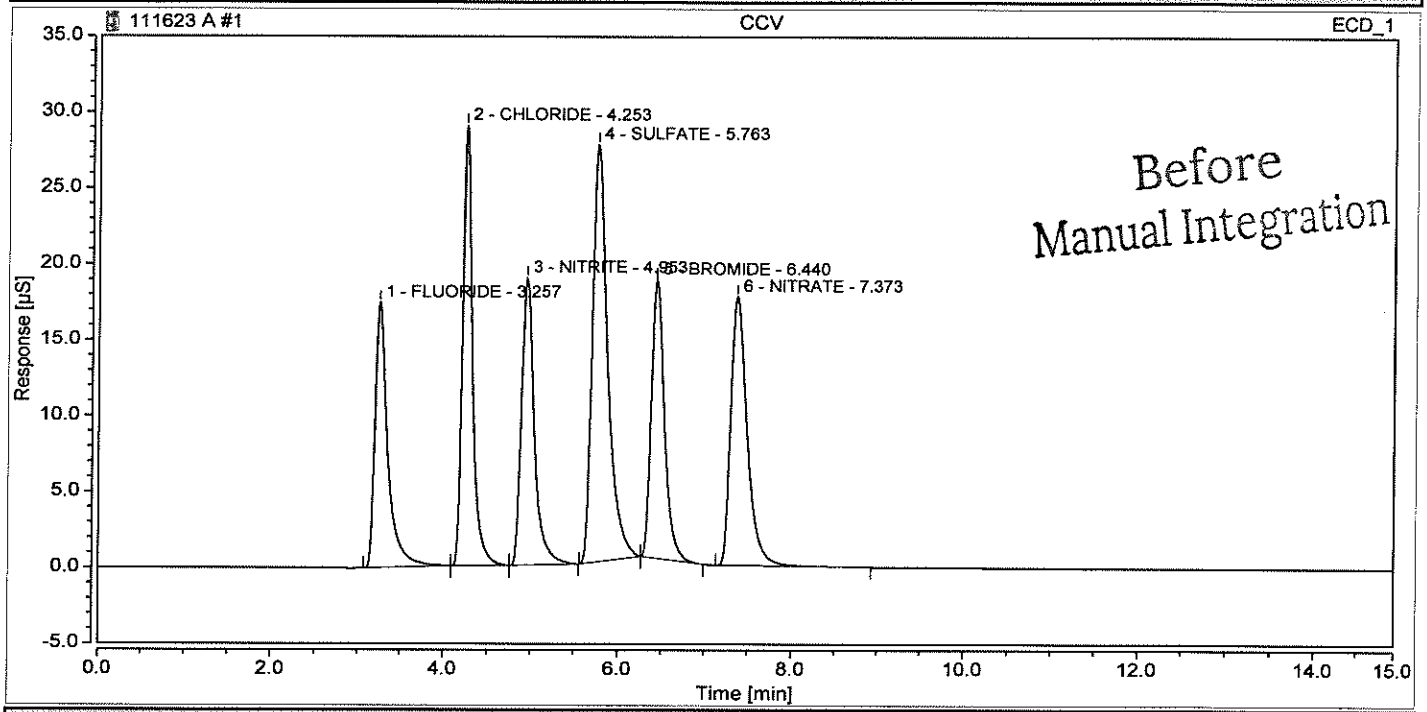
No.	Injection Name	Position	Type	Level	Inject Time	Status
1	CCV	1	Check Standard	06	16/Nov/23 17:27:37	Finished
2	CCB	2	Blank		16/Nov/23 17:44:23	Finished
3	LCS	3	Check Standard	09	16/Nov/23 18:01:38	Finished
4	SQ6310-1	4	Unknown		16/Nov/23 18:18:54	Finished
5	SQ6310-1 DUP	5	Unknown		16/Nov/23 18:36:09	Finished
6	SQ6310-1 MS	6	Unknown		16/Nov/23 18:53:25	Finished
7	SQ6347-1	7	Unknown		16/Nov/23 19:10:40	Finished
8	SQ6112-1DLA	8	Unknown		16/Nov/23 19:27:55	Finished
9	SQ6112-1DLB	9	Unknown		16/Nov/23 19:45:10	Finished
10	SQ6112-2DL	10	Unknown		16/Nov/23 20:02:26	Finished
11	SQ6133-2DLA	11	Unknown		16/Nov/23 20:19:42	Finished
12	CCV	13	Check Standard	06	16/Nov/23 20:36:57	Finished
13	CCB	14	Blank		16/Nov/23 20:54:12	Finished
14	SQ6133-2DLB	15	Unknown		16/Nov/23 21:11:27	Finished
15	SQ6133-5DL	16	Unknown		16/Nov/23 21:28:43	Finished
16	SQ6133-7DL	17	Unknown		16/Nov/23 21:45:58	Finished
17	SQ6133-9DL	18	Unknown		16/Nov/23 22:03:14	Finished
18	SQ6052-2DL	19	Unknown		16/Nov/23 22:20:29	Finished
19	CCV	25	Check Standard	06	16/Nov/23 22:37:45	Finished
20	CCB	26	Blank		16/Nov/23 22:55:02	Finished

Chromatogram and Results

Injection Details

Injection Name:	**CCV**	*Run Time (min):*	**14.95**
Vial Number:	**1**	*Injection Volume:*	**200.00**
Injection Type:	**Check Standard**	*Channel:*	**ECD_1**
Calibration Level:	**06**	*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**16/Nov/23 17:27**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

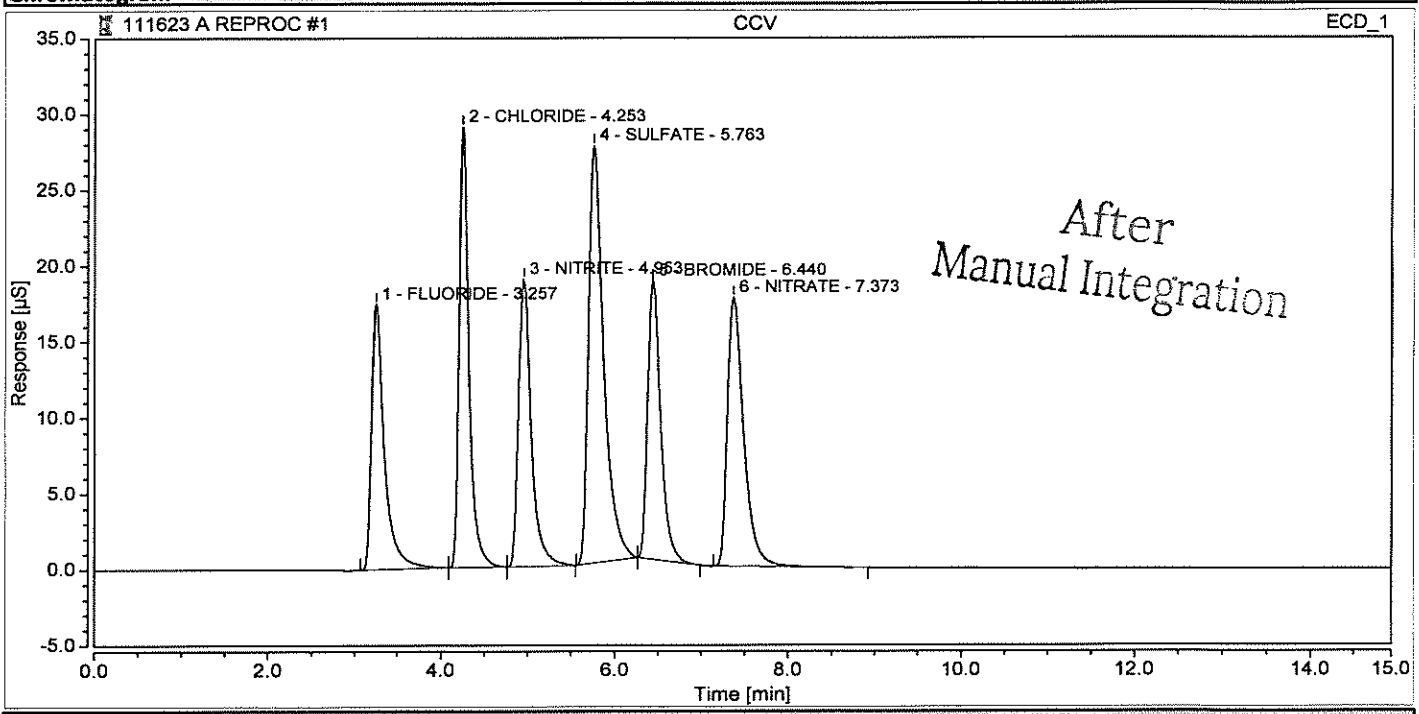
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.257	3.053	17.453	13.42	13.54	4.9549	-0.9021
2	CHLORIDE	4.253	3.801	29.010	16.71	22.51	9.7533	-2.4667
3	NITRITE	4.953	3.283	18.915	14.43	14.67	3.9525	-1.1866
4	SULFATE	5.763	5.536	27.480	24.33	21.32	19.4751	-2.6247
5	BROMIDE	6.440	3.241	18.341	14.24	14.23	19.0638	-4.6811
6	NITRATE	7.373	3.838	17.701	16.87	13.73	3.9219	-1.9534
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**22.753**	**128.900**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**CCV**	*Run Time (min):*	**14.95**
Vial Number:	**1**	*Injection Volume:*	**200.00**
Injection Type:	**Check Standard**	*Channel:*	**ECD_1**
Calibration Level:	**06**	*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**16/Nov/23 17:27**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

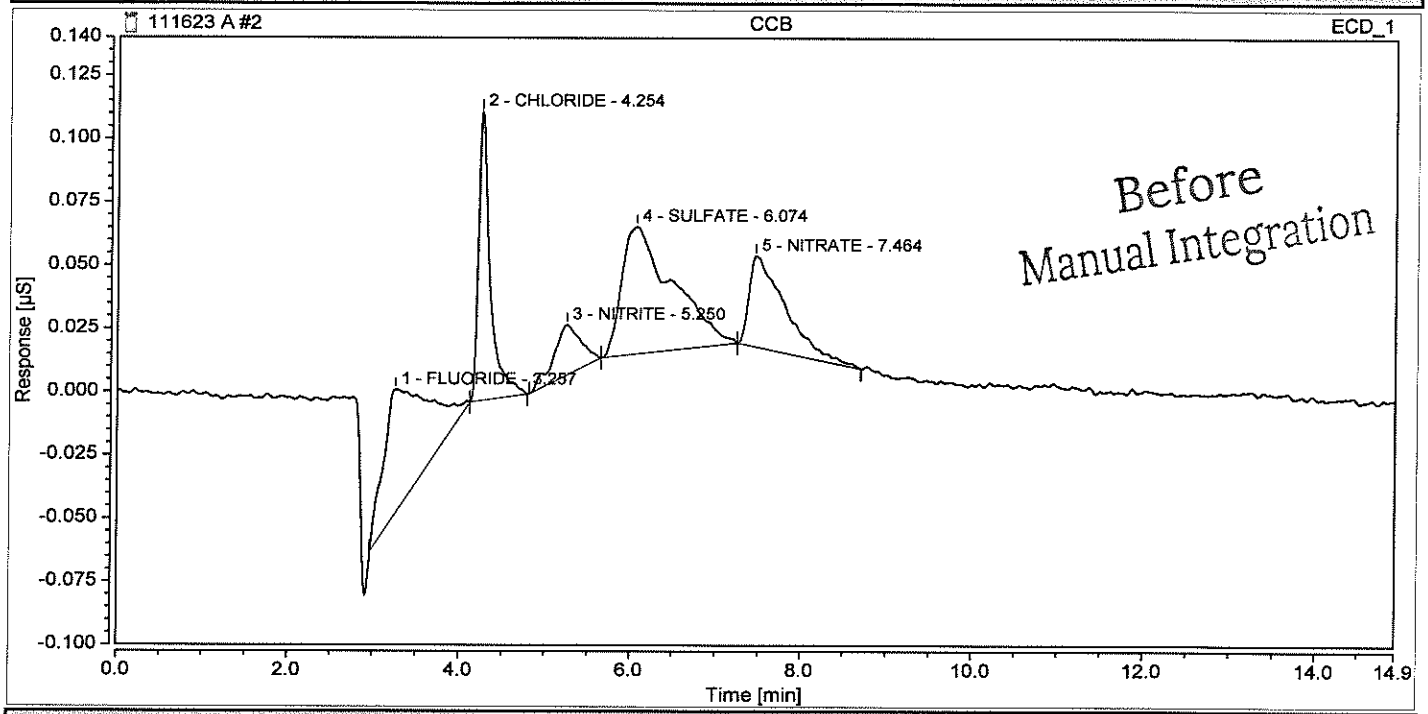
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.257	3.053	17.453	13.42	13.54	4.9549	-0.9021
2	CHLORIDE	4.253	3.801	29.010	16.71	22.51	9.7533	-2.4667
3	NITRITE	4.953	3.283	18.915	14.43	14.67	3.9525	-1.1866
4	SULFATE	5.763	5.536	27.480	24.33	21.32	19.4751	-2.6247
5	BROMIDE	6.440	3.241	18.341	14.24	14.23	19.0638	-4.6811
6	NITRATE	7.373	3.838	17.701	16.87	13.73	3.9219	-1.9534
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**22.753**	**128.900**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**CCB**	*Run Time (min):*	**14.95**
Vial Number:	**2**	*Injection Volume:*	**200.00**
Injection Type:	**Blank**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**16/Nov/23 17:44**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

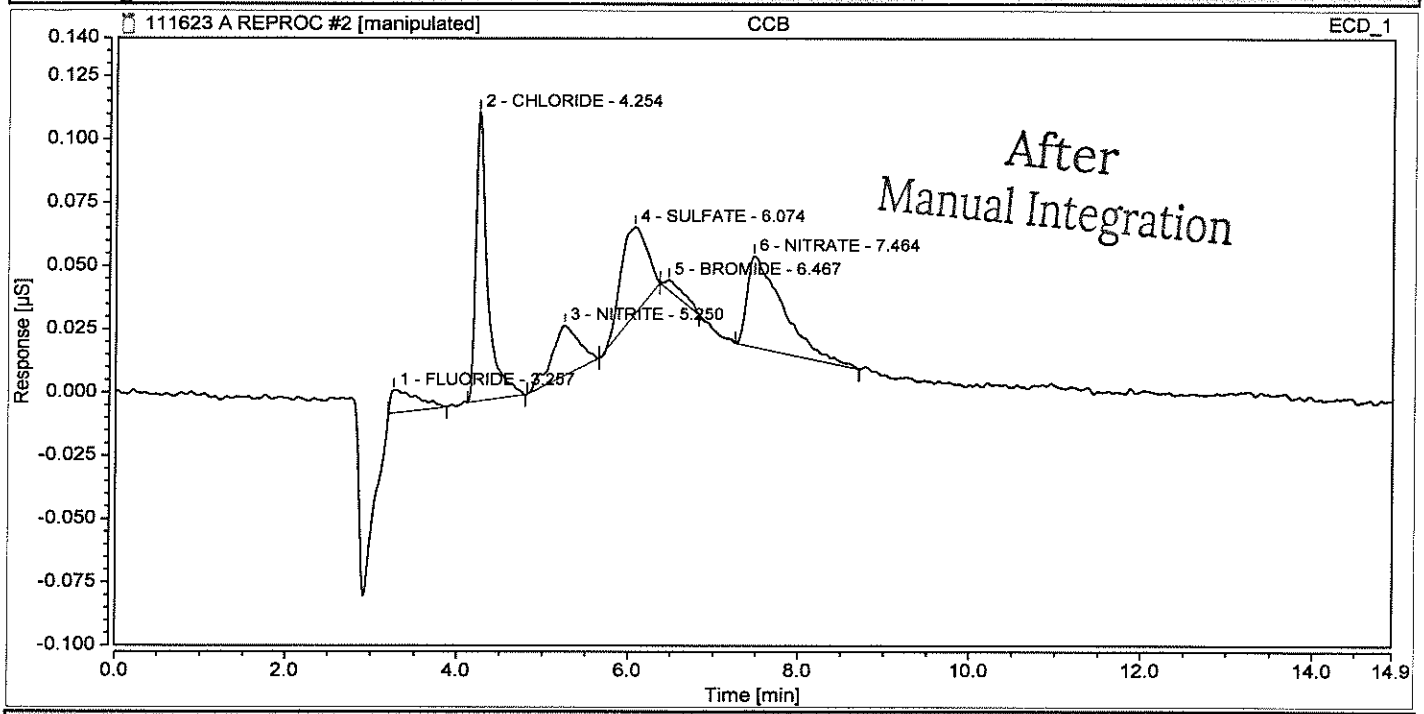
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.257	0.028	0.049	26.18	18.27	0.0603	n.a.
2	CHLORIDE	4.254	0.018	0.114	17.02	42.38	0.0463	n.a.
3	NITRITE	5.250	0.007	0.020	6.91	7.34	0.0167	n.a.
4	SULFATE	6.074	0.035	0.050	32.91	18.67	0.1227	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5	NITRATE	7.464	0.018	0.036	16.97	13.35	0.0184	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.106**	**0.270**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**CCB**	*Run Time (min):*	**14.95**
Vial Number:	**2**	*Injection Volume:*	**200.00**
Injection Type:	**Blank**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**16/Nov/23 17:44**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

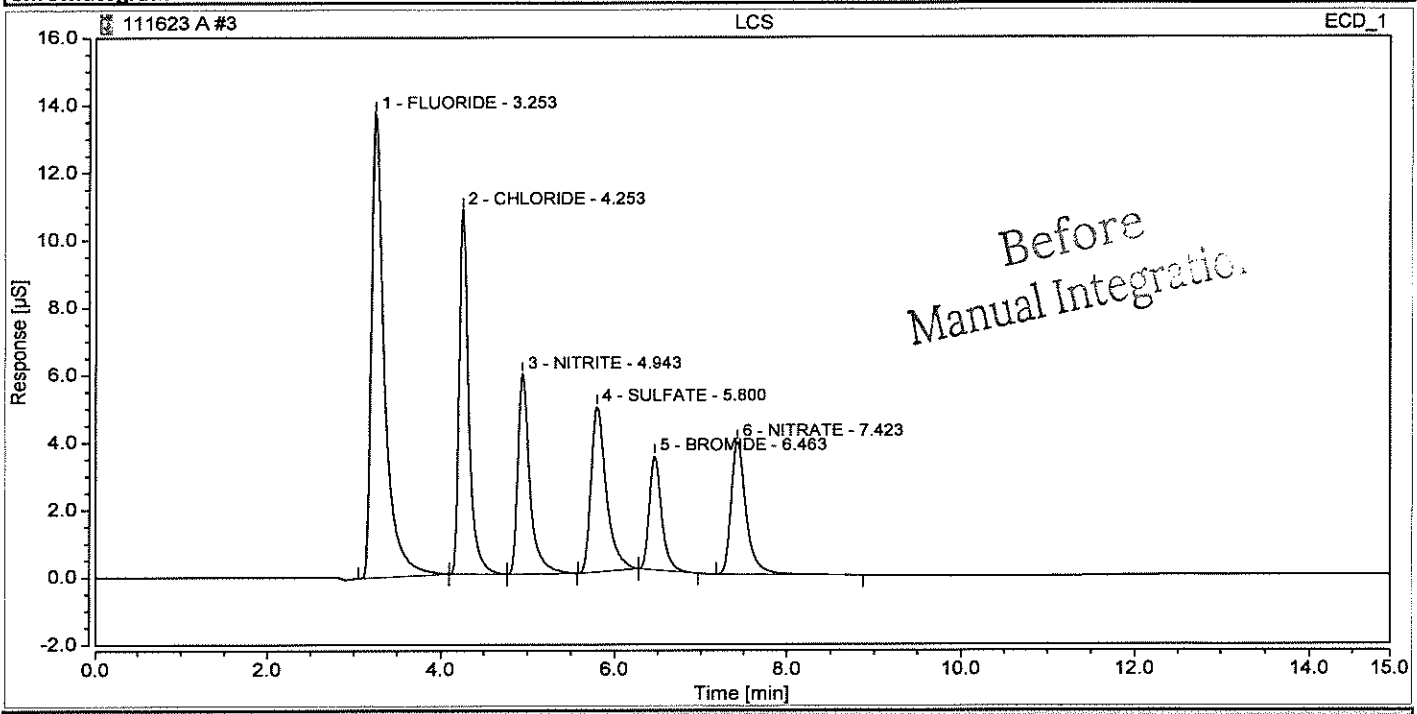
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.257	0.003	0.009	5.32	4.17	0.0217	n.a.
2	CHLORIDE	4.254	0.018	0.114	30.04	52.62	0.0463	n.a.
3	NITRITE	5.250	0.007	0.020	12.20	9.12	0.0167	n.a.
4	SULFATE	6.074	0.012	0.034	20.37	15.67	0.0430	n.a.
5	BROMIDE	6.467	0.001	0.004	2.14	1.85	0.0076	n.a.
6	NITRATE	7.464	0.018	0.036	29.94	16.57	0.0184	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.060**	**0.217**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**LCS**	*Run Time (min):*	**14.95**
Vial Number:	**3**	*Injection Volume:*	**200.00**
Injection Type:	**Check Standard**	*Channel:*	**ECD_1**
Calibration Level:	**09**	*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**16/Nov/23 18:01**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

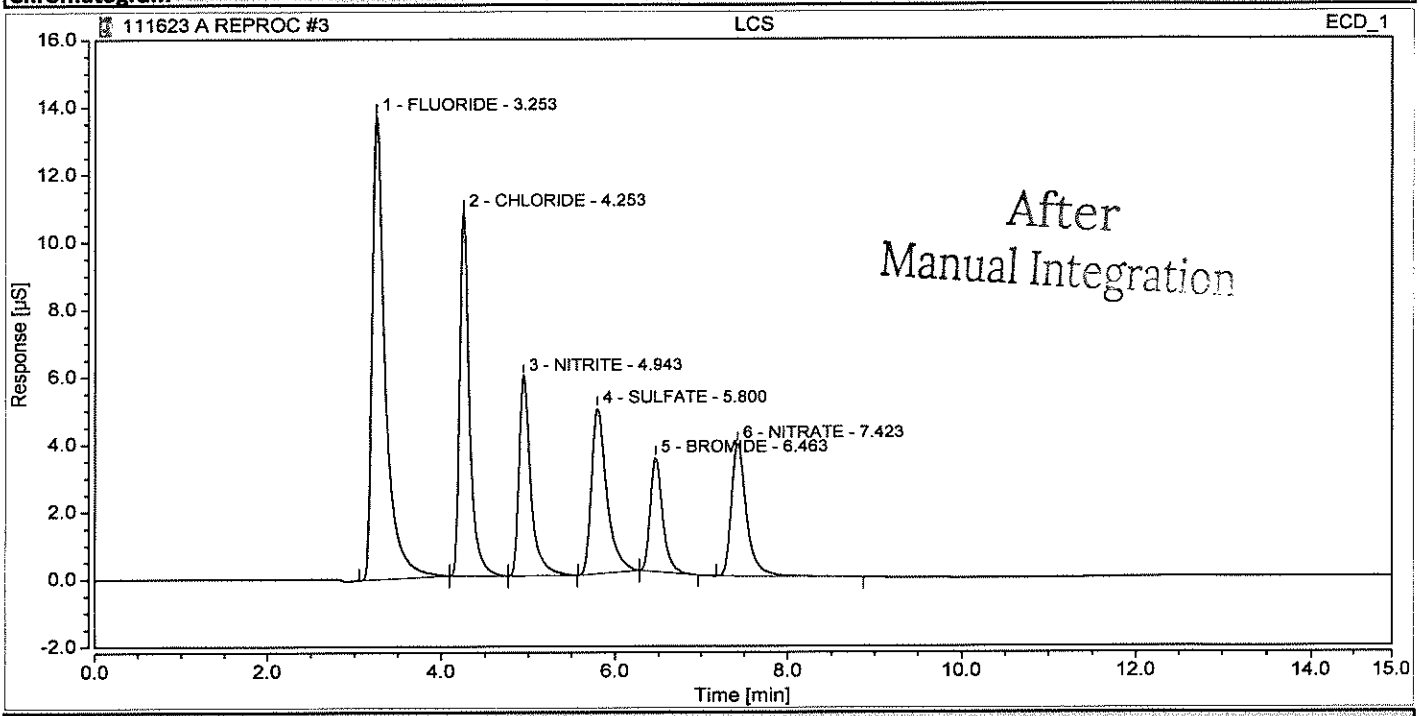
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.253	2.417	13.757	33.75	32.21	3.9015	4.0393
2	CHLORIDE	4.253	1.414	10.798	19.74	25.28	3.6269	-3.2835
3	NITRITE	4.943	0.958	5.927	13.38	13.88	1.1333	-0.5873
4	SULFATE	5.800	0.999	4.906	13.94	11.49	3.5130	-6.3196
5	BROMIDE	6.463	0.568	3.380	7.93	7.92	3.3406	-10.9185
6	NITRATE	7.423	0.806	3.939	11.26	9.22	0.8240	-2.4852
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**7.162**	**42.707**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**LCS**	*Run Time (min):*	**14.95**
Vial Number:	**3**	*Injection Volume:*	**200.00**
Injection Type:	**Check Standard**	*Channel:*	**ECD_1**
Calibration Level:	**09**	*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**16/Nov/23 18:01**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

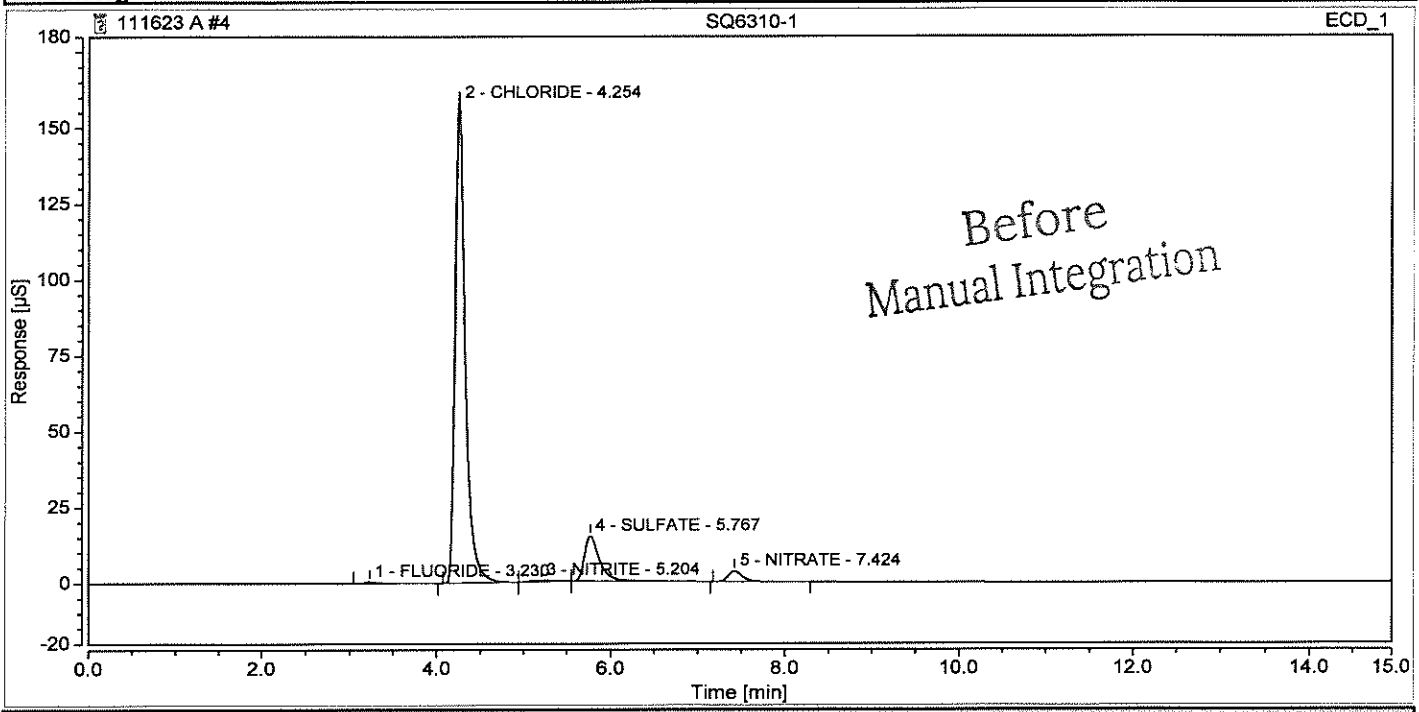
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.253	2.417	13.757	33.75	32.21	3.9015	4.0393
2	CHLORIDE	4.253	1.414	10.798	19.74	25.28	3.6269	-3.2835
3	NITRITE	4.943	0.958	5.927	13.38	13.88	1.1333	-0.5873
4	SULFATE	5.800	0.999	4.906	13.94	11.49	3.5130	-6.3196
5	BROMIDE	6.463	0.568	3.380	7.93	7.92	3.3406	-10.9185
6	NITRATE	7.423	0.806	3.939	11.26	9.22	0.8240	-2.4852
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**7.162**	**42.707**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6310-1**	*Run Time (min):*	**14.96**
Vial Number:	**4**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**16/Nov/23 18:18**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

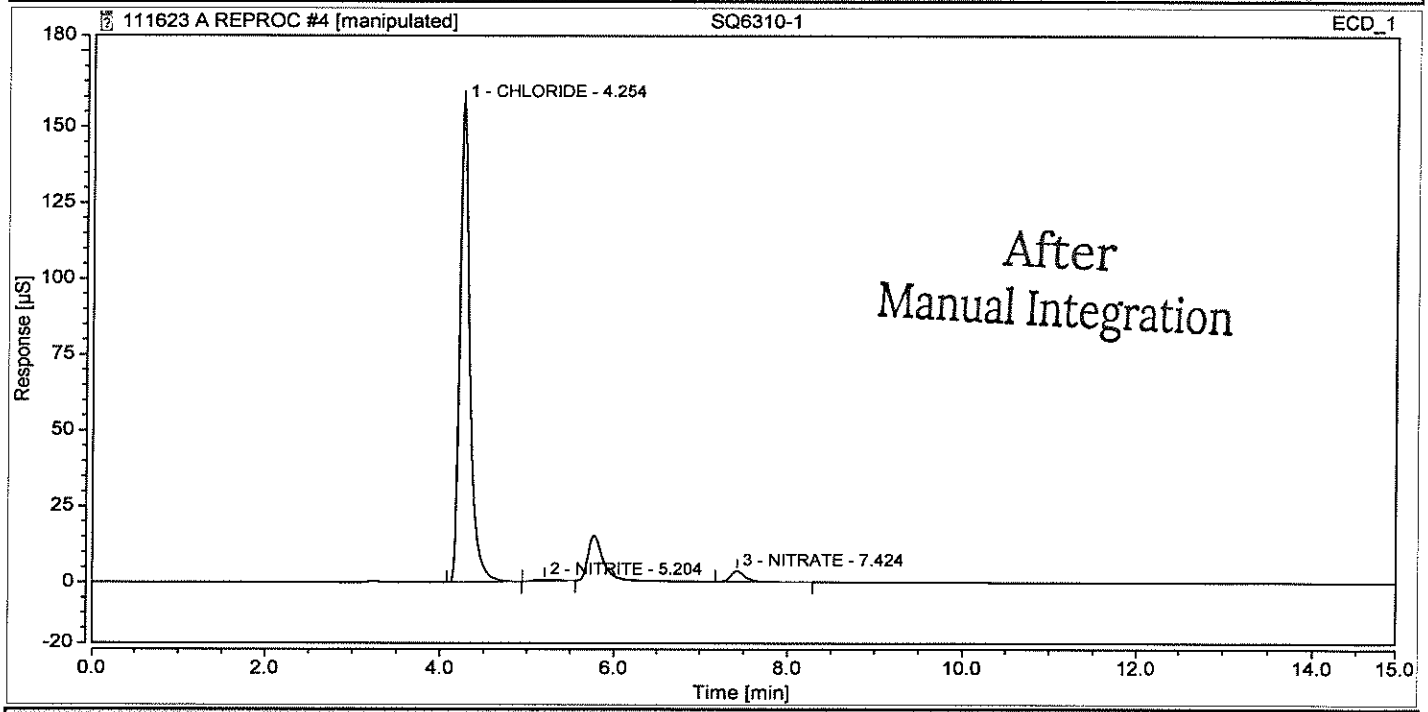
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.230	0.089	0.497	0.35	0.28	0.1561	n.a.
2	CHLORIDE	4.254	21.287	158.074	84.40	89.09	54.6188	n.a.
3	NITRITE	5.204	0.159	0.493	0.63	0.28	0.1938	n.a.
4	SULFATE	5.767	3.003	14.846	11.91	8.37	10.5646	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5	NITRATE	7.424	0.683	3.532	2.71	1.99	0.6979	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**25.222**	**177.442**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6310-1**	*Run Time (min):*	**14.96**
Vial Number:	**4**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**16/Nov/23 18:18**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

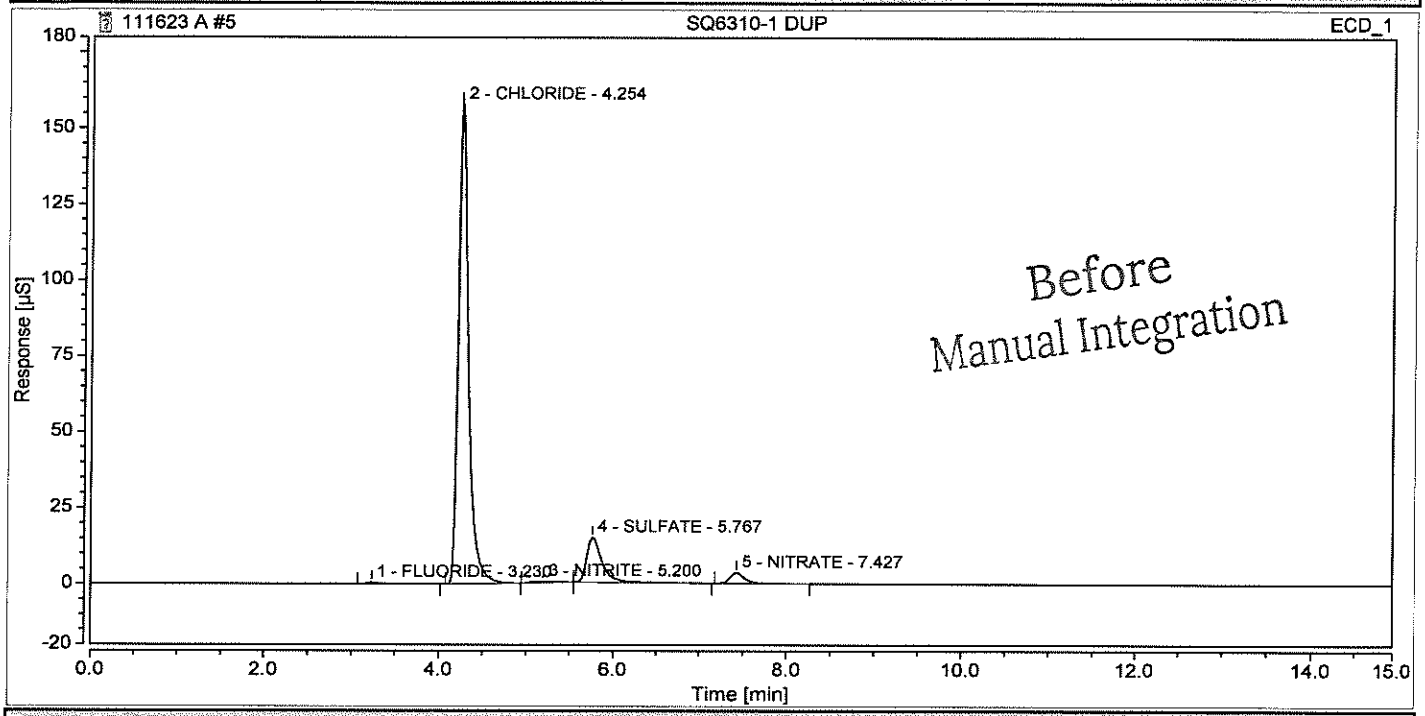
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.254	21.287	158.074	96.19	97.52	54.6188	n.a.
2	NITRITE	5.204	0.159	0.493	0.72	0.30	0.1938	n.a.
n.a.	SULFATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
3	NITRATE	7.424	0.683	3.532	3.09	2.18	0.6979	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**22.130**	**162.099**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6310-1 DUP**	*Run Time (min):*	**14.95**
Vial Number:	**5**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**16/Nov/23 18:36**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

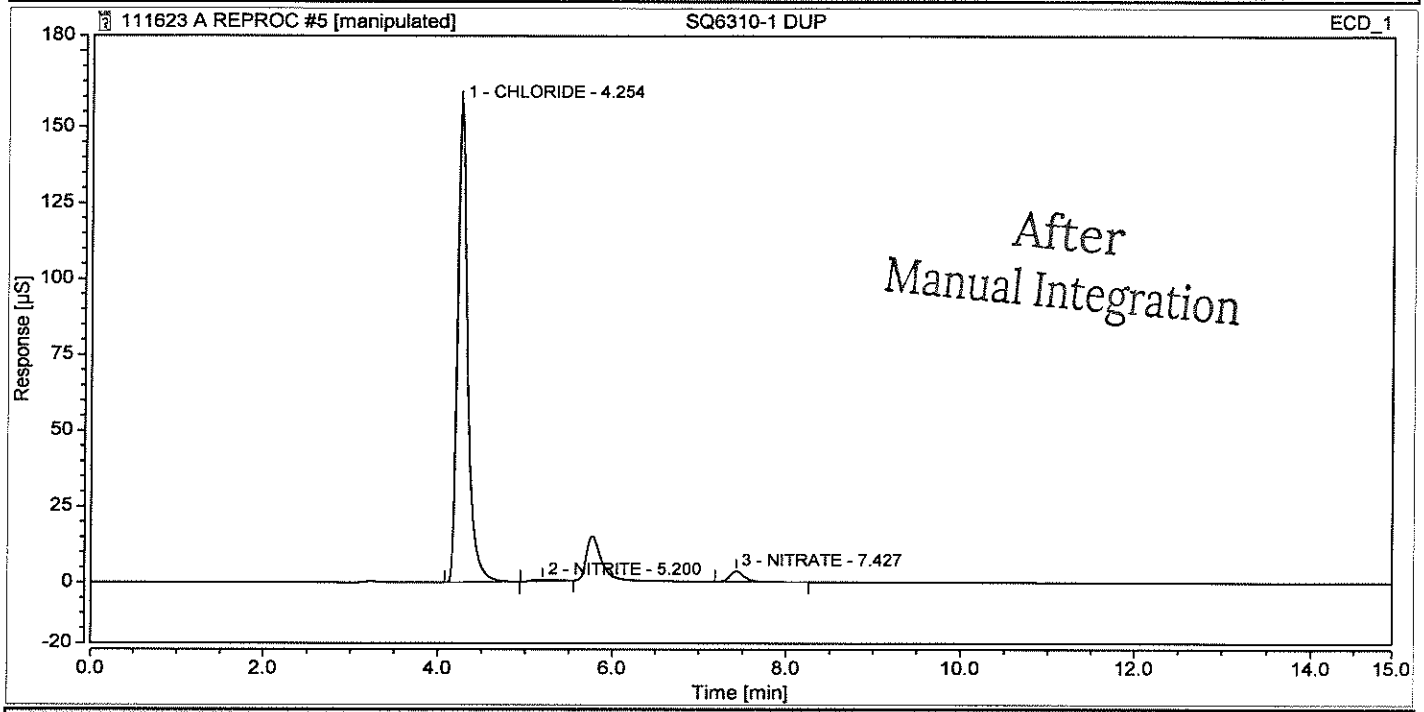
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.230	0.083	0.479	0.33	0.27	0.1464	n.a.
2	CHLORIDE	4.254	21.251	157.949	84.45	89.17	54.5263	n.a.
3	NITRITE	5.200	0.163	0.501	0.65	0.28	0.1983	n.a.
4	SULFATE	5.767	2.999	14.745	11.92	8.32	10.5494	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5	NITRATE	7.427	0.668	3.461	2.66	1.95	0.6829	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**25.164**	**177.135**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6310-1 DUP**	*Run Time (min):*	**14.95**
Vial Number:	**5**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**16/Nov/23 18:36**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

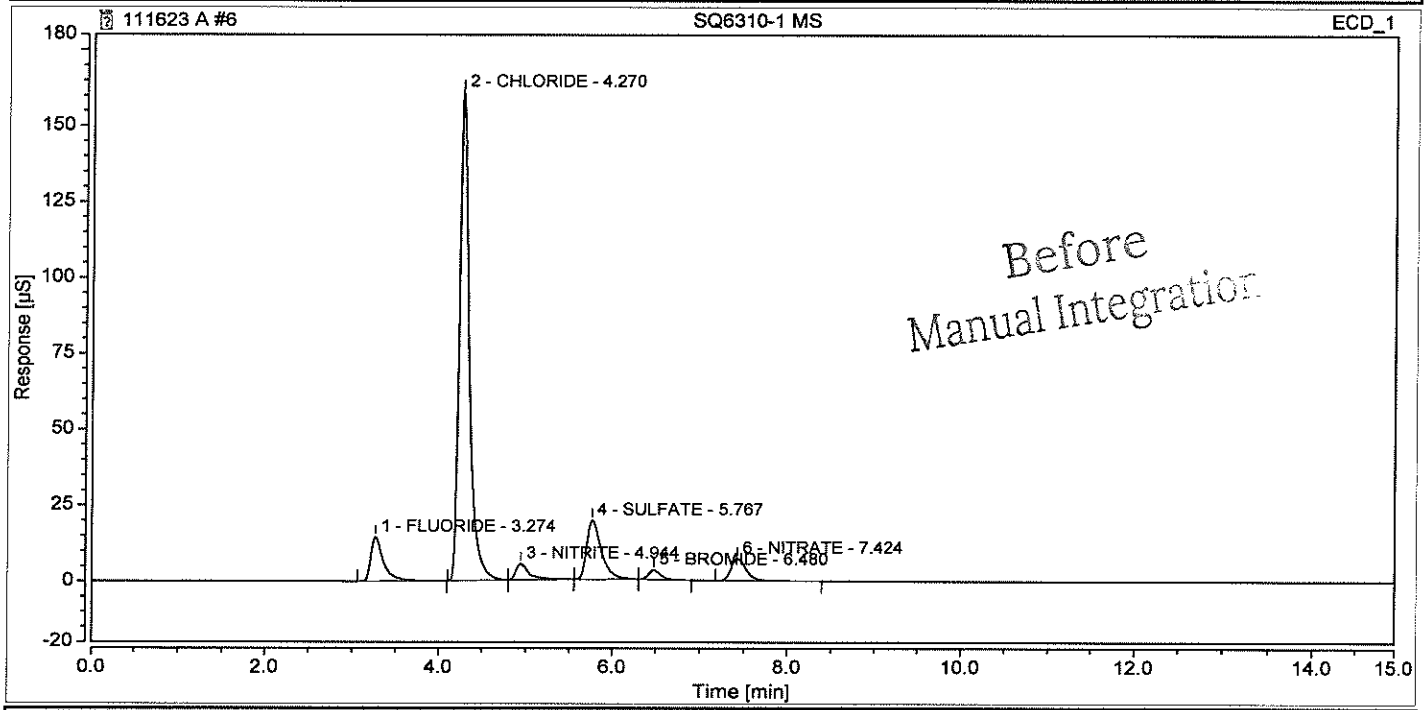
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.254	21.251	157.949	96.24	97.55	54.5263	n.a.
2	NITRITE	5.200	0.163	0.501	0.74	0.31	0.1983	n.a.
n.a.	SULFATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
3	NITRATE	7.427	0.668	3.461	3.03	2.14	0.6829	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**22.083**	**161.911**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6310-1 MS**	*Run Time (min):*	**14.96**
Vial Number:	**6**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**16/Nov/23 18:53**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

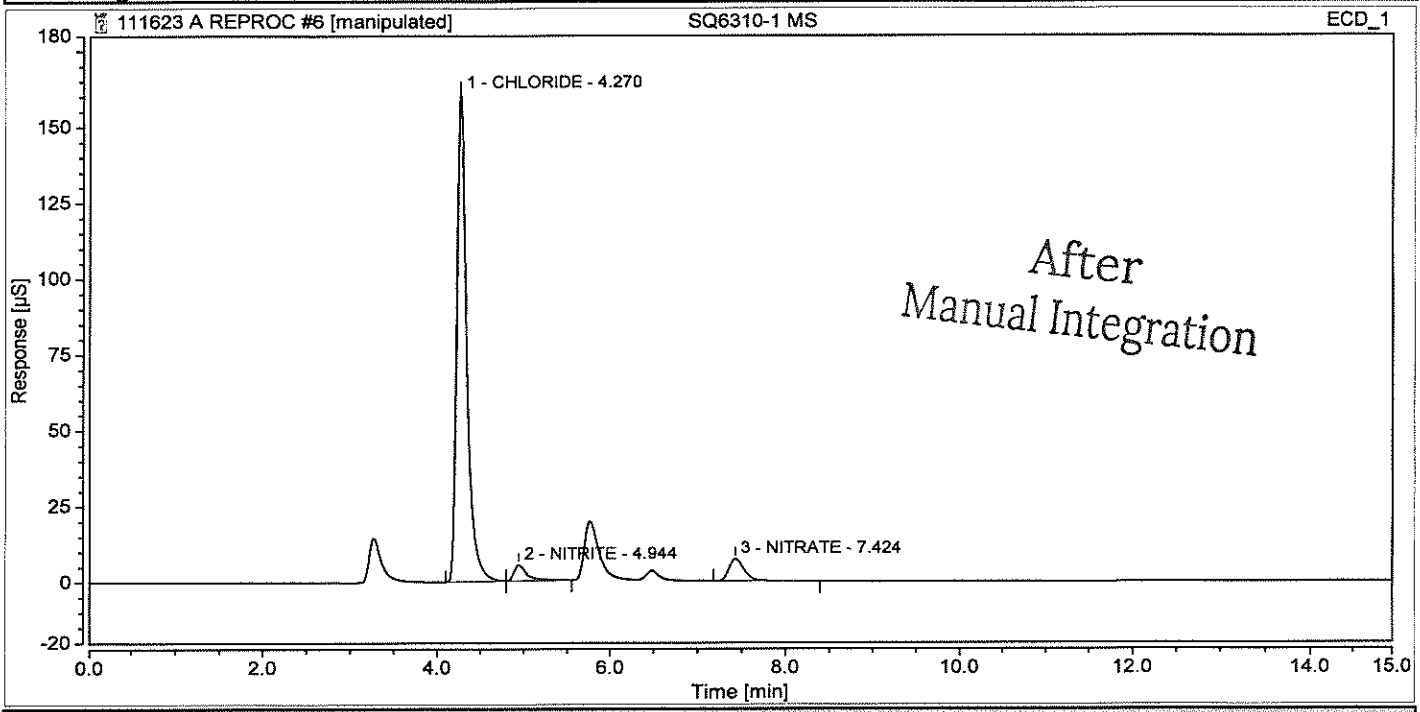
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.274	2.475	14.614	8.02	6.93	3.9964	n.a.
2	CHLORIDE	4.270	21.608	160.939	70.04	76.31	55.4422	n.a.
3	NITRITE	4.944	0.964	5.376	3.12	2.55	1.1404	n.a.
4	SULFATE	5.767	3.841	19.493	12.45	9.24	13.5129	n.a.
5	BROMIDE	6.480	0.515	3.174	1.67	1.50	3.0283	n.a.
6	NITRATE	7.424	1.450	7.317	4.70	3.47	1.4820	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**30.854**	**210.913**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6310-1 MS**	*Run Time (min):*	**14.96**
Vial Number:	**6**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**16/Nov/23 18:53**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

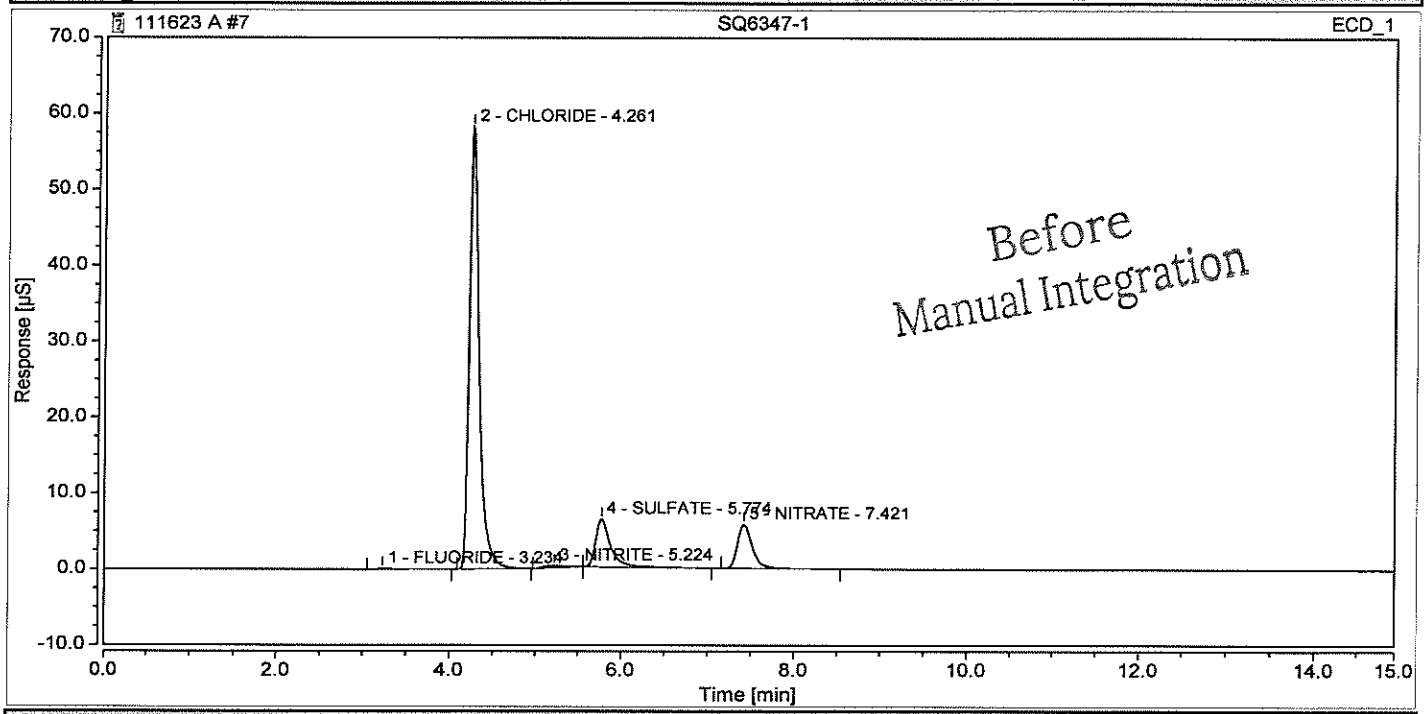
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.270	21.608	160.939	89.95	92.69	55.4422	n.a.
2	NITRITE	4.944	0.964	5.376	4.01	3.10	1.1404	n.a.
n.a.	SULFATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
3	NITRATE	7.424	1.450	7.317	6.04	4.21	1.4820	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**24.023**	**173.632**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6347-1**	*Run Time (min):*	**14.95**
Vial Number:	**7**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**16/Nov/23 19:10**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

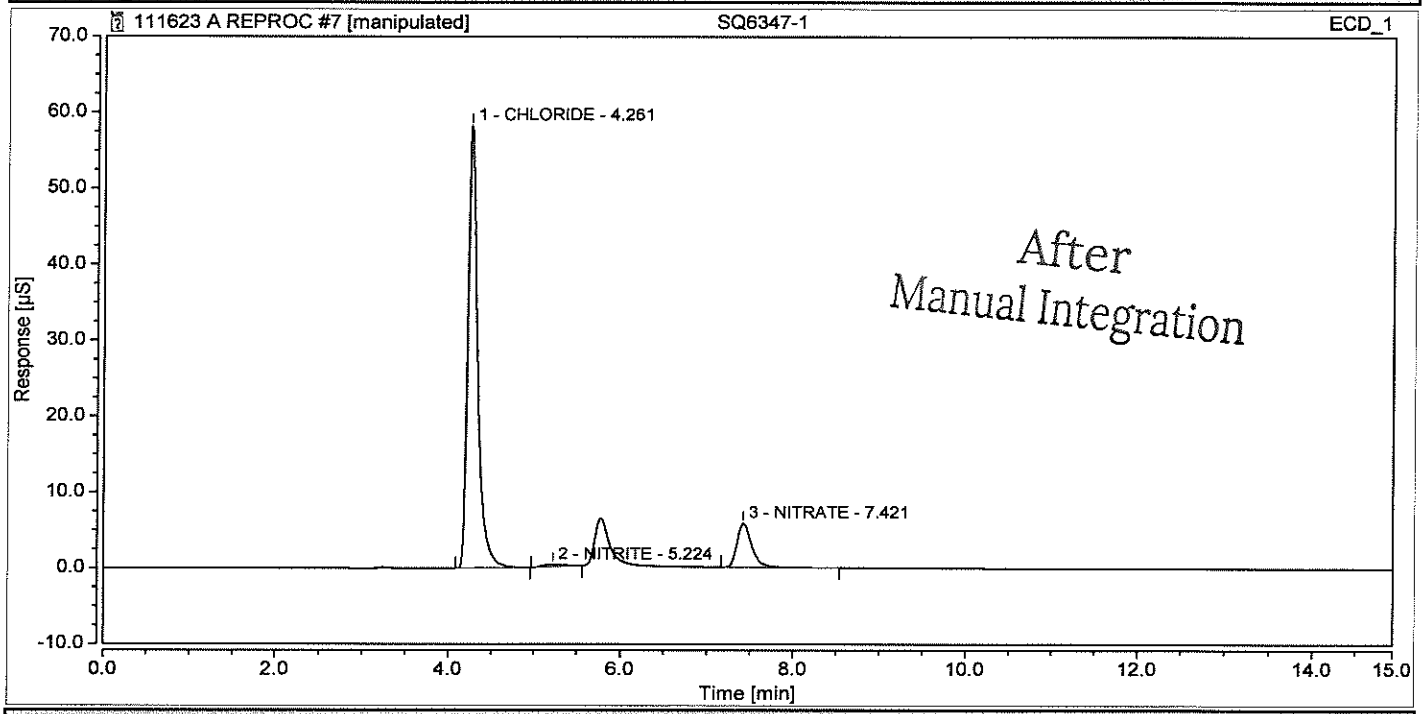
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.234	0.038	0.160	0.37	0.23	0.0763	n.a.
2	CHLORIDE	4.261	7.762	58.291	75.34	82.28	19.9149	n.a.
3	NITRITE	5.224	0.089	0.289	0.87	0.41	0.1125	n.a.
4	SULFATE	5.774	1.263	6.301	12.25	8.89	4.4411	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5	NITRATE	7.421	1.151	5.806	11.17	8.19	1.1763	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**10.303**	**70.847**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6347-1**	*Run Time (min):*	**14.95**
Vial Number:	**7**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**16/Nov/23 19:10**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

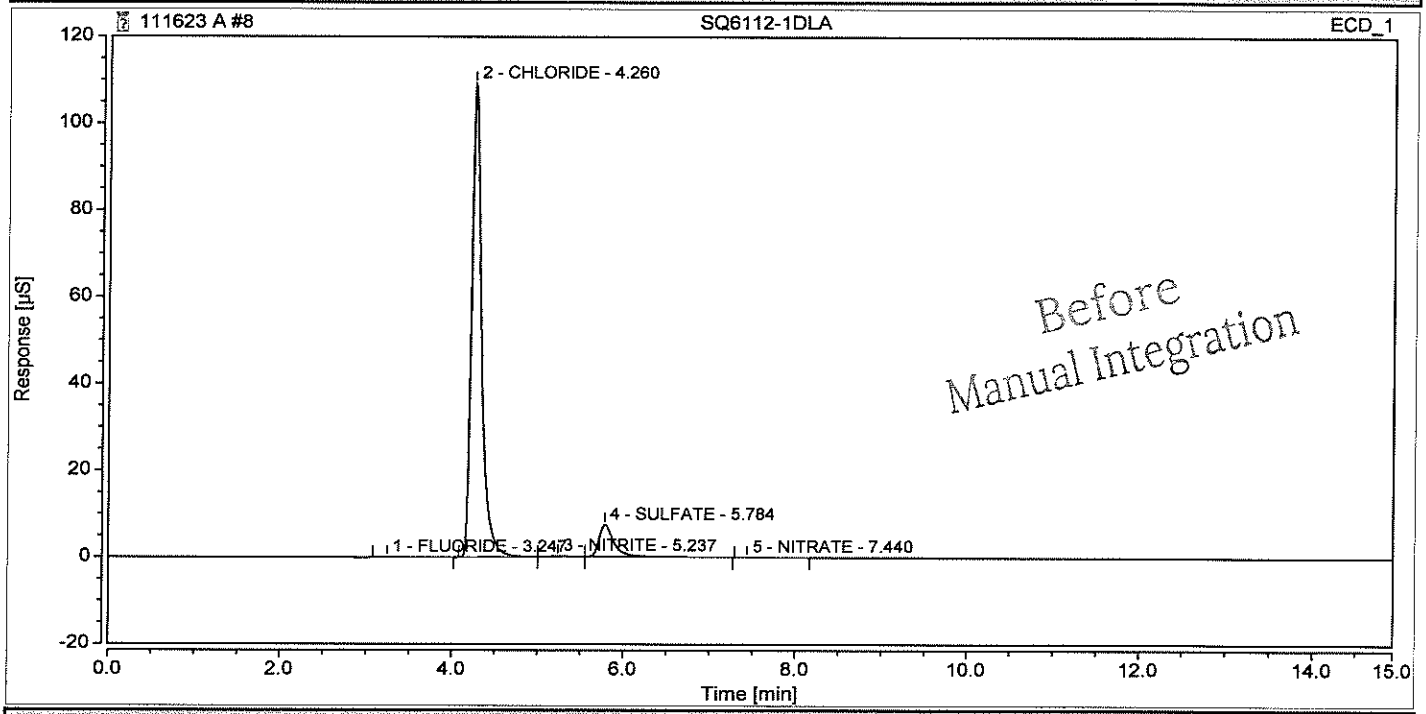
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.261	7.762	58.291	86.22	90.53	19.9149	n.a.
2	NITRITE	5.224	0.089	0.289	0.99	0.45	0.1125	n.a.
n.a.	SULFATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
3	NITRATE	7.421	1.151	5.806	12.79	9.02	1.1763	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**9.002**	**64.386**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6112-1DLA**	*Run Time (min):*	**14.95**
Vial Number:	**8**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**20.0000**
Injection Date/Time:	**16/Nov/23 19:27**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

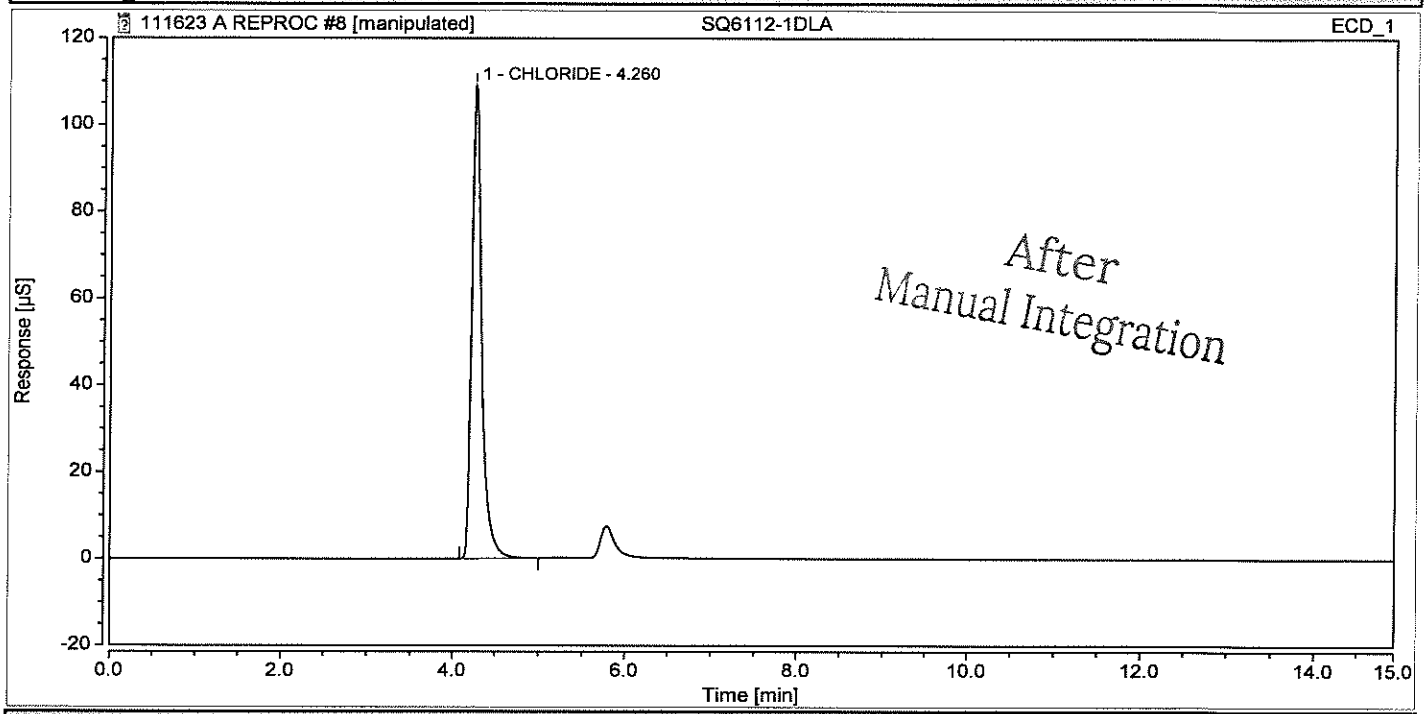
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.247	0.014	0.031	0.08	0.03	0.7613	n.a.
2	CHLORIDE	4.260	14.772	109.223	90.39	93.56	758.0056	n.a.
3	NITRITE	5.237	0.035	0.125	0.22	0.11	0.9909	n.a.
4	SULFATE	5.784	1.519	7.356	9.29	6.30	106.8614	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5	NITRATE	7.440	0.003	0.011	0.02	0.01	0.0658	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**16.343**	**116.745**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6112-1DLA**	*Run Time (min):*	**14.95**
Vial Number:	**8**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**20.0000**
Injection Date/Time:	**16/Nov/23 19:27**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

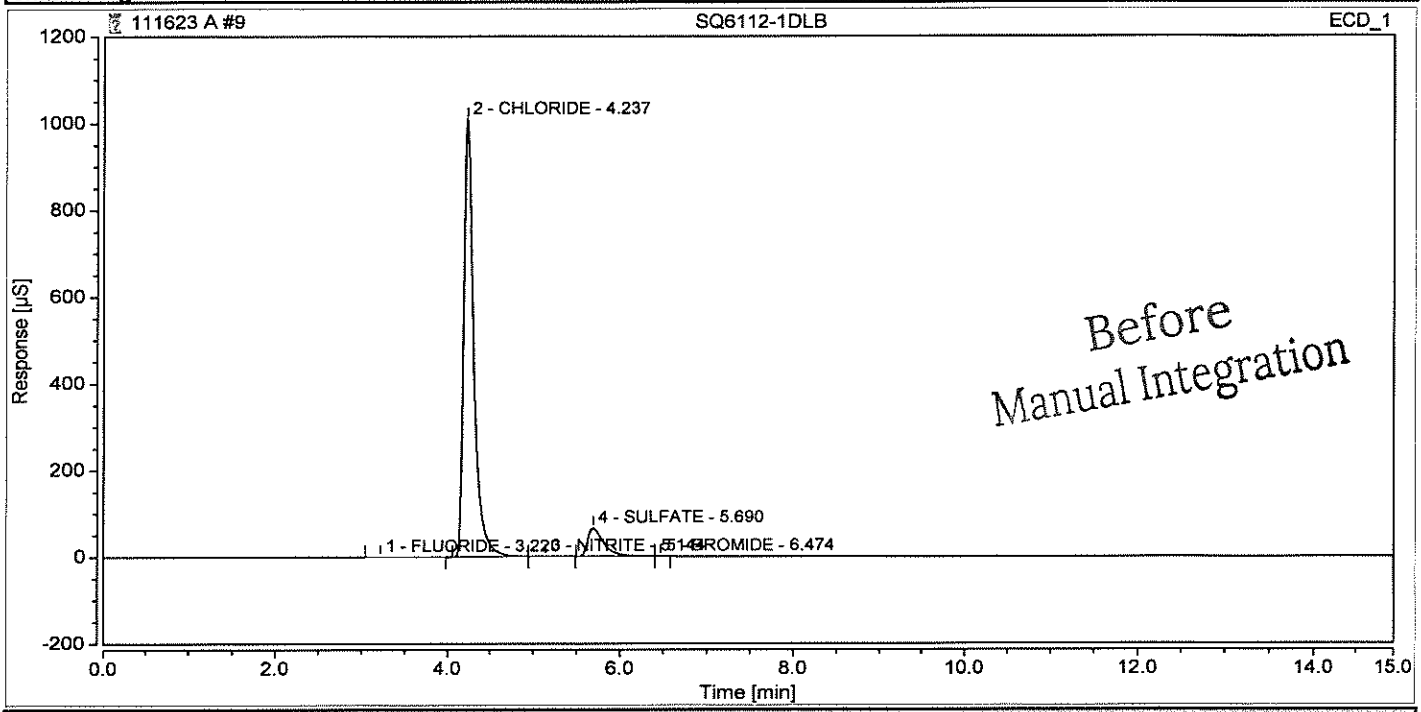
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.260	14.772	109.223	100.00	100.00	758.0056	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	SULFATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**14.772**	**109.223**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6112-1DLB**	*Run Time (min):*	**14.96**
Vial Number:	**9**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**2.0000**
Injection Date/Time:	**16/Nov/23 19:45**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

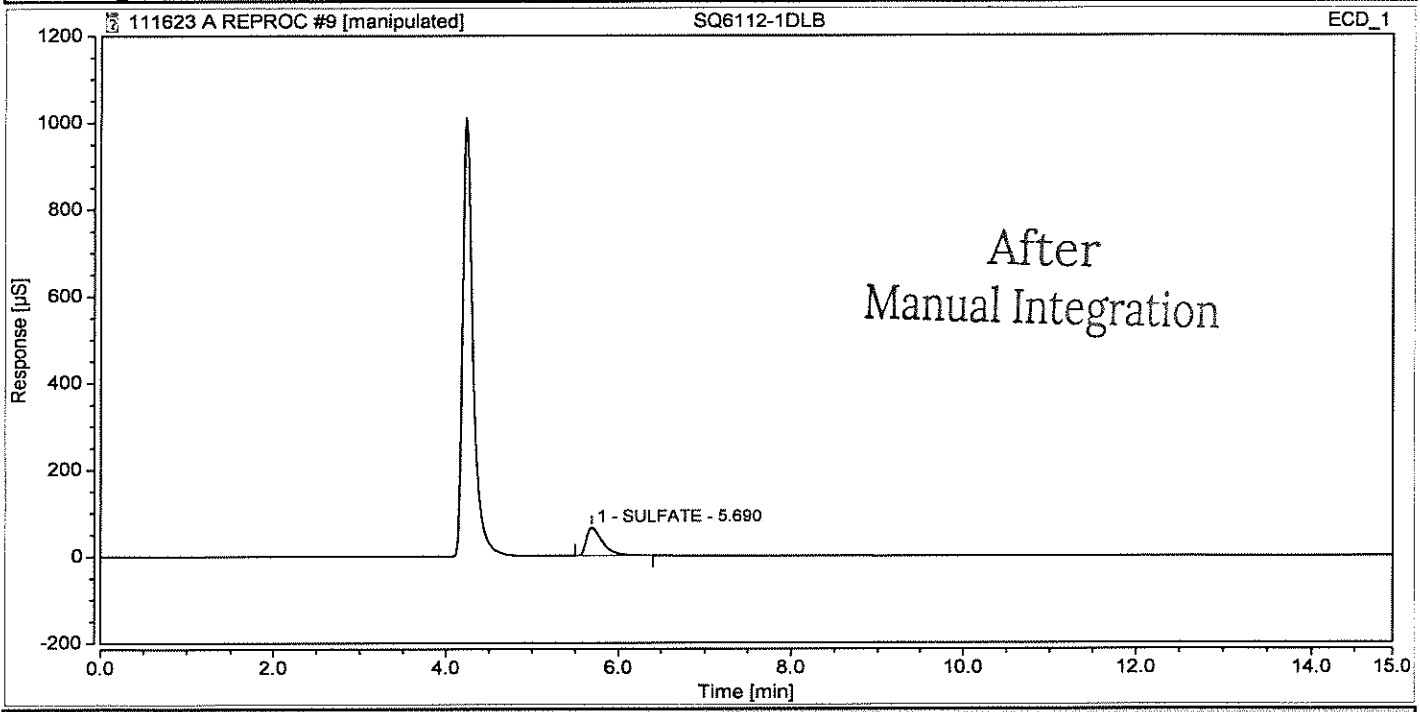
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.220	0.026	0.117	0.02	0.01	0.1160	n.a.
2	CHLORIDE	4.237	140.320	1008.757	90.86	93.87	720.0570	n.a.
3	NITRITE	5.144	0.116	0.409	0.08	0.04	0.2867	n.a.
4	SULFATE	5.690	13.975	65.353	9.05	6.08	98.3218	n.a.
5	BROMIDE	6.474	0.002	0.021	0.00	0.00	0.0249	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**154.440**	**1074.657**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6112-1DLB**	*Run Time (min):*	**14.96**
Vial Number:	**9**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**2.0000**
Injection Date/Time:	**16/Nov/23 19:45**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

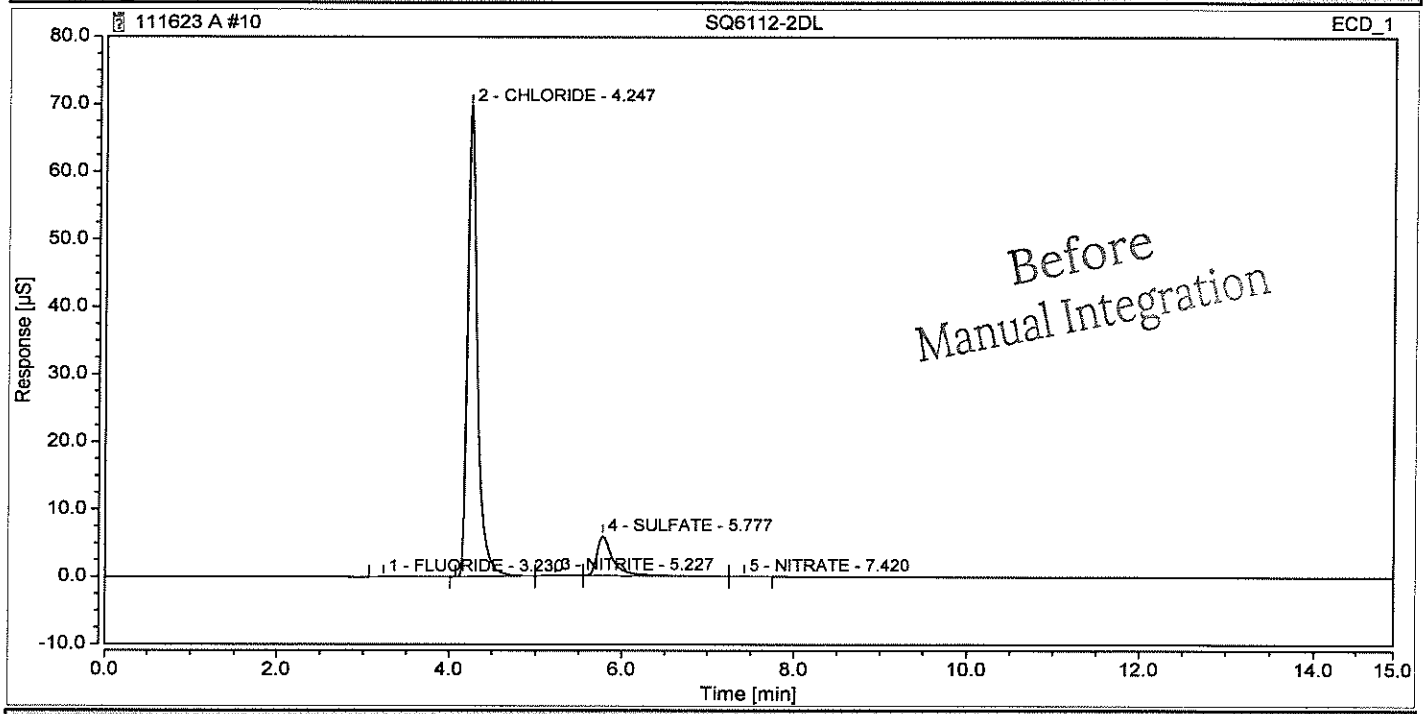
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	CHLORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	SULFATE	5.690	13.975	65.353	100.00	100.00	98.3218	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**13.975**	**65.353**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6112-2DL**	*Run Time (min):*	**14.95**
Vial Number:	**10**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**20.0000**
Injection Date/Time:	**16/Nov/23 20:02**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

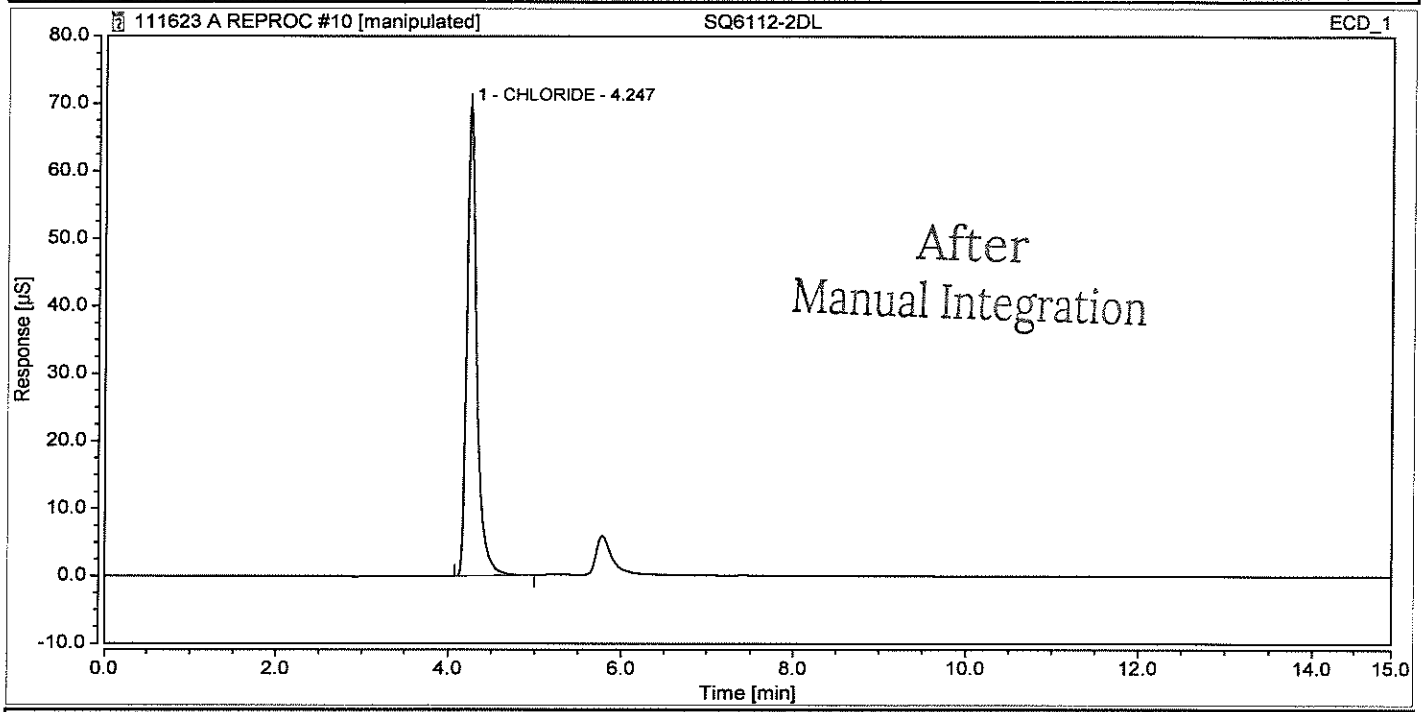
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.230	0.014	0.040	0.13	0.05	0.7819	n.a.
2	CHLORIDE	4.247	9.351	69.689	87.50	92.01	479.8632	n.a.
3	NITRITE	5.227	0.031	0.109	0.29	0.14	0.8953	n.a.
4	SULFATE	5.777	1.285	5.870	12.02	7.75	90.3871	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5	NITRATE	7.420	0.005	0.029	0.05	0.04	0.1081	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**10.687**	**75.738**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6112-2DL**	*Run Time (min):*	**14.95**
Vial Number:	**10**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**20.0000**
Injection Date/Time:	**16/Nov/23 20:02**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

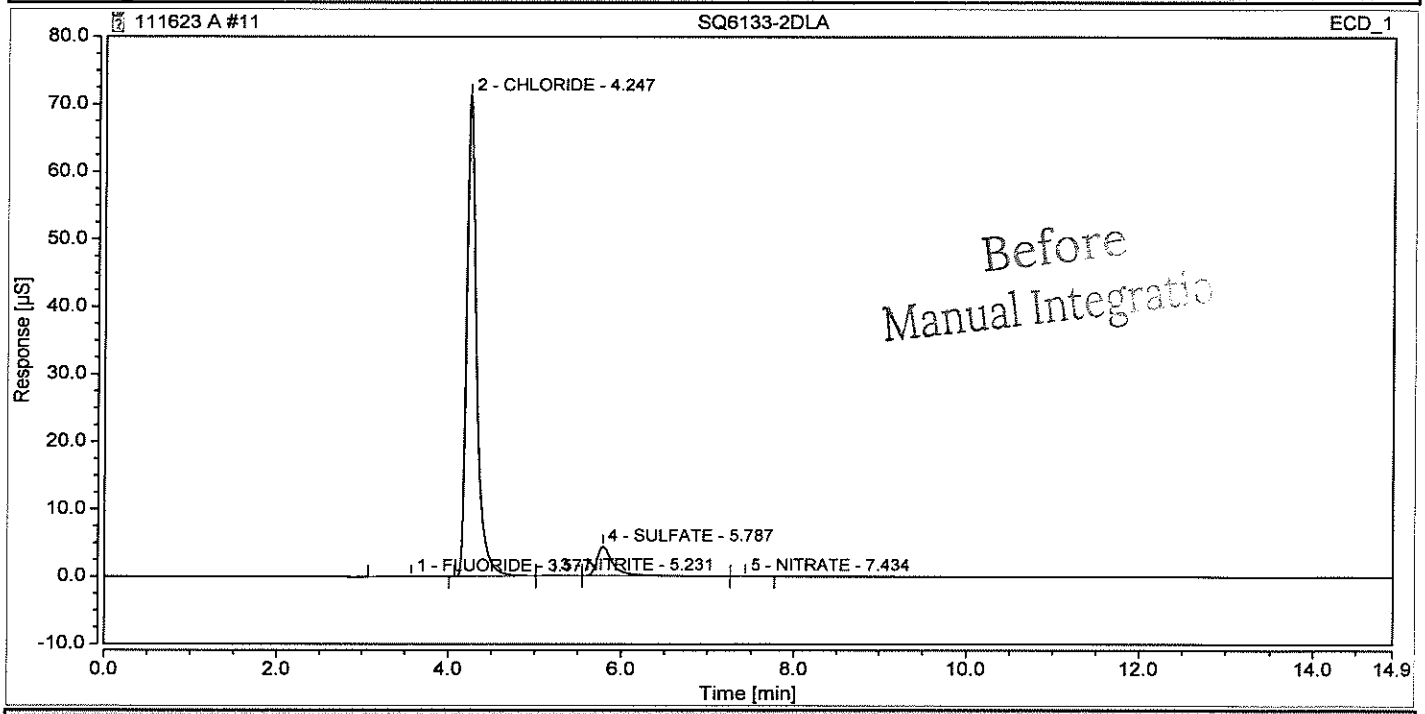
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.247	9.351	69.689	100.00	100.00	479.8632	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	SULFATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**9.351**	**69.689**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6133-2DLA**	*Run Time (min):*	**14.94**
Vial Number:	**11**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**50.0000**
Injection Date/Time:	**16/Nov/23 20:19**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

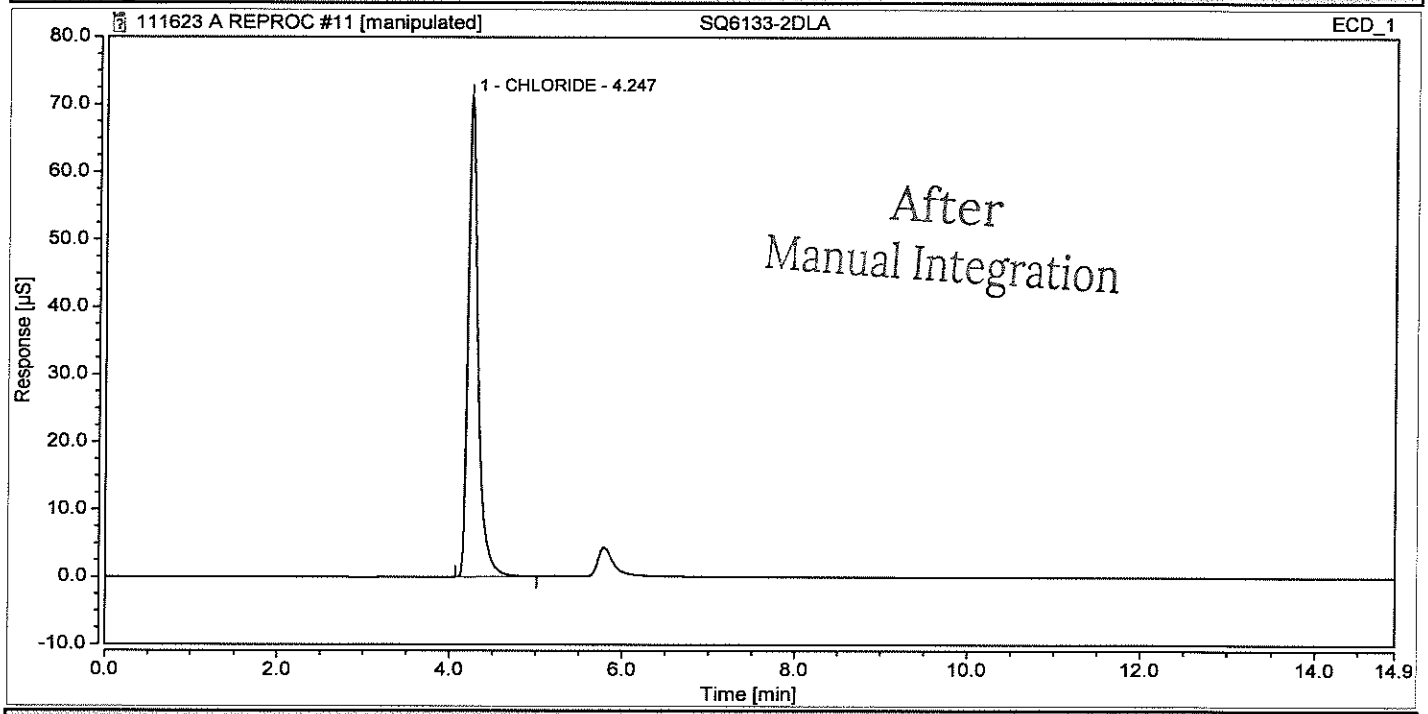
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.577	0.012	0.015	0.11	0.02	1.7674	n.a.
2	CHLORIDE	4.247	9.584	71.196	90.72	94.10	1229.5682	n.a.
3	NITRITE	5.231	0.018	0.066	0.17	0.09	1.4668	n.a.
4	SULFATE	5.787	0.947	4.364	8.96	5.77	166.4792	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5	NITRATE	7.434	0.004	0.021	0.04	0.03	0.2049	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**10.565**	**75.662**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6133-2DLA**	*Run Time (min):*	**14.94**
Vial Number:	**11**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**50.0000**
Injection Date/Time:	**16/Nov/23 20:19**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

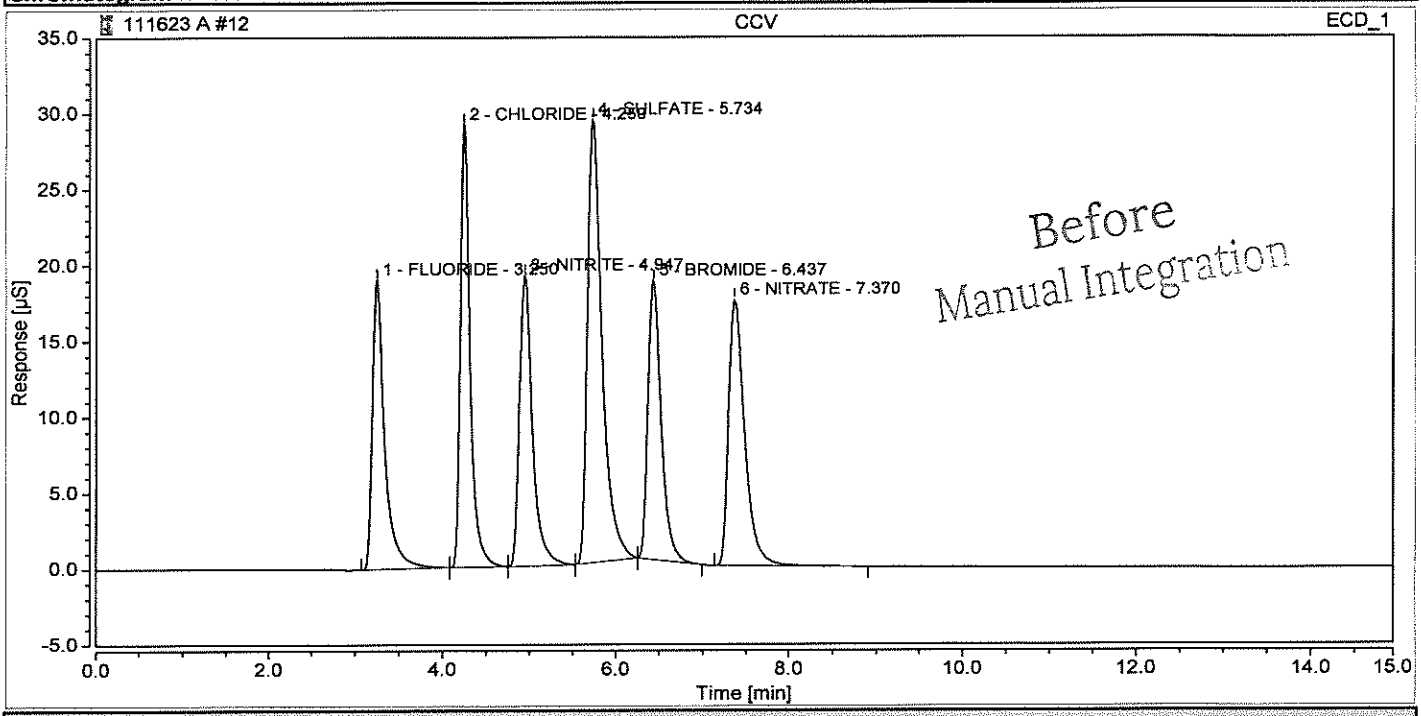
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.247	9.584	71.196	100.00	100.00	1229.5682	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	SULFATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**9.584**	**71.196**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**CCV**	*Run Time (min):*	**14.96**
Vial Number:	**13**	*Injection Volume:*	**200.00**
Injection Type:	**Check Standard**	*Channel:*	**ECD_1**
Calibration Level:	**06**	*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**16/Nov/23 20:36**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

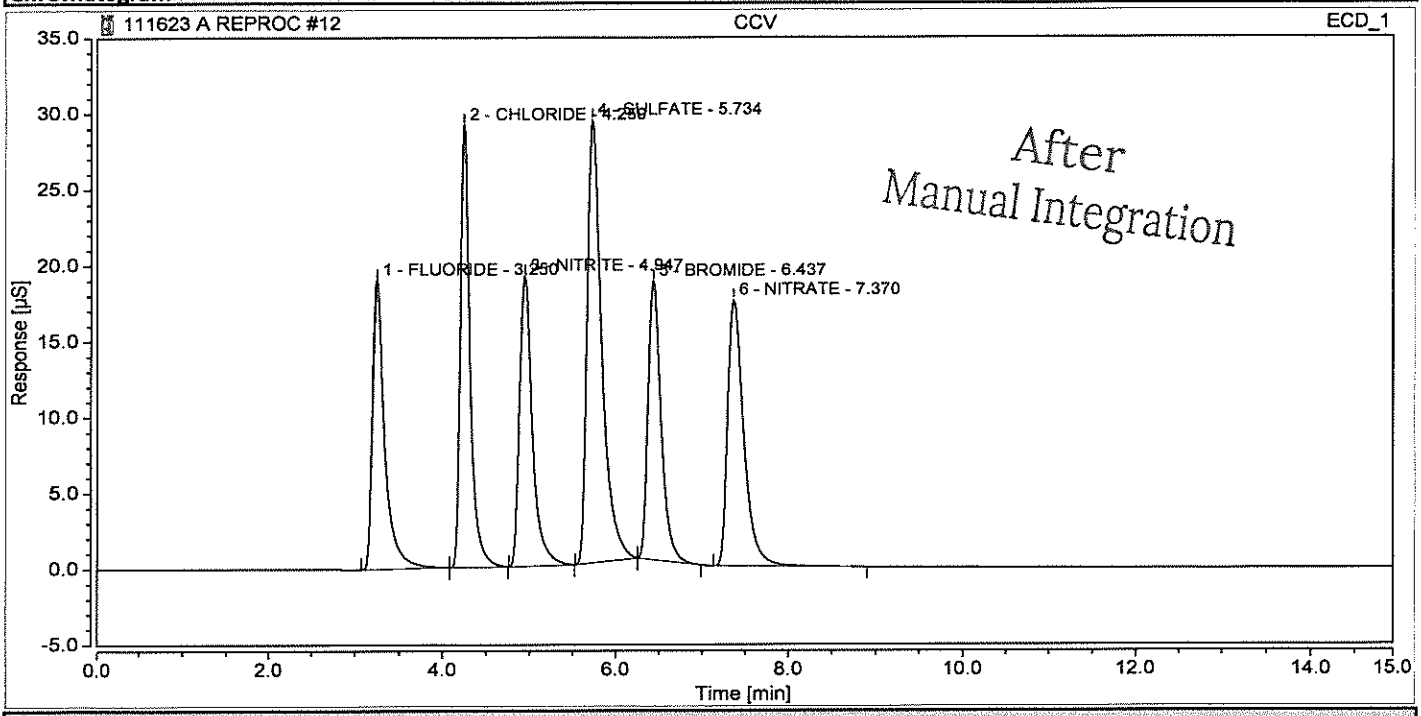
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.250	3.111	19.029	13.48	14.39	5.0520	1.0403
2	CHLORIDE	4.250	3.813	29.123	16.52	22.02	9.7825	-2.1746
3	NITRITE	4.947	3.302	19.126	14.31	14.46	3.9763	-0.5914
4	SULFATE	5.734	5.768	29.161	24.99	22.04	20.2907	1.4535
5	BROMIDE	6.437	3.249	18.345	14.08	13.87	19.1093	-4.4536
6	NITRATE	7.370	3.836	17.499	16.62	13.23	3.9200	-2.0000
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**23.079**	**132.284**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**CCV**	*Run Time (min):*	**14.96**
Vial Number:	**13**	*Injection Volume:*	**200.00**
Injection Type:	**Check Standard**	*Channel:*	**ECD_1**
Calibration Level:	**06**	*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**16/Nov/23 20:36**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

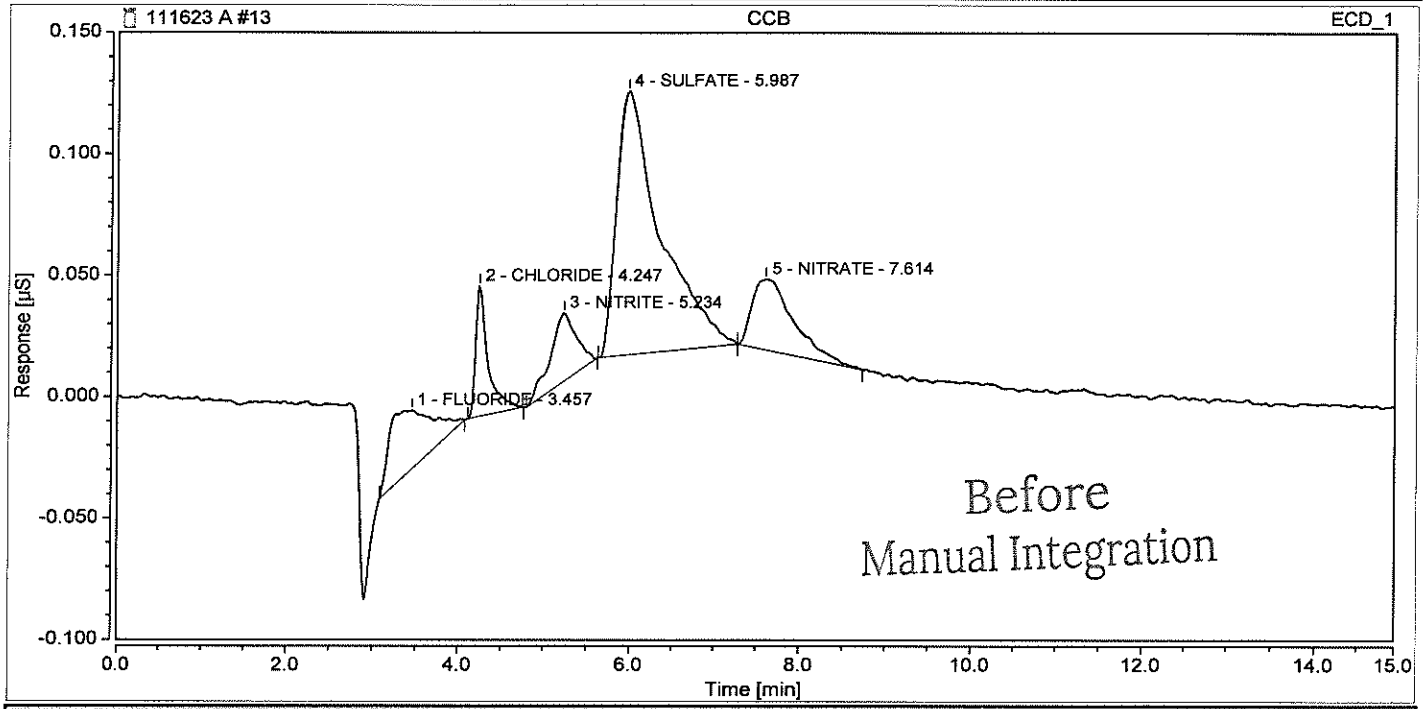
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.250	3.111	19.029	13.48	14.39	5.0520	1.0403
2	CHLORIDE	4.250	3.813	29.123	16.52	22.02	9.7825	-2.1746
3	NITRITE	4.947	3.302	19.126	14.31	14.46	3.9763	-0.5914
4	SULFATE	5.734	5.768	29.161	24.99	22.04	20.2907	1.4535
5	BROMIDE	6.437	3.249	18.345	14.08	13.87	19.1093	-4.4536
6	NITRATE	7.370	3.836	17.499	16.62	13.23	3.9200	-2.0000
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**23.079**	**132.284**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**CCB**	*Run Time (min):*	**14.96**
Vial Number:	**14**	*Injection Volume:*	**200.00**
Injection Type:	**Blank**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**16/Nov/23 20:54**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

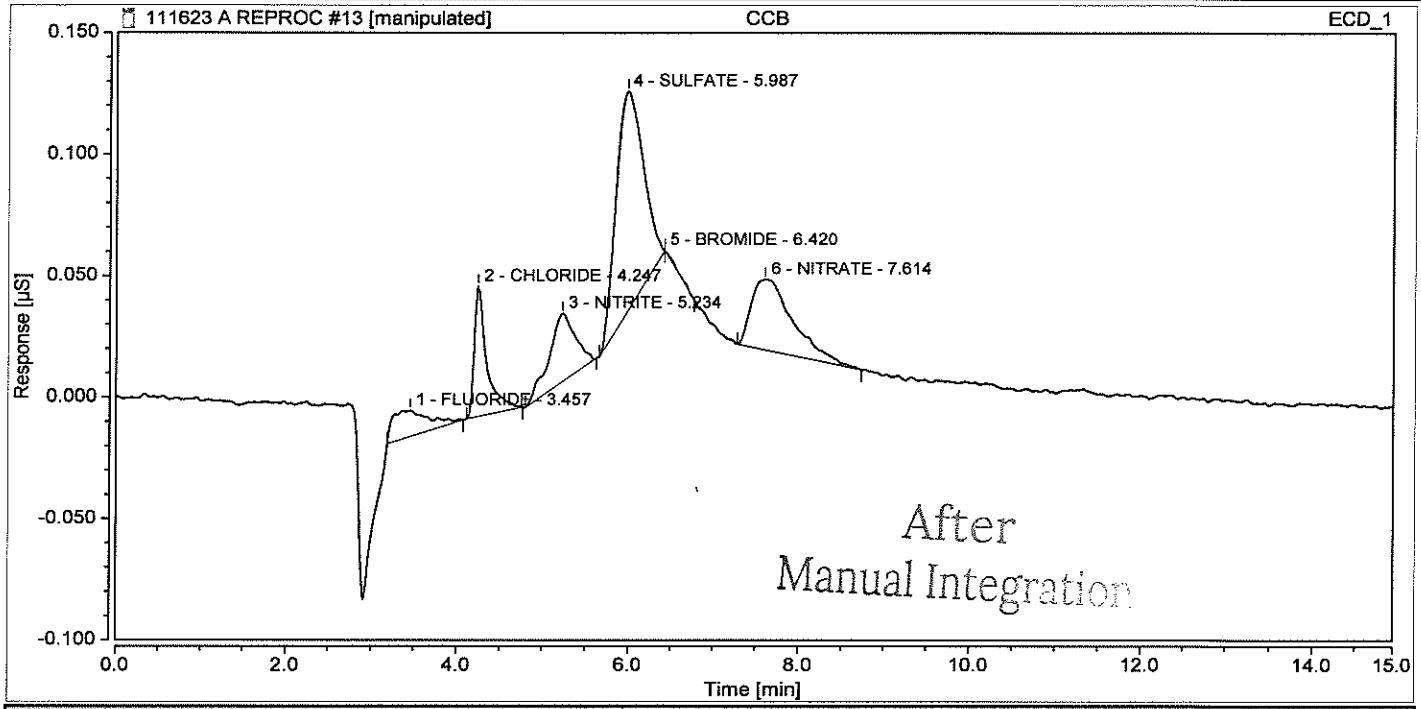
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.457	0.015	0.024	12.80	9.92	0.0397	n.a.
2	CHLORIDE	4.247	0.009	0.054	7.86	22.06	0.0231	n.a.
3	NITRITE	5.234	0.010	0.028	8.69	11.51	0.0198	n.a.
4	SULFATE	5.987	0.065	0.108	56.36	44.59	0.2272	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5	NITRATE	7.614	0.016	0.029	14.28	11.92	0.0167	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.115**	**0.243**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**CCB**	*Run Time (min):*	**14.96**
Vial Number:	**14**	*Injection Volume:*	**200.00**
Injection Type:	**Blank**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**16/Nov/23 20:54**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

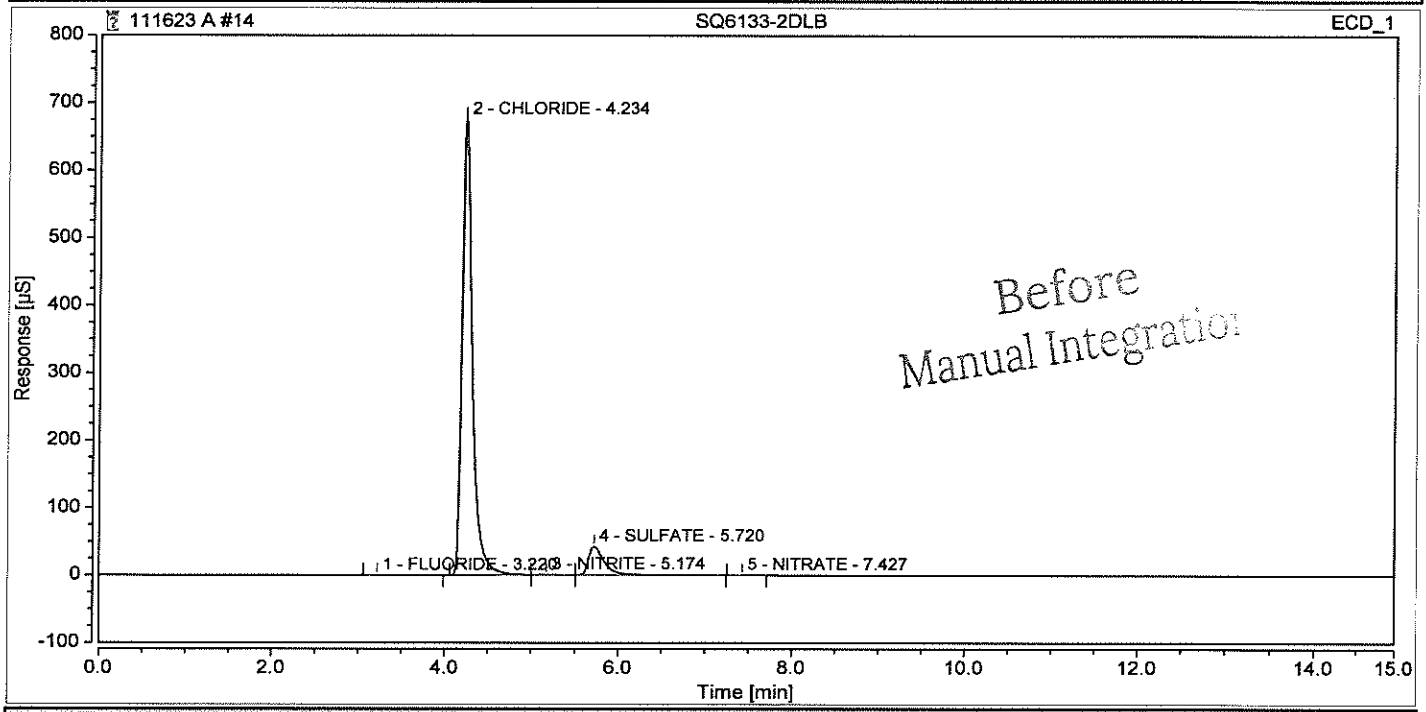
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.457	0.005	0.011	7.14	5.06	0.0250	n.a.
2	CHLORIDE	4.247	0.009	0.054	12.15	25.34	0.0231	n.a.
3	NITRITE	5.234	0.010	0.028	13.43	13.22	0.0198	n.a.
4	SULFATE	5.987	0.033	0.090	45.02	42.69	0.1174	n.a.
5	BROMIDE	6.420	0.000	0.000	0.19	0.00	0.0008	n.a.
6	NITRATE	7.614	0.016	0.029	22.07	13.70	0.0167	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.074**	**0.212**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6133-2DLB**	*Run Time (min):*	**14.95**
Vial Number:	**15**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**5.0000**
Injection Date/Time:	**16/Nov/23 21:11**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

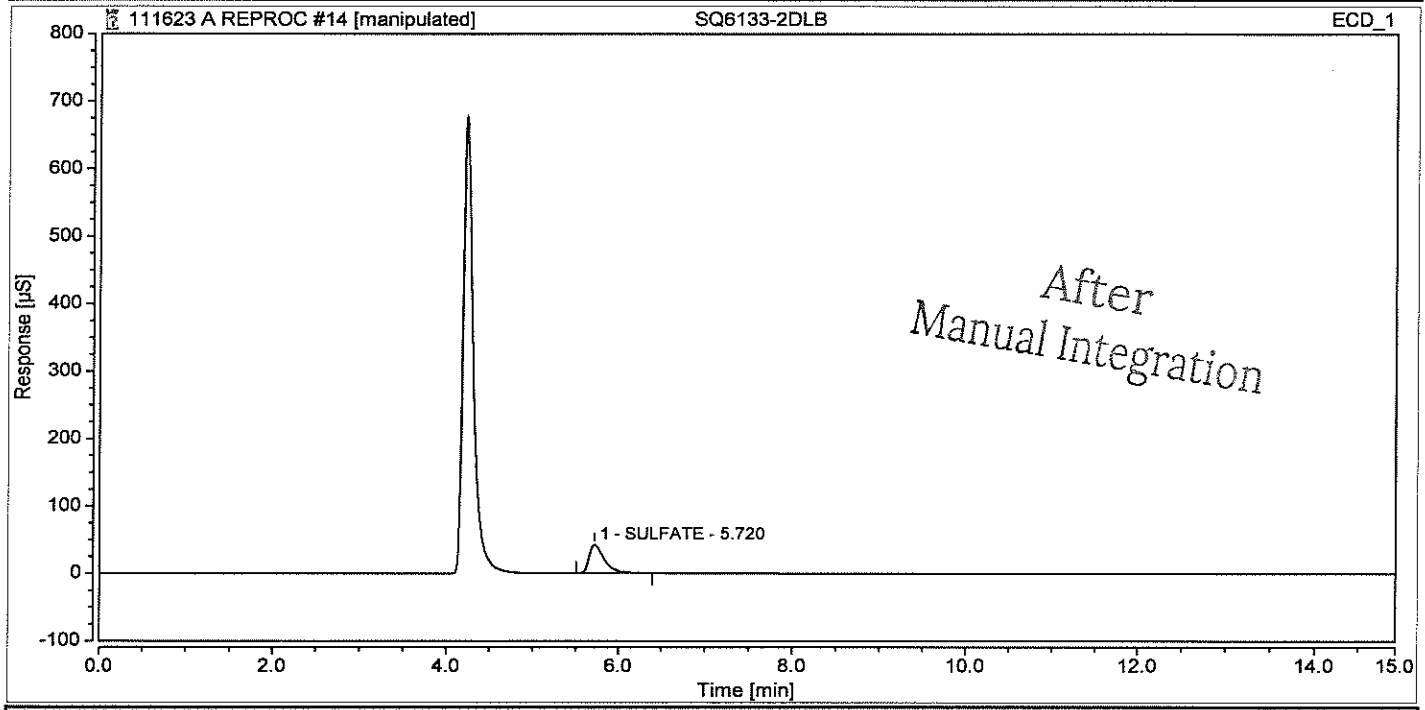
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.220	0.019	0.071	0.02	0.01	0.2328	n.a.
2	CHLORIDE	4.234	93.588	675.598	91.14	94.05	1200.6236	n.a.
3	NITRITE	5.174	0.060	0.231	0.06	0.03	0.3884	n.a.
4	SULFATE	5.720	9.001	42.392	8.77	5.90	158.3191	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5	NITRATE	7.427	0.014	0.078	0.01	0.01	0.0716	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**102.682**	**718.370**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6133-2DLB**	*Run Time (min):*	**14.95**
Vial Number:	**15**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**5.0000**
Injection Date/Time:	**16/Nov/23 21:11**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

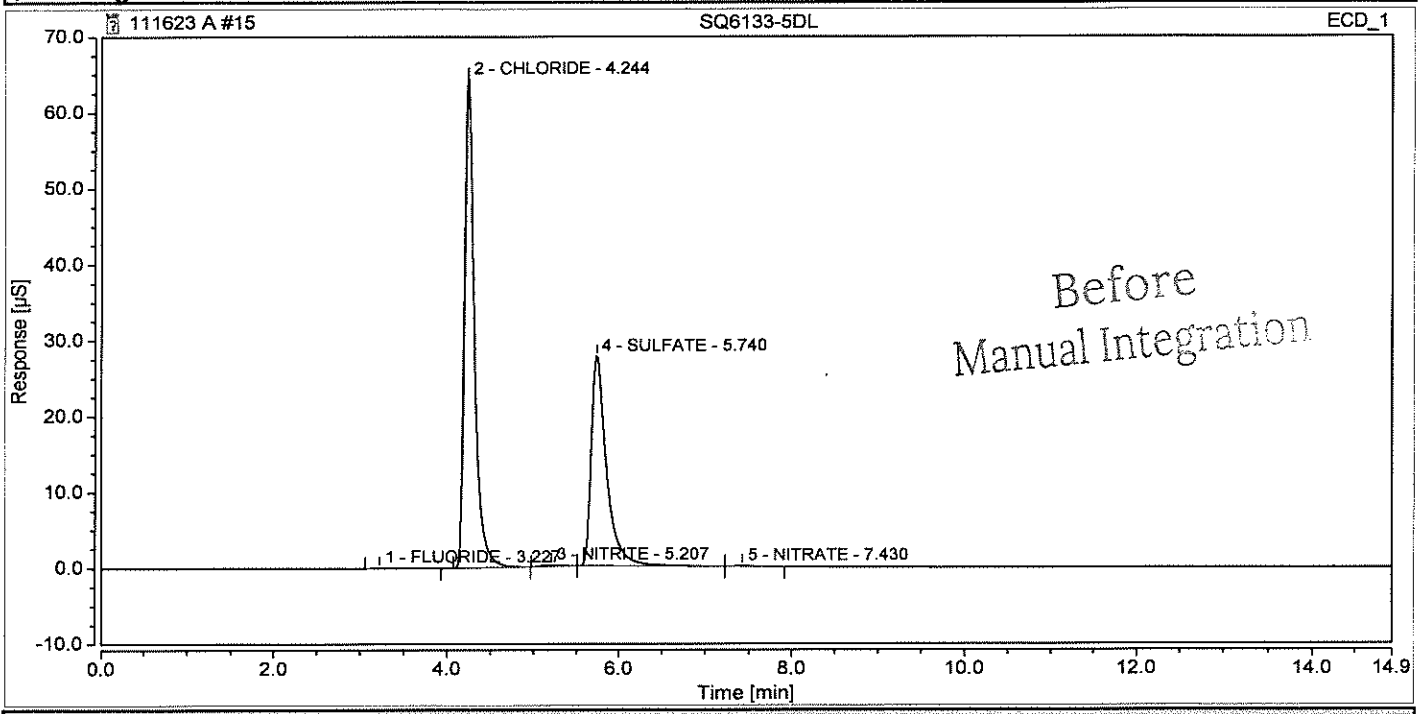
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	CHLORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	SULFATE	5.720	8.654	42.274	100.00	100.00	152.2084	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**8.654**	**42.274**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6133-5DL**	*Run Time (min):*	**14.95**
Vial Number:	**16**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**10.0000**
Injection Date/Time:	**16/Nov/23 21:28**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

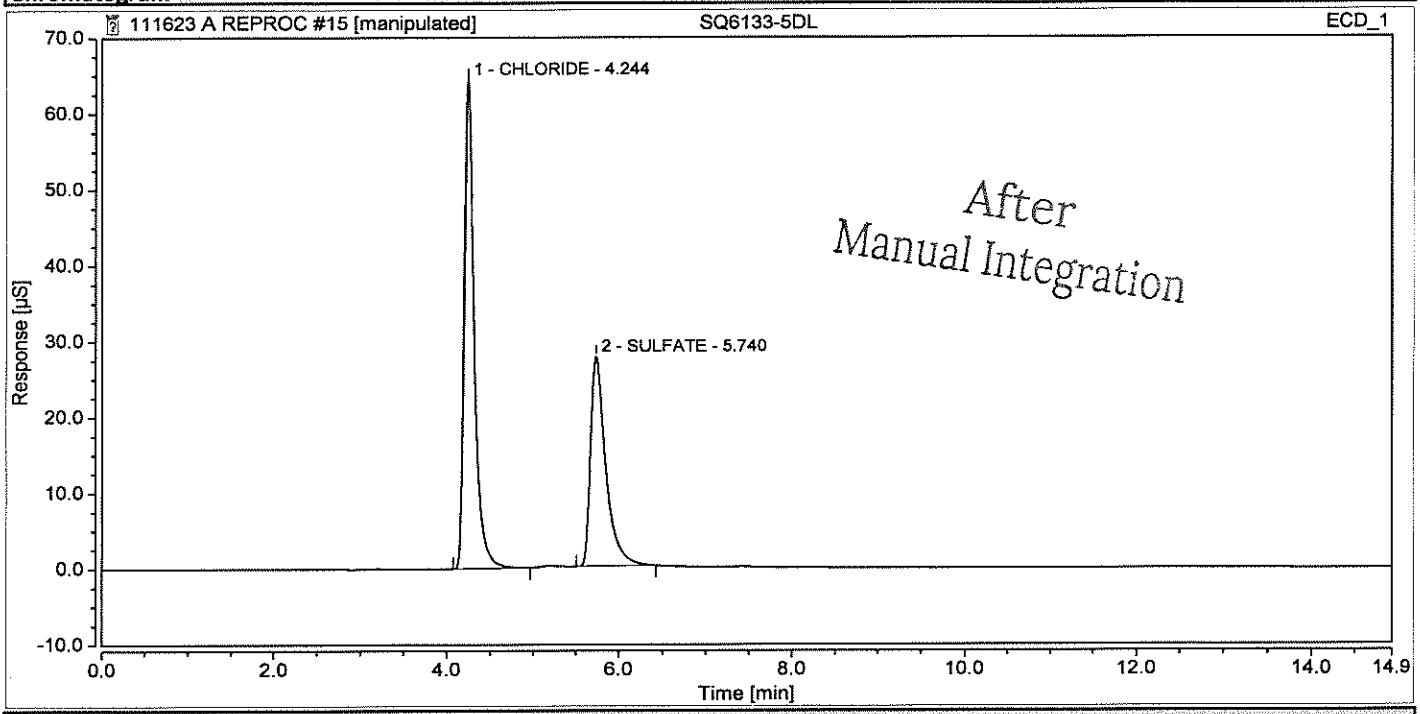
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.227	0.016	0.055	0.11	0.06	0.4135	n.a.
2	CHLORIDE	4.244	8.577	64.368	59.30	69.71	220.0768	n.a.
3	NITRITE	5.207	0.048	0.169	0.33	0.18	0.6391	n.a.
4	SULFATE	5.740	5.803	27.638	40.12	29.93	204.1477	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5	NITRATE	7.430	0.021	0.106	0.14	0.11	0.2130	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**14.465**	**92.336**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6133-5DL**	*Run Time (min):*	**14.95**
Vial Number:	**16**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**10.0000**
Injection Date/Time:	**16/Nov/23 21:28**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

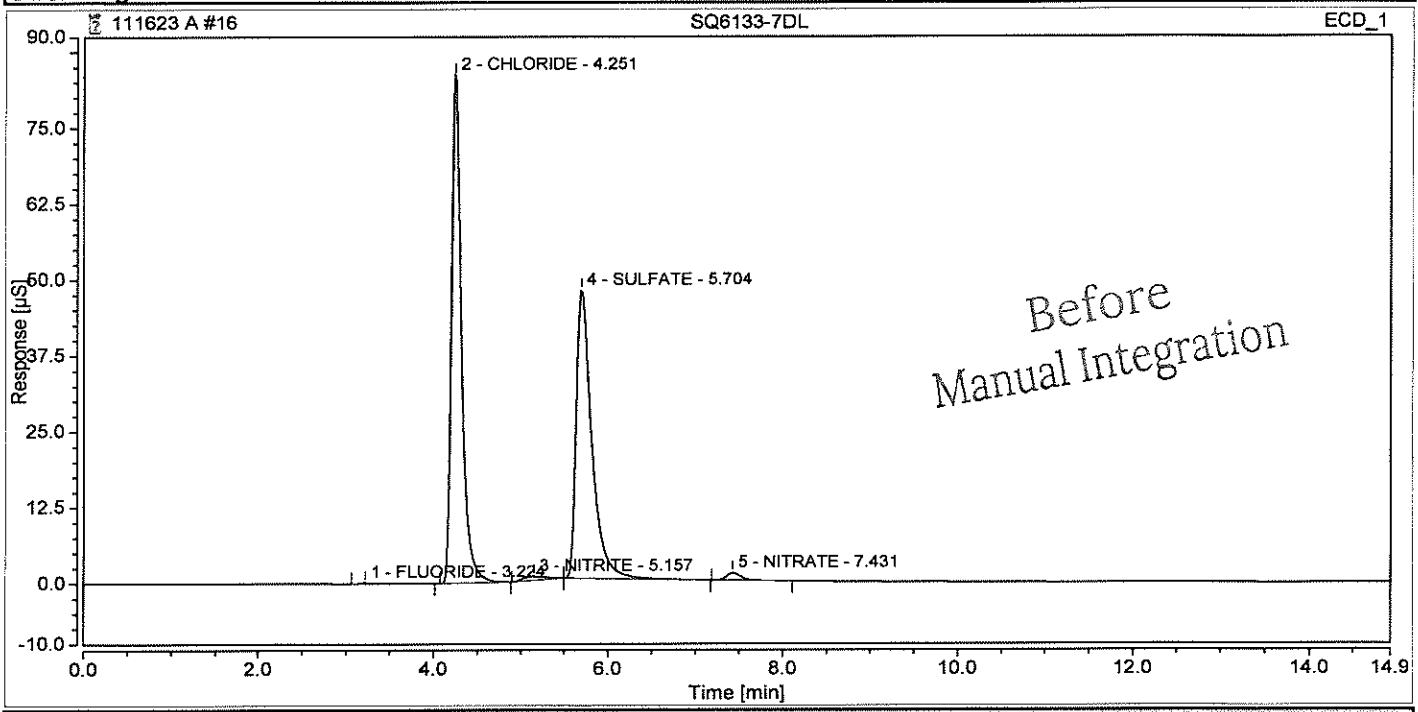
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.244	8.577	64.368	60.27	70.00	220.0768	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2	SULFATE	5.740	5.655	27.586	39.73	30.00	198.9099	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**14.232**	**91.954**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6133-7DL**	*Run Time (min):*	**14.94**
Vial Number:	**17**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**2.0000**
Injection Date/Time:	**16/Nov/23 21:45**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

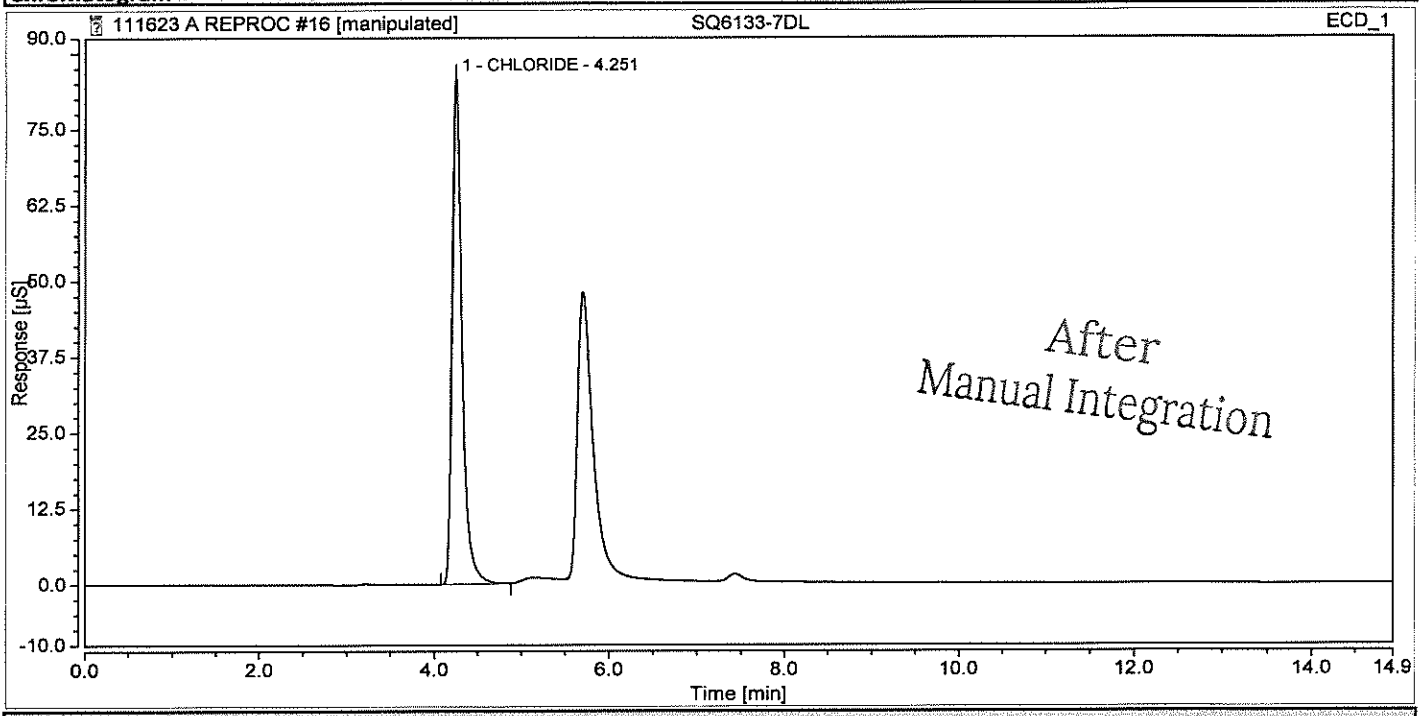
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.224	0.037	0.182	0.18	0.14	0.1508	n.a.
2	CHLORIDE	4.251	11.015	83.712	51.75	62.82	56.5219	n.a.
3	NITRITE	5.157	0.214	0.656	1.00	0.49	0.5148	n.a.
4	SULFATE	5.704	9.776	47.462	45.93	35.62	68.7810	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5	NITRATE	7.431	0.244	1.249	1.15	0.94	0.4982	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**21.286**	**133.261**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6133-7DL**	*Run Time (min):*	**14.94**
Vial Number:	**17**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**2.0000**
Injection Date/Time:	**16/Nov/23 21:45**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

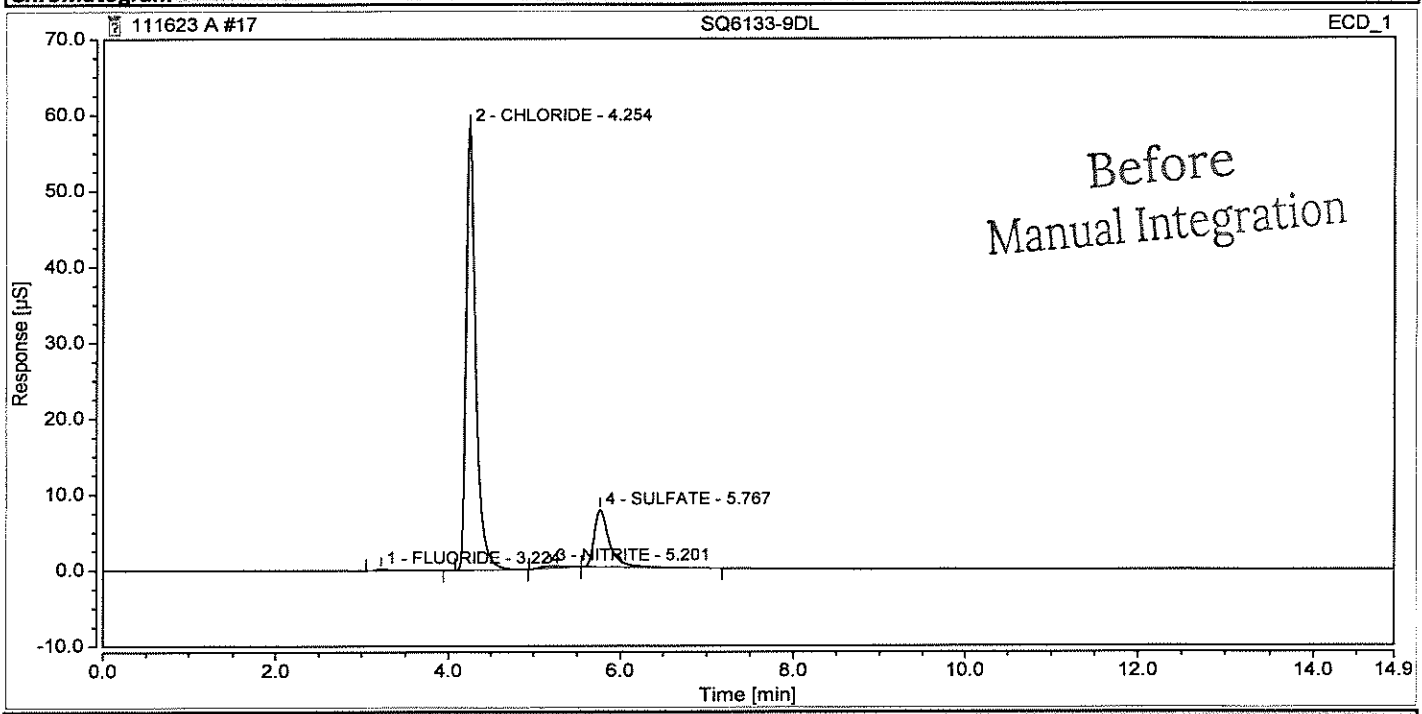
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.251	11.015	83.712	100.00	100.00	56.5219	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	SULFATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**11.015**	**83.712**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6133-9DL**	*Run Time (min):*	**14.95**
Vial Number:	**18**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**5.0000**
Injection Date/Time:	**16/Nov/23 22:03**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

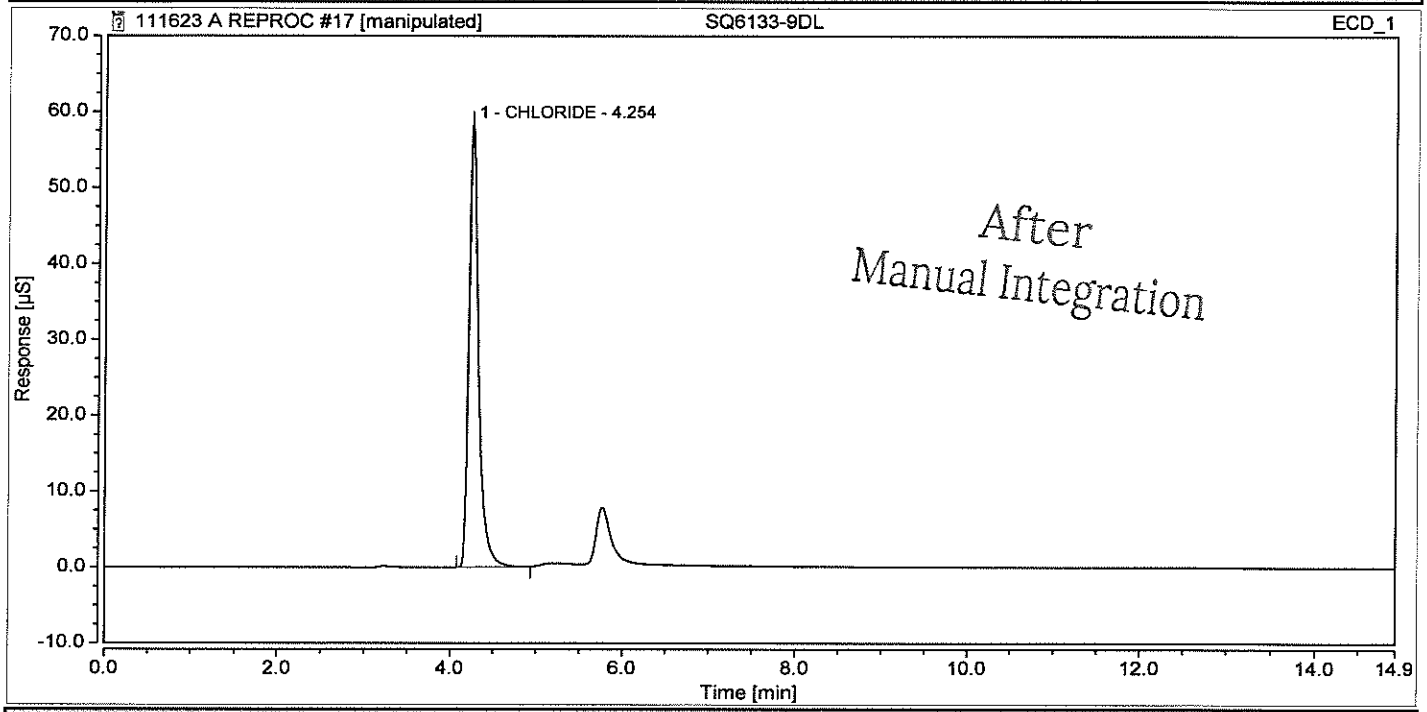
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.224	0.038	0.196	0.40	0.29	0.3785	n.a.
2	CHLORIDE	4.254	7.737	58.479	82.24	87.84	99.2588	n.a.
3	NITRITE	5.201	0.107	0.342	1.13	0.51	0.6626	n.a.
4	SULFATE	5.767	1.526	7.556	16.22	11.35	26.8432	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**9.408**	**66.573**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6133-9DL**	*Run Time (min):*	**14.95**
Vial Number:	**18**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**5.0000**
Injection Date/Time:	**16/Nov/23 22:03**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

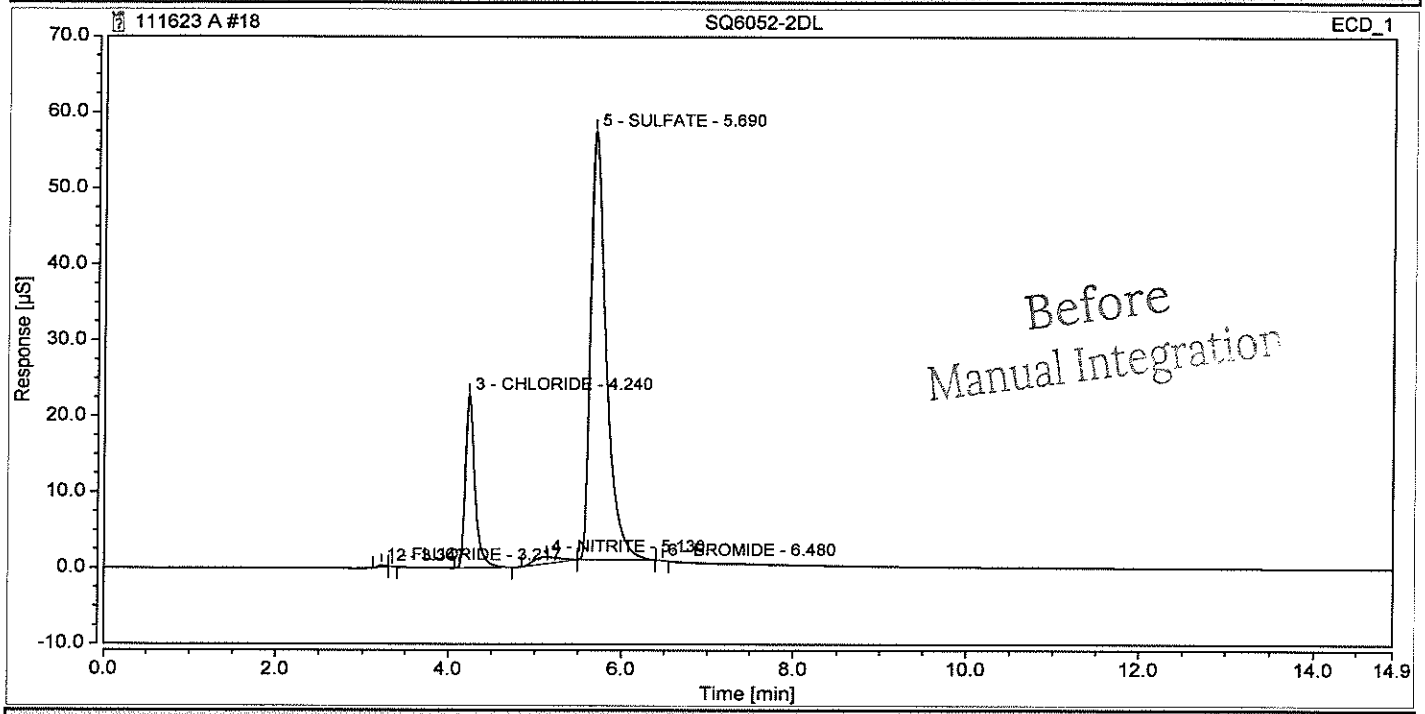
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.254	7.737	58.479	100.00	100.00	99.2588	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	SULFATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**7.737**	**58.479**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6052-2DL**	*Run Time (min):*	**14.94**
Vial Number:	**19**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**2.0000**
Injection Date/Time:	**16/Nov/23 22:20**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

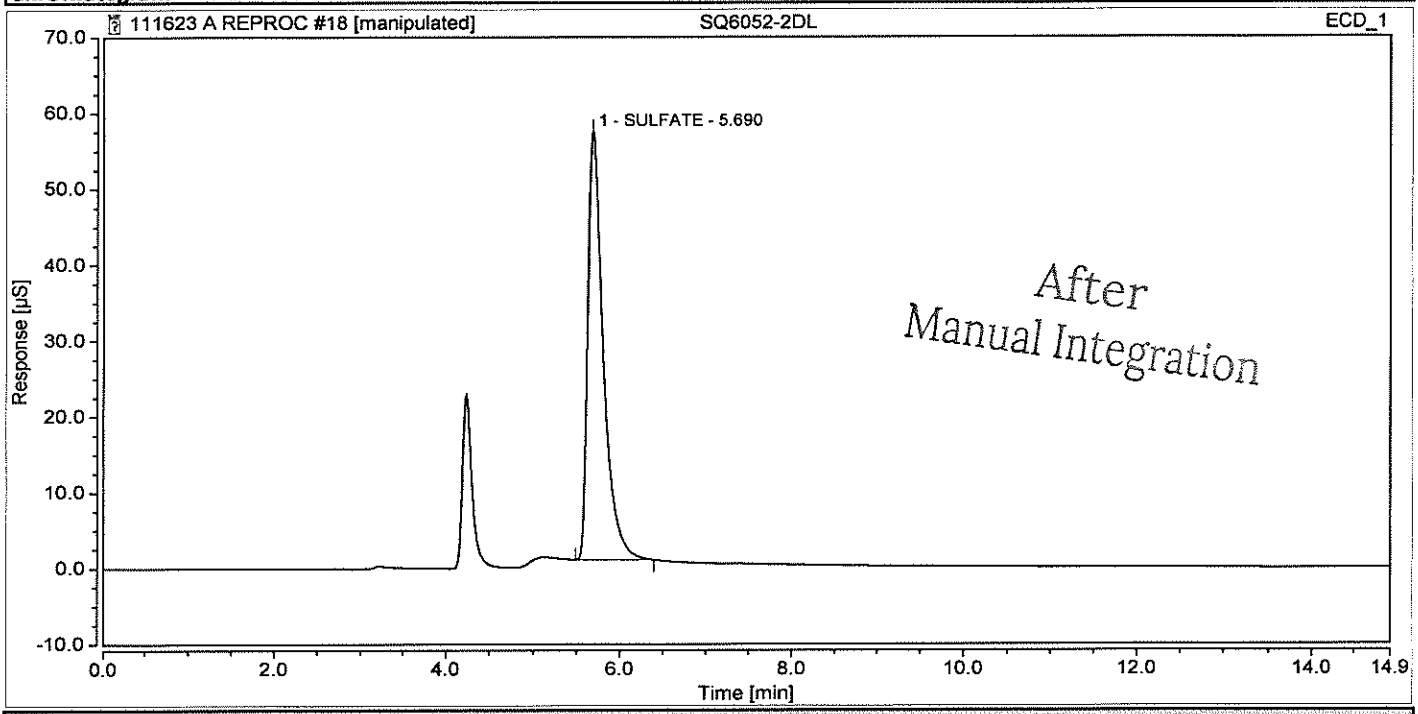
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.217	0.021	0.229	0.14	0.29	0.0978	n.a.
2		3.347	0.001	0.017	0.01	0.02	n.a.	n.a.
3	CHLORIDE	4.240	2.918	22.798	19.47	28.37	14.9726	n.a.
4	NITRITE	5.130	0.316	0.888	2.11	1.10	0.7543	n.a.
5	SULFATE	5.690	11.733	56.421	78.28	70.21	82.5489	n.a.
6	BROMIDE	6.480	0.001	0.009	0.00	0.01	0.0086	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**14.989**	**80.362**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6052-2DL**	*Run Time (min):*	**14.94**
Vial Number:	**19**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**2.0000**
Injection Date/Time:	**16/Nov/23 22:20**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

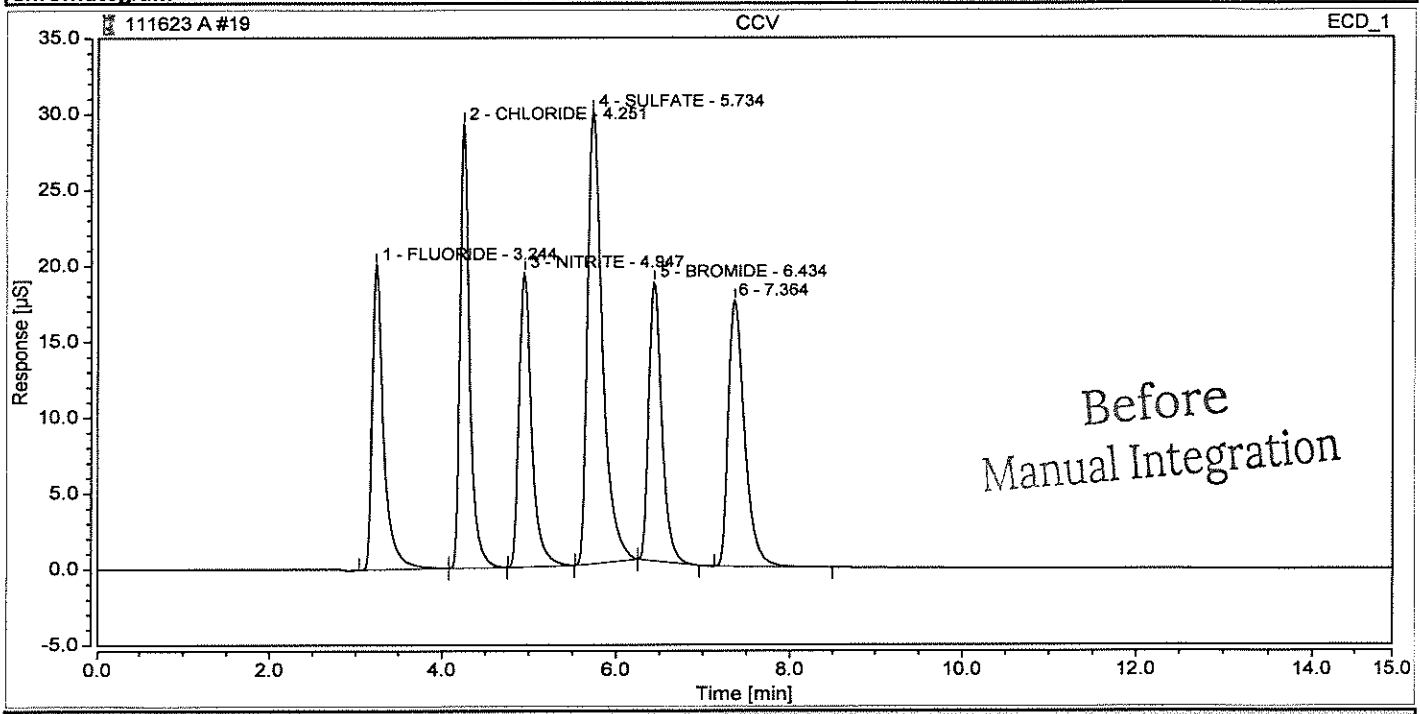
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	CHLORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	SULFATE	5.690	11.733	56.421	100.00	100.00	82.5489	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**11.733**	**56.421**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**CCV**	*Run Time (min):*	**14.95**
Vial Number:	**25**	*Injection Volume:*	**200.00**
Injection Type:	**Check Standard**	*Channel:*	**ECD_1**
Calibration Level:	**06**	*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**16/Nov/23 22:37**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

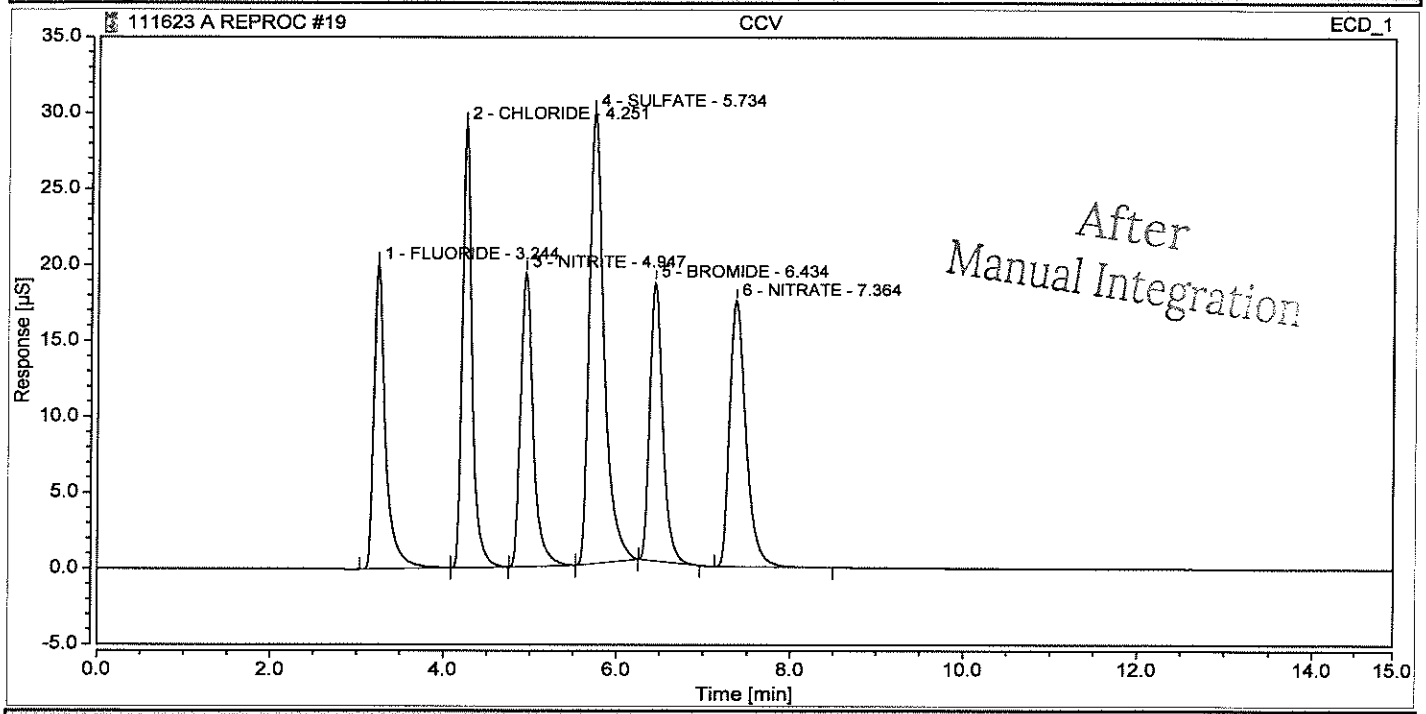
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.244	3.117	20.064	13.50	14.95	5.0611	1.2213
2	CHLORIDE	4.251	3.796	29.190	16.44	21.74	9.7407	-2.5934
3	NITRITE	4.947	3.295	19.371	14.27	14.43	3.9684	-0.7899
4	SULFATE	5.734	5.865	29.766	25.41	22.17	20.6319	3.1596
5	BROMIDE	6.434	3.232	18.358	14.00	13.68	19.0095	-4.9525
6		7.364	3.780	17.488	16.37	13.03	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**23.086**	**134.237**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**CCV**	*Run Time (min):*	**14.95**
Vial Number:	**25**	*Injection Volume:*	**200.00**
Injection Type:	**Check Standard**	*Channel:*	**ECD_1**
Calibration Level:	**06**	*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**16/Nov/23 22:37**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

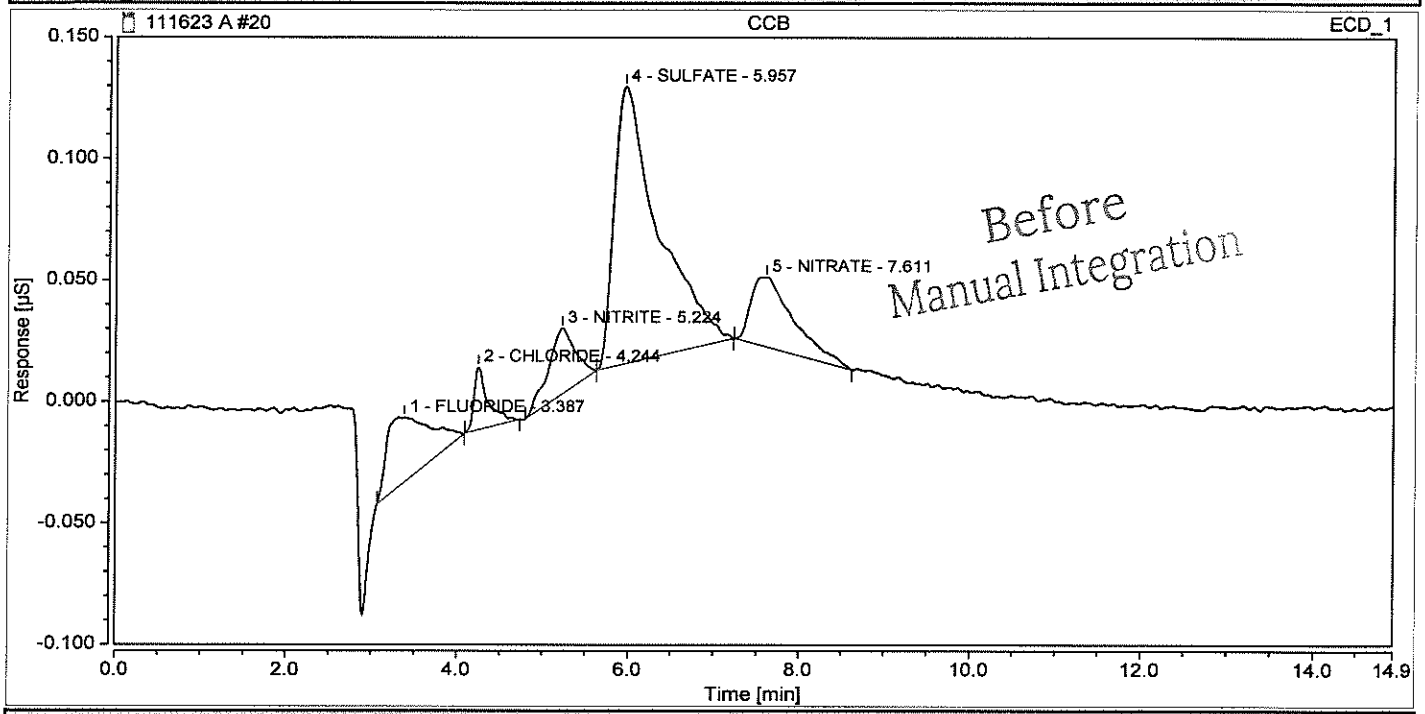
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.244	3.117	20.064	13.50	14.95	5.0611	1.2213
2	CHLORIDE	4.251	3.796	29.190	16.44	21.74	9.7407	-2.5934
3	NITRITE	4.947	3.295	19.371	14.27	14.43	3.9684	-0.7899
4	SULFATE	5.734	5.865	29.766	25.41	22.17	20.6319	3.1596
5	BROMIDE	6.434	3.232	18.358	14.00	13.68	19.0095	-4.9525
6	NITRATE	7.364	3.780	17.488	16.37	13.03	3.8628	-3.4308
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**23.086**	**134.237**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**CCB**	*Run Time (min):*	**14.95**
Vial Number:	**26**	*Injection Volume:*	**200.00**
Injection Type:	**Blank**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**16/Nov/23 22:55**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

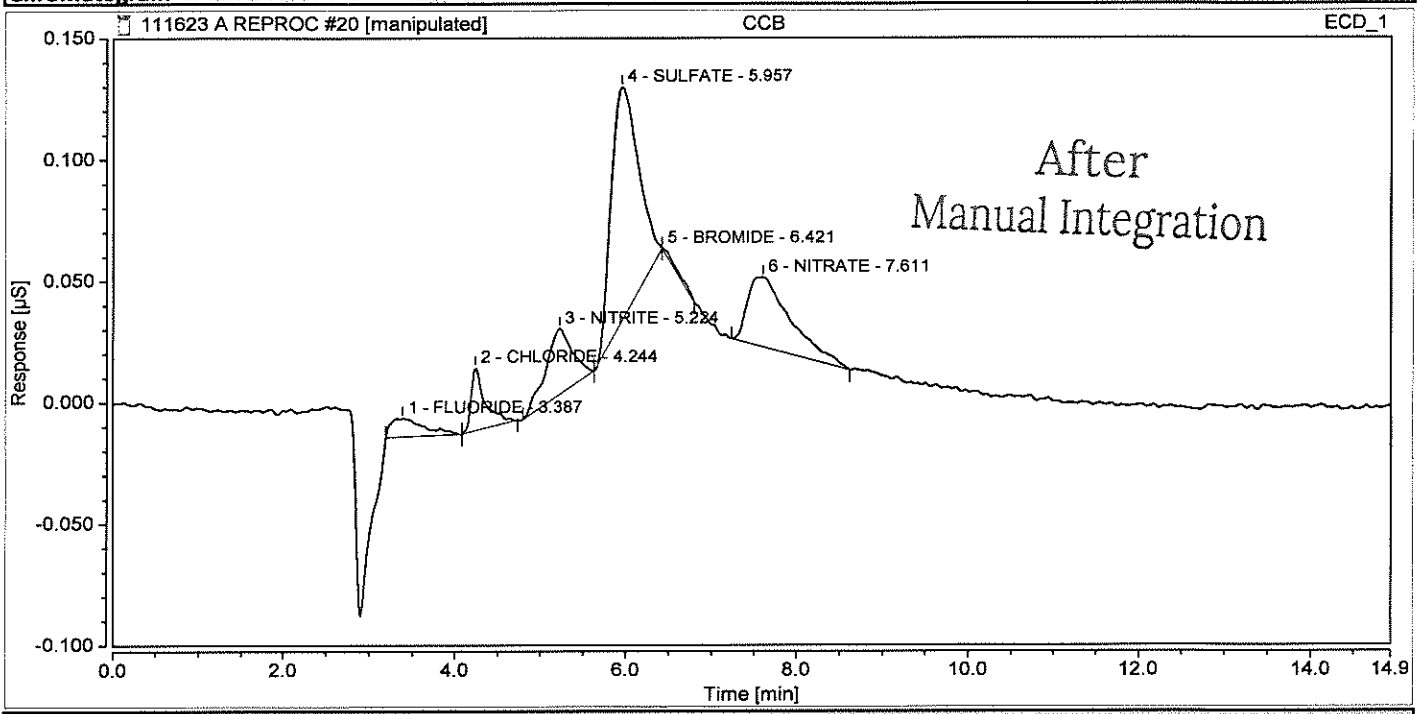
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.387	0.016	0.027	13.47	11.96	0.0411	n.a.
2	CHLORIDE	4.244	0.005	0.026	4.27	11.64	0.0126	n.a.
3	NITRITE	5.224	0.010	0.027	8.61	12.15	0.0198	n.a.
4	SULFATE	5.957	0.068	0.114	59.00	51.34	0.2396	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5	NITRATE	7.611	0.017	0.029	14.65	12.91	0.0173	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.115**	**0.222**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**CCB**	*Run Time (min):*	**14.95**
Vial Number:	**26**	*Injection Volume:*	**200.00**
Injection Type:	**Blank**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**16/Nov/23 22:55**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.387	0.003	0.008	4.87	4.08	0.0221	n.a.
2	CHLORIDE	4.244	0.005	0.026	6.95	13.98	0.0126	n.a.
3	NITRITE	5.224	0.010	0.027	14.01	14.59	0.0198	n.a.
4	SULFATE	5.957	0.035	0.096	49.54	51.84	0.1236	n.a.
5	BROMIDE	6.421	0.001	0.000	0.79	0.00	0.0033	n.a.
6	NITRATE	7.611	0.017	0.029	23.84	15.50	0.0173	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.071**	**0.185**	**100.00**	**100.00**		

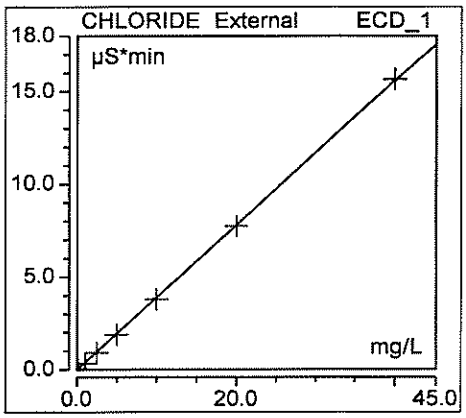
Calibration Batch Report

Sequence:	**101223 CAL REPROC**	*Injection Volume:*	**200.00**
Instrument Method:	**32mM80mA**	*Operator:*	**wetlab**
Inj. Date / Time:	**12-Oct-2023 / 13:07**	*Run Time:*	**14.946667**

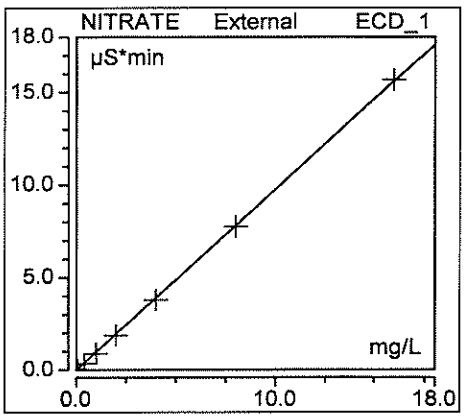
Calibration Summary

Peak Name	Eval.Type	Cal.Type	Points	Offset (C0)	Slope (C1)	Curve (C2)	Coeff.Det. %
FLUORIDE	Area	ly2, WithOffs	8.000	-0.011	0.637	-0.004	99.9990
CHLORIDE	Area	Lin	8.000	0.000	0.390	0.000	99.9875
NITRITE	Area	ly2, WithOffs	8.000	-0.007	0.859	-0.007	99.9990
SULFATE	Area	Lin	8.000	0.000	0.284	0.000	99.9981
BROMIDE	Area	Lin	8.000	0.000	0.170	0.000	99.9752
NITRATE	Area	Lin	8.000	0.000	0.976	0.000	99.9814
		AVERAGE:		-0.0029	0.5526	-0.0018	99.9900

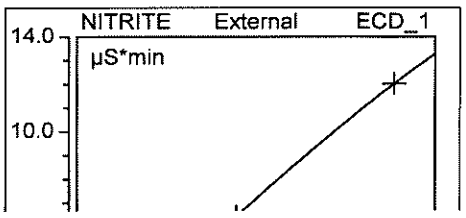
Injection Name **CHLORIDE**	Ret.Time min CHLORIDE	Area µS*min CHLORIDE	Height µS CHLORIDE	Amount mg/L CHLORIDE
	ECD_1	ECD_1	ECD_1	ECD_1
IC1	4.310	0.0013	0.007	0.003
IC2	4.290	0.0319	0.236	0.082
IC3	4.280	0.3373	2.649	0.865
IC4	4.277	0.9117	7.111	2.339
IC5	4.277	1.8945	14.718	4.861
IC6	4.280	3.7977	29.083	9.744
IC7	4.274	7.7443	58.666	19.870
IC8	4.273	15.6522	117.462	40.160
Average	4.283			
Rel. Std. Dev.	0.287 %			



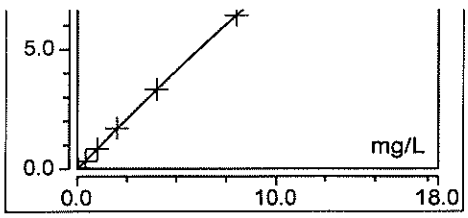
Injection Name **NITRATE**	Ret.Time min NITRATE	Area µS*min NITRATE	Height µS NITRATE	Amount mg/L NITRATE
	ECD_1	ECD_1	ECD_1	ECD_1
IC1	7.577	0.0011	0.005	0.001
IC2	7.557	0.0307	0.152	0.031
IC3	7.537	0.3315	1.685	0.340
IC4	7.521	0.8936	4.512	0.916
IC5	7.500	1.8681	9.167	1.915
IC6	7.470	3.7881	17.516	3.883
IC7	7.420	7.7471	32.517	7.941
IC8	7.347	15.6832	56.804	16.076
Average	7.491			
Rel. Std. Dev.	1.022 %			



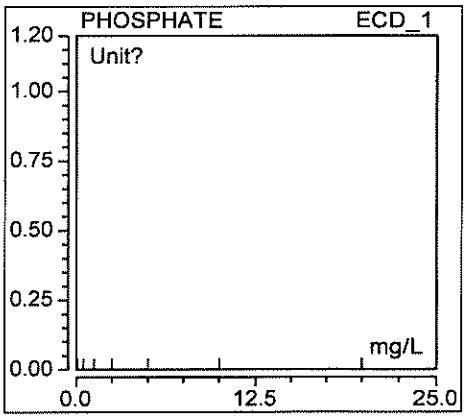
Injection Name **NITRITE**	Ret.Time min NITRITE	Area µS*min NITRITE	Height µS NITRITE	Amount mg/L NITRITE
	ECD_1	ECD_1	ECD_1	ECD_1
IC1	5.277	0.0081	0.032	0.018
IC2	4.990	0.0315	0.165	0.045



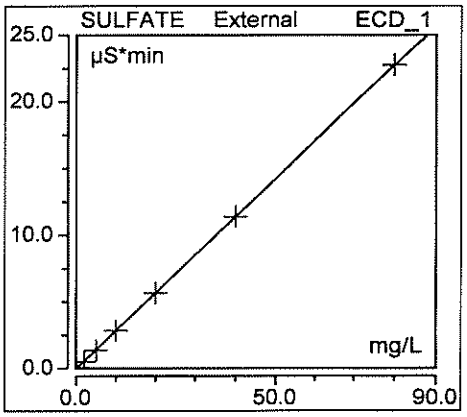
IC3	4.984	0.3130	1.968	0.374
IC4	4.984	0.8317	5.253	0.984
IC5	4.984	1.7014	10.467	2.021
IC6	4.990	3.3244	19.408	4.004
IC7	4.990	6.4268	34.736	7.994
IC8	4.990	12.0030	58.725	16.001
Average	5.024			
Rel. Std. Dev.	2.038 %			



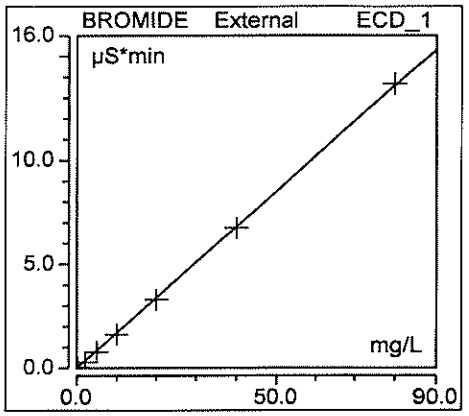
Injection Name	Ret.Time min	Area µS*min	Height µS	Amount mg/L
PHOSPHATE	PHOSPHATE	PHOSPHATE	PHOSPHATE	PHOSPHATE
	ECD_1	ECD_1	ECD_1	ECD_1
IC1	n.a.	n.a.	n.a.	n.a.
IC2	n.a.	n.a.	n.a.	n.a.
IC3	n.a.	n.a.	n.a.	n.a.
IC4	n.a.	n.a.	n.a.	n.a.
IC5	n.a.	n.a.	n.a.	n.a.
IC6	n.a.	n.a.	n.a.	n.a.
IC7	n.a.	n.a.	n.a.	n.a.
IC8	n.a.	n.a.	n.a.	n.a.
Average	#DIV/0!			
Rel. Std. Dev.	#DIV/0!			



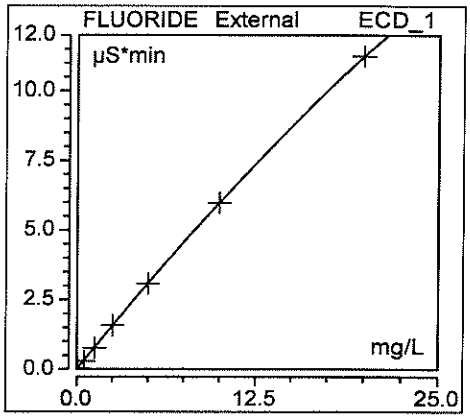
Injection Name	Ret.Time min	Area µS*min	Height µS	Amount mg/L
SULFATE	SULFATE	SULFATE	SULFATE	SULFATE
	ECD_1	ECD_1	ECD_1	ECD_1
IC1	5.844	0.0009	0.004	0.003
IC2	5.834	0.0454	0.229	0.160
IC3	5.820	0.5026	2.833	1.768
IC4	5.817	1.3714	7.732	4.824
IC5	5.797	2.8380	15.881	9.983
IC6	5.777	5.6533	31.045	19.887
IC7	5.744	11.3826	59.540	40.040
IC8	5.687	22.7500	108.379	80.027
Average	5.790			
Rel. Std. Dev.	0.911 %			



Injection Name	Ret.Time min	Area µS*min	Height µS	Amount mg/L
BROMIDE	BROMIDE	BROMIDE	BROMIDE	BROMIDE
	ECD_1	ECD_1	ECD_1	ECD_1
IC1	6.407	0.0004	0.001	0.002
IC2	6.560	0.0257	0.144	0.151
IC3	6.544	0.2814	1.655	1.655
IC4	6.537	0.7709	4.533	4.535
IC5	6.527	1.6186	9.363	9.521
IC6	6.514	3.2868	18.367	19.333
IC7	6.484	6.7353	35.656	39.616
IC8	6.433	13.6787	65.681	80.456
Average	6.501			
Rel. Std. Dev.	0.847 %			



Injection Name FLUORIDE	Ret.Time min FLUORIDE	Area µS*min FLUORIDE	Height µS FLUORIDE	Amount mg/L FLUORIDE
	ECD_1	ECD_1	ECD_1	ECD_1
IC1	3.524	0.0033	0.007	0.022
IC2	3.244	0.0233	0.162	0.053
IC3	3.240	0.2885	2.065	0.471
IC4	3.237	0.7656	5.555	1.228
IC5	3.244	1.5767	11.214	2.530
IC6	3.250	3.0811	21.013	5.001
IC7	3.254	5.9813	38.517	9.993
IC8	3.267	11.2370	67.145	20.001
Average	3.282			
Rel. Std. Dev.	2.982 %			



Anion Summary Report

No. CHLORIDE	Name CHLORIDE	Time min CHLORIDE ECD_1	Area µS*min CHLORIDE ECD_1	Rel.Area % CHLORIDE ECD_1	Height µS CHLORIDE ECD_1	Rel.Height % CHLORIDE ECD_1	Amount mg/L CHLORIDE ECD_1
1	IC1	4.310	0.0013	8.64	0.01	12.08	0.0033
2	IC2	4.290	0.0319	16.92	0.24	21.69	0.0818
3	IC3	4.280	0.3373	16.42	2.65	20.61	0.8653
4	IC4	4.277	0.9117	16.44	7.11	20.50	2.3392
5	IC5	4.277	1.8945	16.48	14.72	20.79	4.8610
6	IC6	4.280	3.7977	16.56	29.08	21.32	9.7441
7	IC7	4.274	7.7443	16.83	58.67	22.60	19.8700
8	IC8	4.273	15.6522	17.20	117.46	24.77	40.1598
	Sum:	34.262	30.371	125.488	229.932	164.342	77.924
	Average:	4.283	3.796	15.686	28.741	20.543	9.741
	Rel.Std.Dev:	0.287 %	143.802 %	18.229 %	142.552 %	17.997 %	143.802 %

No. NITRATE	Name NITRATE	Time min NITRATE ECD_1	Area µS*min NITRATE ECD_1	Rel.Area % NITRATE ECD_1	Height µS NITRATE ECD_1	Rel.Height % NITRATE ECD_1	Amount mg/L NITRATE ECD_1
1	IC1	7.577	0.0011	7.29	0.01	9.24	0.0011
2	IC2	7.557	0.0307	16.31	0.15	13.97	0.0315
3	IC3	7.537	0.3315	16.14	1.69	13.11	0.3398
4	IC4	7.521	0.8936	16.12	4.51	13.00	0.9160
5	IC5	7.500	1.8681	16.25	9.17	12.95	1.9149
6	IC6	7.470	3.7881	16.52	17.52	12.84	3.8830
7	IC7	7.420	7.7471	16.84	32.52	12.52	7.9412
8	IC8	7.347	15.6832	17.23	56.80	11.98	16.0761
	Sum:	59.929	30.344	122.694	122.358	99.612	31.104
	Average:	7.491	3.793	15.337	15.295	12.451	3.888
	Rel.Std.Dev:	1.022 %	144.282 %	21.338 %	131.385 %	11.350 %	144.282 %

No. NITRITE	Name NITRITE	Time min NITRITE ECD_1	Area µS*min NITRITE ECD_1	Rel.Area % NITRITE ECD_1	Height µS NITRITE ECD_1	Rel.Height % NITRITE ECD_1	Amount mg/L NITRITE ECD_1
1	IC1	5.277	0.0081	53.65	0.03	57.13	0.0176
2	IC2	4.990	0.0315	16.72	0.17	15.17	0.0449
3	IC3	4.984	0.3130	15.24	1.97	15.31	0.3737
4	IC4	4.984	0.8317	15.00	5.25	15.14	0.9839
5	IC5	4.984	1.7014	14.80	10.47	14.78	2.0208
6	IC6	4.990	3.3244	14.50	19.41	14.23	4.0043
7	IC7	4.990	6.4268	13.97	34.74	13.38	7.9935
8	IC8	4.990	12.0030	13.19	58.73	12.38	16.0012
	Sum:	40.189	24.640	157.051	130.754	157.526	31.440
	Average:	5.024	3.080	19.631	16.344	19.691	3.930
	Rel.Std.Dev:	2.038 %	136.774 %	70.208 %	127.418 %	77.003 %	141.871 %

No. PHOSPHATE	Name PHOSPHATE	Time min PHOSPHATE ECD_1	Area µS*min PHOSPHATE ECD_1	Rel.Area % PHOSPHATE ECD_1	Height µS PHOSPHATE ECD_1	Rel.Height % PHOSPHATE ECD_1	Amount mg/L PHOSPHATE ECD_1
1	IC1	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2	IC2	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

3	IC3	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
4	IC4	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5	IC5	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
6	IC6	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
7	IC7	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
8	IC8	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
	Sum:	0.000	0.000	0.000	0.000	0.000	0.000
	Average:	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
	Rel.Std.Dev:	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

No. SULFATE	Name SULFATE	Time min SULFATE ECD_1	Area µS*min SULFATE ECD_1	Rel.Area % SULFATE ECD_1	Height µS SULFATE ECD_1	Rel.Height % SULFATE ECD_1	Amount mg/L SULFATE ECD_1
1	IC1	5.844	0.0009	6.16	0.00	7.25	0.0033
2	IC2	5.834	0.0454	24.09	0.23	21.06	0.1596
3	IC3	5.820	0.5026	24.47	2.83	22.04	1.7679
4	IC4	5.817	1.3714	24.73	7.73	22.29	4.8243
5	IC5	5.797	2.8380	24.68	15.88	22.43	9.9833
6	IC6	5.777	5.6533	24.65	31.04	22.75	19.8866
7	IC7	5.744	11.3826	24.74	59.54	22.93	40.0405
8	IC8	5.687	22.7500	25.00	108.38	22.86	80.0271
	Sum:	46.319	44.544	178.521	225.643	163.599	156.693
	Average:	5.790	5.568	22.315	28.205	20.450	19.587
	Rel.Std.Dev:	0.911 %	142.591 %	29.274 %	135.408 %	26.248 %	142.591 %

No. BROMIDE	Name BROMIDE	Time min BROMIDE ECD_1	Area µS*min BROMIDE ECD_1	Rel.Area % BROMIDE ECD_1	Height µS BROMIDE ECD_1	Rel.Height % BROMIDE ECD_1	Amount mg/L BROMIDE ECD_1
1	IC1	6.407	0.0004	2.57	0.00	2.09	0.0023
2	IC2	6.560	0.0257	13.62	0.14	13.22	0.1509
3	IC3	6.544	0.2814	13.70	1.65	12.87	1.6554
4	IC4	6.537	0.7709	13.90	4.53	13.07	4.5345
5	IC5	6.527	1.6186	14.08	9.36	13.22	9.5207
6	IC6	6.514	3.2868	14.33	18.37	13.46	19.3328
7	IC7	6.484	6.7353	14.64	35.66	13.73	39.6161
8	IC8	6.433	13.6787	15.03	65.68	13.85	80.4565
	Sum:	52.006	26.398	101.871	135.400	95.522	155.269
	Average:	6.501	3.300	12.734	16.925	11.940	19.409
	Rel.Std.Dev:	0.847 %	144.644 %	32.456 %	136.608 %	33.434 %	144.644 %

No. FLUORIDE	Name FLUORIDE	Time min FLUORIDE ECD_1	Area µS*min FLUORIDE ECD_1	Rel.Area % FLUORIDE ECD_1	Height µS FLUORIDE ECD_1	Rel.Height % FLUORIDE ECD_1	Amount mg/L FLUORIDE ECD_1
1	IC1	3.524	0.0033	21.68	0.01	12.21	0.0218
2	IC2	3.244	0.0233	12.35	0.16	14.89	0.0532
3	IC3	3.240	0.2885	14.04	2.06	16.06	0.4710
4	IC4	3.237	0.7656	13.81	5.55	16.01	1.2278
5	IC5	3.244	1.5767	13.71	11.21	15.84	2.5301
6	IC6	3.250	3.0811	13.44	21.01	15.40	5.0014
7	IC7	3.254	5.9813	13.00	38.52	14.84	9.9933
8	IC8	3.267	11.2370	12.35	67.15	14.16	20.0014
	Sum:	26.259	22.957	114.375	145.677	119.399	39.300
	Average:	3.282	2.870	14.297	18.210	14.925	4.913
	Rel.Std.Dev:	2.982 %	137.399 %	21.345 %	130.315 %	8.595 %	141.871 %

WET CHEMISTRY BATCH REPORT - TOC
Dec 07 2023, 11:43 am
Batch: WG346583 Run ID 1: R629065 Run ID 2: NONE

Parameter: Total Organic Carbon
Prep Date: N/A

Date Analyzed: 05-DEC-23
Prep Method: N/A

Analyst Initials: CJB
Prep Chemist: N/A

Sample	Samp Type	Method	Initial Amt.	Final Amt.	Rpt. DF	Result	Rpt Result	TS(%)	PQL	MDL	Adj PQL	RPD	%Rec
SQ6133-1	SAMP	SM5310B	20mL	20mL	1	.63357	J0.63 mg/L	NA	1	0.37	1.0		
SQ6133-2	SAMP	SM5310B	20mL	20mL	1	1.54632	1.5 mg/L	NA	1	0.37	1.0		
SQ6133-3	SAMP	SM5310B	20mL	20mL	1	1.53317	1.5 mg/L	NA	1	0.37	1.0		
SQ6133-4	SAMP	SM5310B	20mL	20mL	1	2.09055	2.1 mg/L	NA	1	0.37	1.0		
SQ6133-5	SAMP	SM5310B	20mL	20mL	1	2.69357	2.7 mg/L	NA	1	0.37	1.0		
SQ6133-6	SAMP	SM5310B	20mL	20mL	1	.50471	J0.50 mg/L	NA	1	0.37	1.0		
SQ6133-7	SAMP	SM5310B	20mL	20mL	1	1.67113	1.7 mg/L	NA	1	0.37	1.0		
SQ6133-8	SAMP	SM5310B	20mL	20mL	1	.57208	J0.57 mg/L	NA	1	0.37	1.0		
SQ6133-9	SAMP	SM5310B	20mL	20mL	1	1.19615	1.2 mg/L	NA	1	0.37	1.0		
SQ6133-10	SAMP	SM5310B	20mL	20mL	1	1.31307	1.3 mg/L	NA	1	0.37	1.0		
SQ6137-1	SAMP	SM5310B	20mL	20mL	1	19.29371	19 mg/L	NA	1	0.37	1.0		
SQ6137-2	SAMP	SM5310B	20mL	20mL	1	24.64528	25 mg/L	NA	1	0.37	1.0		
SQ6137-3	SAMP	SM5310B	20mL	20mL	1	152.14533	150 mg/L	NA	1	0.37	1.0		
SQ6137-4	SAMP	SM5310B	20mL	20mL	1	28.45819	28 mg/L	NA	1	0.37	1.0		
WG346583-1	MBLANK	SM5310B	20mL	20mL	1	0	U0.70 mg/L	NA	1	0.35	1.0		
WG346583-2	LCS	SM5310B	20mL	20mL	1	51.79991	51.8 mg/L	NA	1	0.350	1.00		104
WG346583-3	LCSD	SM5310B	20mL	20mL	1	51.95406	52.0 mg/L	NA	1	0.350	1.00	0	104
WG346583-4	DUP	SM5310B	20mL	20mL	1	.49625	U1.0 mg/L	NA	1	0.35	1.0	NC	
WG346583-5	MS	SM5310B	20mL	20mL	1	51.14324	51.1 mg/L	NA	1	0.350	1.00		99
WG346583-6	MSD	SM5310B	20mL	20mL	1	51.6043	51.6 mg/L	NA	1	0.350	1.00	1	100
WG346583-7	MS	SM5310B	20mL	20mL	1	50.97358	51.0 mg/L	NA	1	0.350	1.00		101
WG346583-8	MSD	SM5310B	20mL	20mL	1	51.56865	51.6 mg/L	NA	1	0.350	1.00	1	102

Comments:

SQ6133-1	Anions = NO3, SO4, Cl.
SQ6133-2	Anions = NO3, SO4, Cl.
SQ6133-3	MS/MSD. Anions = NO3, SO4, Cl.
SQ6133-4	Anions = NO3, SO4, Cl.
SQ6133-5	Anions = NO3, SO4, Cl.
SQ6133-6	Anions = NO3, SO4, Cl.
SQ6133-7	Anions = NO3, SO4, Cl.
SQ6133-8	MS/MSD. Anions = NO3, SO4, Cl.
SQ6133-9	Anions = NO3, SO4, Cl.
SQ6133-10	Anions = NO3, SO4, Cl.
WG346583-1	SQ6133-1
WG346583-2	SQ6133-1
WG346583-3	SQ6133-1
WG346583-4	SQ6133-1
WG346583-5	SQ6133-3
WG346583-6	SQ6133-3
WG346583-7	SQ6133-8
WG346583-8	SQ6133-8

Entered by: CJB Date: 12-7-23 Accepted by: RAD Date: 12/7/23

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WET CHEMISTRY BATCH REPORT - TOC
Dec 07 2023, 11:43 am
Batch: WG346583 Run ID 1: R629065 Run ID 2: NONE

Parameter: Total Organic Carbon
Prep Date: N/A

Date Analyzed: 06-DEC-23
Prep Method: N/A

Analyst Initials: CJB
Prep Chemist: N/A

Sample	Samp Type	Method	Initial Amt.	Final Amt.	Rpt. DF	Result	Rpt Result	TS(%)	PQL	MDL	Adj PQL	RPD	%Rec
SQ6233-1	SAMP	SM5310B	20mL	20mL	1	5.55683	5.6 mg/L	NA	1	0.35	1.0		
SQ6233-2	SAMP	SM5310B	20mL	20mL	1	1.27181	1.3 mg/L	NA	1	0.35	1.0		
SQ6234-1	SAMP	SM5310B	20mL	20mL	1	5.63096	5.6 mg/L	NA	1	0.35	1.0		
SQ6234-2	SAMP	SM5310B	20mL	20mL	1	6.59631	6.6 mg/L	NA	1	0.35	1.0		
SQ6234-3	SAMP	SM5310B	20mL	20mL	1	6.00217	6.0 mg/L	NA	1	0.35	1.0		

Comments:

SQ6133-1	Anions = NO3, SO4, Cl.
SQ6133-2	Anions = NO3, SO4, Cl.
SQ6133-3	MS/MSD. Anions = NO3, SO4, Cl.
SQ6133-4	Anions = NO3, SO4, Cl.
SQ6133-5	Anions = NO3, SO4, Cl.
SQ6133-6	Anions = NO3, SO4, Cl.
SQ6133-7	Anions = NO3, SO4, Cl.
SQ6133-8	MS/MSD. Anions = NO3, SO4, Cl.
SQ6133-9	Anions = NO3, SO4, Cl.
SQ6133-10	Anions = NO3, SO4, Cl.
WG346583-1	SQ6133-1
WG346583-2	SQ6133-1
WG346583-3	SQ6133-1
WG346583-4	SQ6133-1
WG346583-5	SQ6133-3
WG346583-6	SQ6133-3
WG346583-7	SQ6133-8
WG346583-8	SQ6133-8

Entered by: CJB Date: 12-7-23 Accepted by: RAD Date: 12/7/23

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KATAHDIN ANALYTICAL SERVICES, LLC
CARBON ANALYSIS RUN INFORMATION SHEET

INSTR. ID: analytikjena multi N/C **ANALYST:** CJB **DATE:** 12-05-23

FILE NAME: 120523 **METHOD(S):**

TOC	DOC	TIC
• EPA 415.1	• EPA 415.1	• EPA 415.1
• SM5310B (circled)	• SM5310B	• SM5310B
• SW9060	• SW9060	• SW9060

CALIBRATION DATE: 08/24/23 **CALIBRATION ANALYST:** CJB

Calibration standards were prepared by performing dilutions of the following standard on the day of calibration:

Calibration Source Standard ID	Prep Date	~~Expiration Date~~ ★	Standard Conc. (mg/L)
W22102	08/24/23	~~11/24/23~~	1000

Note: Calibration must be performed quarterly or whenever a change in analysis conditions warrant. A copy of the associated calibration data is attached to this run.

STANDARDS USED:

Standard Name	Standard ID	Prep Date	Expiration Date	Standard Conc.
CCV #	W22343	11/16/23	2/16/24	1000 mg C/L
LCS	W22282	11/03/23	02/03/24	50 mg C/L
MS Stock Std. *	W22343	11/16/23	2/16/24	1000 mg C/L
Alkalinity Check	W22285	11/02/23	02/02/24	15 mg/L (Inorg. C)

CCV prepared by adding 4.0 mL of CCV Std. to 36 mL of DI.
* Matrix spikes are prepared by adding 2.0 mL of MS Stock Std. to 38 mL of sample.

Additional Comments and Notes:

★ No longer applicable due to procedure updates RAD 12/7/23

aj-Analyzer multi N/C 3100; multiWin 4.12; Serial No: N3-2320/AX

AnalysesTable

AnalysesTable: 120523

Sample ID	Time of analysis	Method	TC/NPOC/POC		Sample volume	Dilute
alk	12/5/2023 4:52:50 P	TOC_Method_101223	618.0µg/l ± 5.50%		500.0µl	1 in 1
CCV	12/5/2023 5:15:37 P	TOC_Method_101223	104.2mg/l ± 0.97%	104%	500.0µl	1 in 1
CCB	12/5/2023 5:31:16 P	TOC_Method_101223	0mg/l		500.0µl	1 in 1
LCS	12/5/2023 5:45:50 P	TOC_Method_101223	51.80mg/l ± 0.44%	104%	500.0µl	1 in 1
LCSD	12/5/2023 6:01:49 P	TOC_Method_101223	51.95mg/l ± 0.72%	104%	500.0µl	1 in 1
SQ6133-1	12/5/2023 6:17:45 P	TOC_Method_101223	633.6µg/l ± 9.78%		500.0µl	1 in 1
SQ6133-1DUP	12/5/2023 6:33:17 P	TOC_Method_101223	496.3µg/l ± 0.43%		500.0µl	1 in 1
SQ6133-2	12/5/2023 6:44:22 P	TOC_Method_101223	1.55mg/l ± 0.08%		500.0µl	1 in 1
SQ6133-3	12/5/2023 7:00:17 P	TOC_Method_101223	1.53mg/l ± 1.56%		500.0µl	1 in 1
SQ6133-3MS	12/5/2023 7:15:49 P	TOC_Method_101223	51.14mg/l ± 0.84%		500.0µl	1 in 1
SQ6133-3MSD	12/5/2023 7:31:54 P	TOC_Method_101223	51.60mg/l ± 0.15%		500.0µl	1 in 1
SQ6133-4	12/5/2023 7:55:45 P	TOC_Method_101223	2.09mg/l ± 0.45%		500.0µl	1 in 1
SQ6133-5	12/5/2023 8:10:51 P	TOC_Method_101223	2.69mg/l ± 0.29%		500.0µl	1 in 1
CCV	12/5/2023 8:22:43 P	TOC_Method_101223	103.8mg/l ± 0.46%	104%	500.0µl	1 in 1
CCB	12/5/2023 8:38:45 P	TOC_Method_101223	0mg/l		500.0µl	1 in 1
SQ6133-6	12/5/2023 8:54:10 P	TOC_Method_101223	504.7µg/l ± 3.47%		500.0µl	1 in 1
SQ6133-7	12/5/2023 9:08:34 P	TOC_Method_101223	1.67mg/l ± 0.20%		500.0µl	1 in 1
SQ6133-8	12/5/2023 9:19:39 P	TOC_Method_101223	572.1µg/l ± 1.00%		500.0µl	1 in 1
SQ6133-8MS	12/5/2023 9:29:45 P	TOC_Method_101223	50.97mg/l ± 1.02%		500.0µl	1 in 1
SQ6133-8MSD	12/5/2023 9:45:04 P	TOC_Method_101223	51.57mg/l ± 0.35%		500.0µl	1 in 1
SQ6133-9	12/5/2023 10:08:51 P	TOC_Method_101223	1.20mg/l ± 3.98%		500.0µl	1 in 1
SQ6133-10	12/5/2023 10:23:58 P	TOC_Method_101223	1.31mg/l ± 2.92%		500.0µl	1 in 1
SQ6137-1	12/5/2023 10:35:33 P	TOC_Method_101223	19.29mg/l ± 1.07%		500.0µl	1 in 1
SQ6137-2	12/5/2023 10:49:36 P	TOC_Method_101223	24.65mg/l ± 0.61%		500.0µl	1 in 1
SQ6137-3	12/5/2023 11:03:43 P	TOC_Method_101223	152.1mg/l ± 0.60%		500.0µl	1 in 1
CCV	12/5/2023 11:19:01 P	TOC_Method_101223	105.2mg/l ± 0.04%	105%	500.0µl	1 in 1
CCB	12/5/2023 11:35:07 P	TOC_Method_101223	0mg/l		500.0µl	1 in 1
SQ6137-4	12/5/2023 11:50:15 P	TOC_Method_101223	28.46mg/l ± 0.67%		500.0µl	1 in 1
SQ6233-1	12/6/2023 12:03:09	TOC_Method_101223	5.56mg/l ± 4.94%		500.0µl	1 in 1
SQ6233-2	12/6/2023 12:20:06	TOC_Method_101223	1.27mg/l ± 3.98%		500.0µl	1 in 1
SQ6234-1	12/6/2023 12:45:11	TOC_Method_101223	5.63mg/l ± 0.40%		500.0µl	1 in 1
SQ6234-2	12/6/2023 12:56:54	TOC_Method_101223	6.60mg/l ± 0.09%		500.0µl	1 in 1
SQ6234-3	12/6/2023 1:08:27 A	TOC_Method_101223	6.00mg/l ± 0.87%		500.0µl	1 in 1
CCV	12/6/2023 1:21:01 A	TOC_Method_101223	102.8mg/l ± 0.57%	103%	500.0µl	1 in 1
CCB	12/6/2023 1:37:04 A	TOC_Method_101223	0mg/l		500.0µl	1 in 1

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AnalysisReport

Sample ID:	alk		
Time of analysis:	12/5/2023 4:52:50 PM -0500	**Method:**	TOC_Method_101223
Directory:	C:\ProgramData\IDC\multiWin\Analyses\2023\12		
File name:	231205165250.ajd		
User:	Admin	**Sample volume:**	500.0µl
Sample type:	Sample	**Dilution:**	1 in 1
Status:	Measurement completed successfully	**Determinations:**	2-3
		Furnace temperature:	800°C

	c	I eff	SD	CV	k0	k1	k2	DF
NPOC	618.0µg/l	652.7AU B!	33.96µg/l SD!	5.50% CV!	-0.15993	7.184E-4	-	1

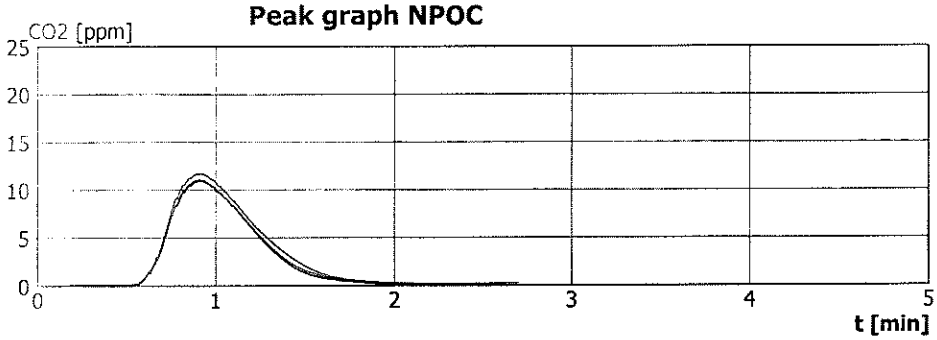
Blank values

NPOC	Diluent blank	0AU/ml

Single replicates:

	Rep.	1	2	3
NPOC	c [µg/l]	~~712.6~~	642.0	594.0
NPOC	I [AU]	~~718.6~~	669.4	636.0

Peak graph NPOC



AnalysisReport

Sample ID: CCV

Time of analysis:	12/5/2023 5:15:37 PM -0500	**Method:**	TOC_Method_101223
Directory:	C:\ProgramData\IDC\multiWin\Analyses\2023\12		
File name:	231205171537.ajd		
User:	Admin	**Sample volume:**	500.0µl
Sample type:	Sample	**Dilution:**	1 in 1
Status:	Measurement completed successfully	**Determinations:**	2-3
		Furnace temperature:	800°C

	c	I eff	SD	CV	k0	k1	k2	DF
NPOC	104.2mg/l	7.278E4AU	1.01mg/l	0.97%	-0.15993	7.184E-4	-	1

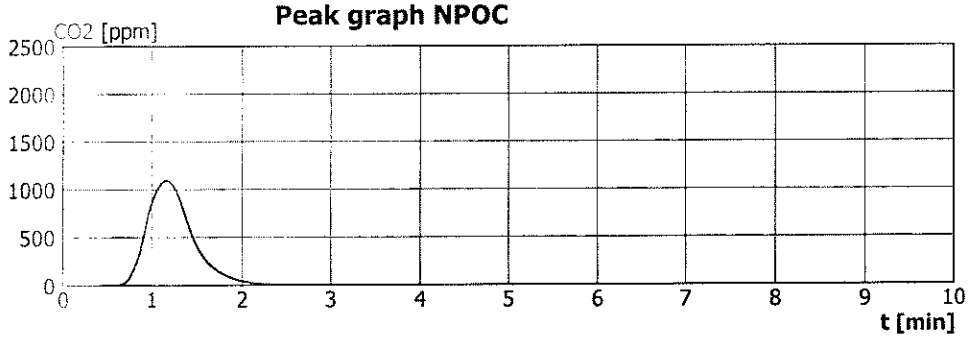
Blank values

NPOC	Diluent blank	0AU/ml

Single replicates:

	Rep.	1	2
NPOC	c [mg/l]	103.5	105.0
NPOC	I [AU]	7.228E4	7.328E4

Peak graph NPOC



AnalysisReport

Sample ID:	CCB		
Time of analysis:	12/5/2023 5:31:16 PM -0500	**Method:**	TOC_Method_101223
Directory:	C:\ProgramData\IDC\multiWin\Analyses\2023\12		
File name:	231205173116.ajd		
User:	Admin	**Sample volume:**	500.0µl
Sample type:	Sample	**Dilution:**	1 in 1
Status:	Measurement completed successfully	**Determinations:**	2-3
		Furnace temperature:	800°C

	c	I eff	SD	CV	k0	k1	k2	DF
NPOC	0mg/l	98.98AU B!			-0.15993	7.184E-4	-	1

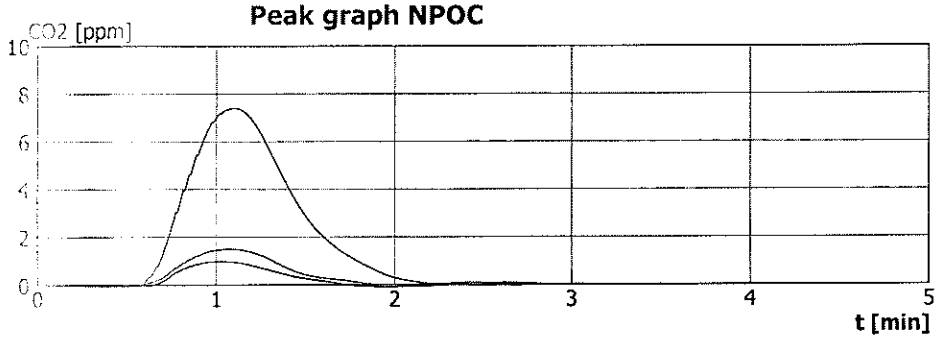
Blank values

NPOC	Diluent blank	0AU/ml

Single replicates:

	Rep.	1	2	3
NPOC	c [mg/l]	0.495	0	0
NPOC	I [AU]	567.2	112.8	85.19

Peak graph NPOC



aj-Analyzer multi N/C 3100; multiWin 4.12; Serial No: N3-2320/AX

AnalysisReport

Sample ID: LCS

Time of analysis:	12/5/2023 5:45:50 PM -0500	**Method:**	TOC_Method_101223
Directory:	C:\ProgramData\IDC\multiWin\Analyses\2023\12		
File name:	231205174550.ajd		
User:	Admin	**Sample volume:**	500.0µl
Sample type:	Sample	**Dilution:**	1 in 1
Status:	Measurement completed successfully	**Determinations:**	2-3
		Furnace temperature:	800°C

	c	I eff	SD	CV	k0	k1	k2	DF
NPOC	51.80mg/l	3.628E4AU	229.0µg/l	0.44%	-0.15993	7.184E-4	-	1

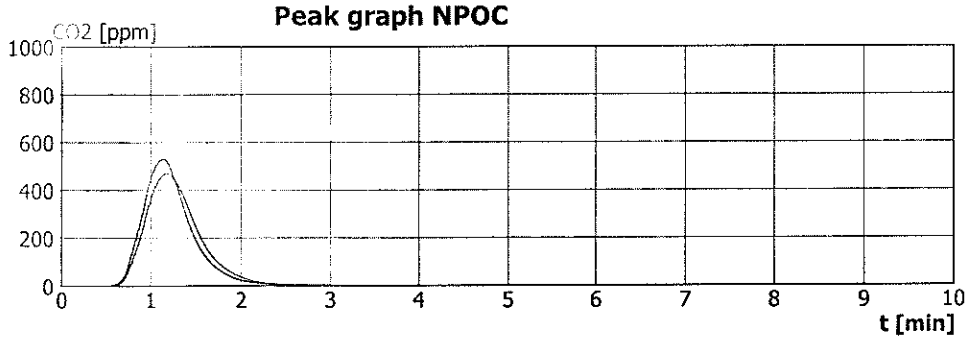
Blank values

NPOC	Diluent blank	0AU/ml

Single replicates:

	Rep.	1	2
NPOC	c [mg/l]	51.68	51.96
NPOC	I [AU]	3.616E4	3.639E4

Peak graph NPOC



aj-Analyzer multi N/C 3100; multiWin 4.12; Serial No: N3-2320/AX

AnalysisReport

Sample ID:	LCSD		
Time of analysis:	12/5/2023 6:01:49 PM -0500	**Method:**	TOC_Method_101223
Directory:	C:\ProgramData\IDC\multiWin\Analyses\2023\12		
File name:	231205180149.ajd		
User:	Admin	**Sample volume:**	500.0µl
Sample type:	Sample	**Dilution:**	1 in 1
Status:	Measurement completed successfully	**Determinations:**	2-3
		Furnace temperature:	800°C

	c	I eff	SD	CV	k0	k1	k2	DF
NPOC	51.95mg/l	3.638E4AU	373.1µg/l	0.72%	-0.15993	7.184E-4	-	1

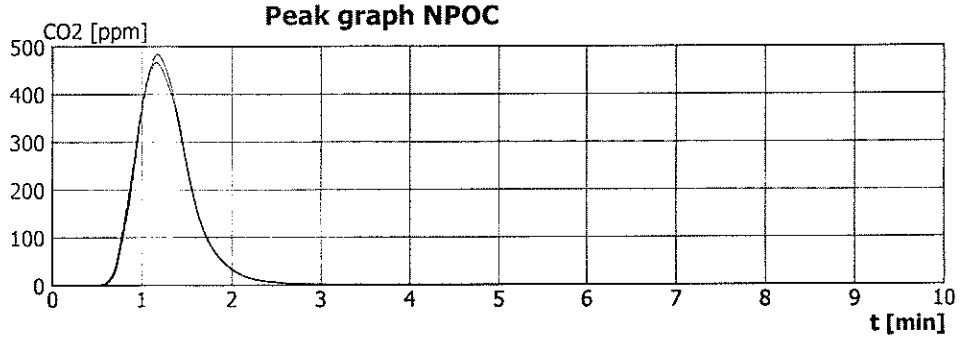
Blank values

NPOC	Diluent blank	0AU/ml

Single replicates:

	Rep.	1	2
NPOC	c [mg/l]	51.69	52.22
NPOC	I [AU]	3.62E4	3.657E4

Peak graph NPOC



AnalysisReport

Sample ID:	SQ6133-1		
Time of analysis:	12/5/2023 6:17:45 PM -0500	**Method:**	TOC_Method_101223
Directory:	C:\ProgramData\IDC\multiWin\Analyses\2023\12		
File name:	231205181745.ajd		
User:	Admin	**Sample volume:**	500.0µl
Sample type:	Sample	**Dilution:**	1 in 1
Status:	Measurement completed successfully	**Determinations:**	2-3
		Furnace temperature:	800°C

	c	I eff	SD	CV	k0	k1	k2	DF
NPOC	633.6µg/l	663.6AU B!	61.98µg/l SD!	9.78% CV!	-0.15993	7.184E-4	-	1

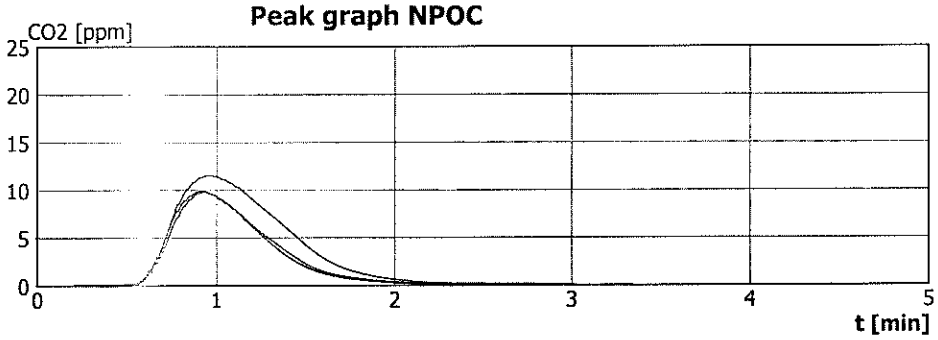
Blank values

NPOC	Diluent blank	0AU/ml

Single replicates:

	Rep.	1	2	3
NPOC	c [µg/l]	966.1	677.4	589.7
NPOC	I [AU]	895.0	694.1	633.1

Peak graph NPOC



aj-Analyzer multi N/C 3100; multiWin 4.12; Serial No: N3-2320/AX

AnalysisReport

Sample ID:	SQ6133-1DUP		
Time of analysis:	12/5/2023 6:33:17 PM -0500	**Method:**	TOC_Method_101223
Directory:	C:\ProgramData\IDC\multiWin\Analyses\2023\12		
File name:	231205183317.ajd		
User:	Admin	**Sample volume:**	500.0µl
Sample type:	Sample	**Dilution:**	1 in 1
Status:	Measurement completed successfully	**Determinations:**	2-3
		Furnace temperature:	800°C

	c	I eff	SD	CV	k0	k1	k2	DF
NPOC	496.3µg/l	568.0AU B!	2.11µg/l	0.43%	-0.15993	7.184E-4	-	1

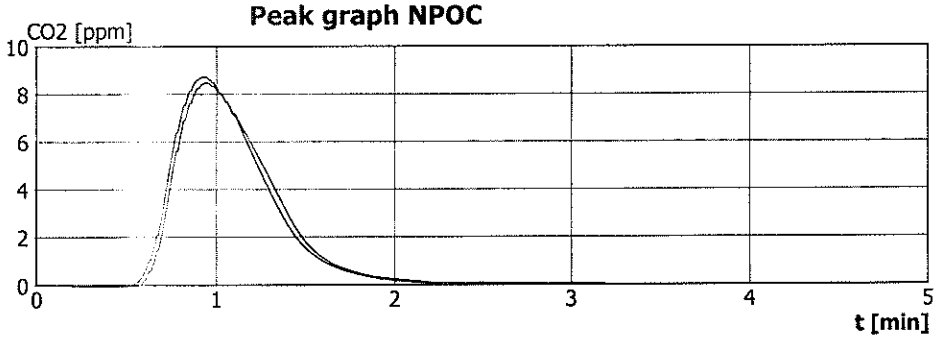
Blank values

NPOC	Diluent blank	0AU/ml

Single replicates:

	Rep.	1	2
NPOC	c [µg/l]	494.8	497.8
NPOC	I [AU]	567.0	569.0

Peak graph NPOC



aj-Analyzer multi N/C 3100; multiWin 4.12; Serial No: N3-2320/AX

AnalysisReport

Sample ID:	SQ6133-2		
Time of analysis:	12/5/2023 6:44:22 PM -0500	**Method:**	TOC_Method_101223
Directory:	C:\ProgramData\IDC\multiWin\Analyses\2023\12		
File name:	231205184422.ajd		
User:	Admin	**Sample volume:**	500.0µl
Sample type:	Sample	**Dilution:**	1 in 1
Status:	Measurement completed successfully	**Determinations:**	2-3
		Furnace temperature:	800°C

	c	I eff	SD	CV	k0	k1	k2	DF
NPOC	1.55mg/l	1,299AU	1.25µg/l	0.08%	-0.15993	7.184E-4	-	1

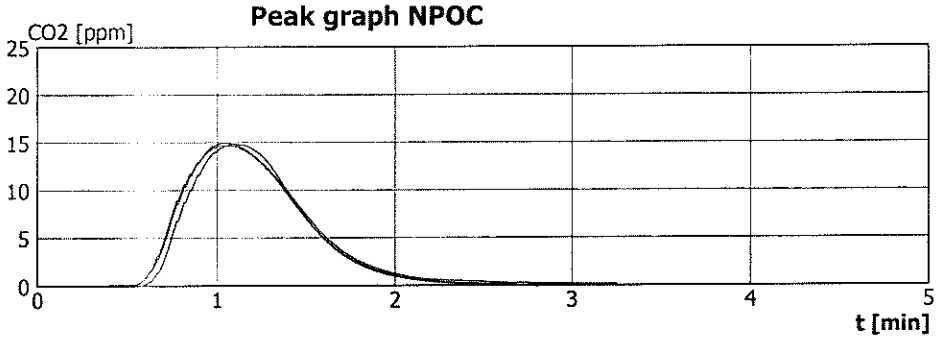
Blank values

NPOC	Diluent blank	0AU/ml

Single replicates:

	Rep.	1	2	3
NPOC	c [mg/l]	~~1.48~~	1.55	1.55
NPOC	I [AU]	~~1,252~~	1,299	1,298

Peak graph NPOC



AnalysisReport

Sample ID:	SQ6133-3		
Time of analysis:	12/5/2023 7:00:17 PM -0500	**Method:**	TOC_Method_101223
Directory:	C:\ProgramData\IDC\multiWin\Analyses\2023\12		
File name:	231205190017.ajd		
User:	Admin	**Sample volume:**	500.0µl
Sample type:	Sample	**Dilution:**	1 in 1
Status:	Measurement completed successfully	**Determinations:**	2-3
		Furnace temperature:	800°C

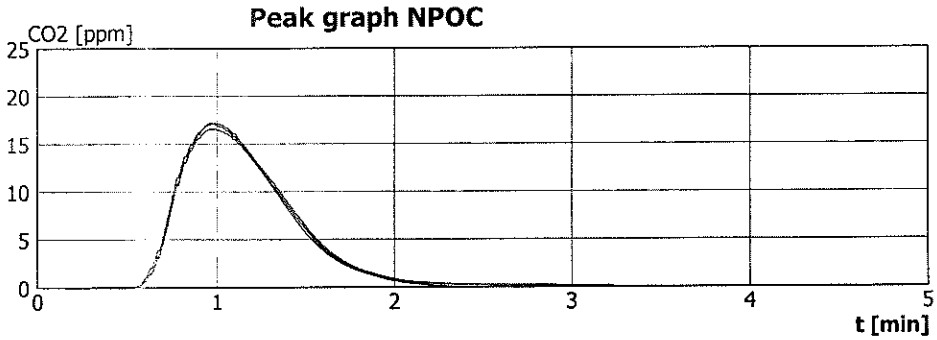
	c	I eff	SD	CV	k0	k1	k2	DF
NPOC	1.53mg/l	1,290AU	23.97µg/l	1.56%	-0.15993	7.184E-4	-	1

Blank values

NPOC	Diluent blank	0AU/ml

Single replicates:

	Rep.	1	2	3
NPOC	c [mg/l]	~~1.60~~	1.52	1.55
NPOC	I [AU]	~~1,337~~	1,278	1,302



aj-Analyzer multi N/C 3100; multiWin 4.12; Serial No: N3-2320/AX

AnalysisReport

Sample ID:	SQ6133-3MS		
Time of analysis:	12/5/2023 7:15:49 PM -0500	**Method:**	TOC_Method_101223
Directory:	C:\ProgramData\IDC\multiWin\Analyses\2023\12		
File name:	231205191549.ajd		
User:	Admin	**Sample volume:**	500.0µl
Sample type:	Sample	**Dilution:**	1 in 1
Status:	Measurement completed successfully	**Determinations:**	2-3
		Furnace temperature:	800°C

	c	I eff	SD	CV	k0	k1	k2	DF
NPOC	51.14mg/l	3.582E4AU	428.6µg/l	0.84%	-0.15993	7.184E-4	-	1

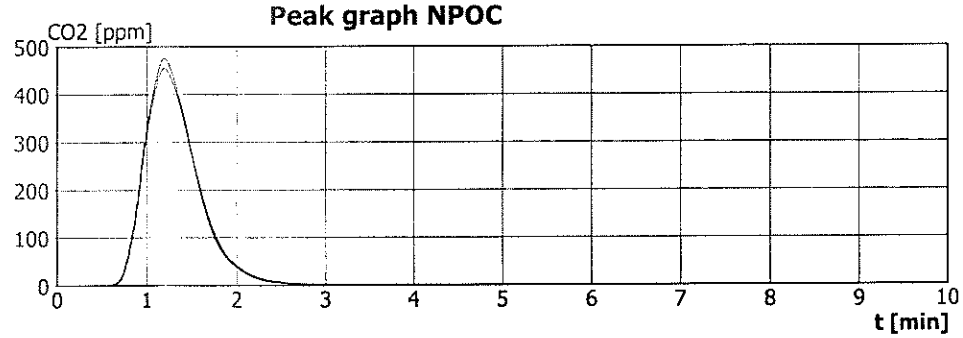
Blank values

NPOC	Diluent blank	0AU/ml

Single replicates:

	Rep.	1	2
NPOC	c [mg/l]	50.84	51.45
NPOC	I [AU]	3.561E4	3.603E4

Peak graph NPOC



aj-Analyzer multi N/C 3100; multiWin 4.12; Serial No: N3-2320/AX

AnalysisReport

Sample ID:	SQ6133-3MSD		
Time of analysis:	12/5/2023 7:31:54 PM -0500	**Method:**	TOC_Method_101223
Directory:	C:\ProgramData\IDC\multiWin\Analyses\2023\12		
File name:	231205193154.ajd		
User:	Admin	**Sample volume:**	500.0µl
Sample type:	Sample	**Dilution:**	1 in 1
Status:	Measurement completed successfully	**Determinations:**	2-3
		Furnace temperature:	800°C

	c	I eff	SD	CV	k0	k1	k2	DF
NPOC	51.60mg/l	3.614E4AU	78.92µg/l	0.15%	-0.15993	7.184E-4	-	1

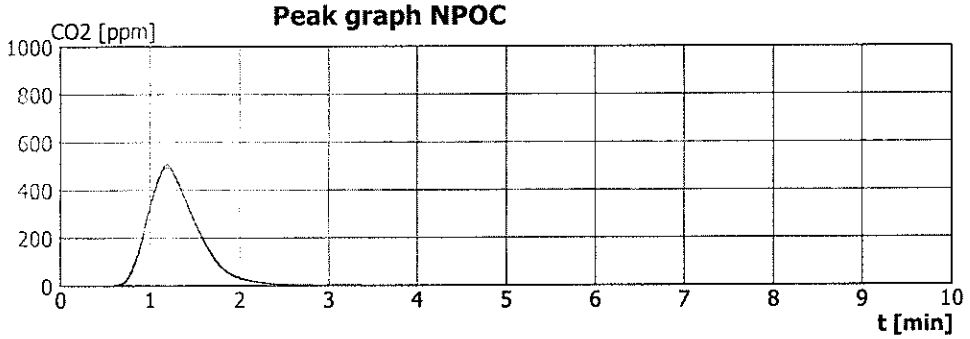
Blank values

NPOC	Diluent blank	0AU/ml

Single replicates:

	Rep.	1	2
NPOC	c [mg/l]	51.55	51.66
NPOC	I [AU]	3.61E4	3.618E4

Peak graph NPOC



aj-Analyzer multi N/C 3100; multiWin 4.12; Serial No: N3-2320/AX

AnalysisReport

Sample ID:	SQ6133-4		
Time of analysis:	12/5/2023 7:55:45 PM -0500	**Method:**	TOC_Method_101223
Directory:	C:\ProgramData\IDC\multiWin\Analyses\2023\12		
File name:	231205195545.ajd		
User:	Admin	**Sample volume:**	500.0µl
Sample type:	Sample	**Dilution:**	1 in 1
Status:	Measurement completed successfully	**Determinations:**	2-3
		Furnace temperature:	800°C

	c	I eff	SD	CV	k0	k1	k2	DF
NPOC	2.09mg/l	1,678AU	9.45µg/l	0.45%	-0.15993	7.184E-4	-	1

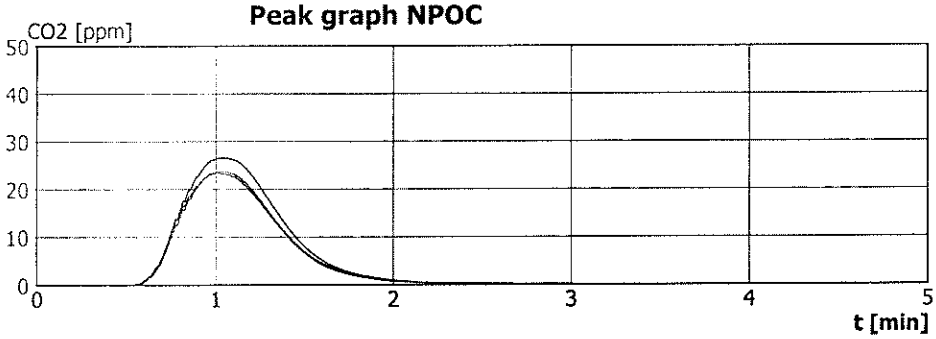
Blank values

NPOC	Diluent blank	0AU/ml

Single replicates:

	Rep.	1	2	3
NPOC	c [mg/l]	~~2.45~~	2.10	2.08
NPOC	I [AU]	~~1,929~~	1,682	1,673

Peak graph NPOC



aj-Analyzer multi N/C 3100; multiWin 4.12; Serial No: N3-2320/AX

AnalysisReport

Sample ID:	SQ6133-5		
Time of analysis:	12/5/2023 8:10:51 PM -0500	**Method:**	TOC_Method_101223
Directory:	C:\ProgramData\IDC\multiWin\Analyses\2023\12		
File name:	231205201051.ajd		
User:	Admin	**Sample volume:**	500.0µl
Sample type:	Sample	**Dilution:**	1 in 1
Status:	Measurement completed successfully	**Determinations:**	2-3
		Furnace temperature:	800°C

	c	I eff	SD	CV	k0	k1	k2	DF
NPOC	2,69mg/l	2,097AU	7.89µg/l	0.29%	-0.15993	7.184E-4	-	1

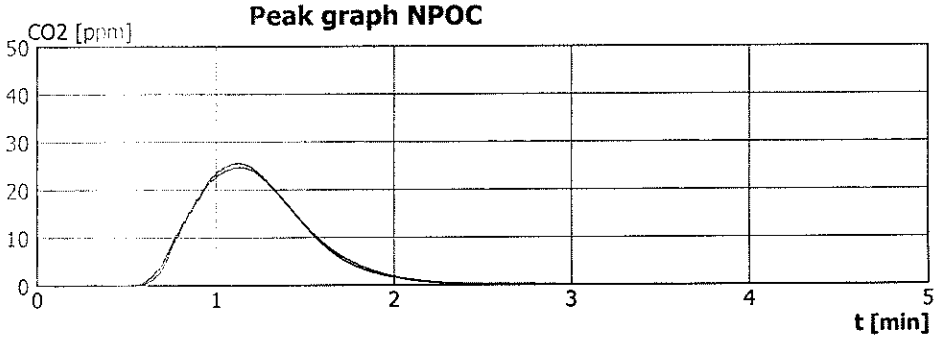
Blank values

NPOC	Diluent blank	0AU/ml

Single replicates:

	Rep.	1	2
NPOC	c [mg/l]	2.70	2.69
NPOC	I [AU]	2.101	2.093

Peak graph NPOC



AnalysisReport

Sample ID:	CCV		
Time of analysis:	12/5/2023 8:22:43 PM -0500	**Method:**	TOC_Method_101223
Directory:	C:\ProgramData\IDC\multiWin\Analyses\2023\12		
File name:	231205202243.ajd		
User:	Admin	**Sample volume:**	500.0µl
Sample type:	Sample	**Dilution:**	1 in 1
Status:	Measurement completed successfully	**Determinations:**	2-3
		Furnace temperature:	800°C

	c	I eff	SD	CV	k0	k1	k2	DF
NPOC	103.8mg/l	7.244E4AU	481.2µg/l	0.46%	-0.15993	7.184E-4	-	1

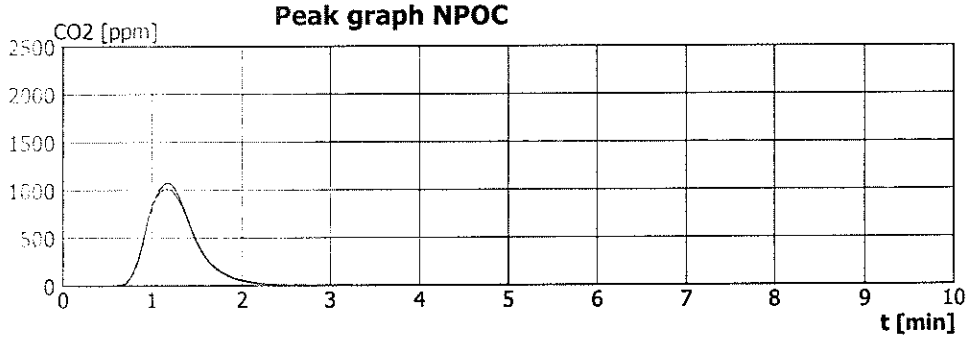
Blank values

NPOC	Diluent blank	0AU/ml

Single replicates:

	Rep.	1	2
NPOC	c [mg/l]	103.4	104.1
NPOC	I [AU]	7.221E4	7.268E4

Peak graph NPOC



AnalysisReport

Sample ID: CCB
Time of analysis: 12/5/2023 8:38:45 PM -0500
Directory: C:\ProgramData\IDC\multiWin\Analyses\2023\12
File name: 231205203845.ajd
User: Admin
Sample type: Sample
Status: Measurement completed successfully

Method: TOC_Method_101223
Sample volume: 500.0µl
Dilution: 1 in 1
Determinations: 2-3
Furnace temperature: 800°C

	c	I eff	SD	CV	k0	k1	k2	DF
NPOC	0mg/l	132.2AU B!			-0.15993	7.184E-4	-	1

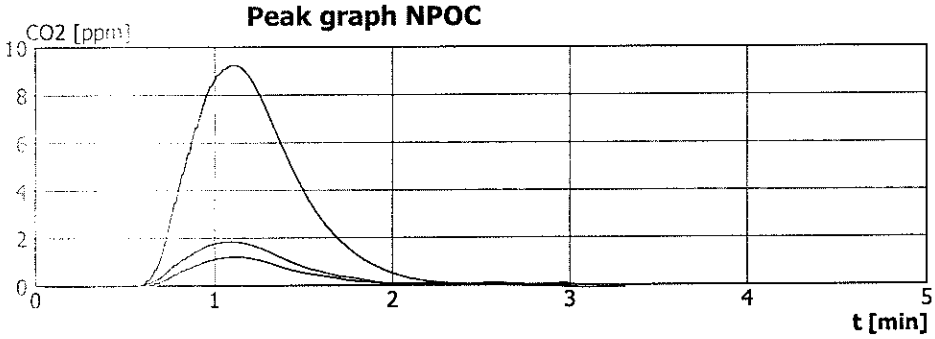
Blank values

NPOC	Diluent blank	0AU/ml

Single replicates:

	Rep.	1	2	3
NPOC	c [mg/l]	0.726	0	0
NPOC	I [AU]	727.7	153.3	111.1

Peak graph NPOC



AnalysisReport

Sample ID:	SQ6133-6		
Time of analysis:	12/5/2023 8:54:10 PM -0500	**Method:**	TOC_Method_101223
Directory:	C:\ProgramData\IDC\multiWin\Analyses\2023\12		
File name:	231205205410.ajd		
User:	Admin	**Sample volume:**	500.0µl
Sample type:	Sample	**Dilution:**	1 in 1
Status:	Measurement completed successfully	**Determinations:**	2-3
		Furnace temperature:	800°C

	c	I eff	SD	CV	k0	k1	k2	DF
NPOC	**504.7µg/l**	**573.9AU B!**	17.51µg/l SD!	3.47% CV!	-0.15993	7.184E-4	-	1

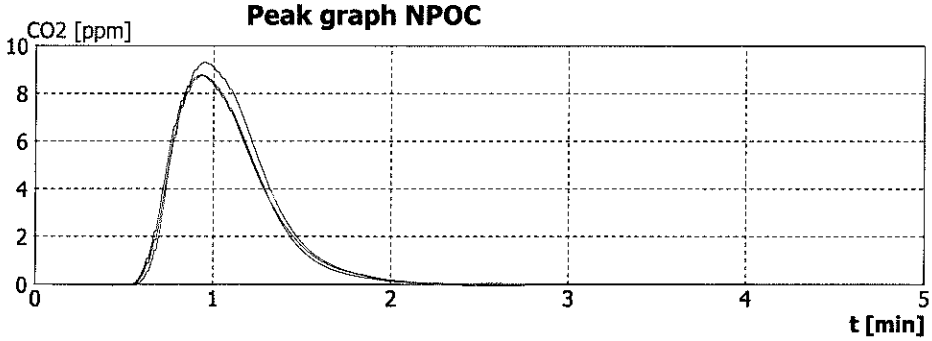
Blank values

NPOC	Diluent blank	0AU/ml

Single replicates:

	Rep.	1	2	3
NPOC	**c [µg/l]**	~~546.9~~	517.1	492.3
NPOC	**I [AU]**	~~603.3~~	582.5	565.3

Peak graph NPOC



AnalysisReport

Sample ID:	SQ6133-7		
Time of analysis:	12/5/2023 9:08:34 PM -0500	**Method:**	TOC_Method_101223
Directory:	C:\ProgramData\IDC\multiWin\Analyses\2023\12		
File name:	231205210834.ajd		
User:	Admin	**Sample volume:**	500.0µl
Sample type:	Sample	**Dilution:**	1 in 1
Status:	Measurement completed successfully	**Determinations:**	2-3
		Furnace temperature:	800°C

	c	I eff	SD	CV	k0	k1	k2	DF
NPOC	**1.67mg/l**	**1,386AU**	3.39µg/l	0.20%	-0.15993	7.184E-4	-	1

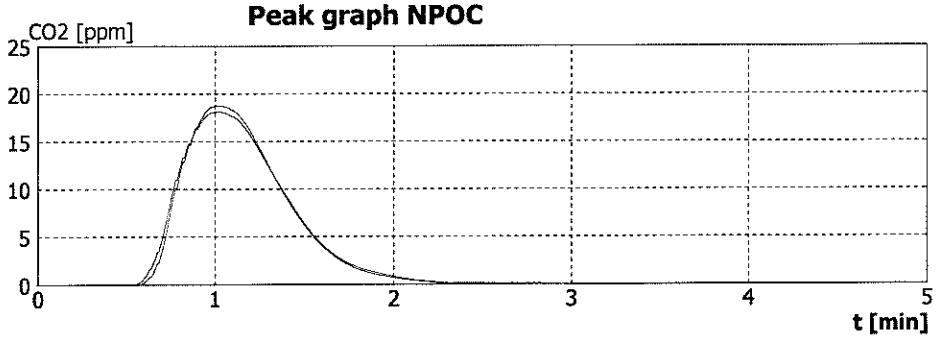
Blank values

NPOC	Diluent blank	0AU/ml

Single replicates:

	Rep.	1	2
NPOC	c [mg/l]	1.67	1.67
NPOC	I [AU]	1,387	1,384

Peak graph NPOC



AnalysisReport

Sample ID:	SQ6133-8		
Time of analysis:	12/5/2023 9:19:39 PM -0500	**Method:**	TOC_Method_101223
Directory:	C:\ProgramData\IDC\multiWin\Analyses\2023\12		
File name:	231205211939.ajd		
User:	Admin	**Sample volume:**	500.0µl
Sample type:	Sample	**Dilution:**	1 in 1
Status:	Measurement completed successfully	**Determinations:**	2-3
		Furnace temperature:	800°C

	c	I eff	SD	CV	k0	k1	k2	DF
NPOC	**572.1µg/l**	**620.8AU B!**	5.70µg/l	1.00%	-0.15993	7.184E-4	-	1

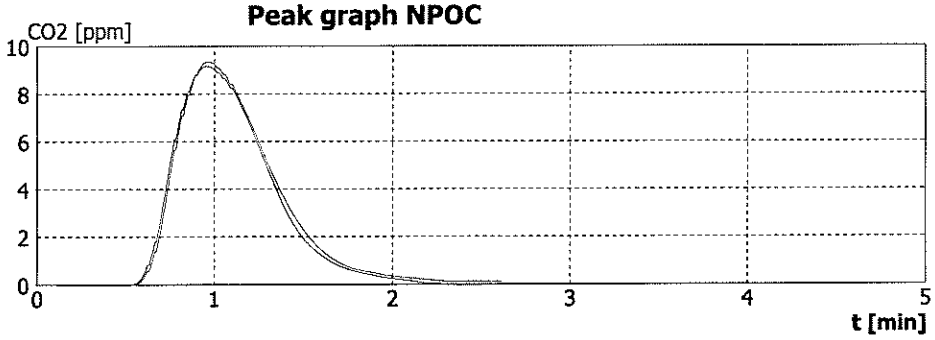
Blank values

NPOC	Diluent blank	0AU/ml

Single replicates:

	Rep.	1	2
NPOC	c [µg/l]	568.1	576.1
NPOC	I [AU]	618.0	623.6

Peak graph NPOC



AnalysisReport

Sample ID:	SQ6133-8MS		
Time of analysis:	12/5/2023 9:29:45 PM -0500	**Method:**	TOC_Method_101223
Directory:	C:\ProgramData\IDC\multiWin\Analyses\2023\12		
File name:	231205212945.ajd		
User:	Admin	**Sample volume:**	500.0µl
Sample type:	Sample	**Dilution:**	1 in 1
Status:	Measurement completed successfully	**Determinations:**	2-3
		Furnace temperature:	800°C

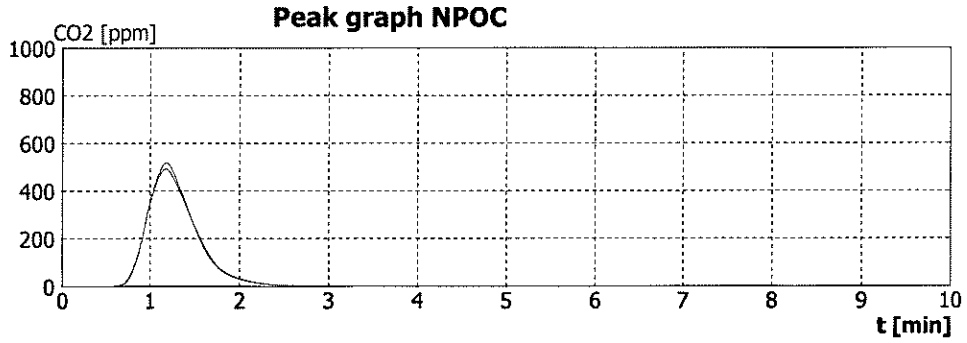
	c	I eff	SD	CV	k0	k1	k2	DF
NPOC	**50.97mg/l**	**3.57E4AU**	517.7µg/l	1.02%	-0.15993	7.184E-4	-	1

Blank values

NPOC	Diluent blank	0AU/ml

Single replicates:

	Rep.	1	2
NPOC	**c [mg/l]**	50.61	51.34
NPOC	**I [AU]**	3.545E4	3.595E4



AnalysisReport

Sample ID:	SQ6133-8MSD		
Time of analysis:	12/5/2023 9:45:04 PM -0500	**Method:**	TOC_Method_101223
Directory:	C:\ProgramData\IDC\multiWin\Analyses\2023\12		
File name:	231205214504.ajd		
User:	Admin	**Sample volume:**	500.0µl
Sample type:	Sample	**Dilution:**	1 in 1
Status:	Measurement completed successfully	**Determinations:**	2-3
		Furnace temperature:	800°C

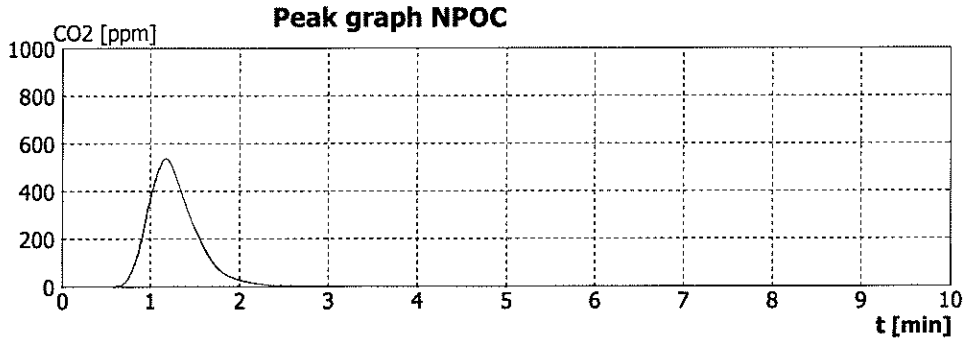
	c	I eff	SD	CV	k0	k1	k2	DF
NPOC	**51.57mg/l**	**3.611E4AU**	178.9µg/l	0.35%	-0.15993	7.184E-4	-	1

Blank values

NPOC	Diluent blank	0AU/ml

Single replicates:

	Rep.	1	2
NPOC	**c [mg/l]**	51.44	51.70
NPOC	**I [AU]**	3.603E4	3.62E4



AnalysisReport

Sample ID:	SQ6133-9		
Time of analysis:	12/5/2023 10:08:51 PM -0500	**Method:**	TOC_Method_101223
Directory:	C:\ProgramData\IDC\multiWin\Analyses\2023\12		
File name:	231205220851.ajd		
User:	Admin	**Sample volume:**	500.0µl
Sample type:	Sample	**Dilution:**	1 in 1
Status:	Measurement completed successfully	**Determinations:**	2-3
		Furnace temperature:	800°C

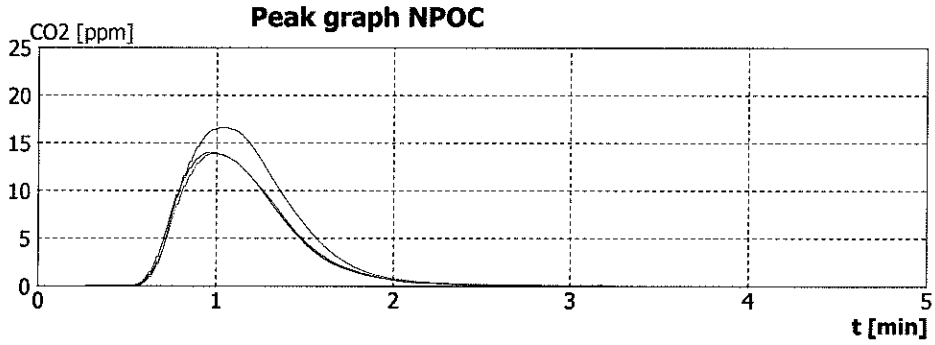
	c	I eff	SD	CV	k0	k1	k2	DF
NPOC	1.20mg/l	1,055AU	47.60µg/l SD!	3.98% CV!	-0.15993	7.184E-4	-	1

Blank values

NPOC	Diluent blank	0AU/ml

Single replicates:

	Rep.	1	2	3
NPOC	c [mg/l]	~~1.51~~	1.23	1.16
NPOC	I [AU]	~~1,276~~	1,079	1,032



aj-Analyzer multi N/C 3100; multiWin 4.12; Serial No: N3-2320/AX

AnalysisReport

Sample ID:	SQ6133-10		
Time of analysis:	12/5/2023 10:23:58 PM -0500	**Method:**	TOC_Method_101223
Directory:	C:\ProgramData\IDC\multiWin\Analyses\2023\12		
File name:	231205222358.ajd		
User:	Admin	**Sample volume:**	500.0µl
Sample type:	Sample	**Dilution:**	1 in 1
Status:	Measurement completed successfully	**Determinations:**	2-3
		Furnace temperature:	800°C

	c	I eff	SD	CV	k0	k1	k2	DF
NPOC	**1.31mg/l**	**1,137AU**	38.32µg/l	2.92%	-0.15993	7.184E-4	-	1

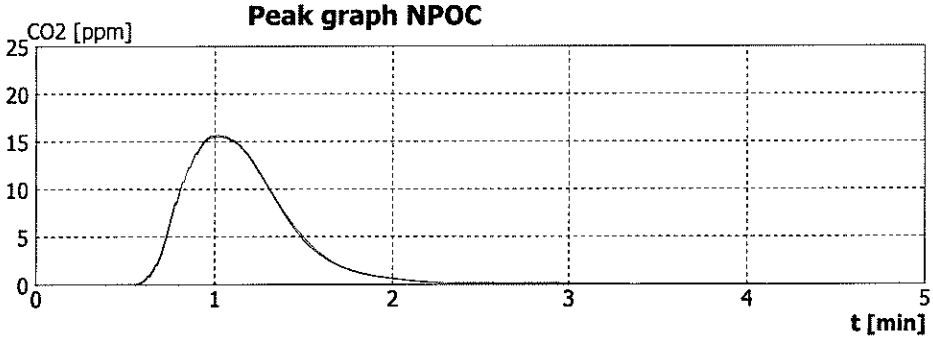
Blank values

NPOC	Diluent blank	0AU/ml

Single replicates:

	Rep.	1	2
NPOC	c [mg/l]	1.34	1.29
NPOC	I [AU]	1,155	1,118

Peak graph NPOC



AnalysisReport

Sample ID: SQ6137-1

Time of analysis:	12/5/2023 10:35:33 PM -0500	**Method:**	TOC_Method_101223
Directory:	C:\ProgramData\IDC\multiWin\Analyses\2023\12		
File name:	231205223533.ajd		
User:	Admin	**Sample volume:**	500.0µl
Sample type:	Sample	**Dilution:**	1 in 1
Status:	Measurement completed successfully	**Determinations:**	2-3
		Furnace temperature:	800°C

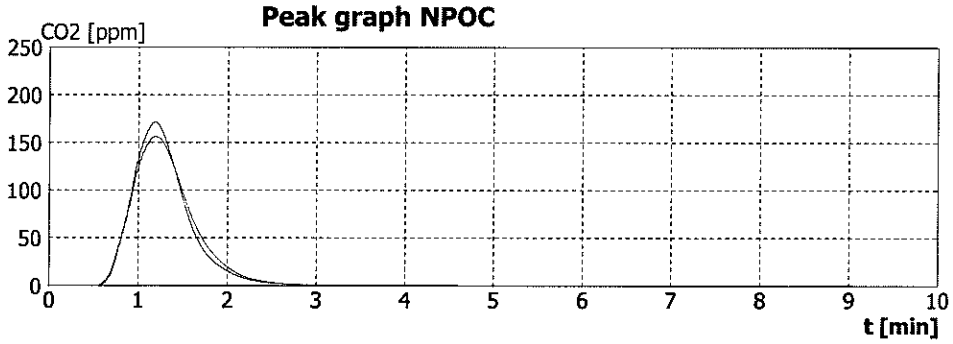
	c	I eff	SD	CV	k0	k1	k2	DF
NPOC	19.29mg/l	1.365E4AU	206.7µg/l	1.07%	-0.15993	7.184E-4	-	1

Blank values

NPOC	Diluent blank	0AU/ml

Single replicates:

	Rep.	1	2
NPOC	c [mg/l]	19.15	19.44
NPOC	I [AU]	1.355E4	1.375E4



AnalysisReport

Sample ID:	SQ6137-2		
Time of analysis:	12/5/2023 10:49:36 PM -0500	**Method:**	TOC_Method_101223
Directory:	C:\ProgramData\IDC\multiWin\Analyses\2023\12		
File name:	231205224936.ajd		
User:	Admin	**Sample volume:**	500.0µl
Sample type:	Sample	**Dilution:**	1 in 1
Status:	Measurement completed successfully	**Determinations:**	2-3
		Furnace temperature:	800°C

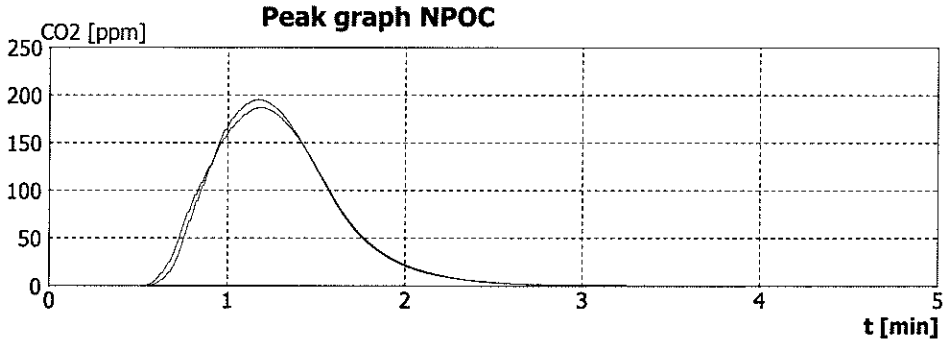
	c	I eff	SD	CV	k0	k1	k2	DF
NPOC	**24.65mg/l**	**1.738E4AU**	149.2µg/l	0.61%	-0.15993	7.184E-4	-	1

Blank values

NPOC	Diluent blank	0AU/ml

Single replicates:

	Rep.	1	2
NPOC	**c [mg/l]**	24.54	24.75
NPOC	**I [AU]**	1.73E4	1.745E4



AnalysisReport

Sample ID: SQ6137-3

Time of analysis:	12/5/2023 11:03:43 PM -0500	**Method:**	TOC_Method_101223
Directory:	C:\ProgramData\IDC\multiWin\Analyses\2023\12		
File name:	231205230343.ajd		
User:	Admin	**Sample volume:**	500.0µl
Sample type:	Sample	**Dilution:**	1 in 1
Status:	Measurement completed successfully	**Determinations:**	2-3
		Furnace temperature:	800°C

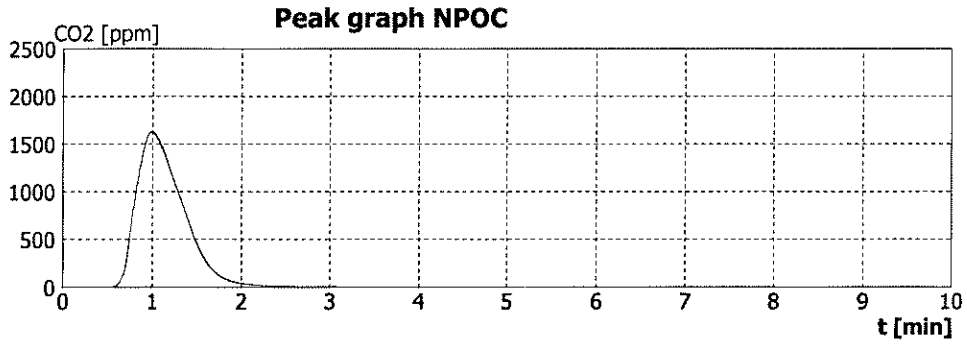
	c	I eff	SD	CV	k0	k1	k2	DF
NPOC	**152.1mg/l**	**1.061E5AU**	919.4µg/l	0.60%	-0.15993	7.184E-4	-	1

Blank values

NPOC	Diluent blank	0AU/ml

Single replicates:

	Rep.	1	2
NPOC	c [mg/l]	151.5	152.8
NPOC	I [AU]	1.057E5	1.066E5



AnalysisReport

Sample ID: CCV

Time of analysis:	12/5/2023 11:19:01 PM -0500	**Method:**	TOC_Method_101223
Directory:	C:\ProgramData\IDC\multiWin\Analyses\2023\12		
File name:	231205231901.ajd		
User:	Admin	**Sample volume:**	500.0µl
Sample type:	Sample	**Dilution:**	1 in 1
Status:	Measurement completed successfully	**Determinations:**	2-3
		Furnace temperature:	800°C

	c	I eff	SD	CV	k0	k1	k2	DF
NPOC	105.2mg/l	7.341E4AU	39.75µg/l	0.04%	-0.15993	7.184E-4	-	1

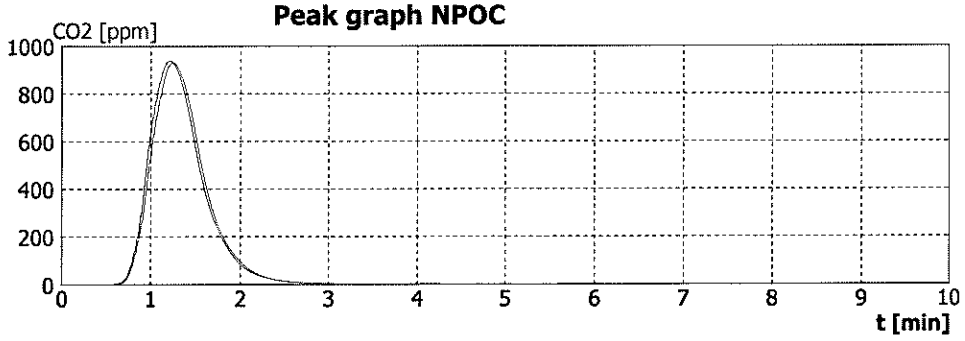
Blank values

NPOC	Diluent blank	0AU/ml

Single replicates:

	Rep.	1	2
NPOC	c [mg/l]	105.2	105.1
NPOC	I [AU]	7.343E4	7.339E4

Peak graph NPOC



AnalysisReport

Sample ID: CCB

Time of analysis:	12/5/2023 11:35:07 PM -0500	**Method:**	TOC_Method_101223
Directory:	C:\ProgramData\IDC\multiWin\Analyses\2023\12		
File name:	231205233507.ajd		
User:	Admin	**Sample volume:**	500.0µl
Sample type:	Sample	**Dilution:**	1 in 1
Status:	Measurement completed successfully	**Determinations:**	2-3
		Furnace temperature:	800°C

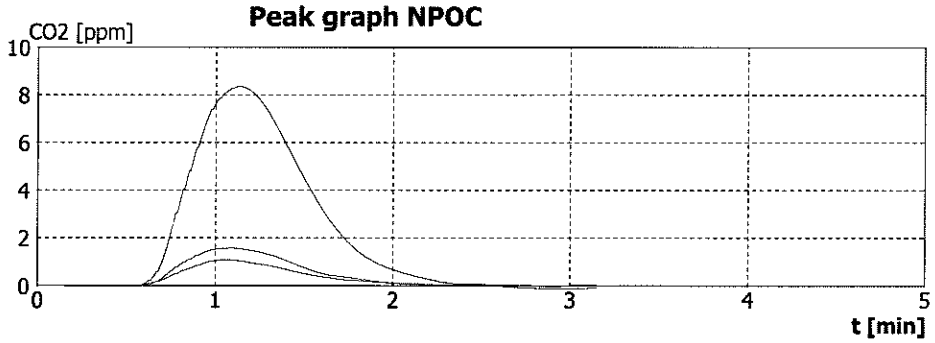
	c	I eff	SD	CV	k0	k1	k2	DF
NPOC	0mg/l	122.6AU B!			-0.15993	7.184E-4	-	1

Blank values

NPOC	Diluent blank	0AU/ml

Single replicates:

	Rep.	1	2	3
NPOC	c [mg/l]	~~0.698~~	0	0
NPOC	I [AU]	~~708.3~~	139.6	105.6



AnalysisReport

Sample ID: SQ6137-4

Time of analysis:	12/5/2023 11:50:15 PM -0500	**Method:**	TOC_Method_101223
Directory:	C:\ProgramData\IDC\multiWin\Analyses\2023\12		
File name:	231205235015.ajd		
User:	Admin	**Sample volume:**	500.0µl
Sample type:	Sample	**Dilution:**	1 in 1
Status:	Measurement completed successfully	**Determinations:**	2-3
		Furnace temperature:	800°C

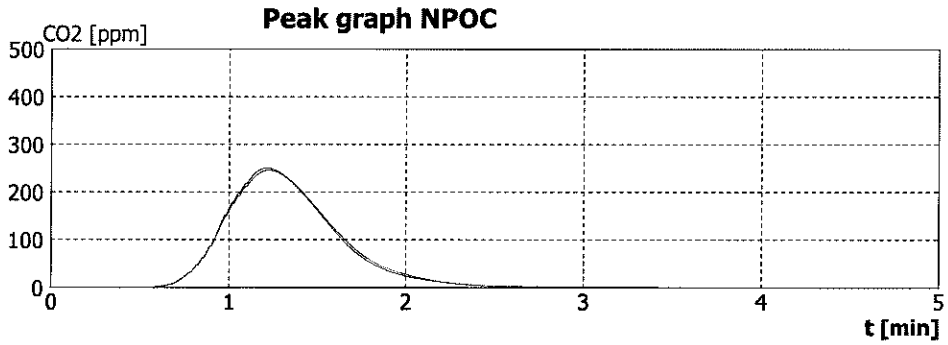
	c	I eff	SD	CV	k0	k1	k2	DF
NPOC	28.46mg/l	2.003E4AU	189.3µg/l	0.67%	-0.15993	7.184E-4	-	1

Blank values

NPOC	Diluent blank	0AU/ml

Single replicates:

	Rep.	1	2
NPOC	c [mg/l]	28.32	28.59
NPOC	I [AU]	1.994E4	2.012E4



AnalysisReport

Sample ID:	SQ6233-1		
Time of analysis:	12/6/2023 12:03:09 AM -0500	**Method:**	TOC_Method_101223
Directory:	C:\ProgramData\IDC\multiWin\Analyses\2023\12		
File name:	231206000309.ajd		
User:	Admin	**Sample volume:**	500.0µl
Sample type:	Sample	**Dilution:**	1 in 1
Status:	Measurement completed successfully	**Determinations:**	2-3
		Furnace temperature:	800°C

	c	I eff	SD	CV	k0	k1	k2	DF
NPOC	5.56mg/l	4,090AU	274.4µg/l SD!	4.94% CV!	-0.15993	7.184E-4	-	1

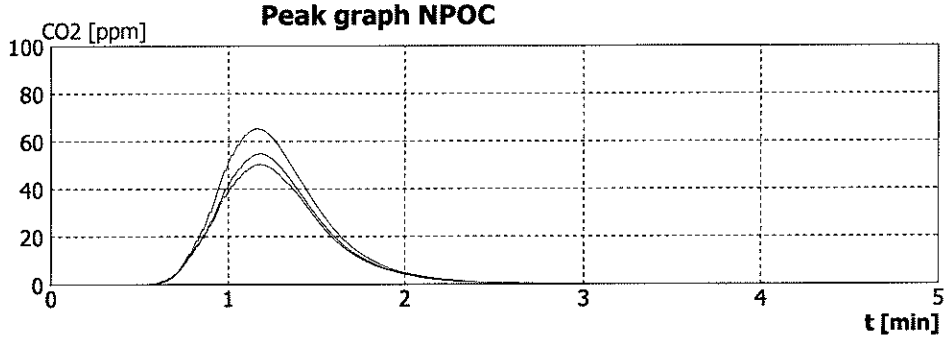
Blank values

NPOC	Diluent blank	0AU/ml

Single replicates:

	Rep.	1	2	3
NPOC	c [mg/l]	~~6.82~~	5.75	5.36
NPOC	I [AU]	~~4,970~~	4,225	3,955

Peak graph NPOC



AnalysisReport

Sample ID:	SQ6233-2		
Time of analysis:	12/6/2023 12:20:06 AM -0500	**Method:**	TOC_Method_101223
Directory:	C:\ProgramData\IDC\multiWin\Analyses\2023\12		
File name:	231206002006.ajd		
User:	Admin	**Sample volume:**	500.0µl
Sample type:	Sample	**Dilution:**	1 in 1
Status:	Measurement completed successfully	**Determinations:**	2-3
		Furnace temperature:	800°C

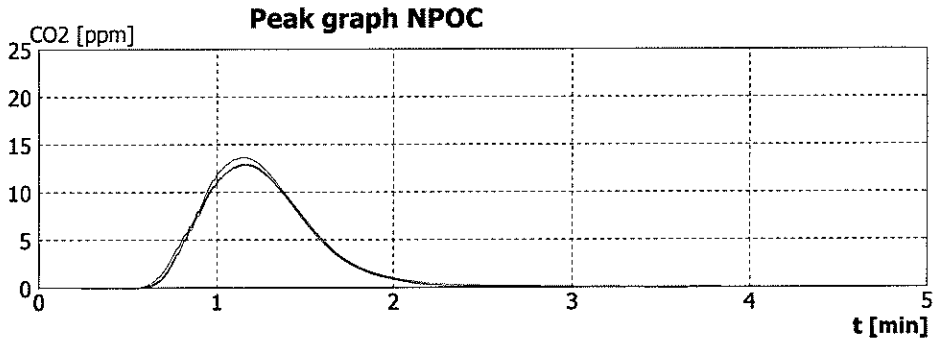
	c	I eff	SD	CV	k0	k1	k2	DF
NPOC	1.27mg/l	1,108AU	50.61µg/l SD!	3.98% CV!	-0.15993	7.184E-4	-	1

Blank values

NPOC	Diluent blank	0AU/ml

Single replicates:

	Rep.	1	2	3
NPOC	c [mg/l]	1.31	1.24	~~1.16~~
NPOC	I [AU]	1,133	1,083	~~1,032~~



AnalysisReport

Sample ID:	SQ6234-1		
Time of analysis:	12/6/2023 12:45:11 AM -0500	**Method:**	TOC_Method_101223
Directory:	C:\ProgramData\IDC\multiWin\Analyses\2023\12		
File name:	231206004511.ajd		
User:	Admin	**Sample volume:**	500.0µl
Sample type:	Sample	**Dilution:**	1 in 1
Status:	Measurement completed successfully	**Determinations:**	2-3
		Furnace temperature:	800°C

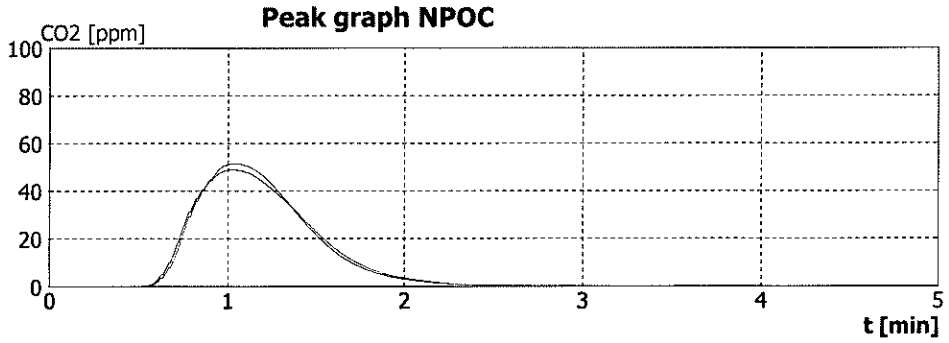
	c	I eff	SD	CV	k0	k1	k2	DF
NPOC	**5.63mg/l**	**4,142AU**	22.68µg/l	0.40%	-0.15993	7.184E-4	-	1

Blank values

NPOC	Diluent blank	0AU/ml

Single replicates:

	Rep.	1	2
NPOC	c [mg/l]	5.61	5.65
NPOC	I [AU]	4,131	4,153



AnalysisReport

Sample ID:	SQ6234-2		
Time of analysis:	12/6/2023 12:56:54 AM -0500	**Method:**	TOC_Method_101223
Directory:	C:\ProgramData\IDC\multiWin\Analyses\2023\12		
File name:	231206005654.ajd		
User:	Admin	**Sample volume:**	500.0µl
Sample type:	Sample	**Dilution:**	1 in 1
Status:	Measurement completed successfully	**Determinations:**	2-3
		Furnace temperature:	800°C

	c	I eff	SD	CV	k0	k1	k2	DF
NPOC	**6.60mg/l**	**4,814AU**	5.85µg/l	0.09%	-0.15993	7.184E-4	-	1

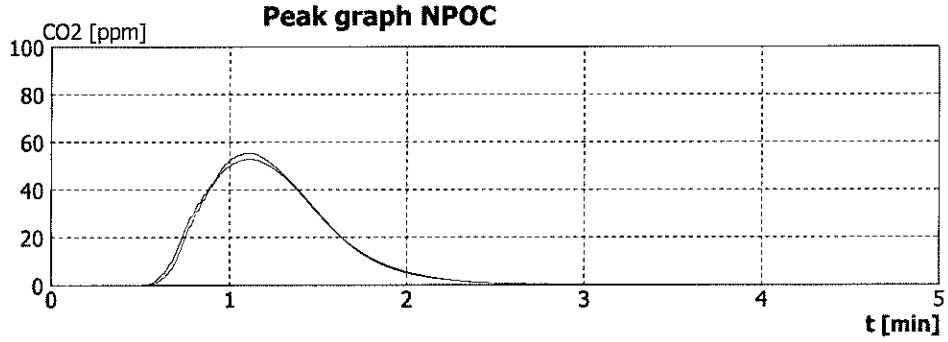
Blank values

NPOC	Diluent blank	0AU/ml

Single replicates:

	Rep.	1	2
NPOC	**c [mg/l]**	6.60	6.59
NPOC	**I [AU]**	4,817	4,811

Peak graph NPOC



AnalysisReport

Sample ID:	SQ6234-3		
Time of analysis:	12/6/2023 1:08:27 AM -0500	**Method:**	TOC_Method_101223
Directory:	C:\ProgramData\IDC\multiWin\Analyses\2023\12		
File name:	231206010827.ajd		
User:	Admin	**Sample volume:**	500.0µl
Sample type:	Sample	**Dilution:**	1 in 1
Status:	Measurement completed successfully	**Determinations:**	2-3
		Furnace temperature:	800°C

	c	I eff	SD	CV	k0	k1	k2	DF
NPOC	**6.00mg/l**	**4,400AU**	52.26µg/l	0.87%	-0.15993	7.184E-4	-	1

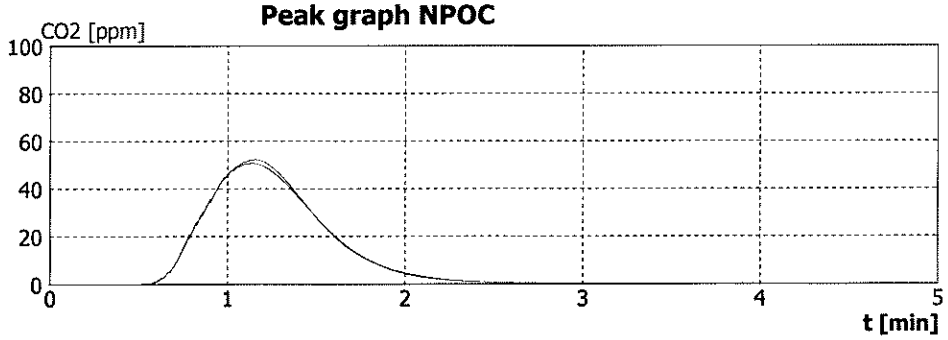
Blank values

NPOC	Diluent blank	0AU/ml

Single replicates:

	Rep.	1	2
NPOC	**c [mg/l]**	5.97	6.04
NPOC	**I [AU]**	4,374	4,426

Peak graph NPOC



AnalysisReport

Sample ID: CCV

Time of analysis:	12/6/2023 1:21:01 AM -0500	**Method:**	TOC_Method_101223
Directory:	C:\ProgramData\IDC\multiWin\Analyses\2023\12		
File name:	231206012101.ajd		
User:	Admin	**Sample volume:**	500.0µl
Sample type:	Sample	**Dilution:**	1 in 1
Status:	Measurement completed successfully	**Determinations:**	2-3
		Furnace temperature:	800°C

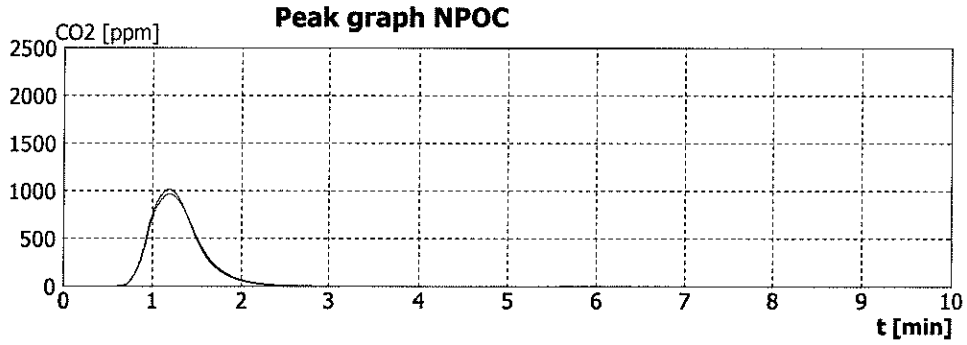
	c	I eff	SD	CV	k0	k1	k2	DF
NPOC	102.8mg/l	7.181E4AU	581.9µg/l	0.57%	-0.15993	7.184E-4	-	1

Blank values

NPOC	Diluent blank	0AU/ml

Single replicates:

	Rep.	1	2
NPOC	c [mg/l]	102.4	103.3
NPOC	I [AU]	7.152E4	7.209E4



AnalysisReport

Sample ID: CCB

Time of analysis:	12/6/2023 1:37:04 AM -0500	**Method:**	TOC_Method_101223
Directory:	C:\ProgramData\IDC\multiWin\Analyses\2023\12		
File name:	231206013704.ajd		
User:	Admin	**Sample volume:**	500.0µl
Sample type:	Sample	**Dilution:**	1 in 1
Status:	Measurement completed successfully	**Determinations:**	2-3
		Furnace temperature:	800°C

	c	I eff	SD	CV	k0	k1	k2	DF
NPOC	**0mg/l**	**108.6AU B!**			-0.15993	7.184E-4	-	1

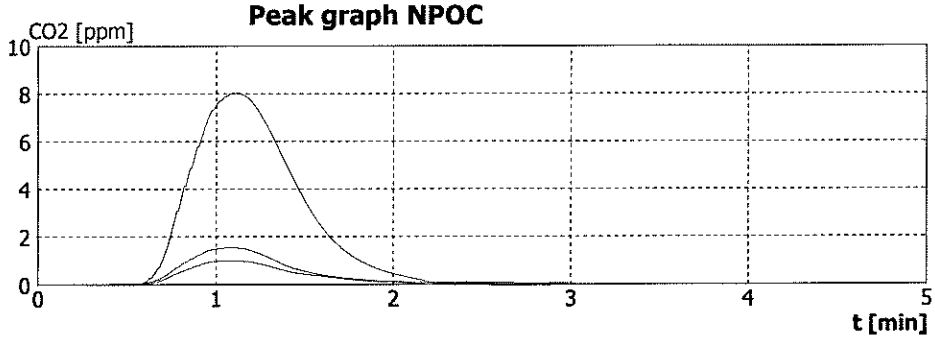
Blank values

NPOC	Diluent blank	0AU/ml

Single replicates:

	Rep.	1	2	3
NPOC	**c [mg/l]**	~~0.590~~	0	0
NPOC	**I [AU]**	~~633.0~~	129.9	87.33

Peak graph NPOC



aj-Analyzer multi N/C 3100; multiWin 4.12; Serial No: N3-2320/AX

CalibrationReport

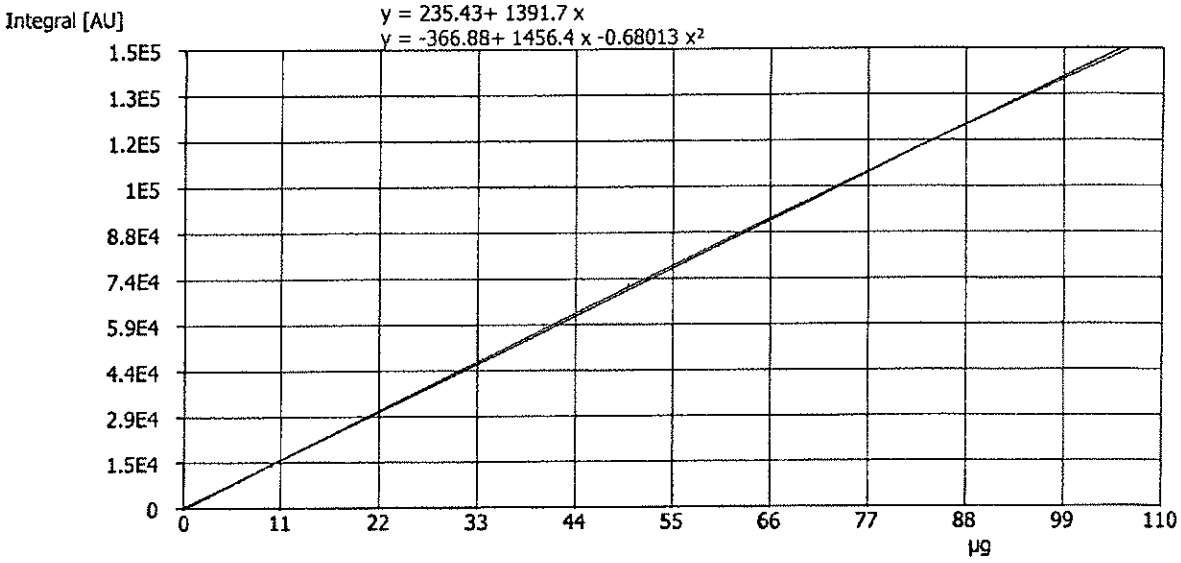
Calibration: Cal_NPOC_Test_8MAY2023_230824_1145
Calibration of: 8/24/2023 11:45:49 AM -0400 **Method:** NPOC_Test_8MAY2023
Directory: C:\ProgramData\IDC\multiWin\Calibration\2023\08
File name: 230824114549.ajc

User: Admin
Calibration channel: **NPOC**
Linear regression [µg]: c = (k1·Ieff + k0) / V
k0 = -0.15993 k1 = 7.184E-4

Residual standard deviation: 922.84AU
Method standard deviation: 1.33mg/l
Method variation coefficient: 1.765% **Detection limit:** 2.13mg/l
Quality of replicates: 0.99976 **Identification limit:** 4.25mg/l
Correlation coefficient: 0.99988 **Quantification limit:** 7.98mg/l

Calibration with fixed sample volume: 500.0µl

No.	Rep.	c-nom.	m-Nominal	I-Net	c-act.	c-delta
BV	3-3			491.4AU/ml		
1	3-3	1.000mg/l	0.500µg	814.0AU	0.850mg/l	-15.03%
2	3-3	5.000mg/l	2.50µg	3,299AU	4.420mg/l	-11.61%
3	3-3	20.000mg/l	10.00µg	1.379E4AU	19.499mg/l	-2.50%
4	3-3	50.000mg/l	25.00µg	3.493E4AU	49.868mg/l	-0.26%
5	3-3	100.000mg/l	50.00µg	7.154E4AU	102.480mg/l	2.48%
6	3-3	150.000mg/l	75.00µg	1.048E5AU	150.290mg/l	0.19%
7	3-3	200.000mg/l	100.0µg	1.384E5AU	198.600mg/l	-0.70%



CalibrationReport

Calibration: Cal_NPOC_Test_8MAY2023_230824_1145
Calibration of: 8/24/2023 11:45:49 AM -0400 **Method:** NPOC_Test_8MAY2023
Directory: C:\ProgramData\IDC\multiWin\Calibration\2023\08
File name: 230824114549.ajc

User: Admin
Calibration channel: **NPOC**
Linear regression [µg]: c = (k1·Ieff + k0) / V
k0 = -0.15993 k1 = 7.184E-4
Residual standard deviation: 922.84AU
Method standard deviation: 1.33mg/l
Method variation coefficient: 1.765% **Detection limit:** 2.13mg/l
Quality of replicates: 0.99976 **Identification limit:** 4.25mg/l
Correlation coefficient: 0.99988 **Quantification limit:** 7.98mg/l

Replicate area units

No.	Avg.	1	2	3	4	5
		6	7	8	9	10
H2O	245.7	277.8	242.2	217.2		
1	814.0	819.1	818.6	804.3		
2	3,299	3,257	3,351	3,288		
3	1.379E4	1.364E4	1.392E4	1.382E4		
4	3.493E4	3.459E4	3.519E4	3.501E4		
5	7.154E4	7.104E4	7.192E4	7.167E4		
6	1.048E5	1.047E5	1.053E5	1.045E5		
7	1.384E5	1.373E5	1.395E5	1.386E5		

aj-Analyzer multi N/C 3100; multiWin 4.12; Serial No: N3-2320/AX

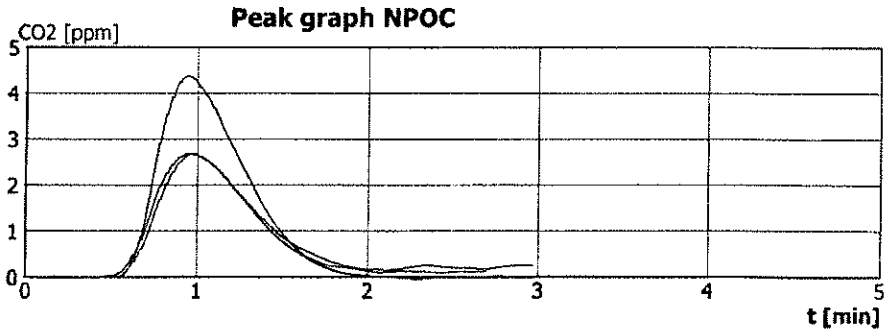
AnalysisReport

Sample ID:	Cal_NPOC_Test_8MAY2023_230824_1145_Konz00		
Time of analysis:	8/24/2023 12:03:41 PM -0400	**Method:**	NPOC_Test_8MAY20
Directory:	C:\ProgramData\IDC\multiWin\Analyses\2023\08		
File name:	230824120341.ajd		
User:	Admin	**Sample volume:**	500.0µl
Sample type:	Determination Preparation blank	**Dilution:**	1 in 1
Status:	Measurement completed successfully	**Determinations:**	3-3
		Furnace temperature:	800°C

	c	I eff	SD	CV
NPOC		245.7AU		

Single replicates:

	Rep.	1	2	3
NPOC	I [AU]	277.8	242.2	217.2



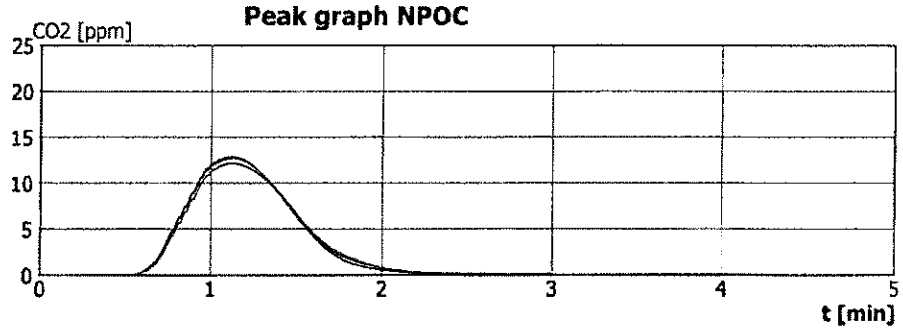
AnalysisReport

Sample ID:	Cal_NPOC_Test_8MAY2023_230824_1145_Konz01		
Time of analysis:	8/24/2023 12:24:21 PM -0400	**Method:**	NPOC_Test_8MAY20
Directory:	C:\ProgramData\IDC\multiWin\Analyses\2023\08		
File name:	230824122421.ajd		
User:	Admin	**Sample volume:**	500.0µl
Sample type:	Calibration measurement	**Dilution:**	1 in 1
Status:	Measurement completed successfully	**Determinations:**	3-3
		Furnace temperature:	800°C

	c	I eff	SD	CV
NPOC		1,060AU		

Single replicates:

	Rep.	1	2	3
NPOC	I [AU]	1,065	1,064	1,050



aj-Analyzer multi N/C 3100; multiWin 4.12; Serial No: N3-2320/AX

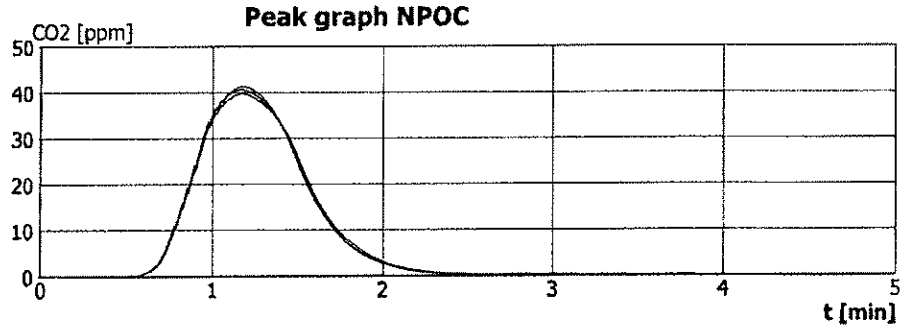
AnalysisReport

Sample ID:	Cal_NPOC_Test_8MAY2023_230824_1145_Konz02		
Time of analysis:	8/24/2023 12:39:12 PM -0400	**Method:**	NPOC_Test_8MAY20
Directory:	C:\ProgramData\IDC\multiWin\Analyses\2023\08		
File name:	230824123912.ajd		
User:	Admin	**Sample volume:**	500.0µl
Sample type:	Calibration measurement	**Dilution:**	1 in 1
Status:	Measurement completed successfully	**Determinations:**	3-3
		Furnace temperature:	800°C

	c	I eff	SD	CV
NPOC		3,544AU		

Single replicates:

	Rep.	1	2	3
NPOC	I [AU]	3,502	3,597	3,534



AnalysisReport

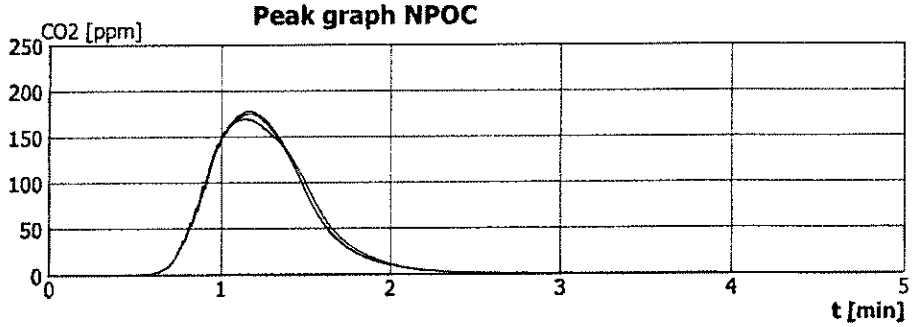
Sample ID:	Cal_NPOC_Test_8MAY2023_230824_1145_Konz03		
Time of analysis:	8/24/2023 12:55:21 PM -0400	**Method:**	NPOC_Test_8MAY20
Directory:	C:\ProgramData\IDC\multiWin\Analyses\2023\08		
File name:	230824125521.ajd		
User:	Admin	**Sample volume:**	500.0µl
Sample type:	Calibration measurement	**Dilution:**	1 in 1
Status:	Measurement completed successfully	**Determinations:**	3-3
		Furnace temperature:	800°C

	c	I eff	SD	CV
NPOC		1.404E4AU		

Single replicates:

	Rep.	1	2	3
NPOC	I [AU]	1.389E4	1.417E4	1.407E4

Peak graph NPOC



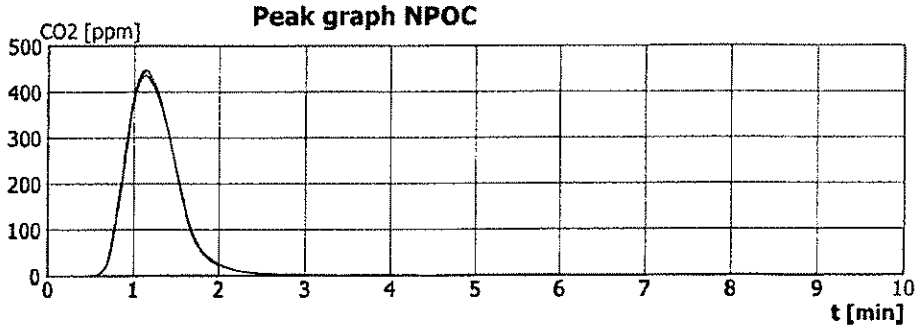
AnalysisReport

Sample ID:	Cal_NPOC_Test_8MAY2023_230824_1145_Konz04		
Time of analysis:	8/24/2023 1:13:55 PM -0400	**Method:**	NPOC_Test_8MAY20
Directory:	C:\ProgramData\IDC\multiWin\Analyses\2023\08		
File name:	230824131355.ajd		
User:	Admin	**Sample volume:**	500.0µl
Sample type:	Calibration measurement	**Dilution:**	1 in 1
Status:	Measurement completed successfully	**Determinations:**	3-3
		Furnace temperature:	800°C

	c	I eff	SD	CV
NPOC		3.518E4AU		

Single replicates:

	Rep.	1	2	3
NPOC	I [AU]	3.484E4	3.544E4	3.525E4



aj-Analyzer multi N/C 3100; multiWin 4.12; Serial No: N3-2320/AX

AnalysisReport

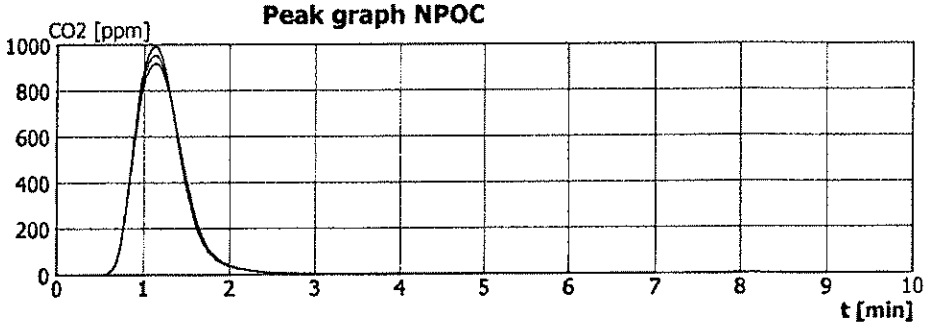
Sample ID:	Cal_NPOC_Test_8MAY2023_230824_1145_Konz05		
Time of analysis:	8/24/2023 1:36:32 PM -0400	**Method:**	NPOC_Test_8MAY20
Directory:	C:\ProgramData\IDC\multiWin\Analyses\2023\08		
File name:	230824133632.ajd		
User:	Admin	**Sample volume:**	500.0µl
Sample type:	Calibration measurement	**Dilution:**	1 in 1
Status:	Measurement completed successfully	**Determinations:**	3-3
		Furnace temperature:	800°C

	c	I eff	SD	CV
NPOC		7.179E4AU		

Single replicates:

	Rep.	1	2	3
NPOC	1 |AU|	7.129E4	7.217E4	7.192E4

Peak graph NPOC



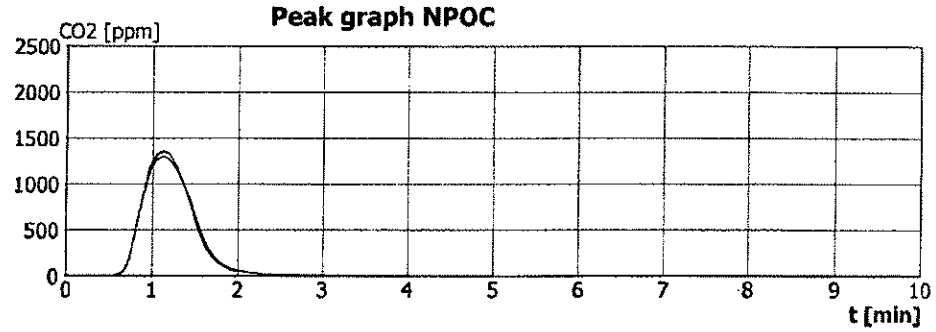
AnalysisReport

Sample ID:	Cal_NPOC_Test_8MAY2023_230824_1145_Konz06		
Time of analysis:	8/24/2023 1:59:18 PM -0400	**Method:**	NPOC_Test_8MAY20
Directory:	C:\ProgramData\IDC\multiWin\Analyses\2023\08		
File name:	230824135918.ajd		
User:	Admin	**Sample volume:**	500.0µl
Sample type:	Calibration measurement	**Dilution:**	1 in 1
Status:	Measurement completed successfully	**Determinations:**	3-3
		Furnace temperature:	800°C

	c	I eff	SD	CV
NPOC		1.051E5AU		

Single replicates:

	Rep.	1	2	3
NPOC	I [AU]	1.049E5	1.055E5	1.048E5



AnalysisReport

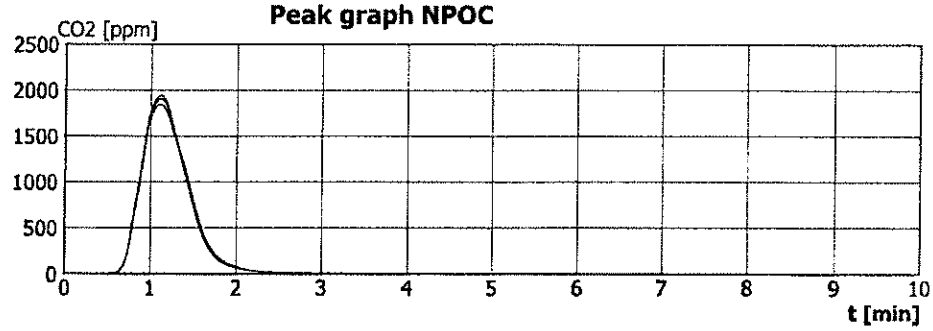
Sample ID:	Cal_NPOC_Test_8MAY2023_230824_1145_Konz07		
Time of analysis:	8/24/2023 2:22:02 PM -0400	**Method:**	NPOC_Test_8MAY20
Directory:	C:\ProgramData\IDC\multiWin\Analyses\2023\08		
File name:	230824142202.ajd		
User:	Admin	**Sample volume:**	500.0µl
Sample type:	Calibration measurement	**Dilution:**	1 in 1
Status:	Measurement completed successfully	**Determinations:**	3-3
		Furnace temperature:	800°C

	c	I eff	SD	CV
NPOC		1.387E5AU		

Single replicates:

	Rep.	1	2	3
NPOC	I [AU]	1.375E5	1.397E5	1.388E5

Peak graph NPOC



Katahdin Analytical Services - Wet Chemistry Lab

REAGENT, INTERMEDIATE AND WORKING STANDARDS PREPARATION LOGBOOK

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Standard ID	Reagent Name	Prep. Date	Prep. Inits.	Exp. Date:	Component	I.D. or Lot Number	Amount Added	Units	Bal./Pipette ID	Final Vol. (mL)	Prep Notes
W21622	0.01N H_2SO_4 JRS 2/13/23	~~2/13/22~~ 2/13/23	JRS	2/13/24	0.10N H_2SO_4	W21322	200	mL	grad cyl	2000	DI
~~—~~	~~Phenol Buffer~~	~~2/13/23~~	~~RAD~~	~~2/14/23~~							RAD 2/13/23
W21623	Copper Sulfate For Phenols	2/13/23	RAD	8/13/23	$CuSO_4$	SWL4951	50.1230	g	bal 01	500	
W21624	LLCOD LCS	2/14/23	EIR	2/14/23	COD Standard	SWL5019	15	mL	W21	200	DI
W21625	LL COD IMS	2/14/23	EIR	2/14/23	COD Standard	SWL5019	60	mL	W21	200	DI
W21626	HL COD CCV	2/14/23	EIR	5/14/23	KHP	SWL4116	0.850	g	bal 01	1,000	DI
W21627	LL COD CCV	2/14/23	EIR	5/14/23	HL COD CCV	W21626	50	mL	good cylinder	1,000	DI
W21628	MBAS Wash Soln	2/14/23	RAD	2/14/24	6N H_2SO_4	W21494	41	mL	grad cyl	1000	
↓	↓	↓	↓	↓	$NaH_2PO_4 \cdot H_2O$	SWL5029	50.0089	g	bal 01	↓	
W21629	10% H_2SO_4	2/14/23	STM	2/14/24	H_2SO_4	SWL5041	10	mL	W00	100	DI
W21630	TPO4 Digestion Solution	2/16/23	CJB	2/16/24	Potassium Sulfate	SWL4953	133.0038	g	bal 01	1000	
↓	↓	↓	↓	↓	Sulfuric Acid	SWL5041	200	mL	grad cyl.	↓	
↓	↓	↓	↓	↓	Mercuric Sulfate	W21131	25	mL	grad cyl.	↓	
W21631	Phenol Buffer	2/16/23	RAD	2/17/23	NH_4Cl	SWL4226	16.9064	g	bal 01	250	
↓	↓	↓	↓	↓	NH_4OH	SWL5015	143	mL	grad cyl	↓	
W21632	Phenol 4AAP	2/16/23	RAD	2/17/23	4AAP	SWL4488	2.010	g	bal 20	100	
W21633	Phenol K Ferricyanide	2/16/23	RAD	2/17/23	$K_3Fe(CN)_6$	SWL4992	8.070	g	b21	100	

Katahdin Analytical Services - Wet Chemistry Lab

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W21809	Tcc cal Std 20.0	4/25/23	SS	4/12/24	1000 mg/L KHP Std	W21766	2.0	ml	W21	200	
W21810	50.0	"	"	"	"	"	5.0	"	"	"	
W21811	100.0	"	"	"	"	"	10.0	"	"	"	
W21812	150.0	"	"	"	"	"	15.0	"	"	"	
W21813	200.0	"	"	"	"	"	20.0	"	"	"	
W21814	TPO4 Ascorbic Acid	4/26/23	RAD	4/27/23	Ascorbic Acid	SWL4970	15.008	g	bal 20	250	
"	"	"	"	"	Na dodecyl sulfate	SWL 3043	0.253	"	"	"	
W21815	$NO_{2/3}$ COLOR	4/27/23	BL	5/27/23	SULFANILAMIDE	SWL5043	40.059	g	BAL 20	1000	
"	"	"	"	"	NED	SWL4660	1.008	"	"	"	
"	"	"	"	"	H_3PO_4	SWL4952	100	mL	grad cyl	"	
W21816	Ammonium molybdate	4/27/23	STM	6/27/23	Ammonium molybdate	SWL4969	40.006	g	BAL 20	1000	
W21817	K Antimonyl Tartrate	4/27/23	STM	6/27/23	K Antimonyl tartrate	SWL3851	1.372	g	BAL 20	500	
W21818	5N H_2SO_4	4/27/23	STM	4/27/24	H_2SO_4	MSE307	70	mL	grad cyl	500	
W21819	NO_2 CCV	4/27/23	BL	5/27/23	NO_2 1000 ppm	SWL4985	0.1	mL	W8	200	
W21820	CrVI Cal ~~Std~~ Std	4/28/23	STM	11/28/23	CrVI	SWL5065	2.5	mL	W00	100	
W21821	Alk CCV	4/28/23	RAD	5/28/23	$CaCO_3$	SWL5062	125	mL	grad cyl	1000	
~~W21822~~	~~CN Std~~	~~4/28/23~~	~~STM~~	~~11/02/24~~							

5/1/23

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Katahdin Analytical Services - Wet Chemistry Lab

REAGENT, INTERMEDIATE AND WORKING STANDARDS PREPARATION LOGBOOK

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Standard ID	Reagent Name	Prep. Date	Prep. Inits.	Exp. Date:	Component	I.D. or Lot Number	Amount Added	Units	Bal./Pipette ID	Final Vol. (mL)	Prep Notes
W21958	~~35~~ 35ppm Cl LCS	6/19/23	SS	7/19/23	1000 ppm Cl LCS int. Stock	W21763	3.5	mL	W10	100	
W21959	TOC LCS (AQ) 50mg/L	6/20/23	CJB	9/20/23	KHP	SWL2834	0.1092	g	Bal01	1000	
〃	〃	〃	〃	〃	H_3PO_4	SWL4952	1	mL	W16	〃	
W21960	Diphenyl Carbazide	6/20/23	SS	12/20/23	Diphenyl Carbazide	SWL4724	0.2503	g	Bal01	50	Acetone
W21961	Cr^6 LCS int.	6/20/23	SS	12/20/23	1000ppm Cr^6 Std.	SWL5048	2.5	ml	W10	100	
W21962	TSS LCS	6/20/23	SS	6/20/24	Celite	SWL4564	1.098	g	Bal01	1000	
W21963	NO_2 0.05ppm	6/22/23	BL	7/22/23	NO_2 1000ppm	SWL4985	0.01	mL	W17	200	
W21964	NO_2 0.25ppm	6/22/23	BL	7/22/23	〃	〃	0.05	〃	W8	〃	
W21965	NO_2 2.0ppm	6/22/23	BL	7/22/23	〃	〃	0.4	〃	W28	〃	
W21966	CN Buffer	6/22/23	SS	6/7/22/23	NaPO3 mono Mono	SWL5029	13.638	g	Bal20	100	
	Comp A	6/22/23	JRS	6/22/24	N-N-dimethyl-p-phenylenediamine	SWL5069	2.257	g	Bal20	1000	
	Comp B				Ferric Chloride	SWL1774	5.45g	g	Bal20	200	
	〃	〃	〃	〃	HCl	MSR306	100	mL	grad	〃	
	Comp A	〃	〃	〃	H_2SO_4	MSR307	660	mL	grad cyl	1000	DI
W21967	MDR Reagent	6/22/23	JRS	6/22/24	Comp A+B	see above					
W21968	IC LCS	6/23/23	~~RAD~~	7/7/23	multielement A	SWL5680	3.75	ml	W10	50	
〃	〃	〃	〃	〃	multielement B	〃 5059	〃	〃	〃	〃	

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Katahdin Analytical Services - Wet Chemistry Lab

REAGENT, INTERMEDIATE AND WORKING STANDARDS PREPARATION LOGBOOK

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W22096	0.25N NaOH	8/9/23	SS	8/9/24	10N NaOH	SWL4994	50	mL	grad cyl	2000	
W22097	Phenol Buffer	8/10/23	RAD	8/15/23	NH_4Cl	SWL 4226	16.9048	g	bal 01	250	
〃	〃	〃	〃	〃	NH_4^+OH	〃 5104	143	mL	grad cyl	〃	RAD 8/10/23
W22098	Phenol 4-AAP	〃	〃	〃	4AAP	SWL 4488	2.0014	g	bal 01	100	
W22099	Phenol K Ferricyanide	〃	〃	〃	$K_3Fe(CN)_6$	SWL 4992	8.0059	g	bal 01	100	
W22100	TPO4 Ascorbic Acid	8/11/23	BL	8/12/23	ASCORBIC ACID	SWL5012	15.006	g	Bal 20	250	
〃	〃	〃	〃	〃	Na DODECYL SULFATE	SWL 4-3043	0.250	〃	〃	〃	BL 8/11/23
W22101	TPO4 NaOH/NaCl	8/11/23	BL	~~8~~ 9/11/23	NaOH	SWL4928	~~5~~ 2.585	g	Bal	125 ~~250~~	BL 8/11/23 BL 8/11/23
〃	〃	〃	〃	〃	NaCl	MSR285	20.93 40.	〃	〃	〃	HALF BATCH BL 8/11/23
W22102	TCC Ca Stock	8/11/23	CJB	11/11/23	KHP	SWL4116	2.0323	g	Bal01	1000	
〃	〃	〃	〃	〃	H_3PO_4	SWL5061	1.0	mL	W28	〃	
W22103	LOW ALK TITRANT	8/11/23	BL	9/11/23	H_2SO_4	MSR307	6.72	mL	W00	12000	
W22104	NO_2 CCV	8/11/23	BL	9/11/23	NO_2 1000ppm	SWL4985	0.1	mL	W8	200	
W22105	NO_3 CCV	〃	〃	〃	NO_3 CCV	SWL4986	0.1	mL	W8	200	
W22106	HDR TSS LCS	8/15/23	BF	9/15/23	(plip	SWL4564	C.0986	g	Bal01	1000	
W22107	〃 〃 LCSD	〃	〃	〃	〃	〃	C.0984	g	〃	〃	

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W22232	IC CCV	10/9/23	RAD	10/23/23	Cl	SWL 5127	2.0	mL	W21	100	
					NO_2	5129	0.8		W22		
					NO_3	5128	0.8		W22		
					Br	5063	4.0		W21		
					SO_4	5053	4.0		W21		
					F	4961	1.0		W22		
											RAD 10/9/23
W22233	IC 8	10/9/23	RAD	10/23/23	Cl	SWL 5127	2.0	mL	W21	50	
					NO_2	5129	0.8		W22		
					NO_3	5128	0.8		W22		
					Br	5063	4.0		W21		
					SO_4	5053	4.0		W21		
					F	4961	1.0		W22		
W22234	TOC LCS Standard	10/9/23	CJB	11/9/24	Dextrose Anhydrous Powder	SWL4892	50018	g	BAL01	50	
W22235	5N H_2SO_4 for LL. Phos	10/10/23	RAD	10/10/24	H_2SO_4	MSR307	70	mL	~~grad cyl~~	500	CB041 RAD 10/10/23
W22236	11N H_2SO_4 for LL Phos						62	mL	CB041	200	
W22237	0.1M Ascorbic Acid (LL. Phos)			10/17/23	Ascorbic Acid	SWL5072	~~1.776~~ 1.7612	g	bal 01	100	RAD 10/10/23

Katahdin Analytical Services - Wet Chemistry Lab

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SS 10/5/23

Standard ID	Reagent Name	Prep. Date	Prep. Inits.	Exp. Date:	Component	I.D. or Lot Number	Amount Added	Units	Bal./Pipette ID	Final Vol. (mL)	Prep Notes
W22271	250 ppb high Pt. stock cc	10/25/23	SS	11/1/23	50ppm cr cal std.	W21828	1	mL	W22	200	0.25 NaOH
W22272	IC LCS	10/25/23	RAD	11/8/23	multielement A	SWL5058	3.75	mL	W10	50	
⊥	⊥	⊥	⊥	⊥	multielement B	SWL5059	3.75	⊥	⊥	⊥	
W22273	TSS LCS	10/25/23	JRS	10/25/24	Celite	SWL4564	1.0007	g	bal 01	1000	
W22274	TPOy NaOH/NaCl	10/26/23	BL	11/26/23	NaOH	SWL4928	5.009	g	Bal20	250	
⊥	⊥	⊥	⊥	⊥	NaCl	SWLS120	40.003	⊥	⊥	⊥	
W22275	TPOy CARRIER	10/26/23	BL	11/26/23	K_2SO_4	SWL4953	15.022	g	Bal20	500	
⊥	⊥	⊥	⊥	⊥	H_2SO_4	MSR307	20	mL	CB052	⊥	
W22276	TPOy ASCORBIC ACID	10/26/23	BL	10/27/23	ASCORBIC ACID	SWL5072	15.022	g	Bal20	250	
⊥	⊥	⊥	⊥	⊥	Na DODECYL SULFATE	SWL3043	0.2516	⊥	⊥	⊥	
W22277	LOW LEVEL TKN CCV	10/31/23	BL	11/1/23	$CaCO_3$	SWLS107	125	mL	CB039	1000	
W22278	TDS/TS-AQ LCS	10/31/23	10/31/24 → RAD		KCl	SWL1705	0.7500	g	bal01	1000	RAD 10/31/23
W22279	CN releasing Soln	11/1/23	5/1/23 → SS		Magnesium cl Hexahydrate	SWLS044	32.007	g	Bal20	200	
⊥	⊥	⊥	SS	5/1/23	H_2SO_4	MSR307	75.54	mL	grad cyl W22	⊥	
W22280	TPOy ASCORBIC ACID	11/2/23	BL	11/3/23	ASCORBIC ACID	SWL5072	15.007	g	Bal20	250	
⊥	⊥	⊥	⊥	⊥	Na DODECYL SULFATE	SWL3043	0.253	⊥	⊥	⊥	
											BL 11/2/23

SS 11/1/23

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W22281	TPO4 COLOR	11/2/23	BL	~~11/9/24~~ 12/4/23	AMONIUM MOLYBDATE	W22178	53.25	mL	CB042 + W00	250	
⊥	⊥	⊥	⊥	⊥	ANTIMONYL K-TARTRATE	W22179	18	⊥	W3	⊥	
WGW22282	TOC LCS (AQ)	11/2/23	CJB	2/2/24	KHP	SWL4116	0.1066	g	B201	1000	
⊥	⊥	⊥	⊥	⊥	H_3PO_4	SWL5061	1.0	mL	W20	⊥	
W22283	0.25N NaOH	11/2/23	JRS	11/2/24	10N NaOH	SWL4994	100	mL	grad cyl	4000	
W22284	⊥	⊥	⊥	⊥	⊥	⊥	⊥	⊥	⊥	⊥	
W22285	TOC Alk Check Std	11/2/23	CJB	2/2/24	1N $NaCO_3$	SWL5075	2.5	mL	W2[illegible]	1000	
W22286	NH_3 MS 50ppm	11/3/23	SS	5/3/24	1000 ppm NH_3 LCS Std.	SWL5124	25	mL	W00	50	
W22287	NH_3 1.5 LCS working Std	11/3/23	SS	12/3/23	NH_3 100 ppm LCS Stock	W22189	3	mL	W10	200	0.2% H_2SO_4 W22245
W22288	NO_3 MATRIX SPIKE	11/3/23	BL	11/3/24	MW LT ELEMENT A	SWL5058	11	mL	W3	25	
W22289	NO_2 MATRIX SPIKE	11/3/23	BL	11/3/24	MW LT ELEMENT B	SWL5059	8.22	⊥	W00	⊥	
W22290	6N HCl (DeAir)	11/01/23	JRS	11/01/24	conc. HCl	SWL5090	500	mL	grad cyl	1000	
W22291	HIGH LEVEL ALK CCV	11/5/23	BL	12/5/23	Na_2CO_3 1N	SWL5075	12.5	mL	W3 + W20	500	
W22292	NO_2 0.05 ppm	11/5/23	BL	12/5/23	NO_2 1000 ppm	SWL5129	0.01	mL	W17	200	
W22293	NO_2 0.25 ppm	⊥	⊥	⊥	⊥	⊥	0.05	⊥	W8	⊥	
W22294	NO_2 1.00 ppm	⊥	⊥	⊥	⊥	⊥	0.2	⊥	⊥	⊥	
W22295	NO_2 2.0 ppm	⊥	⊥	⊥	⊥	⊥	0.4	⊥	W20	⊥	

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W22296	NO_2 CCV	11/5/23	BL	12/5/23	NO_2 1000 ppm	SWCS129	0.1	mL	WB	200	
W22297	NO_3 CCV				NO_3 1000 ppm	SWLS128	0.1				
W22298	NO_2 LCS				MULTIELEMENT B	SWL5059	0.656		W20		
W22299	NO_3 LCS				MULTIELEMENT A	SWL5058	0.833				
W22300	TKN DIGESTION SOL	11/6/23	BL	12/6/23	H_2SO_4	MSR307	268	mL	CB041	2000	
					K_2SO_4	SWL4953	268.1276	g	Bal01		
					$CuSO_4$	SWL4951	14.6066				
W22301	Fe^{2+} Phenanthroline Stk	11/6/23	RAD	11/6/24	1,10-Phenanthroline, 99+%	SWL4423	1.0020	g	bal01	1000	
	~~HCl~~				HCl	SWL5093	20	drops	disposable pipette		RAD 11/6/23
W22302	Fe^{2+} Ammonium Acetate Buffer	11/6/23	RAD	11/6/24	Ammonium Acetate	SWL 4957	250.006	g	bal 20	1000	
					Acetic Acid Cglacial)	MSR236	700	mL	CB045		
W22303	Fe^{2+} LCS Stock	11/6/23	RAD	11/6/24	FAS	SWL2104	4.9015	g	bal 01	500	
W22304	Fe^{2+} CCV Stock	11/6/23	RAD	11/6/24	FAS	SWL1961	0.7020	g	bal 01	500	
W22305	Diphenyl-Carbazide	11/7/23	SS	5/7/24	Diphenyl-Carbazide	SWL 4724	0.2508	g	Bal01	50	Acetone
W22306	TKN BUFFER	11/7/23	BL	12/1/23	NaOH	SWL4928	50.038	g	Bal20	1000	
					EDTA	SWL4964	20.003				
					Sodium Phos. Dibasic	SWL5087	35.080				

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W22318	IC CCV	11/8/23	RAD	11/22/23	Cl	SWL 5127	2.0	mL	W80	100	
					NO_2	5129	0.8		W20		
					NO_3	5128	0.8		1		
					Br	5063	4.0		W00		
					SO_4	5053	4.0		1		
					F	4961	1.0		W20		
W22319	TDS/TS-AQ LCS	11/8/23	JRS	11/8/24	KCl	SWL1705	1.5009	g	bal 01	2000	
W22320	1	1	1	1	1	1	1	1	1	1	
W22321	Fe^{2+} Phenanthroline Stn	11/9/23	RAD	11/9/24	1,10 Phenan-throline, 99%	SWL4423	1.0063	g	bal 01	1000	
1	1	1	1	1	HCl	SWL5093	20	drops	disposable pipette	1	
W22322	0.01N H_2SO_4	11/9/23	JRS	11/9/24	0.1N H_2SO_4	W22113	400	mL	grad cyl	4000	
W22323	1	1	1	1	1	1	1	1	1	1	
W22324	IC LCS	11/9/23	RAD	11/23/23	multielement A	SWL5113	3.75	mL	W10	50	
1	1	1	1	1	multielement B	SWL5059	3.75	1	1	1	
W22325	TPO Ascorbic Acid	11/10/23	BL	11/11/23	Ascorbic Acid	SWL5072	15.018	g	Bal20	250	
1	1	1	1	1	Na Dodecyl Sulfate	SWL3043	0.258	1	1	1	
W22326	Alkalinity LCS/MS	10 11/10/23	12/10/23	BL	Na_2CO_3	SWL5076	1.069	g	Bal20	1000	

BL 11/10/23 BL 11/10/23

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W22327	NO_2/NO_3 BUFFER	11/10/23	BL	12/10/23	EDTA	SWL4964	4.027	g	Bal20	4000	
⊥	⊥	⊥	⊥	⊥	HCl	SWLS093	420	mL	CB034	⊥	
⊥	⊥	⊥	⊥	⊥	NH_4OH	SWLS104	380	⊥	CB041	⊥	
W22328	0.25N NaOH	11/13/23	JRS	11/13/24	10N NaOH	SWL 4994	100 mL	mL	grad cyl	4000	JRS 11/13/23
W22329	⊥	⊥	⊥	⊥	⊥	⊥	⊥	⊥	⊥	⊥	
W22330	NH_3 Trapping Sol'n	11/13/23	SS	2/13/24	0.1 N H_2SO_4	W22113	40	mL	CB042	250	SS 11/13/23
W22331	NH_3 preserved Rinsing Sol'n	11/13/23	⊥	2/13/24	Na tetraborate dehydrate	SWL4647	4.7518	g	Bal01	500	
⊥	⊥	⊥	⊥	⊥	NaOH	SWL4928	11.0947	⊥	⊥	⊥	
W22332	NH_3 Cat preserved Rinsing Sol'n	11/13/23	SS	2/13/24	Na tetraborate dehydrate	SWL4647	5.2003	g	Bal0	500	
⊥	⊥	⊥	⊥	⊥	NaOH	SWL4928	30.514	⊥	⊥	⊥	
W22333	LOW LEVEL ALK CCV	11/14/23	BL	12/14/23	$CaCO_3$	SWLS107	125	mL	CB042	1000	
W22334	TPO4 ASCORBIC ACID	11/15/23	BL	11/16/23	ASCORBIC ACID	SWLS072	15.0105	g	Bal01	250	
⊥	⊥	⊥	⊥	⊥	Na DODECYL SULFATE	SWL3043	0.2556	⊥	⊥	⊥	
W22335	TPO4 COLOR	11/15/23	BL	11/15/24 12/15/23	AMMONIUM MOLYBDATE	W22178	53.25	mL	CB042 W10	250	
⊥	⊥	⊥	⊥	⊥	ANTIMONYL K TARTATE	W22179	18	⊥	W10	⊥	
W22336	TPO4 CAL CCV COR	11/16/23	BL	5/16/24	PPO4 1000ppm	SWLS140	10	mL	W00	200	
W22337	0.01N H_2SO_4	11/16/23	JRS	11/16/24	0.1N H_2SO_4	W22113	200	mL	grad cyl	2000	

JRS 11/16/23

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Katahdin Analytical Services - Wet Chemistry Lab

REAGENT, INTERMEDIATE AND WORKING STANDARDS PREPARATION LOGBOOK

(Use more than one line for a single standard or reagent if necessary.) All preparations are diluted in DI unless otherwise noted.

Standard ID	Reagent Name	Prep. Date	Prep. Inits.	Exp. Date:	Component	I.D. or Lot Number	Amount Added	Units	Bal./Pipette ID	Final Vol. (mL)	Prep Notes
W22338	0.25N NaOH	11/16/23	JRS	11/16/24	10N NaOH	SWL 4994	100	mL	graduated cyl	4000	
W22339	〃	〃	〃	〃	〃	〃	〃	〃	〃	〃	
W22340	Color Con Std. Set	11/16/23	SS	5/16/24	Color Con Stock	SWL5114	0.5, 1, 1.5, 2, 2.5, 3, 3.5, 4, 4.5, 5, 6	mL	W22 W101	50	
W22341	TSS LCS	11/16/23	RAD	11/16/24	Celite	SWL4564	1.0018	g	bal 01	1000	
W22342	0.2% H_2SO_4	11/16/23	SS	11/16/24	H_2SO_4	MSR 307	2	mL	W00	1000	
W22343	TOC Cal Stock	11/16/23	CJB	2/16/24	KHP	SWL4116	2.032	g	Bal20	1000	
〃	〃	〃	〃	〃	H_3PO_4	SWL5061	1.0	mL	W22	〃	
W22344	TPO4 Ascorbic Acid	11/17/23	BL	11/18/23	Ascorbic Acid	SWC5072	15.077	g	Bal20	250	
〃	〃	〃	〃	〃	Na Dodecyl Sulfate	SWL3043	0.256	〃	〃	〃	
W22345	TPO4 Carrier	11/17/23	BL	12/17/23	K_2SO_4	SWL4953	15.074	g	Bal20	500	
〃	〃	〃	〃	〃	H_2SO_4	MSR307	20	mL	CB009	〃	
~~W22340~~	~~TPO4 NaOH/NaCl~~	~~11/17/23~~	~~BL~~	~~12/17/23~~	~~NaOH~~	~~SWL4428~~	~~50.065~~	~~g~~	~~Bal20~~	~~250~~	BL 11/17/23 NEW REMADE ON PM
~~〃~~	~~〃~~	~~〃~~	~~〃~~	~~〃~~	~~NaCl~~	~~SWL5120~~	~~40.049~~	~~〃~~	~~〃~~	~~〃~~	BL 11/17/23
W22347	BaCl for SO_4	11/17/23	SS	11/17/24	BaCl	SWL2129	1.0161	g	Bal01	100	
〃	〃	〃	〃	〃	NaCl	SWL5120	2.0803	〃	〃	〃	
〃	〃	〃	〃	〃	HCL	SWL5135	0.5	ml	W20	〃	
〃	〃	〃	〃	〃	Gelatine	SWL4873	0.0583	g	Bal01	〃	

Katahdin Analytical Services - Wet Chemistry Lab
Reagents and Stock Standards Receipt Logbook

Katahdin STD. ID.	Standard Name	Mfr.	Catalog Number	Mfr. Lot Number	Receipt Initials	Receipt Date	Expiration Date	COA Scanned?
SWL5050	Turbidity std.	Ricca	R8819050-500	1210770	STM	2/15/23	10/23	✓
SWL5051	TISAB II w/ CDTA	Thermo	940909	BZ1	RAD	2/21/23	2/21/28	✓
SWL5052	BOD Nutrient Buffer Pillows	HACH	1486398	A2178	LER	02/27/23	9/27	✓
SWL5053	SO4 std	inorganic ventures	ICS041	S2-SOX701648	RAD	3/15/23	3/15/24	✓
SWL5054	BOD Nutrient Buffer Pillows	Hach	1486398	A2198	LER	03/27/23	9/27	✓
SWL5055	pH Buffer Solution 4.00	Fisher	SB101-500	224881	CJB	03/27/23	8/24~~01/24~~	✓
SWL5056	pH Buffer Solution 10.00	Fisher	SB115-500	224638	CJB	03/27/23	10/24	✓
SWL5057	136C Plain Granules	Hengar	1344-28-1	215-691-6	CJB	03/27/23	03/27/28	
SWL5058	Multielement A	enviro express	HP-IC-2-A-100	2303029-100EE	RAD	4/3/23	3/31/24	✓
SWL5059	Multielement B	〃	HP-IC-2-B-100	2225522-100EE	〃	〃	〃	✓
SWL5060	COD HR Vials	Enviro Express	B1015	13831	LER	04/04/23	11/01/27	✓
SWL5061	Phosphoric Acid	fisher	A242-212	224167	SS	4/19/23	4/19/28	✓
SWL5062	Alk, $CaCO_3$	sigma aldrich	ALK1000-500mL	LEAP4309	SS	4/20/23	1/31/26	✓
SWL 5063	Bromide std. for IC 1000ppm	sigma aldrich	43147-100mL	BCCF8024	RAD	4/21/23	3/24	✓
SWL 5064	BOD Nutrient Buffers	Hach	1486398	A2195	CJB	4/24/23	4/24/27	✓
SWL5065	Cr^{+6} ccv/cal Stock	inorganic ventures	CGCR(6)1	T2-CR722437	STM	4/28/23	4/28/24	✓
SWL5066	Glass Fibre Prefilters (TDS)	Merck millipore	AP4004705	0000194371	RAD	4/28/23	4/28/28	✓

Katahdin Analytical Services - Wet Chemistry Lab
Reagents and Stock Standards Receipt Logbook

Katahdin STD. ID.	Standard Name	Mfr.	Catalog Number	Mfr. Lot Number	Receipt Initials	Receipt Date	Expiration Date	COA Scanned?
SWL5067	CN Standard	ACCU Standard	WC-CN-10X-1	223015037	STM	4/28/23	7/20/24	✓
SWL5068	pH 7 Buffer (yellow)	Fisher	SB107-500	226063	SS	5/3/23	01/25	✓
SWL5069	N-N-Dimethyl-1,4-phenylenediamine oxalate	TCI	D0781	SF5BB-JC	SS	5/3/23	5/3/28	✓
SWL5070	LR COD Vials	ENV EXP	~~13886~~ B1010	13886	CJB	5/18/23	5/18/28	✓ RAD 10/2/23
SWL5071	Cadmium Column for NO_3	Hach	502237 A	3094C	RAD	5/9/23	10/2023	✓
SWL5072	Ascorbic Acid, 99+%	Thermo	A15613.36	M04J019	RAD	5/12/23	5/12/28	✓
SWL5073	Phenol 1000ppm std	Ricca	5740-4	4211D00	RAD	5/12/23	10/24	✓
SWL5074	Sodium sulfide nonahydrate	Thermo	42442-5000	B0154446	SS	5/16/23	5/16/28	✓
SWL5075	Sodium Carbonate	ricca	7190-16	2305F59	SS	5/16/23	10/24	✓
SWL5076	Sodium Carbonate Anhydrous	Fisher	S263-1	219130	SS	5/16/23	5/16/28	✓
SWL5077	pH 2.00 Buffer	Fisher	SB96-500	224625	SS	5/16/23	01/25	✓
SWL5078	pH 4.00 Buffer	Fisher	SB101-500	230419	SS	5/17/23	3/25	✓
SWL5079	Phenol standard 1000ppm	Lab Chem	LC183307	M353-21	RAD	5/25/23	12/18/24	✓
SWL5080	Sodium Thiosulfate, 0.0375N	Ricca	7925-1	2305L08	RAD	5/25/23	11/24	✓
SWL5081	pH 7 BUFFER (YELLOW)	FISHER	SB107-500	226063	BL	5/25/23	1/25	✓
SWL5082	NED	THERMO	42399-1000	B0152963	BL	5/26/23	5/28	✓
SWL5083	SULFANILAMIDE	THERMO	13285-5000	B0152912	BL	5/31/23	5/31/28	✓

Katahdin Analytical Services - Wet Chemistry Lab
Reagents and Stock Standards Receipt Logbook

Katahdin STD. ID.	Standard Name	Mfr.	Catalog Number	Mfr. Lot Number	Receipt Initials	Receipt Date	Expiration Date	COA Scanned?	
SWL5084	HR COD vials	environmental express	B1015	13882	SS	6/2/23	1/28	✓	SS 6/2/2
SWL5085	LR COD vials	⊥	B1010	13907	⊥	~~1/28~~ 1	⊥	✓	
SWL5086	Chloroform	fisher	C606-4	230806	RAD	6/8/23	6/8/28	✓	scan QR on bottle
SWL5087	SODIUM PHOSPHATE DIBASIC HEPTAHYDRATE	FISHER	7782-85-6	215467	BL	6/28/23	6/28/28	✓	
SWL5088	CHLORIDE COLOR REAGENT	RICCA	1940-16	4211C10	BL	6/28/23	10/23	✓	
SWL5089	SAND	SPECTRUM	14808-60-7	1DI0227	BL	6/30/23	6/30/28	✓	
SWL5090	POTASSIUM IODIDE	THERMO	373655000	A0449576	BL	7/5/23	7/5/28	✓	
SWL5091	SODIUM CYANIDE CN 1000ppm	INORGANIC VENTURES	CN-1000-25 ~~143-33-9~~	U2-CN727714	BL	7/5/23	7/5/24 ~~7/25/25~~	✓	BL 7/5/23
SWL5092	SODIUM SALICYLATE	THERMO	A17056.0B	2021018	BL	7/5/23	7/5/28	✓	
SWL5093	HCL, 36.5-38%	J.T. Baker	UN1789	23E1262011	SS	7/6/23	4/3/28		
SWL5094	BUFFER SOLUTION pH 10	FISHER	SB115-500	226060	BL	7/10/23	1/25	✓	
SWL5095	SAND - LAB GRADE	FISHER	14808-60-7	3GB22072111A	BL	7/11/23	7/11/28	N/A	
SWL5096	HR COD Vials	environmental express	B1015	13923	CJB	7/11/23	03/28	✓	
SWL5097	TISAB II	fisher	15-2009-08	BV2	RAD	7/13/23	7/13/28	✓	
SWL5098	LR COD Vials	environmental express	B1010	13929	CJB	7/14/23	03/14/28	✓	
SWL5099	MULTIELEMENT B	ENVIRONMENTAL EXPRESS	HP-1C-N-M-100	2306146-100EE	BL	7/19/23	7/31/24	✓	
SWL5100	BUFFER SOLUTION pH 4	FISHER	SB101-500	230419	BL	7/20/23	3/25	✓	BL 7/20/2

RAD 6/8/23

RAD 7/5/23

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Katahdin Analytical Services - Wet Chemistry Lab
Reagents and Stock Standards Receipt Logbook

Katahdin STD. ID.	Standard Name	Mfr.	Catalog Number	Mfr. Lot Number	Receipt Initials	Receipt Date	Expiration Date	COA Scanned?
SWLS101	Glass Fibre Prefilters (TDS)	Merck Millipore	AP9004705	0000215925	JRS	7/21/23	7/21/28	✓
SWLS102	CADMIUM COLUMN FOR NITRATE	HACH	50237A	3186D	BL	7/31/23	01/24	✓
SWLS103	PLAIN GRANULES	HENGAR	1344-28-1	901800	BL	8/1/23	8/1/28	
SWLS104	AMMONIUM HYDROXIDE	FISHER	A669-212	226397	BL	8/1/23	8/1/28	✓
SWLS105	POTASSIUM CHLORIDE CONDUCTIVITY	RICCA	5888.01-16	2303P78	BL	8/1/23	2/25	✓
SWLS106	COLOR STANDARD	RICCA	2230-4	4304L09	BL	8/1/23	4/25	✓
SWLS107	ALKALINITY $CaCO_3$	SIGMA ALDRICH	ALK1000-500mL	LRAD5850	BL	8/4/23	6/30/26	✓
SWLS108	Potassium Chloride Conductivity	Fisher Brand	09-328-911774226	CC23998	JRS	8/4/23	3/30/24	✓
SWLS109	BOD Nutrient Buffer Pillows	HACH	1486398	A2287	CJB	8/8/23	6/8/28	✓
SWLS110	Nitrification Inhibitor	Lovibond	194920	XA6A5724	CJB	8/14/23	7/M/24	✓
~~SWLS111~~	~~HDR TSS LCS~~	~~Polite~~						
~~SWLS112~~	~~HDR TSS LCSD~~							
SWLS111	HR COD Vials	Env. Exp.	B1015	13807	CJB	8/22/23	10/22/27	✓
SWLS112	MULTIELEMENT B	ENV. EXPRESS	HP-IC-2-B-100	2308942-100EE	BL	8/24/23	8/31/24	
SWLS113	MULTIELEMENT A	ENV. EXPRESS	HP-IC-2-A-100	2303029-100EE	BL	8/24/23	8/31/24	✓
SWLS114	COLOR STANDARD	RICCA	2230-200	4308FOS	BL	8/24/23	7/25	✓
SWLS115	PH7 BUFFER SOLUTION (YELLOW)	FISHER	SB107-500	231058	BL	8/29/23	4/25	✓

RAC 8/24/23

RAC 10/2/23

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Katahdin Analytical Services - Wet Chemistry Lab
Reagents and Stock Standards Receipt Logbook

Katahdin STD. ID.	Standard Name	Mfr.	Catalog Number	Mfr. Lot Number	Receipt Initials	Receipt Date	Expiration Date	COA Scanned?	
SWLS116	LINEAR ALKYLBENZENE 10ppm SULFONATE STANDARD	BICCA	4348-16	130512481	BL	9/1/23	5/24	✓	
SWLS117	LINEAR ALKYLBENZENE SULFONATE STANDARD 1000ppm	BICCA	4350-4	13031130	BL	9/1/23	3/24	✓	
~~SWLS118~~	~~Glucose/Suc Tol Soils~~ AC 9-1-23								RAS 10/2/23
SWL5118	Paint Filters	TCP Global	PS-1903	N/A	LJB	9/5/23	9/5/28	N/A	
SWLS119	Chloroform	Fisher	C606-4	231658	RAD	9/7/23	9/7/28	✓	BN both
SWLS120	SODIUM CHLORIDE	FISHER	S642-212	223943	BL	9/8/23	9/8/28	✓	
SWLS121	PH BUFFER 4, 7, 10	FISHER	NC2402248	225069	BL	9/8/23	10/23	✓	
SWLS122	SODIUM NITROFERRICYANIDE	THERMO	21164025D	A0943695	BL	9/14/23	9/14/28	✓	
SWL5123	Glass Fibre Prefilters (TPS)	Merck Millipore	AP4004705	0000205684	JRS	9/14/23	9/14/28	✓	
SWL5124	AMMONIA STANDARD	ORION	ORION 9151007	BX1	BL	9/18/23	3/25	✓	
SWLS125	ANTIFOAM B EMULSION	SIGMA ALDRICH	10036749S3	MKCT0859	BL	9/26/23	8/26/24	✓	
SWL5126	SOY Standard 1000 ppm	inorganic ventures	ICS041	T2-SOX722793	RAD	10/2/23	10/2/24	✓	
SWLS127	Cl Std 1000ppm	↓	ICCL1	U2-CL731103	↓	↓	↓	✓	
SWLS128	NO3 Std 1000ppm		ICNN031	T2-NOX723937				✓	
SWLS129	NO2 Std 1000ppm		ICNN021	T2-NOX721185				✓	
SWLS130	Sand Lab Grade	Fisher	S25516B	3GH230405O7A	RAD	10/2/23	8/28	N/A	
SWLS131	T-CAL STANDARD 10NTU	TINTOMETER	48011212	2E9A092S	BL	10/10/23	9/25	✓	

Katahdin Analytical Services - Wet Chemistry Lab
Reagents and Stock Standards Receipt Logbook

Katahdin STD. ID.	Standard Name	Mfr.	Catalog Number	Mfr. Lot Number	Receipt Initials	Receipt Date	Expiration Date	COA Scanned?
~~SWLS132~~			~~SO-00-0~~				BL 10/25/23	
SWLS132	pH 4 BUFFER SOL.	FISHER	SB101-500	233052	BL	10/25/23	7/25	✓
SWLS133	CHLORIDE COLOR REAGENT	RICCA	1940-16	4301H76	BL	10/26/23	1/24	✓
SWLS134	BOD Nutrient Buffer Pillows	HACH	1486398	A3169	CJB	10/30/23	8/28	✓
SWLS135	HCL	J.T. Baker	UN1789	23H2862C17	SS	10/31/23	8/1/28	
SWLS136	LR COD Vials	ENV EXP.	B1010	3660011	CJB	10/31/23	7/31/28	✓
SWLS137	HR COD Vials	ENV EXP.	B1015	3GE0544	CJB	10/31/23	5/31/28	✓
SWLS138	TURBIDITY STANDARD, 50NTU	RICCA	R8419050-500	1308J19	BL	11/7/23	7/24	✓
SWLS139	TISAB II	fisher	15-2009-08	BS2	TAD	11/13/23	11/13/28	
SWLS140	PPO_4 1000 ppm	INORGANIC VENTURES	ICPPO41	U2-POX729089	BL	11/14/23	~~2/14/28~~ 11/14/24	BL 11/14/23
SWLS141	CADMIUM COLUMN	HACH	50237A	32974	BL	11/14/23	4/24	
SWLS142	pH 12.46 BUFFER	FISHER	IS-2009-15	BQ1	BL	11/16/23	10/25	
SWLS143	pH 10 BUFFER	FISHER	SB115-500	233928	BL	11/20/23	9/25	
SWLS144	pH 7 BUFFER	FISHER	SB108-1	234774	BL	11/21/23	10/25	
SWLS145	Sodium Thiosulfate (0.0375N)	RICCA	7925-1	2310P43	JRS	11/29/23	~~10/~~ 09/25	JRS 11/29/23
SWLS146	PLAIN GRANULES	HENGAR	1344-28-1	21S-691-6	BL	11/30/23	11/30/28	
SWLS147	ALKALINITY $CaCO_3$	SIGMA ALDRICH	ALK1000-500ML	LRAD7087	BL	12/1/23	11/30/26	

Katahdin Analytical Services, Inc. - Wet Chemistry Lab

STOCK STANDARDS LOGBOOK

Katahdin Std. ID	Standard Name	Manu-facturer	Mfr. Lot Number	Receipt Initials	Receipt Date	Expiration Date
SWL1940	Cupric Sulfate	fisher	0460649	SJC	10/5/05	10/5/10
SWL1944	Nitrite STD	LabChem	3287-10	SJC	10/19/05	1/17/06
SWL1945	Sodium Carbonate	LabChem	5126-07	SJC	10/19/05	5/6/06
SWL1962	Ferrous Ammonium sulfate	Fisher	057085	KGT	102505	1/25/11
SWL1962	Ferrous Ammonium Sulfate .25N	LabChem	5263-14	SJC	11/1/05	3/22/06
SWL1990	Sodium Carbonate 1N	fisher	055959-24	C.P.	11/30/05	11/30/07
SWL1991	Sodium Carbonate 1N	fisher	055959-24	C.P.	11/30/05	11/30/07
SWL1992	Sodium Phosphate 500gm	C.P. 500gm fisher	054177	C.P.	11/30/05	11/30/10
SWL1993	Conductivity STD	fisher	*3442	SJC	12/1/05	8/18/06
SWL1994	↓	↓	3458	↓	↓	9/06/06
SWL1995	↓	↓	3445	↓	↓	8/18/06
SWL2009	Nitrite STD	LabChem	6009-06	SJC	01/17/06	04/10/06
SWL2012	Buffer Solution pH 7	fisher	054999-24	CP	1/24/06	10/31/07
SWL2013	Conductivity STD 1409µmho	LabChem	5332-15	SJC	013106	12/05/07
SWL2014	pH 4.00 Buffer	fisher	055000-24	SJC	013106	10/31/07
SWL2015	Phenolate - Mtg	EST	1006859	KGT	020206	020107
SWL2016	Chloramine - T	EST	1006322	KGT	020206	100106
SWL2017	Nitroprusside	↓	1006779	↓	↓	020107
SWL2018	EDTA Buffer	↓	1006788	↓	↓	↓
SWL2019	Hypochlorite	↓	1006778	↓	↓	↓

WCStockStd.xls

Katahdin Analytical Services, Inc. - Wet Chemistry Lab
Reagent Receipt Logbook

Katahdin Reagent. ID.	Reagent Name	Manu-facturer	Mfr. Lot Number	Receipt Initials	Receipt Date	Expiration Date
SWL4091	H.L. COD vials	E.E.	12434	SC	12-19-16	10.31.021
SWL4092	Sodium Thiosulfate	Ricca	2609057	SC	↓	3.31.18
~~SWL4093~~	~~1000 µS/cm Spec. Con. Std.~~	~~Traceable~~	~~CC15415~~	↓	↓	8/8/17
SWL4094	100 µS/cm ↓	↓	CC15259	↓	↓	9.2.17
~~SWL4095~~	~~10,000 µS/cm~~ ↓	↓	~~CC15217~~	↓	↓	8.19.17
SWL4100	Ferrous Sulfate heptahydrate	Fisher	160768	ZF	12-23-16	12-23-21
SWL4102	Ammonium Hydroxide	Aeros	A0372135	AP	1/6/17	1/31/22
SWL4103	Sodium Carbonate	Aeros	A0375301	AP	1/6/17	1/6/27
SWL4106	Sodium L-(+)-Tartrate dihydrate	fisher	157480	SC	1.30.17	1.30.27
SWL4110	HL COD vials	Env. Express	12462	SC	2.2.17	12.31.21
SWL4111	Ammonia Std 1000 ppm	Orion	UQ1	ZF	2-2-17	10-31-18
SWL4113	Cadmium Column	Lachat	6354	AP	022317	022318
SWL4114	magnesium chloride hexahydrate	fisher	1626213	SC	3-1-17	3-1-22
SWL4115	TISAB	Orion	94109001	↓	3-1-17	↓
SWL4116	Potassium hydrogen phthalate	Acros	A0376652	ZF	3-6-17	NA
SWL4118	HL COD vials	Env. Express	12489	SC	3.13.17	1.31.2022
SWL4119	LL COD vials	↓	12475	↓	↓	↓

See 12-14-16 work logbook

WL-057 - Revision 1 - 07/25/2013

Katahdin Analytical Services, Inc. - Wet Chemistry Lab
Reagent Receipt Logbook

Katahdin Reagent. ID.	Reagent Name	Manu-facturer	Mfr. Lot Number	Receipt Initials	Receipt Date	Expiration Date
SWL 4402	Cadmium Column	lachat	8276	ZF	10/22/18	4/30/19
SWL4403	high level COD vials	Env. Express	128,69	ZF	10/24/18	8/1/23
SWL4404	Phosphate Buffer Soln	Fisher	179167	SC	10-14-18	8-30-19
SWL 4405	Potassium Iodide	Acros	A0 390896	ZF	10/26/18	10/26/23
SWL 4407	Sodium Carbonate	Acros	A0388622	ZF	10/30/18	10/30/23
SWL4408	Potassium Sulfate	Acros	A0390084	ZF	1	1
~~—~~	~~Sodium hydroxide~~					
SWL4409	Plain Granules	hengar	215-691-6	ZF	11/21/18	NA
SWL 4411	low level COD vials	Envi. Express	12584	ZF	12/6/18	6/31/22
SWL4412	high level COD vials	Env. Express	12515	AB	12/6/18	3/31/22
SWL4413	Sodium Phenolate Soln	Thermo	1112036	AP	12/20/18	7/14/19
SWL4416	TISAB II w/CDTA	Orion	LQ2	AP	1	1
SWL 4422	Ammonium Acetate	Fisher	181537	ZF	12/20/18	12/20/23
SWL4423	1, 10- Phenanthroline	Acros	A 0388924	ZF	12/20/18	12/20/23
SWL4424	Iodine	Acros	B0138702	ZF	1	1
SWL4425	10 N NaOH	Fisher	184664	AP	12/20/18	11/30/20
SWL4426	Sodium Thiosulfate Solution 0.0375N	Fisher	175890	JS	12.21.18	8.31.19

ZF 10/30/18

AP 12/21/18

Katahdin Analytical Services, Inc. - Wet Chemistry Lab
Reagent Receipt Logbook

Katahdin Reagent. ID.	Reagent Name	Manu-facturer	Mfr. Lot Number	Receipt Initials	Receipt Date	Expiration Date
SWL4951	Cupric Sulfate Pentahydrate	fisher chemical	190706	MH	5/9/22	5/9/27
SWL4949	Pyridine	Fisher	216630	SS	5/11/22	5/11/27
SWL4952	Phosphoric Acid	Fisher	214806	SS	5/18/22	5/18/27
SWL4953	Potassium sulfate	Thermo	10238938	MH	5/26/22	5/26/27
SWL4954	Chloride R1 (984364)	Thermo	U667	SS	5/26/22	6/30/23
SWL4957	Ammonium Acetate	Fisher	208075	SS	6/8/22	6/8/27
SWL4958	Potassium Sodium tartrate	Thermo	A0431849	SS	6/8/22	6/8/27
SWL4963	Boiling stones/ plain granules	Hengar	215 - 691 - 6	MH	6/20/22	6/20/27
SWL4964	Ethylenediaminetetraacetic acid	thermo	A0384660	RD	6/21/22	6/21/27
SWL4965	Conductivity standard (LCS 4)	Thermo	CC22291	MH	6/27/22	2/11/23
SWL4966	Conductivity standard (LCS 3)	Thermo	CC22425	MH	6/27/22	3/9/23
SWL4967	Conductivity standard (LCS 2)	Thermo	CC22340	MH	6/27/22	2/24/23
SWL4969	Ammonium molybdate	Thermo	A0428276	SS	6/28/22	6/28/27
SWL4970	Ascabic Acid	Thermo	Z08H035	SS	6/28/22	6/28/27
SWL4974	Cadmium Reduction Column	Lachat	20660	RAD	7/13/22	9/30/22
SWL4975	Sulfanilamide	Thermo	B0152173	RAD	7/29/22	7/29/27
SWL4976	Ammonium Hydroxide	Fisher	216954	RAD	8/3/22	8/3/27

Katahdin Analytical Services, Inc. - Wet Chemistry Lab
Reagent Receipt Logbook

Katahdin Reagent. ID.	Reagent Name	Manu-facturer	Mfr. Lot Number	Receipt Initials	Receipt Date	Expiration Date
SWL5041	Sulfuric Acid (9681-03)	J.T. Baker	225076201S	1/13/23 ↔ SS		9/5/27
SWL5042	Sodium Thiosulfate	RICCA	2212C80	ER	1/13/23	6/1/24
SWL5043	Sulfanilamide	thermo scientific	B0152912	ER	01/13/23	01/13/27
SWL5044	Magnesium Chloride Hexahydrate	fisher bioreagents	219274	ER	01/13/23	01/13/27
SWL5045	Iodine Extra Pure 99.5%	ACROS Organics	B01460824	ER	01/13/23	01/13/27
SWL5049	Glass Fibre Prefilters (TDS)	Merck Millipore	0000150777	SS	11/21/22	11/21/27
					SS 2/13/23	

WL-057 - Revision 1 - 07/25/2013

Katahdin Analytical Services, Inc. - Wet Chemistry Lab
Stock Standards Receipt Logbook

Katahdin STD. ID.	Standard Name	Manu-facturer	Mfr. Lot Number	Receipt Initials	Receipt Date	Expiration Date
SWL 4724	sym-diphenylcarbazide	ACROS	A0411427	es	1/13/21	1/13/26
✓ SWL 4725	CrVI +6 LCS STD 1000 ug/mL	ENV express	2031534-100	es	1/15/21	1/31/22
SWL 4728	TISAB II	ORION	940909	es	12/18/21	2/10/25
SWL 4729	Colors Std	RICCA	401 1J97	es	2/17/21	2/17/23
✓ SWL 4730	sulfate	Inorganic Ventures	P2-SO4X6891601	es	〃	〃
✓ SWL 4731	Chromium +6	〃	P2-CR6839607	es	〃	〃
SWL 4732	Buffer 12 pH	Specpure	N10H006	es	〃	〃
✓ SWL4733	Buffer 7 PH	Fisher	212-239	ZL	6/8/21	03/23
✓ SWL 4766	F Std.	Inorg. Ventures	P2-F656382	ZF	6/9/21	6/9/23
SWL4769	Alk $CaCO_3$ 1000mg/L	Sigma-Aldrich	LRAC8778	ZF	6/9/21	1/31/21
✓ SWL4770	Ferric Chloride Solution	fisher	206707	JL/KD	6/29/21	01/23
SWL4771	COD Standard	Labchem	L089-23	JL/KD	6/29/21	4/9/23
✓ SWL4772	COD Vials High level.	Env. Express	13479	JL/KD	6/30/21	5/26
✓ SWL4773	Colors LCS standerd	Ricca	2105C44	JJ/KD	6/30/21	5/2023
✓ SWL4774	Colors CCV standerd	Ricca	2105C44	JJ/KD	6/30/21	5/2023
✓ SWL4775	Buffer 7 pH yellow	Fisher	212239	ZL	7/2/21	03/2023
SWL4784	Spec. Con. LCS 1	Ricca	1106752	JJ/KD	7/13/21	05/2023

Katahdin Analytical Services, Inc. - Wet Chemistry Lab
Stock Standards Receipt Logbook

Katahdin STD. ID.	Standard Name	Manu-facturer	Mfr. Lot Number	Receipt Initials	Receipt Date	Expiration Date	
SWL4938	pH 10 buffer	Fisher	220003	~~ZF~~	4/4/22	1/31/24	
SWL4944	AlK CaCO3 1000	sigma aldrich	LRAD0045	SS	4/20/22	7/31/24	JB 4/22/22
SWL4947	COD Vials Low Level	Env. Exp.	13636	JB	4/21/22	~~7/31/26~~ 1/2027	
SWL4948	Buffer Solution pH 7.00 (clear)	Fisher	220002	SS	5/11/22	02/24	
SWL4955	pH 7 Buffer (yellow)	Fisher	220007	SS	5/27/22	01/24	
SWL4956	AlK CaCO3 1000 mg/L	Sigma Aldrich	LRAD2410	SS	6/8/22	4/30/25	
SWL4959	Ammonia Standard 1000 ppm	Fisher	Av1	SS	6/8/22	05/24	
SWL4960	Cn Standard	Inorganic ventures	S2-CN707122	SS	6/8/22	10/7/23	
SWL4961	F Standard 1000 ppm	Environmentay express (nps)	2202534-100	SS	6/8/22	11/30/23	
SWL4962	No2 1000 ppm SH. Multi element B	Environmentan express (nps)	2206143-100	SS	6/8/22	5/31/23	
SWL4968	pH 7 Buffer (yellow)	Fisher	221685 (SB107-500)	SS	6/28/22	03/24	
SWL4971	Color Standard	Ricca	4204B44	SS	6/28/22	3/24	
SWL4972	pH 4 Buffer	Fisher	221684	SS	7/8/22	4/24	
SWL4973	pH 10 Buffer	Fisher	220003	SS	7/8/22	1/24	
SWL4977	pH 7 Buffer (yellow)	Fisher	221685 (SB107-500)	RAD	8/5/22	3/24	
SWL4978	Mercury(II) oxide, 99+%, red	Acros	A0426593	~~RAD~~	8/8/22		
SWL4979	Potassium Iodide	Thermo	A0430239	SS	8/26/22	8/26/27	

Katahdin Analytical Services, Inc. - Wet Chemistry Lab
Stock Standards Receipt Logbook

Katahdin STD. ID.	Standard Name	Manu-facturer	Mfr. Lot Number	Receipt Initials	Receipt Date	Expiration Date
SWL 5046 ~~W21524~~	P-Xylene 99%	thermo scientific	10241202	ER	12/30/22	12/30/27
SWL 5047 ~~W21525~~	Sulfate	inorganic Ventures	S2-SO4X712629	ER	12/30/22	12/30/23
SWL 5048 ~~W21526~~	Chromium +6	ENV Express	2212933-250	ER	12/30/22	12/31/23
RAD 1/2/23						
					SS 2/13/25	

WL-056 - Revision 1 - 07/25/2013

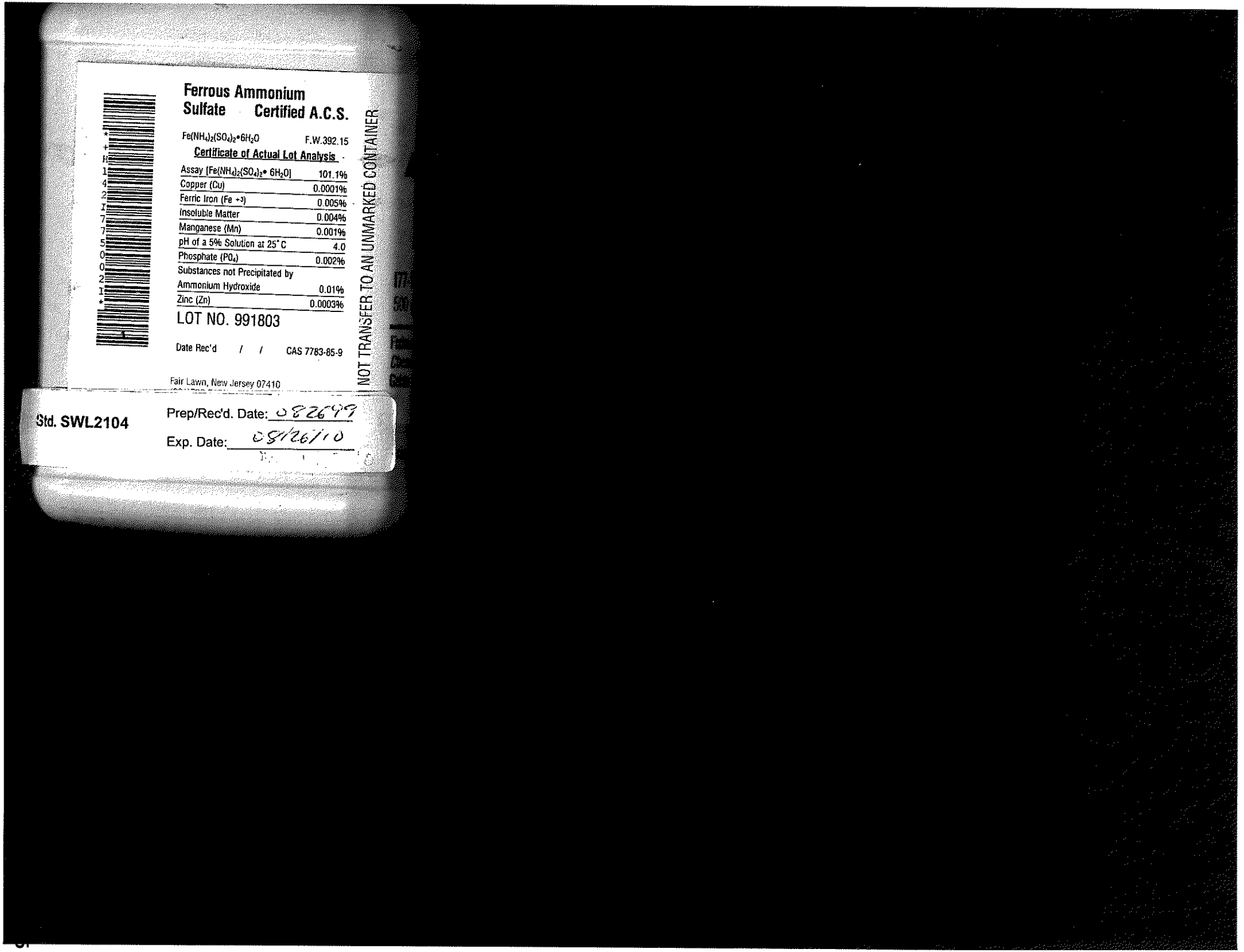
Katahdin Analytical Services, LLC. - Metals Laboratory
Reagent Receipt Logbook

Katahdin Reagent. ID.	Reagent Name	Manu-facturer	Mfr. Lot Number	Receipt Initials	Receipt Date	Expiration Date
SF 4/12/21 MSR232 ~~MSR231~~	HNO_3	JT baker	000026772 5	CD	4-11-21	8-11-25
MSR233	PTFE Boiling stones	chem ware	27769405	SF	4/27/21	N/A
MSR234	HNO_3	JT baker	000026657 2	SF	5/4/21	7/23/25
MSR235	HCl	JT baker	000027567 7	SF	〃	12/15/25
MSR236	Acetic Acid, Glacial	JT baker	0000 281457	SF	5/14/21	3/5/26
MSR237	HCl	JT baker	0000 281827	SF	6/8/21	2/29/26
MSR238	HNO_3	〃	0000 277202	〃	〃	1/14/26
MSR239	H_2SO_4	JT baker	0000 280957	SF	6/10/21	2/25/26
MSR240	$SnCl_2$	JT baker	0000 293024	EP	6/17/21	11/11/21
MSR241	HCl	JT baker	0000 281827	SF	7/14/21	3/29/26
MSR242	HNO_3	Fisher	1121040	SF	7/14/21	4/15/23
MSR243	HNO_3	Fisher	1126080	SF	7/23/21	8/20/22

Katahdin Analytical Services, LLC. - Metals Laboratory
Reagent Receipt Logbook

Katahdin Reagent. ID.	Reagent Name	Manu-facturer	Mfr. Lot Number	Receipt Initials	Receipt Date	Expiration Date
MSR 300	HNO_3 - Nitric Acid	JT Baker	22I8062003	CD	10-3-22	8-30-27
MSR 301	HNO_3 - Nitric Acid	JT Baker	↓	BCF	10-4-22	8-30-27
MSR 302	H_2SO_4 - Sulfuric Acid	JT Baker	22D0862015	BCF	10-4-22	2-22-27
~~MSR303~~	~~Hg IA~~					
~~MSR~~ 303	Hydrochloric Acid 36.5-38%	JT Baker	22L0562004	BCF	01-04-23	10-24-27
MSR304	PTFE Boiling Chips		W122687	CD	1-4-23	1-4-2027
MSR 305	Stannous Chloride, Dihydrate	LabChem	M333-26	BCF	1-11-23	
MSR306	HCl - Baker analyzed (wetchem)	JT Baker	22E0662002	CD	1-24-23	4-10-27
MSR307	Sulfuric Acid - H_2SO_4 (Baker analyzed)	JT Baker	22J0768016	CD	2-6-23	9-5-27
MSR308	Sulfuric Acid - H_2SO_4) Baker-instra analyzed	JT Baker	22L0962010	CD	2-13-23	10-9-27
↓	↓	↓	↓	↓	2-27-23	↓
MSR309	Nitric Acid (HNO_3)	CMC Materials	10048258	CD	CD 3-1-23	8-2023

BCF 1-4-23



Ferrous Ammonium Sulfate Certified A.C.S.

$Fe(NH_4)_2(SO_4)_2 \cdot 6H_2O$ F.W.392.15

Certificate of Actual Lot Analysis

Assay [$Fe(NH_4)_2(SO_4)_2 \cdot 6H_2O$]	101.1%
Copper (Cu)	0.0001%
Ferric Iron (Fe^{+3})	0.005%
Insoluble Matter	0.004%
Manganese (Mn)	0.001%
pH of a 5% Solution at 25°C	4.0
Phosphate (PO_4)	0.002%
Substances not Precipitated by Ammonium Hydroxide	0.01%
Zinc (Zn)	0.0003%

LOT NO. 991803

Date Rec'd / / CAS 7783-85-9

Fair Lawn, New Jersey 07410

NOT TRANSFER TO AN UNMARKED CONTAINER

Std. SWL2104

Prep/Rec'd. Date: 082699

Exp. Date: 08/26/10

CREDERE ASSOCIATES

DOW MILITARY AIRFIELD
SALVAGE YARD

SQ6179

Jennifer Prescott
207-874-2400

KATAHDIN ANALYTICAL SERVICES
600 TECHNOLOGY WAY
SCARBOROUGH, ME 04074

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SAMPLE DATA PACKAGE

NARRATIVE
KATAHDIN ANALYTICAL SERVICES
CREDERE ASSOCIATES
DOW MILITARY AIRFIELD SALVAGE YARD
SQ6179

Sample Receipt

The following samples were received on November 09, 10, 2023 and were logged in under Katahdin Analytical Services work order number SQ6179 for a hardcopy due date of December 04, 2023.

KATAHDIN Sample No.	CREDERE Sample Identification
SQ6179-1	SY-OBMW2-110823
SQ6179-2	SY-OBMW1-110823
SQ6179-3	SY-OBMW9-110823
SQ6179-4	SY-BRMW5-29-44-110823
SQ6179-5	SY-BRMW5-56-66-110823
SQ6179-6	SY-BRMW5-123-133-110823
SQ6179-7	SY-OBMW8-110823
SQ6179-8	SY-OBMW11-110823
SQ6179-9	SY-OBMW110-110823
SQ6179-10	SY-OBMW3-110823

The samples were logged in for the analyses specified on the chain of custody form. All problems encountered and resolved during sample receipt have been documented on the applicable chain of custody forms.

We certify that the test results provided in this report meet all the requirements of the NELAP standards unless otherwise noted in this narrative or in the Report of Analysis.

We certify that the test results provided in this report are accredited under the laboratory's ISO/IEC 17025:2017 and DoD-ELAP accreditation issued by the ANSI-ASQ National Accreditation Board. Refer to certificate and scope of accreditation L2223.

Analytes which are reported but not listed on our ANAB scope of accreditation will be "^" flagged and the following language will be included in the case narrative for all DoD compliant work: "^" Indicates this analyte is not included on Katahdin Analytical Services DoD-ELAP Scope of Accreditation.

Sample analyses have been performed by the methods as noted herein.

Should you have any questions or comments concerning this Report of Analysis, please do not hesitate to contact your Katahdin Analytical Services Project Manager, **Heather Manz**. This narrative is an integral part of the Report of Analysis.

Organics Analysis

The samples of Work Order SQ6179 were analyzed in accordance with Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, EPA publication SW-846, Third Edition, Final Updates I (1993), II (1995), IIA (1994), IIB (1995), III (1997), IIIA (1999), IIIB (2005), IV (2008), V (2015) and VI (2019), and/or "Analysis of Dissolved Methane, Ethane, and Ethylene in Water Samples Using a GC Headspace Equilibration Technique", EPA Method RSK175, Revision No.2, May 2004, and/or for the specific methods listed below or on the Report of Analysis.

RSK 175v.2 Analysis

The target analyte methane was detected below ½ the LOQ in the method blank WG345654-1. According to the DoD QSM, a method blank is considered to be contaminated if the concentration of any target analyte in the blank exceeds ½ the reporting limit and is greater than 1/10 the amount measured in any sample. Since the method blank was acceptable, no further action was taken.

8260C SIM Analysis

There were no protocol deviations or observations noted by the organics laboratory staff for this analysis.

8270D SIM Analysis

Samples SQ6179-1 and 4 had low recoveries for the extraction surrogate pyrene-d10 that were outside of the DoD QSM acceptance limits. The client was contacted on 12/11/2023 and the laboratory was instructed to proceed with narration.

Samples SQ6179-2, 6, and 8 had high recoveries for the extraction surrogate 2-methylnaphthalene-d10 that were outside of the DoD QSM acceptance limits. As this would indicate a high bias, and there were no target analytes detected in the samples, no further action was taken.

The LCS WG345459-2 had a high recovery for the extraction surrogate 2-methylnaphthalene-d10 that was outside of the DoD QSM acceptance limits. Since the recoveries of the spiked target analytes were acceptable, no further action was taken.

The initial calibration on the V instrument on 12/06/2023 had RSE values for the target analytes benzo(a)pyrene, indeno(1,2,3-cd)pyrene, and dibenzo(a,h)anthracene that were outside of the acceptance limits.

Note: The Form VII has a column for %D that is set to 20%. The DoD QSM criterion for an opening CV is 20%D and a closing CV is 50%D. All of the compounds in the CV's were evaluated to either 20% criteria for opening CV's or 50% criteria for closing CV's.

There were no other protocol deviations or observations noted by the organics laboratory staff.

Wet Chemistry Analysis

The samples of Work Order SQ6179 were analyzed in accordance with the specific methods listed on the Report of Analysis.

Analyses for hexavalent chromium were performed according to Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, EPA publication SW-846, Third Edition, Final Updates I (1993), II (1995), IIA (1994), IIB (1995), III (1997), IIIA (1999), IIIB (2005), IV (2008), V (2015) and VI (2019).

Analyses for alkalinity, ferrous iron, and total organic carbon were performed according to "Standard Methods for the Examination of Water and Wastewater", 15th, 16th, 17th, 18th, 19th, and 20th editions, 1980, 1985, 1989, 1992, 1995, 1999. APHA-AWWA-WPCF.

Analyses for chloride, nitrate, and sulfate were performed according to “Methods for the Determination of Inorganic Substances in Environmental Samples”, EPA 600/R-93/100, August 1993.

All Wet Chemistry results were evaluated to Katahdin Analytical Services’ Method Detection Limits (MDL). Measured concentrations that fall between the MDL and Katahdin’s Limit of Quantitation (LOQ) are flagged “J”. Measured concentrations that are below the MDL are flagged “U” and reported as “U LOD”, where “LOD” is the numerical value of the Limit of Detection.

All quality control criteria were met. All analyses were performed within analytical holding times with the following exceptions:

The samples SQ6179-1 and 2 were received by the lab with less than 1 hour left of the method-specified 24-hour holding time for ferrous iron analysis. SQ6179-1 was run 42 minutes out of hold and SQ6179-2 was run 12 minutes out of hold.

The samples SQ6179-1 and 2 were received by the lab with less than 1 hour left of the method-specified 24-hour holding time for hexavalent chromium analysis. SQ6179-1 was run 41 minutes out of hold and SQ6179-2 was run 11 minutes out of hold.

Copies of all relevant standard receipt and preparation logbook pages are included in the report with the exception of the page containing the receipt information for Katahdin Standard SWL2104 used in the ferrous iron analysis. This page was unable to be located, but a scan of the “certificate of actual lot analysis” that is printed on the reagent bottle was included in the report.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package has been authorized by the Quality Assurance Officer, or their designee, as verified by the following signature.



01/03/2024

_____

Jennifer Prescott
Quality Assurance Officer

Katahdin Analytical Services, Inc.

Manual Integration Codes For GC/MS, GC, HPLC and/or IC

M1	Peak splitting.
M2	Well defined peaks on the shoulders of the other peaks.
M3	There is additional area due to a coeluting interferant.
M4	There are negative spikes in the baseline.
M5	There are rising or falling baselines.
M6	The software has failed to detect a peak or misidentified a peak.
M7	Excessive peak tailing.
M8	Analysis such as GRO, DRO and TPH require a baseline hold.
M9	Peak was not completely integrated as in GC/MS.
M10	Primary ion was correctly integrated, but secondary or tertiary ion needed manual integration as in GC/MS.
M11	For GC analysis, when a sample is diluted by 1:10 or more, the surrogate is set to undetected and then the area under the surrogate is manually integrated.
M12	Manual integration saved in method due to TurboChrom floating point error.

Katahdin Analytical Services, LLC. **Sample Receipt Condition Report**

Client:	Credere	KAS PM:	HHM	Sampled By:	Client
Project:		KIMS Entry By:	JCB	Delivered By:	Fedex
KAS Work Order#:	SQ6179	KIMS Review By:	HHM	Received By:	JCB
		Labeled By:	EP		
SDG #:		Cooler: 1 of 1		Date/Time Rec.:	11/09/23 0815

Receipt Criteria	Y	N	EX*	NA	Comments and/or Resolution
1. Custody seals present / intact?	✓				
2. Chain of Custody present in cooler?	✓				
3. Chain of Custody signed by client?	✓				
4. Chain of Custody matches samples?	✓				
5. Temperature Blanks present? If not, take temperature of any sample w/ IR gun.	✓				Temp (°C): 0.8 — Thermometer ID: IR-1
Samples received at <6 °C w/o freezing?	✓				Note: Not required for metals (except Hg soil) analysis.
Ice packs or ice present?	✓				The lack of ice or ice packs (i.e. no attempt to begin cooling process) or insufficient ice may not meet certain regulatory requirements and may invalidate certain data.
If yes, was there sufficient ice to meet temperature requirements?	✓				
If temp. out, has the cooling process begun (i.e. ice or packs present) and sample collection times <6hrs., but samples are not yet cool?				✓	Note: No cooling process required for metals (except Hg soil) analysis.
6. Volatiles:	JEB HHM			✓	VOA in subsequent shipment
Aqueous: No bubble larger than a pea?				✓	
Soil/Sediment:					
Received in airtight container?				✓	
Received in methanol?				✓	
Methanol covering soil?				✓	
D.I. Water - Received within 48 hour HT?	JEB HHM			✓	
7. Trip Blank present in cooler?				✓	
8. Proper sample containers and volume?	✓				
9. Samples within hold time upon receipt?	✓				
10. Aqueous samples properly preserved? Metals, COD, NH3, TKN, O/G, phenol, TPO4, N+N, TOC, DRO, TPH – pH <2	✓				
Sulfide - >9				✓	
Cyanide – pH >12				✓	
11. Bottleware Prepped on:					

* Log-In Notes to Exceptions: document any problems with samples or discrepancies or pH adjustments.

Katahdin Analytical Services, LLC. **Sample Receipt Condition Report**

Client: Cedere	KAS PM: HMM	Sampled By: Client	
Project:	KIMS Entry By: JCB	Delivered By: Client	
KAS Work Order#: SQ6238/6179	KIMS Review By: HMM	Received By: JCB	
	Labeled By: EP		
SDG #:	Cooler: 1 of 4	Date/Time Rec.: 11/10/23 0837	

Receipt Criteria	Y	N	EX*	NA	Comments and/or Resolution
1. Custody seals present / intact?		/			
2. Chain of Custody present in cooler?	/				
3. Chain of Custody signed by client?	/				
4. Chain of Custody matches samples?	/				
5. Temperature Blanks present? If not, take temperature of any sample w/ IR gun.	/				Temp (°C): 0.6 - Thermometer ID: IR-1
Samples received at <6 °C w/o freezing?	/				Note: Not required for metals (except Hg soil) analysis.
Ice packs or ice present?	/				The lack of ice or ice packs (i.e. no attempt to begin cooling process) or insufficient ice may not meet certain regulatory requirements and may invalidate certain data.
If yes, was there sufficient ice to meet temperature requirements?	/				
If temp. out, has the cooling process begun (i.e. ice or packs present) and sample collection times <6hrs., but samples are not yet cool?				/	Note: No cooling process required for metals (except Hg soil) analysis.
6. Volatiles: **Aqueous:** No bubble larger than a pea?	/				VOA from 11/08 - SQ6179
Soil/Sediment:					
Received in airtight container?				/	
Received in methanol?				/	
Methanol covering soil?				/	
D.I. Water - Received within 48 hour HT?				/	
7. Trip Blank present in cooler?	/				
8. Proper sample containers and volume?	/				
9. Samples within hold time upon receipt?	/				
10. Aqueous samples properly preserved? Metals, COD, NH3, TKN, O/G, phenol, TPO4, N+N, TOC, DRO, TPH – pH <2	/				
Sulfide - >9				/	
Cyanide – pH >12				/	
11. Bottleware Prepped on:					

* Log-In Notes to Exceptions: document any problems with samples or discrepancies or pH adjustments.

Katahdin Analytical Services, LLC. Sample Receipt Condition Report

Client: Credere	KAS PM: HHM	Sampled By: Client	
Project:	KIMS Entry By: JCB	Delivered By: Client	
KAS Work Order#: SQ6238/6179	KIMS Review By: HHM	Received By: JCB	
	Labeled By: EP		
SDG #:	Cooler: 2 of 4	Date/Time Rec.: 11/10/23 0837	

Receipt Criteria	Y	N	EX*	NA	Comments and/or Resolution
1. Custody seals present / intact?		✓			
2. Chain of Custody present in cooler?	✓				
3. Chain of Custody signed by client?	✓				
4. Chain of Custody matches samples?	✓				
5. Temperature Blanks present? If not, take temperature of any sample w/ IR gun.	✓				Temp (°C): 0.9 – Thermometer ID: IR-1
Samples received at <6 °C w/o freezing?	✓				Note: Not required for metals (except Hg soil) analysis.
Ice packs or ice present?	✓				The lack of ice or ice packs (i.e. no attempt to begin cooling process) or insufficient ice may not meet certain regulatory requirements and may invalidate certain data.
If yes, was there sufficient ice to meet temperature requirements?	✓				
If temp. out, has the cooling process begun (i.e. ice or packs present) and sample collection times <6hrs., but samples are not yet cool?				✓	Note: No cooling process required for metals (except Hg soil) analysis.
6. Volatiles:					VOA from 11/09 - SQ6238
Aqueous: No bubble larger than a pea?	✓				
Soil/Sediment:					
Received in airtight container?				✓	
Received in methanol?				✓	
Methanol covering soil?				✓	
D.I. Water - Received within 48 hour HT?				✓	
7. Trip Blank present in cooler?	✓				
8. Proper sample containers and volume?	✓				
9. Samples within hold time upon receipt?	✓				
10. Aqueous samples properly preserved? Metals, COD, NH3, TKN, O/G, phenol, TPO4, N+N, TOC, DRO, TPH – pH <2	✓				
Sulfide - >9				✓	
Cyanide – pH >12				✓	
11. Bottleware Prepped on:					

* Log-In Notes to Exceptions: document any problems with samples or discrepancies or pH adjustments.

Katahdin Analytical Services, LLC. **Sample Receipt Condition Report**

Client: Credere	KAS PM: HHM	Sampled By: Client
Project:	KIMS Entry By: JCB	Delivered By: Client
KAS Work Order#: SQ6238/6179	KIMS Review By: HHM	Received By: JCB
	Labeled By: EP	
SDG #:	Cooler: 3 of 4	Date/Time Rec.: 11/10/23 0837

Receipt Criteria	Y	N	EX*	NA	Comments and/or Resolution
1. Custody seals present / intact?		✓			
2. Chain of Custody present in cooler?	✓				
3. Chain of Custody signed by client?	✓				
4. Chain of Custody matches samples?	✓				
5. Temperature Blanks present? If not, take temperature of any sample w/ IR gun.	✓				Temp (°C): 1.7 — Thermometer ID: IR-1
Samples received at <6 °C w/o freezing?	✓				Note: Not required for metals (except Hg soil) analysis.
Ice packs or ice present?	✓				The lack of ice or ice packs (i.e. no attempt to begin cooling process) or insufficient ice may not meet certain regulatory requirements and may invalidate certain data.
If yes, was there sufficient ice to meet temperature requirements?	✓				
If temp. out, has the cooling process begun (i.e. ice or packs present) and sample collection times <6hrs., but samples are not yet cool?				✓	Note: No cooling process required for metals (except Hg soil) analysis.
6. Volatiles:					
Aqueous: No bubble larger than a pea?				✓	
Soil/Sediment:					
Received in airtight container?				✓	
Received in methanol?				✓	
Methanol covering soil?				✓	
D.I. Water - Received within 48 hour HT?				✓	
7. Trip Blank present in cooler?				✓	
8. Proper sample containers and volume?	✓				
9. Samples within hold time upon receipt?	✓				
10. Aqueous samples properly preserved?					
Metals, COD, NH3, TKN, O/G, phenol, TPO4, N+N, TOC, DRO, TPH – pH <2				✓	
Sulfide - >9				✓	
Cyanide – pH >12				✓	
11. Bottleware Prepped on:					

* Log-In Notes to Exceptions: document any problems with samples or discrepancies or pH adjustments.

Katahdin Analytical Services, LLC. **Sample Receipt Condition Report**

Client:	Credere	KAS PM:	HTM	Sampled By:	Client
Project:		KIMS Entry By:	JCB	Delivered By:	Client
KAS Work Order#:	SQC0238/6179	KIMS Review By:	HTM	Received By:	JCB
		Labeled By:	EP		
SDG #:		Cooler: 4 of 4		Date/Time Rec.:	11/10/23 0837

Receipt Criteria	Y	N	EX*	NA	Comments and/or Resolution
1. Custody seals present / intact?		✓			
2. Chain of Custody present in cooler?	✓				
3. Chain of Custody signed by client?	✓				
4. Chain of Custody matches samples?	✓				
5. Temperature Blanks present? If not, take temperature of any sample w/ IR gun.	✓				Temp (°C): 0.1 — Thermometer ID: IR-1
Samples received at <6 °C w/o freezing?	✓				Note: Not required for metals (except Hg soil) analysis.
Ice packs or ice present?	✓				The lack of ice or ice packs (i.e. no attempt to begin cooling process) or insufficient ice may not meet certain regulatory requirements and may invalidate certain data.
If yes, was there sufficient ice to meet temperature requirements?	✓				
If temp. out, has the cooling process begun (i.e. ice or packs present) and sample collection times <6hrs., but samples are not yet cool?				✓	Note: No cooling process required for metals (except Hg soil) analysis.
6. Volatiles:					
Aqueous: No bubble larger than a pea?				✓	
Soil/Sediment:					
Received in airtight container?				✓	
Received in methanol?				✓	
Methanol covering soil?				✓	
D.I. Water - Received within 48 hour HT?				✓	
7. Trip Blank present in cooler?				✓	
8. Proper sample containers and volume?	✓				
9. Samples within hold time upon receipt?	✓				
10. Aqueous samples properly preserved? Metals, COD, NH3, TKN, O/G, phenol, TPO4, N+N, TOC, DRO, TPH – pH <2	✓				
Sulfide - >9				✓	
Cyanide – pH >12				✓	
11. Bottleware Prepped on:					

* Log-In Notes to Exceptions: document any problems with samples or discrepancies or pH adjustments.

Katahdin ANALYTICAL SERVICES
600 Technology Way
P.O. Box 540
Scarborough, ME 04070
Tel: (207) 874-2400
Fax: (207) 775-4029

Chain of Custody

Client:	Contact:	Phone #:	Fax #:
Credere Associates	Allison Drouin	207-749-1141	( )
Address: 776 Main Street	City: Westbrook	State: ME	Zip Code: 04092
Purchase Order #:	Proj. Name/No.: Dow/18001468		Katahdin Quote #:
Bill (if different than above):	Address:		
Sampler (Print/Sign):			Copies To: adrouin@credere1C.com

LAB USE ONLY — Work Order #: SQ6179 (Katahdin Project Number)
Remarks:
Shipping Info: FEDEX UPS CLIENT
Airbill No:
Temp C: Temp Blank Intact Not Intact

*	Sample Description	Date/Time Collected	Matrix	No. of Containers	Filt. Y/N CVOC SIM	Filt. Y/N BNA SIM	Filt. Y/N TOC	Filt. Y/N Dissolved Gasses	Filt. Y/N Anions	Filt. Y/N Alkalinity	Filt. Y/N Hex. Chromium	Filt. Y/N Ferrous Iron	Filt. Y/N	Filt. Y/N
	SY-OBMW2-110823	11.8/0905	W						X	X	X	X		
	SY-OBMW1-110823	0935												
	SY-OBMW9-110823	1016												
	SY-BRMW5-29-44-110823	1100												
	SY-BRMW5-56-66-110823	1115												
	SY-BRMW5-123-133-110823	1140												
	SY-OBMW8-110823	1250												
	SY-OBMW11-110823	1417												
	SY-OBMW10-110823	1422												
	SY-OBMW3-110823	1115												

COMMENTS: Bottle labels for SY-BR... samples have parentheses — do not include parentheses, use sample IDs as written here.

Relinquished By:	Date/Time	Received By:	Relinquished By:	Date/Time	Received By:
[signature]	11/8/1730	[signature] 11/09/23 0815			
Relinquished By:	Date/Time	Received By:	Relinquished By:	Date/Time	Received By:

The terms and conditions on the following page hereof shall govern services, except when a signed contractual agreement exists.

Katahdin ANALYTICAL SERVICES
600 Technology Way
P.O. Box 540
Scarborough, ME 04070
Tel: (207) 874-2400
Fax: (207) 775-4029

Chain of Custody

Client:	Contact:	Phone #:	Fax #:
Credere Associates	Allison Drouin	207-749-1141	( )
Address: 776 Main Street	City: Westbrook	State: ME	Zip Code: 04092
Purchase Order #:	Proj. Name/No.: Dow/18001468		Katahdin Quote #:
Bill (if different than above): invoices@credere llc.com	Address:		
Sampler (Print/Sign): Sean Gannon			Copies To: adrouin@credere llc.com

LAB USE ONLY — Work Order #: SQ6179 (Katahdin Project Number)

Remarks:

Shipping Info: FEDEX UPS CLIENT
Airbill No:
Temp C Temp Blank Intact Not Intact

*	Sample Description	Date/Time Collected	Matrix	No. of Containers	Filt. Y/N CVOC SIM	Filt. Y/N BNA SIM	Filt. Y/N TOC	Filt. Y/N Dissolved Gasses	Filt. Y/N Anions	Filt. Y/N Alkalinity	Filt. Y/N Hex. Chromium	Filt. Y/N Ferrous Iron	Filt. Y/N	Filt. Y/N
					Analysis and Container Type Preservatives									
	SY-OBMW2-110823	11.8/0905	W	10	X	X	X	X						
	SY-OBMW1-110823	0935												
	SY-OBMW9-110823	1016						*						
	SY-BRMW5-29-44-110823	1100												
	SY-BRMW5-56-66-110823	1115												
	SY-BRMW5-123-133-110823	1140												
	SY-OBMW8-110823	1250												
	SY-OBMW11-110823	1417												
	SY-OBMW10-110823	1422												
	SY-OBMW3-110823	1115												
	TB32-110823	11/8/1615		3										

COMMENTS: Bottle labels for SY-BR... samples have parentheses — do not include parentheses, use sample IDs as written here.

Relinquished By:	Date/Time	Received By:	Relinquished By:	Date/Time	Received By:
	11.10/0837				
Relinquished By:	Date/Time	Received By:	Relinquished By:	Date/Time	Received By:

The terms and conditions on the following page hereof shall govern services, except when a signed contractual agreement exists.

Login Chain of Custody (ln01)

Dec. 05, 2023
05:55 PM

Login Number: SQ6179

Account: CREDEREASSOC001
Credere Associates
Project: CREDERE-DOW

Primary Report Address:
Allison Drouin
Credere Associates, LLC
776 Main Street

Westbrook, ME 04092

adrouin@crederellc.com

Primary Invoice Address:
Accounts Payable
Credere Associates, LLC
776 main Street

Westbrook,ME 04092

jenn@crederellc.com (also, cc PM)

Report CC Addresses:
Invoice CC Addresses:

Quote/Incoming: CREDERE-DOW

Login Information

ANALYSIS INSTRUCTIONS	:	DOD 5.1. ND to LOD with J-flags. SVOA use 3550C/3510C/8270D mg/kg. Anions = NO3, SO4, Cl. When hex Cr MS/MSD fail, perform pH & ORP, include this data in the case narrative. Need to include copies of standard receipt and standard prep logbooks in final report.
CHECK NO.	:	
CLIENT PO#	:	18001468
CLIENT PROJECT MANAGE	:	Peter Thompson
CONTRACT	:	W912WJ-18-C-0019
COOLER TEMPERATURE	:	0.8, 0.6, 0.9, 1.7, 0.1
DELIVERY SERVICES	:	FedEx, Client
EDD FORMAT	:	FUDSCHEM
ISM INSTRUCTIONS	:	
LOGIN INITIALS	:	JCB
PM	:	HHM
PROJECT NAME	:	Dow Military Airfield Salvage Yard
QC LEVEL	:	IV
REPORT INSTRUCTIONS	:	2 sample receipt dates Nov 9 & 10. Upload to FUDSChem. Report to adrouin@crederellc.com. Invoices to pthompson@crederellc.com and jenn@crederellc.com.
SDG ID	:	
SDG STATUS	:	
TEMPLATE	:	
VERBAL TAT	:	

5:56 pm, Dec 05, 2023

Run Reports: Logindetail

Login Number: SQ6179

Account: CREDEREASSOC001
Credere Associates

Project: CREDERE-DOW

Quote/Incoming: CREDERE-DOW

Laboratory Sample ID	Client Sample Number	Collect Date/Time	Receive Date	PR	Due Date	Verbal Due Date	Mailed
SQ6179-1	SY-OBMW2-110823	08-NOV-23 09:05	09-NOV-23		04-DEC-23		

Sample Comments: Anions = NO3, SO4, Cl.

Matrix		Product	Hold Date (shortest)		Notes	Bottle Type
Aqueous	S	E300.0-ANIONS	11-NOV-23	SHORT		250mL Plastic
Service	S	REPORTING				
Aqueous	S	RSKSOP175-MEE	22-NOV-23			40mL Vial+HCl
Aqueous	S	SM2320B-ALKALINITY	22-NOV-23			500mL Plastic
Aqueous	S	SM3500D-FERROUS IRON	09-NOV-23	SHORT	Rec. on Holddate	250mL Plastic+HCl
Aqueous	S	SM5310B-TOC	06-DEC-23			40mL Vial+HCl
Aqueous	S	SW7196A-CRVI-AQ	09-NOV-23	SHORT	Rec. on Holddate	250mL Plastic
Aqueous	S	SW8260SIM-S	22-NOV-23			40mL Vial+HCl
Aqueous	S	SW8270SIMPAH-S	15-NOV-23			1L N-Amber Glass
Service	S	WASTE-DISPOSAL				

SQ6179-2	SY-OBMW1-110823	08-NOV-23 09:35	09-NOV-23		04-DEC-23		

Sample Comments: Anions = NO3, SO4, Cl.

Matrix		Product	Hold Date (shortest)		Notes	Bottle Type
Aqueous	S	E300.0-ANIONS	11-NOV-23	SHORT		250mL Plastic
Aqueous	S	RSKSOP175-MEE	22-NOV-23			40mL Vial+HCl
Aqueous	S	SM2320B-ALKALINITY	22-NOV-23			500mL Plastic
Aqueous	S	SM3500D-FERROUS IRON	09-NOV-23	SHORT	Rec. on Holddate	250mL Plastic+HCl
Aqueous	S	SM5310B-TOC	06-DEC-23			40mL Vial+HCl
Aqueous	S	SW7196A-CRVI-AQ	09-NOV-23	SHORT	Rec. on Holddate	250mL Plastic
Aqueous	S	SW8260SIM-S	22-NOV-23			40mL Vial+HCl
Aqueous	S	SW8270SIMPAH-S	15-NOV-23			1L N-Amber Glass

SQ6179-3	SY-OBMW9-110823	08-NOV-23 10:16	09-NOV-23		04-DEC-23		

Sample Comments: Anions = NO3, SO4, Cl.

Matrix		Product	Hold Date (shortest)		Notes	Bottle Type
Aqueous	S	E300.0-ANIONS	11-NOV-23	SHORT		250mL Plastic
Aqueous	S	RSKSOP175-MEE	22-NOV-23			40mL Vial+HCl
Aqueous	S	SM2320B-ALKALINITY	22-NOV-23			500mL Plastic
Aqueous	S	SM3500D-FERROUS IRON	09-NOV-23	SHORT	Rec. on Holddate	250mL Plastic+HCl
Aqueous	S	SM5310B-TOC	06-DEC-23			40mL Vial+HCl
Aqueous	S	SW7196A-CRVI-AQ	09-NOV-23	SHORT	Rec. on Holddate	250mL Plastic
Aqueous	S	SW8260SIM-S	22-NOV-23			40mL Vial+HCl
Aqueous	S	SW8270SIMPAH-S	15-NOV-23			1L N-Amber Glass

SQ6179-4	SY-BRMW5-29-44-110823	08-NOV-23 11:00	09-NOV-23		04-DEC-23		

Sample Comments: Anions = NO3, SO4, Cl.

Matrix		Product	Hold Date (shortest)		Notes	Bottle Type
Aqueous	S	E300.0-ANIONS	11-NOV-23	SHORT		250mL Plastic
Aqueous	S	RSKSOP175-MEE	22-NOV-23			40mL Vial+HCl
Aqueous	S	SM2320B-ALKALINITY	22-NOV-23			500mL Plastic
Aqueous	S	SM3500D-FERROUS IRON	09-NOV-23	SHORT	Rec. on Holddate	250mL Plastic+HCl
Aqueous	S	SM5310B-TOC	06-DEC-23			40mL Vial+HCl
Aqueous	S	SW7196A-CRVI-AQ	09-NOV-23	SHORT	Rec. on Holddate	250mL Plastic
Aqueous	S	SW8260SIM-S	22-NOV-23			40mL Vial+HCl
Aqueous	S	SW8270SIMPAH-S	15-NOV-23			1L N-Amber Glass

5:56 pm, Dec 05, 2023

Run Reports: Logindetail

Login Number: SQ6179

Account: CREDEREASSOC001
Credere Associates

Project: CREDERE-DOW

Quote/Incoming: CREDERE-DOW

Laboratory Sample ID	Client Sample Number	Collect Date/Time	Receive Date	PR	Due Date	Verbal Due Date	Mailed
SQ6179-5	SY-BRMW5-56-66-110823	08-NOV-23 11:15	09-NOV-23		04-DEC-23		

Sample Comments: Anions = NO3, SO4, Cl.

Matrix		Product	Hold Date (shortest)		Notes	Bottle Type
Aqueous	S	E300.0-ANIONS	11-NOV-23	SHORT		250mL Plastic
Aqueous	S	RSKSOP175-MEE	22-NOV-23			40mL Vial+HCl
Aqueous	S	SM2320B-ALKALINITY	22-NOV-23			500mL Plastic
Aqueous	S	SM3500D-FERROUS IRON	09-NOV-23	SHORT	Rec. on Holddate	250mL Plastic+HCl
Aqueous	S	SM5310B-TOC	06-DEC-23			40mL Vial+HCl
Aqueous	S	SW7196A-CRVI-AQ	09-NOV-23	SHORT	Rec. on Holddate	250mL Plastic
Aqueous	S	SW8260SIM-S	22-NOV-23			40mL Vial+HCl
Aqueous	S	SW8270SIMPAH-S	15-NOV-23			1L N-Amber Glass

SQ6179-6	SY-BRMW5-123-133-110823	08-NOV-23 11:40	09-NOV-23		04-DEC-23		

Sample Comments: Anions = NO3, SO4, Cl.

Matrix		Product	Hold Date (shortest)		Notes	Bottle Type
Aqueous	S	E300.0-ANIONS	11-NOV-23	SHORT		250mL Plastic
Aqueous	S	RSKSOP175-MEE	22-NOV-23			40mL Vial+HCl
Aqueous	S	SM2320B-ALKALINITY	22-NOV-23			500mL Plastic
Aqueous	S	SM3500D-FERROUS IRON	09-NOV-23	SHORT	Rec. on Holddate	250mL Plastic+HCl
Aqueous	S	SM5310B-TOC	06-DEC-23			40mL Vial+HCl
Aqueous	S	SW7196A-CRVI-AQ	09-NOV-23	SHORT	Rec. on Holddate	250mL Plastic
Aqueous	S	SW8260SIM-S	22-NOV-23			40mL Vial+HCl
Aqueous	S	SW8270SIMPAH-S	15-NOV-23			1L N-Amber Glass

SQ6179-7	SY-OBMW8-110823	08-NOV-23 12:50	09-NOV-23		04-DEC-23		

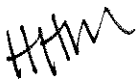
Sample Comments: Anions = NO3, SO4, Cl.

Matrix		Product	Hold Date (shortest)		Notes	Bottle Type
Aqueous	S	E300.0-ANIONS	11-NOV-23	SHORT		250mL Plastic
Aqueous	S	RSKSOP175-MEE	22-NOV-23			40mL Vial+HCl
Aqueous	S	SM2320B-ALKALINITY	22-NOV-23			500mL Plastic
Aqueous	S	SM3500D-FERROUS IRON	09-NOV-23	SHORT	Rec. on Holddate	250mL Plastic+HCl
Aqueous	S	SM5310B-TOC	06-DEC-23			40mL Vial+HCl
Aqueous	S	SW7196A-CRVI-AQ	09-NOV-23	SHORT	Rec. on Holddate	250mL Plastic
Aqueous	S	SW8260SIM-S	22-NOV-23			40mL Vial+HCl
Aqueous	S	SW8270SIMPAH-S	15-NOV-23			1L N-Amber Glass

SQ6179-8	SY-OBMW11-110823	08-NOV-23 14:17	09-NOV-23		04-DEC-23		

Sample Comments: Anions = NO3, SO4, Cl.

Matrix		Product	Hold Date (shortest)		Notes	Bottle Type
Aqueous	S	E300.0-ANIONS	11-NOV-23	SHORT		250mL Plastic
Aqueous	S	RSKSOP175-MEE	22-NOV-23			40mL Vial+HCl
Aqueous	S	SM2320B-ALKALINITY	22-NOV-23			500mL Plastic
Aqueous	S	SM3500D-FERROUS IRON	09-NOV-23	SHORT	Rec. on Holddate	250mL Plastic+HCl
Aqueous	S	SM5310B-TOC	06-DEC-23			40mL Vial+HCl
Aqueous	S	SW7196A-CRVI-AQ	09-NOV-23	SHORT	Rec. on Holddate	250mL Plastic
Aqueous	S	SW8260SIM-S	22-NOV-23			40mL Vial+HCl
Aqueous	S	SW8270SIMPAH-S	15-NOV-23			1L N-Amber Glass



5:57 pm, Dec 05, 2023

Run Reports: Logindetail

Login Number: SQ6179

Account: CREDEREASSOC001
Credere Associates

Project: CREDERE-DOW

Quote/Incoming: CREDERE-DOW

Laboratory Sample ID	Client Sample Number	Collect Date/Time	Receive Date	PR	Due Date	Verbal Due Date	Mailed
SQ6179-9	SY-OBMW110-110823	08-NOV-23 14:22	09-NOV-23		04-DEC-23		

Sample Comments: Anions = NO3, SO4, Cl.

Matrix		Product	Hold Date (shortest)		Notes	Bottle Type
Aqueous	S	E300.0-ANIONS	11-NOV-23	SHORT		250mL Plastic
Aqueous	S	RSKSOP175-MEE	22-NOV-23			40mL Vial+HCl
Aqueous	S	SM2320B-ALKALINITY	22-NOV-23			500mL Plastic
Aqueous	S	SM3500D-FERROUS IRON	09-NOV-23	SHORT	Rec. on Holddate	250mL Plastic+HCl
Aqueous	S	SM5310B-TOC	06-DEC-23			40mL Vial+HCl
Aqueous	S	SW7196A-CRVI-AQ	09-NOV-23	SHORT	Rec. on Holddate	250mL Plastic
Aqueous	S	SW8260SIM-S	22-NOV-23			40mL Vial+HCl
Aqueous	S	SW8270SIMPAH-S	15-NOV-23			1L N-Amber Glass

SQ6179-10	SY-OBMW3-110823	08-NOV-23 11:15	09-NOV-23		04-DEC-23		

Sample Comments: Anions = NO3, SO4, Cl.

Matrix		Product	Hold Date (shortest)		Notes	Bottle Type
Aqueous	S	E300.0-ANIONS	11-NOV-23	SHORT		250mL Plastic
Aqueous	S	RSKSOP175-MEE	22-NOV-23			40mL Vial+HCl
Aqueous	S	SM2320B-ALKALINITY	22-NOV-23			500mL Plastic
Aqueous	S	SM3500D-FERROUS IRON	09-NOV-23	SHORT	Rec. on Holddate	250mL Plastic+HCl
Aqueous	S	SM5310B-TOC	06-DEC-23			40mL Vial+HCl
Aqueous	S	SW7196A-CRVI-AQ	09-NOV-23	SHORT	Rec. on Holddate	250mL Plastic
Aqueous	S	SW8260SIM-S	22-NOV-23			40mL Vial+HCl
Aqueous	S	SW8270SIMPAH-S	15-NOV-23			1L N-Amber Glass

SQ6179-11	TB32-110823	08-NOV-23 16:15	09-NOV-23		04-DEC-23		

Sample Comments: Did not receive.

Matrix	Product	Hold Date (shortest)	Notes	Bottle Type

Total Samples: 10 ***Total Analyses: 82***

5:57 pm, Dec 05, 2023

Run Reports: Logindetail

SAMPLE DATA SUMMARY PACKAGE

KATAHDIN ANALYTICAL SERVICES - ORGANIC DATA QUALIFIERS

U Indicates the compound was analyzed for but not detected above the specified level. This level may be the Practical Quantitation Level (PQL) (also called Limit of Quantitation (LOQ)), the Limit of Detection (LOD) or Method Detection Limit (MDL) as required by the client.

Note: All results reported as "U" MDL have a 50% rate for false negatives compared to those results reported as "U" PQL, "U" LOQ or "U" LOD, where the rate of false negatives is <1%.

* Compound recovery or percent RPD (relative percent difference) was outside of quality control limits.

D Indicates the result was obtained from analysis of a diluted sample. Surrogate recoveries may not be calculable.

E Estimated value. This flag identifies compounds whose concentrations exceed the upper level of the calibration range of the instrument for that specific analysis.

J Estimated value. The analyte was detected in the sample at a concentration less than the laboratory Practical Quantitation Level (PQL) (also called Limit of Quantitation (LOQ)), but above the Method Detection Limit (MDL).

And/or

J Used for Dual Column analytes when there is a greater than 40% difference for detected concentrations between the two GC/HPLC columns.

B Indicates the analyte was detected in the laboratory method blank analyzed concurrently with the sample.

I Indicates that the flagged compound did not meet DoD criteria in the corresponding Initial Calibration (ICAL).

D Indicates that the flagged compound did not meet DoD criteria in the corresponding Initial Calibration Verification (ICV).

C Indicates that the flagged compound did not meet DoD criteria in the corresponding opening Calibration Verification (CV).

V Indicates that the flagged compound did not meet DoD criteria in the corresponding closing Calibration Verification (CV).

L/LL Indicates that the flagged compound did not meet DoD criteria in the corresponding Laboratory Control Sample (LCS) and/or Laboratory Control Sample Duplicate (LCSD) prepared and/or analyzed concurrently with the sample.

M/MM Indicates that the flagged compound did not meet DoD criteria in the Matrix Spike (MS) and/or Matrix Spike Duplicate MSD) prepared and/or analyzed concurrently with the native sample.

H Indicates the flagged compound was detected on the primary column but was not detected on the confirmation column therefore the compound is not reported as a positive detection. (SW846 8330A/B only)

KATAHDIN ANALYTICAL SERVICES – INORGANIC DATA QUALIFIERS

The sampled date indicated on the attached Report(s) of Analysis (ROA) is the date for which a grab sample was collected or the date for which a composite sample was completed. Beginning and start times for composite samples can be found on the Chain-of-Custody.

U Indicates the compound was analyzed for but not detected above the specified level. This level may be the Practical Quantitation Level (PQL) (also called Limit of Quantitation (LOQ)), the Limit of Detection (LOD) or Method Detection Limit (MDL) as required by the client.

Note: All results reported as "U" MDL have a 50% rate for false negatives compared to those results reported as "U" PQL "U" LOQ or "U" LOD, where the rate of false negatives is <1%.

E Estimated value. This flag identifies compounds whose concentrations exceed the upper level of the calibration range of the instrument for that specific analysis.

J Estimated value. The analyte was detected in the sample at a concentration less than the laboratory Practical Quantitation Level (PQL) (also called Limit of Quantitation (LOQ)), but above the Method Detection Limit (MDL).

I-7 The laboratory's Practical Quantitation Level (PQL) or LOQ could not be achieved for this parameter due to sample composition, matrix effects, sample volume, or quantity used for analysis.

A-4 Please refer to cover letter or narrative for further information.

H_ Please note that the regulatory holding time for _____ is "analyze immediately". Ideally, this analysis must be performed in the field at the time of sample collection. _____ for this sample was not performed at the time of sample collection. The analysis was performed as soon as possible after receipt by the laboratory.

H1 - pH H2 - DO H3 - sulfite H4 - residual chlorine

T1 The client did not provide the full volume of at least one liter for analysis of TSS. Therefore, the PQL of 2.5 mg/L could not be achieved.

T2 The client provided the required volume of at least one liter for analysis of TSS, but the laboratory could not filter the full one liter volume due to the sample matrix. Therefore, the PQL of 2.5 mg/L could not be achieved.

M1 The matrix spike and/or matrix spike duplicate recovery performed on this sample was outside of the laboratory acceptance criteria. Sample matrix is suspected. The laboratory criteria was met for the Laboratory Control Sample (LCS) analyzed concurrently with this sample.

M2 The matrix spike and/or matrix spike duplicate recovery was outside of the laboratory acceptance criteria. The native sample concentration is greater than four times the spike added concentration so the spike added could not be distinguished from the native sample concentration.

R1 The relative percent difference (RPD) between the duplicate analyses performed on this sample was outside of the laboratory acceptance criteria (when both values are greater than ten times the PQL).

MCL	Maximum Contaminant Level	NL	No limit
NFL	No Free Liquid Present	FLP	Free Liquid Present
NOD	No Odor Detected	TON	Threshold Odor Number

D-1 As required by Method 5210B, APHA Standard Methods for the Examination of Water and Wastewater (21st edition), the BOD value reported for this sample is 'qualified' because the check standard run concurrently with the sample analysis did not meet the criteria specified in the method (198 +/- 30.5 mg/L). These results may not be reportable for compliance purposes.

D-2 The measured final dissolved oxygen concentrations of all dilutions were less than the method-specified limit of 1 mg/L. The reported BOD result was calculated assuming a final oxygen concentration equal to 1 mg/L. The reported value should be considered a minimum value.

D-3 The dilution water used to prepare this sample did not meet the method and/or regulatory criteria of less than 0.2 or 0.4 mg/L dissolved oxygen (DO) uptake over the five day period of incubation. These results may not be reportable for compliance purposes.

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Report of Analytical Results

SDG: SQ6179
Lab ID: SQ6179-1
Client ID: SY-OBMW2-110823
Matrix: AQ
Lab File ID: S7229.D

Sample Date: 08-NOV-23
Extract Date: 17-NOV-23
Extracted By: JSS
Extraction Method: SW846 5030C
Lab Prep Batch: WG345597

Report Date: 12-DEC-23
Analysis Date: 17-NOV-23
Analyst: JSS
Analysis Method: SW846 8260C SIM
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Vinyl Chloride	U	0.050	ug/L	1	.1	0.10	0.0037	0.050
1,1-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0091	0.025
trans-1,2-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0033	0.025
cis-1,2-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0057	0.025
Trichloroethene	U	0.025	ug/L	1	.05	0.050	0.012	0.025
Tetrachloroethene	U	0.025	ug/L	1	.05	0.050	0.0091	0.025
Dibromofluoromethane		116.	%					
1,2-Dichloroethane-d4		114.	%					
Toluene-D8		100.	%					
p-Bromofluorobenzene		81.7	%					

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Report of Analytical Results

SDG: SQ6179
Lab ID: SQ6179-2
Client ID: SY-OBMW1-110823
Matrix: AQ
Lab File ID: S7230.D

Sample Date: 08-NOV-23
Extract Date: 17-NOV-23
Extracted By: JSS
Extraction Method: SW846 5030C
Lab Prep Batch: WG345597

Report Date: 12-DEC-23
Analysis Date: 17-NOV-23
Analyst: JSS
Analysis Method: SW846 8260C SIM
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Vinyl Chloride	U	0.050	ug/L	1	.1	0.10	0.0037	0.050
1,1-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0091	0.025
trans-1,2-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0033	0.025
cis-1,2-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0057	0.025
Trichloroethene	U	0.025	ug/L	1	.05	0.050	0.012	0.025
Tetrachloroethene	U	0.025	ug/L	1	.05	0.050	0.0091	0.025
Dibromofluoromethane		119.	%					
1,2-Dichloroethane-d4		120.	%					
Toluene-D8		100.	%					
p-Bromofluorobenzene		82.0	%					

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Report of Analytical Results

SDG: SQ6179
Lab ID: SQ6179-3
Client ID: SY-OBMW9-110823
Matrix: AQ
Lab File ID: S7231.D

Sample Date: 08-NOV-23
Extract Date: 17-NOV-23
Extracted By: JSS
Extraction Method: SW846 5030C
Lab Prep Batch: WG345597

Report Date: 12-DEC-23
Analysis Date: 17-NOV-23
Analyst: JSS
Analysis Method: SW846 8260C SIM
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Vinyl Chloride	U	0.050	ug/L	1	.1	0.10	0.0037	0.050
1,1-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0091	0.025
trans-1,2-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0033	0.025
cis-1,2-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0057	0.025
Trichloroethene	U	0.025	ug/L	1	.05	0.050	0.012	0.025
Tetrachloroethene	U	0.025	ug/L	1	.05	0.050	0.0091	0.025
Dibromofluoromethane		123.	%					
1,2-Dichloroethane-d4		120.	%					
Toluene-D8		101.	%					
p-Bromofluorobenzene		82.9	%					

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Report of Analytical Results

SDG: SQ6179
Lab ID: SQ6179-4
Client ID: SY-BRMW5-29-44-110823
Matrix: AQ
Lab File ID: S7232.D

Sample Date: 08-NOV-23
Extract Date: 17-NOV-23
Extracted By: JSS
Extraction Method: SW846 5030C
Lab Prep Batch: WG345597

Report Date: 12-DEC-23
Analysis Date: 17-NOV-23
Analyst: JSS
Analysis Method: SW846 8260C SIM
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Vinyl Chloride	U	0.050	ug/L	1	.1	0.10	0.0037	0.050
1,1-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0091	0.025
trans-1,2-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0033	0.025
cis-1,2-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0057	0.025
Trichloroethene	U	0.025	ug/L	1	.05	0.050	0.012	0.025
Tetrachloroethene	U	0.025	ug/L	1	.05	0.050	0.0091	0.025
Dibromofluoromethane		117.	%					
1,2-Dichloroethane-d4		115.	%					
Toluene-D8		99.5	%					
p-Bromofluorobenzene		78.4	%					

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Report of Analytical Results

SDG: SQ6179
Lab ID: SQ6179-5
Client ID: SY-BRMW5-56-66-110823
Matrix: AQ
Lab File ID: S7233.D

Sample Date: 08-NOV-23
Extract Date: 17-NOV-23
Extracted By: JSS
Extraction Method: SW846 5030C
Lab Prep Batch: WG345597

Report Date: 12-DEC-23
Analysis Date: 17-NOV-23
Analyst: JSS
Analysis Method: SW846 8260C SIM
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Vinyl Chloride	U	0.050	ug/L	1	.1	0.10	0.0037	0.050
1,1-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0091	0.025
trans-1,2-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0033	0.025
cis-1,2-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0057	0.025
Trichloroethene	U	0.025	ug/L	1	.05	0.050	0.012	0.025
Tetrachloroethene	U	0.025	ug/L	1	.05	0.050	0.0091	0.025
Dibromofluoromethane		123.	%					
1,2-Dichloroethane-d4		124.	%					
Toluene-D8		100.	%					
p-Bromofluorobenzene		83.3	%					

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Report of Analytical Results

SDG: SQ6179
Lab ID: SQ6179-6
Client ID: SY-BRMW5-123-133-110823
Matrix: AQ
Lab File ID: S7234.D

Sample Date: 08-NOV-23
Extract Date: 17-NOV-23
Extracted By: JSS
Extraction Method: SW846 5030C
Lab Prep Batch: WG345597

Report Date: 12-DEC-23
Analysis Date: 17-NOV-23
Analyst: JSS
Analysis Method: SW846 8260C SIM
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Vinyl Chloride	U	0.050	ug/L	1	.1	0.10	0.0037	0.050
1,1-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0091	0.025
trans-1,2-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0033	0.025
cis-1,2-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0057	0.025
Trichloroethene		0.58	ug/L	1	.05	0.050	0.012	0.025
Tetrachloroethene	U	0.025	ug/L	1	.05	0.050	0.0091	0.025
Dibromofluoromethane		112.	%					
1,2-Dichloroethane-d4		114.	%					
Toluene-D8		93.4	%					
p-Bromofluorobenzene		80.4	%					

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Report of Analytical Results

SDG: SQ6179
Lab ID: SQ6179-7
Client ID: SY-OBMW8-110823
Matrix: AQ
Lab File ID: S7235.D

Sample Date: 08-NOV-23
Extract Date: 17-NOV-23
Extracted By: JSS
Extraction Method: SW846 5030C
Lab Prep Batch: WG345597

Report Date: 12-DEC-23
Analysis Date: 17-NOV-23
Analyst: JSS
Analysis Method: SW846 8260C SIM
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Vinyl Chloride	U	0.050	ug/L	1	.1	0.10	0.0037	0.050
1,1-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0091	0.025
trans-1,2-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0033	0.025
cis-1,2-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0057	0.025
Trichloroethene		0.074	ug/L	1	.05	0.050	0.012	0.025
Tetrachloroethene	U	0.025	ug/L	1	.05	0.050	0.0091	0.025
Dibromofluoromethane		124.	%					
1,2-Dichloroethane-d4		121.	%					
Toluene-D8		98.0	%					
p-Bromofluorobenzene		84.2	%					

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Report of Analytical Results

SDG: SQ6179
Lab ID: SQ6179-8
Client ID: SY-OBMW11-110823
Matrix: AQ
Lab File ID: S7236.D

Sample Date: 08-NOV-23
Extract Date: 17-NOV-23
Extracted By: JSS
Extraction Method: SW846 5030C
Lab Prep Batch: WG345597

Report Date: 12-DEC-23
Analysis Date: 17-NOV-23
Analyst: JSS
Analysis Method: SW846 8260C SIM
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Vinyl Chloride	U	0.050	ug/L	1	.1	0.10	0.0037	0.050
1,1-Dichloroethene	J	0.048	ug/L	1	.05	0.050	0.0091	0.025
trans-1,2-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0033	0.025
cis-1,2-Dichloroethene		0.088	ug/L	1	.05	0.050	0.0057	0.025
Trichloroethene	E	5.1	ug/L	1	.05	0.050	0.012	0.025
Tetrachloroethene	U	0.025	ug/L	1	.05	0.050	0.0091	0.025
Dibromofluoromethane		124.	%					
1,2-Dichloroethane-d4		124.	%					
Toluene-D8		82.8	%					
p-Bromofluorobenzene		83.6	%					

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Report of Analytical Results

SDG: SQ6179
Lab ID: SQ6179-8DL
Client ID: SY-OBMW11-110823
Matrix: AQ
Lab File ID: S7261.D

Sample Date: 08-NOV-23
Extract Date: 18-NOV-23
Extracted By: JSS
Extraction Method: SW846 5030C
Lab Prep Batch: WG345675

Report Date: 12-DEC-23
Analysis Date: 18-NOV-23
Analyst: JSS
Analysis Method: SW846 8260C SIM
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Vinyl Chloride	U	0.50	ug/L	10	.1	1.0	0.037	0.50
1,1-Dichloroethene	U	0.25	ug/L	10	.05	0.50	0.091	0.25
trans-1,2-Dichloroethene	U	0.25	ug/L	10	.05	0.50	0.033	0.25
cis-1,2-Dichloroethene	U	0.25	ug/L	10	.05	0.50	0.057	0.25
Trichloroethene		5.4	ug/L	10	.05	0.50	0.12	0.25
Tetrachloroethene	U	0.25	ug/L	10	.05	0.50	0.091	0.25
Dibromofluoromethane		112.	%					
1,2-Dichloroethane-d4		112.	%					
Toluene-D8		97.2	%					
p-Bromofluorobenzene		82.9	%					

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Report of Analytical Results

SDG: SQ6179
Lab ID: SQ6179-9
Client ID: SY-OBMW110-110823
Matrix: AQ
Lab File ID: S7237.D

Sample Date: 08-NOV-23
Extract Date: 17-NOV-23
Extracted By: JSS
Extraction Method: SW846 5030C
Lab Prep Batch: WG345597

Report Date: 12-DEC-23
Analysis Date: 17-NOV-23
Analyst: JSS
Analysis Method: SW846 8260C SIM
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Vinyl Chloride	U	0.10	ug/L	1	.1	0.10	0.0037	0.050
1,1-Dichloroethene		0.052	ug/L	1	.05	0.050	0.0091	0.025
trans-1,2-Dichloroethene	U	0.050	ug/L	1	.05	0.050	0.0033	0.025
cis-1,2-Dichloroethene		0.078	ug/L	1	.05	0.050	0.0057	0.025
Trichloroethene	E	5.1	ug/L	1	.05	0.050	0.012	0.025
Tetrachloroethene	U	0.050	ug/L	1	.05	0.050	0.0091	0.025
Dibromofluoromethane		124.	%					
1,2-Dichloroethane-d4		125.	%					
Toluene-D8		85.6	%					
p-Bromofluorobenzene		83.2	%					

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Report of Analytical Results

SDG: SQ6179
Lab ID: SQ6179-9DL
Client ID: SY-OBMW110-110823
Matrix: AQ
Lab File ID: S7262.D

Sample Date: 08-NOV-23
Extract Date: 18-NOV-23
Extracted By: JSS
Extraction Method: SW846 5030C
Lab Prep Batch: WG345675

Report Date: 12-DEC-23
Analysis Date: 18-NOV-23
Analyst: JSS
Analysis Method: SW846 8260C SIM
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Vinyl Chloride	U	0.50	ug/L	10	.1	1.0	0.037	0.50
1,1-Dichloroethene	U	0.25	ug/L	10	.05	0.50	0.091	0.25
trans-1,2-Dichloroethene	U	0.25	ug/L	10	.05	0.50	0.033	0.25
cis-1,2-Dichloroethene	U	0.25	ug/L	10	.05	0.50	0.057	0.25
Trichloroethene		5.0	ug/L	10	.05	0.50	0.12	0.25
Tetrachloroethene	U	0.25	ug/L	10	.05	0.50	0.091	0.25
Dibromofluoromethane		116.	%					
1,2-Dichloroethane-d4		116.	%					
Toluene-D8		98.7	%					
p-Bromofluorobenzene		82.8	%					

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Report of Analytical Results

SDG: SQ6179
Lab ID: SQ6179-10
Client ID: SY-OBMW3-110823
Matrix: AQ
Lab File ID: S7238.D

Sample Date: 08-NOV-23
Extract Date: 17-NOV-23
Extracted By: JSS
Extraction Method: SW846 5030C
Lab Prep Batch: WG345597

Report Date: 12-DEC-23
Analysis Date: 17-NOV-23
Analyst: JSS
Analysis Method: SW846 8260C SIM
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Vinyl Chloride	U	0.050	ug/L	1	.1	0.10	0.0037	0.050
1,1-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0091	0.025
trans-1,2-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0033	0.025
cis-1,2-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0057	0.025
Trichloroethene	U	0.025	ug/L	1	.05	0.050	0.012	0.025
Tetrachloroethene	U	0.025	ug/L	1	.05	0.050	0.0091	0.025
Dibromofluoromethane		124.	%					
1,2-Dichloroethane-d4		121.	%					
Toluene-D8		99.1	%					
p-Bromofluorobenzene		83.0	%					

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ANALYTICAL SERVICES

Report of Analytical Results

SDG: SQ6179
Lab ID: SQ6179-1
Client ID: SY-OBMW2-110823
Matrix: AQ
Lab File ID: V7637.D

Sample Date: 08-NOV-23
Extract Date: 15-NOV-23
Extracted By: NH/CMW
Extraction Method: SW846 3510C
Lab Prep Batch: WG345459

Report Date: 29-DEC-23
Analysis Date: 08-DEC-23
Analyst: EP
Analysis Method: SW846 8270D SIM
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	0.094	ug/L	1	.2	0.19	0.060	0.094
2-Methylnaphthalene	U	0.094	ug/L	1	.2	0.19	0.073	0.094
Acenaphthylene	U	0.094	ug/L	1	.2	0.19	0.051	0.094
Acenaphthene	U	0.094	ug/L	1	.2	0.19	0.060	0.094
Fluorene	U	0.094	ug/L	1	.2	0.19	0.058	0.094
Phenanthrene	U	0.094	ug/L	1	.2	0.19	0.048	0.094
Anthracene	U	0.094	ug/L	1	.2	0.19	0.042	0.094
Fluoranthene	U	0.094	ug/L	1	.2	0.19	0.069	0.094
Pyrene	U	0.094	ug/L	1	.2	0.19	0.056	0.094
Benzo(a)anthracene	U	0.094	ug/L	1	.2	0.19	0.043	0.094
Chrysene	U	0.094	ug/L	1	.2	0.19	0.034	0.094
Benzo(b)Fluoranthene	U	0.094	ug/L	1	.2	0.19	0.084	0.094
Benzo(k)fluoranthene	U	0.094	ug/L	1	.2	0.19	0.046	0.094
Benzo(a)pyrene	U	0.094	ug/L	1	.2	0.19	0.062	0.094
Indeno(1,2,3-cd)pyrene	U	0.094	ug/L	1	.2	0.19	0.049	0.094
Dibenzo(a,h)anthracene	U	0.094	ug/L	1	.2	0.19	0.066	0.094
Benzo(g,h,i)perylene	U	0.094	ug/L	1	.2	0.19	0.061	0.094
2-Methylnaphthalene-D10		48.5	%					
Fluorene-D10		48.8	%					
Pyrene-D10	*	52.1	%					

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Report of Analytical Results

SDG: SQ6179
Lab ID: SQ6179-2
Client ID: SY-OBMW1-110823
Matrix: AQ
Lab File ID: V7638.D

Sample Date: 08-NOV-23
Extract Date: 15-NOV-23
Extracted By: NH/CMW
Extraction Method: SW846 3510C
Lab Prep Batch: WG345459

Report Date: 29-DEC-23
Analysis Date: 08-DEC-23
Analyst: EP
Analysis Method: SW846 8270D SIM
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	0.093	ug/L	1	.2	0.19	0.060	0.093
2-Methylnaphthalene	U	0.093	ug/L	1	.2	0.19	0.072	0.093
Acenaphthylene	U	0.093	ug/L	1	.2	0.19	0.050	0.093
Acenaphthene	U	0.093	ug/L	1	.2	0.19	0.060	0.093
Fluorene	U	0.093	ug/L	1	.2	0.19	0.057	0.093
Phenanthrene	U	0.093	ug/L	1	.2	0.19	0.048	0.093
Anthracene	U	0.093	ug/L	1	.2	0.19	0.041	0.093
Fluoranthene	U	0.093	ug/L	1	.2	0.19	0.068	0.093
Pyrene	U	0.093	ug/L	1	.2	0.19	0.055	0.093
Benzo(a)anthracene	U	0.093	ug/L	1	.2	0.19	0.043	0.093
Chrysene	U	0.093	ug/L	1	.2	0.19	0.034	0.093
Benzo(b)Fluoranthene	U	0.093	ug/L	1	.2	0.19	0.083	0.093
Benzo(k)fluoranthene	U	0.093	ug/L	1	.2	0.19	0.046	0.093
Benzo(a)pyrene	U	0.093	ug/L	1	.2	0.19	0.062	0.093
Indeno(1,2,3-cd)pyrene	U	0.093	ug/L	1	.2	0.19	0.048	0.093
Dibenzo(a,h)anthracene	U	0.093	ug/L	1	.2	0.19	0.065	0.093
Benzo(g,h,i)perylene	U	0.093	ug/L	1	.2	0.19	0.061	0.093
2-Methylnaphthalene-D10	*	99.7	%					
Fluorene-D10		92.7	%					
Pyrene-D10		108.	%					

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Report of Analytical Results

SDG: SQ6179
Lab ID: SQ6179-3
Client ID: SY-OBMW9-110823
Matrix: AQ
Lab File ID: V7639.D

Sample Date: 08-NOV-23
Extract Date: 15-NOV-23
Extracted By: NH/CMW
Extraction Method: SW846 3510C
Lab Prep Batch: WG345459

Report Date: 29-DEC-23
Analysis Date: 08-DEC-23
Analyst: EP
Analysis Method: SW846 8270D SIM
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	0.094	ug/L	1	.2	0.19	0.060	0.094
2-Methylnaphthalene	U	0.094	ug/L	1	.2	0.19	0.073	0.094
Acenaphthylene	U	0.094	ug/L	1	.2	0.19	0.051	0.094
Acenaphthene	U	0.094	ug/L	1	.2	0.19	0.060	0.094
Fluorene	U	0.094	ug/L	1	.2	0.19	0.058	0.094
Phenanthrene	U	0.094	ug/L	1	.2	0.19	0.048	0.094
Anthracene	U	0.094	ug/L	1	.2	0.19	0.042	0.094
Fluoranthene	U	0.094	ug/L	1	.2	0.19	0.069	0.094
Pyrene	U	0.094	ug/L	1	.2	0.19	0.056	0.094
Benzo(a)anthracene	U	0.094	ug/L	1	.2	0.19	0.043	0.094
Chrysene	U	0.094	ug/L	1	.2	0.19	0.034	0.094
Benzo(b)Fluoranthene	U	0.094	ug/L	1	.2	0.19	0.084	0.094
Benzo(k)fluoranthene	U	0.094	ug/L	1	.2	0.19	0.046	0.094
Benzo(a)pyrene	U	0.094	ug/L	1	.2	0.19	0.062	0.094
Indeno(1,2,3-cd)pyrene	U	0.094	ug/L	1	.2	0.19	0.049	0.094
Dibenzo(a,h)anthracene	U	0.094	ug/L	1	.2	0.19	0.066	0.094
Benzo(g,h,i)perylene	U	0.094	ug/L	1	.2	0.19	0.061	0.094
2-Methylnaphthalene-D10		84.5	%					
Fluorene-D10		81.6	%					
Pyrene-D10		96.2	%					

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Report of Analytical Results

SDG: SQ6179
Lab ID: SQ6179-4
Client ID: SY-BRMW5-29-44-110823
Matrix: AQ
Lab File ID: V7640.D

Sample Date: 08-NOV-23
Extract Date: 15-NOV-23
Extracted By: NH/CMW
Extraction Method: SW846 3510C
Lab Prep Batch: WG345459

Report Date: 29-DEC-23
Analysis Date: 08-DEC-23
Analyst: EP
Analysis Method: SW846 8270D SIM
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	0.093	ug/L	1	.2	0.19	0.060	0.093
2-Methylnaphthalene	U	0.093	ug/L	1	.2	0.19	0.072	0.093
Acenaphthylene	U	0.093	ug/L	1	.2	0.19	0.050	0.093
Acenaphthene	U	0.093	ug/L	1	.2	0.19	0.060	0.093
Fluorene	U	0.093	ug/L	1	.2	0.19	0.057	0.093
Phenanthrene	U	0.093	ug/L	1	.2	0.19	0.048	0.093
Anthracene	U	0.093	ug/L	1	.2	0.19	0.041	0.093
Fluoranthene	U	0.093	ug/L	1	.2	0.19	0.068	0.093
Pyrene	U	0.093	ug/L	1	.2	0.19	0.055	0.093
Benzo(a)anthracene	U	0.093	ug/L	1	.2	0.19	0.043	0.093
Chrysene	U	0.093	ug/L	1	.2	0.19	0.034	0.093
Benzo(b)Fluoranthene	U	0.093	ug/L	1	.2	0.19	0.083	0.093
Benzo(k)fluoranthene	U	0.093	ug/L	1	.2	0.19	0.046	0.093
Benzo(a)pyrene	U	0.093	ug/L	1	.2	0.19	0.062	0.093
Indeno(1,2,3-cd)pyrene	U	0.093	ug/L	1	.2	0.19	0.048	0.093
Dibenzo(a,h)anthracene	U	0.093	ug/L	1	.2	0.19	0.065	0.093
Benzo(g,h,i)perylene	U	0.093	ug/L	1	.2	0.19	0.061	0.093
2-Methylnaphthalene-D10		47.8	%					
Fluorene-D10		46.3	%					
Pyrene-D10	*	50.1	%					

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Report of Analytical Results

SDG: SQ6179
Lab ID: SQ6179-5
Client ID: SY-BRMW5-56-66-110823
Matrix: AQ
Lab File ID: V7641.D

Sample Date: 08-NOV-23
Extract Date: 15-NOV-23
Extracted By: NH/CMW
Extraction Method: SW846 3510C
Lab Prep Batch: WG345459

Report Date: 29-DEC-23
Analysis Date: 08-DEC-23
Analyst: EP
Analysis Method: SW846 8270D SIM
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	0.093	ug/L	1	.2	0.19	0.060	0.093
2-Methylnaphthalene	U	0.093	ug/L	1	.2	0.19	0.072	0.093
Acenaphthylene	U	0.093	ug/L	1	.2	0.19	0.050	0.093
Acenaphthene	U	0.093	ug/L	1	.2	0.19	0.060	0.093
Fluorene	U	0.093	ug/L	1	.2	0.19	0.057	0.093
Phenanthrene	U	0.093	ug/L	1	.2	0.19	0.048	0.093
Anthracene	U	0.093	ug/L	1	.2	0.19	0.041	0.093
Fluoranthene	U	0.093	ug/L	1	.2	0.19	0.068	0.093
Pyrene	U	0.093	ug/L	1	.2	0.19	0.055	0.093
Benzo(a)anthracene	U	0.093	ug/L	1	.2	0.19	0.043	0.093
Chrysene	U	0.093	ug/L	1	.2	0.19	0.034	0.093
Benzo(b)Fluoranthene	U	0.093	ug/L	1	.2	0.19	0.083	0.093
Benzo(k)fluoranthene	U	0.093	ug/L	1	.2	0.19	0.046	0.093
Benzo(a)pyrene	U	0.093	ug/L	1	.2	0.19	0.062	0.093
Indeno(1,2,3-cd)pyrene	U	0.093	ug/L	1	.2	0.19	0.048	0.093
Dibenzo(a,h)anthracene	U	0.093	ug/L	1	.2	0.19	0.065	0.093
Benzo(g,h,i)perylene	U	0.093	ug/L	1	.2	0.19	0.061	0.093
2-Methylnaphthalene-D10		69.3	%					
Fluorene-D10		67.6	%					
Pyrene-D10		64.2	%					

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Report of Analytical Results

SDG: SQ6179
Lab ID: SQ6179-6
Client ID: SY-BRMW5-123-133-110823
Matrix: AQ
Lab File ID: V7642.D

Sample Date: 08-NOV-23
Extract Date: 15-NOV-23
Extracted By: NH/CMW
Extraction Method: SW846 3510C
Lab Prep Batch: WG345459

Report Date: 29-DEC-23
Analysis Date: 08-DEC-23
Analyst: EP
Analysis Method: SW846 8270D SIM
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	0.093	ug/L	1	.2	0.19	0.060	0.093
2-Methylnaphthalene	U	0.093	ug/L	1	.2	0.19	0.072	0.093
Acenaphthylene	U	0.093	ug/L	1	.2	0.19	0.050	0.093
Acenaphthene	U	0.093	ug/L	1	.2	0.19	0.060	0.093
Fluorene	U	0.093	ug/L	1	.2	0.19	0.057	0.093
Phenanthrene	U	0.093	ug/L	1	.2	0.19	0.048	0.093
Anthracene	U	0.093	ug/L	1	.2	0.19	0.041	0.093
Fluoranthene	U	0.093	ug/L	1	.2	0.19	0.068	0.093
Pyrene	U	0.093	ug/L	1	.2	0.19	0.055	0.093
Benzo(a)anthracene	U	0.093	ug/L	1	.2	0.19	0.043	0.093
Chrysene	U	0.093	ug/L	1	.2	0.19	0.034	0.093
Benzo(b)Fluoranthene	U	0.093	ug/L	1	.2	0.19	0.083	0.093
Benzo(k)fluoranthene	U	0.093	ug/L	1	.2	0.19	0.046	0.093
Benzo(a)pyrene	U	0.093	ug/L	1	.2	0.19	0.062	0.093
Indeno(1,2,3-cd)pyrene	U	0.093	ug/L	1	.2	0.19	0.048	0.093
Dibenzo(a,h)anthracene	U	0.093	ug/L	1	.2	0.19	0.065	0.093
Benzo(g,h,i)perylene	U	0.093	ug/L	1	.2	0.19	0.061	0.093
2-Methylnaphthalene-D10	*	95.6	%					
Fluorene-D10		92.0	%					
Pyrene-D10		106.	%					

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Report of Analytical Results

SDG: SQ6179
Lab ID: SQ6179-7
Client ID: SY-OBMW8-110823
Matrix: AQ
Lab File ID: V7643.D

Sample Date: 08-NOV-23
Extract Date: 15-NOV-23
Extracted By: NH/CMW
Extraction Method: SW846 3510C
Lab Prep Batch: WG345459

Report Date: 29-DEC-23
Analysis Date: 08-DEC-23
Analyst: EP
Analysis Method: SW846 8270D SIM
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	0.093	ug/L	1	.2	0.19	0.060	0.093
2-Methylnaphthalene	U	0.093	ug/L	1	.2	0.19	0.072	0.093
Acenaphthylene	U	0.093	ug/L	1	.2	0.19	0.050	0.093
Acenaphthene	U	0.093	ug/L	1	.2	0.19	0.060	0.093
Fluorene	U	0.093	ug/L	1	.2	0.19	0.057	0.093
Phenanthrene	U	0.093	ug/L	1	.2	0.19	0.048	0.093
Anthracene	U	0.093	ug/L	1	.2	0.19	0.041	0.093
Fluoranthene	U	0.093	ug/L	1	.2	0.19	0.068	0.093
Pyrene	U	0.093	ug/L	1	.2	0.19	0.055	0.093
Benzo(a)anthracene	U	0.093	ug/L	1	.2	0.19	0.043	0.093
Chrysene	U	0.093	ug/L	1	.2	0.19	0.034	0.093
Benzo(b)Fluoranthene	U	0.093	ug/L	1	.2	0.19	0.083	0.093
Benzo(k)fluoranthene	U	0.093	ug/L	1	.2	0.19	0.046	0.093
Benzo(a)pyrene	U	0.093	ug/L	1	.2	0.19	0.062	0.093
Indeno(1,2,3-cd)pyrene	U	0.093	ug/L	1	.2	0.19	0.048	0.093
Dibenzo(a,h)anthracene	U	0.093	ug/L	1	.2	0.19	0.065	0.093
Benzo(g,h,i)perylene	U	0.093	ug/L	1	.2	0.19	0.061	0.093
2-Methylnaphthalene-D10		91.4	%					
Fluorene-D10		87.3	%					
Pyrene-D10		92.2	%					

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Report of Analytical Results

SDG: SQ6179
Lab ID: SQ6179-8
Client ID: SY-OBMW11-110823
Matrix: AQ
Lab File ID: V7644.D

Sample Date: 08-NOV-23
Extract Date: 15-NOV-23
Extracted By: NH/CMW
Extraction Method: SW846 3510C
Lab Prep Batch: WG345459

Report Date: 29-DEC-23
Analysis Date: 08-DEC-23
Analyst: EP
Analysis Method: SW846 8270D SIM
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	0.093	ug/L	1	.2	0.19	0.060	0.093
2-Methylnaphthalene	U	0.093	ug/L	1	.2	0.19	0.072	0.093
Acenaphthylene	U	0.093	ug/L	1	.2	0.19	0.050	0.093
Acenaphthene	U	0.093	ug/L	1	.2	0.19	0.060	0.093
Fluorene	U	0.093	ug/L	1	.2	0.19	0.057	0.093
Phenanthrene	U	0.093	ug/L	1	.2	0.19	0.048	0.093
Anthracene	U	0.093	ug/L	1	.2	0.19	0.041	0.093
Fluoranthene	U	0.093	ug/L	1	.2	0.19	0.068	0.093
Pyrene	U	0.093	ug/L	1	.2	0.19	0.055	0.093
Benzo(a)anthracene	U	0.093	ug/L	1	.2	0.19	0.043	0.093
Chrysene	U	0.093	ug/L	1	.2	0.19	0.034	0.093
Benzo(b)Fluoranthene	U	0.093	ug/L	1	.2	0.19	0.083	0.093
Benzo(k)fluoranthene	U	0.093	ug/L	1	.2	0.19	0.046	0.093
Benzo(a)pyrene	U	0.093	ug/L	1	.2	0.19	0.062	0.093
Indeno(1,2,3-cd)pyrene	U	0.093	ug/L	1	.2	0.19	0.048	0.093
Dibenzo(a,h)anthracene	U	0.093	ug/L	1	.2	0.19	0.065	0.093
Benzo(g,h,i)perylene	U	0.093	ug/L	1	.2	0.19	0.061	0.093
2-Methylnaphthalene-D10	*	95.6	%					
Fluorene-D10		92.3	%					
Pyrene-D10		107.	%					

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Report of Analytical Results

SDG: SQ6179
Lab ID: SQ6179-9
Client ID: SY-OBMW110-110823
Matrix: AQ
Lab File ID: V7645.D

Sample Date: 08-NOV-23
Extract Date: 15-NOV-23
Extracted By: NH/CMW
Extraction Method: SW846 3510C
Lab Prep Batch: WG345459

Report Date: 29-DEC-23
Analysis Date: 08-DEC-23
Analyst: EP
Analysis Method: SW846 8270D SIM
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	0.093	ug/L	1	.2	0.19	0.060	0.093
2-Methylnaphthalene	U	0.093	ug/L	1	.2	0.19	0.072	0.093
Acenaphthylene	U	0.093	ug/L	1	.2	0.19	0.050	0.093
Acenaphthene	U	0.093	ug/L	1	.2	0.19	0.060	0.093
Fluorene	U	0.093	ug/L	1	.2	0.19	0.057	0.093
Phenanthrene	U	0.093	ug/L	1	.2	0.19	0.048	0.093
Anthracene	U	0.093	ug/L	1	.2	0.19	0.041	0.093
Fluoranthene	U	0.093	ug/L	1	.2	0.19	0.068	0.093
Pyrene	U	0.093	ug/L	1	.2	0.19	0.055	0.093
Benzo(a)anthracene	U	0.093	ug/L	1	.2	0.19	0.043	0.093
Chrysene	U	0.093	ug/L	1	.2	0.19	0.034	0.093
Benzo(b)Fluoranthene	U	0.093	ug/L	1	.2	0.19	0.083	0.093
Benzo(k)fluoranthene	U	0.093	ug/L	1	.2	0.19	0.046	0.093
Benzo(a)pyrene	U	0.093	ug/L	1	.2	0.19	0.062	0.093
Indeno(1,2,3-cd)pyrene	U	0.093	ug/L	1	.2	0.19	0.048	0.093
Dibenzo(a,h)anthracene	U	0.093	ug/L	1	.2	0.19	0.065	0.093
Benzo(g,h,i)perylene	U	0.093	ug/L	1	.2	0.19	0.061	0.093
2-Methylnaphthalene-D10		79.7	%					
Fluorene-D10		76.7	%					
Pyrene-D10		86.1	%					

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Report of Analytical Results

SDG: SQ6179
Lab ID: SQ6179-10
Client ID: SY-OBMW3-110823
Matrix: AQ
Lab File ID: V7646.D

Sample Date: 08-NOV-23
Extract Date: 15-NOV-23
Extracted By: NH/CMW
Extraction Method: SW846 3510C
Lab Prep Batch: WG345459

Report Date: 29-DEC-23
Analysis Date: 08-DEC-23
Analyst: EP
Analysis Method: SW846 8270D SIM
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	0.094	ug/L	1	.2	0.19	0.060	0.094
2-Methylnaphthalene	U	0.094	ug/L	1	.2	0.19	0.073	0.094
Acenaphthylene	U	0.094	ug/L	1	.2	0.19	0.051	0.094
Acenaphthene	U	0.094	ug/L	1	.2	0.19	0.060	0.094
Fluorene	U	0.094	ug/L	1	.2	0.19	0.058	0.094
Phenanthrene	U	0.094	ug/L	1	.2	0.19	0.048	0.094
Anthracene	U	0.094	ug/L	1	.2	0.19	0.042	0.094
Fluoranthene	U	0.094	ug/L	1	.2	0.19	0.069	0.094
Pyrene	U	0.094	ug/L	1	.2	0.19	0.056	0.094
Benzo(a)anthracene	U	0.094	ug/L	1	.2	0.19	0.043	0.094
Chrysene	U	0.094	ug/L	1	.2	0.19	0.034	0.094
Benzo(b)Fluoranthene	U	0.094	ug/L	1	.2	0.19	0.084	0.094
Benzo(k)fluoranthene	U	0.094	ug/L	1	.2	0.19	0.046	0.094
Benzo(a)pyrene	U	0.094	ug/L	1	.2	0.19	0.062	0.094
Indeno(1,2,3-cd)pyrene	U	0.094	ug/L	1	.2	0.19	0.049	0.094
Dibenzo(a,h)anthracene	U	0.094	ug/L	1	.2	0.19	0.066	0.094
Benzo(g,h,i)perylene	U	0.094	ug/L	1	.2	0.19	0.061	0.094
2-Methylnaphthalene-D10		75.1	%					
Fluorene-D10		70.8	%					
Pyrene-D10		73.0	%					

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Report of Analytical Results

SDG: SQ6179
Lab ID: SQ6179-1
Client ID: SY-OBMW2-110823
Matrix: AQ
Lab File ID: 5QK20262.D

Sample Date: 08-NOV-23
Extract Date: 17-NOV-23
Extracted By: DL/SH
Extraction Method: RSK SOP 175
Lab Prep Batch: WG345654

Report Date: 01-DEC-23
Analysis Date: 17-NOV-23
Analyst: DL/SH
Analysis Method: RSK SOP 175 v.2
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Methane	J	3.8	ug/L	1	10.3	10.	2.6	5.2
Ethane	U	9.8	ug/L	1	13.1	13.	5.0	9.8
Ethene	U	9.8	ug/L	1	13.1	13.	5.0	9.8

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Report of Analytical Results

SDG: SQ6179
Lab ID: SQ6179-2
Client ID: SY-OBMW1-110823
Matrix: AQ
Lab File ID: 5QK20264.D

Sample Date: 08-NOV-23
Extract Date: 17-NOV-23
Extracted By: DL/SH
Extraction Method: RSK SOP 175
Lab Prep Batch: WG345654

Report Date: 01-DEC-23
Analysis Date: 17-NOV-23
Analyst: DL/SH
Analysis Method: RSK SOP 175 v.2
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Methane	J	5.5	ug/L	1	10.3	10.	2.6	5.2
Ethane	U	9.8	ug/L	1	13.1	13.	5.0	9.8
Ethene	U	9.8	ug/L	1	13.1	13.	5.0	9.8

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Report of Analytical Results

SDG: SQ6179
Lab ID: SQ6179-3
Client ID: SY-OBMW9-110823
Matrix: AQ
Lab File ID: 5QK20265.D

Sample Date: 08-NOV-23
Extract Date: 17-NOV-23
Extracted By: DL/SH
Extraction Method: RSK SOP 175
Lab Prep Batch: WG345654

Report Date: 01-DEC-23
Analysis Date: 17-NOV-23
Analyst: DL/SH
Analysis Method: RSK SOP 175 v.2
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Methane		24	ug/L	1	10.3	10.	2.6	5.2
Ethane	U	9.8	ug/L	1	13.1	13.	5.0	9.8
Ethene	U	9.8	ug/L	1	13.1	13.	5.0	9.8

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Report of Analytical Results

SDG: SQ6179
Lab ID: SQ6179-4
Client ID: SY-BRMW5-29-44-110823
Matrix: AQ
Lab File ID: 5QK20266.D

Sample Date: 08-NOV-23
Extract Date: 17-NOV-23
Extracted By: DL/SH
Extraction Method: RSK SOP 175
Lab Prep Batch: WG345654

Report Date: 01-DEC-23
Analysis Date: 17-NOV-23
Analyst: DL/SH
Analysis Method: RSK SOP 175 v.2
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Methane	U	5.2	ug/L	1	10.3	10.	2.6	5.2
Ethane	U	9.8	ug/L	1	13.1	13.	5.0	9.8
Ethene	U	9.8	ug/L	1	13.1	13.	5.0	9.8

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Report of Analytical Results

SDG: SQ6179
Lab ID: SQ6179-5
Client ID: SY-BRMW5-56-66-110823
Matrix: AQ
Lab File ID: 5QK20267.D

Sample Date: 08-NOV-23
Extract Date: 17-NOV-23
Extracted By: DL/SH
Extraction Method: RSK SOP 175
Lab Prep Batch: WG345654

Report Date: 01-DEC-23
Analysis Date: 17-NOV-23
Analyst: DL/SH
Analysis Method: RSK SOP 175 v.2
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Methane	J	3.7	ug/L	1	10.3	10.	2.6	5.2
Ethane	U	9.8	ug/L	1	13.1	13.	5.0	9.8
Ethene	U	9.8	ug/L	1	13.1	13.	5.0	9.8

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Report of Analytical Results

SDG: SQ6179
Lab ID: SQ6179-6
Client ID: SY-BRMW5-123-133-110823
Matrix: AQ
Lab File ID: 5QK20268.D

Sample Date: 08-NOV-23
Extract Date: 17-NOV-23
Extracted By: DL/SH
Extraction Method: RSK SOP 175
Lab Prep Batch: WG345654

Report Date: 01-DEC-23
Analysis Date: 17-NOV-23
Analyst: DL/SH
Analysis Method: RSK SOP 175 v.2
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Methane	U	5.2	ug/L	1	10.3	10.	2.6	5.2
Ethane	U	9.8	ug/L	1	13.1	13.	5.0	9.8
Ethene	U	9.8	ug/L	1	13.1	13.	5.0	9.8

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Report of Analytical Results

SDG: SQ6179
Lab ID: SQ6179-7
Client ID: SY-OBMW8-110823
Matrix: AQ
Lab File ID: 5QK20269.D

Sample Date: 08-NOV-23
Extract Date: 17-NOV-23
Extracted By: DL/SH
Extraction Method: RSK SOP 175
Lab Prep Batch: WG345654

Report Date: 01-DEC-23
Analysis Date: 17-NOV-23
Analyst: DL/SH
Analysis Method: RSK SOP 175 v.2
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Methane	J	6.6	ug/L	1	10.3	10.	2.6	5.2
Ethane	U	9.8	ug/L	1	13.1	13.	5.0	9.8
Ethene	U	9.8	ug/L	1	13.1	13.	5.0	9.8

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Report of Analytical Results

SDG: SQ6179
Lab ID: SQ6179-8
Client ID: SY-OBMW11-110823
Matrix: AQ
Lab File ID: 5QK20270.D

Sample Date: 08-NOV-23
Extract Date: 17-NOV-23
Extracted By: DL/SH
Extraction Method: RSK SOP 175
Lab Prep Batch: WG345654

Report Date: 01-DEC-23
Analysis Date: 17-NOV-23
Analyst: DL/SH
Analysis Method: RSK SOP 175 v.2
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Methane	J	5.3	ug/L	1	10.3	10.	2.6	5.2
Ethane	U	9.8	ug/L	1	13.1	13.	5.0	9.8
Ethene	U	9.8	ug/L	1	13.1	13.	5.0	9.8

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Report of Analytical Results

SDG: SQ6179
Lab ID: SQ6179-9
Client ID: SY-OBMW110-110823
Matrix: AQ
Lab File ID: 5QK20271.D

Sample Date: 08-NOV-23
Extract Date: 17-NOV-23
Extracted By: DL/SH
Extraction Method: RSK SOP 175
Lab Prep Batch: WG345654

Report Date: 01-DEC-23
Analysis Date: 17-NOV-23
Analyst: DL/SH
Analysis Method: RSK SOP 175 v.2
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Methane	J	5.8	ug/L	1	10.3	10.	2.6	5.2
Ethane	U	9.8	ug/L	1	13.1	13.	5.0	9.8
Ethene	U	9.8	ug/L	1	13.1	13.	5.0	9.8

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SDG: SQ6179
Lab ID: SQ6179-10
Client ID: SY-OBMW3-110823
Matrix: AQ
Lab File ID: 5QK20273.D

Sample Date: 08-NOV-23
Extract Date: 17-NOV-23
Extracted By: DL/SH
Extraction Method: RSK SOP 175
Lab Prep Batch: WG345654

Report Date: 01-DEC-23
Analysis Date: 17-NOV-23
Analyst: DL/SH
Analysis Method: RSK SOP 175 v.2
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Methane	J	3.2	ug/L	1	10.3	10.	2.6	5.2
Ethane	U	9.8	ug/L	1	13.1	13.	5.0	9.8
Ethene	U	9.8	ug/L	1	13.1	13.	5.0	9.8

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Report of Analytical Results

Lab Sample ID: SQ6179-1
Client ID: SY-OBMW2-110823
SDG: SQ6179
Report Date: 13-DEC-23

Matrix	Date Sampled	Date Received
AQ	08-NOV-23 09:05	09-NOV-23

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Alkalinity	150 mg/L	5.0	0.23	4.0	SM2320B	WG345462	14-NOV-23 15:24	N/A	N/A	
Chloride	110 mg/L	10.	0.50	5.0	EPA 300.0	WG346307	30-NOV-23 23:22	N/A	N/A	
Chromium, Hexavalent	U0.012 mg/L	0.025	0.00076	0.012	SW846 7196A	WG345136	09-NOV-23 09:46	N/A	N/A	
Ferrous Iron	U0.050 mg/L	0.10	0.026	0.050	SM3500D	WG345126	09-NOV-23 09:47	N/A	N/A	
Nitrate as N	0.19 mg/L	0.050	0.017	0.025	EPA 300.0	WG345207	09-NOV-23 17:41	N/A	N/A	
Sulfate	8.5 mg/L	1.0	0.064	0.50	EPA 300.0	WG345207	09-NOV-23 17:41	N/A	N/A	
Total Organic Carbon	U0.75 mg/L	1.0	0.37	0.75	SM5310B	WG346585	06-DEC-23 17:12	N/A	N/A	

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Report of Analytical Results

Lab Sample ID: SQ6179-2
Client ID: SY-OBMW1-110823
SDG: SQ6179
Report Date: 13-DEC-23

Matrix	Date Sampled	Date Received
AQ	08-NOV-23 09:35	09-NOV-23

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Alkalinity	190 mg/L	5.0	0.23	4.0	SM2320B	WG345462	14-NOV-23 15:28	N/A	N/A	
Chloride	8.0 mg/L	2.0	0.099	1.0	EPA 300.0	WG345207	09-NOV-23 17:59	N/A	N/A	
Chromium, Hexavalent	U0.012 mg/L	0.025	0.00076	0.012	SW846 7196A	WG345136	09-NOV-23 09:46	N/A	N/A	
Ferrous Iron	U0.050 mg/L	0.10	0.026	0.050	SM3500D	WG345126	09-NOV-23 09:47	N/A	N/A	
Nitrate as N	U0.025 mg/L	0.050	0.017	0.025	EPA 300.0	WG345207	09-NOV-23 17:59	N/A	N/A	
Sulfate	5.9 mg/L	1.0	0.064	0.50	EPA 300.0	WG345207	09-NOV-23 17:59	N/A	N/A	
Total Organic Carbon	1.5 mg/L	1.0	0.37	0.75	SM5310B	WG346585	06-DEC-23 17:42	N/A	N/A	

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Report of Analytical Results

Lab Sample ID: SQ6179-3
Client ID: SY-OBMW9-110823
SDG: SQ6179
Report Date: 13-DEC-23

Matrix	Date Sampled	Date Received
AQ	08-NOV-23 10:16	09-NOV-23

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Alkalinity	310 mg/L	5.0	0.23	4.0	SM2320B	WG345462	14-NOV-23 15:32	N/A	N/A	
Chloride	100 mg/L	10.	0.50	5.0	EPA 300.0	WG346307	01-DEC-23 00:14	N/A	N/A	
Chromium, Hexavalent	U0.012 mg/L	0.025	0.00076	0.012	SW846 7196A	WG345136	09-NOV-23 09:46	N/A	N/A	
Ferrous Iron	J0.056 mg/L	0.10	0.026	0.050	SM3500D	WG345126	09-NOV-23 09:47	N/A	N/A	
Nitrate as N	U0.025 mg/L	0.050	0.017	0.025	EPA 300.0	WG345207	09-NOV-23 18:16	N/A	N/A	
Sulfate	49 mg/L	1.0	0.064	0.50	EPA 300.0	WG345207	09-NOV-23 18:16	N/A	N/A	
Total Organic Carbon	2.0 mg/L	1.0	0.37	0.75	SM5310B	WG346585	06-DEC-23 18:09	N/A	N/A	

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Report of Analytical Results

Lab Sample ID: SQ6179-4
Client ID: SY-BRMW5-29-44-110823
SDG: SQ6179
Report Date: 13-DEC-23

Matrix	Date Sampled	Date Received
AQ	08-NOV-23 11:00	09-NOV-23

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Alkalinity	190 mg/L	5.0	0.23	4.0	SM2320B	WG345462	14-NOV-23 15:37	N/A	N/A	
Chloride	620 mg/L	40.	2.0	20.	EPA 300.0	WG346307	01-DEC-23 00:31	N/A	N/A	
Chromium, Hexavalent	U0.012 mg/L	0.025	0.00076	0.012	SW846 7196A	WG345136	09-NOV-23 09:46	N/A	N/A	
Ferrous Iron	0.20 mg/L	0.10	0.026	0.050	SM3500D	WG345126	09-NOV-23 09:47	N/A	N/A	
Nitrate as N	0.55 mg/L	0.050	0.017	0.025	EPA 300.0	WG345207	09-NOV-23 18:33	N/A	N/A	
Sulfate	120 mg/L	2.0	0.13	1.0	EPA 300.0	WG346307	01-DEC-23 00:48	N/A	N/A	
Total Organic Carbon	2.7 mg/L	1.0	0.37	0.75	SM5310B	WG346585	06-DEC-23 18:49	N/A	N/A	

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Report of Analytical Results

Lab Sample ID: SQ6179-5
Client ID: SY-BRMW5-56-66-110823
SDG: SQ6179
Report Date: 13-DEC-23

Matrix	Date Sampled	Date Received
AQ	08-NOV-23 11:15	09-NOV-23

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Alkalinity	150 mg/L	5.0	0.23	4.0	SM2320B	WG345462	14-NOV-23 15:41	N/A	N/A	
Chloride	410 mg/L	40.	2.0	20.	EPA 300.0	WG346307	01-DEC-23 01:06	N/A	N/A	
Chromium, Hexavalent	U0.012 mg/L	0.025	0.00076	0.012	SW846 7196A	WG345136	09-NOV-23 09:46	N/A	N/A	
Ferrous Iron	U0.050 mg/L	0.10	0.026	0.050	SM3500D	WG345126	09-NOV-23 09:47	N/A	N/A	
Nitrate as N	0.30 mg/L	0.050	0.017	0.025	EPA 300.0	WG345207	09-NOV-23 18:51	N/A	N/A	
Sulfate	160 mg/L	5.0	0.32	2.5	EPA 300.0	WG346307	01-DEC-23 01:23	N/A	N/A	
Total Organic Carbon	1.1 mg/L	1.0	0.37	0.75	SM5310B	WG346585	06-DEC-23 19:06	N/A	N/A	

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Report of Analytical Results

Lab Sample ID: SQ6179-6
Client ID: SY-BRMW5-123-133-110823
SDG: SQ6179
Report Date: 13-DEC-23

Matrix	Date Sampled	Date Received
AQ	08-NOV-23 11:40	09-NOV-23

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Alkalinity	140 mg/L	5.0	0.23	4.0	SM2320B	WG345462	14-NOV-23 15:45	N/A	N/A	
Chloride	370 mg/L	20.	0.99	10.	EPA 300.0	WG346307	01-DEC-23 01:40	N/A	N/A	
Chromium, Hexavalent	U0.012 mg/L	0.025	0.00076	0.012	SW846 7196A	WG345136	09-NOV-23 09:46	N/A	N/A	
Ferrous Iron	U0.050 mg/L	0.10	0.026	0.050	SM3500D	WG345126	09-NOV-23 09:47	N/A	N/A	
Nitrate as N	0.35 mg/L	0.050	0.017	0.025	EPA 300.0	WG345207	09-NOV-23 19:08	N/A	N/A	
Sulfate	74 mg/L	1.0	0.064	0.50	EPA 300.0	WG345207	09-NOV-23 19:08	N/A	N/A	
Total Organic Carbon	2.8 mg/L	1.0	0.37	0.75	SM5310B	WG346585	06-DEC-23 19:47	N/A	N/A	

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Report of Analytical Results

Lab Sample ID: SQ6179-7
Client ID: SY-OBMW8-110823
SDG: SQ6179
Report Date: 13-DEC-23

Matrix	Date Sampled	Date Received
AQ	08-NOV-23 12:50	09-NOV-23

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Alkalinity	160 mg/L	5.0	0.23	4.0	SM2320B	WG345462	14-NOV-23 15:49	N/A	N/A	
Chloride	9.5 mg/L	2.0	0.099	1.0	EPA 300.0	WG345207	09-NOV-23 19:25	N/A	N/A	
Chromium, Hexavalent	U0.012 mg/L	0.025	0.00076	0.012	SW846 7196A	WG345136	09-NOV-23 09:46	N/A	N/A	
Ferrous Iron	U0.050 mg/L	0.10	0.026	0.050	SM3500D	WG345126	09-NOV-23 09:47	N/A	N/A	
Nitrate as N	U0.025 mg/L	0.050	0.017	0.025	EPA 300.0	WG345207	09-NOV-23 19:25	N/A	N/A	
Sulfate	8.7 mg/L	1.0	0.064	0.50	EPA 300.0	WG345207	09-NOV-23 19:25	N/A	N/A	
Total Organic Carbon	1.1 mg/L	1.0	0.37	0.75	SM5310B	WG346585	06-DEC-23 19:58	N/A	N/A	

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Report of Analytical Results

Lab Sample ID: SQ6179-8
Client ID: SY-OBMW11-110823
SDG: SQ6179
Report Date: 13-DEC-23

Matrix	Date Sampled	Date Received
AQ	08-NOV-23 14:17	09-NOV-23

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Alkalinity	200 mg/L	5.0	0.23	4.0	SM2320B	WG345462	14-NOV-23 15:53	N/A	N/A	
Chloride	650 mg/L	40.	2.0	20.	EPA 300.0	WG346307	01-DEC-23 02:32	N/A	N/A	
Chromium, Hexavalent	U0.012 mg/L	0.025	0.00076	0.012	SW846 7196A	WG345136	09-NOV-23 09:52	N/A	N/A	
Ferrous Iron	J0.037 mg/L	0.10	0.026	0.050	SM3500D	WG345126	09-NOV-23 09:47	N/A	N/A	
Nitrate as N	1.8 mg/L	0.050	0.017	0.025	EPA 300.0	WG345207	09-NOV-23 19:42	N/A	N/A	
Sulfate	200 mg/L	5.0	0.32	2.5	EPA 300.0	WG346307	01-DEC-23 02:49	N/A	N/A	
Total Organic Carbon	1.6 mg/L	1.0	0.37	0.75	SM5310B	WG346585	06-DEC-23 20:13	N/A	N/A	

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Report of Analytical Results

Lab Sample ID: SQ6179-9
Client ID: SY-OBMW110-110823
SDG: SQ6179
Report Date: 13-DEC-23

Matrix	Date Sampled	Date Received
AQ	08-NOV-23 14:22	09-NOV-23

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Alkalinity	200 mg/L	5.0	0.23	4.0	SM2320B	WG345462	14-NOV-23 15:57	N/A	N/A	
Chloride	650 mg/L	40.	2.0	20.	EPA 300.0	WG346307	01-DEC-23 03:58	N/A	N/A	
Chromium, Hexavalent	U0.012 mg/L	0.025	0.00076	0.012	SW846 7196A	WG345136	09-NOV-23 09:52	N/A	N/A	
Ferrous Iron	J0.056 mg/L	0.10	0.026	0.050	SM3500D	WG345126	09-NOV-23 09:47	N/A	N/A	
Nitrate as N	1.8 mg/L	0.050	0.017	0.025	EPA 300.0	WG345207	09-NOV-23 20:00	N/A	N/A	
Sulfate	200 mg/L	5.0	0.32	2.5	EPA 300.0	WG346307	01-DEC-23 04:16	N/A	N/A	
Total Organic Carbon	1.5 mg/L	1.0	0.37	0.75	SM5310B	WG346585	06-DEC-23 20:25	N/A	N/A	

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Report of Analytical Results

Lab Sample ID: SQ6179-10
Client ID: SY-OBMW3-110823
SDG: SQ6179
Report Date: 13-DEC-23

Matrix	Date Sampled	Date Received
AQ	08-NOV-23 11:15	09-NOV-23

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Alkalinity	160 mg/L	5.0	0.23	4.0	SM2320B	WG345462	14-NOV-23 16:12	N/A	N/A	
Chloride	21 mg/L	2.0	0.099	1.0	EPA 300.0	WG345207	09-NOV-23 20:51	N/A	N/A	
Chromium, Hexavalent	U0.012 mg/L	0.025	0.00076	0.012	SW846 7196A	WG345136	09-NOV-23 09:46	N/A	N/A	
Ferrous Iron	U0.050 mg/L	0.10	0.026	0.050	SM3500D	WG345126	09-NOV-23 09:47	N/A	N/A	
Nitrate as N	J0.022 mg/L	0.050	0.017	0.025	EPA 300.0	WG345207	09-NOV-23 20:51	N/A	N/A	
Sulfate	11 mg/L	1.0	0.064	0.50	EPA 300.0	WG345207	09-NOV-23 20:51	N/A	N/A	
Total Organic Carbon	J0.88 mg/L	1.0	0.37	0.75	SM5310B	WG346585	06-DEC-23 20:37	N/A	N/A	

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SIM VOLATILES DATA

QC Summary Section

Form 2
System Monitoring Compound Recovery

Lab Name: Katahdin Analytical Services **SDG:** SQ6179 **Matrix:** AQ

Client Sample ID	Lab Sample ID	Col. ID	BFB #	DBF #	DCA #	TOL #
SY-OBMW2-110823	SQ6179-1		81.7	116.	114.	100.
SY-OBMW1-110823	SQ6179-2		82.0	119.	120.	100.
SY-OBMW9-110823	SQ6179-3		82.9	123.	120.	101.
SY-BRMW5-29-44-110823	SQ6179-4		78.4	117.	115.	99.5
SY-BRMW5-56-66-110823	SQ6179-5		83.3	123.	124.	100.
SY-BRMW5-123-133-1108	SQ6179-6		80.4	112.	114.	93.4
SY-OBMW8-110823	SQ6179-7		84.2	124.	121.	98.0
SY-OBMW11-110823	SQ6179-8		83.6	124.	124.	82.8
SY-OBMW11-110823	SQ6179-8DL		82.9	112.	112.	97.2
SY-OBMW110-110823	SQ6179-9		83.2	124.	125.	85.6
SY-OBMW110-110823	SQ6179-9DL		82.8	116.	116.	98.7
SY-OBMW3-110823	SQ6179-10		83.0	124.	121.	99.1
Laboratory Control S	WG345597-1		99.9	101.	98.4	96.6
Method Blank	WG345597-2		82.3	115.	114.	102.
Laboratory Control S	WG345675-1		99.0	91.2	92.6	97.5
Method Blank	WG345675-2		84.0	104.	104.	98.6
Laboratory Control S	WG345675-6		100.	96.5	99.5	97.6

Abbr.	Surrogate Compound	QC Limits
BFB	p-Bromofluorobenzene	70-130
DBF	Dibromofluoromethane	70-130
DCA	1,2-Dichloroethane-d4	70-130
TOL	Toluene-D8	70-130

= Column to be used to flag recovery limits.
* = Values outside of contract required QC limits.
D= System Monitoring Compound diluted out.

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Form 4
Method Blank Summary

Lab File ID : S7228.D
Instrument ID : GCMS-S
Heated Purge : No
Prep Temperature (C) : N/A

SDG : SQ6179
Lab Sample ID : WG345597-2
Date Analyzed : 17-NOV-23
Time Analyzed : 11:16

This Method Blank applies to the following samples and QC samples:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	
Laboratory Control S	WG345597-1	S7226.D	11/17/23	10:21	
SY-OBMW2-110823	SQ6179-1	S7229.D	11/17/23	11:44	
SY-OBMW1-110823	SQ6179-2	S7230.D	11/17/23	12:11	
SY-OBMW9-110823	SQ6179-3	S7231.D	11/17/23	12:39	
SY-BRMW5-29-44-110823	SQ6179-4	S7232.D	11/17/23	13:06	
SY-BRMW5-56-66-110823	SQ6179-5	S7233.D	11/17/23	13:34	
SY-BRMW5-123-133-110823	SQ6179-6	S7234.D	11/17/23	14:02	
SY-OBMW8-110823	SQ6179-7	S7235.D	11/17/23	14:29	
SY-OBMW11-110823	SQ6179-8	S7236.D	11/17/23	14:57	
SY-OBMW110-110823	SQ6179-9	S7237.D	11/17/23	15:24	
SY-OBMW3-110823	SQ6179-10	S7238.D	11/17/23	15:52	

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Form 4
Method Blank Summary

Lab File ID : S7259.D
Instrument ID : GCMS-S
Heated Purge : No
Prep Temperature (C) : N/A

SDG : SQ6179
Lab Sample ID : WG345675-2
Date Analyzed : 18-NOV-23
Time Analyzed : 13:45

This Method Blank applies to the following samples and QC samples:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	
Laboratory Control S	WG345675-1	S7256.D	11/18/23	12:16	
Laboratory Control S	WG345675-6	S7257.D	11/18/23	12:44	
SY-OBMW11-110823	SQ6179-8DL	S7261.D	11/18/23	14:40	
SY-OBMW110-110823	SQ6179-9DL	S7262.D	11/18/23	15:08	

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Form 5
Volatile Organic Instrument Performance Check

Lab Name : Katahdin Analytical Services
Lab File ID : SB923A.D
Instrument ID : GCMS-S

SDG : SQ6179
Date Analyzed : 16-NOV-23
Time Analyzed : 12:12
Heated Purge : No

m/e	Ion Abundance Criteria	% Relative Abundance		
50	15.0 - 40.0% of mass 95	15.0		
75	30.0 - 60.0% of mass 95	49.4		
95	Base Peak, 100% relative abundance	100		
96	5.0 - 9.0% of mass 95	7.6		
173	Less than 2.0% of mass 174	0.3	0.47	1
174	Greater than 50.0% of mass 95	72.5		
175	5.0 - 9.0% of mass 174	5.2	7.18	1
176	95.0 - 101.0% of mass 174	69.2	95.34	1
177	5.0 - 9.0% of mass 176	4.8	6.94	2

1-Value is % mass 174 2-Value is % mass 176

This check applies to the following samples, LCS, MS, MSD and standards:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Initial Calibration	WG345525-1	S7199.D	11/16/23	12:35
Initial Calibration	WG345525-2	S7200.D	11/16/23	13:02
Initial Calibration	WG345525-3	S7201.D	11/16/23	13:30
Initial Calibration	WG345525-4	S7202.D	11/16/23	13:57
Initial Calibration	WG345525-5	S7203.D	11/16/23	14:25
Initial Calibration	WG345525-6	S7204.D	11/16/23	14:52
Initial Calibration	WG345525-7	S7205.D	11/16/23	15:20
Initial Calibration	WG345525-8	S7206.D	11/16/23	15:48
Independent Source	WG345525-9	S7207A.D	11/16/23	16:15

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Form 5
Volatile Organic Instrument Performance Check

Lab Name : Katahdin Analytical Services
Lab File ID : SB923B.D
Instrument ID : GCMS-S

SDG : SQ6179
Date Analyzed : 17-NOV-23
Time Analyzed : 09:10
Heated Purge : No

m/e	Ion Abundance Criteria	% Relative Abundance		
50	15.0 - 40.0% of mass 95	16.6		
75	30.0 - 60.0% of mass 95	51.9		
95	Base Peak, 100% relative abundance	100		
96	5.0 - 9.0% of mass 95	7.7		
173	Less than 2.0% of mass 174	0.4	0.49	1
174	Greater than 50.0% of mass 95	74.3		
175	5.0 - 9.0% of mass 174	5.4	7.32	1
176	95.0 - 101.0% of mass 174	73.4	98.76	1
177	5.0 - 9.0% of mass 176	4.0	5.40	2

1-Value is % mass 174 2-Value is % mass 176

This check applies to the following samples, LCS, MS, MSD and standards:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Continuing Calibrati	WG345597-4	S7225.D	11/17/23	09:43
Laboratory Control S	WG345597-1	S7226.D	11/17/23	10:21
Method Blank	WG345597-2	S7228.D	11/17/23	11:16
SY-OBMW2-110823	SQ6179-1	S7229.D	11/17/23	11:44
SY-OBMW1-110823	SQ6179-2	S7230.D	11/17/23	12:11
SY-OBMW9-110823	SQ6179-3	S7231.D	11/17/23	12:39
SY-BRMW5-29-44-110823	SQ6179-4	S7232.D	11/17/23	13:06
SY-BRMW5-56-66-110823	SQ6179-5	S7233.D	11/17/23	13:34
SY-BRMW5-123-133-110823	SQ6179-6	S7234.D	11/17/23	14:02
SY-OBMW8-110823	SQ6179-7	S7235.D	11/17/23	14:29
SY-OBMW11-110823	SQ6179-8	S7236.D	11/17/23	14:57
SY-OBMW110-110823	SQ6179-9	S7237.D	11/17/23	15:24
SY-OBMW3-110823	SQ6179-10	S7238.D	11/17/23	15:52
Continuing Calibrati	WG345597-5	S7249.D	11/17/23	20:55

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Form 5
Volatile Organic Instrument Performance Check

Lab Name : Katahdin Analytical Services
Lab File ID : SB924A.D
Instrument ID : GCMS-S

SDG : SQ6179
Date Analyzed : 18-NOV-23
Time Analyzed : 10:35
Heated Purge : No

m/e	Ion Abundance Criteria	% Relative Abundance		
50	15.0 - 40.0% of mass 95	16.1		
75	30.0 - 60.0% of mass 95	49.6		
95	Base Peak, 100% relative abundance	100		
96	5.0 - 9.0% of mass 95	7.6		
173	Less than 2.0% of mass 174	0.0	0.0	1
174	Greater than 50.0% of mass 95	71.9		
175	5.0 - 9.0% of mass 174	5.3	7.42	1
176	95.0 - 101.0% of mass 174	70.6	98.11	1
177	5.0 - 9.0% of mass 176	4.4	6.27	2

1-Value is % mass 174 2-Value is % mass 176

This check applies to the following samples, LCS, MS, MSD and standards:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Continuing Calibrati	WG345675-4	S7255.D	11/18/23	11:32
Laboratory Control S	WG345675-1	S7256.D	11/18/23	12:16
Laboratory Control S	WG345675-6	S7257.D	11/18/23	12:44
Method Blank	WG345675-2	S7259.D	11/18/23	13:45
SY-OBMW11-110823	SQ6179-8DL	S7261.D	11/18/23	14:40
SY-OBMW110-110823	SQ6179-9DL	S7262.D	11/18/23	15:08
Continuing Calibrati	WG345675-5	S7276.D	11/18/23	21:34

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Form 8
Internal Standard Area and RT Summary

Lab Name : Katahdin Analytical Services
SDG: SQ6179
Lab ID : WG345525-5
Analytical Date: 11/16/23 14:25
Lab File ID : S7203.D
Instrument ID: GCMS-S

		PENTAFLUOROBENZENE			1,4-DIFLUOROBENZENE			CHLOROBENZENE-D5		
		Area	#	RT #	Area	#	RT #	Area	#	RT #
	Std .	13752		6.16	21842		6.85	20133		10.24
	Upper Limit	27504		6.33	43684		7.02	40266		10.40
	Lower Limit	6876		5.99	10921		6.69	10066.5		10.07
Client Sample ID	Lab Sample ID									
Continuing Calibrati	WG345597-4	14535		6.16	20541		6.85	17720		10.23
Laboratory Control S	WG345597-1	13027		6.15	19967		6.85	17742		10.23
Method Blank	WG345597-2	11089		6.16	16920		6.85	15814		10.23
SY-OBMW2-110823	SQ6179-1	10848		6.16	16606		6.85	15327		10.23
SY-OBMW1-110823	SQ6179-2	10613		6.16	16557		6.85	15382		10.23
SY-OBMW9-110823	SQ6179-3	10683		6.16	16509		6.85	15456		10.23
SY-BRMW5-29-44-11(	SQ6179-4	11184		6.16	17137		6.86	16200		10.23
SY-BRMW5-56-66-11(	SQ6179-5	11026		6.15	17209		6.85	16231		10.24
SY-BRMW5-123-133-1	SQ6179-6	11994		6.16	18456		6.85	17155		10.23
SY-OBMW8-110823	SQ6179-7	10551		6.16	16319		6.85	14982		10.24
SY-OBMW11-110823	SQ6179-8	10683		6.16	21015		6.85	15533		10.24
SY-OBMW110-110823	SQ6179-9	10420		6.16	20027		6.85	15577		10.23
SY-OBMW3-110823	SQ6179-10	10264		6.16	15990		6.86	14848		10.23
Continuing Calibrati	WG345597-5	12577		6.16	18747		6.85	17879		10.23
Continuing Calibrati	WG345675-4	15000		6.16	21369		6.86	19538		10.23
Laboratory Control S	WG345675-1	15207		6.16	21659		6.85	19494		10.23
Laboratory Control S	WG345675-6	14168		6.16	20850		6.85	19033		10.24
Method Blank	WG345675-2	12718		6.16	18208		6.85	17056		10.23
SY-OBMW11-110823	SQ6179-8DL	11129		6.16	16511		6.85	15250		10.23
SY-OBMW110-110823	SQ6179-9DL	11234		6.16	16610		6.85	15549		10.23
Continuing Calibrati	WG345675-5	12874		6.15	18911		6.86	17733		10.23

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area
RT Upper Limit = + 10 seconds of internal standard RT
RT Lower Limit = - 10 seconds of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

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Sample Data Section

KATAHDIN ANALYTICAL SERVICES - ORGANIC DATA QUALIFIERS

U Indicates the compound was analyzed for but not detected above the specified level. This level may be the Practical Quantitation Level (PQL) (also called Limit of Quantitation (LOQ)), the Limit of Detection (LOD) or Method Detection Limit (MDL) as required by the client.

Note: All results reported as "U" MDL have a 50% rate for false negatives compared to those results reported as "U" PQL, "U" LOQ or "U" LOD, where the rate of false negatives is <1%.

* Compound recovery or percent RPD (relative percent difference) was outside of quality control limits.

D Indicates the result was obtained from analysis of a diluted sample. Surrogate recoveries may not be calculable.

E Estimated value. This flag identifies compounds whose concentrations exceed the upper level of the calibration range of the instrument for that specific analysis.

J Estimated value. The analyte was detected in the sample at a concentration less than the laboratory Practical Quantitation Level (PQL) (also called Limit of Quantitation (LOQ)), but above the Method Detection Limit (MDL).

And/or

J Used for Dual Column analytes when there is a greater than 40% difference for detected concentrations between the two GC/HPLC columns.

B Indicates the analyte was detected in the laboratory method blank analyzed concurrently with the sample.

I Indicates that the flagged compound did not meet DoD criteria in the corresponding Initial Calibration (ICAL).

D Indicates that the flagged compound did not meet DoD criteria in the corresponding Initial Calibration Verification (ICV).

C Indicates that the flagged compound did not meet DoD criteria in the corresponding opening Calibration Verification (CV).

V Indicates that the flagged compound did not meet DoD criteria in the corresponding closing Calibration Verification (CV).

L/LL Indicates that the flagged compound did not meet DoD criteria in the corresponding Laboratory Control Sample (LCS) and/or Laboratory Control Sample Duplicate (LCSD) prepared and/or analyzed concurrently with the sample.

M/MM Indicates that the flagged compound did not meet DoD criteria in the Matrix Spike (MS) and/or Matrix Spike Duplicate MSD) prepared and/or analyzed concurrently with the native sample.

H Indicates the flagged compound was detected on the primary column but was not detected on the confirmation column therefore the compound is not reported as a positive detection. (SW846 8330A/B only)

Katahdin Analytical Services, Inc.

Manual Integration Codes For GC/MS, GC, HPLC and/or IC

M1	Peak splitting.
M2	Well defined peaks on the shoulders of the other peaks.
M3	There is additional area due to a coeluting interferant.
M4	There are negative spikes in the baseline.
M5	There are rising or falling baselines.
M6	The software has failed to detect a peak or misidentified a peak.
M7	Excessive peak tailing.
M8	Analysis such as GRO, DRO and TPH require a baseline hold.
M9	Peak was not completely integrated as in GC/MS.
M10	Primary ion was correctly integrated, but secondary or tertiary ion needed manual integration as in GC/MS.
M11	For GC analysis, when a sample is diluted by 1:10 or more, the surrogate is set to undetected and then the area under the surrogate is manually integrated.
M12	Manual integration saved in method due to TurboChrom floating point error.

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ANALYTICAL SERVICES

Report of Analytical Results

SDG: SQ6179
Lab ID: SQ6179-1
Client ID: SY-OBMW2-110823
Matrix: AQ
Lab File ID: S7229.D

Sample Date: 08-NOV-23
Extract Date: 17-NOV-23
Extracted By: JSS
Extraction Method: SW846 5030C
Lab Prep Batch: WG345597

Report Date: 12-DEC-23
Analysis Date: 17-NOV-23
Analyst: JSS
Analysis Method: SW846 8260C SIM
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Vinyl Chloride	U	0.050	ug/L	1	.1	0.10	0.0037	0.050
1,1-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0091	0.025
trans-1,2-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0033	0.025
cis-1,2-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0057	0.025
Trichloroethene	U	0.025	ug/L	1	.05	0.050	0.012	0.025
Tetrachloroethene	U	0.025	ug/L	1	.05	0.050	0.0091	0.025
Dibromofluoromethane		116.	%					
1,2-Dichloroethane-d4		114.	%					
Toluene-D8		100.	%					
p-Bromofluorobenzene		81.7	%					

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Data File: \\target_server\gg\chem\gcms-s.i\S111723.b\S7229.D
Report Date: 12-Dec-2023 10:10

Katahdin Analytical Services

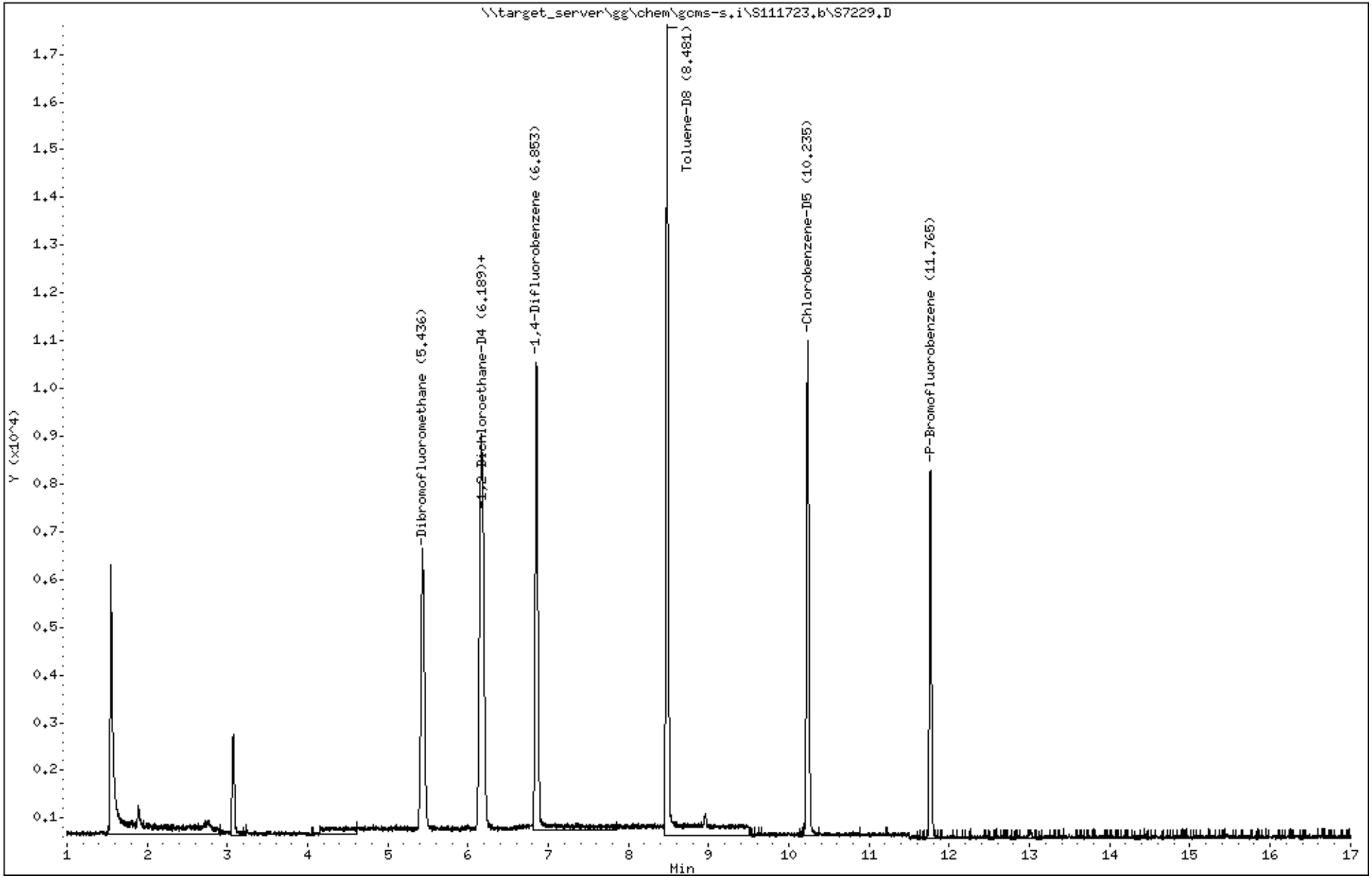
Data file : \\target_server\gg\chem\gcms-s.i\S111723.b\S7229.D
Lab Smp Id: SQ6179-1 Client Smp ID: SY-OBMW2-110823
Inj Date : 17-NOV-2023 11:44
Operator : JSS Inst ID: gcms-s.i
Smp Info : SQ6179-1
Misc Info : WG345597,WG345525-5
Comment : SW846 5030C
Method : \\target_server\gg\chem\gcms-s.i\S111723.b\SSIM(01)CR23.m
Meth Date : 08-Dec-2023 14:53 croy Quant Type: ISTD
Cal Date : 16-NOV-2023 15:48 Cal File: S7206.D
Als bottle: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: credere.sub
Target Version: 4.12
Processing Host: ORGANICS2

Concentration Formula: Amt * DF * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	25.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)	REVIEW CODE
$ 7 Dibromofluoromethane	113	5.435	5.441	(0.882)	8464	1.16502	1.16	
$ 10 1,2-Dichloroethane-D4	65	6.188	6.194	(1.005)	7476	1.13892	1.14	
$ 14 Toluene-D8	98	8.479	8.483	(1.237)	17517	1.00442	1.00	
$ 18 P-Bromofluorobenzene	95	11.767	11.768	(1.150)	5273	0.81693	0.817	
* 9 Pentafluorobenzene	168	6.159	6.163	(1.000)	10848	1.00000		
* 13 1,4-Difluorobenzene	114	6.854	6.855	(1.000)	16606	1.00000		
* 17 Chlorobenzene-D5	117	10.234	10.238	(1.000)	15327	1.00000		

Data File: \\target_server\gg\chem\gcms-s.i\S111723.b\S7229.D
Date : 17-NOV-2023 11:44
Client ID: SY-OBMW2-110823
Instrument: gcms-s.i
Sample Info: SQ6179-1
Purge Volume: 25.0
Operator: JSS
Column phase: RTX-VMS
Column diameter: 0.18



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ANALYTICAL SERVICES

Report of Analytical Results

SDG: SQ6179
Lab ID: SQ6179-2
Client ID: SY-OBMW1-110823
Matrix: AQ
Lab File ID: S7230.D

Sample Date: 08-NOV-23
Extract Date: 17-NOV-23
Extracted By: JSS
Extraction Method: SW846 5030C
Lab Prep Batch: WG345597

Report Date: 12-DEC-23
Analysis Date: 17-NOV-23
Analyst: JSS
Analysis Method: SW846 8260C SIM
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Vinyl Chloride	U	0.050	ug/L	1	.1	0.10	0.0037	0.050
1,1-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0091	0.025
trans-1,2-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0033	0.025
cis-1,2-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0057	0.025
Trichloroethene	U	0.025	ug/L	1	.05	0.050	0.012	0.025
Tetrachloroethene	U	0.025	ug/L	1	.05	0.050	0.0091	0.025
Dibromofluoromethane		119.	%					
1,2-Dichloroethane-d4		120.	%					
Toluene-D8		100.	%					
p-Bromofluorobenzene		82.0	%					

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Data File: \\target_server\gg\chem\gcms-s.i\S111723.b\S7230.D
Report Date: 12-Dec-2023 10:10

Katahdin Analytical Services

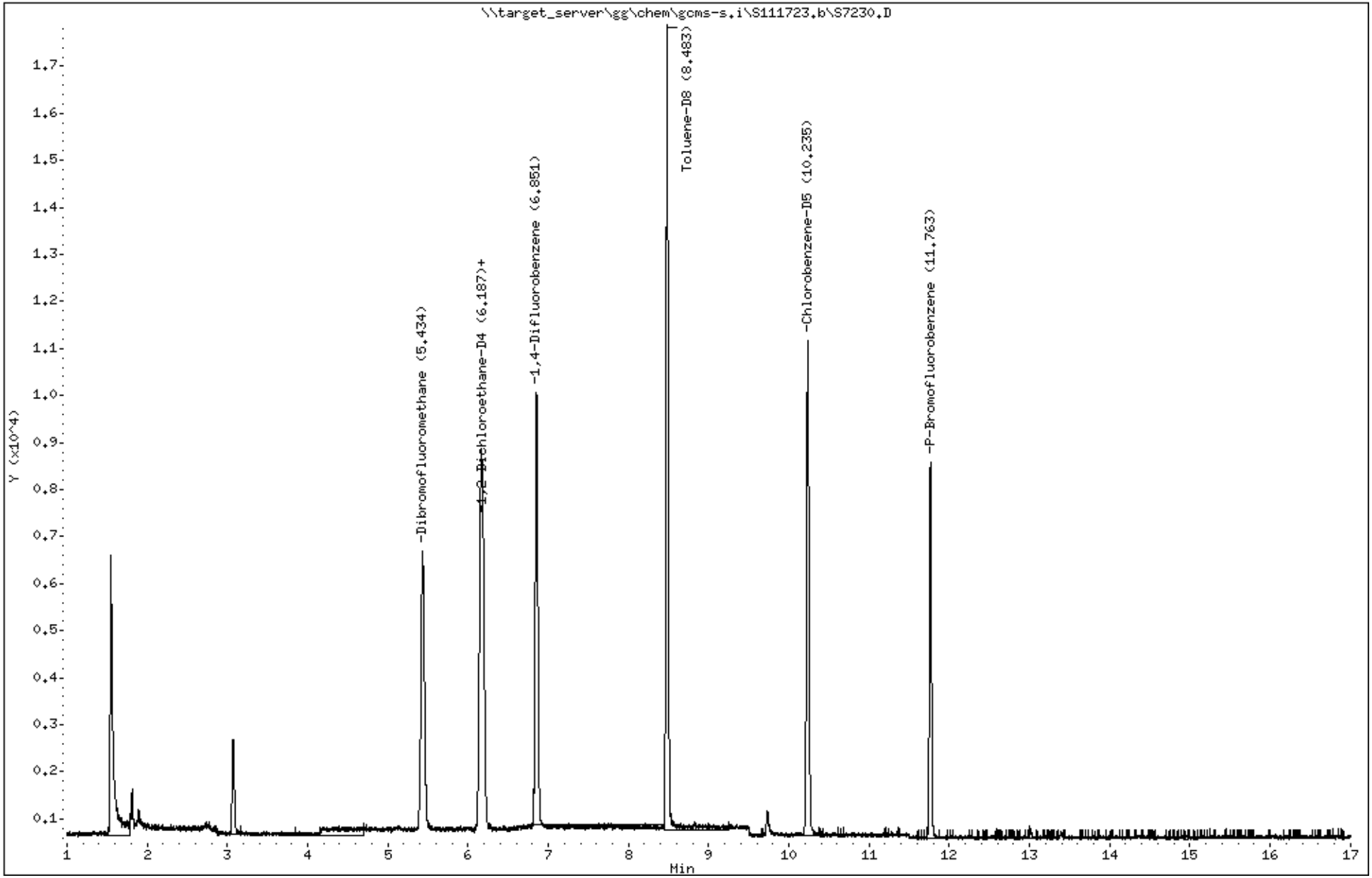
Data file : \\target_server\gg\chem\gcms-s.i\S111723.b\S7230.D
Lab Smp Id: SQ6179-2 Client Smp ID: SY-OBMW1-110823
Inj Date : 17-NOV-2023 12:11
Operator : JSS Inst ID: gcms-s.i
Smp Info : SQ6179-2
Misc Info : WG345597,WG345525-5
Comment : SW846 5030C
Method : \\target_server\gg\chem\gcms-s.i\S111723.b\SSIM(01)CR23.m
Meth Date : 08-Dec-2023 14:53 croy Quant Type: ISTD
Cal Date : 16-NOV-2023 15:48 Cal File: S7206.D
Als bottle: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: credere.sub
Target Version: 4.12
Processing Host: ORGANICS2

Concentration Formula: Amt * DF * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	25.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)	REVIEW CODE
$ 7 Dibromofluoromethane	113	5.433	5.441	(0.883)	8488	1.19419	1.19	
$ 10 1,2-Dichloroethane-D4	65	6.186	6.194	(1.005)	7698	1.19871	1.20	
$ 14 Toluene-D8	98	8.482	8.483	(1.238)	17392	1.00020	1.00	
$ 18 P-Bromofluorobenzene	95	11.763	11.768	(1.150)	5310	0.81972	0.820	
* 9 Pentafluorobenzene	168	6.156	6.163	(1.000)	10613	1.00000		
* 13 1,4-Difluorobenzene	114	6.851	6.855	(1.000)	16557	1.00000		
* 17 Chlorobenzene-D5	117	10.233	10.238	(1.000)	15382	1.00000		

Data File: \\target_server\gg\chem\gcms-s.i\S111723.b\S7230.D
Date : 17-NOV-2023 12:11
Client ID: SY-OBMW1-110823
Instrument: gcms-s.i
Sample Info: SQ6179-2
Purge Volume: 25.0
Operator: JSS
Column phase: RTX-VMS
Column diameter: 0.18



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ANALYTICAL SERVICES

Report of Analytical Results

SDG: SQ6179
Lab ID: SQ6179-3
Client ID: SY-OBMW9-110823
Matrix: AQ
Lab File ID: S7231.D

Sample Date: 08-NOV-23
Extract Date: 17-NOV-23
Extracted By: JSS
Extraction Method: SW846 5030C
Lab Prep Batch: WG345597

Report Date: 12-DEC-23
Analysis Date: 17-NOV-23
Analyst: JSS
Analysis Method: SW846 8260C SIM
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Vinyl Chloride	U	0.050	ug/L	1	.1	0.10	0.0037	0.050
1,1-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0091	0.025
trans-1,2-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0033	0.025
cis-1,2-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0057	0.025
Trichloroethene	U	0.025	ug/L	1	.05	0.050	0.012	0.025
Tetrachloroethene	U	0.025	ug/L	1	.05	0.050	0.0091	0.025
Dibromofluoromethane		123.	%					
1,2-Dichloroethane-d4		120.	%					
Toluene-D8		101.	%					
p-Bromofluorobenzene		82.9	%					

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Data File: \\target_server\gg\chem\gcms-s.i\S111723.b\S7231.D
Report Date: 12-Dec-2023 10:11

Katahdin Analytical Services

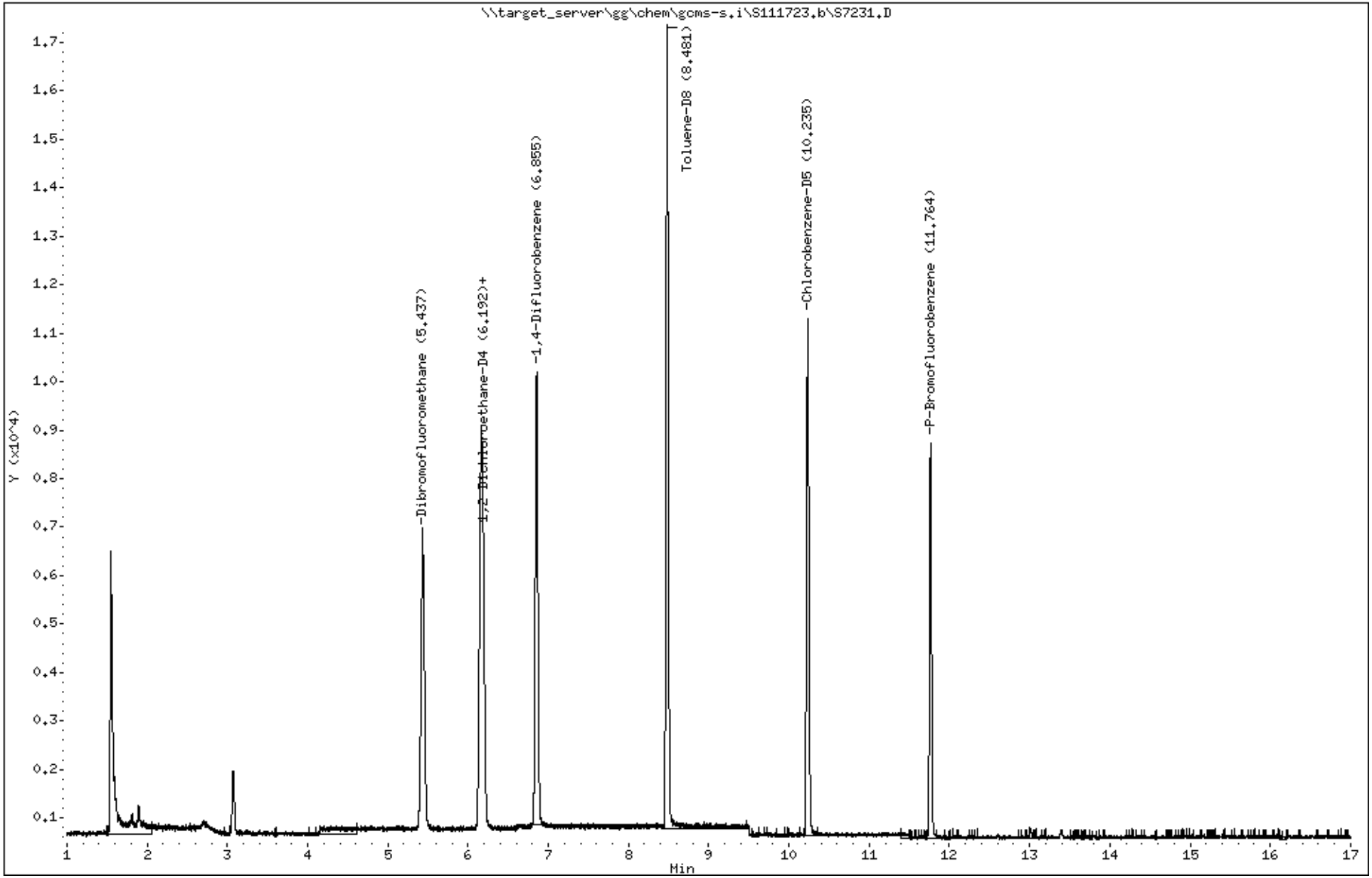
Data file : \\target_server\gg\chem\gcms-s.i\S111723.b\S7231.D
Lab Smp Id: SQ6179-3 Client Smp ID: SY-OBMW9-110823
Inj Date : 17-NOV-2023 12:39
Operator : JSS Inst ID: gcms-s.i
Smp Info : SQ6179-3
Misc Info : WG345597,WG345525-5
Comment : SW846 5030C
Method : \\target_server\gg\chem\gcms-s.i\S111723.b\SSIM(01)CR23.m
Meth Date : 08-Dec-2023 14:53 croy Quant Type: ISTD
Cal Date : 16-NOV-2023 15:48 Cal File: S7206.D
Als bottle: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: credere.sub
Target Version: 4.12
Processing Host: ORGANICS2

Concentration Formula: Amt * DF * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	25.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)	REVIEW CODE
$ 7 Dibromofluoromethane	113	5.437	5.441	(0.883)	8778	1.22690	1.23	
$ 10 1,2-Dichloroethane-D4	65	6.191	6.194	(1.006)	7780	1.20354	1.20	
$ 14 Toluene-D8	98	8.480	8.483	(1.237)	17449	1.00640	1.01	
$ 18 P-Bromofluorobenzene	95	11.763	11.768	(1.149)	5396	0.82901	0.829	
* 9 Pentafluorobenzene	168	6.156	6.163	(1.000)	10683	1.00000		
* 13 1,4-Difluorobenzene	114	6.854	6.855	(1.000)	16509	1.00000		
* 17 Chlorobenzene-D5	117	10.234	10.238	(1.000)	15456	1.00000		

Data File: \\target_server\gg\chem\gcms-s.i\S111723.b\S7231.D
Date : 17-NOV-2023 12:39
Client ID: SY-OBMW9-110823
Instrument: gcms-s.i
Sample Info: SQ6179-3
Purge Volume: 25.0
Operator: JSS
Column phase: RTX-VMS
Column diameter: 0.18



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Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

SDG: SQ6179
Lab ID: SQ6179-4
Client ID: SY-BRMW5-29-44-110823
Matrix: AQ
Lab File ID: S7232.D

Sample Date: 08-NOV-23
Extract Date: 17-NOV-23
Extracted By: JSS
Extraction Method: SW846 5030C
Lab Prep Batch: WG345597

Report Date: 12-DEC-23
Analysis Date: 17-NOV-23
Analyst: JSS
Analysis Method: SW846 8260C SIM
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Vinyl Chloride	U	0.050	ug/L	1	.1	0.10	0.0037	0.050
1,1-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0091	0.025
trans-1,2-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0033	0.025
cis-1,2-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0057	0.025
Trichloroethene	U	0.025	ug/L	1	.05	0.050	0.012	0.025
Tetrachloroethene	U	0.025	ug/L	1	.05	0.050	0.0091	0.025
Dibromofluoromethane		117.	%					
1,2-Dichloroethane-d4		115.	%					
Toluene-D8		99.5	%					
p-Bromofluorobenzene		78.4	%					

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Data File: \\target_server\gg\chem\gcms-s.i\S111723.b\S7232.D
Report Date: 12-Dec-2023 10:11

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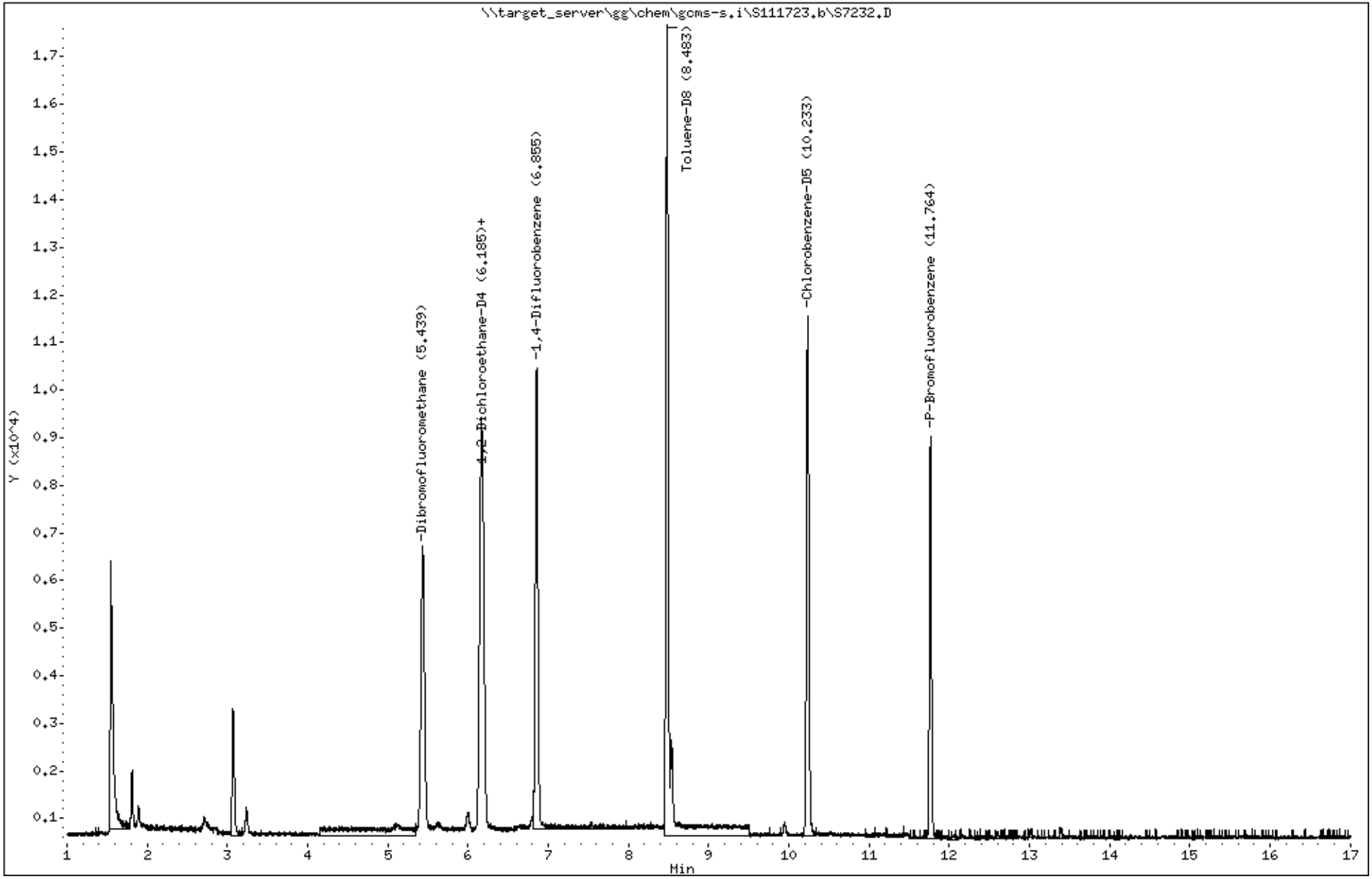
Data file : \\target_server\gg\chem\gcms-s.i\S111723.b\S7232.D
Lab Smp Id: SQ6179-4 Client Smp ID: Y-BRMW5-29-44-11082
Inj Date : 17-NOV-2023 13:06
Operator : JSS Inst ID: gcms-s.i
Smp Info : SQ6179-4
Misc Info : WG345597,WG345525-5
Comment : SW846 5030C
Method : \\target_server\gg\chem\gcms-s.i\S111723.b\SSIM(01)CR23.m
Meth Date : 08-Dec-2023 14:53 croy Quant Type: ISTD
Cal Date : 16-NOV-2023 15:48 Cal File: S7206.D
Als bottle: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: credere.sub
Target Version: 4.12
Processing Host: ORGANICS2

Concentration Formula: Amt * DF * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	25.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)	REVIEW CODE
$ 7 Dibromofluoromethane	113	5.438	5.441	(0.883)	8771	1.17101	1.17	
$ 10 1,2-Dichloroethane-D4	65	6.185	6.194	(1.004)	7780	1.14963	1.15	
$ 14 Toluene-D8	98	8.482	8.483	(1.237)	17916	0.99546	0.995	
$ 18 P-Bromofluorobenzene	95	11.763	11.768	(1.150)	5348	0.78390	0.784	
* 9 Pentafluorobenzene	168	6.159	6.163	(1.000)	11184	1.00000		
* 13 1,4-Difluorobenzene	114	6.856	6.855	(1.000)	17137	1.00000		
* 17 Chlorobenzene-D5	117	10.233	10.238	(1.000)	16200	1.00000		

Data File: \\target_server\gg\chem\gcms-s.i\S111723.b\S7232.D
Date : 17-NOV-2023 13:06
Client ID: Y-BRMW5-29-44-11082
Instrument: gcms-s.i
Sample Info: SQ6179-4
Purge Volume: 25.0
Operator: JSS
Column phase: RTX-VMS
Column diameter: 0.18



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Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

SDG: SQ6179
Lab ID: SQ6179-5
Client ID: SY-BRMW5-56-66-110823
Matrix: AQ
Lab File ID: S7233.D

Sample Date: 08-NOV-23
Extract Date: 17-NOV-23
Extracted By: JSS
Extraction Method: SW846 5030C
Lab Prep Batch: WG345597

Report Date: 12-DEC-23
Analysis Date: 17-NOV-23
Analyst: JSS
Analysis Method: SW846 8260C SIM
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Vinyl Chloride	U	0.050	ug/L	1	.1	0.10	0.0037	0.050
1,1-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0091	0.025
trans-1,2-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0033	0.025
cis-1,2-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0057	0.025
Trichloroethene	U	0.025	ug/L	1	.05	0.050	0.012	0.025
Tetrachloroethene	U	0.025	ug/L	1	.05	0.050	0.0091	0.025
Dibromofluoromethane		123.	%					
1,2-Dichloroethane-d4		124.	%					
Toluene-D8		100.	%					
p-Bromofluorobenzene		83.3	%					

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Data File: \\target_server\gg\chem\gcms-s.i\S111723.b\S7233.D
Report Date: 12-Dec-2023 10:11

Katahdin Analytical Services

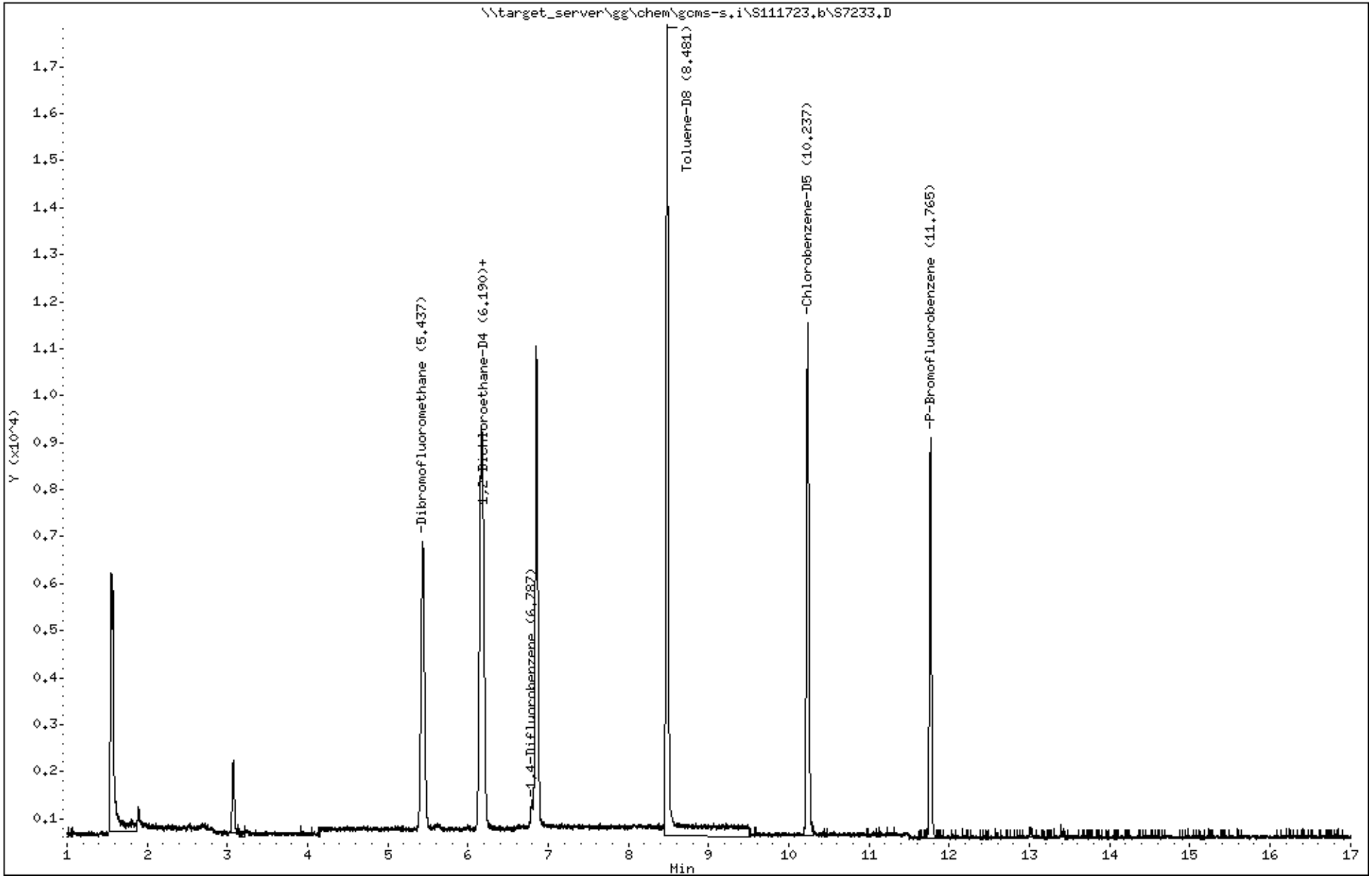
Data file : \\target_server\gg\chem\gcms-s.i\S111723.b\S7233.D
Lab Smp Id: SQ6179-5 Client Smp ID: Y-BRMW5-56-66-11082
Inj Date : 17-NOV-2023 13:34
Operator : JSS Inst ID: gcms-s.i
Smp Info : SQ6179-5
Misc Info : WG345597,WG345525-5
Comment : SW846 5030C
Method : \\target_server\gg\chem\gcms-s.i\S111723.b\SSIM(01)CR23.m
Meth Date : 08-Dec-2023 14:53 croy Quant Type: ISTD
Cal Date : 16-NOV-2023 15:48 Cal File: S7206.D
Als bottle: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: credere.sub
Target Version: 4.12
Processing Host: ORGANICS2

Concentration Formula: Amt * DF * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	25.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)	REVIEW CODE
$ 7 Dibromofluoromethane	113	5.437	5.441	(0.883)	9082	1.22990	1.23	
$ 10 1,2-Dichloroethane-D4	65	6.190	6.194	(1.006)	8309	1.24539	1.24	
$ 14 Toluene-D8	98	8.479	8.483	(1.237)	18115	1.00231	1.00	
$ 18 P-Bromofluorobenzene	95	11.765	11.768	(1.149)	5696	0.83331	0.833	
* 9 Pentafluorobenzene	168	6.154	6.163	(1.000)	11026	1.00000		
* 13 1,4-Difluorobenzene	114	6.852	6.855	(1.000)	17209	1.00000		
* 17 Chlorobenzene-D5	117	10.236	10.238	(1.000)	16231	1.00000		

Data File: \\target_server\gg\chem\gcms-s.i\S111723.b\S7233.D
Date : 17-NOV-2023 13:34
Client ID: Y-BRMW5-56-66-11082
Instrument: gcms-s.i
Sample Info: SQ6179-5
Purge Volume: 25.0
Operator: JSS
Column phase: RTX-VMS
Column diameter: 0.18



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Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

SDG: SQ6179
Lab ID: SQ6179-6
Client ID: SY-BRMW5-123-133-110823
Matrix: AQ
Lab File ID: S7234.D

Sample Date: 08-NOV-23
Extract Date: 17-NOV-23
Extracted By: JSS
Extraction Method: SW846 5030C
Lab Prep Batch: WG345597

Report Date: 12-DEC-23
Analysis Date: 17-NOV-23
Analyst: JSS
Analysis Method: SW846 8260C SIM
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Vinyl Chloride	U	0.050	ug/L	1	.1	0.10	0.0037	0.050
1,1-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0091	0.025
trans-1,2-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0033	0.025
cis-1,2-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0057	0.025
Trichloroethene		0.58	ug/L	1	.05	0.050	0.012	0.025
Tetrachloroethene	U	0.025	ug/L	1	.05	0.050	0.0091	0.025
Dibromofluoromethane		112.	%					
1,2-Dichloroethane-d4		114.	%					
Toluene-D8		93.4	%					
p-Bromofluorobenzene		80.4	%					

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Data File: \\target_server\gg\chem\gcms-s.i\S111723.b\S7234.D
Report Date: 12-Dec-2023 10:11

Katahdin Analytical Services

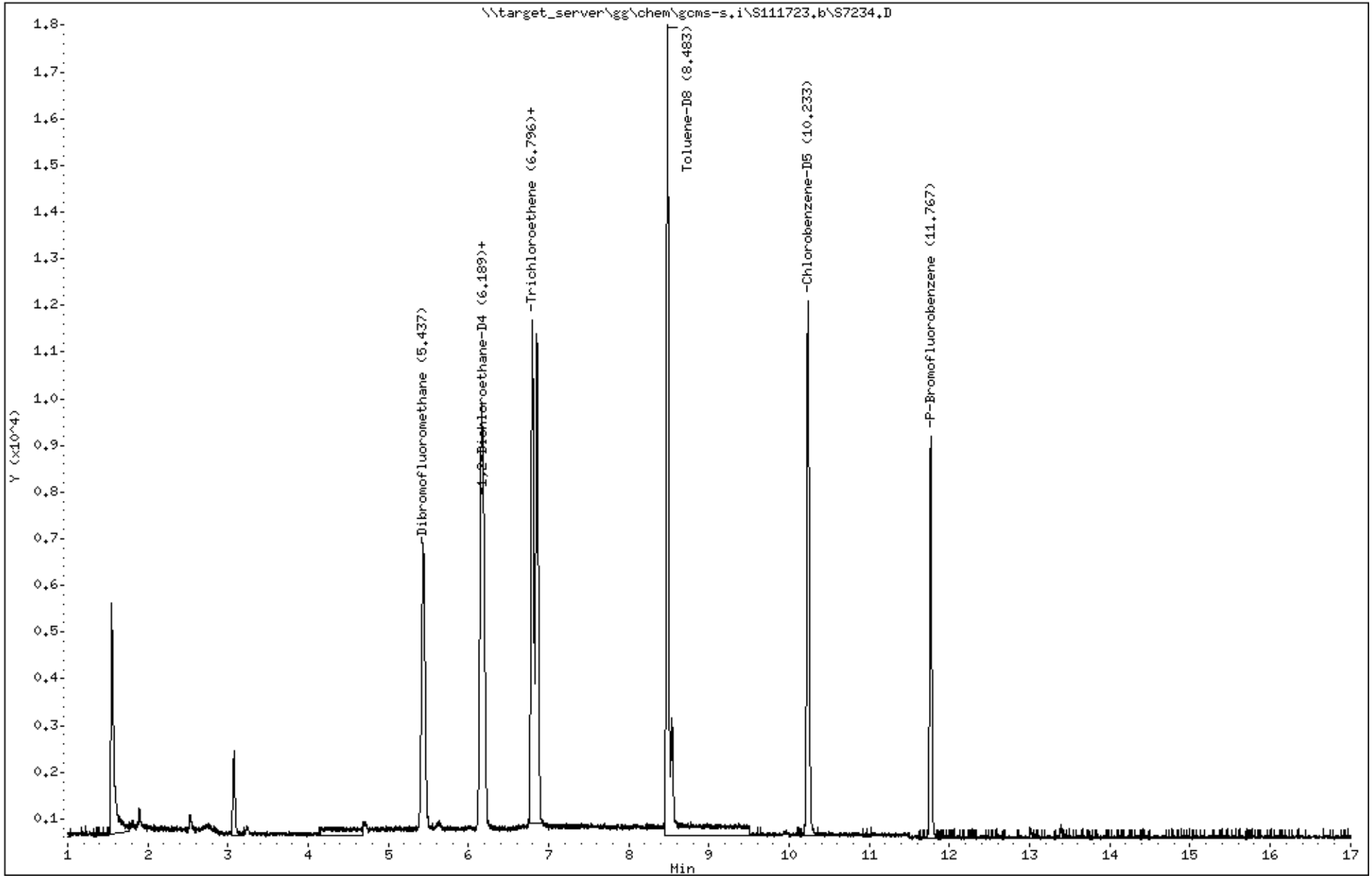
Data file : \\target_server\gg\chem\gcms-s.i\S111723.b\S7234.D
Lab Smp Id: SQ6179-6 Client Smp ID: Y-BRMW5-123-133-110
Inj Date : 17-NOV-2023 14:02
Operator : JSS Inst ID: gcms-s.i
Smp Info : SQ6179-6
Misc Info : WG345597,WG345525-5
Comment : SW846 5030C
Method : \\target_server\gg\chem\gcms-s.i\S111723.b\SSIM(01)CR23.m
Meth Date : 08-Dec-2023 14:53 croy Quant Type: ISTD
Cal Date : 16-NOV-2023 15:48 Cal File: S7206.D
Als bottle: 10
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: credere.sub
Target Version: 4.12
Processing Host: ORGANICS2

Concentration Formula: Amt * DF * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	25.000	sample purged
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)	REVIEW CODE
	12 Trichloroethene	130	6.795	6.794	(0.992)	6109	0.57867	0.579	
$	7 Dibromofluoromethane	113	5.437	5.441	(0.882)	9042	1.12566	1.12	
$	10 1,2-Dichloroethane-D4	65	6.188	6.194	(1.004)	8289	1.14212	1.14	
$	14 Toluene-D8	98	8.479	8.483	(1.237)	18097	0.93366	0.934	
$	18 P-Bromofluorobenzene	95	11.765	11.768	(1.150)	5807	0.80379	0.804	
*	9 Pentafluorobenzene	168	6.161	6.163	(1.000)	11994	1.00000		
*	13 1,4-Difluorobenzene	114	6.852	6.855	(1.000)	18456	1.00000		
*	17 Chlorobenzene-D5	117	10.229	10.238	(1.000)	17155	1.00000		

Data File: \\target_server\gg\chem\gcms-s.i\S111723.b\S7234.D
Date : 17-NOV-2023 14:02
Client ID: Y-BRMW5-123-133-110
Instrument: gcms-s.i
Sample Info: SQ6179-6
Purge Volume: 25.0
Operator: JSS
Column phase: RTX-VMS
Column diameter: 0.18



Katahdin Analytical Services SQ6179 Page 92 of 740

Data File: \\target_server\gg\chem\gcms-s.i\S111723.b\S7234.D

Date : 17-NOV-2023 14:02

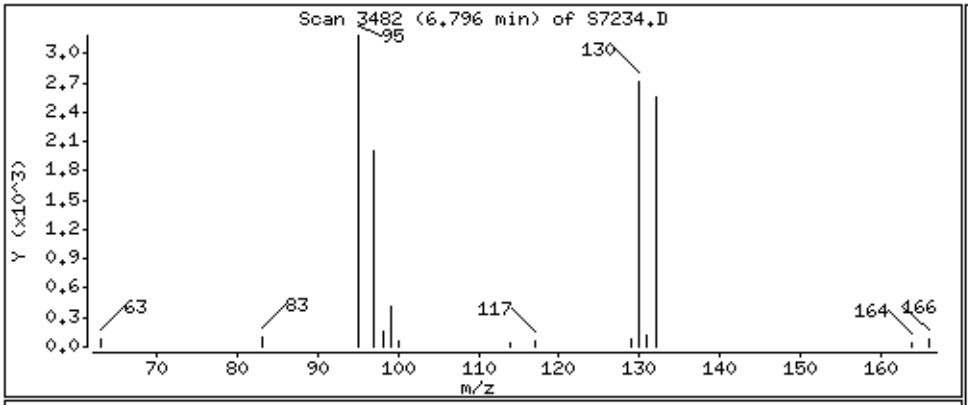
Client ID: Y-BRMW5-123-133-110 Instrument: gcms-s.i

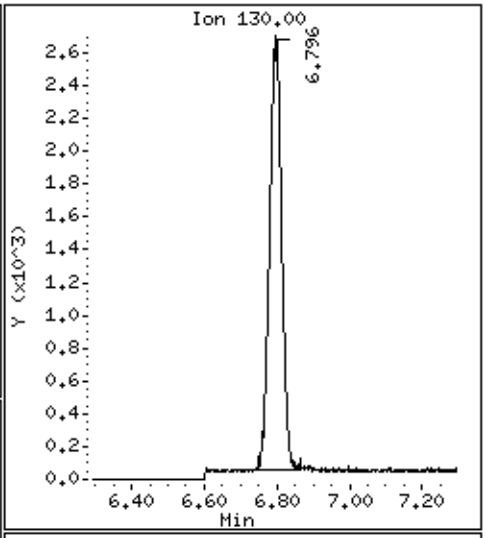
Sample Info: SQ6179-6

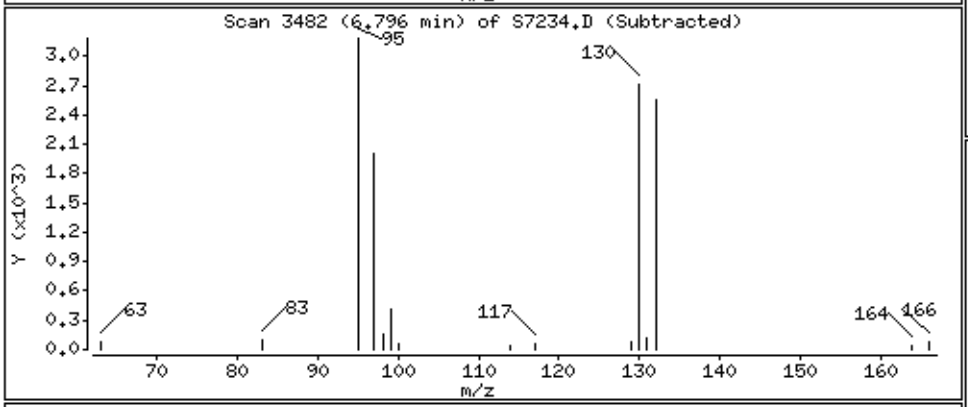
Purge Volume: 25.0 Operator: JSS

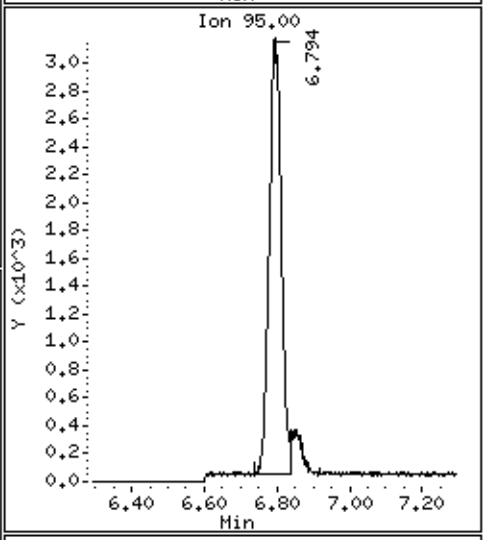
Column phase: RTX-VMS Column diameter: 0.18

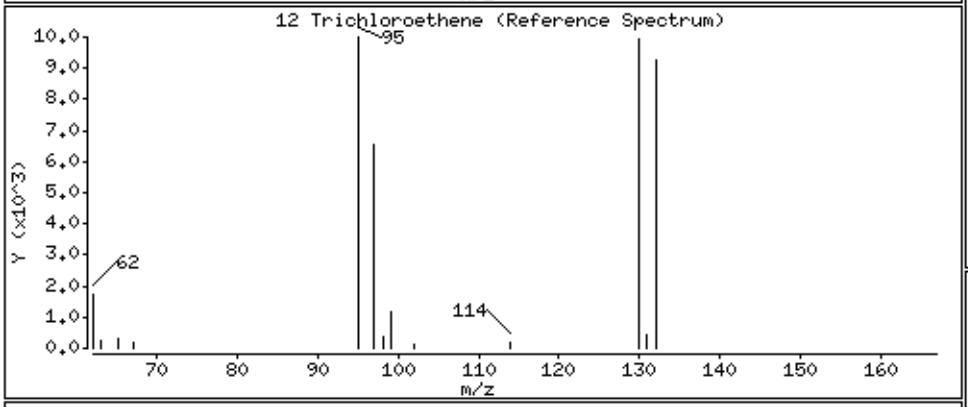
12 Trichloroethene Concentration: 0.579 ug/l

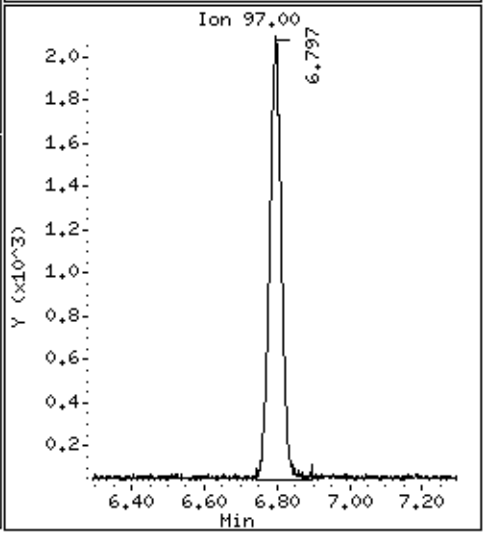


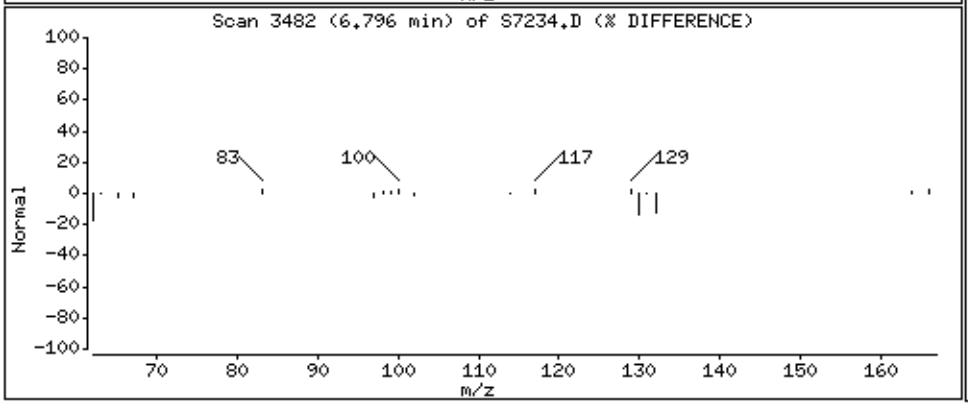












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ANALYTICAL SERVICES

Report of Analytical Results

SDG: SQ6179
Lab ID: SQ6179-7
Client ID: SY-OBMW8-110823
Matrix: AQ
Lab File ID: S7235.D

Sample Date: 08-NOV-23
Extract Date: 17-NOV-23
Extracted By: JSS
Extraction Method: SW846 5030C
Lab Prep Batch: WG345597

Report Date: 12-DEC-23
Analysis Date: 17-NOV-23
Analyst: JSS
Analysis Method: SW846 8260C SIM
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Vinyl Chloride	U	0.050	ug/L	1	.1	0.10	0.0037	0.050
1,1-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0091	0.025
trans-1,2-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0033	0.025
cis-1,2-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0057	0.025
Trichloroethene		0.074	ug/L	1	.05	0.050	0.012	0.025
Tetrachloroethene	U	0.025	ug/L	1	.05	0.050	0.0091	0.025
Dibromofluoromethane		124.	%					
1,2-Dichloroethane-d4		121.	%					
Toluene-D8		98.0	%					
p-Bromofluorobenzene		84.2	%					

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Data File: \\target_server\gg\chem\gcms-s.i\S111723.b\S7235.D
Report Date: 12-Dec-2023 10:11

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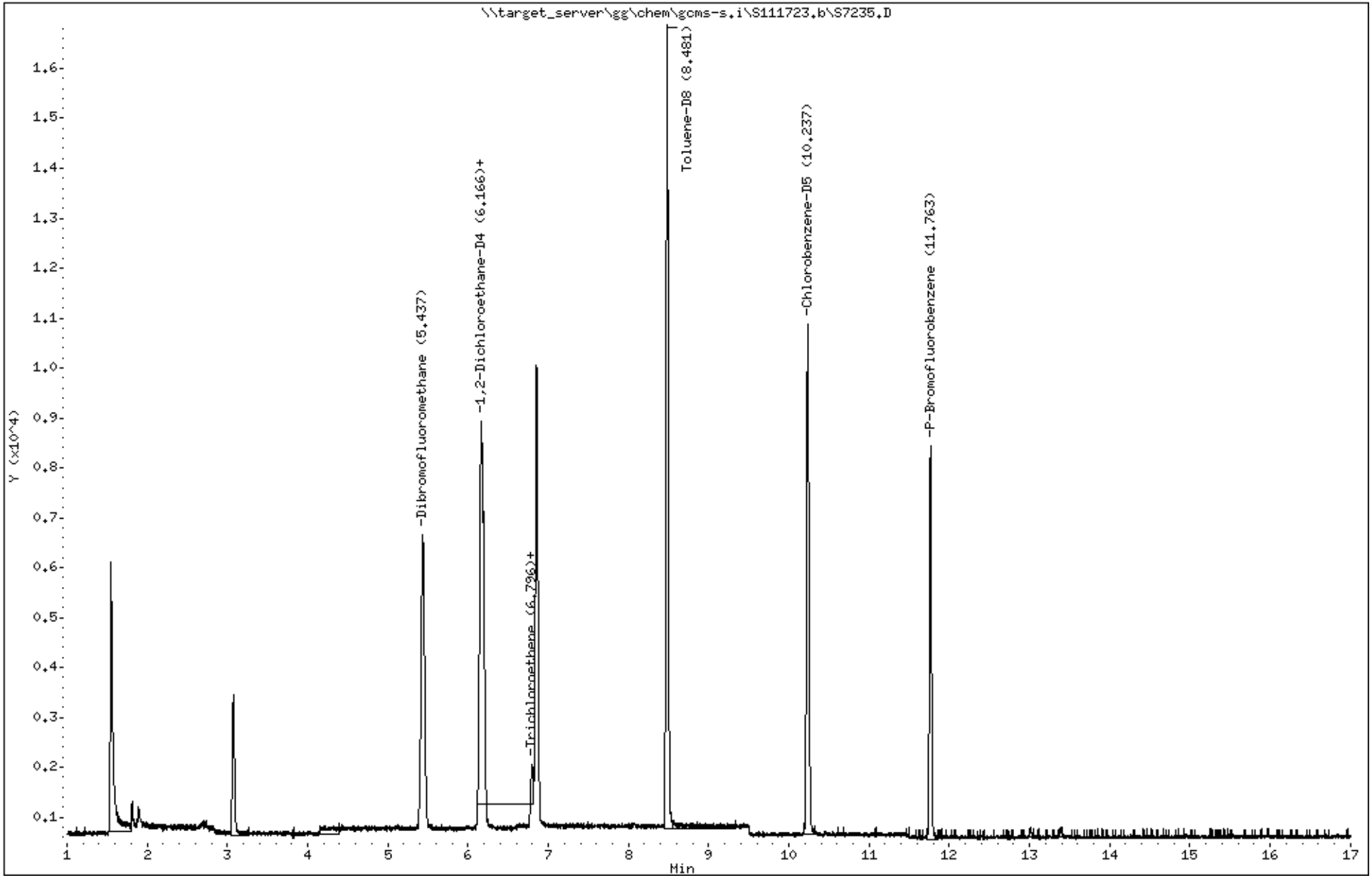
Data file : \\target_server\gg\chem\gcms-s.i\S111723.b\S7235.D
Lab Smp Id: SQ6179-7 Client Smp ID: SY-OBMW8-110823
Inj Date : 17-NOV-2023 14:29
Operator : JSS Inst ID: gcms-s.i
Smp Info : SQ6179-7
Misc Info : WG345597,WG345525-5
Comment : SW846 5030C
Method : \\target_server\gg\chem\gcms-s.i\S111723.b\SSIM(01)CR23.m
Meth Date : 08-Dec-2023 14:53 croy Quant Type: ISTD
Cal Date : 16-NOV-2023 15:48 Cal File: S7206.D
Als bottle: 11
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: credere.sub
Target Version: 4.12
Processing Host: ORGANICS2

Concentration Formula: Amt * DF * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	25.000	sample purged
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)	REVIEW CODE
	12 Trichloroethene	130	6.795	6.794	(0.992)	694	0.07435	0.0743	
$	7 Dibromofluoromethane	113	5.437	5.441	(0.883)	8749	1.23815	1.24	
$	10 1,2-Dichloroethane-D4	65	6.188	6.194	(1.005)	7708	1.20732	1.21	
$	14 Toluene-D8	98	8.480	8.483	(1.238)	16802	0.98036	0.980	
$	18 P-Bromofluorobenzene	95	11.763	11.768	(1.149)	5316	0.84255	0.842	
*	9 Pentafluorobenzene	168	6.158	6.163	(1.000)	10551	1.00000		
*	13 1,4-Difluorobenzene	114	6.852	6.855	(1.000)	16319	1.00000		
*	17 Chlorobenzene-D5	117	10.236	10.238	(1.000)	14982	1.00000		

Data File: \\target_server\gg\chem\gcms-s.i\S111723.b\S7235.D
Date : 17-NOV-2023 14:29
Client ID: SY-OBMW8-110823
Instrument: gcms-s.i
Sample Info: SQ6179-7
Purge Volume: 25.0
Operator: JSS
Column phase: RTX-VMS
Column diameter: 0.18



Data File: \\target_server\gg\chem\gcms-s.i\S111723.b\S7235.D

Date : 17-NOV-2023 14:29

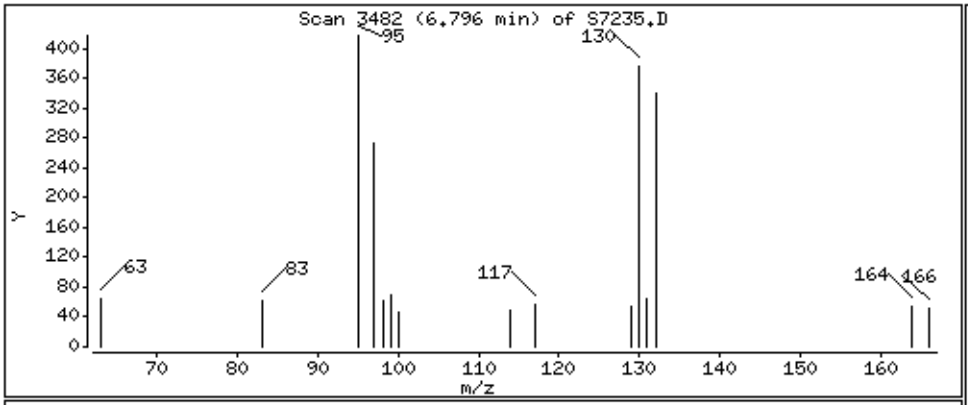
Client ID: SY-OBMW8-110823 Instrument: gcms-s.i

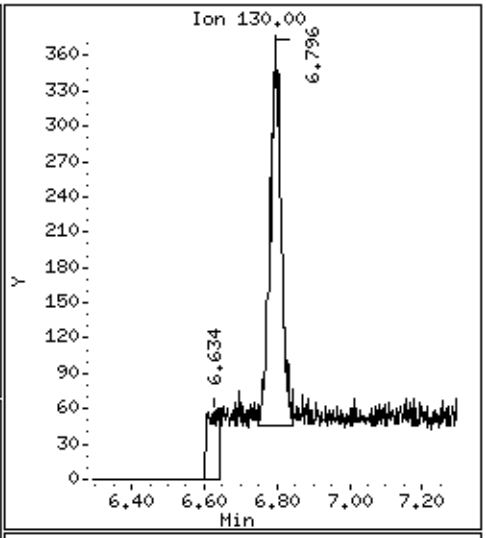
Sample Info: SQ6179-7

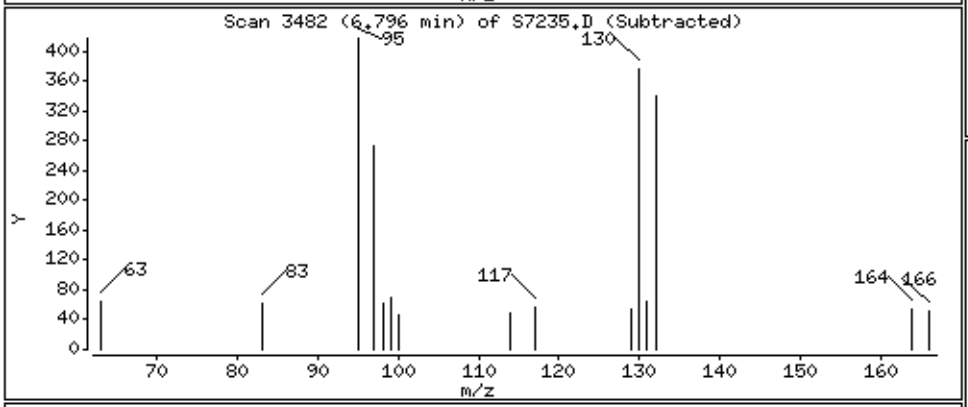
Purge Volume: 25.0 Operator: JSS

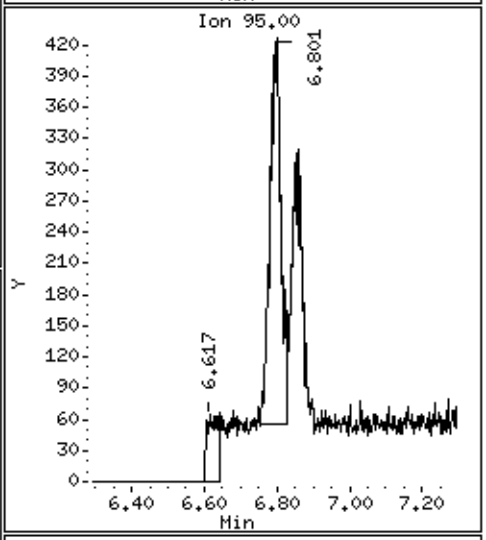
Column phase: RTX-VMS Column diameter: 0.18

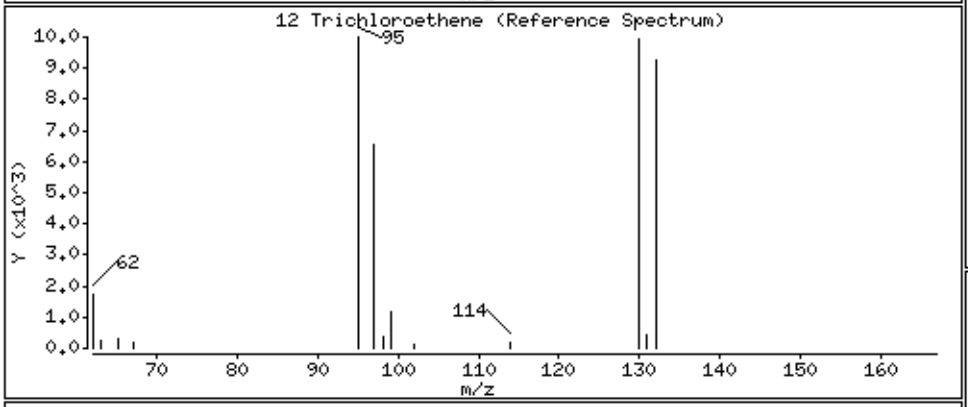
12 Trichloroethene Concentration: 0.0743 ug/l

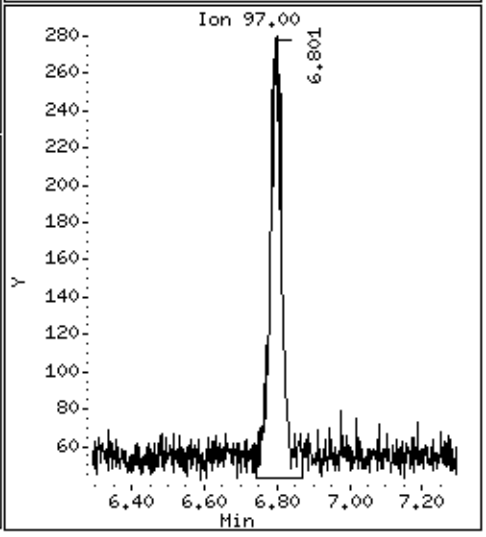


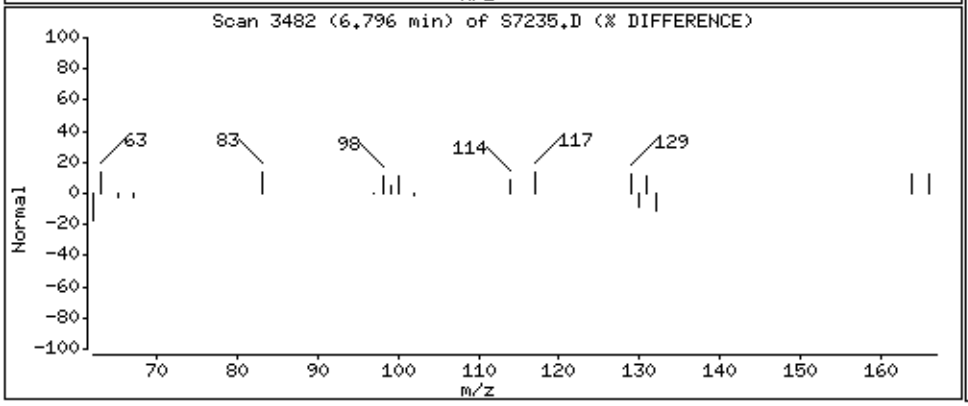












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Report of Analytical Results

SDG: SQ6179
Lab ID: SQ6179-8
Client ID: SY-OBMW11-110823
Matrix: AQ
Lab File ID: S7236.D

Sample Date: 08-NOV-23
Extract Date: 17-NOV-23
Extracted By: JSS
Extraction Method: SW846 5030C
Lab Prep Batch: WG345597

Report Date: 12-DEC-23
Analysis Date: 17-NOV-23
Analyst: JSS
Analysis Method: SW846 8260C SIM
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Vinyl Chloride	U	0.050	ug/L	1	.1	0.10	0.0037	0.050
1,1-Dichloroethene	J	0.048	ug/L	1	.05	0.050	0.0091	0.025
trans-1,2-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0033	0.025
cis-1,2-Dichloroethene		0.088	ug/L	1	.05	0.050	0.0057	0.025
Trichloroethene	E	5.1	ug/L	1	.05	0.050	0.012	0.025
Tetrachloroethene	U	0.025	ug/L	1	.05	0.050	0.0091	0.025
Dibromofluoromethane		124.	%					
1,2-Dichloroethane-d4		124.	%					
Toluene-D8		82.8	%					
p-Bromofluorobenzene		83.6	%					

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Data File: \\target_server\gg\chem\gcms-s.i\S111723.b\S7236.D
Report Date: 12-Dec-2023 10:11

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-s.i\S111723.b\S7236.D
Lab Smp Id: SQ6179-8 Client Smp ID: SY-OBMW11-110823
Inj Date : 17-NOV-2023 14:57
Operator : JSS Inst ID: gcms-s.i
Smp Info : SQ6179-8
Misc Info : WG345597,WG345525-5
Comment : SW846 5030C
Method : \\target_server\gg\chem\gcms-s.i\S111723.b\SSIM(01)CR23.m
Meth Date : 08-Dec-2023 14:53 croy Quant Type: ISTD
Cal Date : 16-NOV-2023 15:48 Cal File: S7206.D
Als bottle: 12
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: credere.sub
Target Version: 4.12
Processing Host: ORGANICS2

Concentration Formula: Amt * DF * 25/Vo * CpndVariable

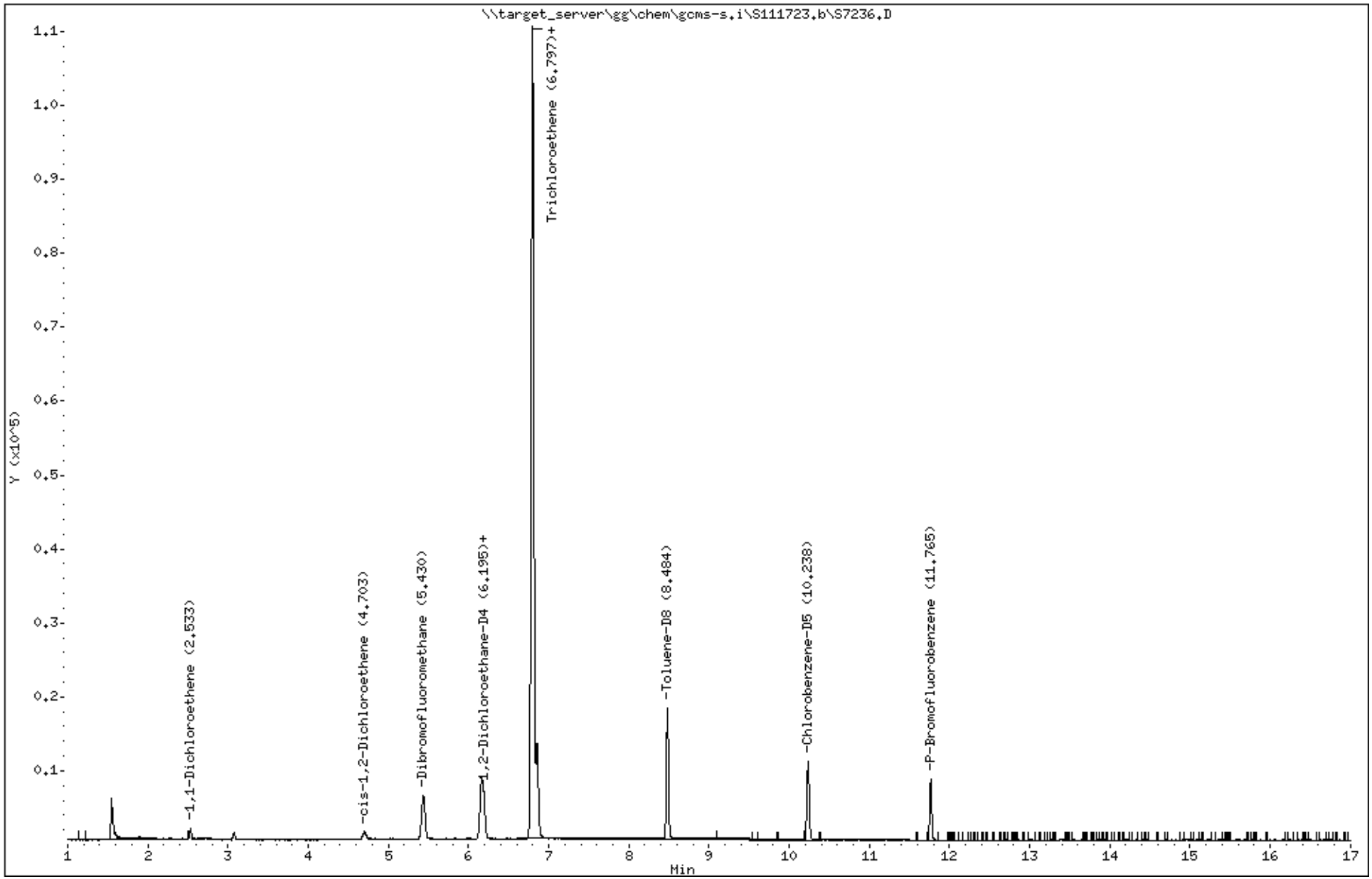
Name	Value	Description
DF	1.000	Dilution Factor
Vo	25.000	sample purged
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)	REVIEW CODE
2	1,1-Dichloroethene	96	2.532	2.532	(0.411)	592	0.04844	0.0484	
4	cis-1,2-Dichloroethene	96	4.702	4.703	(0.764)	911	0.08785	0.0878	
12	Trichloroethene	130	6.795	6.794	(0.992)	61805	5.14155	5.14(A)	
$ 7	Dibromofluoromethane	113	5.430	5.441	(0.882)	8882	1.24144	1.24	
$ 10	1,2-Dichloroethane-D4	65	6.195	6.194	(1.006)	8025	1.24144	1.24	
$ 14	Toluene-D8	98	8.484	8.483	(1.238)	18271	0.82785	0.828	
$ 18	P-Bromofluorobenzene	95	11.765	11.768	(1.149)	5466	0.83560	0.836	
* 9	Pentafluorobenzene	168	6.159	6.163	(1.000)	10683	1.00000		
* 13	1,4-Difluorobenzene	114	6.852	6.855	(1.000)	21015	1.00000		
* 17	Chlorobenzene-D5	117	10.236	10.238	(1.000)	15533	1.00000		

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: \\target_server\gg\chem\gcms-s.i\S111723.b\S7236.D
Date : 17-NOV-2023 14:57
Client ID: SY-OBMW11-110823
Instrument: gcms-s.i
Sample Info: SQ6179-8
Purge Volume: 25.0
Operator: JSS
Column phase: RTX-VMS
Column diameter: 0.18



Katahdin Analytical Services SQ6179 Page 100 of 740

Data File: \\target_server\gg\chem\gcms-s.i\S111723.b\S7236.D

Date : 17-NOV-2023 14:57

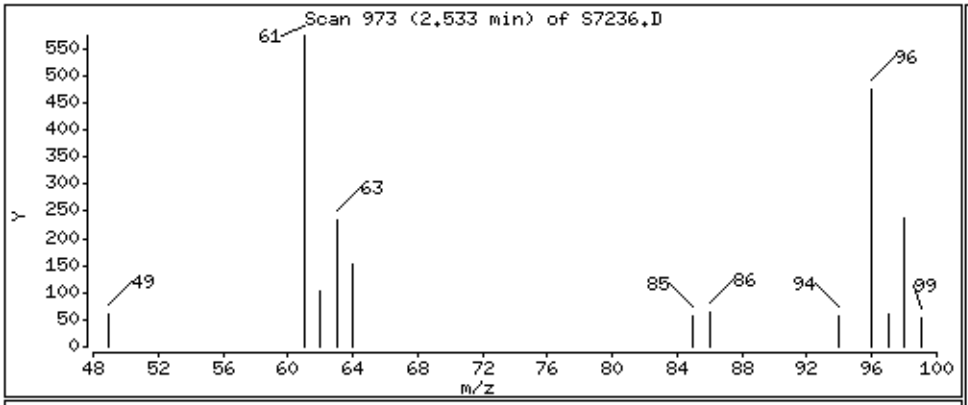
Client ID: SY-OBMW11-110823 Instrument: gcms-s.i

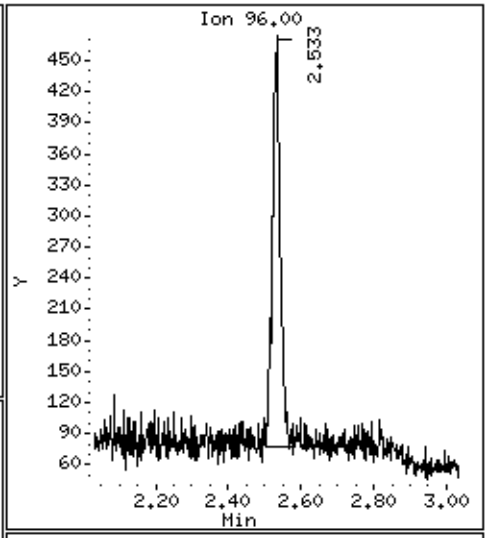
Sample Info: SQ6179-8

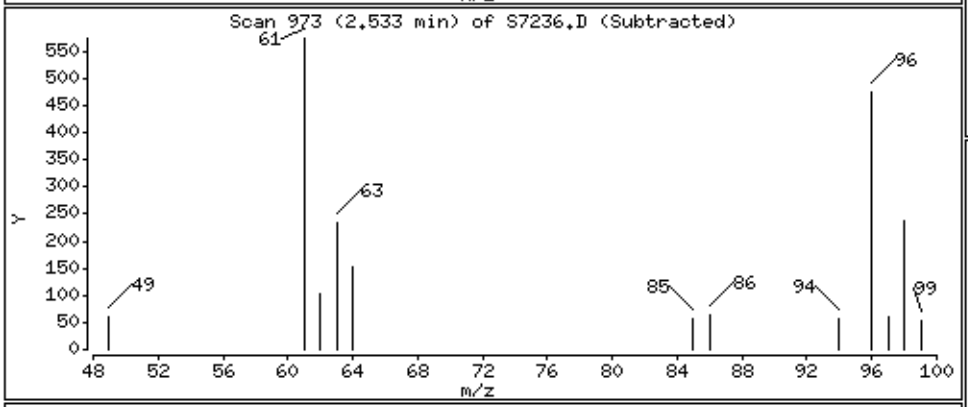
Purge Volume: 25.0 Operator: JSS

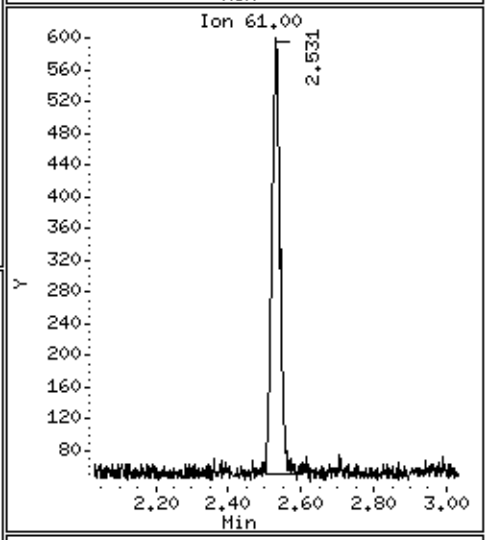
Column phase: RTX-VMS Column diameter: 0.18

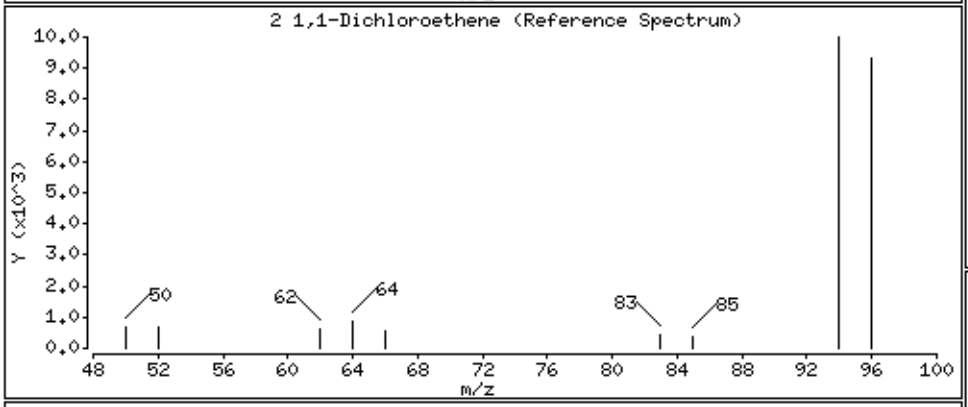
2 1,1-Dichloroethene Concentration: 0.0484 ug/l

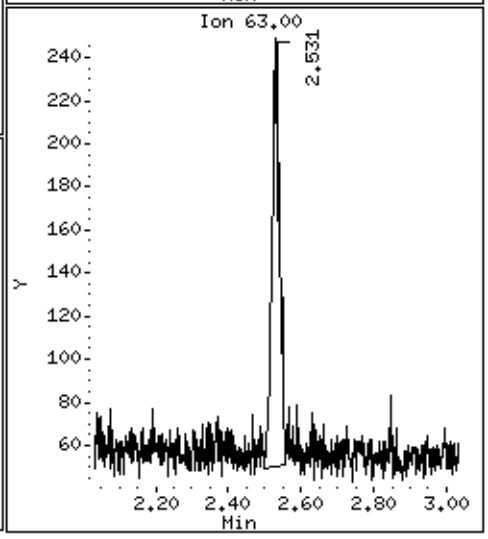


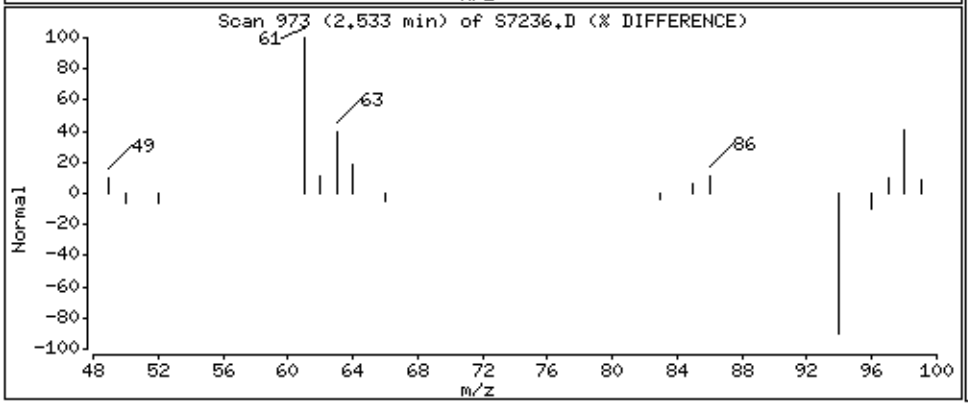












Data File: \\target_server\gg\chem\gcms-s.i\S111723.b\S7236.D

Date : 17-NOV-2023 14:57

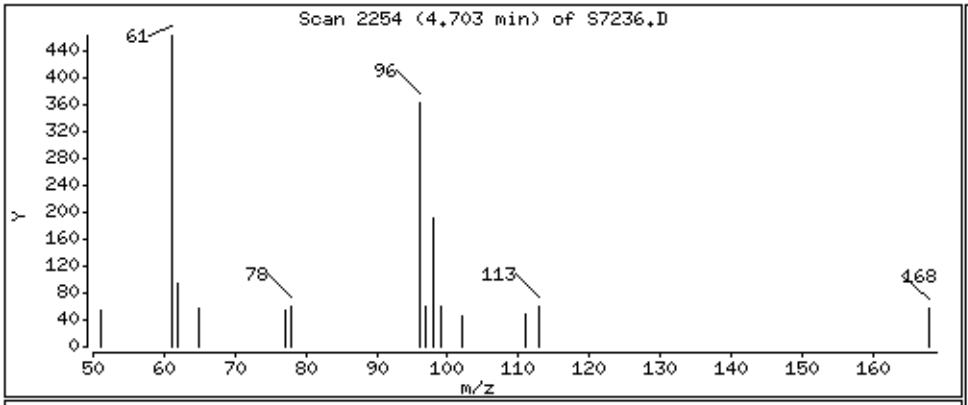
Client ID: SY-OBMW11-110823 Instrument: gcms-s.i

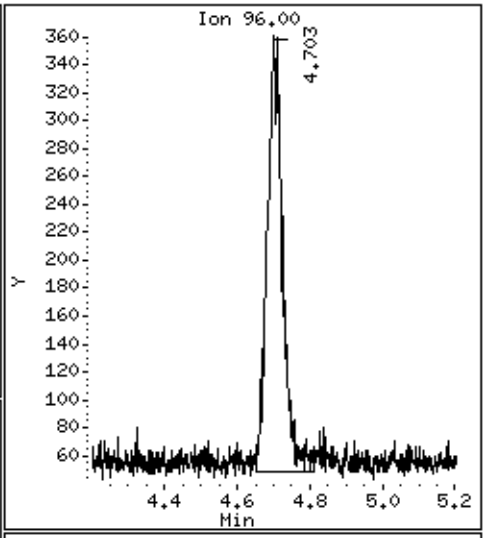
Sample Info: SQ6179-8

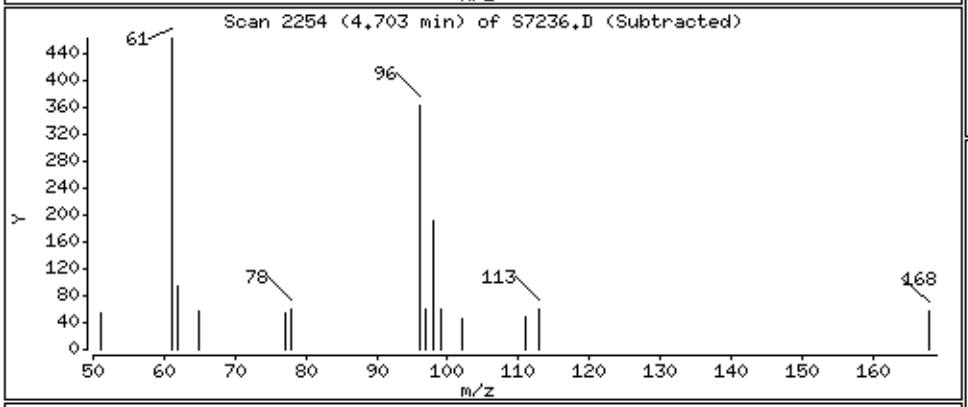
Purge Volume: 25.0 Operator: JSS

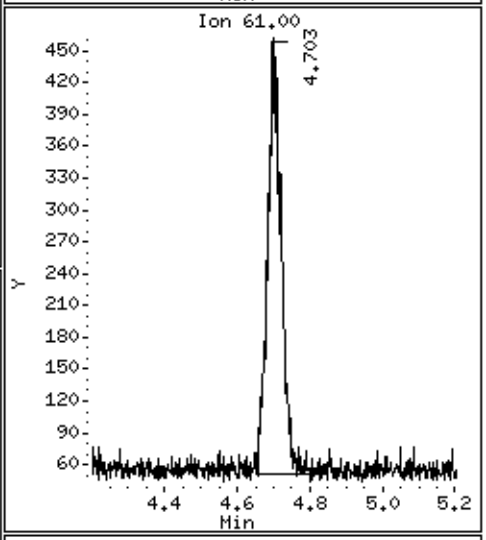
Column phase: RTX-VMS Column diameter: 0.18

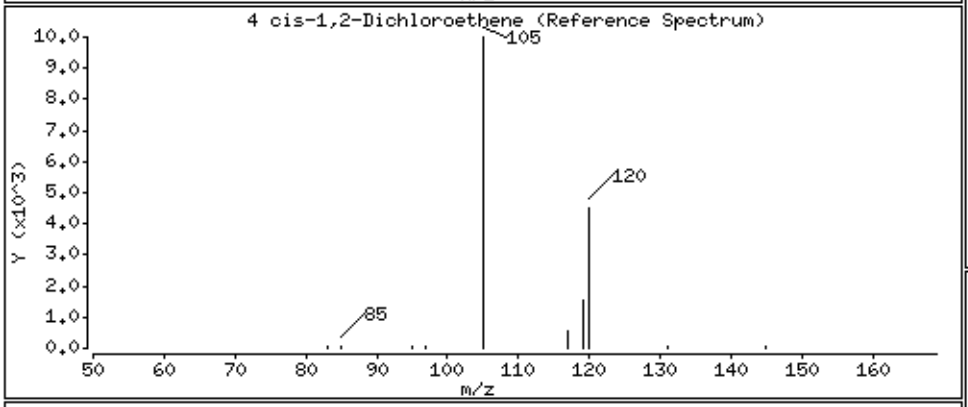
4 cis-1,2-Dichloroethene Concentration: 0.0878 ug/l

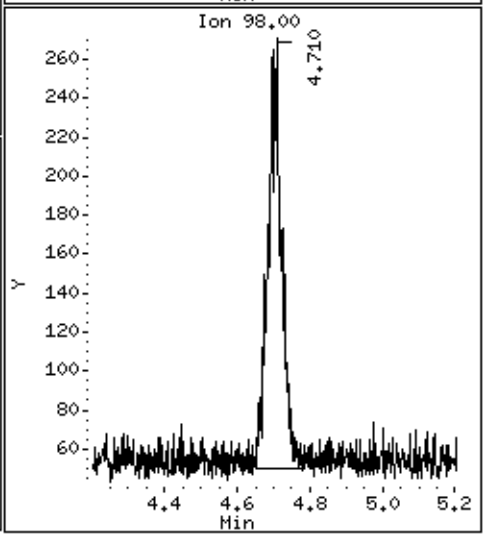


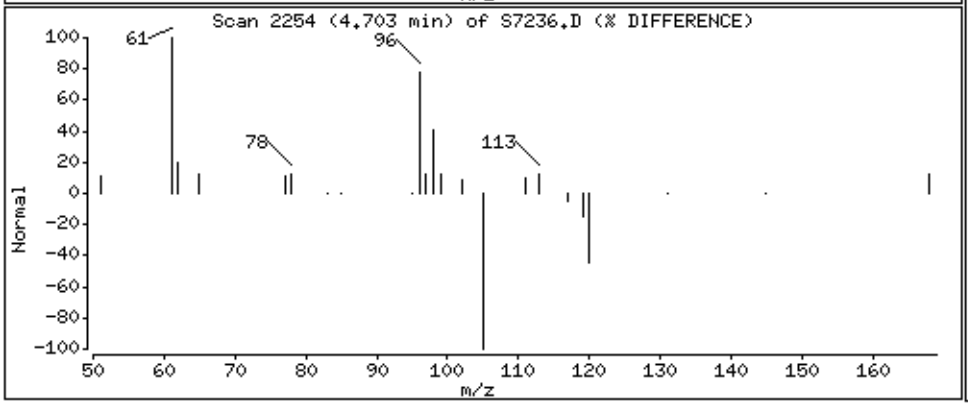












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Date : 17-NOV-2023 14:57

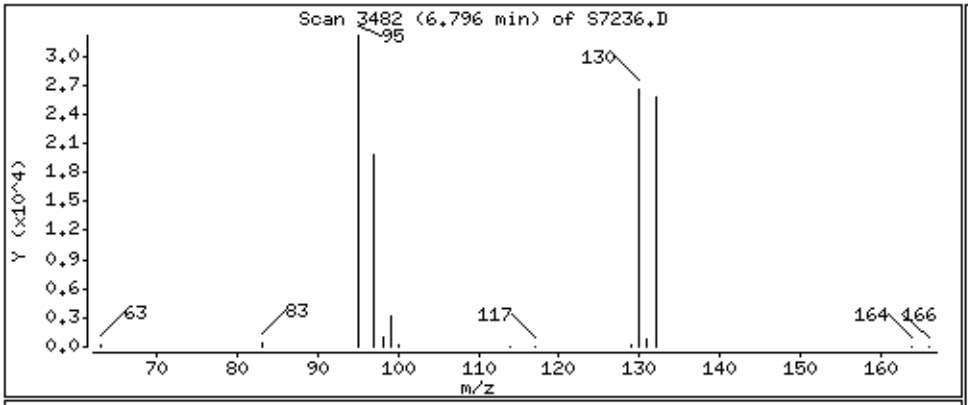
Client ID: SY-OBMW11-110823 Instrument: gcms-s.i

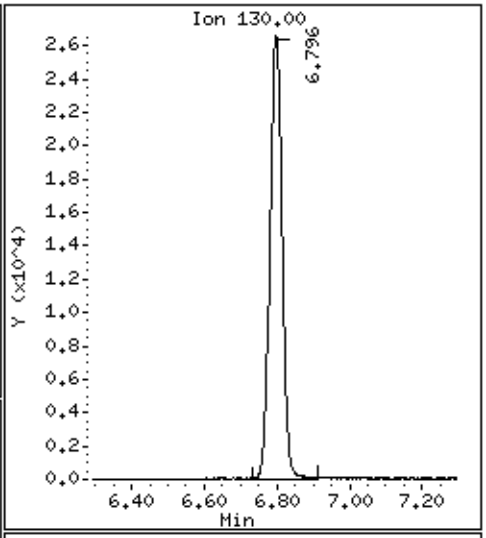
Sample Info: SQ6179-8

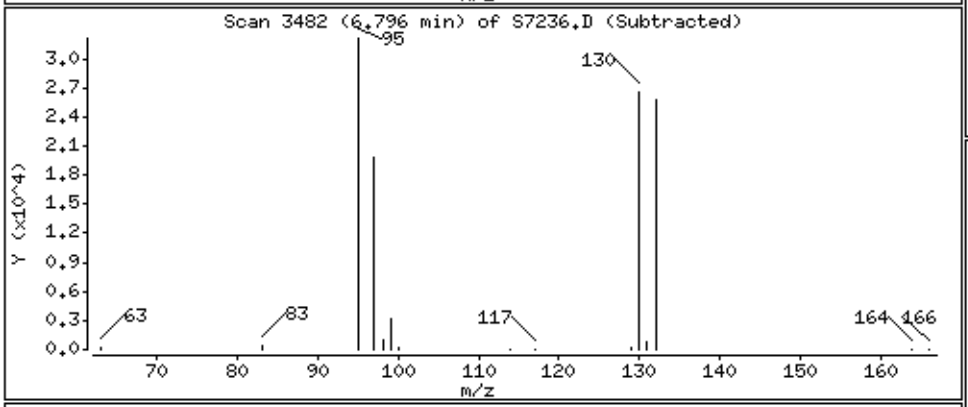
Purge Volume: 25.0 Operator: JSS

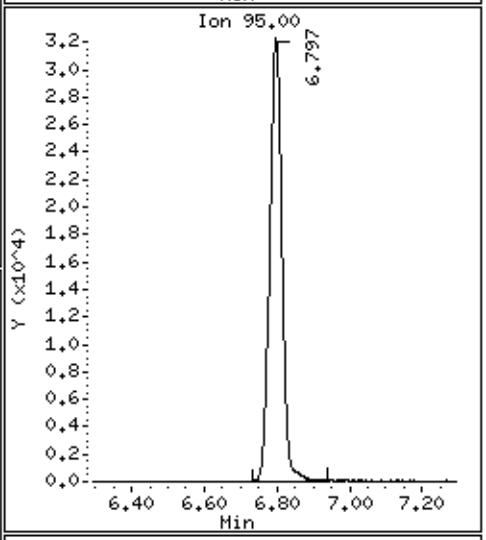
Column phase: RTX-VMS Column diameter: 0.18

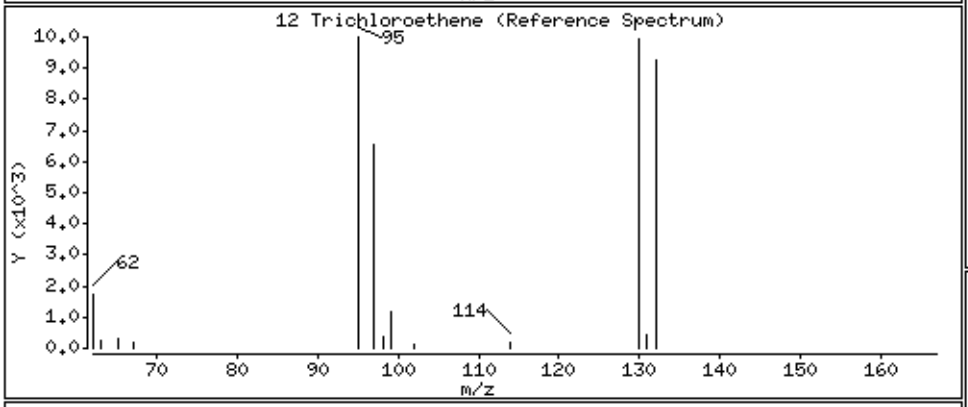
12 Trichloroethene Concentration: 5.14 ug/l

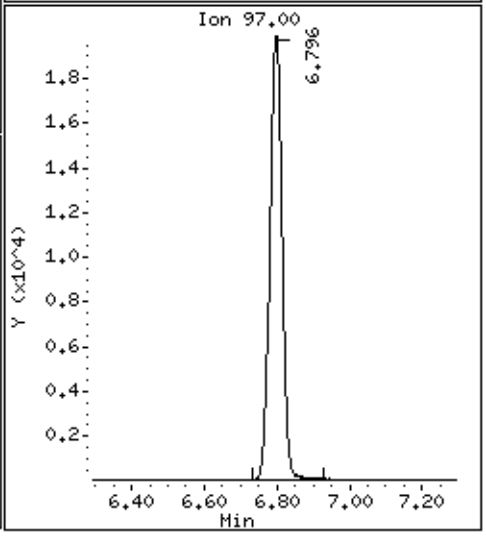


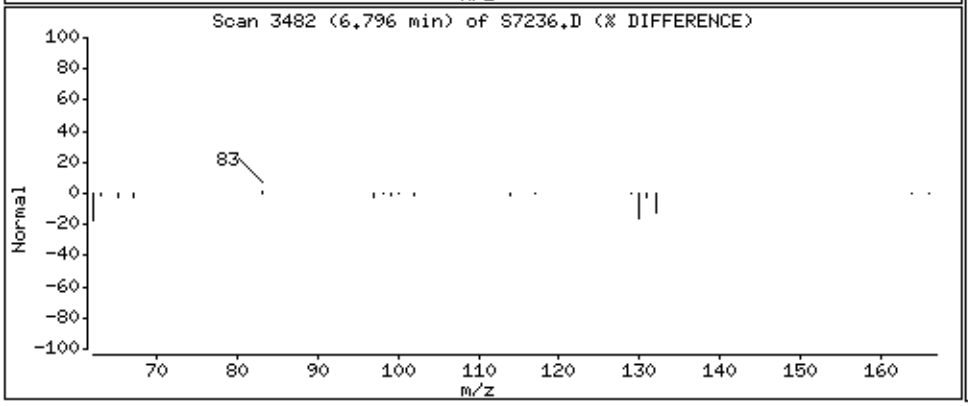












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ANALYTICAL SERVICES

Report of Analytical Results

SDG: SQ6179
Lab ID: SQ6179-8DL
Client ID: SY-OBMW11-110823
Matrix: AQ
Lab File ID: S7261.D

Sample Date: 08-NOV-23
Extract Date: 18-NOV-23
Extracted By: JSS
Extraction Method: SW846 5030C
Lab Prep Batch: WG345675

Report Date: 12-DEC-23
Analysis Date: 18-NOV-23
Analyst: JSS
Analysis Method: SW846 8260C SIM
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Vinyl Chloride	U	0.50	ug/L	10	.1	1.0	0.037	0.50
1,1-Dichloroethene	U	0.25	ug/L	10	.05	0.50	0.091	0.25
trans-1,2-Dichloroethene	U	0.25	ug/L	10	.05	0.50	0.033	0.25
cis-1,2-Dichloroethene	U	0.25	ug/L	10	.05	0.50	0.057	0.25
Trichloroethene		5.4	ug/L	10	.05	0.50	0.12	0.25
Tetrachloroethene	U	0.25	ug/L	10	.05	0.50	0.091	0.25
Dibromofluoromethane		112.	%					
1,2-Dichloroethane-d4		112.	%					
Toluene-D8		97.2	%					
p-Bromofluorobenzene		82.9	%					

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Data File: \\target_server\gg\chem\gcms-s.i\S111823.b\S7261.D
Report Date: 12-Dec-2023 10:11

Katahdin Analytical Services

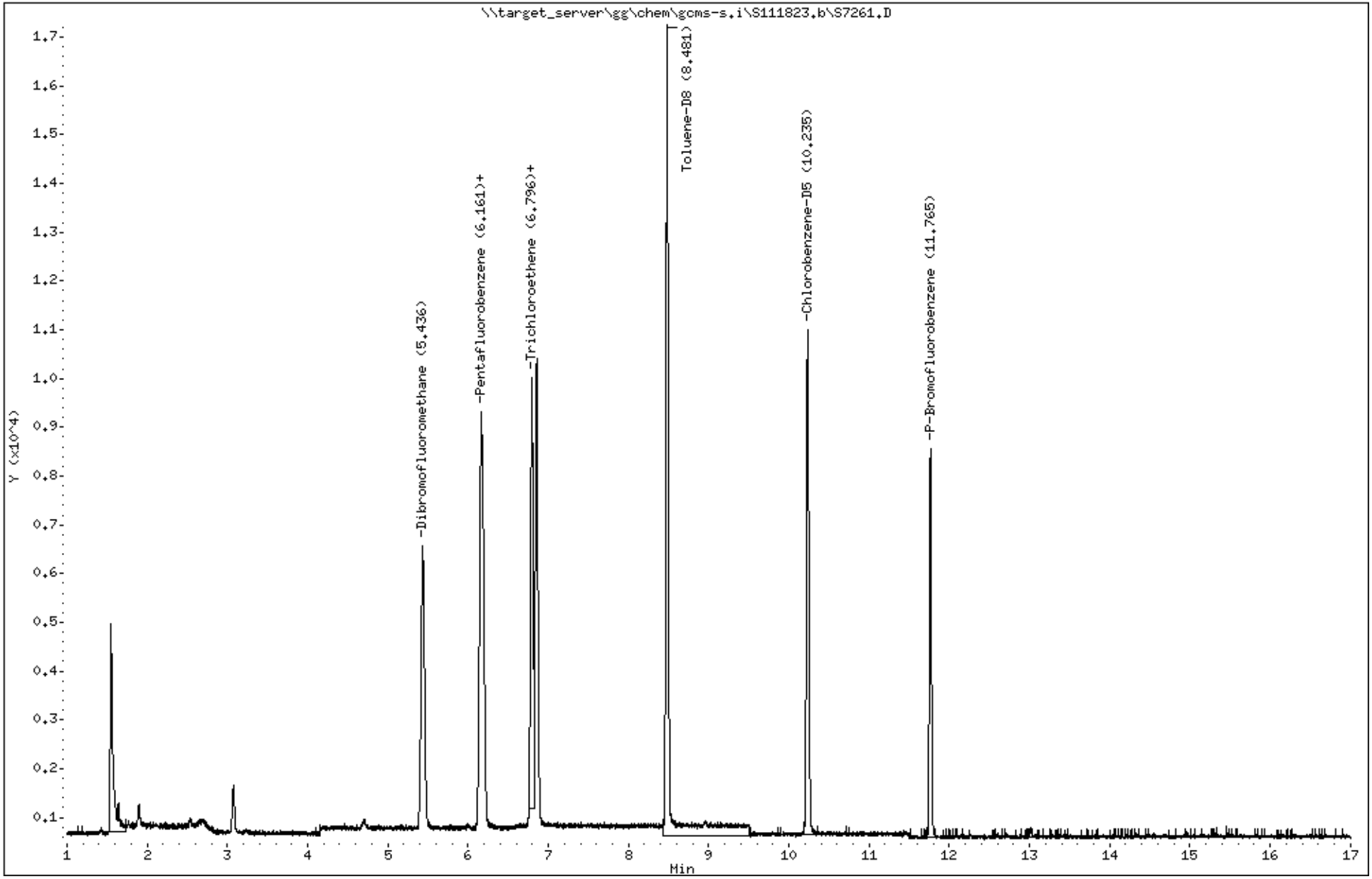
Data file : \\target_server\gg\chem\gcms-s.i\S111823.b\S7261.D
Lab Smp Id: SQ6179-8DL Client Smp ID: SY-OBMW11-110823
Inj Date : 18-NOV-2023 14:40
Operator : JSS Inst ID: gcms-s.i
Smp Info : SQ6179-8DL
Misc Info : WG345675,WG345525-5
Comment : SW846 5030C
Method : \\target_server\gg\chem\gcms-s.i\S111823.b\SSIM(01)CR23.m
Meth Date : 08-Dec-2023 14:57 croy Quant Type: ISTD
Cal Date : 16-NOV-2023 15:48 Cal File: S7206.D
Als bottle: 8
Dil Factor: 10.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.12
Processing Host: T7-O360

Concentration Formula: Amt * DF * 25/Vo * CpndVariable

Name	Value	Description
DF	10.000	Dilution Factor
Vo	25.000	sample purged
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)	REVIEW CODE
$ 7	Dibromofluoromethane	113	5.435	5.441	(0.882)	8316	1.11575	1.12	
* 9	Pentafluorobenzene	168	6.161	6.163	(1.000)	11129	1.00000		
$ 10	1,2-Dichloroethane-D4	65	6.186	6.194	(1.004)	7546	1.12056	1.12	
12	Trichloroethene	130	6.793	6.794	(0.991)	5098	0.53979	5.40	
* 13	1,4-Difluorobenzene	114	6.854	6.855	(1.000)	16511	1.00000		
$ 14	Toluene-D8	98	8.482	8.483	(1.237)	16860	0.97231	0.972	
* 17	Chlorobenzene-D5	117	10.231	10.238	(1.000)	15250	1.00000		
$ 18	P-Bromofluorobenzene	95	11.765	11.768	(1.150)	5326	0.82930	0.829	

Data File: \\target_server\gg\chem\gcms-s.i\S111823.b\S7261.D
Date : 18-NOV-2023 14:40
Client ID: SY-OBMW11-110823
Instrument: gcms-s.i
Sample Info: SQ6179-8DL
Purge Volume: 25.0
Operator: JSS
Column phase: RTX-VMS
Column diameter: 0.18



Katahdin Analytical Services SQ6179 Page 106 of 740

Data File: \\target_server\gg\chem\gcms-s.i\S111823.b\S7261.D

Date : 18-NOV-2023 14:40

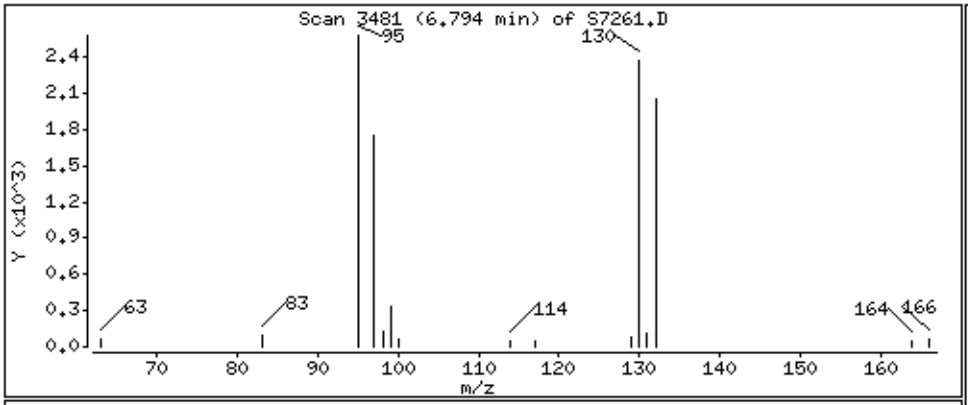
Client ID: SY-OBMW11-110823 Instrument: gcms-s.i

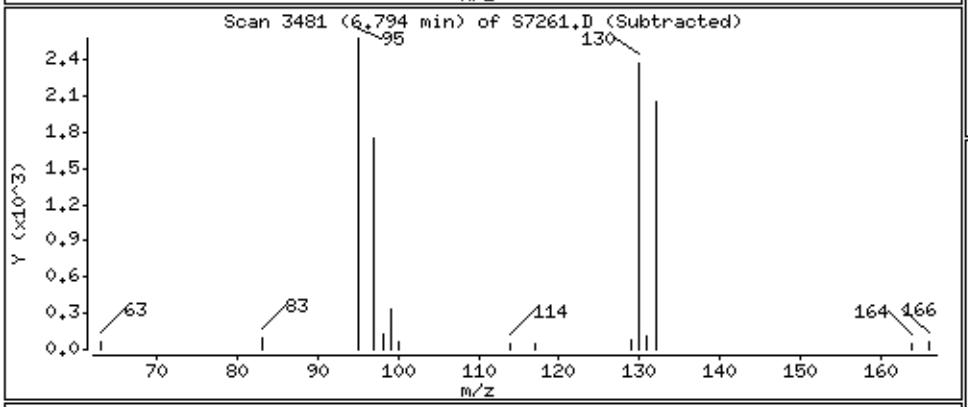
Sample Info: SQ6179-8DL

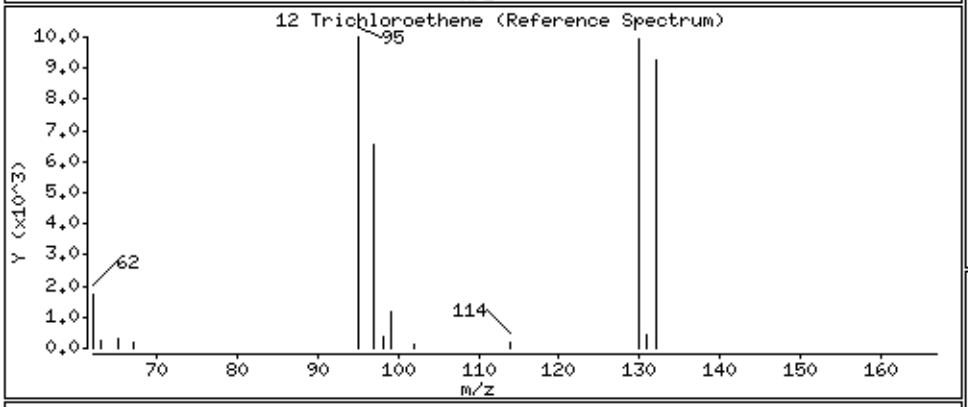
Purge Volume: 25.0 Operator: JSS

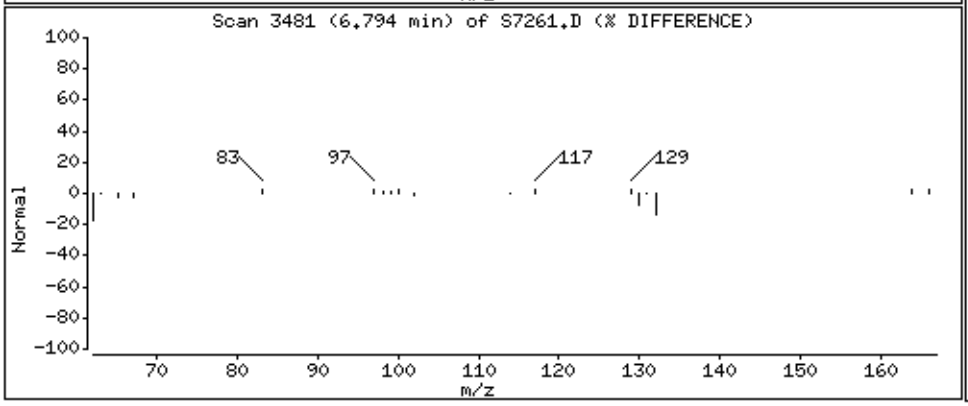
Column phase: RTX-VMS Column diameter: 0.18

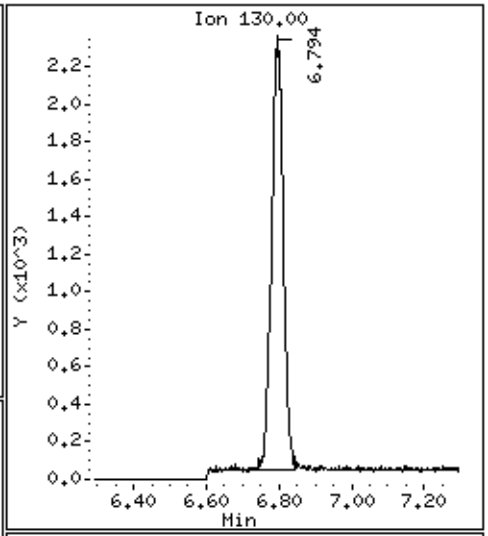
12 Trichloroethene Concentration: 5.40 ug/l

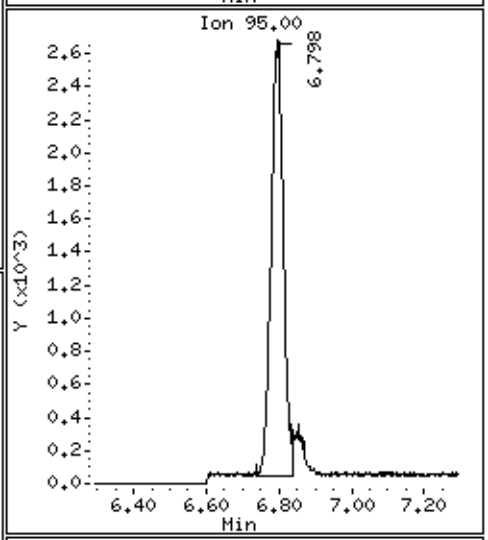


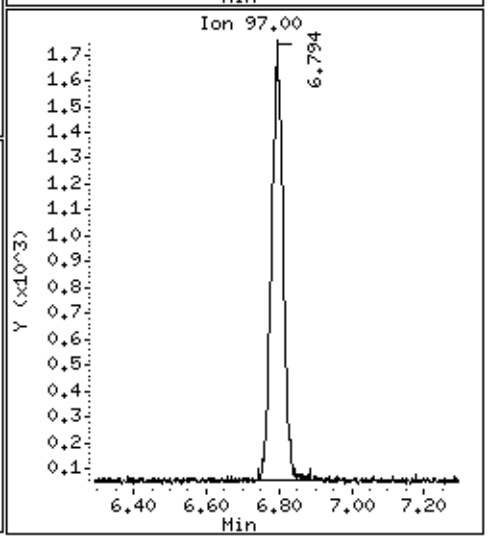












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Report of Analytical Results

SDG: SQ6179
Lab ID: SQ6179-9
Client ID: SY-OBMW110-110823
Matrix: AQ
Lab File ID: S7237.D

Sample Date: 08-NOV-23
Extract Date: 17-NOV-23
Extracted By: JSS
Extraction Method: SW846 5030C
Lab Prep Batch: WG345597

Report Date: 12-DEC-23
Analysis Date: 17-NOV-23
Analyst: JSS
Analysis Method: SW846 8260C SIM
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Vinyl Chloride	U	0.10	ug/L	1	.1	0.10	0.0037	0.050
1,1-Dichloroethene		0.052	ug/L	1	.05	0.050	0.0091	0.025
trans-1,2-Dichloroethene	U	0.050	ug/L	1	.05	0.050	0.0033	0.025
cis-1,2-Dichloroethene		0.078	ug/L	1	.05	0.050	0.0057	0.025
Trichloroethene	E	5.1	ug/L	1	.05	0.050	0.012	0.025
Tetrachloroethene	U	0.050	ug/L	1	.05	0.050	0.0091	0.025
Dibromofluoromethane		124.	%					
1,2-Dichloroethane-d4		125.	%					
Toluene-D8		85.6	%					
p-Bromofluorobenzene		83.2	%					

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Data File: \\target_server\gg\chem\gcms-s.i\S111723.b\S7237.D
Report Date: 08-Dec-2023 14:52

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-s.i\S111723.b\S7237.D
Lab Smp Id: SQ6179-9 Client Smp ID: SY-OBMW110-110823
Inj Date : 17-NOV-2023 15:24
Operator : JSS Inst ID: gcms-s.i
Smp Info : SQ6179-9
Misc Info : WG345597,WG345525-5
Comment : SW846 5030C
Method : \\target_server\gg\chem\gcms-s.i\S111723.b\SSIM(01)CR23.m
Meth Date : 08-Dec-2023 14:32 croy Quant Type: ISTD
Cal Date : 16-NOV-2023 15:48 Cal File: S7206.D
Als bottle: 13
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: credere.sub
Target Version: 4.12
Processing Host: ORGANICS2

Concentration Formula: Amt * DF * 25/Vo * CpndVariable

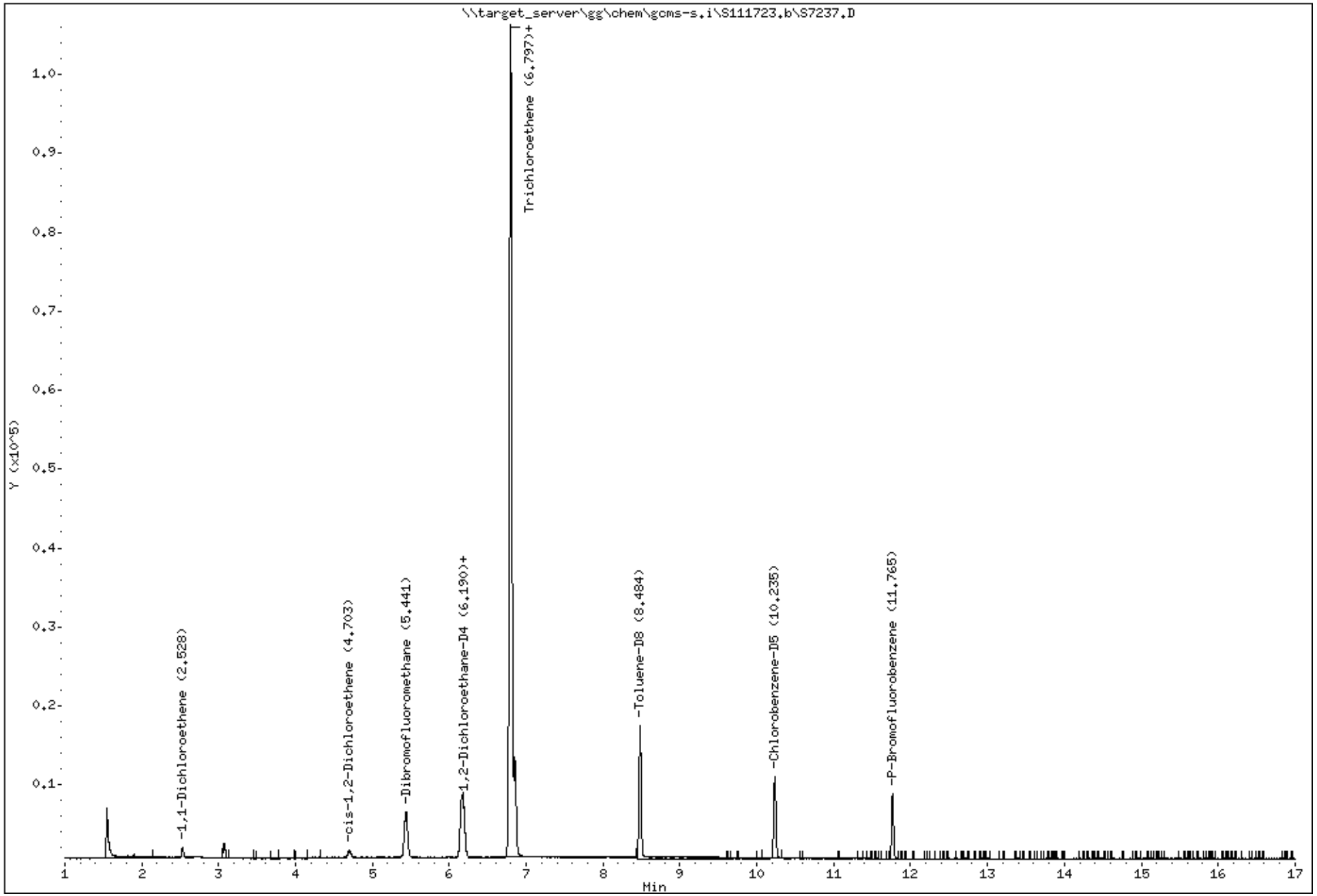
Name	Value	Description
DF	1.000	Dilution Factor
Vo	25.000	sample purged
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)	REVIEW CODE
2	1,1-Dichloroethene	96	2.527	2.532	(0.410)	621	0.05209	0.0521	
4	cis-1,2-Dichloroethene	96	4.703	4.703	(0.764)	790	0.07811	0.0781	
12	Trichloroethene	130	6.797	6.794	(0.992)	58321	5.09107	5.09(A)	
$ 7	Dibromofluoromethane	113	5.440	5.441	(0.884)	8632	1.23695	1.24	
$ 10	1,2-Dichloroethane-D4	65	6.190	6.194	(1.005)	7899	1.25279	1.25	
$ 14	Toluene-D8	98	8.482	8.483	(1.238)	18011	0.85633	0.856	
$ 18	P-Bromofluorobenzene	95	11.765	11.768	(1.150)	5456	0.83171	0.832	
* 9	Pentafluorobenzene	168	6.158	6.163	(1.000)	10420	1.00000		
* 13	1,4-Difluorobenzene	114	6.853	6.855	(1.000)	20027	1.00000		
* 17	Chlorobenzene-D5	117	10.233	10.238	(1.000)	15577	1.00000		

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: \\target_server\gg\chem\gcms-s.i\S111723.b\S7237.D
Date : 17-NOV-2023 15:24
Client ID: SY-OBMW110-110823 Instrument: gcms-s.i
Sample Info: SQ6179-9



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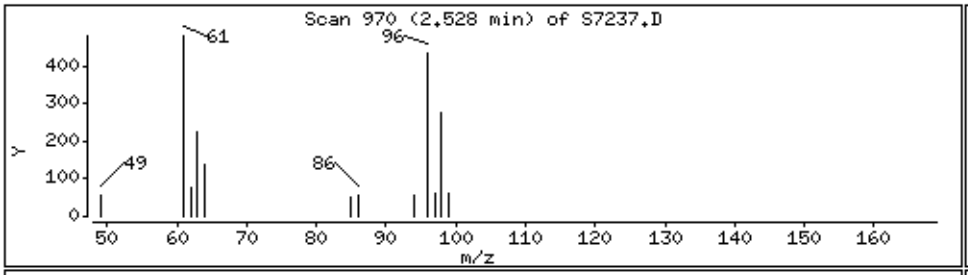
Data File: \\target_server\gg\chem\gcms-s.i\S111723.b\S7237.D

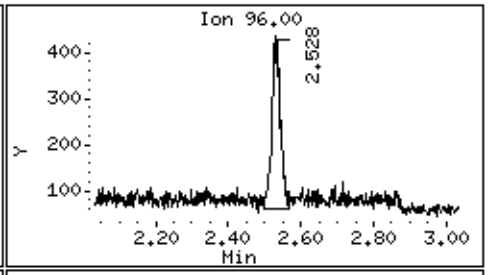
Date : 17-NOV-2023 15:24

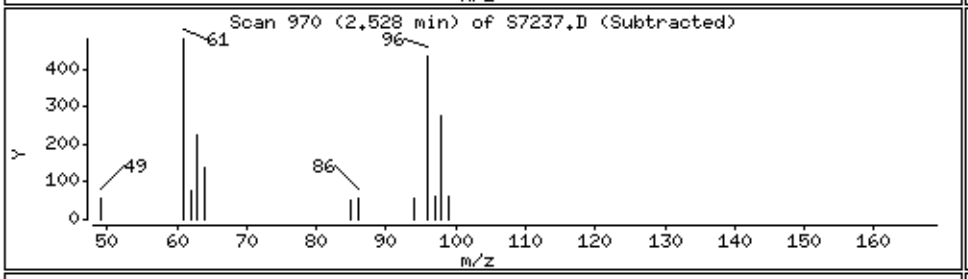
Client ID: SY-OBMW110-110823 Instrument: gcms-s.i

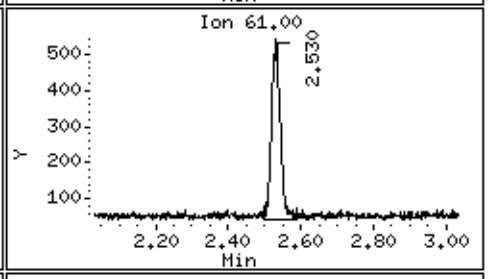
Sample Info: SQ6179-9

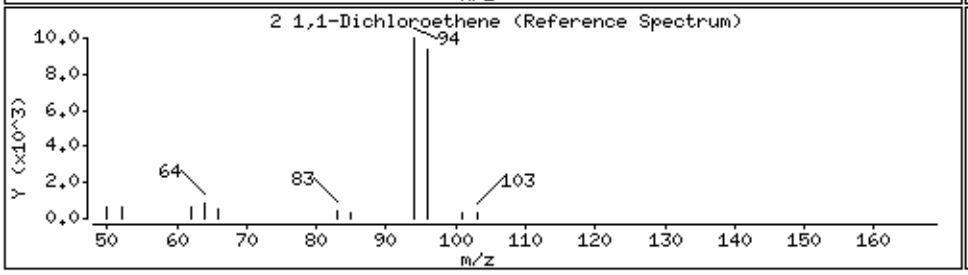
2 1,1-Dichloroethene Concentration: 0.0521 ug/l

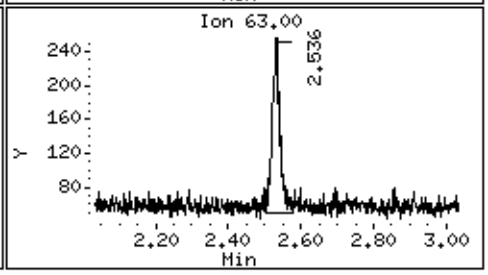




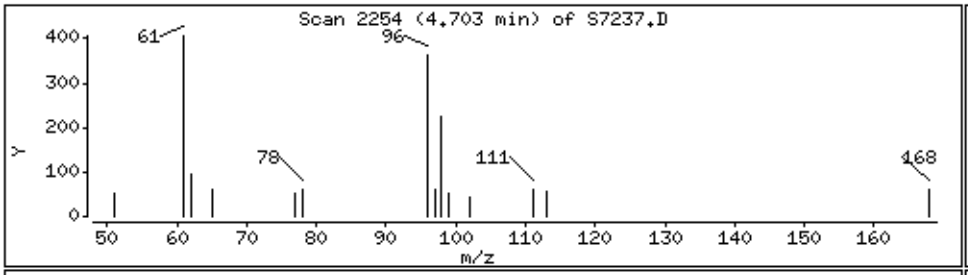


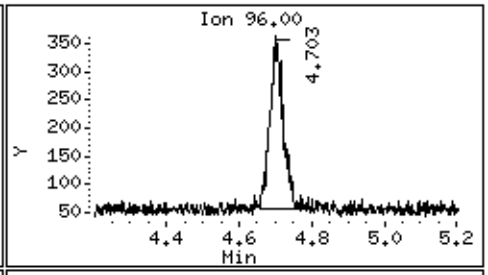


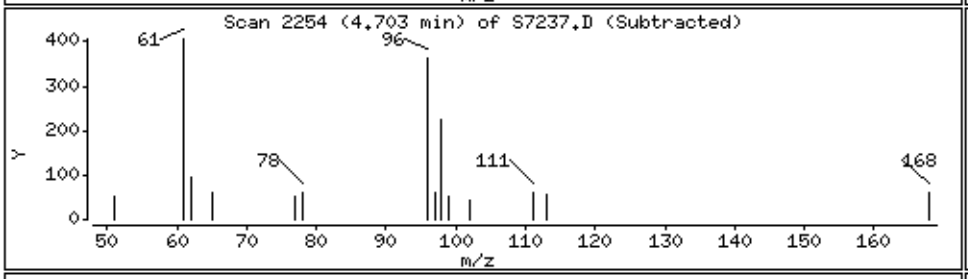


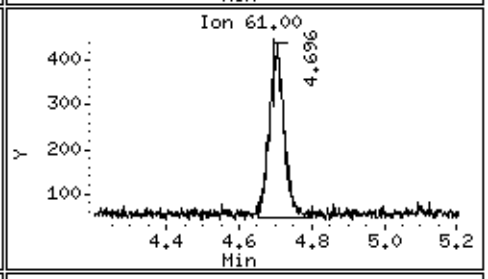


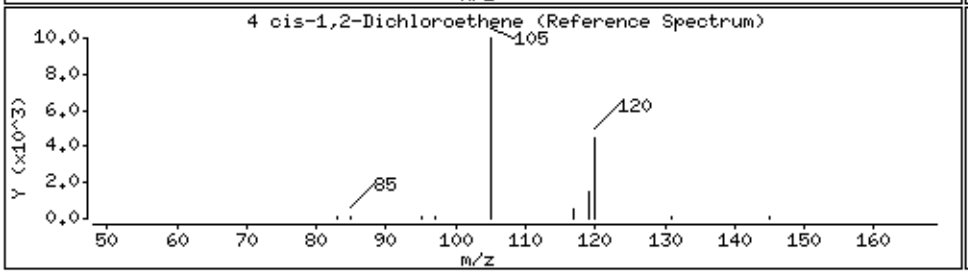
4 cis-1,2-Dichloroethene Concentration: 0.0781 ug/l

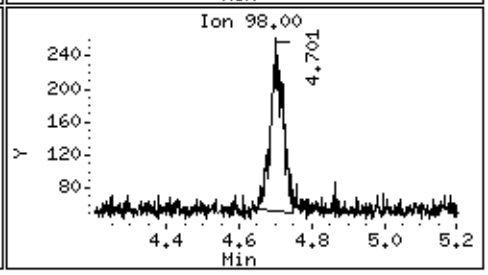












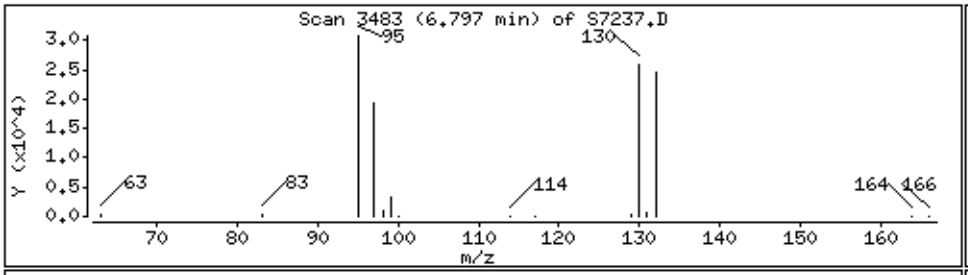
Data File: \\target_server\gg\chem\gcms-s.i\S111723.b\S7237.D

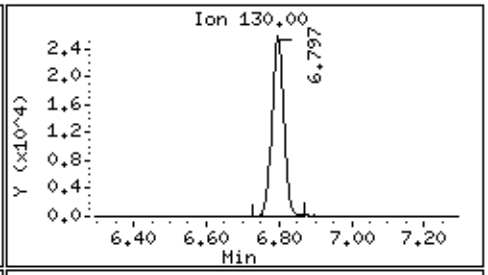
Date : 17-NOV-2023 15:24

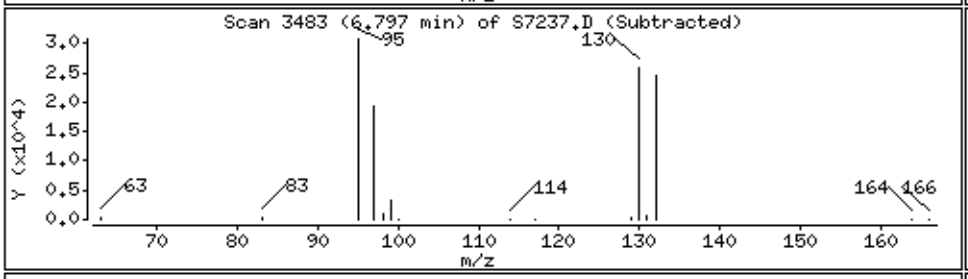
Client ID: SY-OBMW110-110823 Instrument: gcms-s.i

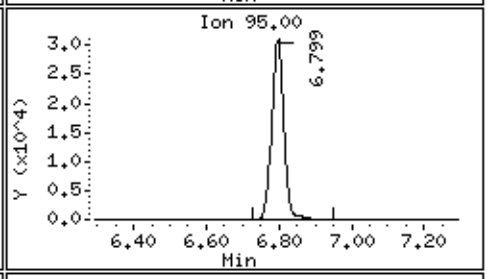
Sample Info: SQ6179-9

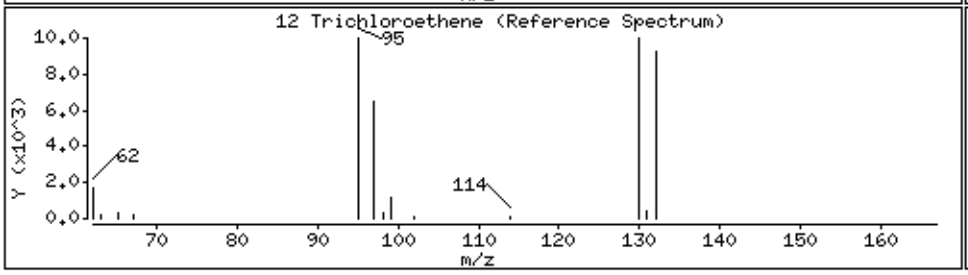
12 Trichloroethene Concentration: 5.09 ug/l

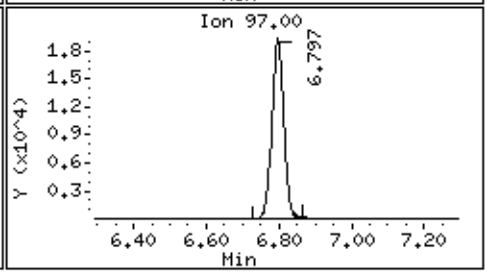












Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

SDG: SQ6179
Lab ID: SQ6179-9DL
Client ID: SY-OBMW110-110823
Matrix: AQ
Lab File ID: S7262.D

Sample Date: 08-NOV-23
Extract Date: 18-NOV-23
Extracted By: JSS
Extraction Method: SW846 5030C
Lab Prep Batch: WG345675

Report Date: 12-DEC-23
Analysis Date: 18-NOV-23
Analyst: JSS
Analysis Method: SW846 8260C SIM
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Vinyl Chloride	U	0.50	ug/L	10	.1	1.0	0.037	0.50
1,1-Dichloroethene	U	0.25	ug/L	10	.05	0.50	0.091	0.25
trans-1,2-Dichloroethene	U	0.25	ug/L	10	.05	0.50	0.033	0.25
cis-1,2-Dichloroethene	U	0.25	ug/L	10	.05	0.50	0.057	0.25
Trichloroethene		5.0	ug/L	10	.05	0.50	0.12	0.25
Tetrachloroethene	U	0.25	ug/L	10	.05	0.50	0.091	0.25
Dibromofluoromethane		116.	%					
1,2-Dichloroethane-d4		116.	%					
Toluene-D8		98.7	%					
p-Bromofluorobenzene		82.8	%					

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Data File: \\target_server\gg\chem\gcms-s.i\S111823.b\S7262.D
Report Date: 12-Dec-2023 10:11

Katahdin Analytical Services

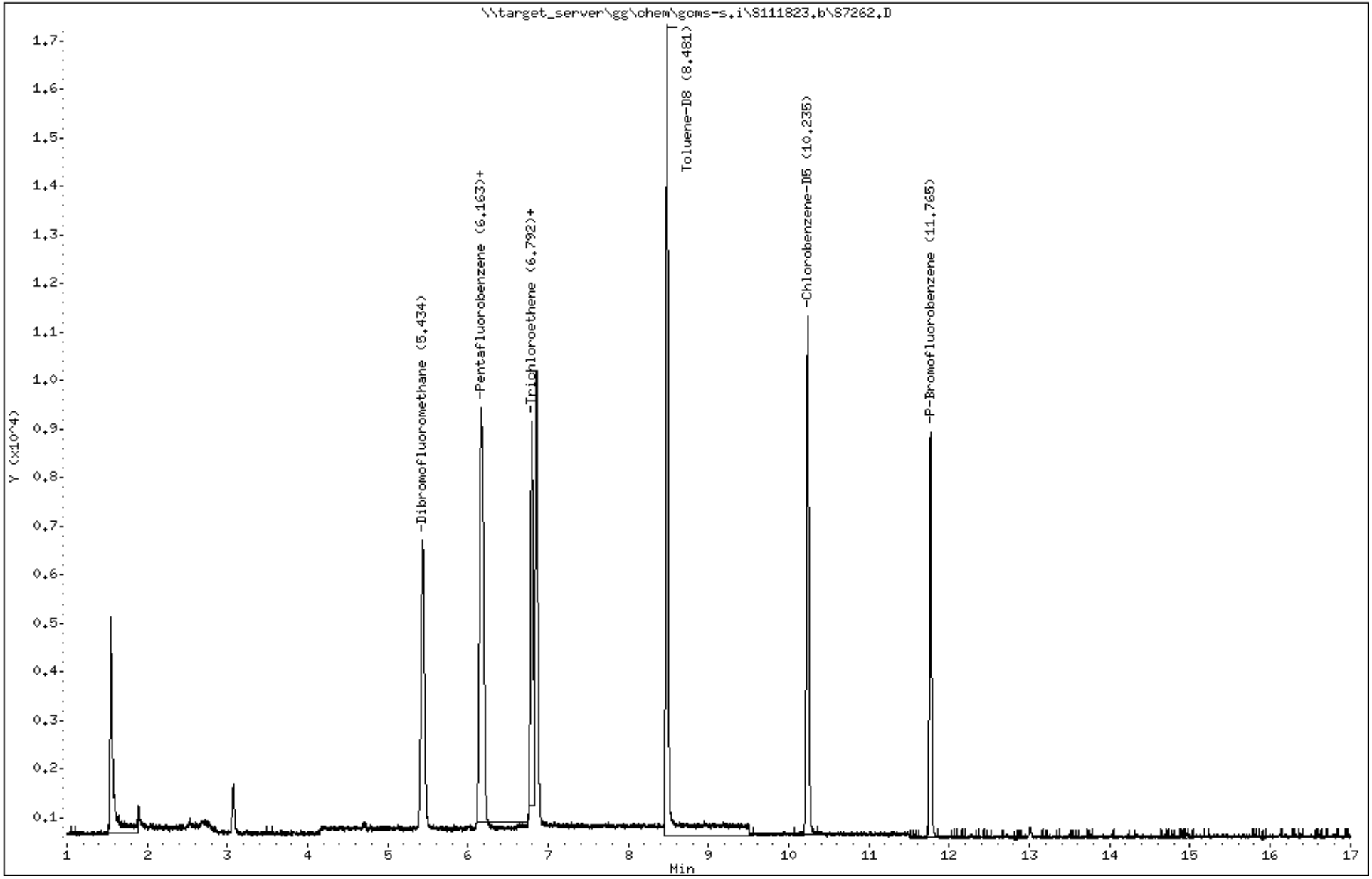
Data file : \\target_server\gg\chem\gcms-s.i\S111823.b\S7262.D
Lab Smp Id: SQ6179-9DL Client Smp ID: SY-OBMW110-110823
Inj Date : 18-NOV-2023 15:08
Operator : JSS Inst ID: gcms-s.i
Smp Info : SQ6179-9DL
Misc Info : WG345675,WG345525-5
Comment : SW846 5030C
Method : \\target_server\gg\chem\gcms-s.i\S111823.b\SSIM(01)CR23.m
Meth Date : 08-Dec-2023 14:57 croy Quant Type: ISTD
Cal Date : 16-NOV-2023 15:48 Cal File: S7206.D
Als bottle: 9
Dil Factor: 10.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.12
Processing Host: T7-O360

Concentration Formula: Amt * DF * 25/Vo * CpndVariable

Name	Value	Description
DF	10.000	Dilution Factor
Vo	25.000	sample purged
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)	REVIEW CODE
$ 7	Dibromofluoromethane	113	5.433	5.441	(0.882)	8699	1.15623	1.16	
* 9	Pentafluorobenzene	168	6.159	6.163	(1.000)	11234	1.00000		
$ 10	1,2-Dichloroethane-D4	65	6.188	6.194	(1.005)	7914	1.16422	1.16	
12	Trichloroethene	130	6.792	6.794	(0.991)	4757	0.50068	5.01	
* 13	1,4-Difluorobenzene	114	6.852	6.855	(1.000)	16610	1.00000		
$ 14	Toluene-D8	98	8.480	8.483	(1.238)	17226	0.98749	0.987	
* 17	Chlorobenzene-D5	117	10.234	10.238	(1.000)	15549	1.00000		
$ 18	P-Bromofluorobenzene	95	11.765	11.768	(1.150)	5422	0.82802	0.828	

Data File: \\target_server\gg\chem\gcms-s.i\S111823.b\S7262.D
Date : 18-NOV-2023 15:08
Client ID: SY-OBMW110-110823
Instrument: gcms-s.i
Sample Info: SQ6179-9DL
Purge Volume: 25.0
Operator: JSS
Column phase: RTX-VMS
Column diameter: 0.18



Katahdin Analytical Services SQ6179 Page 115 of 740

Data File: \\target_server\gg\chem\gcms-s.i\S111823.b\S7262.D

Date : 18-NOV-2023 15:08

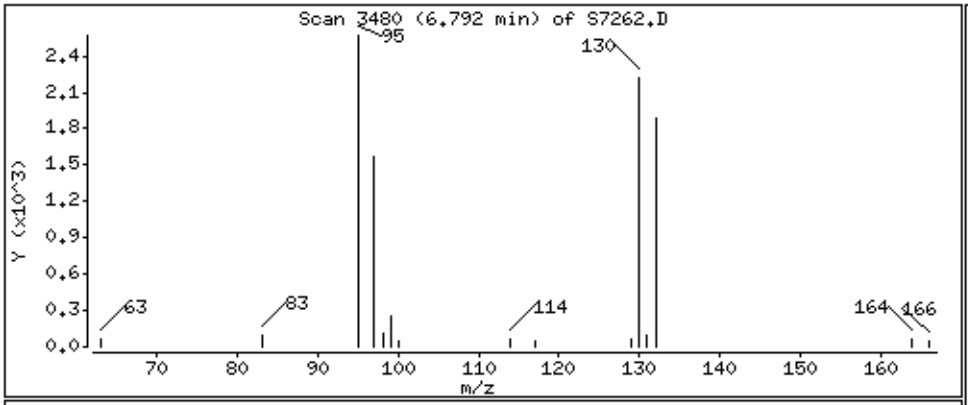
Client ID: SY-OBMW110-110823 Instrument: gcms-s.i

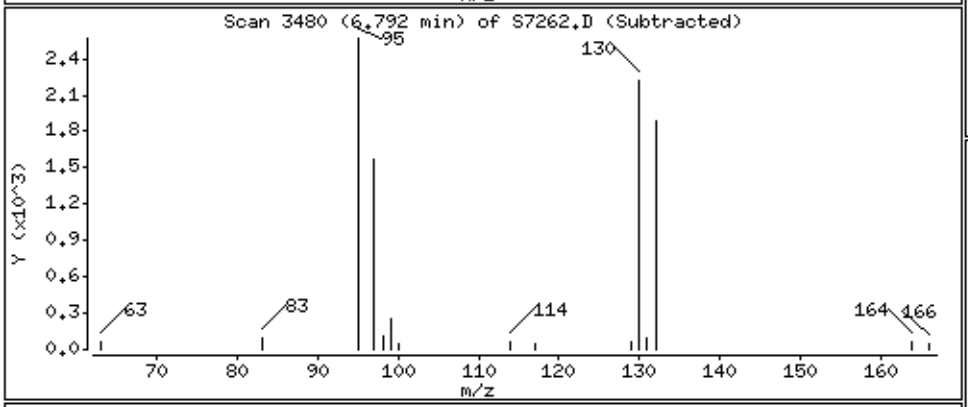
Sample Info: SQ6179-9DL

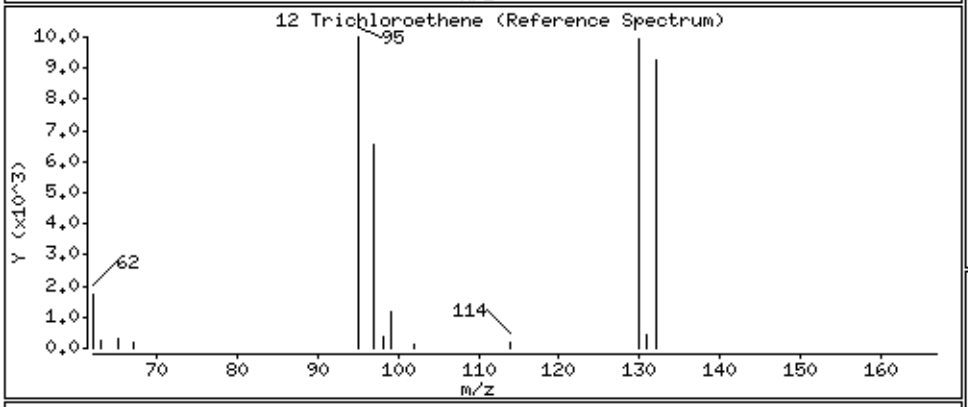
Purge Volume: 25.0 Operator: JSS

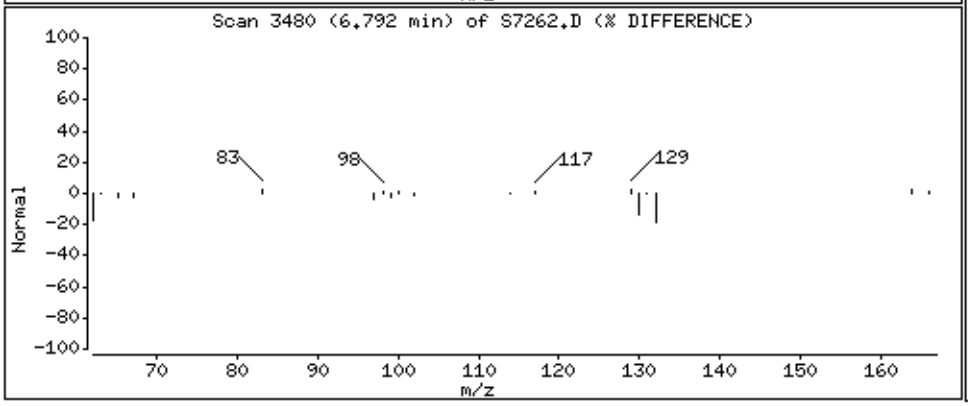
Column phase: RTX-VMS Column diameter: 0.18

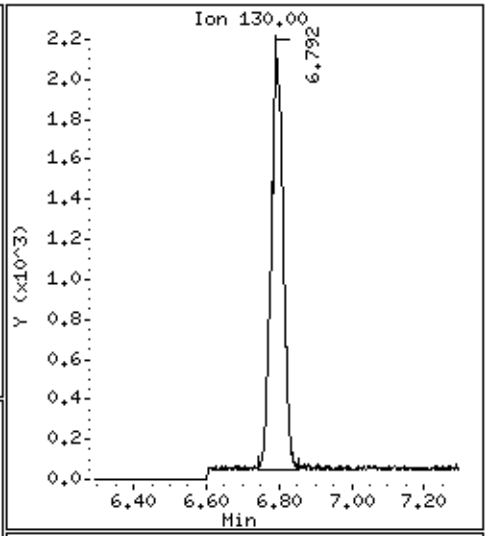
12 Trichloroethene Concentration: 5.01 ug/l

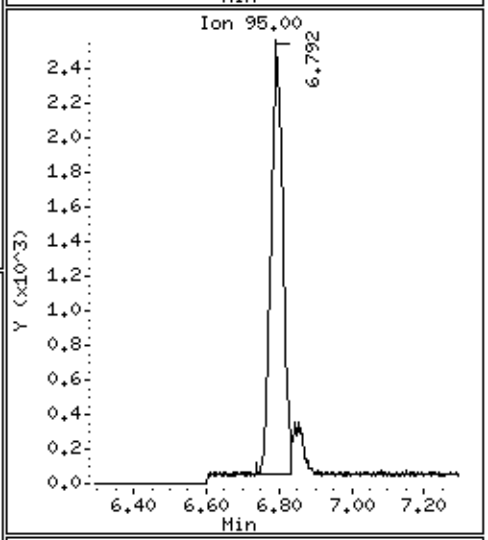


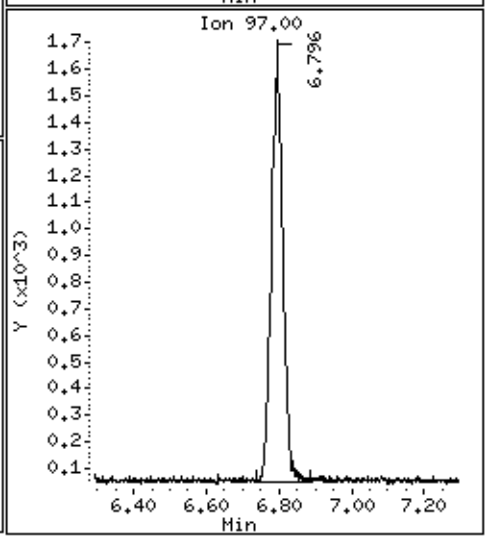












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ANALYTICAL SERVICES

Report of Analytical Results

SDG: SQ6179
Lab ID: SQ6179-10
Client ID: SY-OBMW3-110823
Matrix: AQ
Lab File ID: S7238.D

Sample Date: 08-NOV-23
Extract Date: 17-NOV-23
Extracted By: JSS
Extraction Method: SW846 5030C
Lab Prep Batch: WG345597

Report Date: 12-DEC-23
Analysis Date: 17-NOV-23
Analyst: JSS
Analysis Method: SW846 8260C SIM
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Vinyl Chloride	U	0.050	ug/L	1	.1	0.10	0.0037	0.050
1,1-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0091	0.025
trans-1,2-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0033	0.025
cis-1,2-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0057	0.025
Trichloroethene	U	0.025	ug/L	1	.05	0.050	0.012	0.025
Tetrachloroethene	U	0.025	ug/L	1	.05	0.050	0.0091	0.025
Dibromofluoromethane		124.	%					
1,2-Dichloroethane-d4		121.	%					
Toluene-D8		99.1	%					
p-Bromofluorobenzene		83.0	%					

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Data File: \\target_server\gg\chem\gcms-s.i\S111723.b\S7238.D
Report Date: 12-Dec-2023 10:11

Katahdin Analytical Services

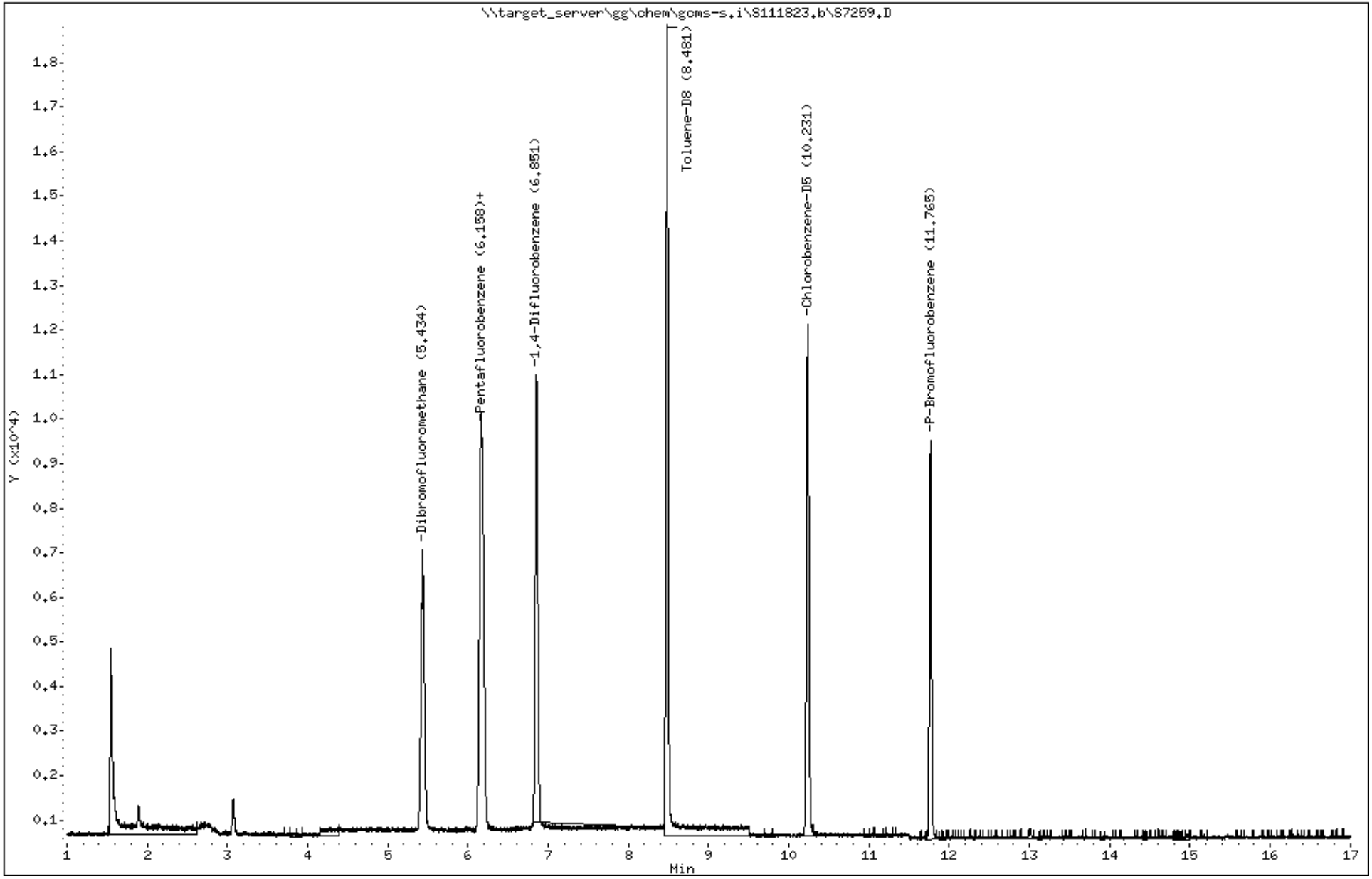
Data file : \\target_server\gg\chem\gcms-s.i\S111723.b\S7238.D
Lab Smp Id: SQ6179-10 Client Smp ID: SY-OBMW3-110823
Inj Date : 17-NOV-2023 15:52
Operator : JSS Inst ID: gcms-s.i
Smp Info : SQ6179-10
Misc Info : WG345597,WG345525-5
Comment : SW846 5030C
Method : \\target_server\gg\chem\gcms-s.i\S111723.b\SSIM(01)CR23.m
Meth Date : 08-Dec-2023 14:53 croy Quant Type: ISTD
Cal Date : 16-NOV-2023 15:48 Cal File: S7206.D
Als bottle: 14
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: credere.sub
Target Version: 4.12
Processing Host: ORGANICS2

Concentration Formula: Amt * DF * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	25.000	sample purged
Cpnd Variable		Local Compound Variable

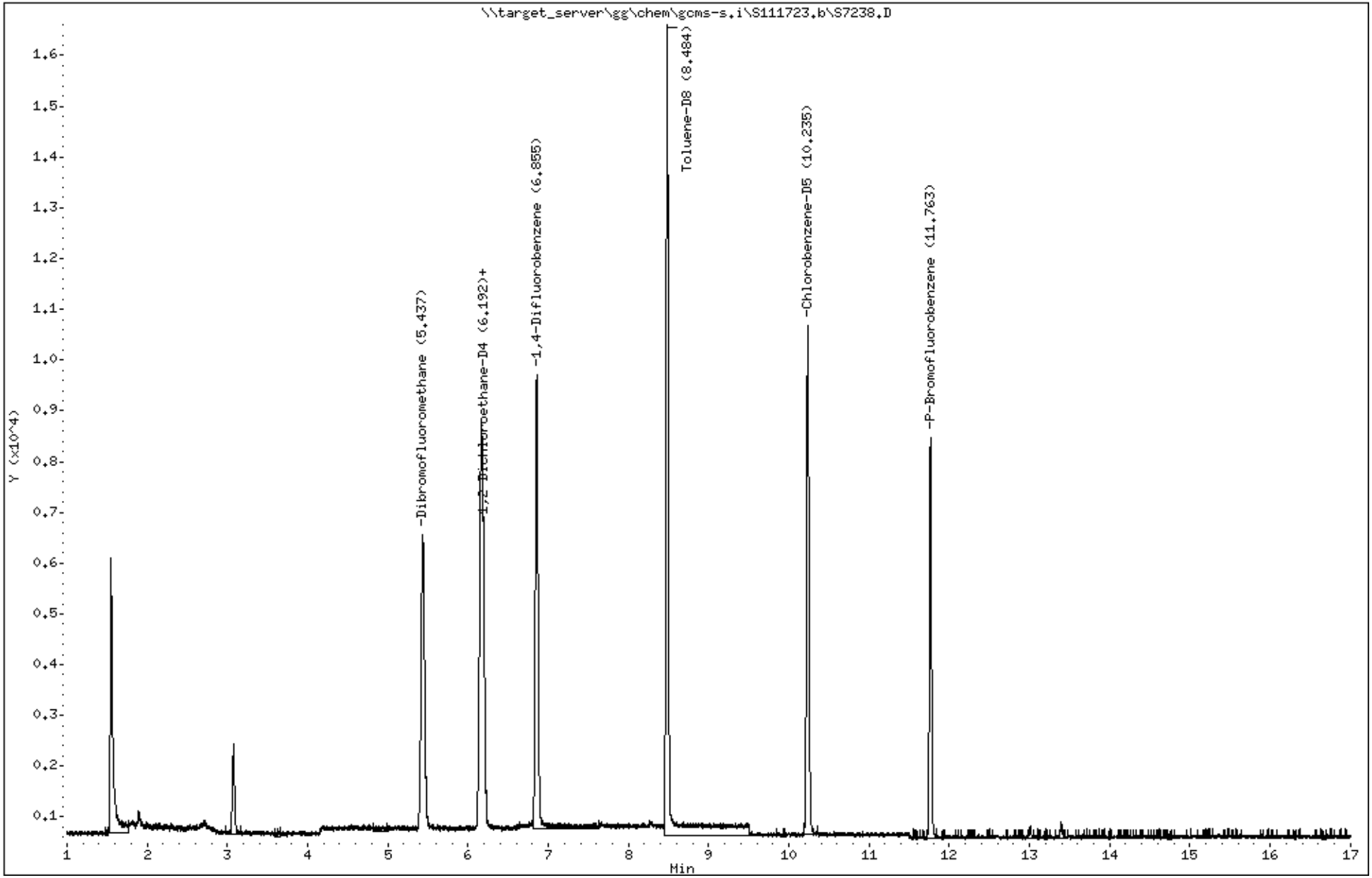
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)	REVIEW CODE
$ 7 Dibromofluoromethane	113	5.437	5.441	(0.883)	8530	1.24091	1.24	
$ 10 1,2-Dichloroethane-D4	65	6.191	6.194	(1.006)	7522	1.21113	1.21	
$ 14 Toluene-D8	98	8.482	8.483	(1.237)	16636	0.99065	0.991	
$ 18 P-Bromofluorobenzene	95	11.763	11.768	(1.149)	5188	0.82969	0.830	
* 9 Pentafluorobenzene	168	6.158	6.163	(1.000)	10264	1.00000		
* 13 1,4-Difluorobenzene	114	6.856	6.855	(1.000)	15990	1.00000		
* 17 Chlorobenzene-D5	117	10.234	10.238	(1.000)	14848	1.00000		

Data File: \\target_server\gg\chem\gcms-s.i\S111823.b\S7259.D
Date : 18-NOV-2023 13:45
Client ID:
Instrument: gcms-s.i
Sample Info: WG345675-2,SQ6179
Purge Volume: 25.0
Operator: JSS
Column phase: RTX-VMS
Column diameter: 0.18



Katahdin Analytical Services SQ6179 Page 119 of 740

Data File: \\target_server\gg\chem\gcms-s.i\S111723.b\S7238.D
Date : 17-NOV-2023 15:52
Client ID: SY-OBMW3-110823
Instrument: gcms-s.i
Sample Info: SQ6179-10
Purge Volume: 25.0
Operator: JSS
Column phase: RTX-VMS
Column diameter: 0.18



Katahdin Analytical Services SQ6179 Page 120 of 740

Standards Data Section

Form 6
Initial Calibration Summary

Lab Name : Katahdin Analytical Services **SDG:** SQ6179

Instrument ID: GCMS-S **Column ID:**

Lab File IDs : S7199.D S7200.D S7201.D S7202.D S7203.D S7204.D S7205.D S7206.D

Calibration Date(s): 16-NOV-23 12:35, 16-NOV-23 15:48

	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Level 7	Level 8	Curve				%RSD or R^2		
	0.0500000	0.0750000	0.1000000	0.3000000	0.5000000	0.7500000	1.0000	2.0000	Type	b	m1	m2	Result	Limit	
Vinyl chloride	1.45744	1.43582	1.53357	1.56289	1.54567	1.46020	1.42173	1.27659	AVG		1.46174		6.28123	15	O
1,1-Dichloroethene	1.11563	1.17283	1.20831	1.25031	1.20259	1.14195	1.10061	0.96005	AVG		1.14404		7.83429	15	O
trans-1,2-Dichloroethene	1.42181	1.25018	1.32122	1.30119	1.29610	1.22294	1.19504	1.07798	AVG		1.26081		8.02973	15	O
cis-1,2-Dichloroethene	1.11563	0.99299	1.00493	0.98887	0.95404	0.92542	0.92812	0.85550	AVG		0.97069		7.82796	15	O
Trichloroethene	0.72437	0.56633	0.56893	0.54584	0.56964	0.54928	0.54296	0.50870	AVG		0.57201		11.31309	15	O
Tetrachloroethene	0.56986	0.53287	0.51877	0.53001	0.51882	0.49882	0.49004	0.44927	AVG		0.51356		6.89257	15	O
Dibromofluoromethane	0.55197	0.70428	0.71482	0.71891	0.69844	0.68422	0.66339	0.62172	AVG		0.66972		8.53895	15	
1,2-Dichloroethane-D4	0.48232	0.61095	0.66525	0.65332	0.64849	0.63339	0.58798	0.55908	AVG		0.60510		10.0998	15	
Toluene-D8	1.04704	1.05885	1.07237	1.04617	1.05315	1.04847	1.04754	1.02817	AVG		1.05022		1.19185	15	
P-Bromofluorobenzene	0.35751	0.35464	0.36499	0.39414	0.42905	0.46951	0.48385	0.51536	AVG		0.42113		14.9005	15	

Legend: O = Acceptable; W = Failed %RSD Value; X = Failed R^2 Value; Y = Failed Minimum RF

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http://katahdinlab.com
sales@katahdinlab.com

Data File: \\target_server\gg\chem\gcms-s.i\S111623.b\S7207A.D
Report Date: 08-Dec-2023 14:22

Katahdin Analytical Services

RECOVERY REPORT

Client Name: Client SDG: SDGa02236
Sample Matrix: LIQUID Fraction: VOA
Lab Smp Id: WG345525-9 Client Smp ID: INDSOURCE
Level: LOW Operator: JSS
Data Type: MS DATA SampleType: INDSOURCE
SpikeList File: 826SIMLCSAQ.spk Quant Type: ISTD
Sublist File: all.sub
Method File: \\target_server\gg\chem\gcms-s.i\S111623.b\SSIM(01)CR23.m
Misc Info: WG345525,WG345525-5

SPIKE COMPOUND	CONC ADDED ug/l	CONC RECOVERED ug/l	% RECOVERED	LIMITS
1 Vinyl chloride	0.500	0.476	95.26	70-130
2 1,1-Dichloroethene	0.500	0.495	99.10	70-130
5 Methylene Chloride	2.00	0.000	*	70-130
6 1,1,1-Trichloroeth	0.500	0.485	97.03	70-130
11 1,2-Dichloroethane	0.500	0.495	98.94	70-130
12 Trichloroethene	0.500	0.474	94.86	70-130
15 Tetrachloroethene	0.500	0.474	94.85	70-130
16 1,1,2-Trichloroeth	0.500	0.511	102.21	70-130
19 1,1,2,2-Tetrachlor	0.500	0.461	92.14	70-130
21 1,2,4-Trimethylben	0.500	0.454	90.87	70-130
22 1,2,4-Trichloroben	0.500	0.493	98.66	70-130
23 1,2,3-Trichloroben	0.500	0.511	102.23	70-130

SURROGATE COMPOUND	AMOUNT ADDED ug/l	AMOUNT RECOVERED ug/l	% RECOVERED	LIMITS
$ 7 Dibromofluorometha	1.00	1.01	100.66	70-130
$ 10 1,2-Dichloroethane	1.00	1.03	102.79	70-130
$ 14 Toluene-D8	1.00	1.01	100.60	70-130
$ 18 P-Bromofluorobenze	1.00	1.01	100.69	70-130

Data File: \\target_server\gg\chem\gcms-s.i\S111623.b\S7207A.D
Report Date: 08-Dec-2023 14:22

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-s.i\S111623.b\S7207A.D
Lab Smp Id: WG345525-9 Client Smp ID: INDSOURCE
Inj Date : 16-NOV-2023 16:15
Operator : JSS Inst ID: gcms-s.i
Smp Info : WG345525-9
Misc Info : WG345525,WG345525-5
Comment : SW846 5030C
Method : \\target_server\gg\chem\gcms-s.i\S111623.b\SSIM(01)CR23.m
Meth Date : 17-Nov-2023 10:03 jsampson Quant Type: ISTD
Cal Date : 16-NOV-2023 15:48 Cal File: S7206.D
Als bottle: 9 QC Sample: INDSOURCE
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.12
Processing Host: VOA-WS

Concentration Formula: Amt * DF * 25/Vo * CpndVariable

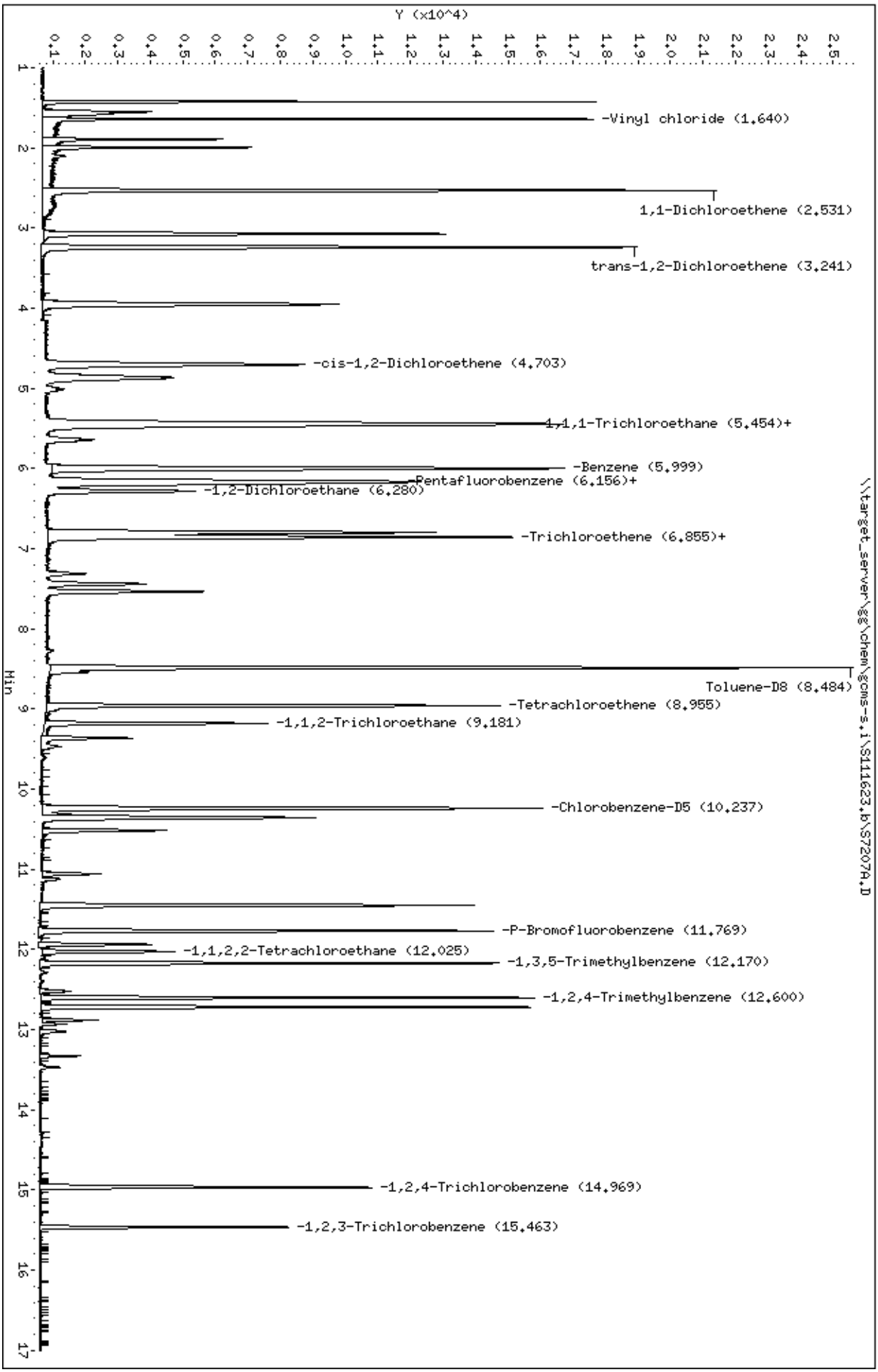
Name	Value	Description
DF	1.000	Dilution Factor
Vo	25.000	sample purged
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)	REVIEW CODE
	1 Vinyl chloride	62	1.640	1.640	(0.266)	10764	0.47628	0.476	
	2 1,1-Dichloroethene	96	2.531	2.532	(0.411)	8764	0.49548	0.495	
	3 trans-1,2-Dichloroethene	96	3.240	3.238	(0.526)	9391	0.48175	0.482	
	4 cis-1,2-Dichloroethene	96	4.702	4.702	(0.764)	7489	0.49901	0.499	
	6 1,1,1-Trichloroethane	97	5.454	5.454	(0.886)	15113	0.48513	0.485	
$	7 Dibromofluoromethane	113	5.433	5.440	(0.883)	10423	1.00661	1.01	
	8 Benzene	78	5.998	6.000	(0.974)	30462	0.49306	0.493	
*	9 Pentafluorobenzene	168	6.156	6.163	(1.000)	15461	1.00000		
$	10 1,2-Dichloroethane-D4	65	6.186	6.193	(1.005)	9616	1.02786	1.03	
	11 1,2-Dichloroethane	62	6.280	6.285	(0.916)	8667	0.49471	0.495	
	12 Trichloroethene	130	6.799	6.793	(0.992)	6695	0.47432	0.474	
*	13 1,4-Difluorobenzene	114	6.854	6.854	(1.000)	24676	1.00000		
$	14 Toluene-D8	98	8.484	8.482	(1.238)	26072	1.00605	1.01	
	15 Tetrachloroethene	164	8.962	8.957	(1.307)	6010	0.47425	0.474	
	16 1,1,2-Trichloroethane	83	9.182	9.181	(1.340)	3395	0.51107	0.511	
*	17 Chlorobenzene-D5	117	10.234	10.238	(1.000)	23193	1.00000		
$	18 P-Bromofluorobenzene	95	11.768	11.768	(1.150)	9835	1.00693	1.01	
	19 1,1,2,2-Tetrachloroethane	83	12.025	12.027	(1.175)	3794	0.46072	0.461	
	20 1,3,5-Trimethylbenzene	105	12.170	12.172	(1.189)	16325	0.42513	0.425(a)	
	21 1,2,4-Trimethylbenzene	105	12.602	12.600	(1.231)	17175	0.45435	0.454	
	22 1,2,4-Trichlorobenzene	180	14.969	14.968	(1.463)	5902	0.49332	0.493	
	23 1,2,3-Trichlorobenzene	180	15.461	15.465	(1.511)	4744	0.51116	0.511	

Data File: \\target_server\gg\chem\gcms-s.i\S111623.b\S7207A.D
Report Date: 08-Dec-2023 14:22

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).


Data File: \\target_server\gg\chem\gcms-s.i\S111623.b\S7207A.D
Date : 16-NOV-2023 16:15
Client ID: INDSOURCE
Sample Info: WG345525-9
Purge Volume: 25.0
Column phase: RTX-VMS
Instrument: gcms-s.i
Operator: JSS
Column diameter: 0.18
Y (x10^4)
Min
-Vinyl chloride (1.640)
1,1-Dichloroethene (2.531)
trans-1,2-Dichloroethene (3.241)
-cis-1,2-Dichloroethene (4.703)
1,1,1-Trichloroethane (5.454)+
-Benzene (5.999)
Pentafluorobenzene (6.156)+
-1,2-Dichloroethane (6.280)
-Trichloroethene (6.855)+
Toluene-D8 (8.484)
-Tetrachloroethene (8.955)
-1,1,2-Trichloroethane (9.181)
-Chlorobenzene-D5 (10.237)
-P-Bromofluorobenzene (11.769)
-1,1,2,2-Tetrachloroethane (12.025)
-1,3,5-Trimethylbenzene (12.170)
-1,2,4-Trimethylbenzene (12.600)
-1,2,4-Trichlorobenzene (14.969)
-1,2,3-Trichlorobenzene (15.463)
\\target_server\gg\chem\gcms-s.i\S111623.b\S7207A.D

Data File: \\target_server\gg\chem\gcms-s.i\S111623.b\S7199.D
Report Date: 08-Dec-2023 14:45

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-s.i\S111623.b\S7199.D
Lab Smp Id: WG345525-1
Inj Date : 16-NOV-2023 12:35
Operator : JSS   Inst ID: gcms-s.i
Smp Info : WG345525-1
Misc Info :
Comment   : SW846 5030C
Method   : \\target_server\gg\chem\gcms-s.i\S111623.b\SSIM(01)CR23.m
Meth Date : 17-Nov-2023 10:03 jsampson   Quant Type: ISTD
Cal Date : 16-NOV-2023 12:35   Cal File: S7199.D
Als bottle: 1   Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: all.sub
Target Version: 4.12

Concentration Formula: Amt * DF * 25/Vo * CpndVariable

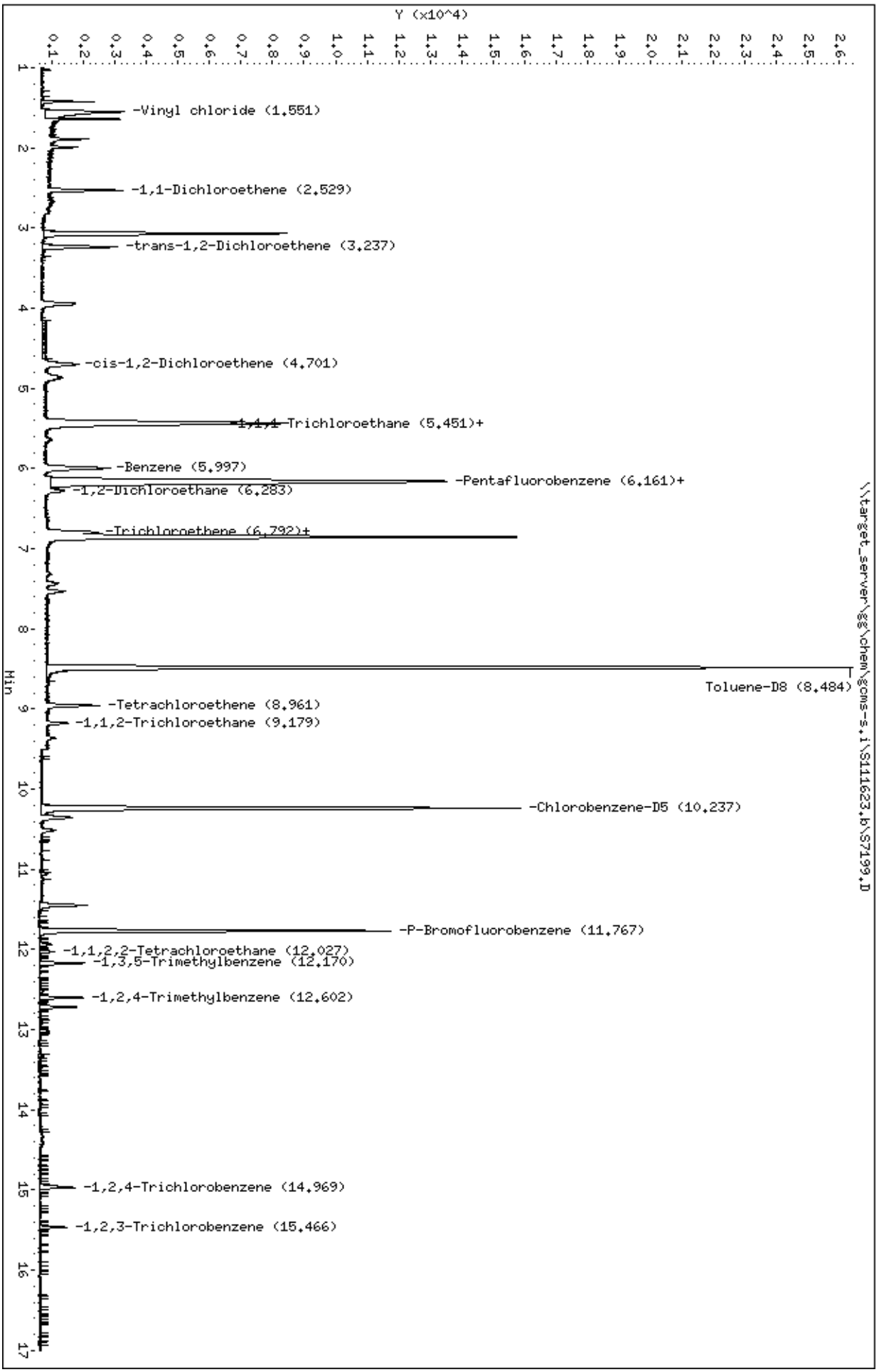
Name	Value	Description
DF	1.000	Dilution Factor
Vo	25.000	sample purged
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)	REVIEW CODE
	1 Vinyl chloride	62	1.640	1.640	(0.267)	1309	0.05000	(a)	
	2 1,1-Dichloroethene	96	2.529	2.532	(0.411)	1002	0.05000	(a)	
	3 trans-1,2-Dichloroethene	96	3.235	3.238	(0.526)	1277	0.05000	(a)	
	4 cis-1,2-Dichloroethene	96	4.701	4.702	(0.764)	1002	0.05000	(a)	
	6 1,1,1-Trichloroethane	97	5.450	5.454	(0.886)	1791	0.05000	(a)	
$	7 Dibromofluoromethane	113	5.435	5.440	(0.883)	9915	1.00000	(a)	
	8 Benzene	78	5.996	6.000	(0.974)	3936	0.05000	(a)	
*	9 Pentafluorobenzene	168	6.154	6.163	(1.000)	17963	1.00000		
$	10 1,2-Dichloroethane-D4	65	6.188	6.193	(1.006)	8664	1.00000	(a)	
	11 1,2-Dichloroethane	62	6.283	6.285	(0.916)	950	0.05000	(a)	
	12 Trichloroethene	130	6.792	6.793	(0.991)	947	0.05000	(a)	
*	13 1,4-Difluorobenzene	114	6.856	6.854	(1.000)	26147	1.00000		
$	14 Toluene-D8	98	8.484	8.482	(1.237)	27377	1.00000	(a)	
	15 Tetrachloroethene	164	8.960	8.957	(1.307)	745	0.05000	(a)	
	16 1,1,2-Trichloroethane	83	9.179	9.181	(1.339)	295	0.05000	(a)	
*	17 Chlorobenzene-D5	117	10.236	10.238	(1.000)	21974	1.00000		
$	18 P-Bromofluorobenzene	95	11.766	11.768	(1.150)	7856	1.00000	(a)	
	19 1,1,2,2-Tetrachloroethane	83	12.028	12.027	(1.175)	386	0.05000	(a)	
	20 1,3,5-Trimethylbenzene	105	12.170	12.172	(1.189)	1612	0.05000	(a)	
	21 1,2,4-Trimethylbenzene	105	12.602	12.600	(1.231)	1494	0.05000	(a)	
	22 1,2,4-Trichlorobenzene	180	14.967	14.968	(1.462)	688	0.05000	(a)	
	23 1,2,3-Trichlorobenzene	180	15.466	15.465	(1.511)	519	0.05000	(a)	

Data File: \\target_server\gg\chem\gcms-s.i\S111623.b\S7199.D
Report Date: 08-Dec-2023 14:45

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).


Data File: \\target_server\gg\chem\gcms-s.i\S111623.b\S7199.D
Date : 16-NOV-2023 12:35
Client ID:
Sample Info: WG345525-1
Purge Volume: 25.0
Column phase: RTX-VMS
Instrument: gcms-s.i
Operator: JSS
Column diameter: 0.18
\\target_server\gg\chem\gcms-s.i\S111623.b\S7199.D
Y (x10^4)
Min
-Vinyl chloride (1.551)
-1,1-Dichloroethene (2.529)
-trans-1,2-Dichloroethene (3.237)
-cis-1,2-Dichloroethene (4.701)
1,1,1-Trichloroethane (5.451)+
-Benzene (5.997)
-Pentafluorobenzene (6.161)+
-1,2-Dichloroethane (6.283)
-Trichloroethene (6.792)+
Toluene-D8 (8.484)
-Tetrachloroethene (8.961)
-1,1,2-Trichloroethane (9.179)
-Chlorobenzene-D5 (10.237)
-P-Bromofluorobenzene (11.767)
-1,1,2,2-Tetrachloroethane (12.027)
-1,3,5-Trimethylbenzene (12.170)
-1,2,4-Trimethylbenzene (12.602)
-1,2,4-Trichlorobenzene (14.969)
-1,2,3-Trichlorobenzene (15.466)

Data File: \\target_server\gg\chem\gcms-s.i\S111623.b\S7200.D
Report Date: 08-Dec-2023 14:45

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-s.i\S111623.b\S7200.D
Lab Smp Id: WG345525-2
Inj Date : 16-NOV-2023 13:02
Operator : JSS   Inst ID: gcms-s.i
Smp Info : WG345525-2
Misc Info :
Comment   : SW846 5030C
Method   : \\target_server\gg\chem\gcms-s.i\S111623.b\SSIM(01)CR23.m
Meth Date : 17-Nov-2023 10:03 jsampson   Quant Type: ISTD
Cal Date : 16-NOV-2023 13:02   Cal File: S7200.D
Als bottle: 2   Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: all.sub
Target Version: 4.12

Concentration Formula: Amt * DF * 25/Vo * CpndVariable

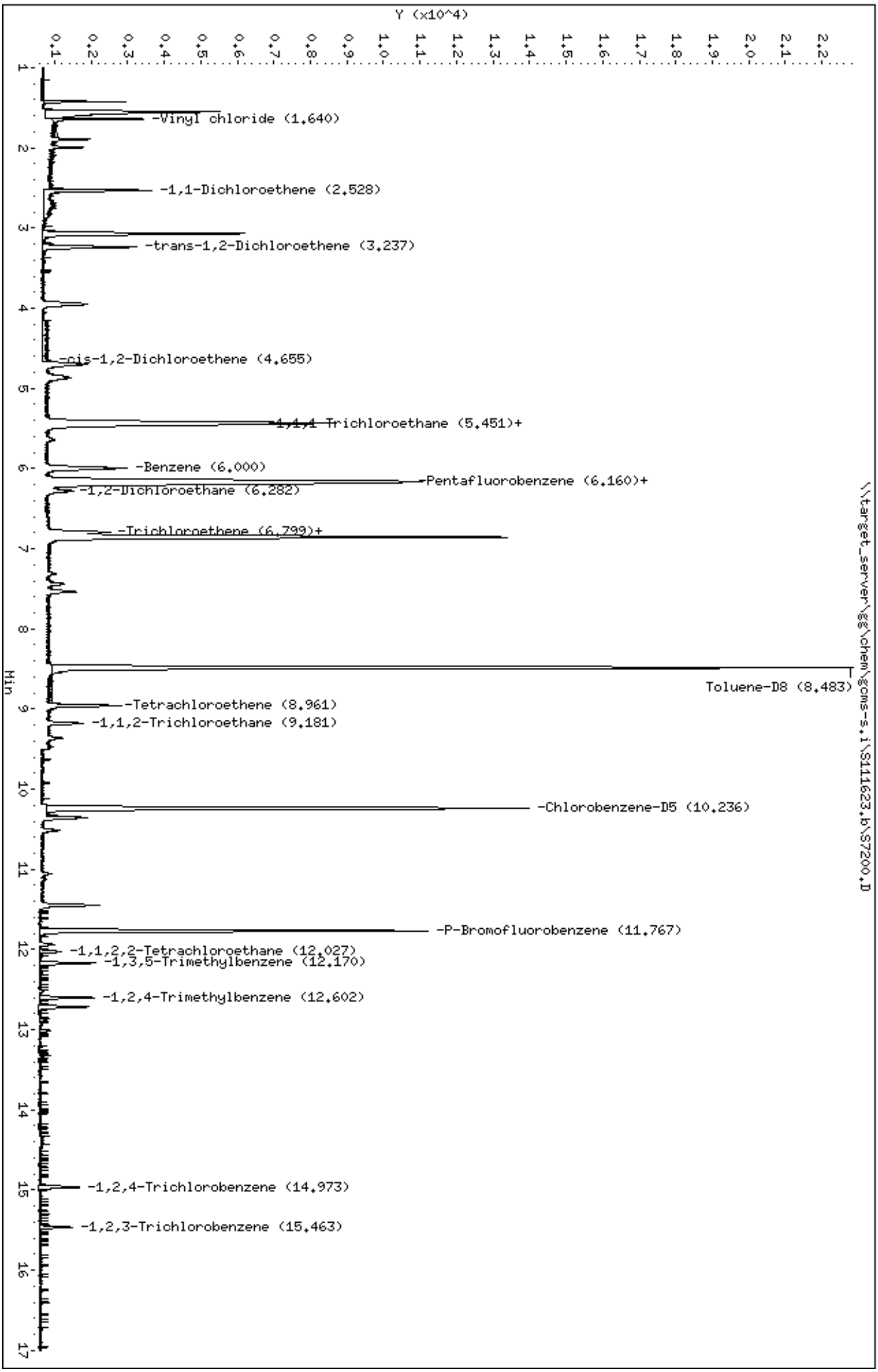
Name	Value	Description
DF	1.000	Dilution Factor
Vo	25.000	sample purged
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)	REVIEW CODE
	1 Vinyl chloride	62	1.638	1.640	(0.266)	1485	0.07500	0.0739	
	2 1,1-Dichloroethene	96	2.534	2.532	(0.411)	1213	0.07500	0.0788	
	3 trans-1,2-Dichloroethene	96	3.235	3.238	(0.525)	1293	0.07500	0.0659	
	4 cis-1,2-Dichloroethene	96	4.699	4.702	(0.763)	1027	0.07500	0.0668	
	6 1,1,1-Trichloroethane	97	5.450	5.454	(0.885)	2151	0.07500	0.0782	
$	7 Dibromofluoromethane	113	5.437	5.440	(0.883)	9712	1.00000	1.28	
	8 Benzene	78	6.000	6.000	(0.974)	4037	0.07500	0.0668	
*	9 Pentafluorobenzene	168	6.159	6.163	(1.000)	13790	1.00000		
$	10 1,2-Dichloroethane-D4	65	6.190	6.193	(1.005)	8425	1.00000	1.27	
	11 1,2-Dichloroethane	62	6.281	6.285	(0.916)	1252	0.07500	0.0786	
	12 Trichloroethene	130	6.799	6.793	(0.992)	931	0.07500	0.0586	
*	13 1,4-Difluorobenzene	114	6.854	6.854	(1.000)	21919	1.00000		
$	14 Toluene-D8	98	8.482	8.482	(1.237)	23209	1.00000	1.01	
	15 Tetrachloroethene	164	8.960	8.957	(1.307)	876	0.07500	0.0701	
	16 1,1,2-Trichloroethane	83	9.181	9.181	(1.339)	422	0.07500	0.0853	
*	17 Chlorobenzene-D5	117	10.236	10.238	(1.000)	19950	1.00000		
$	18 P-Bromofluorobenzene	95	11.766	11.768	(1.150)	7075	1.00000	0.992	
	19 1,1,2,2-Tetrachloroethane	83	12.027	12.027	(1.175)	493	0.07500	0.0703	
	20 1,3,5-Trimethylbenzene	105	12.170	12.172	(1.189)	1710	0.07500	0.0584(a)	
	21 1,2,4-Trimethylbenzene	105	12.602	12.600	(1.231)	1614	0.07500	0.0595	
	22 1,2,4-Trichlorobenzene	180	14.972	14.968	(1.463)	709	0.07500	0.0568	
	23 1,2,3-Trichlorobenzene	180	15.464	15.465	(1.511)	515	0.07500	0.0546	

Data File: \\target_server\gg\chem\gcms-s.i\S111623.b\S7200.D
Report Date: 08-Dec-2023 14:45

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).


Data File: \\target_server\gg\chem\gcms-s,i\S111623,b\S7200,D
Date : 16-NOV-2023 13:02
Client ID:
Sample Info: WG345525-2
Purge Volume: 25,0
Column phase: RTX-VMS
Instrument: gcms-s,i
Operator: JSS
Column diameter: 0,18
\\target_server\gg\chem\gcms-s,i\S111623,b\S7200,D
Y (x10^4)
Min
-Vinyl chloride (1,640)
-1,1-Dichloroethene (2,528)
-trans-1,2-Dichloroethene (3,237)
-cis-1,2-Dichloroethene (4,655)
1,1,1 Trichloroethane (5,451)+
-Benzene (6,000)
Pentafluorobenzene (6,160)+
-1,2-Dichloroethane (6,282)
-Trichloroethene (6,799)+
Toluene-D8 (8,483)
-Tetrachloroethene (8,961)
-1,1,2-Trichloroethane (9,181)
-Chlorobenzene-D5 (10,236)
-P-Bromofluorobenzene (11,767)
-1,1,2,2-Tetrachloroethane (12,027)
-1,3,5-Trimethylbenzene (12,170)
-1,2,4-Trimethylbenzene (12,602)
-1,2,4-Trichlorobenzene (14,973)
-1,2,3-Trichlorobenzene (15,463)

Data File: \\target_server\gg\chem\gcms-s.i\S111623.b\S7201.D
Report Date: 08-Dec-2023 14:45

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-s.i\S111623.b\S7201.D
Lab Smp Id: WG345525-3
Inj Date : 16-NOV-2023 13:30
Operator : JSS   Inst ID: gcms-s.i
Smp Info : WG345525-3
Misc Info :
Comment   : SW846 5030C
Method   : \\target_server\gg\chem\gcms-s.i\S111623.b\SSIM(01)CR23.m
Meth Date : 17-Nov-2023 10:03 jsampson   Quant Type: ISTD
Cal Date : 16-NOV-2023 13:30   Cal File: S7201.D
Als bottle: 3   Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: all.sub
Target Version: 4.12

Concentration Formula: Amt * DF * 25/Vo * CpndVariable

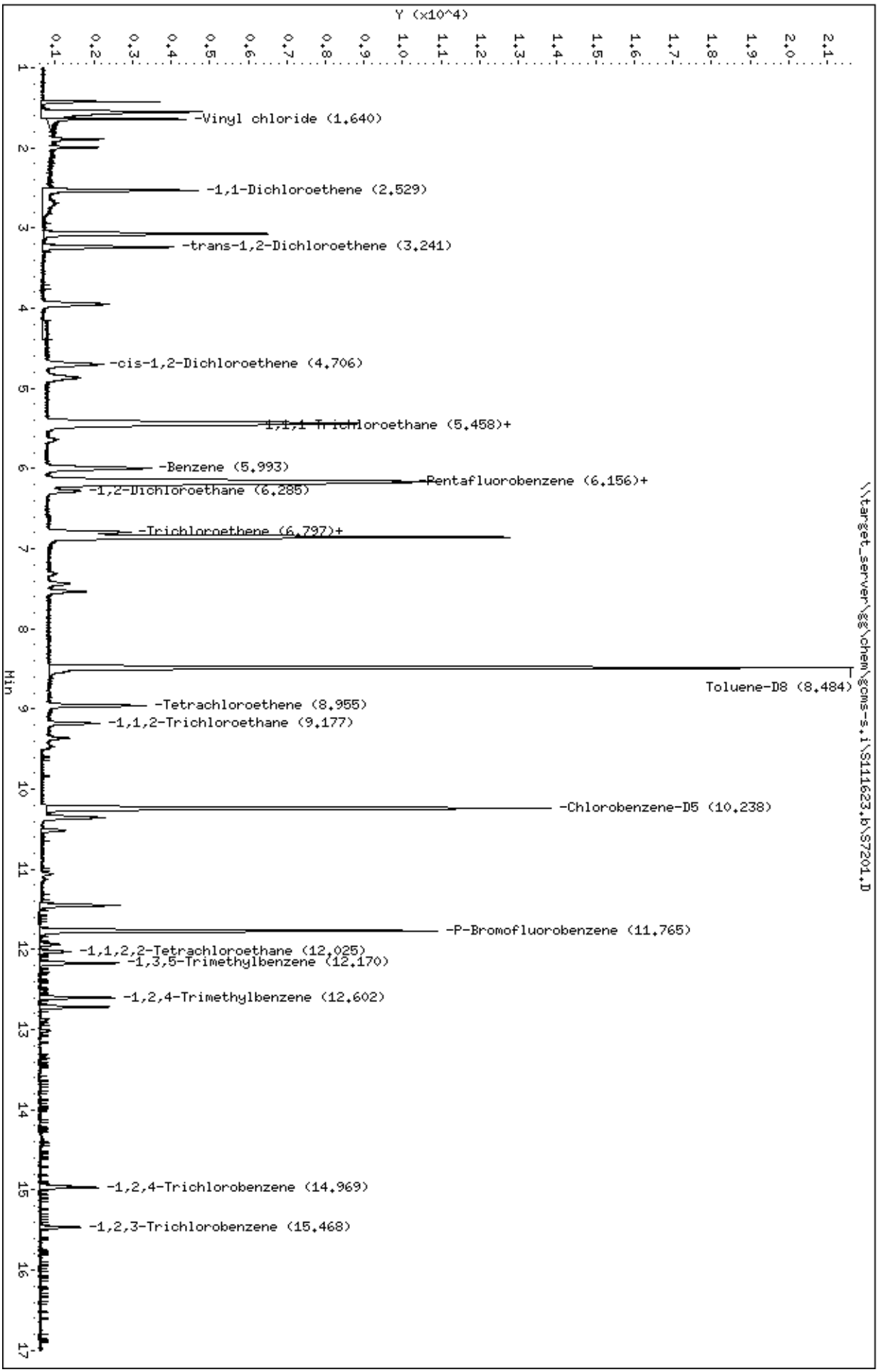
Name	Value	Description
DF	1.000	Dilution Factor
Vo	25.000	sample purged
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)	REVIEW CODE
	1 Vinyl chloride	62	1.640	1.640	(0.266)	2051	0.10000	0.106	
	2 1,1-Dichloroethene	96	2.532	2.532	(0.411)	1616	0.10000	0.106	
	3 trans-1,2-Dichloroethene	96	3.240	3.238	(0.526)	1767	0.10000	0.0989	
	4 cis-1,2-Dichloroethene	96	4.706	4.702	(0.764)	1344	0.10000	0.0953	
	6 1,1,1-Trichloroethane	97	5.457	5.454	(0.887)	2760	0.10000	0.101	
$	7 Dibromofluoromethane	113	5.430	5.440	(0.882)	9560	1.00000	1.14	
	8 Benzene	78	5.993	6.000	(0.974)	5198	0.10000	0.0938	
*	9 Pentafluorobenzene	168	6.156	6.163	(1.000)	13374	1.00000		
$	10 1,2-Dichloroethane-D4	65	6.193	6.193	(1.006)	8897	1.00000	1.22	
	11 1,2-Dichloroethane	62	6.285	6.285	(0.917)	1606	0.10000	0.103	
	12 Trichloroethene	130	6.797	6.793	(0.992)	1191	0.10000	0.0882	
*	13 1,4-Difluorobenzene	114	6.854	6.854	(1.000)	20934	1.00000		
$	14 Toluene-D8	98	8.484	8.482	(1.238)	22449	1.00000	1.02	
	15 Tetrachloroethene	164	8.955	8.957	(1.306)	1086	0.10000	0.0941	
	16 1,1,2-Trichloroethane	83	9.177	9.181	(1.339)	606	0.10000	0.120	
*	17 Chlorobenzene-D5	117	10.238	10.238	(1.000)	19499	1.00000		
$	18 P-Bromofluorobenzene	95	11.765	11.768	(1.149)	7117	1.00000	1.02	
	19 1,1,2,2-Tetrachloroethane	83	12.025	12.027	(1.175)	720	0.10000	0.108	
	20 1,3,5-Trimethylbenzene	105	12.170	12.172	(1.189)	2323	0.10000	0.0913(a)	
	21 1,2,4-Trimethylbenzene	105	12.602	12.600	(1.231)	2096	0.10000	0.0882	
	22 1,2,4-Trichlorobenzene	180	14.967	14.968	(1.462)	898	0.10000	0.0837	
	23 1,2,3-Trichlorobenzene	180	15.461	15.465	(1.510)	705	0.10000	0.0886	

Data File: \\target_server\gg\chem\gcms-s.i\S111623.b\S7201.D
Report Date: 08-Dec-2023 14:45

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).


Data File: \\target_server\gg\chem\gcms-s,i\S111623,b\S7201.D
Date : 16-NOV-2023 13:30
Client ID:
Sample Info: WG345525-3
Purge Volume: 25.0
Column phase: RTX-VMS
Instrument: gcms-s,i
Operator: JSS
Column diameter: 0.18
\\target_server\gg\chem\gcms-s,i\S111623,b\S7201.D
Y (x10^4)
Min
-Vinyl chloride (1.640)
-1,1-Dichloroethene (2.529)
-trans-1,2-Dichloroethene (3.241)
-cis-1,2-Dichloroethene (4.706)
1,1,1 Trichloroethane (5.458)+
-Benzene (5.993)
Pentafluorobenzene (6.156)+
-1,2-Dichloroethane (6.285)
-Trichloroethene (6.797)+
Toluene-D8 (8.484)
-Tetrachloroethene (8.955)
-1,1,2-Trichloroethane (9.177)
-Chlorobenzene-D5 (10.238)
-P-Bromofluorobenzene (11.765)
-1,1,2,2-Tetrachloroethane (12.025)
-1,3,5-Trimethylbenzene (12.170)
-1,2,4-Trimethylbenzene (12.602)
-1,2,4-Trichlorobenzene (14.969)
-1,2,3-Trichlorobenzene (15.468)

Data File: \\target_server\gg\chem\gcms-s.i\S111623.b\S7202.D
Report Date: 08-Dec-2023 14:45

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Data file : \\target_server\gg\chem\gcms-s.i\S111623.b\S7202.D
Lab Smp Id: WG345525-4
Inj Date : 16-NOV-2023 13:57
Operator : JSS   Inst ID: gcms-s.i
Smp Info : WG345525-4
Misc Info :
Comment   : SW846 5030C
Method   : \\target_server\gg\chem\gcms-s.i\S111623.b\SSIM(01)CR23.m
Meth Date : 17-Nov-2023 10:03 jsampson   Quant Type: ISTD
Cal Date : 16-NOV-2023 13:57   Cal File: S7202.D
Als bottle: 4   Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: all.sub
Target Version: 4.12

Concentration Formula: Amt * DF * 25/Vo * CpndVariable

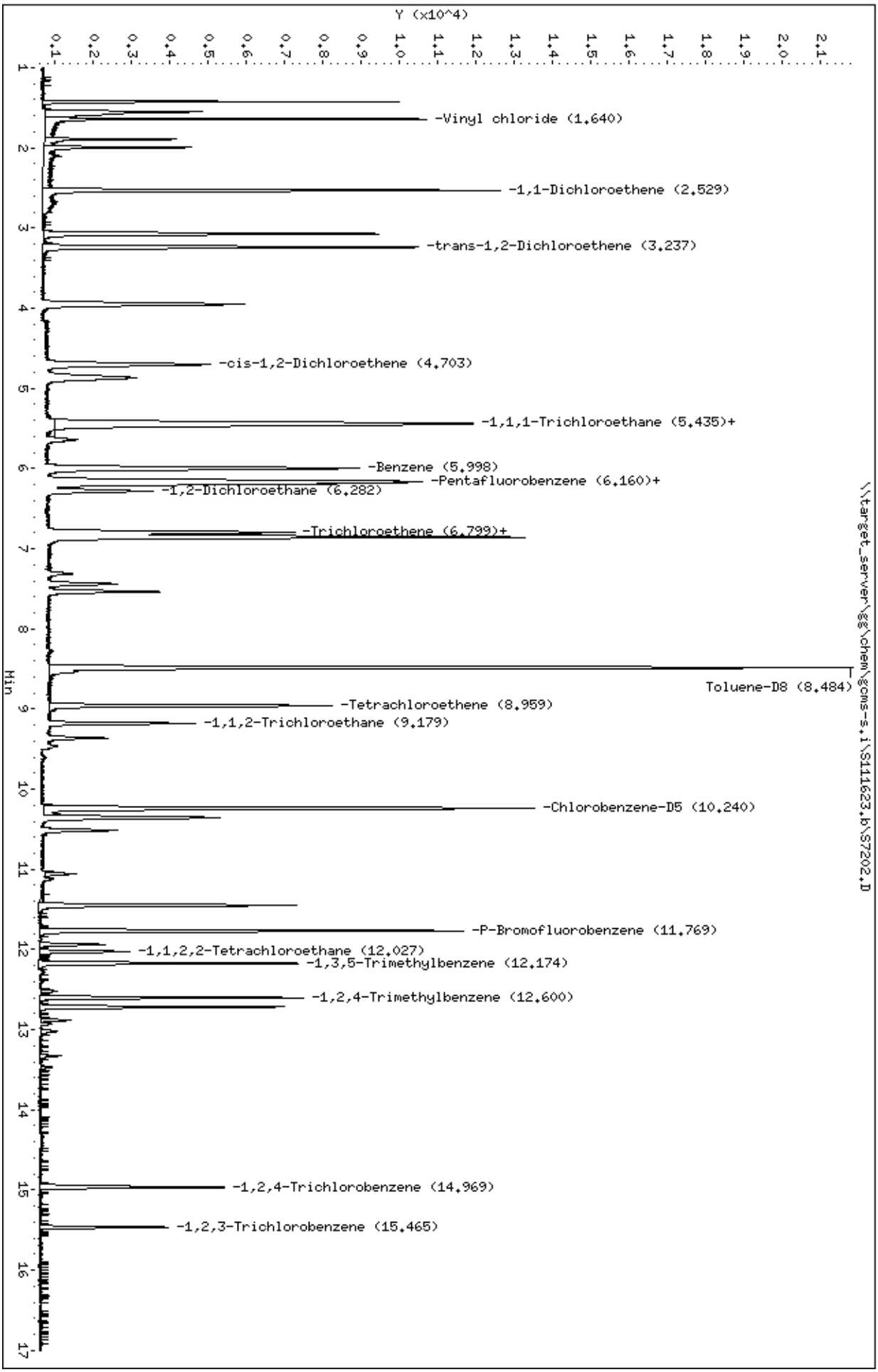
Name	Value	Description
DF	1.000	Dilution Factor
Vo	25.000	sample purged
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)	REVIEW CODE
	1 Vinyl chloride	62	1.642	1.640	(0.267)	6205	0.30000	0.318	
	2 1,1-Dichloroethene	96	2.531	2.532	(0.411)	4964	0.30000	0.322	
	3 trans-1,2-Dichloroethene	96	3.237	3.238	(0.526)	5166	0.30000	0.293	
	4 cis-1,2-Dichloroethene	96	4.702	4.702	(0.763)	3926	0.30000	0.286	
	6 1,1,1-Trichloroethane	97	5.460	5.454	(0.887)	8454	0.30000	0.312	
$	7 Dibromofluoromethane	113	5.437	5.440	(0.883)	9514	1.00000	1.09	
	8 Benzene	78	5.998	6.000	(0.974)	15515	0.30000	0.289	
*	9 Pentafluorobenzene	168	6.159	6.163	(1.000)	13234	1.00000		
$	10 1,2-Dichloroethane-D4	65	6.190	6.193	(1.005)	8646	1.00000	1.11	
	11 1,2-Dichloroethane	62	6.281	6.285	(0.916)	4661	0.30000	0.291	
	12 Trichloroethene	130	6.799	6.793	(0.992)	3483	0.30000	0.264	
*	13 1,4-Difluorobenzene	114	6.854	6.854	(1.000)	21270	1.00000		
$	14 Toluene-D8	98	8.484	8.482	(1.238)	22252	1.00000	0.987	
	15 Tetrachloroethene	164	8.957	8.957	(1.307)	3382	0.30000	0.294	
	16 1,1,2-Trichloroethane	83	9.179	9.181	(1.339)	1904	0.30000	0.348	
*	17 Chlorobenzene-D5	117	10.239	10.238	(1.000)	19503	1.00000		
$	18 P-Bromofluorobenzene	95	11.768	11.768	(1.149)	7687	1.00000	1.10	
	19 1,1,2,2-Tetrachloroethane	83	12.025	12.027	(1.174)	2152	0.30000	0.315	
	20 1,3,5-Trimethylbenzene	105	12.173	12.172	(1.189)	7721	0.30000	0.312(a)	
	21 1,2,4-Trimethylbenzene	105	12.600	12.600	(1.231)	7418	0.30000	0.325	
	22 1,2,4-Trichlorobenzene	180	14.971	14.968	(1.462)	2687	0.30000	0.265	
	23 1,2,3-Trichlorobenzene	180	15.462	15.465	(1.510)	2133	0.30000	0.278	

Data File: \\target_server\gg\chem\gcms-s.i\S111623.b\S7202.D
Report Date: 08-Dec-2023 14:45

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).


Data File: \\target_server\gg\chem\gcms-s,i\S111623,b\S7202,D
Date : 16-NOV-2023 13:57
Client ID:
Sample Info: WG345525-4
Purge Volume: 25,0
Column phase: RTX-VMS
Instrument: gcms-s,i
Operator: JSS
Column diameter: 0,18
\\target_server\gg\chem\gcms-s,i\S111623,b\S7202,D
Y (x10^4)
Min
-Vinyl chloride (1,640)
-1,1-Dichloroethene (2,529)
-trans-1,2-Dichloroethene (3,237)
-cis-1,2-Dichloroethene (4,703)
-1,1,1-Trichloroethane (5,435)+
-Benzene (5,998)
-Pentafluorobenzene (6,160)+
-1,2-Dichloroethane (6,282)
-Trichloroethene (6,799)+
Toluene-D8 (8,484)
-Tetrachloroethene (8,959)
-1,1,2-Trichloroethane (9,179)
-Chlorobenzene-D5 (10,240)
-P-Bromofluorobenzene (11,769)
-1,1,2,2-Tetrachloroethane (12,027)
-1,3,5-Trimethylbenzene (12,174)
-1,2,4-Trimethylbenzene (12,600)
-1,2,4-Trichlorobenzene (14,969)
-1,2,3-Trichlorobenzene (15,465)

Data File: \\target_server\gg\chem\gcms-s.i\S111623.b\S7203.D
Report Date: 08-Dec-2023 14:45

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-s.i\S111623.b\S7203.D
Lab Smp Id: WG345525-5
Inj Date : 16-NOV-2023 14:25
Operator : JSS   Inst ID: gcms-s.i
Smp Info : WG345525-5
Misc Info :
Comment   : SW846 5030C
Method   : \\target_server\gg\chem\gcms-s.i\S111623.b\SSIM(01)CR23.m
Meth Date : 17-Nov-2023 10:03 jsampson   Quant Type: ISTD
Cal Date : 16-NOV-2023 14:25   Cal File: S7203.D
Als bottle: 5   Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: all.sub
Target Version: 4.12
Processing Host: T7-O360

Concentration Formula: Amt * DF * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	25.000	sample purged
Cpnd Variable		Local Compound Variable

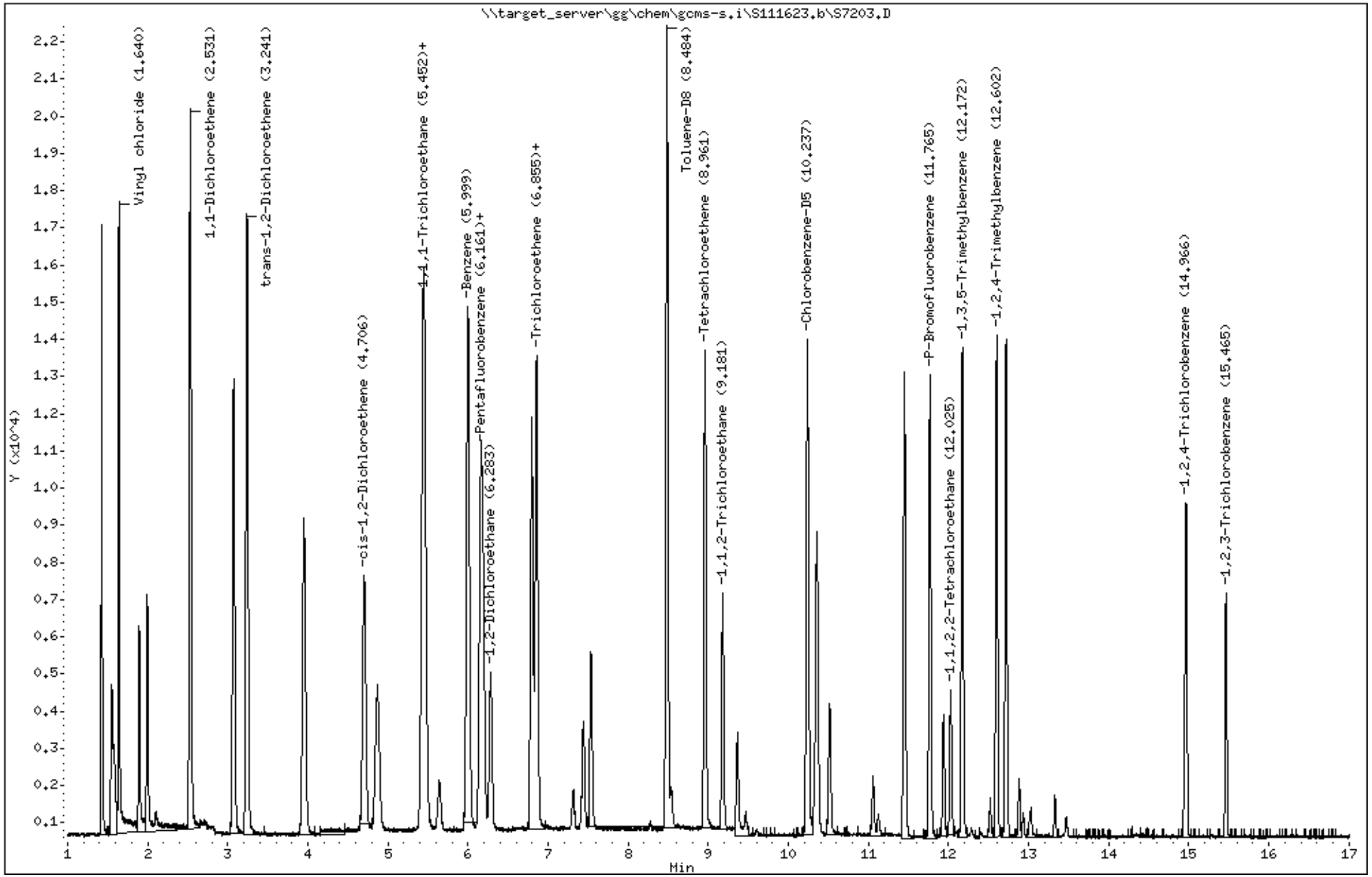
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)	REVIEW CODE
	1 Vinyl chloride	62	1.642	1.640	(0.267)	10727	0.50000	0.523	
	2 1,1-Dichloroethene	96	2.532	2.532	(0.411)	8404	0.50000	0.521	
	3 trans-1,2-Dichloroethene	96	3.242	3.238	(0.526)	8878	0.50000	0.502	
	4 cis-1,2-Dichloroethene	96	4.701	4.702	(0.763)	6560	0.50000	0.483	
	6 1,1,1-Trichloroethane	97	5.452	5.454	(0.885)	14468	0.50000	0.514	
$	7 Dibromofluoromethane	113	5.437	5.440	(0.882)	9601	1.00000	1.03	
	8 Benzene	78	5.998	6.000	(0.974)	27034	0.50000	0.493	
*	9 Pentafluorobenzene	168	6.161	6.163	(1.000)	13752	1.00000		
$	10 1,2-Dichloroethane-D4	65	6.188	6.193	(1.004)	8815	1.00000	1.05	
	11 1,2-Dichloroethane	62	6.283	6.285	(0.917)	7841	0.50000	0.495	
	12 Trichloroethene	130	6.797	6.793	(0.992)	6221	0.50000	0.490	
*	13 1,4-Difluorobenzene	114	6.854	6.854	(1.000)	21842	1.00000		
$	14 Toluene-D8	98	8.482	8.482	(1.237)	22933	1.00000	0.997	
	15 Tetrachloroethene	164	8.958	8.957	(1.307)	5666	0.50000	0.496	
	16 1,1,2-Trichloroethane	83	9.179	9.181	(1.339)	3170	0.50000	0.532	
*	17 Chlorobenzene-D5	117	10.236	10.238	(1.000)	20133	1.00000		
$	18 P-Bromofluorobenzene	95	11.765	11.768	(1.149)	8638	1.00000	1.05	
	19 1,1,2,2-Tetrachloroethane	83	12.025	12.027	(1.175)	3719	0.50000	0.515	
	20 1,3,5-Trimethylbenzene	105	12.173	12.172	(1.189)	15379	0.50000	0.506(a)	
	21 1,2,4-Trimethylbenzene	105	12.602	12.600	(1.231)	15318	0.50000	0.515	
	22 1,2,4-Trichlorobenzene	180	14.969	14.968	(1.462)	5128	0.50000	0.496	
	23 1,2,3-Trichlorobenzene	180	15.462	15.465	(1.511)	3970	0.50000	0.498	

Data File: \\target_server\gg\chem\gcms-s.i\S111623.b\S7203.D
Report Date: 08-Dec-2023 14:45

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\target_server\gg\chem\gcms-s.i\S111623.b\S7203.D
Date : 16-NOV-2023 14:25
Client ID:
Instrument: gcms-s.i
Sample Info: WG345525-5
Purge Volume: 25.0
Operator: JSS
Column phase: RTX-VMS
Column diameter: 0.18



Data File: \\target_server\gg\chem\gcms-s.i\S111623.b\S7204.D
Report Date: 08-Dec-2023 14:45

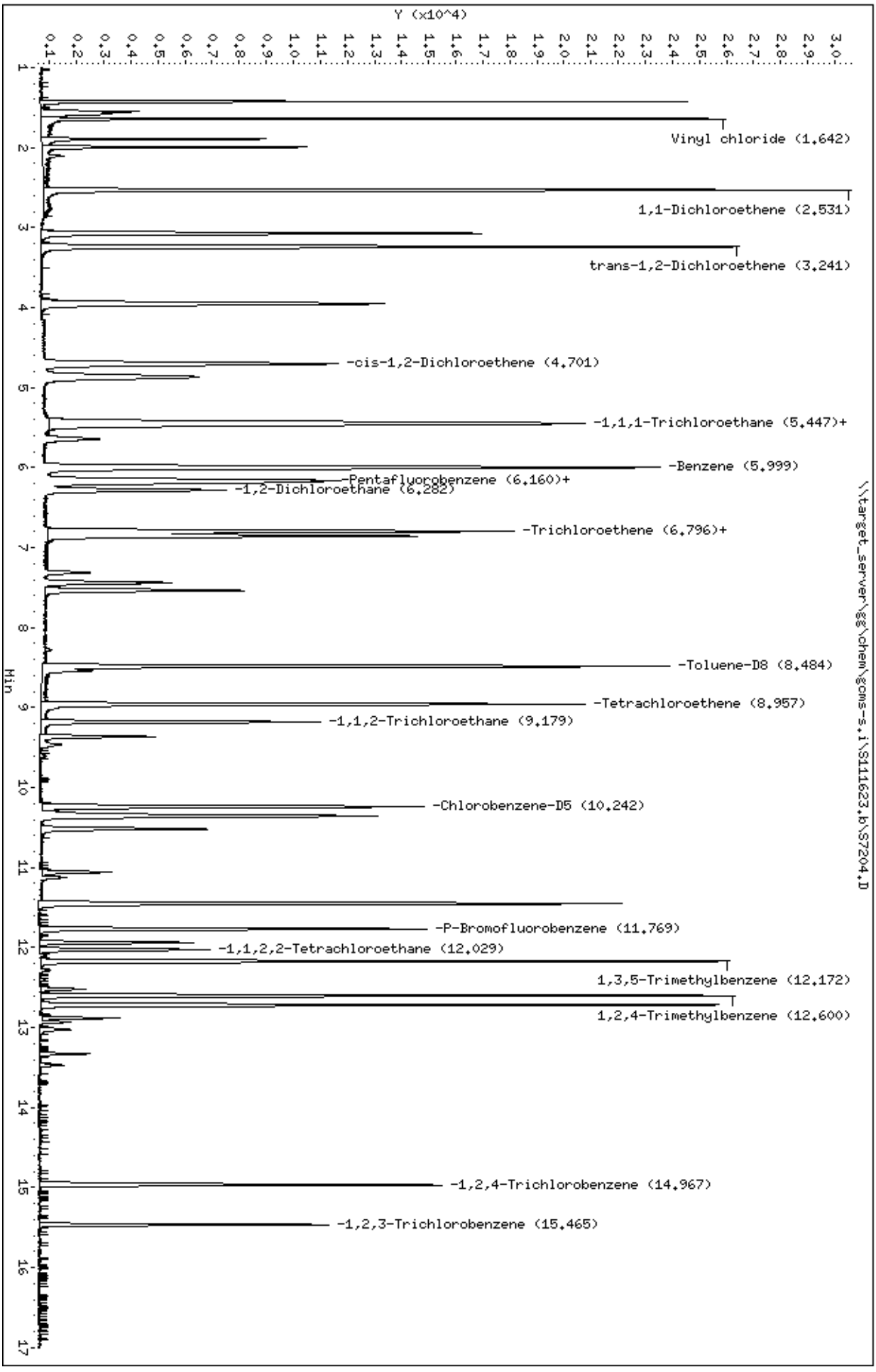
Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-s.i\S111623.b\S7204.D
Lab Smp Id: WG345525-6
Inj Date : 16-NOV-2023 14:52
Operator : JSS   Inst ID: gcms-s.i
Smp Info : WG345525-6
Misc Info :
Comment   : SW846 5030C
Method   : \\target_server\gg\chem\gcms-s.i\S111623.b\SSIM(01)CR23.m
Meth Date : 17-Nov-2023 10:03 jsampson   Quant Type: ISTD
Cal Date : 16-NOV-2023 14:52   Cal File: S7204.D
Als bottle: 6   Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: all.sub
Target Version: 4.12

Concentration Formula: Amt * DF * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	25.000	sample purged
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)	REVIEW CODE
	1 Vinyl chloride	62	1.642	1.640	(0.267)	16137	0.75000	0.727	
	2 1,1-Dichloroethene	96	2.531	2.532	(0.411)	12620	0.75000	0.720	
	3 trans-1,2-Dichloroethene	96	3.240	3.238	(0.526)	13515	0.75000	0.696	
	4 cis-1,2-Dichloroethene	96	4.701	4.702	(0.763)	10227	0.75000	0.686	
	6 1,1,1-Trichloroethane	97	5.454	5.454	(0.885)	21923	0.75000	0.719	
$	7 Dibromofluoromethane	113	5.440	5.440	(0.883)	10082	1.00000	1.01	
	8 Benzene	78	5.998	6.000	(0.974)	43159	0.75000	0.731	
*	9 Pentafluorobenzene	168	6.159	6.163	(1.000)	14735	1.00000		
$	10 1,2-Dichloroethane-D4	65	6.188	6.193	(1.005)	9333	1.00000	1.03	
	11 1,2-Dichloroethane	62	6.281	6.285	(0.916)	12218	0.75000	0.714	
	12 Trichloroethene	130	6.793	6.793	(0.991)	9536	0.75000	0.692	
*	13 1,4-Difluorobenzene	114	6.854	6.854	(1.000)	23148	1.00000		
$	14 Toluene-D8	98	8.482	8.482	(1.237)	24270	1.00000	0.993	
	15 Tetrachloroethene	164	8.958	8.957	(1.307)	8660	0.75000	0.700	
	16 1,1,2-Trichloroethane	83	9.177	9.181	(1.339)	4896	0.75000	0.780	
*	17 Chlorobenzene-D5	117	10.238	10.238	(1.000)	21414	1.00000		
$	18 P-Bromofluorobenzene	95	11.765	11.768	(1.149)	10054	1.00000	1.24	
	19 1,1,2,2-Tetrachloroethane	83	12.025	12.027	(1.175)	5772	0.75000	0.754	
	20 1,3,5-Trimethylbenzene	105	12.172	12.172	(1.189)	28521	0.75000	1.00	
	21 1,2,4-Trimethylbenzene	105	12.601	12.600	(1.231)	29320	0.75000	1.09	
	22 1,2,4-Trichlorobenzene	180	14.967	14.968	(1.462)	8224	0.75000	0.759	
	23 1,2,3-Trichlorobenzene	180	15.464	15.465	(1.510)	6474	0.75000	0.780	


Data File: \\target_server\gg\chem\gcms-s,i\S111623,b\S7204.D
Date : 16-NOV-2023 14:52
Client ID:
Sample Info: WG345525-6
Purge Volume: 25.0
Column phase: RTX-VMS
Instrument: gcms-s,i
Operator: JSS
Column diameter: 0.18
\\target_server\gg\chem\gcms-s,i\S111623,b\S7204.D
Y (x10^4)
Min
Vinyl chloride (1.642)
1,1-Dichloroethene (2.531)
trans-1,2-Dichloroethene (3.241)
-cis-1,2-Dichloroethene (4.701)
-1,1,1-Trichloroethane (5.447)+
-Benzene (5.999)
-Pentafluorobenzene (6.160)+
-1,2-Dichloroethane (6.282)
-Trichloroethene (6.796)+
-Toluene-D8 (8.484)
-Tetrachloroethene (8.957)
-1,1,2-Trichloroethane (9.179)
-Chlorobenzene-D5 (10.242)
-P-Bromofluorobenzene (11.769)
-1,1,2,2-Tetrachloroethane (12.029)
1,3,5-Trimethylbenzene (12.172)
1,2,4-Trimethylbenzene (12.600)
-1,2,4-Trichlorobenzene (14.967)
-1,2,3-Trichlorobenzene (15.465)

Data File: \\target_server\gg\chem\gcms-s.i\S111623.b\S7205.D
Report Date: 08-Dec-2023 14:45

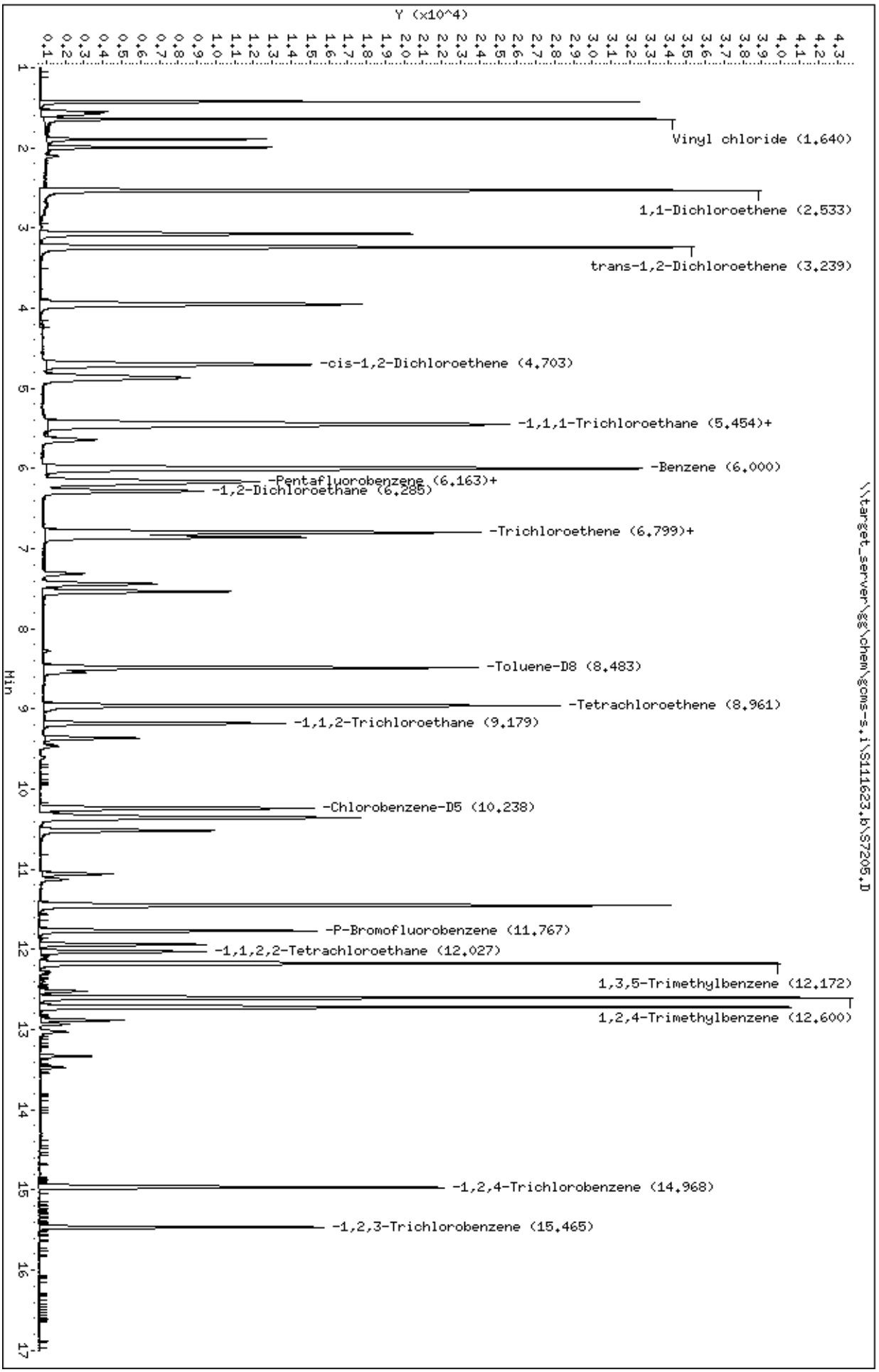
Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-s.i\S111623.b\S7205.D
Lab Smp Id: WG345525-7
Inj Date : 16-NOV-2023 15:20
Operator : JSS   Inst ID: gcms-s.i
Smp Info : WG345525-7
Misc Info :
Comment   : SW846 5030C
Method   : \\target_server\gg\chem\gcms-s.i\S111623.b\SSIM(01)CR23.m
Meth Date : 17-Nov-2023 10:03 jsampson   Quant Type: ISTD
Cal Date : 16-NOV-2023 15:20   Cal File: S7205.D
Als bottle: 7   Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: all.sub
Target Version: 4.12

Concentration Formula: Amt * DF * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	25.000	sample purged
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)	REVIEW CODE
	1 Vinyl chloride	62	1.640	1.640	(0.266)	21380	1.00000	0.948	
	2 1,1-Dichloroethene	96	2.532	2.532	(0.411)	16551	1.00000	0.931	
	3 trans-1,2-Dichloroethene	96	3.238	3.238	(0.526)	17971	1.00000	0.918	
	4 cis-1,2-Dichloroethene	96	4.702	4.702	(0.763)	13957	1.00000	0.931	
	6 1,1,1-Trichloroethane	97	5.454	5.454	(0.885)	29816	1.00000	0.965	
$	7 Dibromofluoromethane	113	5.440	5.440	(0.883)	9976	1.00000	0.977	
	8 Benzene	78	6.000	6.000	(0.974)	60395	1.00000	1.01	
*	9 Pentafluorobenzene	168	6.163	6.163	(1.000)	15038	1.00000		
$	10 1,2-Dichloroethane-D4	65	6.193	6.193	(1.005)	8842	1.00000	0.955	
	11 1,2-Dichloroethane	62	6.285	6.285	(0.917)	16021	1.00000	0.910	
	12 Trichloroethene	130	6.793	6.793	(0.991)	13031	1.00000	0.924	
*	13 1,4-Difluorobenzene	114	6.854	6.854	(1.000)	24000	1.00000		
$	14 Toluene-D8	98	8.482	8.482	(1.237)	25141	1.00000	0.994	
	15 Tetrachloroethene	164	8.957	8.957	(1.307)	11761	1.00000	0.928	
	16 1,1,2-Trichloroethane	83	9.181	9.181	(1.339)	6389	1.00000	0.976	
*	17 Chlorobenzene-D5	117	10.238	10.238	(1.000)	21862	1.00000		
$	18 P-Bromofluorobenzene	95	11.768	11.768	(1.149)	10578	1.00000	1.22	
	19 1,1,2,2-Tetrachloroethane	83	12.027	12.027	(1.175)	7958	1.00000	1.02	
	20 1,3,5-Trimethylbenzene	105	12.172	12.172	(1.189)	46718	1.00000	1.52	
	21 1,2,4-Trimethylbenzene	105	12.600	12.600	(1.231)	48270	1.00000	1.63	
	22 1,2,4-Trichlorobenzene	180	14.967	14.968	(1.462)	12034	1.00000	1.08	
	23 1,2,3-Trichlorobenzene	180	15.464	15.465	(1.510)	9398	1.00000	1.10	


Data File: \\target_server\gg\chem\gcms-s.i\S111623.b\S7205.D
Date : 16-NOV-2023 15:20
Client ID:
Sample Info: WG345525-7
Purge Volume: 25.0
Column phase: RTX-VMS
Instrument: gcms-s.i
Operator: JSS
Column diameter: 0.18
\\target_server\gg\chem\gcms-s.i\S111623.b\S7205.D
Y (x10^4)
Min
Vinyl chloride (1.640)
1,1-Dichloroethene (2.533)
trans-1,2-Dichloroethene (3.239)
-cis-1,2-Dichloroethene (4.703)
-1,1,1-Trichloroethane (5.454)+
-Benzene (6.000)
-Pentafluorobenzene (6.163)+
-1,2-Dichloroethane (6.285)
-Trichloroethene (6.799)+
-Toluene-D8 (8.483)
-Tetrachloroethene (8.961)
-1,1,2-Trichloroethane (9.179)
-Chlorobenzene-D5 (10.238)
-P-Bromofluorobenzene (11.767)
-1,1,2,2-Tetrachloroethane (12.027)
1,3,5-Trimethylbenzene (12.172)
1,2,4-Trimethylbenzene (12.600)
-1,2,4-Trichlorobenzene (14.968)
-1,2,3-Trichlorobenzene (15.465)

Data File: \\target_server\gg\chem\gcms-s.i\S111623.b\S7206.D
Report Date: 08-Dec-2023 14:45

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-s.i\S111623.b\S7206.D
Lab Smp Id: WG345525-8
Inj Date : 16-NOV-2023 15:48
Operator : JSS   Inst ID: gcms-s.i
Smp Info : WG345525-8
Misc Info :
Comment   : SW846 5030C
Method   : \\target_server\gg\chem\gcms-s.i\S111623.b\SSIM(01)CR23.m
Meth Date : 17-Nov-2023 10:03 jsampson   Quant Type: ISTD
Cal Date : 16-NOV-2023 15:48   Cal File: S7206.D
Als bottle: 8   Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: all.sub
Target Version: 4.12
Processing Host: T7-O360

Concentration Formula: Amt * DF * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	25.000	sample purged
Cpnd Variable		Local Compound Variable

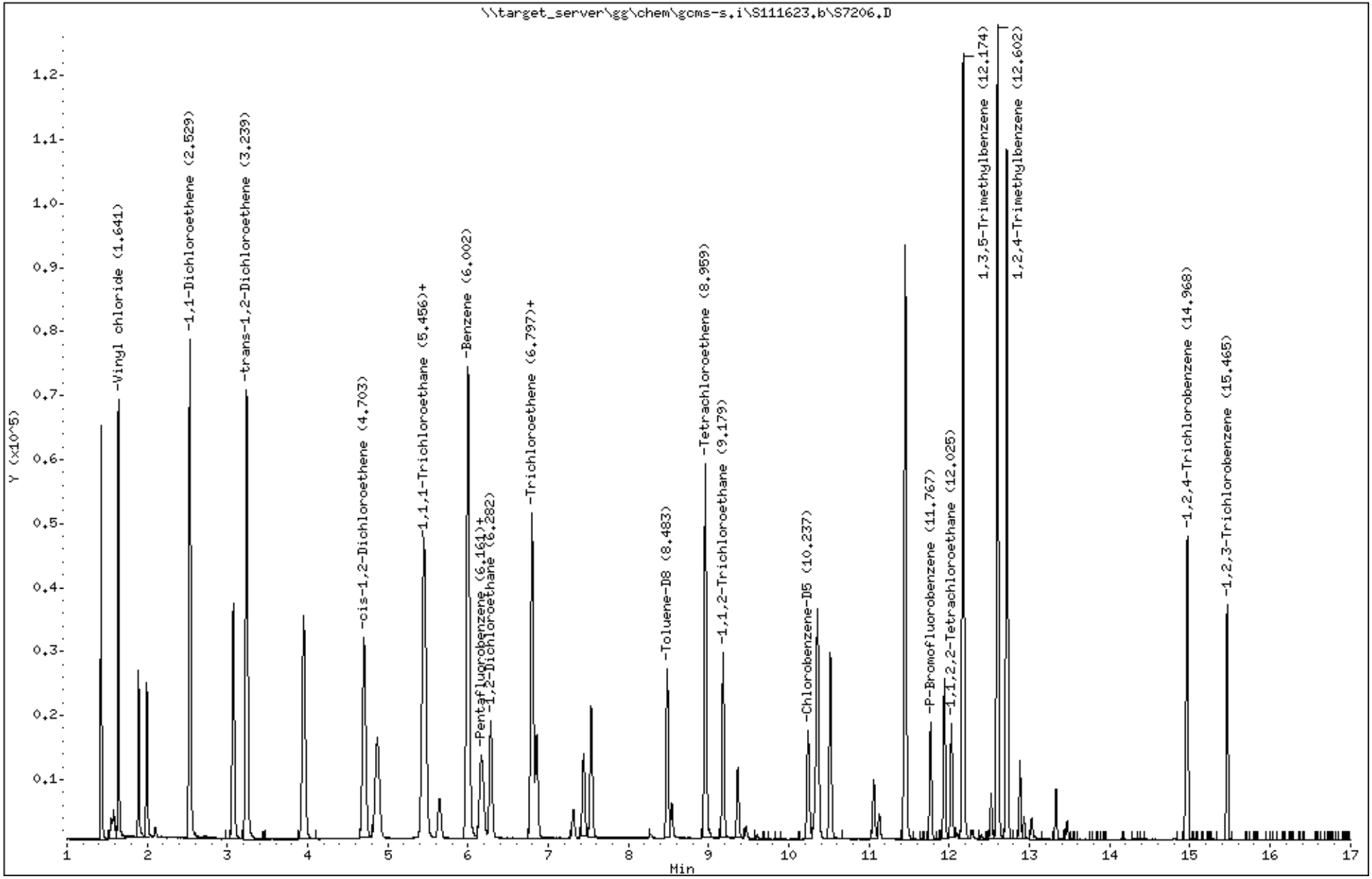
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)	REVIEW CODE
	1 Vinyl chloride	62	1.640	1.640	(0.266)	44101	2.00000	1.75	
	2 1,1-Dichloroethene	96	2.531	2.532	(0.411)	33166	2.00000	1.68	
	3 trans-1,2-Dichloroethene	96	3.239	3.238	(0.526)	37240	2.00000	1.71	
	4 cis-1,2-Dichloroethene	96	4.702	4.702	(0.763)	29554	2.00000	1.76	
	6 1,1,1-Trichloroethane	97	5.455	5.454	(0.886)	62311	2.00000	1.79	
$	7 Dibromofluoromethane	113	5.435	5.440	(0.882)	10739	1.00000	0.928	
	8 Benzene	78	6.002	6.000	(0.974)	138568	2.00000	2.01(A)	
*	9 Pentafluorobenzene	168	6.161	6.163	(1.000)	17273	1.00000		
$	10 1,2-Dichloroethane-D4	65	6.191	6.193	(1.005)	9657	1.00000	0.924	
	11 1,2-Dichloroethane	62	6.281	6.285	(0.916)	34266	2.00000	1.72	
	12 Trichloroethene	130	6.797	6.793	(0.991)	28460	2.00000	1.78	
*	13 1,4-Difluorobenzene	114	6.856	6.854	(1.000)	27973	1.00000		
$	14 Toluene-D8	98	8.480	8.482	(1.237)	28761	1.00000	0.979	
	15 Tetrachloroethene	164	8.960	8.957	(1.307)	25135	2.00000	1.75	
	16 1,1,2-Trichloroethane	83	9.179	9.181	(1.339)	14016	2.00000	1.86	
*	17 Chlorobenzene-D5	117	10.236	10.238	(1.000)	25332	1.00000		
$	18 P-Bromofluorobenzene	95	11.767	11.768	(1.150)	13055	1.00000	1.22	
	19 1,1,2,2-Tetrachloroethane	83	12.025	12.027	(1.175)	16641	2.00000	1.85	
	20 1,3,5-Trimethylbenzene	105	12.172	12.172	(1.189)	136091	2.00000	3.24(A)	
	21 1,2,4-Trimethylbenzene	105	12.602	12.600	(1.231)	136920	2.00000	3.32(A)	
	22 1,2,4-Trichlorobenzene	180	14.967	14.968	(1.462)	27106	2.00000	2.07(A)	
	23 1,2,3-Trichlorobenzene	180	15.464	15.465	(1.511)	21861	2.00000	2.16(A)	

Data File: \\target_server\gg\chem\gcms-s.i\S111623.b\S7206.D
Report Date: 08-Dec-2023 14:45

QC Flag Legend

A - Target compound detected but, quantitated amount
    exceeded maximum amount.

Data File: \\target_server\gg\chem\gcms-s.i\S111623.b\S7206.D
Date : 16-NOV-2023 15:48
Client ID:
Instrument: gcms-s.i
Sample Info: WG345525-8
Purge Volume: 25.0
Operator: JSS
Column phase: RTX-VMS
Column diameter: 0.18



Katahdin Analytical Services SQ6179 Page 148 of 740

Form 7
Calibration Verification Summary

Lab Name: Katahdin Analytical Services
SDG: SQ6179
Lab ID: WG345597-4
Analytical Date: 11/17/23 09:43
Lab File ID: S7225.D
Instrument ID: GCMS-S
Initial Calibration Date(s): 11/16/23 12:35 11/16/23 15:48
Column ID:

Compound	$\overline{RRF}$/Amount	RF0.500	CCAL RRF0.500	Min RF	%D/ %Drift	Max %D/ %Drift	Curve Type	Qual
Vinyl chloride	1.46174	1.40516	1.40516	0.010	-3.87066	20.000	Averaged	
1,1-Dichloroethene	1.14404	1.10850	1.10850	0.100	-3.10653	20.000	Averaged	
trans-1,2-Dichloroethene	1.26081	1.15941	1.15941	0.010	-8.04249	20.000	Averaged	
cis-1,2-Dichloroethene	0.97069	0.83179	0.83179	0.010	-14.30956	20.000	Averaged	
Trichloroethene	0.57201	0.55187	0.55187	0.010	-3.51976	20.000	Averaged	
Tetrachloroethene	0.51356	0.51818	0.51818	0.010	0.90069	20.000	Averaged	
Dibromofluoromethane	0.66972	0.60585	0.60585	0.010	-9.53687	20.000	Averaged	
1,2-Dichloroethane-D4	0.60510	0.54241	0.54241	0.010	-10.35897	20.000	Averaged	
Toluene-D8	1.05022	1.00501	1.00501	0.010	-4.30451	20.000	Averaged	
P-Bromofluorobenzene	0.42113	0.40660	0.40660	0.010	-3.44988	20.000	Averaged	

*** = Compound out of QC criteria**

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Data File: \\target_server\gg\chem\gcms-s.i\S111723.b\S7225.D
Report Date: 08-Dec-2023 14:53

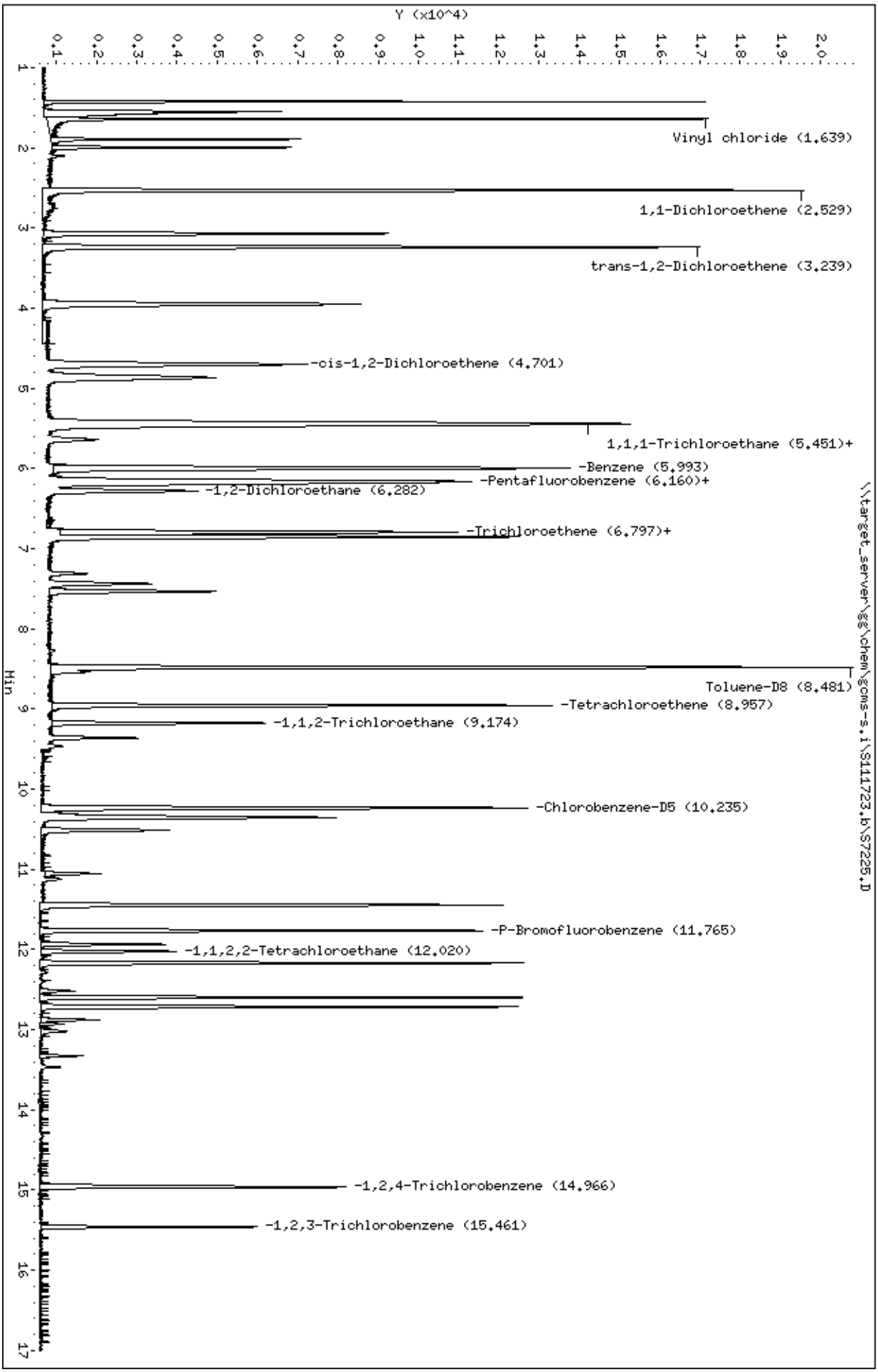
Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-s.i\S111723.b\S7225.D
Lab Smp Id: WG345597-4
Inj Date : 17-NOV-2023 09:43
Operator : JSS   Inst ID: gcms-s.i
Smp Info : WG345597-4,SQ6179
Misc Info : WG345597,WG345525-5,SQ6179-1
Comment   : SW846 5030C
Method   : \\target_server\gg\chem\gcms-s.i\S111723.b\SSIM(01)CR23.m
Meth Date : 08-Dec-2023 14:53 croy   Quant Type: ISTD
Cal Date : 16-NOV-2023 15:48   Cal File: S7206.D
Als bottle: 1   Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: all.sub
Target Version: 4.12
Processing Host: T7-O360

Concentration Formula: Amt * DF * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	25.000	sample purged
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)	REVIEW CODE
	1 Vinyl chloride	62	1.638	1.640	(0.266)	10212	0.50000	0.481	
	2 1,1-Dichloroethene	96	2.531	2.532	(0.411)	8056	0.50000	0.484	
	3 trans-1,2-Dichloroethene	96	3.238	3.238	(0.526)	8426	0.50000	0.460	
	4 cis-1,2-Dichloroethene	96	4.701	4.703	(0.763)	6045	0.50000	0.428	
	6 1,1,1-Trichloroethane	97	5.450	5.454	(0.885)	14015	0.50000	0.478	
$	7 Dibromofluoromethane	113	5.435	5.441	(0.882)	8806	1.00000	0.905	
	8 Benzene	78	5.993	6.000	(0.973)	24294	0.50000	0.418	
*	9 Pentafluorobenzene	168	6.159	6.163	(1.000)	14535	1.00000		
$	10 1,2-Dichloroethane-D4	65	6.188	6.194	(1.005)	7884	1.00000	0.896	
	11 1,2-Dichloroethane	62	6.281	6.285	(0.917)	7071	0.50000	0.485	
	12 Trichloroethene	130	6.795	6.794	(0.992)	5668	0.50000	0.482	
*	13 1,4-Difluorobenzene	114	6.852	6.855	(1.000)	20541	1.00000		
$	14 Toluene-D8	98	8.480	8.483	(1.238)	20644	1.00000	0.957	
	15 Tetrachloroethene	164	8.953	8.957	(1.307)	5322	0.50000	0.504	
	16 1,1,2-Trichloroethane	83	9.173	9.181	(1.339)	2557	0.50000	0.462	
*	17 Chlorobenzene-D5	117	10.234	10.238	(1.000)	17720	1.00000		
$	18 P-Bromofluorobenzene	95	11.763	11.768	(1.149)	7205	1.00000	0.966	
	19 1,1,2,2-Tetrachloroethane	83	12.019	12.027	(1.174)	3164	0.50000	0.503	
	22 1,2,4-Trichlorobenzene	180	14.965	14.968	(1.462)	4356	0.50000	0.476	
	23 1,2,3-Trichlorobenzene	180	15.461	15.465	(1.511)	3249	0.50000	0.458	


Data File: \\target_server\gg\chem\gcms-s.i\S111723.b\S7225.D
Date : 17-NOV-2023 09:43
Client ID:
Sample Info: WG345597-4,SQ6179
Purge Volume: 25.0
Column phase: RTX-VMS
Instrument: gcms-s.i
Operator: JSS
Column diameter: 0.18
Y (x10^4)
Min
\\target_server\gg\chem\gcms-s.i\S111723.b\S7225.D
Vinyl chloride (1.639)
1,1-Dichloroethene (2.529)
trans-1,2-Dichloroethene (3.239)
-cis-1,2-Dichloroethene (4.701)
1,1,1-Trichloroethane (5.451)+
-Benzene (5.993)
-Pentafluorobenzene (6.160)+
-1,2-Dichloroethane (6.282)
-Trichloroethene (6.797)+
Toluene-D8 (8.481)
-Tetrachloroethene (8.957)
-1,1,2-Trichloroethane (9.174)
-Chlorobenzene-D5 (10.235)
-P-Bromofluorobenzene (11.765)
-1,1,2,2-Tetrachloroethane (12.020)
-1,2,4-Trichlorobenzene (14.966)
-1,2,3-Trichlorobenzene (15.461)

Form 7
Calibration Verification Summary

Lab Name: Katahdin Analytical Services
SDG: SQ6179
Lab ID: WG345597-5
Analytical Date: 11/17/23 20:55
Lab File ID: S7249.D
Instrument ID: GCMS-S
Initial Calibration Date(s): 11/16/23 12:35 11/16/23 15:48
Column ID:

Compound	RRF/Amount	RF0.500	CCAL RRF0.500	Min RF	%D/ %Drift	Max %D/ %Drift	Curve Type	Qual
Vinyl chloride	1.46174	1.46700	1.46700	0.010	0.36830	50.000	Averaged	
1,1-Dichloroethene	1.14404	1.24418	1.24418	0.100	8.75316	50.000	Averaged	
trans-1,2-Dichloroethene	1.26081	1.27773	1.27773	0.010	1.34203	50.000	Averaged	
cis-1,2-Dichloroethene	0.97069	0.96060	0.96060	0.010	-1.03471	50.000	Averaged	
Trichloroethene	0.57201	0.59890	0.59890	0.010	4.70580	50.000	Averaged	
Tetrachloroethene	0.51356	0.53982	0.53982	0.010	5.11376	50.000	Averaged	
Dibromofluoromethane	0.66972	0.71030	0.71030	0.010	6.05428	50.000	Averaged	
1,2-Dichloroethane-D4	0.60510	0.64750	0.64750	0.010	6.99972	50.000	Averaged	
Toluene-D8	1.05022	1.04800	1.04800	0.010	-0.24125	50.000	Averaged	
P-Bromofluorobenzene	0.42113	0.42301	0.42301	0.010	0.44619	50.000	Averaged	

*** = Compound out of QC criteria**

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Data File: \\target_server\gg\chem\gcms-s.i\S111723.b\S7249.D
Report Date: 08-Dec-2023 14:52

Katahdin Analytical Services

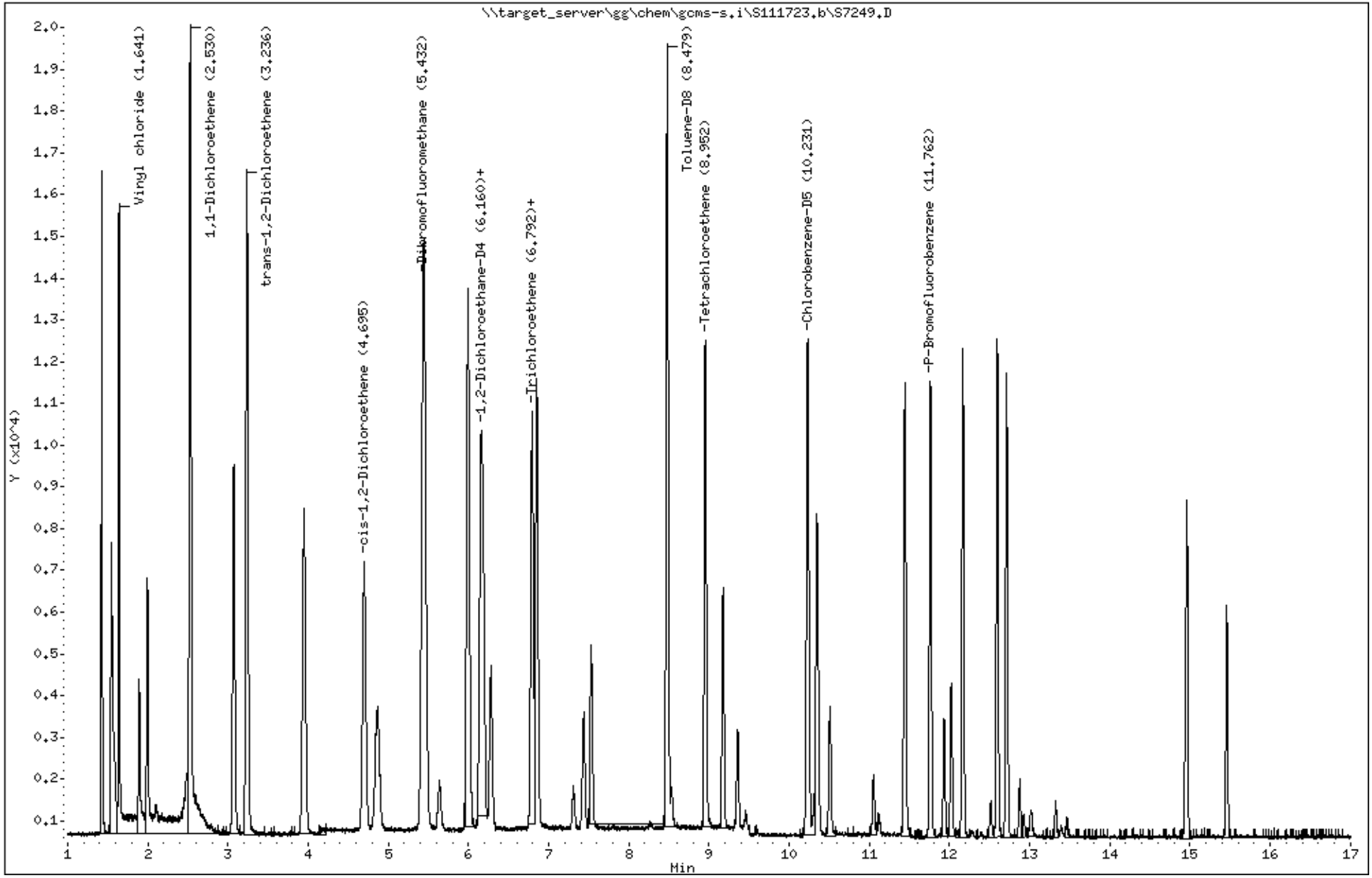
Data file : \\target_server\gg\chem\gcms-s.i\S111723.b\S7249.D
Lab Smp Id: WG345597-5
Inj Date : 17-NOV-2023 20:55
Operator : JSS   Inst ID: gcms-s.i
Smp Info : WG345597-5,SQ6179
Misc Info : WG345597,WG345525-5,SQ6179-1
Comment   : SW846 5030C
Method   : \\target_server\gg\chem\gcms-s.i\S111723.b\SSIM(01)CR23.m
Meth Date : 08-Dec-2023 14:32 croy   Quant Type: ISTD
Cal Date : 16-NOV-2023 15:48   Cal File: S7206.D
Als bottle: 25   Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: credere.sub
Target Version: 4.12
Processing Host: ORGANICS2

Concentration Formula: Amt * DF * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	25.000	sample purged
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)	REVIEW CODE
	1 Vinyl chloride	62	1.640	1.640	(0.266)	9226	0.50000	0.502	
	2 1,1-Dichloroethene	96	2.529	2.532	(0.411)	7824	0.50000	0.544	
	4 cis-1,2-Dichloroethene	96	4.694	4.703	(0.763)	6041	0.50000	0.495	
	3 trans-1,2-Dichloroethene	96	3.235	3.238	(0.526)	8035	0.50000	0.507	
	12 Trichloroethene	130	6.793	6.794	(0.992)	5614	0.50000	0.524	
	15 Tetrachloroethene	164	8.951	8.957	(1.307)	5060	0.50000	0.526	
$	7 Dibromofluoromethane	113	5.432	5.441	(0.882)	8933	1.00000	1.06	
$	10 1,2-Dichloroethane-D4	65	6.186	6.194	(1.005)	8143	1.00000	1.07	
$	14 Toluene-D8	98	8.479	8.483	(1.238)	19641	1.00000	0.998	
$	18 P-Bromofluorobenzene	95	11.763	11.768	(1.150)	7563	1.00000	1.00	
*	9 Pentafluorobenzene	168	6.156	6.163	(1.000)	12577	1.00000		
*	13 1,4-Difluorobenzene	114	6.851	6.855	(1.000)	18747	1.00000		
*	17 Chlorobenzene-D5	117	10.231	10.238	(1.000)	17879	1.00000		

Data File: \\target_server\gg\chem\gcms-s.i\S111723.b\S7249.D
Date : 17-NOV-2023 20:55
Client ID:
Instrument: gcms-s.i
Sample Info: WG345597-5,SQ6179
Purge Volume: 25.0
Operator: JSS
Column phase: RTX-VMS
Column diameter: 0.18



Katahdin Analytical Services SQ6179 Page 154 of 740

Form 7
Calibration Verification Summary

Lab Name: Katahdin Analytical Services
SDG: SQ6179
Lab ID: WG345675-4
Analytical Date: 11/18/23 11:32
Lab File ID: S7255.D
Instrument ID: GCMS-S
Initial Calibration Date(s): 11/16/23 12:35 11/16/23 15:48
Column ID:

Compound	RRF/Amount	RF0.500	CCAL RRF0.500	Min RF	%D/ %Drift	Max %D/ %Drift	Curve Type	Qual
Vinyl chloride	1.46174	1.25493	1.25493	0.010	-14.14792	20.000	Averaged	
1,1-Dichloroethene	1.14404	1.02693	1.02693	0.100	-10.23597	20.000	Averaged	
trans-1,2-Dichloroethene	1.26081	1.09893	1.09893	0.010	-12.83902	20.000	Averaged	
cis-1,2-Dichloroethene	0.97069	0.83027	0.83027	0.010	-14.46601	20.000	Averaged	
Trichloroethene	0.57201	0.51813	0.51813	0.010	-9.41798	20.000	Averaged	
Tetrachloroethene	0.51356	0.47808	0.47808	0.010	-6.90903	20.000	Averaged	
Dibromofluoromethane	0.66972	0.61813	0.61813	0.010	-7.70246	20.000	Averaged	
1,2-Dichloroethane-D4	0.60510	0.55940	0.55940	0.010	-7.55196	20.000	Averaged	
Toluene-D8	1.05022	1.01811	1.01811	0.010	-3.05754	20.000	Averaged	
P-Bromofluorobenzene	0.42113	0.41053	0.41053	0.010	-2.51653	20.000	Averaged	

*** = Compound out of QC criteria**

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Data File: \\target_server\gg\chem\gcms-s.i\S111823.b\S7255.D
Report Date: 08-Dec-2023 14:57

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-s.i\S111823.b\S7255.D
Lab Smp Id: WG345675-4
Inj Date : 18-NOV-2023 11:32
Operator : JSS   Inst ID: gcms-s.i
Smp Info : WG345675-4,SQ6179
Misc Info : WG345675,WG345525-5,SQ6179-8
Comment   : SW846 5030C
Method   : \\target_server\gg\chem\gcms-s.i\S111823.b\SSIM(01)CR23.m
Meth Date : 08-Dec-2023 14:57 croy   Quant Type: ISTD
Cal Date : 16-NOV-2023 15:48   Cal File: S7206.D
Als bottle: 2   Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: all.sub
Target Version: 4.12
Processing Host: T7-O360

Concentration Formula: Amt * DF * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	25.000	sample purged
Cpnd Variable		Local Compound Variable

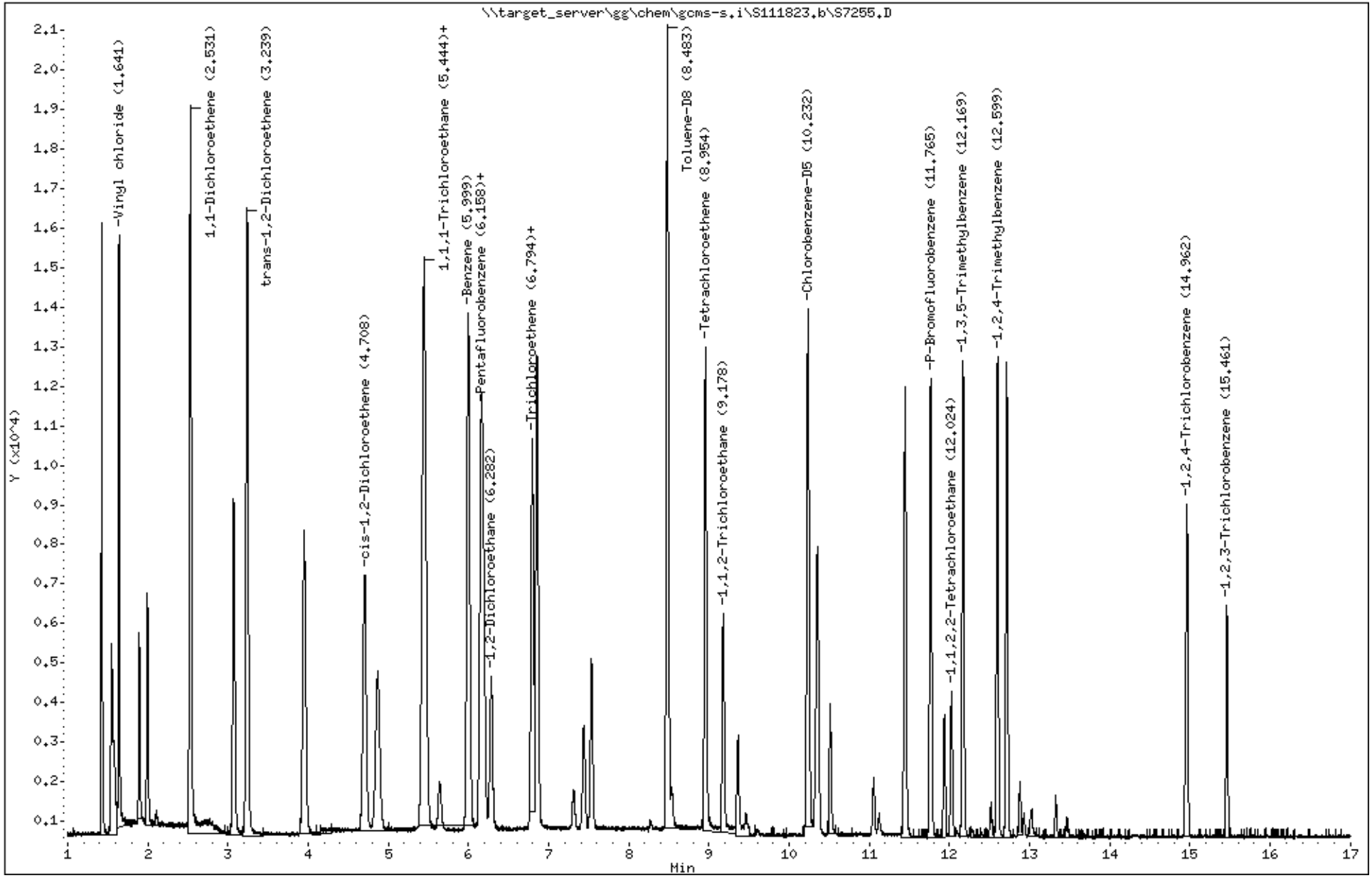
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)	REVIEW CODE
	1 Vinyl chloride	62	1.640	1.640	(0.266)	9412	0.50000	0.429	
	2 1,1-Dichloroethene	96	2.531	2.532	(0.411)	7702	0.50000	0.449	
	3 trans-1,2-Dichloroethene	96	3.239	3.238	(0.526)	8242	0.50000	0.436	
	4 cis-1,2-Dichloroethene	96	4.708	4.703	(0.765)	6227	0.50000	0.428	
	6 1,1,1-Trichloroethane	97	5.452	5.454	(0.885)	13742	0.50000	0.455	
$	7 Dibromofluoromethane	113	5.437	5.441	(0.883)	9272	1.00000	0.923	
	8 Benzene	78	5.998	6.000	(0.974)	24958	0.50000	0.416	
*	9 Pentafluorobenzene	168	6.158	6.163	(1.000)	15000	1.00000		
$	10 1,2-Dichloroethane-D4	65	6.186	6.194	(1.005)	8391	1.00000	0.924	
	11 1,2-Dichloroethane	62	6.281	6.285	(0.916)	7320	0.50000	0.482	
	12 Trichloroethene	130	6.799	6.794	(0.992)	5536	0.50000	0.453	
*	13 1,4-Difluorobenzene	114	6.856	6.855	(1.000)	21369	1.00000		
$	14 Toluene-D8	98	8.482	8.483	(1.237)	21756	1.00000	0.969	
	15 Tetrachloroethene	164	8.953	8.957	(1.306)	5108	0.50000	0.465	
	16 1,1,2-Trichloroethane	83	9.179	9.181	(1.339)	2716	0.50000	0.472	
*	17 Chlorobenzene-D5	117	10.231	10.238	(1.000)	19538	1.00000		
$	18 P-Bromofluorobenzene	95	11.765	11.768	(1.150)	8021	1.00000	0.975	
	19 1,1,2,2-Tetrachloroethane	83	12.023	12.027	(1.175)	3320	0.50000	0.478	
	20 1,3,5-Trimethylbenzene	105	12.168	12.172	(1.189)	13667	0.50000	(a)	
	21 1,2,4-Trimethylbenzene	105	12.598	12.600	(1.231)	13602	0.50000	(a)	
	22 1,2,4-Trichlorobenzene	180	14.965	14.968	(1.463)	4790	0.50000	0.475	
	23 1,2,3-Trichlorobenzene	180	15.461	15.465	(1.511)	3581	0.50000	0.458	

Data File: \\target_server\gg\chem\gcms-s.i\S111823.b\S7255.D
Report Date: 08-Dec-2023 14:57

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\target_server\gg\chem\gcms-s.i\S111823.b\S7255.D
Date : 18-NOV-2023 11:32
Client ID:
Instrument: gcms-s.i
Sample Info: WG345675-4,SQ6179
Purge Volume: 25.0
Operator: JSS
Column phase: RTX-VMS
Column diameter: 0.18



Form 7
Calibration Verification Summary

Lab Name: Katahdin Analytical Services
SDG: SQ6179
Lab ID: WG345675-5
Analytical Date: 11/18/23 21:34
Lab File ID: S7276.D
Instrument ID: GCMS-S
Initial Calibration Date(s): 11/16/23 12:35 11/16/23 15:48
Column ID:

Compound	RRF/Amount	RF0.500	CCAL RRF0.500	Min RF	%D/ %Drift	Max %D/ %Drift	Curve Type	Qual
Vinyl chloride	1.46174	1.52618	1.52618	0.010	4.40830	50.000	Averaged	
1,1-Dichloroethene	1.14404	1.20103	1.20103	0.100	4.98137	50.000	Averaged	
trans-1,2-Dichloroethene	1.26081	1.26783	1.26783	0.010	0.55662	50.000	Averaged	
cis-1,2-Dichloroethene	0.97069	0.94827	0.94827	0.010	-2.30954	50.000	Averaged	
Trichloroethene	0.57201	0.57638	0.57638	0.010	0.76556	50.000	Averaged	
Tetrachloroethene	0.51356	0.52826	0.52826	0.010	2.86363	50.000	Averaged	
Dibromofluoromethane	0.66972	0.67493	0.67493	0.010	0.77765	50.000	Averaged	
1,2-Dichloroethane-D4	0.60510	0.60758	0.60758	0.010	0.41060	50.000	Averaged	
Toluene-D8	1.05022	1.03099	1.03099	0.010	-1.83143	50.000	Averaged	
P-Bromofluorobenzene	0.42113	0.41606	0.41606	0.010	-1.20408	50.000	Averaged	

*** = Compound out of QC criteria**

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Data File: \\target_server\gg\chem\gcms-s.i\S111823.b\S7276.D
Report Date: 08-Dec-2023 14:55

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-s.i\S111823.b\S7276.D
Lab Smp Id: WG345675-5
Inj Date : 18-NOV-2023 21:34
Operator : JSS   Inst ID: gcms-s.i
Smp Info : WG345675-5,SQ6179
Misc Info : WG345675,WG345525-5,SQ6179-8
Comment   : SW846 5030C
Method   : \\target_server\gg\chem\gcms-s.i\S111823.b\SSIM(01)CR23.m
Meth Date : 08-Dec-2023 14:44 croy   Quant Type: ISTD
Cal Date : 16-NOV-2023 15:48   Cal File: S7206.D
Als bottle: 23   Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: all.sub
Target Version: 4.12
Processing Host: T7-O360

Concentration Formula: Amt * DF * 25/Vo * CpndVariable

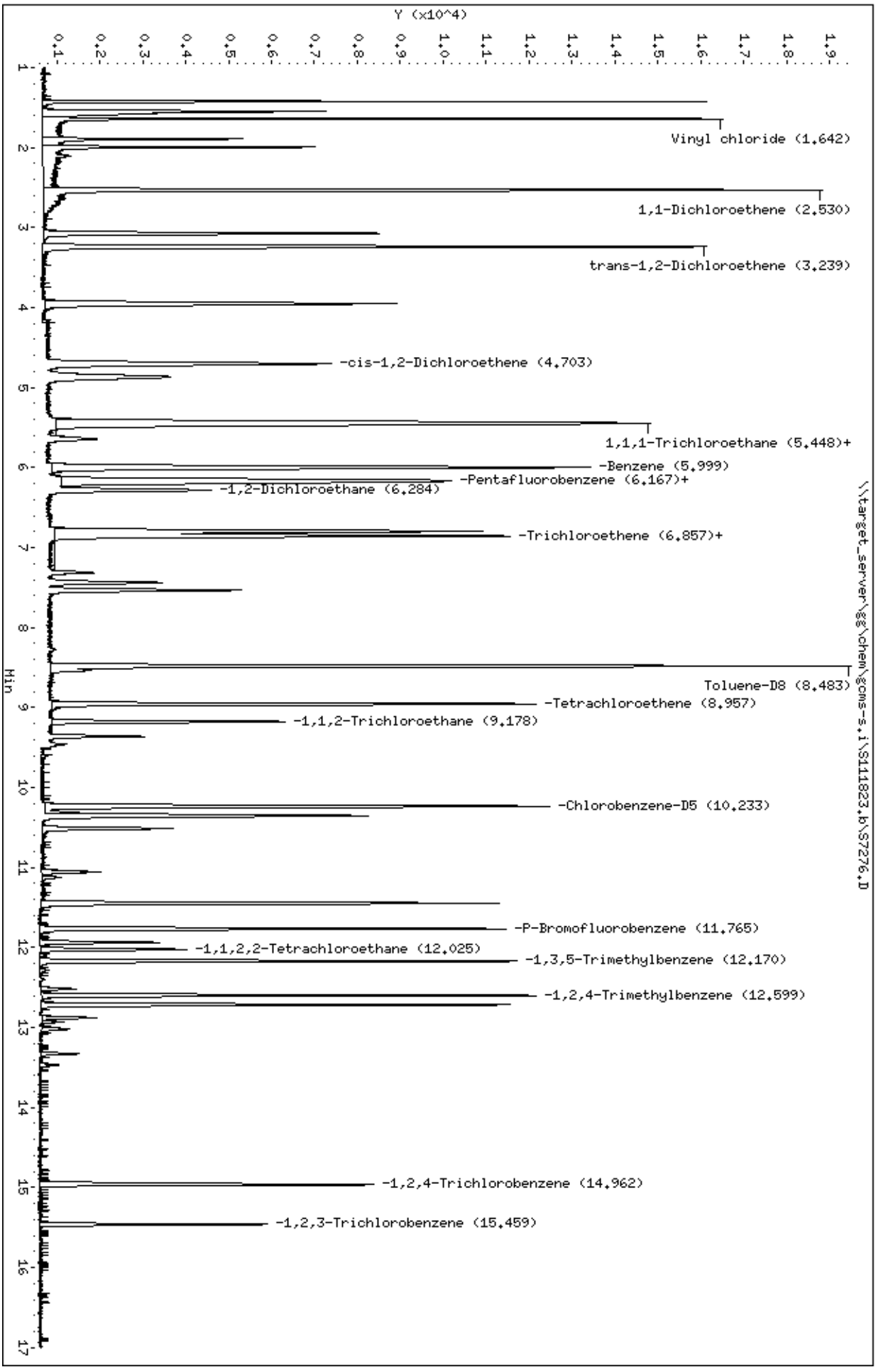
Name	Value	Description
DF	1.000	Dilution Factor
Vo	25.000	sample purged
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)	REVIEW CODE
	1 Vinyl chloride	62	1.640	1.640	(0.267)	9824	0.50000	0.522	
	2 1,1-Dichloroethene	96	2.532	2.532	(0.412)	7731	0.50000	0.525	
	3 trans-1,2-Dichloroethene	96	3.239	3.238	(0.526)	8161	0.50000	0.503	
	4 cis-1,2-Dichloroethene	96	4.703	4.703	(0.764)	6104	0.50000	0.488	
	6 1,1,1-Trichloroethane	97	5.454	5.454	(0.886)	13525	0.50000	0.521	
$	7 Dibromofluoromethane	113	5.432	5.441	(0.883)	8689	1.00000	1.01	
	8 Benzene	78	5.998	6.000	(0.975)	23584	0.50000	0.458	
*	9 Pentafluorobenzene	168	6.154	6.163	(1.000)	12874	1.00000		
$	10 1,2-Dichloroethane-D4	65	6.191	6.194	(1.006)	7822	1.00000	1.00	
	11 1,2-Dichloroethane	62	6.283	6.285	(0.916)	7046	0.50000	0.525	
	12 Trichloroethene	130	6.797	6.794	(0.991)	5450	0.50000	0.504	
*	13 1,4-Difluorobenzene	114	6.856	6.855	(1.000)	18911	1.00000		
$	14 Toluene-D8	98	8.480	8.483	(1.237)	19497	1.00000	0.982	
	15 Tetrachloroethene	164	8.957	8.957	(1.306)	4995	0.50000	0.514	
	16 1,1,2-Trichloroethane	83	9.175	9.181	(1.338)	2755	0.50000	0.541	
*	17 Chlorobenzene-D5	117	10.233	10.238	(1.000)	17733	1.00000		
$	18 P-Bromofluorobenzene	95	11.765	11.768	(1.150)	7378	1.00000	0.988	
	19 1,1,2,2-Tetrachloroethane	83	12.027	12.027	(1.175)	3140	0.50000	0.499	
	20 1,3,5-Trimethylbenzene	105	12.170	12.172	(1.189)	12724	0.50000	(a)	
	21 1,2,4-Trimethylbenzene	105	12.598	12.600	(1.231)	12737	0.50000	(a)	
	22 1,2,4-Trichlorobenzene	180	14.964	14.968	(1.462)	4363	0.50000	0.477	
	23 1,2,3-Trichlorobenzene	180	15.459	15.465	(1.511)	3388	0.50000	0.477	

Data File: \\target_server\gg\chem\gcms-s.i\S111823.b\S7276.D
Report Date: 08-Dec-2023 14:55

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).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Date : 18-NOV-2023 21:34
Client ID:
Sample Info: WG345675-5,SQ6179
Purge Volume: 25,0
Column phase: RTX-VMS
Instrument: gcms-s,i
Operator: JSS
Column diameter: 0,18
Y (x10^4)
Min
\\target_server\gg\chem\gcms-s,i\S111823,b\S7276,D
Vinyl chloride (1,642)
1,1-Dichloroethene (2,530)
trans-1,2-Dichloroethene (3,239)
-cis-1,2-Dichloroethene (4,703)
1,1,1-Trichloroethane (5,448)+
-Benzene (5,999)
-Pentafluorobenzene (6,167)+
-1,2-Dichloroethane (6,284)
-Trichloroethene (6,857)+
Toluene-D8 (8,483)
-Tetrachloroethene (8,957)
-1,1,2-Trichloroethane (9,178)
-Chlorobenzene-D5 (10,233)
-P-Bromofluorobenzene (11,765)
-1,1,2,2-Tetrachloroethane (12,025)
-1,3,5-Trimethylbenzene (12,170)
-1,2,4-Trimethylbenzene (12,599)
-1,2,4-Trichlorobenzene (14,962)
-1,2,3-Trichlorobenzene (15,459)

Data File: \\target_server\gg\chem\gcms-s.i\S111623.b\SB923a.D

Date : 16-NOV-2023 12:12

Client ID:

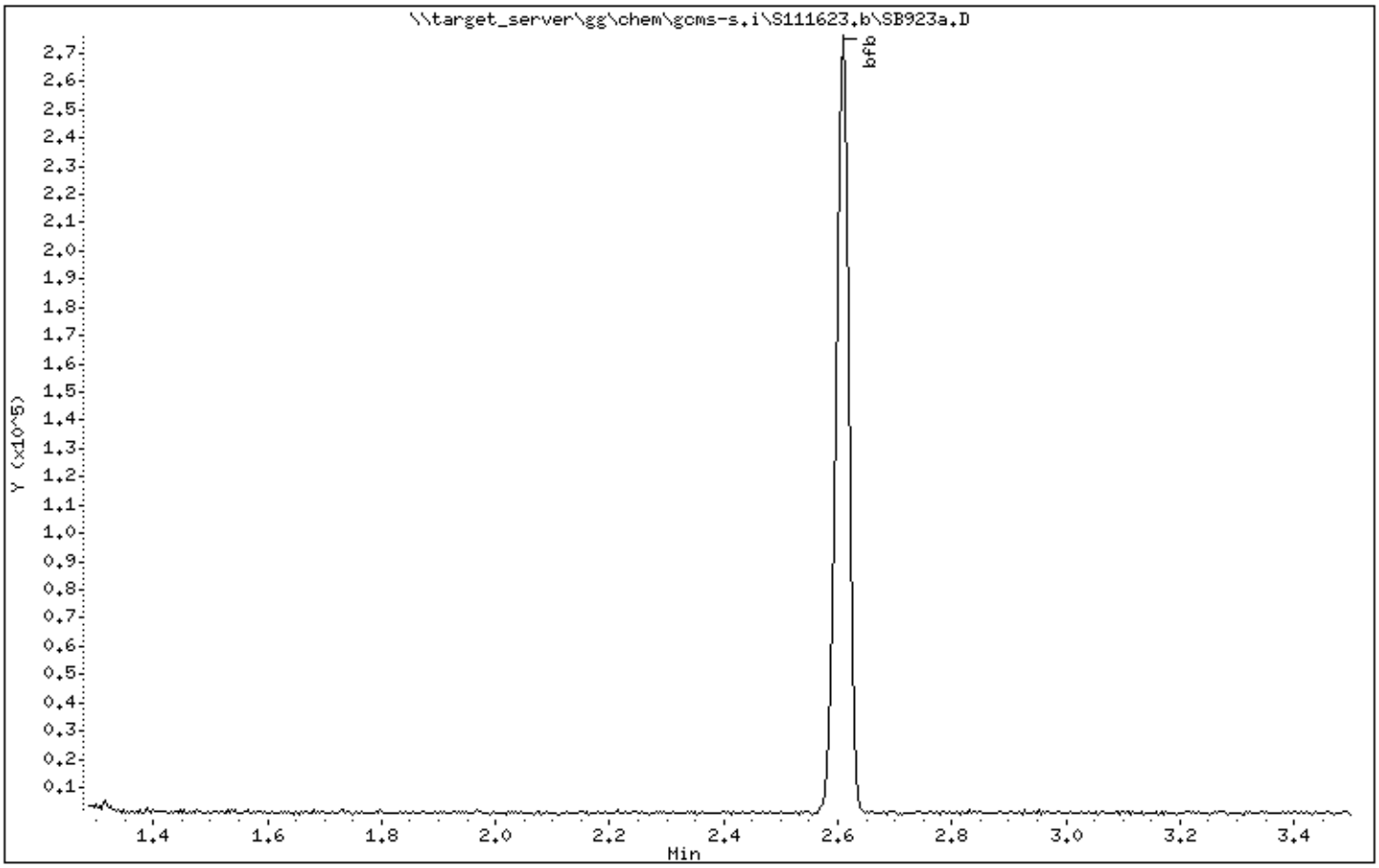
Instrument: gcms-s.i

Sample Info: WG345525-12,SQ6179

Operator: JSS

Column phase: RTX-VMS

Column diameter: 0.18



Data File: \\target_server\gg\chem\gcms-s.i\S111623.b\SB923a.D

Date : 16-NOV-2023 12:12

Client ID:

Instrument: gcms-s.i

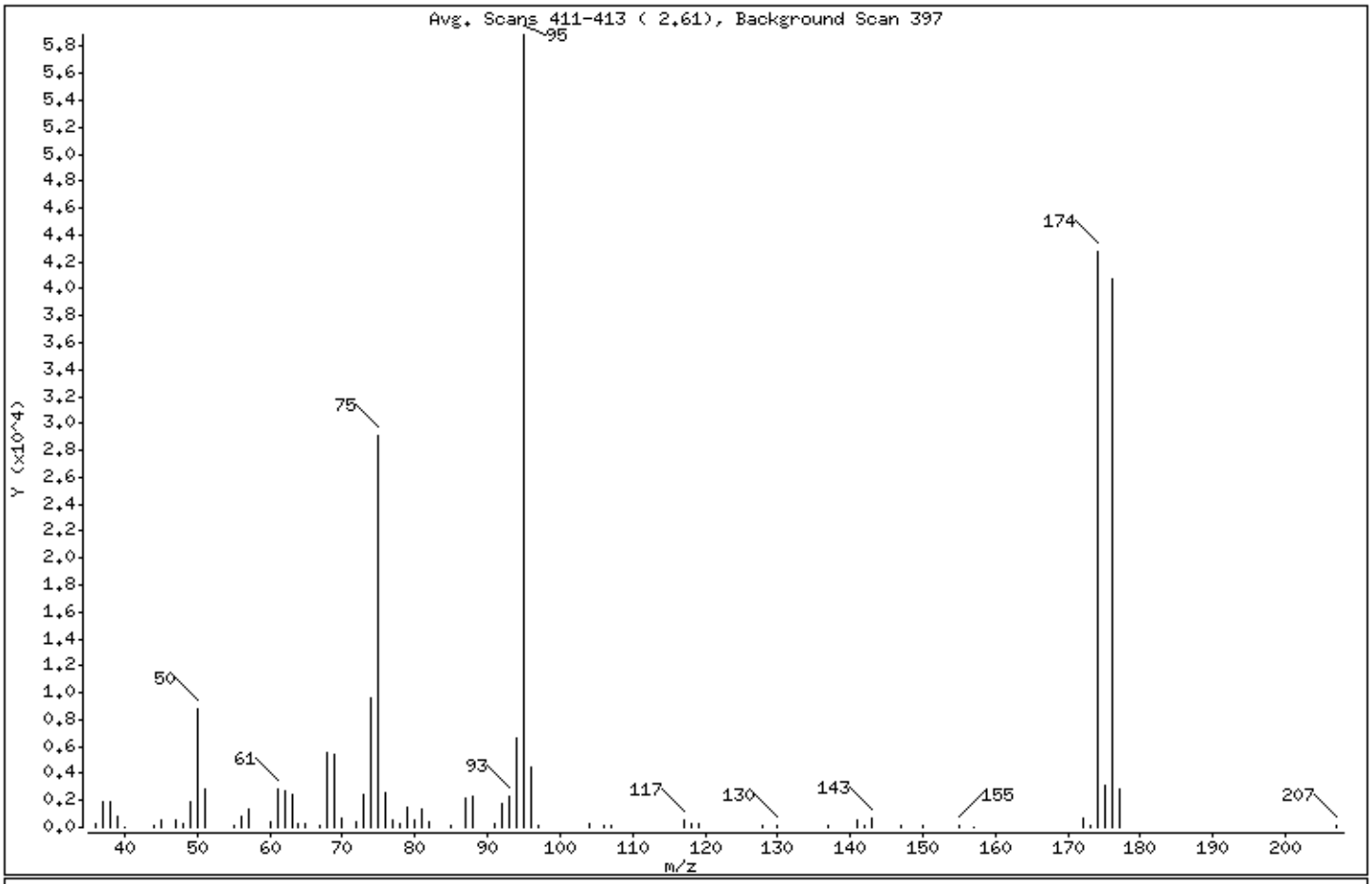
Sample Info: WG345525-12,SQ6179

Operator: JSS

Column phase: RTX-VMS

Column diameter: 0.18

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	15.02
75	30.00 - 60.00% of mass 95	49.37
96	5.00 - 9.00% of mass 95	7.63
173	Less than 2.00% of mass 174	0.34 (0.47)
174	Greater than 50.00% of mass 95	72.55
175	5.00 - 9.00% of mass 174	5.21 (7.18)
176	95.00 - 101.00% of mass 174	69.16 (95.34)
177	5.00 - 9.00% of mass 176	4.80 (6.94)

Date : 16-NOV-2023 12:12

Client ID: Instrument: gcms-s.i

Sample Info: WG345525-12,SQ6179

Operator: JSS

Column phase: RTX-VMS Column diameter: 0.18

Data File: SB923a.D
Spectrum: Avg. Scans 411-413 (2.61), Background Scan 397
Location of Maximum: 95.00
Number of points: 69

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	257	63.00	2457	85.00	105	137.00	72
37.00	1829	64.00	256	87.00	2162	141.00	534
38.00	1842	65.00	301	88.00	2295	142.00	68
39.00	785	67.00	179	91.00	317	143.00	635
40.00	60	68.00	5606	92.00	1796	147.00	159
44.00	126	69.00	5442	93.00	2331	150.00	69
45.00	519	70.00	699	94.00	6656	155.00	75
47.00	593	72.00	385	95.00	58864	157.00	66
48.00	287	73.00	2401	96.00	4489	172.00	673
49.00	1867	74.00	9549	97.00	116	173.00	199
50.00	8840	75.00	29064	104.00	279	174.00	42704
51.00	2805	76.00	2525	106.00	194	175.00	3067
55.00	85	77.00	578	107.00	155	176.00	40712
56.00	752	78.00	223	117.00	571	177.00	2826
57.00	1311	79.00	1455	118.00	307	207.00	98
60.00	426	80.00	583	119.00	315		
61.00	2818	81.00	1309	128.00	93		
62.00	2729	82.00	340	130.00	176		

Data File: \\target_server\gg\chem\gcms-s.i\S111723.b\SB923b.D

Date : 17-NOV-2023 09:10

Client ID:

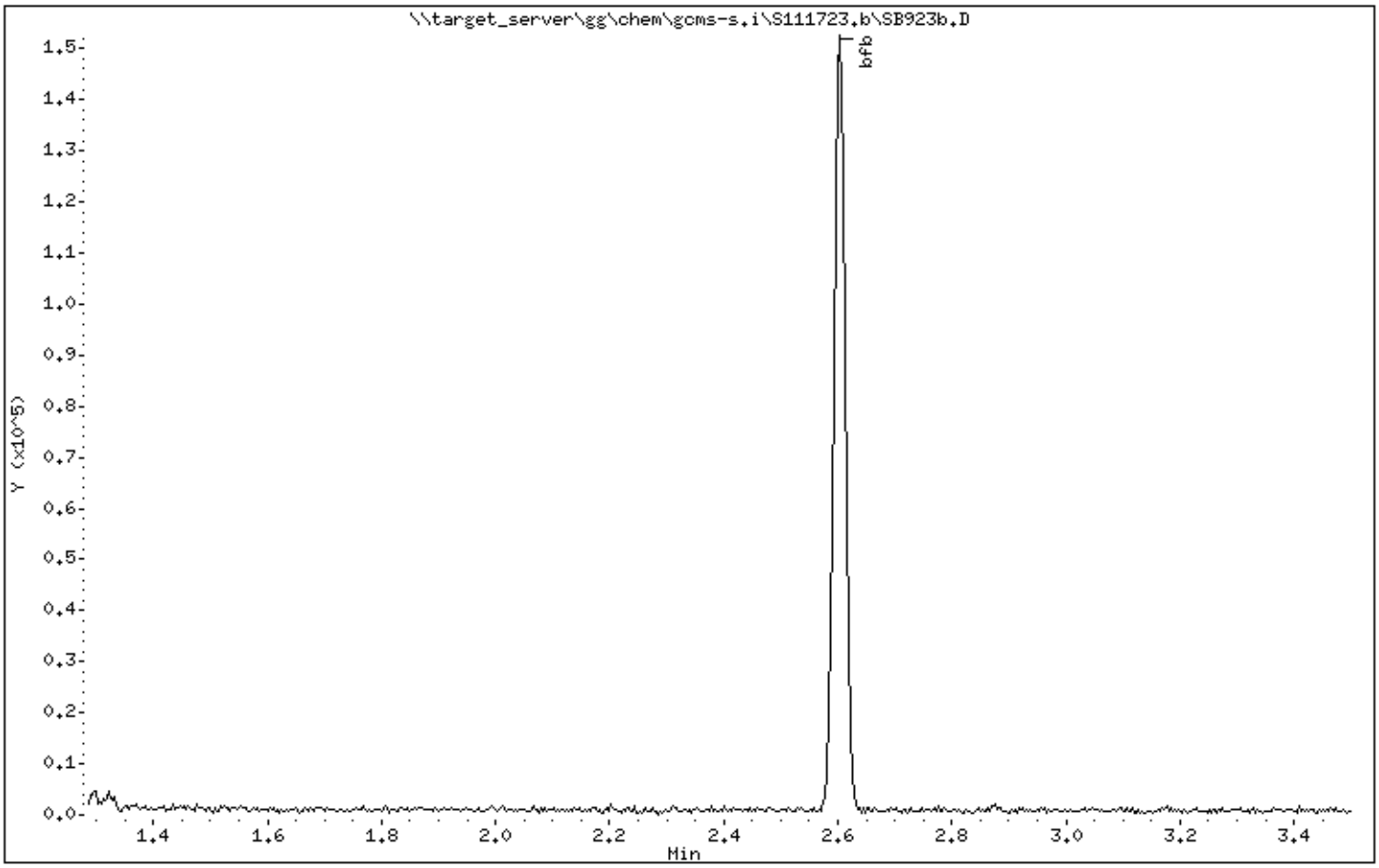
Instrument: gcms-s.i

Sample Info: WG345597-3,SQ6179

Operator: JSS

Column phase: RTX-VMS

Column diameter: 0.18



Data File: \\target_server\gg\chem\gcms-s.i\S111723.b\SB923b.D

Date : 17-NOV-2023 09:10

Client ID:

Instrument: gcms-s.i

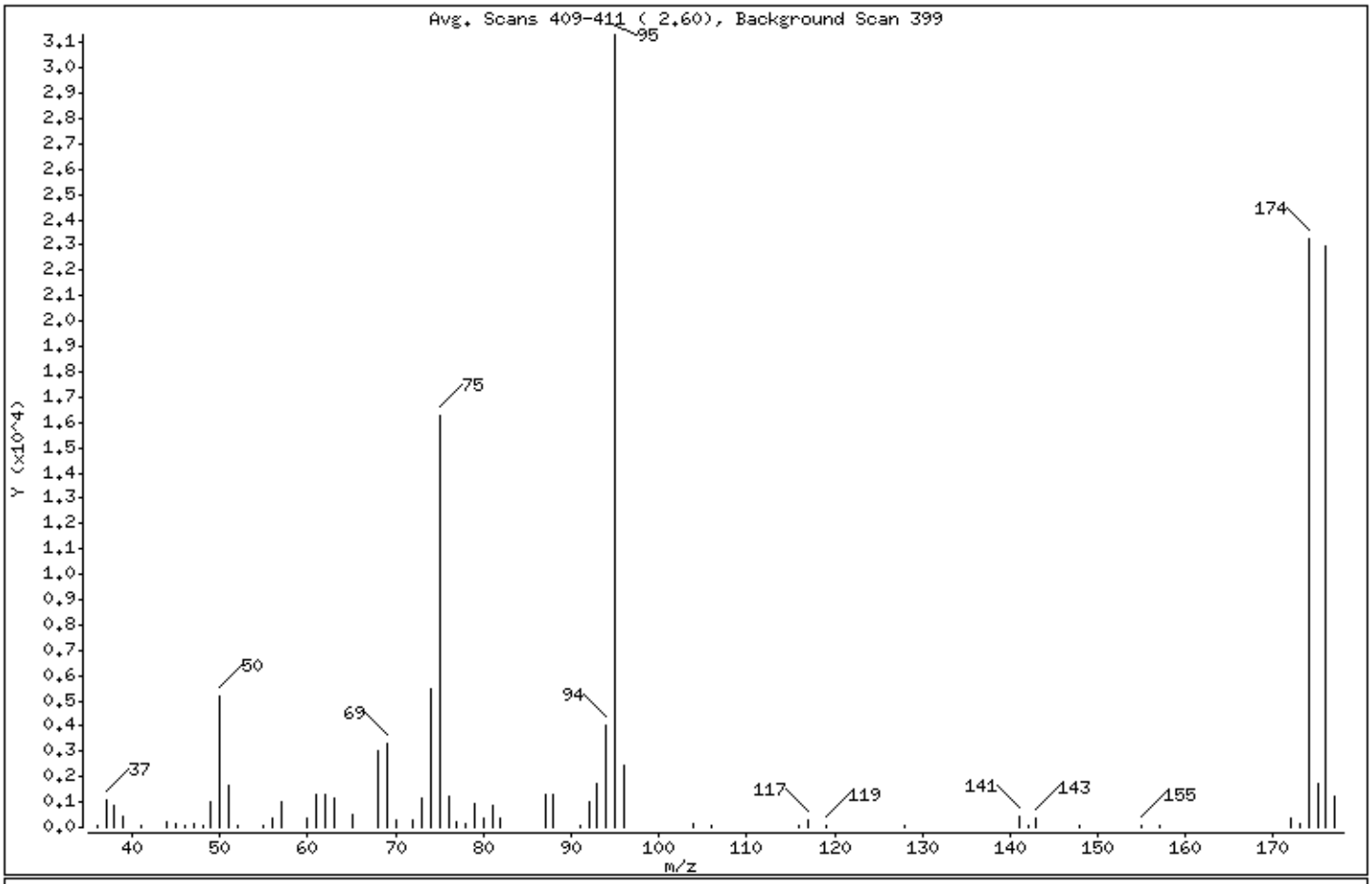
Sample Info: WG345597-3,SQ6179

Operator: JSS

Column phase: RTX-VMS

Column diameter: 0.18

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	16.59
75	30.00 - 60.00% of mass 95	51.94
96	5.00 - 9.00% of mass 95	7.72
173	Less than 2.00% of mass 174	0.36 (0.49)
174	Greater than 50.00% of mass 95	74.27
175	5.00 - 9.00% of mass 174	5.44 (7.32)
176	95.00 - 101.00% of mass 174	73.35 (98.76)
177	5.00 - 9.00% of mass 176	3.96 (5.40)

Date : 17-NOV-2023 09:10

Client ID:

Instrument: gcms-s.i

Sample Info: WG345597-3,SQ6179

Operator: JSS

Column phase: RTX-VMS

Column diameter: 0.18

Data File: SB923b.D
Spectrum: Avg. Scans 409-411 (2.60), Background Scan 399
Location of Maximum: 95.00
Number of points: 62

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	81	57.00	991	79.00	914	119.00	101
37.00	1093	60.00	392	80.00	364	128.00	73
38.00	890	61.00	1293	81.00	876	141.00	461
39.00	425	62.00	1321	82.00	357	142.00	83
41.00	68	63.00	1160	87.00	1323	143.00	375
44.00	185	65.00	476	88.00	1294	148.00	84
45.00	110	68.00	3006	91.00	66	155.00	84
46.00	67	69.00	3333	92.00	978	157.00	68
47.00	118	70.00	311	93.00	1707	172.00	333
48.00	83	72.00	252	94.00	3995	173.00	114
49.00	1023	73.00	1116	95.00	31312	174.00	23256
50.00	5195	74.00	5463	96.00	2416	175.00	1702
51.00	1684	75.00	16263	104.00	168	176.00	22968
52.00	78	76.00	1202	106.00	93	177.00	1240
55.00	78	77.00	190	116.00	67		
56.00	379	78.00	120	117.00	272		

Data File: \\target_server\gg\chem\gcms-s.i\S111823.b\SB924a.D

Date : 18-NOV-2023 10:35

Client ID:

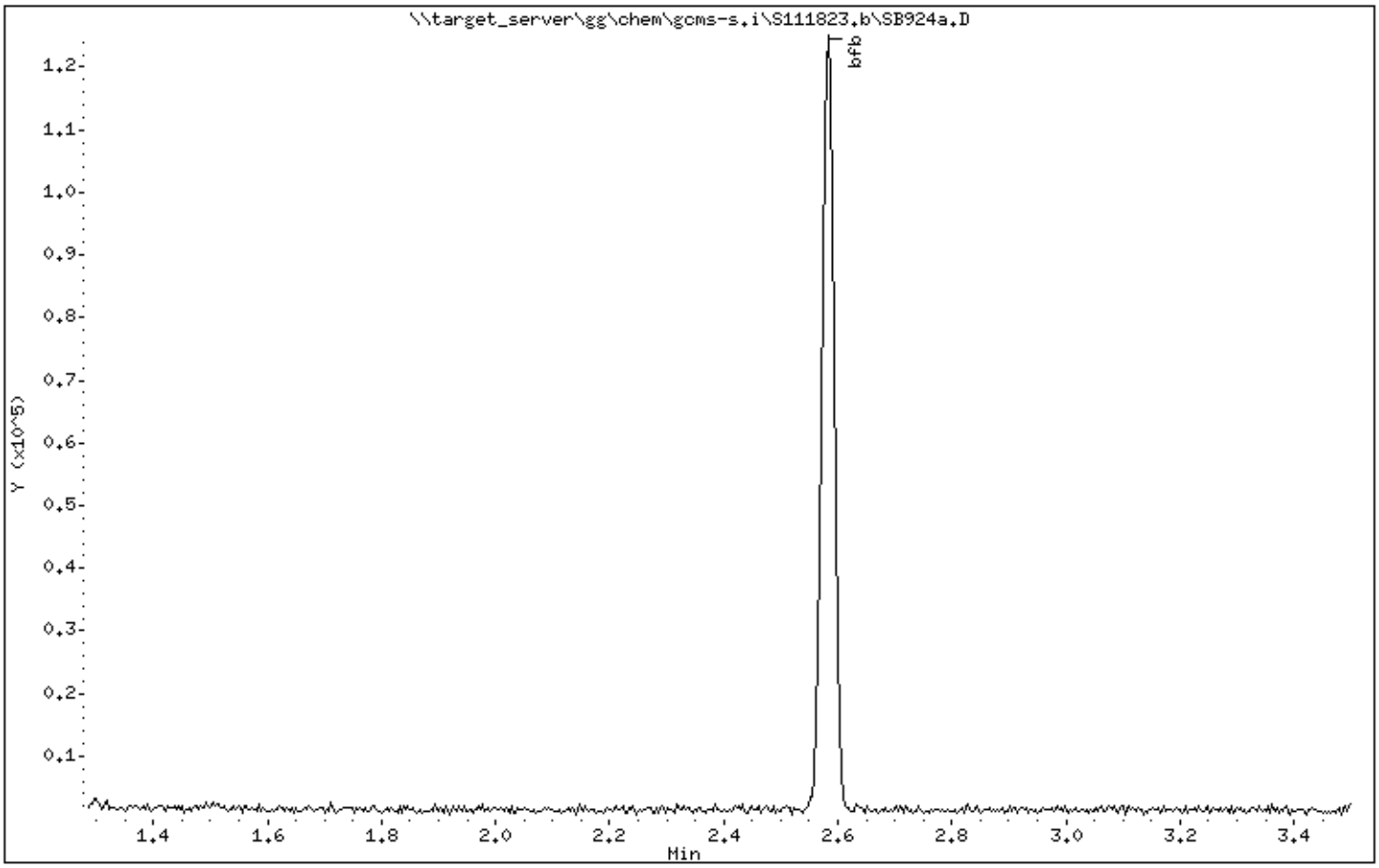
Instrument: gcms-s.i

Sample Info: WG345675-3,SQ6179

Operator: JSS

Column phase: RTX-VMS

Column diameter: 0.18



Data File: \\target_server\gg\chem\gcms-s.i\S111823.b\SB924a.D

Date : 18-NOV-2023 10:35

Client ID:

Instrument: gcms-s.i

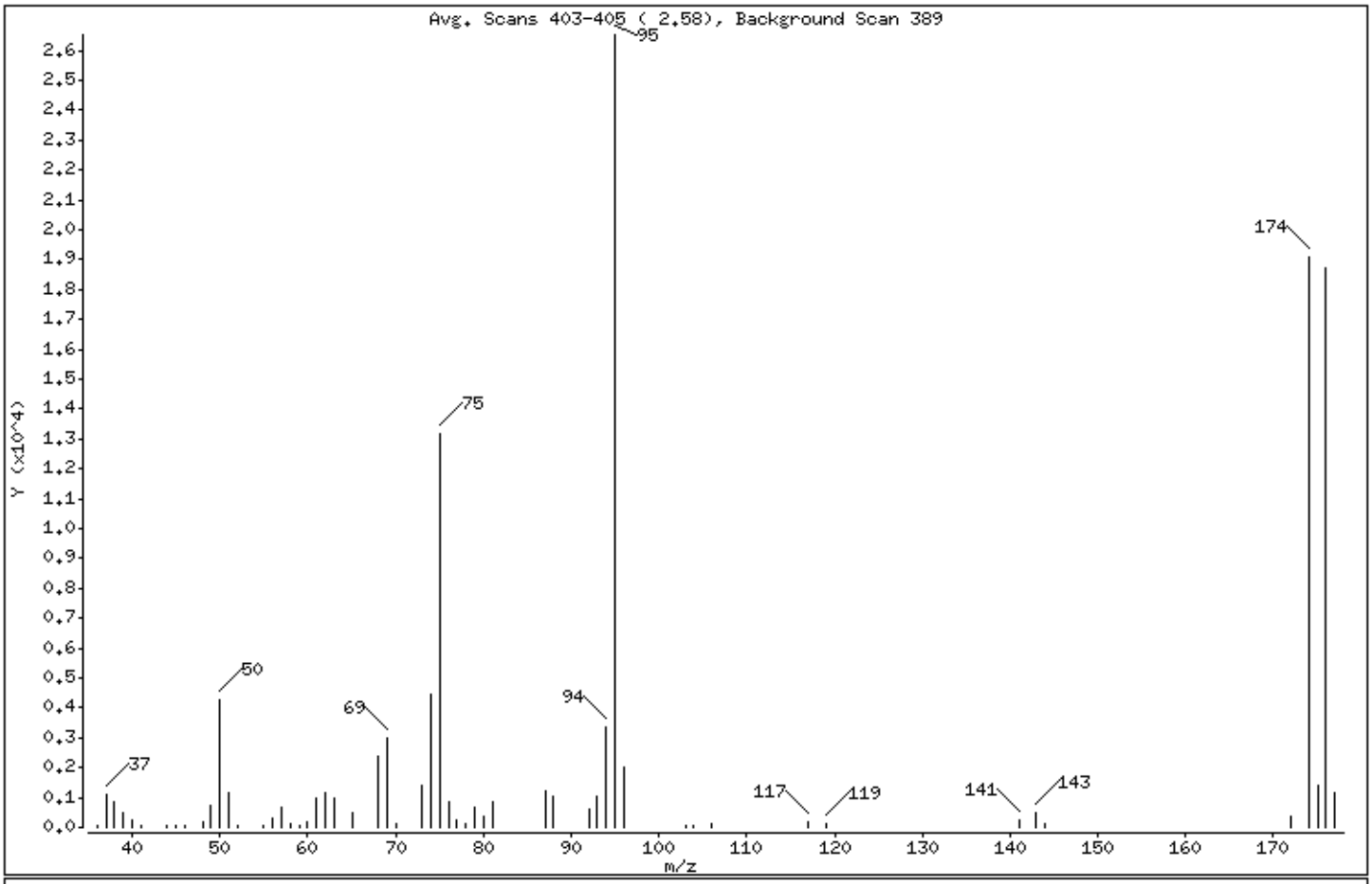
Sample Info: WG345675-3,SQ6179

Operator: JSS

Column phase: RTX-VMS

Column diameter: 0.18

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	16.09
75	30.00 - 60.00% of mass 95	49.63
96	5.00 - 9.00% of mass 95	7.59
173	Less than 2.00% of mass 174	0.00 (0.00)
174	Greater than 50.00% of mass 95	71.92
175	5.00 - 9.00% of mass 174	5.34 (7.42)
176	95.00 - 101.00% of mass 174	70.57 (98.11)
177	5.00 - 9.00% of mass 176	4.43 (6.27)

Date : 18-NOV-2023 10:35

Client ID:

Instrument: gcms-s.i

Sample Info: WG345675-3,SQ6179

Operator: JSS

Column phase: RTX-VMS

Column diameter: 0.18

Data File: SB924a.D
Spectrum: Avg. Scans 403-405 (2.58), Background Scan 389
Location of Maximum: 95.00
Number of points: 56

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	85	56.00	286	76.00	870	106.00	140
37.00	1085	57.00	651	77.00	256	117.00	199
38.00	847	58.00	97	78.00	99	119.00	94
39.00	482	59.00	88	79.00	662	141.00	221
40.00	257	60.00	153	80.00	353	143.00	501
41.00	71	61.00	1002	81.00	861	144.00	115
44.00	73	62.00	1129	87.00	1236	172.00	384
45.00	67	63.00	965	88.00	1063	174.00	19080
46.00	75	65.00	470	92.00	603	175.00	1416
48.00	194	68.00	2364	93.00	1012	176.00	18720
49.00	758	69.00	2960	94.00	3331	177.00	1174
50.00	4268	70.00	122	95.00	26528		
51.00	1137	73.00	1381	96.00	2013		
52.00	73	74.00	4432	103.00	72		
55.00	71	75.00	13165	104.00	73		

Raw QC Data Section

Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

SDG: SQ6179
Lab ID: WG345597-2
Client ID: Method Blank
Matrix: AQ
Lab File ID: S7228.D

Sample Date: N/A
Extract Date: 17-NOV-23
Extracted By: JSS
Extraction Method: SW846 5030C
Lab Prep Batch: WG345597

Report Date: 12-DEC-23
Analysis Date: 17-NOV-23
Analyst: JSS
Analysis Method: SW846 8260C SIM
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Vinyl Chloride	U	0.050	ug/L	1	.1	0.10	0.0037	0.050
1,1-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0091	0.025
trans-1,2-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0033	0.025
cis-1,2-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0057	0.025
Trichloroethene	U	0.025	ug/L	1	.05	0.050	0.012	0.025
Tetrachloroethene	U	0.025	ug/L	1	.05	0.050	0.0091	0.025
Dibromofluoromethane		115.	%					
1,2-Dichloroethane-d4		114.	%					
Toluene-D8		102.	%					
p-Bromofluorobenzene		82.3	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029
http://www.katahdinlab.com

Data File: \\target_server\gg\chem\gcms-s.i\S111723.b\S7228.D
Report Date: 12-Dec-2023 10:10

Katahdin Analytical Services

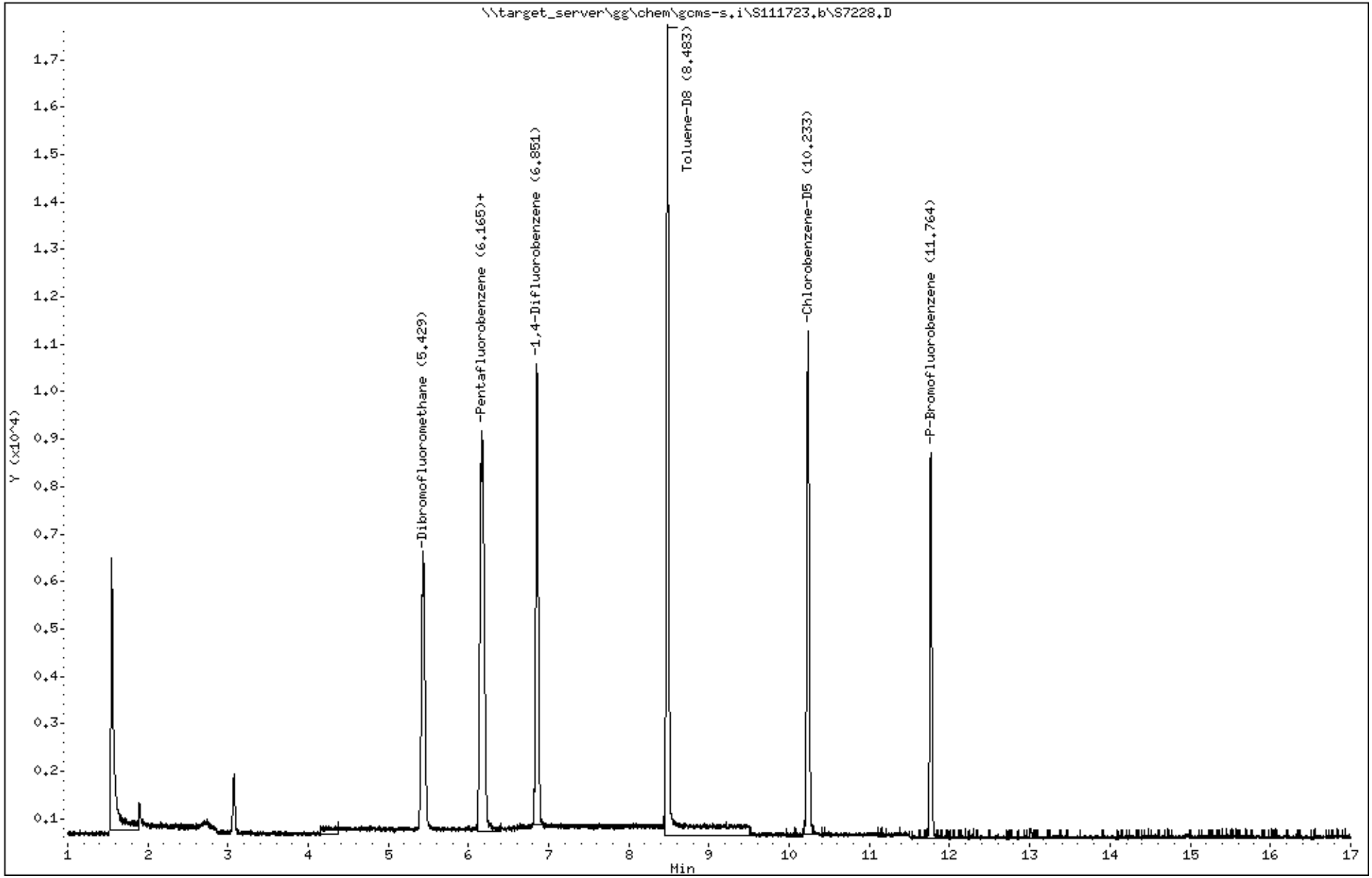
Data file : \\target_server\gg\chem\gcms-s.i\S111723.b\S7228.D
Lab Smp Id: WG345597-2
Inj Date : 17-NOV-2023 11:16
Operator : JSS   Inst ID: gcms-s.i
Smp Info : WG345597-2,SQ6179
Misc Info : WG345597,WG345525-5,SQ6179-1
Comment   : SW846 5030C
Method   : \\target_server\gg\chem\gcms-s.i\S111723.b\SSIM(01)CR23.m
Meth Date : 08-Dec-2023 14:53 croy   Quant Type: ISTD
Cal Date : 16-NOV-2023 15:48   Cal File: S7206.D
Als bottle: 4
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: all.sub
Target Version: 4.12
Processing Host: T6-O360

Concentration Formula: Amt * DF * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	25.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)	REVIEW CODE
$ 7 Dibromofluoromethane	113	5.428	5.441	(0.881)	8538	1.14967	1.15	
* 9 Pentafluorobenzene	168	6.161	6.163	(1.000)	11089	1.00000		
$ 10 1,2-Dichloroethane-D4	65	6.191	6.194	(1.005)	7683	1.14502	1.14	
* 13 1,4-Difluorobenzene	114	6.851	6.855	(1.000)	16920	1.00000		
$ 14 Toluene-D8	98	8.482	8.483	(1.238)	18204	1.02444	1.02	
* 17 Chlorobenzene-D5	117	10.233	10.238	(1.000)	15814	1.00000		
$ 18 P-Bromofluorobenzene	95	11.763	11.768	(1.150)	5484	0.82345	0.823	

Data File: \\target_server\gg\chem\gcms-s.i\S111723.b\S7228.D
Date : 17-NOV-2023 11:16
Client ID:
Instrument: gcms-s.i
Sample Info: WG345597-2,SQ6179
Purge Volume: 25.0
Operator: JSS
Column phase: RTX-VMS
Column diameter: 0.18



Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

SDG: SQ6179
Lab ID: WG345675-2
Client ID: Method Blank
Matrix: AQ
Lab File ID: S7259.D

Sample Date: N/A
Extract Date: 18-NOV-23
Extracted By: JSS
Extraction Method: SW846 5030C
Lab Prep Batch: WG345675

Report Date: 12-DEC-23
Analysis Date: 18-NOV-23
Analyst: JSS
Analysis Method: SW846 8260C SIM
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Vinyl Chloride	U	0.050	ug/L	1	.1	0.10	0.0037	0.050
1,1-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0091	0.025
trans-1,2-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0033	0.025
cis-1,2-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0057	0.025
Trichloroethene	U	0.025	ug/L	1	.05	0.050	0.012	0.025
Tetrachloroethene	U	0.025	ug/L	1	.05	0.050	0.0091	0.025
Dibromofluoromethane		104.	%					
1,2-Dichloroethane-d4		104.	%					
Toluene-D8		98.6	%					
p-Bromofluorobenzene		84.0	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029
http://www.katahdinlab.com

Data File: \\target_server\gg\chem\gcms-s.i\S111823.b\S7259.D
Report Date: 12-Dec-2023 10:15

Katahdin Analytical Services

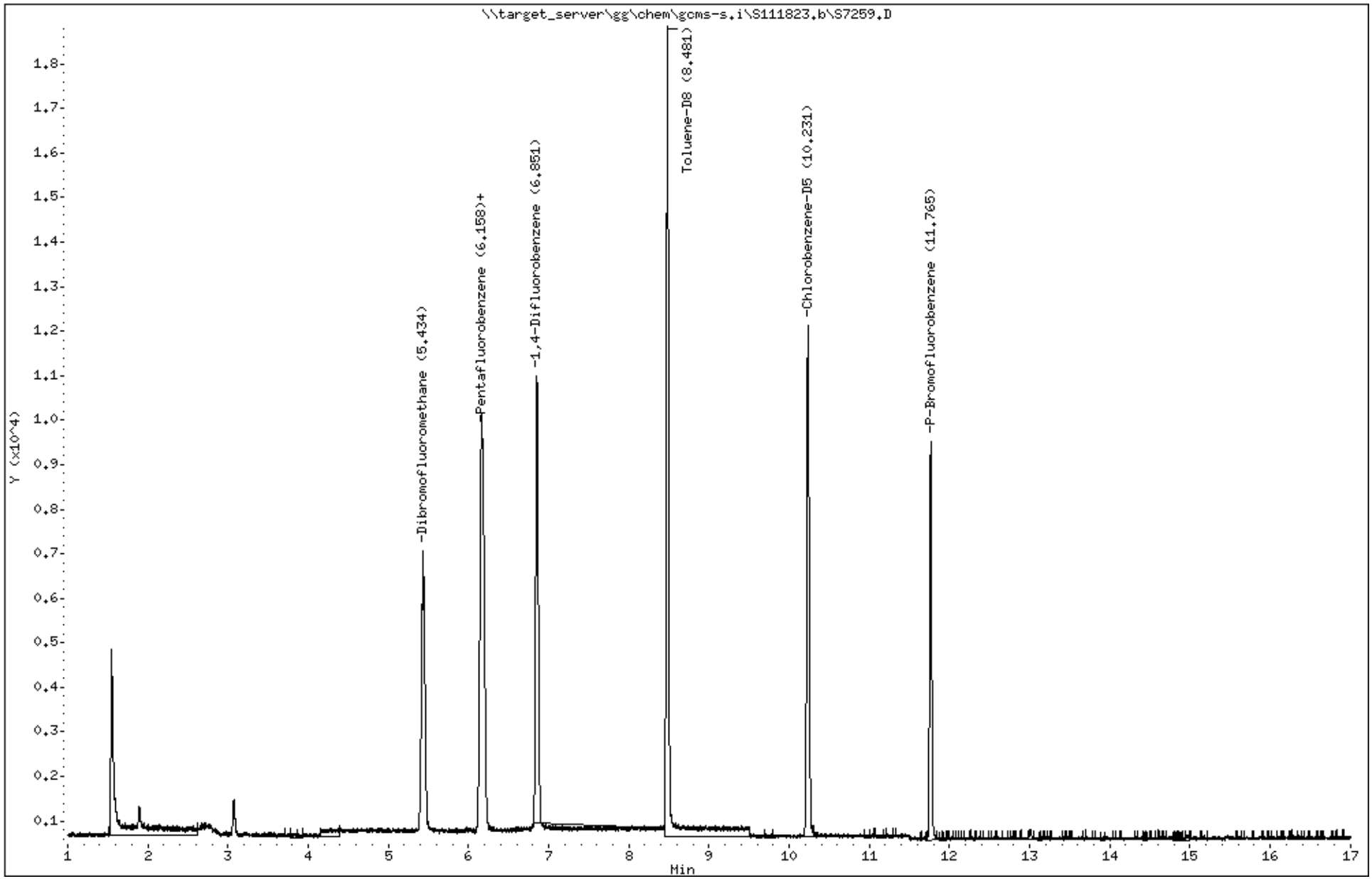
Data file : \\target_server\gg\chem\gcms-s.i\S111823.b\S7259.D
Lab Smp Id: WG345675-2
Inj Date : 18-NOV-2023 13:45
Operator : JSS   Inst ID: gcms-s.i
Smp Info : WG345675-2,SQ6179
Misc Info : WG345675,WG345525-5,SQ6179-8
Comment   : SW846 5030C
Method   : \\target_server\gg\chem\gcms-s.i\S111823.b\SSIM(01)CR23.m
Meth Date : 08-Dec-2023 14:57 croy   Quant Type: ISTD
Cal Date : 16-NOV-2023 15:48   Cal File: S7206.D
Als bottle: 6   QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: all.sub
Target Version: 4.12
Processing Host: T7-O360

Concentration Formula: Amt * DF * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	25.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)	REVIEW CODE
$ 7 Dibromofluoromethane	113	5.433	5.441	(0.882)	8906	1.04562	1.04	
* 9 Pentafluorobenzene	168	6.158	6.163	(1.000)	12718	1.00000		
$ 10 1,2-Dichloroethane-D4	65	6.190	6.194	(1.005)	7977	1.03656	1.04	
* 13 1,4-Difluorobenzene	114	6.851	6.855	(1.000)	18208	1.00000		
$ 14 Toluene-D8	98	8.480	8.483	(1.238)	18856	0.98607	0.986	
* 17 Chlorobenzene-D5	117	10.231	10.238	(1.000)	17056	1.00000		
$ 18 P-Bromofluorobenzene	95	11.765	11.768	(1.150)	6030	0.83950	0.840	

Data File: \\target_server\gg\chem\gcms-s.i\S111823.b\S7259.D
Date : 18-NOV-2023 13:45
Client ID:
Instrument: gcms-s.i
Sample Info: WG345675-2,SQ6179
Purge Volume: 25.0
Operator: JSS
Column phase: RTX-VMS
Column diameter: 0.18



Katahdin Analytical Services SQ6179 Page 178 of 740

Katahdin
ANALYTICAL SERVICES

LCS Recovery Report

Lab ID: WG345597-1
Client ID: LCS
SDG: SQ6179
LCS File ID: S7226.D
Report Date: 12-DEC-23

Extract Date: 17-NOV-23
Extracted By: JSS
Extraction Method: SW846 5030C
Lab Prep Batch: WG345597

Analysis Date: 17-NOV-23
Analyst: JSS
Analysis Method: SW846 8260C SIM
Matrix: AQ

Compound	Recovery (%)	Conc Added	Conc Recovered	Conc Units	Limits
Vinyl Chloride	99.2	0.500	0.496	ug/L	70-130
1,1-Dichloroethene	112.	0.500	0.559	ug/L	70-130
trans-1,2-Dichloroethene	106.	0.500	0.529	ug/L	70-130
cis-1,2-Dichloroethene	101.	0.500	0.505	ug/L	70-130
Trichloroethene	101.	0.500	0.504	ug/L	70-130
Tetrachloroethene	107.	0.500	0.533	ug/L	70-130
Dibromofluoromethane	101.				70-130
1,2-Dichloroethane-d4	98.4				70-130
Toluene-D8	96.6				70-130
p-Bromofluorobenzene	99.9				70-130

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029
http://www.katahdinlab.com

Data File: \\target_server\gg\chem\gcms-s.i\S111723.b\S7226.D
Report Date: 12-Dec-2023 10:10

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-s.i\S111723.b\S7226.D
Lab Smp Id: WG345597-1
Inj Date : 17-NOV-2023 10:21
Operator : JSS   Inst ID: gcms-s.i
Smp Info : WG345597-1,SQ6179
Misc Info : WG345597,WG345525-5,SQ6179-1
Comment   : SW846 5030C
Method   : \\target_server\gg\chem\gcms-s.i\S111723.b\SSIM(01)CR23.m
Meth Date : 08-Dec-2023 14:53 croy   Quant Type: ISTD
Cal Date : 16-NOV-2023 15:48   Cal File: S7206.D
Als bottle: 2   QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: all.sub
Target Version: 4.12
Processing Host: T7-O360

Concentration Formula: Amt * DF * 25/Vo * CpndVariable

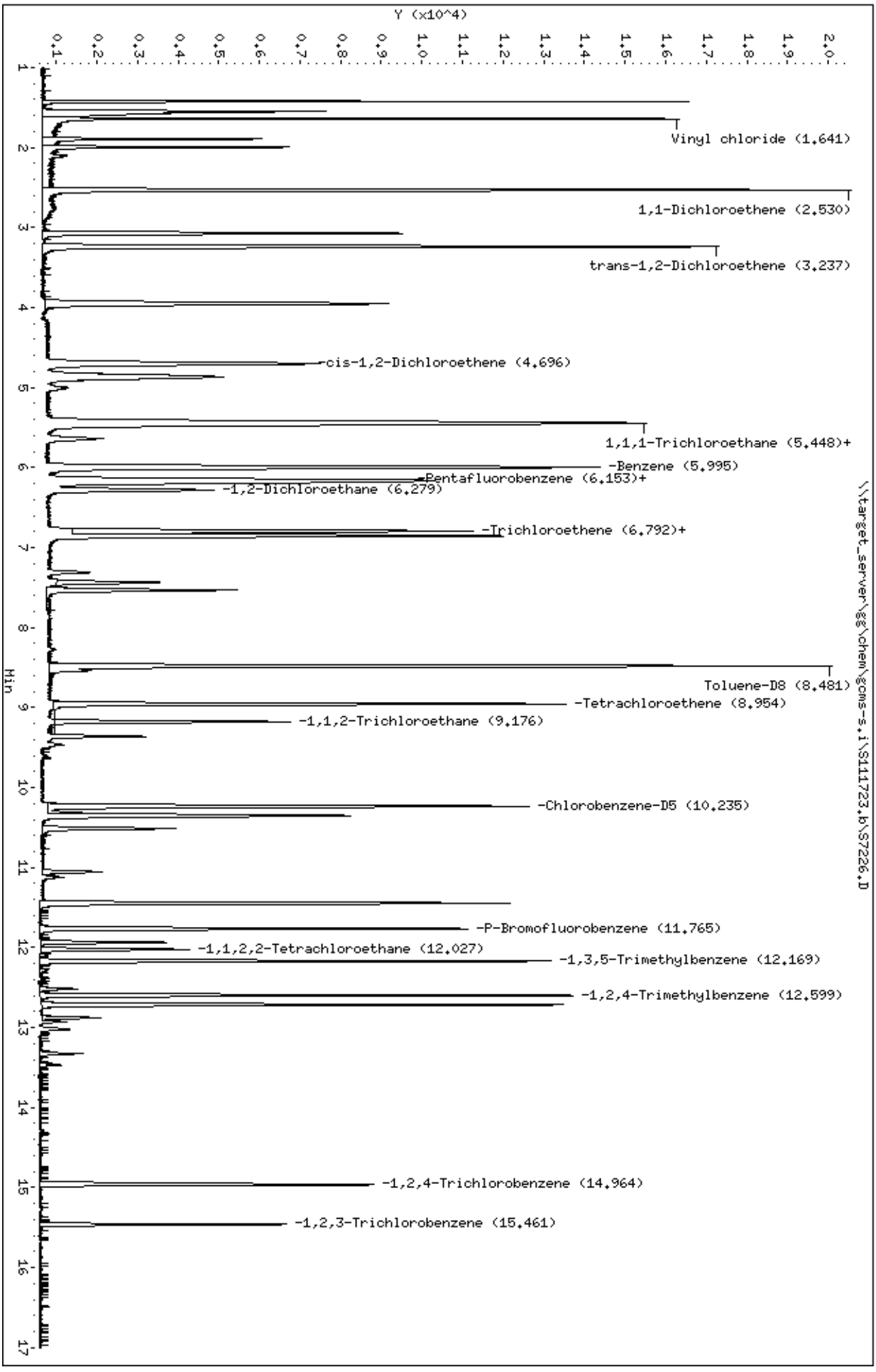
Name	Value	Description
DF	1.000	Dilution Factor
Vo	25.000	sample purged
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)	REVIEW CODE
	1 Vinyl chloride	62	1.640	1.640	(0.267)	9439	0.49569	0.496	
	2 1,1-Dichloroethene	96	2.529	2.532	(0.411)	8338	0.55947	0.559	
	3 trans-1,2-Dichloroethene	96	3.239	3.238	(0.526)	8690	0.52909	0.529	
	4 cis-1,2-Dichloroethene	96	4.696	4.703	(0.763)	6383	0.50478	0.505	
	6 1,1,1-Trichloroethane	97	5.447	5.454	(0.885)	14483	0.55178	0.552	
$	7 Dibromofluoromethane	113	5.430	5.441	(0.883)	8850	1.01439	1.01	
	8 Benzene	78	5.995	6.000	(0.974)	25705	0.49380	0.494	
*	9 Pentafluorobenzene	168	6.153	6.163	(1.000)	13027	1.00000		
$	10 1,2-Dichloroethane-D4	65	6.190	6.194	(1.006)	7761	0.98457	0.984	
	11 1,2-Dichloroethane	62	6.278	6.285	(0.916)	7462	0.52638	0.526	
	12 Trichloroethene	130	6.794	6.794	(0.991)	5756	0.50397	0.504	
*	13 1,4-Difluorobenzene	114	6.854	6.855	(1.000)	19967	1.00000		
$	14 Toluene-D8	98	8.480	8.483	(1.237)	20248	0.96558	0.966	
	15 Tetrachloroethene	164	8.955	8.957	(1.306)	5470	0.53344	0.533	
	16 1,1,2-Trichloroethane	83	9.174	9.181	(1.338)	2891	0.53784	0.538	
*	17 Chlorobenzene-D5	117	10.234	10.238	(1.000)	17742	1.00000		
$	18 P-Bromofluorobenzene	95	11.765	11.768	(1.150)	7464	0.99897	0.999	
	19 1,1,2,2-Tetrachloroethane	83	12.023	12.027	(1.175)	3342	0.53052	0.530	
	20 1,3,5-Trimethylbenzene	105	12.168	12.172	(1.189)	14056		(a)	
	21 1,2,4-Trimethylbenzene	105	12.598	12.600	(1.231)	14726		(aR)	
	22 1,2,4-Trichlorobenzene	180	14.967	14.968	(1.462)	4828	0.52754	0.528	
	23 1,2,3-Trichlorobenzene	180	15.461	15.465	(1.511)	3633	0.51172	0.512	

Data File: \\target_server\gg\chem\gcms-s.i\S111723.b\S7226.D
Report Date: 12-Dec-2023 10:10

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
R - Spike/Surrogate failed recovery limits.


Data File: \\target_server\gg\chem\gcms-s.i\S111723.b\S7226.D
Date : 17-NOV-2023 10:21
Client ID:
Sample Info: WG345597-1,SQ6179
Purge Volume: 25.0
Column phase: RTX-VMS
Instrument: gcms-s.i
Operator: JSS
Column diameter: 0.18
Y (x10^4)
Min
\\target_server\gg\chem\gcms-s.i\S111723.b\S7226.D
Vinyl chloride (1.641)
1,1-Dichloroethene (2.530)
trans-1,2-Dichloroethene (3.237)
cis-1,2-Dichloroethene (4.696)
1,1,1-Trichloroethane (5.448)+
-Benzene (5.995)
Pentafluorobenzene (6.153)+
-1,2-Dichloroethane (6.279)
-Trichloroethene (6.792)+
Toluene-D8 (8.481)
-Tetrachloroethene (8.954)
-1,1,2-Trichloroethane (9.176)
-Chlorobenzene-D5 (10.235)
-P-Bromofluorobenzene (11.765)
-1,1,2,2-Tetrachloroethane (12.027)
-1,3,5-Trimethylbenzene (12.169)
-1,2,4-Trimethylbenzene (12.599)
-1,2,4-Trichlorobenzene (14.964)
-1,2,3-Trichlorobenzene (15.461)

Katahdin
ANALYTICAL SERVICES

LCS/LCSD Recovery Report

LCS ID: WG345675-1
LCSD ID: WG345675-6
SDG: SQ6179
LCS File ID: S7256.D

Extract Date: 18-NOV-23
Extracted By: JSS
Extraction Method: SW846 5030C
Lab Prep Batch: WG345675
LCSD File ID: S7257.D

Analysis Date: 18-NOV-23
Analyst: JSS
Analysis Method: SW846 8260C SIM
Matrix: AQ
Report Date: 12-DEC-23

Compound	Spike Amt	LCS Conc	LCS Rec (%)	LCSD Conc	LCSD Rec (%)	Conc Units	RPD (%)	RPD Limit	Limits
Vinyl Chloride	0.500	0.401	80.2	0.410	82.0	ug/L	2	20	70-130
1,1-Dichloroethene	0.500	0.476	95.2	0.483	96.6	ug/L	1	20	70-130
trans-1,2-Dichloroethene	0.500	0.442	88.4	0.457	91.4	ug/L	3	20	70-130
cis-1,2-Dichloroethene	0.500	0.440	88.0	0.448	89.6	ug/L	2	20	70-130
Trichloroethene	0.500	0.486	97.2	0.465	93.0	ug/L	4	20	70-130
Tetrachloroethene	0.500	0.492	98.4	0.464	92.8	ug/L	6	20	70-130
Dibromofluoromethane			91.2		96.5				70-130
1,2-Dichloroethane-d4			92.6		99.5				70-130
Toluene-D8			97.5		97.6				70-130
p-Bromofluorobenzene			99.0		100.				70-130

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Data File: \\target_server\gg\chem\gcms-s.i\S111823.b\S7256.D
Report Date: 12-Dec-2023 10:11

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-s.i\S111823.b\S7256.D
Lab Smp Id: WG345675-1
Inj Date : 18-NOV-2023 12:16
Operator : JSS   Inst ID: gcms-s.i
Smp Info : WG345675-1,SQ6179
Misc Info : WG345675,WG345525-5,SQ6179-8
Comment   : SW846 5030C
Method   : \\target_server\gg\chem\gcms-s.i\S111823.b\SSIM(01)CR23.m
Meth Date : 08-Dec-2023 14:57 croy   Quant Type: ISTD
Cal Date : 16-NOV-2023 15:48   Cal File: S7206.D
Als bottle: 3   QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: all.sub
Target Version: 4.12
Processing Host: T7-O360

Concentration Formula: Amt * DF * 25/Vo * CpndVariable

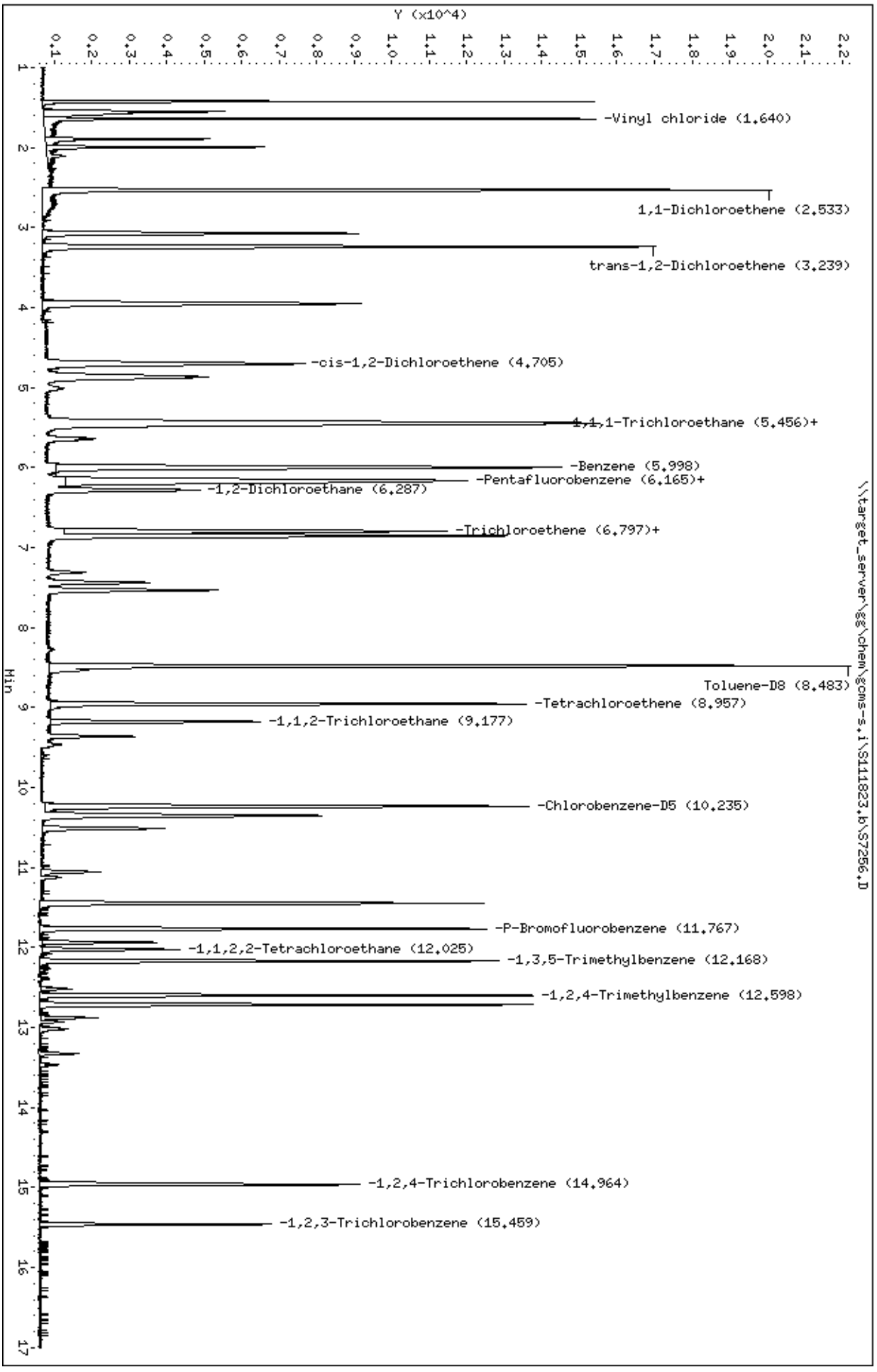
Name	Value	Description
DF	1.000	Dilution Factor
Vo	25.000	sample purged
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)	REVIEW CODE
	1 Vinyl chloride	62	1.640	1.640	(0.266)	8906	0.40065	0.401	
	2 1,1-Dichloroethene	96	2.531	2.532	(0.411)	8282	0.47605	0.476	
	3 trans-1,2-Dichloroethene	96	3.238	3.238	(0.526)	8474	0.44197	0.442	
	4 cis-1,2-Dichloroethene	96	4.704	4.703	(0.764)	6502	0.44048	0.440	
	6 1,1,1-Trichloroethane	97	5.455	5.454	(0.886)	14503	0.47333	0.473	
$	7 Dibromofluoromethane	113	5.438	5.441	(0.883)	9285	0.91169	0.912	
	8 Benzene	78	6.000	6.000	(0.975)	26010	0.42803	0.428	
*	9 Pentafluorobenzene	168	6.156	6.163	(1.000)	15207	1.00000		
$	10 1,2-Dichloroethane-D4	65	6.191	6.194	(1.006)	8520	0.92592	0.926	
	11 1,2-Dichloroethane	62	6.286	6.285	(0.917)	7505	0.48806	0.488	
	12 Trichloroethene	130	6.797	6.794	(0.992)	6017	0.48567	0.486	
*	13 1,4-Difluorobenzene	114	6.852	6.855	(1.000)	21659	1.00000		
$	14 Toluene-D8	98	8.482	8.483	(1.238)	22182	0.97517	0.975	
	15 Tetrachloroethene	164	8.955	8.957	(1.307)	5471	0.49186	0.492	
	16 1,1,2-Trichloroethane	83	9.179	9.181	(1.339)	2799	0.48004	0.480	
*	17 Chlorobenzene-D5	117	10.234	10.238	(1.000)	19494	1.00000		
$	18 P-Bromofluorobenzene	95	11.766	11.768	(1.150)	8129	0.99019	0.990	
	19 1,1,2,2-Tetrachloroethane	83	12.021	12.027	(1.175)	3317	0.47923	0.479	
	20 1,3,5-Trimethylbenzene	105	12.168	12.172	(1.189)	14099			(a)
	21 1,2,4-Trimethylbenzene	105	12.596	12.600	(1.231)	14818			(aR)
	22 1,2,4-Trichlorobenzene	180	14.963	14.968	(1.462)	4877	0.48500	0.485	
	23 1,2,3-Trichlorobenzene	180	15.459	15.465	(1.510)	3780	0.48458	0.484	

Data File: \\target_server\gg\chem\gcms-s.i\S111823.b\S7256.D
Report Date: 12-Dec-2023 10:11

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
R - Spike/Surrogate failed recovery limits.


Data File: \\target_server\gg\chem\gcms-s,i\S111823,b\S7256,D
Date : 18-NOV-2023 12:16
Client ID:
Sample Info: WG345675-1,SQ6179
Purge Volume: 25,0
Column phase: RTX-VMS
Instrument: gcms-s,i
Operator: JSS
Column diameter: 0,18
Y (x10^4)
Min
\\target_server\gg\chem\gcms-s,i\S111823,b\S7256,D
-Vinyl chloride (1,640)
1,1-Dichloroethene (2,533)
trans-1,2-Dichloroethene (3,239)
-cis-1,2-Dichloroethene (4,705)
~~1,1,~~1-Trichloroethane (5,456)+
-Benzene (5,998)
-Pentafluorobenzene (6,165)+
-1,2-Dichloroethane (6,287)
-Trichloroethene (6,797)+
Toluene-D8 (8,483)
-Tetrachloroethene (8,957)
-1,1,2-Trichloroethane (9,177)
-Chlorobenzene-D5 (10,235)
-P-Bromofluorobenzene (11,767)
-1,1,2,2-Tetrachloroethane (12,025)
-1,3,5-Trimethylbenzene (12,168)
-1,2,4-Trimethylbenzene (12,598)
-1,2,4-Trichlorobenzene (14,964)
-1,2,3-Trichlorobenzene (15,459)

Data File: \\target_server\gg\chem\gcms-s.i\S111823.b\S7257.D
Report Date: 12-Dec-2023 10:11

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-s.i\S111823.b\S7257.D
Lab Smp Id: WG345675-6
Inj Date : 18-NOV-2023 12:44
Operator : JSS   Inst ID: gcms-s.i
Smp Info : WG345675-6,SQ6179
Misc Info : WG345675,WG345525-5,SQ6179-8
Comment   : SW846 5030C
Method   : \\target_server\gg\chem\gcms-s.i\S111823.b\SSIM(01)CR23.m
Meth Date : 08-Dec-2023 14:57 croy   Quant Type: ISTD
Cal Date : 16-NOV-2023 15:48   Cal File: S7206.D
Als bottle: 4   QC Sample: LCSD
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: all.sub
Target Version: 4.12
Processing Host: T7-O360

Concentration Formula: Amt * DF * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	25.000	sample purged
Cpnd Variable		Local Compound Variable

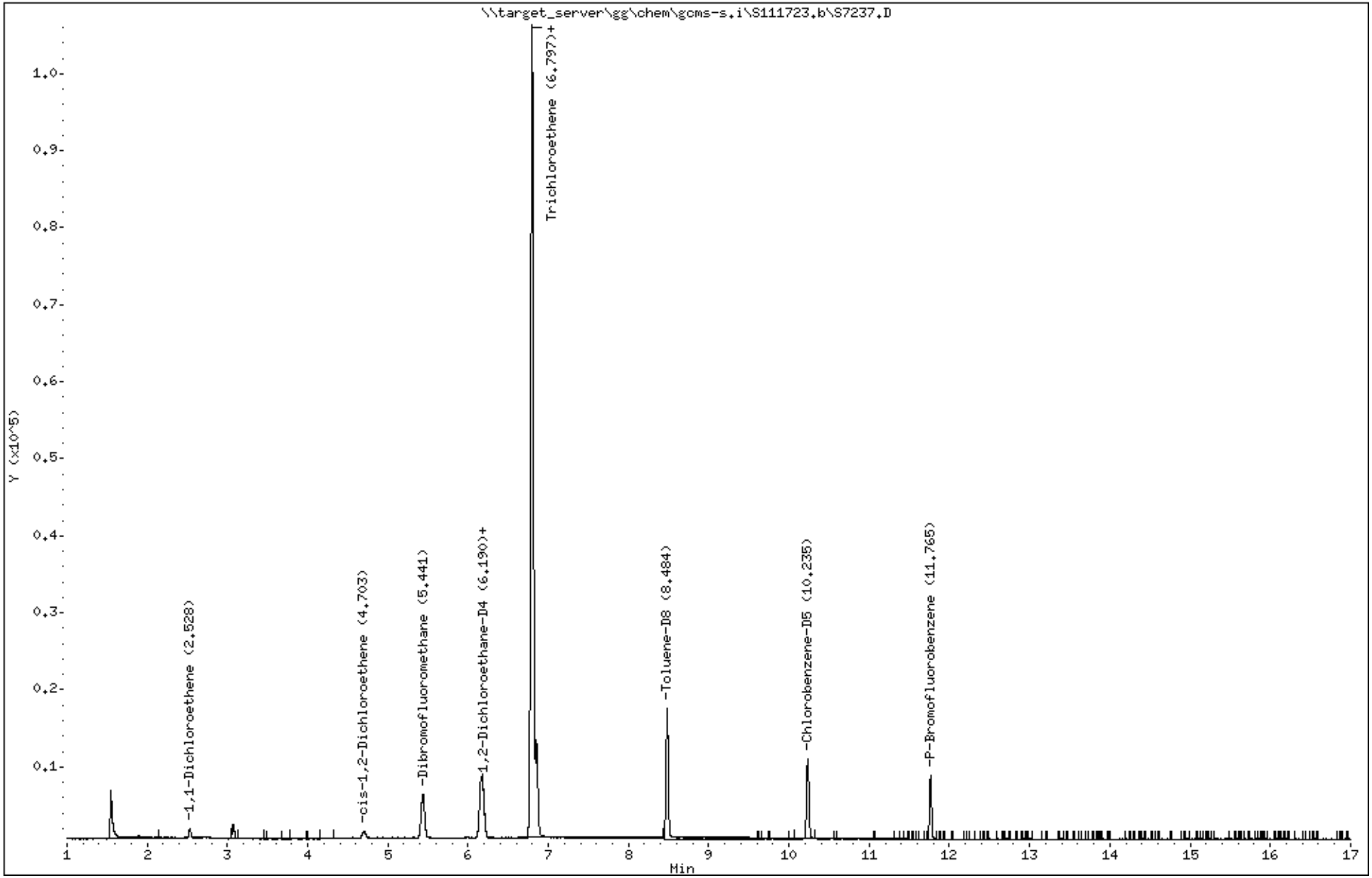
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)	REVIEW CODE
	1 Vinyl chloride	62	1.642	1.640	(0.266)	8481	0.40951	0.410	
	2 1,1-Dichloroethene	96	2.534	2.532	(0.411)	7830	0.48307	0.483	
	3 trans-1,2-Dichloroethene	96	3.242	3.238	(0.526)	8160	0.45681	0.457	
	4 cis-1,2-Dichloroethene	96	4.709	4.703	(0.764)	6162	0.44806	0.448	
	6 1,1,1-Trichloroethane	97	5.454	5.454	(0.885)	13707	0.48016	0.480	
$	7 Dibromofluoromethane	113	5.438	5.441	(0.883)	9160	0.96537	0.965	
	8 Benzene	78	5.996	6.000	(0.973)	24449	0.43185	0.432	
*	9 Pentafluorobenzene	168	6.163	6.163	(1.000)	14168	1.00000		
$	10 1,2-Dichloroethane-D4	65	6.193	6.194	(1.005)	8528	0.99475	0.995	
	11 1,2-Dichloroethane	62	6.286	6.285	(0.917)	7463	0.50416	0.504	
	12 Trichloroethene	130	6.795	6.794	(0.991)	5551	0.46544	0.465	
*	13 1,4-Difluorobenzene	114	6.854	6.855	(1.000)	20850	1.00000		
$	14 Toluene-D8	98	8.482	8.483	(1.237)	21369	0.97588	0.976	
	15 Tetrachloroethene	164	8.957	8.957	(1.307)	4965	0.46369	0.464	
	16 1,1,2-Trichloroethane	83	9.179	9.181	(1.339)	2836	0.50526	0.505	
*	17 Chlorobenzene-D5	117	10.236	10.238	(1.000)	19033	1.00000		
$	18 P-Bromofluorobenzene	95	11.765	11.768	(1.149)	8047	1.00394	1.00	
	19 1,1,2,2-Tetrachloroethane	83	12.023	12.027	(1.175)	3282	0.48566	0.486	
	20 1,3,5-Trimethylbenzene	105	12.168	12.172	(1.189)	13158			(a)
	21 1,2,4-Trimethylbenzene	105	12.598	12.600	(1.231)	13882			(aR)
	22 1,2,4-Trichlorobenzene	180	14.965	14.968	(1.462)	4796	0.48850	0.488	
	23 1,2,3-Trichlorobenzene	180	15.459	15.465	(1.510)	3774	0.49553	0.496	

Data File: \\target_server\gg\chem\gcms-s.i\S111823.b\S7257.D
Report Date: 12-Dec-2023 10:11

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
R - Spike/Surrogate failed recovery limits.

Data File: \\target_server\gg\chem\gcms-s.i\S111723.b\S7237.D
Date : 17-NOV-2023 15:24
Client ID: SY-OBMW110-110823
Instrument: gcms-s.i
Sample Info: SQ6179-9
Purge Volume: 25.0
Operator: JSS
Column phase: RTX-VMS
Column diameter: 0.18



Katahdin Analytical Services SQ6179 Page 189 of 740

Logbooks and Supporting Documents

WG

12-D

KATAHDIN ANALYTICAL SERVICES

GCMS-S INSTRUMENT RUNLOG

DATE/TIME OF BFB INJECTION: 11-16-23

Method - Check One:	8260	8260 - 10 mL	8260 SIM ✓	624	524
STD IDs: * BFB STD: V2824	CAL STD: V2832	XTRAs STD: —	LCS/MS STD: V2833	Vial Lot # 2795FL-PCW	
SURR & IS STD: V2823	MeOH Lot #: —			pH Paper Lot #: L210005	KI Paper Lot # —

SAMPLE NAME	DATAFILE	DF	ALS #	METHOD	Prep Method 5030	5035	1311	Criteria KAS	DoD	QAPP	Y/N	ANALYST	pH	TRC	COMMENTS
WG345525 - 12	SB923	1	-1	VOABFB	✓						Y	✓	NA	NA	
VSTD 0.05 - 1	S7199	1	1	SSIM(01)QR23							Y				
0.075 - 2	S7200	1	2								Y				Curve Averaged
0.10 - 3	01	1	3								Y				- NO RSE
0.30 - 4	02	1	4								Y				
0.50 - 5	03	1	5								Y				
0.75 - 6	04	1	6								Y				
1.00 - 7	05	1	7								Y				
2.00 - 8	06	1	8								Y				
LCS/Ind -10/-9	07	1	9								Y				IND(-9) "A"
LCSD -14	08	1	10								Y				
VBLK	09	1	11								N				Target hits
WG345525 - 11	10	1	12								Y				
~~LOD~~ LOQ	11	1	13								—				
LOD	12	1	14								—		↓		
SQ6133-2B	13	1	15						X		Y		12		
-4B	14	1	16								Y				
-5B	15	1	17								Y				
-6B	16	1	18								Y				
-7B	17	1	19								Y				
-9B	18	1	20								Y				
-10B	19	1	21								Y				
CCV -13	20	1	22								Y		NA		22:14 ✓
	21	1	23								N				not needed
	22	1	24								N				
Rinse	23	1	25								—				

* Refer to page 1 for standard preparation instructions.

Katahdin Analytical Services SQ6179 Page 191 of 740

WG

KATAHDIN ANALYTICAL SERVICES

9:10

GCMS-S INSTRUMENT RUNLOG

DATE/TIME OF BFB INJECTION: 11-17-23

Method - Check One:	8260	8260 - 10 mL	8260 SIM ✓	624	524

STD IDs: *	BFB STD: V2824	CAL STD: V2832	XTRAs STD: —	LCS/MS STD: V2833	Vial Lot # 2795FL-PC-W
SURR & IS STD: V2823	MeOH Lot #: —	Prep Method	Criteria	pH Paper Lot #: 6210005	KI Paper Lot # —

SAMPLE NAME	DATAFILE	DF	ALS #	METHOD	5030	5035	1311	KAS	DoD	QAPP	Y/N	ANALYST	pH	TRC	COMMENTS
WG345597-3	SB923	—	—	VOABCB	✓						Y	CR	N/A	N/A	
VStd 050 -4	S7225	1	1	SSIM(01)CR23							Y				
LCS -1	26	1	2								Y				
VBlank	27	1	3								N				Target Nitrs
VBlank -2	28	1	4								Y				
SQ6179-1 G	29	1	5						✓		Y		<2		
-2 H	30	1	6								Y				
-3 G	31	1	7								Y				
-4 G	32	1	8								Y				
-5 G	33	1	9								Y				
-6 G	34	1	10								Y				
-7 G	35	1	11								Y				
-8 G	36	1	12								Y				ocl RR 1:10
-9 G	37	1	13								Y				↓ ↓
-10 G	38	1	14								Y				
SQ6133-8 F	39	1	15								Y				
SQ6348-2 A	40	1	16								Y				ocl RR 1:10
-3 A	41	1	17								N				RRCO
-4 A	42	1	18								Y				
-7 A	43	1	19								Y				
-8 A	44	1	20								Y				
-12 A	45	1	21								N				1 SSV 1 IS? RR ocl 1:20 + str.
-13 A	46	1	22								N				RRCO
SQ6133-8MS G	47	1	23								Y				
-8MSD H	48	1	24								Y				
CCV -5	49	1	25								Y		N/A		20:55

* Refer to page 1 for standard preparation instructions.

QAMS784 - 000404

VOA-008 - Revision 4 - 03/31/2023

VOA-008 - Revision 4 - 03/31/2023

*CR 11/20/23

GCMS-S INSTRUMENT RUNLOG WG

KATAHDIN ANALYTICAL SERVICES

DATE/TIME OF BFB INJECTION: 11-18-23 10:35

Method - Check One:	8260	8260 - 10 mL	8260 SIM ✓	624	524
STD IDs: * BFB STD: V2824	CAL STD: V2832	XTRAs STD: —	LCS/MS STD: V2833	Vial Lot # 2795FC-PC-W	
SURR & IS STD: V2823	MeOH Lot #: —	Prep Method	Criteria	pH Paper Lot #: 6210005	KI Paper Lot # —

SAMPLE NAME	DATAFILE	DF	ALS #	METHOD	5030	5035	1311	KAS	DoD	QAPP	Y/N	ANALYST	pH	TRC	COMMENTS
WG345675 -3	SB924	1	-1	VOA BFB	✓						Y	[illegible]	NA	NA	
VStd 0.50 *~~-4~~	S7254	1	1	SSIM/OD CR23							N				%D
VSTD 0.50 -4	55	1	2								Y				
LCS -1	56	1	3								Y				
LCSD -6 *~~6~~	57	1	4								Y				
VBLK *~~2~~	58	1	5								N				Ingd hits
WG345675 -2	59	1	6								Y				
SQ6348-15 A	60	1	7						✓		Y		<2		
SQ6179-8DL B	61	10	8								Y				4ml/40ml
-9DL B	62	10	9								Y				
SQ6348-12RA B	63	1	10								Y				1SS
-6 A	64	1	11								Y				
-9 A	65	1	12												1SS benzene + RC
-10DL A	66	100	13												400ml/40ml RR 1:500
-14DL A	67	100	14												400ml/40ml
-1DL A	68	50	15								Y				800ml/40ml
-11DL A	69	2	16												20ml/40ml RR 1:20
-11 B	70	1	17								Y				1SS
-1DL2 A	71	5	18								Y				8ml/40ml
-14DL2 A	72	10	19								Y				4ml/40ml
-10DL2 A	73	10	20								Y				
-14DL2MS A	74	10	21								N				RR
-14DL2MSD A	75	10	22								N				RR
CCV -5	76	1	23								Y		NA		21:34
	77	1	24								N		NA		not needed
	78	1	25								N		NA		

* Refer to page 1 for standard preparation instructions.

VOA-008 - Revision 4 - 03/31/2023

QAMS784 - 000404

KATAHDIN ANALYTICAL SERVICES
GC/MS VOA STANDARD PREP LOG BOOK

CODE: V2823
STANDARD: 8260 SIM IS/SS
FINAL CONC (ug/mL): 5
FINAL VOLUME (mL): 10
PREP DATE: 10-31-23
EXPIRATION DATE: 11-28-23
MEOH VOLUME (uL): 9970
MEOH LOT #: EH084-US
INITIALS: JJ

STOCK NAME	STOCK	STOCK CONC ug/mL	VOLUME ADD uL
8260 IS	Amp 6412	5000	10
SS	7258	2500	20

JJ 10-31-23

CODE: V2824
STANDARD: BFB TUNE
FINAL CONC (ug/mL): 50
FINAL VOLUME (mL): 3
PREP DATE: 11-2-23
EXPIRATION DATE: 11-30-23
MEOH VOLUME (uL): 2970
MEOH LOT #: EH084-US
INITIALS: JJ

STOCK NAME	STOCK	STOCK CONC ug/mL	VOLUME ADD uL
BFB TUNE	Amp 6738	5000	30

JJ 11-2-23

CODE: V2825
STANDARD: 8260 CAL
FINAL CONC (ug/mL): 100
FINAL VOLUME (mL): 4
PREP DATE: 11-7-23
EXPIRATION DATE: 11-21-23
MEOH VOLUME (uL): 2800
MEOH LOT #: EH084-US
INITIALS: JJ

STOCK NAME	STOCK		STOCK CONC ug/mL	VOLUME ADD uL
M-502A-R2-10X	AMP	7248	2000	200
M-601C-10X	AMP	7252	2000	↓
S-7920-R1	AMP	7204	2000	400
VOA CAL MIX #1	AMP	7295	5000	200
M-502B-10X (Gases)	AMP	7291	2000	

11-7-23 JJ

Reviewed by/Date:

KATAHDIN ANALYTICAL SERVICES
GC/MS VOA STANDARD PREP LOG BOOK

CODE: V2832	STOCK NAME	STOCK	STOCK CONC ug/mL	VOLUME ADD uL
STANDARD: SIM CAL	M-502A-R2-10X	Amp 7249	2000	10
FINAL CONC (ug/mL): 5	M-502B-10X	↓ 7302	↓	10
FINAL VOLUME (mL): 4				
PREP DATE: 11-15-23				
EXPIRATION DATE: 11-29-23				
MEOH VOLUME (uL): 3980				
MEOH LOT #: EH084-VS				
INITIALS: JJ			JJ	11-15-23

CODE: V2833	STOCK NAME	STOCK	STOCK CONC ug/mL	VOLUME ADD uL
STANDARD: SIM LCS	502.2CALB000 Mega Mix	Amp 7221	2000	10
FINAL CONC (ug/mL): 5	502.2 CAL MIX #1	↓ 7283	↓	10
FINAL VOLUME (mL): 4				
PREP DATE: 11-15-23				
EXPIRATION DATE: 11-29-23				
MEOH VOLUME (uL): 3980				
MEOH LOT #: EH084-VS				
INITIALS: JJ			JJ	11-15-23

CODE: V2834	STOCK NAME	STOCK		STOCK CONC ug/mL	VOLUME ADD uL
STANDARD: 8260 LCS	502.2CAL MIX #1	AMP	7283	2000	150
FINAL CONC (ug/mL): 100	MTBE- (30402)	AMP	7144	2000	↓
FINAL VOLUME (mL): 3	502.2 CAL 2000 MEGA	AMP	7221	2000	
PREP DATE: 11-21-23	S-457S-10X	AMP	7218	2000	
EXPIRATION DATE: 12-6-23	M-8260-ADD-10X	AMP	7323	2000	
MEOH VOLUME (uL): 2100	CYCLOHEXANE	AMP	7231	2000	
MEOH LOT #: EH084-VS					
INITIALS: JJ				JJ	11-21-23

Reviewed by/Date:

KATAHDIN ANALYTICAL SERVICES

STOCK STANDARDS RECEIVED

GCMS VOLATILES LABORATORY

REVIEWED BY/DATE:

Amp 6904 ↓ 05 ↓ 06

AccuStandard® 125 Market St. New Haven, CT 06513 www.AccuStandard.com
TK-102-08S-10X 1 mL
Cyclohexane
2.0 mg/mL in Methanol
Lot: 219101390 1 comp(s)
Exp: Oct 25, 2029 Storage: Ambient (>5 °C)
FOR LABORATORY USE ONLY
H225 H370 H336 H320 H315 H311 H332 H301 H360 P338 P350 P331 Refer to SDS
Signal Word Danger

Rec'd 4-13-22 JJ

Amp 6907 ↓ 08 ↓ 09

Restek Oxygenates Standard
30619 Lot# A0181864
Varied Conc. X: 02/2025

Rec'd — JJ 4-13-22

Amp 6910 ↓ 11 ↓ 12 ↓ 13 ↓ 14 ↓ 15 ↓ 16 ↓ 17 ↓ 18 ↓ 19

54577
Custom 8260 Internal Standard Mix
Lot# A0184289
Expire: 04/2025 Store 0°C or colder
5000 µg/mL each in P&T Methanol
US/EN
1 mL
RESTEK

Rec'd 4-25-22 JJ

Amp 6920 ↓ 21

AccuStandard® 125 Market St. New Haven, CT 06513 www.AccuStandard.com
M-8260-ADD-10X 1 mL
Method 8260 Additions
2.0 mg/mL in MeOH
Lot: 222031328 8 comp(s)
Exp: Jul 22, 2022 Storage: Freeze (<-10 °C)
FOR LABORATORY USE ONLY
H336 H225 H370 H320 H315 H311 H332 H301 H360, H350 H351 P338 Refer to SDS
Signal Word Danger

Amp 6922 ↓ 23

Agilent PVOC/GRO Standard
@ 1000 µg/mL
Lot #0002541695
Exp 31-Aug-23

EJM Rec'd 04/28/22

KATAHDIN ANALYTICAL SERVICES

STOCK STANDARDS RECEIVED

GCMS VOLATILES LABORATORY

REVIEWED BY/DATE:

Amp 7244
45
46

30402 US/EN
Methyl-tert- Butyl Ether Standard
Lot# A0192444
Expire: 12/2027 Store: 0°C or colder 1 mL
2000 µg/mL each in P&T Methanol
RESTEK

6/21/22

Amp 7247
48
49

AccuStandard® 125 Market St. New Haven, CT 06513 www.AccuStandard.com
M-502A-R2-10X 1 mL
VOC Liquid Mixture - Modified
2.0 mg/mL in Methanol
Lot: 221111385-02 53 comp(s)
Exp: Jun 18, 2025 Storage: Refrig (0-5 °C)
PRODUCT OF THE USA FOR LABORATORY USE ONLY
H336 H225 H370 H320 H315 H311 H332 H301 H360 H350 P338 Refer to SDS
Signal Word: Danger

Amp 7250
7251

AccuStandard® 125 Market St. New Haven, CT 06513 www.AccuStandard.com
GRH-004S-R2 1 mL
Volatile Petroleum Hydrocarbon without Surrogate Std.
10.0 mg/mL in Methanol
Lot: 221011092 15 comp(s)
Exp: Jan 11, 2031 Storage: Ambient (>5 °C)
PRODUCT OF THE USA FOR LABORATORY USE ONLY
H336 H225 H370 H320 H315 H311 H332 H301 H360 H350 P338 Refer to SDS
Signal Word: Danger

7/7/23

Amp 7252
53

AccuStandard® 125 Market St. New Haven, CT 06513 www.AccuStandard.com
M-601C-10X 1 mL
2-Chloroethylvinyl ether
2.0 mg/mL in MeOH
Lot: 223041132 1 comp(s)
Exp: Apr 11, 2026 Storage: Freeze (<-10 °C)
PRODUCT OF THE USA FOR LABORATORY USE ONLY
H225 H370 H336 H320 H315 H311 H332 H301 H360 P336 P360 P331 Refer to SDS
Signal Word: Danger

Rec 7/7/23

Amp 7254
55

AccuStandard® 125 Market St. New Haven, CT 06513 www.AccuStandard.com
M-603-M-5X 1 mL
Acrolein & Acrylonitrile
5.0 mg/mL in MeOH:Water 90:10
Lot: 223061381 2 comp(s)
Exp: Oct 21, 2023 Storage: Freeze (<-10 °C)
PRODUCT OF THE USA FOR LABORATORY USE ONLY
H336 H225 H370 H320 H315 H311 H332 H301 H360 H350 H351 P338 Refer to SDS
Signal Word: Danger

Recd 7/7/23

Amp 7256
57
58
59
60

30240 www.restek.com RESTEK
8260A Surrogate Mix
Lot# A0197611
Expire: 05/2028 Store: 0°C or colder
2500 µg/mL each in P&T Methanol
1 mL US/EN

Rec 7/10/23

KATAHDIN ANALYTICAL SERVICES

STOCK STANDARDS RECEIVED

GCMS VOLATILES LABORATORY

REVIEWED BY/DATE:

Amp 6730 ↓ ↓ ↓ 37

Agilent 2,5-Dibromotoluene STD Rec'd 9-7-21 DL
@5,000 ug/mL
Lot #0006464535
Ex. 6-30-2023

Amp 6738 ↓ 39

30003 US/EN
VOA Tuning Compound Mix
Lot# A0174371
Expire: 10/2026 Store: 0°C or colder 1 mL
5000 µg/mL each in P&T Methanol
RESTEK

Rec'd 9/9/21 CP

Amp 6740 41 42 43 44

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com
S-11160 1 mL
Custom GC Standard
2000 µg/mL in Methanol
Lot: 221091009
Exp: Sep 03, 2026
2 comp(s)
Storage: Ambient (>5 °C)
FOR LABORATORY USE ONLY
H225 H370 H336 H320 H315 H311 H332 H301 H360 P338 P360 P331 Refer to SDS
Signal Word Danger

9/12/21 Rec'd

Amp 6745 ↓ 46 ↓ 47

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com
TK-102-08S-10X 1 mL
Cyclohexane
2.0 mg/mL in Methanol
Lot: 219101390
Exp: Oct 25, 2029
1 comp(s)
Storage: Ambient (>5 °C)
FOR LABORATORY USE ONLY
H225 H370 H336 H320 H315 H311 H332 H301 H360 P338 P360 P331 Refer to SDS
Signal Word Danger

9-9-21 Rec'd

Amp 6748 ↓ 49 ↓ 50

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com
M-8260-ADD-10X 1 mL
Method 8260 Additions
2.0 mg/mL in MeOH
Lot: 221061336-01
Exp: Dec 18, 2021
8 comp(s)
Storage: Freeze (<-10 °C)
FOR LABORATORY USE ONLY
H336 H225 H370 H320 H315 H311 H332 H301 H360, H350 H351 P338 Refer to SDS
Signal Word Danger

Amp 6751 52

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com
S-457S-10X 1 mL
Tetrahydrofuran
2.0 mg/mL in MeOH
Lot: 221051701
Exp: Jun 01, 2031
1 comp(s)
Storage: Ambient (>5 °C)
FOR LABORATORY USE ONLY
H225 H370 H336 H320 H315 H311 H332 H301 H360 H351 P338 P360 Refer to SDS
Signal Word Danger

Rec'd 10-1-21

KATAHDIN ANALYTICAL SERVICES

STOCK STANDARDS RECEIVED

GCMS VOLATILES LABORATORY

REVIEWED BY/DATE:

Amp 7244
45
46

30402 US/EN
Methyl-tert- Butyl Ether Standard
Lot# A0192444
Expire: 12/2027 Store: 0°C or colder 1 mL
2000 µg/mL each in P&T Methanol
RESTEK

6/21/22

Amp 7247
48
49

AccuStandard® 125 Market St. New Haven, CT 06513 www.AccuStandard.com
M-502A-R2-10X 1 mL
VOC Liquid Mixture - Modified
2.0 mg/mL in Methanol
Lot: 221111385-02 53 comp(s)
Exp: Jun 18, 2025 Storage: Refrig (0-5 °C)
PRODUCT OF THE USA FOR LABORATORY USE ONLY
H336 H225 H370 H320 H315 H311 H332 H301 H360 H350 H350 P336 Refer to SDS
Signal Word: Danger

Amp 7250
7251

AccuStandard® 125 Market St. New Haven, CT 06513 www.AccuStandard.com
GRH-004S-R2 1 mL
Volatile Petroleum Hydrocarbon without Surrogate Std.
10.0 mg/mL in Methanol
Lot: 221011092 15 comp(s)
Exp: Jan 11, 2031 Storage: Ambient (>5 °C)
PRODUCT OF THE USA FOR LABORATORY USE ONLY
H336 H225 H370 H320 H315 H311 H332 H301 H360 H350 H350 P336 Refer to SDS
Signal Word: Danger

7/7/23

Amp 7252
53

AccuStandard® 125 Market St. New Haven, CT 06513 www.AccuStandard.com
M-601C-10X 1 mL
2-Chloroethylvinyl ether
2.0 mg/mL in MeOH
Lot: 223041132 1 comp(s)
Exp: Apr 11, 2026 Storage: Freeze (<-10 °C)
PRODUCT OF THE USA FOR LABORATORY USE ONLY
H225 H370 H336 H320 H315 H311 H332 H301 H360 P338 P360 P331 Refer to SDS
Signal Word: Danger

Rec'd 7/7/23

Amp 7254
55

AccuStandard® 125 Market St. New Haven, CT 06513 www.AccuStandard.com
M-603-M-5X 1 mL
Acrolein & Acrylonitrile
5.0 mg/mL in MeOH:Water 90:10
Lot: 223061381 2 comp(s)
Exp: Oct 21, 2023 Storage: Freeze (<-10 °C)
PRODUCT OF THE USA FOR LABORATORY USE ONLY
H336 H225 H370 H320 H315 H311 H332 H301 H360 H350 H351 P338 Refer to SDS
Signal Word: Danger

Recd 7/7/23

Amp 7256
57
58
59
60

30240 www.restek.com RESTEK
8260A Surrogate Mix
Lot# A0197611
Expire: 05/2028 Store: 0°C or colder
2500 µg/mL each in P&T Methanol
1 mL US/EN

Rec 7/10/23

KATAHDIN ANALYTICAL SERVICES

STOCK STANDARDS RECEIVED

GCMS VOLATILES LABORATORY

REVIEWED BY/DATE:

Amp 7297
98
99

30605 www.restek.com
VPH Matrix Spike Mix w/Surrogate (revised)
Lot# A0200451
Expire: 07/2028 Store: 0°C or colder
50 µg/mL each in P&T Methanol
1 mL US/EN

RESTEK

Rec'd 9/14/23 DL

Amp 7300
01

AccuStandard® 125 Market St. New Haven, CT 06513 www.AccuStandard.com
TK-102-08S-10X 1 mL
Cyclohexane
2.0 mg/mL in Methanol
Lot: 221101280 1 comp(s)
Exp: Oct 19, 2031 Storage: Ambient (>5 °C)
PRODUCT OF THE USA FOR LABORATORY USE ONLY
H225 H370 H336 H320 H315 H311 H332 H301 H360 P308 P360 P331 Refer to SDS
Signal Word

Rec'd 9-14-23

Amp 7302
03
04

AccuStandard® 125 Market St. New Haven, CT 06513 www.AccuStandard.com
M-502B-10X 1 mL
Volatile Organic Cmpds - Gases
2.0 mg/mL in MeOH
Lot: 223061232 6 comp(s)
Exp: Jun 21, 2026 Storage: Refrig (0-5 °C)
PRODUCT OF THE USA FOR LABORATORY USE ONLY
H336 H225 H370 H320 H315 H311 H332 H301 H360 H350 P308 Refer to SDS
Signal Word

Amp 7305
06

AccuStandard® 125 Market St. New Haven, CT 06513 www.AccuStandard.com
M-502A-R2-10X 1 mL
VOC Liquid Mixture - Modified
2.0 mg/mL in Methanol
Lot: 221111385-02 53 comp(s)
Exp: Jun 18, 2025 Storage: Refrig (0-5 °C)
PRODUCT OF THE USA FOR LABORATORY USE ONLY
H336 H225 H370 H320 H315 H311 H332 H301 H350 H360 H350 P308 Refer to SDS
Signal Word

Amp 7307
08

AccuStandard® 125 Market St. New Haven, CT 06513 www.AccuStandard.com
M-8240C-R6 1 mL
Appendix IX Volatiles Mix
Varied conc. in MeOH
Lot: 222061040 11 comp(s)
Exp: Jun 06, 2025 Storage: Refrig (0-5 °C)
PRODUCT OF THE USA FOR LABORATORY USE ONLY
H225 H370 H336 H320 H315 H311 H332 H301 H351 H360 H350 P308 Refer to SDS
Signal Word

Amp 7309
10
11
12
13

31081 www.restek.com
1,3,5-Trichlorobenzene Standard
Lot# A0194759
Expire: 02/2028 Store: 10°C or colder
1000 µg/mL each in P&T Methanol
1 mL US/EN

RESTEK

KATAHDIN ANALYTICAL SERVICES

STOCK STANDARDS RECEIVED

GCMS VOLATILES LABORATORY

REVIEWED BY/DATE:

Amp 7213 ↓ 14

AccuStandard® 125 Market St. New Haven, CT 06513 www.AccuStandard.com

M-8260-ADD-10X
Method 8260 Additions
2.0 mg/mL in MeOH
Lot: 223041101
Exp: Aug 07, 2023
PRODUCT OF THE USA

1 mL
8 comp(s)
Storage: Freeze (<-10 °C)
FOR LABORATORY USE ONLY

H336 H225 H370 H320 H315 H311 H332 H301 H360 H350 H351 P338
Refer to SDS
Signal Word: Danger

Recd 4-13-23 JJ

Amp 7215 ↓ 16 ↓ 17

30006 US/EN
VOA Calibration Mix #1
Lot# A0186767
Expire: 09/2025 Store: 0°C or colder 1 mL
5000 µg/mL each in P&T Methanol/Water (60:10)
RESTEK

AccuStandard® 125 Market St. New Haven, CT 06513 www.AccuStandard.com

Amp 7218 ↓ 19 ↓ 20

S-457S-10X
Tetrahydrofuran
2.0 mg/mL in MeOH
Lot: 221051701
Exp: Jun 01, 2031
PRODUCT OF THE USA

1 mL
1 comp(s)
Storage: Ambient (>5 °C)
FOR LABORATORY USE ONLY

H225 H370 H336 H320 H315 H311 H332 H301 H360 H351 P338 P360
Refer to SDS
Signal Word: Danger

Recd 4-24-23 M

Amp 7221 ↓ 22 ↓ 23

30431 www.restek.com RESTEK
502.2 Cal2000 Mega Mix
Lot# A0188935
Expire: 08/2024 Store: 0°C or colder
2000 µg/mL each in P&T Methanol
1 mL US/EN

AccuStandard® 125 Market St. New Haven, CT 06513 www.AccuStandard.com

Amp 7224 ↓ 25

GRH-003S
Wisconsin DNR Mix
2.0 mg/mL in MeOH
Lot: 22081432
Exp: Aug 29, 2032
PRODUCT OF THE USA

1 mL
10 comp(s)
Storage: Ambient (>5 °C)
FOR LABORATORY USE ONLY

H336 H225 H370 H320 H315 H311 H332 H301 H360 P338 P360 P331
Refer to SDS
Signal Word: Danger

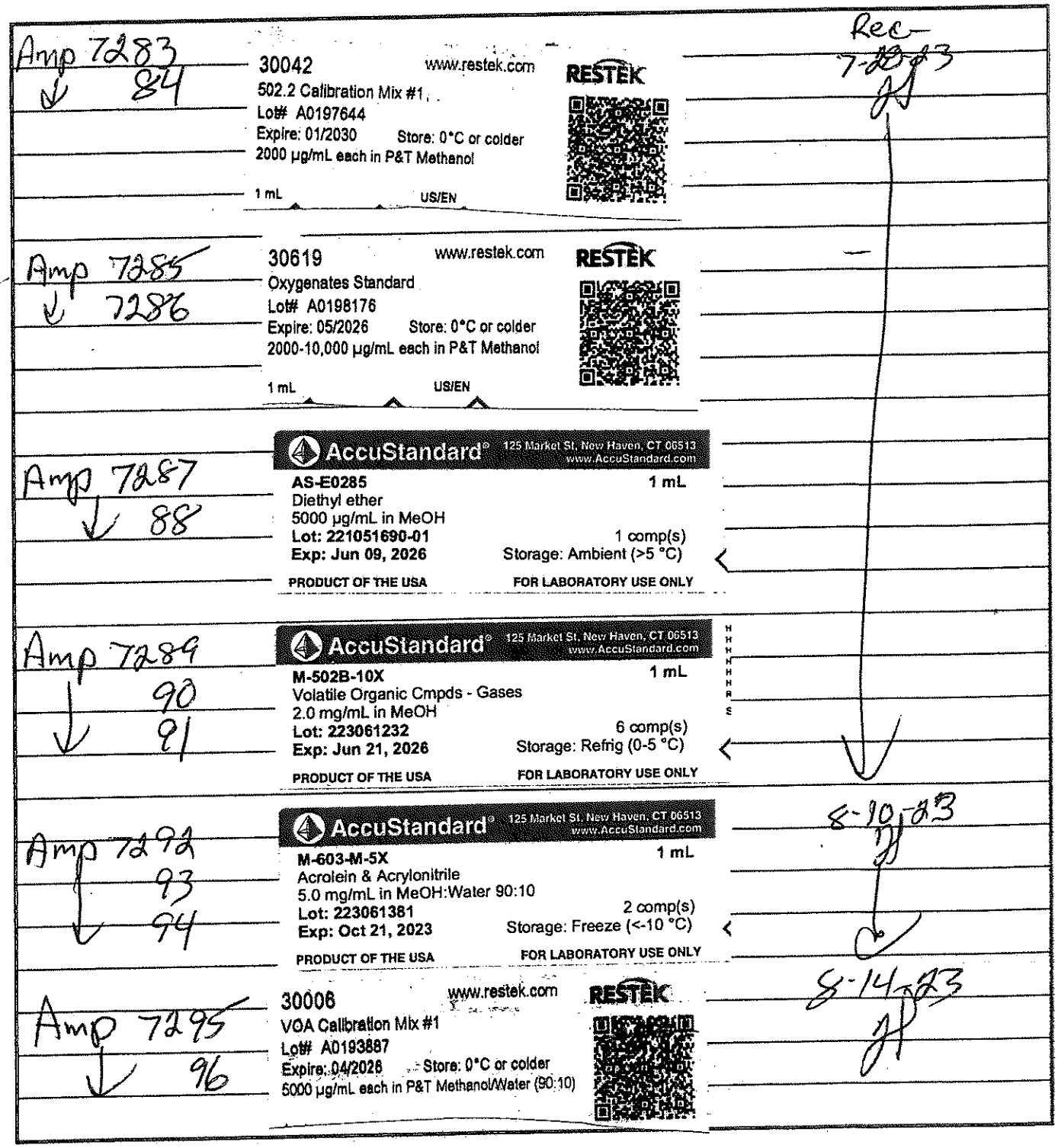
Recd 5-4-23 MA

KATAHDIN ANALYTICAL SERVICES

STOCK STANDARDS RECEIVED

GCMS VOLATILES LABORATORY

REVIEWED BY/DATE:



Amp 7283
84

30042 www.restek.com
502.2 Calibration Mix #1
Lot# A0197644
Expire: 01/2030 Store: 0°C or colder
2000 µg/mL each in P&T Methanol
1 mL US/EN

Rec 7-20-23

Amp 7285
7286

30619 www.restek.com
Oxygenates Standard
Lot# A0198176
Expire: 05/2026 Store: 0°C or colder
2000-10,000 µg/mL each in P&T Methanol
1 mL US/EN

Amp 7287
88

AccuStandard® 125 Market St. New Haven, CT 06513 www.AccuStandard.com
AS-E0285 1 mL
Diethyl ether
5000 µg/mL in MeOH
Lot: 221051690-01 1 comp(s)
Exp: Jun 09, 2026 Storage: Ambient (>5 °C)
PRODUCT OF THE USA FOR LABORATORY USE ONLY

Amp 7289
90
91

AccuStandard® 125 Market St. New Haven, CT 06513 www.AccuStandard.com
M-502B-10X 1 mL
Volatile Organic Cmpds - Gases
2.0 mg/mL in MeOH
Lot: 223061232 6 comp(s)
Exp: Jun 21, 2026 Storage: Refrig (0-5 °C)
PRODUCT OF THE USA FOR LABORATORY USE ONLY

8-10-23

Amp 7292
93
94

AccuStandard® 125 Market St. New Haven, CT 06513 www.AccuStandard.com
M-603-M-5X 1 mL
Acrolein & Acrylonitrile
5.0 mg/mL in MeOH:Water 90:10
Lot: 223061381 2 comp(s)
Exp: Oct 21, 2023 Storage: Freeze (<-10 °C)
PRODUCT OF THE USA FOR LABORATORY USE ONLY

8-14-23

Amp 7295
96

30006 www.restek.com
VOA Calibration Mix #1
Lot# A0193887
Expire: 04/2026 Store: 0°C or colder
5000 µg/mL each in P&T Methanol/Water (90:10)

8270 SIM
POLYNUCLEAR AROMATIC HYDROCARBONS DATA

QC Summary Section

Form 2
System Monitoring Compound Recovery

Lab Name: Katahdin Analytical Services **SDG:** SQ6179 **Matrix:** AQ

Client Sample ID	Lab Sample ID	Col. ID	2MN	#	FLO	#	PYR	#
SY-OBMW2-110823	SQ6179-1		48.5		48.8		52.1	*
SY-OBMW1-110823	SQ6179-2		99.7	*	92.7		108.	
SY-OBMW9-110823	SQ6179-3		84.5		81.6		96.2	
SY-BRMW5-29-44-110823	SQ6179-4		47.8		46.3		50.1	*
SY-BRMW5-56-66-110823	SQ6179-5		69.3		67.6		64.2	
SY-BRMW5-123-133-1108	SQ6179-6		95.6	*	92.0		106.	
SY-OBMW8-110823	SQ6179-7		91.4		87.3		92.2	
SY-OBMW11-110823	SQ6179-8		95.6	*	92.3		107.	
SY-OBMW110-110823	SQ6179-9		79.7		76.7		86.1	
SY-OBMW3-110823	SQ6179-10		75.1		70.8		73.0	
Method Blank	WG345459-1		90.3		88.7		95.2	
Laboratory Control S	WG345459-2		98.3	*	85.8		81.9	

Abbr.	Surrogate Compound	QC Limits
2MN	2-Methylnaphthalene-D10	43-92
FLO	Fluorene-D10	29-101
PYR	Pyrene-D10	53-166

= Column to be used to flag recovery limits.
* = Values outside of contract required QC limits.
D= System Monitoring Compound diluted out.

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Method Blank Summary

Lab Name : Katahdin Analytical Services
SDG : SQ6179
Lab File ID : V7635.D
Lab Sample ID : WG345459-1
Instrument ID : GCMS-V
Date Extracted : 15-NOV-23
Matrix : AQ
Date Analyzed : 08-DEC-23
Extraction method : SW846 3510C
Time Analyzed : 13:28

This Method Blank applies to the following samples and QC samples:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Laboratory Control S	WG345459-2	V7636.D	12/08/23	14:01
SY-OBMW2-110823	SQ6179-1	V7637.D	12/08/23	14:35
SY-OBMW1-110823	SQ6179-2	V7638.D	12/08/23	15:08
SY-OBMW9-110823	SQ6179-3	V7639.D	12/08/23	15:41
SY-BRMW5-29-44-110823	SQ6179-4	V7640.D	12/08/23	16:14
SY-BRMW5-56-66-110823	SQ6179-5	V7641.D	12/08/23	16:47
SY-BRMW5-123-133-110823	SQ6179-6	V7642.D	12/08/23	17:20
SY-OBMW8-110823	SQ6179-7	V7643.D	12/08/23	17:53
SY-OBMW11-110823	SQ6179-8	V7644.D	12/08/23	18:26
SY-OBMW110-110823	SQ6179-9	V7645.D	12/08/23	19:00
SY-OBMW3-110823	SQ6179-10	V7646.D	12/08/23	19:33

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Form 5
Semivolatile Organic Instrument Performance Check

Lab Name : Katahdin Analytical Services
SDG : SQ6179
Lab File ID : VD408A.D
Date Analyzed : 06-DEC-23
Instrument ID : GCMS-V
Time Analyzed : 10:47

m/e	Ion Abundance Criteria	% Relative Abundance		
51	10.0 - 80.0% of mass 198	16.6		
68	Less than 2.0% of mass 69	0.7	1.66	1
69	Greater than 0.1% of mass 198	41.0		
70	Less than 2.0% of mass 69	0.3	0.67	1
127	10.0 - 80.0% of mass 198	62.7		
197	Less than 2.0% of mass 198	0.4		
198	Base Peak, 100% relative abundance	100		
199	5.0 - 9.0% of mass 198	6.9		
275	10.0 - 60.0% of mass 198	26.3		
365	Greater than 1.0% of mass 198	4.3		
441	0.01 - 100.0% of mass 443	16.1	75.11	2
442	Greater than 50.0% of mass 198	108.7		
443	15.0 - 24.0% of mass 442	21.4	19.69	3

1-Value is % mass 69
2-Value is % mass 443
3-Value is % mass 442

This check applies to the following samples, LCS, MS, MSD and standards:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Initial Calibration	WG346507-4	V7602.D	12/06/23	11:05
Initial Calibration	WG346507-3	V7603.D	12/06/23	11:38
Initial Calibration	WG346507-2	V7604.D	12/06/23	12:11
Initial Calibration	WG346507-5	V7605.D	12/06/23	12:44
Initial Calibration	WG346507-6	V7606.D	12/06/23	13:17
Initial Calibration	WG346507-7	V7607.D	12/06/23	13:50
Independent Source	WG346507-8	V7608.D	12/06/23	14:23

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Form 5
Semivolatile Organic Instrument Performance Check

Lab Name : Katahdin Analytical Services
SDG : SQ6179
Lab File ID : VD410.D
Date Analyzed : 08-DEC-23
Instrument ID : GCMS-V
Time Analyzed : 11:30

m/e	Ion Abundance Criteria	% Relative Abundance		
51	10.0 - 80.0% of mass 198	15.4		
68	Less than 2.0% of mass 69	0.5	1.39	1
69	Greater than 0.1% of mass 198	38.2		
70	Less than 2.0% of mass 69	0.3	0.70	1
127	10.0 - 80.0% of mass 198	60.5		
197	Less than 2.0% of mass 198	0.3		
198	Base Peak, 100% relative abundance	100		
199	5.0 - 9.0% of mass 198	6.9		
275	10.0 - 60.0% of mass 198	25.4		
365	Greater than 1.0% of mass 198	4.2		
441	0.01 - 100.0% of mass 443	15.4	75.65	2
442	Greater than 50.0% of mass 198	104.2		
443	15.0 - 24.0% of mass 442	20.4	19.59	3

1-Value is % mass 69
2-Value is % mass 443
3-Value is % mass 442

This check applies to the following samples, LCS, MS, MSD and standards:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Continuing Calibrati	WG346651-2	V7632.D	12/08/23	11:48
Method Blank	WG345459-1	V7635.D	12/08/23	13:28
Laboratory Control S	WG345459-2	V7636.D	12/08/23	14:01
SY-OBMW2-110823	SQ6179-1	V7637.D	12/08/23	14:35
SY-OBMW1-110823	SQ6179-2	V7638.D	12/08/23	15:08
SY-OBMW9-110823	SQ6179-3	V7639.D	12/08/23	15:41
SY-BRMW5-29-44-110823	SQ6179-4	V7640.D	12/08/23	16:14
SY-BRMW5-56-66-110823	SQ6179-5	V7641.D	12/08/23	16:47
SY-BRMW5-123-133-110823	SQ6179-6	V7642.D	12/08/23	17:20
SY-OBMW8-110823	SQ6179-7	V7643.D	12/08/23	17:53
SY-OBMW11-110823	SQ6179-8	V7644.D	12/08/23	18:26
SY-OBMW110-110823	SQ6179-9	V7645.D	12/08/23	19:00
SY-OBMW3-110823	SQ6179-10	V7646.D	12/08/23	19:33
Continuing Calibrati	WG346651-3	V7652.D	12/08/23	22:53

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Form 8
Internal Standard Area and RT Summary

Lab Name : Katahdin Analytical Services
Lab ID : WG346507-4
Lab File ID : V7602.D

SDG: SQ6179
Analytical Date: 12/06/23 11:05
Instrument ID: GCMS-V

		1,4-DICHLOROBENZENE-D4			NAPHTHALENE-D8			ACENAPHTHENE-D10		
		Area	#	RT	#	Area	#	RT	#	Area	#	RT	#
	Std .	58071		6.68		185403		8.20		77855		10.33	
	Upper Limit	116142		6.84		370806		8.36		155710		10.50	
	Lower Limit	29035.5		6.51		92701.5		8.03		38927.5		10.17	
Client Sample ID	Lab Sample ID												
Continuing Calibrati	WG346651-2	46802		6.69		156938		8.20		67276		10.33	
Method Blank	WG345459-1	57565		6.69		180117		8.20		80388		10.33	
Laboratory Control S	WG345459-2	50108		6.69		162656		8.20		71036		10.33	
SY-OBMW2-110823	SQ6179-1	55005		6.69		176689		8.20		81364		10.33	
SY-OBMW1-110823	SQ6179-2	53615		6.69		163518		8.20		73912		10.33	
SY-OBMW9-110823	SQ6179-3	48434		6.69		149119		8.20		66201		10.33	
SY-BRMW5-29-44-11(	SQ6179-4	53430		6.69		171531		8.20		78080		10.33	
SY-BRMW5-56-66-11(	SQ6179-5	46044		6.69		144055		8.20		63164		10.33	
SY-BRMW5-123-133-1	SQ6179-6	48081		6.69		150729		8.20		64713		10.33	
SY-OBMW8-110823	SQ6179-7	50595		6.69		157071		8.20		72311		10.33	
SY-OBMW11-110823	SQ6179-8	51925		6.69		161667		8.20		73772		10.33	
SY-OBMW110-110823	SQ6179-9	60914		6.69		190428		8.20		83092		10.33	
SY-OBMW3-110823	SQ6179-10	47000		6.69		148753		8.20		66916		10.33	
Continuing Calibrati	WG346651-3	45154		6.69		142158		8.20		60087		10.33	

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area
RT Upper Limit = + 10 seconds of internal standard RT
RT Lower Limit = - 10 seconds of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

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Form 8
Internal Standard Area and RT Summary

Lab Name : Katahdin Analytical Services
Lab ID : WG346507-4
Lab File ID : V7602.D

SDG: SQ6179
Analytical Date: 12/06/23 11:05
Instrument ID: GCMS-V

		PHENANTHRENE-D10			CHRYSENE-D12			PERYLENE-D12		
		Area	#	RT	#	Area	#	RT	#	Area	#	RT	#
	Std .	115916		12.14		64499		15.76		40297		19.67	
	Upper Limit	231832		12.30		128998		15.93		80594		19.83	
	Lower Limit	57958		11.97		32249.5		15.59		20148.5		19.50	
Client Sample ID	Lab Sample ID												
Continuing Calibrati	WG346651-2	97279		12.14		52977		15.75		33616		19.65	
Method Blank	WG345459-1	125700		12.14		62941		15.75		46330		19.65	
Laboratory Control S	WG345459-2	102558		12.14		61414		15.75		48229		19.65	
SY-OBMW2-110823	SQ6179-1	129357		12.14		60373		15.75		38600		19.65	
SY-OBMW1-110823	SQ6179-2	109850		12.14		55676		15.75		35492		19.65	
SY-OBMW9-110823	SQ6179-3	98736		12.14		49432		15.75		36482		19.65	
SY-BRMW5-29-44-11(	SQ6179-4	122310		12.14		61386		15.75		45470		19.65	
SY-BRMW5-56-66-11(	SQ6179-5	91883		12.14		45862		15.75		32716		19.65	
SY-BRMW5-123-133-1	SQ6179-6	94014		12.14		47838		15.75		34643		19.65	
SY-OBMW8-110823	SQ6179-7	111629		12.14		56592		15.75		35933		19.65	
SY-OBMW11-110823	SQ6179-8	112233		12.14		58791		15.75		38342		19.65	
SY-OBMW110-110823	SQ6179-9	122313		12.14		61067		15.75		42907		19.65	
SY-OBMW3-110823	SQ6179-10	105138		12.14		51262		15.75		36558		19.65	
Continuing Calibrati	WG346651-3	83079		12.14		44927		15.75		32400		19.65	

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area
RT Upper Limit = + 10 seconds of internal standard RT
RT Lower Limit = - 10 seconds of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

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Sample Data Section

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U Indicates the compound was analyzed for but not detected above the specified level. This level may be the Practical Quantitation Level (PQL) (also called Limit of Quantitation (LOQ)), the Limit of Detection (LOD) or Method Detection Limit (MDL) as required by the client.

Note: All results reported as "U" MDL have a 50% rate for false negatives compared to those results reported as "U" PQL, "U" LOQ or "U" LOD, where the rate of false negatives is <1%.

* Compound recovery or percent RPD (relative percent difference) was outside of quality control limits.

D Indicates the result was obtained from analysis of a diluted sample. Surrogate recoveries may not be calculable.

E Estimated value. This flag identifies compounds whose concentrations exceed the upper level of the calibration range of the instrument for that specific analysis.

J Estimated value. The analyte was detected in the sample at a concentration less than the laboratory Practical Quantitation Level (PQL) (also called Limit of Quantitation (LOQ)), but above the Method Detection Limit (MDL).

And/or

J Used for Dual Column analytes when there is a greater than 40% difference for detected concentrations between the two GC/HPLC columns.

B Indicates the analyte was detected in the laboratory method blank analyzed concurrently with the sample.

I Indicates that the flagged compound did not meet DoD criteria in the corresponding Initial Calibration (ICAL).

D Indicates that the flagged compound did not meet DoD criteria in the corresponding Initial Calibration Verification (ICV).

C Indicates that the flagged compound did not meet DoD criteria in the corresponding opening Calibration Verification (CV).

V Indicates that the flagged compound did not meet DoD criteria in the corresponding closing Calibration Verification (CV).

L/LL Indicates that the flagged compound did not meet DoD criteria in the corresponding Laboratory Control Sample (LCS) and/or Laboratory Control Sample Duplicate (LCSD) prepared and/or analyzed concurrently with the sample.

M/MM Indicates that the flagged compound did not meet DoD criteria in the Matrix Spike (MS) and/or Matrix Spike Duplicate MSD) prepared and/or analyzed concurrently with the native sample.

H Indicates the flagged compound was detected on the primary column but was not detected on the confirmation column therefore the compound is not reported as a positive detection. (SW846 8330A/B only)

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Manual Integration Codes For GC/MS, GC, HPLC and/or IC

M1	Peak splitting.
M2	Well defined peaks on the shoulders of the other peaks.
M3	There is additional area due to a coeluting interferant.
M4	There are negative spikes in the baseline.
M5	There are rising or falling baselines.
M6	The software has failed to detect a peak or misidentified a peak.
M7	Excessive peak tailing.
M8	Analysis such as GRO, DRO and TPH require a baseline hold.
M9	Peak was not completely integrated as in GC/MS.
M10	Primary ion was correctly integrated, but secondary or tertiary ion needed manual integration as in GC/MS.
M11	For GC analysis, when a sample is diluted by 1:10 or more, the surrogate is set to undetected and then the area under the surrogate is manually integrated.
M12	Manual integration saved in method due to TurboChrom floating point error.

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ANALYTICAL SERVICES

Report of Analytical Results

SDG: SQ6179
Lab ID: SQ6179-1
Client ID: SY-OBMW2-110823
Matrix: AQ
Lab File ID: V7637.D

Sample Date: 08-NOV-23
Extract Date: 15-NOV-23
Extracted By: NH/CMW
Extraction Method: SW846 3510C
Lab Prep Batch: WG345459

Report Date: 29-DEC-23
Analysis Date: 08-DEC-23
Analyst: EP
Analysis Method: SW846 8270D SIM
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	0.094	ug/L	1	.2	0.19	0.060	0.094
2-Methylnaphthalene	U	0.094	ug/L	1	.2	0.19	0.073	0.094
Acenaphthylene	U	0.094	ug/L	1	.2	0.19	0.051	0.094
Acenaphthene	U	0.094	ug/L	1	.2	0.19	0.060	0.094
Fluorene	U	0.094	ug/L	1	.2	0.19	0.058	0.094
Phenanthrene	U	0.094	ug/L	1	.2	0.19	0.048	0.094
Anthracene	U	0.094	ug/L	1	.2	0.19	0.042	0.094
Fluoranthene	U	0.094	ug/L	1	.2	0.19	0.069	0.094
Pyrene	U	0.094	ug/L	1	.2	0.19	0.056	0.094
Benzo(a)anthracene	U	0.094	ug/L	1	.2	0.19	0.043	0.094
Chrysene	U	0.094	ug/L	1	.2	0.19	0.034	0.094
Benzo(b)Fluoranthene	U	0.094	ug/L	1	.2	0.19	0.084	0.094
Benzo(k)fluoranthene	U	0.094	ug/L	1	.2	0.19	0.046	0.094
Benzo(a)pyrene	U	0.094	ug/L	1	.2	0.19	0.062	0.094
Indeno(1,2,3-cd)pyrene	U	0.094	ug/L	1	.2	0.19	0.049	0.094
Dibenzo(a,h)anthracene	U	0.094	ug/L	1	.2	0.19	0.066	0.094
Benzo(g,h,i)perylene	U	0.094	ug/L	1	.2	0.19	0.061	0.094
2-Methylnaphthalene-D10		48.5	%					
Fluorene-D10		48.8	%					
Pyrene-D10	*	52.1	%					

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Data File: \\target_server\gg\chem\gcms-v.i\V120823.b\V7637.D
Report Date: 29-Dec-2023 14:49

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-v.i\V120823.b\V7637.D
Lab Smp Id: SQ6179-1 Client Smp ID: SY-OBMW2-110823
Inj Date : 08-DEC-2023 14:35
Operator : EP Inst ID: gcms-v.i
Smp Info : SQ6179-1
Misc Info : WG346651,WG345459,WG346507-4
Comment :
Method : \\target_server\gg\chem\gcms-v.i\V120823.b\VSPSIM21.m
Meth Date : 11-Dec-2023 07:52 epelletier Quant Type: ISTD
Cal Date : 06-DEC-2023 13:50 Cal File: V7607.D
Als bottle: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pahplus.sub
Target Version: 4.12
Processing Host: INSPIRON1

Concentration Formula: Amt * DF * Uf*(Vt/Vo)*1000 * CpndVariable

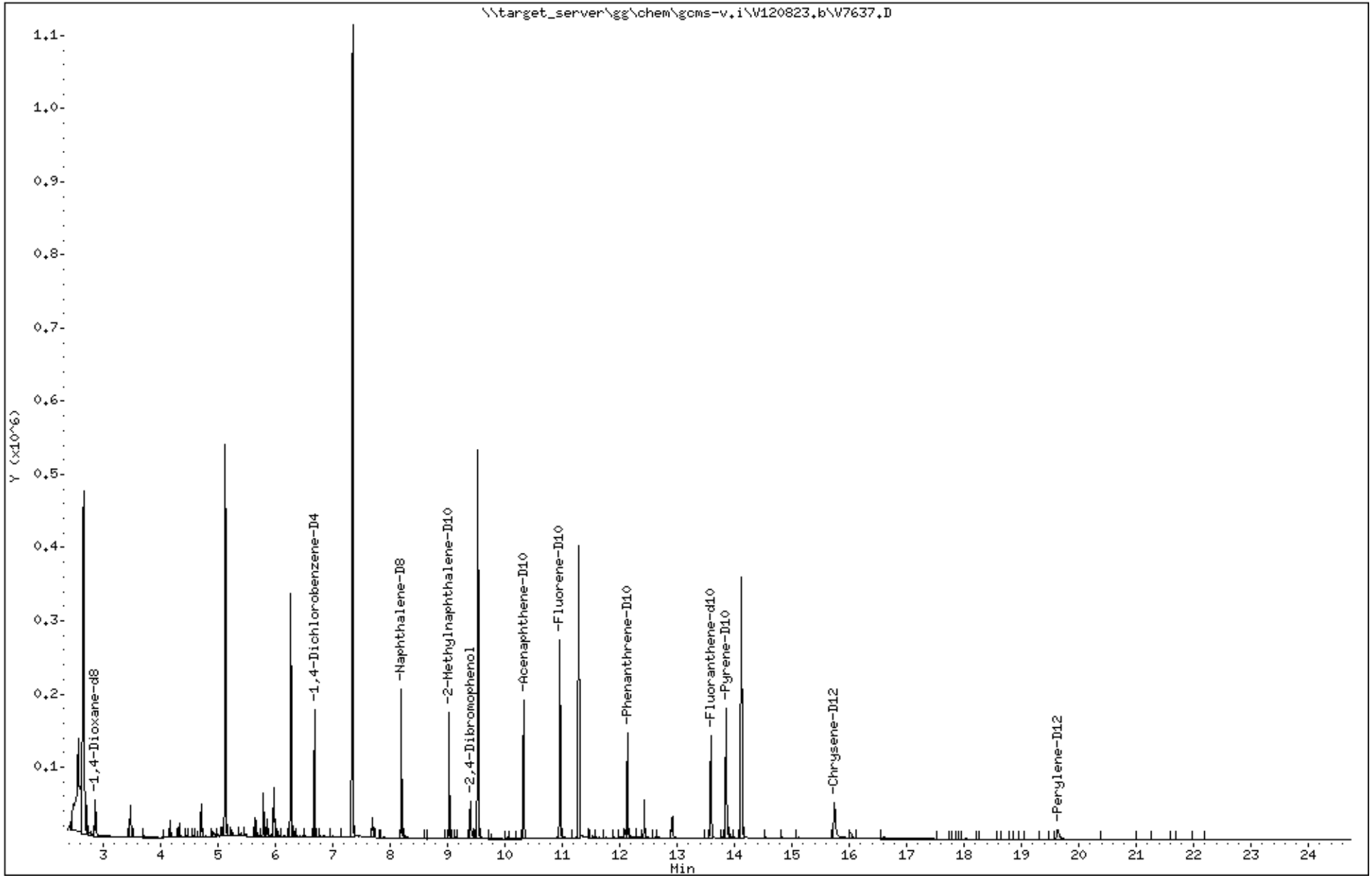
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.060	Sample Volume (L)
Cpnd Variable		Local Compound Variable

		QUANT SIG					CONCENTRATIONS ON-COLUMN	FINAL	
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/ml)	(ug/L)	REVIEW CODE
$	1 1,4-Dioxane-d8	96	2.874	2.833	(0.278)	47148	1.07577	1.01(QH)	
*	10 1,4-Dichlorobenzene-D4	152	6.687	6.676	(1.000)	55005	0.80000	(aQ)	
*	27 Naphthalene-D8	136	8.196	8.196	(1.000)	176689	0.80000	(a)	
$	33 2-Methylnaphthalene-D10	152	9.028	9.028	(1.101)	101392	0.96981	0.915(a)	
$	38 2,4-Dibromophenol	252	9.408	9.408	(0.910)	38623	1.00833	0.951	
*	48 Acenaphthene-D10	164	10.333	10.333	(1.000)	81364	0.80000	(a)	
$	56 Fluorene-D10	174	10.962	10.962	(1.061)	107342	0.97598	0.921(a)	
*	66 Phenanthrene-D10	188	12.137	12.137	(1.000)	129357	0.80000	(a)	
$	71 Fluoranthene-d10	212	13.594	13.604	(1.120)	107813	0.99667	0.940(R)	
$	73 Pyrene-D10	212	13.860	13.871	(0.880)	121931	1.04294	0.984(R)	
*	78 Chrysene-D12	240	15.748	15.769	(1.000)	60373	0.80000	(a)	
*	85 Perylene-D12	264	19.645	19.676	(1.000)	38600	0.80000	(a)	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.
H - Operator selected an alternate compound hit.

Data File: \\target_server\gg\chem\gcms-v.i\V120823.b\V7637.D
Date : 08-DEC-2023 14:35
Client ID: SY-OBMW2-110823
Instrument: gcms-v.i
Sample Info: SQ6179-1
Volume Injected (uL): 1.0
Operator: EP
Column phase: Rxi-SVOCms
Column diameter: 0.25



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ANALYTICAL SERVICES

Report of Analytical Results

SDG: SQ6179
Lab ID: SQ6179-2
Client ID: SY-OBMW1-110823
Matrix: AQ
Lab File ID: V7638.D

Sample Date: 08-NOV-23
Extract Date: 15-NOV-23
Extracted By: NH/CMW
Extraction Method: SW846 3510C
Lab Prep Batch: WG345459

Report Date: 29-DEC-23
Analysis Date: 08-DEC-23
Analyst: EP
Analysis Method: SW846 8270D SIM
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	0.093	ug/L	1	.2	0.19	0.060	0.093
2-Methylnaphthalene	U	0.093	ug/L	1	.2	0.19	0.072	0.093
Acenaphthylene	U	0.093	ug/L	1	.2	0.19	0.050	0.093
Acenaphthene	U	0.093	ug/L	1	.2	0.19	0.060	0.093
Fluorene	U	0.093	ug/L	1	.2	0.19	0.057	0.093
Phenanthrene	U	0.093	ug/L	1	.2	0.19	0.048	0.093
Anthracene	U	0.093	ug/L	1	.2	0.19	0.041	0.093
Fluoranthene	U	0.093	ug/L	1	.2	0.19	0.068	0.093
Pyrene	U	0.093	ug/L	1	.2	0.19	0.055	0.093
Benzo(a)anthracene	U	0.093	ug/L	1	.2	0.19	0.043	0.093
Chrysene	U	0.093	ug/L	1	.2	0.19	0.034	0.093
Benzo(b)Fluoranthene	U	0.093	ug/L	1	.2	0.19	0.083	0.093
Benzo(k)fluoranthene	U	0.093	ug/L	1	.2	0.19	0.046	0.093
Benzo(a)pyrene	U	0.093	ug/L	1	.2	0.19	0.062	0.093
Indeno(1,2,3-cd)pyrene	U	0.093	ug/L	1	.2	0.19	0.048	0.093
Dibenzo(a,h)anthracene	U	0.093	ug/L	1	.2	0.19	0.065	0.093
Benzo(g,h,i)perylene	U	0.093	ug/L	1	.2	0.19	0.061	0.093
2-Methylnaphthalene-D10	*	99.7	%					
Fluorene-D10		92.7	%					
Pyrene-D10		108.	%					

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Data File: \\target_server\gg\chem\gcms-v.i\V120823.b\V7638.D
Report Date: 29-Dec-2023 14:49

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Data file : \\target_server\gg\chem\gcms-v.i\V120823.b\V7638.D
Lab Smp Id: SQ6179-2 Client Smp ID: SY-OBMW1-110823
Inj Date : 08-DEC-2023 15:08
Operator : EP Inst ID: gcms-v.i
Smp Info : SQ6179-2
Misc Info : WG346651,WG345459,WG346507-4
Comment :
Method : \\target_server\gg\chem\gcms-v.i\V120823.b\VSPSIM21.m
Meth Date : 11-Dec-2023 07:52 epelletier Quant Type: ISTD
Cal Date : 06-DEC-2023 13:50 Cal File: V7607.D
Als bottle: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pahplus.sub
Target Version: 4.12
Processing Host: INSPIRON1

Concentration Formula: Amt * DF * Uf*(Vt/Vo)*1000 * CpndVariable

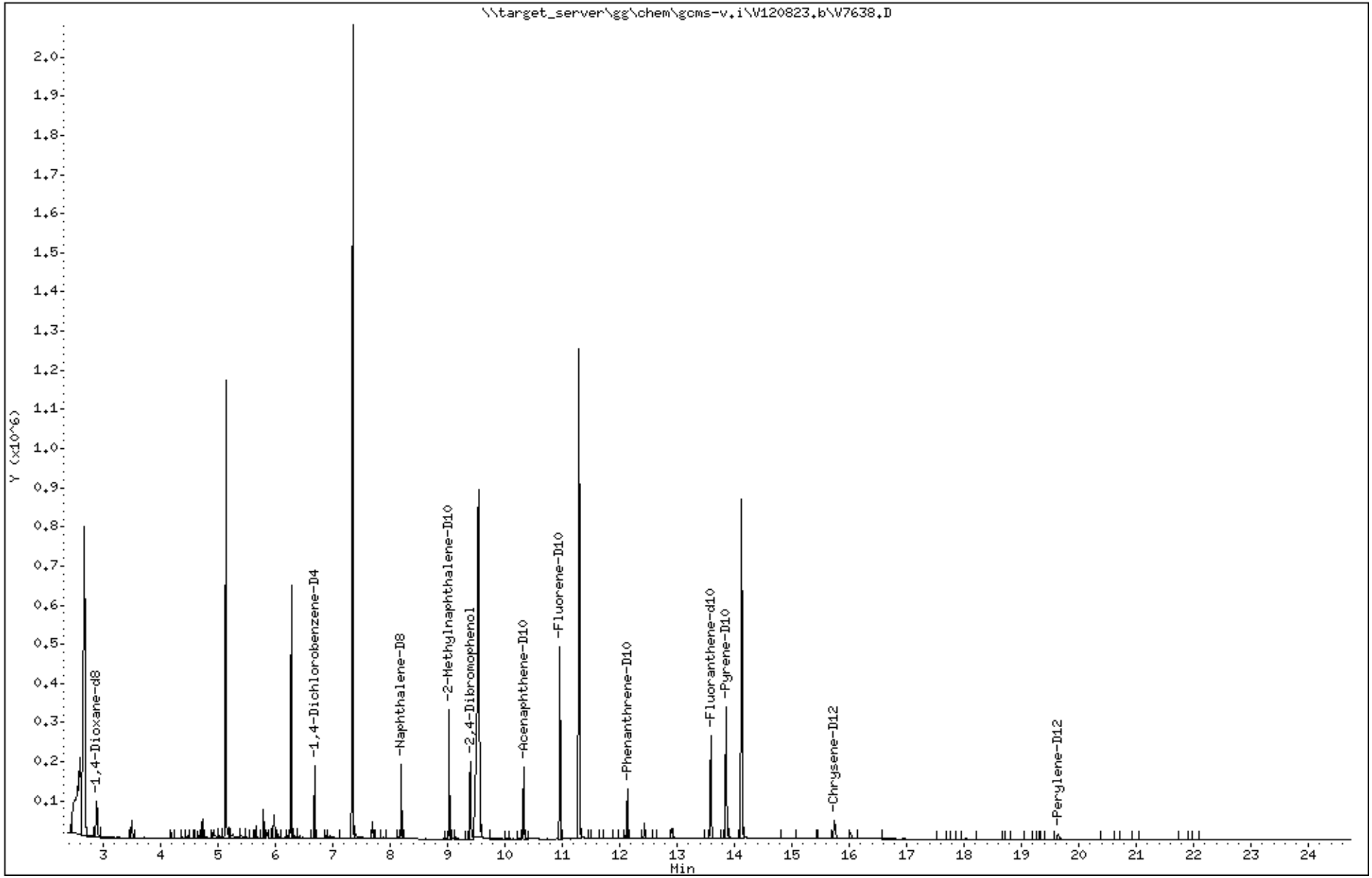
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.070	Sample Volume (L)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/L)	REVIEW CODE
$	1 1,4-Dioxane-d8	96	2.895	2.833	(0.280)	91381	2.29524	2.14(QH)	
*	10 1,4-Dichlorobenzene-D4	152	6.687	6.676	(1.000)	53615	0.80000	(aQ)	
*	27 Naphthalene-D8	136	8.196	8.196	(1.000)	163518	0.80000	(a)	
$	33 2-Methylnaphthalene-D10	152	9.028	9.028	(1.101)	192976	1.99449	1.86(R)	
$	38 2,4-Dibromophenol	252	9.408	9.408	(0.910)	137548	3.95302	3.69	
*	48 Acenaphthene-D10	164	10.333	10.333	(1.000)	73912	0.80000	(a)	
$	56 Fluorene-D10	174	10.962	10.962	(1.061)	185311	1.85476	1.73	
*	66 Phenanthrene-D10	188	12.137	12.137	(1.000)	109850	0.80000	(a)	
$	71 Fluoranthene-d10	212	13.594	13.604	(1.120)	202884	2.20861	2.06	
$	73 Pyrene-D10	212	13.861	13.871	(0.880)	233032	2.16141	2.02	
*	78 Chrysene-D12	240	15.749	15.769	(1.000)	55676	0.80000	(a)	
*	85 Perylene-D12	264	19.645	19.676	(1.000)	35492	0.80000	(a)	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.
H - Operator selected an alternate compound hit.

Data File: \\target_server\gg\chem\gcms-v.i\V120823.b\V7638.D
Date : 08-DEC-2023 15:08
Client ID: SY-OBMW1-110823
Instrument: gcms-v.i
Sample Info: SQ6179-2
Volume Injected (uL): 1.0
Operator: EP
Column phase: Rxi-SVOCms
Column diameter: 0.25



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ANALYTICAL SERVICES

Report of Analytical Results

SDG: SQ6179
Lab ID: SQ6179-3
Client ID: SY-OBMW9-110823
Matrix: AQ
Lab File ID: V7639.D

Sample Date: 08-NOV-23
Extract Date: 15-NOV-23
Extracted By: NH/CMW
Extraction Method: SW846 3510C
Lab Prep Batch: WG345459

Report Date: 29-DEC-23
Analysis Date: 08-DEC-23
Analyst: EP
Analysis Method: SW846 8270D SIM
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	0.094	ug/L	1	.2	0.19	0.060	0.094
2-Methylnaphthalene	U	0.094	ug/L	1	.2	0.19	0.073	0.094
Acenaphthylene	U	0.094	ug/L	1	.2	0.19	0.051	0.094
Acenaphthene	U	0.094	ug/L	1	.2	0.19	0.060	0.094
Fluorene	U	0.094	ug/L	1	.2	0.19	0.058	0.094
Phenanthrene	U	0.094	ug/L	1	.2	0.19	0.048	0.094
Anthracene	U	0.094	ug/L	1	.2	0.19	0.042	0.094
Fluoranthene	U	0.094	ug/L	1	.2	0.19	0.069	0.094
Pyrene	U	0.094	ug/L	1	.2	0.19	0.056	0.094
Benzo(a)anthracene	U	0.094	ug/L	1	.2	0.19	0.043	0.094
Chrysene	U	0.094	ug/L	1	.2	0.19	0.034	0.094
Benzo(b)Fluoranthene	U	0.094	ug/L	1	.2	0.19	0.084	0.094
Benzo(k)fluoranthene	U	0.094	ug/L	1	.2	0.19	0.046	0.094
Benzo(a)pyrene	U	0.094	ug/L	1	.2	0.19	0.062	0.094
Indeno(1,2,3-cd)pyrene	U	0.094	ug/L	1	.2	0.19	0.049	0.094
Dibenzo(a,h)anthracene	U	0.094	ug/L	1	.2	0.19	0.066	0.094
Benzo(g,h,i)perylene	U	0.094	ug/L	1	.2	0.19	0.061	0.094
2-Methylnaphthalene-D10		84.5	%					
Fluorene-D10		81.6	%					
Pyrene-D10		96.2	%					

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Data File: \\target_server\gg\chem\gcms-v.i\V120823.b\V7639.D
Report Date: 29-Dec-2023 14:49

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Data file : \\target_server\gg\chem\gcms-v.i\V120823.b\V7639.D
Lab Smp Id: SQ6179-3 Client Smp ID: SY-OBMW9-110823
Inj Date : 08-DEC-2023 15:41
Operator : EP Inst ID: gcms-v.i
Smp Info : SQ6179-3
Misc Info : WG346651,WG345459,WG346507-4
Comment :
Method : \\target_server\gg\chem\gcms-v.i\V120823.b\VSPSIM21.m
Meth Date : 11-Dec-2023 07:52 epelletier Quant Type: ISTD
Cal Date : 06-DEC-2023 13:50 Cal File: V7607.D
Als bottle: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pahplus.sub
Target Version: 4.12
Processing Host: INSPIRON1

Concentration Formula: Amt * DF * Uf*(Vt/Vo)*1000 * CpndVariable

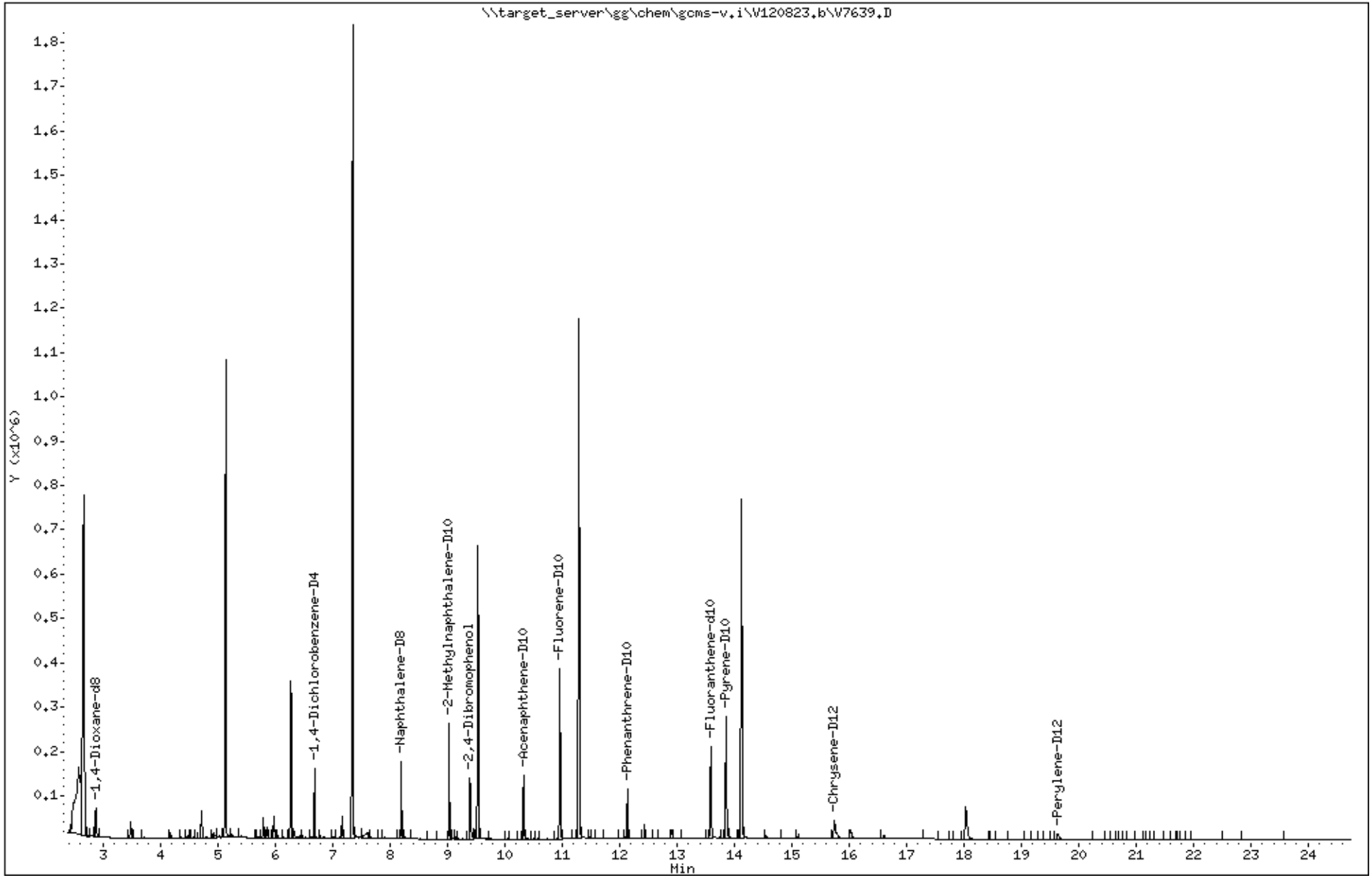
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.060	Sample Volume (L)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/L)	REVIEW CODE
$	1 1,4-Dioxane-d8	96	2.885	2.833	(0.279)	62159	1.74312	1.64(QH)	
*	10 1,4-Dichlorobenzene-D4	152	6.687	6.676	(1.000)	48434	0.80000	(aQ)	
*	27 Naphthalene-D8	136	8.196	8.196	(1.000)	149119	0.80000	(a)	
$	33 2-Methylnaphthalene-D10	152	9.028	9.028	(1.101)	149129	1.69014	1.59	
$	38 2,4-Dibromophenol	252	9.408	9.408	(0.910)	105072	3.37141	3.18	
*	48 Acenaphthene-D10	164	10.333	10.333	(1.000)	66201	0.80000	(a)	
$	56 Fluorene-D10	174	10.962	10.962	(1.061)	146132	1.63299	1.54	
*	66 Phenanthrene-D10	188	12.137	12.137	(1.000)	98736	0.80000	(a)	
$	71 Fluoranthene-d10	212	13.594	13.604	(1.120)	158939	1.92498	1.82	
$	73 Pyrene-D10	212	13.861	13.871	(0.880)	184161	1.92388	1.81	
*	78 Chrysene-D12	240	15.749	15.769	(1.000)	49432	0.80000	(a)	
*	85 Perylene-D12	264	19.645	19.676	(1.000)	36482	0.80000	(a)	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
H - Operator selected an alternate compound hit.

Data File: \\target_server\gg\chem\gcms-v.i\V120823.b\V7639.D
Date : 08-DEC-2023 15:41
Client ID: SY-OBMW9-110823
Instrument: gcms-v.i
Sample Info: SQ6179-3
Volume Injected (uL): 1.0
Operator: EP
Column phase: Rxi-SVOCms
Column diameter: 0.25



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ANALYTICAL SERVICES

Report of Analytical Results

SDG: SQ6179
Lab ID: SQ6179-4
Client ID: SY-BRMW5-29-44-110823
Matrix: AQ
Lab File ID: V7640.D

Sample Date: 08-NOV-23
Extract Date: 15-NOV-23
Extracted By: NH/CMW
Extraction Method: SW846 3510C
Lab Prep Batch: WG345459

Report Date: 29-DEC-23
Analysis Date: 08-DEC-23
Analyst: EP
Analysis Method: SW846 8270D SIM
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	0.093	ug/L	1	.2	0.19	0.060	0.093
2-Methylnaphthalene	U	0.093	ug/L	1	.2	0.19	0.072	0.093
Acenaphthylene	U	0.093	ug/L	1	.2	0.19	0.050	0.093
Acenaphthene	U	0.093	ug/L	1	.2	0.19	0.060	0.093
Fluorene	U	0.093	ug/L	1	.2	0.19	0.057	0.093
Phenanthrene	U	0.093	ug/L	1	.2	0.19	0.048	0.093
Anthracene	U	0.093	ug/L	1	.2	0.19	0.041	0.093
Fluoranthene	U	0.093	ug/L	1	.2	0.19	0.068	0.093
Pyrene	U	0.093	ug/L	1	.2	0.19	0.055	0.093
Benzo(a)anthracene	U	0.093	ug/L	1	.2	0.19	0.043	0.093
Chrysene	U	0.093	ug/L	1	.2	0.19	0.034	0.093
Benzo(b)Fluoranthene	U	0.093	ug/L	1	.2	0.19	0.083	0.093
Benzo(k)fluoranthene	U	0.093	ug/L	1	.2	0.19	0.046	0.093
Benzo(a)pyrene	U	0.093	ug/L	1	.2	0.19	0.062	0.093
Indeno(1,2,3-cd)pyrene	U	0.093	ug/L	1	.2	0.19	0.048	0.093
Dibenzo(a,h)anthracene	U	0.093	ug/L	1	.2	0.19	0.065	0.093
Benzo(g,h,i)perylene	U	0.093	ug/L	1	.2	0.19	0.061	0.093
2-Methylnaphthalene-D10		47.8	%					
Fluorene-D10		46.3	%					
Pyrene-D10	*	50.1	%					

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Data File: \\target_server\gg\chem\gcms-v.i\V120823.b\V7640.D
Report Date: 29-Dec-2023 14:50

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Data file : \\target_server\gg\chem\gcms-v.i\V120823.b\V7640.D
Lab Smp Id: SQ6179-4 Client Smp ID: Y-BRMW5-29-44-11082
Inj Date : 08-DEC-2023 16:14
Operator : EP Inst ID: gcms-v.i
Smp Info : SQ6179-4
Misc Info : WG346651,WG345459,WG346507-4
Comment :
Method : \\target_server\gg\chem\gcms-v.i\V120823.b\VSPSIM21.m
Meth Date : 11-Dec-2023 07:52 epelletier Quant Type: ISTD
Cal Date : 06-DEC-2023 13:50 Cal File: V7607.D
Als bottle: 10
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pahplus.sub
Target Version: 4.12
Processing Host: INSPIRON1

Concentration Formula: Amt * DF * Uf*(Vt/Vo)*1000 * CpndVariable

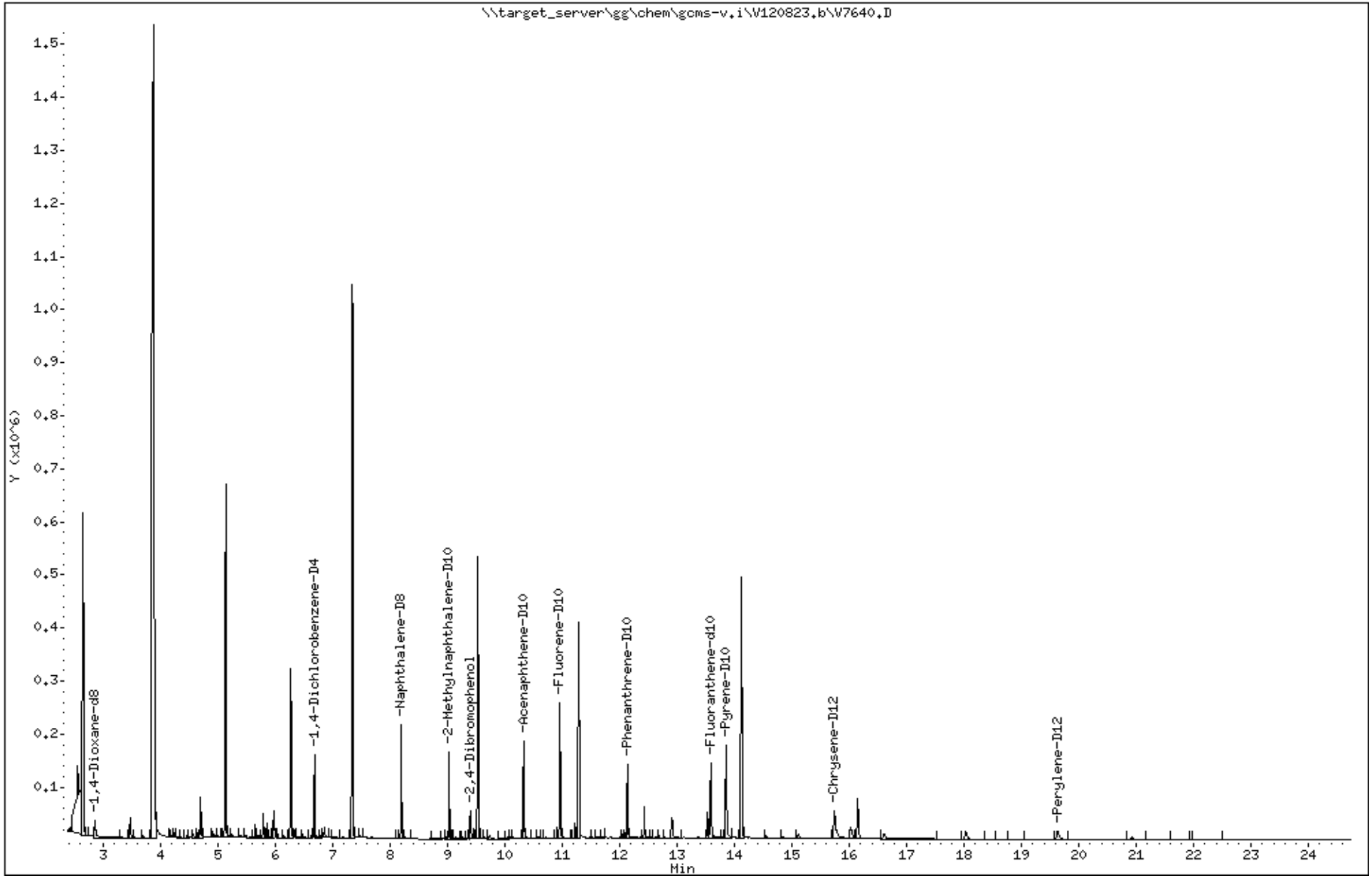
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.070	Sample Volume (L)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/L)	REVIEW CODE
$	1 1,4-Dioxane-d8	96	2.864	2.833	(0.277)	30646	0.72866	0.681(aQ)	
*	10 1,4-Dichlorobenzene-D4	152	6.687	6.676	(1.000)	53430	0.80000	(aQ)	
*	27 Naphthalene-D8	136	8.196	8.196	(1.000)	171531	0.80000	(a)	
$	33 2-Methylnaphthalene-D10	152	9.028	9.028	(1.101)	96946	0.95517	0.893(a)	
$	38 2,4-Dibromophenol	252	9.408	9.408	(0.910)	38651	1.05150	0.983	
*	48 Acenaphthene-D10	164	10.333	10.333	(1.000)	78080	0.80000	(a)	
$	56 Fluorene-D10	174	10.962	10.962	(1.061)	97805	0.92667	0.866(a)	
*	66 Phenanthrene-D10	188	12.137	12.137	(1.000)	122310	0.80000	(a)	
$	71 Fluoranthene-d10	212	13.594	13.604	(1.120)	105772	1.03414	0.966	
$	73 Pyrene-D10	212	13.860	13.871	(0.880)	119089	1.00183	0.936(R)	
*	78 Chrysene-D12	240	15.748	15.769	(1.000)	61386	0.80000	(a)	
*	85 Perylene-D12	264	19.645	19.676	(1.000)	45470	0.80000	(a)	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.

Data File: \\target_server\gg\chem\gcms-v.i\V120823.b\V7640.D
Date : 08-DEC-2023 16:14
Client ID: Y-BRMW5-29-44-11082
Instrument: gcms-v.i
Sample Info: SQ6179-4
Volume Injected (uL): 1.0
Operator: EP
Column phase: Rxi-SVOCms
Column diameter: 0.25



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ANALYTICAL SERVICES

Report of Analytical Results

SDG: SQ6179
Lab ID: SQ6179-5
Client ID: SY-BRMW5-56-66-110823
Matrix: AQ
Lab File ID: V7641.D

Sample Date: 08-NOV-23
Extract Date: 15-NOV-23
Extracted By: NH/CMW
Extraction Method: SW846 3510C
Lab Prep Batch: WG345459

Report Date: 29-DEC-23
Analysis Date: 08-DEC-23
Analyst: EP
Analysis Method: SW846 8270D SIM
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	0.093	ug/L	1	.2	0.19	0.060	0.093
2-Methylnaphthalene	U	0.093	ug/L	1	.2	0.19	0.072	0.093
Acenaphthylene	U	0.093	ug/L	1	.2	0.19	0.050	0.093
Acenaphthene	U	0.093	ug/L	1	.2	0.19	0.060	0.093
Fluorene	U	0.093	ug/L	1	.2	0.19	0.057	0.093
Phenanthrene	U	0.093	ug/L	1	.2	0.19	0.048	0.093
Anthracene	U	0.093	ug/L	1	.2	0.19	0.041	0.093
Fluoranthene	U	0.093	ug/L	1	.2	0.19	0.068	0.093
Pyrene	U	0.093	ug/L	1	.2	0.19	0.055	0.093
Benzo(a)anthracene	U	0.093	ug/L	1	.2	0.19	0.043	0.093
Chrysene	U	0.093	ug/L	1	.2	0.19	0.034	0.093
Benzo(b)Fluoranthene	U	0.093	ug/L	1	.2	0.19	0.083	0.093
Benzo(k)fluoranthene	U	0.093	ug/L	1	.2	0.19	0.046	0.093
Benzo(a)pyrene	U	0.093	ug/L	1	.2	0.19	0.062	0.093
Indeno(1,2,3-cd)pyrene	U	0.093	ug/L	1	.2	0.19	0.048	0.093
Dibenzo(a,h)anthracene	U	0.093	ug/L	1	.2	0.19	0.065	0.093
Benzo(g,h,i)perylene	U	0.093	ug/L	1	.2	0.19	0.061	0.093
2-Methylnaphthalene-D10		69.3	%					
Fluorene-D10		67.6	%					
Pyrene-D10		64.2	%					

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Data File: \\target_server\gg\chem\gcms-v.i\V120823.b\V7641.D
Report Date: 29-Dec-2023 14:50

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Data file : \\target_server\gg\chem\gcms-v.i\V120823.b\V7641.D
Lab Smp Id: SQ6179-5 Client Smp ID: Y-BRMW5-56-66-11082
Inj Date : 08-DEC-2023 16:47
Operator : EP Inst ID: gcms-v.i
Smp Info : SQ6179-5
Misc Info : WG346651,WG345459,WG346507-4
Comment :
Method : \\target_server\gg\chem\gcms-v.i\V120823.b\VSPSIM21.m
Meth Date : 11-Dec-2023 07:52 epelletier Quant Type: ISTD
Cal Date : 06-DEC-2023 13:50 Cal File: V7607.D
Als bottle: 11
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pahplus.sub
Target Version: 4.12
Processing Host: INSPIRON1

Concentration Formula: Amt * DF * Uf*(Vt/Vo)*1000 * CpndVariable

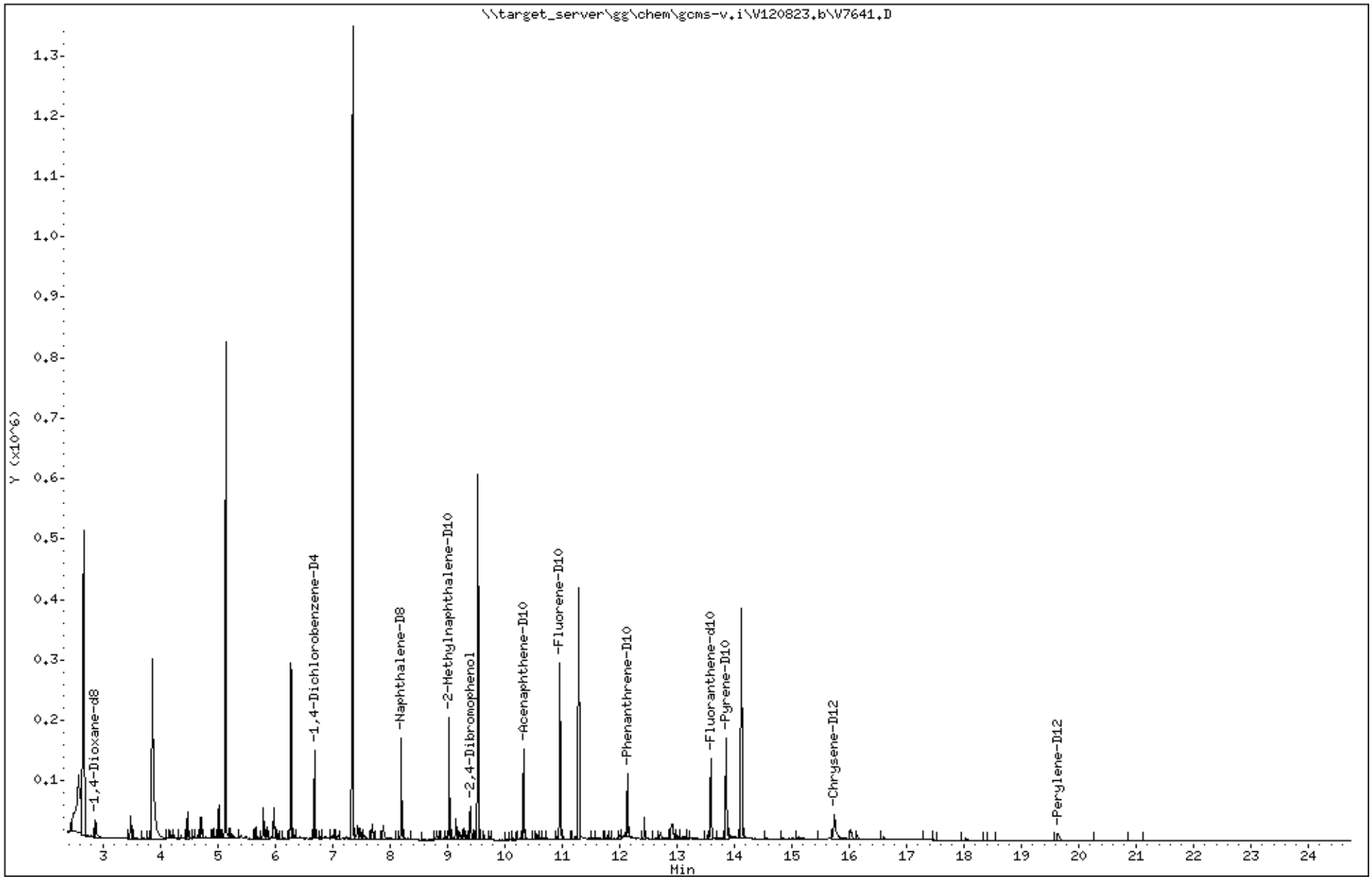
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.070	Sample Volume (L)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/L)	REVIEW CODE
$	1 1,4-Dioxane-d8	96	2.885	2.833	(0.279)	31910	0.93788	0.876(aQ)	
*	10 1,4-Dichlorobenzene-D4	152	6.687	6.676	(1.000)	46044	0.80000	(aQ)	
*	27 Naphthalene-D8	136	8.196	8.196	(1.000)	144055	0.80000	(a)	
$	33 2-Methylnaphthalene-D10	152	9.028	9.028	(1.101)	118110	1.38565	1.29	
$	38 2,4-Dibromophenol	252	9.408	9.408	(0.910)	42037	1.41368	1.32	
*	48 Acenaphthene-D10	164	10.333	10.333	(1.000)	63164	0.80000	(a)	
$	56 Fluorene-D10	174	10.962	10.962	(1.061)	115375	1.35128	1.26	
*	66 Phenanthrene-D10	188	12.137	12.137	(1.000)	91883	0.80000	(a)	
$	71 Fluoranthene-d10	212	13.594	13.604	(1.120)	100619	1.30953	1.22	
$	73 Pyrene-D10	212	13.861	13.871	(0.880)	113995	1.28358	1.20	
*	78 Chrysene-D12	240	15.749	15.769	(1.000)	45862	0.80000	(a)	
*	85 Perylene-D12	264	19.645	19.676	(1.000)	32716	0.80000	(a)	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.

Data File: \\target_server\gg\chem\gcms-v.i\V120823.b\V7641.D
Date : 08-DEC-2023 16:47
Client ID: Y-BRMW5-56-66-11082
Instrument: gcms-v.i
Sample Info: SQ6179-5
Volume Injected (uL): 1.0
Operator: EP
Column phase: Rxi-SVOCms
Column diameter: 0.25



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ANALYTICAL SERVICES

Report of Analytical Results

SDG: SQ6179
Lab ID: SQ6179-6
Client ID: SY-BRMW5-123-133-110823
Matrix: AQ
Lab File ID: V7642.D

Sample Date: 08-NOV-23
Extract Date: 15-NOV-23
Extracted By: NH/CMW
Extraction Method: SW846 3510C
Lab Prep Batch: WG345459

Report Date: 29-DEC-23
Analysis Date: 08-DEC-23
Analyst: EP
Analysis Method: SW846 8270D SIM
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	0.093	ug/L	1	.2	0.19	0.060	0.093
2-Methylnaphthalene	U	0.093	ug/L	1	.2	0.19	0.072	0.093
Acenaphthylene	U	0.093	ug/L	1	.2	0.19	0.050	0.093
Acenaphthene	U	0.093	ug/L	1	.2	0.19	0.060	0.093
Fluorene	U	0.093	ug/L	1	.2	0.19	0.057	0.093
Phenanthrene	U	0.093	ug/L	1	.2	0.19	0.048	0.093
Anthracene	U	0.093	ug/L	1	.2	0.19	0.041	0.093
Fluoranthene	U	0.093	ug/L	1	.2	0.19	0.068	0.093
Pyrene	U	0.093	ug/L	1	.2	0.19	0.055	0.093
Benzo(a)anthracene	U	0.093	ug/L	1	.2	0.19	0.043	0.093
Chrysene	U	0.093	ug/L	1	.2	0.19	0.034	0.093
Benzo(b)Fluoranthene	U	0.093	ug/L	1	.2	0.19	0.083	0.093
Benzo(k)fluoranthene	U	0.093	ug/L	1	.2	0.19	0.046	0.093
Benzo(a)pyrene	U	0.093	ug/L	1	.2	0.19	0.062	0.093
Indeno(1,2,3-cd)pyrene	U	0.093	ug/L	1	.2	0.19	0.048	0.093
Dibenzo(a,h)anthracene	U	0.093	ug/L	1	.2	0.19	0.065	0.093
Benzo(g,h,i)perylene	U	0.093	ug/L	1	.2	0.19	0.061	0.093
2-Methylnaphthalene-D10	*	95.6	%					
Fluorene-D10		92.0	%					
Pyrene-D10		106.	%					

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Data File: \\target_server\gg\chem\gcms-v.i\V120823.b\V7642.D
Report Date: 29-Dec-2023 14:50

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Data file : \\target_server\gg\chem\gcms-v.i\V120823.b\V7642.D
Lab Smp Id: SQ6179-6 Client Smp ID: Y-BRMW5-123-133-110
Inj Date : 08-DEC-2023 17:20
Operator : EP Inst ID: gcms-v.i
Smp Info : SQ6179-6
Misc Info : WG346651,WG345459,WG346507-4
Comment :
Method : \\target_server\gg\chem\gcms-v.i\V120823.b\VSPSIM21.m
Meth Date : 11-Dec-2023 07:52 epelletier Quant Type: ISTD
Cal Date : 06-DEC-2023 13:50 Cal File: V7607.D
Als bottle: 12
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pahplus.sub
Target Version: 4.12
Processing Host: INSPIRON1

Concentration Formula: Amt * DF * Uf*(Vt/Vo)*1000 * CpndVariable

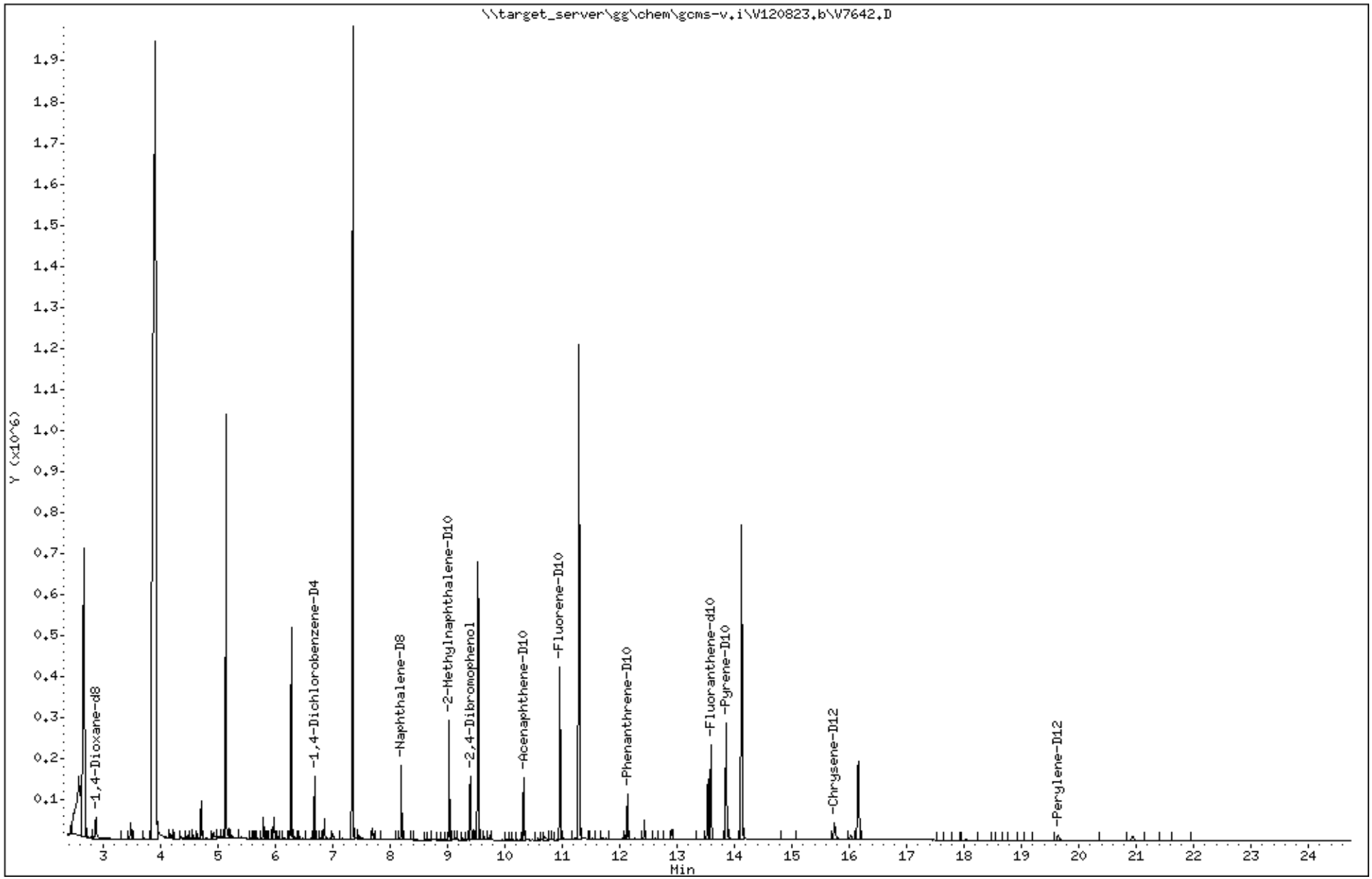
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.070	Sample Volume (L)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/L)	REVIEW CODE
$	1 1,4-Dioxane-d8	96	2.885	2.833	(0.279)	52875	1.51686	1.42(Q)	
*	10 1,4-Dichlorobenzene-D4	152	6.687	6.676	(1.000)	48081	0.80000	(aQ)	
*	27 Naphthalene-D8	136	8.196	8.196	(1.000)	150729	0.80000	(a)	
$	33 2-Methylnaphthalene-D10	152	9.028	9.028	(1.101)	170522	1.91195	1.79(R)	
$	38 2,4-Dibromophenol	252	9.408	9.408	(0.910)	110849	3.63856	3.40	
*	48 Acenaphthene-D10	164	10.333	10.333	(1.000)	64713	0.80000	(a)	
$	56 Fluorene-D10	174	10.962	10.962	(1.061)	160949	1.83992	1.72	
*	66 Phenanthrene-D10	188	12.137	12.137	(1.000)	94014	0.80000	(a)	
$	71 Fluoranthene-d10	212	13.594	13.604	(1.120)	173044	2.20107	2.06	
$	73 Pyrene-D10	212	13.861	13.871	(0.880)	196438	2.12052	1.98	
*	78 Chrysene-D12	240	15.749	15.769	(1.000)	47838	0.80000	(a)	
*	85 Perylene-D12	264	19.645	19.676	(1.000)	34643	0.80000	(a)	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.

Data File: \\target_server\gg\chem\gcms-v.i\V120823.b\V7642.D
Date : 08-DEC-2023 17:20
Client ID: Y-BRMW5-123-133-110
Instrument: gcms-v.i
Sample Info: SQ6179-6
Volume Injected (uL): 1.0
Operator: EP
Column phase: Rxi-SVOCms
Column diameter: 0.25



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Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

SDG: SQ6179
Lab ID: SQ6179-7
Client ID: SY-OBMW8-110823
Matrix: AQ
Lab File ID: V7643.D

Sample Date: 08-NOV-23
Extract Date: 15-NOV-23
Extracted By: NH/CMW
Extraction Method: SW846 3510C
Lab Prep Batch: WG345459

Report Date: 29-DEC-23
Analysis Date: 08-DEC-23
Analyst: EP
Analysis Method: SW846 8270D SIM
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	0.093	ug/L	1	.2	0.19	0.060	0.093
2-Methylnaphthalene	U	0.093	ug/L	1	.2	0.19	0.072	0.093
Acenaphthylene	U	0.093	ug/L	1	.2	0.19	0.050	0.093
Acenaphthene	U	0.093	ug/L	1	.2	0.19	0.060	0.093
Fluorene	U	0.093	ug/L	1	.2	0.19	0.057	0.093
Phenanthrene	U	0.093	ug/L	1	.2	0.19	0.048	0.093
Anthracene	U	0.093	ug/L	1	.2	0.19	0.041	0.093
Fluoranthene	U	0.093	ug/L	1	.2	0.19	0.068	0.093
Pyrene	U	0.093	ug/L	1	.2	0.19	0.055	0.093
Benzo(a)anthracene	U	0.093	ug/L	1	.2	0.19	0.043	0.093
Chrysene	U	0.093	ug/L	1	.2	0.19	0.034	0.093
Benzo(b)Fluoranthene	U	0.093	ug/L	1	.2	0.19	0.083	0.093
Benzo(k)fluoranthene	U	0.093	ug/L	1	.2	0.19	0.046	0.093
Benzo(a)pyrene	U	0.093	ug/L	1	.2	0.19	0.062	0.093
Indeno(1,2,3-cd)pyrene	U	0.093	ug/L	1	.2	0.19	0.048	0.093
Dibenzo(a,h)anthracene	U	0.093	ug/L	1	.2	0.19	0.065	0.093
Benzo(g,h,i)perylene	U	0.093	ug/L	1	.2	0.19	0.061	0.093
2-Methylnaphthalene-D10		91.4	%					
Fluorene-D10		87.3	%					
Pyrene-D10		92.2	%					

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Data File: \\target_server\gg\chem\gcms-v.i\V120823.b\V7643.D
Report Date: 29-Dec-2023 14:50

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Data file : \\target_server\gg\chem\gcms-v.i\V120823.b\V7643.D
Lab Smp Id: SQ6179-7 Client Smp ID: SY-OBMW8-110823
Inj Date : 08-DEC-2023 17:53
Operator : EP Inst ID: gcms-v.i
Smp Info : SQ6179-7
Misc Info : WG346651,WG345459,WG346507-4
Comment :
Method : \\target_server\gg\chem\gcms-v.i\V120823.b\VSPSIM21.m
Meth Date : 11-Dec-2023 07:52 epelletier Quant Type: ISTD
Cal Date : 06-DEC-2023 13:50 Cal File: V7607.D
Als bottle: 13
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pahplus.sub
Target Version: 4.12
Processing Host: INSPIRON1

Concentration Formula: Amt * DF * Uf*(Vt/Vo)*1000 * CpndVariable

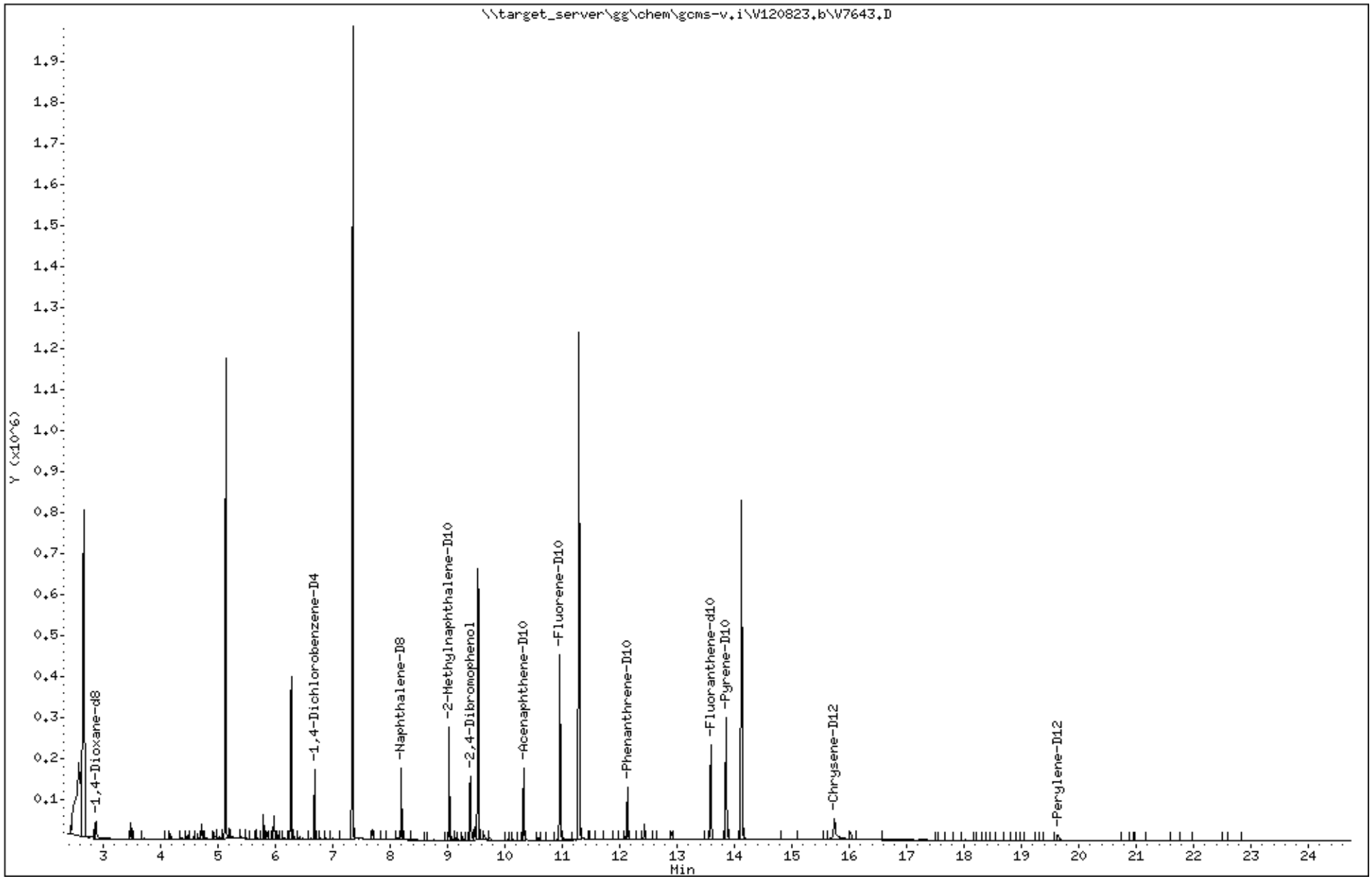
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.070	Sample Volume (L)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/L)	REVIEW CODE
$	1 1,4-Dioxane-d8	96	2.885	2.833	(0.279)	43751	1.12324	1.05(QH)	
*	10 1,4-Dichlorobenzene-D4	152	6.687	6.676	(1.000)	50595	0.80000	(aQ)	
*	27 Naphthalene-D8	136	8.196	8.196	(1.000)	157071	0.80000	(a)	
$	33 2-Methylnaphthalene-D10	152	9.028	9.028	(1.101)	169968	1.82880	1.71	
$	38 2,4-Dibromophenol	252	9.408	9.408	(0.910)	113362	3.33007	3.11	
*	48 Acenaphthene-D10	164	10.333	10.333	(1.000)	72311	0.80000	(a)	
$	56 Fluorene-D10	174	10.962	10.962	(1.061)	170715	1.74650	1.63	
*	66 Phenanthrene-D10	188	12.137	12.137	(1.000)	111629	0.80000	(a)	
$	71 Fluoranthene-d10	212	13.594	13.604	(1.120)	177306	1.89940	1.78	
$	73 Pyrene-D10	212	13.861	13.871	(0.880)	201987	1.84314	1.72	
*	78 Chrysene-D12	240	15.749	15.769	(1.000)	56592	0.80000	(a)	
*	85 Perylene-D12	264	19.645	19.676	(1.000)	35933	0.80000	(a)	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
H - Operator selected an alternate compound hit.

Data File: \\target_server\gg\chem\gcms-v.i\V120823.b\V7643.D
Date : 08-DEC-2023 17:53
Client ID: SY-OBMW8-110823
Instrument: gcms-v.i
Sample Info: SQ6179-7
Volume Injected (uL): 1.0
Operator: EP
Column phase: Rxi-SVOCms
Column diameter: 0.25



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ANALYTICAL SERVICES

Report of Analytical Results

SDG: SQ6179
Lab ID: SQ6179-8
Client ID: SY-OBMW11-110823
Matrix: AQ
Lab File ID: V7644.D

Sample Date: 08-NOV-23
Extract Date: 15-NOV-23
Extracted By: NH/CMW
Extraction Method: SW846 3510C
Lab Prep Batch: WG345459

Report Date: 29-DEC-23
Analysis Date: 08-DEC-23
Analyst: EP
Analysis Method: SW846 8270D SIM
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	0.093	ug/L	1	.2	0.19	0.060	0.093
2-Methylnaphthalene	U	0.093	ug/L	1	.2	0.19	0.072	0.093
Acenaphthylene	U	0.093	ug/L	1	.2	0.19	0.050	0.093
Acenaphthene	U	0.093	ug/L	1	.2	0.19	0.060	0.093
Fluorene	U	0.093	ug/L	1	.2	0.19	0.057	0.093
Phenanthrene	U	0.093	ug/L	1	.2	0.19	0.048	0.093
Anthracene	U	0.093	ug/L	1	.2	0.19	0.041	0.093
Fluoranthene	U	0.093	ug/L	1	.2	0.19	0.068	0.093
Pyrene	U	0.093	ug/L	1	.2	0.19	0.055	0.093
Benzo(a)anthracene	U	0.093	ug/L	1	.2	0.19	0.043	0.093
Chrysene	U	0.093	ug/L	1	.2	0.19	0.034	0.093
Benzo(b)Fluoranthene	U	0.093	ug/L	1	.2	0.19	0.083	0.093
Benzo(k)fluoranthene	U	0.093	ug/L	1	.2	0.19	0.046	0.093
Benzo(a)pyrene	U	0.093	ug/L	1	.2	0.19	0.062	0.093
Indeno(1,2,3-cd)pyrene	U	0.093	ug/L	1	.2	0.19	0.048	0.093
Dibenzo(a,h)anthracene	U	0.093	ug/L	1	.2	0.19	0.065	0.093
Benzo(g,h,i)perylene	U	0.093	ug/L	1	.2	0.19	0.061	0.093
2-Methylnaphthalene-D10	*	95.6	%					
Fluorene-D10		92.3	%					
Pyrene-D10		107.	%					

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Data File: \\target_server\gg\chem\gcms-v.i\V120823.b\V7644.D
Report Date: 29-Dec-2023 14:50

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Data file : \\target_server\gg\chem\gcms-v.i\V120823.b\V7644.D
Lab Smp Id: SQ6179-8 Client Smp ID: SY-OBMW11-110823
Inj Date : 08-DEC-2023 18:26
Operator : EP Inst ID: gcms-v.i
Smp Info : SQ6179-8
Misc Info : WG346651,WG345459,WG346507-4
Comment :
Method : \\target_server\gg\chem\gcms-v.i\V120823.b\VSPSIM21.m
Meth Date : 11-Dec-2023 07:52 epelletier Quant Type: ISTD
Cal Date : 06-DEC-2023 13:50 Cal File: V7607.D
Als bottle: 14
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pahplus.sub
Target Version: 4.12
Processing Host: INSPIRON1

Concentration Formula: Amt * DF * Uf*(Vt/Vo)*1000 * CpndVariable

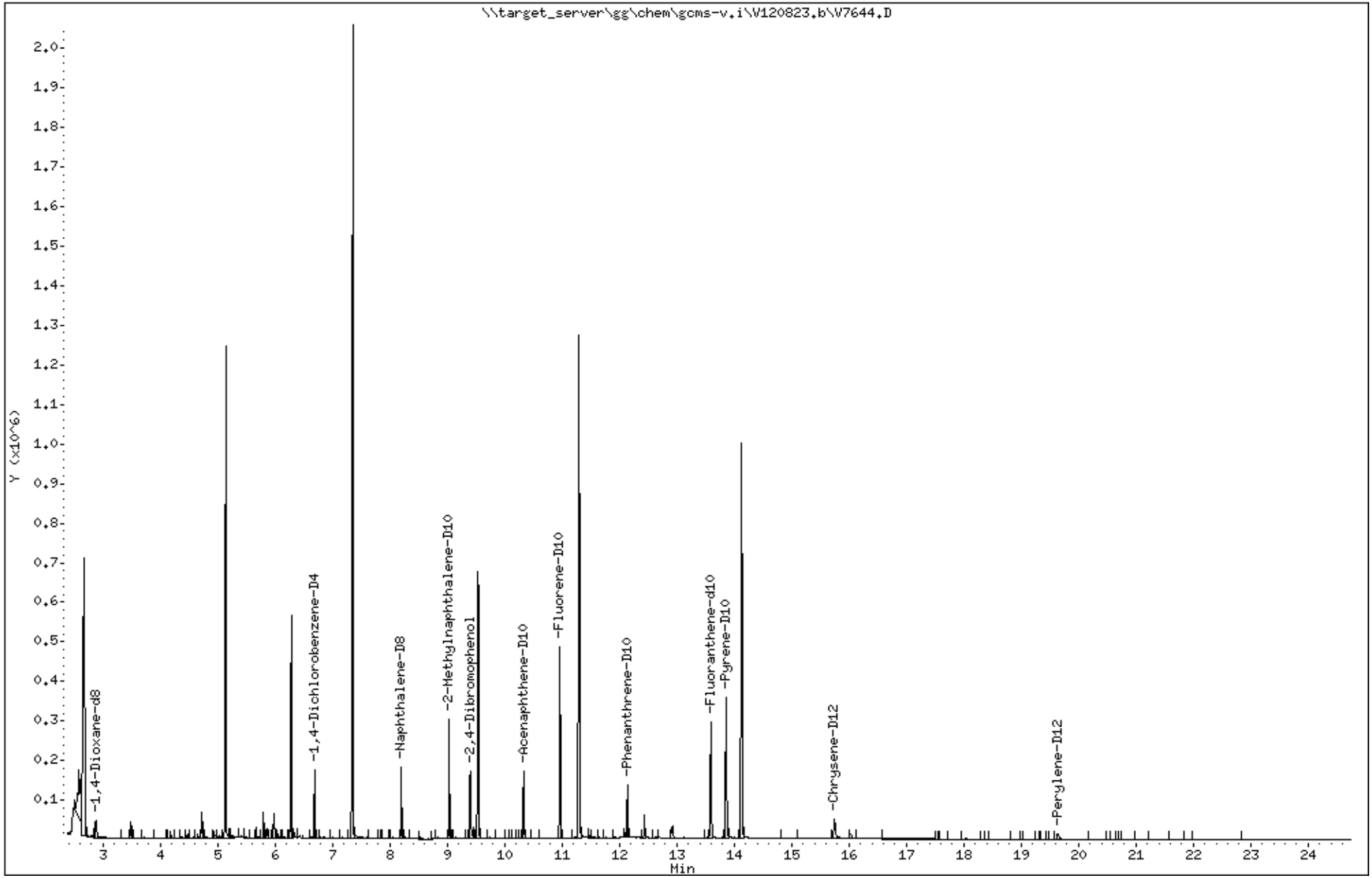
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.070	Sample Volume (L)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/L)	REVIEW CODE
$	1 1,4-Dioxane-d8	96	2.885	2.833	(0.279)	44965	1.13154	1.06(QH)	
*	10 1,4-Dichlorobenzene-D4	152	6.687	6.676	(1.000)	51925	0.80000	(aQ)	
*	27 Naphthalene-D8	136	8.196	8.196	(1.000)	161667	0.80000	(a)	
$	33 2-Methylnaphthalene-D10	152	9.028	9.028	(1.101)	182984	1.91287	1.79(R)	
$	38 2,4-Dibromophenol	252	9.408	9.408	(0.910)	129686	3.73415	3.49	
*	48 Acenaphthene-D10	164	10.333	10.333	(1.000)	73772	0.80000	(a)	
$	56 Fluorene-D10	174	10.962	10.962	(1.061)	184059	1.84573	1.72	
*	66 Phenanthrene-D10	188	12.137	12.137	(1.000)	112233	0.80000	(a)	
$	71 Fluoranthene-d10	212	13.594	13.604	(1.120)	213080	2.27035	2.12	
$	73 Pyrene-D10	212	13.860	13.871	(0.880)	243029	2.13470	2.00	
*	78 Chrysene-D12	240	15.748	15.769	(1.000)	58791	0.80000	(a)	
*	85 Perylene-D12	264	19.645	19.676	(1.000)	38342	0.80000	(a)	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.
H - Operator selected an alternate compound hit.

Data File: \\target_server\gg\chem\gcms-v.i\V120823.b\V7644.D
Date : 08-DEC-2023 18:26
Client ID: SY-OBMW11-110823
Instrument: gcms-v.i
Sample Info: SQ6179-8
Volume Injected (uL): 1.0
Operator: EP
Column phase: Rxi-SVOCms
Column diameter: 0.25



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ANALYTICAL SERVICES

Report of Analytical Results

SDG: SQ6179
Lab ID: SQ6179-9
Client ID: SY-OBMW110-110823
Matrix: AQ
Lab File ID: V7645.D

Sample Date: 08-NOV-23
Extract Date: 15-NOV-23
Extracted By: NH/CMW
Extraction Method: SW846 3510C
Lab Prep Batch: WG345459

Report Date: 29-DEC-23
Analysis Date: 08-DEC-23
Analyst: EP
Analysis Method: SW846 8270D SIM
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	0.093	ug/L	1	.2	0.19	0.060	0.093
2-Methylnaphthalene	U	0.093	ug/L	1	.2	0.19	0.072	0.093
Acenaphthylene	U	0.093	ug/L	1	.2	0.19	0.050	0.093
Acenaphthene	U	0.093	ug/L	1	.2	0.19	0.060	0.093
Fluorene	U	0.093	ug/L	1	.2	0.19	0.057	0.093
Phenanthrene	U	0.093	ug/L	1	.2	0.19	0.048	0.093
Anthracene	U	0.093	ug/L	1	.2	0.19	0.041	0.093
Fluoranthene	U	0.093	ug/L	1	.2	0.19	0.068	0.093
Pyrene	U	0.093	ug/L	1	.2	0.19	0.055	0.093
Benzo(a)anthracene	U	0.093	ug/L	1	.2	0.19	0.043	0.093
Chrysene	U	0.093	ug/L	1	.2	0.19	0.034	0.093
Benzo(b)Fluoranthene	U	0.093	ug/L	1	.2	0.19	0.083	0.093
Benzo(k)fluoranthene	U	0.093	ug/L	1	.2	0.19	0.046	0.093
Benzo(a)pyrene	U	0.093	ug/L	1	.2	0.19	0.062	0.093
Indeno(1,2,3-cd)pyrene	U	0.093	ug/L	1	.2	0.19	0.048	0.093
Dibenzo(a,h)anthracene	U	0.093	ug/L	1	.2	0.19	0.065	0.093
Benzo(g,h,i)perylene	U	0.093	ug/L	1	.2	0.19	0.061	0.093
2-Methylnaphthalene-D10		79.7	%					
Fluorene-D10		76.7	%					
Pyrene-D10		86.1	%					

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Data File: \\target_server\gg\chem\gcms-v.i\V120823.b\V7645.D
Report Date: 29-Dec-2023 14:50

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-v.i\V120823.b\V7645.D
Lab Smp Id: SQ6179-9 Client Smp ID: SY-OBMW110-110823
Inj Date : 08-DEC-2023 19:00
Operator : EP Inst ID: gcms-v.i
Smp Info : SQ6179-9
Misc Info : WG346651,WG345459,WG346507-4
Comment :
Method : \\target_server\gg\chem\gcms-v.i\V120823.b\VSPSIM21.m
Meth Date : 11-Dec-2023 07:52 epelletier Quant Type: ISTD
Cal Date : 06-DEC-2023 13:50 Cal File: V7607.D
Als bottle: 15
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pahplus.sub
Target Version: 4.12
Processing Host: INSPIRON1

Concentration Formula: Amt * DF * Uf*(Vt/Vo)*1000 * CpndVariable

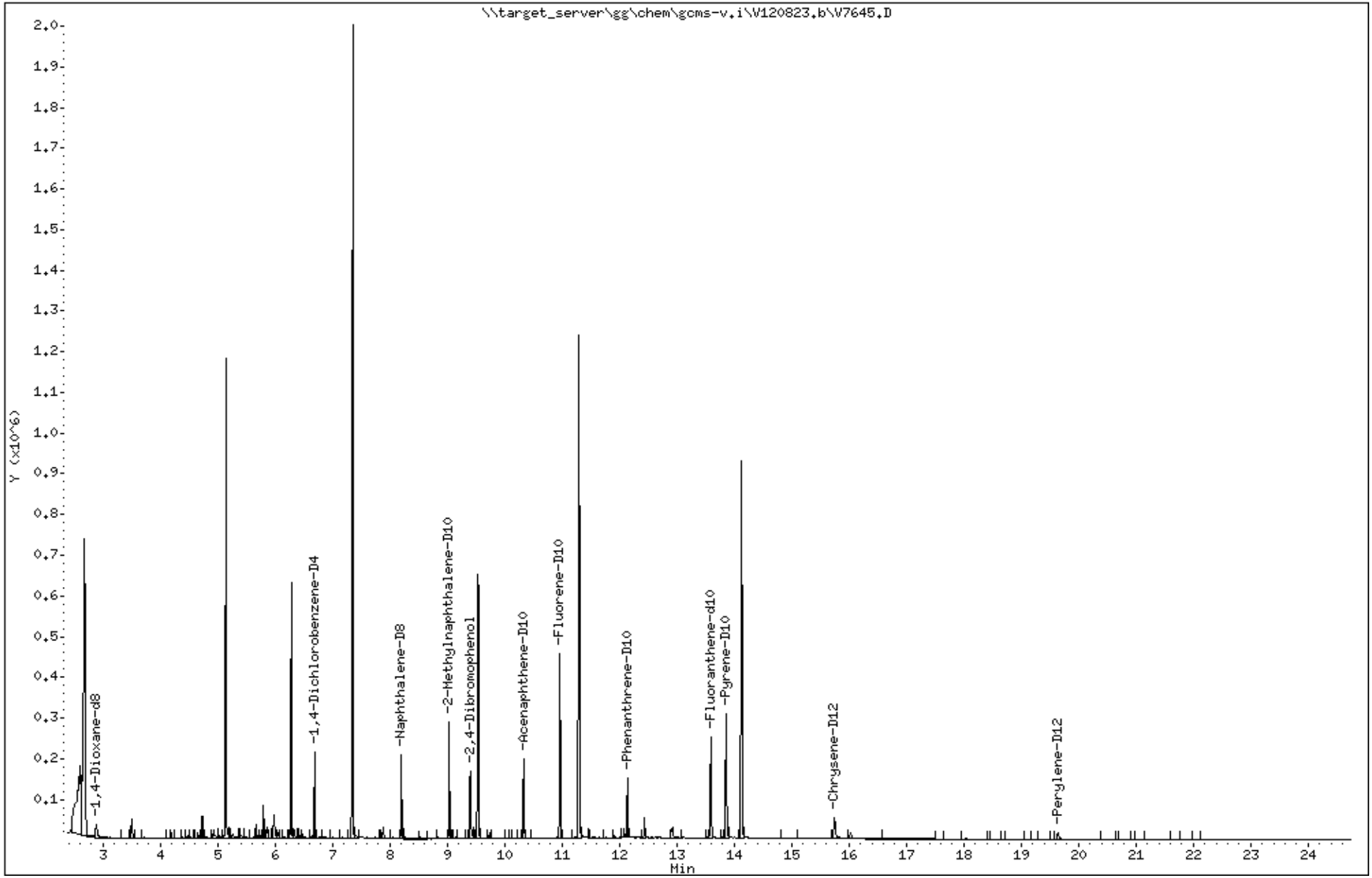
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.070	Sample Volume (L)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/L)	REVIEW CODE
$	1 1,4-Dioxane-d8	96	2.895	2.833	(0.280)	32331	0.72235	0.675(aH)	
*	10 1,4-Dichlorobenzene-D4	152	6.687	6.676	(1.000)	60914	0.80000	(aQ)	
*	27 Naphthalene-D8	136	8.196	8.196	(1.000)	190428	0.80000	(a)	
$	33 2-Methylnaphthalene-D10	152	9.028	9.028	(1.101)	179604	1.59397	1.49	
$	38 2,4-Dibromophenol	252	9.408	9.408	(0.910)	123106	3.14709	2.94	
*	48 Acenaphthene-D10	164	10.333	10.333	(1.000)	83092	0.80000	(a)	
$	56 Fluorene-D10	174	10.962	10.962	(1.061)	172293	1.53395	1.43	
*	66 Phenanthrene-D10	188	12.137	12.137	(1.000)	122313	0.80000	(a)	
$	71 Fluoranthene-d10	212	13.594	13.604	(1.120)	183021	1.78937	1.67	
$	73 Pyrene-D10	212	13.860	13.871	(0.880)	203712	1.72266	1.61	
*	78 Chrysene-D12	240	15.748	15.769	(1.000)	61067	0.80000	(a)	
*	85 Perylene-D12	264	19.645	19.676	(1.000)	42907	0.80000	(a)	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
H - Operator selected an alternate compound hit.

Data File: \\target_server\gg\chem\gcms-v.i\V120823.b\V7645.D
Date : 08-DEC-2023 19:00
Client ID: SY-OBMW110-110823
Instrument: gcms-v.i
Sample Info: SQ6179-9
Volume Injected (uL): 1.0
Operator: EP
Column phase: Rxi-SVOCms
Column diameter: 0.25



Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

SDG: SQ6179
Lab ID: SQ6179-10
Client ID: SY-OBMW3-110823
Matrix: AQ
Lab File ID: V7646.D

Sample Date: 08-NOV-23
Extract Date: 15-NOV-23
Extracted By: NH/CMW
Extraction Method: SW846 3510C
Lab Prep Batch: WG345459

Report Date: 29-DEC-23
Analysis Date: 08-DEC-23
Analyst: EP
Analysis Method: SW846 8270D SIM
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	0.094	ug/L	1	.2	0.19	0.060	0.094
2-Methylnaphthalene	U	0.094	ug/L	1	.2	0.19	0.073	0.094
Acenaphthylene	U	0.094	ug/L	1	.2	0.19	0.051	0.094
Acenaphthene	U	0.094	ug/L	1	.2	0.19	0.060	0.094
Fluorene	U	0.094	ug/L	1	.2	0.19	0.058	0.094
Phenanthrene	U	0.094	ug/L	1	.2	0.19	0.048	0.094
Anthracene	U	0.094	ug/L	1	.2	0.19	0.042	0.094
Fluoranthene	U	0.094	ug/L	1	.2	0.19	0.069	0.094
Pyrene	U	0.094	ug/L	1	.2	0.19	0.056	0.094
Benzo(a)anthracene	U	0.094	ug/L	1	.2	0.19	0.043	0.094
Chrysene	U	0.094	ug/L	1	.2	0.19	0.034	0.094
Benzo(b)Fluoranthene	U	0.094	ug/L	1	.2	0.19	0.084	0.094
Benzo(k)fluoranthene	U	0.094	ug/L	1	.2	0.19	0.046	0.094
Benzo(a)pyrene	U	0.094	ug/L	1	.2	0.19	0.062	0.094
Indeno(1,2,3-cd)pyrene	U	0.094	ug/L	1	.2	0.19	0.049	0.094
Dibenzo(a,h)anthracene	U	0.094	ug/L	1	.2	0.19	0.066	0.094
Benzo(g,h,i)perylene	U	0.094	ug/L	1	.2	0.19	0.061	0.094
2-Methylnaphthalene-D10		75.1	%					
Fluorene-D10		70.8	%					
Pyrene-D10		73.0	%					

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Tel:(207) 874-2400 Fax:(207) 775-4029

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Data File: \\target_server\gg\chem\gcms-v.i\V120823.b\V7646.D
Report Date: 29-Dec-2023 14:50

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-v.i\V120823.b\V7646.D
Lab Smp Id: SQ6179-10 Client Smp ID: SY-OBMW3-110823
Inj Date : 08-DEC-2023 19:33
Operator : EP Inst ID: gcms-v.i
Smp Info : SQ6179-10
Misc Info : WG346651,WG345459,WG346507-4
Comment :
Method : \\target_server\gg\chem\gcms-v.i\V120823.b\VSPSIM21.m
Meth Date : 11-Dec-2023 07:52 epelletier Quant Type: ISTD
Cal Date : 06-DEC-2023 13:50 Cal File: V7607.D
Als bottle: 16
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pahplus.sub
Target Version: 4.12
Processing Host: INSPIRON1

Concentration Formula: Amt * DF * Uf*(Vt/Vo)*1000 * CpndVariable

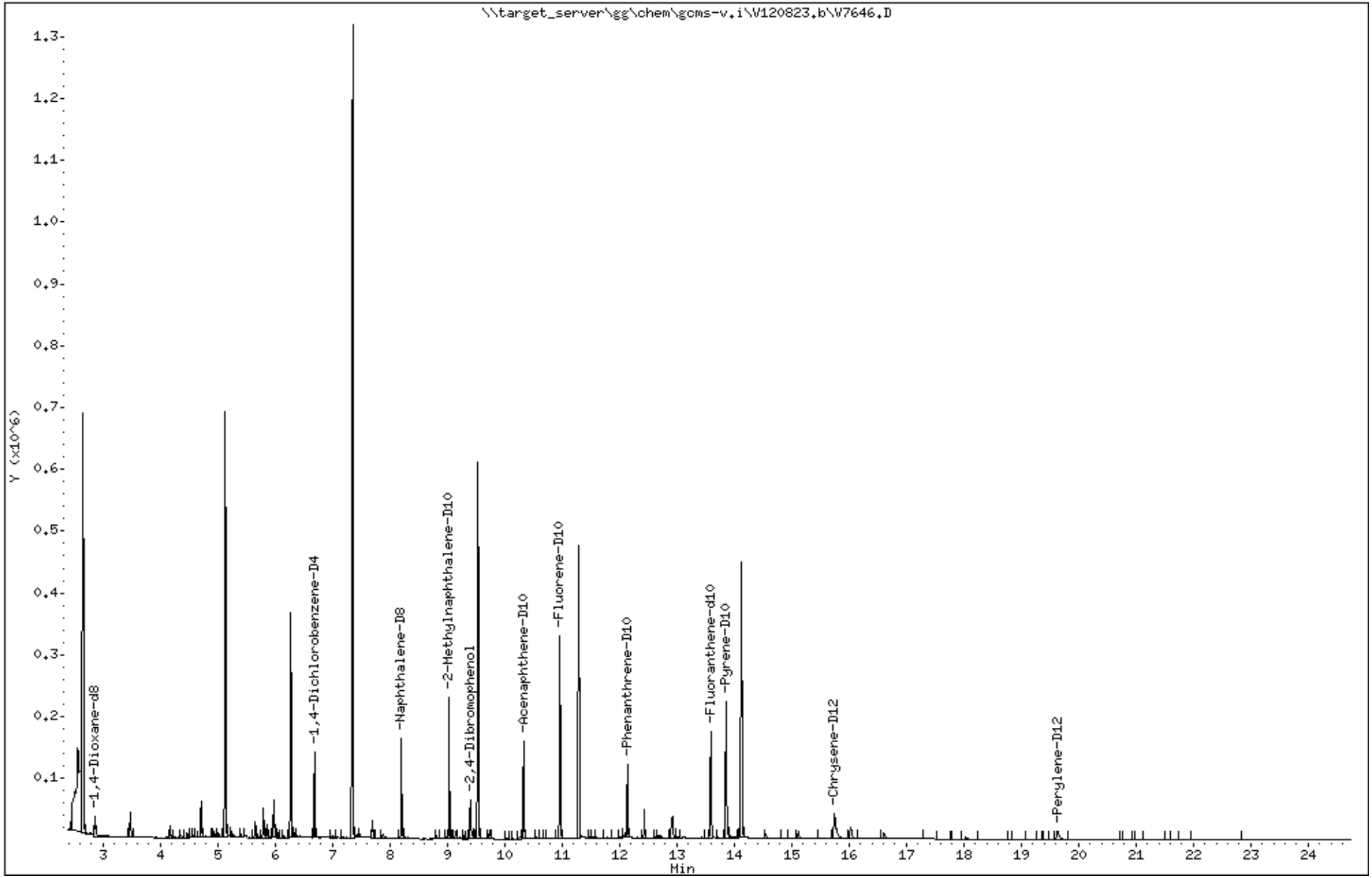
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.060	Sample Volume (L)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/L)	REVIEW CODE
$	1 1,4-Dioxane-d8	96	2.874	2.833	(0.278)	34027	0.94402	0.890(aQ)	
*	10 1,4-Dichlorobenzene-D4	152	6.687	6.676	(1.000)	47000	0.80000	(aQ)	
*	27 Naphthalene-D8	136	8.196	8.196	(1.000)	148753	0.80000	(a)	
$	33 2-Methylnaphthalene-D10	152	9.028	9.028	(1.101)	132177	1.50170	1.42	
$	38 2,4-Dibromophenol	252	9.408	9.408	(0.910)	46084	1.46288	1.38	
*	48 Acenaphthene-D10	164	10.333	10.333	(1.000)	66916	0.80000	(a)	
$	56 Fluorene-D10	174	10.962	10.962	(1.061)	128164	1.41690	1.34	
*	66 Phenanthrene-D10	188	12.137	12.137	(1.000)	105138	0.80000	(a)	
$	71 Fluoranthene-d10	212	13.594	13.604	(1.120)	130778	1.48746	1.40	
$	73 Pyrene-D10	212	13.861	13.871	(0.880)	144861	1.45930	1.38	
*	78 Chrysene-D12	240	15.749	15.769	(1.000)	51262	0.80000	(a)	
*	85 Perylene-D12	264	19.645	19.676	(1.000)	36558	0.80000	(a)	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.

Data File: \\target_server\gg\chem\gcms-v.i\V120823.b\V7646.D
Date : 08-DEC-2023 19:33
Client ID: SY-OBMW3-110823
Instrument: gcms-v.i
Sample Info: SQ6179-10
Volume Injected (uL): 1.0
Operator: EP
Column phase: Rxi-SVOCms
Column diameter: 0.25



Standards Data Section

Form 6
Initial Calibration Summary

Lab Name : Katahdin Analytical Services **SDG:** SQ6179

Instrument ID: GCMS-V **Column ID:**

Lab File IDs : V7604.D V7603.D V7602.D **Calibration Date(s):** 06-DEC-23 11:05
V7605.D V7606.D V7607.D 06-DEC-23 13:50

	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Curve				%RSD or R^2		
	0.200000(	0.500000(	2.0000	7.0000	10.0000	15.0000	Type	b	m1	m2	Result	Limit	
Naphthalene	1.17856	1.07819	1.11828	1.04221	1.06252	0.98142	AVG		1.07686		6.23991	20	O
2-Methylnaphthalene	0.64500	0.62564	0.66927	0.61914	0.62062	0.58912	AVG		0.62813		4.29715	20	O
Acenaphthylene	1.98244	1.93074	2.16197	1.96391	2.11032	2.12284	AVG		2.04537		4.76791	20	O
Acenaphthene	1.32972	1.23443	1.32460	1.21965	1.30996	1.34235	AVG		1.29345		4.07326	20	O
Fluorene	1.34426	1.26680	1.37372	1.22655	1.36073	1.37366	AVG		1.32429		4.71161	20	O
Phenanthrene	1.21267	1.11003	1.14624	1.05015	1.09315	1.09433	AVG		1.11776		4.99783	20	O
Anthracene	0.96658	0.96885	1.10917	1.04236	1.07788	1.09673	AVG		1.04359		6.03290	20	O
Fluoranthene	0.80996	0.82012	1.03036	0.94215	1.01767	1.01855	AVG		0.93980		10.81497	20	O
Pyrene	2.34242	2.18662	1.95601	1.76422	1.77611	1.82265	AVG		1.97467		12.13986	20	O
Benzo(a)anthracene	0.94676	0.94362	1.20076	1.15963	1.27123	1.38020	AVG		1.15037		15.26871	20	O
Chrysene	1.48971	1.33146	1.41721	1.30110	1.36275	1.42770	AVG		1.38832		5.00689	20	O
Benzo(b)fluoranthene	1.26585	1.32999	1.54841	1.49091	1.58454	1.62699	AVG		1.47445		9.85225	20	O
Benzo(k)fluoranthene	1.47621	1.73968	1.94219	1.86926	1.92619	2.00665	AVG		1.82670		10.61069	20	O
Benzo(a)pyrene	4508	12016	129884	463151	767441	986400	LNR	0.000e+00	1.49514		0.99449	0.99	O
Indeno(1,2,3-cd)pyrene	2962	7607	81664	311244	548996	766135	QUA	0.000e+00	1.20123	-0.01650	0.99900	0.99	O
Dibenzo(a,h)anthracene	2871	8015	90937	338978	581292	794310	QUA	0.000e+00	1.10467	-0.01300	0.99938	0.99	O
Benzo(g,h,i)perylene	3973	10665	109389	409538	662297	906796	QUA	0.000e+00	0.93238	-0.00858	0.99994	0.99	O
2-Methylnaphthalene-D10	0.48674	0.47476	0.50540	0.45698	0.47122	0.44508	AVG		0.47336		4.51153	20	
Fluorene-D10	1.11216	1.04844	1.13601	0.99383	1.09310	1.10487	AVG		1.08140		4.78224	20	
Pyrene-D10	1.73788	1.65379	1.57226	1.42328	1.42882	1.47902	AVG		1.54917		8.28376	20	

Legend: O = Acceptable; W = Failed %RSD Value; X = Failed R^2 Value; Y = Failed Minimum RF

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Data File: \\target_server\gg\chem\gcms-v.i\V120623.b\V7608.D
Report Date: 07-Dec-2023 07:07

Katahdin Analytical Services

RECOVERY REPORT

Client Name: Client SDG: 021497
Sample Matrix: LIQUID Fraction: SV
Lab Smp Id: WG346507-8
Level: LOW Operator: EP
Data Type: MS DATA SampleType: INDSOURCE
SpikeList File: SIM_IND_CHK5.spk Quant Type: ISTD
Sublist File: all.sub
Method File: \\target_server\gg\chem\gcms-v.i\V120623.b\VSPSIM21.m
Misc Info: WG346507,WG346507,WG346507-4

SPIKE	COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
2	1,4-Dioxane	5.00	5.52	110.33	80-120
3	N-Nitrosodimethyla	5.00	5.87	117.47	80-120
4	Pyridine	5.00	7.84	156.70*	80-120
5	Benzaldehyde	5.00	3.86	77.21*	80-120
6	Phenol	5.00	5.63	112.67	80-120
7	Bis(2-Chloroethyl)	5.00	5.41	108.25	80-120
8	2-Chlorophenol	5.00	5.41	108.17	80-120
9	1,3-Dichlorobenzen	5.00	5.38	107.53	80-120
11	1,4-Dichlorobenzen	5.00	5.54	110.80	80-120
12	1,2-Dichlorobenzen	5.00	5.44	108.91	80-120
13	2,2'-Oxybis(1-chlo	5.00	3.86	77.20*	80-120
14	2-Methylphenol	5.00	5.31	106.23	80-120
15	Acetophenone	5.00	5.50	109.99	80-120
16	N-Nitroso-di-n-pro	5.00	5.08	101.64	80-120
17	3&4-Methylphenol	5.00	5.19	103.74	80-120
18	Hexachloroethane	5.00	5.44	108.77	80-120
19	Nitrobenzene	5.00	5.73	114.54	80-120
20	Isophorone	5.00	4.84	96.79	80-120
21	2-Nitrophenol	5.00	5.50	110.06	80-120
22	2,4-Dimethylphenol	5.00	6.04	120.78*	80-120
23	bis(2-Chloroethoxy	5.00	5.22	104.48	80-120
25	2,4-Dichlorophenol	5.00	5.62	112.34	80-120
26	1,2,4-Trichloroben	5.00	5.23	104.52	80-120
28	Naphthalene	5.00	5.44	108.78	80-120
29	4-Chloroaniline	5.00	3.98	79.70*	80-120
30	Hexachlorobutadien	5.00	5.25	104.94	80-120
31	Caprolactam	5.00	4.45	88.96	80-120
32	4-Chloro-3-Methylp	5.00	5.09	101.86	80-120
34	2-Methylnaphthalen	5.00	5.61	112.24	80-120
35	1-Methylnaphthalen	5.00	5.53	110.67	80-120
36	1,2,4,5-Tetrachlor	5.00	5.24	104.71	80-120
37	Hexachlorocyclopen	5.00	4.93	98.53	80-120
39	2,4,6-Trichlorophe	5.00	4.85	96.98	80-120
40	2,4,5-Trichlorophe	5.00	5.16	103.27	80-120
41	1,1'-Biphenyl	5.00	5.34	106.72	80-120
42	2-Chloronaphthalen	5.00	5.08	101.55	80-120
43	2-Nitroaniline	5.00	4.82	96.52	80-120
44	Dimethyl Phthalate	5.00	4.84	96.87	80-120
45	2,6-Dinitrotoluene	5.00	4.28	85.70	80-120
46	Acenaphthylene	5.00	4.74	94.87	80-120

Data File: \\target_server\gg\chem\gcms-v.i\V120623.b\V7608.D
Report Date: 07-Dec-2023 07:07

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
47 3-Nitroaniline	5.00	8.02	160.47*	80-120
49 Acenaphthene	5.00	4.98	99.66	80-120
50 2,4-Dinitrophenol	5.00	3.36	67.30*	80-120
51 Dibenzofuran	5.00	5.30	106.11	80-120
53 2,4-Dinitrotoluene	5.00	3.98	79.72*	80-120
52 4-Nitrophenol	5.00	3.15	63.02*	80-120
54 2,3,4,6-Tetrachlor	5.00	4.44	88.86	80-120
55 Diethylphthalate	5.00	4.84	96.84	80-120
57 Fluorene	5.00	4.83	96.63	80-120
58 4-Chlorophenyl-phe	5.00	4.92	98.43	80-120
59 4-Nitroaniline	5.00	5.17	103.38	80-120
60 4,6-Dinitro-2-Meth	5.00	4.27	85.34	80-120
61 N-Nitrosodiphenyla	5.00	4.01	80.26	80-120
62 4-Bromophenyl-phen	5.00	5.27	105.45	80-120
63 Hexachlorobenzene	5.00	4.95	98.95	80-120
64 Atrazine	5.00	4.80	96.10	80-120
65 Pentachlorophenol	5.00	4.39	87.79	80-120
67 Phenanthrene	5.00	5.18	103.62	80-120
68 Anthracene	5.00	5.16	103.28	80-120
69 Carbazole	5.00	7.15	142.95*	80-120
70 Di-n-butylphthalat	5.00	5.56	111.28	80-120
72 Fluoranthene	5.00	4.98	99.66	80-120
74 Pyrene	5.00	4.36	87.11	80-120
75 Butylbenzylphthala	5.00	4.80	96.01	80-120
76 Benzo(a)anthracene	5.00	5.01	100.12	80-120
77 3,3'-Dichlorobenzi	5.00	5.91	118.17	80-120
79 Chrysene	5.00	4.87	97.45	80-120
80 bis(2-Ethylhexyl)p	5.00	4.64	92.80	80-120
81 Di-n-octylphthalat	5.00	4.49	89.78	80-120
82 Benzo(b)fluoranthe	5.00	5.12	102.31	80-120
83 Benzo(k)fluoranthe	5.00	5.10	102.05	80-120
84 Benzo(a)pyrene	5.00	4.24	84.81	80-120
86 Indeno(1,2,3-cd)py	5.00	4.97	99.35	80-120
87 Dibenzo(a,h)anthra	5.00	5.29	105.82	80-120
88 Benzo(g,h,i)peryle	5.00	5.52	110.48	80-120

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 1 1,4-Dioxane-d8	2.00	0.000	*	26-115
$ 33 2-Methylnaphthale	2.00	0.000	*	43-92
$ 38 2,4-Dibromophenol	4.00	0.000	*	10-130
$ 56 Fluorene-D10	2.00	0.000	*	29-101
$ 71 Fluoranthene-d10	2.00	0.000	*	50-150
$ 73 Pyrene-D10	2.00	0.000	*	53-166

ICAL Workgroup WG346507

Parameter	Curve Type	r^2	r^2 Limit	RSE	RSE limit	Column
Caprolactam	LNR	0.99624	.99	35.88**	20/30	
Hexachlorocyclopentadiene	LNR	0.99009	.99	29.52*	20/30	
2-Nitroaniline	LNR	0.99235	.99	33**	20/30	
2,6-Dinitrotoluene	LNR	0.99657	.99	29.64*	20/30	
3-Nitroaniline	QUA	0.99693	.99	41.92**	20/30	
2,4-Dinitrophenol	QUA	0.99092	.99	42.68**	20/30	
4-Nitrophenol	QUA	0.99108	.99	32.69**	20/30	
2,4-Dinitrotoluene	LNR	0.99072	.99	32.22**	20/30	
4-Nitroaniline	LNR	0.99491	.99	27.98*	20/30	
4,6-Dinitro-2-Methylphenol	QUA	0.99520	.99	36.55**	20/30	
Atrazine	LNR	0.99292	.99	30.58**	20/30	
Butylbenzylphthalate	QUA	0.99856	.99	20.01*	20/30	
bis(2-Ethylhexyl)phthalate	QUA	0.99684	.99	28.98*	20/30	
Di-n-octylphthalate	QUA	0.99270	.99	30.82**	20/30	
Benzo(a)pyrene	LNR	0.99449	.99	28.19*	20/30	
Indeno(1,2,3-cd)pyrene	QUA	0.99900	.99	23.27*	20/30	
Dibenzo(a,h)anthracene	QUA	0.99938	.99	27.27*	20/30	
Benzo(g,h,i)perylene	QUA	0.99994	.99	19.11	20/30	

*** = RSE over 20%**
**** = RSE over 30%**

Data File: \\target_server\gg\chem\gcms-v.i\V120623.b\V7602.D
Report Date: 07-Dec-2023 07:09

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-v.i\V120623.b\V7602.D
Lab Smp Id: WG346507-4
Inj Date : 06-DEC-2023 11:05
Operator : EP   Inst ID: gcms-v.i
Smp Info : WG346507-4
Misc Info :
Comment   :
Method   : \\target_server\gg\chem\gcms-v.i\V120623.b\VSPSIM21.m
Meth Date : 07-Dec-2023 07:08 gcms-v.i   Quant Type: ISTD
Cal Date : 06-DEC-2023 11:05   Cal File: V7602.D
Als bottle: 2   Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: all.sub
Target Version: 4.12

Concentration Formula: Amt * DF * Uf*(Vt/Vo)*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.000	Sample Volume (L)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
$	1 1,4-Dioxane-d8	96	2.833	2.833	(0.274)	78111	2.00000	1.86	
	2 1,4-Dioxane	88	2.874	2.874	(0.431)	89103	2.00000	2.03	
	3 N-Nitrosodimethylamine	74	3.300	3.300	(0.494)	96785	2.00000	1.92	
	4 Pyridine	79	3.362	3.341	(0.504)	176810	2.00000	2.03	
	5 Benzaldehyde	77	6.146	6.146	(0.921)	86447	2.00000	2.51	
	6 Phenol	94	6.281	6.291	(0.941)	535528	4.50000	4.65	
	7 Bis(2-Chloroethyl)ether	93	6.385	6.385	(0.956)	199241	2.00000	2.06	
	8 2-Chlorophenol	128	6.416	6.427	(0.961)	451192	4.50000	4.47	
	9 1,3-Dichlorobenzene	146	6.603	6.603	(0.989)	218300	2.00000	1.99	
*	10 1,4-Dichlorobenzene-D4	152	6.676	6.676	(1.000)	58071	0.80000	(aQ)	
	11 1,4-Dichlorobenzene	146	6.697	6.697	(1.003)	224105	2.00000	2.03	
	12 1,2-Dichlorobenzene	146	6.874	6.874	(1.030)	218381	2.00000	2.05	
	13 2,2'-Oxybis(1-chloropropane)	45	7.020	7.030	(1.051)	94584	2.00000	2.09(Q)	
	14 2-Methylphenol	108	6.999	7.009	(1.048)	384947	4.50000	4.56	
	15 Acetophenone	105	7.165	7.176	(0.874)	268545	2.00000	2.06	
	16 N-Nitroso-di-n-propylamine	70	7.186	7.186	(1.076)	105775	2.00000	2.11	
	17 3&4-Methylphenol	108	7.186	7.196	(1.076)	406605	4.50000	4.69(Q)	
	18 Hexachloroethane	117	7.269	7.269	(1.089)	95055	2.00000	2.03	
	19 Nitrobenzene	77	7.363	7.363	(0.898)	166287	2.00000	2.03	
	20 Isophorone	82	7.662	7.662	(0.935)	312516	2.00000	2.12	
	21 2-Nitrophenol	139	7.745	7.745	(0.945)	199409	4.50000	4.64	
	22 2,4-Dimethylphenol	107	7.827	7.827	(0.955)	373925	4.50000	4.96	

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			QUANT SIG					AMOUNTS		
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
	23	bis(2-Chloroethoxy)methane	93	7.939	7.950	(0.969)	217231	2.00000	2.10	
	24	Benzoic Acid	105	7.919	7.970	(0.966)	181282	2.00000	2.41	
	25	2,4-Dichlorophenol	162	8.309	8.042	(1.014)	179072	4.50000	2.81	
	26	1,2,4-Trichlorobenzene	180	8.134	8.145	(0.992)	151773	2.00000	1.96	
*	27	Naphthalene-D8	136	8.196	8.196	(1.000)	185403	0.80000	(a)	
	28	Naphthalene	128	8.227	8.227	(1.004)	518331	2.00000	2.08	
	29	4-Chloroaniline	127	8.309	8.319	(1.014)	168564	2.00000	2.51(H)	
	30	Hexachlorobutadiene	225	8.401	8.401	(1.025)	87722	2.00000	1.96	
	31	Caprolactam	113	8.719	8.730	(1.064)	36786	2.00000	1.78	
	32	4-Chloro-3-Methylphenol	107	8.904	8.915	(1.086)	311421	4.50000	4.74	
$	33	2-Methylnaphthalene-D10	152	9.028	9.028	(1.101)	234259	2.00000	2.14	
	34	2-Methylnaphthalene	142	9.069	9.069	(1.107)	310213	2.00000	2.13	
	35	1-Methylnaphthalene	142	9.182	9.182	(1.120)	282146	2.00000	2.08	
	36	1,2,4,5-Tetrachlorobenzene	216	9.274	9.274	(0.898)	138376	2.00000	1.95	
	37	Hexachlorocyclopentadiene	237	9.274	9.274	(0.898)	61642	2.00000	1.59	
$	38	2,4-Dibromophenol	252	9.408	9.408	(0.910)	74670	2.00000	2.04	
	39	2,4,6-Trichlorophenol	196	9.418	9.418	(0.911)	203314	4.50000	4.66	
	40	2,4,5-Trichlorophenol	196	9.459	9.459	(0.915)	199176	4.50000	4.45	
	41	1,1'-Biphenyl	154	9.644	9.644	(0.933)	356455	2.00000	2.08	
	42	2-Chloronaphthalene	164	9.655	9.655	(0.934)	96473	2.00000	2.03	
	43	2-Nitroaniline	65	9.788	9.788	(0.947)	51763	2.00000	1.71	
	44	Dimethyl Phthalate	163	10.045	10.055	(0.972)	618950	4.50000	4.74	
	45	2,6-Dinitrotoluene	165	10.107	10.107	(0.978)	62661	2.00000	1.86	
	46	Acenaphthylene	152	10.158	10.158	(0.983)	420801	2.00000	2.11	
	47	3-Nitroaniline	138	10.292	10.312	(0.996)	37446	2.00000	2.23	
*	48	Acenaphthene-D10	164	10.333	10.333	(1.000)	77855	0.80000	(a)	
	49	Acenaphthene	153	10.364	10.374	(1.003)	257817	2.00000	2.05	
	50	2,4-Dinitrophenol	184	10.425	10.436	(1.009)	47242	4.50000	4.59	
	51	Dibenzofuran	168	10.580	10.590	(1.024)	360058	2.00000	2.06	
	52	4-Nitrophenol	109	10.518	10.528	(1.018)	69193	4.50000	4.77	
	53	2,4-Dinitrotoluene	165	10.590	10.590	(1.025)	75029	2.00000	1.80	
	54	2,3,4,6-Tetrachlorophenol	232	10.744	10.744	(1.040)	142818	4.50000	4.77	
	55	Diethylphthalate	149	10.910	10.910	(1.056)	600400	4.50000	4.80	
$	56	Fluorene-D10	174	10.962	10.962	(1.061)	221111	2.00000	2.10	
	57	Fluorene	166	10.993	11.003	(1.064)	267378	2.00000	2.07	
	58	4-Chlorophenyl-phenylether	204	11.024	11.024	(1.067)	132931	2.00000	2.03	
	59	4-Nitroaniline	138	11.035	11.045	(1.068)	36454	2.00000	2.03(Q)	
	60	4,6-Dinitro-2-Methylphenol	198	11.076	11.087	(0.913)	71851	4.50000	4.69	
	61	N-Nitrosodiphenylamine	169	11.170	11.170	(0.920)	203423	2.00000	2.08	
	62	4-Bromophenyl-phenylether	248	11.618	11.618	(0.957)	74726	2.00000	2.04	
	63	Hexachlorobenzene	284	11.670	11.670	(0.962)	87907	2.00000	1.98	
	64	Atrazine	200	11.847	11.857	(0.976)	46902	2.00000	1.80	
	65	Pentachlorophenol	266	11.920	11.920	(0.982)	99475	4.50000	4.82	
*	66	Phenanthrene-D10	188	12.137	12.137	(1.000)	115916	0.80000	(a)	
	67	Phenanthrene	178	12.167	12.167	(1.003)	332169	2.00000	2.05	
	68	Anthracene	178	12.229	12.229	(1.008)	321425	2.00000	2.12	
	69	Carbazole	167	12.434	12.434	(1.025)	175325	2.00000	2.27	
	70	Di-n-butylphthalate	149	12.927	12.927	(1.065)	834204	4.50000	5.03	
$	71	Fluoranthene-d10	212	13.594	13.604	(1.120)	212484	2.00000	2.19	
	72	Fluoranthene	202	13.614	13.625	(1.122)	298588	2.00000	2.19	
$	73	Pyrene-D10	212	13.871	13.871	(0.880)	253523	2.00000	2.03	
	74	Pyrene	202	13.891	13.891	(0.882)	315402	2.00000	1.98	
	75	Butylbenzylphthalate	149	14.856	14.856	(0.943)	275684	4.50000	4.68	
	76	Benzo(a)anthracene	228	15.738	15.749	(0.999)	193620	2.00000	2.09	

Data File: \\target_server\gg\chem\gcms-v.i\V120623.b\V7602.D
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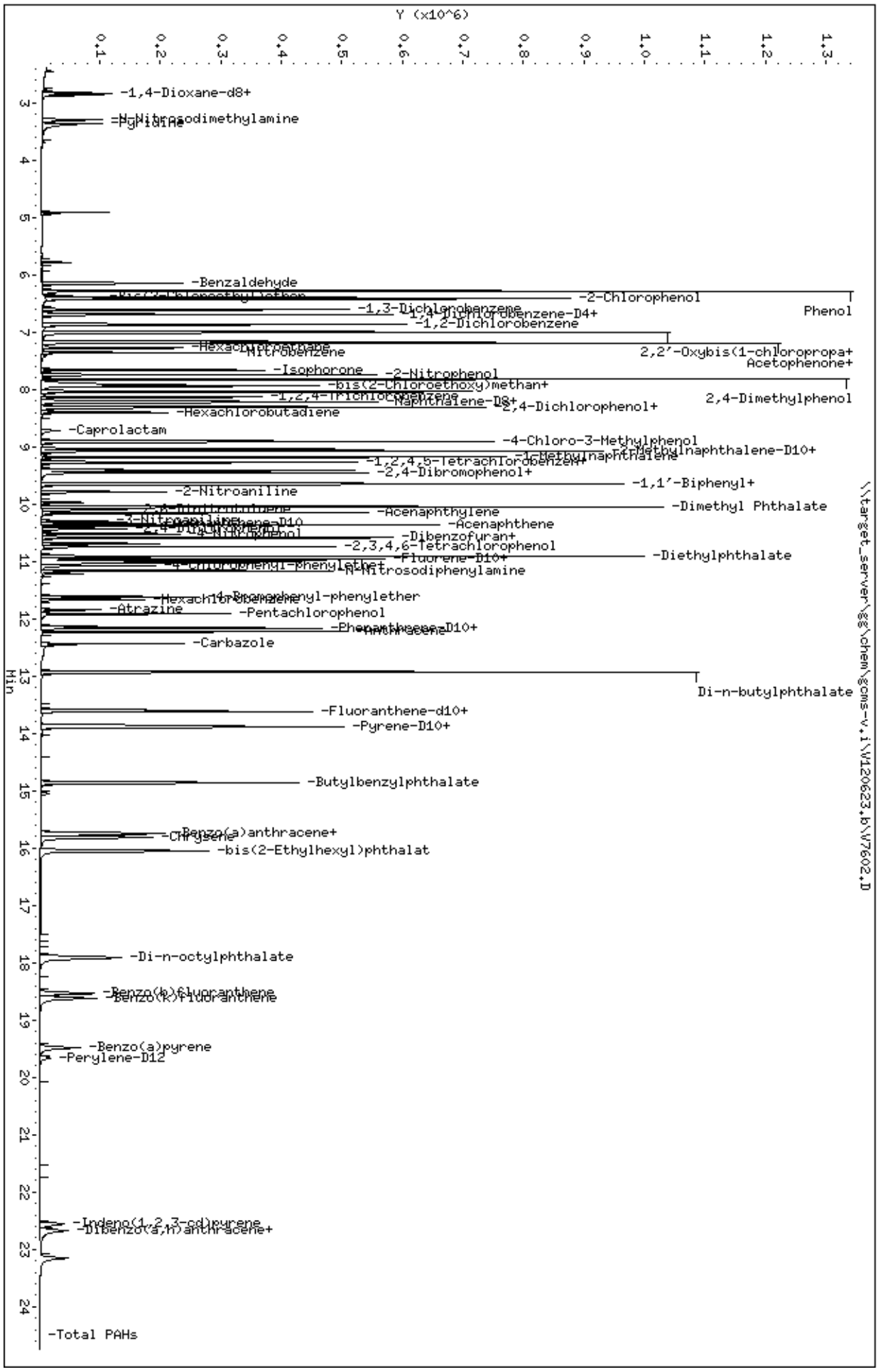
			QUANT SIG					AMOUNTS		
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
	77	3,3'-Dichlorobenzidine	252	15.759	15.769	(1.000)	33344	2.00000	2.16	
*	78	Chrysene-D12	240	15.759	15.769	(1.000)	64499	0.80000	(a)	
	79	Chrysene	228	15.810	15.820	(1.003)	228521	2.00000	2.04	
	80	bis(2-Ethylhexyl)phthalate	149	16.046	16.046	(1.018)	342929	4.50000	4.68	
	81	Di-n-octylphthalate	149	17.915	17.905	(1.137)	389636	4.50000	4.65	
	82	Benzo(b)fluoranthene	252	18.533	18.543	(0.942)	155991	2.00000	2.10	
	83	Benzo(k)fluoranthene	252	18.626	18.636	(0.947)	195661	2.00000	2.13(H)	
	84	Benzo(a)pyrene	252	19.480	19.491	(0.991)	129884	2.00000	1.72	
*	85	Perylene-D12	264	19.666	19.676	(1.000)	40297	0.80000	(a)	
	86	Indeno(1,2,3-cd)pyrene	276	22.560	22.580	(1.147)	81664	2.00000	1.89	
	87	Dibenzo(a,h)anthracene	278	22.673	22.694	(1.153)	90937	2.00000	1.94	
	88	Benzo(g,h,i)perylene	276	23.157	23.178	(1.178)	109389	2.00000	1.97	
M	89	Total PAHs	100				4509937	36.0000	(a)	

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
H - Operator selected an alternate compound hit.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Date : 06-DEC-2023 11:05
Client ID:
Sample Info: W0346507-4
Volume Injected (uL): 1.0
Column phase: Rxi-5WOCms
Instrument: gcms-v.i
Operator: EP
Column diameter: 0.25
\\target_server\gg\chem\gcms-v.i\W120623.b\W7602.D
Y (x10^6)
Min
-1,4-Dioxane-d8+
-N-Nitrosodimethylamine
-Benzaldehyde
-2-Chlorophenol
Phenol
-1,3-Dichlorobenzene
-1,4-Dichlorobenzene-D4+
-1,2-Dichlorobenzene
-Hexachloroethane
-Nitrobenzene
2,2'-Oxybis(1-chloropropa+
Acetophenone+
-Isophorone
-2-Nitrophenol
-bis(2-Chloroethoxy)methan+
2,4-Dimethylphenol
-Naphthalene-D8+
2,4-Dichlorophenol+
-Hexachlorobutadiene
-Caprolactam
-4-Chloro-3-Methylphenol
-2-Methylnaphthalene-D10+
-1,2,4,5-Tetrachlorobenzen+
-2,4-Dibromophenol+
-1,1'-Biphenyl+
-2-Nitroaniline
-Dimethyl Phthalate
-Acenaphthylene
-Acenaphthene
-Dibenzofuran+
-2,3,4,6-Tetrachlorophenol
-Fluorene-D10+
-Diethylphthalate
-N-Nitrosodiphenylamine
-Hexachlorobenzene
-Atrazine
-Pentachlorophenol
-Phenanthrene-D10+
-Carbazole
Di-n-butylphthalate
-Fluoranthene-d10+
-Pyrene-D10+
-Butylbenzylphthalate
-Benzo(a)anthracene+
-Chrysene
-bis(2-Ethylhexyl)phthalat
-Di-n-octylphthalate
-Benzo(b)fluoranthene
-Benzo(k)fluoranthene
-Benzo(a)pyrene
-Perylene-D12
-Indeno(1,2,3-cd)pyrene
-Dibenzo(a,h)anthracene+
-Total PAHs

Data File: \\target_server\gg\chem\gcms-v.i\V120623.b\V7603.D
Report Date: 07-Dec-2023 07:09

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-v.i\V120623.b\V7603.D
Lab Smp Id: WG346507-3
Inj Date : 06-DEC-2023 11:38
Operator : EP   Inst ID: gcms-v.i
Smp Info : WG346507-3
Misc Info :
Comment   :
Method   : \\target_server\gg\chem\gcms-v.i\V120623.b\VSPSIM21.m
Meth Date : 07-Dec-2023 07:08 gcms-v.i   Quant Type: ISTD
Cal Date : 06-DEC-2023 11:38   Cal File: V7603.D
Als bottle: 3   Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: all.sub
Target Version: 4.12

Concentration Formula: Amt * DF * Uf*(Vt/Vo)*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.000	Sample Volume (L)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)	REVIEW CODE
$	1 1,4-Dioxane-d8	96	2.843	2.833	(0.275)	17590	0.50000	0.412(a)	
	2 1,4-Dioxane	88	2.874	2.874	(0.431)	20595	0.50000	0.460(a)	
	3 N-Nitrosodimethylamine	74	3.321	3.300	(0.497)	23647	0.50000	0.460	
	4 Pyridine	79	3.414	3.341	(0.511)	37886	0.50000	0.426	
	5 Benzaldehyde	77	6.156	6.146	(0.922)	24276	0.50000	0.690	
	6 Phenol	94	6.281	6.291	(0.941)	230987	2.00000	1.96	
	7 Bis(2-Chloroethyl)ether	93	6.385	6.385	(0.956)	49388	0.50000	0.500	
	8 2-Chlorophenol	128	6.416	6.427	(0.961)	199424	2.00000	1.93	
	9 1,3-Dichlorobenzene	146	6.603	6.603	(0.989)	53237	0.50000	0.475	
*	10 1,4-Dichlorobenzene-D4	152	6.676	6.676	(1.000)	59347	0.80000	(aQ)	
	11 1,4-Dichlorobenzene	146	6.697	6.697	(1.003)	54209	0.50000	0.480	
	12 1,2-Dichlorobenzene	146	6.874	6.874	(1.030)	51687	0.50000	0.476	
	13 2,2'-Oxybis(1-chloropropane)	45	7.020	7.030	(1.051)	22603	0.50000	0.489	
	14 2-Methylphenol	108	6.999	7.009	(1.048)	168066	2.00000	1.95	
	15 Acetophenone	105	7.165	7.176	(0.874)	64458	0.50000	0.480	
	16 N-Nitroso-di-n-propylamine	70	7.186	7.186	(1.076)	23648	0.50000	0.461	
	17 3&4-Methylphenol	108	7.186	7.196	(1.076)	177664	2.00000	2.01	
	18 Hexachloroethane	117	7.269	7.269	(1.089)	21596	0.50000	0.452	
	19 Nitrobenzene	77	7.363	7.363	(0.898)	36351	0.50000	0.431	
	20 Isophorone	82	7.663	7.662	(0.935)	68638	0.50000	0.454	
	21 2-Nitrophenol	139	7.745	7.745	(0.945)	79213	2.00000	1.79	
	22 2,4-Dimethylphenol	107	7.827	7.827	(0.955)	168114	2.00000	2.17	

Data File: \\target_server\gg\chem\gcms-v.i\V120623.b\V7603.D
Report Date: 07-Dec-2023 07:09

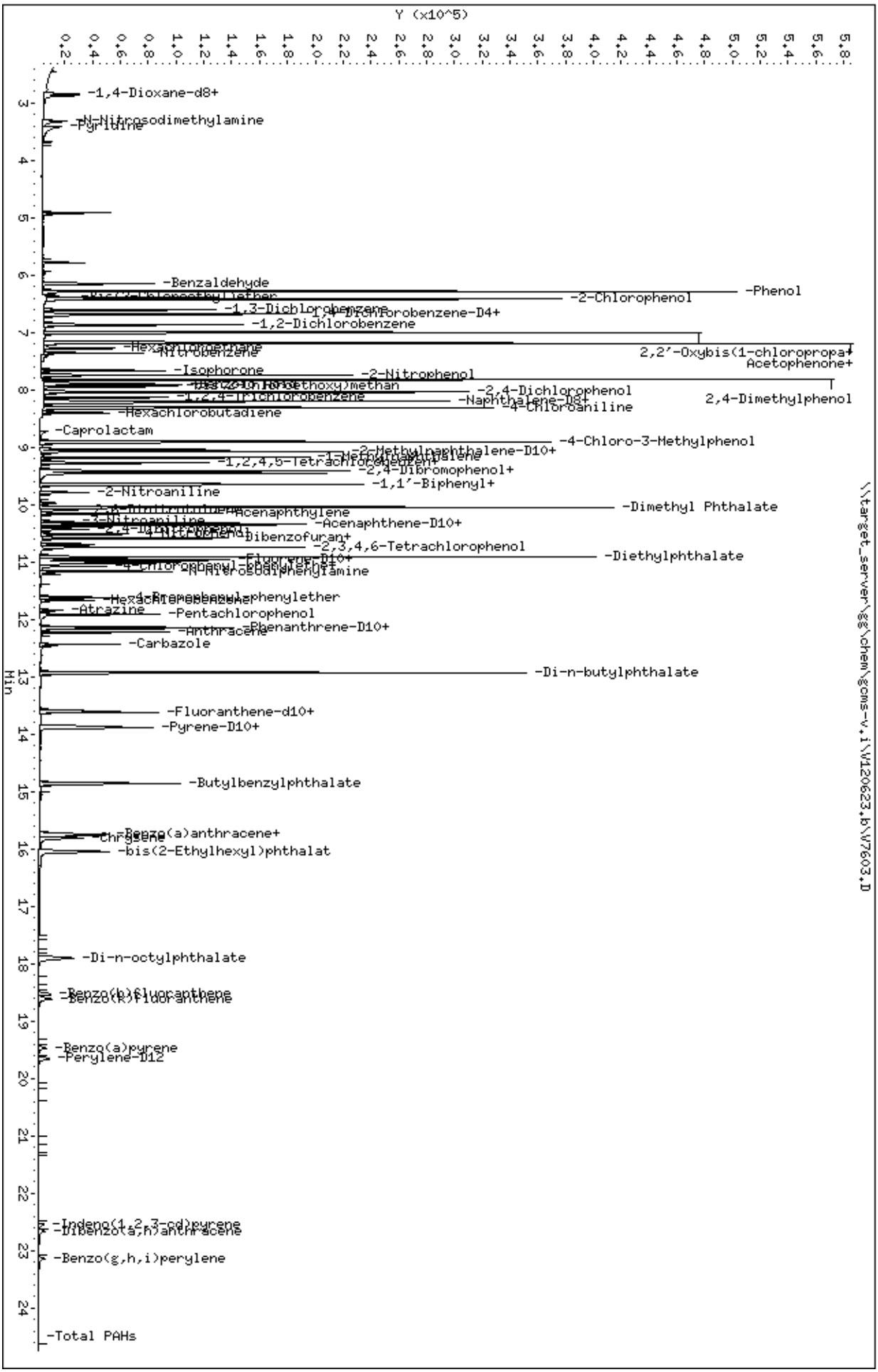
			QUANT SIG					AMOUNTS		
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
	23	bis(2-Chloroethoxy)methane	93	7.939	7.950	(0.969)	50524	0.50000	0.475	
	24	Benzoic Acid	105	7.898	7.970	(0.964)	61711	0.50000	0.798	
	25	2,4-Dichlorophenol	162	8.042	8.042	(0.981)	135727	2.00000	2.07(H)	
	26	1,2,4-Trichlorobenzene	180	8.134	8.145	(0.992)	37332	0.50000	0.469	
*	27	Naphthalene-D8	136	8.196	8.196	(1.000)	190764	0.80000	(a)	
	28	Naphthalene	128	8.216	8.227	(1.002)	128550	0.50000	0.501	
	29	4-Chloroaniline	127	8.309	8.319	(1.014)	38427	0.50000	0.556(a)	
	30	Hexachlorobutadiene	225	8.401	8.401	(1.025)	21014	0.50000	0.458	
	31	Caprolactam	113	8.730	8.730	(1.065)	6025	0.50000	0.283	
	32	4-Chloro-3-Methylphenol	107	8.904	8.915	(1.086)	134272	2.00000	1.98	
$	33	2-Methylnaphthalene-D10	152	9.028	9.028	(1.101)	56604	0.50000	0.501(a)	
	34	2-Methylnaphthalene	142	9.069	9.069	(1.106)	74593	0.50000	0.498	
	35	1-Methylnaphthalene	142	9.182	9.182	(1.120)	69044	0.50000	0.495	
	36	1,2,4,5-Tetrachlorobenzene	216	9.274	9.274	(0.898)	33691	0.50000	0.467	
	37	Hexachlorocyclopentadiene	237	9.274	9.274	(0.898)	12415	0.50000	0.314	
$	38	2,4-Dibromophenol	252	9.408	9.408	(0.910)	15463	0.50000	0.414(a)	
	39	2,4,6-Trichlorophenol	196	9.418	9.418	(0.911)	85701	2.00000	1.93	
	40	2,4,5-Trichlorophenol	196	9.459	9.459	(0.915)	81846	2.00000	1.79	
	41	1,1'-Biphenyl	154	9.644	9.644	(0.933)	86417	0.50000	0.494	
	42	2-Chloronaphthalene	164	9.655	9.655	(0.934)	22913	0.50000	0.473	
	43	2-Nitroaniline	65	9.788	9.788	(0.947)	9191	0.50000	0.298	
	44	Dimethyl Phthalate	163	10.045	10.055	(0.972)	256982	2.00000	1.93	
	45	2,6-Dinitrotoluene	165	10.107	10.107	(0.978)	11216	0.50000	0.327	
	46	Acenaphthylene	152	10.148	10.158	(0.982)	95732	0.50000	0.472	
	47	3-Nitroaniline	138	10.292	10.312	(0.996)	7476	0.50000	0.266	
*	48	Acenaphthene-D10	164	10.333	10.333	(1.000)	79333	0.80000	(a)	
	49	Acenaphthene	153	10.364	10.374	(1.003)	61207	0.50000	0.477	
	50	2,4-Dinitrophenol	184	10.425	10.436	(1.009)	11888	2.00000	1.20	
	51	Dibenzofuran	168	10.580	10.590	(1.024)	86897	0.50000	0.488	
	52	4-Nitrophenol	109	10.508	10.528	(1.017)	22738	2.00000	1.52	
	53	2,4-Dinitrotoluene	165	10.590	10.590	(1.025)	13393	0.50000	0.315	
	54	2,3,4,6-Tetrachlorophenol	232	10.744	10.744	(1.040)	57921	2.00000	1.90	
	55	Diethylphthalate	149	10.910	10.910	(1.056)	234420	2.00000	1.84	
$	56	Fluorene-D10	174	10.962	10.962	(1.061)	51985	0.50000	0.485(a)	
	57	Fluorene	166	10.993	11.003	(1.064)	62812	0.50000	0.478	
	58	4-Chlorophenyl-phenylether	204	11.024	11.024	(1.067)	31647	0.50000	0.475	
	59	4-Nitroaniline	138	11.035	11.045	(1.068)	6162	0.50000	0.336	
	60	4,6-Dinitro-2-Methylphenol	198	11.076	11.087	(0.913)	18949	2.00000	1.40	
	61	N-Nitrosodiphenylamine	169	11.170	11.170	(0.920)	43427	0.50000	0.478	
	62	4-Bromophenyl-phenylether	248	11.618	11.618	(0.957)	16254	0.50000	0.479	
	63	Hexachlorobenzene	284	11.670	11.670	(0.962)	20680	0.50000	0.502	
	64	Atrazine	200	11.847	11.857	(0.976)	7585	0.50000	0.313	
	65	Pentachlorophenol	266	11.920	11.920	(0.982)	34009	2.00000	1.77	
*	66	Phenanthrene-D10	188	12.137	12.137	(1.000)	107648	0.80000	(a)	
	67	Phenanthrene	178	12.168	12.167	(1.003)	74683	0.50000	0.496	
	68	Anthracene	178	12.229	12.229	(1.008)	65184	0.50000	0.464	
	69	Carbazole	167	12.434	12.434	(1.025)	41135	0.50000	0.572	
	70	Di-n-butylphthalate	149	12.927	12.927	(1.065)	262840	2.00000	1.71	
$	71	Fluoranthene-d10	212	13.594	13.604	(1.120)	36974	0.50000	0.411	
	72	Fluoranthene	202	13.614	13.625	(1.122)	55178	0.50000	0.436	
$	73	Pyrene-D10	212	13.871	13.871	(0.880)	43503	0.50000	0.534(a)	
	74	Pyrene	202	13.891	13.891	(0.881)	57519	0.50000	0.554	
	75	Butylbenzylphthalate	149	14.856	14.856	(0.943)	63015	2.00000	1.71	
	76	Benzo(a)anthracene	228	15.738	15.749	(0.999)	24822	0.50000	0.410	

Data File: \\target_server\gg\chem\gcms-v.i\V120623.b\V7603.D
Report Date: 07-Dec-2023 07:09

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
	77 3,3'-Dichlorobenzidine	252	15.749	15.769	(0.999)	3956	0.50000	0.393	
*	78 Chrysene-D12	240	15.759	15.769	(1.000)	42088	0.80000	(a)	
	79 Chrysene	228	15.810	15.820	(1.003)	35024	0.50000	0.480	
	80 bis(2-Ethylhexyl)phthalate	149	16.046	16.046	(1.018)	65272	2.00000	1.43	
	81 Di-n-octylphthalate	149	17.905	17.905	(1.136)	66437	2.00000	1.29	
	82 Benzo(b)fluoranthene	252	18.533	18.543	(0.943)	16787	0.50000	0.451	
	83 Benzo(k)fluoranthene	252	18.615	18.636	(0.947)	21958	0.50000	0.476(H)	
	84 Benzo(a)pyrene	252	19.470	19.491	(0.991)	12016	0.50000	0.318	
*	85 Perylene-D12	264	19.656	19.676	(1.000)	20195	0.80000	(a)	
	86 Indeno(1,2,3-cd)pyrene	276	22.549	22.580	(1.147)	7607	0.50000	0.360	
	87 Dibenzo(a,h)anthracene	278	22.663	22.694	(1.153)	8015	0.50000	0.349	
	88 Benzo(g,h,i)perylene	276	23.136	23.178	(1.177)	10665	0.50000	0.392	
M	89 Total PAHs	100				881396	7.20000	(a)	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
H - Operator selected an alternate compound hit.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Sample Info: WG346507-3
Volume Injected (uL): 1.0
Column phase: Rxi-5ViMS
Instrument: gcms-v,i
Operator: EP
Column diameter: 0.25
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Y (x10^5)
Min
-1,4-Dioxane-d8+
-N-Nitrosodimethylamine
-Pyridine
-Benzaldehyde
-Phenol
-2-Chlorophenol
-1,3-Dichlorobenzene
-1,4-Dichlorobenzene-D4+
-1,2-Dichlorobenzene
-Hexachloroethane
-Nitrobenzene
2,2'-Oxybis(1-chloropropa+
Acetophenone+
-Isophorone
-2-Nitrophenol
-2,4-Dichlorophenol
2,4-Dimethylphenol
-1,2,4-Trichlorobenzene
-Naphthalene-D8+
-4-Chloroaniline
-Hexachlorobutadiene
-Caprolactam
-4-Chloro-3-Methylphenol
-2-Methylnaphthalene-D10+
-1-Methylnaphthalene
-1,2,4,5-Tetrachlorobenzen+
-2,4-Dibromophenol+
-1,1'-Biphenyl+
-2-Nitroaniline
-Dimethyl Phthalate
-Acenaphthylene
-Acenaphthene-D10+
-Dibenzofuran+
-2,3,4,6-Tetrachlorophenol
-Diethylphthalate
-Fluorene-D10+
-N-Nitrosodiphenylamine
-Hexachlorobenzene
-Atrazine
-Pentachlorophenol
-Phenanthrene-D10+
-Anthracene
-Carbazole
-Di-n-butylphthalate
-Fluoranthene-d10+
-Pyrene-D10+
-Butylbenzylphthalate
-Benzo(a)anthracene+
-Chrysene
-bis(2-Ethylhexyl)phthalat
-Di-n-octylphthalate
-Benzo(b)fluoranthene
-Benzo(k)fluoranthene
-Benzo(a)pyrene
-Perylene-D12
-Indeno(1,2,3-cd)pyrene
-Dibenzo(a,h)anthracene
-Benzo(g,h,i)perylene
-Total PAHs

Data File: \\target_server\gg\chem\gcms-v.i\V120623.b\V7604.D
Report Date: 07-Dec-2023 07:09

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-v.i\V120623.b\V7604.D
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Inj Date : 06-DEC-2023 12:11
Operator : EP   Inst ID: gcms-v.i
Smp Info : WG346507-2
Misc Info :
Comment   :
Method   : \\target_server\gg\chem\gcms-v.i\V120623.b\VSPSIM21.m
Meth Date : 07-Dec-2023 07:08 gcms-v.i   Quant Type: ISTD
Cal Date : 06-DEC-2023 12:11   Cal File: V7604.D
Als bottle: 4   Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: all.sub
Target Version: 4.12

Concentration Formula: Amt * DF * Uf*(Vt/Vo)*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.000	Sample Volume (L)
Cpnd Variable		Local Compound Variable

EP
3:04 pm, Dec 29, 2023

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
$	1 1,4-Dioxane-d8	96	2.843	2.833	(0.275)	7727	0.20000	0.190(a)	
	2 1,4-Dioxane	88	2.885	2.874	(0.432)	9548	0.20000	0.220(a)	
	3 N-Nitrosodimethylamine	74	3.341	3.300	(0.501)	7825	0.20000	0.157(aM)	M6
	4 Pyridine	79	3.476	3.341	(0.521)	11686	0.20000	0.135(a)	
	5 Benzaldehyde	77	6.156	6.146	(0.922)	9955	0.20000	0.292	
	6 Phenol	94	6.281	6.291	(0.941)	103729	1.00000	0.909(a)	
	7 Bis(2-Chloroethyl)ether	93	6.385	6.385	(0.956)	19780	0.20000	0.206	
	8 2-Chlorophenol	128	6.416	6.427	(0.961)	90900	1.00000	0.910(a)	
	9 1,3-Dichlorobenzene	146	6.603	6.603	(0.989)	22091	0.20000	0.203	
*	10 1,4-Dichlorobenzene-D4	152	6.676	6.676	(1.000)	57548	0.80000	(a)	
	11 1,4-Dichlorobenzene	146	6.697	6.697	(1.003)	22453	0.20000	0.205	
	12 1,2-Dichlorobenzene	146	6.874	6.874	(1.030)	21404	0.20000	0.203	
	13 2,2'-Oxybis(1-chloropropane)	45	7.020	7.030	(1.051)	9338	0.20000	0.208	
	14 2-Methylphenol	108	6.999	7.009	(1.048)	77601	1.00000	0.928(a)	
	15 Acetophenone	105	7.165	7.176	(0.874)	25815	0.20000	0.198(aQ)	
	16 N-Nitroso-di-n-propylamine	70	7.186	7.186	(1.076)	8756	0.20000	0.176(a)	
	17 3&4-Methylphenol	108	7.186	7.196	(1.076)	79423	1.00000	0.925(a)	
	18 Hexachloroethane	117	7.269	7.269	(1.089)	8932	0.20000	0.192(a)	
	19 Nitrobenzene	77	7.363	7.363	(0.898)	13336	0.20000	0.163(a)	
	20 Isophorone	82	7.662	7.662	(0.935)	26492	0.20000	0.180(a)	
	21 2-Nitrophenol	139	7.745	7.745	(0.945)	31178	1.00000	0.727(a)	
	22 2,4-Dimethylphenol	107	7.827	7.827	(0.955)	75215	1.00000	1.000	

Data File: \\target_server\gg\chem\gcms-v.i\V120623.b\V7604.D
Report Date: 07-Dec-2023 07:09

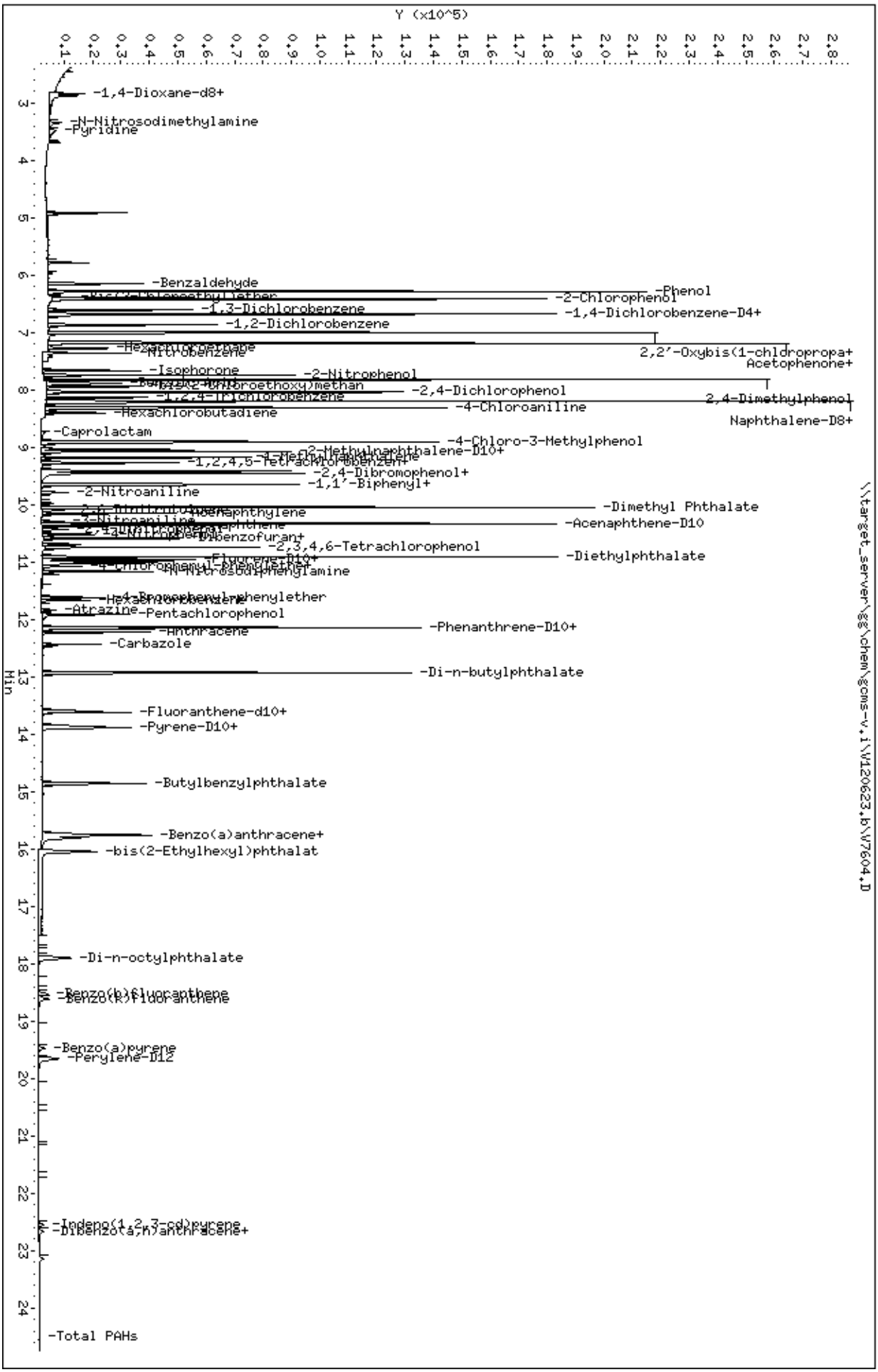
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
	23 bis(2-Chloroethoxy)methane	93	7.939	7.950	(0.969)	20521	0.20000	0.199(a)	
	24 Benzoic Acid	105	7.888	7.970	(0.962)	18448	0.20000	0.246	
	25 2,4-Dichlorophenol	162	8.042	8.042	(0.981)	60240	1.00000	0.946(H)	
	26 1,2,4-Trichlorobenzene	180	8.134	8.145	(0.992)	15148	0.20000	0.196(a)	
*	27 Naphthalene-D8	136	8.196	8.196	(1.000)	185042	0.80000	(a)	
	28 Naphthalene	128	8.227	8.227	(1.004)	54521	0.20000	0.219	
	29 4-Chloroaniline	127	8.309	8.319	(1.014)	13464	0.20000	0.201(a)	
	30 Hexachlorobutadiene	225	8.401	8.401	(1.025)	8730	0.20000	0.196(a)	
	31 Caprolactam	113	8.750	8.730	(1.068)	1854	0.20000	0.0897(aQ)	
	32 4-Chloro-3-Methylphenol	107	8.904	8.915	(1.086)	57309	1.00000	0.873(a)	
$	33 2-Methylnaphthalene-D10	152	9.028	9.028	(1.101)	22517	0.20000	0.206(a)	
	34 2-Methylnaphthalene	142	9.069	9.069	(1.106)	29838	0.20000	0.205	
	35 1-Methylnaphthalene	142	9.182	9.182	(1.120)	27578	0.20000	0.204	
	36 1,2,4,5-Tetrachlorobenzene	216	9.274	9.274	(0.898)	14003	0.20000	0.204	
	37 Hexachlorocyclopentadiene	237	9.274	9.274	(0.898)	4667	0.20000	0.124(a)	
$	38 2,4-Dibromophenol	252	9.408	9.408	(0.910)	5526	0.20000	0.155(a)	
	39 2,4,6-Trichlorophenol	196	9.418	9.418	(0.911)	37444	1.00000	0.884(a)	
	40 2,4,5-Trichlorophenol	196	9.459	9.459	(0.915)	43026	1.00000	0.990(a)	
	41 1,1'-Biphenyl	154	9.644	9.644	(0.933)	35468	0.20000	0.213	
	42 2-Chloronaphthalene	164	9.654	9.655	(0.934)	9217	0.20000	0.200	
	43 2-Nitroaniline	65	9.788	9.788	(0.947)	3047	0.20000	0.104(a)	
	44 Dimethyl Phthalate	163	10.045	10.055	(0.972)	120941	1.00000	0.953(a)	
	45 2,6-Dinitrotoluene	165	10.107	10.107	(0.978)	3505	0.20000	0.107(a)	
	46 Acenaphthylene	152	10.158	10.158	(0.983)	37479	0.20000	0.194(a)	
	47 3-Nitroaniline	138	10.292	10.312	(0.996)	2743	0.20000	0.0926(a)	
*	48 Acenaphthene-D10	164	10.333	10.333	(1.000)	75622	0.80000	(a)	
	49 Acenaphthene	153	10.364	10.374	(1.003)	25139	0.20000	0.206	
	50 2,4-Dinitrophenol	184	10.436	10.436	(1.010)	3651	1.00000	0.392(a)	
	51 Dibenzofuran	168	10.590	10.590	(1.025)	35907	0.20000	0.212	
	52 4-Nitrophenol	109	10.518	10.528	(1.018)	7230	1.00000	0.504(a)	
	53 2,4-Dinitrotoluene	165	10.590	10.590	(1.025)	4110	0.20000	0.102(a)	
	54 2,3,4,6-Tetrachlorophenol	232	10.744	10.744	(1.040)	25307	1.00000	0.870(a)	
	55 Diethylphthalate	149	10.910	10.910	(1.056)	111033	1.00000	0.913(a)	
$	56 Fluorene-D10	174	10.962	10.962	(1.061)	21026	0.20000	0.206(a)	
	57 Fluorene	166	10.993	11.003	(1.064)	25414	0.20000	0.203	
	58 4-Chlorophenyl-phenylether	204	11.024	11.024	(1.067)	13291	0.20000	0.209	
	59 4-Nitroaniline	138	11.035	11.045	(1.068)	1975	0.20000	0.113(a)	
	60 4,6-Dinitro-2-Methylphenol	198	11.076	11.087	(0.913)	5752	1.00000	0.450(a)	
	61 N-Nitrosodiphenylamine	169	11.170	11.170	(0.920)	16988	0.20000	0.195(a)	
	62 4-Bromophenyl-phenylether	248	11.618	11.618	(0.957)	6449	0.20000	0.198(a)	
	63 Hexachlorobenzene	284	11.670	11.670	(0.962)	8965	0.20000	0.227	
	64 Atrazine	200	11.847	11.857	(0.976)	2522	0.20000	0.109(a)	
	65 Pentachlorophenol	266	11.920	11.920	(0.982)	12559	1.00000	0.684(a)	
*	66 Phenanthrene-D10	188	12.137	12.137	(1.000)	103052	0.80000	(a)	
	67 Phenanthrene	178	12.167	12.167	(1.003)	31242	0.20000	0.217	
	68 Anthracene	178	12.229	12.229	(1.008)	24902	0.20000	0.185(a)	
	69 Carbazole	167	12.434	12.434	(1.025)	15982	0.20000	0.232	
	70 Di-n-butylphthalate	149	12.927	12.927	(1.065)	106507	1.00000	0.723(a)	
$	71 Fluoranthene-d10	212	13.594	13.604	(1.120)	14413	0.20000	0.167	
	72 Fluoranthene	202	13.614	13.625	(1.122)	20867	0.20000	0.172(a)	
$	73 Pyrene-D10	212	13.871	13.871	(0.880)	17185	0.20000	0.224(a)	
	74 Pyrene	202	13.891	13.891	(0.882)	23163	0.20000	0.237	
	75 Butylbenzylphthalate	149	14.856	14.856	(0.943)	23613	1.00000	0.690(a)	
	76 Benzo(a)anthracene	228	15.738	15.749	(0.999)	9362	0.20000	0.165(a)	

Data File: \\target_server\gg\chem\gcms-v.i\V120623.b\V7604.D
Report Date: 07-Dec-2023 07:09

			QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
	77	3,3'-Dichlorobenzidine	252	15.748	15.769	(0.999)	1425	0.20000	0.151(a)	
*	78	Chrysene-D12	240	15.759	15.769	(1.000)	39554	0.80000	(a)	
	79	Chrysene	228	15.810	15.820	(1.003)	14731	0.20000	0.215	
	80	bis(2-Ethylhexyl)phthalate	149	16.046	16.046	(1.018)	25076	1.00000	0.593(a)	
	81	Di-n-octylphthalate	149	17.905	17.905	(1.136)	29522	1.00000	0.619(a)	
	82	Benzo(b)fluoranthene	252	18.533	18.543	(0.943)	6240	0.20000	0.172(a)	
	83	Benzo(k)fluoranthene	252	18.615	18.636	(0.947)	7277	0.20000	0.162(aH)	
	84	Benzo(a)pyrene	252	19.470	19.491	(0.991)	4508	0.20000	0.122(a)	
*	85	Perylene-D12	264	19.655	19.676	(1.000)	19718	0.80000	(a)	
	86	Indeno(1,2,3-cd)pyrene	276	22.549	22.580	(1.147)	2962	0.20000	0.144(a)	
	87	Dibenzo(a,h)anthracene	278	22.663	22.694	(1.153)	2871	0.20000	0.128(a)	
	88	Benzo(g,h,i)perylene	276	23.136	23.178	(1.177)	3973	0.20000	0.150(a)	
M	89	Total PAHs	100				352067	3.60000	(a)	

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.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Volume Injected (uL): 1.0
Column phase: Rxi-5ViOms
Instrument: gcms-v.i
Operator: EP
Column diameter: 0.25
\\target_server\gg\chem\gcms-v.i\W120623.b\W7604.D
Y (x10^5)
Min
-1,4-Dioxane-d8+
-N-Nitrosodimethylamine
-Pyridine
-Benzaldehyde
-Phenol
-2-Chlorophenol
-1,3-Dichlorobenzene
-1,4-Dichlorobenzene-D4+
-1,2-Dichlorobenzene
-Hexachloroethane
-Nitrobenzene
2,2'-Oxybis(1-chloropropa+
Acetophenone+
-Isophorone
-2-Nitrophenol
-2,4-Dichlorophenol
2,4-Dimethylphenol
-4-Chloroaniline
-Hexachlorobutadiene
Naphthalene-D8+
-Caprolactam
-4-Chloro-3-Methylphenol
-2-Methylnaphthalene-D10+
-1,2,4,5-Tetrachlorobenzene+
-2,4-Dibromophenol+
-1,1'-Biphenyl+
-2-Nitroaniline
-Dimethyl Phthalate
-Acenaphthene-D10
-2,3,4,6-Tetrachlorophenol
-Diethylphthalate
-N-Nitrosodiphenylamine
-Atrazine
-Pentachlorophenol
-Phenanthrene-D10+
-Carbazole
-Di-n-butylphthalate
-Fluoranthene-d10+
-Pyrene-D10+
-Butylbenzylphthalate
-Benzo(a)anthracene+
-bis(2-Ethylhexyl)phthalat
-Di-n-octylphthalate
-Benzo(b)fluoranthene
-Benzo(k)fluoranthene
-Benzo(a)pyrene
-Perylene-D12
-Indeno(1,2,3-cd)pyrene
-Dibenzo(a,h)anthracene+
-Total PAHs

Data File: \\target_server\gg\chem\gcms-v.i\V120623.b\V7605.D
Report Date: 07-Dec-2023 07:09

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-v.i\V120623.b\V7605.D
Lab Smp Id: WG346507-5
Inj Date : 06-DEC-2023 12:44
Operator : EP   Inst ID: gcms-v.i
Smp Info : WG346507-5
Misc Info :
Comment   :
Method   : \\target_server\gg\chem\gcms-v.i\V120623.b\VSPSIM21.m
Meth Date : 07-Dec-2023 07:08 gcms-v.i   Quant Type: ISTD
Cal Date : 06-DEC-2023 12:44   Cal File: V7605.D
Als bottle: 5   Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: all.sub
Target Version: 4.12

Concentration Formula: Amt * DF * Uf*(Vt/Vo)*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.000	Sample Volume (L)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
$	1 1,4-Dioxane-d8	96	2.822	2.833	(0.273)	316369	7.00000	7.15	
	2 1,4-Dioxane	88	2.864	2.874	(0.429)	320719	7.00000	6.73	
	3 N-Nitrosodimethylamine	74	3.290	3.300	(0.493)	418936	7.00000	7.67	
	4 Pyridine	79	3.331	3.341	(0.499)	756548	7.00000	8.00	
	5 Benzaldehyde	77	6.146	6.146	(0.921)	186488	7.00000	4.99	
	6 Phenol	94	6.281	6.291	(0.941)	864090	7.00000	6.91	
	7 Bis(2-Chloroethyl)ether	93	6.385	6.385	(0.956)	696408	7.00000	6.63	
	8 2-Chlorophenol	128	6.427	6.427	(0.963)	758702	7.00000	6.93	
	9 1,3-Dichlorobenzene	146	6.603	6.603	(0.989)	812087	7.00000	6.82	
*	10 1,4-Dichlorobenzene-D4	152	6.676	6.676	(1.000)	63055	0.80000	(aQ)	
	11 1,4-Dichlorobenzene	146	6.697	6.697	(1.003)	822777	7.00000	6.85	
	12 1,2-Dichlorobenzene	146	6.874	6.874	(1.030)	793064	7.00000	6.87	
	13 2,2'-Oxybis(1-chloropropane)	45	7.030	7.030	(1.053)	332335	7.00000	6.77	
	14 2-Methylphenol	108	7.009	7.009	(1.050)	627126	7.00000	6.84	
	15 Acetophenone	105	7.165	7.176	(0.874)	928776	7.00000	6.75(Q)	
	16 N-Nitroso-di-n-propylamine	70	7.186	7.186	(1.076)	391863	7.00000	7.19	
	17 3&4-Methylphenol	108	7.196	7.196	(1.078)	654476	7.00000	6.96	
	18 Hexachloroethane	117	7.269	7.269	(1.089)	352078	7.00000	6.93	
	19 Nitrobenzene	77	7.363	7.363	(0.898)	640353	7.00000	7.40	
	20 Isophorone	82	7.662	7.662	(0.935)	1103175	7.00000	7.11	
	21 2-Nitrophenol	139	7.744	7.745	(0.945)	325481	7.00000	7.18	
	22 2,4-Dimethylphenol	107	7.827	7.827	(0.955)	501093	7.00000	6.30	

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		QUANT SIG					AMOUNTS CAL-AMT	ON-COL	
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/ml)	(ug/ml)	REVIEW CODE
	23 bis(2-Chloroethoxy)methane	93	7.939	7.950	(0.969)	744091	7.00000	6.82	
	24 Benzoic Acid	105	7.939	7.970	(0.969)	295036	7.00000	3.72	
	25 2,4-Dichlorophenol	162	8.042	8.042	(0.981)	508021	7.00000	7.55	
	26 1,2,4-Trichlorobenzene	180	8.145	8.145	(0.994)	566179	7.00000	6.93	
*	27 Naphthalene-D8	136	8.196	8.196	(1.000)	195596	0.80000	(a)	
	28 Naphthalene	128	8.227	8.227	(1.004)	1783711	7.00000	6.77	
	29 4-Chloroaniline	127	8.309	8.319	(1.014)	486324	7.00000	6.87	
	30 Hexachlorobutadiene	225	8.401	8.401	(1.025)	325305	7.00000	6.91	
	31 Caprolactam	113	8.719	8.730	(1.064)	137799	7.00000	6.31(Q)	
	32 4-Chloro-3-Methylphenol	107	8.915	8.915	(1.088)	480930	7.00000	6.93	
$	33 2-Methylnaphthalene-D10	152	9.028	9.028	(1.101)	782103	7.00000	6.76	
	34 2-Methylnaphthalene	142	9.069	9.069	(1.106)	1059639	7.00000	6.90	
	35 1-Methylnaphthalene	142	9.182	9.182	(1.120)	968023	7.00000	6.77	
	36 1,2,4,5-Tetrachlorobenzene	216	9.274	9.274	(0.898)	493398	7.00000	6.60	
	37 Hexachlorocyclopentadiene	237	9.274	9.274	(0.898)	244392	7.00000	5.98	
$	38 2,4-Dibromophenol	252	9.408	9.408	(0.910)	271684	7.00000	7.02	
	39 2,4,6-Trichlorophenol	196	9.418	9.418	(0.911)	306810	7.00000	6.66	
	40 2,4,5-Trichlorophenol	196	9.459	9.459	(0.915)	305602	7.00000	6.47	
	41 1,1'-Biphenyl	154	9.644	9.644	(0.933)	1190880	7.00000	6.58	
	42 2-Chloronaphthalene	164	9.654	9.655	(0.934)	332713	7.00000	6.63	
	43 2-Nitroaniline	65	9.788	9.788	(0.947)	192245	7.00000	6.02	
	44 Dimethyl Phthalate	163	10.045	10.055	(0.972)	871226	7.00000	6.32	
	45 2,6-Dinitrotoluene	165	10.107	10.107	(0.978)	223611	7.00000	6.30	
	46 Acenaphthylene	152	10.158	10.158	(0.983)	1411940	7.00000	6.72	
	47 3-Nitroaniline	138	10.302	10.312	(0.997)	78371	7.00000	6.56	
*	48 Acenaphthene-D10	164	10.333	10.333	(1.000)	82165	0.80000	(a)	
	49 Acenaphthene	153	10.374	10.374	(1.004)	876861	7.00000	6.60	
	50 2,4-Dinitrophenol	184	10.436	10.436	(1.010)	70945	7.00000	6.31	
	51 Dibenzofuran	168	10.590	10.590	(1.025)	1198777	7.00000	6.51	
	52 4-Nitrophenol	109	10.518	10.528	(1.018)	97685	7.00000	6.43	
	53 2,4-Dinitrotoluene	165	10.590	10.590	(1.025)	257322	7.00000	5.85	
	54 2,3,4,6-Tetrachlorophenol	232	10.744	10.744	(1.040)	207923	7.00000	6.58	
	55 Diethylphthalate	149	10.910	10.910	(1.056)	874791	7.00000	6.62	
$	56 Fluorene-D10	174	10.962	10.962	(1.061)	714506	7.00000	6.43	
	57 Fluorene	166	11.003	11.003	(1.065)	881820	7.00000	6.48	
	58 4-Chlorophenyl-phenylether	204	11.024	11.024	(1.067)	441518	7.00000	6.40	
	59 4-Nitroaniline	138	11.035	11.045	(1.068)	116393	7.00000	6.14(Q)	
	60 4,6-Dinitro-2-Methylphenol	198	11.076	11.087	(0.913)	102723	7.00000	6.57	
	61 N-Nitrosodiphenylamine	169	11.170	11.170	(0.920)	669664	7.00000	6.92	
	62 4-Bromophenyl-phenylether	248	11.618	11.618	(0.957)	244283	7.00000	6.76	
	63 Hexachlorobenzene	284	11.670	11.670	(0.962)	281041	7.00000	6.41	
	64 Atrazine	200	11.857	11.857	(0.977)	159137	7.00000	6.17	
	65 Pentachlorophenol	266	11.920	11.920	(0.982)	143588	7.00000	7.03	
*	66 Phenanthrene-D10	188	12.137	12.137	(1.000)	114689	0.80000	(a)	
	67 Phenanthrene	178	12.167	12.167	(1.003)	1053858	7.00000	6.58	
	68 Anthracene	178	12.229	12.229	(1.008)	1046036	7.00000	6.99	
	69 Carbazole	167	12.434	12.434	(1.025)	507146	7.00000	6.62	
	70 Di-n-butylphthalate	149	12.927	12.927	(1.065)	1193533	7.00000	7.28	
$	71 Fluoranthene-d10	212	13.594	13.604	(1.120)	690107	7.00000	7.20	
	72 Fluoranthene	202	13.624	13.625	(1.123)	945477	7.00000	7.02	
$	73 Pyrene-D10	212	13.871	13.871	(0.880)	793713	7.00000	6.43	
	74 Pyrene	202	13.891	13.891	(0.881)	983844	7.00000	6.25	
	75 Butylbenzylphthalate	149	14.856	14.856	(0.942)	408891	7.00000	6.79	
	76 Benzo(a)anthracene	228	15.748	15.749	(0.999)	646683	7.00000	7.06	

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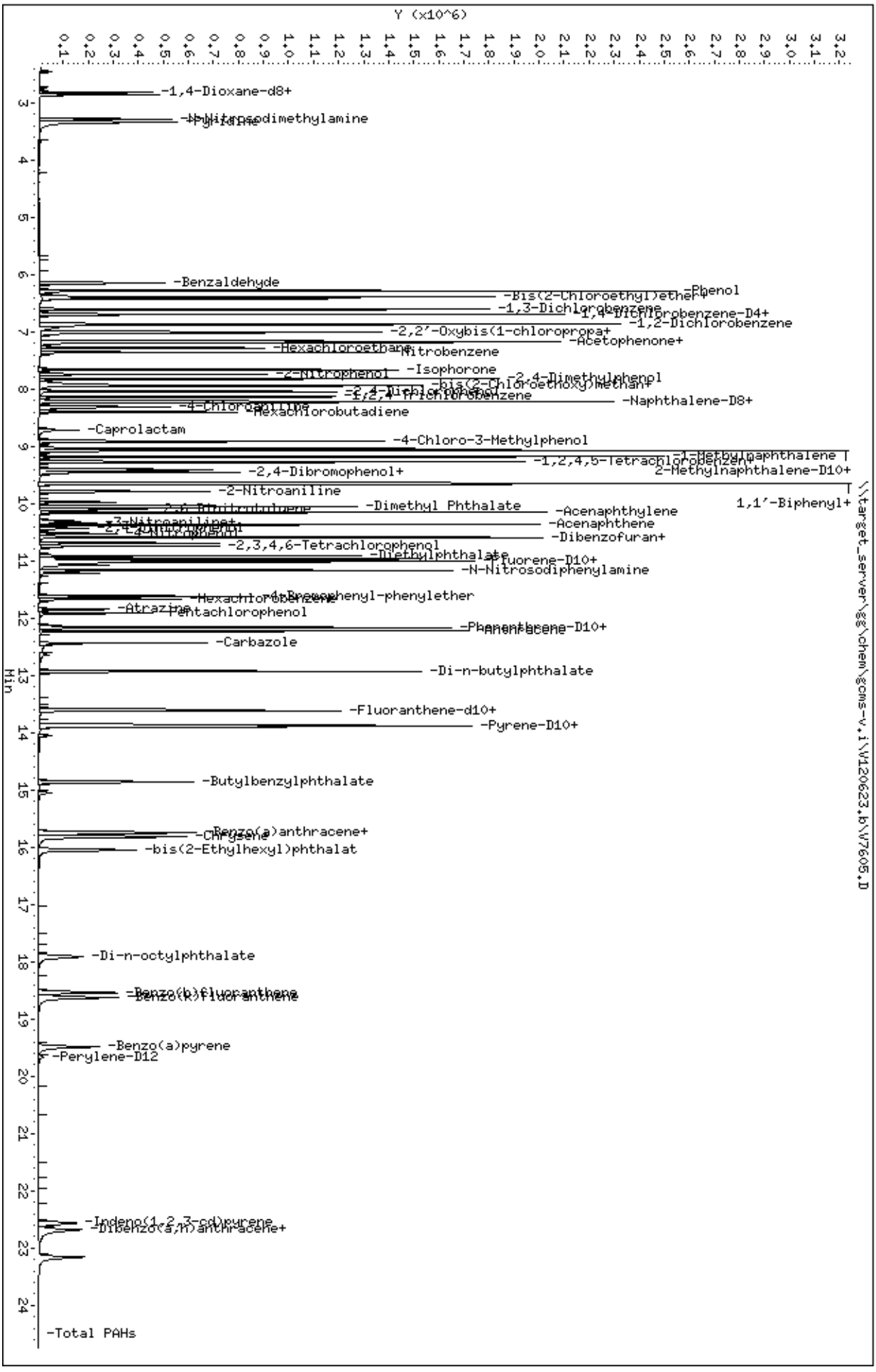
							AMOUNTS		
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
	77 3,3'-Dichlorobenzidine	252	15.759	15.769	(0.999)	110949	7.00000	7.28	
*	78 Chrysene-D12	240	15.769	15.769	(1.000)	63733	0.80000	(a)	
	79 Chrysene	228	15.820	15.820	(1.003)	725579	7.00000	6.56	
	80 bis(2-Ethylhexyl)phthalate	149	16.046	16.046	(1.018)	501912	7.00000	6.70	
	81 Di-n-octylphthalate	149	17.915	17.905	(1.136)	544584	7.00000	6.34	
	82 Benzo(b)fluoranthene	252	18.543	18.543	(0.943)	518674	7.00000	7.08	
	83 Benzo(k)fluoranthene	252	18.626	18.636	(0.947)	650298	7.00000	7.16(H)	
	84 Benzo(a)pyrene	252	19.491	19.491	(0.991)	463151	7.00000	6.23	
*	85 Perylene-D12	264	19.666	19.676	(1.000)	39759	0.80000	(a)	
	86 Indeno(1,2,3-cd)pyrene	276	22.570	22.580	(1.148)	311244	7.00000	6.71	
	87 Dibenzo(a,h)anthracene	278	22.694	22.694	(1.154)	338978	7.00000	6.78	
	88 Benzo(g,h,i)perylene	276	23.157	23.178	(1.178)	409538	7.00000	6.96	
M	89 Total PAHs	100				15075354	126.000	(a)	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
H - Operator selected an alternate compound hit.


Data File: \\target_server\gg\chem\gcms-v,i\W120623,b\W7605,D
Date : 06-DEC-2023 12:44
Client ID:
Sample Info: WG346507-5
Volume Injected (uL): 1.0
Column phase: Rxi-5ViMS
Instrument: gcms-v,i
Operator: EP
Column diameter: 0.25
\\target_server\gg\chem\gcms-v,i\W120623,b\W7605,D
Y (x10^6)
Min
-1,4-Dioxane-d8+
-Pyridine
-N-Nitrosodimethylamine
-Benzaldehyde
-Phenol
-Bis(2-Chloroethyl)ether
-1,3-Dichlorobenzene
-1,4-Dichlorobenzene-D4+
-1,2-Dichlorobenzene
-2,2'-Oxybis(1-chloropropa+
-Acetophenone+
-Hexachloroethane
-Nitrobenzene
-Isophorone
-2-Nitrophenol
-2,4-Dimethylphenol
-bis(2-Chloroethoxy)methan+
-2,4-Dichlorophenol
-1,2,4-Trichlorobenzene
-Naphthalene-D8+
-4-Chloroaniline
-Hexachlorobutadiene
-Caprolactam
-4-Chloro-3-Methylphenol
-1-Methylnaphthalene
-1,2,4,5-Tetrachlorobenzen+
2-Methylnaphthalene-D10+
-2,4-Dibromophenol+
-2-Nitroaniline
1,1'-Biphenyl+
-Dimethyl Phthalate
-Acenaphthylene
-Acenaphthene
-Dibenzofuran+
-2,3,4,6-Tetrachlorophenol
-Diethylphthalate
-Fluorene-D10+
-N-Nitrosodiphenylamine
-4-Bromophenyl-phenylether
-Hexachlorobenzene
-Atrazine
-Pentachlorophenol
-Phenanthrene-D10+
-Carbazole
-Di-n-butylphthalate
-Fluoranthene-d10+
-Pyrene-D10+
-Butylbenzylphthalate
-Benzo(a)anthracene+
-Chrysene
-bis(2-Ethylhexyl)phthalat
-Di-n-octylphthalate
-Benzo(b)fluoranthene
-Benzo(k)fluoranthene
-Benzo(a)pyrene
-Perylene-D12
-Indeno(1,2,3-cd)pyrene
-Dibenzo(a,h)anthracene+
-Total PAHs

Data File: \\target_server\gg\chem\gcms-v.i\V120623.b\V7606.D
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Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-v.i\V120623.b\V7606.D
Lab Smp Id: WG346507-6
Inj Date : 06-DEC-2023 13:17
Operator : EP   Inst ID: gcms-v.i
Smp Info : WG346507-6
Misc Info :
Comment   :
Method   : \\target_server\gg\chem\gcms-v.i\V120623.b\VSPSIM21.m
Meth Date : 07-Dec-2023 07:08 gcms-v.i   Quant Type: ISTD
Cal Date : 06-DEC-2023 13:17   Cal File: V7606.D
Als bottle: 6   Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: all.sub
Target Version: 4.12

Concentration Formula: Amt * DF * Uf*(Vt/Vo)*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.000	Sample Volume (L)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
$	1 1,4-Dioxane-d8	96	2.822	2.833	(1.000)	406231	10.0000	10.8	
	2 1,4-Dioxane	88	2.864	2.874	(0.429)	411537	10.0000	9.90	
	3 N-Nitrosodimethylamine	74	3.289	3.300	(0.493)	522787	10.0000	11.0	
	4 Pyridine	79	3.331	3.341	(0.499)	897053	10.0000	10.9	
	5 Benzaldehyde	77	6.146	6.146	(0.921)	225706	10.0000	6.91	
	6 Phenol	94	6.281	6.291	(0.941)	1129202	10.0000	10.3	
	7 Bis(2-Chloroethyl)ether	93	6.385	6.385	(0.956)	948435	10.0000	10.3	
	8 2-Chlorophenol	128	6.426	6.427	(0.963)	1023060	10.0000	10.7	
	9 1,3-Dichlorobenzene	146	6.603	6.603	(0.989)	1082425	10.0000	10.4	
*	10 1,4-Dichlorobenzene-D4	152	6.676	6.676	(1.000)	55058	0.80000	(aQ)	
	11 1,4-Dichlorobenzene	146	6.697	6.697	(1.003)	1091403	10.0000	10.4	
	12 1,2-Dichlorobenzene	146	6.874	6.874	(1.030)	1061168	10.0000	10.5	
	13 2,2'-Oxybis(1-chloropropane)	45	7.020	7.030	(1.051)	431235	10.0000	10.0(Q)	
	14 2-Methylphenol	108	7.009	7.009	(1.050)	837661	10.0000	10.5	
	15 Acetophenone	105	7.165	7.176	(0.874)	1237024	10.0000	10.2	
	16 N-Nitroso-di-n-propylamine	70	7.186	7.186	(1.076)	524844	10.0000	11.0	
	17 3&4-Methylphenol	108	7.196	7.196	(1.078)	856624	10.0000	10.4	
	18 Hexachloroethane	117	7.269	7.269	(1.089)	474396	10.0000	10.7	
	19 Nitrobenzene	77	7.363	7.363	(0.898)	858132	10.0000	11.2	
	20 Isophorone	82	7.662	7.662	(0.935)	1472392	10.0000	10.7	
	21 2-Nitrophenol	139	7.744	7.745	(0.945)	456600	10.0000	11.4	
	22 2,4-Dimethylphenol	107	7.827	7.827	(0.955)	680519	10.0000	9.68	

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EP
3:04 pm, Dec 29, 2023

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
	23 bis(2-Chloroethoxy)methane	93	7.939	7.950	(0.969)	974815	10.0000	10.1	
	24 Benzoic Acid	105	7.950	7.970	(0.970)	487132	10.0000	6.95	
	25 2,4-Dichlorophenol	162	8.042	8.042	(0.981)	686638	10.0000	11.6	
	26 1,2,4-Trichlorobenzene	180	8.134	8.145	(0.992)	753592	10.0000	10.4	
*	27 Naphthalene-D8	136	8.196	8.196	(1.000)	172819	0.80000	(a)	
	28 Naphthalene	128	8.227	8.227	(1.004)	2295291	10.0000	9.87	
	29 4-Chloroaniline	127	8.309	8.319	(1.014)	457767	10.0000	7.32	
	30 Hexachlorobutadiene	225	8.401	8.401	(1.025)	439898	10.0000	10.6	
	31 Caprolactam	113	8.719	8.730	(1.064)	197474	10.0000	10.2	
	32 4-Chloro-3-Methylphenol	107	8.915	8.915	(1.088)	638794	10.0000	10.4	
$	33 2-Methylnaphthalene-D10	152	9.028	9.028	(1.101)	1017951	10.0000	9.95	
	34 2-Methylnaphthalene	142	9.069	9.069	(1.106)	1340695	10.0000	9.88	
	35 1-Methylnaphthalene	142	9.182	9.182	(1.120)	1272587	10.0000	10.1	
	36 1,2,4,5-Tetrachlorobenzene	216	9.274	9.274	(1.000)	659559	10.0000	10.4	
	37 Hexachlorocyclopentadiene	237	9.274	9.274	(1.000)	336261	10.0000	9.68	
$	38 2,4-Dibromophenol	252	9.408	9.408	(1.000)	375823	10.0000	11.4	
	39 2,4,6-Trichlorophenol	196	9.418	9.418	(1.000)	412198	10.0000	10.5	
	40 2,4,5-Trichlorophenol	196	9.459	9.459	(1.000)	445839	10.0000	11.1	
	41 1,1'-Biphenyl	154	9.644	9.644	(1.000)	1507069	10.0000	9.80	
	42 2-Chloronaphthalene	164	9.654	9.655	(1.000)	443589	10.0000	10.4	
	43 2-Nitroaniline	65	9.788	9.788	(1.000)	267769	10.0000	9.87	
	44 Dimethyl Phthalate	163	10.045	10.055	(1.000)	1225427	10.0000	10.5	
	45 2,6-Dinitrotoluene	165	10.107	10.107	(1.000)	306234	10.0000	10.2	
	46 Acenaphthylene	152	10.158	10.158	(1.000)	1840987	10.0000	10.3	
	47 3-Nitroaniline	138	10.302	10.312	(1.000)	87890	10.0000	10.5	
*	48 Acenaphthene-D10	164	10.333	10.333	(1.000)	69790	0.80000	(aM)	M6
	49 Acenaphthene	153	10.374	10.374	(1.000)	1142778	10.0000	10.1	
	50 2,4-Dinitrophenol	184	10.436	10.436	(1.000)	115823	10.0000	10.8	
	51 Dibenzofuran	168	10.590	10.590	(1.000)	1555729	10.0000	9.94	
	52 4-Nitrophenol	109	10.518	10.528	(1.000)	136403	10.0000	10.8	
	53 2,4-Dinitrotoluene	165	10.590	10.590	(1.000)	372187	10.0000	9.96	
	54 2,3,4,6-Tetrachlorophenol	232	10.744	10.744	(1.000)	286793	10.0000	10.7	
	55 Diethylphthalate	149	10.910	10.910	(1.000)	1217084	10.0000	10.8	
$	56 Fluorene-D10	174	10.962	10.962	(1.000)	953597	10.0000	10.1(A)	
	57 Fluorene	166	11.003	11.003	(1.000)	1187069	10.0000	10.3	
	58 4-Chlorophenyl-phenylether	204	11.024	11.024	(1.000)	602267	10.0000	10.3	
	59 4-Nitroaniline	138	11.035	11.045	(1.000)	166379	10.0000	10.3	
	60 4,6-Dinitro-2-Methylphenol	198	11.076	11.087	(0.913)	163841	10.0000	10.5	
	61 N-Nitrosodiphenylamine	169	11.170	11.170	(0.920)	890542	10.0000	9.98	
	62 4-Bromophenyl-phenylether	248	11.618	11.618	(0.957)	336165	10.0000	10.1	
	63 Hexachlorobenzene	284	11.670	11.670	(0.962)	380631	10.0000	9.41	
	64 Atrazine	200	11.857	11.857	(0.977)	229125	10.0000	9.63	
	65 Pentachlorophenol	266	11.920	11.920	(0.982)	213262	10.0000	11.3	
*	66 Phenanthrene-D10	188	12.137	12.137	(1.000)	105775	0.80000	(a)	
	67 Phenanthrene	178	12.167	12.167	(1.003)	1445353	10.0000	9.78	
	68 Anthracene	178	12.229	12.229	(1.008)	1425166	10.0000	10.3	
	69 Carbazole	167	12.434	12.434	(1.025)	551517	10.0000	7.81	
	70 Di-n-butylphthalate	149	12.927	12.927	(1.065)	1719040	10.0000	11.4	
$	71 Fluoranthene-d10	212	13.594	13.604	(1.120)	977887	10.0000	11.0	
	72 Fluoranthene	202	13.624	13.625	(1.123)	1345557	10.0000	10.8	
$	73 Pyrene-D10	212	13.871	13.871	(0.880)	1112835	10.0000	9.22	
	74 Pyrene	202	13.891	13.891	(0.881)	1383320	10.0000	8.99	
	75 Butylbenzylphthalate	149	14.856	14.856	(0.943)	641221	10.0000	10.2	
	76 Benzo(a)anthracene	228	15.738	15.749	(0.999)	990099	10.0000	11.0	

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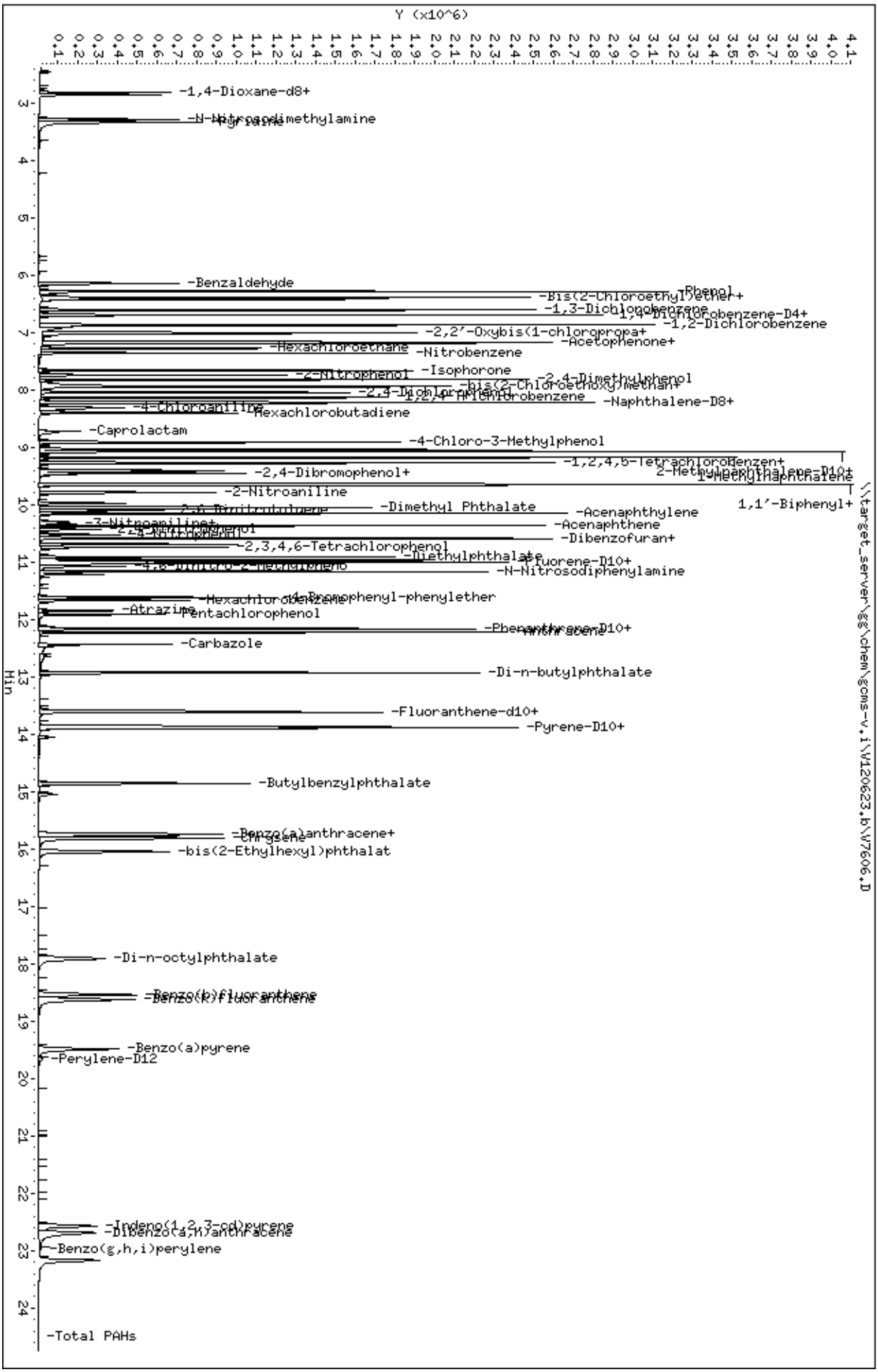
Report Date: 07-Dec-2023 07:09

			QUANT SIG					AMOUNTS		
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
	77	3,3'-Dichlorobenzidine	252	15.759	15.769	(1.000)	160672	10.0000	10.8	
*	78	Chrysene-D12	240	15.759	15.769	(1.000)	62308	0.80000	(a)	
	79	Chrysene	228	15.810	15.820	(1.003)	1061374	10.0000	9.82	
	80	bis(2-Ethylhexyl)phthalate	149	16.046	16.046	(1.018)	819210	10.0000	10.4	
	81	Di-n-octylphthalate	149	17.915	17.905	(1.137)	1008943	10.0000	10.6	
	82	Benzo(b)fluoranthene	252	18.543	18.543	(0.943)	831090	10.0000	10.7	
	83	Benzo(k)fluoranthene	252	18.626	18.636	(0.947)	1010287	10.0000	10.5(H)	
	84	Benzo(a)pyrene	252	19.491	19.491	(0.991)	767441	10.0000	9.79	
*	85	Perylene-D12	264	19.666	19.676	(1.000)	41960	0.80000	(a)	
	86	Indeno(1,2,3-cd)pyrene	276	22.570	22.580	(1.148)	548996	10.0000	10.3	
	87	Dibenzo(a,h)anthracene	278	22.694	22.694	(1.154)	581292	10.0000	10.2	
	88	Benzo(g,h,i)perylene	276	23.167	23.178	(1.178)	662297	10.0000	10.1	
M	89	Total PAHs	100				21131679	180.000	(a)	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
A - Target compound detected but, quantitated amount
exceeded maximum amount.
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.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Date : 06-DEC-2023 13:17
Client ID:
Sample Info: WG346507-6
Volume Injected (uL): 1.0
Column phase: Rxi-5ViMS
Instrument: gcms-v,i
Operator: EP
Column diameter: 0.25
\\target_server\gg\chem\gcms-v,i\W120623,b\W7606,D
Y (x10^6)
Min
-1,4-Dioxane-d8+
-N-Nitrosodimethylamine
-Benzaldehyde
-Phenol
-Bis(2-Chloroethyl)ether+
-1,3-Dichlorobenzene
-1,4-Dichlorobenzene-D4+
-1,2-Dichlorobenzene
-2,2'-Oxybis(1-chloropropa+
-Acetophenone+
-Hexachloroethane
-Nitrobenzene
-Isophorone
-2-Nitrophenol
-2,4-Dimethylphenol
-bis(2-Chloroethoxy)methan+
-2,4-Dichlorophenol
-1,2,4-Trichlorobenzene
-Naphthalene-D8+
-4-Chloroaniline
-Hexachlorobutadiene
-Caprolactam
-4-Chloro-3-Methylphenol
-1,2,4,5-Tetrachlorobenzen+
2-Methylnaphthalene-D10+
1-Methylnaphthalene
-2,4-Dibromophenol+
-2-Nitroaniline
1,1'-Biphenyl+
-Dimethyl Phthalate
-Acenaphthylene
-3-Nitroaniline
-Acenaphthene
-Dibenzofuran+
-2,3,4,6-Tetrachlorophenol
-Diethylphthalate
-Fluorene-D10+
-N-Nitrosodiphenylamine
-4-Bromophenyl-phenylether
-Hexachlorobenzene
-Atrazine
-Pentachlorophenol
-Phenanthrene-D10+
-Carbazole
-Di-n-butylphthalate
-Fluoranthene-d10+
-Pyrene-D10+
-Butylbenzylphthalate
-Benzo(a)anthracene+
-Chrysene
-bis(2-Ethylhexyl)phthalat
-Di-n-octylphthalate
-Benzo(b)fluoranthene
-Benzo(k)fluoranthene
-Benzo(a)pyrene
-Perylene-D12
-Indeno(1,2,3-cd)pyrene
-Dibenz(a,h)anthracene
-Benzo(g,h,i)perylene
-Total PAHs

Data File: \\target_server\gg\chem\gcms-v.i\V120623.b\V7607.D
Report Date: 07-Dec-2023 07:09

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-v.i\V120623.b\V7607.D
Lab Smp Id: WG346507-7
Inj Date : 06-DEC-2023 13:50
Operator : EP   Inst ID: gcms-v.i
Smp Info : WG346507-7
Misc Info :
Comment   :
Method   : \\target_server\gg\chem\gcms-v.i\V120623.b\VSPSIM21.m
Meth Date : 07-Dec-2023 07:08 gcms-v.i   Quant Type: ISTD
Cal Date : 06-DEC-2023 13:50   Cal File: V7607.D
Als bottle: 7   Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: all.sub
Target Version: 4.12

Concentration Formula: Amt * DF * Uf*(Vt/Vo)*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.000	Sample Volume (L)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)	REVIEW CODE
$	1 1,4-Dioxane-d8	96	2.833	2.833	(1.000)	569237	15.0000	17.9(A)	
	2 1,4-Dioxane	88	2.874	2.874	(0.431)	591494	15.0000	15.2(A)	
	3 N-Nitrosodimethylamine	74	3.300	3.300	(0.494)	760439	15.0000	17.1(A)	
	4 Pyridine	79	3.341	3.341	(0.501)	1420030	15.0000	18.4(A)	
	5 Benzaldehyde	77	6.146	6.146	(0.921)	229941	15.0000	7.54	
	6 Phenol	94	6.291	6.291	(0.942)	1617109	15.0000	15.8(A)	
	7 Bis(2-Chloroethyl)ether	93	6.385	6.385	(0.956)	1231024	15.0000	14.4	
	8 2-Chlorophenol	128	6.427	6.427	(0.963)	1432635	15.0000	16.0(A)	
	9 1,3-Dichlorobenzene	146	6.603	6.603	(0.989)	1494803	15.0000	15.4(A)	
*	10 1,4-Dichlorobenzene-D4	152	6.676	6.676	(1.000)	51453	0.80000	(aQ)	
	11 1,4-Dichlorobenzene	146	6.697	6.697	(1.003)	1446727	15.0000	14.8	
	12 1,2-Dichlorobenzene	146	6.874	6.874	(1.030)	1375785	15.0000	14.6	
	13 2,2'-Oxybis(1-chloropropane)	45	7.030	7.030	(1.053)	578571	15.0000	14.4	
	14 2-Methylphenol	108	7.009	7.009	(1.050)	1186366	15.0000	15.9(A)	
	15 Acetophenone	105	7.176	7.176	(0.876)	1686385	15.0000	15.5(A)	
	16 N-Nitroso-di-n-propylamine	70	7.186	7.186	(1.076)	676153	15.0000	15.2(A)	
	17 3&4-Methylphenol	108	7.196	7.196	(1.078)	1142686	15.0000	14.9(Q)	
	18 Hexachloroethane	117	7.269	7.269	(1.089)	659247	15.0000	15.9(A)	
	19 Nitrobenzene	77	7.363	7.363	(0.898)	1159932	15.0000	17.0(A)	
	20 Isophorone	82	7.662	7.662	(0.935)	1903040	15.0000	15.5(A)	
	21 2-Nitrophenol	139	7.745	7.745	(0.945)	633231	15.0000	17.7(A)	
	22 2,4-Dimethylphenol	107	7.827	7.827	(0.955)	890674	15.0000	14.2	

Data File: \\target_server\gg\chem\gcms-v.i\V120623.b\V7607.D
Report Date: 07-Dec-2023 07:09

EP
3:04 pm, Dec 29, 2023

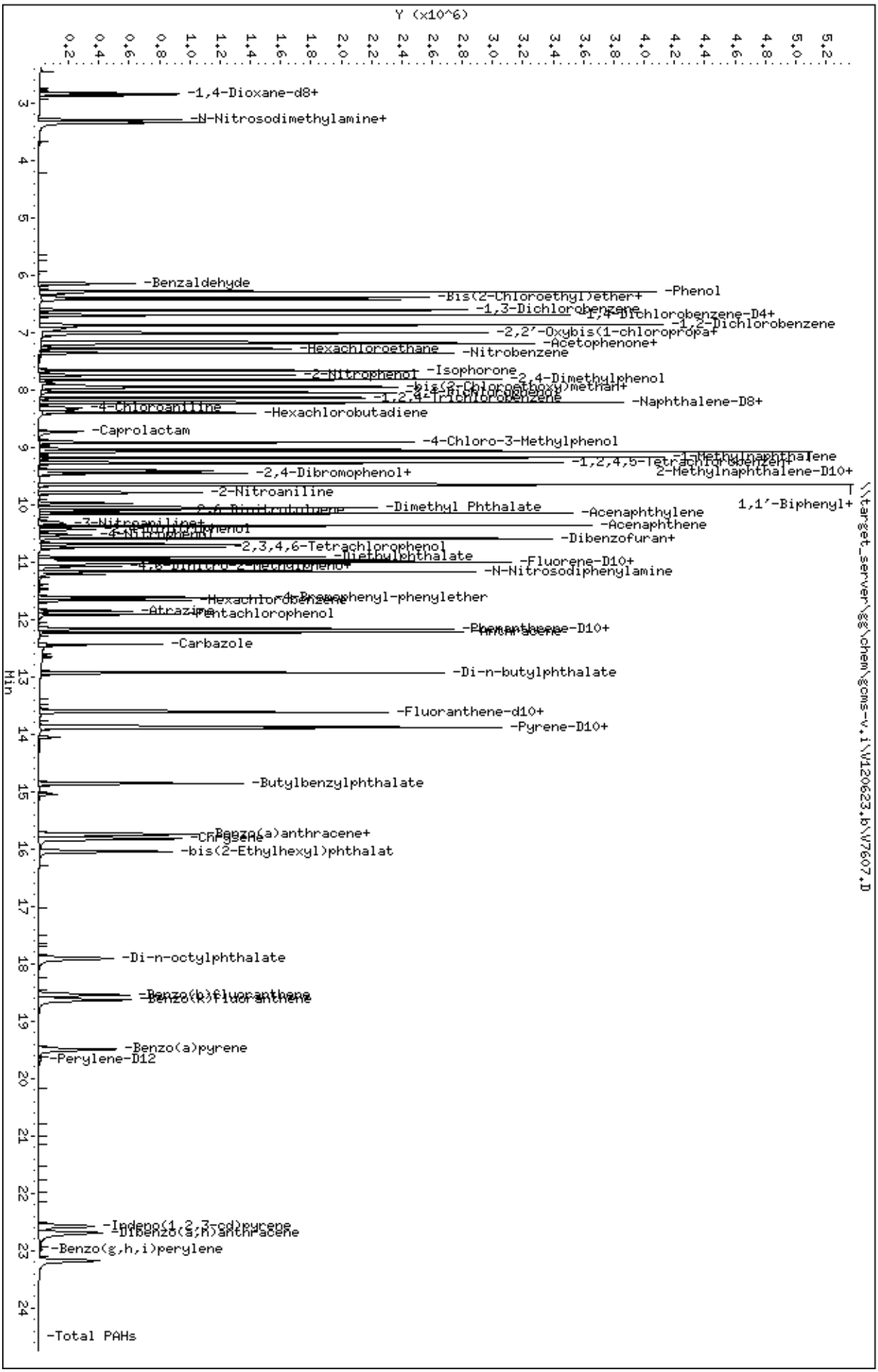
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
	23 bis(2-Chloroethoxy)methane	93	7.950	7.950	(0.970)	1321706	15.0000	15.3(A)	
	24 Benzoic Acid	105	7.970	7.970	(0.972)	699237	15.0000	11.2	
	25 2,4-Dichlorophenol	162	8.042	8.042	(0.981)	924940	15.0000	17.4(A)	
	26 1,2,4-Trichlorobenzene	180	8.145	8.145	(0.994)	1030604	15.0000	16.0(A)	
*	27 Naphthalene-D8	136	8.196	8.196	(1.000)	154436	0.80000	(a)	
	28 Naphthalene	128	8.227	8.227	(1.004)	2841874	15.0000	13.7	
	29 4-Chloroaniline	127	8.319	8.319	(1.015)	766988	15.0000	13.7	
	30 Hexachlorobutadiene	225	8.401	8.401	(1.025)	601525	15.0000	16.2(A)	
	31 Caprolactam	113	8.730	8.730	(1.065)	261558	15.0000	15.2(A)	
	32 4-Chloro-3-Methylphenol	107	8.915	8.915	(1.088)	861660	15.0000	15.7(A)	
$	33 2-Methylnaphthalene-D10	152	9.028	9.028	(1.101)	1288819	15.0000	14.1	
	34 2-Methylnaphthalene	142	9.069	9.069	(1.106)	1705888	15.0000	14.1	
	35 1-Methylnaphthalene	142	9.182	9.182	(1.120)	1645130	15.0000	14.6	
	36 1,2,4,5-Tetrachlorobenzene	216	9.274	9.274	(1.000)	876902	15.0000	16.4(A)	
	37 Hexachlorocyclopentadiene	237	9.274	9.274	(1.000)	458671	15.0000	15.6(A)	
$	38 2,4-Dibromophenol	252	9.408	9.408	(1.000)	511944	15.0000	18.4	
	39 2,4,6-Trichlorophenol	196	9.418	9.418	(1.000)	550120	15.0000	16.6(A)	
	40 2,4,5-Trichlorophenol	196	9.459	9.459	(1.000)	553488	15.0000	16.3(A)	
	41 1,1'-Biphenyl	154	9.644	9.644	(1.000)	1922923	15.0000	14.8	
	42 2-Chloronaphthalene	164	9.655	9.655	(1.000)	568381	15.0000	15.8(A)	
	43 2-Nitroaniline	65	9.788	9.788	(1.000)	355061	15.0000	15.5(A)	
	44 Dimethyl Phthalate	163	10.055	10.055	(1.000)	1605186	15.0000	16.2(A)	
	45 2,6-Dinitrotoluene	165	10.107	10.107	(1.000)	386881	15.0000	15.2(A)	
	46 Acenaphthylene	152	10.158	10.158	(1.000)	2346159	15.0000	15.6(A)	
	47 3-Nitroaniline	138	10.312	10.312	(1.000)	90757	15.0000	14.8	
*	48 Acenaphthene-D10	164	10.333	10.333	(1.000)	58944	0.80000	(aM)	M6
	49 Acenaphthene	153	10.374	10.374	(1.000)	1483565	15.0000	15.6(A)	
	50 2,4-Dinitrophenol	184	10.436	10.436	(1.000)	160927	15.0000	14.8	
	51 Dibenzofuran	168	10.590	10.590	(1.000)	1998921	15.0000	15.1(A)	
	52 4-Nitrophenol	109	10.528	10.528	(1.000)	154768	15.0000	14.7	
	53 2,4-Dinitrotoluene	165	10.590	10.590	(1.000)	488781	15.0000	15.5(A)	
	54 2,3,4,6-Tetrachlorophenol	232	10.744	10.744	(1.000)	377874	15.0000	16.7(A)	
	55 Diethylphthalate	149	10.910	10.910	(1.000)	1524459	15.0000	16.1(A)	
$	56 Fluorene-D10	174	10.962	10.962	(1.000)	1221107	15.0000	15.3(A)	
	57 Fluorene	166	11.003	11.003	(1.000)	1518166	15.0000	15.6(A)	
	58 4-Chlorophenyl-phenylether	204	11.024	11.024	(1.000)	772580	15.0000	15.6(A)	
	59 4-Nitroaniline	138	11.045	11.045	(1.069)	205851	15.0000	15.1(AQM)	M9
	60 4,6-Dinitro-2-Methylphenol	198	11.087	11.087	(0.913)	214060	15.0000	14.8	
	61 N-Nitrosodiphenylamine	169	11.170	11.170	(0.920)	1129404	15.0000	15.6(A)	
	62 4-Bromophenyl-phenylether	248	11.618	11.618	(0.957)	427869	15.0000	15.8(A)	
	63 Hexachlorobenzene	284	11.670	11.670	(0.962)	497535	15.0000	15.2(A)	
	64 Atrazine	200	11.857	11.857	(0.977)	300801	15.0000	15.6(A)	
	65 Pentachlorophenol	266	11.920	11.920	(0.982)	280540	15.0000	18.4(A)	
*	66 Phenanthrene-D10	188	12.137	12.137	(1.000)	85789	0.80000	(a)	
	67 Phenanthrene	178	12.167	12.167	(1.003)	1760279	15.0000	14.7	
	68 Anthracene	178	12.229	12.229	(1.008)	1764145	15.0000	15.8(A)	
	69 Carbazole	167	12.434	12.434	(1.025)	714400	15.0000	12.5	
	70 Di-n-butylphthalate	149	12.927	12.927	(1.065)	2073745	15.0000	16.9(A)	
$	71 Fluoranthene-d10	212	13.604	13.604	(1.121)	1197440	15.0000	16.7(A)	
	72 Fluoranthene	202	13.625	13.625	(1.123)	1638379	15.0000	16.2(A)	
$	73 Pyrene-D10	212	13.871	13.871	(0.880)	1344899	15.0000	14.3(A)	
	74 Pyrene	202	13.891	13.891	(0.881)	1657370	15.0000	13.8	
	75 Butylbenzylphthalate	149	14.856	14.856	(0.942)	824245	15.0000	14.9	
	76 Benzo(a)anthracene	228	15.749	15.749	(0.999)	1255043	15.0000	18.0(A)	

Data File: \\target_server\gg\chem\gcms-v.i\V120623.b\V7607.D
Report Date: 07-Dec-2023 07:09

		QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
Compounds									
	77 3,3'-Dichlorobenzidine	252	15.769	15.769	(1.000)	219000	15.0000	18.9(A)	
*	78 Chrysene-D12	240	15.769	15.769	(1.000)	48497	0.80000	(a)	
	79 Chrysene	228	15.820	15.820	(1.003)	1298238	15.0000	15.4(A)	
	80 bis(2-Ethylhexyl)phthalate	149	16.046	16.046	(1.018)	1051116	15.0000	14.9	
	81 Di-n-octylphthalate	149	17.905	17.905	(1.135)	1380535	15.0000	14.8	
	82 Benzo(b)fluoranthene	252	18.543	18.543	(0.942)	1040165	15.0000	16.6(A)	
	83 Benzo(k)fluoranthene	252	18.636	18.636	(0.947)	1282887	15.0000	16.5(AH)	
	84 Benzo(a)pyrene	252	19.491	19.491	(0.991)	986400	15.0000	15.5(A)	
*	85 Perylene-D12	264	19.676	19.676	(1.000)	34097	0.80000	(a)	
	86 Indeno(1,2,3-cd)pyrene	276	22.580	22.580	(1.148)	766135	15.0000	14.9	
	87 Dibenzo(a,h)anthracene	278	22.694	22.694	(1.153)	794310	15.0000	14.9	
	88 Benzo(g,h,i)perylene	276	23.178	23.178	(1.178)	906796	15.0000	15.0	
M	89 Total PAHs	100				26690929	270.000	(a)	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
A - Target compound detected but, quantitated amount
exceeded maximum amount.
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.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Date : 06-DEC-2023 13:50
Client ID:
Sample Info: WG346507-7
Volume Injected (uL): 1.0
Column phase: Rxi-5ViMS
Instrument: gcms-v,i
Operator: EP
Column diameter: 0.25
\\target_server\gg\chem\gcms-v,i\W120623,b\W7607,D
Y (x10^6)
Min
-1,4-Dioxane-d8+
-N-Nitrosodimethylamine+
-Benzaldehyde
-Phenol
-Bis(2-Chloroethyl)ether+
-1,3-Dichlorobenzene
-1,4-Dichlorobenzene-D4+
-1,2-Dichlorobenzene
-2,2'-Oxybis(1-chloropropa+
-Acetophenone+
-Hexachloroethane
-Nitrobenzene
-Isophorone
-2-Nitrophenol
-2,4-Dimethylphenol
-bis(2-Chloroethoxy)methan+
-2,4-Dichlorophenol
-1,2,4-Trichlorobenzene
-Naphthalene-D8+
-4-Chloroaniline
-Hexachlorobutadiene
-Caprolactam
-4-Chloro-3-Methylphenol
-1-Methylnaphthalene
-1,2,4,5-Tetrachlorobenzen+
2-Methylnaphthalene-D10+
-2,4-Dibromophenol+
-2-Nitroaniline
1,1'-Biphenyl+
-Dimethyl Phthalate
-Acenaphthylene
-Acenaphthene
-Dibenzofuran+
-2,3,4,6-Tetrachlorophenol
-Fluorene-D10+
-N-Nitrosodiphenylamine
-Hexachlorobenzene
-Atrazine
-Pentachlorophenol
-Phenanthrene-D10+
-Carbazole
-Di-n-butylphthalate
-Fluoranthene-d10+
-Pyrene-D10+
-Butylbenzylphthalate
-Benzo(a)anthracene+
-Chrysene
-bis(2-Ethylhexyl)phthalat
-Di-n-octylphthalate
-Benzo(b)fluoranthene
-Benzo(k)fluoranthene
-Benzo(a)pyrene
-Perylene-D12
-Indeno(1,2,3-cd)pyrene
-Dibenzo(a,h)anthracene
-Benzo(g,h,i)perylene
-Total PAHs

Data File: \\target_server\gg\chem\gcms-v.i\V120623.b\V7608.D
Report Date: 07-Dec-2023 07:07

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-v.i\V120623.b\V7608.D
Lab Smp Id: WG346507-8
Inj Date : 06-DEC-2023 14:23
Operator : EP   Inst ID: gcms-v.i
Smp Info : WG346507-8
Misc Info : WG346507,WG346507,WG346507-4
Comment   :
Method   : \\target_server\gg\chem\gcms-v.i\V120623.b\VSPSIM21.m
Meth Date : 07-Dec-2023 07:02 epelletier Quant Type: ISTD
Cal Date : 06-DEC-2023 13:50   Cal File: V7607.D
Als bottle: 8   QC Sample: INDSOURCE
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: all.sub
Target Version: 4.12
Processing Host: INSPIRON1

Concentration Formula: Amt * DF * Uf*(Vt/Vo)*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.000	Sample Volume (L)
Cpnd Variable		Local Compound Variable

EP
7:14 am, Dec 07, 2023

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/L)	REVIEW CODE
2	1,4-Dioxane	88	2.874	2.875	(0.431)	184815	5.51653	5.52	
3	N-Nitrosodimethylamine	74	3.300	3.300	(0.494)	225550	5.87336	5.87	
4	Pyridine	79	3.342	3.342	(0.501)	521219	7.83502	7.84(RM)	M6
5	Benzaldehyde	77	6.146	6.146	(0.921)	101550	3.86061	3.86(R)	
6	Phenol	94	6.281	6.292	(0.941)	495720	5.63347	5.63	
7	Bis(2-Chloroethyl)ether	93	6.385	6.385	(0.956)	399919	5.41239	5.41	
8	2-Chlorophenol	128	6.427	6.427	(0.963)	416665	5.40862	5.41	
9	1,3-Dichlorobenzene	146	6.603	6.604	(0.989)	450588	5.37629	5.38	
* 10	1,4-Dichlorobenzene-D4	152	6.676	6.677	(1.000)	44361	0.80000	(aQ)	
11	1,4-Dichlorobenzene	146	6.697	6.698	(1.003)	468106	5.54014	5.54	
12	1,2-Dichlorobenzene	146	6.874	6.874	(1.030)	442421	5.44561	5.44	
13	2,2'-Oxybis(1-chloropropane)	45	7.030	7.031	(1.053)	133364	3.85984	3.86(QR)	
14	2-Methylphenol	108	7.009	7.010	(1.050)	342311	5.31140	5.31	
15	Acetophenone	105	7.165	7.176	(0.874)	535659	5.49935	5.50	
16	N-Nitroso-di-n-propylamine	70	7.186	7.187	(1.076)	194844	5.08206	5.08	
17	3&4-Methylphenol	108	7.186	7.197	(1.076)	343328	5.18721	5.19	
18	Hexachloroethane	117	7.269	7.270	(1.089)	194436	5.43830	5.44	
19	Nitrobenzene	77	7.363	7.363	(0.898)	350955	5.72677	5.73	
20	Isophorone	82	7.652	7.663	(0.934)	531479	4.83963	4.84	
21	2-Nitrophenol	139	7.745	7.745	(0.945)	176618	5.50296	5.50	
22	2,4-Dimethylphenol	107	7.827	7.827	(0.955)	340065	6.03888	6.04(R)	

Data File: \\target_server\gg\chem\gcms-v.i\V120623.b\V7608.D
Report Date: 07-Dec-2023 07:07

EP
7:14 am, Dec 07, 2023

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	CONCENTRATIONS FINAL (ug/L)	REVIEW CODE
	23 bis(2-Chloroethoxy)methane	93	7.939	7.950	(0.969)	403748	5.22411	5.22	
	24 Benzoic Acid	105	7.909	7.971	(0.965)	100896	1.79611	1.80	
	25 2,4-Dichlorophenol	162	8.042	8.042	(0.981)	267565	5.61711	5.62	
	26 1,2,4-Trichlorobenzene	180	8.134	8.145	(0.992)	302130	5.22610	5.23	
*	27 Naphthalene-D8	136	8.196	8.196	(1.000)	138500	0.80000	(a)	
	28 Naphthalene	128	8.227	8.227	(1.004)	1013973	5.43883	5.44	
	29 4-Chloroaniline	127	8.309	8.319	(1.014)	199831	3.98489	3.98(R)	
	30 Hexachlorobutadiene	225	8.401	8.401	(1.025)	174971	5.24719	5.25	
	31 Caprolactam	113	8.709	8.730	(1.063)	68806	4.44789	4.45(M)	M9
	32 4-Chloro-3-Methylphenol	107	8.904	8.915	(1.086)	250134	5.09275	5.09	
	34 2-Methylnaphthalene	142	9.069	9.069	(1.106)	610268	5.61190	5.61	
	35 1-Methylnaphthalene	142	9.182	9.182	(1.120)	559927	5.53365	5.53	
	36 1,2,4,5-Tetrachlorobenzene	216	9.274	9.275	(0.898)	268427	5.23566	5.24	
	37 Hexachlorocyclopentadiene	237	9.274	9.275	(0.898)	138180	4.92666	4.93	
	39 2,4,6-Trichlorophenol	196	9.418	9.419	(0.911)	153110	4.84898	4.85	
	40 2,4,5-Trichlorophenol	196	9.459	9.460	(0.915)	167290	5.16348	5.16	
	41 1,1'-Biphenyl	154	9.644	9.645	(0.933)	662460	5.33617	5.34	
	42 2-Chloronaphthalene	164	9.655	9.655	(0.934)	174710	5.07741	5.08	
	43 2-Nitroaniline	65	9.788	9.789	(0.947)	105696	4.82576	4.82	
	44 Dimethyl Phthalate	163	10.045	10.056	(0.972)	458187	4.84356	4.84	
	45 2,6-Dinitrotoluene	165	10.107	10.107	(0.978)	104269	4.28523	4.28	
	46 Acenaphthylene	152	10.148	10.159	(0.982)	683445	4.74348	4.74	
	47 3-Nitroaniline	138	10.292	10.313	(0.996)	60670	8.02326	8.02(R)	
*	48 Acenaphthene-D10	164	10.333	10.333	(1.000)	56354	0.80000	(a)	
	49 Acenaphthene	153	10.364	10.374	(1.003)	454038	4.98318	4.98	
	50 2,4-Dinitrophenol	184	10.436	10.436	(1.010)	24507	3.36477	3.36(R)	
	51 Dibenzofuran	168	10.580	10.590	(1.024)	670267	5.30526	5.30	
	52 4-Nitrophenol	109	10.518	10.529	(1.018)	33292	3.15114	3.15(R)	
	53 2,4-Dinitrotoluene	165	10.590	10.590	(1.025)	120266	3.98593	3.98(R)	
	54 2,3,4,6-Tetrachlorophenol	232	10.744	10.744	(1.040)	96277	4.44292	4.44	
	55 Diethylphthalate	149	10.910	10.910	(1.056)	438795	4.84203	4.84	
	57 Fluorene	166	10.993	11.004	(1.064)	450723	4.83162	4.83	
	58 4-Chlorophenyl-phenylether	204	11.024	11.025	(1.067)	232723	4.92140	4.92	
	59 4-Nitroaniline	138	11.035	11.046	(1.068)	67248	5.16911	5.17(Q)	
	60 4,6-Dinitro-2-Methylphenol	198	11.076	11.087	(0.913)	42596	4.26680	4.27	
	61 N-Nitrosodiphenylamine	169	11.170	11.171	(0.920)	257658	4.01297	4.01	
	62 4-Bromophenyl-phenylether	248	11.618	11.618	(0.957)	126508	5.27241	5.27	
	63 Hexachlorobenzene	284	11.670	11.670	(0.962)	144009	4.94752	4.95	
	64 Atrazine	200	11.847	11.858	(0.976)	82258	4.80490	4.80	
	65 Pentachlorophenol	266	11.920	11.920	(0.982)	59515	4.38943	4.39	
*	66 Phenanthrene-D10	188	12.137	12.137	(1.000)	76100	0.80000	(a)	
	67 Phenanthrene	178	12.168	12.168	(1.003)	550890	5.18108	5.18	
	68 Anthracene	178	12.229	12.230	(1.008)	512663	5.16423	5.16	
	69 Carbazole	167	12.434	12.435	(1.025)	363007	7.14767	7.15(R)	
	70 Di-n-butylphthalate	149	12.927	12.927	(1.065)	605300	5.56421	5.56	
	72 Fluoranthene	202	13.614	13.625	(1.122)	445464	4.98289	4.98	
	74 Pyrene	202	13.891	13.892	(0.882)	473890	4.35563	4.36	
	75 Butylbenzylphthalate	149	14.856	14.856	(0.943)	193774	4.80029	4.80	
	76 Benzo(a)anthracene	228	15.738	15.749	(0.999)	317304	5.00619	5.01	
	77 3,3'-Dichlorobenzidine	252	15.759	15.770	(1.000)	62253	5.90848	5.91	
*	78 Chrysene-D12	240	15.759	15.770	(1.000)	44078	0.80000	(a)	
	79 Chrysene	228	15.810	15.821	(1.003)	372703	4.87238	4.87	
	80 bis(2-Ethylhexyl)phthalate	149	16.046	16.047	(1.018)	232147	4.63987	4.64	
	81 Di-n-octylphthalate	149	17.905	17.905	(1.136)	256064	4.48921	4.49	

Data File: \\target_server\gg\chem\gcms-v.i\V120623.b\V7608.D
Report Date: 07-Dec-2023 07:07

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	CONCENTRATIONS FINAL (ug/L)	REVIEW CODE
	82 Benzo(b)fluoranthene	252	18.533	18.544	(0.943)	266081	5.11530	5.12	
	83 Benzo(k)fluoranthene	252	18.615	18.636	(0.947)	328823	5.10250	5.10(H)	
	84 Benzo(a)pyrene	252	19.481	19.491	(0.991)	223671	4.24046	4.24	
*	85 Perylene-D12	264	19.656	19.677	(1.000)	28223	0.80000	(a)	
	86 Indeno(1,2,3-cd)pyrene	276	22.560	22.581	(1.148)	158041	4.96738	4.97	
	87 Dibenzo(a,h)anthracene	278	22.673	22.694	(1.154)	182936	5.29125	5.29	
	88 Benzo(g,h,i)perylene	276	23.147	23.178	(1.178)	225611	5.52424	5.52	
M	89 Total PAHs	100				7830451	90.9462	90.9	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Data File: \\target_server\gg\chem\gcms-v,i\W120623,b\W7608.D
Date : 06-DEC-2023 14:23
Client ID:
Sample Info: WG346507-8
Volume Injected (uL): 1.0
Column phase: Rxi-5ViMS
Instrument: gcms-v,i
Operator: EP
Column diameter: 0.25
\\target_server\gg\chem\gcms-v,i\W120623,b\W7608.D
Y (x10^6)
Min
-1,4-Dioxane
-N-Nitrosodimethylamine
-Benzaldehyde
-Phenol
-Bis(2-Chloroethyl)ether+
-1,3-Dichlorobenzene
-1,4-Dichlorobenzene-D4+
-1,2-Dichlorobenzene
-Acetophenone+
-Nitrobenzene
-Isophorone
-2-Nitrophenol
-2,4-Dimethylphenol
-Benzoic Acid
-bis(2-Chloroethoxy)methan
-2,4-Dichlorophenol
-Naphthalene-D8+
-Hexachlorobutadiene
-Caprolactam
-4-Chloro-3-Methylphenol
-2-Methylnaphthalene
-1,2,4,5-Tetrachlorobenzene
-2,4,6-Trichlorophenol+
-1,1'-Biphenyl+
-2-Nitroaniline
-Dimethyl Phthalate
-Acenaphthylene
-3-Nitroaniline
-Acenaphthene-D10+
-2,4-Dinitrophenol
-Dibenzofuran+
-2,3,4,6-Tetrachlorophenol
-Diethylphthalate
-Fluorene
-N-Nitrosodiphenylamine
-4-Bromophenyl-phenylether
-Hexachlorobenzene
-Atrazine
-Pentachlorophenol
-Phenanthrene-D10+
-Anthracene
-Carbazole
-Di-n-butylphthalate
-Fluoranthene
-Pyrene
-Butylbenzylphthalate
-Benzo(a)anthracene+
-Chrysene
-bis(2-Ethylhexyl)phthalat
-Di-n-octylphthalate
-Benzo(b)fluoranthene
-Benzo(k)fluoranthene
-Benzo(a)pyrene
-Perylene-D12
-Indeno(1,2,3-cd)pyrene
-Dibenzo(a,h)anthracene+
-Total PAHs

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Injection Date: 06-DEC-2023 12:11
Instrument: gcms-v.i
Client Sample ID:

Compound: N-Nitrosodimethylamine
CAS Number: 62-75-9

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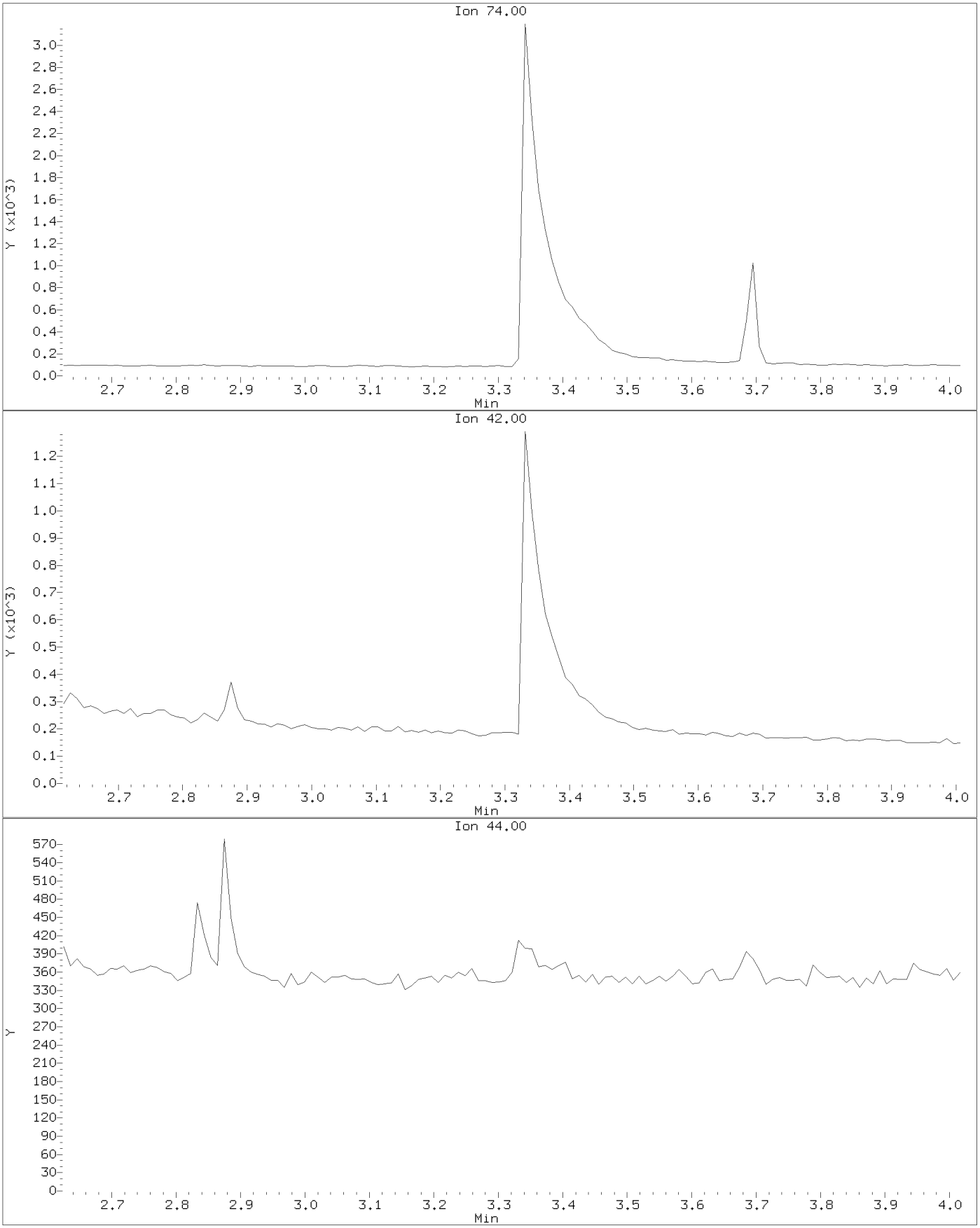

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Client Sample ID:

Compound: N-Nitrosodimethylamine
CAS Number: 62-75-9

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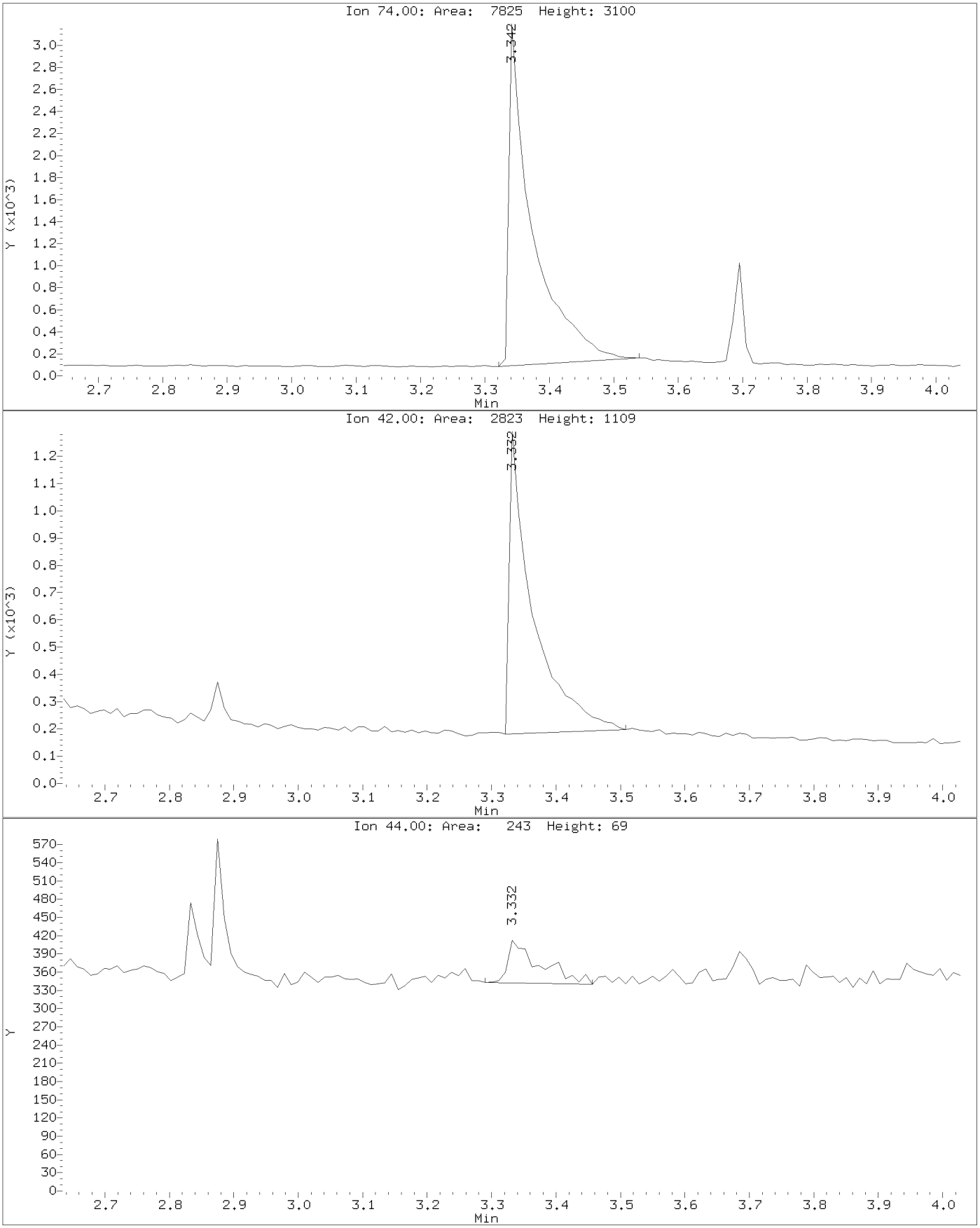

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Instrument: gcms-v.i
Client Sample ID:

Compound: Acenaphthene-D10
CAS Number: 15067-26-2

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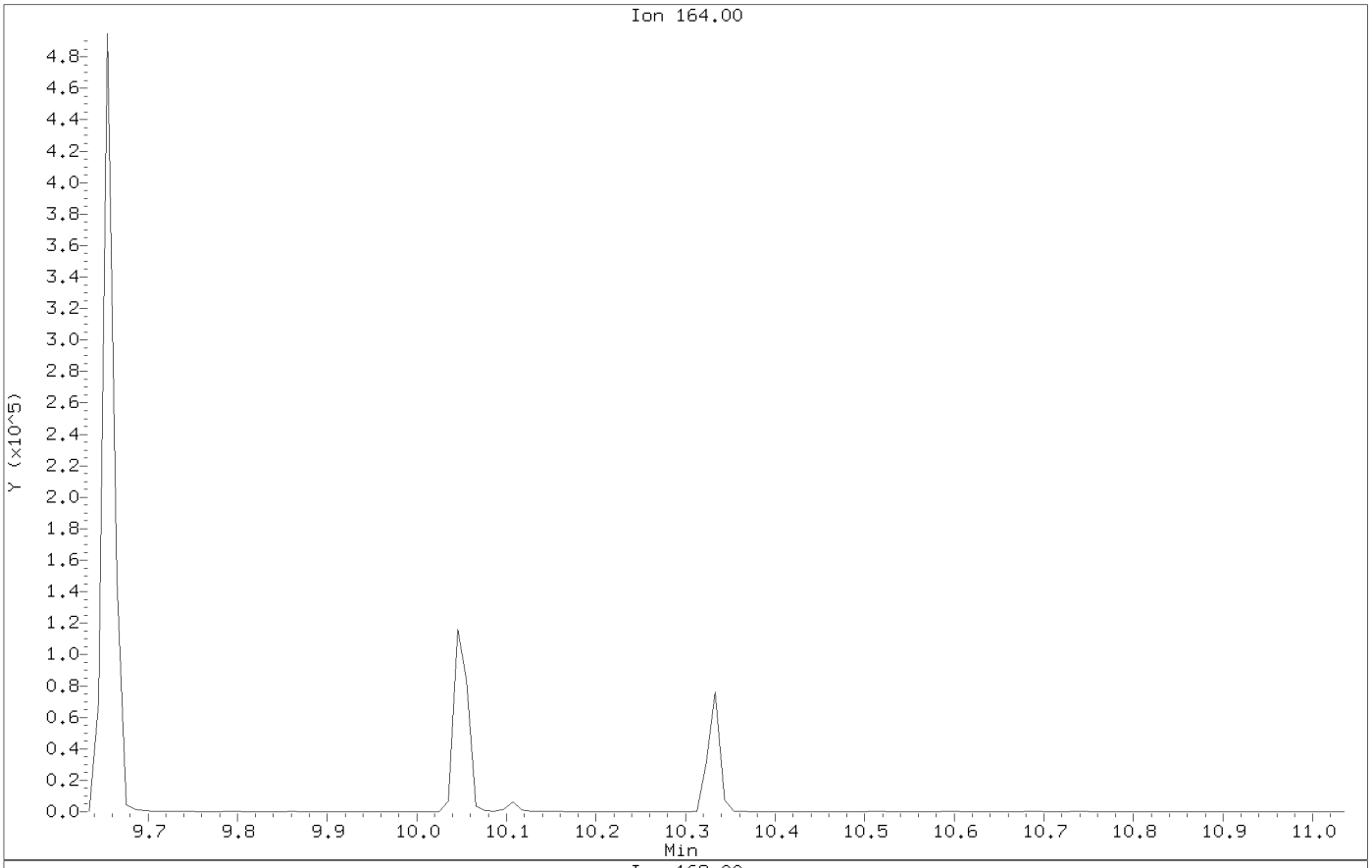

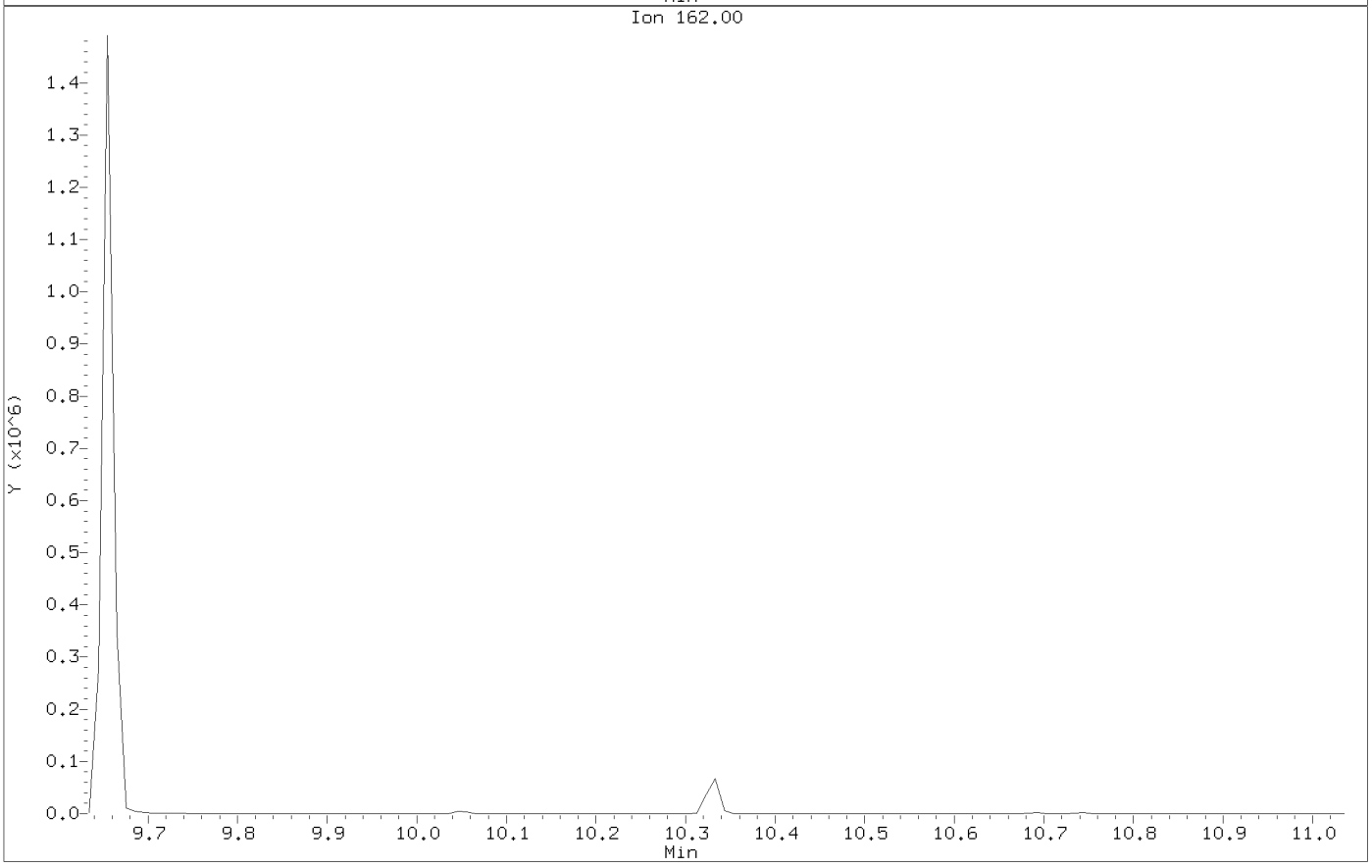

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Compound: Acenaphthene-D10
CAS Number: 15067-26-2

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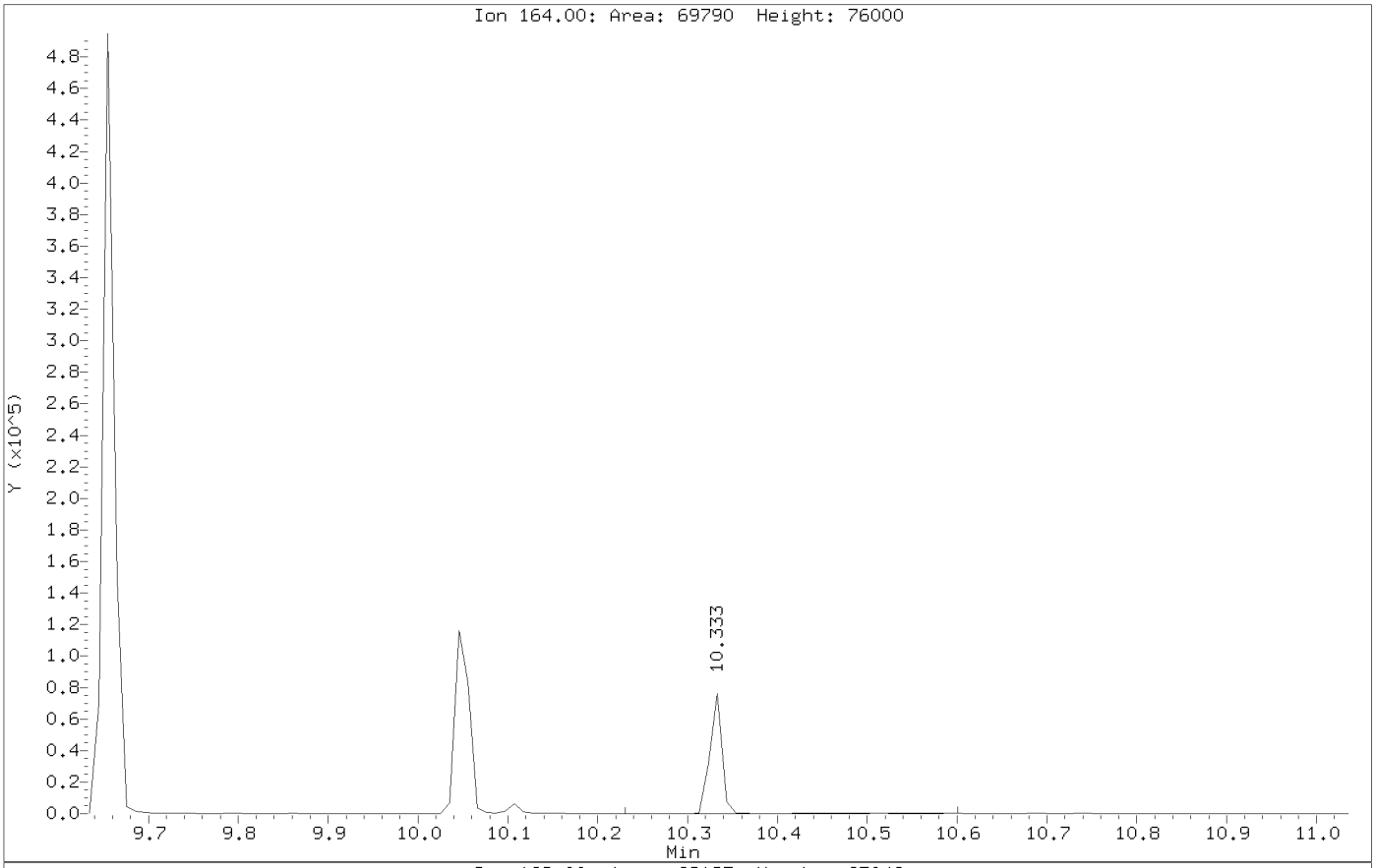

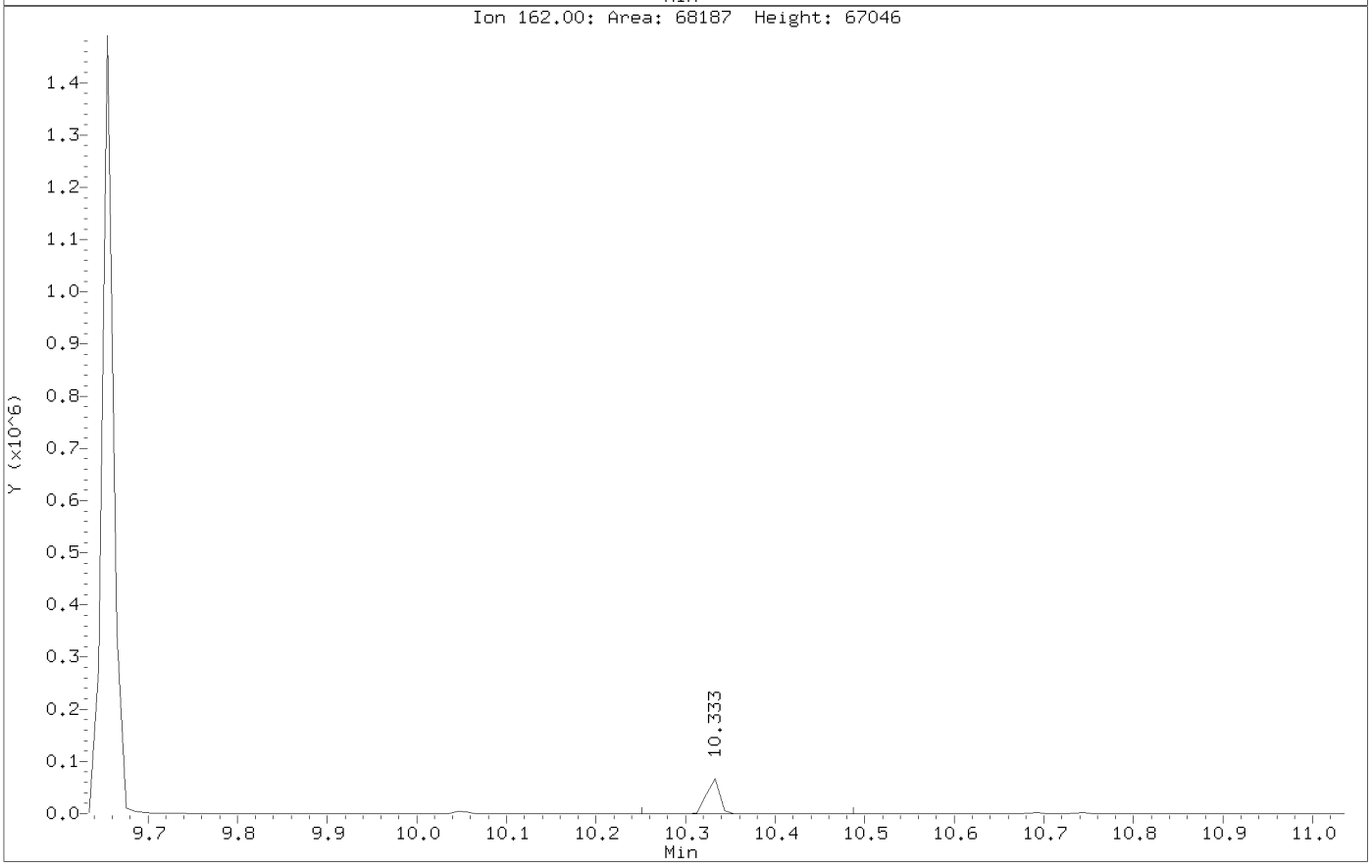

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Instrument: gcms-v.i
Client Sample ID:

Compound: Acenaphthene-D10
CAS Number: 15067-26-2

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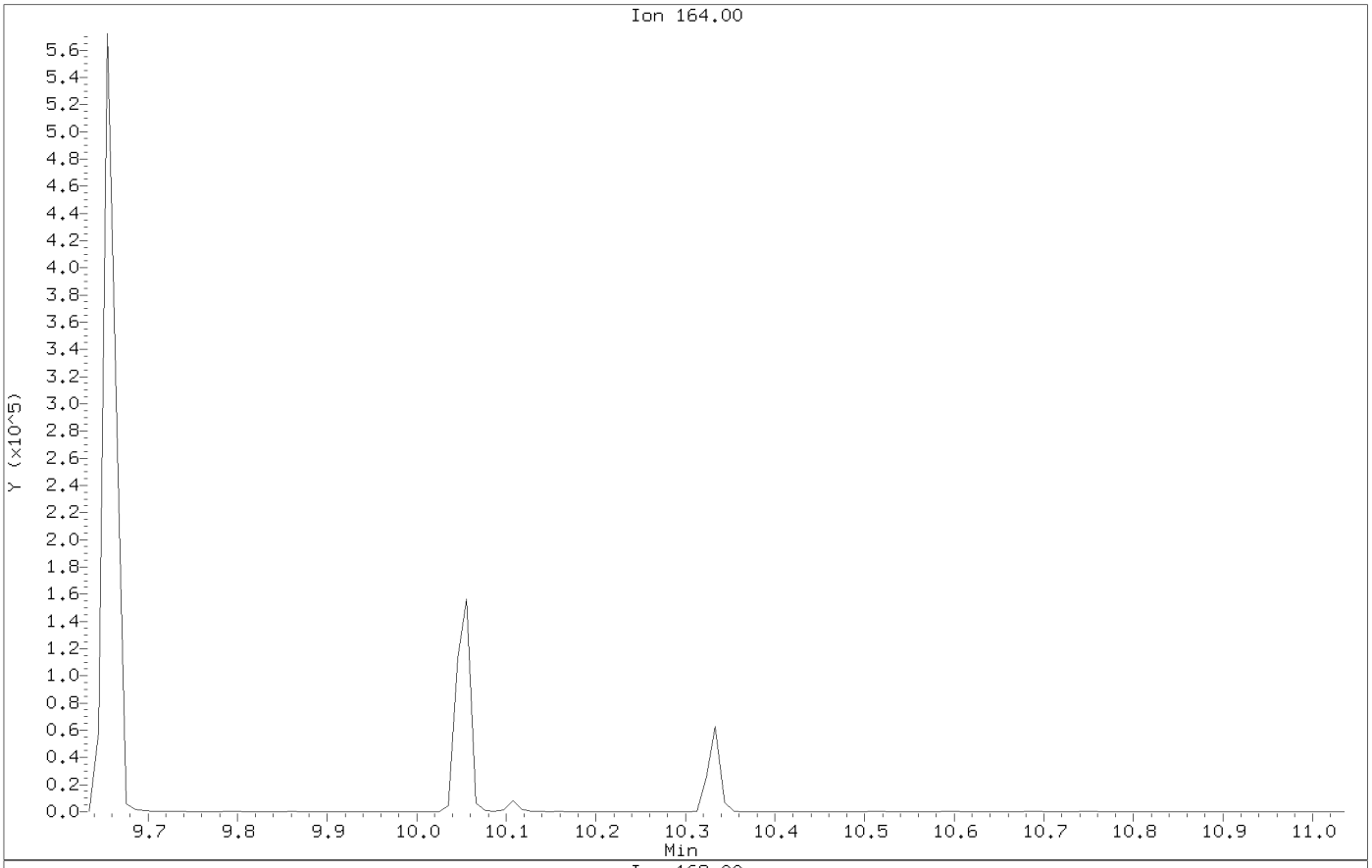

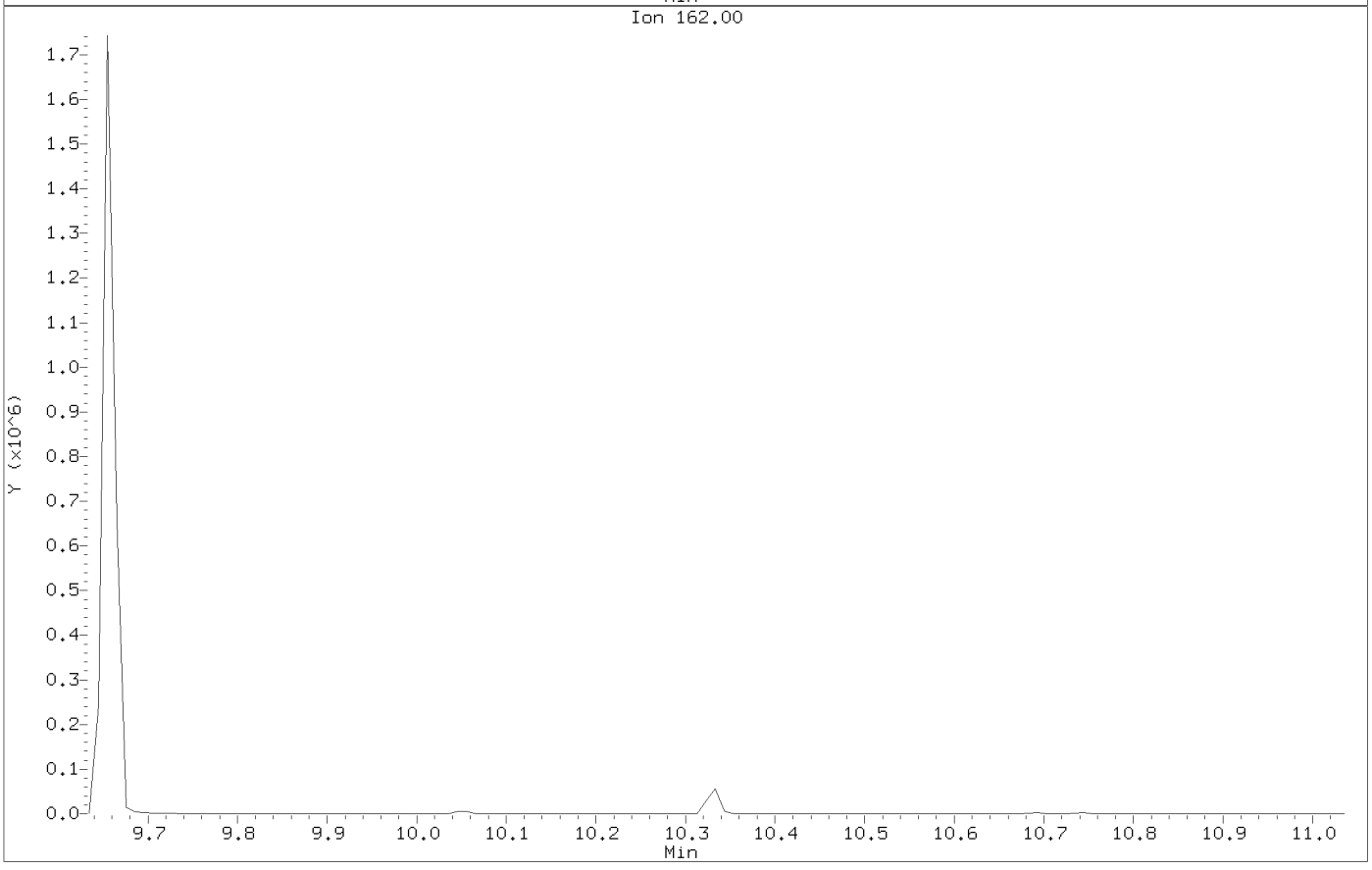

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Instrument: gcms-v.i
Client Sample ID:

Compound: Acenaphthene-D10
CAS Number: 15067-26-2

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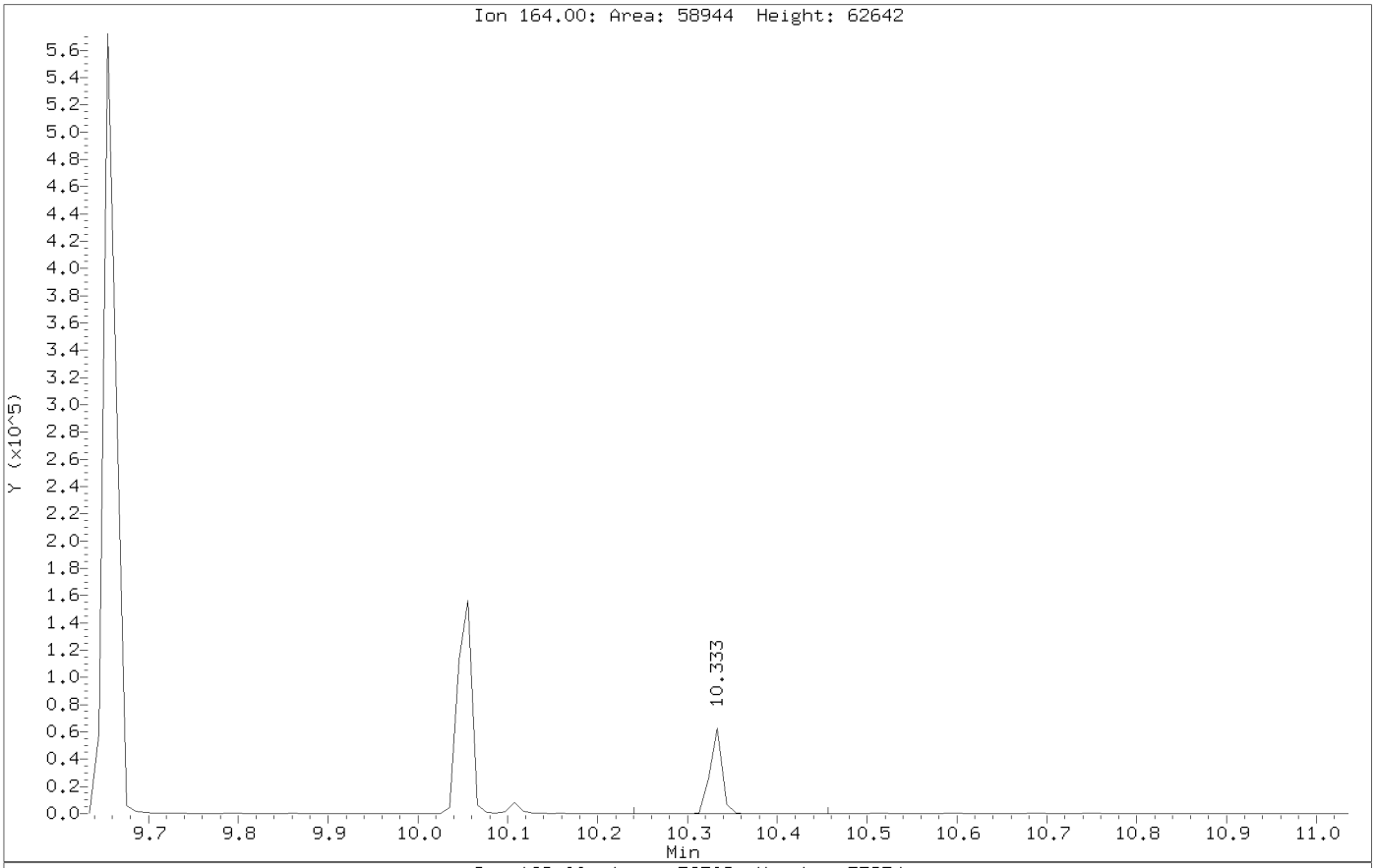

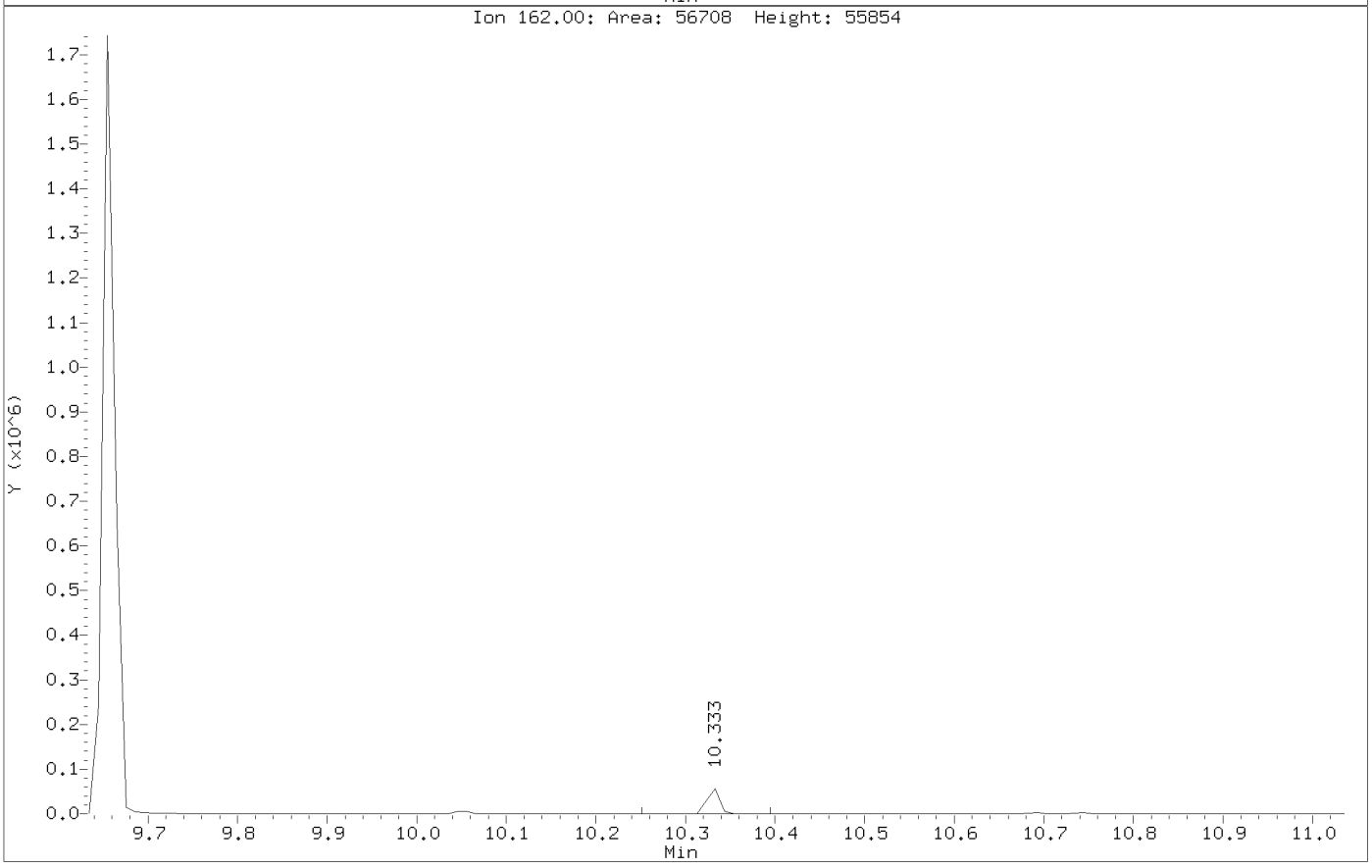

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Instrument: gcms-v.i
Client Sample ID:

Compound: 4-Nitroaniline
CAS Number: 100-01-6

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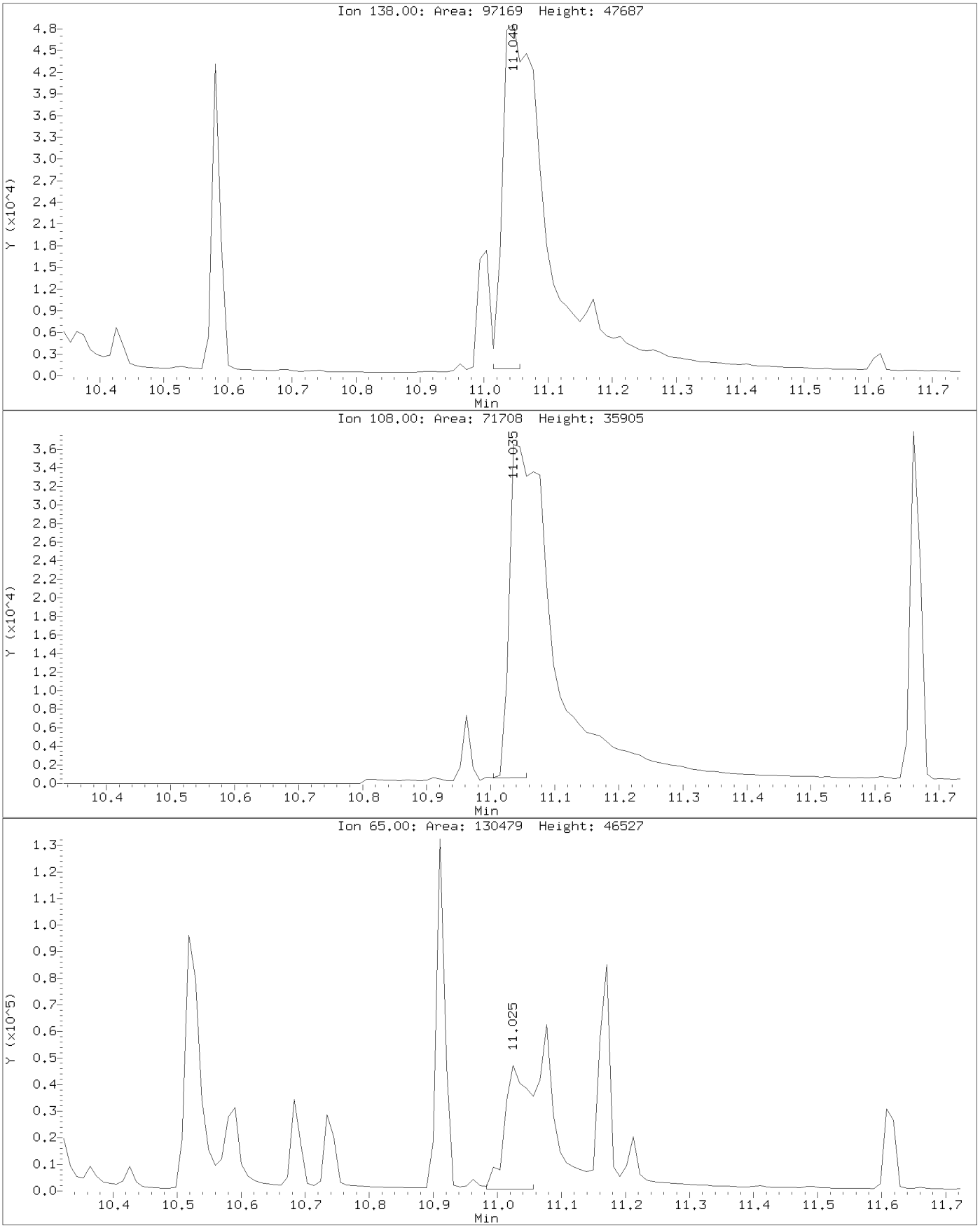

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Instrument: gcms-v.i
Client Sample ID:

Compound: 4-Nitroaniline
CAS Number: 100-01-6

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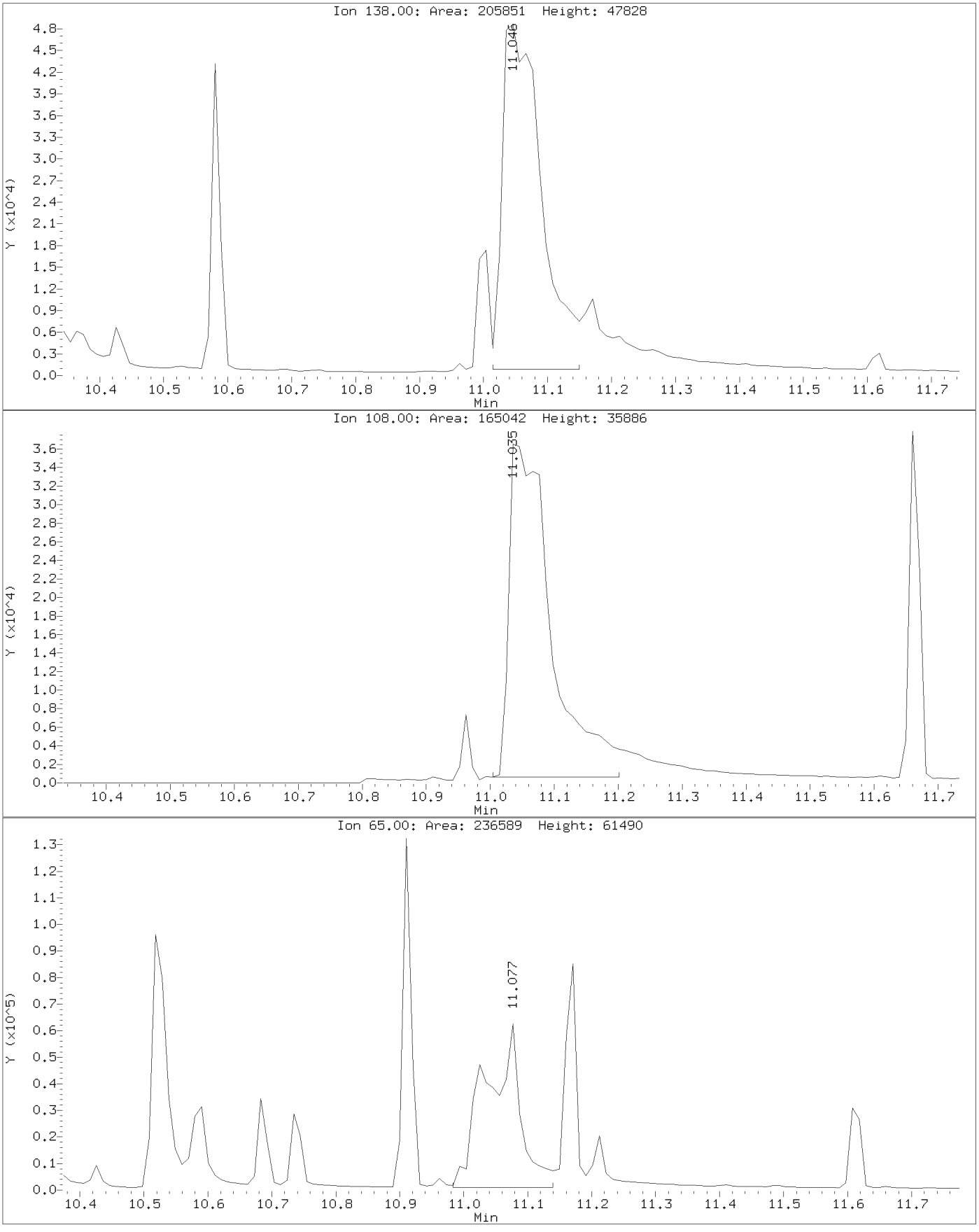

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Injection Date: 06-DEC-2023 14:23
Instrument: gcms-v.i
Client Sample ID:

Compound: Pyridine
CAS Number: 110-86-1

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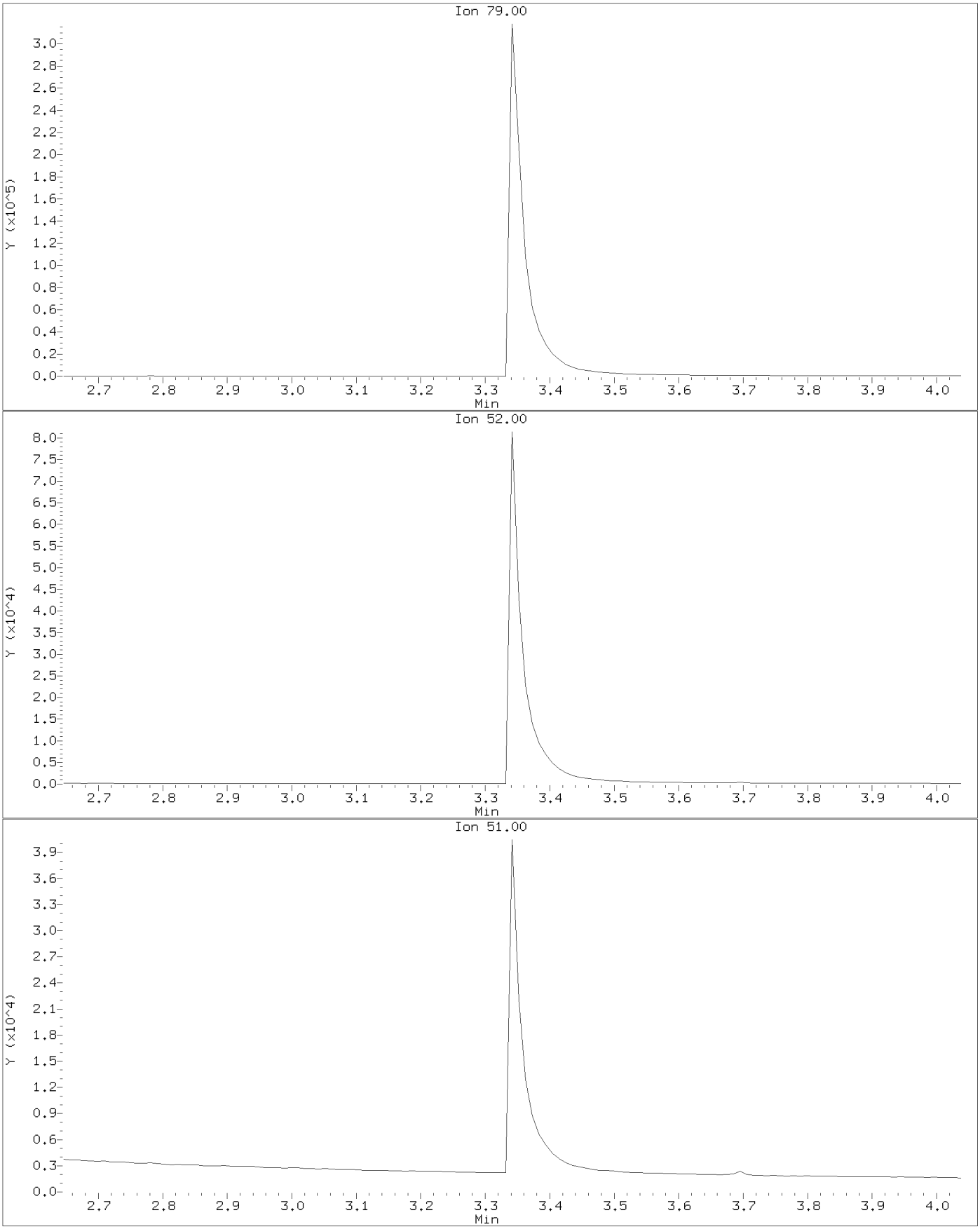

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Instrument: gcms-v.i
Client Sample ID:

Compound: Pyridine
CAS Number: 110-86-1

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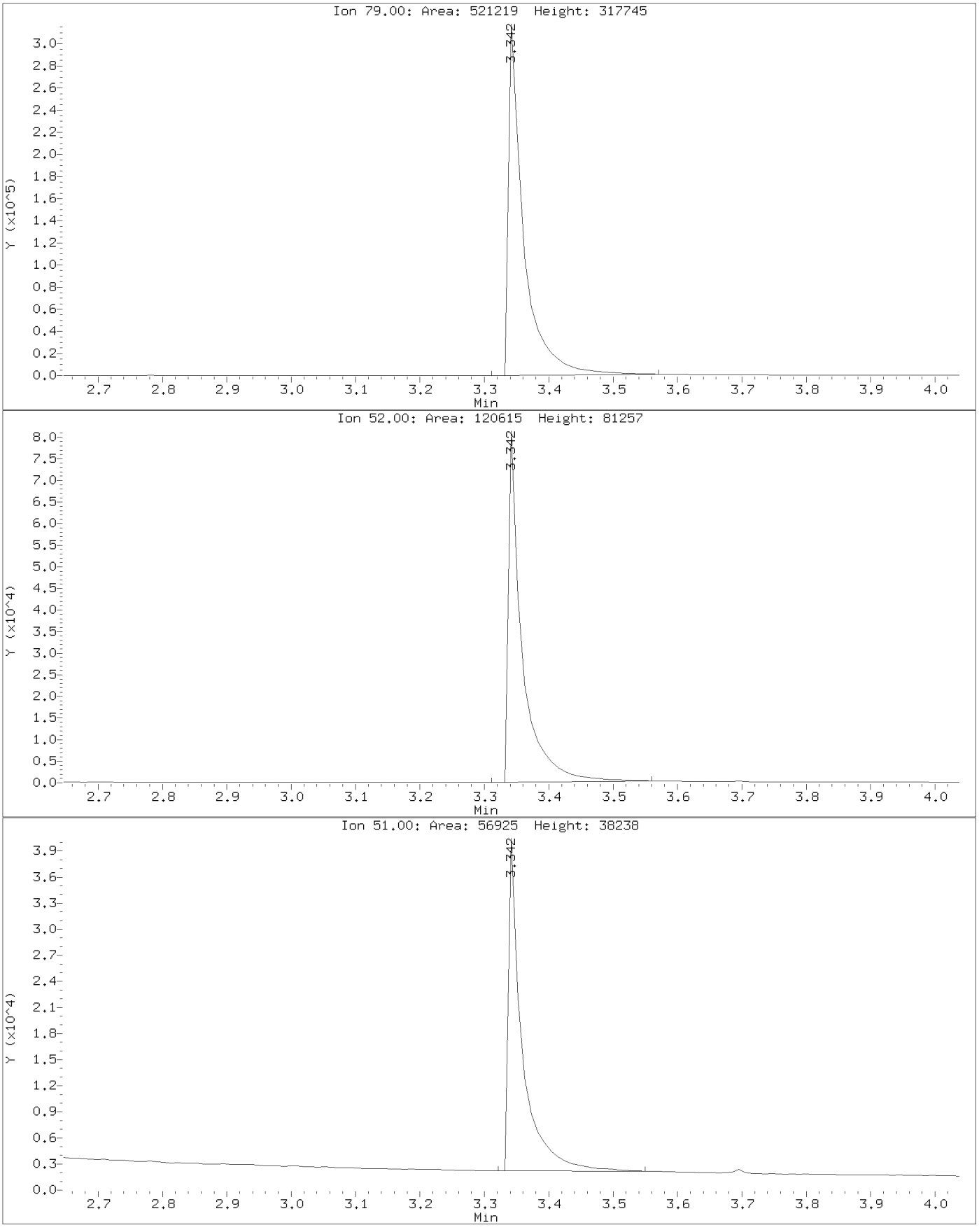

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Injection Date: 06-DEC-2023 14:23
Instrument: gcms-v.i
Client Sample ID:

Compound: Caprolactam
CAS Number: 105-60-2

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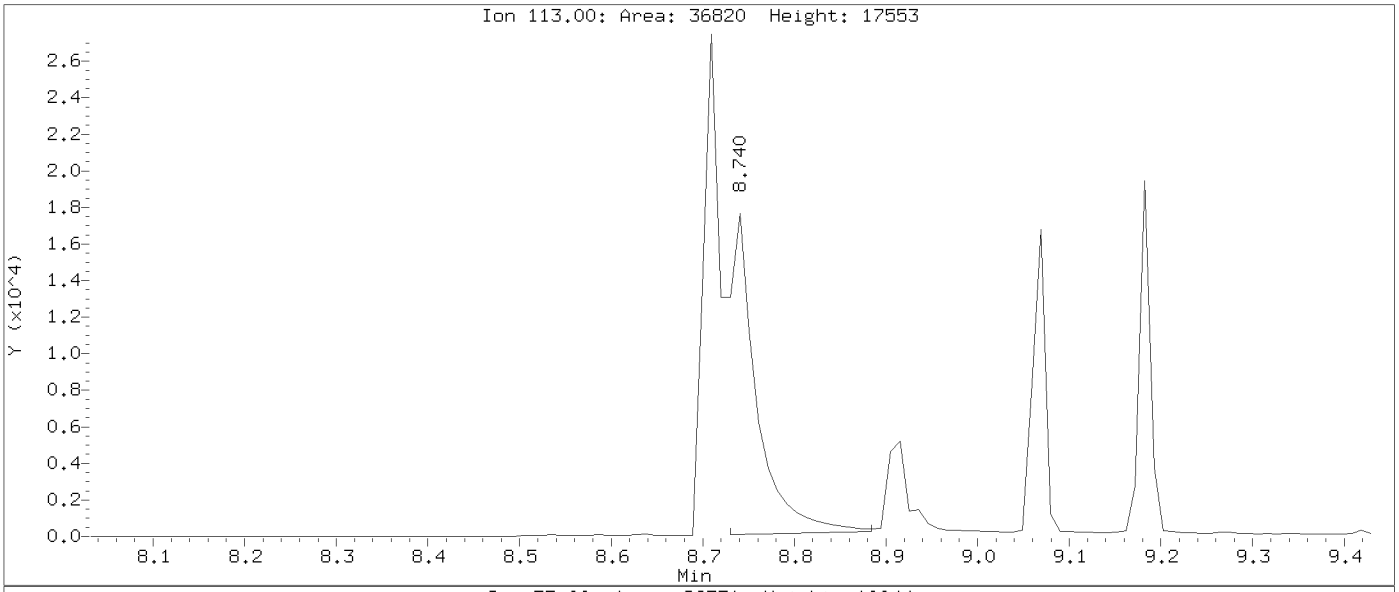

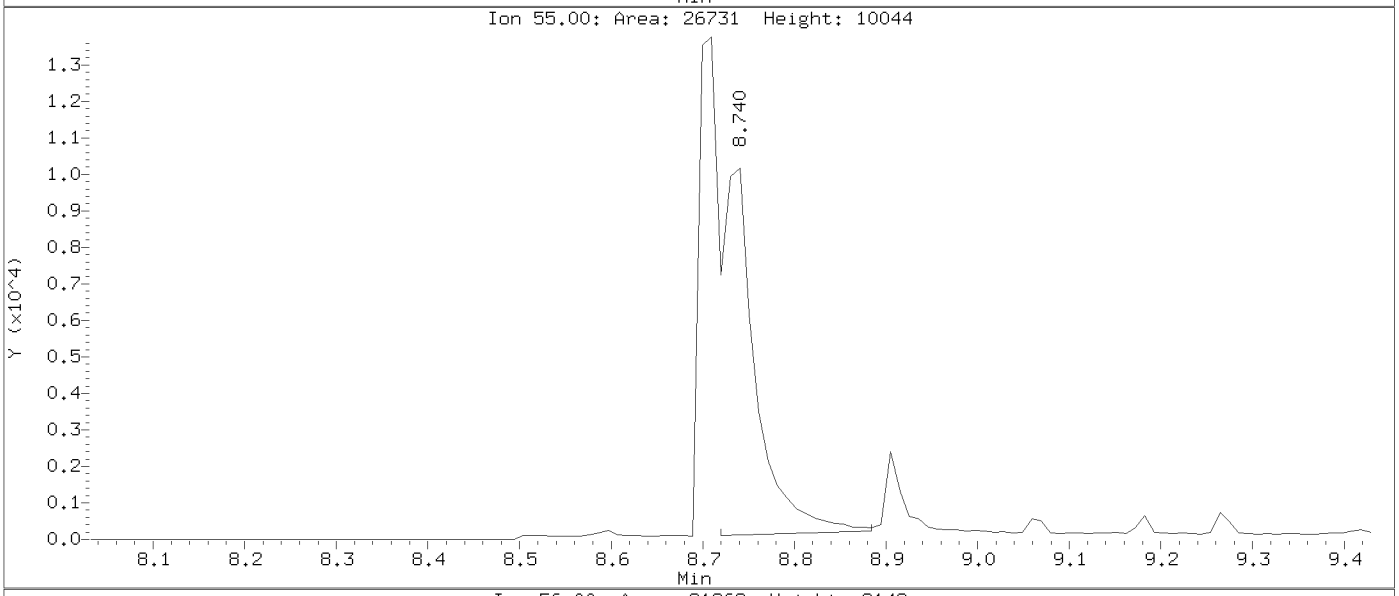

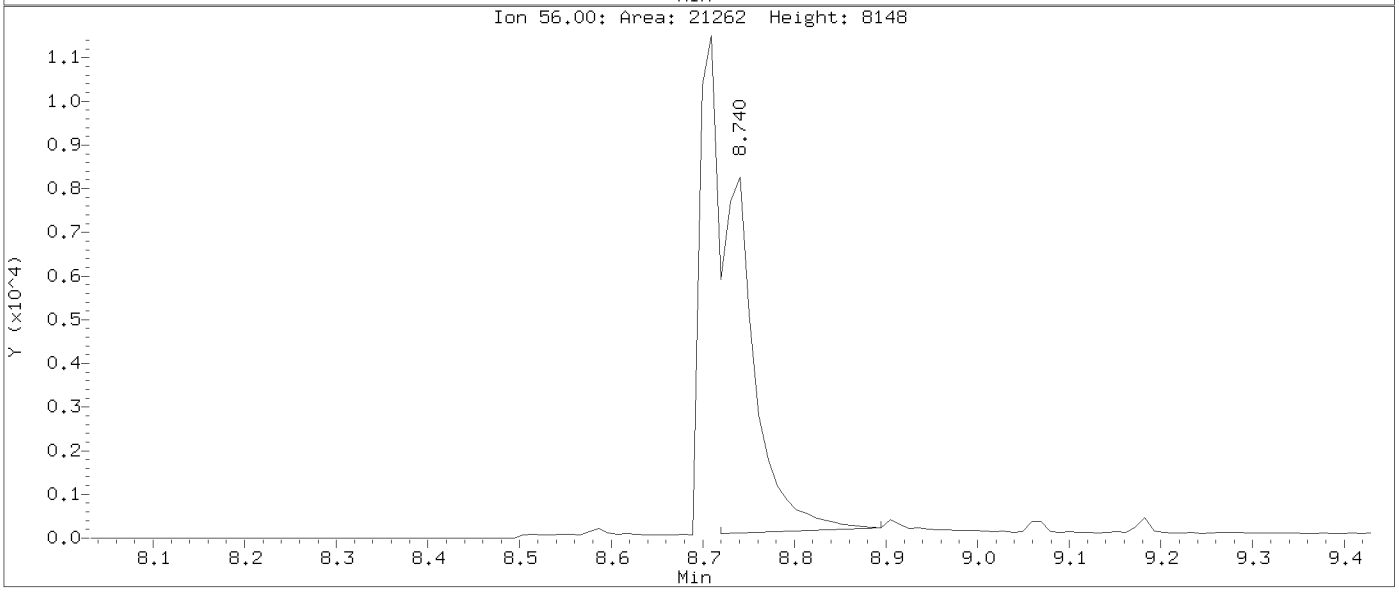

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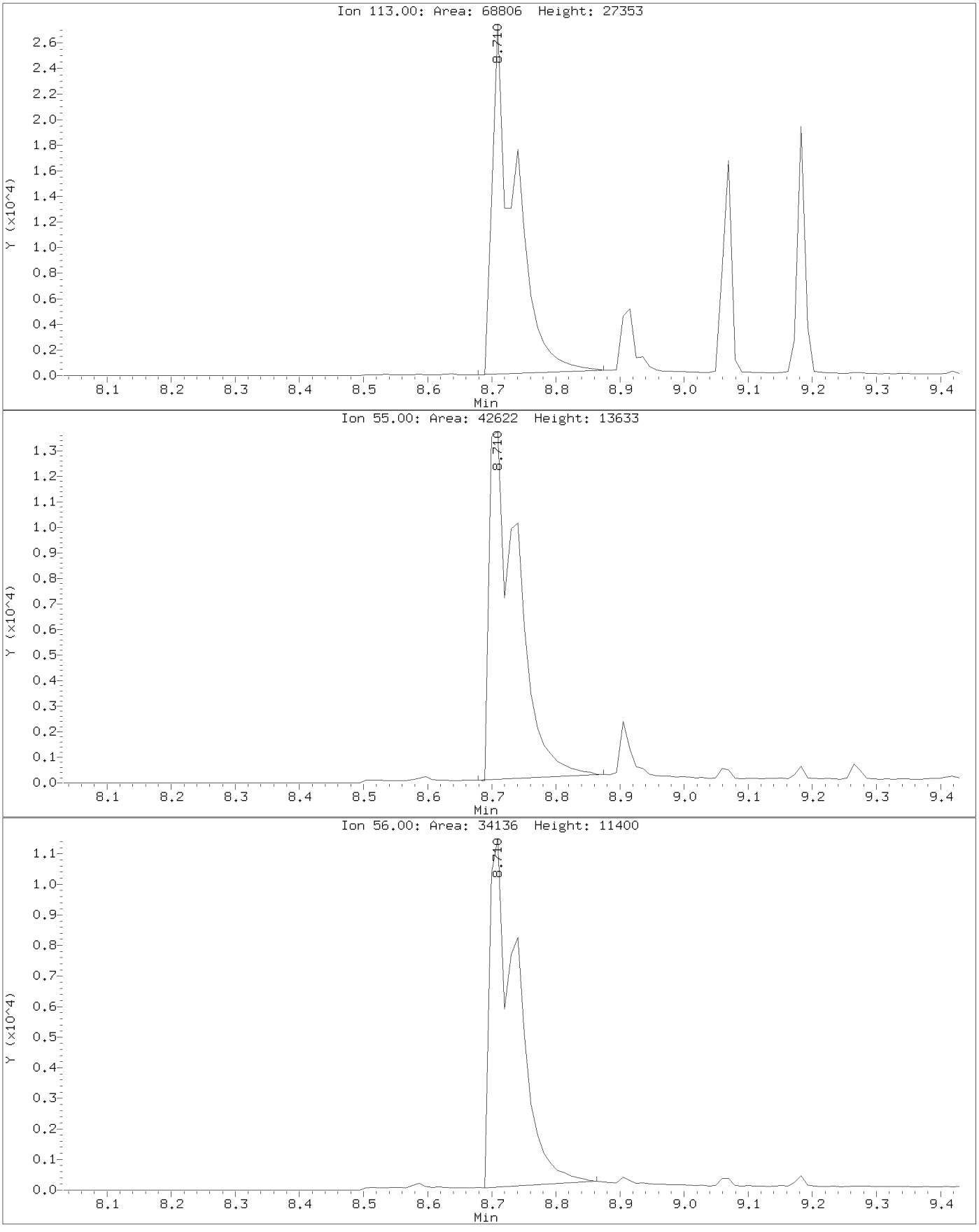
Injection Date: 06-DEC-2023 14:23
Instrument: gcms-v.i
Client Sample ID:

Compound: Caprolactam
CAS Number: 105-60-2

AFTER MANUAL INTEGRATION



Form 7
Calibration Verification Summary

Lab Name: Katahdin Analytical Services
SDG: SQ6179
Lab ID: WG346651-2
Analytical Date: 12/08/23 11:48
Lab File ID: V7632.D
Instrument ID: GCMS-V
Initial Calibration Date(s): 12/06/23 11:05 12/06/23 13:50
Column ID:

Compound	$\overline{RRF}$/Amount	RF2	CCAL RRF2	Min RF	%D/ %Drift	Max %D/ %Drift	Curve Type	Qual
Naphthalene	1.07686	1.20459	1.20459	0.010	11.86044	20.000	Averaged	
2-Methylnaphthalene	0.62813	0.69741	0.69741	0.010	11.02996	20.000	Averaged	
Acenaphthylene	2.04537	2.22945	2.22945	0.010	8.99986	20.000	Averaged	
Acenaphthene	1.29345	1.35362	1.35362	0.010	4.65153	20.010	Averaged	
Fluorene	1.32429	1.42043	1.42043	0.010	7.25983	20.000	Averaged	
Phenanthrene	1.11776	1.22799	1.22799	0.010	9.86098	20.000	Averaged	
Anthracene	1.04359	1.17316	1.17316	0.010	12.41505	20.000	Averaged	
Fluoranthene	0.93980	1.06441	1.06441	0.010	13.25843	20.010	Averaged	
Pyrene	1.97467	2.05186	2.05186	0.010	3.90913	20.000	Averaged	
Benzo(a)anthracene	1.15037	1.23377	1.23377	0.010	7.25036	20.000	Averaged	
Chrysene	1.38832	1.51332	1.51332	0.010	9.00364	20.000	Averaged	
Benzo(b)fluoranthene	1.47445	1.36028	1.36028	0.010	-7.74307	20.000	Averaged	
Benzo(k)fluoranthene	1.82670	1.94806	1.94806	0.010	6.64393	20.000	Averaged	
Benzo(a)pyrene	2.00000	1.65530	1.23746	0.010	-17.23484	20.010	Linear	
Indeno(1,2,3-cd)pyrene	2.00000	1.65830	0.70744	0.010	-17.08481	20.000	Quadratic	
Dibenzo(a,h)anthracene	2.00000	1.74220	0.80776	0.010	-12.88987	20.000	Quadratic	
Benzo(g,h,i)perylene	2.00000	1.76695	0.96915	0.010	-11.65240	20.000	Quadratic	
2-Methylnaphthalene-D10	0.47336	0.52184	0.52184	0.010	10.24144	20.000	Averaged	
Fluorene-D10	1.08140	1.17195	1.17195	0.010	8.37339	20.000	Averaged	
Pyrene-D10	1.54917	1.69850	1.69850	0.010	9.63922	20.000	Averaged	

*** = Compound out of QC criteria**

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Data File: \\target_server\gg\chem\gcms-v.i\V120823.b\V7632.D
Report Date: 29-Dec-2023 14:49

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-v.i\V120823.b\V7632.D
Lab Smp Id: WG346651-2
Inj Date : 08-DEC-2023 11:48
Operator : EP   Inst ID: gcms-v.i
Smp Info : WG346651-2
Misc Info : WG346651,WG346651,WG346507-4,SQ6179-1
Comment   :
Method   : \\target_server\gg\chem\gcms-v.i\V120823.b\VSPSIM21.m
Meth Date : 11-Dec-2023 07:52 epelletier Quant Type: ISTD
Cal Date : 06-DEC-2023 13:50   Cal File: V7607.D
Als bottle: 2   Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: all.sub
Target Version: 4.12
Processing Host: INSPIRON1

Concentration Formula: Amt * DF * Uf*(Vt/Vo)*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.000	Sample Volume (L)
Cpnd Variable		Local Compound Variable

			QUANT SIG					AMOUNTS		
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
$	1	1,4-Dioxane-d8	96	2.843	2.833	(0.275)	67180	2.00000	1.85	
	2	1,4-Dioxane	88	2.885	2.874	(0.431)	74472	2.00000	2.11	
	3	N-Nitrosodimethylamine	74	3.310	3.300	(0.495)	84781	2.00000	2.09	
	4	Pyridine	79	3.373	3.341	(0.504)	148662	2.00000	2.12	
	5	Benzaldehyde	77	6.156	6.146	(0.921)	65360	2.00000	2.36	
	6	Phenol	94	6.281	6.291	(0.939)	435631	4.50000	4.69	
	7	Bis(2-Chloroethyl)ether	93	6.385	6.385	(0.955)	167460	2.00000	2.15	
	8	2-Chlorophenol	128	6.427	6.427	(0.961)	387130	4.50000	4.76	
	9	1,3-Dichlorobenzene	146	6.614	6.603	(0.989)	192533	2.00000	2.18	
*	10	1,4-Dichlorobenzene-D4	152	6.687	6.676	(1.000)	46802	0.80000	(a)	
	11	1,4-Dichlorobenzene	146	6.697	6.697	(1.002)	192674	2.00000	2.16	
	12	1,2-Dichlorobenzene	146	6.874	6.874	(1.028)	187946	2.00000	2.19	
	13	2,2'-Oxybis(1-chloropropane)	45	7.030	7.030	(1.051)	81622	2.00000	2.24	
	14	2-Methylphenol	108	7.009	7.009	(1.048)	331478	4.50000	4.88	
	15	Acetophenone	105	7.165	7.176	(0.874)	233864	2.00000	2.12	
	16	N-Nitroso-di-n-propylamine	70	7.186	7.186	(1.075)	92474	2.00000	2.29	
	17	3&4-Methylphenol	108	7.197	7.196	(1.076)	340361	4.50000	4.87	
	18	Hexachloroethane	117	7.280	7.269	(1.089)	78666	2.00000	2.08	
	19	Nitrobenzene	77	7.363	7.363	(0.898)	150469	2.00000	2.17	
	20	Isophorone	82	7.663	7.662	(0.935)	274022	2.00000	2.20	
	21	2-Nitrophenol	139	7.745	7.745	(0.945)	174470	4.50000	4.80	

Data File: \\target_server\gg\chem\gcms-v.i\V120823.b\V7632.D
Report Date: 29-Dec-2023 14:49

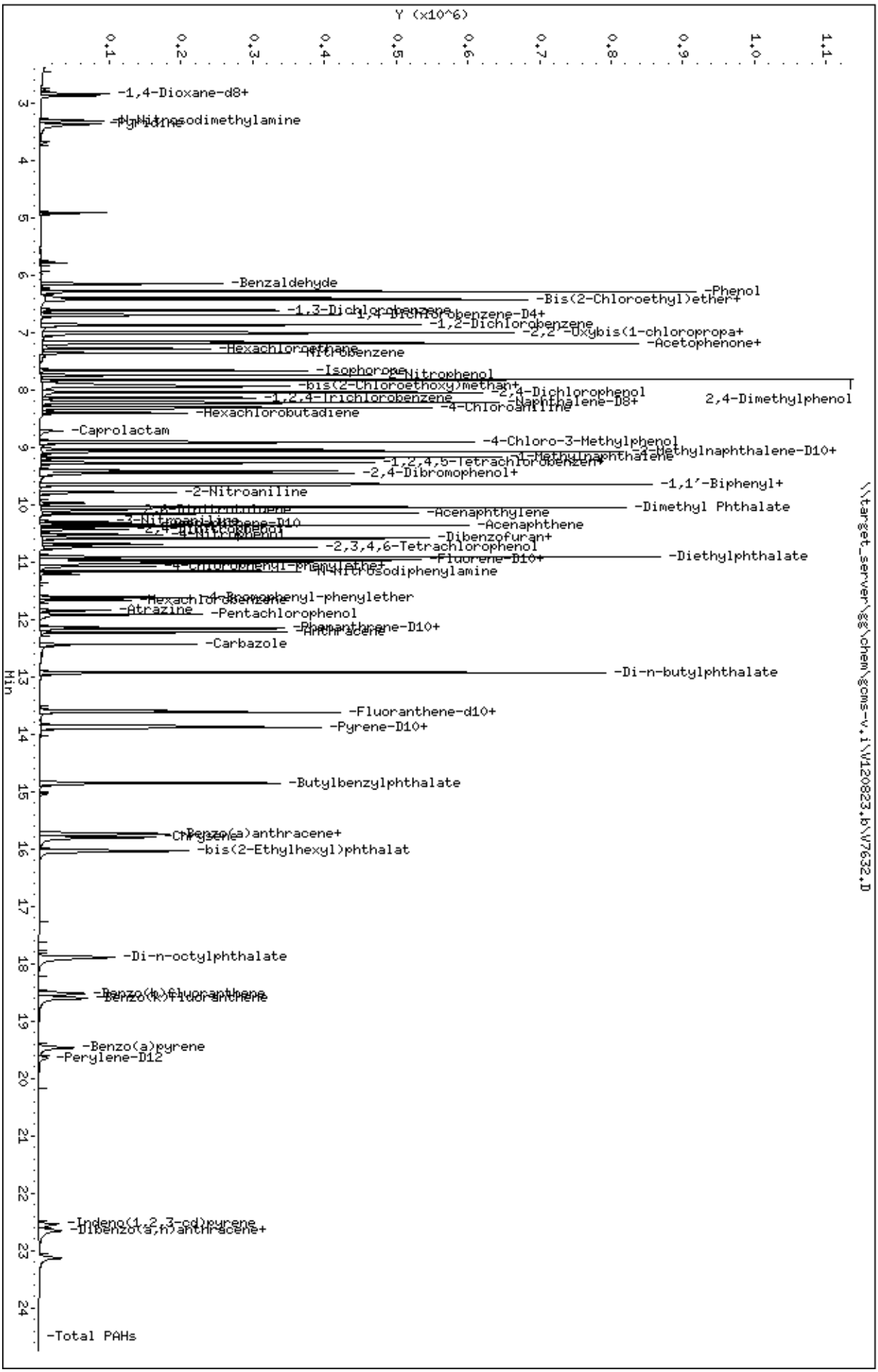
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
	22 2,4-Dimethylphenol	107	7.827	7.827	(0.955)	310023	4.50000	4.86	
	23 bis(2-Chloroethoxy)methane	93	7.940	7.950	(0.969)	186702	2.00000	2.13	
	24 Benzoic Acid	105	7.929	7.970	(0.967)	165947	2.00000	2.61	
	25 2,4-Dichlorophenol	162	8.042	8.042	(0.981)	269809	4.50000	5.00	
	26 1,2,4-Trichlorobenzene	180	8.145	8.145	(0.994)	136146	2.00000	2.08	
*	27 Naphthalene-D8	136	8.196	8.196	(1.000)	156938	0.80000	(a)	
	28 Naphthalene	128	8.227	8.227	(1.004)	472613	2.00000	2.24	
	29 4-Chloroaniline	127	8.309	8.319	(1.014)	156602	2.00000	2.76	
	30 Hexachlorobutadiene	225	8.401	8.401	(1.025)	76201	2.00000	2.02	
	31 Caprolactam	113	8.709	8.730	(1.063)	34193	2.00000	1.95	
	32 4-Chloro-3-Methylphenol	107	8.915	8.915	(1.088)	256762	4.50000	4.61	
$	33 2-Methylnaphthalene-D10	152	9.028	9.028	(1.101)	204743	2.00000	2.20	
	34 2-Methylnaphthalene	142	9.069	9.069	(1.106)	273627	2.00000	2.22	
	35 1-Methylnaphthalene	142	9.182	9.182	(1.120)	249280	2.00000	2.17	
	36 1,2,4,5-Tetrachlorobenzene	216	9.274	9.274	(0.898)	121991	2.00000	1.99	
	37 Hexachlorocyclopentadiene	237	9.274	9.274	(0.898)	56309	2.00000	1.68	
$	38 2,4-Dibromophenol	252	9.408	9.408	(0.910)	66489	2.00000	2.10	
	39 2,4,6-Trichlorophenol	196	9.418	9.418	(0.911)	171639	4.50000	4.55	
	40 2,4,5-Trichlorophenol	196	9.459	9.459	(0.915)	190360	4.50000	4.92	
	41 1,1'-Biphenyl	154	9.644	9.644	(0.933)	316527	2.00000	2.14	
	42 2-Chloronaphthalene	164	9.655	9.655	(0.934)	85154	2.00000	2.07	
	43 2-Nitroaniline	65	9.788	9.788	(0.947)	47767	2.00000	1.83	
	44 Dimethyl Phthalate	163	10.045	10.055	(0.972)	514285	4.50000	4.55	
	45 2,6-Dinitrotoluene	165	10.107	10.107	(0.978)	56261	2.00000	1.94	
	46 Acenaphthylene	152	10.148	10.158	(0.982)	374971	2.00000	2.18	
	47 3-Nitroaniline	138	10.292	10.312	(0.996)	38764	2.00000	2.94	
*	48 Acenaphthene-D10	164	10.333	10.333	(1.000)	67276	0.80000	(a)	
	49 Acenaphthene	153	10.364	10.374	(1.003)	227665	2.00000	2.09	
	50 2,4-Dinitrophenol	184	10.425	10.436	(1.009)	45887	4.50000	5.11	
	51 Dibenzofuran	168	10.580	10.590	(1.024)	324734	2.00000	2.15	
	52 4-Nitrophenol	109	10.518	10.528	(1.018)	56644	4.50000	4.52	
	53 2,4-Dinitrotoluene	165	10.590	10.590	(1.025)	69504	2.00000	1.93	
	54 2,3,4,6-Tetrachlorophenol	232	10.744	10.744	(1.040)	120817	4.50000	4.67	
	55 Diethylphthalate	149	10.910	10.910	(1.056)	502176	4.50000	4.64	
$	56 Fluorene-D10	174	10.962	10.962	(1.061)	197111	2.00000	2.17	
	57 Fluorene	166	10.993	11.003	(1.064)	238902	2.00000	2.14	
	58 4-Chlorophenyl-phenylether	204	11.024	11.024	(1.067)	121181	2.00000	2.15	
	59 4-Nitroaniline	138	11.035	11.045	(1.068)	35196	2.00000	2.27	
	60 4,6-Dinitro-2-Methylphenol	198	11.076	11.087	(0.913)	66342	4.50000	5.13	
	61 N-Nitrosodiphenylamine	169	11.170	11.170	(0.920)	183914	2.00000	2.24	
	62 4-Bromophenyl-phenylether	248	11.618	11.618	(0.957)	65913	2.00000	2.15	
	63 Hexachlorobenzene	284	11.670	11.670	(0.962)	77596	2.00000	2.08	
	64 Atrazine	200	11.847	11.857	(0.976)	42920	2.00000	1.96	
	65 Pentachlorophenol	266	11.920	11.920	(0.982)	88050	4.50000	5.08	
*	66 Phenanthrene-D10	188	12.137	12.137	(1.000)	97279	0.80000	(a)	
	67 Phenanthrene	178	12.157	12.167	(1.002)	298643	2.00000	2.20	
	68 Anthracene	178	12.229	12.229	(1.008)	285309	2.00000	2.25	
	69 Carbazole	167	12.434	12.434	(1.025)	192445	2.00000	2.96	
	70 Di-n-butylphthalate	149	12.927	12.927	(1.065)	689232	4.50000	4.96	
$	71 Fluoranthene-d10	212	13.594	13.604	(1.120)	193017	2.00000	2.37	
	72 Fluoranthene	202	13.614	13.625	(1.122)	258861	2.00000	2.26	
$	73 Pyrene-D10	212	13.861	13.871	(0.880)	224954	2.00000	2.19	
	74 Pyrene	202	13.881	13.891	(0.881)	271754	2.00000	2.08	
	75 Butylbenzylphthalate	149	14.856	14.856	(0.943)	230256	4.50000	4.75	

Data File: \\target_server\gg\chem\gcms-v.i\V120823.b\V7632.D
Report Date: 29-Dec-2023 14:49

			QUANT SIG					AMOUNTS		
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
	76	Benzo(a)anthracene	228	15.738	15.749	(0.999)	163404	2.00000	2.14	
	77	3,3'-Dichlorobenzidine	252	15.749	15.769	(1.000)	38123	2.00000	3.01	
*	78	Chrysene-D12	240	15.749	15.769	(1.000)	52977	0.80000	(a)	
	79	Chrysene	228	15.800	15.820	(1.003)	200428	2.00000	2.18	
	80	bis(2-Ethylhexyl)phthalate	149	16.036	16.046	(1.018)	268142	4.50000	4.47	
	81	Di-n-octylphthalate	149	17.895	17.905	(1.136)	319787	4.50000	4.65	
	82	Benzo(b)fluoranthene	252	18.523	18.543	(0.943)	114318	2.00000	1.84	
	83	Benzo(k)fluoranthene	252	18.605	18.636	(0.947)	163715	2.00000	2.13(H)	
	84	Benzo(a)pyrene	252	19.460	19.491	(0.991)	103996	2.00000	1.66	
*	85	Perylene-D12	264	19.645	19.676	(1.000)	33616	0.80000	(a)	
	86	Indeno(1,2,3-cd)pyrene	276	22.539	22.580	(1.147)	59453	2.00000	1.66	
	87	Dibenzo(a,h)anthracene	278	22.653	22.694	(1.153)	67884	2.00000	1.74	
	88	Benzo(g,h,i)perylene	276	23.126	23.178	(1.177)	81447	2.00000	1.77	
M	89	Total PAHs	100				3906270	36.0000	37.0	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
H - Operator selected an alternate compound hit.


Data File: \\target_server\gg\chem\gcms-v.i\W120823.b\W7632.D
Date : 08-DEC-2023 11:48
Client ID:
Sample Info: WG346651-2
Volume Injected (uL): 1.0
Column phase: Rxi-5ViMS
Instrument: gcms-v.i
Operator: EP
Column diameter: 0.25
\\target_server\gg\chem\gcms-v.i\W120823.b\W7632.D
Y (x10^6)
Min
-1,4-Dioxane-d8+
-Benzaldehyde
-Phenol
-Bis(2-Chloroethyl)ether+
-1,3-Dichlorobenzene
-1,4-Dichlorobenzene-D4+
-1,2-Dichlorobenzene
-2,2'-Oxybis(1-chloropropa+
-Acetophenone+
-Hexachloroethane
-Isophorone
-2-Nitrophenol
-bis(2-Chloroethoxy)methan+
-2,4-Dichlorophenol
2,4-Dimethylphenol
-1,2,4-Trichlorobenzene
-Naphthalene-D8+
-4-Chloroaniline
-Hexachlorobutadiene
-Caprolactam
-4-Chloro-3-Methylphenol
-2-Methylnaphthalene-D10+
-1,2,4,5-Tetrachlorobenzen+
-2,4-Dibromophenol+
-1,1'-Biphenyl+
-2-Nitroaniline
-Dimethyl Phthalate
-Acenaphthylene
-Acenaphthene
-Dibenzofuran+
-2,3,4,6-Tetrachlorophenol
-Fluorene-D10+
-Diethylphthalate
-Hexachlorobenzene
-Atrazine
-Pentachlorophenol
-Phenanthrene-D10+
-Carbazole
-Di-n-butylphthalate
-Fluoranthene-d10+
-Pyrene-D10+
-Butylbenzylphthalate
-Benzo(a)anthracene+
-bis(2-Ethylhexyl)phthalat
-Di-n-octylphthalate
-Benzo(a)pyrene
-Perylene-D12
-Indeno(1,2,3-cd)pyrene
-Dibenzo(a,h)anthracene+
-Total PAHs

Form 7
Calibration Verification Summary

Lab Name: Katahdin Analytical Services
SDG: SQ6179
Lab ID: WG346651-3
Analytical Date: 12/08/23 22:53
Lab File ID: V7652.D
Instrument ID: GCMS-V
Initial Calibration Date(s): 12/06/23 11:05 12/06/23 13:50
Column ID:

Compound	$\overline{RRF}$/Amount	RF2	CCAL RRF2	Min RF	%D/ %Drift	Max %D/ %Drift	Curve Type	Qual
Naphthalene	1.07686	1.23427	1.23427	0.010	14.61745	20.000	Averaged	
2-Methylnaphthalene	0.62813	0.69508	0.69508	0.010	10.65836	20.000	Averaged	
Acenaphthylene	2.04537	2.20337	2.20337	0.010	7.72493	20.000	Averaged	
Acenaphthene	1.29345	1.35764	1.35764	0.010	4.96286	20.010	Averaged	
Fluorene	1.32429	1.38499	1.38499	0.010	4.58336	20.000	Averaged	
Phenanthrene	1.11776	1.20271	1.20271	0.010	7.59979	20.000	Averaged	
Anthracene	1.04359	1.16825	1.16825	0.010	11.94497	20.000	Averaged	
Fluoranthene	0.93980	1.02639	1.02639	0.010	9.21295	20.010	Averaged	
Pyrene	1.97467	1.97118	1.97118	0.010	-0.17682	20.000	Averaged	
Benzo(a)anthracene	1.15037	1.24646	1.24646	0.010	8.35300	20.000	Averaged	
Chrysene	1.38832	1.47104	1.47104	0.010	5.95783	20.000	Averaged	
Benzo(b)fluoranthene	1.47445	1.40228	1.40228	0.010	-4.89433	20.000	Averaged	
Benzo(k)fluoranthene	1.82670	1.93360	1.93360	0.010	5.85258	20.000	Averaged	
Benzo(a)pyrene	2.00000	1.68570	1.26019	0.010	-15.71479	20.010	Linear	
Indeno(1,2,3-cd)pyrene	2.00000	2.09317	0.89901	0.010	4.65844	20.000	Quadratic	
Dibenzo(a,h)anthracene	2.00000	2.19316	1.02349	0.010	9.65781	20.000	Quadratic	
Benzo(g,h,i)perylene	2.00000	2.26786	1.25222	0.010	13.39293	20.000	Quadratic	
2-Methylnaphthalene-D10	0.47336	0.51774	0.51774	0.010	9.37487	20.000	Averaged	
Fluorene-D10	1.08140	1.12450	1.12450	0.010	3.98482	20.000	Averaged	
Pyrene-D10	1.54917	1.56633	1.56633	0.010	1.10723	20.000	Averaged	

*** = Compound out of QC criteria**

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Data File: \\target_server\gg\chem\gcms-v.i\V120823.b\V7652.D
Report Date: 29-Dec-2023 14:50

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-v.i\V120823.b\V7652.D
Lab Smp Id: WG346651-3
Inj Date : 08-DEC-2023 22:53
Operator : EP   Inst ID: gcms-v.i
Smp Info : WG346651-3
Misc Info : WG346651,WG346651,WG346507-4,SQ6179-1
Comment   :
Method   : \\target_server\gg\chem\gcms-v.i\V120823.b\VSPSIM21.m
Meth Date : 11-Dec-2023 07:52 epelletier Quant Type: ISTD
Cal Date : 06-DEC-2023 13:50   Cal File: V7607.D
Als bottle: 2   Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: all.sub
Target Version: 4.12
Processing Host: INSPIRON1

Concentration Formula: Amt * DF * Uf*(Vt/Vo)*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.000	Sample Volume (L)
Cpnd Variable		Local Compound Variable

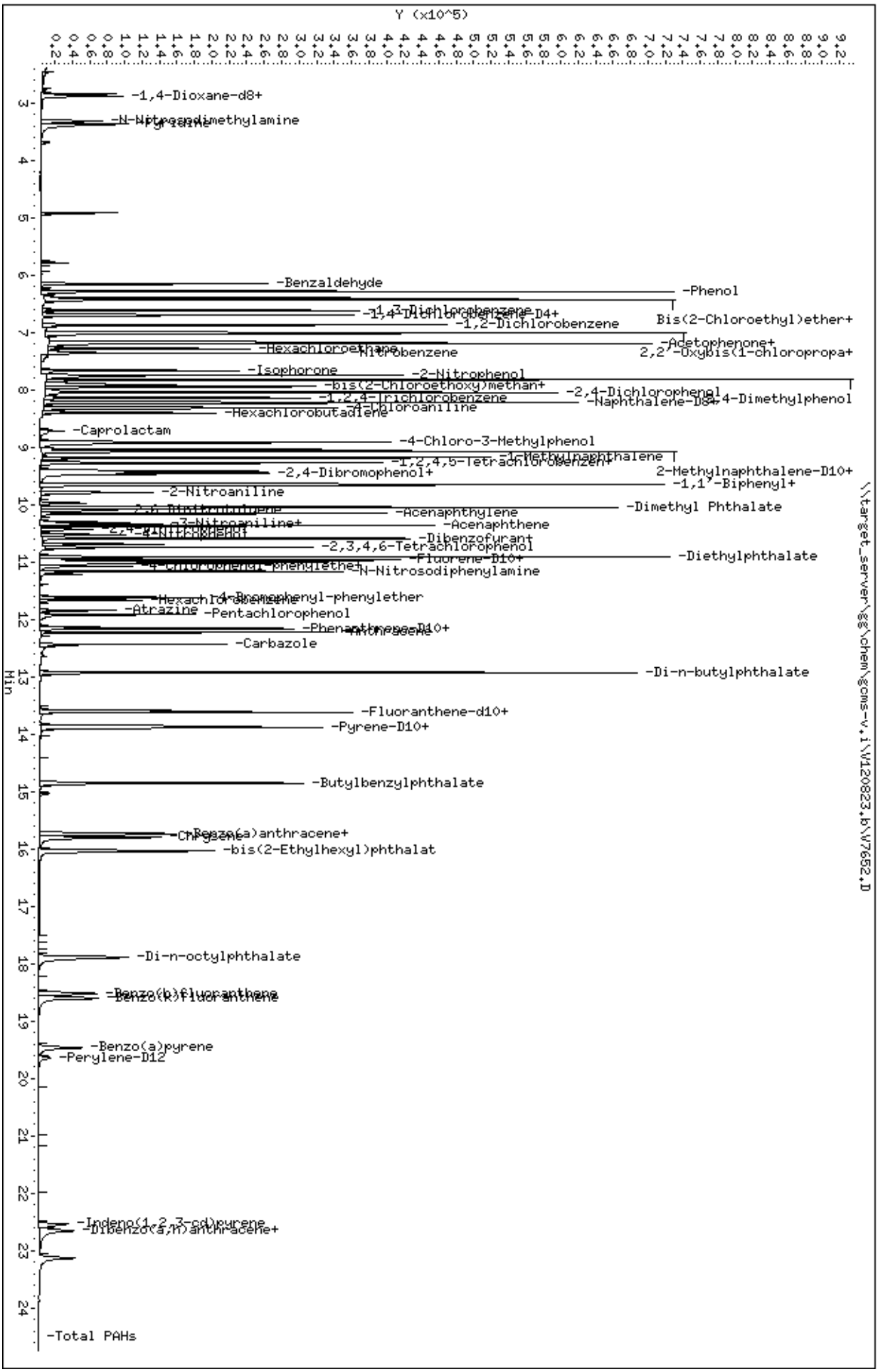
			QUANT SIG					AMOUNTS		
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
$	1	1,4-Dioxane-d8	96	2.843	2.833	(0.275)	70497	2.00000	2.18	
	2	1,4-Dioxane	88	2.885	2.874	(0.431)	71190	2.00000	2.09	
*	10	1,4-Dichlorobenzene-D4	152	6.687	6.676	(1.000)	45154	0.80000	(a)	
*	27	Naphthalene-D8	136	8.196	8.196	(1.000)	142158	0.80000	(a)	
	28	Naphthalene	128	8.227	8.227	(1.004)	438655	2.00000	2.29	
$	33	2-Methylnaphthalene-D10	152	9.028	9.028	(1.101)	184003	2.00000	2.19	
	34	2-Methylnaphthalene	142	9.069	9.069	(1.106)	247028	2.00000	2.21	
	35	1-Methylnaphthalene	142	9.182	9.182	(1.120)	219481	2.00000	2.11	
$	38	2,4-Dibromophenol	252	9.408	9.408	(0.910)	64033	2.00000	2.26	
	42	2-Chloronaphthalene	164	9.655	9.655	(0.934)	76573	2.00000	2.09	
	46	Acenaphthylene	152	10.158	10.158	(0.983)	330985	2.00000	2.15	
*	48	Acenaphthene-D10	164	10.333	10.333	(1.000)	60087	0.80000	(a)	
	49	Acenaphthene	153	10.364	10.374	(1.003)	203942	2.00000	2.10	
$	56	Fluorene-D10	174	10.962	10.962	(1.061)	168919	2.00000	2.08	
	57	Fluorene	166	10.993	11.003	(1.064)	208049	2.00000	2.09	
	65	Pentachlorophenol	266	11.920	11.920	(0.982)	66742	4.50000	4.51	
*	66	Phenanthrene-D10	188	12.137	12.137	(1.000)	83079	0.80000	(a)	
	67	Phenanthrene	178	12.168	12.167	(1.003)	249800	2.00000	2.15	
	68	Anthracene	178	12.229	12.229	(1.008)	242643	2.00000	2.24	
$	71	Fluoranthene-d10	212	13.594	13.604	(1.120)	155239	2.00000	2.23	
	72	Fluoranthene	202	13.614	13.625	(1.122)	213178	2.00000	2.18	

Data File: \\target_server\gg\chem\gcms-v.i\V120823.b\V7652.D
Report Date: 29-Dec-2023 14:50

							AMOUNTS		
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
$	73 Pyrene-D10	212	13.861	13.871	(0.880)	175926	2.00000	2.02	
	74 Pyrene	202	13.881	13.891	(0.881)	221398	2.00000	2.00	
	76 Benzo(a)anthracene	228	15.728	15.749	(0.999)	139999	2.00000	2.17	
*	78 Chrysene-D12	240	15.749	15.769	(1.000)	44927	0.80000	(a)	
	79 Chrysene	228	15.800	15.820	(1.003)	165223	2.00000	2.12	
	82 Benzo(b)fluoranthene	252	18.523	18.543	(0.943)	113585	2.00000	1.90	
	83 Benzo(k)fluoranthene	252	18.605	18.636	(0.947)	156622	2.00000	2.12(H)	
	84 Benzo(a)pyrene	252	19.460	19.491	(0.991)	102075	2.00000	1.68	
*	85 Perylene-D12	264	19.645	19.676	(1.000)	32400	0.80000	(a)	
	86 Indeno(1,2,3-cd)pyrene	276	22.539	22.580	(1.147)	72820	2.00000	2.09	
	87 Dibenzo(a,h)anthracene	278	22.663	22.694	(1.154)	82903	2.00000	2.19	
	88 Benzo(g,h,i)perylene	276	23.126	23.178	(1.177)	101430	2.00000	2.27	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
H - Operator selected an alternate compound hit.


Data File: \\target_server\gg\chem\gcms-v,i\W120823,b\W7652,D
Date : 08-DEC-2023 22:53
Client ID:
Sample Info: WG346651-3
Volume Injected (uL): 1.0
Column phase: Rxi-5ViMS
Instrument: gcms-v,i
Operator: EP
Column diameter: 0.25
\\target_server\gg\chem\gcms-v,i\W120823,b\W7652,D
Y (x10^5)
Min
-1,4-Dioxane-d8+
-N-Nitrosodimethylamine
-Benzaldehyde
-Phenol
-1,3-Dichlorobenzene
-1,4-Dichlorobenzene-D4+
-1,2-Dichlorobenzene
Bis(2-Chloroethyl)ether+
-Acetophenone+
-Hexachloroethane
-Nitrobenzene
2,2'-Oxybis(1-chloropropa+
-Isophorone
-2-Nitrophenol
-bis(2-Chloroethoxy)methan+
-2,4-Dichlorophenol
-1,2,4-Trichlorobenzene
-Naphthalene-D8+
-4-Chloroaniline
-2,4-Dimethylphenol
-Hexachlorobutadiene
-Caprolactam
-4-Chloro-3-Methylphenol
-1,2,4,5-Tetrachlorobenzen+
-1-Methylnaphthalene
2-Methylnaphthalene-D10+
-2,4-Dibromophenol+
-1,1'-Biphenyl+
-2-Nitroaniline
-Dimethyl Phthalate
-Acenaphthylene
-3-Nitroaniline+
-Acenaphthene
-Dibenzofurant
-2,3,4,6-Tetrachlorophenol
-Fluorene-D10+
-Diethylphthalate
-N-Nitrosodiphenylamine
-4-Bromophenyl-phenylether
-Hexachlorobenzene
-Atrazine
-Pentachlorophenol
-Phenanthrene-D10+
-Carbazole
-Di-n-butylphthalate
-Fluoranthene-d10+
-Pyrene-D10+
-Butylbenzylphthalate
-Benzo(a)anthracene+
-Chrysene
-bis(2-Ethylhexyl)phthalat
-Di-n-octylphthalate
-Benzo(b)fluoranthene
-Benzo(k)fluoranthene
-Benzo(a)pyrene
-Perylene-D12
-Indeno(1,2,3-cd)pyrene
-Dibenzo(a,h)anthracene+
-Total PAHs

Data File: \\target_server\gg\chem\gcms-v.i\V120623.b\VD408a.D

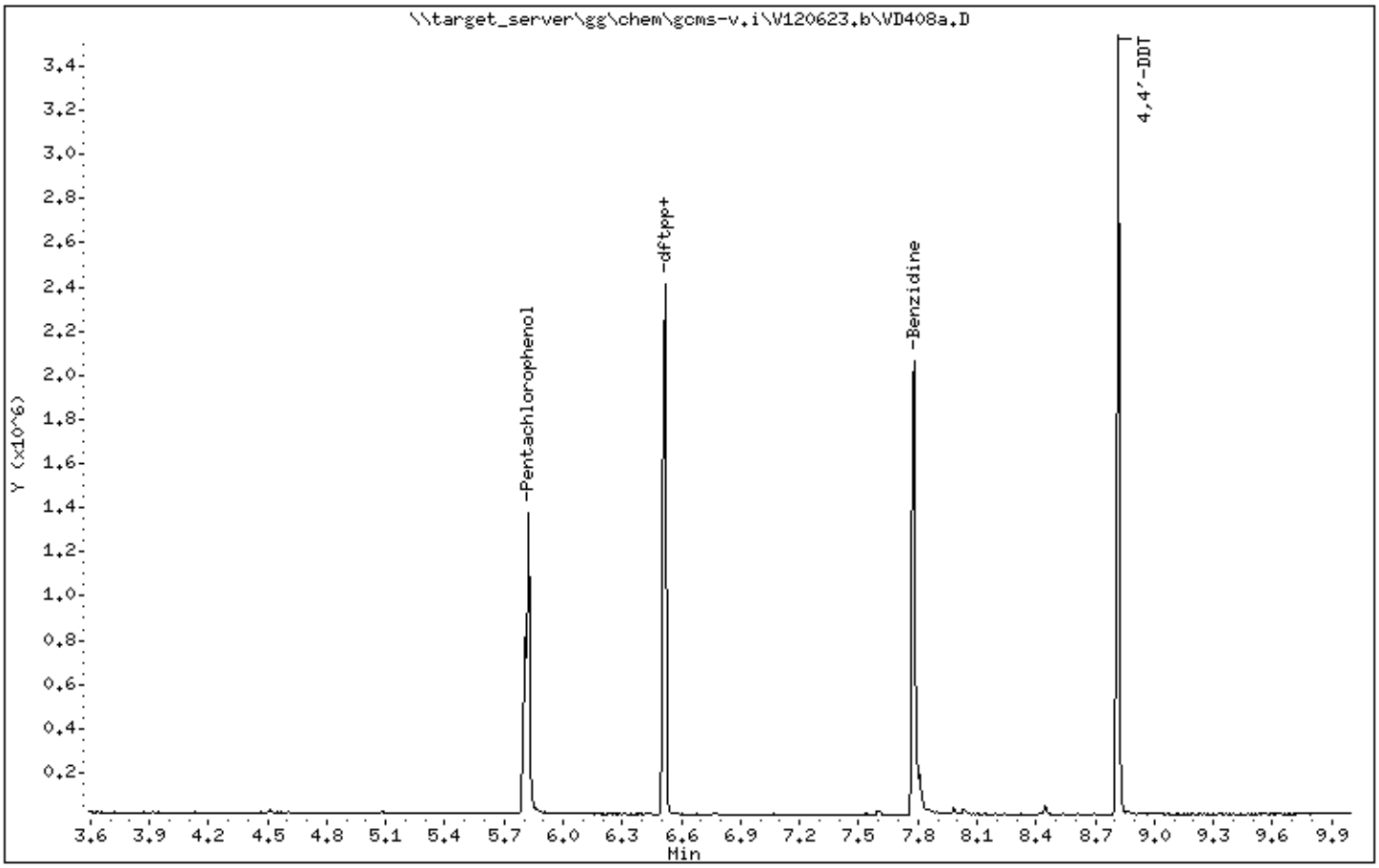
Date : 06-DEC-2023 10:47

Client ID: DFTPP02 Instrument: gcms-v.i

Sample Info: WG346507-1

Operator: EP

Column phase: Rxi-SVOCms Column diameter: 0.25



Data File: \\target_server\gg\chem\gcms-v.i\W120623.b\VD408a.D

Date : 06-DEC-2023 10:47

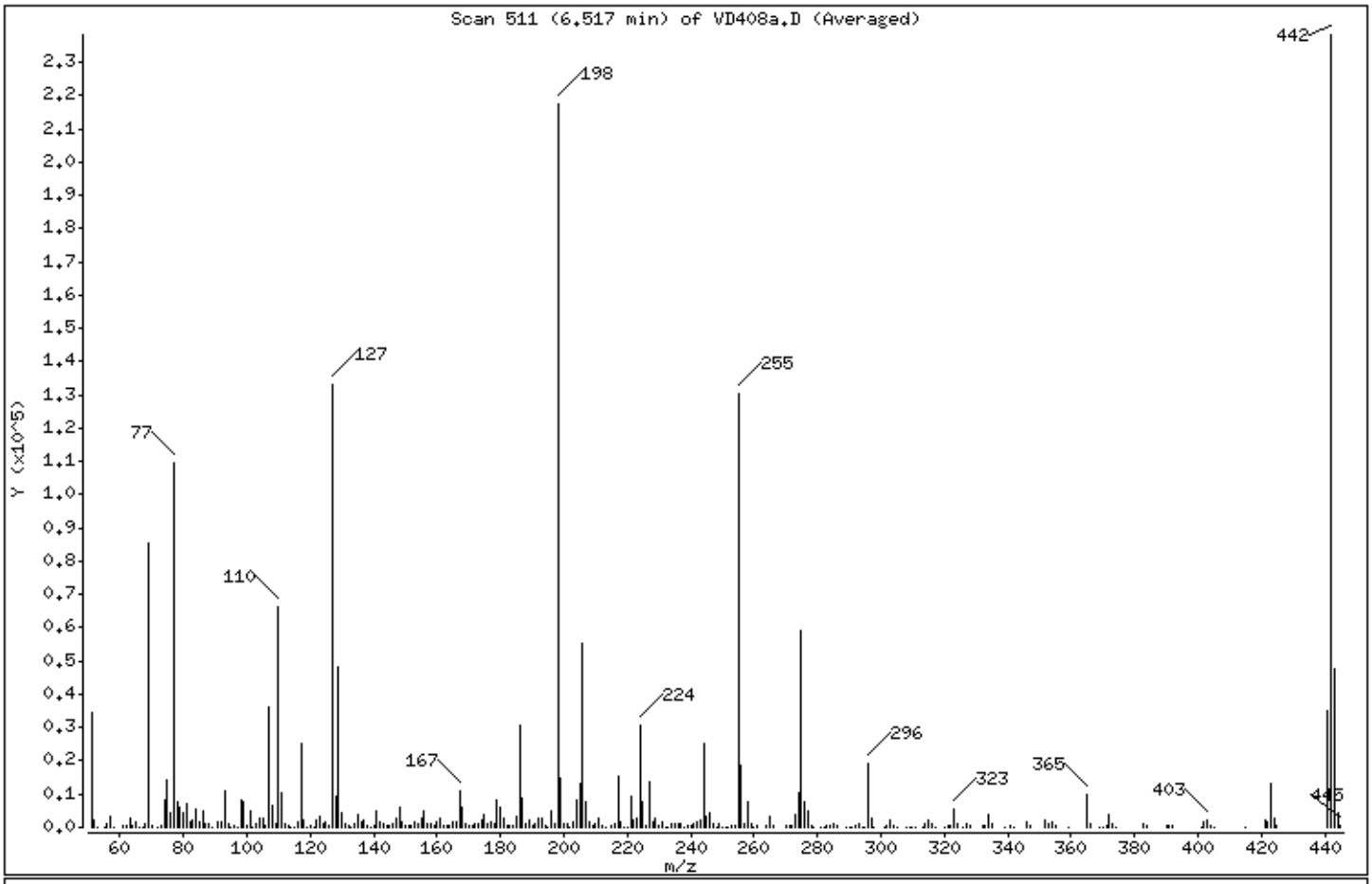
Client ID: DFTPP02 Instrument: gcms-v.i

Sample Info: WG346507-1

Operator: EP

Column phase: Rxi-SVOCms Column diameter: 0.25

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	10.00 - 80.00% of mass 198	16.58
68	Less than 2.00% of mass 69	0.68 (1.66)
69	Greater than 0.10% of mass 198	40.96
70	Less than 2.00% of mass 69	0.27 (0.67)
127	10.00 - 80.00% of mass 198	62.68
197	Less than 2.00% of mass 198	0.44
199	5.00 - 9.00% of mass 198	6.86
275	10.00 - 60.00% of mass 198	26.29
365	Greater than 1.00% of mass 198	4.29
441	0.01 - 100.00% of mass 443	16.08 (75.11)
442	Greater than 50.00% of mass 442	108.72 (100.00)
443	15.00 - 24.00% of mass 442	21.41 (19.69)

Data File: \\target_server\gg\chem\gcms-v.i\W120623.b\VD408a.D

Date : 06-DEC-2023 10:47

Client ID: DFTPP02 Instrument: gcms-v.i

Sample Info: WG346507-1

Operator: EP

Column phase: Rxi-SVOCms Column diameter: 0.25

Data File: VD408a.D
Spectrum: Scans 511-513 (6.517 min), Subtraction Scan 505
Location of Maximum: 442.00
Number of points: 297

m/z	Y	m/z	Y	m/z	Y	m/z	Y
51.00	33398	132.00	534	207.00	7309	292.00	391
52.00	2067	133.00	150	208.00	1847	293.00	1349
53.00	129	134.00	1306	209.00	477	294.00	237
55.00	214	135.00	3936	210.00	1012	295.00	218
56.00	1106	136.00	1380	211.00	2500	296.00	19245
57.00	3115	137.00	1930	212.00	535	297.00	2918
58.00	166	138.00	410	213.00	268	298.00	195
61.00	647	139.00	207	215.00	581	301.00	175
62.00	689	140.00	464	216.00	1202	302.00	277
63.00	2766	141.00	5146	217.00	15109	303.00	2153
64.00	638	142.00	1854	218.00	1769	304.00	636
65.00	1567	143.00	1256	219.00	115	305.00	55
66.00	159	144.00	513	220.00	266	308.00	252
67.00	135	145.00	358	221.00	9140	309.00	201
68.00	1299	146.00	1117	222.00	2400	310.00	258
69.00	85314	147.00	2829	223.00	2903	311.00	178
70.00	585	148.00	6075	224.00	30768	313.00	151
72.00	51	149.00	1890	225.00	7547	314.00	1238
73.00	292	150.00	437	226.00	743	315.00	2201
74.00	8475	151.00	771	227.00	13467	316.00	1255
75.00	14198	152.00	481	228.00	1836	317.00	169
76.00	4588	153.00	1788	229.00	2604	320.00	141
77.00	109485	154.00	1102	230.00	391	321.00	743
78.00	7602	155.00	2746	231.00	1420	322.00	432
79.00	6009	156.00	4995	232.00	226	323.00	5419
80.00	4515	157.00	910	233.00	258	324.00	1177
81.00	7185	158.00	909	234.00	906	326.00	60
82.00	1563	159.00	799	235.00	875	327.00	1284
83.00	2407	160.00	1635	236.00	845	328.00	671
85.00	1657	161.00	2562	237.00	1206	332.00	573
86.00	2003	162.00	658	238.00	138	333.00	697
87.00	1189	163.00	292	239.00	427	334.00	3829
88.00	197	164.00	399	240.00	425	335.00	958
89.00	235	165.00	1886	241.00	881	339.00	54
91.00	1601	166.00	1554	242.00	1897	341.00	779

Data File: \\target_server\gg\chem\gcms-v.i\W120623.b\VD408a.D

Date : 06-DEC-2023 10:47

Client ID: DFTPP02 Instrument: gcms-v.i

Sample Info: WG346507-1

Operator: EP

Column phase: Rxi-SVOCms Column diameter: 0.25

Data File: VD408a.D
Spectrum: Scans 511-513 (6.517 min), Subtraction Scan 505
Location of Maximum: 442.00
Number of points: 297

m/z	Y	m/z	Y	m/z	Y	m/z	Y
92.00	1882	167.00	11015	243.00	2028	342.00	272
93.00	11175	168.00	6240	244.00	25336	346.00	1484
94.00	852	169.00	880	245.00	3262	347.00	341
95.00	183	170.00	525	246.00	4591	352.00	2194
96.00	593	171.00	491	247.00	1079	353.00	1369
97.00	98	172.00	940	248.00	97	354.00	1913
98.00	8356	173.00	1165	249.00	942	355.00	487
99.00	7614	174.00	2233	250.00	173	359.00	114
100.00	748	175.00	4107	251.00	226	365.00	9620
101.00	4805	176.00	1354	252.00	230	366.00	1357
102.00	230	177.00	1584	253.00	508	369.00	62
103.00	1236	178.00	913	254.00	642	370.00	182
104.00	2767	179.00	8435	255.00	130128	371.00	520
105.00	2641	180.00	5860	256.00	18583	372.00	3563
106.00	750	181.00	2616	257.00	1135	373.00	1147
107.00	36042	182.00	455	258.00	7634	374.00	110
108.00	6578	183.00	309	259.00	1133	383.00	1097
109.00	836	184.00	656	260.00	244	384.00	355
110.00	66512	185.00	3176	261.00	276	390.00	582
111.00	10554	186.00	30496	264.00	298	391.00	391
112.00	1327	187.00	8866	265.00	3085	392.00	285
113.00	469	188.00	968	266.00	507	401.00	136
114.00	95	189.00	2057	270.00	354	402.00	1609
115.00	167	190.00	296	271.00	382	403.00	2316
116.00	1622	191.00	973	272.00	468	404.00	563
117.00	25256	192.00	2634	273.00	3849	405.00	73
118.00	2277	193.00	2569	274.00	10290	415.00	64
119.00	272	194.00	749	275.00	59354	421.00	2114
120.00	349	195.00	262	276.00	7770	422.00	1562
121.00	118	196.00	5099	277.00	5074	423.00	13140
122.00	2359	197.00	903	278.00	744	424.00	2770
123.00	3426	198.00	217536	279.00	143	425.00	323
124.00	1352	199.00	14583	282.00	220	441.00	35152
125.00	1444	200.00	1366	283.00	787	442.00	238250
126.00	322	201.00	946	284.00	335	443.00	47597

Data File: \\target_server\gg\chem\gcms-v.i\V120623.b\VD408a.D

Date : 06-DEC-2023 10:47

Client ID: DFTPP02 Instrument: gcms-v.i

Sample Info: WG346507-1

Operator: EP

Column phase: Rxi-SVOCms Column diameter: 0.25

Data File: VD408a.D
Spectrum: Scans 511-513 (6.517 min), Subtraction Scan 505
Location of Maximum: 442.00
Number of points: 297

m/z	Y	m/z	Y	m/z	Y	m/z	Y
127.00	133296	202.00	244	285.00	884	444.00	4253
128.00	9526	203.00	1520	286.00	304	445.00	300
129.00	48437	204.00	8060	289.00	256		
130.00	4271	205.00	13399	290.00	230		
131.00	940	206.00	55109	291.00	84		

Data File: \\target_server\gg\chem\gcms-v.i\W120823.b\VD410.D

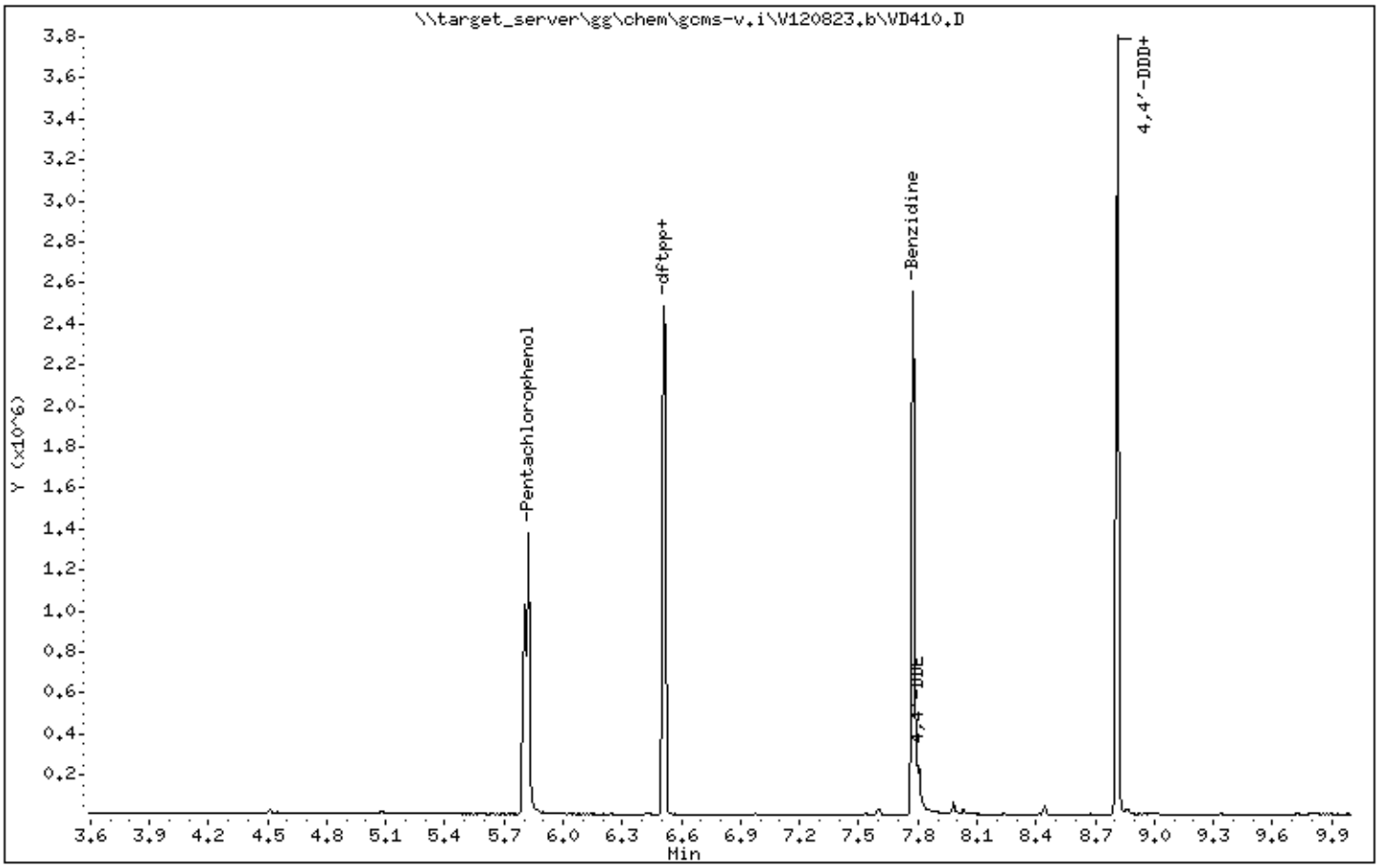
Date : 08-DEC-2023 11:30

Client ID: DFTPP02 Instrument: gcms-v.i

Sample Info: WG346651-1

Operator: EP

Column phase: Rxi-SVOCms Column diameter: 0.25



Data File: \\target_server\gg\chem\gcms-v.i\W120823.b\VD410.D

Date : 08-DEC-2023 11:30

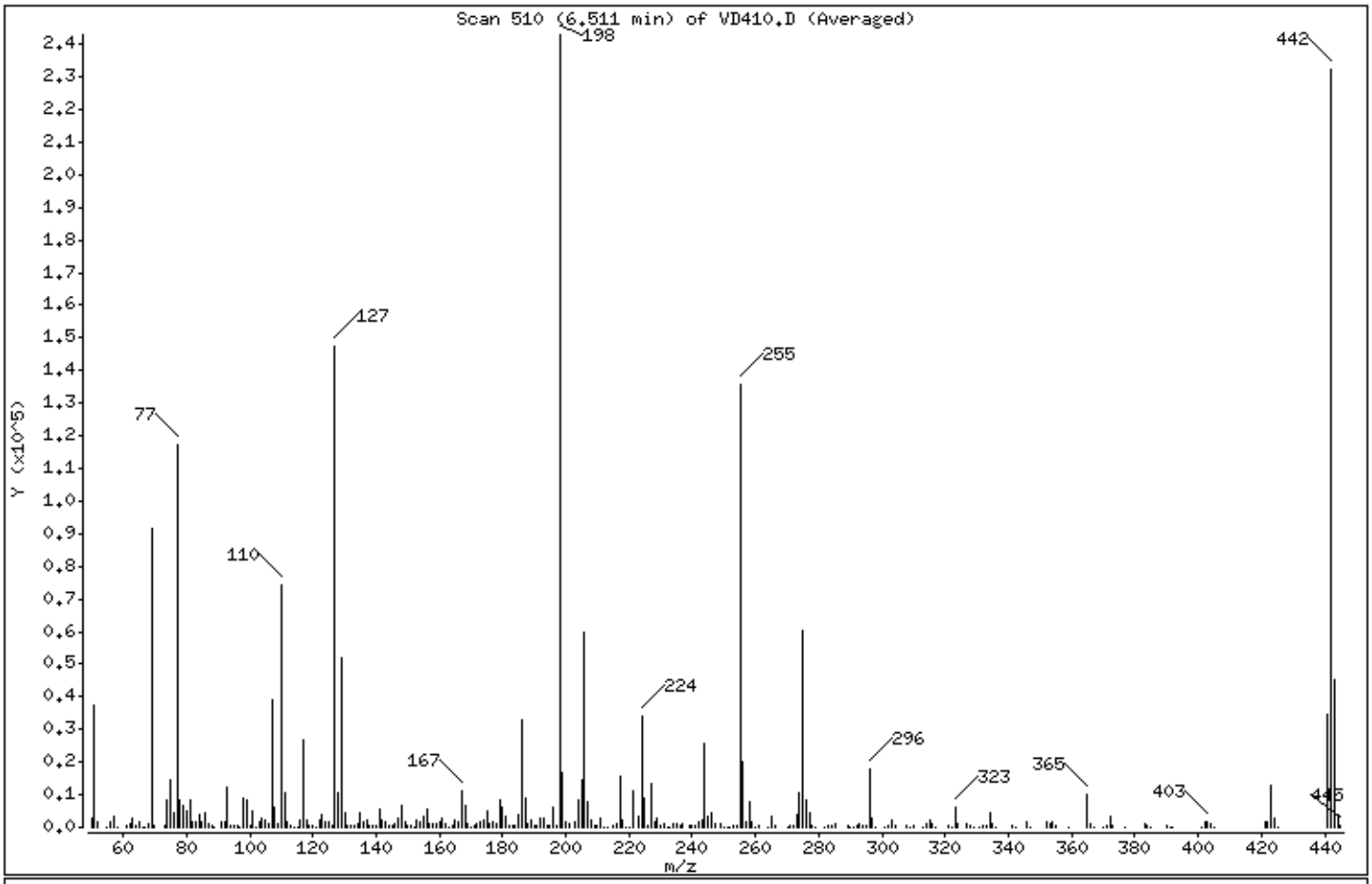
Client ID: DFTPP02 Instrument: gcms-v.i

Sample Info: WG346651-1

Operator: EP

Column phase: Rxi-SVOCms Column diameter: 0.25

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	10.00 - 80.00% of mass 198	15.41
68	Less than 2.00% of mass 69	0.53 (1.39)
69	Greater than 0.10% of mass 198	38.18
70	Less than 2.00% of mass 69	0.27 (0.70)
127	10.00 - 80.00% of mass 198	60.53
197	Less than 2.00% of mass 198	0.32
199	5.00 - 9.00% of mass 198	6.92
275	10.00 - 60.00% of mass 198	25.38
365	Greater than 1.00% of mass 198	4.20
441	0.01 - 100.00% of mass 443	15.44 (75.65)
442	Greater than 50.00% of mass 442	104.19 (100.00)
443	15.00 - 24.00% of mass 442	20.41 (19.59)

Data File: \\target_server\gg\chem\gcms-v.i\W120823.b\VD410.D

Date : 08-DEC-2023 11:30

Client ID: DFTPP02 Instrument: gcms-v.i

Sample Info: WG346651-1

Operator: EP

Column phase: Rxi-SVOCms Column diameter: 0.25

Data File: VD410.D
Spectrum: Scans 510-512 (6.511 min), Subtraction Scan 505
Location of Maximum: 198.00
Number of points: 290

m/z	Y	m/z	Y	m/z	Y	m/z	Y
50.00	2612	130.00	4708	204.00	8462	291.00	212
51.00	36624	131.00	754	205.00	14638	292.00	282
52.00	1951	132.00	427	206.00	59578	293.00	1317
55.00	203	133.00	109	207.00	7778	294.00	327
56.00	1399	134.00	1188	208.00	2005	295.00	451
57.00	3595	135.00	4198	209.00	733	296.00	17821
58.00	165	136.00	1409	210.00	716	297.00	2691
61.00	620	137.00	2341	211.00	2721	298.00	172
62.00	934	138.00	459	212.00	201	301.00	199
63.00	2875	139.00	283	213.00	148	302.00	359
64.00	405	140.00	643	215.00	547	303.00	2039
65.00	1771	141.00	5852	216.00	978	304.00	725
66.00	184	142.00	2083	217.00	15728	308.00	312
67.00	186	143.00	1555	218.00	2091	309.00	226
68.00	1338	144.00	384	219.00	169	310.00	393
69.00	91789	145.00	310	220.00	116	313.00	66
70.00	547	146.00	1054	221.00	11417	314.00	959
73.00	510	147.00	2860	223.00	3439	315.00	2119
74.00	8591	148.00	6443	224.00	33898	316.00	1117
75.00	14741	149.00	1443	225.00	8715	317.00	127
76.00	4739	150.00	422	226.00	723	321.00	642
77.00	116881	151.00	806	227.00	13597	322.00	247
78.00	8128	152.00	108	228.00	1810	323.00	5983
79.00	6536	153.00	2015	229.00	2781	324.00	1190
80.00	4885	154.00	1479	230.00	381	327.00	1270
81.00	8122	155.00	3328	231.00	1313	328.00	655
82.00	1525	156.00	5362	232.00	169	329.00	233
83.00	1362	157.00	1070	233.00	246	331.00	134
84.00	464	158.00	1252	234.00	937	332.00	364
85.00	1952	159.00	854	235.00	1063	333.00	603
86.00	2084	160.00	1894	236.00	647	334.00	4217
87.00	963	161.00	2879	237.00	1375	335.00	1042
88.00	366	162.00	846	239.00	486	336.00	129
89.00	234	163.00	263	240.00	575	341.00	823
91.00	1764	164.00	327	241.00	796	342.00	262

Data File: \\target_server\gg\chem\gcms-v.i\W120823.b\VD410.D

Date : 08-DEC-2023 11:30

Client ID: DFTPP02 Instrument: gcms-v.i

Sample Info: WG346651-1

Operator: EP

Column phase: Rxi-SVOCms Column diameter: 0.25

Data File: VD410.D
Spectrum: Scans 510-512 (6.511 min), Subtraction Scan 505
Location of Maximum: 198.00
Number of points: 290

m/z	Y	m/z	Y	m/z	Y	m/z	Y
92.00	1832	165.00	1848	242.00	1666	346.00	1634
93.00	12269	166.00	1813	243.00	1988	347.00	156
94.00	631	167.00	11393	244.00	25805	352.00	1853
95.00	489	168.00	6966	245.00	3166	353.00	1296
96.00	703	169.00	1093	246.00	4687	354.00	1918
97.00	223	170.00	270	247.00	1061	355.00	391
98.00	9057	171.00	508	249.00	907	359.00	221
99.00	8526	172.00	1144	250.00	147	365.00	10112
100.00	734	173.00	1406	251.00	232	366.00	1376
101.00	5155	174.00	2338	252.00	177	367.00	62
102.00	241	175.00	4882	253.00	509	370.00	195
103.00	1538	176.00	1366	254.00	656	371.00	552
104.00	2756	177.00	1588	255.00	135424	372.00	3517
105.00	2300	178.00	949	256.00	20107	373.00	750
106.00	866	179.00	8129	257.00	1560	377.00	69
107.00	39152	180.00	6342	258.00	8004	383.00	1142
108.00	6084	181.00	3531	259.00	1405	384.00	515
109.00	1030	182.00	539	260.00	125	385.00	69
110.00	74074	183.00	384	261.00	341	390.00	663
111.00	10378	184.00	735	264.00	225	391.00	241
112.00	1571	185.00	3911	265.00	3242	392.00	272
113.00	506	186.00	33120	266.00	606	401.00	163
114.00	63	187.00	9165	270.00	163	402.00	1526
115.00	272	188.00	894	271.00	338	403.00	1848
116.00	2105	189.00	2049	272.00	467	404.00	895
117.00	26978	190.00	348	273.00	4085	405.00	58
118.00	2158	191.00	817	274.00	10790	421.00	1951
119.00	295	192.00	2812	275.00	60149	422.00	1620
120.00	592	193.00	2940	276.00	8403	423.00	13018
121.00	222	194.00	563	277.00	4722	424.00	2841
122.00	2257	195.00	419	278.00	753	425.00	160
123.00	4086	196.00	6290	279.00	239	441.00	34658
124.00	1591	197.00	758	282.00	71	442.00	232000
125.00	1735	198.00	242858	283.00	536	443.00	45253
126.00	367	199.00	16685	284.00	439	444.00	4024

Data File: \\target_server\gg\chem\gcms-v.i\V120823.b\VD410.D

Date : 08-DEC-2023 11:30

Client ID: DFTPP02 Instrument: gcms-v.i

Sample Info: WG346651-1

Operator: EP

Column phase: Rxi-SVOCms Column diameter: 0.25

Data File: VD410.D
Spectrum: Scans 510-512 (6.511 min), Subtraction Scan 505
Location of Maximum: 198.00
Number of points: 290

m/z	Y	m/z	Y	m/z	Y	m/z	Y
127.00	147240	200.00	1471	285.00	917	445.00	378
128.00	10733	201.00	1189	289.00	281		
129.00	52096	203.00	1567	290.00	180		

Raw QC Data Section

Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

SDG: SQ6179
Lab ID: WG345459-1
Client ID: Method Blank
Matrix: AQ
Lab File ID: V7635.D

Sample Date: N/A
Extract Date: 15-NOV-23
Extracted By: NH/CMW
Extraction Method: SW846 3510C
Lab Prep Batch: WG345459

Report Date: 29-DEC-23
Analysis Date: 08-DEC-23
Analyst: EP
Analysis Method: SW846 8270D SIM
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	0.10	ug/L	1	.2	0.20	0.064	0.10
2-Methylnaphthalene	U	0.10	ug/L	1	.2	0.20	0.077	0.10
Acenaphthylene	U	0.10	ug/L	1	.2	0.20	0.054	0.10
Acenaphthene	U	0.10	ug/L	1	.2	0.20	0.064	0.10
Fluorene	U	0.10	ug/L	1	.2	0.20	0.061	0.10
Phenanthrene	U	0.10	ug/L	1	.2	0.20	0.051	0.10
Anthracene	U	0.10	ug/L	1	.2	0.20	0.044	0.10
Fluoranthene	U	0.10	ug/L	1	.2	0.20	0.073	0.10
Pyrene	U	0.10	ug/L	1	.2	0.20	0.059	0.10
Benzo(a)anthracene	U	0.10	ug/L	1	.2	0.20	0.046	0.10
Chrysene	U	0.10	ug/L	1	.2	0.20	0.036	0.10
Benzo(b)Fluoranthene	U	0.10	ug/L	1	.2	0.20	0.089	0.10
Benzo(k)fluoranthene	U	0.10	ug/L	1	.2	0.20	0.049	0.10
Benzo(a)pyrene	U	0.10	ug/L	1	.2	0.20	0.066	0.10
Indeno(1,2,3-cd)pyrene	U	0.10	ug/L	1	.2	0.20	0.052	0.10
Dibenzo(a,h)anthracene	U	0.10	ug/L	1	.2	0.20	0.070	0.10
Benzo(g,h,i)perylene	U	0.10	ug/L	1	.2	0.20	0.065	0.10
2-Methylnaphthalene-D10		90.3	%					
Fluorene-D10		88.7	%					
Pyrene-D10		95.2	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029
http://www.katahdinlab.com

Data File: \\target_server\gg\chem\gcms-v.i\V120823.b\V7635.D
Report Date: 29-Dec-2023 14:49

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-v.i\V120823.b\V7635.D
Lab Smp Id: WG345459-1 Client Smp ID: WG345459-Blank
Inj Date : 08-DEC-2023 13:28
Operator : EP Inst ID: gcms-v.i
Smp Info : WG345459-1
Misc Info : WG346651,WG345459,WG346507-4,SQ6179-1
Comment :
Method : \\target_server\gg\chem\gcms-v.i\V120823.b\VSPSIM21.m
Meth Date : 11-Dec-2023 07:52 epelletier Quant Type: ISTD
Cal Date : 06-DEC-2023 13:50 Cal File: V7607.D
Als bottle: 5 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pahplus.sub
Target Version: 4.12
Processing Host: INSPIRON1

Concentration Formula: Amt * DF * Uf*(Vt/Vo)*1000 * CpndVariable

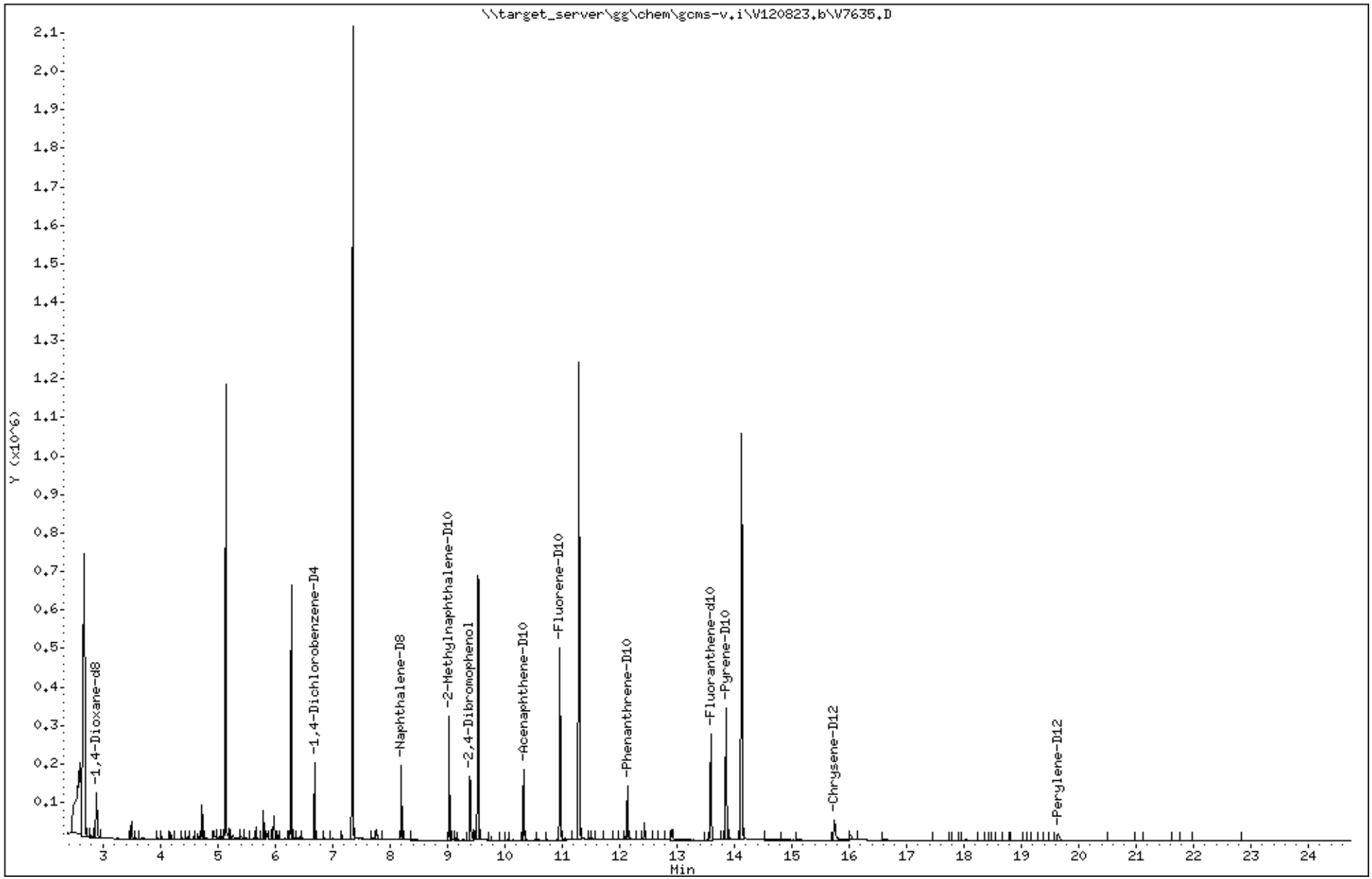
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.000	Sample Volume (L)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/L)	REVIEW CODE
$	1 1,4-Dioxane-d8	96	2.895	2.833	(0.280)	105776	2.44278	2.44(QR)	
*	10 1,4-Dichlorobenzene-D4	152	6.687	6.676	(1.000)	57565	0.80000	(aQ)	
*	27 Naphthalene-D8	136	8.196	8.196	(1.000)	180117	0.80000	(a)	
$	33 2-Methylnaphthalene-D10	152	9.028	9.028	(1.101)	192555	1.80673	1.81	
$	38 2,4-Dibromophenol	252	9.408	9.408	(0.910)	129195	3.41385	3.41	
*	48 Acenaphthene-D10	164	10.333	10.333	(1.000)	80388	0.80000	(a)	
$	56 Fluorene-D10	174	10.962	10.962	(1.061)	192830	1.77454	1.77	
*	66 Phenanthrene-D10	188	12.137	12.137	(1.000)	125700	0.80000	(a)	
$	71 Fluoranthene-d10	212	13.594	13.604	(1.120)	205889	1.95870	1.96	
$	73 Pyrene-D10	212	13.860	13.871	(0.880)	232191	1.90503	1.90	
*	78 Chrysene-D12	240	15.748	15.769	(1.000)	62941	0.80000	(a)	
*	85 Perylene-D12	264	19.645	19.676	(1.000)	46330	0.80000	(a)	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.

Data File: \\target_server\gg\chem\gcms-v.i\V120823.b\V7635.D
Date : 08-DEC-2023 13:28
Client ID: WG345459-Blank
Instrument: gcms-v.i
Sample Info: WG345459-1
Volume Injected (uL): 1.0
Operator: EP
Column phase: Rxi-SVOCms
Column diameter: 0.25



Katahdin Analytical Services SQ6179 Page 311 of 740

Katahdin
ANALYTICAL SERVICES

LCS Recovery Report

Lab ID: WG345459-2
Client ID: LCS
SDG: SQ6179
LCS File ID: V7636.D
Report Date: 29-DEC-23

Extract Date: 15-NOV-23
Extracted By: NH/CMW
Extraction Method: SW846 3510C
Lab Prep Batch: WG345459

Analysis Date: 08-DEC-23
Analyst: EP
Analysis Method: SW846 8270D SIM
Matrix: AQ

Compound	Recovery (%)	Conc Added	Conc Recovered	Conc Units	Limits
Naphthalene	89.6	5.00	4.48	ug/L	43-114
2-Methylnaphthalene	92.8	5.00	4.64	ug/L	39-114
Acenaphthylene	84.4	5.00	4.22	ug/L	35-121
Acenaphthene	87.6	5.00	4.38	ug/L	48-114
Fluorene	89.0	5.00	4.45	ug/L	50-118
Phenanthrene	90.6	5.00	4.53	ug/L	53-115
Anthracene	94.2	5.00	4.71	ug/L	53-119
Fluoranthene	99.6	5.00	4.98	ug/L	58-120
Pyrene	81.0	5.00	4.05	ug/L	53-121
Benzo(a)anthracene	100.	5.00	5.00	ug/L	59-120
Chrysene	93.8	5.00	4.69	ug/L	57-120
Benzo(b)Fluoranthene	82.0	5.00	4.10	ug/L	53-126
Benzo(k)fluoranthene	77.0	5.00	3.85	ug/L	54-125
Benzo(a)pyrene	70.0	5.00	3.50	ug/L	53-120
Indeno(1,2,3-cd)pyrene	78.4	5.00	3.92	ug/L	48-130
Dibenzo(a,h)anthracene	80.0	5.00	4.00	ug/L	44-131
Benzo(g,h,i)perylene	84.4	5.00	4.22	ug/L	44-128
2-Methylnaphthalene-D10	* 98.3				43-92
Fluorene-D10	85.8				29-101
Pyrene-D10	81.9				53-166

600 Technology Way
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Data File: \\target_server\gg\chem\gcms-v.i\V120823.b\V7636.D
Report Date: 29-Dec-2023 14:49

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-v.i\V120823.b\V7636.D
Lab Smp Id: WG345459-2 Client Smp ID: WG345459-LCS
Inj Date : 08-DEC-2023 14:01
Operator : EP Inst ID: gcms-v.i
Smp Info : WG345459-2
Misc Info : WG346651,WG345459,WG346507-4,SQ6179-1
Comment :
Method : \\target_server\gg\chem\gcms-v.i\V120823.b\VSPSIM21.m
Meth Date : 11-Dec-2023 07:52 epelletier Quant Type: ISTD
Cal Date : 06-DEC-2023 13:50 Cal File: V7607.D
Als bottle: 6 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pahplus.sub
Target Version: 4.12
Processing Host: INSPIRON1

Concentration Formula: Amt * DF * Uf*(Vt/Vo)*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.000	Sample Volume (L)
Cpnd Variable		Local Compound Variable

			QUANT SIG					CONCENTRATIONS		
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/ml)	FINAL (ug/L)	REVIEW CODE
$	1	1,4-Dioxane-d8	96	2.874	2.833	(0.278)	33794	0.88318	0.883(a)	
	2	1,4-Dioxane	88	2.906	2.874	(0.435)	69114	1.82637	1.83(Q)	
*	10	1,4-Dichlorobenzene-D4	152	6.687	6.676	(1.000)	50108	0.80000	(aQ)	
*	27	Naphthalene-D8	136	8.196	8.196	(1.000)	162656	0.80000	(a)	
	28	Naphthalene	128	8.227	8.227	(1.004)	980434	4.47793	4.48	
$	33	2-Methylnaphthalene-D10	152	9.028	9.028	(1.101)	189286	1.96672	1.97(R)	
	34	2-Methylnaphthalene	142	9.069	9.069	(1.106)	593026	4.64347	4.64	
	35	1-Methylnaphthalene	142	9.182	9.182	(1.120)	549631	4.62521	4.62	
$	38	2,4-Dibromophenol	252	9.398	9.408	(0.909)	117889	3.52521	3.52	
	42	2-Chloronaphthalene	164	9.655	9.655	(0.934)	181550	4.18569	4.18	
	46	Acenaphthylene	152	10.148	10.158	(0.982)	766038	4.21784	4.22	
*	48	Acenaphthene-D10	164	10.333	10.333	(1.000)	71036	0.80000	(a)	
	49	Acenaphthene	153	10.364	10.374	(1.003)	503360	4.38268	4.38	
$	56	Fluorene-D10	174	10.962	10.962	(1.061)	164695	1.71516	1.72	
	57	Fluorene	166	10.993	11.003	(1.064)	523387	4.45094	4.45	
	65	Pentachlorophenol	266	11.920	11.920	(0.982)	183338	10.0334	10.0	
*	66	Phenanthrene-D10	188	12.137	12.137	(1.000)	102558	0.80000	(a)	
	67	Phenanthrene	178	12.157	12.167	(1.002)	649365	4.53168	4.53	
	68	Anthracene	178	12.229	12.229	(1.008)	630540	4.71304	4.71	
$	71	Fluoranthene-d10	212	13.594	13.604	(1.120)	169645	1.97807	1.98	
	72	Fluoranthene	202	13.614	13.625	(1.122)	599915	4.97936	4.98	

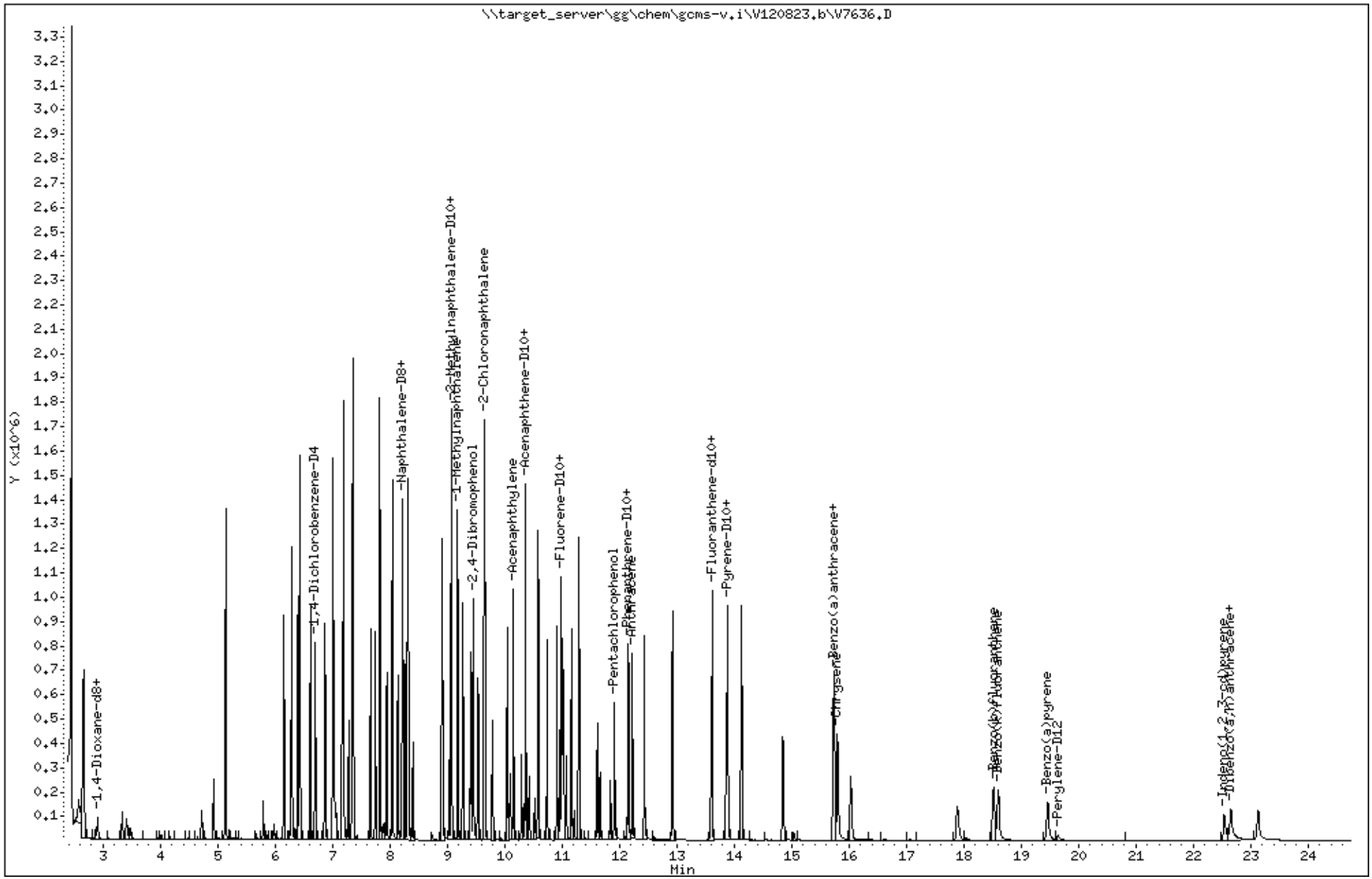
Data File: \\target_server\gg\chem\gcms-v.i\V120823.b\V7636.D
Report Date: 29-Dec-2023 14:49

							CONCENTRATIONS		
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/ml)	FINAL (ug/L)	REVIEW CODE
$	73 Pyrene-D10	212	13.861	13.871	(0.880)	194914	1.63895	1.64	
	74 Pyrene	202	13.881	13.891	(0.881)	613686	4.04831	4.05	
	76 Benzo(a)anthracene	228	15.728	15.749	(0.999)	441373	4.99795	5.00	
*	78 Chrysene-D12	240	15.749	15.769	(1.000)	61414	0.80000	(a)	
	79 Chrysene	228	15.800	15.820	(1.003)	499859	4.69008	4.69	
	82 Benzo(b)fluoranthene	252	18.523	18.543	(0.943)	364437	4.09991	4.10	
	83 Benzo(k)fluoranthene	252	18.605	18.636	(0.947)	423784	3.84822	3.85(H)	
	84 Benzo(a)pyrene	252	19.460	19.491	(0.991)	315576	3.50109	3.50	
*	85 Perylene-D12	264	19.645	19.676	(1.000)	48229	0.80000	(a)	
	86 Indeno(1,2,3-cd)pyrene	276	22.539	22.580	(1.147)	209501	3.92535	3.92	
	87 Dibenzo(a,h)anthracene	278	22.663	22.694	(1.154)	231054	3.99507	4.00	
	88 Benzo(g,h,i)perylene	276	23.126	23.178	(1.177)	288477	4.21609	4.22	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.
H - Operator selected an alternate compound hit.

Data File: \\target_server\gg\chem\gcms-v.i\V120823.b\V7636.D
Date : 08-DEC-2023 14:01
Client ID: WG345459-LCS
Instrument: gcms-v.i
Sample Info: WG345459-2
Volume Injected (uL): 1.0
Operator: EP
Column phase: Rxi-SVOCms
Column diameter: 0.25



Katahdin Analytical Services SQ6179 Page 315 of 740

Logbooks and Supporting Documents

S/S
SEP

KATAHDIN ANALYTICAL SERVICES, LLC.
ORGANIC EXTRACTIONS LOG - AQUEOUS SEMI-VOLATILES

Extraction Method: (check one)	SW846 3510 (SEP) ✓	SW846 3520 (CLLE)	
Analytical Method: (check one)	SW846 8270 ✓	SW846 8270 SIM ✓	Other:
Surrogate ID: SV 3183	Surrogate ID: SV 3178 (SVOA)	Spike ID: SV3182 (SIM)	Spike ID: —
Methylene Chloride Lot #: EH362-US	pH Paper Lot # 6306004	KI Starch Paper ID: 0306 2023	If positive, note in comments and contact the PM, the client may need to resample.
pH (1st Extraction) ≤ 2	H_2SO_4 Lot # RE1036	pH (2nd Extraction) 12	NaOH Lot # UN1824
$NaSO_4$ Lot # RE1042	Filter Paper Lot #: CX0206	Boiling Stones ID: —	Vial Lot #: CX0
Nitrogen Bath Temperature: 40°C			Client ID vs KAS ID Verified: ✓
Prep Start Time: 9:50	Prep End Time: 14:30	CLLE Start Time: —	CLLE End Date & Time: —

Date Extracted	Ext. Init.	Sample ID	Initial Vol. mL	Surr. Vol.	Spike Vol.	Fraction SV	Fraction SIM	Final Vol. mL	Date Conc.	SV981 Tray Location	Initials	R627233 Comments R627234
11/15/23	NH CMW	WG345 459-1 460-1	1000	1.0	NR	✓	✓	1.0	11/16/23	C4	NG	
		459-2			1.0		✓			C5		LCS
		-3	1070				✓			C6		MS SQ6220-3D
		-4	1070				✓			C7		MSD SQ6220-3Y
		460-2	1000			✓				C8		LCS
		-3				✓				C9		LCSD
		-4	200		NR	✓				C10		TCP PBT 1820-A

SH 11/16/23

EX-007 – Revision 7– 09/22/2020

QAEX501 000802 0000156

Date Extracted	Ext. Init.	Sample ID	Initial Vol. mL	Surr. Vol.	Spike Vol.	Fraction SV	Fraction SIM	Final Vol. mL	Date Conc.	SV982 Tray Location	Initials	Comments
11/15/23	NH CMW	SQ 6081-1	200	1.0	NR	✓		1.0	11/16/23	D1		
		-2				✓				D2		
		SQ 6110-1				✓				D3		
		SQ 6138-1				✓				D4		
		SQ6179-1	1060				✓			D5		
		-2	1070				✓			D6		
		-3	1060				✓			D7		
		-4	1070				✓			D8		
		-5	1070				✓			D9		
		-6	1070				✓			D10		
		-7	1070				✓			E1		
		-8	1070				✓			E2		
		-9	1070				✓			E3		
		-10	1060				✓			E4		
		SQ 6220-1	1000				✓			E5		
		-2	950				✓			E6		
		-3	1060				✓			E7		
		-4	1050				✓			E8		
		-5	1010				✓			E9		
		-6	1060				✓			E10		
		-7	1010				✓			A1		
		-9	1070				✓					

Reviewed By _____ Date _____

KATAHDIN ANALYTICAL SERVICES

GC/MS SVOA INJ LOG INSTRUMENT: 5975 - V

DATE OF DFTPP INJECTION: 06Dec23

WORKGROUP	SAMPLE	DATAFILE	DF	VIAL #	METHOD	UL INJ	CHEMIST	COMMENTS
W6346507-1	50 ng DFTPP	VD4080	1	1	DFTPPSIM	2.0	EP	ok
-4	SSTD 2.0 V1206	V7602		2	VSPSIM21			✓
-3	0.5	03		3				✓
-2	0.2	04		4				✓
-5	7.0	05		5				✓
-6	10	06		6				✓
-7	15	07		7				✓
-8	IND	08		8				ok
								EP 07Dec23

STANDARD	CODE	MeCl2 Lot #
DFTPP	54038	PH486-US
CAL. STD.	54039 54040	
ICV. STD.	54036	
IS MIX	54033	

REVIEWED AND APPROVED BY: _____

DATE: _____

VSPSIM23-1

KATAHDIN ANALYTICAL SERVICES
GC/MS SVOA INJ LOG INSTRUMENT: 5975 - V

DATE OF DFTPP INJECTION: 08Dec23

WORKGROUP	SAMPLE	DATAFILE	DF	VIAL #	METHOD	UL INJ	CHEMIST	COMMENTS
W6346651-1	50ng DFTPP	VD410	1	1	DFTPPSIM	2.0	EP	ok
1 -2	SSTD 2.0 V1208	V7632		2	VSPSIM21			ok
	W6345818-4	33		3				LOD
	1 -5	34		4				LOQ
	W6345459-1	35		5				④ surr to ok
	1 -2	36		6				surr2↑ ok
	SQ6179-1	37		7				surr6↓
	-2	38		8				surr2↑-no hits
	-3	39		9				✓
	-4	40		10				surr6↓ (>10%)
	-5	41		11				✓
	-6	42		12				surr2↑-no hits
	-7	43		13				✓
	-8	44		14				surr2↑-no hits
	-9	45		15				✓
	-10	46		16				✓
	SQ6220-1	47		17				✓
	1 -2	48		18				✓
	1 -3	49		19				✓
	W6345459-3	50		20				9↓ ok
	1 -4	51		21				8↓ ok
W6346651-3	SSTD 2.0 V1208	52		2				ok
1 -4		53						not using
1 -5	1	54	1	1	1	1	1	1
								EP 11Dec23

STANDARD	CODE	MeCl2 Lot #
DFTPP	54038	PH486-US
CAL. STD.	54039 54040	
ICV. STD.	—	
IS MIX	54033	

④ EP 11Dec23

REVIEWED AND APPROVED BY: _____
DATE: _____

KATAHDIN ANALYTICAL SERVICES

STOCK STANDARDS RECEIVED

Extractions Laboratory

STD00089
90
91

RESTEK
30614 Danger 1 mL
Lot# A0189253
Expire: 09/2025 Store: 0°C or colder
1,4-dioxane-d8 Standard
2000 µg/mL each in P&T Methanol
Full label information for the chemical is provided on the outside package

AP 10/2/22

STD0092

RESTEK
32200 Danger 1 mL
Lot# A0190445
Expire: 02/2027 Store: 10°C or colder
2,4'-DDT Standard
1000 µg/mL each in Methanol
Full label information for the chemical is provided on the outside pack

STD0093
94
95
96

RESTEK
32000 Danger 1 mL
Lot# A0188903
Expire: 11/2028 Store: 10°C or colder
Pesticide Surrogate Mix
Contains PCBs - sonicate prior to use.
200 µg/mL each in Acetone
Full label information for the chemical is provided on the outside package

STD0097

RESTEK
32098 Danger 1 mL
Lot# A0190447
Expire: 02/2027 Store: 10°C or colder
2,4'-DDD Standard
1000 µg/mL each in Methanol
Full label information for the chemical is provided on the outside pack

STD0098
99
100
101
102

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com
Z-014F 1 mL
Benzidine & 3,3'-Dichlorobenzidine
2.0 mg/mL in MeOH
Lot: 221091154
Exp: Sep 09, 2025
PRODUCT OF THE USA
2 comp(s)
Storage: Ambient (>5 °C)
FOR LABORATORY USE ONLY
H225 H370 H336 H320 H315 H311 H332 H301 H350 H360 H350 P338 Refer to SDS
Signal Word: Danger

DT 11/3/22

STD0103

SR 11/3/22

RESTEK
32099 Danger 1 mL
Lot# A0190873
Expire: 02/2027 Store: 10°C or colder
2,4'-DDE Standard
1000 µg/mL each in Methanol
Full label information for the chemical is provided on the outside package

STD0104
105
106

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com
H-001S-D-40X 1 mL
1-Methylnaphthalene
2.0 mg/mL in Dichloromethane
Lot: 221121197
Exp: Dec 15, 2031
PRODUCT OF THE USA
1 comp(s)
Storage: Ambient (>5 °C)
FOR LABORATORY USE ONLY
H315 H335 H332 H302 H351 H350 P338 P360 P331 P233 P262 P202 Refer to SDS
Signal Word: Warning

KATAHDIN ANALYTICAL SERVICES

STOCK STANDARDS RECEIVED

Extractions Laboratory

STD0107
108
109
110
111

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com

APP-9-191-10X 1 mL
1,2,4,5-Tetrachlorobenzene
1000 µg/mL in MeOH
Lot: 219041253 1 comp(s)
Exp: Apr 09, 2029 Storage: Ambient (>5 °C)
PRODUCT OF THE USA FOR LABORATORY USE ONLY

H336 H225 H370 H320 H315 H311 H332 H301 H360 P308 P360 P331 Refer to SDS
Signal Word: Danger

SR 11/3/22

STD0112
113
114
115
116

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com

CLP-HC-A-R 1 mL
Acid Composite Mixture
2.0 mg/mL in CH2Cl2
Lot: 222041590 19 comp(s)
Exp: May 03, 2025 Storage: Ambient (>5 °C)
PRODUCT OF THE USA FOR LABORATORY USE ONLY

H315 H335 H332 H302 H350 H350 P308 P360 P331 P233 P262 P202 Refer to SDS
Signal Word: Danger

SR 11/3/22

STD0117
118
119

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com

Z-014E-R3 1 mL
Composite Mix #3
2.0 mg/mL in CH2Cl2
Lot: 221111178 10 comp(s)
Exp: Dec 10, 2023 Storage: Freeze (<-10 °C)/Sonicate
PRODUCT OF THE USA FOR LABORATORY USE ONLY

H315 H335 H332 H302 H351 H350 P308 P360 P331 P233 P262 P202 Refer to SDS
Signal Word: Warning

SR 11/3/22

STD0120
121
122
123
124

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com

CLP-HC-BN-R 1 mL
Base/Neutral Composite Mixture
2.0 mg/mL in Benzene:Dichloromethane:AcCN (2:2:1)
Lot: 222011220 44 comp(s)
Exp: Feb 18, 2024 Storage: Freeze (<-10 °C)/Sonicate
PRODUCT OF THE USA FOR LABORATORY USE ONLY

H225 H315 H335 H332 H302 H350 H360 H350 P308 P360 P331 P233 Refer to SDS
Signal Word: Danger

SR 11/3/22

STD0125
126
127
128
129

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com

S-7226 1 ml
Custom Standard
5000 µg/mL in CH2Cl2
Lot: 222111144 5 comp(s)
Exp: Dec 14, 2024 Storage: Freeze (<-10 °C)
PRODUCT OF THE USA FOR LABORATORY USE ONLY

H315 H335 H332 H302 H351 H360 H350 P308 P360 P331 P233 P262 Refer to SDS
Signal Word: Warning

SR 11/21/22

STD0130
131
132
133
134

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com

P-233S-A-10X 1 mL
bis(2-Ethylhexyl)adipate
1000 µg/mL in Acetone
Lot: 219071483-01 1 comp(s)
Exp: Nov 21, 2024 Storage: Refrig (0-5 °C)
PRODUCT OF THE USA FOR LABORATORY USE ONLY

H225 H336 H335 H319 H315 P308 P360 P331 P233 P260 P262 P202 Refer to SDS
Signal Word: Danger

SR 11/21/22

~~STD0135~~
136

CMW 1/26/23

KATAHDIN ANALYTICAL SERVICES

STOCK STANDARDS RECEIVED

Extractions Laboratory

STD 0157

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com

H315 H335 H332 H302 H351 H350 P338 P360 P331 P233 P262 P202 Refer to SDS

Signal Word: Warning

H-001S-D-40X 1 mL
1-Methylnaphthalene
2.0 mg/mL in Dichloromethane
Lot: 221121197 1 comp(s)
Exp: Dec 15, 2031 Storage: Ambient (>5 °C)
PRODUCT OF THE USA **FOR LABORATORY USE ONLY**

11/30 YAP

STD 0158
9
60

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com

H315 H335 H332 H302 H351 H350 P338 P360 P331 P233 P262 P202 Refer to SDS

Signal Word: Warning

Z-014E-R3 1 mL
Composite Mix #3
2.0 mg/mL in CH2Cl2
Lot: 221111178 10 comp(s)
Exp: Dec 10, 2023 Storage: Freeze (<-10 °C)/Sonicate
PRODUCT OF THE USA **FOR LABORATORY USE ONLY**

STD 0161
62
3
4
5

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com

H315 H335 H332 H302 H351 H360 H350 P338 P360 P331 P233 P262 Refer to SDS

Signal Word: Warning

S-7226 1 ml
Custom Standard
5000 µg/mL in CH2Cl2
Lot: 222111144 5 comp(s)
Exp: Dec 14, 2024 Storage: Freeze (<-10 °C)
PRODUCT OF THE USA **FOR LABORATORY USE ONLY**

STD 0169
7
8
9
70

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com

H336 H225 H370 H320 H315 H311 H332 H301 H360 P338 P360 P331 Refer to SDS

Signal Word: Danger

APP-9-191-10X 1 mL
1,2,4,5-Tetrachlorobenzene
1000 µg/mL in MeOH
Lot: 219041253 1 comp(s)
Exp: Apr 09, 2029 Storage: Ambient (>5 °C)
PRODUCT OF THE USA **FOR LABORATORY USE ONLY**

STD 0171
2
3
4
5

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com

H315 H335 H332 H302 H350 H350 P338 P360 P331 P233 P262 P202 Refer to SDS

Signal Word: Danger

CLP-HC-A-R 1 mL
Acid Composite Mixture
2.0 mg/mL in CH2Cl2
Lot: 222041590 19 comp(s)
Exp: May 03, 2025 Storage: Ambient (>5 °C)
PRODUCT OF THE USA **FOR LABORATORY USE ONLY**

KATAHDIN ANALYTICAL SERVICES

STOCK STANDARDS RECEIVED

Extractions Laboratory

3/27/23 CMW

STD 0283
4
5
6
7

AccuStandard® 125 Market St. New Haven, CT 06513 www.AccuStandard.com

Z-014F 1 mL
Benzidine & 3,3'-Dichlorobenzidine
2.0 mg/mL in MeOH
Lot: 223021429
Exp: Feb 22, 2027
2 comp(s)
Storage: Ambient (>5 °C)
PRODUCT OF THE USA
FOR LABORATORY USE ONLY

H225 H370 H336 H320 H315 H311 H332 H301 H350 H360 H350 P338 Refer to SDS
Signal Word: Danger



STD 0288
89
90
1
2

AccuStandard® 125 Market St. New Haven, CT 06513 www.AccuStandard.com

CLP-HC-A-R 1 mL
Acid Composite Mixture
2.0 mg/mL in CH2Cl2
Lot: 222041590
Exp: May 03, 2025
19 comp(s)
Storage: Ambient (>5 °C)
PRODUCT OF THE USA
FOR LABORATORY USE ONLY

H315 H335 H332 H302 H350 H350 P338 P360 P331 P233 P262 P202 Refer to SDS
Signal Word: Danger



STD 0293
4
5
6
7

AccuStandard® 125 Market St. New Haven, CT 06513 www.AccuStandard.com

H-001S-D-40X 1 mL
1-Methylnaphthalene
2.0 mg/mL in Dichloromethane
Lot: 221121197
Exp: Dec 15, 2031
1 comp(s)
Storage: Ambient (>5 °C)
PRODUCT OF THE USA
FOR LABORATORY USE ONLY

H315 H335 H332 H302 H351 H350 P338 P360 P331 P233 P262 P202 Refer to SDS
Signal Word: Warning



STD 0298
9
300
01
02

AccuStandard® 125 Market St. New Haven, CT 06513 www.AccuStandard.com

P-233S-10X 1 mL STD 0
bis(2-Ethylhexyl)adipate
1000 µg/mL in MeOH
Lot: 222011504
Exp: Jan 25, 2032
1 comp(s)
Storage: Ambient (>5 °C)
PRODUCT OF THE USA
FOR LABORATORY USE ONLY

H336 H225 H370 H320 H315 H311 H332 H301 H360 P338 P360 P331 Refer to SDS
Signal Word: Danger



STD 0303
4
5
6
7

AccuStandard® 125 Market St. New Haven, CT 06513 www.AccuStandard.com

APP-9-191-10X 1 mL
1,2,4,5-Tetrachlorobenzene
1000 µg/mL in MeOH
Lot: 219041253
Exp: Apr 09, 2029
1 comp(s)
Storage: Ambient (>5 °C)
PRODUCT OF THE USA
FOR LABORATORY USE ONLY

H336 H225 H370 H320 H315 H311 H332 H301 H360 P338 P360 P331 Refer to SDS
Signal Word: Danger



STD 0308
9
10
11
12

AccuStandard® 125 Market St. New Haven, CT 06513 www.AccuStandard.com

APP-9-096-20X 1 mL
p-Dioxane Standard
2.0 mg/mL in MeOH
Lot: 222121106
Exp: Dec 20, 2032
1 comp(s)
Storage: Ambient (>5 °C)
PRODUCT OF THE USA
FOR LABORATORY USE ONLY

H225 H336 H370 H320 H315 H311 H332 H301 H351 H360 H350 P338 Refer to SDS
Signal Word: Danger



KATAHDIN ANALYTICAL SERVICES

STOCK STANDARDS RECEIVED

Extractions Laboratory

STD0333
334
335
336
337

AccuStandard® 125 Market St. New Haven, CT 06513 www.AccuStandard.com

M-8150B-SS-10X 1 mL
2,4-Dichlorophenylacetic acid
1000 µg/mL in Acetone
Lot: 221051049-01
Exp: Jun 17, 2025
PRODUCT OF THE USA

1 comp(s)
Storage: Ambient (>5 °C)
FOR LABORATORY USE ONLY

H225 H336 H335 H315 P338 P360 P233 P260 P262 P202 P264 P284
Refer to SDS
Signal Word: Danger

SR 5/4/23

STD0338 Silicic Acid ~80 Mesh SR 5/9/23
0339 3016363-25G

STD0340
341
342
343

31087 RESTEK
Acid Surrogate Mix (A89 SOW)
Lot# A0197037
Expire: 04/2031 Store: 10°C or colder
10000 µg/mL each in Methanol
Danger
Vial Label / Peel Here

SR 5/9/23

STD0344
345

RESTEK 31889 Warning 5 mL
Lot# A0191955
Expire: 10/2028 Store: 10°C or colder
Revised B/N Surrogate Mix
Sonicate prior to use.
5000 µg/mL each in Methylene Chloride
Full label information for the chemical is provided on the outside package

SR 5/9/23

STD0346
347
348
349

32000 RESTEK
Pesticide Surrogate Mix
Lot# A0197094
Expire: 07/2029 Store: 10°C or colder
200 µg/mL each in Acetone
Contains PCBs - sonicate prior to use
Danger
Vial Label / Peel Here

SR 5/9/23

STD0350
351
352
353

31459 RESTEK
MA EPH Aliphatic Hydrocarbon Standard
Lot# A0195674
Expire: 04/2030 Store: 25°C nominal
1000 µg/mL each in Hexane
Danger
Vial Label / Peel Here

SR 5/9/23

STD 0354
355
356
357
358

1,2 Dibromoethane

KATAHDIN ANALYTICAL SERVICES

STOCK STANDARDS RECEIVED

Extractions Laboratory

STD 0359
34260
34761

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com

M-8240C-R6 1 mL
Appendix IX Volatiles Mix
Varied conc. in MeOH
Lot: 222061040
Exp: Jun 06, 2025 11 comp(s)
Storage: Refrig (0-5 °C)
PRODUCT OF THE USA FOR LABORATORY USE ONLY

H225 H370 H336 H320 H315 H311 H332 H301 H351 H360 H350 P336
Refer to SDS
Signal Word: Danger

STD 0362
63

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com

M-625-TS-20X 1 mL
GC/MS Tuning Std for EPA Method 624/625
1000 µg/mL in CH2Cl2
Lot: 222031198-01
Exp: May 28, 2025 4 comp(s)
Storage: Ambient (>5 °C)
PRODUCT OF THE USA FOR LABORATORY USE ONLY

H315 H335 H332 H302 H350 H360 H350 P308 P360 P331 P233 P262
Refer to SDS
Signal Word: Warning

STD 0364
65
66
67

RESTEK
33204
Danger 1 mL
Lot# A0191734
Expire: 11/2025 Store: 10°C or colder
8330B Nitroaromatics and Nitramine Mix
1000 µg/mL each in Acetonitrile

STD 0368
69
70
71
72

31086 RESTEK
B/N Surrogate Mix (4/09 SOW)
Store: 10°C or colder
Methylene Chloride

5/23

STD 0373

14 RESTEK
A0195206
Expire 02/2026 Store: 0°C or colder
2000 µg/mL each in P&T Methanol
Danger

5/23

STD 0374 DRH-007-55
1-Chlorooctadecane

6/5/23

KATAHDIN ANALYTICAL SERVICES

STOCK STANDARDS RECEIVED

Extractions Laboratory

STD0375 Sodium Hexametaphosphate 1Kg, 65-70% 6/16/23 SR

STD0376

RESTEK
31601 Danger 1 mL
Lot# A0192460
Expire: 12/2027 Store: 10°C or colder
EGDN Standard
1000 µg/mL each in Methanol
Full label information for the chemicals is provided on the outside package

6/16/23 AL

STD0377

31498 RESTEK
Nitroglycerin Standard
Lot# A0197032
Expire 04/2028 Store 10°C or colder
1000 µg/mL each in Methanol
Danger
Peel Here

STD0378

31600 RESTEK
PETN Standard
Lot# A0194156
Expire 01/2028 Store 10°C or colder
1000 µg/mL each in Methanol
Sonicate prior to use
Danger
Peel Here

STD0379 0390 0381 0382

31480 RESTEK
MA Fractionation Surrogate Spike Mix
Lot# A0196246
Expire 02/2029 Store 10°C or colder
4000 µg/mL each in Hexane
Sonication required Mix is photosensitive
Danger
Peel Here

6/23/23 SR

STD0383 0384 0385

31087 RESTEK
Acid Surrogate Mix (4/89 SOW)
Lot# A0197037
Expire 04/2031 Store 10°C or colder
10000 µg/mL each in Methanol
Danger
Peel Here

STD0386 0387 0388

31086 RESTEK
B/N Surrogate Mix (4/89 SOW)
Lot# A0193606
Expire 12/2028 Store 10°C or colder
5000 µg/mL each in Methylene Chloride
Sonicate prior to use
Warning
Peel Here

STD0389 ~~0390~~

Agilent Technologies
Calibration Standard 1 ML
Item: PPM-8082-1 Danger
Lot: 0006740524
Expires: 30-Nov 2029
Full safety on outer box
Contains 2,2,4-trimethylpentane, aroclor 1260

6/28/23 AL

KATAHDIN ANALYTICAL SERVICES

STOCK STANDARDS RECEIVED

Extractions Laboratory

STD 0416	31086 RESTEK BN Surrogate Mix (4/89 SOW) Lot# A0193806 Expire: 12/2028 Store: 10°C or colder 5000 µg/mL each in Methylene Chloride Sonicate prior to use Warning	SR/JS	7/12/23
0417			
0418			
0419			
STD 0420	APP-9-096-20X Lot: 222121106 Exp: Dec 20, 2032 Date Opened	SR/JS	7/12/23
0421			
0422			
0423			
0424			
STD 0425	31087 RESTEK Acid Surrogate Mix (4/89 SOW) Lot# A0197037 Expire: 04/2031 Store: 10°C or colder 10000 µg/mL each in Methanol Danger	JS	7/12/23
0426			
0427			
0428			
0429			
STD 0430	33912 US/EN alpha-Terpineol Standard Lot# A0190441 Expire: 10/2025 Store: 10°C or colder 1 mL 2000 µg/mL each in Methylene Chloride RESTEK	JS	7/12/23
0431			
0432			
0433			
0434			
0435			
0436			
0437			
0438			
0439			
STD 0440	30614 RESTEK 1,4-dioxane-d8 Standard Lot# A0195206 Expire: 02/2026 Store: 0°C or colder 2000 µg/mL each in P&T Methanol Danger	JS	7/12/23
0441			
STD 0442	APP-9-048-R1-20X Lot: 223071032 Exp: Aug 07, 2025 Date Opened	CMW	7/12/23
0443			
0444			

AJS 7/12/23

KATAHDIN ANALYTICAL SERVICES

STOCK STANDARDS RECEIVED

Extractions Laboratory

STD 0442	Z-014E-R3 Lot: 221111178-01 Exp: Jan 13, 2025 Date Opened	JS	7/12/23
0443			
0444			
0445			
0446			
0447			
0448			
0449			
~~0450~~			
0450			
0451			
STD 0452	CLP-HC-A-R Lot: 222111297 Exp: Nov 30, 2025 Date Opened	JS	7/12/23
0453			
0454			
0455			
0456			
0457			
0458			
0459			
0460			
0461			
STD 0462	CLP-HC-BN-R Lot: 222111137 Exp: Dec 11, 2024 Date Opened	JS	7/12/23
0463			
0464			
0465			
0466			
0467			
0468			
0469			
0470			
0471			

KATAHDIN ANALYTICAL SERVICES

STOCK STANDARDS RECEIVED

Extractions Laboratory

STD 0472	H-001S-D-40X Lot: 221121197 Exp: Dec 15, 2031 Date Opened	JS	7/12/23
0473			
0474			
0475			
0476			
0477			
0478			
0479			
STD 0480	Z-014F Lot: 223021429 Exp: Feb 22, 2027 Date Opened	JS	7/12/23
0481			
0482			
0483			
0484			
0485			
0486			
0487			
0488			
0489			
STD 0490	P-233S-10X Lot: 222011504 Exp: Jan 25, 2032 Date Opened	JS	7/12/23
0491			
0492			
0493			
0494			
0495			
0496			
0497			
0498			
0499			
0500			
0501			
0502			
0503			
0504			
0505			
0506			
0507			
0508			
0509			

KATAHDIN ANALYTICAL SERVICES

STOCK STANDARDS RECEIVED

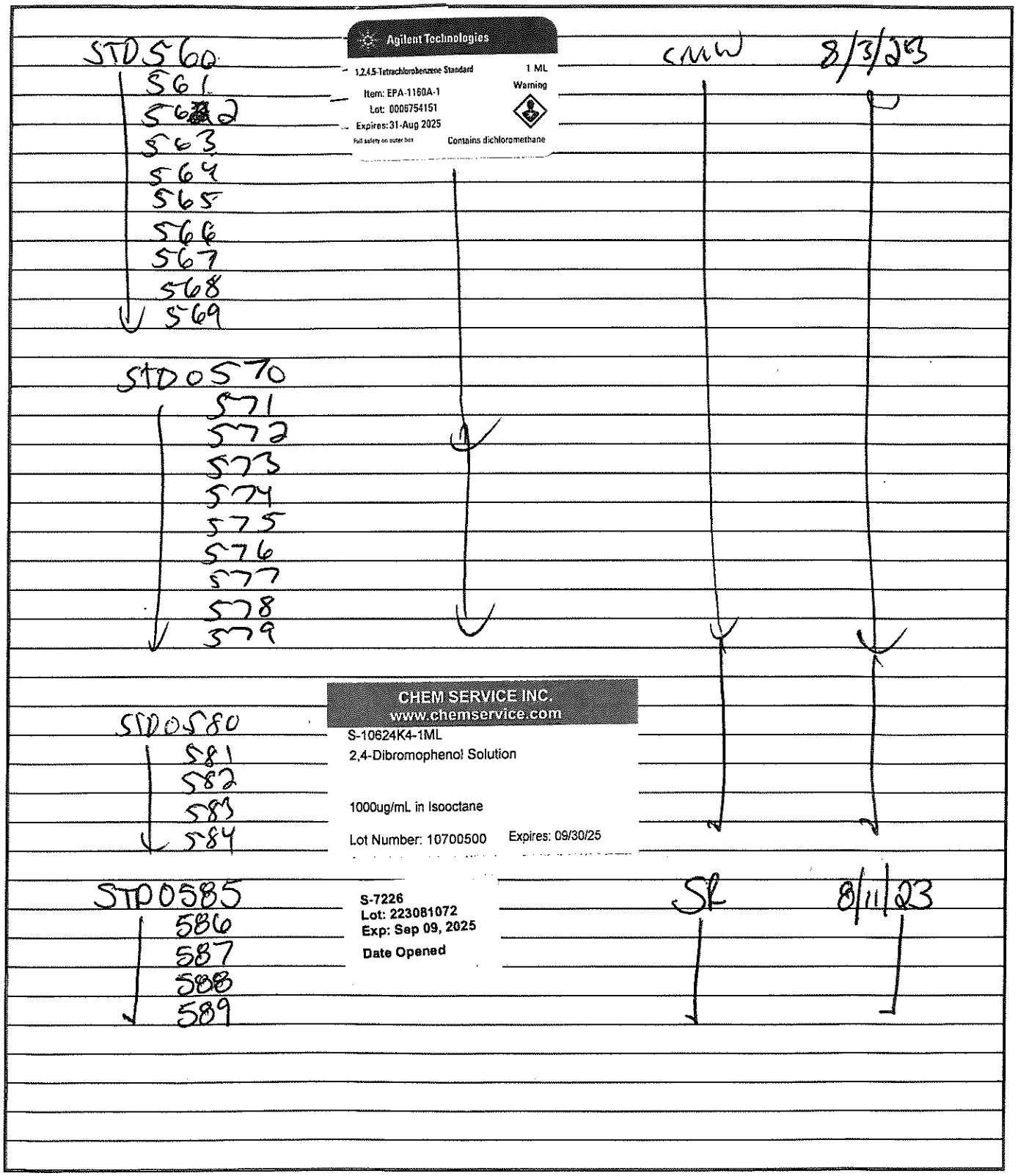
Extractions Laboratory

STD 0510 0511 0512 0513 0514	DRH-007-SS Lot: 223061651 Exp: Jul 10, 2033 Date Opened	CMW	7/13/23
STD 0515	BPA-A-S Lot: 221101223 Exp: Oct 14, 2025 Date Opened		
STD 0516 17 18 19	M-8330-SS Lot: 223031204 Exp: Mar 14, 2033 Date Opened	CMW	7/18/23
STD 0520 21 22 23 24	DRH-007S Lot: 223061309 Exp: Jun 19, 2033 Date Opened		
STD 0525 -26 -27 -28 -29	DRH-006S Lot: 223071038 Exp: Jul 12, 2033 Date Opened		
STD 0530 -31 -32 -33 -34	DRH-FTRPH Lot: 223011743 Exp: Feb 10, 2033 Date Opened		

KATAHDIN ANALYTICAL SERVICES

STOCK STANDARDS RECEIVED

Extractions Laboratory



KATAHDIN ANALYTICAL SERVICES

STOCK STANDARDS RECEIVED

Extractions Laboratory

10/24/23 CMM

SMD0696
97
98
99

RESTEK 31459
110 Benner Circle Bellefonte, PA 16823
814-353-1300
www.restek.com
Danger
Lot# A0200172
Expire 09/2030 Store 25°C nominal
MA EPH Aliphatic Hydrocarbon Standard
1000 µg/mL each in Hexane
Notebook Label
Full label information for the chemical is provided on the outside package
Receipt Date:
Opened Date:
Made in USA
For Laboratory Use Only
1 mL

SMD0700
701

RESTEK 31097
110 Benner Circle Bellefonte, PA 16823
814-353-1300
www.restek.com
Warning
Lot# A0201243
Expire 03/2027 Store 10°C or colder
o-Terphenyl Standard
10000 µg/mL each in Methylene Chloride
Sonicate prior to use
Notebook Label
Full label information for the chemical is provided on the outside package
Receipt Date:
Opened Date:
Made in USA
For Laboratory Use Only
1 mL

SMD0702
703
704
705

RESTEK 30614
110 Benner Circle Bellefonte, PA 16823
814-353-1300
www.restek.com
Danger
Lot# A0199745
Expire 07/2026 Store 0°C or colder
1,4-dioxane-d8 Standard
2000 µg/mL each in P&T Methanol
Notebook Label
Full label information for the chemical is provided on the outside package
Receipt Date:
Opened Date:
Made in USA
For Laboratory Use Only
1 mL

SMD0706

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com
1 mL
M-8270-09-ASL
Method 8270B - Organophosphorous Pesticide Mix
2.0 mg/mL in CH2Cl2
Lot: 218121268-03
Exp: Mar 21, 2025
PRODUCT OF THE USA
9 comp(s)
Storage: Refrig (0-5 °C)
FOR LABORATORY USE ONLY
H315 H335
H332 H302
H351 H350
P338 P360
P331 P233
P262 P202
Refer to SDS
Signal Word: Warning

SMD0707
708

RESTEK 31661
110 Benner Circle Bellefonte, PA 16823
814-353-1300
www.restek.com
Danger
Lot# A0200245
Expire 02/2029 Store 10°C or colder
3,5-Dinitroaniline Standard
1000 µg/mL each in Acetonitrile
Notebook Label
Full label information for the chemical is provided on the outside package
Receipt Date:
Opened Date:
Made in USA
For Laboratory Use Only
1 mL

SMD0709
710
711
712

RESTEK 31098
110 Benner Circle Bellefonte, PA 16823
814-353-1300
www.restek.com
Warning
Lot# A0201707
Expire 09/2030 Store 10°C or colder
1-Chlorooctadecane Standard
10000 µg/mL each in Methylene Chloride
Notebook Label
Full label information for the chemical is provided on the outside package
Receipt Date:
Opened Date:
Made in USA
For Laboratory Use Only
1 mL

0000082

KATAHDIN ANALYTICAL SERVICES

STOCK STANDARDS RECEIVED

GC and Semivolatile Extractables Laboratory

STK6340

33913 US/EN
SOM01.0 SIM Analysis Standard
Lot# A0186160
Expire. 05/2028 Store: 10°C or colder 1 mL
2000 µg/mL each in Methylene Chloride
RESTEK

STK6341
STK6342

33913 US/EN
SOM01.0 SIM Analysis Standard
Lot# A0186160
Expire. 05/2028 Store: 10°C or colder 1 mL
2000 µg/mL each in Methylene Chloride
RESTEK

STK6343 DLM-165-0 CAS 1718-52-1 Rec'd 9/6/22 DT
Pyrene-D10 Lot# PR-30304
CAMBRIDGE ISOTOPE

STK6344 DLM-1123-0 CAS 81103-79-9 Rec'd 9/6/22 DT
Fluorene-D10 Lot# PR-24453
CAMBRIDGE ISOTOPE

CHEM SERVICE INC.
PO Box 599, West Chester, PA 19381 800-452-9994

STK6345 N-10624-1G 2,4-Dibromophenol Rec'd 9/6 DT
Purity: 99.4%
DANGER
Lot Number: 13602300
Expires: 08/31/25
www.chemservice.com

31879 US/EN
Benzoic Acid Mix
Lot# A0180473
Expire: 01/2026 Store: 10°C or colder 1 ml
2000 µg/mL each in Methylene Chloride
RESTEK

STK6346 9/14

AccuStandard® 125 Market St. New Haven, CT 06513 www.AccuStandard.com

STK6347 AS-E0455 1 mL
Dinoseb
1000 µg/mL in AcCN
Lot: 221071576-01 1 comp(s)
Exp: Sep 12, 2026 Storage: Ambient (>5 °C)

FOR LABORATORY USE ONLY
H225 H315 H332 H319 H360 P338 P352 P340 P233 P260 P262 P202 Refer to SDS
Signal Word Danger

9/14

KATAHDIN ANALYTICAL SERVICES

STOCK STANDARDS RECEIVED

GC and Semivolatile Extractables Laboratory

STK6384
85
86
87
88

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com

Z-014J 1 mL
Internal Standard Mix
4.0 mg/mL in CH2Cl2
Lot: 222091463 6 comp(s)
Exp: Oct 03, 2032 Storage: Ambient (>5 °C)/Sonicate
PRODUCT OF THE USA FOR LABORATORY USE ONLY

H315 H335
H332 H302
H351 H350
P308 P360
P331 P233
P262 P202
Refer to SDS
Signal Word: Warning

11/29 DT

STK6389
L 90

31879 US/EN
Benzoic Acid Mix
Lot# A0183914
Expire: 04/2026 Store: 10°C or colder 1 mL
2000 µg/mL each in Methylene Chloride
RESTEK

R: 12/8/22 EP

STK6391

31850 US/EN
8270 MegaMix®
Lot# A0185274
Expire: 11/2023 Store: 0°C or colder 1 mL
500-1000 µg/mL each in Methylene Chloride
RESTEK

R: 12/21/22 EP

STK6392

31834 US/EN
Benzidine Mix
Lot# A0187252
Expire: 02/2027 Store: 10°C or colder 1 mL
2000 µg/mL each in Methylene Chloride
RESTEK

1/3/23 DT

STK6393

31031 US/EN
606 Phthalate Esters Calibration Mix
Lot# A0190160
Expire: 02/2027 Store: 10°C or colder 1 mL
2000 µg/mL each in Methanol
RESTEK

R: 1/6/23 EP

STK6394

32007 US/EN
Aroclor® 1221 Standard
Lot# A0187032
Expire: 10/2028 Store: 25°C nominal 1 mL
1000 µg/mL each in Hexane
RESTEK

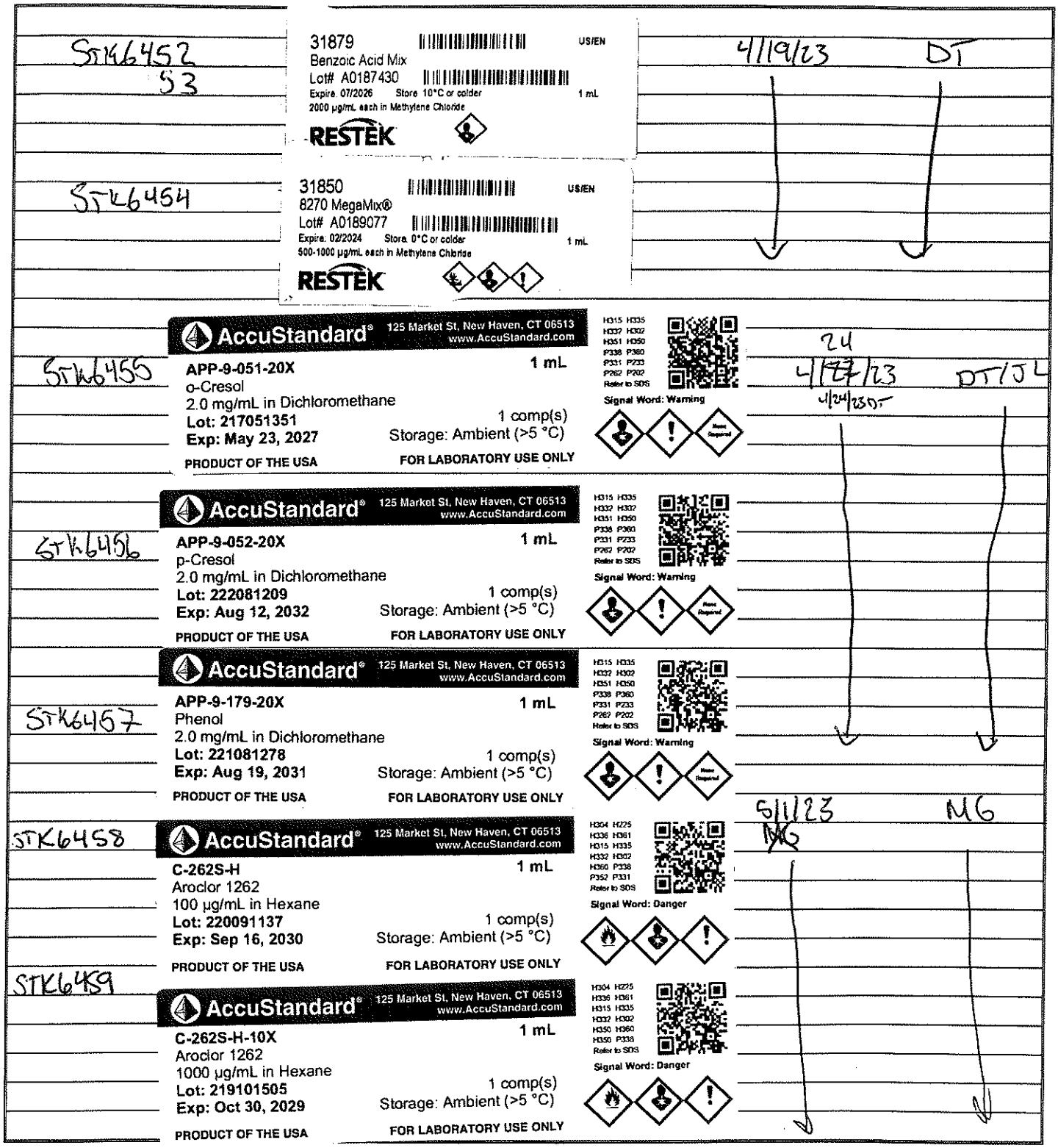
This product contains PCBs

R: 1/12/23 MG

KATAHDIN ANALYTICAL SERVICES

STOCK STANDARDS RECEIVED

GC and Semivolatile Extractables Laboratory



STK6452
53

31879 US/EN
Benzoic Acid Mix
Lot# A0187430
Expire. 07/2026 Store. 10°C or colder 1 mL
2000 µg/mL each in Methylene Chloride
RESTEK

4/19/23 DT

STK6454

31850 US/EN
8270 MegaMix®
Lot# A0189077
Expire. 02/2024 Store. 0°C or colder 1 mL
500-1000 µg/mL each in Methylene Chloride
RESTEK

STK6455

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com
APP-9-051-20X 1 mL
o-Cresol
2.0 mg/mL in Dichloromethane
Lot: 217051351 1 comp(s)
Exp: May 23, 2027 Storage: Ambient (>5 °C)
PRODUCT OF THE USA FOR LABORATORY USE ONLY
Signal Word: Warning

24
4/27/23 DT/JL
4/24/23 DT

STK6456

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com
APP-9-052-20X 1 mL
p-Cresol
2.0 mg/mL in Dichloromethane
Lot: 222081209 1 comp(s)
Exp: Aug 12, 2032 Storage: Ambient (>5 °C)
PRODUCT OF THE USA FOR LABORATORY USE ONLY
Signal Word: Warning

STK6457

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com
APP-9-179-20X 1 mL
Phenol
2.0 mg/mL in Dichloromethane
Lot: 221081278 1 comp(s)
Exp: Aug 19, 2031 Storage: Ambient (>5 °C)
PRODUCT OF THE USA FOR LABORATORY USE ONLY
Signal Word: Warning

5/1/23 MG
MG

STK6458

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com
C-262S-H 1 mL
Aroclor 1262
100 µg/mL in Hexane
Lot: 220091137 1 comp(s)
Exp: Sep 16, 2030 Storage: Ambient (>5 °C)
PRODUCT OF THE USA FOR LABORATORY USE ONLY
Signal Word: Danger

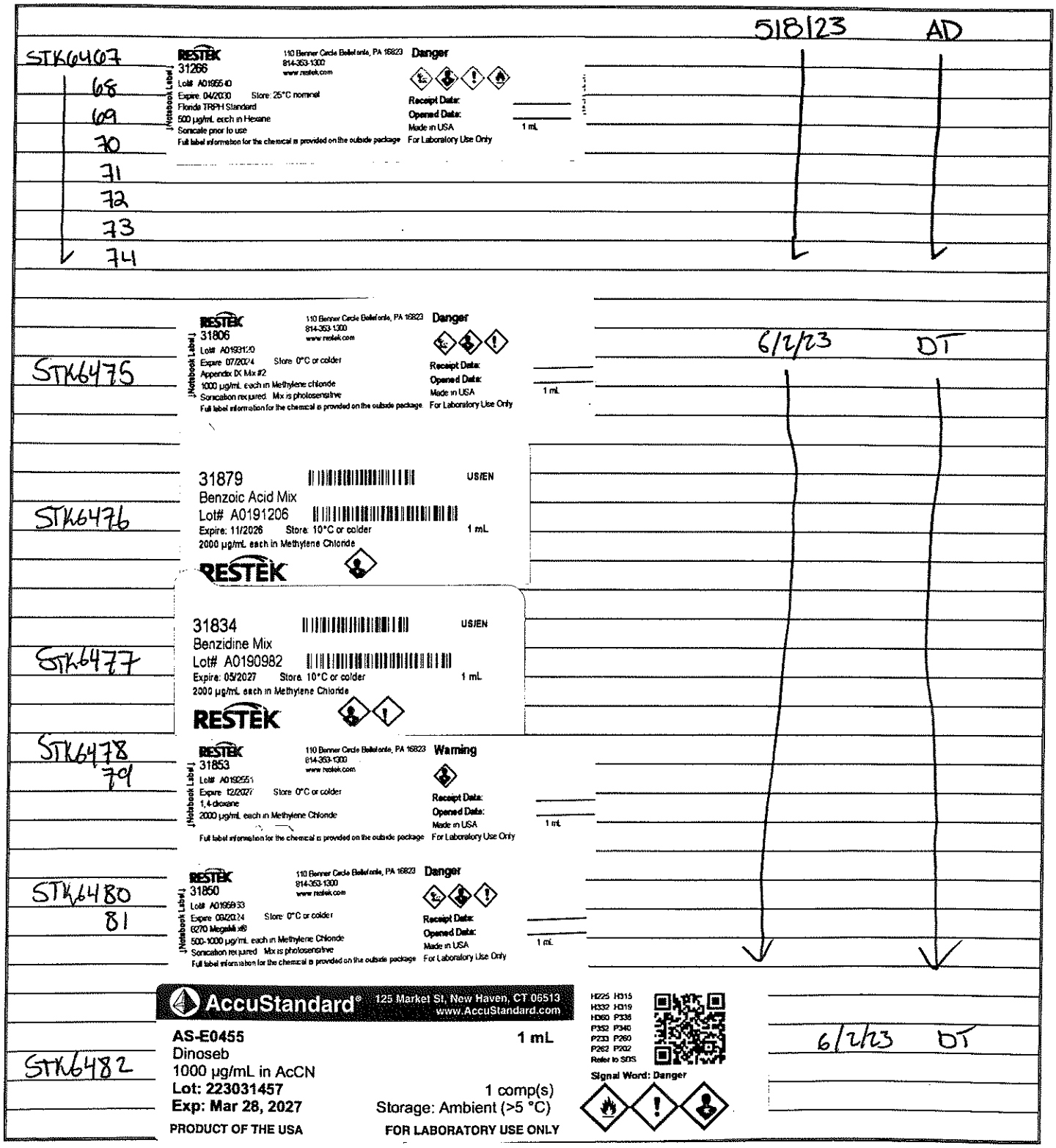
STK6459

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com
C-262S-H-10X 1 mL
Aroclor 1262
1000 µg/mL in Hexane
Lot: 219101505 1 comp(s)
Exp: Oct 30, 2029 Storage: Ambient (>5 °C)
PRODUCT OF THE USA FOR LABORATORY USE ONLY
Signal Word: Danger

KATAHDIN ANALYTICAL SERVICES

STOCK STANDARDS RECEIVED

GC and Semivolatile Extractables Laboratory



KATAHDIN ANALYTICAL SERVICES

STOCK STANDARDS RECEIVED

GC and Semivolatile Extractables Laboratory

6/6/23 DT
STK6482
3

AccuStandard® 125 Market St. New Haven, CT 06513 www.AccuStandard.com

APP-9-191-10X
1,2,4,5-Tetrachlorobenzene
1000 µg/mL in MeOH
Lot: 219041253
Exp: Apr 09, 2029
PRODUCT OF THE USA

1 mL
1 comp(s)
Storage: Ambient (>5 °C)
FOR LABORATORY USE ONLY

H336 H225
H370 H320
H315 H311
H332 H301
H360 P308
P360 P331
Refer to SDS

Signal Word: Danger

6/2/23 DT

STK6484
15
16

spex® certiprep

Part # : S-3480
Lot # : MP221219006
Date Opened:

6/20/23 AD

n-Tetratetracontane
Contains the following in **Cyclohexane:Dichloromethane(1:1)**

Concentration	Compound
1000 µg/mL	n-Tetratetracontane

S-3480
MP221219006

Warning

Storage: **Freezer**

Harmful if swallowed. Suspected of causing cancer.

Wash thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection. IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell. IF exposed or concerned: Get medical advice/attention. Dispose of contents/container in accordance with local/regional/national/international regulations.

Phone: 732-549-7144

For Laboratory Use Only

RESTEK
33913
Lot# A0105662
Expire 02/2029 Store 10°C or colder
SOM01.0 SIM Analysis Standard
2000 µg/mL each in Methylene Chloride
Sonication required Mix is photosensitive
Full label information for the chemical is provided on the outside package

110 Benner Circle Bellefonte, PA 16823
814-353-1300
www.restek.com

Warning

Receipt Date:
Opened Date:
Made in USA
For Laboratory Use Only

1 mL

STK6487
88
89

6/26/23 DT

STK6490
L 91

31097 RESTEK
o-Terphenyl Standard
Lot# A0197729
Expire 12/2026 Store 10°C or colder
10000 µg/mL each in Methylene Chloride
Sonicate prior to use
Warning

Peel Here

6/28/23 AD

KATAHDIN ANALYTICAL SERVICES

STOCK STANDARDS RECEIVED

GC and Semivolatile Extractables Laboratory

STK6525

26
27
28

31266 RESTEK
Florida TRPH Standard
Lot# A0195540
Expire: 04/2030 Store: 25°C nominal
[illegible] µg/mL each in Hexane
[illegible]icate prior to use
Danger

AD 8/11/23

STK6529

30
31
32
33

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com

M-625-TS-20X 1 mL
GC/MS Tuning Std for EPA Method 624/625
1000 µg/mL in CH2Cl2
Lot: 222031198-01 4 comp(s)
Exp: May 28, 2025 Storage: Ambient (>5 °C)
PRODUCT OF THE USA FOR LABORATORY USE ONLY

H315 H335
H332 H302
H350 H360
H350 P308
P360 P331
P233 P262
Refer to SDS
Signal Word: Warning

EP 8/11/23

STK6534

35
36
37
38

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com

Z-014J 1 mL
Internal Standard Mix
4.0 mg/mL in CH2Cl2
Lot: 223061537 6 comp(s)
Exp: Jun 28, 2033 Storage: Ambient (>5 °C)/Sonicate
PRODUCT OF THE USA FOR LABORATORY USE ONLY

H315 H335
H332 H302
H351 H350
P338 P360
P331 P233
P262 P202
Refer to SDS
Signal Word: Warning

STK6539

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com

M-8270-SS 1 mL
Method 8270 - Surrogate Standard
4.0 mg/mL in CH2Cl2
Lot: 223021323 6 comp(s)
Exp: Feb 15, 2033 Storage: Ambient (>5 °C)
PRODUCT OF THE USA FOR LABORATORY USE ONLY

H315 H335
H332 H302
H351 H350
P338 P360
P331 P233
P262 P202
Refer to SDS
Signal Word: Warning

STK6540

32419 US/EN
EPA 8270 Organophosphorous Pesticides Mix
Lot# A0189840
Expire: 03/2024 Store: 10°C or colder 1 mL
2000 µg/mL each in Methylene Chloride
RESTEK

STK6541

32460 US/EN
Methapyrilene Standard
Lot# A0191563
Expire: 05/2024 Store: 0°C or colder 1 mL
2000 µg/mL each in Methylene Chloride
RESTEK

KATAHDIN ANALYTICAL SERVICES

STOCK STANDARDS RECEIVED

GC and Semivolatile Extractables Laboratory

STK6547
48
49

RESTEK 110 Benner Circle Bellefonte, PA 16823 814-353-1300 www.restek.com
33913
Lot# A0199849
Expire 09/2029 Store 10°C or colder
SOM01.0 SIM Analysis Standard
2000 µg/mL each in Methylene Chloride
Sonication required Mix is photosensitive
Full label information for the chemical is provided on the outside package
Warning
Receipt Date:
Opened Date:
Made in USA
For Laboratory Use Only
1 mL

Recieved: 9/11/23 DT

STK6550
51

RESTEK 110 Benner Circle Bellefonte, PA 16823 814-353-1300 www.restek.com
31834
Lot# A0197191
Expire 11/2027 Store 10°C or colder
Benzidine Mix
2000 µg/mL each in Methylene Chloride
Contains carcinogen/reproductive toxin
Full label information for the chemical is provided on the outside package
Danger
Receipt Date:
Opened Date:
Made in USA
For Laboratory Use Only
1 mL

10/12/23
Recieved: 10/12/23 DT

STK6552
53

RESTEK 110 Benner Circle Bellefonte, PA 16823 814-353-1300 www.restek.com
31850
Lot# A0197902
Expire 11/2024 Store 0°C or colder
8270 MegaMix®
500-1000 µg/mL each in Methylene Chloride
Sonication required Mix is photosensitive
Full label information for the chemical is provided on the outside package
Warning Danger
Receipt Date:
Opened Date:
Made in USA
For Laboratory Use Only
1 mL

Recieved: 10/12/23 DT

STK6554

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com
C-202S 1 mL
2,2',3,3',5,5',6,6'-Octachlorobiphenyl
35 µg/mL in Isooctane
Lot: 105-271-01 1 comp(s)
Exp: May 20, 2025 Storage: Ambient (>5 °C)/Sonicate
PRODUCT OF THE USA FOR LABORATORY USE ONLY
H305 H225 H336 H315 H302 H319 P338 P352 P331 P233 P260 P262 Refer to SDS
Signal Word: Danger

10/24/23 (MW)

STK6555

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com
C-200S-R1 1 mL
2,2',3,3',4,5,6,6'-Octachlorobiphenyl
35 µg/mL in Isooctane
Lot: 222021273 1 comp(s)
Exp: Feb 15, 2032 Storage: Ambient (>5 °C)/Sonicate
PRODUCT OF THE USA FOR LABORATORY USE ONLY
H225 H336 H304 H400 H413 H319 H315 H335 H302 P338 P352 P331 Refer to SDS
Signal Word: Danger

STK6556

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com
C-201S-R1 1 mL
2,2',3,3',4,5',6,6'-Octachlorobiphenyl
35 µg/mL in Isooctane
Lot: B5020150-01 1 comp(s)
Exp: Dec 04, 2029 Storage: Ambient (>5 °C)/Sonicate
PRODUCT OF THE USA FOR LABORATORY USE ONLY
H305 H225 H336 H315 H302 H319 P338 P352 P331 P233 P260 P262 Refer to SDS
Signal Word: Danger

GC/MS SVOA STANDARD PREP LOGBOOK

Standard ID	Description/Name of Std	Date Received	Date Prepared	Prepared By	Stock #	Chemical Name	Amt Added	Stock Exp Date	Final Vol	Final Conc
S3915	8270 Stock	2/28/23	8/28/23	EP	STK6402	8270 Mega Mix	220mL	2/17/24	1.8mL	125 ug/mL
					STK6405	APPIX Mix #2		2/17/24		
					STK6395	Dinoseb		2/17/24		
					STK6348	8270 Surr Mix	55mL	10/14/23		
					STK6332	Methapyrilene	110mL	11/7/23		
					STK6390	Benzoic Acid Mix		2/17/24		
					STK6392	Benzidine Mix		1/24/24		
					STK6374	Org Phos Pest		12/7/23		
					STK6377	APPIX Mix #1		11/15/23		
					STD0966	α-terpineol		11/7/23		
					EF820-US	MeCl2	355mL	—		
S3916	Fluorene-D10 Stock	2/23/23	2/28/24	DT	STK6344	Fluorene-D10	19.5mg	—	10mL	1950 ug/mL
					EF820-US	MeCl2	~10mL	—		
S3917	1,4-Dioxane	3/1/23	3/31/23	EP	S3899	1,4-dioxane Pre-stock	180mL	3/31/23	1.8mL	20 ug/mL
〃	〃	〃	〃	〃	EF820-US	MeCl2	1620mL	—	〃	
S3918	SIM IND	3/2/23	5/7/23	CO	S3887	SIM IND Prestock	90mL	5/7/23	1.8mL	5ug/mL
					EF820-US	MeCl	1710mL			
S3919	SIM Stock B	3/3/23	7/6/23	CO	S3872	SIM Prestock B	18mL	~~5/7~~ 7/6/23	1.8mL	10ug/mL
					EF820-US	MeCl2	1620mL			

Reviewed by/Date:

GC/MS SVOA STANDARD PREP LOGBOOK

Standard	Standard Name	Date Prep	Date Exp	Initials	Stock	Stock Name	Amt Added	Stock Exp Date	Total Vol	Final Conc
S4002	8270 Stock for PP	8/14/23	2/14/24	EP	STK6481	8270 MegaMix	220	8/14/24	1.8mL	125 µg/mL
					STK6424	8270 Surrogate	55	4/4/24		
					STK6476	Benzoic Acid Mix	210	6/27/24		
					STK6477	Benzidine Mix	1	6/27/24		
					S3951	o-toluene sulfonamide	113	4/17/24		
					S3952	p-toluene sulfonamide	106	4/17/24		
					S3953	2,6-dimethylphenol	111	4/17/24		
					EG266-US	$MeCl_2$	985	—		
S4003	SIM STOCK A	8/16/23	9/24/23	DT	STK6481	8270 Megamix	200µL	8/14/24	10mL	20µg/mL
					S3958	OLM COMPOUNDS		11/3/23		
					STD0555	1,2,4,5-TCB		7/31/24		
					STK6477	BENZIDINE MIX	100µL	6/27/24		
					STK6478	1,4-dioxane		6/2/24		
					STK6476	Benz~~idine~~ oic acid Mix 9/19/23 DT		6/27/23		
					S3932	SIM SURR MIX	1 ML	9/24/23		
					EH197-US	$MeCl_2$	→10mL	—		
S4004	SIM IND	8/18/23	11/9/23	DT	S3963	SIM IND PRE-STOCK	90µL	11/9/23	1.8mL	5µg/mL
					EH197-US	$MeCl_2$	1710µL	—		
S4005	Pyrene-D10	8/18/23	8/18/24	DT	STK6343	Pyrene-D10	0.0225g	—	10mL	2250 µg/mL
					EH197-US	$MeCl_2$	→10mL	—		

Reviewed by/Date:

QA-004 – Revision 1 – 11/10/10

GC/MS SVOA STANDARD PREP LOGBOOK

Standard #	Standard Name	Date	Exp. Date	Initials	Stock #	Stock Name	Amt Added	Stock Exp Date	Total Vol	Final Conc
S4014	8270 STOCK	9/13/23	1/31/24	DT	STK6431	8270 ~~STOC~~ 9/15/23 DT MegaMIX	220 uL	8/14/24	4.8 mL	125 ug/mL
					STK6475	APPIX MIX #2	↓	6/23/24		
					STK6482	DINOSEB	↓	6/28/24		
					STK6424	8270 SURR	55 uL	4/4/24		
					STK6541	Methapyrilene	110 uL	5/31/24		
					STK6476	Benzoic ACID MIX	↓	6/27/24		
					STK6477	BENZIDINE MIX	↓	6/19/24		
					STK6440	ORG PHOS PEST	↓	1/31/24		
					STK6543	APPIX MIX #1	↓	9/13/24		
					STD0269	X-Terpineol	↓	5/31/24		
					EH197-US	$MeCl_2$	355 uL	—		
S4015	SIM IS	9/15/23	3/15/24	DT	STK6429	INTERNAL STD MIX	100 uL	8/22/24	5 mL	80 ug/mL
					EH197-US	$MeCl_2$	→ 5 mL	—		
S4016	2,4-dibromophenol	9/15/23	9/15/24	DT	STK3868	2,4-dibromophenol	⊛ 22.2 mg ~~220 mg~~	—	10 mL	2220 ug/mL
⊥	⊥	⊥	⊥	⊥	EH197-US	$MeCl_2$	→ 10 mL	—	⊥	⊥
S4017	SIM Surr Mix (6)	9/15/23	2/28/24	DT	S4016	2,4-dibromophenol	⊛ 900 uL ~~1.68 mL~~	9/15/24	10 mL	200 ug/mL
↓	↓	↓	↓	↓	S4005	Pyrene-d10	⊥ 990 uL ~~950 mL~~	8/18/24	↓	↓
↓	↓	↓	↓	↓	S3916	Fluorene-d10	1.0 mL	2/28/24	↓	↓
↓	↓	↓	↓	↓	STD0373	1,4-dioxane-d8	↓	5/27/24	↓	↓
↓	↓	↓	↓	↓	STK6489	SOM1.0 SIM Analysis Std	↓	9/15/24	↓	↓
⊥	⊥	⊥	⊥	⊥	EH197-US	$MeCl_2$	→ 10 mL	—	⊥	⊥

Reviewed by/Date:

⊛ EP 15Sep23

GC/MS SVOA STANDARD PREP LOGBOOK

•9/18/23DT

Standard ID	Standard Name	Prep Date	Expiration Date	Prep By	Source #	Source Name	Amt Added	Stock Exp Date	Final Vol	Final Conc
S4018	DFTPP	~~8~~/15/23	3/15/24	DT	STD0362	GCMS Tuning Std	250mL	7/4/24	10mL	25 mg/mL
1	1	9 1	1	1	EH197-US	$MeCl_2$	→10mL	—	1	1
S4019	Fluorene-D10	9/15/23	9/15/24	DT	STK6344	Fluorene-D10	21.0mg	—	10mL	2100 ug/mL
					EH197-US	$MeCl_2$	→10mL	—		
S4020	SIM STOCK A	9/18/23	11/3/23	DT	STK6481	8270 Mega Mix	200mL	8/14/24	10mL	20 ug/mL
					S3958	OLM Compounds	↓	11/3/23		
					STD0655	1,2,4,5-TCB	↓	7/31/24		
					STK6477	Benzidine Mix	100mL	6/15/24		
					STK6478	1,4-Dioxane	↓	6/2/24		
					STK6476	Benzoic Acid Mix	↓	6/27/24		
					S4017	SIM SURR MIX	1mL	7/28/24		
					EH197-US	$MeCl_2$	→10mL	—		
S4021	SIM STOCK B	9/22/23	12/5/23	EP	S3976	Prestock B	180mL	9/5/23	1.8mL	20 mg/mL
1	1	1	1	1	EH206-US	$MeCl_2$	1620mL	—	1	1
S4022	SIM IND	9/27/23	11/9/23	DT	S3963	SIM IND PRE-STOCK	90mL	11/9/23	1.8mL	5 ug/mL
					EH206-US	$MeCl_2$	1710mL	10/2/23 DT —		
S4023	SIM Prestock B	10/4/23	1/6/24	EP	STD0115	Acid Composite Mix	180mL	1/6/24	1.8mL	200 mg/mL
1	1	1	1	1	STK6393	606 Phthalate Esters	180mL	1/6/24	1	1
					EH206-US	$MeCl_2$	1440mL	—		

Reviewed by/Date:

GC/MS SVOA STANDARD PREP LOGBOOK

Standard ID	Standard Type	Date Received	Date Expired	Prepped By	Source	Solvent/Neat Used	Amt Added	Solvent Exp Date	Final Vol	Final Conc
84030	OLM Compounds	10/12/23	4/12/24	DT	STD0164	5-7226 Custom	360	9/22/24	1.8 mL	1000 ug/mL
					EH206-05	MeCl2	1440	—		
54031	SIM STOCK A	10/12/23	2/28/24	DT	STK6552	8270 Mega Mix	200	10/12/24	10mL	20 ug/mL
					54030	OLM Compounds	↓	4/12/24		
					STD0555	10/12/23 DT ~~TM~~ 1,2,4,5-TCB	↓	7/31/24		
					STK6550	Benzidine Mix	100	10/12/24		
					STK6478	1,4-Dioxane	↓	6/2/24		
					STK6453	Benzoic Acid Mix	↓	10/12/24		
					54017	SIM Surr MIX	1 mL	2/28/24		
					EH206-05	MeCl2	→10mL	—		
54032	SIM Stock B	10/18/23	1/6/24	EP	54023	Pre-Stock B	180mL	1/6/24	1.8mL	20ug/mL
1	1	1	1	1	EH206-05	MeCl2	1620mL	—	1	1
54033	SIM IS	10/27/23	4/27/24 10/27/23 DT	DT	STK6534	Internal Standard Mix	100µL	10/10/24	5mL	80 ug/mL
					EH206-05	MeCl2	→5mL	—		
54034	SIM IND	11/1/23	11/9/23	EP	53963	SIM IND Pre-Stock	90mL	11/9/23	1.8mL	5ug/mL
1	1	1	1	1	EH206-05	MeCl2	1710mL	—	1	1

Reviewed by/Date:

QA-004 Revision 1 11/10/10

(*) EP 10NOV23

GC/MS SVOA STANDARD PREP LOGBOOK

Standard #	Standard Name	Prep Date	Exp Date	Initials	Stock #	Stock Name	Amt Added	Stock Exp Date	Total Vol	Final Conc
S4035	SIM Pre-stock IND	~~11/10~~ 11/10/23	01/06/24	EP	STD0115	Acid Composite Mix	90 uL	01/06/24	1.8 mL	100 ug/mL
					STD0467	B/N Composite Mix		10/30/24		
					STD0446	Composite Mix #3		11/10/24		
					STD0489	Benzidine Mix		9/22/24		
					STD0473	1-Methylnaphthalene		9/22/24		
					STD0309	1,4-dioxane		11/10/23 (*)		
					STD0164	Custom OLM	36 uL	9/22/24		
					STD0520	1,2,4,5 TCB	180 uL	11/10/24		
					EH304-US	MeCl2	1044 uL	—		
S4036	SIM IND	11/10/23	01/06/24	EP	S4035	SIM IND Pre-stock	90 uL	01/06/24	1.8 mL	5 ug/mL
					EH304-US	MeCl2	1710 uL	—		
S4037	SIM Stock B	11/15/23	1/6/24	EP	S4023	Pre-stock B	180 uL	1/6/24	1.8 mL	20 ug/mL
					EH362-US	MeCl2	1620 uL	—		
S4038	DFTPP	11/17/23	5/17/24	EP	STD0362	GC/MS Tuning Mix	250 uL	7/4/24	10 mL	25 ug/mL
					EH362-US	MeCl2	→ 10 mL	—		

Reviewed by/Date:

QAMS755 - 000619

0000080

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GC/MS SVOA STANDARD PREP LOGBOOK

Standard ID	Standard Name	Prep Date	Exp Date	Initials	Stock #	Stock Name	Amt Added	Stock Exp Date	Total Vol	Final Conc
S4039	SIM Stock A	11/29/23	2/28/24	EP	STK6552	8270 Mega Mix	200 mL	10/12/24	10 mL	20 ug/mL
					S4030	OLM Compounds		4/12/24		
					STD0520	1.2.4.5 -TCB		11/10/24		
					STK6550	Benzidine Mix	100 mL	10/12/24		
					STK6478	1,4-Dioxane		6/2/24		
					STK6453	Benzoic Acid Mix		10/10/24		
					S4017	SIM Surr Mix	1 mL	2/28/24		
					PH486-US	$MeCl_2$	→ 10 mL	—		
S4040	SIM Stock B	12/1/23	1/6/24	EP	S4023	Pre-Stock B	180 mL	1/6/24	1.8 mL	20 ug/mL
					PH486-US	$MeCl_2$	1620 mL	—		
S4041	SIM IND	12/7/23	1/6/24	EP	S4035	SIM IND Pre-Stock	90 mL	1/6/24	1.8 mL	5 ug/mL
					PH486-US	$MeCl_2$	1710 mL	—		
S4042	SIM IS	12/15/23	6/14/24	DT	STK6534	INTERNAL STD MIX	100 mL	10/10/24	5 mL	80 ug/mL
					PH486-US	$MeCl_2$	→ 5 mL			
S4043	DFTPP	12/20/23	6/20/24	DT	STK6529	GC/MS Tuning MIX	250 mL	12/20/24	10 mL	25 ug/mL
					PH486-US	$MeCl_2$	→ 10 mL			

Reviewed by/Date:

SVOA EXTRACTION SPIKE STANDARD PREPARATION

PREP INFO	STOCK NAME	AMT ADDED	STOCK CONC.	STOCK#
ID#: SV3174	**APP IX SPIKE**			
Prep Date: 9/5/23	CLP-HC-X1-R1	0.25 mL	2000 ug/mL ✓	STD0242 STD0622
Initials: JS	M-8270-07-R1	0.25 mL	2000 ug/mL ✓	STD0241
Exp. Date: ~~3/5/24~~	M-8270-08-R1	0.25 mL	2000 ug/mL ✓	STD9072, 617
X 2/3/24	M-8270-09-R1	0.25 mL	2000 ug/mL ✓	STD618,
JS 9/5/23	M-8270-10-R1	0.25 mL	2000 ug/mL ✓	STD620, 9074
	APP-9-014-D10X	0.25 mL	2000 ug/mL ✓	
	Diluted to 10mL in MeOH#		**F.C.: 50 ug/mL**	
	SIM SURR MIX			
ID#: SV3175	SOM 1.0 SIM	2 mL	2000ug/mL	STK6547, STK6548
Prep Date: 9/15/23	Pyrene-D10	1.78 mL	2250ug/mL	54005
Initials: DT	Fluorene-D10	1 mL	1950ug/mL	53916
Exp. Date: 3/15/24	Fluorene-D10	0.98 mL	2100ug/mL	54019
	Diluted to 10 mL in MeOH	#EG017-US		F.C. 400ug/mL BQ
	S/S SURR			
ID#: SV3176	SIM SURR Stock	2.5 mL	400 ug/mL	SV3175
Prep Date: 9/18/23	B/N Surr mix	5.0 mL	5000 ug/mL	STD0416
Initials: CMW	Acid Surr mix	5.0 mL	10,000 ug/mL	STD0383 340 428
Exp. Date: ~~3/18/24~~ 3/18/25	1,4-dioxane-D8	0.5 mL	2000 ug/mL	STD0441
24	2,4-dibromphenol	2.0 mL	1000 ug/mL	STD0583 581
9/19/23 DT	**Diluted to 500mL in acetone#**		**F.C.: Various**	

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SVOA EXTRACTION SPIKE STANDARD PREPARATION

PREP INFO	STOCK NAME	AMT ADDED	STOCK CONC.	STOCK#
ID#: SV3178		1,4 D Surr		
Prep Date: 10/11/23	1,4 Dioxane	0.25 mL	2000 ug/mL	STD0089
Initials: CMW	Diluted to	250 mL in	MeOH EG001-US	
Exp. Date: ~~10~~ 3/11/24			F.C 2ug/mL	

SIM SPIKE	
SVOA SPIKE SV3178 5.0 mL	50/100 ug/mL
Diluted to 50 mL in MeOH#	**F.C.: 5/10 ug/mL**

ID#: SV3181
Prep Date: 10/18/23
Initials: SH/AC
Exp. Date: 4/18/23

SIM SPIKE	
SVOA SPIKE SV3178 5.0 mL	50/100 ug/mL
Diluted to 50 mL in MeOH# EG017-US	**F.C.: 5/10 ug/mL**

ID#: SV3182
Prep Date: 11/6/23
Initials: SH
Exp. Date: 5/6/24

SVOA EXTRACTION SPIKE STANDARD PREPARATION

PREP INFO	STOCK NAME	AMT ADDED	STOCK CONC	STOCK#
~~ID#:~~ SV3182				
Prep Date: 11/2/23				
Initials: SH				
Exp. Date: 5/2/24				

SVOA SPIKE		
CLP-HC-BN-R-PAK	2.5 mL	2000 ug/mL
Z-014E	2.5 mL	2000 ug/mL
CLP-HC-A-R-PAK	5.0 mL	2000 ug/mL
S-7226	1.0 mL	5000 ug/mL
H-001S-D40X	2.5 mL	2000 ug/mL

SH 11/2/23

~~ID#:~~	APP-9-096-20X	2.5 mL	2000 ug/mL
~~Prep Date:~~	P-233S-10X	5.0 mL	1000 ug/mL
Initials:	APP-9-191-10X	5.0 mL	1000 ug/mL
Exp. Date:	Z-014F-PAK	5.0 mL	2000 ug/mL
	α- TERP	~~2.5 mL~~	2000 ug/mL
	Diluted to 100 mL in MeOH#		**F.C.: 50/100 ug/mL**

S/S SURR			
SIM SURR Stock	2.5 mL	400 ug/mL	SV3175
B/N Surr mix	5.0 mL	5000 ug/mL	STD0371
Acid Surr mix	5.0 mL	10,000 ug/mL	STD0384, 0425
1,4-dioxane-D8	0.5 mL	2000 ug/mL	STD0441, 0705
2,4-dibromphenol	2.0 mL	1000 ug/mL	STD0584
Diluted to 500mL in acetone# 225567		**F.C.: Various**	

ID#: SV3183
Prep Date: 11/6/23
Initials: SH
Exp. Date: 5/6/24

METHANE ETHANE ETHYLENE DATA BY METHOD RSK SOP 175

QC Summary Section

Form 4
Method Blank Summary

Lab File ID : 5QK20260.D
Instrument ID : GC05
Heated Purge : No
Prep Temperature (C) : 20.4

SDG : SQ6179
Lab Sample ID : WG345654-1
Date Analyzed : 17-NOV-23
Time Analyzed : 15:42

This Method Blank applies to the following samples and QC samples:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Prep Temp (C)
Laboratory Control S	WG345654-2	5QK20261.	11/17/23	15:59	20.4
SY-OBMW2-110823	SQ6179-1	5QK20262.	11/17/23	16:30	20.5
Sample Duplicate	WG345654-3	5QK20263.	11/17/23	16:47	20.5
SY-OBMW1-110823	SQ6179-2	5QK20264.	11/17/23	17:04	20.5
SY-OBMW9-110823	SQ6179-3	5QK20265.	11/17/23	17:21	20.5
SY-BRMW5-29-44-110823	SQ6179-4	5QK20266.	11/17/23	17:39	20.6
SY-BRMW5-56-66-110823	SQ6179-5	5QK20267.	11/17/23	17:56	20.6
SY-BRMW5-123-133-110823	SQ6179-6	5QK20268.	11/17/23	18:13	20.6
SY-OBMW8-110823	SQ6179-7	5QK20269.	11/17/23	18:29	20.6
SY-OBMW11-110823	SQ6179-8	5QK20270.	11/17/23	18:46	20.6
SY-OBMW110-110823	SQ6179-9	5QK20271.	11/17/23	19:04	20.5
SY-OBMW3-110823	SQ6179-10	5QK20273.	11/17/23	19:38	20.5

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Form 8
Analytical Sequence

Lab Name: Katahdin Analytical Services **SDG:** SQ6179
Instrument ID: GC05 **Column ID:** A

Client Sample ID	Lab Sample ID	Date Analyzed	Time Analyzed
Initial Calibration	WG344993-1	11/07/23	08:28
Initial Calibration	WG344993-2	11/07/23	08:46
Initial Calibration	WG344993-3	11/07/23	09:03
Initial Calibration	WG344993-4	11/07/23	09:20
Initial Calibration	WG344993-5	11/07/23	09:37
Initial Calibration	WG344993-6	11/07/23	09:54
Initial Calibration	WG344993-7	11/07/23	10:11
Independent Source	WG344993-8	11/07/23	11:39
Continuing Calibrati	WG345654-4	11/17/23	14:55
Method Blank	WG345654-1	11/17/23	15:42
Laboratory Control S	WG345654-2	11/17/23	15:59
SY-OBMW2-110823	SQ6179-1	11/17/23	16:30
Sample Duplicate	WG345654-3	11/17/23	16:47
SY-OBMW1-110823	SQ6179-2	11/17/23	17:04
SY-OBMW9-110823	SQ6179-3	11/17/23	17:21
SY-BRMW5-29-44-110823	SQ6179-4	11/17/23	17:39
SY-BRMW5-56-66-110823	SQ6179-5	11/17/23	17:56
SY-BRMW5-123-133-110823	SQ6179-6	11/17/23	18:13
SY-OBMW8-110823	SQ6179-7	11/17/23	18:29
SY-OBMW11-110823	SQ6179-8	11/17/23	18:46
SY-OBMW110-110823	SQ6179-9	11/17/23	19:04
Continuing Calibrati	WG345654-5	11/17/23	19:21
SY-OBMW3-110823	SQ6179-10	11/17/23	19:38
Continuing Calibrati	WG345654-6	11/17/23	19:55

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Sample Data Section

KATAHDIN ANALYTICAL SERVICES - ORGANIC DATA QUALIFIERS

U Indicates the compound was analyzed for but not detected above the specified level. This level may be the Practical Quantitation Level (PQL) (also called Limit of Quantitation (LOQ)), the Limit of Detection (LOD) or Method Detection Limit (MDL) as required by the client.

Note: All results reported as "U" MDL have a 50% rate for false negatives compared to those results reported as "U" PQL, "U" LOQ or "U" LOD, where the rate of false negatives is <1%.

* Compound recovery or percent RPD (relative percent difference) was outside of quality control limits.

D Indicates the result was obtained from analysis of a diluted sample. Surrogate recoveries may not be calculable.

E Estimated value. This flag identifies compounds whose concentrations exceed the upper level of the calibration range of the instrument for that specific analysis.

J Estimated value. The analyte was detected in the sample at a concentration less than the laboratory Practical Quantitation Level (PQL) (also called Limit of Quantitation (LOQ)), but above the Method Detection Limit (MDL).

And/or

J Used for Dual Column analytes when there is a greater than 40% difference for detected concentrations between the two GC/HPLC columns.

B Indicates the analyte was detected in the laboratory method blank analyzed concurrently with the sample.

I Indicates that the flagged compound did not meet DoD criteria in the corresponding Initial Calibration (ICAL).

D Indicates that the flagged compound did not meet DoD criteria in the corresponding Initial Calibration Verification (ICV).

C Indicates that the flagged compound did not meet DoD criteria in the corresponding opening Calibration Verification (CV).

V Indicates that the flagged compound did not meet DoD criteria in the corresponding closing Calibration Verification (CV).

L/LL Indicates that the flagged compound did not meet DoD criteria in the corresponding Laboratory Control Sample (LCS) and/or Laboratory Control Sample Duplicate (LCSD) prepared and/or analyzed concurrently with the sample.

M/MM Indicates that the flagged compound did not meet DoD criteria in the Matrix Spike (MS) and/or Matrix Spike Duplicate MSD) prepared and/or analyzed concurrently with the native sample.

H Indicates the flagged compound was detected on the primary column but was not detected on the confirmation column therefore the compound is not reported as a positive detection. (SW846 8330A/B only)

Katahdin Analytical Services, Inc.

Manual Integration Codes For GC/MS, GC, HPLC and/or IC

M1	Peak splitting.
M2	Well defined peaks on the shoulders of the other peaks.
M3	There is additional area due to a coeluting interferant.
M4	There are negative spikes in the baseline.
M5	There are rising or falling baselines.
M6	The software has failed to detect a peak or misidentified a peak.
M7	Excessive peak tailing.
M8	Analysis such as GRO, DRO and TPH require a baseline hold.
M9	Peak was not completely integrated as in GC/MS.
M10	Primary ion was correctly integrated, but secondary or tertiary ion needed manual integration as in GC/MS.
M11	For GC analysis, when a sample is diluted by 1:10 or more, the surrogate is set to undetected and then the area under the surrogate is manually integrated.
M12	Manual integration saved in method due to TurboChrom floating point error.

Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

SDG: SQ6179
Lab ID: SQ6179-1
Client ID: SY-OBMW2-110823
Matrix: AQ
Lab File ID: 5QK20262.D

Sample Date: 08-NOV-23
Extract Date: 17-NOV-23
Extracted By: DL/SH
Extraction Method: RSK SOP 175
Lab Prep Batch: WG345654

Report Date: 01-DEC-23
Analysis Date: 17-NOV-23
Analyst: DL/SH
Analysis Method: RSK SOP 175 v.2
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Methane	J	3.8	ug/L	1	10.3	10.	2.6	5.2
Ethane	U	9.8	ug/L	1	13.1	13.	5.0	9.8
Ethene	U	9.8	ug/L	1	13.1	13.	5.0	9.8

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Data File: \\target_server\gg\chem\gc05.i\GC05QK17.b\5QK20262.D
Report Date: 01-Dec-2023 17:04

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Data file : \\target_server\gg\chem\gc05.i\GC05QK17.b\5QK20262.D
Lab Smp Id: SQ6179-1 Client Smp ID: SY-OBMW2-110823
Inj Date : 17-NOV-2023 16:30
Operator : DL/SH Inst ID: gc05.i
Smp Info : SQ6179-1
Misc Info : WG345654,WG344993-4
Comment : RSK SOP 175
Method : \\target_server\gg\chem\gc05.i\GC05QK17.b\MEEB47A.m
Meth Date : 18-Nov-2023 06:37 dlewry Quant Type: ESTD
Cal Date : 07-NOV-2023 10:11 Cal File: 5QK20014.D
Als bottle: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSKSOP175-MEE.sub
Target Version: 4.12
Processing Host: V200T3

Concentration Formula: Amt * DF * 0.005/Vo * CpndVariable

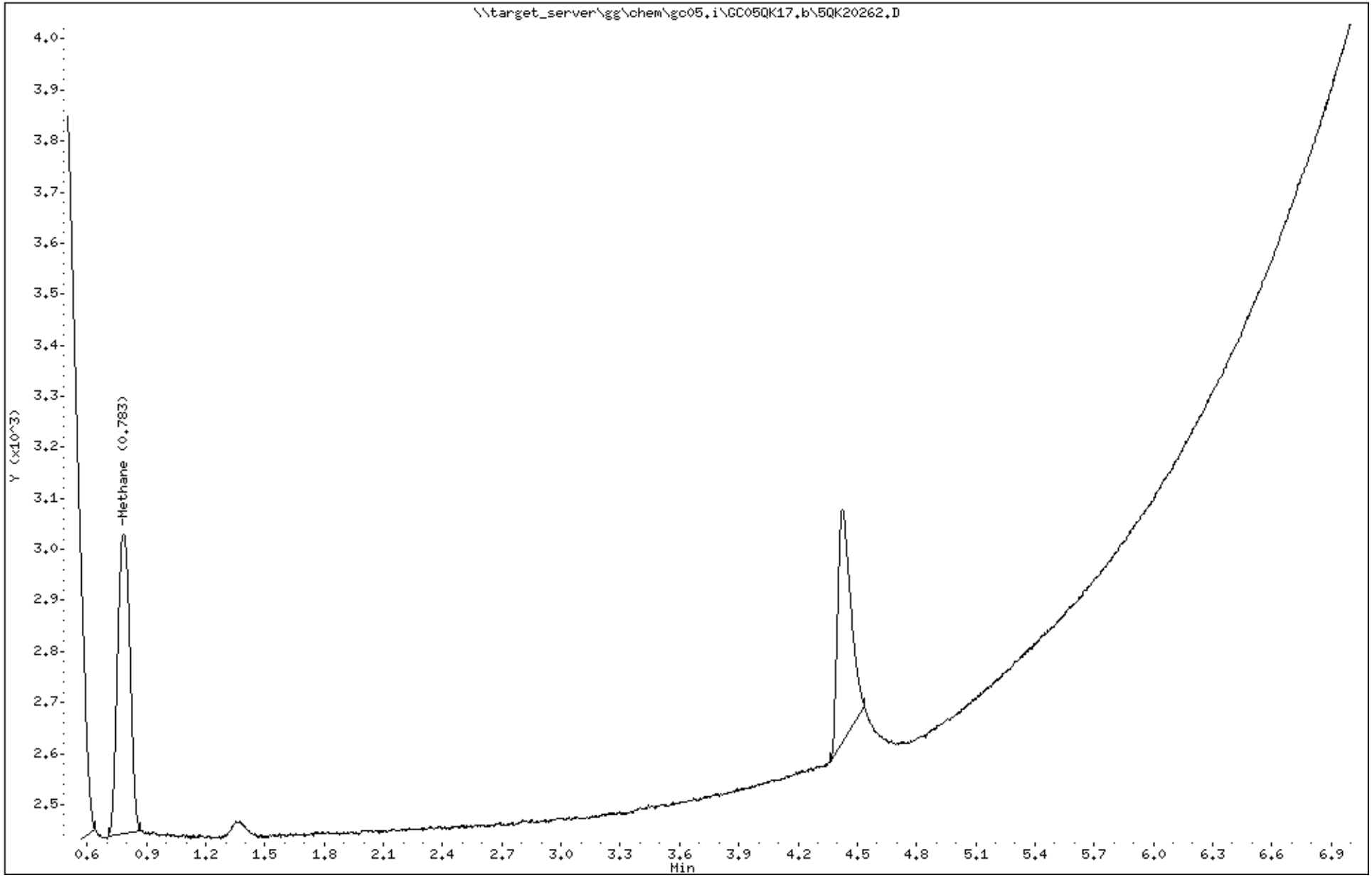
Name	Value	Description
DF	1.000	Dilution Factor
Vo	0.00500	sample purged (L)
Cpnd Variable		Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (PPM)	CONCENTRATIONS FINAL (PPM)	REVIEW CODE
1 Methane	0.783	0.760	0.023	2594	5.46709	5.47(a)	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: \\target_server\gg\chem\gc05.i\GC05QK17.b\5QK20262.D
Date : 17-NOV-2023 16:30
Client ID: SY-OBMW2-110823
Instrument: gc05.i
Sample Info: SQ6179-1
Purge Volume: 0.0
Operator: DL/SH
Column phase: Porapak Q
Column diameter: 0.00



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ANALYTICAL SERVICES

Report of Analytical Results

SDG: SQ6179
Lab ID: SQ6179-2
Client ID: SY-OBMW1-110823
Matrix: AQ
Lab File ID: 5QK20264.D

Sample Date: 08-NOV-23
Extract Date: 17-NOV-23
Extracted By: DL/SH
Extraction Method: RSK SOP 175
Lab Prep Batch: WG345654

Report Date: 01-DEC-23
Analysis Date: 17-NOV-23
Analyst: DL/SH
Analysis Method: RSK SOP 175 v.2
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Methane	J	5.5	ug/L	1	10.3	10.	2.6	5.2
Ethane	U	9.8	ug/L	1	13.1	13.	5.0	9.8
Ethene	U	9.8	ug/L	1	13.1	13.	5.0	9.8

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Data File: \\target_server\gg\chem\gc05.i\GC05QK17.b\5QK20264.D
Report Date: 01-Dec-2023 17:04

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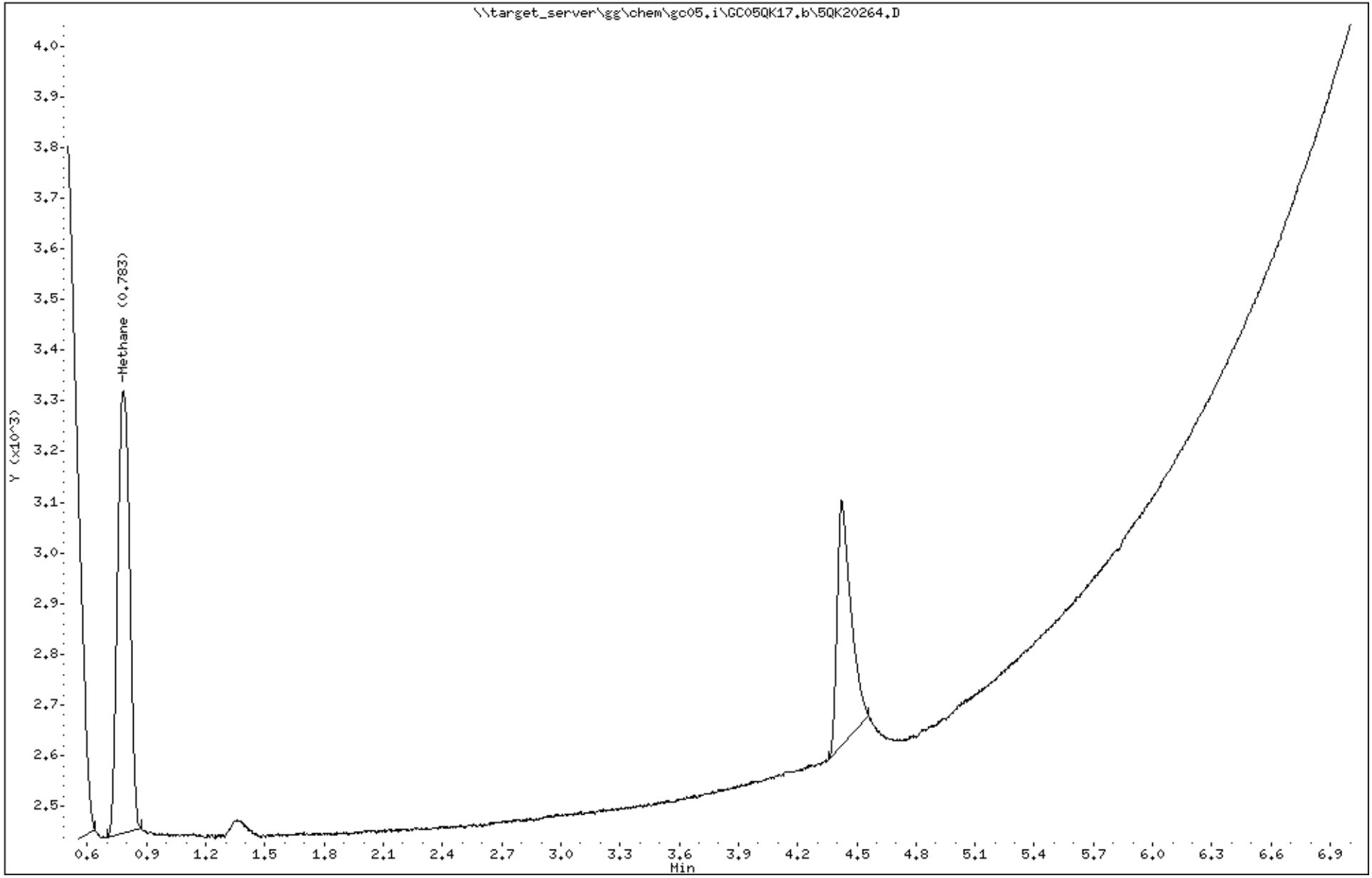
Data file : \\target_server\gg\chem\gc05.i\GC05QK17.b\5QK20264.D
Lab Smp Id: SQ6179-2 Client Smp ID: SY-OBMW1-110823
Inj Date : 17-NOV-2023 17:04
Operator : DL/SH Inst ID: gc05.i
Smp Info : SQ6179-2
Misc Info : WG345654,WG344993-4
Comment : RSK SOP 175
Method : \\target_server\gg\chem\gc05.i\GC05QK17.b\MEEB47A.m
Meth Date : 18-Nov-2023 06:37 dlewry Quant Type: ESTD
Cal Date : 07-NOV-2023 10:11 Cal File: 5QK20014.D
Als bottle: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSKSOP175-MEE.sub
Target Version: 4.12
Processing Host: V200T3

Concentration Formula: Amt * DF * 0.005/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	0.00500	sample purged (L)
Cpnd Variable		Local Compound Variable

					CONCENTRATIONS ON-COLUMN	CONCENTRATIONS FINAL	
Compounds	RT	EXP RT	DLT RT	RESPONSE	(PPM)	(PPM)	REVIEW CODE
1 Methane	0.783	0.760	0.023	3775	7.95616	7.96	

Data File: \\target_server\gg\chem\gc05.i\GC05QK17.b\5QK20264.D
Date : 17-NOV-2023 17:04
Client ID: SY-OBMW1-110823
Instrument: gc05.i
Sample Info: SQ6179-2
Purge Volume: 0.0
Operator: DL/SH
Column phase: Porapak Q
Column diameter: 0.00



Katahdin Analytical Services SQ6179 Page 362 of 740

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ANALYTICAL SERVICES

Report of Analytical Results

SDG: SQ6179
Lab ID: SQ6179-3
Client ID: SY-OBMW9-110823
Matrix: AQ
Lab File ID: 5QK20265.D

Sample Date: 08-NOV-23
Extract Date: 17-NOV-23
Extracted By: DL/SH
Extraction Method: RSK SOP 175
Lab Prep Batch: WG345654

Report Date: 01-DEC-23
Analysis Date: 17-NOV-23
Analyst: DL/SH
Analysis Method: RSK SOP 175 v.2
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Methane		24	ug/L	1	10.3	10.	2.6	5.2
Ethane	U	9.8	ug/L	1	13.1	13.	5.0	9.8
Ethene	U	9.8	ug/L	1	13.1	13.	5.0	9.8

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Data File: \\target_server\gg\chem\gc05.i\GC05QK17.b\5QK20265.D
Report Date: 01-Dec-2023 17:04

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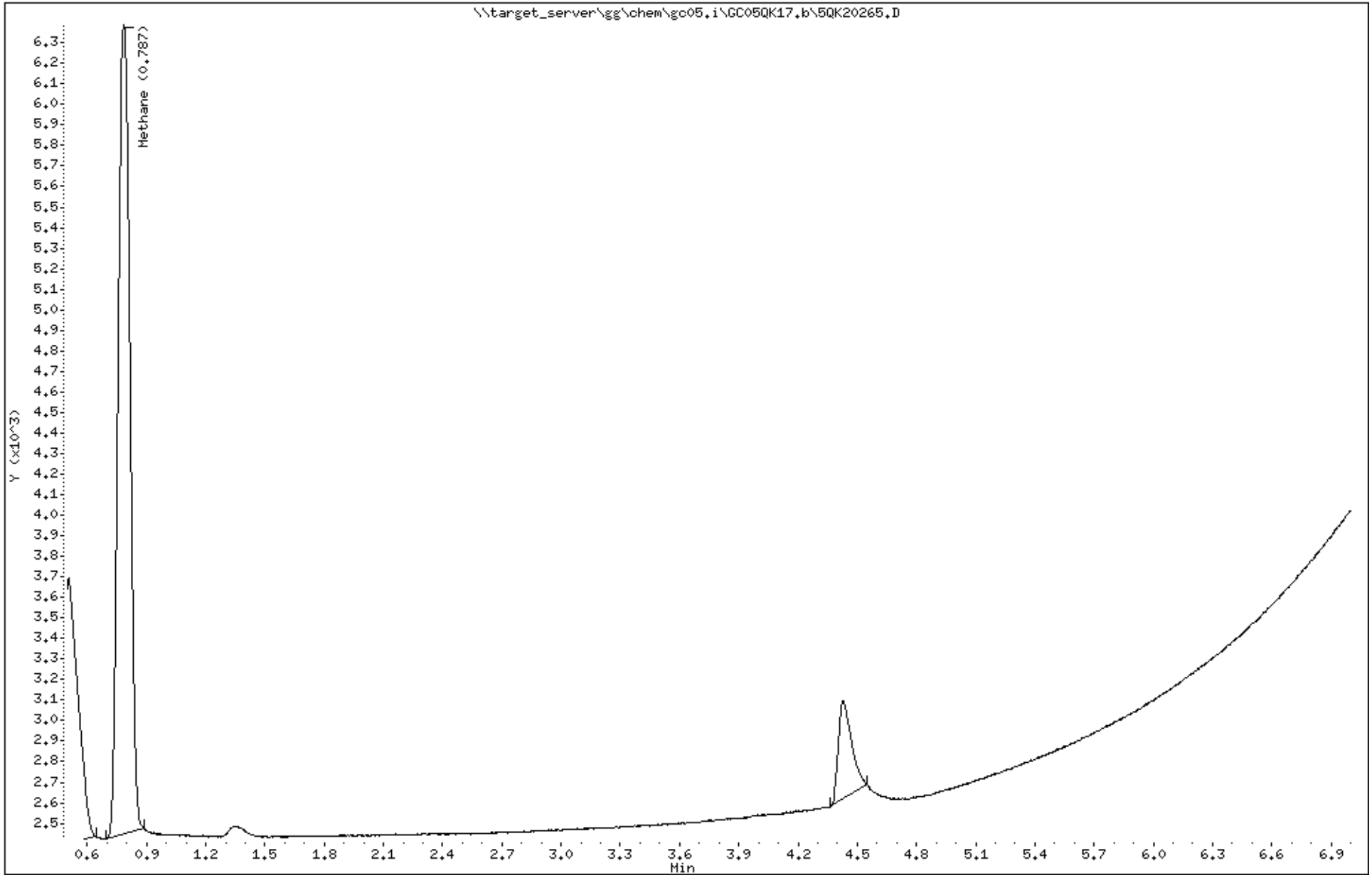
Data file : \\target_server\gg\chem\gc05.i\GC05QK17.b\5QK20265.D
Lab Smp Id: SQ6179-3 Client Smp ID: SY-OBMW9-110823
Inj Date : 17-NOV-2023 17:21
Operator : DL/SH Inst ID: gc05.i
Smp Info : SQ6179-3
Misc Info : WG345654,WG344993-4
Comment : RSK SOP 175
Method : \\target_server\gg\chem\gc05.i\GC05QK17.b\MEEB47A.m
Meth Date : 18-Nov-2023 06:37 dlewry Quant Type: ESTD
Cal Date : 07-NOV-2023 10:11 Cal File: 5QK20014.D
Als bottle: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSKSOP175-MEE.sub
Target Version: 4.12
Processing Host: V200T3

Concentration Formula: Amt * DF * 0.005/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	0.00500	sample purged (L)
Cpnd Variable		Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (PPM)	CONCENTRATIONS FINAL (PPM)	REVIEW CODE
1 Methane	0.786	0.760	0.026	16593	34.9713	35.0	

Data File: \\target_server\gg\chem\gc05.i\GC05QK17.b\5QK20265.D
Date : 17-NOV-2023 17:21
Client ID: SY-OBMW9-110823
Instrument: gc05.i
Sample Info: SQ6179-3
Purge Volume: 0.0
Operator: DL/SH
Column phase: Porapak Q
Column diameter: 0.00



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ANALYTICAL SERVICES

Report of Analytical Results

SDG: SQ6179
Lab ID: SQ6179-4
Client ID: SY-BRMW5-29-44-110823
Matrix: AQ
Lab File ID: 5QK20266.D

Sample Date: 08-NOV-23
Extract Date: 17-NOV-23
Extracted By: DL/SH
Extraction Method: RSK SOP 175
Lab Prep Batch: WG345654

Report Date: 01-DEC-23
Analysis Date: 17-NOV-23
Analyst: DL/SH
Analysis Method: RSK SOP 175 v.2
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Methane	U	5.2	ug/L	1	10.3	10.	2.6	5.2
Ethane	U	9.8	ug/L	1	13.1	13.	5.0	9.8
Ethene	U	9.8	ug/L	1	13.1	13.	5.0	9.8

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Data File: \\target_server\gg\chem\gc05.i\GC05QK17.b\5QK20266.D
Report Date: 01-Dec-2023 17:04

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gc05.i\GC05QK17.b\5QK20266.D
Lab Smp Id: SQ6179-4 Client Smp ID: Y-BRMW5-29-44-11082
Inj Date : 17-NOV-2023 17:39
Operator : DL/SH Inst ID: gc05.i
Smp Info : SQ6179-4
Misc Info : WG345654,WG344993-4
Comment : RSK SOP 175
Method : \\target_server\gg\chem\gc05.i\GC05QK17.b\MEEB47A.m
Meth Date : 18-Nov-2023 06:37 dlewry Quant Type: ESTD
Cal Date : 07-NOV-2023 10:11 Cal File: 5QK20014.D
Als bottle: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSKSOP175-MEE.sub
Target Version: 4.12
Processing Host: V200T3

Concentration Formula: Amt * DF * 0.005/Vo * CpndVariable

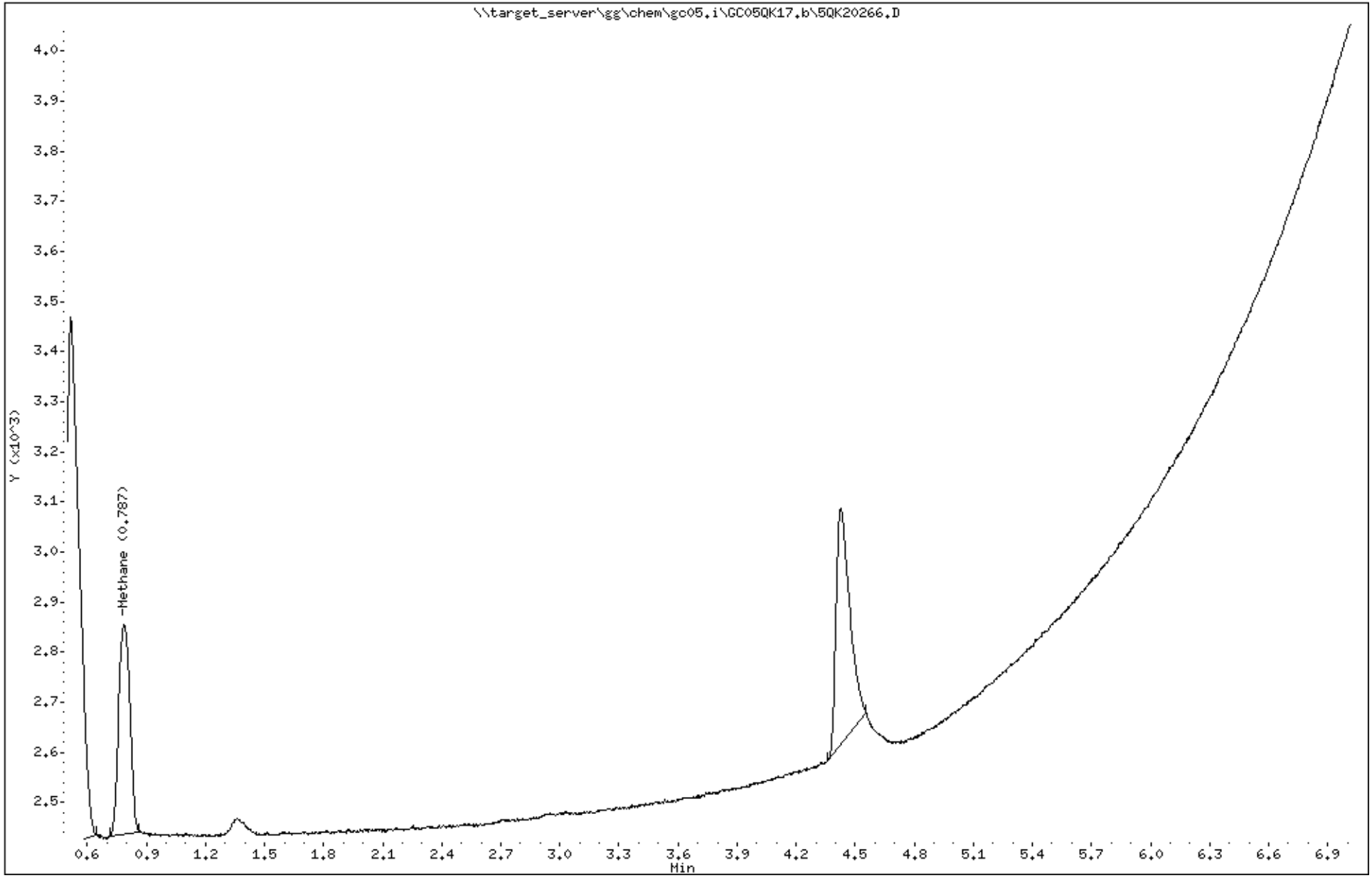
Name	Value	Description
DF	1.000	Dilution Factor
Vo	0.00500	sample purged (L)
Cpnd Variable		Local Compound Variable

					CONCENTRATIONS ON-COLUMN (PPM)	CONCENTRATIONS FINAL (PPM)	
Compounds	RT	EXP RT	DLT RT	RESPONSE			REVIEW CODE
1 Methane	0.786	0.760	0.026	1660	3.49860	3.50(a)	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: \\target_server\gg\chem\gc05.i\GC05QK17.b\5QK20266.D
Date : 17-NOV-2023 17:39
Client ID: Y-BRMW5-29-44-11082
Instrument: gc05.i
Sample Info: SQ6179-4
Purge Volume: 0.0
Operator: DL/SH
Column phase: Porapak Q
Column diameter: 0.00



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Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

SDG: SQ6179
Lab ID: SQ6179-5
Client ID: SY-BRMW5-56-66-110823
Matrix: AQ
Lab File ID: 5QK20267.D

Sample Date: 08-NOV-23
Extract Date: 17-NOV-23
Extracted By: DL/SH
Extraction Method: RSK SOP 175
Lab Prep Batch: WG345654

Report Date: 01-DEC-23
Analysis Date: 17-NOV-23
Analyst: DL/SH
Analysis Method: RSK SOP 175 v.2
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Methane	J	3.7	ug/L	1	10.3	10.	2.6	5.2
Ethane	U	9.8	ug/L	1	13.1	13.	5.0	9.8
Ethene	U	9.8	ug/L	1	13.1	13.	5.0	9.8

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Data File: \\target_server\gg\chem\gc05.i\GC05QK17.b\5QK20267.D
Report Date: 01-Dec-2023 17:04

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gc05.i\GC05QK17.b\5QK20267.D
Lab Smp Id: SQ6179-5 Client Smp ID: Y-BRMW5-56-66-11082
Inj Date : 17-NOV-2023 17:56
Operator : DL/SH Inst ID: gc05.i
Smp Info : SQ6179-5
Misc Info : WG345654,WG344993-4
Comment : RSK SOP 175
Method : \\target_server\gg\chem\gc05.i\GC05QK17.b\MEEB47A.m
Meth Date : 18-Nov-2023 06:37 dlewry Quant Type: ESTD
Cal Date : 07-NOV-2023 10:11 Cal File: 5QK20014.D
Als bottle: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSKSOP175-MEE.sub
Target Version: 4.12
Processing Host: V200T3

Concentration Formula: Amt * DF * 0.005/Vo * CpndVariable

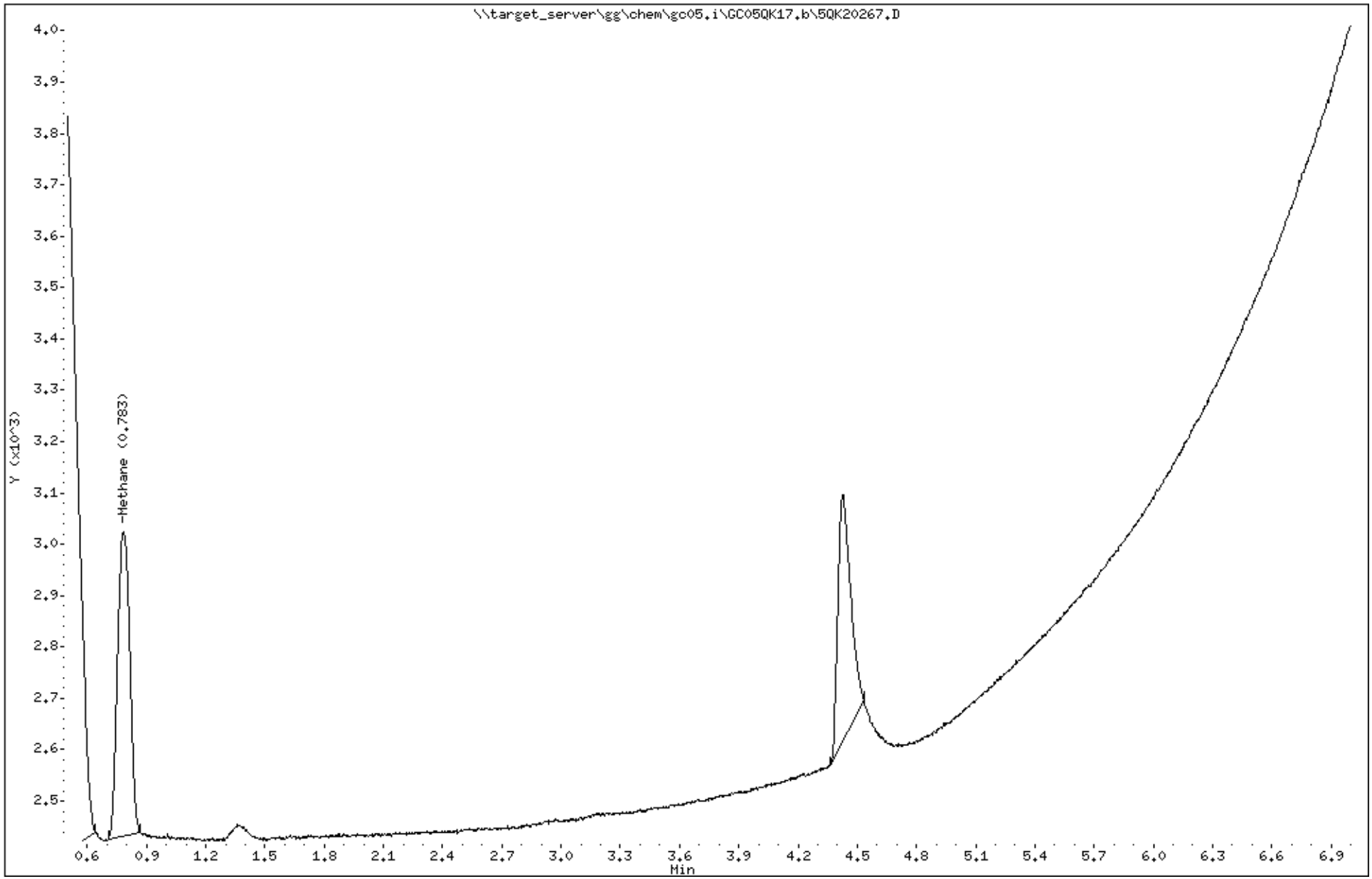
Name	Value	Description
DF	1.000	Dilution Factor
Vo	0.00500	sample purged (L)
Cpnd Variable		Local Compound Variable

					CONCENTRATIONS ON-COLUMN (PPM)	CONCENTRATIONS FINAL (PPM)	
Compounds	RT	EXP RT	DLT RT	RESPONSE			REVIEW CODE
1 Methane	0.783	0.760	0.023	2583	5.44391	5.44(a)	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: \\target_server\gg\chem\gc05.i\GC05QK17.b\5QK20267.D
Date : 17-NOV-2023 17:56
Client ID: Y-BRMW5-56-66-11082
Instrument: gc05.i
Sample Info: SQ6179-5
Purge Volume: 0.0
Operator: DL/SH
Column phase: Porapak Q
Column diameter: 0.00



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Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

SDG: SQ6179
Lab ID: SQ6179-6
Client ID: SY-BRMW5-123-133-110823
Matrix: AQ
Lab File ID: 5QK20268.D

Sample Date: 08-NOV-23
Extract Date: 17-NOV-23
Extracted By: DL/SH
Extraction Method: RSK SOP 175
Lab Prep Batch: WG345654

Report Date: 01-DEC-23
Analysis Date: 17-NOV-23
Analyst: DL/SH
Analysis Method: RSK SOP 175 v.2
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Methane	U	5.2	ug/L	1	10.3	10.	2.6	5.2
Ethane	U	9.8	ug/L	1	13.1	13.	5.0	9.8
Ethene	U	9.8	ug/L	1	13.1	13.	5.0	9.8

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Data File: \\target_server\gg\chem\gc05.i\GC05QK17.b\5QK20268.D
Report Date: 01-Dec-2023 17:04

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Data file : \\target_server\gg\chem\gc05.i\GC05QK17.b\5QK20268.D
Lab Smp Id: SQ6179-6 Client Smp ID: Y-BRMW5-123-133-110
Inj Date : 17-NOV-2023 18:13
Operator : DL/SH Inst ID: gc05.i
Smp Info : SQ6179-6
Misc Info : WG345654,WG344993-4
Comment : RSK SOP 175
Method : \\target_server\gg\chem\gc05.i\GC05QK17.b\MEEB47A.m
Meth Date : 18-Nov-2023 06:37 dlewry Quant Type: ESTD
Cal Date : 07-NOV-2023 10:11 Cal File: 5QK20014.D
Als bottle: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSKSOP175-MEE.sub
Target Version: 4.12
Processing Host: V200T3

Concentration Formula: Amt * DF * 0.005/Vo * CpndVariable

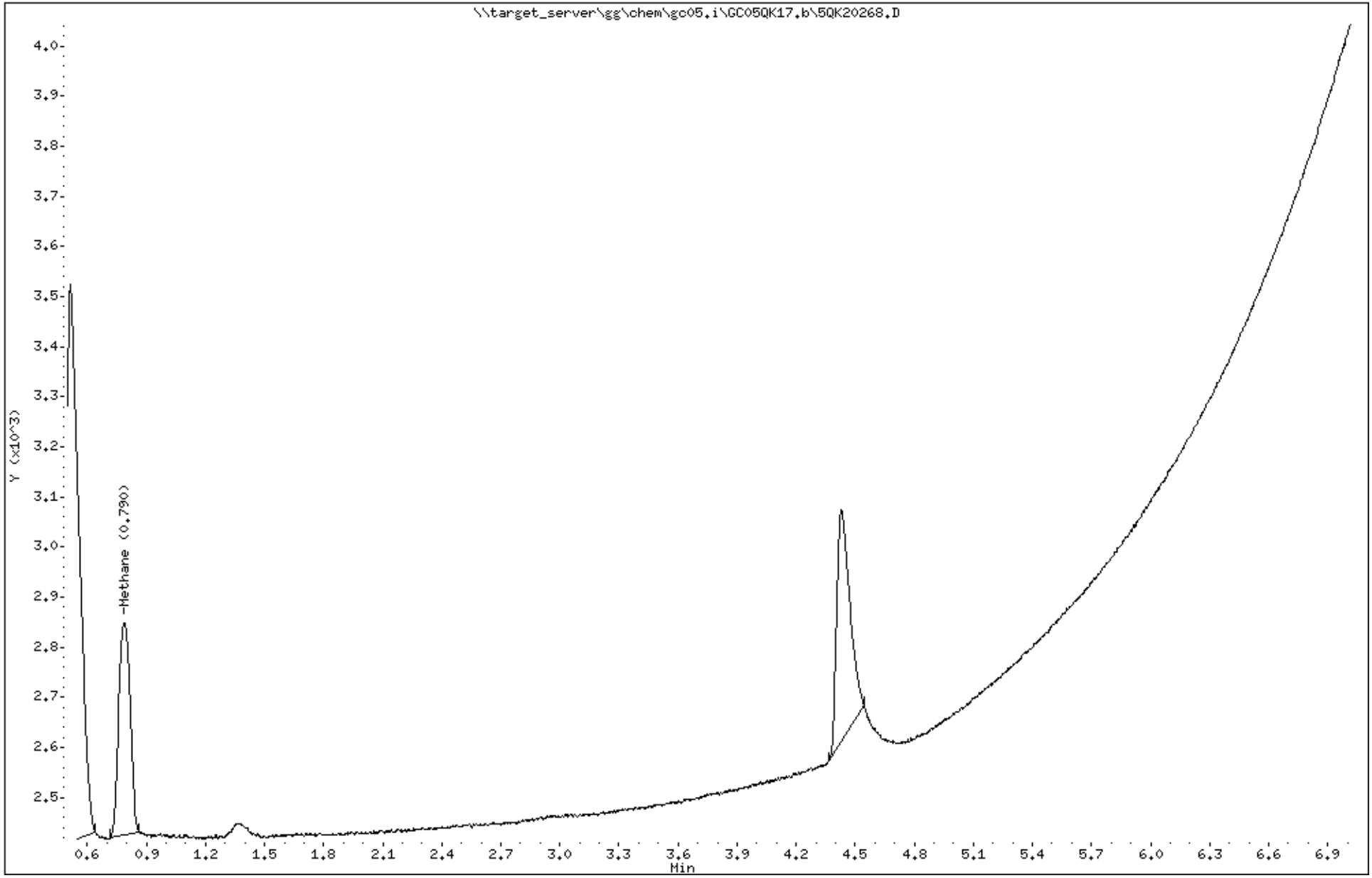
Name	Value	Description
DF	1.000	Dilution Factor
Vo	0.00500	sample purged (L)
Cpnd Variable		Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (PPM)	CONCENTRATIONS FINAL (PPM)	REVIEW CODE
1 Methane	0.790	0.760	0.030	1704	3.59134	3.59(a)	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: \\target_server\gg\chem\gc05.i\GC05QK17.b\5QK20268.D
Date : 17-NOV-2023 18:13
Client ID: Y-BRMW5-123-133-110
Instrument: gc05.i
Sample Info: SQ6179-6
Purge Volume: 0.0
Operator: DL/SH
Column phase: Porapak Q
Column diameter: 0.00



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Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

SDG: SQ6179
Lab ID: SQ6179-7
Client ID: SY-OBMW8-110823
Matrix: AQ
Lab File ID: 5QK20269.D

Sample Date: 08-NOV-23
Extract Date: 17-NOV-23
Extracted By: DL/SH
Extraction Method: RSK SOP 175
Lab Prep Batch: WG345654

Report Date: 01-DEC-23
Analysis Date: 17-NOV-23
Analyst: DL/SH
Analysis Method: RSK SOP 175 v.2
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Methane	J	6.6	ug/L	1	10.3	10.	2.6	5.2
Ethane	U	9.8	ug/L	1	13.1	13.	5.0	9.8
Ethene	U	9.8	ug/L	1	13.1	13.	5.0	9.8

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Data File: \\target_server\gg\chem\gc05.i\GC05QK17.b\5QK20269.D
Report Date: 01-Dec-2023 17:04

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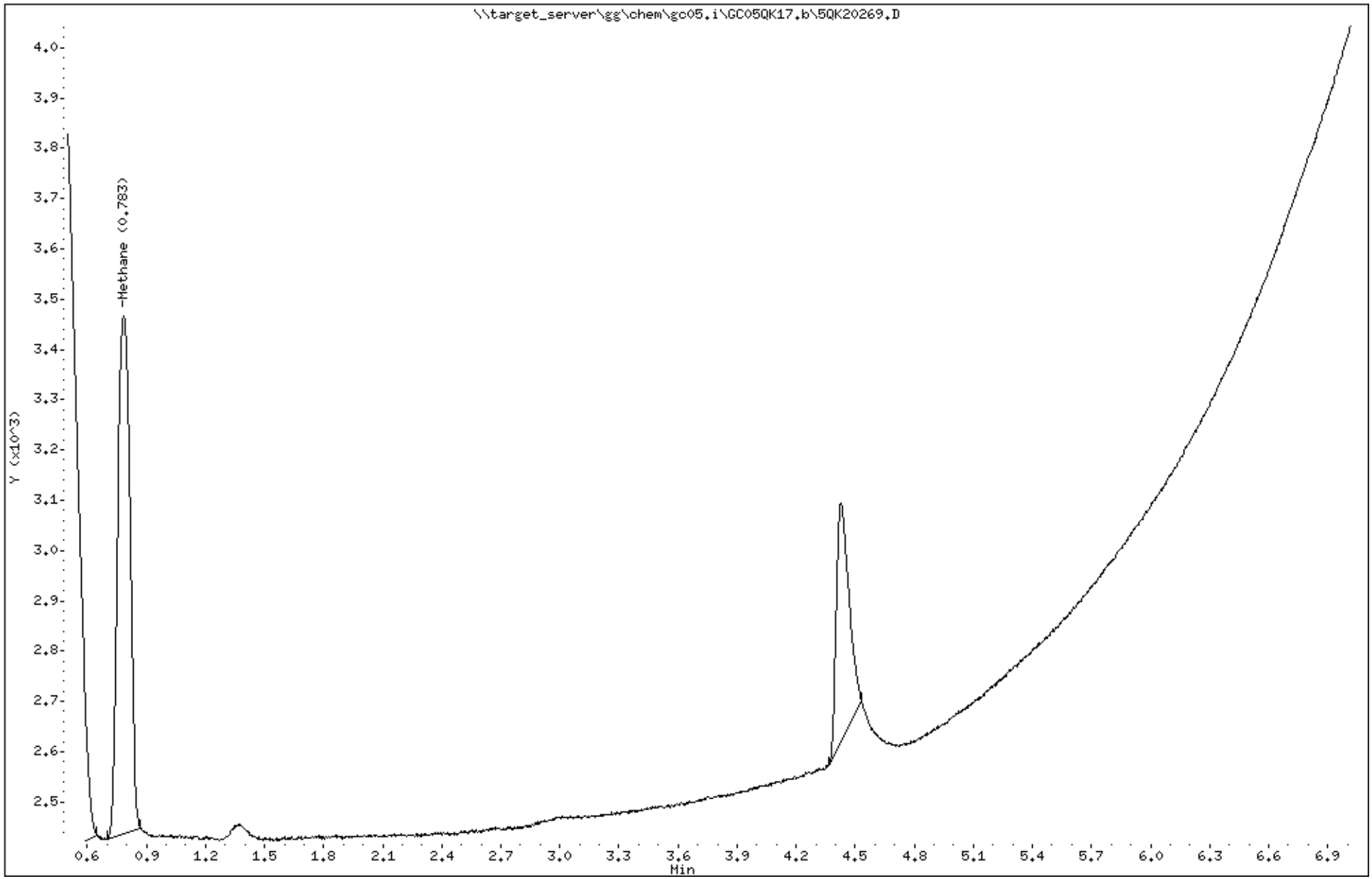
Data file : \\target_server\gg\chem\gc05.i\GC05QK17.b\5QK20269.D
Lab Smp Id: SQ6179-7 Client Smp ID: SY-OBMW8-110823
Inj Date : 17-NOV-2023 18:29
Operator : DL/SH Inst ID: gc05.i
Smp Info : SQ6179-7
Misc Info : WG345654,WG344993-4
Comment : RSK SOP 175
Method : \\target_server\gg\chem\gc05.i\GC05QK17.b\MEEB47A.m
Meth Date : 18-Nov-2023 06:37 dlewry Quant Type: ESTD
Cal Date : 07-NOV-2023 10:11 Cal File: 5QK20014.D
Als bottle: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSKSOP175-MEE.sub
Target Version: 4.12
Processing Host: V200T3

Concentration Formula: Amt * DF * 0.005/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	0.00500	sample purged (L)
Cpnd Variable		Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (PPM)	CONCENTRATIONS FINAL (PPM)	REVIEW CODE
1 Methane	0.783	0.760	0.023	4527	9.54107	9.54	

Data File: \\target_server\gg\chem\gc05.i\GC05QK17.b\5QK20269.D
Date : 17-NOV-2023 18:29
Client ID: SY-OBMW8-110823
Instrument: gc05.i
Sample Info: SQ6179-7
Purge Volume: 0.0
Operator: DL/SH
Column phase: Porapak Q
Column diameter: 0.00



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ANALYTICAL SERVICES

Report of Analytical Results

SDG: SQ6179
Lab ID: SQ6179-8
Client ID: SY-OBMW11-110823
Matrix: AQ
Lab File ID: 5QK20270.D

Sample Date: 08-NOV-23
Extract Date: 17-NOV-23
Extracted By: DL/SH
Extraction Method: RSK SOP 175
Lab Prep Batch: WG345654

Report Date: 01-DEC-23
Analysis Date: 17-NOV-23
Analyst: DL/SH
Analysis Method: RSK SOP 175 v.2
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Methane	J	5.3	ug/L	1	10.3	10.	2.6	5.2
Ethane	U	9.8	ug/L	1	13.1	13.	5.0	9.8
Ethene	U	9.8	ug/L	1	13.1	13.	5.0	9.8

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Data File: \\target_server\gg\chem\gc05.i\GC05QK17.b\5QK20270.D
Report Date: 01-Dec-2023 17:04

Katahdin Analytical Services

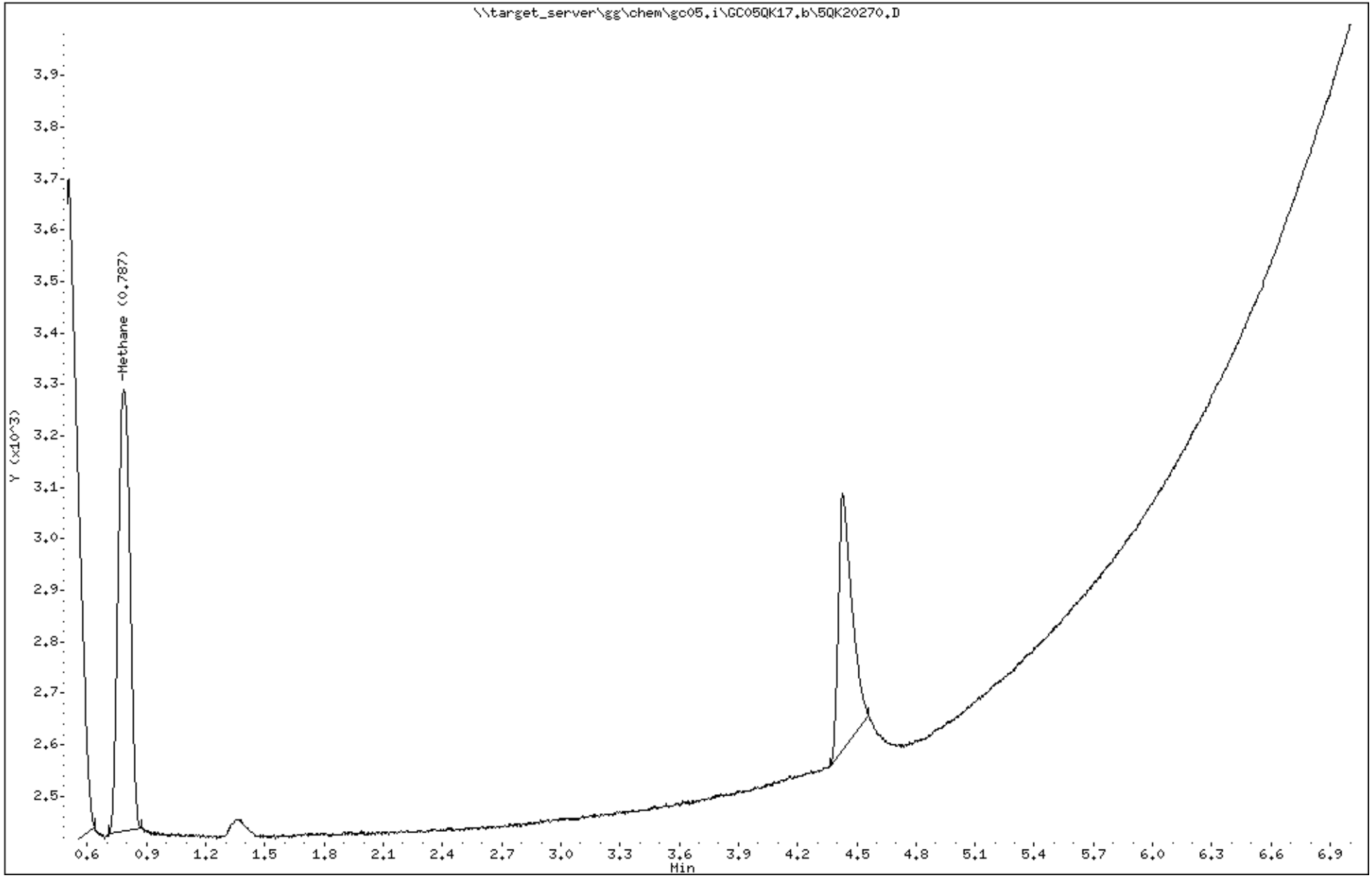
Data file : \\target_server\gg\chem\gc05.i\GC05QK17.b\5QK20270.D
Lab Smp Id: SQ6179-8 Client Smp ID: SY-OBMW11-110823
Inj Date : 17-NOV-2023 18:46
Operator : DL/SH Inst ID: gc05.i
Smp Info : SQ6179-8
Misc Info : WG345654,WG344993-4
Comment : RSK SOP 175
Method : \\target_server\gg\chem\gc05.i\GC05QK17.b\MEEB47A.m
Meth Date : 18-Nov-2023 06:37 dlewry Quant Type: ESTD
Cal Date : 07-NOV-2023 10:11 Cal File: 5QK20014.D
Als bottle: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSKSOP175-MEE.sub
Target Version: 4.12
Processing Host: V200T3

Concentration Formula: Amt * DF * 0.005/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	0.00500	sample purged (L)
Cpnd Variable		Local Compound Variable

					CONCENTRATIONS ON-COLUMN	CONCENTRATIONS FINAL	
Compounds	RT	EXP RT	DLT RT	RESPONSE	(PPM)	(PPM)	REVIEW CODE
1 Methane	0.786	0.760	0.026	3634	7.65899	7.66	

Data File: \\target_server\gg\chem\gc05.i\GC05QK17.b\5QK20270.D
Date : 17-NOV-2023 18:46
Client ID: SY-OBMW11-110823
Instrument: gc05.i
Sample Info: SQ6179-8
Purge Volume: 0.0
Operator: DL/SH
Column phase: Porapak Q
Column diameter: 0.00



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Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

SDG: SQ6179
Lab ID: SQ6179-9
Client ID: SY-OBMW110-110823
Matrix: AQ
Lab File ID: 5QK20271.D

Sample Date: 08-NOV-23
Extract Date: 17-NOV-23
Extracted By: DL/SH
Extraction Method: RSK SOP 175
Lab Prep Batch: WG345654

Report Date: 01-DEC-23
Analysis Date: 17-NOV-23
Analyst: DL/SH
Analysis Method: RSK SOP 175 v.2
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Methane	J	5.8	ug/L	1	10.3	10.	2.6	5.2
Ethane	U	9.8	ug/L	1	13.1	13.	5.0	9.8
Ethene	U	9.8	ug/L	1	13.1	13.	5.0	9.8

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Data File: \\target_server\gg\chem\gc05.i\GC05QK17.b\5QK20271.D
Report Date: 01-Dec-2023 17:04

Katahdin Analytical Services

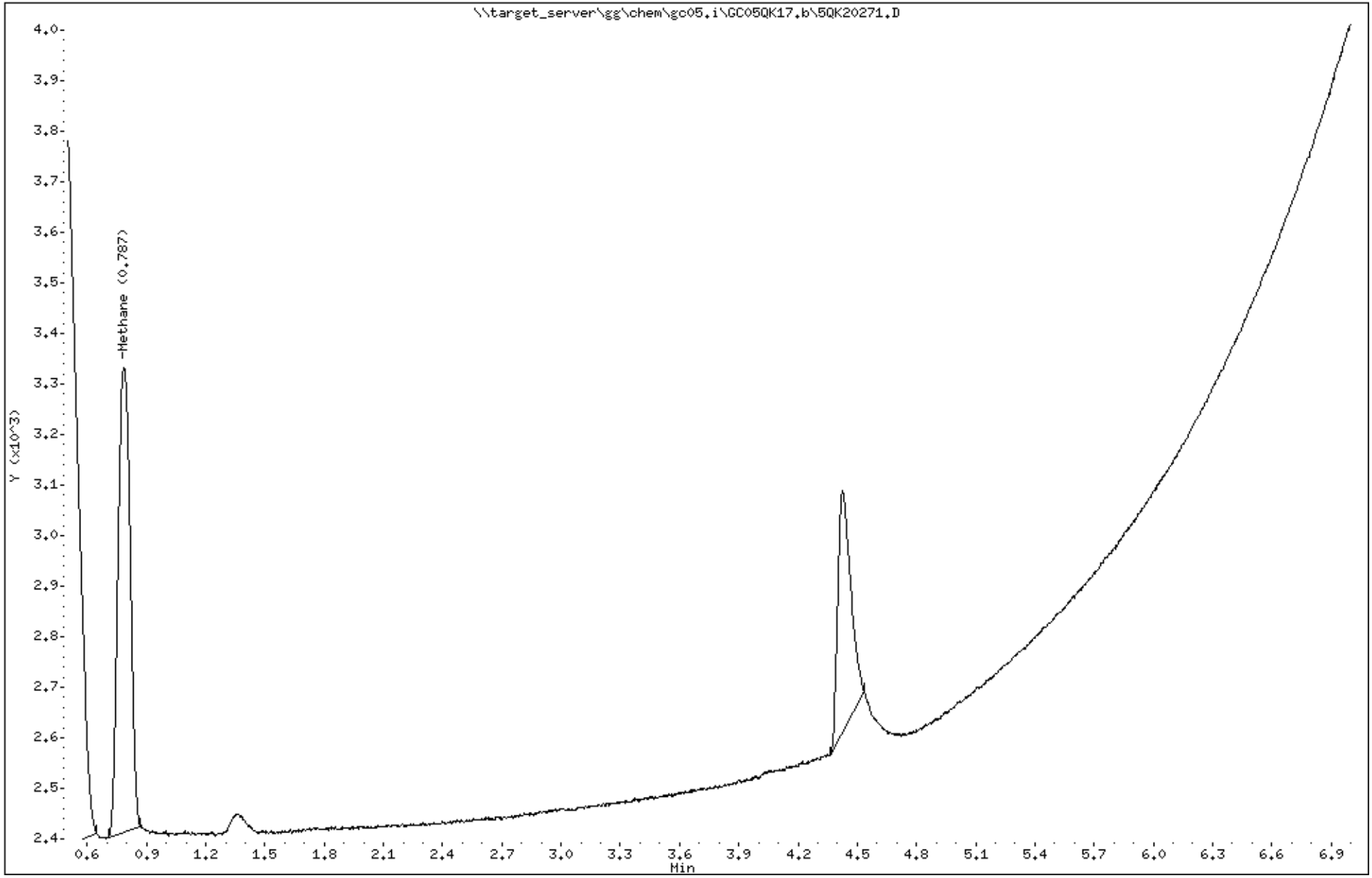
Data file : \\target_server\gg\chem\gc05.i\GC05QK17.b\5QK20271.D
Lab Smp Id: SQ6179-9 Client Smp ID: SY-OBMW110-110823
Inj Date : 17-NOV-2023 19:04
Operator : DL/SH Inst ID: gc05.i
Smp Info : SQ6179-9
Misc Info : WG345654,WG344993-4
Comment : RSK SOP 175
Method : \\target_server\gg\chem\gc05.i\GC05QK17.b\MEEB47A.m
Meth Date : 18-Nov-2023 06:37 dlewry Quant Type: ESTD
Cal Date : 07-NOV-2023 10:11 Cal File: 5QK20014.D
Als bottle: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSKSOP175-MEE.sub
Target Version: 4.12
Processing Host: V200T3

Concentration Formula: Amt * DF * 0.005/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	0.00500	sample purged (L)
Cpnd Variable		Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (PPM)	CONCENTRATIONS FINAL (PPM)	REVIEW CODE
1 Methane	0.786	0.760	0.026	4016	8.46409	8.46	

Data File: \\target_server\gg\chem\gc05.i\GC05QK17.b\5QK20271.D
Date : 17-NOV-2023 19:04
Client ID: SY-OBMW110-110823
Instrument: gc05.i
Sample Info: SQ6179-9
Purge Volume: 0.0
Operator: DL/SH
Column phase: Porapak Q
Column diameter: 0.00



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Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

SDG: SQ6179
Lab ID: SQ6179-10
Client ID: SY-OBMW3-110823
Matrix: AQ
Lab File ID: 5QK20273.D

Sample Date: 08-NOV-23
Extract Date: 17-NOV-23
Extracted By: DL/SH
Extraction Method: RSK SOP 175
Lab Prep Batch: WG345654

Report Date: 01-DEC-23
Analysis Date: 17-NOV-23
Analyst: DL/SH
Analysis Method: RSK SOP 175 v.2
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Methane	J	3.2	ug/L	1	10.3	10.	2.6	5.2
Ethane	U	9.8	ug/L	1	13.1	13.	5.0	9.8
Ethene	U	9.8	ug/L	1	13.1	13.	5.0	9.8

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Data File: \\target_server\gg\chem\gc05.i\GC05QK17.b\5QK20273.D
Report Date: 01-Dec-2023 17:04

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gc05.i\GC05QK17.b\5QK20273.D
Lab Smp Id: SQ6179-10 Client Smp ID: SY-OBMW3-110823
Inj Date : 17-NOV-2023 19:38
Operator : DL/SH Inst ID: gc05.i
Smp Info : SQ6179-10
Misc Info : WG345654,WG344993-4
Comment : RSK SOP 175
Method : \\target_server\gg\chem\gc05.i\GC05QK17.b\MEEB47A.m
Meth Date : 18-Nov-2023 06:37 dlewry Quant Type: ESTD
Cal Date : 07-NOV-2023 10:11 Cal File: 5QK20014.D
Als bottle: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSKSOP175-MEE.sub
Target Version: 4.12
Processing Host: V200T3

Concentration Formula: Amt * DF * 0.005/Vo * CpndVariable

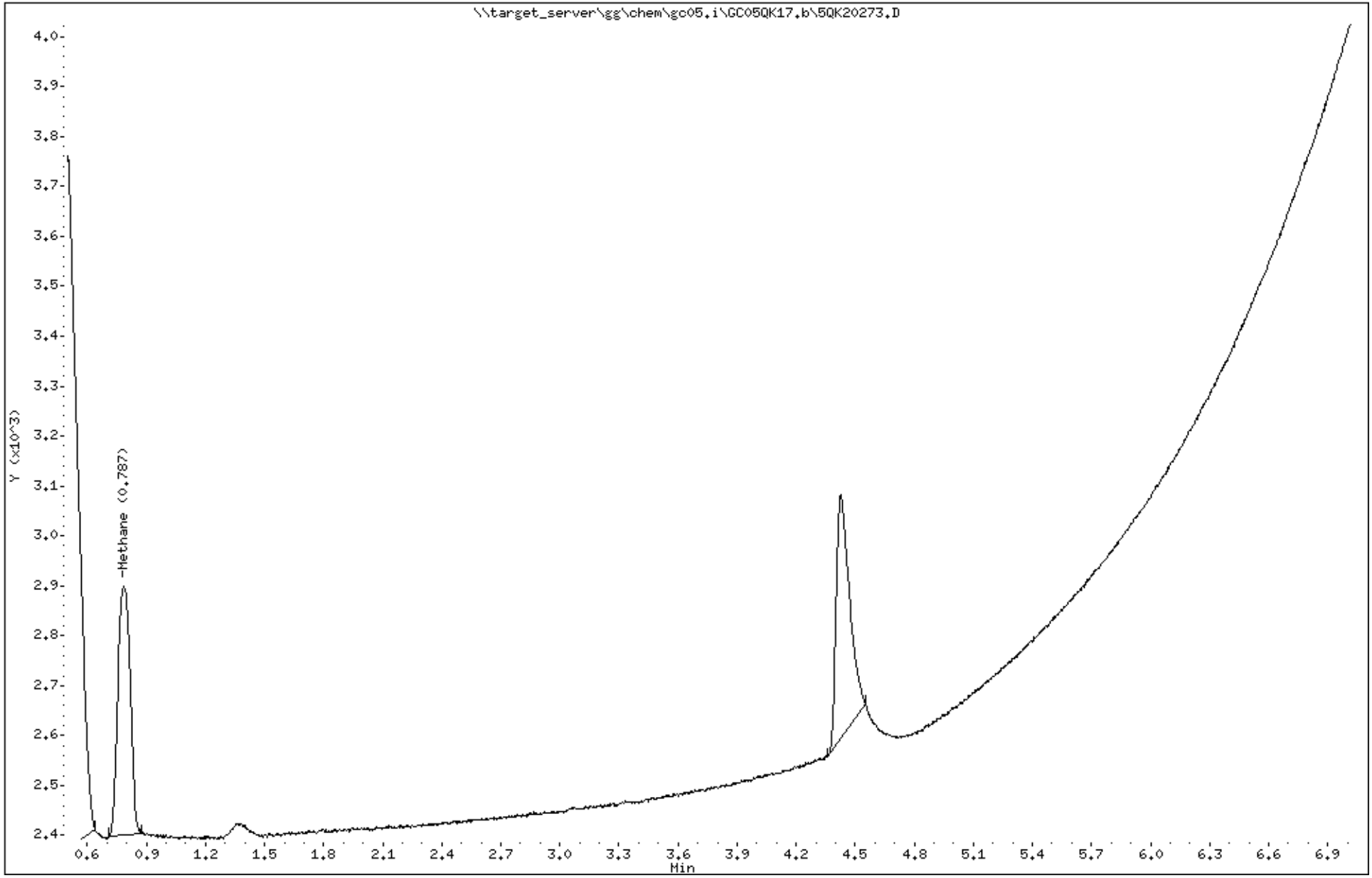
Name	Value	Description
DF	1.000	Dilution Factor
Vo	0.00500	sample purged (L)
Cpnd Variable		Local Compound Variable

					CONCENTRATIONS ON-COLUMN	FINAL	
Compounds	RT	EXP RT	DLT RT	RESPONSE	(PPM)	(PPM)	REVIEW CODE
1 Methane	0.786	0.760	0.026	2180	4.59455	4.59(a)	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: \\target_server\gg\chem\gc05.i\GC05QK17.b\5QK20273.D
Date : 17-NOV-2023 19:38
Client ID: SY-OBMW3-110823
Instrument: gc05.i
Sample Info: SQ6179-10
Purge Volume: 0.0
Operator: DL/SH
Column phase: Porapak Q
Column diameter: 0.00



Standards Data Section

Form 6
Initial Calibration Summary

Lab Name : Katahdin Analytical Services **SDG:** SQ6179

Instrument ID: GC05 **Column ID:** A

Lab File IDs : 5QK20008.D5QK20009.D5QK20010.D 5QK20011.D5QK20012.D5QK20013.D 5QK20014.D **Calibration Date(s):** 07-NOV-23 08:28 07-NOV-23 10:11

	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Level 7		Curve				%RSD or R^2		
	6.5000	10.0000	50.0000	100.0000	500.0000	1000.0000	1500.0000		Type	b	m1	m2	Result	Limit	
Methane	635	558	472	453	437	420	346		AVG		474		19.95879	25	O
Ethene	830	809	836	826	811	789	654		AVG		793		8.01360	25	O
Ethane	862	837	865	855	843	821	677		AVG		823		8.03115	25	O

Legend: O = Acceptable; W = Failed %RSD Value; X = Failed R^2 Value; Y = Failed Minimum RF

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sales@katahdinlab.com

Data File: \\target_server\gg\chem\gc05.i\GC05QK07.b\5QK20015.D
Report Date: 18-Nov-2023 10:15

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RECOVERY REPORT

Client Name: Client SDG: SDGa00256
Sample Matrix: LIQUID Fraction: VOA
Lab Smp Id: WG344993-8
Level: LOW Operator: DL
Data Type: GC DATA SampleType: INDSOURCE
SpikeList File: ind.spk Quant Type: ESTD
Sublist File: all.sub
Method File: \\target_server\gg\chem\gc05.i\GC05QK07.b\MEEB47A.m
Misc Info: WG344993,WG344993-4

SPIKE COMPOUND	CONC ADDED PPM	CONC RECOVERED PPM	% RECOVERED	LIMITS
1 Methane	100	88.6	88.59	85-115
2 Ethene	100	96.0	96.05	85-115
3 Ethane	100	93.9	93.86	85-115

Data File: \\target_server\gg\chem\gc05.i\GC05QK07.b\5QK20008.D
Report Date: 18-Nov-2023 10:15

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gc05.i\GC05QK07.b\5QK20008.D
Lab Smp Id: WG344993-1
Inj Date : 07-NOV-2023 08:28
Operator : DL   Inst ID: gc05.i
Smp Info : WG344993-1
Misc Info :
Comment   : RSK SOP 175
Method   : \\target_server\gg\chem\gc05.i\GC05QK07.b\MEEB47A.m
Meth Date : 08-Nov-2023 06:10 dlewry   Quant Type: ESTD
Cal Date : 07-NOV-2023 08:28   Cal File: 5QK20008.D
Als bottle: 1   Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: Falcon   Compound Sublist: all.sub
Target Version: 4.12

Concentration Formula: Amt * DF * 0.005/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	0.00500	sample purged (L)
Cpnd Variable		Local Compound Variable

DL

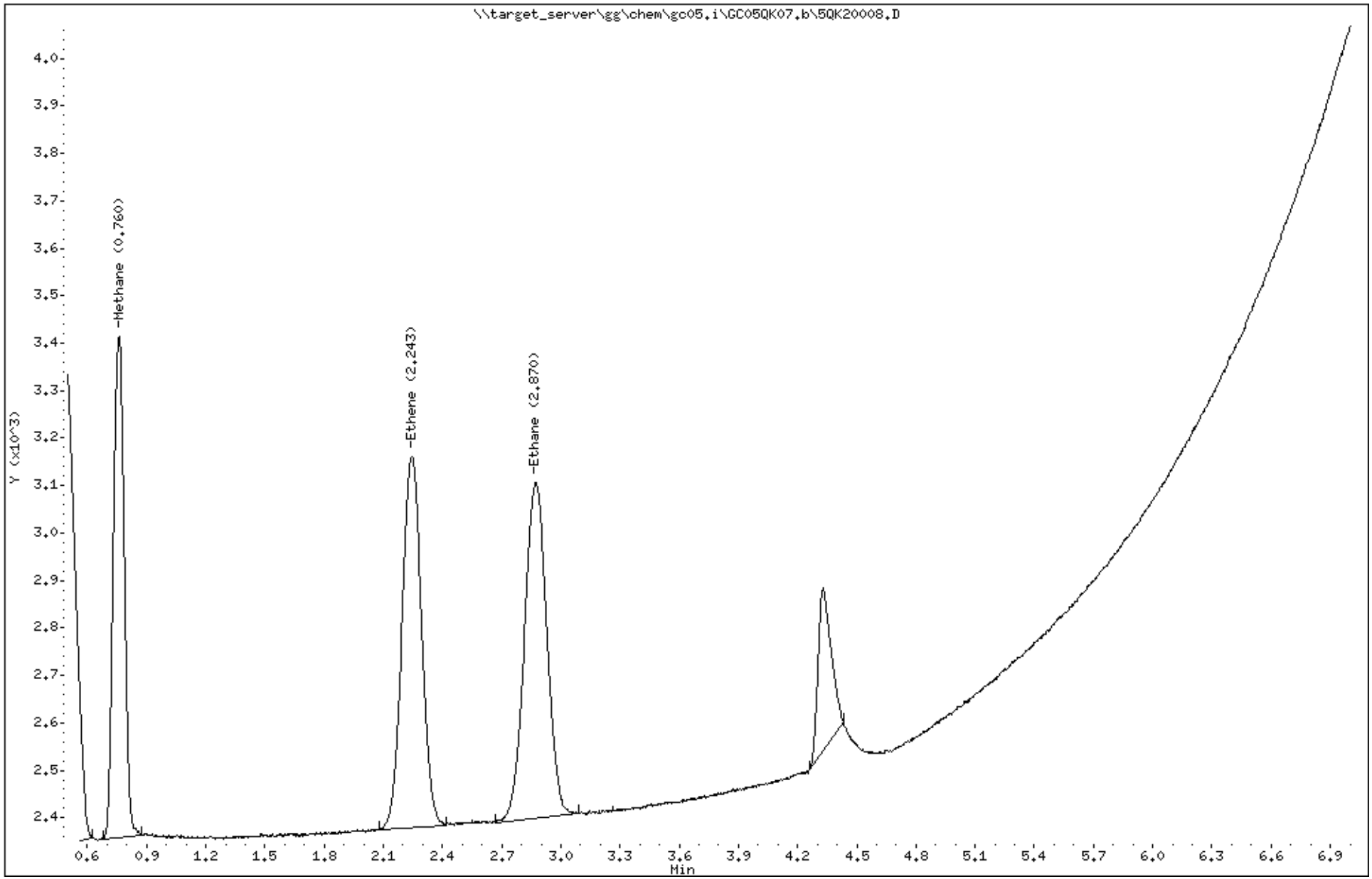
10:16 am, Nov 18, 2023

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (PPM)	ON-COL (PPM)	REVIEW CODE
1 Methane	0.760	0.760	0.000	4126	6.50000	6.50(aM)	M9
2 Ethene	2.243	2.317	-0.074	5395	6.50000	6.50(aM)	M9
3 Ethane	2.870	2.957	-0.087	5600	6.50000	6.50(aM)	M9

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

Data File: \\target_server\gg\chem\gc05.i\GC05QK07.b\5QK20008.D
Date : 07-NOV-2023 08:28
Client ID:
Instrument: gc05.i
Sample Info: WG344993-1
Purge Volume: 0.0
Operator: DL
Column phase: Porapak Q
Column diameter: 0.00



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Data File: \\target_server\gg\chem\gc05.i\GC05QK07.b\5QK20009.D
Report Date: 18-Nov-2023 10:15

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gc05.i\GC05QK07.b\5QK20009.D
Lab Smp Id: WG344993-2
Inj Date : 07-NOV-2023 08:46
Operator : DL   Inst ID: gc05.i
Smp Info : WG344993-2
Misc Info :
Comment   : RSK SOP 175
Method   : \\target_server\gg\chem\gc05.i\GC05QK07.b\MEEB47A.m
Meth Date : 08-Nov-2023 06:10 dlewry   Quant Type: ESTD
Cal Date : 07-NOV-2023 08:46   Cal File: 5QK20009.D
Als bottle: 1   Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: Falcon   Compound Sublist: all.sub
Target Version: 4.12
Processing Host: V200T3

Concentration Formula: Amt * DF * 0.005/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	0.00500	sample purged (L)
Cpnd Variable		Local Compound Variable

DL

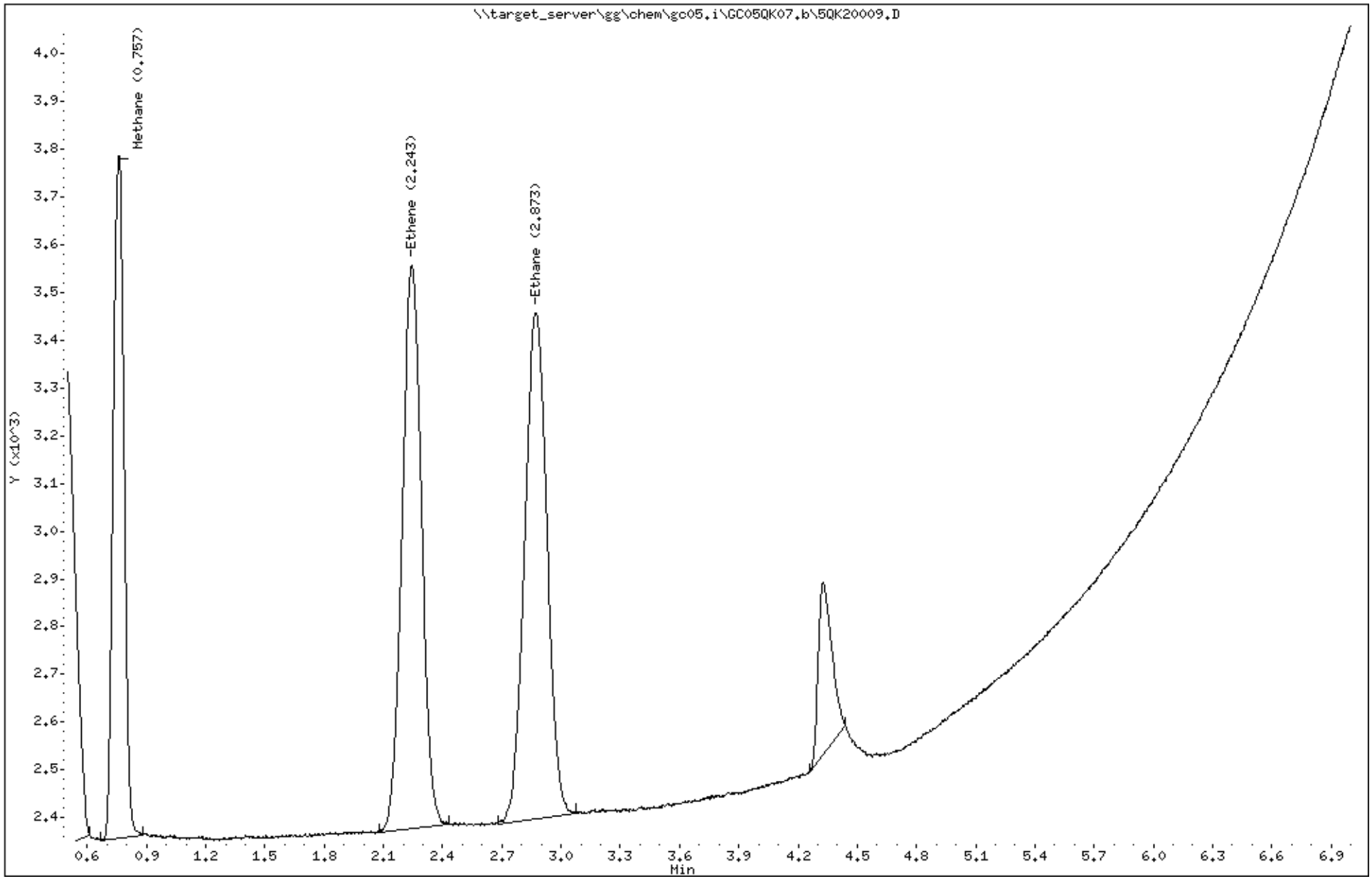
10:16 am, Nov 18, 2023

					AMOUNTS		
					CAL-AMT	ON-COL	
Compounds	RT	EXP RT	DLT RT	RESPONSE	(PPM)	(PPM)	REVIEW CODE
1 Methane	0.756	0.760	-0.004	5575	10.0000	12.2(M)	M9
2 Ethene	2.243	2.317	-0.074	8088	10.0000	13.1(M)	M9
3 Ethane	2.873	2.957	-0.084	8367	10.0000	13.1(M)	M9

QC Flag Legend

M - Compound response manually integrated.

Data File: \\target_server\gg\chem\gc05.i\GC05QK07.b\5QK20009.D
Date : 07-NOV-2023 08:46
Client ID:
Instrument: gc05.i
Sample Info: WG344993-2
Purge Volume: 0.0
Operator: DL
Column phase: Porapak Q
Column diameter: 0.00



Katahdin Analytical Services SQ6179 Page 393 of 740

Data File: \\target_server\gg\chem\gc05.i\GC05QK07.b\5QK20010.D
Report Date: 18-Nov-2023 10:15

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gc05.i\GC05QK07.b\5QK20010.D
Lab Smp Id: WG344993-3
Inj Date : 07-NOV-2023 09:03
Operator : DL   Inst ID: gc05.i
Smp Info : WG344993-3
Misc Info :
Comment   : RSK SOP 175
Method   : \\target_server\gg\chem\gc05.i\GC05QK07.b\MEEB47A.m
Meth Date : 08-Nov-2023 06:10 dlewry   Quant Type: ESTD
Cal Date : 07-NOV-2023 09:03   Cal File: 5QK20010.D
Als bottle: 1   Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: Falcon   Compound Sublist: all.sub
Target Version: 4.12
Processing Host: V200T3

Concentration Formula: Amt * DF * 0.005/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	0.00500	sample purged (L)
Cpnd Variable		Local Compound Variable

DL

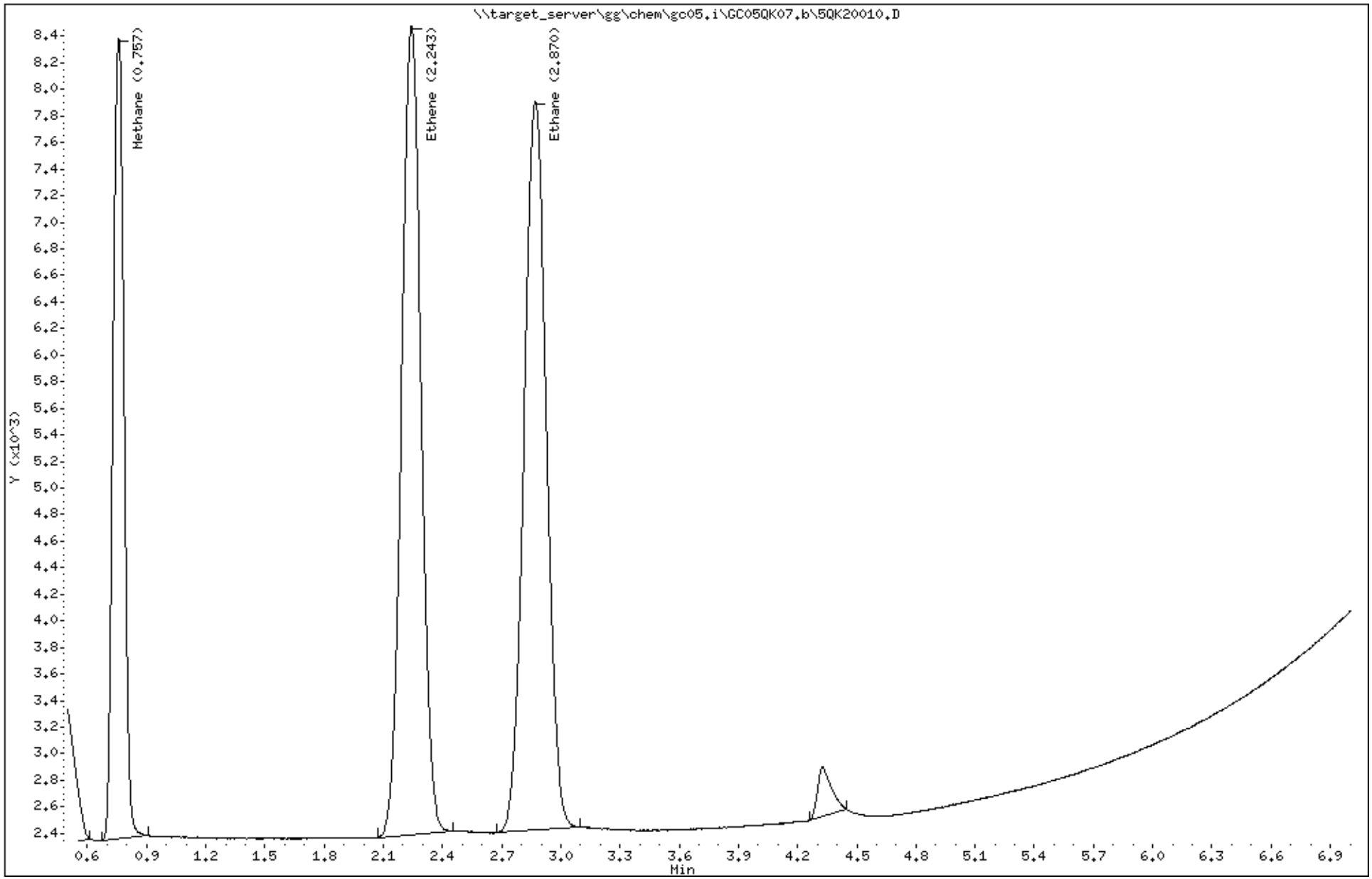
10:16 am, Nov 18, 2023

					AMOUNTS		
					CAL-AMT	ON-COL	
Compounds	RT	EXP RT	DLT RT	RESPONSE	(PPM)	(PPM)	REVIEW CODE
1 Methane	0.756	0.760	-0.004	23588	50.0000	49.8(M)	M9
2 Ethene	2.243	2.317	-0.074	41800	50.0000	50.7(M)	M9
3 Ethane	2.870	2.957	-0.087	43269	50.0000	50.6(M)	M9

QC Flag Legend

M - Compound response manually integrated.

Data File: \\target_server\gg\chem\gc05.i\GC05QK07.b\5QK20010.D
Date : 07-NOV-2023 09:03
Client ID:
Instrument: gc05.i
Sample Info: WG344993-3
Purge Volume: 0.0
Operator: DL
Column phase: Porapak Q
Column diameter: 0.00



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Data File: \\target_server\gg\chem\gc05.i\GC05QK07.b\5QK20011.D
Report Date: 18-Nov-2023 10:15

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gc05.i\GC05QK07.b\5QK20011.D
Lab Smp Id: WG344993-4
Inj Date : 07-NOV-2023 09:20
Operator : DL   Inst ID: gc05.i
Smp Info : WG344993-4
Misc Info :
Comment   : RSK SOP 175
Method   : \\target_server\gg\chem\gc05.i\GC05QK07.b\MEEB47A.m
Meth Date : 08-Nov-2023 06:10 dlewry   Quant Type: ESTD
Cal Date : 07-NOV-2023 09:20   Cal File: 5QK20011.D
Als bottle: 1   Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: Falcon   Compound Sublist: all.sub
Target Version: 4.12
Processing Host: V200T3

Concentration Formula: Amt * DF * 0.005/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	0.00500	sample purged (L)
Cpnd Variable		Local Compound Variable

DL

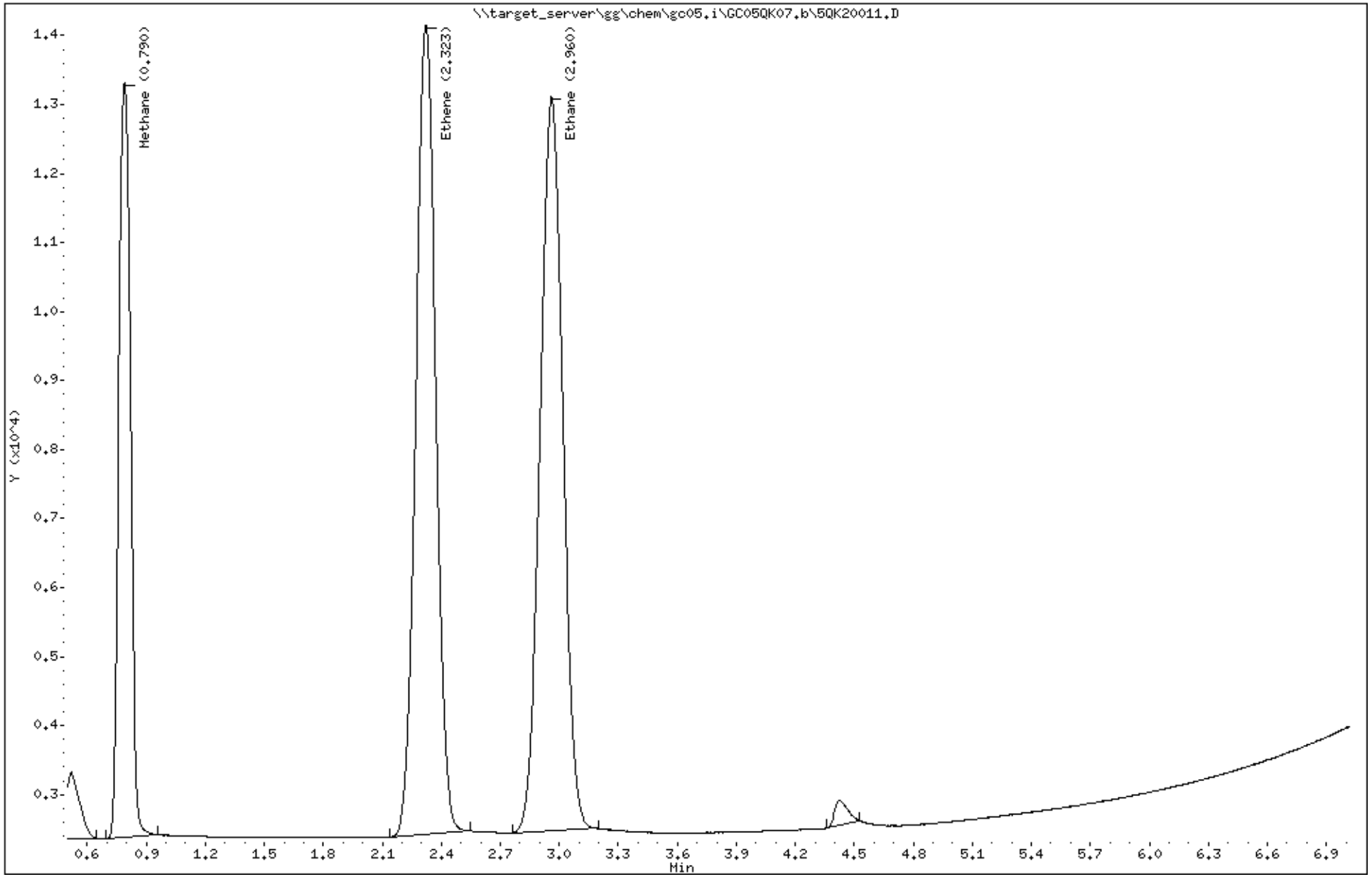
10:16 am, Nov 18, 2023

					AMOUNTS		
					CAL-AMT	ON-COL	
Compounds	RT	EXP RT	DLT RT	RESPONSE	(PPM)	(PPM)	REVIEW CODE
1 Methane	0.790	0.760	0.030	45348	100.000	95.6(M)	M9
2 Ethene	2.323	2.317	0.006	82636	100.000	100(M)	M9
3 Ethane	2.960	2.957	0.003	85497	100.000	100(M)	M9

QC Flag Legend

M - Compound response manually integrated.

Data File: \\target_server\gg\chem\gc05.i\GC05QK07.b\5QK20011.D
Date : 07-NOV-2023 09:20
Client ID:
Instrument: gc05.i
Sample Info: WG344993-4
Purge Volume: 0.0
Operator: DL
Column phase: Porapak Q
Column diameter: 0.00



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Report Date: 18-Nov-2023 10:15

Katahdin Analytical Services

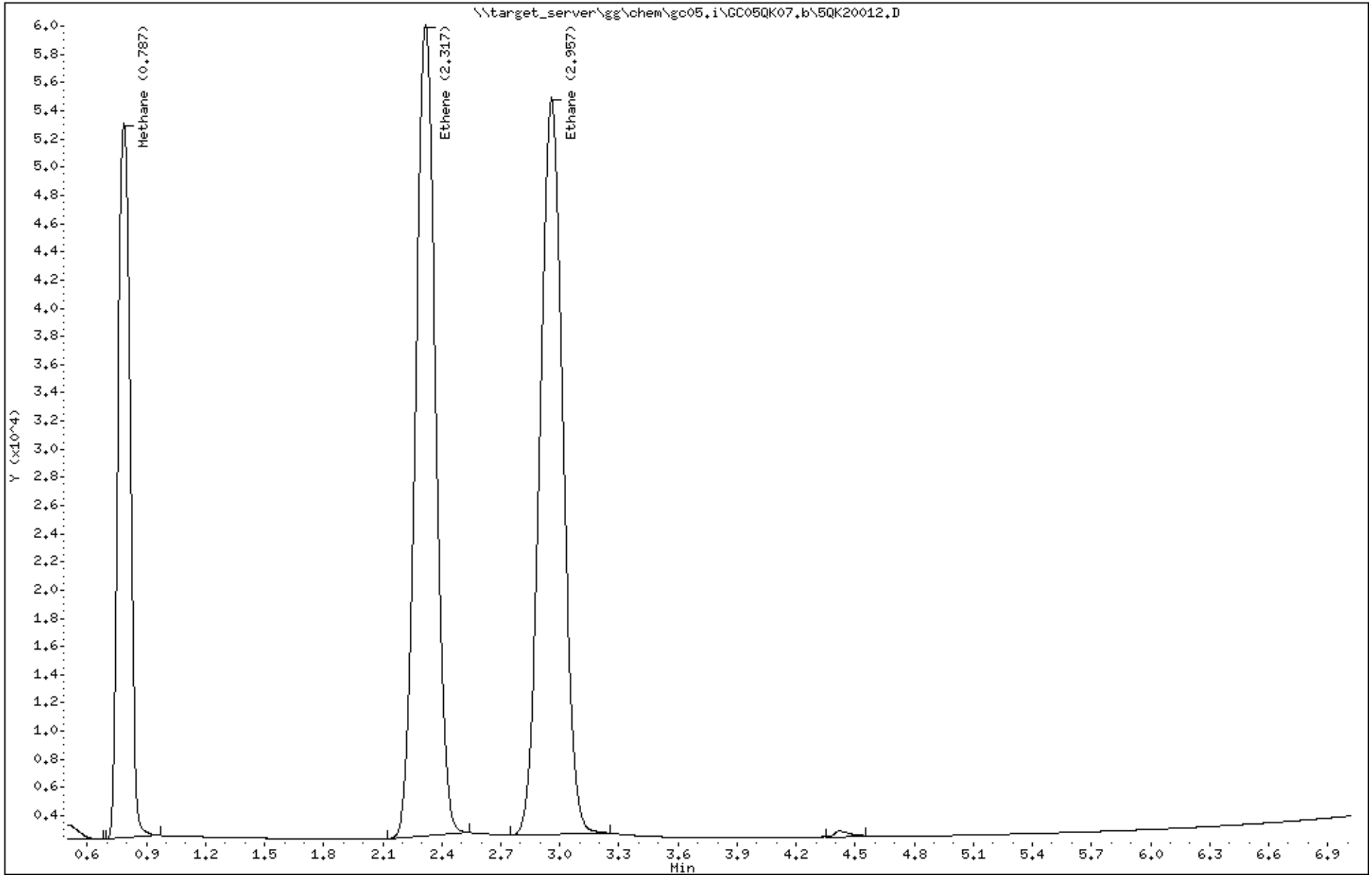
Data file : \\target_server\gg\chem\gc05.i\GC05QK07.b\5QK20012.D
Lab Smp Id: WG344993-5
Inj Date : 07-NOV-2023 09:37
Operator : DL   Inst ID: gc05.i
Smp Info : WG344993-5
Misc Info :
Comment   : RSK SOP 175
Method   : \\target_server\gg\chem\gc05.i\GC05QK07.b\MEEB47A.m
Meth Date : 08-Nov-2023 06:10 dlewry   Quant Type: ESTD
Cal Date : 07-NOV-2023 09:37   Cal File: 5QK20012.D
Als bottle: 1   Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: Falcon   Compound Sublist: all.sub
Target Version: 4.12
Processing Host: V200T3

Concentration Formula: Amt * DF * 0.005/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	0.00500	sample purged (L)
Cpnd Variable		Local Compound Variable

					AMOUNTS		
					CAL-AMT	ON-COL	
Compounds	RT	EXP RT	DLT RT	RESPONSE	(PPM)	(PPM)	REVIEW CODE
1 Methane	0.786	0.760	0.026	218681	500.000	461	
2 Ethene	2.316	2.317	-0.001	405356	500.000	493	
3 Ethane	2.956	2.957	-0.001	421667	500.000	495	

Data File: \\target_server\gg\chem\gc05.i\GC05QK07.b\5QK20012.D
Date : 07-NOV-2023 09:37
Client ID:
Instrument: gc05.i
Sample Info: WG344993-5
Purge Volume: 0.0
Operator: DL
Column phase: Porapak Q
Column diameter: 0.00



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Data File: \\target_server\gg\chem\gc05.i\GC05QK07.b\5QK20013.D
Report Date: 18-Nov-2023 10:15

Katahdin Analytical Services

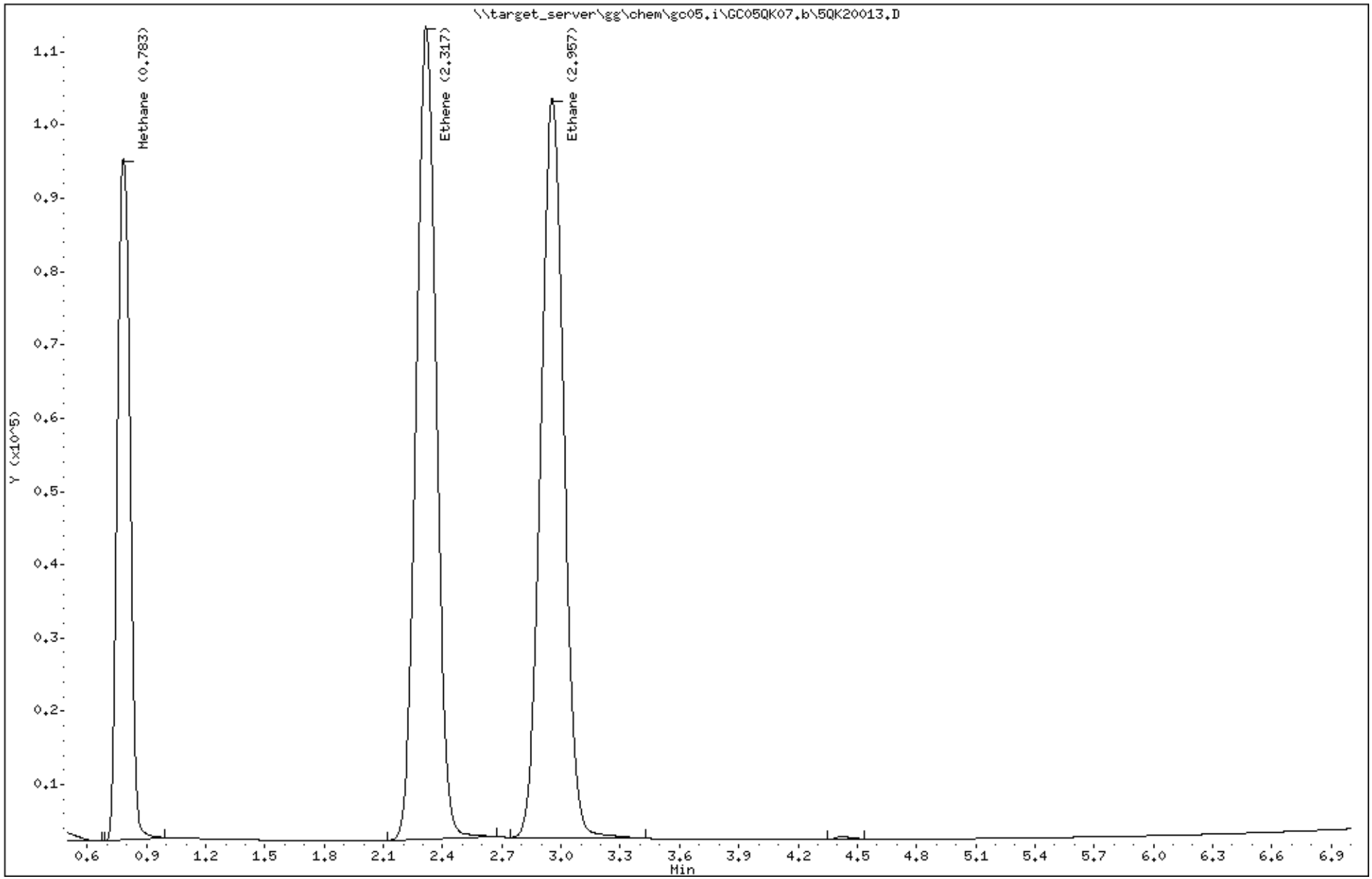
Data file : \\target_server\gg\chem\gc05.i\GC05QK07.b\5QK20013.D
Lab Smp Id: WG344993-6
Inj Date : 07-NOV-2023 09:54
Operator : DL   Inst ID: gc05.i
Smp Info : WG344993-6
Misc Info :
Comment   : RSK SOP 175
Method   : \\target_server\gg\chem\gc05.i\GC05QK07.b\MEEB47A.m
Meth Date : 08-Nov-2023 06:10 dlewry   Quant Type: ESTD
Cal Date : 07-NOV-2023 09:54   Cal File: 5QK20013.D
Als bottle: 1   Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: Falcon   Compound Sublist: all.sub
Target Version: 4.12
Processing Host: V200T3

Concentration Formula: Amt * DF * 0.005/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	0.00500	sample purged (L)
Cpnd Variable		Local Compound Variable

					AMOUNTS		
					CAL-AMT	ON-COL	
Compounds	RT	EXP RT	DLT RT	RESPONSE	(PPM)	(PPM)	REVIEW CODE
1 Methane	0.783	0.760	0.023	420262	1000.00	886	
2 Ethene	2.316	2.317	-0.001	788519	1000.00	965	
3 Ethane	2.956	2.957	-0.001	820746	1000.00	969	

Data File: \\target_server\gg\chem\gc05.i\GC05QK07.b\5QK20013.D
Date : 07-NOV-2023 09:54
Client ID:
Instrument: gc05.i
Sample Info: WG344993-6
Purge Volume: 0.0
Operator: DL
Column phase: Porapak Q
Column diameter: 0.00



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Data File: \\target_server\gg\chem\gc05.i\GC05QK07.b\5QK20014.D
Report Date: 13-Dec-2023 12:30

Katahdin Analytical Services

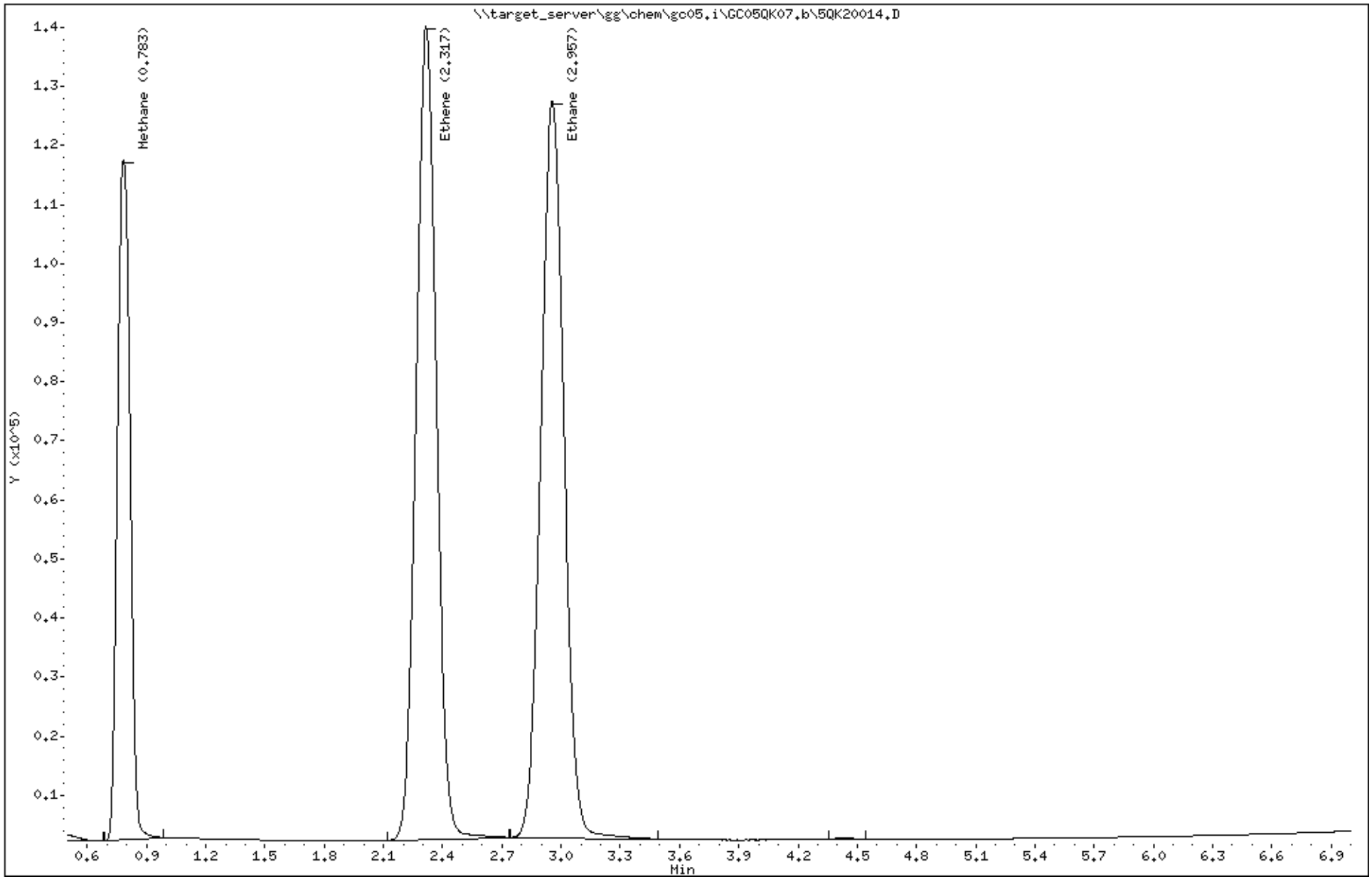
Data file : \\target_server\gg\chem\gc05.i\GC05QK07.b\5QK20014.D
Lab Smp Id: WG344993-7
Inj Date : 07-NOV-2023 10:11
Operator : DL   Inst ID: gc05.i
Smp Info : WG344993-7
Misc Info :
Comment   : RSK SOP 175
Method   : \\target_server\gg\chem\gc05.i\GC05QK07.b\MEEB47A.m
Meth Date : 08-Nov-2023 06:10 dlewry   Quant Type: ESTD
Cal Date : 07-NOV-2023 10:11   Cal File: 5QK20014.D
Als bottle: 1   Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: Falcon   Compound Sublist: all.sub
Target Version: 4.12
Processing Host: V200T3

Concentration Formula: Amt * DF * 0.005/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	0.00500	sample purged (L)
Cpnd Variable		Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (PPM)	AMOUNTS ON-COL (PPM)	REVIEW CODE
1 Methane	0.783	0.760	0.023	519291	1500.00	1090	
2 Ethene	2.316	2.317	-0.001	980865	1500.00	1240	
3 Ethane	2.956	2.957	-0.001	1015625	1500.00	1230	

Data File: \\target_server\gg\chem\gc05.i\GC05QK07.b\5QK20014.D
Date : 07-NOV-2023 10:11
Client ID:
Instrument: gc05.i
Sample Info: WG344993-7
Purge Volume: 0.0
Operator: DL
Column phase: Porapak Q
Column diameter: 0.00



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Data File: \\target_server\gg\chem\gc05.i\GC05QK07.b\5QK20015.D
Report Date: 18-Nov-2023 10:15

Katahdin Analytical Services

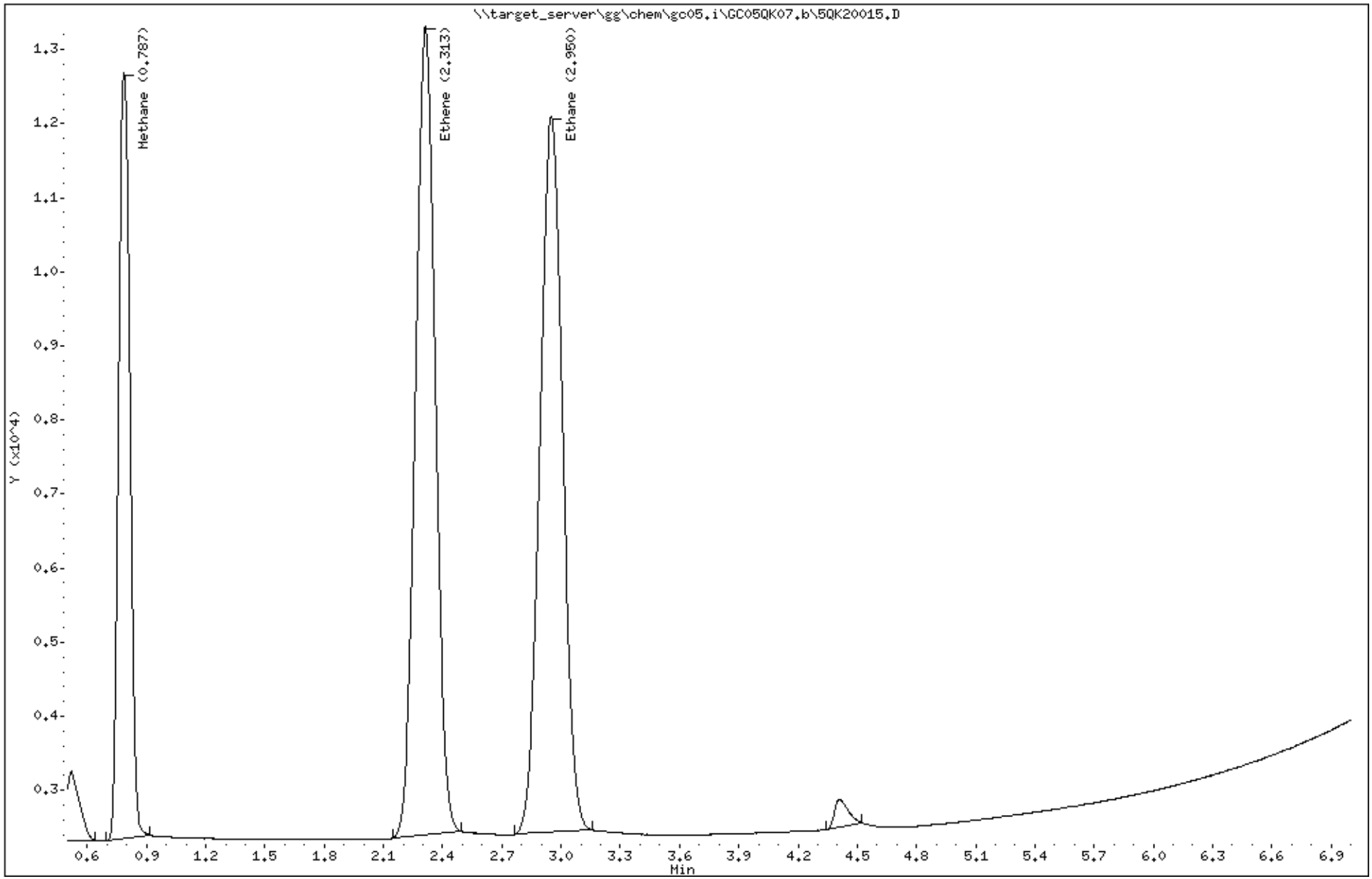
Data file : \\target_server\gg\chem\gc05.i\GC05QK07.b\5QK20015.D
Lab Smp Id: WG344993-8
Inj Date : 07-NOV-2023 11:39
Operator : DL   Inst ID: gc05.i
Smp Info : WG344993-8
Misc Info : WG344993,WG344993-4
Comment   : RSK SOP 175
Method   : \\target_server\gg\chem\gc05.i\GC05QK07.b\MEEB47A.m
Meth Date : 08-Nov-2023 06:10 dlewry   Quant Type: ESTD
Cal Date : 07-NOV-2023 10:11   Cal File: 5QK20014.D
Als bottle: 1   QC Sample: INDSOURCE
Dil Factor: 1.00000
Integrator: Falcon   Compound Sublist: all.sub
Target Version: 4.12
Processing Host: V200T3

Concentration Formula: Amt * DF * 0.005/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	0.00500	sample purged (L)
Cpnd Variable		Local Compound Variable

					CONCENTRATIONS ON-COLUMN (PPM)	CONCENTRATIONS FINAL (PPM)	
Compounds	RT	EXP RT	DLT RT	RESPONSE			REVIEW CODE
1 Methane	0.786	0.760	0.026	42036	88.5947	88.6	
2 Ethene	2.313	2.317	-0.004	76214	96.0513	96.0	
3 Ethane	2.950	2.957	-0.007	77231	93.8612	93.9	

Data File: \\target_server\gg\chem\gc05.i\GC05QK07.b\5QK20015.D
Date : 07-NOV-2023 11:39
Client ID:
Instrument: gc05.i
Sample Info: WG344993-8
Purge Volume: 0.0
Operator: DL
Column phase: Porapak Q
Column diameter: 0.00



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Form 7
Calibration Verification Summary

Lab Name: Katahdin Analytical Services
SDG: SQ6179
Lab ID: WG345654-4
Analytical Date: 11/17/23 14:55
Lab File ID: 5QK20259.D
Instrument ID: GC05
Initial Calibration Date(s): 11/07/23 08:28 11/07/23 10:11
Column ID: A

Compound	RRF/Amount	RF100	CCAL RRF100	Min RF	%D/ %Drift	Max %D/ %Drift	Curve Type	Qual
Methane	474	445	445	0.100	-6.20376	15.000	Averaged	
Ethene	793	804	804	0.100	1.31050	15.000	Averaged	
Ethane	823	836	836	0.100	1.64292	15.000	Averaged	

*** = Compound out of QC criteria**

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http://katahdinlab.com
sales@katahdinlab.com

Data File: \\target_server\gg\chem\gc05.i\GC05QK17.b\5QK20259.D
Report Date: 01-Dec-2023 17:04

Katahdin Analytical Services

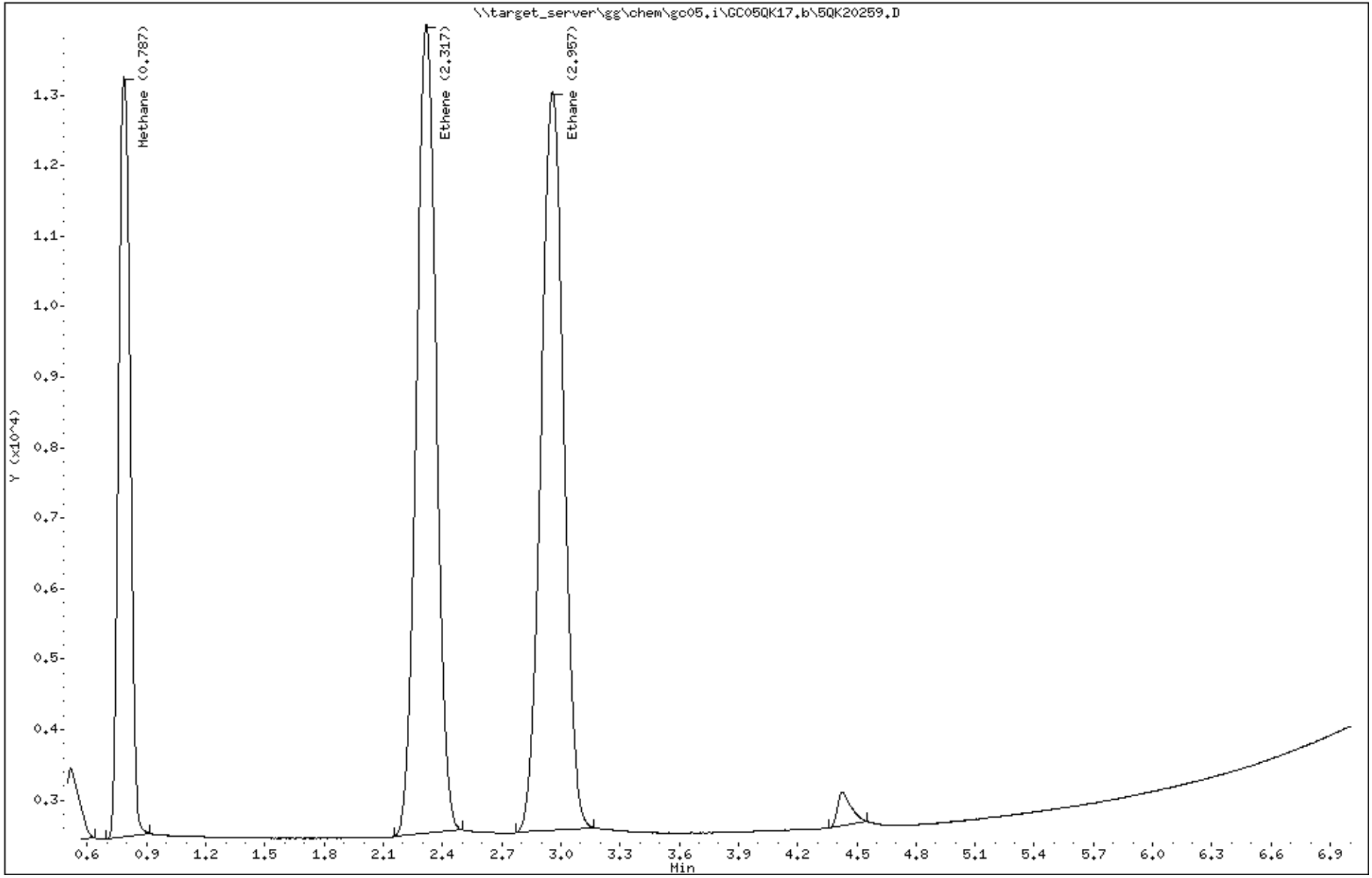
Data file : \\target_server\gg\chem\gc05.i\GC05QK17.b\5QK20259.D
Lab Smp Id: WG345593-10
Inj Date : 17-NOV-2023 14:55
Operator : DL/SH   Inst ID: gc05.i
Smp Info : WG345654-4
Misc Info : WG345654,WG344993-4,SQ6179-1
Comment   : RSK SOP 175
Method   : \\target_server\gg\chem\gc05.i\GC05QK17.b\MEEB47A.m
Meth Date : 18-Nov-2023 06:37 dlewry   Quant Type: ESTD
Cal Date : 07-NOV-2023 10:11   Cal File: 5QK20014.D
Als bottle: 1   Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon   Compound Sublist: all.sub
Target Version: 4.12
Processing Host: V200T3

Concentration Formula: Amt * DF * 0.005/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	0.00500	sample purged (L)
Cpnd Variable		Local Compound Variable

					AMOUNTS		
					CAL-AMT	ON-COL	
Compounds	RT	EXP RT	DLT RT	RESPONSE	(PPM)	(PPM)	REVIEW CODE
1 Methane	0.786	0.760	0.026	44504	100.000	93.8	
2 Ethene	2.316	2.317	-0.001	80387	100.000	101	
3 Ethane	2.956	2.957	-0.001	83634	100.000	102	

Data File: \\target_server\gg\chem\gc05.i\GC05QK17.b\5QK20259.D
Date : 17-NOV-2023 14:55
Client ID:
Instrument: gc05.i
Sample Info: WG345654-4
Purge Volume: 0.0
Operator: DL/SH
Column phase: Porapak Q
Column diameter: 0.00



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Form 7
Calibration Verification Summary

Lab Name: Katahdin Analytical Services
SDG: SQ6179
Lab ID: WG345654-5
Analytical Date: 11/17/23 19:21
Lab File ID: 5QK20272.D
Instrument ID: GC05
Initial Calibration Date(s): 11/07/23 08:28 11/07/23 10:11
Column ID: A

Compound	RRF/Amount	RF100	CCAL RRF100	Min RF	%D/ %Drift	Max %D/ %Drift	Curve Type	Qual
Methane	474	426	426	0.100	-10.22083	15.000	Averaged	
Ethene	793	769	769	0.100	-3.05765	15.000	Averaged	
Ethane	823	799	799	0.100	-2.89512	15.000	Averaged	

*** = Compound out of QC criteria**

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http://katahdinlab.com
sales@katahdinlab.com

Data File: \\target_server\gg\chem\gc05.i\GC05QK17.b\5QK20272.D
Report Date: 01-Dec-2023 17:04

Katahdin Analytical Services

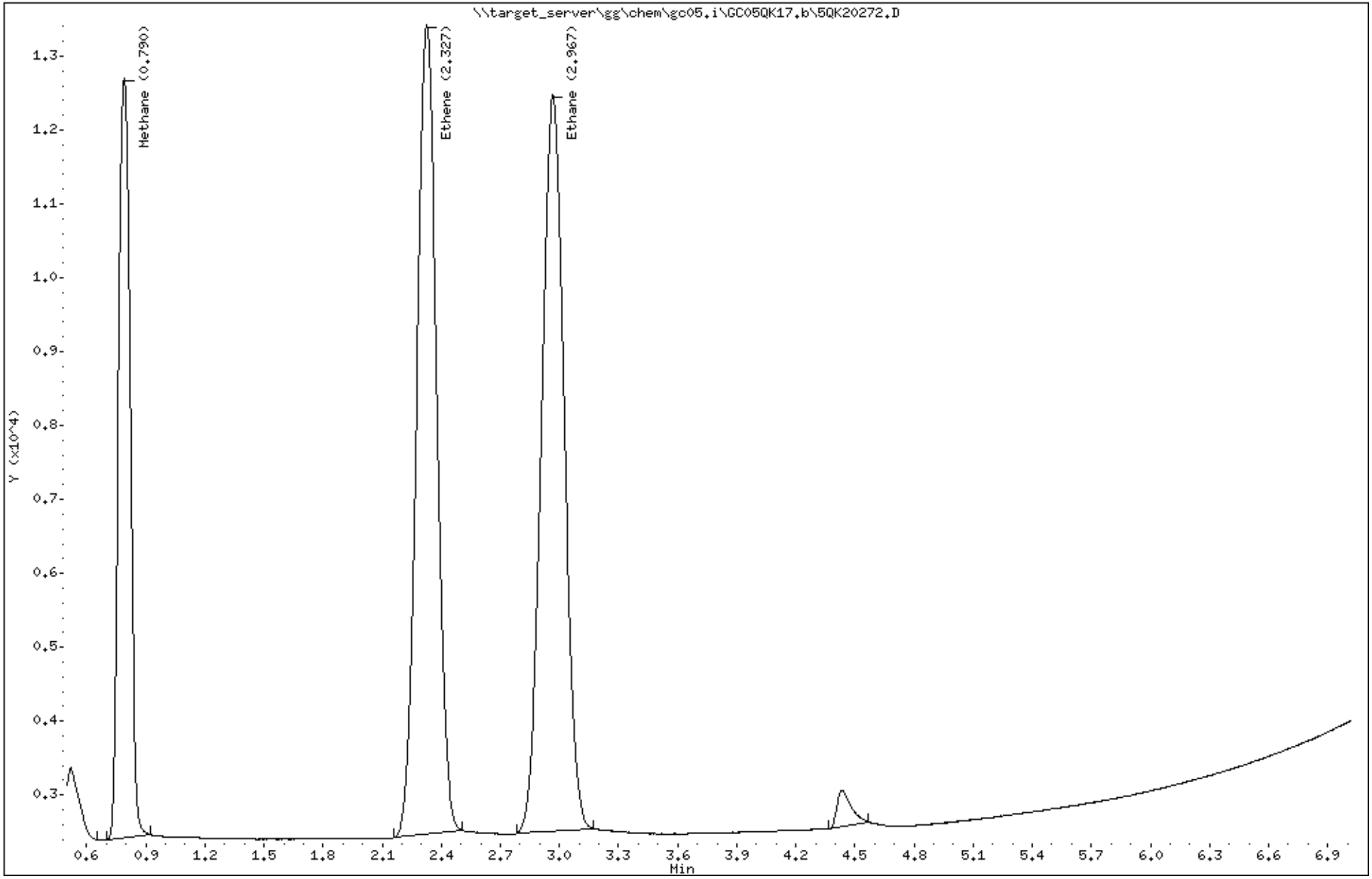
Data file : \\target_server\gg\chem\gc05.i\GC05QK17.b\5QK20272.D
Lab Smp Id: WG345654-5 Client Smp ID: ontinuing Calibrati
Inj Date : 17-NOV-2023 19:21
Operator : DL/SH Inst ID: gc05.i
Smp Info : WG345654-5
Misc Info : WG345654,WG344993-4,SQ6179-1
Comment : RSK SOP 175
Method : \\target_server\gg\chem\gc05.i\GC05QK17.b\MEEB47A.m
Meth Date : 18-Nov-2023 06:37 dlewry Quant Type: ESTD
Cal Date : 07-NOV-2023 10:11 Cal File: 5QK20014.D
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSKSOP175-MEE.sub
Target Version: 4.12
Processing Host: V200T3

Concentration Formula: Amt * DF * 0.005/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	0.00500	sample purged (L)
Cpnd Variable		Local Compound Variable

					AMOUNTS		
					CAL-AMT	ON-COL	
Compounds	RT	EXP RT	DLT RT	RESPONSE	(PPM)	(PPM)	REVIEW CODE
1 Methane	0.790	0.760	0.030	42598	100.000	89.8	
2 Ethene	2.326	2.317	0.009	76921	100.000	96.9	
3 Ethane	2.966	2.957	0.009	79900	100.000	97.1	

Data File: \\target_server\gg\chem\gc05.i\GC05QK17.b\5QK20272.D
Date : 17-NOV-2023 19:21
Client ID: ontinuing Calibrati
Instrument: gc05.i
Sample Info: WG345654-5
Purge Volume: 0.0
Operator: DL/SH
Column phase: Porapak Q
Column diameter: 0.00



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Form 7
Calibration Verification Summary

Lab Name: Katahdin Analytical Services
SDG: SQ6179
Lab ID: WG345654-6
Analytical Date: 11/17/23 19:55
Lab File ID: 5QK20274.D
Instrument ID: GC05
Initial Calibration Date(s): 11/07/23 08:28 11/07/23 10:11
Column ID: A

Compound	RRF/Amount	RF100	CCAL RRF100	Min RF	%D/ %Drift	Max %D/ %Drift	Curve Type	Qual
Methane	474	437	437	0.100	-7.91091	15.000	Averaged	
Ethene	793	784	784	0.100	-1.16344	15.000	Averaged	
Ethane	823	812	812	0.100	-1.29818	15.000	Averaged	

*** = Compound out of QC criteria**

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029
http://katahdinlab.com
sales@katahdinlab.com

Data File: \\target_server\gg\chem\gc05.i\GC05QK17.b\5QK20274.D
Report Date: 01-Dec-2023 17:04

Katahdin Analytical Services

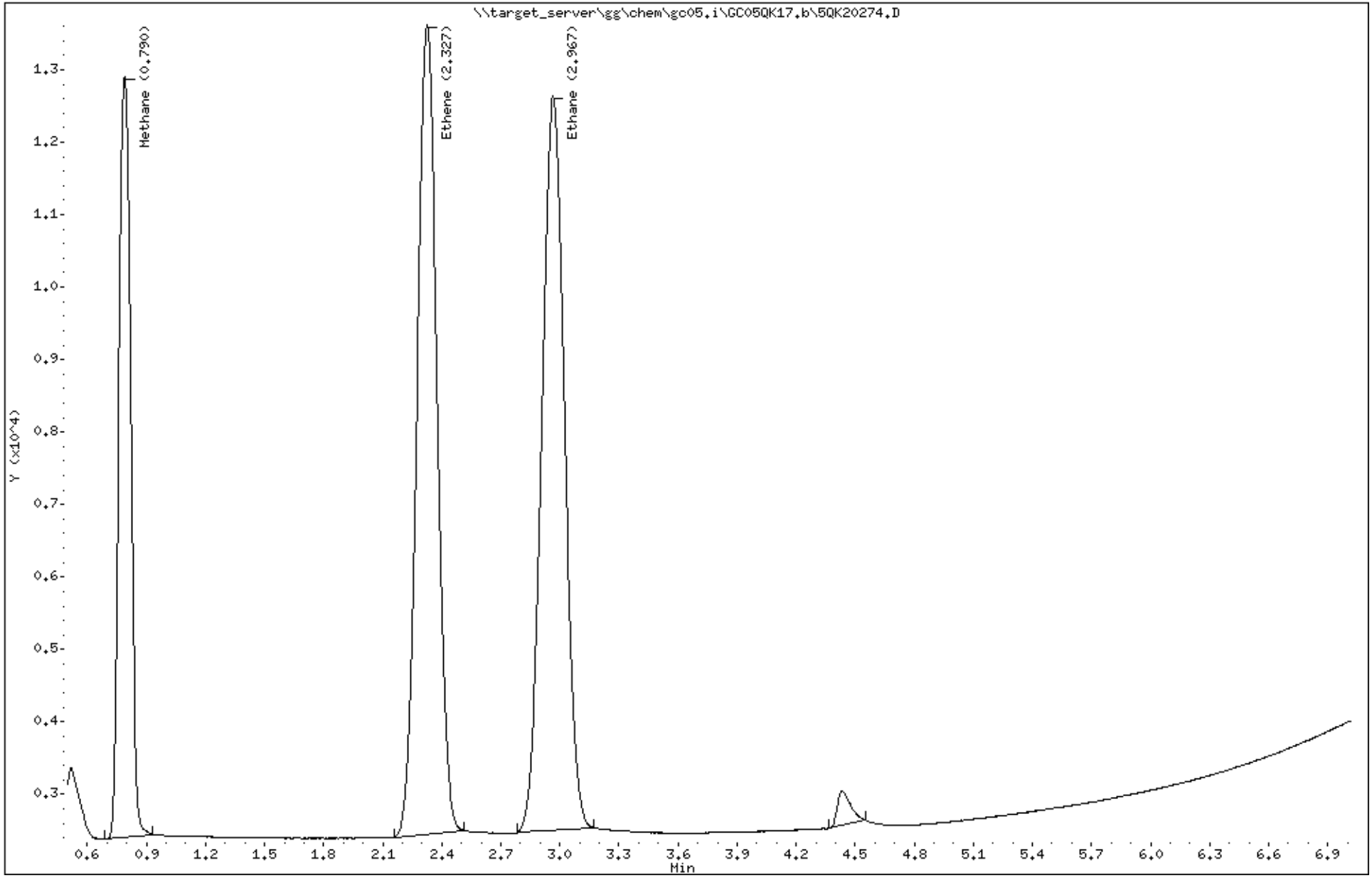
Data file : \\target_server\gg\chem\gc05.i\GC05QK17.b\5QK20274.D
Lab Smp Id: WG345654-6
Inj Date : 17-NOV-2023 19:55
Operator : DL/SH   Inst ID: gc05.i
Smp Info : WG345654-6
Misc Info : WG345654,WG344993-4,SQ6179-1
Comment   : RSK SOP 175
Method   : \\target_server\gg\chem\gc05.i\GC05QK17.b\MEEB47A.m
Meth Date : 18-Nov-2023 06:37 dlewry   Quant Type: ESTD
Cal Date : 07-NOV-2023 10:11   Cal File: 5QK20014.D
Als bottle: 1   Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon   Compound Sublist: all.sub
Target Version: 4.12
Processing Host: V200T3

Concentration Formula: Amt * DF * 0.005/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	0.00500	sample purged (L)
Cpnd Variable		Local Compound Variable

					AMOUNTS		
					CAL-AMT	ON-COL	
Compounds	RT	EXP RT	DLT RT	RESPONSE	(PPM)	(PPM)	REVIEW CODE
1 Methane	0.790	0.760	0.030	43694	100.000	92.1	
2 Ethene	2.326	2.317	0.009	78424	100.000	98.8	
3 Ethane	2.966	2.957	0.009	81214	100.000	98.7	

Data File: \\target_server\gg\chem\gc05.i\GC05QK17.b\5QK20274.D
Date : 17-NOV-2023 19:55
Client ID:
Instrument: gc05.i
Sample Info: WG345654-6
Purge Volume: 0.0
Operator: DL/SH
Column phase: Porapak Q
Column diameter: 0.00



Katahdin Analytical Services SQ6179 Page 414 of 740

Raw QC Data Section

Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

SDG: SQ6179
Lab ID: WG345654-1
Client ID: Method Blank
Matrix: AQ
Lab File ID: 5QK20260.D

Sample Date: N/A
Extract Date: 17-NOV-23
Extracted By: DL/SH
Extraction Method: RSK SOP 175
Lab Prep Batch: WG345654

Report Date: 01-DEC-23
Analysis Date: 17-NOV-23
Analyst: DL/SH
Analysis Method: RSK SOP 175 v.2
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Methane	J	3.1	ug/L	1	10.3	10.	2.6	5.2
Ethane	U	9.8	ug/L	1	13.1	13.	5.0	9.8
Ethene	U	9.8	ug/L	1	13.1	13.	5.0	9.8

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Data File: \\target_server\gg\chem\gc05.i\GC05QK17.b\5QK20260.D
Report Date: 01-Dec-2023 17:04

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gc05.i\GC05QK17.b\5QK20260.D
Lab Smp Id: WG345654-1 Client Smp ID: WG345654-Blank
Inj Date : 17-NOV-2023 15:42
Operator : DL/SH Inst ID: gc05.i
Smp Info : WG345654-1
Misc Info : WG345654,WG344993-4,SQ6179-1
Comment : RSK SOP 175
Method : \\target_server\gg\chem\gc05.i\GC05QK17.b\MEEB47A.m
Meth Date : 18-Nov-2023 06:37 dlewry Quant Type: ESTD
Cal Date : 07-NOV-2023 10:11 Cal File: 5QK20014.D
Als bottle: 1 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSKSOP175-MEE.sub
Target Version: 4.12
Processing Host: V200T3

Concentration Formula: Amt * DF * 0.005/Vo * CpndVariable

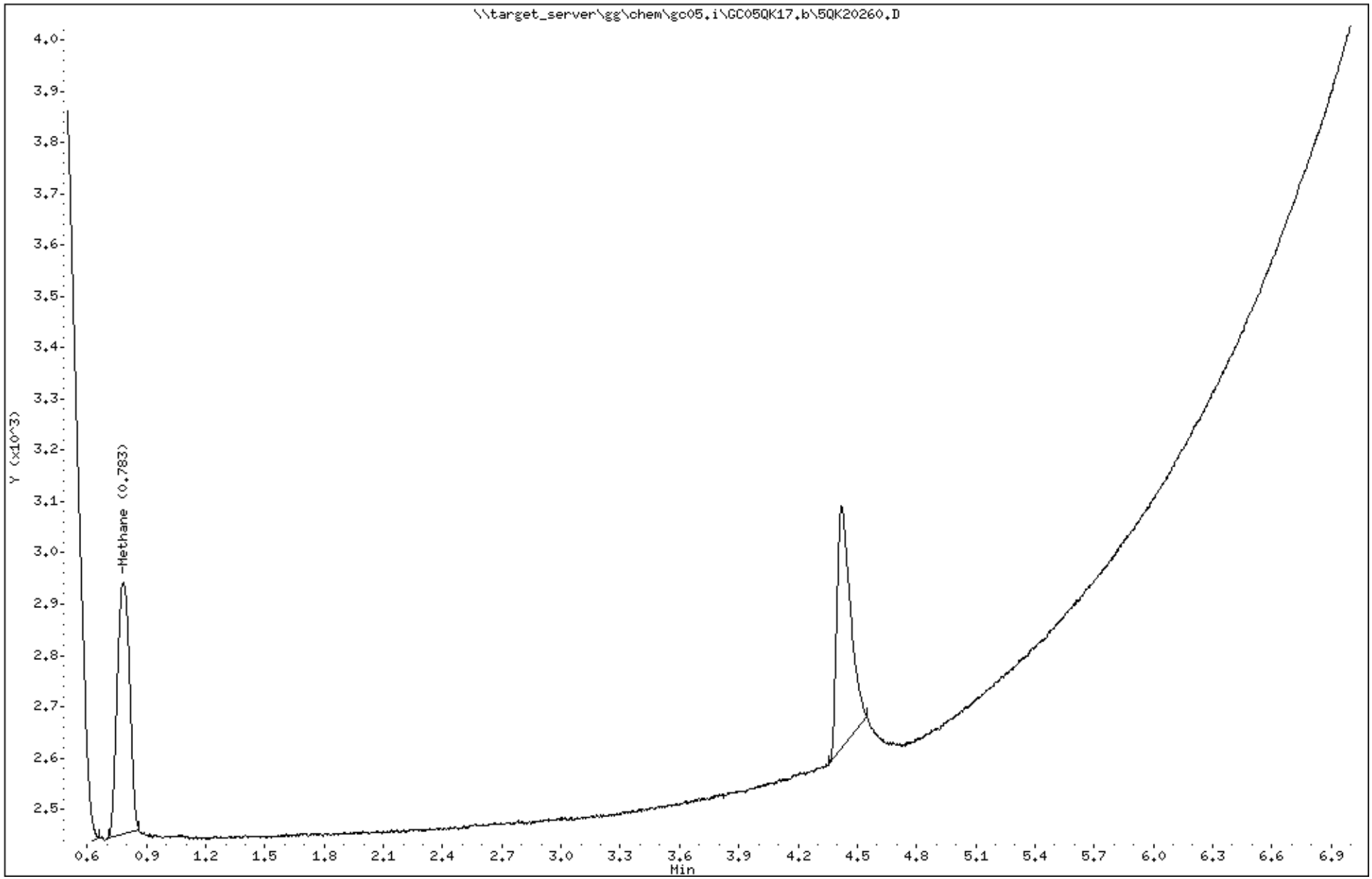
Name	Value	Description
DF	1.000	Dilution Factor
Vo	0.00500	sample purged (L)
Cpnd Variable		Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (PPM)	CONCENTRATIONS FINAL (PPM)	REVIEW CODE
1 Methane	0.783	0.760	0.023	2164	4.56083	4.56(a)	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: \\target_server\gg\chem\gc05.i\GC05QK17.b\5QK20260.D
Date : 17-NOV-2023 15:42
Client ID: WG345654-Blank
Instrument: gc05.i
Sample Info: WG345654-1
Purge Volume: 0.0
Operator: DL/SH
Column phase: Porapak Q
Column diameter: 0.00



Katahdin Analytical Services SQ6179 Page 418 of 740

Katahdin
ANALYTICAL SERVICES

LCS Recovery Report

Lab ID: WG345654-2
Client ID: LCS
SDG: SQ6179
LCS File ID: 5QK20261.D
Report Date: 01-DEC-23

Extract Date: 17-NOV-23
Extracted By: DL/SH
Extraction Method: RSK SOP 175
Lab Prep Batch: WG345654

Analysis Date: 17-NOV-23
Analyst: DL/SH
Analysis Method: RSK SOP 175 v.2
Matrix: AQ

Compound	Recovery (%)	Conc Added	Conc Recovered	Conc Units	Limits
Methane	88.0	68.9	60.6	ug/L	85-115
Ethane	91.6	131.	120.	ug/L	85-115
Ethene	94.6	131.	124.	ug/L	85-115

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Data File: \\target_server\gg\chem\gc05.i\GC05QK17.b\5QK20261.D
Report Date: 01-Dec-2023 17:04

Katahdin Analytical Services

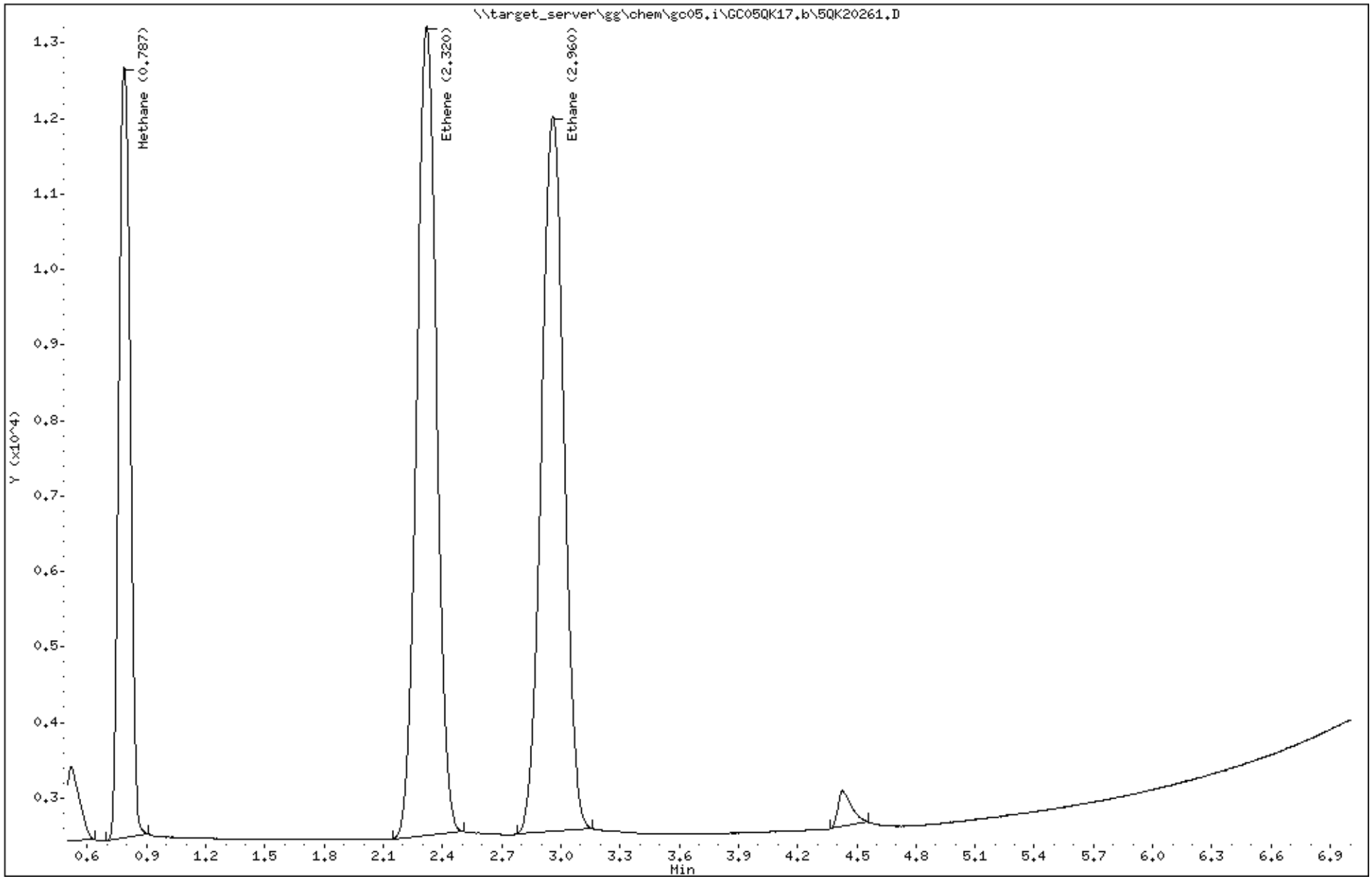
Data file : \\target_server\gg\chem\gc05.i\GC05QK17.b\5QK20261.D
Lab Smp Id: WG345654-2 Client Smp ID: WG345654-LCS
Inj Date : 17-NOV-2023 15:59
Operator : DL/SH Inst ID: gc05.i
Smp Info : WG345654-2
Misc Info : WG345654,WG344993-4,SQ6179-1
Comment : RSK SOP 175
Method : \\target_server\gg\chem\gc05.i\GC05QK17.b\MEEB47A.m
Meth Date : 18-Nov-2023 06:37 dlewry Quant Type: ESTD
Cal Date : 07-NOV-2023 10:11 Cal File: 5QK20014.D
Als bottle: 1 QC Sample: LCS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSKSOP175-MEE.sub
Target Version: 4.12
Processing Host: V200T3

Concentration Formula: Amt * DF * 0.005/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	0.00500	sample purged (L)
Cpnd Variable		Local Compound Variable

					CONCENTRATIONS ON-COLUMN	CONCENTRATIONS FINAL	
Compounds	RT	EXP RT	DLT RT	RESPONSE	(PPM)	(PPM)	REVIEW CODE
1 Methane	0.786	0.760	0.026	41706	87.8992	87.9	
2 Ethene	2.320	2.317	0.003	75066	94.6045	94.6	
3 Ethane	2.960	2.957	0.003	75704	92.0054	92.0	

Data File: \\target_server\gg\chem\gc05.i\GC05QK17.b\5QK20261.D
Date : 17-NOV-2023 15:59
Client ID: WG345654-LCS
Instrument: gc05.i
Sample Info: WG345654-2
Purge Volume: 0.0
Operator: DL/SH
Column phase: Porapak Q
Column diameter: 0.00



Katahdin
ANALYTICAL SERVICES

Sample Duplicate Report

Dup. ID: WG345654-3
Sample ID: SQ6179-1
Client ID: SY-OBMW2-110823
SDG: SQ6179
Dup. File ID: 5QK20263.D

Extract Date: 17-NOV-23
Extracted By: DL/SH
Extraction Method: RSK SOP 175
Lab Prep Batch: WG345654
Sample File ID: 5QK20262.D

Analysis Date: 17-NOV-23
Analyst: DL/SH
Analysis Method: RSK SOP 175 v.2
Matrix: AQ **% Solids:** N/A
Report Date: 01-DEC-23

Compound	Dup. Result	Sample Result	Units	RPD (%)	Limits
Methane	U5.2	J3.8	ug/L	NC	30
Ethane	U9.8	U9.8	ug/L	NC	30
Ethene	U9.8	U9.8	ug/L	NC	30

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Data File: \\target_server\gg\chem\gc05.i\GC05QK17.b\5QK20263.D
Report Date: 01-Dec-2023 17:04

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gc05.i\GC05QK17.b\5QK20263.D
Lab Smp Id: WG345654-3 Client Smp ID: SY-OBMW2-110823-DUP
Inj Date : 17-NOV-2023 16:47
Operator : DL/SH Inst ID: gc05.i
Smp Info : WG345654-3
Misc Info : WG345654,WG344993-4,SQ6179-1
Comment : RSK SOP 175
Method : \\target_server\gg\chem\gc05.i\GC05QK17.b\MEEB47A.m
Meth Date : 18-Nov-2023 06:37 dlewry Quant Type: ESTD
Cal Date : 07-NOV-2023 10:11 Cal File: 5QK20014.D
Als bottle: 1 QC Sample: DUP
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSKSOP175-MEE.sub
Target Version: 4.12
Processing Host: V200T3

Concentration Formula: Amt * DF * 0.005/Vo * CpndVariable

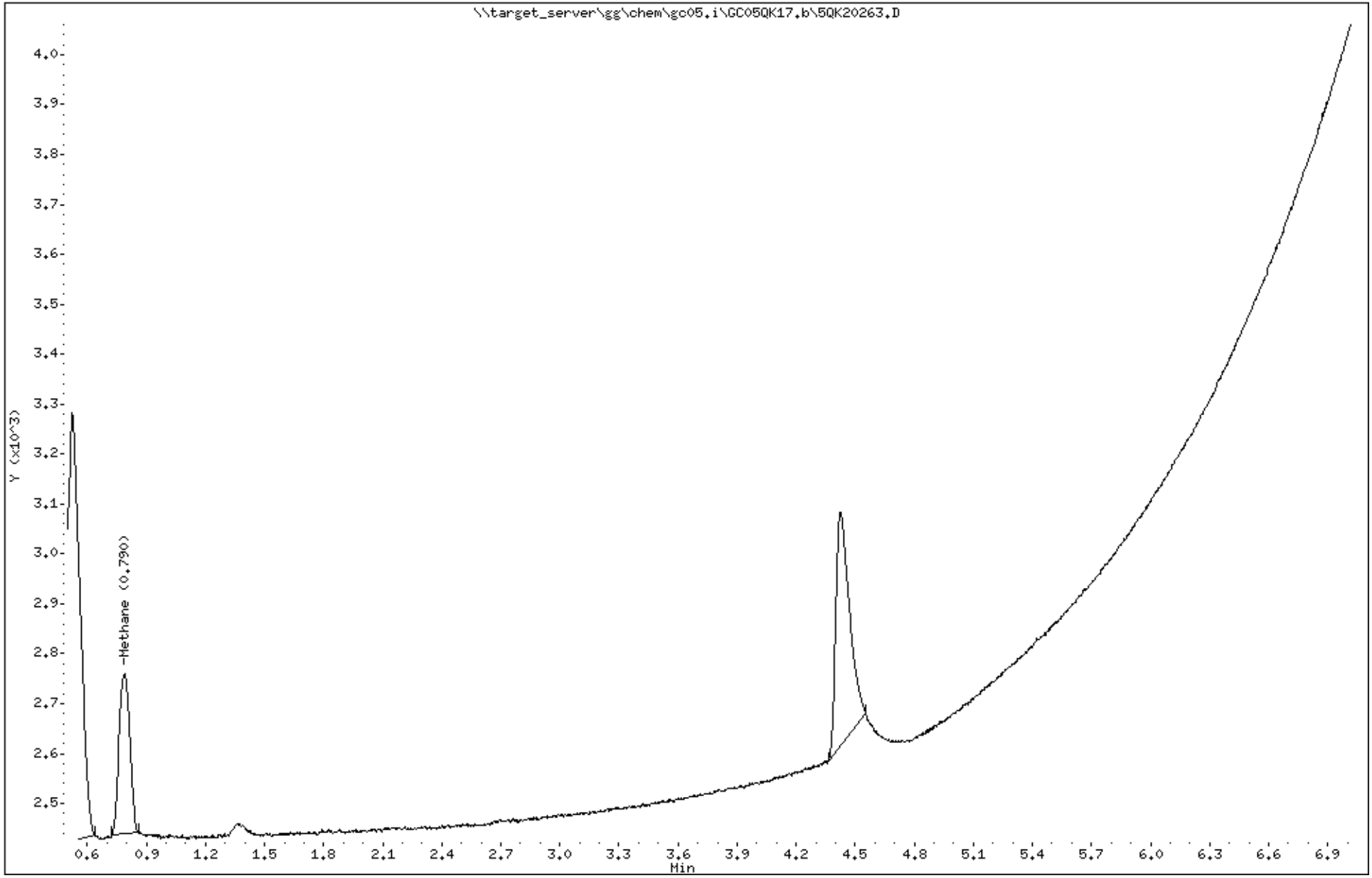
Name	Value	Description
DF	1.000	Dilution Factor
Vo	0.00500	sample purged (L)
Cpnd Variable		Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (PPM)	CONCENTRATIONS FINAL (PPM)	REVIEW CODE
1 Methane	0.790	0.760	0.030	1214	2.55862	2.56(a)	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: \\target_server\gg\chem\gc05.i\GC05QK17.b\5QK20263.D
Date : 17-NOV-2023 16:47
Client ID: SY-OBMW2-110823-DUP
Instrument: gc05.i
Sample Info: WG345654-3
Purge Volume: 0.0
Operator: DL/SH
Column phase: Porapak Q
Column diameter: 0.00



Katahdin Analytical Services SQ6179 Page 424 of 740

Logbooks and Supporting Documents

KATAHDIN ANALYTICAL SERVICES

STOCK STANDARDS RECEIVED

GCMS VOLATILES LABORATORY

REVIEWED BY/DATE:

Amp 6546

30201 US/EN
524 Internal Std / Surrogate Mix
Lot# A0163165
Expire: 09/2027 Store: 0°C or colder 1 mL
2000 µg/mL each in P&T Methanol
RESTEK

Rec'd 1-7-21 JR

Amp 6547
45
↓ 49

AccuStandard® 125 Market St. New Haven, CT 06513 www.AccuStandard.com
M-8240C-R6 1 mL
Appendix IX Volatiles Mix
Varied conc. in MeOH
Lot: 219051809 11 comp(s)
Exp: Jun 05, 2022 Storage: Refrig (0-5 °C)
FOR LABORATORY USE ONLY
H336 H225 H370 H320 H315 H311 H332 H301 H360, H350 H351 P338 Refer to SDS
Signal Word Danger
JB RL 1-12-21

AMP 6550 Airgas Specialty Gases - Scott Mini-Mix JHR
14 Liters @ 240PSIG 1.0 % Rec'd 1-12-2021
Cylinder #: ST0000228564
Ex: 12/29/23 Lot #: 160-401985759-1

AMP 6551 Airgas Specialty Gases - Scott Mini-Mix JHR
14 Liters @ 240PSIG 1000 ppm Rec'd 1-12-2021
Cylinder #: ST0000228565
Ex: 12/29/23 Lot #: 160-401987240-1

Amp 6552
53
↓ 54

30619 US/EN
Oxygenates Standard
Lot# A0167816
Expire: 01/2024 Store: 0°C or colder 1 mL
2000-10,000 µg/mL each in P&T Methanol
RESTEK

CR Rec'd 1/19/21

Amp 1555
54
57

AccuStandard® 125 Market St. New Haven, CT 06513 www.AccuStandard.com
APP-9-048-R1-20X 1 mL
Chloroprene
2.0 mg/mL in MeOH
Lot: 220101123 1 comp(s)
Exp: Nov 09, 2022 Storage: Freeze (<-10 °C)
FOR LABORATORY USE ONLY
H225 H370 H336 H320 H315 H311 H332 H301 H360, H350 H351 P338 Refer to SDS
Signal Word Danger
RL 1/20/21

KATAHDIN ANALYTICAL SERVICES

STOCK STANDARDS RECEIVED

GCMS VOLATILES LABORATORY

REVIEWED BY/DATE:

Amp 6832 Airgas Specialty Gases - Scott Mini-mix JM
1HL@2240 PSIG 1000ppm Recd 1-10-22
Cylinder #= ST0000235789
Ex: 12/22/24 Lot #: 160-402299623-1

Amp 6833
34
35

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com
M-603-M-5X 1 mL
Acrolein & Acrylonitrile
5.0 mg/mL in MeOH:Water 90:10
Lot: 222011130 2 comp(s)
Exp: May 13, 2022 Storage: Freeze (<-10 °C)
FOR LABORATORY USE ONLY
H336 H225
H370 H320
H315 H311
H332 H301
H360, H350
H351 P338
Refer to SDS
Signal Word Danger

Recd 2-2-22 JJ

Amp 6836
37

30497 US/EN
Volatiles MegaMix(TM), EPA Method 624
Lot# A0171975
Expire: 05/2024 Store: 0°C or colder 1 mL
2000 µg/mL each in P&T Methanol
RESTEK

Recd 2-2-22 JJ

Amp 6838
39
40

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com
S-457S-10X 1 mL
Tetrahydrofuran
2.0 mg/mL in MeOH
Lot: 221051701 1 comp(s)
Exp: Jun 01, 2031 Storage: Ambient (>5 °C)
FOR LABORATORY USE ONLY
H225 H370
H336 H320
H315 H311
H332 H301
H360 H351
P338 P360
Refer to SDS
Signal Word Danger

Recd. 2-8-22 JJ

Amp 6841
42

30619 US/EN
Oxygenates Standard
Lot# A0176238
Expire: 09/2024 Store: 0°C or colder 1 mL
2000-10,000 µg/mL each in P&T Methanol
RESTEK

2-8-22

Katahdin Analytical Services

GC Laboratory Instrument Runlog

Instrument: GC05

pH Paper Lot#: 6303005

Date: 11/7/23

Method: RSK SOP-175

Sample Name	Data File	Sample Amt.	DF	Method	Y/N	pH	Temp °C	DoD Y/N	Analyst	Comments
prime	5QK20007	5mL	1	MEEB47A	N	—	—	N	DL	
WG344993-1	8	32.5mL			Y		20.5	Y		ICV 6.5
-2	9	50uL			Y		↓	Y		10
-3	5QK20010	250uL			Y		20.6	Y		50
-4	11	500uL			Y			Y		100
-5	12	2.5mL			Y		↓	Y		500
-6	13	5mL			Y		20.7	Y		1000
-7	14	7.5mL			Y		20.8	Y		1500
-8/10	15	50uL			Y		20.3	Y		INVLCS
-9	16	5mL			Y	↓	20.5	Y		
SQ5824-1D	17				Y	<2	↓	Y		
-2D	18				Y		21.6	Y		
-3D	19				Y		20.8	Y		
-4G	20				Y		21.0	Y		
-6E	21				Y		↓	Y		
SQ5899-1E	22				Y		21.1	Y		MoverCon
-2D	23				Y		↓	Y		
-3D	24				Y			Y		
-6E	25				Y			Y		
WG344993-4	26	↓			Y	↓	↓	Y		DUP SQ5897-6
CV	27	500uL			Y	—	20.9	Y		WG344993-12
SQ5899-7L	28	5mL			Y	<2	21.0	Y		
CV	29	500uL	↓	↓	Y	—	20.9	Y	↓	WG344993-13 2X SPIKE
										DL 11/7/23

STANDARD	STOCK #	CONC.		AMOUNT
ICAL	Amp 6832	1000 ug/mL		see comments
CV	Amp 6832	1000 ug/mL		500 uL
LCS	Amp C550	10 000 ug/mL		50 uL

Katahdin Analytical Services

GC Laboratory Instrument Runlog

Instrument: GC05

pH Paper Lot#: 630801

Date: 11/17/23

Method: RSK SOP-175

Sample Name	Data File	Sample Amt.	DF	Method	Y/N	pH	Temp °C	DoD Y/N	Analyst	Comments
Prime	SQ20234	5mL	1	MEEB47A	N	—	—	N	DJSH	
CV	235	500uL			N		20.1	Y		No Spike
CV	236	↓			Y		19.8	Y		
WG345593-1	237	5mL			Y		19.4	Y		WG345593-B
↓ -2	238	5mL			Y	↓	↓	Y		
SQ6133-1C	239	5mL			Y	L2	20.5	Y		
↓ -2C	240				Y		20.6	Y		
↓ -3C	241				Y		20.7	Y		
WG345593-4	242				Y		↓	Y		MS SQ6133-3D
↓ -5	243				Y		20.8	Y		MSD ↓ -3E
SQ6133-4C	244				Y			Y		
↓ -5C	245				Y			Y		
-6C	246				Y			Y		
↓ -7C	247	↓			Y	↓	↓	Y		
CV	248	500uL			Y	—	20.1	Y		WG345593-9
SQ6133-8C	249	5mL			Y	L2	20.8	Y		
WG345593-6	250				Y		20.9	Y		MS SQ6133-8D
↓ -7	251				Y			Y		MSD ↓ -8E
SQ6133-9C	252				Y			Y		
↓ 10C	253				Y		↓	Y		
SQ6259-1A	254				Y		21	Y		
↓ -2A	255				Y			Y		
-3A	256				Y		↓	Y		
↓ -4A	257				Y		21.1	Y		
WG345593-3	258	↓			Y	↓	↓	Y		DUP SQ6259-4B
CV	259	500uL			Y	—	20.1	Y		WG345593-10/WG345593-4
										DL 11/17/23

STANDARD	STOCK #	CONC.		AMOUNT
ICAL		1000 ug/mL		see comments
CV	AMP 6832	1000 ug/mL		500 uL
LCS	AMP 6550	10 000 ug/mL		50 uL

Katahdin Analytical Services

GC Laboratory Instrument Runlog

Instrument: GC05

pH Paper Lot#: 630804

Date: 11/17/23

Method: RSK SOP-175

Sample Name	Data File	Sample Amt.	DF	Method	Y/N	pH	Temp °C	DoD Y/N	Analyst	Comments
WG745654-1	5QK20260	5mL	1	MEEB47A	Y	—	20.4	Y	DL/SH	
↓ -2	261	50uL			Y	↓	↓	Y		
SQ6179-1A	262	5mL			Y	L2	20.5	Y		
WG745654-3	263				Y			Y		Dup SQ6179-1B
SQ6179-2A	264				Y			Y		
-3A	265				Y		↓	Y		
-4A	266				Y		20.6	Y		
-5A	267				Y			Y		
-6A	268				Y			Y		
-7A	269				Y			Y		
-8A	270				Y		↓	Y		
↓ -9A	271	↓			Y	↓	20.5	Y		
CV	272	500uL			Y	—	20.5	Y		WG745654-5
SQ6179-10A	273	5mL			Y	L2	↓	Y		
CV	↓ 274	500uL	↓	↓	Y	—	20.5	Y	↓	WG745654-6
										DL 11/17/23

STANDARD	STOCK #	CONC.		AMOUNT
ICAL		1000 ug/mL		see comments
CV	AMP6832	1000 ug/mL		500 uL
LCS	AMP6550	10 000 ug/mL		50 uL

CONVENTIONAL AND PHYSICAL ANALYTICAL DATA

QC Summary Section

Katahdin
ANALYTICAL SERVICES

Quality Control Report

Blank Sample Summary Report

Alkalinity

QC Batch	Anal. Method	Anal. Date	Prep. Date	Result	Units	LOQ	MDL	LOD
WG345462	SM2320B	14-NOV-23	N/A	J2.8	mg/L	5.0	0.23	4.0

Chloride

QC Batch	Anal. Method	Anal. Date	Prep. Date	Result	Units	LOQ	MDL	LOD
WG345207	EPA 300.0	09-NOV-23	N/A	U1.0	mg/L	2.0	0.099	1.0
WG346307	EPA 300.0	01-DEC-23	N/A	U1.0	mg/L	2.0	0.099	1.0

Chromium, Hexavalent

QC Batch	Anal. Method	Anal. Date	Prep. Date	Result	Units	LOQ	MDL	LOD
WG345136	SW846 7196A	09-NOV-23	N/A	U0.012	mg/L	0.025	0.00076	0.012

Ferrous Iron

QC Batch	Anal. Method	Anal. Date	Prep. Date	Result	Units	LOQ	MDL	LOD
WG345126	SM3500D	09-NOV-23	N/A	U0.050	mg/L	0.10	0.026	0.050

Nitrate as N

QC Batch	Anal. Method	Anal. Date	Prep. Date	Result	Units	LOQ	MDL	LOD
WG345207	EPA 300.0	09-NOV-23	N/A	U0.025	mg/L	0.050	0.017	0.025

Sulfate

QC Batch	Anal. Method	Anal. Date	Prep. Date	Result	Units	LOQ	MDL	LOD
WG345207	EPA 300.0	09-NOV-23	N/A	J0.068	mg/L	1.0	0.064	0.50
WG346307	EPA 300.0	01-DEC-23	N/A	J0.11	mg/L	1.0	0.064	0.50

Total Organic Carbon

QC Batch	Anal. Method	Anal. Date	Prep. Date	Result	Units	LOQ	MDL	LOD
WG346585	SM5310B	06-DEC-23	N/A	U0.70	mg/L	1.0	0.35	0.70

Quality Control Report

Laboratory Control Sample Summary Report

Alkalinity

Laboratory Sample ID	Sample Type	QC Batch	Analysis Date	Prep Date	Units	Spike Amount	Result	Recovery (%)	Acceptance Range	RPD
WG345462-2	LCS	WG345462	14-NOV-23	N/A	mg/L	120	130	108	80-120	
WG345462-3	LCSD	WG345462	14-NOV-23	N/A	mg/L	120	140	114	80-120	6

Chloride

Laboratory Sample ID	Sample Type	QC Batch	Analysis Date	Prep Date	Units	Spike Amount	Result	Recovery (%)	Acceptance Range	RPD
WG345207-2	LCS	WG345207	09-NOV-23	N/A	mg/L	3.75	3.63	96.8	90-110	
WG346307-2	LCS	WG346307	01-DEC-23	N/A	mg/L	3.75	3.53	94.1	90-110	

Chromium, Hexavalent

Laboratory Sample ID	Sample Type	QC Batch	Analysis Date	Prep Date	Units	Spike Amount	Result	Recovery (%)	Acceptance Range	RPD
WG345136-2	LCS	WG345136	09-NOV-23	N/A	mg/L	.5	0.50	99	85-115	
WG345136-3	LCSD	WG345136	09-NOV-23	N/A	mg/L	.5	0.50	99	85-115	0

Ferrous Iron

Laboratory Sample ID	Sample Type	QC Batch	Analysis Date	Prep Date	Units	Spike Amount	Result	Recovery (%)	Acceptance Range	RPD
WG345126-2	LCS	WG345126	09-NOV-23	N/A	mg/L	139.95	140	100	80-120	
WG345126-3	LCSD	WG345126	09-NOV-23	N/A	mg/L	139.95	140	102	80-120	2

Nitrate as N

Laboratory Sample ID	Sample Type	QC Batch	Analysis Date	Prep Date	Units	Spike Amount	Result	Recovery (%)	Acceptance Range	RPD
WG345207-2	LCS	WG345207	09-NOV-23	N/A	mg/L	0.845	0.797	94.3	90-110	

Sulfate

Laboratory Sample ID	Sample Type	QC Batch	Analysis Date	Prep Date	Units	Spike Amount	Result	Recovery (%)	Acceptance Range	RPD
WG345207-2	LCS	WG345207	09-NOV-23	N/A	mg/L	3.75	3.68	98.1	90-110	
WG346307-2	LCS	WG346307	01-DEC-23	N/A	mg/L	3.75	3.88	103.	90-110	

Total Organic Carbon

Laboratory Sample ID	Sample Type	QC Batch	Analysis Date	Prep Date	Units	Spike Amount	Result	Recovery (%)	Acceptance Range	RPD
WG346585-2	LCS	WG346585	06-DEC-23	N/A	mg/L	50	51.7	103	80-120	
WG346585-3	LCSD	WG346585	06-DEC-23	N/A	mg/L	50	51.8	104	80-120	0

Quality Control Report

Duplicate Sample Summary Report

Chloride

Duplicate Sample ID	Original Sample ID	QC Batch	Analysis Date	Units	Sample Result	Duplicate Result	RPD	RPD Limit
WG346307-3	SQ6179-6	WG346307	01-DEC-23	mg/L	370	380	2	20

Chromium, Hexavalent

Duplicate Sample ID	Original Sample ID	QC Batch	Analysis Date	Units	Sample Result	Duplicate Result	RPD	RPD Limit
WG345136-4	SQ6179-9	WG345136	09-NOV-23	mg/L	U 0.012	U 0.012	NC	20

Total Organic Carbon

Duplicate Sample ID	Original Sample ID	QC Batch	Analysis Date	Units	Sample Result	Duplicate Result	RPD	RPD Limit
WG346585-4	SQ6179-1	WG346585	06-DEC-23	mg/L	U 0.75	U 1.0	NC	30

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ANALYTICAL SERVICES

Cert No E87604

Quality Control Report

Matrix Spike Sample Summary Report

Chloride

Matrix Spike Sample ID	Sample Type	Original Sample ID	QC Batch	Analysis Date	Units	Spike Amount	Sample Result	MS Result	Recovery (%)	Acceptance Range	RPD
WG346307-4	MS	SQ6179-6	WG346307	01-DEC-23	mg/L	39.5	370	409	92	90 - 110	

Chromium, Hexavalent

Matrix Spike Sample ID	Sample Type	Original Sample ID	QC Batch	Analysis Date	Units	Spike Amount	Sample Result	MS Result	Recovery (%)	Acceptance Range	RPD
WG345136-5	MS	SQ6179-9	WG345136	09-NOV-23	mg/L	.5	U 0.012	0.47	95	85 - 115	

Total Organic Carbon

Matrix Spike Sample ID	Sample Type	Original Sample ID	QC Batch	Analysis Date	Units	Spike Amount	Sample Result	MS Result	Recovery (%)	Acceptance Range	RPD
WG346585-5	MS	SQ6179-2	WG346585	06-DEC-23	mg/L	50	1.5	51.8	101	75 - 125	
WG346585-6	MS	SQ6179-3	WG346585	06-DEC-23	mg/L	50	2.0	53.1	102	75 - 125	

Sample Data Section

KATAHDIN ANALYTICAL SERVICES – INORGANIC DATA QUALIFIERS

The sampled date indicated on the attached Report(s) of Analysis (ROA) is the date for which a grab sample was collected or the date for which a composite sample was completed. Beginning and start times for composite samples can be found on the Chain-of-Custody.

U Indicates the compound was analyzed for but not detected above the specified level. This level may be the Practical Quantitation Level (PQL) (also called Limit of Quantitation (LOQ)), the Limit of Detection (LOD) or Method Detection Limit (MDL) as required by the client. Note: All results reported as "U" MDL have a 50% rate for false negatives compared to those results reported as "U" PQL "U" LOQ or "U" LOD, where the rate of false negatives is <1%.

E Estimated value. This flag identifies compounds whose concentrations exceed the upper level of the calibration range of the instrument for that specific analysis.

J Estimated value. The analyte was detected in the sample at a concentration less than the laboratory Practical Quantitation Level (PQL) (also called Limit of Quantitation (LOQ)), but above the Method Detection Limit (MDL).

I-7 The laboratory's Practical Quantitation Level (PQL) or LOQ could not be achieved for this parameter due to sample composition, matrix effects, sample volume, or quantity used for analysis.

A-4 Please refer to cover letter or narrative for further information.

H_ Please note that the regulatory holding time for _____ is "analyze immediately". Ideally, this analysis must be performed in the field at the time of sample collection. _____ for this sample was not performed at the time of sample collection. The analysis was performed as soon as possible after receipt by the laboratory.

H1 - pH H2 - DO H3 - sulfite H4 - residual chlorine

T1 The client did not provide the full volume of at least one liter for analysis of TSS. Therefore, the PQL of 2.5 mg/L could not be achieved.

T2 The client provided the required volume of at least one liter for analysis of TSS, but the laboratory could not filter the full one liter volume due to the sample matrix. Therefore, the PQL of 2.5 mg/L could not be achieved.

M1 The matrix spike and/or matrix spike duplicate recovery performed on this sample was outside of the laboratory acceptance criteria. Sample matrix is suspected. The laboratory criteria was met for the Laboratory Control Sample (LCS) analyzed concurrently with this sample.

M2 The matrix spike and/or matrix spike duplicate recovery was outside of the laboratory acceptance criteria. The native sample concentration is greater than four times the spike added concentration so the spike added could not be distinguished from the native sample concentration.

R1 The relative percent difference (RPD) between the duplicate analyses performed on this sample was outside of the laboratory acceptance criteria (when both values are greater than ten times the PQL).

MCL	Maximum Contaminant Level	NL	No limit	NOD	No Odor Detected
NFL	No Free Liquid Present	FLP	Free Liquid Present	TON	Threshold Odor Number

D-1 As required by Method 5210B, APHA Standard Methods for the Examination of Water and Wastewater (21st edition), the BOD value reported for this sample is 'qualified' because the check standard run concurrently with the sample analysis did not meet the criteria specified in the method (198 +/- 30.5 mg/L). These results may not be reportable for compliance purposes.

D-2 The measured final dissolved oxygen concentrations of all dilutions were less than the method-specified limit of 1 mg/L. The reported BOD result was calculated assuming a final oxygen concentration equal to 1 mg/L. The reported value should be considered a minimum value.

D-3 The dilution water used to prepare this sample did not meet the method and/or regulatory criteria of less than 0.2 mg/L dissolved oxygen (DO) uptake over the five day period of incubation. These results may not be reportable for compliance purposes.

D-4 The dilution water used to prepare this sample did not meet the method and/or regulatory criteria of less than 0.4 mg/L dissolved oxygen (DO) uptake over the five day period of incubation. These results may not be reportable for compliance purposes.

D-5 The seed control factor did not meet the method criteria of greater than 2.0 mg/L of dissolved oxygen (DO) uptake over the five day period of incubation. The dilution closest to meeting the criteria was used to estimate the seed control factor.

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Report of Analytical Results

Lab Sample ID: SQ6179-1
Client ID: SY-OBMW2-110823
SDG: SQ6179
Report Date: 13-DEC-23

Matrix	Date Sampled	Date Received
AQ	08-NOV-23 09:05	09-NOV-23

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Alkalinity	150 mg/L	5.0	0.23	4.0	SM2320B	WG345462	14-NOV-23 15:24	N/A	N/A	
Chloride	110 mg/L	10.	0.50	5.0	EPA 300.0	WG346307	30-NOV-23 23:22	N/A	N/A	
Chromium, Hexavalent	U0.012 mg/L	0.025	0.00076	0.012	SW846 7196A	WG345136	09-NOV-23 09:46	N/A	N/A	
Ferrous Iron	U0.050 mg/L	0.10	0.026	0.050	SM3500D	WG345126	09-NOV-23 09:47	N/A	N/A	
Nitrate as N	0.19 mg/L	0.050	0.017	0.025	EPA 300.0	WG345207	09-NOV-23 17:41	N/A	N/A	
Sulfate	8.5 mg/L	1.0	0.064	0.50	EPA 300.0	WG345207	09-NOV-23 17:41	N/A	N/A	
Total Organic Carbon	U0.75 mg/L	1.0	0.37	0.75	SM5310B	WG346585	06-DEC-23 17:12	N/A	N/A	

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Report of Analytical Results

Lab Sample ID: SQ6179-2
Client ID: SY-OBMW1-110823
SDG: SQ6179
Report Date: 13-DEC-23

Matrix	Date Sampled	Date Received
AQ	08-NOV-23 09:35	09-NOV-23

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Alkalinity	190 mg/L	5.0	0.23	4.0	SM2320B	WG345462	14-NOV-23 15:28	N/A	N/A	
Chloride	8.0 mg/L	2.0	0.099	1.0	EPA 300.0	WG345207	09-NOV-23 17:59	N/A	N/A	
Chromium, Hexavalent	U0.012 mg/L	0.025	0.00076	0.012	SW846 7196A	WG345136	09-NOV-23 09:46	N/A	N/A	
Ferrous Iron	U0.050 mg/L	0.10	0.026	0.050	SM3500D	WG345126	09-NOV-23 09:47	N/A	N/A	
Nitrate as N	U0.025 mg/L	0.050	0.017	0.025	EPA 300.0	WG345207	09-NOV-23 17:59	N/A	N/A	
Sulfate	5.9 mg/L	1.0	0.064	0.50	EPA 300.0	WG345207	09-NOV-23 17:59	N/A	N/A	
Total Organic Carbon	1.5 mg/L	1.0	0.37	0.75	SM5310B	WG346585	06-DEC-23 17:42	N/A	N/A	

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Report of Analytical Results

Lab Sample ID: SQ6179-3
Client ID: SY-OBMW9-110823
SDG: SQ6179
Report Date: 13-DEC-23

Matrix	Date Sampled	Date Received
AQ	08-NOV-23 10:16	09-NOV-23

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Alkalinity	310 mg/L	5.0	0.23	4.0	SM2320B	WG345462	14-NOV-23 15:32	N/A	N/A	
Chloride	100 mg/L	10.	0.50	5.0	EPA 300.0	WG346307	01-DEC-23 00:14	N/A	N/A	
Chromium, Hexavalent	U0.012 mg/L	0.025	0.00076	0.012	SW846 7196A	WG345136	09-NOV-23 09:46	N/A	N/A	
Ferrous Iron	J0.056 mg/L	0.10	0.026	0.050	SM3500D	WG345126	09-NOV-23 09:47	N/A	N/A	
Nitrate as N	U0.025 mg/L	0.050	0.017	0.025	EPA 300.0	WG345207	09-NOV-23 18:16	N/A	N/A	
Sulfate	49 mg/L	1.0	0.064	0.50	EPA 300.0	WG345207	09-NOV-23 18:16	N/A	N/A	
Total Organic Carbon	2.0 mg/L	1.0	0.37	0.75	SM5310B	WG346585	06-DEC-23 18:09	N/A	N/A	

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Report of Analytical Results

Lab Sample ID: SQ6179-4
Client ID: SY-BRMW5-29-44-110823
SDG: SQ6179
Report Date: 13-DEC-23

Matrix	Date Sampled	Date Received
AQ	08-NOV-23 11:00	09-NOV-23

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Alkalinity	190 mg/L	5.0	0.23	4.0	SM2320B	WG345462	14-NOV-23 15:37	N/A	N/A	
Chloride	620 mg/L	40.	2.0	20.	EPA 300.0	WG346307	01-DEC-23 00:31	N/A	N/A	
Chromium, Hexavalent	U0.012 mg/L	0.025	0.00076	0.012	SW846 7196A	WG345136	09-NOV-23 09:46	N/A	N/A	
Ferrous Iron	0.20 mg/L	0.10	0.026	0.050	SM3500D	WG345126	09-NOV-23 09:47	N/A	N/A	
Nitrate as N	0.55 mg/L	0.050	0.017	0.025	EPA 300.0	WG345207	09-NOV-23 18:33	N/A	N/A	
Sulfate	120 mg/L	2.0	0.13	1.0	EPA 300.0	WG346307	01-DEC-23 00:48	N/A	N/A	
Total Organic Carbon	2.7 mg/L	1.0	0.37	0.75	SM5310B	WG346585	06-DEC-23 18:49	N/A	N/A	

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Report of Analytical Results

Lab Sample ID: SQ6179-5
Client ID: SY-BRMW5-56-66-110823
SDG: SQ6179
Report Date: 13-DEC-23

Matrix	Date Sampled	Date Received
AQ	08-NOV-23 11:15	09-NOV-23

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Alkalinity	150 mg/L	5.0	0.23	4.0	SM2320B	WG345462	14-NOV-23 15:41	N/A	N/A	
Chloride	410 mg/L	40.	2.0	20.	EPA 300.0	WG346307	01-DEC-23 01:06	N/A	N/A	
Chromium, Hexavalent	U0.012 mg/L	0.025	0.00076	0.012	SW846 7196A	WG345136	09-NOV-23 09:46	N/A	N/A	
Ferrous Iron	U0.050 mg/L	0.10	0.026	0.050	SM3500D	WG345126	09-NOV-23 09:47	N/A	N/A	
Nitrate as N	0.30 mg/L	0.050	0.017	0.025	EPA 300.0	WG345207	09-NOV-23 18:51	N/A	N/A	
Sulfate	160 mg/L	5.0	0.32	2.5	EPA 300.0	WG346307	01-DEC-23 01:23	N/A	N/A	
Total Organic Carbon	1.1 mg/L	1.0	0.37	0.75	SM5310B	WG346585	06-DEC-23 19:06	N/A	N/A	

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Report of Analytical Results

Lab Sample ID: SQ6179-6
Client ID: SY-BRMW5-123-133-110823
SDG: SQ6179
Report Date: 13-DEC-23

Matrix	Date Sampled	Date Received
AQ	08-NOV-23 11:40	09-NOV-23

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Alkalinity	140 mg/L	5.0	0.23	4.0	SM2320B	WG345462	14-NOV-23 15:45	N/A	N/A	
Chloride	370 mg/L	20.	0.99	10.	EPA 300.0	WG346307	01-DEC-23 01:40	N/A	N/A	
Chromium, Hexavalent	U0.012 mg/L	0.025	0.00076	0.012	SW846 7196A	WG345136	09-NOV-23 09:46	N/A	N/A	
Ferrous Iron	U0.050 mg/L	0.10	0.026	0.050	SM3500D	WG345126	09-NOV-23 09:47	N/A	N/A	
Nitrate as N	0.35 mg/L	0.050	0.017	0.025	EPA 300.0	WG345207	09-NOV-23 19:08	N/A	N/A	
Sulfate	74 mg/L	1.0	0.064	0.50	EPA 300.0	WG345207	09-NOV-23 19:08	N/A	N/A	
Total Organic Carbon	2.8 mg/L	1.0	0.37	0.75	SM5310B	WG346585	06-DEC-23 19:47	N/A	N/A	

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Report of Analytical Results

Lab Sample ID: SQ6179-7
Client ID: SY-OBMW8-110823
SDG: SQ6179
Report Date: 13-DEC-23

Matrix	Date Sampled	Date Received
AQ	08-NOV-23 12:50	09-NOV-23

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Alkalinity	160 mg/L	5.0	0.23	4.0	SM2320B	WG345462	14-NOV-23 15:49	N/A	N/A	
Chloride	9.5 mg/L	2.0	0.099	1.0	EPA 300.0	WG345207	09-NOV-23 19:25	N/A	N/A	
Chromium, Hexavalent	U0.012 mg/L	0.025	0.00076	0.012	SW846 7196A	WG345136	09-NOV-23 09:46	N/A	N/A	
Ferrous Iron	U0.050 mg/L	0.10	0.026	0.050	SM3500D	WG345126	09-NOV-23 09:47	N/A	N/A	
Nitrate as N	U0.025 mg/L	0.050	0.017	0.025	EPA 300.0	WG345207	09-NOV-23 19:25	N/A	N/A	
Sulfate	8.7 mg/L	1.0	0.064	0.50	EPA 300.0	WG345207	09-NOV-23 19:25	N/A	N/A	
Total Organic Carbon	1.1 mg/L	1.0	0.37	0.75	SM5310B	WG346585	06-DEC-23 19:58	N/A	N/A	

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Report of Analytical Results

Lab Sample ID: SQ6179-8
Client ID: SY-OBMW11-110823
SDG: SQ6179
Report Date: 13-DEC-23

Matrix	Date Sampled	Date Received
AQ	08-NOV-23 14:17	09-NOV-23

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Alkalinity	200 mg/L	5.0	0.23	4.0	SM2320B	WG345462	14-NOV-23 15:53	N/A	N/A	
Chloride	650 mg/L	40.	2.0	20.	EPA 300.0	WG346307	01-DEC-23 02:32	N/A	N/A	
Chromium, Hexavalent	U0.012 mg/L	0.025	0.00076	0.012	SW846 7196A	WG345136	09-NOV-23 09:52	N/A	N/A	
Ferrous Iron	J0.037 mg/L	0.10	0.026	0.050	SM3500D	WG345126	09-NOV-23 09:47	N/A	N/A	
Nitrate as N	1.8 mg/L	0.050	0.017	0.025	EPA 300.0	WG345207	09-NOV-23 19:42	N/A	N/A	
Sulfate	200 mg/L	5.0	0.32	2.5	EPA 300.0	WG346307	01-DEC-23 02:49	N/A	N/A	
Total Organic Carbon	1.6 mg/L	1.0	0.37	0.75	SM5310B	WG346585	06-DEC-23 20:13	N/A	N/A	

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Report of Analytical Results

Lab Sample ID: SQ6179-9
Client ID: SY-OBMW110-110823
SDG: SQ6179
Report Date: 13-DEC-23

Matrix	Date Sampled	Date Received
AQ	08-NOV-23 14:22	09-NOV-23

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Alkalinity	200 mg/L	5.0	0.23	4.0	SM2320B	WG345462	14-NOV-23 15:57	N/A	N/A	
Chloride	650 mg/L	40.	2.0	20.	EPA 300.0	WG346307	01-DEC-23 03:58	N/A	N/A	
Chromium, Hexavalent	U0.012 mg/L	0.025	0.00076	0.012	SW846 7196A	WG345136	09-NOV-23 09:52	N/A	N/A	
Ferrous Iron	J0.056 mg/L	0.10	0.026	0.050	SM3500D	WG345126	09-NOV-23 09:47	N/A	N/A	
Nitrate as N	1.8 mg/L	0.050	0.017	0.025	EPA 300.0	WG345207	09-NOV-23 20:00	N/A	N/A	
Sulfate	200 mg/L	5.0	0.32	2.5	EPA 300.0	WG346307	01-DEC-23 04:16	N/A	N/A	
Total Organic Carbon	1.5 mg/L	1.0	0.37	0.75	SM5310B	WG346585	06-DEC-23 20:25	N/A	N/A	

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Report of Analytical Results

Lab Sample ID: SQ6179-10
Client ID: SY-OBMW3-110823
SDG: SQ6179
Report Date: 13-DEC-23

Matrix	Date Sampled	Date Received
AQ	08-NOV-23 11:15	09-NOV-23

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Alkalinity	160 mg/L	5.0	0.23	4.0	SM2320B	WG345462	14-NOV-23 16:12	N/A	N/A	
Chloride	21 mg/L	2.0	0.099	1.0	EPA 300.0	WG345207	09-NOV-23 20:51	N/A	N/A	
Chromium, Hexavalent	U0.012 mg/L	0.025	0.00076	0.012	SW846 7196A	WG345136	09-NOV-23 09:46	N/A	N/A	
Ferrous Iron	U0.050 mg/L	0.10	0.026	0.050	SM3500D	WG345126	09-NOV-23 09:47	N/A	N/A	
Nitrate as N	J0.022 mg/L	0.050	0.017	0.025	EPA 300.0	WG345207	09-NOV-23 20:51	N/A	N/A	
Sulfate	11 mg/L	1.0	0.064	0.50	EPA 300.0	WG345207	09-NOV-23 20:51	N/A	N/A	
Total Organic Carbon	J0.88 mg/L	1.0	0.37	0.75	SM5310B	WG346585	06-DEC-23 20:37	N/A	N/A	

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029
http://www.katahdinlab.com

Raw Data Section

WET CHEMISTRY BATCH REPORT
Nov 09 2023, 03:07 pm
Batch: WG345126 Run ID 1: R626706 Run ID 2: NONE

Parameter: Ferrous Iron

Date Analyzed: 09-NOV-23

Analyst Initials: RAD

Prep Date: N/A

Prep Method: N/A

Prep Chemist: N/A

Sample	Samp Type	Method	Initial Amt.	Final Amt.	Rpt. DF	Result	Rpt Result	TS(%)	PQL	MDL	Adj PQL	RPD	%Rec
SQ6179-1	SAMP	SM3500D	50.000mL	50.000mL	1	.007	U0.050 mg/L	NA	.1	0.026	0.10		
SQ6179-2	SAMP	SM3500D	50.000mL	50.000mL	1	-.003	U0.050 mg/L	NA	.1	0.026	0.10		
SQ6179-3	SAMP	SM3500D	50.000mL	50.000mL	1	.056	J0.056 mg/L	NA	.1	0.026	0.10		
SQ6179-4	SAMP	SM3500D	50.000mL	50.000mL	1	.204	0.20 mg/L	NA	.1	0.026	0.10		
SQ6179-5	SAMP	SM3500D	50.000mL	50.000mL	1	-.003	U0.050 mg/L	NA	.1	0.026	0.10		
SQ6179-6	SAMP	SM3500D	50.000mL	50.000mL	1	-.003	U0.050 mg/L	NA	.1	0.026	0.10		
SQ6179-7	SAMP	SM3500D	50.000mL	50.000mL	1	.007	U0.050 mg/L	NA	.1	0.026	0.10		
SQ6179-8	SAMP	SM3500D	50.000mL	50.000mL	1	.037	J0.037 mg/L	NA	.1	0.026	0.10		
SQ6179-9	SAMP	SM3500D	50.000mL	50.000mL	1	.056	J0.056 mg/L	NA	.1	0.026	0.10		
SQ6179-10	SAMP	SM3500D	50.000mL	50.000mL	1	.007	U0.050 mg/L	NA	.1	0.026	0.10		
WG345126-1	MBLANK	SM3500D	50.000mL	50.000mL	1	-.003	U0.050 mg/L	NA	.1	0.026	0.10		
WG345126-2	LCS	SM3500D	50.000mL	50.000mL	1	140.29	140 mg/L	NA	.1	0.026	0.10		100
WG345126-3	LCSD	SM3500D	50.000mL	50.000mL	1	142.5	140 mg/L	NA	.1	0.026	0.10	2	102

Comments:

SQ6179-1	Anions = NO3, SO4, Cl.
SQ6179-2	Anions = NO3, SO4, Cl.
SQ6179-3	Anions = NO3, SO4, Cl.
SQ6179-4	Anions = NO3, SO4, Cl.
SQ6179-5	Anions = NO3, SO4, Cl.
SQ6179-6	Anions = NO3, SO4, Cl.
SQ6179-7	Anions = NO3, SO4, Cl.
SQ6179-8	Anions = NO3, SO4, Cl.
SQ6179-9	Anions = NO3, SO4, Cl.
SQ6179-10	Anions = NO3, SO4, Cl.
WG345126-1	SQ6179-1
WG345126-2	SQ6179-1
WG345126-3	SQ6179-1

Entered by: RAD Date: 11/9/23 Accepted by: SS Date: 11/15/23

KATAHDIN ANALYTICAL SERVICES, INC.

Standard Stock Solution — formulas below on p2

Ferrous Ammonium Sulfate (Fe(NH4)2(SO4)2-6H2O) Stock ID: W22304

Salt Weight (g): 0.702 Final Volume(mL): 500 Concentration ug Fe++/mL: 199.9

FAS Working Standard : mLs of Stock 10 Final Volume(mL): 100 Concentration ug Fe++/mL: 19.99

CCV TV= 20.02 MG/L

LCS Stock Solution

Ferrous Ammonium Sulfate (Fe(NH4)2(SO4)2-6H2O) Stock ID: W22303

Salt Weight (g): 4.902 Final Volume(mL): 500 Concentration ug Fe++/mL: 1396.1

FAS Working Standard : mLs of Stock 10 Final Volume(mL): 100 Concentration ug Fe++/mL: 139.61

LCS TV= 139.95 MG/L

Matrix Spike Addition as Fe++ Total ug: 2 mL added to Sample 279.9

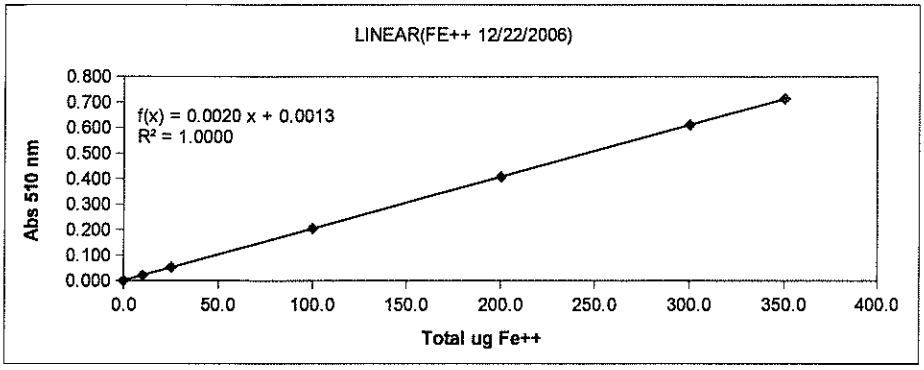
STANDARD CURVE Date: 11/07/23 **All standards and samples prepared to 100 mL final volume**

Standard	Fe++ Stock mL	Fe++ Con mg/L	510 nm Abs	Fe++ Total ug	*Linear Regression y=ax+b*	
Blank	0	0.00	0.001	0.0		
10 ug	0.5	0.20	0.021	10.0		
25ug	1.25	0.50	0.053	25.0		
100ug	5	2.00	0.205	100.1	*Correlation Coefficient=*	1.00000
200ug	10	4.00	0.407	200.2	*Slope=*	0.0020
300ug	15	6.00	0.611	300.3	*Intercept=*	0.0013
350ug	17.5	7.00	0.713	350.3		

Client	Katahdin ID	Sample Vol(mLs)	Sample Blank	510 nm	Net Abs	Fe++ Total ug	Final Con. mg/L	Fe++ mg/L		LCS RECOVERY (mg/L)		
	CCV	10	0	0.402	0.402	197.35	19.73	3.947	98.6%		True Value	Measured Value	% Recovery
	CCB	50	0	0.001	0.001	-0.13	0.00	-0.003					
	LCS	2	0	0.571	0.571	280.57	140.29	5.611	100.2%				
	LCSD	2	0	0.580	0.580	285.01	142.50	5.700	101.8%		140.0	140.29	100.2%
	SQ6179-1	50	0	0.002	0.002	0.36	0.01	0.007					
	SQ6179-2	50	0	0.001	0.001	-0.13	0.00	-0.003					
	SQ6179-3	50	0	0.007	0.007	2.82	0.06	0.056					
	SQ6179-4	50	0	0.022	0.022	10.21	0.20	0.204					
	SQ6179-5	50	0	0.001	0.001	-0.13	0.00	-0.003					
	CCV	10	0	0.402	0.402	197.35	19.73	3.947	98.6%				
	CCB	50	0	0.001	0.001	-0.13	0.00	-0.003					
	SQ6179-10	50	0	0.002	0.002	0.36	0.01	0.007					
	SQ6179-6	50	0	0.001	0.001	-0.13	0.00	-0.003					
	SQ6179-7	50	0	0.002	0.002	0.36	0.01	0.007					
	SQ6179-9	50	0	0.007	0.007	2.82	0.06	0.056					
	SQ6179-8	50	0	0.005	0.005	1.84	0.04	0.037					
	CCV	10	0	0.403	0.403	197.84	19.78	3.957	98.8%				
	CCB	50	0	0.001	0.001	-0.13	0.00	-0.003					

ANALYST: RAD DATE: 11/9/2023

CHECKED BY: SS DATE: 11/15/23



Fe++ ug	Abs
0.0	0.001
10.1	0.015
25.2	0.045
100.1	0.205
200.2	0.407
300.3	0.611
350.3	0.713
0.0	0.000

Fe++ ug	Abs
0.0	0.0012664
100.1	0.2045289
200.2	0.4077913
300.3	0.6110538
350.3	0.712685
0.0	0.0012664
	#VALUE!

FORMULAS

M3 STOCK Concentration ug Fe++/ [g FAS /mw FAS]x mw Fe x10exp6 {REM ug/g}/ volume in ml

M6 WORKING Concentration ug Fe++/mL: STOCK CONCENTRATION x DILUTION FACTOR

I12 LCS STOCK LCS Stock Concentration as Fe++ mg/mL: [vol x . normality of K2CrO7/ vol FAS] x mw OF Fe

I14 LCS WORKING Working LCS Stock Concentration as Fe++ ug/mL: STOCK CONCENTRATION x DILUTION FACTOR

KATAHDIN ANALYTICAL SERVICES

FERROUS IRON SM 3500-Fe B

Reagents Information:

Ammonium Acetate Buffer ID: WZZ302	Notes:
Phenanthroline Solution ID: WZZ301	
Ferrous Ammonium Sulfate Stock ID: WZZ304 19.99	WG345126
Ferrous Ammonium Sulfate Working Standard/CCV ID: 110923 Conc (µg/mL)	→ R626706
LCS/ICV/MS Stock Standard ID: WZZ303	
LCS/ICV/MS Working Standard ID: 110923 139.61 Conc (µg/mL)	
Spectronic 301:	
Spectronic 401: — SPEC 1	

Distillation and Analysis Data:

KAS Sample ID	Initial Dilution	Prep Time	Phenanthroline Addition (V)	Sample Volume (mLs)	Abs 510nm	
CCV		9:47	✓	50	0.402	
CCB					0.001	
LCS					0.571	
LCSD					0.580	
SQ6179-1					0.002	0905
-2					0.001	0935
-3					0.007	1016
-4					0.022	1100
-5					0.001	1115 BRMW5
CCV					0.402	
CCB					0.001	
6179-10					0.002	1150BMW3
-6					0.001	1140
-7					0.002	1250
-9					0.007	1422
-8					0.005	OBMW11
CCV					0.403	
CCB					0.001	
						RAD 11/9/23

Analyst: RAD Date: 11/9/23

Reviewed by: SS Date: 11/15/23

WET CHEMISTRY BATCH REPORT
Nov 14 2023, 09:29 am
Batch: WG345136 Run ID 1: R626955 Run ID 2: NONE

Parameter: Chromium, Hexavalent

Date Analyzed: 09-NOV-23

Analyst Initials: SS

Prep Date: N/A

Prep Method: N/A

Prep Chemist: N/A

Sample	Samp Type	Method	Initial Amt.	Final Amt.	Rpt. DF	Result		Rpt Result	TS(%)	PQL	MDL	Adj PQL	RPD	%Rec
SQ6176-1	SAMP	SW846 7196A	95.000mL	95.000mL	1	.00037	M1	U0.025 mg/L	NA	.025	0.00076	0.025		
SQ6178-1	SAMP	SW846 7196A	95.000mL	95.000mL	1	-.00032		U0.025 mg/L	NA	.025	0.00076	0.025		
SQ6179-1	SAMP	SW846 7196A	95.000mL	95.000mL	1	-.00015		U0.012 mg/L	NA	.025	0.00076	0.025		
SQ6179-2	SAMP	SW846 7196A	95.000mL	95.000mL	1	-.00035		U0.012 mg/L	NA	.025	0.00076	0.025		
SQ6179-3	SAMP	SW846 7196A	95.000mL	95.000mL	1	-.00028		U0.012 mg/L	NA	.025	0.00076	0.025		
SQ6179-4	SAMP	SW846 7196A	95.000mL	95.000mL	1	-.00025		U0.012 mg/L	NA	.025	0.00076	0.025		
SQ6179-5	SAMP	SW846 7196A	95.000mL	95.000mL	1	-.00028		U0.012 mg/L	NA	.025	0.00076	0.025		
SQ6179-6	SAMP	SW846 7196A	95.000mL	95.000mL	1	-.00019		U0.012 mg/L	NA	.025	0.00076	0.025		
SQ6179-7	SAMP	SW846 7196A	95.000mL	95.000mL	1	-.00003		U0.012 mg/L	NA	.025	0.00076	0.025		
SQ6179-8	SAMP	SW846 7196A	95.000mL	95.000mL	1	-.00021		U0.012 mg/L	NA	.025	0.00076	0.025		
SQ6179-9	SAMP	SW846 7196A	95.000mL	95.000mL	1	-.0003		U0.012 mg/L	NA	.025	0.00076	0.025		
SQ6179-10	SAMP	SW846 7196A	95.000mL	95.000mL	1	-.00016		U0.012 mg/L	NA	.025	0.00076	0.025		
WG345136-1	MBLANK	SW846 7196A	95.000mL	95.000mL	1	-.00022		U0.012 mg/L	NA	.025	0.00076	0.025		
WG345136-2	LCS	SW846 7196A	95.000mL	95.000mL	1	.49749		0.50 mg/L	NA	.025	0.00076	0.025		99
WG345136-3	LCSD	SW846 7196A	95.000mL	95.000mL	1	.49718		0.50 mg/L	NA	.025	0.00076	0.025	0	99
WG345136-4	DUP	SW846 7196A	95.000mL	95.000mL	1	-.00027		U0.012 mg/L	NA	.025	0.00076	0.025	NC	
WG345136-5	MS	SW846 7196A	95.000mL	95.000mL	1	.47401		0.47 mg/L	NA	.025	0.00076	0.025		95
WG345136-6	MS	SW846 7196A	95.000mL	95.000mL	1	.00357		U0.025 mg/L	NA	.025	0.00076	0.025		1

Comments:

SQ6179-1	Anions = NO3, SO4, Cl.
SQ6179-2	Anions = NO3, SO4, Cl.
SQ6179-3	Anions = NO3, SO4, Cl.
SQ6179-4	Anions = NO3, SO4, Cl.
SQ6179-5	Anions = NO3, SO4, Cl.
SQ6179-6	Anions = NO3, SO4, Cl.
SQ6179-7	Anions = NO3, SO4, Cl.
SQ6179-8	Anions = NO3, SO4, Cl.
SQ6179-9	Anions = NO3, SO4, Cl.
SQ6179-10	Anions = NO3, SO4, Cl.
WG345136-1	SQ6176-1
WG345136-2	SQ6176-1
WG345136-3	SQ6176-1
WG345136-4	SQ6179-9
WG345136-5	SQ6179-9
WG345136-6	SQ6176-1

Entered by: SS Date: 11/14/23 Accepted by: RAD Date: 11/14/23

Katahdin Analytical Services SQ6179 Page 454 of 740

KATAHDIN ANALYTICAL SERVICES, LLC
Wet Chemistry Analysis Run Information Sheet

Analyte: HEXAVALENT CHROMIUM	**Analyst:** SS
Instrument: KONELAB 20	**Analysis Date:** 11/9/23

W6345136 → R626955

Analytical Method (Check all that apply):

[✓] SW846 7196 A [ ] SM 3500-Cr B [ ] Other (list): _____

Reagent Information:

Reagent Name	Reagent ID	Expiration Date
Diphenylcarbazide Solution	**W22305**	**5/7/2024**
10% v/v Sulfuric Acid	**W21629**	**2/14/2024**

Standards Information:

Standard Name	Concentration (mg/L as Cr^6)	ID	Expiration Date
Cal. Standard / CCV Stock	1000.0	**SWL5065**	**4/28/2024**
Cal. Std. / CCV Intermediate	25.0	**W21820**	**11/28/2023**
1.0 mg/L Calibration Standard - (1.00 mL / 25.0 mL dilution of Cal. Standard / CCV Intermediate)	1.00	HC_Cal110923	Day of use only
CCV - (0.50 mL / 25.0 mL dilution of Cal. Standard / CCV Intermediate)	0.50	HC_CCV110923	Day of use only
LCS / MS Stock	1000.0	**SWL5048**	**12/31/2023**
LCS / MS Intermediate	25.0	**W21961**	**12/20/2023**
LCS - (0.50 mL / 25.0 mL dilution of LCS / MS Intermediate)	0.50	HC_LCS110923	Day of use only

Notes:

1) Additional calibration standards (0.50, 0.10, 0.050, 0.020, 0.010 mg/L) are automatically prepared by the instrument during analysis through dilution of the 1.0 mg/L Calibration Standard.
2) Matrix spikes are prepared prior to analysis by adding 0.5 mL of LCS / MS Intermediate to 25 mL of sample. Matrix spike added = 0.50 mg/L as Cr6.

Comments:

Pipettes: W7, W8, W10

Aquakem v. 7.2									
Results from time period:									
Thu Nov 09 09:02:42 2023									
Thu Nov 09 16:10:14 2023									
Sample Id	Test short name	Result	Result unit	Result date and time	Dil. Factor	Response	Blank init abs. (A)	Main abs. 1	Comments
CRVI-0	Chromium	-0.0008661	mg/l	11/9/23 9:02:42	1	0.0001	-0.00025	-0.00015	CAL PREP ERROR, RERUN
CRVI-1.0	Chromium	0.0099171	mg/l	11/9/23 9:02:43	100	0.00361	-0.00055	0.00307	CAL PREP ERROR, RERUN
CRVI-1.0	Chromium	0.0204105	mg/l	11/9/23 9:02:44	50	0.00703	-0.00043	0.00661	CAL PREP ERROR, RERUN
CRVI-1.0	Chromium	0.0497029	mg/l	11/9/23 9:02:45	20	0.01658	-0.00041	0.01617	CAL PREP ERROR, RERUN
CRVI-1.0	Chromium	0.1004722	mg/l	11/9/23 9:02:46	10	0.03312	-0.00018	0.03294	CAL PREP ERROR, RERUN
CRVI-1.0	Chromium	0.5008064	mg/l	11/9/23 9:02:47	2	0.16358	-0.00041	0.16318	CAL PREP ERROR, RERUN
CRVI-1.0	Chromium	0.999557	mg/l	11/9/23 9:02:48	1	0.32612	0.0004	0.32652	CAL PREP ERROR, RERUN
CRVI-CCV	Chromium	0.5153923	mg/l	11/9/23 9:16:08	1	0.16834	0.00053	0.16887	CAL PREP ERROR, RERUN
CRVI-CCB	Chromium	-0.0012024	mg/l	11/9/23 9:16:09	1	-0.00001	-0.00034	-0.00035	CAL PREP ERROR, RERUN
CRVI LCS	Chromium	1.0000845	mg/l	11/9/23 9:16:10	1	0.32629	-0.00036	0.32593	CAL PREP ERROR, RERUN
CRVI LCSD	Chromium	0.979172	mg/l	11/9/23 9:16:11	1	0.31948	-0.00052	0.31895	CAL PREP ERROR, RERUN
SQ6179 0905	Chromium	-0.0008202	mg/l	11/9/23 9:16:12	1	0.00011	-0.00048	-0.00037	CAL PREP ERROR, RERUN
SQ6179 0935	Chromium	-0.0012837	mg/l	11/9/23 9:16:13	1	-0.00004	-0.00048	-0.00052	CAL PREP ERROR, RERUN
SQ6179 1016	Chromium	-0.001017	mg/l	11/9/23 9:16:14	1	0.00005	-0.00036	-0.00031	CAL PREP ERROR, RERUN
SQ6179 1100	Chromium	-0.0010072	mg/l	11/9/23 9:16:15	1	0.00005	-0.00034	-0.00028	CAL PREP ERROR, RERUN
SQ6179 1115 GWK	Chromium	-0.0009114	mg/l	11/9/23 9:16:16	1	0.00008	-0.00013	-0.00005	CAL PREP ERROR, RERUN
SQ6179 1115 CRB	Chromium	-0.0005106	mg/l	11/9/23 9:16:17	1	0.00022	-0.00039	-0.00017	CAL PREP ERROR, RERUN
SQ6179 1140	Chromium	-0.0003858	mg/l	11/9/23 9:16:18	1	0.00026	-0.00023	0.00003	CAL PREP ERROR, RERUN
SQ6179 1250	Chromium	0.0000593	mg/l	11/9/23 9:16:19	1	0.0004	0.0004	0.00081	CAL PREP ERROR, RERUN
CRVI-CCV	Chromium	0.5082905	mg/l	11/9/23 9:18:56	1	0.16602	0.00081	0.16683	CAL PREP ERROR, RERUN
CRVI-CCB	Chromium	-0.0010668	mg/l	11/9/23 9:18:57	1	0.00003	-0.00017	-0.00013	CAL PREP ERROR, RERUN
CRVI-0	Chromium	-0.0001493	mg/l	11/9/23 9:31:59	1	0.00015	-0.00012	0.00003	CAL POINT
CRVI-1.0	Chromium	0.0098258	mg/l	11/9/23 9:32:00	100	0.00657	-0.0004	0.00617	CAL POINT
CRVI-1.0	Chromium	0.0201037	mg/l	11/9/23 9:32:01	50	0.01319	-0.00028	0.01291	CAL POINT
CRVI-1.0	Chromium	0.0505159	mg/l	11/9/23 9:32:02	20	0.03277	-0.00031	0.03246	CAL POINT
CRVI-1.0	Chromium	0.1011944	mg/l	11/9/23 9:32:03	10	0.06539	-0.00013	0.06527	CAL POINT
CRVI-1.0	Chromium	0.4973101	mg/l	11/9/23 9:32:04	2	0.32042	-0.00029	0.32012	CAL POINT
CRVI-1.0	Chromium	1.0011994	mg/l	11/9/23 9:32:05	1	0.64483	0.00047	0.64529	CAL POINT
CRVI-CCV	Chromium	0.513226	mg/l	11/9/23 9:46:00	1	0.33066	0.0005	0.33116	103%
CRVI-CCB	Chromium	-0.0002213	mg/l	11/9/23 9:46:01	1	0.0001	-0.00038	-0.00028	
CRVI LCS	Chromium	0.4974972	mg/l	11/9/23 9:46:02	1	0.32054	-0.00048	0.32006	ACCEPTED
CRVI LCSD	Chromium	0.4971899	mg/l	11/9/23 9:46:03	1	0.32034	-0.00056	0.31978	ACCEPTED
SQ6179 0905	Chromium	-0.0001546	mg/l	11/9/23 9:46:04	1	0.00014	-0.00048	-0.00034	ACCEPTED
SQ6179 0935	Chromium	-0.0003508	mg/l	11/9/23 9:46:05	1	0.00002	-0.00049	-0.00047	ACCEPTED
SQ6179 1016	Chromium	-0.0002801	mg/l	11/9/23 9:46:06	1	0.00006	-0.00034	-0.00027	ACCEPTED
SQ6179 1100	Chromium	-0.0002512	mg/l	11/9/23 9:46:07	1	0.00008	-0.0004	-0.00031	ACCEPTED
SQ6179 1115 GWK	Chromium	-0.0001686	mg/l	11/9/23 9:46:08	1	0.00014	-0.00021	-0.00007	ACCEPTED
SQ6179 1115 CRB	Chromium	-0.0002861	mg/l	11/9/23 9:46:09	1	0.00006	-0.00044	-0.00038	ACCEPTED
SQ6179 1140	Chromium	-0.0001969	mg/l	11/9/23 9:46:10	1	0.00012	-0.00028	-0.00016	ACCEPTED
SQ6179 1250	Chromium	-0.0000391	mg/l	11/9/23 9:46:11	1	0.00022	0.00042	0.00064	ACCEPTED
CRVI-CCV	Chromium	0.5003453	mg/l	11/9/23 9:52:25	1	0.32237	-0.00037	0.322	100%
CRVI-CCB	Chromium	0.0000313	mg/l	11/9/23 9:52:26	1	0.00026	-0.00044	-0.00017	

SS
11/14/23

SQ6179 1417	Chromium	-0.0002168	mg/l	11/9/23 9:52:27	1	0.0001	-0.00043	-0.00032	ACCEPTED
SQ6179 1422	Chromium	-0.0003085	mg/l	11/9/23 9:52:28	1	0.00005	-0.00039	-0.00034	ACCEPTED
SQ6179 1422 DUP	Chromium	-0.0002751	mg/l	11/9/23 9:52:29	1	0.00007	-0.00025	-0.00018	ACCEPTED
SQ6179 1422 MS	Chromium	0.4740156	mg/l	11/9/23 9:52:30	1	0.30542	-0.00019	0.30522	ACCEPTED
SQ6178	Chromium	-0.0003227	mg/l	11/9/23 9:52:31	1	0.00004	-0.00013	-0.00009	ACCEPTED
SQ6176	Chromium	0.0003719	mg/l	11/9/23 9:52:32	1	0.00048	-0.00007	0.00041	ACCEPTED
SQ6176 MS	Chromium	0.0035729	mg/l	11/9/23 9:52:33	1	0.00254	0.0001	0.00264	ACCEPTED
CRVI-CCV	Chromium	0.5065765	mg/l	11/9/23 9:54:55	1	0.32638	0.00065	0.32704	101%
CRVI-CCB	Chromium	-0.0002843	mg/l	11/9/23 9:54:56	1	0.00006	-0.00036	-0.0003	
CRVI-CCV	Chromium	0.5062072	mg/l	11/9/23 10:24:23	1	0.32614	-0.00036	0.32579	101%
CRVI-CCB	Chromium	-0.0002711	mg/l	11/9/23 10:24:24	1	0.00007	-0.00048	-0.00041	
SQ6176 5X	Chromium	-0.0004256	mg/l	11/9/23 10:24:25	1	-0.00003	-0.00037	-0.0004	NOT REPORTED, RERUN FOR MATRIX
SQ6176 MS 5X	Chromium	0.0032277	mg/l	11/9/23 10:24:26	1	0.00232	0.00181	0.00413	NOT REPORTED, RERUN FOR MATRIX
CRVI-CCV	Chromium	0.5097474	mg/l	11/9/23 10:26:23	1	0.32842	0.00057	0.329	102%
CRVI-CCB	Chromium	-0.0002942	mg/l	11/9/23 10:26:24	1	0.00005	-0.00043	-0.00038	

SS 11/14/23

Result Report | Aquakem 7.2 | Page: 1

Laboratory
Analyzer User

Date : 11/9/2023
Time : 11:55

Test: Chromium
Unit: mg/l

Sample ID:	Result	Date and Time	Note
CRVI-CCV	0.515392	11/9/2023 9:16	
CRVI-CCB	-0.001	11/9/2023 9:16	
CRVI LCS	_____	-	R
CRVI LCSD	_____	-	R
-1 SQ6179 0905	_____	-	R
-2 SQ6179 0935	_____	-	R
-3 SQ6179 1016	_____	-	R
-4 SQ6179 1100	_____	-	R
-10 SQ6179 1115 GWK	_____	-	R
-5 SQ6179 1115 CRB	_____	-	R
-6 SQ6179 1140	_____	-	R
-7 SQ6179 1250	_____	-	R
CRVI-CCV	0.508290	11/9/2023 9:18	
CRVI-CCB	-0.001	11/9/2023 9:18	
CRVI-CCV	0.513226	11/9/2023 9:46	
CRVI-CCB	-0.0002	11/9/2023 9:46	
CRVI LCS	0.497497	11/9/2023 9:46	R
CRVI LCSD	0.497190	11/9/2023 9:46	R
-1 SQ6179 0905	-0.0002	11/9/2023 9:46	R
-2 SQ6179 0935	-0.0004	11/9/2023 9:46	R
-3 SQ6179 1016	-0.0003	11/9/2023 9:46	R
-4 SQ6179 1100	-0.0003	11/9/2023 9:46	R
-10 SQ6179 1115 GWK	-0.0002	11/9/2023 9:46	R
-5 SQ6179 1115 CRB	-0.0003	11/9/2023 9:46	R
-6 SQ6179 1140	-0.0002	11/9/2023 9:46	R
-7 SQ6179 1250	-4e-005	11/9/2023 9:46	R
CRVI-CCV	0.500345	11/9/2023 9:52	
CRVI-CCB	0.000031	11/9/2023 9:52	
-8 SQ6179 1417	-0.0002	11/9/2023 9:52	
-9 SQ6179 1422	-0.0003	11/9/2023 9:52	
-9 SQ6179 1422 DUP	-0.0003	11/9/2023 9:52	
-9 SQ6179 1422 MS	0.474016	11/9/2023 9:52	
SQ6178-1	-0.0003	11/9/2023 9:52	
-1 SQ6176	0.000372	11/9/2023 9:52	
-1 SQ6176 MS	0.003573	11/9/2023 9:52	
CRVI-CCV	0.506577	11/9/2023 9:54	
CRVI-CCB	-0.0003	11/9/2023 9:54	
CRVI-CCV	0.506207	11/9/2023 10:24	
CRVI-CCB	-0.0003	11/9/2023 10:24	
-1 SQ6176 5X	-0.0004	11/9/2023 10:24	
-1 SQ6176 MS 5X	0.003228	11/9/2023 10:24	
CRVI-CCV	0.509747	11/9/2023 10:26	
CRVI-CCB	-0.0003	11/9/2023 10:26	

SS 11/9/23

Laboratory
Analyzer User

11/9/2023 9:32

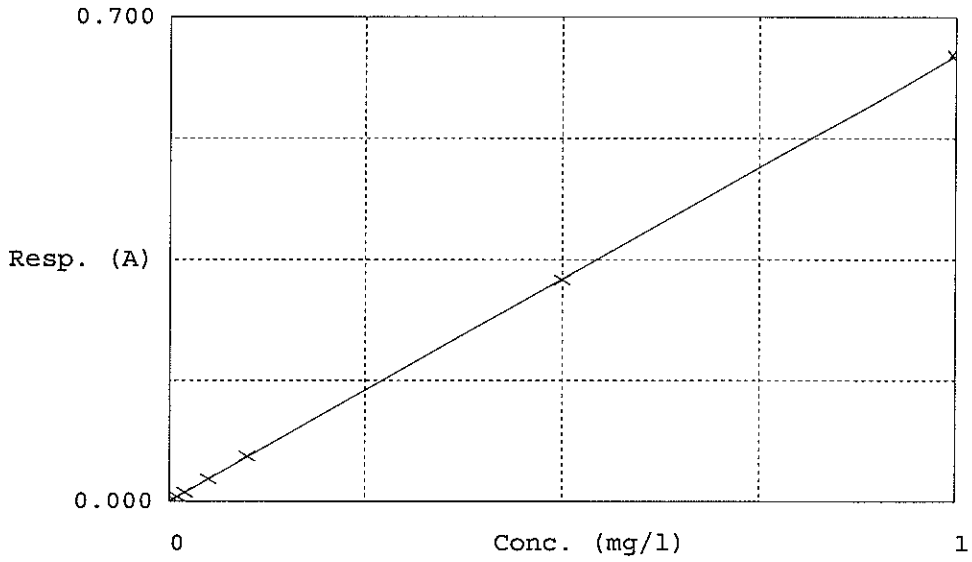
Test Chromium

Accepted 11/9/2023 9:32

Factor 1.553
Bias 0

Coeff. of det. 0.999988

Errors



	Calibrator	Response	Calc. con.	Conc.	Errors
1	CRVI-0	0.000	-0.0001493	0.0000000	
2	CRVI-1.0	0.007	0.0098258	0.0100000	
3	CRVI-1.0	0.013	0.0201037	0.0200000	
4	CRVI-1.0	0.033	0.0505159	0.0500000	
5	CRVI-1.0	0.065	0.1011944	0.1000000	
6	CRVI-1.0	0.320	0.4973101	0.5000000	
7	CRVI-1.0	0.645	1.0011994	1.0000000	

Katahdin
ANALYTICAL SERVICES

Accredited in accordance with nelac
Cert No E87604

Wet Chemistry Batch Report

Analyst Initials: RAD
Date Analyzed: 09-NOV-23

Batch: WG345207
Prep Method: N/A
Prep Chemist: RAD

Sample	Samp Type	Method	Parameter	DF	Result		Rpt. Result	Units	PQL	Adj. PQL	MDL	Adj. MDL	RPD	Rec.
SQ6179-1	SAMP	EPA 300.0	Nitrate as N	1	.1877		0.19	mg/L	.05	0.050	.0174	0.017		
SQ6179-1	SAMP	EPA 300.0	Sulfate	1	8.5171		8.5	mg/L	1	1.0	.0637	0.064		
SQ6179-10	SAMP	EPA 300.0	Chloride	1	20.7393		21	mg/L	2	2.0	.0993	0.099		
SQ6179-10	SAMP	EPA 300.0	Nitrate as N	1	.022	J	0.022	mg/L	.05	0.050	.0174	0.017		
SQ6179-10	SAMP	EPA 300.0	Sulfate	1	10.9681		11	mg/L	1	1.0	.0637	0.064		
SQ6179-2	SAMP	EPA 300.0	Chloride	1	7.9726		8.0	mg/L	2	2.0	.0993	0.099		
SQ6179-2	SAMP	EPA 300.0	Nitrate as N	1	.0067	U	0.025	mg/L	.05	0.050	.0174	0.017		
SQ6179-2	SAMP	EPA 300.0	Sulfate	1	5.8845		5.9	mg/L	1	1.0	.0637	0.064		
SQ6179-3	SAMP	EPA 300.0	Nitrate as N	1	.0064	U	0.025	mg/L	.05	0.050	.0174	0.017		
SQ6179-3	SAMP	EPA 300.0	Sulfate	1	48.6101		49	mg/L	1	1.0	.0637	0.064		
SQ6179-4	SAMP	EPA 300.0	Nitrate as N	1	.5539		0.55	mg/L	.05	0.050	.0174	0.017		
SQ6179-5	SAMP	EPA 300.0	Nitrate as N	1	.2994		0.30	mg/L	.05	0.050	.0174	0.017		
SQ6179-6	SAMP	EPA 300.0	Nitrate as N	1	.3525		0.35	mg/L	.05	0.050	.0174	0.017		
SQ6179-6	SAMP	EPA 300.0	Sulfate	1	74.5638		74	mg/L	1	1.0	.0637	0.064		
SQ6179-7	SAMP	EPA 300.0	Chloride	1	9.5455		9.5	mg/L	2	2.0	.0993	0.099		
SQ6179-7	SAMP	EPA 300.0	Nitrate as N	1	.0014	U	0.025	mg/L	.05	0.050	.0174	0.017		
SQ6179-7	SAMP	EPA 300.0	Sulfate	1	8.7255		8.7	mg/L	1	1.0	.0637	0.064		
SQ6179-8	SAMP	EPA 300.0	Nitrate as N	1	1.7673		1.8	mg/L	.05	0.050	.0174	0.017		
SQ6179-9	SAMP	EPA 300.0	Nitrate as N	1	1.7677		1.8	mg/L	.05	0.050	.0174	0.017		
WG345207-1	MBLANK	EPA 300.0	Chloride	1	.0084	U	1.0	mg/L	2	2.0	.0993	0.099		
WG345207-1	MBLANK	EPA 300.0	Nitrate as N	1	.0106	U	0.025	mg/L	.05	0.050	.0174	0.017		
WG345207-1	MBLANK	EPA 300.0	Sulfate	1	.0676	J	0.068	mg/L	1	1.0	.0637	0.064		
WG345207-2	LCS	EPA 300.0	Chloride	1	3.6294		3.63	mg/L	2	2.0	.0993	0.099		96.8
WG345207-2	LCS	EPA 300.0	Nitrate as N	1	.7968		0.797	mg/L	.05	0.050	.0174	0.017		94.3
WG345207-2	LCS	EPA 300.0	Sulfate	1	3.6845		3.68	mg/L	1	1.0	.0637	0.064		98.1

Comments:

SQ6179-1	Anions = NO3, SO4,
SQ6179-10	Anions = NO3, SO4,
SQ6179-2	Anions = NO3, SO4,
SQ6179-3	Anions = NO3, SO4,
SQ6179-4	Anions = NO3, SO4,
SQ6179-5	Anions = NO3, SO4,
SQ6179-6	Anions = NO3, SO4,
SQ6179-7	Anions = NO3, SO4,
SQ6179-8	Anions = NO3, SO4,
SQ6179-9	Anions = NO3, SO4,
WG345207-1	SQ6179-1
WG345207-2	SQ6179-1

Entered by: RAD Date: 11/10/23 Accepted by: SS Date: 11/15/23

Katahdin
ANALYTICAL SERVICES

Accredited in accordance with nelac
Cert No E87604

Wet Chemistry Batch Report

Analyst Initials: RAD
Date Analyzed: 09-NOV-23
10-NOV-23

Batch: WG345208
Prep Method: N/A
Prep Chemist: RAD

Sample	Samp Type	Method	Parameter	DF	Result	Rpt. Result	Units	PQL	Adj. PQL	MDL	Adj. MDL	RPD	Rec.
SQ6064-1	SAMP	SW846 9056A	Nitrate as N	1	2.1722	2.2	mg/L	.05	0.050	.0174	0.017		
SQ6064-1	SAMP	SW846 9056A	Sulfate	1	10.7432	11	mg/L	1	1.0	.0637	0.064		
SQ6064-10	SAMP	SW846 9056A	Nitrate as N	1	.0033	U 0.025	mg/L	.05	0.050	.0174	0.017		
SQ6064-10	SAMP	SW846 9056A	Sulfate	1	27.376	27	mg/L	1	1.0	.0637	0.064		
SQ6064-2	SAMP	SW846 9056A	Nitrate as N	1	.1936	0.19	mg/L	.05	0.050	.0174	0.017		
SQ6064-2	SAMP	SW846 9056A	Sulfate	1	5.6502	5.6	mg/L	1	1.0	.0637	0.064		
SQ6064-3	SAMP	SW846 9056A	Nitrate as N	1	.2617	0.26	mg/L	.05	0.050	.0174	0.017		
SQ6064-3	SAMP	SW846 9056A	Sulfate	1	12.6734	13	mg/L	1	1.0	.0637	0.064		
SQ6064-4	SAMP	SW846 9056A	Nitrate as N	1	.0191	J 0.019	mg/L	.05	0.050	.0174	0.017		
SQ6064-4	SAMP	SW846 9056A	Sulfate	1	20.6395	21	mg/L	1	1.0	.0637	0.064		
SQ6064-5	SAMP	SW846 9056A	Nitrate as N	1	.0018	U 0.025	mg/L	.05	0.050	.0174	0.017		
SQ6064-5	SAMP	SW846 9056A	Sulfate	1	20.2163	20	mg/L	1	1.0	.0637	0.064		
SQ6064-6	SAMP	SW846 9056A	Nitrate as N	1	.0048	U 0.025	mg/L	.05	0.050	.0174	0.017		
SQ6064-6	SAMP	SW846 9056A	Sulfate	1	31.1728	31	mg/L	1	1.0	.0637	0.064		
SQ6064-7	SAMP	SW846 9056A	Nitrate as N	1	.0077	U 0.025	mg/L	.05	0.050	.0174	0.017		
SQ6064-7	SAMP	SW846 9056A	Sulfate	1	19.4771	19	mg/L	1	1.0	.0637	0.064		
SQ6064-8	SAMP	SW846 9056A	Nitrate as N	1	.1019	0.10	mg/L	.05	0.050	.0174	0.017		
SQ6064-8	SAMP	SW846 9056A	Sulfate	1	23.3359	23	mg/L	1	1.0	.0637	0.064		
SQ6220-1	SAMP	SW846 9056A	Nitrate as N	1	.0431	J 0.043	mg/L	.05	0.050	.0174	0.017		
SQ6220-1	SAMP	SW846 9056A	Sulfate	1	5.0879	5.1	mg/L	1	1.0	.0637	0.064		
SQ6220-2	SAMP	SW846 9056A	Nitrate as N	1	.0376	J 0.038	mg/L	.05	0.050	.0174	0.017		
SQ6220-2	SAMP	SW846 9056A	Sulfate	1	5.148	5.1	mg/L	1	1.0	.0637	0.064		
SQ6220-3	SAMP	SW846 9056A	Nitrate as N	1	2.7125	2.7	mg/L	.05	0.050	.0174	0.017		
SQ6220-3	SAMP	SW846 9056A	Sulfate	1	25.8421	26	mg/L	1	1.0	.0637	0.064		
SQ6220-4	SAMP	SW846 9056A	Nitrate as N	1	.0009	U 0.025	mg/L	.05	0.050	.0174	0.017		
SQ6220-4	SAMP	SW846 9056A	Sulfate	1	39.175	39	mg/L	1	1.0	.0637	0.064		
SQ6220-5	SAMP	SW846 9056A	Nitrate as N	1	.0037	U 0.025	mg/L	.05	0.050	.0174	0.017		
SQ6220-5	SAMP	SW846 9056A	Sulfate	1	17.7711	18	mg/L	1	1.0	.0637	0.064		
SQ6220-6	SAMP	SW846 9056A	Nitrate as N	1	.0071	U 0.025	mg/L	.05	0.050	.0174	0.017		
SQ6220-6	SAMP	SW846 9056A	Sulfate	1	2.3677	2.4	mg/L	1	1.0	.0637	0.064		
SQ6220-7	SAMP	SW846 9056A	Nitrate as N	1	.0029	U 0.025	mg/L	.05	0.050	.0174	0.017		
SQ6220-7	SAMP	SW846 9056A	Sulfate	1	.0186	U 0.50	mg/L	1	1.0	.0637	0.064		
SQ6220-9	SAMP	SW846 9056A	Nitrate as N	1	.0105	U 0.025	mg/L	.05	0.050	.0174	0.017		
SQ6220-9	SAMP	SW846 9056A	Sulfate	1	25.3171	25	mg/L	1	1.0	.0637	0.064		
WG345208-1	MBLANK	SW846 9056A	Nitrate as N	1	.0093	U 0.025	mg/L	.05	0.050	.0174	0.017		
WG345208-1	MBLANK	SW846 9056A	Sulfate	1	.0901	J 0.090	mg/L	1	1.0	.0637	0.064		
WG345208-2	LCS	SW846 9056A	Nitrate as N	1	.8016	0.802	mg/L	.05	0.050	.0174	0.017		94.9
WG345208-2	LCS	SW846 9056A	Sulfate	1	3.8577	3.86	mg/L	1	1.0	.0637	0.064		103.
WG345208-3	MS	SW846 9056A	Nitrate as N	1	3.64105	3.64	mg/L	.05	0.050	.0174	0.017		104
WG345208-3	MS	SW846 9056A	Sulfate	1	29.898	29.9	mg/L	1	1.0	.0637	0.064		103
WG345208-4	MSD	SW846 9056A	Nitrate as N	1	3.68368	3.68	mg/L	.05	0.050	.0174	0.017	1	109
WG345208-4	MSD	SW846 9056A	Sulfate	1	30.0404	30.0	mg/L	1	1.0	.0637	0.064	0	106
WG345208-5	MS	SW846 9056A	Nitrate as N	1	.787368	* 0.787	mg/L	.05	0.050	.0174	0.017		88.6
WG345208-5	MS	SW846 9056A	Sulfate	1	35.4745	35.5	mg/L	1	1.0	.0637	0.064		109
WG345208-6	MSD	SW846 9056A	Nitrate as N	1	.770842	* 0.771	mg/L	.05	0.050	.0174	0.017	2	86.7
WG345208-6	MSD	SW846 9056A	Sulfate	1	35.3443	35.3	mg/L	1	1.0	.0637	0.064	0	106

Entered by: RAD Date: 11/10/23 Accepted by: SS Date: 11/15/23

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Wet Chemistry Batch Report

Analyst Initials: RAD
Date Analyzed: 09-NOV-23
10-NOV-23

Batch: WG345208
Prep Method: N/A
Prep Chemist: RAD

Sample	Samp Type	Method	Parameter	DF	Result	Rpt. Result	Units	PQL	Adj. PQL	MDL	Adj. MDL	RPD	Rec.

Comments:

SQ6064-1	Anions: SO4 + NO3.
SQ6064-10	Anions: SO4 + NO3.
SQ6064-2	Anions: SO4 + NO3.
SQ6064-3	Anions: SO4 + NO3.
SQ6064-4	Anions: SO4 + NO3.
SQ6064-5	Anions: SO4 + NO3.
SQ6064-6	MS/MSD Anions: S(
SQ6064-7	Anions: SO4 + NO3.
SQ6064-8	Anions: SO4 + NO3.
SQ6220-1	Anions: SO4 + NO3.
SQ6220-2	Anions: SO4 + NO3.
SQ6220-3	MS/MSD Anions: S(
SQ6220-4	Anions: SO4 + NO3.
SQ6220-5	Anions: SO4 + NO3.
SQ6220-6	Anions: SO4 + NO3.
SQ6220-7	Anions: SO4 + NO3.
SQ6220-9	Anions: SO4 + NO3.
WG345208-1	SQ6064-1
WG345208-2	SQ6064-1
WG345208-3	SQ6220-3
WG345208-4	SQ6220-3
WG345208-5	SQ6064-6
WG345208-6	SQ6064-6

Entered by: RAD Date: 11/10/23 Accepted by: SS Date: 11/15/23

Katahdin Analytical Services SQ6179 Page 462 of 740

IC STANDARDS PREPARATION

Fill sheet in completely and file with each batch of samples analyzed.

IC8 MIX ID:	EXPIRATION DATE:	ICAL DATE:	CCV STOCK ID:	EXPIRATION DATE:
W22233	10/23/23	10/12/23	W22318	11/22/23

ALALYTE	INITIAL AMOUNT (mL)	OF	STOCK CONC. (mg/L)	TO	FINAL VOLUME (mL)	=	FINAL CONC. (mg/L)
Cl	2.0	OF	1000	TO	100	=	20
NO2 (as N)	0.8		1000				8
NO3 (as N)	0.8		1000				8
Br	4.0		1000				40
SO4	4.0		1000				40
F	1.0		1000				10
PO4 (as P)	1.0		1000				10

WORKING STANDARDS

Standards prepared on each day of use.

STD.	INITIAL AMOUNT (mL)	OF	FINAL VOLUME (mL)	FINAL CONC. (mg/L)							STD ID*
				Cl	NO2	NO3	Br	SO4	PO4	F	
IC8	5	IC8	5	40	16	16	80	80	20	20	IC8-101223
IC7	2.5	IC8	5	20	8	8	40	40	10	10	IC7-101223
IC6	2.5	IC7	5	10	4	4	20	20	5	5	IC6-101223
IC5	1.25	IC7	5	5	2	2	10	10	2.5	2.5	IC5-101223
IC4	1.25	IC6	5	2.5	1	1	5	5	1.25	1.25	IC4-101223
IC3	0.5	IC6	5	1	0.4	0.4	2	2	0.5	0.5	IC3-101223
IC2	0.5	IC3	5	0.1	0.04	0.04	0.2	0.2	0.05	0.05	IC2-101223
CCV	2.5	IC7	5	10	4	4	20	20	5	5	CCV-110923

* STD ID is prefix followed by the date of preparation (ie. IC6-020216)

LCS/MATRIX SPIKE MIX ID: W22324	EXPIRATION DATE: 11/23/23

3.75 mL of High Purity Multi-Element IC Standard Solution "A" and 3.75 mL of High Purity Multi-Element IC Standard Solution "B" diluted to 50 mL. For MS, add 0.25 mL of mix to 4.75 mL of sample. For LCS, add 0.25 mL of mix to 4.75 mL of DI water.

FINAL CONCENTRATIONS (mg/L)

Cl	NO2 (as N)	NO3 (as N)	Br	SO4	PO4 (as P)	F	STD ID*
3.75	1.14	0.845	3.75	3.75	1.22	3.75	IC-LCS-110923

PIPETTES: W00, W16

2x dil = 2.5mL samp + 2.5mL DI	**5x dil** = 1.0mL samp + 4.0mL DI	**10x dil** = 0.5mL samp + 4.5mL DI
20x dil = 0.25mL samp + 4.75mL DI	**50x dil** = 0.1mL samp + 4.9mL DI	**100x dil** = 0.05mL samp + 4.95mL DI
200x dil = 0.025mL samp + 4.975mL DI	**500x dil** = 0.01mL samp + 4.99mL DI	**1000x dil** = 0.005mL samp + 4.995mL DI

Katahdin Analytical Services **ION CHROMATOGRAPHY RUNLOG** Dionex ICS-2100 (Instrument IC-3)

Analysis Date: 11/9/23	**Analytical Column S/N:** 220503194	**Calibration Date:** 10/12/23
Analysis Sequence: 110923 A	**Guard Column S/N:** 2204062O8	**Calibration Sequence:** 101223 CAL
Analyst: RAD	**Suppressor S/N:** 221117086	☐ If box at left is checked, continued from previous page. Refer to previous page for header information.

Reporting / Reanalysis Codes: ✓ Report without manipulation; S Report, peak automatically reintegrated with SmartPeak; M Report, peak manually integrated; A Report, peak manually assigned; R Do not report, reanalyze sample

Method Codes: E EPA 300.0; SW SW846 9056A

E: WG345207 → R626781
S: WG346208 → R626780

Katahdin Sample Number	Dilution Factor	Method Code	Report or Reanalyze (enter appropriate code): F	Cl	NO_2	SO_4	Br	NO_3	PO_4	Comments
CCV			✓	✓	✓	✓	✓	✓		
CCB			M	✓	✓	M	M	✓		
LCS			✓	✓	✓	✓	R	✓		
SQ6179 -1	1	E		R		✓		✓		Cl=5x
-2				✓		✓		M		
-3				R		✓		M		Cl=5x
-4				R		R		✓		Cl=20x SO4=2x
-5				R		R		✓		Cl=20x SO4=5x
-6				R		✓		✓		Cl=10x
-7				✓		✓		M		
-8				R		R		✓		Cl=20x SO4=5x
-9				R		R		✓		Cl=20x SO4=5x
CCV			✓	✓	✓	✓	✓	✓		
CCB			M	✓	✓	✓	✓	✓		
6179-10	1	E		✓		✓		✓		
6220-6		S				✓		M		
-1						✓		✓		
-4						✓		M		
-3						✓		✓		
-5						✓		M		
-9						✓		M		
-2						✓		✓		

Katahdin Analytical Services **ION CHROMATOGRAPHY RUNLOG** Dionex ICS-2100 (Instrument IC-3)

Analysis Date:	**Analytical Column S/N:**	**Calibration Date:**
Analysis Sequence:	**Guard Column S/N:**	**Calibration Sequence:**
Analyst:	**Suppressor S/N:**	☑ If box at left is checked, continued from previous page. Refer to previous page for header information.

Reporting / Reanalysis Codes: ✓ Report without manipulation; S Report, peak automatically reintegrated with SmartPeak; M Report, peak manually integrated; A Report, peak manually assigned; R Do not report, reanalyze sample

Method Codes: E EPA 300.0; SW SW846 9056A

Katahdin Sample Number	Dilution Factor	Method Code	Report or Reanalyze (enter appropriate code): F	Cl	NO_2	SO_4	Br	NO_3	PO_4	Comments
6220-3MS	1	S				✓		✓		
" -3MSD	"	"				✓		✓		
CCV			✓	✓	✓	✓	✓	✓		
CCB			M	✓	✓	M	M	✓		
6220-7	1	S				✓		✓		
6064-1		S				✓		✓		
-2						✓		✓		
-3						✓		✓		
-4						✓		✓		
-5						✓		M		
-6						✓		M		
-6MS						✓		✓		
-6MSD						✓		✓		
" -7	"	"				✓		M		
CCV			✓	✓	✓	✓	✓	✓		
CCB			M	✓	✓	M	M	✓		
LCS			R	✓	✓	✓	✓	✓		
6064-8	1	S				✓		✓		
" -10	"	"				✓		✓		
CCV			✓	✓	✓	✓	✓	✓		
CCB			M	✓	✓	✓	✓	✓		RAD 11/10/23

Reviewed by: SS Review Date: 11/15/23

QAWL1114 - 000893

Sequence Overview

Sequence Details

Name:	**110923 A REPROC**	*Created On:*	**28/Dec/22 13:33:49**
Directory:	**2023\11-NOV**	*Created By:*	**wetlab**
Data Vault:	**ChromeleonLocal**	*Updated On:*	**10/Nov/23 14:03:49**
No. of Injections:	**43**	*Updated By:*	**wetlab**

Injection Details

No.	Injection Name	Position	Type	Level	Inject Time	Status
1	CCV	1	Check Standard	06	09/Nov/23 16:50:42	Finished
2	CCB	2	Blank		09/Nov/23 17:07:28	Finished
3	LCS	3	Check Standard	09	09/Nov/23 17:24:43	Finished
4	SQ6179-1	4	Unknown		09/Nov/23 17:41:59	Finished
5	SQ6179-2	5	Unknown		09/Nov/23 17:59:14	Finished
6	SQ6179-3	6	Unknown		09/Nov/23 18:16:30	Finished
7	SQ6179-4	7	Unknown		09/Nov/23 18:33:46	Finished
8	SQ6179-5	8	Unknown		09/Nov/23 18:51:01	Finished
9	SQ6179-6	9	Unknown		09/Nov/23 19:08:16	Finished
10	SQ6179-7	10	Unknown		09/Nov/23 19:25:32	Finished
11	SQ6179-8	11	Unknown		09/Nov/23 19:42:47	Finished
12	SQ6179-9	12	Unknown		09/Nov/23 20:00:03	Finished
13	CCV	13	Check Standard	06	09/Nov/23 20:17:18	Finished
14	CCB	14	Blank		09/Nov/23 20:34:34	Finished
15	SQ6179-10	15	Unknown		09/Nov/23 20:51:49	Finished
16	SQ6220-6	16	Unknown		09/Nov/23 21:09:04	Finished
17	SQ6220-1	17	Unknown		09/Nov/23 21:26:20	Finished
18	SQ6220-4	18	Unknown		09/Nov/23 21:43:35	Finished
19	SQ6220-3	19	Unknown		09/Nov/23 22:00:50	Finished
20	SQ6220-5	20	Unknown		09/Nov/23 22:18:06	Finished
21	SQ6220-9	21	Unknown		09/Nov/23 22:35:21	Finished
22	SQ6220-2	22	Unknown		09/Nov/23 22:52:37	Finished
23	SQ6220-3 MS	23	Unknown		09/Nov/23 23:09:52	Finished
24	SQ6220-3 MSD	24	Unknown		09/Nov/23 23:27:07	Finished
25	CCV	25	Check Standard	06	09/Nov/23 23:44:23	Finished
26	CCB	26	Blank		10/Nov/23 00:01:38	Finished
27	SQ6220-7	27	Unknown		10/Nov/23 00:18:53	Finished
28	SQ6064-1	28	Unknown		10/Nov/23 00:36:09	Finished
29	SQ6064-2	29	Unknown		10/Nov/23 00:53:24	Finished
30	SQ6064-3	30	Unknown		10/Nov/23 01:10:40	Finished
31	SQ6064-4	31	Unknown		10/Nov/23 01:27:55	Finished
32	SQ6064-5	32	Unknown		10/Nov/23 01:45:11	Finished
33	SQ6064-6	33	Unknown		10/Nov/23 02:02:26	Finished
34	SQ6064-6 MS	34	Unknown		10/Nov/23 02:19:42	Finished
35	SQ6064-6 MSD	35	Unknown		10/Nov/23 02:37:01	Finished
36	SQ6064-7	36	Unknown		10/Nov/23 02:54:16	Finished
37	CCV	37	Check Standard	06	10/Nov/23 03:11:31	Finished
38	CCB	38	Blank		10/Nov/23 03:28:47	Finished
39	LCS	39	Check Standard	09	10/Nov/23 03:46:02	Finished
40	SQ6064-8	40	Unknown		10/Nov/23 04:03:17	Finished
41	SQ6064-10	41	Unknown		10/Nov/23 04:20:33	Finished
42	CCV	49	Check Standard	06	10/Nov/23 04:37:49	Finished

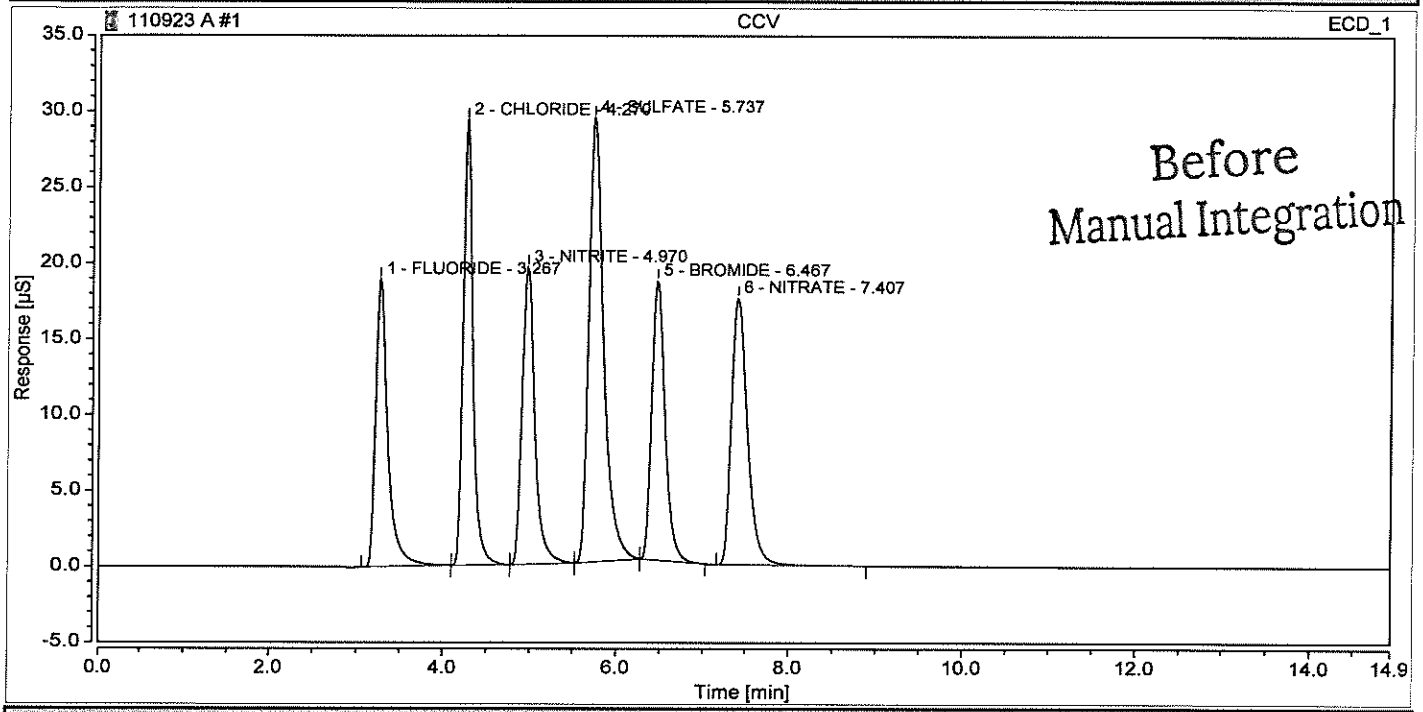
43	CCB	50	Blank		10/Nov/23 04:55:07	Finished

Chromatogram and Results

Injection Details

Injection Name:	**CCV**	*Run Time (min):*	**14.95**
Vial Number:	**1**	*Injection Volume:*	**200.00**
Injection Type:	**Check Standard**	*Channel:*	**ECD_1**
Calibration Level:	**06**	*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**09/Nov/23 16:50**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

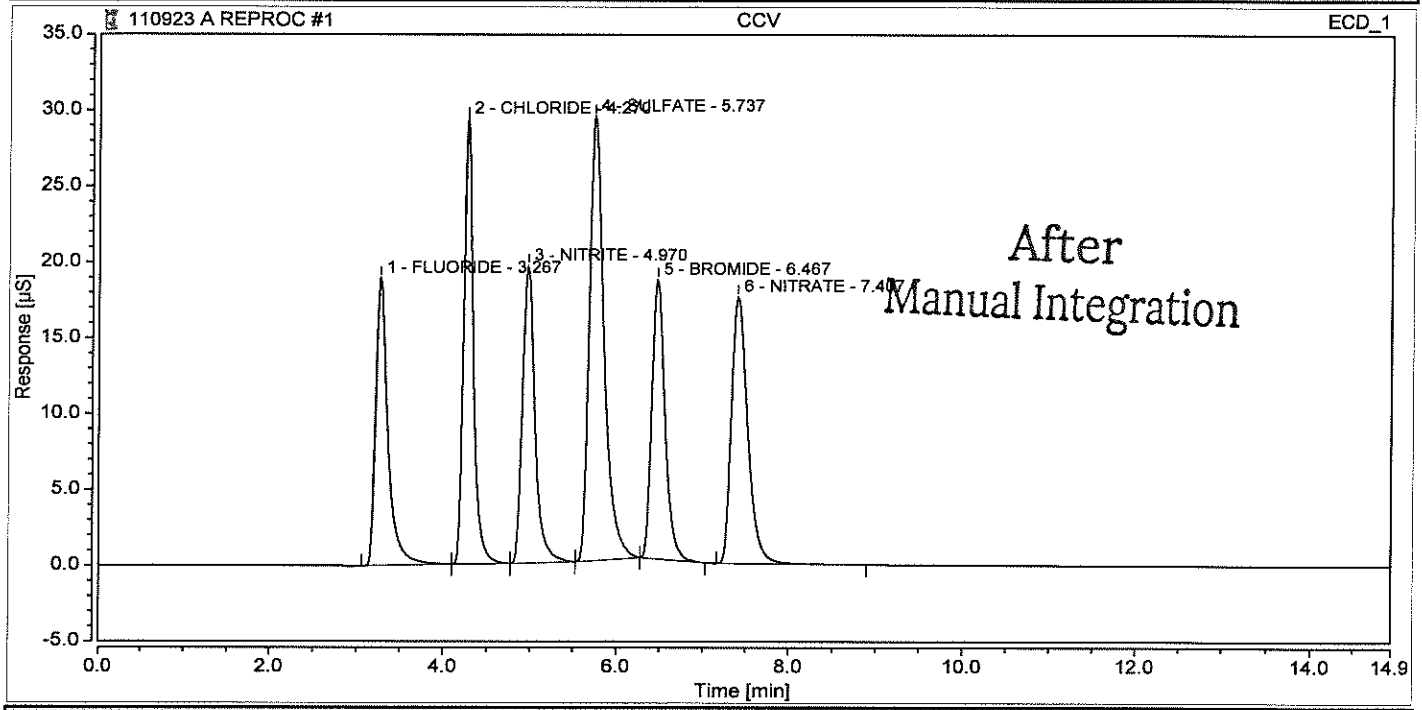
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.267	3.108	18.952	13.43	14.23	5.0461	0.9228
2	CHLORIDE	4.270	3.823	29.343	16.53	22.03	9.8092	-1.9081
3	NITRITE	4.970	3.350	19.612	14.48	14.73	4.0363	0.9084
4	SULFATE	5.737	5.742	29.282	24.82	21.99	20.1975	0.9874
5	BROMIDE	6.467	3.289	18.413	14.22	13.83	19.3465	-3.2677
6	NITRATE	7.407	3.822	17.571	16.52	13.19	3.9050	-2.3752
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**23.134**	**133.173**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**CCV**	*Run Time (min):*	**14.95**
Vial Number:	**1**	*Injection Volume:*	**200.00**
Injection Type:	**Check Standard**	*Channel:*	**ECD_1**
Calibration Level:	**06**	*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**09/Nov/23 16:50**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

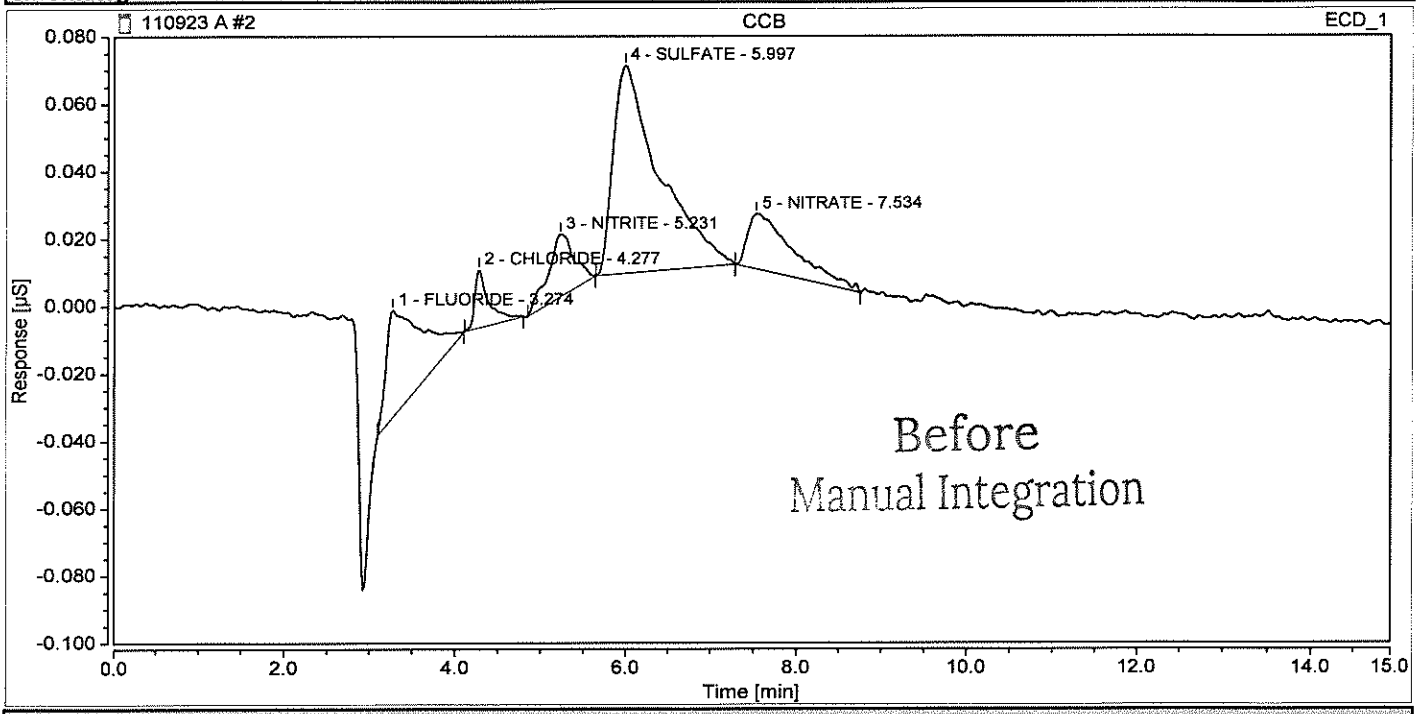
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.267	3.108	18.952	13.43	14.23	5.0461	0.9228
2	CHLORIDE	4.270	3.823	29.343	16.53	22.03	9.8092	-1.9081
3	NITRITE	4.970	3.350	19.612	14.48	14.73	4.0363	0.9084
4	SULFATE	5.737	5.742	29.282	24.82	21.99	20.1975	0.9874
5	BROMIDE	6.467	3.289	18.413	14.22	13.83	19.3465	-3.2677
6	NITRATE	7.407	3.822	17.571	16.52	13.19	3.9050	-2.3752
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**23.134**	**133.173**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**CCB**	*Run Time (min):*	**14.95**
Vial Number:	**2**	*Injection Volume:*	**200.00**
Injection Type:	**Blank**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**09/Nov/23 17:07**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

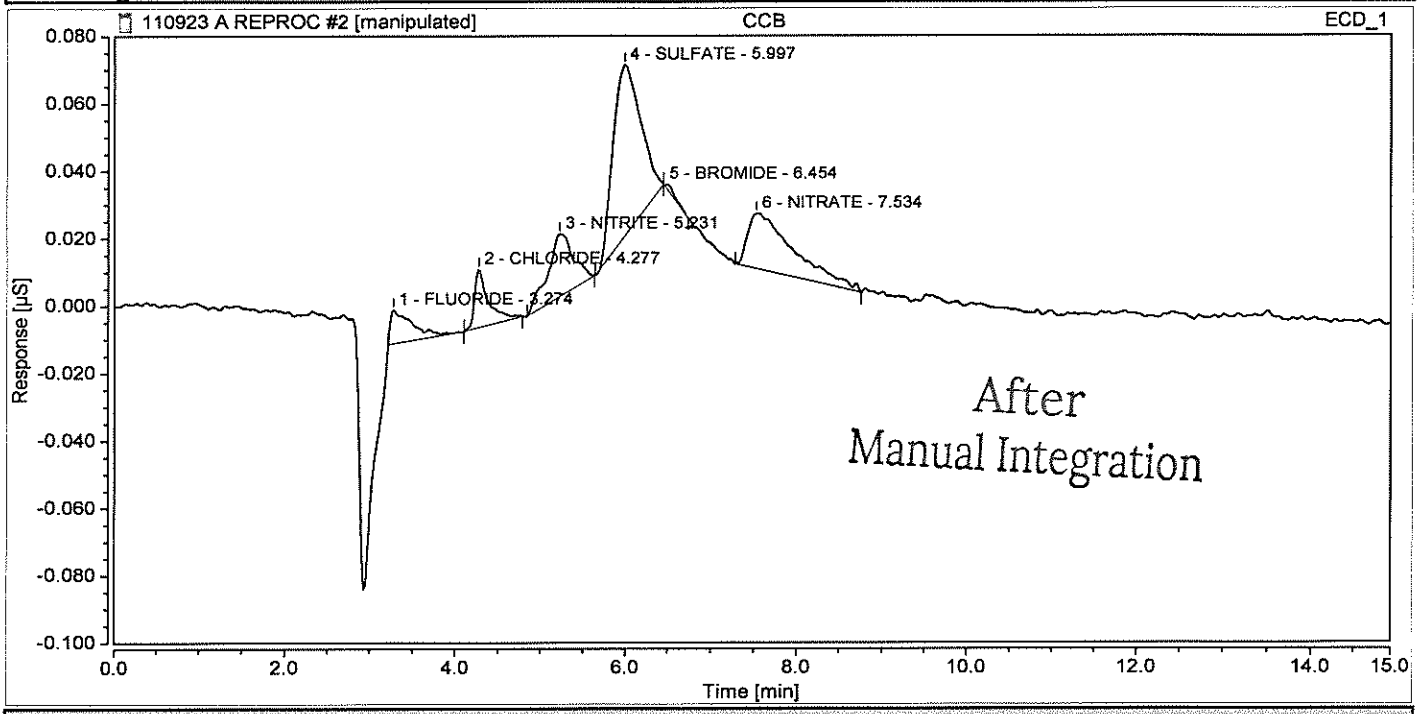
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.274	0.014	0.032	19.52	21.79	0.0393	n.a.
2	CHLORIDE	4.277	0.003	0.017	4.45	11.88	0.0084	n.a.
3	NITRITE	5.231	0.007	0.018	8.85	12.70	0.0158	n.a.
4	SULFATE	5.997	0.039	0.062	53.07	42.39	0.1376	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5	NITRATE	7.534	0.010	0.016	14.11	11.25	0.0106	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.074**	**0.146**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**CCB**	*Run Time (min):*	**14.95**
Vial Number:	**2**	*Injection Volume:*	**200.00**
Injection Type:	**Blank**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**09/Nov/23 17:07**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

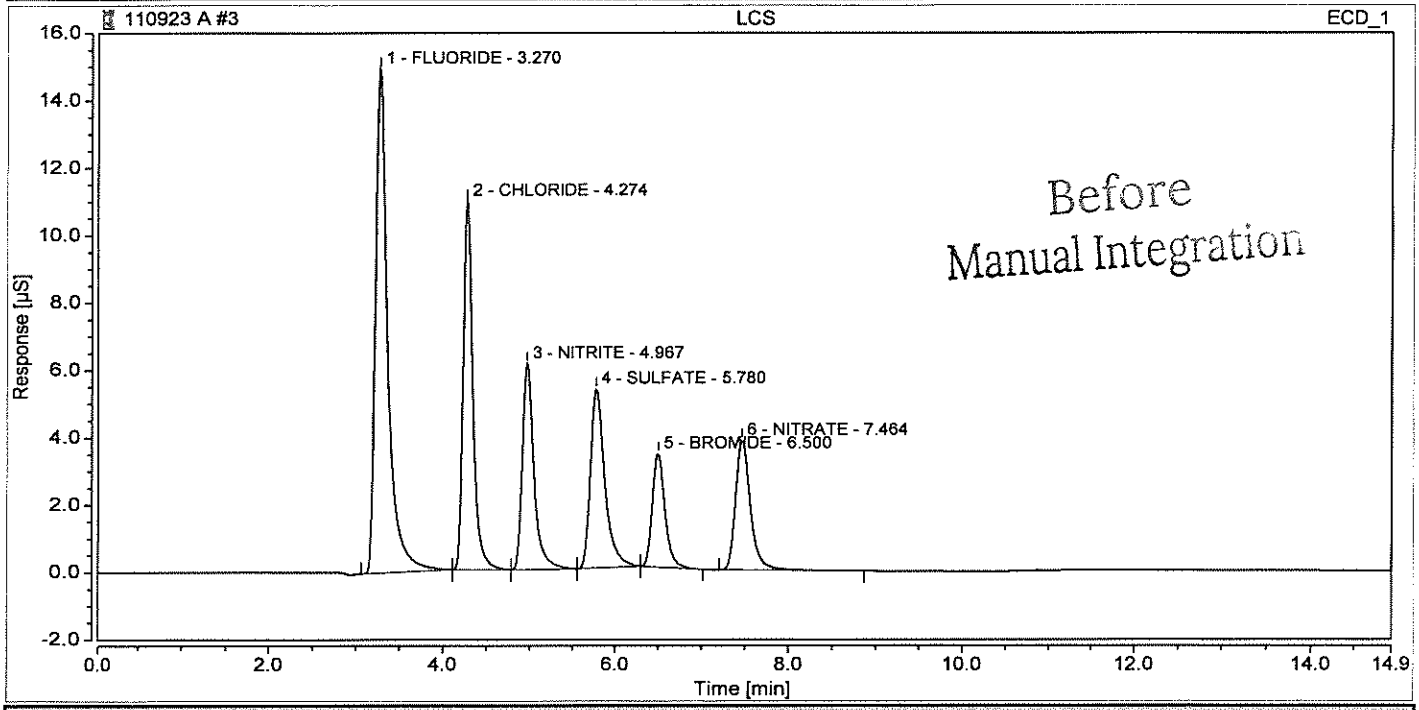
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.274	0.003	0.010	6.88	8.90	0.0213	n.a.
2	CHLORIDE	4.277	0.003	0.017	7.70	15.34	0.0084	n.a.
3	NITRITE	5.231	0.007	0.018	15.32	16.40	0.0158	n.a.
4	SULFATE	5.997	0.019	0.051	45.13	44.85	0.0676	n.a.
5	BROMIDE	6.454	0.000	0.000	0.55	0.00	0.0014	n.a.
6	NITRATE	7.534	0.010	0.016	24.41	14.52	0.0106	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.043**	**0.113**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**LCS**	*Run Time (min):*	**14.94**
Vial Number:	**3**	*Injection Volume:*	**200.00**
Injection Type:	**Check Standard**	*Channel:*	**ECD_1**
Calibration Level:	**09**	*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**09/Nov/23 17:24**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

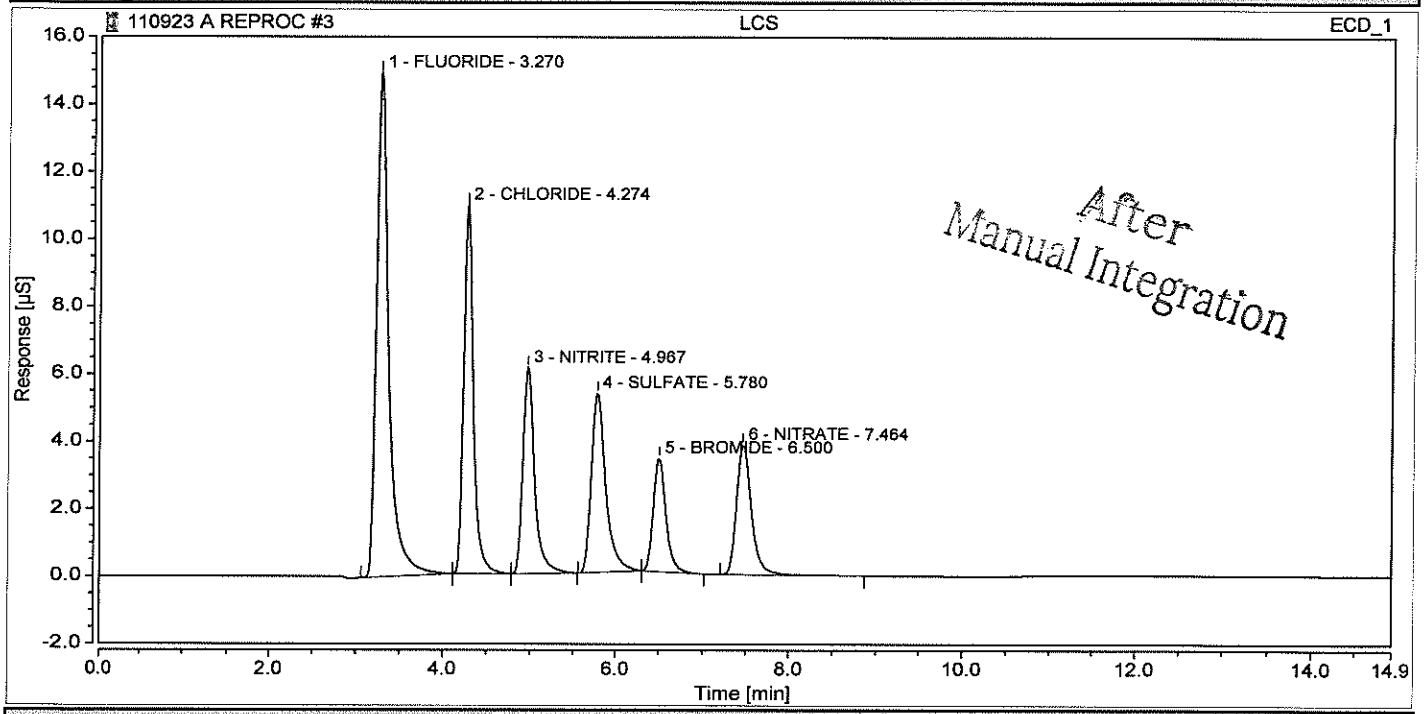
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.270	2.458	14.953	33.98	33.57	3.9694	5.8506
2	CHLORIDE	4.274	1.415	10.946	19.55	24.58	3.6294	-3.2163
3	NITRITE	4.967	0.963	6.107	13.31	13.71	1.1391	-0.0803
4	SULFATE	5.780	1.047	5.313	14.48	11.93	3.6845	-1.7467
5	BROMIDE	6.500	0.571	3.367	7.89	7.56	3.3582	-10.4468
6	NITRATE	7.464	0.780	3.853	10.78	8.65	0.7968	-5.7033
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**7.234**	**44.538**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**LCS**	*Run Time (min):*	**14.94**
Vial Number:	**3**	*Injection Volume:*	**200.00**
Injection Type:	**Check Standard**	*Channel:*	**ECD_1**
Calibration Level:	**09**	*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**09/Nov/23 17:24**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

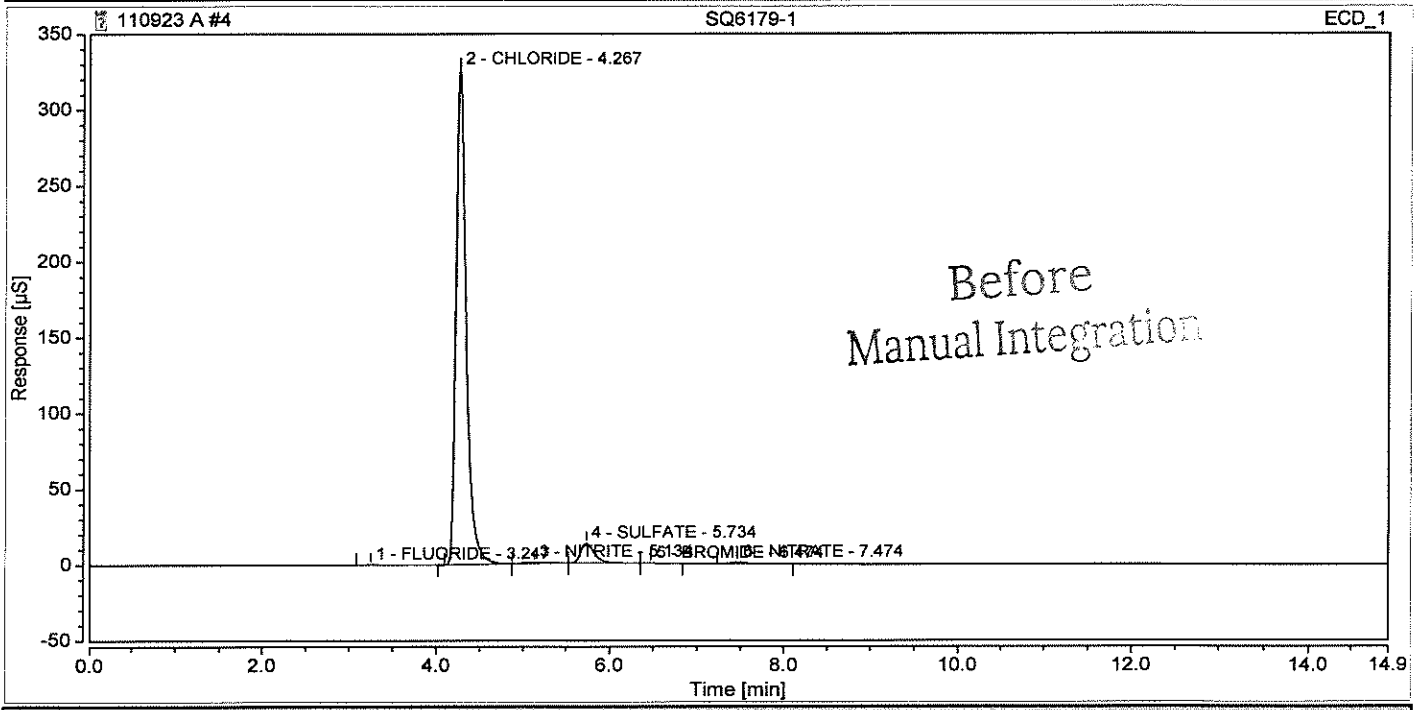
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.270	2.458	14.953	33.98	33.57	3.9694	5.8506
2	CHLORIDE	4.274	1.415	10.946	19.55	24.58	3.6294	-3.2163
3	NITRITE	4.967	0.963	6.107	13.31	13.71	1.1391	-0.0803
4	SULFATE	5.780	1.047	5.313	14.48	11.93	3.6845	-1.7467
5	BROMIDE	6.500	0.571	3.367	7.89	7.56	3.3582	-10.4468
6	NITRATE	7.464	0.780	3.853	10.78	8.65	0.7968	-5.7033
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**7.234**	**44.538**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6179-1**	*Run Time (min):*	**14.95**
Vial Number:	**4**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**09/Nov/23 17:41**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

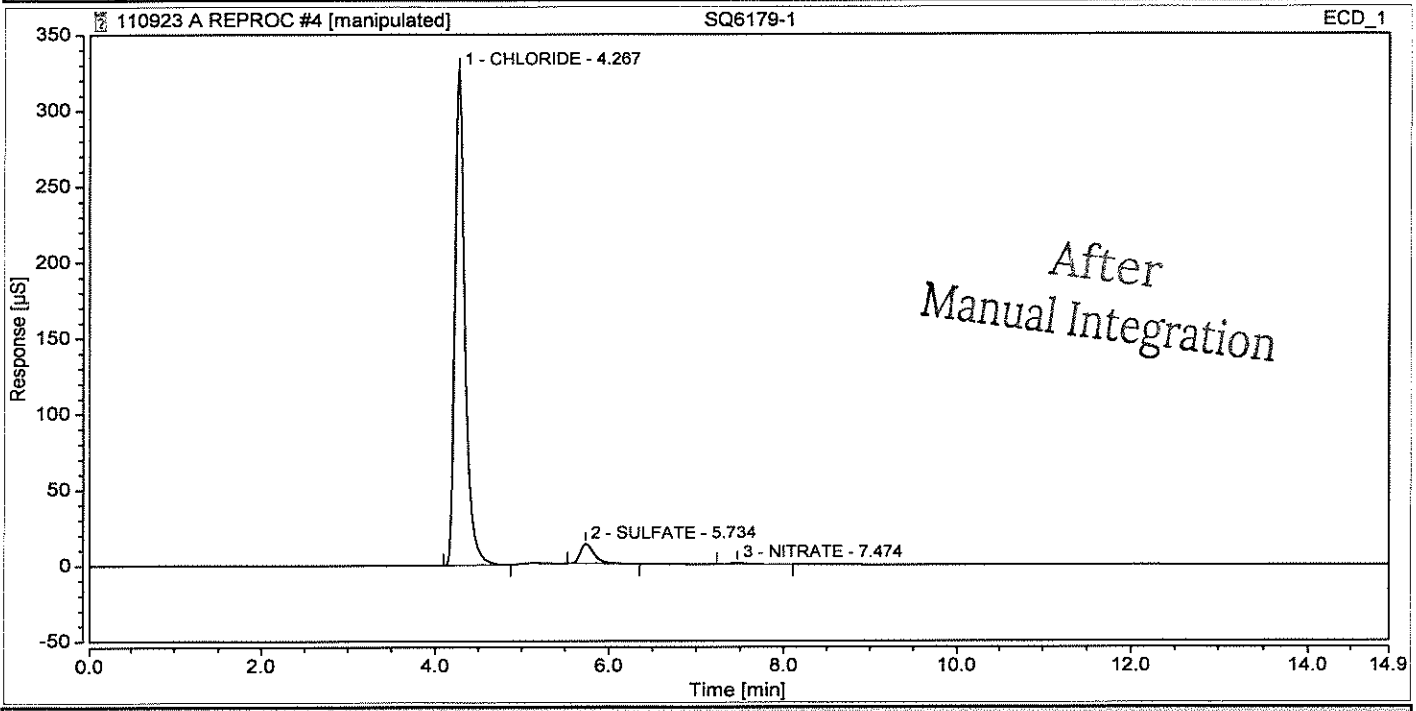
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.247	0.038	0.169	0.08	0.05	0.0757	n.a.
2	CHLORIDE	4.267	44.477	326.434	93.80	95.61	114.1184	n.a.
3	NITRITE	5.134	0.289	0.836	0.61	0.24	0.3455	n.a.
4	SULFATE	5.734	2.421	12.995	5.11	3.81	8.5171	n.a.
5	BROMIDE	6.474	0.010	0.055	0.02	0.02	0.0597	n.a.
6	NITRATE	7.474	0.184	0.947	0.39	0.28	0.1877	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**47.419**	**341.437**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6179-1**	*Run Time (min):*	**14.95**
Vial Number:	**4**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**09/Nov/23 17:41**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

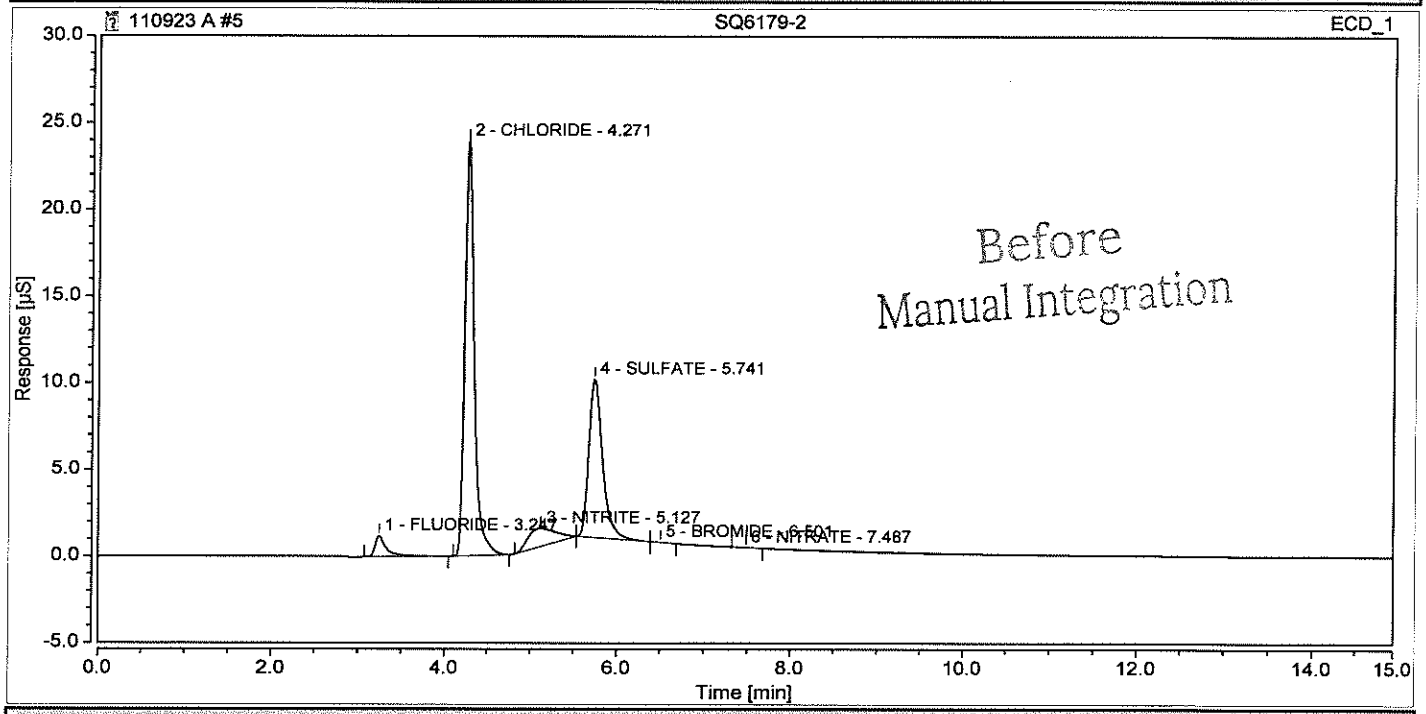
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.267	44.477	326.434	94.47	95.90	114.1184	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2	SULFATE	5.734	2.421	12.995	5.14	3.82	8.5171	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
3	NITRATE	7.474	0.184	0.947	0.39	0.28	0.1877	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**47.082**	**340.376**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6179-2**	*Run Time (min):*	**14.95**
Vial Number:	**5**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**09/Nov/23 17:59**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

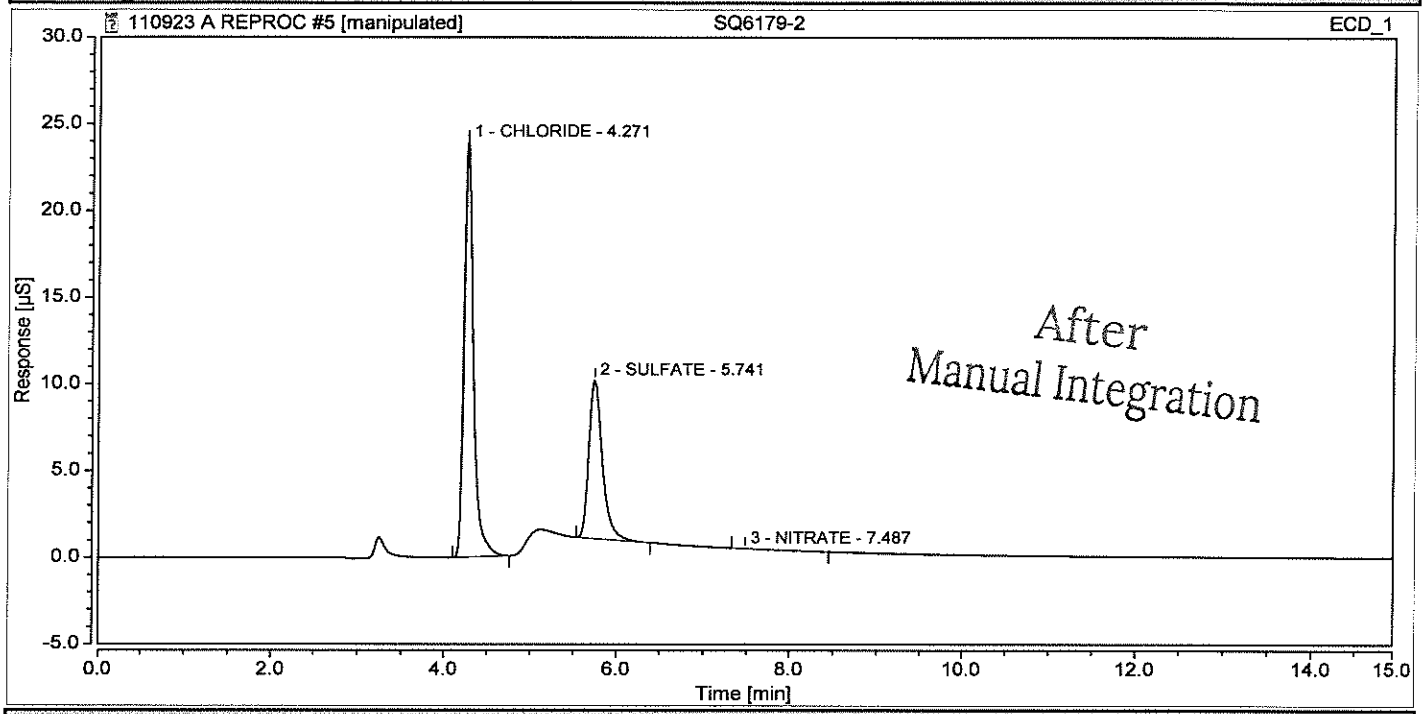
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.247	0.187	1.210	3.49	3.42	0.3115	n.a.
2	CHLORIDE	4.271	3.107	23.923	57.95	67.72	7.9726	n.a.
3	NITRITE	5.127	0.392	1.045	7.31	2.96	0.4660	n.a.
4	SULFATE	5.741	1.673	9.133	31.20	25.85	5.8845	n.a.
5	BROMIDE	6.501	0.002	0.013	0.03	0.04	0.0096	n.a.
6	NITRATE	7.487	0.001	0.006	0.02	0.02	0.0009	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**5.362**	**35.329**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6179-2**	*Run Time (min):*	**14.95**
Vial Number:	**5**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**09/Nov/23 17:59**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

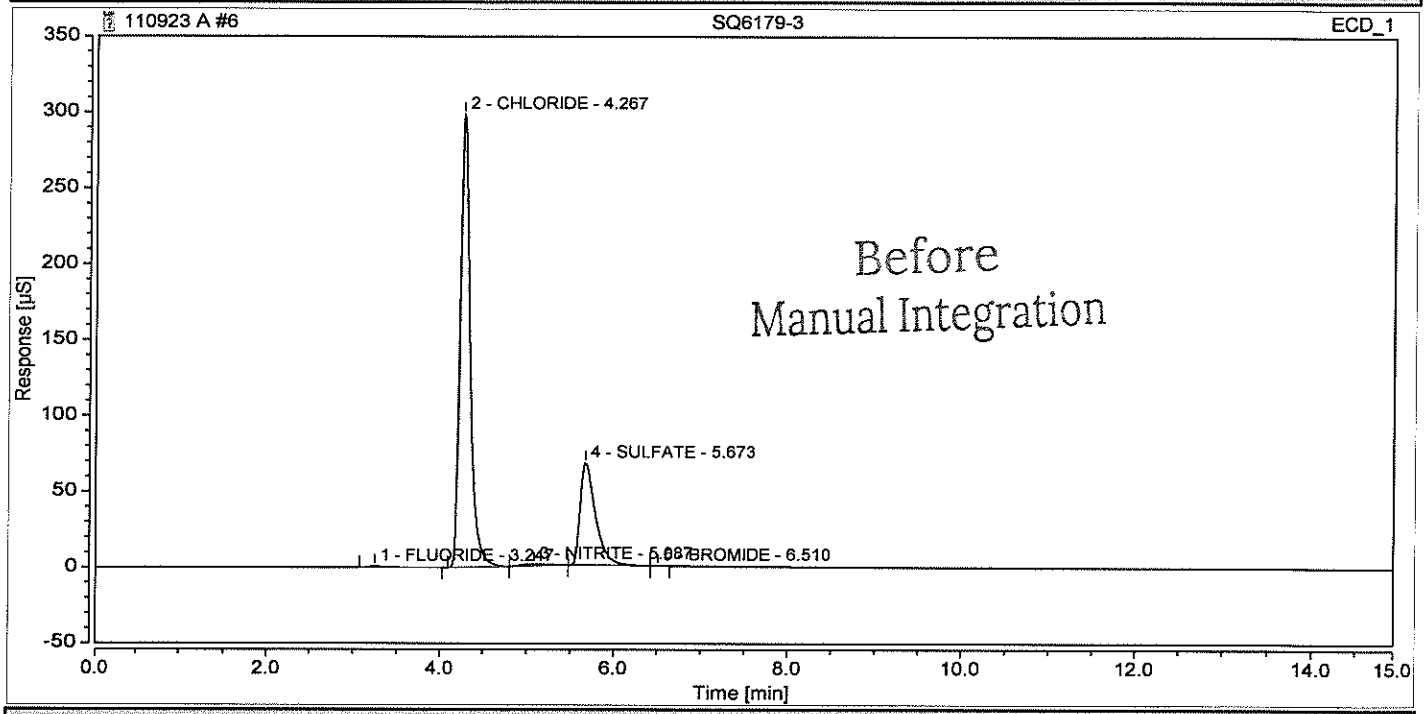
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.271	3.107	23.923	64.92	72.37	7.9726	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2	SULFATE	5.741	1.673	9.133	34.95	27.63	5.8845	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
3	NITRATE	7.487	0.007	0.002	0.14	0.01	0.0067	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**4.787**	**33.057**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6179-3**	*Run Time (min):*	**14.95**
Vial Number:	**6**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**09/Nov/23 18:16**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

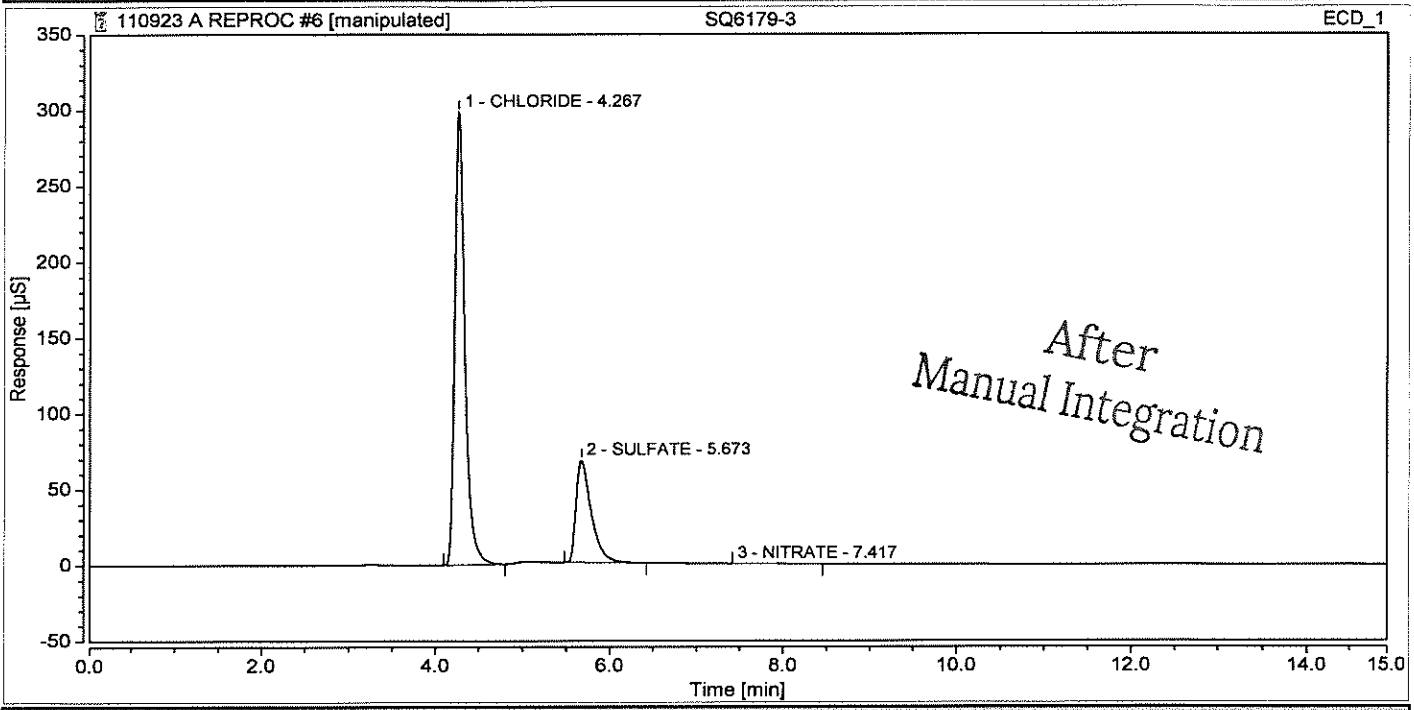
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.247	0.136	0.858	0.25	0.23	0.2303	n.a.
2	CHLORIDE	4.267	40.610	298.645	73.84	81.12	104.1959	n.a.
3	NITRITE	5.087	0.433	1.159	0.79	0.31	0.5140	n.a.
4	SULFATE	5.673	13.819	67.457	25.12	18.32	48.6101	n.a.
5	BROMIDE	6.510	0.003	0.025	0.01	0.01	0.0166	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**55.000**	**368.144**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6179-3**	*Run Time (min):*	**14.95**
Vial Number:	**6**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**09/Nov/23 18:16**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

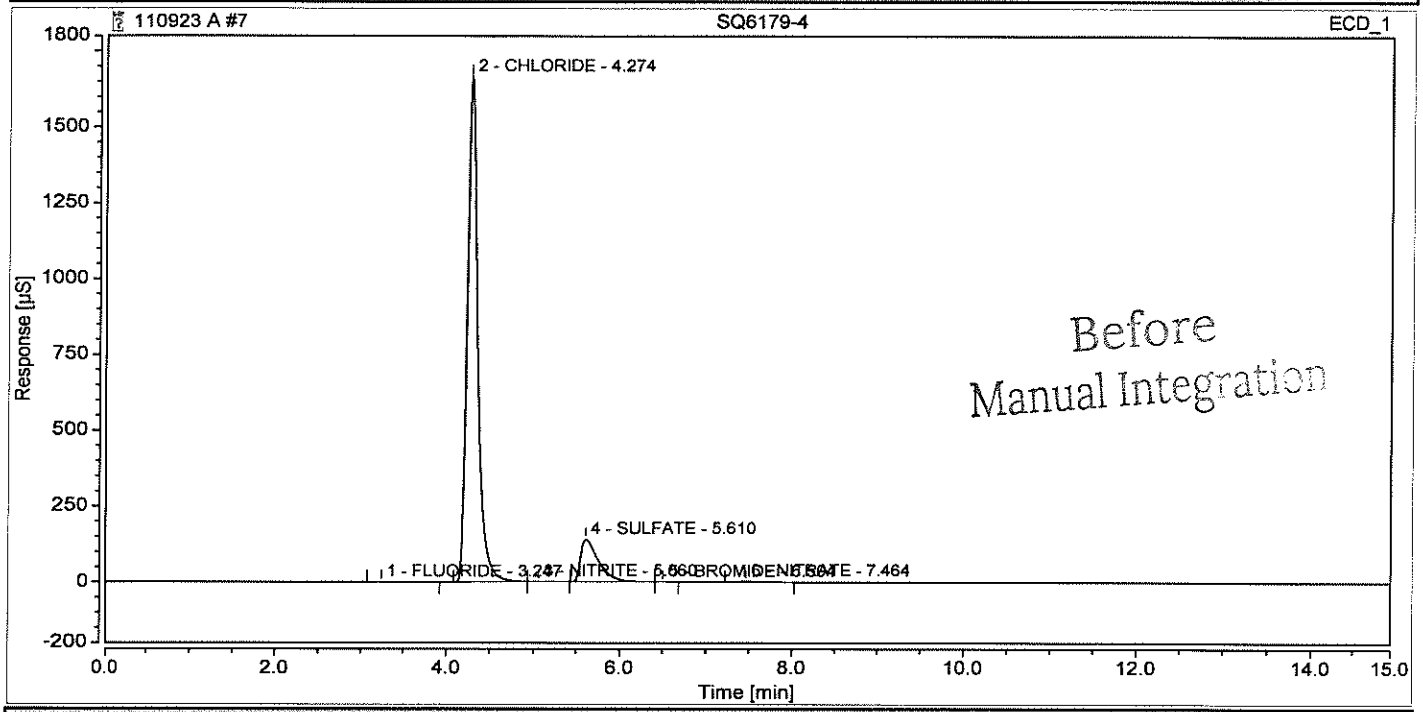
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.267	40.610	298.645	74.60	81.57	104.1959	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2	SULFATE	5.673	13.819	67.457	25.39	18.43	48.6101	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
3	NITRATE	7.417	0.006	0.000	0.01	0.00	0.0064	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**54.435**	**366.102**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6179-4**	*Run Time (min):*	**14.96**
Vial Number:	**7**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**09/Nov/23 18:33**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

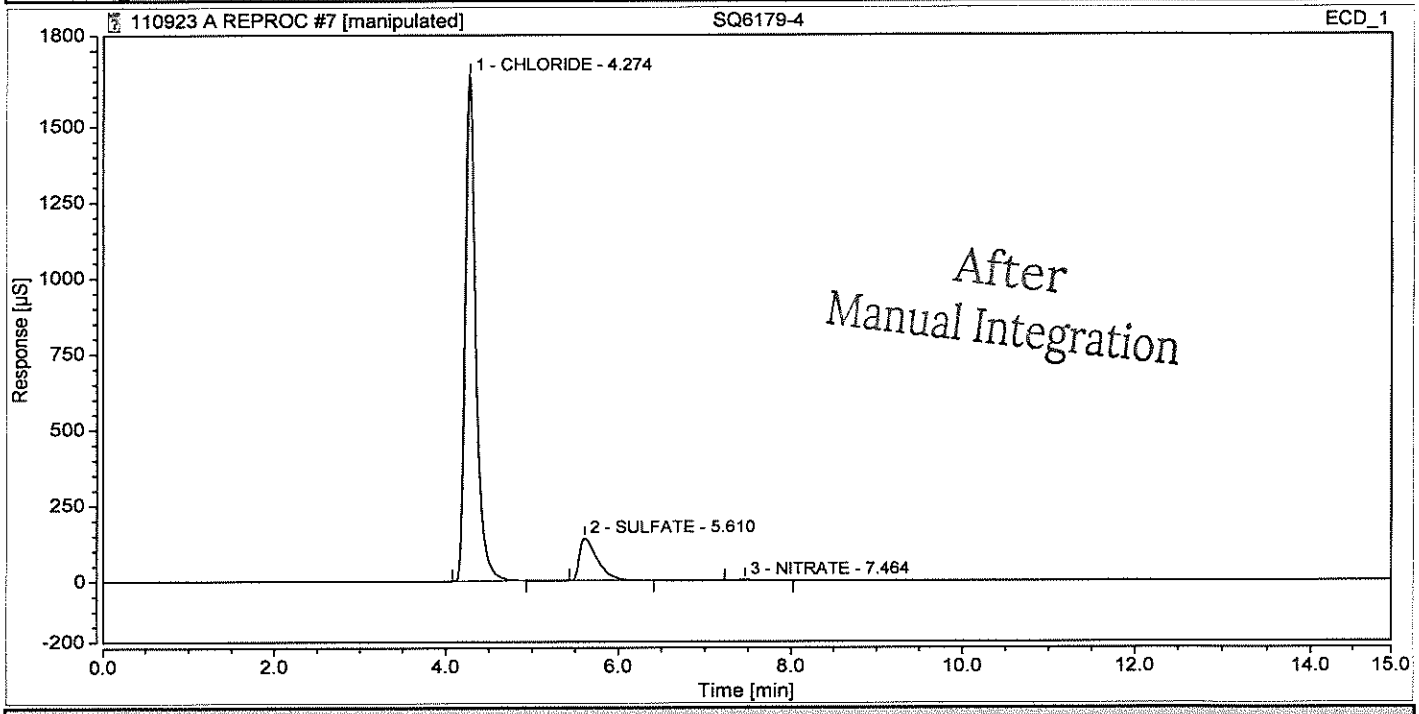
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.247	0.071	0.396	0.03	0.02	0.1276	n.a.
2	CHLORIDE	4.274	235.847	1665.727	87.37	92.06	605.1285	n.a.
3	NITRITE	5.060	0.074	0.259	0.03	0.01	0.0949	n.a.
4	SULFATE	5.610	33.390	140.146	12.37	7.75	117.4539	n.a.
5	BROMIDE	6.504	0.011	0.086	0.00	0.00	0.0639	n.a.
6	NITRATE	7.464	0.542	2.795	0.20	0.15	0.5539	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**269.934**	**1809.408**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6179-4**	*Run Time (min):*	**14.96**
Vial Number:	**7**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**09/Nov/23 18:33**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

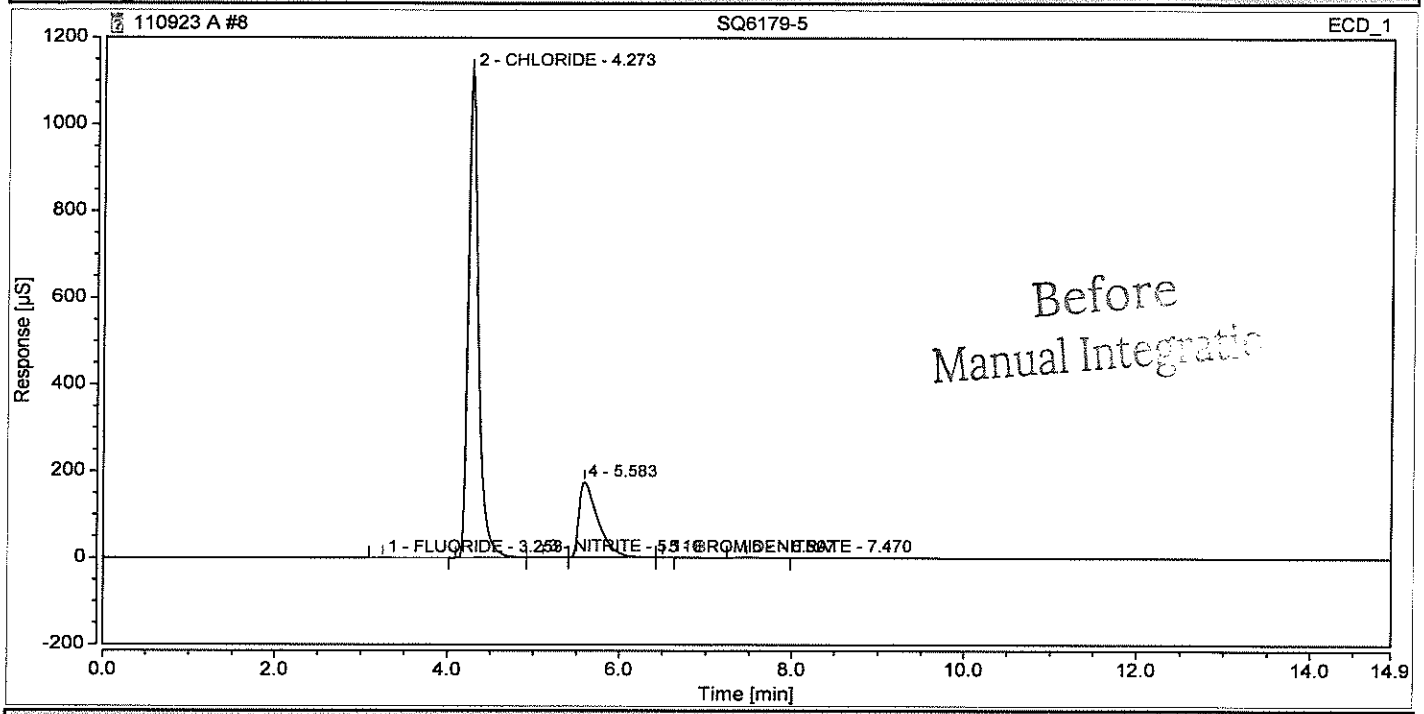
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.274	235.847	1665.727	87.42	92.10	605.1285	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2	SULFATE	5.610	33.390	140.146	12.38	7.75	117.4539	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
3	NITRATE	7.464	0.542	2.795	0.20	0.15	0.5539	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**269.779**	**1808.667**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6179-5**	*Run Time (min):*	**14.95**
Vial Number:	**8**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**09/Nov/23 18:51**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

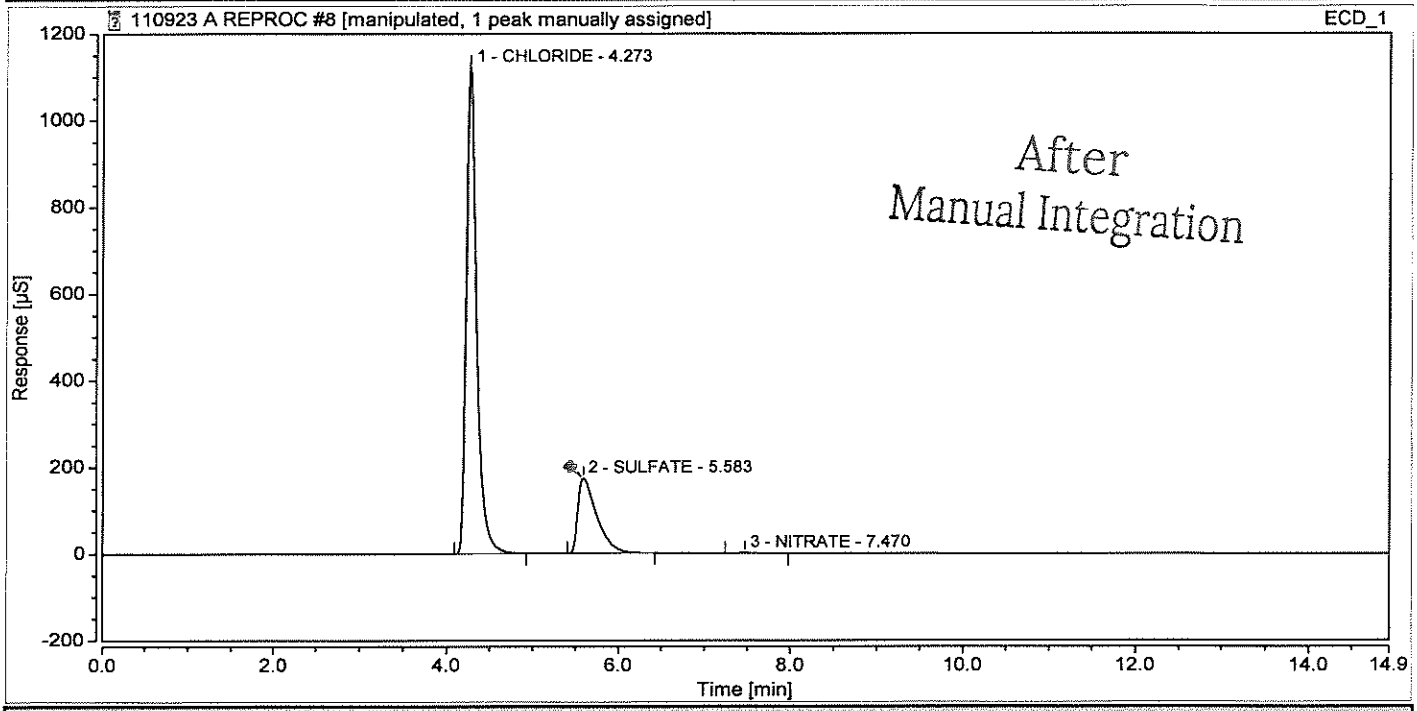
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.253	0.087	0.490	0.04	0.04	0.1538	n.a.
2	CHLORIDE	4.273	155.377	1122.783	77.59	86.43	398.6602	n.a.
3	NITRITE	5.110	0.129	0.485	0.06	0.04	0.1582	n.a.
4		5.583	44.350	173.671	22.15	13.37	n.a.	n.a.
n.a.	SULFATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5	BROMIDE	6.507	0.006	0.054	0.00	0.00	0.0346	n.a.
6	NITRATE	7.470	0.293	1.524	0.15	0.12	0.2994	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**200.241**	**1299.008**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6179-5**	*Run Time (min):*	**14.95**
Vial Number:	**8**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**09/Nov/23 18:51**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

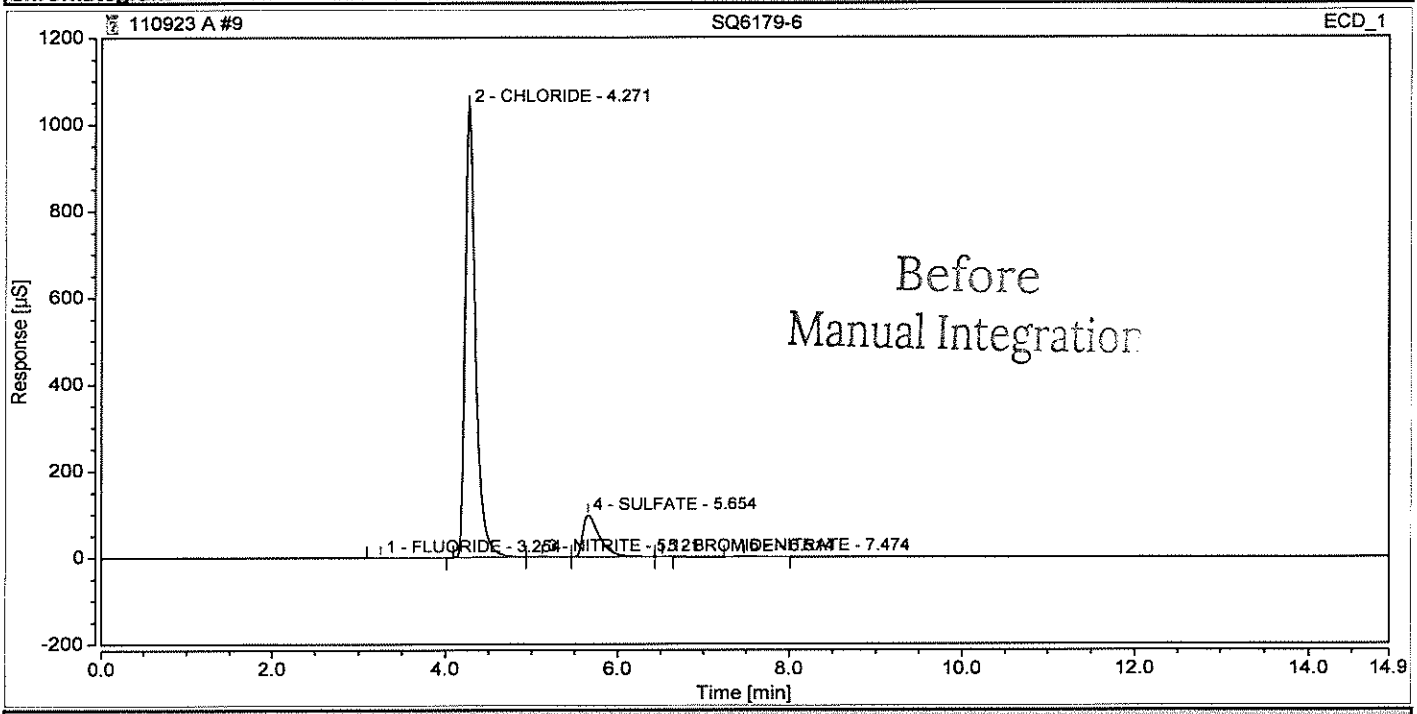
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.273	155.377	1122.783	77.68	86.50	398.6602	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2	SULFATE	5.583	44.350	173.671	22.17	13.38	156.0080	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
3	NITRATE	7.470	0.293	1.524	0.15	0.12	0.2994	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**200.019**	**1297.978**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6179-6**	*Run Time (min):*	**14.94**
Vial Number:	**9**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**09/Nov/23 19:08**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

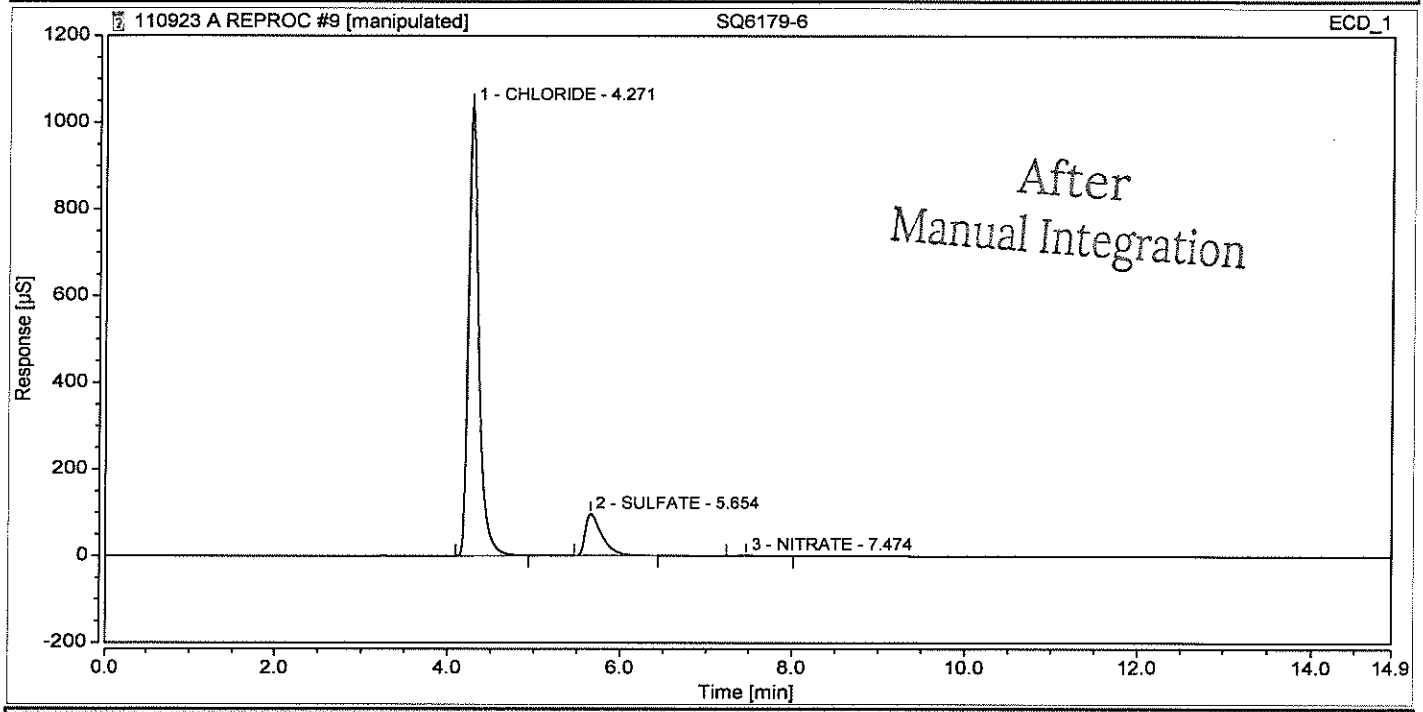
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.254	0.064	0.353	0.04	0.03	0.1173	n.a.
2	CHLORIDE	4.271	144.401	1039.845	86.91	91.34	370.5008	n.a.
3	NITRITE	5.121	0.138	0.489	0.08	0.04	0.1689	n.a.
4	SULFATE	5.654	21.197	95.951	12.76	8.43	74.5638	n.a.
5	BROMIDE	6.514	0.003	0.028	0.00	0.00	0.0173	n.a.
6	NITRATE	7.474	0.345	1.792	0.21	0.16	0.3525	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**166.148**	**1138.459**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6179-6**	*Run Time (min):*	**14.94**
Vial Number:	**9**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**09/Nov/23 19:08**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

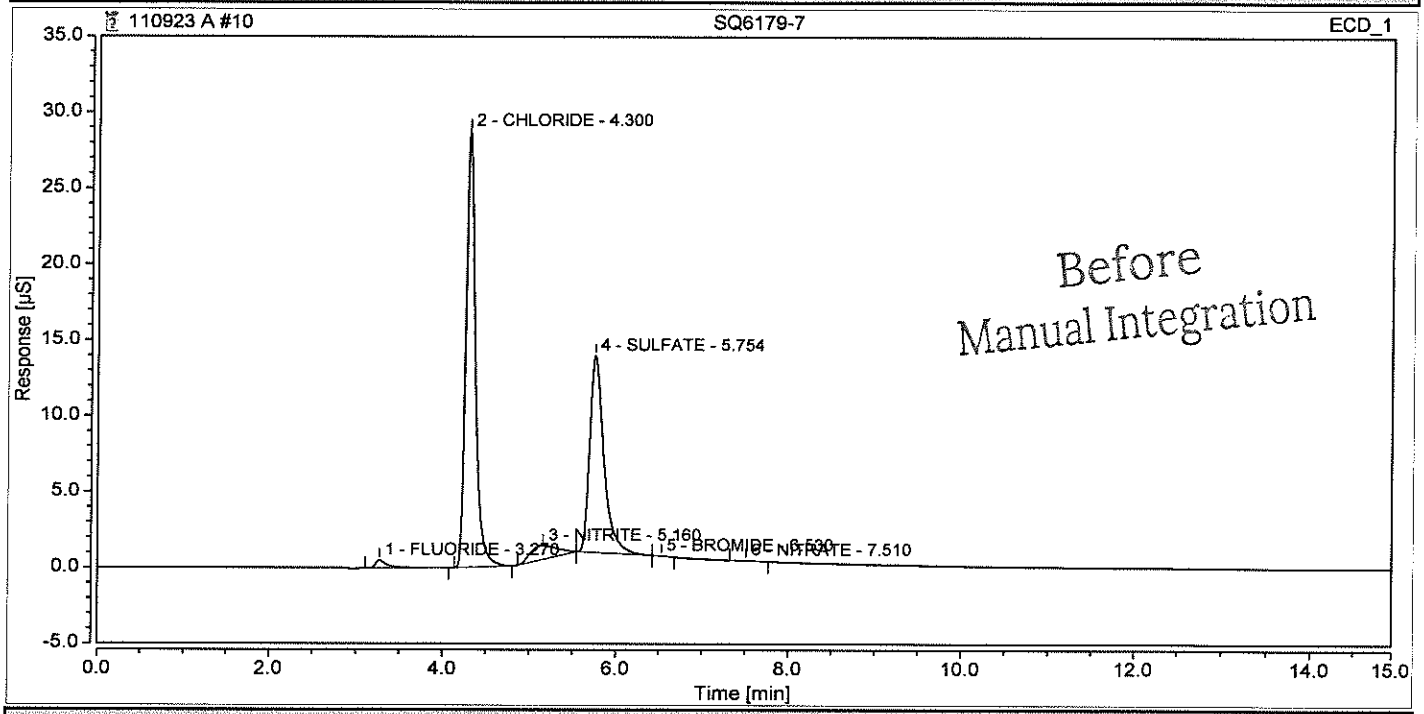
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.271	144.401	1039.845	87.02	91.41	370.5008	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2	SULFATE	5.654	21.197	95.951	12.77	8.43	74.5638	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
3	NITRATE	7.474	0.345	1.792	0.21	0.16	0.3525	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**165.943**	**1137.589**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6179-7**	*Run Time (min):*	**14.96**
Vial Number:	**10**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**09/Nov/23 19:25**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

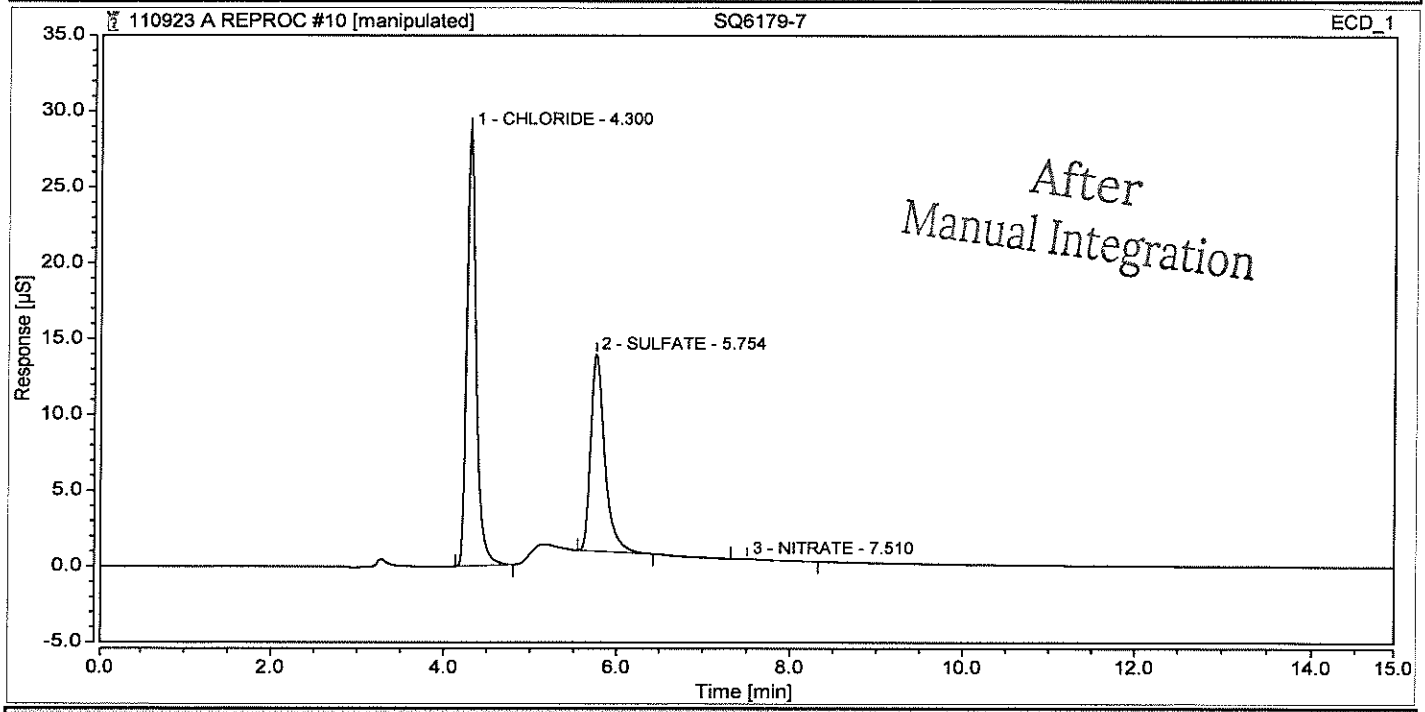
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.270	0.087	0.524	1.31	1.21	0.1529	n.a.
2	CHLORIDE	4.300	3.720	28.754	56.19	66.56	9.5455	n.a.
3	NITRITE	5.160	0.328	0.908	4.95	2.10	0.3913	n.a.
4	SULFATE	5.754	2.480	12.973	37.46	30.03	8.7255	n.a.
5	BROMIDE	6.530	0.002	0.018	0.03	0.04	0.0136	n.a.
6	NITRATE	7.510	0.003	0.019	0.05	0.04	0.0035	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**6.621**	**43.196**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6179-7**	*Run Time (min):*	**14.96**
Vial Number:	**10**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**09/Nov/23 19:25**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

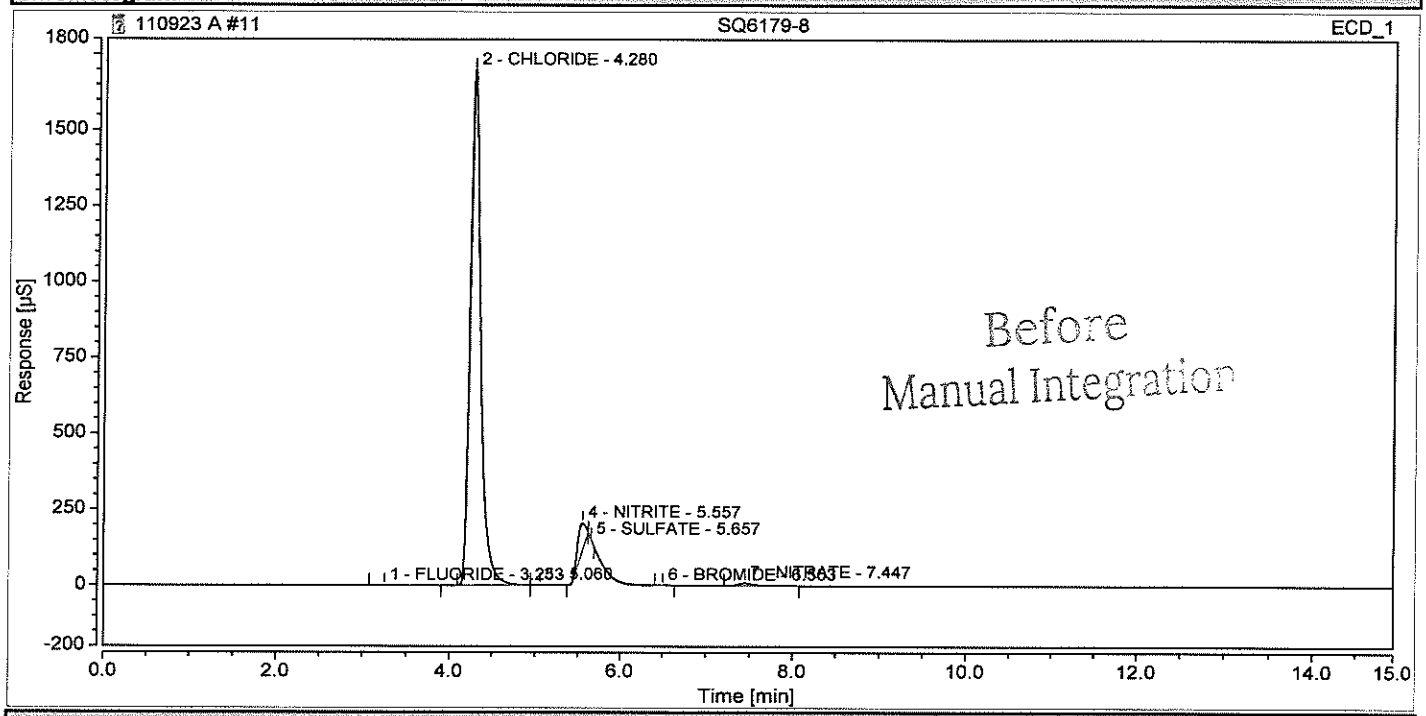
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.300	3.720	28.754	59.98	68.88	9.5455	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2	SULFATE	5.754	2.480	12.973	39.99	31.08	8.7255	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
3	NITRATE	7.510	0.001	0.016	0.02	0.04	0.0014	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**6.202**	**41.743**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6179-8**	*Run Time (min):*	**14.95**
Vial Number:	**11**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**09/Nov/23 19:42**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

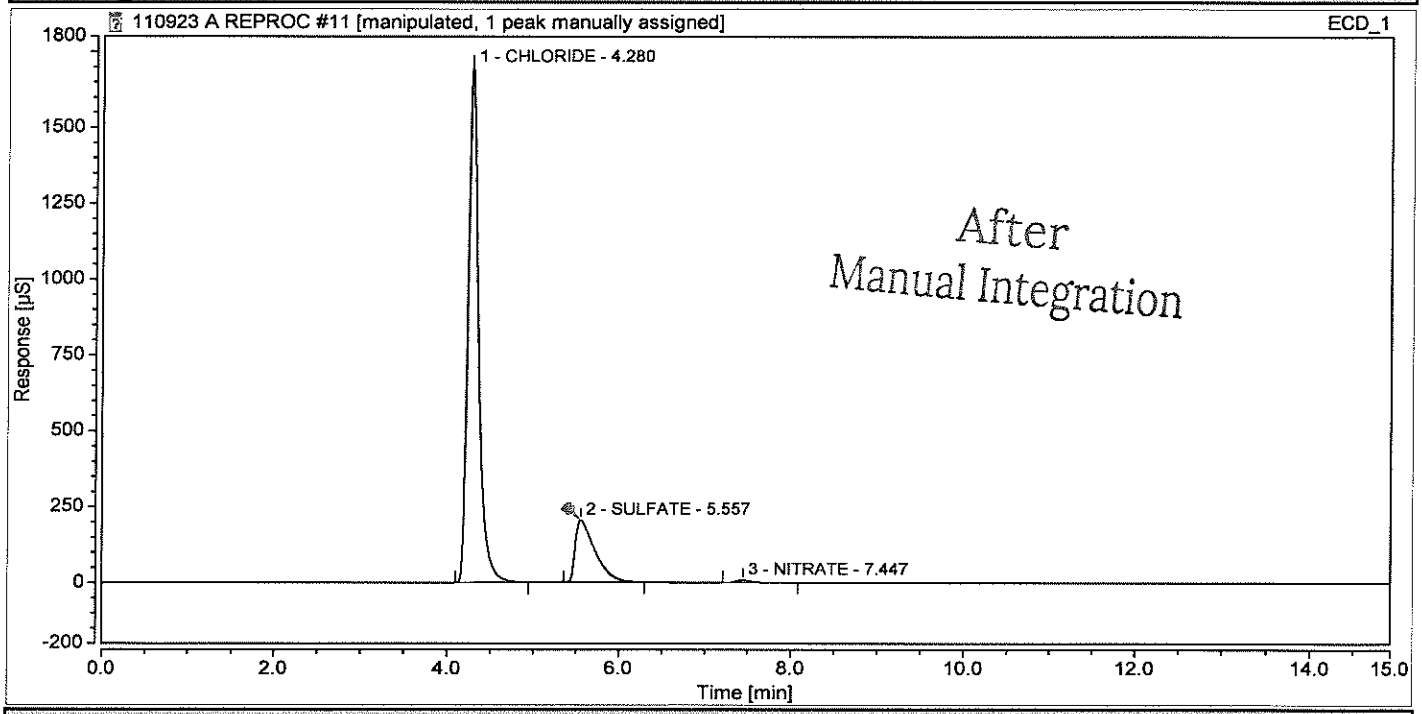
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.253	0.051	0.277	0.02	0.02	0.0975	n.a.
2	CHLORIDE	4.280	239.997	1698.642	95.13	94.52	615.7759	n.a.
3		5.060	0.069	0.278	0.03	0.02	n.a.	n.a.
4	NITRITE	5.557	10.411	88.476	4.13	4.92	13.5829	n.a.
5	SULFATE	5.657	0.028	0.783	0.01	0.04	0.0990	n.a.
6	BROMIDE	6.503	0.006	0.049	0.00	0.00	0.0328	n.a.
7	NITRATE	7.447	1.730	8.609	0.69	0.48	1.7673	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**252.291**	**1797.115**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6179-8**	*Run Time (min):*	**14.95**
Vial Number:	**11**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**09/Nov/23 19:42**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

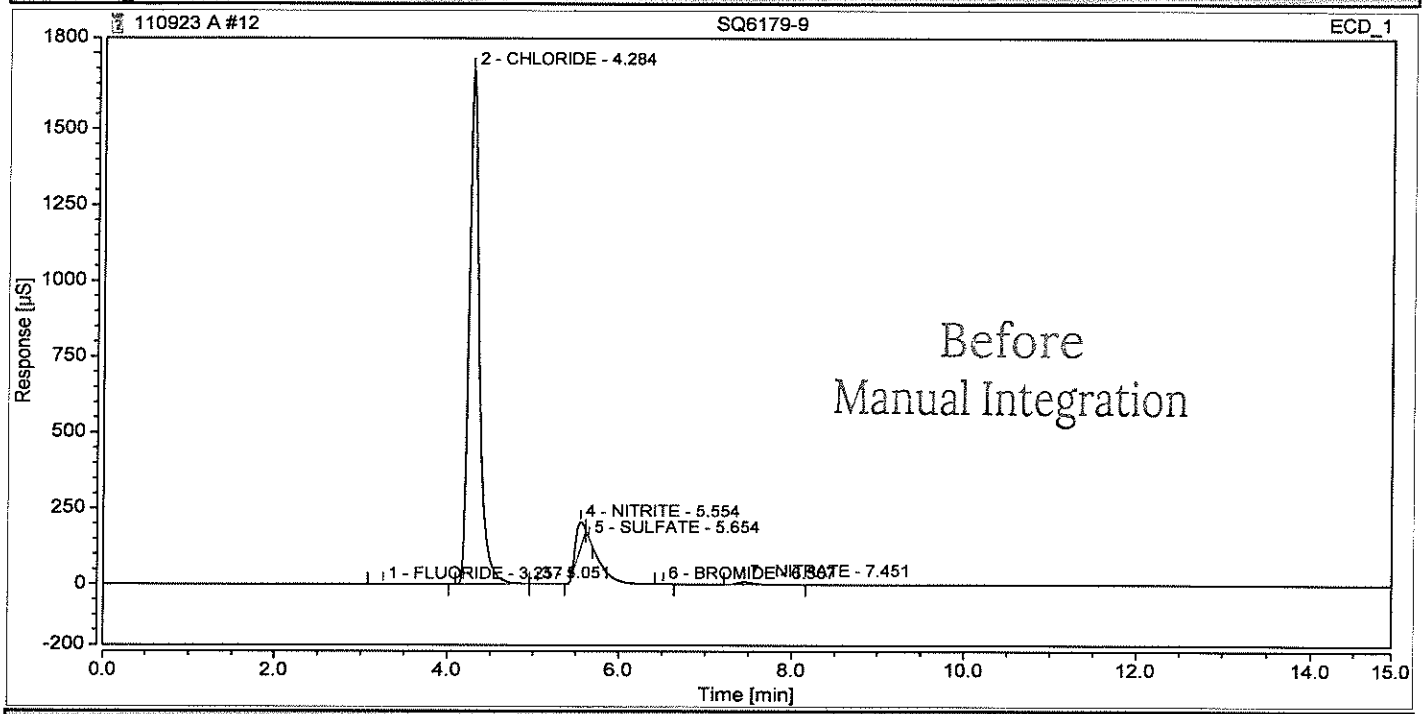
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.280	239.997	1698.642	80.96	88.85	615.7759	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2	SULFATE	5.557	54.705	204.575	18.45	10.70	192.4350	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
3	NITRATE	7.447	1.730	8.609	0.58	0.45	1.7673	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**296.431**	**1911.827**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6179-9**	*Run Time (min):*	**14.95**
Vial Number:	**12**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**09/Nov/23 20:00**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

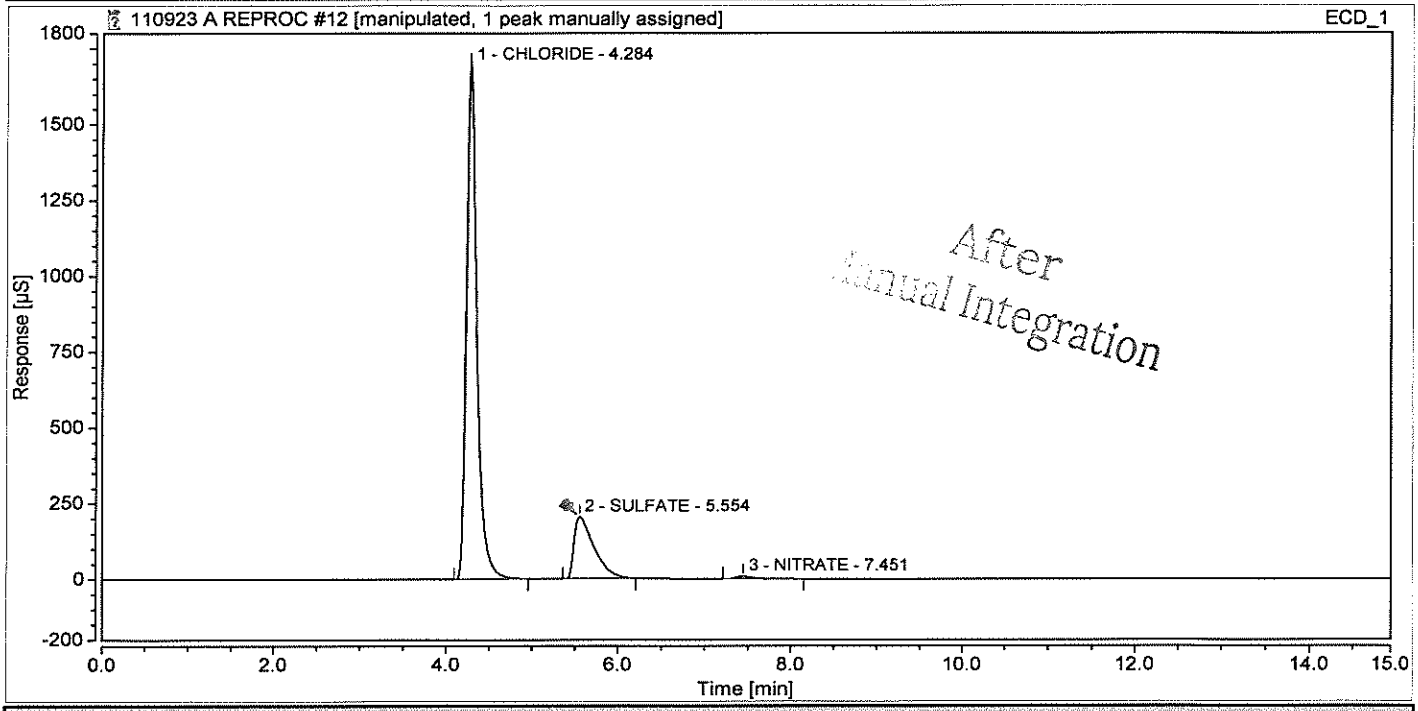
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.257	0.054	0.282	0.02	0.02	0.1017	n.a.
2	CHLORIDE	4.284	239.569	1694.792	95.33	94.60	614.6782	n.a.
3		5.051	0.063	0.239	0.03	0.01	n.a.	n.a.
4	NITRITE	5.554	9.850	86.839	3.92	4.85	12.7593	n.a.
5	SULFATE	5.654	0.030	0.755	0.01	0.04	0.1051	n.a.
6	BROMIDE	6.507	0.004	0.039	0.00	0.00	0.0246	n.a.
7	NITRATE	7.451	1.730	8.612	0.69	0.48	1.7677	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**251.300**	**1791.558**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6179-9**	*Run Time (min):*	**14.95**
Vial Number:	**12**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**09/Nov/23 20:00**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

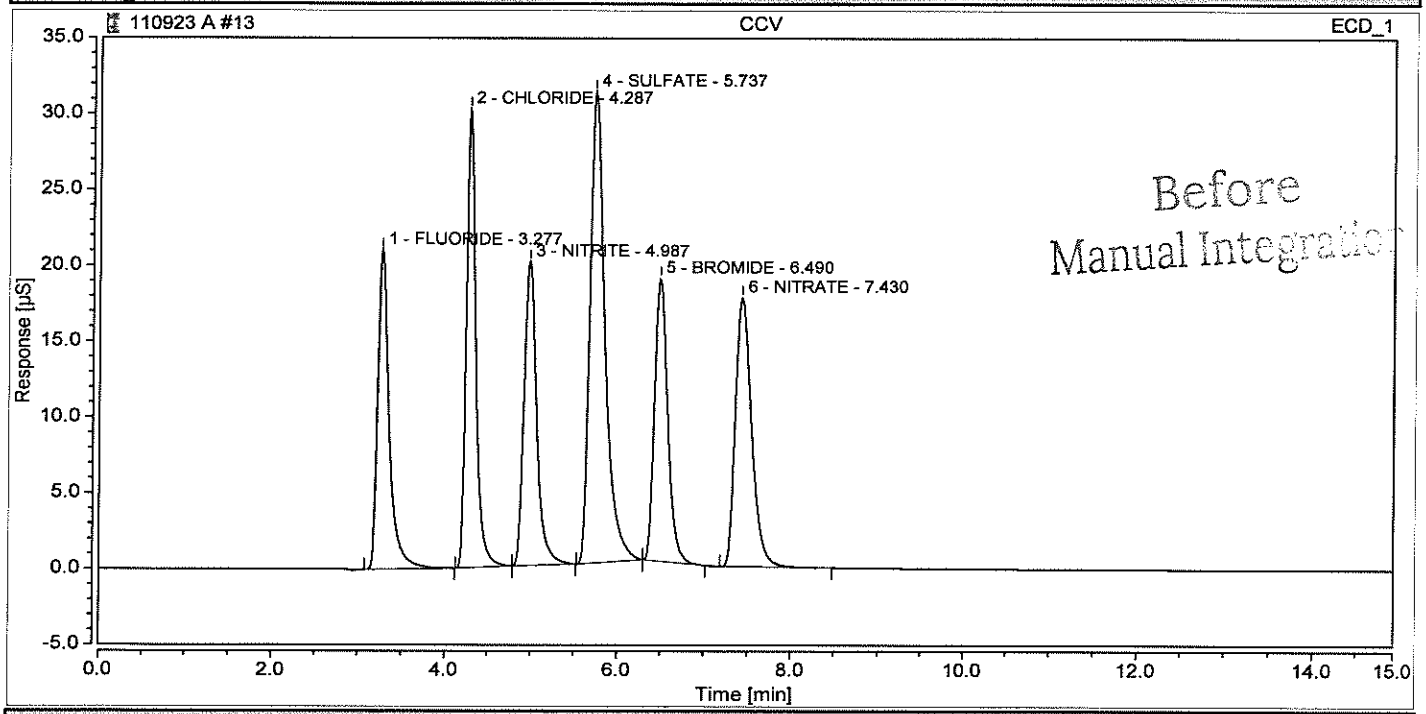
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.284	239.569	1694.792	81.05	88.85	614.6782	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2	SULFATE	5.554	54.278	204.052	18.36	10.70	190.9320	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
3	NITRATE	7.451	1.730	8.612	0.59	0.45	1.7677	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**295.577**	**1907.456**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**CCV**	*Run Time (min):*	**14.95**
Vial Number:	**13**	*Injection Volume:*	**200.00**
Injection Type:	**Check Standard**	*Channel:*	**ECD_1**
Calibration Level:	**06**	*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**09/Nov/23 20:17**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

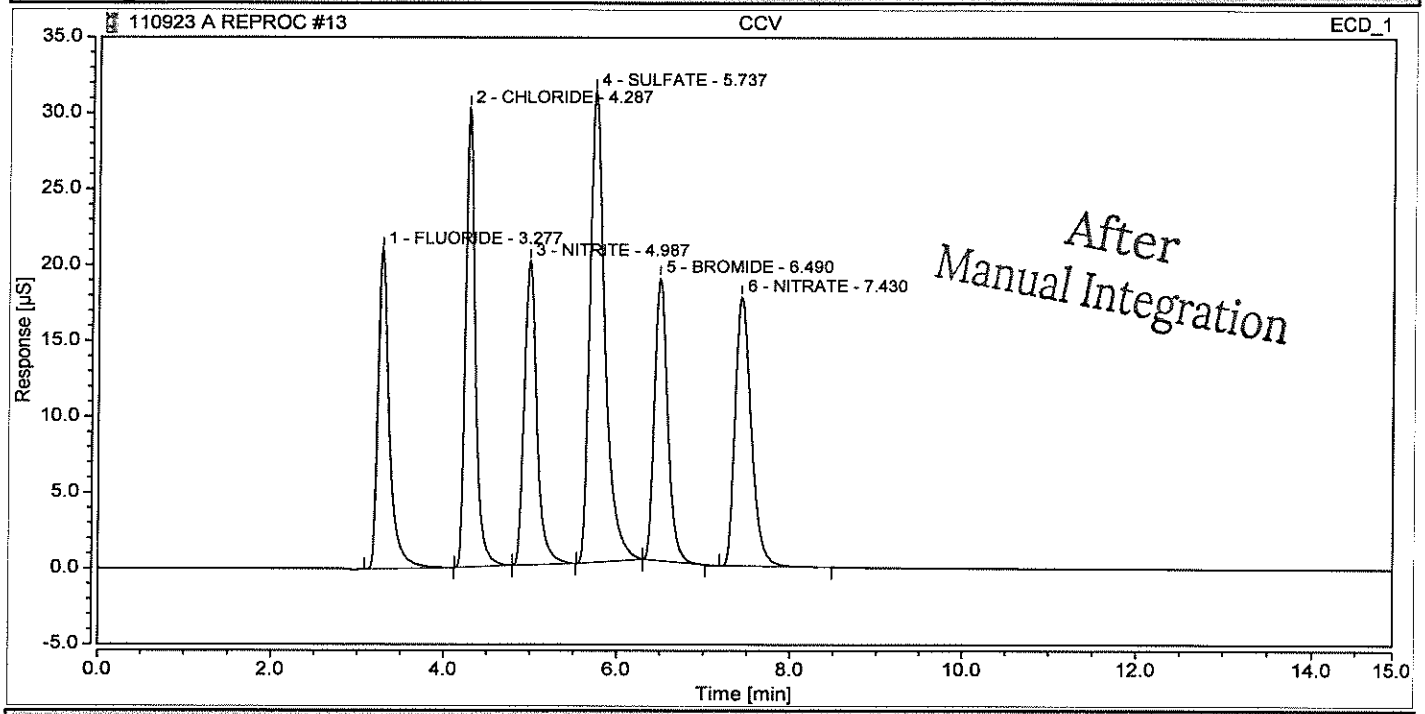
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.277	3.204	21.083	13.37	15.19	5.2067	4.1348
2	CHLORIDE	4.287	3.986	30.251	16.63	21.79	10.2270	2.2704
3	NITRITE	4.987	3.396	20.030	14.17	14.43	4.0939	2.3484
4	SULFATE	5.737	6.229	31.076	26.00	22.38	21.9117	9.5585
5	BROMIDE	6.490	3.317	18.660	13.84	13.44	19.5108	-2.4460
6	NITRATE	7.430	3.829	17.731	15.98	12.77	3.9124	-2.1909
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**23.961**	**138.831**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**CCV**	*Run Time (min):*	**14.95**
Vial Number:	**13**	*Injection Volume:*	**200.00**
Injection Type:	**Check Standard**	*Channel:*	**ECD_1**
Calibration Level:	**06**	*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**09/Nov/23 20:17**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

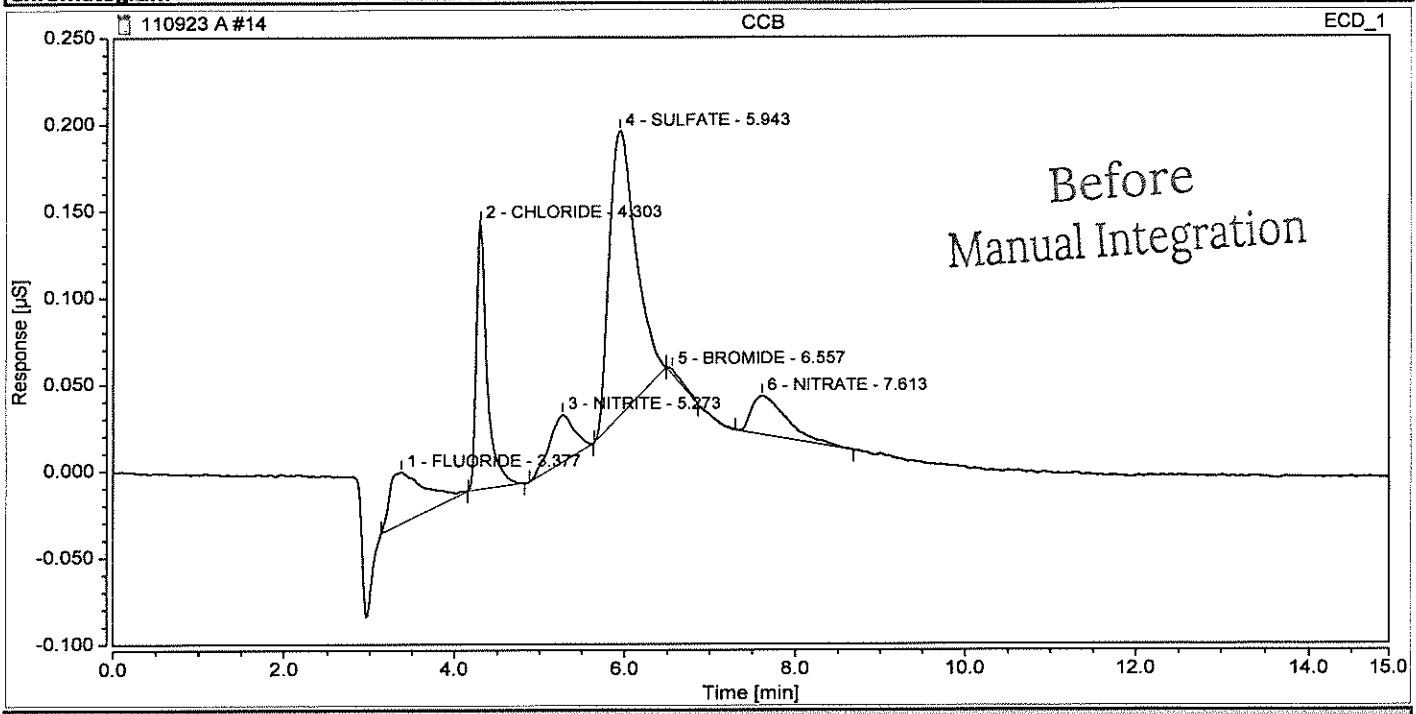
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.277	3.204	21.083	13.37	15.19	5.2067	4.1348
2	CHLORIDE	4.287	3.986	30.251	16.63	21.79	10.2270	2.2704
3	NITRITE	4.987	3.396	20.030	14.17	14.43	4.0939	2.3484
4	SULFATE	5.737	6.229	31.076	26.00	22.38	21.9117	9.5585
5	BROMIDE	6.490	3.317	18.660	13.84	13.44	19.5108	-2.4460
6	NITRATE	7.430	3.829	17.731	15.98	12.77	3.9124	-2.1909
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**23.961**	**138.831**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**CCB**	*Run Time (min):*	**14.96**
Vial Number:	**14**	*Injection Volume:*	**200.00**
Injection Type:	**Blank**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**09/Nov/23 20:34**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

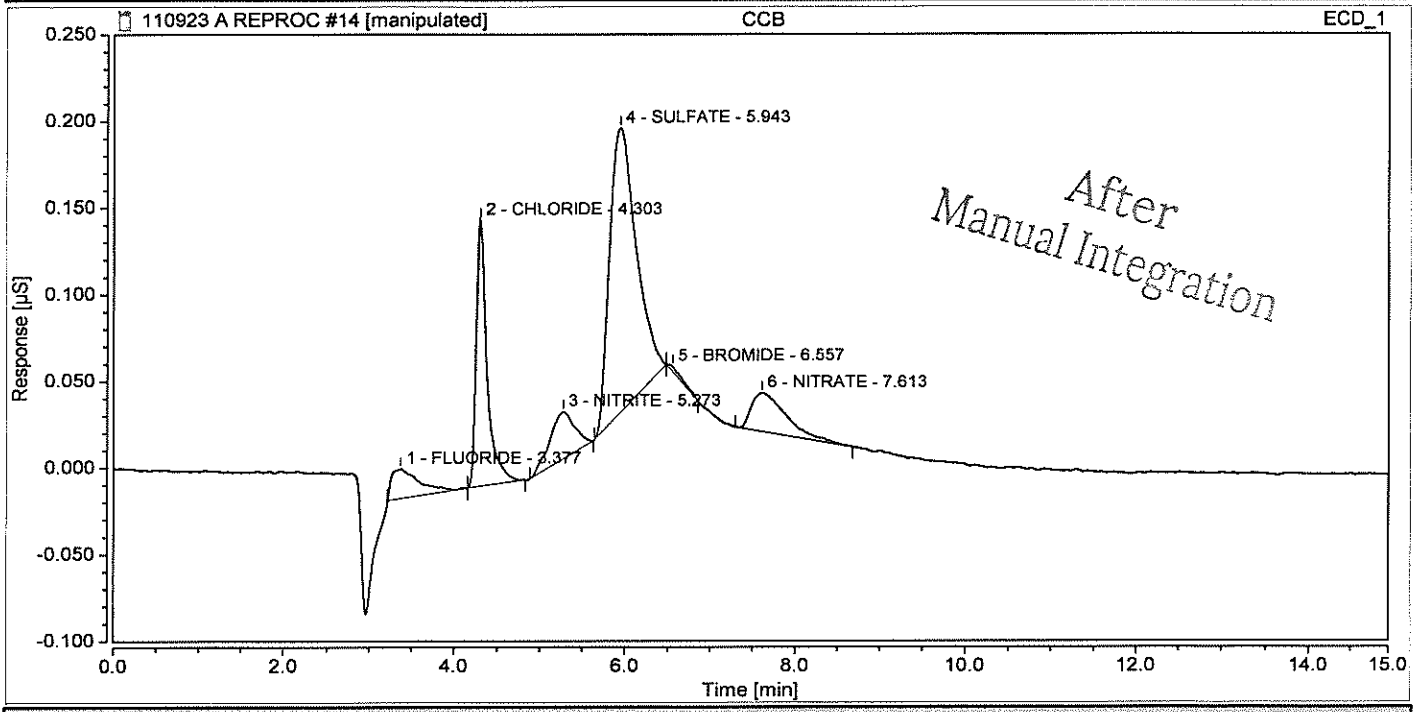
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.377	0.014	0.030	12.11	7.44	0.0388	n.a.
2	CHLORIDE	4.303	0.022	0.153	19.06	38.39	0.0569	n.a.
3	NITRITE	5.273	0.009	0.027	8.03	6.82	0.0191	n.a.
4	SULFATE	5.943	0.059	0.164	51.16	41.10	0.2092	n.a.
5	BROMIDE	6.557	0.001	0.003	0.55	0.69	0.0038	n.a.
6	NITRATE	7.613	0.011	0.022	9.08	5.56	0.0108	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.116**	**0.400**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**CCB**	*Run Time (min):*	**14.96**
Vial Number:	**14**	*Injection Volume:*	**200.00**
Injection Type:	**Blank**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**09/Nov/23 20:34**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

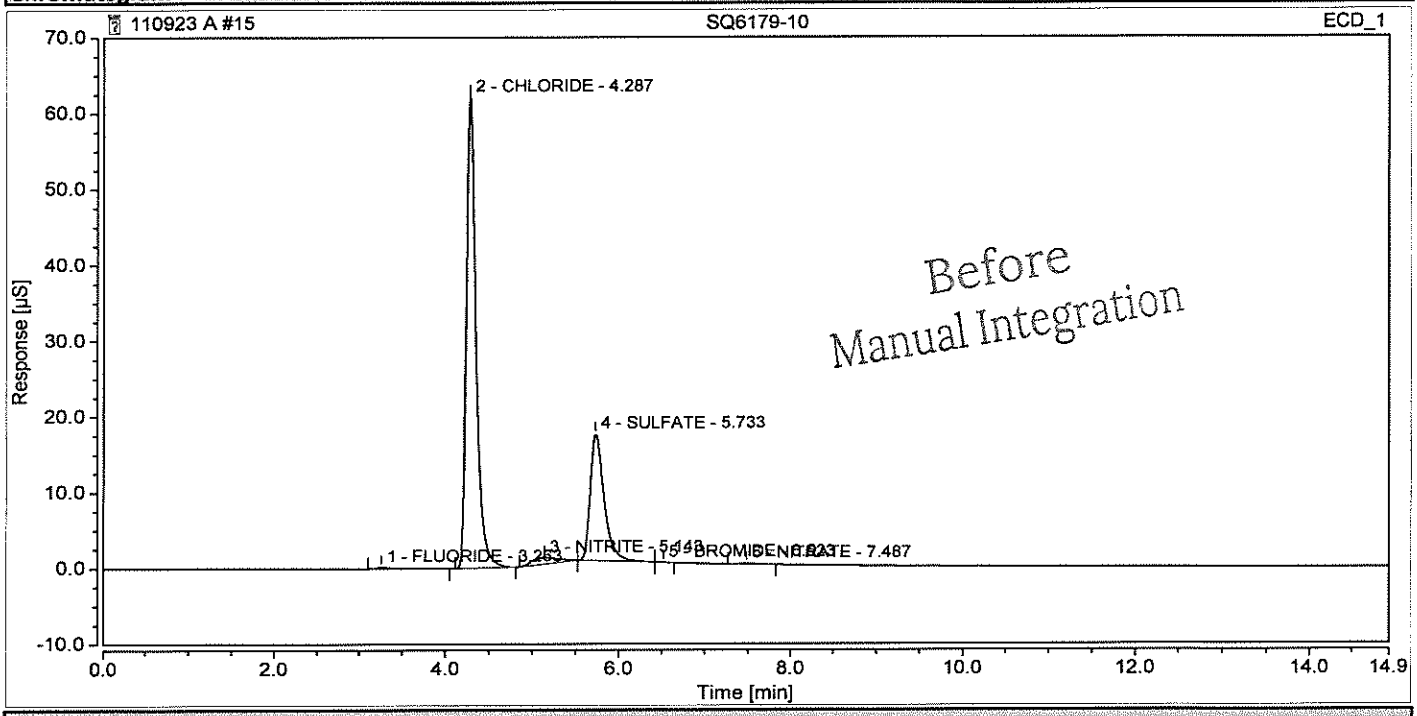
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.377	0.006	0.017	5.95	4.43	0.0268	n.a.
2	CHLORIDE	4.303	0.022	0.153	20.40	39.64	0.0569	n.a.
3	NITRITE	5.273	0.009	0.027	8.59	7.04	0.0191	n.a.
4	SULFATE	5.943	0.059	0.164	54.74	42.44	0.2092	n.a.
5	BROMIDE	6.557	0.001	0.003	0.59	0.71	0.0038	n.a.
6	NITRATE	7.613	0.011	0.022	9.72	5.74	0.0108	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.109**	**0.387**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6179-10**	*Run Time (min):*	**14.95**
Vial Number:	**15**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**09/Nov/23 20:51**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

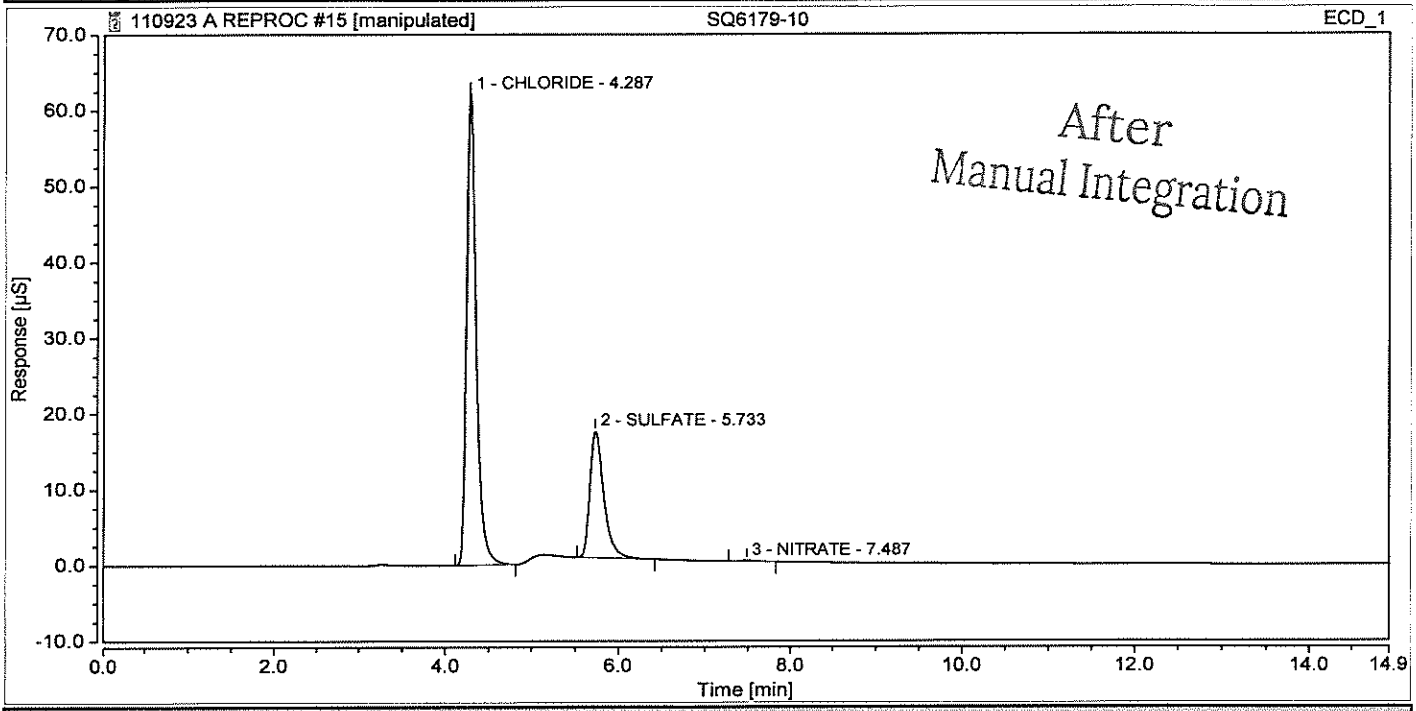
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.263	0.037	0.191	0.32	0.24	0.0747	n.a.
2	CHLORIDE	4.287	8.083	62.125	69.86	77.63	20.7393	n.a.
3	NITRITE	5.143	0.309	0.869	2.67	1.09	0.3691	n.a.
4	SULFATE	5.733	3.118	16.717	26.95	20.89	10.9681	n.a.
5	BROMIDE	6.523	0.001	0.010	0.01	0.01	0.0069	n.a.
6	NITRATE	7.487	0.022	0.114	0.19	0.14	0.0220	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**11.570**	**80.026**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6179-10**	*Run Time (min):*	**14.95**
Vial Number:	**15**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**09/Nov/23 20:51**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

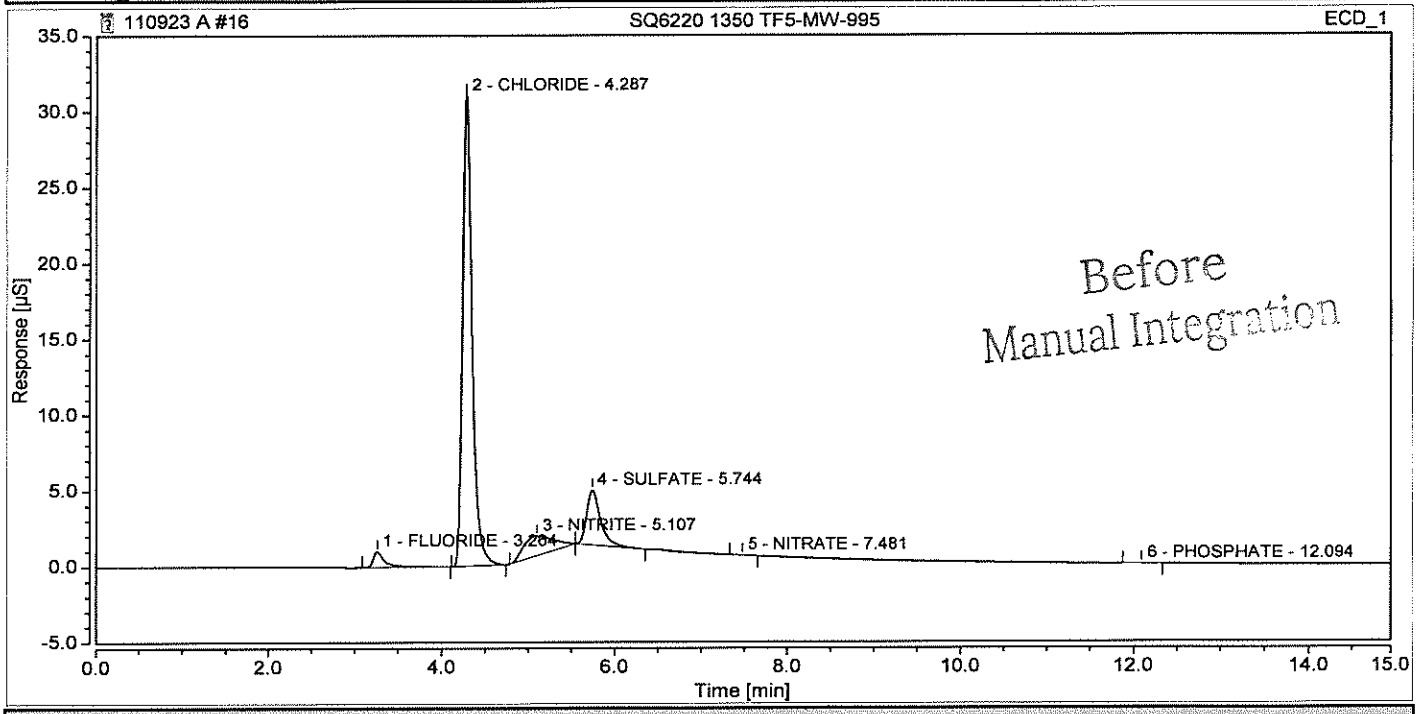
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.287	8.083	62.125	72.02	78.68	20.7393	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2	SULFATE	5.733	3.118	16.717	27.78	21.17	10.9681	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
3	NITRATE	7.487	0.022	0.114	0.19	0.14	0.0220	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**11.223**	**78.956**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6220 1350 TF5-MW-995**	*Run Time (min):*	**14.96**
Vial Number:	**16**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**09/Nov/23 21:09**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

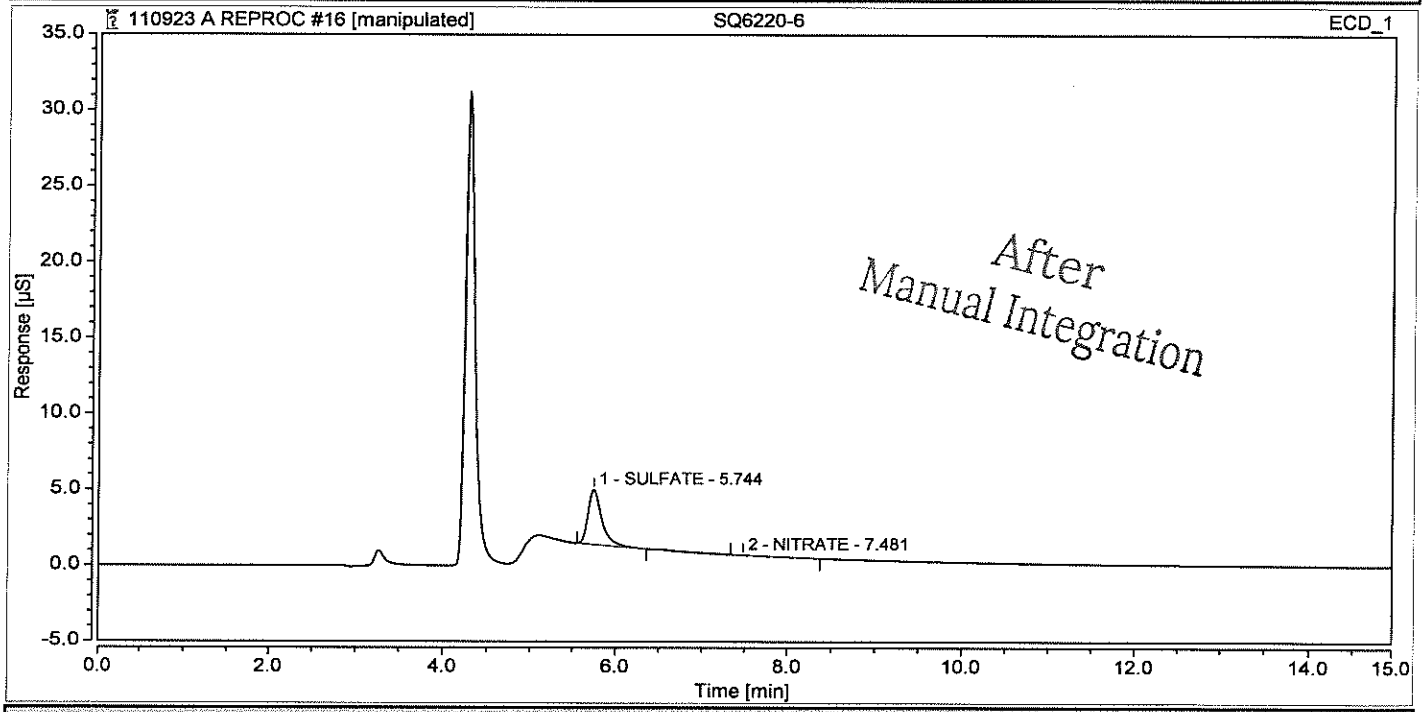
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.264	0.162	1.034	3.03	2.80	0.2710	n.a.
2	CHLORIDE	4.287	3.969	31.015	74.45	83.92	10.1832	n.a.
3	NITRITE	5.107	0.526	1.283	9.87	3.47	0.6238	n.a.
4	SULFATE	5.744	0.673	3.622	12.63	9.80	2.3677	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5	NITRATE	7.481	0.000	0.003	0.01	0.01	0.0004	n.a.
6	PHOSPHATE	12.094	0.000	0.002	0.01	0.01	n.a.	n.a.
Total:			**5.331**	**36.959**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6220-6**	*Run Time (min):*	**14.96**
Vial Number:	**16**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**09/Nov/23 21:09**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

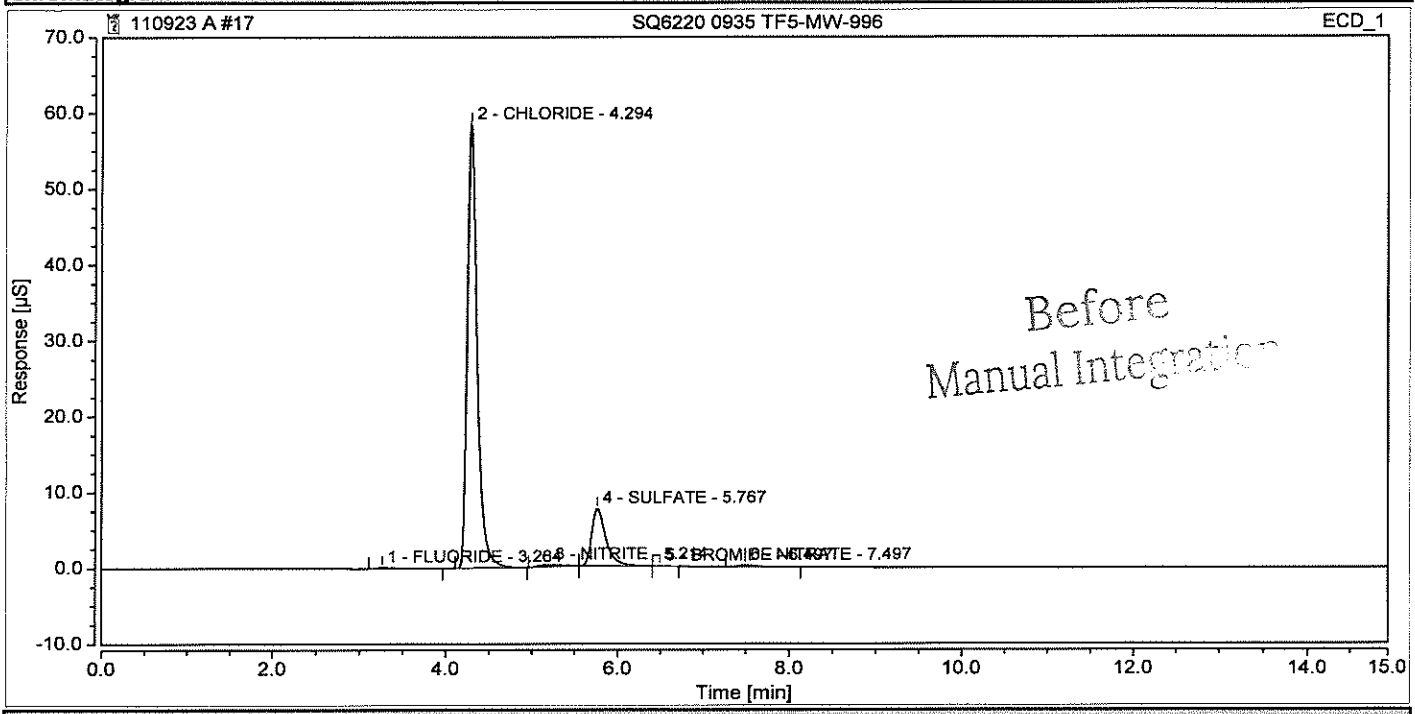
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	CHLORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	SULFATE	5.744	0.673	3.622	98.97	99.97	2.3677	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2	NITRATE	7.481	0.007	0.001	1.03	0.03	0.0071	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.680**	**3.623**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6220 0935 TF5-MW-996**	*Run Time (min):*	**14.95**
Vial Number:	**17**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**09/Nov/23 21:26**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

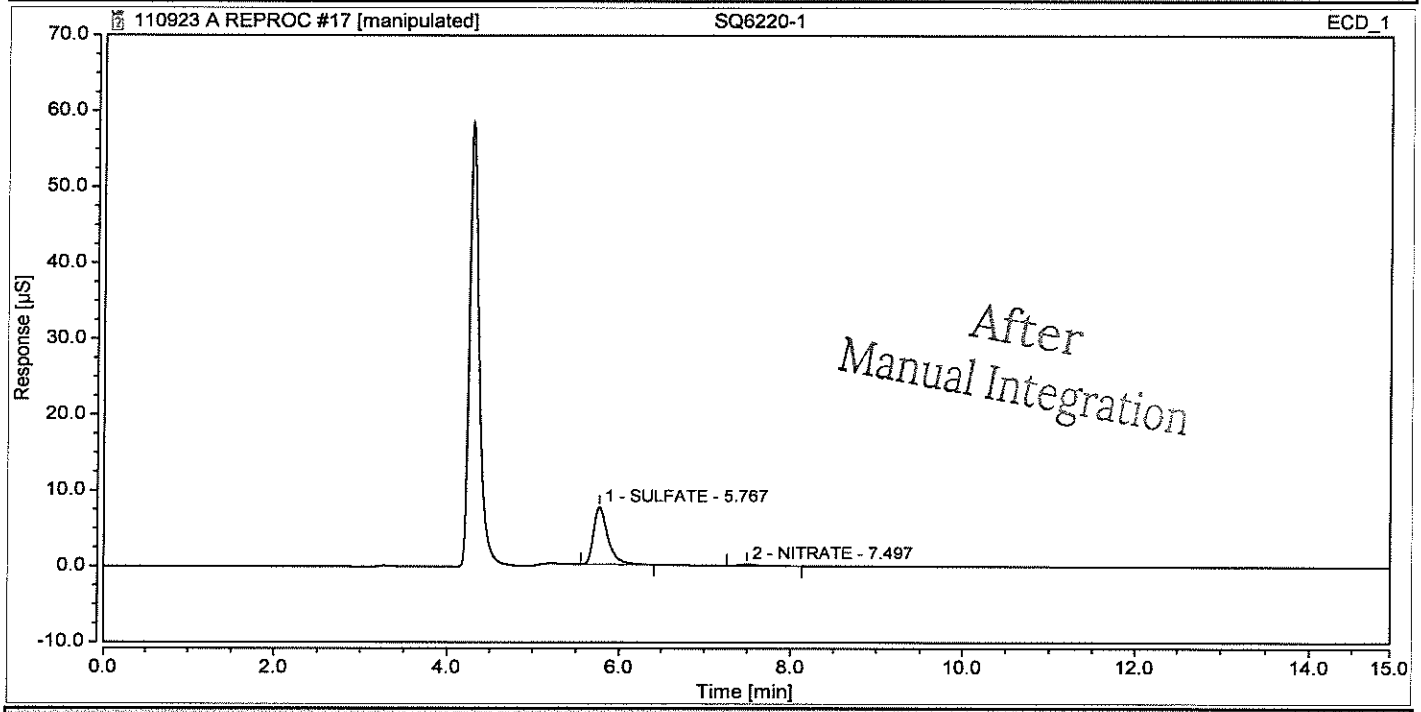
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.264	0.027	0.140	0.29	0.21	0.0588	n.a.
2	CHLORIDE	4.294	7.718	58.498	82.90	87.75	19.8015	n.a.
3	NITRITE	5.214	0.074	0.245	0.79	0.37	0.0939	n.a.
4	SULFATE	5.767	1.446	7.552	15.54	11.33	5.0879	n.a.
5	BROMIDE	6.497	0.003	0.019	0.03	0.03	0.0178	n.a.
6	NITRATE	7.497	0.042	0.212	0.45	0.32	0.0431	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**9.310**	**66.666**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6220-1**	*Run Time (min):*	**14.95**
Vial Number:	**17**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**09/Nov/23 21:26**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

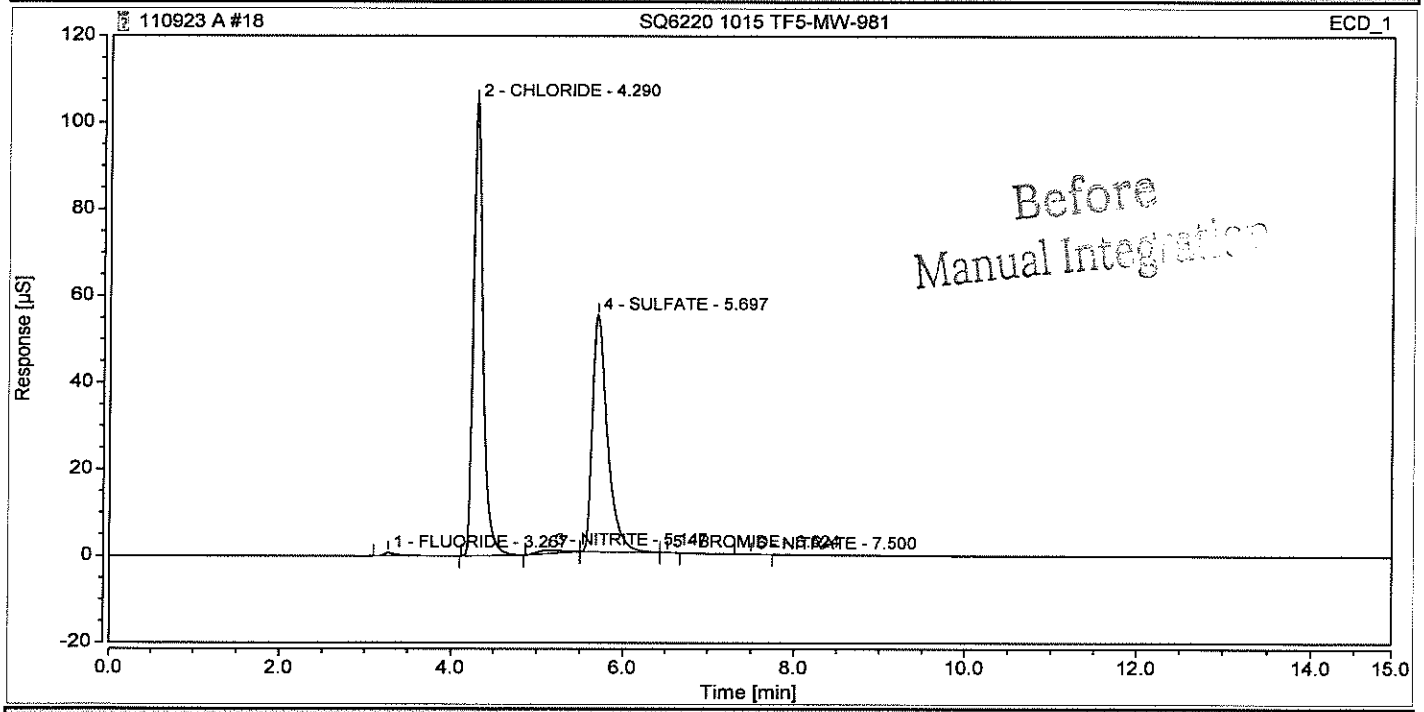
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	CHLORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	SULFATE	5.767	1.446	7.552	97.16	97.27	5.0879	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2	NITRATE	7.497	0.042	0.212	2.84	2.73	0.0431	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**1.489**	**7.764**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6220 1015 TF5-MW-981**	*Run Time (min):*	**14.96**
Vial Number:	**18**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**09/Nov/23 21:43**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

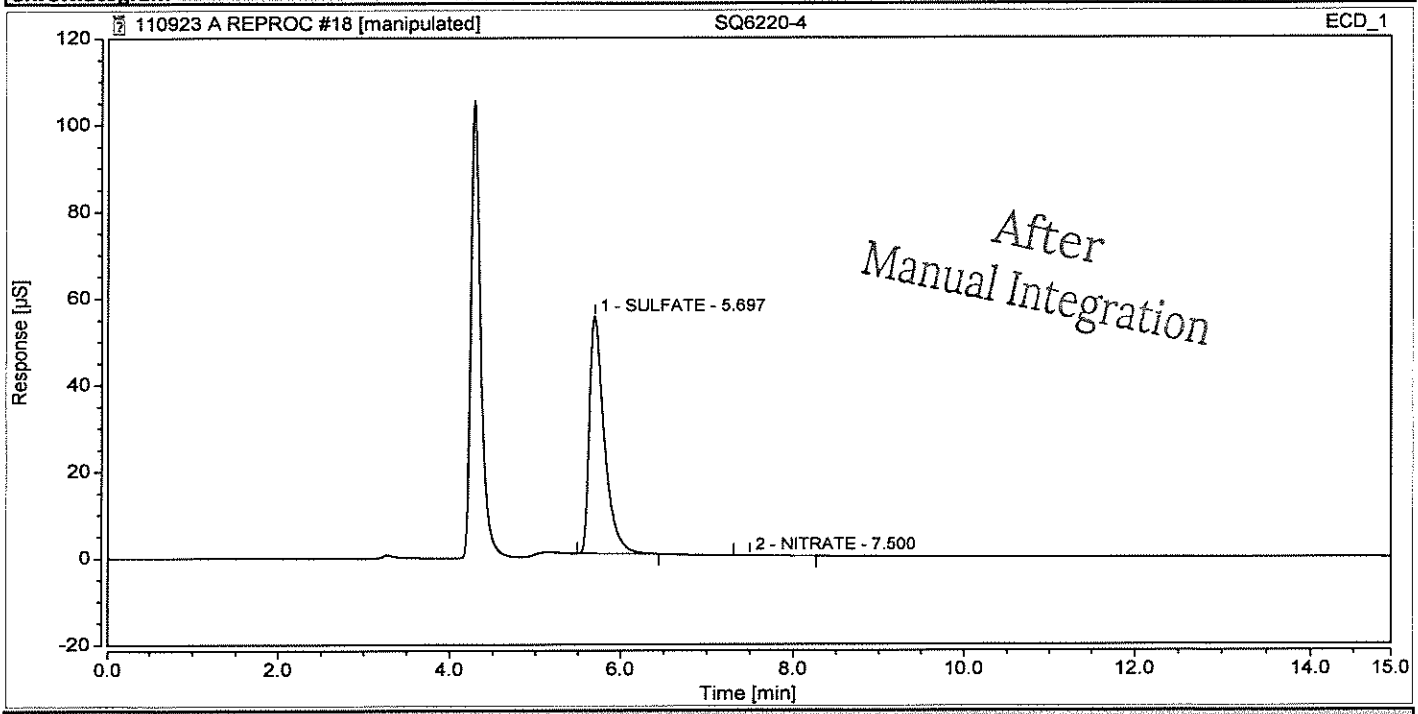
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.267	0.138	0.761	0.54	0.47	0.2330	n.a.
2	CHLORIDE	4.290	13.802	104.850	54.47	65.09	35.4119	n.a.
3	NITRITE	5.147	0.257	0.767	1.01	0.48	0.3083	n.a.
4	SULFATE	5.697	11.137	54.668	43.95	33.94	39.1750	n.a.
5	BROMIDE	6.524	0.003	0.027	0.01	0.02	0.0176	n.a.
6	NITRATE	7.500	0.003	0.016	0.01	0.01	0.0028	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**25.339**	**161.090**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6220-4**	*Run Time (min):*	**14.96**
Vial Number:	**18**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**09/Nov/23 21:43**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

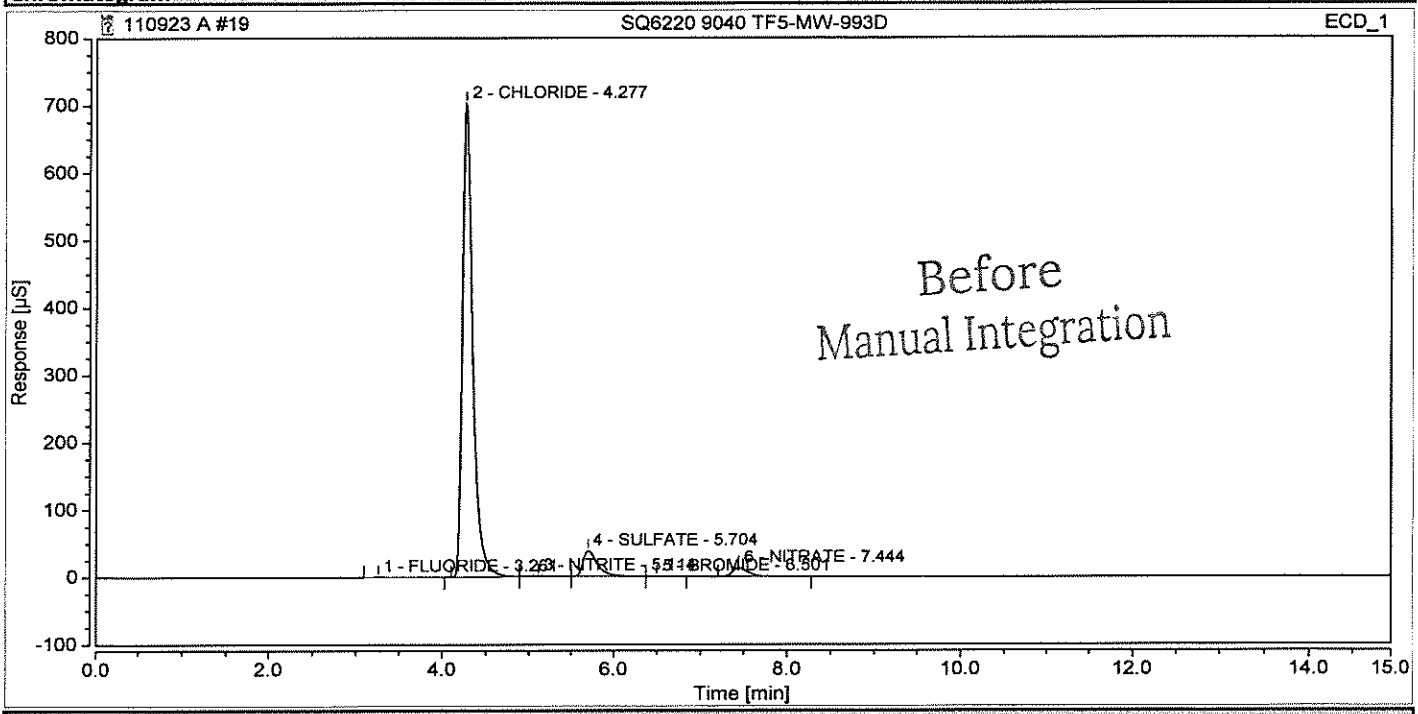
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	CHLORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	SULFATE	5.697	11.137	54.668	99.99	99.97	39.1750	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2	NITRATE	7.500	0.001	0.014	0.01	0.03	0.0009	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**11.137**	**54.682**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6220 9040 TF5-MW-993D**	*Run Time (min):*	**14.96**
Vial Number:	**19**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**09/Nov/23 22:00**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

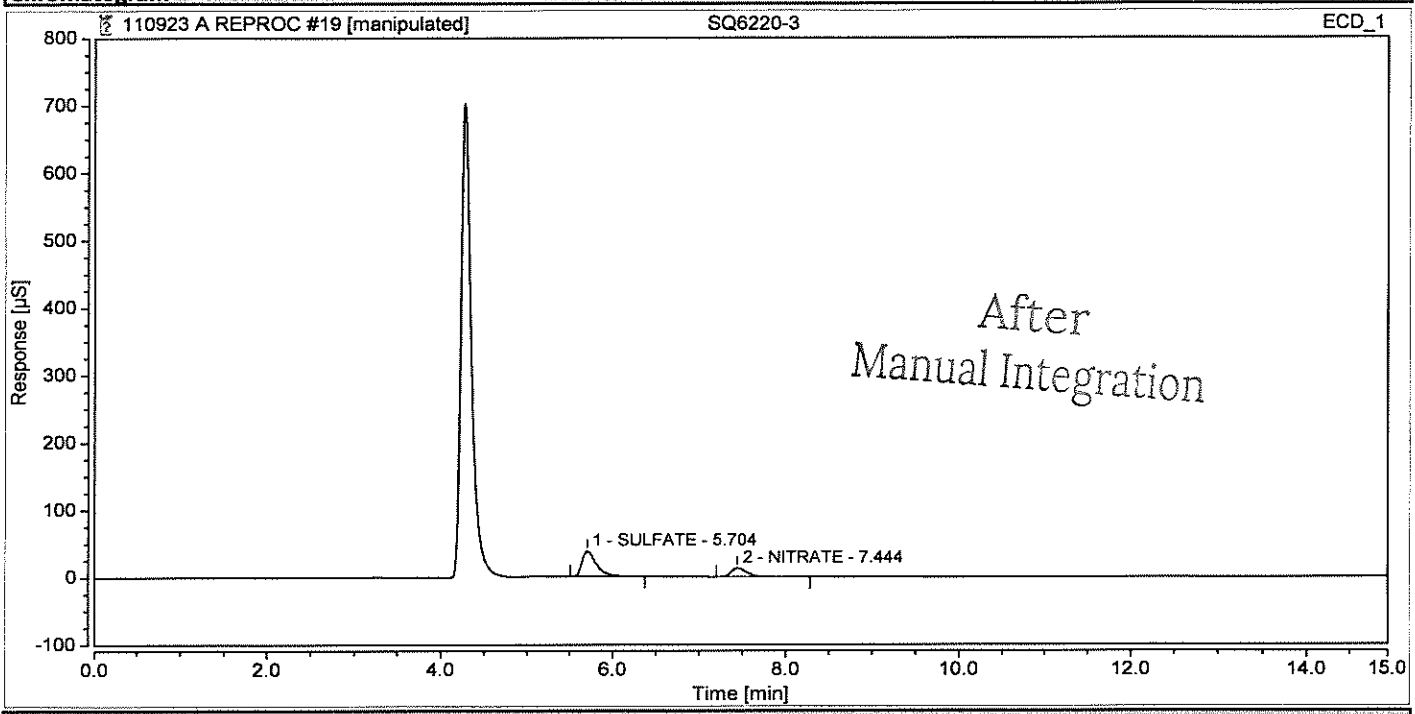
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.261	0.100	0.635	0.09	0.08	0.1739	n.a.
2	CHLORIDE	4.277	96.417	702.512	90.31	93.09	247.3840	n.a.
3	NITRITE	5.114	0.223	0.693	0.21	0.09	0.2688	n.a.
4	SULFATE	5.704	7.346	37.679	6.88	4.99	25.8421	n.a.
5	BROMIDE	6.501	0.025	0.138	0.02	0.02	0.1442	n.a.
6	NITRATE	7.444	2.655	12.997	2.49	1.72	2.7125	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**106.766**	**754.653**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6220-3**	*Run Time (min):*	**14.96**
Vial Number:	**19**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**09/Nov/23 22:00**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

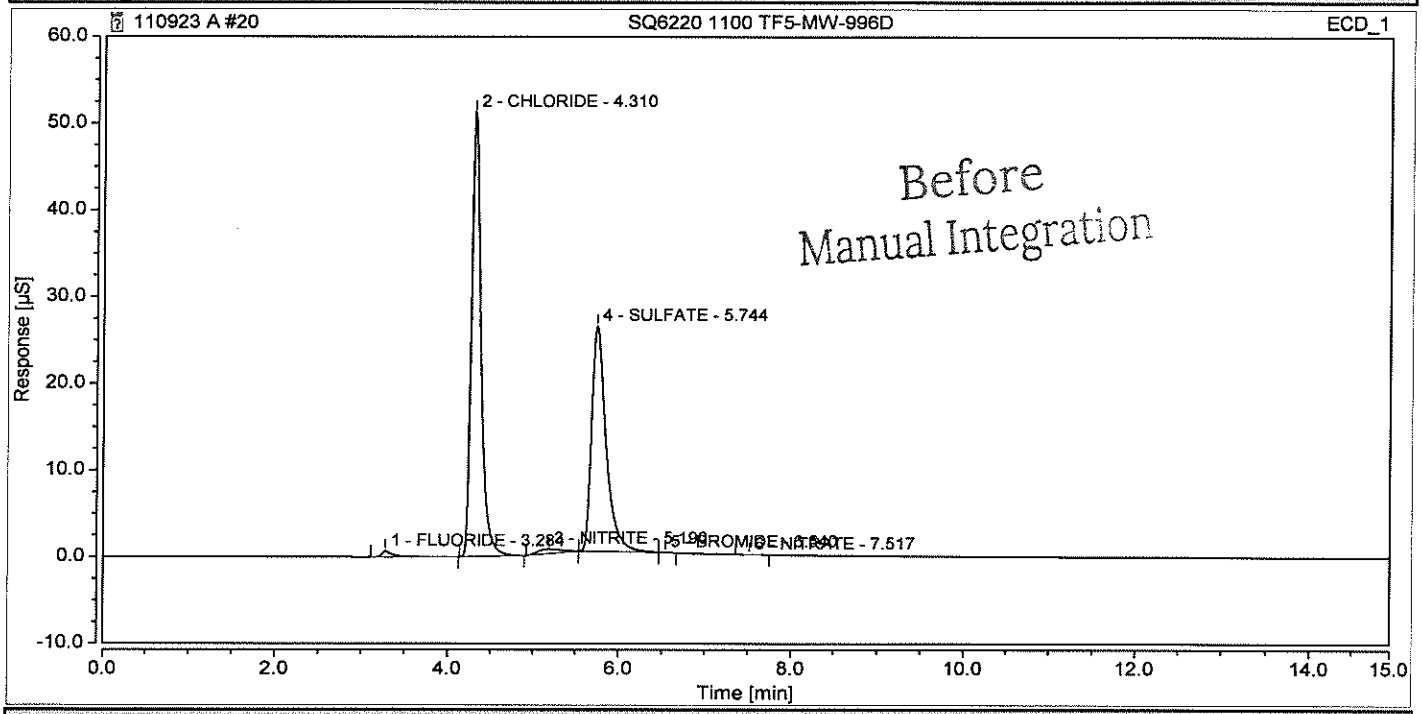
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	CHLORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	SULFATE	5.704	7.346	37.679	73.46	74.35	25.8421	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2	NITRATE	7.444	2.655	12.997	26.54	25.65	2.7125	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**10.001**	**50.676**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6220 1100 TF5-MW-996D**	*Run Time (min):*	**14.95**
Vial Number:	**20**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**09/Nov/23 22:18**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

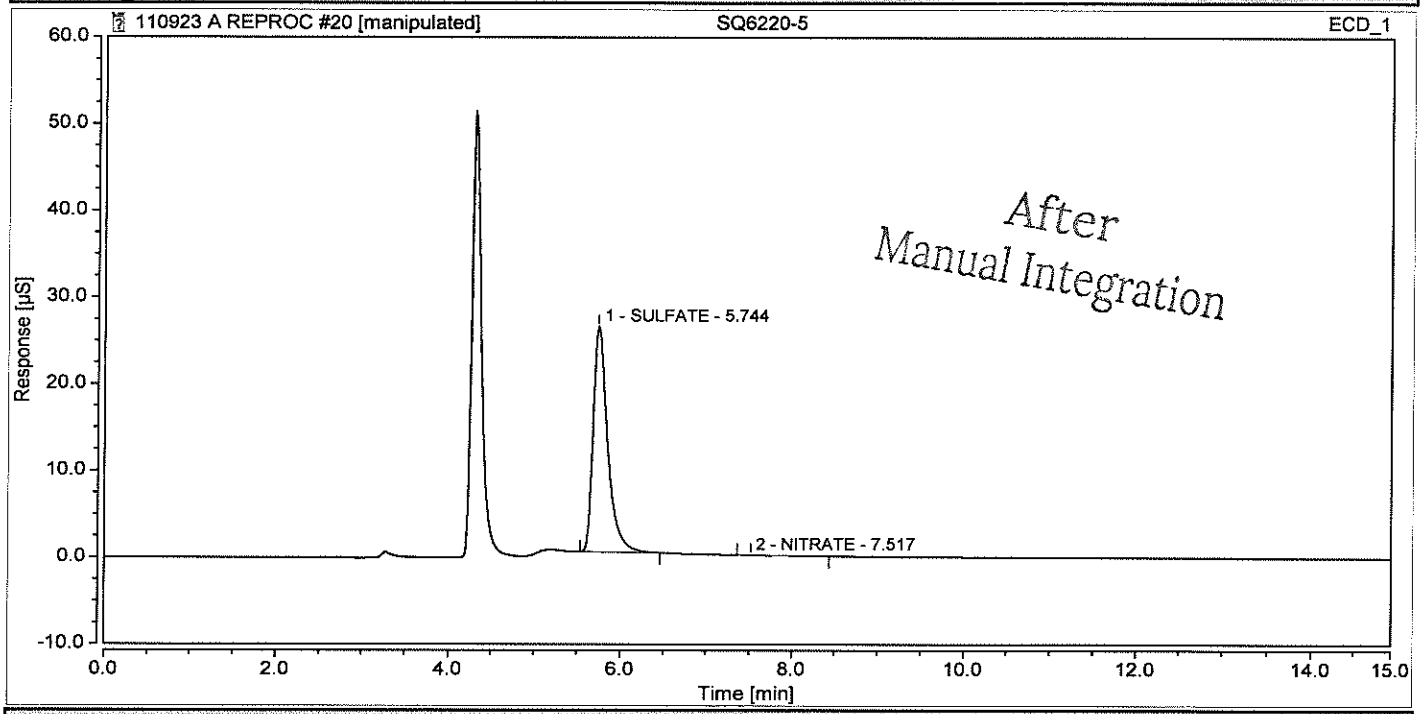
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.284	0.113	0.688	0.94	0.88	0.1946	n.a.
2	CHLORIDE	4.310	6.708	51.257	55.70	65.30	17.2121	n.a.
3	NITRITE	5.190	0.169	0.531	1.40	0.68	0.2053	n.a.
4	SULFATE	5.744	5.052	26.001	41.94	33.13	17.7711	n.a.
5	BROMIDE	6.540	0.001	0.011	0.01	0.01	0.0064	n.a.
6	NITRATE	7.517	0.001	0.006	0.01	0.01	0.0010	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**12.045**	**78.494**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6220-5**	*Run Time (min):*	**14.95**
Vial Number:	**20**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**09/Nov/23 22:18**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

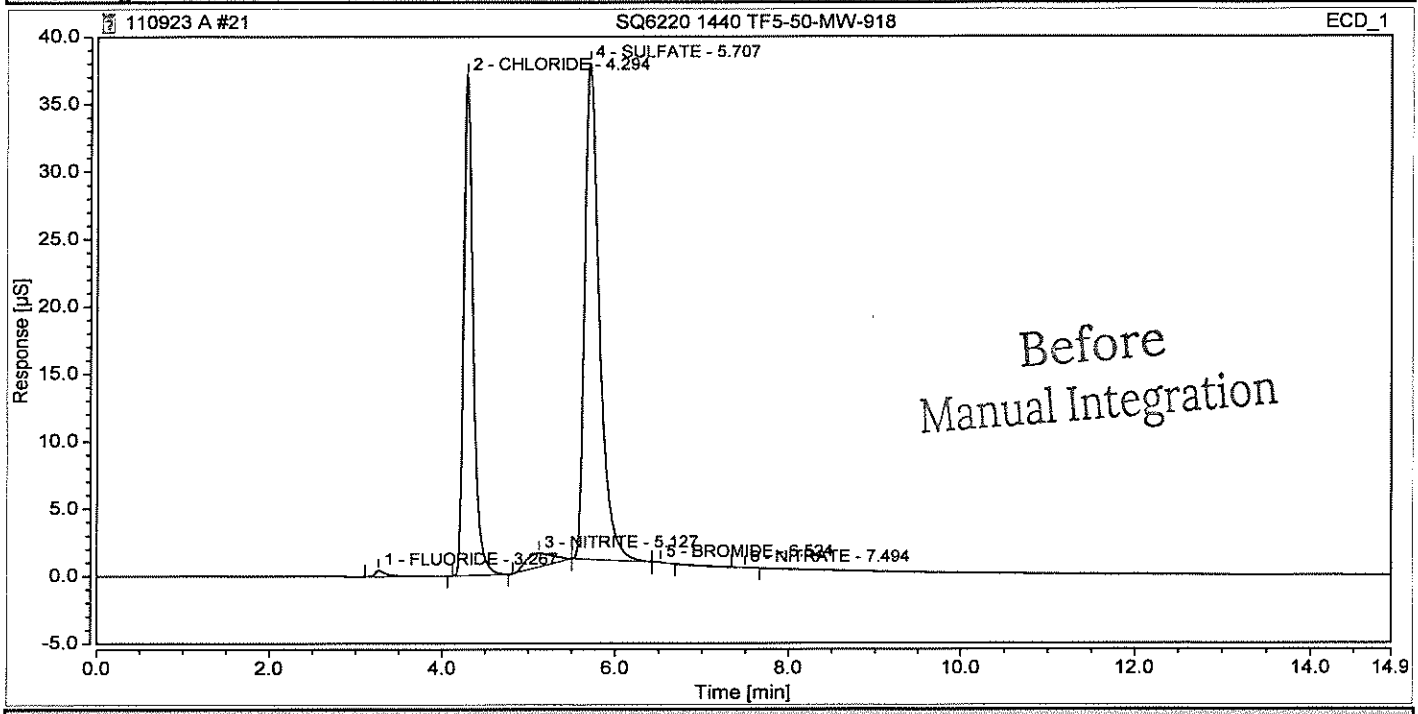
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	CHLORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	SULFATE	5.744	5.052	26.001	99.93	99.99	17.7711	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2	NITRATE	7.517	0.004	0.004	0.07	0.01	0.0037	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**5.056**	**26.005**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6220 1440 TF5-50-MW-918**	*Run Time (min):*	**14.95**
Vial Number:	**21**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**09/Nov/23 22:35**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

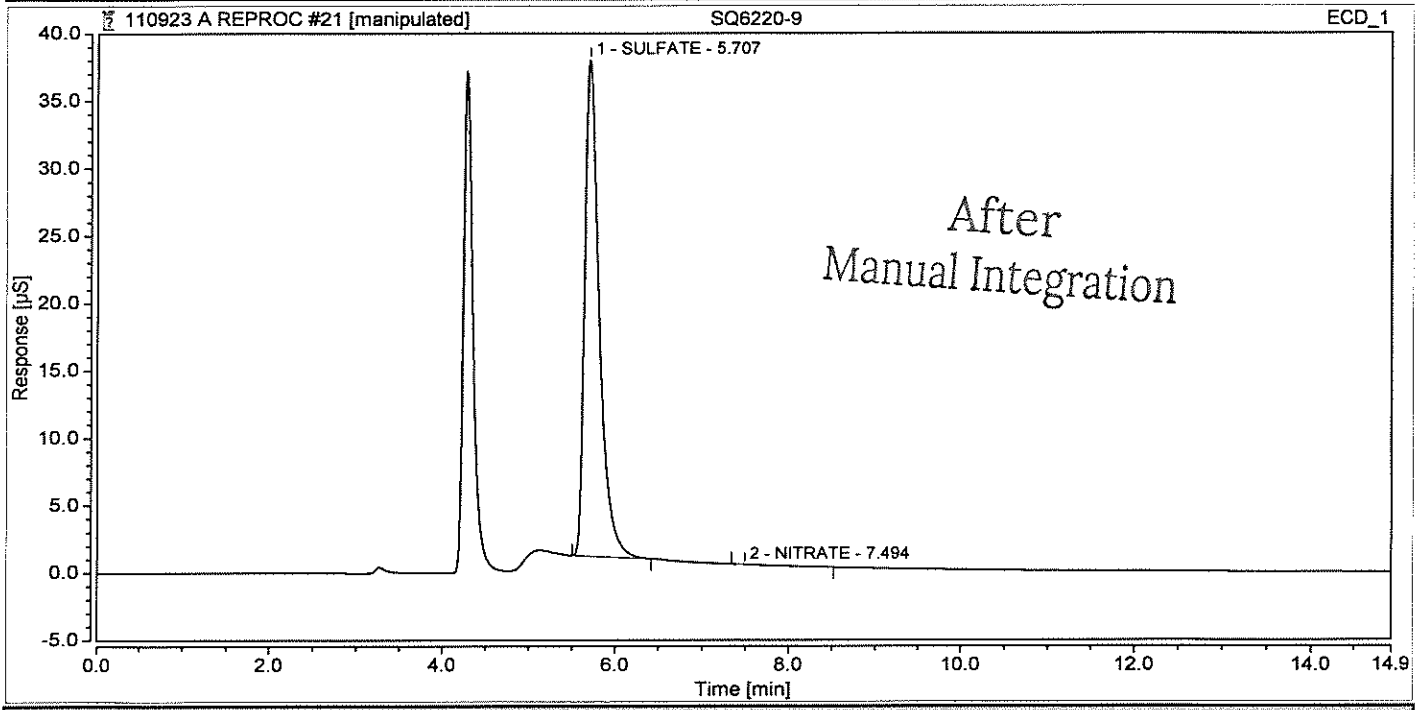
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.267	0.079	0.469	0.64	0.62	0.1412	n.a.
2	CHLORIDE	4.294	4.776	37.104	38.40	49.16	12.2532	n.a.
3	NITRITE	5.127	0.380	1.023	3.05	1.36	0.4516	n.a.
4	SULFATE	5.707	7.197	36.841	57.87	48.81	25.3171	n.a.
5	BROMIDE	6.524	0.004	0.035	0.04	0.05	0.0262	n.a.
6	NITRATE	7.494	0.001	0.006	0.01	0.01	0.0009	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**12.437**	**75.478**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6220-9**	*Run Time (min):*	**14.95**
Vial Number:	**21**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**09/Nov/23 22:35**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

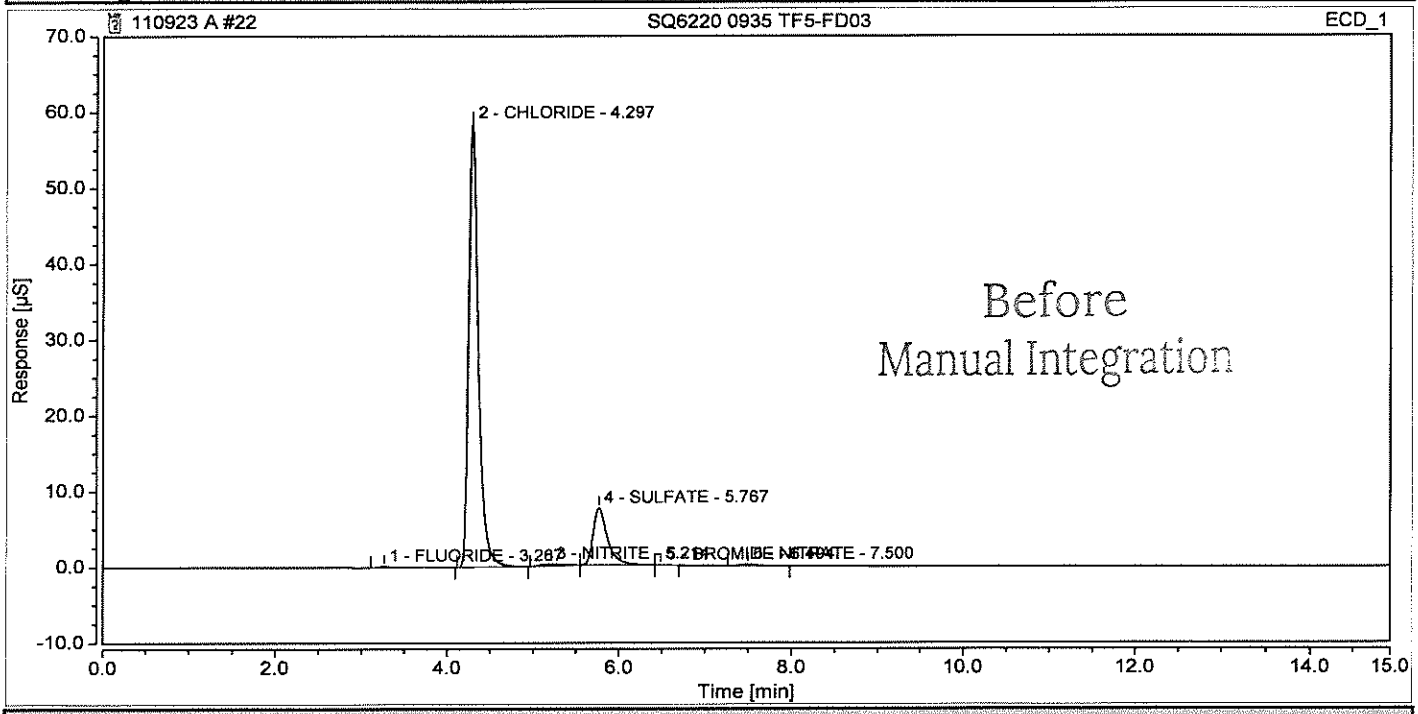
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	CHLORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	SULFATE	5.707	7.197	36.841	99.86	100.00	25.3171	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2	NITRATE	7.494	0.010	0.000	0.14	0.00	0.0105	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**7.207**	**36.841**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6220 0935 TF5-FD03**	*Run Time (min):*	**14.95**
Vial Number:	**22**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**09/Nov/23 22:52**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

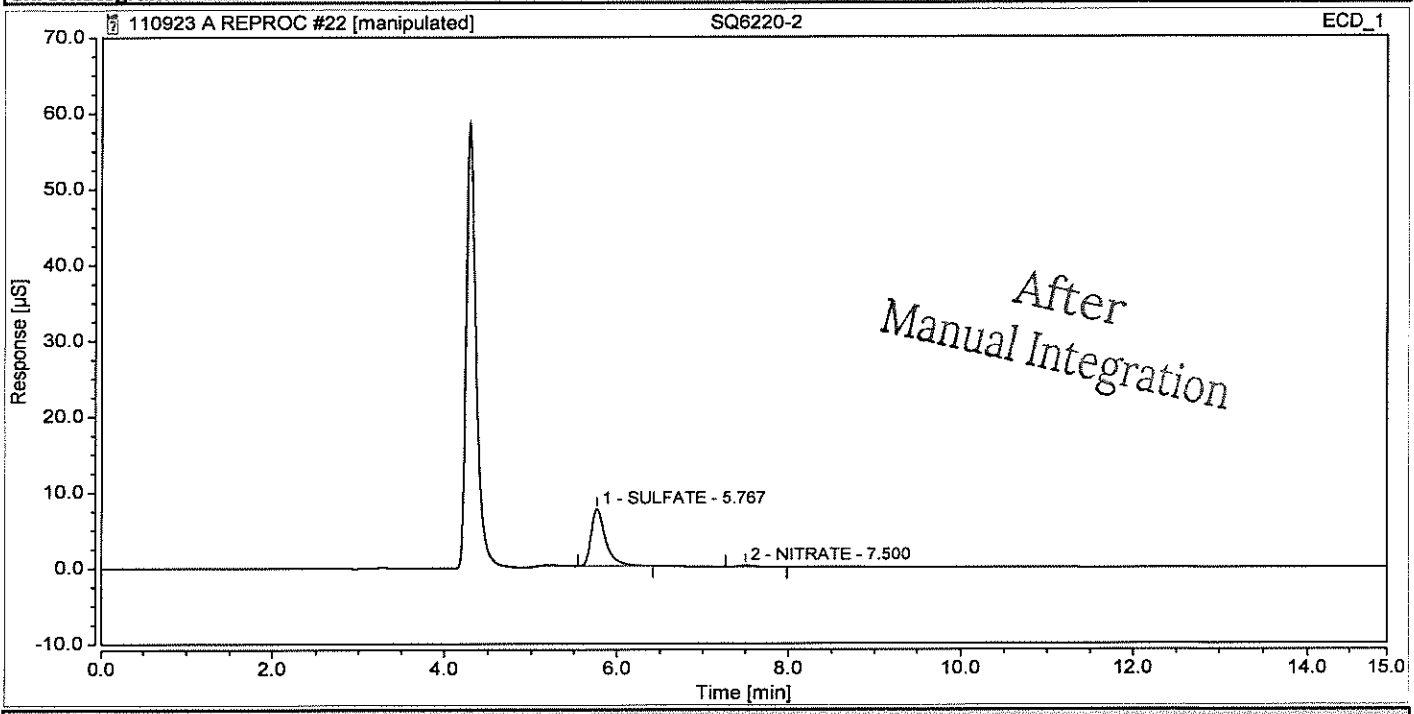
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.267	0.029	0.143	0.31	0.21	0.0618	n.a.
2	CHLORIDE	4.297	7.709	58.486	82.83	87.85	19.7789	n.a.
3	NITRITE	5.214	0.067	0.223	0.72	0.33	0.0858	n.a.
4	SULFATE	5.767	1.463	7.521	15.72	11.30	5.1480	n.a.
5	BROMIDE	6.494	0.003	0.016	0.03	0.02	0.0156	n.a.
6	NITRATE	7.500	0.037	0.188	0.40	0.28	0.0376	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**9.307**	**66.577**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6220-2**	*Run Time (min):*	**14.95**
Vial Number:	**22**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**09/Nov/23 22:52**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

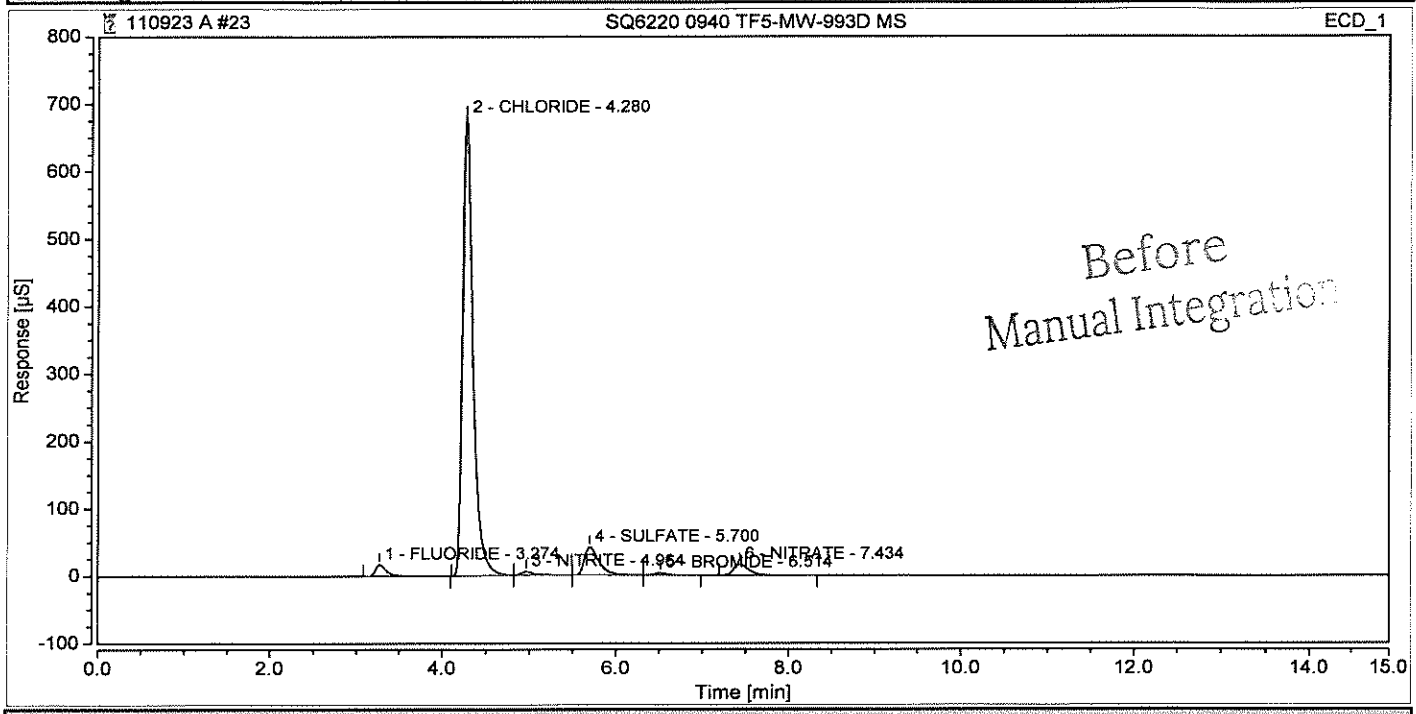
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	CHLORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	SULFATE	5.767	1.463	7.521	97.55	97.57	5.1480	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2	NITRATE	7.500	0.037	0.188	2.45	2.43	0.0376	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**1.500**	**7.709**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6220 0940 TF5-MW-993D MS**	*Run Time (min):*	**14.95**
Vial Number:	**23**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**09/Nov/23 23:09**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

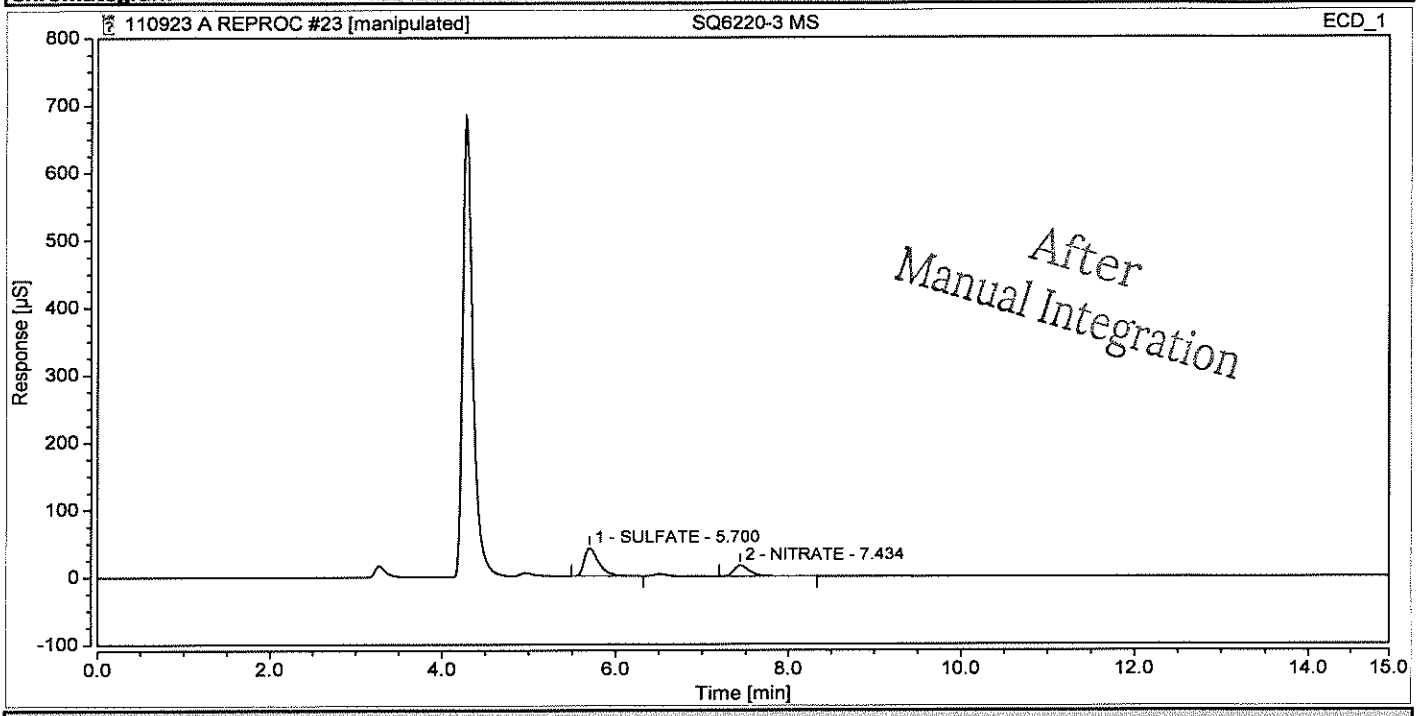
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.274	2.574	17.256	2.37	2.26	4.1604	n.a.
2	CHLORIDE	4.280	93.167	679.500	85.70	89.04	239.0449	n.a.
3	NITRITE	4.964	0.952	5.244	0.88	0.69	1.1263	n.a.
4	SULFATE	5.700	8.074	41.563	7.43	5.45	28.4031	n.a.
5	BROMIDE	6.514	0.560	3.366	0.51	0.44	3.2917	n.a.
6	NITRATE	7.434	3.385	16.226	3.11	2.13	3.4590	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**108.712**	**763.154**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6220-3 MS**	*Run Time (min):*	**14.95**
Vial Number:	**23**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**09/Nov/23 23:09**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

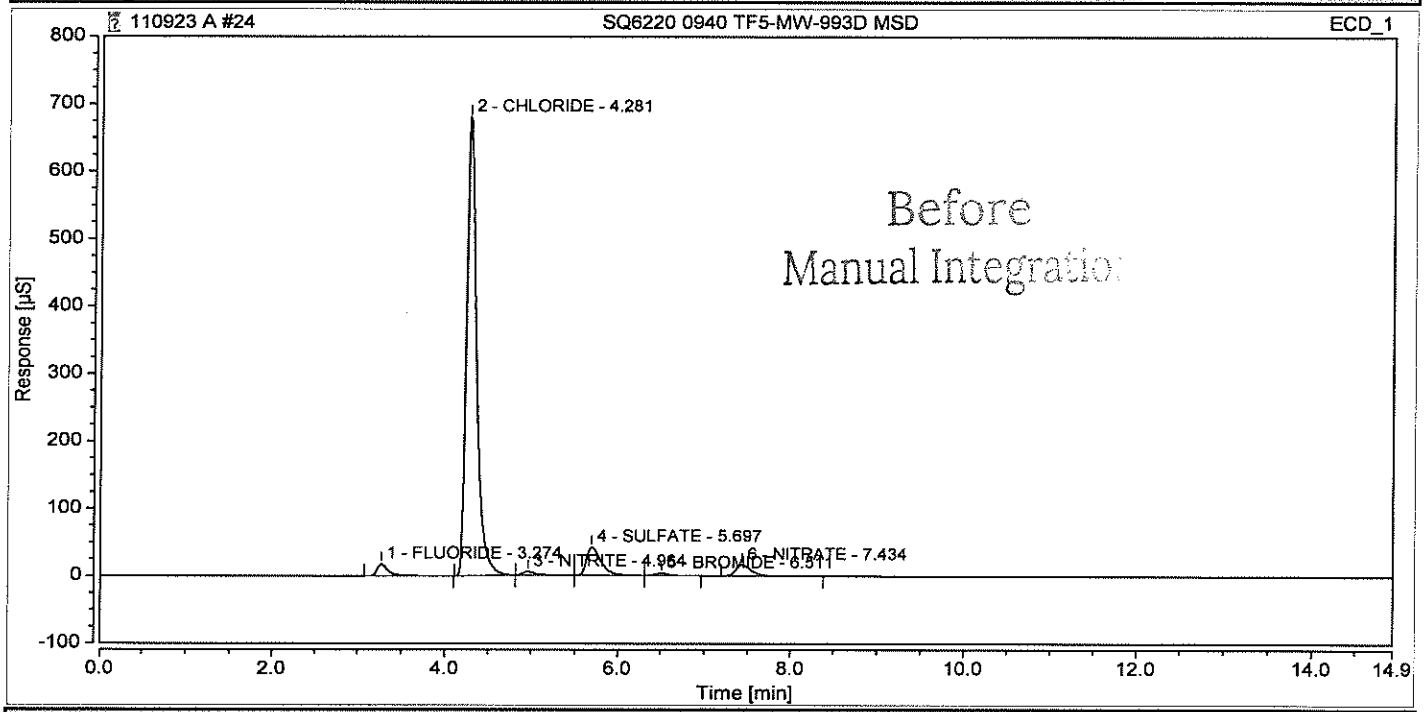
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	CHLORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	SULFATE	5.700	8.074	41.563	70.46	71.92	28.4031	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2	NITRATE	7.434	3.385	16.226	29.54	28.08	3.4590	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**11.459**	**57.789**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6220 0940 TF5-MW-993D MSD**	*Run Time (min):*	**14.95**
Vial Number:	**24**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**09/Nov/23 23:27**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

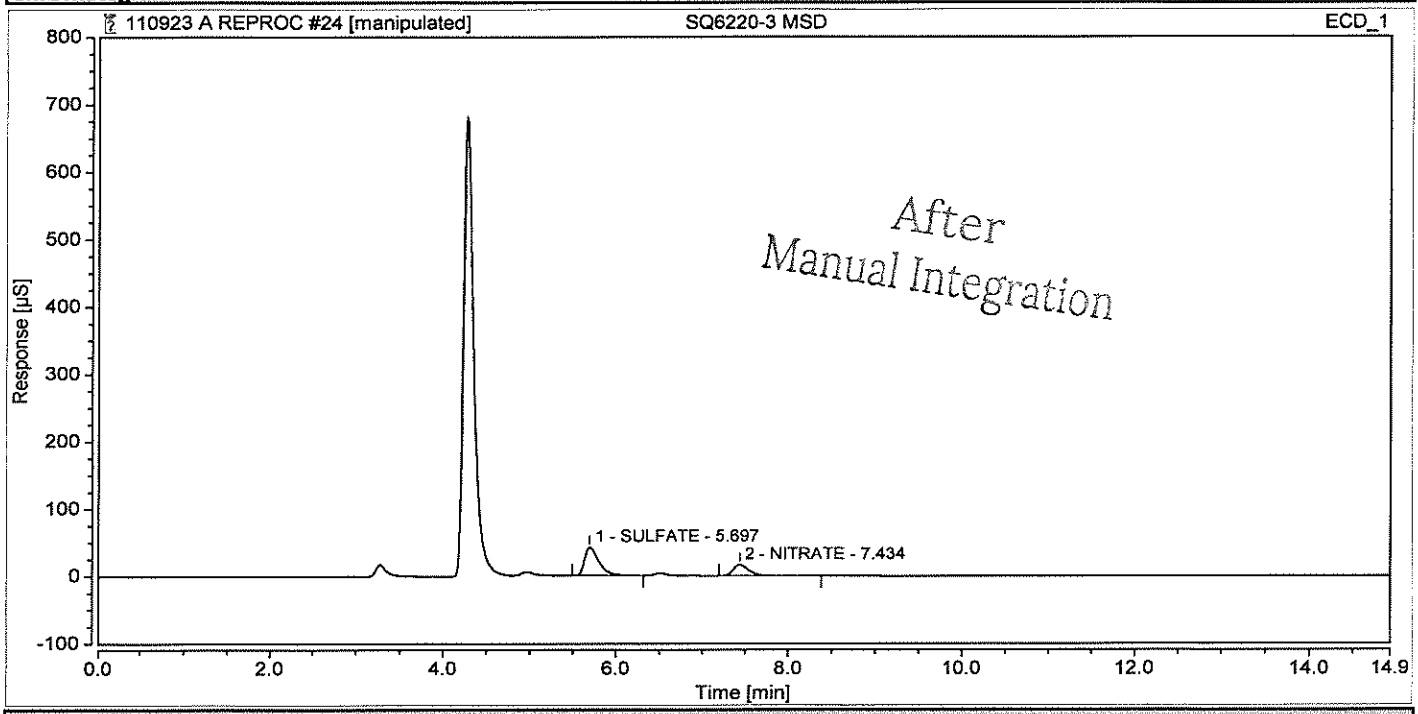
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.274	2.676	18.003	2.46	2.35	4.3288	n.a.
2	CHLORIDE	4.281	93.009	680.580	85.50	88.87	238.6390	n.a.
3	NITRITE	4.964	0.984	5.445	0.90	0.71	1.1644	n.a.
4	SULFATE	5.697	8.113	41.920	7.46	5.47	28.5384	n.a.
5	BROMIDE	6.511	0.582	3.487	0.53	0.46	3.4205	n.a.
6	NITRATE	7.434	3.425	16.343	3.15	2.13	3.4995	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**108.788**	**765.778**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6220-3 MSD**	*Run Time (min):*	**14.95**
Vial Number:	**24**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**09/Nov/23 23:27**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

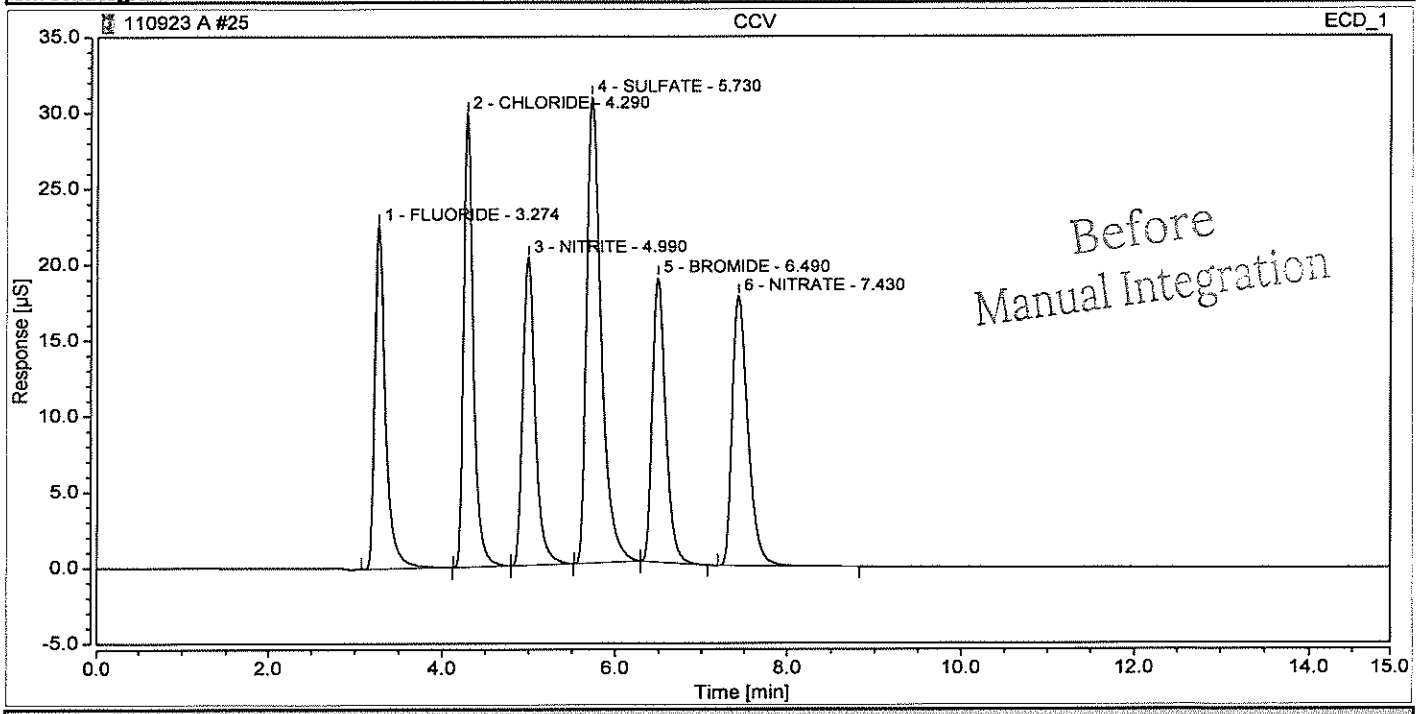
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	CHLORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	SULFATE	5.697	8.113	41.920	70.32	71.95	28.5384	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2	NITRATE	7.434	3.425	16.343	29.68	28.05	3.4995	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**11.538**	**58.263**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**CCV**	*Run Time (min):*	**14.95**
Vial Number:	**25**	*Injection Volume:*	**200.00**
Injection Type:	**Check Standard**	*Channel:*	**ECD_1**
Calibration Level:	**06**	*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**09/Nov/23 23:44**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

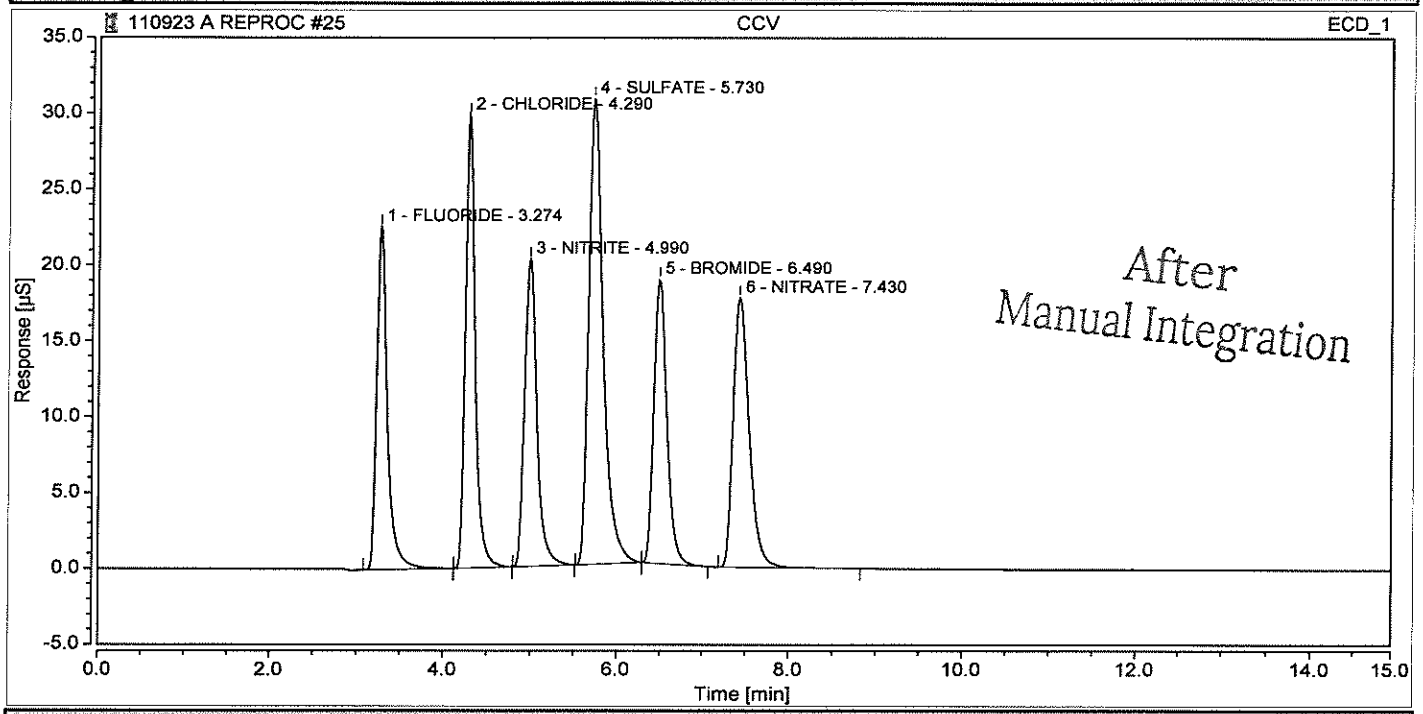
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.274	3.226	22.617	13.62	16.15	5.2429	4.8585
2	CHLORIDE	4.290	3.912	29.884	16.52	21.34	10.0367	0.3674
3	NITRITE	4.990	3.392	20.275	14.32	14.48	4.0884	2.2094
4	SULFATE	5.730	5.999	30.717	25.33	21.94	21.1015	5.5074
5	BROMIDE	6.490	3.327	18.753	14.05	13.39	19.5713	-2.1437
6	NITRATE	7.430	3.830	17.764	16.17	12.69	3.9139	-2.1514
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**23.686**	**140.009**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**CCV**	*Run Time (min):*	**14.95**
Vial Number:	**25**	*Injection Volume:*	**200.00**
Injection Type:	**Check Standard**	*Channel:*	**ECD_1**
Calibration Level:	**06**	*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**09/Nov/23 23:44**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

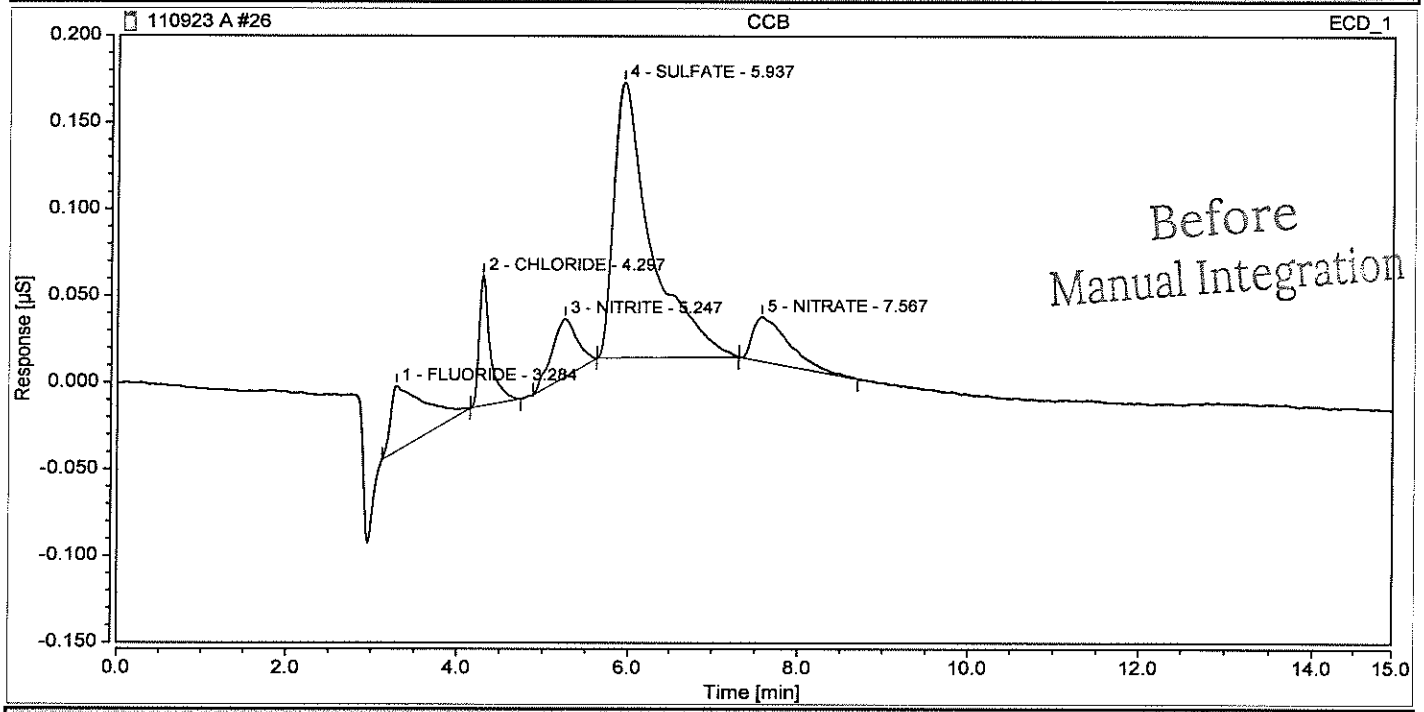
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.274	3.226	22.617	13.62	16.15	5.2429	4.8585
2	CHLORIDE	4.290	3.912	29.884	16.52	21.34	10.0367	0.3674
3	NITRITE	4.990	3.392	20.275	14.32	14.48	4.0884	2.2094
4	SULFATE	5.730	5.999	30.717	25.33	21.94	21.1015	5.5074
5	BROMIDE	6.490	3.327	18.753	14.05	13.39	19.5713	-2.1437
6	NITRATE	7.430	3.830	17.764	16.17	12.69	3.9139	-2.1514
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**23.686**	**140.009**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**CCB**	*Run Time (min):*	**14.95**
Vial Number:	**26**	*Injection Volume:*	**200.00**
Injection Type:	**Blank**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**10/Nov/23 00:01**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

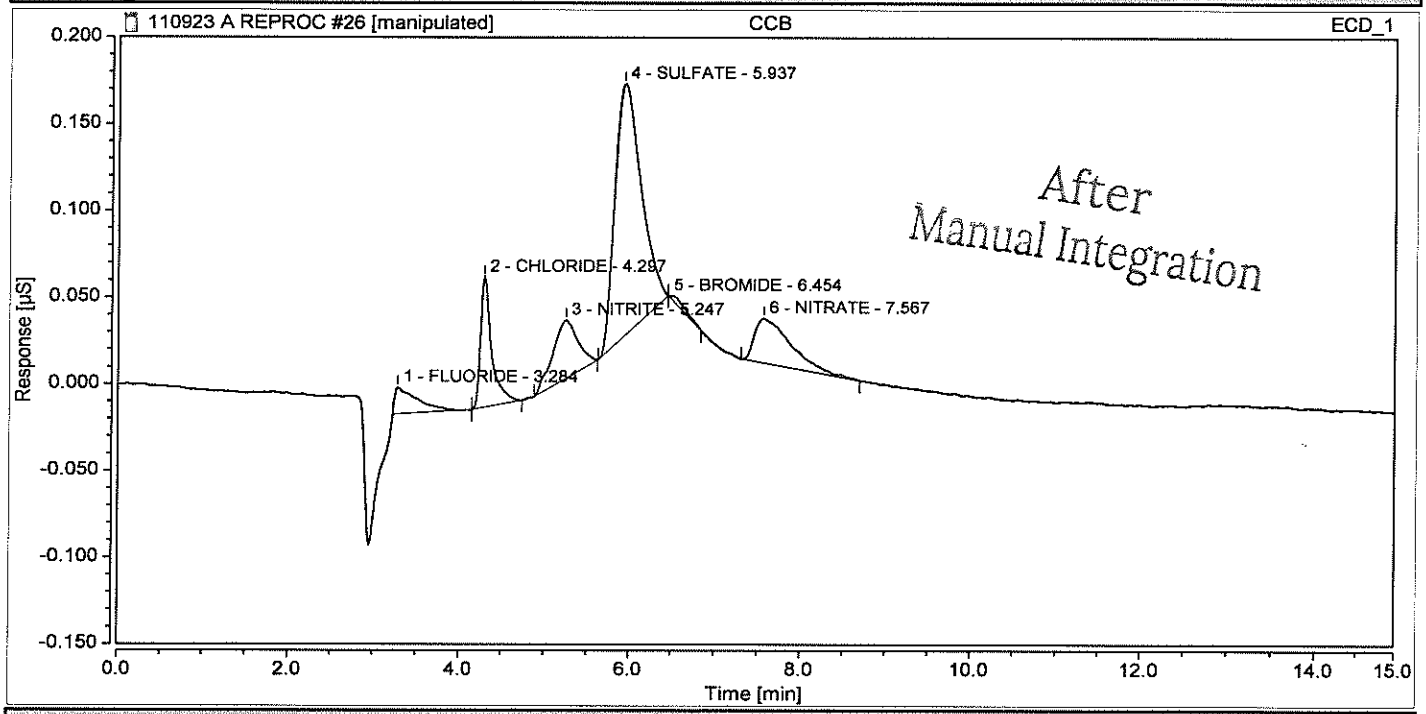
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.284	0.017	0.038	12.43	11.47	0.0428	n.a.
2	CHLORIDE	4.297	0.011	0.075	8.54	22.66	0.0293	n.a.
3	NITRITE	5.247	0.011	0.034	8.49	10.15	0.0215	n.a.
4	SULFATE	5.937	0.081	0.159	60.81	47.94	0.2864	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5	NITRATE	7.567	0.013	0.026	9.72	7.78	0.0133	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.134**	**0.331**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**CCB**	*Run Time (min):*	**14.95**
Vial Number:	**26**	*Injection Volume:*	**200.00**
Injection Type:	**Blank**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**10/Nov/23 00:01**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

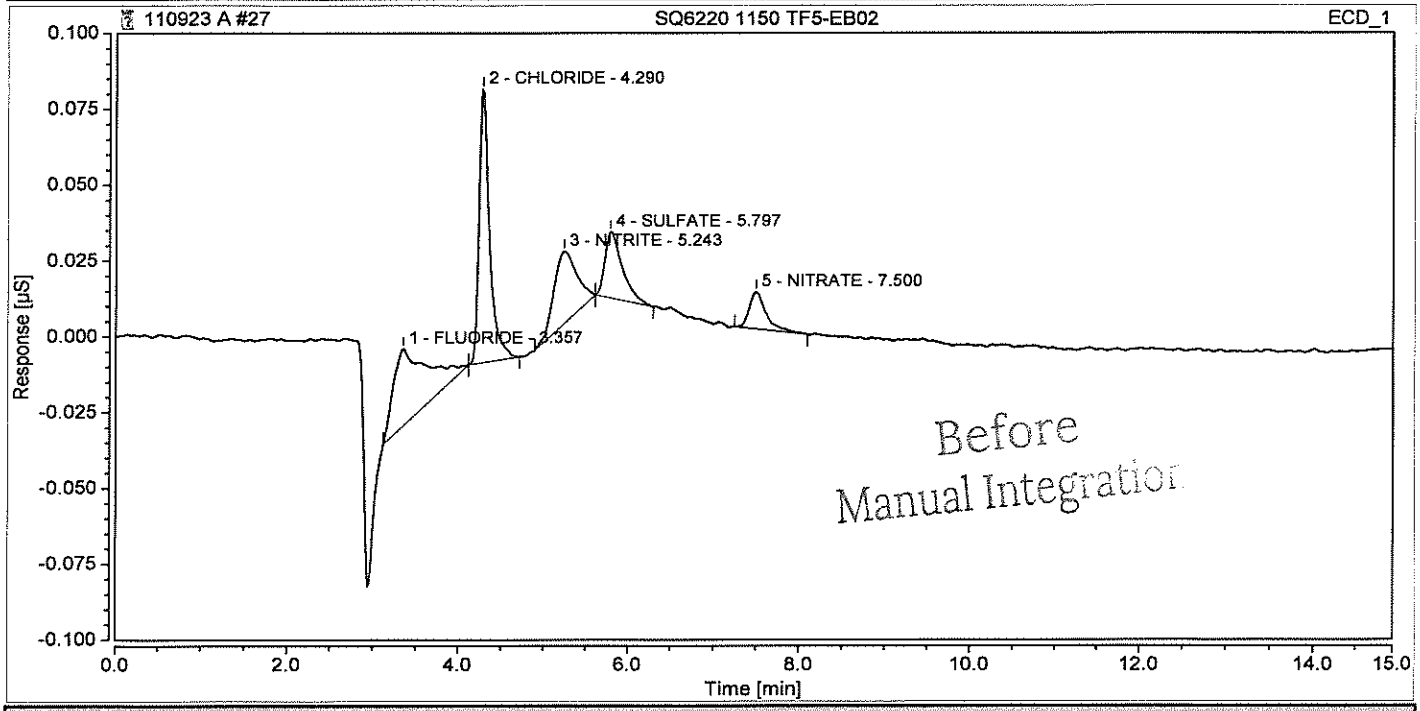
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.284	0.004	0.015	4.82	5.21	0.0237	n.a.
2	CHLORIDE	4.297	0.011	0.075	12.25	25.45	0.0293	n.a.
3	NITRITE	5.247	0.011	0.034	12.18	11.40	0.0215	n.a.
4	SULFATE	5.937	0.052	0.145	56.02	49.20	0.1839	n.a.
5	BROMIDE	6.454	0.001	0.000	0.77	0.00	0.0042	n.a.
6	NITRATE	7.567	0.013	0.026	13.95	8.74	0.0133	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.093**	**0.295**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6220 1150 TF5-EB02**	*Run Time (min):*	**14.95**
Vial Number:	**27**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**10/Nov/23 00:18**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

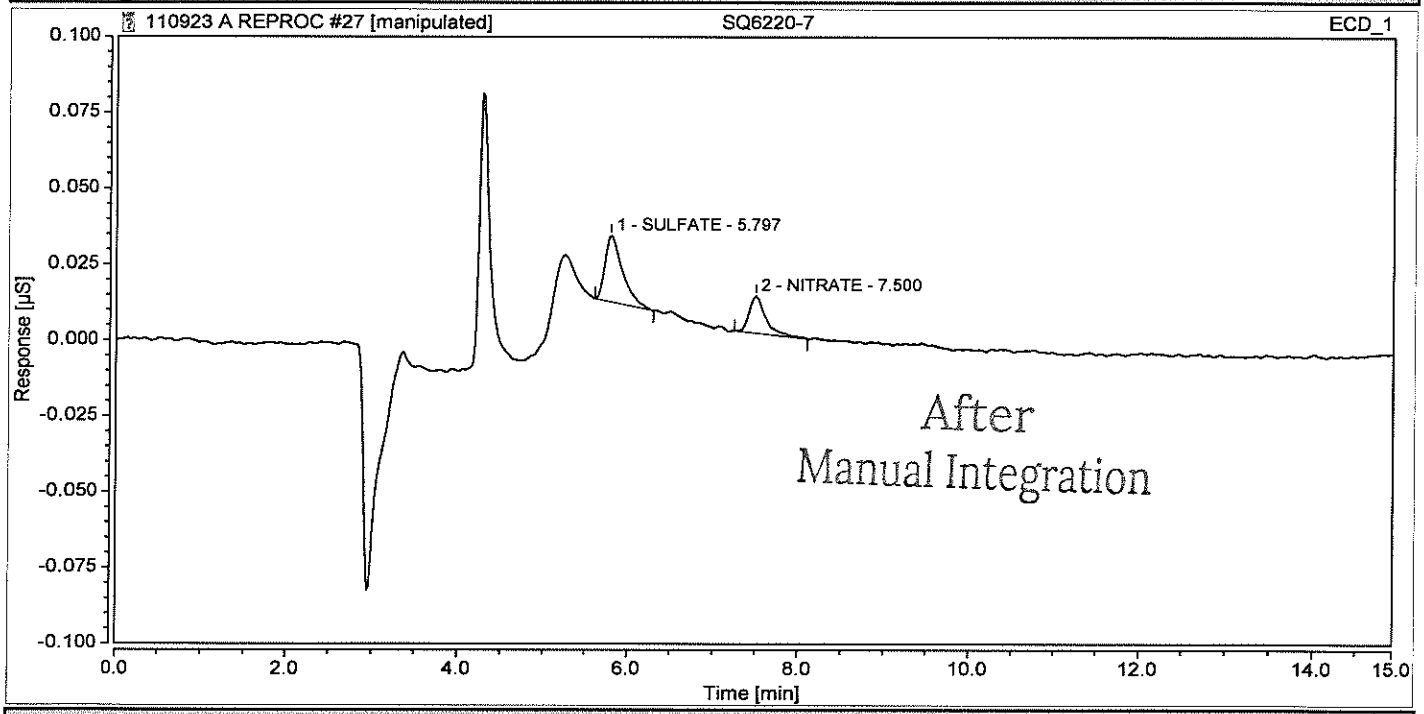
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.357	0.011	0.025	28.26	14.59	0.0342	n.a.
2	CHLORIDE	4.290	0.013	0.090	32.35	52.05	0.0328	n.a.
3	NITRITE	5.243	0.007	0.024	18.87	13.70	0.0169	n.a.
4	SULFATE	5.797	0.005	0.022	13.41	12.60	0.0186	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5	NITRATE	7.500	0.003	0.012	7.10	7.06	0.0029	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.039**	**0.173**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6220-7**	*Run Time (min):*	**14.95**
Vial Number:	**27**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**10/Nov/23 00:18**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

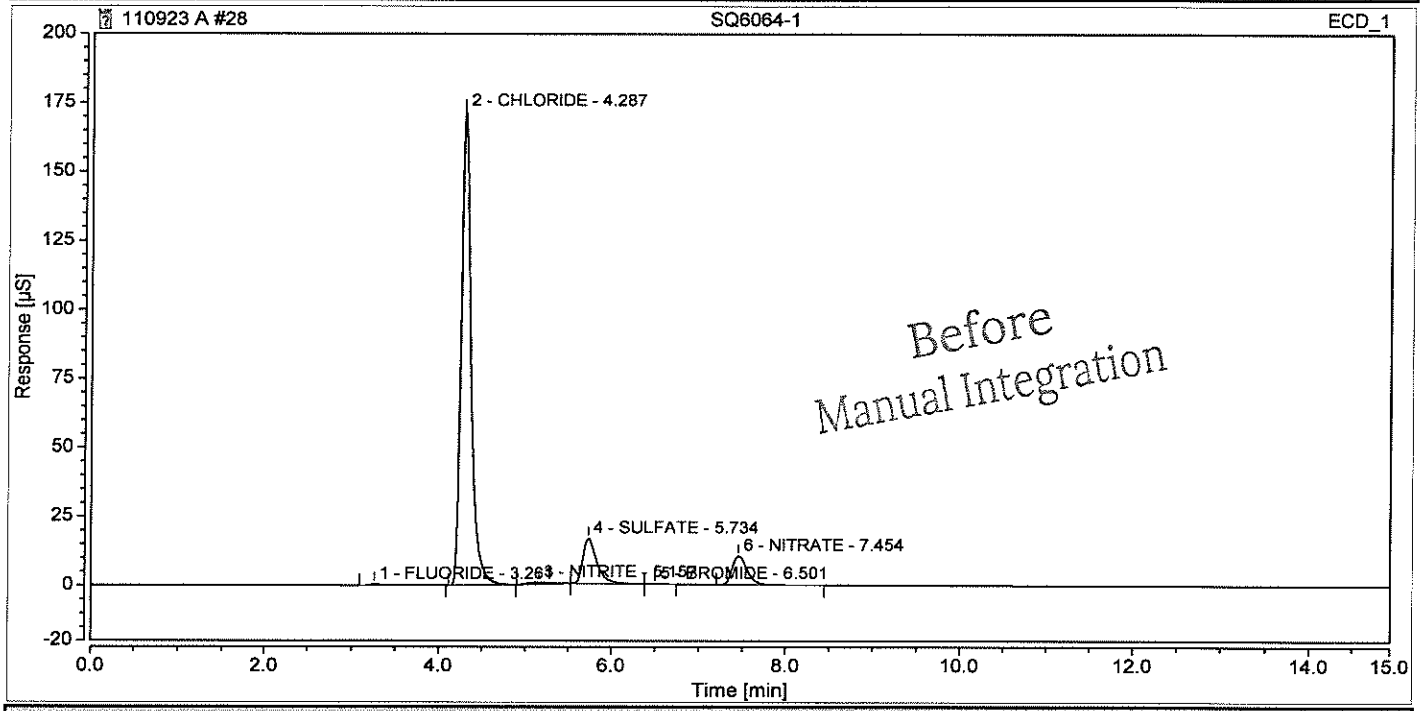
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	CHLORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	SULFATE	5.797	0.005	0.022	65.37	64.09	0.0186	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2	NITRATE	7.500	0.003	0.012	34.63	35.91	0.0029	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.008**	**0.034**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6064-1**	*Run Time (min):*	**14.95**
Vial Number:	**28**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**10/Nov/23 00:36**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

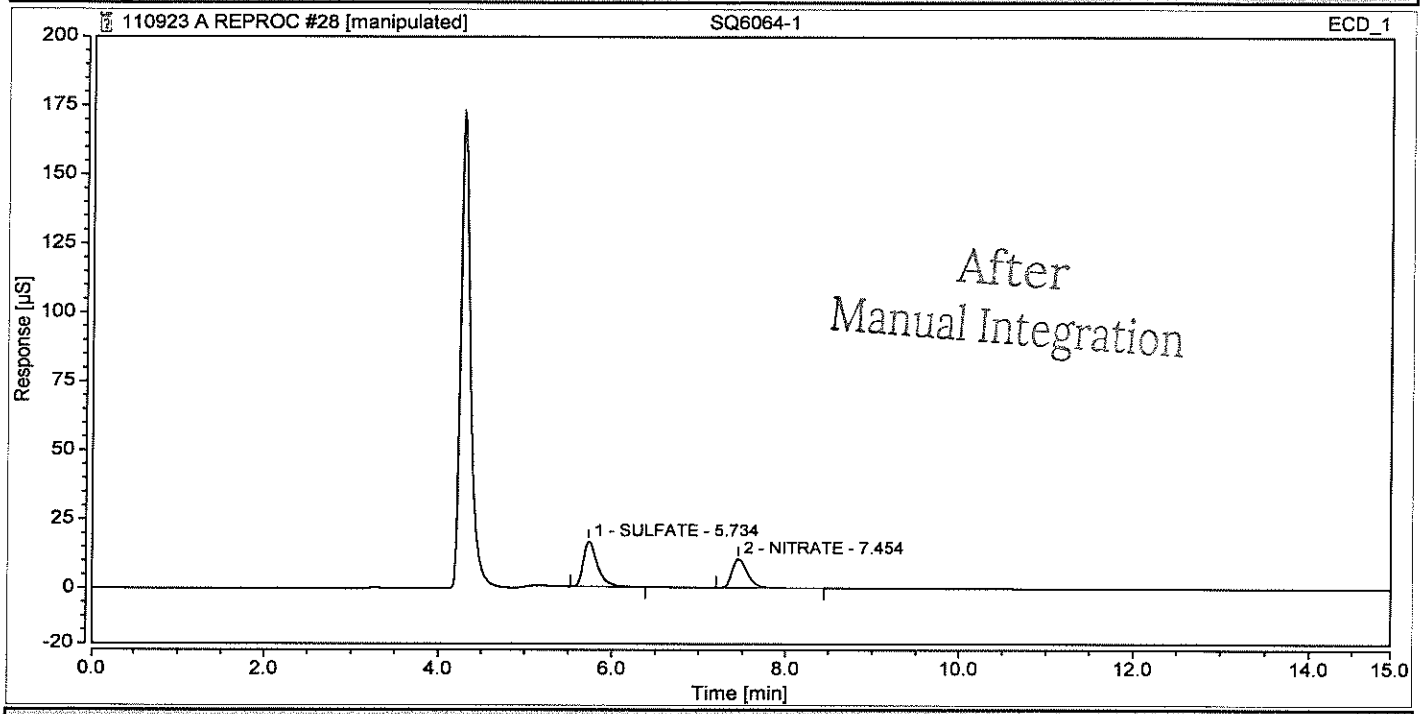
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.261	0.073	0.435	0.25	0.22	0.1308	n.a.
2	CHLORIDE	4.287	23.021	171.845	80.82	85.98	59.0676	n.a.
3	NITRITE	5.157	0.203	0.620	0.71	0.31	0.2454	n.a.
4	SULFATE	5.734	3.054	16.388	10.72	8.20	10.7432	n.a.
5	BROMIDE	6.501	0.009	0.059	0.03	0.03	0.0542	n.a.
6	NITRATE	7.454	2.126	10.510	7.46	5.26	2.1722	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**28.486**	**199.856**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6064-1**	*Run Time (min):*	**14.95**
Vial Number:	**28**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**10/Nov/23 00:36**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

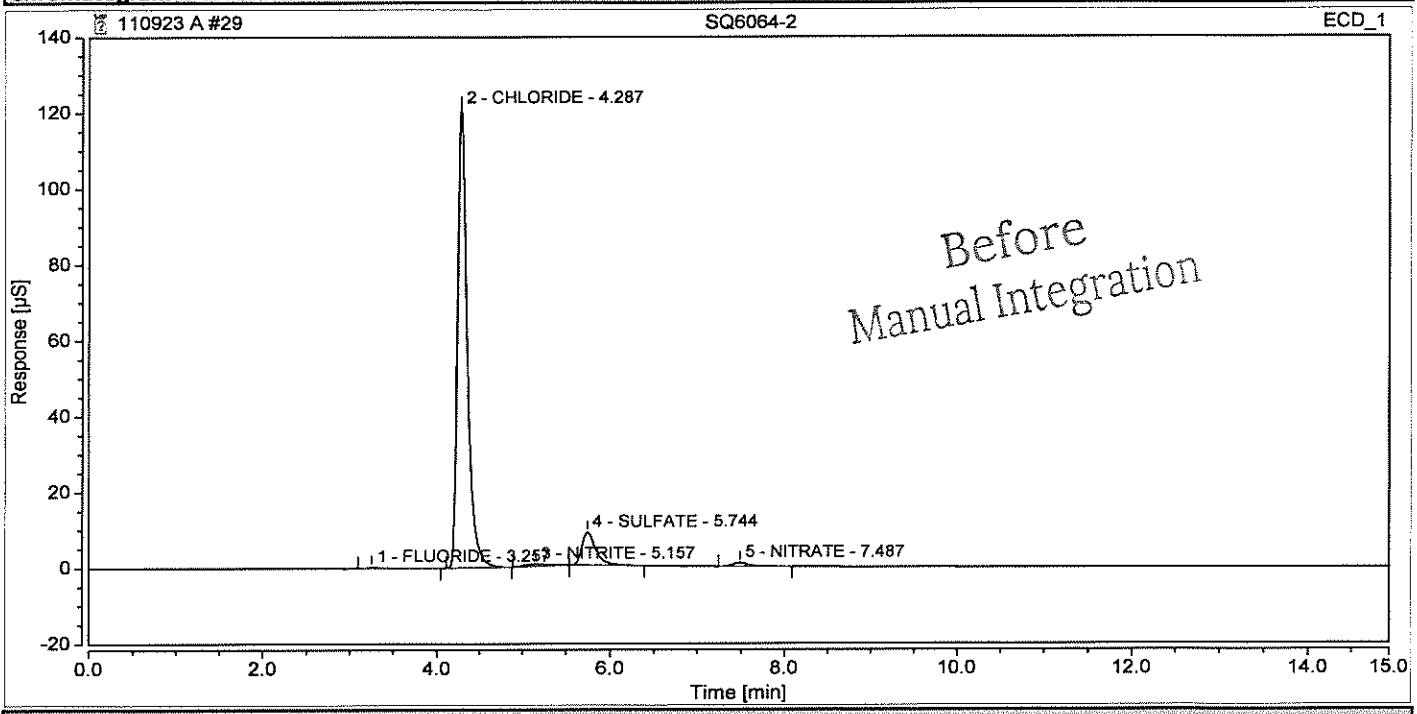
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	CHLORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	SULFATE	5.734	3.054	16.388	58.96	60.93	10.7432	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2	NITRATE	7.454	2.126	10.510	41.04	39.07	2.1722	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**5.180**	**26.898**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6064-2**	*Run Time (min):*	**14.95**
Vial Number:	**29**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**10/Nov/23 00:53**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

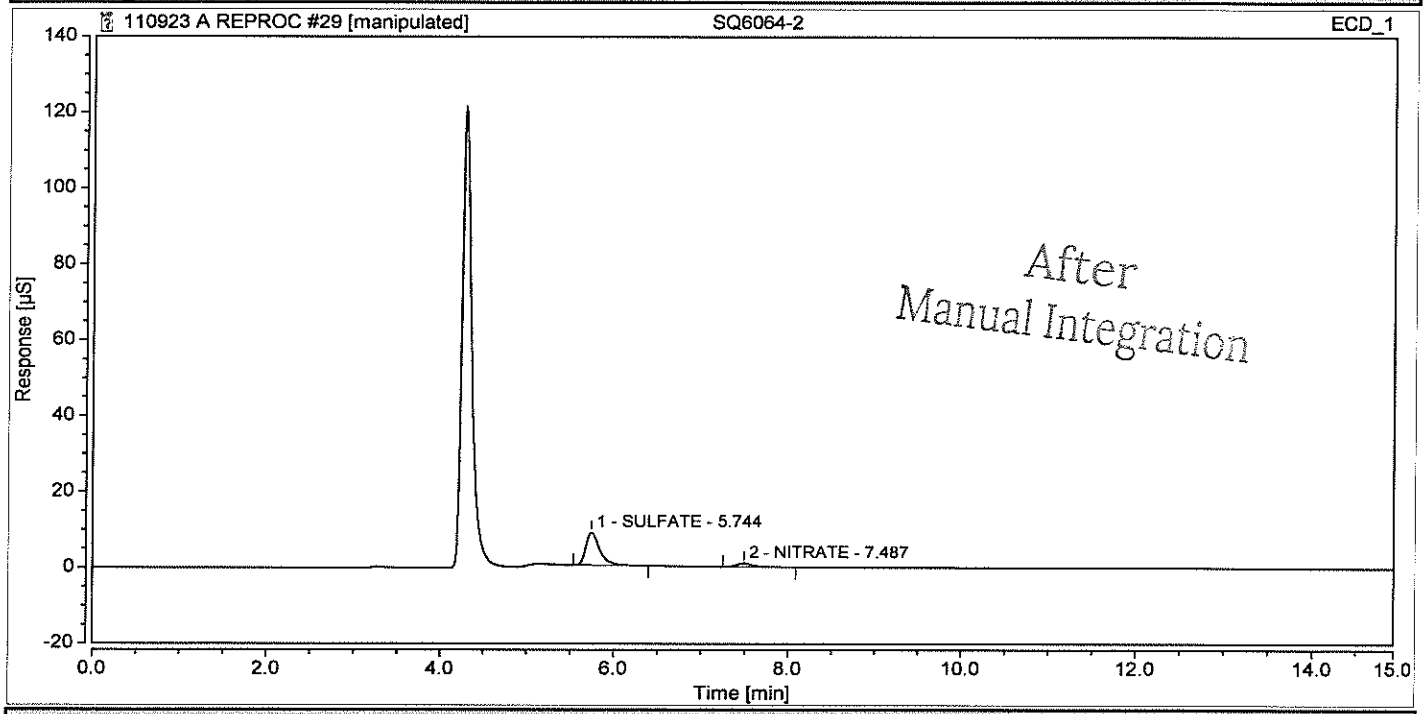
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.257	0.053	0.307	0.29	0.23	0.0997	n.a.
2	CHLORIDE	4.287	16.070	121.131	88.69	91.95	41.2323	n.a.
3	NITRITE	5.157	0.201	0.606	1.11	0.46	0.2423	n.a.
4	SULFATE	5.744	1.606	8.706	8.86	6.61	5.6502	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5	NITRATE	7.487	0.190	0.978	1.05	0.74	0.1936	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**18.119**	**131.729**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6064-2**	*Run Time (min):*	**14.95**
Vial Number:	**29**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**10/Nov/23 00:53**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

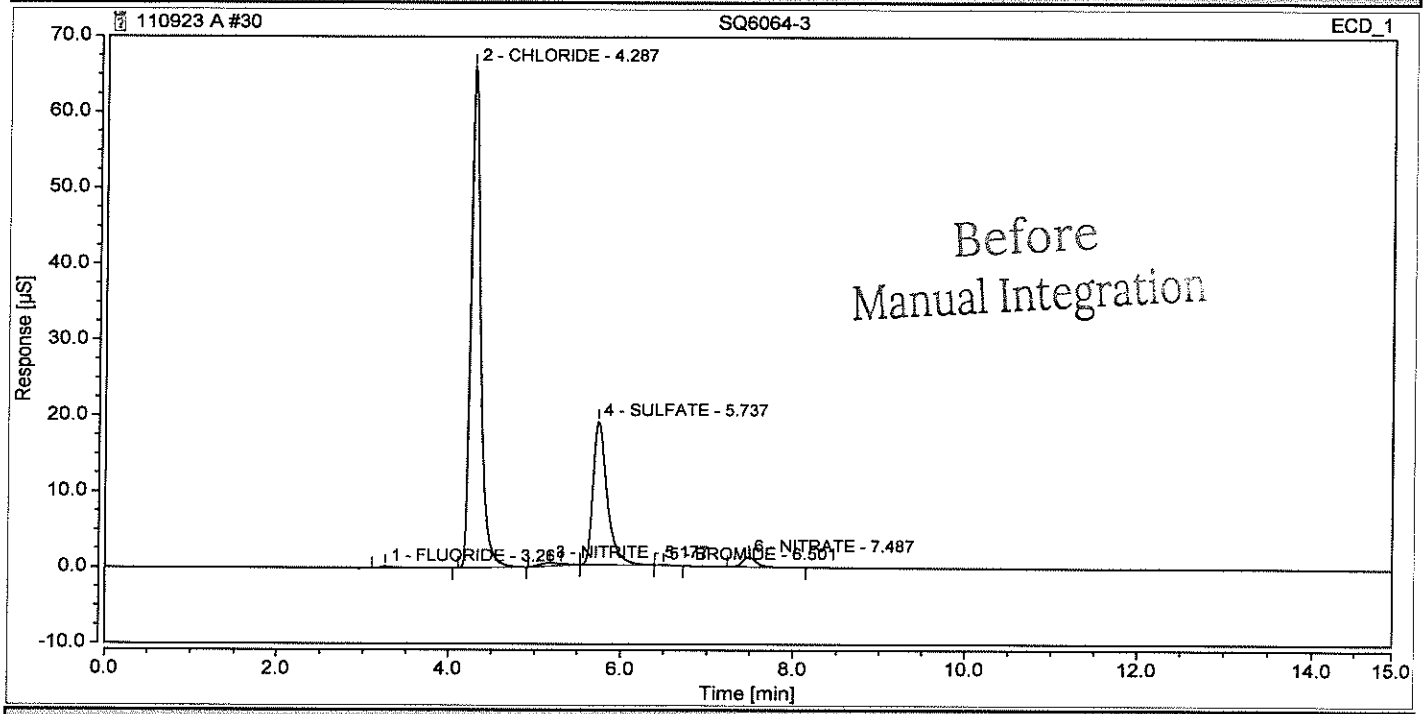
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	CHLORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	SULFATE	5.744	1.606	8.706	89.45	89.90	5.6502	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2	NITRATE	7.487	0.190	0.978	10.55	10.10	0.1936	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**1.796**	**9.684**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6064-3**	*Run Time (min):*	**14.95**
Vial Number:	**30**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**10/Nov/23 01:10**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

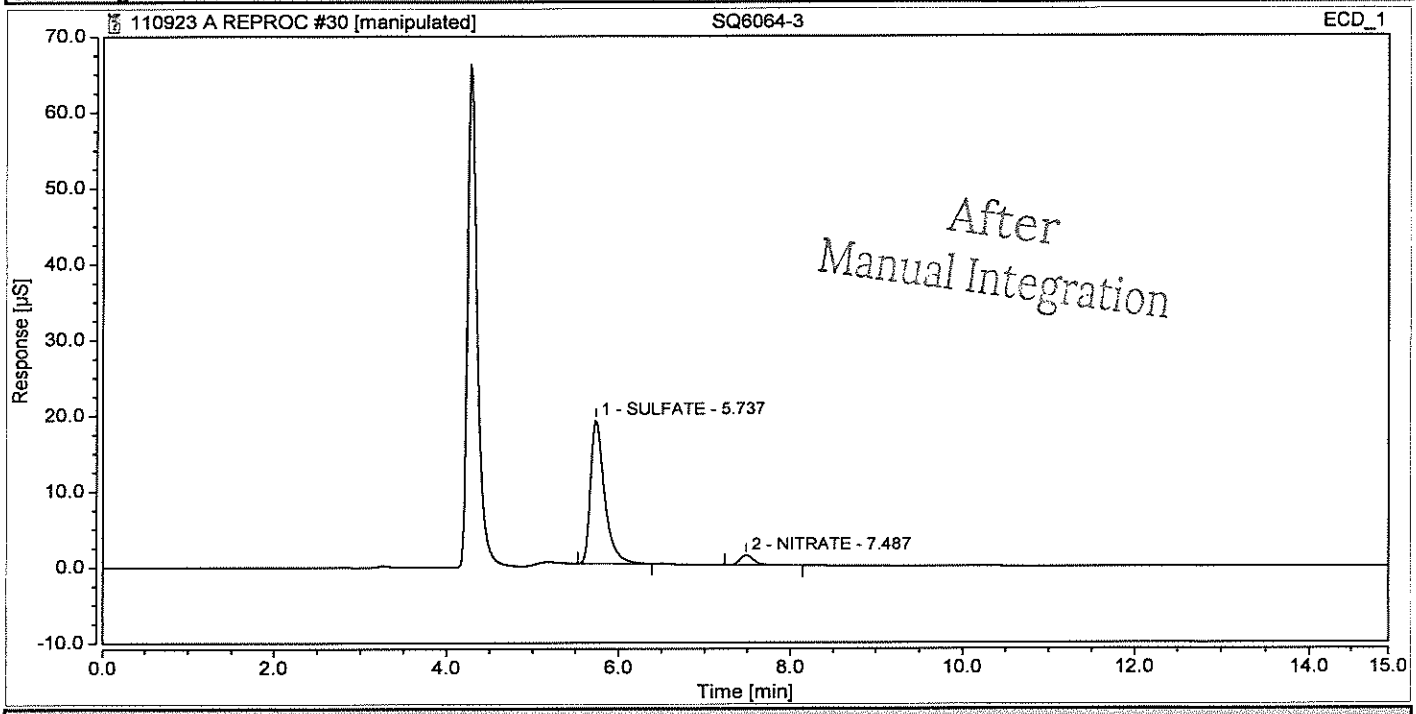
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.261	0.039	0.218	0.31	0.25	0.0784	n.a.
2	CHLORIDE	4.287	8.667	66.086	68.27	75.94	22.2371	n.a.
3	NITRITE	5.177	0.120	0.393	0.95	0.45	0.1484	n.a.
4	SULFATE	5.737	3.603	18.934	28.38	21.76	12.6734	n.a.
5	BROMIDE	6.501	0.010	0.065	0.08	0.07	0.0571	n.a.
6	NITRATE	7.487	0.256	1.328	2.02	1.53	0.2617	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**12.695**	**87.024**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6064-3**	*Run Time (min):*	**14.95**
Vial Number:	**30**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**10/Nov/23 01:10**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

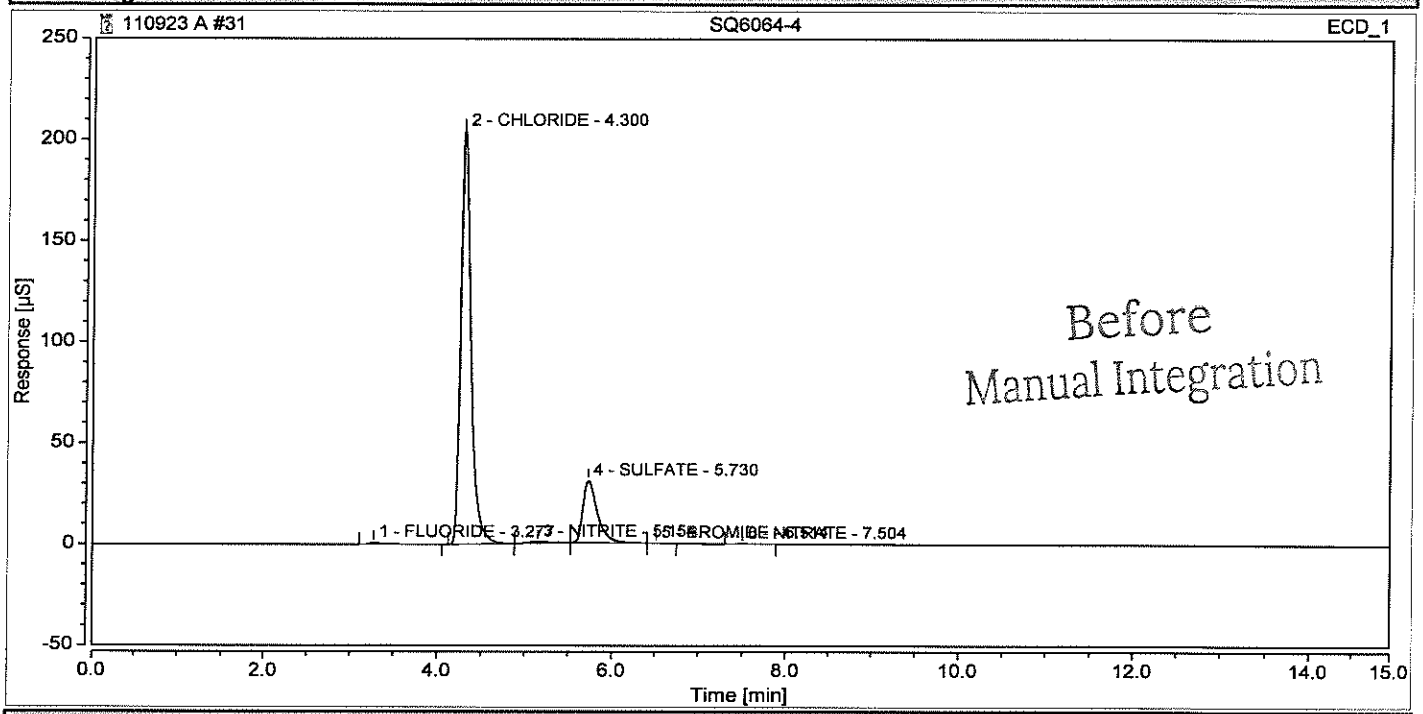
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	CHLORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	SULFATE	5.737	3.603	18.934	93.36	93.45	12.6734	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2	NITRATE	7.487	0.256	1.328	6.64	6.55	0.2617	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**3.859**	**20.263**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6064-4**	*Run Time (min):*	**14.95**
Vial Number:	**31**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**10/Nov/23 01:27**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

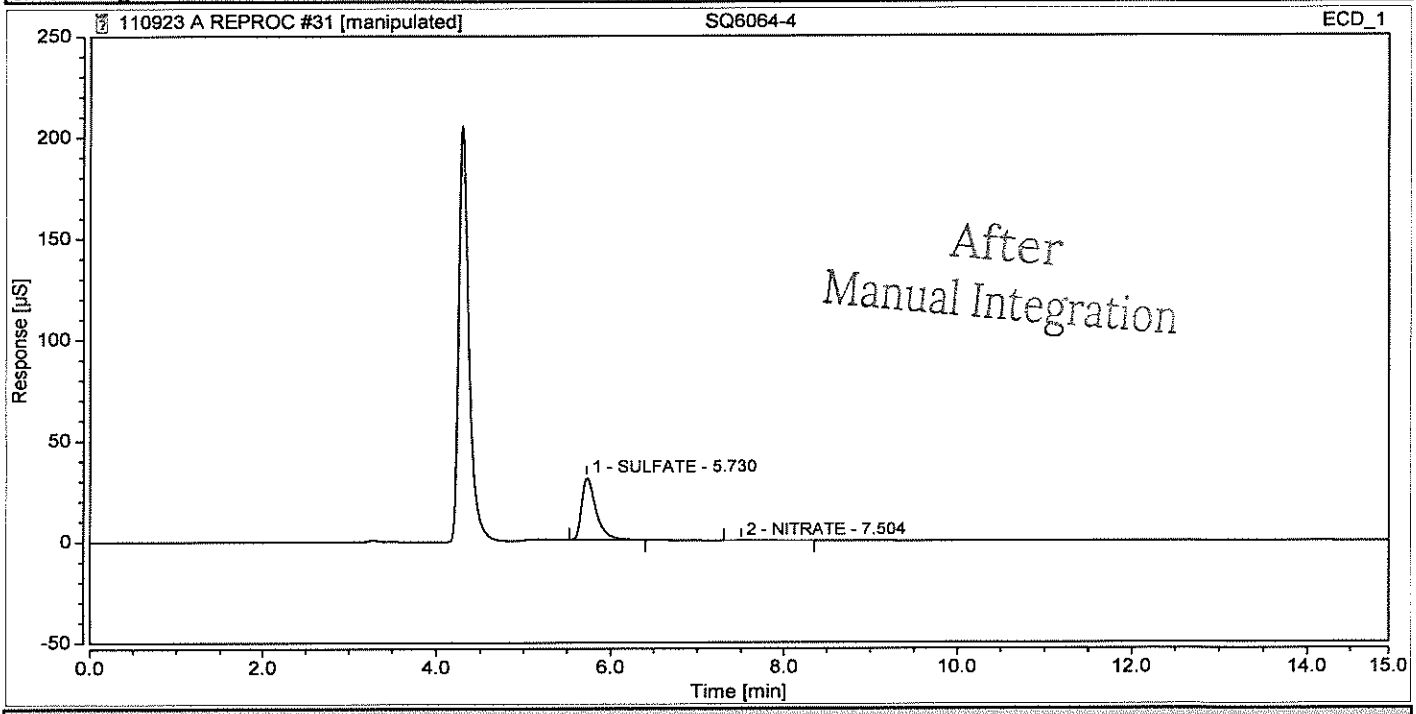
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.277	0.131	0.916	0.39	0.39	0.2234	n.a.
2	CHLORIDE	4.300	27.528	204.461	81.48	86.28	70.6307	n.a.
3	NITRITE	5.154	0.225	0.675	0.67	0.29	0.2708	n.a.
4	SULFATE	5.730	5.867	30.746	17.37	12.97	20.6395	n.a.
5	BROMIDE	6.514	0.013	0.080	0.04	0.03	0.0739	n.a.
6	NITRATE	7.504	0.021	0.108	0.06	0.05	0.0213	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**33.785**	**236.985**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6064-4**	*Run Time (min):*	**14.95**
Vial Number:	**31**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**10/Nov/23 01:27**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

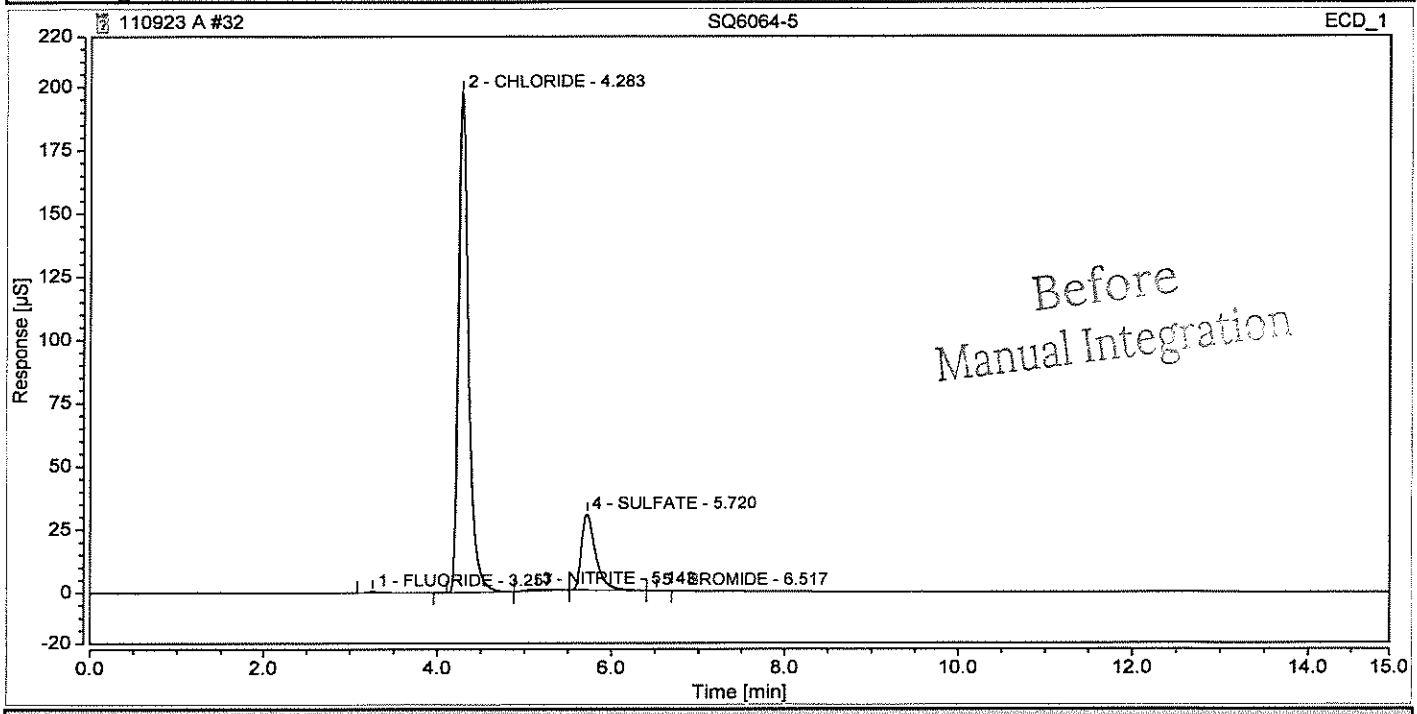
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	CHLORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	SULFATE	5.730	5.867	30.746	99.68	99.65	20.6395	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2	NITRATE	7.504	0.019	0.107	0.32	0.35	0.0191	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**5.886**	**30.853**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6064-5**	*Run Time (min):*	**14.95**
Vial Number:	**32**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**10/Nov/23 01:45**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

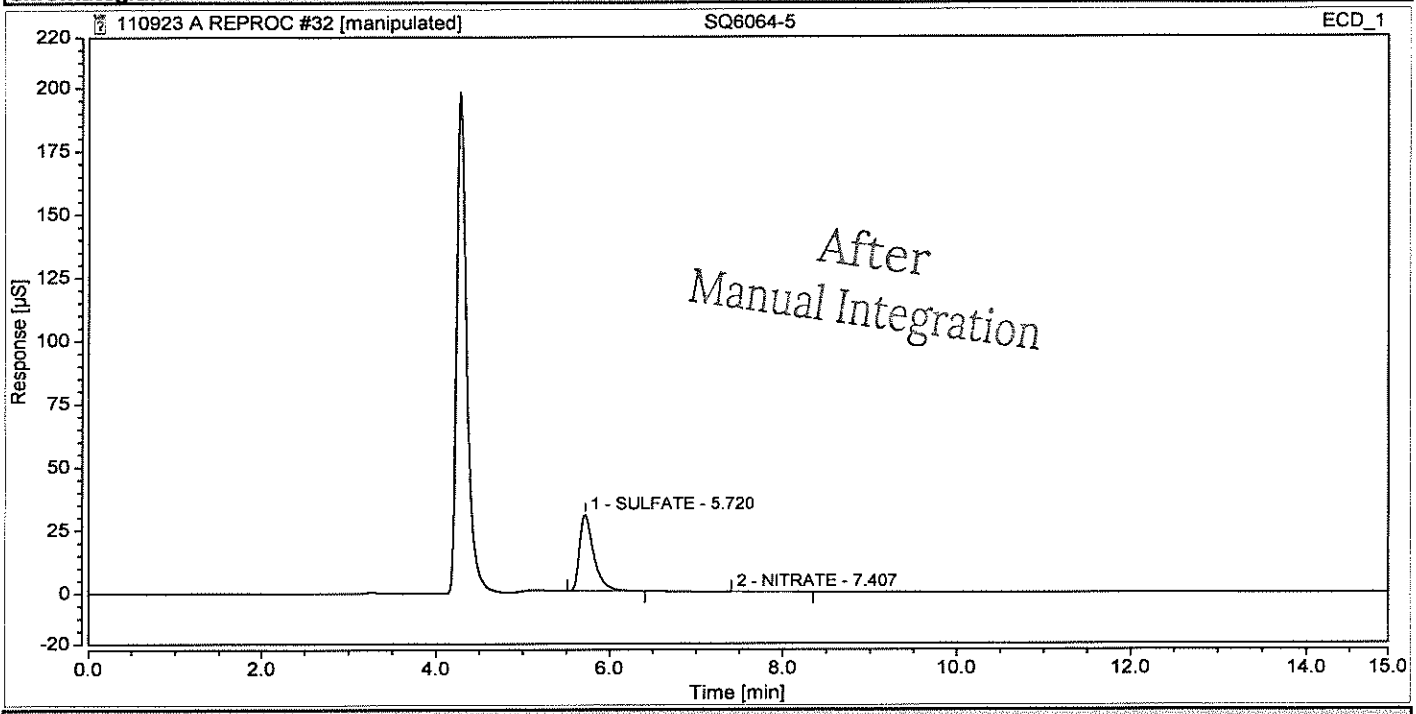
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.257	0.083	0.545	0.25	0.24	0.1466	n.a.
2	CHLORIDE	4.283	26.600	197.808	81.43	86.30	68.2496	n.a.
3	NITRITE	5.143	0.231	0.693	0.71	0.30	0.2773	n.a.
4	SULFATE	5.720	5.747	30.123	17.59	13.14	20.2163	n.a.
5	BROMIDE	6.517	0.005	0.035	0.01	0.02	0.0272	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**32.665**	**229.203**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6064-5**	*Run Time (min):*	**14.95**
Vial Number:	**32**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**10/Nov/23 01:45**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

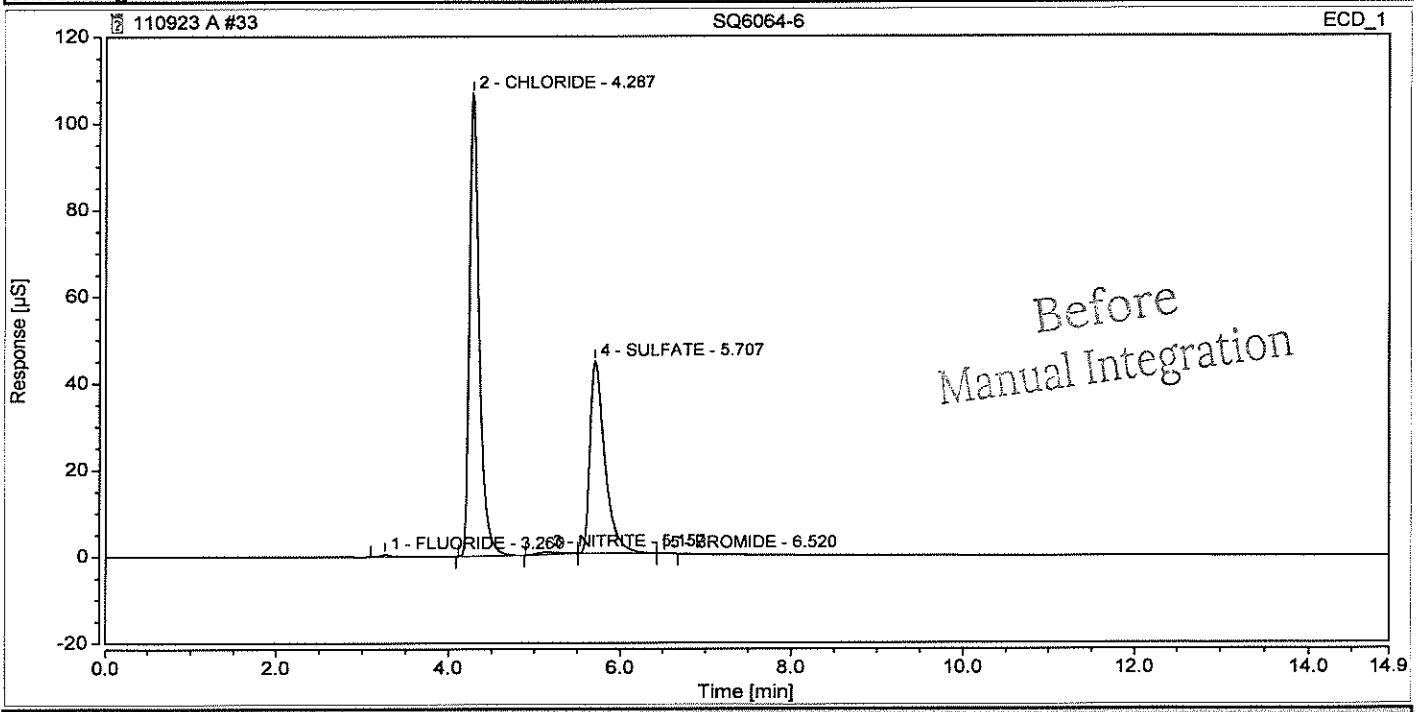
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	CHLORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	SULFATE	5.720	5.747	30.123	99.97	100.00	20.2163	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2	NITRATE	7.407	0.002	0.000	0.03	0.00	0.0018	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**5.749**	**30.123**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6064-6**	*Run Time (min):*	**14.94**
Vial Number:	**33**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**10/Nov/23 02:02**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

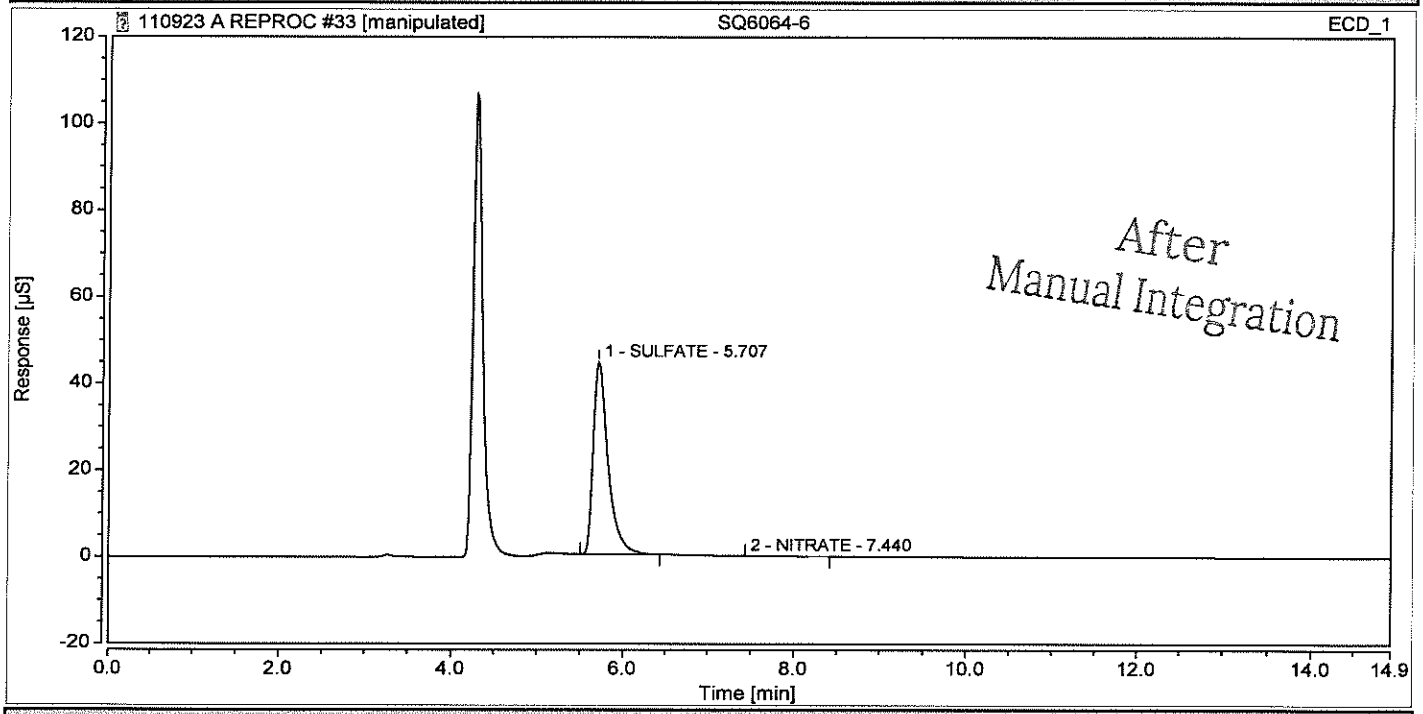
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.260	0.093	0.561	0.40	0.37	0.1623	n.a.
2	CHLORIDE	4.287	14.127	106.840	60.74	70.14	36.2469	n.a.
3	NITRITE	5.157	0.172	0.547	0.74	0.36	0.2086	n.a.
4	SULFATE	5.707	8.862	44.345	38.10	29.11	31.1728	n.a.
5	BROMIDE	6.520	0.004	0.035	0.02	0.02	0.0238	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**23.257**	**152.329**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6064-6**	*Run Time (min):*	**14.94**
Vial Number:	**33**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**10/Nov/23 02:02**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

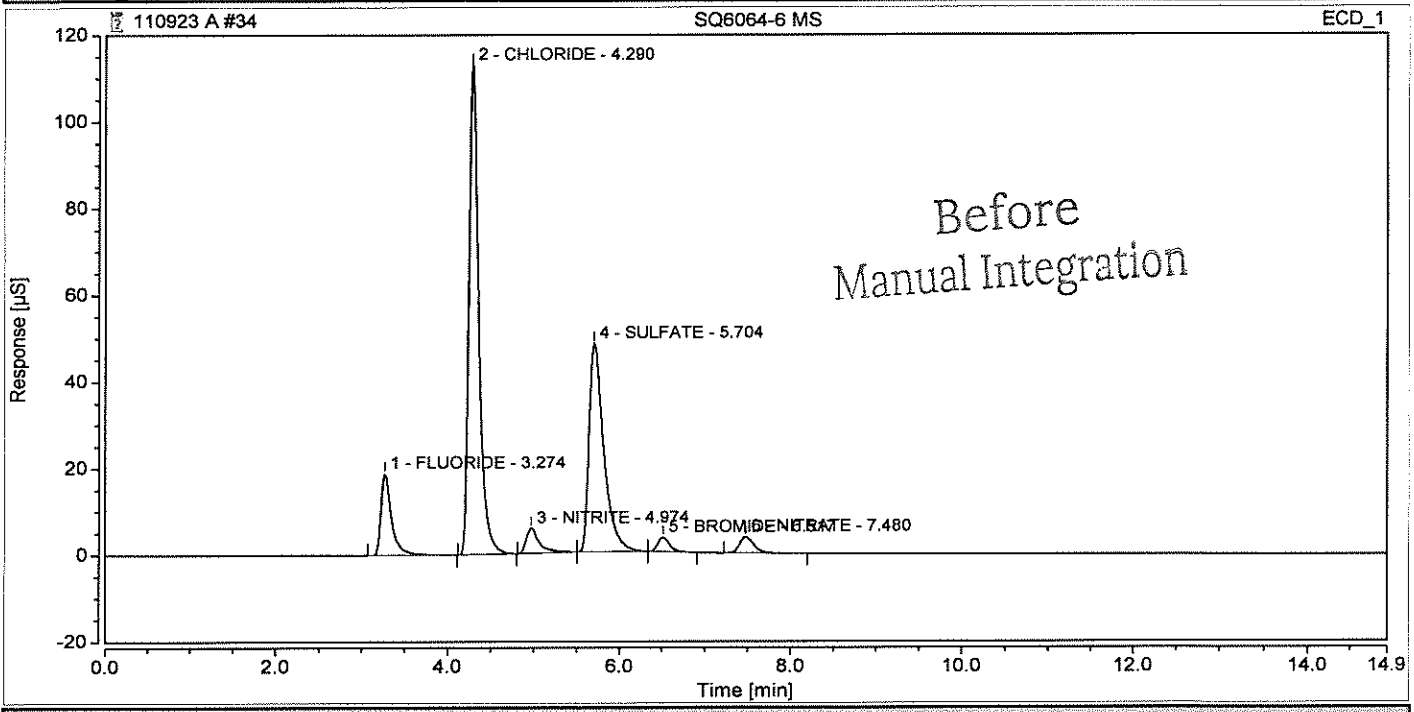
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	CHLORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	SULFATE	5.707	8.862	44.345	99.95	100.00	31.1728	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2	NITRATE	7.440	0.005	0.000	0.05	0.00	0.0048	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**8.866**	**44.345**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6064-6 MS**	*Run Time (min):*	**14.95**
Vial Number:	**34**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**10/Nov/23 02:19**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

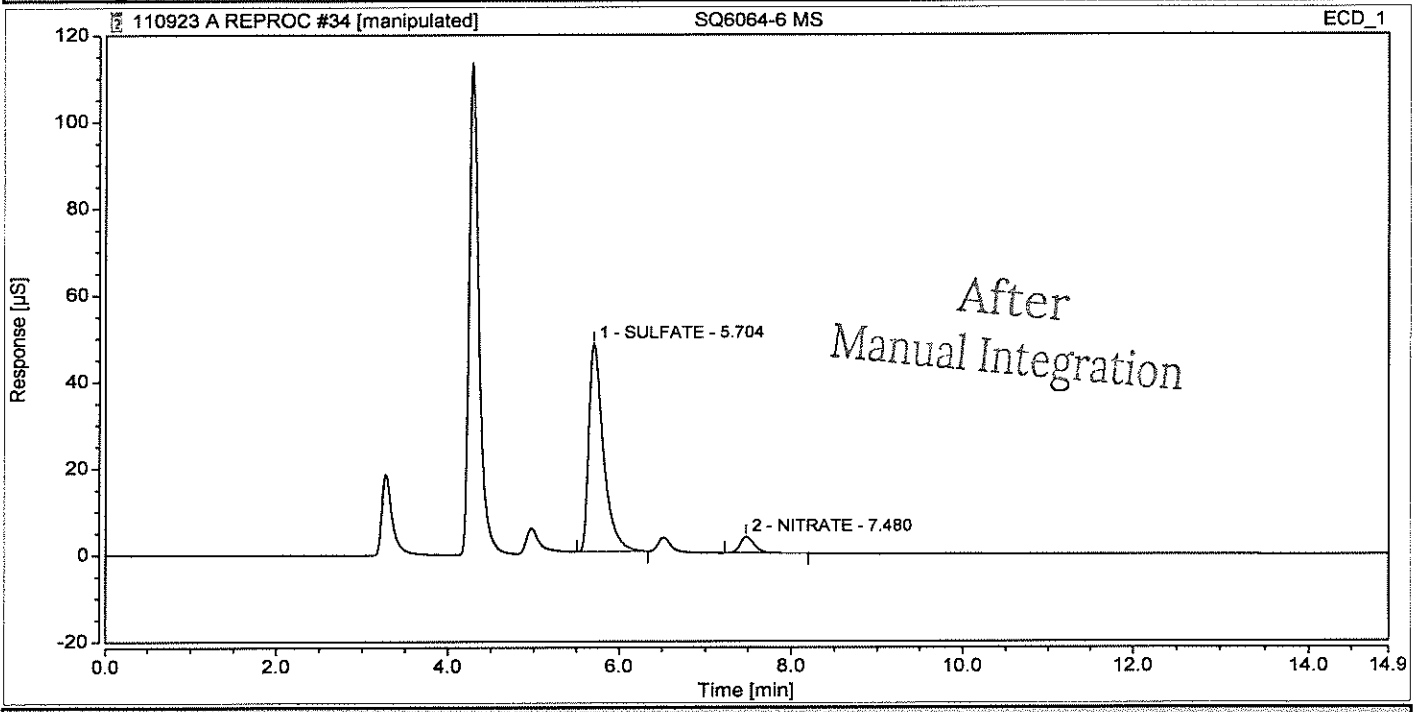
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.274	2.722	18.867	9.21	9.79	4.4046	n.a.
2	CHLORIDE	4.290	14.938	112.896	50.54	58.61	38.3267	n.a.
3	NITRITE	4.974	1.041	5.761	3.52	2.99	1.2325	n.a.
4	SULFATE	5.704	9.580	48.024	32.42	24.93	33.7008	n.a.
5	BROMIDE	6.517	0.540	3.302	1.83	1.71	3.1756	n.a.
6	NITRATE	7.480	0.732	3.774	2.48	1.96	0.7480	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**29.553**	**192.625**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6064-6 MS**	*Run Time (min):*	**14.95**
Vial Number:	**34**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**10/Nov/23 02:19**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

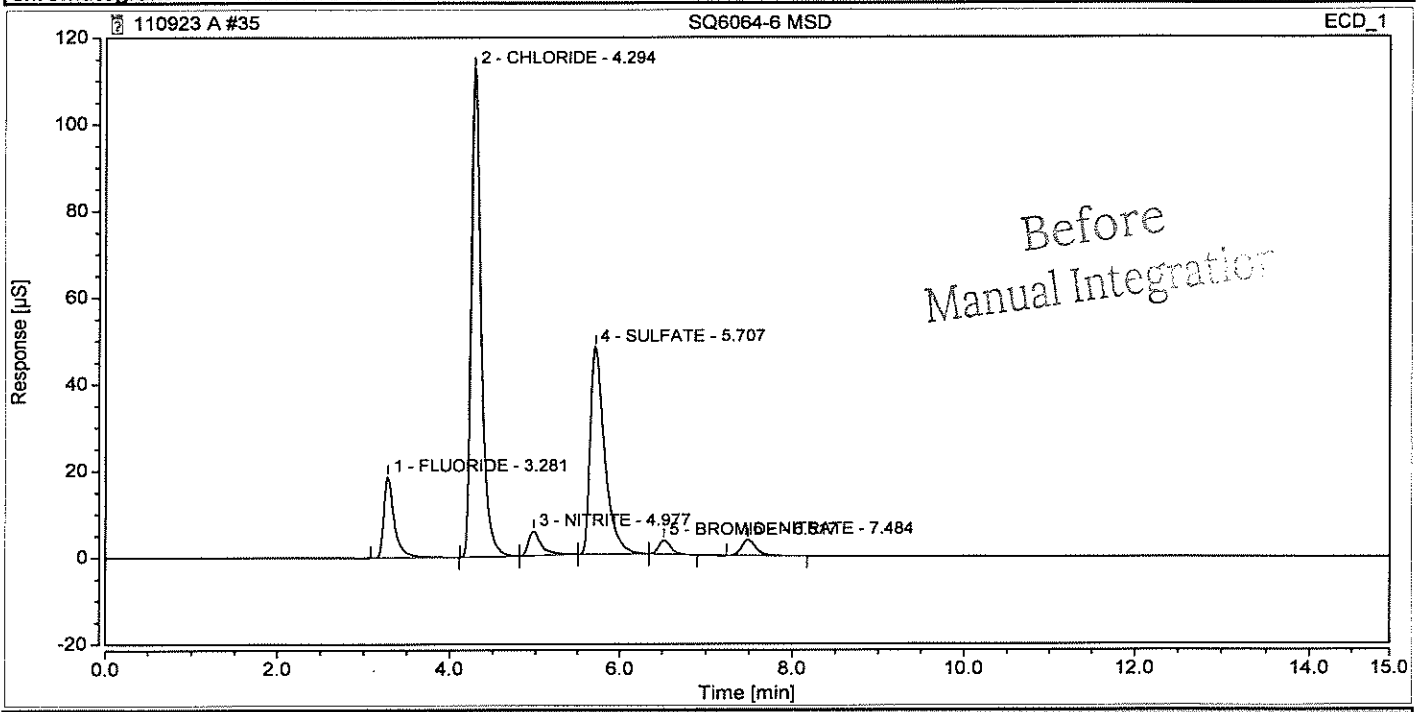
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	CHLORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	SULFATE	5.704	9.580	48.024	92.90	92.71	33.7008	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2	NITRATE	7.480	0.732	3.774	7.10	7.29	0.7480	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**10.312**	**51.798**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6064-6 MSD**	*Run Time (min):*	**14.95**
Vial Number:	**35**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**10/Nov/23 02:37**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

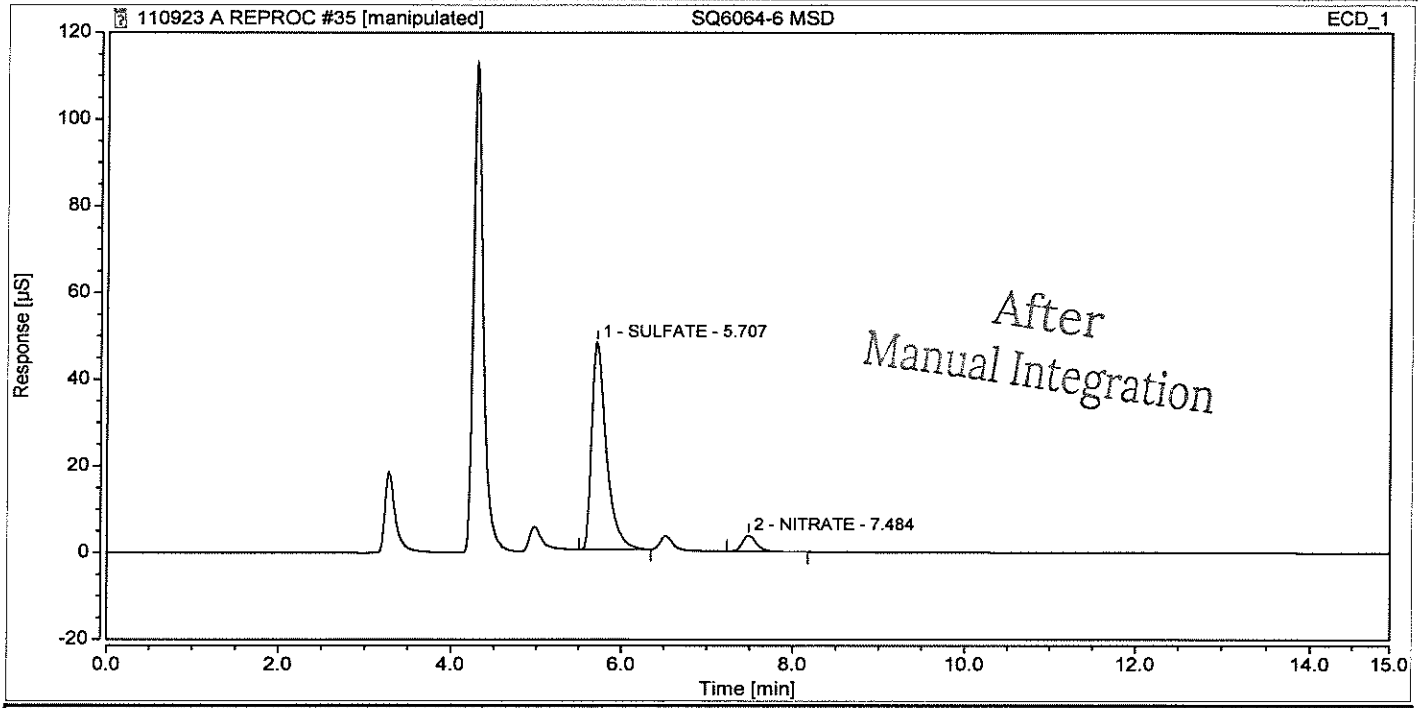
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.281	2.700	18.707	9.16	9.75	4.3676	n.a.
2	CHLORIDE	4.294	14.944	112.662	50.72	58.73	38.3437	n.a.
3	NITRITE	4.977	1.026	5.683	3.48	2.96	1.2145	n.a.
4	SULFATE	5.707	9.545	47.850	32.40	24.94	33.5771	n.a.
5	BROMIDE	6.517	0.531	3.250	1.80	1.69	3.1242	n.a.
6	NITRATE	7.484	0.717	3.690	2.43	1.92	0.7323	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**29.463**	**191.842**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6064-6 MSD**	*Run Time (min):*	**14.95**
Vial Number:	**35**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**10/Nov/23 02:37**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

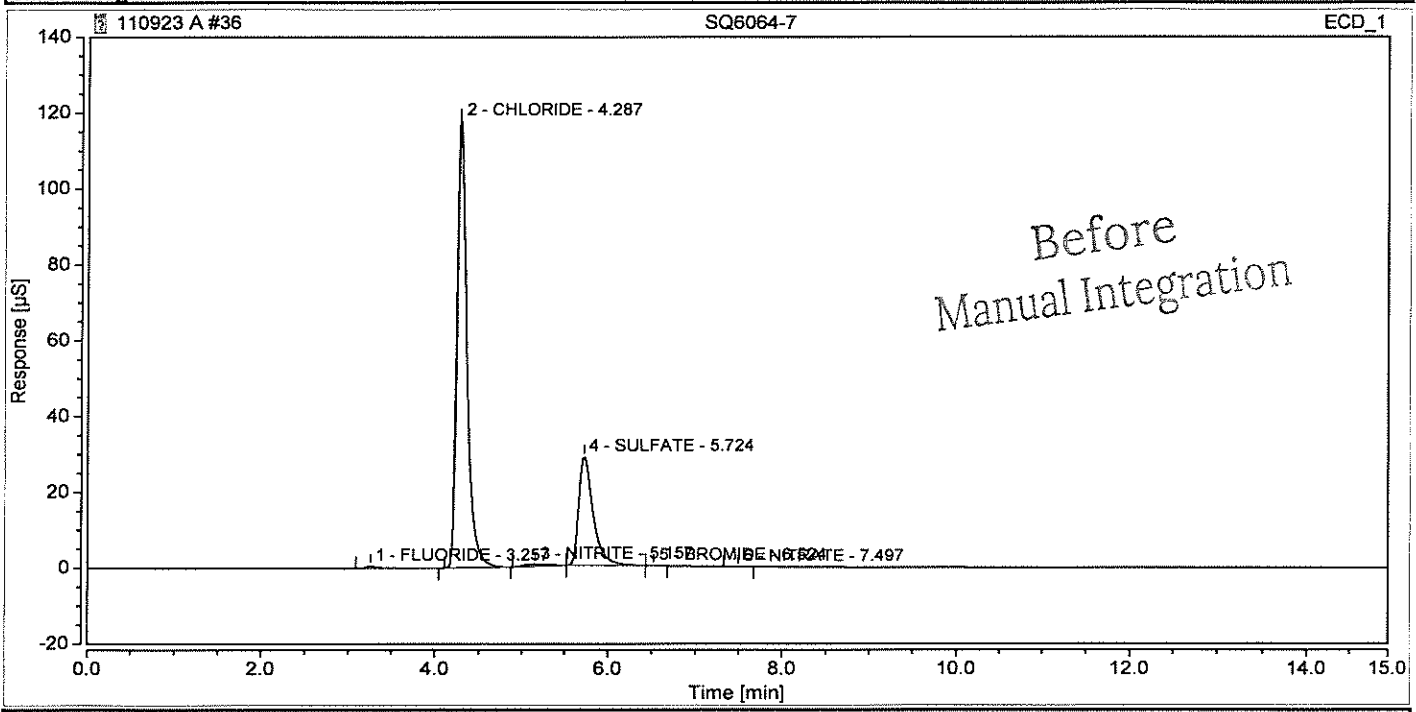
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	CHLORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	SULFATE	5.707	9.545	47.850	93.02	92.84	33.5771	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2	NITRATE	7.484	0.717	3.690	6.98	7.16	0.7323	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**10.262**	**51.540**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6064-7**	*Run Time (min):*	**14.96**
Vial Number:	**36**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**10/Nov/23 02:54**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

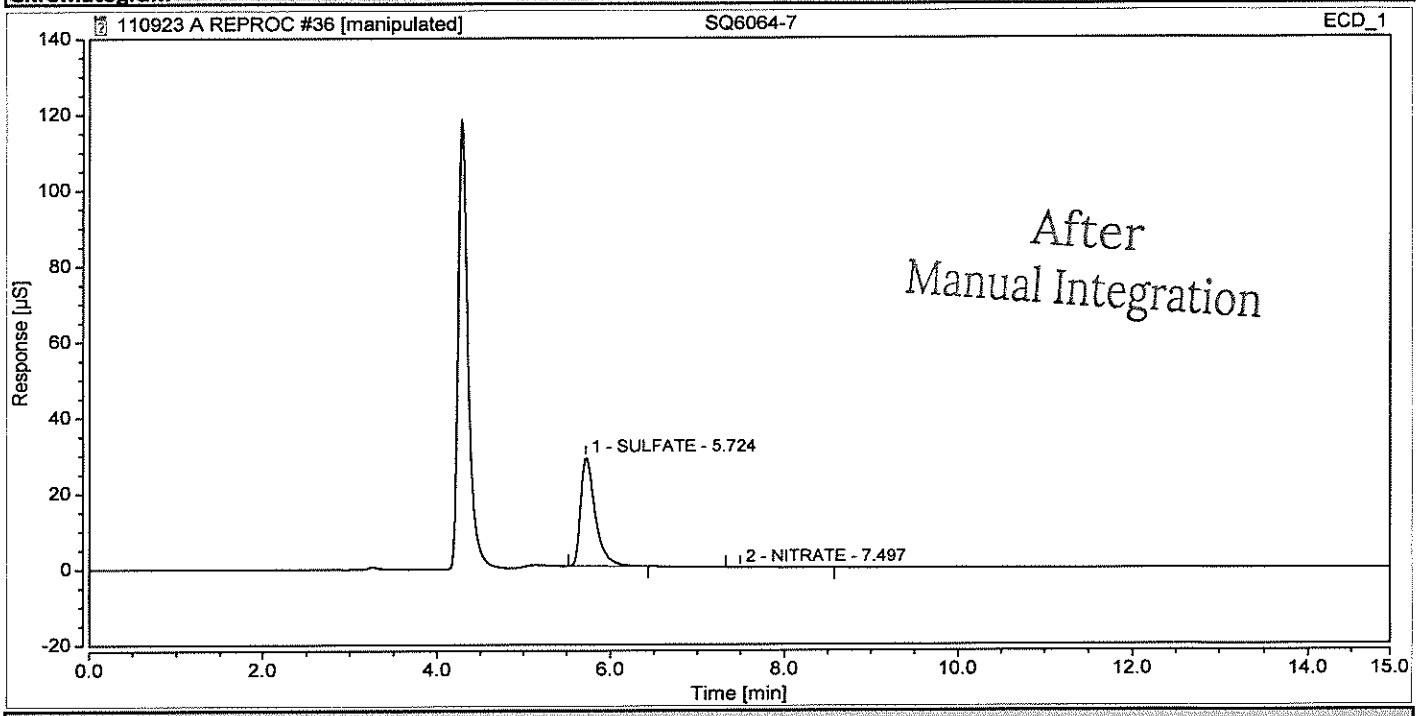
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.257	0.098	0.641	0.46	0.43	0.1706	n.a.
2	CHLORIDE	4.287	15.679	117.954	72.89	79.75	40.2275	n.a.
3	NITRITE	5.157	0.193	0.595	0.90	0.40	0.2333	n.a.
4	SULFATE	5.724	5.537	28.686	25.74	19.39	19.4771	n.a.
5	BROMIDE	6.524	0.003	0.026	0.01	0.02	0.0184	n.a.
6	NITRATE	7.497	0.001	0.005	0.00	0.00	0.0008	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**21.510**	**147.908**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6064-7**	*Run Time (min):*	**14.96**
Vial Number:	**36**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**10/Nov/23 02:54**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

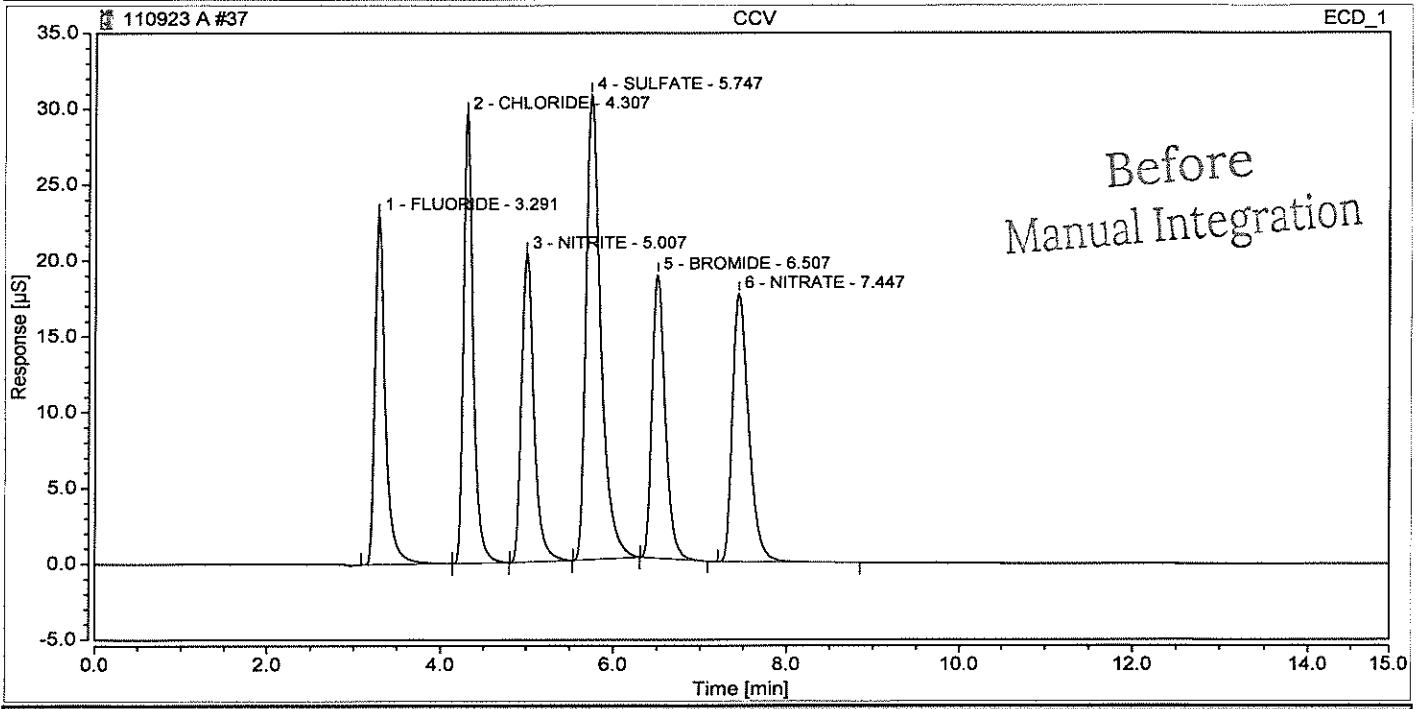
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	CHLORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	SULFATE	5.724	5.537	28.686	99.86	100.00	19.4771	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2	NITRATE	7.497	0.008	0.001	0.14	0.00	0.0077	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**5.544**	**28.687**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**CCV**	*Run Time (min):*	**14.95**
Vial Number:	**37**	*Injection Volume:*	**200.00**
Injection Type:	**Check Standard**	*Channel:*	**ECD_1**
Calibration Level:	**06**	*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**10/Nov/23 03:11**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

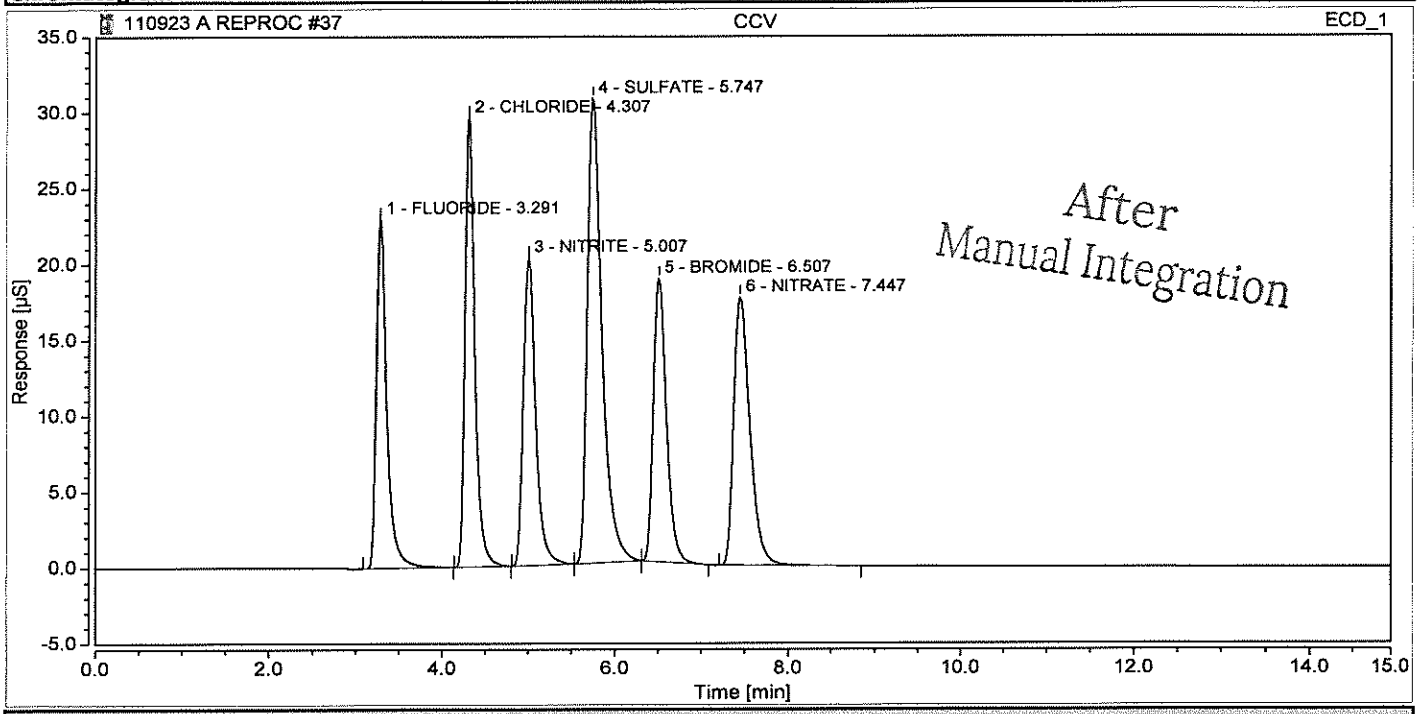
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.291	3.210	23.036	13.61	16.46	5.2160	4.3196
2	CHLORIDE	4.307	3.864	29.606	16.38	21.15	9.9141	-0.8589
3	NITRITE	5.007	3.399	20.308	14.41	14.51	4.0965	2.4136
4	SULFATE	5.747	5.963	30.644	25.28	21.89	20.9761	4.8804
5	BROMIDE	6.507	3.319	18.708	14.07	13.36	19.5196	-2.4021
6	NITRATE	7.447	3.833	17.684	16.25	12.63	3.9165	-2.0870
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**23.587**	**139.986**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**CCV**	*Run Time (min):*	**14.95**
Vial Number:	**37**	*Injection Volume:*	**200.00**
Injection Type:	**Check Standard**	*Channel:*	**ECD_1**
Calibration Level:	**06**	*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**10/Nov/23 03:11**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

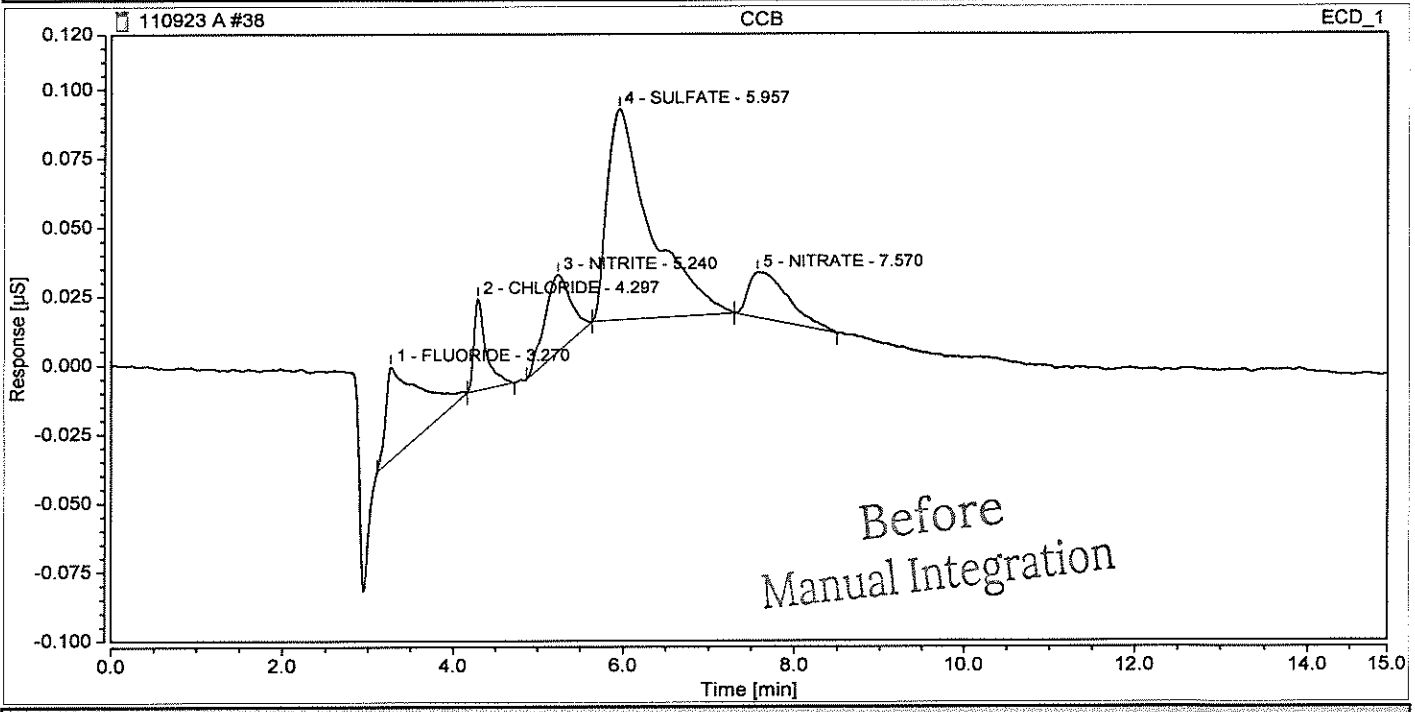
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.291	3.210	23.036	13.61	16.46	5.2160	4.3196
2	CHLORIDE	4.307	3.864	29.606	16.38	21.15	9.9141	-0.8589
3	NITRITE	5.007	3.399	20.308	14.41	14.51	4.0965	2.4136
4	SULFATE	5.747	5.963	30.644	25.28	21.89	20.9761	4.8804
5	BROMIDE	6.507	3.319	18.708	14.07	13.36	19.5196	-2.4021
6	NITRATE	7.447	3.833	17.684	16.25	12.63	3.9165	-2.0870
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**23.587**	**139.986**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**CCB**	*Run Time (min):*	**14.95**
Vial Number:	**38**	*Injection Volume:*	**200.00**
Injection Type:	**Blank**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**10/Nov/23 03:28**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

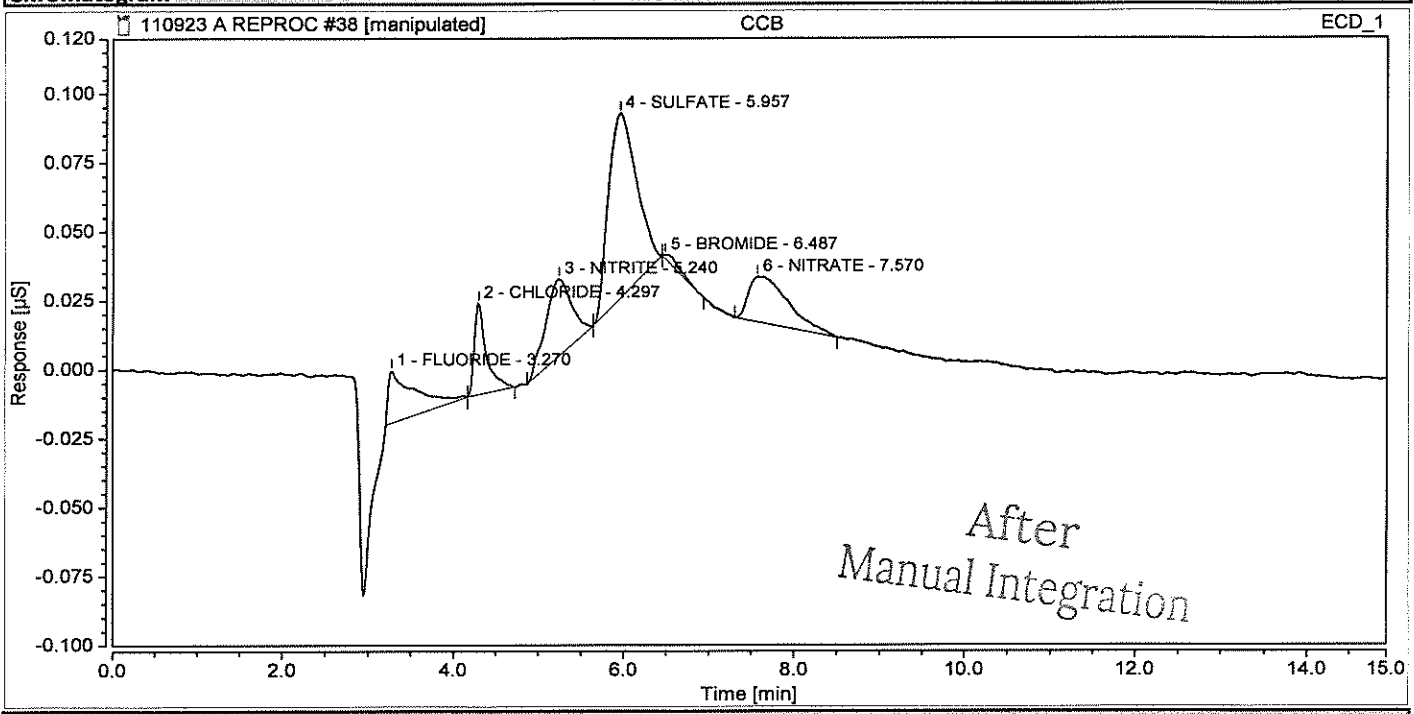
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.270	0.015	0.034	17.72	17.95	0.0402	n.a.
2	CHLORIDE	4.297	0.005	0.033	6.51	17.68	0.0141	n.a.
3	NITRITE	5.240	0.010	0.028	11.71	14.88	0.0197	n.a.
4	SULFATE	5.957	0.045	0.076	53.23	40.75	0.1582	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5	NITRATE	7.570	0.009	0.016	10.83	8.74	0.0093	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.084**	**0.188**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**CCB**	*Run Time (min):*	**14.95**
Vial Number:	**38**	*Injection Volume:*	**200.00**
Injection Type:	**Blank**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**10/Nov/23 03:28**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

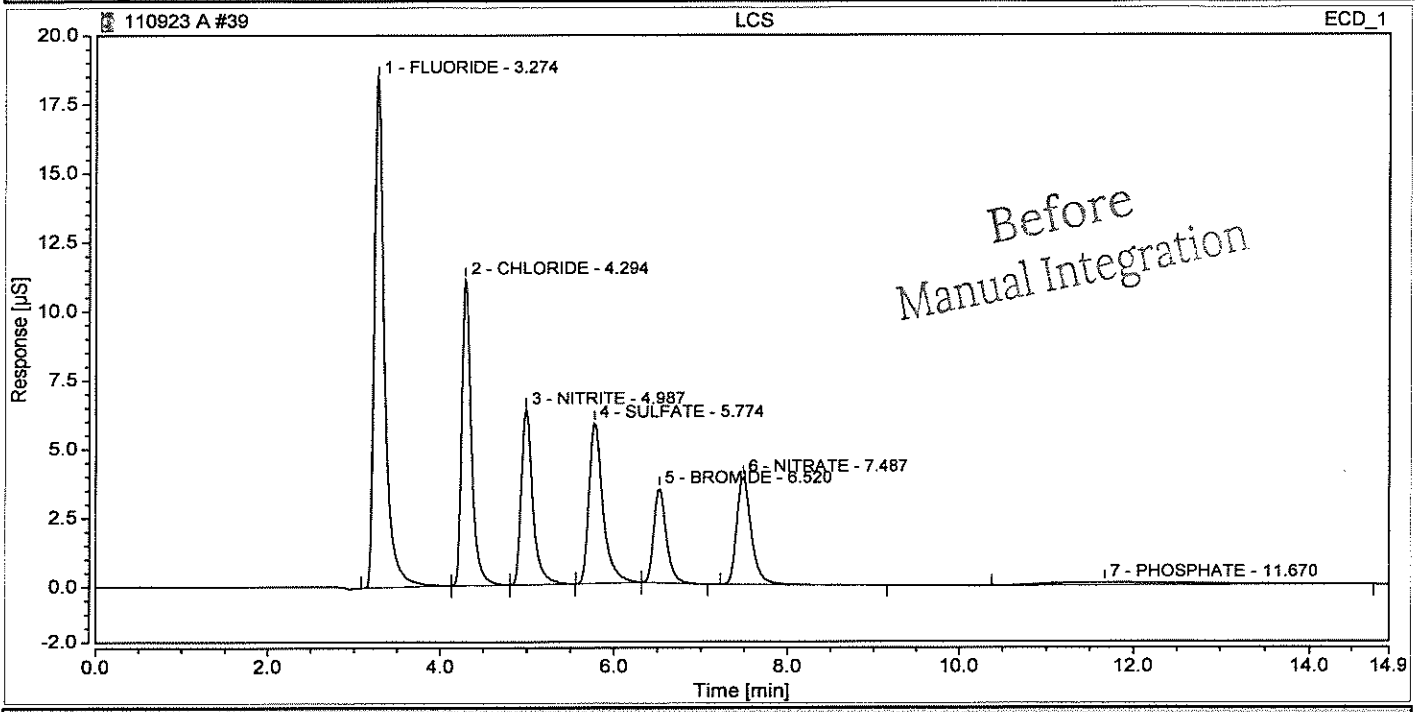
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.270	0.007	0.019	11.67	11.49	0.0272	n.a.
2	CHLORIDE	4.297	0.005	0.033	9.57	20.11	0.0141	n.a.
3	NITRITE	5.240	0.010	0.028	17.24	16.92	0.0197	n.a.
4	SULFATE	5.957	0.026	0.067	44.64	40.63	0.0901	n.a.
5	BROMIDE	6.487	0.001	0.001	0.95	0.91	0.0032	n.a.
6	NITRATE	7.570	0.009	0.016	15.93	9.94	0.0093	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.057**	**0.165**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**LCS**	*Run Time (min):*	**14.94**
Vial Number:	**39**	*Injection Volume:*	**200.00**
Injection Type:	**Check Standard**	*Channel:*	**ECD_1**
Calibration Level:	**09**	*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**10/Nov/23 03:46**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

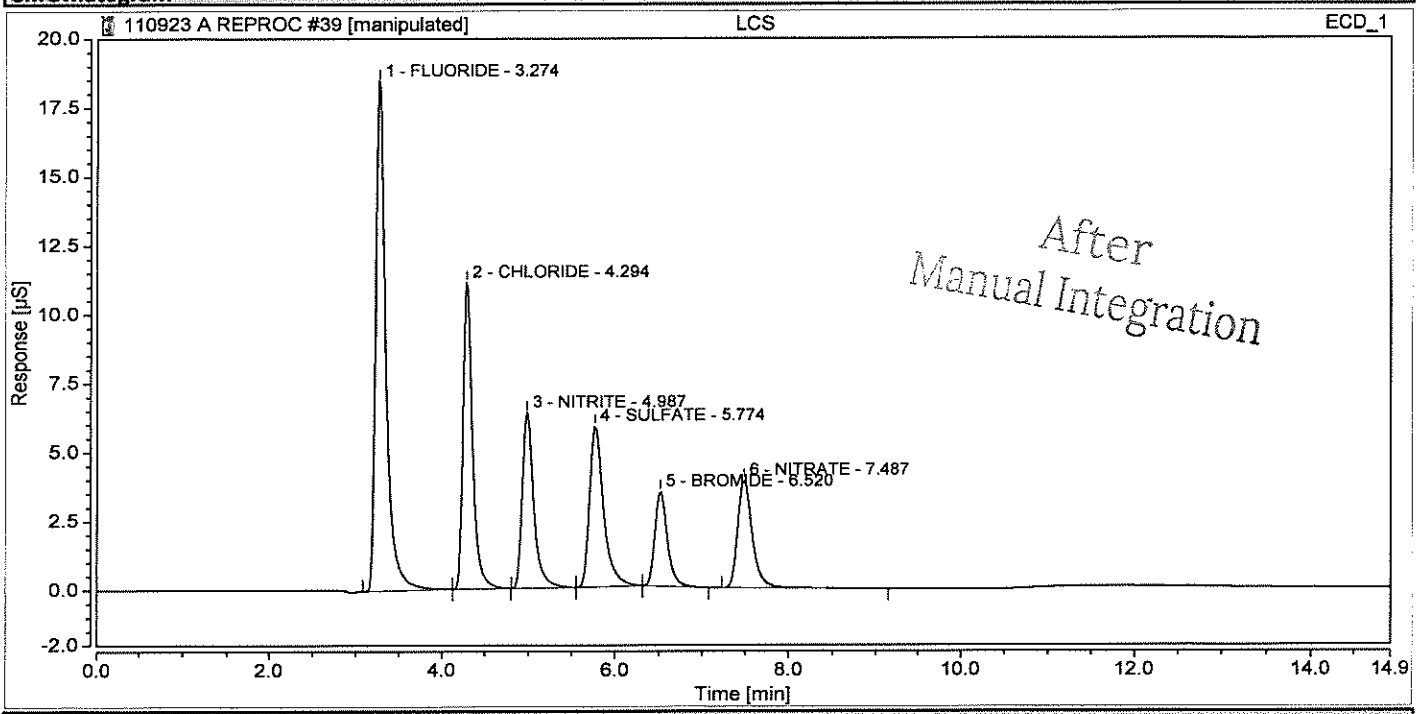
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.274	2.558	18.474	33.41	37.56	4.1328	10.2088
2	CHLORIDE	4.294	1.430	11.104	18.68	22.57	3.6701	-2.1309
3	NITRITE	4.987	0.985	6.357	12.86	12.92	1.1652	2.2149
4	SULFATE	5.774	1.097	5.835	14.32	11.86	3.8577	2.8710
5	BROMIDE	6.520	0.577	3.421	7.53	6.95	3.3920	-9.5478
6	NITRATE	7.487	0.785	3.898	10.25	7.92	0.8016	-5.1316
7	PHOSPHATE	11.670	0.225	0.103	2.94	0.21	n.a.	n.a.
Total:			**7.656**	**49.191**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**LCS**	*Run Time (min):*	**14.94**
Vial Number:	**39**	*Injection Volume:*	**200.00**
Injection Type:	**Check Standard**	*Channel:*	**ECD_1**
Calibration Level:	**09**	*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**10/Nov/23 03:46**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

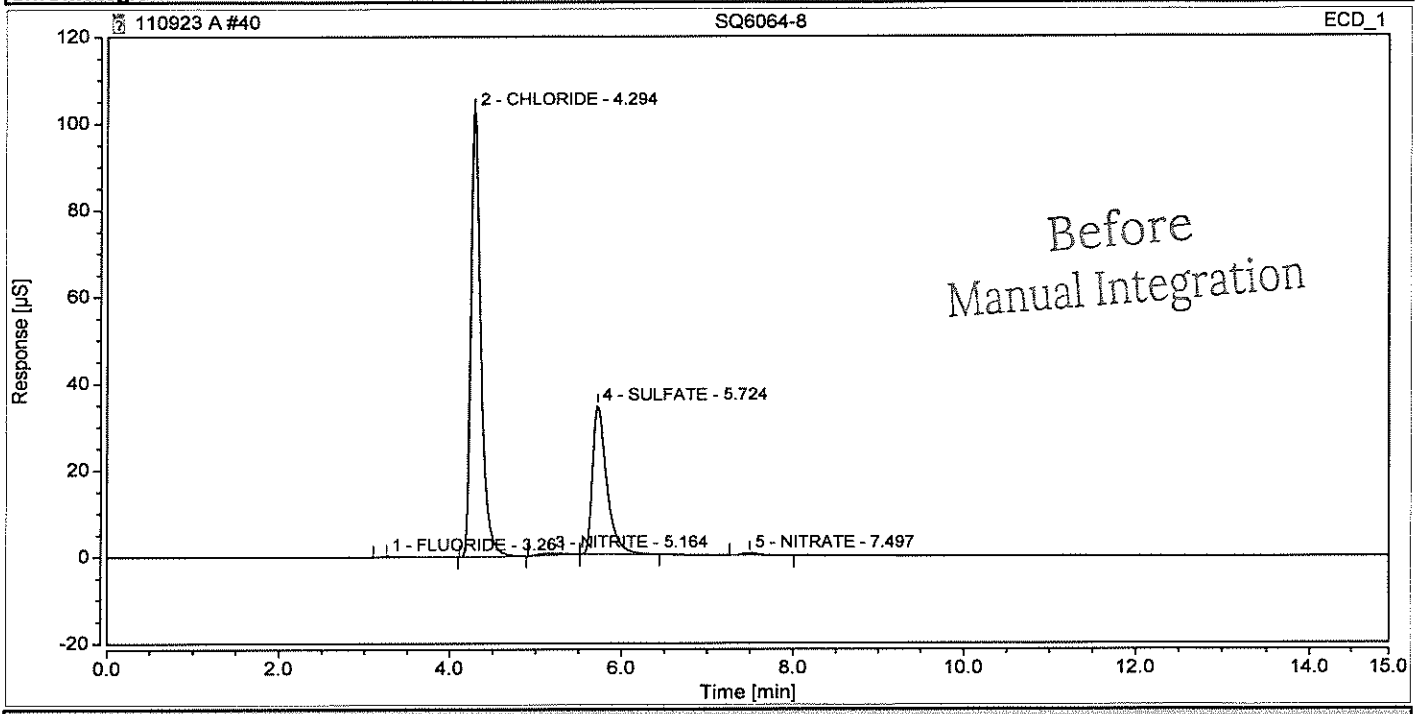
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.274	2.558	18.474	34.42	37.63	4.1328	10.2088
2	CHLORIDE	4.294	1.430	11.104	19.25	22.62	3.6701	-2.1309
3	NITRITE	4.987	0.985	6.357	13.25	12.95	1.1652	2.2149
4	SULFATE	5.774	1.097	5.835	14.76	11.89	3.8577	2.8710
5	BROMIDE	6.520	0.577	3.421	7.76	6.97	3.3920	-9.5478
6	NITRATE	7.487	0.785	3.898	10.56	7.94	0.8016	-5.1316
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**7.431**	**49.088**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6064-8**	*Run Time (min):*	**14.95**
Vial Number:	**40**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**10/Nov/23 04:03**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

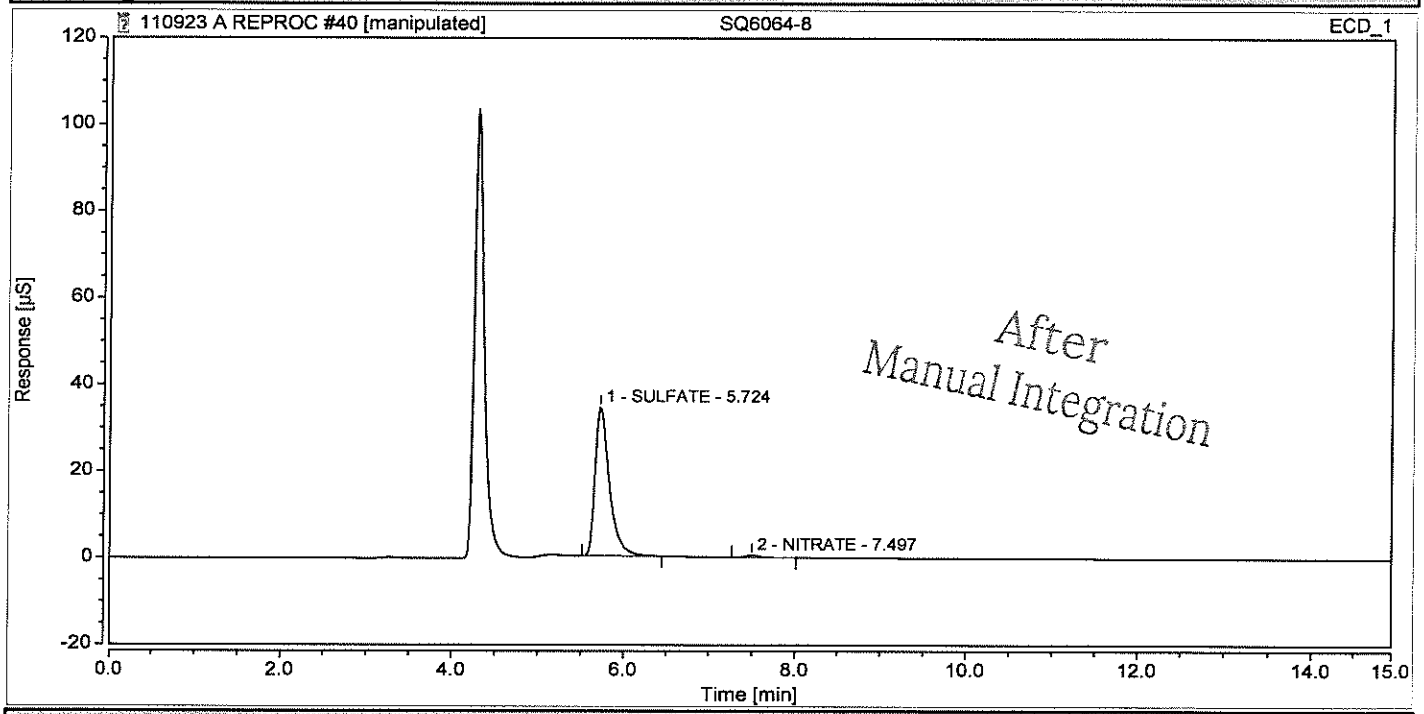
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.261	0.047	0.240	0.23	0.17	0.0900	n.a.
2	CHLORIDE	4.294	13.694	103.016	66.40	74.36	35.1347	n.a.
3	NITRITE	5.164	0.148	0.482	0.72	0.35	0.1806	n.a.
4	SULFATE	5.724	6.634	34.287	32.17	24.75	23.3359	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5	NITRATE	7.497	0.100	0.508	0.48	0.37	0.1019	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**20.622**	**138.533**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6064-8**	*Run Time (min):*	**14.95**
Vial Number:	**40**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**10/Nov/23 04:03**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

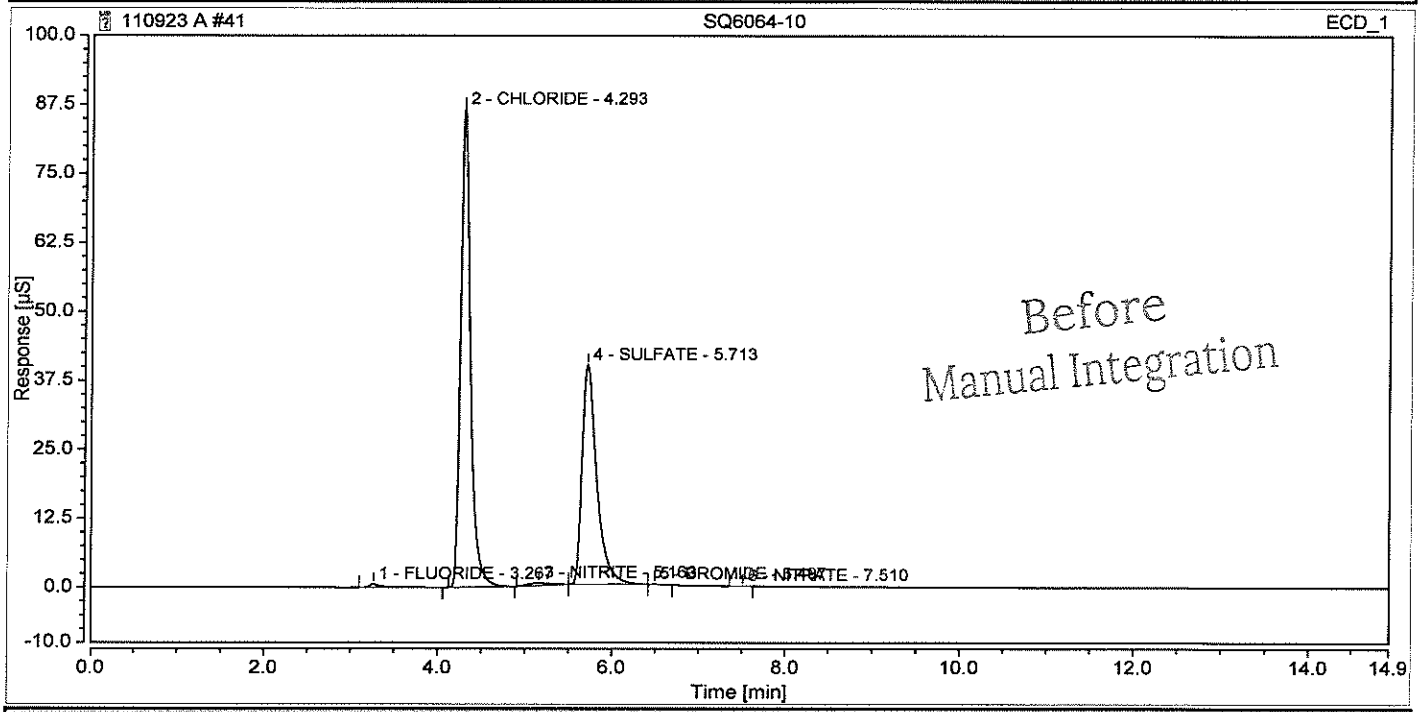
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	CHLORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	SULFATE	5.724	6.634	34.287	98.52	98.54	23.3359	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2	NITRATE	7.497	0.100	0.508	1.48	1.46	0.1019	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**6.734**	**34.795**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6064-10**	*Run Time (min):*	**14.95**
Vial Number:	**41**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**10/Nov/23 04:20**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

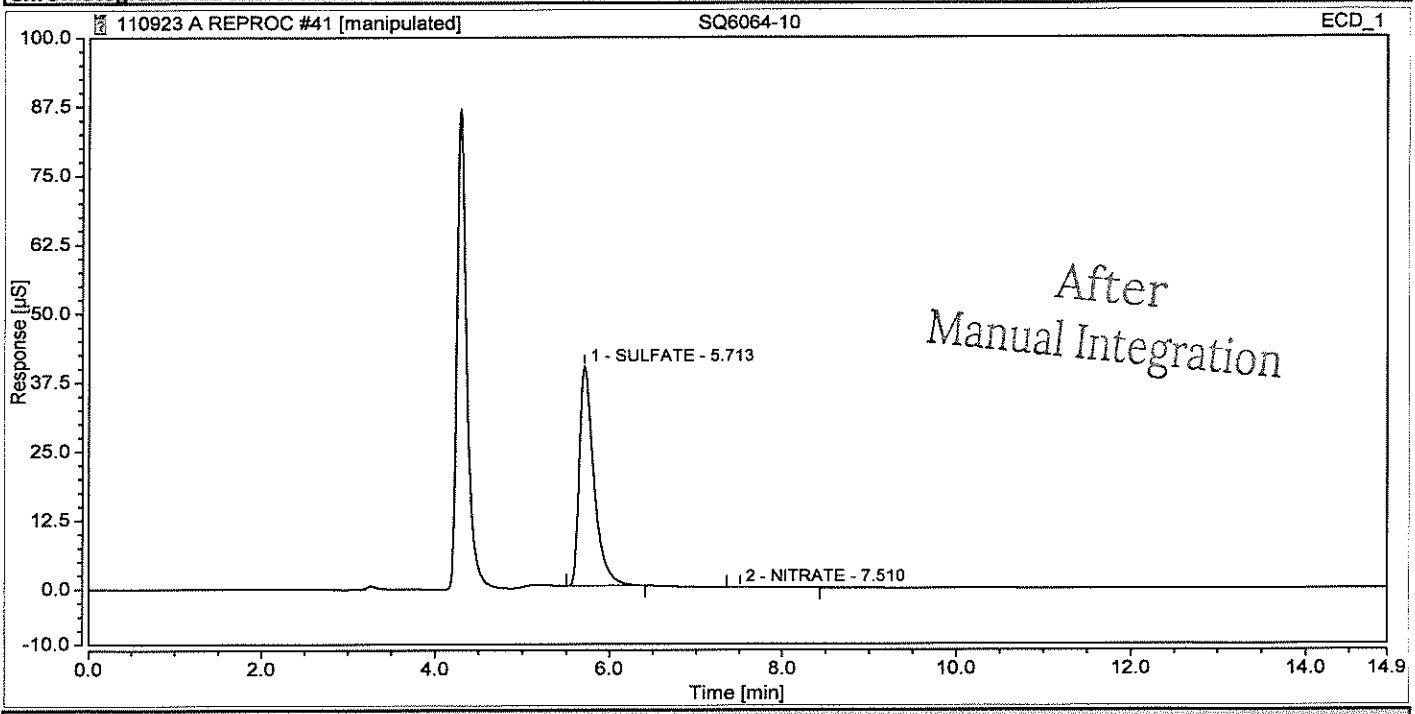
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.267	0.097	0.623	0.50	0.49	0.1694	n.a.
2	CHLORIDE	4.293	11.466	86.603	58.81	67.93	29.4180	n.a.
3	NITRITE	5.163	0.142	0.465	0.73	0.37	0.1740	n.a.
4	SULFATE	5.713	7.782	39.742	39.92	31.17	27.3760	n.a.
5	BROMIDE	6.497	0.008	0.051	0.04	0.04	0.0456	n.a.
6	NITRATE	7.510	0.001	0.004	0.00	0.00	0.0005	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**19.496**	**127.489**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6064-10**	*Run Time (min):*	**14.95**
Vial Number:	**41**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**10/Nov/23 04:20**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

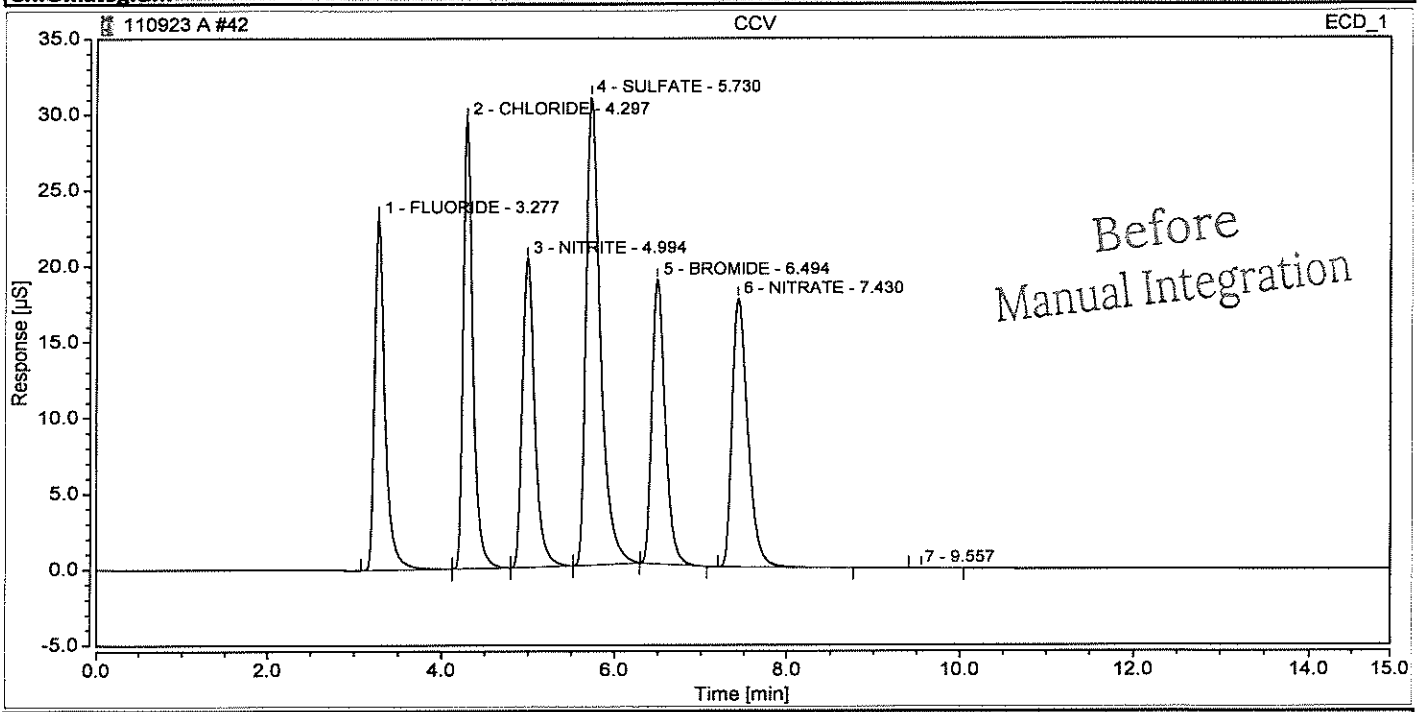
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	CHLORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	SULFATE	5.713	7.782	39.742	99.96	100.00	27.3760	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2	NITRATE	7.510	0.003	0.002	0.04	0.00	0.0033	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**7.786**	**39.744**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**CCV**	*Run Time (min):*	**14.96**
Vial Number:	**49**	*Injection Volume:*	**200.00**
Injection Type:	**Check Standard**	*Channel:*	**ECD_1**
Calibration Level:	**06**	*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**10/Nov/23 04:37**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

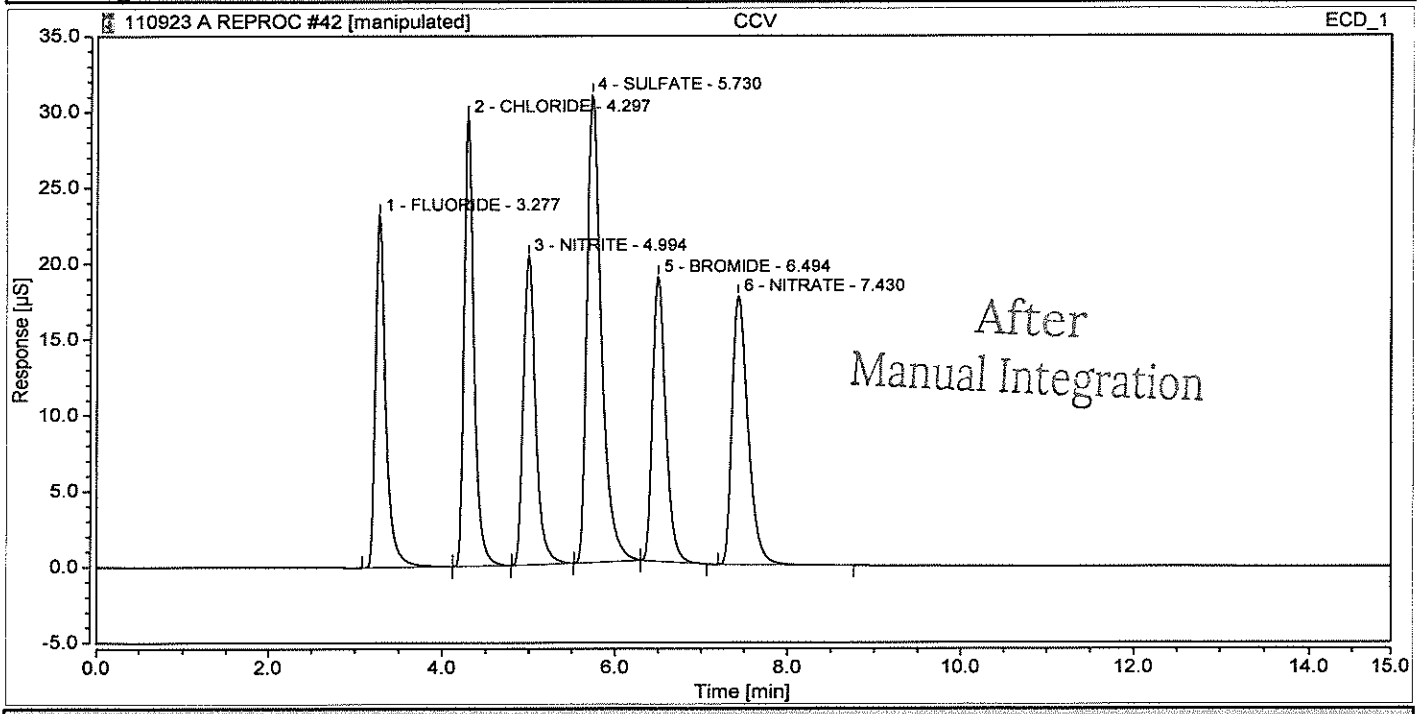
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.277	3.202	23.182	13.60	16.51	5.2026	4.0512
2	CHLORIDE	4.297	3.854	29.593	16.37	21.08	9.8893	-1.1073
3	NITRITE	4.994	3.392	20.352	14.41	14.50	4.0887	2.2164
4	SULFATE	5.730	5.941	30.825	25.24	21.96	20.8981	4.4905
5	BROMIDE	6.494	3.326	18.732	14.13	13.34	19.5619	-2.1905
6	NITRATE	7.430	3.824	17.686	16.25	12.60	3.9079	-2.3016
7		9.557	0.001	0.002	0.00	0.00	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**23.540**	**140.371**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**CCV**	*Run Time (min):*	**14.96**
Vial Number:	**49**	*Injection Volume:*	**200.00**
Injection Type:	**Check Standard**	*Channel:*	**ECD_1**
Calibration Level:	**06**	*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**10/Nov/23 04:37**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

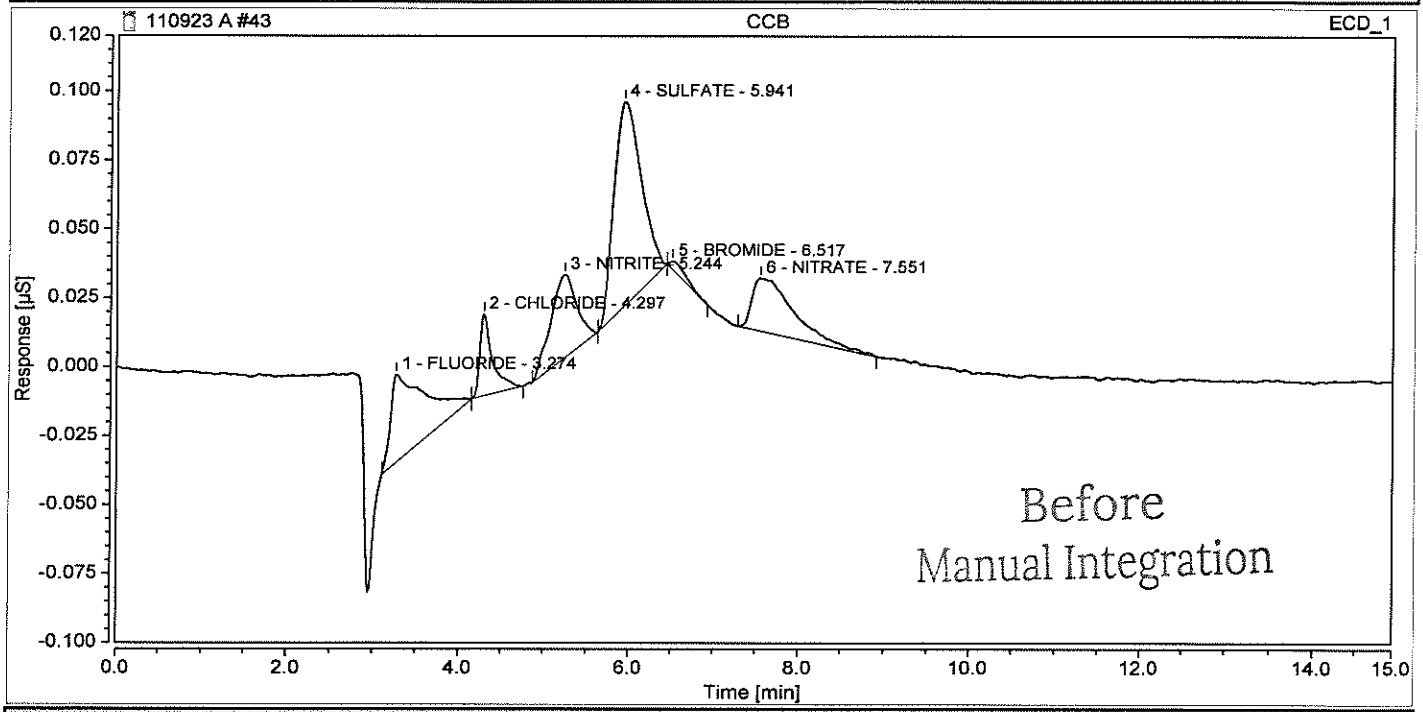
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.277	3.202	23.182	13.60	16.51	5.2026	4.0512
2	CHLORIDE	4.297	3.854	29.593	16.37	21.08	9.8893	-1.1073
3	NITRITE	4.994	3.392	20.352	14.41	14.50	4.0887	2.2164
4	SULFATE	5.730	5.941	30.825	25.24	21.96	20.8981	4.4905
5	BROMIDE	6.494	3.326	18.732	14.13	13.34	19.5619	-2.1905
6	NITRATE	7.430	3.824	17.686	16.25	12.60	3.9079	-2.3016
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**23.539**	**140.369**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**CCB**	*Run Time (min):*	**14.95**
Vial Number:	**50**	*Injection Volume:*	**200.00**
Injection Type:	**Blank**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**10/Nov/23 04:55**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

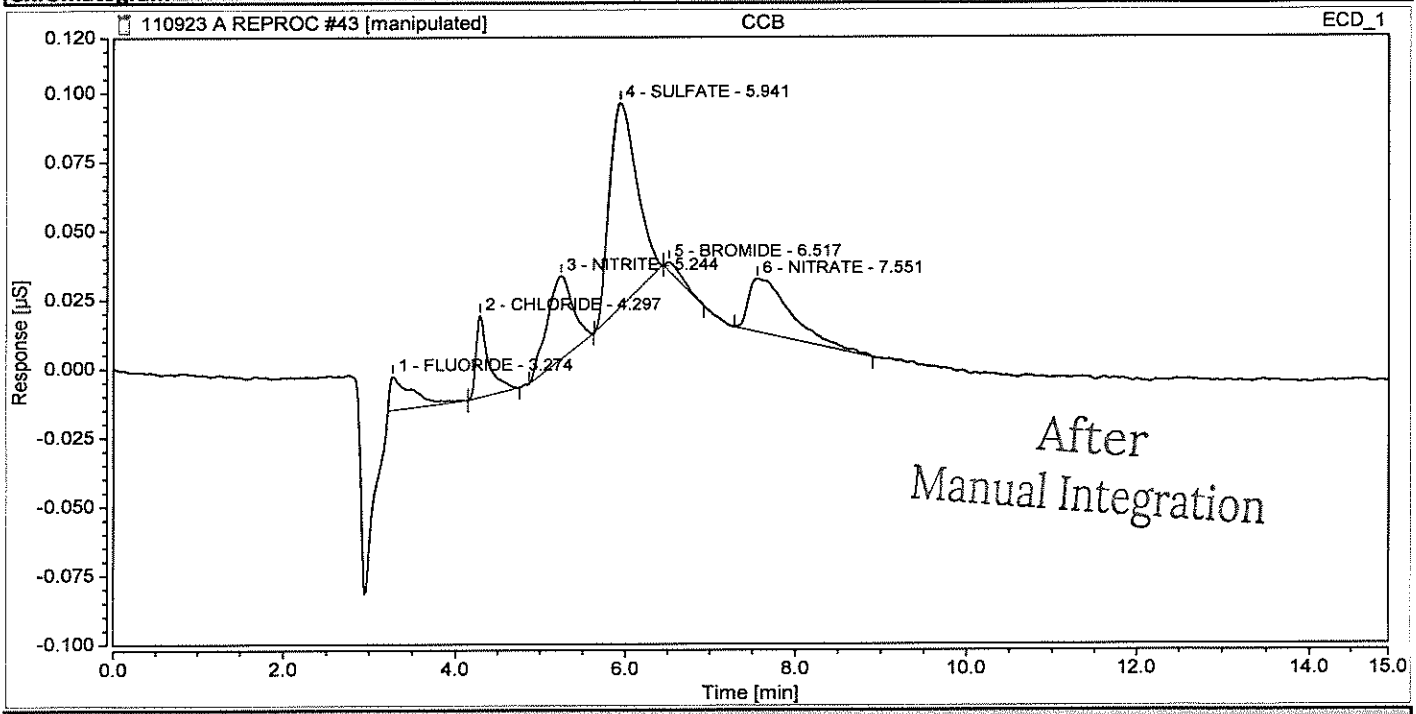
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.274	0.014	0.032	20.54	16.96	0.0391	n.a.
2	CHLORIDE	4.297	0.005	0.030	7.38	15.80	0.0132	n.a.
3	NITRITE	5.244	0.011	0.030	15.19	16.02	0.0205	n.a.
4	SULFATE	5.941	0.028	0.074	39.63	39.38	0.0970	n.a.
5	BROMIDE	6.517	0.001	0.003	1.08	1.61	0.0044	n.a.
6	NITRATE	7.551	0.011	0.019	16.18	10.23	0.0115	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.070**	**0.188**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**CCB**	*Run Time (min):*	**14.95**
Vial Number:	**50**	*Injection Volume:*	**200.00**
Injection Type:	**Blank**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**10/Nov/23 04:55**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.274	0.004	0.012	6.21	7.32	0.0224	n.a.
2	CHLORIDE	4.297	0.005	0.030	8.71	17.64	0.0132	n.a.
3	NITRITE	5.244	0.011	0.030	17.93	17.87	0.0205	n.a.
4	SULFATE	5.941	0.028	0.074	46.78	43.95	0.0970	n.a.
5	BROMIDE	6.517	0.001	0.003	1.28	1.80	0.0044	n.a.
6	NITRATE	7.551	0.011	0.019	19.10	11.41	0.0115	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.059**	**0.168**	**100.00**	**100.00**		

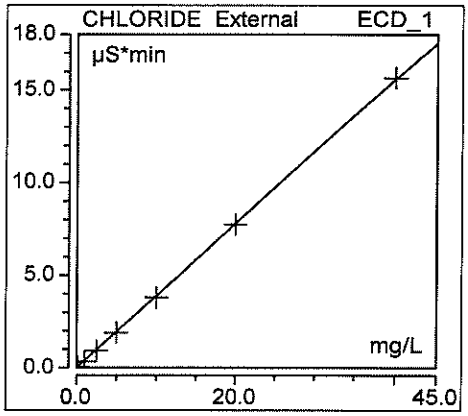
Calibration Batch Report

Sequence:	**101223 CAL REPROC**	*Injection Volume:*	**200.00**
Instrument Method:	**32mM80mA**	*Operator:*	**wetlab**
Inj. Date / Time:	**12-Oct-2023 / 13:07**	*Run Time:*	**14.946667**

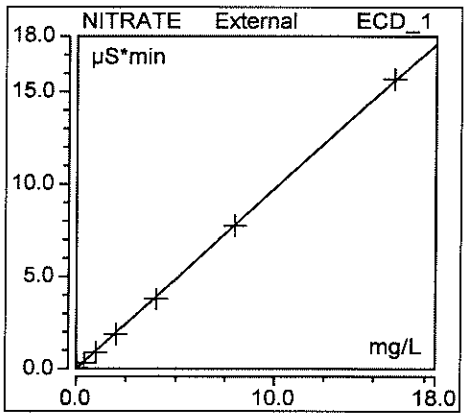
Calibration Summary

Peak Name	Eval.Type	Cal.Type	Points	Offset (C0)	Slope (C1)	Curve (C2)	Coeff.Det. %
FLUORIDE	Area	ly2, WithOffs	8.000	-0.011	0.637	-0.004	99.9990
CHLORIDE	Area	Lin	8.000	0.000	0.390	0.000	99.9875
NITRITE	Area	ly2, WithOffs	8.000	-0.007	0.859	-0.007	99.9990
SULFATE	Area	Lin	8.000	0.000	0.284	0.000	99.9981
BROMIDE	Area	Lin	8.000	0.000	0.170	0.000	99.9752
NITRATE	Area	Lin	8.000	0.000	0.976	0.000	99.9814
		AVERAGE:		-0.0029	0.5526	-0.0018	99.9900

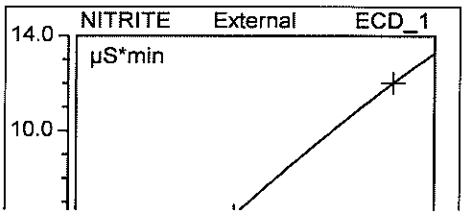
Injection Name / CHLORIDE	Ret.Time min CHLORIDE	Area µS*min CHLORIDE	Height µS CHLORIDE	Amount mg/L CHLORIDE
	ECD_1	ECD_1	ECD_1	ECD_1
IC1	4.310	0.0013	0.007	0.003
IC2	4.290	0.0319	0.236	0.082
IC3	4.280	0.3373	2.649	0.865
IC4	4.277	0.9117	7.111	2.339
IC5	4.277	1.8945	14.718	4.861
IC6	4.280	3.7977	29.083	9.744
IC7	4.274	7.7443	58.666	19.870
IC8	4.273	15.6522	117.462	40.160
Average	4.283			
Rel. Std. Dev.	0.287 %			



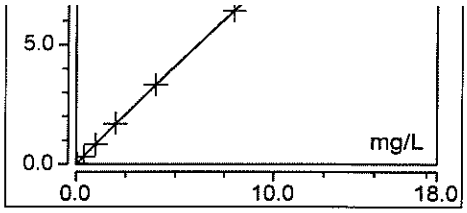
Injection Name / NITRATE	Ret.Time min NITRATE	Area µS*min NITRATE	Height µS NITRATE	Amount mg/L NITRATE
	ECD_1	ECD_1	ECD_1	ECD_1
IC1	7.577	0.0011	0.005	0.001
IC2	7.557	0.0307	0.152	0.031
IC3	7.537	0.3315	1.685	0.340
IC4	7.521	0.8936	4.512	0.916
IC5	7.500	1.8681	9.167	1.915
IC6	7.470	3.7881	17.516	3.883
IC7	7.420	7.7471	32.517	7.941
IC8	7.347	15.6832	56.804	16.076
Average	7.491			
Rel. Std. Dev.	1.022 %			



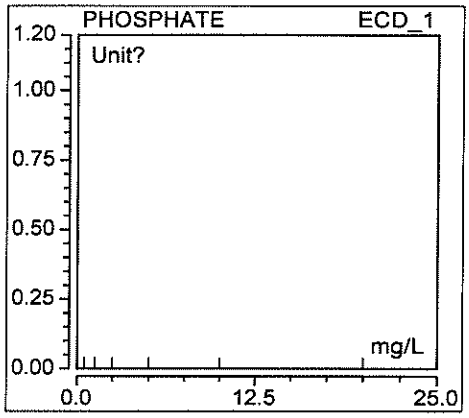
Injection Name / NITRITE	Ret.Time min NITRITE	Area µS*min NITRITE	Height µS NITRITE	Amount mg/L NITRITE
	ECD_1	ECD_1	ECD_1	ECD_1
IC1	5.277	0.0081	0.032	0.018
IC2	4.990	0.0315	0.165	0.045



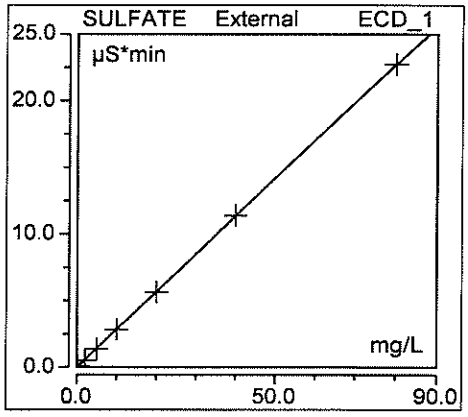
IC3	4.984	0.3130	1.968	0.374
IC4	4.984	0.8317	5.253	0.984
IC5	4.984	1.7014	10.467	2.021
IC6	4.990	3.3244	19.408	4.004
IC7	4.990	6.4268	34.736	7.994
IC8	4.990	12.0030	58.725	16.001
Average	5.024			
Rel. Std. Dev.	2.038 %			



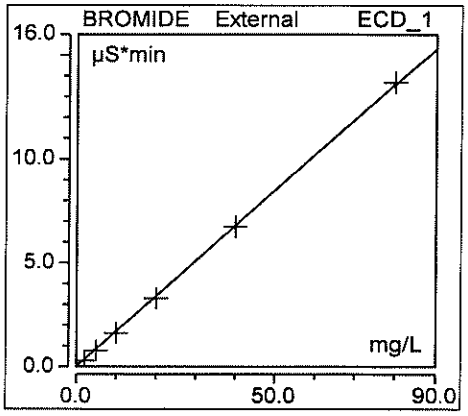
Injection Name **PHOSPHATE**	Ret.Time min PHOSPHATE	Area µS*min PHOSPHATE	Height µS PHOSPHATE	Amount mg/L PHOSPHATE
	ECD_1	ECD_1	ECD_1	ECD_1
IC1	n.a.	n.a.	n.a.	n.a.
IC2	n.a.	n.a.	n.a.	n.a.
IC3	n.a.	n.a.	n.a.	n.a.
IC4	n.a.	n.a.	n.a.	n.a.
IC5	n.a.	n.a.	n.a.	n.a.
IC6	n.a.	n.a.	n.a.	n.a.
IC7	n.a.	n.a.	n.a.	n.a.
IC8	n.a.	n.a.	n.a.	n.a.
Average	#DIV/0!			
Rel. Std. Dev.	#DIV/0!			



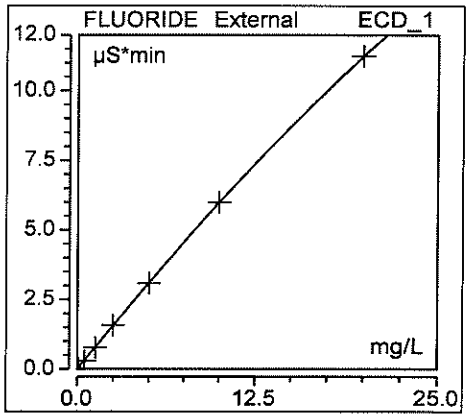
Injection Name **SULFATE**	Ret.Time min SULFATE	Area µS*min SULFATE	Height µS SULFATE	Amount mg/L SULFATE
	ECD_1	ECD_1	ECD_1	ECD_1
IC1	5.844	0.0009	0.004	0.003
IC2	5.834	0.0454	0.229	0.160
IC3	5.820	0.5026	2.833	1.768
IC4	5.817	1.3714	7.732	4.824
IC5	5.797	2.8380	15.881	9.983
IC6	5.777	5.6533	31.045	19.887
IC7	5.744	11.3826	59.540	40.040
IC8	5.687	22.7500	108.379	80.027
Average	5.790			
Rel. Std. Dev.	0.911 %			



Injection Name **BROMIDE**	Ret.Time min BROMIDE	Area µS*min BROMIDE	Height µS BROMIDE	Amount mg/L BROMIDE
	ECD_1	ECD_1	ECD_1	ECD_1
IC1	6.407	0.0004	0.001	0.002
IC2	6.560	0.0257	0.144	0.151
IC3	6.544	0.2814	1.655	1.655
IC4	6.537	0.7709	4.533	4.535
IC5	6.527	1.6186	9.363	9.521
IC6	6.514	3.2868	18.367	19.333
IC7	6.484	6.7353	35.656	39.616
IC8	6.433	13.6787	65.681	80.456
Average	6.501			
Rel. Std. Dev.	0.847 %			



Injection Name FLUORIDE	Ret.Time min FLUORIDE	Area µS*min FLUORIDE	Height µS FLUORIDE	Amount mg/L FLUORIDE
	ECD_1	ECD_1	ECD_1	ECD_1
IC1	3.524	0.0033	0.007	0.022
IC2	3.244	0.0233	0.162	0.053
IC3	3.240	0.2885	2.065	0.471
IC4	3.237	0.7656	5.555	1.228
IC5	3.244	1.5767	11.214	2.530
IC6	3.250	3.0811	21.013	5.001
IC7	3.254	5.9813	38.517	9.993
IC8	3.267	11.2370	67.145	20.001
Average	3.282			
Rel. Std. Dev.	2.982 %			



Anion Summary Report

No. CHLORIDE	Name CHLORIDE	Time min CHLORIDE ECD_1	Area µS*min CHLORIDE ECD_1	Rel.Area % CHLORIDE ECD_1	Height µS CHLORIDE ECD_1	Rel.Height % CHLORIDE ECD_1	Amount mg/L CHLORIDE ECD_1
1	IC1	4.310	0.0013	8.64	0.01	12.08	0.0033
2	IC2	4.290	0.0319	16.92	0.24	21.69	0.0818
3	IC3	4.280	0.3373	16.42	2.65	20.61	0.8653
4	IC4	4.277	0.9117	16.44	7.11	20.50	2.3392
5	IC5	4.277	1.8945	16.48	14.72	20.79	4.8610
6	IC6	4.280	3.7977	16.56	29.08	21.32	9.7441
7	IC7	4.274	7.7443	16.83	58.67	22.60	19.8700
8	IC8	4.273	15.6522	17.20	117.46	24.77	40.1598
	Sum:	34.262	30.371	125.488	229.932	164.342	77.924
	Average:	4.283	3.796	15.686	28.741	20.543	9.741
	Rel.Std.Dev:	0.287 %	143.802 %	18.229 %	142.552 %	17.997 %	143.802 %

No. NITRATE	Name NITRATE	Time min NITRATE ECD_1	Area µS*min NITRATE ECD_1	Rel.Area % NITRATE ECD_1	Height µS NITRATE ECD_1	Rel.Height % NITRATE ECD_1	Amount mg/L NITRATE ECD_1
1	IC1	7.577	0.0011	7.29	0.01	9.24	0.0011
2	IC2	7.557	0.0307	16.31	0.15	13.97	0.0315
3	IC3	7.537	0.3315	16.14	1.69	13.11	0.3398
4	IC4	7.521	0.8936	16.12	4.51	13.00	0.9160
5	IC5	7.500	1.8681	16.25	9.17	12.95	1.9149
6	IC6	7.470	3.7881	16.52	17.52	12.84	3.8830
7	IC7	7.420	7.7471	16.84	32.52	12.52	7.9412
8	IC8	7.347	15.6832	17.23	56.80	11.98	16.0761
	Sum:	59.929	30.344	122.694	122.358	99.612	31.104
	Average:	7.491	3.793	15.337	15.295	12.451	3.888
	Rel.Std.Dev:	1.022 %	144.282 %	21.338 %	131.385 %	11.350 %	144.282 %

No. NITRITE	Name NITRITE	Time min NITRITE ECD_1	Area µS*min NITRITE ECD_1	Rel.Area % NITRITE ECD_1	Height µS NITRITE ECD_1	Rel.Height % NITRITE ECD_1	Amount mg/L NITRITE ECD_1
1	IC1	5.277	0.0081	53.65	0.03	57.13	0.0176
2	IC2	4.990	0.0315	16.72	0.17	15.17	0.0449
3	IC3	4.984	0.3130	15.24	1.97	15.31	0.3737
4	IC4	4.984	0.8317	15.00	5.25	15.14	0.9839
5	IC5	4.984	1.7014	14.80	10.47	14.78	2.0208
6	IC6	4.990	3.3244	14.50	19.41	14.23	4.0043
7	IC7	4.990	6.4268	13.97	34.74	13.38	7.9935
8	IC8	4.990	12.0030	13.19	58.73	12.38	16.0012
	Sum:	40.189	24.640	157.051	130.754	157.526	31.440
	Average:	5.024	3.080	19.631	16.344	19.691	3.930
	Rel.Std.Dev:	2.038 %	136.774 %	70.208 %	127.418 %	77.003 %	141.871 %

No. PHOSPHATE	Name PHOSPHATE	Time min PHOSPHATE ECD_1	Area µS*min PHOSPHATE ECD_1	Rel.Area % PHOSPHATE ECD_1	Height µS PHOSPHATE ECD_1	Rel.Height % PHOSPHATE ECD_1	Amount mg/L PHOSPHATE ECD_1
1	IC1	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2	IC2	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

3	IC3	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
4	IC4	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5	IC5	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
6	IC6	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
7	IC7	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
8	IC8	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
	Sum:	0.000	0.000	0.000	0.000	0.000	0.000
	Average:	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
	Rel.Std.Dev:	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

No. SULFATE	Name SULFATE	Time min SULFATE ECD_1	Area µS*min SULFATE ECD_1	Rel.Area % SULFATE ECD_1	Height µS SULFATE ECD_1	Rel.Height % SULFATE ECD_1	Amount mg/L SULFATE ECD_1
1	IC1	5.844	0.0009	6.16	0.00	7.25	0.0033
2	IC2	5.834	0.0454	24.09	0.23	21.06	0.1596
3	IC3	5.820	0.5026	24.47	2.83	22.04	1.7679
4	IC4	5.817	1.3714	24.73	7.73	22.29	4.8243
5	IC5	5.797	2.8380	24.68	15.88	22.43	9.9833
6	IC6	5.777	5.6533	24.65	31.04	22.75	19.8866
7	IC7	5.744	11.3826	24.74	59.54	22.93	40.0405
8	IC8	5.687	22.7500	25.00	108.38	22.86	80.0271
	Sum:	46.319	44.544	178.521	225.643	163.599	156.693
	Average:	5.790	5.568	22.315	28.205	20.450	19.587
	Rel.Std.Dev:	0.911 %	142.591 %	29.274 %	135.408 %	26.248 %	142.591 %

No. BROMIDE	Name BROMIDE	Time min BROMIDE ECD_1	Area µS*min BROMIDE ECD_1	Rel.Area % BROMIDE ECD_1	Height µS BROMIDE ECD_1	Rel.Height % BROMIDE ECD_1	Amount mg/L BROMIDE ECD_1
1	IC1	6.407	0.0004	2.57	0.00	2.09	0.0023
2	IC2	6.560	0.0257	13.62	0.14	13.22	0.1509
3	IC3	6.544	0.2814	13.70	1.65	12.87	1.6554
4	IC4	6.537	0.7709	13.90	4.53	13.07	4.5345
5	IC5	6.527	1.6186	14.08	9.36	13.22	9.5207
6	IC6	6.514	3.2868	14.33	18.37	13.46	19.3328
7	IC7	6.484	6.7353	14.64	35.66	13.73	39.6161
8	IC8	6.433	13.6787	15.03	65.68	13.85	80.4565
	Sum:	52.006	26.398	101.871	135.400	95.522	155.269
	Average:	6.501	3.300	12.734	16.925	11.940	19.409
	Rel.Std.Dev:	0.847 %	144.644 %	32.456 %	136.608 %	33.434 %	144.644 %

No. FLUORIDE	Name FLUORIDE	Time min FLUORIDE ECD_1	Area µS*min FLUORIDE ECD_1	Rel.Area % FLUORIDE ECD_1	Height µS FLUORIDE ECD_1	Rel.Height % FLUORIDE ECD_1	Amount mg/L FLUORIDE ECD_1
1	IC1	3.524	0.0033	21.68	0.01	12.21	0.0218
2	IC2	3.244	0.0233	12.35	0.16	14.89	0.0532
3	IC3	3.240	0.2885	14.04	2.06	16.06	0.4710
4	IC4	3.237	0.7656	13.81	5.55	16.01	1.2278
5	IC5	3.244	1.5767	13.71	11.21	15.84	2.5301
6	IC6	3.250	3.0811	13.44	21.01	15.40	5.0014
7	IC7	3.254	5.9813	13.00	38.52	14.84	9.9933
8	IC8	3.267	11.2370	12.35	67.15	14.16	20.0014
	Sum:	26.259	22.957	114.375	145.677	119.399	39.300
	Average:	3.282	2.870	14.297	18.210	14.925	4.913
	Rel.Std.Dev:	2.982 %	137.399 %	21.345 %	130.315 %	8.595 %	141.871 %

WET CHEMISTRY BATCH REPORT
Nov 15 2023, 10:02 am
Batch: WG345462 Run ID 1: R627175 Run ID 2: NONE

Parameter: Alkalinity
Prep Date: N/A

Date Analyzed: 14-NOV-23
Prep Method: N/A

Analyst Initials: BL
Prep Chemist: N/A

Sample	Samp Type	Method	Initial Amt.	Final Amt.	Rpt. DF	Result	Rpt Result	TS(%)	PQL	MDL	Adj PQL	RPD	%Rec
SQ6133-8	SAMP	SM2320B	50.0mL	50.0mL	1	101.139	100 mg/L	NA	5	0.23	5.0		
SQ6133-9	SAMP	SM2320B	50.0mL	50.0mL	1	185.261	180 mg/L	NA	5	0.23	5.0		
SQ6133-10	SAMP	SM2320B	50.0mL	50.0mL	1	114.165	110 mg/L	NA	5	0.23	5.0		
SQ6137-1	SAMP	SM2320B	50.0mL	50.0mL	1	418	420 mg/L	NA	5	0.23	5.0		
SQ6137-2	SAMP	SM2320B	50.0mL	50.0mL	1	307.342	310 mg/L	NA	5	0.23	5.0		
SQ6137-3	SAMP	SM2320B	50.0mL	50.0mL	1	258.36	260 mg/L	NA	5	0.23	5.0		
SQ6137-4	SAMP	SM2320B	50.0mL	50.0mL	1	380.232	380 mg/L	NA	5	0.23	5.0		
SQ6179-1	SAMP	SM2320B	50.0mL	50.0mL	1	150.206	150 mg/L	NA	5	0.23	5.0		
SQ6179-2	SAMP	SM2320B	50.0mL	50.0mL	1	193.261	190 mg/L	NA	5	0.23	5.0		
SQ6179-3	SAMP	SM2320B	50.0mL	50.0mL	1	312.195	310 mg/L	NA	5	0.23	5.0		
SQ6179-4	SAMP	SM2320B	50.0mL	50.0mL	1	191.102	190 mg/L	NA	5	0.23	5.0		
SQ6179-5	SAMP	SM2320B	50.0mL	50.0mL	1	154.882	150 mg/L	NA	5	0.23	5.0		
SQ6179-6	SAMP	SM2320B	50.0mL	50.0mL	1	139.822	140 mg/L	NA	5	0.23	5.0		
SQ6179-7	SAMP	SM2320B	50.0mL	50.0mL	1	164.45	160 mg/L	NA	5	0.23	5.0		
SQ6179-8	SAMP	SM2320B	50.0mL	50.0mL	1	202.271	200 mg/L	NA	5	0.23	5.0		
SQ6179-9	SAMP	SM2320B	50.0mL	50.0mL	1	203.829	200 mg/L	NA	5	0.23	5.0		
SQ6179-10	SAMP	SM2320B	50.0mL	50.0mL	1	163.59	160 mg/L	NA	5	0.23	5.0		
SQ6233-1	SAMP	SM2320B	50.0mL	50.0mL	1	68.466	68. mg/L	NA	5	0.23	5.0		
SQ6233-2	SAMP	SM2320B	50.0mL	50.0mL	1	44.101	44. mg/L	NA	5	0.23	5.0		
WG345462-1	MBLANK	SM2320B	50.0mL	50.0mL	1	2.758	J2.8 mg/L	NA	5	0.23	5.0		
WG345462-2	LCS	SM2320B	50.0mL	50.0mL	1	129.053	130 mg/L	NA	5	0.23	5.0		108
WG345462-3	LCSD	SM2320B	50.0mL	50.0mL	1	136.483	140 mg/L	NA	5	0.23	5.0	6	114
WG345462-4	MS	SM2320B	50.0mL	50.0mL	1	221.263	220 mg/L	NA	5	0.23	5.0		110
WG345462-5	MSD	SM2320B	50.0mL	50.0mL	1	217.186	220 mg/L	NA	5	0.23	5.0	2	107

Comments:

SQ6133-8	MS/MSD. Anions = NO3, SO4, Cl.
SQ6133-9	Anions = NO3, SO4, Cl.
SQ6133-10	Anions = NO3, SO4, Cl.
SQ6179-1	Anions = NO3, SO4, Cl.
SQ6179-2	Anions = NO3, SO4, Cl.
SQ6179-3	Anions = NO3, SO4, Cl.
SQ6179-4	Anions = NO3, SO4, Cl.
SQ6179-5	Anions = NO3, SO4, Cl.
SQ6179-6	Anions = NO3, SO4, Cl.
SQ6179-7	Anions = NO3, SO4, Cl.
SQ6179-8	Anions = NO3, SO4, Cl.
SQ6179-9	Anions = NO3, SO4, Cl.
SQ6179-10	Anions = NO3, SO4, Cl.
WG345462-1	SQ6133-10
WG345462-2	SQ6133-10
WG345462-3	SQ6133-10

Entered by: BL Date: 11/15/23 Accepted by: RAD Date: 11/15/23

Katahdin Analytical Services SQ6179 Page 559 of 740

WET CHEMISTRY BATCH REPORT
Nov 15 2023, 10:02 am
Batch: WG345462 Run ID 1: R627175 Run ID 2: NONE

WG345462-4	SQ6133-8
WG345462-5	SQ6133-8

Entered by: BL Date: 11/15/23 Accepted by: RAD Date: 11/15/23

WET CHEMISTRY BATCH REPORT - BICARBONATE
Nov 15 2023, 10:02 am
Batch: WG345463 Run ID 1: R627176 Run ID 2: NONE

Parameter: Bicarbonate (As CaCO3)

Date Analyzed: 14-NOV-23

Analyst Initials: BL

Prep Date: N/A

Prep Method: N/A

Prep Chemist: N/A

Sample	Samp Type	Method	Alkalinity	pH	Rpt. DF	Result	Rpt Result	TS(%)	PQL	MDL	Adj PQL	RPD	%Rec
SQ6233-1	SAMP	SM4500CO2 D	68.4660	6.506	1	68.44377	68. mg/L	NA	5	.497	5		
SQ6233-2	SAMP	SM4500CO2 D	44.1010	9.809	1	25.46226	25. mg/L	NA	5	.497	5		
WG345463-1	MBLANK	SM4500CO2 D	2.75800	5.967	1	2.7573	U5.0 mg/L	NA	5	.497	5		

Comments:

WG345463-1 SQ6233-1

Entered by: BL Date: 11/15/23 Accepted by: RAD Date: 11/15/23

WET CHEMISTRY BATCH REPORT - CARBONATE
Nov 15 2023, 10:02 am
Batch: WG345464 Run ID 1: R627177 Run ID 2: NONE

Parameter: Carbonate (As CaCO3)

Date Analyzed: 14-NOV-23

Analyst Initials: BL

Prep Date: N/A

Prep Method: N/A

Prep Chemist: N/A

Sample	Samp Type	Method	Bicarb	pH	Rpt. DF	Result	Rpt Result	TS(%)	PQL	MDL	Adj PQL	RPD	%Rec
SQ6233-1	SAMP	SM4500CO2 D	68.4438	6.506	1	.02063	U5.0 mg/L	NA	5	.497	5		
SQ6233-2	SAMP	SM4500CO2 D	25.4623	9.809	1	15.41789	15. mg/L	NA	5	.497	5		
WG345464-1	MBLANK	SM4500CO2 D	2.75730	5.967	1	.00024	U5.0 mg/L	NA	5	.497	5		

Comments:

WG345464-1 SQ6233-1

Entered by: BL Date: 11/15/23 Accepted by: RAD Date: 11/15/23

(ALK) WG345462 → R627175
(TBICARB) WG345463 → R627176
(TCARB) WG345464 → R627177

KATAHDIN ANALYTICAL SERVICES

ALKALINITY, BICARBONATE, CARBONATE, FREE CO2 - DL 25 AUTOTITRATOR

Analysis: EPA 310.1 (SM2320B) Calculations: (SM 4500-CO2 D)

pH Probe ID: DA111-SC	
Sulfuric Acid Titrant Reagent ID: W22103	Buffer pH 4 ID: SWLS132
Sulfuric Acid Concentration: 0.02N	Buffer pH 7 ID: S115
Alkalinity Check Standard (CCV): W22333 TV= 125	Buffer pH 10 ID: 5094
Alkalinity LCS/MS ID: W22326 TV=120	Pipette IDs: W00

Sample ID	Run #	Sample Volume (mL)	Sample ID	Run #	Sample Volume (mL)	Comments - Must indicate which sample
CCV	1	50	CCV	11	50	
CCB	2	"	CCB	12	1	
LCS	3	"	SQ6179-10	1	50	
LCSD	4	"	6232-9	2	"	SQ6232-9 = HIGH LEVEL
SQ6133-8	1	50	6233-1	3	"	
MS	2	"	-2	4	"	
MSD	3	"	CCV	5	"	
SQ6133-9	4	"	CCB	6	"	
-10	5	"				
6137-1	6	"				
-2	7	"				
-3	8	"				
CCV	9	"				
CCB	10	"				
SQ6137-4	1	50				
6179-1	2	"				
-2	3	"				
-3	4	"				
-4	5	"				
-5	6	"				
-6	7	"				
-7	8	"				
-8	9	"		BL	11/14/23	
-9	10	"				

Analyst: BL Date: 11/14/23

Checked By: RAD Date: 11/15/23

Start time: 11/14/2023 14:04

Results

No.	Comment / ID	Start time	Rx	Result	Unit	Name	
1/4	CCV	11/14/2023 2:05:21 PM	R1 =	4.325	mg/L	P Alkalinity- pH8.2	**98.82%**
			R2 =	123.524	mg/L	Total Alkalinity	
			R3 =	8.6	pH	pH	
			R4 =	19.5	oC	TEMPERATURE	
2/4	CCB	11/14/2023 2:09:21 PM	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	2.758	mg/L	Total Alkalinity	
			R3 =	5.967	pH	pH	
			R4 =	20.2	oC	TEMPERATURE	
3/4	LCS	11/14/2023 2:11:28 PM	R1 =	73.152	mg/L	P Alkalinity- pH8.2	**107.54%**
			R2 =	129.053	mg/L	Total Alkalinity	
			R3 =	10.721	pH	pH	
			R4 =	20.1	oC	TEMPERATURE	
4/4	LCSD	11/14/2023 2:15:18 PM	R1 =	77.312	mg/L	P Alkalinity- pH8.2	**113.74%**
			R2 =	136.483	mg/L	Total Alkalinity	
			R3 =	10.726	pH	pH	
			R4 =	20	oC	TEMPERATURE	

Start time: 11/14/2023 14:21

Results

No.	Comment / ID	Start time	Rx	Result	Unit	Name
1/10	SQ6133-8	11/14/2023 2:23:02 PM	R1 =	0	mg/L	P Alkalinity- pH8.2
			R2 =	101.139	mg/L	Total Alkalinity
			R3 =	7.074	pH	pH
			R4 =	9	oC	TEMPERATURE
2/10	SQ6133-8 MS	11/14/2023 2:26:41 PM	R1 =	93.404	mg/L	P Alkalinity- pH8.2
			R2 =	221.263	mg/L	Total Alkalinity
			R3 =	10.169	pH	pH
			R4 =	10.4	oC	TEMPERATURE
3/10	SQ6133-8 MSD	11/14/2023 2:31:10 PM	R1 =	92.341	mg/L	P Alkalinity- pH8.2
			R2 =	217.186	mg/L	Total Alkalinity
			R3 =	10.151	pH	pH
			R4 =	11	oC	TEMPERATURE
4/10	SQ6133-9	11/14/2023 2:35:23 PM	R1 =	0	mg/L	P Alkalinity- pH8.2
			R2 =	185.261	mg/L	Total Alkalinity
			R3 =	7.769	pH	pH
			R4 =	10.4	oC	TEMPERATURE
5/10	SQ6133-10	11/14/2023 2:39:33 PM	R1 =	0	mg/L	P Alkalinity- pH8.2
			R2 =	114.165	mg/L	Total Alkalinity
			R3 =	7.543	pH	pH
			R4 =	10.6	oC	TEMPERATURE
6/10	SQ6137-1	11/14/2023 2:43:11 PM	R1 =	0	mg/L	P Alkalinity- pH8.2
			R2 =	418	mg/L	Total Alkalinity
			R3 =	6.467	pH	pH
			R4 =	11.1	oC	TEMPERATURE
7/10	SQ6137-2	11/14/2023 2:48:53 PM	R1 =	0	mg/L	P Alkalinity- pH8.2
			R2 =	307.342	mg/L	Total Alkalinity
			R3 =	6.255	pH	pH
			R4 =	12	oC	TEMPERATURE
8/10	SQ6137-3	11/14/2023 2:54:43 PM	R1 =	0	mg/L	P Alkalinity- pH8.2
			R2 =	258.36	mg/L	Total Alkalinity
			R3 =	5.914	pH	pH
			R4 =	12.8	oC	TEMPERATURE
9/10	CCV	11/14/2023 3:00:03 PM	R1 =	7.587	mg/L	P Alkalinity- pH8.2	**102.95%**
			R2 =	128.686	mg/L	Total Alkalinity	
			R3 =	8.681	pH	pH	
			R4 =	18.6	oC	TEMPERATURE	

10/10	CCB	11/14/2023 3:04:09 PM	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	2.227	mg/L	Total Alkalinity	
			R3 =	5.621	pH	pH	
			R4 =	19.3	oC	TEMPERATURE	

Start time: 11/14/2023 15:17

Results

No.	Comment / ID	Start time	Rx	Result	Unit	Name	
1/12	SQ6137-4	11/14/2023 3:19:09 PM	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	380.232	mg/L	Total Alkalinity	
			R3 =	6.585	pH	pH	
			R4 =	12.2	oC	TEMPERATURE	
2/12	SQ6179-1	11/14/2023 3:24:43 PM	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	150.206	mg/L	Total Alkalinity	
			R3 =	7.685	pH	pH	
			R4 =	12.1	oC	TEMPERATURE	
3/12	SQ6179-2	11/14/2023 3:28:33 PM	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	193.261	mg/L	Total Alkalinity	
			R3 =	7.928	pH	pH	
			R4 =	12.1	oC	TEMPERATURE	
4/12	SQ6179-3	11/14/2023 3:32:38 PM	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	312.195	mg/L	Total Alkalinity	
			R3 =	7.96	pH	pH	
			R4 =	12.5	oC	TEMPERATURE	
5/12	SQ6179-4	11/14/2023 3:37:35 PM	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	191.102	mg/L	Total Alkalinity	
			R3 =	7.404	pH	pH	
			R4 =	13.2	oC	TEMPERATURE	
6/12	SQ6179-5	11/14/2023 3:41:40 PM	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	154.882	mg/L	Total Alkalinity	
			R3 =	7.439	pH	pH	
			R4 =	13.5	oC	TEMPERATURE	
7/12	SQ6179-6	11/14/2023 3:45:34 PM	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	139.822	mg/L	Total Alkalinity	
			R3 =	7.459	pH	pH	
			R4 =	14.4	oC	TEMPERATURE	
8/12	SQ6179-7	11/14/2023 3:49:29 PM	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	164.45	mg/L	Total Alkalinity	
			R3 =	7.549	pH	pH	
			R4 =	14.4	oC	TEMPERATURE	
9/12	SQ6179-8	11/14/2023 3:53:13 PM	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	202.271	mg/L	Total Alkalinity	
			R3 =	7.367	pH	pH	
			R4 =	14.5	oC	TEMPERATURE	
10/12	SQ6179-9	11/14/2023 3:57:41 PM	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	203.829	mg/L	Total Alkalinity	
			R3 =	7.471	pH	pH	
			R4 =	15	oC	TEMPERATURE	
11/12	CCV	11/14/2023 4:02:23 PM	R1 =	8.061	mg/L	P Alkalinity- pH8.2	**100.21%**
			R2 =	125.26	mg/L	Total Alkalinity	
			R3 =	8.704	pH	pH	
			R4 =	18.6	oC	TEMPERATURE	
12/12	CCB	11/14/2023 4:06:31 PM	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	2.34	mg/L	Total Alkalinity	
			R3 =	5.905	pH	pH	
			R4 =	19.2	oC	TEMPERATURE	

Start time: 11/14/2023 16:11

Results

No.	Comment / ID	Start time	Rx	Result	Unit	Name	
1/6	SQ6179-10	11/14/2023 4:12:38 PM	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	163.59	mg/L	Total Alkalinity	
			R3 =	7.504	pH	pH	
			R4 =	13	oC	TEMPERATURE	
2/6	SQ6232-9	11/14/2023 4:16:50 PM	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	NaN	mg/L	Total Alkalinity	
			R3 =	6.825	pH	pH	
			R4 =	13.5	oC	TEMPERATURE	
3/6	SQ6233-1	11/14/2023 4:26:27 PM	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	68.466	mg/L	Total Alkalinity	
			R3 =	6.506	pH	pH	
			R4 =	15	oC	TEMPERATURE	
4/6	SQ6233-2	11/14/2023 4:29:28 PM	R1 =	19.416	mg/L	P Alkalinity- pH8.2	
			R2 =	44.101	mg/L	Total Alkalinity	
			R3 =	9.809	pH	pH	
			R4 =	15.9	oC	TEMPERATURE	
5/6	CCV	11/14/2023 4:32:37 PM	R1 =	7.174	mg/L	P Alkalinity- pH8.2	**106.90%**
			R2 =	133.622	mg/L	Total Alkalinity	
			R3 =	8.714	pH	pH	
			R4 =	18.9	oC	TEMPERATURE	
6/6	CCB	11/14/2023 4:36:50 PM	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	2.585	mg/L	Total Alkalinity	
			R3 =	5.922	pH	pH	
			R4 =	19.8	oC	TEMPERATURE	

Start time: 11/14/2023 9:15

Results

No.	Comment / ID	Start time	Rx	Result	Unit	Name

Calibration data

Number of segments	1	
Slope	-58.53 mV/pH	
Zero point	7.060 pH	
Calibration temperature	25.0 oC	

Katahdin
ANALYTICAL SERVICES

ACCREDITED IN ACCORDANCE WITH nelac
Cert No E87604

Wet Chemistry Batch Report

Analyst Initials: RAD
Date Analyzed: 30-NOV-23

Batch: WG346305
Prep Method: N/A
Prep Chemist: RAD

Sample	Samp Type	Method	Parameter	DF	Result	Rpt. Result	Units	PQL	Adj. PQL	MDL	Adj. MDL	RPD	Rec.
SQ6565-1	SAMP	SW846 9056A	Chloride	1	19.6792	20	mg/L	2	2.0	.5	0.50		
SQ6565-1	SAMP	SW846 9056A	Nitrate as N	1	.0036	U 0.040	mg/L	.05	0.050	.02	0.020		
SQ6565-1	SAMP	SW846 9056A	Nitrite as N	1	.2394	0.24	mg/L	.05	0.050	.013	0.013		
SQ6565-1	SAMP	SW846 9056A	Sulfate	1	6.5976	6.6	mg/L	1	1.0	.25	0.25		
SQ6565-2	SAMP	SW846 9056A	Chloride	1	3.0116	3.0	mg/L	2	2.0	.5	0.50		
SQ6565-2	SAMP	SW846 9056A	Nitrate as N	1	.0028	U 0.040	mg/L	.05	0.050	.02	0.020		
SQ6565-2	SAMP	SW846 9056A	Nitrite as N	1	.2913	0.29	mg/L	.05	0.050	.013	0.013		
SQ6565-2	SAMP	SW846 9056A	Sulfate	1	13.574	14	mg/L	1	1.0	.25	0.25		
SQ6565-3	SAMP	SW846 9056A	Chloride	1	3.8034	3.8	mg/L	2	2.0	.5	0.50		
SQ6565-3	SAMP	SW846 9056A	Nitrate as N	1	.0104	U 0.040	mg/L	.05	0.050	.02	0.020		
SQ6565-3	SAMP	SW846 9056A	Nitrite as N	1	.2845	0.28	mg/L	.05	0.050	.013	0.013		
SQ6565-3	SAMP	SW846 9056A	Sulfate	1	6.2337	6.2	mg/L	1	1.0	.25	0.25		
SQ6565-5	SAMP	SW846 9056A	Chloride	1	6.3315	6.3	mg/L	2	2.0	.5	0.50		
SQ6565-5	SAMP	SW846 9056A	Nitrate as N	1	.0969	0.097	mg/L	.05	0.050	.02	0.020		
SQ6565-5	SAMP	SW846 9056A	Nitrite as N	1	.1282	0.13	mg/L	.05	0.050	.013	0.013		
SQ6565-5	SAMP	SW846 9056A	Sulfate	1	13.8045	14	mg/L	1	1.0	.25	0.25		
SQ6565-6	SAMP	SW846 9056A	Chloride	1	15.0463	15	mg/L	2	2.0	.5	0.50		
SQ6565-6	SAMP	SW846 9056A	Nitrate as N	1	.0039	U 0.040	mg/L	.05	0.050	.02	0.020		
SQ6565-6	SAMP	SW846 9056A	Nitrite as N	1	.2652	0.26	mg/L	.05	0.050	.013	0.013		
SQ6565-6	SAMP	SW846 9056A	Sulfate	1	12.354	12	mg/L	1	1.0	.25	0.25		
WG346305-1	MBLANK	SW846 9056A	Chloride	1	.0084	U 1.0	mg/L	2	2.0	.5	0.50		
WG346305-1	MBLANK	SW846 9056A	Nitrate as N	1	.0121	U 0.040	mg/L	.05	0.050	.02	0.020		
WG346305-1	MBLANK	SW846 9056A	Nitrite as N	1	.0177	J 0.018	mg/L	.05	0.050	.013	0.013		
WG346305-1	MBLANK	SW846 9056A	Sulfate	1	.0526	U 0.50	mg/L	1	1.0	.25	0.25		
WG346305-2	LCS	SW846 9056A	Chloride	1	3.551	3.55	mg/L	2	2.00	.5	0.500		94.7
WG346305-2	LCS	SW846 9056A	Nitrate as N	1	.7959	0.796	mg/L	.05	0.0500	.02	0.0200		94.2
WG346305-2	LCS	SW846 9056A	Nitrite as N	1	1.1172	1.12	mg/L	.05	0.0500	.013	0.0130		98.2
WG346305-2	LCS	SW846 9056A	Sulfate	1	3.6502	3.65	mg/L	1	1.00	.25	0.250		97.3
WG346305-3	DUP	SW846 9056A	Chloride	1	19.7037	20	mg/L	2	2.0	.5	0.50	0	
WG346305-3	DUP	SW846 9056A	Nitrate as N	1	.0043	U 0.040	mg/L	.05	0.050	.02	0.020	NC	
WG346305-3	DUP	SW846 9056A	Nitrite as N	1	.2382	0.24	mg/L	.05	0.050	.013	0.013	0	
WG346305-3	DUP	SW846 9056A	Sulfate	1	6.5754	6.6	mg/L	1	1.0	.25	0.25	0	
WG346305-4	MS	SW846 9056A	Chloride	1	23.5542	23.6	mg/L	2	2.00	.5	0.500		98.1
WG346305-4	MS	SW846 9056A	Nitrate as N	1	.760105	* 0.760	mg/L	.05	0.0500	.02	0.0200		85.5
WG346305-4	MS	SW846 9056A	Nitrite as N	1	1.25158	* 1.25	mg/L	.05	0.0500	.013	0.0130		84.3
WG346305-4	MS	SW846 9056A	Sulfate	1	10.4801	10.5	mg/L	1	1.00	.25	0.250		98.3
WG346305-5	MS	SW846 9056A	Chloride	1	6.88789	6.89	mg/L	2	2.00	.5	0.500		98.1
WG346305-5	MS	SW846 9056A	Nitrate as N	1	.759789	* 0.760	mg/L	.05	0.0500	.02	0.0200		85.5
WG346305-5	MS	SW846 9056A	Nitrite as N	1	1.318	* 1.32	mg/L	.05	0.0500	.013	0.0130		85.6
WG346305-5	MS	SW846 9056A	Sulfate	1	17.5365	17.5	mg/L	1	1.00	.25	0.250		100

Comments:

SQ6565-1	Anions=Cl, NO3, NO
SQ6565-2	MS/MSD 8260 & 1,4-
SQ6565-3	Anions=Cl, NO3, NO

Entered by: RAD Date: 12/1/23

Accepted by: SS Date: 12/4/23

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Wet Chemistry Batch Report

Analyst Initials: RAD
Date Analyzed: 30-NOV-23

Batch: WG346305
Prep Method: N/A
Prep Chemist: RAD

Sample	Samp Type	Method	Parameter	DF	Result	Rpt. Result	Units	PQL	Adj. PQL	MDL	Adj. MDL	RPD	Rec.
SQ6565-5		Anions=Cl, NO3, NO											
SQ6565-6		MS/MSD 8260 & 1,4-											
WG346305-1		SQ6565-1											
WG346305-2		SQ6565-1											
WG346305-3		SQ6565-1											
WG346305-4		SQ6565-1											
WG346305-5		SQ6565-2											

Entered by: RAD Date: 12/1/23 Accepted by: SS Date: 12/4/23

Katahdin Analytical Services SQ6179 Page 568 of 740

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Wet Chemistry Batch Report

Analyst Initials: RAD
Date Analyzed: 30-NOV-23

Batch: WG346306
Prep Method: N/A
Prep Chemist: RAD

Sample	Samp Type	Method	Parameter	DF	Result	Rpt. Result	Units	PQL	Adj. PQL	MDL	Adj. MDL	RPD	Rec.
SQ6295-1DL	SAMP	EPA 300.0	Chloride	10	214.7302	210	mg/L	2	20.	.0993	0.99		
SQ6295-2DL	SAMP	EPA 300.0	Chloride	5	76.2849	76.	mg/L	2	10.	.0993	0.50		
SQ6295-4DL	SAMP	EPA 300.0	Chloride	5	76.3247	76.	mg/L	2	10.	.0993	0.50		
SQ6295-5DL	SAMP	EPA 300.0	Chloride	2	59.2329	59.	mg/L	2	4.0	.0993	0.20		
SQ6295-6DL	SAMP	EPA 300.0	Chloride	10	209.8212	210	mg/L	2	20.	.0993	0.99		
SQ6295-7DL	SAMP	EPA 300.0	Chloride	20	596.408	600	mg/L	2	40.	.0993	2.0		
SQ6335-1DL	SAMP	EPA 300.0	Chloride	2	41.2421	41.	mg/L	2	4.0	.0993	0.20		
SQ6335-2DL	SAMP	EPA 300.0	Chloride	2	65.4757	65.	mg/L	2	4.0	.0993	0.20		
SQ6335-3DL	SAMP	EPA 300.0	Chloride	5	91.9868	92.	mg/L	2	10.	.0993	0.50		
SQ6335-4DL	SAMP	EPA 300.0	Chloride	5	126.5321	130	mg/L	2	10.	.0993	0.50		
WG346306-1	MBLANK	EPA 300.0	Chloride	1	.0084	U 1.0	mg/L	2	2.0	.0993	0.099		
WG346306-2	LCS	EPA 300.0	Chloride	1	3.551	3.55	mg/L	2	2.0	.0993	0.099		94.7

Comments:

SQ6295-1	Anions = SO4, Cl.
SQ6295-2	Anions = SO4, Cl.
SQ6295-4	Anions = SO4, Cl.
SQ6295-5	Anions = SO4, Cl.
SQ6295-6	Anions = SO4, Cl.
SQ6295-7	Anions = SO4, Cl.
SQ6335-1	Anions = SO4, Cl.
SQ6335-2	Anions = SO4, Cl.
SQ6335-3	Anions = SO4, Cl.
SQ6335-4	Anions = SO4, Cl.
WG346306-1	SQ6295-1
WG346306-2	SQ6295-1

Entered by: RAD Date: 12/1/23 Accepted by: SS Date: 12/4/23

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Wet Chemistry Batch Report

Analyst Initials: RAD
Date Analyzed: 30-NOV-23
01-DEC-23

Batch: WG346307
Prep Method: N/A
Prep Chemist: RAD

Sample	Samp Type	Method	Parameter	DF	Result	Rpt. Result	Units	PQL	Adj. PQL	MDL	Adj. MDL	RPD	Rec.
SQ6179-1DL	SAMP	EPA 300.0	Chloride	5	114.9352	110	mg/L	2	10.	.0993	0.50		
SQ6179-3DL	SAMP	EPA 300.0	Chloride	5	104.5609	100	mg/L	2	10.	.0993	0.50		
SQ6179-4DLA	SAMP	EPA 300.0	Chloride	20	624.0627	620	mg/L	2	40.	.0993	2.0		
SQ6179-4DLB	SAMP	EPA 300.0	Sulfate	2	120.1149	120	mg/L	1	2.0	.0637	0.13		
SQ6179-5DLA	SAMP	EPA 300.0	Chloride	20	414.8466	410	mg/L	2	40.	.0993	2.0		
SQ6179-5DLB	SAMP	EPA 300.0	Sulfate	5	163.6907	160	mg/L	1	5.0	.0637	0.32		
SQ6179-6DL	SAMP	EPA 300.0	Chloride	10	372.3177	370	mg/L	2	20.	.0993	0.99		
SQ6179-8DLA	SAMP	EPA 300.0	Chloride	20	651.3657	650	mg/L	2	40.	.0993	2.0		
SQ6179-8DLB	SAMP	EPA 300.0	Sulfate	5	204.29	200	mg/L	1	5.0	.0637	0.32		
SQ6179-9DLA	SAMP	EPA 300.0	Chloride	20	647.1713	650	mg/L	2	40.	.0993	2.0		
SQ6179-9DLB	SAMP	EPA 300.0	Sulfate	5	204.1355	200	mg/L	1	5.0	.0637	0.32		
WG346307-1	MBLANK	EPA 300.0	Chloride	1	.0167	U 1.0	mg/L	2	2.0	.0993	0.099		
WG346307-1	MBLANK	EPA 300.0	Sulfate	1	.1146	J 0.11	mg/L	1	1.0	.0637	0.064		
WG346307-2	LCS	EPA 300.0	Chloride	1	3.5317	3.53	mg/L	2	2.00	.0993	0.0990		94.1
WG346307-2	LCS	EPA 300.0	Sulfate	1	3.8819	3.88	mg/L	1	1.00	.0637	0.0640		103.
WG346307-3	DUP	EPA 300.0	Chloride	10	380.7431	380	mg/L	2	20.	.0993	0.99	2	
WG346307-4	MS	EPA 300.0	Chloride	10	408.674	409	mg/L	2	20.0	.0993	0.990		92

Comments:

SQ6179-1	Anions = NO3, SO4,
SQ6179-3	Anions = NO3, SO4,
SQ6179-4	Anions = NO3, SO4,
SQ6179-5	Anions = NO3, SO4,
SQ6179-6	Anions = NO3, SO4,
SQ6179-8	Anions = NO3, SO4,
SQ6179-9	Anions = NO3, SO4,
WG346307-1	SQ6179-1
WG346307-2	SQ6179-1
WG346307-3	SQ6179-6
WG346307-4	SQ6179-6

Entered by: RAD Date: 12/1/23 Accepted by: SS Date: 12/4/23

IC STANDARDS PREPARATION

Fill sheet in completely and file with each batch of samples analyzed.

IC8 MIX ID:	EXPIRATION DATE:	ICAL DATE:	CCV STOCK ID:	EXPIRATION DATE:
W22233	10/23/23	10/12/23	W22360	12/11/23

ALALYTE	INITIAL AMOUNT (mL)	OF	STOCK CONC. (mg/L)	TO	FINAL VOLUME (mL)	=	FINAL CONC. (mg/L)
Cl	2.0	OF	1000	TO	100	=	20
NO2 (as N)	0.8		1000				8
NO3 (as N)	0.8		1000				8
Br	4.0		1000				40
SO4	4.0		1000				40
F	1.0		1000				10
PO4 (as P)	1.0		1000				10

WORKING STANDARDS

Standards prepared on each day of use.

STD.	INITIAL AMOUNT (mL)	OF	FINAL VOLUME (mL)	FINAL CONC. (mg/L)							STD ID*
				Cl	NO2	NO3	Br	SO4	PO4	F	
IC8	5	IC8	5	40	16	16	80	80	20	20	IC8-101223
IC7	2.5	IC8	5	20	8	8	40	40	10	10	IC7-101223
IC6	2.5	IC7	5	10	4	4	20	20	5	5	IC6-101223
IC5	1.25	IC7	5	5	2	2	10	10	2.5	2.5	IC5-101223
IC4	1.25	IC6	5	2.5	1	1	5	5	1.25	1.25	IC4-101223
IC3	0.5	IC6	5	1	0.4	0.4	2	2	0.5	0.5	IC3-101223
IC2	0.5	IC3	5	0.1	0.04	0.04	0.2	0.2	0.05	0.05	IC2-101223
CCV	2.5	IC7	5	10	4	4	20	20	5	5	CCV-113023

* STD ID is prefix followed by the date of preparation (ie. IC6-020216)

LCS/MATRIX SPIKE MIX ID: W22361	EXPIRATION DATE: 12/11/23

3.75 mL of High Purity Multi-Element IC Standard Solution "A" and 3.75 mL of High Purity Multi-Element IC Standard Solution "B" diluted to 50 mL. For MS, add 0.25 mL of mix to 4.75 mL of sample. For LCS, add 0.25 mL of mix to 4.75 mL of DI water.

FINAL CONCENTRATIONS (mg/L)

Cl	NO2 (as N)	NO3 (as N)	Br	SO4	PO4 (as P)	F	STD ID*
3.75	1.14	0.845	3.75	3.75	1.22	3.75	IC-LCS-113023

PIPETTES: W00, W16

2x dil = 2.5mL samp + 2.5mL DI	**5x dil** = 1.0mL samp + 4.0mL DI	**10x dil** = 0.5mL samp + 4.5mL DI
20x dil = 0.25mL samp + 4.75mL DI	**50x dil** = 0.1mL samp + 4.9mL DI	**100x dil** = 0.05mL samp + 4.95mL DI
200x dil = 0.025mL samp + 4.975mL DI	**500x dil** = 0.01mL samp + 4.99mL DI	**1000x dil** = 0.005mL samp + 4.995mL DI

Katahdin Analytical Services **ION CHROMATOGRAPHY RUNLOG** Dionex ICS-2100 (Instrument IC-3)

Analysis Date: 11/30/23	**Analytical Column S/N:** 220503194	**Calibration Date:** 10/12/23
Analysis Sequence: 113023 A	**Guard Column S/N:** 220406208	**Calibration Sequence:** 101223 CAL
Analyst: RAD	**Suppressor S/N:** 2211170086	☐ If box at left is checked, continued from previous page. Refer to previous page for header information.

Reporting / Reanalysis Codes: ✓ Report without manipulation; S Report, peak automatically reintegrated with SmartPeak; M Report, peak manually integrated; A Report, peak manually assigned; R Do not report, reanalyze sample

Method Codes: E EPA 300.0; SW SW846 9056A

Katahdin Sample Number	Dilution Factor	Method Code	Report or Reanalyze (enter appropriate code): F	Cl	NO_2	SO_4	Br	NO_3	PO_4	Comments
CCV			✓	✓	✓	✓	✓	✓		
CCB			M	✓	✓	M	M	✓		
LCS			✓	✓	✓	✓	R	✓		
SQ6565-1	1	S		✓	✓	✓		M		
-1 DUP				✓	✓	✓		M		
-1 MS				✓	✓	✓		✓		
-2				✓	✓	✓		M		
-2 MS				✓	✓	✓		✓		
-3				✓	✓	✓		✓		
-5				✓	✓	✓		✓		
-6				✓	✓	✓		M		
6295-1	10	E		✓						
CCV			✓	✓	✓	✓	✓	✓		
CCB			M	✓	✓	✓	✓	✓		
6295 -2	5	E		✓						
-4	5			✓						
-5	2			✓						
-6	10			✓						
-7	20			✓						
6335 -1	2	E		✓						
-2	2			✓						
-3	5			✓						

CCV 12/4/23 13:51 → SQ6565-1 → 12628472
SQ6565-6 → 12628470 → 12628471 → SQ6295-1 → CCV

Reviewed by: SS
QAWL1114 - 000893

Review Date: 12/4/23

Katahdin Analytical Services **ION CHROMATOGRAPHY RUNLOG** Dionex ICS-2100 (Instrument IC-3)

Analysis Date:	**Analytical Column S/N:**	**Calibration Date:**
Analysis Sequence:	**Guard Column S/N:**	**Calibration Sequence:**
Analyst:	**Suppressor S/N:**	☑ If box at left is checked, continued from previous page. Refer to previous page for header information.

Reporting / Reanalysis Codes: ✓ Report without manipulation; S Report, peak automatically reintegrated with SmartPeak; M Report, peak manually integrated; A Report, peak manually assigned; R Do not report, reanalyze sample

Method Codes: E EPA 300.0; SW SW846 9056A

Katahdin Sample Number	Dilution Factor	Method Code	Report or Reanalyze (enter appropriate code): F	Cl	NO_2	SO_4	Br	NO_3	PO_4	Comments
6335-4	5	E		✓						
61179-1	5	E		✓						
CCV			✓	✓	✓	✓	✓	✓		
CCB			M	✓	✓	M	M	M		
61179-3	5	E		✓						
-4	20			✓						
-4	2					✓				
-5	20			✓						
-5	5					M				
-6	10			M						
-6DUP	10			M						
-6MS	10			✓						
-8	20			✓						
-8	5					M				
CCV			✓	✓	✓	✓	✓	✓		
CCB			M	✓	✓	M	M	✓		
LCS			✓	✓	✓	✓	R	✓		
61179-9	20	E		M						
-9	5					M				
CCV			✓	✓	✓	✓	✓	✓		
CCB			✓	✓	✓	M	M	✓		RAD 12/1/23

Reviewed by: SS Review Date: 12/4/23

QAWL1114 - 000893

0000015

Sequence Overview

Sequence Details

Name:	**113023 A REPROC**	*Created On:*	**28/Dec/22 13:33:49**
Directory:	**2023\11-NOV**	*Created By:*	**wetlab**
Data Vault:	**ChromeleonLocal**	*Updated On:*	**01/Dec/23 12:36:22**
No. of Injections:	**43**	*Updated By:*	**wetlab**

Injection Details

No.	Injection Name	Position	Type	Level	Inject Time	Status
1	CCV	1	Check Standard	06	30/Nov/23 16:45:58	Finished
2	CCB	2	Blank		30/Nov/23 17:02:44	Finished
3	LCS	3	Check Standard	09	30/Nov/23 17:20:00	Finished
4	SQ6565-1	4	Unknown		30/Nov/23 17:37:16	Finished
5	SQ6565-1 DUP	5	Unknown		30/Nov/23 17:54:31	Finished
6	SQ6565-1 MS	6	Unknown		30/Nov/23 18:11:47	Finished
7	SQ6565-2	7	Unknown		30/Nov/23 18:29:04	Finished
8	SQ6565-2 MS	8	Unknown		30/Nov/23 18:46:20	Finished
9	SQ6565-3	9	Unknown		30/Nov/23 19:03:36	Finished
10	SQ6565-5	10	Unknown		30/Nov/23 19:20:52	Finished
11	SQ6565-6	11	Unknown		30/Nov/23 19:38:08	Finished
12	SQ6295-1DL	12	Unknown		30/Nov/23 19:55:24	Finished
13	CCV	13	Check Standard	06	30/Nov/23 20:12:41	Finished
14	CCB	14	Blank		30/Nov/23 20:29:57	Finished
15	SQ6295-2DL	15	Unknown		30/Nov/23 20:47:13	Finished
16	SQ6295-4DL	16	Unknown		30/Nov/23 21:04:29	Finished
17	SQ6295-5DL	17	Unknown		30/Nov/23 21:21:45	Finished
18	SQ6295-6DL	18	Unknown		30/Nov/23 21:39:01	Finished
19	SQ6295-7DL	19	Unknown		30/Nov/23 21:56:17	Finished
20	SQ6335-1DL	20	Unknown		30/Nov/23 22:13:33	Finished
21	SQ6335-2DL	21	Unknown		30/Nov/23 22:30:49	Finished
22	SQ6335-3DL	22	Unknown		30/Nov/23 22:48:05	Finished
23	SQ6335-4DL	23	Unknown		30/Nov/23 23:05:22	Finished
24	SQ6179-1DL	24	Unknown		30/Nov/23 23:22:38	Finished
25	CCV	25	Check Standard	06	30/Nov/23 23:39:54	Finished
26	CCB	26	Blank		30/Nov/23 23:57:10	Finished
27	SQ6179-3DL	27	Unknown		01/Dec/23 00:14:26	Finished
28	SQ6179-4DLA	28	Unknown		01/Dec/23 00:31:42	Finished
29	SQ6179-4DLB	29	Unknown		01/Dec/23 00:48:58	Finished
30	SQ6179-5DLA	30	Unknown		01/Dec/23 01:06:14	Finished
31	SQ6179-5DLB	31	Unknown		01/Dec/23 01:23:30	Finished
32	SQ6179-6DL	32	Unknown		01/Dec/23 01:40:46	Finished
33	SQ6179-6DL DUP	33	Unknown		01/Dec/23 01:58:02	Finished
34	SQ6179-6DL MS	34	Unknown		01/Dec/23 02:15:18	Finished
35	SQ6179-8DLA	35	Unknown		01/Dec/23 02:32:34	Finished
36	SQ6179-8DLB	36	Unknown		01/Dec/23 02:49:50	Finished
37	CCV	37	Check Standard	06	01/Dec/23 03:07:06	Finished
38	CCB	38	Blank		01/Dec/23 03:24:22	Finished
39	LCS	39	Check Standard	09	01/Dec/23 03:41:38	Finished
40	SQ6179-9DLA	40	Unknown		01/Dec/23 03:58:54	Finished
41	SQ6179-9DLB	41	Unknown		01/Dec/23 04:16:10	Finished
42	CCV	49	Check Standard	06	01/Dec/23 04:33:26	Finished

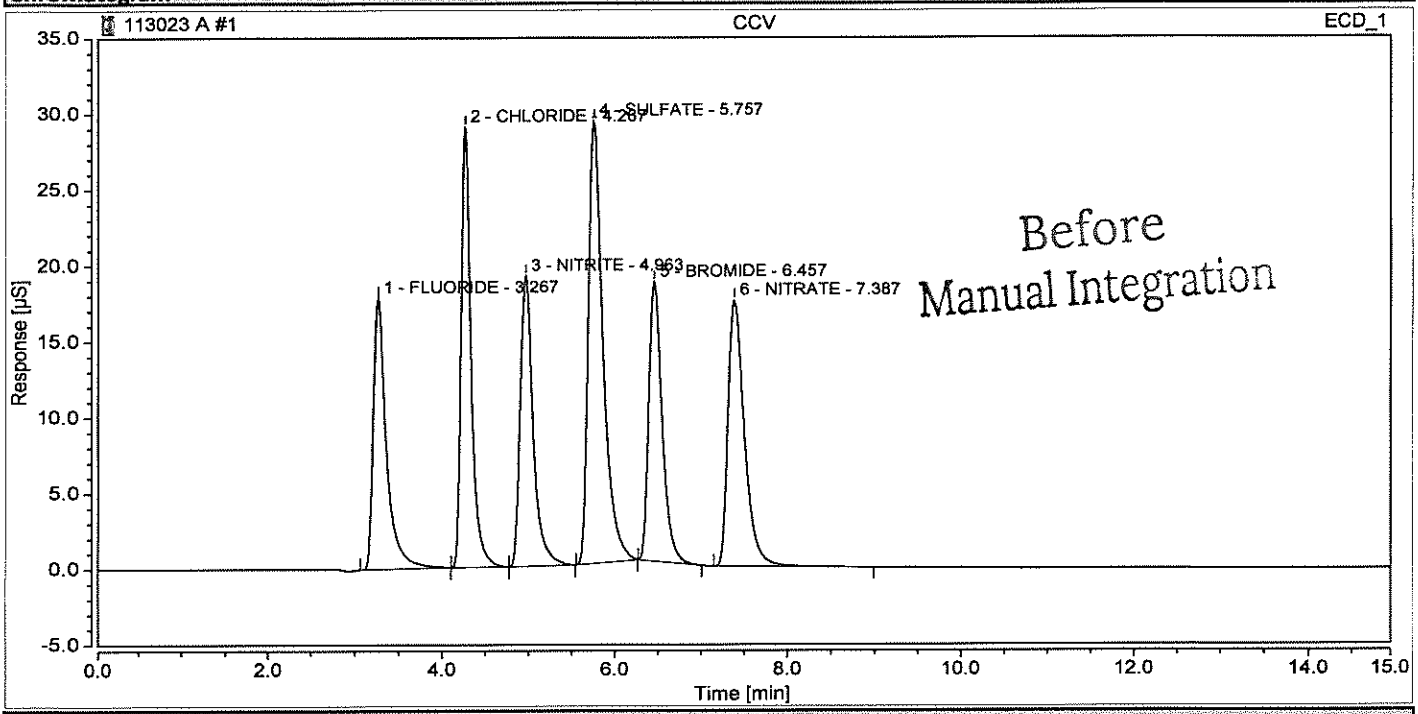
43	CCB	50	Blank		01/Dec/23 04:50:45	Finished

Chromatogram and Results

Injection Details

Injection Name:	**CCV**	*Run Time (min):*	**14.96**
Vial Number:	**1**	*Injection Volume:*	**200.00**
Injection Type:	**Check Standard**	*Channel:*	**ECD_1**
Calibration Level:	**06**	*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**30/Nov/23 16:45**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

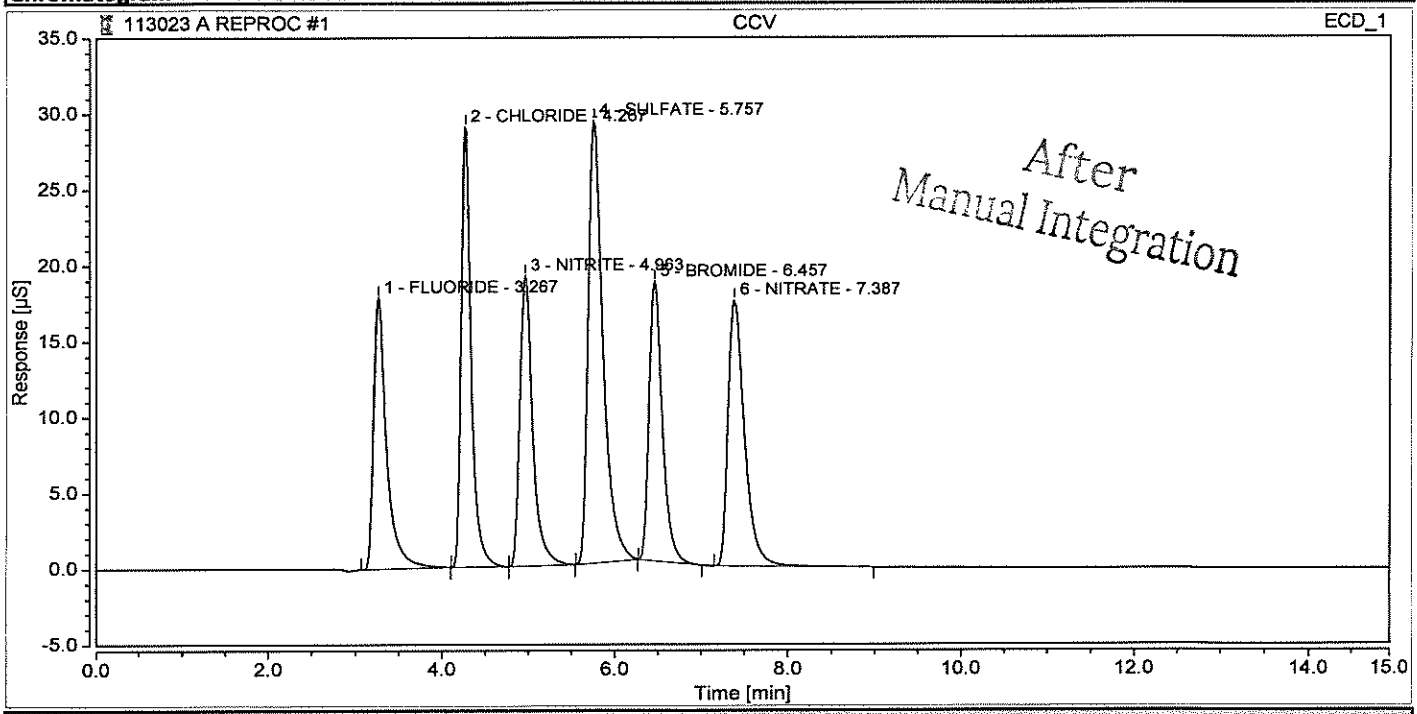
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.267	3.107	17.873	13.35	13.63	5.0451	0.9013
2	CHLORIDE	4.267	3.889	29.013	16.70	22.13	9.9785	-0.2152
3	NITRITE	4.963	3.339	19.130	14.34	14.59	4.0228	0.5710
4	SULFATE	5.757	5.758	29.176	24.73	22.25	20.2534	1.2670
5	BROMIDE	6.457	3.325	18.402	14.28	14.03	19.5576	-2.2120
6	NITRATE	7.387	3.864	17.525	16.60	13.37	3.9488	-1.2795
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**23.283**	**131.119**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**CCV**	*Run Time (min):*	**14.96**
Vial Number:	**1**	*Injection Volume:*	**200.00**
Injection Type:	**Check Standard**	*Channel:*	**ECD_1**
Calibration Level:	**06**	*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**30/Nov/23 16:45**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

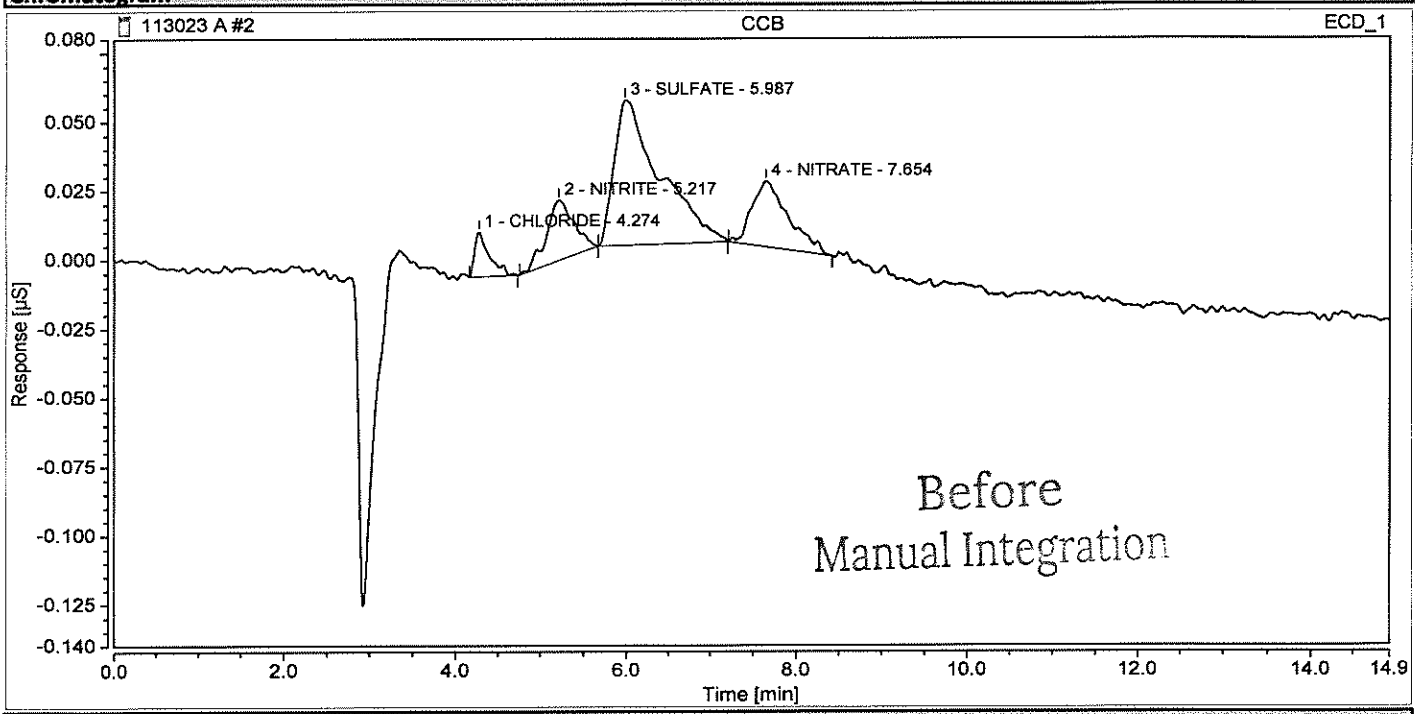
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.267	3.107	17.873	13.35	13.63	5.0451	0.9013
2	CHLORIDE	4.267	3.889	29.013	16.70	22.13	9.9785	-0.2152
3	NITRITE	4.963	3.339	19.130	14.34	14.59	4.0228	0.5710
4	SULFATE	5.757	5.758	29.176	24.73	22.25	20.2534	1.2670
5	BROMIDE	6.457	3.325	18.402	14.28	14.03	19.5576	-2.2120
6	NITRATE	7.387	3.864	17.525	16.60	13.37	3.9488	-1.2795
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**23.283**	**131.119**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**CCB**	*Run Time (min):*	**14.95**
Vial Number:	**2**	*Injection Volume:*	**200.00**
Injection Type:	**Blank**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**30/Nov/23 17:02**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

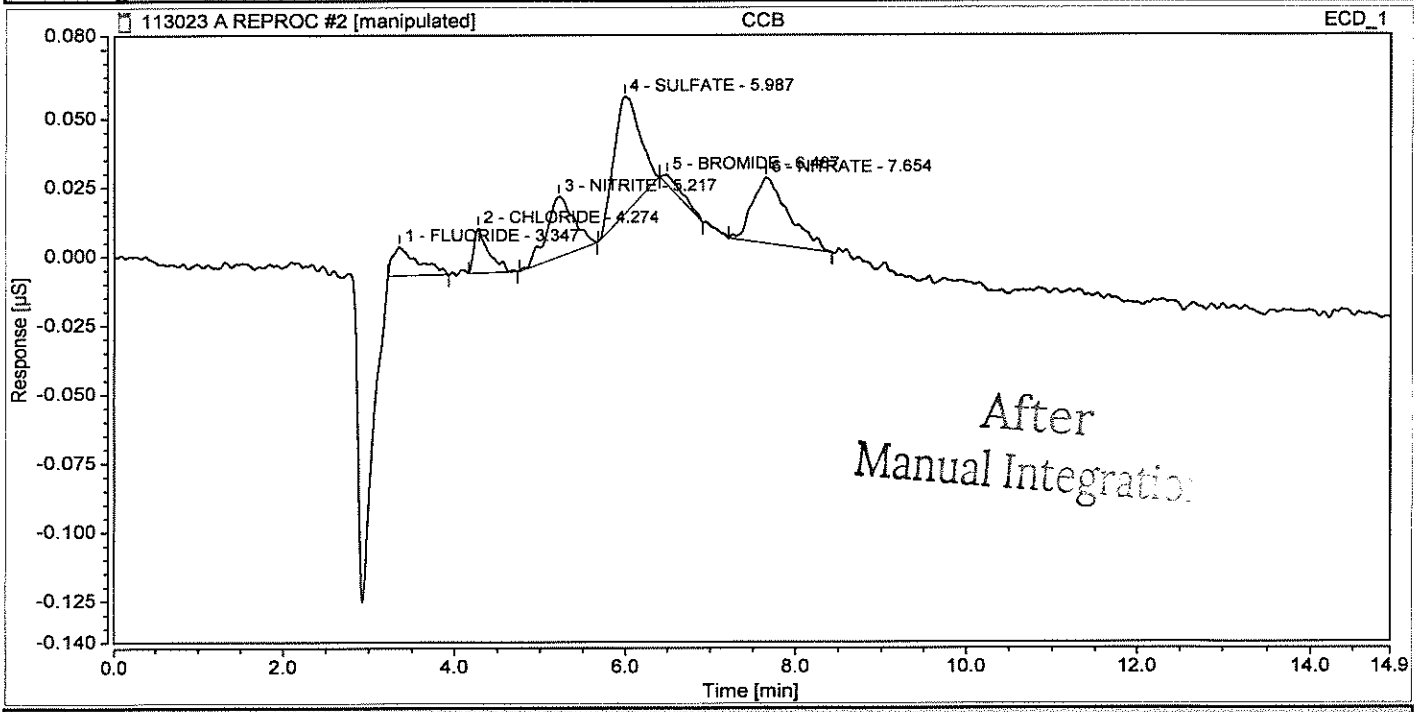
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.274	0.003	0.016	5.79	14.16	0.0084	n.a.
2	NITRITE	5.217	0.008	0.022	14.53	19.09	0.0177	n.a.
3	SULFATE	5.987	0.033	0.053	58.68	45.93	0.1161	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
4	NITRATE	7.654	0.012	0.024	21.00	20.83	0.0121	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.056**	**0.114**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**CCB**	*Run Time (min):*	**14.95**
Vial Number:	**2**	*Injection Volume:*	**200.00**
Injection Type:	**Blank**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**30/Nov/23 17:02**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

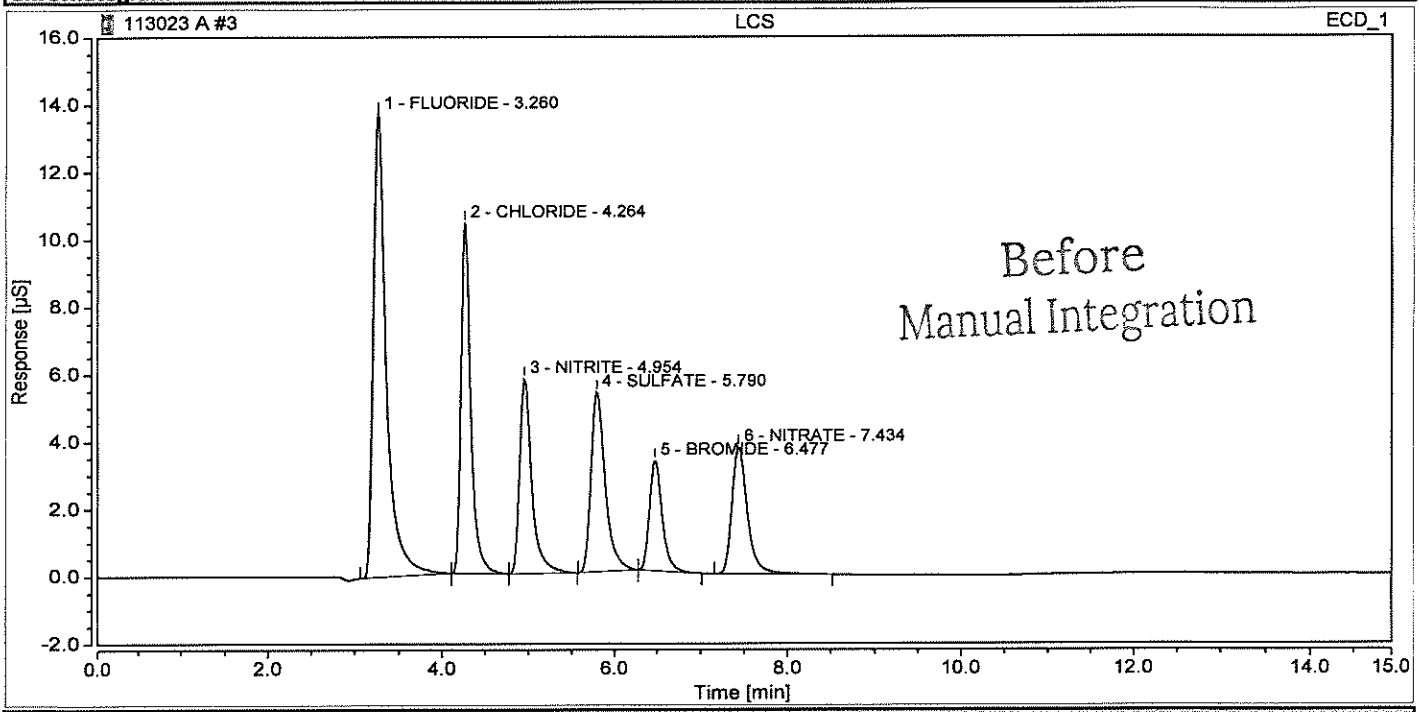
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.347	0.004	0.011	8.57	8.95	0.0225	n.a.
2	CHLORIDE	4.274	0.003	0.016	7.57	13.65	0.0084	n.a.
3	NITRITE	5.217	0.008	0.022	18.98	18.41	0.0177	n.a.
4	SULFATE	5.987	0.015	0.043	34.76	35.88	0.0526	n.a.
5	BROMIDE	6.487	0.001	0.004	2.67	3.02	0.0068	n.a.
6	NITRATE	7.654	0.012	0.024	27.45	20.08	0.0121	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.043**	**0.119**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**LCS**	*Run Time (min):*	**14.96**
Vial Number:	**3**	*Injection Volume:*	**200.00**
Injection Type:	**Check Standard**	*Channel:*	**ECD_1**
Calibration Level:	**09**	*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**30/Nov/23 17:20**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

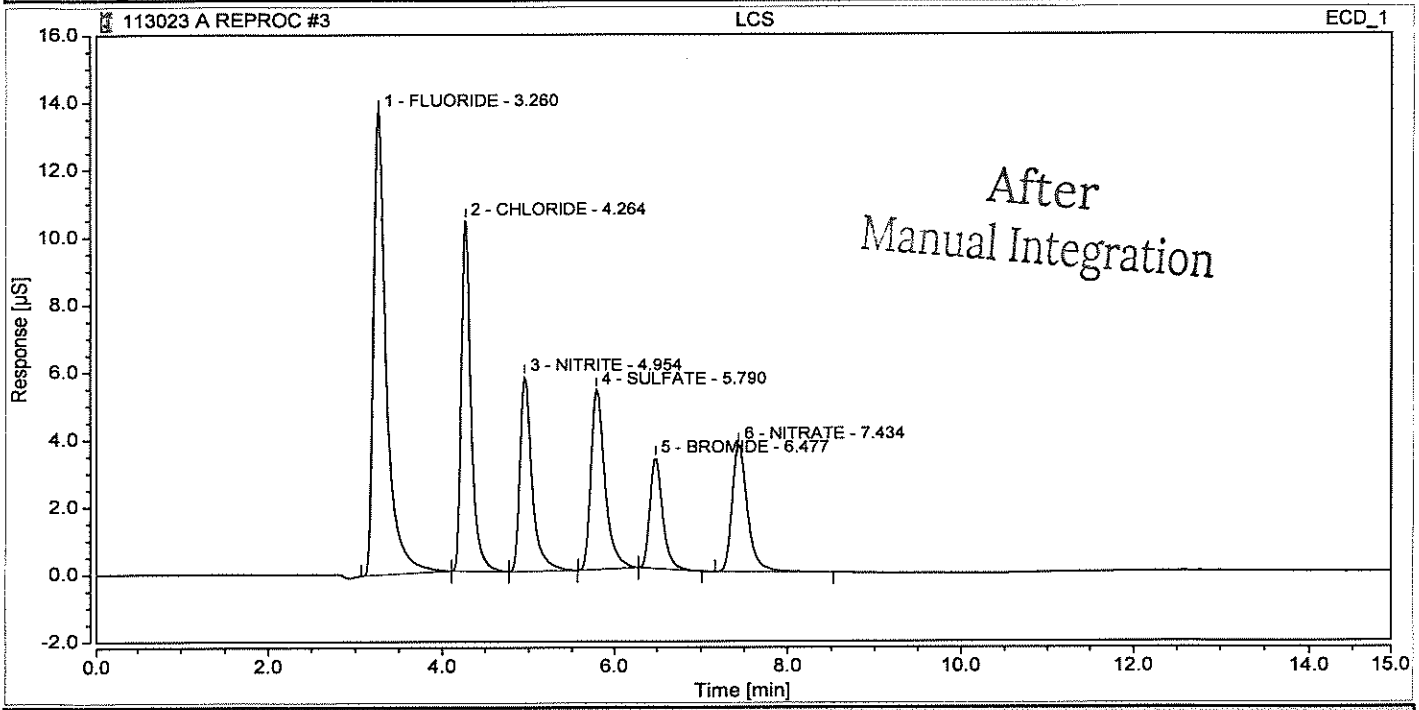
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.260	2.364	13.751	33.41	32.47	3.8134	1.6909
2	CHLORIDE	4.264	1.384	10.408	19.57	24.57	3.5510	-5.3074
3	NITRITE	4.954	0.944	5.796	13.35	13.68	1.1172	-1.9981
4	SULFATE	5.790	1.038	5.342	14.67	12.61	3.6502	-2.6622
5	BROMIDE	6.477	0.565	3.283	7.99	7.75	3.3248	-11.3396
6	NITRATE	7.434	0.779	3.774	11.01	8.91	0.7959	-5.8145
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**7.074**	**42.353**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**LCS**	*Run Time (min):*	**14.96**
Vial Number:	**3**	*Injection Volume:*	**200.00**
Injection Type:	**Check Standard**	*Channel:*	**ECD_1**
Calibration Level:	**09**	*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**30/Nov/23 17:20**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

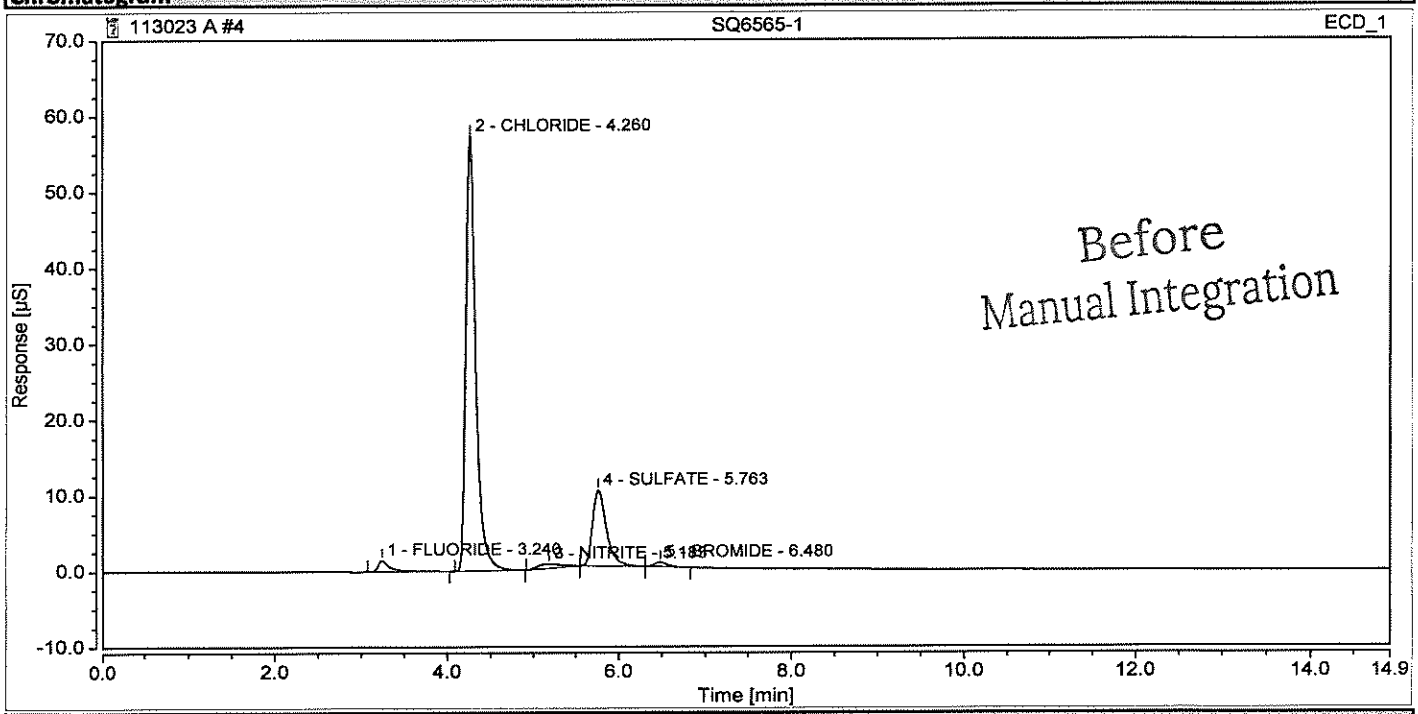
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.260	2.364	13.751	33.41	32.47	3.8134	1.6909
2	CHLORIDE	4.264	1.384	10.408	19.57	24.57	3.5510	-5.3074
3	NITRITE	4.954	0.944	5.796	13.35	13.68	1.1172	-1.9981
4	SULFATE	5.790	1.038	5.342	14.67	12.61	3.6502	-2.6622
5	BROMIDE	6.477	0.565	3.283	7.99	7.75	3.3248	-11.3396
6	NITRATE	7.434	0.779	3.774	11.01	8.91	0.7959	-5.8145
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**7.074**	**42.353**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6565-1**	*Run Time (min):*	**14.94**
Vial Number:	**4**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**30/Nov/23 17:37**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

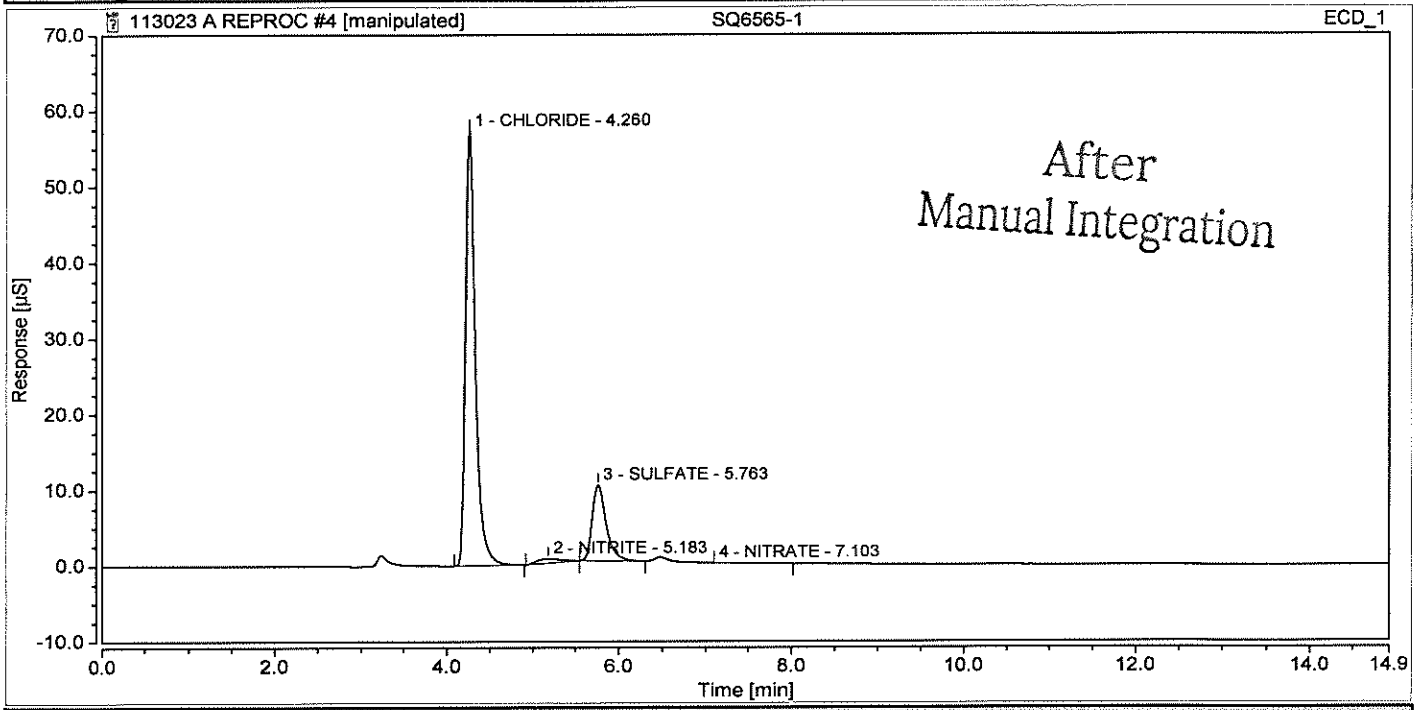
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.240	0.250	1.486	2.48	2.13	0.4102	n.a.
2	CHLORIDE	4.260	7.670	57.283	76.00	81.90	19.6792	n.a.
3	NITRITE	5.183	0.198	0.592	1.96	0.85	0.2394	n.a.
4	SULFATE	5.763	1.876	9.994	18.58	14.29	6.5976	n.a.
5	BROMIDE	6.480	0.098	0.590	0.97	0.84	0.5782	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**10.092**	**69.945**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6565-1**	*Run Time (min):*	**14.94**
Vial Number:	**4**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**30/Nov/23 17:37**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

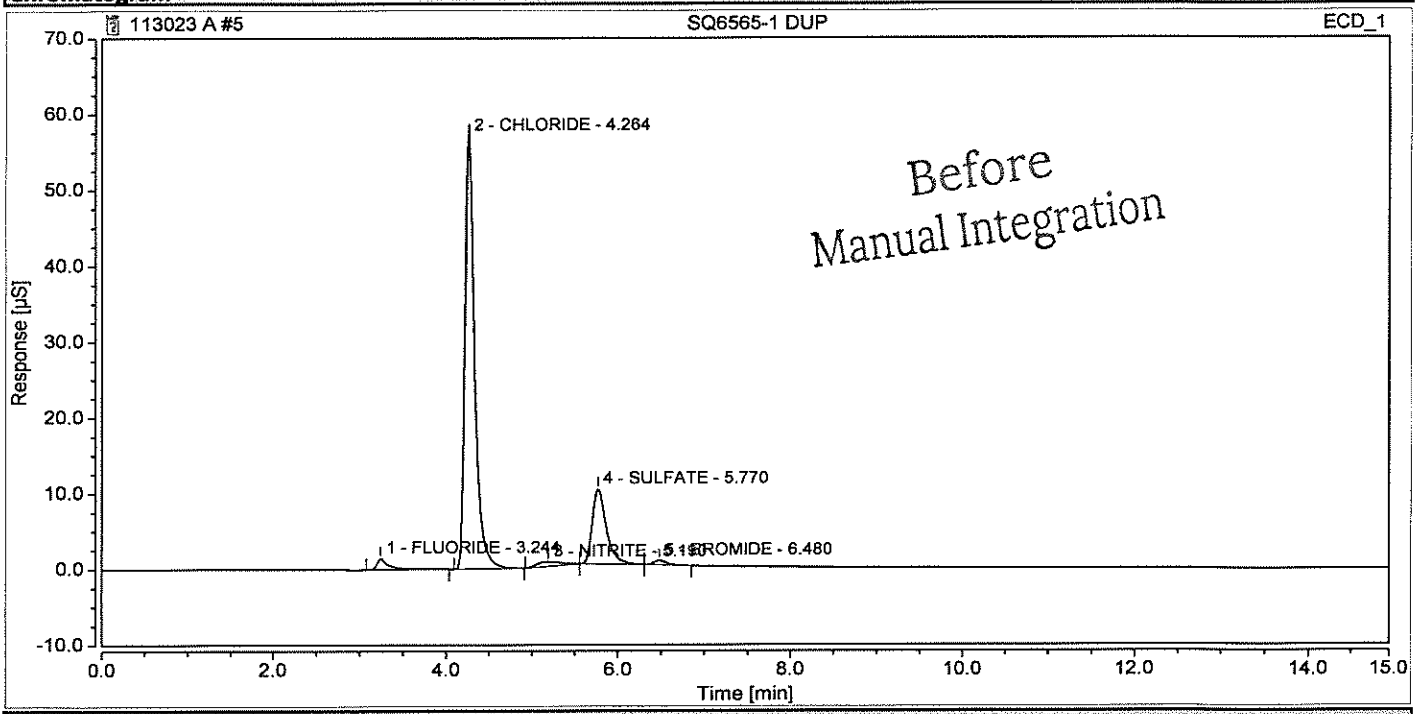
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.260	7.670	57.283	78.69	84.40	19.6792	n.a.
2	NITRITE	5.183	0.198	0.592	2.03	0.87	0.2394	n.a.
3	SULFATE	5.763	1.876	9.994	19.24	14.73	6.5976	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
4	NITRATE	7.103	0.004	0.000	0.04	0.00	0.0036	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**9.747**	**67.868**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6565-1 DUP**	*Run Time (min):*	**14.95**
Vial Number:	**5**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**30/Nov/23 17:54**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

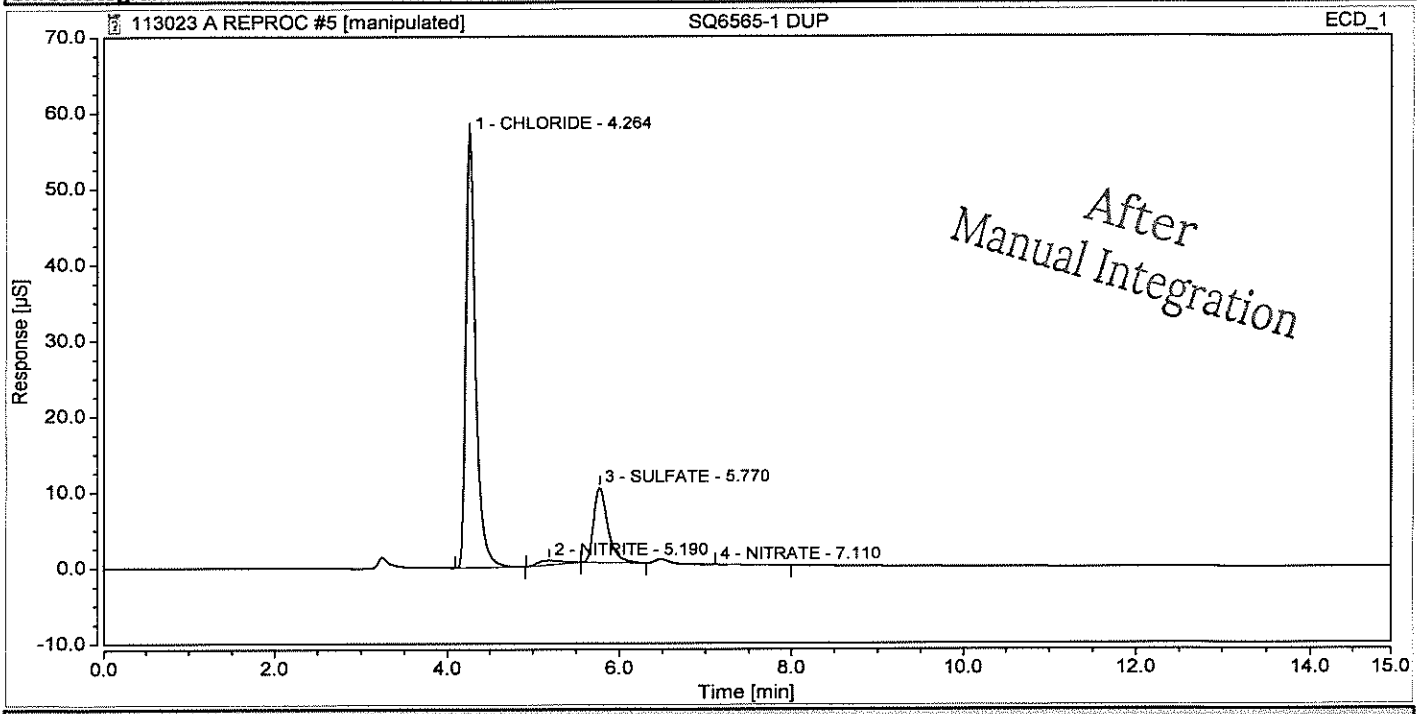
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.244	0.246	1.471	2.44	2.11	0.4042	n.a.
2	CHLORIDE	4.264	7.679	57.124	76.12	82.02	19.7037	n.a.
3	NITRITE	5.190	0.197	0.587	1.95	0.84	0.2382	n.a.
4	SULFATE	5.770	1.869	9.880	18.53	14.19	6.5754	n.a.
5	BROMIDE	6.480	0.097	0.583	0.96	0.84	0.5685	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**10.089**	**69.645**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6565-1 DUP**	*Run Time (min):*	**14.95**
Vial Number:	**5**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**30/Nov/23 17:54**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

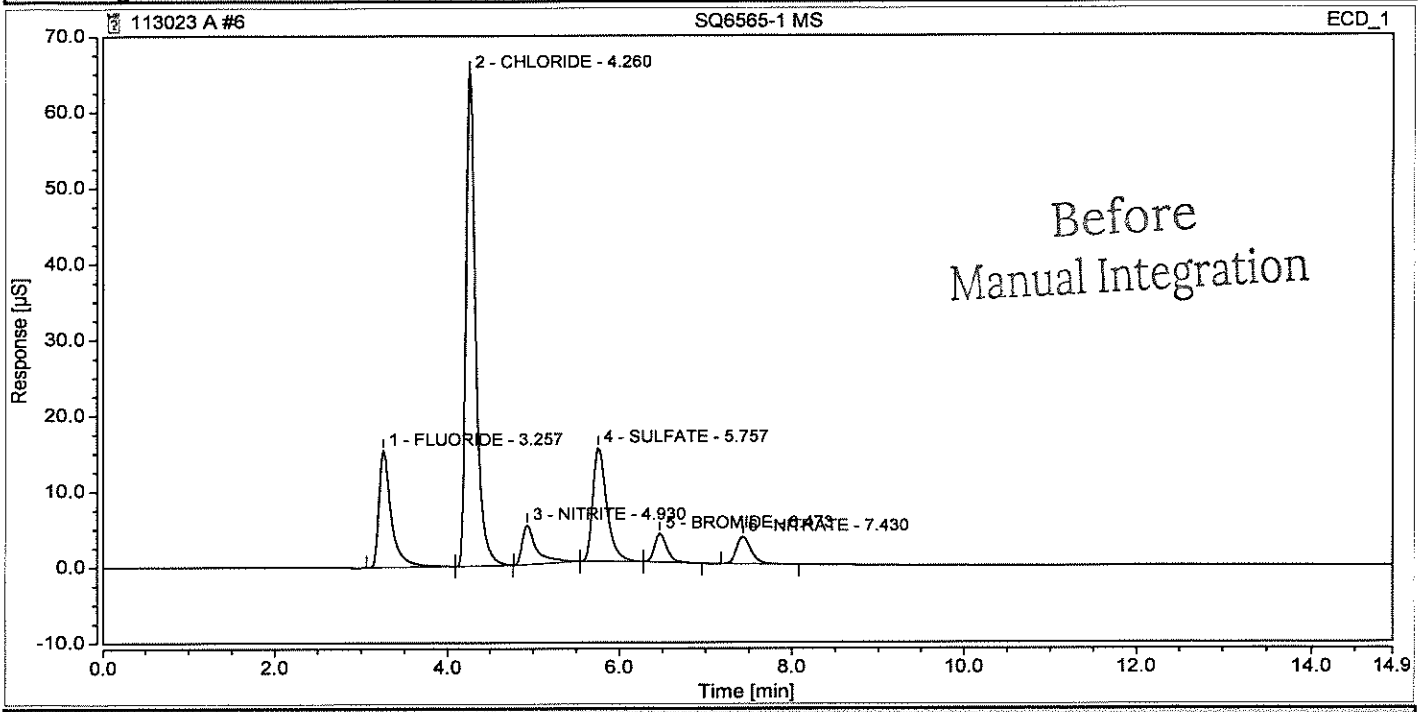
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.264	7.679	57.124	78.76	84.51	19.7037	n.a.
2	NITRITE	5.190	0.197	0.587	2.02	0.87	0.2382	n.a.
3	SULFATE	5.770	1.869	9.880	19.17	14.62	6.5754	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
4	NITRATE	7.110	0.004	0.000	0.04	0.00	0.0043	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**9.750**	**67.591**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6565-1 MS**	*Run Time (min):*	**14.95**
Vial Number:	**6**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**30/Nov/23 18:11**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

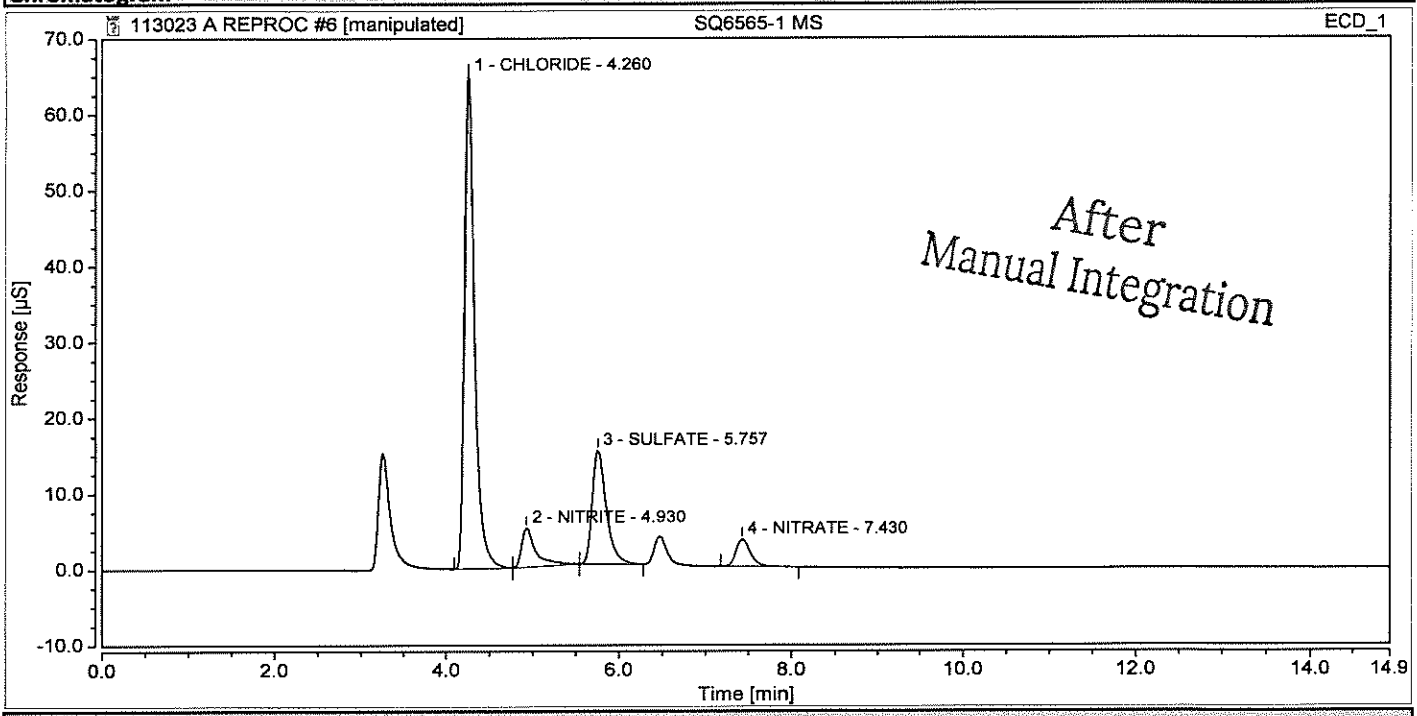
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.257	2.559	15.387	15.55	14.26	4.1354	n.a.
2	CHLORIDE	4.260	8.721	64.995	52.99	60.24	22.3765	n.a.
3	NITRITE	4.930	1.005	5.163	6.11	4.79	1.1890	n.a.
4	SULFATE	5.757	2.830	14.999	17.20	13.90	9.9561	n.a.
5	BROMIDE	6.473	0.635	3.772	3.86	3.50	3.7327	n.a.
6	NITRATE	7.430	0.707	3.585	4.29	3.32	0.7221	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**16.457**	**107.901**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6565-1 MS**	*Run Time (min):*	**14.95**
Vial Number:	**6**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**30/Nov/23 18:11**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

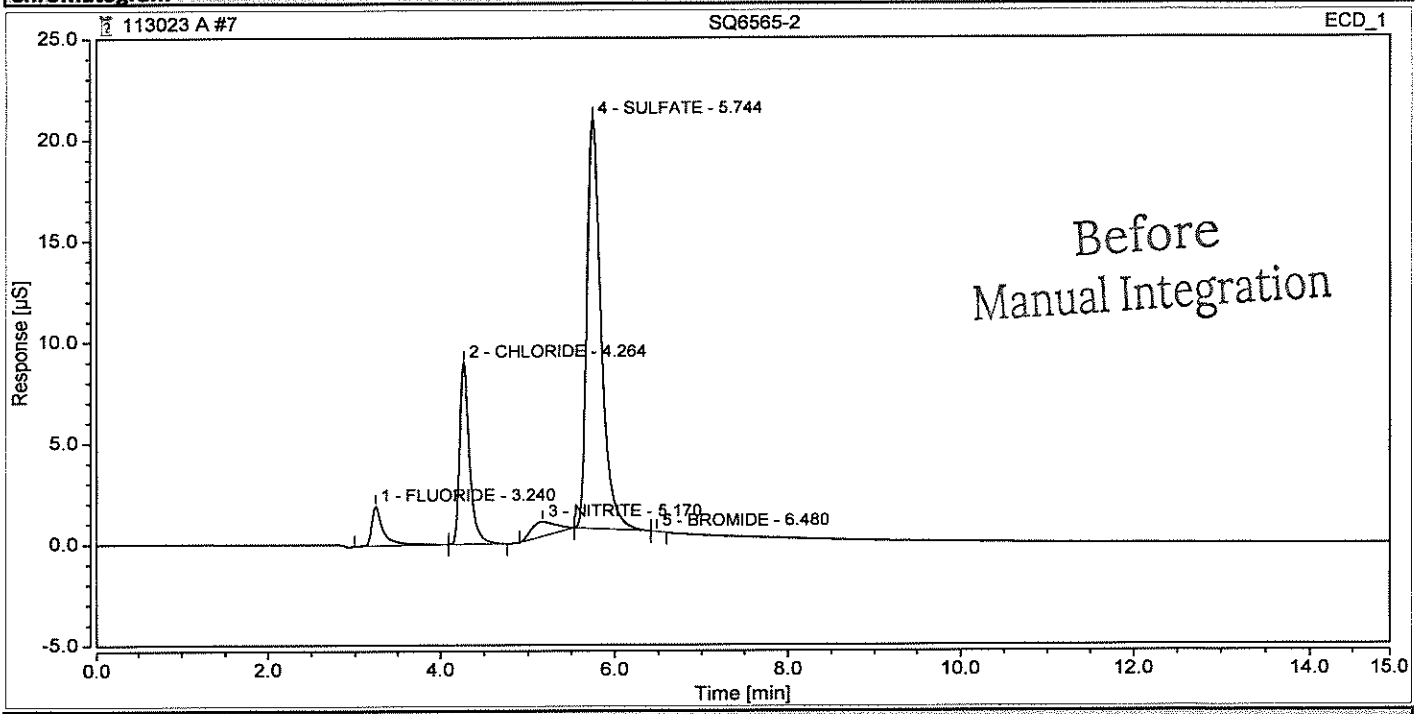
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.260	8.721	64.995	65.76	73.24	22.3765	n.a.
2	NITRITE	4.930	1.005	5.163	7.58	5.82	1.1890	n.a.
3	SULFATE	5.757	2.830	14.999	21.34	16.90	9.9561	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
4	NITRATE	7.430	0.707	3.585	5.33	4.04	0.7221	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**13.263**	**88.742**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6565-2**	*Run Time (min):*	**14.95**
Vial Number:	**7**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**30/Nov/23 18:29**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

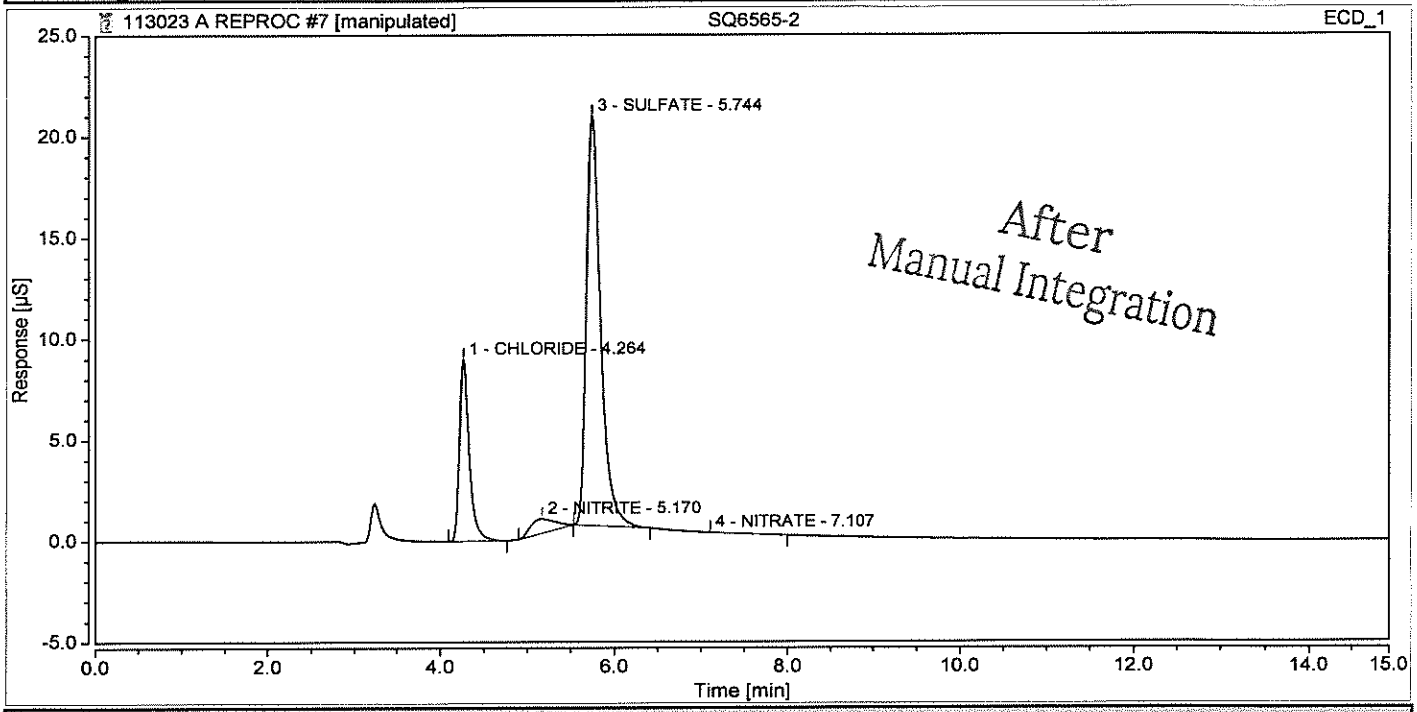
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.240	0.318	1.947	5.69	6.11	0.5183	n.a.
2	CHLORIDE	4.264	1.174	8.977	20.98	28.16	3.0116	n.a.
3	NITRITE	5.170	0.243	0.709	4.34	2.22	0.2913	n.a.
4	SULFATE	5.744	3.859	20.237	68.97	63.48	13.5740	n.a.
5	BROMIDE	6.480	0.001	0.010	0.02	0.03	0.0064	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**5.595**	**31.880**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6565-2**	*Run Time (min):*	**14.95**
Vial Number:	**7**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**30/Nov/23 18:29**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

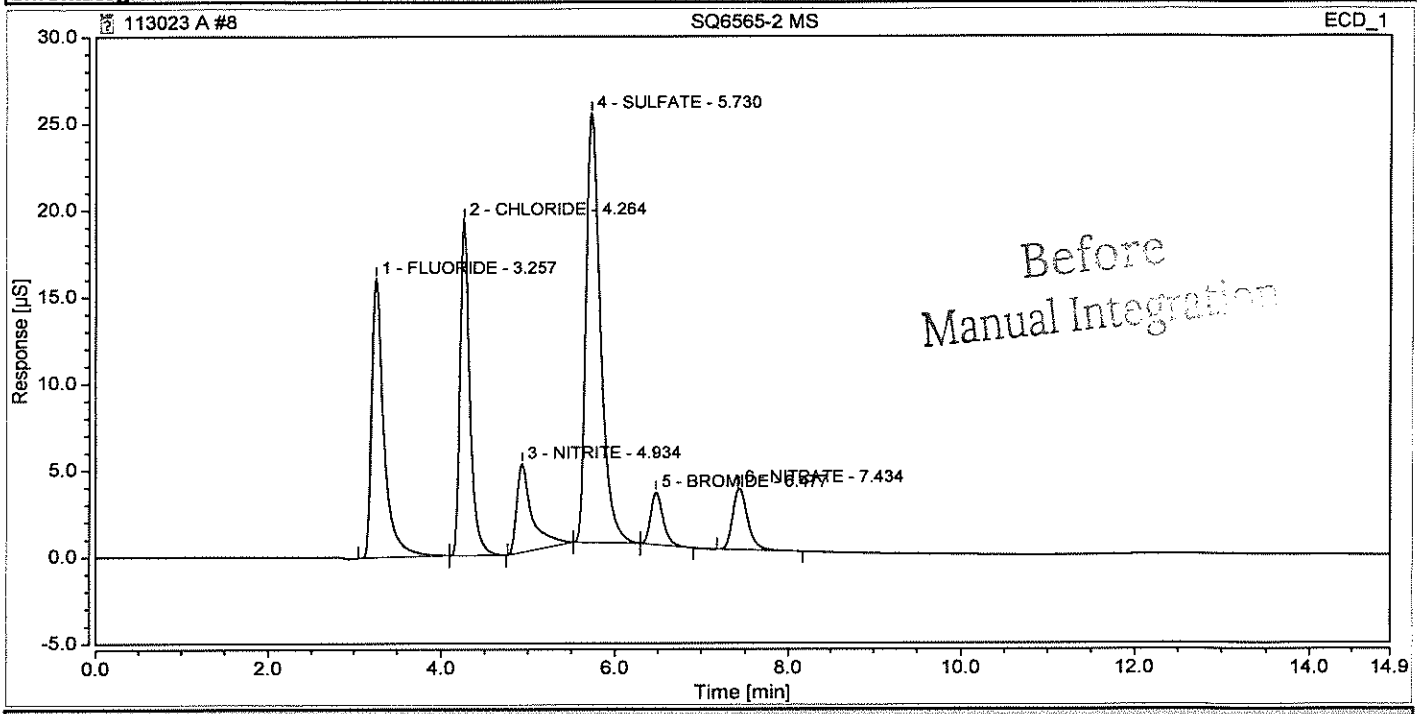
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.264	1.174	8.977	22.24	30.00	3.0116	n.a.
2	NITRITE	5.170	0.243	0.709	4.60	2.37	0.2913	n.a.
3	SULFATE	5.744	3.859	20.237	73.11	67.63	13.5740	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
4	NITRATE	7.107	0.003	0.000	0.05	0.00	0.0028	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**5.278**	**29.922**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6565-2 MS**	*Run Time (min):*	**14.95**
Vial Number:	**8**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**30/Nov/23 18:46**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

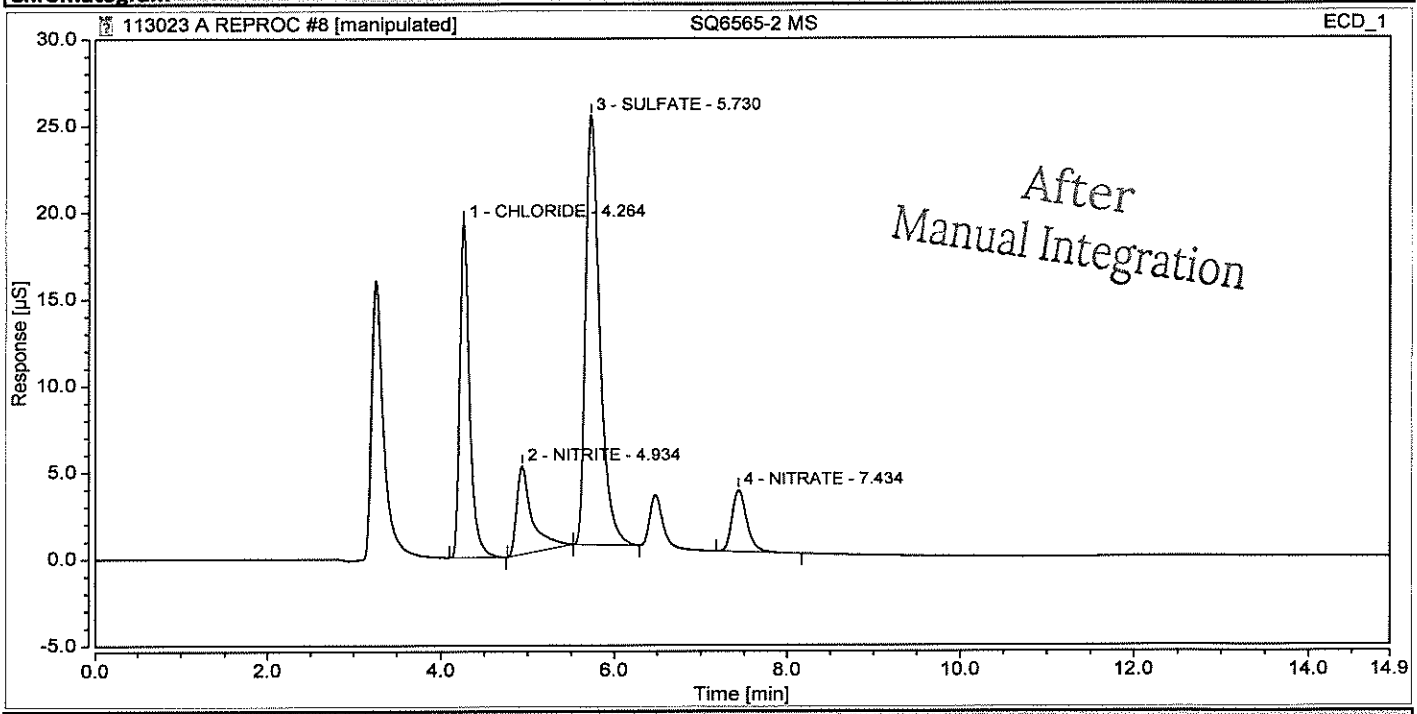
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.257	2.636	16.073	21.62	22.38	4.2616	n.a.
2	CHLORIDE	4.264	2.550	19.340	20.92	26.93	6.5435	n.a.
3	NITRITE	4.934	1.058	5.084	8.68	7.08	1.2521	n.a.
4	SULFATE	5.730	4.736	24.737	38.84	34.45	16.6597	n.a.
5	BROMIDE	6.477	0.506	3.017	4.15	4.20	2.9788	n.a.
6	NITRATE	7.434	0.706	3.563	5.79	4.96	0.7218	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**12.193**	**71.814**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6565-2 MS**	*Run Time (min):*	**14.95**
Vial Number:	**8**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**30/Nov/23 18:46**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

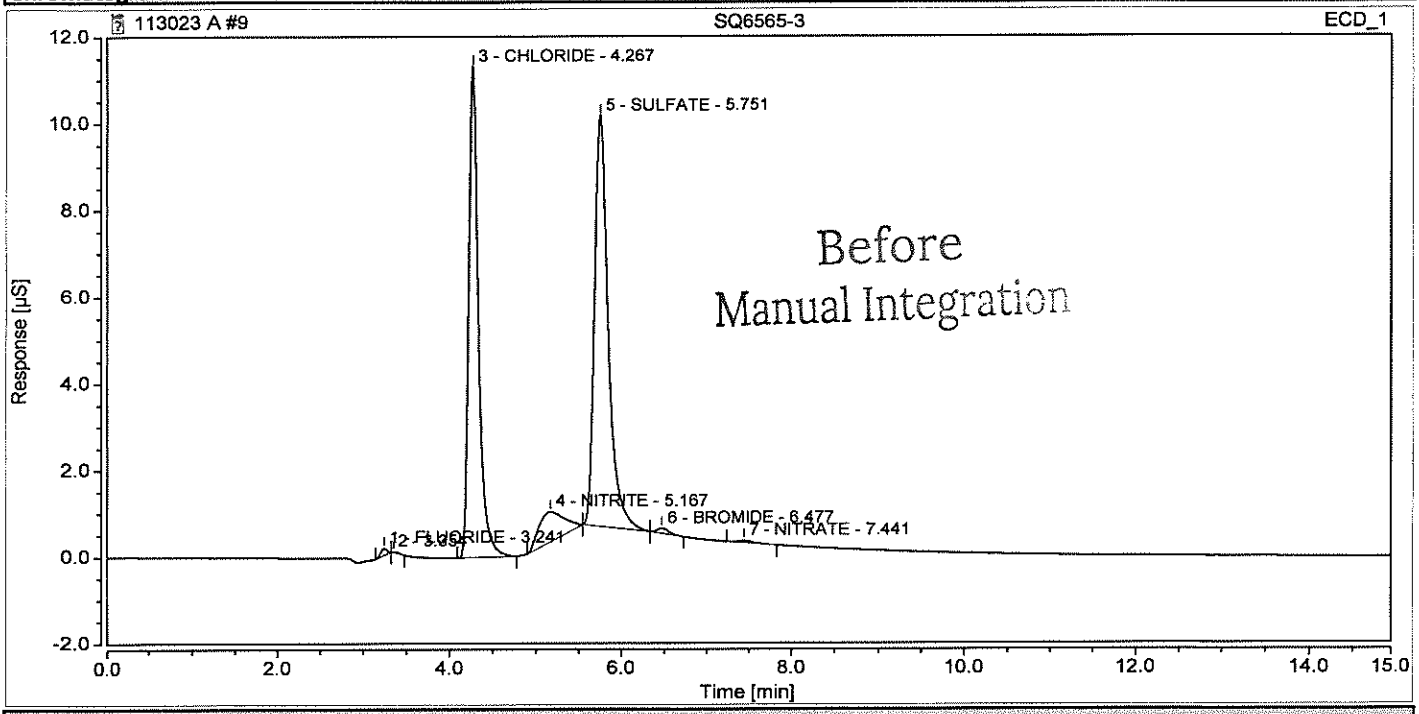
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.264	2.550	19.340	28.18	36.68	6.5435	n.a.
2	NITRITE	4.934	1.058	5.084	11.69	9.64	1.2521	n.a.
3	SULFATE	5.730	4.736	24.737	52.33	46.92	16.6597	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
4	NITRATE	7.434	0.706	3.563	7.80	6.76	0.7218	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**9.051**	**52.724**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6565-3**	*Run Time (min):*	**14.96**
Vial Number:	**9**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**30/Nov/23 19:03**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

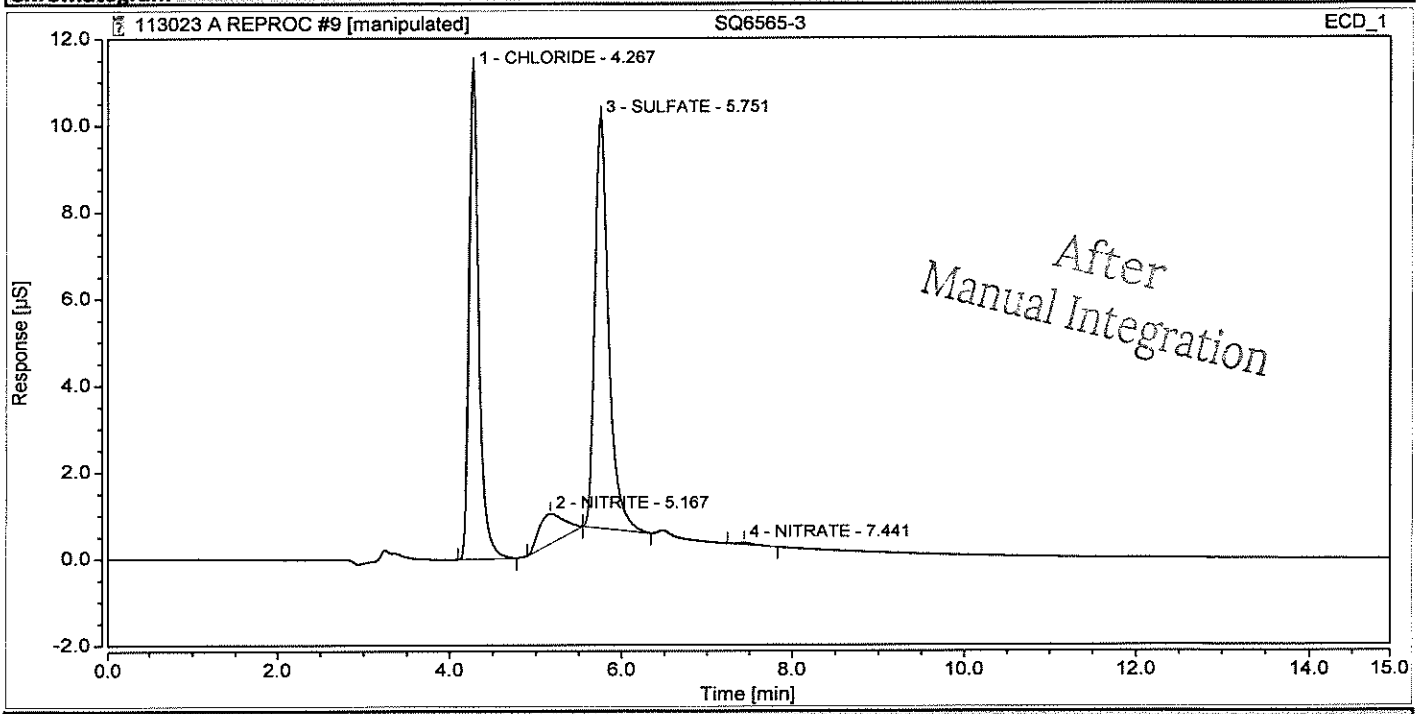
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.241	0.014	0.159	0.40	0.73	0.0387	n.a.
2		3.354	0.002	0.020	0.05	0.09	n.a.	n.a.
3	CHLORIDE	4.267	1.482	11.314	41.94	51.87	3.8034	n.a.
4	NITRITE	5.167	0.237	0.687	6.70	3.15	0.2845	n.a.
5	SULFATE	5.751	1.772	9.471	50.14	43.42	6.2337	n.a.
6	BROMIDE	6.477	0.017	0.110	0.49	0.50	0.1009	n.a.
7	NITRATE	7.441	0.010	0.050	0.29	0.23	0.0104	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**3.534**	**21.810**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6565-3**	*Run Time (min):*	**14.96**
Vial Number:	**9**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**30/Nov/23 19:03**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

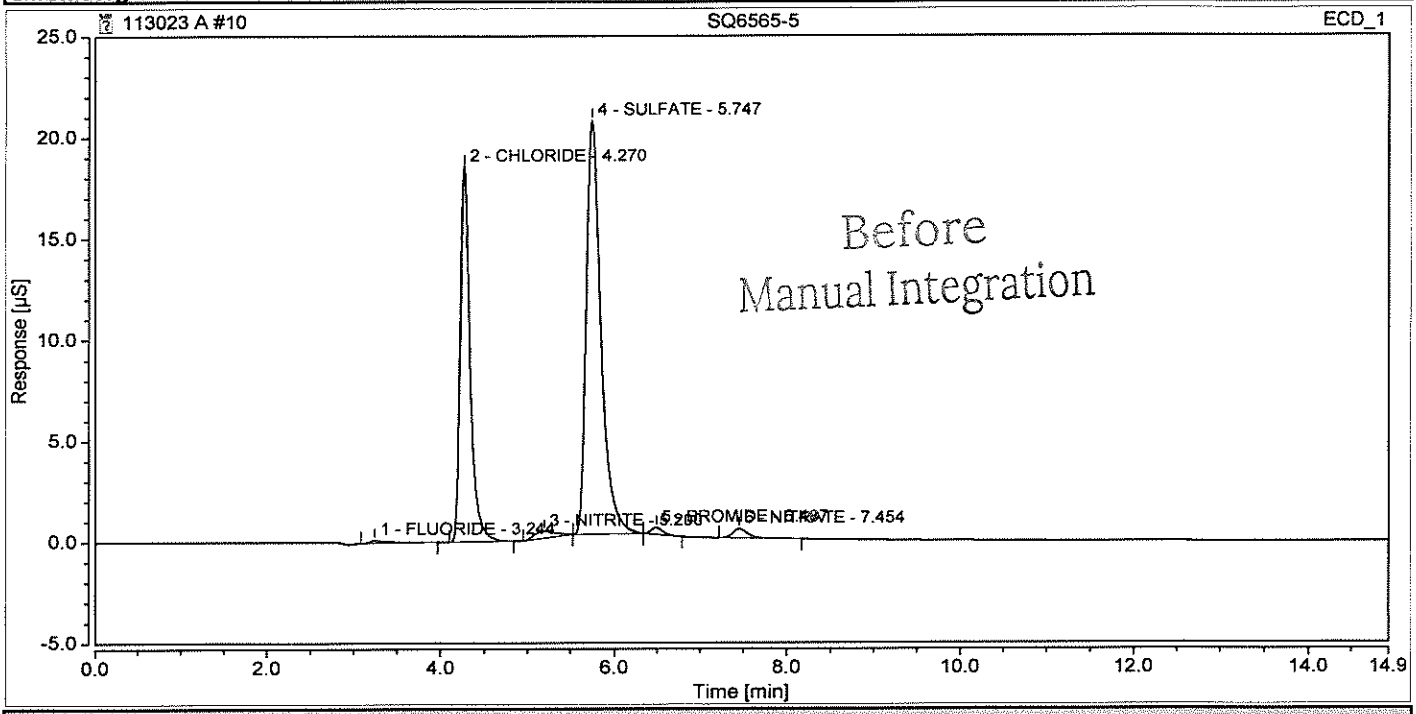
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.267	1.482	11.314	42.34	52.57	3.8034	n.a.
2	NITRITE	5.167	0.237	0.687	6.76	3.19	0.2845	n.a.
3	SULFATE	5.751	1.772	9.471	50.61	44.01	6.2337	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
4	NITRATE	7.441	0.010	0.050	0.29	0.23	0.0104	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**3.501**	**21.522**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6565-5**	*Run Time (min):*	**14.95**
Vial Number:	**10**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**30/Nov/23 19:20**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

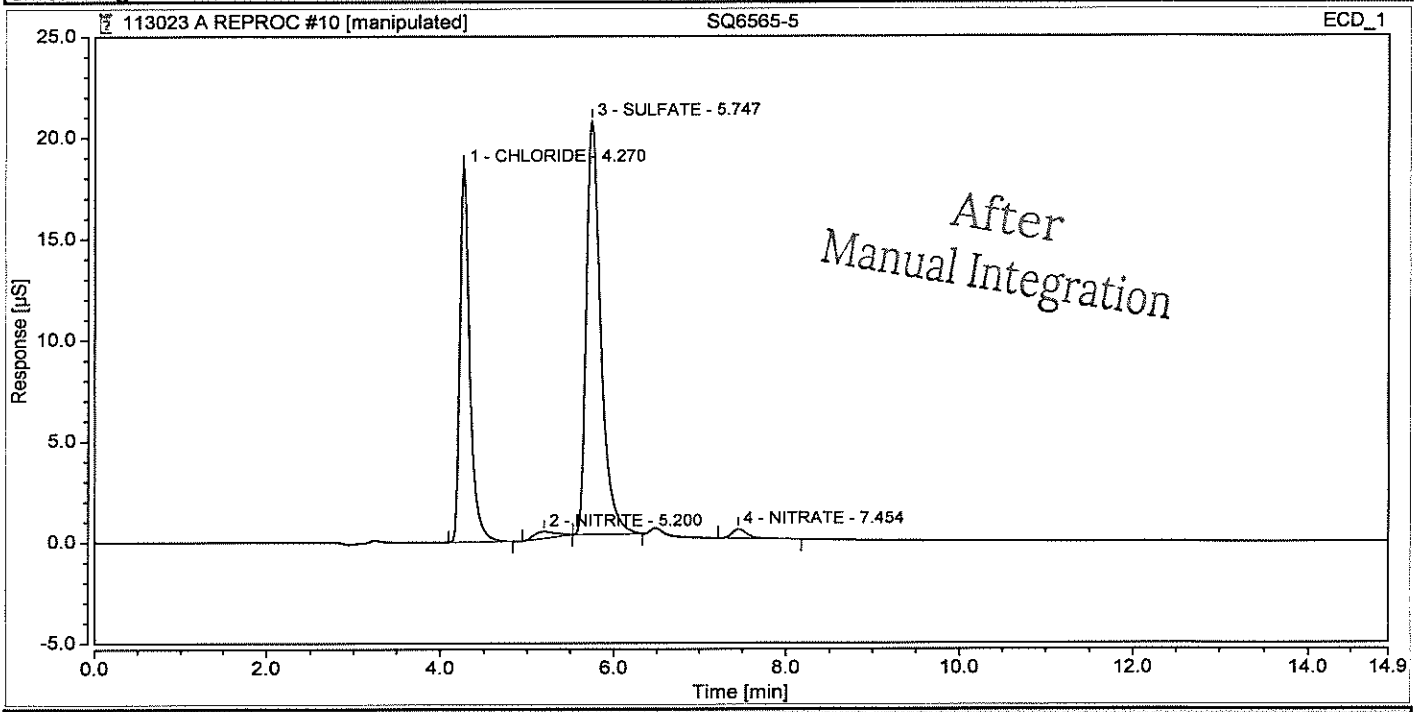
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.244	0.035	0.155	0.52	0.39	0.0713	n.a.
2	CHLORIDE	4.270	2.468	18.546	36.95	46.03	6.3315	n.a.
3	NITRITE	5.200	0.103	0.340	1.54	0.84	0.1282	n.a.
4	SULFATE	5.747	3.924	20.450	58.76	50.76	13.8045	n.a.
5	BROMIDE	6.487	0.054	0.340	0.80	0.84	0.3160	n.a.
6	NITRATE	7.454	0.095	0.460	1.42	1.14	0.0969	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**6.678**	**40.292**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6565-5**	*Run Time (min):*	**14.95**
Vial Number:	**10**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**30/Nov/23 19:20**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

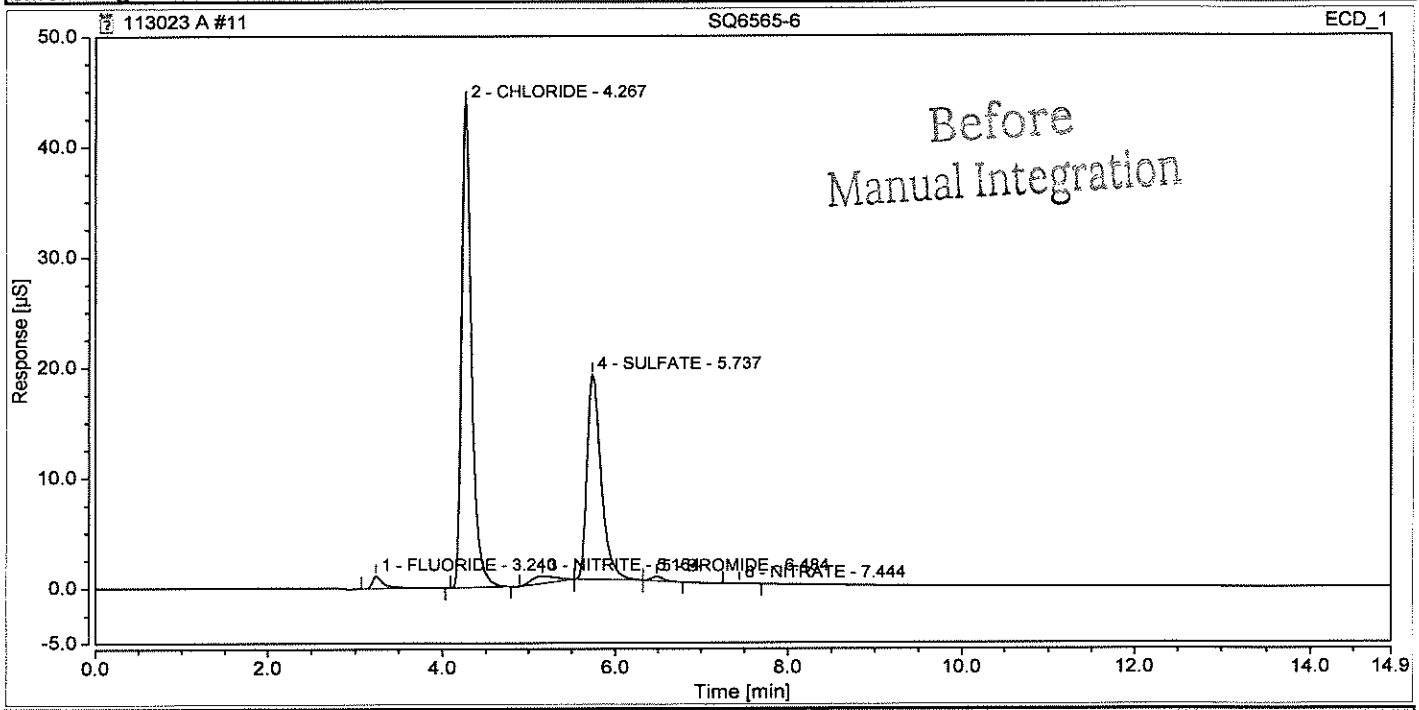
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.270	2.468	18.546	37.45	46.60	6.3315	n.a.
2	NITRITE	5.200	0.103	0.340	1.56	0.85	0.1282	n.a.
3	SULFATE	5.747	3.924	20.450	59.55	51.39	13.8045	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
4	NITRATE	7.454	0.095	0.460	1.44	1.16	0.0969	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**6.590**	**39.797**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6565-6**	*Run Time (min):*	**14.94**
Vial Number:	**11**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**30/Nov/23 19:38**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

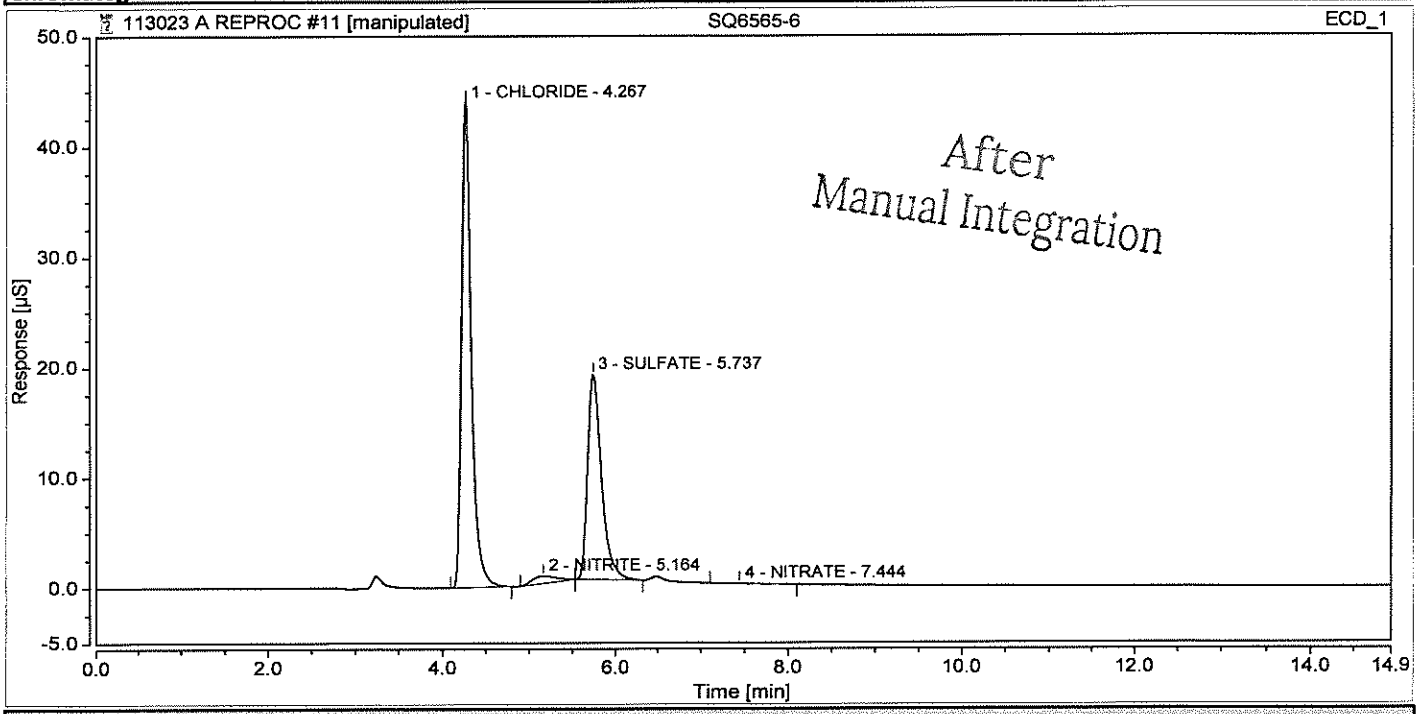
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.240	0.183	1.143	1.85	1.77	0.3039	n.a.
2	CHLORIDE	4.267	5.864	43.951	59.56	67.89	15.0463	n.a.
3	NITRITE	5.164	0.220	0.657	2.24	1.02	0.2652	n.a.
4	SULFATE	5.737	3.512	18.578	35.67	28.70	12.3540	n.a.
5	BROMIDE	6.484	0.065	0.399	0.66	0.62	0.3850	n.a.
6	NITRATE	7.444	0.002	0.009	0.02	0.01	0.0018	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**9.846**	**64.738**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6565-6**	*Run Time (min):*	**14.94**
Vial Number:	**11**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**30/Nov/23 19:38**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

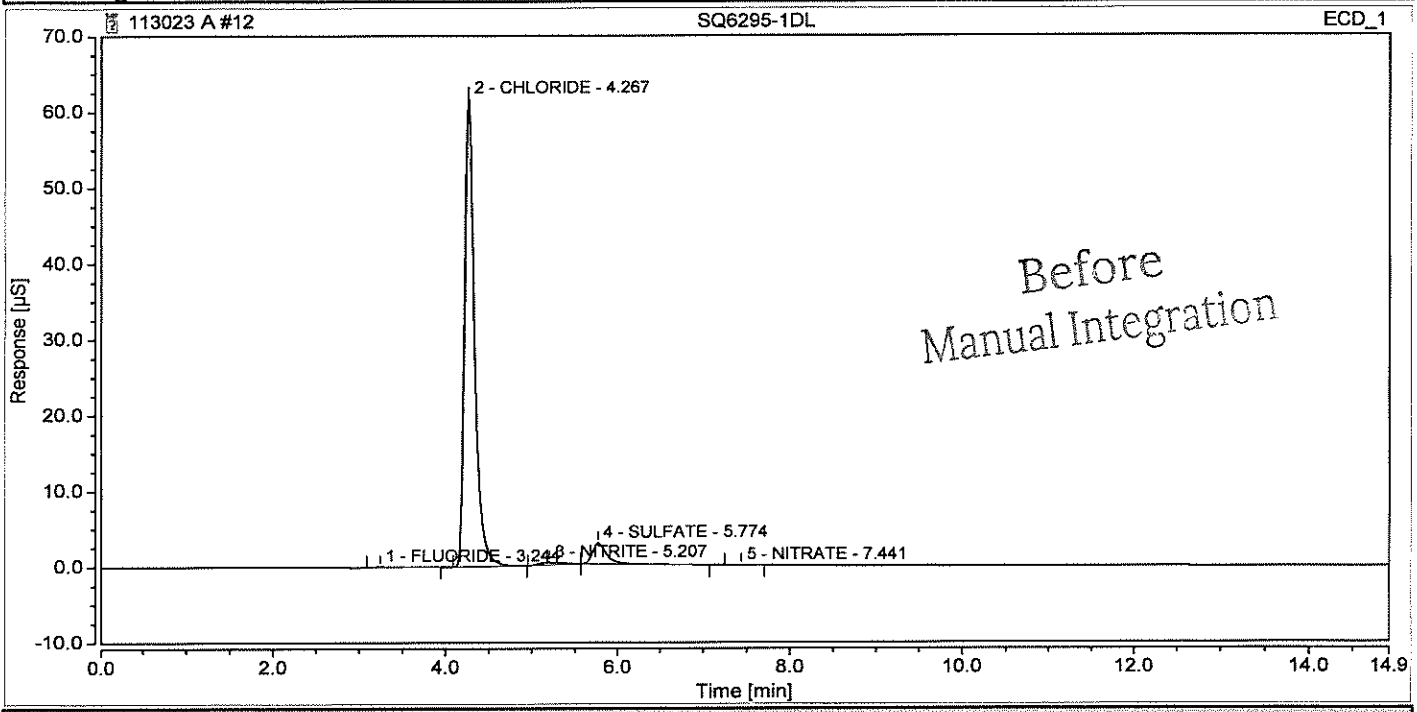
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.267	5.864	43.951	61.08	69.56	15.0463	n.a.
2	NITRITE	5.164	0.220	0.657	2.30	1.04	0.2652	n.a.
3	SULFATE	5.737	3.512	18.578	36.58	29.40	12.3540	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
4	NITRATE	7.444	0.004	0.002	0.04	0.00	0.0039	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**9.600**	**63.188**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6295-1DL**	*Run Time (min):*	**14.94**
Vial Number:	**12**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**10.0000**
Injection Date/Time:	**30/Nov/23 19:55**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

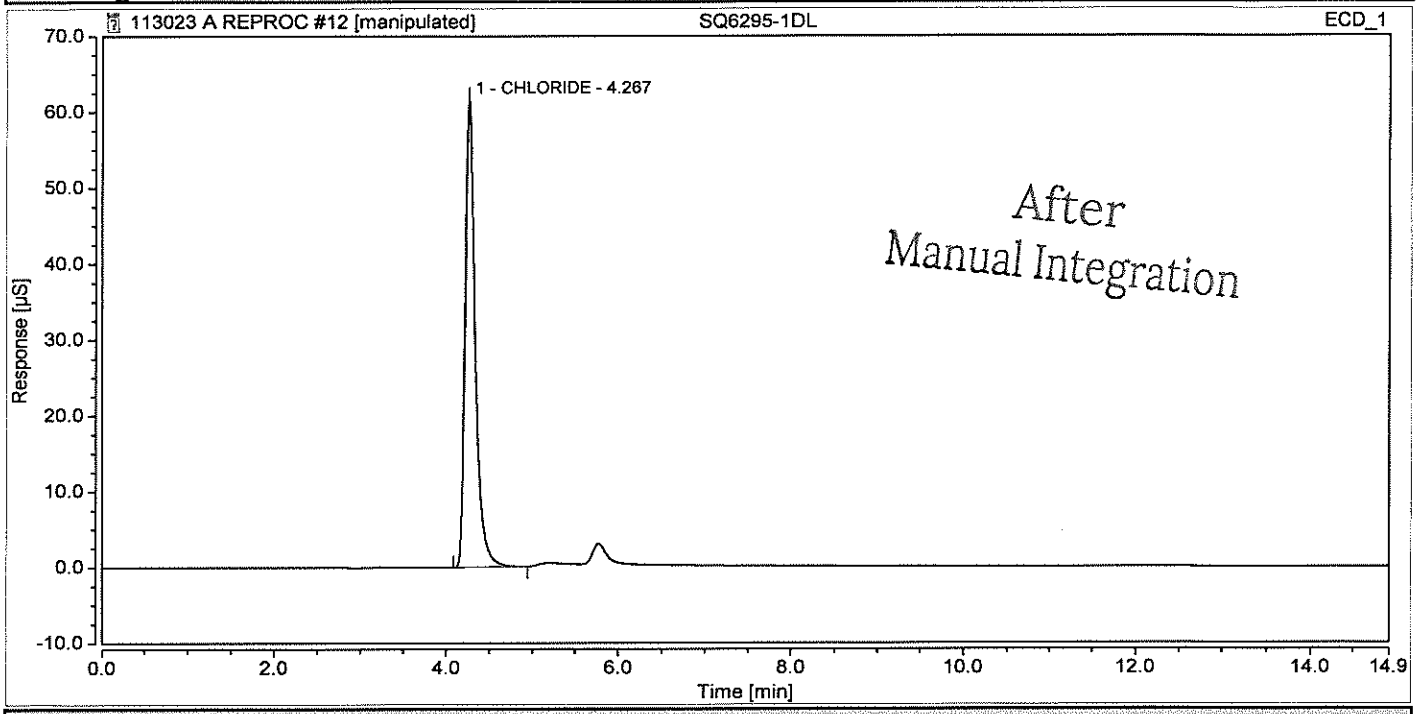
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.244	0.018	0.060	0.20	0.09	0.4517	n.a.
2	CHLORIDE	4.267	8.369	61.708	92.61	95.10	214.7302	n.a.
3	NITRITE	5.207	0.110	0.345	1.21	0.53	1.3587	n.a.
4	SULFATE	5.774	0.537	2.760	5.95	4.25	18.9006	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5	NITRATE	7.441	0.003	0.016	0.03	0.02	0.0303	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**9.037**	**64.889**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6295-1DL**	*Run Time (min):*	**14.94**
Vial Number:	**12**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**10.0000**
Injection Date/Time:	**30/Nov/23 19:55**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

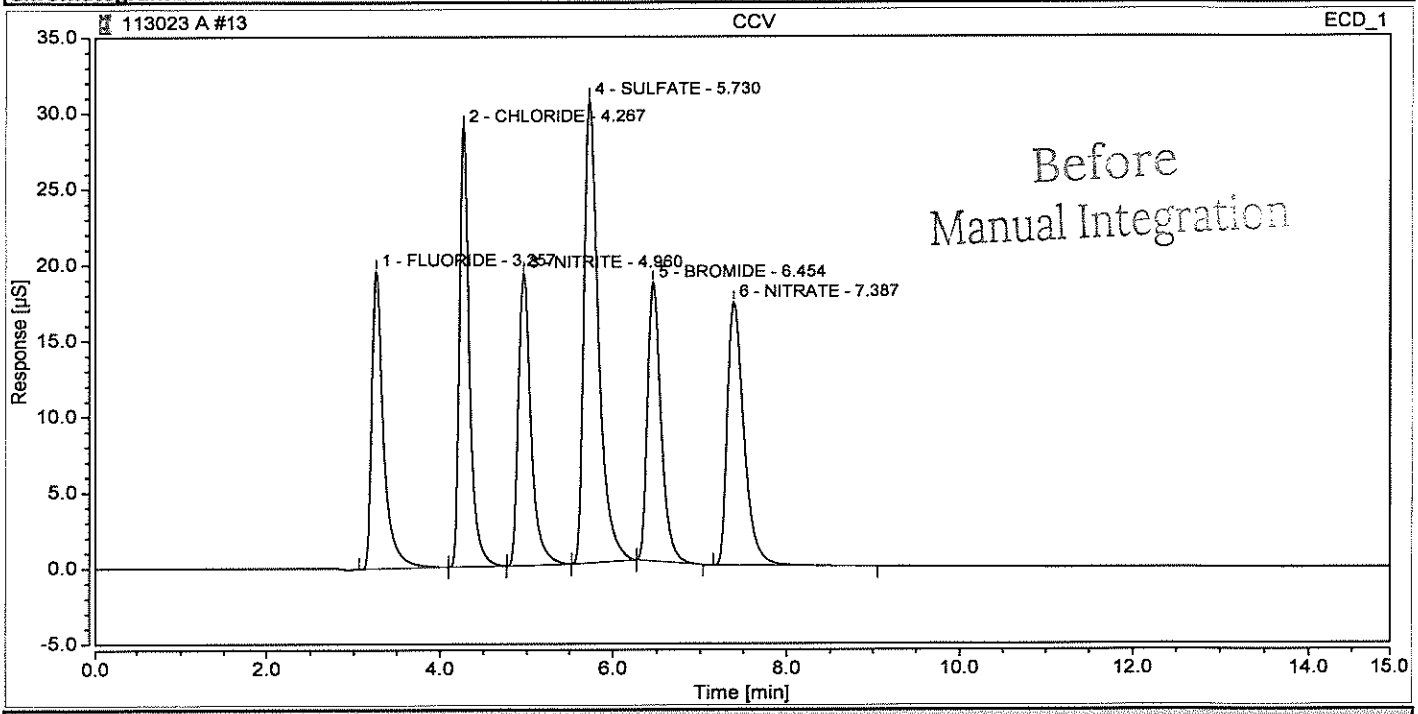
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.267	8.369	61.708	100.00	100.00	214.7302	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	SULFATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**8.369**	**61.708**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**CCV**	*Run Time (min):*	**14.95**
Vial Number:	**13**	*Injection Volume:*	**200.00**
Injection Type:	**Check Standard**	*Channel:*	**ECD_1**
Calibration Level:	**06**	*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**30/Nov/23 20:12**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

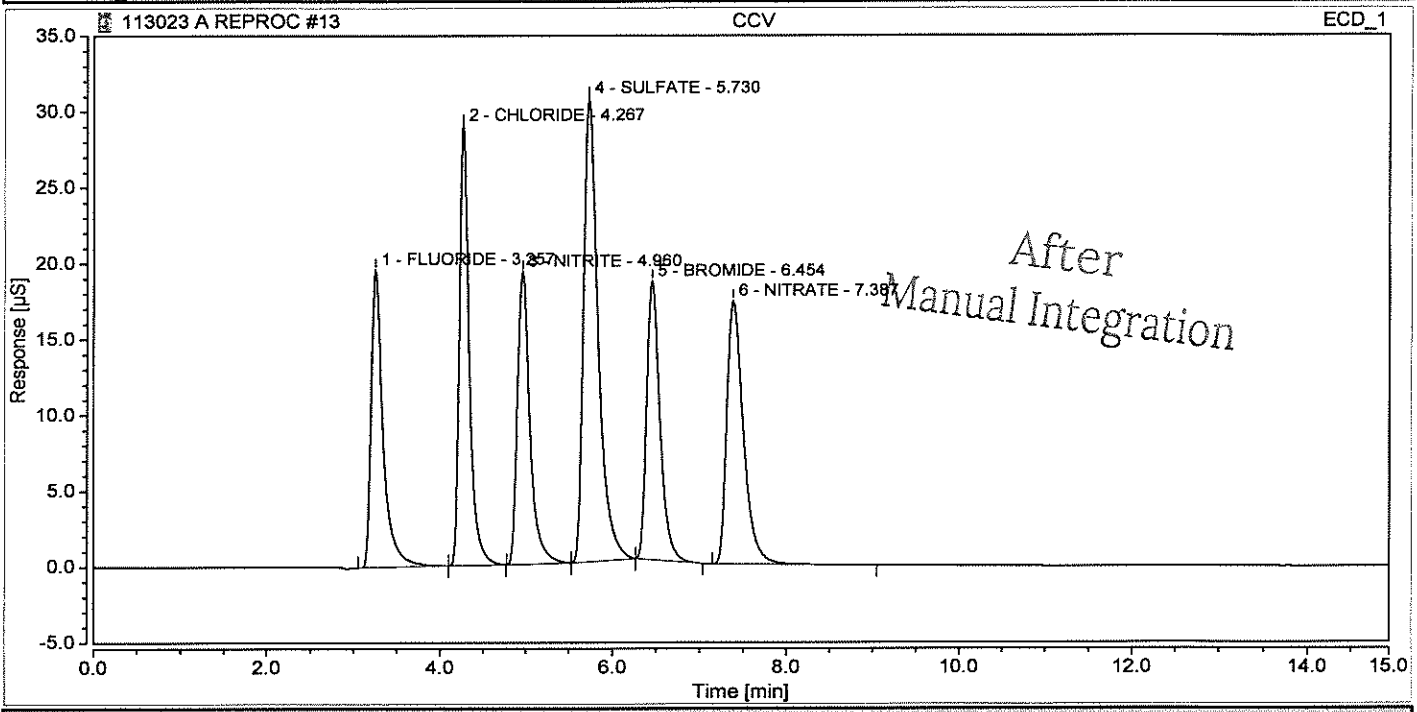
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.257	3.136	19.595	13.38	14.62	5.0925	1.8510
2	CHLORIDE	4.267	3.882	28.978	16.56	21.62	9.9602	-0.3984
3	NITRITE	4.960	3.343	19.274	14.27	14.38	4.0280	0.6993
4	SULFATE	5.730	5.906	30.514	25.20	22.77	20.7761	3.8803
5	BROMIDE	6.454	3.327	18.345	14.19	13.69	19.5668	-2.1658
6	NITRATE	7.387	3.843	17.333	16.40	12.93	3.9271	-1.8217
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**23.437**	**134.040**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**CCV**	*Run Time (min):*	**14.95**
Vial Number:	**13**	*Injection Volume:*	**200.00**
Injection Type:	**Check Standard**	*Channel:*	**ECD_1**
Calibration Level:	**06**	*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**30/Nov/23 20:12**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

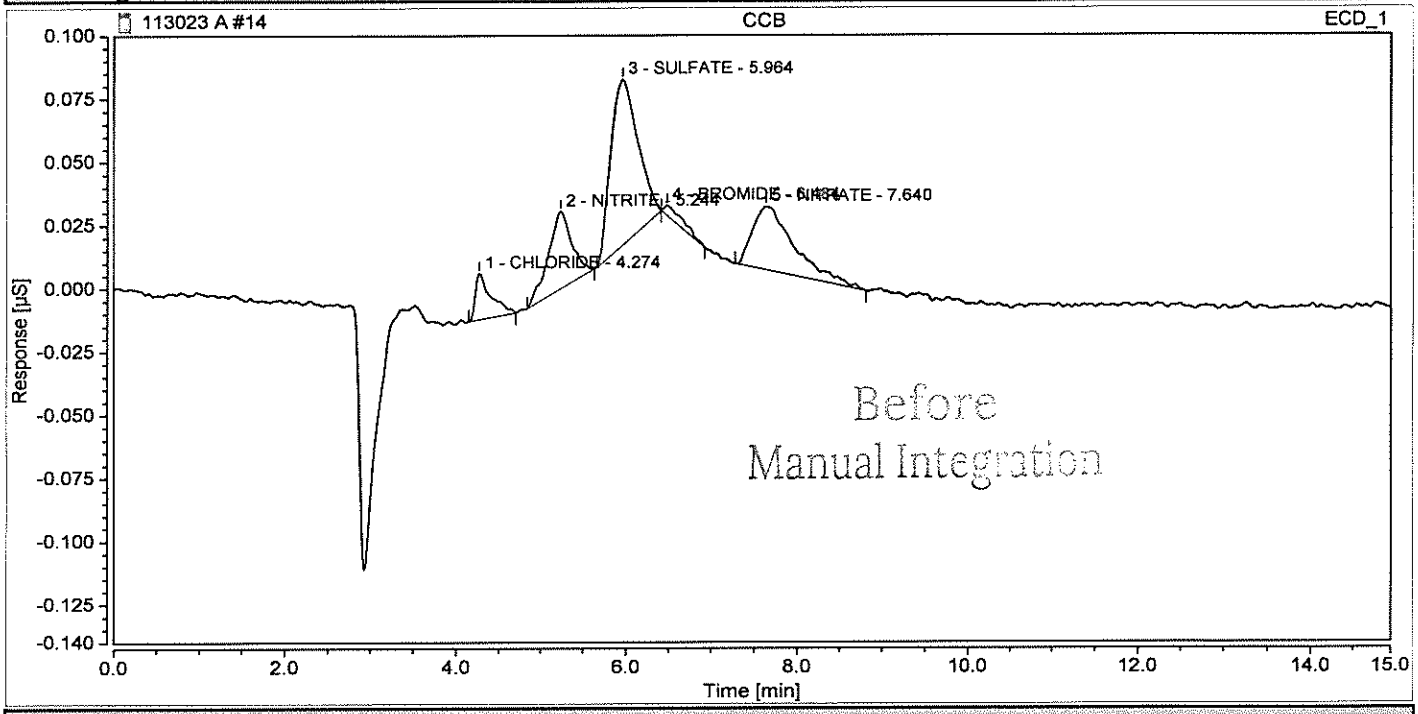
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.257	3.136	19.595	13.38	14.62	5.0925	1.8510
2	CHLORIDE	4.267	3.882	28.978	16.56	21.62	9.9602	-0.3984
3	NITRITE	4.960	3.343	19.274	14.27	14.38	4.0280	0.6993
4	SULFATE	5.730	5.906	30.514	25.20	22.77	20.7761	3.8803
5	BROMIDE	6.454	3.327	18.345	14.19	13.69	19.5668	-2.1658
6	NITRATE	7.387	3.843	17.333	16.40	12.93	3.9271	-1.8217
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**23.437**	**134.040**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**CCB**	*Run Time (min):*	**14.95**
Vial Number:	**14**	*Injection Volume:*	**200.00**
Injection Type:	**Blank**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**30/Nov/23 20:29**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

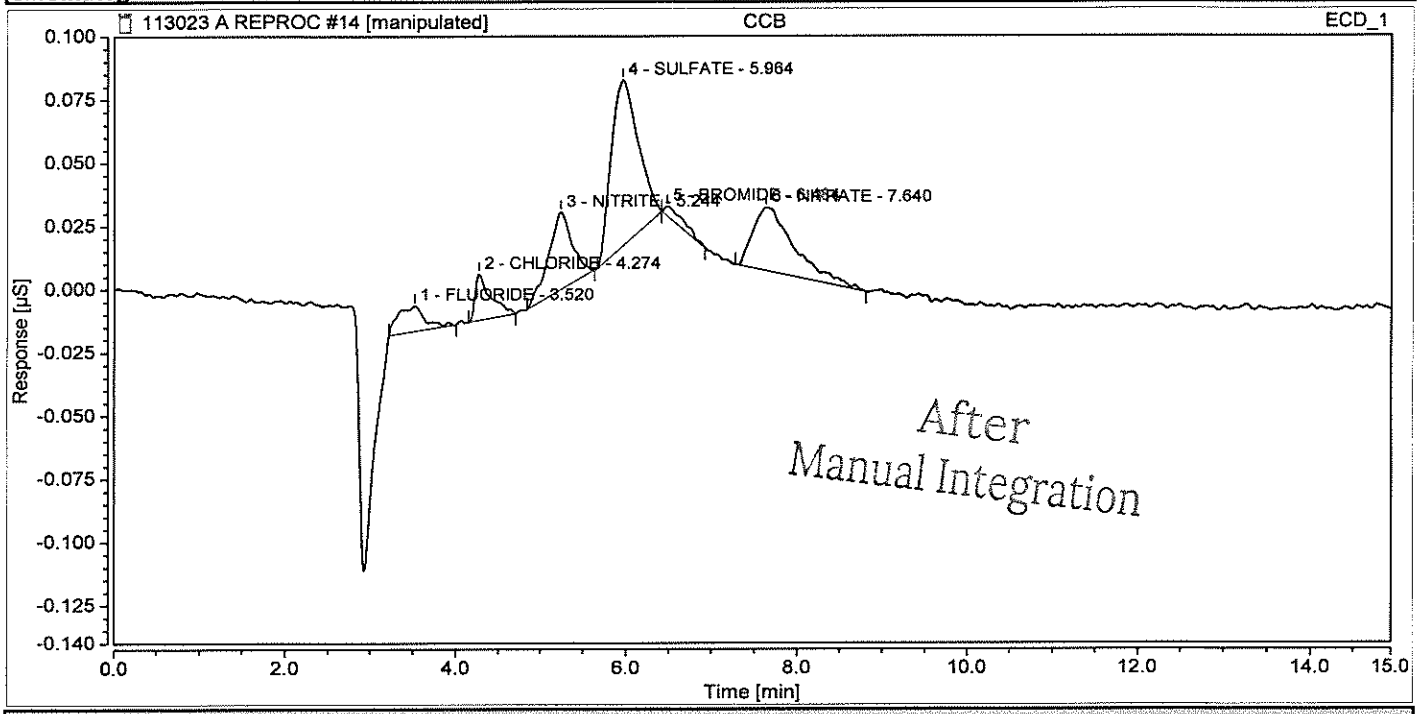
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.274	0.004	0.018	7.43	12.76	0.0102	n.a.
2	NITRITE	5.244	0.010	0.030	18.69	21.30	0.0198	n.a.
3	SULFATE	5.964	0.024	0.065	44.94	45.70	0.0842	n.a.
4	BROMIDE	6.484	0.001	0.004	2.36	2.76	0.0074	n.a.
5	NITRATE	7.640	0.014	0.025	26.58	17.48	0.0145	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.053**	**0.143**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**CCB**	*Run Time (min):*	**14.95**
Vial Number:	**14**	*Injection Volume:*	**200.00**
Injection Type:	**Blank**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**30/Nov/23 20:29**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

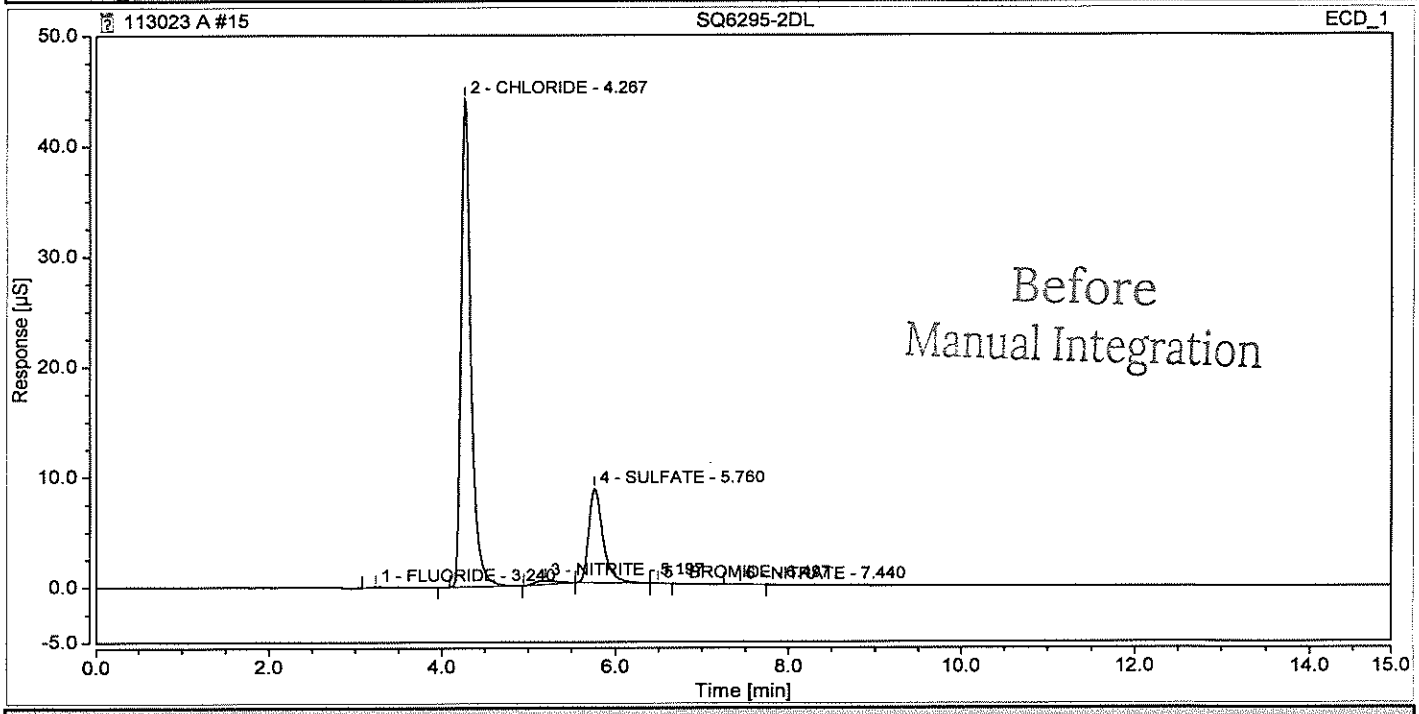
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.520	0.004	0.010	6.53	6.58	0.0225	n.a.
2	CHLORIDE	4.274	0.004	0.018	6.94	11.92	0.0102	n.a.
3	NITRITE	5.244	0.010	0.030	17.47	19.90	0.0198	n.a.
4	SULFATE	5.964	0.024	0.065	42.01	42.69	0.0842	n.a.
5	BROMIDE	6.484	0.001	0.004	2.21	2.58	0.0074	n.a.
6	NITRATE	7.640	0.014	0.025	24.85	16.33	0.0145	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.057**	**0.153**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6295-2DL**	*Run Time (min):*	**14.95**
Vial Number:	**15**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**5.0000**
Injection Date/Time:	**30/Nov/23 20:47**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

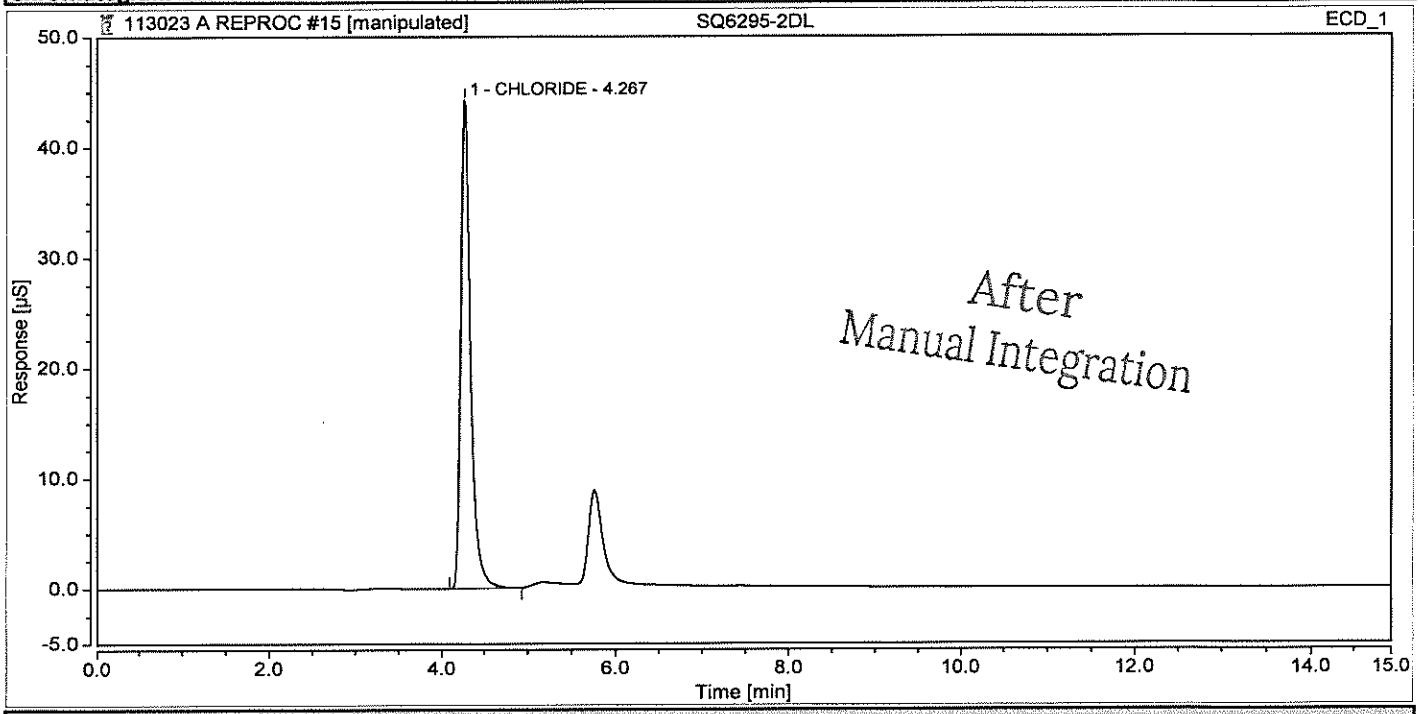
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.240	0.022	0.090	0.29	0.17	0.2576	n.a.
2	CHLORIDE	4.267	5.946	44.242	77.44	83.05	76.2849	n.a.
3	NITRITE	5.197	0.107	0.347	1.39	0.65	0.6645	n.a.
4	SULFATE	5.760	1.596	8.549	20.78	16.05	28.0636	n.a.
5	BROMIDE	6.497	0.001	0.009	0.01	0.02	0.0298	n.a.
6	NITRATE	7.440	0.006	0.033	0.08	0.06	0.0324	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**7.678**	**53.270**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6295-2DL**	*Run Time (min):*	**14.95**
Vial Number:	**15**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**5.0000**
Injection Date/Time:	**30/Nov/23 20:47**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

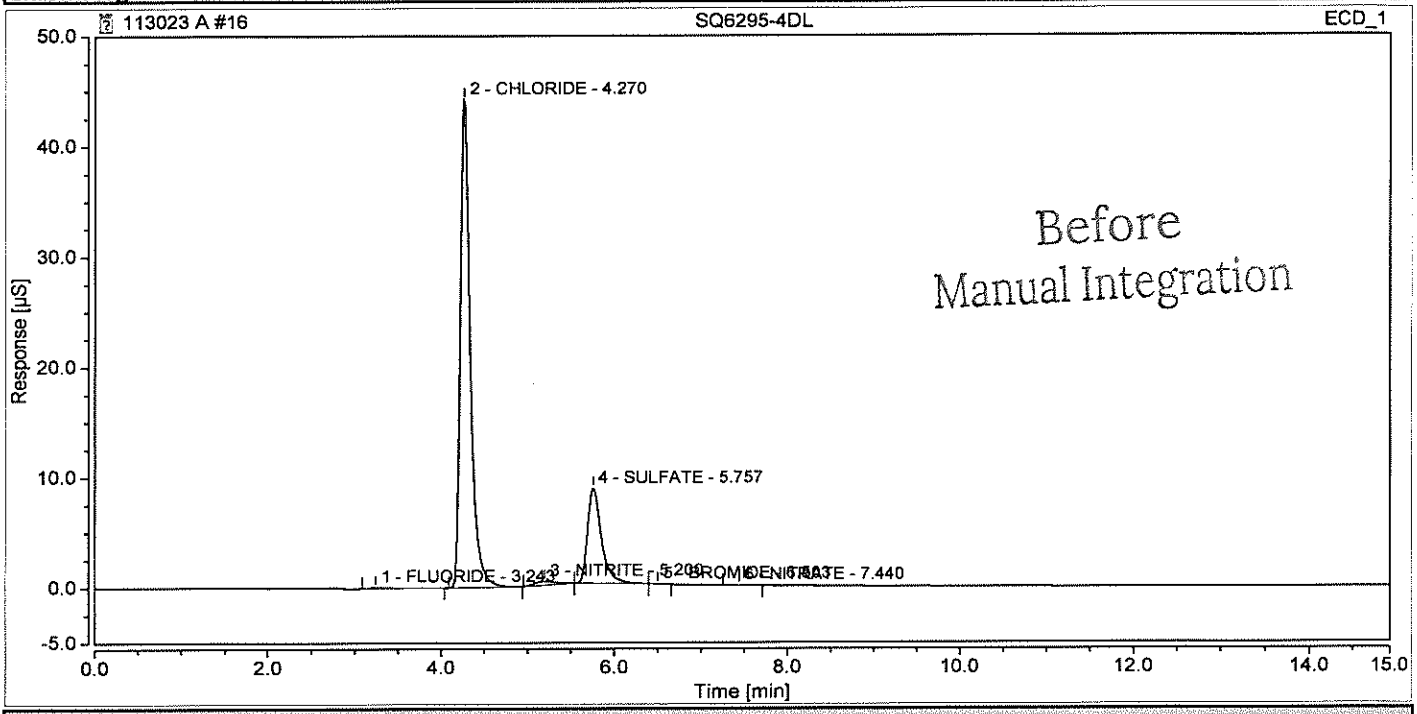
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.267	5.946	44.242	100.00	100.00	76.2849	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	SULFATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**5.946**	**44.242**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6295-4DL**	*Run Time (min):*	**14.95**
Vial Number:	**16**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**5.0000**
Injection Date/Time:	**30/Nov/23 21:04**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

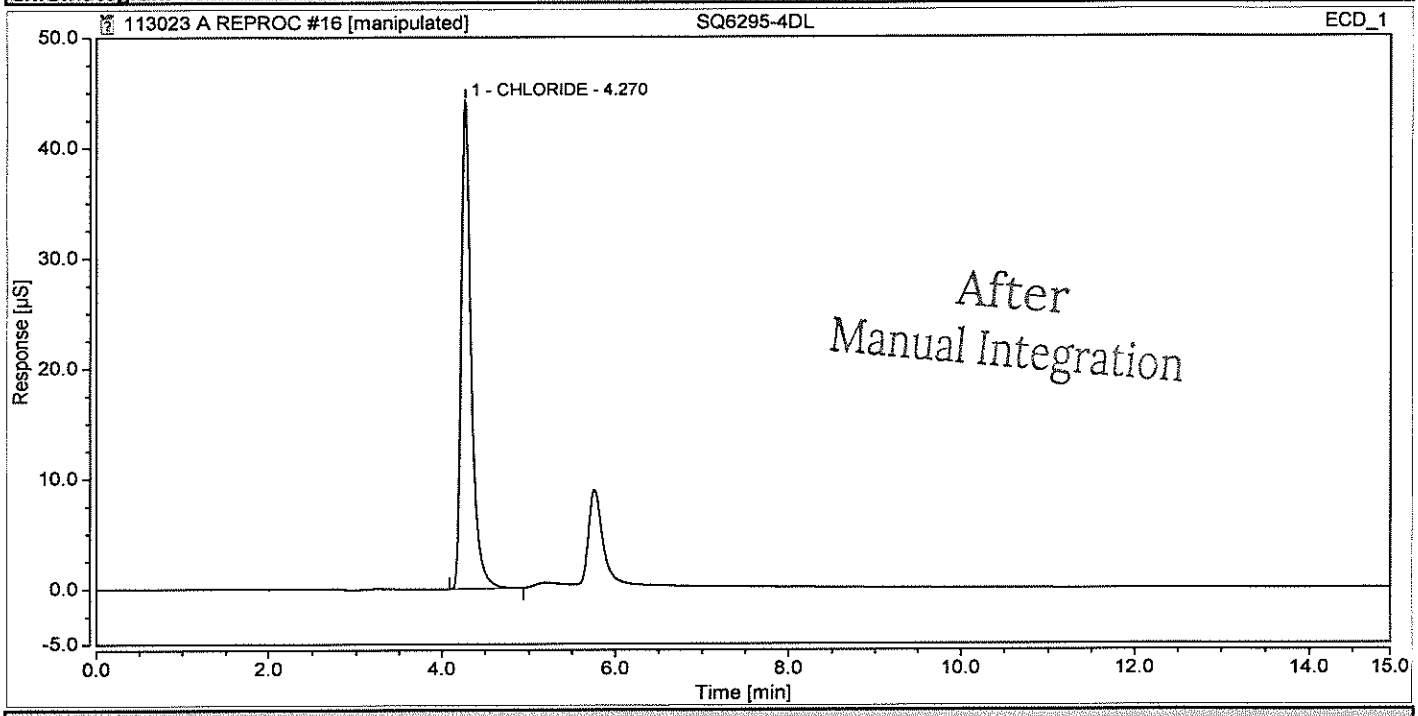
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.243	0.025	0.093	0.32	0.17	0.2771	n.a.
2	CHLORIDE	4.270	5.949	44.228	77.32	82.96	76.3247	n.a.
3	NITRITE	5.200	0.105	0.340	1.36	0.64	0.6508	n.a.
4	SULFATE	5.757	1.610	8.620	20.93	16.17	28.3256	n.a.
5	BROMIDE	6.503	0.001	0.009	0.02	0.02	0.0363	n.a.
6	NITRATE	7.440	0.004	0.020	0.05	0.04	0.0186	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**7.694**	**53.310**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6295-4DL**	*Run Time (min):*	**14.95**
Vial Number:	**16**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**5.0000**
Injection Date/Time:	**30/Nov/23 21:04**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

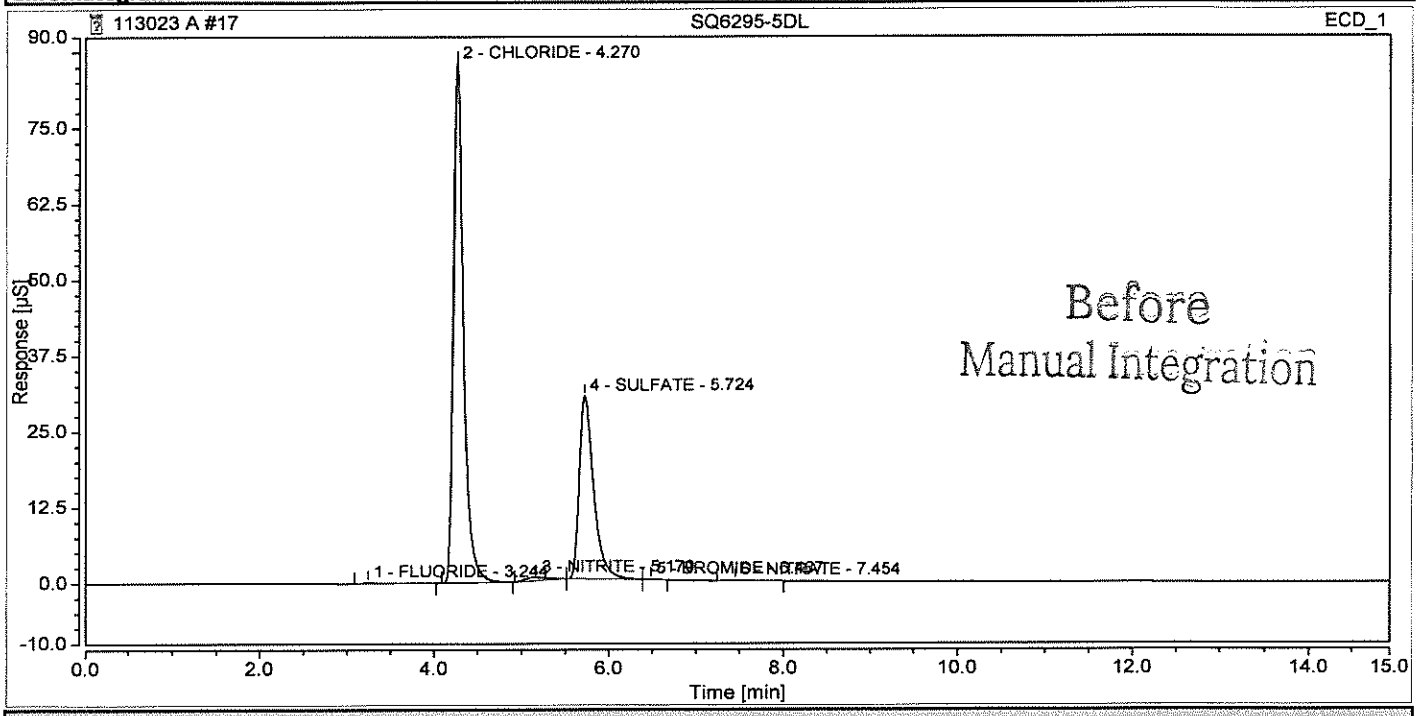
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.270	5.949	44.228	100.00	100.00	76.3247	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	SULFATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**5.949**	**44.228**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6295-5DL**	*Run Time (min):*	**14.95**
Vial Number:	**17**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**2.0000**
Injection Date/Time:	**30/Nov/23 21:21**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

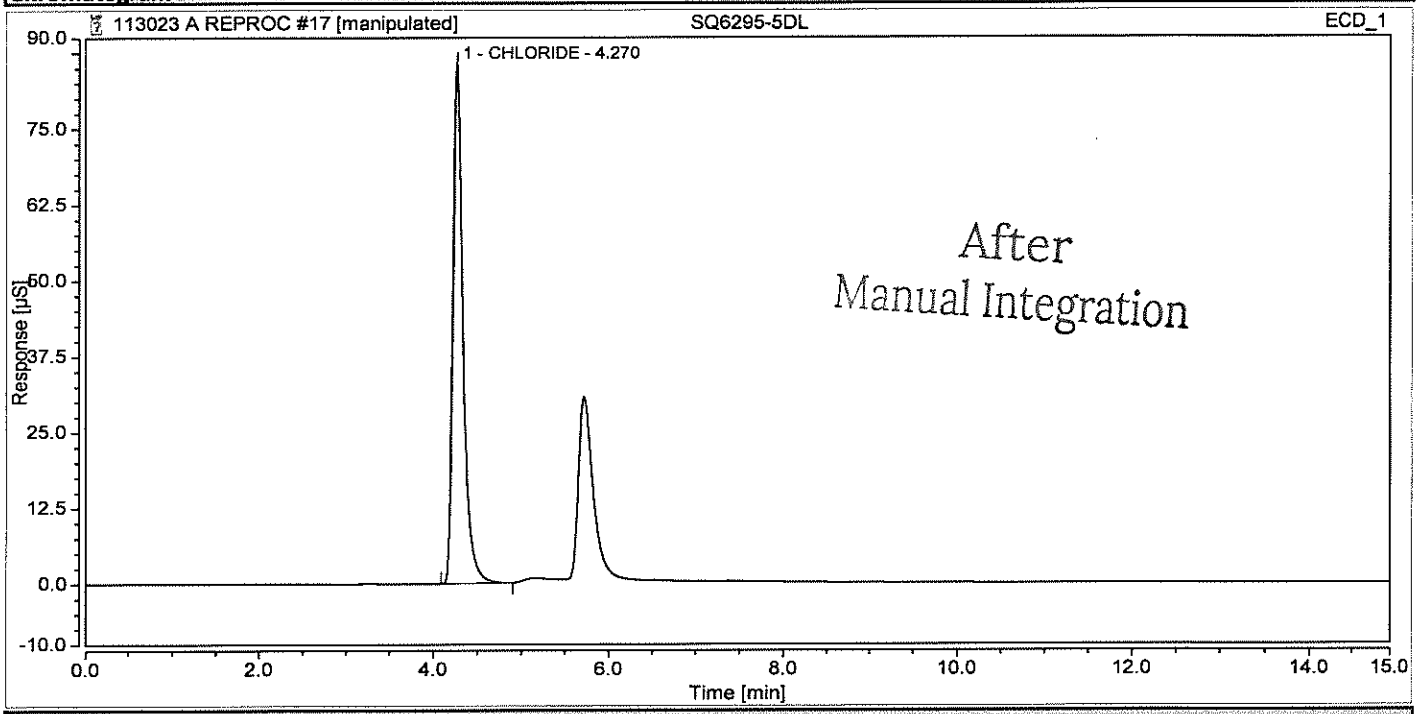
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.244	0.037	0.170	0.21	0.15	0.1489	n.a.
2	CHLORIDE	4.270	11.543	85.577	65.59	73.42	59.2329	n.a.
3	NITRITE	5.170	0.170	0.535	0.96	0.46	0.4120	n.a.
4	SULFATE	5.724	5.828	30.155	33.12	25.87	41.0055	n.a.
5	BROMIDE	6.487	0.003	0.026	0.02	0.02	0.0365	n.a.
6	NITRATE	7.454	0.019	0.089	0.11	0.08	0.0380	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**17.599**	**116.552**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6295-5DL**	*Run Time (min):*	**14.95**
Vial Number:	**17**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**2.0000**
Injection Date/Time:	**30/Nov/23 21:21**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

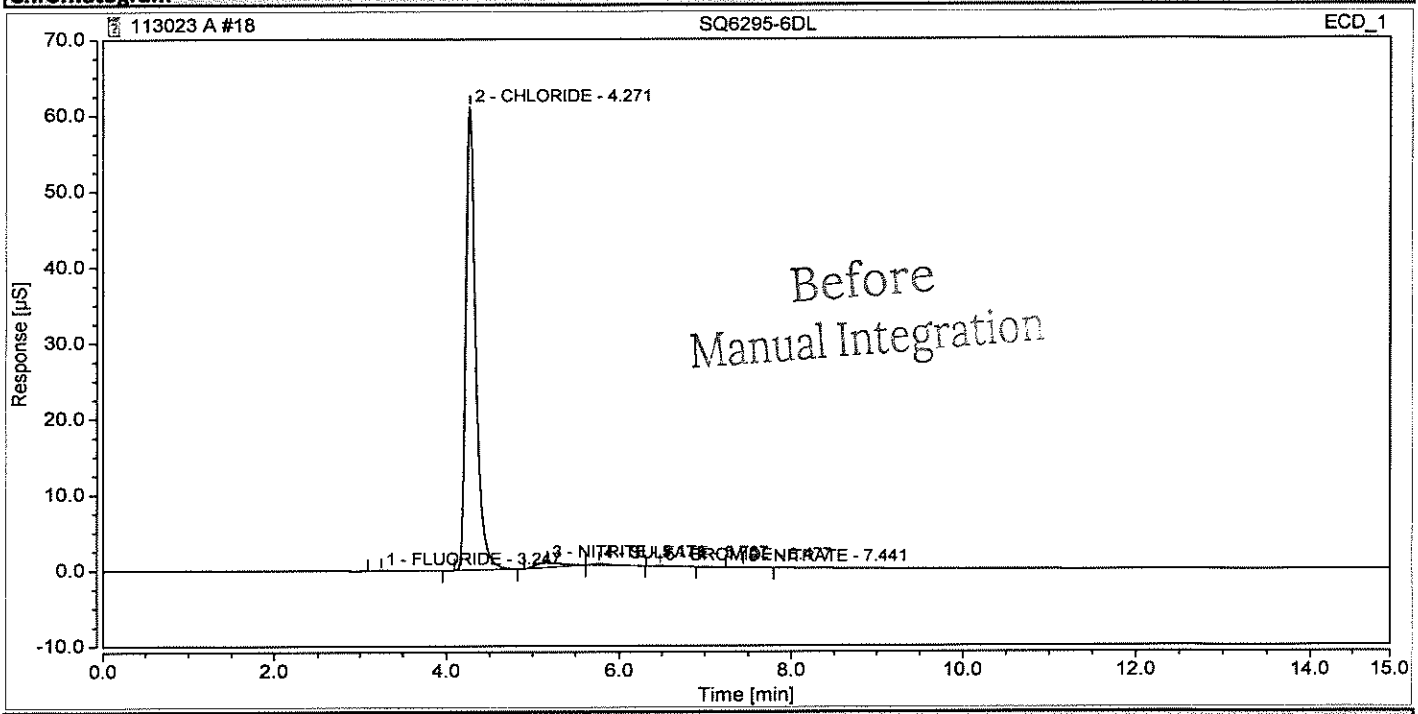
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.270	11.543	85.577	100.00	100.00	59.2329	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	SULFATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**11.543**	**85.577**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6295-6DL**	*Run Time (min):*	**14.95**
Vial Number:	**18**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**10.0000**
Injection Date/Time:	**30/Nov/23 21:39**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

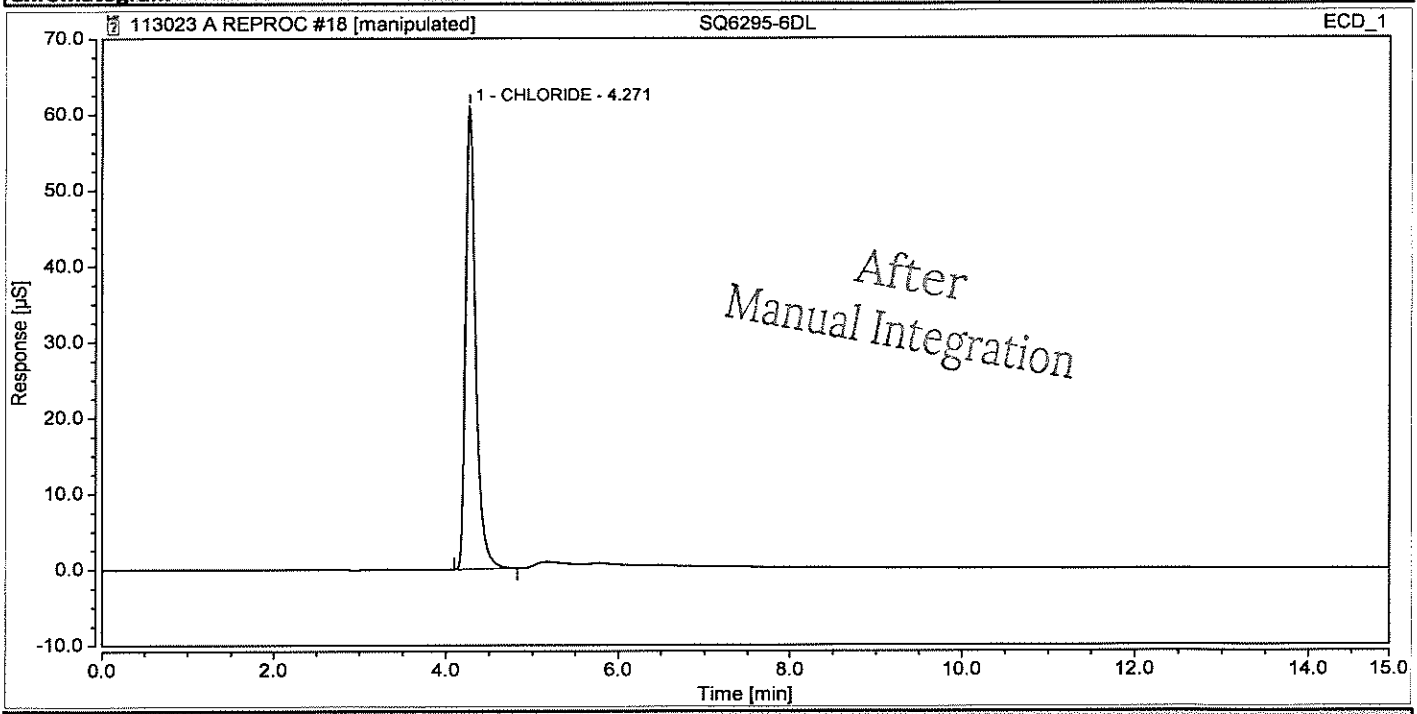
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.247	0.021	0.066	0.25	0.11	0.4954	n.a.
2	CHLORIDE	4.271	8.178	61.031	96.20	98.33	209.8212	n.a.
3	NITRITE	5.171	0.229	0.637	2.70	1.03	2.7590	n.a.
4	SULFATE	5.767	0.052	0.219	0.61	0.35	1.8217	n.a.
5	BROMIDE	6.477	0.012	0.068	0.14	0.11	0.7143	n.a.
6	NITRATE	7.441	0.009	0.046	0.10	0.07	0.0911	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**8.501**	**62.067**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6295-6DL**	*Run Time (min):*	**14.95**
Vial Number:	**18**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**10.0000**
Injection Date/Time:	**30/Nov/23 21:39**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

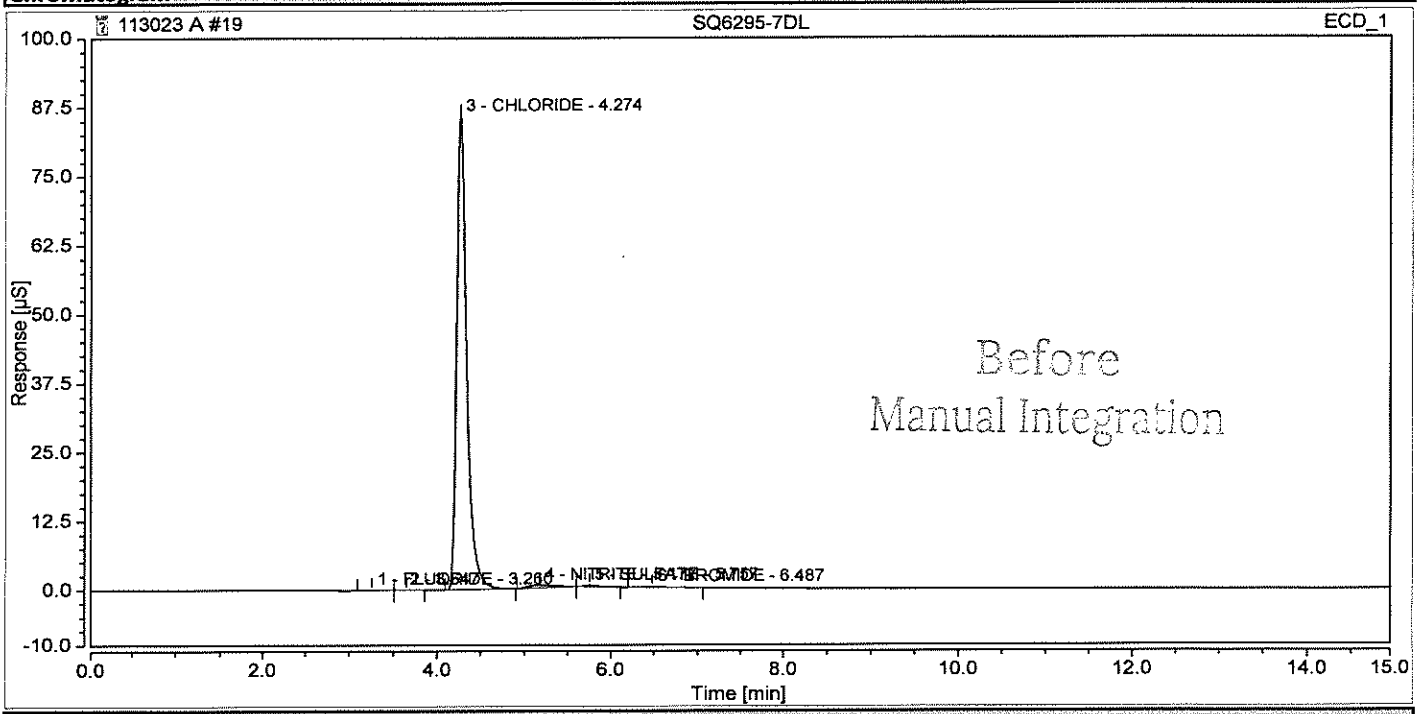
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.271	8.178	61.031	100.00	100.00	209.8212	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	SULFATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**8.178**	**61.031**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6295-7DL**	*Run Time (min):*	**14.96**
Vial Number:	**19**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**20.0000**
Injection Date/Time:	**30/Nov/23 21:56**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

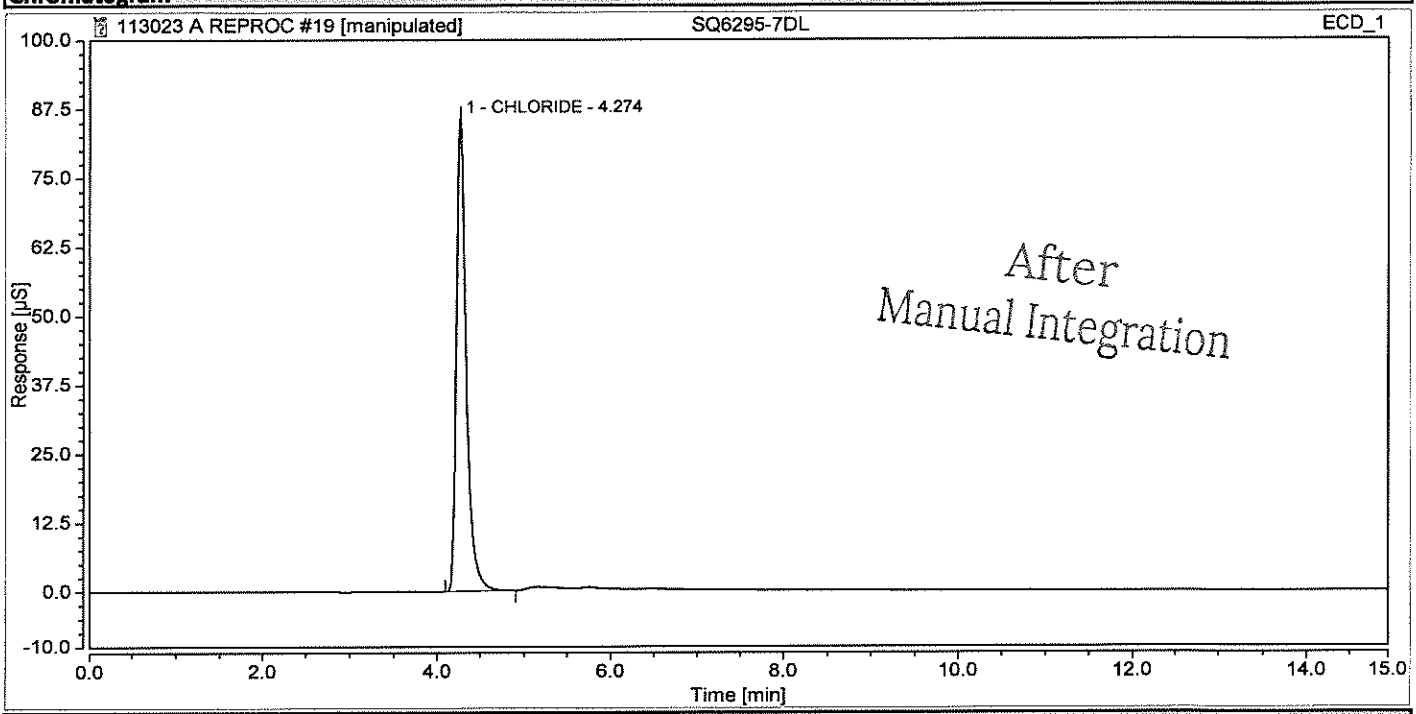
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.260	0.008	0.040	0.06	0.05	0.5697	n.a.
2		3.647	0.001	0.011	0.01	0.01	n.a.	n.a.
3	CHLORIDE	4.274	11.622	85.805	97.77	98.89	596.4080	n.a.
4	NITRITE	5.177	0.186	0.538	1.57	0.62	4.5132	n.a.
5	SULFATE	5.757	0.047	0.269	0.40	0.31	3.3163	n.a.
6	BROMIDE	6.487	0.022	0.103	0.19	0.12	2.6353	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**11.887**	**86.766**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6295-7DL**	*Run Time (min):*	**14.96**
Vial Number:	**19**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**20.0000**
Injection Date/Time:	**30/Nov/23 21:56**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

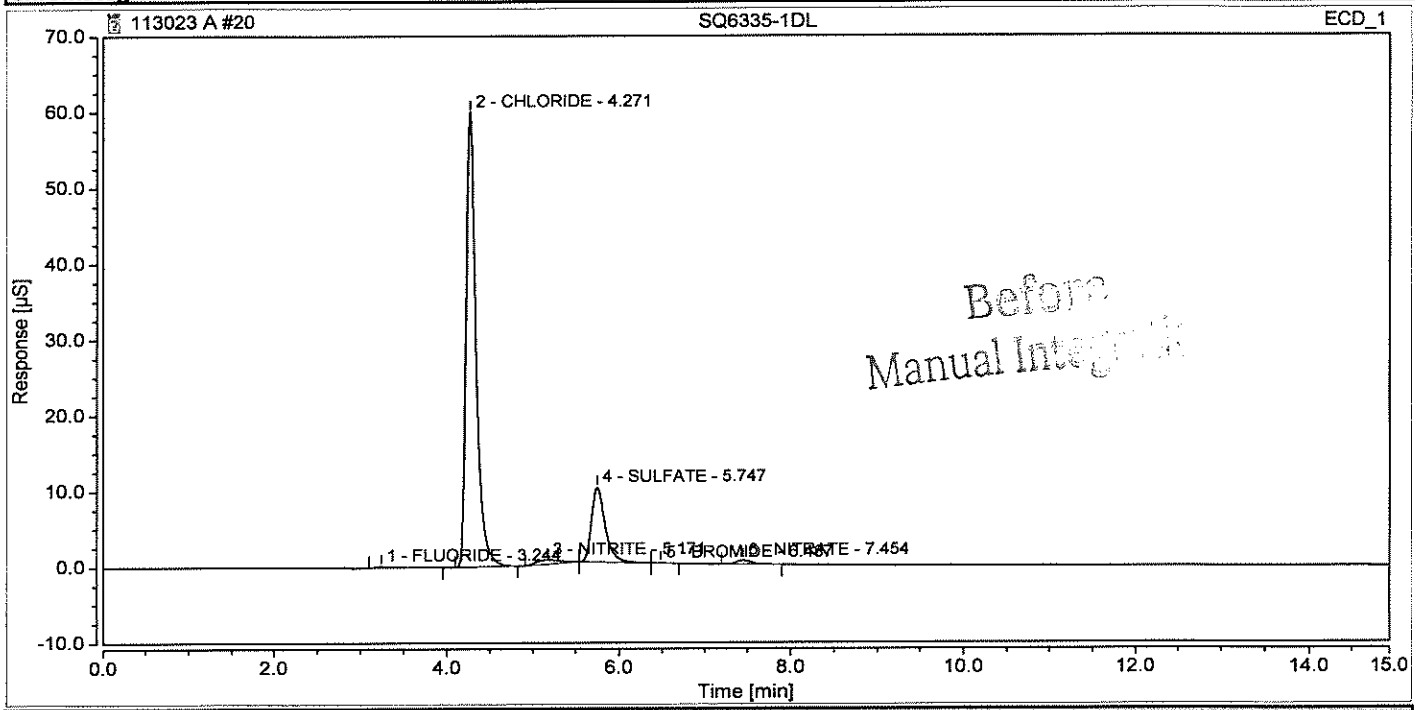
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.274	11.622	85.805	100.00	100.00	596.4080	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	SULFATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**11.622**	**85.805**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6335-1DL**	*Run Time (min):*	**14.95**
Vial Number:	**20**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**2.0000**
Injection Date/Time:	**30/Nov/23 22:13**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

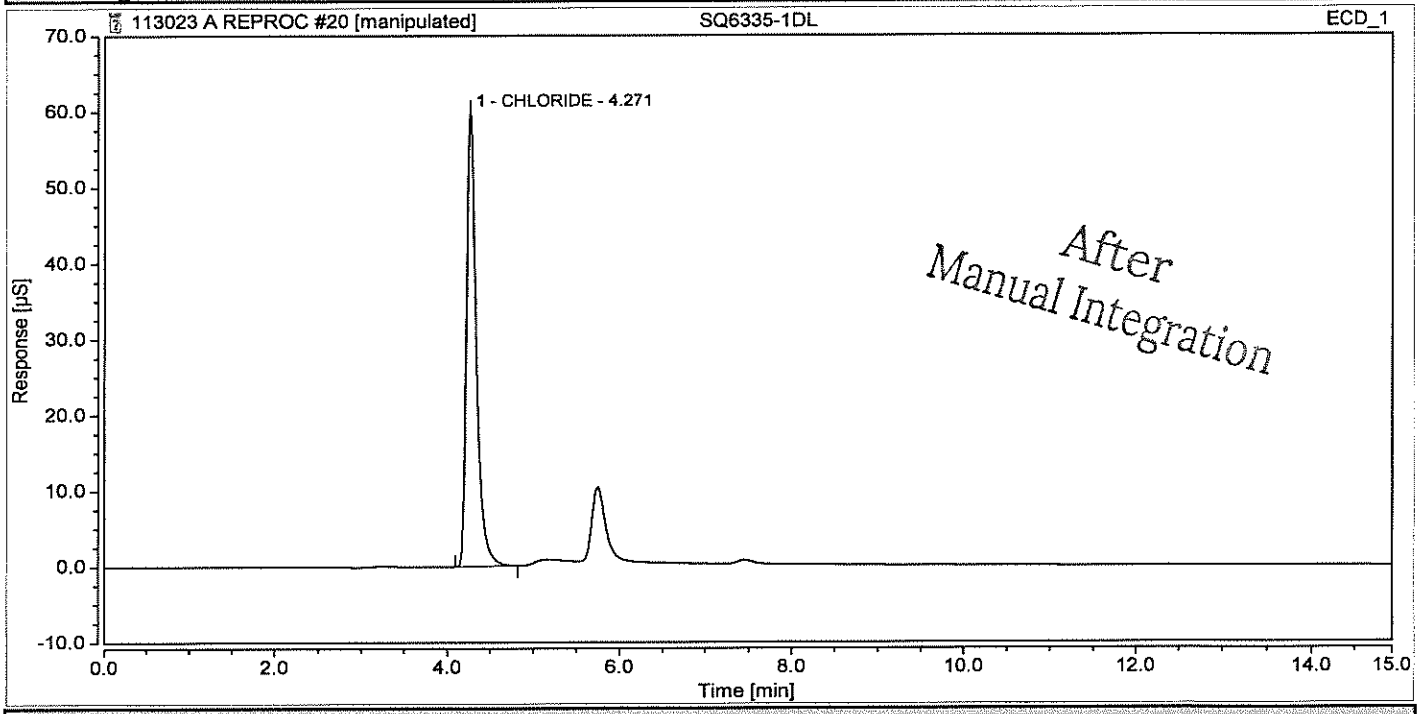
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.244	0.030	0.148	0.30	0.21	0.1282	n.a.
2	CHLORIDE	4.271	8.037	59.937	79.09	84.34	41.2421	n.a.
3	NITRITE	5.171	0.190	0.575	1.87	0.81	0.4589	n.a.
4	SULFATE	5.747	1.798	9.867	17.70	13.88	12.6511	n.a.
5	BROMIDE	6.487	0.002	0.014	0.02	0.02	0.0229	n.a.
6	NITRATE	7.454	0.105	0.528	1.03	0.74	0.2139	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**10.162**	**71.070**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6335-1DL**	*Run Time (min):*	**14.95**
Vial Number:	**20**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**2.0000**
Injection Date/Time:	**30/Nov/23 22:13**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

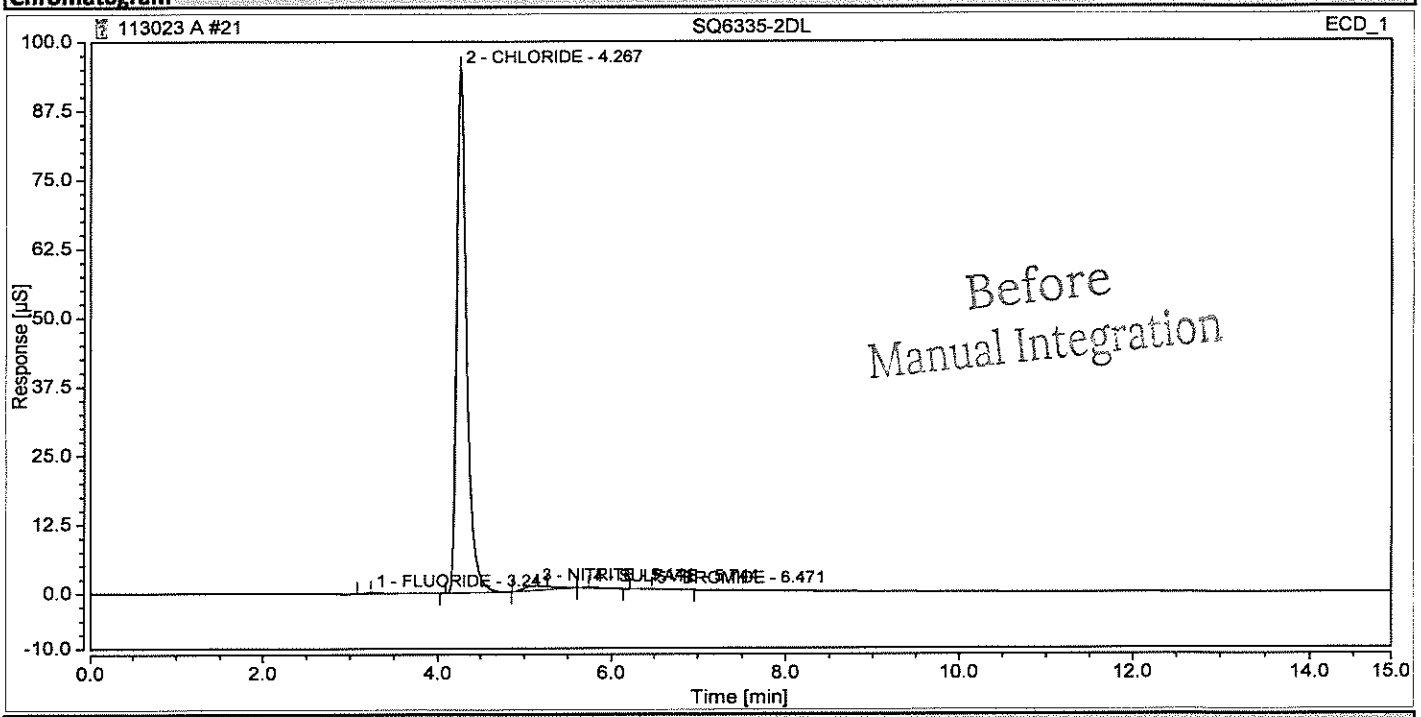
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.271	8.037	59.937	100.00	100.00	41.2421	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	SULFATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**8.037**	**59.937**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6335-2DL**	*Run Time (min):*	**14.95**
Vial Number:	**21**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**2.0000**
Injection Date/Time:	**30/Nov/23 22:30**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

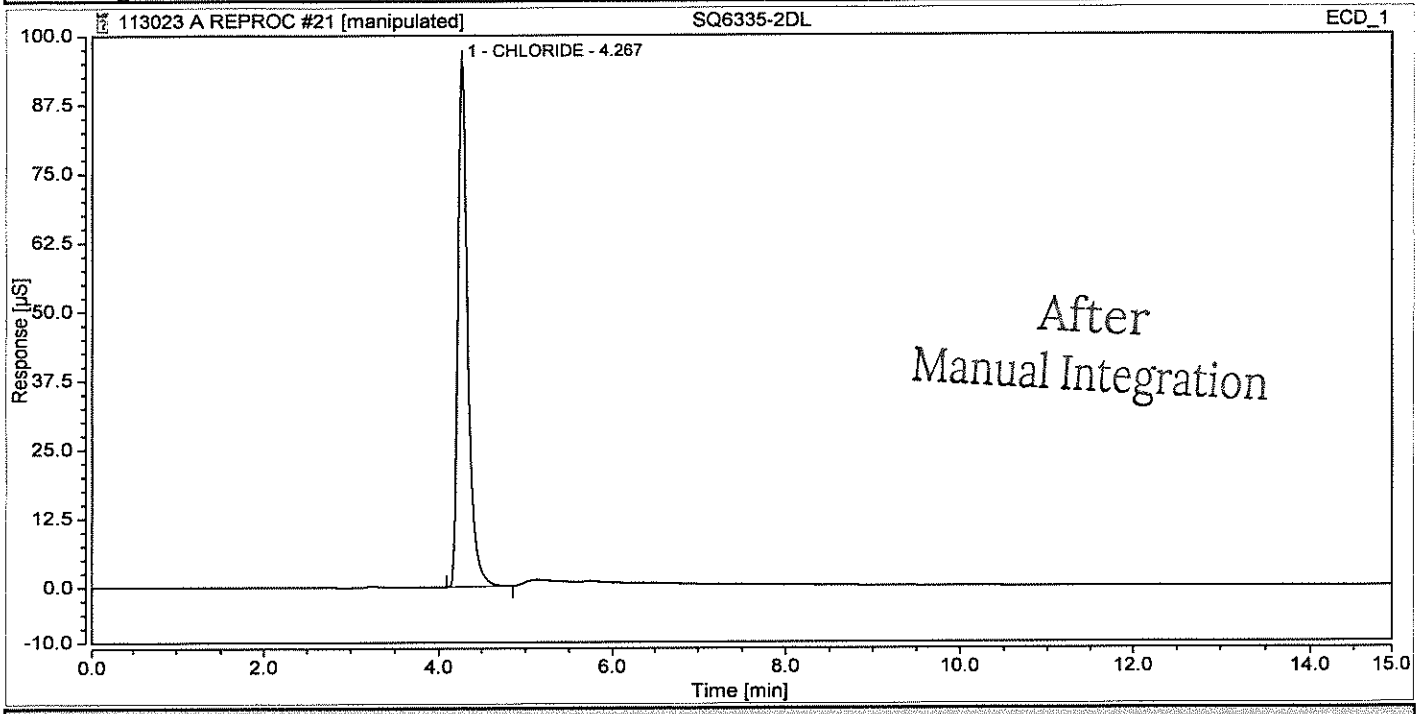
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.241	0.055	0.276	0.42	0.29	0.2071	n.a.
2	CHLORIDE	4.267	12.759	95.132	96.76	98.55	65.4757	n.a.
3	NITRITE	5.141	0.318	0.836	2.41	0.87	0.7590	n.a.
4	SULFATE	5.744	0.040	0.221	0.30	0.23	0.2828	n.a.
5	BROMIDE	6.471	0.014	0.069	0.10	0.07	0.1595	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**13.187**	**96.533**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6335-2DL**	*Run Time (min):*	**14.95**
Vial Number:	**21**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**2.0000**
Injection Date/Time:	**30/Nov/23 22:30**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

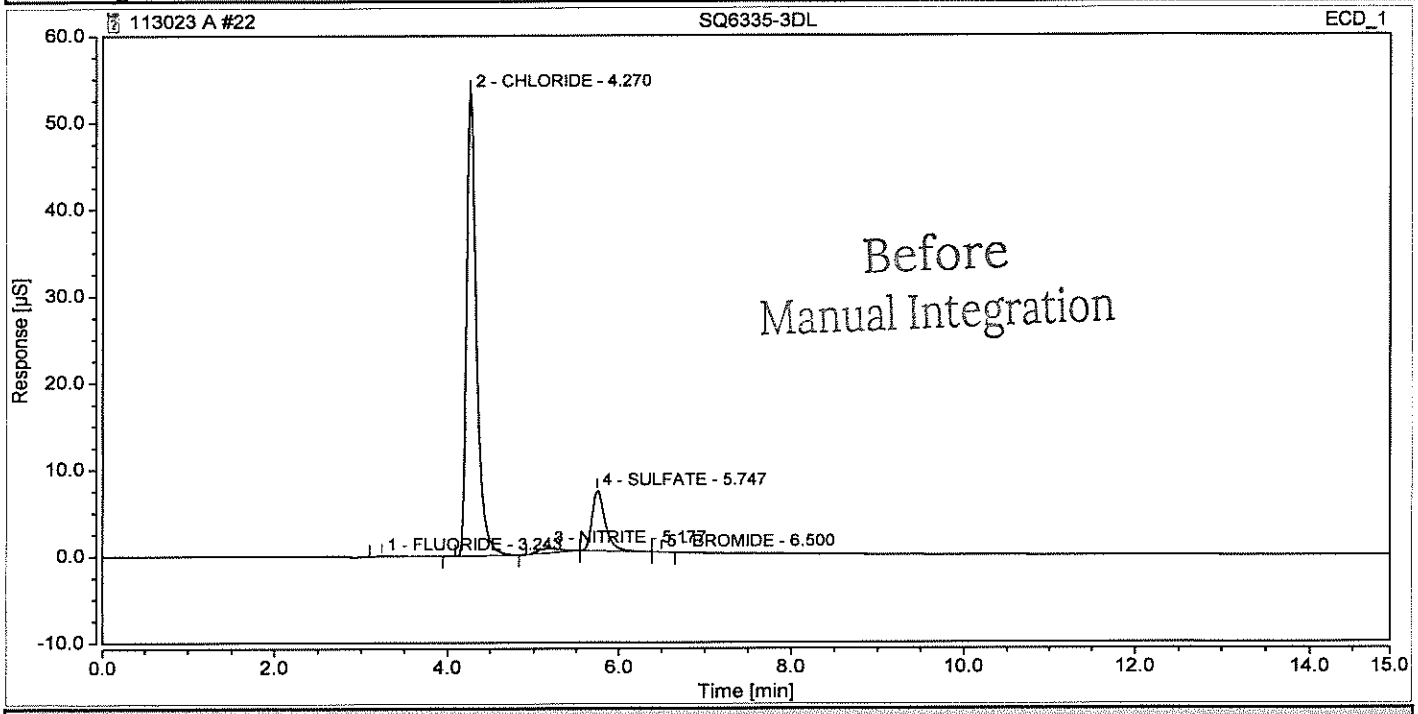
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.267	12.759	95.132	100.00	100.00	65.4757	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	SULFATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**12.759**	**95.132**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6335-3DL**	*Run Time (min):*	**14.95**
Vial Number:	**22**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**5.0000**
Injection Date/Time:	**30/Nov/23 22:48**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

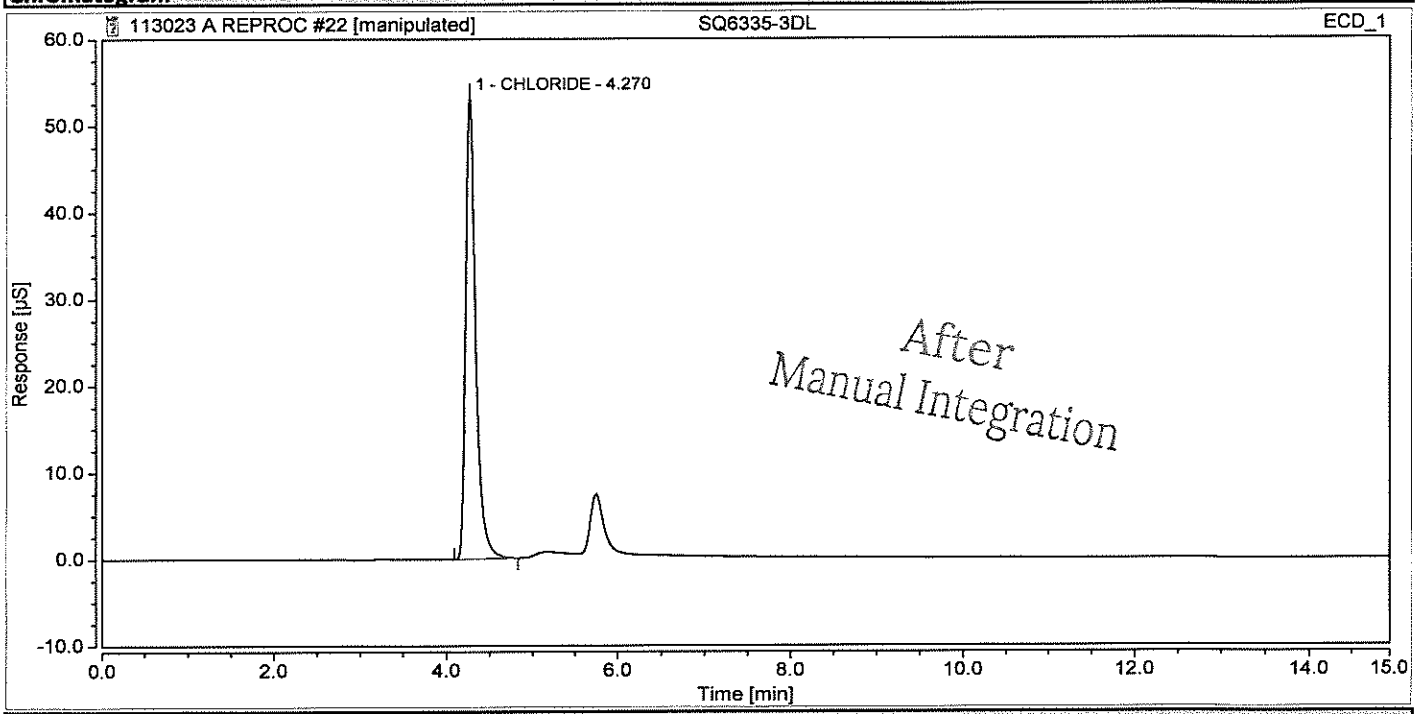
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.243	0.024	0.109	0.28	0.18	0.2754	n.a.
2	CHLORIDE	4.270	7.170	53.479	83.13	87.60	91.9868	n.a.
3	NITRITE	5.177	0.167	0.513	1.94	0.84	1.0167	n.a.
4	SULFATE	5.747	1.263	6.945	14.64	11.37	22.2088	n.a.
5	BROMIDE	6.500	0.001	0.006	0.01	0.01	0.0236	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**8.626**	**61.052**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6335-3DL**	*Run Time (min):*	**14.95**
Vial Number:	**22**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**5.0000**
Injection Date/Time:	**30/Nov/23 22:48**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

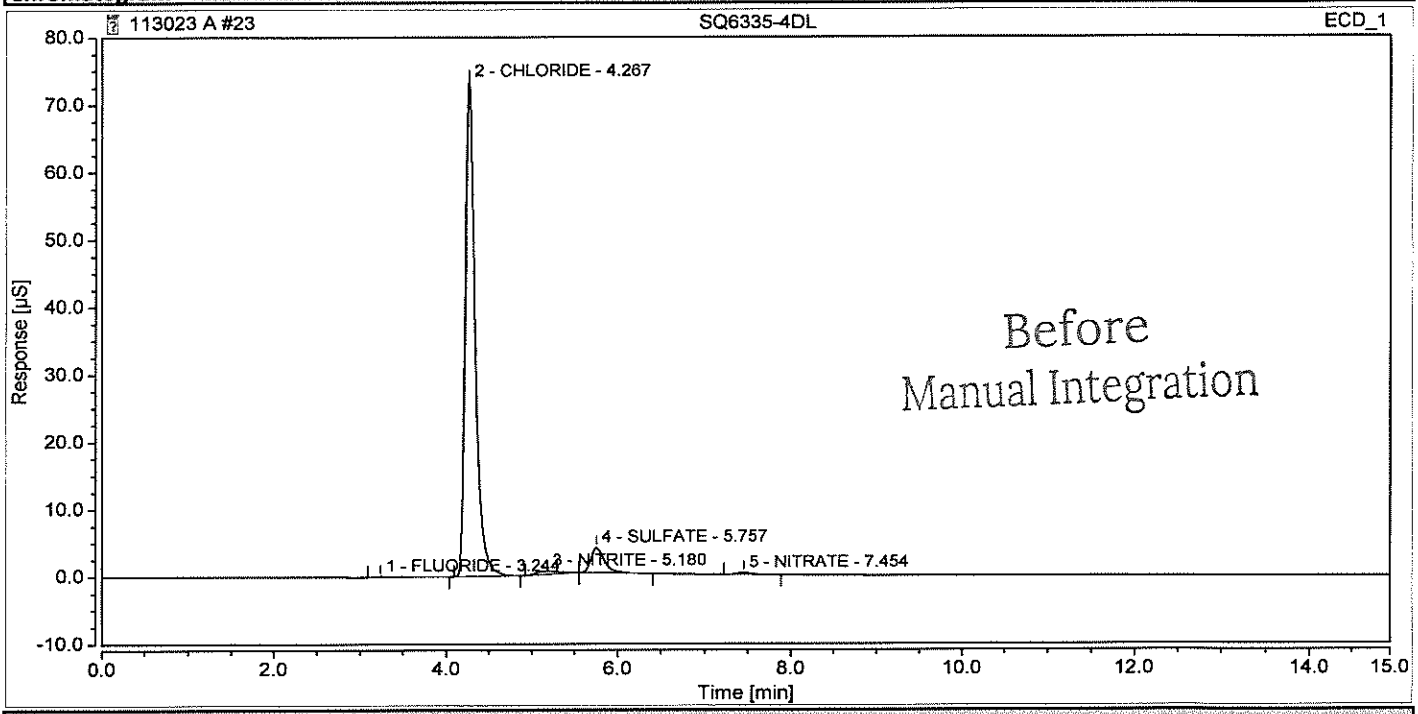
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.270	7.170	53.479	100.00	100.00	91.9868	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	SULFATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**7.170**	**53.479**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6335-4DL**	*Run Time (min):*	**14.96**
Vial Number:	**23**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**5.0000**
Injection Date/Time:	**30/Nov/23 23:05**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

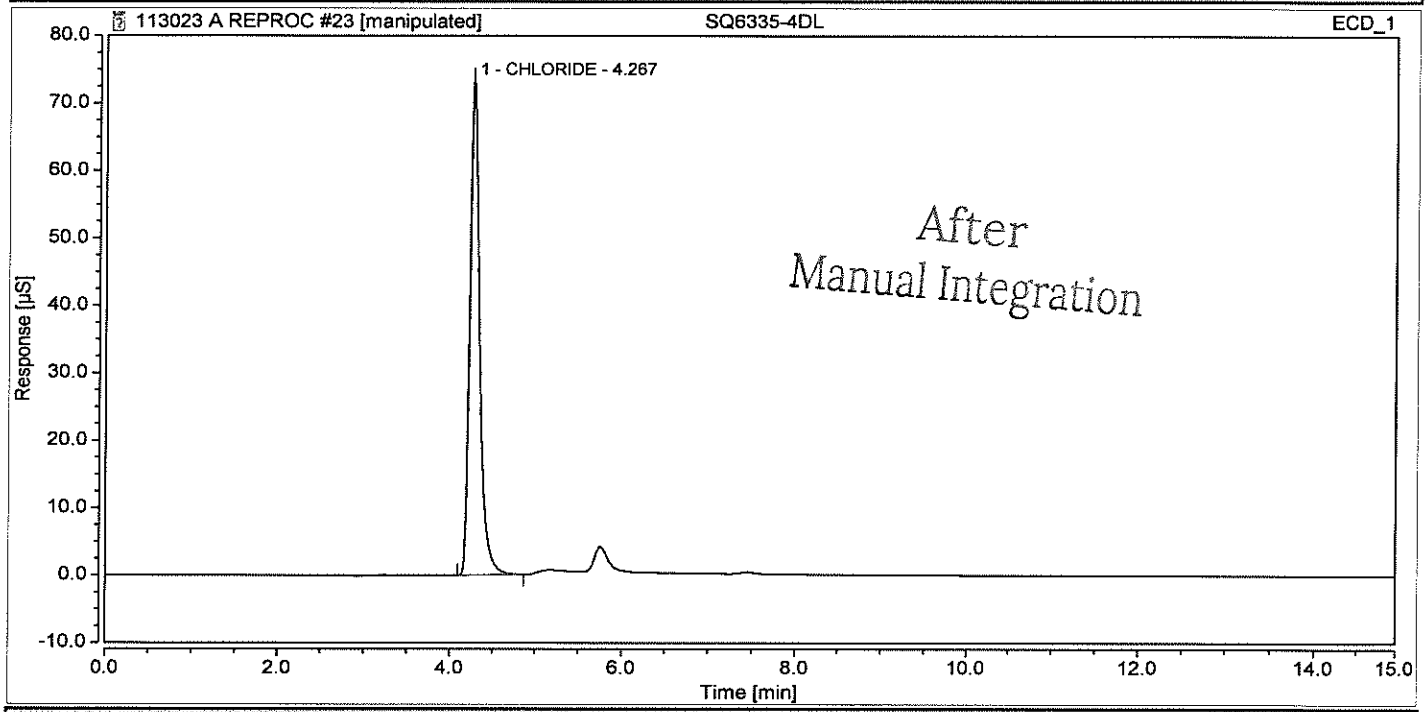
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.244	0.019	0.070	0.18	0.09	0.2351	n.a.
2	CHLORIDE	4.267	9.863	73.393	91.52	94.12	126.5321	n.a.
3	NITRITE	5.180	0.159	0.486	1.48	0.62	0.9697	n.a.
4	SULFATE	5.757	0.682	3.762	6.33	4.82	11.9977	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5	NITRATE	7.454	0.053	0.271	0.49	0.35	0.2697	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**10.777**	**77.982**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6335-4DL**	*Run Time (min):*	**14.96**
Vial Number:	**23**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**5.0000**
Injection Date/Time:	**30/Nov/23 23:05**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

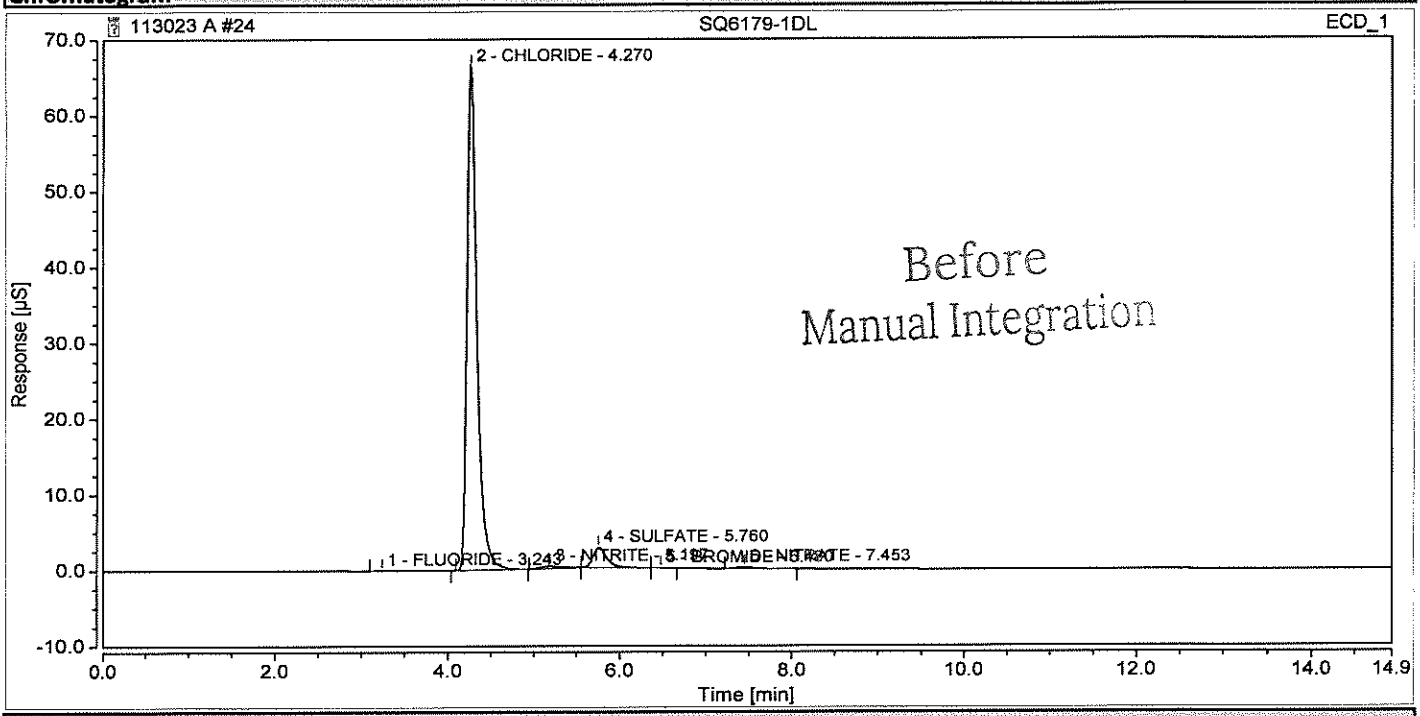
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.267	9.863	73.393	100.00	100.00	126.5321	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	SULFATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**9.863**	**73.393**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6179-1DL**	*Run Time (min):*	**14.94**
Vial Number:	**24**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**5.0000**
Injection Date/Time:	**30/Nov/23 23:22**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

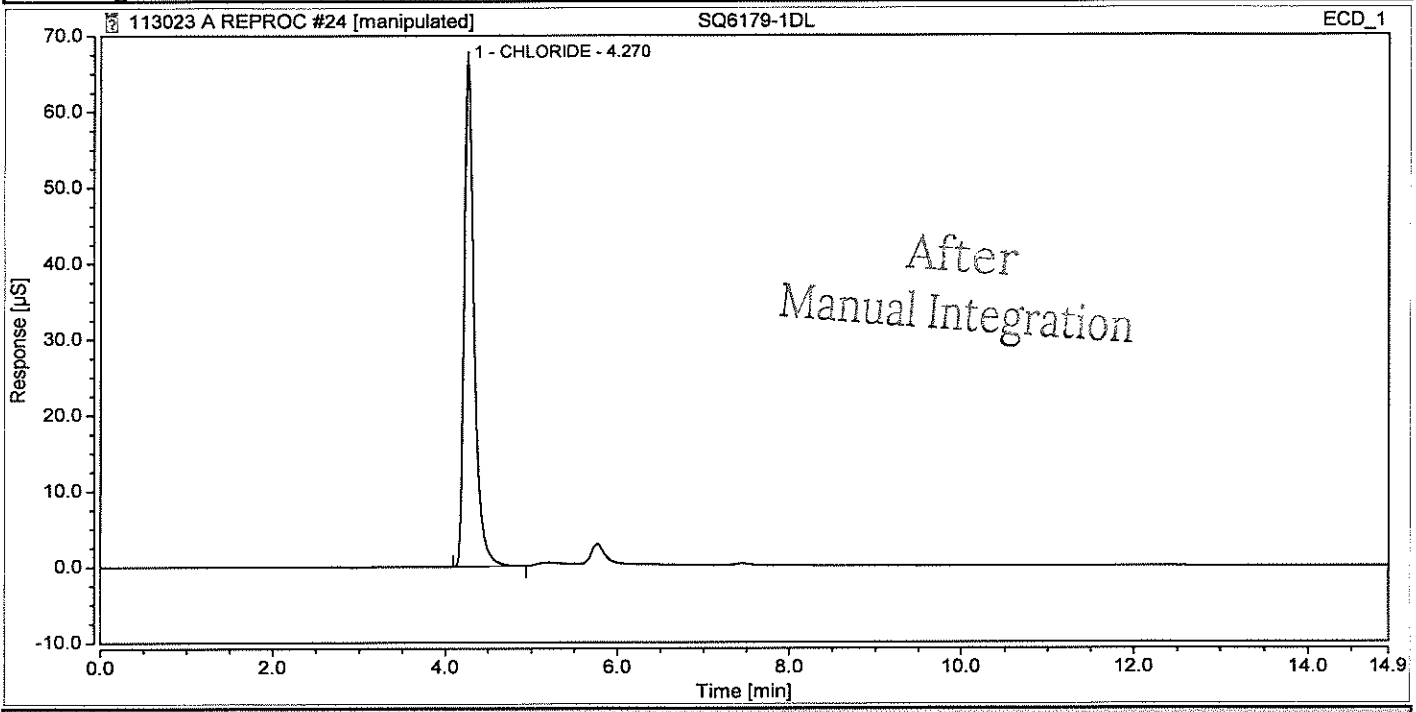
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.243	0.015	0.047	0.16	0.07	0.2028	n.a.
2	CHLORIDE	4.270	8.959	66.404	93.29	95.34	114.9352	n.a.
3	NITRITE	5.197	0.096	0.310	1.00	0.44	0.6025	n.a.
4	SULFATE	5.760	0.486	2.654	5.06	3.81	8.5445	n.a.
5	BROMIDE	6.480	0.002	0.011	0.02	0.02	0.0481	n.a.
6	NITRATE	7.453	0.045	0.226	0.47	0.32	0.2304	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**9.603**	**69.652**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6179-1DL**	*Run Time (min):*	**14.94**
Vial Number:	**24**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**5.0000**
Injection Date/Time:	**30/Nov/23 23:22**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

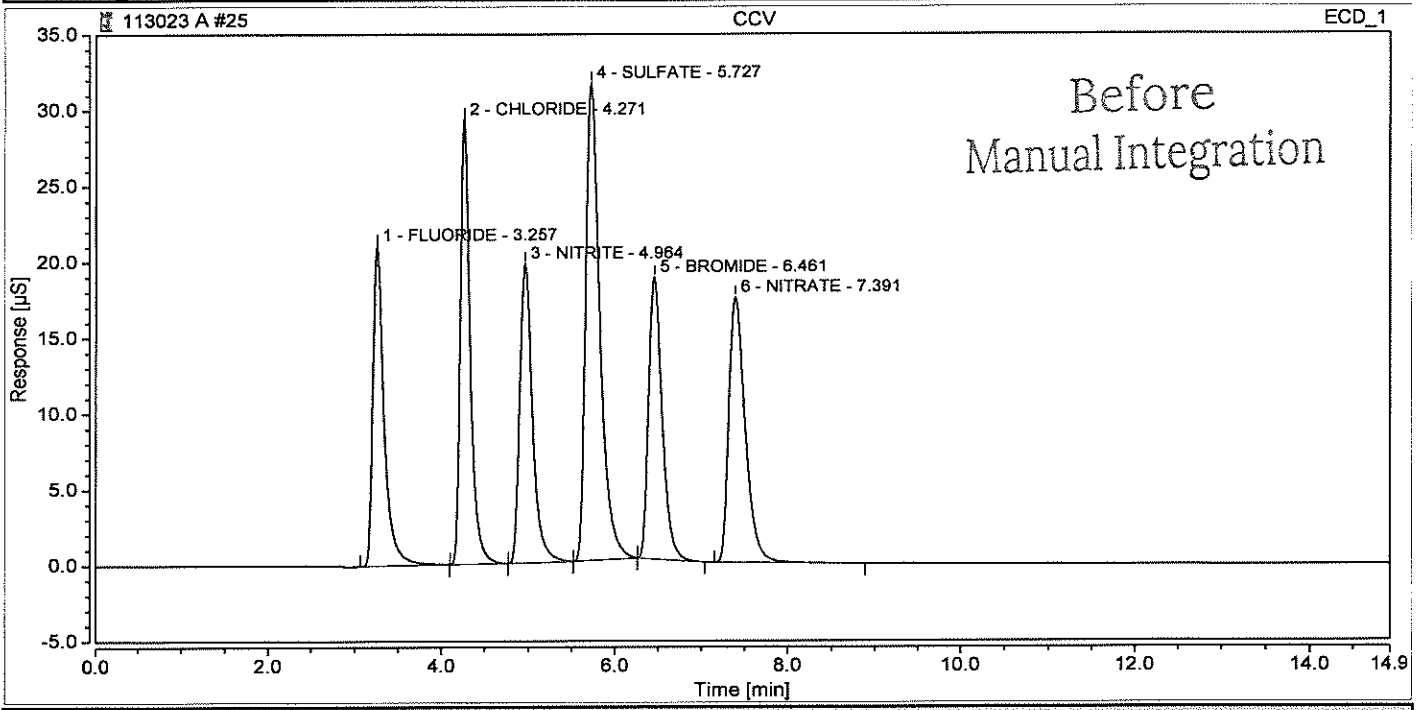
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.270	8.959	66.404	100.00	100.00	114.9352	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	SULFATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**8.959**	**66.404**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**CCV**	*Run Time (min):*	**14.94**
Vial Number:	**25**	*Injection Volume:*	**200.00**
Injection Type:	**Check Standard**	*Channel:*	**ECD_1**
Calibration Level:	**06**	*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**30/Nov/23 23:39**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

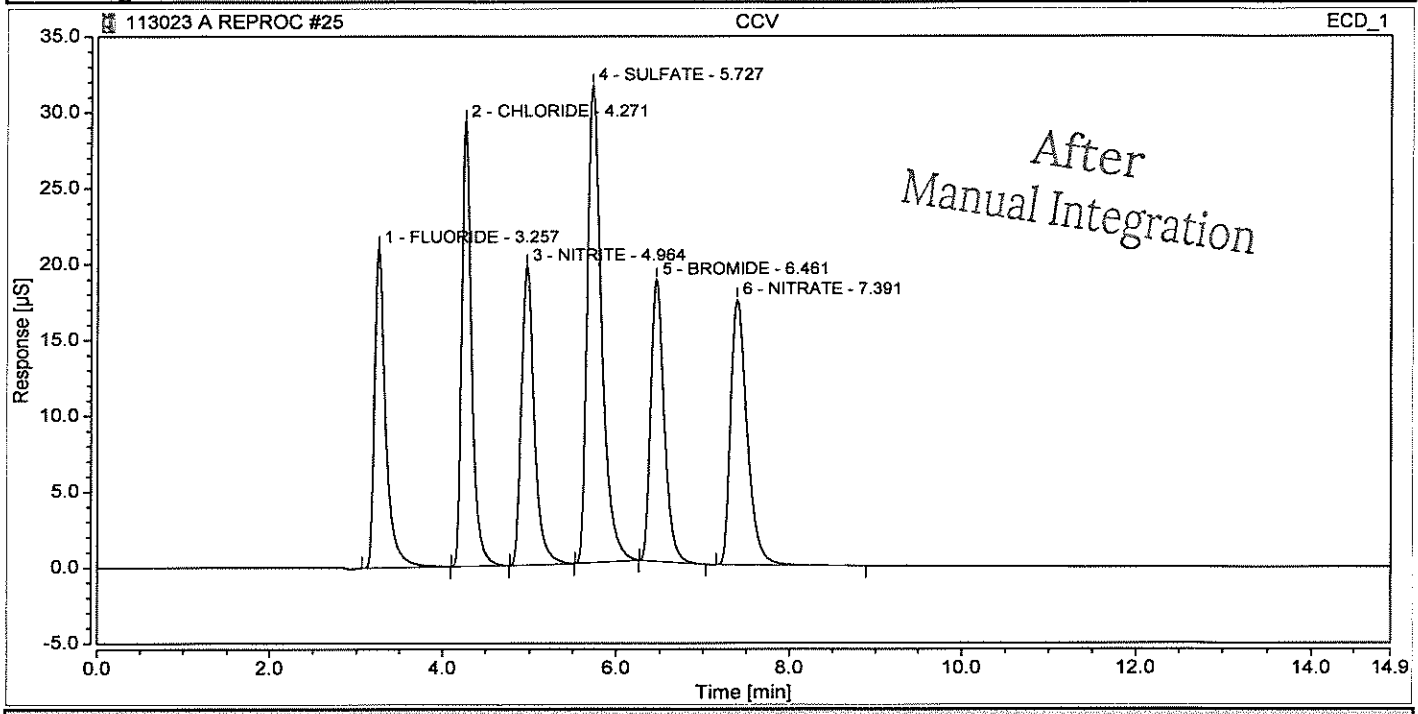
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.257	3.180	21.085	13.44	15.33	5.1666	3.3326
2	CHLORIDE	4.271	3.897	29.276	16.47	21.28	9.9982	-0.0182
3	NITRITE	4.964	3.369	19.711	14.24	14.33	4.0599	1.4964
4	SULFATE	5.727	6.014	31.462	25.41	22.87	21.1550	5.7750
5	BROMIDE	6.461	3.355	18.566	14.17	13.49	19.7319	-1.3403
6	NITRATE	7.391	3.852	17.485	16.28	12.71	3.9363	-1.5913
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**23.667**	**137.584**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**CCV**	*Run Time (min):*	**14.94**
Vial Number:	**25**	*Injection Volume:*	**200.00**
Injection Type:	**Check Standard**	*Channel:*	**ECD_1**
Calibration Level:	**06**	*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**30/Nov/23 23:39**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

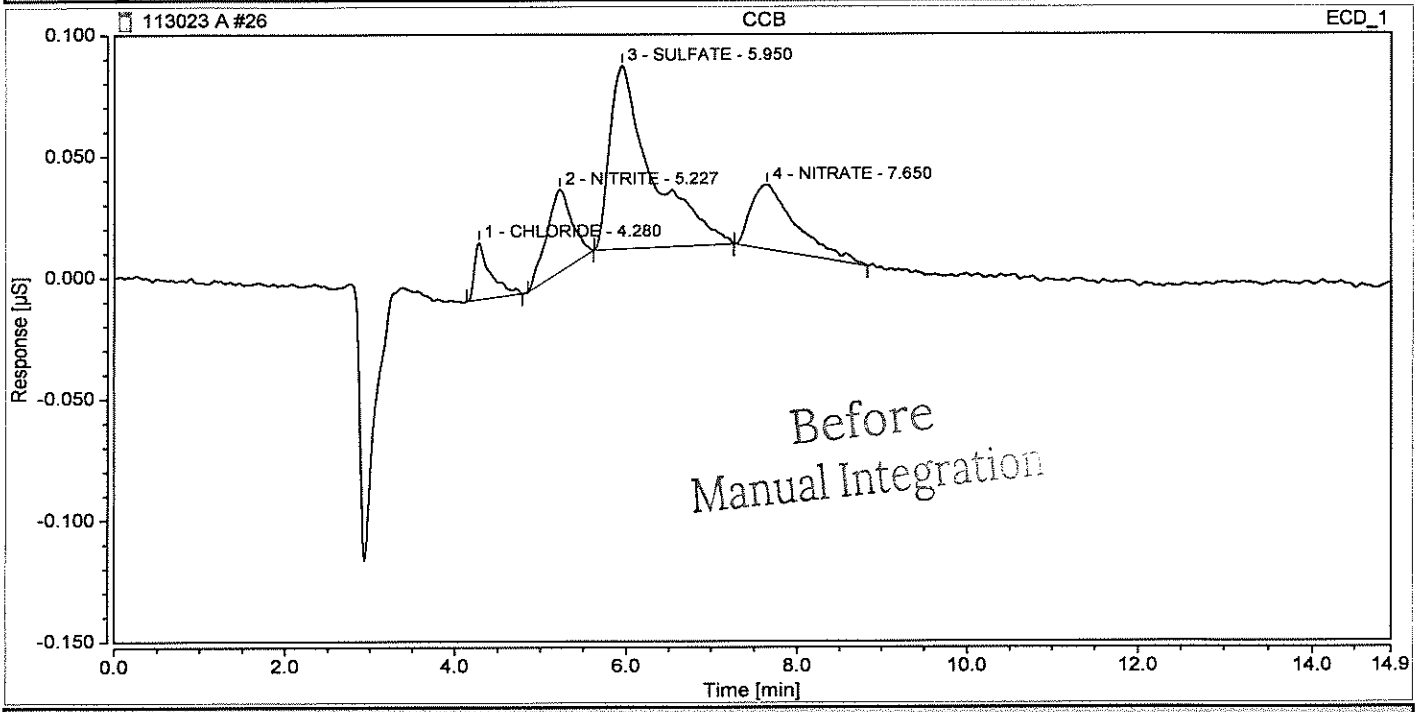
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.257	3.180	21.085	13.44	15.33	5.1666	3.3326
2	CHLORIDE	4.271	3.897	29.276	16.47	21.28	9.9982	-0.0182
3	NITRITE	4.964	3.369	19.711	14.24	14.33	4.0599	1.4964
4	SULFATE	5.727	6.014	31.462	25.41	22.87	21.1550	5.7750
5	BROMIDE	6.461	3.355	18.566	14.17	13.49	19.7319	-1.3403
6	NITRATE	7.391	3.852	17.485	16.28	12.71	3.9363	-1.5913
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**23.667**	**137.584**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**CCB**	*Run Time (min):*	**14.95**
Vial Number:	**26**	*Injection Volume:*	**200.00**
Injection Type:	**Blank**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**30/Nov/23 23:57**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

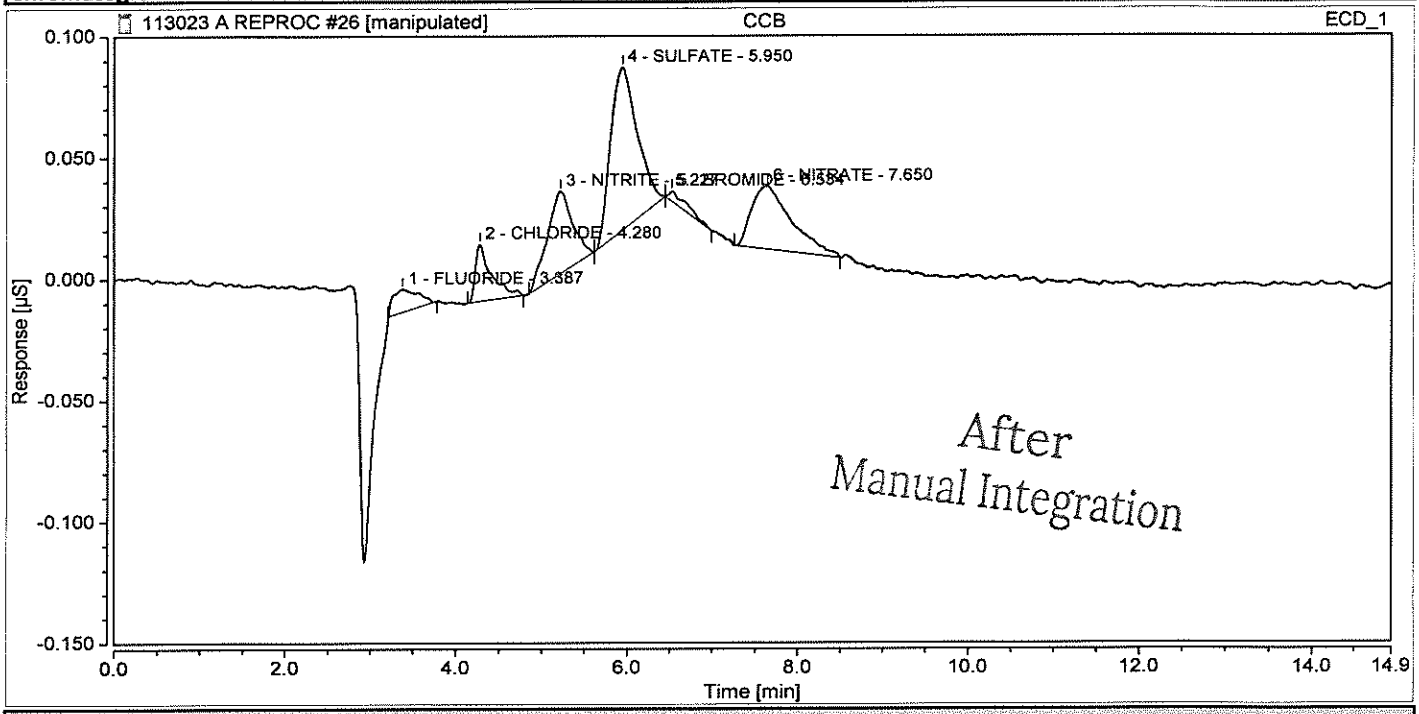
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.280	0.005	0.024	6.64	14.75	0.0130	n.a.
2	NITRITE	5.227	0.012	0.034	15.57	21.19	0.0220	n.a.
3	SULFATE	5.950	0.043	0.075	56.64	47.38	0.1518	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
4	NITRATE	7.650	0.016	0.027	21.15	16.67	0.0165	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.076**	**0.159**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**CCB**	*Run Time (min):*	**14.95**
Vial Number:	**26**	*Injection Volume:*	**200.00**
Injection Type:	**Blank**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**30/Nov/23 23:57**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

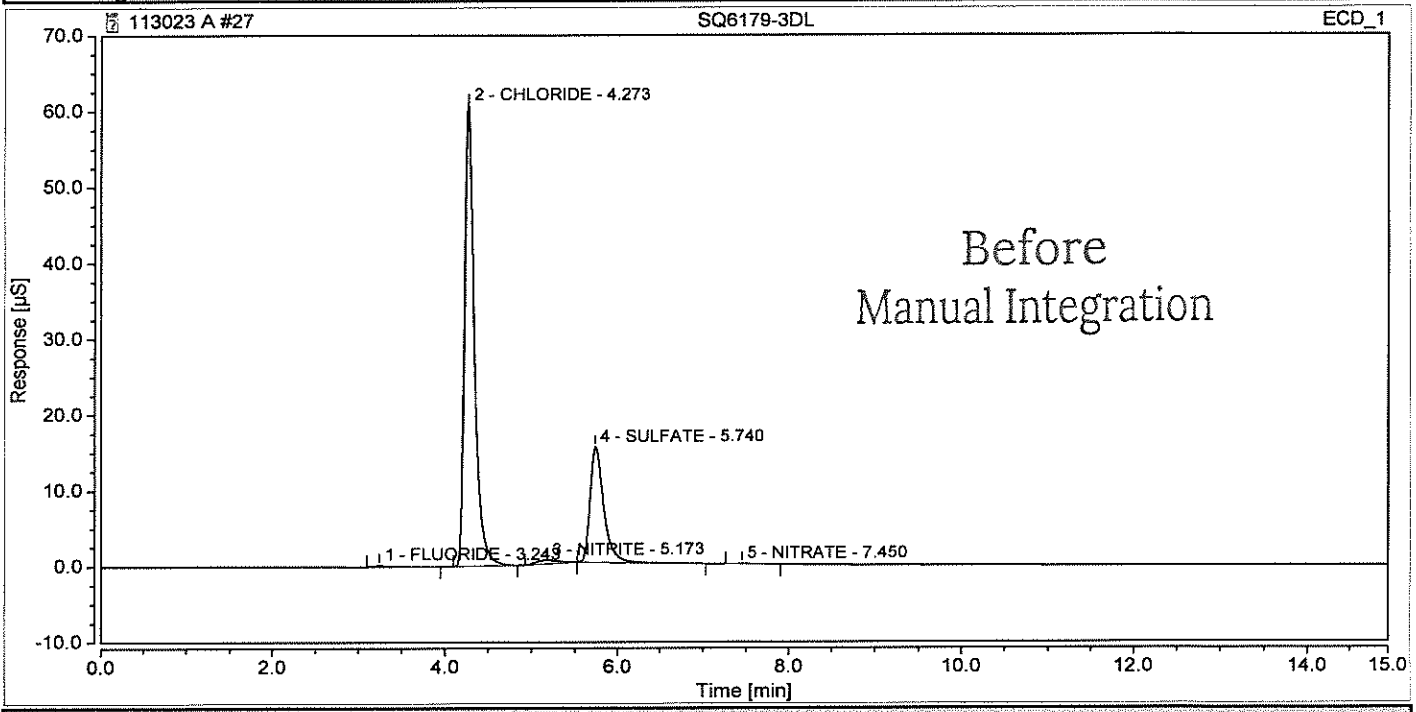
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.387	0.003	0.009	5.30	5.77	0.0216	n.a.
2	CHLORIDE	4.280	0.005	0.024	8.48	14.36	0.0130	n.a.
3	NITRITE	5.227	0.012	0.034	19.88	20.63	0.0220	n.a.
4	SULFATE	5.950	0.024	0.067	40.77	40.90	0.0856	n.a.
5	BROMIDE	6.534	0.001	0.004	1.99	2.57	0.0070	n.a.
6	NITRATE	7.650	0.014	0.026	23.56	15.78	0.0144	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.060**	**0.164**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6179-3DL**	*Run Time (min):*	**14.96**
Vial Number:	**27**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**5.0000**
Injection Date/Time:	**01/Dec/23 00:14**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

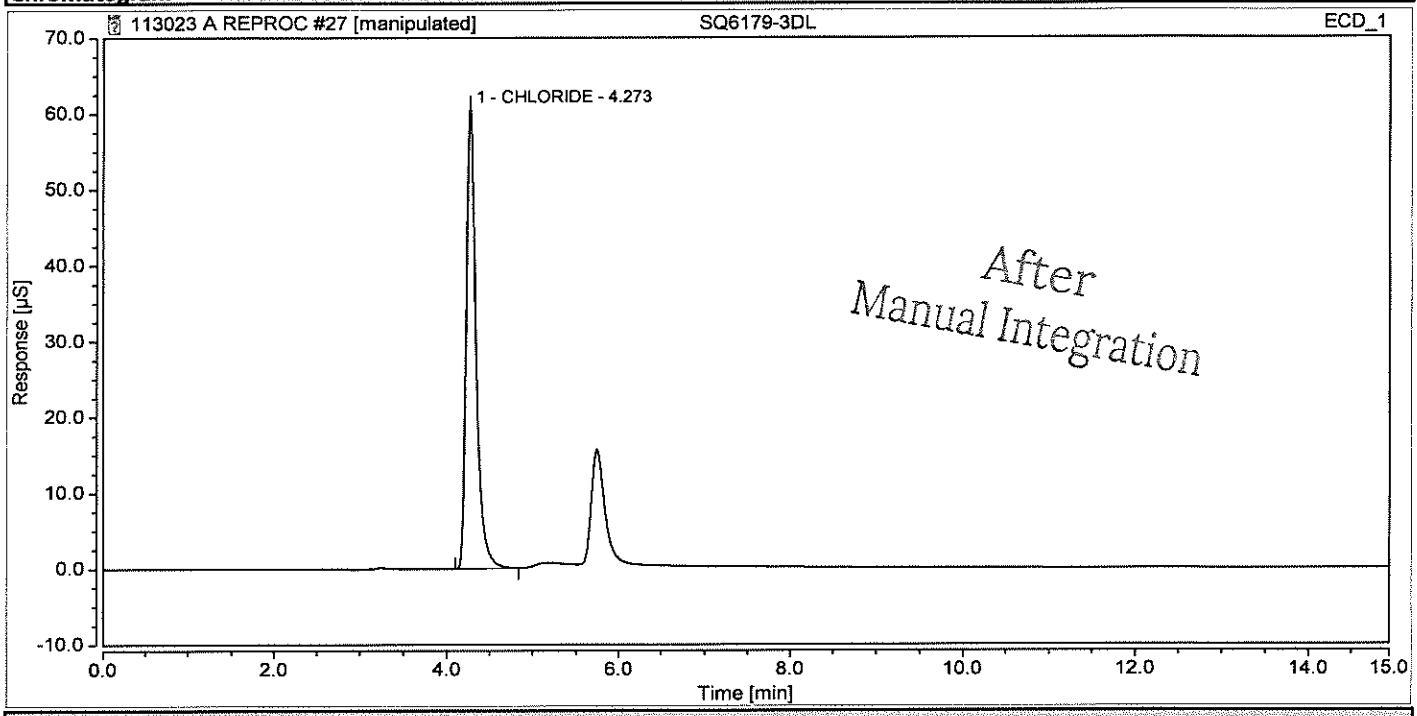
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.243	0.034	0.187	0.31	0.24	0.3541	n.a.
2	CHLORIDE	4.273	8.150	60.725	72.96	79.25	104.5609	n.a.
3	NITRITE	5.173	0.155	0.491	1.39	0.64	0.9438	n.a.
4	SULFATE	5.740	2.821	15.169	25.26	19.80	49.6234	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5	NITRATE	7.450	0.010	0.053	0.09	0.07	0.0524	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**11.171**	**76.625**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6179-3DL**	*Run Time (min):*	**14.96**
Vial Number:	**27**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**5.0000**
Injection Date/Time:	**01/Dec/23 00:14**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

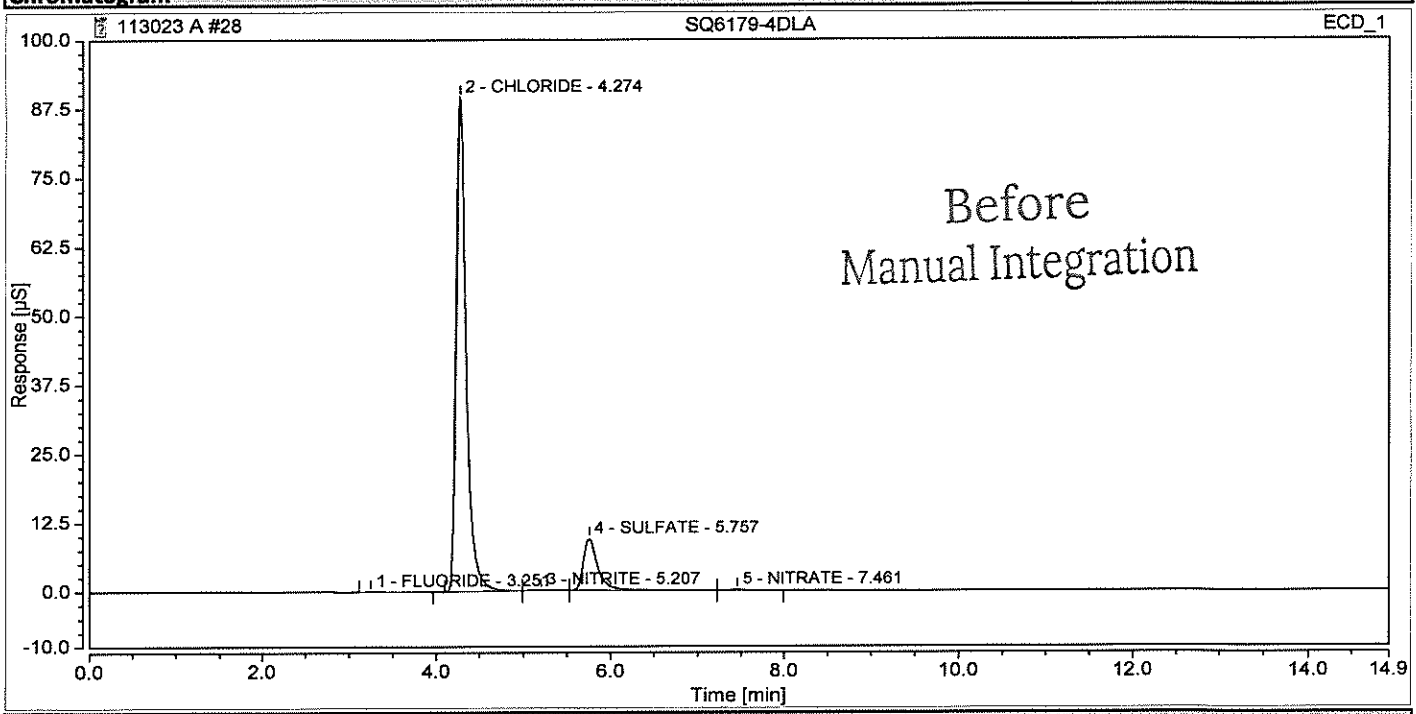
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.273	8.150	60.725	100.00	100.00	104.5609	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	SULFATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**8.150**	**60.725**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6179-4DLA**	*Run Time (min):*	**14.94**
Vial Number:	**28**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**20.0000**
Injection Date/Time:	**01/Dec/23 00:31**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

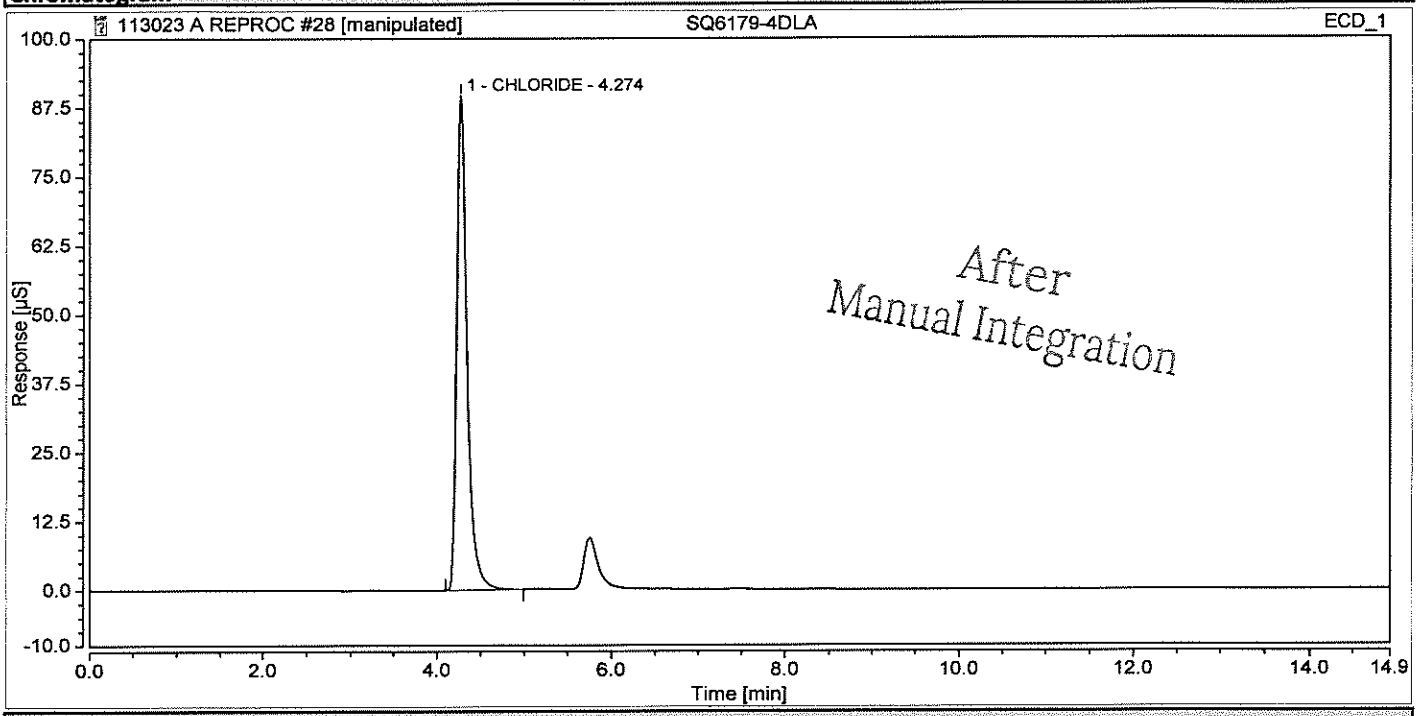
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.251	0.012	0.038	0.08	0.04	0.7028	n.a.
2	CHLORIDE	4.274	12.161	89.552	86.43	90.23	624.0627	n.a.
3	NITRITE	5.207	0.032	0.117	0.23	0.12	0.9184	n.a.
4	SULFATE	5.757	1.833	9.383	13.03	9.45	128.9471	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5	NITRATE	7.461	0.032	0.158	0.23	0.16	0.6517	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**14.070**	**99.249**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6179-4DLA**	*Run Time (min):*	**14.94**
Vial Number:	**28**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**20.0000**
Injection Date/Time:	**01/Dec/23 00:31**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

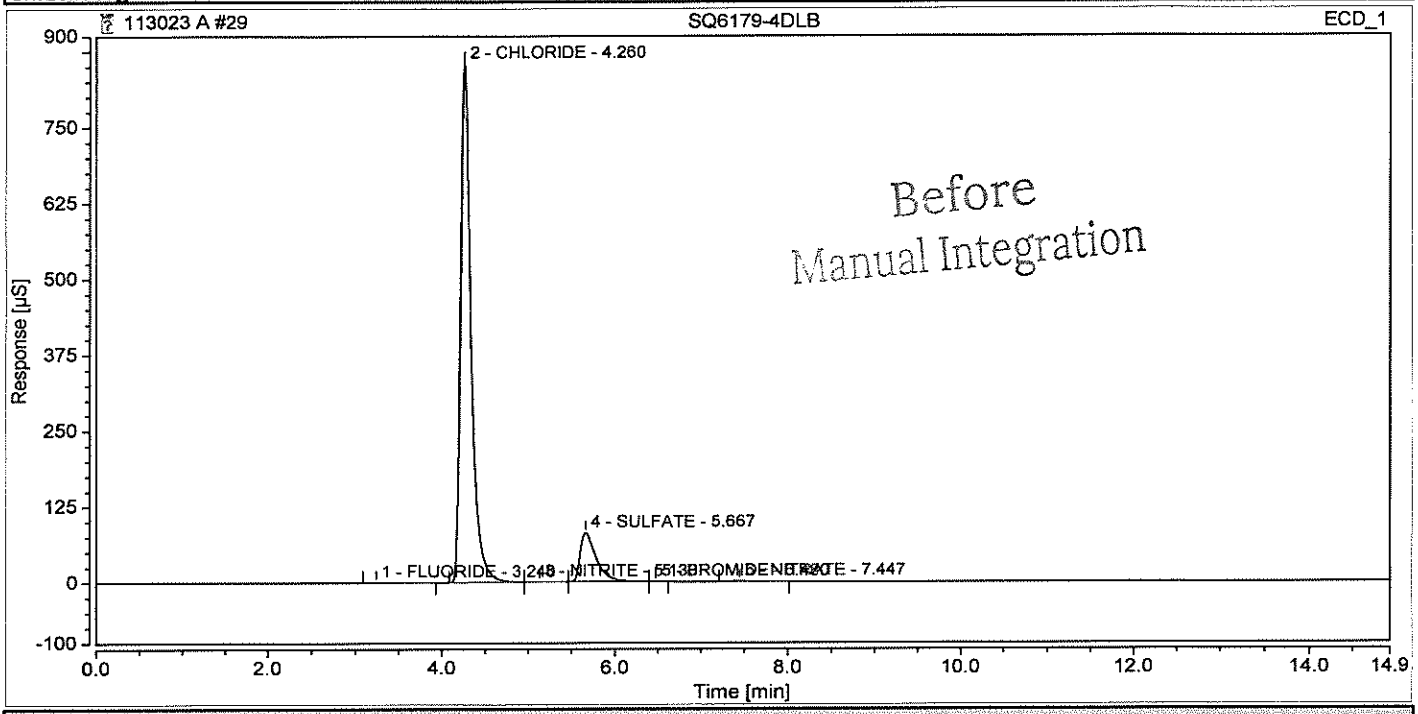
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.274	12.161	89.552	100.00	100.00	624.0627	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	SULFATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**12.161**	**89.552**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6179-4DLB**	*Run Time (min):*	**14.94**
Vial Number:	**29**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**2.0000**
Injection Date/Time:	**01/Dec/23 00:48**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

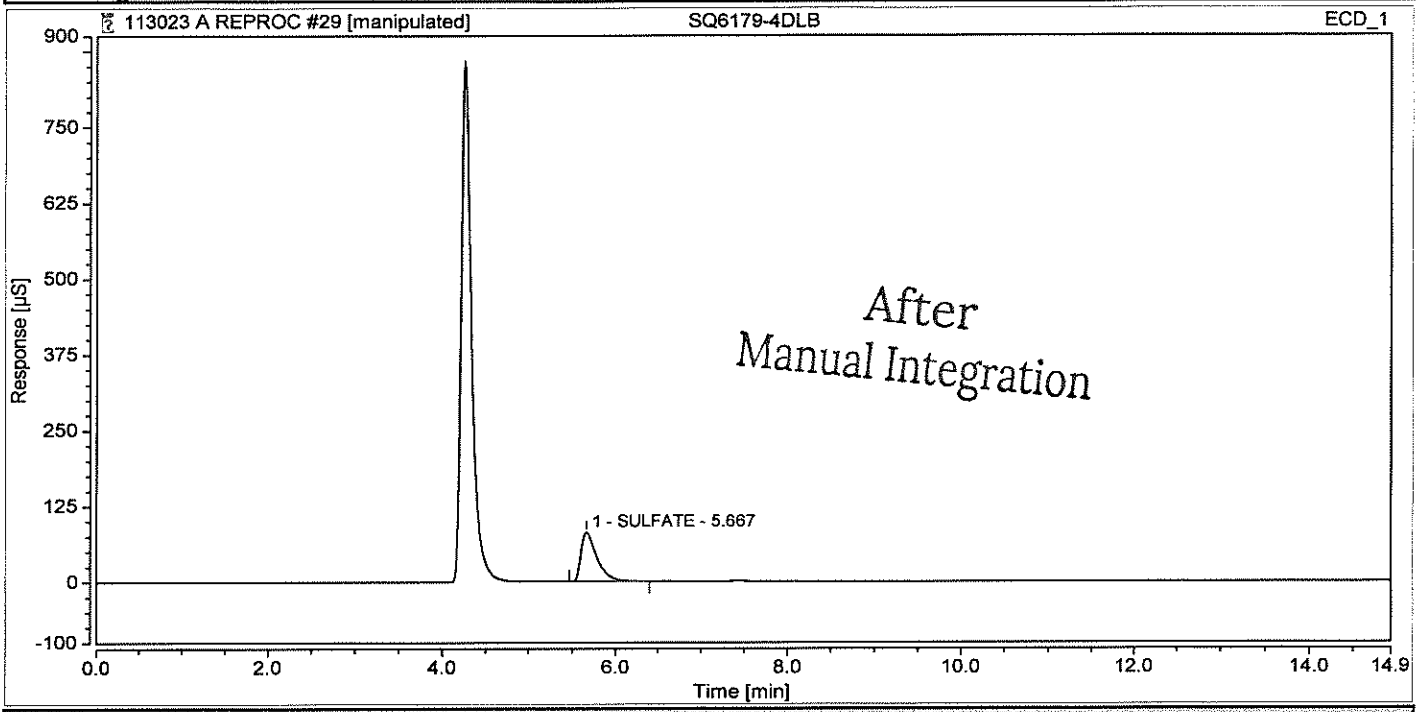
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.240	0.042	0.235	0.03	0.03	0.1656	n.a.
2	CHLORIDE	4.260	119.626	854.995	87.25	91.18	613.8635	n.a.
3	NITRITE	5.130	0.096	0.354	0.07	0.04	0.2394	n.a.
4	SULFATE	5.667	17.073	80.715	12.45	8.61	120.1149	n.a.
5	BROMIDE	6.480	0.004	0.034	0.00	0.00	0.0453	n.a.
6	NITRATE	7.447	0.271	1.394	0.20	0.15	0.5541	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**137.111**	**937.729**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6179-4DLB**	*Run Time (min):*	**14.94**
Vial Number:	**29**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**2.0000**
Injection Date/Time:	**01/Dec/23 00:48**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

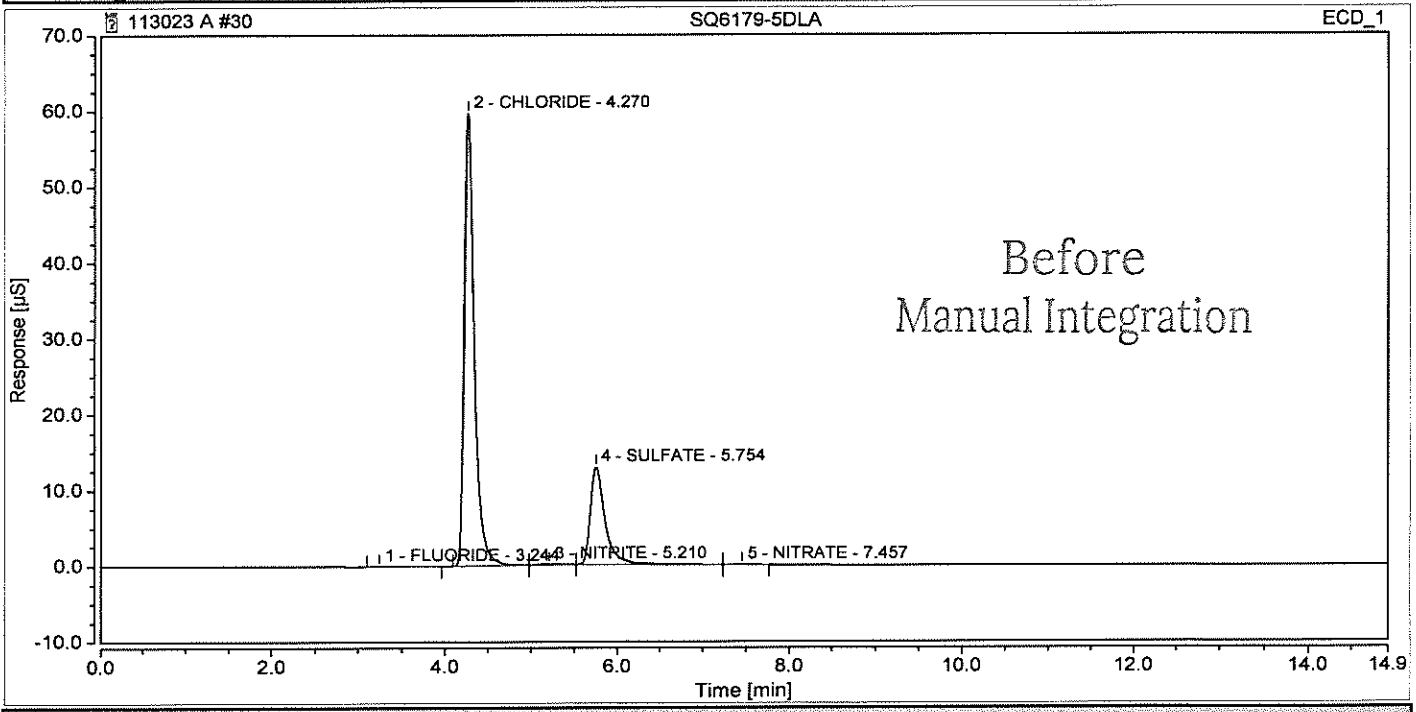
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	CHLORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	SULFATE	5.667	17.073	80.715	100.00	100.00	120.1149	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**17.073**	**80.715**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6179-5DLA**	*Run Time (min):*	**14.95**
Vial Number:	**30**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**20.0000**
Injection Date/Time:	**01/Dec/23 01:06**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

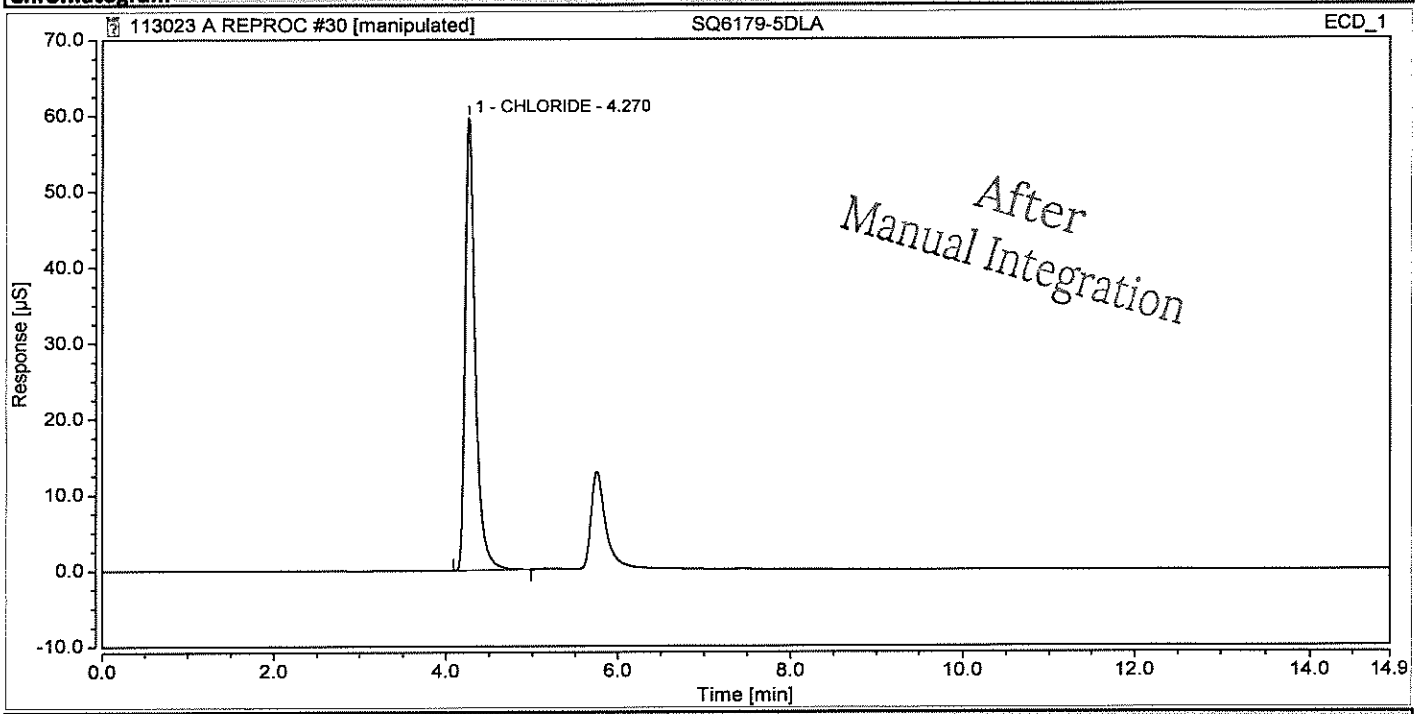
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.244	0.013	0.044	0.12	0.06	0.7352	n.a.
2	CHLORIDE	4.270	8.084	59.722	75.25	81.98	414.8466	n.a.
3	NITRITE	5.210	0.032	0.113	0.29	0.16	0.8980	n.a.
4	SULFATE	5.754	2.599	12.887	24.20	17.69	182.8807	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5	NITRATE	7.457	0.015	0.079	0.14	0.11	0.3144	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**10.743**	**72.845**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6179-5DLA**	*Run Time (min):*	**14.95**
Vial Number:	**30**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**20.0000**
Injection Date/Time:	**01/Dec/23 01:06**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

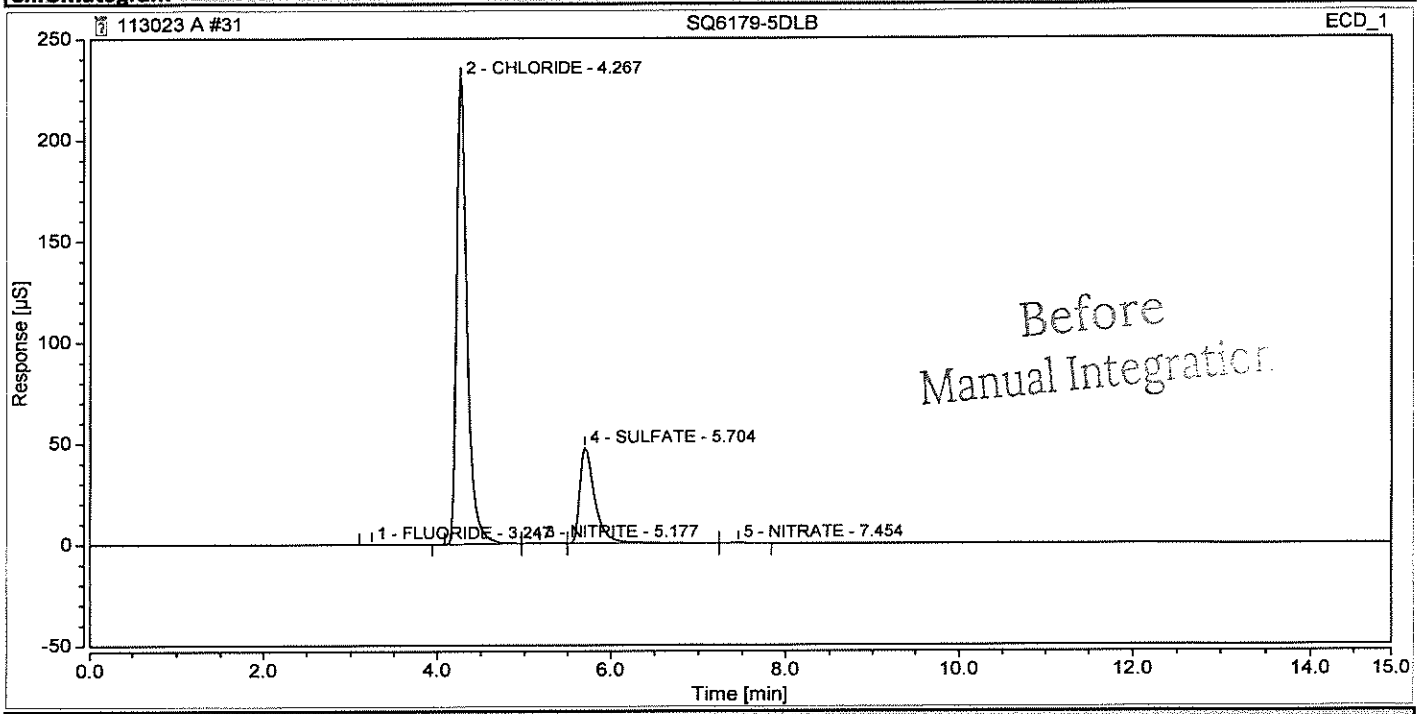
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.270	8.084	59.722	100.00	100.00	414.8466	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	SULFATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**8.084**	**59.722**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6179-5DLB**	*Run Time (min):*	**14.95**
Vial Number:	**31**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**5.0000**
Injection Date/Time:	**01/Dec/23 01:23**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

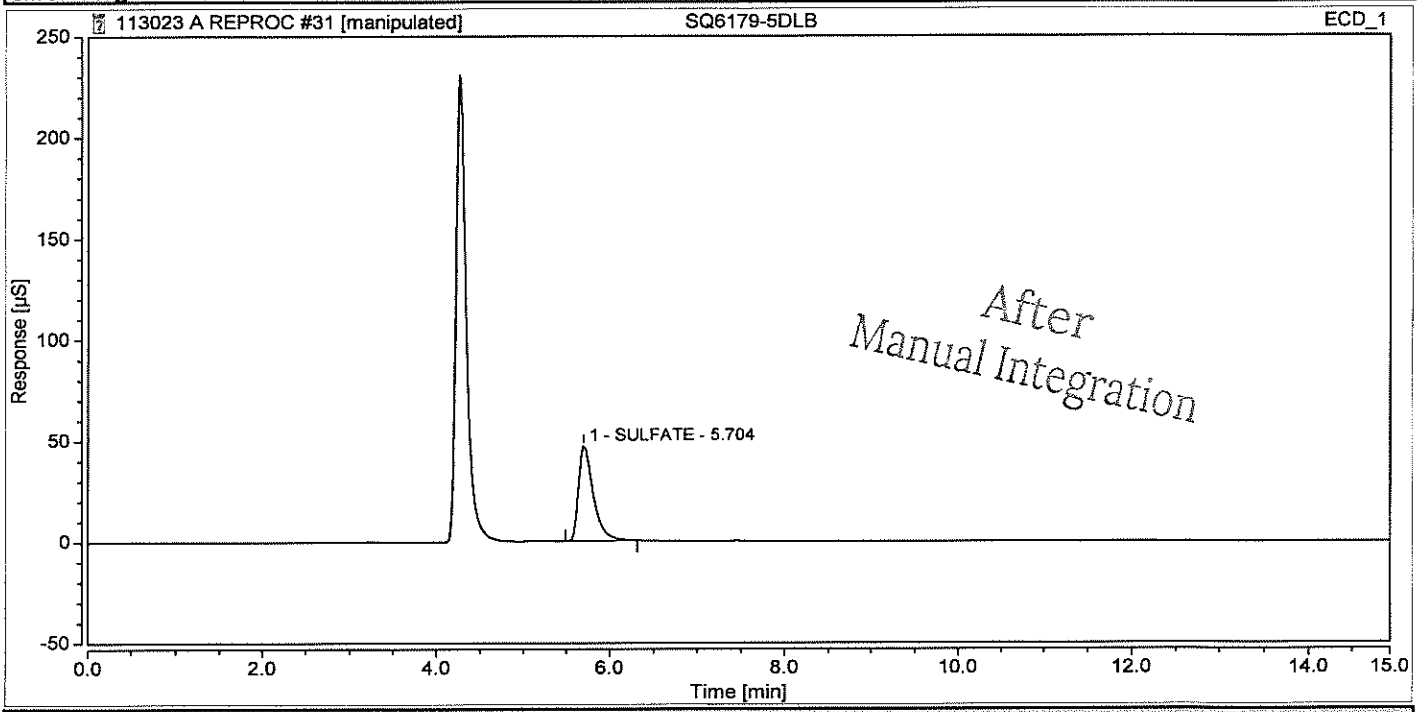
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.247	0.026	0.127	0.06	0.05	0.2846	n.a.
2	CHLORIDE	4.267	31.704	229.893	76.51	82.80	406.7216	n.a.
3	NITRITE	5.177	0.075	0.271	0.18	0.10	0.4768	n.a.
4	SULFATE	5.704	9.575	47.057	23.11	16.95	168.4042	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5	NITRATE	7.454	0.060	0.305	0.14	0.11	0.3040	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**41.438**	**277.652**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6179-5DLB**	*Run Time (min):*	**14.95**
Vial Number:	**31**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**5.0000**
Injection Date/Time:	**01/Dec/23 01:23**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

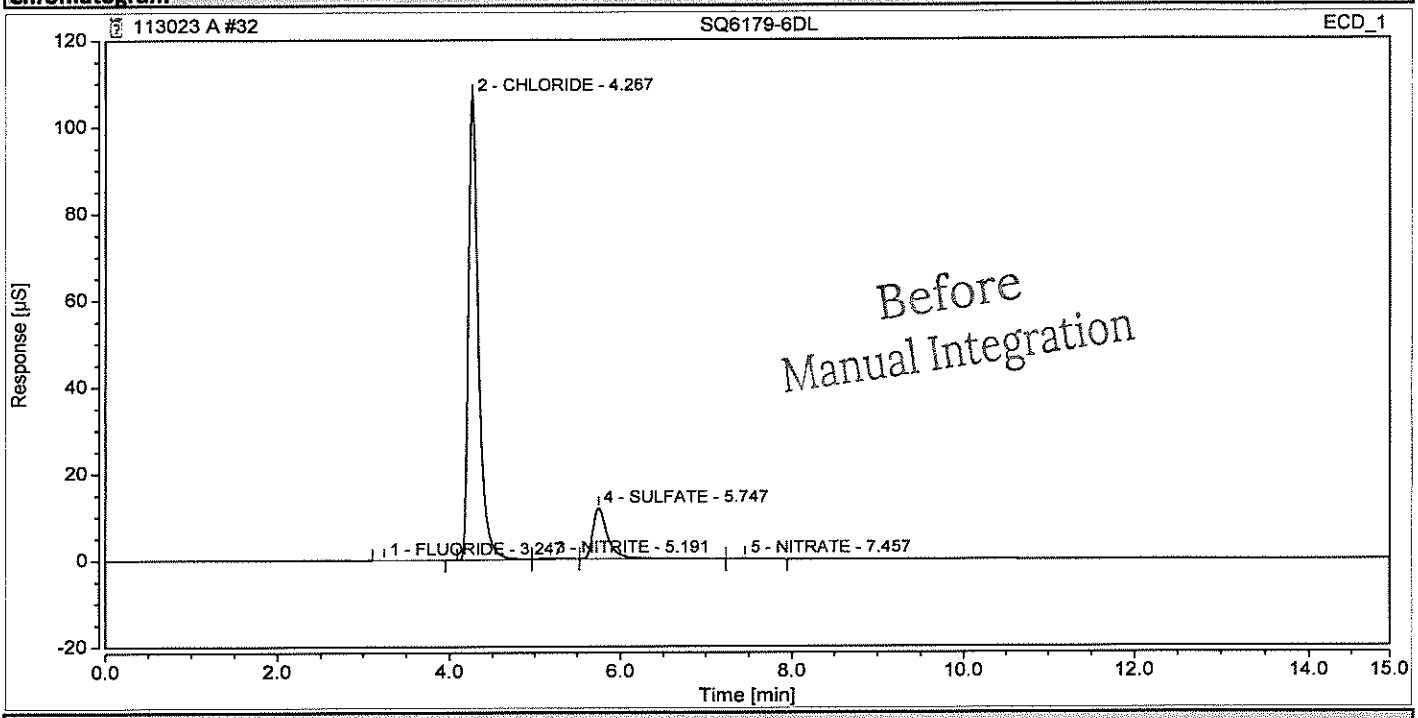
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	CHLORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	SULFATE	5.704	9.307	46.957	100.00	100.00	163.6907	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**9.307**	**46.957**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6179-6DL**	*Run Time (min):*	**14.96**
Vial Number:	**32**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**10.0000**
Injection Date/Time:	**01/Dec/23 01:40**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

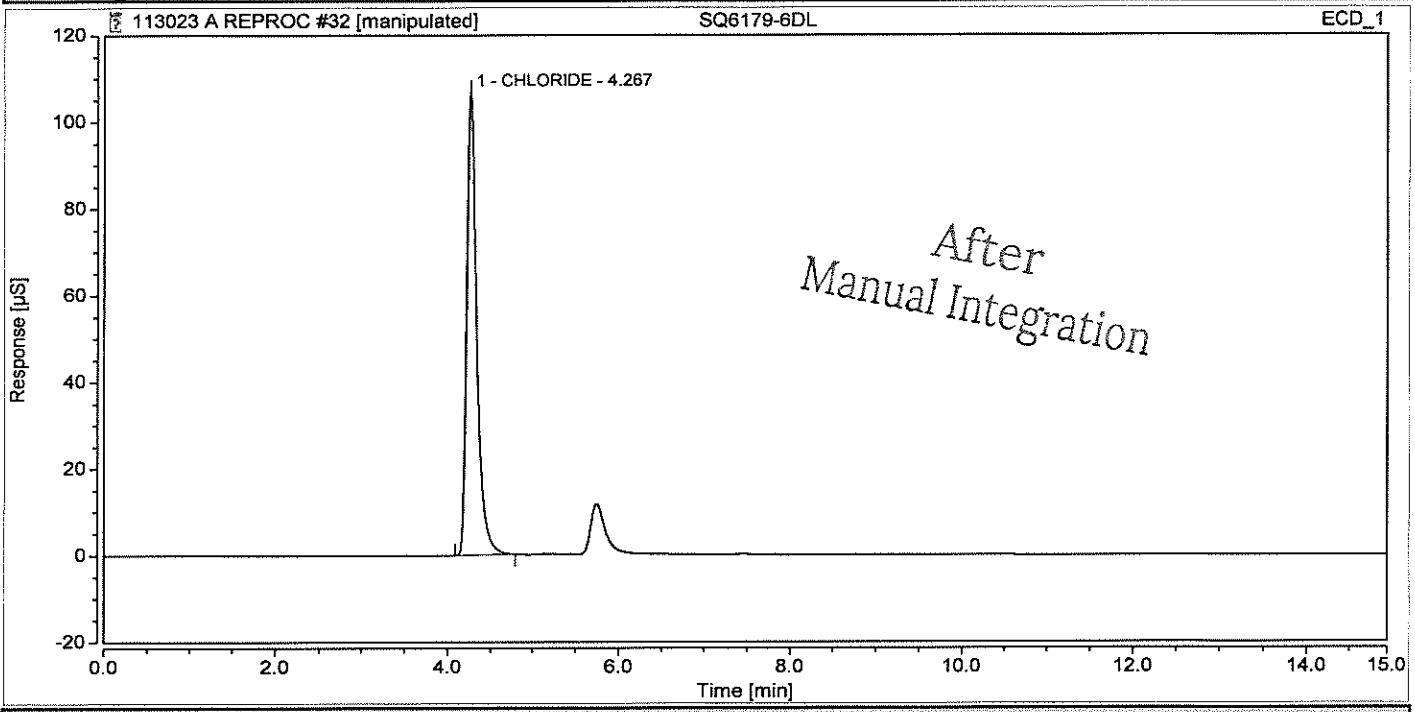
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.247	0.014	0.053	0.08	0.04	0.3886	n.a.
2	CHLORIDE	4.267	14.567	106.986	85.66	89.83	373.7499	n.a.
3	NITRITE	5.191	0.045	0.160	0.27	0.13	0.6084	n.a.
4	SULFATE	5.747	2.346	11.724	13.80	9.84	82.5331	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5	NITRATE	7.457	0.033	0.169	0.20	0.14	0.3407	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**17.006**	**119.092**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6179-6DL**	*Run Time (min):*	**14.96**
Vial Number:	**32**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**10.0000**
Injection Date/Time:	**01/Dec/23 01:40**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

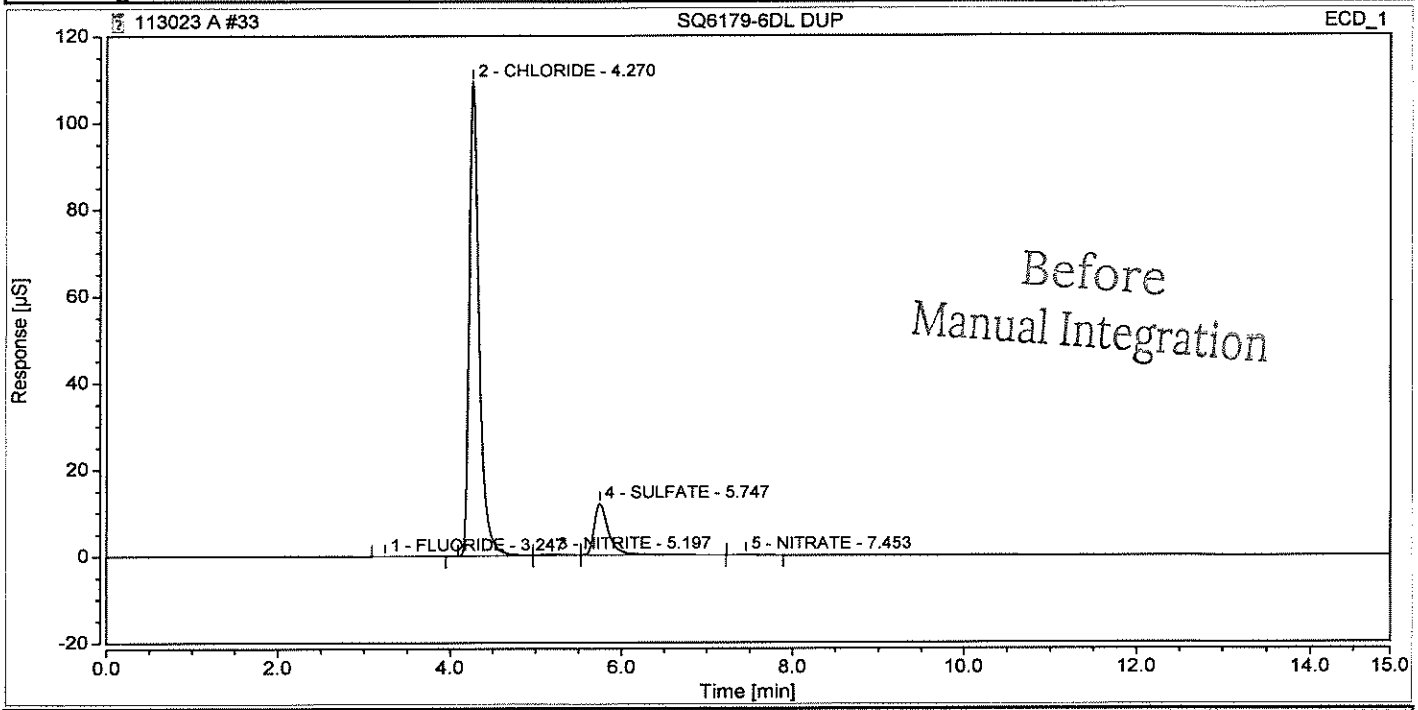
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.267	14.511	106.952	100.00	100.00	372.3177	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	SULFATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**14.511**	**106.952**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6179-6DL DUP**	*Run Time (min):*	**14.95**
Vial Number:	**33**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**10.0000**
Injection Date/Time:	**01/Dec/23 01:58**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

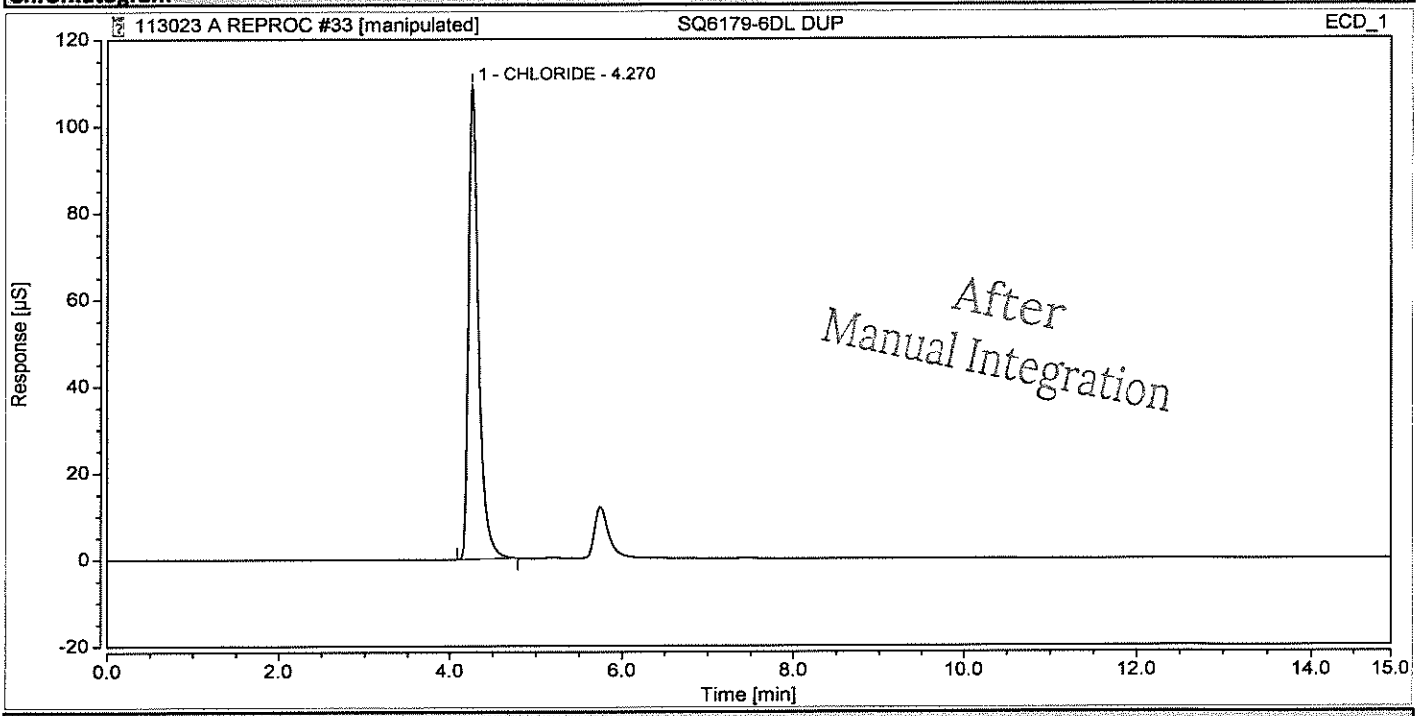
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.247	0.016	0.058	0.09	0.05	0.4236	n.a.
2	CHLORIDE	4.270	14.897	109.357	86.02	89.91	382.2252	n.a.
3	NITRITE	5.197	0.045	0.160	0.26	0.13	0.6088	n.a.
4	SULFATE	5.747	2.324	11.880	13.42	9.77	81.7664	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5	NITRATE	7.453	0.035	0.175	0.20	0.14	0.3561	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**17.318**	**121.630**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6179-6DL DUP**	*Run Time (min):*	**14.95**
Vial Number:	**33**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**10.0000**
Injection Date/Time:	**01/Dec/23 01:58**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

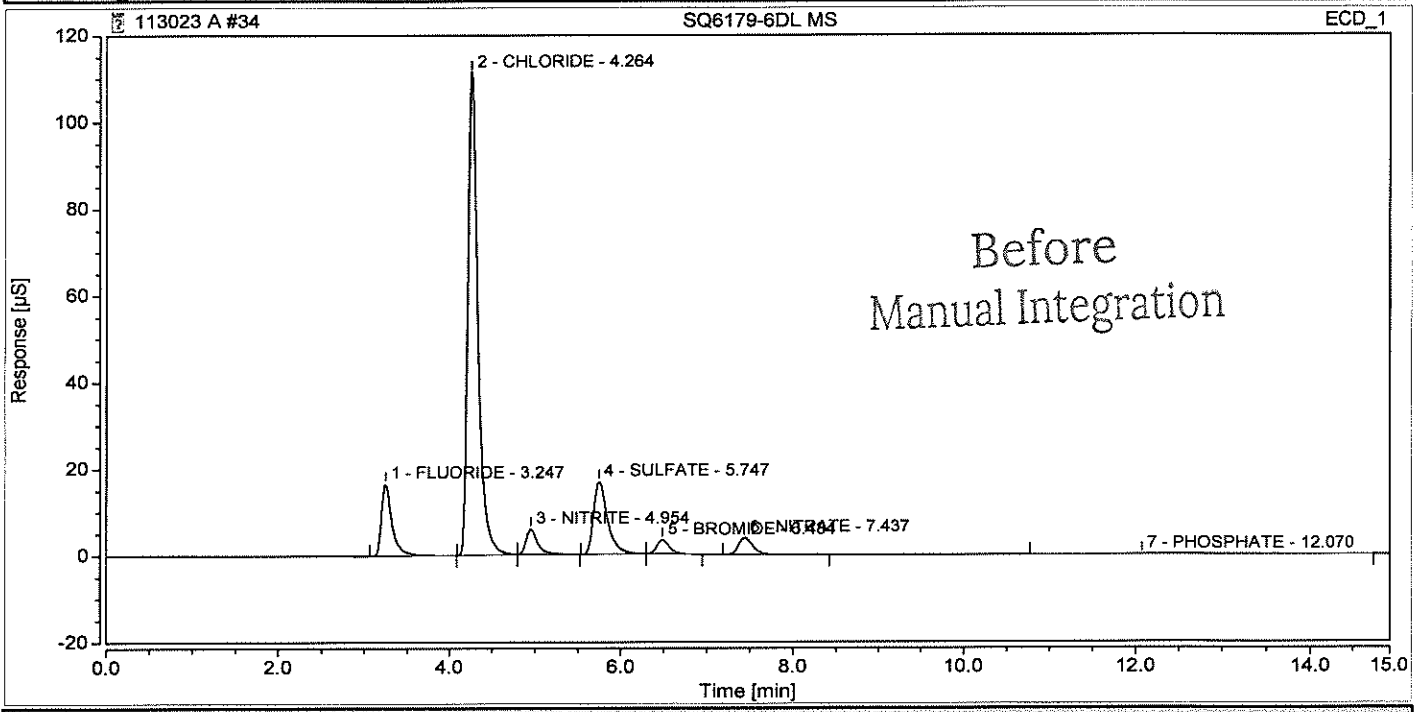
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.270	14.839	109.322	100.00	100.00	380.7431	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	SULFATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**14.839**	**109.322**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6179-6DL MS**	*Run Time (min):*	**14.95**
Vial Number:	**34**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**10.0000**
Injection Date/Time:	**01/Dec/23 02:15**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

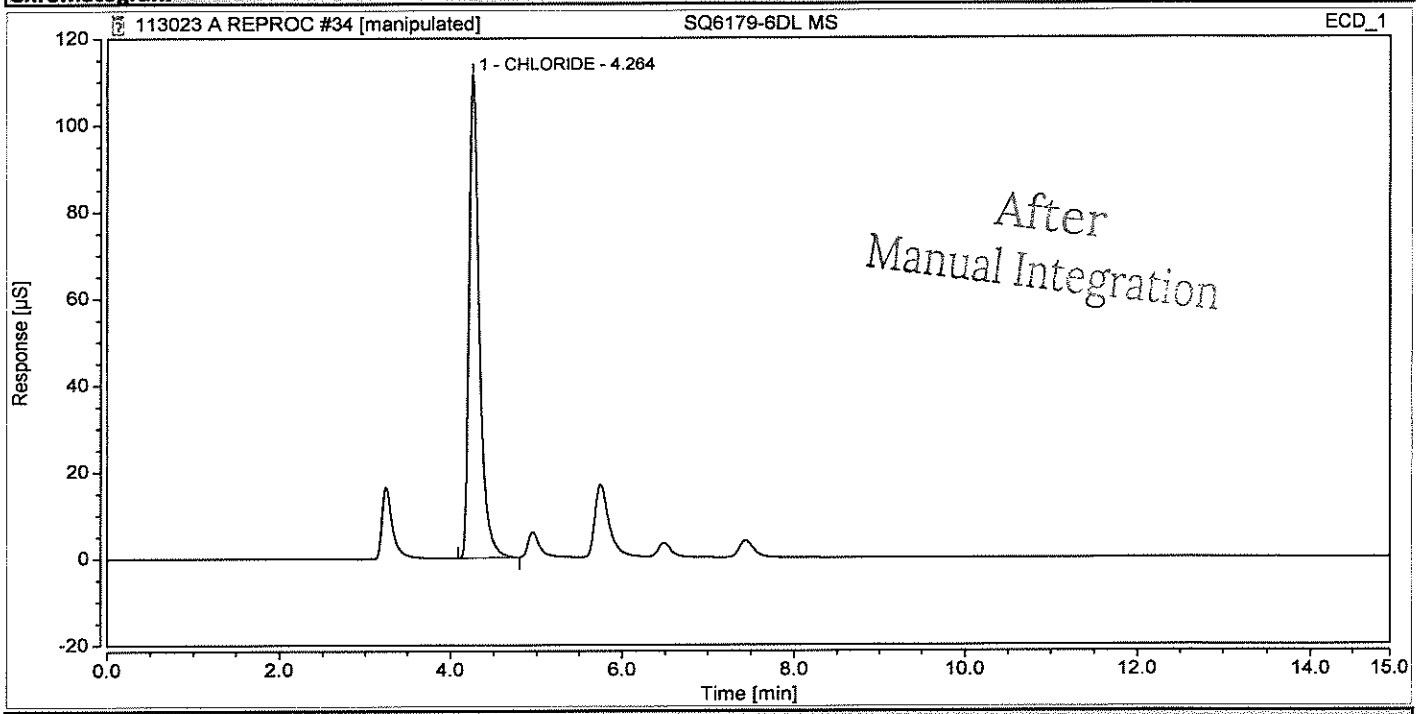
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.247	2.427	16.698	10.48	10.57	39.1806	n.a.
2	CHLORIDE	4.264	15.132	111.360	65.31	70.51	388.2407	n.a.
3	NITRITE	4.954	0.930	5.861	4.02	3.71	11.0074	n.a.
4	SULFATE	5.747	3.173	16.804	13.69	10.64	111.6016	n.a.
5	BROMIDE	6.484	0.545	3.226	2.35	2.04	32.0739	n.a.
6	NITRATE	7.437	0.783	3.905	3.38	2.47	7.9986	n.a.
7	PHOSPHATE	12.070	0.181	0.088	0.78	0.06	n.a.	n.a.
Total:			**23.170**	**157.942**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6179-6DL MS**	*Run Time (min):*	**14.95**
Vial Number:	**34**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**10.0000**
Injection Date/Time:	**01/Dec/23 02:15**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

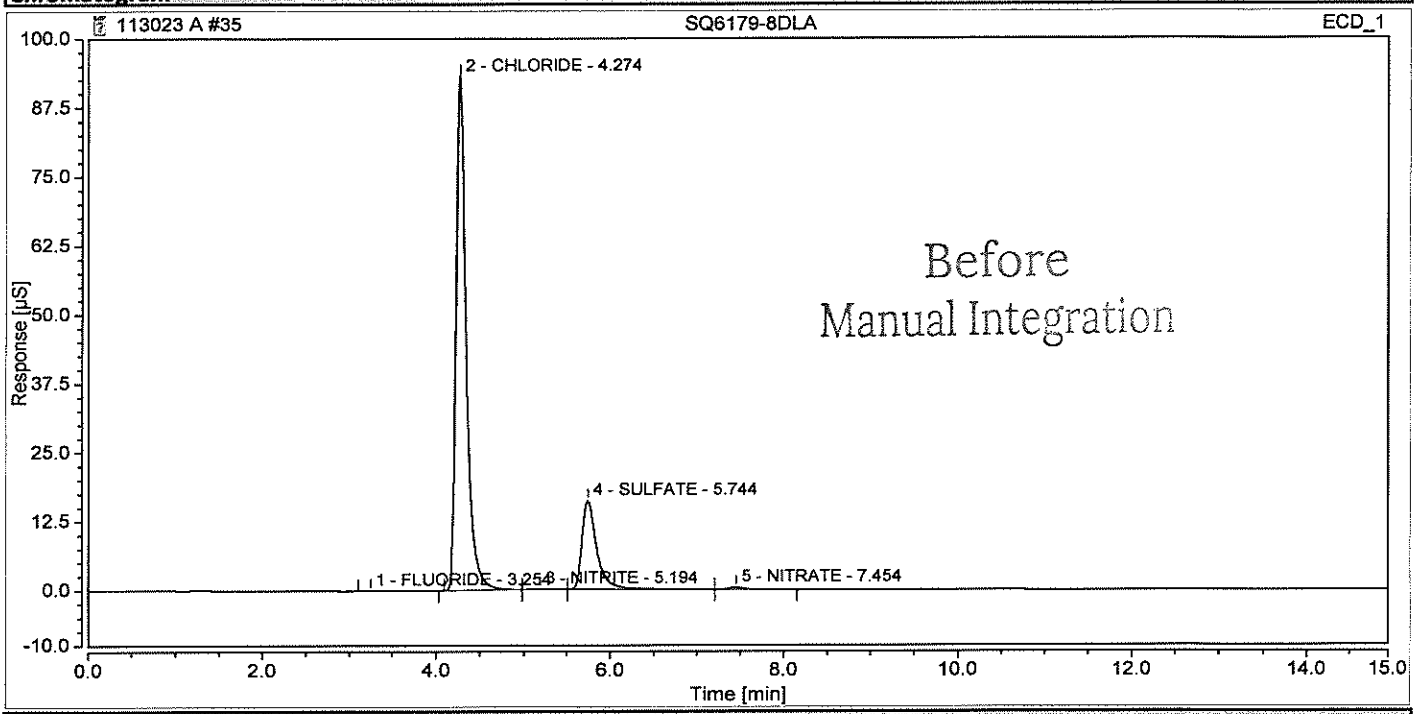
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.264	15.132	111.360	100.00	100.00	388.2407	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	SULFATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**15.132**	**111.360**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6179-8DLA**	*Run Time (min):*	**14.96**
Vial Number:	**35**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**20.0000**
Injection Date/Time:	**01/Dec/23 02:32**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

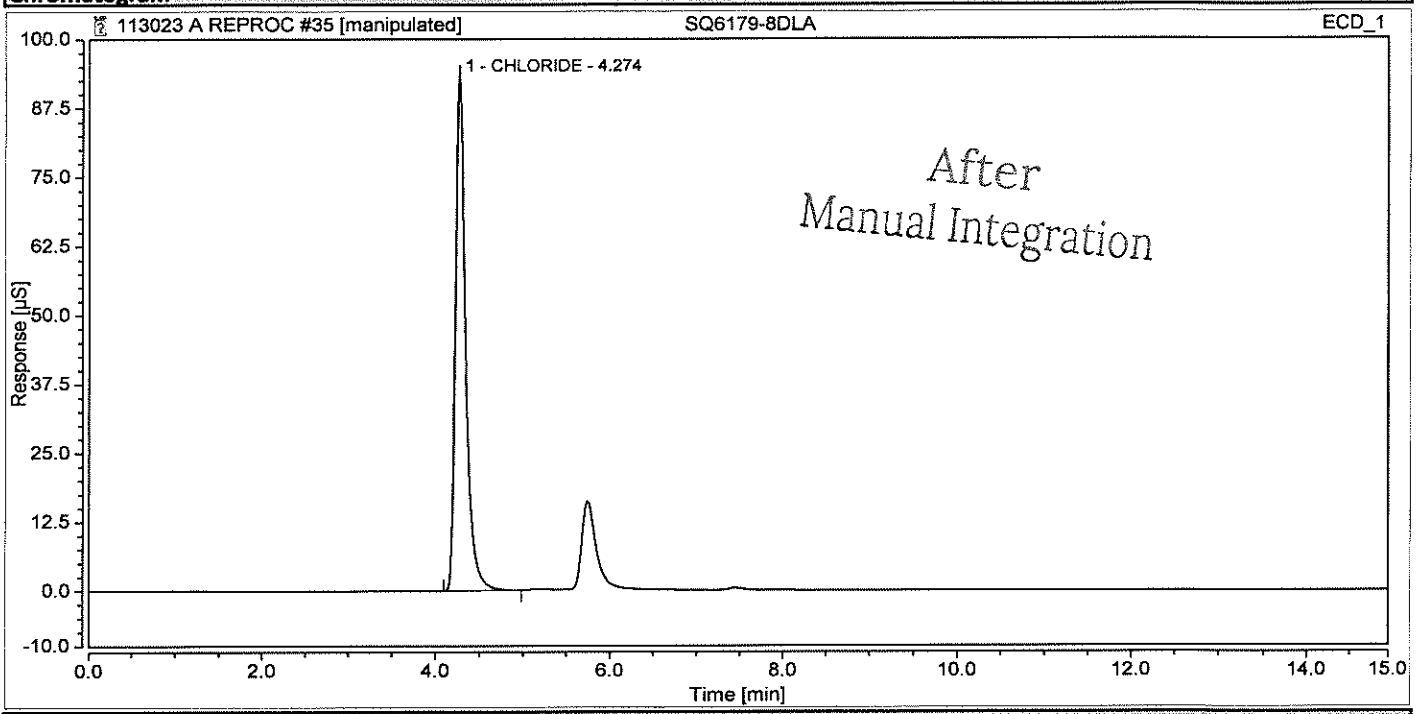
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.254	0.018	0.051	0.11	0.05	0.8928	n.a.
2	CHLORIDE	4.274	12.693	93.131	79.36	84.82	651.3657	n.a.
3	NITRITE	5.194	0.035	0.128	0.22	0.12	0.9740	n.a.
4	SULFATE	5.744	3.167	16.087	19.80	14.65	222.8292	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5	NITRATE	7.454	0.082	0.399	0.51	0.36	1.6760	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**15.995**	**109.795**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6179-8DLA**	*Run Time (min):*	**14.96**
Vial Number:	**35**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**20.0000**
Injection Date/Time:	**01/Dec/23 02:32**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

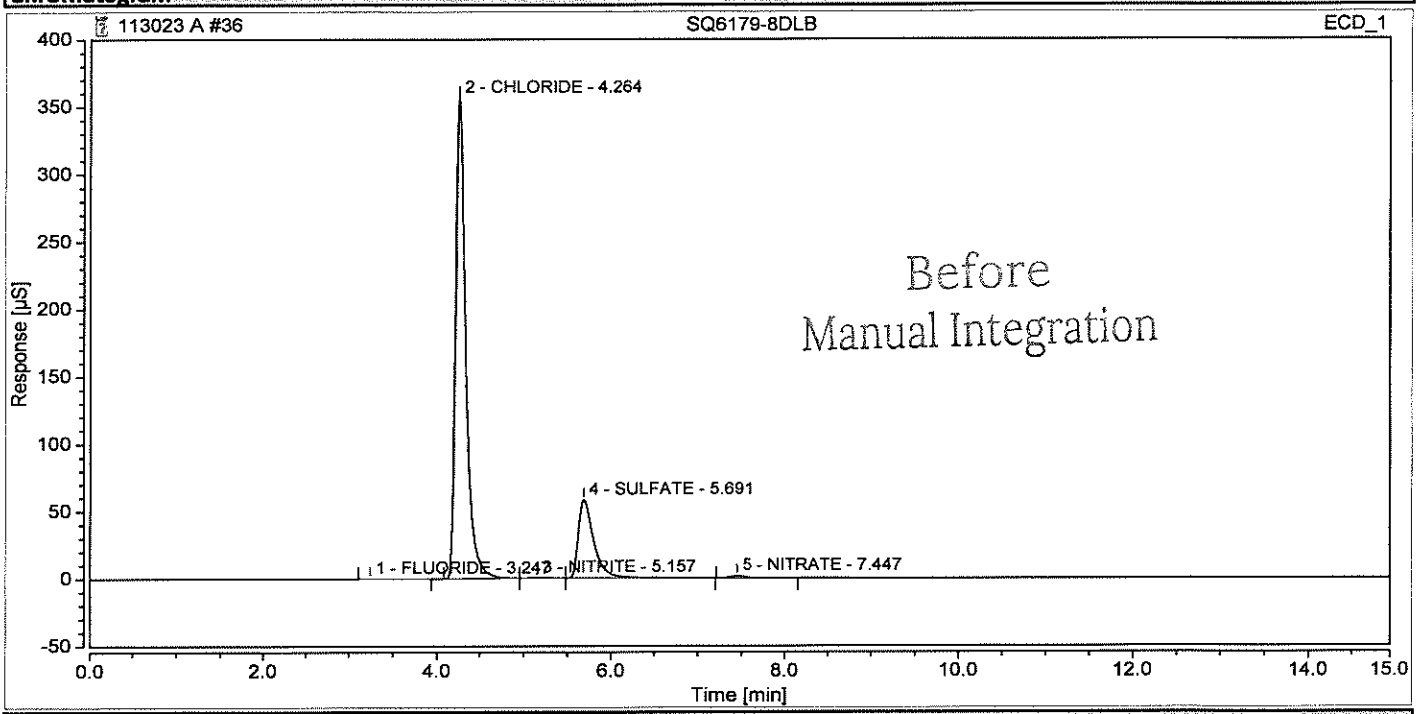
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.274	12.693	93.131	100.00	100.00	651.3657	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	SULFATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**12.693**	**93.131**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6179-8DLB**	*Run Time (min):*	**14.95**
Vial Number:	**36**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**5.0000**
Injection Date/Time:	**01/Dec/23 02:49**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

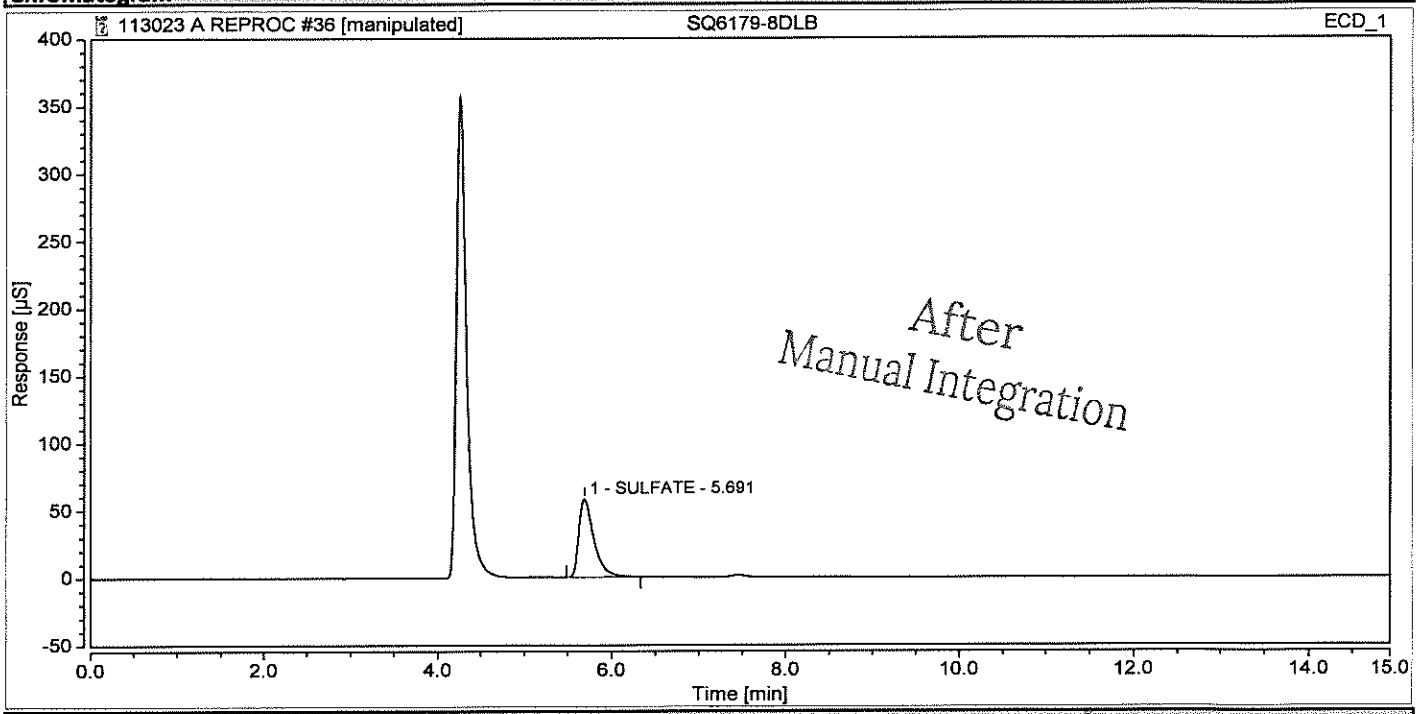
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.247	0.018	0.082	0.03	0.02	0.2266	n.a.
2	CHLORIDE	4.264	49.267	356.547	80.01	85.59	632.0374	n.a.
3	NITRITE	5.157	0.079	0.291	0.13	0.07	0.4990	n.a.
4	SULFATE	5.691	11.895	58.032	19.32	13.93	209.2097	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5	NITRATE	7.447	0.321	1.638	0.52	0.39	1.6376	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**61.579**	**416.591**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6179-8DLB**	*Run Time (min):*	**14.95**
Vial Number:	**36**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**5.0000**
Injection Date/Time:	**01/Dec/23 02:49**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

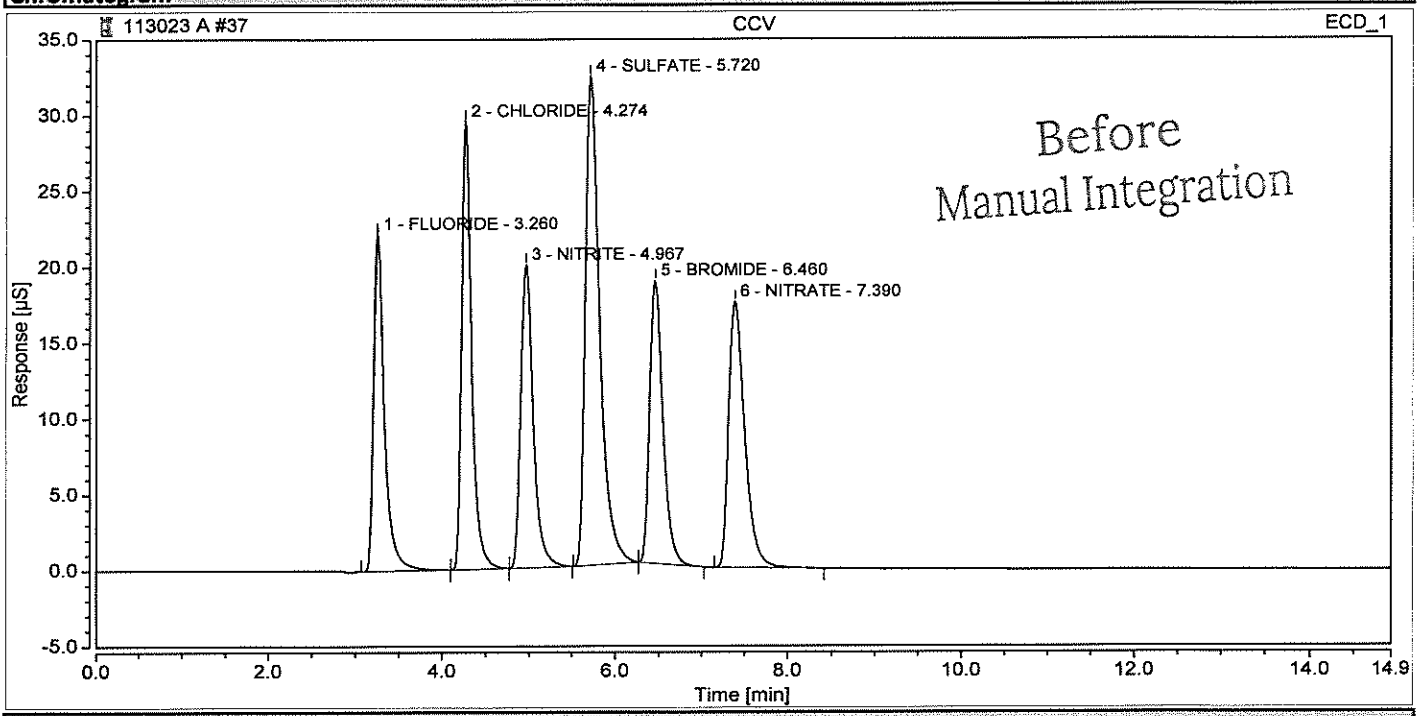
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	CHLORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	SULFATE	5.691	11.615	57.938	100.00	100.00	204.2900	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**11.615**	**57.938**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**CCV**	*Run Time (min):*	**14.95**
Vial Number:	**37**	*Injection Volume:*	**200.00**
Injection Type:	**Check Standard**	*Channel:*	**ECD_1**
Calibration Level:	**06**	*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**01/Dec/23 03:07**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

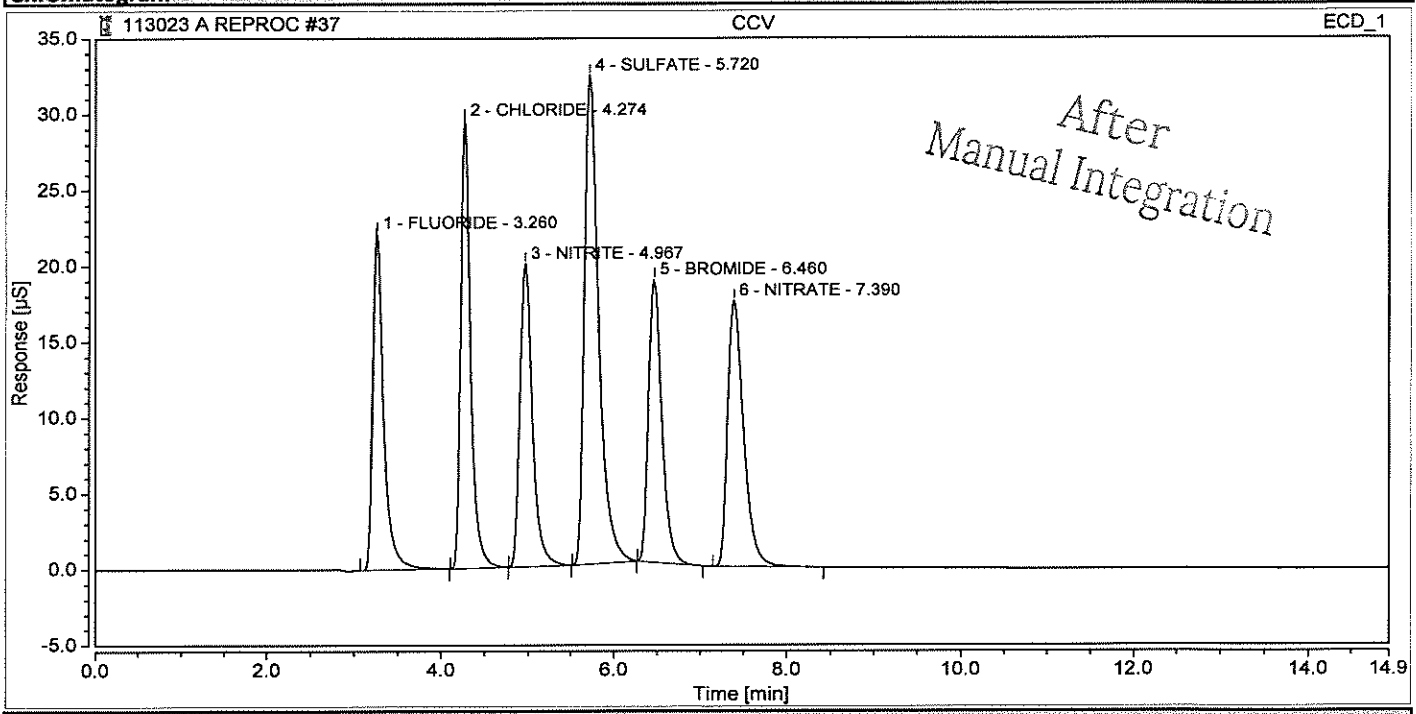
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.260	3.221	22.171	13.49	15.84	5.2354	4.7074
2	CHLORIDE	4.274	3.913	29.499	16.39	21.08	10.0404	0.4044
3	NITRITE	4.967	3.381	19.950	14.16	14.26	4.0748	1.8709
4	SULFATE	5.720	6.183	32.203	25.89	23.01	21.7513	8.7564
5	BROMIDE	6.460	3.348	18.618	14.02	13.30	19.6924	-1.5379
6	NITRATE	7.390	3.833	17.497	16.05	12.50	3.9168	-2.0790
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**23.880**	**139.938**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**CCV**	*Run Time (min):*	**14.95**
Vial Number:	**37**	*Injection Volume:*	**200.00**
Injection Type:	**Check Standard**	*Channel:*	**ECD_1**
Calibration Level:	**06**	*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**01/Dec/23 03:07**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

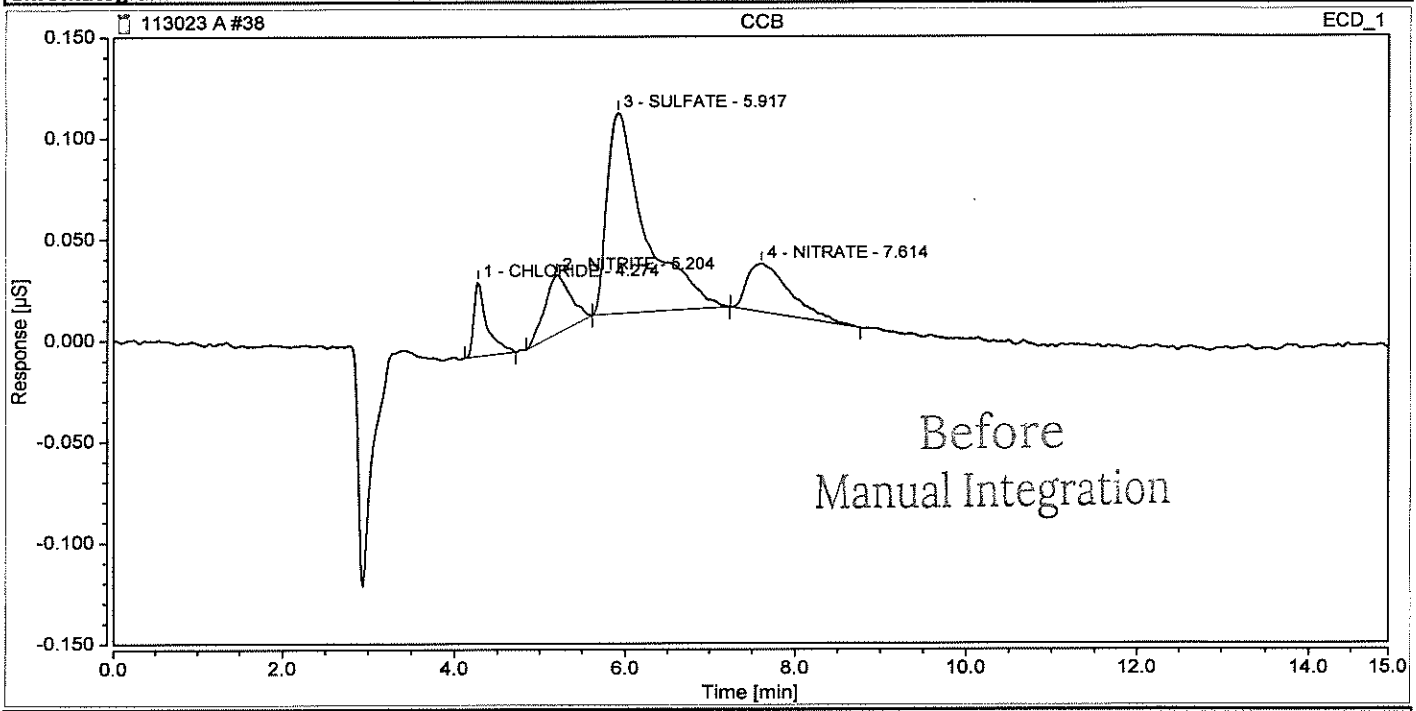
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.260	3.221	22.171	13.49	15.84	5.2354	4.7074
2	CHLORIDE	4.274	3.913	29.499	16.39	21.08	10.0404	0.4044
3	NITRITE	4.967	3.381	19.950	14.16	14.26	4.0748	1.8709
4	SULFATE	5.720	6.183	32.203	25.89	23.01	21.7513	8.7564
5	BROMIDE	6.460	3.348	18.618	14.02	13.30	19.6924	-1.5379
6	NITRATE	7.390	3.833	17.497	16.05	12.50	3.9168	-2.0790
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**23.880**	**139.938**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**CCB**	*Run Time (min):*	**14.95**
Vial Number:	**38**	*Injection Volume:*	**200.00**
Injection Type:	**Blank**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**01/Dec/23 03:24**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

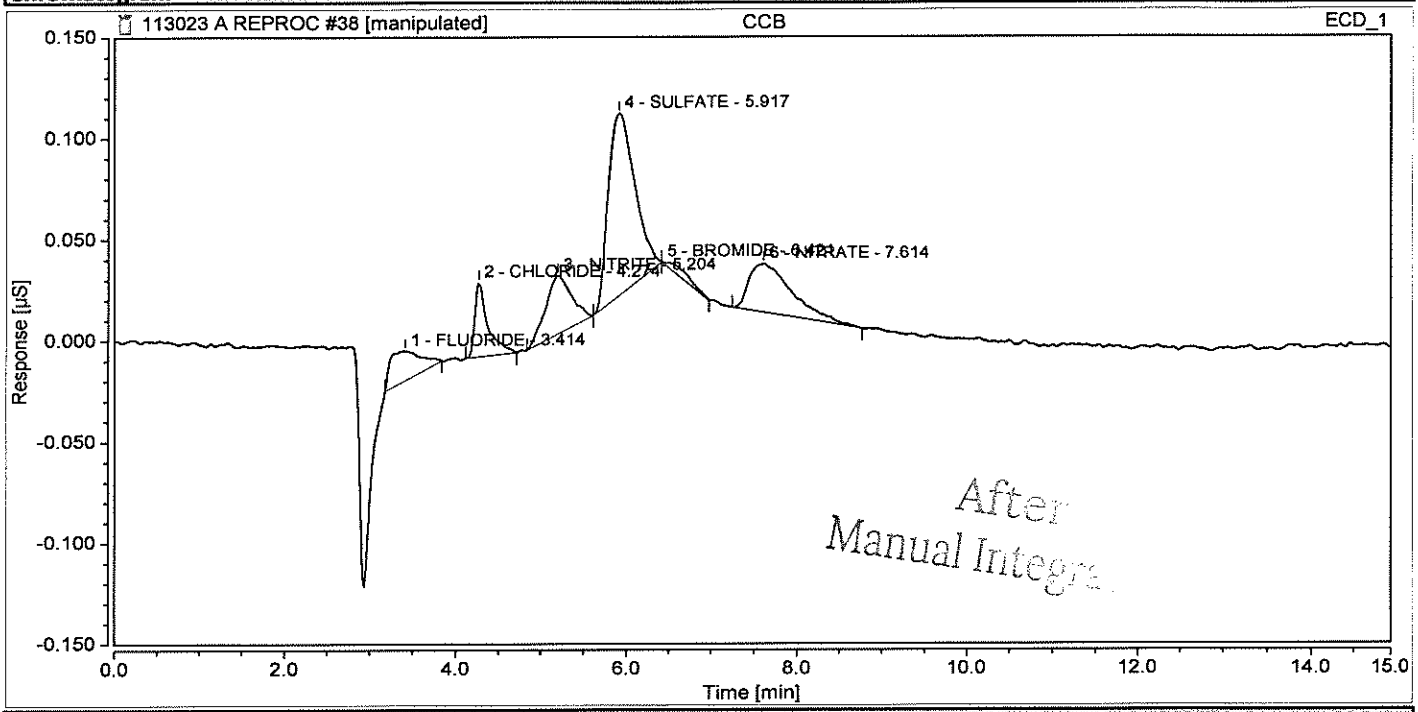
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.274	0.007	0.037	7.86	19.46	0.0167	n.a.
2	NITRITE	5.204	0.010	0.029	12.24	15.27	0.0200	n.a.
3	SULFATE	5.917	0.052	0.099	63.08	52.55	0.1841	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
4	NITRATE	7.614	0.014	0.024	16.82	12.72	0.0143	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.083**	**0.189**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**CCB**	*Run Time (min):*	**14.95**
Vial Number:	**38**	*Injection Volume:*	**200.00**
Injection Type:	**Blank**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**01/Dec/23 03:24**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

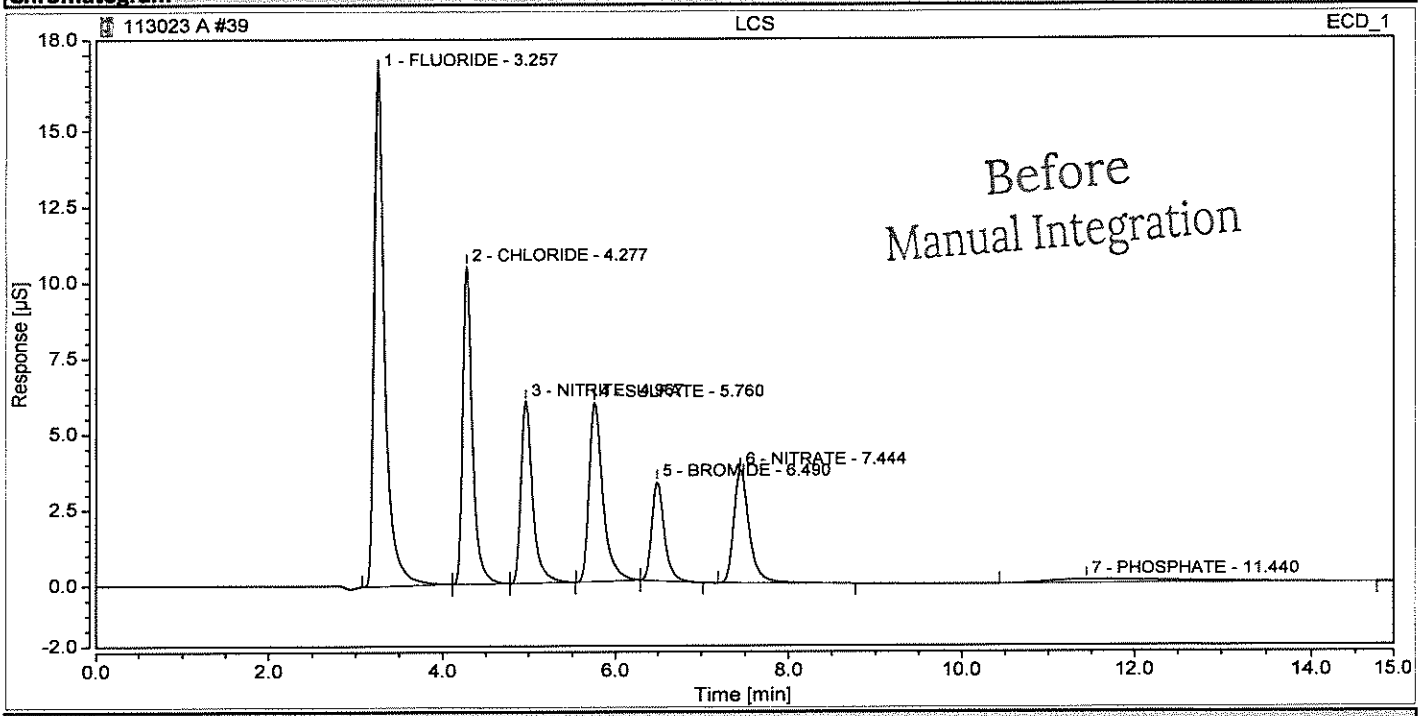
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.414	0.006	0.015	8.71	7.51	0.0263	n.a.
2	CHLORIDE	4.274	0.007	0.037	9.23	18.92	0.0167	n.a.
3	NITRITE	5.204	0.010	0.029	14.37	14.85	0.0200	n.a.
4	SULFATE	5.917	0.033	0.090	46.12	46.35	0.1146	n.a.
5	BROMIDE	6.421	0.001	0.000	1.80	0.00	0.0075	n.a.
6	NITRATE	7.614	0.014	0.024	19.76	12.37	0.0143	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.071**	**0.194**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**LCS**	*Run Time (min):*	**14.95**
Vial Number:	**39**	*Injection Volume:*	**200.00**
Injection Type:	**Check Standard**	*Channel:*	**ECD_1**
Calibration Level:	**09**	*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**01/Dec/23 03:41**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

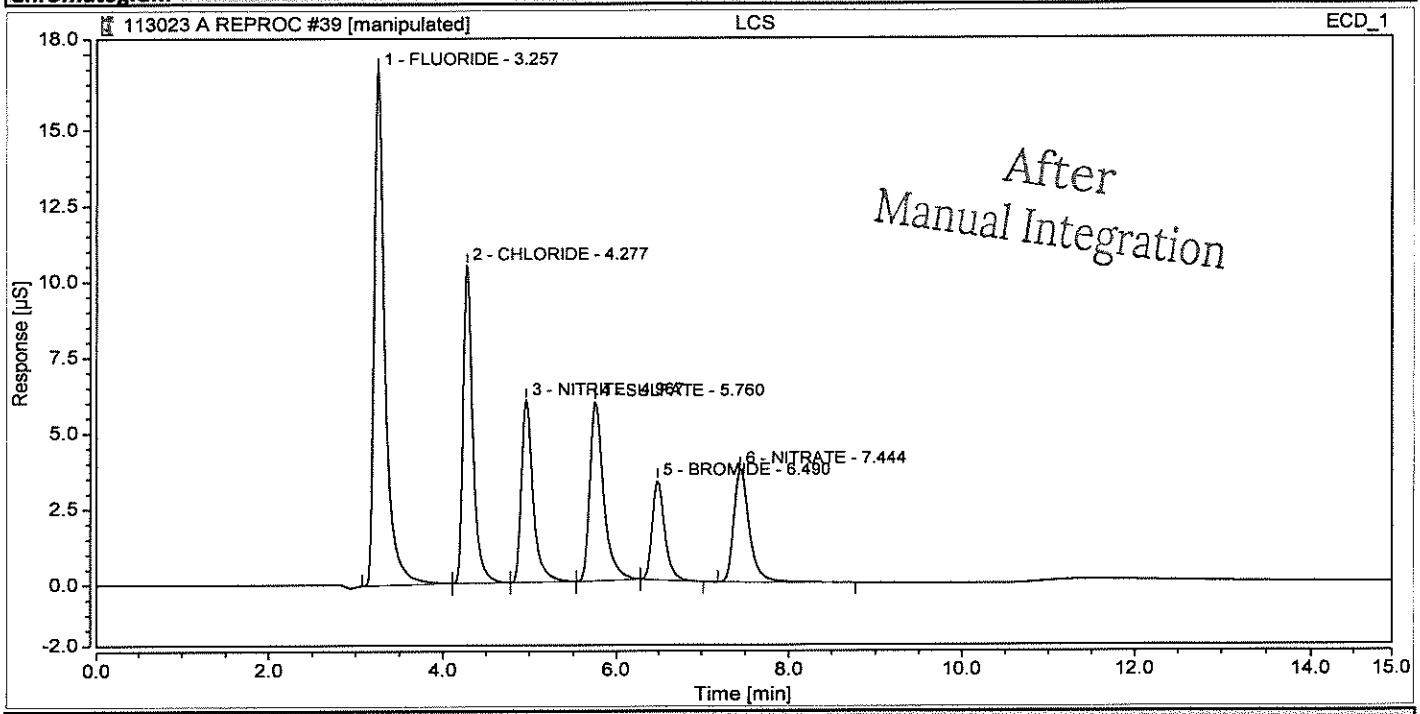
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.257	2.445	16.982	32.87	36.55	3.9480	5.2798
2	CHLORIDE	4.277	1.376	10.472	18.50	22.54	3.5317	-5.8202
3	NITRITE	4.967	0.945	5.996	12.70	12.90	1.1176	-1.9622
4	SULFATE	5.760	1.104	5.903	14.84	12.71	3.8819	3.5163
5	BROMIDE	6.490	0.559	3.264	7.52	7.02	3.2905	-12.2545
6	NITRATE	7.444	0.764	3.724	10.28	8.01	0.7812	-7.5562
7	PHOSPHATE	11.440	0.245	0.123	3.29	0.27	n.a.	n.a.
Total:			**7.439**	**46.464**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**LCS**	*Run Time (min):*	**14.95**
Vial Number:	**39**	*Injection Volume:*	**200.00**
Injection Type:	**Check Standard**	*Channel:*	**ECD_1**
Calibration Level:	**09**	*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**01/Dec/23 03:41**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

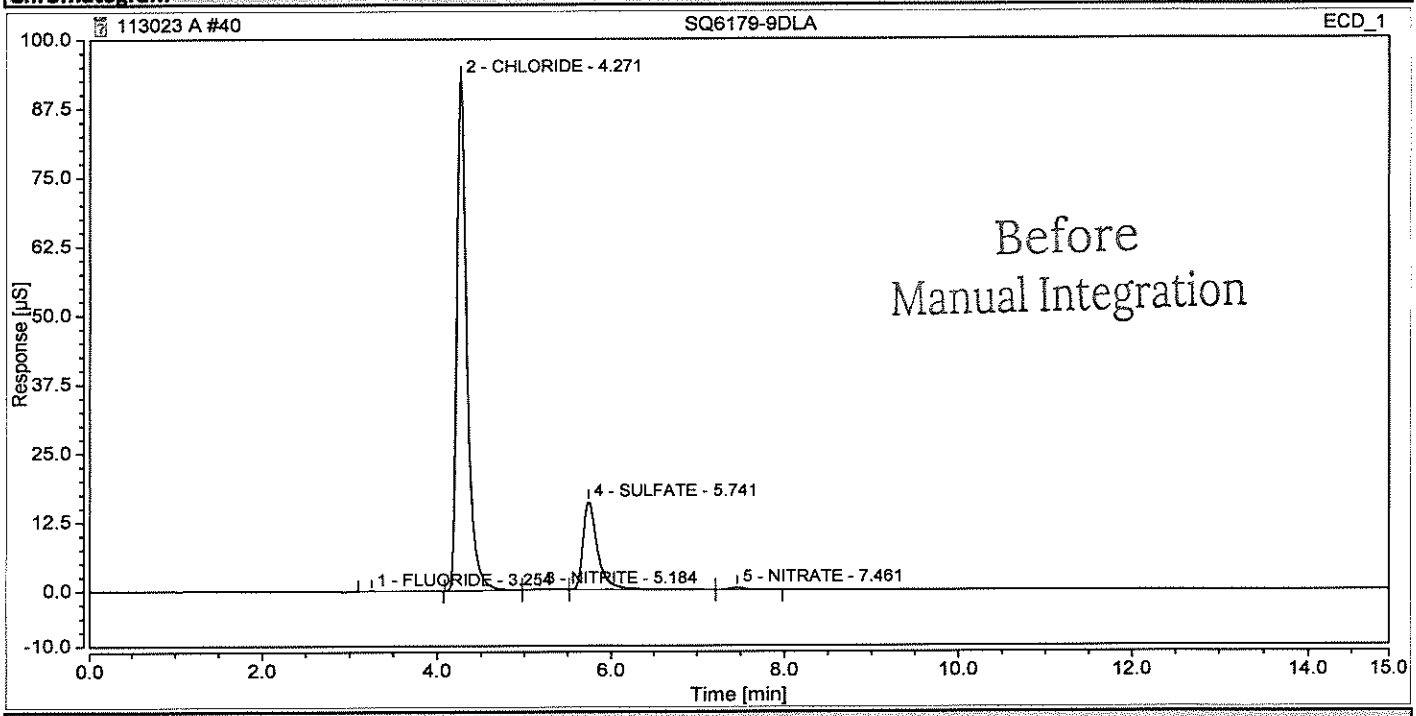
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.257	2.445	16.982	33.99	36.65	3.9480	5.2798
2	CHLORIDE	4.277	1.376	10.472	19.13	22.60	3.5317	-5.8202
3	NITRITE	4.967	0.945	5.996	13.13	12.94	1.1176	-1.9622
4	SULFATE	5.760	1.104	5.903	15.34	12.74	3.8819	3.5163
5	BROMIDE	6.490	0.559	3.264	7.78	7.04	3.2905	-12.2545
6	NITRATE	7.444	0.764	3.724	10.63	8.04	0.7812	-7.5562
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**7.194**	**46.341**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6179-9DLA**	*Run Time (min):*	**14.95**
Vial Number:	**40**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**20.0000**
Injection Date/Time:	**01/Dec/23 03:58**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

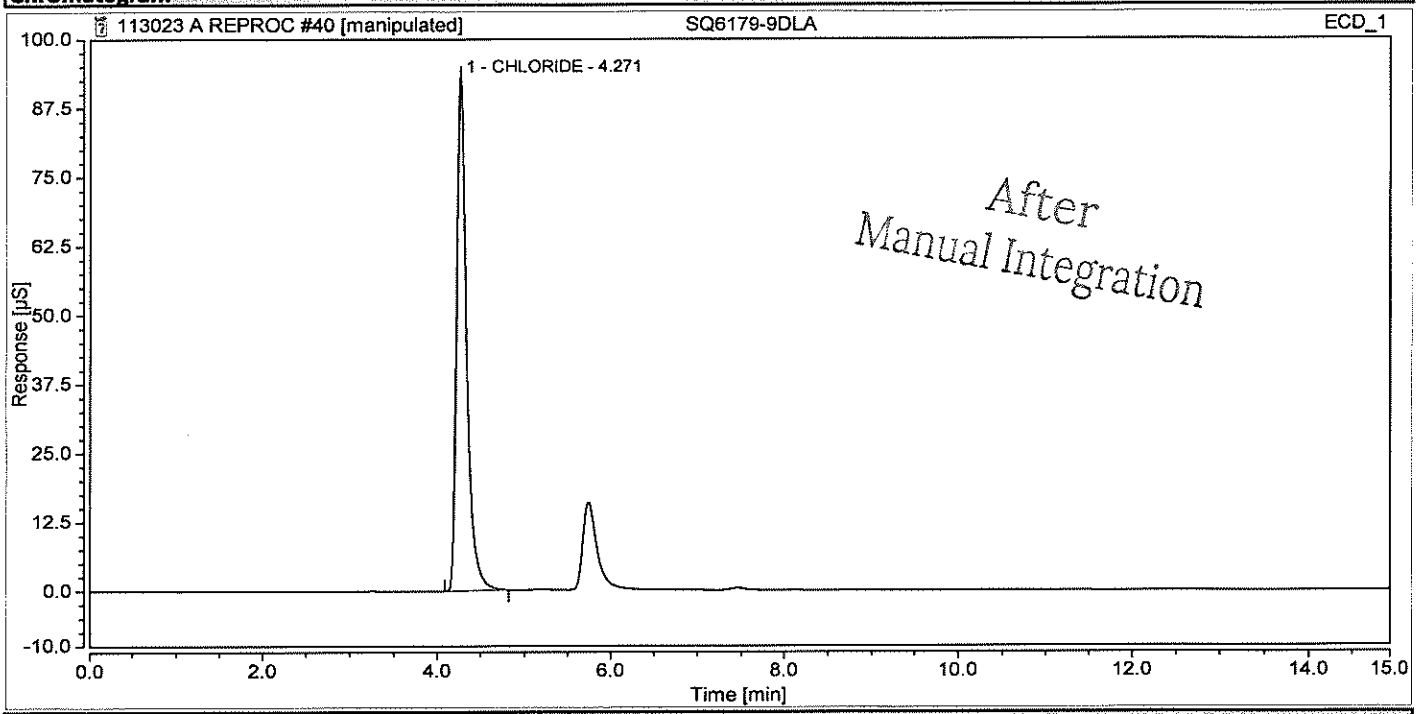
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.254	0.018	0.046	0.11	0.04	0.9008	n.a.
2	CHLORIDE	4.271	12.650	93.041	79.48	84.90	649.1398	n.a.
3	NITRITE	5.184	0.033	0.122	0.21	0.11	0.9410	n.a.
4	SULFATE	5.741	3.131	15.967	19.67	14.57	220.2966	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5	NITRATE	7.461	0.083	0.408	0.52	0.37	1.6892	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**15.915**	**109.585**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6179-9DLA**	*Run Time (min):*	**14.95**
Vial Number:	**40**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**20.0000**
Injection Date/Time:	**01/Dec/23 03:58**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

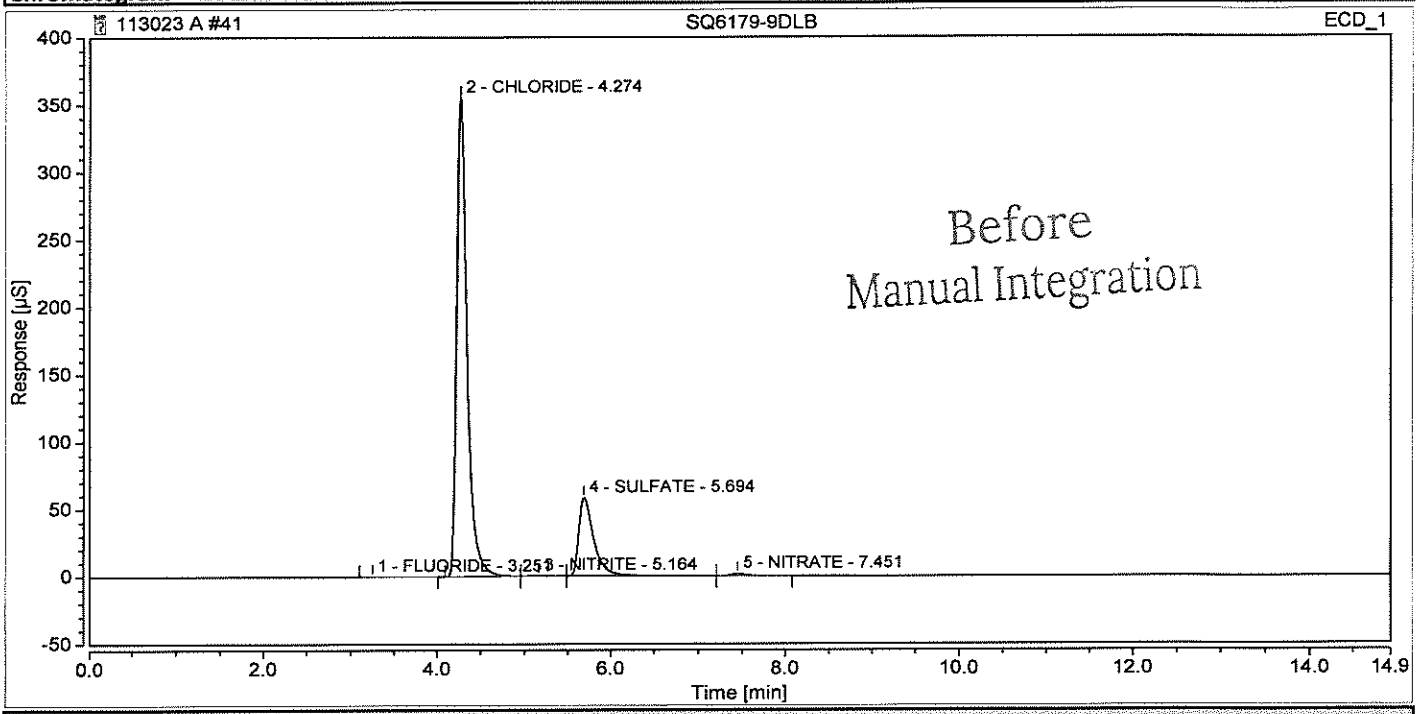
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.271	12.612	93.019	100.00	100.00	647.1713	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	SULFATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**12.612**	**93.019**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6179-9DLB**	*Run Time (min):*	**14.94**
Vial Number:	**41**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**5.0000**
Injection Date/Time:	**01/Dec/23 04:16**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

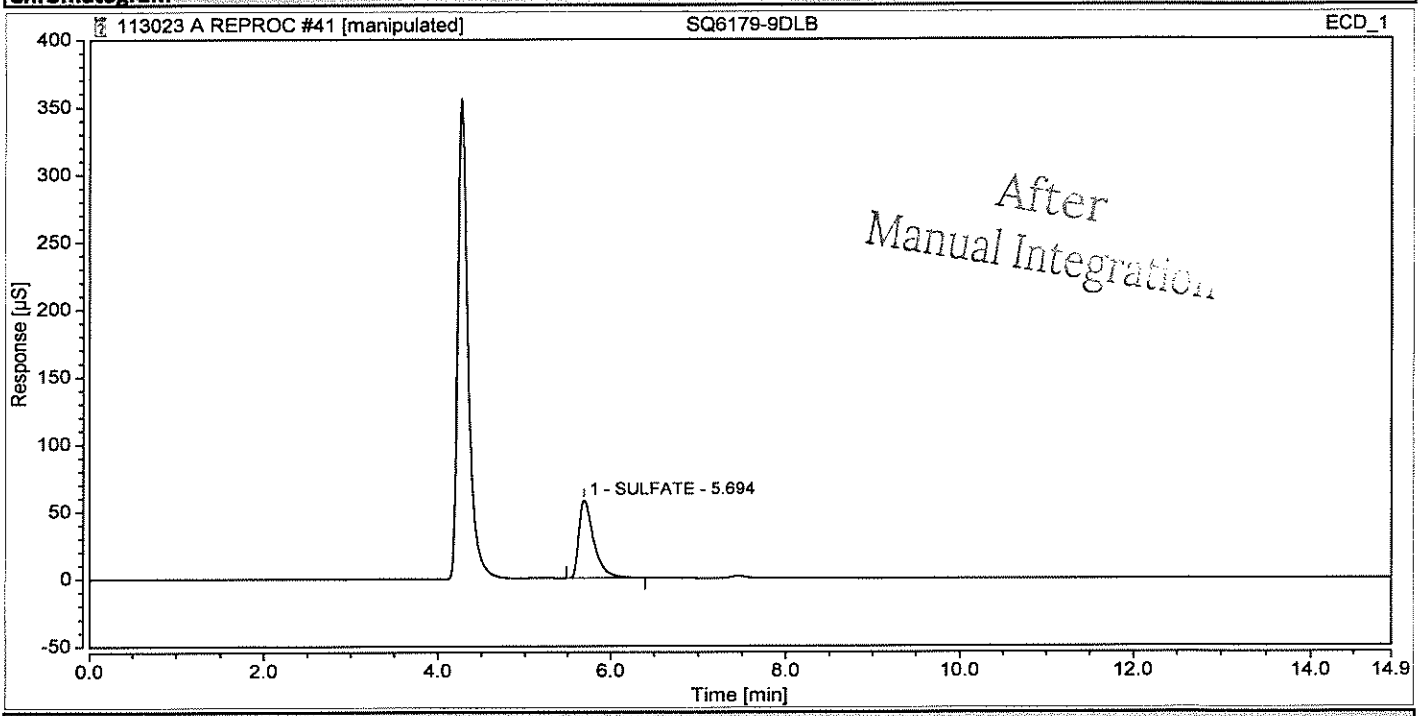
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.251	0.020	0.087	0.03	0.02	0.2431	n.a.
2	CHLORIDE	4.274	49.150	355.003	80.02	85.54	630.5379	n.a.
3	NITRITE	5.164	0.077	0.284	0.12	0.07	0.4880	n.a.
4	SULFATE	5.694	11.854	58.035	19.30	13.98	208.4975	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5	NITRATE	7.451	0.317	1.617	0.52	0.39	1.6206	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**61.419**	**415.026**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6179-9DLB**	*Run Time (min):*	**14.94**
Vial Number:	**41**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**5.0000**
Injection Date/Time:	**01/Dec/23 04:16**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

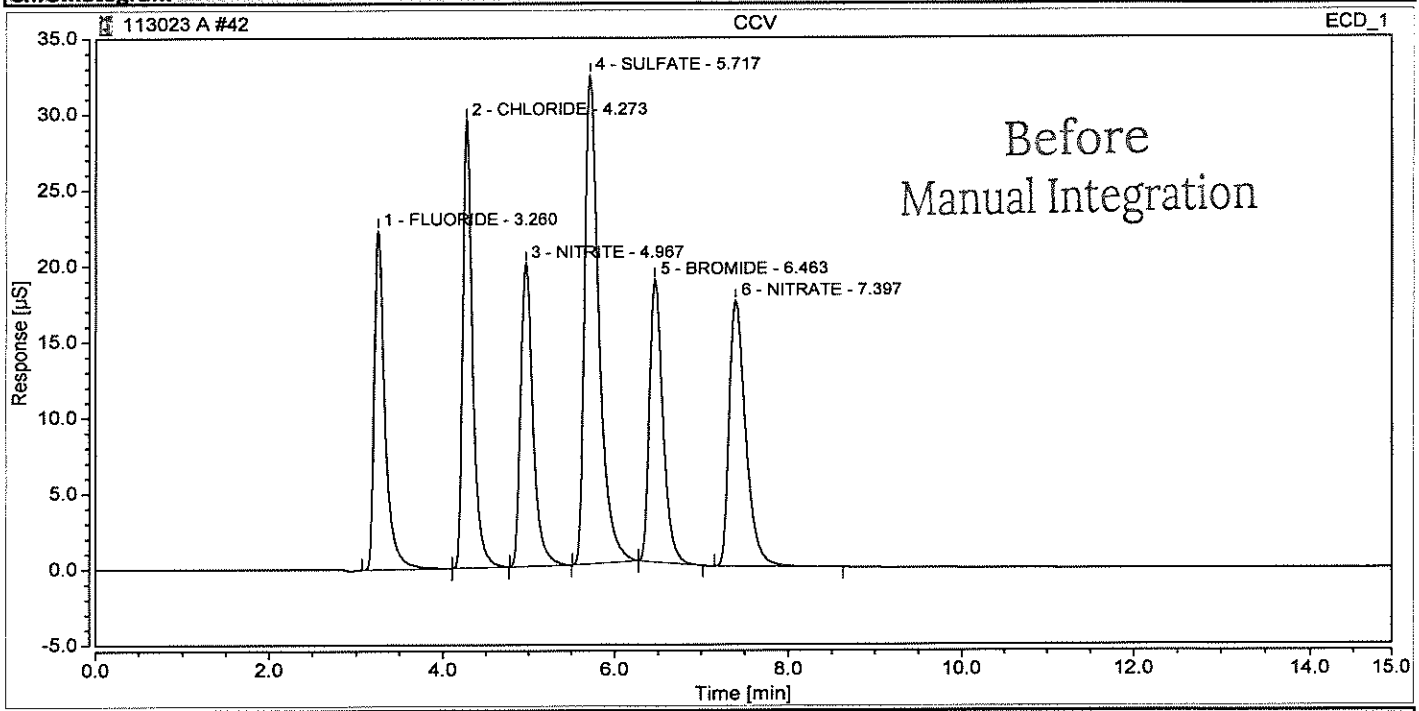
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	CHLORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	SULFATE	5.694	11.606	57.958	100.00	100.00	204.1355	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**11.606**	**57.958**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**CCV**	*Run Time (min):*	**14.96**
Vial Number:	**49**	*Injection Volume:*	**200.00**
Injection Type:	**Check Standard**	*Channel:*	**ECD_1**
Calibration Level:	**06**	*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**01/Dec/23 04:33**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

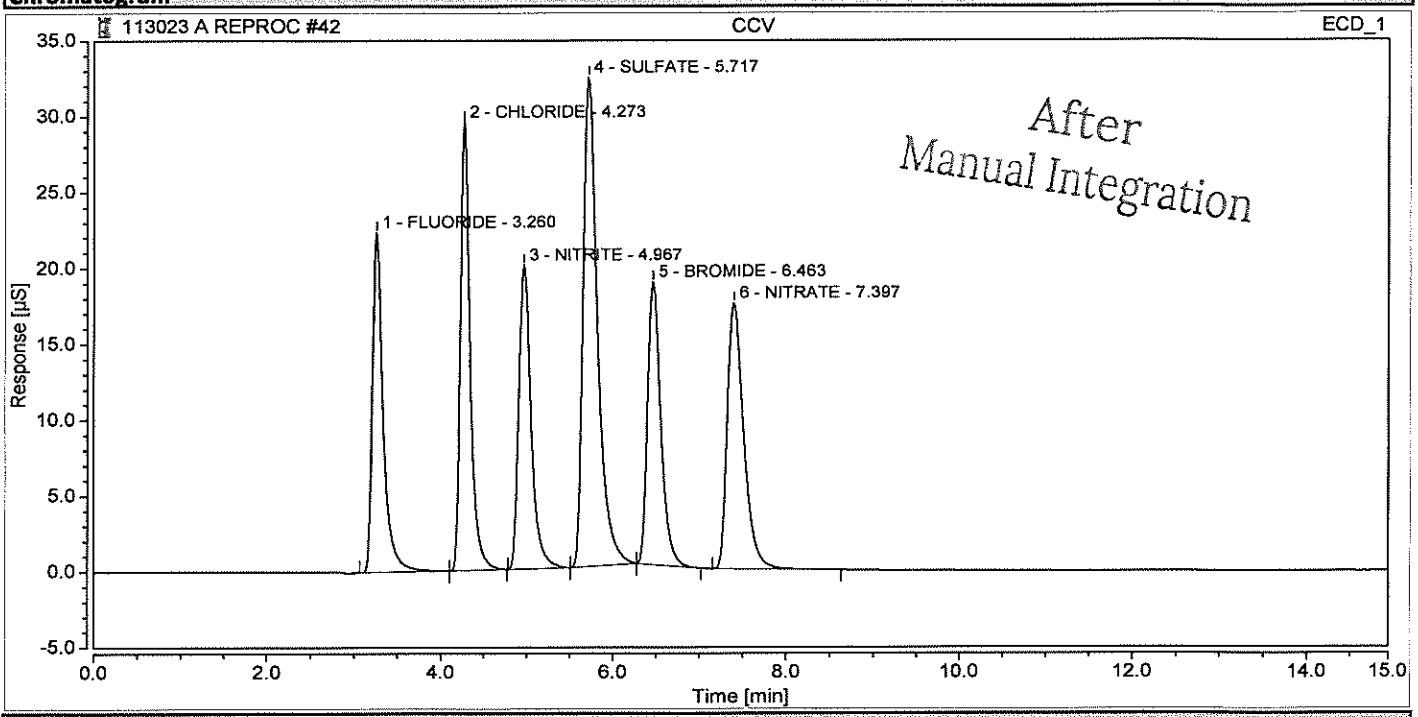
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.260	3.227	22.352	13.49	15.95	5.2455	4.9091
2	CHLORIDE	4.273	3.921	29.512	16.38	21.06	10.0594	0.5943
3	NITRITE	4.967	3.386	19.984	14.15	14.26	4.0804	2.0095
4	SULFATE	5.717	6.189	32.215	25.86	22.98	21.7712	8.8559
5	BROMIDE	6.463	3.355	18.608	14.02	13.28	19.7318	-1.3408
6	NITRATE	7.397	3.852	17.493	16.10	12.48	3.9361	-1.5982
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**23.929**	**140.165**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**CCV**	*Run Time (min):*	**14.96**
Vial Number:	**49**	*Injection Volume:*	**200.00**
Injection Type:	**Check Standard**	*Channel:*	**ECD_1**
Calibration Level:	**06**	*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**01/Dec/23 04:33**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

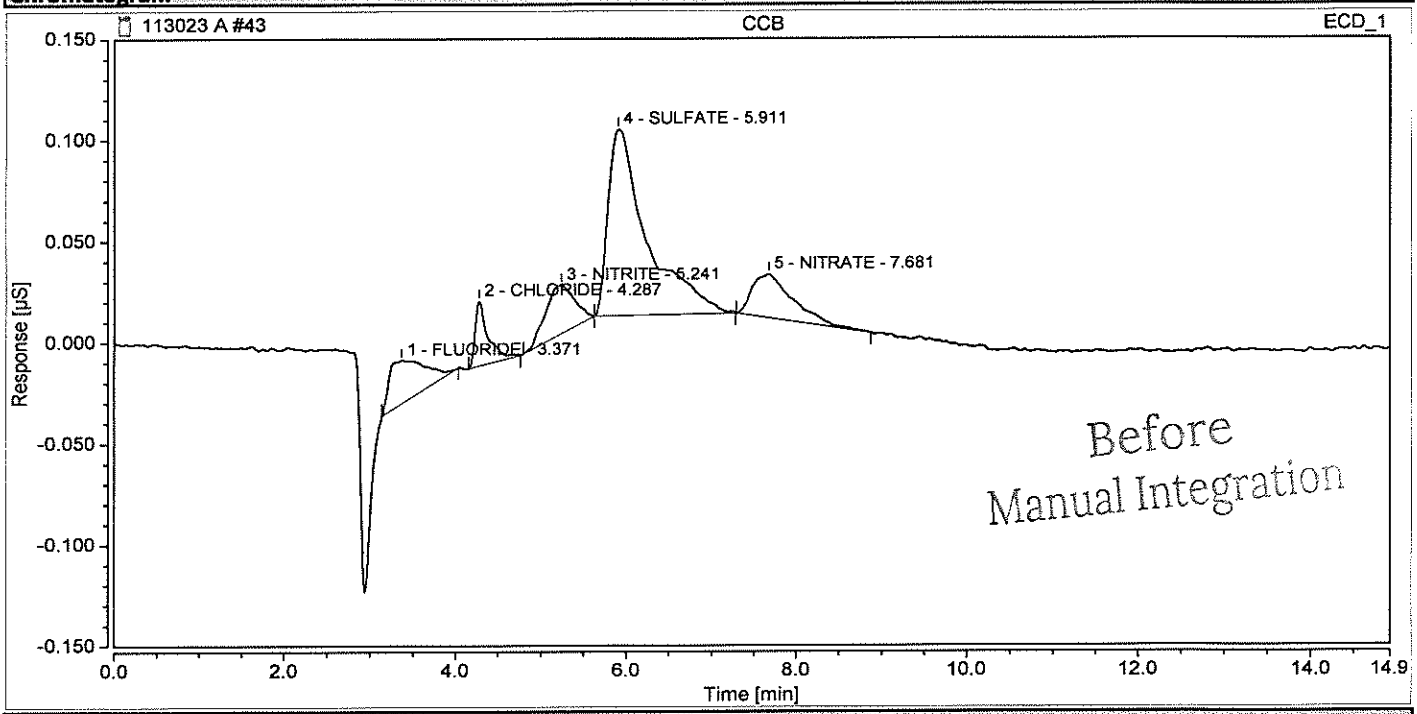
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.260	3.227	22.352	13.49	15.95	5.2455	4.9091
2	CHLORIDE	4.273	3.921	29.512	16.38	21.06	10.0594	0.5943
3	NITRITE	4.967	3.386	19.984	14.15	14.26	4.0804	2.0095
4	SULFATE	5.717	6.189	32.215	25.86	22.98	21.7712	8.8559
5	BROMIDE	6.463	3.355	18.608	14.02	13.28	19.7318	-1.3408
6	NITRATE	7.397	3.852	17.493	16.10	12.48	3.9361	-1.5982
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**23.929**	**140.165**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**CCB**	*Run Time (min):*	**14.94**
Vial Number:	**50**	*Injection Volume:*	**200.00**
Injection Type:	**Blank**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**01/Dec/23 04:50**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

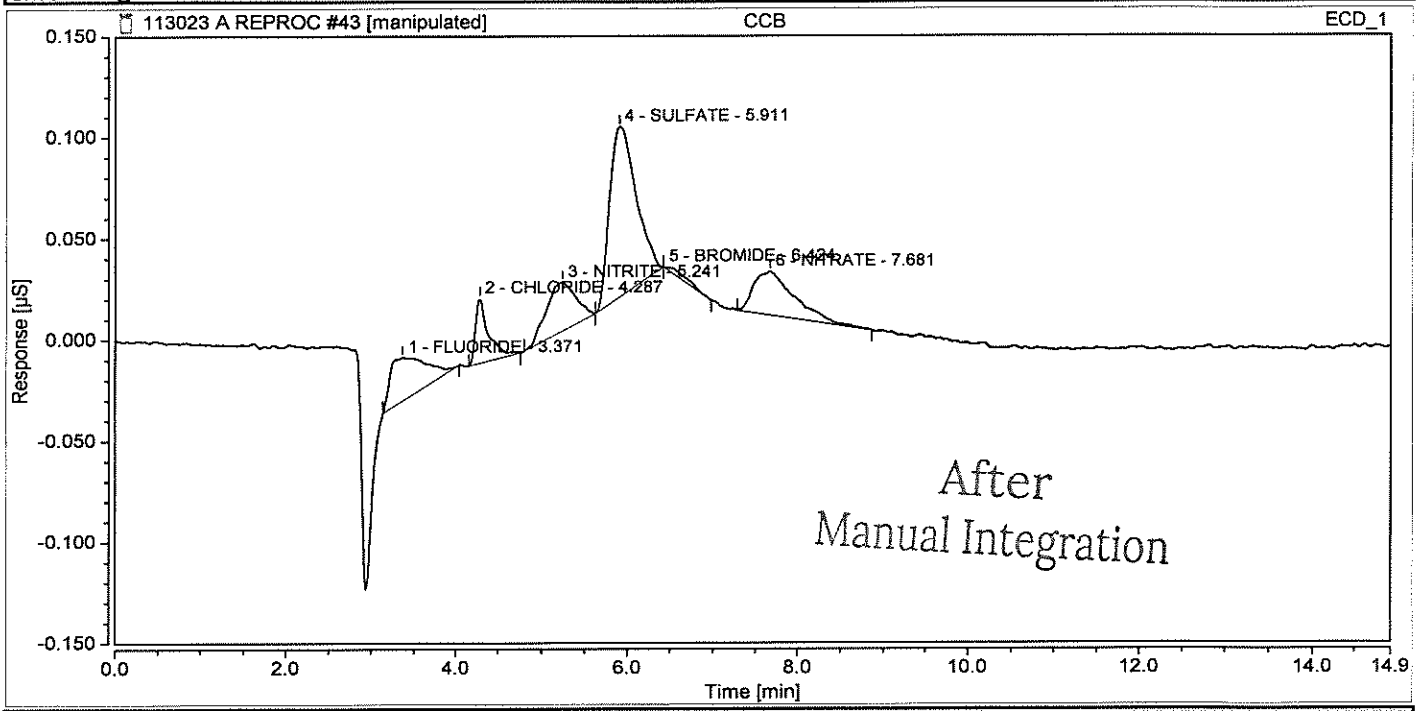
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.371	0.010	0.021	11.74	11.16	0.0325	n.a.
2	CHLORIDE	4.287	0.006	0.032	6.63	16.79	0.0146	n.a.
3	NITRITE	5.241	0.010	0.024	11.22	12.56	0.0195	n.a.
4	SULFATE	5.911	0.049	0.092	56.39	48.18	0.1706	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5	NITRATE	7.681	0.012	0.022	14.02	11.32	0.0123	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.086**	**0.191**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**CCB**	*Run Time (min):*	**14.94**
Vial Number:	**50**	*Injection Volume:*	**200.00**
Injection Type:	**Blank**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**01/Dec/23 04:50**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.371	0.010	0.021	14.70	11.64	0.0325	n.a.
2	CHLORIDE	4.287	0.006	0.032	8.31	17.51	0.0146	n.a.
3	NITRITE	5.241	0.010	0.024	14.06	13.10	0.0195	n.a.
4	SULFATE	5.911	0.030	0.084	44.21	45.93	0.1068	n.a.
5	BROMIDE	6.424	0.001	0.000	1.16	0.00	0.0047	n.a.
6	NITRATE	7.681	0.012	0.022	17.56	11.82	0.0123	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.069**	**0.183**	**100.00**	**100.00**		

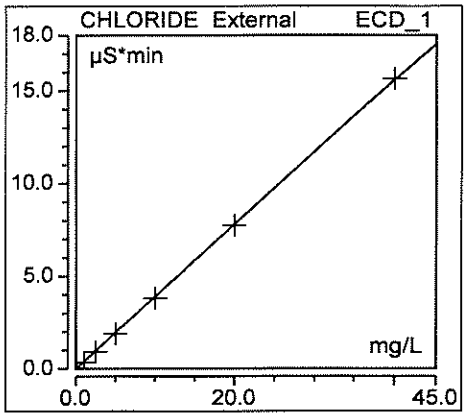
Calibration Batch Report

Sequence:	**101223 CAL REPROC**	*Injection Volume:*	**200.00**
Instrument Method:	**32mM80mA**	*Operator:*	**wetlab**
Inj. Date / Time:	**12-Oct-2023 / 13:07**	*Run Time:*	**14.946667**

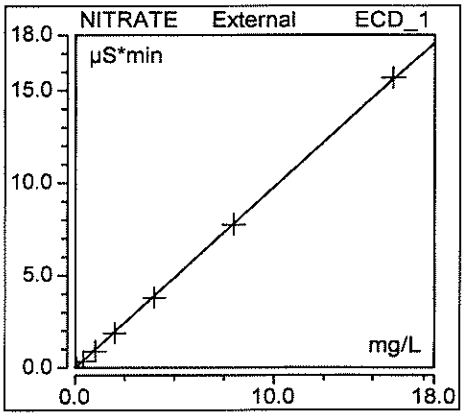
Calibration Summary

Peak Name	Eval.Type	Cal.Type	Points	Offset (C0)	Slope (C1)	Curve (C2)	Coeff.Det. %
FLUORIDE	Area	ly2, WithOffs	8.000	-0.011	0.637	-0.004	99.9990
CHLORIDE	Area	Lin	8.000	0.000	0.390	0.000	99.9875
NITRITE	Area	ly2, WithOffs	8.000	-0.007	0.859	-0.007	99.9990
SULFATE	Area	Lin	8.000	0.000	0.284	0.000	99.9981
BROMIDE	Area	Lin	8.000	0.000	0.170	0.000	99.9752
NITRATE	Area	Lin	8.000	0.000	0.976	0.000	99.9814
		AVERAGE:		-0.0029	0.5526	-0.0018	99.9900

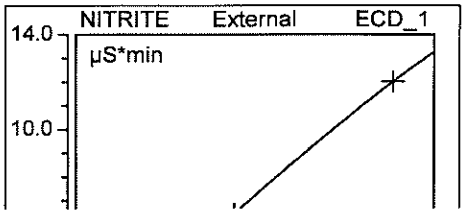
Injection Name / CHLORIDE	Ret.Time min CHLORIDE	Area µS*min CHLORIDE	Height µS CHLORIDE	Amount mg/L CHLORIDE
	ECD_1	ECD_1	ECD_1	ECD_1
IC1	4.310	0.0013	0.007	0.003
IC2	4.290	0.0319	0.236	0.082
IC3	4.280	0.3373	2.649	0.865
IC4	4.277	0.9117	7.111	2.339
IC5	4.277	1.8945	14.718	4.861
IC6	4.280	3.7977	29.083	9.744
IC7	4.274	7.7443	58.666	19.870
IC8	4.273	15.6522	117.462	40.160
Average	4.283			
Rel. Std. Dev.	0.287 %			



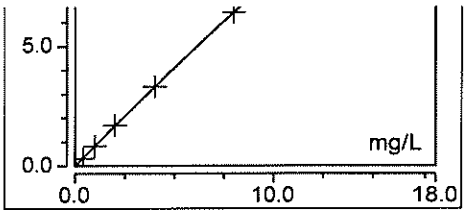
Injection Name / NITRATE	Ret.Time min NITRATE	Area µS*min NITRATE	Height µS NITRATE	Amount mg/L NITRATE
	ECD_1	ECD_1	ECD_1	ECD_1
IC1	7.577	0.0011	0.005	0.001
IC2	7.557	0.0307	0.152	0.031
IC3	7.537	0.3315	1.685	0.340
IC4	7.521	0.8936	4.512	0.916
IC5	7.500	1.8681	9.167	1.915
IC6	7.470	3.7881	17.516	3.883
IC7	7.420	7.7471	32.517	7.941
IC8	7.347	15.6832	56.804	16.076
Average	7.491			
Rel. Std. Dev.	1.022 %			



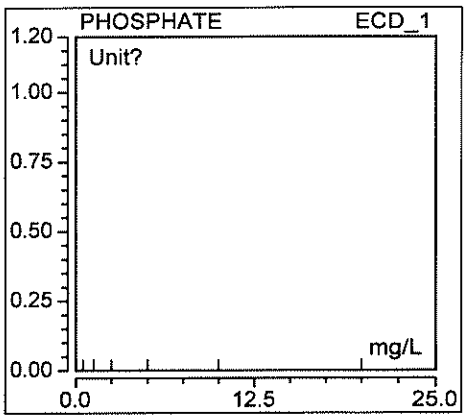
Injection Name / NITRITE	Ret.Time min NITRITE	Area µS*min NITRITE	Height µS NITRITE	Amount mg/L NITRITE
	ECD_1	ECD_1	ECD_1	ECD_1
IC1	5.277	0.0081	0.032	0.018
IC2	4.990	0.0315	0.165	0.045



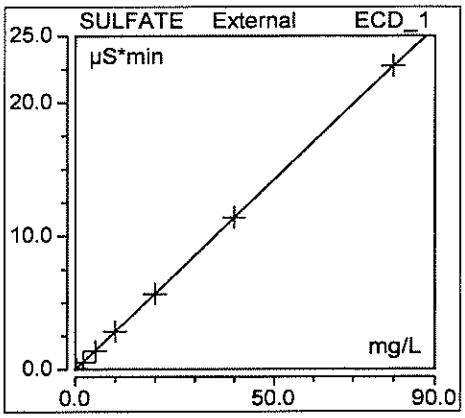
IC3	4.984	0.3130	1.968	0.374
IC4	4.984	0.8317	5.253	0.984
IC5	4.984	1.7014	10.467	2.021
IC6	4.990	3.3244	19.408	4.004
IC7	4.990	6.4268	34.736	7.994
IC8	4.990	12.0030	58.725	16.001
Average	5.024			
Rel. Std. Dev.	2.038 %			



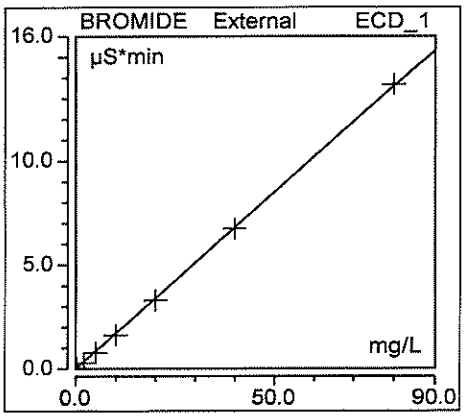
Injection Name	Ret.Time min	Area µS*min	Height µS	Amount mg/L
PHOSPHATE	PHOSPHATE	PHOSPHATE	PHOSPHATE	PHOSPHATE
	ECD_1	ECD_1	ECD_1	ECD_1
IC1	n.a.	n.a.	n.a.	n.a.
IC2	n.a.	n.a.	n.a.	n.a.
IC3	n.a.	n.a.	n.a.	n.a.
IC4	n.a.	n.a.	n.a.	n.a.
IC5	n.a.	n.a.	n.a.	n.a.
IC6	n.a.	n.a.	n.a.	n.a.
IC7	n.a.	n.a.	n.a.	n.a.
IC8	n.a.	n.a.	n.a.	n.a.
Average	#DIV/0!			
Rel. Std. Dev.	#DIV/0!			



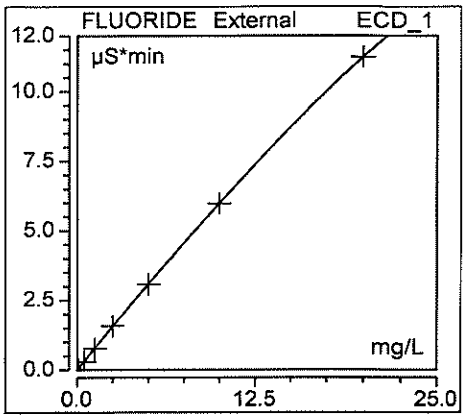
Injection Name	Ret.Time min	Area µS*min	Height µS	Amount mg/L
SULFATE	SULFATE	SULFATE	SULFATE	SULFATE
	ECD_1	ECD_1	ECD_1	ECD_1
IC1	5.844	0.0009	0.004	0.003
IC2	5.834	0.0454	0.229	0.160
IC3	5.820	0.5026	2.833	1.768
IC4	5.817	1.3714	7.732	4.824
IC5	5.797	2.8380	15.881	9.983
IC6	5.777	5.6533	31.045	19.887
IC7	5.744	11.3826	59.540	40.040
IC8	5.687	22.7500	108.379	80.027
Average	5.790			
Rel. Std. Dev.	0.911 %			



Injection Name	Ret.Time min	Area µS*min	Height µS	Amount mg/L
BROMIDE	BROMIDE	BROMIDE	BROMIDE	BROMIDE
	ECD_1	ECD_1	ECD_1	ECD_1
IC1	6.407	0.0004	0.001	0.002
IC2	6.560	0.0257	0.144	0.151
IC3	6.544	0.2814	1.655	1.655
IC4	6.537	0.7709	4.533	4.535
IC5	6.527	1.6186	9.363	9.521
IC6	6.514	3.2868	18.367	19.333
IC7	6.484	6.7353	35.656	39.616
IC8	6.433	13.6787	65.681	80.456
Average	6.501			
Rel. Std. Dev.	0.847 %			



Injection Name FLUORIDE	Ret.Time min FLUORIDE	Area µS*min FLUORIDE	Height µS FLUORIDE	Amount mg/L FLUORIDE
	ECD_1	ECD_1	ECD_1	ECD_1
IC1	3.524	0.0033	0.007	0.022
IC2	3.244	0.0233	0.162	0.053
IC3	3.240	0.2885	2.065	0.471
IC4	3.237	0.7656	5.555	1.228
IC5	3.244	1.5767	11.214	2.530
IC6	3.250	3.0811	21.013	5.001
IC7	3.254	5.9813	38.517	9.993
IC8	3.267	11.2370	67.145	20.001
Average	3.282			
Rel. Std. Dev.	2.982 %			



Anion Summary Report

No. CHLORIDE	Name CHLORIDE	Time min CHLORIDE ECD_1	Area µS*min CHLORIDE ECD_1	Rel.Area % CHLORIDE ECD_1	Height µS CHLORIDE ECD_1	Rel.Height % CHLORIDE ECD_1	Amount mg/L CHLORIDE ECD_1
1	IC1	4.310	0.0013	8.64	0.01	12.08	0.0033
2	IC2	4.290	0.0319	16.92	0.24	21.69	0.0818
3	IC3	4.280	0.3373	16.42	2.65	20.61	0.8653
4	IC4	4.277	0.9117	16.44	7.11	20.50	2.3392
5	IC5	4.277	1.8945	16.48	14.72	20.79	4.8610
6	IC6	4.280	3.7977	16.56	29.08	21.32	9.7441
7	IC7	4.274	7.7443	16.83	58.67	22.60	19.8700
8	IC8	4.273	15.6522	17.20	117.46	24.77	40.1598
	Sum:	34.262	30.371	125.488	229.932	164.342	77.924
	Average:	4.283	3.796	15.686	28.741	20.543	9.741
	Rel.Std.Dev:	0.287 %	143.802 %	18.229 %	142.552 %	17.997 %	143.802 %

No. NITRATE	Name NITRATE	Time min NITRATE ECD_1	Area µS*min NITRATE ECD_1	Rel.Area % NITRATE ECD_1	Height µS NITRATE ECD_1	Rel.Height % NITRATE ECD_1	Amount mg/L NITRATE ECD_1
1	IC1	7.577	0.0011	7.29	0.01	9.24	0.0011
2	IC2	7.557	0.0307	16.31	0.15	13.97	0.0315
3	IC3	7.537	0.3315	16.14	1.69	13.11	0.3398
4	IC4	7.521	0.8936	16.12	4.51	13.00	0.9160
5	IC5	7.500	1.8681	16.25	9.17	12.95	1.9149
6	IC6	7.470	3.7881	16.52	17.52	12.84	3.8830
7	IC7	7.420	7.7471	16.84	32.52	12.52	7.9412
8	IC8	7.347	15.6832	17.23	56.80	11.98	16.0761
	Sum:	59.929	30.344	122.694	122.358	99.612	31.104
	Average:	7.491	3.793	15.337	15.295	12.451	3.888
	Rel.Std.Dev:	1.022 %	144.282 %	21.338 %	131.385 %	11.350 %	144.282 %

No. NITRITE	Name NITRITE	Time min NITRITE ECD_1	Area µS*min NITRITE ECD_1	Rel.Area % NITRITE ECD_1	Height µS NITRITE ECD_1	Rel.Height % NITRITE ECD_1	Amount mg/L NITRITE ECD_1
1	IC1	5.277	0.0081	53.65	0.03	57.13	0.0176
2	IC2	4.990	0.0315	16.72	0.17	15.17	0.0449
3	IC3	4.984	0.3130	15.24	1.97	15.31	0.3737
4	IC4	4.984	0.8317	15.00	5.25	15.14	0.9839
5	IC5	4.984	1.7014	14.80	10.47	14.78	2.0208
6	IC6	4.990	3.3244	14.50	19.41	14.23	4.0043
7	IC7	4.990	6.4268	13.97	34.74	13.38	7.9935
8	IC8	4.990	12.0030	13.19	58.73	12.38	16.0012
	Sum:	40.189	24.640	157.051	130.754	157.526	31.440
	Average:	5.024	3.080	19.631	16.344	19.691	3.930
	Rel.Std.Dev:	2.038 %	136.774 %	70.208 %	127.418 %	77.003 %	141.871 %

No. PHOSPHATE	Name PHOSPHATE	Time min PHOSPHATE ECD_1	Area µS*min PHOSPHATE ECD_1	Rel.Area % PHOSPHATE ECD_1	Height µS PHOSPHATE ECD_1	Rel.Height % PHOSPHATE ECD_1	Amount mg/L PHOSPHATE ECD_1
1	IC1	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2	IC2	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

3	IC3	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
4	IC4	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5	IC5	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
6	IC6	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
7	IC7	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
8	IC8	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
	Sum:	0.000	0.000	0.000	0.000	0.000	0.000
	Average:	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
	Rel.Std.Dev:	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

No. SULFATE	Name SULFATE	Time min SULFATE ECD_1	Area µS*min SULFATE ECD_1	Rel.Area % SULFATE ECD_1	Height µS SULFATE ECD_1	Rel.Height % SULFATE ECD_1	Amount mg/L SULFATE ECD_1
1	IC1	5.844	0.0009	6.16	0.00	7.25	0.0033
2	IC2	5.834	0.0454	24.09	0.23	21.06	0.1596
3	IC3	5.820	0.5026	24.47	2.83	22.04	1.7679
4	IC4	5.817	1.3714	24.73	7.73	22.29	4.8243
5	IC5	5.797	2.8380	24.68	15.88	22.43	9.9833
6	IC6	5.777	5.6533	24.65	31.04	22.75	19.8866
7	IC7	5.744	11.3826	24.74	59.54	22.93	40.0405
8	IC8	5.687	22.7500	25.00	108.38	22.86	80.0271
	Sum:	46.319	44.544	178.521	225.643	163.599	156.693
	Average:	5.790	5.568	22.315	28.205	20.450	19.587
	Rel.Std.Dev:	0.911 %	142.591 %	29.274 %	135.408 %	26.248 %	142.591 %

No. BROMIDE	Name BROMIDE	Time min BROMIDE ECD_1	Area µS*min BROMIDE ECD_1	Rel.Area % BROMIDE ECD_1	Height µS BROMIDE ECD_1	Rel.Height % BROMIDE ECD_1	Amount mg/L BROMIDE ECD_1
1	IC1	6.407	0.0004	2.57	0.00	2.09	0.0023
2	IC2	6.560	0.0257	13.62	0.14	13.22	0.1509
3	IC3	6.544	0.2814	13.70	1.65	12.87	1.6554
4	IC4	6.537	0.7709	13.90	4.53	13.07	4.5345
5	IC5	6.527	1.6186	14.08	9.36	13.22	9.5207
6	IC6	6.514	3.2868	14.33	18.37	13.46	19.3328
7	IC7	6.484	6.7353	14.64	35.66	13.73	39.6161
8	IC8	6.433	13.6787	15.03	65.68	13.85	80.4565
	Sum:	52.006	26.398	101.871	135.400	95.522	155.269
	Average:	6.501	3.300	12.734	16.925	11.940	19.409
	Rel.Std.Dev:	0.847 %	144.644 %	32.456 %	136.608 %	33.434 %	144.644 %

No. FLUORIDE	Name FLUORIDE	Time min FLUORIDE ECD_1	Area µS*min FLUORIDE ECD_1	Rel.Area % FLUORIDE ECD_1	Height µS FLUORIDE ECD_1	Rel.Height % FLUORIDE ECD_1	Amount mg/L FLUORIDE ECD_1
1	IC1	3.524	0.0033	21.68	0.01	12.21	0.0218
2	IC2	3.244	0.0233	12.35	0.16	14.89	0.0532
3	IC3	3.240	0.2885	14.04	2.06	16.06	0.4710
4	IC4	3.237	0.7656	13.81	5.55	16.01	1.2278
5	IC5	3.244	1.5767	13.71	11.21	15.84	2.5301
6	IC6	3.250	3.0811	13.44	21.01	15.40	5.0014
7	IC7	3.254	5.9813	13.00	38.52	14.84	9.9933
8	IC8	3.267	11.2370	12.35	67.15	14.16	20.0014
	Sum:	26.259	22.957	114.375	145.677	119.399	39.300
	Average:	3.282	2.870	14.297	18.210	14.925	4.913
	Rel.Std.Dev:	2.982 %	137.399 %	21.345 %	130.315 %	8.595 %	141.871 %

WET CHEMISTRY BATCH REPORT - TOC
Dec 07 2023, 12:02 pm
Batch: WG346585 Run ID 1: R629066 Run ID 2: NONE

Parameter: Total Organic Carbon
Prep Date: N/A

Date Analyzed: 06-DEC-23
Prep Method: N/A

Analyst Initials: CJB
Prep Chemist: N/A

Sample	Samp Type	Method	Initial Amt.	Final Amt.	Rpt. DF	Result	Rpt Result	TS(%)	PQL	MDL	Adj PQL	RPD	%Rec
SQ6179-1	SAMP	SM5310B	20mL	20mL	1	.18269	U0.75 mg/L	NA	1	0.37	1.0		
SQ6179-2	SAMP	SM5310B	20mL	20mL	1	1.46691	1.5 mg/L	NA	1	0.37	1.0		
SQ6179-3	SAMP	SM5310B	20mL	20mL	1	2.05995	2.0 mg/L	NA	1	0.37	1.0		
SQ6179-4	SAMP	SM5310B	20mL	20mL	1	2.69288	2.7 mg/L	NA	1	0.37	1.0		
SQ6179-5	SAMP	SM5310B	20mL	20mL	1	1.124	1.1 mg/L	NA	1	0.37	1.0		
SQ6179-6	SAMP	SM5310B	20mL	20mL	1	2.82834	2.8 mg/L	NA	1	0.37	1.0		
SQ6179-7	SAMP	SM5310B	20mL	20mL	1	1.07349	1.1 mg/L	NA	1	0.37	1.0		
SQ6179-8	SAMP	SM5310B	20mL	20mL	1	1.62656	1.6 mg/L	NA	1	0.37	1.0		
SQ6179-9	SAMP	SM5310B	20mL	20mL	1	1.52342	1.5 mg/L	NA	1	0.37	1.0		
SQ6179-10	SAMP	SM5310B	20mL	20mL	1	.88278	J0.88 mg/L	NA	1	0.37	1.0		
SQ6232-1	SAMP	SM5310B	20mL	20mL	1	0	U1.0 mg/L	NA	1	0.35	1.0		
SQ6232-2	SAMP	SM5310B	20mL	20mL	1	52.78675	53 mg/L	NA	1	0.35	1.0		
SQ6232-3	SAMP	SM5310B	20mL	20mL	1	72.51197	72 mg/L	NA	1	0.35	1.0		
SQ6232-4	SAMP	SM5310B	20mL	20mL	1	8.31542	8.3 mg/L	NA	1	0.35	1.0		
SQ6232-5	SAMP	SM5310B	20mL	20mL	1	64.65922	65 mg/L	NA	1	0.35	1.0		
SQ6232-6	SAMP	SM5310B	20mL	20mL	1	3.27132	3.3 mg/L	NA	1	0.35	1.0		
SQ6232-7	SAMP	SM5310B	20mL	20mL	1	62.7707	63 mg/L	NA	1	0.35	1.0		
SQ6232-9	SAMP	SM5310B	20mL	20mL	1	63.9744	64 mg/L	NA	1	0.35	1.0		
WG346585-1	MBLANK	SM5310B	20mL	20mL	1	0	U0.70 mg/L	NA	1	0.35	1.0		
WG346585-2	LCS	SM5310B	20mL	20mL	1	51.66766	51.7 mg/L	NA	1	0.350	1.00		103
WG346585-3	LCSD	SM5310B	20mL	20mL	1	51.84774	51.8 mg/L	NA	1	0.350	1.00	0	104
WG346585-4	DUP	SM5310B	20mL	20mL	1	.30383	U1.0 mg/L	NA	1	0.35	1.0	NC	
WG346585-5	MS	SM5310B	20mL	20mL	1	51.7681	51.8 mg/L	NA	1	0.350	1.00		101
WG346585-6	MS	SM5310B	20mL	20mL	1	53.1477	53.1 mg/L	NA	1	0.350	1.00		102

Comments:

SQ6179-1	Anions = NO3, SO4, Cl.
SQ6179-2	Anions = NO3, SO4, Cl.
SQ6179-3	Anions = NO3, SO4, Cl.
SQ6179-4	Anions = NO3, SO4, Cl.
SQ6179-5	Anions = NO3, SO4, Cl.
SQ6179-6	Anions = NO3, SO4, Cl.
SQ6179-7	Anions = NO3, SO4, Cl.
SQ6179-8	Anions = NO3, SO4, Cl.
SQ6179-9	Anions = NO3, SO4, Cl.
SQ6179-10	Anions = NO3, SO4, Cl.
WG346585-1	SQ6179-1
WG346585-2	SQ6179-1
WG346585-3	SQ6179-1
WG346585-4	SQ6179-1
WG346585-5	SQ6179-2
WG346585-6	SQ6179-3

Entered by: CJB Date: 12-7-23 Accepted by: RAD Date: 12/7/23

KATAHDIN ANALYTICAL SERVICES, LLC
CARBON ANALYSIS RUN INFORMATION SHEET

INSTR. ID: analytikjena multi N/C **ANALYST:** CJB **DATE:** 12-06-23

FILE NAME: 120623 **METHOD(S):**

TOC	DOC	TIC
• EPA 415.1	• EPA 415.1	• EPA 415.1
• SM5310B	• SM5310B	• SM5310B
• SW9060	• SW9060	• SW9060

CALIBRATION DATE: 08/24/23 **CALIBRATION ANALYST:** CJB

Calibration standards were prepared by performing dilutions of the following standard on the day of calibration:

Calibration Source Standard ID	Prep Date	~~Expiration Date~~ ☆	Standard Conc. (mg/L)
W22102	08/24/23	~~11/24/23~~	1000

Note: Calibration must be performed quarterly or whenever a change in analysis conditions warrant. A copy of the associated calibration data is attached to this run.

STANDARDS USED:

Standard Name	Standard ID	Prep Date	Expiration Date	Standard Conc.
CCV #	W22343	11/16/23	2/16/24	1000 mg C/L
LCS	W22391	12/06/23	03/06/24	50 mg C/L
MS Stock Std. *	W22343	11/16/23	2/16/24	1000 mg C/L
Alkalinity Check	W22285	11/02/23	02/02/24	15 mg/L (Inorg. C)

CCV prepared by adding 4.0 mL of CCV Std. to 36 mL of DI.
* Matrix spikes are prepared by adding 2.0 mL of MS Stock Std. to 38 mL of sample.

Additional Comments and Notes:

☆ No longer applicable due to procedure updates BAD 12/7/23

aj-Analyzer multi N/C 3100; multiWin 4.12; Serial No: N3-2320/AX

AnalysesTable

AnalysesTable: 120623

Sample ID	Time of analysis	Method	TC/NPOC/POC		Sample volume	Dilute
alk	12/6/2023 3:45:33 P	TOC_Method_101223	503.3µg/l ± 1.01%		500.0µl	1 in 1
CCV	12/6/2023 4:10:54 P	TOC_Method_101223	102.0mg/l ± 0.42%	102%	500.0µl	1 in 1
CCB	12/6/2023 4:26:42 P	TOC_Method_101223	0mg/l		500.0µl	1 in 1
LCS	12/6/2023 4:41:09 P	TOC_Method_101223	51.67mg/l ± 0.32%	103%	500.0µl	1 in 1
LCSD	12/6/2023 4:56:57 P	TOC_Method_101223	51.85mg/l ± 0.47%	104%	500.0µl	1 in 1
SQ6179-1	12/6/2023 5:12:53 P	TOC_Method_101223	182.7µg/l ± 18.59%		500.0µl	1 in 1
SQ6179-1DUP	12/6/2023 5:28:04 P	TOC_Method_101223	303.8µg/l ± 1.21%		500.0µl	1 in 1
SQ6179-2	12/6/2023 5:42:27 P	TOC_Method_101223	1.47mg/l ± 0.34%		500.0µl	1 in 1
SQ6179-2MS	12/6/2023 5:53:22 P	TOC_Method_101223	51.77mg/l ± 1.24%		500.0µl	1 in 1
SQ6179-3	12/6/2023 6:09:24 P	TOC_Method_101223	2.06mg/l ± 0.83%		500.0µl	1 in 1
SQ6179-3MS	12/6/2023 6:25:19 P	TOC_Method_101223	53.15mg/l ± 0.63%		500.0µl	1 in 1
SQ6179-4	12/6/2023 6:49:57 P	TOC_Method_101223	2.69mg/l ± 1.75%		500.0µl	1 in 1
SQ6179-5	12/6/2023 7:06:26 P	TOC_Method_101223	1.12mg/l ± 2.18%		500.0µl	1 in 1
CCV	12/6/2023 7:17:19 P	TOC_Method_101223	104.3mg/l ± 0.41%	104%	500.0µl	1 in 1
CCB	12/6/2023 7:33:16 P	TOC_Method_101223	0mg/l		500.0µl	1 in 1
SQ6179-6	12/6/2023 7:47:37 P	TOC_Method_101223	2.83mg/l ± 2.11%		500.0µl	1 in 1
SQ6179-7	12/6/2023 7:58:41 P	TOC_Method_101223	1.07mg/l ± 3.71%		500.0µl	1 in 1
SQ6179-8	12/6/2023 8:13:51 P	TOC_Method_101223	1.63mg/l ± 1.86%		500.0µl	1 in 1
SQ6179-9	12/6/2023 8:25:30 P	TOC_Method_101223	1.52mg/l ± 1.36%		500.0µl	1 in 1
SQ6179-10	12/6/2023 8:37:18 P	TOC_Method_101223	882.8µg/l ± 4.11%		500.0µl	1 in 1
SQ6232-1	12/6/2023 9:01:22 P	TOC_Method_101223	0mg/l		500.0µl	1 in 1
SQ6232-2	12/6/2023 9:15:49 P	TOC_Method_101223	52.79mg/l ± 0.87%		500.0µl	1 in 1
SQ6232-3	12/6/2023 9:31:49 P	TOC_Method_101223	72.51mg/l ± 0.34%		500.0µl	1 in 1
SQ6232-4	12/6/2023 9:46:33 P	TOC_Method_101223	8.32mg/l ± 0.41%		500.0µl	1 in 1
SQ6232-5	12/6/2023 10:05:14 P	TOC_Method_101223	64.66mg/l ± 0.56%		500.0µl	1 in 1
CCV	12/6/2023 10:20:24 P	TOC_Method_101223	105.3mg/l ± 0.37%	105%	500.0µl	1 in 1
CCB	12/6/2023 10:36:23 P	TOC_Method_101223	0mg/l		500.0µl	1 in 1
SQ6232-6	12/6/2023 10:51:10 P	TOC_Method_101223	3.27mg/l ± 0.18%		500.0µl	1 in 1
SQ6232-7	12/6/2023 11:02:33 P	TOC_Method_101223	62.77mg/l ± 0.39%		500.0µl	1 in 1
SQ6232-9	12/6/2023 11:17:48 P	TOC_Method_101223	63.97mg/l ± 0.04%		500.0µl	1 in 1
CCV	12/6/2023 11:40:53 P	TOC_Method_101223	103.3mg/l ± 0.43%	103%	500.0µl	1 in 1
CCB	12/6/2023 11:56:40 P	TOC_Method_101223	0mg/l		500.0µl	1 in 1

Katahdin Analytical Services SQ6179 Page 669 of 740

aj-Analyzer multi N/C 3100; multiWin 4.12; Serial No: N3-2320/AX

AnalysisReport

Sample ID: alk

Time of analysis:	12/6/2023 3:45:33 PM -0500	**Method:**	TOC_Method_101223
Directory:	C:\ProgramData\IDC\multiWin\Analyses\2023\12		
File name:	231206154533.ajd		
User:	Admin	**Sample volume:**	500.0µl
Sample type:	Sample	**Dilution:**	1 in 1
Status:	Measurement completed successfully	**Determinations:**	2-3
		Furnace temperature:	800°C

	c	I eff	SD	CV	k0	k1	k2	DF
NPOC	**503.3µg/l**	**572.9AU B!**	5.06µg/l	1.01%	-0.15993	7.184E-4	-	1

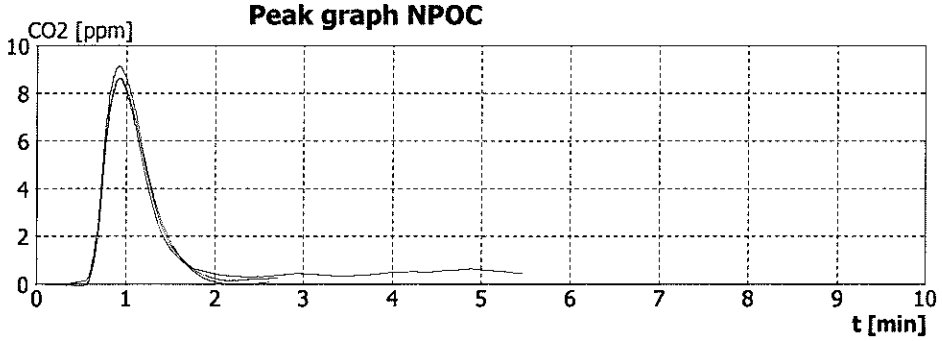
Blank values

NPOC	Diluent blank	0AU/ml

Single replicates:

	Rep.	1	2	3
NPOC	**c [µg/l]**	499.7	~~456.1~~	506.9
NPOC	**I [AU]**	570.4	~~540.1~~	575.4

Peak graph NPOC



AnalysisReport

Sample ID: CCV

Time of analysis:	12/6/2023 4:10:54 PM -0500	**Method:**	TOC_Method_101223
Directory:	C:\ProgramData\IDC\multiWin\Analyses\2023\12		
File name:	231206161054.ajd		
User:	Admin	**Sample volume:**	500.0µl
Sample type:	Sample	**Dilution:**	1 in 1
Status:	Measurement completed successfully	**Determinations:**	2-3
		Furnace temperature:	800°C

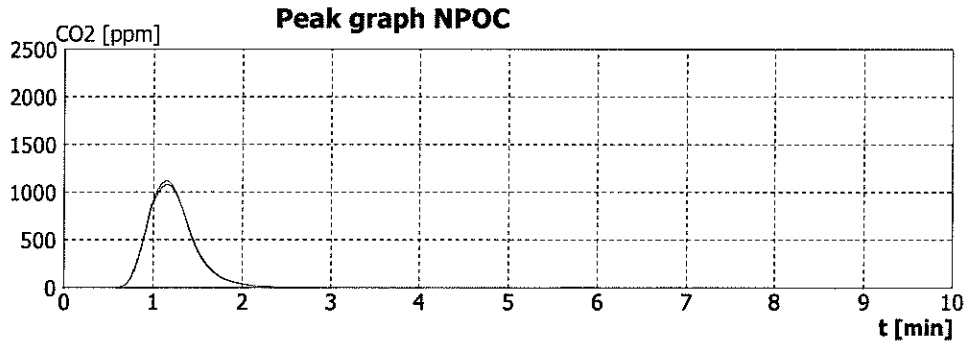
	c	I eff	SD	CV	k0	k1	k2	DF
NPOC	**102.0mg/l**	**7.123E4AU**	433.2µg/l	0.42%	-0.15993	7.184E-4	-	1

Blank values

NPOC	Diluent blank	0AU/ml

Single replicates:

	Rep.	1	2
NPOC	**c [mg/l]**	101.7	102.3
NPOC	**I [AU]**	7.102E4	7.145E4



aj-Analyzer multi N/C 3100; multiWin 4.12; Serial No: N3-2320/AX

AnalysisReport

Sample ID: CCB

Time of analysis:	12/6/2023 4:26:42 PM -0500	**Method:**	TOC_Method_101223
Directory:	C:\ProgramData\IDC\multiWin\Analyses\2023\12		
File name:	231206162642.ajd		
User:	Admin	**Sample volume:**	500.0µl
Sample type:	Sample	**Dilution:**	1 in 1
Status:	Measurement completed successfully	**Determinations:**	2-3
		Furnace temperature:	800°C

	c	I eff	SD	CV	k0	k1	k2	DF
NPOC	**0mg/l**	**123.9AU B!**			-0.15993	7.184E-4	-	1

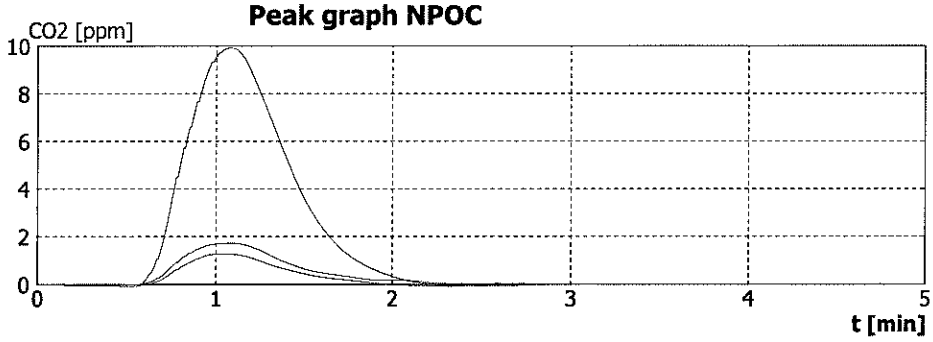
Blank values

NPOC	Diluent blank	0AU/ml

Single replicates:

	Rep.	1	2	3
NPOC	**c [mg/l]**	~~0.711~~	0	0
NPOC	**I [AU]**	~~717.7~~	135.0	112.9

Peak graph NPOC



AnalysisReport

Sample ID: LCS

Time of analysis:	12/6/2023 4:41:09 PM -0500	**Method:**	TOC_Method_101223
Directory:	C:\ProgramData\IDC\multiWin\Analyses\2023\12		
File name:	231206164109.ajd		
User:	Admin	**Sample volume:**	500.0µl
Sample type:	Sample	**Dilution:**	1 in 1
Status:	Measurement completed successfully	**Determinations:**	2-3
		Furnace temperature:	800°C

	c	I eff	SD	CV	k0	k1	k2	DF
NPOC	**51.67mg/l**	**3.618E4AU**	165.1µg/l	0.32%	-0.15993	7.184E-4	-	1

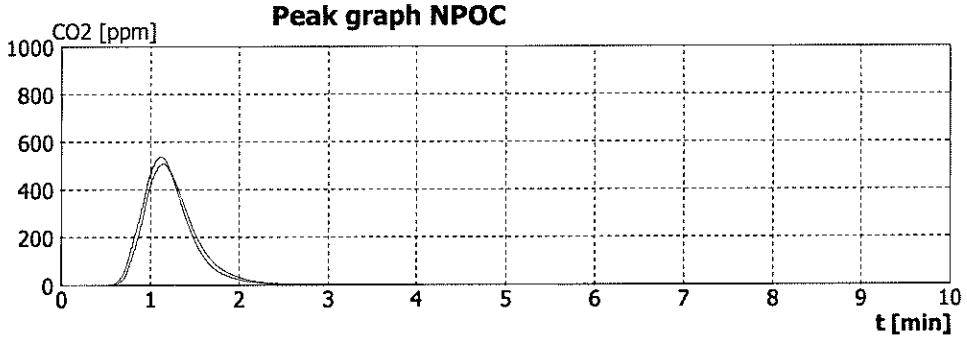
Blank values

NPOC	Diluent blank	0AU/ml

Single replicates:

	Rep.	1	2
NPOC	**c [mg/l]**	51.55	51.78
NPOC	**I [AU]**	3.61E4	3.626E4

Peak graph NPOC



AnalysisReport

Sample ID: LCSD

Time of analysis:	12/6/2023 4:56:57 PM -0500	**Method:**	TOC_Method_101223
Directory:	C:\ProgramData\IDC\multiWin\Analyses\2023\12		
File name:	231206165657.ajd		
User:	Admin	**Sample volume:**	500.0µl
Sample type:	Sample	**Dilution:**	1 in 1
Status:	Measurement completed successfully	**Determinations:**	2-3
		Furnace temperature:	800°C

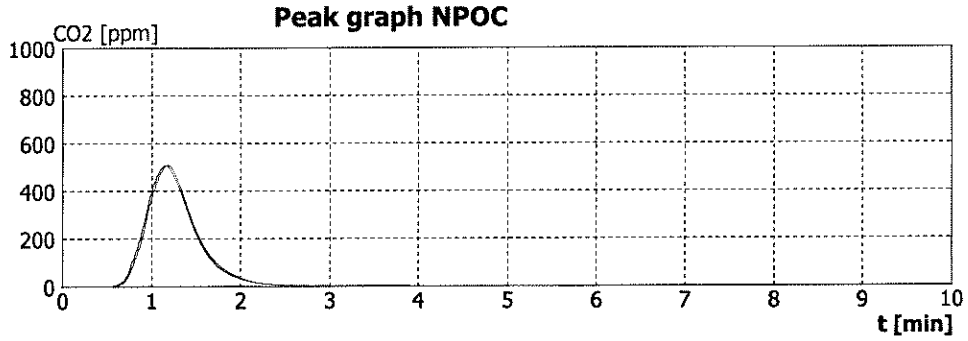
	c	I eff	SD	CV	k0	k1	k2	DF
NPOC	**51.85mg/l**	**3.631E4AU**	244.6µg/l	0.47%	-0.15993	7.184E-4	-	1

Blank values

NPOC	Diluent blank	0AU/ml

Single replicates:

	Rep.	1	2
NPOC	c [mg/l]	51.67	52.02
NPOC	I [AU]	3.619E4	3.643E4



AnalysisReport

Sample ID:	SQ6179-1		
Time of analysis:	12/6/2023 5:12:53 PM -0500	**Method:**	TOC_Method_101223
Directory:	C:\ProgramData\IDC\multiWin\Analyses\2023\12		
File name:	231206171253.ajd		
User:	Admin	**Sample volume:**	500.0µl
Sample type:	Sample	**Dilution:**	1 in 1
Status:	Measurement completed successfully	**Determinations:**	2-3
		Furnace temperature:	800°C

	c	I eff	SD	CV	k0	k1	k2	DF
NPOC	**182.7µg/l**	**349.8AU B!**	33.95µg/l SD!	18.59% CV!	-0.15993	7.184E-4	-	1

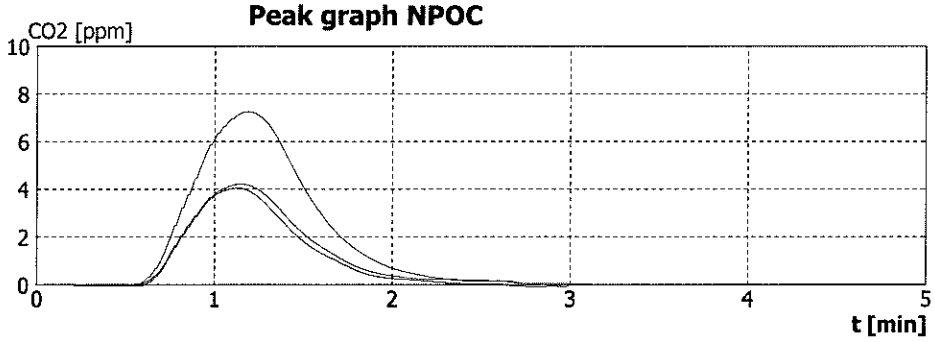
Blank values

NPOC	Diluent blank	0AU/ml

Single replicates:

	Rep.	1	2	3
NPOC	c [µg/l]	~~572.3~~	206.7	158.7
NPOC	I [AU]	~~621.0~~	366.5	333.1

Peak graph NPOC



aj-Analyzer multi N/C 3100; multiWin 4.12; Serial No: N3-2320/AX

AnalysisReport

Sample ID:	SQ6179-1DUP		
Time of analysis:	12/6/2023 5:28:04 PM -0500	**Method:**	TOC_Method_101223
Directory:	C:\ProgramData\IDC\multiWin\Analyses\2023\12		
File name:	231206172804.ajd		
User:	Admin	**Sample volume:**	500.0µl
Sample type:	Sample	**Dilution:**	1 in 1
Status:	Measurement completed successfully	**Determinations:**	2-3
		Furnace temperature:	800°C

	c	I eff	SD	CV	k0	k1	k2	DF
NPOC	**303.8µg/l**	**434.1AU B!**	3.69µg/l	1.21%	-0.15993	7.184E-4	-	1

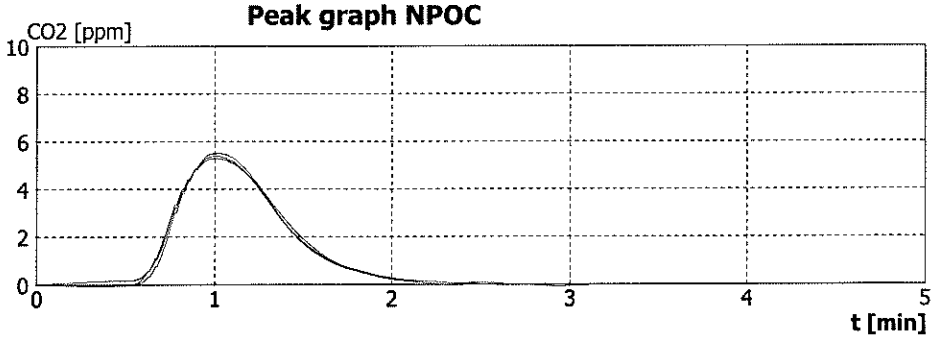
Blank values

NPOC	Diluent blank	0AU/ml

Single replicates:

	Rep.	1	2	3
NPOC	c [µg/l]	306.4	~~276.2~~	301.2
NPOC	I [AU]	435.9	~~414.9~~	432.3

Peak graph NPOC



AnalysisReport

Sample ID:	SQ6179-2		
Time of analysis:	12/6/2023 5:42:27 PM -0500	**Method:**	TOC_Method_101223
Directory:	C:\ProgramData\IDC\multiWin\Analyses\2023\12		
File name:	231206174227.ajd		
User:	Admin	**Sample volume:**	500.0µl
Sample type:	Sample	**Dilution:**	1 in 1
Status:	Measurement completed successfully	**Determinations:**	2-3
		Furnace temperature:	800°C

	c	I eff	SD	CV	k0	k1	k2	DF
NPOC	**1.47mg/l**	**1,244AU**	5.01µg/l	0.34%	-0.15993	7.184E-4	-	1

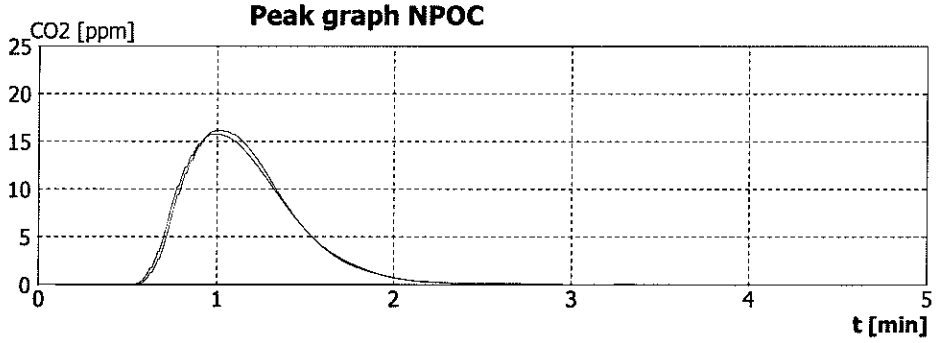
Blank values

NPOC	Diluent blank	0AU/ml

Single replicates:

	Rep.	1	2
NPOC	**c [mg/l]**	1.47	1.46
NPOC	**I [AU]**	1,246	1,241

Peak graph NPOC



AnalysisReport

Sample ID:	SQ6179-2MS		
Time of analysis:	12/6/2023 5:53:22 PM -0500	**Method:**	TOC_Method_101223
Directory:	C:\ProgramData\IDC\multiWin\Analyses\2023\12		
File name:	231206175322.ajd		
User:	Admin	**Sample volume:**	500.0µl
Sample type:	Sample	**Dilution:**	1 in 1
Status:	Measurement completed successfully	**Determinations:**	2-3
		Furnace temperature:	800°C

	c	I eff	SD	CV	k0	k1	k2	DF
NPOC	**51.77mg/l**	**3.625E4AU**	644.4µg/l	1.24%	-0.15993	7.184E-4	-	1

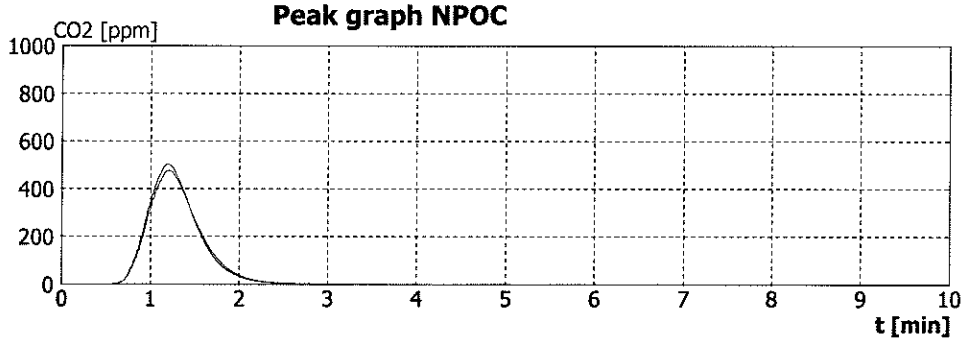
Blank values

NPOC	Diluent blank	0AU/ml

Single replicates:

	Rep.	1	2
NPOC	**c [mg/l]**	51.31	52.22
NPOC	**I [AU]**	3.594E4	3.657E4

Peak graph NPOC



AnalysisReport

Sample ID:	SQ6179-3		
Time of analysis:	12/6/2023 6:09:24 PM -0500	**Method:**	TOC_Method_101223
Directory:	C:\ProgramData\IDC\multiWin\Analyses\2023\12		
File name:	231206180924.ajd		
User:	Admin	**Sample volume:**	500.0µl
Sample type:	Sample	**Dilution:**	1 in 1
Status:	Measurement completed successfully	**Determinations:**	2-3
		Furnace temperature:	800°C

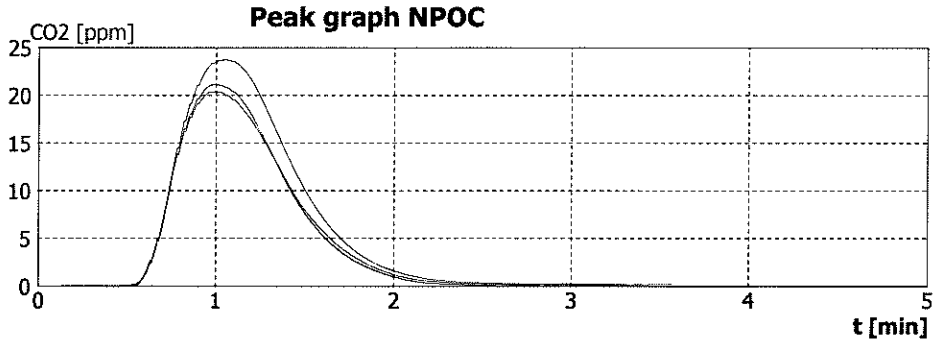
	c	I eff	SD	CV	k0	k1	k2	DF
NPOC	2.06mg/l	1,656AU	17.07µg/l	0.83%	-0.15993	7.184E-4	-	1

Blank values

NPOC	Diluent blank	0AU/ml

Single replicates:

	Rep.	1	2	3
NPOC	c [mg/l]	~~2.50~~	2.07	2.05
NPOC	I [AU]	~~1,959~~	1,665	1,648



AnalysisReport

Sample ID:	SQ6179-3MS		
Time of analysis:	12/6/2023 6:25:19 PM -0500	**Method:**	TOC_Method_101223
Directory:	C:\ProgramData\IDC\multiWin\Analyses\2023\12		
File name:	231206182519.ajd		
User:	Admin	**Sample volume:**	500.0µl
Sample type:	Sample	**Dilution:**	1 in 1
Status:	Measurement completed successfully	**Determinations:**	2-3
		Furnace temperature:	800°C

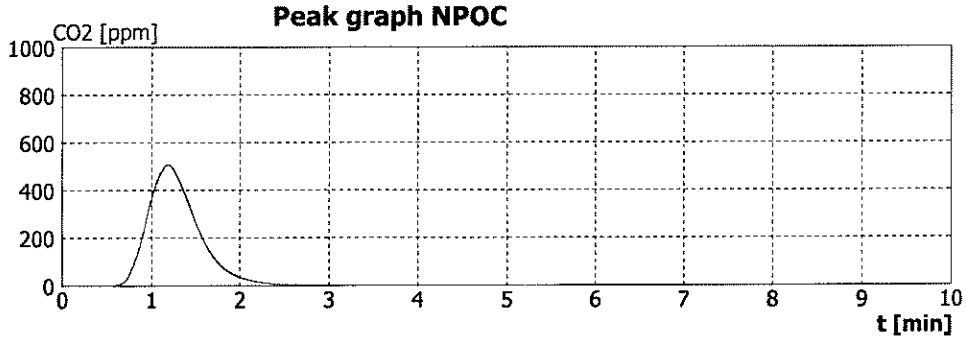
	c	I eff	SD	CV	k0	k1	k2	DF
NPOC	**53.15mg/l**	**3.721E4AU**	335.7µg/l	0.63%	-0.15993	7.184E-4	-	1

Blank values

NPOC	Diluent blank	0AU/ml

Single replicates:

	Rep.	1	2
NPOC	**c [mg/l]**	52.91	53.39
NPOC	**I [AU]**	3.705E4	3.738E4



AnalysisReport

Sample ID:	SQ6179-4		
Time of analysis:	12/6/2023 6:49:57 PM -0500	**Method:**	TOC_Method_101223
Directory:	C:\ProgramData\IDC\multiWin\Analyses\2023\12		
File name:	231206184957.ajd		
User:	Admin	**Sample volume:**	500.0µl
Sample type:	Sample	**Dilution:**	1 in 1
Status:	Measurement completed successfully	**Determinations:**	2-3
		Furnace temperature:	800°C

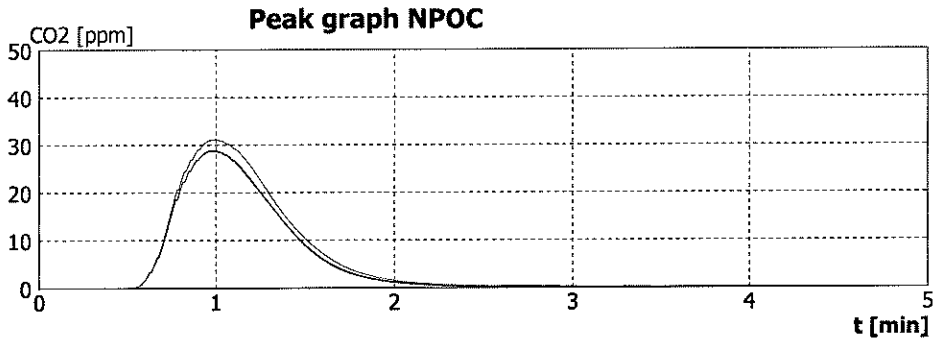
	c	I eff	SD	CV	k0	k1	k2	DF
NPOC	2.69mg/l	2,097AU	47.07µg/l	1.75%	-0.15993	7.184E-4	-	1

Blank values

NPOC	Diluent blank	0AU/ml

Single replicates:

	Rep.	1	2	3
NPOC	c [mg/l]	~~3.12~~	2.73	2.66
NPOC	I [AU]	~~2,392~~	2,120	2,074



aj-Analyzer multi N/C 3100; multiWin 4.12; Serial No: N3-2320/AX

AnalysisReport

Sample ID:	SQ6179-5		
Time of analysis:	12/6/2023 7:06:26 PM -0500	**Method:**	TOC_Method_101223
Directory:	C:\ProgramData\IDC\multiWin\Analyses\2023\12		
File name:	231206190626.ajd		
User:	Admin	**Sample volume:**	500.0µl
Sample type:	Sample	**Dilution:**	1 in 1
Status:	Measurement completed successfully	**Determinations:**	2-3
		Furnace temperature:	800°C

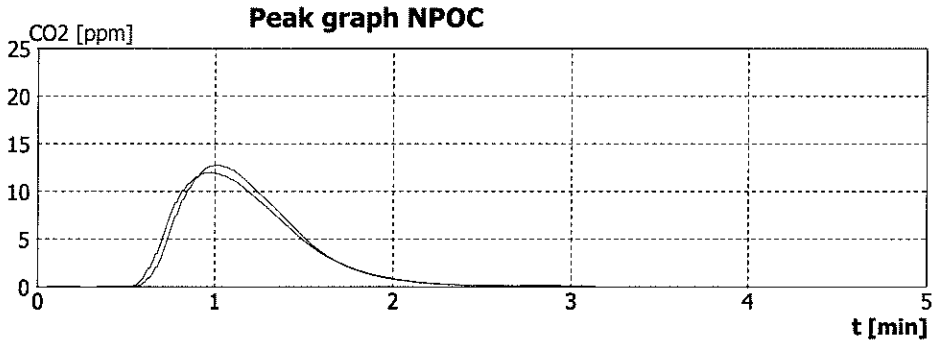
	c	I eff	SD	CV	k0	k1	k2	DF
NPOC	1.12mg/l	1,005AU	24.53µg/l	2.18%	-0.15993	7.184E-4	-	1

Blank values

NPOC	Diluent blank	0AU/ml

Single replicates:

	Rep.	1	2
NPOC	c [mg/l]	1.14	1.11
NPOC	I [AU]	1,017	992.9



AnalysisReport

Sample ID: CCV

Time of analysis:	12/6/2023 7:17:19 PM -0500	**Method:**	TOC_Method_101223
Directory:	C:\ProgramData\IDC\multiWin\Analyses\2023\12		
File name:	231206191719.ajd		
User:	Admin	**Sample volume:**	500.0µl
Sample type:	Sample	**Dilution:**	1 in 1
Status:	Measurement completed successfully	**Determinations:**	2-3
		Furnace temperature:	800°C

	c	I eff	SD	CV	k0	k1	k2	DF
NPOC	104.3mg/l	7.279E4AU	432.6µg/l	0.41%	-0.15993	7.184E-4	-	1

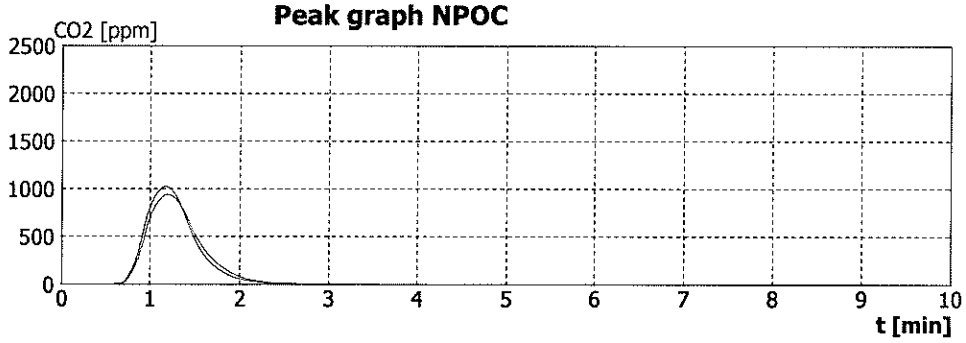
Blank values

NPOC	Diluent blank	0AU/ml

Single replicates:

	Rep.	1	2
NPOC	c [mg/l]	104.0	104.6
NPOC	I [AU]	7.258E4	7.3E4

Peak graph NPOC



AnalysisReport

Sample ID: CCB

Time of analysis:	12/6/2023 7:33:16 PM -0500	**Method:**	TOC_Method_101223
Directory:	C:\ProgramData\IDC\multiWin\Analyses\2023\12		
File name:	231206193316.ajd		
User:	Admin	**Sample volume:**	500.0µl
Sample type:	Sample	**Dilution:**	1 in 1
Status:	Measurement completed successfully	**Determinations:**	2-3
		Furnace temperature:	800°C

	c	I eff	SD	CV	k0	k1	k2	DF
NPOC	**0mg/l**	**148.4AU B!**			-0.15993	7.184E-4	-	1

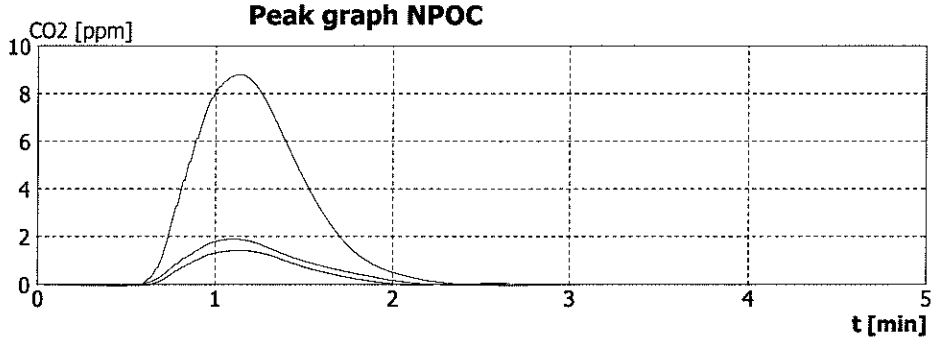
Blank values

NPOC	Diluent blank	0AU/ml

Single replicates:

	Rep.	1	2	3
NPOC	**c [mg/l]**	~~0.701~~	0	0
NPOC	**I [AU]**	~~710.4~~	164.5	132.4

Peak graph NPOC



AnalysisReport

Sample ID:	SQ6179-6		
Time of analysis:	12/6/2023 7:47:37 PM -0500	**Method:**	TOC_Method_101223
Directory:	C:\ProgramData\IDC\multiWin\Analyses\2023\12		
File name:	231206194737.ajd		
User:	Admin	**Sample volume:**	500.0µl
Sample type:	Sample	**Dilution:**	1 in 1
Status:	Measurement completed successfully	**Determinations:**	2-3
		Furnace temperature:	800°C

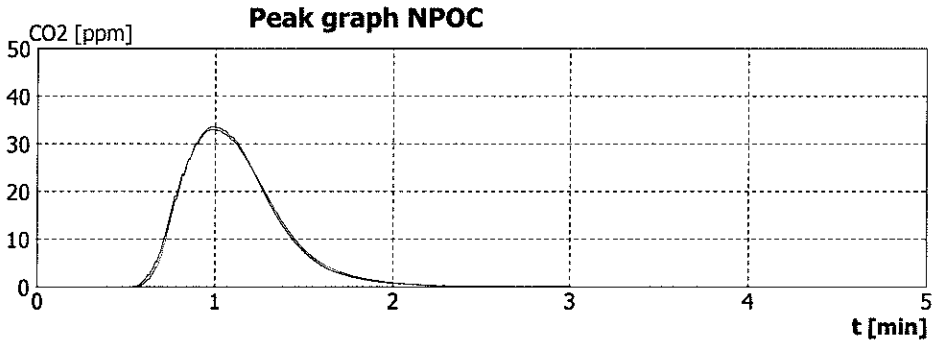
	c	I eff	SD	CV	k0	k1	k2	DF
NPOC	2.83mg/l	2,191AU	59.69µg/l	2.11%	-0.15993	7.184E-4	-	1

Blank values

NPOC	Diluent blank	0AU/ml

Single replicates:

	Rep.	1	2
NPOC	c [mg/l]	2.79	2.87
NPOC	I [AU]	2,162	2,221



AnalysisReport

Sample ID:	SQ6179-7		
Time of analysis:	12/6/2023 7:58:41 PM -0500	**Method:**	TOC_Method_101223
Directory:	C:\ProgramData\IDC\multiWin\Analyses\2023\12		
File name:	231206195841.ajd		
User:	Admin	**Sample volume:**	500.0µl
Sample type:	Sample	**Dilution:**	1 in 1
Status:	Measurement completed successfully	**Determinations:**	2-3
		Furnace temperature:	800°C

	c	I eff	SD	CV	k0	k1	k2	DF
NPOC	**1.07mg/l**	**969.8AU**	39.80µg/l SD!	3.71% CV!	-0.15993	7.184E-4	-	1

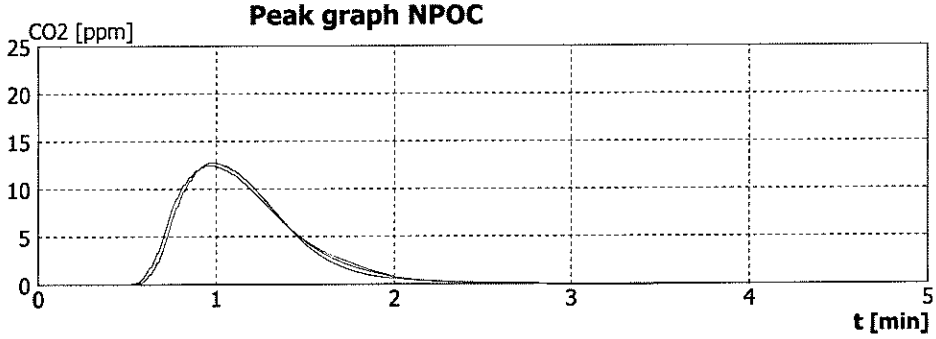
Blank values

NPOC	Diluent blank	0AU/ml

Single replicates:

	Rep.	1	2	3
NPOC	c [mg/l]	1.05	~~1.19~~	1.10
NPOC	I [AU]	950.2	~~1,048~~	989.4

Peak graph NPOC



AnalysisReport

Sample ID:	SQ6179-8		
Time of analysis:	12/6/2023 8:13:51 PM -0500	**Method:**	TOC_Method_101223
Directory:	C:\ProgramData\IDC\multiWin\Analyses\2023\12		
File name:	231206201351.ajd		
User:	Admin	**Sample volume:**	500.0µl
Sample type:	Sample	**Dilution:**	1 in 1
Status:	Measurement completed successfully	**Determinations:**	2-3
		Furnace temperature:	800°C

	c	I eff	SD	CV	k0	k1	k2	DF
NPOC	**1.63mg/l**	**1,355AU**	30.24µg/l	1.86%	-0.15993	7.184E-4	-	1

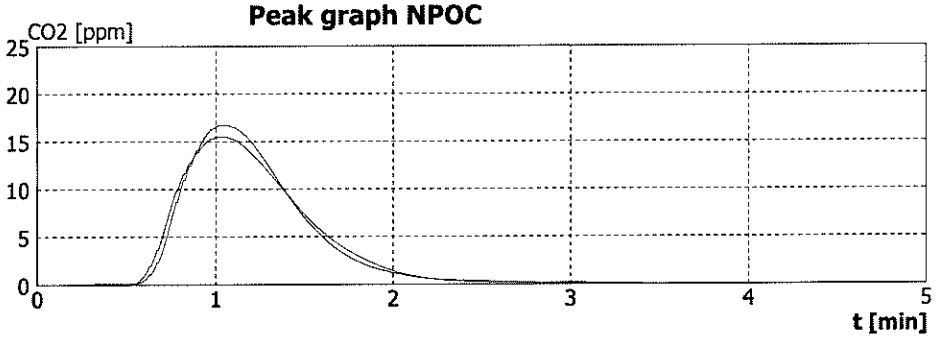
Blank values

NPOC	Diluent blank	0AU/ml

Single replicates:

	Rep.	1	2
NPOC	**c [mg/l]**	1.61	1.65
NPOC	**I [AU]**	1,340	1,370

Peak graph NPOC



AnalysisReport

Sample ID: SQ6179-9

Time of analysis: 12/6/2023 8:25:30 PM -0500
Directory: C:\ProgramData\IDC\multiWin\Analyses\2023\12
File name: 231206202530.ajd
User: Admin
Sample type: Sample
Status: Measurement completed successfully

Method: TOC_Method_101223
Sample volume: 500.0µl
Dilution: 1 in 1
Determinations: 2-3
Furnace temperature: 800°C

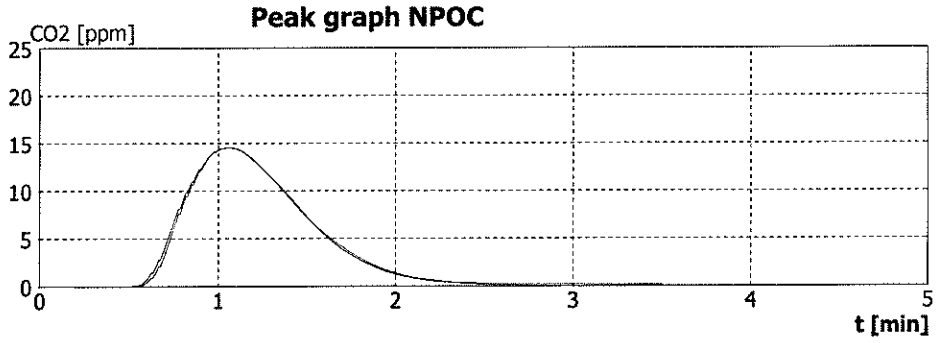
	c	I eff	SD	CV	k0	k1	k2	DF
NPOC	1.52mg/l	1,283AU	20.78µg/l	1.36%	-0.15993	7.184E-4	-	1

Blank values

NPOC	Diluent blank	0AU/ml

Single replicates:

	Rep.	1	2
NPOC	c [mg/l]	1.51	1.54
NPOC	I [AU]	1,273	1,293



AnalysisReport

Sample ID:	SQ6179-10		
Time of analysis:	12/6/2023 8:37:18 PM -0500	**Method:**	TOC_Method_101223
Directory:	C:\ProgramData\IDC\multiWin\Analyses\2023\12		
File name:	231206203718.ajd		
User:	Admin	**Sample volume:**	500.0µl
Sample type:	Sample	**Dilution:**	1 in 1
Status:	Measurement completed successfully	**Determinations:**	2-3
		Furnace temperature:	800°C

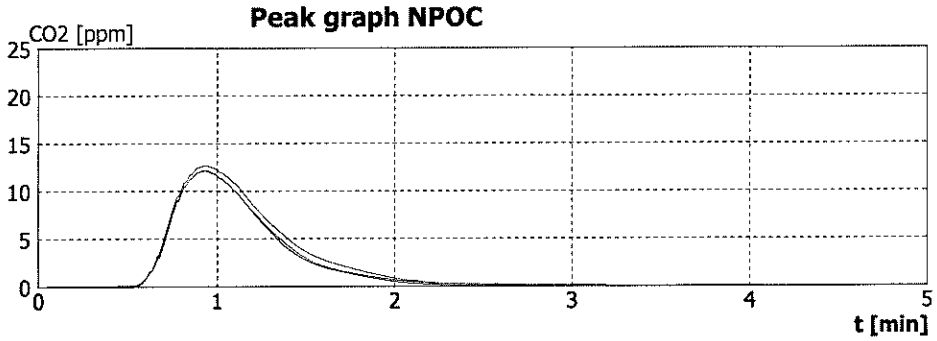
	c	I eff	SD	CV	k0	k1	k2	DF
NPOC	882.8µg/l	837.0AU	36.24µg/l SD!	4.11% CV!	-0.15993	7.184E-4	-	1

Blank values

NPOC	Diluent blank	0AU/ml

Single replicates:

	Rep.	1	2	3
NPOC	c [µg/l]	~~1041~~	908.4	857.2
NPOC	I [AU]	~~947.4~~	854.9	819.2



AnalysisReport

Sample ID: SQ6232-1

Time of analysis:	12/6/2023 9:01:22 PM -0500	**Method:**	TOC_Method_101223
Directory:	C:\ProgramData\IDC\multiWin\Analyses\2023\12		
File name:	231206210122.ajd		
User:	Admin	**Sample volume:**	500.0µl
Sample type:	Sample	**Dilution:**	1 in 1
Status:	Measurement completed successfully	**Determinations:**	2-3
		Furnace temperature:	800°C

	c	I eff	SD	CV	k0	k1	k2	DF
NPOC	0mg/l	153.5AU B!			-0.15993	7.184E-4	-	1

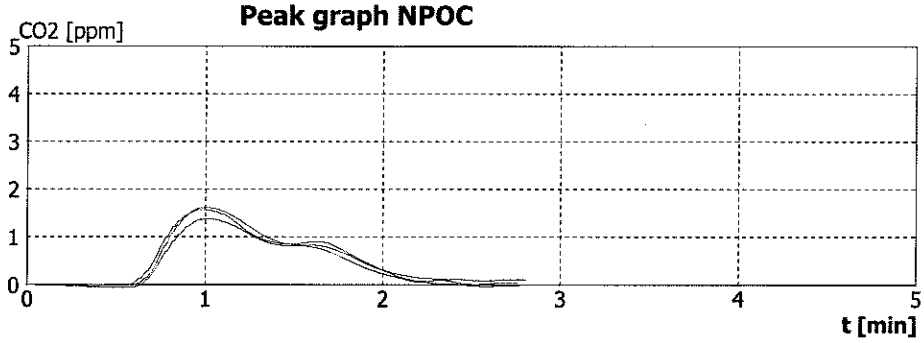
Blank values

NPOC	Diluent blank	0AU/ml

Single replicates:

	Rep.	1	2	3
NPOC	c [mg/l]	0	0	0
NPOC	I [AU]	157.0	149.9	~~162.1~~

Peak graph NPOC



AnalysisReport

Sample ID:	SQ6232-2		
Time of analysis:	12/6/2023 9:15:49 PM -0500	**Method:**	TOC_Method_101223
Directory:	C:\ProgramData\IDC\multiWin\Analyses\2023\12		
File name:	231206211549.ajd		
User:	Admin	**Sample volume:**	500.0µl
Sample type:	Sample	**Dilution:**	1 in 1
Status:	Measurement completed successfully	**Determinations:**	2-3
		Furnace temperature:	800°C

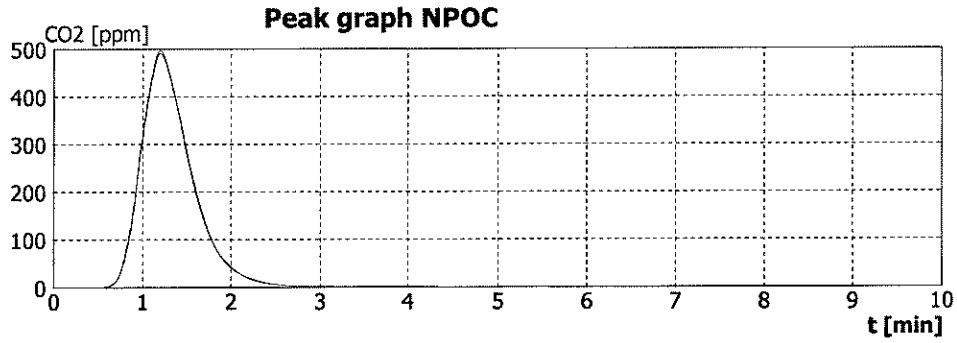
	c	I eff	SD	CV	k0	k1	k2	DF
NPOC	52.79mg/l	3.696E4AU	456.7µg/l	0.87%	-0.15993	7.184E-4	-	1

Blank values

NPOC	Diluent blank	0AU/ml

Single replicates:

	Rep.	1	2
NPOC	c [mg/l]	52.46	53.11
NPOC	I [AU]	3.674E4	3.719E4



AnalysisReport

Sample ID:	SQ6232-3		
Time of analysis:	12/6/2023 9:31:49 PM -0500	**Method:**	TOC_Method_101223
Directory:	C:\ProgramData\IDC\multiWin\Analyses\2023\12		
File name:	231206213149.ajd		
User:	Admin	**Sample volume:**	500.0µl
Sample type:	Sample	**Dilution:**	1 in 1
Status:	Measurement completed successfully	**Determinations:**	2-3
		Furnace temperature:	800°C

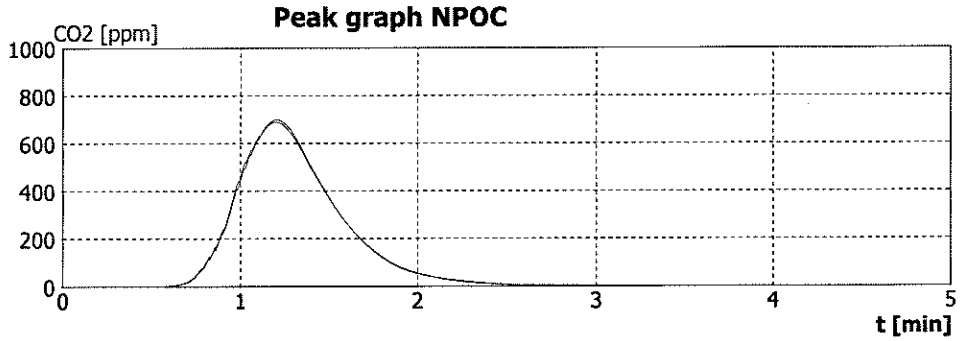
	c	I eff	SD	CV	k0	k1	k2	DF
NPOC	**72.51mg/l**	**5.069E4AU**	248.6µg/l	0.34%	-0.15993	7.184E-4	-	1

Blank values

NPOC	Diluent blank	0AU/ml

Single replicates:

	Rep.	1	2
NPOC	c [mg/l]	72.34	72.69
NPOC	I [AU]	5.057E4	5.081E4



aj-Analyzer multi N/C 3100; multiWin 4.12; Serial No: N3-2320/AX

AnalysisReport

Sample ID:	SQ6232-4		
Time of analysis:	12/6/2023 9:46:33 PM -0500	**Method:**	TOC_Method_101223
Directory:	C:\ProgramData\IDC\multiWin\Analyses\2023\12		
File name:	231206214633.ajd		
User:	Admin	**Sample volume:**	500.0µl
Sample type:	Sample	**Dilution:**	1 in 1
Status:	Measurement completed successfully	**Determinations:**	2-3
		Furnace temperature:	800°C

	c	I eff	SD	CV	k0	k1	k2	DF
NPOC	**8.32mg/l**	**6,010AU**	34.21µg/l	0.41%	-0.15993	7.184E-4	-	1

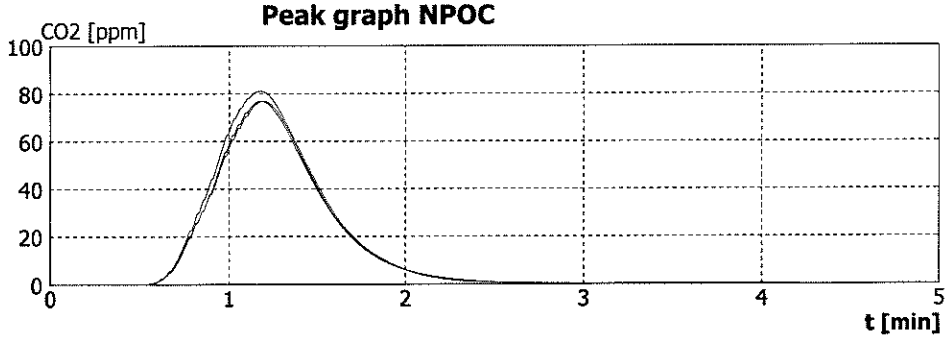
Blank values

NPOC	Diluent blank	0AU/ml

Single replicates:

	Rep.	1	2	3
NPOC	c [mg/l]	~~8.85~~	8.34	8.29
NPOC	I [AU]	~~6,381~~	6,027	5,993

Peak graph NPOC



aj-Analyzer multi N/C 3100; multiWin 4.12; Serial No: N3-2320/AX

AnalysisReport

Sample ID:	SQ6232-5		
Time of analysis:	12/6/2023 10:05:14 PM -0500	**Method:**	TOC_Method_101223
Directory:	C:\ProgramData\IDC\multiWin\Analyses\2023\12		
File name:	231206220514.ajd		
User:	Admin	**Sample volume:**	500.0µl
Sample type:	Sample	**Dilution:**	1 in 1
Status:	Measurement completed successfully	**Determinations:**	2-3
		Furnace temperature:	800°C

	c	I eff	SD	CV	k0	k1	k2	DF
NPOC	64.66mg/l	4.523E4AU	361.7µg/l	0.56%	-0.15993	7.184E-4	-	1

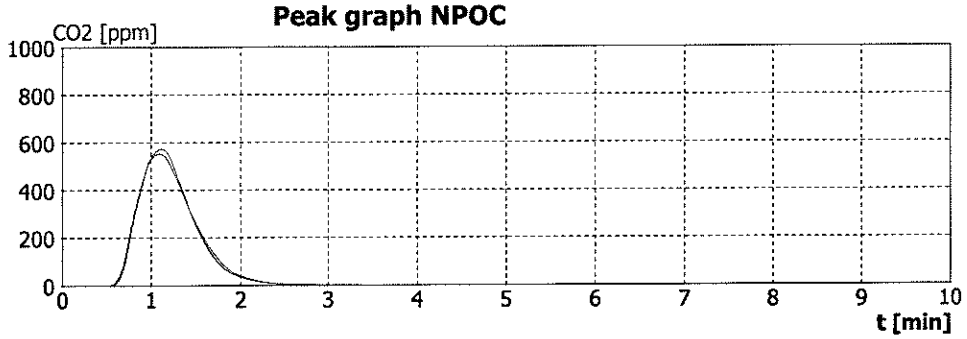
Blank values

NPOC	Diluent blank	0AU/ml

Single replicates:

	Rep.	1	2
NPOC	c [mg/l]	64.40	64.91
NPOC	I [AU]	4.505E4	4.54E4

Peak graph NPOC



AnalysisReport

Sample ID: CCV

Time of analysis:	12/6/2023 10:20:24 PM -0500	**Method:**	TOC_Method_101223
Directory:	C:\ProgramData\IDC\multiWin\Analyses\2023\12		
File name:	231206222024.ajd		
User:	Admin	**Sample volume:**	500.0µl
Sample type:	Sample	**Dilution:**	1 in 1
Status:	Measurement completed successfully	**Determinations:**	2-3
		Furnace temperature:	800°C

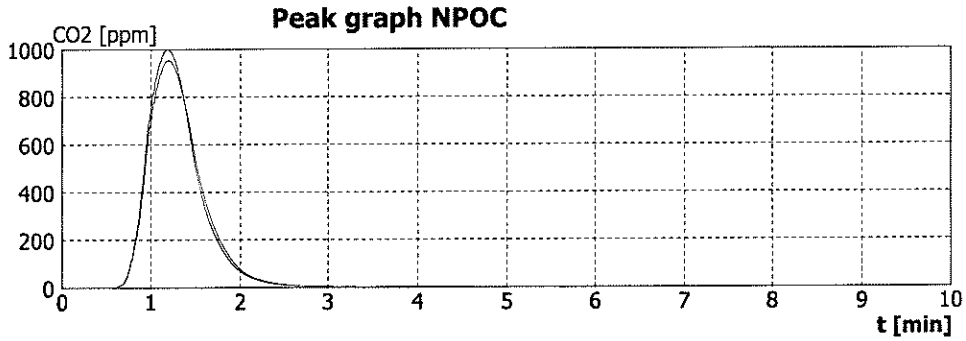
	c	I eff	SD	CV	k0	k1	k2	DF
NPOC	105.3mg/l	7.35E4AU	390.3µg/l	0.37%	-0.15993	7.184E-4	-	1

Blank values

NPOC	Diluent blank	0AU/ml

Single replicates:

	Rep.	1	2
NPOC	c [mg/l]	105.0	105.6
NPOC	I [AU]	7.331E4	7.37E4



AnalysisReport

Sample ID:	CCB		
Time of analysis:	12/6/2023 10:36:23 PM -0500	**Method:**	TOC_Method_101223
Directory:	C:\ProgramData\IDC\multiWin\Analyses\2023\12		
File name:	231206223623.ajd		
User:	Admin	**Sample volume:**	500.0µl
Sample type:	Sample	**Dilution:**	1 in 1
Status:	Measurement completed successfully	**Determinations:**	2-3
		Furnace temperature:	800°C

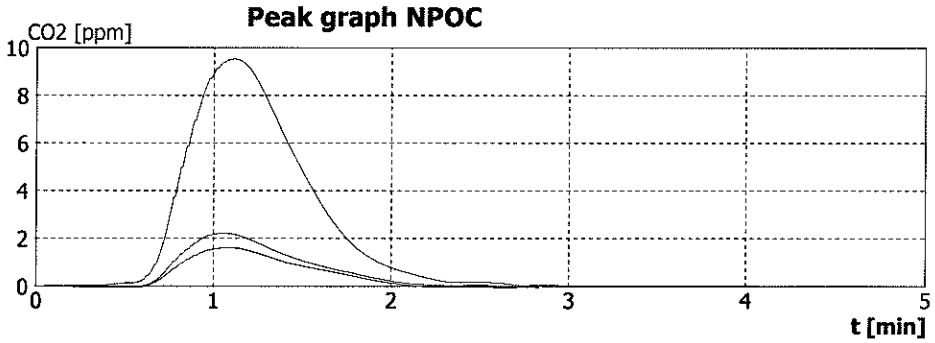
	c	I eff	SD	CV	k0	k1	k2	DF
NPOC	0mg/l	173.3AU B!			-0.15993	7.184E-4	-	1

Blank values

NPOC	Diluent blank	0AU/ml

Single replicates:

	Rep.	1	2	3
NPOC	c [mg/l]	~~0.802~~	0	0
NPOC	I [AU]	~~780.9~~	191.2	155.5



AnalysisReport

Sample ID: SQ6232-6

Time of analysis:	12/6/2023 10:51:10 PM -0500	**Method:**	TOC_Method_101223
Directory:	C:\ProgramData\IDC\multiWin\Analyses\2023\12		
File name:	231206225110.ajd		
User:	Admin	**Sample volume:**	500.0µl
Sample type:	Sample	**Dilution:**	1 in 1
Status:	Measurement completed successfully	**Determinations:**	2-3
		Furnace temperature:	800°C

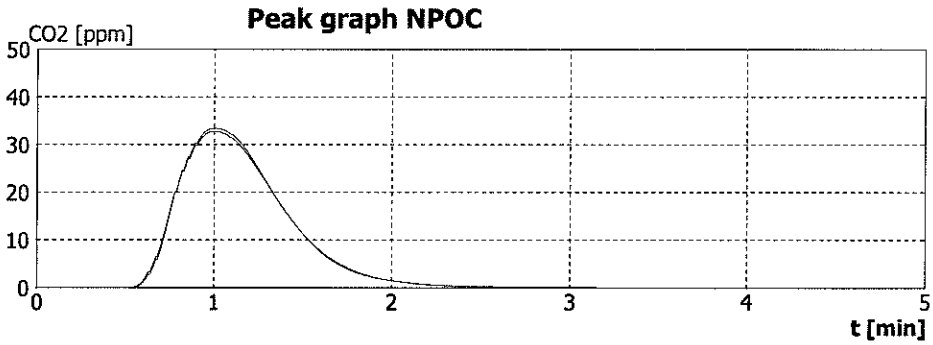
	c	I eff	SD	CV	k0	k1	k2	DF
NPOC	3.27mg/l	2,499AU	5.75µg/l	0.18%	-0.15993	7.184E-4	-	1

Blank values

NPOC	Diluent blank	0AU/ml

Single replicates:

	Rep.	1	2
NPOC	c [mg/l]	3.27	3.28
NPOC	I [AU]	2,497	2,502



AnalysisReport

Sample ID: SQ6232-7

Time of analysis:	12/6/2023 11:02:33 PM -0500	**Method:**	TOC_Method_101223
Directory:	C:\ProgramData\IDC\multiWin\Analyses\2023\12		
File name:	231206230233.ajd		
User:	Admin	**Sample volume:**	500.0µl
Sample type:	Sample	**Dilution:**	1 in 1
Status:	Measurement completed successfully	**Determinations:**	2-3
		Furnace temperature:	800°C

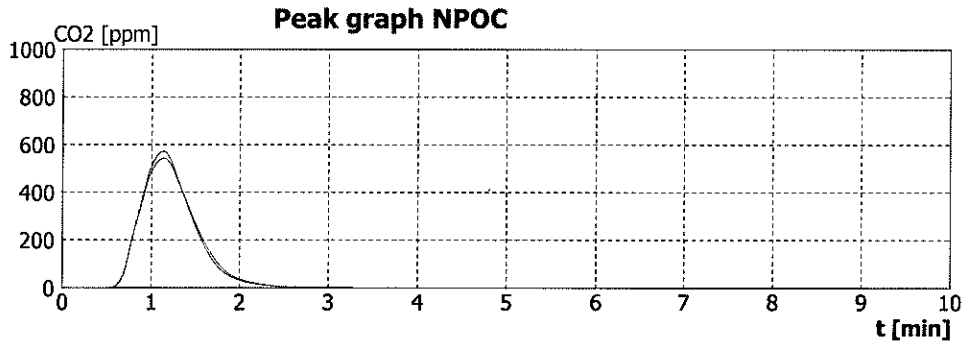
	c	I eff	SD	CV	k0	k1	k2	DF
NPOC	**62.77mg/l**	**4.391E4AU**	242.1µg/l	0.39%	-0.15993	7.184E-4	-	1

Blank values

NPOC	Diluent blank	0AU/ml

Single replicates:

	Rep.	1	2
NPOC	**c [mg/l]**	62.60	62.94
NPOC	**I [AU]**	4.379E4	4.403E4



AnalysisReport

Sample ID: SQ6232-9

Time of analysis:	12/6/2023 11:17:48 PM -0500	**Method:**	TOC_Method_101223
Directory:	C:\ProgramData\IDC\multiWin\Analyses\2023\12		
File name:	231206231748.ajd		
User:	Admin	**Sample volume:**	500.0µl
Sample type:	Sample	**Dilution:**	1 in 1
Status:	Measurement completed successfully	**Determinations:**	2-3
		Furnace temperature:	800°C

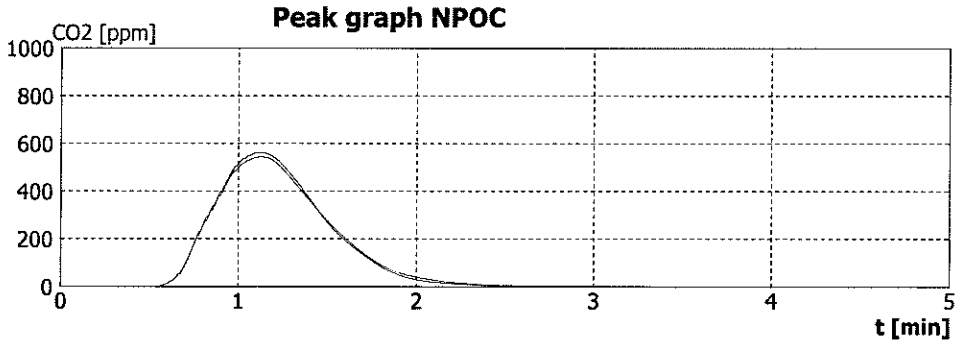
	c	I eff	SD	CV	k0	k1	k2	DF
NPOC	63.97mg/l	4.475E4AU	23.74µg/l	0.04%	-0.15993	7.184E-4	-	1

Blank values

NPOC	Diluent blank	0AU/ml

Single replicates:

	Rep.	1	2
NPOC	c [mg/l]	63.96	63.99
NPOC	I [AU]	4.474E4	4.476E4



AnalysisReport

Sample ID: CCV

Time of analysis:	12/6/2023 11:40:53 PM -0500	**Method:**	TOC_Method_101223
Directory:	C:\ProgramData\IDC\multiWin\Analyses\2023\12		
File name:	231206234053.ajd		
User:	Admin	**Sample volume:**	500.0µl
Sample type:	Sample	**Dilution:**	1 in 1
Status:	Measurement completed successfully	**Determinations:**	2-3
		Furnace temperature:	800°C

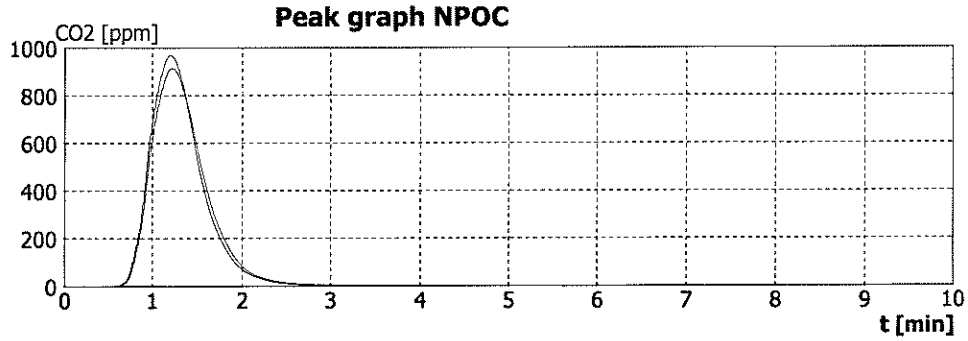
	c	I eff	SD	CV	k0	k1	k2	DF
NPOC	103.3mg/l	7.21E4AU	439.2µg/l	0.43%	-0.15993	7.184E-4	-	1

Blank values

NPOC	Diluent blank	0AU/ml

Single replicates:

	Rep.	1	2
NPOC	c [mg/l]	103.0	103.6
NPOC	I [AU]	7.189E4	7.232E4



AnalysisReport

Sample ID: CCB

Time of analysis: 12/6/2023 11:56:40 PM -0500
Directory: C:\ProgramData\IDC\multiWin\Analyses\2023\12
File name: 231206235640.ajd
User: Admin
Sample type: Sample
Status: Measurement completed successfully

Method: TOC_Method_101223
Sample volume: 500.0µl
Dilution: 1 in 1
Determinations: 2-3
Furnace temperature: 800°C

	c	I eff	SD	CV	k0	k1	k2	DF
NPOC	0mg/l	185.7AU B!			-0.15993	7.184E-4	-	1

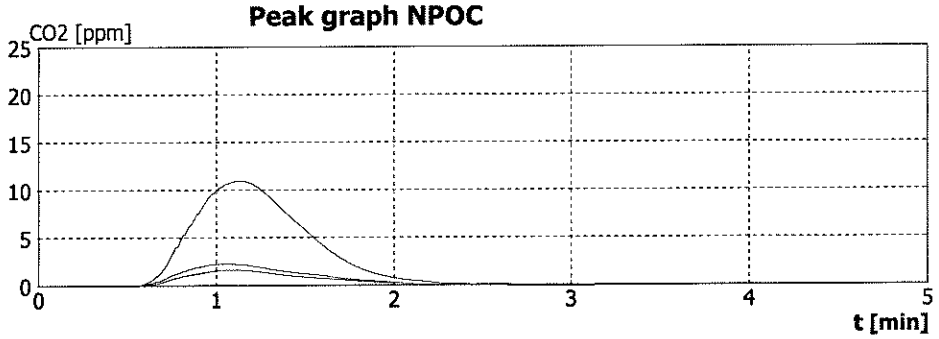
Blank values

NPOC Diluent blank 0AU/ml

Single replicates:

	Rep.	1	2	3
NPOC	c [mg/l]	~~0.999~~	0	0
NPOC	I [AU]	~~917.7~~	202.1	169.4

Peak graph NPOC



aj-Analyzer multi N/C 3100; multiWin 4.12; Serial No: N3-2320/AX

CalibrationReport

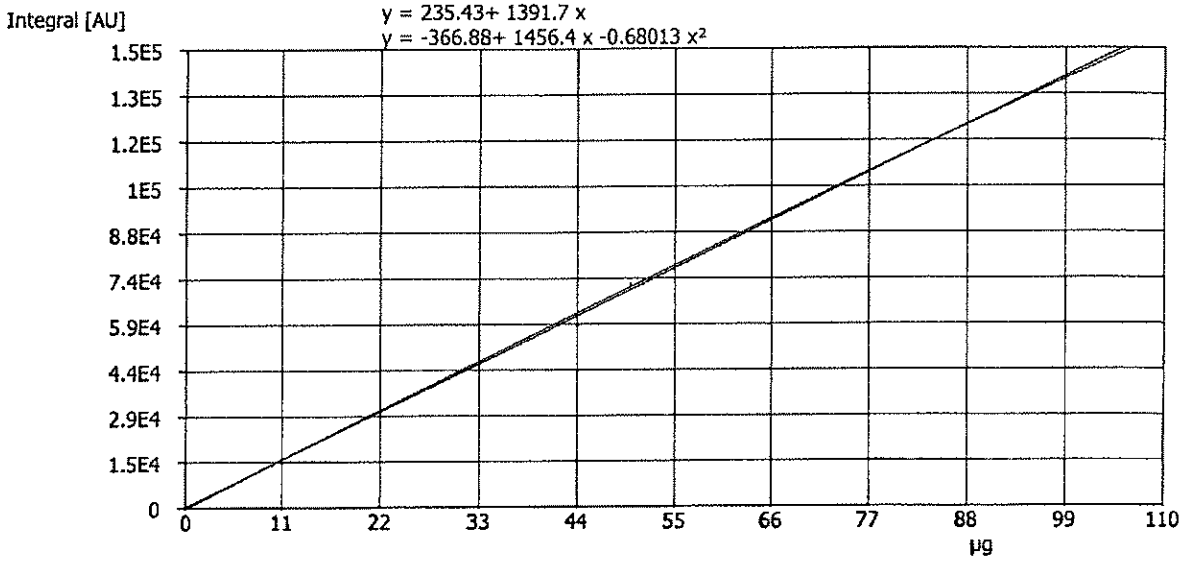
Calibration: Cal_NPOC_Test_8MAY2023_230824_1145
Calibration of: 8/24/2023 11:45:49 AM -0400 **Method:** NPOC_Test_8MAY2023
Directory: C:\ProgramData\IDC\multiWin\Calibration\2023\08
File name: 230824114549.ajc

User: Admin
Calibration channel: **NPOC**
Linear regression [µg]: c = (k1·Ieff + k0) / V
k0 = -0.15993 k1 = 7.184E-4

Residual standard deviation: 922.84AU
Method standard deviation: 1.33mg/l
Method variation coefficient: 1.765% **Detection limit:** 2.13mg/l
Quality of replicates: 0.99976 **Identification limit:** 4.25mg/l
Correlation coefficient: 0.99988 **Quantification limit:** 7.98mg/l

Calibration with fixed sample volume: 500.0µl

No.	Rep.	c-nom.	m-Nominal	I-Net	c-act.	c-delta
BV	3-3			491.4AU/ml		
1	3-3	1.000mg/l	0.500µg	814.0AU	0.850mg/l	-15.03%
2	3-3	5.000mg/l	2.50µg	3,299AU	4.420mg/l	-11.61%
3	3-3	20.000mg/l	10.00µg	1.379E4AU	19.499mg/l	-2.50%
4	3-3	50.000mg/l	25.00µg	3.493E4AU	49.868mg/l	-0.26%
5	3-3	100.000mg/l	50.00µg	7.154E4AU	102.480mg/l	2.48%
6	3-3	150.000mg/l	75.00µg	1.048E5AU	150.290mg/l	0.19%
7	3-3	200.000mg/l	100.0µg	1.384E5AU	198.600mg/l	-0.70%



CalibrationReport

Calibration:	Cal_NPOC_Test_8MAY2023_230824_1145		
Calibration of:	8/24/2023 11:45:49 AM -0400	**Method:**	NPOC_Test_8MAY2023
Directory:	C:\ProgramData\IDC\multiWin\Calibration\2023\08		
File name:	230824114549.ajc		

User:	Admin		
Calibration channel:	**NPOC**		
Linear regression [µg]:	c = (k1·Ieff + k0) / V		
	k0 = -0.15993	k1 = 7.184E-4	
Residual standard deviation:	922.84AU		
Method standard deviation:	1.33mg/l		
Method variation coefficient:	1.765%	**Detection limit:**	2.13mg/l
Quality of replicates:	0.99976	**Identification limit:**	4.25mg/l
Correlation coefficient:	0.99988	**Quantification limit:**	7.98mg/l

Replicate area units

No.	Avg.	1	2	3	4	5
		6	7	8	9	10
H2O	245.7	277.8	242.2	217.2		
1	814.0	819.1	818.6	804.3		
2	3,299	3,257	3,351	3,288		
3	1.379E4	1.364E4	1.392E4	1.382E4		
4	3.493E4	3.459E4	3.519E4	3.501E4		
5	7.154E4	7.104E4	7.192E4	7.167E4		
6	1.048E5	1.047E5	1.053E5	1.045E5		
7	1.384E5	1.373E5	1.395E5	1.386E5		

aj-Analyzer multi N/C 3100; multiWin 4.12; Serial No: N3-2320/AX

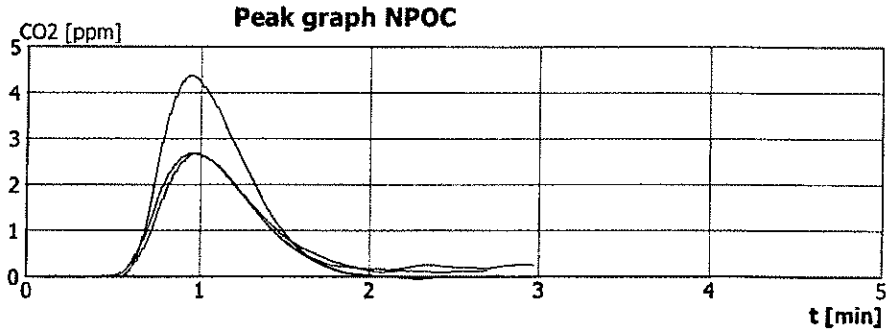
AnalysisReport

Sample ID:	Cal_NPOC_Test_8MAY2023_230824_1145_Konz00		
Time of analysis:	8/24/2023 12:03:41 PM -0400	**Method:**	NPOC_Test_8MAY20
Directory:	C:\ProgramData\IDC\multiWin\Analyses\2023\08		
File name:	230824120341.ajd		
User:	Admin	**Sample volume:**	500.0µl
Sample type:	Determination Preparation blank	**Dilution:**	1 in 1
Status:	Measurement completed successfully	**Determinations:**	3-3
		Furnace temperature:	800°C

	c	I eff	SD	CV
NPOC		245.7AU		

Single replicates:

	Rep.	1	2	3
NPOC	I [AU]	277.8	242.2	217.2



AnalysisReport

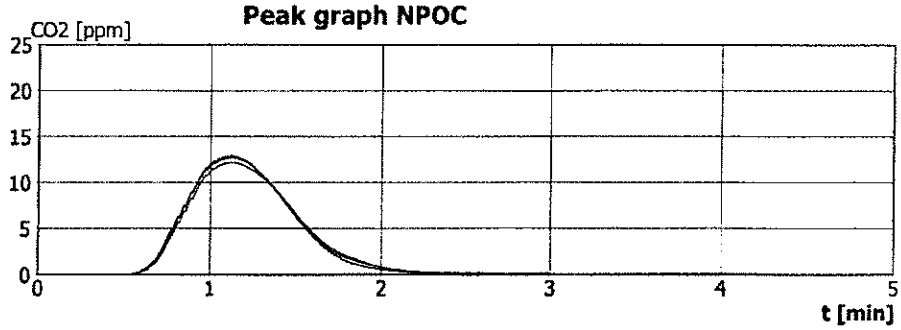
Sample ID:	Cal_NPOC_Test_8MAY2023_230824_1145_Konz01		
Time of analysis:	8/24/2023 12:24:21 PM -0400	**Method:**	NPOC_Test_8MAY20
Directory:	C:\ProgramData\IDC\multiWin\Analyses\2023\08		
File name:	230824122421.ajd		
User:	Admin	**Sample volume:**	500.0µl
Sample type:	Calibration measurement	**Dilution:**	1 in 1
Status:	Measurement completed successfully	**Determinations:**	3-3
		Furnace temperature:	800°C

	c	I eff	SD	CV
NPOC		1,060AU		

Single replicates:

	Rep.	1	2	3
NPOC	I [AU]	1,065	1,064	1,050

Peak graph NPOC



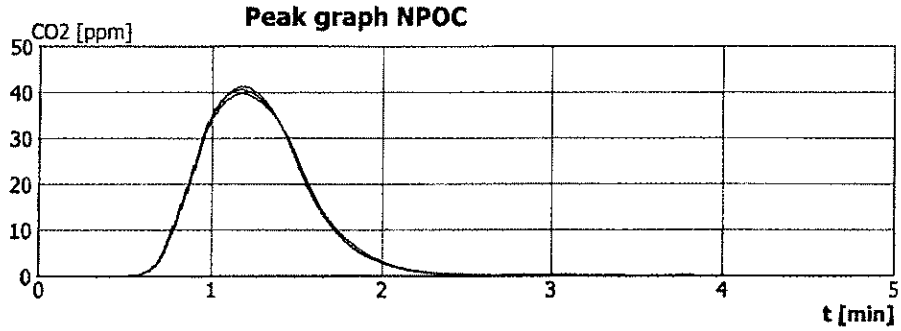
AnalysisReport

Sample ID:	Cal_NPOC_Test_8MAY2023_230824_1145_Konz02		
Time of analysis:	8/24/2023 12:39:12 PM -0400	**Method:**	NPOC_Test_8MAY20
Directory:	C:\ProgramData\IDC\multiWin\Analyses\2023\08		
File name:	230824123912.ajd		
User:	Admin	**Sample volume:**	500.0µl
Sample type:	Calibration measurement	**Dilution:**	1 in 1
Status:	Measurement completed successfully	**Determinations:**	3-3
		Furnace temperature:	800°C

	c	I eff	SD	CV
NPOC		3,544AU		

Single replicates:

	Rep.	1	2	3
NPOC	I [AU]	3,502	3,597	3,534



aj-Analyzer multi N/C 3100; multiWin 4.12; Serial No: N3-2320/AX

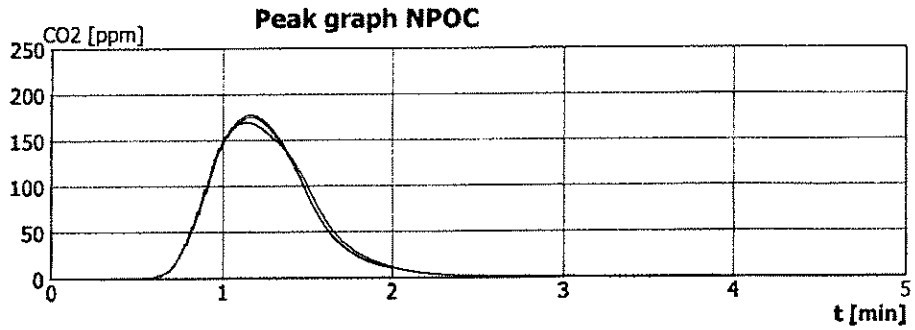
AnalysisReport

Sample ID:	Cal_NPOC_Test_8MAY2023_230824_1145_Konz03		
Time of analysis:	8/24/2023 12:55:21 PM -0400	**Method:**	NPOC_Test_8MAY20
Directory:	C:\ProgramData\IDC\multiWin\Analyses\2023\08		
File name:	230824125521.ajd		
User:	Admin	**Sample volume:**	500.0µl
Sample type:	Calibration measurement	**Dilution:**	1 in 1
Status:	Measurement completed successfully	**Determinations:**	3-3
		Furnace temperature:	800°C

	c	I eff	SD	CV
NPOC		1.404E4AU		

Single replicates:

	Rep.	1	2	3
NPOC	I [AU]	1.389E4	1.417E4	1.407E4



aj-Analyzer multi N/C 3100; multiWin 4.12; Serial No: N3-2320/AX

AnalysisReport

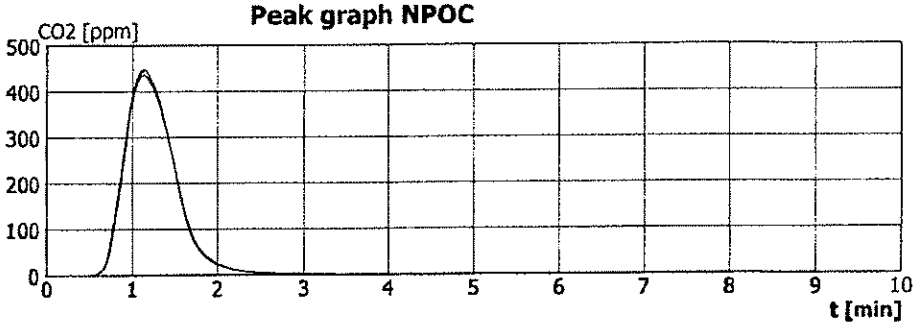
Sample ID:	Cal_NPOC_Test_8MAY2023_230824_1145_Konz04		
Time of analysis:	8/24/2023 1:13:55 PM -0400	**Method:**	NPOC_Test_8MAY20
Directory:	C:\ProgramData\IDC\multiWin\Analyses\2023\08		
File name:	230824131355.ajd		
User:	Admin	**Sample volume:**	500.0µl
Sample type:	Calibration measurement	**Dilution:**	1 in 1
Status:	Measurement completed successfully	**Determinations:**	3-3
		Furnace temperature:	800°C

	c	I eff	SD	CV
NPOC		3.518E4AU		

Single replicates:

	Rep.	1	2	3
NPOC	I [AU]	3.484E4	3.544E4	3.525E4

Peak graph NPOC



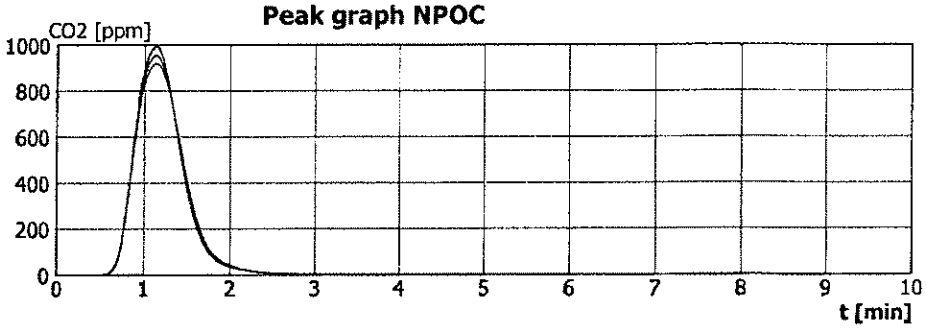
AnalysisReport

Sample ID:	Cal_NPOC_Test_8MAY2023_230824_1145_Konz05		
Time of analysis:	8/24/2023 1:36:32 PM -0400	**Method:**	NPOC_Test_8MAY20
Directory:	C:\ProgramData\IDC\multiWin\Analyses\2023\08		
File name:	230824133632.ajd		
User:	Admin	**Sample volume:**	500.0µl
Sample type:	Calibration measurement	**Dilution:**	1 in 1
Status:	Measurement completed successfully	**Determinations:**	3-3
		Furnace temperature:	800°C

	c	I eff	SD	CV
NPOC		7.179E4AU		

Single replicates:

	Rep.	1	2	3
NPOC	I [AU]	7.129E4	7.217E4	7.192E4



aj-Analyzer multi N/C 3100; multiWin 4.12; Serial No: N3-2320/AX

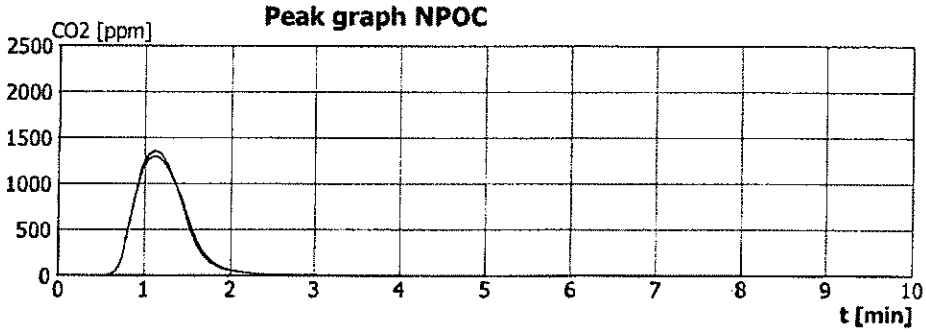
AnalysisReport

Sample ID:	Cal_NPOC_Test_8MAY2023_230824_1145_Konz06		
Time of analysis:	8/24/2023 1:59:18 PM -0400	**Method:**	NPOC_Test_8MAY20
Directory:	C:\ProgramData\IDC\multiWin\Analyses\2023\08		
File name:	230824135918.ajd		
User:	Admin	**Sample volume:**	500.0µl
Sample type:	Calibration measurement	**Dilution:**	1 in 1
Status:	Measurement completed successfully	**Determinations:**	3-3
		Furnace temperature:	800°C

	c	I eff	SD	CV
NPOC		1.051E5AU		

Single replicates:

	Rep.	1	2	3
NPOC	I [AU]	1.049E5	1.055E5	1.048E5



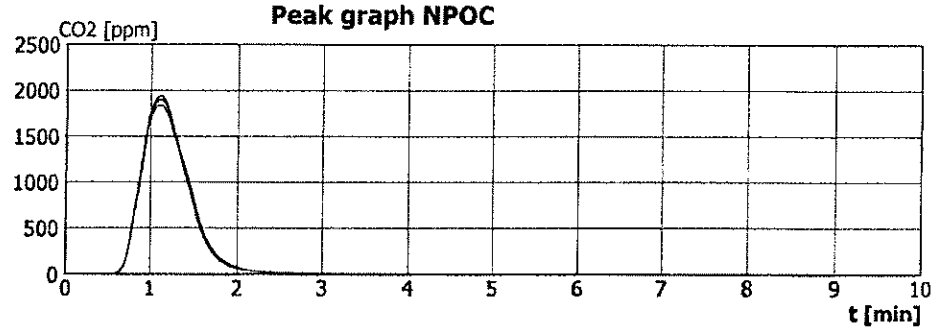
AnalysisReport

Sample ID:	Cal_NPOC_Test_8MAY2023_230824_1145_Konz07		
Time of analysis:	8/24/2023 2:22:02 PM -0400	**Method:**	NPOC_Test_8MAY20
Directory:	C:\ProgramData\JDC\multiWin\Analyses\2023\08		
File name:	230824142202.ajd		
User:	Admin	**Sample volume:**	500.0µl
Sample type:	Calibration measurement	**Dilution:**	1 in 1
Status:	Measurement completed successfully	**Determinations:**	3-3
		Furnace temperature:	800°C

	c	I eff	SD	CV
NPOC		1.387E5AU		

Single replicates:

	Rep.	1	2	3
NPOC	I [AU]	1.375E5	1.397E5	1.388E5



Katahdin Analytical Services - Wet Chemistry Lab

REAGENT, INTERMEDIATE AND WORKING STANDARDS PREPARATION LOGBOOK

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Standard ID	Reagent Name	Prep. Date	Prep. Inits.	Exp. Date:	Component	I.D. or Lot Number	Amount Added	Units	Bal./Pipette ID	Final Vol. (mL)	Prep Notes
W21622	0.01N H_2SO_4 JRS 2/13/23	~~2/13/22~~ 2/13/23	JRS	2/13/24	0.10N H_2SO_4	W21322	200	mL	grad cyl	2000	DI
~~—~~	~~Phenol Buffer~~	~~2/13/23~~	~~RAD~~	~~2/14/23~~							RAD 2/13/23
W21623	Copper Sulfate for Phenols	2/13/23	RAD	8/13/23	$CuSO_4$	SWL4951	50.1230	g	bal 01	500	
W21624	LLCOD LCS	2/14/23	ER	2/14/23	COD Standard	SWL5019	15	mL	W21	200	DI
W21625	LL COD MS	2/14/23	ER	2/14/23	COD Standard	SWL5019	60	mL	W21	200	DI
W21626	HL COD CCV	2/14/23	ER	5/14/23	KHP	SWL4116	0.850	g	bal 01	1,000	DI
W21627	LL COD CCV	2/14/23	ER	5/14/23	HL COD CCV	W21626	50	mL	grad cylinder	1,000	DI
W21628	MBAS Wash Soln	2/14/23	RAD	2/14/24	6N H_2SO_4	W21494	41	mL	grad cyl	1000	
↓	↓	↓	↓	↓	$NaH_2PO_4 \cdot H_2O$	SWL5029	50.0089	g	bal 01	↓	
W21629	10% H_2SO_4	2/14/23	STM	2/14/24	H_2SO_4	SWL5041	10	mL	W00	100	DI
W21630	TPO4 Digestion Solution	2/16/23	CJB	2/16/24	Potassium Sulfate	SWL4953	133.0038	g	bal 01	1000	
↓	↓	↓	↓	↓	Sulfuric Acid	SWL5041	200	mL	grad cyl	↓	
↓	↓	↓	↓	↓	Mercuric Sulfate	W21131	25	mL	grad cyl.	↓	
W21631	Phenol Buffer	2/16/23	RAD	2/17/23	NH_4Cl	SWL4226	116.9064	g	bal 01	250	
↓	↓	↓	↓	↓	NH_4OH	SWL5015	143	mL	grad cyl	↓	
W21632	Phenol 4AAP	2/16/23	RAD	2/17/23	4AAP	SWL4488	2.010	g	bal 20	100	
W21633	Phenol K Ferricyanide	2/14/23	RAD	2/17/23	$K_3Fe(CN)_6$	SWL4992	8.070	g	b21	100	

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W21809	Toc cal std 20.0	4/25/23	SS	4/12/24	1000 mg/L KHP Std	W21766	2.0	ml	W21	200	
W21810	50.0						5.0				
W21811	100.0						10.0				
W21812	150.0						15.0				
W21813	200.0						20.0				
W21814	TPO4 Ascorbic Acid	4/26/23	RAD	4/27/23	Ascorbic Acid	SWL4970	15.008	g	bal 20	250	
					Na dodecyl sulfate	SWL 3043	0.253				
W21815	$NO_{2/3}$ COLOR	4/27/23	BL	5/27/23	SULFANILAMIDE	SWL5043	40.059	g	BAL 20	1000	
					NED	SWL4660	1.008				
					H_3PO_4	SWL4952	100	mL	grad cyl		
W21816	Ammonium molybdate	4/27/23	STM	6/27/23	Ammonium molybdate	SWL4969	40.006	g	BAL 20	1000	
W21817	K Antimonyl Tartrate	4/27/23	STM	6/27/23	K Antimonyl tartrate	SWL3851	1.372	g	BAL 20	500	
W21818	5N H_2SO_4	4/27/23	STM	4/27/24	H_2SO_4	MSE307	70	mL	grad cyl	500	
W21819	NO_2 CCV	4/27/23	BL	5/27/23	NO_2 1000 ppm	SWL4985	0.1	mL	W8	200	
W21820	CrVI cal ~~std~~ Std	4/28/23	STM	11/28/23	CrVI	SWL5065	2.5	mL	W00	100	
W21821	Alk CCV	4/28/23	RAD	5/28/23	$CaCO_3$	SWL5062	125	mL	grad cyl	1000	
~~W21822~~	~~CN Std~~	~~4/28/23~~	~~STM~~	~~11/24~~							

STM 11/28/23

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Standard ID	Reagent Name	Prep. Date	Prep. Inits.	Exp. Date:	Component	I.D. or Lot Number	Amount Added	Units	Bal./Pipette ID	Final Vol. (mL)	Prep Notes
W21958	~~35~~ 35ppm Cl LCS	6/19/23	SS	7/19/23	1000 ppm Cl LCS int. Stock	W21763	3.5	mL	W10	100	
W21959	TOC LCS (AQ) 50mg/L	6/20/23	CJB	9/20/23	KHP	SWL2834	0.1092	g	Bal01	1000	
〃	〃	〃	〃	〃	H_3PO_4	SWL4952	1	mL	W16	〃	
W21960	Diphenyl carbazide	6/20/23	SS	12/20/23	Diphenyl Carbazide	SWL4724	0.2503	g	Bal01	50	Acetone
W21961	Cr^6 LCS int.	6/20/23	SS	12/20/23	1000ppm Cr^6 Std.	SWL5048	2.5	ml	W10	100	
W21962	TSS LCS	6/20/23	SS	6/20/24	celite	SWL4564	1.098	g	Bal01	1000	
W21963	NO_2 0.05ppm	6/22/23	BL	7/22/23	NO_2 1000ppm	SWL4985	0.01	mL	W17	200	
W21964	NO_2 0.25ppm	6/22/23	BL	7/22/23	〃	〃	0.05	〃	W8	〃	
W21965	NO_2 2.0ppm	6/22/23	BL	7/22/23	〃	〃	0.4	〃	W28	〃	
W21966	CN Buffer	6/22/23	SS	~~6/7~~/22/23	NaPO3 mono mono	SWL5029	13638	g	Bal20	100	
	Comp A	6/22/23	JRS	6/22/24	N-N-dimethyl-p-phenylenediamine	SWL5069	2.257	g	Bal20	1000	
	Comp B	〃	〃	〃	Ferric Chloride	SWL1774	5.45g	g	Bal20	200	
	〃	〃	〃	〃	HCl	MSR306	100	mL	grad cyl	〃	
	Comp A	〃	〃	〃	H_2SO_4	MSR307	660	mL	grad cyl	1000	DI
W21967	MDR Reagent	6/22/23	JRS	6/22/24	Comp A+B	see above					
W21968	IC LCS	6/23/23	~~RAD~~	7/7/23	multielement A	SWL5680	3.75	mL	W10	50	
〃	〃	〃	〃	〃	multielement B	〃 5059	〃	〃	〃	〃	

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REAGENT, INTERMEDIATE AND WORKING STANDARDS PREPARATION LOGBOOK

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Standard ID	Reagent Name	Prep. Date	Prep. Inits.	Exp. Date:	Component	I.D. or Lot Number	Amount Added	Units	Bal./Pipette ID	Final Vol. (mL)	Prep Notes
W22096	0.25N NaOH	8/9/23	SS	8/9/24	10N NaOH	SWL4994	50	mL	grad cyl	2000	
W22097	Phenol Buffer	8/10/23	RAD	8/15/23	NH_4Cl	SWL 4226	16.9048	g	bal 01	250	
↓	↓	↓	↓	↓	NH_4^+OH	↓ 5104	143	mL	grad cyl	↓	RAD 8/10/23
W22098	Phenol 4-AAP				4AAP	SWL 4488	2.0014	g	bal 01	100	
W22099	Phenol K Ferricyanide	↓	↓	↓	$K_3Fe(CN)_6$	SWL 4992	8.0059	g	bal 01	100	
W22100	TPO4 Ascorbic Acid	8/11/23	BL	8/12/23	ASCORBIC ACID	SWLS012	15.006	g	Bal 20	250	
↓	↓	↓	↓	↓	Na DODECYL SULFATE	SWL 4 3043	0.250	↓	↓	↓	BL 8/11/23
W22101	TPO4 NaOH/NaCl	8/11/23	BL	~~8~~ 9/11/23	NaOH	SWL4928	~~5~~ 2.585	g	Bal	125 ~~250~~	BL 8/11/23 BL 8/11/23 BL 8/11/23
↓	↓	↓	↓	↓	NaCl	MSR285	20.93 40.	↓	↓	↓	HALF BATCH BL 8/11/23
W22102	TCC Cal Stock	8/11/23	CJB	11/11/23	KHP	SWL4116	2.0323	g	Bal01	1000	
↓	↓	↓	↓	↓	H_3PO_4	SWL5061	1.0	mL	W28	↓	
W22103	LOW ALK TITRANT	8/11/23	BL	9/11/23	H_2SO_4	MSR307	6.72	mL	W00	12000	
W22104	NO_2 CCV	8/11/23	BL	9/11/23	NO_2 1000ppm	SWL4985	0.1	mL	W8	200	
W22105	NO_3 CCV	↓	↓	↓	NO_3 CCV	SWL4986	0.1	mL	W8	200	
W22106	HDR TSS LCS	8/15/23	BF	9/15/23	Cellp	SWL4564	C.0986	g	Bal01	1000	
W22107	↓ ↓ LCSD	↓	↓	↓	↓	↓	C.0984	g	↓	↓	

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W22232	IC CCV	10/9/23	RAD	10/23/23	Cl	SWL 5127	2.0	mL	W21	100	
					NO_2	5129	0.8		W22		
					NO_3	5128	0.8		W22		
					Br	5063	4.0		W21		
					SO_4	5053	4.0		W21		
					F	4961	1.0		W22		
											RAD 10/9/23
W22233	IC8	10/9/23	RAD	10/23/23	Cl	SWL 5127	2.0	mL	W21	50	
					NO_2	5129	0.8		W22		
					NO_3	5128	0.8		W22		
					Br	5063	4.0		W21		
					SO_4	5053	4.0		W21		
					F	4961	1.0		W22		
W22234	TOC LCS Standard	10/9/23	CJB	1/9/24	Dextrose Anhydrous Powder	SWL4892	50018	g	BAL01	50	
W22235	5N H_2SO_4 for LL. Phos	10/10/23	RAD	10/10/24	H_2SO_4	MSR307	70	mL	~~grad cyl~~	500	CB041 RAD 10/10/23
W22236	11N H_2SO_4 for LL Phos						6.2	mL	CB041	200	
W22237	0.1M Ascorbic Acid (LL. Phos)			10/17/23	Ascorbic Acid	SWL5072	~~1.776~~ 1.7612	g	bal 01	100	RAD 10/10/23

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3L 11/2/23 W22281	TPO4 COLOR	11/2/23	BL	~~11/3/~~ 12/2/23	AMMONIUM MOLYBDATE	W22178	53.25	mL	CB042 + W00	250	
⊥	⊥	⊥	⊥	⊥	ANTIMONYL K TARTATE	W22179	18	⊥	W3	⊥	
CJB 11/2/23 W6 W22282	TOC LCS (AQ)	11/2/23	CJB	2/2/24	KHP	SWL4116	0.1066	g	B101	1000	
⊥	⊥	⊥	⊥	⊥	H_3PO_4	SWL5061	1.0	mL	W20	⊥	
W22283	0.25N NaOH	11/2/23	JRS	11/2/24	10N NaOH	SWL4994	100	mL	grad cyl	4000	
W22284	⊥	⊥	⊥	⊥	⊥	⊥	⊥	⊥	⊥	⊥	
W22285	TOC Alk Check Std	11/2/23	CJB	2/2/24	1N $NaCO_3$	SWL5075	2.5	mL	W2i	1000	
W22286	NH_3 MS 50ppm	11/3/23	SS	5/3/24	1000 ppm NH_3 LCS Std.	SWLS124	2.5	mL	W00	50	
W22287	NH_3 1.5 LCS working Std	11/3/23	SS	12/3/23	NH_3 100 ppm LCS STOCK	W22189	3	mL	W10	200	0.2% H_2SO_4 W22245
W22288	NO_3 MATRIX SPIKE	11/3/23	BL	11/3/24	MW LT ELEMENT A	SWLS058	11	mL	W3	25	
W22289	NO_2 MATRIX SPIKE	11/3/23	BL	11/3/24	MW LT ELEMENT B	SWLS059	8.22	⊥	W00	⊥	
W22290	6N HCl (De Air)	11/01/23	JRS	11/01/24	conc. HCl	SWL5090	500	mL	grad cyl	1000	
W22291	HIGH LEVEL ALK CCV	11/5/23	BL	12/5/23	Na_2CO_3 1N	SWLS075	12.5	mL	W3 + W20	500	
W22292	NO_2 0.05 ppm	11/5/23	BL	12/5/23	NO_2 1000 ppm	SWLS129	0.01	mL	W17	200	
W22293	NO_2 0.25 ppm	⊥	⊥	⊥	⊥	⊥	0.05	⊥	W8	⊥	
W22294	NO_2 1.00 ppm	⊥	⊥	⊥	⊥	⊥	0.2	⊥	⊥	⊥	
W22295	NO_2 2.0 ppm	⊥	⊥	⊥	⊥	⊥	0.4	⊥	W20	⊥	

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W22296	NO_2 CCV	11/5/23	BL	12/5/23	NO_2 1000 ppm	SWCS129	0.1	mL	WB	200	
W22297	NO_3 CCV				NO_3 1000 ppm	SWCS128	0.1				
W22298	NO_2 LCS				MULTIELEMENT B	SWL5059	0.656		W20		
W22299	NO_3 LCS				MULTIELEMENT A	SWL5058	0.833				
W22300	TKN DIGESTION SOL	11/6/23	BL	12/6/23	H_2SO_4	MSR307	268	mL	CB041	2000	
					K_2SO_4	SWL4953	268.1226	g	Bal01		
					$CuSO_4$	SWL4951	14.6006				
W22301	Fe^{2+} Phenanthroline Stk	11/6/23	RAD	11/6/24	1,10-Phenanthroline, 99+%	SWL4423	1.0020	g	bal01	1000	
	~~HCl~~				HCl	SWL5093	20	drops	disposable pipette		RAD 11/6/23
W22302	Fe^{2+} Ammonium Acetate Buffer	11/6/23	RAD	11/6/24	Ammonium Acetate	SWL4957	250.006	g	bal20	1000	
					Acetic Acid Cglacial)	MSR236	700	mL	CB045		
W22303	Fe^{2+} LCS Stock	11/6/23	RAD	11/6/24	FAS	SWL2104	4.9015	g	bal01	500	
W22304	Fe^{2+} CCV Stock	11/6/23	RAD	11/6/24	FAS	SWL1961	0.7020	g	bal01	500	
W22305	Diphenyl-Carbazide	11/7/23	SS	5/7/24	Diphenyl-Carbazide	SWL4724	0.2508	g	Bal01	50	Acetone
W22306	TKN BUFFER	11/7/23	BL	12/1/23	NaOH	SWL4928	50.038	g	Bal20	1000	
					EDTA	SWL4964	20.003				
					Sodium Phos. Dibasic	SWL5087	35.080				

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REAGENT, INTERMEDIATE AND WORKING STANDARDS PREPARATION LOGBOOK

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Standard ID	Reagent Name	Prep. Date	Prep. Inits.	Exp. Date:	Component	I.D. or Lot Number	Amount Added	Units	Bal./Pipette ID	Final Vol. (mL)	Prep Notes
W22318	IC CCV	11/8/23	RAD	11/22/23	Cl	SWL 5127	2.0	mL	W00	100	
					NO_2	5129	0.8		W20		
					NO_3	5128	0.8		〃		
					Br	5063	4.0		W00		
					SO_4	5053	4.0		〃		
					F	4961	1.0		W20		
W22319	TDS/TS-AQ LCS	11/8/23	JRS	11/8/24	KCl	SWL1709	1.5009	g	bal 01	2000	
W22320	〃	〃	〃	〃	〃	1	〃	〃	〃	〃	
W22321	Fe^{2+} Phenanthroline Stn	11/9/23	RAD	11/9/24	1,10 Phenan-throline, 99%	SWL4423	1.0063	g	bal 01	1000	
〃	〃	〃	〃	〃	*HCl	SWL5093	20	drops	disposable pipette	〃	
W22322	0.01N H_2SO_4	11/9/23	JRS	11/9/24	0.1N H_2SO_4	W22113	400	mL	grad cyl	4000	
W22323	〃	〃	〃	〃	〃	〃	〃	〃	〃	〃	
W22324	IC LCS	11/9/23	RAD	11/23/23	multielement A	SWL5113	3.75	mL	W10	50	
〃	〃	〃	〃	〃	multielement B	SWL5059	3.75	〃	〃	〃	
W22325	Ascorbic Acid TPO	11/10/23	BL	11/11/23	Ascorbic Acid	SWL5072	15.018	g	Bal 20	250	
〃	〃	〃	〃	〃	Na Dodecyl Sulfate	SWL3043	0.238	〃	〃	〃	
W22326	ALKALINITY LCS/MS	11/10/23 BL 11/10/23	12/10/23 BL 11/10/23	BL	Na_2CO_3	SWL5076	1.069	g	Bal 20	1000	

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REAGENT, INTERMEDIATE AND WORKING STANDARDS PREPARATION LOGBOOK

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Standard ID	Reagent Name	Prep. Date	Prep. Inits.	Exp. Date:	Component	I.D. or Lot Number	Amount Added	Units	Bal./Pipette ID	Final Vol. (mL)	Prep Notes
W22327	NO_2/NO_3 BUFFER	11/10/23	BL	12/10/23	EDTA	SWL4964	4.027	g	Bal20	4000	
⊥	⊥	⊥	⊥	⊥	HCl	SWLS093	420	mL	CB034	⊥	
⊥	⊥	⊥	⊥	⊥	NH_4OH	SWLS104	380	⊥	CB041	⊥	
W22328	0.25N NaOH	11/13/23	JRS	11/13/24	10N NaOH	SWL 4994	100 mL	mL	grad cyl	4000	JRS 11/13/23
W22329	⊥	⊥	⊥	⊥	⊥	⊥	⊥	⊥	⊥	⊥	
W22330	NH_3 Trapping Sol'n	11/13/23	SS	2/13/24	0.1N H_2SO_4	W22113	40	mL	CB042	250	SS 11/13/23
W22331	NH_3 preserved Reagent Sol'n	11/13/23	⊥	2/13/24	Na tetraborate dehydrate	SWL4647	4.7518	g	BalC1	500	
⊥	⊥	⊥	⊥	⊥	NaOH	SWL4928	11.0947	⊥	⊥	⊥	
W22332	NH_3 Cyt preserved Reagent Sol'n	11/13/23	SS	2/13/24	Na tetraborate dehydrate	SWL4647	5.2003	g	Bal0	500	
⊥	⊥	⊥	⊥	⊥	NaOH	SWL4928	30.514	⊥	⊥	⊥	
W22333	LOW LEVEL ALK CCV	11/14/23	BL	12/14/23	$CaCO_3$	SWLS107	125	mL	CB042	1000	
W22334	TPO4 ASCORBIC ACID	11/15/23	BL	11/16/23	ASCORBIC ACID	SWLS072	15.0105	g	Bal01	250	
⊥	⊥	⊥	⊥	⊥	Na DODECYL SULFATE	SWL3043	0.2556	⊥	⊥	⊥	
W22335	TPO4 COLOR	11/15/23	BL	~~11/15/23~~ 11/15/24	AMMONIUM MOLYBDATE	W22178	53.25	mL	CB042 W10	250	
⊥	⊥	⊥	⊥	⊥	ANTIMONYL K TARTATE	W22179	18	⊥	W10	⊥	
W22336	TPO4 CAL/CCV CCB	11/16/23	BL	5/16/24	PPO4 1000ppm	SWLS140	10	mL	W00	200	
W22337	0.01N H_2SO_4	11/16/23	JRS	11/16/24	0.1N H_2SO_4	~~SW22113~~	200	mL	grad cyl	2000	

JRS 11/16/23

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REAGENT, INTERMEDIATE AND WORKING STANDARDS PREPARATION LOGBOOK

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Standard ID	Reagent Name	Prep. Date	Prep. Inits.	Exp. Date:	Component	I.D. or Lot Number	Amount Added	Units	Bal./Pipette ID	Final Vol. (mL)	Prep Notes
W22338	0.25N NaOH	11/16/23	JRS	11/16/24	10N NaOH	SWL 4994	100	mL	grad cyl	4000	
W22339	〃	〃	〃	〃	〃	〃	〃	〃	〃	〃	
W22340	Color con Std. Set	11/16/23	SS	5/16/24	Color Cal Stock	SWL5114	0.5, 1, 1.5, 2, 2.5, 3, 3.5, 4, 4.5, 5, 6	mL	W22 W101	50	
W22341	TSS LCS	11/16/23	RAD	11/16/24	Celite	SWL4564	1.0018	g	bal 01	1000	
W22342	0.2% H_2SO_4	11/16/23	SS	11/16/24	H_2SO_4	MSR 307	2	mL	W00	1000	
W22343	TOC Cal Stock	11/16/23	CJB	2/16/24	KHP	SWL4116	2.032	g	Bal20	1000	
〃	〃	〃	〃	〃	H_3PO_4	SWL5061	1.0	mL	W22	〃	
W22344	TPO4 Ascorbic Acid	11/17/23	BL	11/18/23	Ascorbic Acid	SWCS072	15.077	g	Bal20	250	
〃	〃	〃	〃	〃	Na Dodecyl Sulfate	SWL3043	0.256	〃	〃	〃	
W22345	TPO4 Carrier	11/17/23	BL	12/17/23	K_2SO_4	SWL4953	15.074	g	Bal20	500	
〃	〃	〃	〃	〃	H_2SO_4	MSR307	20	mL	CB009	〃	
~~W22340~~	~~TPO4 NaOH/NaCl~~	~~11/17/23~~	~~BL~~	~~12/17/23~~	~~NaOH~~	~~SWL4928~~	~~50.065~~	~~g~~	~~Bal20~~	~~250~~	BL 11/17/23 REMADE ON NEW PAC
~~〃~~	~~〃~~	~~〃~~	~~〃~~	~~〃~~	~~NaCl~~	~~SWL5120~~	~~40.049~~	~~〃~~	~~〃~~	~~〃~~	BL 11/17/23
W22347	BaCl for SO_4	11/17/23	SS	11/17/24	BaCl	SWL2129	1.0161	g	Bal01	100	
					NaCl	SWL5120	2.0803	〃	〃		
					HCL	SWL5135	0.5	ml	W20		
〃	〃	〃	〃	〃	Gelatine	SWL4873	0.0583	g	Bal01	〃	

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W22360	IC CCV	11/27/23	RAD	12/11/23	Cl	SWL5127	2.0	mL	W00	100	
					NO_2	5129	0.8		W22		
					NO_3	5128	0.8				
					Br	5063	4.0		W00		
					SO_4	5126	4.0				
					F	4961	1.0		W22		
W22361	IC LCS	11/27/23	RAD	12/11/23	multielement A	SWL5113	3.75	mL	W00	50	
					multielement B	5059	3.75				
W22362	AMMONIUM MOLYBDATE	11/27/23	BL	11/27/24	AMMONIUM MOLYBDATE	SWL4969	40.015	g	Bal 20	1000	BL 11/27/23
W22363	K ANTIMONYL TARTATE	11/27/23	BL	11/27/24	K ANTIMONYL TARTRATE	SWL3851	1.3711	g	Bal 01	500	
W22364	TPO4 ASCORBIC ACID	11/28/23	BL	11/29/23	ASCORBIC ACID	SWL5072	15.007	g	Bal 20	250	
					Na DODECYL SULFATE	SWL3043	0.251				
W22365	TPO4 COLOR	11/28/23	BL	12/28/23	AMMONIUM MOLYBDATE	W22362	53.25	mL	CB042 W0+C	250	
					ANTIMONYL K TARTATE	W22363	18		W3		
W22366	HL COD CCV	11/28/23	CJB	2/28/24	KHP	SWL4116	.8503	g	Bal 01	500	
W22367	LL COD CCV	11/28/23	CJB	2/28/24	HL COD CCV	W22366	50	mL	CB046	1000	
W22368	LL COD LCS	11/28/23	CJB	2/28/24	COD Standard	SWL5019	15	mL	CB046	200	

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W22379	TOC Soil CCV	12/5/23	CJB	3/5/24	Glucose	SWL4891	25.001	g	Bal20	250	.5 mL HCl
W22380	NO2 0.05 ppm	12/5/23	BL	1/5/24 ~~23~~	NO2 1000ppm	SWLS129	0.01	mL	W17	200	BC 12/5/23
W22381	NO2 0.25ppm	〃	〃	〃	〃	〃	0.05	〃	WB	〃	
W22382	NO2 1.00 ppm	〃	〃	〃	〃	〃	0.2	〃	WB	〃	
W22383	NO2 2.0 ppm	〃	〃	〃	〃	〃	0.4	〃	W22	〃	
W22384	NO2 CCV 0.5ppm	〃	〃	〃	〃	〃	0.1	〃	WB	〃	
W22385	NO3 CCV	12/5/23	BL	1/5/24 ~~23~~	NO3 1000ppm	SWLS128	0.1	mL	WB	〃	BC 12/5/23
W22386	NO2 LCS	12/5/23	BL	1/5/24 ~~23~~	MULTI ELEMENT B	SWLS059	0.656	〃	W22	〃	BL 12/5/23
W22387	NO3 LCS	12/5/23	BL	1/5/24 ~~23~~	MULTI ELEMENT A	SWLS113	0.833	〃	W22	〃	BL 12/5/23
W22388	NH3 1.5ppm LCS	12/6/23	SS	1/6/24	LCS Stock 100ppm NH3	W22189	3	mL	W00	200	0.2% H2SO4 W22342
W22389	Zn Acetate	12/6/23	JCB	12/6/24	Zn Acetate	SWL4537	44.027	g	Bal01	200	
W22390	Sodium Phenolate	12/6/23	SS	12/6/24	Phenol	SWL4909	~~8.336~~ 8.335	g	Bal20	100	SS 12/6/23
〃	〃	〃	〃	〃	NaOH	SWL4928	3.29	〃	〃	〃	
W22391	TOC LCS (AQ)	12/6/23	CJB	3/6/24	KHP	SWL4916	.1066	g	Bal01	1000	
〃	〃	〃	〃	〃	H_3PO_4	SWL5061	1.0	mL	W20	〃	
W22392	Cl Cal Stock 10,000 mg/L	12/8/23	SS	6/8/24 ~~28~~	NaCl	SWLS120	4.1213	g	Bal01	250	
W22393	Cl Cal working std. 100 mg/L	〃	〃	3/8/24 ~~28~~	Cl Cal Stock 10,000 mg/L	W22392	2	mL	W00	200	

SS 12/8/23

Katahdin Analytical Services - Wet Chemistry Lab
Reagents and Stock Standards Receipt Logbook

Katahdin STD. ID.	Standard Name	Mfr.	Catalog Number	Mfr. Lot Number	Receipt Initials	Receipt Date	Expiration Date	COA Scanned?
SWL5050	Turbidity Std.	Ricca	R8819050-500	1210770	STM	2/15/23	10/23	✓
SWL5051	TISAB II w/ CDTA	Thermo	940909	BZ1	RAD	2/21/23	2/21/28	✓
SWL5052	BOD Nutrient Buffer Pillow	HACH	1486398	A2178	EIR	02/27/23	9/27	✓
SWL5053	SO4 Std	inorganic ventures	ICS041	S2-SOX701648	RAD	3/15/23	3/15/24	✓
SWL5054	BOD Nutrient Buffer Pillow	Hach	1486398	A2198	EIR	03/27/23	9/27	✓
SWL5055	pH Buffer Solution 4.00	Fisher	SB101-500	224881	CJB	03/27/23	8/24~~01/24~~	✓
SWL5056	pH Buffer Solution 10.00	Fisher	SB115-500	224638	CJB	03/27/23	10/24	✓
SWL5057	136C Plain Granules	Hengar	1344-28-1	215-691-6	CJB	03/27/23	03/27/28	
SWL5058	Multielement A	enviro express	HP-IC-2-A-100	2303029-100EE	RAD	4/3/23	3/31/24	✓
SWL5059	Multielement B	〃	HP-IC-2-B-100	2225522-100EE	〃	〃	〃	✓
SWL5060	COD HR Vials	Envior Express	B1015	13831	EIR	04/04/23	11/01/27	✓
SWL5061	Phosphoric Acid	Fisher	A242-212	224167	SS	4/19/23	4/19/28	✓
SWL5062	AIK, $CaCO_3$	sigma aldrich	ALK1000-500mL	LEAP4309	SS	4/20/23	1/31/26	✓
SWL 5063	Bromide std. for IC 1000ppm	sigma aldrich	43147-100mL	BCCF8024	RAD	4/21/23	3/24	✓
SWL 5064	BOD Nutrient Buffers	Hach	1486398	A2195	CJB	4/24/23	4/24/27	✓
SWL5065	Cr+6 ccv/cal Stock	inorganic ventures	CGCR(6)1	T2-CR722437	STM	4/28/23	4/28/24	✓
SWL5066	Glass Fibre Prefilters (TDS)	Merck millipore	AP4004705	0000194371	RAD	4/28/23	4/28/28	✓

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Katahdin STD. ID.	Standard Name	Mfr.	Catalog Number	Mfr. Lot Number	Receipt Initials	Receipt Date	Expiration Date	COA Scanned?
SWL5067	CN Standard	ACCU Standard	WC-CN-10X-1	223015037	STM	4/28/23	7/10/24	✓
SWL5068	pH 7 Buffer (yellow)	Fisher	SB107-500	226063	SS	5/3/23	01/25	✓
SWL5069	N-N-Dimethyl-1,4-phenylenediamine oxalate	TCI	D0781	SF5BB-JC	SS	5/3/23	5/3/28	✓
SWL5070	LR COD Vials	ENV EXP	~~13886~~ B1010	13886	CJB	5/8/23	5/8/28	✓ RAD 10/24/23
SWL5071	Cadmium Column for NO_3	Hach	502237 A	3094C	RAD	5/9/23	10/2023	✓
SWL5072	Ascorbic Acid, 99+%	Thermo	A15613.36	M04J019	RAD	5/12/23	5/12/28	✓
SWL5073	Phenol 1000ppm std	Ricca	5740-4	421 1D00	RAD	5/12/23	10/24	✓
SWL5074	Sodium sulfide nonahydrate	Thermo	42442-5000	B0549446	SS	5/16/23	5/16/28	✓
SWL5075	Sodium Carbonate	Ricca	7190-16	2305F59	SS	5/16/23	10/24	✓
SWL5076	Sodium Carbonate Anhydrous	Fisher	S263-1	219130	SS	5/16/23	5/16/28	✓
SWL5077	pH 2.00 Buffer	Fisher	SB96-500	224625	SS	5/16/23	01/25	✓
SWL5078	pH 4.00 Buffer	Fisher	SB101-500	230419	SS	5/17/23	3/25	✓
SWL5079	Phenol Standard 1000ppm	Lab Chem	LC183307	M353-21	RAD	5/25/23	12/18/24	✓
SWL5080	Sodium Thiosulfate, 0.0375N	Ricca	7925-1	2305L08	RAD	5/25/23	11/24	✓
SWL5081	pH 7 BUFFER (YELLOW)	FISHER	SB107-500	226063	BL	5/25/23	1/25	✓
SWL5082	NED	THERMO	42399-1000	B0152963	BL	5/26/23	5/26	✓
SWL5083	SULFANILAMIDE	THERMO	13285-5000	B0152912	BL	5/31/23	5/31/28	✓

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Katahdin STD. ID.	Standard Name	Mfr.	Catalog Number	Mfr. Lot Number	Receipt Initials	Receipt Date	Expiration Date	COA Scanned?
SWLS084	HR COD Vials	environmental express	B1015	13882	SS	6/2/23	1/28	✓ SS 6/2/23
SWLS085	LR COD Vials	"	B1010	13907	"	~~1~~/28	"	✓
SWLS086	Chloroform	fisher	C6006-4	230806	RAD	6/8/23 ~~28~~	6/8/28	✓ scan QR on bottle
SWLS087	SODIUM PHOSPHATE DIBASIC HEPTAHYDRATE	FISHER	7782-85-6	215467	BL	6/28/23	6/28/28	✓
SWLS088	CHLORIDE LOUOR REAGENT	RICCA	1940-16	4211C10	BL	6/28/23	10/23	✓
SWLS089	SAND	SPECTRUM	14808-60-7	1DI0227	BL	6/30/23	6/30/28	✓
SWLS090	POTASSIUM IODIDE	THERMO	373655000	A0449576	BL	7/5/23	7/5/28	✓
SWLS091	SODIUM CYANIDE CN 1000ppm	INORGANIC VENTURES	~~CN-1000-25~~ ~~143-33-4~~	V2-CN7277-14	BL	7/5/23	~~7/5/24~~ 7/25/25	✓ BL 7/5/23
SWLS092	SODIUM SALICYLATE	THERMO	A17056.0B	Z021018	BL	7/5/23	7/5/28	✓
SWLS093	HCL, 36.5-38%	J.T. Baker	UN1789	23E1262011	SS	7/6/23	4/3/28	
SWLS094	BUFFER SOLUTION pH 10	FISHER	SB115-500	226060	BL	7/10/23	1/25	✓
SWLS095	SAND - LAB GRADE	FISHER	14808-60-7	3GB220721111A	BL	7/11/23	7/11/28	N/A
SWLS096	HR COD Vials	environmental express	B1015	13923	CJB	7/11/23	03/28	✓
SWLS097	TISAB II	fisher	15-2009-08	BV2	RAD	7/13/23	7/13/28	✓
SWLS098	LR COD Vials	environmental express	B1010	13929	CJB	7/19/23	03/19/28	✓
SWLS099	MULTIELEMENT B	ENVIRONMENTAL EXPRESS	HP-IC-N-M-100	230619-100EE	BL	7/19/23	7/31/24	✓
SWLS100	BUFFER SOLUTION pH 4	FISHER	SB101-500	230419	BL	7/20/23	~~3~~/25	✓ BL 7/20/23

RAD 6/8/23

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Katahdin STD. ID.	Standard Name	Mfr.	Catalog Number	Mfr. Lot Number	Receipt Initials	Receipt Date	Expiration Date	COA Scanned?
SWLS101	Glass Fibre Prefilters (TDS)	Merck Millipore	AP9004705	R000215925	JRS	7/21/23	7/21/28	✓
SWLS102	CADMIUM COLUMN FOR NITRATE	HACH	50237A	31867D	BL	7/31/23	01/24	✓
SWLS103	PLAIN GRANULES	HENGAR	1344-28-1	901800	BL	8/1/23	8/1/28	
SWLS104	AMMONIUM HYDROXIDE	FISHER	A669-212	226397	BL	8/1/23	8/1/28	✓
SWLS105	POTASSIUM CHLORIDE CONDUCTIVITY	RICCA	S888.01-16	2303F78	BL	8/1/23	2/25	✓
SWLS106	COLOR STANDARD	RICCA	2230-4	4304L09	BL	8/1/23	4/25	✓
SWLS107	ALKALINITY $CaCO_3$	SIGMA ALDRICH	ALK1000-500mL	LRAD5850	BL	8/4/23	6/30/26	✓
SWLS108	Potassium Chloride Conductivity	Fisher Brand	09-328-911774226	CC23998	JRS	8/4/23	3/30/24	✓
SWLS109	BOD Nutrient Buffer Pillows	HACH	1486398	A2287	CJB	8/8/23	6/8/28	✓
SWLS110	Nitrification Inhibitor	Lovibond	194920	XA6A0724	CJB	8/14/23	7/M/24	✓
~~SWLS111~~	~~HIGH TSS LCS~~	~~Lovibond~~						
~~SWLS112~~	~~HIGH TSS LCSD~~							
SWLS111	HR COD Vials	Env. Exp.	B1015	13807	CJB	8/22/23	10/27/27	✓
SWLS112	MULTIELEMENT B	ENV. EXPRESS	HP-IC-2-B-100	2308942-100EE	BL	8/24/23	8/31/24	
SWLS113	MULTIELEMENT A	ENV. EXPRESS	HP-IC-2-A-100	2303029-100EE	BL	8/24/23	8/31/24	✓
SWLS114	COLOR STANDARD	RICCA	2230-200	4308FOS	BL	8/24/23	7/25	✓
SWLS115	pH 7 BUFFER SOLUTION (YELLOW)	FISHER	SB107-500	231058	BL	8/29/23	4/25	✓

RAD 10/4/23

RAD 10/4/23

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Katahdin STD. ID.	Standard Name	Mfr.	Catalog Number	Mfr. Lot Number	Receipt Initials	Receipt Date	Expiration Date	COA Scanned?
SWLS116	LINEAR ALKYLBENZENE 10ppm SULFONATE STANDARD	BICCA	4348-16	130SR81	BL	9/1/23	5/24	✓
SWLS117	LINEAR ALKYLBENZENE SULFONATE STANDARD 1000ppm	BICCA	4350-4	13031 30	BL	9/1/23	3/24	✓
~~SWLS118~~	~~Glucose Doc Toc Soils~~ AC 9-1-23							RAS 10/2/23
SWL5118	Paint Filters	TCP Global	PS-1903	N/A	LJB	9/5/23	9/5/28	N/A
SWLS119	Chloroform	Fisher	C606-4	231658	RAD	9/7/23	9/7/28	✓ BOTH
SWLS120	SODIUM CHLORIDE	FISHER	S642-212	223943	BL	9/8/23	9/8/28	✓
SWLS121	PH BUFFER 4, 7, 10	FISHER	NC2402248	225069	BL	9/8/23	10/23	✓
SWLS122	SODIUM NITROFERRICYANIDE	THERMO	21164025D	A0943695	BL	9/14/23	9/14/28	✓
SWL5123	Glass Fibre Prefilters (TPS)	Merck Millipore	AP4004705	0000205684	JRS	9/19/23	9/14/28	✓
SWL5124	AMMONIA STANDARD	ORION	ORION 9151007	BX1	BL	9/18/23	3/25	✓
SWLS125	ANTIFOAM B EMULSION	SIGMA ALDRICH	10036749S3	MKCT0859	BL	9/26/23	8/26/24	✓
SWL5126	SOY Standard 1000 ppm	inorganic ventures	ICS041	T2-SOX722793	RAD	10/2/23	10/2/24	✓
SWL5127	Cl Std 1000ppm	↓	ICCL1	U2-CL731103	↓	↓	↓	✓
SWL5128	NO3 Std 1000ppm		ICNN031	T2-NOX723937				✓
SWLS129	NO2 Std 1000ppm		ICNN021	T2-NOX721185				✓
SWLS130	Sand Lab Grade	fisher	S25516B	3GH230405074	RAD	10/2/23	8/28	N/A
SWLS131	T-CAL STANDARD 10NTU	TINTOMETER	48011212	2E9A092S	BL	10/10/23	9/25	✓

Katahdin Analytical Services - Wet Chemistry Lab
Reagents and Stock Standards Receipt Logbook

Katahdin STD. ID.	Standard Name	Mfr.	Catalog Number	Mfr. Lot Number	Receipt Initials	Receipt Date	Expiration Date	COA Scanned?	
~~SWLS132~~			~~SO-00-0~~				BL 10/25/23		
SWLS132	PH 4 BUFFER SOL.	FISHER	SB101-500	233052	BL	10/25/23	7/25	✓	
SWLS133	CHLORIDE COLOR REAGENT	RICCA	1940-16	4301H76	BL	10/26/23	1/24	✓	
SWLS134	BOD Nutrient Buffer Pillows	HACH	1486398	A3169	CJB	10/30/23	8/28	✓	
SWLS135	HCL	J.T. Baker	UN1789	23H2862017	SS	10/31/23	8/1/28		
SWLS136	LR COD Vials	ENV EXP.	B1010	3660011	CJB	10/31/23	7/31/28	✓	
SWLS137	HR COD Vials	ENV EXP.	B1015	3GE0544	CJB	10/31/23	5/31/28	✓	
SWLS138	TURBIDITY STANDARD, 50NTU	RICCA	R6819050-500A	1308J19	BL	11/7/23	7/24	✓	
SWLS139	TISAB II	fisher	15-2009-08	BS2	TAD	11/13/23	11/13/28		
SWLS140	PPO_4 1000 ppm	INORGANIC VENTURES	ICPPO41	U2-POX729089	BL	11/14/23	~~11/14/24~~ 1/14/28		BL 11/14/23
SWLS141	CADMIUM COLUMN	HACH	50237A	3297A	BL	11/14/23	4/24		
SWLS142	PH 12.46 BUFFER	FISHER	IS-2009-15	BQ1	BL	11/16/23	10/25		
SWLS143	PH 10 BUFFER	FISHER	SB115-500	233928	BL	11/20/23	9/25		
SWLS144	PH 7 BUFFER	FISHER	SB108-1	234774	BL	11/21/23	10/25		
SWLS145	Sodium Thiosulfate (0.0375N)	RICCA	7925-1	2310P43	JRS	11/29/23	~~10/~~ 04/25		JRS 11/29/23
SWLS146	PLAIN GRANULES	HENGAR	1344-28-1	21S-691-6	BL	11/30/23	11/30/28		
SWLS147	ALKALINITY $CaCO_3$	SIGMA ALDRICH	ALK1000-500ML	LRAD7087	BL	12/1/23	11/30/26		

Katahdin Analytical Services, Inc. - Wet Chemistry Lab

STOCK STANDARDS LOGBOOK

Katahdin Std. ID	Standard Name	Manu-facturer	Mfr. Lot Number	Receipt Initials	Receipt Date	Expiration Date
SWL1940	Cupric Sulfate	fisher	0460649	SJC	10/5/05	10/5/10
SWL1944	Nitrite STD	LabChem	3287-10	SJC	10/19/05	1/17/06
SWL1945	Sodium Carbonate	LabChem	5126-07	SJC	10/19/05	5/6/06
SWL1961	Ferrous Ammonium sulfate	Fisher	057085	KGT	102505	10/25/11
SWL1962	ferrous Ammonium Sulfate .25N	LabChem	S2263-14	SJC	11/1/05	3/22/06
SWL1990	Sodium Carbonate 1N	fisher	055959-24	C.P.	11/30/05	11/30/07
SWL1991	Sodium Carbonate 1N	fisher	055959-24	C.P.	11/30/05	11/30/07
SWL1992	Sodium Phosphate 500gm	C.P. fisher	054177	C.P.	11/30/05	11/30/10
SWL1993	Conductivity STD	fisher	3442	SJC	12/01/05	8/18/06
SWL1994	↓	↓	3458	↓	↓	9/06/06
SWL1995	↓	↓	3445	↓	↓	8/18/06
SWL2009	Nitrite STD	LabChem	6009-06	SJC	01/17/06	04/10/06
SWL2012	Buffer Solution pH 7	fisher	054999-24	CP	1/24/06	10/31/07
SWL2013	Conductivity STD 1409µmho	LabChem	5332-15	SJC	013106	12/05/07
SWL2014	pH 4.00 Buffer	fisher	055000-24	SJC	013106	10/31/07
SWL2015	Phenolate - NH3	EST	1006859	KGT	020206	020107
SWL2016	Chloramine - T	EST	1006322	KGT	020206	100106
SWL2017	Nitroprusside	↓	1006779	↓	↓	020107
SWL2018	EDTA Buffer	↓	1006780	↓	↓	↓
SWL2019	Hypochlorite	↓	1006778	↓	↓	↓

WCStockStd.xls

Katahdin Analytical Services, Inc. - Wet Chemistry Lab
Reagent Receipt Logbook

Katahdin Reagent. ID.	Reagent Name	Manu-facturer	Mfr. Lot Number	Receipt Initials	Receipt Date	Expiration Date
SWL4091	H.L. COD vials	E.E.	12434	SC	12-19-16	10-31-021
SWL4092	Sodium Thiosulfate	Ricca	2660C57	SC	↓	3-31-18
SWL4093	1000 µS/cm Spec. Con. Std.	Traceable	CC15545	↓	↓	8/8/17
SWL4094	100 µS/cm ↓	↓	CC15259	↓	↓	9-2-17
SWL4095	10,000 µS/cm ↓	↓	CC15217	↓	↓	8-19-17
SWL4100	Ferrous Sulfate heptahydrate	Fisher	160768	ZF	12-23-16	12-23-21
SWL4102	Ammonium Hydroxide	Aeros	A0372135	AP	1/6/17	1/31/22
SWL4103	Sodium Carbonate	Aeros	A0375301	AP	1/6/17	1/6/27
SWL4106	Sodium L-(+)-Tartrate dihydrate	fisher	157480	SC	1-30-17	1-30-27
SWL4110	HL COD vials	Env. Express	12462	SC	2-2-17	12-31-21
SWL4111	Ammonia Std 1000 ppm	Orion	UQ1	ZF	2-2-17	10-31-18
SWL4113	Cadmium Column	Lachat	6354	AP	022317	022318
SWL4114	magnesium chloride hexahydrate	fisher	162613	SC	3-1-17	3-1-22
SWL4115	TISAB	Orion	9405901	↓	3-1-17	↓
SWL4116	Potassium hydrogen phthalate	Acros	A0376652	ZF	3-6-17	NA
SWL4118	HL COD vials	Env. Express	12489	SC	3-13-17	1-31-2022
SWL4119	HL COD vials	↓	12475	↓	↓	↓

See 12-14-16 worklog

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Katahdin Analytical Services, Inc. - Wet Chemistry Lab
Reagent Receipt Logbook

Katahdin Reagent. ID.	Reagent Name	Manu-facturer	Mfr. Lot Number	Receipt Initials	Receipt Date	Expiration Date
SWL 4402	Cadmium Column	lachat	8276	ZF	10/22/18	4/30/19
SWL4403	high level COD vials	Env. Express	12869	ZF	10/24/18	8/1/23
SWL4404	Phosphate buffer Soln	Fisher	179167	SC	10-14-18	8-30-19
SWL4405	Potassium Iodide	Acros	A0390896	ZF	10/26/18	10/26/23
SWL4407	Sodium Carbonate	Acros	A0388522	ZF	10/30/18	10/30/23
SWL4408	Potassium Sulfate	Acros	A0390084	ZF	1	1
~~—~~	~~Sodium hydroxide~~					ZF 10/30/18
SWL4409	Plain Granules	hengar	215-691-6	ZF	11/21/18	NA
SWL4411	low level COD vials	Envi. Express	12584	ZF	12/6/18	6/31/22
SWL4412	high level COD vials	Envi Express	12515	AB	12/6/18	3/31/22
SWL4415	Sodium Phenolate Soln	Thermo	1112036	AP	12/20/18	7/14/19
SWL4416	TISAB II w/CDTA	Orion	LQ2	AP	1	1
SWL4422	Ammonium Acetate	Fisher	181537	ZF	12/20/18	12/20/23
SWL4423	1, 10- Phenanthroline	Acros	A0388924	ZF	12/20/18	12/20/23
SWL4424	Iodine	Acros	B0138702	ZF	1	1
SWL4425	10 N NaOH	Fisher	184664	AP	12/20/18	11/30/20 AP 12/21/18
SWL4426	Sodium Thiosulfate Solution 0.0375N	Fisher	175890	JS	12.21.18	8.31.19

Katahdin Analytical Services, Inc. - Wet Chemistry Lab
Reagent Receipt Logbook

Katahdin Reagent. ID.	Reagent Name	Manu-facturer	Mfr. Lot Number	Receipt Initials	Receipt Date	Expiration Date
SWL4951	Cupric Sulfate Pentahydrate	fisher chemical	190706	MH	5/9/22	5/9/27
SwL4949	Pyridine	Fisher	216630	SS	5/11/22	5/11/27
SwL4952	Phosphoric Acid	Fisher	214806	SS	5/18/22	5/18/27
SWL4953	Potassium sulfate	Thermo	10238938	MH	5/26/22	5/26/27
SwL4954	Chloride R1 (984364)	Thermo	U667	SS	5/26/22	6/30/23
SwL4957	Ammonium Acetate	Fisher	208075	SS	6/8/22	6/8/27
SwL4958	Potassium Sodium tartrate	Thermo	A0431849	SS	6/8/22	6/8/27
SWL4963	Boiling stones/ plain granules	Hengar	215 - 691 - 6	MH	6/20/22	6/20/27
SWL4964	Ethylenediaminetetraacetic acid	thermo	A0384660	RD	6/21/22	6/21/27
SWL4965	Conductivity standard (LCS 4)	Thermo	CC22291	MH	6/27/22	2/11/23
SWL4966	Conductivity standard (LCS 3)	Thermo	CC22425	MH	6/27/22	3/9/23
SWL4967	Conductivity standard (LCS 2)	Thermo	CC22340	MH	6/27/22	2/24/23
SwL4969	Ammonium molybdate	Thermo	A0428276	SS	6/28/22	6/28/27
SwL4970	Ascorbic Acid	Thermo	208H035	SS	6/28/22	6/28/27
SwL4974	Cadmium Reduction Column	Lachat	20616D	RAD	7/13/22	9/30/22
SWL4975	Sulfanilamide	Thermo	B0152173	RAD	7/29/22	7/29/27
SWL4976	Ammonium Hydroxide	Fisher	216954	RAD	8/3/22	8/3/27

Katahdin Analytical Services, Inc. - Wet Chemistry Lab
Reagent Receipt Logbook

Katahdin Reagent. ID.	Reagent Name	Manu-facturer	Mfr. Lot Number	Receipt Initials	Receipt Date	Expiration Date
SWL5041	Sulfuric Acid (9681-03)	J.T. Baker	22507620 15	1/13/23 ↔ SS		9/5/27
SWL5042	Sodium Thiosulfate	RICCA	2212C80	ER	1/13/23	6/1/24
SWL5043	Sulfanilamide	thermo scientific	B0152912	ER	01/13/23	01/13/27
SWL5044	Magnesium Chloride Hexahydrate	fisher bioreagents	219274	ER	01/13/23	01/13/27
SWL5045	Iodine Extra Pure 99.5%	ACROS Organics	B01460824	ER	01/13/23	01/13/27
SWL5049	Glass Fibre Prefilters (TDS)	Merck Millipore	0000150777	SS	11/21/22	11/21/27
					SS 2/13/23	

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Katahdin Analytical Services, Inc. - Wet Chemistry Lab
Stock Standards Receipt Logbook

Katahdin STD. ID.	Standard Name	Manu-facturer	Mfr. Lot Number	Receipt Initials	Receipt Date	Expiration Date
SWL 4724	sym-diphenylcarbazide	ACROS	A0411427	es	1/13/21	1/13/26
✓ SWL 4725	CrVI +6 LCS STD 1000 ug/mL	ENVR express	2031534-100	es	1/15/21	1/31/22
SWL 4728	TISTB11	ORION	940909	es	12/10/21	2/10/25
SWL 4729	Color Std	RICCA	401 1J97	es	2/17/21	2/17/23
✓ SWL 4730	sulfate	inorganic ventures	R2-80X089601	es	↓	↓
✓ SWL 4731	Chromium +6	↓	P2-CR6839607	es	↓	↓
SWL 4732	Buffer 12 pH	Specpure	N10H006	es	↓	↓
✓ SWL4733	Buffer 7 PH	Fisher	212-739	ZL	6/8/21	03/23
✓ SWL 4766	F Std.	Inorg. Ventures	P2-F656382	ZF	6/9/21	6/9/23
SWL4769	Alk $CaCO_3$ 1000 mg/L	Sigma-Aldrich	LRAC8778	ZF	6/9/21	1/31/21
✓ SWL4770	Ferric Chloride Solution	fisher	206707	ZL/KD	6/29/21	01/23
SWL4771	COD Standard	LabChem	L089-23	ZL/KD	6/29/21	4/9/23
✓ SWL4772	COD Vials High level.	Env. Express	13479	ZL/KD	6/30/21	5/26
✓ SWL4773	Colors LCS standard	Ricca	2105C44	JJ/KD	6/30/21	5/2023
✓ SWL 4774	Colors CCV standard	Ricca	2105C44	JJ/KD	6/30/21	5/2023
✓ SWL4775	Buffer 7 pH yellow	Fisher	212239	ZL	7/2/21	03/2023
SWL4784	Spec. Con. LCS 1	Ricca	1106752	JJ/KD	7/13/21	05/2023

Katahdin Analytical Services, Inc. - Wet Chemistry Lab
Stock Standards Receipt Logbook

Katahdin STD. ID.	Standard Name	Manu-facturer	Mfr. Lot Number	Receipt Initials	Receipt Date	Expiration Date	
SWL4938	pH 10 buffer	Fisher	220003	~~ZF~~	4/4/22	1/31/24	
SWL4944	Alk CaCO3 1000	Sigma aldrich	LRAD0045	SS	4/20/22	7/31/24	JB 4/22/22
SWL4947	COD Vials Low Level	Env. Exp.	13636	JB	4/21/22	~~7/31/26~~	1/2027
SWL4948	Buffer Solution pH 7.00 (clear)	Fisher	220002	SS	5/11/22	02/24	
SWL4955	pH 7 Buffer (yellow)	Fisher	220007	SS	5/27/22	01/24	
SWL4956	Alk CaCO3 1000 mg/L	Sigma Aldrich	LRAD2410	SS	6/8/22	4/30/25	
SWL4959	Ammonia Standard 1000 ppm	Fisher	Av2	SS	6/8/22	05/24	
SWL4960	Cn Standard	Inorganic ventures	52-CN 707222	SS	6/8/22	10/7/23	
SWL4961	F Standard 1000 ppm	Environmentex express (hps)	2202534-100	SS	6/8/22	11/30/23	
SWL4962	NO2 1000 ppm SH. Multi element B	Environmental express (hps)	2206143-100	SS	6/8/22	5/31/23	
SWL4968	pH 7 Buffer (yellow)	Fisher	221685 (SB107-500)	SS	6/28/22	03/24	
SWL4971	Color Standard	Ricca	4204B44	SS	6/28/22	3/24	
SWL4972	pH 4 Buffer	Fisher	221684	SS	7/8/22	4/24	
SWL4973	pH 10 Buffer	Fisher	220003	SS	7/8/22	1/24	
SWL4977	pH 7 Buffer (yellow)	Fisher	221685 (SB107-500)	RAD	8/5/22	3/24	
SWL4978	Mercury(II) oxide, 99+%, red	Acros	A0426593	RAD	8/8/22		
SWL4979	Potassium Iodide	Thermo	A0430239	SS	8/26/22	8/26/27	

Katahdin Analytical Services, Inc. - Wet Chemistry Lab
Stock Standards Receipt Logbook

Katahdin STD. ID.	Standard Name	Manu-facturer	Mfr. Lot Number	Receipt Initials	Receipt Date	Expiration Date
SWL 5046 ~~W21524~~	P-Xylene 99%	thermo scientific	10241202	ER	12/30/22	12/30/27
SWL 5047 ~~W21525~~	Sulfate	Inorganic Ventures	S2-SO4712629	ER	12/30/22	12/30/23
SWL 5048 ~~W21526~~	Chromium +6	ENV. Express	2212933-250	ER	12/30/22	12/31/23
RAD 1/2/23						
					SS 2/13/25	

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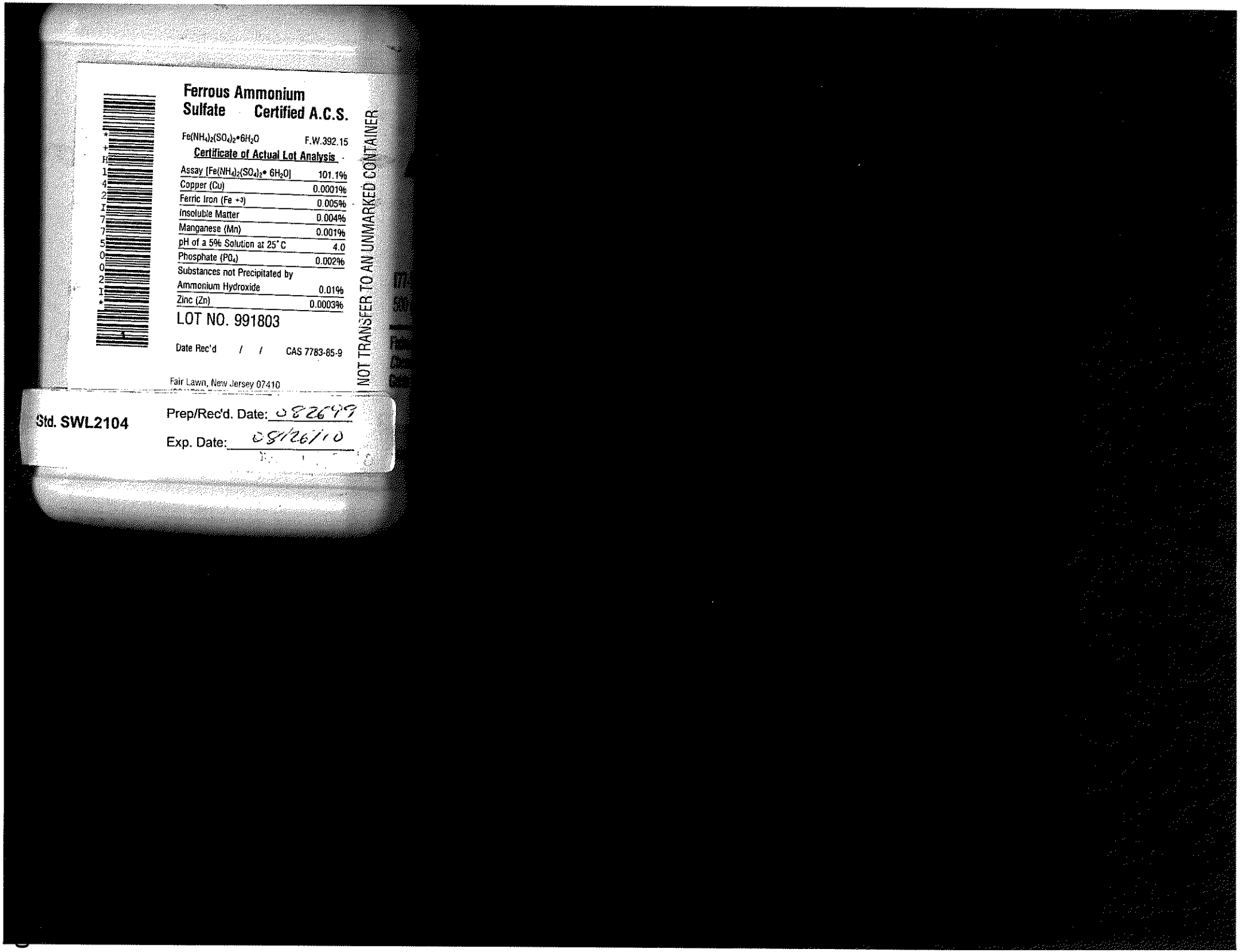
Katahdin Analytical Services, LLC. - Metals Laboratory
Reagent Receipt Logbook

Katahdin Reagent. ID.	Reagent Name	Manu-facturer	Mfr. Lot Number	Receipt Initials	Receipt Date	Expiration Date
SF 4/12/21 MSR232 ~~MSR231~~	HNO_3	JT baker	0000267725	CD	4-11-21	8-11-25
MSR233	PTFE Boiling stones	chem ware	27769405	SF	4/27/21	N/A
MSR234	HNO_3	JT baker	0000266572	SF	5/4/21	7/23/25
MSR235	HCl	JT baker	0000275677	SF	〃	12/15/25
MSR236	Acetic Acid, Glacial	JT baker	0000281457	SF	5/14/21	3/5/26
MSR237	HCl	JT baker	0000281827	SF	6/8/21	9/29/26
MSR238	HNO_3	〃	0000277202	〃	〃	1/14/26
MSR239	H_2SO_4	JT baker	0000280957	SF	6/10/21	2/25/26
MSR240	$SnCl_2$	JT baker	0000293024	EP	6/17/21	11/11/21
MSR241	HCl	JT baker	0000281827	SF	7/14/21	3/29/26
MSR242	HNO_3	Fisher	1121040	SF	7/14/21	4/15/23
MSR243	HNO_3	Fisher	1126080	SF	7/23/21	8/20/22

Katahdin Analytical Services, LLC. - Metals Laboratory
Reagent Receipt Logbook

Katahdin Reagent. ID.	Reagent Name	Manu-facturer	Mfr. Lot Number	Receipt Initials	Receipt Date	Expiration Date
MSR 800	HNO_3 - Nitric Acid	JT Baker	22I8062093	CD	10-3-22	8-30-27
MSR 301	HNO_3 - Nitric Acid	JT Baker	↓	BCF	10-4-22	8-30-27
MSR 302	H_2SO_4 - Sulfuric Acid	JT Baker	22D0862015	BCF	10-4-22	2-22-27
~~MSR303~~	~~Hg IA~~					
~~MSR~~ 303	Hydrochloric Acid 36.5-38%	JT Baker	22L0562004	BCF	01-04-23	10-24-27
MSR304	PTFE Boiling Chips		W122687	CD	1-4-23	1-4-2027
MSR 305	Stannous Chloride, Dihydrate	LabChem	M333-26	BCF	1-11-23	
MSR306	HCl - Baker analyzed (wetchem)	JT Baker	88E0662002	CD	1-24-23	4-10-27
MSR307	Sulfuric Acid - H_2SO_4 (Baker analyzed)	JT Baker	22J0768016	CD	2-6-23	9-5-27
MSR308	Sulfuric Acid - H_2SO_4) Baker-instra analyzed	JT Baker	2210962010	CD	2-13-23	10-9-27
↓	↓	↓	↓	↓	2-27-23	↓
MSR309	Nitric Acid (HNO_3)	Cmc Materials	10048258	CD	CD 3-1 3-1-23	8-2023

BCF 1-4-23


Ferrous Ammonium Sulfate Certified A.C.S.
$Fe(NH_4)_2(SO_4)_2 \cdot 6H_2O$ F.W.392.15
Certificate of Actual Lot Analysis
Assay [$Fe(NH_4)_2(SO_4)_2 \cdot 6H_2O$] 101.1%
Copper (Cu) 0.0001%
Ferric Iron (Fe +3) 0.005%
Insoluble Matter 0.004%
Manganese (Mn) 0.001%
pH of a 5% Solution at 25°C 4.0
Phosphate (PO_4) 0.002%
Substances not Precipitated by Ammonium Hydroxide 0.01%
Zinc (Zn) 0.0003%
LOT NO. 991803
Date Rec'd / /
CAS 7783-85-9
Fair Lawn, New Jersey 07410
NOT TRANSFER TO AN UNMARKED CONTAINER
Std. SWL2104
Prep/Rec'd. Date: 082699
Exp. Date: 08/26/10

CREDERE ASSOCIATES

DOW MILITARY AIRFIELD
SALVAGE YARD

SQ6238

Jennifer Prescott
207-874-2400

KATAHDIN ANALYTICAL SERVICES
600 TECHNOLOGY WAY
SCARBOROUGH, ME 04074

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SAMPLE DATA PACKAGE

NARRATIVE
KATAHDIN ANALYTICAL SERVICES
CREDERE ASSOCIATES
DOW MILITARY AIRFIELD SALVAGE YARD
SQ6238

Sample Receipt

The following samples were received on November 10, 2023 and were logged in under Katahdin Analytical Services work order number SQ6238 for a hardcopy due date of December 04, 2023.

KATAHDIN Sample No.	CREDERE Sample Identification
SQ6238-1	SY-BRMW4-62-72-110923
SQ6238-2	SY-BRMW40-62-72-110923
SQ6238-3	SY-BRMW4-138-148-110923
SQ6238-4	SY-BRMW3-47-62-110923
SQ6238-5	SY-BRMW3-145-155-110923
SQ6238-6	SY-BRMW3-287-297-110923
SQ6238-7	SY-BRMW4-291-301-110923
SQ6238-8	SY-BRMW1-42-52-110923
SQ6238-9	SY-BRMW1-65-75-110923
SQ6238-10	SY-BRMW10-65-75-110923
SQ6238-11	SY-BRMW1-150-157-110923
SQ6238-12	TB33-110923

The samples were logged in for the analyses specified on the chain of custody form. All problems encountered and resolved during sample receipt have been documented on the applicable chain of custody forms.

We certify that the test results provided in this report meet all the requirements of the NELAP standards unless otherwise noted in this narrative or in the Report of Analysis.

We certify that the test results provided in this report are accredited under the laboratory's ISO/IEC 17025:2017 and DoD-ELAP accreditation issued by the ANSI-ASQ National Accreditation Board. Refer to certificate and scope of accreditation L2223.

Analytes which are reported but not listed on our ANAB scope of accreditation will be "^" flagged and the following language will be included in the case narrative for all DoD compliant work: "^" Indicates this analyte is not included on Katahdin Analytical Services DoD-ELAP Scope of Accreditation.

Sample analyses have been performed by the methods as noted herein.

Should you have any questions or comments concerning this Report of Analysis, please do not hesitate to contact your Katahdin Analytical Services Project Manager, **Heather Manz**. This narrative is an integral part of the Report of Analysis.

Organics Analysis

The samples of Work Order SQ6238 were analyzed in accordance with Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, EPA publication SW-846, Third Edition, Final Updates I (1993), II (1995), IIA (1994), IIB (1995), III (1997), IIIA (1999), IIIB (2005), IV (2008), V (2015) and VI (2019), and/or "Analysis of Dissolved Methane, Ethane, and Ethylene in Water Samples Using a GC Headspace Equilibration Technique", EPA Method RSK175, Revision No.2, May 2004, and/or for the specific methods listed below or on the Report of Analysis.

RSK 175v.2 Analysis

The target analyte methane was detected below ½ the LOQ in the method blank WG345566-1. According to the DoD QSM, a method blank is considered to be contaminated if the concentration of any target analyte in the blank exceeds ½ the reporting limit and is greater than 1/10 the amount measured in any sample. Since the method blank was acceptable, no further action was taken.

8260C SIM Analysis

Samples SQ6238-1, 6, and 7 were manually integrated for the target analytes trichloroethane, trans-1,2-dichloroethene and/or the surrogate 1,2-dichloroethane-D4. The specific reasons for the manual integrations are indicated on the raw data by the manual integration codes (M1-M11). These codes are further explained in the attachment following this narrative.

8270D SIM Analysis

Sample SQ6238-4 was manually integrated for the analyte benzo(k)fluoranthene. The specific reason for the manual integration is indicated on the raw data by the manual integration codes (M1-M11). These codes are further explained in the attachment following this narrative.

Samples SQ6238-3 and 10 had low recoveries for the extraction surrogates 2-methylnaphthalene-d10 and/or pyrene-d10 that were outside of the DoD QSM acceptance limits. The client was contacted on 12/15/2023 and the laboratory was instructed to proceed with narration.

The LCS WG345531-2 had a high recovery for the extraction surrogate 2-methylnaphthalene-d10 that was outside of the DoD QSM acceptance limits. Since the recoveries of the spiked target analytes were acceptable, no further action was taken.

Note: The Form VII has a column for %D that is set to 20%. The DoD QSM criterion for an opening CV is 20%D and a closing CV is 50%D. All of the compounds in the CV's were evaluated to either 20% criteria for opening CV's or 50% criteria for closing CV's.

The closing CV (file N0453) had low responses for the internal standards chrysene-d12 and perylene-d12, which was outside the DoD QSM acceptance limits of -50% to +100% of the responses of the internal standard of the mid-point level calibration standard from the initial calibration. If a closing CV fails, the DoD QSM allows for the analysis of two additional CV's which do not need to be within the 12-hour window. The two additional CV's (files N0454 and N0455) were analyzed, and all three CV's are reported.

The closing CV (file N0476) had low responses for the internal standards phenanthrene-d10, chrysene-

d12, and perylene-d12, which was outside the DoD QSM acceptance limits of -50% to +100% of the responses of the internal standard of the mid-point level calibration standard from the initial calibration. If a closing CV fails, the DoD QSM allows for the analysis of two additional CV's which do not need to be within the 12-hour window. The two additional CV's (files N0477and N0478) were analyzed, and all three CV's are reported.

There were no other protocol deviations or observations noted by the organics laboratory staff.

Wet Chemistry Analysis

The samples of Work Order SQ6238 were analyzed in accordance with the specific methods listed on the Report of Analysis.

Analyses for hexavalent chromium were performed according to Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, EPA publication SW-846, Third Edition, Final Updates I (1993), II (1995), IIA (1994), IIB (1995), III (1997), IIIA (1999), IIIB (2005), IV (2008), V (2015) and VI (2019).

Analyses for alkalinity, ferrous iron, and total organic carbon were performed according to "Standard Methods for the Examination of Water and Wastewater", 15th, 16th, 17th, 18th, 19th, and 20th editions, 1980, 1985, 1989, 1992, 1995, 1999. APHA-AWWA-WPCF.

Analyses for chloride, nitrate, and sulfate were performed according to "Methods for the Determination of Inorganic Substances in Environmental Samples", EPA 600/R-93/100, August 1993.

All Wet Chemistry results were evaluated to Katahdin Analytical Services' Method Detection Limits (MDL). Measured concentrations that fall between the MDL and Katahdin's Limit of Quantitation (LOQ) are flagged "J". Measured concentrations that are below the MDL are flagged "U" and reported as "U LOD", where "LOD" is the numerical value of the Limit of Detection.

All quality control criteria were met. All analyses were performed within analytical holding times with the following exceptions:

The samples SQ6238-1 and 2 were received by the lab with less than 15 minutes left of the method-specified 24-hour holding time for ferrous iron analysis. SQ6238-1 was run 32 minutes out of hold and SQ6238-2 was run 27 minutes out of hold.

The samples SQ6238-1 and 2 were received by the lab with less than 15 minutes left of the method-specified 24-hour holding time for hexavalent chromium analysis. SQ6238-1 was run 26 minutes out of hold and SQ6238-2 was run 21 minutes out of hold.

The nitrate matrix spike (WG345363-4) on sample SQ6238-1 had a low recovery that was outside of the acceptance limits.

Copies of all relevant standard receipt and preparation logbook pages are included in the report with the exception of the page containing the receipt information for Katahdin Standard SWL2104 used in the ferrous iron analysis. This page was unable to be located, but a scan of the "certificate of actual lot analysis" that is printed on the reagent bottle was included in the report.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package has been authorized by the Quality Assurance Officer, or their designee, as verified by the following signature.



01/03/2024

_____

Jennifer Prescott
Quality Assurance Officer

Katahdin Analytical Services, Inc.

Manual Integration Codes For GC/MS, GC, HPLC and/or IC

M1	Peak splitting.
M2	Well defined peaks on the shoulders of the other peaks.
M3	There is additional area due to a coeluting interferant.
M4	There are negative spikes in the baseline.
M5	There are rising or falling baselines.
M6	The software has failed to detect a peak or misidentified a peak.
M7	Excessive peak tailing.
M8	Analysis such as GRO, DRO and TPH require a baseline hold.
M9	Peak was not completely integrated as in GC/MS.
M10	Primary ion was correctly integrated, but secondary or tertiary ion needed manual integration as in GC/MS.
M11	For GC analysis, when a sample is diluted by 1:10 or more, the surrogate is set to undetected and then the area under the surrogate is manually integrated.
M12	Manual integration saved in method due to TurboChrom floating point error.

Katahdin Analytical Services, LLC. **Sample Receipt Condition Report**

Client:	Cordere	KAS PM:	HMM	Sampled By:	Client
Project:		KIMS Entry By:	JCB	Delivered By:	Client
KAS Work Order#:	SQ6238/6179	KIMS Review By:	HMM	Received By:	JCB
		Labeled By:	EP		
SDG #:		Cooler: 1 of 4		Date/Time Rec.:	11/10/23 0837

Receipt Criteria	Y	N	EX*	NA	Comments and/or Resolution
1. Custody seals present / intact?		✓			
2. Chain of Custody present in cooler?	✓				
3. Chain of Custody signed by client?	✓				
4. Chain of Custody matches samples?	✓				
5. Temperature Blanks present? If not, take temperature of any sample w/ IR gun.	✓				Temp (°C): 0.6 – Thermometer ID: IR-1
Samples received at <6 °C w/o freezing?	✓				Note: Not required for metals (except Hg soil) analysis.
Ice packs or ice present?	✓				The lack of ice or ice packs (i.e. no attempt to begin cooling process) or insufficient ice may not meet certain regulatory requirements and may invalidate certain data.
If yes, was there sufficient ice to meet temperature requirements?	✓				
If temp. out, has the cooling process begun (i.e. ice or packs present) and sample collection times <6hrs., but samples are not yet cool?				✓	Note: No cooling process required for metals (except Hg soil) analysis.
6. Volatiles: **Aqueous:** No bubble larger than a pea?	✓				VOA from 11/08 - SQ6179
Soil/Sediment: Received in airtight container?				✓	
Received in methanol?				✓	
Methanol covering soil?				✓	
D.I. Water - Received within 48 hour HT?				✓	
7. Trip Blank present in cooler?	✓				
8. Proper sample containers and volume?	✓				
9. Samples within hold time upon receipt?	✓				
10. Aqueous samples properly preserved? Metals, COD, NH3, TKN, O/G, phenol, TPO4, N+N, TOC, DRO, TPH – pH <2	✓				
Sulfide - >9				✓	
Cyanide – pH >12				✓	
11. Bottleware Prepped on:					

* Log-In Notes to Exceptions: document any problems with samples or discrepancies or pH adjustments.

Katahdin Analytical Services, LLC. Sample Receipt Condition Report

Client: Credere	KAS PM: HHM	Sampled By: Client	
Project:	KIMS Entry By: JCB	Delivered By: Client	
KAS Work Order#: SQ6238/6179	KIMS Review By: HHM	Received By: JCB	
	Labeled By: EP		
SDG #:	Cooler: 2 of 4	Date/Time Rec.: 11/10/23 0837	

Receipt Criteria	Y	N	EX*	NA	Comments and/or Resolution
1. Custody seals present / intact?		✓			
2. Chain of Custody present in cooler?	✓				
3. Chain of Custody signed by client?	✓				
4. Chain of Custody matches samples?	✓				
5. Temperature Blanks present? If not, take temperature of any sample w/ IR gun.	✓				Temp (°C): 0.9 – Thermometer ID: IR-1
Samples received at <6 °C w/o freezing?	✓				Note: Not required for metals (except Hg soil) analysis.
Ice packs or ice present?	✓				The lack of ice or ice packs (i.e. no attempt to begin cooling process) or insufficient ice may not meet certain regulatory requirements and may invalidate certain data.
If yes, was there sufficient ice to meet temperature requirements?	✓				
If temp. out, has the cooling process begun (i.e. ice or packs present) and sample collection times <6hrs., but samples are not yet cool?				✓	Note: No cooling process required for metals (except Hg soil) analysis.
6. Volatiles: Aqueous: No bubble larger than a pea?	✓				VOA from 11/09 - SQ6238
Soil/Sediment: Received in airtight container?				✓	
Received in methanol?				✓	
Methanol covering soil?				✓	
D.I. Water - Received within 48 hour HT?				✓	
7. Trip Blank present in cooler?	✓				
8. Proper sample containers and volume?	✓				
9. Samples within hold time upon receipt?	✓				
10. Aqueous samples properly preserved? Metals, COD, NH3, TKN, O/G, phenol, TPO4, N+N, TOC, DRO, TPH – pH <2	✓				
Sulfide - >9				✓	
Cyanide – pH >12				✓	
11. Bottleware Prepped on:					

* Log-In Notes to Exceptions: document any problems with samples or discrepancies or pH adjustments.

Katahdin Analytical Services, LLC. **Sample Receipt Condition Report**

Client: Credere	KAS PM: HHM	Sampled By: Client
Project:	KIMS Entry By: JCB	Delivered By: Client
KAS Work Order#: SQ6238/6179	KIMS Review By: HHM	Received By: JCB
	Labeled By: EP	
SDG #:	Cooler: 3 of 4	Date/Time Rec.: 11/10/23 0837

Receipt Criteria	Y	N	EX*	NA	Comments and/or Resolution
1. Custody seals present / intact?		✓			
2. Chain of Custody present in cooler?	✓				
3. Chain of Custody signed by client?	✓				
4. Chain of Custody matches samples?	✓				
5. Temperature Blanks present? If not, take temperature of any sample w/ IR gun.	✓				Temp (°C): 1.7 — Thermometer ID: IR-1
Samples received at <6 °C w/o freezing?	✓				Note: Not required for metals (except Hg soil) analysis.
Ice packs or ice present?	✓				The lack of ice or ice packs (i.e. no attempt to begin cooling process) or insufficient ice may not meet certain regulatory requirements and may invalidate certain data.
If yes, was there sufficient ice to meet temperature requirements?	✓				
If temp. out, has the cooling process begun (i.e. ice or packs present) and sample collection times <6hrs., but samples are not yet cool?				✓	Note: No cooling process required for metals (except Hg soil) analysis.
6. Volatiles:					
Aqueous: No bubble larger than a pea?				✓	
Soil/Sediment:					
Received in airtight container?				✓	
Received in methanol?				✓	
Methanol covering soil?				✓	
D.I. Water - Received within 48 hour HT?				✓	
7. Trip Blank present in cooler?				✓	
8. Proper sample containers and volume?	✓				
9. Samples within hold time upon receipt?	✓				
10. Aqueous samples properly preserved?					
Metals, COD, NH3, TKN, O/G, phenol, TPO4, N+N, TOC, DRO, TPH – pH <2				✓	
Sulfide - >9				✓	
Cyanide – pH >12				✓	
11. Bottleware Prepped on:					

* Log-In Notes to Exceptions: document any problems with samples or discrepancies or pH adjustments.

Katahdin Analytical Services, LLC. **Sample Receipt Condition Report**

Client:	Credere	KAS PM:	HTM	Sampled By:	Client
Project:		KIMS Entry By:	JCB	Delivered By:	Client
KAS Work Order#:	SQ6238/6179	KIMS Review By:	HTM	Received By:	JCB
		Labeled By:	EP		
SDG #:		Cooler: 4 of 4		Date/Time Rec.:	11/10/23 0837

Receipt Criteria	Y	N	EX*	NA	Comments and/or Resolution
1. Custody seals present / intact?		✓			
2. Chain of Custody present in cooler?	✓				
3. Chain of Custody signed by client?	✓				
4. Chain of Custody matches samples?	✓				
5. Temperature Blanks present? If not, take temperature of any sample w/ IR gun.	✓				Temp (°C): 0.1 — Thermometer ID: IR-1
Samples received at <6 °C w/o freezing?	✓				Note: Not required for metals (except Hg soil) analysis.
Ice packs or ice present?	✓				The lack of ice or ice packs (i.e. no attempt to begin cooling process) or insufficient ice may not meet certain regulatory requirements and may invalidate certain data.
If yes, was there sufficient ice to meet temperature requirements?	✓				
If temp. out, has the cooling process begun (i.e. ice or packs present) and sample collection times <6hrs., but samples are not yet cool?				✓	Note: No cooling process required for metals (except Hg soil) analysis.
6. Volatiles:					
Aqueous: No bubble larger than a pea?				✓	
Soil/Sediment:					
Received in airtight container?				✓	
Received in methanol?				✓	
Methanol covering soil?				✓	
D.I. Water - Received within 48 hour HT?				✓	
7. Trip Blank present in cooler?				✓	
8. Proper sample containers and volume?	✓				
9. Samples within hold time upon receipt?	✓				
10. Aqueous samples properly preserved? Metals, COD, NH3, TKN, O/G, phenol, TPO4, N+N, TOC, DRO, TPH – pH <2	✓				
Sulfide - >9				✓	
Cyanide – pH >12				✓	
11. Bottleware Prepped on:					

* Log-In Notes to Exceptions: document any problems with samples or discrepancies or pH adjustments.

Katahdin ANALYTICAL SERVICES
600 Technology Way
P.O. Box 540
Scarborough, ME 04070
Tel: (207) 874-2400
Fax: (207) 775-4029

Chain of Custody

Client:	Contact:	Phone #:	Fax #:
Credere Associates	Allison Drouin	207-749-1141	( )
Address: 776 Main Street	City: Westbrook	State: ME	Zip Code: 04092
Purchase Order #:	Proj. Name/No.: Dow/18001468		Katahdin Quote #:
Bill (if different than above): invoices@credere llc.com	Address:		
Sampler (Print/Sign): SeanCannon			Copies To: adrouin@credere llc.com

LAB USE ONLY — Work Order #: SQ6238 (Katahdin Project Number)

Remarks:

Shipping Info: FEDEX UPS CLIENT
Airbill No:
Temp C: Temp Blank: Intact / Not Intact

*	Sample Description	Date/Time Collected	Matrix	No. of Containers	Filt. Y/N CVOC SIM	Filt. Y/N BNA SIM	Filt. Y/N TOC	Filt. Y/N Dissolved Gasses	Filt. Y/N Anions	Filt. Y/N Alkalinity	Filt. Y/N Hex. Chromium	Filt. Y/N Ferrous Iron	Filt. Y/N	Filt. Y/N
	SY-BRMW4-62-72-110923	11.9/0930	W	12	X	X	X	X	X	X	X	X		
	SY-BRMW4-62-72-110923	0935												
	SY-BRMW4-138-148-110923	0940												
	SY-BRMW3-47-62-110923	0945												
	SY-BRMW3-145-155-110923	1000												
	SY-BRMW3-287-297-110923	1015												
	SY-BRMW4-291-301	1100												
	SY-BRMW1-42-52-110923	1145												
	SY-BRMW1-65-75-110923	1350												
	SY-BRMW10-65-75-110923	1355												
	SY-BRMW1-150-157-110923	1240												
	TB33-110923	1500		3	X									

COMMENTS: SY-BR... bottle labels include parentheses — do not include parentheses, use IDs as written here

Relinquished By:	Date/Time	Received By:	Relinquished By:	Date/Time	Received By:
	11.10 0837				
Relinquished By:	Date/Time	Received By:	Relinquished By:	Date/Time	Received By:

The terms and conditions on the following page hereof shall govern services, except when a signed contractual agreement exists.

Katahdin
ANALYTICAL SERVICES

Katahdin Analytical Services

Login Chain of Custody (ln01)

Nov. 14, 2023
10:44 AM

Login Number: SQ6238

Account: CREDEREASSOC001
Credere Associates

Project: CREDERE-DOW

Primary Report Address:
Allison Drouin
Credere Associates, LLC
776 Main Street

Westbrook, ME 04092

adrouin@crederellc.com

Primary Invoice Address:
Accounts Payable
Credere Associates, LLC
776 main Street

Westbrook,ME 04092

jenn@crederellc.com (also, cc PM)

Report CC Addresses:
Invoice CC Addresses:

Quote/Incoming: CREDERE-DOW

Login Information

ANALYSIS INSTRUCTIONS	:	DOD 5.1. ND to LOD with J-flags. SVOA use 3550C/3510C/8270D mg/kg. Anions = NO3, SO4, Cl. When hex Cr MS/MSD fail, perform pH & ORP, include this data in the case narrative. Need to include copies of standard receipt and standard prep logbooks in final report.
CHECK NO.	:	
CLIENT PO#	:	18001468
CLIENT PROJECT MANAGE	:	Peter Thompson
CONTRACT	:	W912WJ-18-C-0019
COOLER TEMPERATURE	:	0.6, 0.9, 1.7, 0.1
DELIVERY SERVICES	:	Client
EDD FORMAT	:	FUDSCHEM
ISM INSTRUCTIONS	:	
LOGIN INITIALS	:	JCB
PM	:	HHM
PROJECT NAME	:	Dow Military Airfield Salvage Yard
QC LEVEL	:	IV
REPORT INSTRUCTIONS	:	Upload to FUDSChem. Report to adrouin@crederellc.com. Invoices to pthompson@crederellc.com and jenn@crederellc.com.
SDG ID	:	
SDG STATUS	:	
TEMPLATE	:	
VERBAL TAT	:	

10:47 am, Nov 14, 2023

Run Reports: Logindetail

Login Number: SQ6238

Account: CREDEREASSOC001
Credere Associates

Project: CREDERE-DOW

Quote/Incoming: CREDERE-DOW

Laboratory Sample ID	Client Sample Number	Collect Date/Time	Receive Date	PR	Due Date	Verbal Due Date	Mailed
SQ6238-1	SY-BRMW4-62-72-110923	09-NOV-23 09:00	10-NOV-23		04-DEC-23		

Sample Comments: Anions = NO3, SO4, Cl.

Matrix		Product	Hold Date (shortest)		Notes	Bottle Type
Aqueous	S	E300.0-ANIONS	12-NOV-23	SHORT		250mL Plastic
Service	S	REPORTING				
Aqueous	S	RSKSOP175-MEE	23-NOV-23			40mL Vial+HCl
Aqueous	S	SM2320B-ALKALINITY	23-NOV-23			500mL Plastic
Aqueous	S	SM3500D-FERROUS IRON	10-NOV-23	SHORT	Rec. on Holddate	250mL Plastic+HCl
Aqueous	S	SM5310B-TOC	07-DEC-23			40mL Vial+HCl
Aqueous	S	SW7196A-CRVI-AQ	10-NOV-23	SHORT	Rec. on Holddate	250mL Plastic
Aqueous	S	SW8260SIM-S	23-NOV-23			40mL Vial+HCl
Aqueous	S	SW8270SIMPAH-S	16-NOV-23			1L N-Amber Glass
Service	S	WASTE-DISPOSAL				

SQ6238-2	SY-BRMW40-62-72-110923	09-NOV-23 09:05	10-NOV-23		04-DEC-23		

Sample Comments: Anions = NO3, SO4, Cl.

Matrix		Product	Hold Date (shortest)		Notes	Bottle Type
Aqueous	S	E300.0-ANIONS	12-NOV-23	SHORT		250mL Plastic
Aqueous	S	RSKSOP175-MEE	23-NOV-23			40mL Vial+HCl
Aqueous	S	SM2320B-ALKALINITY	23-NOV-23			500mL Plastic
Aqueous	S	SM3500D-FERROUS IRON	10-NOV-23	SHORT	Rec. on Holddate	250mL Plastic+HCl
Aqueous	S	SM5310B-TOC	07-DEC-23			40mL Vial+HCl
Aqueous	S	SW7196A-CRVI-AQ	10-NOV-23	SHORT	Rec. on Holddate	250mL Plastic
Aqueous	S	SW8260SIM-S	23-NOV-23			40mL Vial+HCl
Aqueous	S	SW8270SIMPAH-S	16-NOV-23			1L N-Amber Glass

SQ6238-3	SY-BRMW4-138-148-110923	09-NOV-23 09:40	10-NOV-23		04-DEC-23		

Sample Comments: Anions = NO3, SO4, Cl.

Matrix		Product	Hold Date (shortest)		Notes	Bottle Type
Aqueous	S	E300.0-ANIONS	12-NOV-23	SHORT		250mL Plastic
Aqueous	S	RSKSOP175-MEE	23-NOV-23			40mL Vial+HCl
Aqueous	S	SM2320B-ALKALINITY	23-NOV-23			500mL Plastic
Aqueous	S	SM3500D-FERROUS IRON	10-NOV-23	SHORT	Rec. on Holddate	250mL Plastic+HCl
Aqueous	S	SM5310B-TOC	07-DEC-23			40mL Vial+HCl
Aqueous	S	SW7196A-CRVI-AQ	10-NOV-23	SHORT	Rec. on Holddate	250mL Plastic
Aqueous	S	SW8260SIM-S	23-NOV-23			40mL Vial+HCl
Aqueous	S	SW8270SIMPAH-S	16-NOV-23			1L N-Amber Glass

SQ6238-4	SY-BRMW3-47-62-110923	09-NOV-23 09:45	10-NOV-23		04-DEC-23		

Sample Comments: Anions = NO3, SO4, Cl.

Matrix		Product	Hold Date (shortest)		Notes	Bottle Type
Aqueous	S	E300.0-ANIONS	12-NOV-23	SHORT		250mL Plastic
Aqueous	S	RSKSOP175-MEE	23-NOV-23			40mL Vial+HCl
Aqueous	S	SM2320B-ALKALINITY	23-NOV-23			500mL Plastic
Aqueous	S	SM3500D-FERROUS IRON	10-NOV-23	SHORT	Rec. on Holddate	250mL Plastic+HCl
Aqueous	S	SM5310B-TOC	07-DEC-23			40mL Vial+HCl
Aqueous	S	SW7196A-CRVI-AQ	10-NOV-23	SHORT	Rec. on Holddate	250mL Plastic
Aqueous	S	SW8260SIM-S	23-NOV-23			40mL Vial+HCl
Aqueous	S	SW8270SIMPAH-S	16-NOV-23			1L N-Amber Glass

10:47 am, Nov 14, 2023

Run Reports: Logindetail

Login Number: SQ6238

Account: CREDEREASSOC001
Credere Associates

Project: CREDERE-DOW

Quote/Incoming: CREDERE-DOW

Laboratory Sample ID	Client Sample Number	Collect Date/Time	Receive Date	PR	Due Date	Verbal Due Date	Mailed
SQ6238-5	SY-BRMW3-145-155-110923	09-NOV-23 10:00	10-NOV-23		04-DEC-23		

Sample Comments: Anions = NO3, SO4, Cl.

Matrix		Product	Hold Date (shortest)		Notes	Bottle Type
Aqueous	S	E300.0-ANIONS	12-NOV-23	SHORT		250mL Plastic
Aqueous	S	RSKSOP175-MEE	23-NOV-23			40mL Vial+HCl
Aqueous	S	SM2320B-ALKALINITY	23-NOV-23			500mL Plastic
Aqueous	S	SM3500D-FERROUS IRON	10-NOV-23	SHORT	Rec. on Holddate	250mL Plastic+HCl
Aqueous	S	SM5310B-TOC	07-DEC-23			40mL Vial+HCl
Aqueous	S	SW7196A-CRVI-AQ	10-NOV-23	SHORT	Rec. on Holddate	250mL Plastic
Aqueous	S	SW8260SIM-S	23-NOV-23			40mL Vial+HCl
Aqueous	S	SW8270SIMPAH-S	16-NOV-23			1L N-Amber Glass

SQ6238-6	SY-BRMW3-287-297-110923	09-NOV-23 10:15	10-NOV-23		04-DEC-23		

Sample Comments: Anions = NO3, SO4, Cl.

Matrix		Product	Hold Date (shortest)		Notes	Bottle Type
Aqueous	S	E300.0-ANIONS	12-NOV-23	SHORT		250mL Plastic
Aqueous	S	RSKSOP175-MEE	23-NOV-23			40mL Vial+HCl
Aqueous	S	SM2320B-ALKALINITY	23-NOV-23			500mL Plastic
Aqueous	S	SM3500D-FERROUS IRON	10-NOV-23	SHORT	Rec. on Holddate	250mL Plastic+HCl
Aqueous	S	SM5310B-TOC	07-DEC-23			40mL Vial+HCl
Aqueous	S	SW7196A-CRVI-AQ	10-NOV-23	SHORT	Rec. on Holddate	250mL Plastic
Aqueous	S	SW8260SIM-S	23-NOV-23			40mL Vial+HCl
Aqueous	S	SW8270SIMPAH-S	16-NOV-23			1L N-Amber Glass

SQ6238-7	SY-BRMW4-291-301-110923	09-NOV-23 11:00	10-NOV-23		04-DEC-23		

Sample Comments: Anions = NO3, SO4, Cl.

Matrix		Product	Hold Date (shortest)		Notes	Bottle Type
Aqueous	S	E300.0-ANIONS	12-NOV-23	SHORT		250mL Plastic
Aqueous	S	RSKSOP175-MEE	23-NOV-23			40mL Vial+HCl
Aqueous	S	SM2320B-ALKALINITY	23-NOV-23			500mL Plastic
Aqueous	S	SM3500D-FERROUS IRON	10-NOV-23	SHORT	Rec. on Holddate	250mL Plastic+HCl
Aqueous	S	SM5310B-TOC	07-DEC-23			40mL Vial+HCl
Aqueous	S	SW7196A-CRVI-AQ	10-NOV-23	SHORT	Rec. on Holddate	250mL Plastic
Aqueous	S	SW8260SIM-S	23-NOV-23			40mL Vial+HCl
Aqueous	S	SW8270SIMPAH-S	16-NOV-23			1L N-Amber Glass

SQ6238-8	SY-BRMW1-42-52-110923	09-NOV-23 11:45	10-NOV-23		04-DEC-23		

Sample Comments: Anions = NO3, SO4, Cl.

Matrix		Product	Hold Date (shortest)		Notes	Bottle Type
Aqueous	S	E300.0-ANIONS	12-NOV-23	SHORT		250mL Plastic
Aqueous	S	RSKSOP175-MEE	23-NOV-23			40mL Vial+HCl
Aqueous	S	SM2320B-ALKALINITY	23-NOV-23			500mL Plastic
Aqueous	S	SM3500D-FERROUS IRON	10-NOV-23	SHORT	Rec. on Holddate	250mL Plastic+HCl
Aqueous	S	SM5310B-TOC	07-DEC-23			40mL Vial+HCl
Aqueous	S	SW7196A-CRVI-AQ	10-NOV-23	SHORT	Rec. on Holddate	250mL Plastic
Aqueous	S	SW8260SIM-S	23-NOV-23			40mL Vial+HCl
Aqueous	S	SW8270SIMPAH-S	16-NOV-23			1L N-Amber Glass

10:47 am, Nov 14, 2023

Run Reports: Logindetail

Login Number: SQ6238

Account: CREDEREASSOC001
Credere Associates

Project: CREDERE-DOW

Quote/Incoming: CREDERE-DOW

Laboratory Sample ID	Client Sample Number	Collect Date/Time	Receive Date	PR	Due Date	Verbal Due Date	Mailed
SQ6238-9	SY-BRMW1-65-75-110923	09-NOV-23 13:50	10-NOV-23		04-DEC-23		

Sample Comments: Anions = NO3, SO4, Cl.

Matrix		Product	Hold Date (shortest)		Notes	Bottle Type
Aqueous	S	E300.0-ANIONS	12-NOV-23	SHORT		250mL Plastic
Aqueous	S	RSKSOP175-MEE	23-NOV-23			40mL Vial+HCl
Aqueous	S	SM2320B-ALKALINITY	23-NOV-23			500mL Plastic
Aqueous	S	SM3500D-FERROUS IRON	10-NOV-23	SHORT	Rec. on Holddate	250mL Plastic+HCl
Aqueous	S	SM5310B-TOC	07-DEC-23			40mL Vial+HCl
Aqueous	S	SW7196A-CRVI-AQ	10-NOV-23	SHORT	Rec. on Holddate	250mL Plastic
Aqueous	S	SW8260SIM-S	23-NOV-23			40mL Vial+HCl
Aqueous	S	SW8270SIMPAH-S	16-NOV-23			1L N-Amber Glass

SQ6238-10	SY-BRMW10-65-75-110923	09-NOV-23 13:55	10-NOV-23		04-DEC-23		

Sample Comments: Anions = NO3, SO4, Cl.

Matrix		Product	Hold Date (shortest)		Notes	Bottle Type
Aqueous	S	E300.0-ANIONS	12-NOV-23	SHORT		250mL Plastic
Aqueous	S	RSKSOP175-MEE	23-NOV-23			40mL Vial+HCl
Aqueous	S	SM2320B-ALKALINITY	23-NOV-23			500mL Plastic
Aqueous	S	SM3500D-FERROUS IRON	10-NOV-23	SHORT	Rec. on Holddate	250mL Plastic+HCl
Aqueous	S	SM5310B-TOC	07-DEC-23			40mL Vial+HCl
Aqueous	S	SW7196A-CRVI-AQ	10-NOV-23	SHORT	Rec. on Holddate	250mL Plastic
Aqueous	S	SW8260SIM-S	23-NOV-23			40mL Vial+HCl
Aqueous	S	SW8270SIMPAH-S	16-NOV-23			1L N-Amber Glass

SQ6238-11	SY-BRMW1-150-157-110923	09-NOV-23 12:40	10-NOV-23		04-DEC-23		

Sample Comments: Anions = NO3, SO4, Cl.

Matrix		Product	Hold Date (shortest)		Notes	Bottle Type
Aqueous	S	E300.0-ANIONS	12-NOV-23	SHORT		250mL Plastic
Aqueous	S	RSKSOP175-MEE	23-NOV-23			40mL Vial+HCl
Aqueous	S	SM2320B-ALKALINITY	23-NOV-23			500mL Plastic
Aqueous	S	SM3500D-FERROUS IRON	10-NOV-23	SHORT	Rec. on Holddate	250mL Plastic+HCl
Aqueous	S	SM5310B-TOC	07-DEC-23			40mL Vial+HCl
Aqueous	S	SW7196A-CRVI-AQ	10-NOV-23	SHORT	Rec. on Holddate	250mL Plastic
Aqueous	S	SW8260SIM-S	23-NOV-23			40mL Vial+HCl
Aqueous	S	SW8270SIMPAH-S	16-NOV-23			1L N-Amber Glass

SQ6238-12	TB33-110923	09-NOV-23 15:00	10-NOV-23		04-DEC-23		

Sample Comments:

Matrix		Product	Hold Date (shortest)		Notes	Bottle Type
Aqueous	S	SW8260SIM-S	23-NOV-23			40mL Vial+HCl

Total Samples: 12 ***Total Analyses: 91***

10:47 am, Nov 14, 2023

Run Reports: Logindetail

SAMPLE DATA SUMMARY PACKAGE

KATAHDIN ANALYTICAL SERVICES - ORGANIC DATA QUALIFIERS

U Indicates the compound was analyzed for but not detected above the specified level. This level may be the Practical Quantitation Level (PQL) (also called Limit of Quantitation (LOQ)), the Limit of Detection (LOD) or Method Detection Limit (MDL) as required by the client.

Note: All results reported as "U" MDL have a 50% rate for false negatives compared to those results reported as "U" PQL, "U" LOQ or "U" LOD, where the rate of false negatives is <1%.

* Compound recovery or percent RPD (relative percent difference) was outside of quality control limits.

D Indicates the result was obtained from analysis of a diluted sample. Surrogate recoveries may not be calculable.

E Estimated value. This flag identifies compounds whose concentrations exceed the upper level of the calibration range of the instrument for that specific analysis.

J Estimated value. The analyte was detected in the sample at a concentration less than the laboratory Practical Quantitation Level (PQL) (also called Limit of Quantitation (LOQ)), but above the Method Detection Limit (MDL).

And/or

J Used for Dual Column analytes when there is a greater than 40% difference for detected concentrations between the two GC/HPLC columns.

B Indicates the analyte was detected in the laboratory method blank analyzed concurrently with the sample.

I Indicates that the flagged compound did not meet DoD criteria in the corresponding Initial Calibration (ICAL).

D Indicates that the flagged compound did not meet DoD criteria in the corresponding Initial Calibration Verification (ICV).

C Indicates that the flagged compound did not meet DoD criteria in the corresponding opening Calibration Verification (CV).

V Indicates that the flagged compound did not meet DoD criteria in the corresponding closing Calibration Verification (CV).

L/LL Indicates that the flagged compound did not meet DoD criteria in the corresponding Laboratory Control Sample (LCS) and/or Laboratory Control Sample Duplicate (LCSD) prepared and/or analyzed concurrently with the sample.

M/MM Indicates that the flagged compound did not meet DoD criteria in the Matrix Spike (MS) and/or Matrix Spike Duplicate MSD) prepared and/or analyzed concurrently with the native sample.

H Indicates the flagged compound was detected on the primary column but was not detected on the confirmation column therefore the compound is not reported as a positive detection. (SW846 8330A/B only)

KATAHDIN ANALYTICAL SERVICES – INORGANIC DATA QUALIFIERS

The sampled date indicated on the attached Report(s) of Analysis (ROA) is the date for which a grab sample was collected or the date for which a composite sample was completed. Beginning and start times for composite samples can be found on the Chain-of-Custody.

U Indicates the compound was analyzed for but not detected above the specified level. This level may be the Practical Quantitation Level (PQL) (also called Limit of Quantitation (LOQ)), the Limit of Detection (LOD) or Method Detection Limit (MDL) as required by the client.

Note: All results reported as "U" MDL have a 50% rate for false negatives compared to those results reported as "U" PQL "U" LOQ or "U" LOD, where the rate of false negatives is <1%.

E Estimated value. This flag identifies compounds whose concentrations exceed the upper level of the calibration range of the instrument for that specific analysis.

J Estimated value. The analyte was detected in the sample at a concentration less than the laboratory Practical Quantitation Level (PQL) (also called Limit of Quantitation (LOQ)), but above the Method Detection Limit (MDL).

I-7 The laboratory's Practical Quantitation Level (PQL) or LOQ could not be achieved for this parameter due to sample composition, matrix effects, sample volume, or quantity used for analysis.

A-4 Please refer to cover letter or narrative for further information.

H_ Please note that the regulatory holding time for _____ is "analyze immediately". Ideally, this analysis must be performed in the field at the time of sample collection. _____ for this sample was not performed at the time of sample collection. The analysis was performed as soon as possible after receipt by the laboratory.

H1 - pH H2 - DO H3 - sulfite H4 - residual chlorine

T1 The client did not provide the full volume of at least one liter for analysis of TSS. Therefore, the PQL of 2.5 mg/L could not be achieved.

T2 The client provided the required volume of at least one liter for analysis of TSS, but the laboratory could not filter the full one liter volume due to the sample matrix. Therefore, the PQL of 2.5 mg/L could not be achieved.

M1 The matrix spike and/or matrix spike duplicate recovery performed on this sample was outside of the laboratory acceptance criteria. Sample matrix is suspected. The laboratory criteria was met for the Laboratory Control Sample (LCS) analyzed concurrently with this sample.

M2 The matrix spike and/or matrix spike duplicate recovery was outside of the laboratory acceptance criteria. The native sample concentration is greater than four times the spike added concentration so the spike added could not be distinguished from the native sample concentration.

R1 The relative percent difference (RPD) between the duplicate analyses performed on this sample was outside of the laboratory acceptance criteria (when both values are greater than ten times the PQL).

MCL	Maximum Contaminant Level	NL	No limit
NFL	No Free Liquid Present	FLP	Free Liquid Present
NOD	No Odor Detected	TON	Threshold Odor Number

D-1 As required by Method 5210B, APHA Standard Methods for the Examination of Water and Wastewater (21st edition), the BOD value reported for this sample is 'qualified' because the check standard run concurrently with the sample analysis did not meet the criteria specified in the method (198 +/- 30.5 mg/L). These results may not be reportable for compliance purposes.

D-2 The measured final dissolved oxygen concentrations of all dilutions were less than the method-specified limit of 1 mg/L. The reported BOD result was calculated assuming a final oxygen concentration equal to 1 mg/L. The reported value should be considered a minimum value.

D-3 The dilution water used to prepare this sample did not meet the method and/or regulatory criteria of less than 0.2 or 0.4 mg/L dissolved oxygen (DO) uptake over the five day period of incubation. These results may not be reportable for compliance purposes.

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Report of Analytical Results

SDG: SQ6238
Lab ID: SQ6238-1
Client ID: SY-BRMW4-62-72-110923
Matrix: AQ
Lab File ID: D8887.D

Sample Date: 09-NOV-23
Extract Date: 17-NOV-23
Extracted By: JSS
Extraction Method: SW846 5030C
Lab Prep Batch: WG345599

Report Date: 12-DEC-23
Analysis Date: 17-NOV-23
Analyst: JSS
Analysis Method: SW846 8260C SIM
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Vinyl Chloride	U	0.050	ug/L	1	.1	0.10	0.0037	0.050
1,1-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0091	0.025
trans-1,2-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0033	0.025
cis-1,2-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0057	0.025
Trichloroethene	U	0.025	ug/L	1	.05	0.050	0.012	0.025
Tetrachloroethene	U	0.025	ug/L	1	.05	0.050	0.0091	0.025
Dibromofluoromethane		77.0	%					
1,2-Dichloroethane-d4		78.4	%					
Toluene-D8		89.3	%					
p-Bromofluorobenzene		78.6	%					

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Report of Analytical Results

SDG: SQ6238
Lab ID: SQ6238-2
Client ID: SY-BRMW40-62-72-110923
Matrix: AQ
Lab File ID: D8888.D

Sample Date: 09-NOV-23
Extract Date: 17-NOV-23
Extracted By: JSS
Extraction Method: SW846 5030C
Lab Prep Batch: WG345599

Report Date: 12-DEC-23
Analysis Date: 17-NOV-23
Analyst: JSS
Analysis Method: SW846 8260C SIM
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Vinyl Chloride	U	0.050	ug/L	1	.1	0.10	0.0037	0.050
1,1-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0091	0.025
trans-1,2-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0033	0.025
cis-1,2-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0057	0.025
Trichloroethene	U	0.025	ug/L	1	.05	0.050	0.012	0.025
Tetrachloroethene	U	0.025	ug/L	1	.05	0.050	0.0091	0.025
Dibromofluoromethane		78.3	%					
1,2-Dichloroethane-d4		81.3	%					
Toluene-D8		88.6	%					
p-Bromofluorobenzene		80.2	%					

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Report of Analytical Results

SDG: SQ6238
Lab ID: SQ6238-3
Client ID: SY-BRMW4-138-148-110923
Matrix: AQ
Lab File ID: D8889.D

Sample Date: 09-NOV-23
Extract Date: 17-NOV-23
Extracted By: JSS
Extraction Method: SW846 5030C
Lab Prep Batch: WG345599

Report Date: 12-DEC-23
Analysis Date: 17-NOV-23
Analyst: JSS
Analysis Method: SW846 8260C SIM
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Vinyl Chloride	U	0.050	ug/L	1	.1	0.10	0.0037	0.050
1,1-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0091	0.025
trans-1,2-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0033	0.025
cis-1,2-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0057	0.025
Trichloroethene		0.079	ug/L	1	.05	0.050	0.012	0.025
Tetrachloroethene	U	0.025	ug/L	1	.05	0.050	0.0091	0.025
Dibromofluoromethane		79.6	%					
1,2-Dichloroethane-d4		83.4	%					
Toluene-D8		90.5	%					
p-Bromofluorobenzene		76.4	%					

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Report of Analytical Results

SDG: SQ6238
Lab ID: SQ6238-4
Client ID: SY-BRMW3-47-62-110923
Matrix: AQ
Lab File ID: D8890.D

Sample Date: 09-NOV-23
Extract Date: 17-NOV-23
Extracted By: JSS
Extraction Method: SW846 5030C
Lab Prep Batch: WG345599

Report Date: 12-DEC-23
Analysis Date: 17-NOV-23
Analyst: JSS
Analysis Method: SW846 8260C SIM
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Vinyl Chloride	J	0.054	ug/L	1	.1	0.10	0.0037	0.050
1,1-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0091	0.025
trans-1,2-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0033	0.025
cis-1,2-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0057	0.025
Trichloroethene	U	0.025	ug/L	1	.05	0.050	0.012	0.025
Tetrachloroethene	U	0.025	ug/L	1	.05	0.050	0.0091	0.025
Dibromofluoromethane		88.0	%					
1,2-Dichloroethane-d4		90.1	%					
Toluene-D8		93.3	%					
p-Bromofluorobenzene		77.1	%					

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Report of Analytical Results

SDG: SQ6238
Lab ID: SQ6238-5
Client ID: SY-BRMW3-145-155-110923
Matrix: AQ
Lab File ID: D8891.D

Sample Date: 09-NOV-23
Extract Date: 17-NOV-23
Extracted By: JSS
Extraction Method: SW846 5030C
Lab Prep Batch: WG345599

Report Date: 12-DEC-23
Analysis Date: 17-NOV-23
Analyst: JSS
Analysis Method: SW846 8260C SIM
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Vinyl Chloride	J	0.027	ug/L	1	.1	0.10	0.0037	0.050
1,1-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0091	0.025
trans-1,2-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0033	0.025
cis-1,2-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0057	0.025
Trichloroethene	U	0.025	ug/L	1	.05	0.050	0.012	0.025
Tetrachloroethene	U	0.025	ug/L	1	.05	0.050	0.0091	0.025
Dibromofluoromethane		98.0	%					
1,2-Dichloroethane-d4		100.	%					
Toluene-D8		95.0	%					
p-Bromofluorobenzene		77.9	%					

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Report of Analytical Results

SDG: SQ6238
Lab ID: SQ6238-6
Client ID: SY-BRMW3-287-297-110923
Matrix: AQ
Lab File ID: D8892.D

Sample Date: 09-NOV-23
Extract Date: 17-NOV-23
Extracted By: JSS
Extraction Method: SW846 5030C
Lab Prep Batch: WG345599

Report Date: 12-DEC-23
Analysis Date: 17-NOV-23
Analyst: JSS
Analysis Method: SW846 8260C SIM
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Vinyl Chloride	J	0.024	ug/L	1	.1	0.10	0.0037	0.050
1,1-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0091	0.025
trans-1,2-Dichloroethene	J	0.043	ug/L	1	.05	0.050	0.0033	0.025
cis-1,2-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0057	0.025
Trichloroethene	U	0.025	ug/L	1	.05	0.050	0.012	0.025
Tetrachloroethene	U	0.025	ug/L	1	.05	0.050	0.0091	0.025
Dibromofluoromethane		86.7	%					
1,2-Dichloroethane-d4		88.1	%					
Toluene-D8		95.3	%					
p-Bromofluorobenzene		78.9	%					

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Report of Analytical Results

SDG: SQ6238
Lab ID: SQ6238-7
Client ID: SY-BRMW4-291-301-110923
Matrix: AQ
Lab File ID: D8893.D

Sample Date: 09-NOV-23
Extract Date: 17-NOV-23
Extracted By: JSS
Extraction Method: SW846 5030C
Lab Prep Batch: WG345599

Report Date: 12-DEC-23
Analysis Date: 17-NOV-23
Analyst: JSS
Analysis Method: SW846 8260C SIM
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Vinyl Chloride	U	0.050	ug/L	1	.1	0.10	0.0037	0.050
1,1-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0091	0.025
trans-1,2-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0033	0.025
cis-1,2-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0057	0.025
Trichloroethene		0.070	ug/L	1	.05	0.050	0.012	0.025
Tetrachloroethene	U	0.025	ug/L	1	.05	0.050	0.0091	0.025
Dibromofluoromethane		82.2	%					
1,2-Dichloroethane-d4		86.3	%					
Toluene-D8		90.3	%					
p-Bromofluorobenzene		78.2	%					

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Report of Analytical Results

SDG: SQ6238
Lab ID: SQ6238-8
Client ID: SY-BRMW1-42-52-110923
Matrix: AQ
Lab File ID: D8894.D

Sample Date: 09-NOV-23
Extract Date: 17-NOV-23
Extracted By: JSS
Extraction Method: SW846 5030C
Lab Prep Batch: WG345599

Report Date: 12-DEC-23
Analysis Date: 17-NOV-23
Analyst: JSS
Analysis Method: SW846 8260C SIM
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Vinyl Chloride	U	0.050	ug/L	1	.1	0.10	0.0037	0.050
1,1-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0091	0.025
trans-1,2-Dichloroethene	J	0.030	ug/L	1	.05	0.050	0.0033	0.025
cis-1,2-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0057	0.025
Trichloroethene		0.066	ug/L	1	.05	0.050	0.012	0.025
Tetrachloroethene	U	0.025	ug/L	1	.05	0.050	0.0091	0.025
Dibromofluoromethane		83.2	%					
1,2-Dichloroethane-d4		87.1	%					
Toluene-D8		90.7	%					
p-Bromofluorobenzene		76.8	%					

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Report of Analytical Results

SDG: SQ6238
Lab ID: SQ6238-9
Client ID: SY-BRMW1-65-75-110923
Matrix: AQ
Lab File ID: D8895.D

Sample Date: 09-NOV-23
Extract Date: 17-NOV-23
Extracted By: JSS
Extraction Method: SW846 5030C
Lab Prep Batch: WG345599

Report Date: 12-DEC-23
Analysis Date: 17-NOV-23
Analyst: JSS
Analysis Method: SW846 8260C SIM
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Vinyl Chloride	U	0.050	ug/L	1	.1	0.10	0.0037	0.050
1,1-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0091	0.025
trans-1,2-Dichloroethene	J	0.022	ug/L	1	.05	0.050	0.0033	0.025
cis-1,2-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0057	0.025
Trichloroethene		0.081	ug/L	1	.05	0.050	0.012	0.025
Tetrachloroethene	U	0.025	ug/L	1	.05	0.050	0.0091	0.025
Dibromofluoromethane		86.3	%					
1,2-Dichloroethane-d4		88.9	%					
Toluene-D8		92.7	%					
p-Bromofluorobenzene		78.2	%					

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Report of Analytical Results

SDG: SQ6238
Lab ID: SQ6238-10
Client ID: SY-BRMW10-65-75-110923
Matrix: AQ
Lab File ID: D8896.D

Sample Date: 09-NOV-23
Extract Date: 17-NOV-23
Extracted By: JSS
Extraction Method: SW846 5030C
Lab Prep Batch: WG345599

Report Date: 12-DEC-23
Analysis Date: 17-NOV-23
Analyst: JSS
Analysis Method: SW846 8260C SIM
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Vinyl Chloride	U	0.050	ug/L	1	.1	0.10	0.0037	0.050
1,1-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0091	0.025
trans-1,2-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0033	0.025
cis-1,2-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0057	0.025
Trichloroethene		0.082	ug/L	1	.05	0.050	0.012	0.025
Tetrachloroethene	U	0.025	ug/L	1	.05	0.050	0.0091	0.025
Dibromofluoromethane		88.8	%					
1,2-Dichloroethane-d4		94.0	%					
Toluene-D8		92.4	%					
p-Bromofluorobenzene		79.3	%					

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Report of Analytical Results

SDG: SQ6238
Lab ID: SQ6238-11
Client ID: SY-BRMW1-150-157-110923
Matrix: AQ
Lab File ID: D8897.D

Sample Date: 09-NOV-23
Extract Date: 17-NOV-23
Extracted By: JSS
Extraction Method: SW846 5030C
Lab Prep Batch: WG345599

Report Date: 12-DEC-23
Analysis Date: 17-NOV-23
Analyst: JSS
Analysis Method: SW846 8260C SIM
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Vinyl Chloride	U	0.050	ug/L	1	.1	0.10	0.0037	0.050
1,1-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0091	0.025
trans-1,2-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0033	0.025
cis-1,2-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0057	0.025
Trichloroethene		0.86	ug/L	1	.05	0.050	0.012	0.025
Tetrachloroethene	U	0.025	ug/L	1	.05	0.050	0.0091	0.025
Dibromofluoromethane		100.	%					
1,2-Dichloroethane-d4		99.2	%					
Toluene-D8		90.9	%					
p-Bromofluorobenzene		78.9	%					

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Report of Analytical Results

SDG: SQ6238
Lab ID: SQ6238-12
Client ID: TB33-110923
Matrix: AQ
Lab File ID: D8886.D

Sample Date: 09-NOV-23
Extract Date: 17-NOV-23
Extracted By: JSS
Extraction Method: SW846 5030C
Lab Prep Batch: WG345599

Report Date: 12-DEC-23
Analysis Date: 17-NOV-23
Analyst: JSS
Analysis Method: SW846 8260C SIM
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Vinyl Chloride	U	0.050	ug/L	1	.1	0.10	0.0037	0.050
1,1-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0091	0.025
trans-1,2-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0033	0.025
cis-1,2-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0057	0.025
Trichloroethene	U	0.025	ug/L	1	.05	0.050	0.012	0.025
Tetrachloroethene	U	0.025	ug/L	1	.05	0.050	0.0091	0.025
Dibromofluoromethane		101.	%					
1,2-Dichloroethane-d4		101.	%					
Toluene-D8		99.2	%					
p-Bromofluorobenzene		79.9	%					

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Report of Analytical Results

SDG: SQ6238
Lab ID: SQ6238-1
Client ID: SY-BRMW4-62-72-110923
Matrix: AQ
Lab File ID: N0439.D

Sample Date: 09-NOV-23
Extract Date: 16-NOV-23
Extracted By: AN/CMW
Extraction Method: SW846 3510C
Lab Prep Batch: WG345531

Report Date: 29-DEC-23
Analysis Date: 11-DEC-23
Analyst: EP
Analysis Method: SW846 8270D SIM
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	0.093	ug/L	1	.2	0.19	0.060	0.093
2-Methylnaphthalene	U	0.093	ug/L	1	.2	0.19	0.072	0.093
Acenaphthylene	U	0.093	ug/L	1	.2	0.19	0.050	0.093
Acenaphthene	U	0.093	ug/L	1	.2	0.19	0.060	0.093
Fluorene	U	0.093	ug/L	1	.2	0.19	0.057	0.093
Phenanthrene	U	0.093	ug/L	1	.2	0.19	0.048	0.093
Anthracene	U	0.093	ug/L	1	.2	0.19	0.041	0.093
Fluoranthene	U	0.093	ug/L	1	.2	0.19	0.068	0.093
Pyrene	U	0.093	ug/L	1	.2	0.19	0.055	0.093
Benzo(a)anthracene	U	0.093	ug/L	1	.2	0.19	0.043	0.093
Chrysene	U	0.093	ug/L	1	.2	0.19	0.034	0.093
Benzo(b)Fluoranthene	U	0.093	ug/L	1	.2	0.19	0.083	0.093
Benzo(k)fluoranthene	U	0.093	ug/L	1	.2	0.19	0.046	0.093
Benzo(a)pyrene	U	0.093	ug/L	1	.2	0.19	0.062	0.093
Indeno(1,2,3-cd)pyrene	U	0.093	ug/L	1	.2	0.19	0.048	0.093
Dibenzo(a,h)anthracene	U	0.093	ug/L	1	.2	0.19	0.065	0.093
Benzo(g,h,i)perylene	U	0.093	ug/L	1	.2	0.19	0.061	0.093
2-Methylnaphthalene-D10		76.9	%					
Fluorene-D10		81.4	%					
Pyrene-D10		93.5	%					

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Report of Analytical Results

SDG: SQ6238
Lab ID: SQ6238-2
Client ID: SY-BRMW40-62-72-110923
Matrix: AQ
Lab File ID: N0440.D

Sample Date: 09-NOV-23
Extract Date: 16-NOV-23
Extracted By: AN/CMW
Extraction Method: SW846 3510C
Lab Prep Batch: WG345531

Report Date: 29-DEC-23
Analysis Date: 11-DEC-23
Analyst: EP
Analysis Method: SW846 8270D SIM
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	0.094	ug/L	1	.2	0.19	0.060	0.094
2-Methylnaphthalene	U	0.094	ug/L	1	.2	0.19	0.073	0.094
Acenaphthylene	U	0.094	ug/L	1	.2	0.19	0.051	0.094
Acenaphthene	U	0.094	ug/L	1	.2	0.19	0.060	0.094
Fluorene	U	0.094	ug/L	1	.2	0.19	0.058	0.094
Phenanthrene	U	0.094	ug/L	1	.2	0.19	0.048	0.094
Anthracene	U	0.094	ug/L	1	.2	0.19	0.042	0.094
Fluoranthene	U	0.094	ug/L	1	.2	0.19	0.069	0.094
Pyrene	U	0.094	ug/L	1	.2	0.19	0.056	0.094
Benzo(a)anthracene	U	0.094	ug/L	1	.2	0.19	0.043	0.094
Chrysene	U	0.094	ug/L	1	.2	0.19	0.034	0.094
Benzo(b)Fluoranthene	U	0.094	ug/L	1	.2	0.19	0.084	0.094
Benzo(k)fluoranthene	U	0.094	ug/L	1	.2	0.19	0.046	0.094
Benzo(a)pyrene	U	0.094	ug/L	1	.2	0.19	0.062	0.094
Indeno(1,2,3-cd)pyrene	U	0.094	ug/L	1	.2	0.19	0.049	0.094
Dibenzo(a,h)anthracene	U	0.094	ug/L	1	.2	0.19	0.066	0.094
Benzo(g,h,i)perylene	U	0.094	ug/L	1	.2	0.19	0.061	0.094
2-Methylnaphthalene-D10		80.9	%					
Fluorene-D10		77.2	%					
Pyrene-D10		95.8	%					

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Report of Analytical Results

SDG: SQ6238
Lab ID: SQ6238-3
Client ID: SY-BRMW4-138-148-110923
Matrix: AQ
Lab File ID: N0441.D

Sample Date: 09-NOV-23
Extract Date: 16-NOV-23
Extracted By: AN/CMW
Extraction Method: SW846 3510C
Lab Prep Batch: WG345531

Report Date: 29-DEC-23
Analysis Date: 11-DEC-23
Analyst: EP
Analysis Method: SW846 8270D SIM
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	0.094	ug/L	1	.2	0.19	0.060	0.094
2-Methylnaphthalene	U	0.094	ug/L	1	.2	0.19	0.073	0.094
Acenaphthylene	U	0.094	ug/L	1	.2	0.19	0.051	0.094
Acenaphthene	U	0.094	ug/L	1	.2	0.19	0.060	0.094
Fluorene	U	0.094	ug/L	1	.2	0.19	0.058	0.094
Phenanthrene	U	0.094	ug/L	1	.2	0.19	0.048	0.094
Anthracene	U	0.094	ug/L	1	.2	0.19	0.042	0.094
Fluoranthene	U	0.094	ug/L	1	.2	0.19	0.069	0.094
Pyrene	U	0.094	ug/L	1	.2	0.19	0.056	0.094
Benzo(a)anthracene	U	0.094	ug/L	1	.2	0.19	0.043	0.094
Chrysene	J	0.035	ug/L	1	.2	0.19	0.034	0.094
Benzo(b)Fluoranthene	U	0.094	ug/L	1	.2	0.19	0.084	0.094
Benzo(k)fluoranthene	U	0.094	ug/L	1	.2	0.19	0.046	0.094
Benzo(a)pyrene	U	0.094	ug/L	1	.2	0.19	0.062	0.094
Indeno(1,2,3-cd)pyrene	U	0.094	ug/L	1	.2	0.19	0.049	0.094
Dibenzo(a,h)anthracene	U	0.094	ug/L	1	.2	0.19	0.066	0.094
Benzo(g,h,i)perylene	U	0.094	ug/L	1	.2	0.19	0.061	0.094
2-Methylnaphthalene-D10	*	41.7	%					
Fluorene-D10		42.7	%					
Pyrene-D10	*	46.6	%					

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Report of Analytical Results

SDG: SQ6238
Lab ID: SQ6238-4
Client ID: SY-BRMW3-47-62-110923
Matrix: AQ
Lab File ID: N0442.D

Sample Date: 09-NOV-23
Extract Date: 16-NOV-23
Extracted By: AN/CMW
Extraction Method: SW846 3510C
Lab Prep Batch: WG345531

Report Date: 29-DEC-23
Analysis Date: 11-DEC-23
Analyst: EP
Analysis Method: SW846 8270D SIM
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	0.093	ug/L	1	.2	0.19	0.060	0.093
2-Methylnaphthalene	U	0.093	ug/L	1	.2	0.19	0.072	0.093
Acenaphthylene	U	0.093	ug/L	1	.2	0.19	0.050	0.093
Acenaphthene	U	0.093	ug/L	1	.2	0.19	0.060	0.093
Fluorene	U	0.093	ug/L	1	.2	0.19	0.057	0.093
Phenanthrene	J	0.13	ug/L	1	.2	0.19	0.048	0.093
Anthracene	J	0.063	ug/L	1	.2	0.19	0.041	0.093
Fluoranthene		0.40	ug/L	1	.2	0.19	0.068	0.093
Pyrene		0.34	ug/L	1	.2	0.19	0.055	0.093
Benzo(a)anthracene		0.21	ug/L	1	.2	0.19	0.043	0.093
Chrysene		0.25	ug/L	1	.2	0.19	0.034	0.093
Benzo(b)Fluoranthene		0.28	ug/L	1	.2	0.19	0.083	0.093
Benzo(k)fluoranthene	J	0.13	ug/L	1	.2	0.19	0.046	0.093
Benzo(a)pyrene	J	0.14	ug/L	1	.2	0.19	0.062	0.093
Indeno(1,2,3-cd)pyrene	J	0.14	ug/L	1	.2	0.19	0.048	0.093
Dibenzo(a,h)anthracene	U	0.093	ug/L	1	.2	0.19	0.065	0.093
Benzo(g,h,i)perylene	J	0.092	ug/L	1	.2	0.19	0.061	0.093
2-Methylnaphthalene-D10		57.1	%					
Fluorene-D10		54.9	%					
Pyrene-D10		55.5	%					

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Report of Analytical Results

SDG: SQ6238
Lab ID: SQ6238-5
Client ID: SY-BRMW3-145-155-110923
Matrix: AQ
Lab File ID: N0443.D

Sample Date: 09-NOV-23
Extract Date: 16-NOV-23
Extracted By: AN/CMW
Extraction Method: SW846 3510C
Lab Prep Batch: WG345531

Report Date: 29-DEC-23
Analysis Date: 11-DEC-23
Analyst: EP
Analysis Method: SW846 8270D SIM
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	0.094	ug/L	1	.2	0.19	0.060	0.094
2-Methylnaphthalene	U	0.094	ug/L	1	.2	0.19	0.073	0.094
Acenaphthylene	U	0.094	ug/L	1	.2	0.19	0.051	0.094
Acenaphthene	U	0.094	ug/L	1	.2	0.19	0.060	0.094
Fluorene	U	0.094	ug/L	1	.2	0.19	0.058	0.094
Phenanthrene	U	0.094	ug/L	1	.2	0.19	0.048	0.094
Anthracene	U	0.094	ug/L	1	.2	0.19	0.042	0.094
Fluoranthene	U	0.094	ug/L	1	.2	0.19	0.069	0.094
Pyrene	U	0.094	ug/L	1	.2	0.19	0.056	0.094
Benzo(a)anthracene	U	0.094	ug/L	1	.2	0.19	0.043	0.094
Chrysene	U	0.094	ug/L	1	.2	0.19	0.034	0.094
Benzo(b)Fluoranthene	U	0.094	ug/L	1	.2	0.19	0.084	0.094
Benzo(k)fluoranthene	U	0.094	ug/L	1	.2	0.19	0.046	0.094
Benzo(a)pyrene	U	0.094	ug/L	1	.2	0.19	0.062	0.094
Indeno(1,2,3-cd)pyrene	U	0.094	ug/L	1	.2	0.19	0.049	0.094
Dibenzo(a,h)anthracene	U	0.094	ug/L	1	.2	0.19	0.066	0.094
Benzo(g,h,i)perylene	U	0.094	ug/L	1	.2	0.19	0.061	0.094
2-Methylnaphthalene-D10		88.1	%					
Fluorene-D10		88.4	%					
Pyrene-D10		110.	%					

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Report of Analytical Results

SDG: SQ6238
Lab ID: SQ6238-6
Client ID: SY-BRMW3-287-297-110923
Matrix: AQ
Lab File ID: N0444.D

Sample Date: 09-NOV-23
Extract Date: 16-NOV-23
Extracted By: AN/CMW
Extraction Method: SW846 3510C
Lab Prep Batch: WG345531

Report Date: 29-DEC-23
Analysis Date: 11-DEC-23
Analyst: EP
Analysis Method: SW846 8270D SIM
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	0.094	ug/L	1	.2	0.19	0.060	0.094
2-Methylnaphthalene	U	0.094	ug/L	1	.2	0.19	0.073	0.094
Acenaphthylene	U	0.094	ug/L	1	.2	0.19	0.051	0.094
Acenaphthene	U	0.094	ug/L	1	.2	0.19	0.060	0.094
Fluorene	U	0.094	ug/L	1	.2	0.19	0.058	0.094
Phenanthrene	U	0.094	ug/L	1	.2	0.19	0.048	0.094
Anthracene	U	0.094	ug/L	1	.2	0.19	0.042	0.094
Fluoranthene	U	0.094	ug/L	1	.2	0.19	0.069	0.094
Pyrene	U	0.094	ug/L	1	.2	0.19	0.056	0.094
Benzo(a)anthracene	U	0.094	ug/L	1	.2	0.19	0.043	0.094
Chrysene	U	0.094	ug/L	1	.2	0.19	0.034	0.094
Benzo(b)Fluoranthene	U	0.094	ug/L	1	.2	0.19	0.084	0.094
Benzo(k)fluoranthene	U	0.094	ug/L	1	.2	0.19	0.046	0.094
Benzo(a)pyrene	U	0.094	ug/L	1	.2	0.19	0.062	0.094
Indeno(1,2,3-cd)pyrene	U	0.094	ug/L	1	.2	0.19	0.049	0.094
Dibenzo(a,h)anthracene	U	0.094	ug/L	1	.2	0.19	0.066	0.094
Benzo(g,h,i)perylene	U	0.094	ug/L	1	.2	0.19	0.061	0.094
2-Methylnaphthalene-D10		82.8	%					
Fluorene-D10		80.0	%					
Pyrene-D10		87.0	%					

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Report of Analytical Results

SDG: SQ6238
Lab ID: SQ6238-7
Client ID: SY-BRMW4-291-301-110923
Matrix: AQ
Lab File ID: N0445.D

Sample Date: 09-NOV-23
Extract Date: 16-NOV-23
Extracted By: AN/CMW
Extraction Method: SW846 3510C
Lab Prep Batch: WG345531

Report Date: 29-DEC-23
Analysis Date: 11-DEC-23
Analyst: EP
Analysis Method: SW846 8270D SIM
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	0.094	ug/L	1	.2	0.19	0.060	0.094
2-Methylnaphthalene	U	0.094	ug/L	1	.2	0.19	0.073	0.094
Acenaphthylene	U	0.094	ug/L	1	.2	0.19	0.051	0.094
Acenaphthene	U	0.094	ug/L	1	.2	0.19	0.060	0.094
Fluorene	U	0.094	ug/L	1	.2	0.19	0.058	0.094
Phenanthrene	U	0.094	ug/L	1	.2	0.19	0.048	0.094
Anthracene	U	0.094	ug/L	1	.2	0.19	0.042	0.094
Fluoranthene	J	0.092	ug/L	1	.2	0.19	0.069	0.094
Pyrene	J	0.10	ug/L	1	.2	0.19	0.056	0.094
Benzo(a)anthracene	U	0.094	ug/L	1	.2	0.19	0.043	0.094
Chrysene	J	0.063	ug/L	1	.2	0.19	0.034	0.094
Benzo(b)Fluoranthene	J	0.099	ug/L	1	.2	0.19	0.084	0.094
Benzo(k)fluoranthene	U	0.094	ug/L	1	.2	0.19	0.046	0.094
Benzo(a)pyrene	U	0.094	ug/L	1	.2	0.19	0.062	0.094
Indeno(1,2,3-cd)pyrene	J	0.050	ug/L	1	.2	0.19	0.049	0.094
Dibenzo(a,h)anthracene	U	0.094	ug/L	1	.2	0.19	0.066	0.094
Benzo(g,h,i)perylene	U	0.094	ug/L	1	.2	0.19	0.061	0.094
2-Methylnaphthalene-D10		78.6	%					
Fluorene-D10		79.0	%					
Pyrene-D10		101.	%					

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Report of Analytical Results

SDG: SQ6238
Lab ID: SQ6238-8
Client ID: SY-BRMW1-42-52-110923
Matrix: AQ
Lab File ID: N0446.D

Sample Date: 09-NOV-23
Extract Date: 16-NOV-23
Extracted By: AN/CMW
Extraction Method: SW846 3510C
Lab Prep Batch: WG345531

Report Date: 29-DEC-23
Analysis Date: 11-DEC-23
Analyst: EP
Analysis Method: SW846 8270D SIM
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	0.094	ug/L	1	.2	0.19	0.060	0.094
2-Methylnaphthalene	U	0.094	ug/L	1	.2	0.19	0.073	0.094
Acenaphthylene	U	0.094	ug/L	1	.2	0.19	0.051	0.094
Acenaphthene	U	0.094	ug/L	1	.2	0.19	0.060	0.094
Fluorene	U	0.094	ug/L	1	.2	0.19	0.058	0.094
Phenanthrene	U	0.094	ug/L	1	.2	0.19	0.048	0.094
Anthracene	U	0.094	ug/L	1	.2	0.19	0.042	0.094
Fluoranthene	U	0.094	ug/L	1	.2	0.19	0.069	0.094
Pyrene	U	0.094	ug/L	1	.2	0.19	0.056	0.094
Benzo(a)anthracene	U	0.094	ug/L	1	.2	0.19	0.043	0.094
Chrysene	U	0.094	ug/L	1	.2	0.19	0.034	0.094
Benzo(b)Fluoranthene	U	0.094	ug/L	1	.2	0.19	0.084	0.094
Benzo(k)fluoranthene	U	0.094	ug/L	1	.2	0.19	0.046	0.094
Benzo(a)pyrene	U	0.094	ug/L	1	.2	0.19	0.062	0.094
Indeno(1,2,3-cd)pyrene	U	0.094	ug/L	1	.2	0.19	0.049	0.094
Dibenzo(a,h)anthracene	U	0.094	ug/L	1	.2	0.19	0.066	0.094
Benzo(g,h,i)perylene	U	0.094	ug/L	1	.2	0.19	0.061	0.094
2-Methylnaphthalene-D10		76.7	%					
Fluorene-D10		80.2	%					
Pyrene-D10		96.1	%					

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Report of Analytical Results

SDG: SQ6238
Lab ID: SQ6238-9RA
Client ID: SY-BRMW1-65-75-110923
Matrix: AQ
Lab File ID: N0462.D

Sample Date: 09-NOV-23
Extract Date: 16-NOV-23
Extracted By: AN/CMW
Extraction Method: SW846 3510C
Lab Prep Batch: WG345531

Report Date: 29-DEC-23
Analysis Date: 12-DEC-23
Analyst: EP
Analysis Method: SW846 8270D SIM
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	0.095	ug/L	1	.2	0.19	0.061	0.095
2-Methylnaphthalene	U	0.095	ug/L	1	.2	0.19	0.073	0.095
Acenaphthylene	U	0.095	ug/L	1	.2	0.19	0.051	0.095
Acenaphthene	U	0.095	ug/L	1	.2	0.19	0.061	0.095
Fluorene	J	0.089	ug/L	1	.2	0.19	0.058	0.095
Phenanthrene	J	0.16	ug/L	1	.2	0.19	0.048	0.095
Anthracene	J	0.12	ug/L	1	.2	0.19	0.042	0.095
Fluoranthene		0.27	ug/L	1	.2	0.19	0.070	0.095
Pyrene		0.27	ug/L	1	.2	0.19	0.056	0.095
Benzo(a)anthracene	J	0.18	ug/L	1	.2	0.19	0.044	0.095
Chrysene		0.23	ug/L	1	.2	0.19	0.034	0.095
Benzo(b)Fluoranthene		0.20	ug/L	1	.2	0.19	0.085	0.095
Benzo(k)fluoranthene		0.22	ug/L	1	.2	0.19	0.047	0.095
Benzo(a)pyrene	J	0.073	ug/L	1	.2	0.19	0.063	0.095
Indeno(1,2,3-cd)pyrene	J	0.11	ug/L	1	.2	0.19	0.050	0.095
Dibenzo(a,h)anthracene	J	0.15	ug/L	1	.2	0.19	0.067	0.095
Benzo(g,h,i)perylene	J	0.11	ug/L	1	.2	0.19	0.062	0.095
2-Methylnaphthalene-D10		49.2	%					
Fluorene-D10		46.7	%					
Pyrene-D10		55.1	%					

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Report of Analytical Results

SDG: SQ6238
Lab ID: SQ6238-10
Client ID: SY-BRMW10-65-75-110923
Matrix: AQ
Lab File ID: N0448.D

Sample Date: 09-NOV-23
Extract Date: 16-NOV-23
Extracted By: AN/CMW
Extraction Method: SW846 3510C
Lab Prep Batch: WG345531

Report Date: 29-DEC-23
Analysis Date: 11-DEC-23
Analyst: EP
Analysis Method: SW846 8270D SIM
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	0.095	ug/L	1	.2	0.19	0.061	0.095
2-Methylnaphthalene	U	0.095	ug/L	1	.2	0.19	0.073	0.095
Acenaphthylene	U	0.095	ug/L	1	.2	0.19	0.051	0.095
Acenaphthene	U	0.095	ug/L	1	.2	0.19	0.061	0.095
Fluorene	U	0.095	ug/L	1	.2	0.19	0.058	0.095
Phenanthrene	U	0.095	ug/L	1	.2	0.19	0.048	0.095
Anthracene	U	0.095	ug/L	1	.2	0.19	0.042	0.095
Fluoranthene	U	0.095	ug/L	1	.2	0.19	0.070	0.095
Pyrene	U	0.095	ug/L	1	.2	0.19	0.056	0.095
Benzo(a)anthracene	U	0.095	ug/L	1	.2	0.19	0.044	0.095
Chrysene	U	0.095	ug/L	1	.2	0.19	0.034	0.095
Benzo(b)Fluoranthene	U	0.095	ug/L	1	.2	0.19	0.085	0.095
Benzo(k)fluoranthene	U	0.095	ug/L	1	.2	0.19	0.047	0.095
Benzo(a)pyrene	U	0.095	ug/L	1	.2	0.19	0.063	0.095
Indeno(1,2,3-cd)pyrene	U	0.095	ug/L	1	.2	0.19	0.050	0.095
Dibenzo(a,h)anthracene	U	0.095	ug/L	1	.2	0.19	0.067	0.095
Benzo(g,h,i)perylene	U	0.095	ug/L	1	.2	0.19	0.062	0.095
2-Methylnaphthalene-D10		42.8	%					
Fluorene-D10		39.6	%					
Pyrene-D10	*	48.4	%					

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Report of Analytical Results

SDG: SQ6238
Lab ID: SQ6238-11
Client ID: SY-BRMW1-150-157-110923
Matrix: AQ
Lab File ID: N0449.D

Sample Date: 09-NOV-23
Extract Date: 16-NOV-23
Extracted By: AN/CMW
Extraction Method: SW846 3510C
Lab Prep Batch: WG345531

Report Date: 29-DEC-23
Analysis Date: 11-DEC-23
Analyst: EP
Analysis Method: SW846 8270D SIM
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	0.095	ug/L	1	.2	0.19	0.061	0.095
2-Methylnaphthalene	U	0.095	ug/L	1	.2	0.19	0.073	0.095
Acenaphthylene	U	0.095	ug/L	1	.2	0.19	0.051	0.095
Acenaphthene	U	0.095	ug/L	1	.2	0.19	0.061	0.095
Fluorene	U	0.095	ug/L	1	.2	0.19	0.058	0.095
Phenanthrene	U	0.095	ug/L	1	.2	0.19	0.048	0.095
Anthracene	U	0.095	ug/L	1	.2	0.19	0.042	0.095
Fluoranthene	U	0.095	ug/L	1	.2	0.19	0.070	0.095
Pyrene	J	0.084	ug/L	1	.2	0.19	0.056	0.095
Benzo(a)anthracene	U	0.095	ug/L	1	.2	0.19	0.044	0.095
Chrysene	J	0.054	ug/L	1	.2	0.19	0.034	0.095
Benzo(b)Fluoranthene	U	0.095	ug/L	1	.2	0.19	0.085	0.095
Benzo(k)fluoranthene	U	0.095	ug/L	1	.2	0.19	0.047	0.095
Benzo(a)pyrene	U	0.095	ug/L	1	.2	0.19	0.063	0.095
Indeno(1,2,3-cd)pyrene	U	0.095	ug/L	1	.2	0.19	0.050	0.095
Dibenzo(a,h)anthracene	U	0.095	ug/L	1	.2	0.19	0.067	0.095
Benzo(g,h,i)perylene	U	0.095	ug/L	1	.2	0.19	0.062	0.095
2-Methylnaphthalene-D10		85.6	%					
Fluorene-D10		91.1	%					
Pyrene-D10		112.	%					

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Report of Analytical Results

SDG: SQ6238
Lab ID: SQ6238-1
Client ID: SY-BRMW4-62-72-110923
Matrix: AQ
Lab File ID: 5QK20220.D

Sample Date: 09-NOV-23
Extract Date: 16-NOV-23
Extracted By: DL/SH
Extraction Method: RSK SOP 175
Lab Prep Batch: WG345566

Report Date: 01-DEC-23
Analysis Date: 16-NOV-23
Analyst: DL/SH
Analysis Method: RSK SOP 175 v.2
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Methane	J	6.1	ug/L	1	10.3	10.	2.6	5.2
Ethane	U	9.8	ug/L	1	13.1	13.	5.0	9.8
Ethene	U	9.8	ug/L	1	13.1	13.	5.0	9.8

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Report of Analytical Results

SDG: SQ6238
Lab ID: SQ6238-2
Client ID: SY-BRMW40-62-72-110923
Matrix: AQ
Lab File ID: 5QK20221.D

Sample Date: 09-NOV-23
Extract Date: 16-NOV-23
Extracted By: DL/SH
Extraction Method: RSK SOP 175
Lab Prep Batch: WG345566

Report Date: 01-DEC-23
Analysis Date: 16-NOV-23
Analyst: DL/SH
Analysis Method: RSK SOP 175 v.2
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Methane	J	5.3	ug/L	1	10.3	10.	2.6	5.2
Ethane	U	9.8	ug/L	1	13.1	13.	5.0	9.8
Ethene	U	9.8	ug/L	1	13.1	13.	5.0	9.8

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Report of Analytical Results

SDG: SQ6238
Lab ID: SQ6238-3
Client ID: SY-BRMW4-138-148-110923
Matrix: AQ
Lab File ID: 5QK20222.D

Sample Date: 09-NOV-23
Extract Date: 16-NOV-23
Extracted By: DL/SH
Extraction Method: RSK SOP 175
Lab Prep Batch: WG345566

Report Date: 01-DEC-23
Analysis Date: 16-NOV-23
Analyst: DL/SH
Analysis Method: RSK SOP 175 v.2
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Methane	J	3.8	ug/L	1	10.3	10.	2.6	5.2
Ethane	U	9.8	ug/L	1	13.1	13.	5.0	9.8
Ethene	U	9.8	ug/L	1	13.1	13.	5.0	9.8

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Report of Analytical Results

SDG: SQ6238
Lab ID: SQ6238-4
Client ID: SY-BRMW3-47-62-110923
Matrix: AQ
Lab File ID: 5QK20223.D

Sample Date: 09-NOV-23
Extract Date: 16-NOV-23
Extracted By: DL/SH
Extraction Method: RSK SOP 175
Lab Prep Batch: WG345566

Report Date: 01-DEC-23
Analysis Date: 16-NOV-23
Analyst: DL/SH
Analysis Method: RSK SOP 175 v.2
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Methane		20	ug/L	1	10.3	10.	2.6	5.2
Ethane	U	9.8	ug/L	1	13.1	13.	5.0	9.8
Ethene	U	9.8	ug/L	1	13.1	13.	5.0	9.8

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Report of Analytical Results

SDG: SQ6238
Lab ID: SQ6238-5
Client ID: SY-BRMW3-145-155-110923
Matrix: AQ
Lab File ID: 5QK20225.D

Sample Date: 09-NOV-23
Extract Date: 16-NOV-23
Extracted By: DL/SH
Extraction Method: RSK SOP 175
Lab Prep Batch: WG345566

Report Date: 01-DEC-23
Analysis Date: 16-NOV-23
Analyst: DL/SH
Analysis Method: RSK SOP 175 v.2
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Methane		14	ug/L	1	10.3	10.	2.6	5.2
Ethane	U	9.8	ug/L	1	13.1	13.	5.0	9.8
Ethene	U	9.8	ug/L	1	13.1	13.	5.0	9.8

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Report of Analytical Results

SDG: SQ6238
Lab ID: SQ6238-6
Client ID: SY-BRMW3-287-297-110923
Matrix: AQ
Lab File ID: 5QK20226.D

Sample Date: 09-NOV-23
Extract Date: 16-NOV-23
Extracted By: DL/SH
Extraction Method: RSK SOP 175
Lab Prep Batch: WG345566

Report Date: 01-DEC-23
Analysis Date: 16-NOV-23
Analyst: DL/SH
Analysis Method: RSK SOP 175 v.2
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Methane	J	9.2	ug/L	1	10.3	10.	2.6	5.2
Ethane	U	9.8	ug/L	1	13.1	13.	5.0	9.8
Ethene	U	9.8	ug/L	1	13.1	13.	5.0	9.8

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Report of Analytical Results

SDG: SQ6238
Lab ID: SQ6238-7
Client ID: SY-BRMW4-291-301-110923
Matrix: AQ
Lab File ID: 5QK20227.D

Sample Date: 09-NOV-23
Extract Date: 16-NOV-23
Extracted By: DL/SH
Extraction Method: RSK SOP 175
Lab Prep Batch: WG345566

Report Date: 01-DEC-23
Analysis Date: 16-NOV-23
Analyst: DL/SH
Analysis Method: RSK SOP 175 v.2
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Methane	J	3.9	ug/L	1	10.3	10.	2.6	5.2
Ethane	U	9.8	ug/L	1	13.1	13.	5.0	9.8
Ethene	U	9.8	ug/L	1	13.1	13.	5.0	9.8

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Report of Analytical Results

SDG: SQ6238
Lab ID: SQ6238-8
Client ID: SY-BRMW1-42-52-110923
Matrix: AQ
Lab File ID: 5QK20228.D

Sample Date: 09-NOV-23
Extract Date: 16-NOV-23
Extracted By: DL/SH
Extraction Method: RSK SOP 175
Lab Prep Batch: WG345566

Report Date: 01-DEC-23
Analysis Date: 16-NOV-23
Analyst: DL/SH
Analysis Method: RSK SOP 175 v.2
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Methane	J	4.7	ug/L	1	10.3	10.	2.6	5.2
Ethane	U	9.8	ug/L	1	13.1	13.	5.0	9.8
Ethene	U	9.8	ug/L	1	13.1	13.	5.0	9.8

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Report of Analytical Results

SDG: SQ6238
Lab ID: SQ6238-9
Client ID: SY-BRMW1-65-75-110923
Matrix: AQ
Lab File ID: 5QK20229.D

Sample Date: 09-NOV-23
Extract Date: 16-NOV-23
Extracted By: DL/SH
Extraction Method: RSK SOP 175
Lab Prep Batch: WG345566

Report Date: 01-DEC-23
Analysis Date: 16-NOV-23
Analyst: DL/SH
Analysis Method: RSK SOP 175 v.2
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Methane	J	4.1	ug/L	1	10.3	10.	2.6	5.2
Ethane	U	9.8	ug/L	1	13	13.	5.0	9.8
Ethene	U	9.8	ug/L	1	13.1	13.	5.0	9.8

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Report of Analytical Results

SDG: SQ6238
Lab ID: SQ6238-10
Client ID: SY-BRMW10-65-75-110923
Matrix: AQ
Lab File ID: 5QK20230.D

Sample Date: 09-NOV-23
Extract Date: 16-NOV-23
Extracted By: DL/SH
Extraction Method: RSK SOP 175
Lab Prep Batch: WG345566

Report Date: 01-DEC-23
Analysis Date: 16-NOV-23
Analyst: DL/SH
Analysis Method: RSK SOP 175 v.2
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Methane	J	3.9	ug/L	1	10.3	10.	2.6	5.2
Ethane	U	9.8	ug/L	1	13	13.	5.0	9.8
Ethene	U	9.8	ug/L	1	13.1	13.	5.0	9.8

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Report of Analytical Results

SDG: SQ6238
Lab ID: SQ6238-11
Client ID: SY-BRMW1-150-157-110923
Matrix: AQ
Lab File ID: 5QK20231.D

Sample Date: 09-NOV-23
Extract Date: 16-NOV-23
Extracted By: DL/SH
Extraction Method: RSK SOP 175
Lab Prep Batch: WG345566

Report Date: 01-DEC-23
Analysis Date: 16-NOV-23
Analyst: DL/SH
Analysis Method: RSK SOP 175 v.2
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Methane	J	6.4	ug/L	1	10.3	10.	2.6	5.2
Ethane	U	9.8	ug/L	1	13	13.	5.0	9.8
Ethene	U	9.8	ug/L	1	13.1	13.	5.0	9.8

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Report of Analytical Results

Lab Sample ID: SQ6238-1
Client ID: SY-BRMW4-62-72-110923
SDG: SQ6238
Report Date: 13-DEC-23

Matrix	Date Sampled	Date Received
AQ	09-NOV-23 09:00	10-NOV-23

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Alkalinity	110 mg/L	5.0	0.23	4.0	SM2320B	WG345760	17-NOV-23 13:39	N/A	N/A	
Chloride	320 mg/L	20.	0.99	10.	EPA 300.0	WG346358	01-DEC-23 17:30	N/A	N/A	
Chromium, Hexavalent	J0.0035 mg/L	0.025	0.00076	0.012	SW846 7196A	WG345317	10-NOV-23 09:26	N/A	N/A	
Ferrous Iron	J0.076 mg/L	0.10	0.026	0.050	SM3500D	WG345198	10-NOV-23 09:32	N/A	N/A	
Nitrate as N	U0.025 mg/L	0.050	0.017	0.025	EPA 300.0	WG345363	10-NOV-23 17:03	N/A	N/A	M1
Sulfate	92 mg/L	2.0	0.13	1.0	EPA 300.0	WG346358	01-DEC-23 17:48	N/A	N/A	
Total Organic Carbon	2.0 mg/L	1.0	0.37	0.75	SM5310B	WG346586	07-DEC-23 00:43	N/A	N/A	

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Report of Analytical Results

Lab Sample ID: SQ6238-2
Client ID: SY-BRMW40-62-72-110923
SDG: SQ6238
Report Date: 13-DEC-23

Matrix	Date Sampled	Date Received
AQ	09-NOV-23 09:05	10-NOV-23

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Alkalinity	110 mg/L	5.0	0.23	4.0	SM2320B	WG345760	17-NOV-23 13:42	N/A	N/A	
Chloride	320 mg/L	20.	0.99	10.	EPA 300.0	WG346358	01-DEC-23 18:05	N/A	N/A	
Chromium, Hexavalent	J0.00082 mg/L	0.025	0.00076	0.012	SW846 7196A	WG345317	10-NOV-23 09:26	N/A	N/A	
Ferrous Iron	J0.096 mg/L	0.10	0.026	0.050	SM3500D	WG345198	10-NOV-23 09:32	N/A	N/A	
Nitrate as N	U0.025 mg/L	0.050	0.017	0.025	EPA 300.0	WG345363	10-NOV-23 17:55	N/A	N/A	
Sulfate	94 mg/L	2.0	0.13	1.0	EPA 300.0	WG346358	01-DEC-23 18:22	N/A	N/A	
Total Organic Carbon	2.2 mg/L	1.0	0.37	0.75	SM5310B	WG346586	07-DEC-23 01:16	N/A	N/A	

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Report of Analytical Results

Lab Sample ID: SQ6238-3
Client ID: SY-BRMW4-138-148-110923
SDG: SQ6238
Report Date: 13-DEC-23

Matrix	Date Sampled	Date Received
AQ	09-NOV-23 09:40	10-NOV-23

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Alkalinity	120 mg/L	5.0	0.23	4.0	SM2320B	WG345760	17-NOV-23 13:46	N/A	N/A	
Chloride	410 mg/L	40.	2.0	20.	EPA 300.0	WG346358	01-DEC-23 18:39	N/A	N/A	
Chromium, Hexavalent	U0.012 mg/L	0.025	0.00076	0.012	SW846 7196A	WG345317	10-NOV-23 09:26	N/A	N/A	
Ferrous Iron	J0.096 mg/L	0.10	0.026	0.050	SM3500D	WG345198	10-NOV-23 09:32	N/A	N/A	
Nitrate as N	0.16 mg/L	0.050	0.017	0.025	EPA 300.0	WG345363	10-NOV-23 18:30	N/A	N/A	
Sulfate	66 mg/L	1.0	0.064	0.50	EPA 300.0	WG345363	10-NOV-23 18:30	N/A	N/A	
Total Organic Carbon	1.7 mg/L	1.0	0.37	0.75	SM5310B	WG346586	07-DEC-23 01:43	N/A	N/A	

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Report of Analytical Results

Lab Sample ID: SQ6238-4
Client ID: SY-BRMW3-47-62-110923
SDG: SQ6238
Report Date: 13-DEC-23

Matrix	Date Sampled	Date Received
AQ	09-NOV-23 09:45	10-NOV-23

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Alkalinity	150 mg/L	5.0	0.23	4.0	SM2320B	WG345760	17-NOV-23 13:49	N/A	N/A	
Chloride	65 mg/L	4.0	0.20	2.0	EPA 300.0	WG346358	01-DEC-23 18:57	N/A	N/A	
Chromium, Hexavalent	U0.012 mg/L	0.025	0.00076	0.012	SW846 7196A	WG345317	10-NOV-23 09:26	N/A	N/A	
Ferrous Iron	U0.050 mg/L	0.10	0.026	0.050	SM3500D	WG345198	10-NOV-23 09:32	N/A	N/A	
Nitrate as N	U0.025 mg/L	0.050	0.017	0.025	EPA 300.0	WG345363	10-NOV-23 18:47	N/A	N/A	
Sulfate	17 mg/L	1.0	0.064	0.50	EPA 300.0	WG345363	10-NOV-23 18:47	N/A	N/A	
Total Organic Carbon	4.4 mg/L	1.0	0.37	0.75	SM5310B	WG346586	07-DEC-23 02:23	N/A	N/A	

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Report of Analytical Results

Lab Sample ID: SQ6238-5
Client ID: SY-BRMW3-145-155-110923
SDG: SQ6238
Report Date: 13-DEC-23

Matrix	Date Sampled	Date Received
AQ	09-NOV-23 10:00	10-NOV-23

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Alkalinity	160 mg/L	5.0	0.23	4.0	SM2320B	WG345760	17-NOV-23 15:31	N/A	N/A	
Chloride	12 mg/L	2.0	0.099	1.0	EPA 300.0	WG345363	10-NOV-23 19:04	N/A	N/A	
Chromium, Hexavalent	U0.012 mg/L	0.025	0.00076	0.012	SW846 7196A	WG345317	10-NOV-23 09:26	N/A	N/A	
Ferrous Iron	U0.050 mg/L	0.10	0.026	0.050	SM3500D	WG345198	10-NOV-23 09:32	N/A	N/A	
Nitrate as N	U0.025 mg/L	0.050	0.017	0.025	EPA 300.0	WG345363	10-NOV-23 19:04	N/A	N/A	
Sulfate	5.9 mg/L	1.0	0.064	0.50	EPA 300.0	WG345363	10-NOV-23 19:04	N/A	N/A	
Total Organic Carbon	1.5 mg/L	1.0	0.37	0.75	SM5310B	WG346586	07-DEC-23 02:39	N/A	N/A	

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Report of Analytical Results

Lab Sample ID: SQ6238-6
Client ID: SY-BRMW3-287-297-110923
SDG: SQ6238
Report Date: 13-DEC-23

Matrix	Date Sampled	Date Received
AQ	09-NOV-23 10:15	10-NOV-23

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Alkalinity	180 mg/L	5.0	0.23	4.0	SM2320B	WG345760	17-NOV-23 15:35	N/A	N/A	
Chloride	23 mg/L	2.0	0.099	1.0	EPA 300.0	WG345363	10-NOV-23 19:21	N/A	N/A	
Chromium, Hexavalent	U0.012 mg/L	0.025	0.00076	0.012	SW846 7196A	WG345317	10-NOV-23 09:26	N/A	N/A	
Ferrous Iron	J0.056 mg/L	0.10	0.026	0.050	SM3500D	WG345198	10-NOV-23 09:32	N/A	N/A	
Nitrate as N	U0.025 mg/L	0.050	0.017	0.025	EPA 300.0	WG345363	10-NOV-23 19:21	N/A	N/A	
Sulfate	8.6 mg/L	1.0	0.064	0.50	EPA 300.0	WG345363	10-NOV-23 19:21	N/A	N/A	
Total Organic Carbon	4.7 mg/L	1.0	0.37	0.75	SM5310B	WG346586	07-DEC-23 03:21	N/A	N/A	

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Report of Analytical Results

Lab Sample ID: SQ6238-7
Client ID: SY-BRMW4-291-301-110923
SDG: SQ6238
Report Date: 13-DEC-23

Matrix	Date Sampled	Date Received
AQ	09-NOV-23 11:00	10-NOV-23

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Alkalinity	110 mg/L	5.0	0.23	4.0	SM2320B	WG345760	17-NOV-23 15:39	N/A	N/A	
Chloride	480 mg/L	40.	2.0	20.	EPA 300.0	WG346358	01-DEC-23 19:14	N/A	N/A	
Chromium, Hexavalent	U0.012 mg/L	0.025	0.00076	0.012	SW846 7196A	WG345317	10-NOV-23 09:26	N/A	N/A	
Ferrous Iron	J0.047 mg/L	0.10	0.026	0.050	SM3500D	WG345198	10-NOV-23 09:32	N/A	N/A	
Nitrate as N	J0.020 mg/L	0.050	0.017	0.025	EPA 300.0	WG345363	10-NOV-23 20:13	N/A	N/A	
Sulfate	68 mg/L	1.0	0.064	0.50	EPA 300.0	WG345363	10-NOV-23 20:13	N/A	N/A	
Total Organic Carbon	2.7 mg/L	1.0	0.37	0.75	SM5310B	WG346586	07-DEC-23 03:32	N/A	N/A	

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Report of Analytical Results

Lab Sample ID: SQ6238-8
Client ID: SY-BRMW1-42-52-110923
SDG: SQ6238
Report Date: 13-DEC-23

Matrix	Date Sampled	Date Received
AQ	09-NOV-23 11:45	10-NOV-23

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Alkalinity	140 mg/L	5.0	0.23	4.0	SM2320B	WG345760	17-NOV-23 15:42	N/A	N/A	
Chloride	760 mg/L	40.	2.0	20.	EPA 300.0	WG346358	01-DEC-23 19:31	N/A	N/A	
Chromium, Hexavalent	J0.0014 mg/L	0.025	0.00076	0.012	SW846 7196A	WG345317	10-NOV-23 09:26	N/A	N/A	
Ferrous Iron	2.6 mg/L	0.10	0.026	0.050	SM3500D	WG345198	10-NOV-23 09:32	N/A	N/A	
Nitrate as N	U0.025 mg/L	0.050	0.017	0.025	EPA 300.0	WG345363	10-NOV-23 20:30	N/A	N/A	
Sulfate	230 mg/L	5.0	0.32	2.5	EPA 300.0	WG346358	01-DEC-23 19:48	N/A	N/A	
Total Organic Carbon	3.9 mg/L	1.0	0.37	0.75	SM5310B	WG346586	07-DEC-23 03:43	N/A	N/A	

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Report of Analytical Results

Lab Sample ID: SQ6238-9
Client ID: SY-BRMW1-65-75-110923
SDG: SQ6238
Report Date: 13-DEC-23

Matrix	Date Sampled	Date Received
AQ	09-NOV-23 13:50	10-NOV-23

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Alkalinity	130 mg/L	5.0	0.23	4.0	SM2320B	WG345760	17-NOV-23 15:46	N/A	N/A	
Chloride	850 mg/L	100	5.0	50.	EPA 300.0	WG346590	06-DEC-23 18:49	N/A	N/A	
Chromium, Hexavalent	U0.012 mg/L	0.025	0.00076	0.012	SW846 7196A	WG345317	10-NOV-23 09:30	N/A	N/A	
Ferrous Iron	0.16 mg/L	0.10	0.026	0.050	SM3500D	WG345198	10-NOV-23 09:32	N/A	N/A	
Nitrate as N	J0.022 mg/L	0.050	0.017	0.025	EPA 300.0	WG345363	10-NOV-23 20:48	N/A	N/A	
Sulfate	240 mg/L	5.0	0.32	2.5	EPA 300.0	WG346590	06-DEC-23 19:06	N/A	N/A	
Total Organic Carbon	2.3 mg/L	1.0	0.37	0.75	SM5310B	WG346586	07-DEC-23 03:55	N/A	N/A	

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Report of Analytical Results

Lab Sample ID: SQ6238-10
Client ID: SY-BRMW10-65-75-110923
SDG: SQ6238
Report Date: 13-DEC-23

Matrix	Date Sampled	Date Received
AQ	09-NOV-23 13:55	10-NOV-23

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Alkalinity	130 mg/L	5.0	0.23	4.0	SM2320B	WG345760	17-NOV-23 15:50	N/A	N/A	
Chloride	860 mg/L	100	5.0	50.	EPA 300.0	WG346590	06-DEC-23 19:23	N/A	N/A	
Chromium, Hexavalent	J0.0014 mg/L	0.025	0.00076	0.012	SW846 7196A	WG345317	10-NOV-23 09:44	N/A	N/A	
Ferrous Iron	0.18 mg/L	0.10	0.026	0.050	SM3500D	WG345198	10-NOV-23 09:32	N/A	N/A	
Nitrate as N	J0.033 mg/L	0.050	0.017	0.025	EPA 300.0	WG345363	10-NOV-23 21:05	N/A	N/A	
Sulfate	250 mg/L	5.0	0.32	2.5	EPA 300.0	WG346590	06-DEC-23 19:40	N/A	N/A	
Total Organic Carbon	2.2 mg/L	1.0	0.37	0.75	SM5310B	WG346586	07-DEC-23 04:06	N/A	N/A	

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Report of Analytical Results

Lab Sample ID: SQ6238-11
Client ID: SY-BRMW1-150-157-110923
SDG: SQ6238
Report Date: 13-DEC-23

Matrix	Date Sampled	Date Received
AQ	09-NOV-23 12:40	10-NOV-23

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Alkalinity	160 mg/L	5.0	0.23	4.0	SM2320B	WG345760	17-NOV-23 15:53	N/A	N/A	
Chloride	140 mg/L	10.	0.50	5.0	EPA 300.0	WG346590	06-DEC-23 19:58	N/A	N/A	
Chromium, Hexavalent	J0.0017 mg/L	0.025	0.00076	0.012	SW846 7196A	WG345317	10-NOV-23 09:30	N/A	N/A	
Ferrous Iron	J0.027 mg/L	0.10	0.026	0.050	SM3500D	WG345198	10-NOV-23 09:32	N/A	N/A	
Nitrate as N	0.11 mg/L	0.050	0.017	0.025	EPA 300.0	WG345363	10-NOV-23 21:22	N/A	N/A	
Sulfate	32 mg/L	1.0	0.064	0.50	EPA 300.0	WG345363	10-NOV-23 21:22	N/A	N/A	
Total Organic Carbon	1.4 mg/L	1.0	0.37	0.75	SM5310B	WG346586	07-DEC-23 04:17	N/A	N/A	

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SIM VOLATILES DATA

QC Summary Section

Form 2
System Monitoring Compound Recovery

Lab Name: Katahdin Analytical Services **SDG:** SQ6238 **Matrix:** AQ

Client Sample ID	Lab Sample ID	Col. ID	BFB #	DBF #	DCA #	TOL #
SY-BRMW4-62-72-110923	SQ6238-1		78.6	77.0	78.4	89.3
SY-BRMW40-62-72-11092	SQ6238-2		80.2	78.3	81.3	88.6
SY-BRMW4-138-148-1109	SQ6238-3		76.4	79.6	83.4	90.5
SY-BRMW3-47-62-110923	SQ6238-4		77.1	88.0	90.1	93.3
SY-BRMW3-145-155-1109	SQ6238-5		77.9	98.0	100.	95.0
SY-BRMW3-287-297-1109	SQ6238-6		78.9	86.7	88.1	95.3
SY-BRMW4-291-301-1109	SQ6238-7		78.2	82.2	86.3	90.3
SY-BRMW1-42-52-110923	SQ6238-8		76.8	83.2	87.1	90.7
SY-BRMW1-65-75-110923	SQ6238-9		78.2	86.3	88.9	92.7
SY-BRMW10-65-75-11092	SQ6238-10		79.3	88.8	94.0	92.4
SY-BRMW1-150-157-1109	SQ6238-11		78.9	100.	99.2	90.9
TB33-110923	SQ6238-12		79.9	101.	101.	99.2
Laboratory Control S	WG345599-1		101.	87.0	84.5	97.7
Method Blank	WG345599-2		78.1	96.3	94.4	99.9

Abbr.	Surrogate Compound	QC Limits
BFB	p-Bromofluorobenzene	70-130
DBF	Dibromofluoromethane	70-130
DCA	1,2-Dichloroethane-d4	70-130
TOL	Toluene-D8	70-130

= Column to be used to flag recovery limits.
* = Values outside of contract required QC limits.
D= System Monitoring Compound diluted out.

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Form 4
Method Blank Summary

Lab File ID : D8885.D
Instrument ID : GCMS-D
Heated Purge : No
Prep Temperature (C) : N/A

SDG : SQ6238
Lab Sample ID : WG345599-2
Date Analyzed : 17-NOV-23
Time Analyzed : 10:03

This Method Blank applies to the following samples and QC samples:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	
Laboratory Control S	WG345599-1	D8883.D	11/17/23	08:52	
TB33-110923	SQ6238-12	D8886.D	11/17/23	10:37	
SY-BRMW4-62-72-110923	SQ6238-1	D8887.D	11/17/23	11:10	
SY-BRMW40-62-72-110923	SQ6238-2	D8888.D	11/17/23	11:43	
SY-BRMW4-138-148-110923	SQ6238-3	D8889.D	11/17/23	12:17	
SY-BRMW3-47-62-110923	SQ6238-4	D8890.D	11/17/23	12:50	
SY-BRMW3-145-155-110923	SQ6238-5	D8891.D	11/17/23	13:23	
SY-BRMW3-287-297-110923	SQ6238-6	D8892.D	11/17/23	13:57	
SY-BRMW4-291-301-110923	SQ6238-7	D8893.D	11/17/23	14:30	
SY-BRMW1-42-52-110923	SQ6238-8	D8894.D	11/17/23	15:03	
SY-BRMW1-65-75-110923	SQ6238-9	D8895.D	11/17/23	15:36	
SY-BRMW10-65-75-110923	SQ6238-10	D8896.D	11/17/23	16:10	
SY-BRMW1-150-157-110923	SQ6238-11	D8897.D	11/17/23	16:43	

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Form 5
Volatile Organic Instrument Performance Check

Lab Name : Katahdin Analytical Services
Lab File ID : DB230A.D
Instrument ID : GCMS-D

SDG : SQ6238
Date Analyzed : 16-NOV-23
Time Analyzed : 06:37
Heated Purge : No

m/e	Ion Abundance Criteria	% Relative Abundance		
50	15.0 - 40.0% of mass 95	15.6		
75	30.0 - 60.0% of mass 95	47.2		
95	Base Peak, 100% relative abundance	100		
96	5.0 - 9.0% of mass 95	7.0		
173	Less than 2.0% of mass 174	0.7	0.79	1
174	Greater than 50.0% of mass 95	91.3		
175	5.0 - 9.0% of mass 174	6.5	7.14	1
176	95.0 - 101.0% of mass 174	88.1	96.46	1
177	5.0 - 9.0% of mass 176	5.4	6.08	2

1-Value is % mass 174 2-Value is % mass 176

This check applies to the following samples, LCS, MS, MSD and standards:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Initial Calibration	WG345527-1	D8857.D	11/16/23	07:03
Initial Calibration	WG345527-2	D8858.D	11/16/23	07:36
Initial Calibration	WG345527-3	D8859.D	11/16/23	08:09
Initial Calibration	WG345527-4	D8860.D	11/16/23	08:42
Initial Calibration	WG345527-8	D8861.D	11/16/23	09:15
Initial Calibration	WG345527-7	D8862.D	11/16/23	09:48
Initial Calibration	WG345527-6	D8863.D	11/16/23	10:22
Initial Calibration	WG345527-5	D8864.D	11/16/23	10:55
Independent Source	WG345527-9	D8867A.D	11/16/23	12:35

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Form 5
Volatile Organic Instrument Performance Check

Lab Name : Katahdin Analytical Services
Lab File ID : DB231A.D
Instrument ID : GCMS-D

SDG : SQ6238
Date Analyzed : 17-NOV-23
Time Analyzed : 07:54
Heated Purge : No

m/e	Ion Abundance Criteria	% Relative Abundance		
50	15.0 - 40.0% of mass 95	15.5		
75	30.0 - 60.0% of mass 95	46.1		
95	Base Peak, 100% relative abundance	100		
96	5.0 - 9.0% of mass 95	7.6		
173	Less than 2.0% of mass 174	0.6	0.71	1
174	Greater than 50.0% of mass 95	90.7		
175	5.0 - 9.0% of mass 174	6.3	6.90	1
176	95.0 - 101.0% of mass 174	86.6	95.52	1
177	5.0 - 9.0% of mass 176	5.5	6.35	2

1-Value is % mass 174 2-Value is % mass 176

This check applies to the following samples, LCS, MS, MSD and standards:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Continuing Calibrati	WG345599-4	D8882.D	11/17/23	08:19
Laboratory Control S	WG345599-1	D8883.D	11/17/23	08:52
Method Blank	WG345599-2	D8885.D	11/17/23	10:03
TB33-110923	SQ6238-12	D8886.D	11/17/23	10:37
SY-BRMW4-62-72-110923	SQ6238-1	D8887.D	11/17/23	11:10
SY-BRMW40-62-72-110923	SQ6238-2	D8888.D	11/17/23	11:43
SY-BRMW4-138-148-110923	SQ6238-3	D8889.D	11/17/23	12:17
SY-BRMW3-47-62-110923	SQ6238-4	D8890.D	11/17/23	12:50
SY-BRMW3-145-155-110923	SQ6238-5	D8891.D	11/17/23	13:23
SY-BRMW3-287-297-110923	SQ6238-6	D8892.D	11/17/23	13:57
SY-BRMW4-291-301-110923	SQ6238-7	D8893.D	11/17/23	14:30
SY-BRMW1-42-52-110923	SQ6238-8	D8894.D	11/17/23	15:03
SY-BRMW1-65-75-110923	SQ6238-9	D8895.D	11/17/23	15:36
SY-BRMW10-65-75-110923	SQ6238-10	D8896.D	11/17/23	16:10
SY-BRMW1-150-157-110923	SQ6238-11	D8897.D	11/17/23	16:43
Continuing Calibrati	WG345599-5	D8901.D	11/17/23	18:56

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Form 8
Internal Standard Area and RT Summary

Lab Name : Katahdin Analytical Services
Lab ID : WG345527-5
Lab File ID : D8864.d

SDG: SQ6238
Analytical Date: 11/16/23 10:55
Instrument ID: GCMS-D

		PENTAFLUOROBENZENE				1,4-DIFLUOROBENZENE				CHLOROBENZENE-D5			
		Area	#	RT	#	Area	#	RT	#	Area	#	RT	#
	Std .	20191		5.55		30045		6.10		26800		8.98	
	Upper Limit	40382		5.72		60090		6.26		53600		9.15	
	Lower Limit	10095.5		5.38		15022.5		5.93		13400		8.82	
Client Sample ID	Lab Sample ID												
Continuing Calibrati	WG345599-4	24267		5.55		32822		6.10		27732		8.98	
Laboratory Control S	WG345599-1	22710		5.55		30970		6.10		26803		8.98	
Method Blank	WG345599-2	18740		5.55		26001		6.10		22745		8.98	
TB33-110923	SQ6238-12	17997		5.55		25223		6.10		22627		8.98	
SY-BRMW4-62-72-11(	SQ6238-1	23435		5.55		27949		6.10		23379		8.98	
SY-BRMW40-62-72-1	SQ6238-2	22951		5.55		27207		6.10		22643		8.98	
SY-BRMW4-138-148-	SQ6238-3	22141		5.55		26979		6.10		24214		8.98	
SY-BRMW3-47-62-11(	SQ6238-4	20529		5.55		26229		6.10		24601		8.98	
SY-BRMW3-145-155-	SQ6238-5	17624		5.55		23754		6.10		22433		8.98	
SY-BRMW3-287-297-	SQ6238-6	21539		5.55		27028		6.10		25155		8.98	
SY-BRMW4-291-301-	SQ6238-7	22220		5.55		27290		6.10		24743		8.98	
SY-BRMW1-42-52-11(	SQ6238-8	21618		5.55		27065		6.10		24662		8.98	
SY-BRMW1-65-75-11(	SQ6238-9	21141		5.55		27092		6.10		25218		8.98	
SY-BRMW10-65-75-1	SQ6238-10	20700		5.55		26921		6.10		24972		8.98	
SY-BRMW1-150-157-	SQ6238-11	18662		5.55		26103		6.10		23349		8.98	
Continuing Calibrati	WG345599-5	19692		5.55		26661		6.10		23878		8.98	

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area
RT Upper Limit = + 10 seconds of internal standard RT
RT Lower Limit = - 10 seconds of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

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Sample Data Section

KATAHDIN ANALYTICAL SERVICES - ORGANIC DATA QUALIFIERS

U Indicates the compound was analyzed for but not detected above the specified level. This level may be the Practical Quantitation Level (PQL) (also called Limit of Quantitation (LOQ)), the Limit of Detection (LOD) or Method Detection Limit (MDL) as required by the client.

Note: All results reported as "U" MDL have a 50% rate for false negatives compared to those results reported as "U" PQL, "U" LOQ or "U" LOD, where the rate of false negatives is <1%.

* Compound recovery or percent RPD (relative percent difference) was outside of quality control limits.

D Indicates the result was obtained from analysis of a diluted sample. Surrogate recoveries may not be calculable.

E Estimated value. This flag identifies compounds whose concentrations exceed the upper level of the calibration range of the instrument for that specific analysis.

J Estimated value. The analyte was detected in the sample at a concentration less than the laboratory Practical Quantitation Level (PQL) (also called Limit of Quantitation (LOQ)), but above the Method Detection Limit (MDL).

And/or

J Used for Dual Column analytes when there is a greater than 40% difference for detected concentrations between the two GC/HPLC columns.

B Indicates the analyte was detected in the laboratory method blank analyzed concurrently with the sample.

I Indicates that the flagged compound did not meet DoD criteria in the corresponding Initial Calibration (ICAL).

D Indicates that the flagged compound did not meet DoD criteria in the corresponding Initial Calibration Verification (ICV).

C Indicates that the flagged compound did not meet DoD criteria in the corresponding opening Calibration Verification (CV).

V Indicates that the flagged compound did not meet DoD criteria in the corresponding closing Calibration Verification (CV).

L/LL Indicates that the flagged compound did not meet DoD criteria in the corresponding Laboratory Control Sample (LCS) and/or Laboratory Control Sample Duplicate (LCSD) prepared and/or analyzed concurrently with the sample.

M/MM Indicates that the flagged compound did not meet DoD criteria in the Matrix Spike (MS) and/or Matrix Spike Duplicate MSD) prepared and/or analyzed concurrently with the native sample.

H Indicates the flagged compound was detected on the primary column but was not detected on the confirmation column therefore the compound is not reported as a positive detection. (SW846 8330A/B only)

Katahdin Analytical Services, Inc.

Manual Integration Codes For GC/MS, GC, HPLC and/or IC

M1	Peak splitting.
M2	Well defined peaks on the shoulders of the other peaks.
M3	There is additional area due to a coeluting interferant.
M4	There are negative spikes in the baseline.
M5	There are rising or falling baselines.
M6	The software has failed to detect a peak or misidentified a peak.
M7	Excessive peak tailing.
M8	Analysis such as GRO, DRO and TPH require a baseline hold.
M9	Peak was not completely integrated as in GC/MS.
M10	Primary ion was correctly integrated, but secondary or tertiary ion needed manual integration as in GC/MS.
M11	For GC analysis, when a sample is diluted by 1:10 or more, the surrogate is set to undetected and then the area under the surrogate is manually integrated.
M12	Manual integration saved in method due to TurboChrom floating point error.

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ANALYTICAL SERVICES

Report of Analytical Results

SDG: SQ6238
Lab ID: SQ6238-1
Client ID: SY-BRMW4-62-72-110923
Matrix: AQ
Lab File ID: D8887.D

Sample Date: 09-NOV-23
Extract Date: 17-NOV-23
Extracted By: JSS
Extraction Method: SW846 5030C
Lab Prep Batch: WG345599

Report Date: 12-DEC-23
Analysis Date: 17-NOV-23
Analyst: JSS
Analysis Method: SW846 8260C SIM
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Vinyl Chloride	U	0.050	ug/L	1	.1	0.10	0.0037	0.050
1,1-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0091	0.025
trans-1,2-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0033	0.025
cis-1,2-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0057	0.025
Trichloroethene	U	0.025	ug/L	1	.05	0.050	0.012	0.025
Tetrachloroethene	U	0.025	ug/L	1	.05	0.050	0.0091	0.025
Dibromofluoromethane		77.0	%					
1,2-Dichloroethane-d4		78.4	%					
Toluene-D8		89.3	%					
p-Bromofluorobenzene		78.6	%					

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Data File: \\target_server\gg\chem\gcms-d.i\D111723.b\D8887.d
Report Date: 12-Dec-2023 07:58

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Data file : \\target_server\gg\chem\gcms-d.i\D111723.b\D8887.d
Lab Smp Id: SQ6238-1 Client Smp ID: Y-BRMW4-62-72-11092
Inj Date : 17-NOV-2023 11:10
Operator : JSS Inst ID: gcms-d.i
Smp Info : SQ6238-1
Misc Info : WG345599,WG345527-5
Comment : SW846 5030C
Method : \\target_server\gg\chem\gcms-d.i\D111723.b\DSIM(01)CR23.m
Meth Date : 11-Dec-2023 10:56 CROY Quant Type: ISTD
Cal Date : 16-NOV-2023 10:22 Cal File: D8863.d
Als bottle: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: Credere.sub
Target Version: 4.12

Concentration Formula: Amt * DF * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	25.000	sample purged
Cpnd Variable		Local Compound Variable

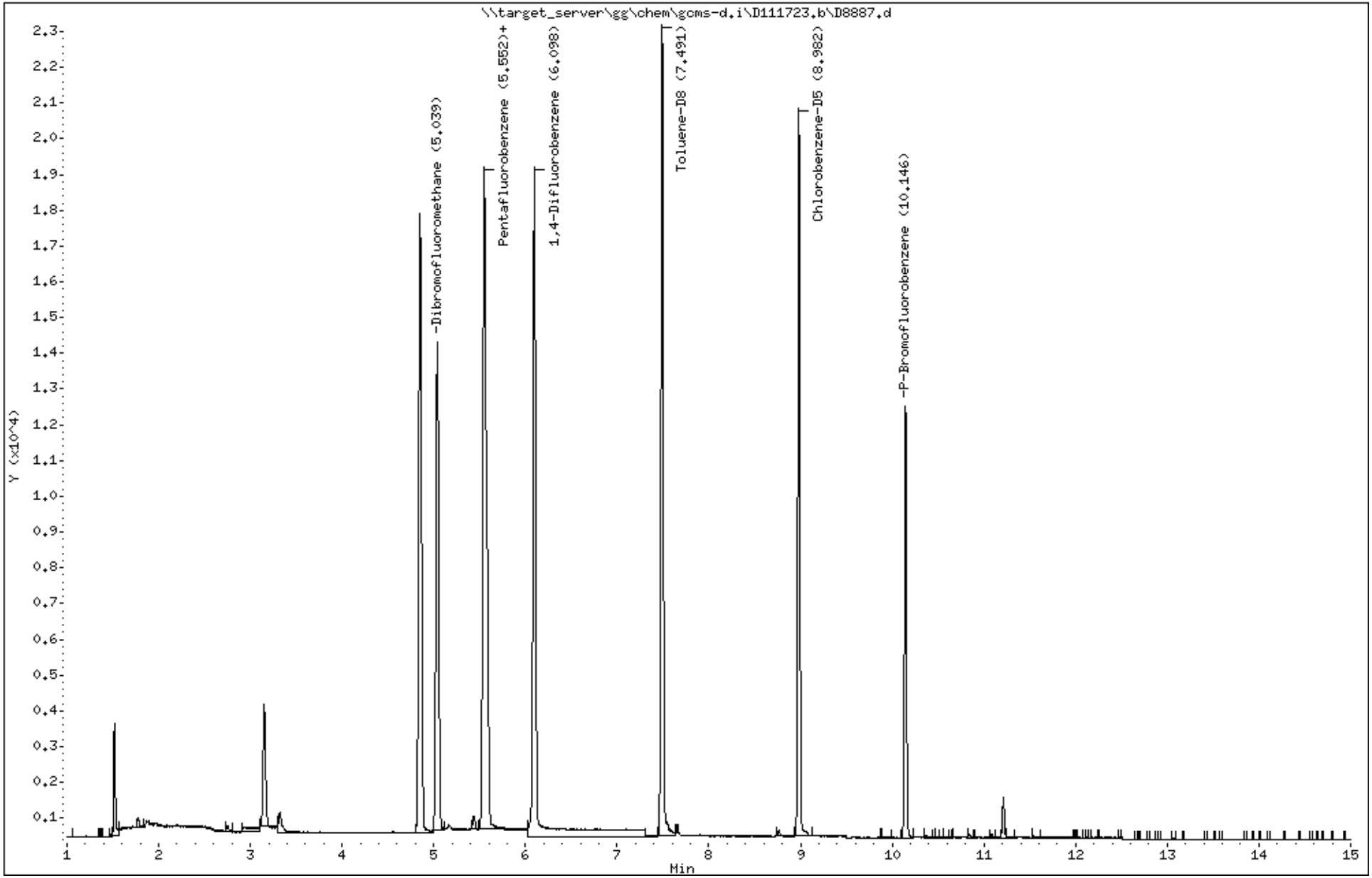
8:03 am, Dec 12, 2023

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)	REVIEW CODE
$ 7 Dibromofluoromethane	113	5.038	5.037	(0.908)	14102	0.77054	0.770	
$ 11 1,2-Dichloroethane-D4	65	5.581	5.582	(1.005)	8465	0.78364	0.784(M)	M6
$ 15 Toluene-D8	98	7.490	7.491	(1.228)	22603	0.89314	0.893	
$ 20 P-Bromofluorobenzene	95	10.144	10.146	(1.129)	6143	0.78574	0.786	
* 10 Pentafluorobenzene	168	5.551	5.549	(1.000)	23435	1.00000		
* 14 1,4-Difluorobenzene	114	6.097	6.096	(1.000)	27949	1.00000		
* 18 Chlorobenzene-D5	117	8.981	8.984	(1.000)	23379	1.00000		

QC Flag Legend

M - Compound response manually integrated.

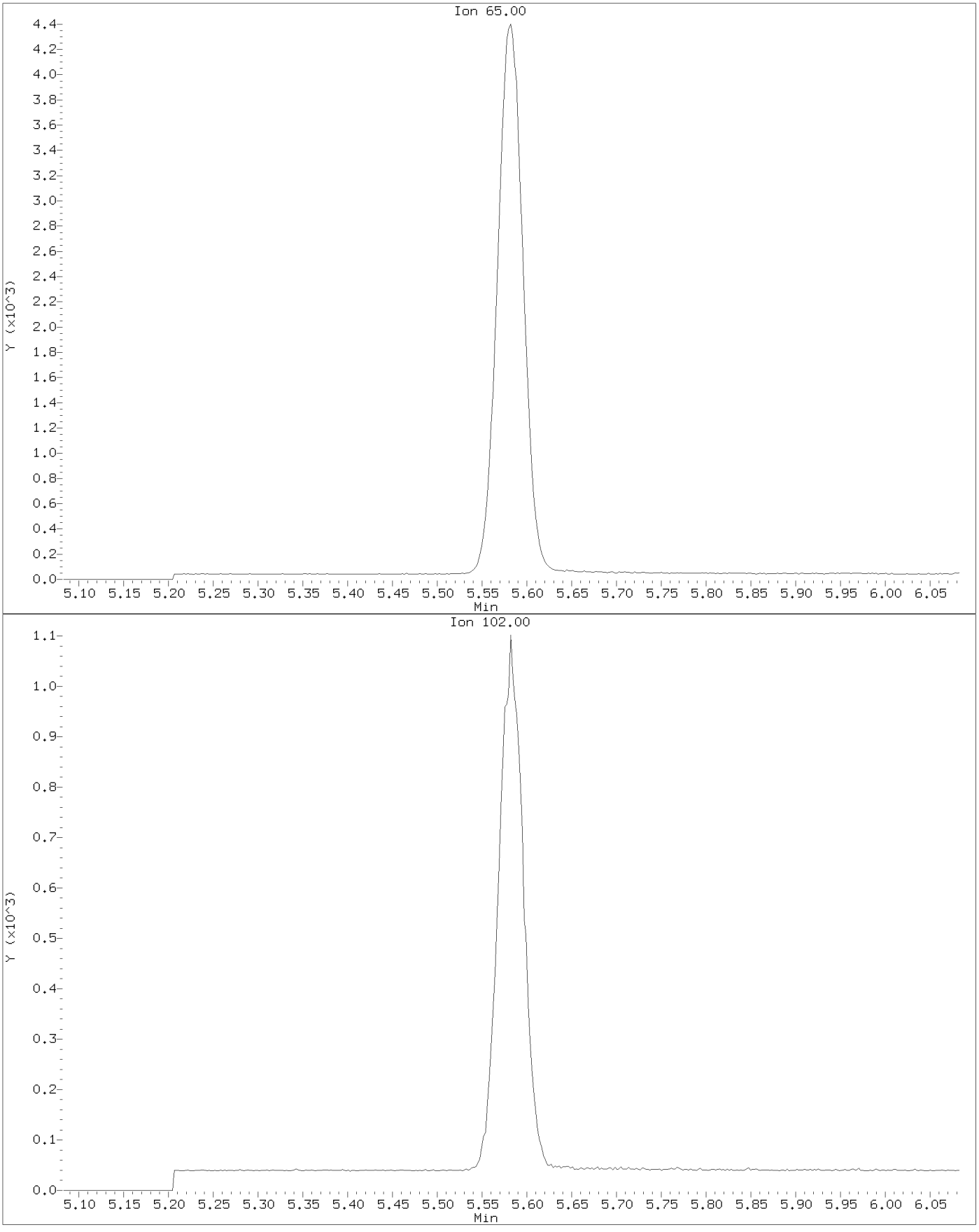
Data File: \\target_server\gg\chem\gcms-d.i\D111723.b\D8887.d
Date : 17-NOV-2023 11:10
Client ID: Y-BRMW4-62-72-11092
Instrument: gcms-d.i
Sample Info: SQ6238-1
Purge Volume: 25.0
Operator: JSS
Column phase: RTX-VMS
Column diameter: 0.18



BEFORE MANUAL INTEGRATION

Data File: \\target_server\gg\chem\gcms-d.i\D111723.b\D8887.d
Injection Date: 17-NOV-2023 11:10
Instrument: gcms-d.i
Client Sample ID: Y-BRMW4-62-72-11092

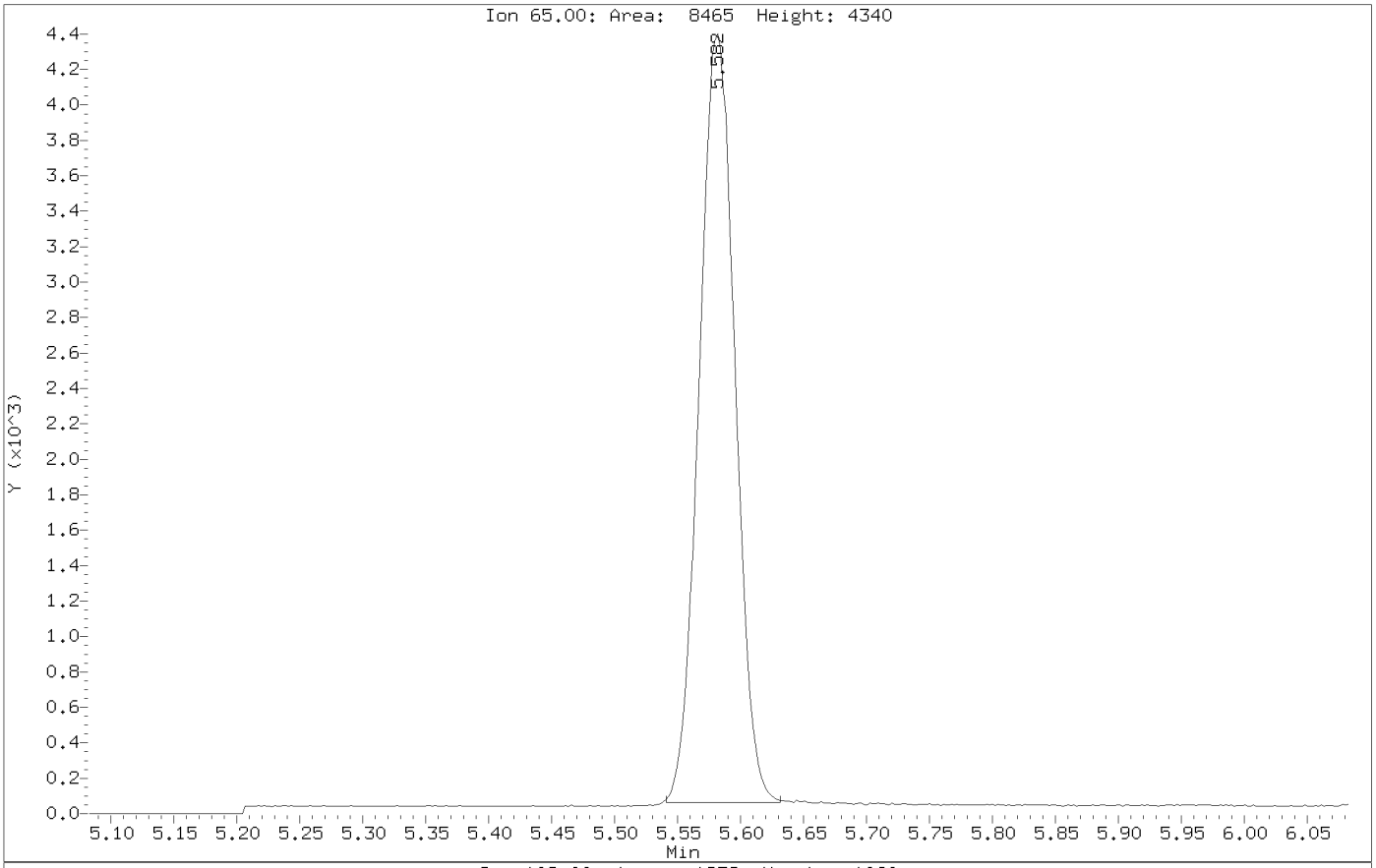
Compound: 1,2-Dichloroethane-D4
CAS Number: 17060-07-0

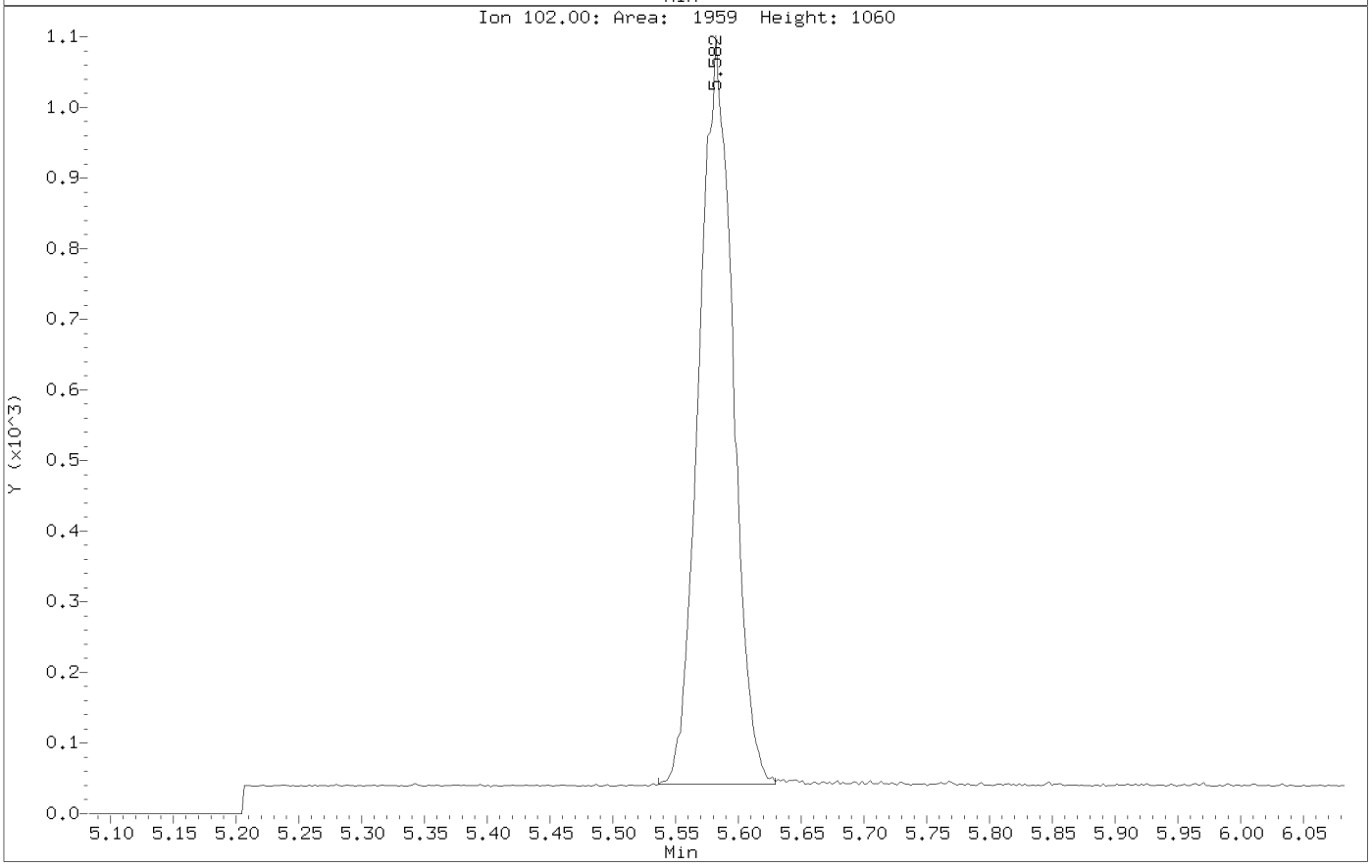


Data File: \\target_server\gg\chem\gcms-d.i\D111723.b\D8887.d
Injection Date: 17-NOV-2023 11:10
Instrument: gcms-d.i
Client Sample ID: Y-BRMW4-62-72-11092

Compound: 1,2-Dichloroethane-D4
CAS Number: 17060-07-0

AFTER MANUAL INTEGRATION





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ANALYTICAL SERVICES

Report of Analytical Results

SDG: SQ6238
Lab ID: SQ6238-2
Client ID: SY-BRMW40-62-72-110923
Matrix: AQ
Lab File ID: D8888.D

Sample Date: 09-NOV-23
Extract Date: 17-NOV-23
Extracted By: JSS
Extraction Method: SW846 5030C
Lab Prep Batch: WG345599

Report Date: 12-DEC-23
Analysis Date: 17-NOV-23
Analyst: JSS
Analysis Method: SW846 8260C SIM
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Vinyl Chloride	U	0.050	ug/L	1	.1	0.10	0.0037	0.050
1,1-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0091	0.025
trans-1,2-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0033	0.025
cis-1,2-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0057	0.025
Trichloroethene	U	0.025	ug/L	1	.05	0.050	0.012	0.025
Tetrachloroethene	U	0.025	ug/L	1	.05	0.050	0.0091	0.025
Dibromofluoromethane		78.3	%					
1,2-Dichloroethane-d4		81.3	%					
Toluene-D8		88.6	%					
p-Bromofluorobenzene		80.2	%					

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Data File: \\target_server\gg\chem\gcms-d.i\D111723.b\D8888.d
Report Date: 12-Dec-2023 07:58

Katahdin Analytical Services

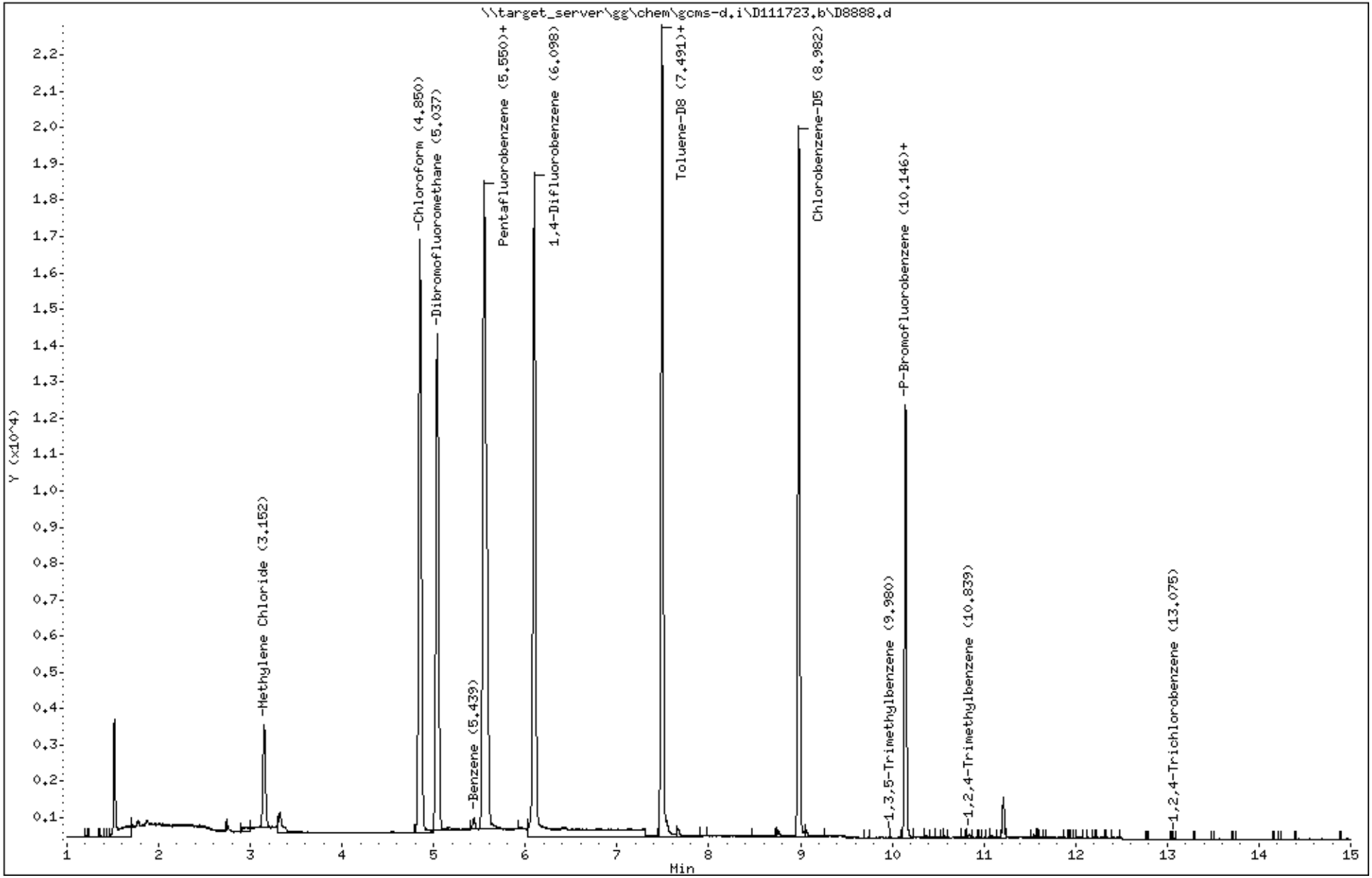
Data file : \\target_server\gg\chem\gcms-d.i\D111723.b\D8888.d
Lab Smp Id: SQ6238-2 Client Smp ID: Y-BRMW40-62-72-1109
Inj Date : 17-NOV-2023 11:43
Operator : JSS Inst ID: gcms-d.i
Smp Info : SQ6238-2
Misc Info : WG345599,WG345527-5
Comment : SW846 5030C
Method : \\target_server\gg\chem\gcms-d.i\D111723.b\DSIM(01)CR23.m
Meth Date : 11-Dec-2023 10:56 CROY Quant Type: ISTD
Cal Date : 16-NOV-2023 10:22 Cal File: D8863.d
Als bottle: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: Credere.sub
Target Version: 4.12

Concentration Formula: Amt * DF * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	25.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)	REVIEW CODE
$ 7 Dibromofluoromethane	113	5.036	5.037	(0.908)	14027	0.78261	0.783	
$ 11 1,2-Dichloroethane-D4	65	5.579	5.582	(1.006)	8605	0.81340	0.813	
$ 15 Toluene-D8	98	7.490	7.491	(1.228)	21838	0.88644	0.886	
$ 20 P-Bromofluorobenzene	95	10.145	10.146	(1.130)	6074	0.80217	0.802	
* 10 Pentafluorobenzene	168	5.547	5.549	(1.000)	22951	1.00000		
* 14 1,4-Difluorobenzene	114	6.097	6.096	(1.000)	27207	1.00000		
* 18 Chlorobenzene-D5	117	8.981	8.984	(1.000)	22643	1.00000		

Data File: \\target_server\gg\chem\gcms-d.i\D111723.b\D8888.d
Date : 17-NOV-2023 11:43
Client ID: Y-BRMW40-62-72-1109
Instrument: gcms-d.i
Sample Info: SQ6238-2
Purge Volume: 25.0
Operator: JSS
Column phase: RTX-VMS
Column diameter: 0.18



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Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

SDG: SQ6238
Lab ID: SQ6238-3
Client ID: SY-BRMW4-138-148-110923
Matrix: AQ
Lab File ID: D8889.D

Sample Date: 09-NOV-23
Extract Date: 17-NOV-23
Extracted By: JSS
Extraction Method: SW846 5030C
Lab Prep Batch: WG345599

Report Date: 12-DEC-23
Analysis Date: 17-NOV-23
Analyst: JSS
Analysis Method: SW846 8260C SIM
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Vinyl Chloride	U	0.050	ug/L	1	.1	0.10	0.0037	0.050
1,1-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0091	0.025
trans-1,2-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0033	0.025
cis-1,2-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0057	0.025
Trichloroethene		0.079	ug/L	1	.05	0.050	0.012	0.025
Tetrachloroethene	U	0.025	ug/L	1	.05	0.050	0.0091	0.025
Dibromofluoromethane		79.6	%					
1,2-Dichloroethane-d4		83.4	%					
Toluene-D8		90.5	%					
p-Bromofluorobenzene		76.4	%					

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Data File: \\target_server\gg\chem\gcms-d.i\D111723.b\D8889.d
Report Date: 12-Dec-2023 07:58

Katahdin Analytical Services

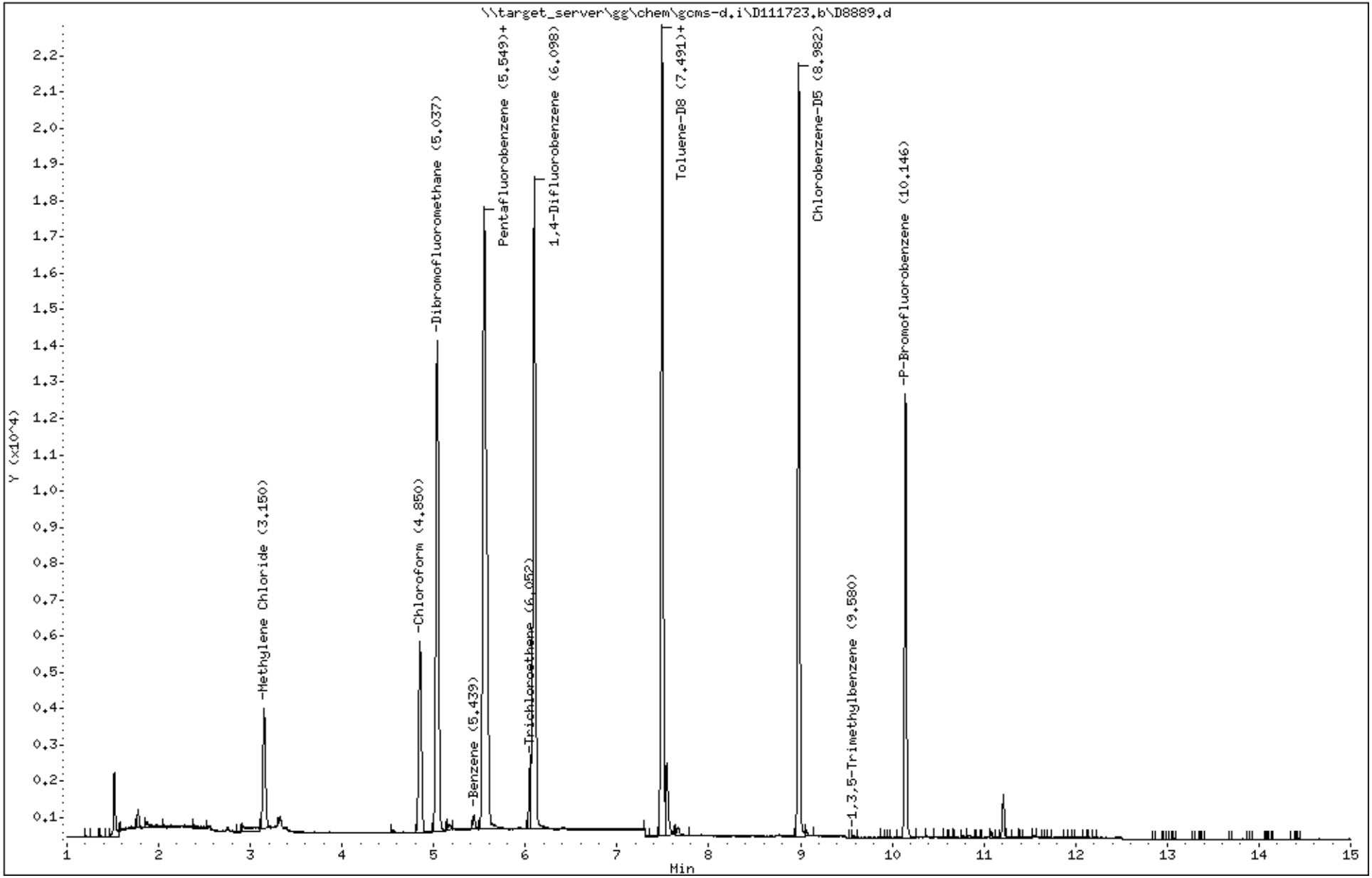
Data file : \\target_server\gg\chem\gcms-d.i\D111723.b\D8889.d
Lab Smp Id: SQ6238-3 Client Smp ID: Y-BRMW4-138-148-110
Inj Date : 17-NOV-2023 12:17
Operator : JSS Inst ID: gcms-d.i
Smp Info : SQ6238-3
Misc Info : WG345599,WG345527-5
Comment : SW846 5030C
Method : \\target_server\gg\chem\gcms-d.i\D111723.b\DSIM(01)CR23.m
Meth Date : 11-Dec-2023 10:56 CROY Quant Type: ISTD
Cal Date : 16-NOV-2023 10:22 Cal File: D8863.d
Als bottle: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: Credere.sub
Target Version: 4.12

Concentration Formula: Amt * DF * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	25.000	sample purged
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)	REVIEW CODE
	13 Trichloroethene	130	6.050	6.052	(0.992)	940	0.07927	0.0793	
$	7 Dibromofluoromethane	113	5.036	5.037	(0.908)	13772	0.79649	0.796	
$	11 1,2-Dichloroethane-D4	65	5.579	5.582	(1.005)	8512	0.83405	0.834	
$	15 Toluene-D8	98	7.490	7.491	(1.228)	22118	0.90539	0.905	
$	20 P-Bromofluorobenzene	95	10.144	10.146	(1.129)	6189	0.76433	0.764	
*	10 Pentafluorobenzene	168	5.549	5.549	(1.000)	22141	1.00000		
*	14 1,4-Difluorobenzene	114	6.097	6.096	(1.000)	26979	1.00000		
*	18 Chlorobenzene-D5	117	8.981	8.984	(1.000)	24214	1.00000		

Data File: \\target_server\gg\chem\gcms-d.i\D111723.b\D8889.d
Date : 17-NOV-2023 12:17
Client ID: Y-BRMW4-138-148-110
Instrument: gcms-d.i
Sample Info: SQ6238-3
Purge Volume: 25.0
Operator: JSS
Column phase: RTX-VMS
Column diameter: 0.18



Katahdin Analytical Services SQ6238 Page 84 of 875

Data File: \\target_server\gg\chem\gcms-d.i\D111723.b\D8889.d

Date : 17-NOV-2023 12:17

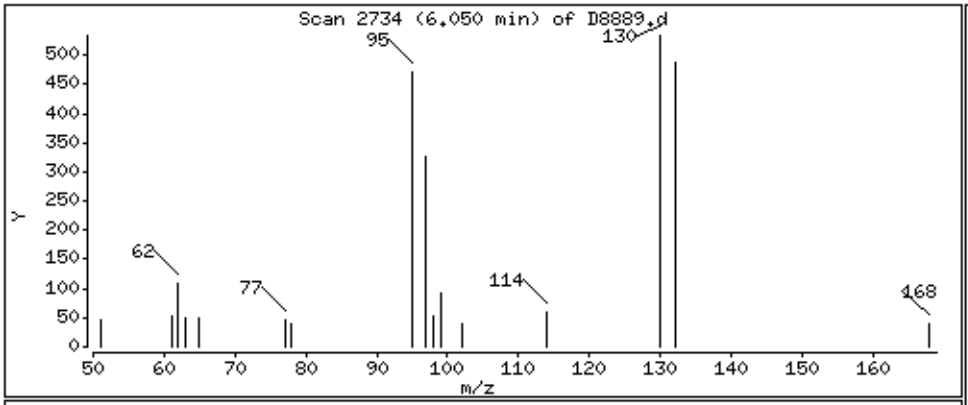
Client ID: Y-BRMW4-138-148-110 Instrument: gcms-d.i

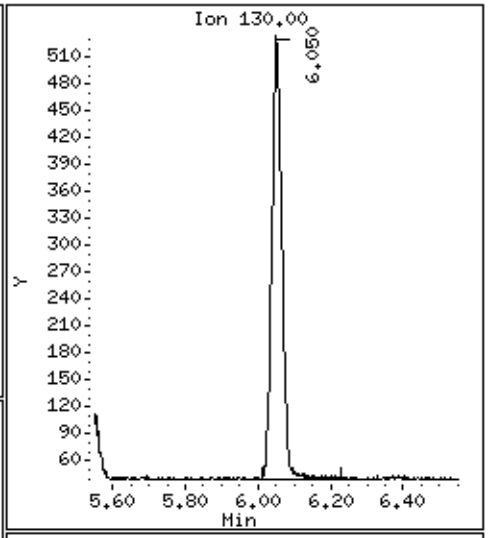
Sample Info: SQ6238-3

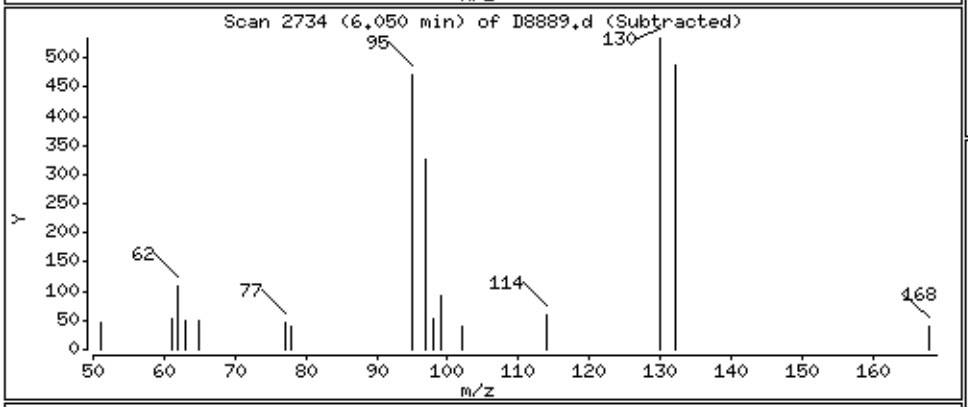
Purge Volume: 25.0 Operator: JSS

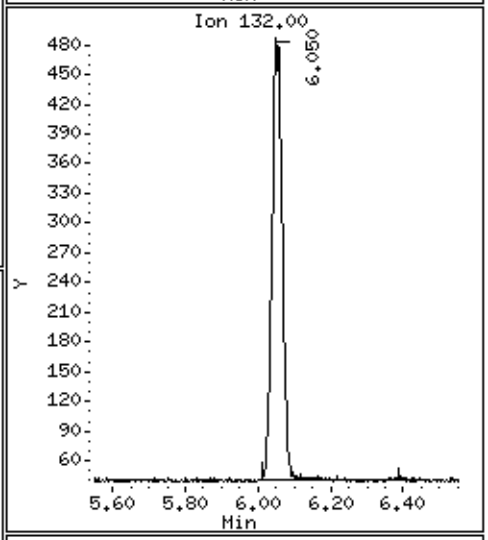
Column phase: RTX-VMS Column diameter: 0.18

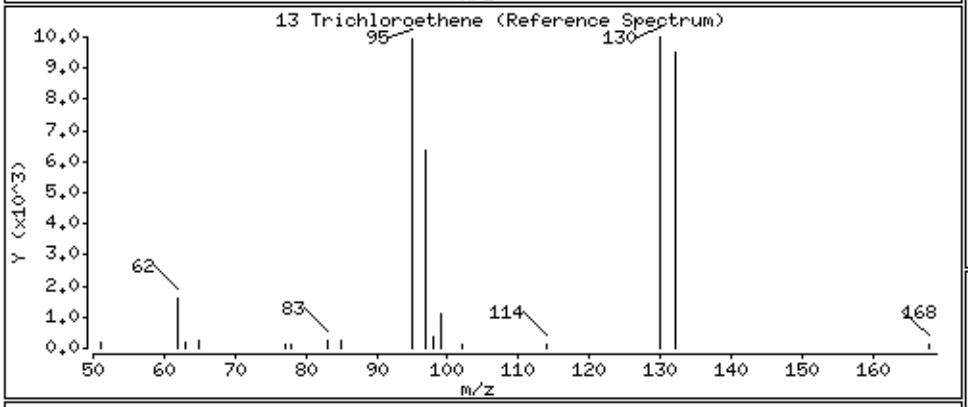
13 Trichloroethene Concentration: 0.0793 ug/l

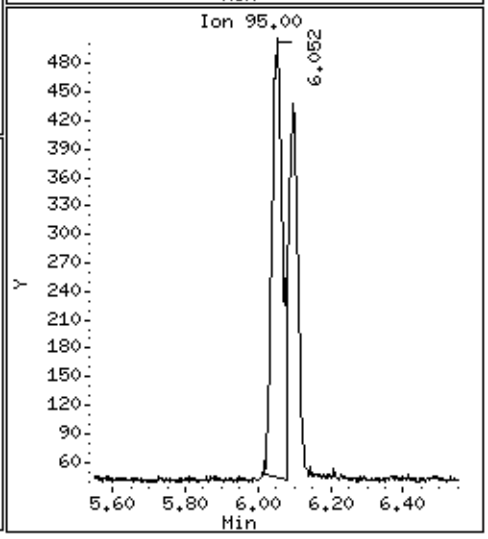


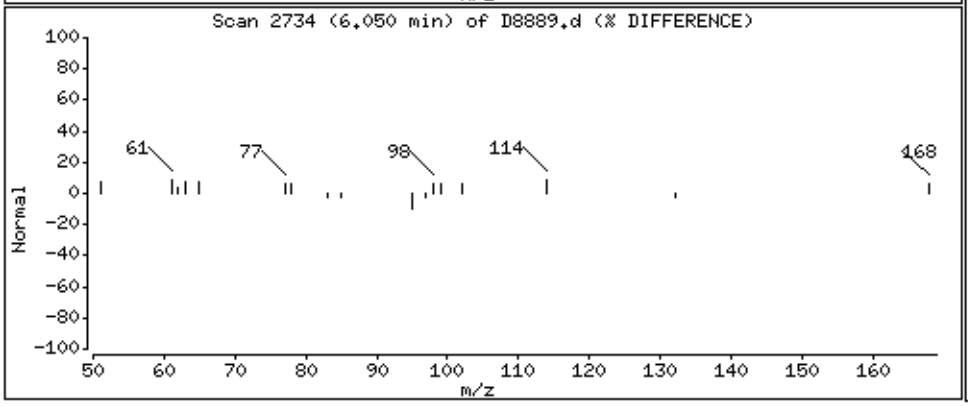












Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

SDG: SQ6238
Lab ID: SQ6238-4
Client ID: SY-BRMW3-47-62-110923
Matrix: AQ
Lab File ID: D8890.D

Sample Date: 09-NOV-23
Extract Date: 17-NOV-23
Extracted By: JSS
Extraction Method: SW846 5030C
Lab Prep Batch: WG345599

Report Date: 12-DEC-23
Analysis Date: 17-NOV-23
Analyst: JSS
Analysis Method: SW846 8260C SIM
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Vinyl Chloride	J	0.054	ug/L	1	.1	0.10	0.0037	0.050
1,1-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0091	0.025
trans-1,2-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0033	0.025
cis-1,2-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0057	0.025
Trichloroethene	U	0.025	ug/L	1	.05	0.050	0.012	0.025
Tetrachloroethene	U	0.025	ug/L	1	.05	0.050	0.0091	0.025
Dibromofluoromethane		88.0	%					
1,2-Dichloroethane-d4		90.1	%					
Toluene-D8		93.3	%					
p-Bromofluorobenzene		77.1	%					

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Data File: \\target_server\gg\chem\gcms-d.i\D111723.b\D8890.d
Report Date: 12-Dec-2023 07:58

Katahdin Analytical Services

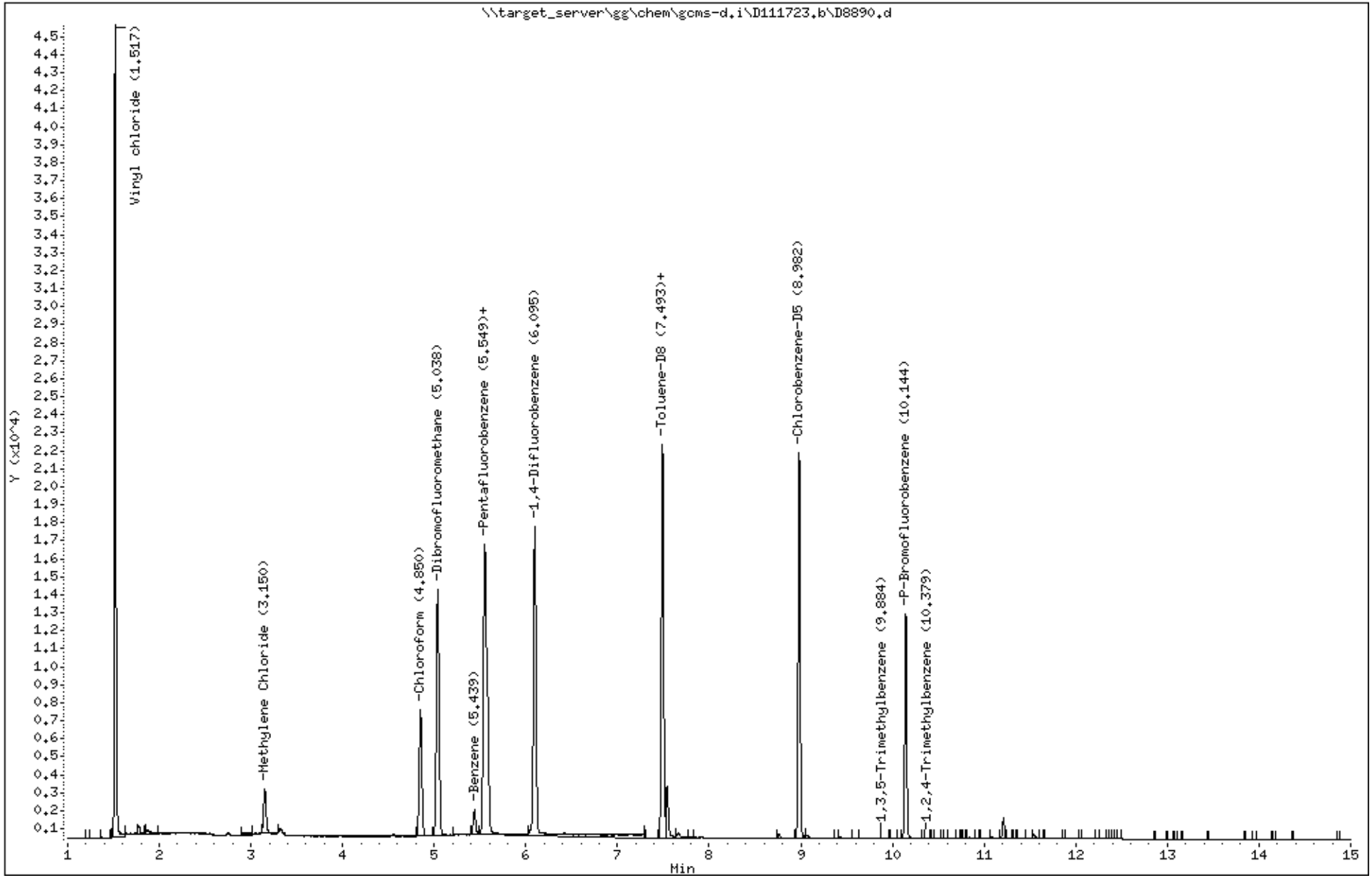
Data file : \\target_server\gg\chem\gcms-d.i\D111723.b\D8890.d
Lab Smp Id: SQ6238-4 Client Smp ID: Y-BRMW3-47-62-11092
Inj Date : 17-NOV-2023 12:50
Operator : JSS Inst ID: gcms-d.i
Smp Info : SQ6238-4
Misc Info : WG345599,WG345527-5
Comment : SW846 5030C
Method : \\target_server\gg\chem\gcms-d.i\D111723.b\DSIM(01)CR23.m
Meth Date : 11-Dec-2023 10:56 CROY Quant Type: ISTD
Cal Date : 16-NOV-2023 10:22 Cal File: D8863.d
Als bottle: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: Credere.sub
Target Version: 4.12

Concentration Formula: Amt * DF * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	25.000	sample purged
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)	REVIEW CODE
	1 Vinyl chloride	62	1.513	1.591	(0.273)	773	0.05366	0.0537	
$	7 Dibromofluoromethane	113	5.036	5.037	(0.908)	14115	0.88043	0.880	
$	11 1,2-Dichloroethane-D4	65	5.581	5.582	(1.006)	8525	0.90091	0.901	
$	15 Toluene-D8	98	7.492	7.491	(1.229)	22167	0.93335	0.933	
$	20 P-Bromofluorobenzene	95	10.143	10.146	(1.129)	6345	0.77126	0.771	
*	10 Pentafluorobenzene	168	5.549	5.549	(1.000)	20529	1.00000		
*	14 1,4-Difluorobenzene	114	6.095	6.096	(1.000)	26229	1.00000		
*	18 Chlorobenzene-D5	117	8.983	8.984	(1.000)	24601	1.00000		

Data File: \\target_server\gg\chem\gcms-d.i\D111723.b\D8890.d
Date : 17-NOV-2023 12:50
Client ID: Y-BRMW3-47-62-11092
Instrument: gcms-d.i
Sample Info: SQ6238-4
Purge Volume: 25.0
Operator: JSS
Column phase: RTX-VMS
Column diameter: 0.18



Katahdin Analytical Services SQ6238 Page 88 of 875

Data File: \\target_server\gg\chem\gcms-d.i\D111723.b\D8890.d

Date : 17-NOV-2023 12:50

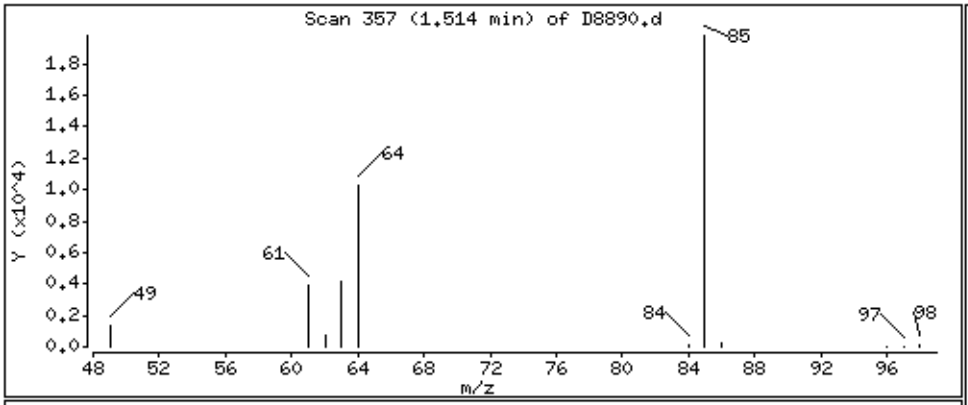
Client ID: Y-BRMW3-47-62-11092 Instrument: gcms-d.i

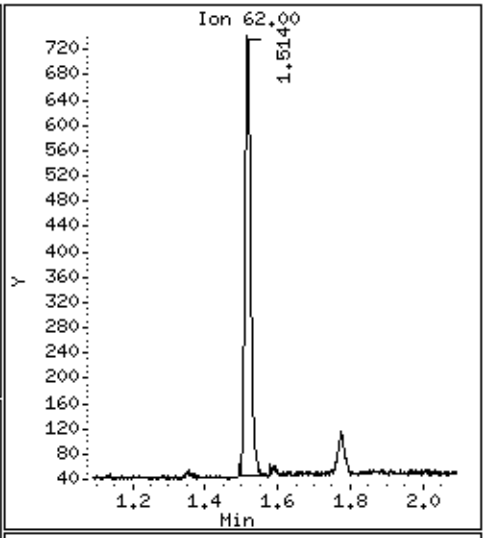
Sample Info: SQ6238-4

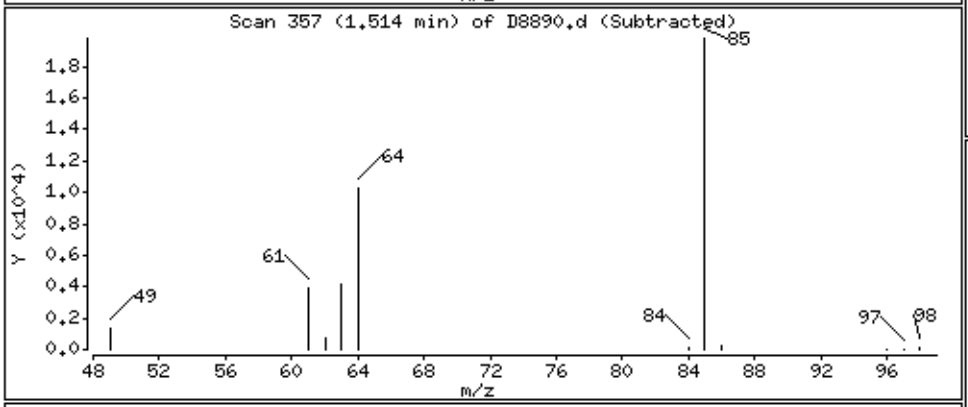
Purge Volume: 25.0 Operator: JSS

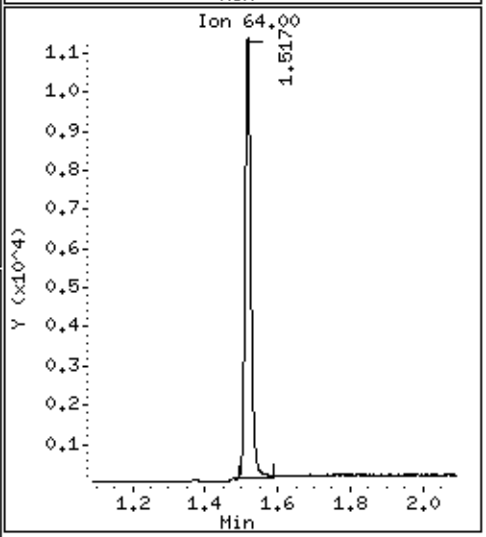
Column phase: RTX-VMS Column diameter: 0.18

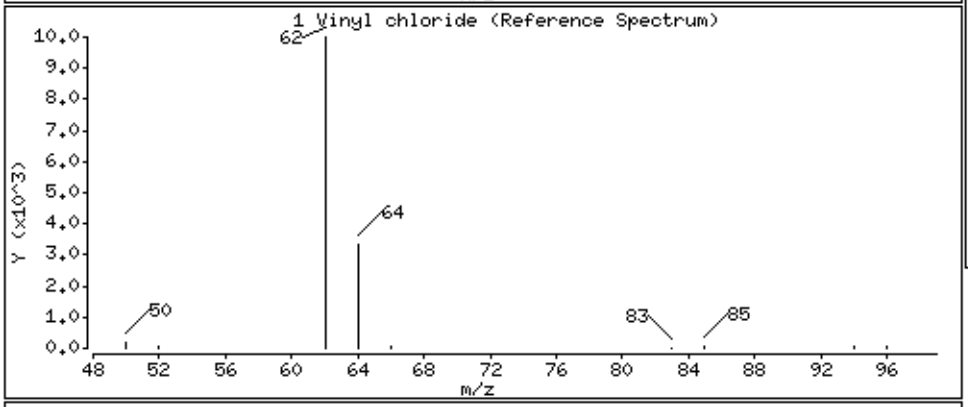
1 Vinyl chloride Concentration: 0.0537 ug/l

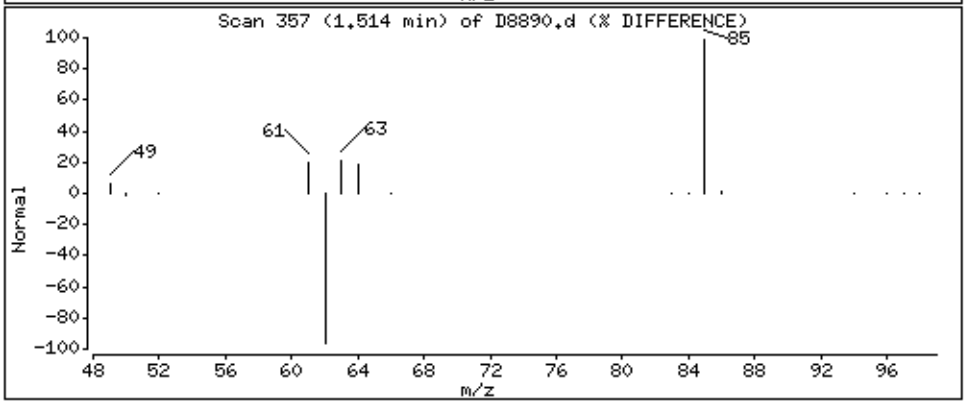












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ANALYTICAL SERVICES

Report of Analytical Results

SDG: SQ6238
Lab ID: SQ6238-5
Client ID: SY-BRMW3-145-155-110923
Matrix: AQ
Lab File ID: D8891.D

Sample Date: 09-NOV-23
Extract Date: 17-NOV-23
Extracted By: JSS
Extraction Method: SW846 5030C
Lab Prep Batch: WG345599

Report Date: 12-DEC-23
Analysis Date: 17-NOV-23
Analyst: JSS
Analysis Method: SW846 8260C SIM
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Vinyl Chloride	J	0.027	ug/L	1	.1	0.10	0.0037	0.050
1,1-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0091	0.025
trans-1,2-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0033	0.025
cis-1,2-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0057	0.025
Trichloroethene	U	0.025	ug/L	1	.05	0.050	0.012	0.025
Tetrachloroethene	U	0.025	ug/L	1	.05	0.050	0.0091	0.025
Dibromofluoromethane		98.0	%					
1,2-Dichloroethane-d4		100.	%					
Toluene-D8		95.0	%					
p-Bromofluorobenzene		77.9	%					

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Data File: \\target_server\gg\chem\gcms-d.i\D111723.b\D8891.d
Report Date: 12-Dec-2023 07:58

Katahdin Analytical Services

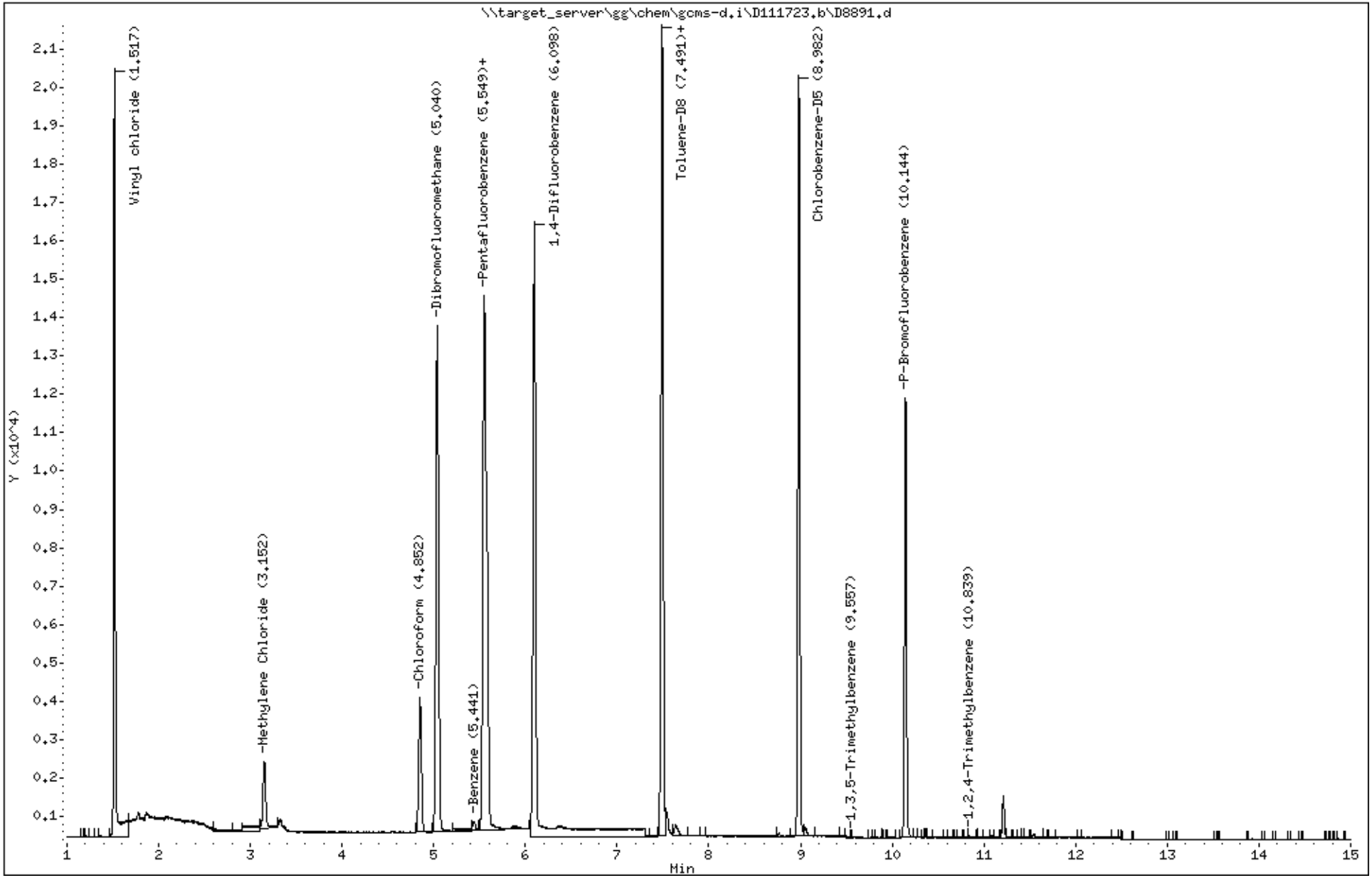
Data file : \\target_server\gg\chem\gcms-d.i\D111723.b\D8891.d
Lab Smp Id: SQ6238-5 Client Smp ID: Y-BRMW3-145-155-110
Inj Date : 17-NOV-2023 13:23
Operator : JSS Inst ID: gcms-d.i
Smp Info : SQ6238-5
Misc Info : WG345599,WG345527-5
Comment : SW846 5030C
Method : \\target_server\gg\chem\gcms-d.i\D111723.b\DSIM(01)CR23.m
Meth Date : 11-Dec-2023 10:56 CROY Quant Type: ISTD
Cal Date : 16-NOV-2023 10:22 Cal File: D8863.d
Als bottle: 10
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: Credere.sub
Target Version: 4.12

Concentration Formula: Amt * DF * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	25.000	sample purged
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/l)	REVIEW CODE
	1 Vinyl chloride	62	1.515	1.591	(0.273)	338	0.02733	0.0273	
$	7 Dibromofluoromethane	113	5.040	5.037	(0.908)	13494	0.98043	0.980	
$	11 1,2-Dichloroethane-D4	65	5.579	5.582	(1.005)	8148	1.00300	1.00	
$	15 Toluene-D8	98	7.490	7.491	(1.228)	20439	0.95026	0.950	
$	20 P-Bromofluorobenzene	95	10.143	10.146	(1.129)	5845	0.77915	0.779	
*	10 Pentafluorobenzene	168	5.549	5.549	(1.000)	17624	1.00000		
*	14 1,4-Difluorobenzene	114	6.097	6.096	(1.000)	23754	1.00000		
*	18 Chlorobenzene-D5	117	8.981	8.984	(1.000)	22433	1.00000		

Data File: \\target_server\gg\chem\gcms-d.i\D111723.b\D8891.d
Date : 17-NOV-2023 13:23
Client ID: Y-BRMW3-145-155-110
Instrument: gcms-d.i
Sample Info: SQ6238-5
Purge Volume: 25.0
Operator: JSS
Column phase: RTX-VMS
Column diameter: 0.18



Katahdin Analytical Services SQ6238 Page 92 of 875

Data File: \\target_server\gg\chem\gcms-d.i\D111723.b\D8891.d

Date : 17-NOV-2023 13:23

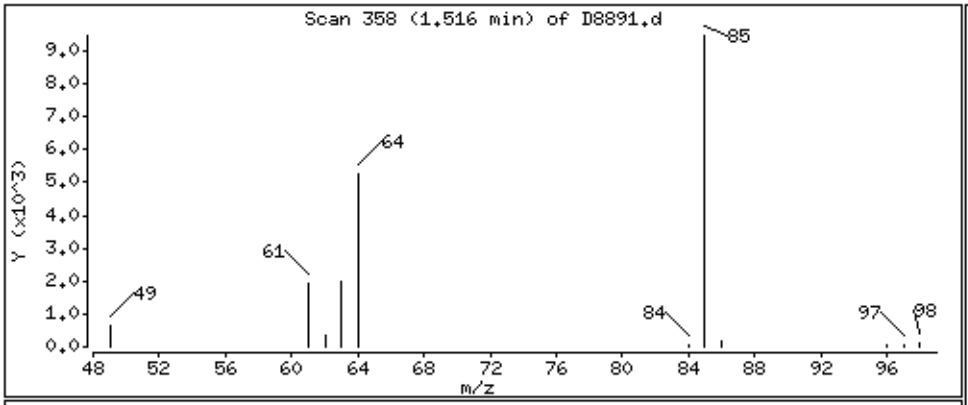
Client ID: Y-BRMW3-145-155-110 Instrument: gcms-d.i

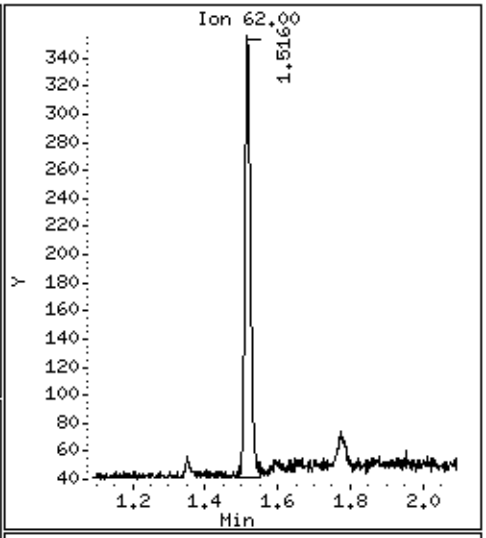
Sample Info: SQ6238-5

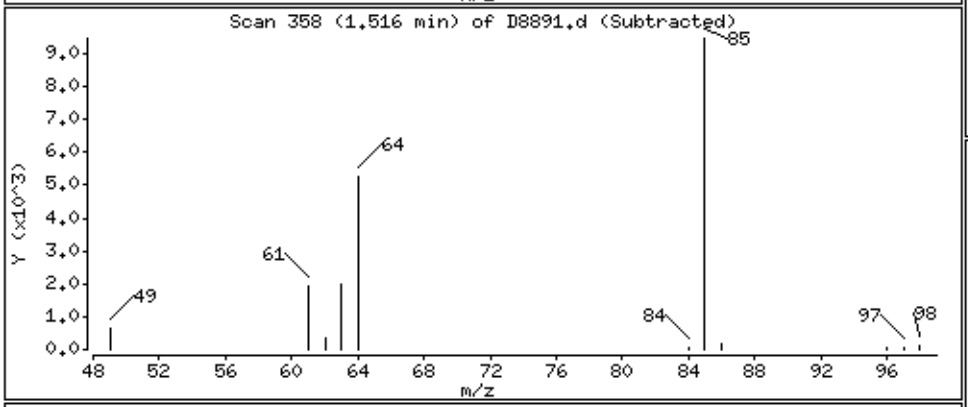
Purge Volume: 25.0 Operator: JSS

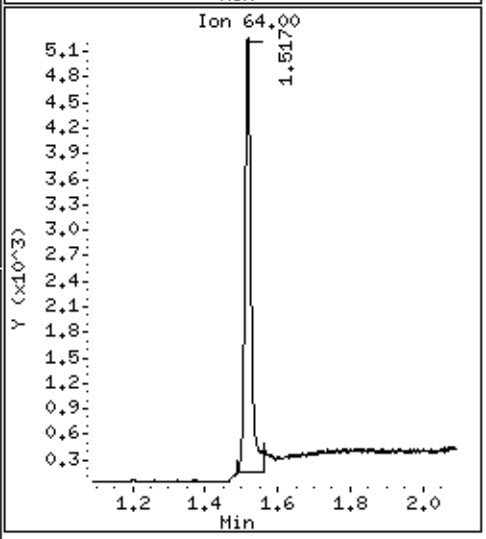
Column phase: RTX-VMS Column diameter: 0.18

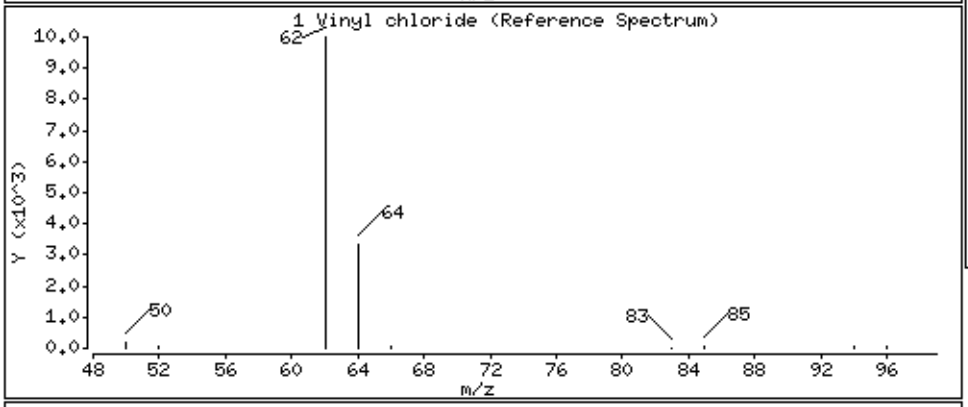
1 Vinyl chloride Concentration: 0.0273 ug/l

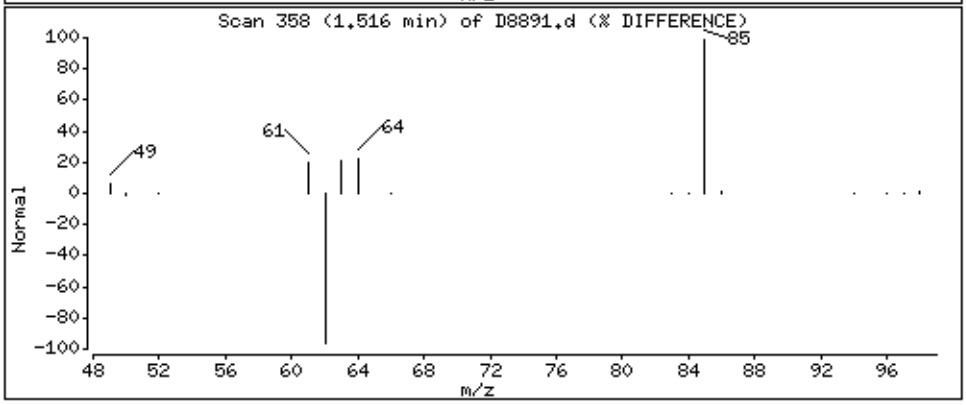












Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

SDG: SQ6238
Lab ID: SQ6238-6
Client ID: SY-BRMW3-287-297-110923
Matrix: AQ
Lab File ID: D8892.D

Sample Date: 09-NOV-23
Extract Date: 17-NOV-23
Extracted By: JSS
Extraction Method: SW846 5030C
Lab Prep Batch: WG345599

Report Date: 12-DEC-23
Analysis Date: 17-NOV-23
Analyst: JSS
Analysis Method: SW846 8260C SIM
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Vinyl Chloride	J	0.024	ug/L	1	.1	0.10	0.0037	0.050
1,1-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0091	0.025
trans-1,2-Dichloroethene	J	0.043	ug/L	1	.05	0.050	0.0033	0.025
cis-1,2-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0057	0.025
Trichloroethene	U	0.025	ug/L	1	.05	0.050	0.012	0.025
Tetrachloroethene	U	0.025	ug/L	1	.05	0.050	0.0091	0.025
Dibromofluoromethane		86.7	%					
1,2-Dichloroethane-d4		88.1	%					
Toluene-D8		95.3	%					
p-Bromofluorobenzene		78.9	%					

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Data File: \\target_server\gg\chem\gcms-d.i\D111723.b\D8892.d
Report Date: 12-Dec-2023 08:05

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-d.i\D111723.b\D8892.d
Lab Smp Id: SQ6238-6 Client Smp ID: Y-BRMW3-287-297-110
Inj Date : 17-NOV-2023 13:57
Operator : JSS Inst ID: gcms-d.i
Smp Info : SQ6238-6
Misc Info : WG345599,WG345527-5
Comment : SW846 5030C
Method : \\target_server\gg\chem\gcms-d.i\D111723.b\DSIM(01)CR23.m
Meth Date : 11-Dec-2023 10:56 CROY Quant Type: ISTD
Cal Date : 16-NOV-2023 10:22 Cal File: D8863.d
Als bottle: 11
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: Credere.sub
Target Version: 4.12

Concentration Formula: Amt * DF * 25/Vo * CpndVariable

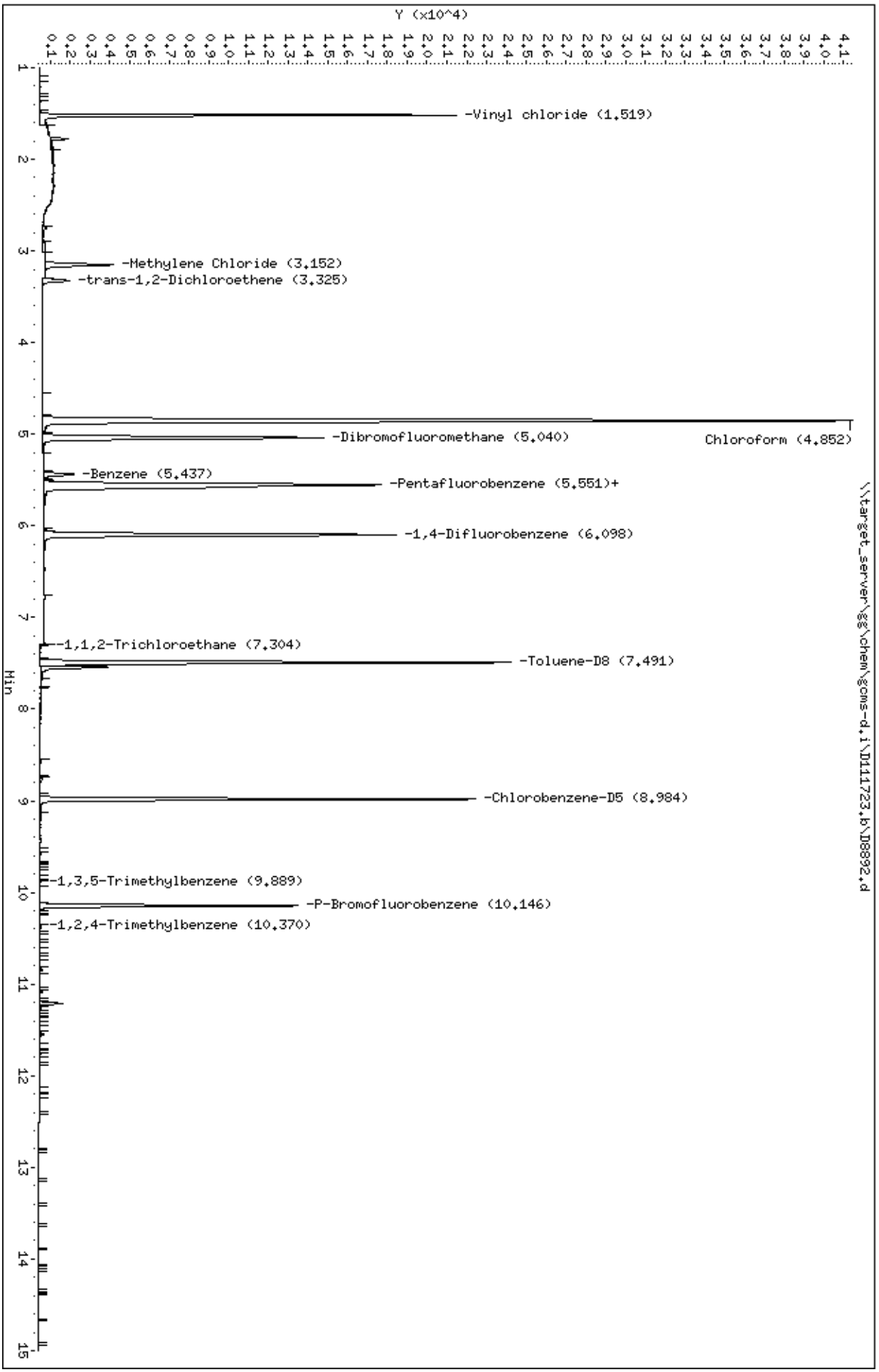
Name	Value	Description
DF	1.000	Dilution Factor
Vo	25.000	sample purged
Cpnd Variable		Local Compound Variable

8:09 am, Dec 12, 2023

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)	REVIEW CODE
1 Vinyl chloride	62	1.519	1.591	(0.274)	368	0.02435	0.0243(a)	
4 trans-1,2-Dichloroethene	96	3.324	3.323	(0.599)	681	0.04316	0.0432(aM)	M10
$ 7 Dibromofluoromethane	113	5.040	5.037	(0.908)	14585	0.86708	0.867	
$ 11 1,2-Dichloroethane-D4	65	5.583	5.582	(1.005)	8749	0.88123	0.881	
$ 15 Toluene-D8	98	7.490	7.491	(1.228)	23327	0.95315	0.953	
$ 20 P-Bromofluorobenzene	95	10.143	10.146	(1.129)	6636	0.78887	0.789	
* 10 Pentafluorobenzene	168	5.553	5.549	(1.000)	21539	1.00000		
* 14 1,4-Difluorobenzene	114	6.097	6.096	(1.000)	27028	1.00000		
* 18 Chlorobenzene-D5	117	8.983	8.984	(1.000)	25155	1.00000		

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.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Date : 17-NOV-2023 13:57
Client ID: Y-BRMW3-287-297-110
Sample Info: SQ6238-6
Purge Volume: 25,0
Column phase: RTX-VMS
Instrument: gcms-d,i
Operator: JSS
Column diameter: 0,18
\\target_server\gg\chem\gcms-d,i\D111723,b\D8892,d
Y (x10^4)
Min
-Vinyl chloride (1,519)
-Methylene Chloride (3,152)
-trans-1,2-Dichloroethene (3,325)
Chloroform (4,852)
-Dibromofluoromethane (5,040)
-Benzene (5,437)
-Pentafluorobenzene (5,551)+
-1,4-Difluorobenzene (6,098)
-1,1,2-Trichloroethane (7,304)
-Toluene-D8 (7,491)
-Chlorobenzene-D5 (8,984)
-1,3,5-Trimethylbenzene (9,889)
-P-Bromofluorobenzene (10,146)
-1,2,4-Trimethylbenzene (10,370)

Data File: \\target_server\gg\chem\gcms-d.i\D111723.b\D8892.d

Date : 17-NOV-2023 13:57

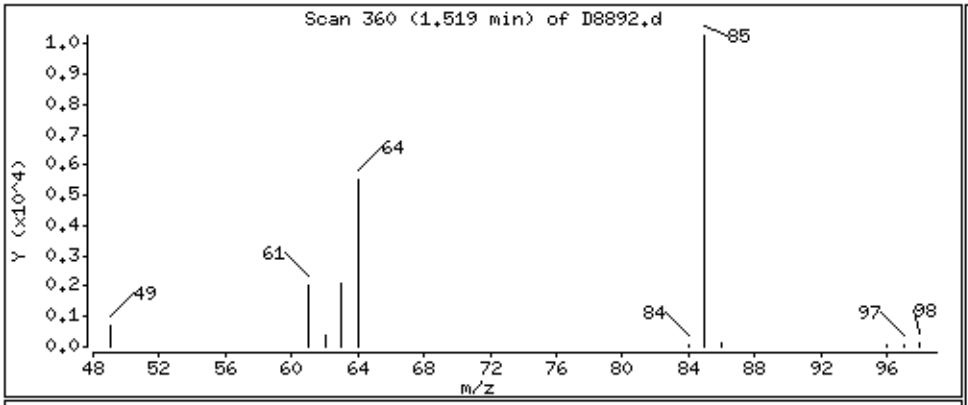
Client ID: Y-BRMW3-287-297-110 Instrument: gcms-d.i

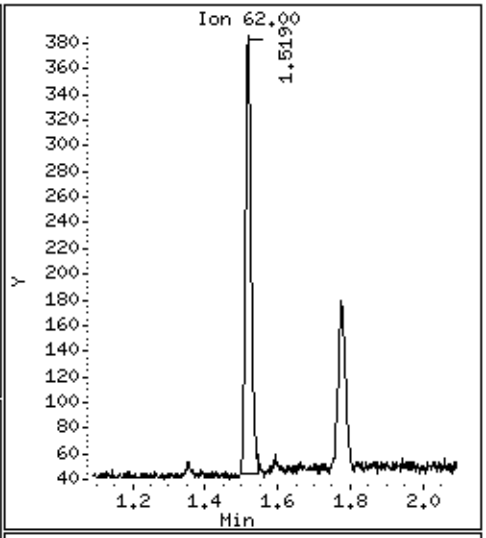
Sample Info: SQ6238-6

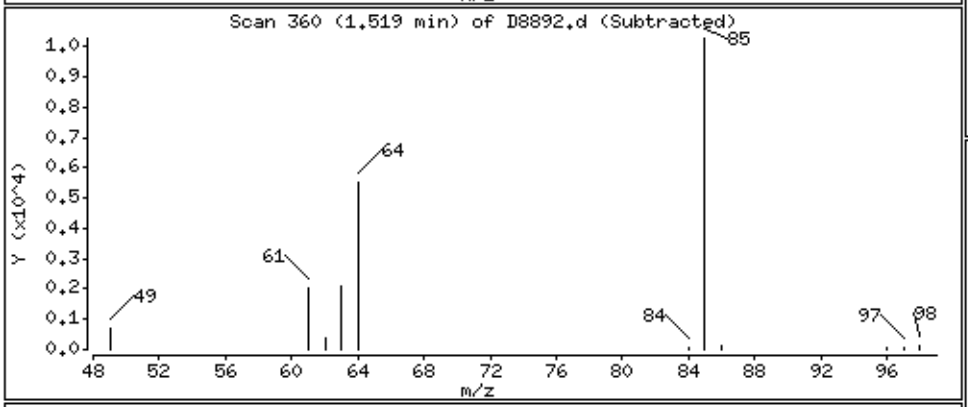
Purge Volume: 25.0 Operator: JSS

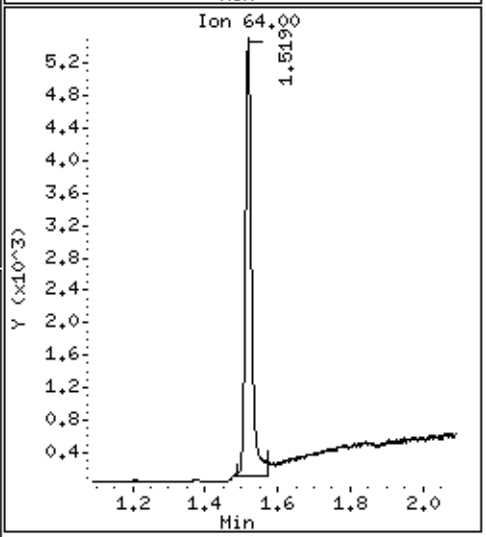
Column phase: RTX-VMS Column diameter: 0.18

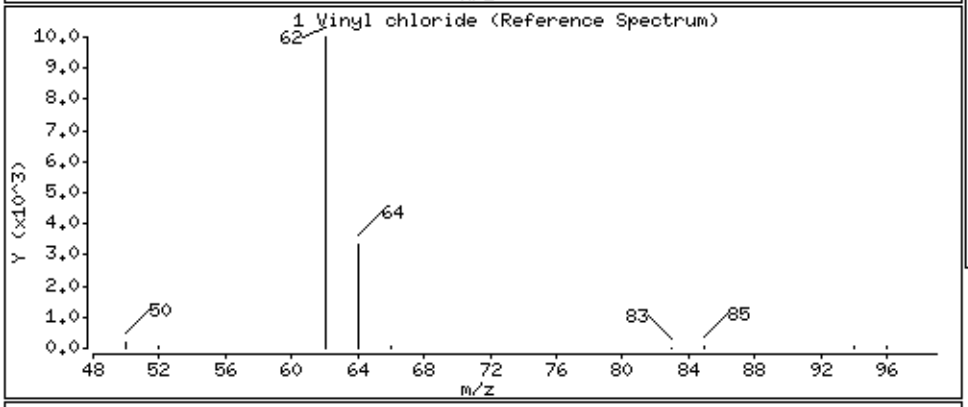
1 Vinyl chloride Concentration: 0.0243 ug/l

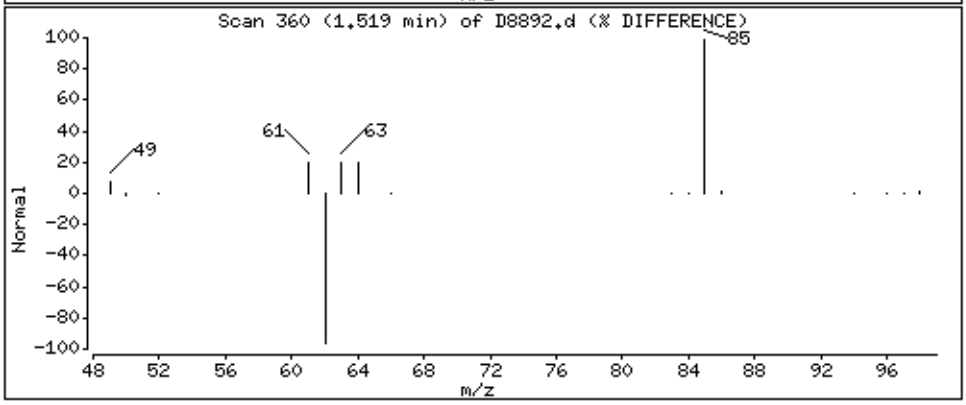












Data File: \\target_server\gg\chem\gcms-d.i\D111723.b\D8892.d

Date : 17-NOV-2023 13:57

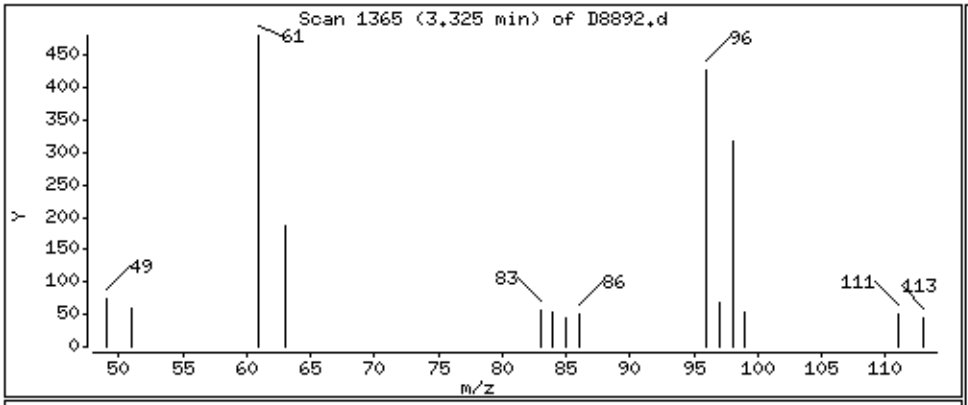
Client ID: Y-BRMW3-287-297-110 Instrument: gcms-d.i

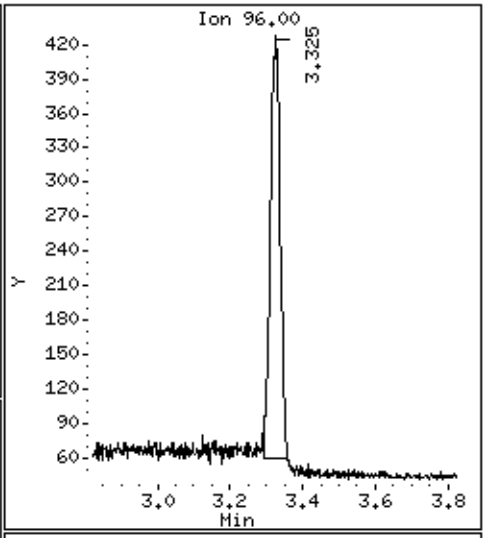
Sample Info: SQ6238-6

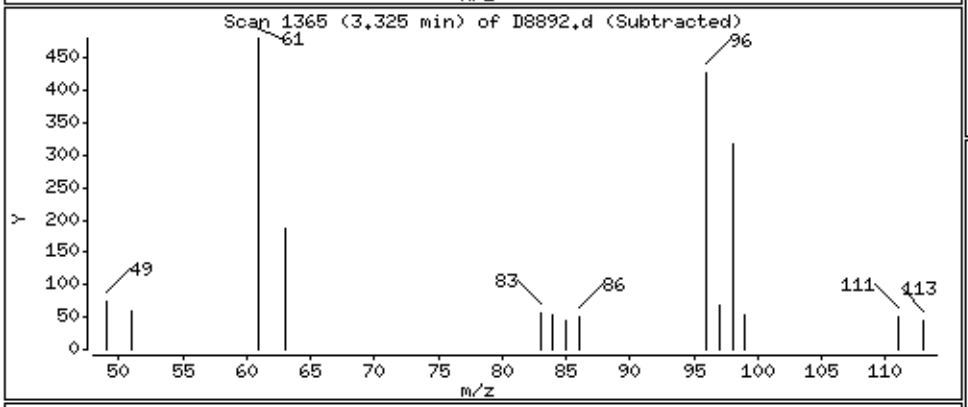
Purge Volume: 25.0 Operator: JSS

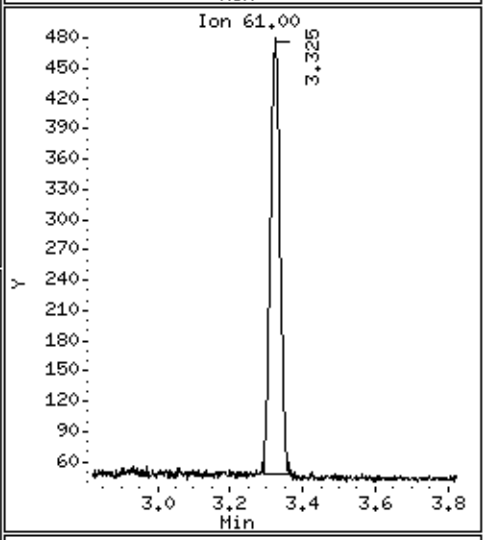
Column phase: RTX-VMS Column diameter: 0.18

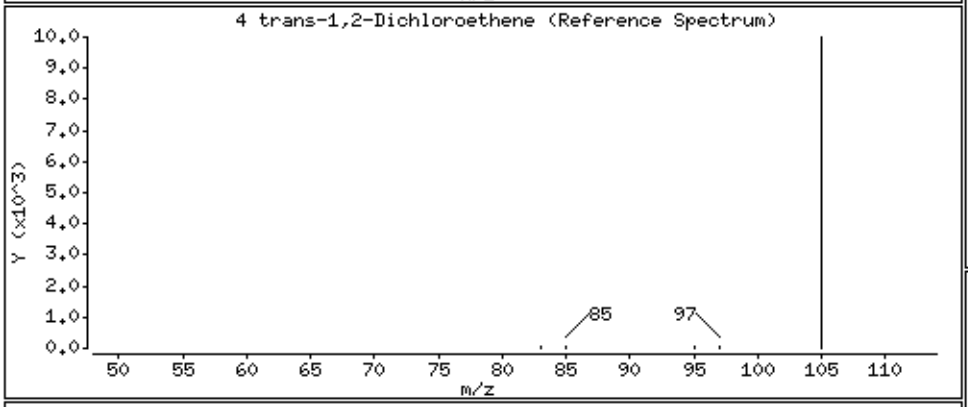
4 trans-1,2-Dichloroethene Concentration: 0.0432 ug/l

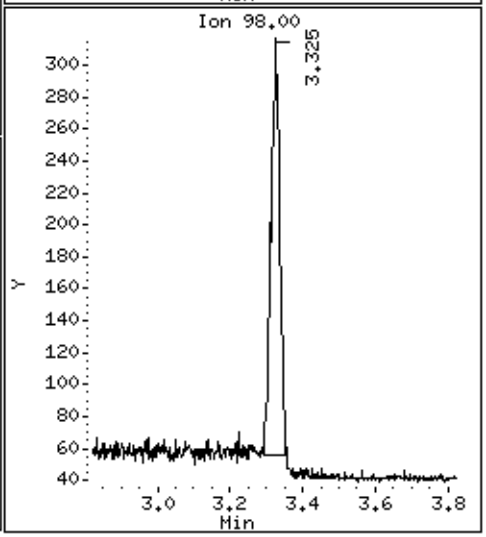


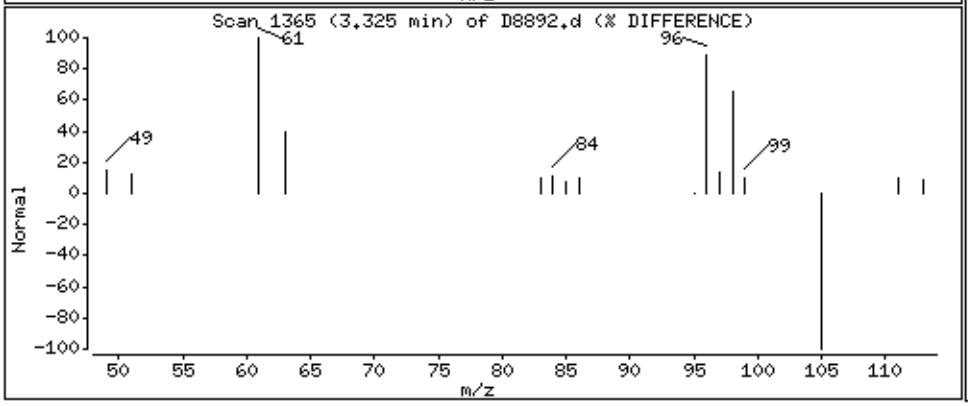








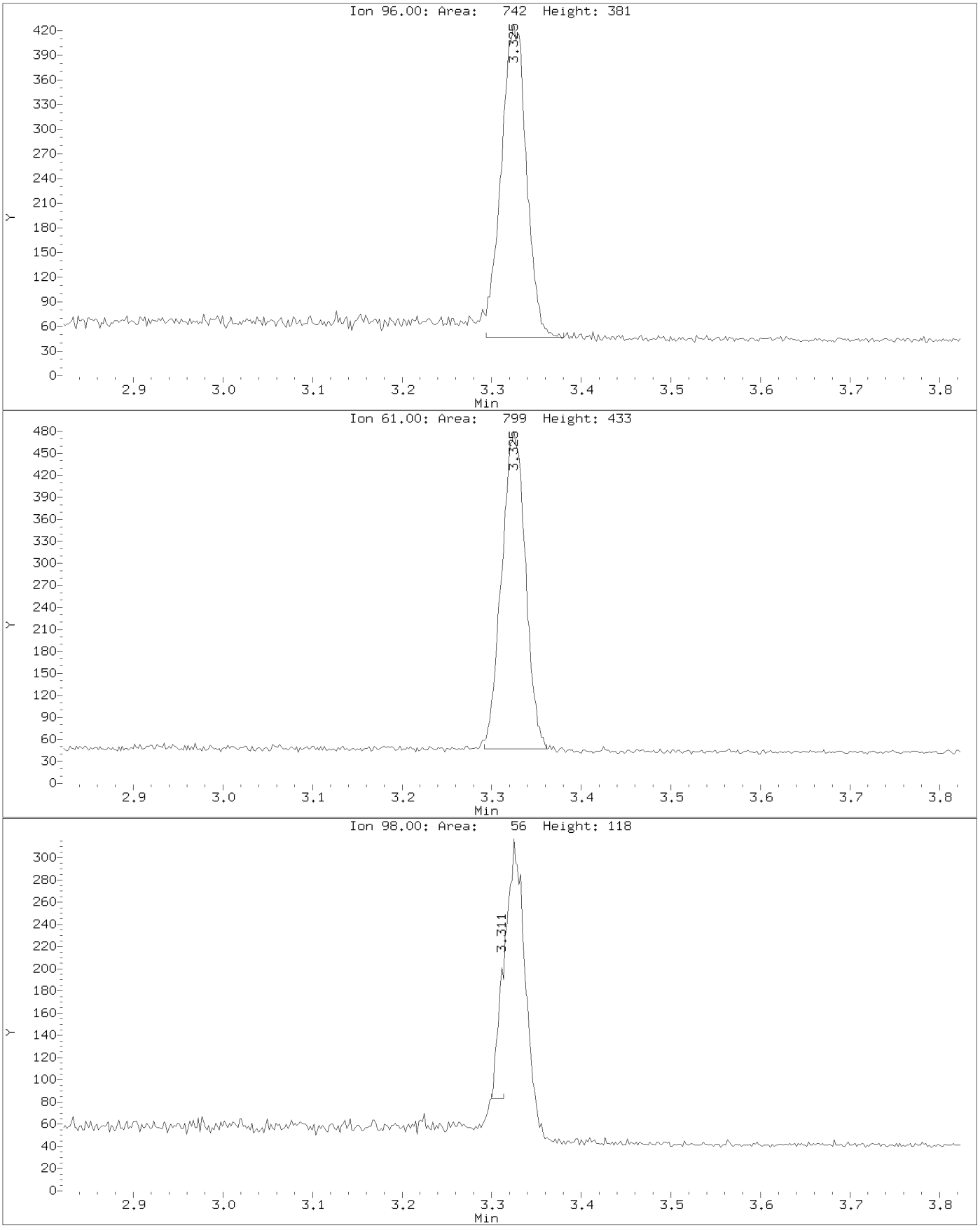




Data File: \\target_server\gg\chem\gcms-d.i\D111723.b\D8892.d
Injection Date: 17-NOV-2023 13:57
Instrument: gcms-d.i
Client Sample ID: Y-BRMW3-287-297-110

Compound: trans-1,2-Dichloroethene
CAS Number: 156-60-5

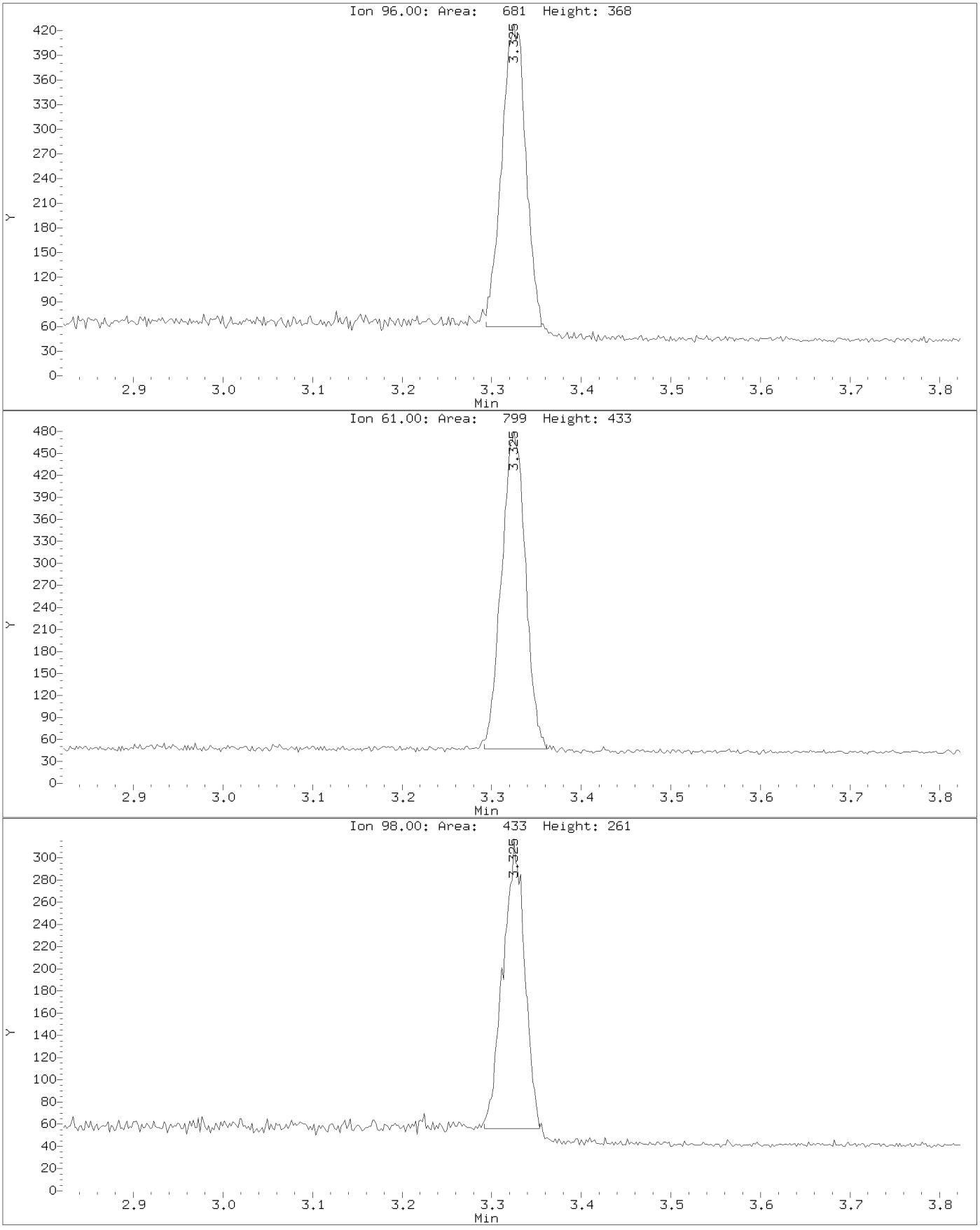
BEFORE MANUAL INTEGRATION



AFTER MANUAL INTEGRATION

Data File: \\target_server\gg\chem\gcms-d.i\D111723.b\D8892.d
Injection Date: 17-NOV-2023 13:57
Instrument: gcms-d.i
Client Sample ID: Y-BRMW3-287-297-110

Compound: trans-1,2-Dichloroethene
CAS Number: 156-60-5



Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

SDG: SQ6238
Lab ID: SQ6238-7
Client ID: SY-BRMW4-291-301-110923
Matrix: AQ
Lab File ID: D8893.D

Sample Date: 09-NOV-23
Extract Date: 17-NOV-23
Extracted By: JSS
Extraction Method: SW846 5030C
Lab Prep Batch: WG345599

Report Date: 12-DEC-23
Analysis Date: 17-NOV-23
Analyst: JSS
Analysis Method: SW846 8260C SIM
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Vinyl Chloride	U	0.050	ug/L	1	.1	0.10	0.0037	0.050
1,1-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0091	0.025
trans-1,2-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0033	0.025
cis-1,2-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0057	0.025
Trichloroethene		0.070	ug/L	1	.05	0.050	0.012	0.025
Tetrachloroethene	U	0.025	ug/L	1	.05	0.050	0.0091	0.025
Dibromofluoromethane		82.2	%					
1,2-Dichloroethane-d4		86.3	%					
Toluene-D8		90.3	%					
p-Bromofluorobenzene		78.2	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029
http://www.katahdinlab.com

Data File: \\target_server\gg\chem\gcms-d.i\D111723.b\D8893.d
Report Date: 12-Dec-2023 08:27

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-d.i\D111723.b\D8893.d
Lab Smp Id: SQ6238-7 Client Smp ID: Y-BRMW4-291-301-110
Inj Date : 17-NOV-2023 14:30
Operator : JSS Inst ID: gcms-d.i
Smp Info : SQ6238-7
Misc Info : WG345599,WG345527-5
Comment : SW846 5030C
Method : \\target_server\gg\chem\gcms-d.i\D111723.b\DSIM(01)CR23.m
Meth Date : 11-Dec-2023 10:56 CROY Quant Type: ISTD
Cal Date : 16-NOV-2023 10:22 Cal File: D8863.d
Als bottle: 12
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: Credere.sub
Target Version: 4.12
Processing Host: ORGANICS2

Concentration Formula: Amt * DF * 25/Vo * CpndVariable

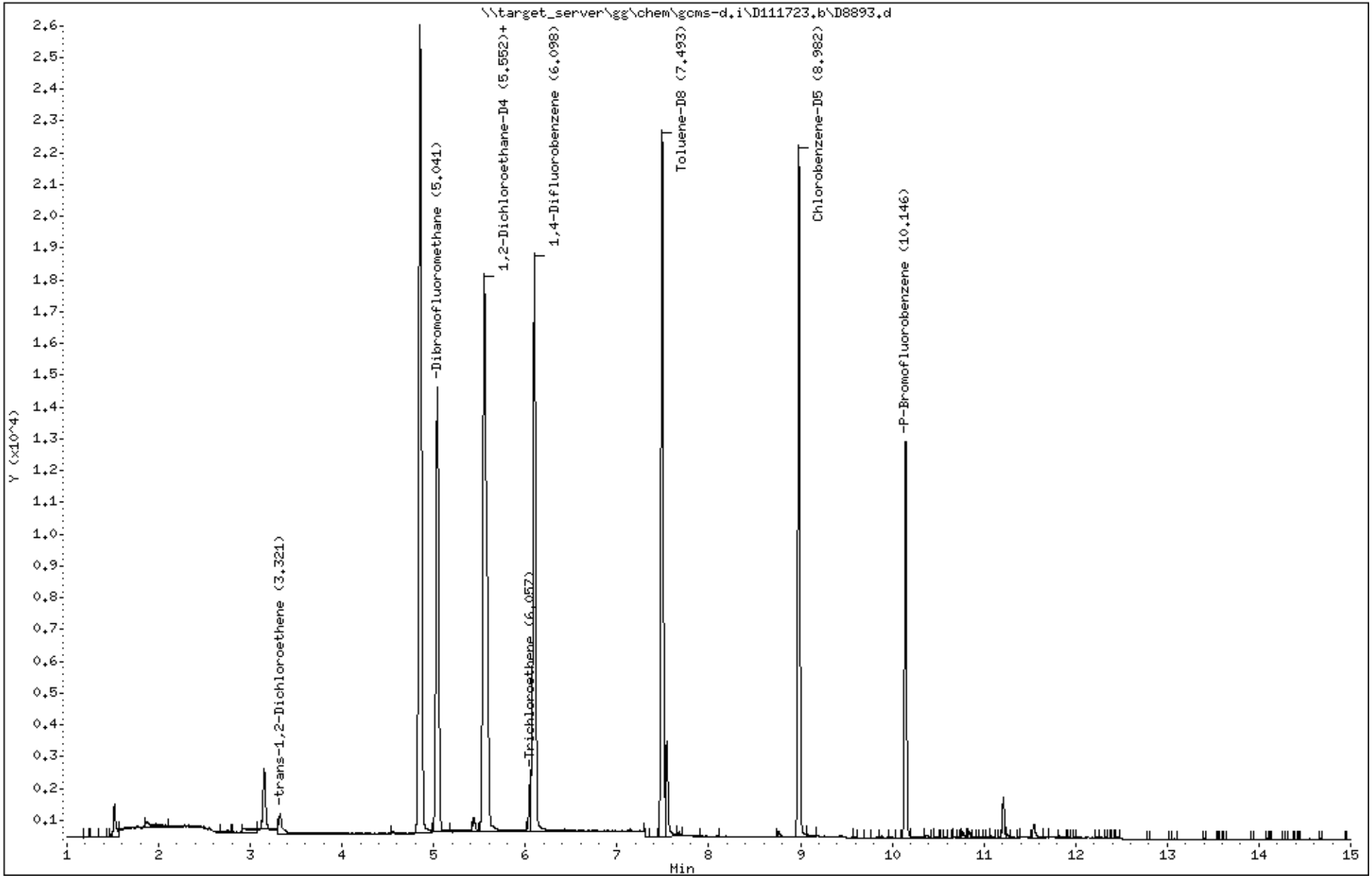
Name	Value	Description
DF	1.000	Dilution Factor
Vo	25.000	sample purged
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)	REVIEW CODE
	13 Trichloroethene	130	6.056	6.052	(0.993)	844	0.07037	0.0704(M)	M7
$	7 Dibromofluoromethane	113	5.040	5.037	(0.908)	14274	0.82259	0.822	
$	11 1,2-Dichloroethane-D4	65	5.581	5.582	(1.006)	8841	0.86320	0.863	
$	15 Toluene-D8	98	7.492	7.491	(1.229)	22317	0.90313	0.903	
$	20 P-Bromofluorobenzene	95	10.144	10.146	(1.129)	6469	0.78182	0.782	
*	10 Pentafluorobenzene	168	5.549	5.549	(1.000)	22220	1.00000		
*	14 1,4-Difluorobenzene	114	6.097	6.096	(1.000)	27290	1.00000		
*	18 Chlorobenzene-D5	117	8.981	8.984	(1.000)	24743	1.00000		

QC Flag Legend

M - Compound response manually integrated.

Data File: \\target_server\gg\chem\gcms-d.i\D111723.b\D8893.d
Date : 17-NOV-2023 14:30
Client ID: Y-BRMW4-291-301-110
Instrument: gcms-d.i
Sample Info: SQ6238-7
Purge Volume: 25.0
Operator: JSS
Column phase: RTX-VMS
Column diameter: 0.18



Katahdin Analytical Services SQ6238 Page 103 of 875

Data File: \\target_server\gg\chem\gcms-d.i\D111723.b\D8893.d

Date : 17-NOV-2023 14:30

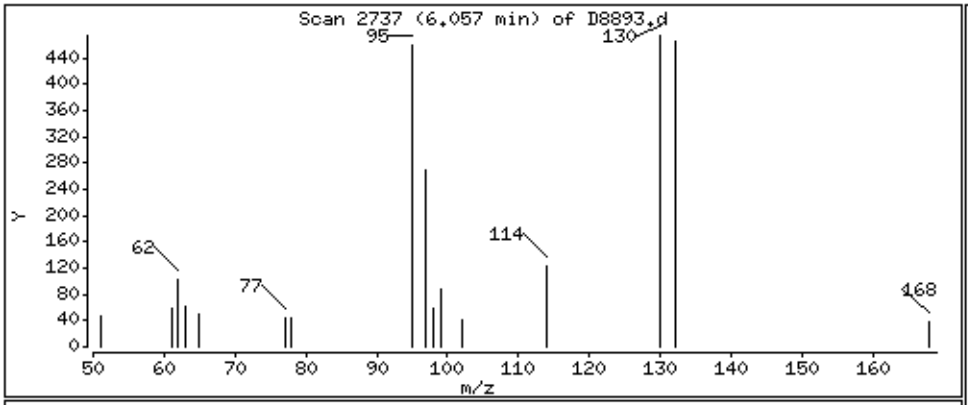
Client ID: Y-BRMW4-291-301-110 Instrument: gcms-d.i

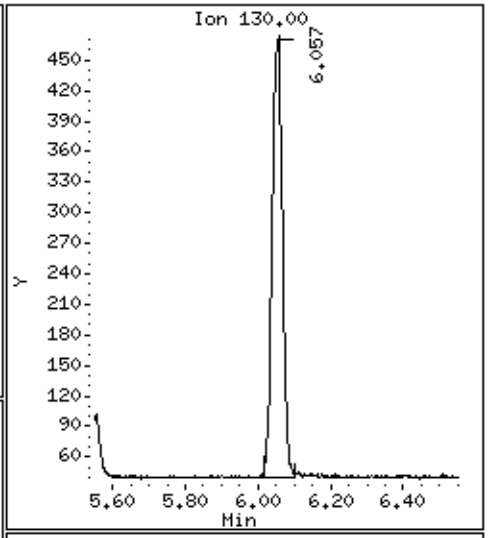
Sample Info: SQ6238-7

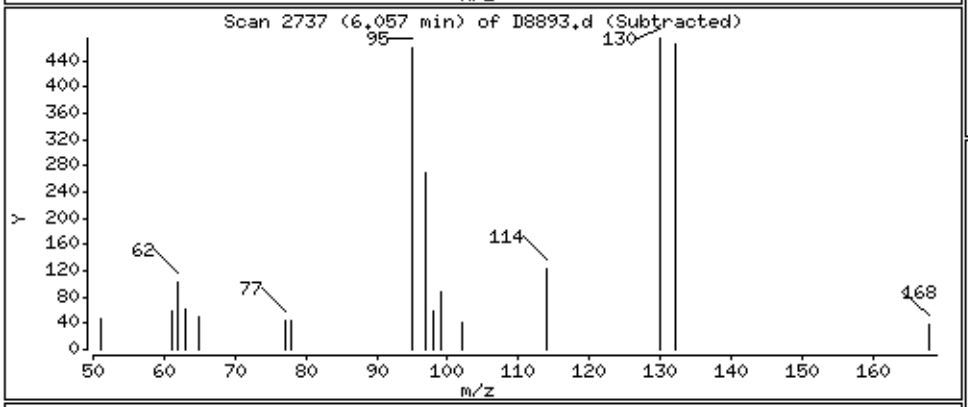
Purge Volume: 25.0 Operator: JSS

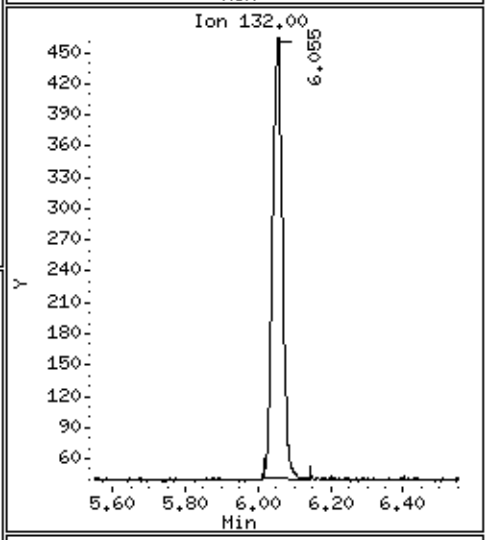
Column phase: RTX-VMS Column diameter: 0.18

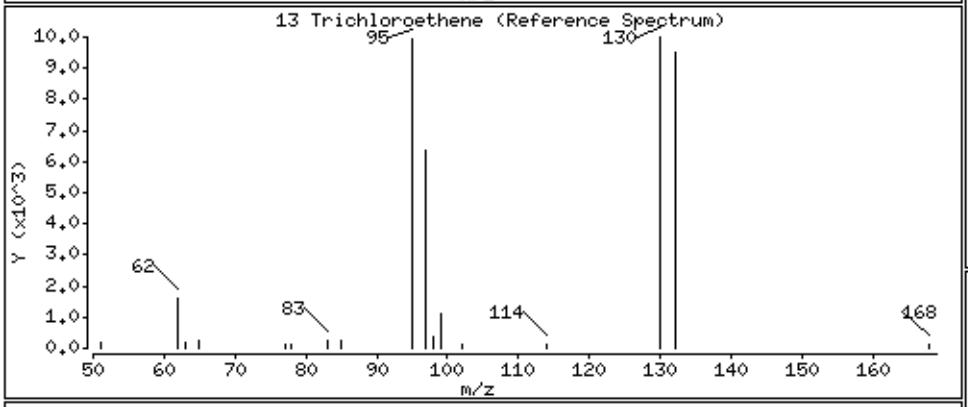
13 Trichloroethene Concentration: 0.0704 ug/l

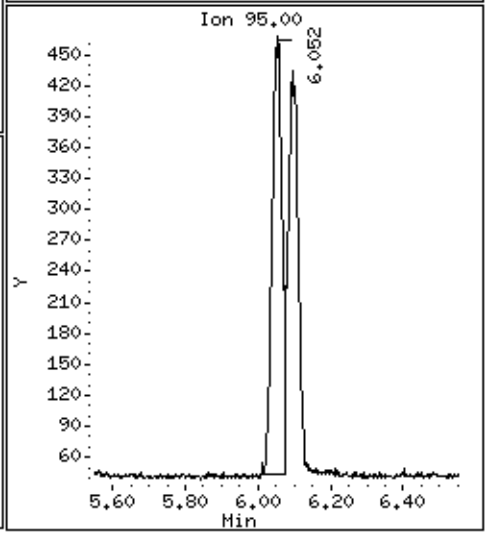


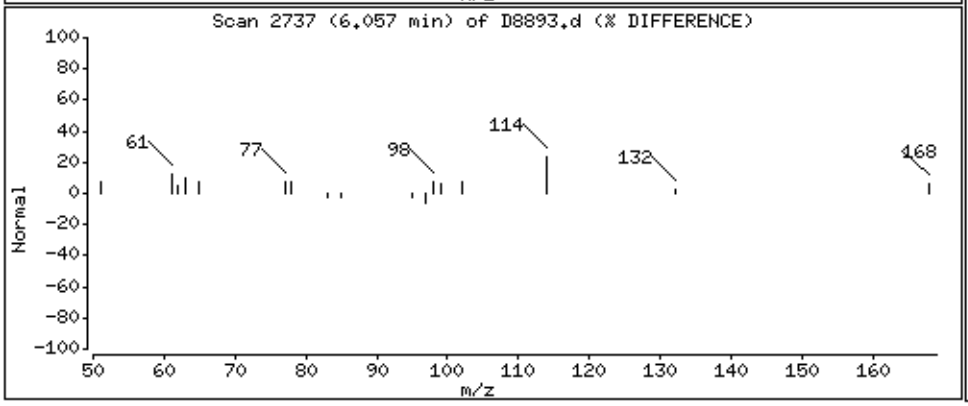








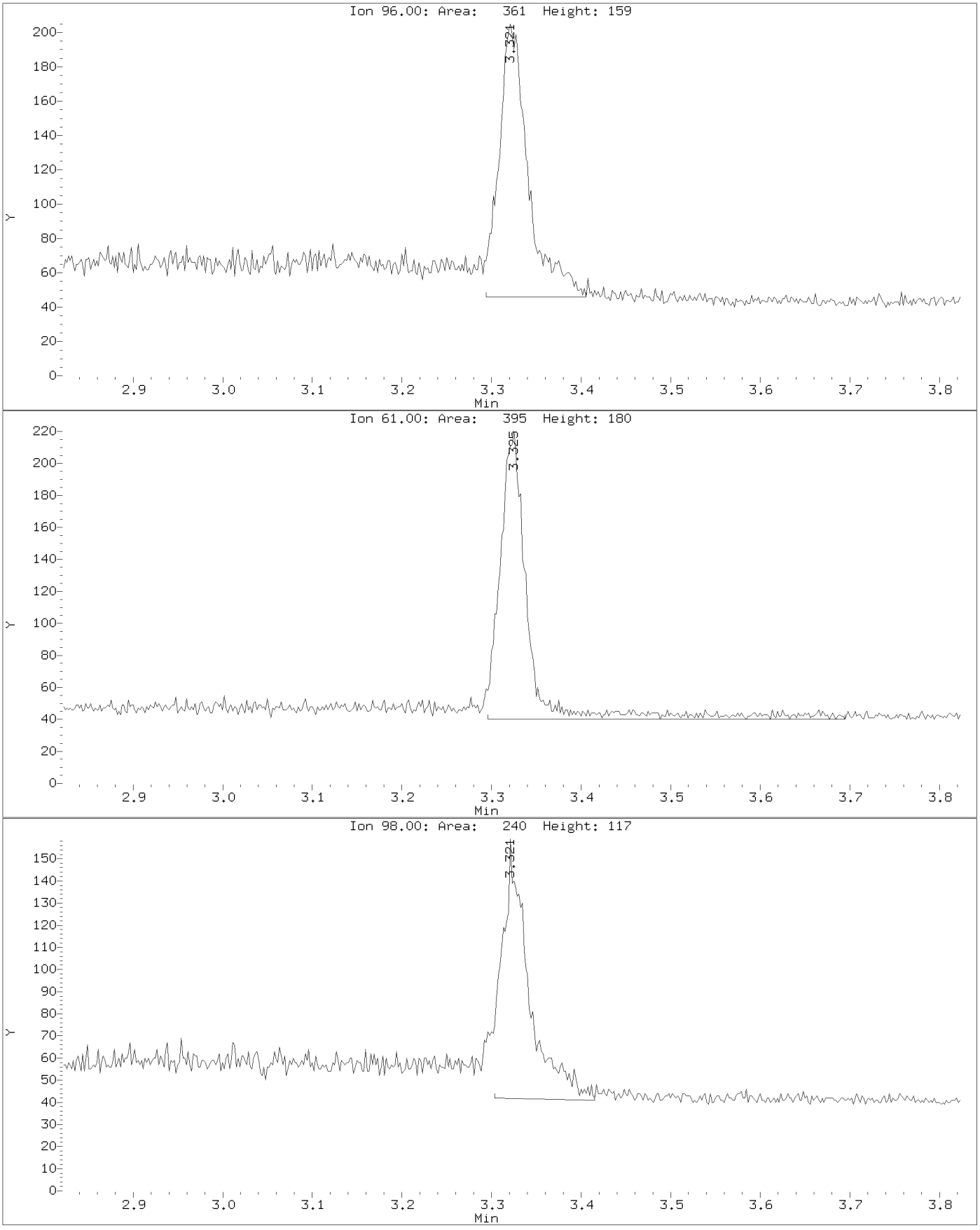




Data File: \\target_server\gg\chem\gcms-d.i\D111723.b\D8893.d
Injection Date: 17-NOV-2023 14:30
Instrument: gcms-d.i
Client Sample ID: Y-BRMW4-291-301-110

Compound: trans-1,2-Dichloroethene
CAS Number: 156-60-5

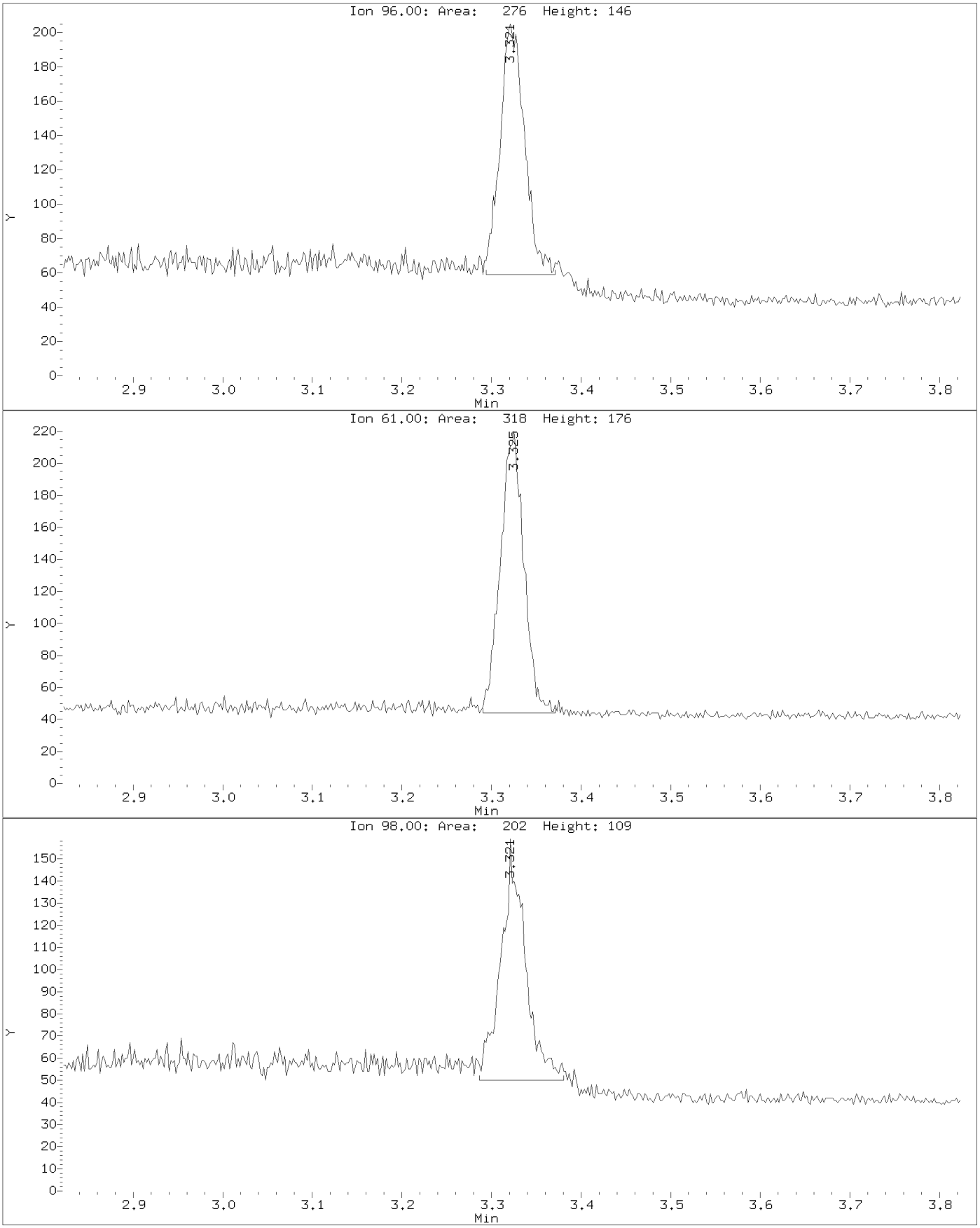
BEFORE MANUAL INTEGRATION



AFTER MANUAL INTEGRATION

Data File: \\target_server\gg\chem\gcms-d.i\D111723.b\D8893.d
Injection Date: 17-NOV-2023 14:30
Instrument: gcms-d.i
Client Sample ID: Y-BRMW4-291-301-110

Compound: trans-1,2-Dichloroethene
CAS Number: 156-60-5



Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

SDG: SQ6238
Lab ID: SQ6238-8
Client ID: SY-BRMW1-42-52-110923
Matrix: AQ
Lab File ID: D8894.D

Sample Date: 09-NOV-23
Extract Date: 17-NOV-23
Extracted By: JSS
Extraction Method: SW846 5030C
Lab Prep Batch: WG345599

Report Date: 12-DEC-23
Analysis Date: 17-NOV-23
Analyst: JSS
Analysis Method: SW846 8260C SIM
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Vinyl Chloride	U	0.050	ug/L	1	.1	0.10	0.0037	0.050
1,1-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0091	0.025
trans-1,2-Dichloroethene	J	0.030	ug/L	1	.05	0.050	0.0033	0.025
cis-1,2-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0057	0.025
Trichloroethene		0.066	ug/L	1	.05	0.050	0.012	0.025
Tetrachloroethene	U	0.025	ug/L	1	.05	0.050	0.0091	0.025
Dibromofluoromethane		83.2	%					
1,2-Dichloroethane-d4		87.1	%					
Toluene-D8		90.7	%					
p-Bromofluorobenzene		76.8	%					

600 Technology Way
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http://www.katahdinlab.com

Data File: \\target_server\gg\chem\gcms-d.i\D111723.b\D8894.d
Report Date: 12-Dec-2023 07:58

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-d.i\D111723.b\D8894.d
Lab Smp Id: SQ6238-8 Client Smp ID: Y-BRMW1-42-52-11092
Inj Date : 17-NOV-2023 15:03
Operator : JSS Inst ID: gcms-d.i
Smp Info : SQ6238-8
Misc Info : WG345599,WG345527-5
Comment : SW846 5030C
Method : \\target_server\gg\chem\gcms-d.i\D111723.b\DSIM(01)CR23.m
Meth Date : 11-Dec-2023 10:56 CROY Quant Type: ISTD
Cal Date : 16-NOV-2023 10:22 Cal File: D8863.d
Als bottle: 13
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: Credere.sub
Target Version: 4.12

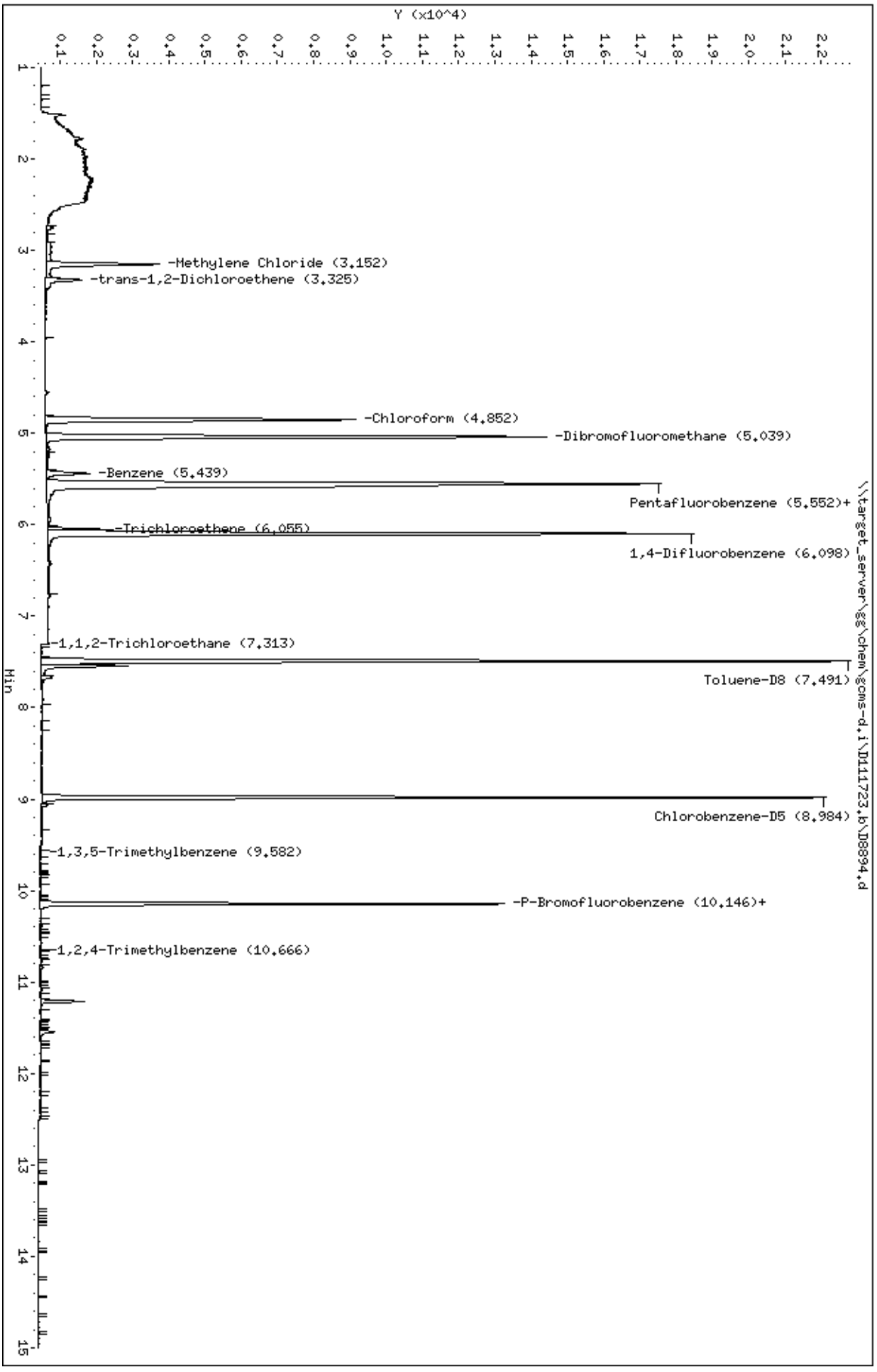
Concentration Formula: Amt * DF * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	25.000	sample purged
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)	REVIEW CODE
	4 trans-1,2-Dichloroethene	96	3.321	3.323	(0.598)	483	0.03050	0.0305(a)	
	13 Trichloroethene	130	6.054	6.052	(0.993)	779	0.06549	0.0655	
$	7 Dibromofluoromethane	113	5.038	5.037	(0.908)	14047	0.83205	0.832	
$	11 1,2-Dichloroethane-D4	65	5.581	5.582	(1.005)	8677	0.87078	0.871	
$	15 Toluene-D8	98	7.492	7.491	(1.229)	22221	0.90672	0.907	
$	20 P-Bromofluorobenzene	95	10.145	10.146	(1.129)	6334	0.76802	0.768	
*	10 Pentafluorobenzene	168	5.551	5.549	(1.000)	21618	1.00000		
*	14 1,4-Difluorobenzene	114	6.097	6.096	(1.000)	27065	1.00000		
*	18 Chlorobenzene-D5	117	8.983	8.984	(1.000)	24662	1.00000		

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).


Data File: \\target_server\gg\chem\gcms-d,i\D111723,b\D8894,d
Date : 17-NOV-2023 15:03
Client ID: Y-BRMW1-42-52-11092
Sample Info: SQ6238-8
Purge Volume: 25.0
Column phase: RTX-VMS
Instrument: gcms-d,i
Operator: JSS
Column diameter: 0.18
Y (x10^4)
Min
-Methylene Chloride (3.152)
-trans-1,2-Dichloroethene (3.325)
-Chloroform (4.852)
-Dibromofluoromethane (5.039)
-Benzene (5.439)
Pentafluorobenzene (5.552)+
-Trichloroethene (6.055)
1,4-Difluorobenzene (6.098)
-1,1,2-Trichloroethane (7.313)
Toluene-D8 (7.491)
Chlorobenzene-D5 (8.984)
1,3,5-Trimethylbenzene (9.582)
-P-Bromofluorobenzene (10.146)+
1,2,4-Trimethylbenzene (10.666)
\\target_server\gg\chem\gcms-d,i\D111723,b\D8894,d

Data File: \\target_server\gg\chem\gcms-d.i\D111723.b\D8894.d

Date : 17-NOV-2023 15:03

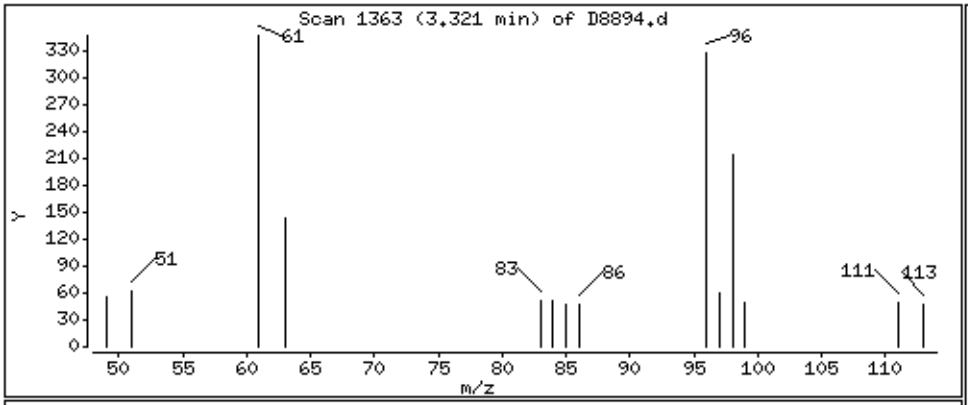
Client ID: Y-BRMW1-42-52-11092 Instrument: gcms-d.i

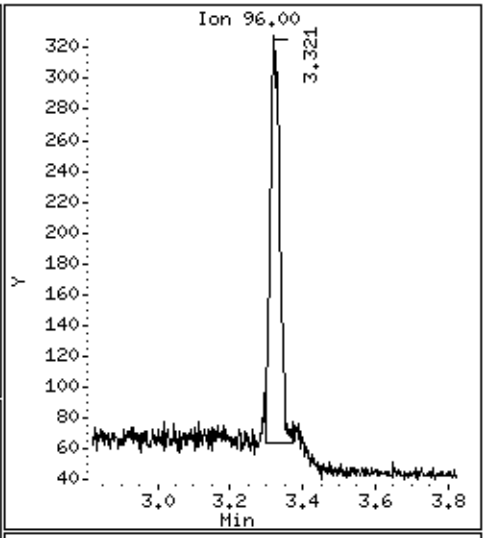
Sample Info: SQ6238-8

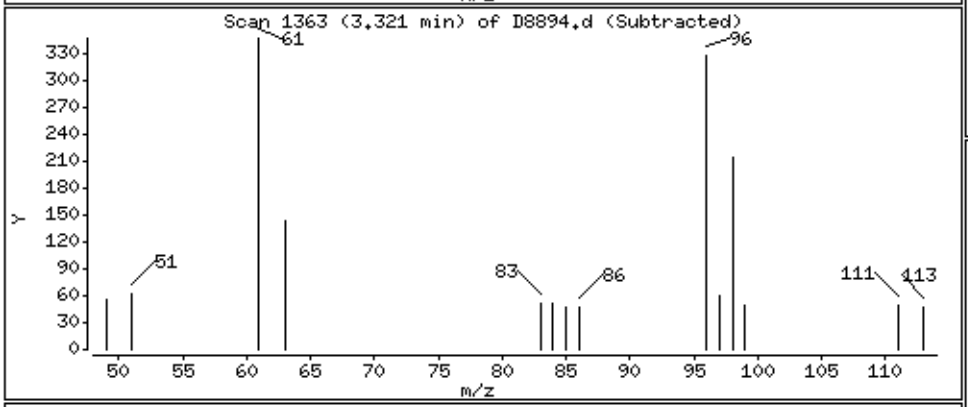
Purge Volume: 25.0 Operator: JSS

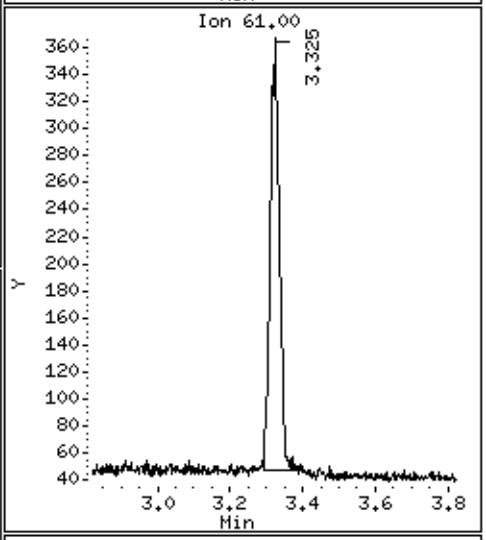
Column phase: RTX-VMS Column diameter: 0.18

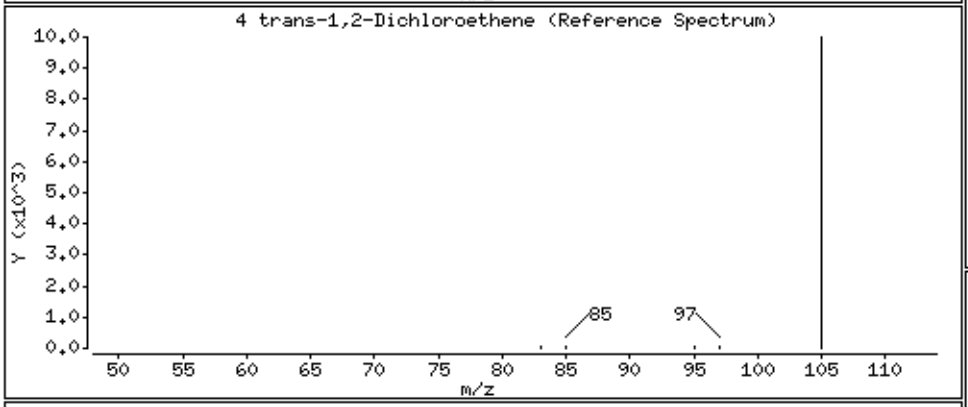
4 trans-1,2-Dichloroethene Concentration: 0.0305 ug/l

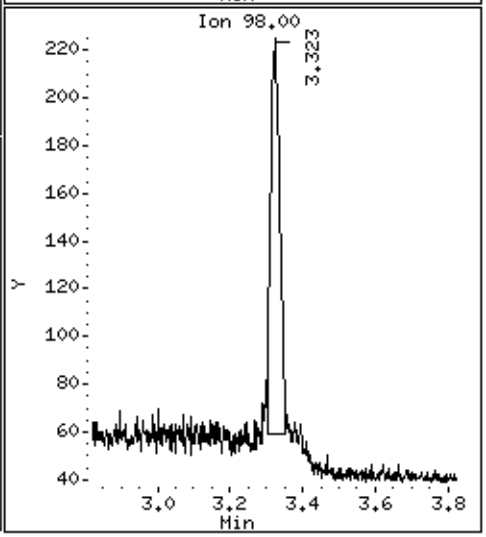


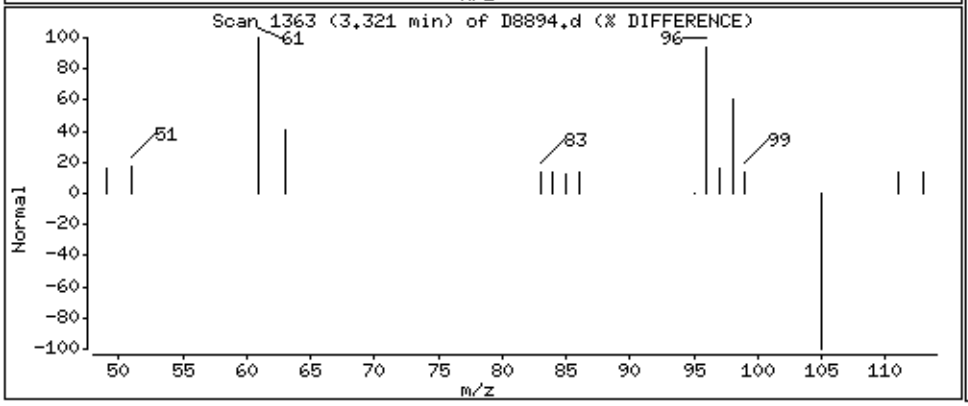












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Date : 17-NOV-2023 15:03

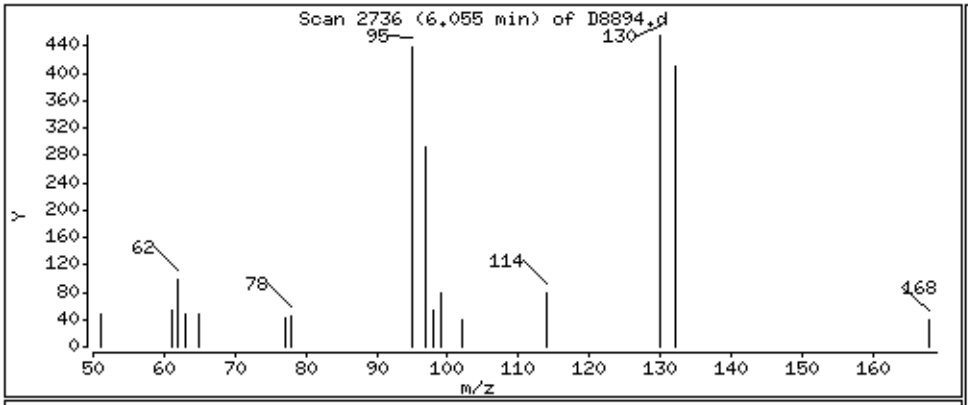
Client ID: Y-BRMW1-42-52-11092 Instrument: gcms-d.i

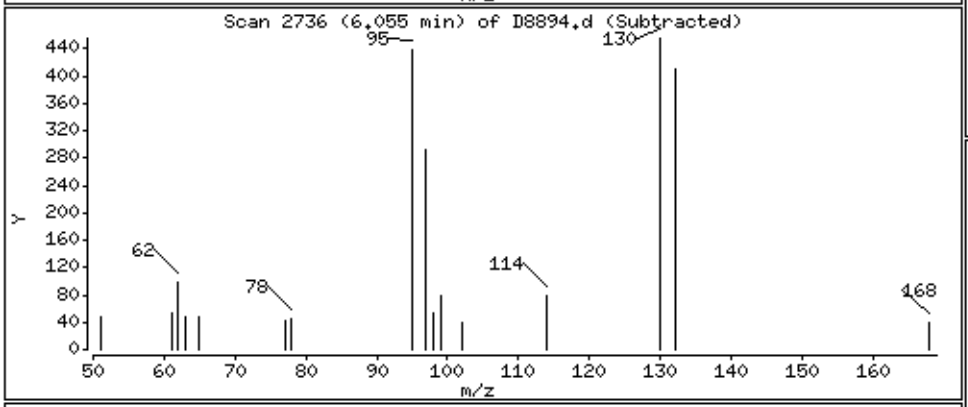
Sample Info: SQ6238-8

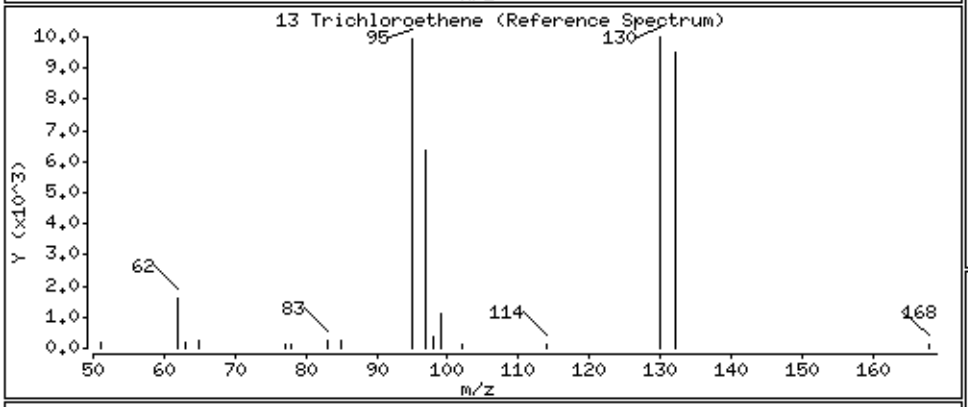
Purge Volume: 25.0 Operator: JSS

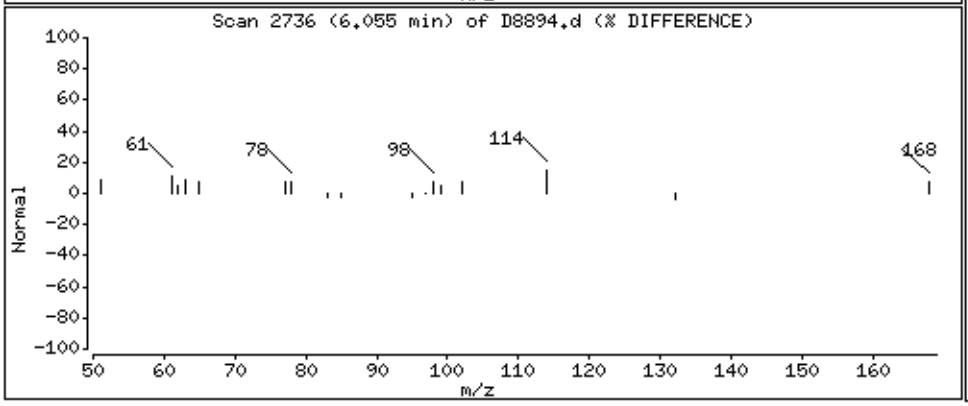
Column phase: RTX-VMS Column diameter: 0.18

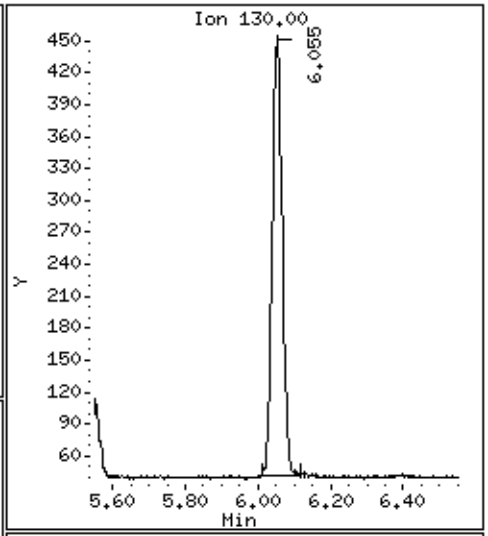
13 Trichloroethene Concentration: 0.0655 ug/l

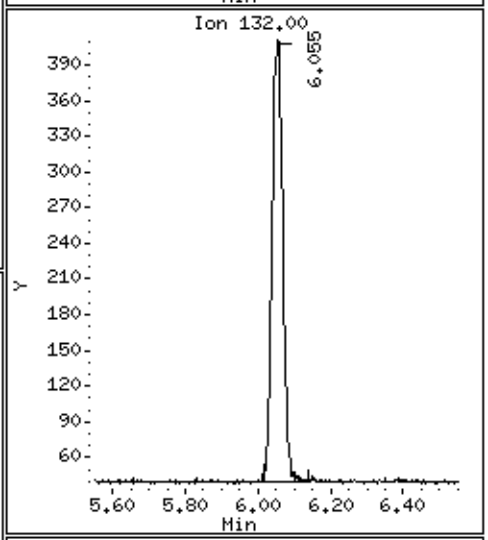


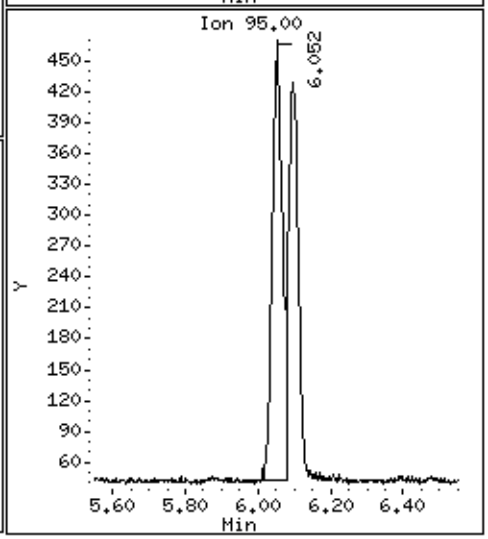












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ANALYTICAL SERVICES

Report of Analytical Results

SDG: SQ6238
Lab ID: SQ6238-9
Client ID: SY-BRMW1-65-75-110923
Matrix: AQ
Lab File ID: D8895.D

Sample Date: 09-NOV-23
Extract Date: 17-NOV-23
Extracted By: JSS
Extraction Method: SW846 5030C
Lab Prep Batch: WG345599

Report Date: 12-DEC-23
Analysis Date: 17-NOV-23
Analyst: JSS
Analysis Method: SW846 8260C SIM
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Vinyl Chloride	U	0.050	ug/L	1	.1	0.10	0.0037	0.050
1,1-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0091	0.025
trans-1,2-Dichloroethene	J	0.022	ug/L	1	.05	0.050	0.0033	0.025
cis-1,2-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0057	0.025
Trichloroethene		0.081	ug/L	1	.05	0.050	0.012	0.025
Tetrachloroethene	U	0.025	ug/L	1	.05	0.050	0.0091	0.025
Dibromofluoromethane		86.3	%					
1,2-Dichloroethane-d4		88.9	%					
Toluene-D8		92.7	%					
p-Bromofluorobenzene		78.2	%					

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Data File: \\target_server\gg\chem\gcms-d.i\D111723.b\D8895.d
Report Date: 12-Dec-2023 07:58

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-d.i\D111723.b\D8895.d
Lab Smp Id: SQ6238-9 Client Smp ID: Y-BRMW1-65-75-11092
Inj Date : 17-NOV-2023 15:36
Operator : JSS Inst ID: gcms-d.i
Smp Info : SQ6238-9
Misc Info : WG345599,WG345527-5
Comment : SW846 5030C
Method : \\target_server\gg\chem\gcms-d.i\D111723.b\DSIM(01)CR23.m
Meth Date : 11-Dec-2023 10:56 CROY Quant Type: ISTD
Cal Date : 16-NOV-2023 10:22 Cal File: D8863.d
Als bottle: 14
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: Credere.sub
Target Version: 4.12

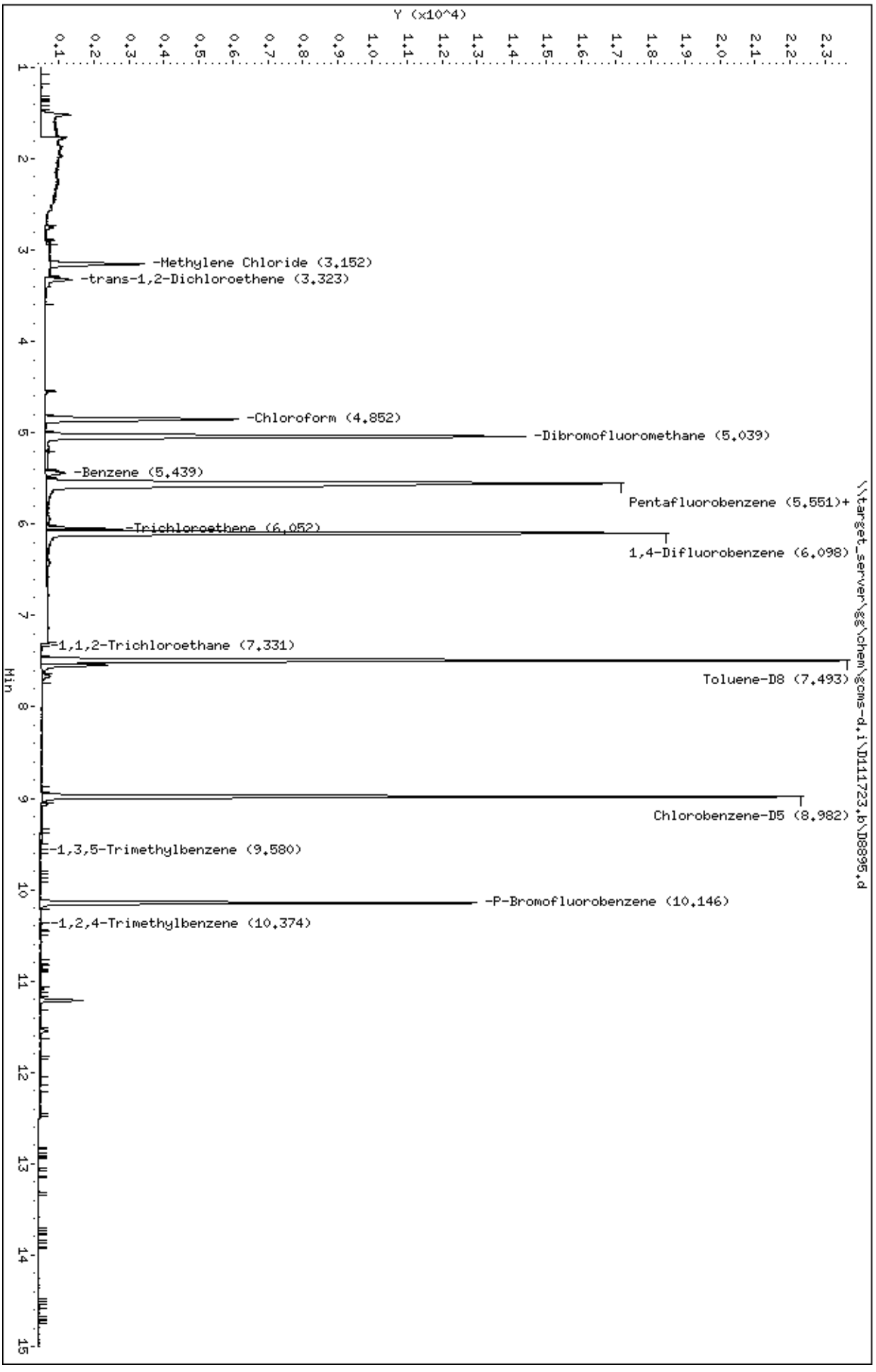
Concentration Formula: Amt * DF * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	25.000	sample purged
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)	REVIEW CODE
	4 trans-1,2-Dichloroethene	96	3.322	3.323	(0.599)	334	0.02157	0.0216(a)	
	13 Trichloroethene	130	6.052	6.052	(0.993)	965	0.08104	0.0810	
$	7 Dibromofluoromethane	113	5.038	5.037	(0.908)	14250	0.86312	0.863	
$	11 1,2-Dichloroethane-D4	65	5.583	5.582	(1.006)	8661	0.88879	0.889	
$	15 Toluene-D8	98	7.492	7.491	(1.229)	22735	0.92677	0.927	
$	20 P-Bromofluorobenzene	95	10.143	10.146	(1.129)	6594	0.78192	0.782	
*	10 Pentafluorobenzene	168	5.549	5.549	(1.000)	21141	1.00000		
*	14 1,4-Difluorobenzene	114	6.097	6.096	(1.000)	27092	1.00000		
*	18 Chlorobenzene-D5	117	8.981	8.984	(1.000)	25218	1.00000		

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).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Date : 17-NOV-2023 15:36
Client ID: Y-BRMW1-65-75-11092
Sample Info: SQ6238-9
Purge Volume: 25.0
Column phase: RTX-VMS
Instrument: gcms-d.i
Operator: JSS
Column diameter: 0.18
Y (x10^4)
Min
-Methylene Chloride (3.152)
-trans-1,2-Dichloroethene (3.323)
-Chloroform (4.852)
-Dibromofluoromethane (5.039)
-Benzene (5.439)
Pentafluorobenzene (5.551)+
-Trichloroethene (6.052)
1,4-Difluorobenzene (6.098)
=1,1,2-Trichloroethane (7.331)
Toluene-D8 (7.493)
Chlorobenzene-D5 (8.982)
-1,3,5-Trimethylbenzene (9.580)
-P-Bromofluorobenzene (10.146)
-1,2,4-Trimethylbenzene (10.374)
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Data File: \\target_server\gg\chem\gcms-d.i\D111723.b\D8895.d

Date : 17-NOV-2023 15:36

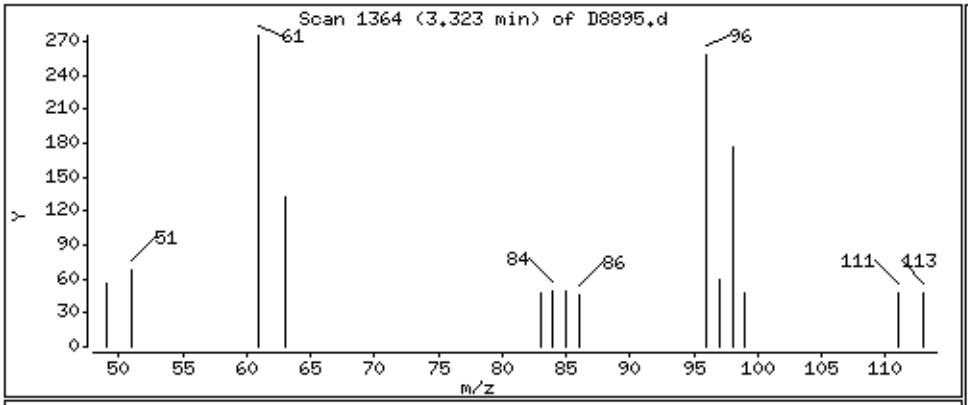
Client ID: Y-BRMW1-65-75-11092 Instrument: gcms-d.i

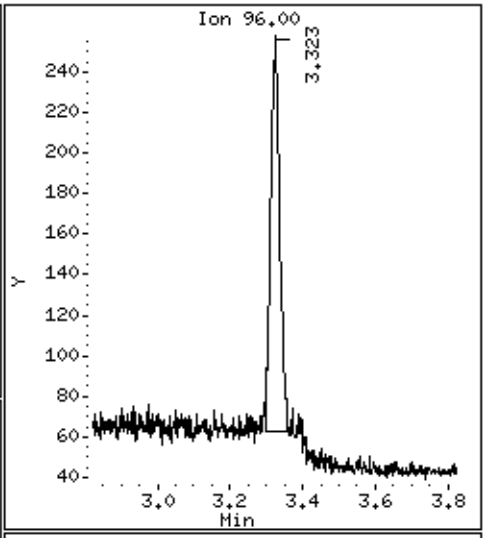
Sample Info: SQ6238-9

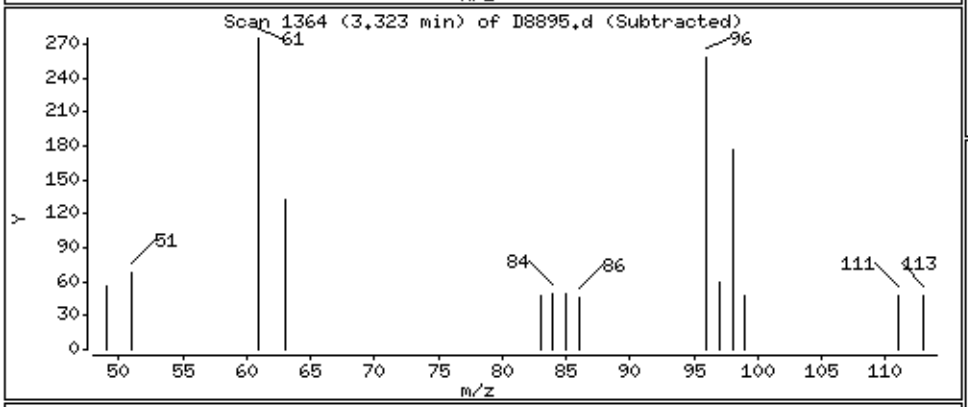
Purge Volume: 25.0 Operator: JSS

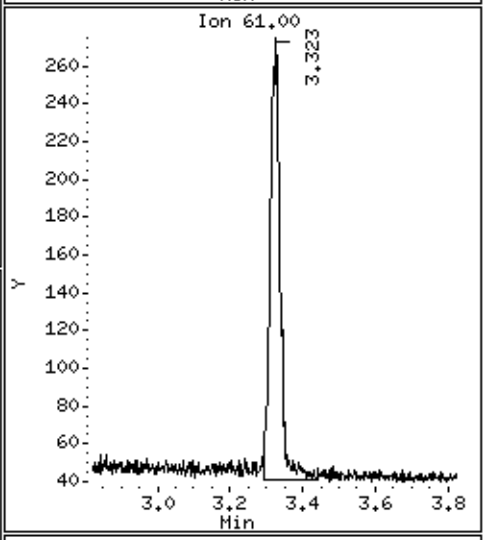
Column phase: RTX-VMS Column diameter: 0.18

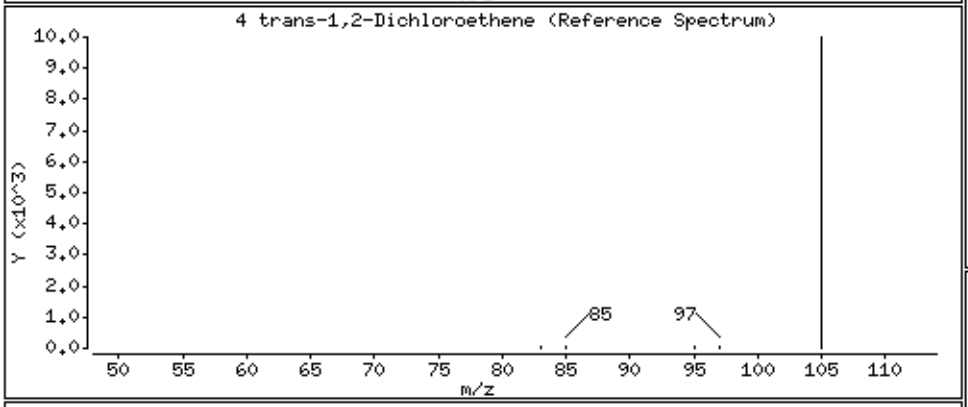
4 trans-1,2-Dichloroethene Concentration: 0.0216 ug/l

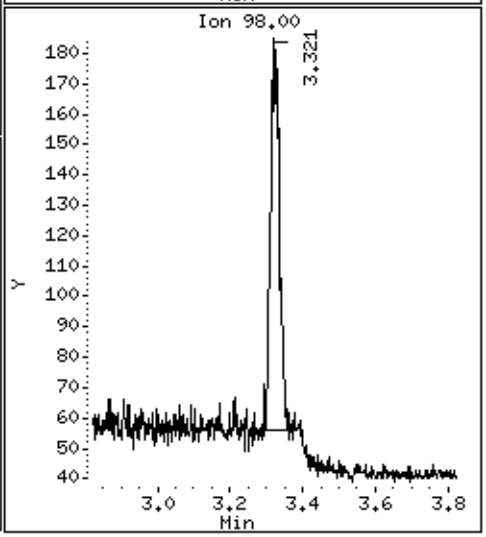


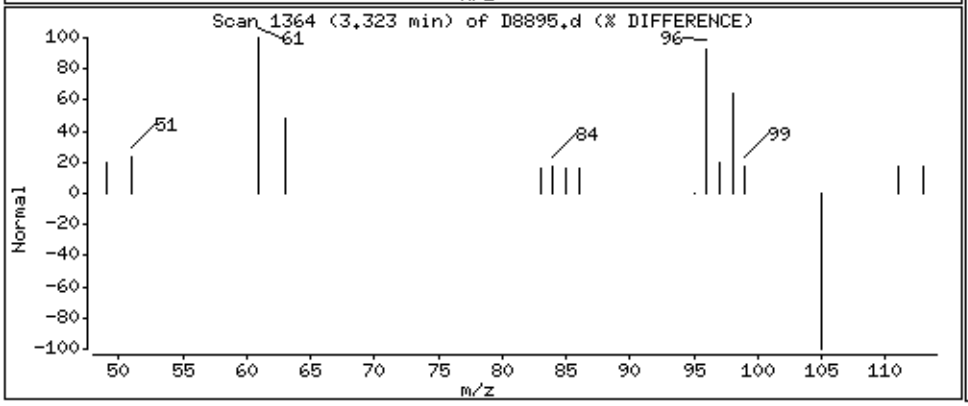












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Date : 17-NOV-2023 15:36

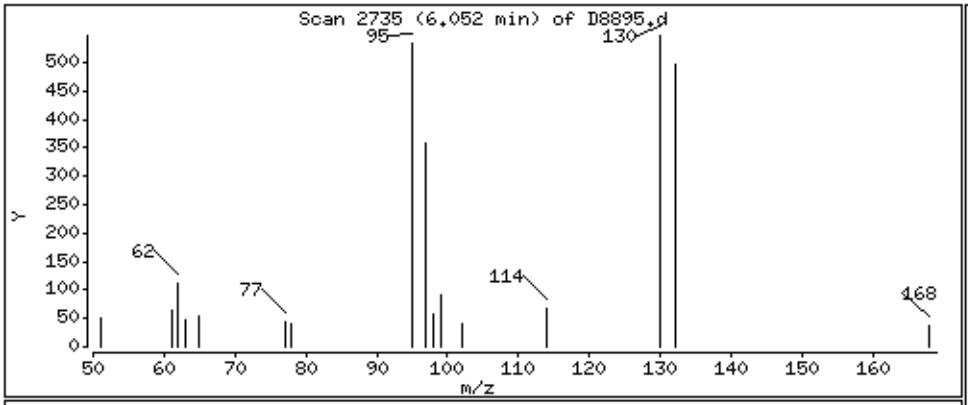
Client ID: Y-BRMW1-65-75-11092 Instrument: gcms-d.i

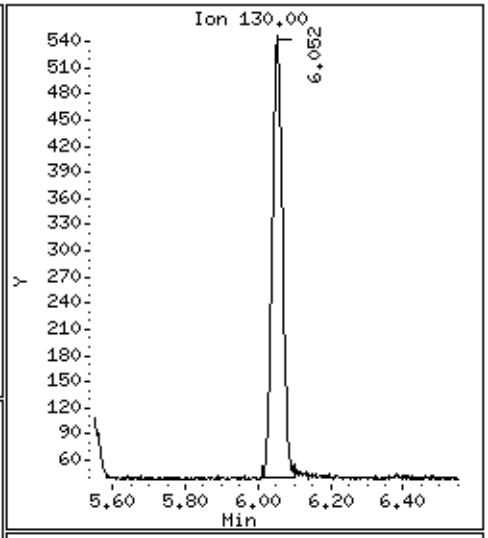
Sample Info: SQ6238-9

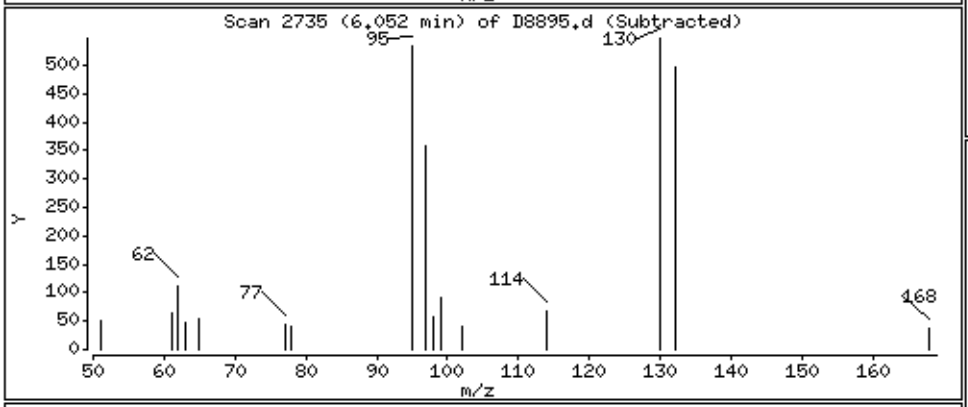
Purge Volume: 25.0 Operator: JSS

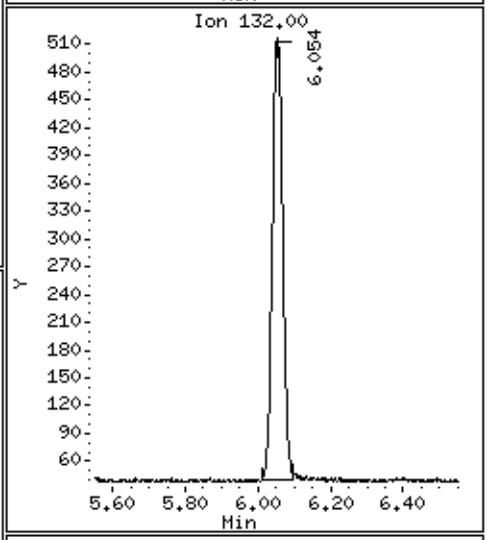
Column phase: RTX-VMS Column diameter: 0.18

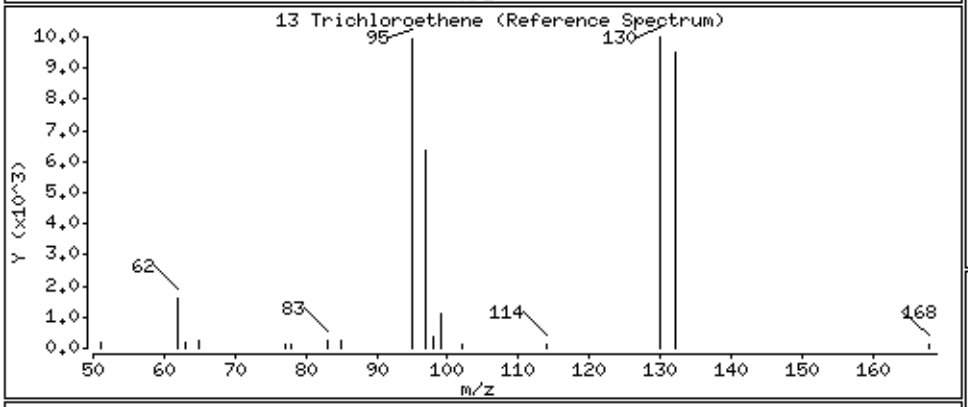
13 Trichloroethene Concentration: 0.0810 ug/l

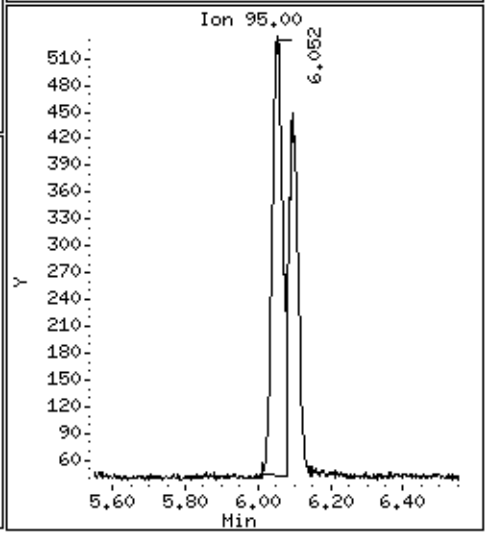


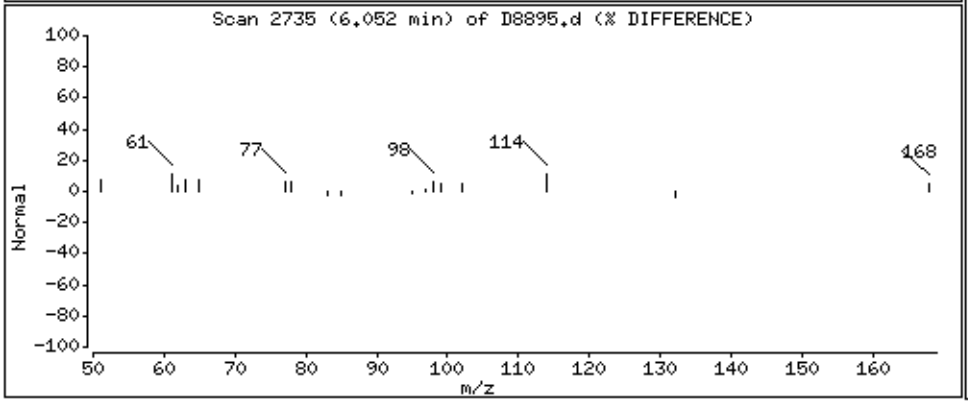












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Report of Analytical Results

SDG: SQ6238
Lab ID: SQ6238-10
Client ID: SY-BRMW10-65-75-110923
Matrix: AQ
Lab File ID: D8896.D

Sample Date: 09-NOV-23
Extract Date: 17-NOV-23
Extracted By: JSS
Extraction Method: SW846 5030C
Lab Prep Batch: WG345599

Report Date: 12-DEC-23
Analysis Date: 17-NOV-23
Analyst: JSS
Analysis Method: SW846 8260C SIM
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Vinyl Chloride	U	0.050	ug/L	1	.1	0.10	0.0037	0.050
1,1-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0091	0.025
trans-1,2-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0033	0.025
cis-1,2-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0057	0.025
Trichloroethene		0.082	ug/L	1	.05	0.050	0.012	0.025
Tetrachloroethene	U	0.025	ug/L	1	.05	0.050	0.0091	0.025
Dibromofluoromethane		88.8	%					
1,2-Dichloroethane-d4		94.0	%					
Toluene-D8		92.4	%					
p-Bromofluorobenzene		79.3	%					

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Data File: \\target_server\gg\chem\gcms-d.i\D111723.b\D8896.d
Report Date: 12-Dec-2023 07:58

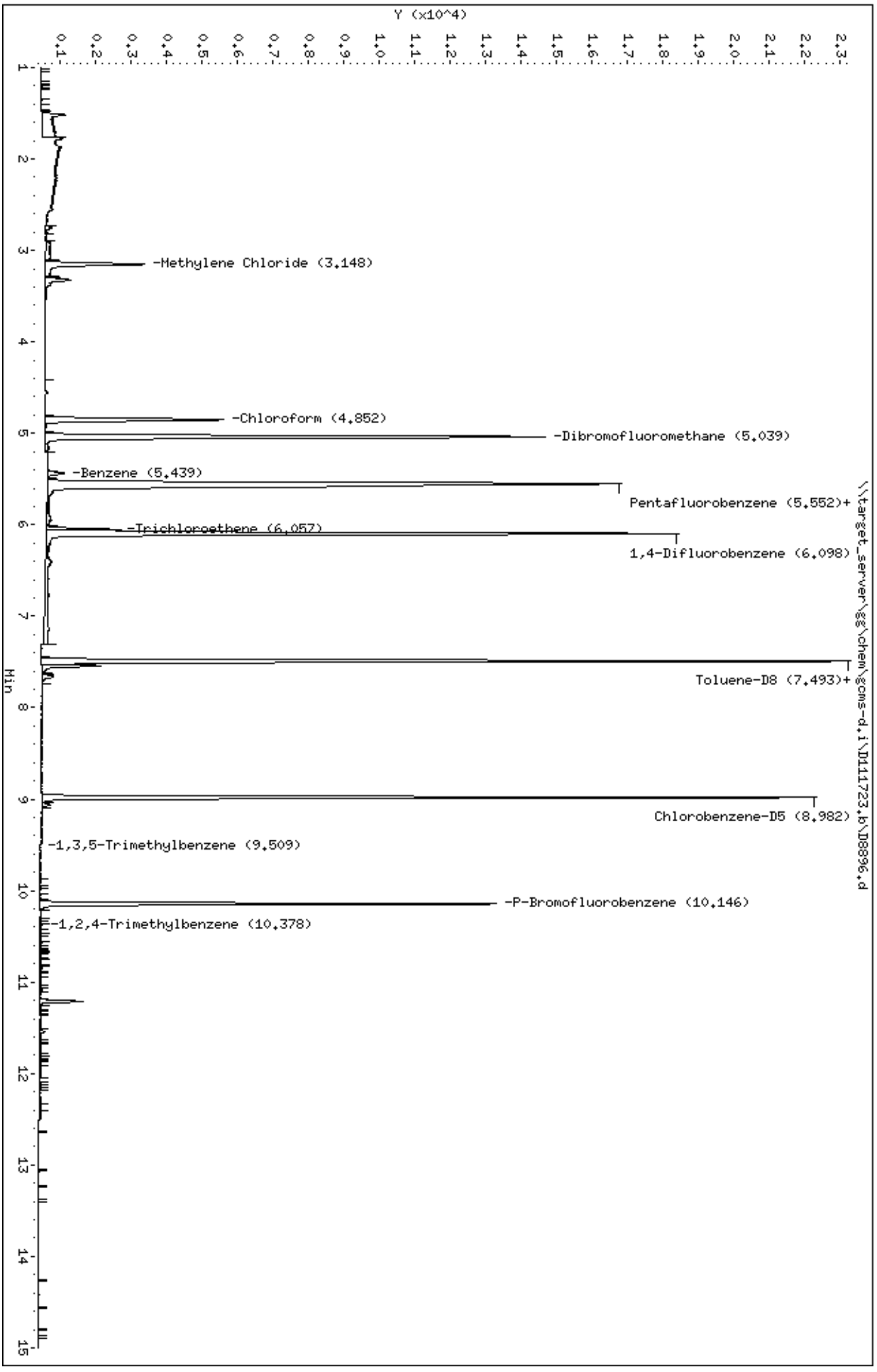
Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-d.i\D111723.b\D8896.d
Lab Smp Id: SQ6238-10 Client Smp ID: Y-BRMW1D-65-75-1109
Inj Date : 17-NOV-2023 16:10
Operator : JSS Inst ID: gcms-d.i
Smp Info : SQ6238-10
Misc Info : WG345599,WG345527-5
Comment : SW846 5030C
Method : \\target_server\gg\chem\gcms-d.i\D111723.b\DSIM(01)CR23.m
Meth Date : 11-Dec-2023 10:56 CROY Quant Type: ISTD
Cal Date : 16-NOV-2023 10:22 Cal File: D8863.d
Als bottle: 15
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: Credere.sub
Target Version: 4.12

Concentration Formula: Amt * DF * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	25.000	sample purged
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)	REVIEW CODE
	13 Trichloroethene	130	6.054	6.052	(0.993)	970	0.08198	0.0820	
$	7 Dibromofluoromethane	113	5.038	5.037	(0.908)	14350	0.88769	0.888	
$	11 1,2-Dichloroethane-D4	65	5.579	5.582	(1.005)	8968	0.93990	0.940	
$	15 Toluene-D8	98	7.492	7.491	(1.229)	22520	0.92384	0.924	
$	20 P-Bromofluorobenzene	95	10.145	10.146	(1.130)	6624	0.79322	0.793	
*	10 Pentafluorobenzene	168	5.549	5.549	(1.000)	20700	1.00000		
*	14 1,4-Difluorobenzene	114	6.097	6.096	(1.000)	26921	1.00000		
*	18 Chlorobenzene-D5	117	8.981	8.984	(1.000)	24972	1.00000		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Date : 17-NOV-2023 16:10
Client ID: Y-BRMW1D-65-75-1109
Sample Info: SQ6238-10
Purge Volume: 25.0
Column phase: RTX-VMS
Instrument: gcms-d.i
Operator: JSS
Column diameter: 0.18
Y (x10^4)
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1.0
1.1
1.2
1.3
1.4
1.5
1.6
1.7
1.8
1.9
2.0
2.1
2.2
2.3
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
Min
-Methylene Chloride (3.148)
-Chloroform (4.852)
-Dibromofluoromethane (5.039)
-Benzene (5.439)
Pentafluorobenzene (5.552)+
-Trichloroethene (6.057)
1,4-Difluorobenzene (6.098)
\\target_server\gg\chem\gcms-d.i\D111723.b\D8896.d
Toluene-D8 (7.493)+
Chlorobenzene-D5 (8.982)
-1,3,5-Trimethylbenzene (9.509)
-P-Bromofluorobenzene (10.146)
-1,2,4-Trimethylbenzene (10.378)

Data File: \\target_server\gg\chem\gcms-d.i\D111723.b\D8896.d

Date : 17-NOV-2023 16:10

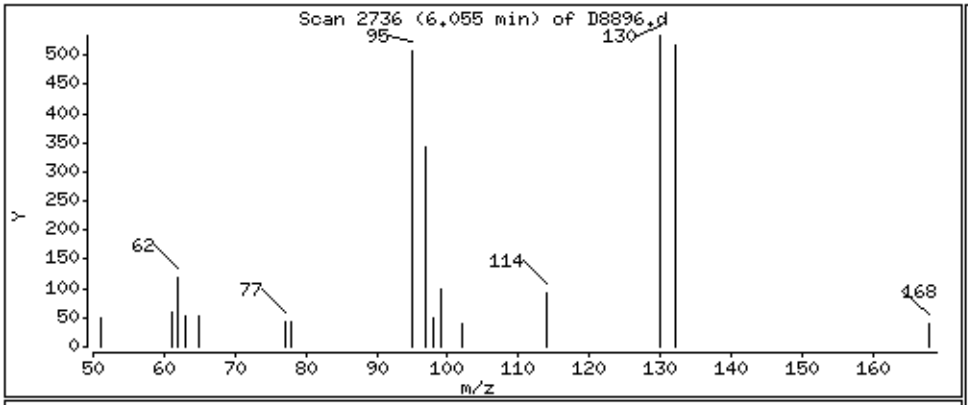
Client ID: Y-BRMW1D-65-75-1109 Instrument: gcms-d.i

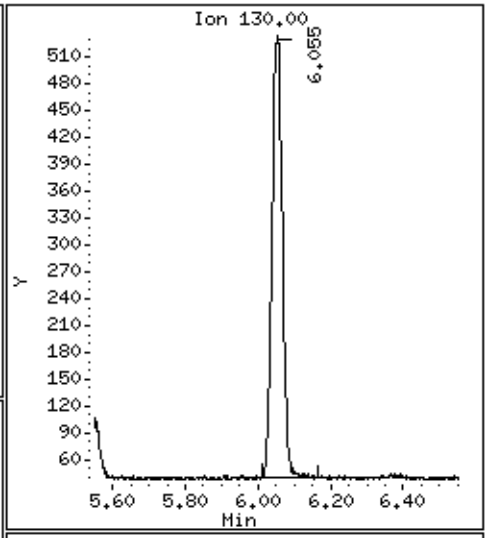
Sample Info: SQ6238-10

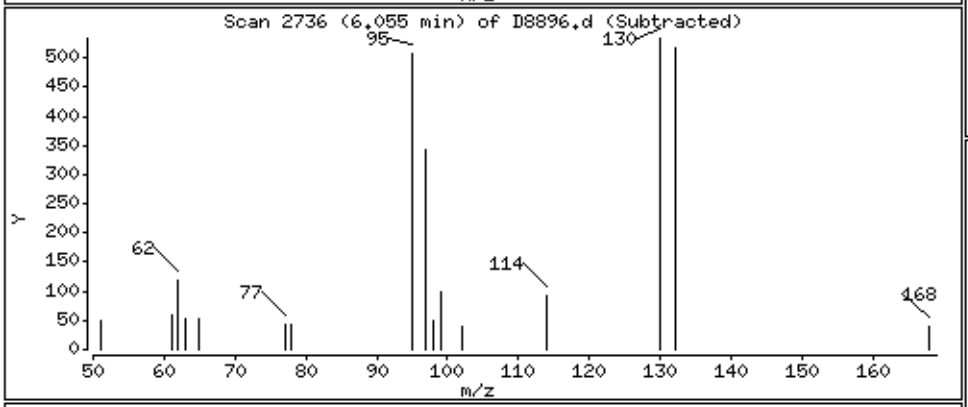
Purge Volume: 25.0 Operator: JSS

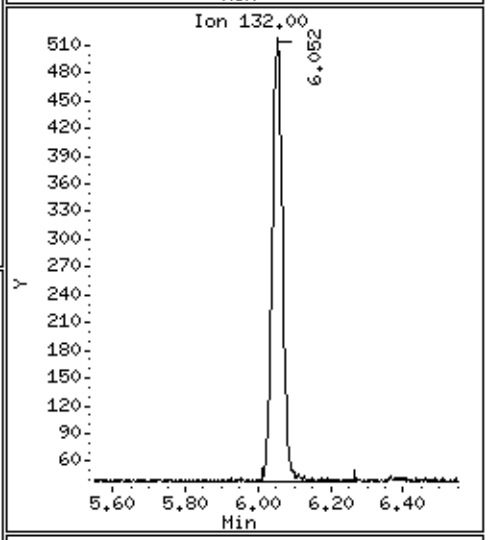
Column phase: RTX-VMS Column diameter: 0.18

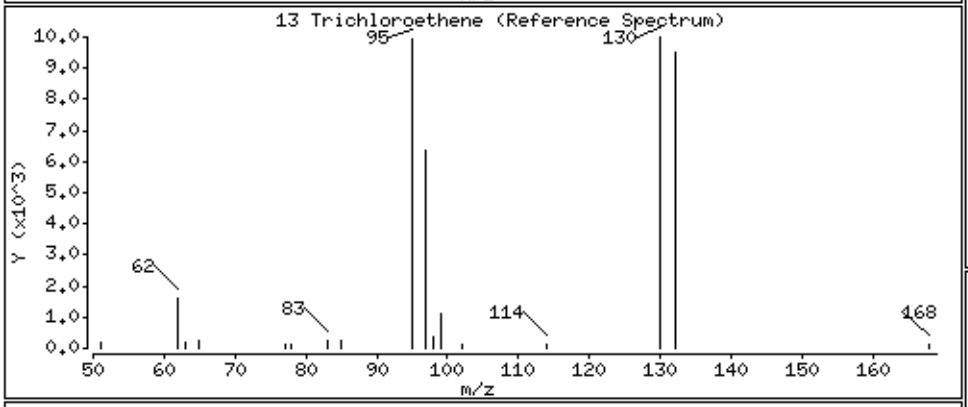
13 Trichloroethene Concentration: 0.0820 ug/l

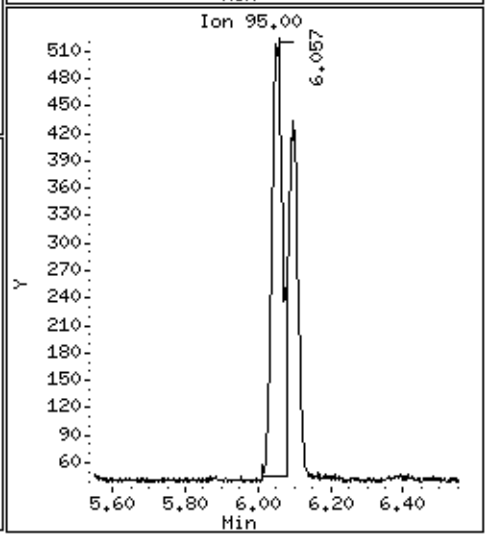


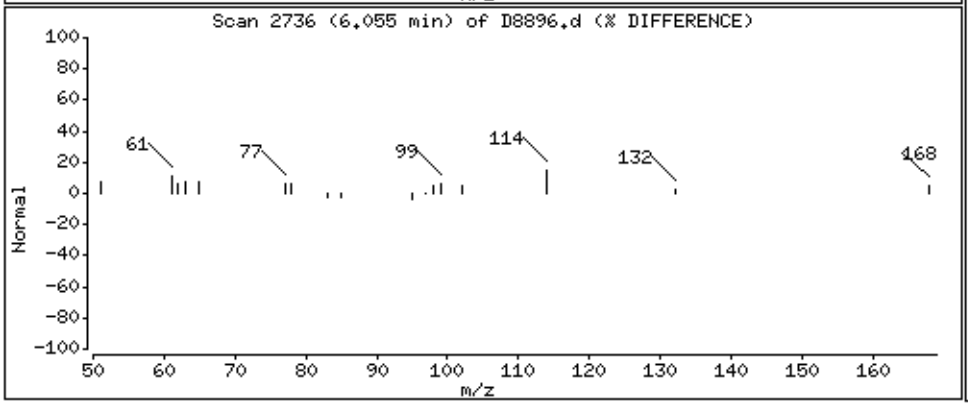












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ANALYTICAL SERVICES

Report of Analytical Results

SDG: SQ6238
Lab ID: SQ6238-11
Client ID: SY-BRMW1-150-157-110923
Matrix: AQ
Lab File ID: D8897.D

Sample Date: 09-NOV-23
Extract Date: 17-NOV-23
Extracted By: JSS
Extraction Method: SW846 5030C
Lab Prep Batch: WG345599

Report Date: 12-DEC-23
Analysis Date: 17-NOV-23
Analyst: JSS
Analysis Method: SW846 8260C SIM
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Vinyl Chloride	U	0.050	ug/L	1	.1	0.10	0.0037	0.050
1,1-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0091	0.025
trans-1,2-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0033	0.025
cis-1,2-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0057	0.025
Trichloroethene		0.86	ug/L	1	.05	0.050	0.012	0.025
Tetrachloroethene	U	0.025	ug/L	1	.05	0.050	0.0091	0.025
Dibromofluoromethane		100.	%					
1,2-Dichloroethane-d4		99.2	%					
Toluene-D8		90.9	%					
p-Bromofluorobenzene		78.9	%					

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Data File: \\target_server\gg\chem\gcms-d.i\D111723.b\D8897.d
Report Date: 12-Dec-2023 07:58

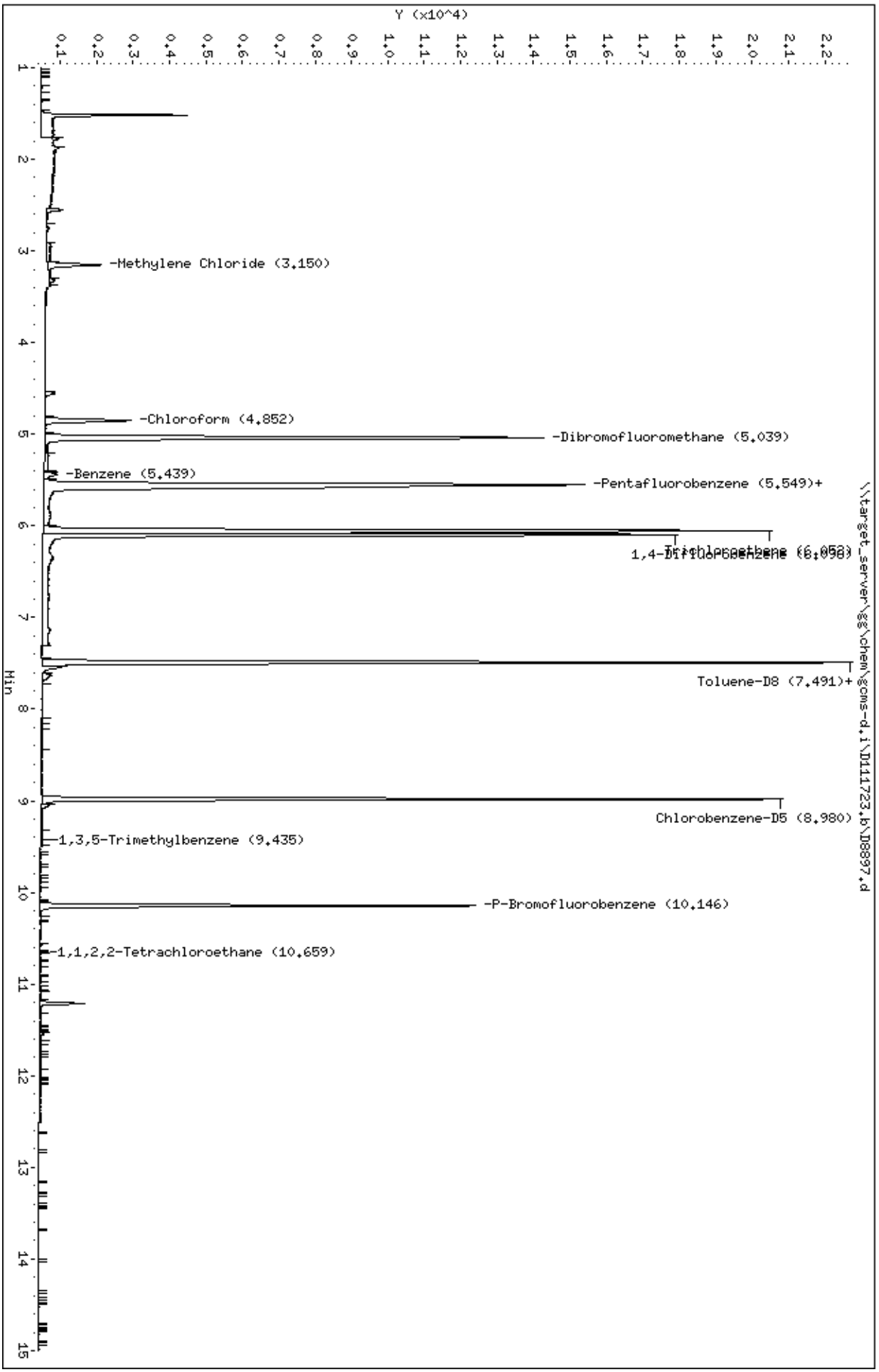
Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-d.i\D111723.b\D8897.d
Lab Smp Id: SQ6238-11 Client Smp ID: Y-BRMW1-150-157-110
Inj Date : 17-NOV-2023 16:43
Operator : JSS Inst ID: gcms-d.i
Smp Info : SQ6238-11
Misc Info : WG345599,WG345527-5
Comment : SW846 5030C
Method : \\target_server\gg\chem\gcms-d.i\D111723.b\DSIM(01)CR23.m
Meth Date : 11-Dec-2023 10:56 CROY Quant Type: ISTD
Cal Date : 16-NOV-2023 10:22 Cal File: D8863.d
Als bottle: 16
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: Credere.sub
Target Version: 4.12

Concentration Formula: Amt * DF * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	25.000	sample purged
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)	REVIEW CODE
	13 Trichloroethene	130	6.054	6.052	(0.993)	9828	0.85666	0.857	
$	7 Dibromofluoromethane	113	5.038	5.037	(0.908)	14593	1.00131	1.00	
$	11 1,2-Dichloroethane-D4	65	5.579	5.582	(1.005)	8538	0.99255	0.992	
$	15 Toluene-D8	98	7.490	7.491	(1.228)	21494	0.90938	0.909	
$	20 P-Bromofluorobenzene	95	10.144	10.146	(1.130)	6159	0.78880	0.789	
*	10 Pentafluorobenzene	168	5.549	5.549	(1.000)	18662	1.00000		
*	14 1,4-Difluorobenzene	114	6.097	6.096	(1.000)	26103	1.00000		
*	18 Chlorobenzene-D5	117	8.979	8.984	(1.000)	23349	1.00000		


Data File: \\target_server\gg\chem\gcms-d.i\D111723.b\D0897.d
Date : 17-NOV-2023 16:43
Client ID: Y-BRM1-150-157-110
Sample Info: SQ6238-11
Purge Volume: 25.0
Column phase: RTX-VMS
Instrument: gcms-d.i
Operator: JSS
Column diameter: 0.18
Y (x10^4)
Min
-Methylene Chloride (3.150)
-Chloroform (4.852)
-Dibromofluoromethane (5.039)
-Benzene (5.439)
-Pentafluorobenzene (5.549)+
1,4-Difluorobenzene (6.058)
Toluene-D8 (7.491)+
Chlorobenzene-D5 (8.980)
1,3,5-Trimethylbenzene (9.435)
-P-Bromofluorobenzene (10.146)
1,1,2,2-Tetrachloroethane (10.659)
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Data File: \\target_server\gg\chem\gcms-d.i\D111723.b\D8897.d

Date : 17-NOV-2023 16:43

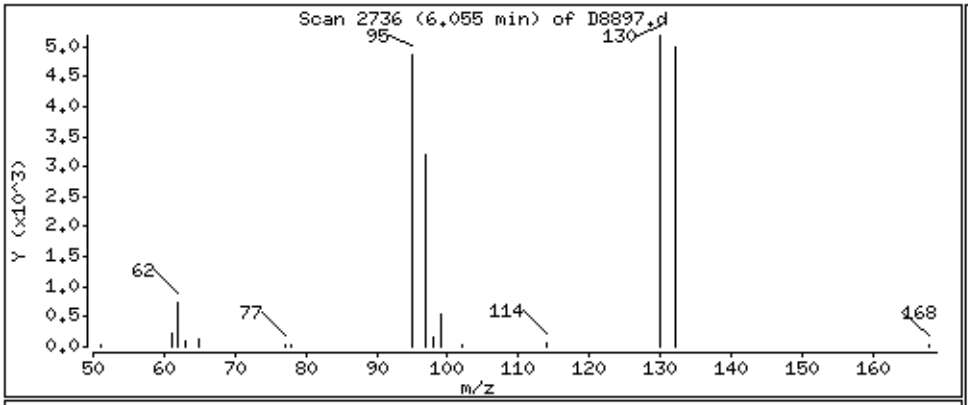
Client ID: Y-BRMW1-150-157-110 Instrument: gcms-d.i

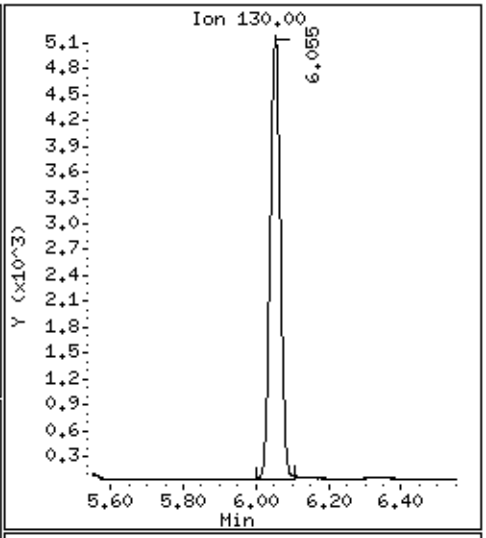
Sample Info: SQ6238-11

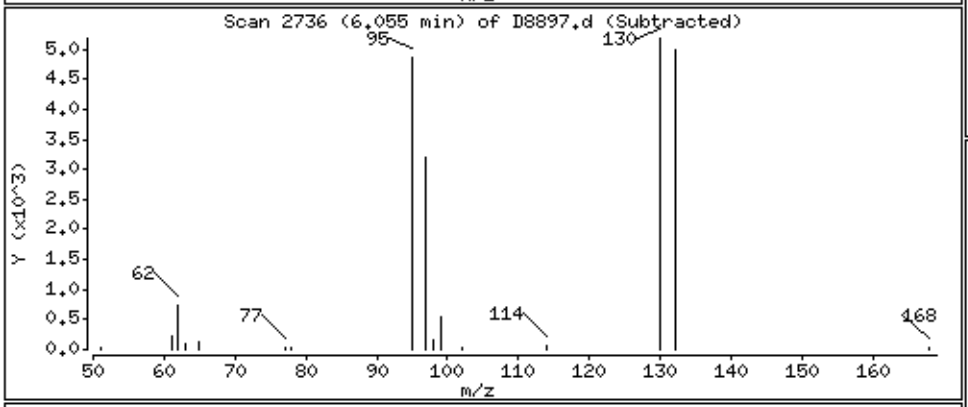
Purge Volume: 25.0 Operator: JSS

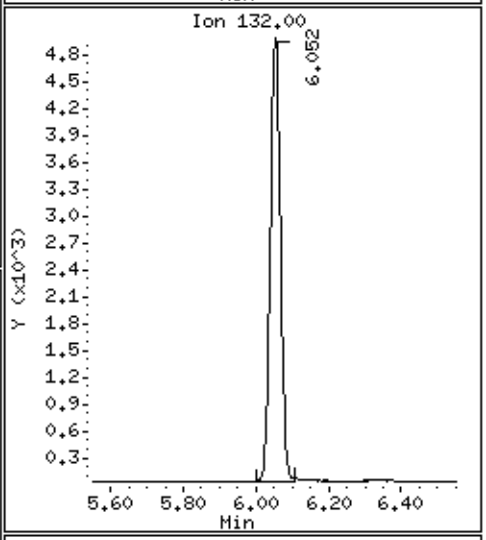
Column phase: RTX-VMS Column diameter: 0.18

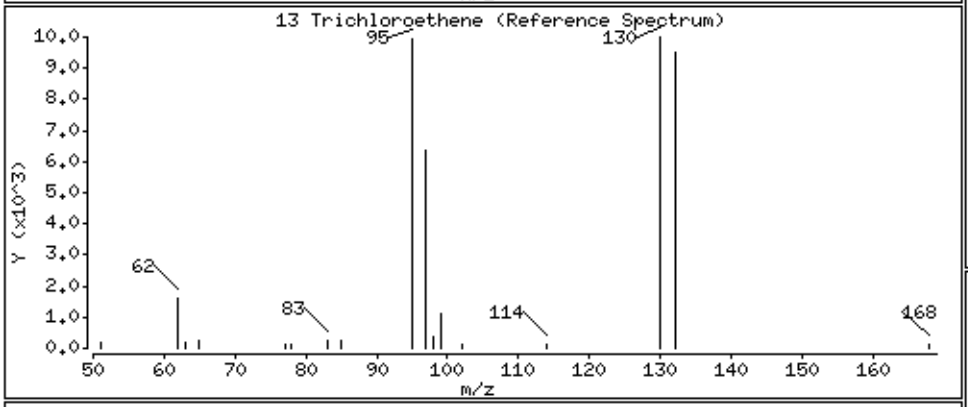
13 Trichloroethene Concentration: 0.857 ug/l

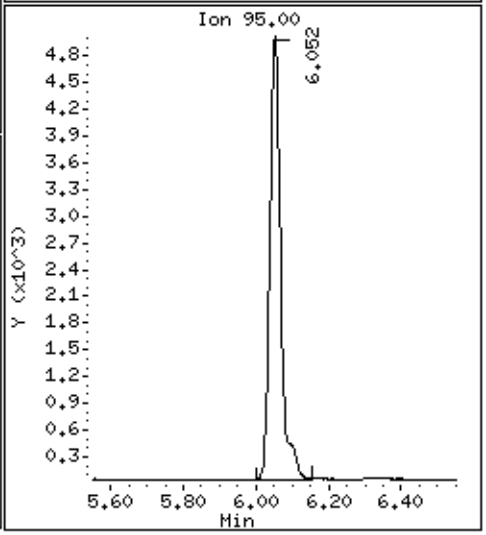


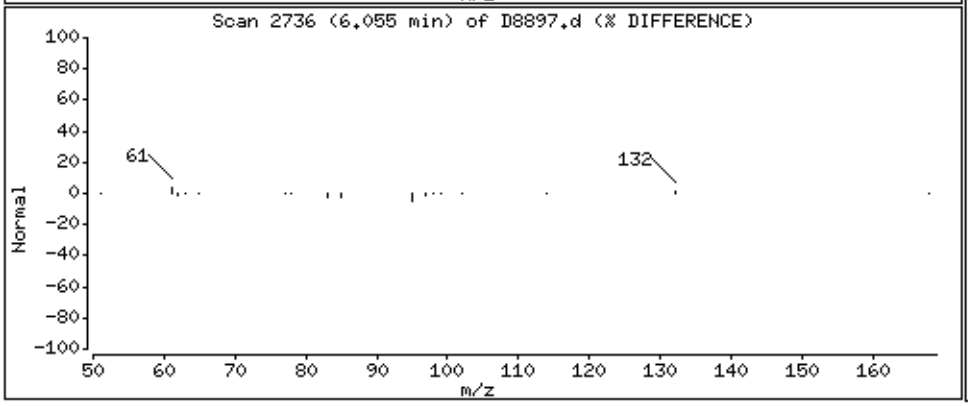












Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

SDG: SQ6238
Lab ID: SQ6238-12
Client ID: TB33-110923
Matrix: AQ
Lab File ID: D8886.D

Sample Date: 09-NOV-23
Extract Date: 17-NOV-23
Extracted By: JSS
Extraction Method: SW846 5030C
Lab Prep Batch: WG345599

Report Date: 12-DEC-23
Analysis Date: 17-NOV-23
Analyst: JSS
Analysis Method: SW846 8260C SIM
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Vinyl Chloride	U	0.050	ug/L	1	.1	0.10	0.0037	0.050
1,1-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0091	0.025
trans-1,2-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0033	0.025
cis-1,2-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0057	0.025
Trichloroethene	U	0.025	ug/L	1	.05	0.050	0.012	0.025
Tetrachloroethene	U	0.025	ug/L	1	.05	0.050	0.0091	0.025
Dibromofluoromethane		101.	%					
1,2-Dichloroethane-d4		101.	%					
Toluene-D8		99.2	%					
p-Bromofluorobenzene		79.9	%					

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Data File: \\target_server\gg\chem\gcms-d.i\D111723.b\D8886.d
Report Date: 12-Dec-2023 07:57

Katahdin Analytical Services

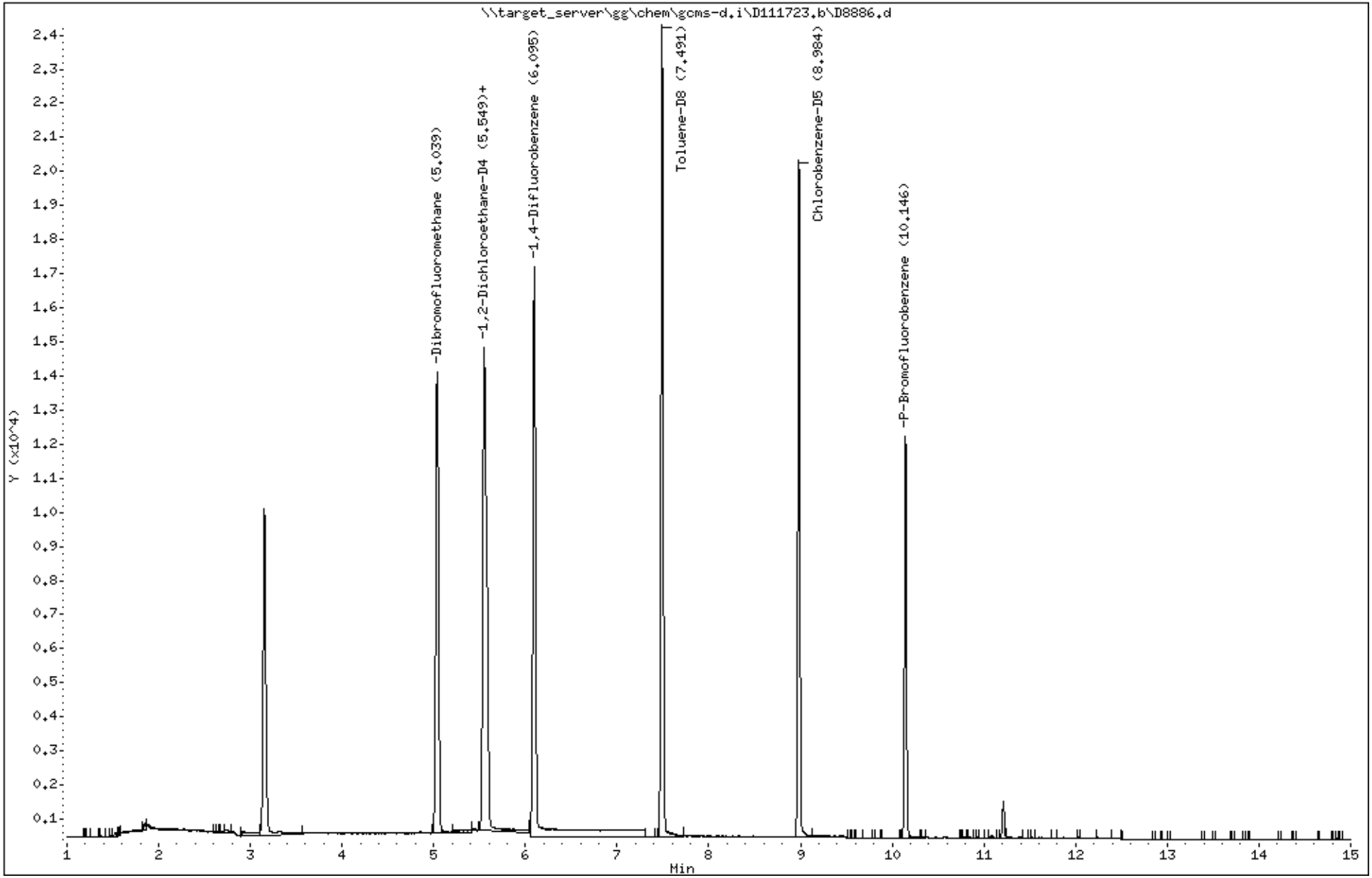
Data file : \\target_server\gg\chem\gcms-d.i\D111723.b\D8886.d
Lab Smp Id: SQ6238-12 Client Smp ID: TB33-110923
Inj Date : 17-NOV-2023 10:37
Operator : JSS Inst ID: gcms-d.i
Smp Info : SQ6238-12
Misc Info : WG345599,WG345527-5
Comment : SW846 5030C
Method : \\target_server\gg\chem\gcms-d.i\D111723.b\DSIM(01)CR23.m
Meth Date : 11-Dec-2023 10:56 CROY Quant Type: ISTD
Cal Date : 16-NOV-2023 10:22 Cal File: D8863.d
Als bottle: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: Credere.sub
Target Version: 4.12

Concentration Formula: Amt * DF * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	25.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/l)	REVIEW CODE
$ 7 Dibromofluoromethane	113	5.038	5.037	(0.908)	14161	1.00757	1.01	
$ 11 1,2-Dichloroethane-D4	65	5.577	5.582	(1.005)	8388	1.01114	1.01	
$ 15 Toluene-D8	98	7.490	7.491	(1.229)	22660	0.99216	0.992	
$ 20 P-Bromofluorobenzene	95	10.144	10.146	(1.129)	6047	0.79917	0.799	
* 10 Pentafluorobenzene	168	5.549	5.549	(1.000)	17997	1.00000		
* 14 1,4-Difluorobenzene	114	6.095	6.096	(1.000)	25223	1.00000		
* 18 Chlorobenzene-D5	117	8.983	8.984	(1.000)	22627	1.00000		

Data File: \\target_server\gg\chem\gcms-d.i\D111723.b\D8886.d
Date : 17-NOV-2023 10:37
Client ID: TB33-110923
Instrument: gcms-d.i
Sample Info: SQ6238-12
Purge Volume: 25.0
Operator: JSS
Column phase: RTX-VMS
Column diameter: 0.18



Standards Data Section

Form 6
Initial Calibration Summary

Lab Name : Katahdin Analytical Services **SDG:** SQ6238

Instrument ID: GCMS-D **Column ID:**

Lab File IDs : D8857.d D8858.d D8859.d D8860.d D8864.d D8863.d D8862.d D8861.d

Calibration Date(s): 16-NOV-23 07:03, 16-NOV-23 10:55

	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Level 7	Level 8	Curve				%RSD or R^2		
	0.0500000	0.0750000	0.1000000	0.3000000	0.5000000	0.7500000	1.0000	2.0000	Type	b	m1	m2	Result	Limit	
Vinyl chloride	0.52945	0.72743	0.76855	0.77482	0.76390	0.72809	0.68602	0.63518	AVG		0.70168		11.97008	15	O
1,1-Dichloroethene	0.49275	0.71974	0.73490	0.71180	0.68912	0.63922	0.59643	0.56885	AVG		0.64410		13.30914	15	O
trans-1,2-Dichloroethene	0.60562	0.75957	0.80828	0.80738	0.79441	0.74641	0.70032	0.63795	AVG		0.73249		10.59785	15	O
cis-1,2-Dichloroethene	0.55423	0.56601	0.59641	0.57998	0.59650	0.55985	0.53725	0.49246	AVG		0.56034		6.11031	15	O
Trichloroethene	0.39193	0.47329	0.47280	0.45148	0.44906	0.43876	0.42564	0.41309	AVG		0.43951		6.45761	15	O
Tetrachloroethene	0.26930	0.38638	0.40828	0.40354	0.39587	0.38279	0.36947	0.36610	AVG		0.37272		11.90812	15	O
Dibromofluoromethane	0.83786	0.82422	0.83983	0.84612	0.77232	0.73731	0.71786	0.67202	AVG		0.78094		8.47335	15	
1,2-Dichloroethane-D4	0.52482	0.47906	0.49059	0.50003	0.45505	0.42864	0.42223	0.38709	AVG		0.46094		9.99112	15	
Toluene-D8	0.92229	0.91817	0.91349	0.90697	0.90295	0.90168	0.89676	0.88160	AVG		0.90549		1.43214	15	
P-Bromofluorobenzene	0.28630	0.27651	0.28209	0.31889	0.34399	0.36984	0.38547	0.41217	AVG		0.33441		15.4335	15	

Legend: O = Acceptable; W = Failed %RSD Value; X = Failed R^2 Value; Y = Failed Minimum RF

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P.O. Box 540, Scarborough, ME 04070
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http://katahdinlab.com
sales@katahdinlab.com

Data File: \\target_server\gg\chem\gcms-d.i\D111623.b\D8867a.d
Report Date: 04-Dec-2023 12:54

Katahdin Analytical Services

RECOVERY REPORT

Client Name: Client SDG: SDGa02236
Sample Matrix: LIQUID Fraction: VOA
Lab Smp Id: WG345527-9 Client Smp ID: INDSOURCE
Level: LOW Operator: JSS
Data Type: MS DATA SampleType: INDSOURCE
SpikeList File: IND_CHECKsim.spk Quant Type: ISTD
Sublist File: all.sub
Method File: \\target_server\gg\chem\gcms-d.i\D111623.b\DSIM(01)CR23.m
Misc Info: WG345527,WG345527-5

SPIKE COMPOUND	CONC ADDED ug/l	CONC RECOVERED ug/l	% RECOVERED	LIMITS
1 Vinyl chloride	0.500	0.539	107.74	80-120
2 1,1-Dichloroethene	0.500	0.584	116.75	80-120
3 Methylene Chloride	20.0	0.000	*	80-120
4 trans-1,2-Dichloro	0.500	0.571	114.14	80-120
5 cis-1,2-Dichloroet	0.500	0.533	106.67	80-120
6 Chloroform	0.500	0.000	0.00*	80-120
8 1,1,1-Trichloroeth	0.500	0.000	0.00*	80-120
9 Benzene	0.500	0.000	0.00*	80-120
12 1,2-Dichloroethane	0.500	0.000	0.00*	80-120
13 Trichloroethene	0.500	0.539	107.88	80-120
16 Tetrachloroethene	0.500	0.559	111.84	80-120
17 1,1,2-Trichloroeth	0.500	0.000	0.00*	80-120
21 1,1,2,2-Tetrachlor	0.500	0.000	0.00*	80-120
22 1,2,4-Trimethylben	0.500	0.000	0.00*	80-120
23 1,2,4-Trichloroben	0.500	0.000	0.00*	80-120
24 1,2,3-Trichloroben	0.500	0.000	0.00*	80-120

SURROGATE COMPOUND	AMOUNT ADDED ug/l	AMOUNT RECOVERED ug/l	% RECOVERED	LIMITS
$ 7 Dibromofluorometha	1.00	1.04	104.58	70-130
$ 11 1,2-Dichloroethane	1.00	1.02	101.89	70-130
$ 15 Toluene-D8	1.00	0.989	98.93	70-130
$ 20 P-Bromofluorobenze	1.00	1.02	102.54	70-130

Data File: \\target_server\gg\chem\gcms-d.i\D111623.b\D8867a.d
Report Date: 04-Dec-2023 12:54

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-d.i\D111623.b\D8867a.d
Lab Smp Id: WG345527-9 Client Smp ID: INDSOURCE
Inj Date : 16-NOV-2023 12:35
Operator : JSS Inst ID: gcms-d.i
Smp Info : WG345527-9
Misc Info : WG345527,WG345527-5
Comment : SW846 5030C
Method : \\target_server\gg\chem\gcms-d.i\D111623.b\DSIM(01)CR23.m
Meth Date : 04-Dec-2023 12:48 croy Quant Type: ISTD
Cal Date : 16-NOV-2023 10:22 Cal File: D8863.d
Als bottle: 11 QC Sample: INDSOURCE
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.12
Processing Host: ORGANICS2

Concentration Formula: Amt * DF * 25/Vo * CpndVariable

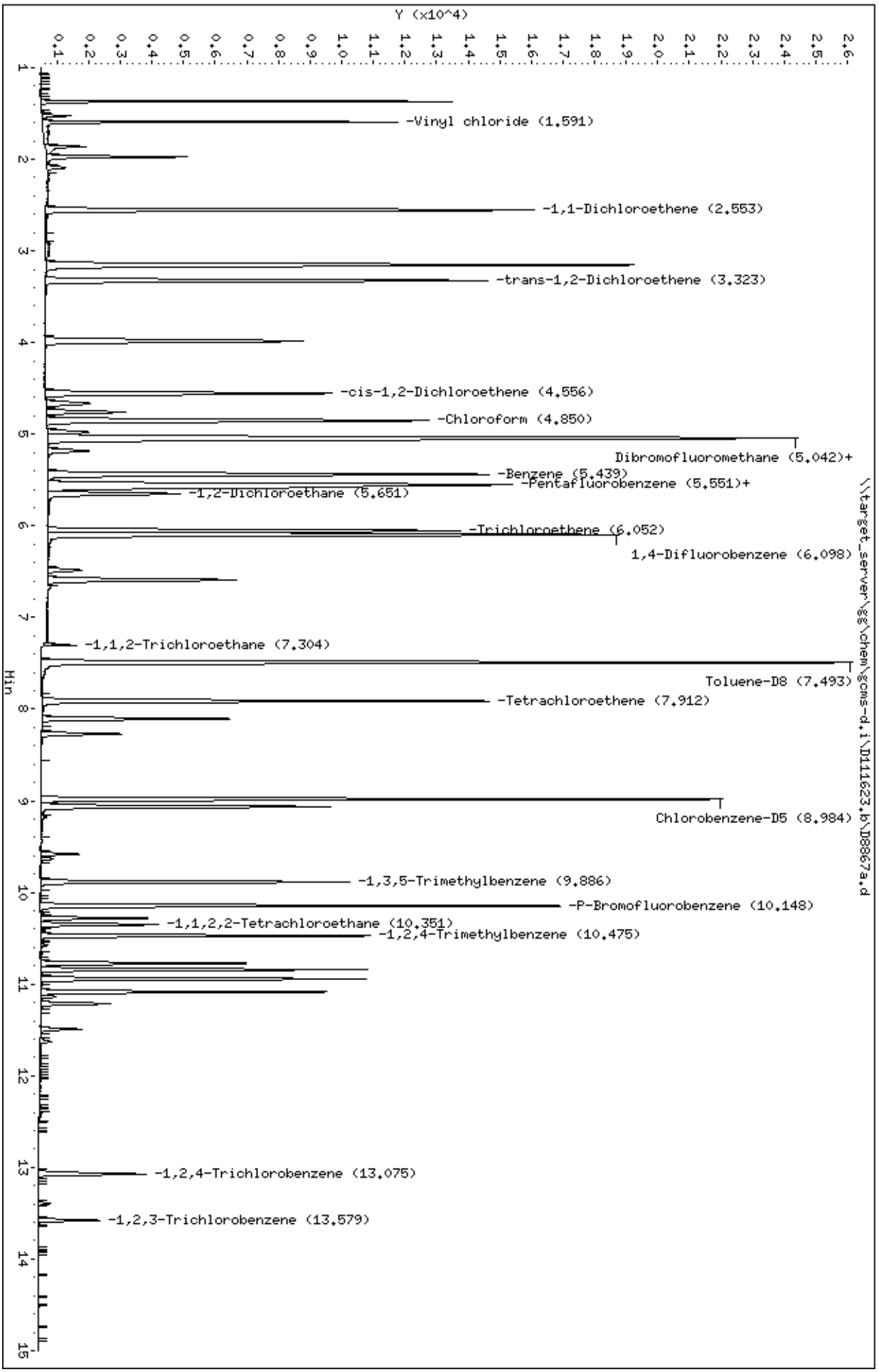
Name	Value	Description
DF	1.000	Dilution Factor
Vo	25.000	sample purged
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)	REVIEW CODE
1	Vinyl chloride	62	1.591	1.591	(0.287)	7004	0.53868	0.539	
2	1,1-Dichloroethene	96	2.554	2.553	(0.460)	6967	0.58374	0.584	
4	trans-1,2-Dichloroethene	96	3.324	3.323	(0.599)	7746	0.57069	0.571	
5	cis-1,2-Dichloroethene	96	4.553	4.558	(0.820)	5538	0.53337	0.533	
6	Chloroform	83	4.850	4.848	(0.874)	14428			(aR)
$ 7	Dibromofluoromethane	113	5.038	5.037	(0.908)	15133	1.04575	1.04	
8	1,1,1-Trichloroethane	97	5.051	5.054	(0.910)	10761			(aR)
9	Benzene	78	5.439	5.439	(0.980)	19844			(aR)
* 10	Pentafluorobenzene	168	5.551	5.549	(1.000)	18530	1.00000		
$ 11	1,2-Dichloroethane-D4	65	5.581	5.582	(1.005)	8703	1.01894	1.02	
12	1,2-Dichloroethane	62	5.650	5.649	(0.927)	5230			(aR)
13	Trichloroethene	130	6.054	6.052	(0.993)	6480	0.53941	0.539	
* 14	1,4-Difluorobenzene	114	6.097	6.096	(1.000)	27333	1.00000		
$ 15	Toluene-D8	98	7.492	7.491	(1.229)	24485	0.98931	0.989	
16	Tetrachloroethene	164	7.911	7.912	(1.298)	5697	0.55922	0.559	
17	1,1,2-Trichloroethane	83	7.312	7.310	(1.199)	568			(aR)
* 18	Chlorobenzene-D5	117	8.983	8.984	(1.000)	24578	1.00000		
19	1,3,5-Trimethylbenzene	105	9.885	9.888	(1.100)	11238			(a)
$ 20	P-Bromofluorobenzene	95	10.147	10.146	(1.130)	8428	1.02542	1.02	
21	1,1,2,2-Tetrachloroethane	83	10.350	10.351	(1.152)	2814			(aR)
22	1,2,4-Trimethylbenzene	105	10.471	10.473	(1.166)	9255			(aR)
23	1,2,4-Trichlorobenzene	180	13.074	13.075	(1.455)	1891			(aR)
24	1,2,3-Trichlorobenzene	180	13.577	13.579	(1.511)	1086			(aR)

Data File: \\target_server\gg\chem\gcms-d.i\D111623.b\D8867a.d
Report Date: 04-Dec-2023 12:54

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
R - Spike/Surrogate failed recovery limits.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Date : 16-NOV-2023 12:35
Client ID: INDSOURCE
Sample Info: WG345527-9
Purge Volume: 25.0
Column phase: RTX-VMS
Instrument: gcms-d.i
Operator: JSS
Column diameter: 0.18
Y (x10^4)
Min
-Vinyl chloride (1.591)
-1,1-Dichloroethene (2.553)
-trans-1,2-Dichloroethene (3.323)
-cis-1,2-Dichloroethene (4.556)
-Chloroform (4.850)
Dibromofluoromethane (5.042)+
-Benzene (5.439)
-Pentafluorobenzene (5.551)+
-1,2-Dichloroethane (5.651)
-Trichloroethene (6.052)
1,4-Difluorobenzene (6.098)
-1,1,2-Trichloroethane (7.304)
Toluene-D8 (7.493)
-Tetrachloroethene (7.912)
Chlorobenzene-D5 (8.984)
-1,3,5-Trimethylbenzene (9.886)
-P-Bromofluorobenzene (10.148)
-1,1,2,2-Tetrachloroethane (10.351)
-1,2,4-Trimethylbenzene (10.475)
-1,2,4-Trichlorobenzene (13.075)
-1,2,3-Trichlorobenzene (13.579)
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Data File: \\target_server\gg\chem\gcms-d.i\D111623.b\D8857.d
Report Date: 04-Dec-2023 12:49

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-d.i\D111623.b\D8857.d
Lab Smp Id: WG345527-1
Inj Date : 16-NOV-2023 07:03
Operator : JSS   Inst ID: gcms-d.i
Smp Info : WG345527-1
Misc Info :
Comment   : SW846 5030C
Method   : \\target_server\gg\chem\gcms-d.i\D111623.b\DSIM(01)CR23.m
Meth Date : 04-Dec-2023 12:48 croy   Quant Type: ISTD
Cal Date : 16-NOV-2023 12:02   Cal File: D8866.d
Als bottle: 1   Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: Credere.sub
Target Version: 4.12

Concentration Formula: Amt * DF * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	25.000	sample purged
Cpnd Variable		Local Compound Variable

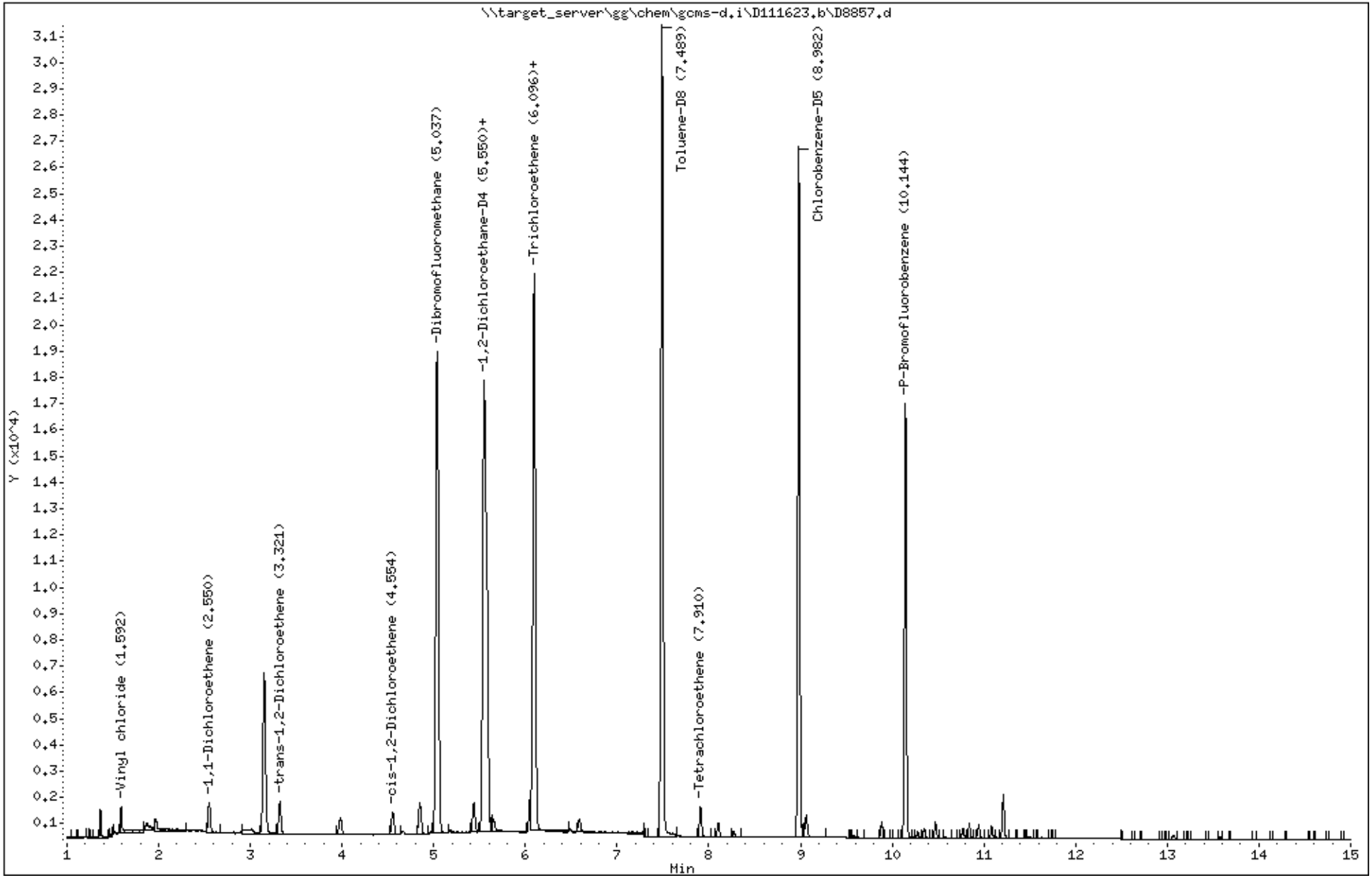
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)	REVIEW CODE
1	Vinyl chloride	62	1.591	1.591	(0.287)	577	0.05000	0.0346	
2	1,1-Dichloroethene	96	2.551	2.553	(0.460)	537	0.05000	0.0358	
4	trans-1,2-Dichloroethene	96	3.323	3.323	(0.599)	660	0.05000	0.0381(a)	
5	cis-1,2-Dichloroethene	96	4.554	4.558	(0.821)	604	0.05000	0.0464(a)	
13	Trichloroethene	130	6.048	6.052	(0.992)	636	0.05000	0.0436	
16	Tetrachloroethene	164	7.910	7.912	(1.298)	437	0.05000	0.0340	
$ 7	Dibromofluoromethane	113	5.036	5.037	(0.908)	18262	1.00000	1.08	
$ 11	1,2-Dichloroethane-D4	65	5.577	5.582	(1.005)	11439	1.00000	1.15	
$ 15	Toluene-D8	98	7.488	7.491	(1.229)	29933	1.00000	1.02	
$ 20	P-Bromofluorobenzene	95	10.144	10.146	(1.129)	8466	1.00000	0.832	
* 10	Pentafluorobenzene	168	5.549	5.549	(1.000)	21796	1.00000		
* 14	1,4-Difluorobenzene	114	6.095	6.096	(1.000)	32455	1.00000		
* 18	Chlorobenzene-D5	117	8.981	8.984	(1.000)	29570	1.00000		

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\target_server\gg\chem\gcms-d.i\D111623.b\D8857.d
Date : 16-NOV-2023 07:03
Client ID:
Sample Info: WG345527-1
Purge Volume: 25.0
Column phase: RTX-VMS

Instrument: gcms-d.i
Operator: JSS
Column diameter: 0.18



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Data File: \\target_server\gg\chem\gcms-d.i\D111623.b\D8858.d
Report Date: 04-Dec-2023 12:49

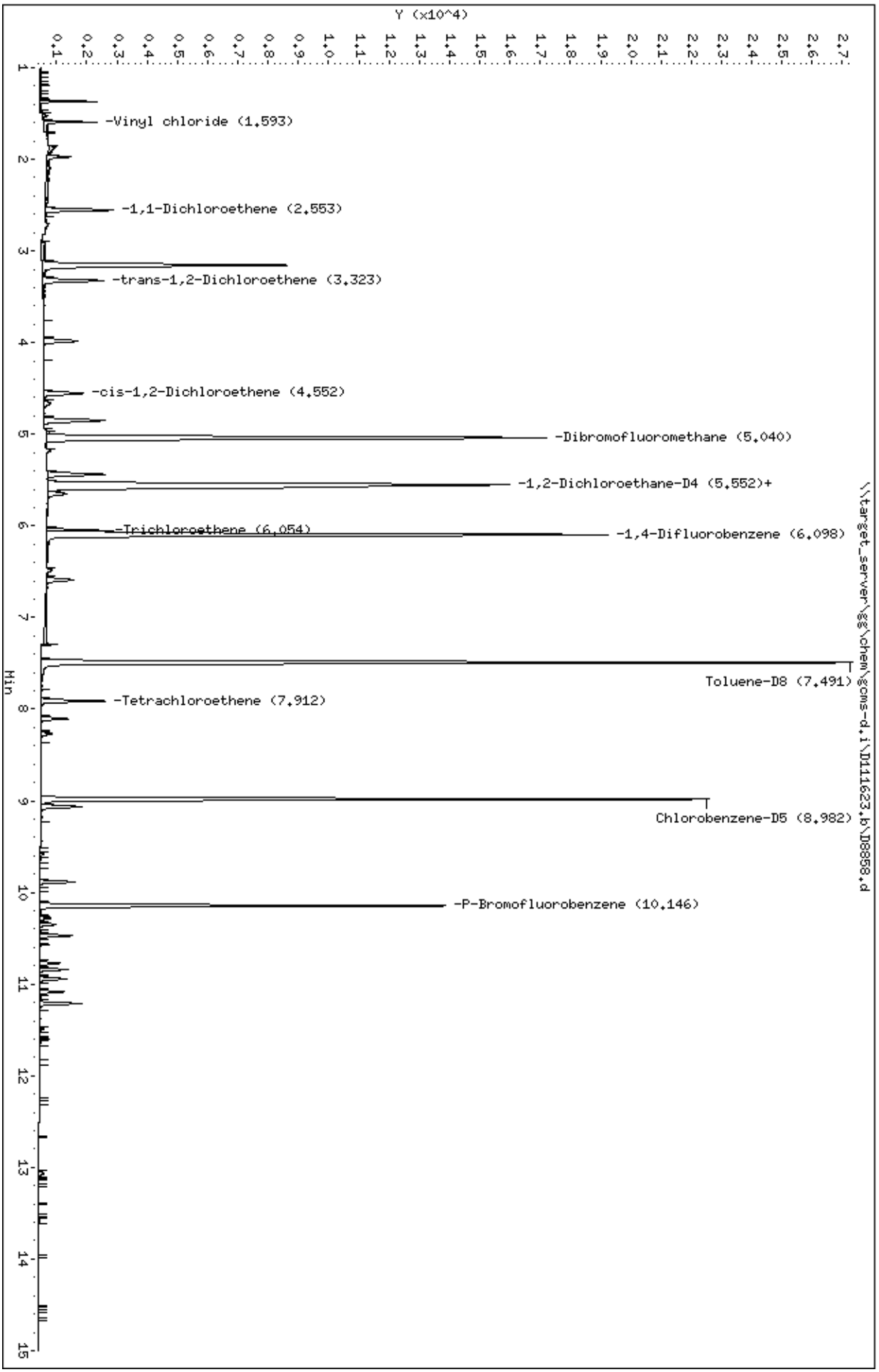
Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-d.i\D111623.b\D8858.d
Lab Smp Id: WG345527-2
Inj Date : 16-NOV-2023 07:36
Operator : JSS   Inst ID: gcms-d.i
Smp Info : WG345527-2
Misc Info :
Comment   : SW846 5030C
Method   : \\target_server\gg\chem\gcms-d.i\D111623.b\DSIM(01)CR23.m
Meth Date : 04-Dec-2023 12:48 croy   Quant Type: ISTD
Cal Date : 16-NOV-2023 07:36   Cal File: D8858.d
Als bottle: 2   Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: Credere.sub
Target Version: 4.12

Concentration Formula: Amt * DF * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	25.000	sample purged
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)	REVIEW CODE
	1 Vinyl chloride	62	1.593	1.591	(0.287)	1041	0.07500	0.0844	
	2 1,1-Dichloroethene	96	2.554	2.553	(0.460)	1030	0.07500	0.0913	
	4 trans-1,2-Dichloroethene	96	3.322	3.323	(0.599)	1087	0.07500	0.0814	
	5 cis-1,2-Dichloroethene	96	4.551	4.558	(0.820)	810	0.07500	0.0738	
	13 Trichloroethene	130	6.050	6.052	(0.992)	1002	0.07500	0.0844	
	16 Tetrachloroethene	164	7.911	7.912	(1.298)	818	0.07500	0.0871	
$	7 Dibromofluoromethane	113	5.040	5.037	(0.908)	15727	1.00000	1.02	
$	11 1,2-Dichloroethane-D4	65	5.581	5.582	(1.005)	9141	1.00000	0.978	
$	15 Toluene-D8	98	7.490	7.491	(1.228)	25918	1.00000	1.01	
$	20 P-Bromofluorobenzene	95	10.143	10.146	(1.129)	6903	1.00000	0.877	
*	10 Pentafluorobenzene	168	5.551	5.549	(1.000)	19081	1.00000		
*	14 1,4-Difluorobenzene	114	6.097	6.096	(1.000)	28228	1.00000		
*	18 Chlorobenzene-D5	117	8.981	8.984	(1.000)	24965	1.00000		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Date : 16-NOV-2023 07:36
Client ID:
Sample Info: WG345527-2
Purge Volume: 25,0
Column phase: RTX-VMS
Instrument: gcms-d,i
Operator: JSS
Column diameter: 0,18
Y (x10^4)
Min
-Vinyl chloride (1,593)
-1,1-Dichloroethene (2,553)
-trans-1,2-Dichloroethene (3,323)
-cis-1,2-Dichloroethene (4,552)
-Dibromofluoromethane (5,040)
-1,2-Dichloroethane-D4 (5,552)+
-Trichloroethene (6,054)
-1,4-Difluorobenzene (6,098)
Toluene-D8 (7,491)
-Tetrachloroethene (7,912)
Chlorobenzene-D5 (8,982)
-P-Bromofluorobenzene (10,146)
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Data File: \\target_server\gg\chem\gcms-d.i\D111623.b\D8859.d
Report Date: 04-Dec-2023 12:49

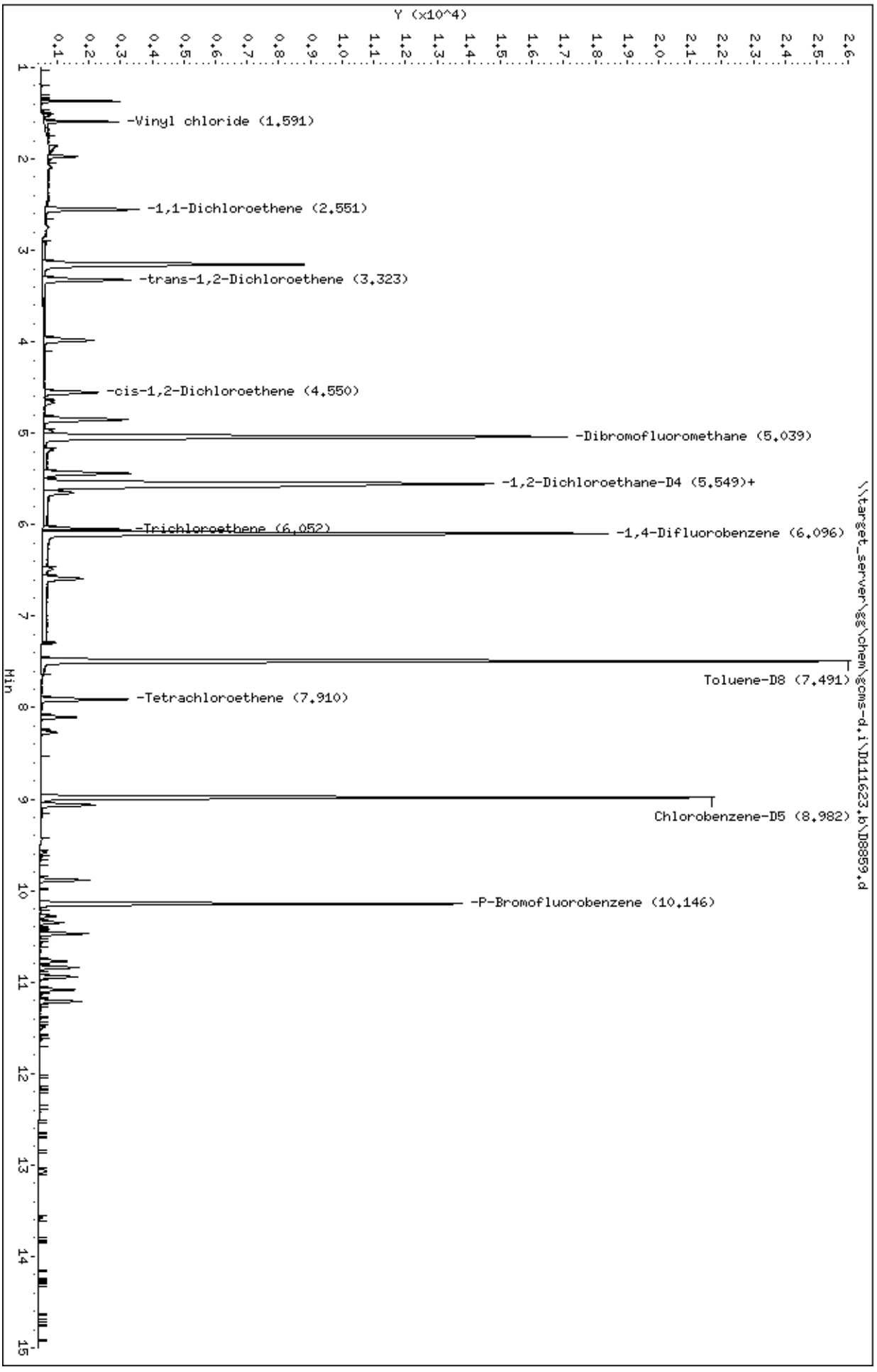
Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-d.i\D111623.b\D8859.d
Lab Smp Id: WG345527-3
Inj Date : 16-NOV-2023 08:09
Operator : JSS   Inst ID: gcms-d.i
Smp Info : WG345527-3
Misc Info :
Comment   : SW846 5030C
Method   : \\target_server\gg\chem\gcms-d.i\D111623.b\DSIM(01)CR23.m
Meth Date : 04-Dec-2023 12:48 croy   Quant Type: ISTD
Cal Date : 16-NOV-2023 08:09   Cal File: D8859.d
Als bottle: 3   Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: Credere.sub
Target Version: 4.12

Concentration Formula: Amt * DF * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	25.000	sample purged
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)	REVIEW CODE
	1 Vinyl chloride	62	1.591	1.591	(0.287)	1393	0.10000	0.114	
	2 1,1-Dichloroethene	96	2.553	2.553	(0.460)	1332	0.10000	0.116	
	4 trans-1,2-Dichloroethene	96	3.323	3.323	(0.599)	1465	0.10000	0.112	
	5 cis-1,2-Dichloroethene	96	4.553	4.558	(0.821)	1081	0.10000	0.104	
	13 Trichloroethene	130	6.050	6.052	(0.993)	1275	0.10000	0.108	
	16 Tetrachloroethene	164	7.909	7.912	(1.298)	1101	0.10000	0.116	
$	7 Dibromofluoromethane	113	5.038	5.037	(0.908)	15222	1.00000	1.03	
$	11 1,2-Dichloroethane-D4	65	5.579	5.582	(1.005)	8892	1.00000	1.01	
$	15 Toluene-D8	98	7.490	7.491	(1.229)	24634	1.00000	0.999	
$	20 P-Bromofluorobenzene	95	10.145	10.146	(1.130)	6756	1.00000	0.933	
*	10 Pentafluorobenzene	168	5.549	5.549	(1.000)	18125	1.00000		
*	14 1,4-Difluorobenzene	114	6.095	6.096	(1.000)	26967	1.00000		
*	18 Chlorobenzene-D5	117	8.981	8.984	(1.000)	23950	1.00000		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Date : 16-NOV-2023 08:09
Client ID:
Sample Info: WG345527-3
Purge Volume: 25.0
Column phase: RTX-VMS
Instrument: gcms-d.i
Operator: JSS
Column diameter: 0.18
Y (x10^4)
Min
-Vinyl chloride (1.591)
-1,1-Dichloroethene (2.551)
-trans-1,2-Dichloroethene (3.323)
-cis-1,2-Dichloroethene (4.550)
-Dibromofluoromethane (5.039)
-1,2-Dichloroethane-D4 (5.549)+
-Trichloroethene (6.052)
-1,4-Difluorobenzene (6.096)
Toluene-D8 (7.491)
-Tetrachloroethene (7.910)
Chlorobenzene-D5 (8.982)
-P-Bromofluorobenzene (10.146)
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Data File: \\target_server\gg\chem\gcms-d.i\D111623.b\D8860.d
Report Date: 04-Dec-2023 12:49

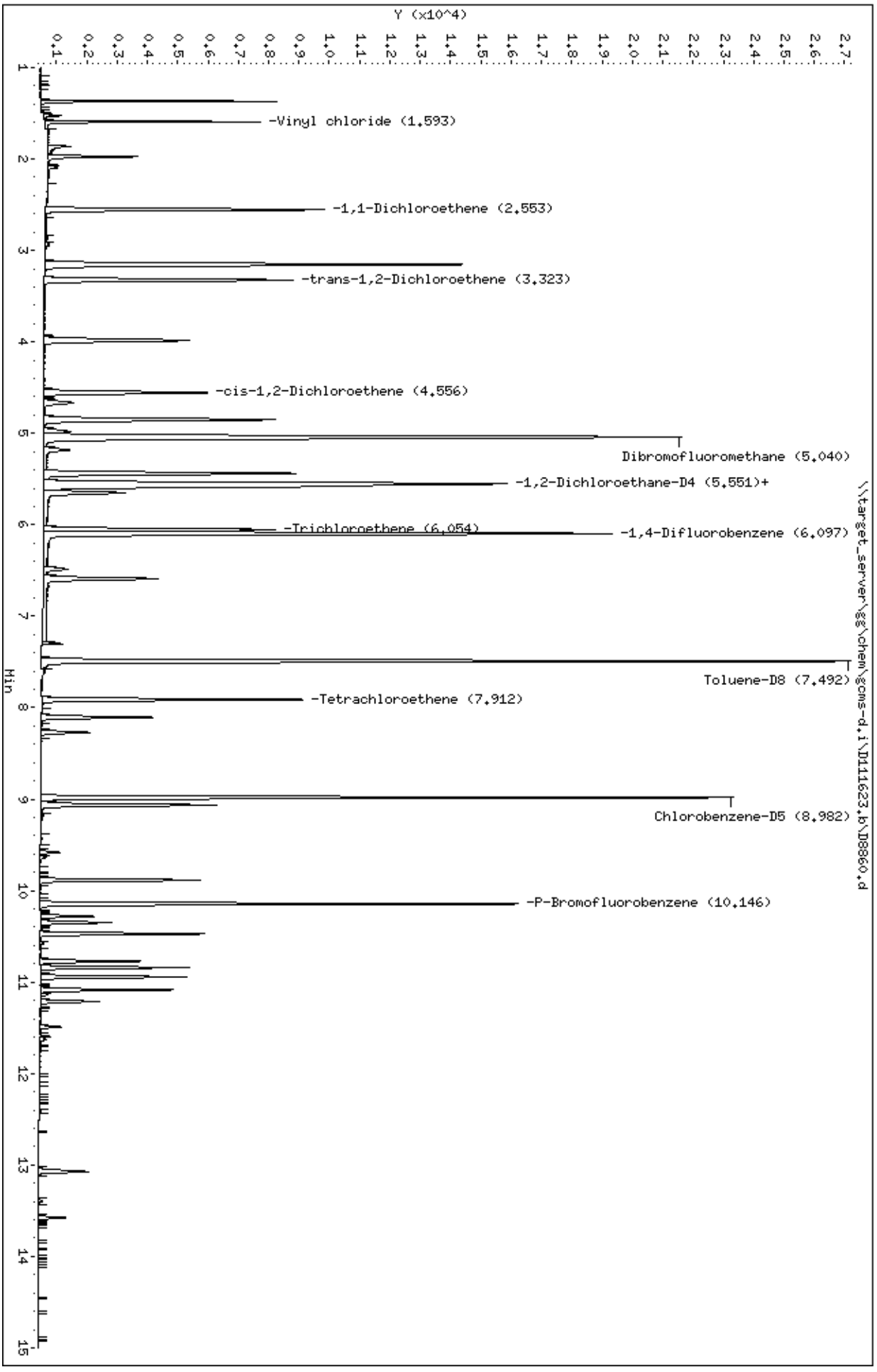
Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-d.i\D111623.b\D8860.d
Lab Smp Id: WG345527-4
Inj Date : 16-NOV-2023 08:42
Operator : JSS   Inst ID: gcms-d.i
Smp Info : WG345527-4
Misc Info :
Comment   : SW846 5030C
Method   : \\target_server\gg\chem\gcms-d.i\D111623.b\DSIM(01)CR23.m
Meth Date : 04-Dec-2023 12:48 croy   Quant Type: ISTD
Cal Date : 16-NOV-2023 08:42   Cal File: D8860.d
Als bottle: 4   Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: Credere.sub
Target Version: 4.12

Concentration Formula: Amt * DF * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	25.000	sample purged
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)	REVIEW CODE
	1 Vinyl chloride	62	1.593	1.591	(0.287)	4426	0.30000	0.333	
	2 1,1-Dichloroethene	96	2.552	2.553	(0.460)	4066	0.30000	0.324	
	4 trans-1,2-Dichloroethene	96	3.326	3.323	(0.599)	4612	0.30000	0.326	
	5 cis-1,2-Dichloroethene	96	4.553	4.558	(0.821)	3313	0.30000	0.301	
	13 Trichloroethene	130	6.054	6.052	(0.993)	3861	0.30000	0.303	
	16 Tetrachloroethene	164	7.909	7.912	(1.297)	3451	0.30000	0.332	
$	7 Dibromofluoromethane	113	5.040	5.037	(0.908)	16111	1.00000	1.03	
$	11 1,2-Dichloroethane-D4	65	5.581	5.582	(1.006)	9521	1.00000	1.02	
$	15 Toluene-D8	98	7.492	7.491	(1.229)	25854	1.00000	0.992	
$	20 P-Bromofluorobenzene	95	10.145	10.146	(1.130)	8169	1.00000	1.07	
*	10 Pentafluorobenzene	168	5.549	5.549	(1.000)	19041	1.00000		
*	14 1,4-Difluorobenzene	114	6.097	6.096	(1.000)	28506	1.00000		
*	18 Chlorobenzene-D5	117	8.981	8.984	(1.000)	25617	1.00000		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Date : 16-NOV-2023 08:42
Client ID:
Sample Info: WG345527-4
Purge Volume: 25.0
Column phase: RTX-VMS
Instrument: gcms-d.i
Operator: JSS
Column diameter: 0.18
Y (x10^4)
Min
-Vinyl chloride (1.593)
-1,1-Dichloroethene (2.553)
-trans-1,2-Dichloroethene (3.323)
-cis-1,2-Dichloroethene (4.556)
Dibromofluoromethane (5.040)
-1,2-Dichloroethane-D4 (5.551)+
-Trichloroethene (6.054)
-1,4-Difluorobenzene (6.097)
Toluene-D8 (7.492)
-Tetrachloroethene (7.912)
Chlorobenzene-D5 (8.982)
-P-Bromofluorobenzene (10.146)
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Data File: \\target_server\gg\chem\gcms-d.i\D111623.b\D8861.d
Report Date: 04-Dec-2023 12:49

Katahdin Analytical Services

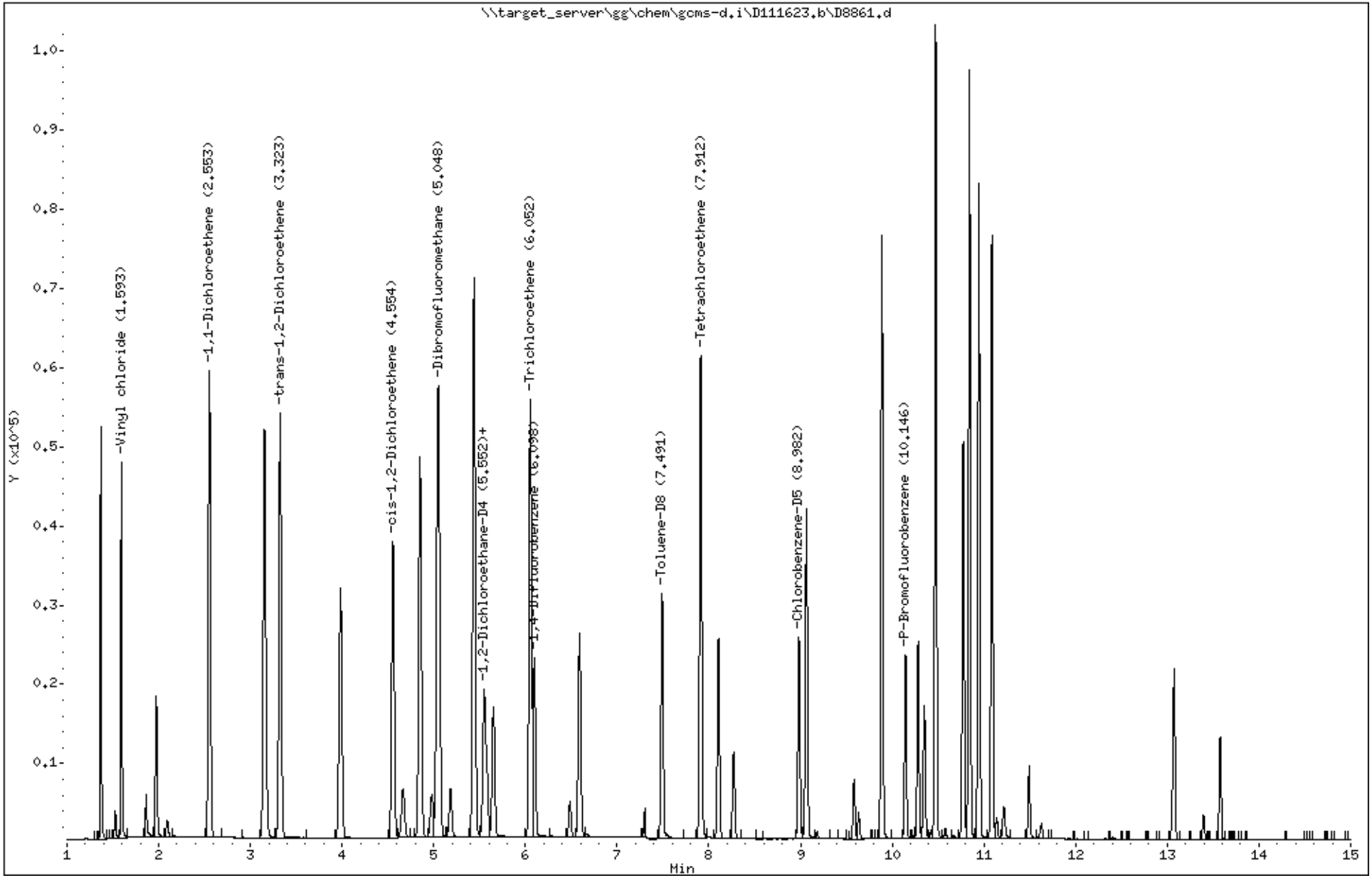
Data file : \\target_server\gg\chem\gcms-d.i\D111623.b\D8861.d
Lab Smp Id: WG345527-8
Inj Date : 16-NOV-2023 09:15
Operator : JSS   Inst ID: gcms-d.i
Smp Info : WG345527-8
Misc Info :
Comment   : SW846 5030C
Method   : \\target_server\gg\chem\gcms-d.i\D111623.b\DSIM(01)CR23.m
Meth Date : 04-Dec-2023 12:48 croy   Quant Type: ISTD
Cal Date : 16-NOV-2023 09:15   Cal File: D8861.d
Als bottle: 5   Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: Credere.sub
Target Version: 4.12

Concentration Formula: Amt * DF * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	25.000	sample purged
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)	REVIEW CODE
	1 Vinyl chloride	62	1.593	1.591	(0.287)	29809	2.00000	1.78	
	2 1,1-Dichloroethene	96	2.553	2.553	(0.460)	26696	2.00000	1.70	
	4 trans-1,2-Dichloroethene	96	3.324	3.323	(0.599)	29939	2.00000	1.69	
	5 cis-1,2-Dichloroethene	96	4.553	4.558	(0.821)	23111	2.00000	1.70	
	13 Trichloroethene	130	6.052	6.052	(0.993)	27821	2.00000	1.84	
	16 Tetrachloroethene	164	7.911	7.912	(1.298)	24656	2.00000	1.96	
$	7 Dibromofluoromethane	113	5.038	5.037	(0.908)	15769	1.00000	0.815	
$	11 1,2-Dichloroethane-D4	65	5.581	5.582	(1.006)	9083	1.00000	0.790	
$	15 Toluene-D8	98	7.490	7.491	(1.228)	29687	1.00000	0.966	
$	20 P-Bromofluorobenzene	95	10.145	10.146	(1.130)	11950	1.00000	1.37	
*	10 Pentafluorobenzene	168	5.549	5.549	(1.000)	23465	1.00000		
*	14 1,4-Difluorobenzene	114	6.097	6.096	(1.000)	33674	1.00000		
*	18 Chlorobenzene-D5	117	8.981	8.984	(1.000)	28993	1.00000		

Data File: \\target_server\gg\chem\gcms-d.i\D111623.b\D8861.d
Date : 16-NOV-2023 09:15
Client ID:
Instrument: gcms-d.i
Sample Info: WG345527-8
Purge Volume: 25.0
Operator: JSS
Column phase: RTX-VMS
Column diameter: 0.18



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Data File: \\target_server\gg\chem\gcms-d.i\D111623.b\D8862.d
Report Date: 04-Dec-2023 12:49

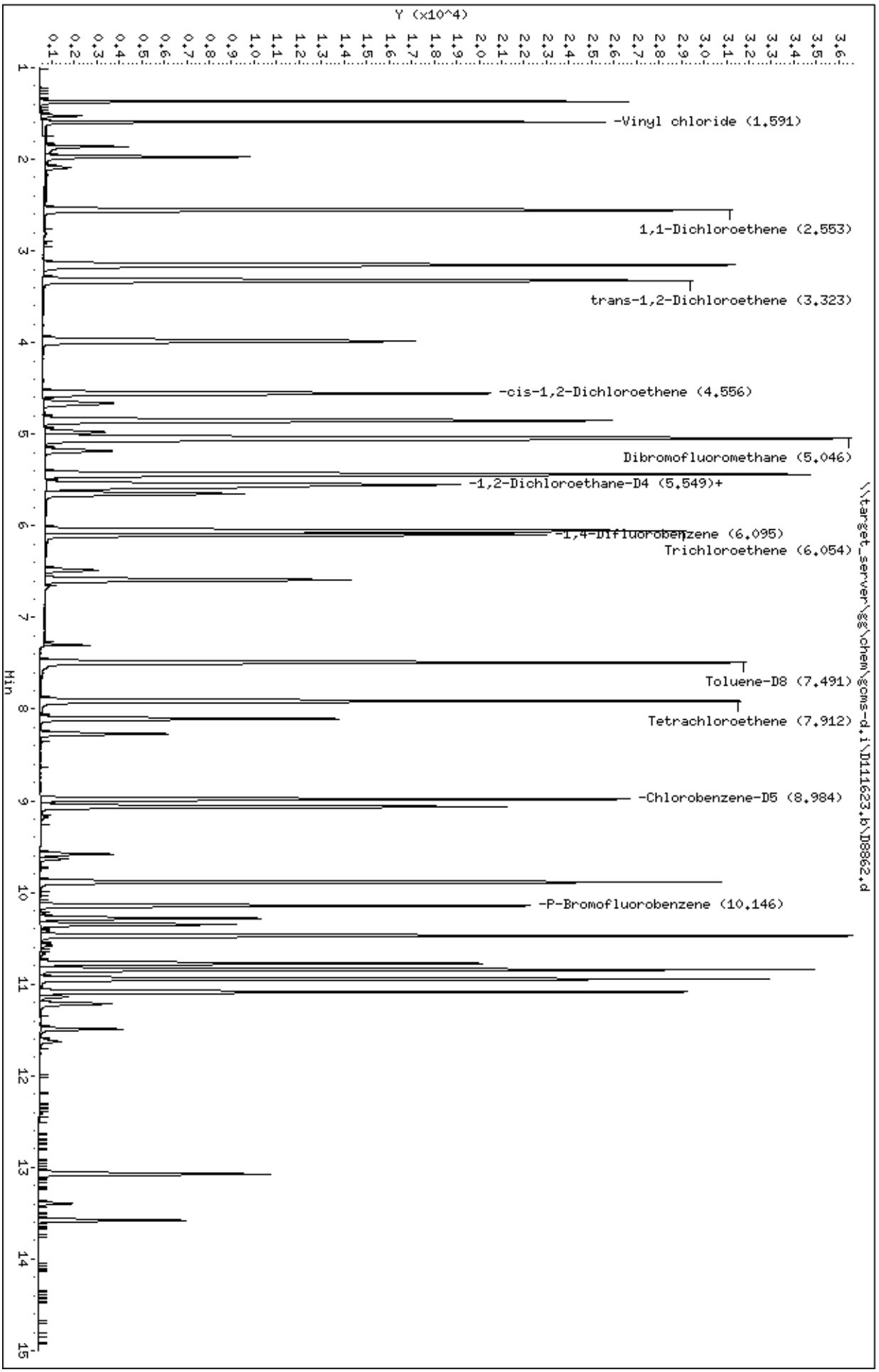
Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-d.i\D111623.b\D8862.d
Lab Smp Id: WG345527-7
Inj Date : 16-NOV-2023 09:48
Operator : JSS   Inst ID: gcms-d.i
Smp Info : WG345527-7
Misc Info :
Comment   : SW846 5030C
Method   : \\target_server\gg\chem\gcms-d.i\D111623.b\DSIM(01)CR23.m
Meth Date : 04-Dec-2023 12:48 croy   Quant Type: ISTD
Cal Date : 16-NOV-2023 09:48   Cal File: D8862.d
Als bottle: 6   Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: Credere.sub
Target Version: 4.12

Concentration Formula: Amt * DF * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	25.000	sample purged
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)	REVIEW CODE
	1 Vinyl chloride	62	1.591	1.591	(0.287)	15729	1.00000	0.980	
	2 1,1-Dichloroethene	96	2.551	2.553	(0.460)	13675	1.00000	0.914	
	4 trans-1,2-Dichloroethene	96	3.322	3.323	(0.599)	16057	1.00000	0.952	
	5 cis-1,2-Dichloroethene	96	4.555	4.558	(0.821)	12318	1.00000	0.952	
	13 Trichloroethene	130	6.054	6.052	(0.993)	14351	1.00000	0.963	
	16 Tetrachloroethene	164	7.911	7.912	(1.298)	12457	1.00000	0.994	
$	7 Dibromofluoromethane	113	5.038	5.037	(0.908)	16459	1.00000	0.899	
$	11 1,2-Dichloroethane-D4	65	5.579	5.582	(1.005)	9681	1.00000	0.893	
$	15 Toluene-D8	98	7.490	7.491	(1.229)	30235	1.00000	0.988	
$	20 P-Bromofluorobenzene	95	10.143	10.146	(1.129)	11374	1.00000	1.20	
*	10 Pentafluorobenzene	168	5.549	5.549	(1.000)	22928	1.00000		
*	14 1,4-Difluorobenzene	114	6.095	6.096	(1.000)	33716	1.00000		
*	18 Chlorobenzene-D5	117	8.983	8.984	(1.000)	29507	1.00000		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Date : 16-NOV-2023 09:48
Client ID:
Sample Info: WG345527-7
Purge Volume: 25,0
Column phase: RTX-VMS
Instrument: gcms-d,i
Operator: JSS
Column diameter: 0,18
Y (x10^4)
-Vinyl chloride (1,591)
1,1-Dichloroethene (2,553)
trans-1,2-Dichloroethene (3,323)
-cis-1,2-Dichloroethene (4,556)
Dibromofluoromethane (5,046)
-1,2-Dichloroethane-D4 (5,549)+
-1,4-Difluorobenzene (6,095)
Trichloroethene (6,054)
Toluene-D8 (7,491)
Tetrachloroethene (7,912)
-Chlorobenzene-D5 (8,984)
-P-Bromofluorobenzene (10,146)
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Min

Data File: \\target_server\gg\chem\gcms-d.i\D111623.b\D8863.d
Report Date: 04-Dec-2023 12:49

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-d.i\D111623.b\D8863.d
Lab Smp Id: WG345527-6
Inj Date : 16-NOV-2023 10:22
Operator : JSS   Inst ID: gcms-d.i
Smp Info : WG345527-6
Misc Info :
Comment   : SW846 5030C
Method   : \\target_server\gg\chem\gcms-d.i\D111623.b\DSIM(01)CR23.m
Meth Date : 04-Dec-2023 12:48 croy   Quant Type: ISTD
Cal Date : 16-NOV-2023 10:22   Cal File: D8863.d
Als bottle: 7   Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: Credere.sub
Target Version: 4.12

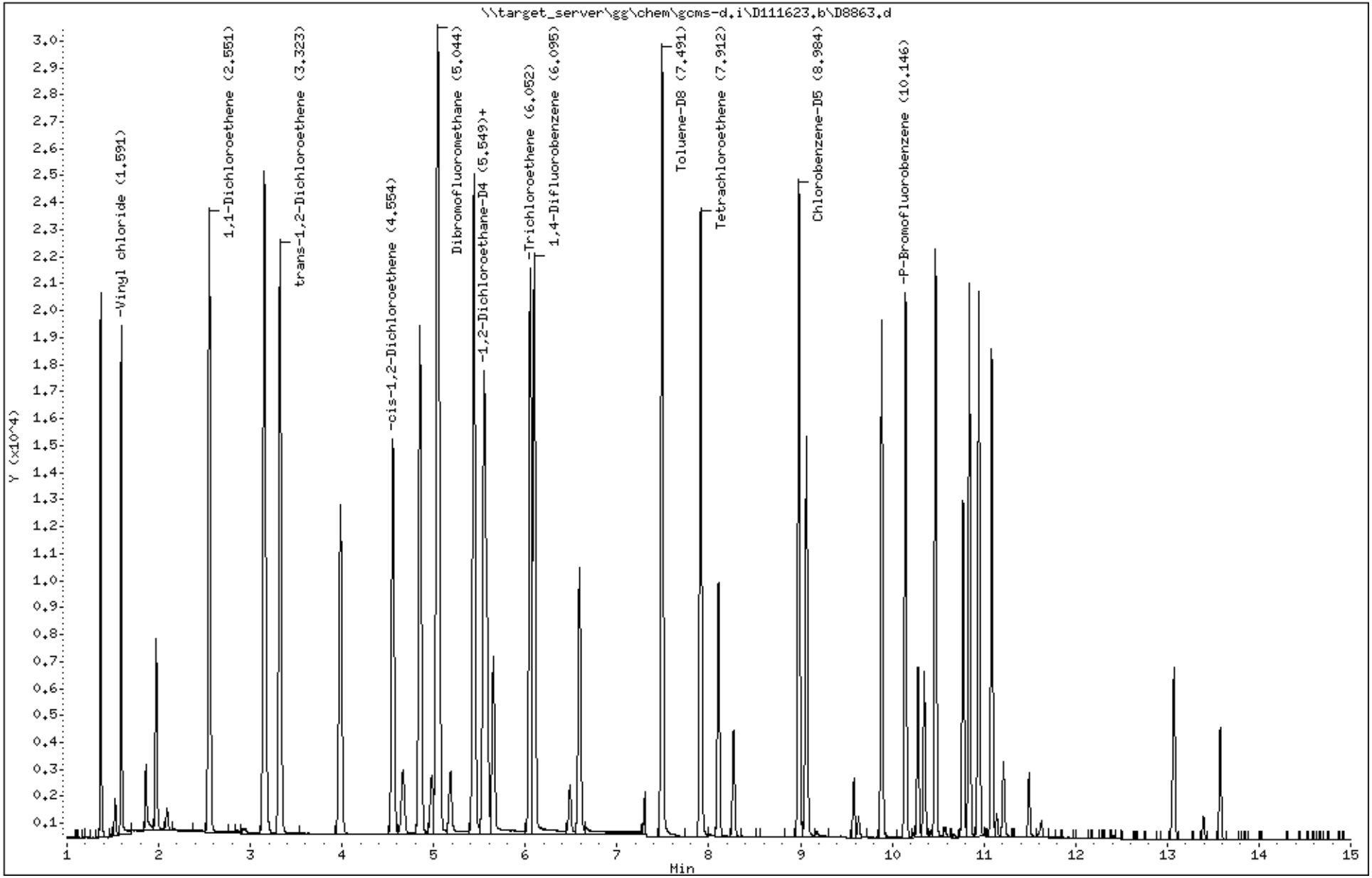
Concentration Formula: Amt * DF * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	25.000	sample purged
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)	REVIEW CODE
	1 Vinyl chloride	62	1.591	1.591	(0.287)	11724	0.75000	0.782	
	2 1,1-Dichloroethene	96	2.551	2.553	(0.460)	10293	0.75000	0.744	
	4 trans-1,2-Dichloroethene	96	3.322	3.323	(0.599)	12019	0.75000	0.766	
	5 cis-1,2-Dichloroethene	96	4.553	4.558	(0.821)	9015	0.75000	0.749	
	13 Trichloroethene	130	6.050	6.052	(0.993)	10419	0.75000	0.748	
	16 Tetrachloroethene	164	7.911	7.912	(1.298)	9090	0.75000	0.773	
$	7 Dibromofluoromethane	113	5.036	5.037	(0.908)	15830	1.00000	0.937	
$	11 1,2-Dichloroethane-D4	65	5.579	5.582	(1.006)	9203	1.00000	0.921	
$	15 Toluene-D8	98	7.490	7.491	(1.229)	28549	1.00000	0.995	
$	20 P-Bromofluorobenzene	95	10.143	10.146	(1.129)	10381	1.00000	1.12	
*	10 Pentafluorobenzene	168	5.547	5.549	(1.000)	21470	1.00000		
*	14 1,4-Difluorobenzene	114	6.095	6.096	(1.000)	31662	1.00000		
*	18 Chlorobenzene-D5	117	8.981	8.984	(1.000)	28069	1.00000		

Data File: \\target_server\gg\chem\gcms-d.i\D111623.b\D8863.d
Date : 16-NOV-2023 10:22
Client ID:
Sample Info: WG345527-6
Purge Volume: 25.0
Column phase: RTX-VMS

Instrument: gcms-d.i
Operator: JSS
Column diameter: 0.18



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Data File: \\target_server\gg\chem\gcms-d.i\D111623.b\D8864.d
Report Date: 04-Dec-2023 12:49

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-d.i\D111623.b\D8864.d
Lab Smp Id: WG345527-5
Inj Date : 16-NOV-2023 10:55
Operator : JSS   Inst ID: gcms-d.i
Smp Info : WG345527-5
Misc Info :
Comment   : SW846 5030C
Method   : \\target_server\gg\chem\gcms-d.i\D111623.b\DSIM(01)CR23.m
Meth Date : 04-Dec-2023 12:48 croy   Quant Type: ISTD
Cal Date : 16-NOV-2023 10:55   Cal File: D8864.d
Als bottle: 8   Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: Credere.sub
Target Version: 4.12

Concentration Formula: Amt * DF * 25/Vo * CpndVariable

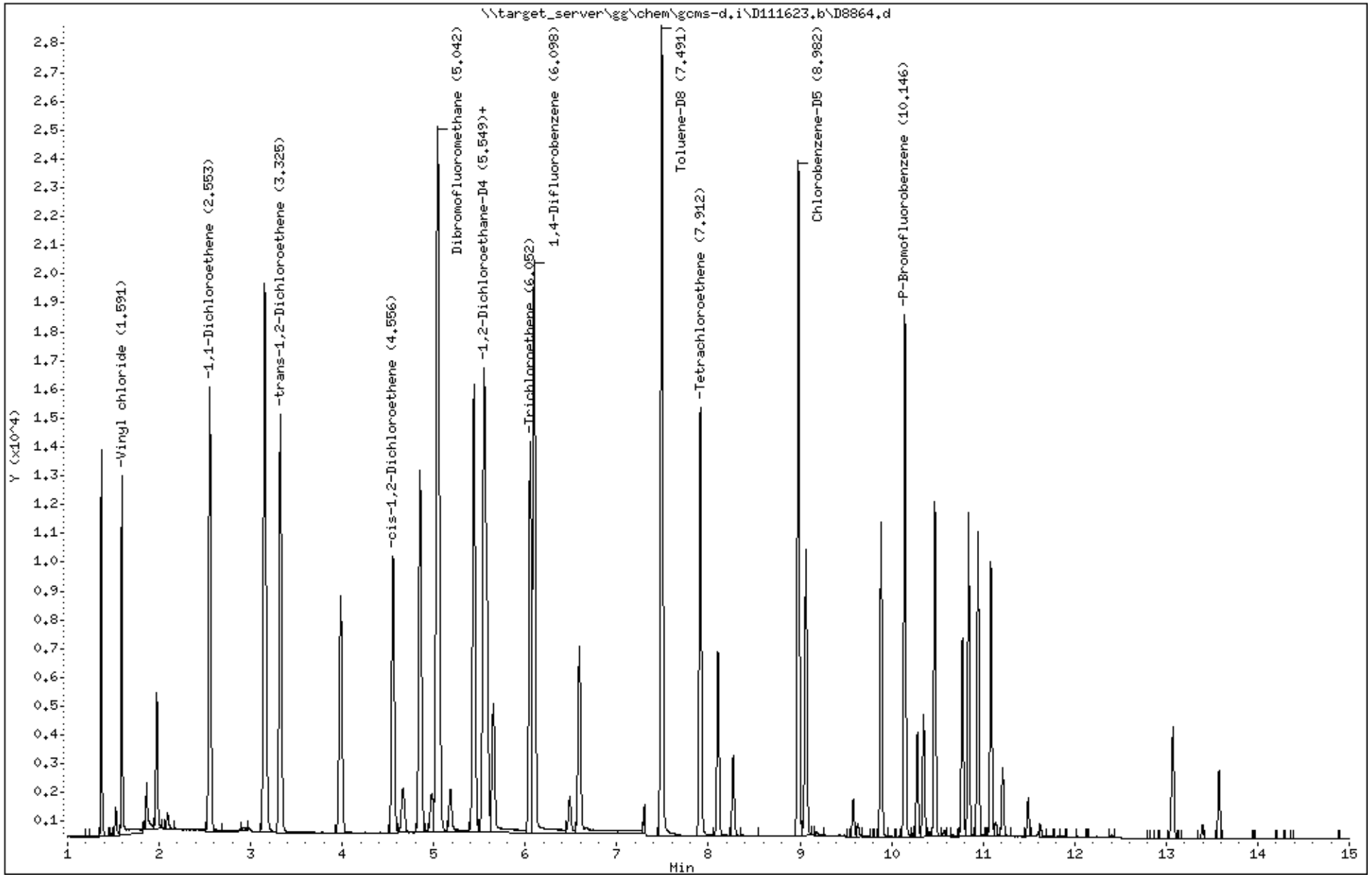
Name	Value	Description
DF	1.000	Dilution Factor
Vo	25.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)	REVIEW CODE
$ 7 Dibromofluoromethane	113	5.036	5.037	(0.908)	15594	1.00000	(a)	
$ 11 1,2-Dichloroethane-D4	65	5.581	5.582	(1.006)	9188	1.00000	(a)	
$ 15 Toluene-D8	98	7.490	7.491	(1.229)	27129	1.00000	(a)	
$ 20 P-Bromofluorobenzene	95	10.145	10.146	(1.129)	9219	1.00000	(a)	
* 10 Pentafluorobenzene	168	5.549	5.549	(1.000)	20191	1.00000		
* 14 1,4-Difluorobenzene	114	6.095	6.096	(1.000)	30045	1.00000		
* 18 Chlorobenzene-D5	117	8.983	8.984	(1.000)	26800	1.00000		

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\target_server\gg\chem\gcms-d.i\D111623.b\D8864.d
Date : 16-NOV-2023 10:55
Client ID:
Instrument: gcms-d.i
Sample Info: WG345527-5
Purge Volume: 25.0
Operator: JSS
Column phase: RTX-VMS
Column diameter: 0.18



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Form 7
Calibration Verification Summary

Lab Name: Katahdin Analytical Services
SDG: SQ6238
Lab ID: WG345599-4
Analytical Date: 11/17/23 08:19
Lab File ID: D8882.d
Instrument ID: GCMS-D
Initial Calibration Date(s): 11/16/23 07:03 11/16/23 10:55
Column ID:

Compound	$\overline{RRF}$/Amount	RF0.500	CCAL RRF0.500	Min RF	%D/ %Drift	Max %D/ %Drift	Curve Type	Qual
Vinyl chloride	0.70168	0.65018	0.65018	0.010	-7.33902	20.000	Averaged	
1,1-Dichloroethene	0.64410	0.57222	0.57222	0.100	-11.16015	20.000	Averaged	
trans-1,2-Dichloroethene	0.73249	0.70870	0.70870	0.010	-3.24817	20.000	Averaged	
cis-1,2-Dichloroethene	0.56034	0.48535	0.48535	0.010	-13.38222	20.000	Averaged	
Trichloroethene	0.43951	0.40820	0.40820	0.010	-7.12280	20.000	Averaged	
Tetrachloroethene	0.37272	0.35842	0.35842	0.010	-3.83601	20.000	Averaged	
Dibromofluoromethane	0.78094	0.66432	0.66432	0.010	-14.93397	20.000	Averaged	
1,2-Dichloroethane-D4	0.46094	0.38851	0.38851	0.010	-15.71339	20.000	Averaged	
Toluene-D8	0.90549	0.86509	0.86509	0.010	-4.46127	20.000	Averaged	
P-Bromofluorobenzene	0.33441	0.34325	0.34325	0.010	2.64430	20.000	Averaged	

*** = Compound out of QC criteria**

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Data File: \\target_server\gg\chem\gcms-d.i\D111723.b\D8882.d
Report Date: 11-Dec-2023 10:56

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-d.i\D111723.b\D8882.d
Lab Smp Id: WG345599-4
Inj Date : 17-NOV-2023 08:19
Operator : JSS   Inst ID: gcms-d.i
Smp Info : WG345599-4,SQ6238
Misc Info : WG345599,WG345527-5,SQ6238-1
Comment   : SW846 5030C
Method   : \\target_server\gg\chem\gcms-d.i\D111723.b\DSIM(01)CR23.m
Meth Date : 11-Dec-2023 10:56 CROY   Quant Type: ISTD
Cal Date : 16-NOV-2023 10:22   Cal File: D8863.d
Als bottle: 1   Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: all.sub
Target Version: 4.12
Processing Host: T6-O360

Concentration Formula: Amt * DF * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	25.000	sample purged
Cpnd Variable		Local Compound Variable

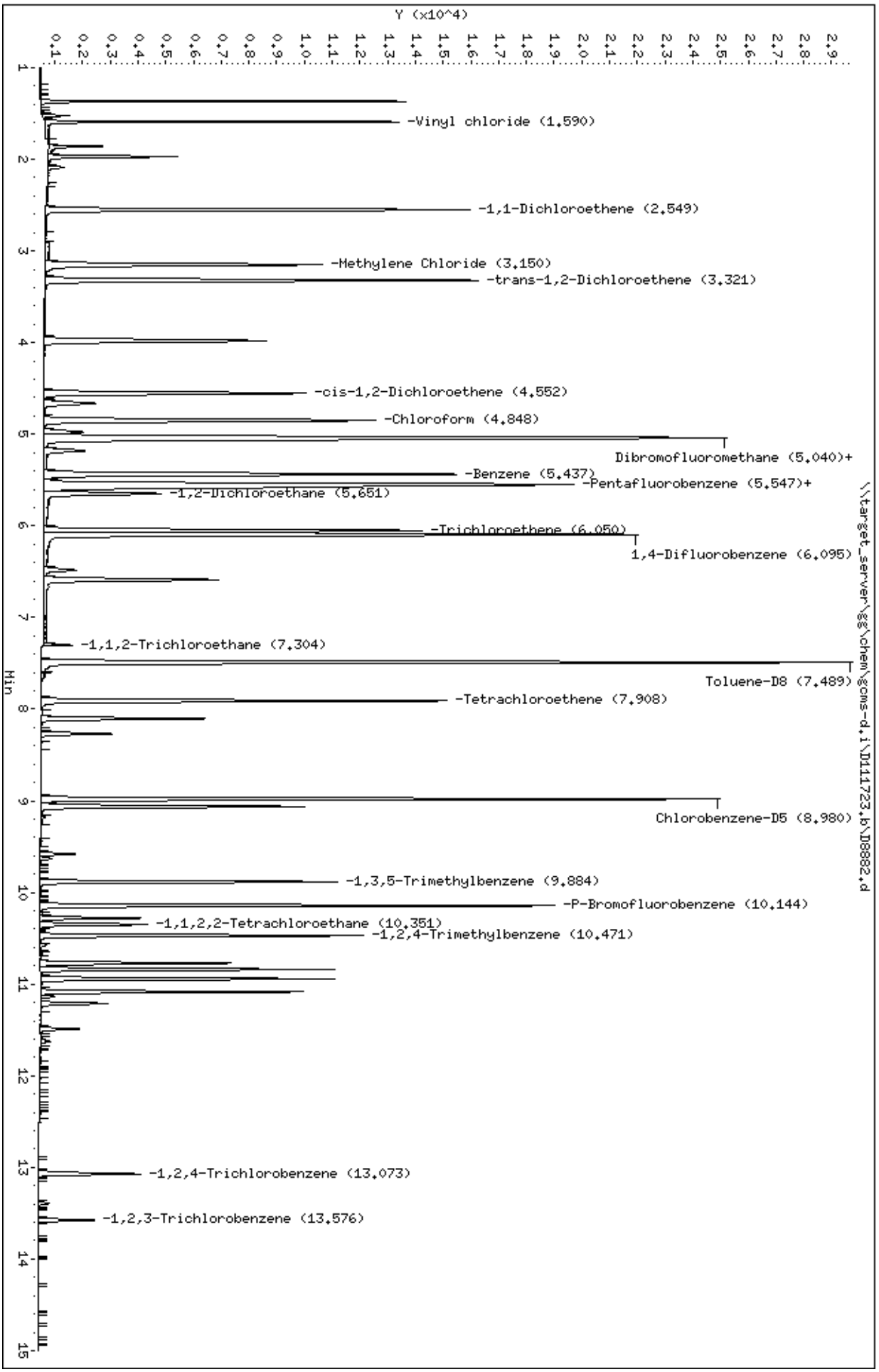
		QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)	REVIEW CODE
	1 Vinyl chloride	62	1.589	1.591	(0.287)	7889	0.50000	0.463	
	2 1,1-Dichloroethene	96	2.551	2.553	(0.460)	6943	0.50000	0.444	
	3 Methylene Chloride	84	3.149	3.154	(0.568)	6696	2.00000	(a)	
	4 trans-1,2-Dichloroethene	96	3.320	3.323	(0.599)	8599	0.50000	0.484	
	5 cis-1,2-Dichloroethene	96	4.551	4.558	(0.821)	5889	0.50000	0.433	
	6 Chloroform	83	4.848	4.848	(0.874)	14082	0.50000	(a)	
$	7 Dibromofluoromethane	113	5.036	5.037	(0.908)	16121	1.00000	0.851	
	8 1,1,1-Trichloroethane	97	5.048	5.054	(0.910)	10940	0.50000	(a)	
	9 Benzene	78	5.437	5.439	(0.980)	21131	0.50000	(a)	
*	10 Pentafluorobenzene	168	5.547	5.549	(1.000)	24267	1.00000		
$	11 1,2-Dichloroethane-D4	65	5.577	5.582	(1.005)	9428	1.00000	0.843	
	12 1,2-Dichloroethane	62	5.650	5.649	(0.927)	5147	0.50000	(a)	
	13 Trichloroethene	130	6.050	6.052	(0.993)	6699	0.50000	0.464	
*	14 1,4-Difluorobenzene	114	6.095	6.096	(1.000)	32822	1.00000		
$	15 Toluene-D8	98	7.488	7.491	(1.229)	28394	1.00000	0.955	
	16 Tetrachloroethene	164	7.909	7.912	(1.298)	5882	0.50000	0.481	
	17 1,1,2-Trichloroethane	83	7.306	7.310	(1.199)	469	0.50000	(a)	
*	18 Chlorobenzene-D5	117	8.981	8.984	(1.000)	27732	1.00000		
	19 1,3,5-Trimethylbenzene	105	9.884	9.888	(1.100)	12368	0.50000	(a)	
$	20 P-Bromofluorobenzene	95	10.143	10.146	(1.129)	9519	1.00000	1.03	
	21 1,1,2,2-Tetrachloroethane	83	10.350	10.351	(1.152)	2929	0.50000	(a)	
	22 1,2,4-Trimethylbenzene	105	10.471	10.473	(1.166)	10133	0.50000	(a)	
	23 1,2,4-Trichlorobenzene	180	13.072	13.075	(1.455)	2018	0.50000	(a)	

Data File: \\target_server\gg\chem\gcms-d.i\D111723.b\D8882.d
Report Date: 11-Dec-2023 10:56

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)	REVIEW CODE
24 1,2,3-Trichlorobenzene	180	13.575	13.579	(1.511)	1209	0.50000	(a)	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).



Data File: \\target_server\gg\chem\gcms-d,i\D111723,b\D8882,d
Date : 17-NOV-2023 08:19
Client ID:
Sample Info: WG345599-4,SQ6238
Purge Volume: 25.0
Column phase: RTX-VMS

Instrument: gcms-d,i
Operator: JSS
Column diameter: 0.18

Form 7
Calibration Verification Summary

Lab Name: Katahdin Analytical Services
SDG: SQ6238
Lab ID: WG345599-5
Analytical Date: 11/17/23 18:56
Lab File ID: D8901.d
Instrument ID: GCMS-D
Initial Calibration Date(s): 11/16/23 07:03 11/16/23 10:55
Column ID:

Compound	$\overline{RRF}$/Amount	RF0.500	CCAL RRF0.500	Min RF	%D/ %Drift	Max %D/ %Drift	Curve Type	Qual
Vinyl chloride	0.70168	0.72720	0.72720	0.010	3.63685	50.000	Averaged	
1,1-Dichloroethene	0.64410	0.69277	0.69277	0.100	7.55608	50.000	Averaged	
trans-1,2-Dichloroethene	0.73249	0.69602	0.69602	0.010	-4.97930	50.000	Averaged	
cis-1,2-Dichloroethene	0.56034	0.52895	0.52895	0.010	-5.60201	50.000	Averaged	
Trichloroethene	0.43951	0.44252	0.44252	0.010	0.68532	50.000	Averaged	
Tetrachloroethene	0.37272	0.38378	0.38378	0.010	2.96903	50.000	Averaged	
Dibromofluoromethane	0.78094	0.72009	0.72009	0.010	-7.79241	50.000	Averaged	
1,2-Dichloroethane-D4	0.46094	0.43779	0.43779	0.010	-5.02202	50.000	Averaged	
Toluene-D8	0.90549	0.87814	0.87814	0.010	-3.02049	50.000	Averaged	
P-Bromofluorobenzene	0.33441	0.34814	0.34814	0.010	4.10810	50.000	Averaged	

*** = Compound out of QC criteria**

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Data File: \\target_server\gg\chem\gcms-d.i\D111723.b\D8901.d
Report Date: 11-Dec-2023 10:55

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-d.i\D111723.b\D8901.d
Lab Smp Id: WG345599-5
Inj Date : 17-NOV-2023 18:56
Operator : JSS   Inst ID: gcms-d.i
Smp Info : WG345599-5,SQ6238
Misc Info : WG345599,WG345527-5,SQ6238-1
Comment   : SW846 5030C
Method   : \\target_server\gg\chem\gcms-d.i\D111723.b\DSIM(01)CR23.m
Meth Date : 11-Dec-2023 10:55 croy   Quant Type: ISTD
Cal Date : 16-NOV-2023 10:22   Cal File: D8863.d
Als bottle: 20   Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: all.sub
Target Version: 4.12
Processing Host: ORGANICS2

Concentration Formula: Amt * DF * 25/Vo * CpndVariable

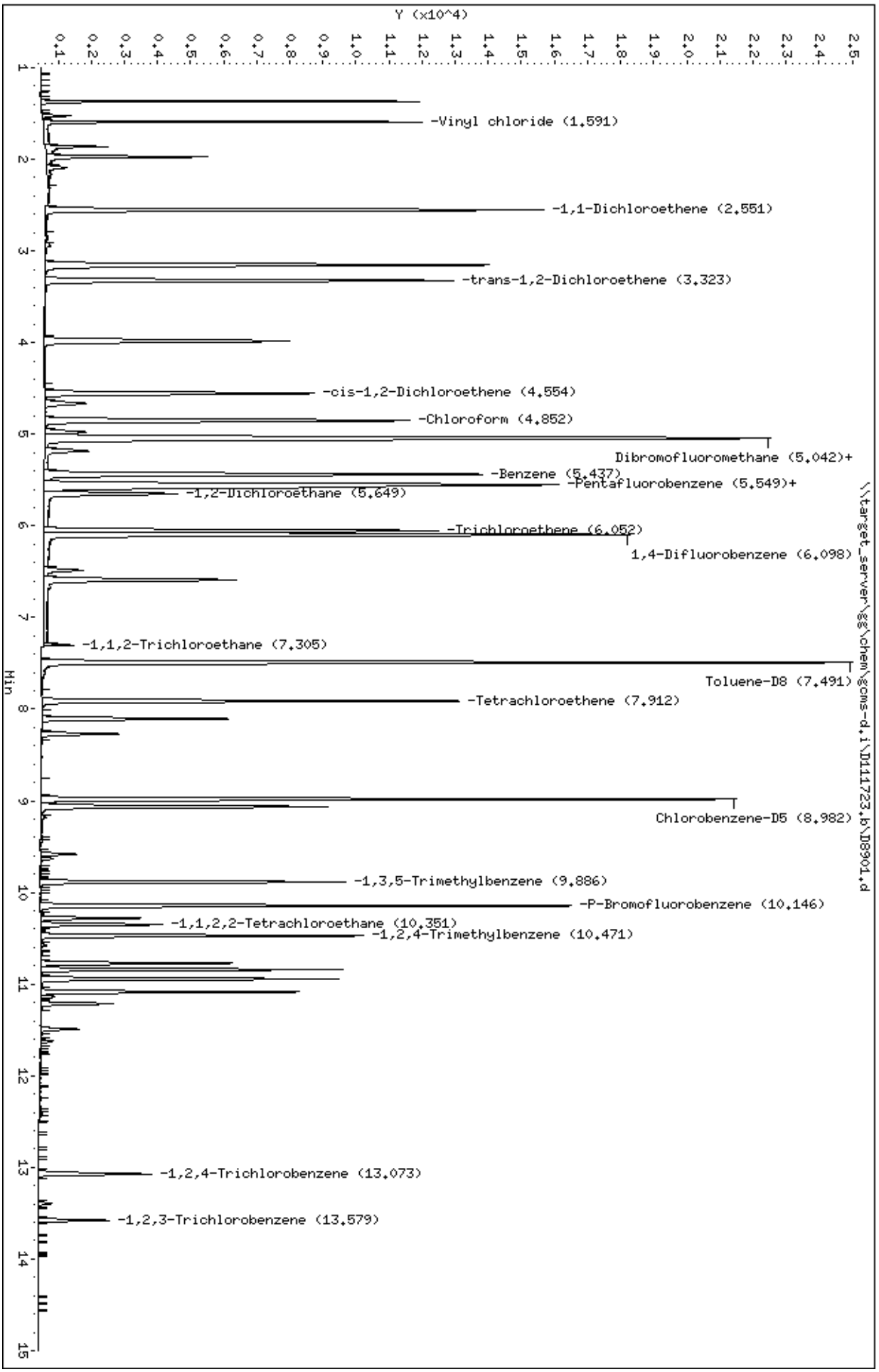
Name	Value	Description
DF	1.000	Dilution Factor
Vo	25.000	sample purged
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)	REVIEW CODE
	1 Vinyl chloride	62	1.591	1.591	(0.287)	7160	0.50000	0.518	
	2 1,1-Dichloroethene	96	2.551	2.553	(0.460)	6821	0.50000	0.538	
	4 trans-1,2-Dichloroethene	96	3.322	3.323	(0.599)	6853	0.50000	0.475	
	5 cis-1,2-Dichloroethene	96	4.555	4.558	(0.821)	5208	0.50000	0.472	
	6 Chloroform	83	4.851	4.848	(0.875)	13060	0.50000	(a)	
$	7 Dibromofluoromethane	113	5.036	5.037	(0.908)	14180	1.00000	0.922	
	8 1,1,1-Trichloroethane	97	5.048	5.054	(0.910)	10491	0.50000	(a)	
	9 Benzene	78	5.439	5.439	(0.981)	18747	0.50000	(a)	
*	10 Pentafluorobenzene	168	5.547	5.549	(1.000)	19692	1.00000		
$	11 1,2-Dichloroethane-D4	65	5.579	5.582	(1.006)	8621	1.00000	0.950	
	12 1,2-Dichloroethane	62	5.648	5.649	(0.926)	4961	0.50000	(a)	
	13 Trichloroethene	130	6.052	6.052	(0.993)	5899	0.50000	0.503	
*	14 1,4-Difluorobenzene	114	6.097	6.096	(1.000)	26661	1.00000		
$	15 Toluene-D8	98	7.490	7.491	(1.228)	23412	1.00000	0.970	
	16 Tetrachloroethene	164	7.911	7.912	(1.298)	5116	0.50000	0.515	
	17 1,1,2-Trichloroethane	83	7.306	7.310	(1.198)	308	0.50000	(a)	
*	18 Chlorobenzene-D5	117	8.981	8.984	(1.000)	23878	1.00000		
	19 1,3,5-Trimethylbenzene	105	9.885	9.888	(1.101)	10574	0.50000	(a)	
$	20 P-Bromofluorobenzene	95	10.144	10.146	(1.129)	8313	1.00000	1.04	
	21 1,1,2,2-Tetrachloroethane	83	10.350	10.351	(1.152)	2825	0.50000	(a)	
	22 1,2,4-Trimethylbenzene	105	10.471	10.473	(1.166)	8546	0.50000	(a)	
	23 1,2,4-Trichlorobenzene	180	13.072	13.075	(1.456)	1912	0.50000	(a)	
	24 1,2,3-Trichlorobenzene	180	13.579	13.579	(1.512)	1265	0.50000	(a)	

Data File: \\target_server\gg\chem\gcms-d.i\D111723.b\D8901.d
Report Date: 11-Dec-2023 10:55

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).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Date : 17-NOV-2023 18:56
Client ID:
Sample Info: WG345599-5,SQ6238
Purge Volume: 25.0
Column phase: RTX-VMS
Instrument: gcms-d.i
Operator: JSS
Column diameter: 0.18
Y (x10^4)
Min
-Vinyl chloride (1.591)
-1,1-Dichloroethene (2.551)
-trans-1,2-Dichloroethene (3.323)
-cis-1,2-Dichloroethene (4.554)
-Chloroform (4.852)
Dibromofluoromethane (5.042)+
-Benzene (5.437)
-Pentafluorobenzene (5.549)+
-1,2-Dichloroethane (5.649)
-Trichloroethene (6.052)
1,4-Difluorobenzene (6.098)
-1,1,2-Trichloroethane (7.305)
Toluene-D8 (7.491)
-Tetrachloroethene (7.912)
Chlorobenzene-D5 (8.982)
-1,3,5-Trimethylbenzene (9.886)
-P-Bromofluorobenzene (10.146)
-1,1,2,2-Tetrachloroethane (10.351)
-1,2,4-Trimethylbenzene (10.471)
-1,2,4-Trichlorobenzene (13.073)
-1,2,3-Trichlorobenzene (13.579)
\\target_server\gg\chem\gcms-d.i\D111723.b\D8901.d

Data File: \\target_server\gg\chem\gcms-d.i\D111623.b\DB230a.d

Date : 16-NOV-2023 06:37

Client ID:

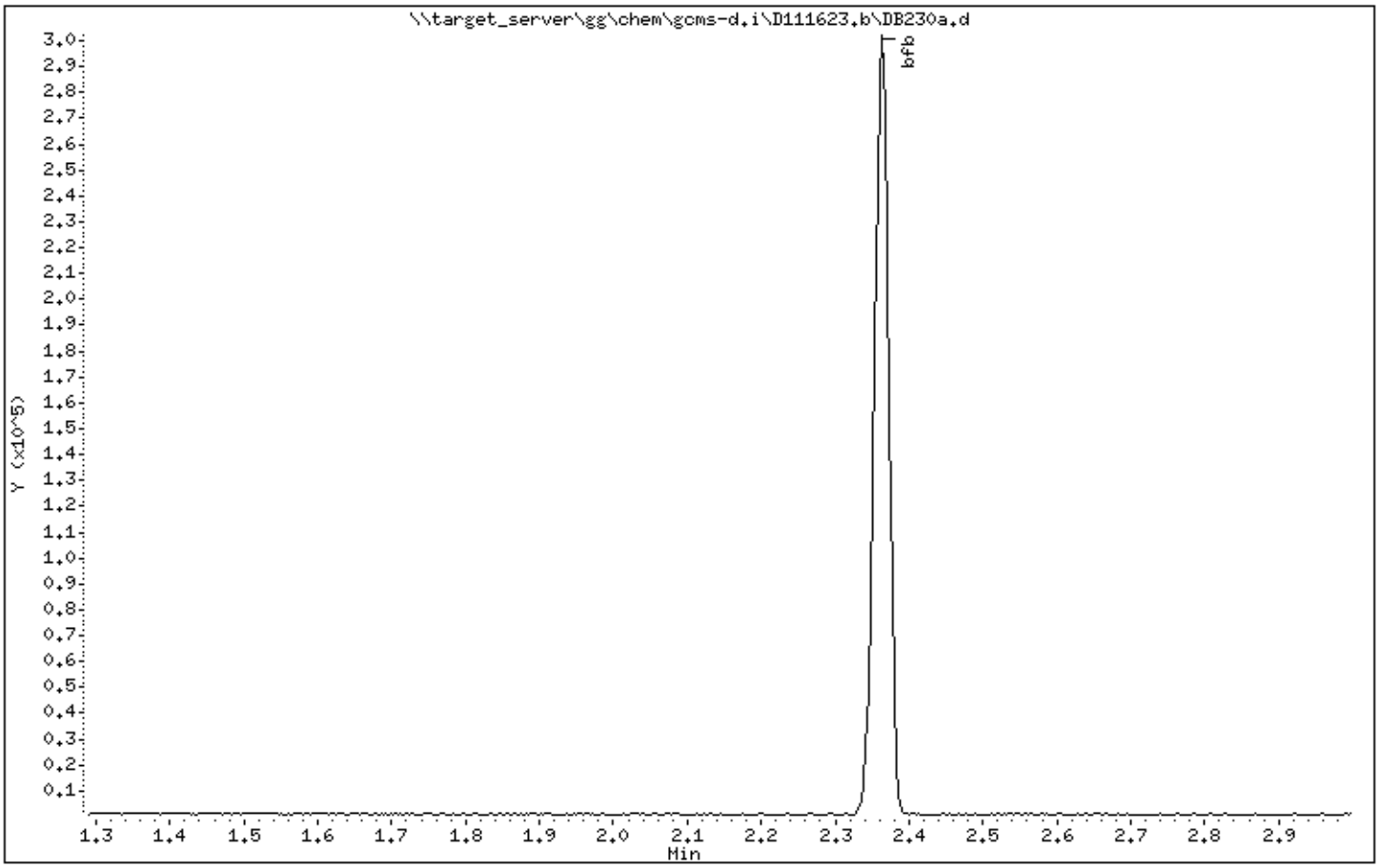
Instrument: gcms-d.i

Sample Info: WG345527-12,SQ6112

Operator: JSS

Column phase: RTX-VMS

Column diameter: 0.18



Data File: \\target_server\gg\chem\gcms-d.i\D111623.b\DB230a.d

Date : 16-NOV-2023 06:37

Client ID:

Instrument: gcms-d.i

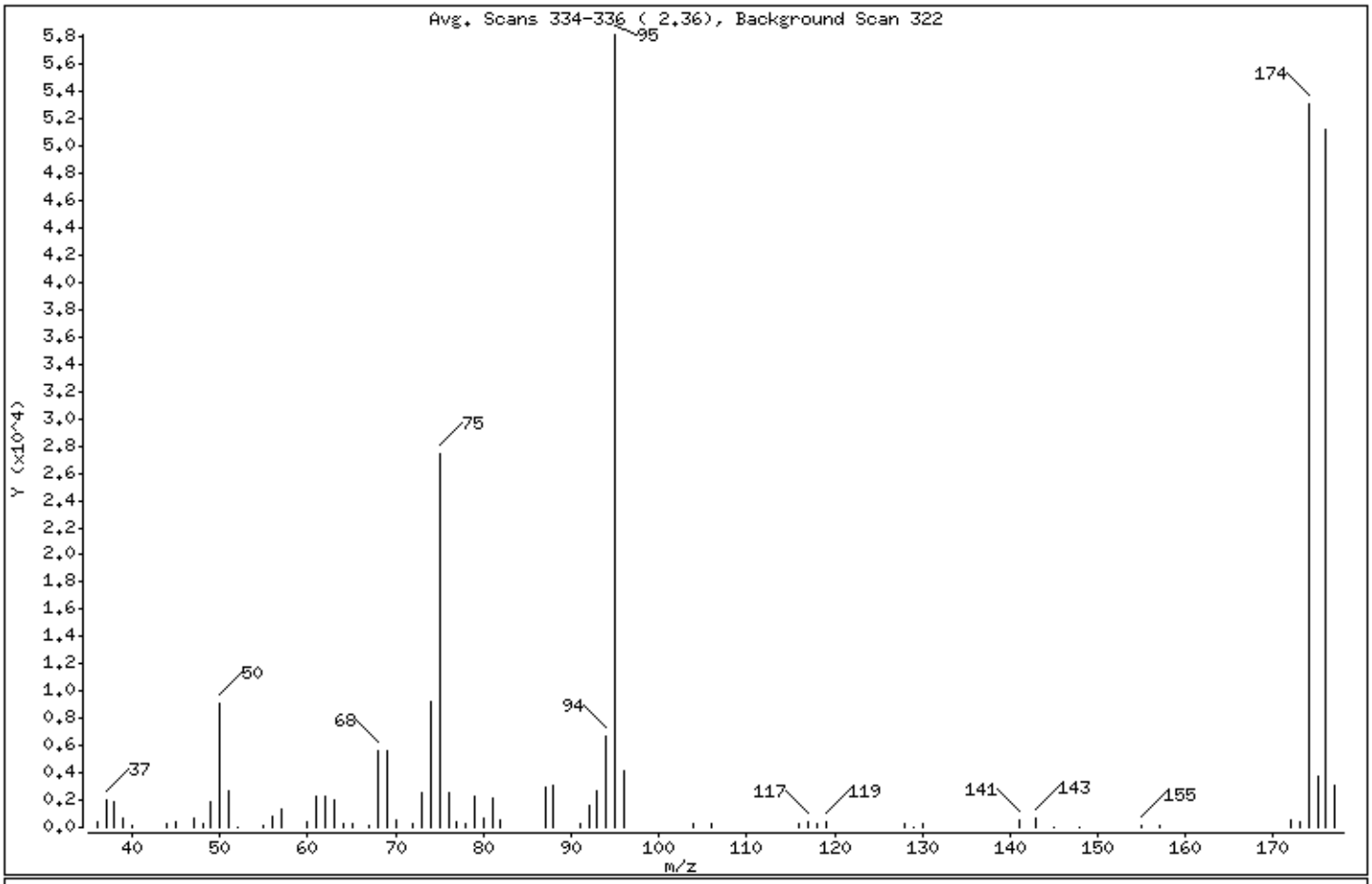
Sample Info: WG345527-12,SQ6112

Operator: JSS

Column phase: RTX-VMS

Column diameter: 0.18

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	15.56
75	30.00 - 60.00% of mass 95	47.16
96	5.00 - 9.00% of mass 95	7.03
173	Less than 2.00% of mass 174	0.72 (0.79)
174	Greater than 50.00% of mass 95	91.34
175	5.00 - 9.00% of mass 174	6.53 (7.14)
176	95.00 - 101.00% of mass 174	88.11 (96.46)
177	5.00 - 9.00% of mass 176	5.36 (6.08)

Date : 16-NOV-2023 06:37

Client ID: Instrument: gcms-d.i

Sample Info: WG345527-12,SQ6112

Operator: JSS

Column phase: RTX-VMS Column diameter: 0.18

Data File: DB230a.d
Spectrum: Avg. Scans 334-336 (2.36), Background Scan 322
Location of Maximum: 95.00
Number of points: 66

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	353	61.00	2340	80.00	713	128.00	221
37.00	1952	62.00	2331	81.00	2181	129.00	50
38.00	1881	63.00	2021	82.00	579	130.00	236
39.00	656	64.00	228	87.00	2900	141.00	567
40.00	113	65.00	316	88.00	3031	143.00	698
44.00	267	67.00	112	91.00	217	145.00	55
45.00	366	68.00	5605	92.00	1620	148.00	50
47.00	642	69.00	5582	93.00	2618	155.00	125
48.00	245	70.00	481	94.00	6677	157.00	73
49.00	1850	72.00	282	95.00	58184	172.00	571
50.00	9054	73.00	2500	96.00	4091	173.00	418
51.00	2728	74.00	9284	104.00	319	174.00	53144
52.00	50	75.00	27440	106.00	256	175.00	3797
55.00	82	76.00	2479	116.00	235	176.00	51264
56.00	742	77.00	395	117.00	438	177.00	3117
57.00	1346	78.00	290	118.00	249		
60.00	370	79.00	2269	119.00	376		

Data File: \\target_server\gg\chem\gcms-d.i\D111723.b\DB231a.d

Date : 17-NOV-2023 07:54

Client ID:

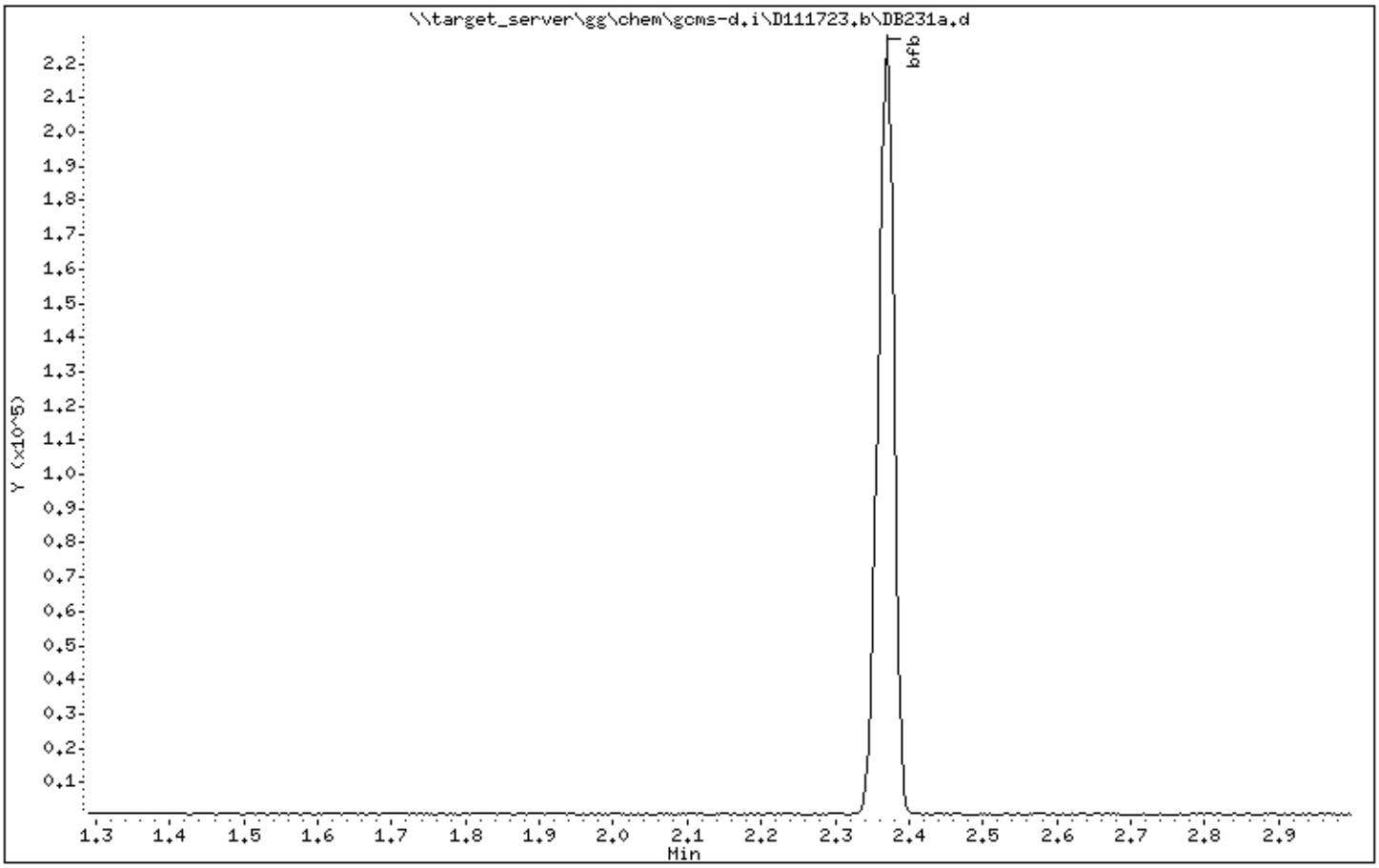
Instrument: gcms-d.i

Sample Info: WG345599-3,SQ6238

Operator: JSS

Column phase: RTX-VMS

Column diameter: 0.18



Data File: \\target_server\gg\chem\gcms-d.i\D111723.b\DB231a.d

Date : 17-NOV-2023 07:54

Client ID:

Instrument: gcms-d.i

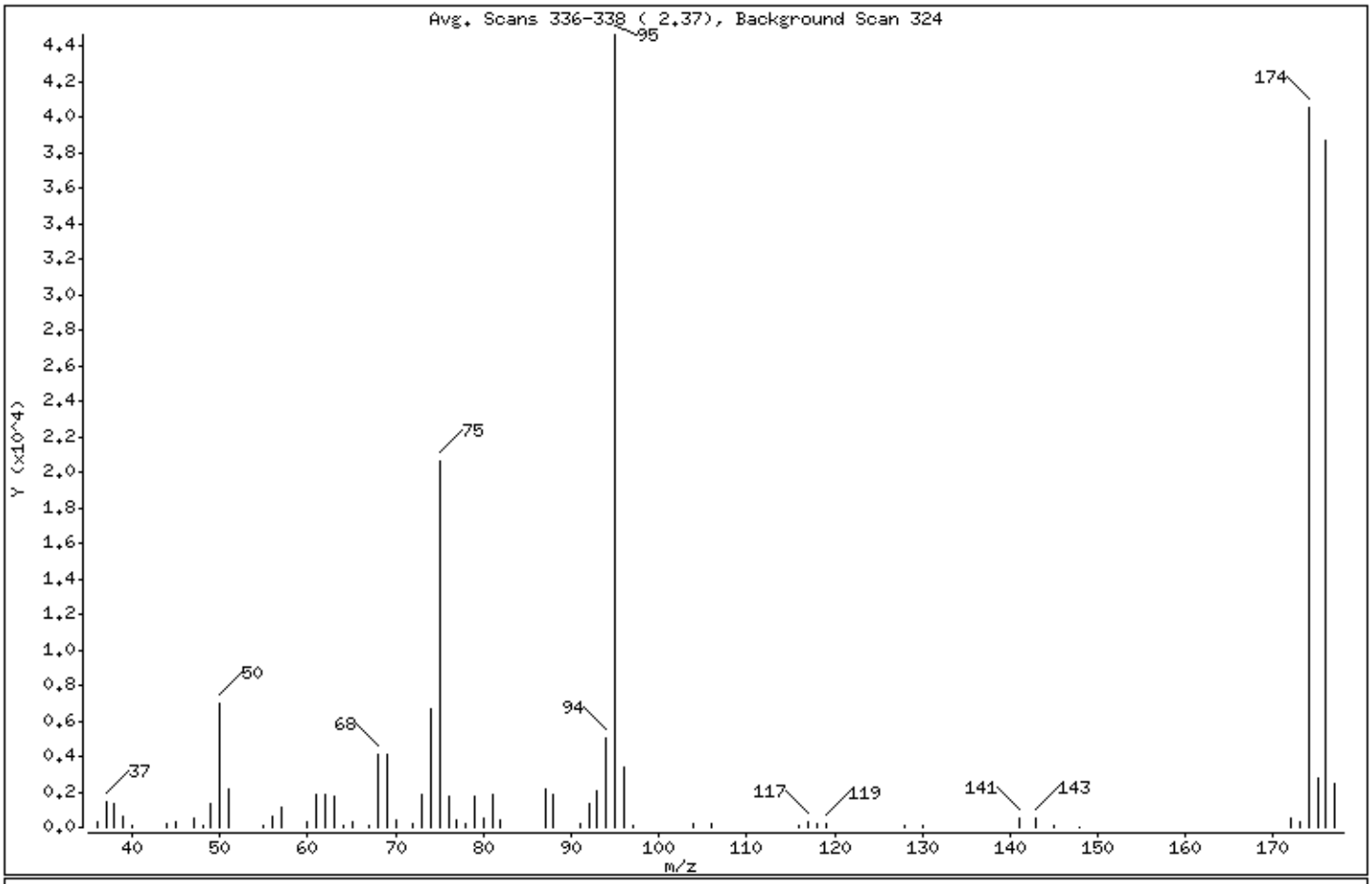
Sample Info: WG345599-3,SQ6238

Operator: JSS

Column phase: RTX-VMS

Column diameter: 0.18

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	15.53
75	30.00 - 60.00% of mass 95	46.13
96	5.00 - 9.00% of mass 95	7.62
173	Less than 2.00% of mass 174	0.65 (0.71)
174	Greater than 50.00% of mass 95	90.70
175	5.00 - 9.00% of mass 174	6.26 (6.90)
176	95.00 - 101.00% of mass 174	86.64 (95.52)
177	5.00 - 9.00% of mass 176	5.50 (6.35)

Date : 17-NOV-2023 07:54

Client ID:

Instrument: gcms-d.i

Sample Info: WG345599-3,SQ6238

Operator: JSS

Column phase: RTX-VMS

Column diameter: 0.18

Data File: DB231a.d
Spectrum: Avg. Scans 336-338 (2.37), Background Scan 324
Location of Maximum: 95.00
Number of points: 63

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	335	61.00	1891	79.00	1715	117.00	329
37.00	1453	62.00	1846	80.00	484	118.00	213
38.00	1308	63.00	1713	81.00	1880	119.00	217
39.00	597	64.00	147	82.00	433	128.00	104
40.00	67	65.00	289	87.00	2183	130.00	144
44.00	227	67.00	63	88.00	1831	141.00	512
45.00	293	68.00	4155	91.00	201	143.00	556
47.00	555	69.00	4154	92.00	1327	145.00	75
48.00	135	70.00	449	93.00	2053	148.00	51
49.00	1359	72.00	214	94.00	5012	172.00	502
50.00	6934	73.00	1822	95.00	44656	173.00	289
51.00	2109	74.00	6633	96.00	3405	174.00	40504
55.00	104	75.00	20600	97.00	52	175.00	2794
56.00	637	76.00	1774	104.00	253	176.00	38688
57.00	1157	77.00	404	106.00	233	177.00	2456
60.00	316	78.00	159	116.00	136		

Raw QC Data Section

Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

SDG: SQ6238
Lab ID: WG345599-2
Client ID: Method Blank
Matrix: AQ
Lab File ID: D8885.D

Sample Date: N/A
Extract Date: 17-NOV-23
Extracted By: JSS
Extraction Method: SW846 5030C
Lab Prep Batch: WG345599

Report Date: 12-DEC-23
Analysis Date: 17-NOV-23
Analyst: JSS
Analysis Method: SW846 8260C SIM
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Vinyl Chloride	U	0.050	ug/L	1	.1	0.10	0.0037	0.050
1,1-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0091	0.025
trans-1,2-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0033	0.025
cis-1,2-Dichloroethene	U	0.025	ug/L	1	.05	0.050	0.0057	0.025
Trichloroethene	U	0.025	ug/L	1	.05	0.050	0.012	0.025
Tetrachloroethene	U	0.025	ug/L	1	.05	0.050	0.0091	0.025
Dibromofluoromethane		96.3	%					
1,2-Dichloroethane-d4		94.4	%					
Toluene-D8		99.9	%					
p-Bromofluorobenzene		78.1	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029
http://www.katahdinlab.com

Data File: \\target_server\gg\chem\gcms-d.i\D111723.b\D8885.d
Report Date: 12-Dec-2023 08:06

Katahdin Analytical Services

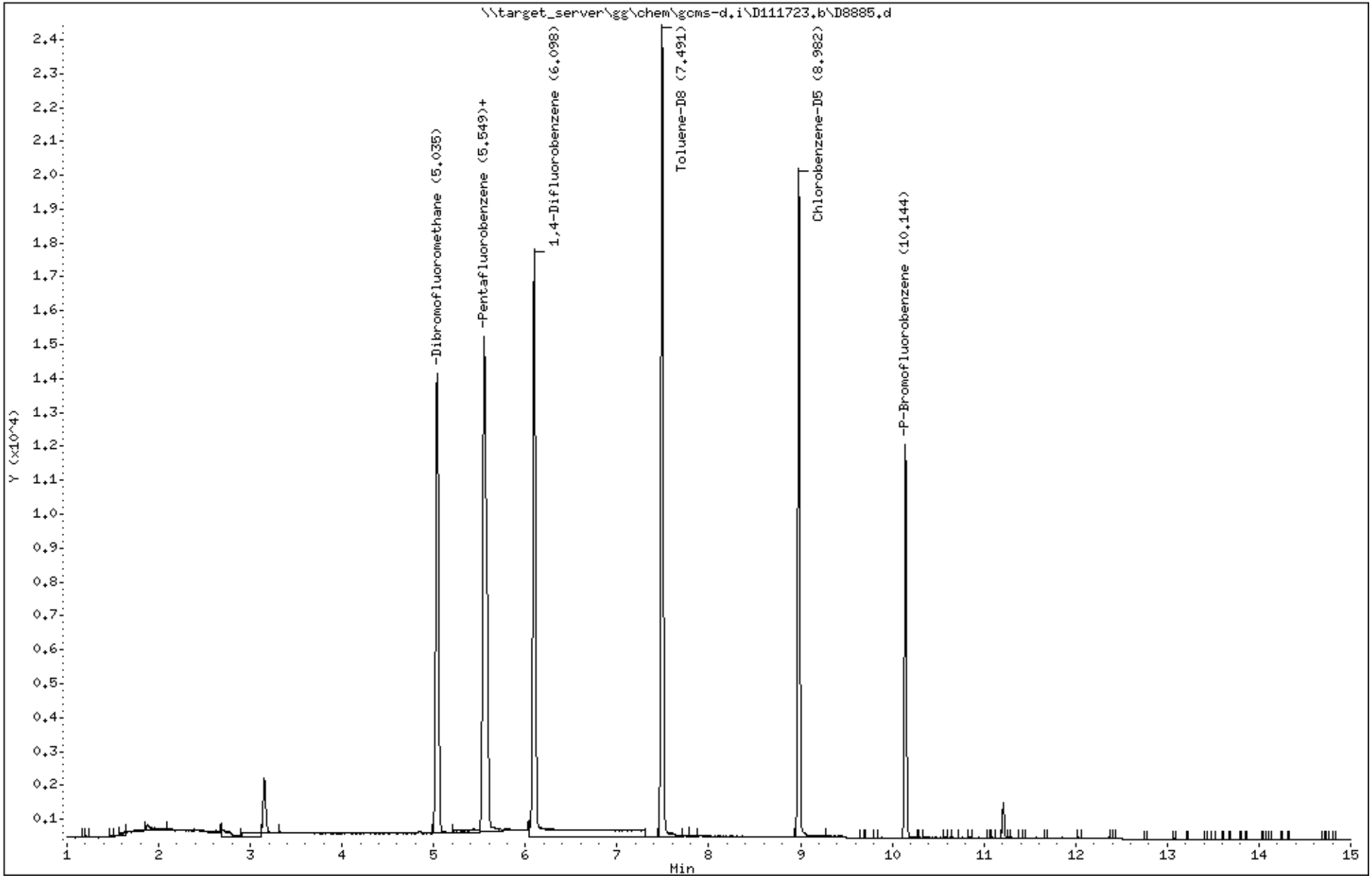
Data file : \\target_server\gg\chem\gcms-d.i\D111723.b\D8885.d
Lab Smp Id: WG345599-2
Inj Date : 17-NOV-2023 10:03
Operator : JSS   Inst ID: gcms-d.i
Smp Info : WG345599-2,SQ6238
Misc Info : WG345599,WG345527-5,SQ6238-1
Comment   : SW846 5030C
Method   : \\target_server\gg\chem\gcms-d.i\D111723.b\DSIM(01)CR23.m
Meth Date : 11-Dec-2023 10:56 CROY   Quant Type: ISTD
Cal Date : 16-NOV-2023 10:22   Cal File: D8863.d
Als bottle: 4
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: all.sub
Target Version: 4.12
Processing Host: T6-O360

Concentration Formula: Amt * DF * 25/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	25.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)	REVIEW CODE
$ 7 Dibromofluoromethane	113	5.036	5.037	(0.908)	14100	0.96345	0.963	
* 10 Pentafluorobenzene	168	5.549	5.549	(1.000)	18740	1.00000		
$ 11 1,2-Dichloroethane-D4	65	5.579	5.582	(1.005)	8152	0.94373	0.944	
* 14 1,4-Difluorobenzene	114	6.097	6.096	(1.000)	26001	1.00000		
$ 15 Toluene-D8	98	7.490	7.491	(1.228)	23512	0.99866	0.999	
* 18 Chlorobenzene-D5	117	8.981	8.984	(1.000)	22745	1.00000		
$ 20 P-Bromofluorobenzene	95	10.144	10.146	(1.129)	5940	0.78095	0.781	

Data File: \\target_server\gg\chem\gcms-d.i\D111723.b\D8885.d
Date : 17-NOV-2023 10:03
Client ID:
Instrument: gcms-d.i
Sample Info: WG345599-2,SQ6238
Purge Volume: 25.0
Operator: JSS
Column phase: RTX-VMS
Column diameter: 0.18



Katahdin
ANALYTICAL SERVICES

LCS Recovery Report

Lab ID: WG345599-1
Client ID: LCS
SDG: SQ6238
LCS File ID: D8883.D
Report Date: 12-DEC-23

Extract Date: 17-NOV-23
Extracted By: JSS
Extraction Method: SW846 5030C
Lab Prep Batch: WG345599

Analysis Date: 17-NOV-23
Analyst: JSS
Analysis Method: SW846 8260C SIM
Matrix: AQ

Compound	Recovery (%)	Conc Added	Conc Recovered	Conc Units	Limits
Vinyl Chloride	88.6	0.500	0.443	ug/L	70-130
1,1-Dichloroethene	101.	0.500	0.506	ug/L	70-130
trans-1,2-Dichloroethene	93.8	0.500	0.469	ug/L	70-130
cis-1,2-Dichloroethene	95.8	0.500	0.479	ug/L	70-130
Trichloroethene	98.8	0.500	0.494	ug/L	70-130
Tetrachloroethene	104.	0.500	0.522	ug/L	70-130
Dibromofluoromethane	87.0				70-130
1,2-Dichloroethane-d4	84.5				70-130
Toluene-D8	97.7				70-130
p-Bromofluorobenzene	101.				70-130

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029
http://www.katahdinlab.com

Data File: \\target_server\gg\chem\gcms-d.i\D111723.b\D8883.d
Report Date: 12-Dec-2023 08:06

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-d.i\D111723.b\D8883.d
Lab Smp Id: WG345599-1
Inj Date : 17-NOV-2023 08:52
Operator : JSS   Inst ID: gcms-d.i
Smp Info : WG345599-1,SQ6238
Misc Info : WG345599,WG345527-5,SQ6238-1
Comment   : SW846 5030C
Method   : \\target_server\gg\chem\gcms-d.i\D111723.b\DSIM(01)CR23.m
Meth Date : 11-Dec-2023 10:56 CROY   Quant Type: ISTD
Cal Date : 16-NOV-2023 10:22   Cal File: D8863.d
Als bottle: 2   QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: all.sub
Target Version: 4.12
Processing Host: VOA-WS

Concentration Formula: Amt * DF * 25/Vo * CpndVariable

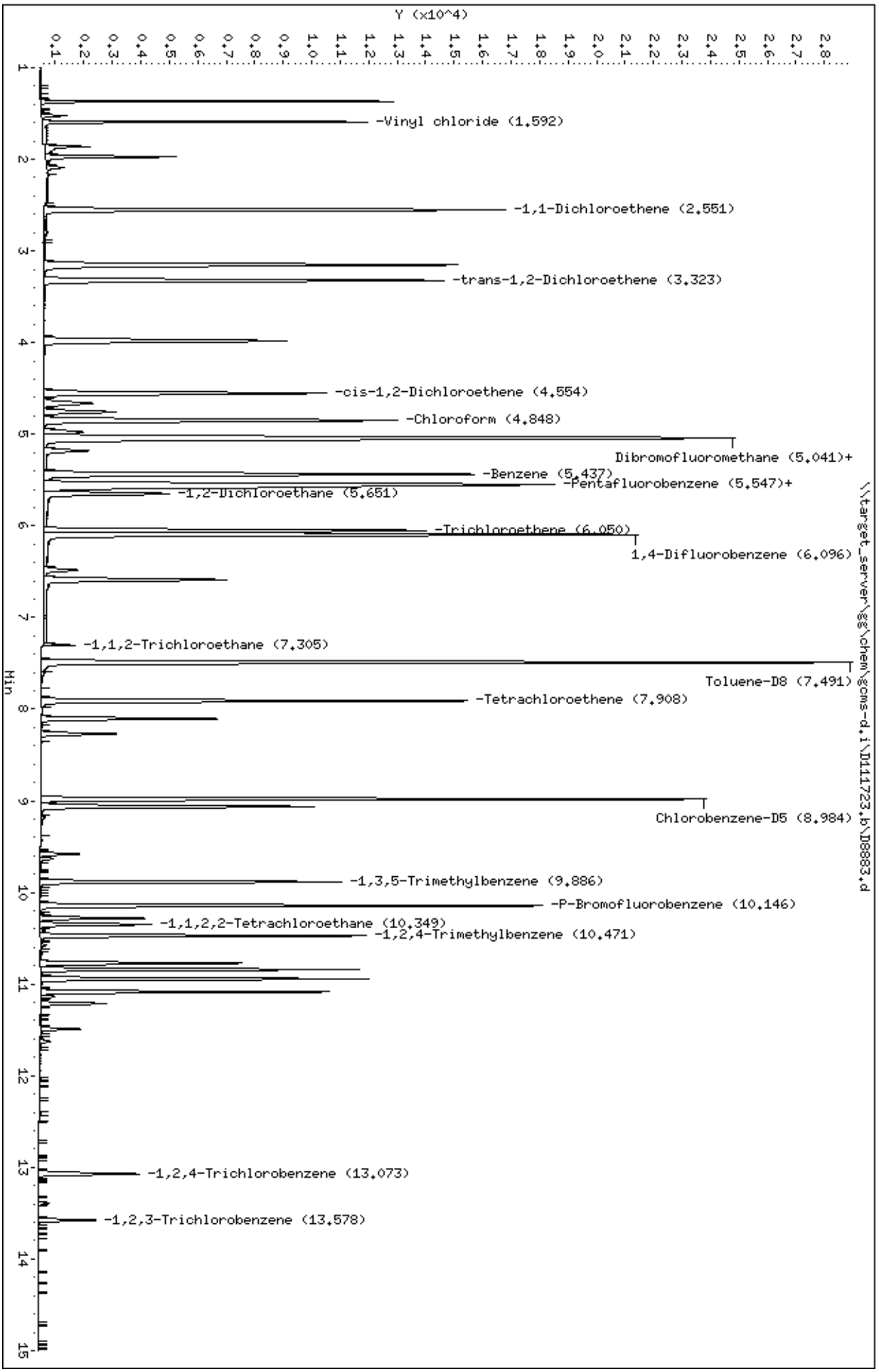
Name	Value	Description
DF	1.000	Dilution Factor
Vo	25.000	sample purged
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)	REVIEW CODE
1	Vinyl chloride	62	1.591	1.591	(0.287)	7056	0.44279	0.443	
2	1,1-Dichloroethene	96	2.551	2.553	(0.460)	7406	0.50631	0.506	
4	trans-1,2-Dichloroethene	96	3.323	3.323	(0.599)	7809	0.46944	0.469	
5	cis-1,2-Dichloroethene	96	4.554	4.558	(0.821)	6096	0.47905	0.479	
6	Chloroform	83	4.848	4.848	(0.874)	14500		(a)	
$ 7	Dibromofluoromethane	113	5.036	5.037	(0.908)	15436	0.87036	0.870	
8	1,1,1-Trichloroethane	97	5.050	5.054	(0.910)	11315		(a)	
9	Benzene	78	5.437	5.439	(0.980)	21610		(a)	
* 10	Pentafluorobenzene	168	5.547	5.549	(1.000)	22710	1.00000		
$ 11	1,2-Dichloroethane-D4	65	5.577	5.582	(1.005)	8843	0.84477	0.845	
12	1,2-Dichloroethane	62	5.650	5.649	(0.927)	5354		(a)	
13	Trichloroethene	130	6.050	6.052	(0.993)	6730	0.49443	0.494	
* 14	1,4-Difluorobenzene	114	6.095	6.096	(1.000)	30970	1.00000		
$ 15	Toluene-D8	98	7.490	7.491	(1.229)	27391	0.97675	0.977	
16	Tetrachloroethene	164	7.910	7.912	(1.298)	6029	0.52231	0.522	
17	1,1,2-Trichloroethane	83	7.312	7.310	(1.200)	491		(a)	
* 18	Chlorobenzene-D5	117	8.980	8.984	(1.000)	26803	1.00000		
19	1,3,5-Trimethylbenzene	105	9.885	9.888	(1.101)	12306		(a)	
$ 20	P-Bromofluorobenzene	95	10.142	10.146	(1.129)	9079	1.01293	1.01	
21	1,1,2,2-Tetrachloroethane	83	10.349	10.351	(1.152)	2946		(a)	
22	1,2,4-Trimethylbenzene	105	10.471	10.473	(1.166)	10155		(a)	
23	1,2,4-Trichlorobenzene	180	13.073	13.075	(1.456)	1996		(a)	
24	1,2,3-Trichlorobenzene	180	13.579	13.579	(1.512)	1171		(a)	

Data File: \\target_server\gg\chem\gcms-d.i\D111723.b\D8883.d
Report Date: 12-Dec-2023 08:06

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).


Data File: \\target_server\gg\chem\gcms-d.i\D111723.b\D8883.d
Date : 17-NOV-2023 08:52
Client ID:
Sample Info: WG345599-1,SQ6238
Purge Volume: 25.0
Column phase: RTX-VMS
Instrument: gcms-d.i
Operator: JSS
Column diameter: 0.18
Y (x10^4)
Min
-Vinyl chloride (1.592)
-1,1-Dichloroethene (2.551)
-trans-1,2-Dichloroethene (3.323)
-cis-1,2-Dichloroethene (4.554)
-Chloroform (4.848)
Dibromofluoromethane (5.041)+
-Benzene (5.437)
-Pentafluorobenzene (5.547)+
-1,2-Dichloroethane (5.651)
-Trichloroethene (6.050)
1,4-Difluorobenzene (6.096)
-1,1,2-Trichloroethane (7.305)
Toluene-D8 (7.491)
-Tetrachloroethene (7.908)
Chlorobenzene-D5 (8.984)
-1,3,5-Trimethylbenzene (9.886)
-P-Bromofluorobenzene (10.146)
-1,1,2,2-Tetrachloroethane (10.349)
-1,2,4-Trimethylbenzene (10.471)
-1,2,4-Trichlorobenzene (13.073)
-1,2,3-Trichlorobenzene (13.578)
\\target_server\gg\chem\gcms-d.i\D111723.b\D8883.d

Logbooks and Supporting Documents

KATAHDIN ANALYTICAL SERVICES

GCMS- D INSTRUMENT RUNLOG

DATE: 11-16-23

BFB Injection Time: 6:37

Method:Check one	Standards	Std IDs *	pH paper Lot #	6210005	Criteria
8260 5mL O	BFB	V 2824	KI paper Lot #	—	K = Lab
8260 10mL O	IS / SS	V 2823	Vial Lot #	2795FL-PC-W	D = DOD
8260 SL O	CAL	V 2832	MeOH Lot #	—	Q = QUAPP
8260 SIM ✓	EXTRAs	~~V 2833~~	Work Grouped WG		Curve okay
524 O	LCS	V 2833	176+93		
8260 25mL O					Post-merged curve

SAMPLE NAME	DATA FILE	DF	ALS	METHOD	5030	5035	1311	Criteria	pH	TRC	Y/N	Initials	Comments
WG345527-12	D8230	1	-1	VOA8BFB	✓				NA	NA	Y	✓	
VSTD 0.05 -1	D8857	1	1	DSDM(61)CR23							Y		
0.075 -2	58	1	2								Y		
0.10 -3	59	1	3								Y		
0.30 -4	60	1	4								Y		
0.60 -8	61	1	5								Y		
1.00 -7	62	1	6								Y		
0.75 -6	63	1	7								Y		
V 0.50 -5	64	1	8								Y		
Rinse	65	1	9								N		
LOQ @ 0.05	66	1	10								Y		
LCS -10 / -9	67	1	11								Y		INDS(9)"A"
LCSD -14	68	1	12								Y		
VBLK	69	1	13								2		Target Hits
WG345527-11	70	1	14								Y		
LOD @ 0.025	71	1	15						↓		1		
SQ6112-3A	72	1	16					D	12		Y		
SQ6133-11A	73	1	17								Y		
SQ6112-1C	74	1	18								Y		
↓ -2C	75	1	19								Y		
SQ6133-13	76	1	20					↓	↓		Y		
CCV -13	77	1	21						NA		Y		18.056 ✓
CCV	78	1	22								2		NOA needed
CCV	79	1	23								2		↓
Rinse	√80	1	24	✓	—				✓	✓	—	✓	
													OR 11/16/23

* Refer to page 1 for standard preparation instructions.

KATAHDIN ANALYTICAL SERVICES

GCMS- D INSTRUMENT RUNLOG

DATE: 11-17-23

BFB Injection Time: 7:54

Method:Check one	Standards	Std IDs *	pH paper Lot #	6210005	Criteria
8260 5mL O	BFB	V2824	KI paper Lot #	—	K = Lab
8260 10mL O	IS / SS	V2823	Vial Lot #	2795FL-PC-W	D = DOD
8260 SL O	CAL	V2832	MeOH Lot #	—	Q = QUAPP
8260 SIM ✓	EXTRAs	V —	Work Grouped ✓		
524 O	LCS	V2833			
8260 25mL O					

*CR 11/17/23

SAMPLE NAME	DATA FILE	DF	ALS	METHOD	5030	5035	1311	Criteria	pH	TRC	Y/N	Initials	Comments
WG345599-3	D8231	—	—	VOABFB	✓				N/A	N/A	Y	CR	
VStd 050 -4	D8882 ~~D8882~~	1	1	DSIM(01)CR23							Y		
LCS -1	83	1	2								Y		
VBlank	84	1	3								N		Target Hits
VBlank -2	85	1	4								Y		
SQ6238-12A	86	1	5					D	<2		Y		
-1B	87	1	6								Y		
-2B	88	1	7								Y		
-3B	89	1	8								Y		
-4B	90	1	9								Y		
-5B	91	1	10								Y		
-6B	92	1	11								Y		
-7B	93	1	12								Y		
-8B	94	1	13								Y		
-9B	95	1	14								Y		
-10B	96	1	15								Y		
-11C	97	1	16								Y		
SQ6133-3I	98	1	17								Y		
-6 -3MS G	99	1	18										Y.R2 ✓
-7 -3MSD H	D8900	1	19										✓
CCV -5	01	1	20						N/A		Y		18:56 ✓
CCV	02	1	21								N		[illegible]
CCV	03	1	22								N		
Rinse	04	1	23								—		

CR 11/17/23

* Refer to page 1 for standard preparation instructions.

KATAHDIN ANALYTICAL SERVICES
GC/MS VOA STANDARD PREP LOG BOOK

CODE: V2823
STANDARD: 8260 SIM IS/SS
FINAL CONC (ug/mL): 5
FINAL VOLUME (mL): 10
PREP DATE: 10-31-23
EXPIRATION DATE: 11-28-23
MEOH VOLUME (uL): 9970
MEOH LOT #: EH084-US
INITIALS: JJ

STOCK NAME	STOCK	STOCK CONC ug/mL	VOLUME ADD uL
8260 IS	Amp 6412	5000	10
SS	7258	2500	20

JJ 10-31-23

CODE: V2824
STANDARD: BFB TUNE
FINAL CONC (ug/mL): 50
FINAL VOLUME (mL): 3
PREP DATE: 11-2-23
EXPIRATION DATE: 11-30-23
MEOH VOLUME (uL): 2970
MEOH LOT #: EH084-US
INITIALS: JJ

STOCK NAME	STOCK	STOCK CONC ug/mL	VOLUME ADD uL
BFB TUNE	Amp 6736	5000	30

JJ 11-2-23

CODE: V2825
STANDARD: 8260 CAL
FINAL CONC (ug/mL): 100
FINAL VOLUME (mL): 4
PREP DATE: 11-7-23
EXPIRATION DATE: 11-21-23
MEOH VOLUME (uL): 2800
MEOH LOT #: EH084-US
INITIALS: JJ

STOCK NAME	STOCK		STOCK CONC ug/mL	VOLUME ADD uL
M-502A-R2-10X	AMP	7248	2000	200
M-601C-10X	AMP	7252	2000	
S-7920-R1	AMP	7204	2000	
VOA CAL MIX #1	AMP	7295	5000	400
M-502B-10X (Gases)	AMP	7291	2000	200

11-7-23 JJ

Reviewed by/Date:

KATAHDIN ANALYTICAL SERVICES
GC/MS VOA STANDARD PREP LOG BOOK

CODE: V2832	STOCK NAME	STOCK	STOCK CONC ug/mL	VOLUME ADD uL
STANDARD: SIM CAL	m-502A-R2-10X	Amp 7249	2000	10
FINAL CONC (ug/mL): 5	M-502B-10X	↓ 7302	↓	10
FINAL VOLUME (mL): 4				
PREP DATE: 11-15-23				
EXPIRATION DATE: 11-29-23				
MEOH VOLUME (uL): 3980				
MEOH LOT #: EH084-VS				
INITIALS: JJ			JJ 11-15-23	

CODE: V2833	STOCK NAME	STOCK	STOCK CONC ug/mL	VOLUME ADD uL
STANDARD: SIM LCS	502.2CALMIX2000 Mega Mix	Amp 7221	2000	10
FINAL CONC (ug/mL): 5	502.2 CAL MIX #1	↓ 7283	↓	10
FINAL VOLUME (mL): 4				
PREP DATE: 11-15-23				
EXPIRATION DATE: 11-29-23				
MEOH VOLUME (uL): 3980				
MEOH LOT #: EH084-VS				
INITIALS: JJ			JJ 11-15-23	

CODE: V2834	STOCK NAME	STOCK		STOCK CONC ug/mL	VOLUME ADD uL
STANDARD: 8260 LCS	502.2CAL MIX #1	AMP	7283	2000	150
FINAL CONC (ug/mL): 100	MTBE- (30402)	AMP	7144	2000	↓
FINAL VOLUME (mL): 3	502.2 CAL 2000 MEGA	AMP	7221	2000	
PREP DATE: 11-21-23	S-457S-10X	AMP	7218	2000	
EXPIRATION DATE: 12-6-23	M-8260-ADD-10X	AMP	7323	2000	
MEOH VOLUME (uL): 2100	CYCLOHEXANE	AMP	7231	2000	
MEOH LOT #: EH084-VS					
INITIALS: JJ				JJ 11-21-23	

Reviewed by/Date:

KATAHDIN ANALYTICAL SERVICES

STOCK STANDARDS RECEIVED

GCMS VOLATILES LABORATORY

REVIEWED BY/DATE:

Amp 6904 — AccuStandard 125 Market St. New Haven, CT 06513 www.AccuStandard.com
TK-102-08S-10X 1 mL
Cyclohexane
2.0 mg/mL in Methanol
Lot: 219101390 1 comp(s)
Exp: Oct 25, 2029 Storage: Ambient (>5 °C)
FOR LABORATORY USE ONLY H225 H370 H336 H320 H315 H311 H332 H301 H360 P338 P360 P331 Refer to SDS
Signal Word Danger
Rec'd 4-12-22

05

06

Amp 6907 Restek Oxygenates Standard Rec'd
08 30619 Lot# A0181864 — 4-13-22
09 Varied Conc. X: 02/2025

Amp 6910 — 54577 US/EN
Custom 8260 Internal Standard Mix
Lot# A0184289
Expire: 04/2025 Store: 0°C or colder
5000 µg/mL each in P&T Methanol 1 mL
RESTEK
Rec'd 4-25-22

11

12

13

14

15

16 —

17

18

19

Amp 6920 — AccuStandard 125 Market St. New Haven, CT 06513 www.AccuStandard.com
M-8260-ADD-10X 1 mL
Method 8260 Additions
2.0 mg/mL in MeOH
Lot: 222031328 8 comp(s)
Exp: Jul 22, 2022 Storage: Freeze (<-10 °C)
FOR LABORATORY USE ONLY H336 H225 H370 H320 H315 H311 H332 H301 H360, H350 H351 P338 Refer to SDS
Signal Word Danger

21

Amp 6922 Agilent PVOC/GRO Standard
23 @ 1000 µg/mL
Lot #000 654 6695
Exp 31-Aug-23
Rec'd 04/28/22

VOA-022 – Revision 1 – 10/15/2013

KATAHDIN ANALYTICAL SERVICES

STOCK STANDARDS RECEIVED

GCMS VOLATILES LABORATORY

REVIEWED BY/DATE:

Amp 7244
45
46

30402 US/EN
Methyl-tert- Butyl Ether Standard
Lot# A0192444
Expire: 12/2027 Store: 0°C or colder 1 mL
2000 µg/mL each in P&T Methanol
RESTEK

6/21/23

Amp 7247
48
49

AccuStandard® 125 Market St. New Haven, CT 06513 www.AccuStandard.com
M-502A-R2-10X 1 mL
VOC Liquid Mixture - Modified
2.0 mg/mL in Methanol
Lot: 221111385-02
Exp: Jun 18, 2025 53 comp(s)
PRODUCT OF THE USA Storage: Refrig (0-5 °C)
FOR LABORATORY USE ONLY
H336 H225 H370 H320 H315 H311 H332 H301 H360 H350 P338 Refer to SDS
Signal Word: Danger

Amp 7250
7251

AccuStandard® 125 Market St. New Haven, CT 06513 www.AccuStandard.com
GRH-004S-R2 1 mL
Volatile Petroleum Hydrocarbon without Surrogate Std.
10.0 mg/mL in Methanol
Lot: 221011092
Exp: Jan 11, 2031 15 comp(s)
PRODUCT OF THE USA Storage: Ambient (>5 °C)
FOR LABORATORY USE ONLY
H336 H225 H370 H320 H315 H311 H332 H301 H360 H350 P338 Refer to SDS
Signal Word: Danger

7/7/23

Amp 7252
53

AccuStandard® 125 Market St. New Haven, CT 06513 www.AccuStandard.com
M-601C-10X 1 mL
2-Chloroethylvinyl ether
2.0 mg/mL in MeOH
Lot: 223041132
Exp: Apr 11, 2026 1 comp(s)
PRODUCT OF THE USA Storage: Freeze (<-10 °C)
FOR LABORATORY USE ONLY
H225 H370 H336 H320 H315 H311 H332 H301 H360 P338 P360 P331 Refer to SDS
Signal Word: Danger

Rec'd 7/7/23

Amp 7254
55

AccuStandard® 125 Market St. New Haven, CT 06513 www.AccuStandard.com
M-603-M-5X 1 mL
Acrolein & Acrylonitrile
5.0 mg/mL in MeOH:Water 90:10
Lot: 223061381
Exp: Oct 21, 2023 2 comp(s)
PRODUCT OF THE USA Storage: Freeze (<-10 °C)
FOR LABORATORY USE ONLY
H336 H225 H370 H320 H315 H311 H332 H301 H360 H350 H351 P338 Refer to SDS
Signal Word: Danger

Rec'd 7/7/23

Amp 7256
57
58
59
60

30240 www.restek.com
8260A Surrogate Mix
Lot# A0197611
Expire: 05/2028 Store: 0°C or colder
2500 µg/mL each in P&T Methanol
1 mL US/EN
RESTEK

Rec 7/10/23

VOA-022 – Revision 1 – 10/15/2013

KATAHDIN ANALYTICAL SERVICES

STOCK STANDARDS RECEIVED

GCMS VOLATILES LABORATORY

REVIEWED BY/DATE:

Amp 6730 ... 37

Agilent 2,5-Dibromotoluene STD Rec'd 9-7-21 DL
@5,000 ug/mL
Lot #0006464535
Ex: 6-30-2023

Amp 6738 ... 39

30003 US/EN
VOA Tuning Compound Mix
Lot# A0174371
Expire: 10/2026 Store: 0°C or colder 1 mL
5000 µg/mL each in P&T Methanol
RESTEK

Rec'd 9/9/21 CD

Amp 6740 41 42 43 44

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com
S-11160 1 mL
Custom GC Standard
2000 µg/mL in Methanol
Lot: 221091009 2 comp(s)
Exp: Sep 03, 2026 Storage: Ambient (>5 °C)
FOR LABORATORY USE ONLY
H225 H370 H336 H320 H315 H311 H332 H301 H360 P338 P360 P331 Refer to SDS
Signal Word Danger

CD 9/12/21 RJC

Amp 6745 ... 46 47

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com
TK-102-08S-10X 1 mL
Cyclohexane
2.0 mg/mL in Methanol
Lot: 219101390 1 comp(s)
Exp: Oct 25, 2029 Storage: Ambient (>5 °C)
FOR LABORATORY USE ONLY
H225 H370 H336 H320 H315 H311 H332 H301 P338 P360 P331 Refer to SDS
Signal Word Danger

9-10-21 Rec'd

Amp 6748 ... 49 50

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com
M-8260-ADD-10X 1 mL
Method 8260 Additions
2.0 mg/mL in MeOH
Lot: 221061336-01 8 comp(s)
Exp: Dec 18, 2021 Storage: Freeze (<-10 °C)
FOR LABORATORY USE ONLY
H336 H225 H370 H320 H315 H311 H332 H301 H360, H350 H351 P338 Refer to SDS
Signal Word Danger

Amp 6751 ... 52

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com
S-457S-10X 1 mL
Tetrahydrofuran
2.0 mg/mL in MeOH
Lot: 221051701 1 comp(s)
Exp: Jun 01, 2031 Storage: Ambient (>5 °C)
FOR LABORATORY USE ONLY
H225 H370 H336 H320 H315 H311 H332 H301 H360 H351 P338 P360 Refer to SDS
Signal Word Danger

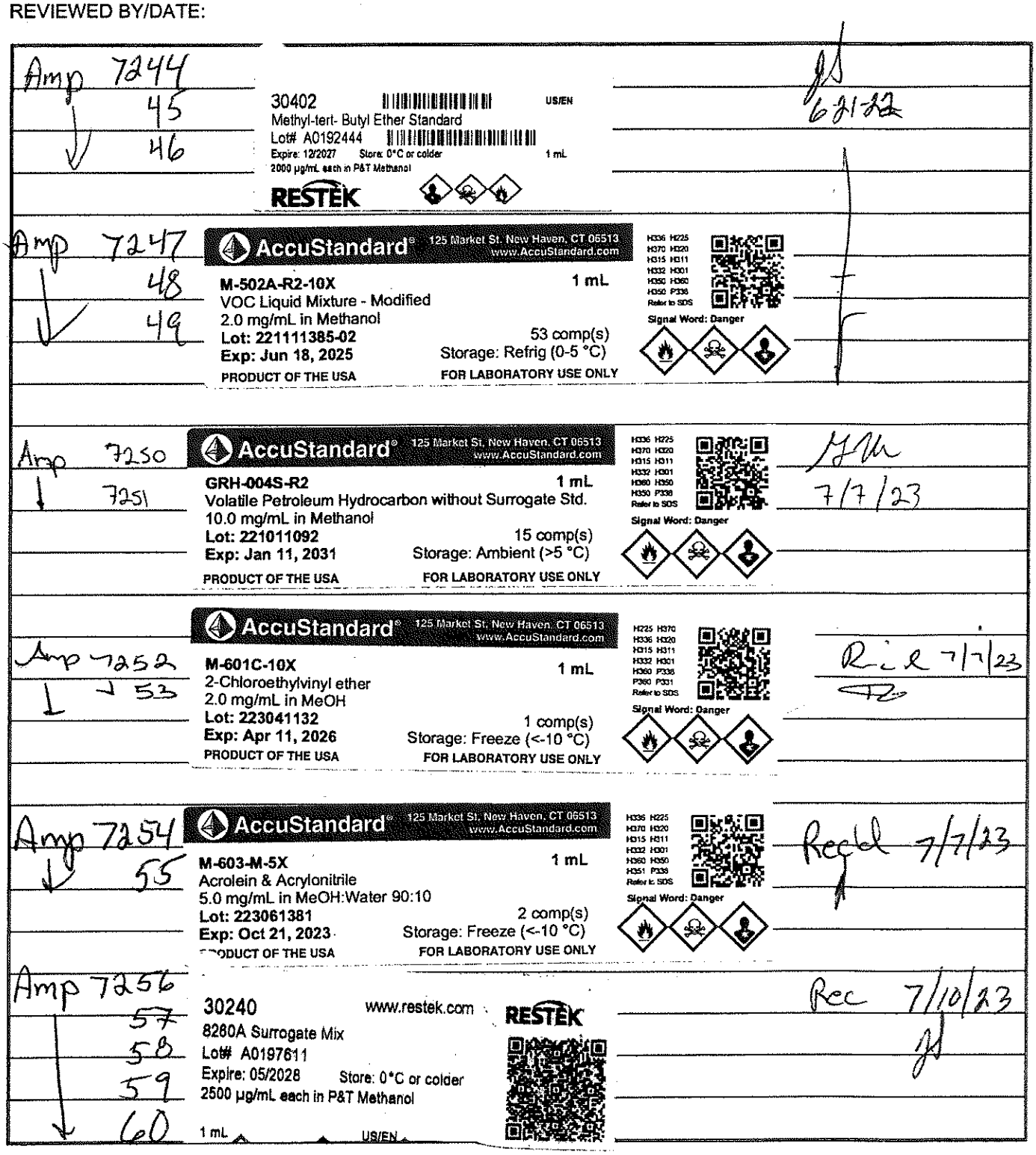
Rec'd 10-1-21 JH

KATAHDIN ANALYTICAL SERVICES

STOCK STANDARDS RECEIVED

GCMS VOLATILES LABORATORY

REVIEWED BY/DATE:



Amp 7244
45
46

30402 US/EN
Methyl-tert- Butyl Ether Standard
Lot# A0192444
Expire: 12/2027 Store: 0°C or colder 1 mL
2000 µg/mL each in P&T Methanol
RESTEK

6-21-22

Amp 7247
48
49

AccuStandard® 125 Market St. New Haven, CT 06513 www.AccuStandard.com
M-502A-R2-10X 1 mL
VOC Liquid Mixture - Modified
2.0 mg/mL in Methanol
Lot: 221111385-02 53 comp(s)
Exp: Jun 18, 2025 Storage: Refrig (0-5 °C)
PRODUCT OF THE USA FOR LABORATORY USE ONLY
H336 H225 H370 H320 H315 H311 H332 H301 H360 H350 H350 P336
Refer to SDS
Signal Word: Danger

Amp 7250
7251

AccuStandard® 125 Market St. New Haven, CT 06513 www.AccuStandard.com
GRH-004S-R2 1 mL
Volatile Petroleum Hydrocarbon without Surrogate Std.
10.0 mg/mL in Methanol
Lot: 221011092 15 comp(s)
Exp: Jan 11, 2031 Storage: Ambient (>5 °C)
PRODUCT OF THE USA FOR LABORATORY USE ONLY
H336 H225 H370 H320 H315 H311 H332 H301 H360 H350 H350 P336
Refer to SDS
Signal Word: Danger

7/7/23

Amp 7252
53

AccuStandard® 125 Market St. New Haven, CT 06513 www.AccuStandard.com
M-601C-10X 1 mL
2-Chloroethylvinyl ether
2.0 mg/mL in MeOH
Lot: 223041132 1 comp(s)
Exp: Apr 11, 2026 Storage: Freeze (<-10 °C)
PRODUCT OF THE USA FOR LABORATORY USE ONLY
H225 H370 H336 H320 H315 H311 H332 H301 H360 P308 P360 P331
Refer to SDS
Signal Word: Danger

Rec'd 7/7/23

Amp 7254
55

AccuStandard® 125 Market St. New Haven, CT 06513 www.AccuStandard.com
M-603-M-5X 1 mL
Acrolein & Acrylonitrile
5.0 mg/mL in MeOH:Water 90:10
Lot: 223061381 2 comp(s)
Exp: Oct 21, 2023 Storage: Freeze (<-10 °C)
PRODUCT OF THE USA FOR LABORATORY USE ONLY
H336 H225 H370 H320 H315 H311 H332 H301 H360 H350 H351 P338
Refer to SDS
Signal Word: Danger

Rec'd 7/7/23

Amp 7256
57
58
59
60

30240 www.restek.com RESTEK
8260A Surrogate Mix
Lot# A0197611
Expire: 05/2028 Store: 0°C or colder
2500 µg/mL each in P&T Methanol
1 mL US/EN

Rec 7/10/23

VOA-022 – Revision 1 – 10/15/2013

KATAHDIN ANALYTICAL SERVICES

STOCK STANDARDS RECEIVED

GCMS VOLATILES LABORATORY

REVIEWED BY/DATE:

Rec'd 9/14/23 DL

Amp 7297
98
99

30605 www.restek.com
VPH Matrix Spike Mix w/Surrogate (revised)
Lot# A0200451
Expire: 07/2028 Store: 0°C or colder
50 µg/mL each in P&T Methanol
1 mL US/EN

Rec'd 9-14-23

Amp 7300
01

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com
TK-102-08S-10X 1 mL
Cyclohexane
2.0 mg/mL in Methanol
Lot: 221101280
Exp: Oct 19, 2031
PRODUCT OF THE USA
1 comp(s)
Storage: Ambient (>5 °C)
FOR LABORATORY USE ONLY
H225 H370 H336 H320 H315 H311 H332 H301 H360 P338 P360 P331 Refer to SDS
Signal Word

Amp 7302
03
04

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com
M-502B-10X 1 mL
Volatile Organic Cmpds - Gases
2.0 mg/mL in MeOH
Lot: 223061232
Exp: Jun 21, 2026
PRODUCT OF THE USA
6 comp(s)
Storage: Refrig (0-5 °C)
FOR LABORATORY USE ONLY
H336 H225 H370 H320 H315 H311 H332 H301 H360 H350 P338 Refer to SDS
Signal Word

Amp 7305
06

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com
M-502A-R2-10X 1 mL
VOC Liquid Mixture - Modified
2.0 mg/mL in Methanol
Lot: 221111385-02
Exp: Jun 18, 2025
PRODUCT OF THE USA
53 comp(s)
Storage: Refrig (0-5 °C)
FOR LABORATORY USE ONLY
H336 H225 H370 H320 H315 H311 H332 H301 H350 H360 H350 P338 Refer to SDS
Signal Word

Amp 7307
08

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com
M-8240C-R6 1 mL
Appendix IX Volatiles Mix
Varied conc. in MeOH
Lot: 222061040
Exp: Jun 06, 2025
PRODUCT OF THE USA
11 comp(s)
Storage: Refrig (0-5 °C)
FOR LABORATORY USE ONLY
H225 H370 H336 H320 H315 H311 H332 H301 H351 H360 H350 P338 Refer to SDS
Signal Word

Amp 7309
10
11
12
13

31081 www.restek.com
1,3,5-Trichlorobenzene Standard
Lot# A0194759
Expire: 02/2028 Store: 10°C or colder
1000 µg/mL each in P&T Methanol
1 mL US/EN

KATAHDIN ANALYTICAL SERVICES

STOCK STANDARDS RECEIVED

GCMS VOLATILES LABORATORY

REVIEWED BY/DATE:

Amp 7213
14

AccuStandard® 125 Market St. New Haven, CT 06513 www.AccuStandard.com

M-8260-ADD-10X
Method 8260 Additions
2.0 mg/mL in MeOH
Lot: 223041101
Exp: Aug 07, 2023

1 mL
8 comp(s)
Storage: Freeze (<-10 °C)

PRODUCT OF THE USA
FOR LABORATORY USE ONLY

H336 H225
H370 H320
H315 H311
H332 H301
H360 H350
H351 P338
Refer to SDS
Signal Word: Danger

Rec'd 4-13-23 JJ

Amp 7215
16
17

30006
VOA Calibration Mix #1
Lot# A0186767
Expire: 09/2025 Store: 0°C or colder
5000 µg/mL each in P&T Methanol/Water (90:10)
1 mL
US/EN

RESTEK

AccuStandard® 125 Market St. New Haven, CT 06513 www.AccuStandard.com

S-457S-10X
Tetrahydrofuran
2.0 mg/mL in MeOH
Lot: 221051701
Exp: Jun 01, 2031

1 mL
1 comp(s)
Storage: Ambient (>5 °C)

PRODUCT OF THE USA
FOR LABORATORY USE ONLY

H225 H370
H336 H320
H315 H311
H332 H301
H360 H351
P338 P360
Refer to SDS
Signal Word: Danger

Rec'd 4-24-23 JJ

Amp 7218
19
20

30431 www.restek.com
502.2 Cal2000 Mega Mix
Lot# A0188935
Expire: 08/2024 Store: 0°C or colder
2000 µg/mL each in P&T Methanol

1 mL
US/EN

RESTEK

Amp 7221
22
23

AccuStandard® 125 Market St. New Haven, CT 06513 www.AccuStandard.com

GRH-003S
Wisconsin DNR Mix
2.0 mg/mL in MeOH
Lot: 222081432
Exp: Aug 29, 2032

1 mL
10 comp(s)
Storage: Ambient (>5 °C)

PRODUCT OF THE USA
FOR LABORATORY USE ONLY

H336 H225
H370 H320
H315 H311
H332 H301
H360 P338
P360 P331
Refer to SDS
Signal Word: Danger

Amp 7224
25

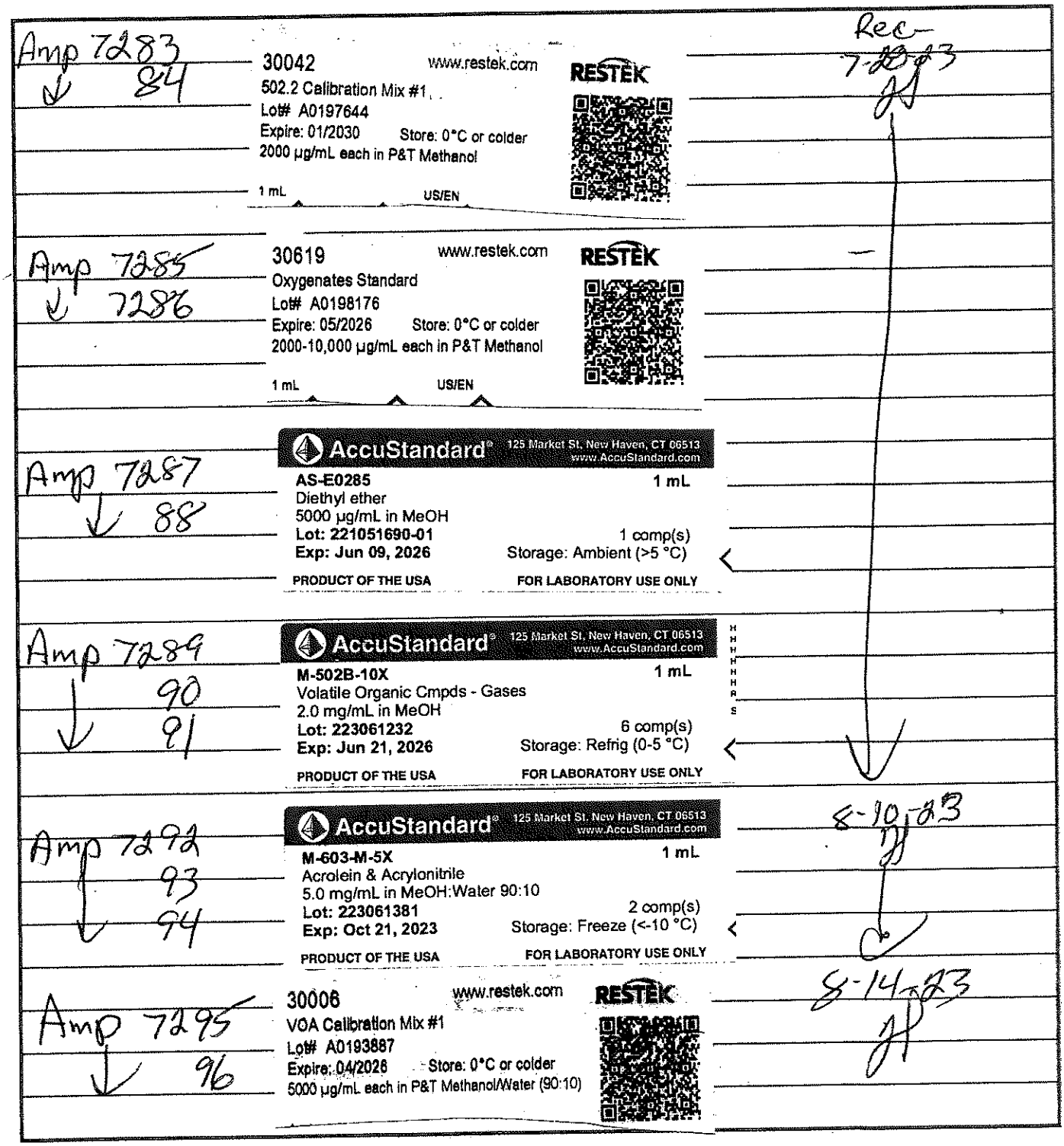
Rec'd 5-4-23 JJ

KATAHDIN ANALYTICAL SERVICES

STOCK STANDARDS RECEIVED

GCMS VOLATILES LABORATORY

REVIEWED BY/DATE:



Amp 7283 ↓ 84

30042 www.restek.com
502.2 Calibration Mix #1
Lot# A0197644
Expire: 01/2030 Store: 0°C or colder
2000 µg/mL each in P&T Methanol
1 mL US/EN

Rec 7-28-23 JJ

Amp 7285 ↓ 7286

30619 www.restek.com
Oxygenates Standard
Lot# A0198176
Expire: 05/2026 Store: 0°C or colder
2000-10,000 µg/mL each in P&T Methanol
1 mL US/EN

Amp 7287 ↓ 88

AccuStandard® 125 Market St. New Haven, CT 06513 www.AccuStandard.com
AS-E0285 1 mL
Diethyl ether
5000 µg/mL in MeOH
Lot: 221051690-01 1 comp(s)
Exp: Jun 09, 2026 Storage: Ambient (>5 °C)
PRODUCT OF THE USA FOR LABORATORY USE ONLY

Amp 7289 ↓ 90 ↓ 91

AccuStandard® 125 Market St. New Haven, CT 06513 www.AccuStandard.com
M-502B-10X 1 mL
Volatile Organic Cmpds - Gases
2.0 mg/mL in MeOH
Lot: 223061232 6 comp(s)
Exp: Jun 21, 2026 Storage: Refrig (0-5 °C)
PRODUCT OF THE USA FOR LABORATORY USE ONLY

Amp 7292 ↓ 93 ↓ 94

AccuStandard® 125 Market St. New Haven, CT 06513 www.AccuStandard.com
M-603-M-5X 1 mL
Acrolein & Acrylonitrile
5.0 mg/mL in MeOH:Water 90:10
Lot: 223061381 2 comp(s)
Exp: Oct 21, 2023 Storage: Freeze (<-10 °C)
PRODUCT OF THE USA FOR LABORATORY USE ONLY

8-10-23 JJ

Amp 7295 ↓ 96

30006 www.restek.com
VOA Calibration Mix #1
Lot# A0193887
Expire: 04/2026 Store: 0°C or colder
5000 µg/mL each in P&T Methanol/Water (90:10)

8-14-23 JJ

8270 SIM
POLYNUCLEAR AROMATIC HYDROCARBONS DATA

QC Summary Section

Form 2
System Monitoring Compound Recovery

Lab Name: Katahdin Analytical Services **SDG:** SQ6238 **Matrix:** AQ

Client Sample ID	Lab Sample ID	Col. ID	2MN	#	FLO	#	PYR	#
SY-BRMW4-62-72-110923	SQ6238-1		76.9		81.4		93.5	
SY-BRMW40-62-72-11092	SQ6238-2		80.9		77.2		95.8	
SY-BRMW4-138-148-1109	SQ6238-3		41.7	*	42.7		46.6	*
SY-BRMW3-47-62-110923	SQ6238-4		57.1		54.9		55.5	
SY-BRMW3-145-155-1109	SQ6238-5		88.1		88.4		110.	
SY-BRMW3-287-297-1109	SQ6238-6		82.8		80.0		87.0	
SY-BRMW4-291-301-1109	SQ6238-7		78.6		79.0		101.	
SY-BRMW1-42-52-110923	SQ6238-8		76.7		80.2		96.1	
SY-BRMW1-65-75-110923	SQ6238-9RA		49.2		46.7		55.1	
SY-BRMW10-65-75-11092	SQ6238-10		42.8		39.6		48.4	*
SY-BRMW1-150-157-1109	SQ6238-11		85.6		91.1		112.	
Method Blank	WG345531-1		75.2		73.5		79.8	
Laboratory Control S	WG345531-2		98.5	*	80.9		83.5	

Abbr.	Surrogate Compound	QC Limits
2MN	2-Methylnaphthalene-D10	43-92
FLO	Fluorene-D10	29-101
PYR	Pyrene-D10	53-166

= Column to be used to flag recovery limits.
* = Values outside of contract required QC limits.
D= System Monitoring Compound diluted out.

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Method Blank Summary

Lab Name : Katahdin Analytical Services
SDG : SQ6238
Lab File ID : N0434.D
Lab Sample ID : WG345531-1
Instrument ID : GCMS-N
Date Extracted : 16-NOV-23
Matrix : AQ
Date Analyzed : 11-DEC-23
Extraction method : SW846 3510C
Time Analyzed : 12:46

This Method Blank applies to the following samples and QC samples:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Laboratory Control S	WG345531-2	N0435.D	12/11/23	13:16
SY-BRMW4-62-72-110923	SQ6238-1	N0439.D	12/11/23	15:17
SY-BRMW40-62-72-110923	SQ6238-2	N0440.D	12/11/23	15:47
SY-BRMW4-138-148-110923	SQ6238-3	N0441.D	12/11/23	16:17
SY-BRMW3-47-62-110923	SQ6238-4	N0442.D	12/11/23	16:47
SY-BRMW3-145-155-110923	SQ6238-5	N0443.D	12/11/23	17:19
SY-BRMW3-287-297-110923	SQ6238-6	N0444.D	12/11/23	17:51
SY-BRMW4-291-301-110923	SQ6238-7	N0445.D	12/11/23	18:24
SY-BRMW1-42-52-110923	SQ6238-8	N0446.D	12/11/23	18:56
SY-BRMW10-65-75-110923	SQ6238-10	N0448.D	12/11/23	20:01
SY-BRMW1-150-157-110923	SQ6238-11	N0449.D	12/11/23	20:33
SY-BRMW1-65-75-110923	SQ6238-9RA	N0462.D	12/12/23	16:17

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Form 5
Semivolatile Organic Instrument Performance Check

Lab Name : Katahdin Analytical Services
SDG : SQ6238
Lab File ID : ND537.D
Date Analyzed : 07-DEC-23
Instrument ID : GCMS-N
Time Analyzed : 11:53

m/e	Ion Abundance Criteria	% Relative Abundance		
51	10.0 - 80.0% of mass 198	22.2		
68	Less than 2.0% of mass 69	0.7	1.73	1
69	Greater than 0.1% of mass 198	42.9		
70	Less than 2.0% of mass 69	0.3	0.79	1
127	10.0 - 80.0% of mass 198	61.3		
197	Less than 2.0% of mass 198	0.2		
198	Base Peak, 100% relative abundance	100		
199	5.0 - 9.0% of mass 198	6.8		
275	10.0 - 60.0% of mass 198	22.0		
365	Greater than 1.0% of mass 198	3.0		
441	0.01 - 100.0% of mass 443	13.1	74.52	2
442	Greater than 50.0% of mass 198	88.6		
443	15.0 - 24.0% of mass 442	17.5	19.80	3

1-Value is % mass 69
2-Value is % mass 443
3-Value is % mass 442

This check applies to the following samples, LCS, MS, MSD and standards:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Initial Calibration	WG346503-4	N0380.D	12/07/23	12:11
Initial Calibration	WG346503-3	N0381.D	12/07/23	12:41
Initial Calibration	WG346503-2	N0382.D	12/07/23	13:11
Initial Calibration	WG346503-5	N0383.D	12/07/23	13:41
Initial Calibration	WG346503-6	N0384.D	12/07/23	14:12
Initial Calibration	WG346503-7	N0385.D	12/07/23	14:42
Independent Source	WG346503-8	N0386.D	12/07/23	15:12

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Form 5
Semivolatile Organic Instrument Performance Check

Lab Name : Katahdin Analytical Services
SDG : SQ6238
Lab File ID : ND540.D
Date Analyzed : 11-DEC-23
Instrument ID : GCMS-N
Time Analyzed : 11:58

m/e	Ion Abundance Criteria	% Relative Abundance		
51	10.0 - 80.0% of mass 198	22.0		
68	Less than 2.0% of mass 69	0.6	1.62	1
69	Greater than 0.1% of mass 198	39.5		
70	Less than 2.0% of mass 69	0.3	0.78	1
127	10.0 - 80.0% of mass 198	58.5		
197	Less than 2.0% of mass 198	0.1		
198	Base Peak, 100% relative abundance	100		
199	5.0 - 9.0% of mass 198	6.5		
275	10.0 - 60.0% of mass 198	22.1		
365	Greater than 1.0% of mass 198	2.9		
441	0.01 - 100.0% of mass 443	13.9	76.27	2
442	Greater than 50.0% of mass 198	93.6		
443	15.0 - 24.0% of mass 442	18.2	19.50	3

1-Value is % mass 69
2-Value is % mass 443
3-Value is % mass 442

This check applies to the following samples, LCS, MS, MSD and standards:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Continuing Calibrati	WG346778-2	N0433.D	12/11/23	12:16
Method Blank	WG345531-1	N0434.D	12/11/23	12:46
Laboratory Control S	WG345531-2	N0435.D	12/11/23	13:16
SY-BRMW4-62-72-110923	SQ6238-1	N0439.D	12/11/23	15:17
SY-BRMW40-62-72-110923	SQ6238-2	N0440.D	12/11/23	15:47
SY-BRMW4-138-148-110923	SQ6238-3	N0441.D	12/11/23	16:17
SY-BRMW3-47-62-110923	SQ6238-4	N0442.D	12/11/23	16:47
SY-BRMW3-145-155-110923	SQ6238-5	N0443.D	12/11/23	17:19
SY-BRMW3-287-297-110923	SQ6238-6	N0444.D	12/11/23	17:51
SY-BRMW4-291-301-110923	SQ6238-7	N0445.D	12/11/23	18:24
SY-BRMW1-42-52-110923	SQ6238-8	N0446.D	12/11/23	18:56
SY-BRMW10-65-75-110923	SQ6238-10	N0448.D	12/11/23	20:01
SY-BRMW1-150-157-110923	SQ6238-11	N0449.D	12/11/23	20:33
Continuing Calibrati	WG346778-3	N0453.D	12/11/23	22:43
Continuing Calibrati	WG346778-4	N0454.D	12/11/23	23:16
Continuing Calibrati	WG346778-5	N0455.D	12/11/23	23:48

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Form 5
Semivolatile Organic Instrument Performance Check

Lab Name : Katahdin Analytical Services
SDG : SQ6238
Lab File ID : ND541.D
Date Analyzed : 12-DEC-23
Instrument ID : GCMS-N
Time Analyzed : 12:59

m/e	Ion Abundance Criteria	% Relative Abundance		
51	10.0 - 80.0% of mass 198	20.9		
68	Less than 2.0% of mass 69	0.6	1.47	1
69	Greater than 0.1% of mass 198	39.6		
70	Less than 2.0% of mass 69	0.2	0.54	1
127	10.0 - 80.0% of mass 198	57.6		
197	Less than 2.0% of mass 198	0.0		
198	Base Peak, 100% relative abundance	100		
199	5.0 - 9.0% of mass 198	6.6		
275	10.0 - 60.0% of mass 198	21.9		
365	Greater than 1.0% of mass 198	3.0		
441	0.01 - 100.0% of mass 443	13.5	75.33	2
442	Greater than 50.0% of mass 198	91.8		
443	15.0 - 24.0% of mass 442	17.9	19.50	3

1-Value is % mass 69
2-Value is % mass 443
3-Value is % mass 442

This check applies to the following samples, LCS, MS, MSD and standards:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Continuing Calibrati	WG346831-2	N0456.D	12/12/23	13:17
SY-BRMW1-65-75-110923	SQ6238-9RA	N0462.D	12/12/23	16:17
Continuing Calibrati	WG346831-3	N0476.D	12/12/23	23:46
Continuing Calibrati	WG346831-4	N0477.D	12/13/23	00:18
Continuing Calibrati	WG346831-5	N0478.D	12/13/23	00:50

Form 8
Internal Standard Area and RT Summary

Lab Name : Katahdin Analytical Services
Lab ID : WG346503-4
Lab File ID : N0380.D

SDG: SQ6238
Analytical Date: 12/07/23 12:11
Instrument ID: GCMS-N

		1,4-DICHLOROBENZENE-D4				NAPHTHALENE-D8				ACENAPHTHENE-D10			
		Area	#	RT	#	Area	#	RT	#	Area	#	RT	#
	Std .	52277		6.61		180916		8.14		80047		10.25	
	Upper Limit	104554		6.78		361832		8.30		160094		10.42	
	Lower Limit	26138.5		6.45		90458		7.97		40023.5		10.09	
Client Sample ID	Lab Sample ID												
Continuing Calibrati	WG346778-2	32554		6.60		131703		8.14		54093		10.26	
Method Blank	WG345531-1	34555		6.61		129082		8.15		57527		10.26	
Laboratory Control S	WG345531-2	35354		6.60		128717		8.13		57404		10.25	
SY-BRMW4-62-72-11(	SQ6238-1	37654		6.61		139654		8.15		58314		10.26	
SY-BRMW40-62-72-1	SQ6238-2	42117		6.61		153342		8.15		67205		10.26	
SY-BRMW4-138-148-	SQ6238-3	39791		6.61		150688		8.15		66082		10.26	
SY-BRMW3-47-62-11(	SQ6238-4	50754		6.61		173148		8.15		82802		10.26	
SY-BRMW3-145-155-	SQ6238-5	48250		6.61		174361		8.15		77629		10.26	
SY-BRMW3-287-297-	SQ6238-6	48890		6.61		163999		8.15		66808		10.25	
SY-BRMW4-291-301-	SQ6238-7	50221		6.61		178140		8.15		76855		10.26	
SY-BRMW1-42-52-11(	SQ6238-8	52729		6.61		181326		8.14		77388		10.25	
SY-BRMW10-65-75-1	SQ6238-10	46230		6.61		157326		8.15		72664		10.26	
SY-BRMW1-150-157-	SQ6238-11	44754		6.61		160052		8.15		67743		10.25	
Continuing Calibrati	WG346778-3	40451		6.60		147350		8.13		63563		10.25	
Continuing Calibrati	WG346778-4	43723		6.60		156449		8.13		68694		10.25	
Continuing Calibrati	WG346778-5	42245		6.60		149958		8.13		65041		10.25	
Continuing Calibrati	WG346831-2	38147		6.60		134676		8.13		60619		10.25	
SY-BRMW1-65-75-11(	SQ6238-9RA	37347		6.61		128386		8.15		60937		10.25	
Continuing Calibrati	WG346831-3	36766		6.60		124881		8.13		44418		10.25	
Continuing Calibrati	WG346831-4	37559		6.60		127051		8.13		45650		10.25	
Continuing Calibrati	WG346831-5	39006		6.60		131177		8.13		48384		10.25	

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area
RT Upper Limit = + 10 seconds of internal standard RT
RT Lower Limit = - 10 seconds of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

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Form 8
Internal Standard Area and RT Summary

Lab Name : Katahdin Analytical Services
SDG: SQ6238
Lab ID : WG346503-4
Analytical Date: 12/07/23 12:11
Lab File ID : N0380.D
Instrument ID: GCMS-N

		PHENANTHRENE-D10			CHRYSENE-D12			PERYLENE-D12		
		Area	#	RT	#	Area	#	RT	#	Area	#	RT	#
	Std .	104080		12.05		43517		15.48		31178		18.33	
	Upper Limit	208160		12.22		87034		15.64		62356		18.50	
	Lower Limit	52040		11.88		21758.5		15.31		15589		18.17	
Client Sample ID	Lab Sample ID												
Continuing Calibrati	WG346778-2	68403		12.06		27333		15.49		21078		18.34	
Method Blank	WG345531-1	75979		12.06		28437		15.50		22116		18.34	
Laboratory Control S	WG345531-2	69723		12.05		30802		15.49		22671		18.33	
SY-BRMW4-62-72-11(	SQ6238-1	75096		12.06		26825		15.49		21184		18.33	
SY-BRMW40-62-72-1:	SQ6238-2	80391		12.06		27669		15.49		21429		18.33	
SY-BRMW4-138-148-:	SQ6238-3	80078		12.06		26592		15.49		20518		18.33	
SY-BRMW3-47-62-11(	SQ6238-4	98465		12.05		34613		15.49		26963		18.32	
SY-BRMW3-145-155-:	SQ6238-5	94018		12.06		30945		15.49		24170		18.32	
SY-BRMW3-287-297-:	SQ6238-6	83375		12.05		29527		15.48		19737		18.32	
SY-BRMW4-291-301-:	SQ6238-7	90585		12.05		26936		15.48		17772		18.32	
SY-BRMW1-42-52-11(	SQ6238-8	88977		12.05		28776		15.48		18764		18.32	
SY-BRMW10-65-75-1:	SQ6238-10	85826		12.05		23354		15.48		16384		18.32	
SY-BRMW1-150-157-:	SQ6238-11	87567		12.05		24300		15.48		16623		18.32	
Continuing Calibrati	WG346778-3	70637		12.05		20592	*	15.48		14075	*	18.32	
Continuing Calibrati	WG346778-4	76362		12.05		21772		15.48		14501	*	18.32	
Continuing Calibrati	WG346778-5	72425		12.05		23333		15.48		14581	*	18.32	
Continuing Calibrati	WG346831-2	72531		12.05		25092		15.48		17127		18.33	
SY-BRMW1-65-75-11(	SQ6238-9RA	75618		12.05		22975		15.48		17786		18.32	
Continuing Calibrati	WG346831-3	44171	*	12.05		17231	*	15.47		11398	*	18.31	
Continuing Calibrati	WG346831-4	43848	*	12.05		15652	*	15.48		10428	*	18.31	
Continuing Calibrati	WG346831-5	47282	*	12.05		16432	*	15.48		10572	*	18.31	

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area
RT Upper Limit = + 10 seconds of internal standard RT
RT Lower Limit = - 10 seconds of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

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Sample Data Section

KATAHDIN ANALYTICAL SERVICES - ORGANIC DATA QUALIFIERS

U Indicates the compound was analyzed for but not detected above the specified level. This level may be the Practical Quantitation Level (PQL) (also called Limit of Quantitation (LOQ)), the Limit of Detection (LOD) or Method Detection Limit (MDL) as required by the client.

Note: All results reported as "U" MDL have a 50% rate for false negatives compared to those results reported as "U" PQL, "U" LOQ or "U" LOD, where the rate of false negatives is <1%.

* Compound recovery or percent RPD (relative percent difference) was outside of quality control limits.

D Indicates the result was obtained from analysis of a diluted sample. Surrogate recoveries may not be calculable.

E Estimated value. This flag identifies compounds whose concentrations exceed the upper level of the calibration range of the instrument for that specific analysis.

J Estimated value. The analyte was detected in the sample at a concentration less than the laboratory Practical Quantitation Level (PQL) (also called Limit of Quantitation (LOQ)), but above the Method Detection Limit (MDL).

And/or

J Used for Dual Column analytes when there is a greater than 40% difference for detected concentrations between the two GC/HPLC columns.

B Indicates the analyte was detected in the laboratory method blank analyzed concurrently with the sample.

I Indicates that the flagged compound did not meet DoD criteria in the corresponding Initial Calibration (ICAL).

D Indicates that the flagged compound did not meet DoD criteria in the corresponding Initial Calibration Verification (ICV).

C Indicates that the flagged compound did not meet DoD criteria in the corresponding opening Calibration Verification (CV).

V Indicates that the flagged compound did not meet DoD criteria in the corresponding closing Calibration Verification (CV).

L/LL Indicates that the flagged compound did not meet DoD criteria in the corresponding Laboratory Control Sample (LCS) and/or Laboratory Control Sample Duplicate (LCSD) prepared and/or analyzed concurrently with the sample.

M/MM Indicates that the flagged compound did not meet DoD criteria in the Matrix Spike (MS) and/or Matrix Spike Duplicate MSD) prepared and/or analyzed concurrently with the native sample.

H Indicates the flagged compound was detected on the primary column but was not detected on the confirmation column therefore the compound is not reported as a positive detection. (SW846 8330A/B only)

Katahdin Analytical Services, Inc.

Manual Integration Codes For GC/MS, GC, HPLC and/or IC

M1	Peak splitting.
M2	Well defined peaks on the shoulders of the other peaks.
M3	There is additional area due to a coeluting interferant.
M4	There are negative spikes in the baseline.
M5	There are rising or falling baselines.
M6	The software has failed to detect a peak or misidentified a peak.
M7	Excessive peak tailing.
M8	Analysis such as GRO, DRO and TPH require a baseline hold.
M9	Peak was not completely integrated as in GC/MS.
M10	Primary ion was correctly integrated, but secondary or tertiary ion needed manual integration as in GC/MS.
M11	For GC analysis, when a sample is diluted by 1:10 or more, the surrogate is set to undetected and then the area under the surrogate is manually integrated.
M12	Manual integration saved in method due to TurboChrom floating point error.

Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

SDG: SQ6238
Lab ID: SQ6238-1
Client ID: SY-BRMW4-62-72-110923
Matrix: AQ
Lab File ID: N0439.D

Sample Date: 09-NOV-23
Extract Date: 16-NOV-23
Extracted By: AN/CMW
Extraction Method: SW846 3510C
Lab Prep Batch: WG345531

Report Date: 29-DEC-23
Analysis Date: 11-DEC-23
Analyst: EP
Analysis Method: SW846 8270D SIM
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	0.093	ug/L	1	.2	0.19	0.060	0.093
2-Methylnaphthalene	U	0.093	ug/L	1	.2	0.19	0.072	0.093
Acenaphthylene	U	0.093	ug/L	1	.2	0.19	0.050	0.093
Acenaphthene	U	0.093	ug/L	1	.2	0.19	0.060	0.093
Fluorene	U	0.093	ug/L	1	.2	0.19	0.057	0.093
Phenanthrene	U	0.093	ug/L	1	.2	0.19	0.048	0.093
Anthracene	U	0.093	ug/L	1	.2	0.19	0.041	0.093
Fluoranthene	U	0.093	ug/L	1	.2	0.19	0.068	0.093
Pyrene	U	0.093	ug/L	1	.2	0.19	0.055	0.093
Benzo(a)anthracene	U	0.093	ug/L	1	.2	0.19	0.043	0.093
Chrysene	U	0.093	ug/L	1	.2	0.19	0.034	0.093
Benzo(b)Fluoranthene	U	0.093	ug/L	1	.2	0.19	0.083	0.093
Benzo(k)fluoranthene	U	0.093	ug/L	1	.2	0.19	0.046	0.093
Benzo(a)pyrene	U	0.093	ug/L	1	.2	0.19	0.062	0.093
Indeno(1,2,3-cd)pyrene	U	0.093	ug/L	1	.2	0.19	0.048	0.093
Dibenzo(a,h)anthracene	U	0.093	ug/L	1	.2	0.19	0.065	0.093
Benzo(g,h,i)perylene	U	0.093	ug/L	1	.2	0.19	0.061	0.093
2-Methylnaphthalene-D10		76.9	%					
Fluorene-D10		81.4	%					
Pyrene-D10		93.5	%					

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Data File: \\target_server\gg\chem\gcms-n.i\N121123.b\N0439.D
Report Date: 29-Dec-2023 15:34

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-n.i\N121123.b\N0439.D
Lab Smp Id: SQ6238-1 Client Smp ID: Y-BRMW4-62-72-11092
Inj Date : 11-DEC-2023 15:17
Operator : EP Inst ID: gcms-n.i
Smp Info : SQ6238-1
Misc Info : WG346778,WG345531,WG346503-4
Comment :
Method : \\target_server\gg\chem\gcms-n.i\N121123.b\NSPSIM95.m
Meth Date : 12-Dec-2023 08:48 epelletier Quant Type: ISTD
Cal Date : 07-DEC-2023 14:42 Cal File: N0385.D
Als bottle: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pahplus.sub
Target Version: 4.12
Processing Host: INSPIRON1

Concentration Formula: Amt * DF * Uf*(Vt/Vo*Vi)*1000 * CpndVariable

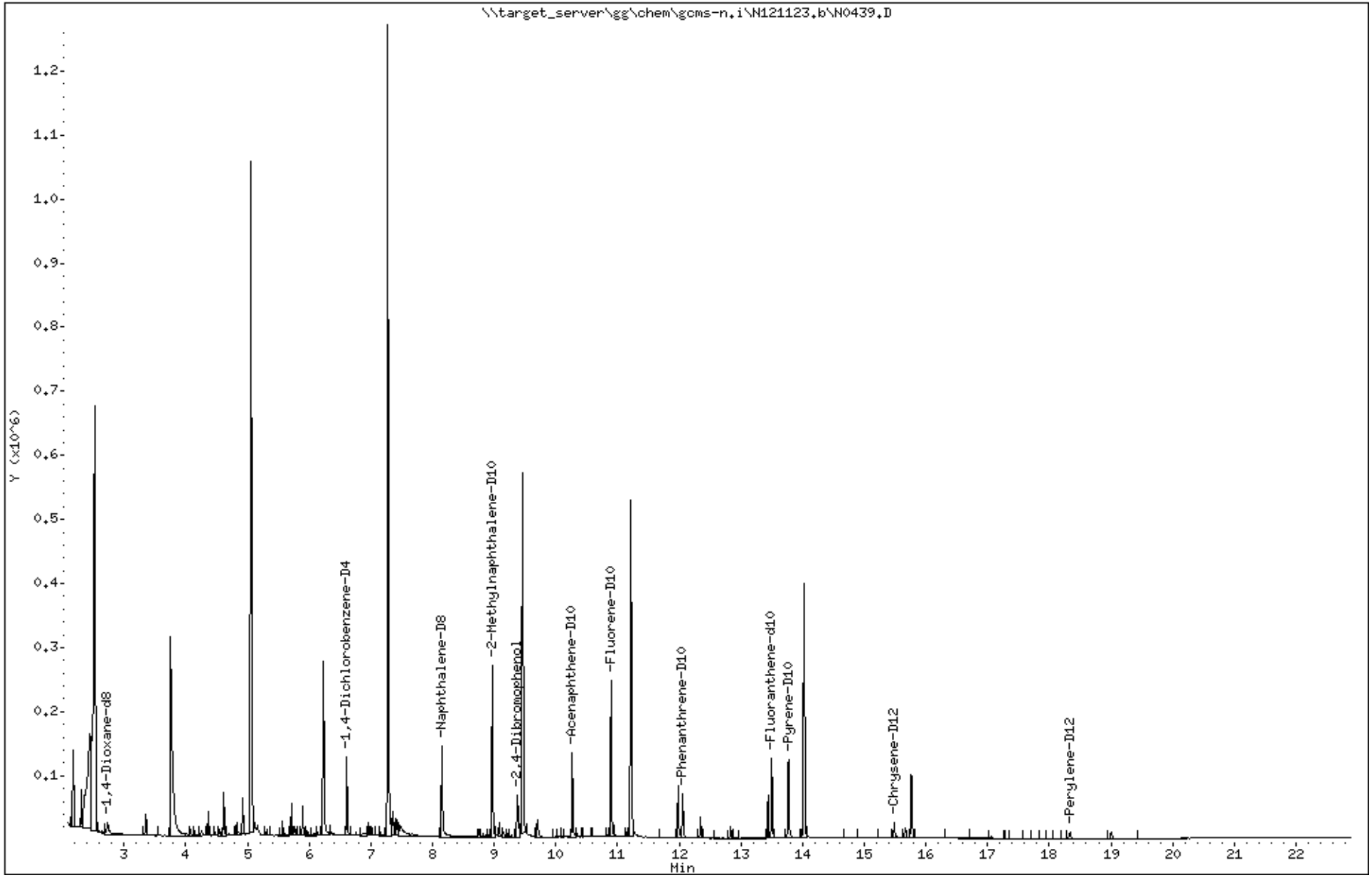
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.070	Sample Volume (L)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/L)	REVIEW CODE
$	1 1,4-Dioxane-d8	96	2.730	2.742	(0.266)	16681	0.62066	0.580(a)	
*	10 1,4-Dichlorobenzene-D4	152	6.614	6.604	(1.000)	37654	0.80000	(aQ)	
*	27 Naphthalene-D8	136	8.147	8.125	(1.000)	139654	0.80000	(a)	
$	33 2-Methylnaphthalene-D10	152	8.974	8.954	(1.102)	140946	1.53768	1.44	
$	38 2,4-Dibromophenol	252	9.377	9.346	(0.914)	70568	3.44702	3.22	
*	48 Acenaphthene-D10	164	10.264	10.254	(1.000)	58314	0.80000	(a)	
$	56 Fluorene-D10	174	10.897	10.887	(1.062)	124239	1.62801	1.52	
*	66 Phenanthrene-D10	188	12.062	12.052	(1.000)	75096	0.80000	(a)	
$	71 Fluoranthene-d10	212	13.501	13.502	(1.119)	99487	1.62988	1.52	
$	73 Pyrene-D10	212	13.776	13.777	(0.889)	117375	1.87007	1.75	
*	78 Chrysene-D12	240	15.488	15.478	(1.000)	26825	0.80000	(a)	
*	85 Perylene-D12	264	18.334	18.324	(1.000)	21184	0.80000	(a)	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.

Data File: \\target_server\gg\chem\gcms-n.i\N121123.b\N0439.D
Date : 11-DEC-2023 15:17
Client ID: Y-BRMW4-62-72-11092
Instrument: gcms-n.i
Sample Info: SQ6238-1
Volume Injected (uL): 1.0
Operator: EP
Column phase: Rxi-SVOCms
Column diameter: 0.25



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Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

SDG: SQ6238
Lab ID: SQ6238-2
Client ID: SY-BRMW40-62-72-110923
Matrix: AQ
Lab File ID: N0440.D

Sample Date: 09-NOV-23
Extract Date: 16-NOV-23
Extracted By: AN/CMW
Extraction Method: SW846 3510C
Lab Prep Batch: WG345531

Report Date: 29-DEC-23
Analysis Date: 11-DEC-23
Analyst: EP
Analysis Method: SW846 8270D SIM
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	0.094	ug/L	1	.2	0.19	0.060	0.094
2-Methylnaphthalene	U	0.094	ug/L	1	.2	0.19	0.073	0.094
Acenaphthylene	U	0.094	ug/L	1	.2	0.19	0.051	0.094
Acenaphthene	U	0.094	ug/L	1	.2	0.19	0.060	0.094
Fluorene	U	0.094	ug/L	1	.2	0.19	0.058	0.094
Phenanthrene	U	0.094	ug/L	1	.2	0.19	0.048	0.094
Anthracene	U	0.094	ug/L	1	.2	0.19	0.042	0.094
Fluoranthene	U	0.094	ug/L	1	.2	0.19	0.069	0.094
Pyrene	U	0.094	ug/L	1	.2	0.19	0.056	0.094
Benzo(a)anthracene	U	0.094	ug/L	1	.2	0.19	0.043	0.094
Chrysene	U	0.094	ug/L	1	.2	0.19	0.034	0.094
Benzo(b)Fluoranthene	U	0.094	ug/L	1	.2	0.19	0.084	0.094
Benzo(k)fluoranthene	U	0.094	ug/L	1	.2	0.19	0.046	0.094
Benzo(a)pyrene	U	0.094	ug/L	1	.2	0.19	0.062	0.094
Indeno(1,2,3-cd)pyrene	U	0.094	ug/L	1	.2	0.19	0.049	0.094
Dibenzo(a,h)anthracene	U	0.094	ug/L	1	.2	0.19	0.066	0.094
Benzo(g,h,i)perylene	U	0.094	ug/L	1	.2	0.19	0.061	0.094
2-Methylnaphthalene-D10		80.9	%					
Fluorene-D10		77.2	%					
Pyrene-D10		95.8	%					

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Data File: \\target_server\gg\chem\gcms-n.i\N121123.b\N0440.D
Report Date: 29-Dec-2023 15:34

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-n.i\N121123.b\N0440.D
Lab Smp Id: SQ6238-2 Client Smp ID: Y-BRMW40-62-72-1109
Inj Date : 11-DEC-2023 15:47
Operator : EP Inst ID: gcms-n.i
Smp Info : SQ6238-2
Misc Info : WG346778,WG345531,WG346503-4
Comment :
Method : \\target_server\gg\chem\gcms-n.i\N121123.b\NSPSIM95.m
Meth Date : 12-Dec-2023 08:48 epelletier Quant Type: ISTD
Cal Date : 07-DEC-2023 14:42 Cal File: N0385.D
Als bottle: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pahplus.sub
Target Version: 4.12
Processing Host: INSPIRON1

Concentration Formula: Amt * DF * Uf*(Vt/Vo*Vi)*1000 * CpndVariable

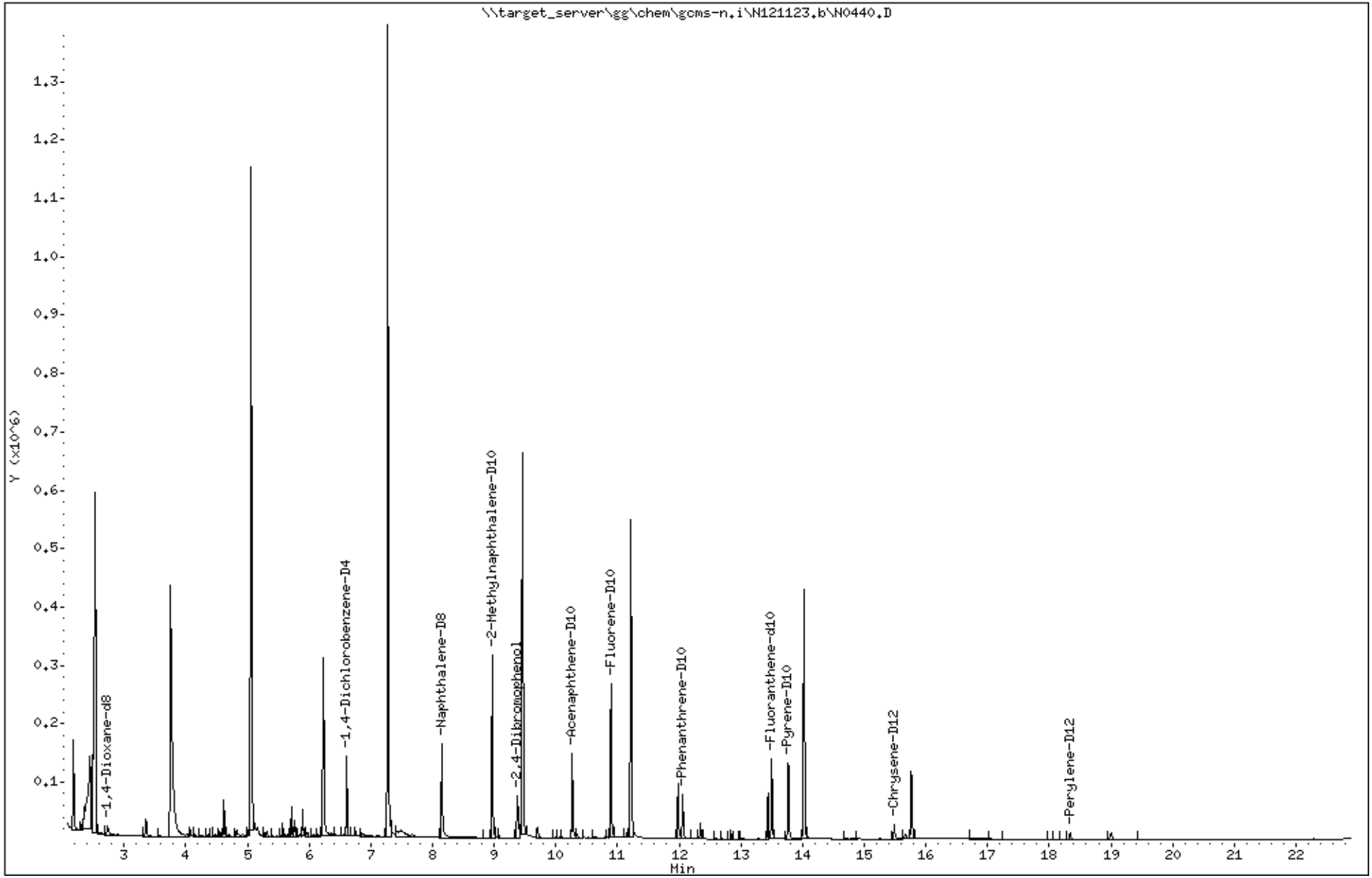
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.060	Sample Volume (L)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/L)	REVIEW CODE
$	1 1,4-Dioxane-d8	96	2.731	2.742	(0.266)	15085	0.48702	0.459(aR)	
*	10 1,4-Dichlorobenzene-D4	152	6.614	6.604	(1.000)	42117	0.80000	(aQ)	
*	27 Naphthalene-D8	136	8.147	8.125	(1.000)	153342	0.80000	(a)	
$	33 2-Methylnaphthalene-D10	152	8.975	8.954	(1.102)	162905	1.61860	1.53	
$	38 2,4-Dibromophenol	252	9.377	9.346	(0.914)	80188	3.39873	3.21	
*	48 Acenaphthene-D10	164	10.264	10.254	(1.000)	67205	0.80000	(a)	
$	56 Fluorene-D10	174	10.897	10.887	(1.062)	135850	1.54465	1.46	
*	66 Phenanthrene-D10	188	12.062	12.052	(1.000)	80391	0.80000	(a)	
$	71 Fluoranthene-d10	212	13.501	13.502	(1.119)	108540	1.66108	1.57	
$	73 Pyrene-D10	212	13.776	13.777	(0.889)	123981	1.91506	1.81	
*	78 Chrysene-D12	240	15.488	15.478	(1.000)	27669	0.80000	(a)	
*	85 Perylene-D12	264	18.334	18.324	(1.000)	21429	0.80000	(a)	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.

Data File: \\target_server\gg\chem\gcms-n.i\N121123.b\N0440.D
Date : 11-DEC-2023 15:47
Client ID: Y-BRMW40-62-72-1109
Instrument: gcms-n.i
Sample Info: SQ6238-2
Volume Injected (uL): 1.0
Operator: EP
Column phase: Rxi-SVOCms
Column diameter: 0.25



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Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

SDG: SQ6238
Lab ID: SQ6238-3
Client ID: SY-BRMW4-138-148-110923
Matrix: AQ
Lab File ID: N0441.D

Sample Date: 09-NOV-23
Extract Date: 16-NOV-23
Extracted By: AN/CMW
Extraction Method: SW846 3510C
Lab Prep Batch: WG345531

Report Date: 29-DEC-23
Analysis Date: 11-DEC-23
Analyst: EP
Analysis Method: SW846 8270D SIM
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	0.094	ug/L	1	.2	0.19	0.060	0.094
2-Methylnaphthalene	U	0.094	ug/L	1	.2	0.19	0.073	0.094
Acenaphthylene	U	0.094	ug/L	1	.2	0.19	0.051	0.094
Acenaphthene	U	0.094	ug/L	1	.2	0.19	0.060	0.094
Fluorene	U	0.094	ug/L	1	.2	0.19	0.058	0.094
Phenanthrene	U	0.094	ug/L	1	.2	0.19	0.048	0.094
Anthracene	U	0.094	ug/L	1	.2	0.19	0.042	0.094
Fluoranthene	U	0.094	ug/L	1	.2	0.19	0.069	0.094
Pyrene	U	0.094	ug/L	1	.2	0.19	0.056	0.094
Benzo(a)anthracene	U	0.094	ug/L	1	.2	0.19	0.043	0.094
Chrysene	J	0.035	ug/L	1	.2	0.19	0.034	0.094
Benzo(b)Fluoranthene	U	0.094	ug/L	1	.2	0.19	0.084	0.094
Benzo(k)fluoranthene	U	0.094	ug/L	1	.2	0.19	0.046	0.094
Benzo(a)pyrene	U	0.094	ug/L	1	.2	0.19	0.062	0.094
Indeno(1,2,3-cd)pyrene	U	0.094	ug/L	1	.2	0.19	0.049	0.094
Dibenzo(a,h)anthracene	U	0.094	ug/L	1	.2	0.19	0.066	0.094
Benzo(g,h,i)perylene	U	0.094	ug/L	1	.2	0.19	0.061	0.094
2-Methylnaphthalene-D10	*	41.7	%					
Fluorene-D10		42.7	%					
Pyrene-D10	*	46.6	%					

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Data File: \\target_server\gg\chem\gcms-n.i\N121123.b\N0441.D
Report Date: 29-Dec-2023 15:34

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-n.i\N121123.b\N0441.D
Lab Smp Id: SQ6238-3 Client Smp ID: Y-BRMW4-138-148-110
Inj Date : 11-DEC-2023 16:17
Operator : EP Inst ID: gcms-n.i
Smp Info : SQ6238-3
Misc Info : WG346778,WG345531,WG346503-4
Comment :
Method : \\target_server\gg\chem\gcms-n.i\N121123.b\NSPSIM95.m
Meth Date : 12-Dec-2023 08:48 epelletier Quant Type: ISTD
Cal Date : 07-DEC-2023 14:42 Cal File: N0385.D
Als bottle: 10
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pahplus.sub
Target Version: 4.12
Processing Host: INSPIRON1

Concentration Formula: Amt * DF * Uf*(Vt/Vo*Vi)*1000 * CpndVariable

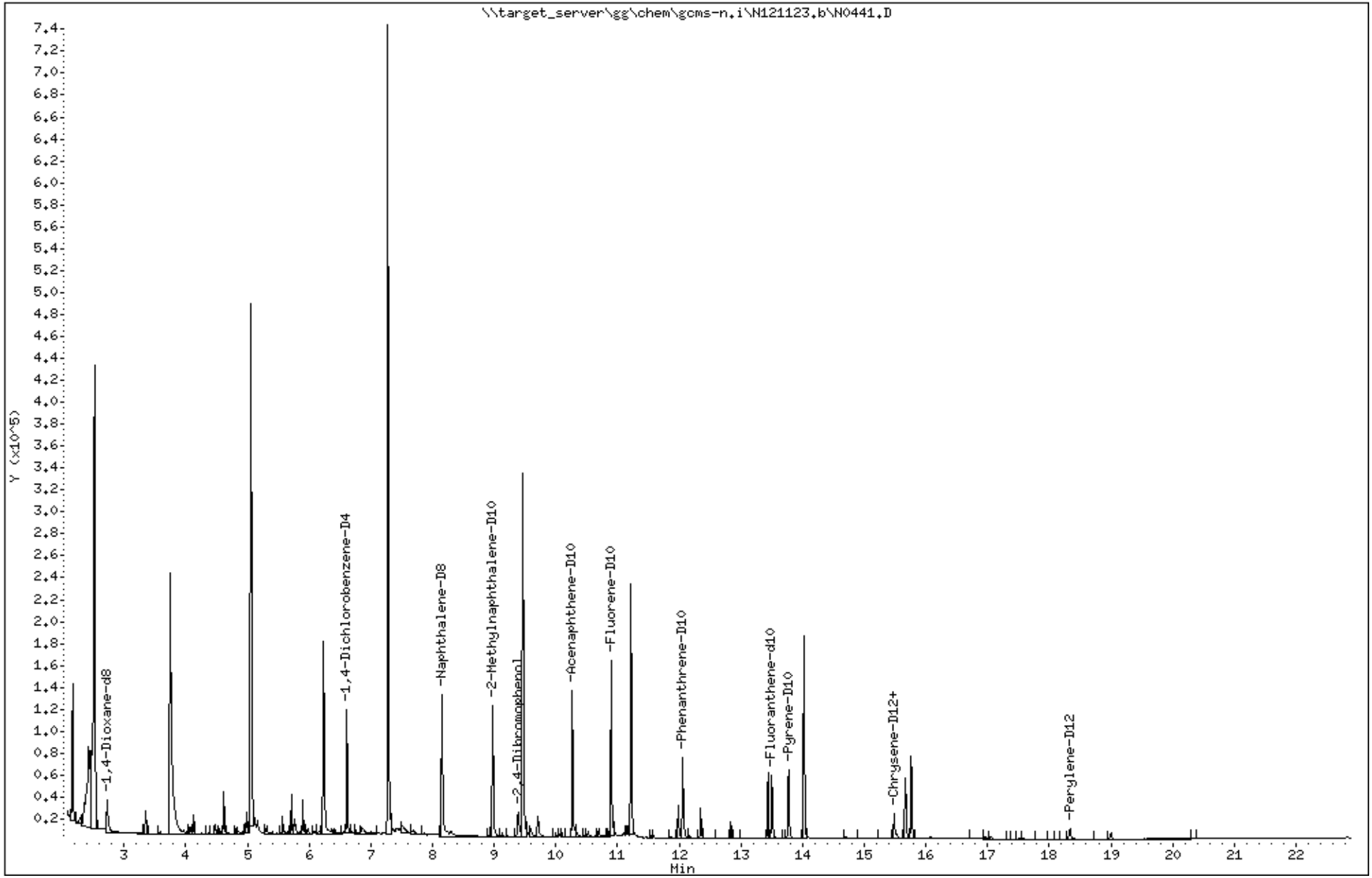
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.060	Sample Volume (L)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/L)	REVIEW CODE
$	1 1,4-Dioxane-d8	96	2.731	2.742	(0.266)	29185	0.95826	0.904(aQ)	
*	10 1,4-Dichlorobenzene-D4	152	6.614	6.604	(1.000)	39791	0.80000	(aQ)	
*	27 Naphthalene-D8	136	8.147	8.125	(1.000)	150688	0.80000	(a)	
$	33 2-Methylnaphthalene-D10	152	8.985	8.954	(1.103)	82477	0.83391	0.787(aR)	
$	38 2,4-Dibromophenol	252	9.388	9.346	(0.915)	27911	1.20310	1.13	
*	48 Acenaphthene-D10	164	10.264	10.254	(1.000)	66082	0.80000	(a)	
$	56 Fluorene-D10	174	10.897	10.887	(1.062)	73900	0.85454	0.806(a)	
*	66 Phenanthrene-D10	188	12.062	12.052	(1.000)	80078	0.80000	(a)	
$	71 Fluoranthene-d10	212	13.501	13.502	(1.119)	52884	0.81249	0.766(R)	
$	73 Pyrene-D10	212	13.776	13.777	(0.889)	57992	0.93205	0.879(aR)	
*	78 Chrysene-D12	240	15.488	15.478	(1.000)	26592	0.80000	(a)	
	79 Chrysene	228	15.529	15.529	(1.003)	2062	0.03738	0.0353(a)	
*	85 Perylene-D12	264	18.334	18.324	(1.000)	20518	0.80000	(a)	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.

Data File: \\target_server\gg\chem\gcms-n.i\N121123.b\N0441.D
Date : 11-DEC-2023 16:17
Client ID: Y-BRMW4-138-148-110 Instrument: gcms-n.i
Sample Info: SQ6238-3
Volume Injected (uL): 1.0 Operator: EP
Column phase: Rxi-SVOCms Column diameter: 0.25



Data File: \\target_server\gg\chem\gcms-n.i\N121123.b\N0441.D

Date : 11-DEC-2023 16:17

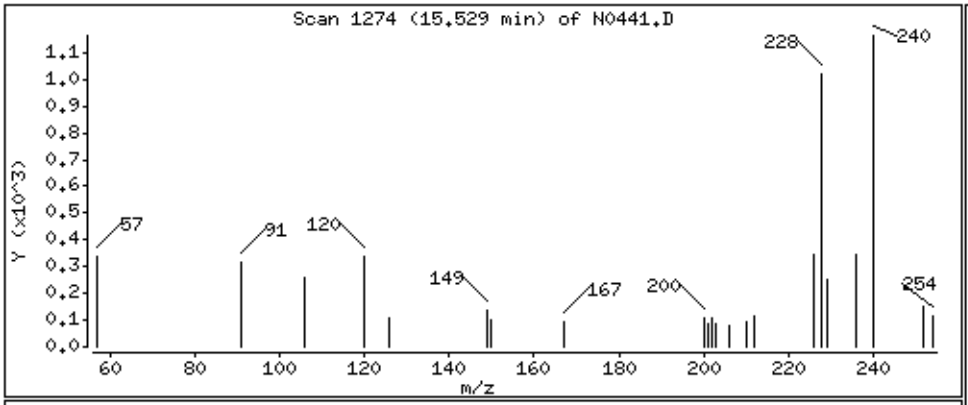
Client ID: Y-BRMW4-138-148-110 Instrument: gcms-n.i

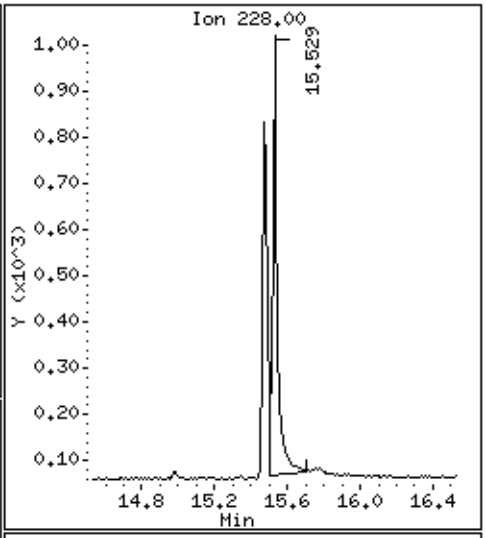
Sample Info: SQ6238-3

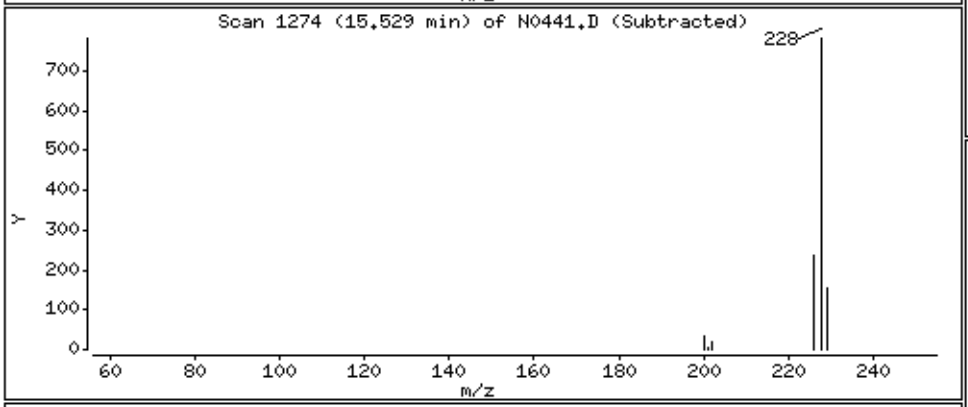
Volume Injected (uL): 1.0 Operator: EP

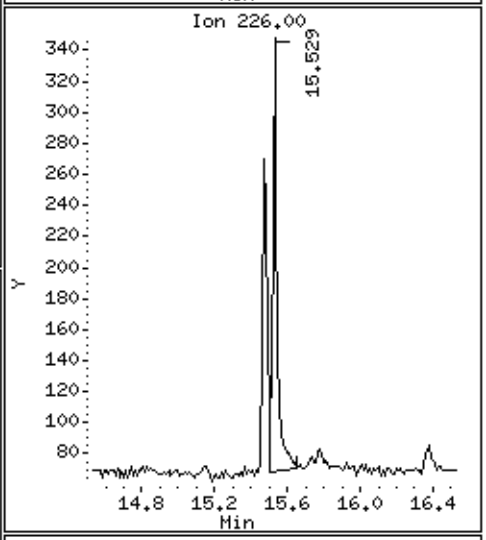
Column phase: Rxi-SVOCms Column diameter: 0.25

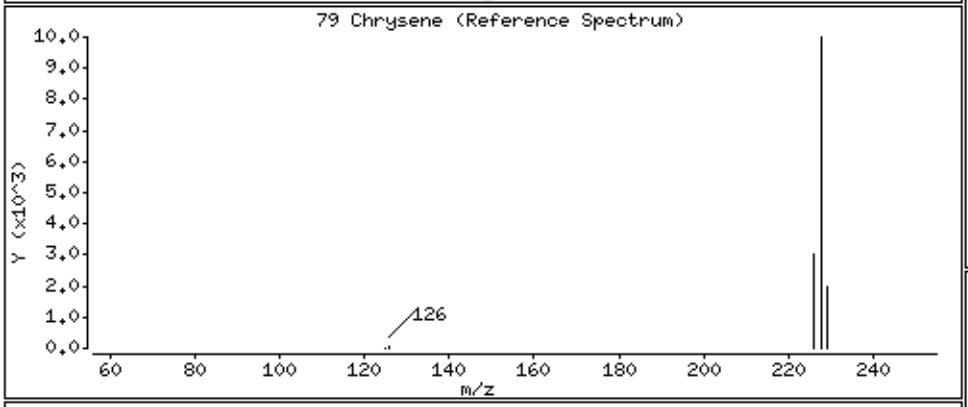
79 Chrysene Concentration: 0.0353 ug/L

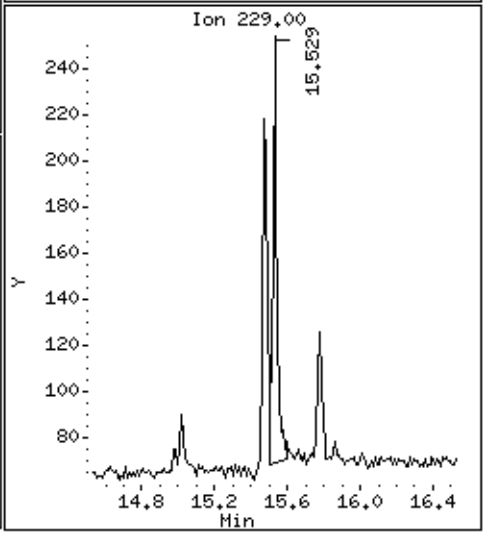


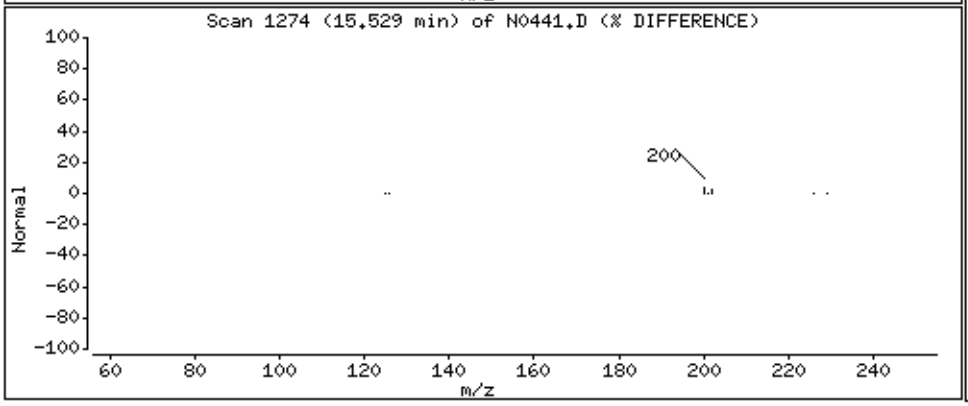












Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

SDG: SQ6238
Lab ID: SQ6238-4
Client ID: SY-BRMW3-47-62-110923
Matrix: AQ
Lab File ID: N0442.D

Sample Date: 09-NOV-23
Extract Date: 16-NOV-23
Extracted By: AN/CMW
Extraction Method: SW846 3510C
Lab Prep Batch: WG345531

Report Date: 29-DEC-23
Analysis Date: 11-DEC-23
Analyst: EP
Analysis Method: SW846 8270D SIM
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	0.093	ug/L	1	.2	0.19	0.060	0.093
2-Methylnaphthalene	U	0.093	ug/L	1	.2	0.19	0.072	0.093
Acenaphthylene	U	0.093	ug/L	1	.2	0.19	0.050	0.093
Acenaphthene	U	0.093	ug/L	1	.2	0.19	0.060	0.093
Fluorene	U	0.093	ug/L	1	.2	0.19	0.057	0.093
Phenanthrene	J	0.13	ug/L	1	.2	0.19	0.048	0.093
Anthracene	J	0.063	ug/L	1	.2	0.19	0.041	0.093
Fluoranthene		0.40	ug/L	1	.2	0.19	0.068	0.093
Pyrene		0.34	ug/L	1	.2	0.19	0.055	0.093
Benzo(a)anthracene		0.21	ug/L	1	.2	0.19	0.043	0.093
Chrysene		0.25	ug/L	1	.2	0.19	0.034	0.093
Benzo(b)Fluoranthene		0.28	ug/L	1	.2	0.19	0.083	0.093
Benzo(k)fluoranthene	J	0.13	ug/L	1	.2	0.19	0.046	0.093
Benzo(a)pyrene	J	0.14	ug/L	1	.2	0.19	0.062	0.093
Indeno(1,2,3-cd)pyrene	J	0.14	ug/L	1	.2	0.19	0.048	0.093
Dibenzo(a,h)anthracene	U	0.093	ug/L	1	.2	0.19	0.065	0.093
Benzo(g,h,i)perylene	J	0.092	ug/L	1	.2	0.19	0.061	0.093
2-Methylnaphthalene-D10		57.1	%					
Fluorene-D10		54.9	%					
Pyrene-D10		55.5	%					

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Data File: \\target_server\gg\chem\gcms-n.i\N121123.b\N0442.D
Report Date: 29-Dec-2023 15:34

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-n.i\N121123.b\N0442.D
Lab Smp Id: SQ6238-4 Client Smp ID: Y-BRMW3-47-62-11092
Inj Date : 11-DEC-2023 16:47
Operator : EP Inst ID: gcms-n.i
Smp Info : SQ6238-4
Misc Info : WG346778,WG345531,WG346503-4
Comment :
Method : \\target_server\gg\chem\gcms-n.i\N121123.b\NSPSIM95.m
Meth Date : 12-Dec-2023 08:48 epelletier Quant Type: ISTD
Cal Date : 07-DEC-2023 14:42 Cal File: N0385.D
Als bottle: 11
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pahplus.sub
Target Version: 4.12
Processing Host: INSPIRON1

Concentration Formula: Amt * DF * Uf*(Vt/Vo*Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.070	Sample Volume (L)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

EP
3:52 pm, Dec 29, 2023

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/L)	REVIEW CODE
$	1 1,4-Dioxane-d8	96	2.752	2.742	(0.268)	13282	0.34804	0.325(aR)	
*	10 1,4-Dichlorobenzene-D4	152	6.614	6.604	(1.000)	50754	0.80000	(aQ)	
*	27 Naphthalene-D8	136	8.147	8.125	(1.000)	173148	0.80000	(a)	
$	33 2-Methylnaphthalene-D10	152	8.975	8.954	(1.102)	129750	1.14171	1.07	
$	38 2,4-Dibromophenol	252	9.377	9.346	(0.914)	39539	1.36017	1.27	
*	48 Acenaphthene-D10	164	10.264	10.254	(1.000)	82802	0.80000	(a)	
$	56 Fluorene-D10	174	10.897	10.887	(1.062)	118895	1.09722	1.02	
*	66 Phenanthrene-D10	188	12.051	12.052	(1.000)	98465	0.80000	(a)	
	67 Phenanthrene	178	12.083	12.073	(1.003)	20891	0.14031	0.131(a)	
	68 Anthracene	178	12.147	12.137	(1.008)	10124	0.06770	0.0633(a)	
$	71 Fluoranthene-d10	212	13.501	13.502	(1.120)	80840	1.01007	0.944	
	72 Fluoranthene	202	13.522	13.522	(1.122)	50046	0.43304	0.405	
$	73 Pyrene-D10	212	13.766	13.777	(0.889)	89866	1.10963	1.04	
	74 Pyrene	202	13.786	13.797	(0.890)	38954	0.36406	0.340	
	76 Benzo(a)anthracene	228	15.467	15.468	(0.999)	13390	0.22347	0.209	
*	78 Chrysene-D12	240	15.488	15.478	(1.000)	34613	0.80000	(a)	
	79 Chrysene	228	15.528	15.529	(1.003)	19421	0.27045	0.253	
	82 Benzo(b)fluoranthene	252	17.510	17.521	(0.956)	14846	0.30187	0.282	
	83 Benzo(k)fluoranthene	252	17.572	17.573	(0.959)	9015	0.14175	0.132(aMH)	M6
	84 Benzo(a)pyrene	252	18.200	18.211	(0.993)	7395	0.15370	0.144(a)	

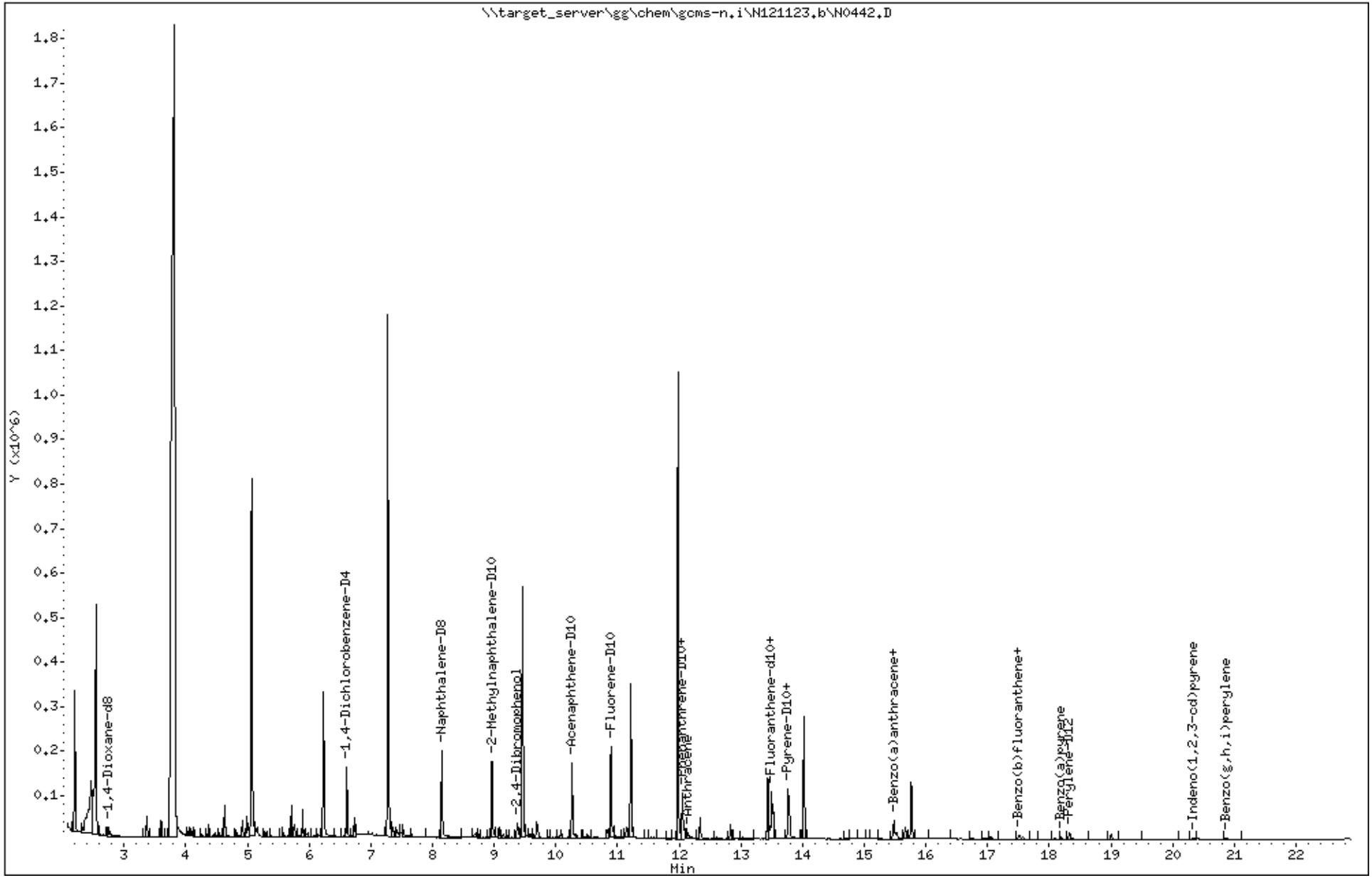
Data File: \\target_server\gg\chem\gcms-n.i\N121123.b\N0442.D
Report Date: 29-Dec-2023 15:34

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	CONCENTRATIONS FINAL (ug/L)	REVIEW CODE
* 85 Perylene-D12	264	18.324	18.324	(1.000)	26963	0.80000	(a)	
86 Indeno(1,2,3-cd)pyrene	276	20.332	20.343	(1.110)	5103	0.14637	0.137(a)	
88 Benzo(g,h,i)perylene	276	20.868	20.878	(1.139)	3878	0.09867	0.0922(a)	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Data File: \\target_server\gg\chem\gcms-n.i\N121123.b\N0442.D
Date : 11-DEC-2023 16:47
Client ID: Y-BRMW3-47-62-11092
Instrument: gcms-n.i
Sample Info: SQ6238-4
Volume Injected (uL): 1.0
Operator: EP
Column phase: Rxi-SVOCms
Column diameter: 0.25



Katahdin Analytical Services SQ6238 Page 209 of 875

Data File: \\target_server\gg\chem\gcms-n.i\N121123.b\N0442.D

Date : 11-DEC-2023 16:47

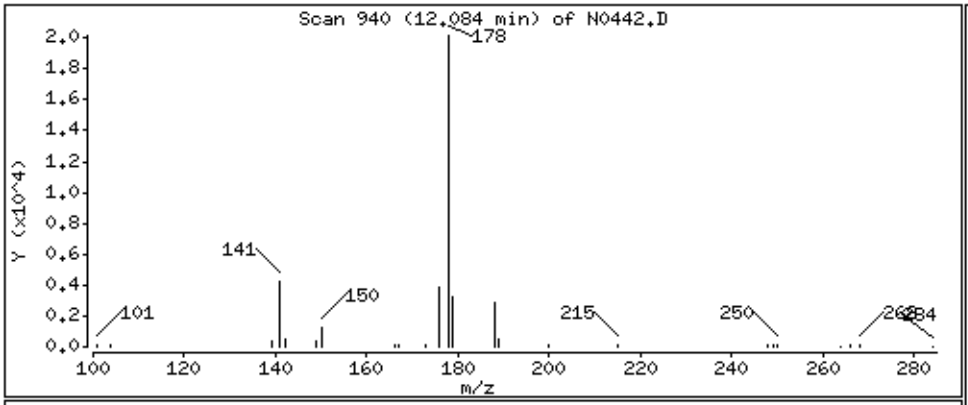
Client ID: Y-BRMW3-47-62-11092 Instrument: gcms-n.i

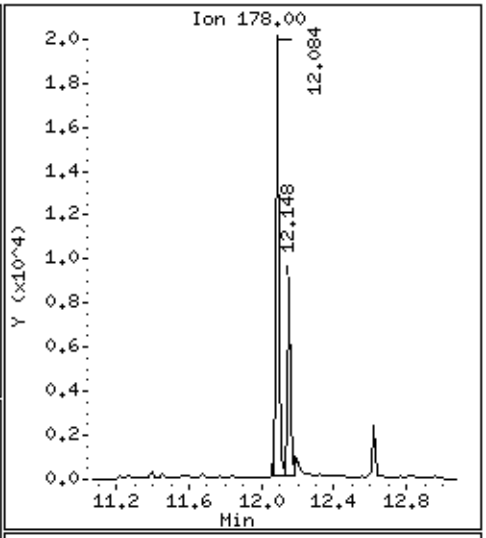
Sample Info: SQ6238-4

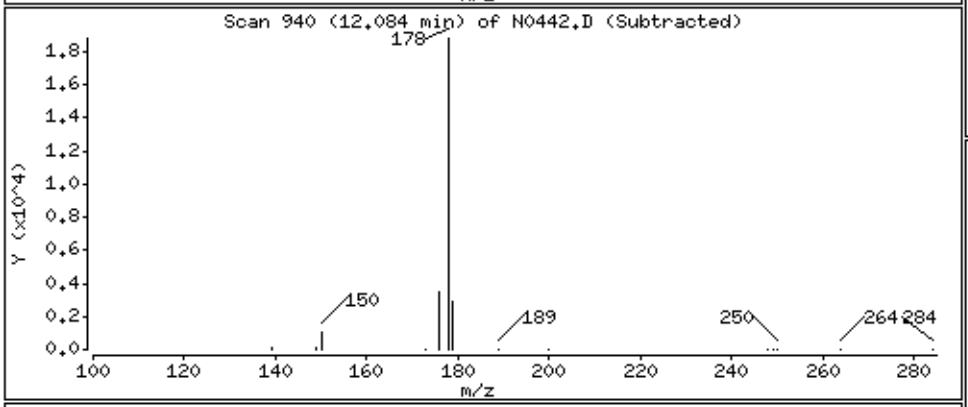
Volume Injected (uL): 1.0 Operator: EP

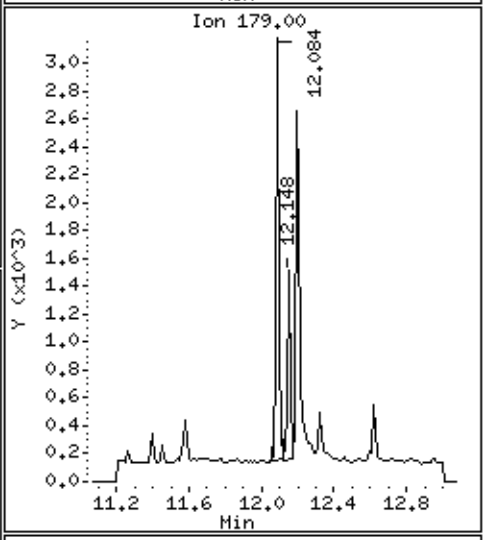
Column phase: Rxi-SVOCms Column diameter: 0.25

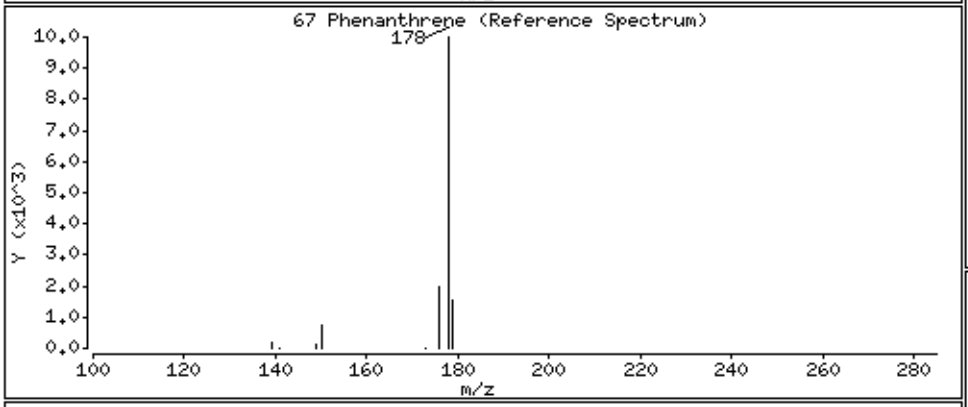
67 Phenanthrene Concentration: 0.131 ug/L

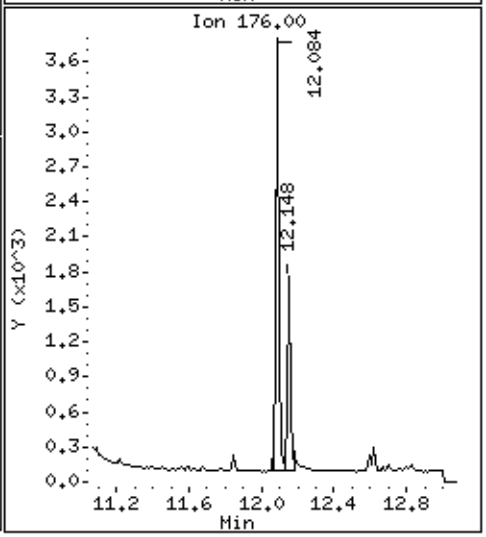


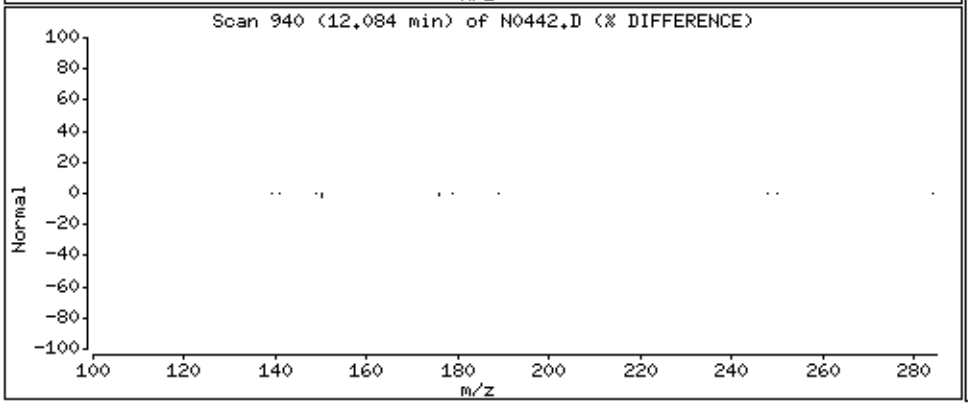












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Date : 11-DEC-2023 16:47

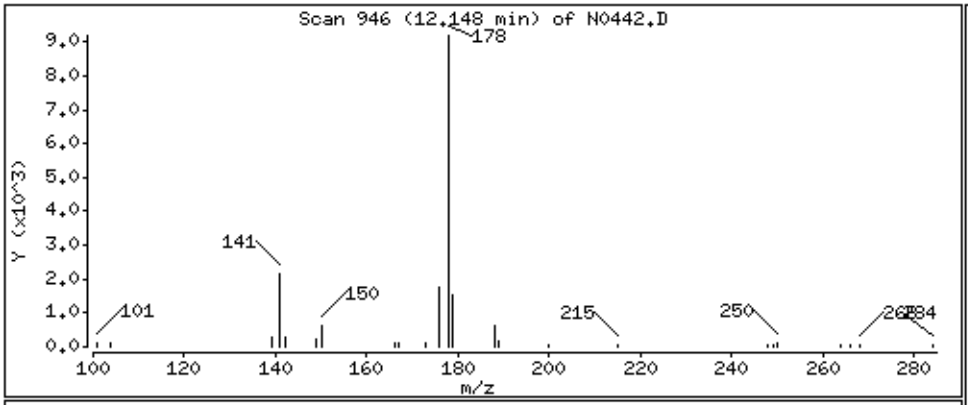
Client ID: Y-BRMW3-47-62-11092 Instrument: gcms-n.i

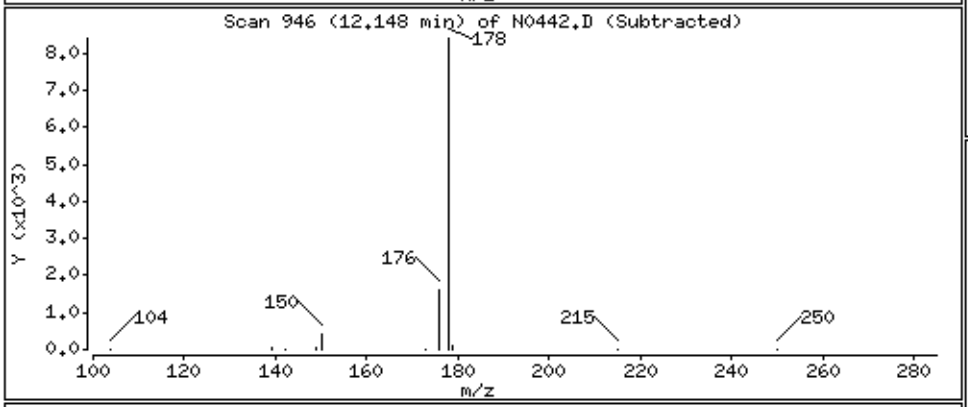
Sample Info: SQ6238-4

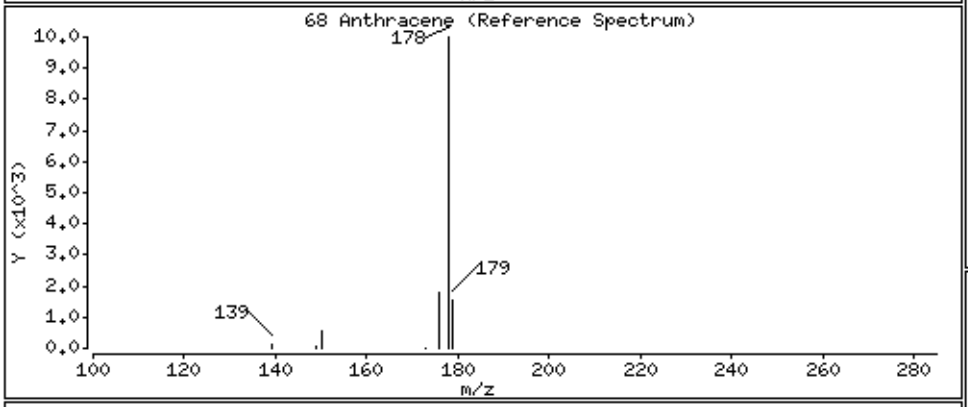
Volume Injected (uL): 1.0 Operator: EP

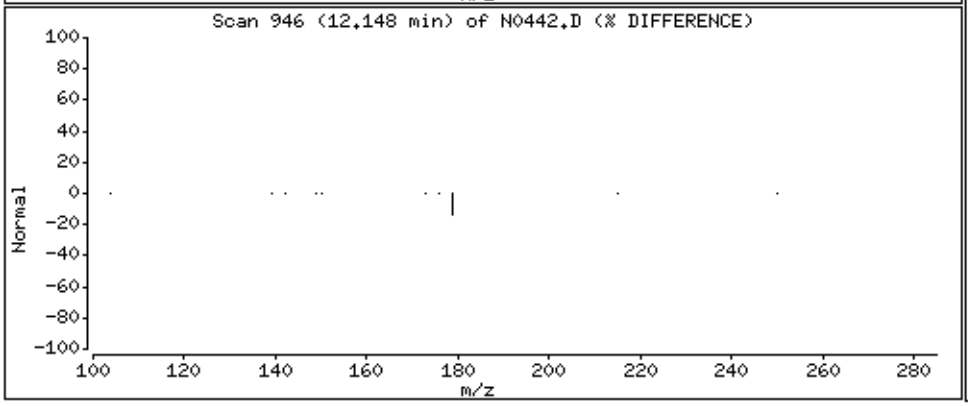
Column phase: Rxi-SVOCms Column diameter: 0.25

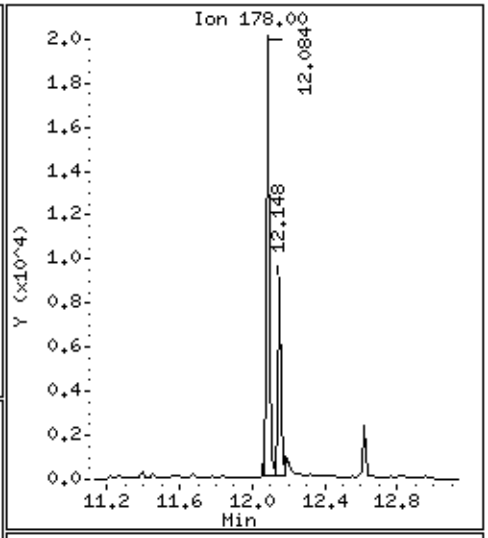
68 Anthracene Concentration: 0.0633 ug/L

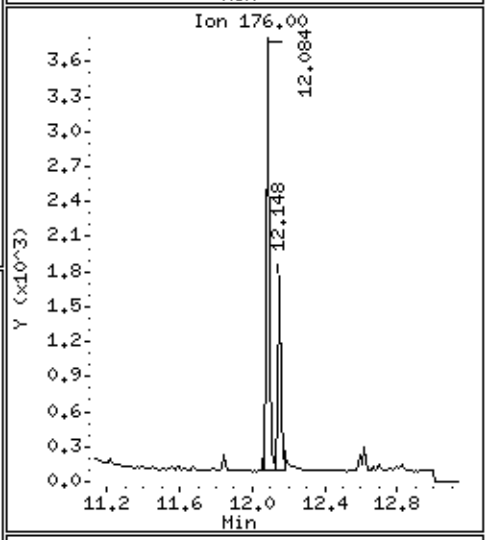


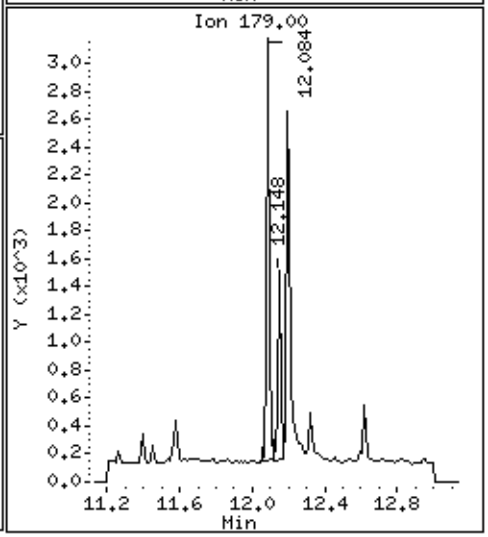












Data File: \\target_server\gg\chem\gcms-n.i\N121123.b\N0442.D

Date : 11-DEC-2023 16:47

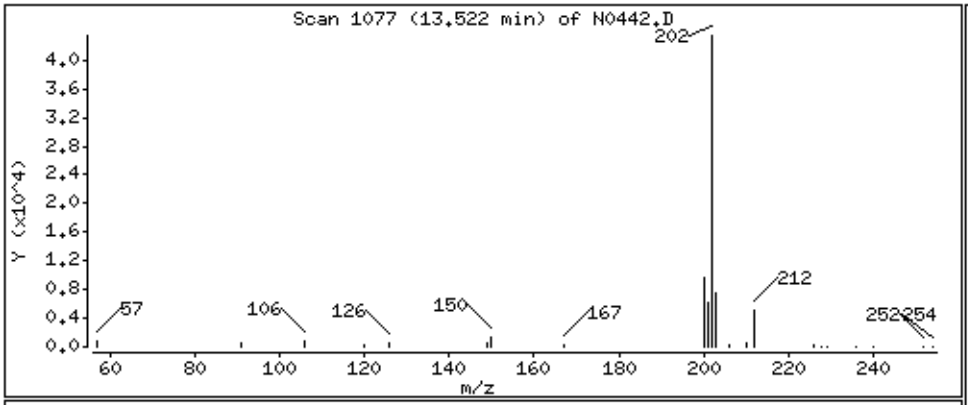
Client ID: Y-BRMW3-47-62-11092 Instrument: gcms-n.i

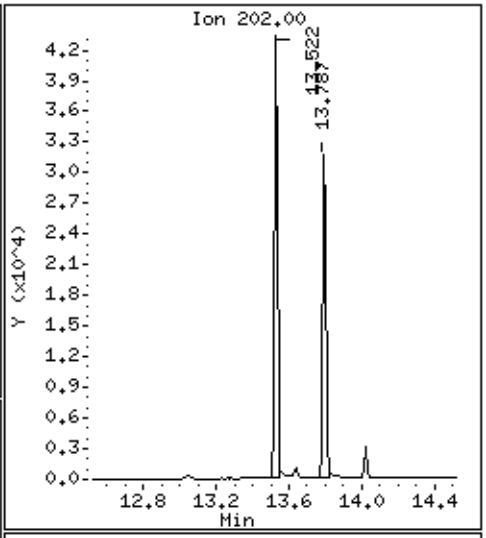
Sample Info: SQ6238-4

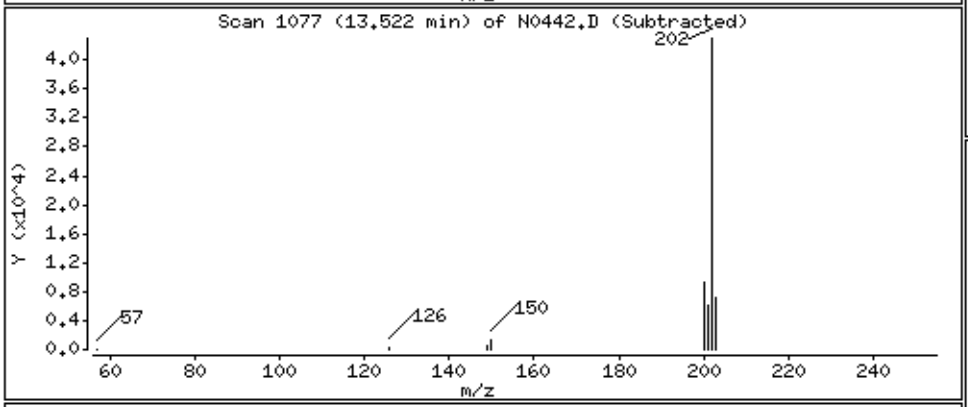
Volume Injected (uL): 1.0 Operator: EP

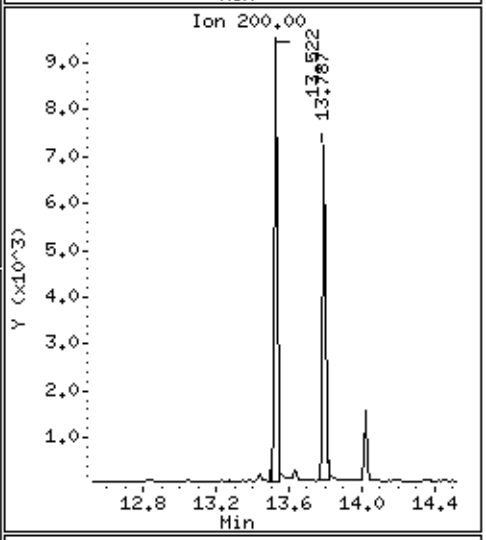
Column phase: Rxi-SVOCms Column diameter: 0.25

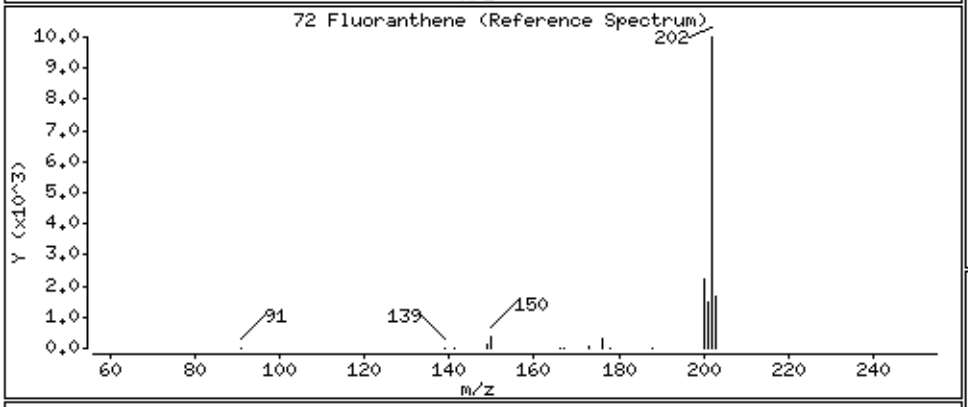
72 Fluoranthene Concentration: 0.405 ug/L

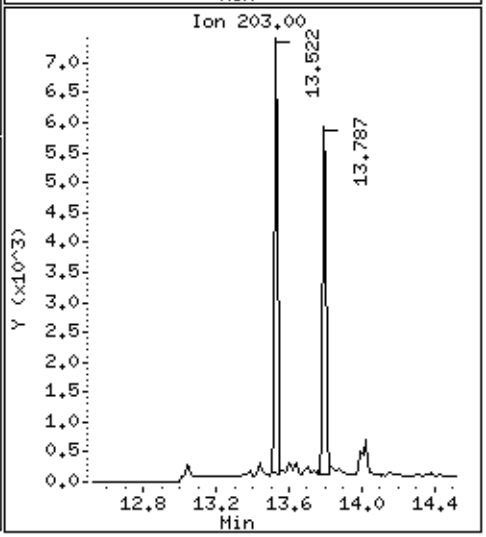


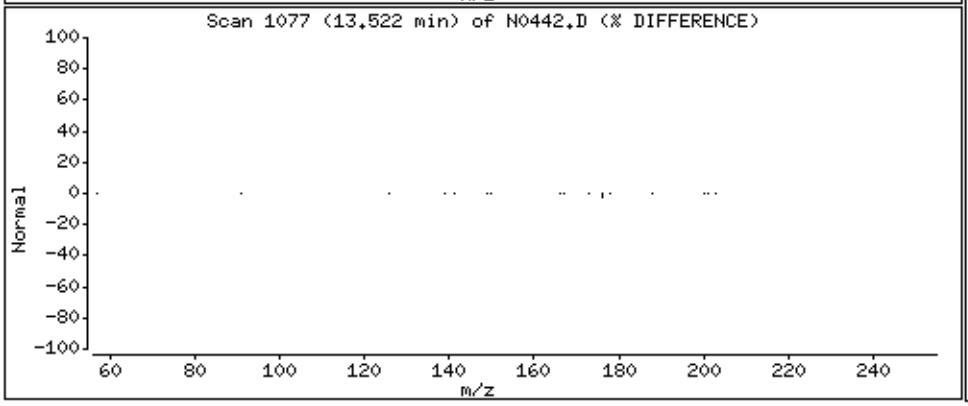












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Date : 11-DEC-2023 16:47

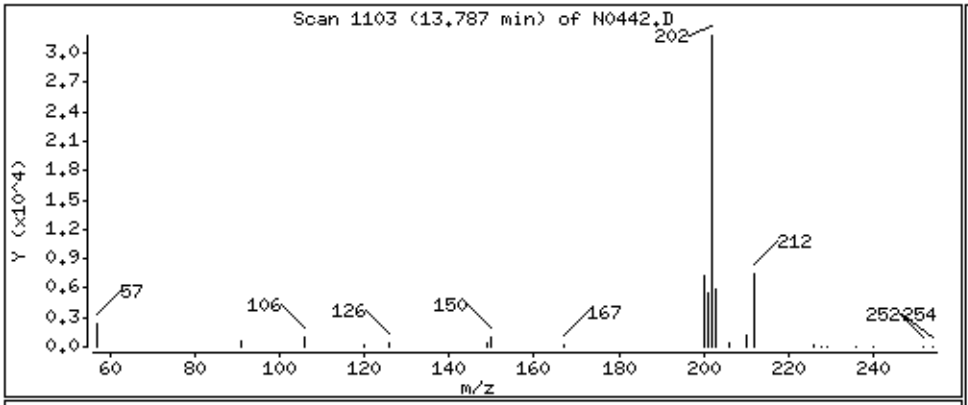
Client ID: Y-BRMW3-47-62-11092 Instrument: gcms-n.i

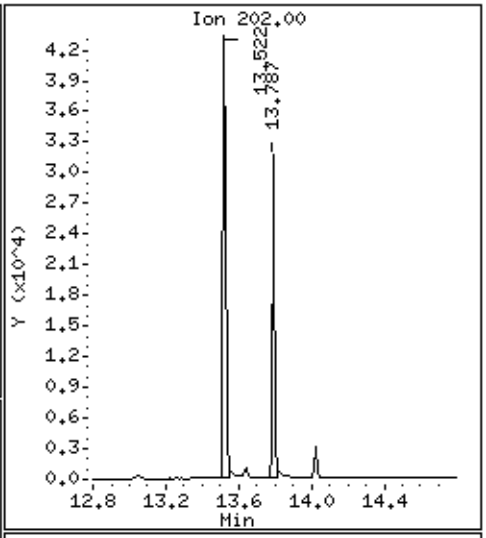
Sample Info: SQ6238-4

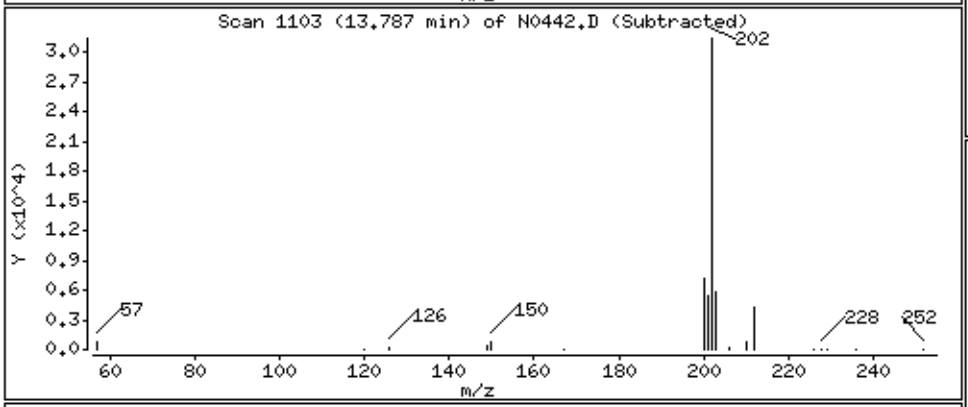
Volume Injected (uL): 1.0 Operator: EP

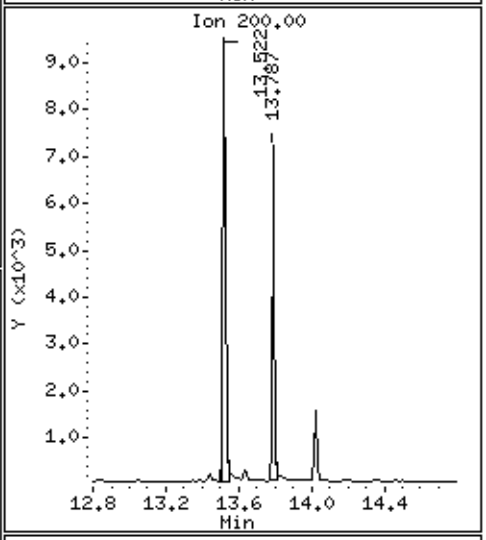
Column phase: Rxi-SVOCms Column diameter: 0.25

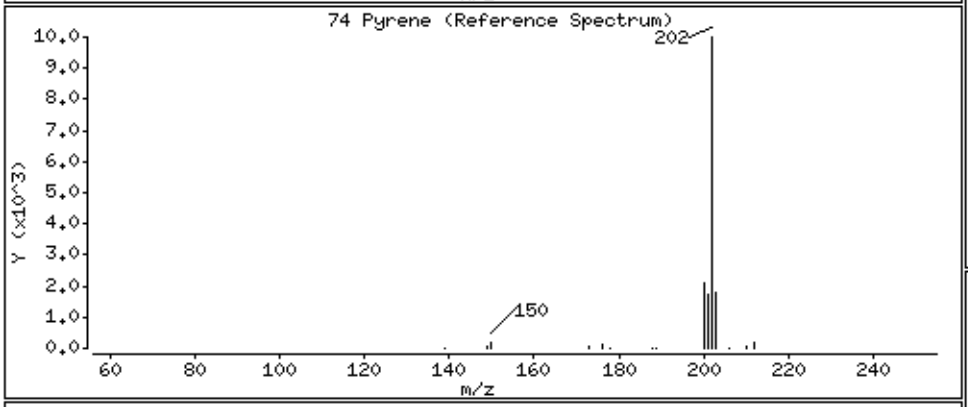
74 Pyrene Concentration: 0.340 ug/L

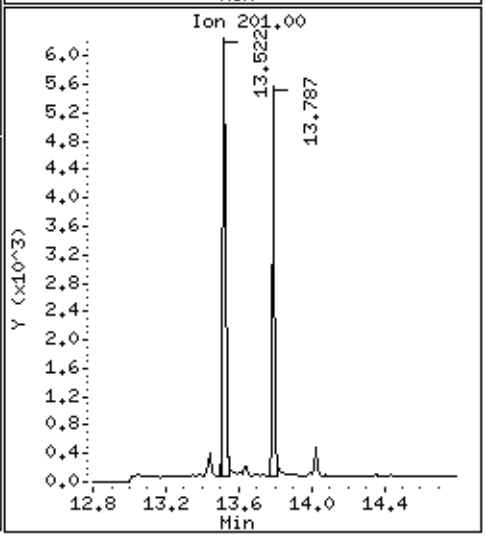


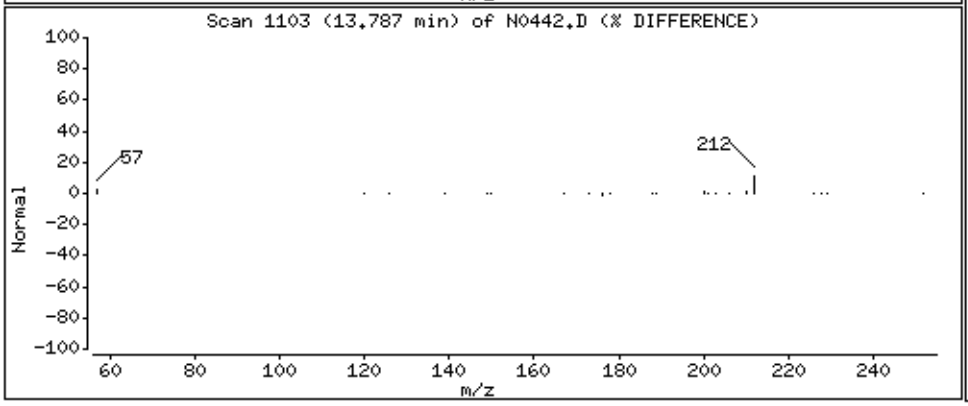












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Date : 11-DEC-2023 16:47

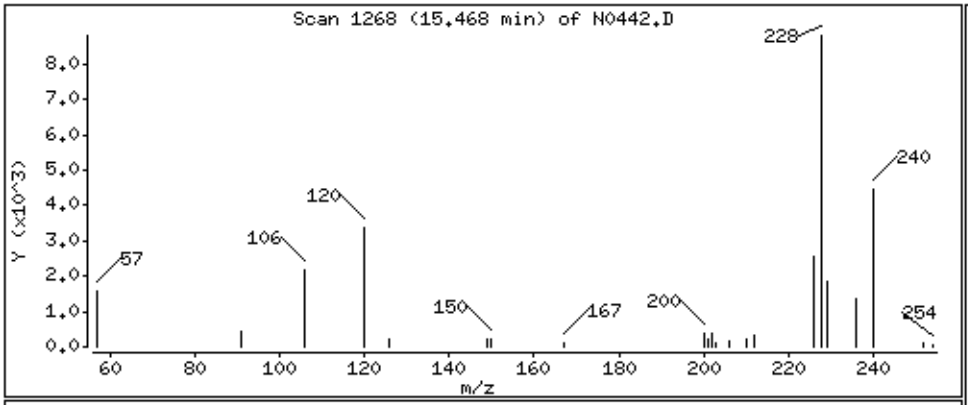
Client ID: Y-BRMW3-47-62-11092 Instrument: gcms-n.i

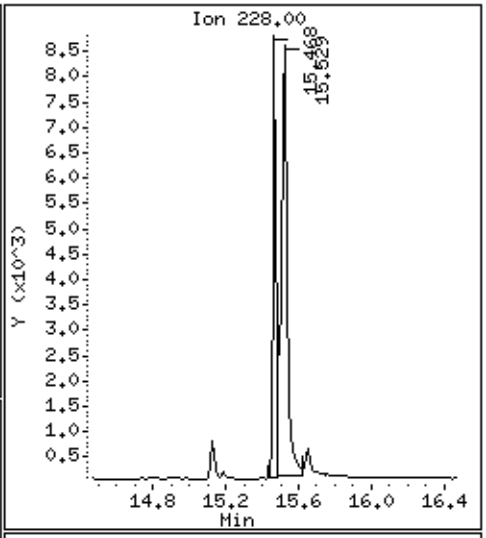
Sample Info: SQ6238-4

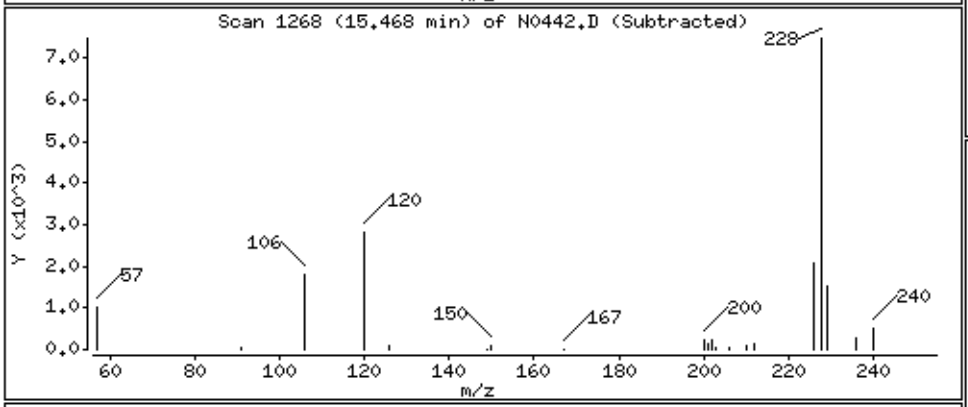
Volume Injected (uL): 1.0 Operator: EP

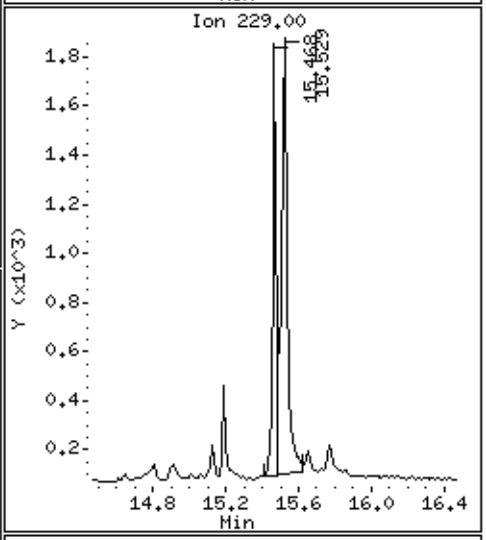
Column phase: Rxi-SVOCms Column diameter: 0.25

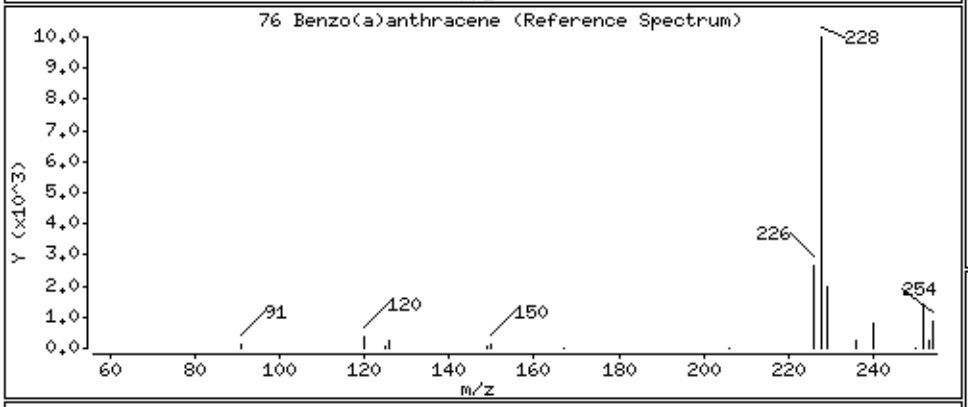
76 Benzo(a)anthracene Concentration: 0.209 ug/L

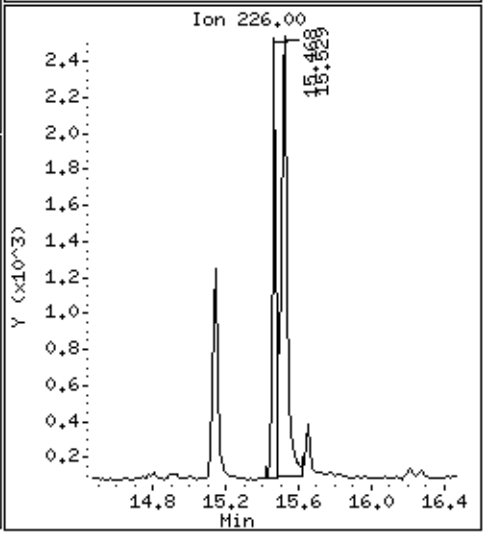


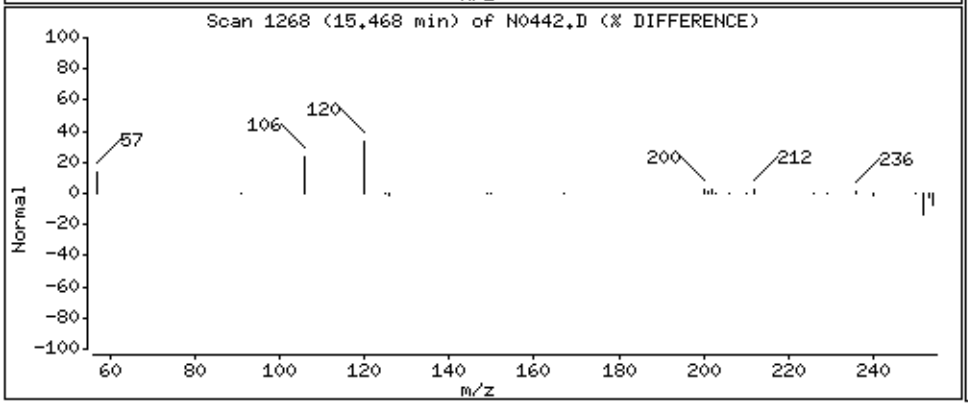












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Date : 11-DEC-2023 16:47

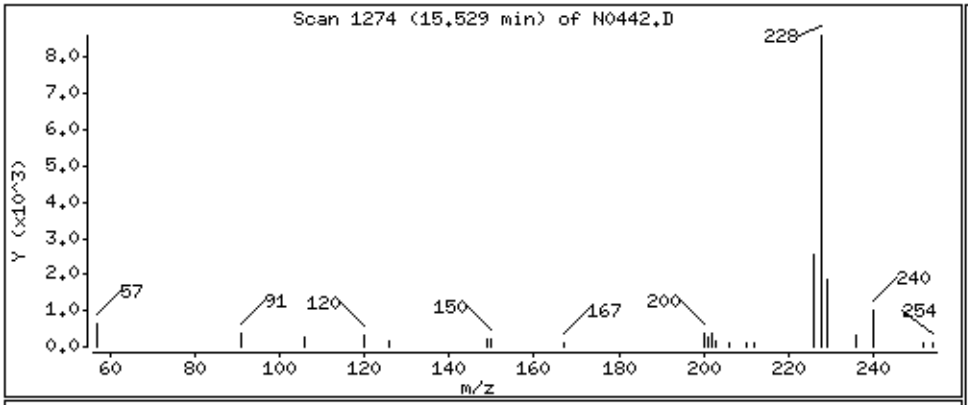
Client ID: Y-BRMW3-47-62-11092 Instrument: gcms-n.i

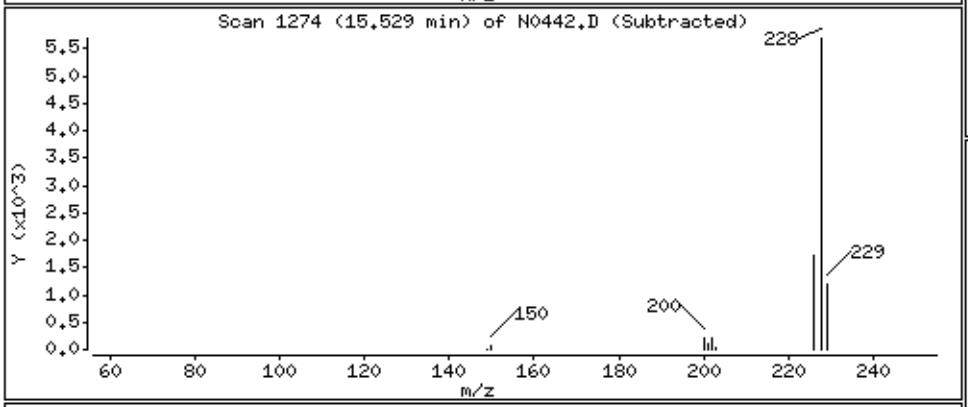
Sample Info: SQ6238-4

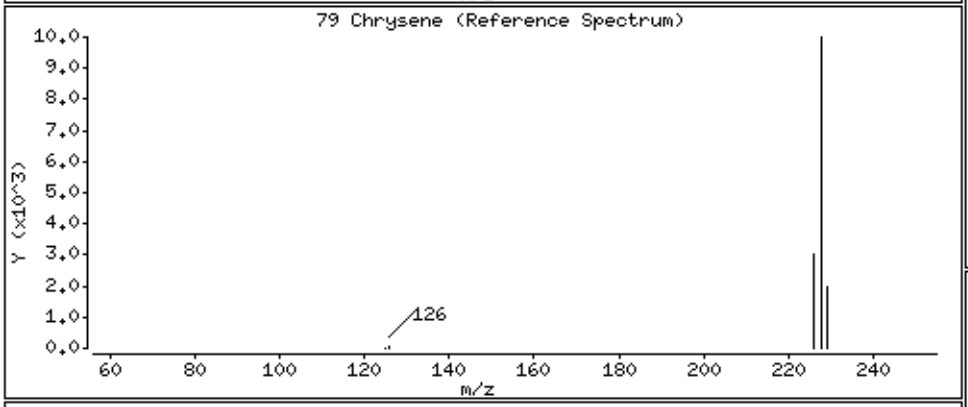
Volume Injected (uL): 1.0 Operator: EP

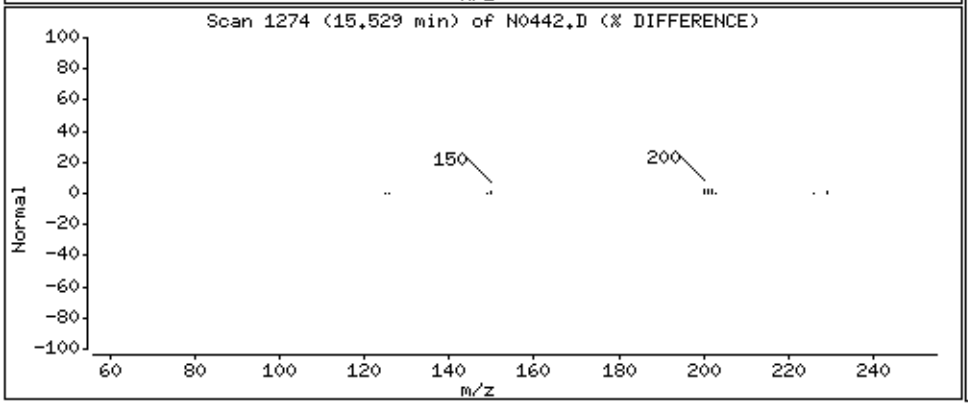
Column phase: Rxi-SVOCms Column diameter: 0.25

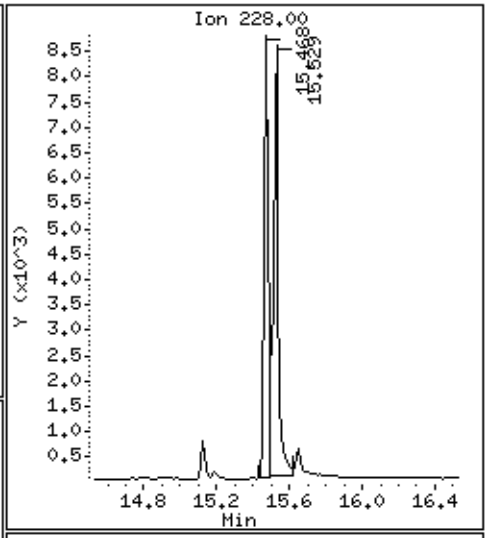
79 Chrysene Concentration: 0.253 ug/L

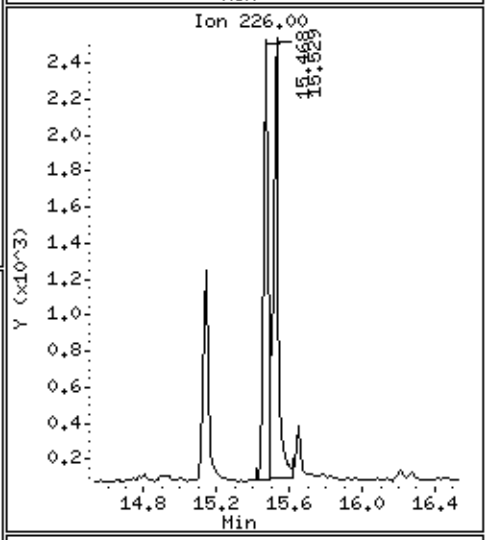


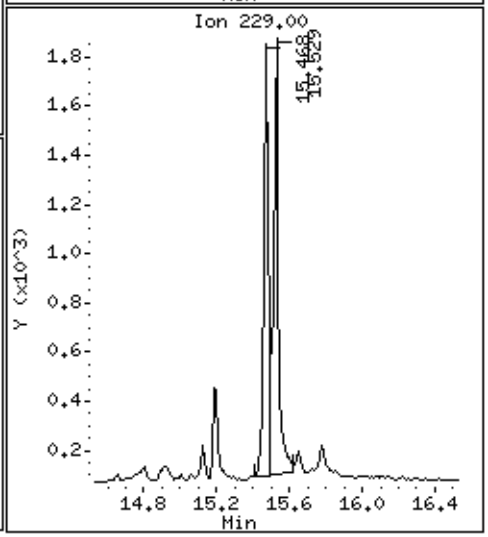












Data File: \\target_server\gg\chem\gcms-n.i\N121123.b\N0442.D

Date : 11-DEC-2023 16:47

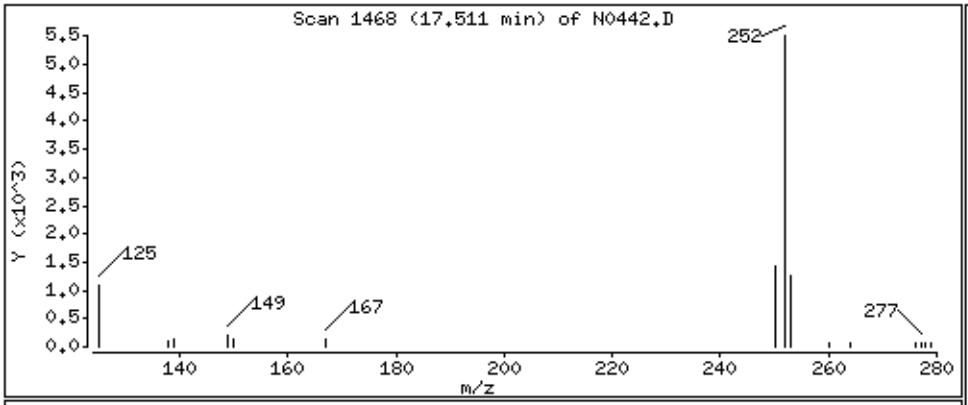
Client ID: Y-BRMW3-47-62-11092 Instrument: gcms-n.i

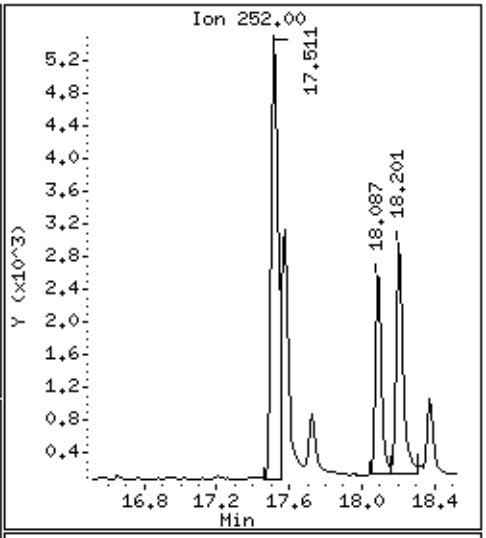
Sample Info: SQ6238-4

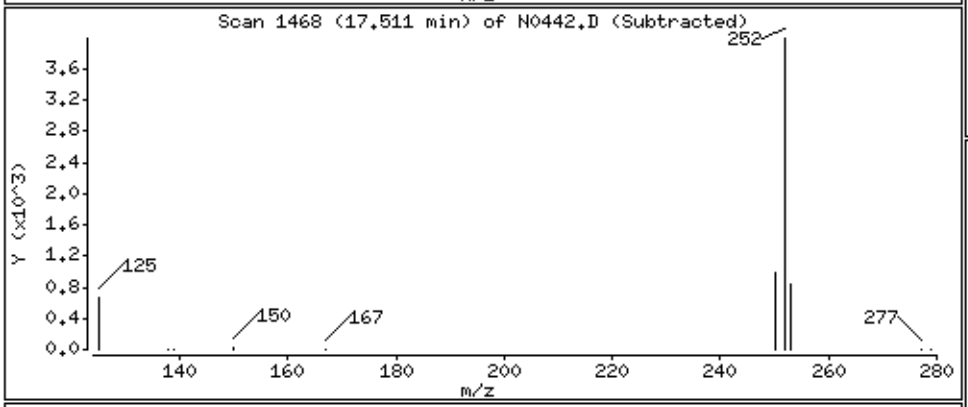
Volume Injected (uL): 1.0 Operator: EP

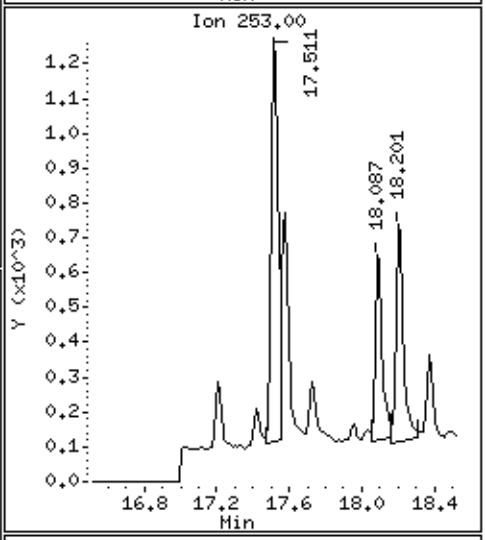
Column phase: Rxi-SVOCms Column diameter: 0.25

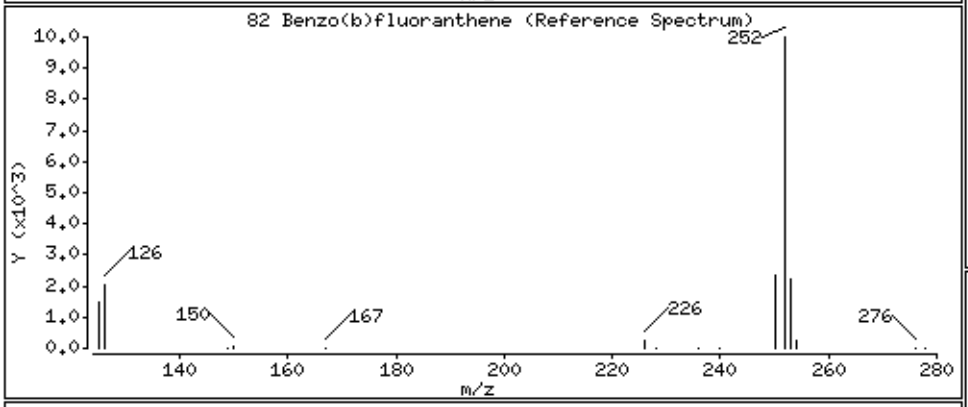
82 Benzo(b)fluoranthene Concentration: 0.282 ug/L

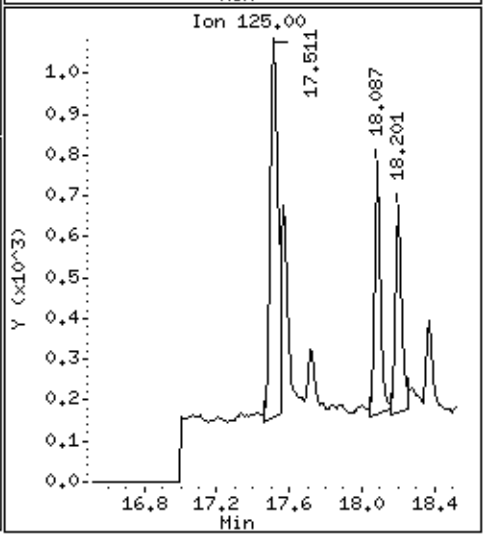


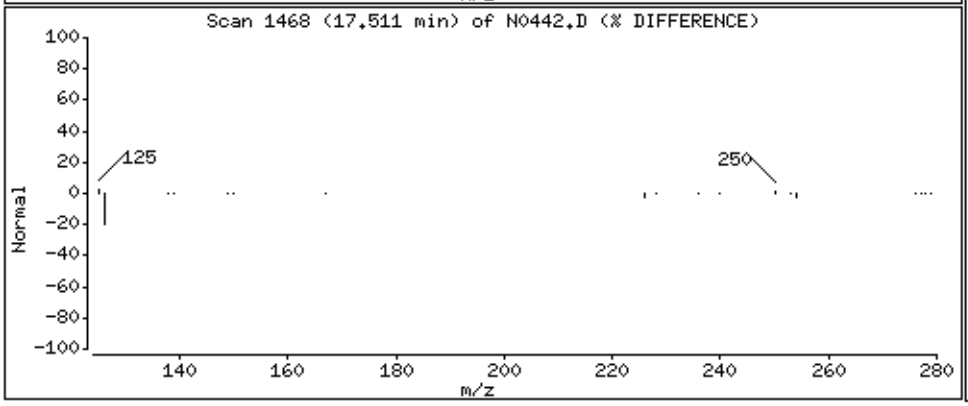












Data File: \\target_server\gg\chem\gcms-n.i\N121123.b\N0442.D

Date : 11-DEC-2023 16:47

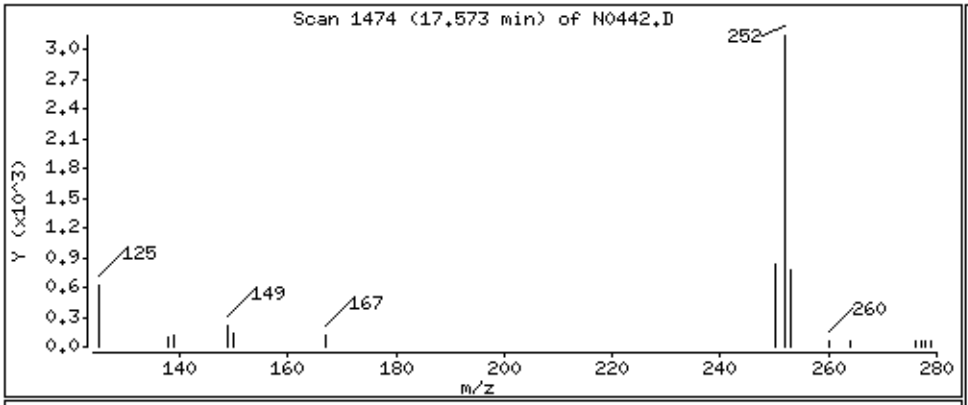
Client ID: Y-BRMW3-47-62-11092 Instrument: gcms-n.i

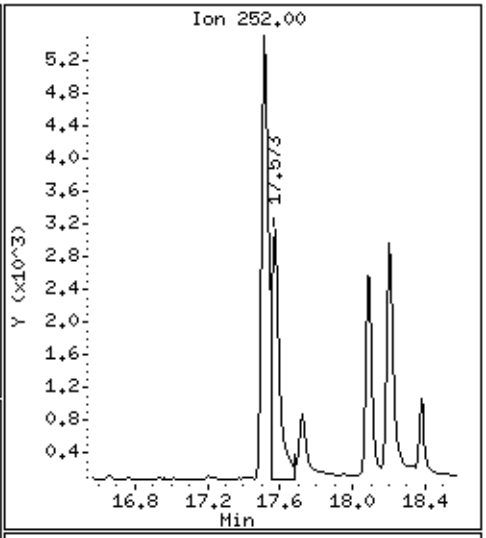
Sample Info: SQ6238-4

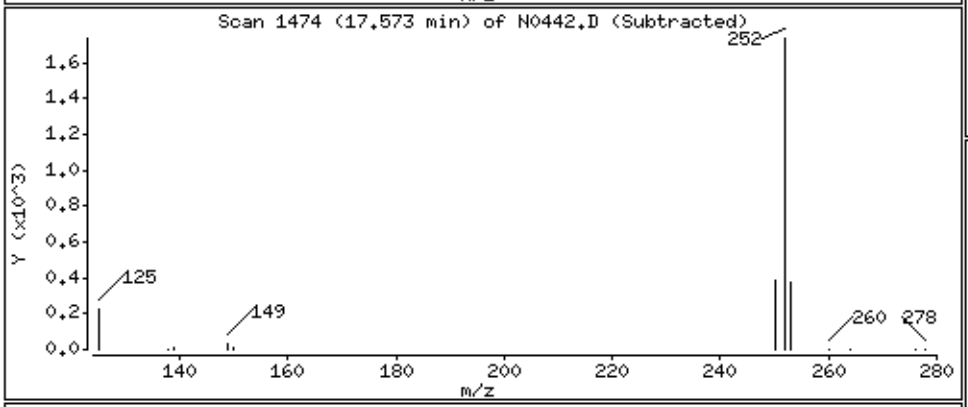
Volume Injected (uL): 1.0 Operator: EP

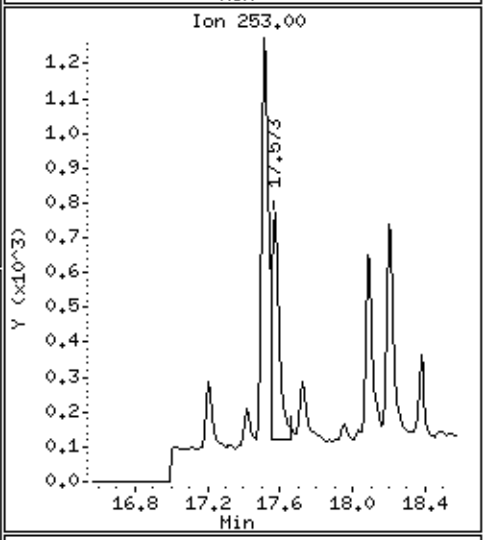
Column phase: Rxi-SVOCms Column diameter: 0.25

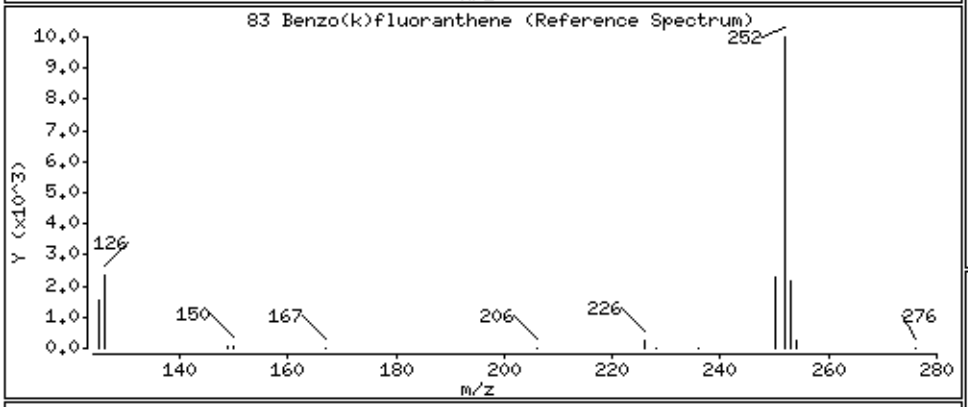
83 Benzo(k)fluoranthene Concentration: 0.132 ug/L

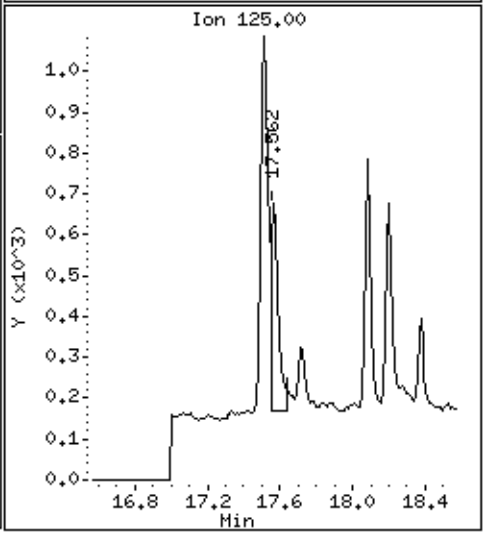


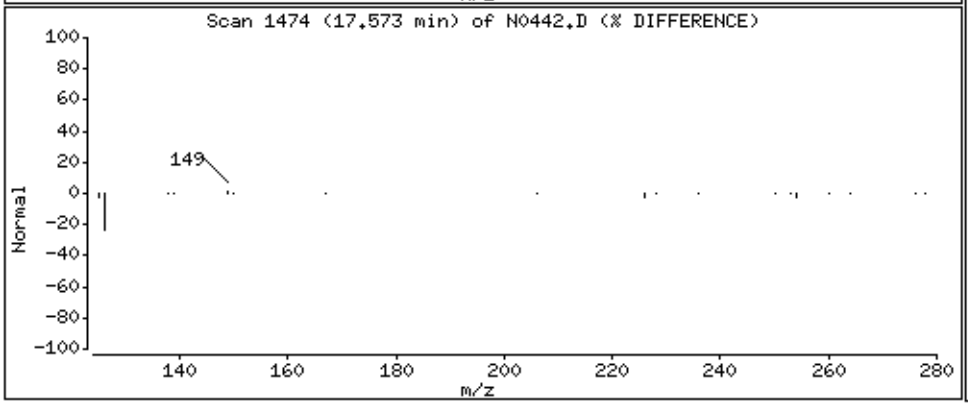












Data File: \\target_server\gg\chem\gcms-n.i\N121123.b\N0442.D

Date : 11-DEC-2023 16:47

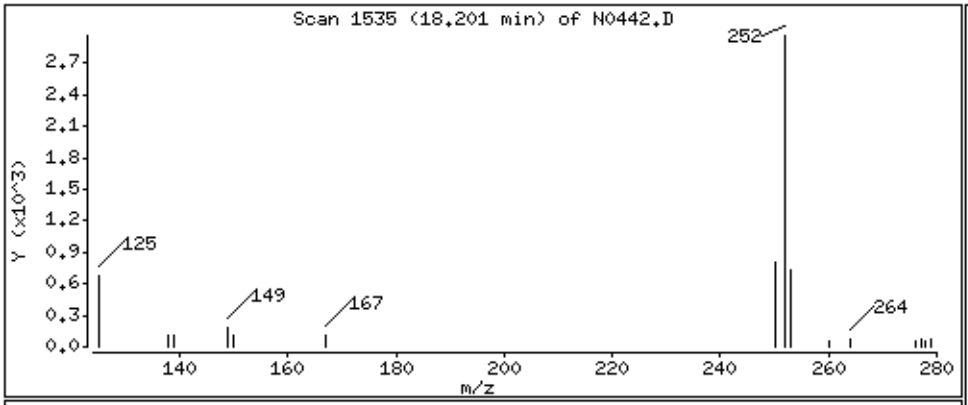
Client ID: Y-BRMW3-47-62-11092 Instrument: gcms-n.i

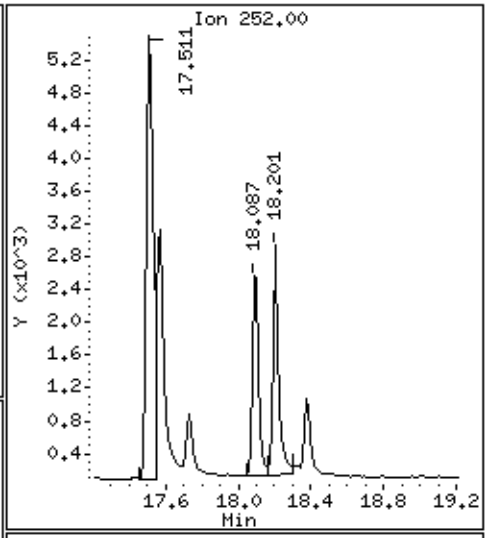
Sample Info: SQ6238-4

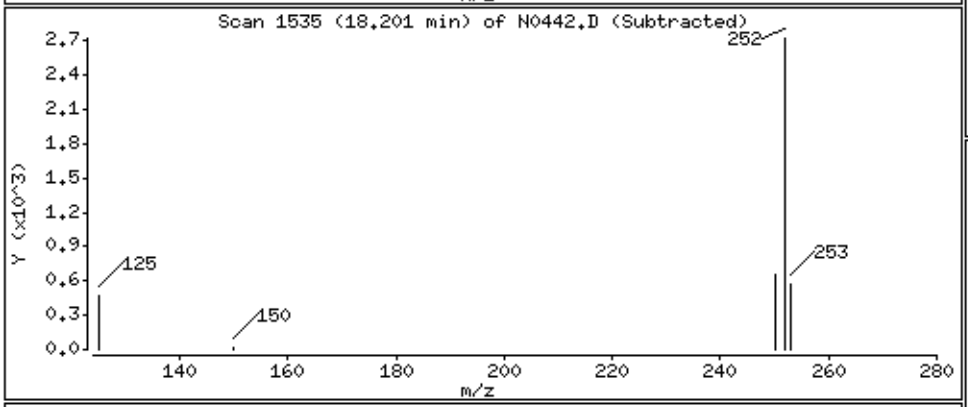
Volume Injected (uL): 1.0 Operator: EP

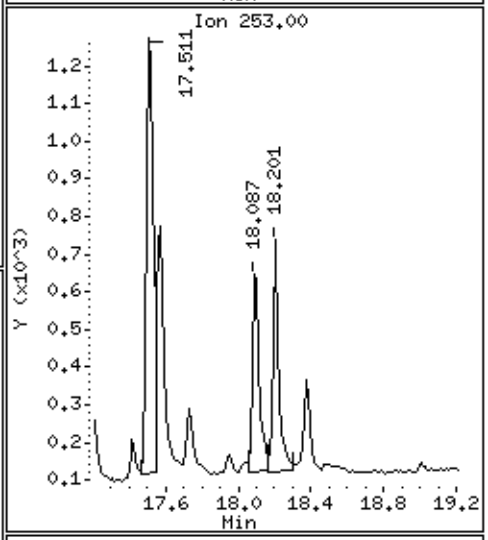
Column phase: Rxi-SVOCms Column diameter: 0.25

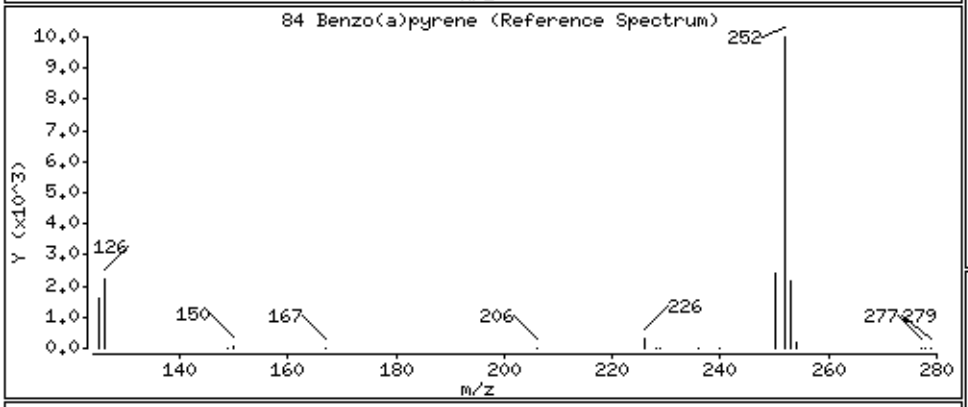
84 Benzo(a)pyrene Concentration: 0.144 ug/L

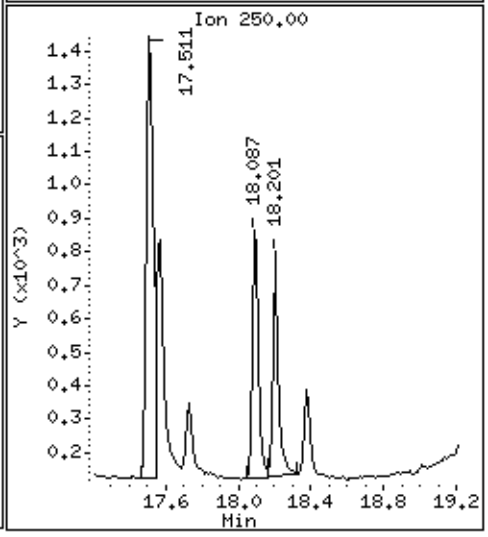


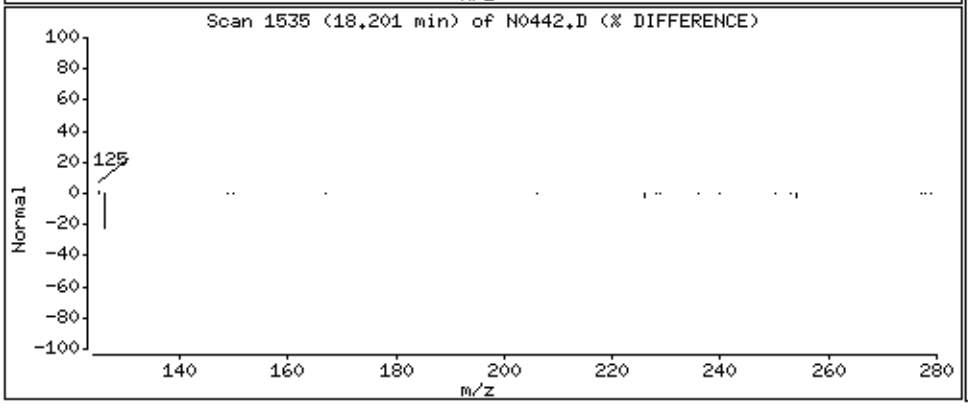












Data File: \\target_server\gg\chem\gcms-n.i\N121123.b\N0442.D

Date : 11-DEC-2023 16:47

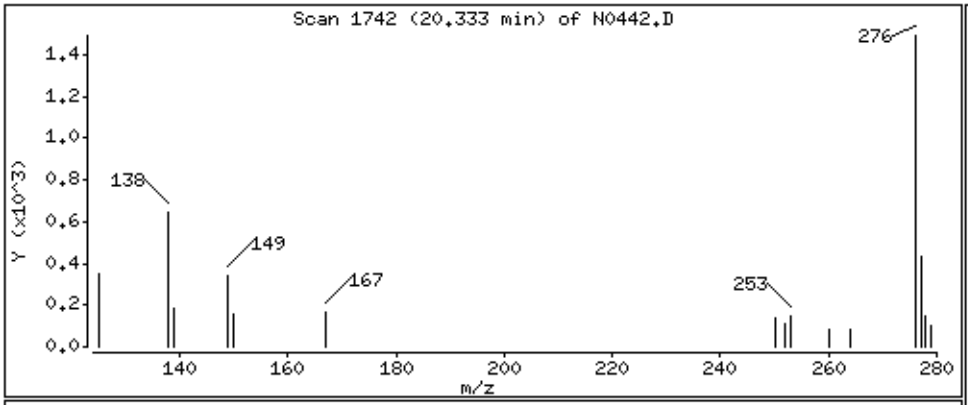
Client ID: Y-BRMW3-47-62-11092 Instrument: gcms-n.i

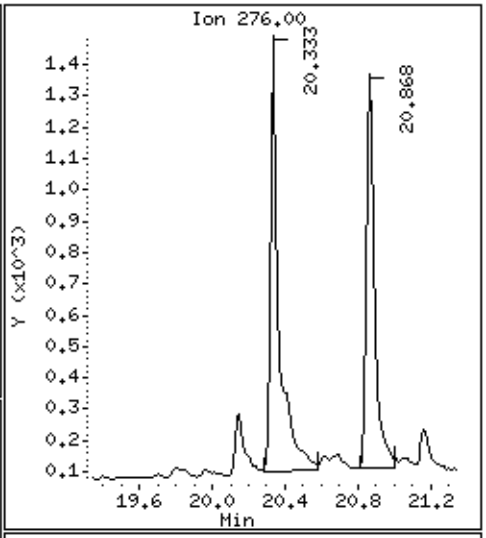
Sample Info: SQ6238-4

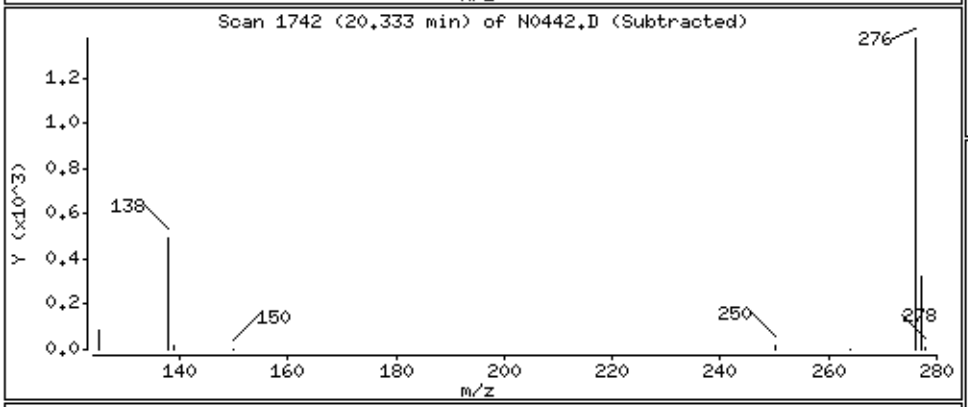
Volume Injected (uL): 1.0 Operator: EP

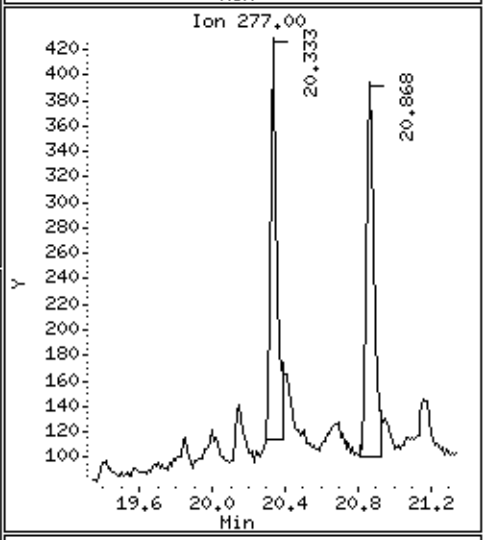
Column phase: Rxi-SVOCms Column diameter: 0.25

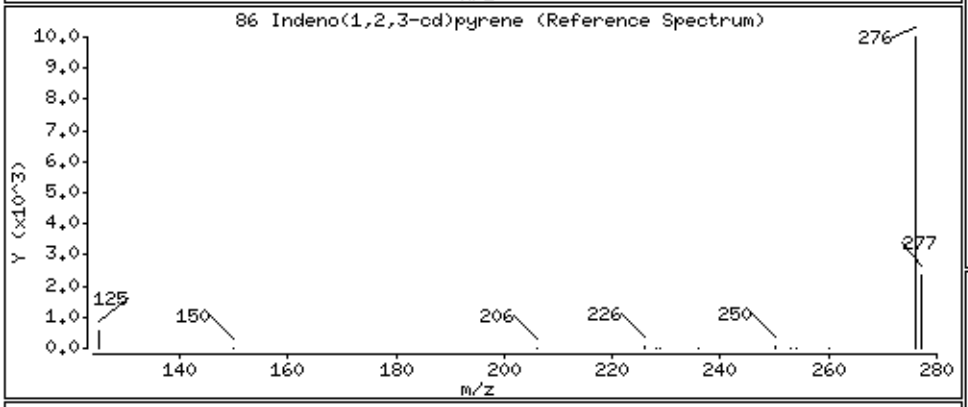
86 Indeno(1,2,3-cd)pyrene Concentration: 0.137 ug/L

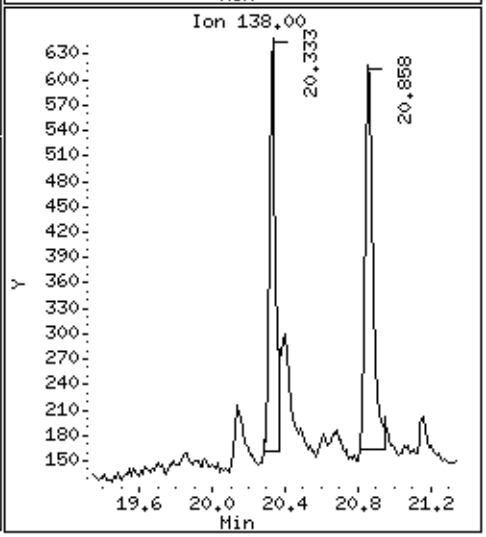


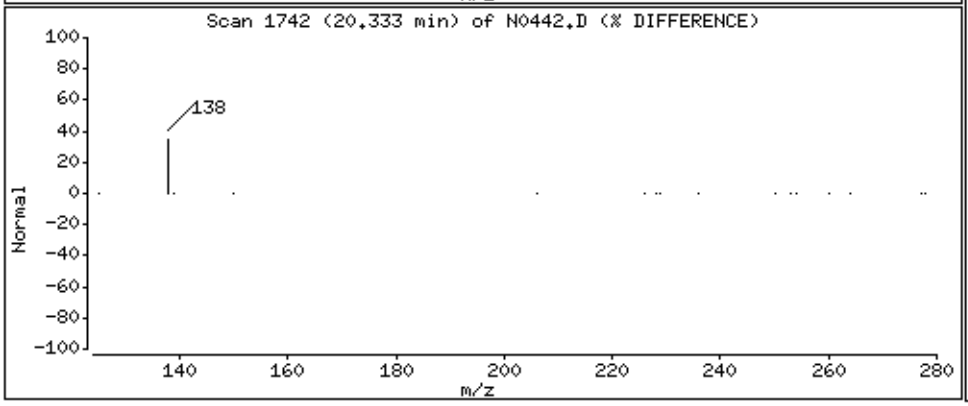












Data File: \\target_server\gg\chem\gcms-n.i\N121123.b\N0442.D

Date : 11-DEC-2023 16:47

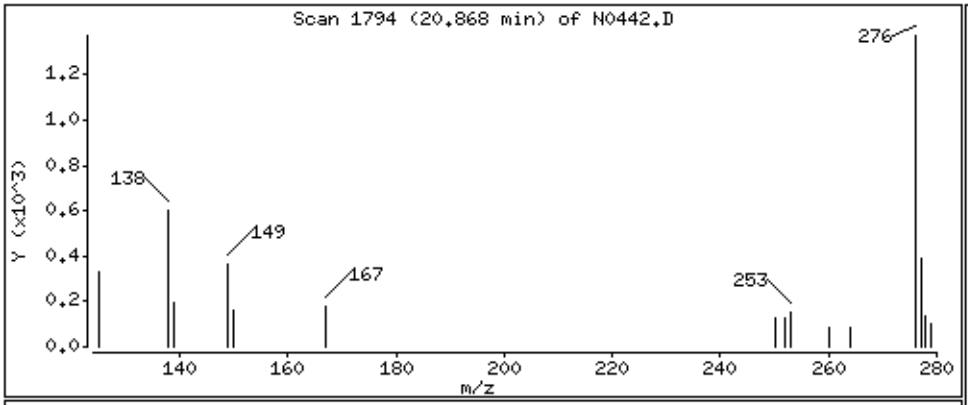
Client ID: Y-BRMW3-47-62-11092 Instrument: gcms-n.i

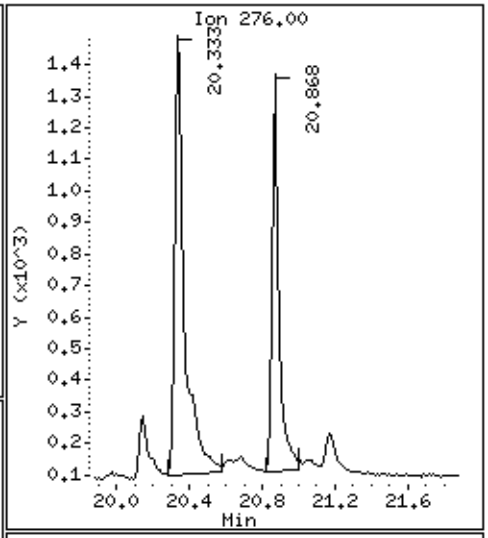
Sample Info: SQ6238-4

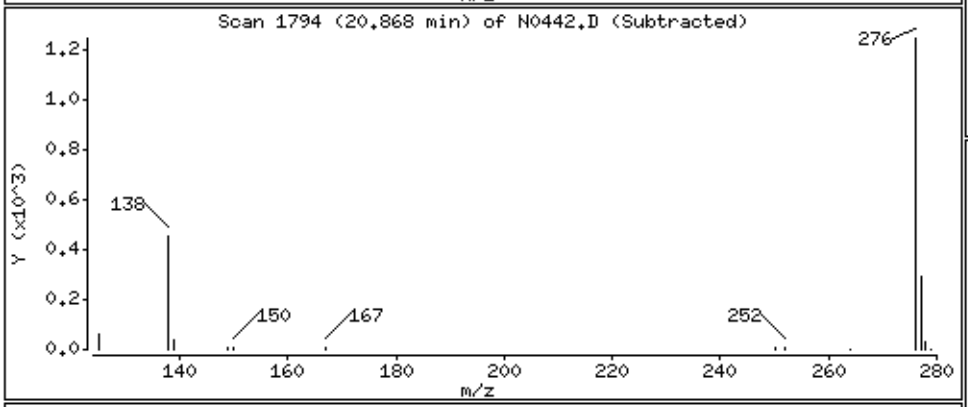
Volume Injected (uL): 1.0 Operator: EP

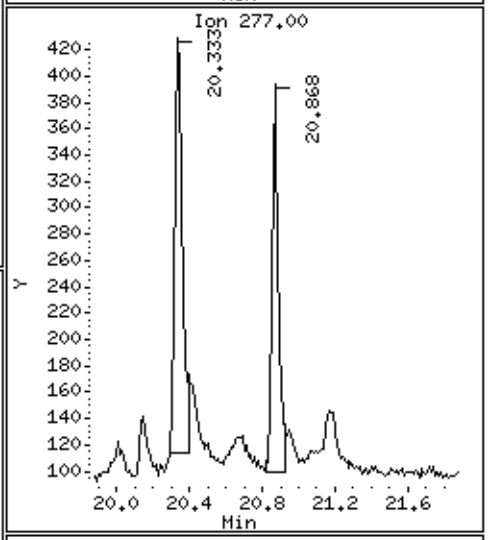
Column phase: Rxi-SVOCms Column diameter: 0.25

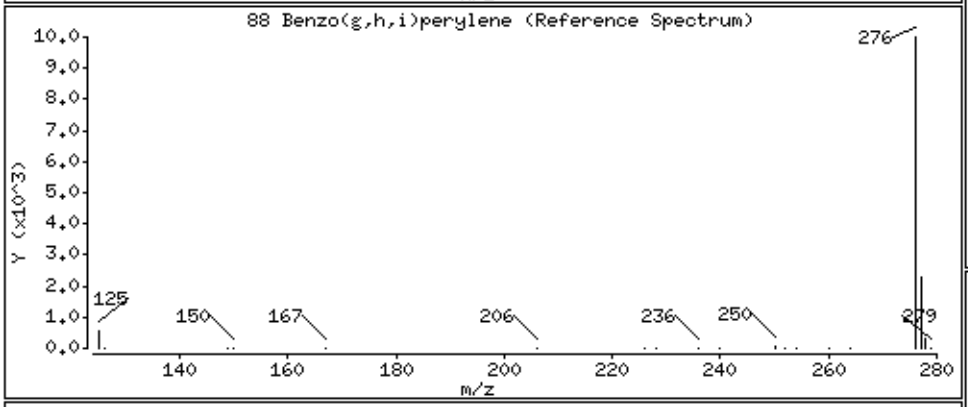
88 Benzo(g,h,i)perylene Concentration: 0.0922 ug/L

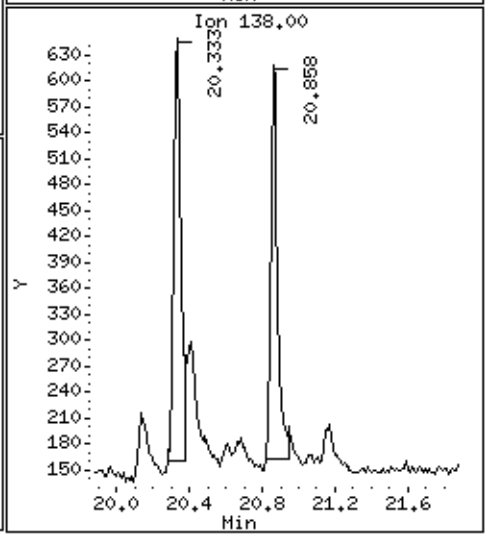


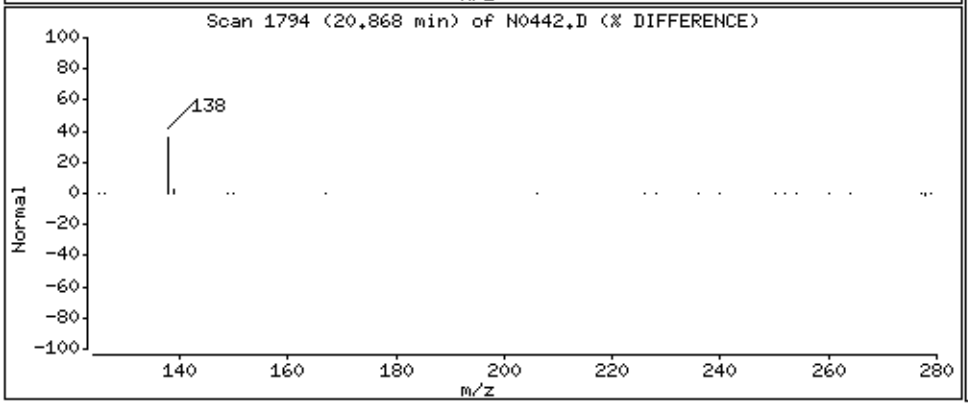








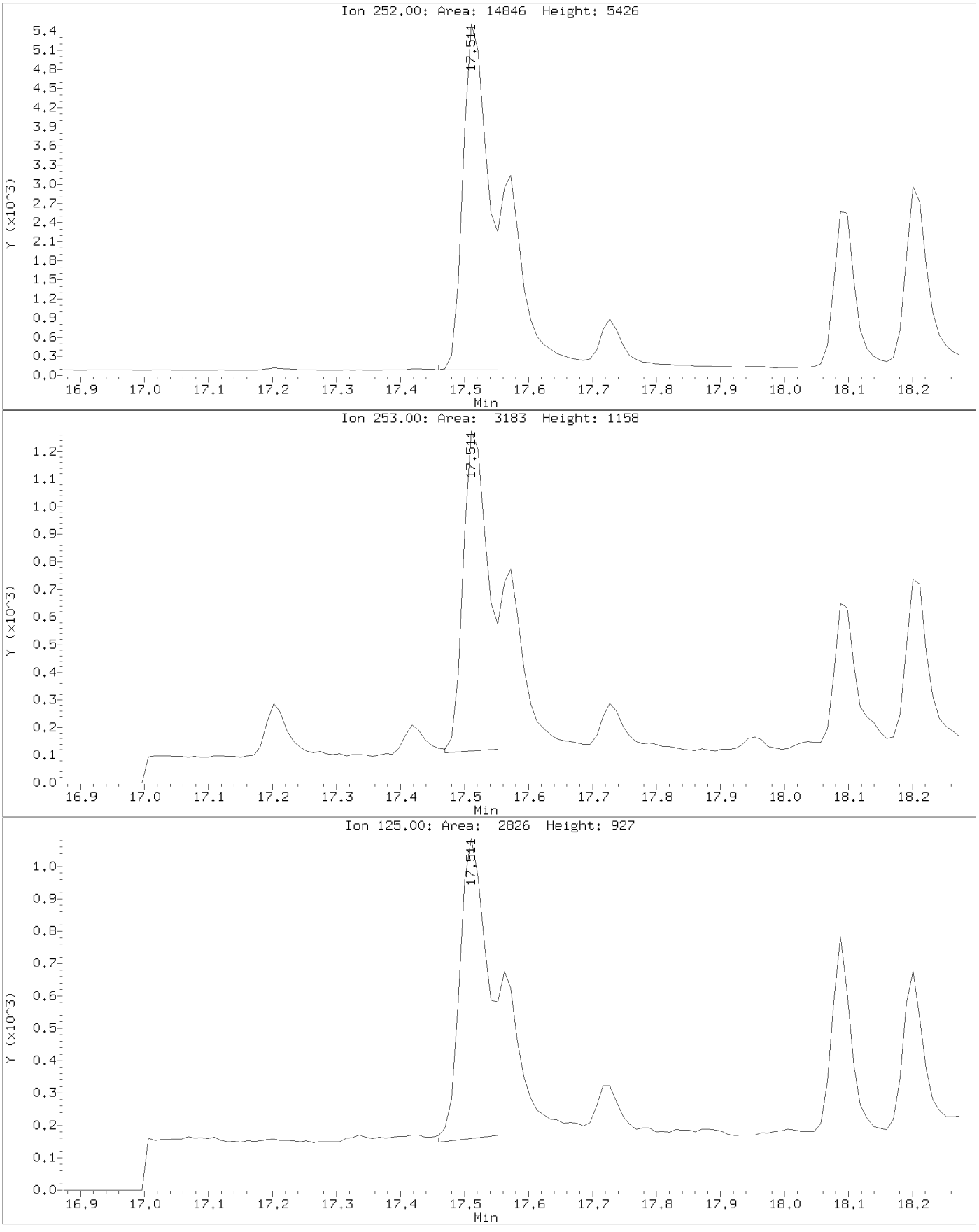




Data File: \\target_server\gg\chem\gcms-n.i\N121123.b\N0442.D
Injection Date: 11-DEC-2023 16:47
Instrument: gcms-n.i
Client Sample ID: Y-BRMW3-47-62-11092

Compound: Benzo(k)fluoranthene
CAS Number: 207-08-9

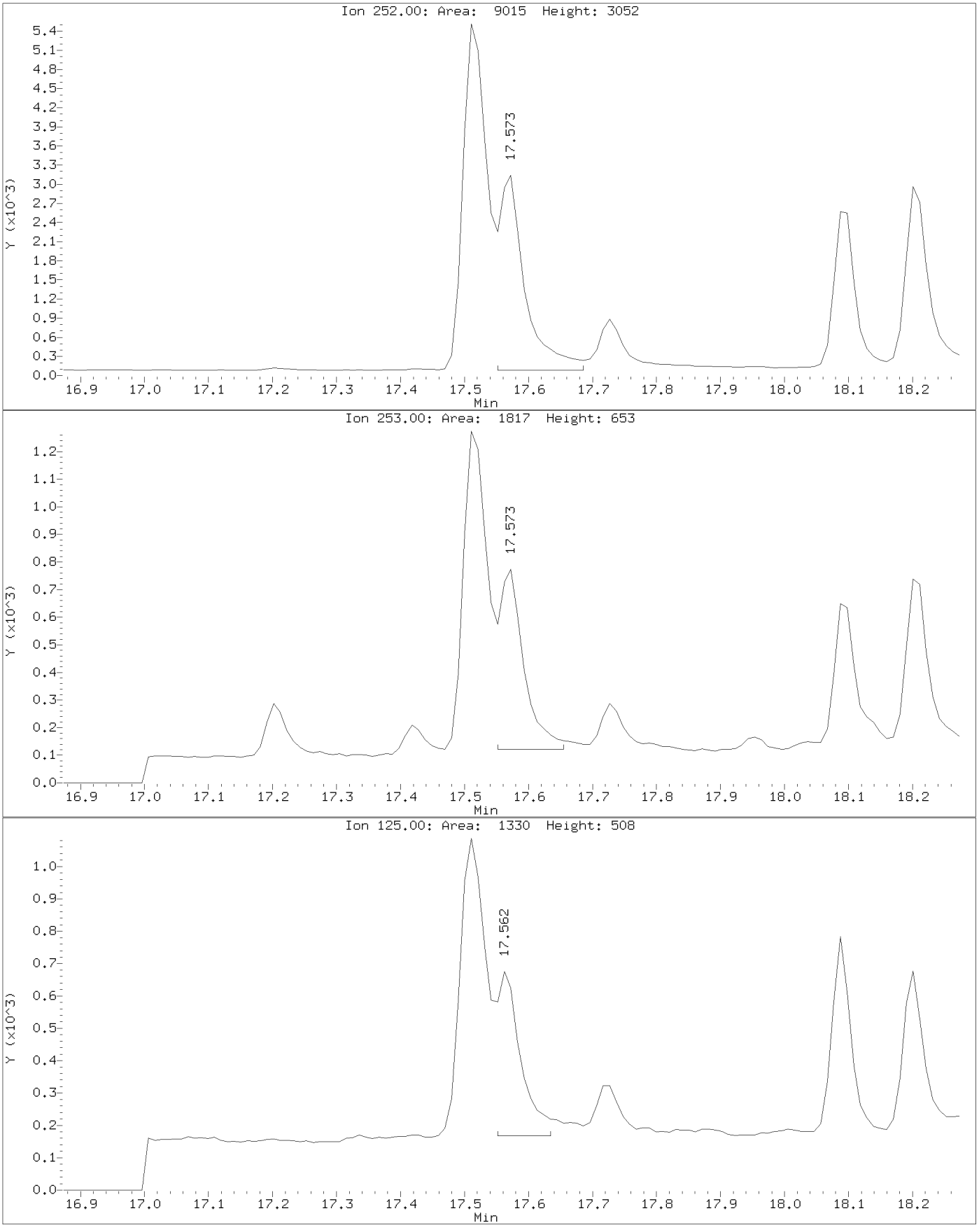
BEFORE MANUAL INTEGRATION



Data File: \\target_server\gg\chem\gcms-n.i\N121123.b\N0442.D
Injection Date: 11-DEC-2023 16:47
Instrument: gcms-n.i
Client Sample ID: Y-BRMW3-47-62-11092

Compound: Benzo(k)fluoranthene
CAS Number: 207-08-9

AFTER MANUAL INTEGRATION



Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

SDG: SQ6238
Lab ID: SQ6238-5
Client ID: SY-BRMW3-145-155-110923
Matrix: AQ
Lab File ID: N0443.D

Sample Date: 09-NOV-23
Extract Date: 16-NOV-23
Extracted By: AN/CMW
Extraction Method: SW846 3510C
Lab Prep Batch: WG345531

Report Date: 29-DEC-23
Analysis Date: 11-DEC-23
Analyst: EP
Analysis Method: SW846 8270D SIM
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	0.094	ug/L	1	.2	0.19	0.060	0.094
2-Methylnaphthalene	U	0.094	ug/L	1	.2	0.19	0.073	0.094
Acenaphthylene	U	0.094	ug/L	1	.2	0.19	0.051	0.094
Acenaphthene	U	0.094	ug/L	1	.2	0.19	0.060	0.094
Fluorene	U	0.094	ug/L	1	.2	0.19	0.058	0.094
Phenanthrene	U	0.094	ug/L	1	.2	0.19	0.048	0.094
Anthracene	U	0.094	ug/L	1	.2	0.19	0.042	0.094
Fluoranthene	U	0.094	ug/L	1	.2	0.19	0.069	0.094
Pyrene	U	0.094	ug/L	1	.2	0.19	0.056	0.094
Benzo(a)anthracene	U	0.094	ug/L	1	.2	0.19	0.043	0.094
Chrysene	U	0.094	ug/L	1	.2	0.19	0.034	0.094
Benzo(b)Fluoranthene	U	0.094	ug/L	1	.2	0.19	0.084	0.094
Benzo(k)fluoranthene	U	0.094	ug/L	1	.2	0.19	0.046	0.094
Benzo(a)pyrene	U	0.094	ug/L	1	.2	0.19	0.062	0.094
Indeno(1,2,3-cd)pyrene	U	0.094	ug/L	1	.2	0.19	0.049	0.094
Dibenzo(a,h)anthracene	U	0.094	ug/L	1	.2	0.19	0.066	0.094
Benzo(g,h,i)perylene	U	0.094	ug/L	1	.2	0.19	0.061	0.094
2-Methylnaphthalene-D10		88.1	%					
Fluorene-D10		88.4	%					
Pyrene-D10		110.	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029
http://www.katahdinlab.com

Data File: \\target_server\gg\chem\gcms-n.i\N121123.b\N0443.D
Report Date: 29-Dec-2023 15:34

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-n.i\N121123.b\N0443.D
Lab Smp Id: SQ6238-5 Client Smp ID: Y-BRMW3-145-155-110
Inj Date : 11-DEC-2023 17:19
Operator : EP Inst ID: gcms-n.i
Smp Info : SQ6238-5
Misc Info : WG346778,WG345531,WG346503-4
Comment :
Method : \\target_server\gg\chem\gcms-n.i\N121123.b\NSPSIM95.m
Meth Date : 12-Dec-2023 08:48 epelletier Quant Type: ISTD
Cal Date : 07-DEC-2023 14:42 Cal File: N0385.D
Als bottle: 12
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pahplus.sub
Target Version: 4.12
Processing Host: INSPIRON1

Concentration Formula: Amt * DF * Uf*(Vt/Vo*Vi)*1000 * CpndVariable

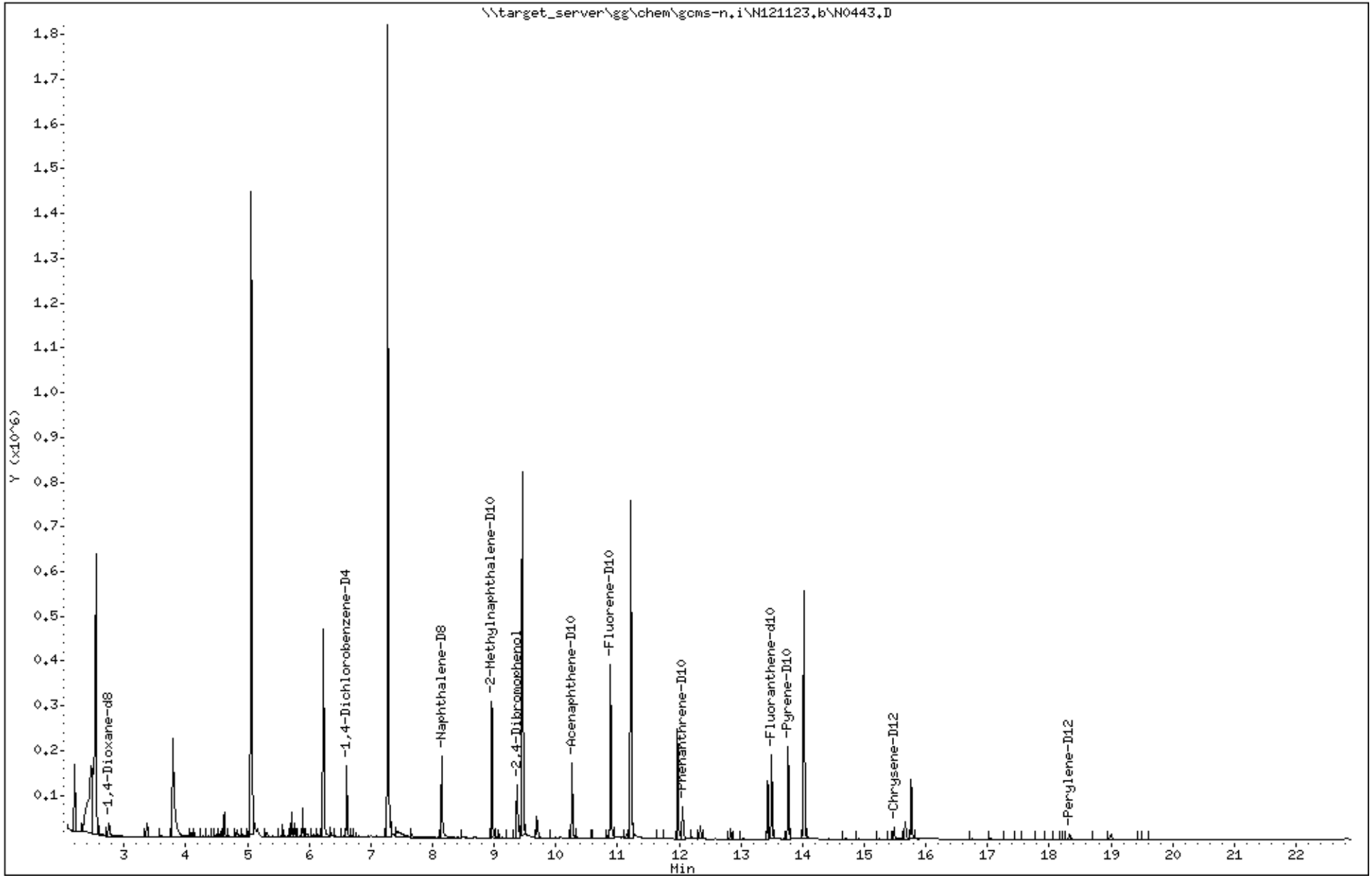
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.060	Sample Volume (L)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/L)	REVIEW CODE
$	1 1,4-Dioxane-d8	96	2.752	2.742	(0.268)	30169	0.84322	0.795(a)	
*	10 1,4-Dichlorobenzene-D4	152	6.614	6.604	(1.000)	48250	0.80000	(aQ)	
*	27 Naphthalene-D8	136	8.147	8.125	(1.000)	174361	0.80000	(a)	
$	33 2-Methylnaphthalene-D10	152	8.975	8.954	(1.102)	201573	1.76136	1.66	
$	38 2,4-Dibromophenol	252	9.366	9.346	(0.913)	115216	4.22763	3.99	
*	48 Acenaphthene-D10	164	10.264	10.254	(1.000)	77629	0.80000	(a)	
$	56 Fluorene-D10	174	10.886	10.887	(1.061)	179733	1.76919	1.67	
*	66 Phenanthrene-D10	188	12.062	12.052	(1.000)	94018	0.80000	(a)	
$	71 Fluoranthene-d10	212	13.501	13.502	(1.119)	144338	1.88876	1.78	
$	73 Pyrene-D10	212	13.766	13.777	(0.889)	158583	2.19022	2.07	
*	78 Chrysene-D12	240	15.488	15.478	(1.000)	30945	0.80000	(a)	
*	85 Perylene-D12	264	18.324	18.324	(1.000)	24170	0.80000	(a)	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.

Data File: \\target_server\gg\chem\gcms-n.i\N121123.b\N0443.D
Date : 11-DEC-2023 17:19
Client ID: Y-BRMW3-145-155-110
Instrument: gcms-n.i
Sample Info: SQ6238-5
Volume Injected (uL): 1.0
Operator: EP
Column phase: Rxi-SVOCms
Column diameter: 0.25



Katahdin Analytical Services SQ6238 Page 225 of 875

Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

SDG: SQ6238
Lab ID: SQ6238-6
Client ID: SY-BRMW3-287-297-110923
Matrix: AQ
Lab File ID: N0444.D

Sample Date: 09-NOV-23
Extract Date: 16-NOV-23
Extracted By: AN/CMW
Extraction Method: SW846 3510C
Lab Prep Batch: WG345531

Report Date: 29-DEC-23
Analysis Date: 11-DEC-23
Analyst: EP
Analysis Method: SW846 8270D SIM
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	0.094	ug/L	1	.2	0.19	0.060	0.094
2-Methylnaphthalene	U	0.094	ug/L	1	.2	0.19	0.073	0.094
Acenaphthylene	U	0.094	ug/L	1	.2	0.19	0.051	0.094
Acenaphthene	U	0.094	ug/L	1	.2	0.19	0.060	0.094
Fluorene	U	0.094	ug/L	1	.2	0.19	0.058	0.094
Phenanthrene	U	0.094	ug/L	1	.2	0.19	0.048	0.094
Anthracene	U	0.094	ug/L	1	.2	0.19	0.042	0.094
Fluoranthene	U	0.094	ug/L	1	.2	0.19	0.069	0.094
Pyrene	U	0.094	ug/L	1	.2	0.19	0.056	0.094
Benzo(a)anthracene	U	0.094	ug/L	1	.2	0.19	0.043	0.094
Chrysene	U	0.094	ug/L	1	.2	0.19	0.034	0.094
Benzo(b)Fluoranthene	U	0.094	ug/L	1	.2	0.19	0.084	0.094
Benzo(k)fluoranthene	U	0.094	ug/L	1	.2	0.19	0.046	0.094
Benzo(a)pyrene	U	0.094	ug/L	1	.2	0.19	0.062	0.094
Indeno(1,2,3-cd)pyrene	U	0.094	ug/L	1	.2	0.19	0.049	0.094
Dibenzo(a,h)anthracene	U	0.094	ug/L	1	.2	0.19	0.066	0.094
Benzo(g,h,i)perylene	U	0.094	ug/L	1	.2	0.19	0.061	0.094
2-Methylnaphthalene-D10		82.8	%					
Fluorene-D10		80.0	%					
Pyrene-D10		87.0	%					

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Data File: \\target_server\gg\chem\gcms-n.i\N121123.b\N0444.D
Report Date: 29-Dec-2023 15:34

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-n.i\N121123.b\N0444.D
Lab Smp Id: SQ6238-6 Client Smp ID: Y-BRMW3-287-297-110
Inj Date : 11-DEC-2023 17:51
Operator : EP Inst ID: gcms-n.i
Smp Info : SQ6238-6
Misc Info : WG346778,WG345531,WG346503-4
Comment :
Method : \\target_server\gg\chem\gcms-n.i\N121123.b\NSPSIM95.m
Meth Date : 12-Dec-2023 08:48 epelletier Quant Type: ISTD
Cal Date : 07-DEC-2023 14:42 Cal File: N0385.D
Als bottle: 13
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pahplus.sub
Target Version: 4.12
Processing Host: INSPIRON1

Concentration Formula: Amt * DF * Uf*(Vt/Vo*Vi)*1000 * CpndVariable

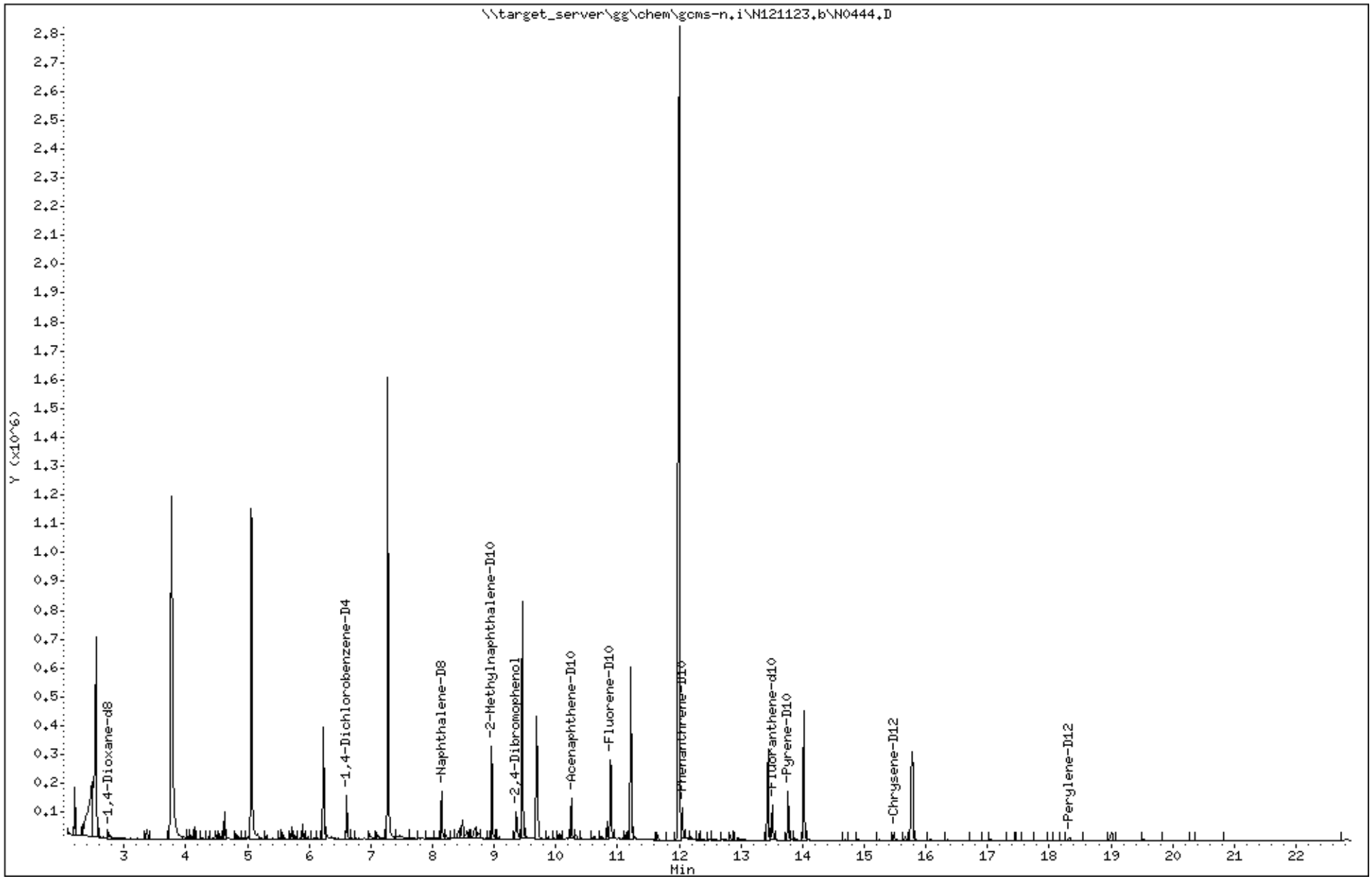
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.060	Sample Volume (L)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/L)	REVIEW CODE
$	1 1,4-Dioxane-d8	96	2.752	2.742	(0.268)	14255	0.46296	0.437(aR)	
*	10 1,4-Dichlorobenzene-D4	152	6.614	6.604	(1.000)	48890	0.80000	(aQ)	
*	27 Naphthalene-D8	136	8.147	8.125	(1.000)	163999	0.80000	(a)	
$	33 2-Methylnaphthalene-D10	152	8.964	8.954	(1.100)	178341	1.65682	1.56	
$	38 2,4-Dibromophenol	252	9.356	9.346	(0.912)	89352	3.80964	3.59	
*	48 Acenaphthene-D10	164	10.253	10.254	(1.000)	66808	0.80000	(a)	
$	56 Fluorene-D10	174	10.897	10.887	(1.063)	139868	1.59978	1.51	
*	66 Phenanthrene-D10	188	12.051	12.052	(1.000)	83375	0.80000	(a)	
$	71 Fluoranthene-d10	212	13.511	13.502	(1.121)	110185	1.62590	1.53	
$	73 Pyrene-D10	212	13.766	13.777	(0.889)	120263	1.74074	1.64	
*	78 Chrysene-D12	240	15.477	15.478	(1.000)	29527	0.80000	(a)	
*	85 Perylene-D12	264	18.324	18.324	(1.000)	19737	0.80000	(a)	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.

Data File: \\target_server\gg\chem\gcms-n.i\N121123.b\N0444.D
Date : 11-DEC-2023 17:51
Client ID: Y-BRMW3-287-297-110
Instrument: gcms-n.i
Sample Info: SQ6238-6
Volume Injected (uL): 1.0
Operator: EP
Column phase: Rxi-SVOCms
Column diameter: 0.25



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ANALYTICAL SERVICES

Report of Analytical Results

SDG: SQ6238
Lab ID: SQ6238-7
Client ID: SY-BRMW4-291-301-110923
Matrix: AQ
Lab File ID: N0445.D

Sample Date: 09-NOV-23
Extract Date: 16-NOV-23
Extracted By: AN/CMW
Extraction Method: SW846 3510C
Lab Prep Batch: WG345531

Report Date: 29-DEC-23
Analysis Date: 11-DEC-23
Analyst: EP
Analysis Method: SW846 8270D SIM
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	0.094	ug/L	1	.2	0.19	0.060	0.094
2-Methylnaphthalene	U	0.094	ug/L	1	.2	0.19	0.073	0.094
Acenaphthylene	U	0.094	ug/L	1	.2	0.19	0.051	0.094
Acenaphthene	U	0.094	ug/L	1	.2	0.19	0.060	0.094
Fluorene	U	0.094	ug/L	1	.2	0.19	0.058	0.094
Phenanthrene	U	0.094	ug/L	1	.2	0.19	0.048	0.094
Anthracene	U	0.094	ug/L	1	.2	0.19	0.042	0.094
Fluoranthene	J	0.092	ug/L	1	.2	0.19	0.069	0.094
Pyrene	J	0.10	ug/L	1	.2	0.19	0.056	0.094
Benzo(a)anthracene	U	0.094	ug/L	1	.2	0.19	0.043	0.094
Chrysene	J	0.063	ug/L	1	.2	0.19	0.034	0.094
Benzo(b)Fluoranthene	J	0.099	ug/L	1	.2	0.19	0.084	0.094
Benzo(k)fluoranthene	U	0.094	ug/L	1	.2	0.19	0.046	0.094
Benzo(a)pyrene	U	0.094	ug/L	1	.2	0.19	0.062	0.094
Indeno(1,2,3-cd)pyrene	J	0.050	ug/L	1	.2	0.19	0.049	0.094
Dibenzo(a,h)anthracene	U	0.094	ug/L	1	.2	0.19	0.066	0.094
Benzo(g,h,i)perylene	U	0.094	ug/L	1	.2	0.19	0.061	0.094
2-Methylnaphthalene-D10		78.6	%					
Fluorene-D10		79.0	%					
Pyrene-D10		101.	%					

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Data File: \\target_server\gg\chem\gcms-n.i\N121123.b\N0445.D
Report Date: 29-Dec-2023 15:34

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-n.i\N121123.b\N0445.D
Lab Smp Id: SQ6238-7 Client Smp ID: Y-BRMW4-291-301-110
Inj Date : 11-DEC-2023 18:24
Operator : EP Inst ID: gcms-n.i
Smp Info : SQ6238-7
Misc Info : WG346778,WG345531,WG346503-4
Comment :
Method : \\target_server\gg\chem\gcms-n.i\N121123.b\NSPSIM95.m
Meth Date : 12-Dec-2023 08:48 epelletier Quant Type: ISTD
Cal Date : 07-DEC-2023 14:42 Cal File: N0385.D
Als bottle: 14
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pahplus.sub
Target Version: 4.12
Processing Host: INSPIRON1

Concentration Formula: Amt * DF * Uf*(Vt/Vo*Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.060	Sample Volume (L)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

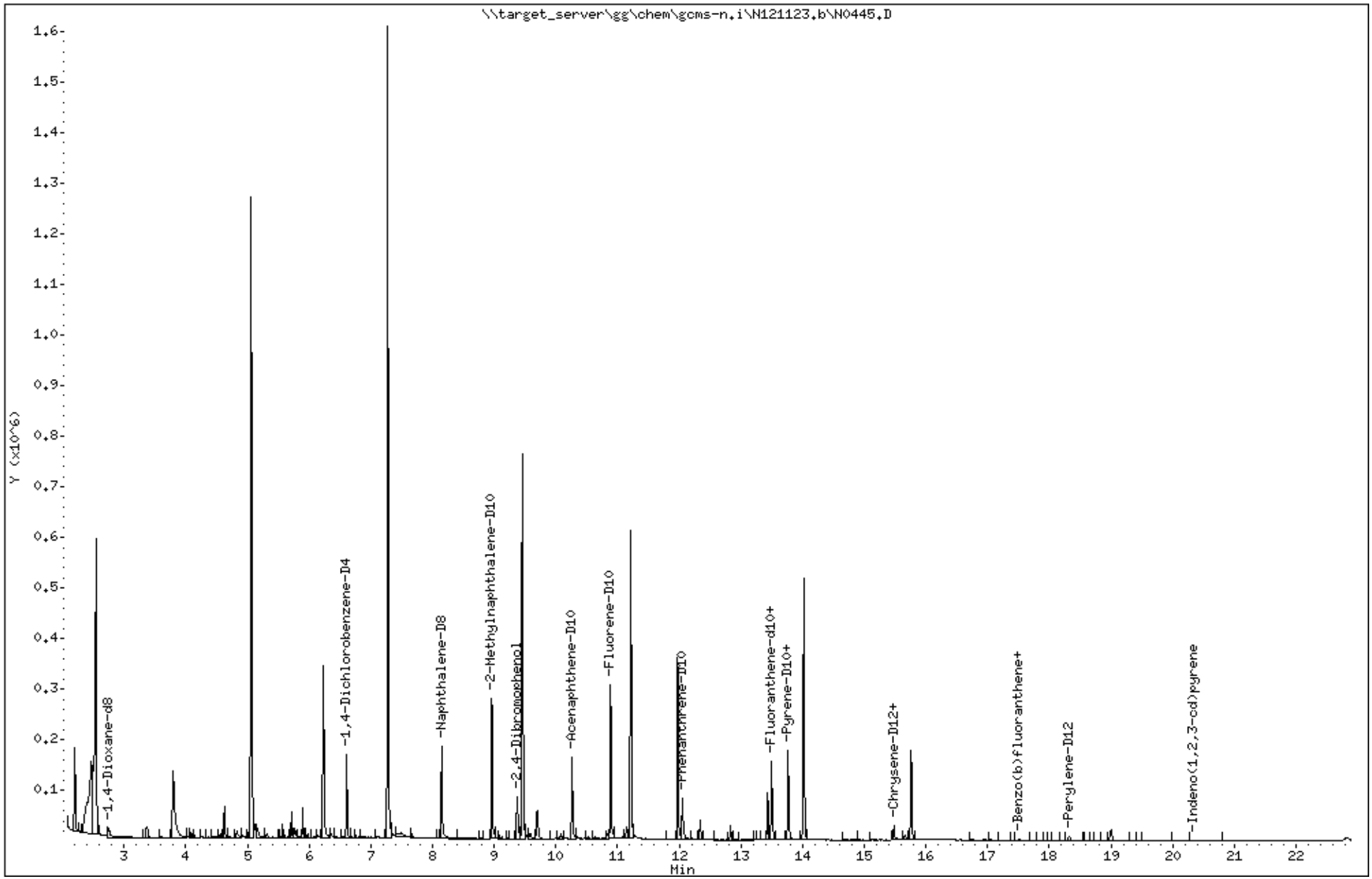
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/L)	REVIEW CODE
$	1 1,4-Dioxane-d8	96	2.752	2.742	(0.268)	17256	0.48716	0.460(aR)	
*	10 1,4-Dichlorobenzene-D4	152	6.614	6.604	(1.000)	50221	0.80000	(aQ)	
*	27 Naphthalene-D8	136	8.147	8.125	(1.000)	178140	0.80000	(a)	
$	33 2-Methylnaphthalene-D10	152	8.975	8.954	(1.102)	183687	1.57102	1.48	
$	38 2,4-Dibromophenol	252	9.377	9.346	(0.914)	91433	3.38875	3.20	
*	48 Acenaphthene-D10	164	10.264	10.254	(1.000)	76855	0.80000	(a)	
$	56 Fluorene-D10	174	10.886	10.887	(1.061)	158851	1.57939	1.49	
*	66 Phenanthrene-D10	188	12.051	12.052	(1.000)	90585	0.80000	(a)	
$	71 Fluoranthene-d10	212	13.501	13.502	(1.120)	115662	1.57087	1.48	
	72 Fluoranthene	202	13.522	13.522	(1.122)	10335	0.09721	0.0917(a)	
$	73 Pyrene-D10	212	13.766	13.777	(0.889)	127446	2.02215	1.91	
	74 Pyrene	202	13.786	13.797	(0.891)	9004	0.10813	0.102(a)	
*	78 Chrysene-D12	240	15.478	15.478	(1.000)	26936	0.80000	(a)	
	79 Chrysene	228	15.518	15.529	(1.003)	3707	0.06633	0.0626(a)	
	82 Benzo(b)fluoranthene	252	17.510	17.521	(0.956)	3411	0.10523	0.0993(a)	
*	85 Perylene-D12	264	18.324	18.324	(1.000)	17772	0.80000	(a)	
	86 Indeno(1,2,3-cd)pyrene	276	20.332	20.343	(1.110)	1205	0.05244	0.0495(a)	

Data File: \\target_server\gg\chem\gcms-n.i\N121123.b\N0445.D
Report Date: 29-Dec-2023 15:34

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.

Data File: \\target_server\gg\chem\gcms-n.i\N121123.b\N0445.D
Date : 11-DEC-2023 18:24
Client ID: Y-BRMW4-291-301-110
Instrument: gcms-n.i
Sample Info: SQ6238-7
Volume Injected (uL): 1.0
Operator: EP
Column phase: Rxi-SVOCms
Column diameter: 0.25



Data File: \\target_server\gg\chem\gcms-n.i\N121123.b\N0445.D

Date : 11-DEC-2023 18:24

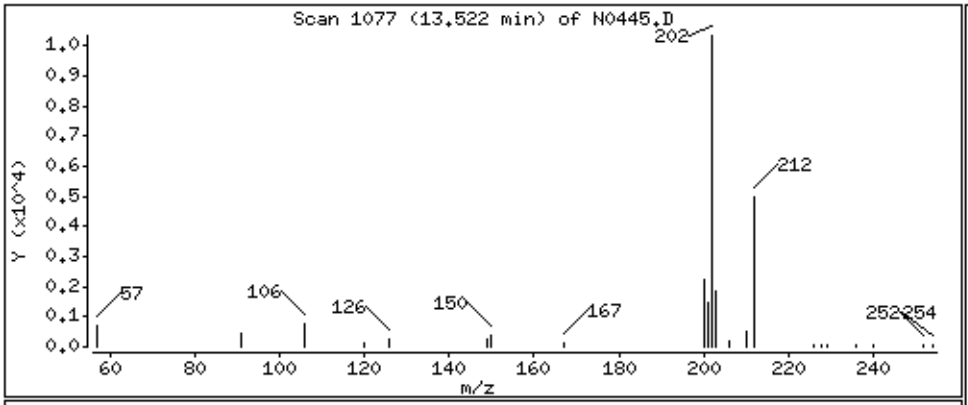
Client ID: Y-BRMW4-291-301-110 Instrument: gcms-n.i

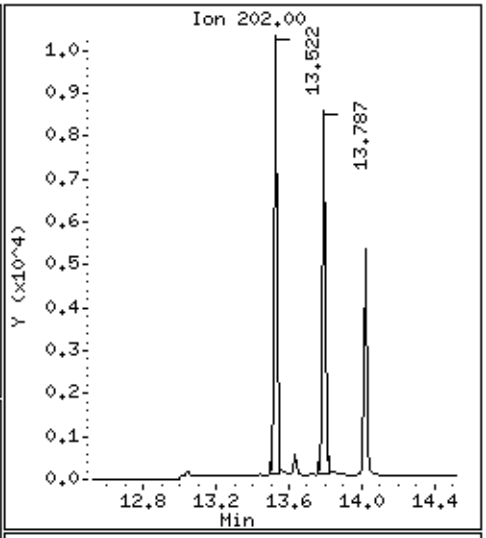
Sample Info: SQ6238-7

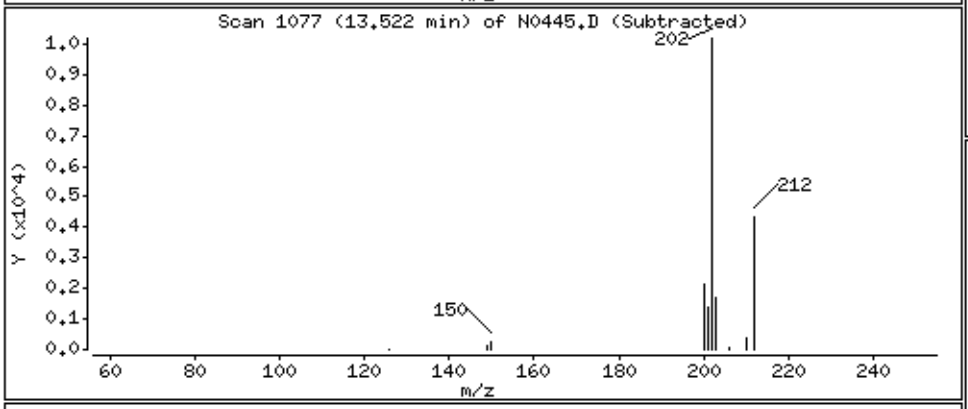
Volume Injected (uL): 1.0 Operator: EP

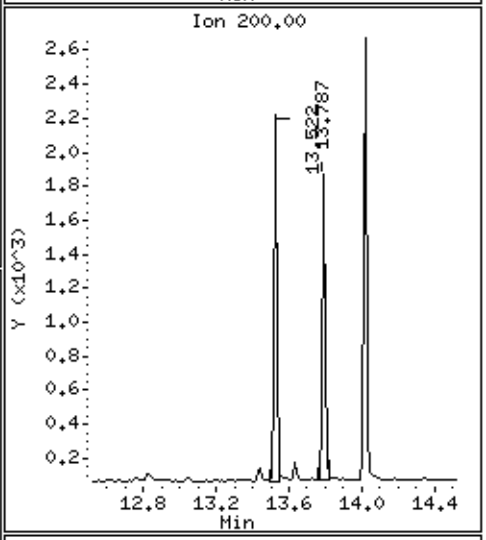
Column phase: Rxi-SVOCms Column diameter: 0.25

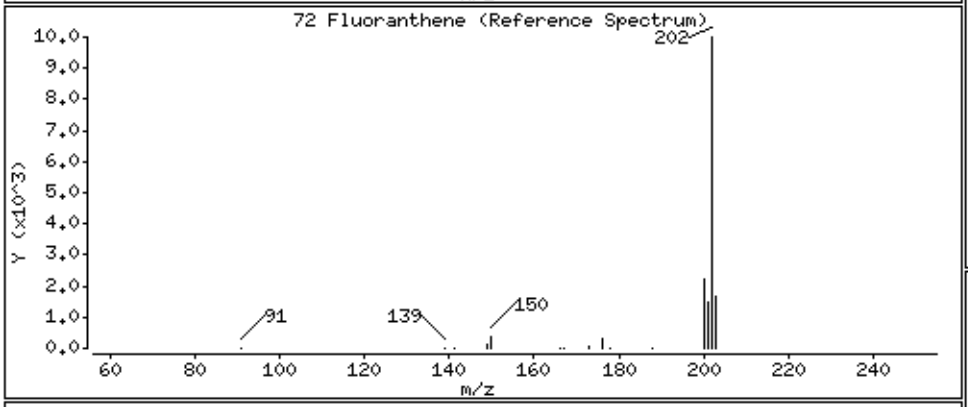
72 Fluoranthene Concentration: 0.0917 ug/L

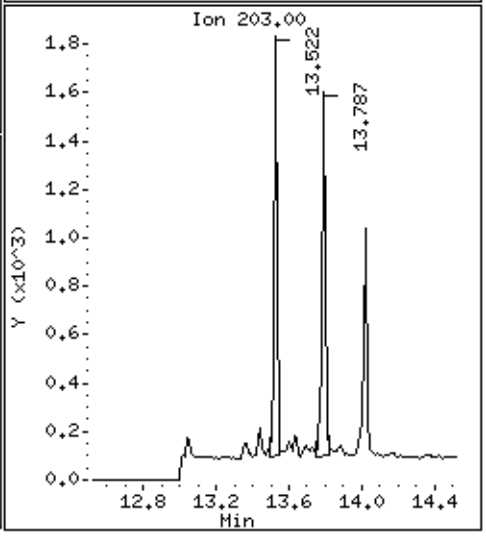


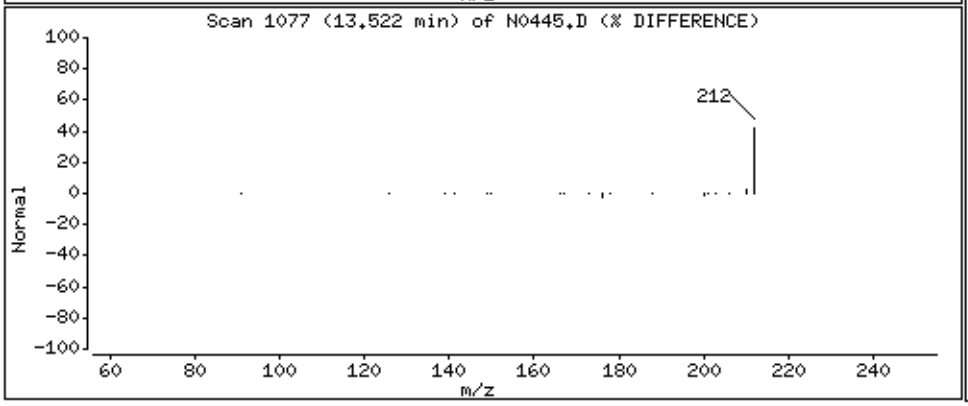












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Date : 11-DEC-2023 18:24

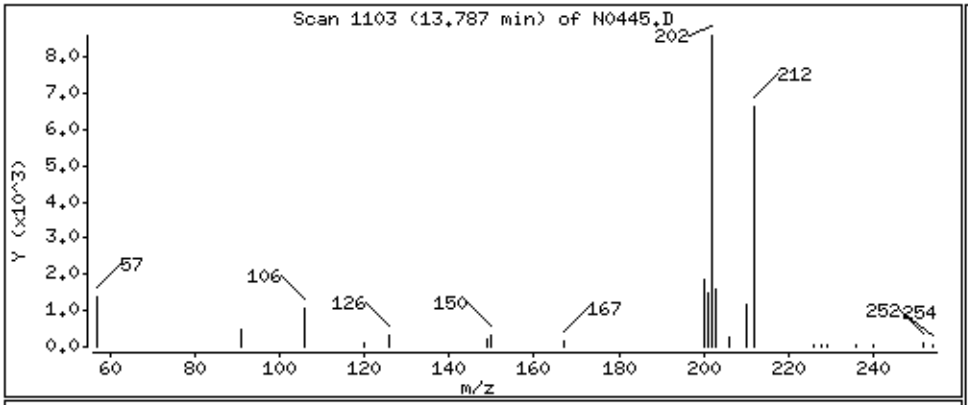
Client ID: Y-BRMW4-291-301-110 Instrument: gcms-n.i

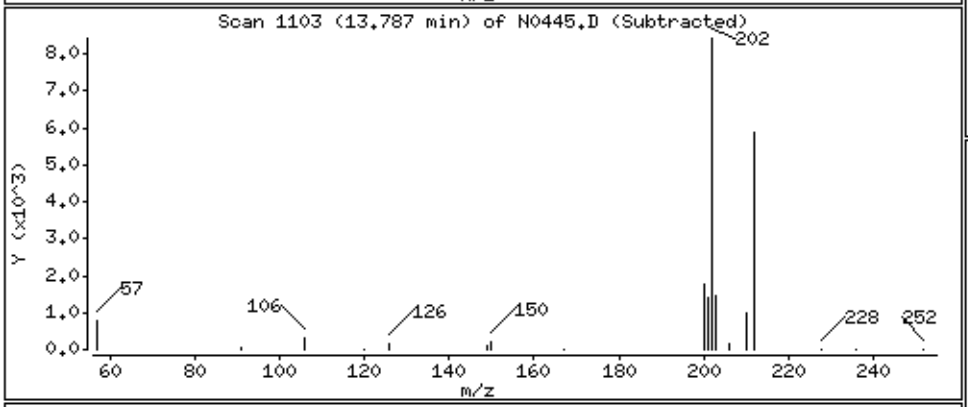
Sample Info: SQ6238-7

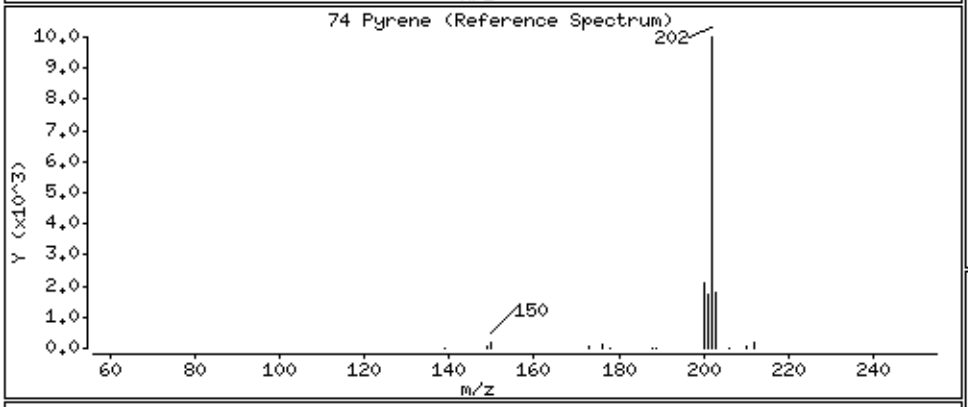
Volume Injected (uL): 1.0 Operator: EP

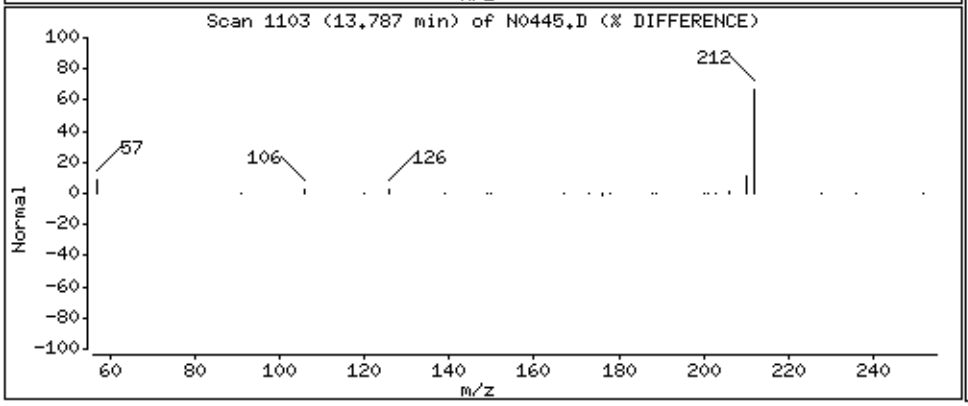
Column phase: Rxi-SVOCms Column diameter: 0.25

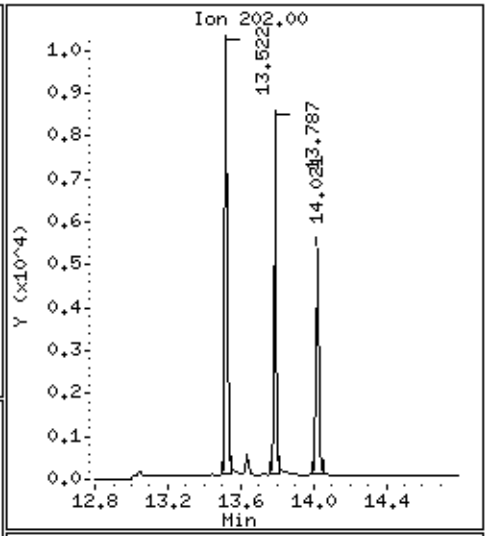
74 Pyrene Concentration: 0.102 ug/L

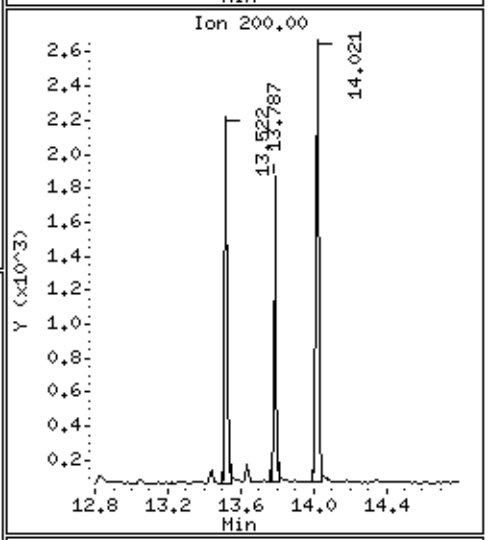


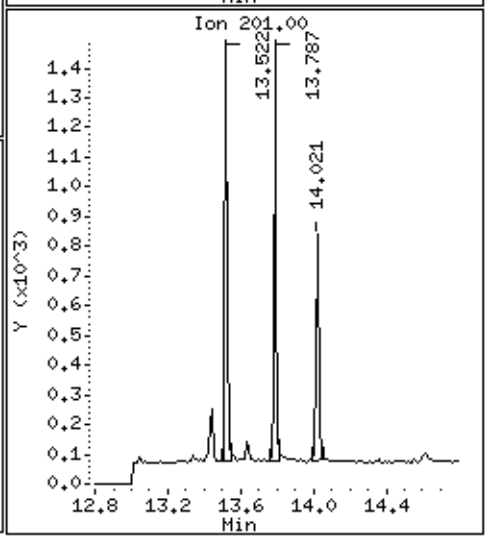












Data File: \\target_server\gg\chem\gcms-n.i\N121123.b\N0445.D

Date : 11-DEC-2023 18:24

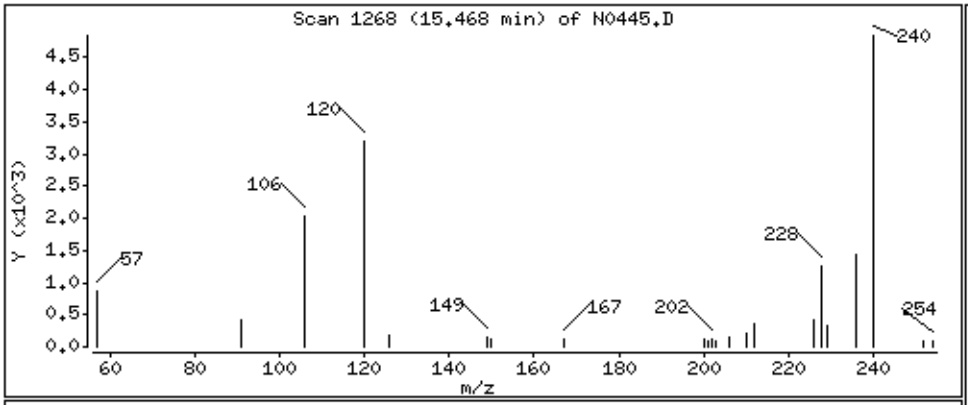
Client ID: Y-BRMW4-291-301-110 Instrument: gcms-n.i

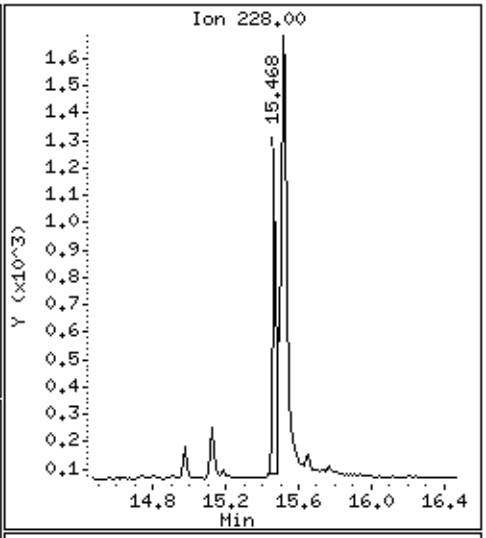
Sample Info: SQ6238-7

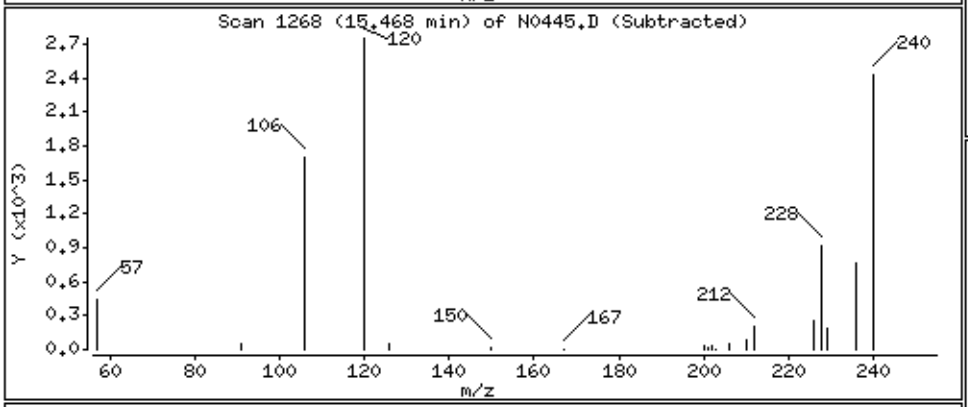
Volume Injected (uL): 1.0 Operator: EP

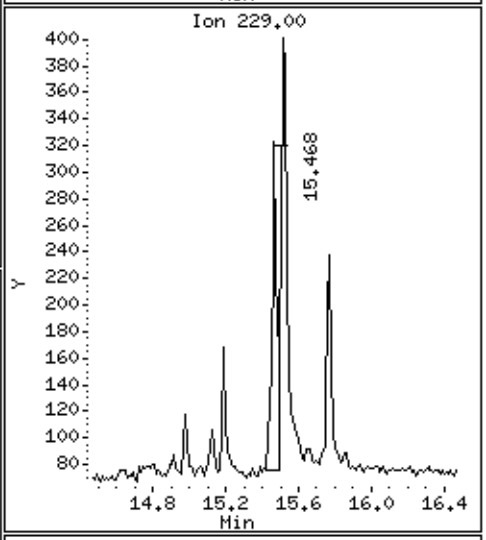
Column phase: Rxi-SVOCms Column diameter: 0.25

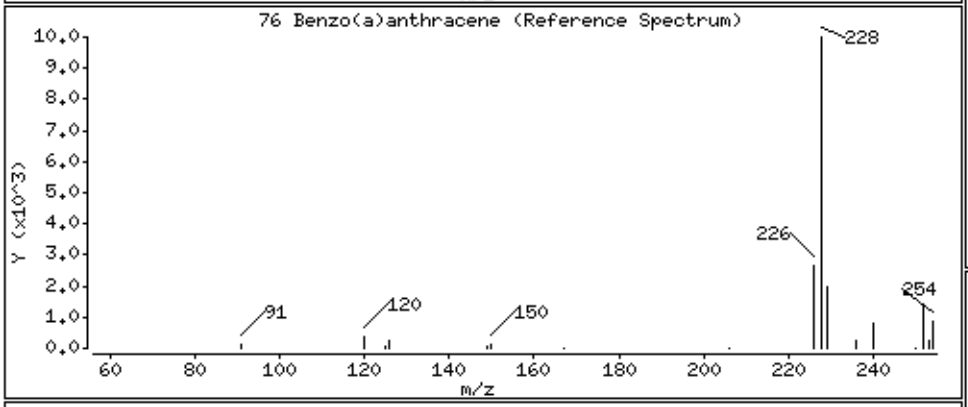
76 Benzo(a)anthracene Concentration: 0.0390 ug/L

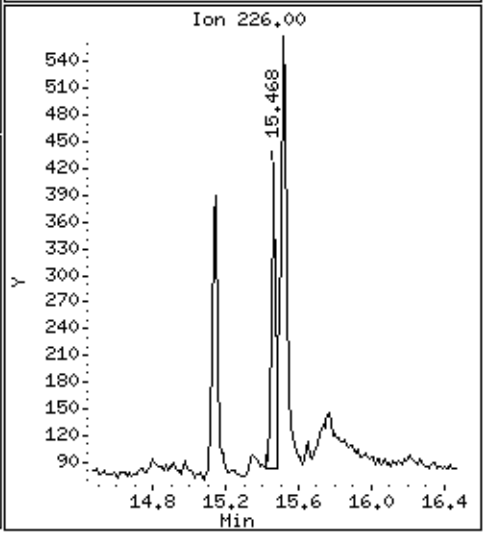


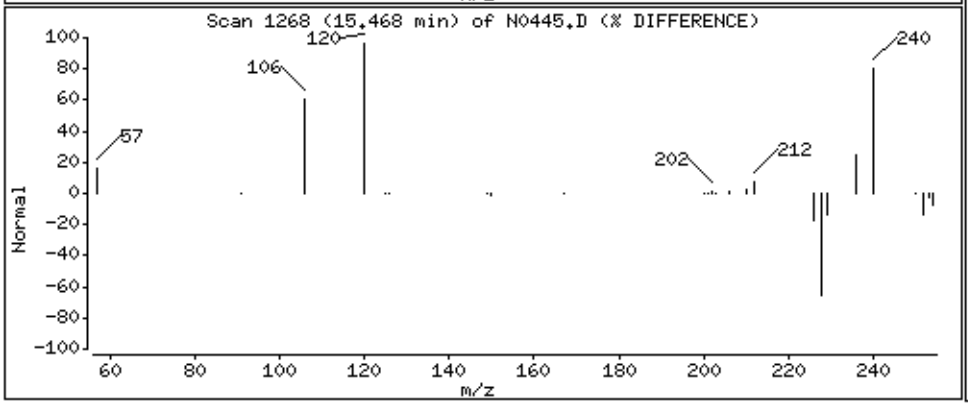












Data File: \\target_server\gg\chem\gcms-n.i\N121123.b\N0445.D

Date : 11-DEC-2023 18:24

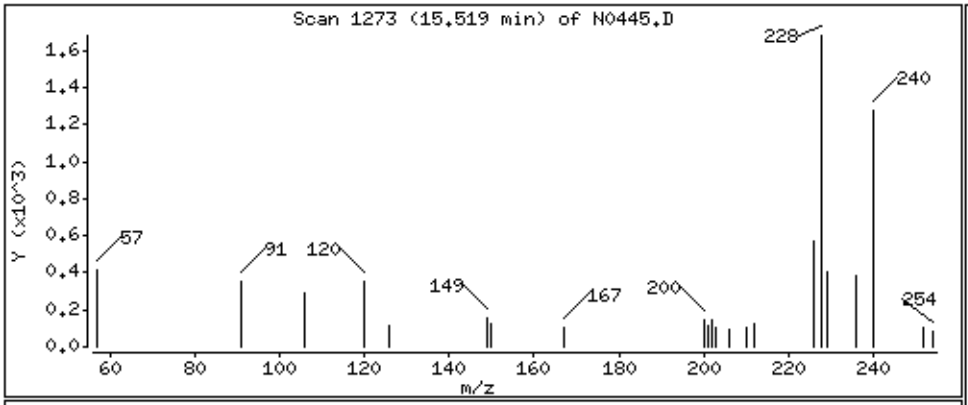
Client ID: Y-BRMW4-291-301-110 Instrument: gcms-n.i

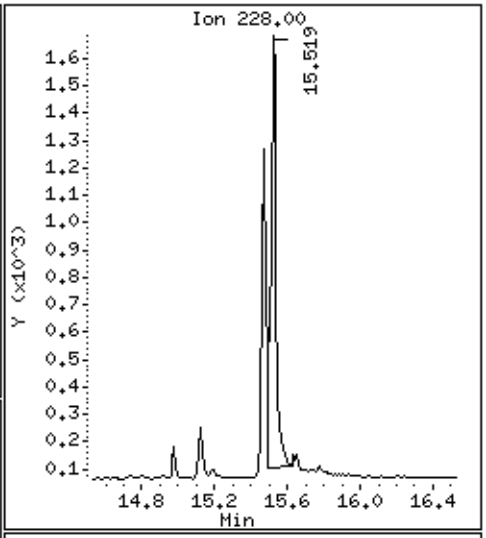
Sample Info: SQ6238-7

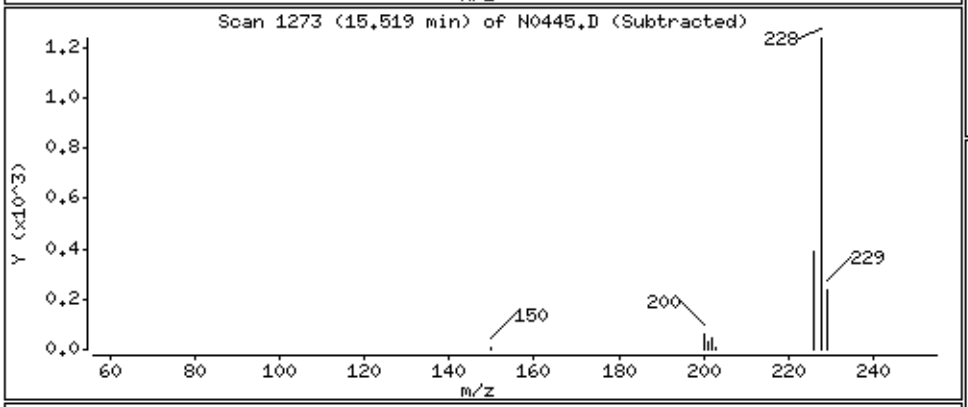
Volume Injected (uL): 1.0 Operator: EP

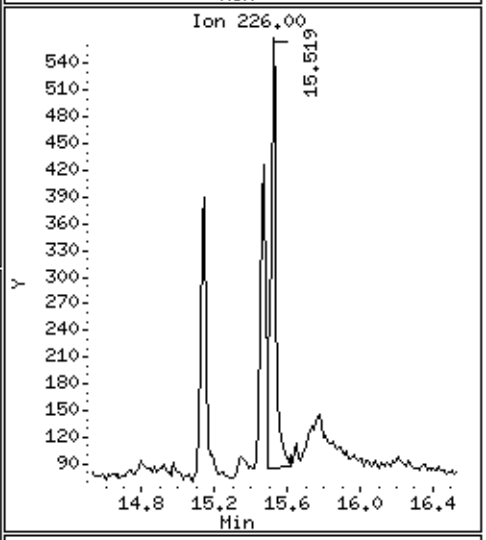
Column phase: Rxi-SVOCms Column diameter: 0.25

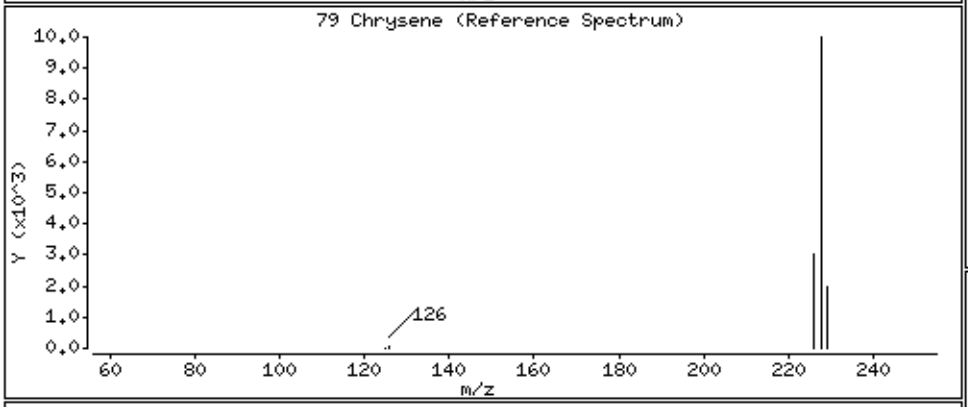
79 Chrysene Concentration: 0.0626 ug/L

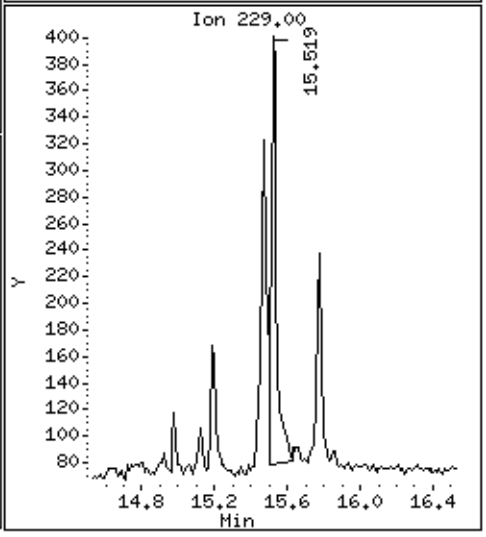


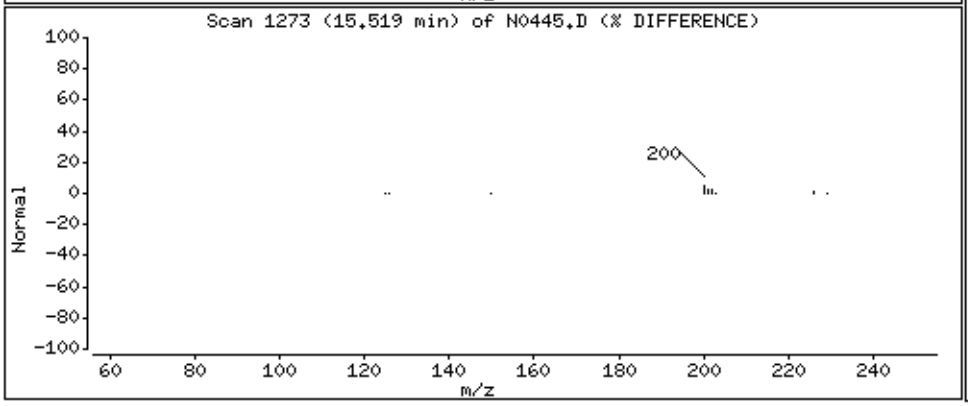












Data File: \\target_server\gg\chem\gcms-n.i\N121123.b\N0445.D

Date : 11-DEC-2023 18:24

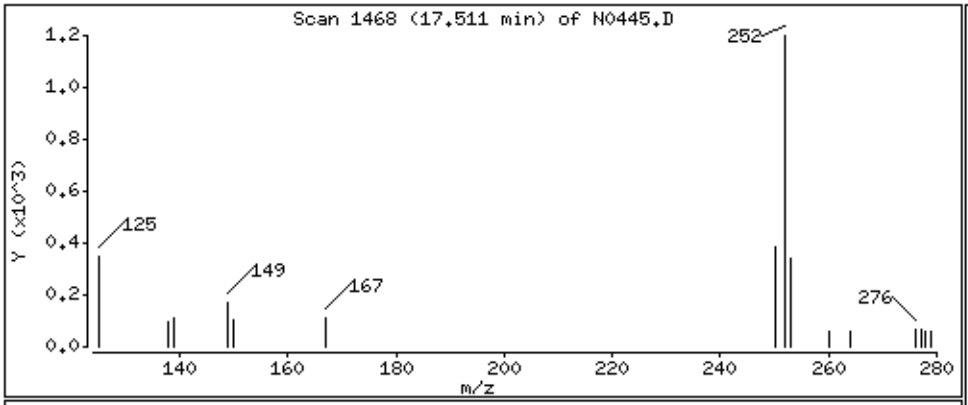
Client ID: Y-BRMW4-291-301-110 Instrument: gcms-n.i

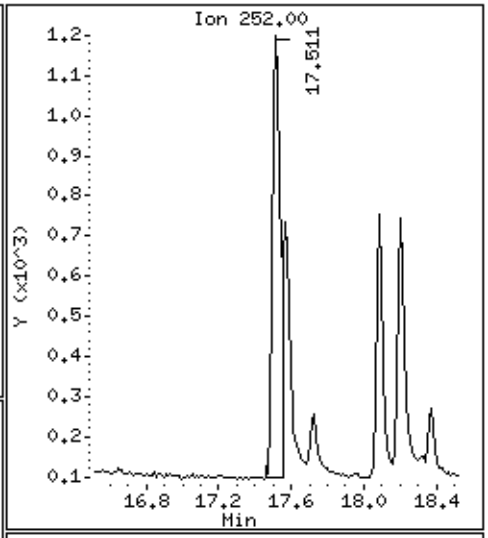
Sample Info: SQ6238-7

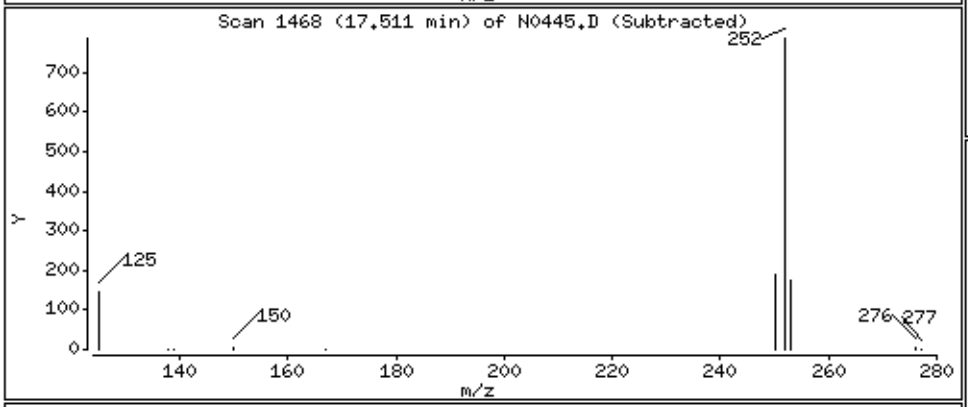
Volume Injected (uL): 1.0 Operator: EP

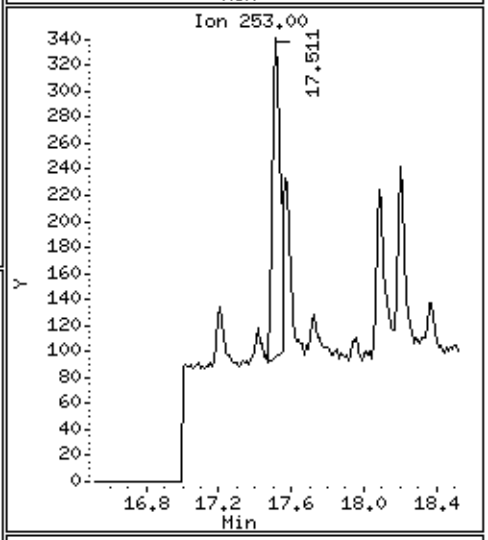
Column phase: Rxi-SVOCms Column diameter: 0.25

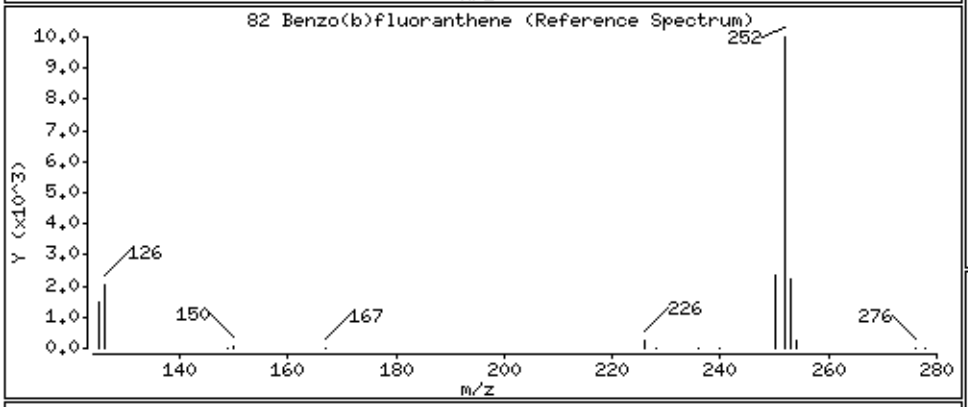
82 Benzo(b)fluoranthene Concentration: 0.0993 ug/L

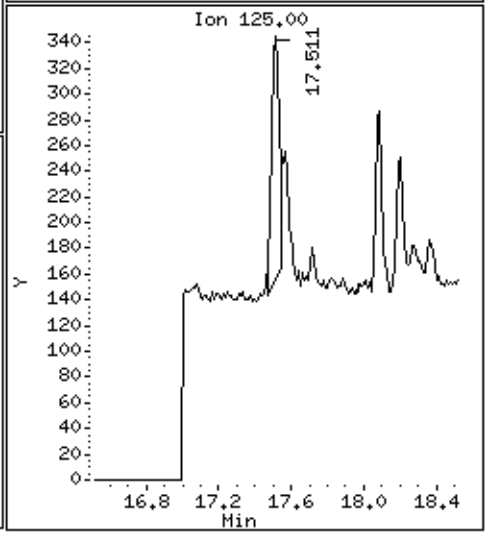


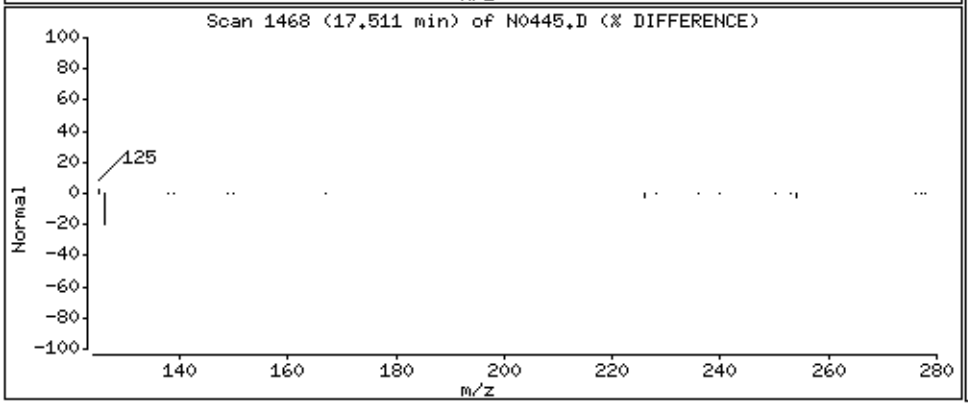












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Date : 11-DEC-2023 18:24

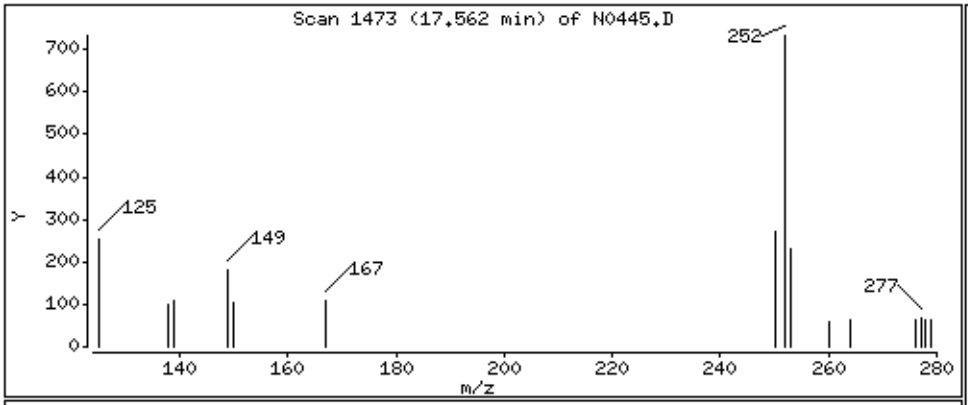
Client ID: Y-BRMW4-291-301-110 Instrument: gcms-n.i

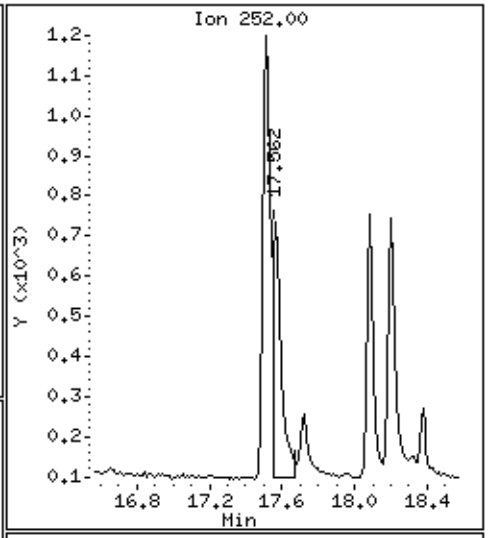
Sample Info: SQ6238-7

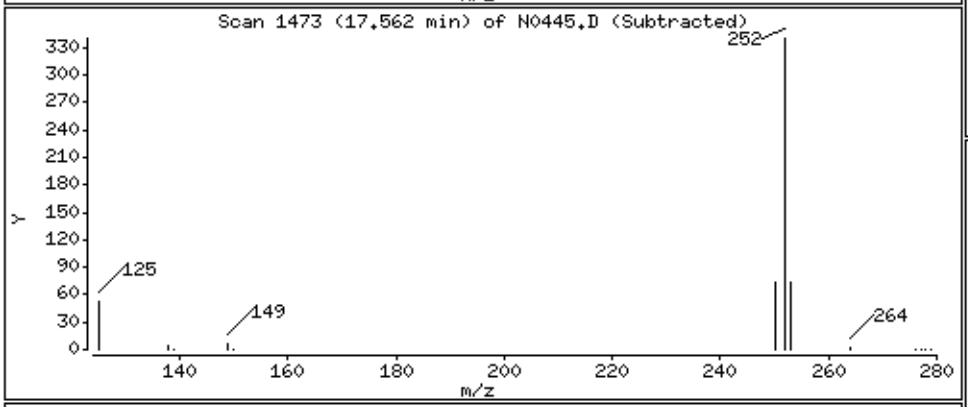
Volume Injected (uL): 1.0 Operator: EP

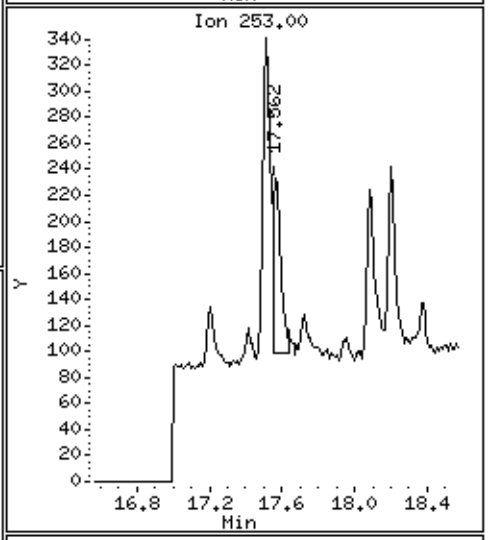
Column phase: Rxi-SVOCms Column diameter: 0.25

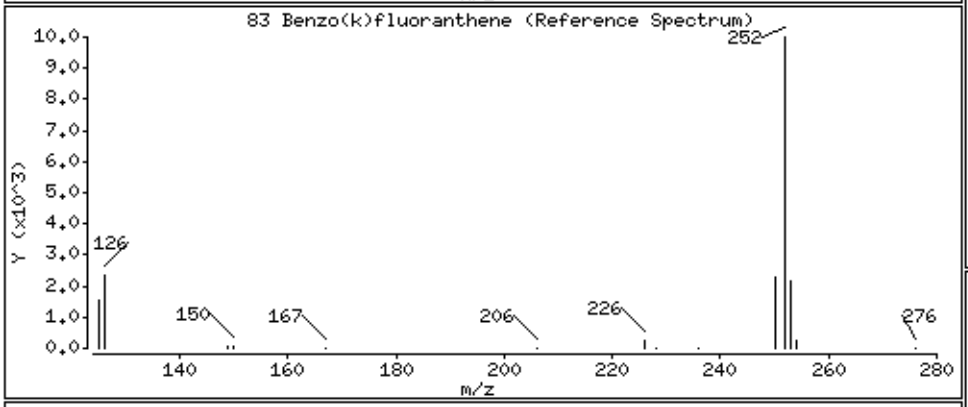
83 Benzo(k)fluoranthene Concentration: 0.0434 ug/L

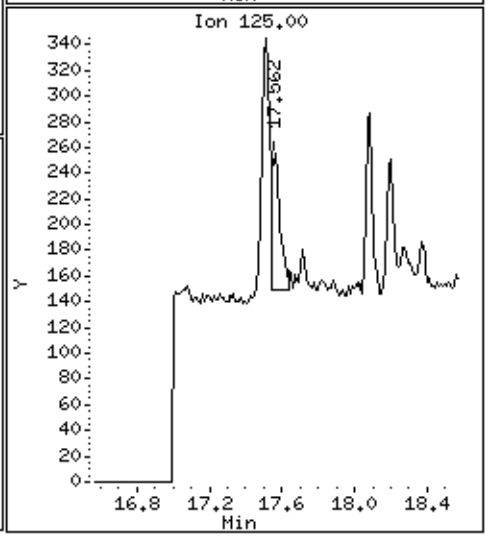


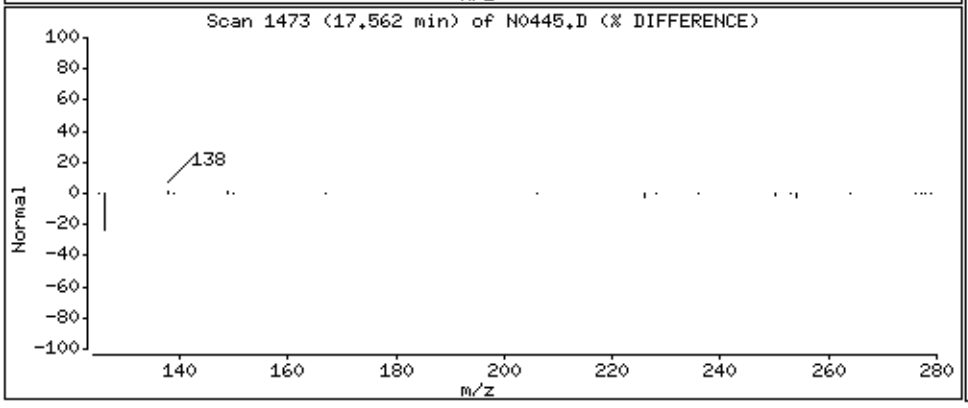












Data File: \\target_server\gg\chem\gcms-n.i\N121123.b\N0445.D

Date : 11-DEC-2023 18:24

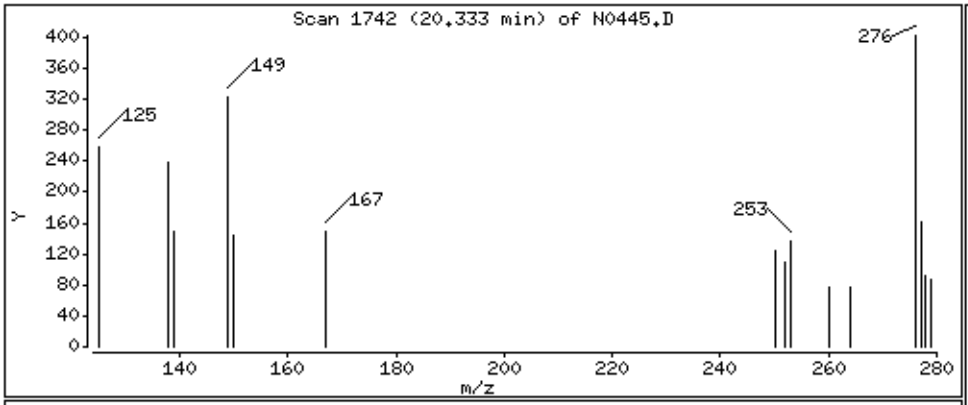
Client ID: Y-BRMW4-291-301-110 Instrument: gcms-n.i

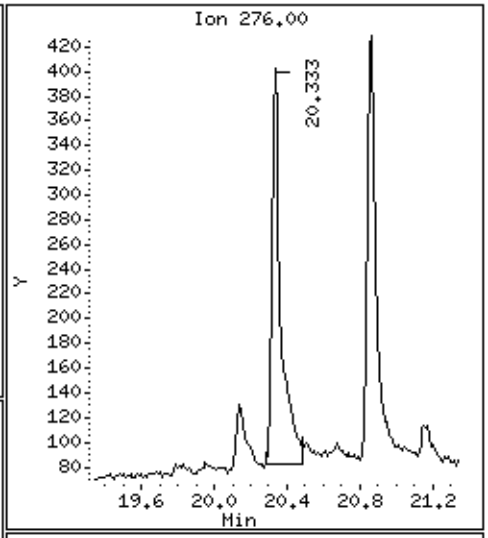
Sample Info: SQ6238-7

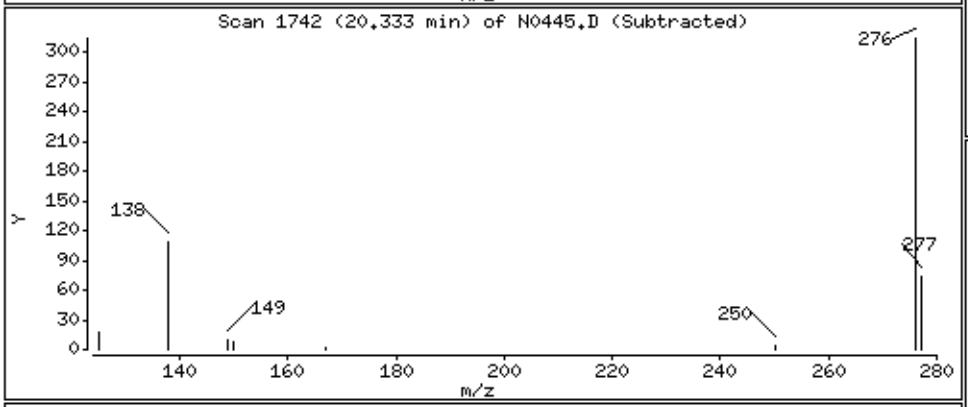
Volume Injected (uL): 1.0 Operator: EP

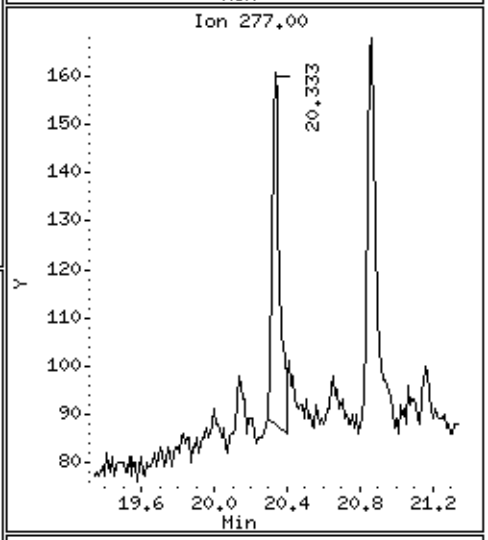
Column phase: Rxi-SVOCms Column diameter: 0.25

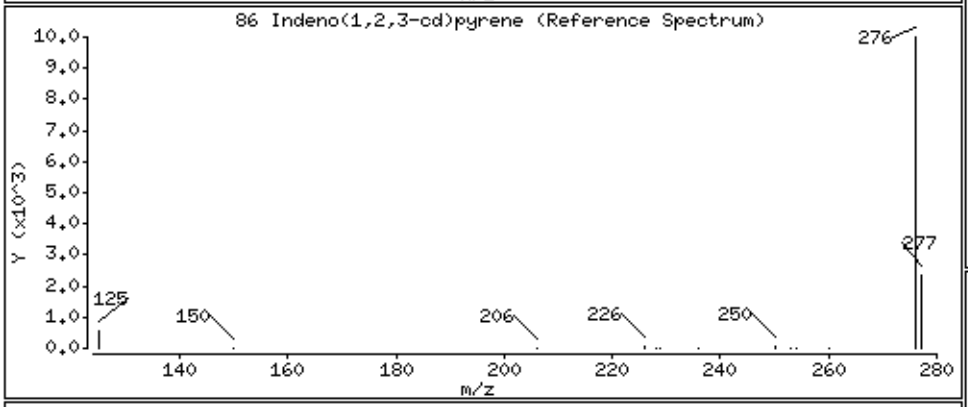
86 Indeno(1,2,3-cd)pyrene Concentration: 0.0495 ug/L

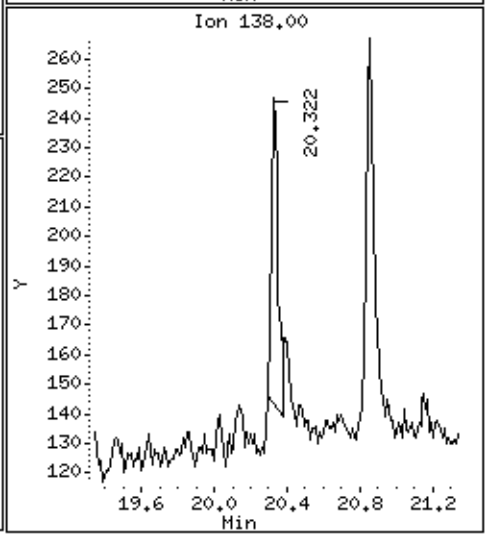


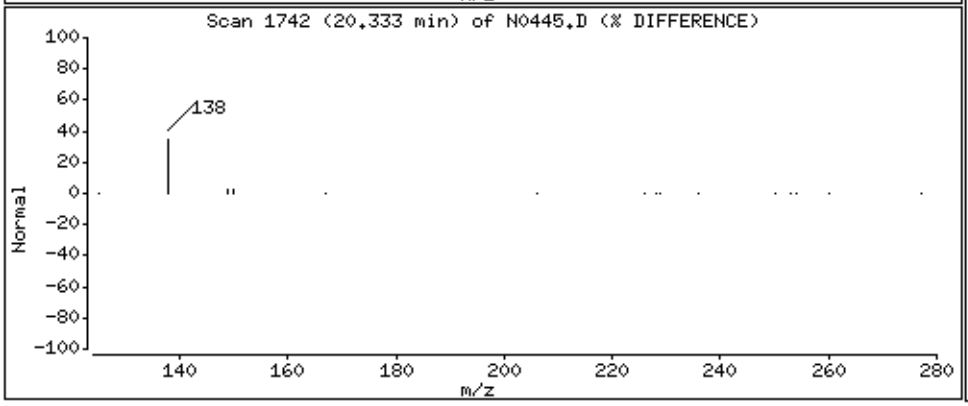








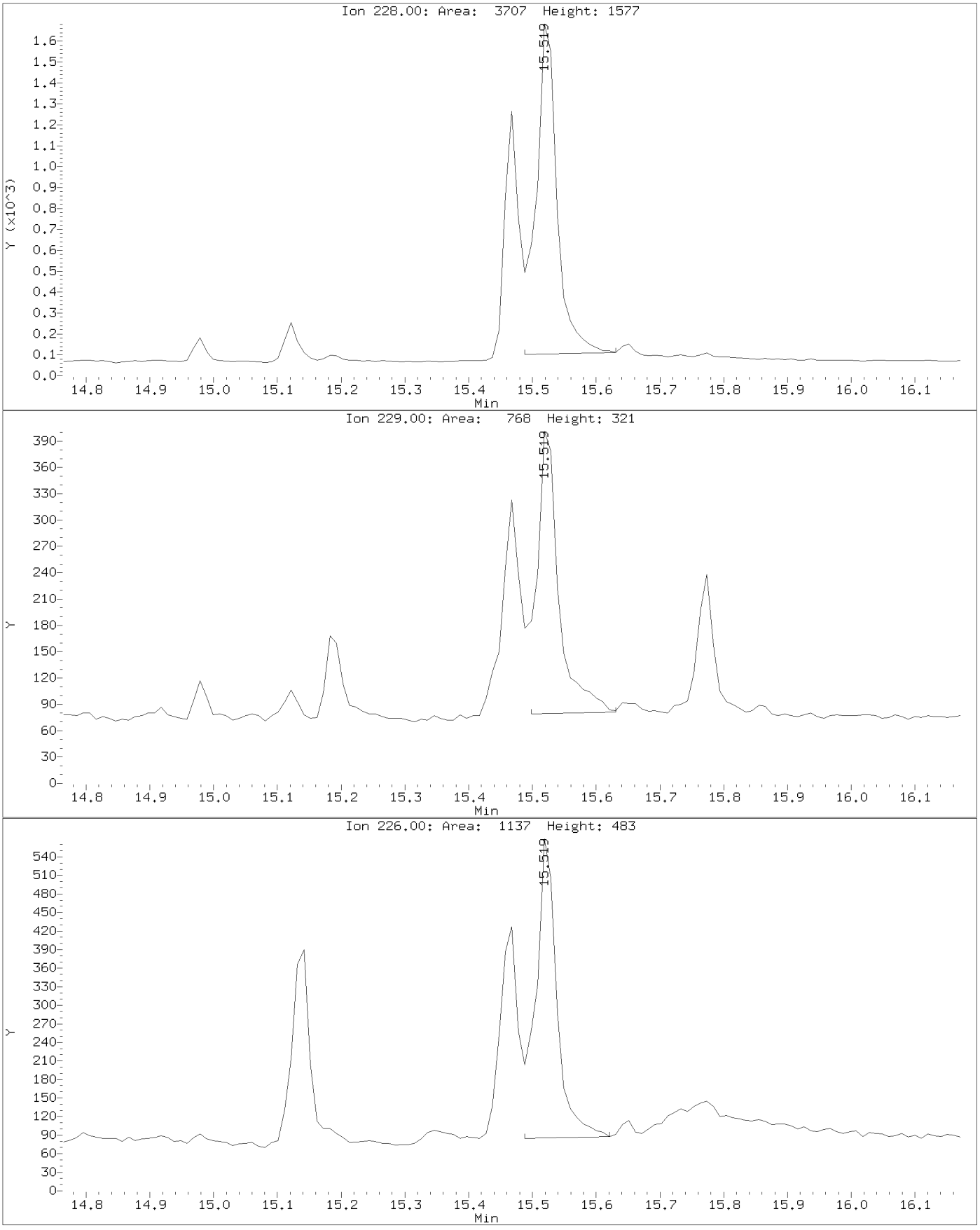




Data File: \\target_server\gg\chem\gcms-n.i\N121123.b\N0445.D
Injection Date: 11-DEC-2023 18:24
Instrument: gcms-n.i
Client Sample ID: Y-BRMW4-291-301-110

Compound: Benzo(a)anthracene
CAS Number: 56-55-3

BEFORE MANUAL INTEGRATION



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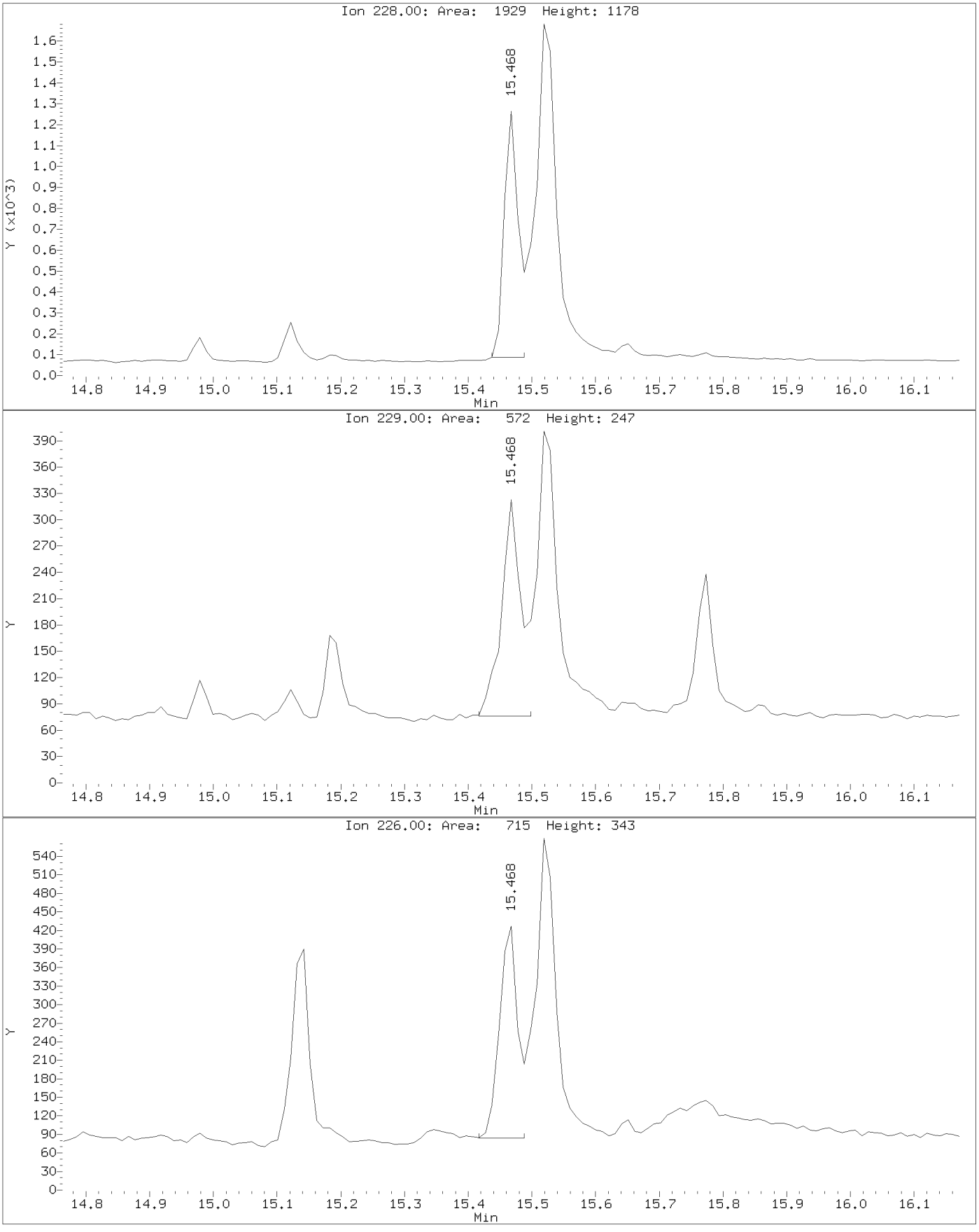
Injection Date: 11-DEC-2023 18:24
Instrument: gcms-n.i
Client Sample ID: Y-BRMW4-291-301-110

Compound: Benzo(a)anthracene
CAS Number: 56-55-3

AFTER MANUAL INTEGRATION



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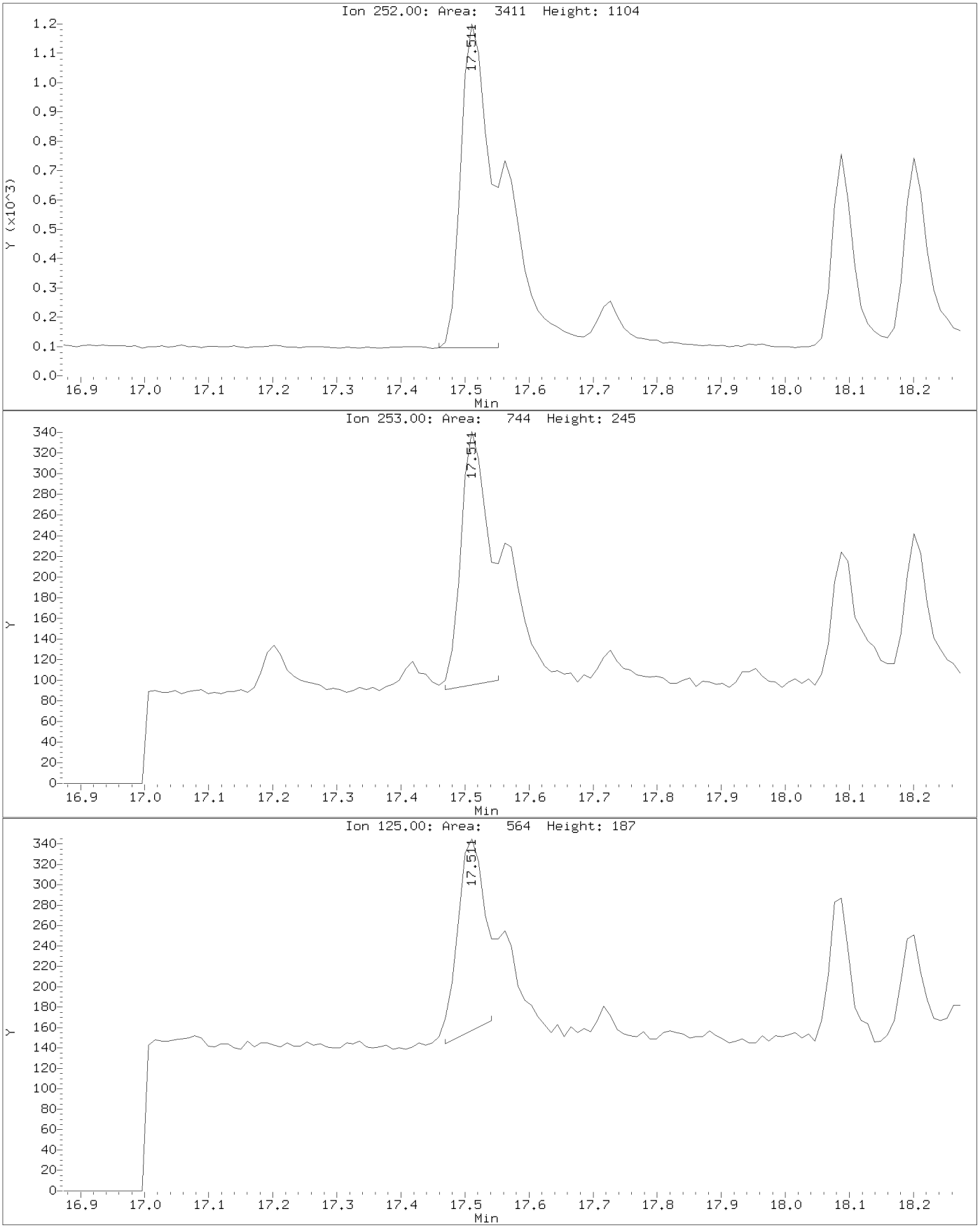
Injection Date: 11-DEC-2023 18:24
Instrument: gcms-n.i
Client Sample ID: Y-BRMW4-291-301-110

Compound: Benzo(k)fluoranthene
CAS Number: 207-08-9

BEFORE MANUAL INTEGRATION



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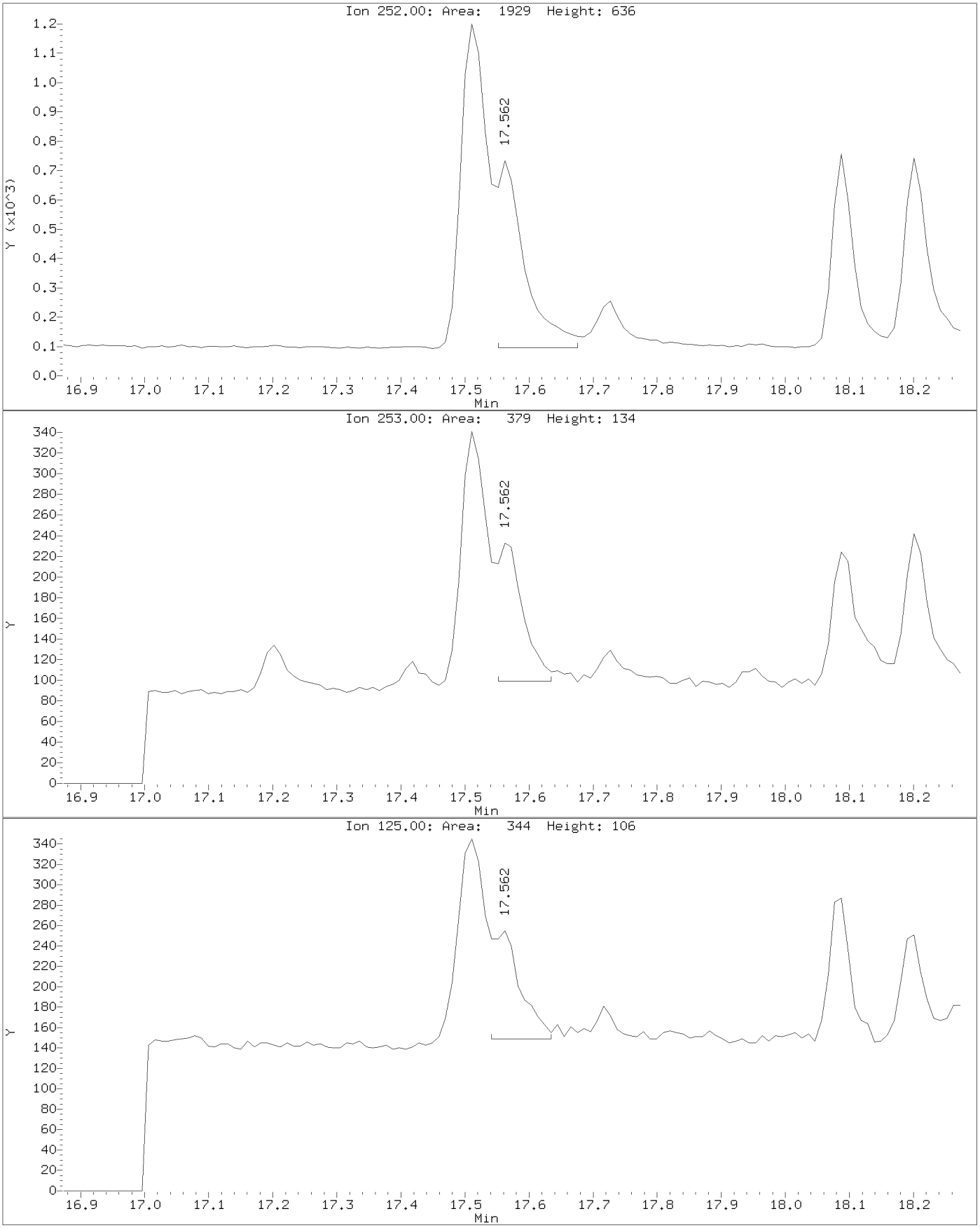
Injection Date: 11-DEC-2023 18:24
Instrument: gcms-n.i
Client Sample ID: Y-BRMW4-291-301-110

Compound: Benzo(k)fluoranthene
CAS Number: 207-08-9

AFTER MANUAL INTEGRATION



Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

SDG: SQ6238
Lab ID: SQ6238-8
Client ID: SY-BRMW1-42-52-110923
Matrix: AQ
Lab File ID: N0446.D

Sample Date: 09-NOV-23
Extract Date: 16-NOV-23
Extracted By: AN/CMW
Extraction Method: SW846 3510C
Lab Prep Batch: WG345531

Report Date: 29-DEC-23
Analysis Date: 11-DEC-23
Analyst: EP
Analysis Method: SW846 8270D SIM
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	0.094	ug/L	1	.2	0.19	0.060	0.094
2-Methylnaphthalene	U	0.094	ug/L	1	.2	0.19	0.073	0.094
Acenaphthylene	U	0.094	ug/L	1	.2	0.19	0.051	0.094
Acenaphthene	U	0.094	ug/L	1	.2	0.19	0.060	0.094
Fluorene	U	0.094	ug/L	1	.2	0.19	0.058	0.094
Phenanthrene	U	0.094	ug/L	1	.2	0.19	0.048	0.094
Anthracene	U	0.094	ug/L	1	.2	0.19	0.042	0.094
Fluoranthene	U	0.094	ug/L	1	.2	0.19	0.069	0.094
Pyrene	U	0.094	ug/L	1	.2	0.19	0.056	0.094
Benzo(a)anthracene	U	0.094	ug/L	1	.2	0.19	0.043	0.094
Chrysene	U	0.094	ug/L	1	.2	0.19	0.034	0.094
Benzo(b)Fluoranthene	U	0.094	ug/L	1	.2	0.19	0.084	0.094
Benzo(k)fluoranthene	U	0.094	ug/L	1	.2	0.19	0.046	0.094
Benzo(a)pyrene	U	0.094	ug/L	1	.2	0.19	0.062	0.094
Indeno(1,2,3-cd)pyrene	U	0.094	ug/L	1	.2	0.19	0.049	0.094
Dibenzo(a,h)anthracene	U	0.094	ug/L	1	.2	0.19	0.066	0.094
Benzo(g,h,i)perylene	U	0.094	ug/L	1	.2	0.19	0.061	0.094
2-Methylnaphthalene-D10		76.7	%					
Fluorene-D10		80.2	%					
Pyrene-D10		96.1	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029
http://www.katahdinlab.com

Data File: \\target_server\gg\chem\gcms-n.i\N121123.b\N0446.D
Report Date: 29-Dec-2023 15:34

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-n.i\N121123.b\N0446.D
Lab Smp Id: SQ6238-8 Client Smp ID: Y-BRMW1-42-52-11092
Inj Date : 11-DEC-2023 18:56
Operator : EP Inst ID: gcms-n.i
Smp Info : SQ6238-8
Misc Info : WG346778,WG345531,WG346503-4
Comment :
Method : \\target_server\gg\chem\gcms-n.i\N121123.b\NSPSIM95.m
Meth Date : 12-Dec-2023 08:48 epelletier Quant Type: ISTD
Cal Date : 07-DEC-2023 14:42 Cal File: N0385.D
Als bottle: 15
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pahplus.sub
Target Version: 4.12
Processing Host: INSPIRON1

Concentration Formula: Amt * DF * Uf*(Vt/Vo*Vi)*1000 * CpndVariable

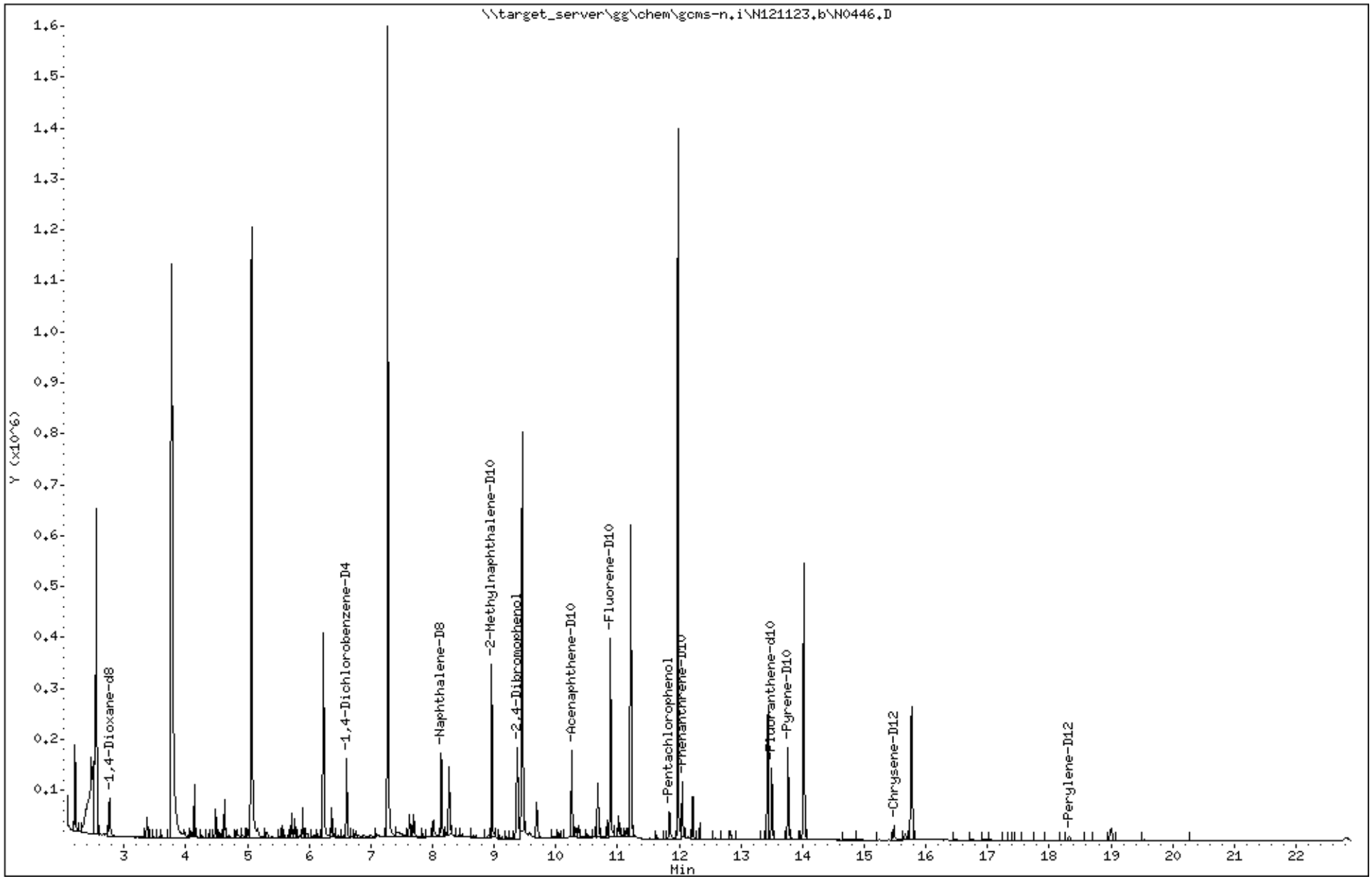
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.060	Sample Volume (L)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/L)	REVIEW CODE
$	1 1,4-Dioxane-d8	96	2.762	2.742	(0.269)	77578	2.17506	2.05(Q)	
*	10 1,4-Dichlorobenzene-D4	152	6.614	6.604	(1.000)	52729	0.80000	(aQ)	
*	27 Naphthalene-D8	136	8.136	8.125	(1.000)	181326	0.80000	(a)	
$	33 2-Methylnaphthalene-D10	152	8.964	8.954	(1.102)	182567	1.53401	1.45	
$	38 2,4-Dibromophenol	252	9.366	9.346	(0.913)	98232	3.61566	3.41	
*	48 Acenaphthene-D10	164	10.253	10.254	(1.000)	77388	0.80000	(a)	
$	56 Fluorene-D10	174	10.886	10.887	(1.062)	162369	1.60325	1.51	
	65 Pentachlorophenol	266	11.848	11.849	(0.983)	31588	5.03844	4.75	
*	66 Phenanthrene-D10	188	12.051	12.052	(1.000)	88977	0.80000	(a)	
$	71 Fluoranthene-d10	212	13.501	13.502	(1.120)	117181	1.62027	1.53	
$	73 Pyrene-D10	212	13.766	13.777	(0.889)	129378	1.92155	1.81	
*	78 Chrysene-D12	240	15.478	15.478	(1.000)	28776	0.80000	(a)	
*	85 Perylene-D12	264	18.324	18.324	(1.000)	18764	0.80000	(a)	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.

Data File: \\target_server\gg\chem\gcms-n.i\N121123.b\N0446.D
Date : 11-DEC-2023 18:56
Client ID: Y-BRMW1-42-52-11092
Instrument: gcms-n.i
Sample Info: SQ6238-8
Volume Injected (uL): 1.0
Operator: EP
Column phase: Rxi-SVOCms
Column diameter: 0.25



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Date : 11-DEC-2023 18:56

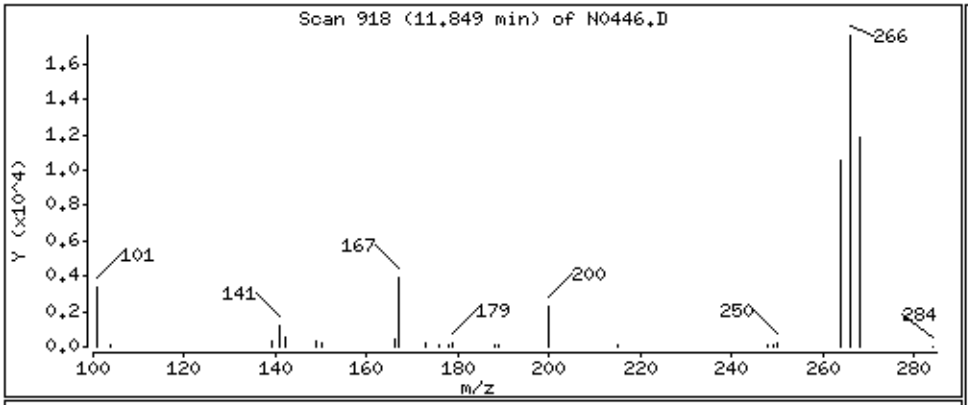
Client ID: Y-BRMW1-42-52-11092 Instrument: gcms-n.i

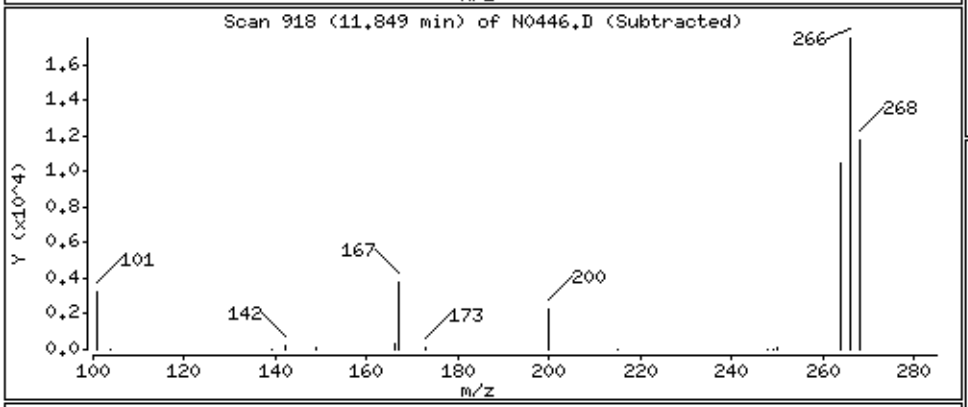
Sample Info: SQ6238-8

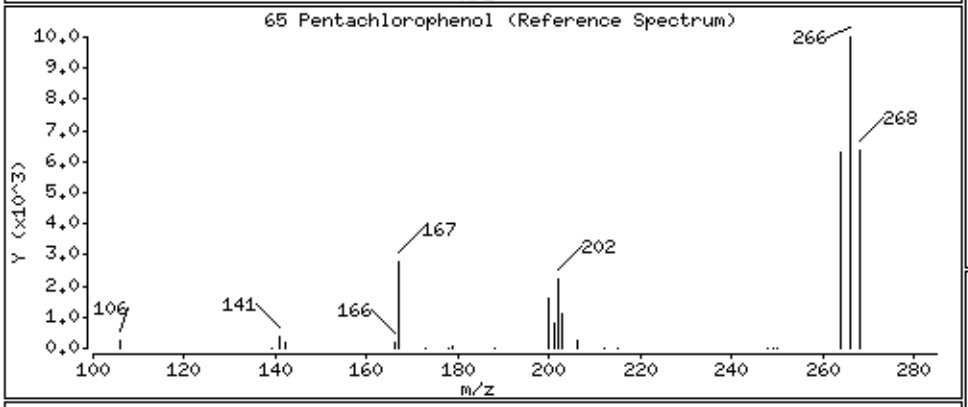
Volume Injected (uL): 1.0 Operator: EP

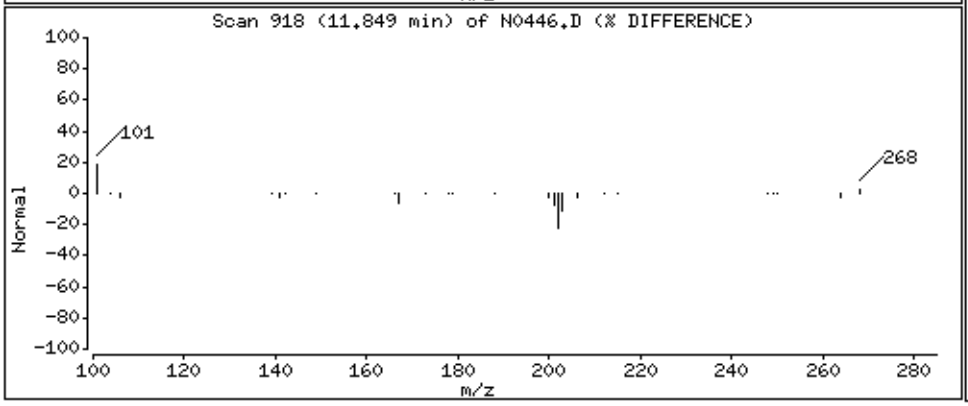
Column phase: Rxi-SVOCms Column diameter: 0.25

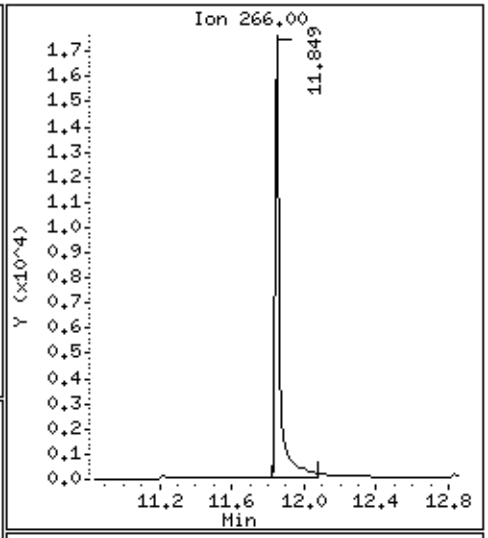
65 Pentachlorophenol Concentration: 4.75 ug/L

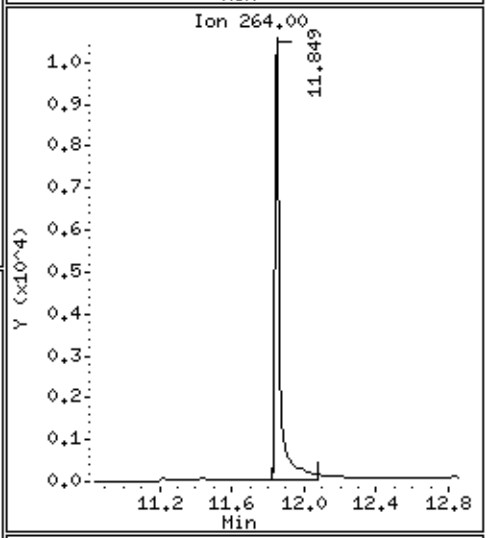


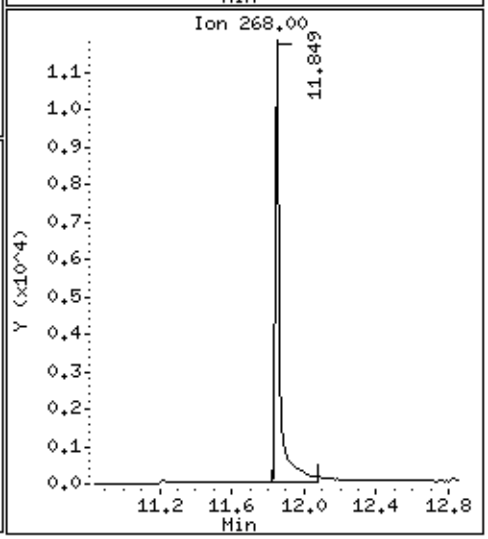












Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

SDG: SQ6238
Lab ID: SQ6238-9RA
Client ID: SY-BRMW1-65-75-110923
Matrix: AQ
Lab File ID: N0462.D

Sample Date: 09-NOV-23
Extract Date: 16-NOV-23
Extracted By: AN/CMW
Extraction Method: SW846 3510C
Lab Prep Batch: WG345531

Report Date: 29-DEC-23
Analysis Date: 12-DEC-23
Analyst: EP
Analysis Method: SW846 8270D SIM
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	0.095	ug/L	1	.2	0.19	0.061	0.095
2-Methylnaphthalene	U	0.095	ug/L	1	.2	0.19	0.073	0.095
Acenaphthylene	U	0.095	ug/L	1	.2	0.19	0.051	0.095
Acenaphthene	U	0.095	ug/L	1	.2	0.19	0.061	0.095
Fluorene	J	0.089	ug/L	1	.2	0.19	0.058	0.095
Phenanthrene	J	0.16	ug/L	1	.2	0.19	0.048	0.095
Anthracene	J	0.12	ug/L	1	.2	0.19	0.042	0.095
Fluoranthene		0.27	ug/L	1	.2	0.19	0.070	0.095
Pyrene		0.27	ug/L	1	.2	0.19	0.056	0.095
Benzo(a)anthracene	J	0.18	ug/L	1	.2	0.19	0.044	0.095
Chrysene		0.23	ug/L	1	.2	0.19	0.034	0.095
Benzo(b)Fluoranthene		0.20	ug/L	1	.2	0.19	0.085	0.095
Benzo(k)fluoranthene		0.22	ug/L	1	.2	0.19	0.047	0.095
Benzo(a)pyrene	J	0.073	ug/L	1	.2	0.19	0.063	0.095
Indeno(1,2,3-cd)pyrene	J	0.11	ug/L	1	.2	0.19	0.050	0.095
Dibenzo(a,h)anthracene	J	0.15	ug/L	1	.2	0.19	0.067	0.095
Benzo(g,h,i)perylene	J	0.11	ug/L	1	.2	0.19	0.062	0.095
2-Methylnaphthalene-D10		49.2	%					
Fluorene-D10		46.7	%					
Pyrene-D10		55.1	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029
http://www.katahdinlab.com

Data File: \\target_server\gg\chem\gcms-n.i\N121223.b\N0462.D
Report Date: 29-Dec-2023 15:35

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-n.i\N121223.b\N0462.D
Lab Smp Id: SQ6238-9RA Client Smp ID: Y-BRMW1-65-75-11092
Inj Date : 12-DEC-2023 16:17
Operator : EP Inst ID: gcms-n.i
Smp Info : SQ6238-9RA
Misc Info : WG346831,WG345531,WG346503-4
Comment   :
Method   : \\target_server\gg\chem\gcms-n.i\N121223.b\NSPSIM95.m
Meth Date : 13-Dec-2023 09:19 dtasker Quant Type: ISTD
Cal Date : 07-DEC-2023 14:42 Cal File: N0385.D
Als bottle: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pahplus.sub
Target Version: 4.12
Processing Host: INSPIRON1

Concentration Formula: Amt * DF * Uf*(Vt/Vo*Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.050	Sample Volume (L)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

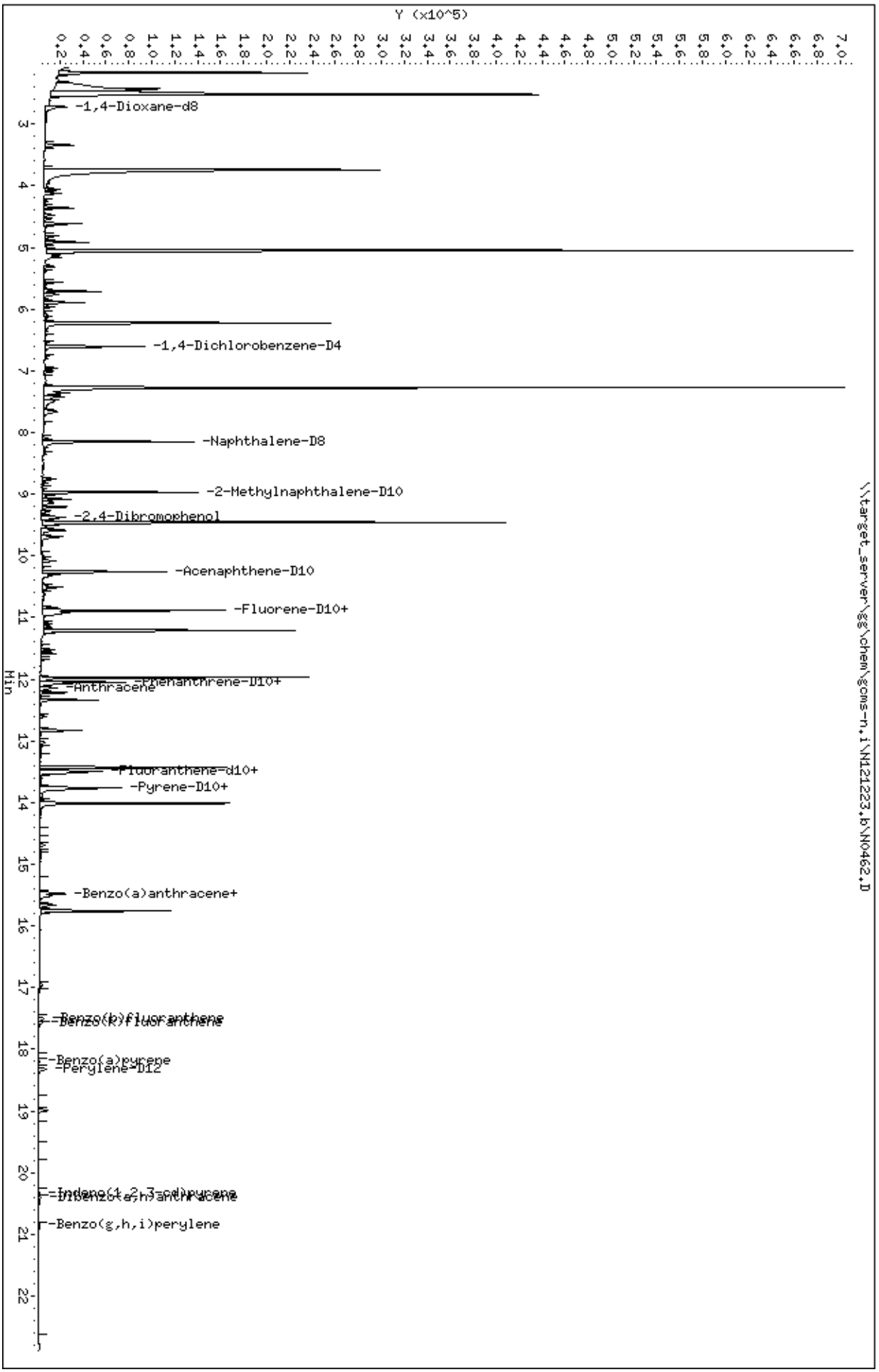
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/L)	REVIEW CODE
$	1 1,4-Dioxane-d8	96	2.720	2.742	(0.265)	19343	0.68873	0.656(aQ)	
*	10 1,4-Dichlorobenzene-D4	152	6.614	6.604	(1.000)	37347	0.80000	(aQ)	
*	27 Naphthalene-D8	136	8.147	8.125	(1.000)	128386	0.80000	(a)	
$	33 2-Methylnaphthalene-D10	152	8.974	8.954	(1.102)	82844	0.98313	0.936(a)	
$	38 2,4-Dibromophenol	252	9.377	9.346	(0.915)	28008	1.30921	1.25	
*	48 Acenaphthene-D10	164	10.253	10.254	(1.000)	60937	0.80000	(a)	
$	56 Fluorene-D10	174	10.886	10.887	(1.062)	74495	0.93415	0.890(a)	
	57 Fluorene	166	10.918	10.919	(1.065)	9392	0.09330	0.0888(a)	
*	66 Phenanthrene-D10	188	12.051	12.052	(1.000)	75618	0.80000	(a)	
	67 Phenanthrene	178	12.073	12.073	(1.002)	18681	0.16338	0.156(a)	
	68 Anthracene	178	12.137	12.137	(1.007)	14543	0.12663	0.121(a)	
$	71 Fluoranthene-d10	212	13.501	13.502	(1.120)	53780	0.87499	0.833(R)	
	72 Fluoranthene	202	13.521	13.522	(1.122)	25393	0.28611	0.272	
$	73 Pyrene-D10	212	13.766	13.777	(0.889)	59238	1.10196	1.05	
	74 Pyrene	202	13.786	13.797	(0.891)	20382	0.28698	0.273	
	76 Benzo(a)anthracene	228	15.457	15.468	(0.999)	7472	0.18787	0.179(a)	
*	78 Chrysene-D12	240	15.477	15.478	(1.000)	22975	0.80000	(a)	
	79 Chrysene	228	15.518	15.529	(1.003)	11392	0.23900	0.228	
	82 Benzo(b)fluoranthene	252	17.500	17.521	(0.955)	6715	0.20699	0.197	
	83 Benzo(k)fluoranthene	252	17.562	17.573	(0.958)	9603	0.22891	0.218(H)	

Data File: \\target_server\gg\chem\gcms-n.i\N121223.b\N0462.D
Report Date: 29-Dec-2023 15:35

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	CONCENTRATIONS FINAL (ug/L)	REVIEW CODE
	84 Benzo(a)pyrene	252	18.200	18.211	(0.993)	2427	0.07647	0.0728(a)	
*	85 Perylene-D12	264	18.324	18.324	(1.000)	17786	0.80000	(a)	
	86 Indeno(1,2,3-cd)pyrene	276	20.332	20.343	(1.110)	2719	0.11823	0.113(a)	
	87 Dibenzo(a,h)anthracene	278	20.414	20.415	(1.114)	3628	0.15303	0.146(a)	
	88 Benzo(g,h,i)perylene	276	20.868	20.878	(1.139)	3002	0.11579	0.110(a)	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.
H - Operator selected an alternate compound hit.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Date : 12-DEC-2023 16:17
Client ID: Y-BRNW1-65-75-11092
Sample Info: SQ6238-9RA
Volume Injected (uL): 1.0
Column phase: Rxi-5VOCms
Instrument: gcms-n,i
Operator: EP
Column diameter: 0.25
\\target_server\gg\chem\gcms-n,i\N121223,b\N0462.D
Y (x10^5)
Min
-1,4-Dioxane-d8
-1,4-Dichlorobenzene-D4
-Naphthalene-D8
-2-Methylnaphthalene-D10
-2,4-Dibromophenol
-Acenaphthene-D10
-Fluorene-D10+
-Phenanthrene-D10+
-Anthracene
-Fluoranthene-d10+
-Pyrene-D10+
-Benzo(a)anthracene+
-Benzo(b)fluoranthene
-Benzo(k)fluoranthene
-Benzo(a)pyrene
-Perylene-D12
-Indeno(1,2,3-cd)pyrene
-Dibenz(a,h)anthracene
-Benzo(g,h,i)perylene

Data File: \\target_server\gg\chem\gcms-n.i\N121223.b\N0462.D

Date : 12-DEC-2023 16:17

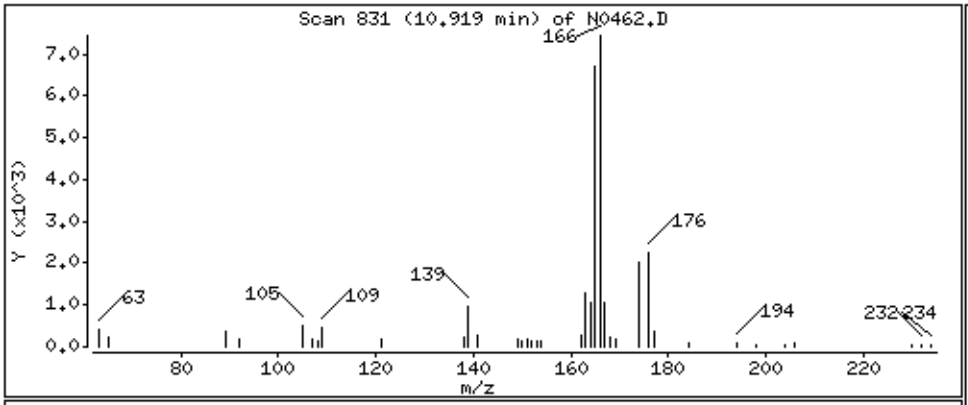
Client ID: Y-BRMW1-65-75-11092 Instrument: gcms-n.i

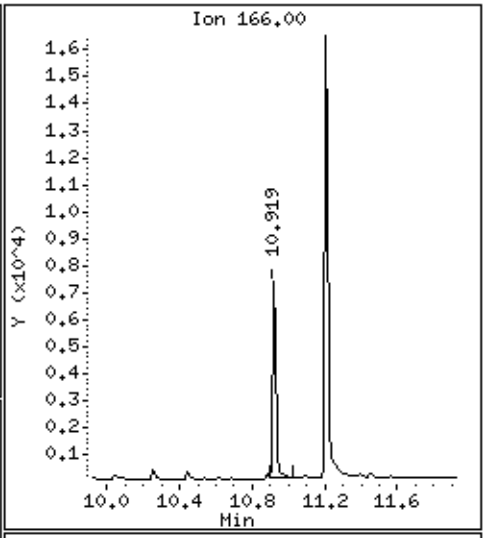
Sample Info: SQ6238-9RA

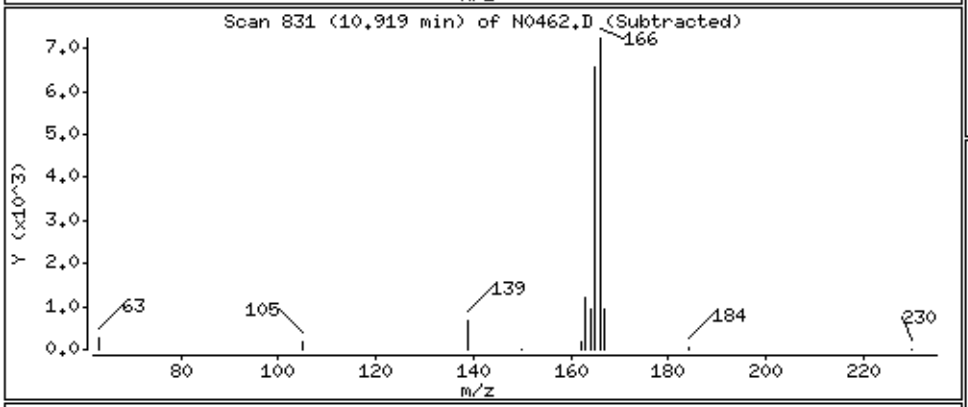
Volume Injected (uL): 1.0 Operator: EP

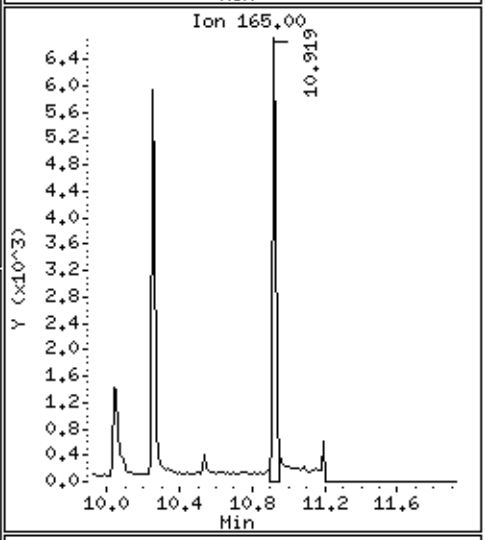
Column phase: Rxi-SVOCms Column diameter: 0.25

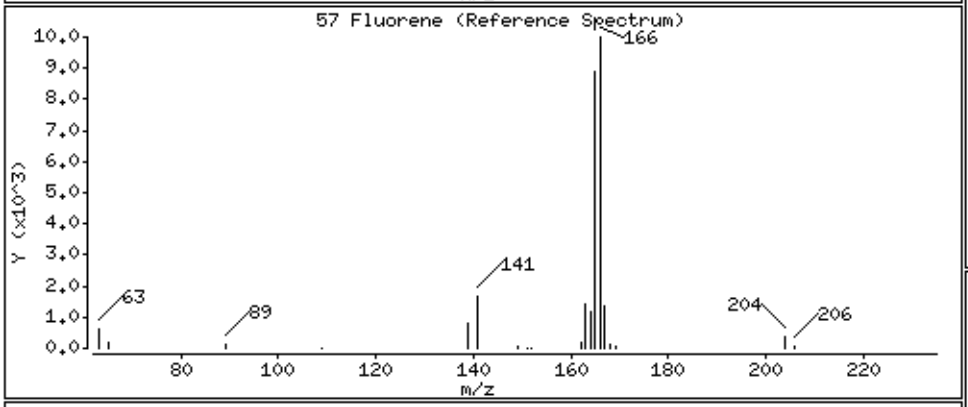
57 Fluorene Concentration: 0.0888 ug/L

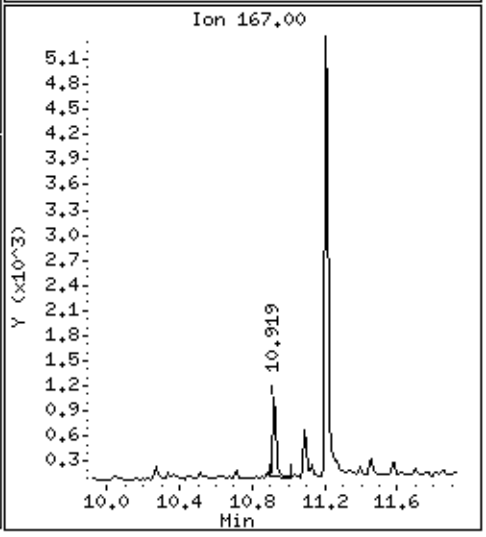


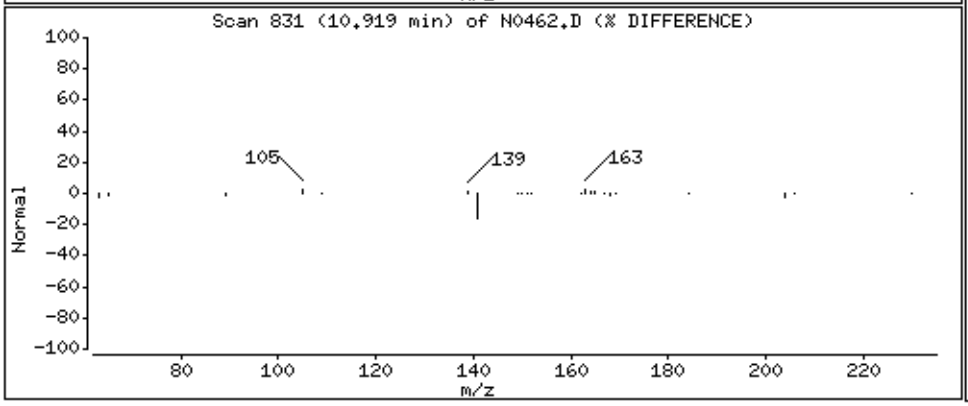












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Date : 12-DEC-2023 16:17

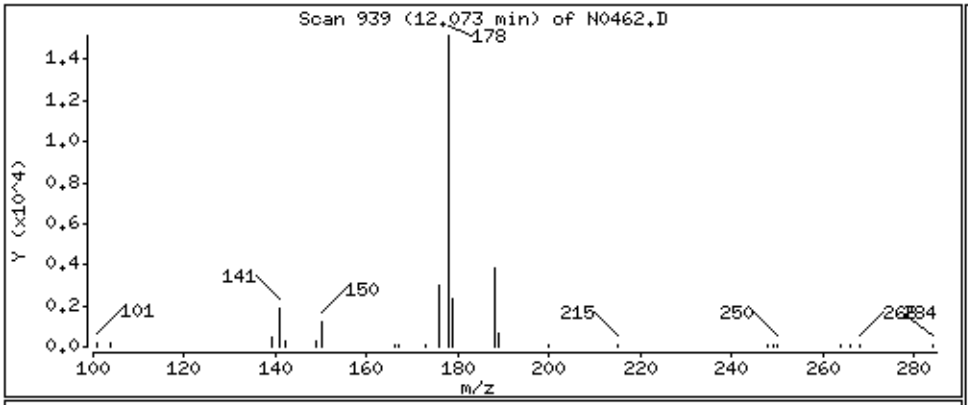
Client ID: Y-BRMW1-65-75-11092 Instrument: gcms-n.i

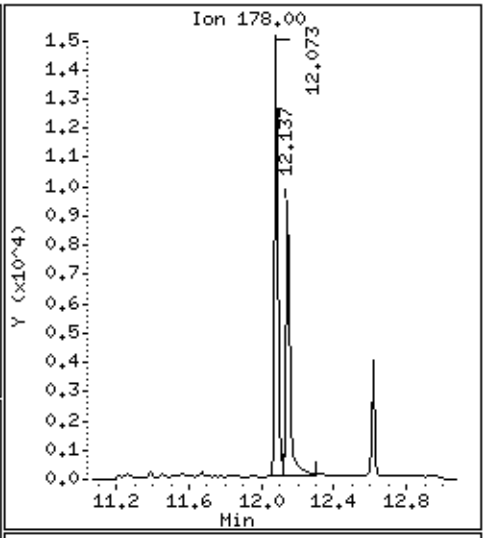
Sample Info: SQ6238-9RA

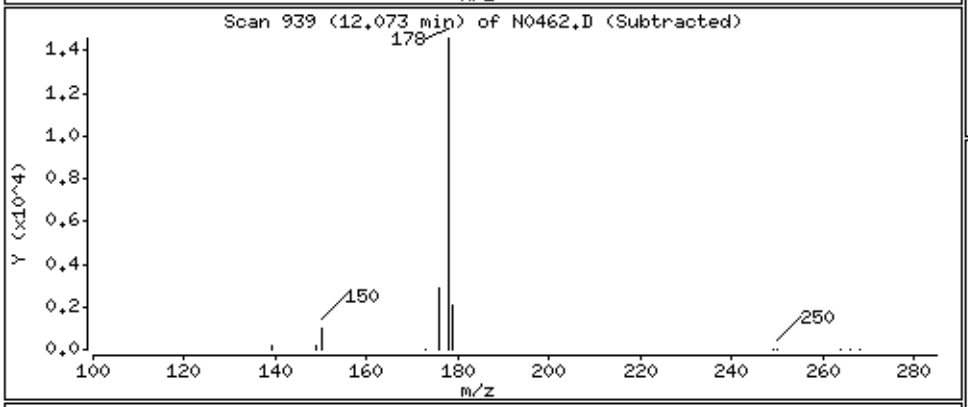
Volume Injected (uL): 1.0 Operator: EP

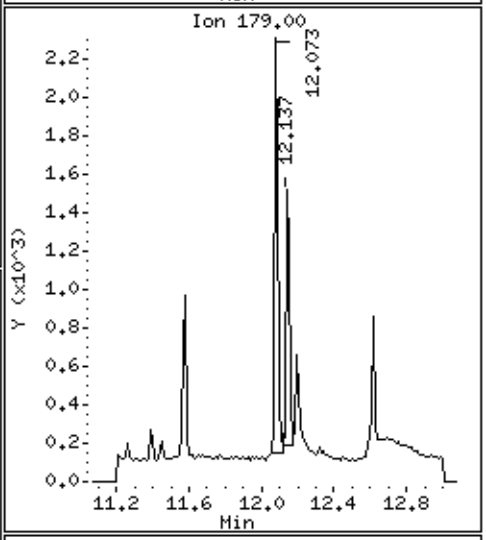
Column phase: Rxi-SVOCms Column diameter: 0.25

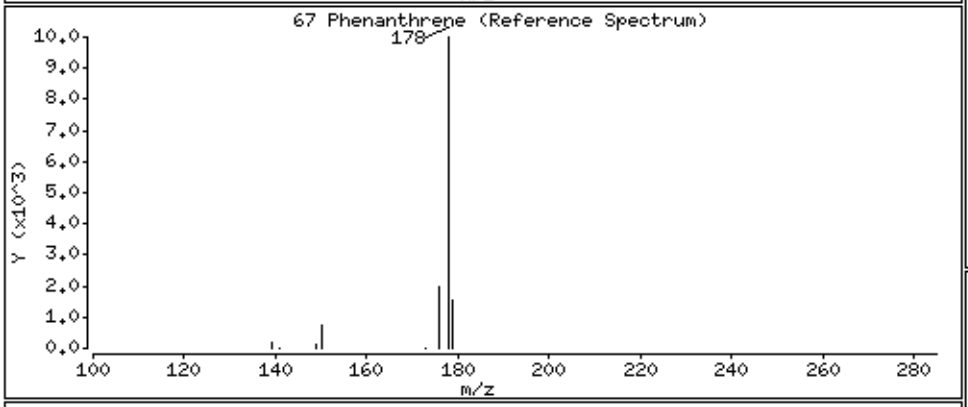
67 Phenanthrene Concentration: 0.156 ug/L

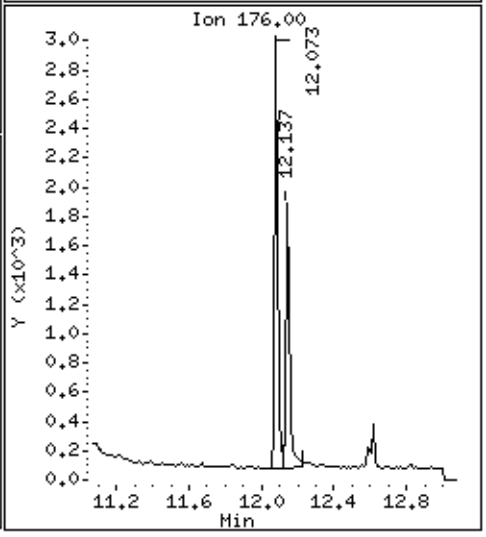


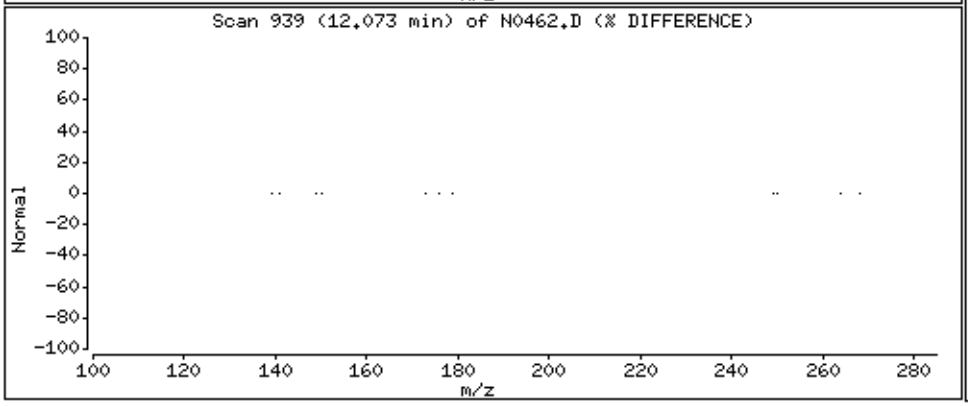












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Date : 12-DEC-2023 16:17

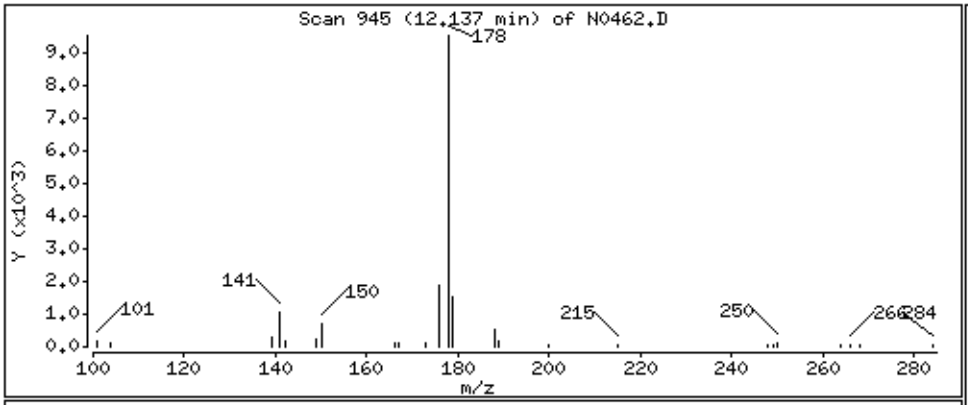
Client ID: Y-BRMW1-65-75-11092 Instrument: gcms-n.i

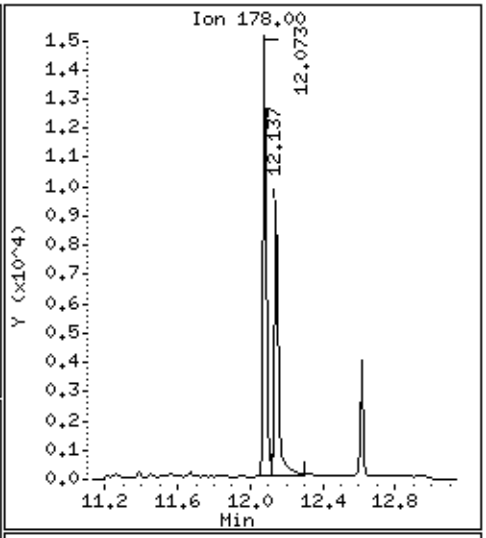
Sample Info: SQ6238-9RA

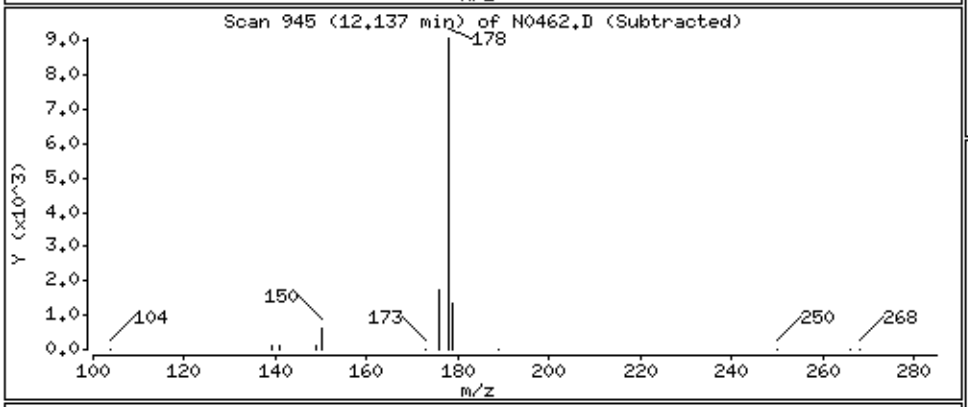
Volume Injected (uL): 1.0 Operator: EP

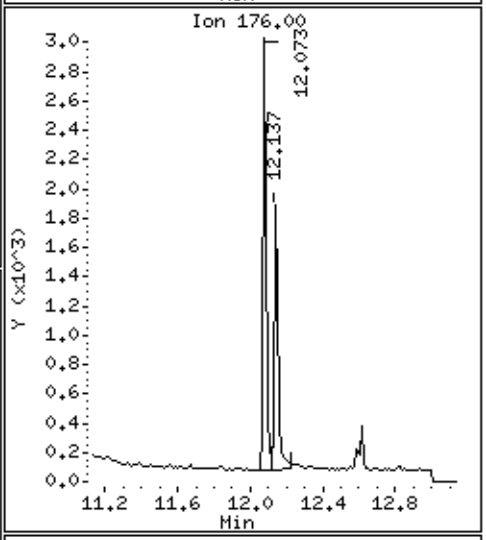
Column phase: Rxi-SVOCms Column diameter: 0.25

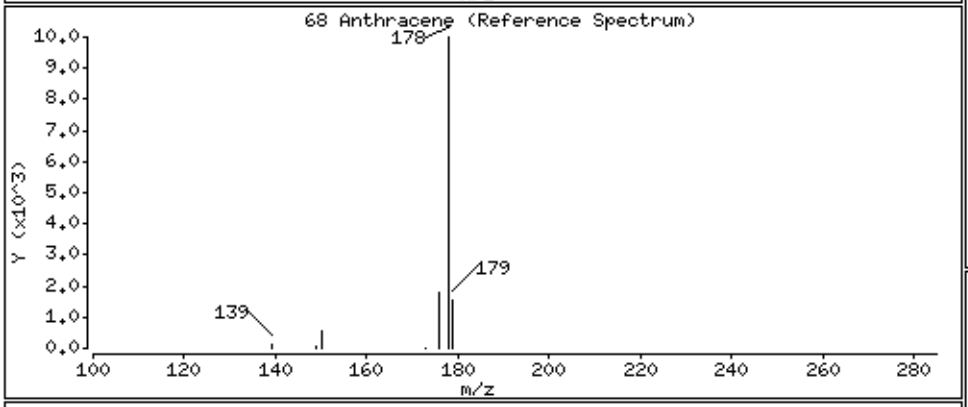
68 Anthracene Concentration: 0.121 ug/L

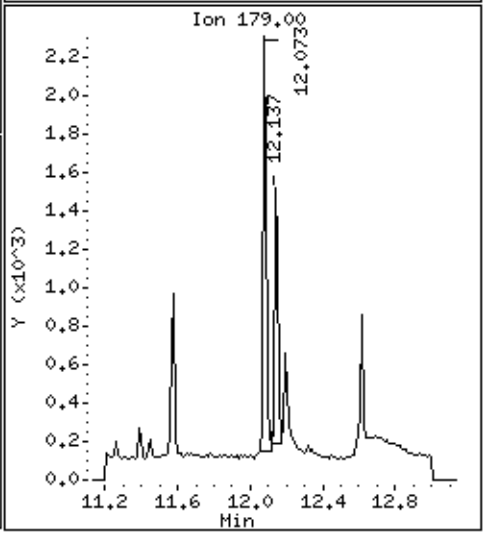


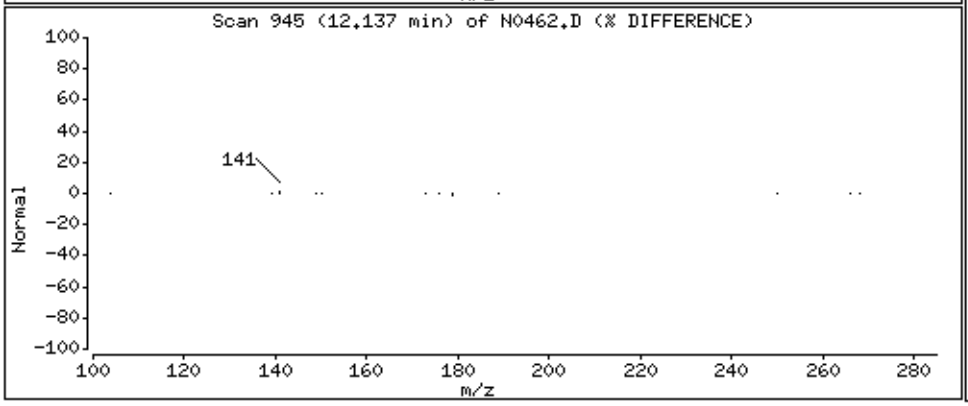












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Date : 12-DEC-2023 16:17

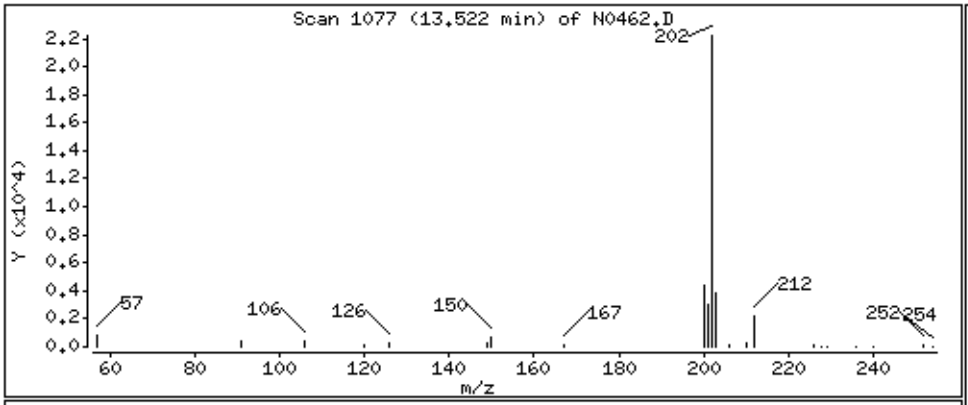
Client ID: Y-BRMW1-65-75-11092 Instrument: gcms-n.i

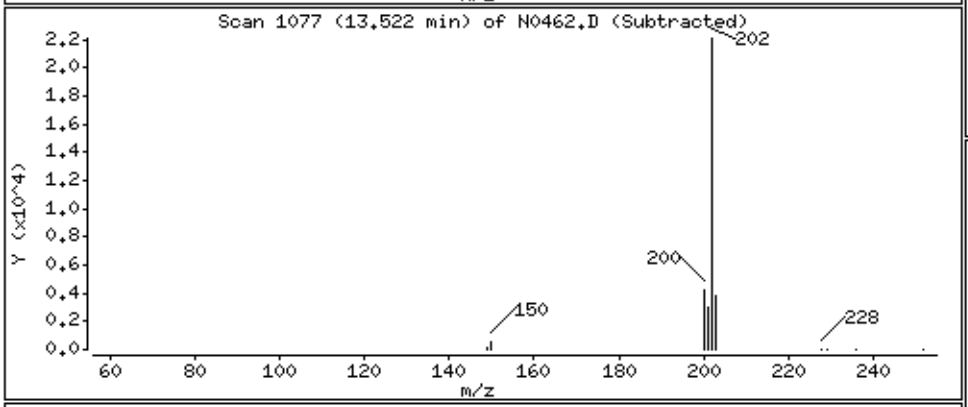
Sample Info: SQ6238-9RA

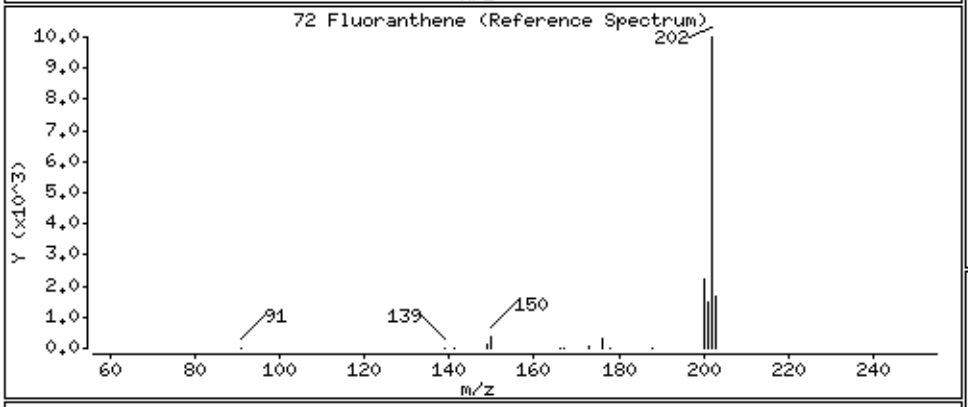
Volume Injected (uL): 1.0 Operator: EP

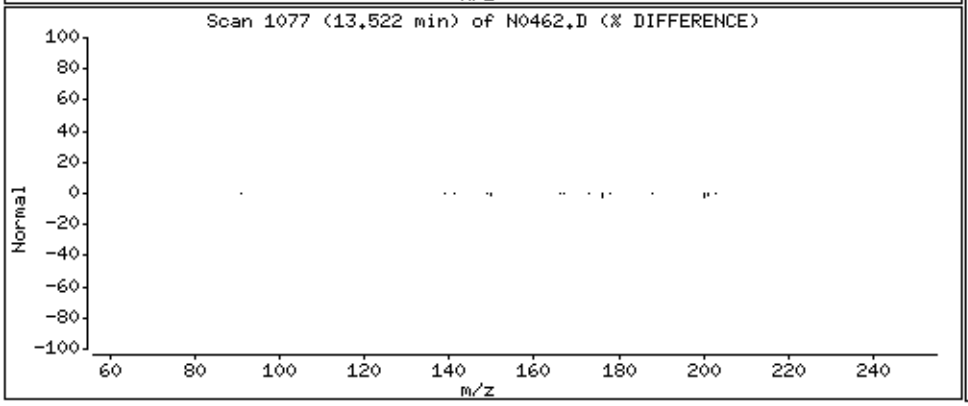
Column phase: Rxi-SVOCms Column diameter: 0.25

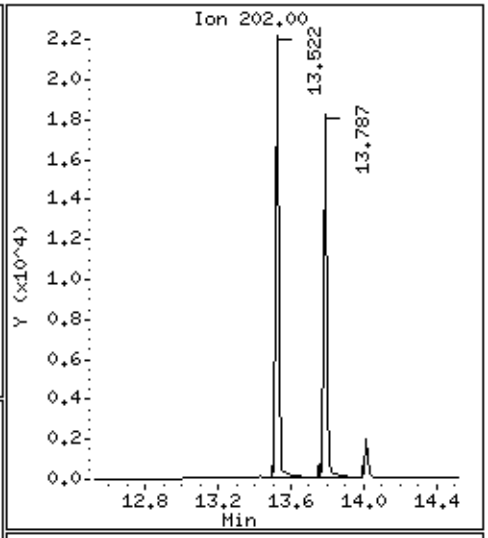
72 Fluoranthene Concentration: 0.272 ug/L

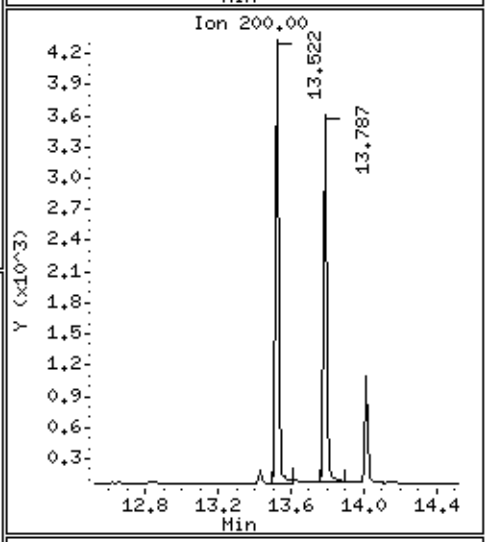


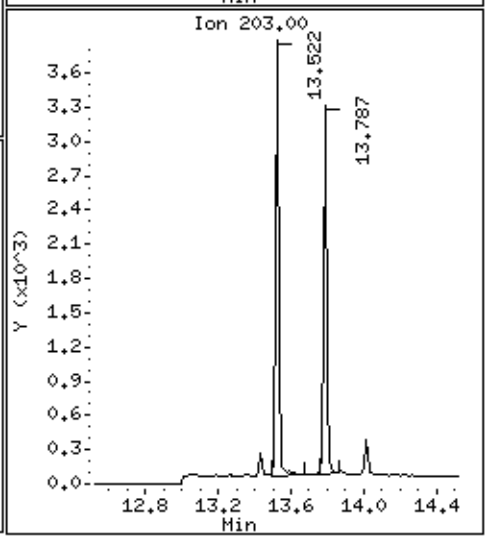












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Date : 12-DEC-2023 16:17

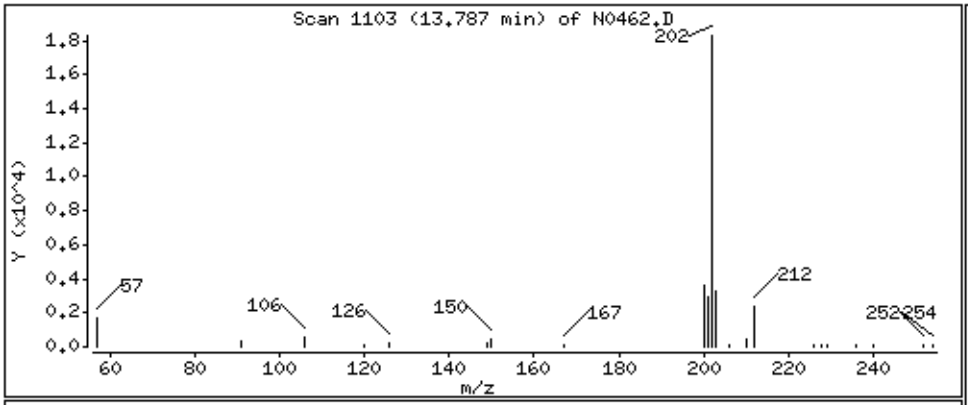
Client ID: Y-BRMW1-65-75-11092 Instrument: gcms-n.i

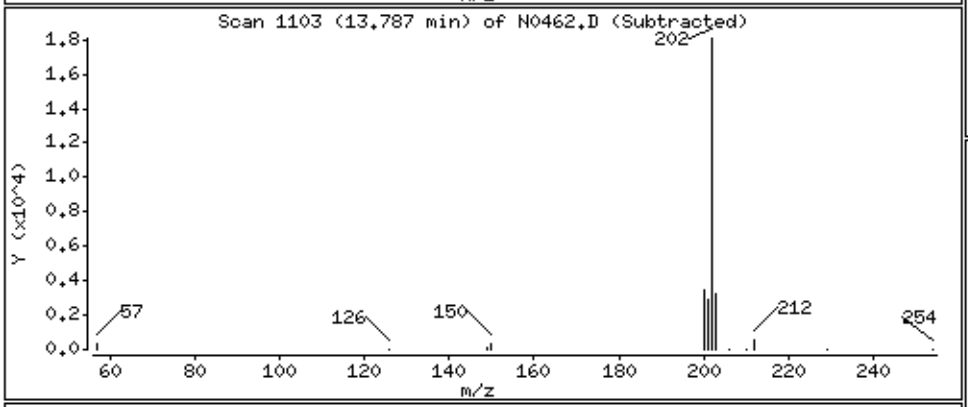
Sample Info: SQ6238-9RA

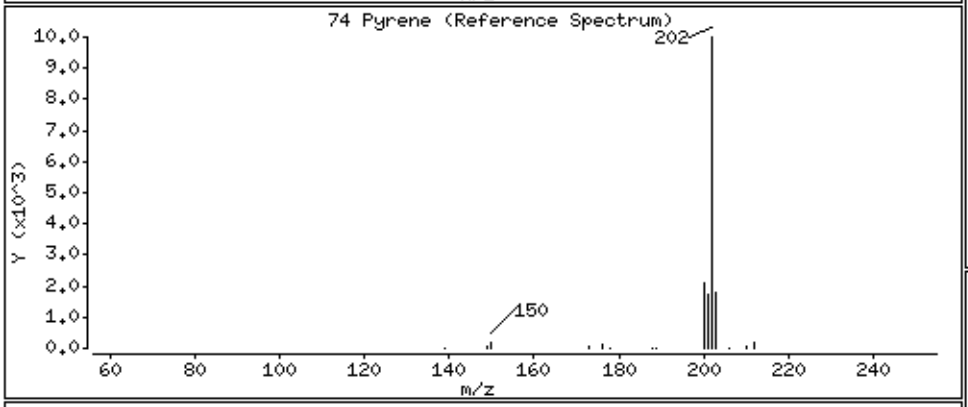
Volume Injected (uL): 1.0 Operator: EP

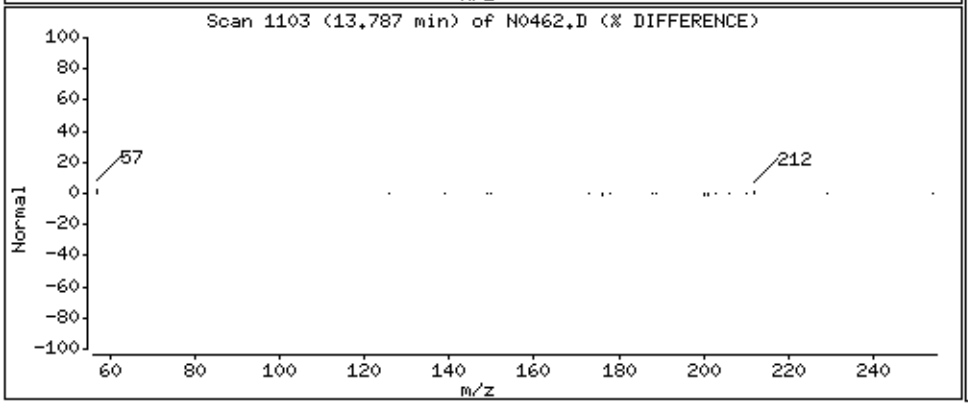
Column phase: Rxi-SVOCms Column diameter: 0.25

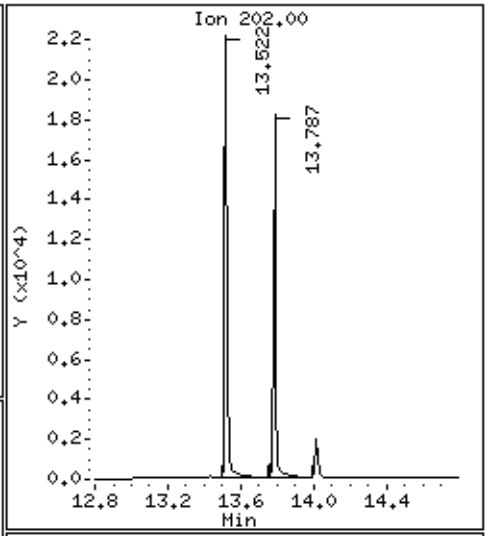
74 Pyrene Concentration: 0.273 ug/L

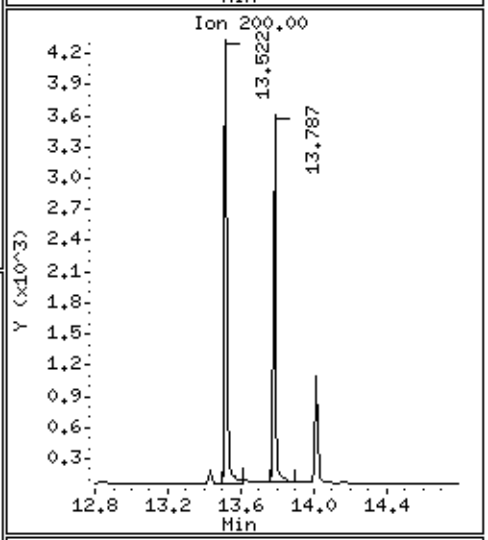


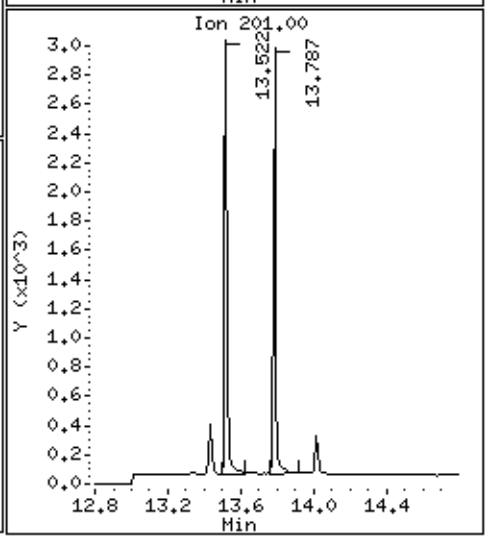












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Date : 12-DEC-2023 16:17

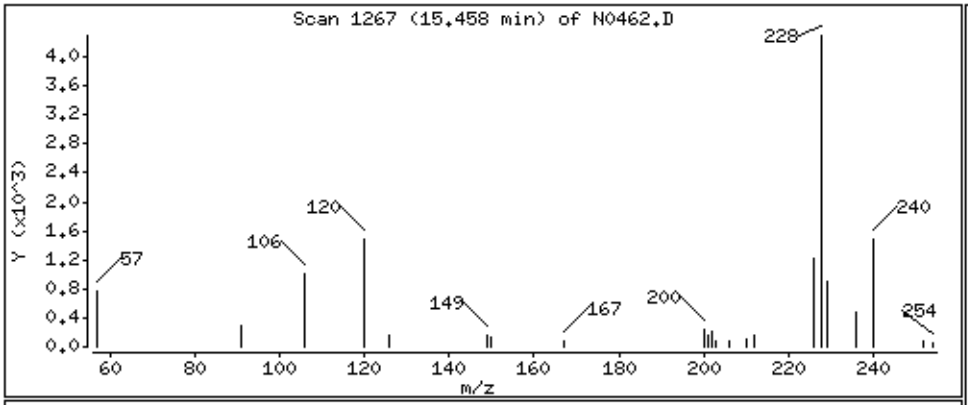
Client ID: Y-BRMW1-65-75-11092 Instrument: gcms-n.i

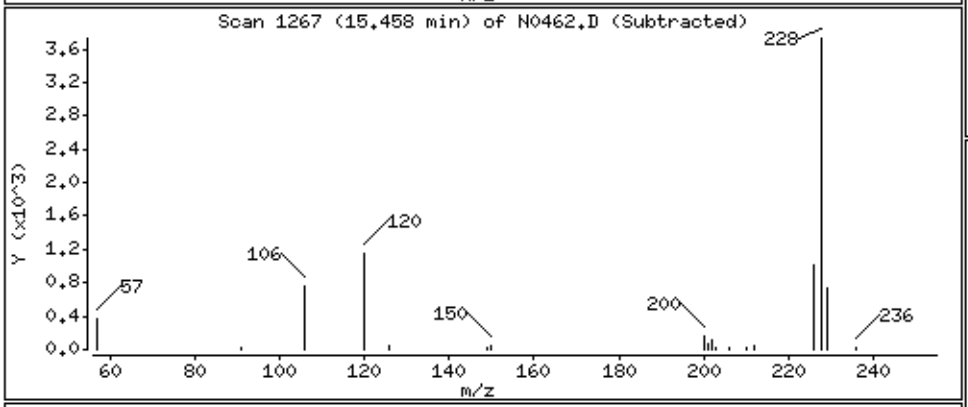
Sample Info: SQ6238-9RA

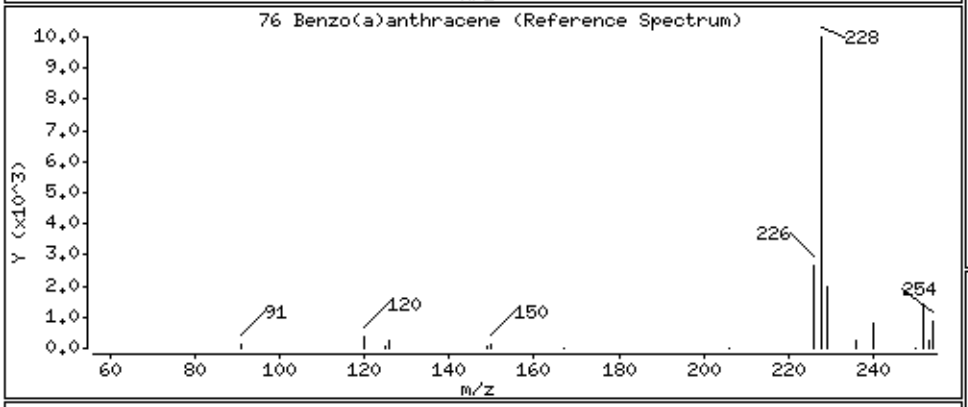
Volume Injected (uL): 1.0 Operator: EP

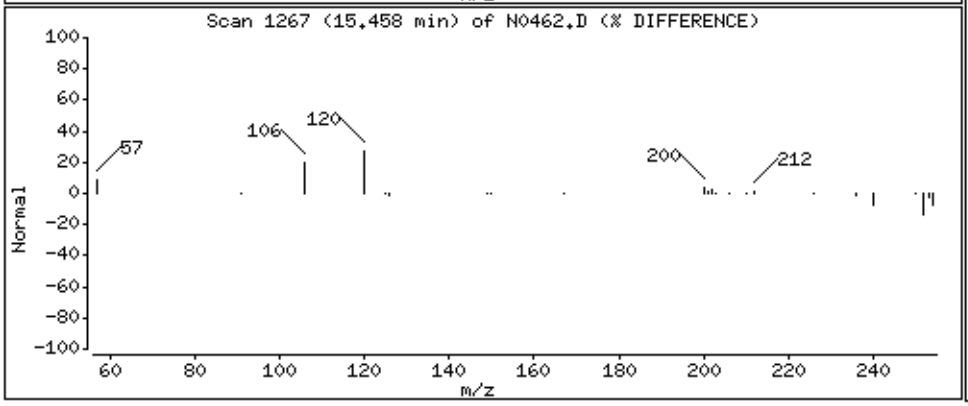
Column phase: Rxi-SVOCms Column diameter: 0.25

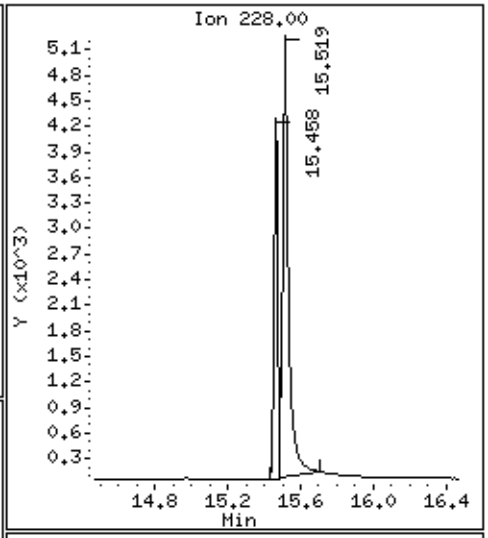
76 Benzo(a)anthracene Concentration: 0.179 ug/L

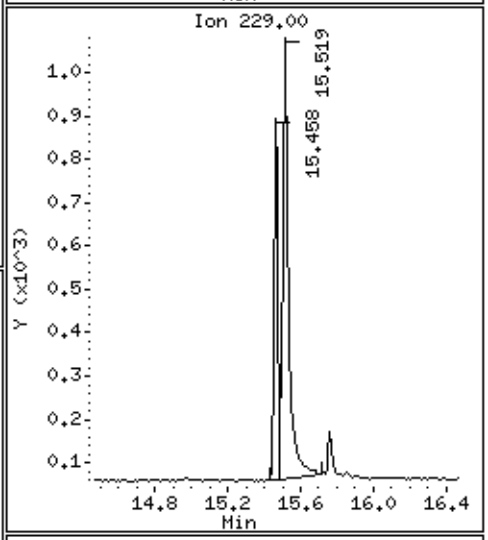


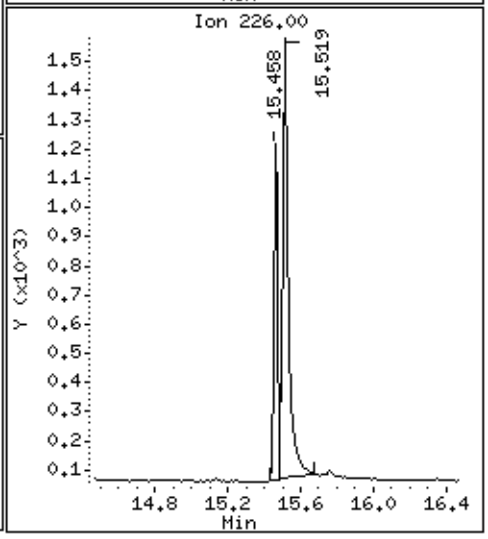












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Date : 12-DEC-2023 16:17

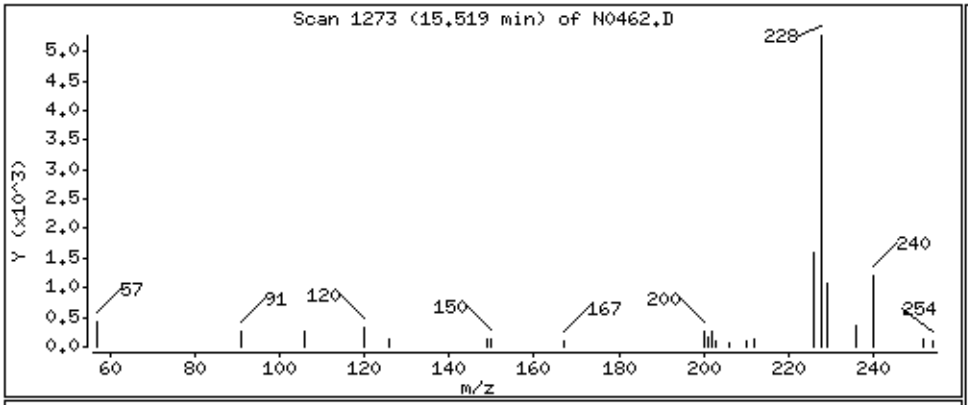
Client ID: Y-BRMW1-65-75-11092 Instrument: gcms-n.i

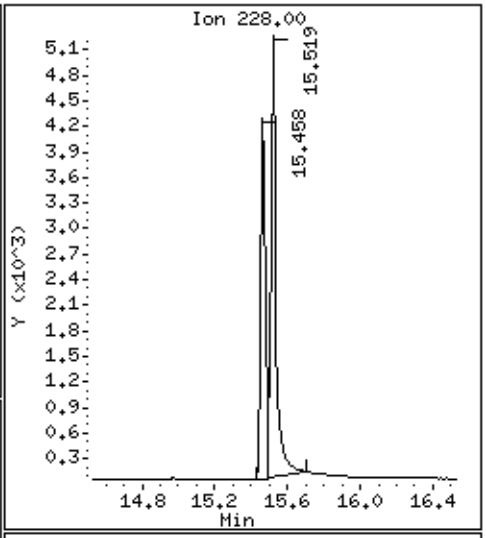
Sample Info: SQ6238-9RA

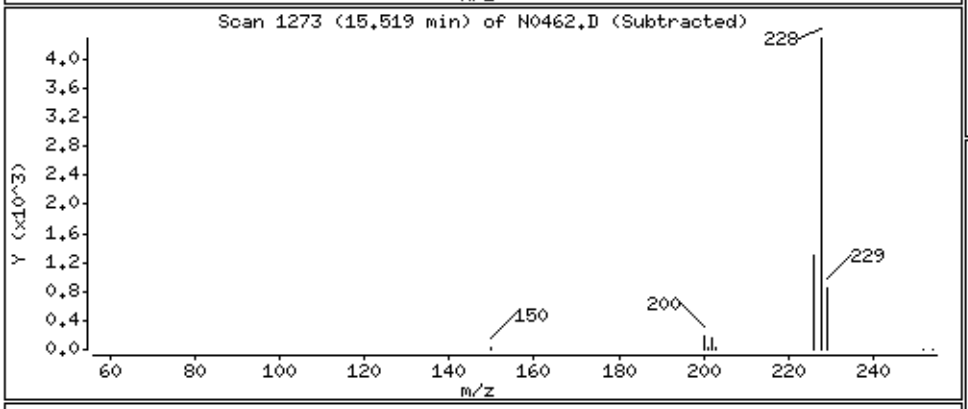
Volume Injected (uL): 1.0 Operator: EP

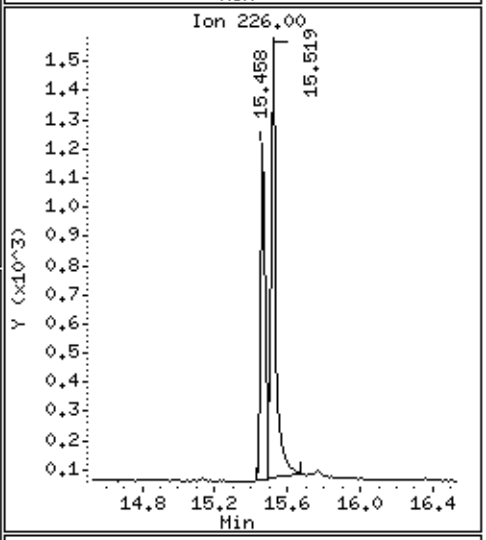
Column phase: Rxi-SVOCms Column diameter: 0.25

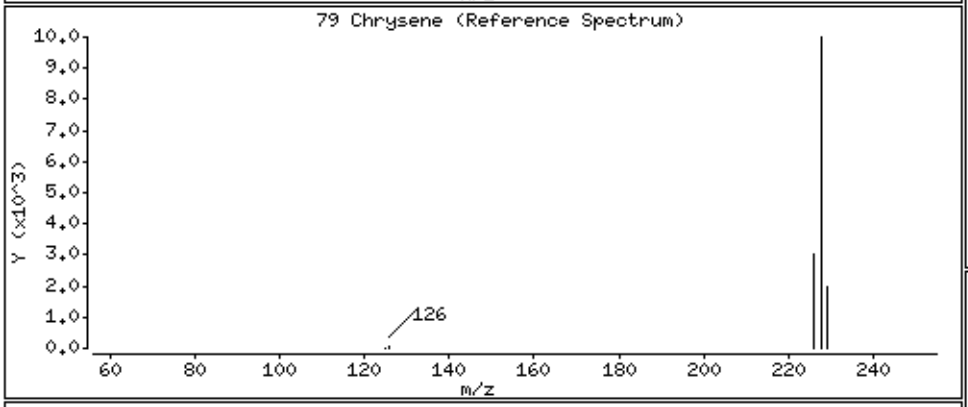
79 Chrysene Concentration: 0.228 ug/L

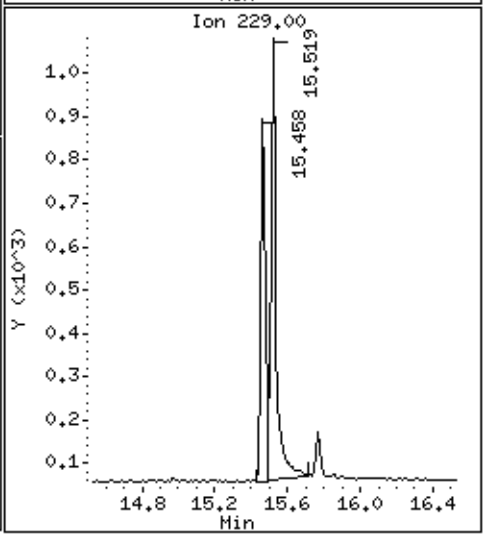


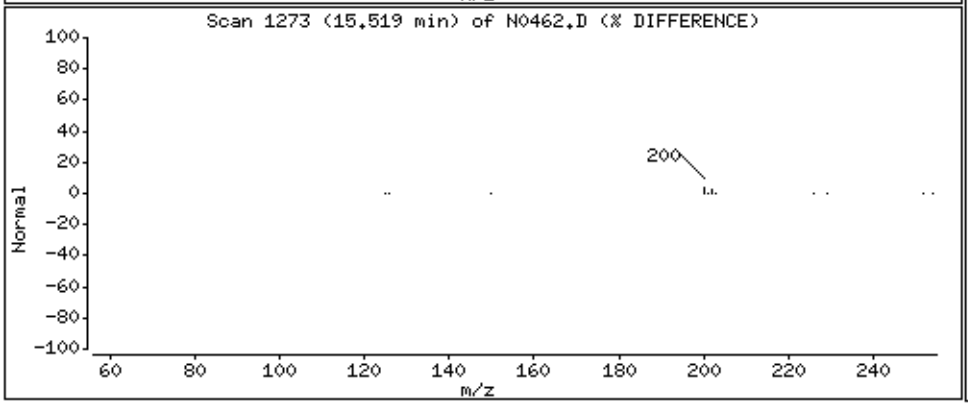












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Date : 12-DEC-2023 16:17

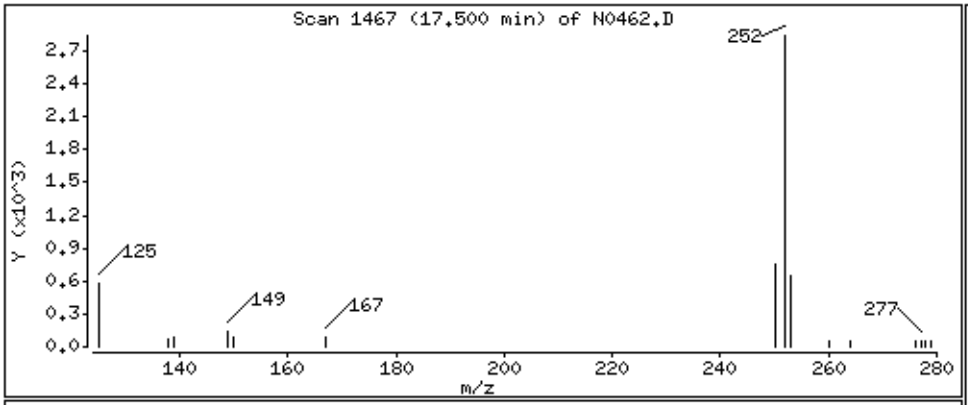
Client ID: Y-BRMW1-65-75-11092 Instrument: gcms-n.i

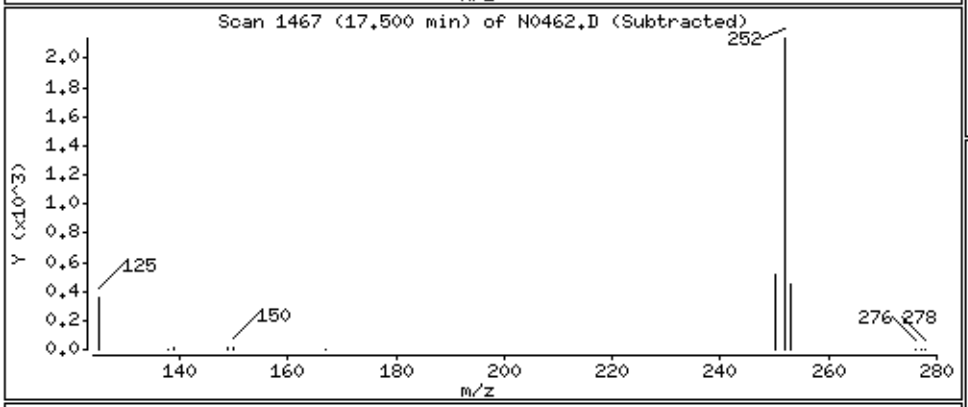
Sample Info: SQ6238-9RA

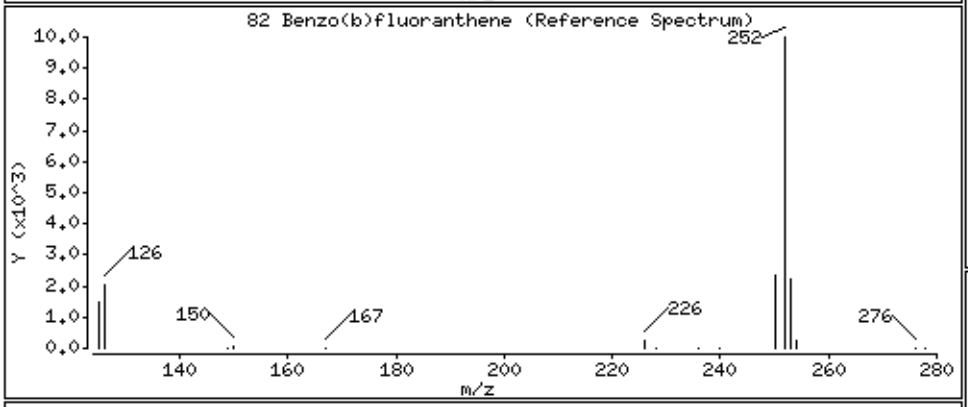
Volume Injected (uL): 1.0 Operator: EP

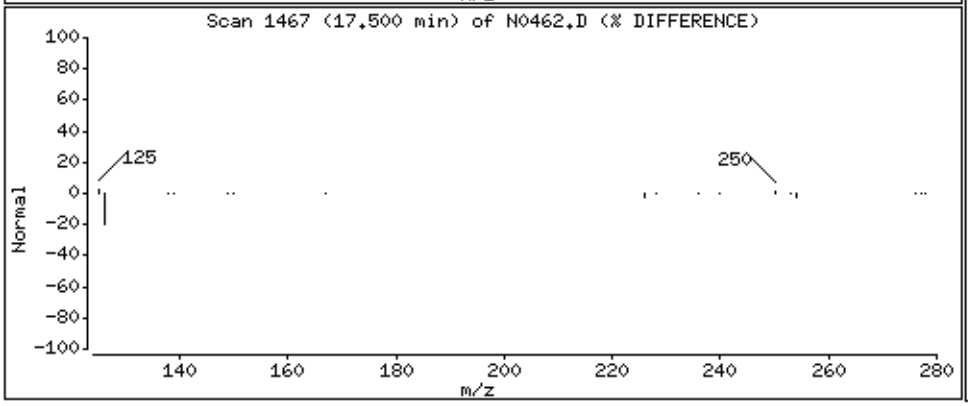
Column phase: Rxi-SVOCms Column diameter: 0.25

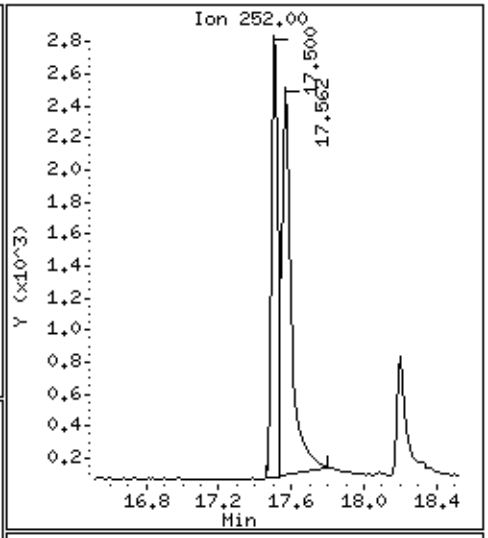
82 Benzo(b)fluoranthene Concentration: 0.197 ug/L

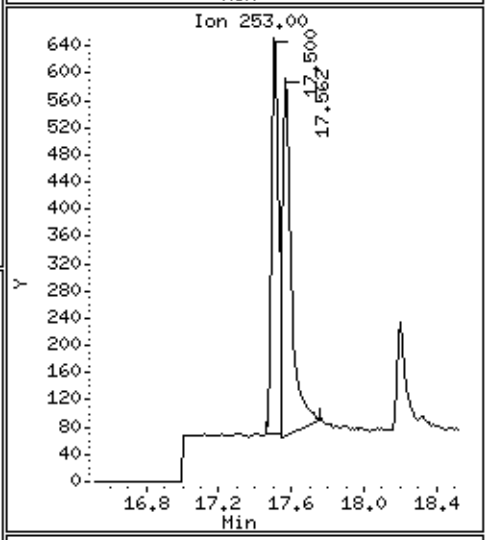


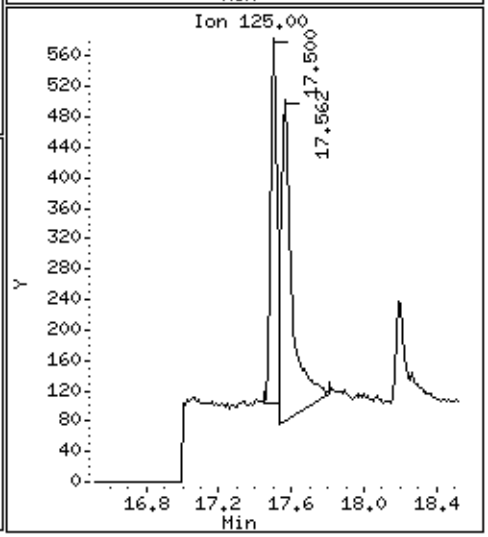












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Date : 12-DEC-2023 16:17

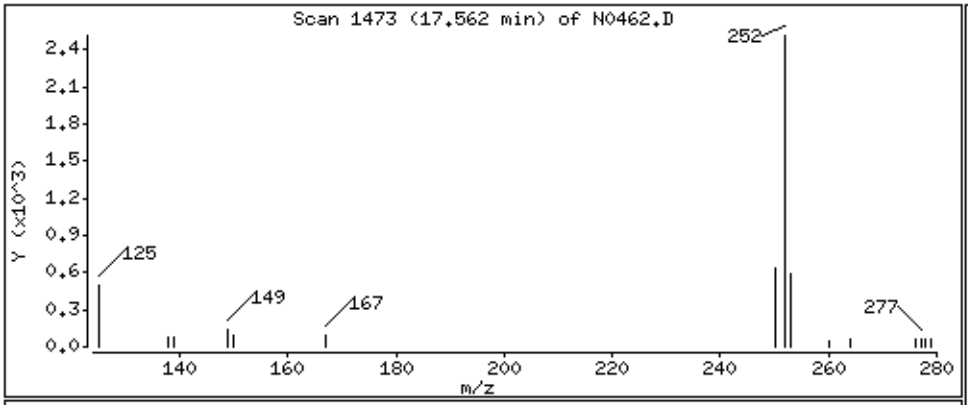
Client ID: Y-BRMW1-65-75-11092 Instrument: gcms-n.i

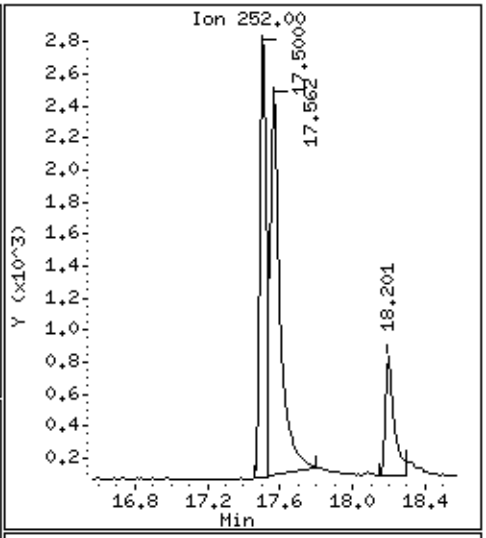
Sample Info: SQ6238-9RA

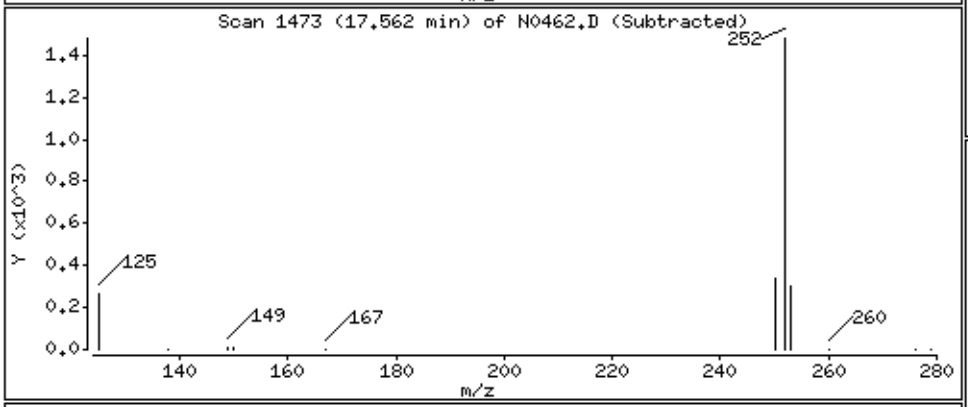
Volume Injected (uL): 1.0 Operator: EP

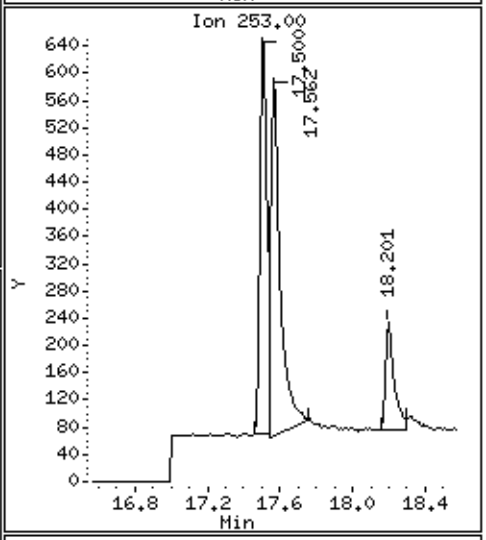
Column phase: Rxi-SVOCms Column diameter: 0.25

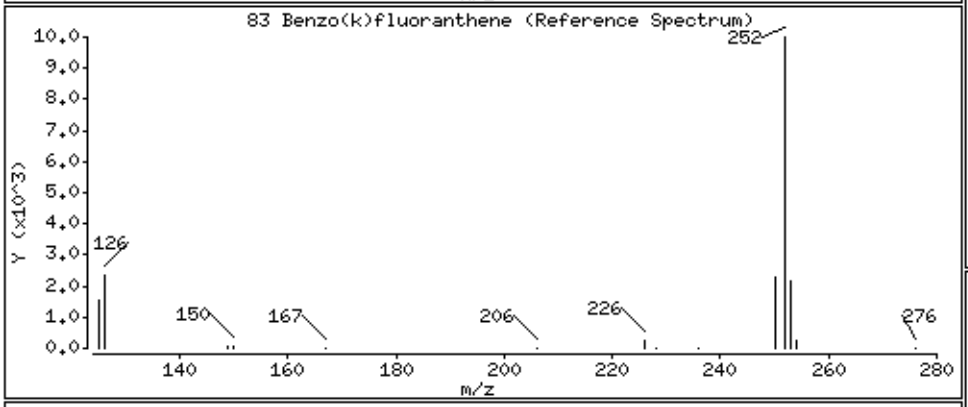
83 Benzo(k)fluoranthene Concentration: 0.218 ug/L

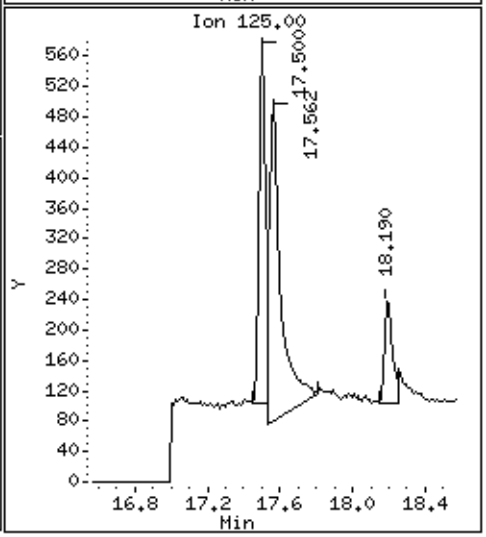


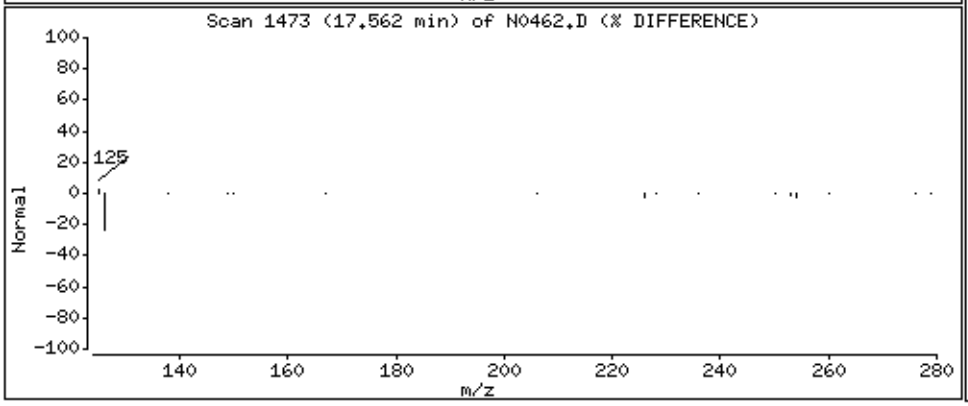












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Date : 12-DEC-2023 16:17

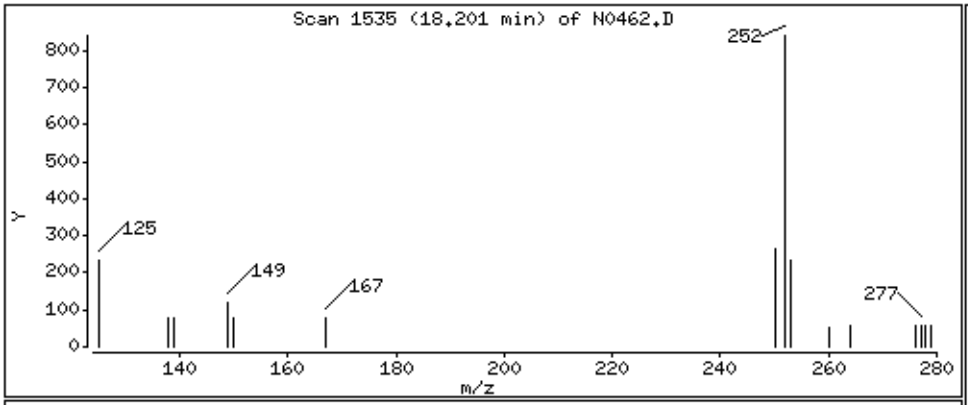
Client ID: Y-BRMW1-65-75-11092 Instrument: gcms-n.i

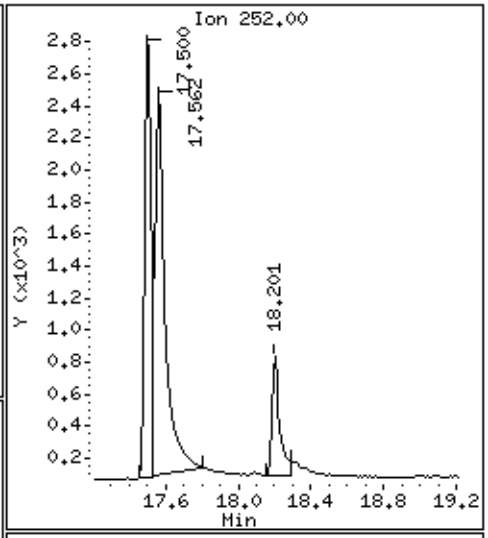
Sample Info: SQ6238-9RA

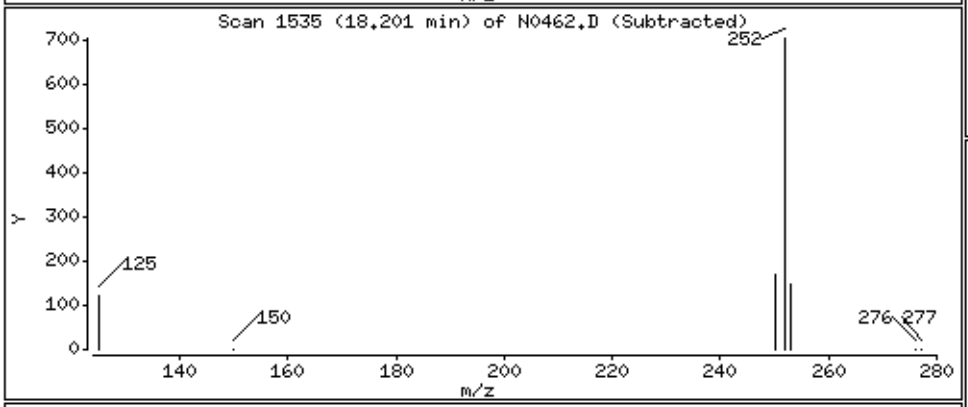
Volume Injected (uL): 1.0 Operator: EP

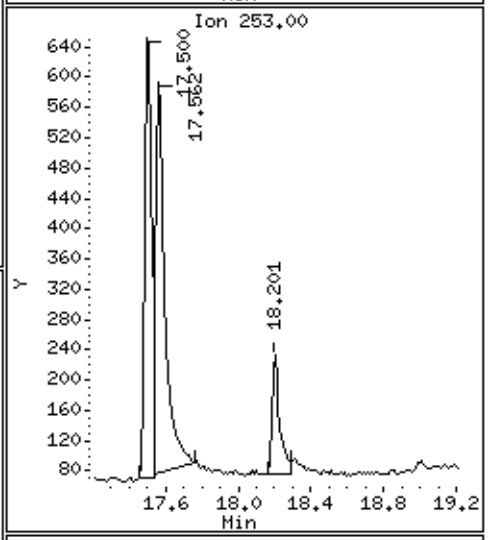
Column phase: Rxi-SVOCms Column diameter: 0.25

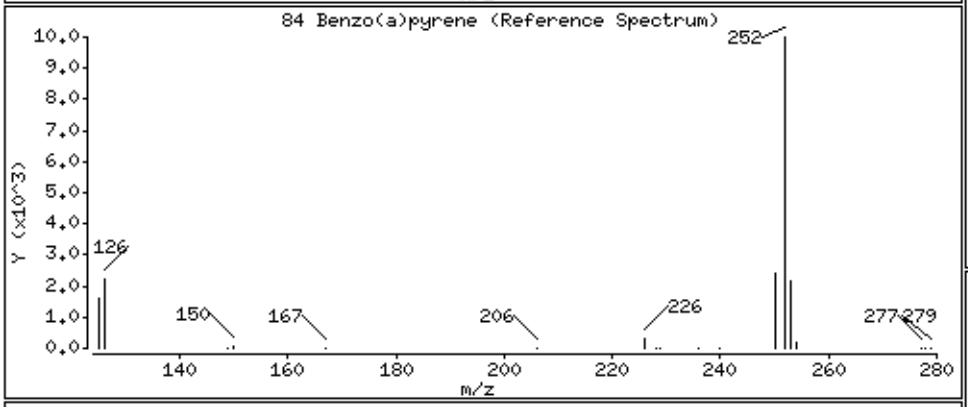
84 Benzo(a)pyrene Concentration: 0.0728 ug/L

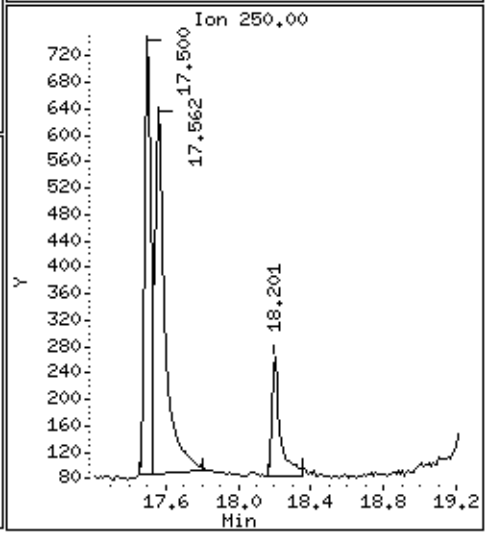


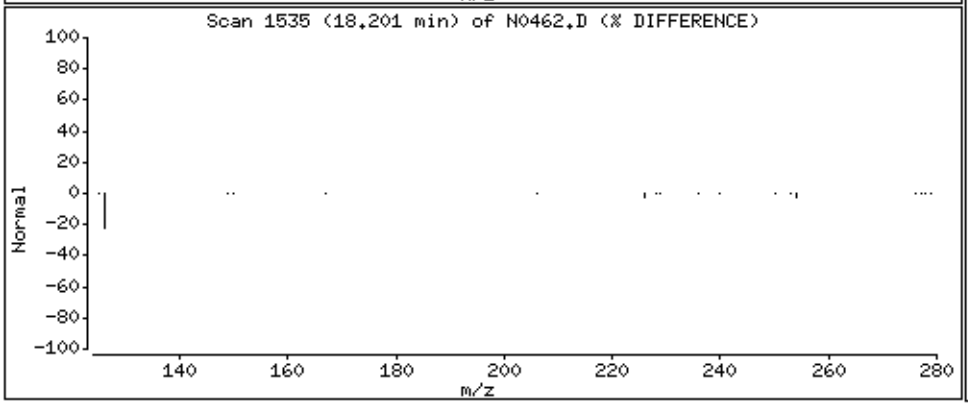












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Date : 12-DEC-2023 16:17

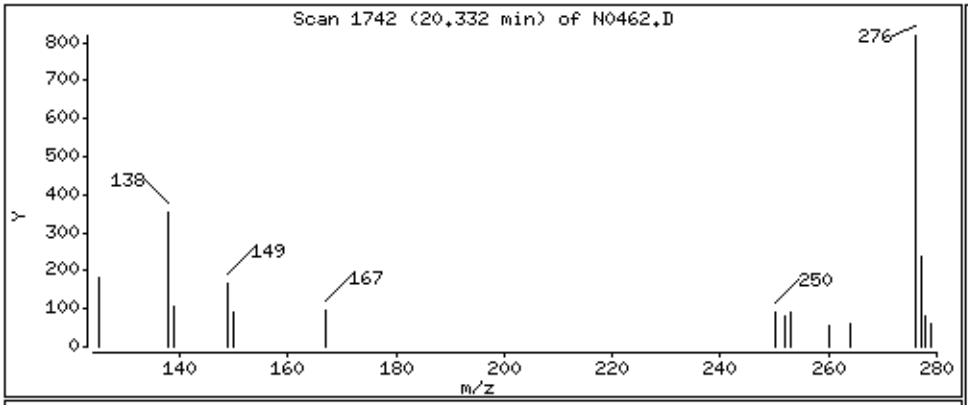
Client ID: Y-BRMW1-65-75-11092 Instrument: gcms-n.i

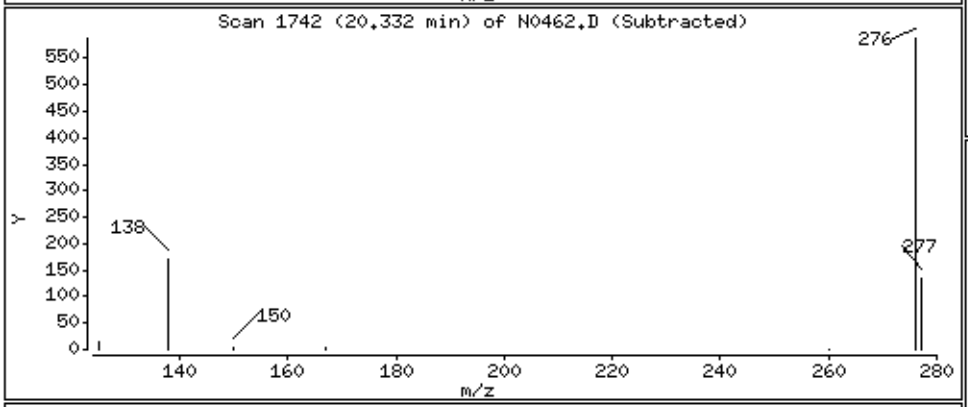
Sample Info: SQ6238-9RA

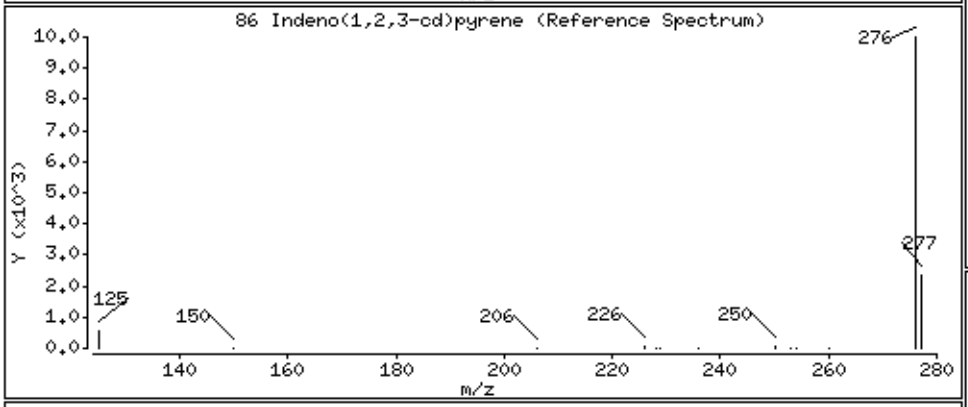
Volume Injected (uL): 1.0 Operator: EP

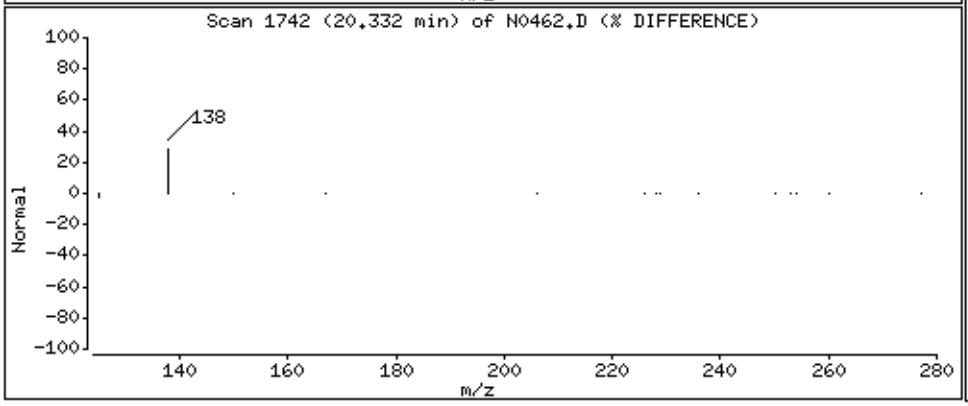
Column phase: Rxi-SVOCms Column diameter: 0.25

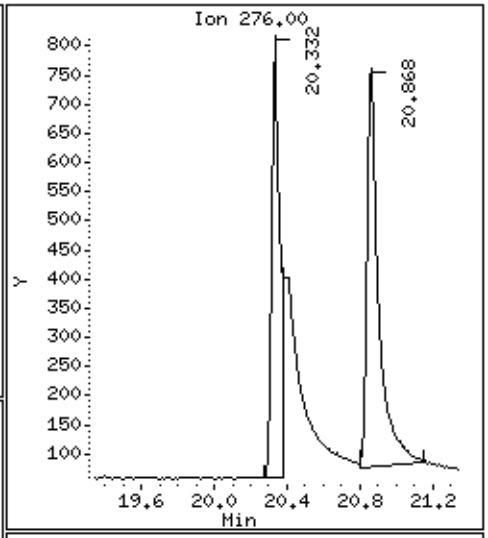
86 Indeno(1,2,3-cd)pyrene Concentration: 0.113 ug/L

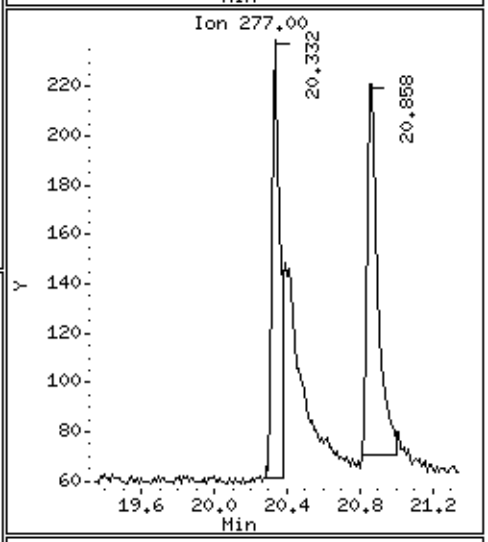


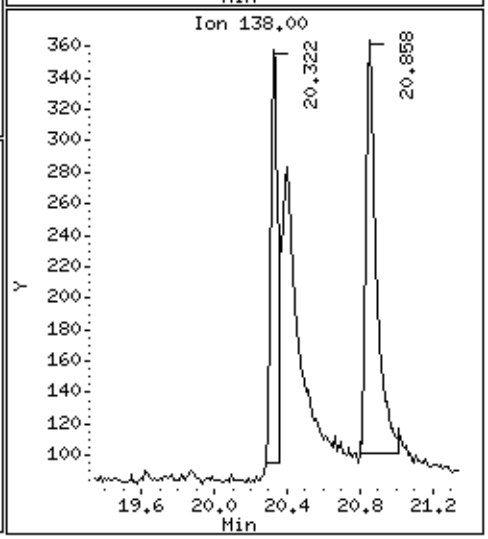












Data File: \\target_server\gg\chem\gcms-n.i\N121223.b\N0462.D

Date : 12-DEC-2023 16:17

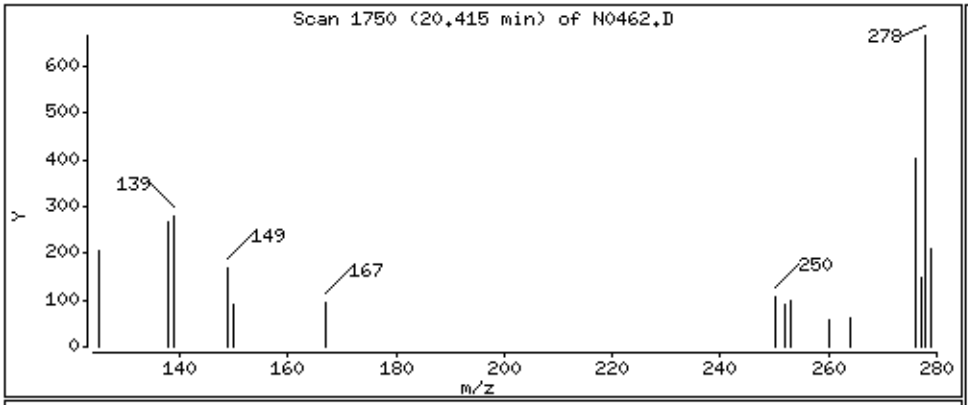
Client ID: Y-BRMW1-65-75-11092 Instrument: gcms-n.i

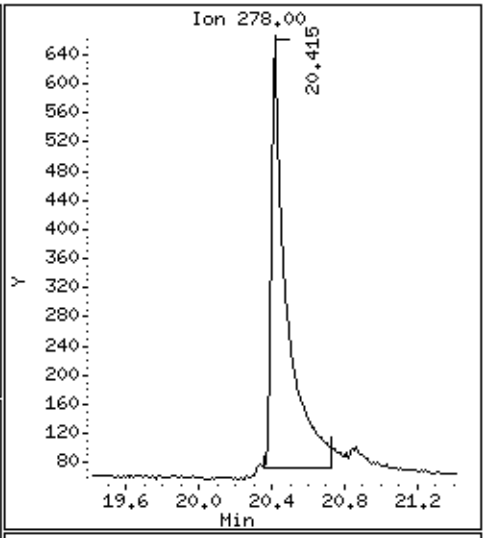
Sample Info: SQ6238-9RA

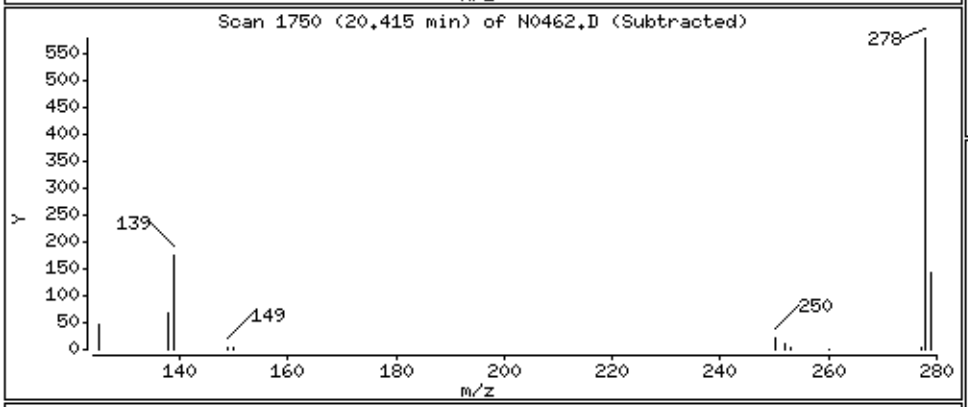
Volume Injected (uL): 1.0 Operator: EP

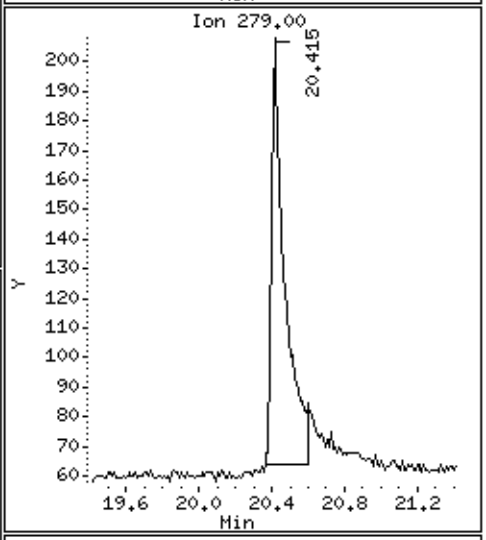
Column phase: Rxi-SVOCms Column diameter: 0.25

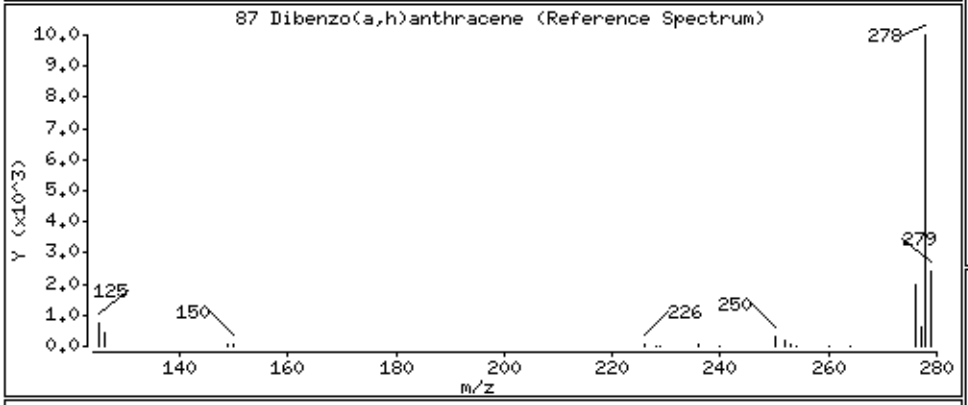
87 Dibenzo(a,h)anthracene Concentration: 0.146 ug/L

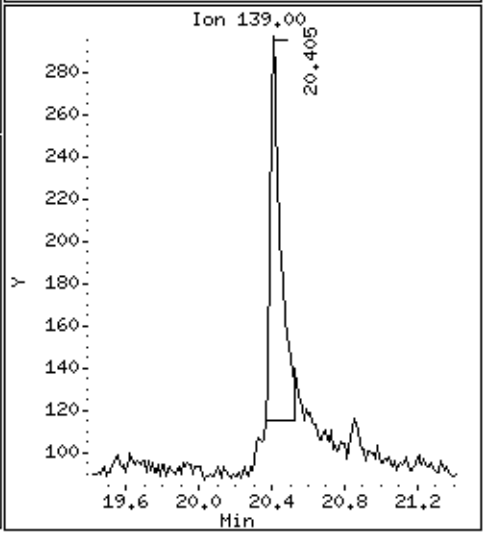


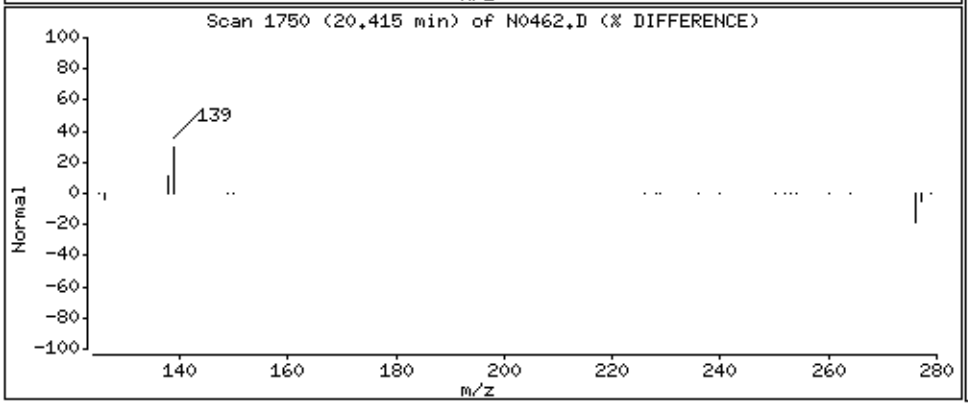












Data File: \\target_server\gg\chem\gcms-n.i\N121223.b\N0462.D

Date : 12-DEC-2023 16:17

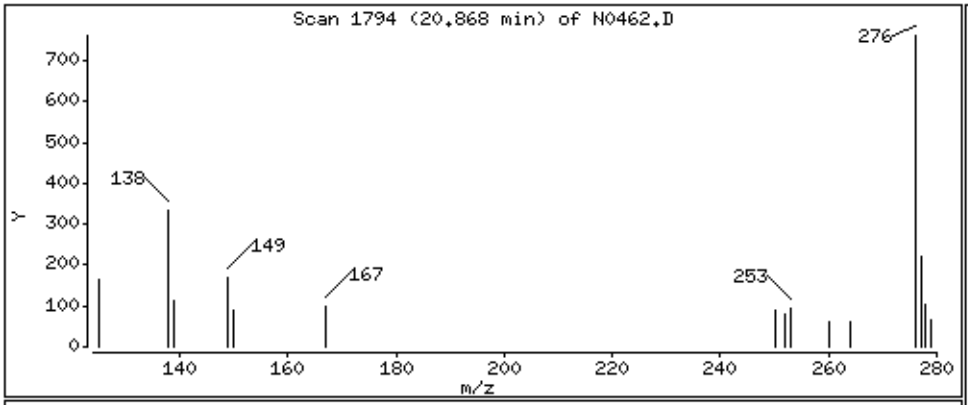
Client ID: Y-BRMW1-65-75-11092 Instrument: gcms-n.i

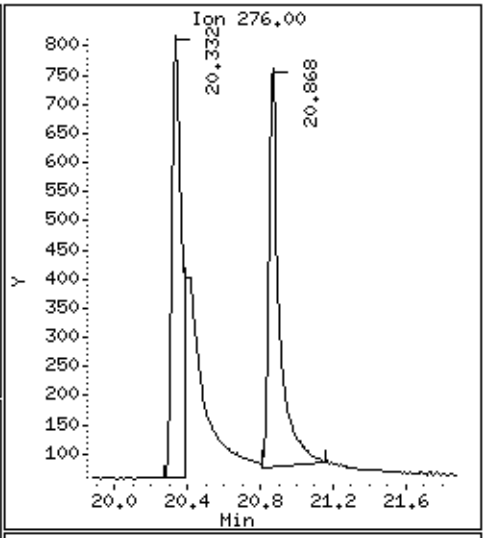
Sample Info: SQ6238-9RA

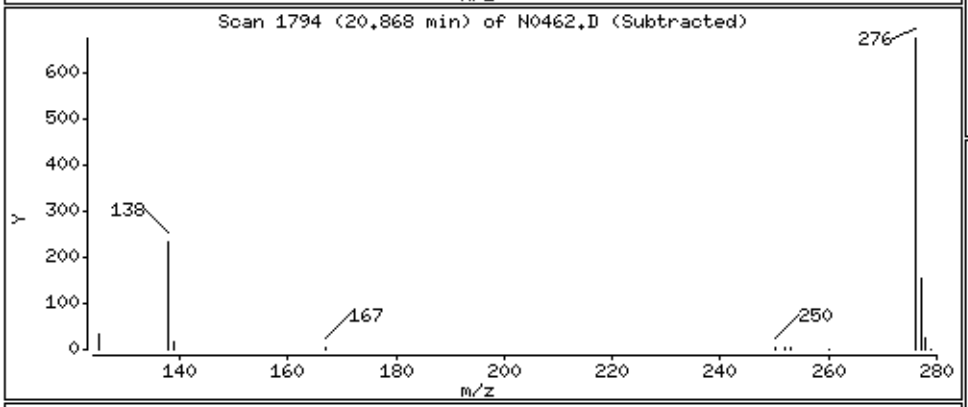
Volume Injected (uL): 1.0 Operator: EP

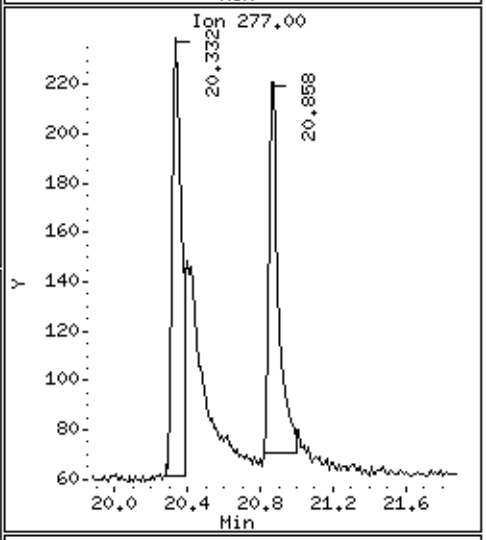
Column phase: Rxi-SVOCms Column diameter: 0.25

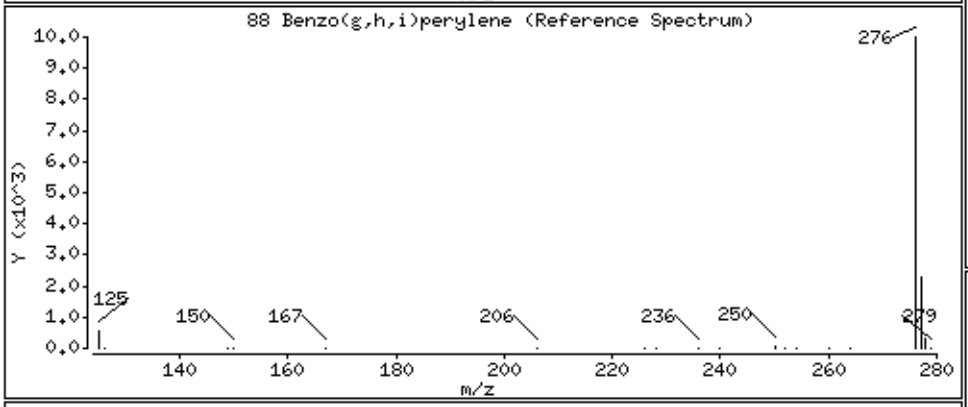
88 Benzo(g,h,i)perylene Concentration: 0.110 ug/L

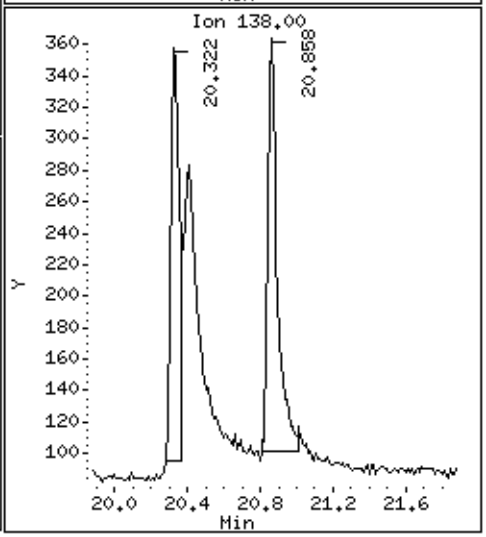


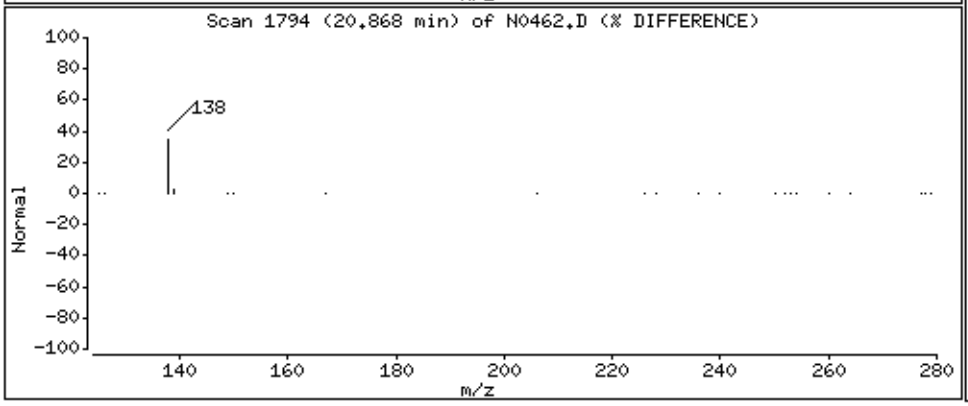












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ANALYTICAL SERVICES

Report of Analytical Results

SDG: SQ6238
Lab ID: SQ6238-10
Client ID: SY-BRMW10-65-75-110923
Matrix: AQ
Lab File ID: N0448.D

Sample Date: 09-NOV-23
Extract Date: 16-NOV-23
Extracted By: AN/CMW
Extraction Method: SW846 3510C
Lab Prep Batch: WG345531

Report Date: 29-DEC-23
Analysis Date: 11-DEC-23
Analyst: EP
Analysis Method: SW846 8270D SIM
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	0.095	ug/L	1	.2	0.19	0.061	0.095
2-Methylnaphthalene	U	0.095	ug/L	1	.2	0.19	0.073	0.095
Acenaphthylene	U	0.095	ug/L	1	.2	0.19	0.051	0.095
Acenaphthene	U	0.095	ug/L	1	.2	0.19	0.061	0.095
Fluorene	U	0.095	ug/L	1	.2	0.19	0.058	0.095
Phenanthrene	U	0.095	ug/L	1	.2	0.19	0.048	0.095
Anthracene	U	0.095	ug/L	1	.2	0.19	0.042	0.095
Fluoranthene	U	0.095	ug/L	1	.2	0.19	0.070	0.095
Pyrene	U	0.095	ug/L	1	.2	0.19	0.056	0.095
Benzo(a)anthracene	U	0.095	ug/L	1	.2	0.19	0.044	0.095
Chrysene	U	0.095	ug/L	1	.2	0.19	0.034	0.095
Benzo(b)Fluoranthene	U	0.095	ug/L	1	.2	0.19	0.085	0.095
Benzo(k)fluoranthene	U	0.095	ug/L	1	.2	0.19	0.047	0.095
Benzo(a)pyrene	U	0.095	ug/L	1	.2	0.19	0.063	0.095
Indeno(1,2,3-cd)pyrene	U	0.095	ug/L	1	.2	0.19	0.050	0.095
Dibenzo(a,h)anthracene	U	0.095	ug/L	1	.2	0.19	0.067	0.095
Benzo(g,h,i)perylene	U	0.095	ug/L	1	.2	0.19	0.062	0.095
2-Methylnaphthalene-D10		42.8	%					
Fluorene-D10		39.6	%					
Pyrene-D10	*	48.4	%					

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Data File: \\target_server\gg\chem\gcms-n.i\N121123.b\N0448.D
Report Date: 29-Dec-2023 15:34

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-n.i\N121123.b\N0448.D
Lab Smp Id: SQ6238-10 Client Smp ID: Y-BRMW10-65-75-1109
Inj Date : 11-DEC-2023 20:01
Operator : EP Inst ID: gcms-n.i
Smp Info : SQ6238-10
Misc Info : WG346778,WG345531,WG346503-4
Comment :
Method : \\target_server\gg\chem\gcms-n.i\N121123.b\NSPSIM95.m
Meth Date : 12-Dec-2023 08:48 epelletier Quant Type: ISTD
Cal Date : 07-DEC-2023 14:42 Cal File: N0385.D
Als bottle: 17
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pahplus.sub
Target Version: 4.12
Processing Host: INSPIRON1

Concentration Formula: Amt * DF * Uf*(Vt/Vo*Vi)*1000 * CpndVariable

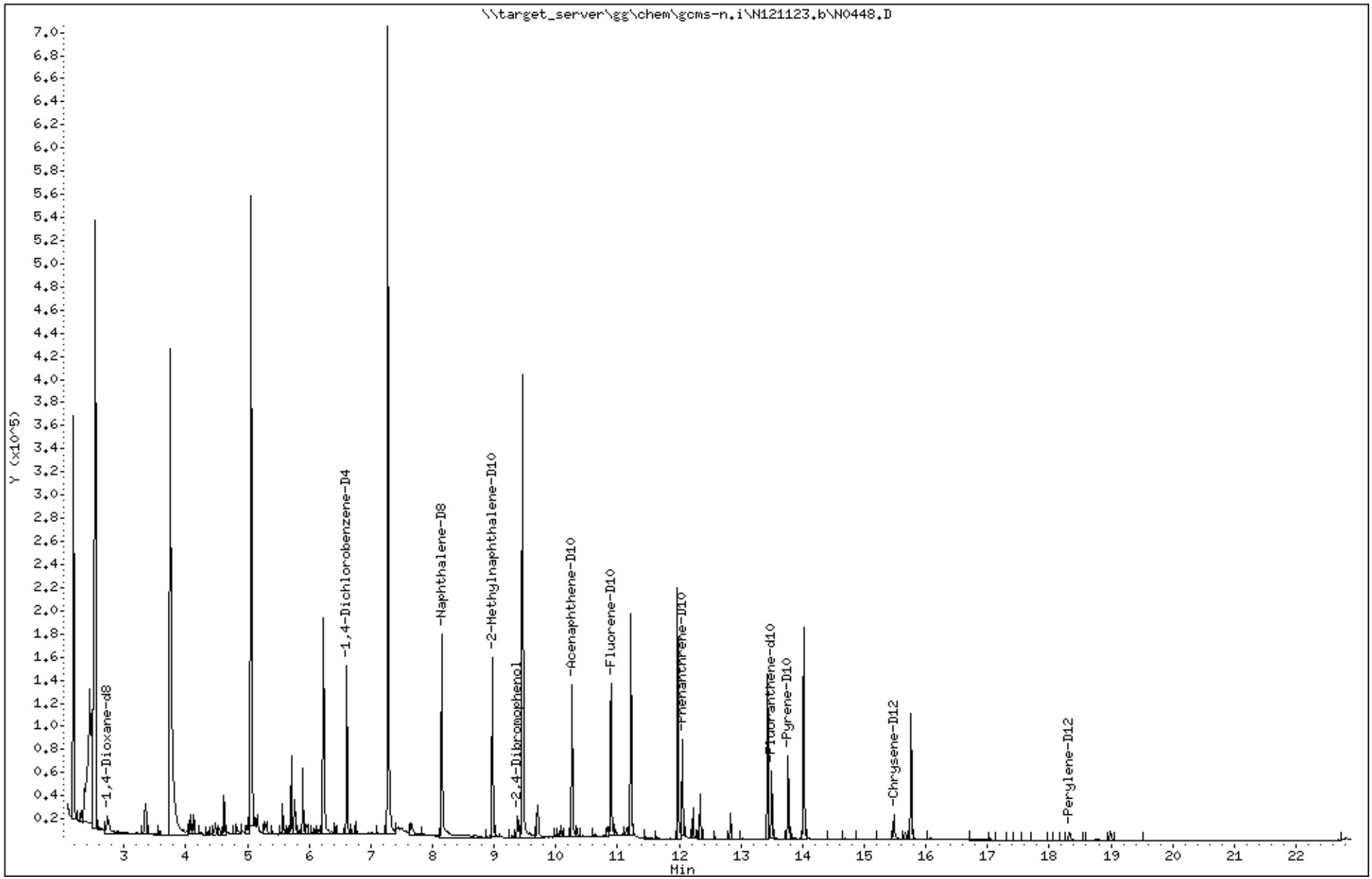
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.050	Sample Volume (L)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/L)	REVIEW CODE
$	1 1,4-Dioxane-d8	96	2.731	2.742	(0.266)	14775	0.44118	0.420(aR)	
*	10 1,4-Dichlorobenzene-D4	152	6.614	6.604	(1.000)	46230	0.80000	(aQ)	
*	27 Naphthalene-D8	136	8.147	8.125	(1.000)	157326	0.80000	(a)	
$	33 2-Methylnaphthalene-D10	152	8.975	8.954	(1.102)	88408	0.85616	0.815(aR)	
$	38 2,4-Dibromophenol	252	9.377	9.346	(0.914)	20434	0.80102	0.763(a)	
*	48 Acenaphthene-D10	164	10.264	10.254	(1.000)	72664	0.80000	(a)	
$	56 Fluorene-D10	174	10.897	10.887	(1.062)	75370	0.79259	0.755(a)	
*	66 Phenanthrene-D10	188	12.051	12.052	(1.000)	85826	0.80000	(a)	
$	71 Fluoranthene-d10	212	13.501	13.502	(1.120)	50959	0.73048	0.696(R)	
$	73 Pyrene-D10	212	13.766	13.777	(0.889)	52865	0.96745	0.921(aR)	
*	78 Chrysene-D12	240	15.478	15.478	(1.000)	23354	0.80000	(a)	
*	85 Perylene-D12	264	18.324	18.324	(1.000)	16384	0.80000	(a)	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.

Data File: \\target_server\gg\chem\gcms-n.i\N121123.b\N0448.D
Date : 11-DEC-2023 20:01
Client ID: Y-BRMW10-65-75-1109
Instrument: gcms-n.i
Sample Info: SQ6238-10
Volume Injected (uL): 1.0
Operator: EP
Column phase: Rxi-SVOCms
Column diameter: 0.25



Katahdin Analytical Services SQ6238 Page 267 of 875

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ANALYTICAL SERVICES

Report of Analytical Results

SDG: SQ6238
Lab ID: SQ6238-11
Client ID: SY-BRMW1-150-157-110923
Matrix: AQ
Lab File ID: N0449.D

Sample Date: 09-NOV-23
Extract Date: 16-NOV-23
Extracted By: AN/CMW
Extraction Method: SW846 3510C
Lab Prep Batch: WG345531

Report Date: 29-DEC-23
Analysis Date: 11-DEC-23
Analyst: EP
Analysis Method: SW846 8270D SIM
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	0.095	ug/L	1	.2	0.19	0.061	0.095
2-Methylnaphthalene	U	0.095	ug/L	1	.2	0.19	0.073	0.095
Acenaphthylene	U	0.095	ug/L	1	.2	0.19	0.051	0.095
Acenaphthene	U	0.095	ug/L	1	.2	0.19	0.061	0.095
Fluorene	U	0.095	ug/L	1	.2	0.19	0.058	0.095
Phenanthrene	U	0.095	ug/L	1	.2	0.19	0.048	0.095
Anthracene	U	0.095	ug/L	1	.2	0.19	0.042	0.095
Fluoranthene	U	0.095	ug/L	1	.2	0.19	0.070	0.095
Pyrene	J	0.084	ug/L	1	.2	0.19	0.056	0.095
Benzo(a)anthracene	U	0.095	ug/L	1	.2	0.19	0.044	0.095
Chrysene	J	0.054	ug/L	1	.2	0.19	0.034	0.095
Benzo(b)Fluoranthene	U	0.095	ug/L	1	.2	0.19	0.085	0.095
Benzo(k)fluoranthene	U	0.095	ug/L	1	.2	0.19	0.047	0.095
Benzo(a)pyrene	U	0.095	ug/L	1	.2	0.19	0.063	0.095
Indeno(1,2,3-cd)pyrene	U	0.095	ug/L	1	.2	0.19	0.050	0.095
Dibenzo(a,h)anthracene	U	0.095	ug/L	1	.2	0.19	0.067	0.095
Benzo(g,h,i)perylene	U	0.095	ug/L	1	.2	0.19	0.062	0.095
2-Methylnaphthalene-D10		85.6	%					
Fluorene-D10		91.1	%					
Pyrene-D10		112.	%					

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Data File: \\target_server\gg\chem\gcms-n.i\N121123.b\N0449.D
Report Date: 29-Dec-2023 15:34

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-n.i\N121123.b\N0449.D
Lab Smp Id: SQ6238-11 Client Smp ID: Y-BRMW1-150-157-110
Inj Date : 11-DEC-2023 20:33
Operator : EP Inst ID: gcms-n.i
Smp Info : SQ6238-11
Misc Info : WG346778,WG345531,WG346503-4
Comment :
Method : \\target_server\gg\chem\gcms-n.i\N121123.b\NSPSIM95.m
Meth Date : 12-Dec-2023 08:48 epelletier Quant Type: ISTD
Cal Date : 07-DEC-2023 14:42 Cal File: N0385.D
Als bottle: 18
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pahplus.sub
Target Version: 4.12
Processing Host: INSPIRON1

Concentration Formula: Amt * DF * Uf*(Vt/Vo*Vi)*1000 * CpndVariable

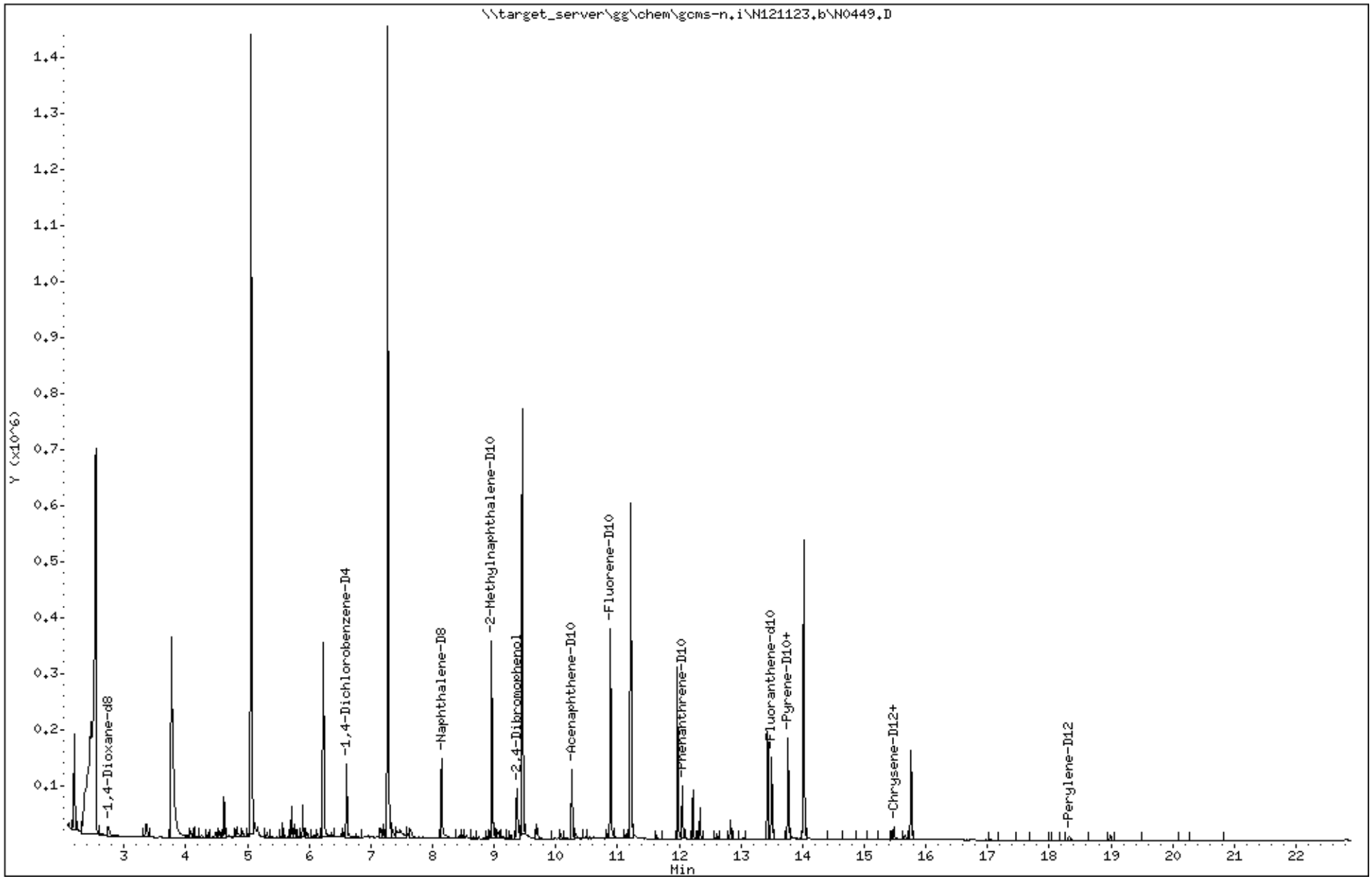
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.050	Sample Volume (L)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/L)	REVIEW CODE
$	1 1,4-Dioxane-d8	96	2.741	2.742	(0.267)	17585	0.56323	0.536(a)	
*	10 1,4-Dichlorobenzene-D4	152	6.614	6.604	(1.000)	44754	0.80000	(aQ)	
*	27 Naphthalene-D8	136	8.147	8.125	(1.000)	160052	0.80000	(a)	
$	33 2-Methylnaphthalene-D10	152	8.964	8.954	(1.100)	179780	1.71138	1.63	
$	38 2,4-Dibromophenol	252	9.366	9.346	(0.913)	93423	3.92824	3.74	
*	48 Acenaphthene-D10	164	10.253	10.254	(1.000)	67743	0.80000	(a)	
$	56 Fluorene-D10	174	10.886	10.887	(1.062)	161463	1.82129	1.73	
*	66 Phenanthrene-D10	188	12.051	12.052	(1.000)	87567	0.80000	(a)	
$	71 Fluoranthene-d10	212	13.501	13.502	(1.120)	114036	1.60217	1.52	
$	73 Pyrene-D10	212	13.766	13.777	(0.889)	127003	2.23372	2.13	
	74 Pyrene	202	13.786	13.797	(0.891)	6648	0.08850	0.0843(a)	
*	78 Chrysene-D12	240	15.477	15.478	(1.000)	24300	0.80000	(a)	
	79 Chrysene	228	15.518	15.529	(1.003)	2883	0.05719	0.0545(a)	
*	85 Perylene-D12	264	18.324	18.324	(1.000)	16623	0.80000	(a)	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.

Data File: \\target_server\gg\chem\gcms-n.i\N121123.b\N0449.D
Date : 11-DEC-2023 20:33
Client ID: Y-BRMW1-150-157-110
Instrument: gcms-n.i
Sample Info: SQ6238-11
Volume Injected (uL): 1.0
Operator: EP
Column phase: Rxi-SVOCms
Column diameter: 0.25



Data File: \\target_server\gg\chem\gcms-n.i\N121123.b\N0449.D

Date : 11-DEC-2023 20:33

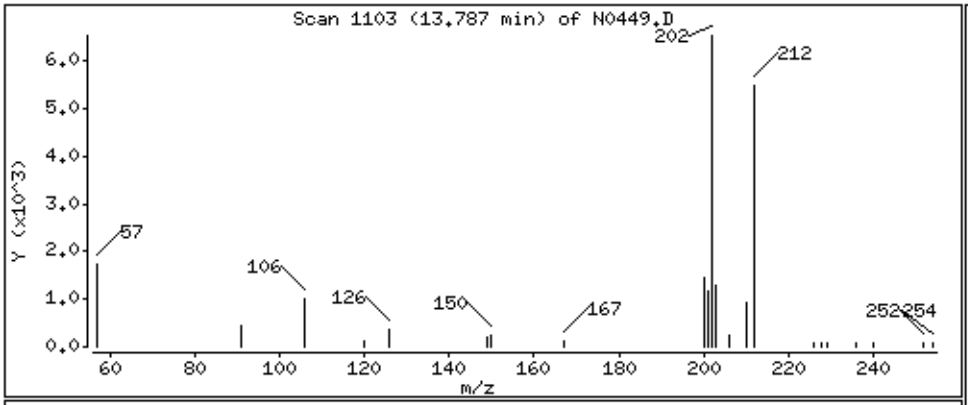
Client ID: Y-BRMW1-150-157-110 Instrument: gcms-n.i

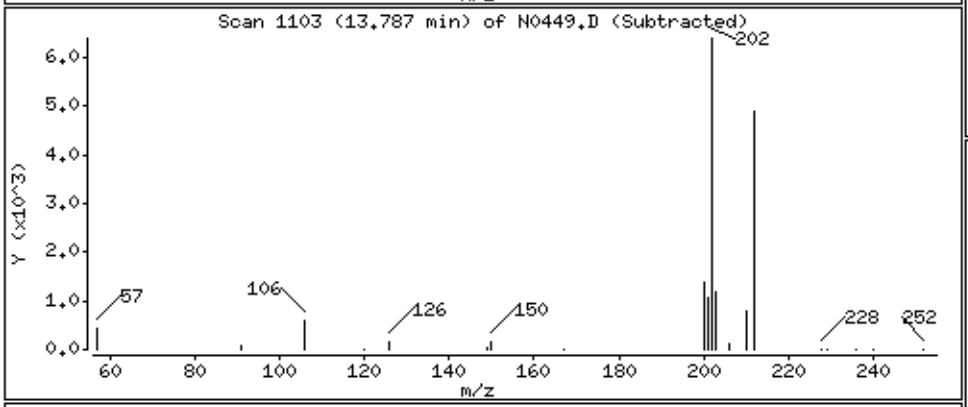
Sample Info: SQ6238-11

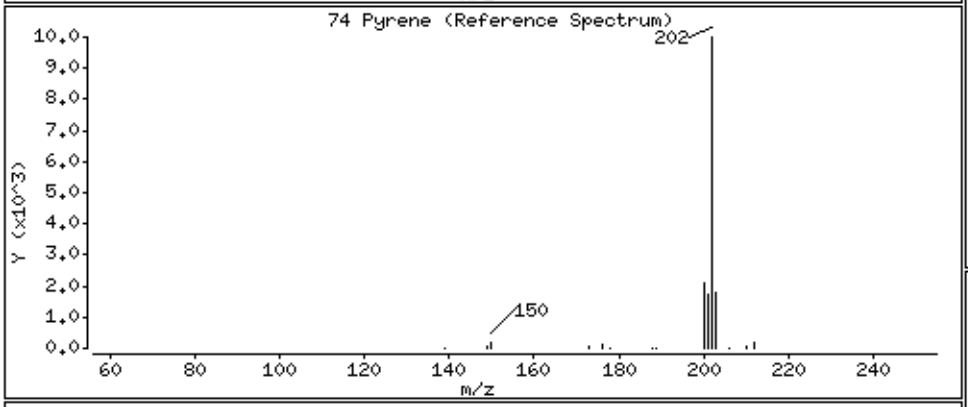
Volume Injected (uL): 1.0 Operator: EP

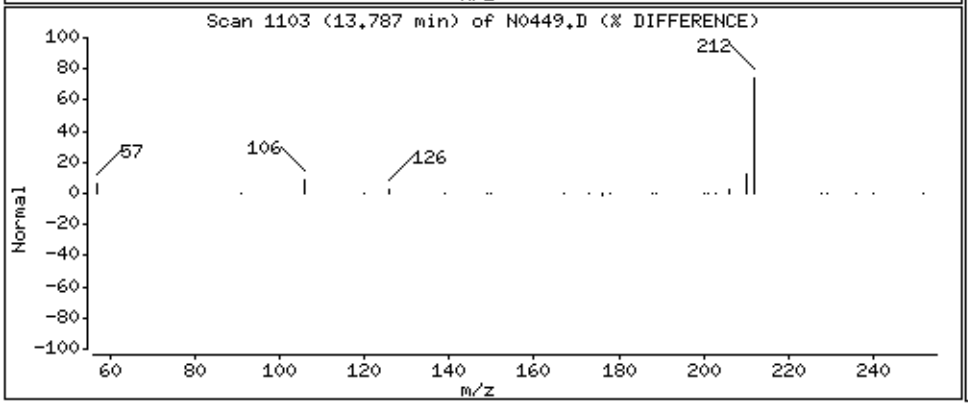
Column phase: Rxi-SVOCms Column diameter: 0.25

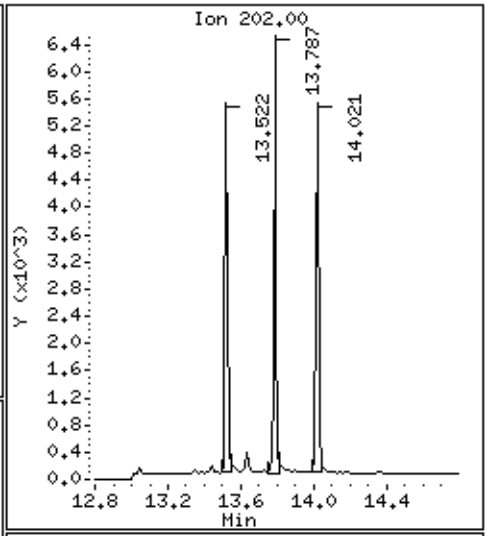
74 Pyrene Concentration: 0.0843 ug/L

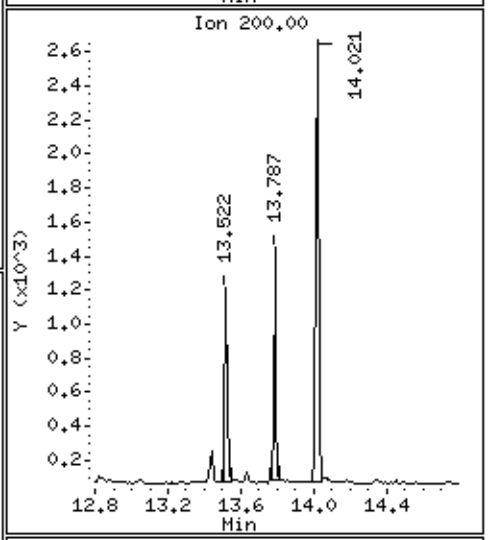


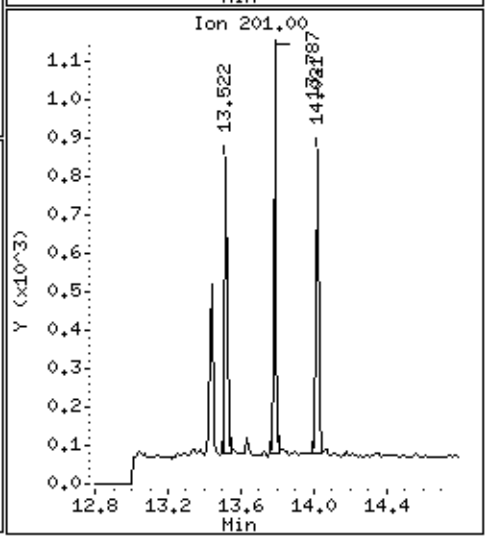












Data File: \\target_server\gg\chem\gcms-n.i\N121123.b\N0449.D

Date : 11-DEC-2023 20:33

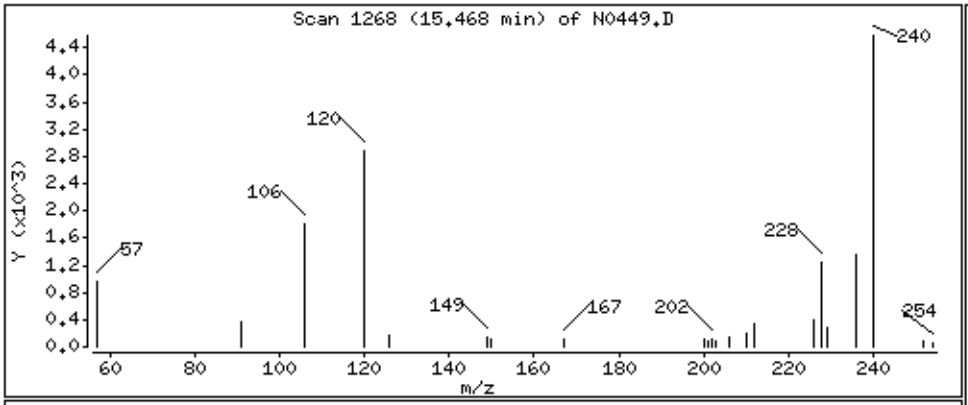
Client ID: Y-BRMW1-150-157-110 Instrument: gcms-n.i

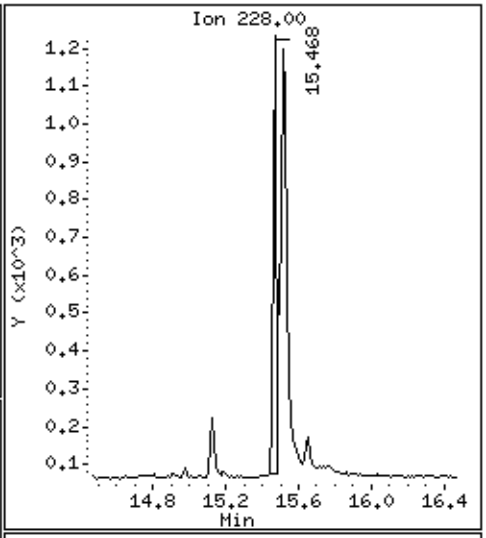
Sample Info: SQ6238-11

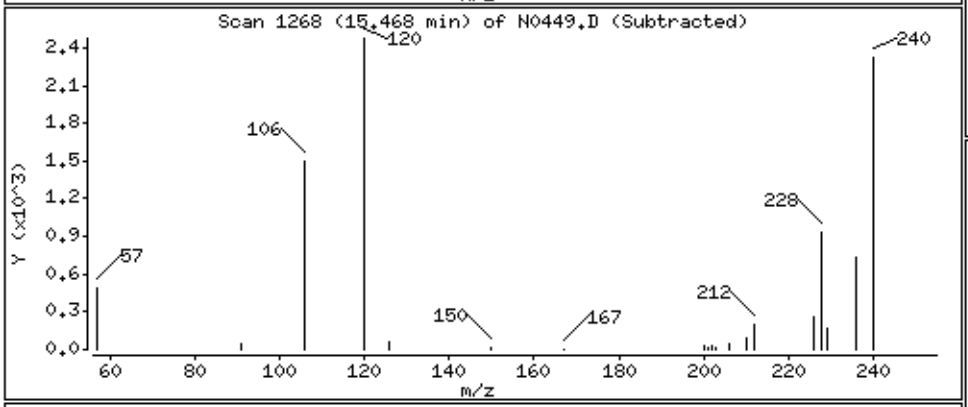
Volume Injected (uL): 1.0 Operator: EP

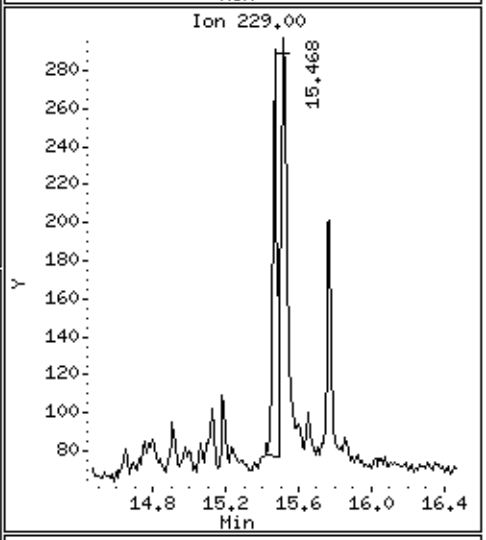
Column phase: Rxi-SVOCms Column diameter: 0.25

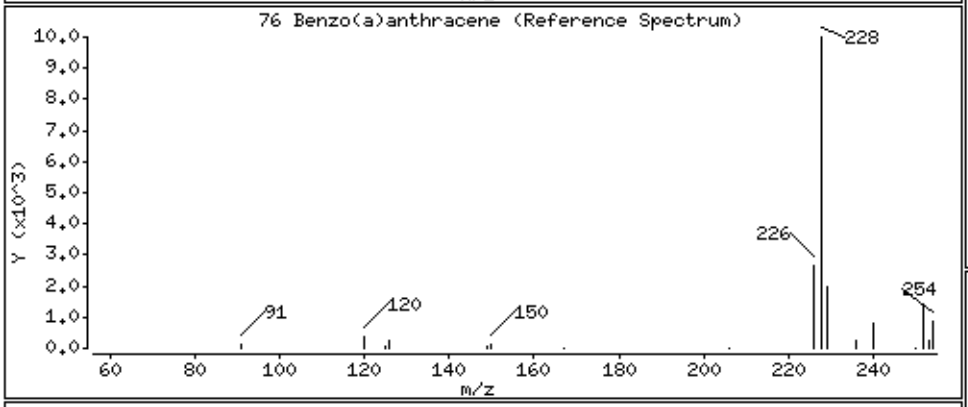
76 Benzo(a)anthracene Concentration: 0.0428 ug/L

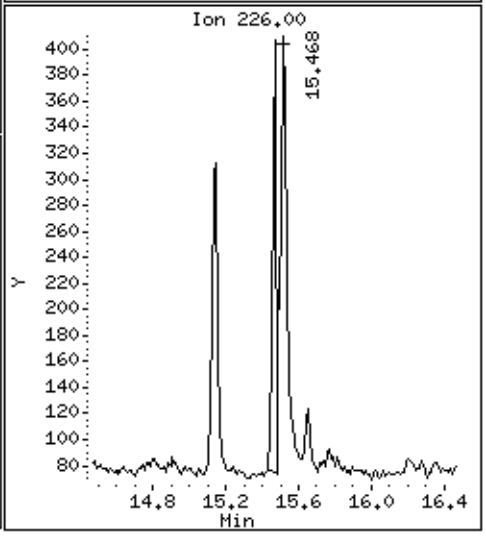


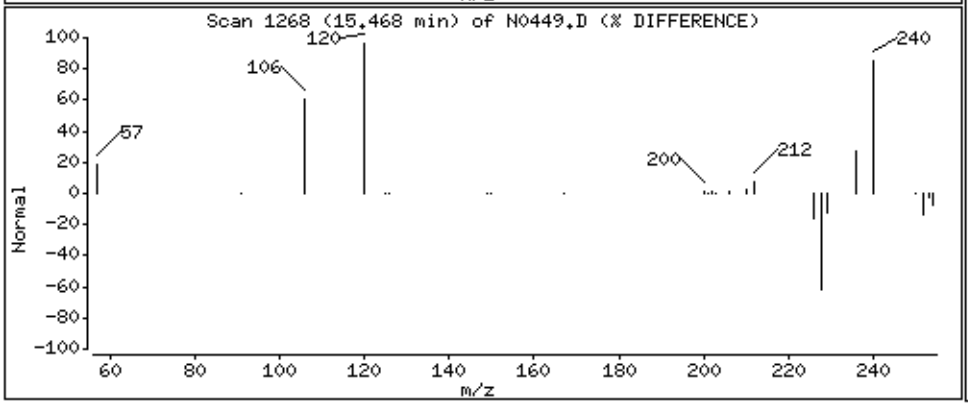












Data File: \\target_server\gg\chem\gcms-n.i\N121123.b\N0449.D

Date : 11-DEC-2023 20:33

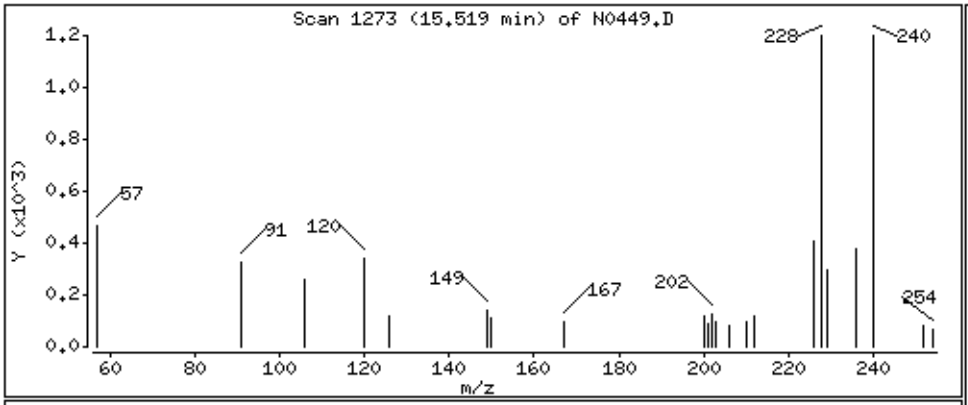
Client ID: Y-BRMW1-150-157-110 Instrument: gcms-n.i

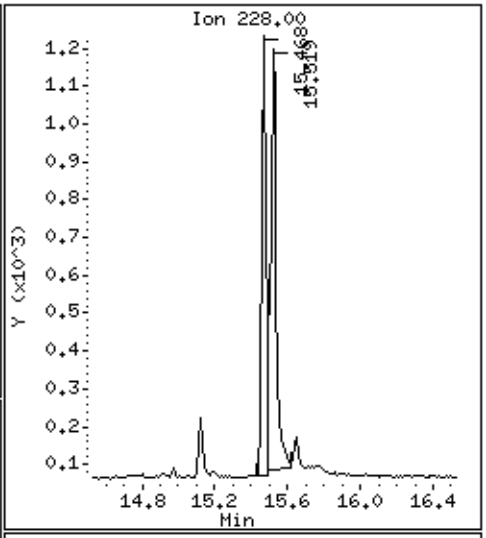
Sample Info: SQ6238-11

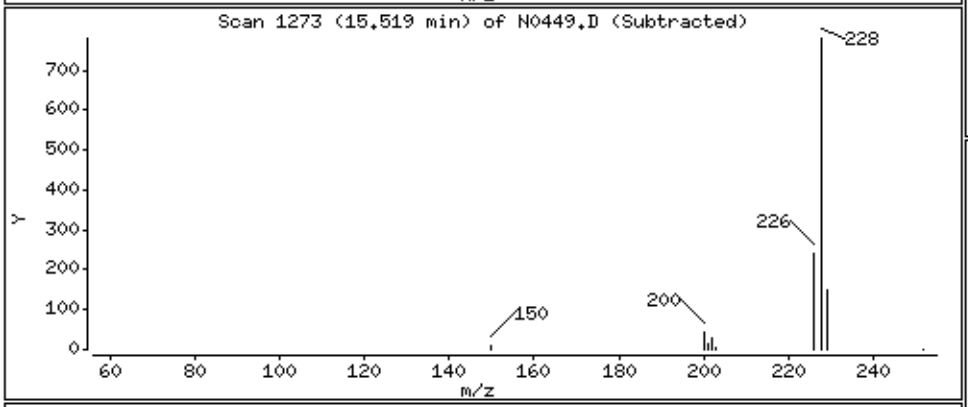
Volume Injected (uL): 1.0 Operator: EP

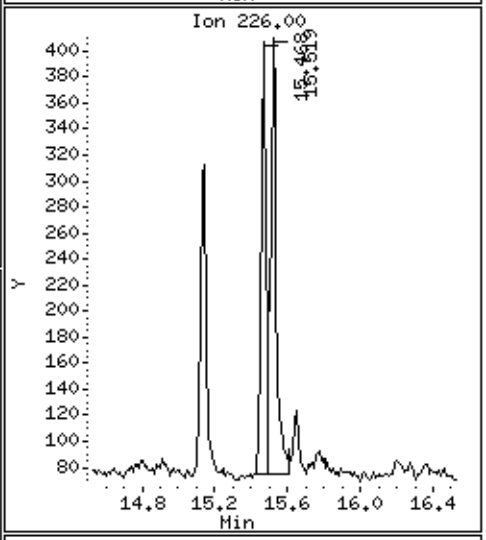
Column phase: Rxi-SVOCms Column diameter: 0.25

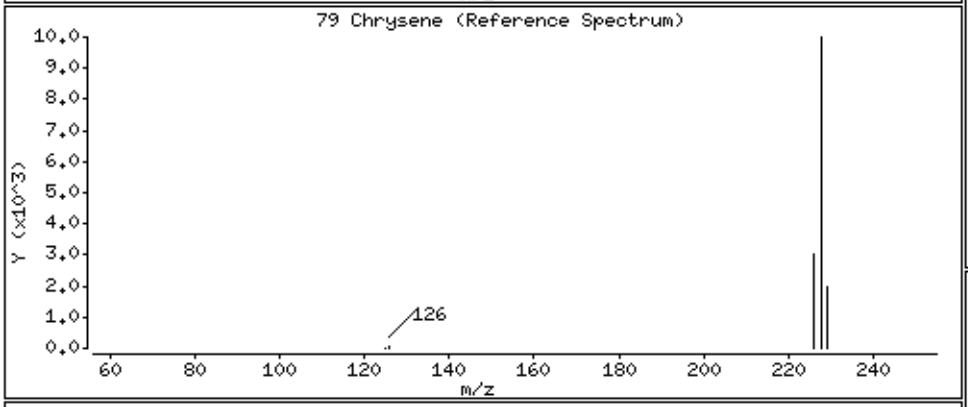
79 Chrysene Concentration: 0.0545 ug/L

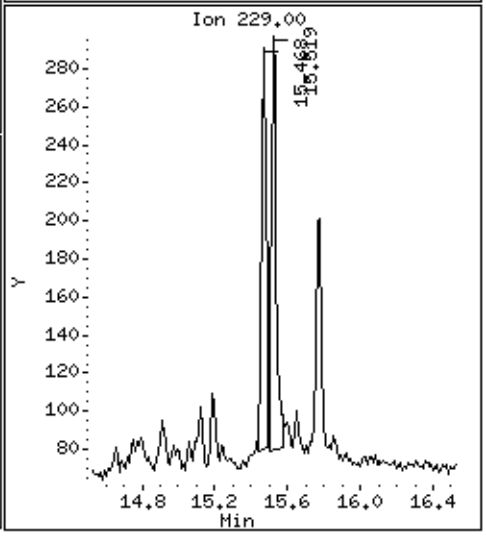


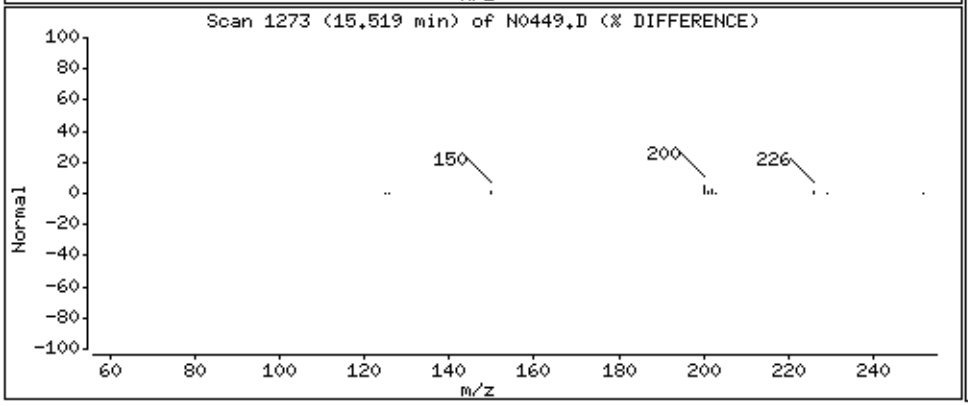








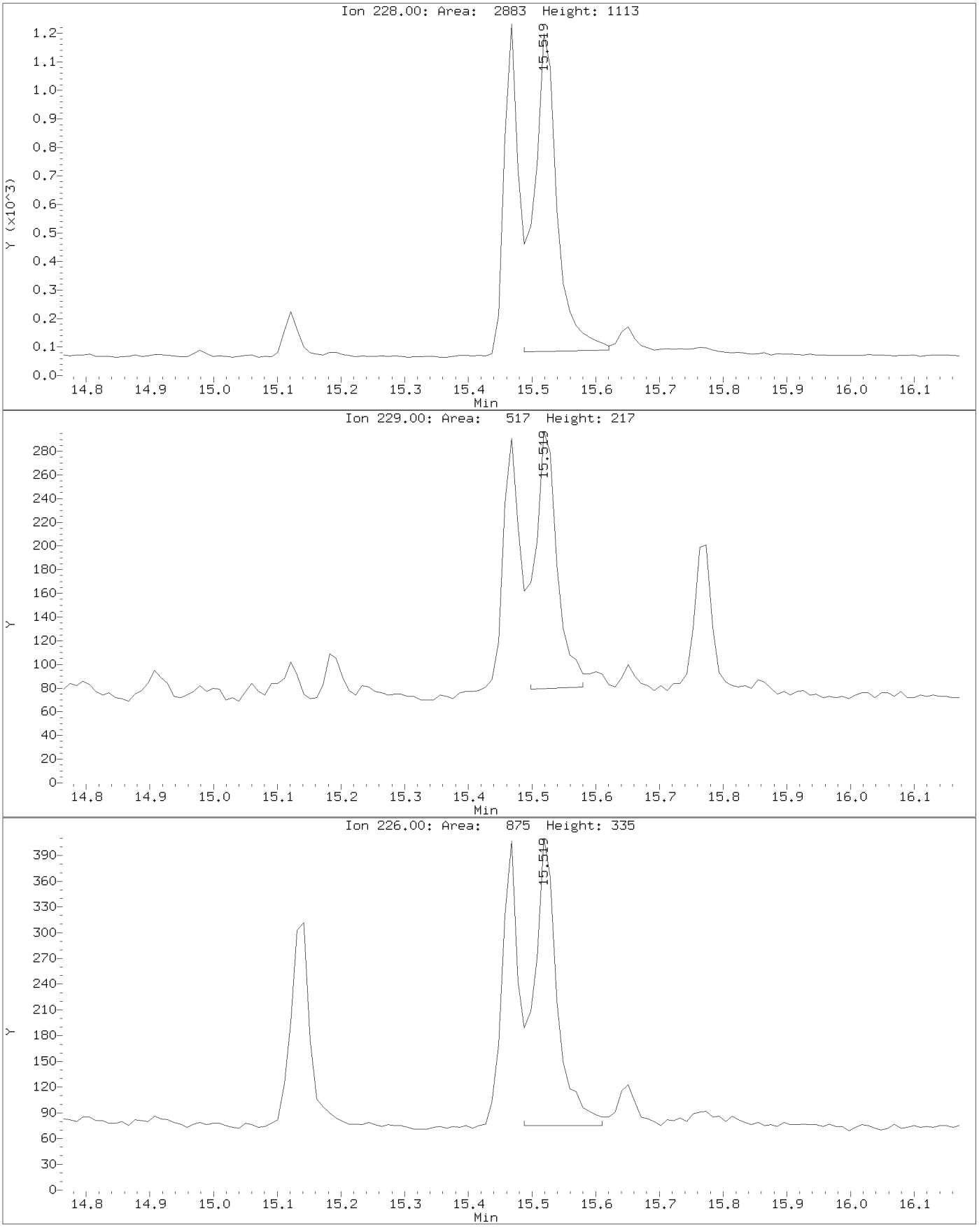




Data File: \\target_server\gg\chem\gcms-n.i\N121123.b\N0449.D
Injection Date: 11-DEC-2023 20:33
Instrument: gcms-n.i
Client Sample ID: Y-BRMW1-150-157-110

Compound: Benzo(a)anthracene
CAS Number: 56-55-3

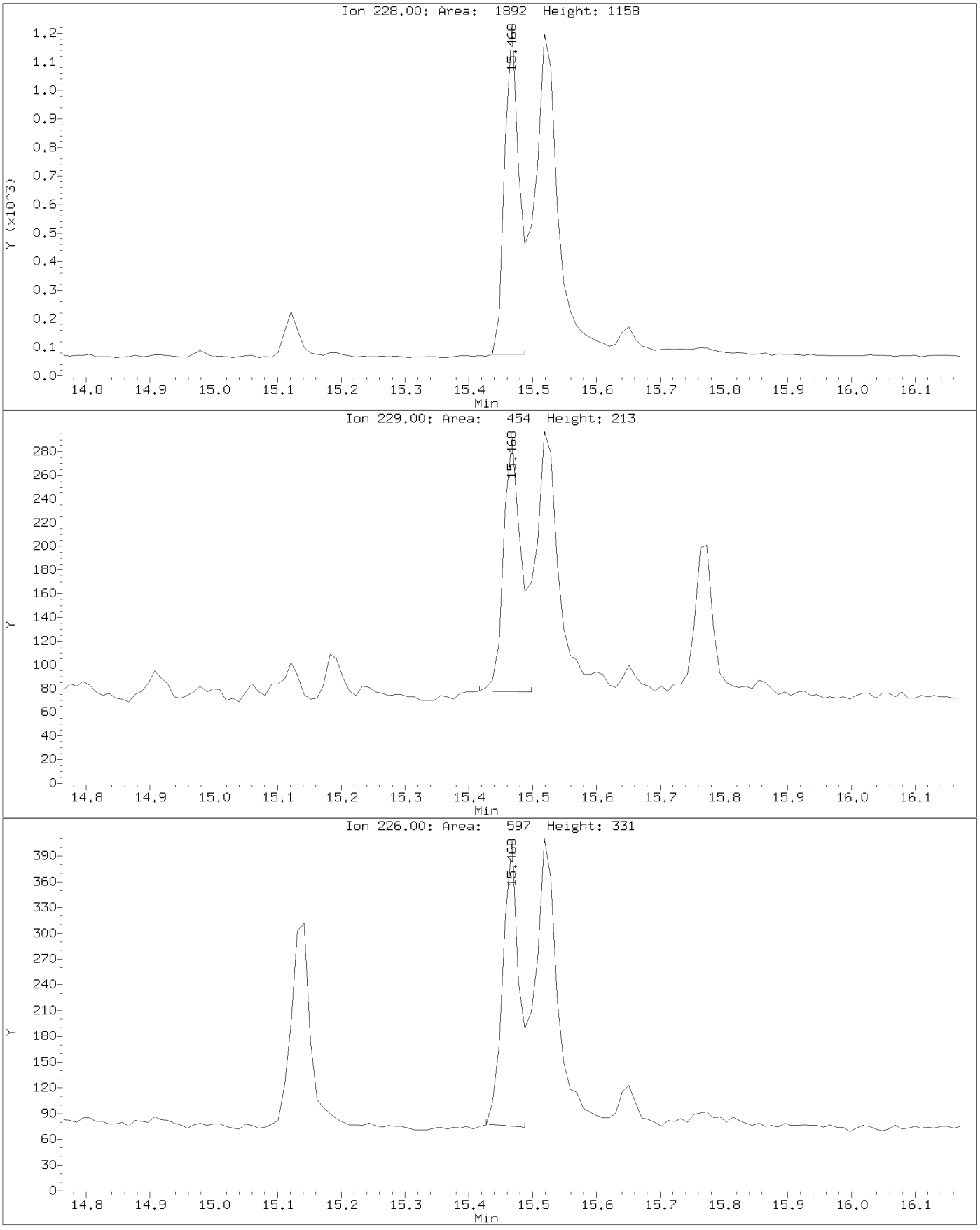
BEFORE MANUAL INTEGRATION



Data File: \\target_server\gg\chem\gcms-n.i\N121123.b\N0449.D
Injection Date: 11-DEC-2023 20:33
Instrument: gcms-n.i
Client Sample ID: Y-BRMW1-150-157-110

Compound: Benzo(a)anthracene
CAS Number: 56-55-3

AFTER MANUAL INTEGRATION



Standards Data Section

Form 6
Initial Calibration Summary

Lab Name : Katahdin Analytical Services **SDG:** SQ6238

Instrument ID: GCMS-N **Column ID:**

Lab File IDs : N0382.D N0381.D N0380.D **Calibration Date(s):** 07-DEC-23 12:11
N0383.D N0384.D N0385.D 07-DEC-23 14:42

	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Curve				%RSD or R^2		
	0.200000(	0.500000(	2.0000	7.0000	10.0000	15.0000	Type	b	m1	m2	Result	Limit	
Naphthalene	1.05063	1.07884	1.22387	1.05107	1.10624	1.05411	AVG		1.09413		6.13937	20	O
2-Methylnaphthalene	0.82651	0.71862	0.75497	0.66058	0.70938	0.66901	AVG		0.72318		8.46834	20	O
Acenaphthylene	2.21627	2.16727	2.41218	2.13226	2.29341	2.14127	AVG		2.22711		4.86552	20	O
Acenaphthene	1.41236	1.26165	1.39111	1.24625	1.33203	1.29225	AVG		1.32261		5.16190	20	O
Fluorene	1.30160	1.22909	1.45593	1.30288	1.35643	1.28380	AVG		1.32162		5.86044	20	O
Phenanthrene	1.18338	1.08322	1.33965	1.18197	1.24158	1.22822	AVG		1.20967		6.98569	20	O
Anthracene	1.20771	1.14818	1.30739	1.18305	1.22382	1.21976	AVG		1.21499		4.38242	20	O
Fluoranthene	0.84554	0.82244	1.07243	0.95178	0.96181	0.97974	AVG		0.93896		9.81551	20	O
Pyrene	2.88179	2.51272	2.74421	2.28233	2.27577	2.14147	AVG		2.47305		11.8222	20	O
Benzo(a)anthracene	1.24217	1.23448	1.51637	1.42425	1.42767	1.46429	AVG		1.38487		8.54168	20	O
Chrysene	1.93770	1.62496	1.73929	1.55761	1.54502	1.55382	AVG		1.65973		9.31875	20	O
Benzo(b)fluoranthene	1.28612	1.24062	1.57248	1.50583	1.59031	1.55970	AVG		1.45918		10.6184	20	O
Benzo(k)fluoranthene	1.84414	1.83211	1.98355	1.84142	1.91469	1.90583	AVG		1.88696		3.12366	20	O
Benzo(a)pyrene	1.30903	1.28129	1.47097	1.44259	1.52961	1.53150	AVG		1.42750		7.59499	20	O
Indeno(1,2,3-cd)pyrene	0.85477	0.85717	1.07209	1.13004	1.19777	1.09455	AVG		1.03440		13.9797	20	O
Dibenzo(a,h)anthracene	0.87746	0.93361	1.10760	1.14548	1.20771	1.12644	AVG		1.06638		12.2163	20	O
Benzo(g,h,i)perylene	1.13609	1.04648	1.19148	1.23585	1.28221	1.10453	AVG		1.16611		7.47533	20	O
2-Methylnaphthalene-D10	0.51866	0.50023	0.57974	0.50149	0.54254	0.50780	AVG		0.52508		5.90412	20	
Fluorene-D10	1.06416	0.98001	1.12411	1.02369	1.06321	1.02641	AVG		1.04693		4.67136	20	
Pyrene-D10	2.09645	1.90385	2.06850	1.77300	1.75535	1.63390	AVG		1.87184		9.85375	20	

Legend: O = Acceptable; W = Failed %RSD Value; X = Failed R^2 Value; Y = Failed Minimum RF

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Data File: \\target_server\gg\chem\gcms-n.i\N120723.b\N0386.D
Report Date: 08-Dec-2023 07:19

Katahdin Analytical Services

RECOVERY REPORT

Client Name: Client SDG: 021497
Sample Matrix: LIQUID Fraction: SV
Lab Smp Id: WG346503-8
Level: LOW Operator: EP
Data Type: MS DATA SampleType: INDSOURCE
SpikeList File: SIM_IND_CHK5.spk Quant Type: ISTD
Sublist File: all.sub
Method File: \\target_server\gg\chem\gcms-n.i\N120723.b\NSPSIM95.m
Misc Info: WG346503,WG346503,WG346503-4

SPIKE	COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
2	1,4-Dioxane	5.00	4.96	99.27	80-120
3	N-Nitrosodimethyla	5.00	5.76	115.32	80-120
4	Pyridine	5.00	4.45	89.08	80-120
5	Benzaldehyde	5.00	0.430	8.61*	80-120
6	Phenol	5.00	5.48	109.67	80-120
7	Bis(2-Chloroethyl)	5.00	4.73	94.64	80-120
8	2-Chlorophenol	5.00	5.13	102.55	80-120
9	1,3-Dichlorobenzen	5.00	4.92	98.43	80-120
11	1,4-Dichlorobenzen	5.00	5.05	100.98	80-120
12	1,2-Dichlorobenzen	5.00	4.90	98.02	80-120
13	2,2'-Oxybis(1-chlo	5.00	3.73	74.60*	80-120
14	2-Methylphenol	5.00	4.80	96.09	80-120
15	Acetophenone	5.00	5.03	100.69	80-120
16	N-Nitroso-di-n-pro	5.00	4.72	94.45	80-120
17	3&4-Methylphenol	5.00	4.87	97.50	80-120
18	Hexachloroethane	5.00	4.96	99.23	80-120
19	Nitrobenzene	5.00	5.08	101.68	80-120
20	Isophorone	5.00	4.24	84.74	80-120
21	2-Nitrophenol	5.00	5.44	108.83	80-120
22	2,4-Dimethylphenol	5.00	5.54	110.86	80-120
23	bis(2-Chloroethoxy	5.00	4.70	94.06	80-120
25	2,4-Dichlorophenol	5.00	4.54	90.92	80-120
26	1,2,4-Trichloroben	5.00	4.76	95.20	80-120
28	Naphthalene	5.00	4.90	97.92	80-120
29	4-Chloroaniline	5.00	8.30	166.06*	80-120
30	Hexachlorobutadien	5.00	4.77	95.39	80-120
31	Caprolactam	5.00	5.51	110.22	80-120
32	4-Chloro-3-Methylp	5.00	4.89	97.87	80-120
34	2-Methylnaphthalen	5.00	4.98	99.58	80-120
35	1-Methylnaphthalen	5.00	5.00	100.07	80-120
36	1,2,4,5-Tetrachlor	5.00	4.67	93.36	80-120
37	Hexachlorocyclopen	5.00	5.67	113.44	80-120
39	2,4,6-Trichlorophe	5.00	4.92	98.30	80-120
40	2,4,5-Trichlorophe	5.00	4.98	99.55	80-120
41	1,1'-Biphenyl	5.00	4.91	98.25	80-120
42	2-Chloronaphthalen	5.00	4.85	97.10	80-120
43	2-Nitroaniline	5.00	4.86	97.11	80-120
44	Dimethyl Phthalate	5.00	5.05	100.95	80-120
45	2,6-Dinitrotoluene	5.00	4.30	86.06	80-120
46	Acenaphthylene	5.00	4.42	88.39	80-120

Data File: \\target_server\gg\chem\gcms-n.i\N120723.b\N0386.D
Report Date: 08-Dec-2023 07:19

	SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
47	3-Nitroaniline	5.00	5.98	119.62	80-120
49	Acenaphthene	5.00	4.73	94.65	80-120
50	2,4-Dinitrophenol	5.00	4.12	82.40	80-120
51	Dibenzofuran	5.00	5.02	100.36	80-120
53	2,4-Dinitrotoluene	5.00	4.29	85.77	80-120
52	4-Nitrophenol	5.00	4.60	92.03	80-120
54	2,3,4,6-Tetrachlor	5.00	4.14	82.90	80-120
55	Diethylphthalate	5.00	5.07	101.50	80-120
57	Fluorene	5.00	4.80	96.05	80-120
58	4-Chlorophenyl-phe	5.00	4.82	96.30	80-120
59	4-Nitroaniline	5.00	4.34	86.72	80-120
60	4,6-Dinitro-2-Meth	5.00	4.58	91.52	80-120
61	N-Nitrosodiphenyla	5.00	3.72	74.35*	80-120
62	4-Bromophenyl-phen	5.00	4.87	97.47	80-120
63	Hexachlorobenzene	5.00	4.56	91.31	80-120
64	Atrazine	5.00	4.82	96.30	80-120
65	Pentachlorophenol	5.00	5.47	109.38	80-120
67	Phenanthrene	5.00	4.84	96.88	80-120
68	Anthracene	5.00	4.69	93.83	80-120
69	Carbazole	5.00	6.02	120.40*	80-120
70	Di-n-butylphthalat	5.00	4.82	96.46	80-120
72	Fluoranthene	5.00	4.56	91.31	80-120
74	Pyrene	5.00	4.87	97.35	80-120
75	Butylbenzylphthala	5.00	4.63	92.54	80-120
76	Benzo(a)anthracene	5.00	4.66	93.31	80-120
77	3,3'-Dichlorobenzi	5.00	3.02	60.45*	80-120
79	Chrysene	5.00	4.54	90.91	80-120
80	bis(2-Ethylhexyl)p	5.00	4.33	86.62	80-120
81	Di-n-octylphthalat	5.00	4.42	88.31	80-120
82	Benzo(b)fluoranthe	5.00	5.01	100.14	80-120
83	Benzo(k)fluoranthe	5.00	4.67	93.37	80-120
84	Benzo(a)pyrene	5.00	4.58	91.64	80-120
86	Indeno(1,2,3-cd)py	5.00	4.62	92.35	80-120
87	Dibenzo(a,h)anthra	5.00	4.84	96.90	80-120
88	Benzo(g,h,i)peryle	5.00	4.83	96.69	80-120

	SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 1	1,4-Dioxane-d8	2.00	0.000	*	26-115
$ 33	2-Methylnaphthale	2.00	0.000	*	43-92
$ 38	2,4-Dibromophenol	4.00	0.000	*	10-130
$ 56	Fluorene-D10	2.00	0.000	*	29-101
$ 71	Fluoranthene-d10	2.00	0.000	*	50-150
$ 73	Pyrene-D10	2.00	0.000	*	53-166

Data File: \\target_server\gg\chem\gcms-n.i\N120723.b\N0380.D
Report Date: 08-Dec-2023 07:21

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-n.i\N120723.b\N0380.D
Lab Smp Id: WG346503-4
Inj Date : 07-DEC-2023 12:11
Operator : EP   Inst ID: gcms-n.i
Smp Info : WG346503-4
Misc Info :
Comment   :
Method   : \\target_server\gg\chem\gcms-n.i\N120723.b\NSPSIM95.m
Meth Date : 08-Dec-2023 07:21 gcms-n.i   Quant Type: ISTD
Cal Date : 07-DEC-2023 12:11   Cal File: N0380.D
Als bottle: 2   Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: all.sub
Target Version: 4.12

Concentration Formula: Amt * DF * Uf*(Vt/Vo*Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.000	Sample Volume (L)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
$	1 1,4-Dioxane-d8	96	2.741	2.741	(0.267)	78150	2.00000	2.12	
	2 1,4-Dioxane	88	2.773	2.783	(0.419)	90932	2.00000	2.36	
	3 N-Nitrosodimethylamine	74	3.216	3.216	(0.486)	113792	2.00000	2.40	
	4 Pyridine	79	3.280	3.237	(0.496)	164613	2.00000	1.81	
	5 Benzaldehyde	77	6.084	6.084	(0.920)	73658	2.00000	3.01	
	6 Phenol	94	6.240	6.240	(0.943)	449642	4.50000	4.40	
	7 Bis(2-Chloroethyl)ether	93	6.323	6.323	(0.956)	187038	2.00000	2.09	
	8 2-Chlorophenol	128	6.364	6.365	(0.962)	403294	4.50000	4.67	
	9 1,3-Dichlorobenzene	146	6.541	6.531	(0.989)	214991	2.00000	2.06	
*	10 1,4-Dichlorobenzene-D4	152	6.614	6.604	(1.000)	52277	0.80000	(aQ)	
	11 1,4-Dichlorobenzene	146	6.635	6.625	(1.003)	214380	2.00000	2.03	
	12 1,2-Dichlorobenzene	146	6.812	6.802	(1.030)	205663	2.00000	2.01	
	13 2,2'-Oxybis(1-chloropropane)	45	6.968	6.958	(1.053)	124184	2.00000	2.22(Q)	
	14 2-Methylphenol	108	6.958	6.958	(1.052)	385078	4.50000	4.80	
	15 Acetophenone	105	7.103	7.103	(0.873)	240486	2.00000	2.16	
	16 N-Nitroso-di-n-propylamine	70	7.124	7.124	(1.077)	117037	2.00000	2.14	
	17 3&4-Methylphenol	108	7.155	7.145	(1.082)	376767	4.50000	4.54	
	18 Hexachloroethane	117	7.207	7.197	(1.090)	85121	2.00000	2.06	
	19 Nitrobenzene	77	7.301	7.291	(0.897)	162090	2.00000	2.22	
	20 Isophorone	82	7.607	7.596	(0.935)	321019	2.00000	2.18	
	21 2-Nitrophenol	139	7.686	7.675	(0.945)	140337	4.50000	4.74	

Data File: \\target_server\gg\chem\gcms-n.i\N120723.b\N0380.D
Report Date: 08-Dec-2023 07:21

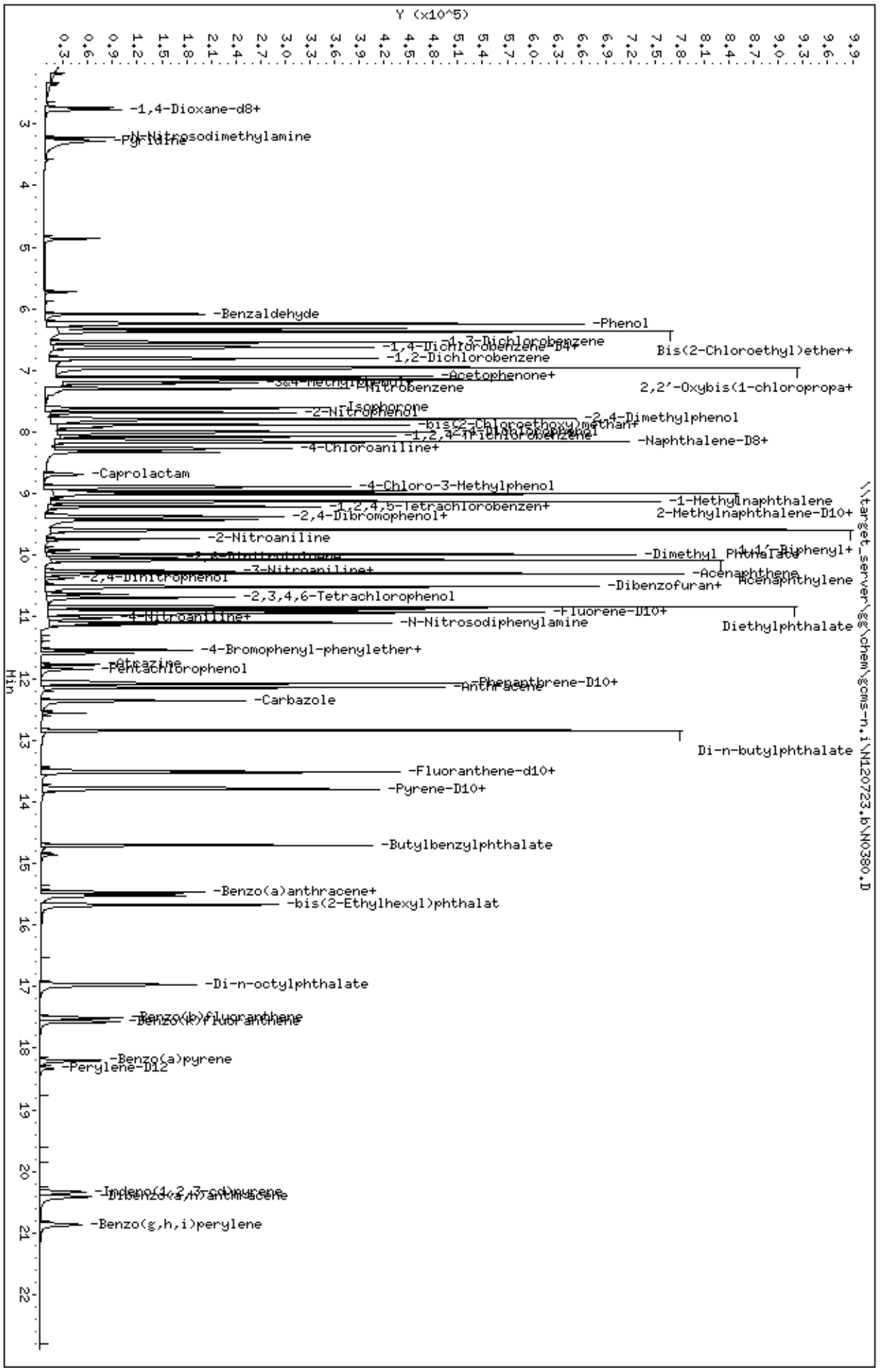
							AMOUNTS		
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
	22 2,4-Dimethylphenol	107	7.787	7.776	(0.957)	322104	4.50000	5.21	
	23 bis(2-Chloroethoxy)methane	93	7.889	7.877	(0.970)	203214	2.00000	2.22	
	24 Benzoic Acid	105	7.934	7.956	(0.975)	40700	2.00000	2.58(Q)	
	25 2,4-Dichlorophenol	162	7.990	7.979	(0.982)	306499	4.50000	4.43	
	26 1,2,4-Trichlorobenzene	180	8.069	8.069	(0.992)	157225	2.00000	2.13	
*	27 Naphthalene-D8	136	8.136	8.125	(1.000)	180916	0.80000	(a)	
	28 Naphthalene	128	8.159	8.147	(1.003)	553545	2.00000	2.24	
	29 4-Chloroaniline	127	8.271	8.282	(1.017)	124138	2.00000	2.71	
	30 Hexachlorobutadiene	225	8.327	8.316	(1.024)	70721	2.00000	2.22	
	31 Caprolactam	113	8.687	8.699	(1.068)	39697	2.00000	2.24	
	32 4-Chloro-3-Methylphenol	107	8.879	8.869	(1.091)	288900	4.50000	5.16	
$	33 2-Methylnaphthalene-D10	152	8.964	8.953	(1.102)	262209	2.00000	2.21	
	34 2-Methylnaphthalene	142	9.006	8.996	(1.107)	341464	2.00000	2.09	
	35 1-Methylnaphthalene	142	9.123	9.112	(1.121)	316841	2.00000	2.12	
	36 1,2,4,5-Tetrachlorobenzene	216	9.218	9.208	(0.899)	132768	2.00000	2.08	
	37 Hexachlorocyclopentadiene	237	9.208	9.186	(0.898)	56804	2.00000	2.12	
$	38 2,4-Dibromophenol	252	9.356	9.345	(0.912)	55751	2.00000	1.98	
	39 2,4,6-Trichlorophenol	196	9.366	9.356	(0.913)	137422	4.50000	4.45	
	40 2,4,5-Trichlorophenol	196	9.419	9.419	(0.919)	172270	4.50000	5.07	
	41 1,1'-Biphenyl	154	9.578	9.578	(0.934)	377526	2.00000	2.11	
	42 2-Chloronaphthalene	164	9.589	9.578	(0.935)	100253	2.00000	2.13	
	43 2-Nitroaniline	65	9.739	9.728	(0.950)	53050	2.00000	1.85	
	44 Dimethyl Phthalate	163	9.985	9.975	(0.974)	602863	4.50000	4.96	
	45 2,6-Dinitrotoluene	165	10.039	10.039	(0.979)	61268	2.00000	1.96	
	46 Acenaphthylene	152	10.082	10.082	(0.983)	482719	2.00000	2.17	
	47 3-Nitroaniline	138	10.243	10.243	(0.999)	34493	2.00000	2.46	
*	48 Acenaphthene-D10	164	10.253	10.253	(1.000)	80047	0.80000	(a)	
	49 Acenaphthene	153	10.296	10.286	(1.004)	278386	2.00000	2.10	
	50 2,4-Dinitrophenol	184	10.371	10.371	(1.012)	15353	4.50000	4.00	
	51 Dibenzofuran	168	10.511	10.500	(1.025)	387282	2.00000	2.18	
	52 4-Nitrophenol	109	10.500	10.489	(1.024)	33470	4.50000	4.35(Q)	
	53 2,4-Dinitrotoluene	165	10.522	10.522	(1.026)	65739	2.00000	1.85	
	54 2,3,4,6-Tetrachlorophenol	232	10.682	10.672	(1.042)	85431	4.50000	4.18	
	55 Diethylphthalate	149	10.843	10.833	(1.058)	582306	4.50000	5.09	
$	56 Fluorene-D10	174	10.886	10.886	(1.062)	224955	2.00000	2.15	
	57 Fluorene	166	10.929	10.918	(1.066)	291357	2.00000	2.20	
	58 4-Chlorophenyl-phenylether	204	10.950	10.940	(1.068)	129019	2.00000	2.20	
	59 4-Nitroaniline	138	10.993	10.983	(1.072)	31780	2.00000	2.33	
	60 4,6-Dinitro-2-Methylphenol	198	11.026	11.015	(0.915)	27073	4.50000	3.79	
	61 N-Nitrosodiphenylamine	169	11.101	11.090	(0.921)	227518	2.00000	2.21	
	62 4-Bromophenyl-phenylether	248	11.539	11.528	(0.957)	67657	2.00000	2.18	
	63 Hexachlorobenzene	284	11.592	11.582	(0.962)	71068	2.00000	2.09	
	64 Atrazine	200	11.784	11.774	(0.978)	47299	2.00000	2.08	
	65 Pentachlorophenol	266	11.848	11.848	(0.983)	34313	4.50000	4.68	
*	66 Phenanthrene-D10	188	12.051	12.051	(1.000)	104080	0.80000	(a)	
	67 Phenanthrene	178	12.083	12.073	(1.003)	348576	2.00000	2.21	
	68 Anthracene	178	12.147	12.137	(1.008)	340184	2.00000	2.15	
	69 Carbazole	167	12.361	12.361	(1.026)	264220	2.00000	2.38	
	70 Di-n-butylphthalate	149	12.841	12.831	(1.066)	810361	4.50000	4.46	
$	71 Fluoranthene-d10	212	13.501	13.501	(1.120)	190959	2.00000	2.26	
	72 Fluoranthene	202	13.522	13.522	(1.122)	279047	2.00000	2.28	
$	73 Pyrene-D10	212	13.776	13.776	(0.890)	225037	2.00000	2.21	
	74 Pyrene	202	13.797	13.797	(0.891)	298549	2.00000	2.22	
	75 Butylbenzylphthalate	149	14.703	14.703	(0.950)	244351	4.50000	4.36	

Data File: \\target_server\gg\chem\gcms-n.i\N120723.b\N0380.D
Report Date: 08-Dec-2023 07:21

		Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)	REVIEW CODE
	76	Benzo(a)anthracene	228	15.467	15.467	(0.999)	164970	2.00000	2.19	
	77	3,3'-Dichlorobenzidine	252	15.488	15.488	(1.001)	42189	2.00000	2.17	
*	78	Chrysene-D12	240	15.477	15.478	(1.000)	43517	0.80000	(a)	
	79	Chrysene	228	15.528	15.528	(1.003)	189222	2.00000	2.10	
	80	bis(2-Ethylhexyl)phthalate	149	15.671	15.671	(1.013)	305579	4.50000	4.23	
	81	Di-n-octylphthalate	149	16.965	16.965	(1.096)	387911	4.50000	4.47	
	82	Benzo(b)fluoranthene	252	17.510	17.521	(0.955)	122567	2.00000	2.16	
	83	Benzo(k)fluoranthene	252	17.572	17.572	(0.958)	154608	2.00000	2.10(H)	
	84	Benzo(a)pyrene	252	18.211	18.211	(0.993)	114655	2.00000	2.06	
*	85	Perylene-D12	264	18.334	18.324	(1.000)	31178	0.80000	(a)	
	86	Indeno(1,2,3-cd)pyrene	276	20.332	20.342	(1.109)	83564	2.00000	2.07	
	87	Dibenzo(a,h)anthracene	278	20.414	20.414	(1.113)	86332	2.00000	2.08	
	88	Benzo(g,h,i)perylene	276	20.868	20.878	(1.138)	92870	2.00000	2.04	
M	89	Total PAHs	100				4539456	36.0000	(a)	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
H - Operator selected an alternate compound hit.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Date : 07-DEC-2023 12:11
Client ID:
Sample Info: WG346503-4
Volume Injected (uL): 1.0
Column phase: Rxi-5MSCms
Instrument: gcms-n,i
Operator: EP
Column diameter: 0.25
\\target_server\gg\chem\gcms-n,i\N120723,b\N0380.D
Y (x10^5)
Min
-1,4-Dioxane-d8+
-N-Nitrosodimethylamine
-Pyridine
-Benzaldehyde
-Phenol
-1,3-Dichlorobenzene
-1,4-Dichlorobenzene-D4+
-1,2-Dichlorobenzene
Bis(2-Chloroethyl)ether+
-Acetophenone+
-3&4-Methylphenol+
-Nitrobenzene
2,2'-Oxybis(1-chloropropa+
-Isophorone
-2-Nitrophenol
-2,4-Dimethylphenol
-bis(2-Chloroethoxy)methan+
-2,4-Dichlorophenol
-1,2,4-Trichlorobenzene
-Naphthalene-D8+
-4-Chloroaniline+
-Caprolactam
-4-Chloro-3-Methylphenol
-1-Methylnaphthalene
-1,2,4,5-Tetrachlorobenzen+
2-Methylnaphthalene-D10+
-2,4-Dibromophenol+
-2-Nitroaniline
-Dimethyl Phthalate
-1,1'-Biphenyl+
-2,6-Dinitrotoluene
-3-Nitroaniline+
-Acenaphthene
-2,4-Dinitrophenol
Acenaphthylene
-Dibenzofuran+
-2,3,4,6-Tetrachlorophenol
-Fluorene-D10+
-4-Nitroaniline+
-N-Nitrosodiphenylamine
Diethylphthalate
-4-Bromophenyl-phenylether+
-Atrazine
-Pentachlorophenol
-Phenanthrene-D10+
-Anthracene
-Carbazole
Di-n-butylphthalate
-Fluoranthene-d10+
-Pyrene-D10+
-Butylbenzylphthalate
-Benzo(a)anthracene+
-bis(2-Ethylhexyl)phthalat
-Di-n-octylphthalate
-Benzo(b)fluoranthene
-Benzo(k)fluoranthene
-Benzo(a)pyrene
-Perylene-D12
-Indeno(1,2,3-cd)pyrene
-Dibenz(a,h)anthracene
-Benzo(g,h,i)perylene

Data File: \\target_server\gg\chem\gcms-n.i\N120723.b\N0381.D
Report Date: 08-Dec-2023 07:21

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-n.i\N120723.b\N0381.D
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Inj Date : 07-DEC-2023 12:41
Operator : EP   Inst ID: gcms-n.i
Smp Info : WG346503-3
Misc Info :
Comment   :
Method   : \\target_server\gg\chem\gcms-n.i\N120723.b\NSPSIM95.m
Meth Date : 08-Dec-2023 07:21 gcms-n.i   Quant Type: ISTD
Cal Date : 07-DEC-2023 12:41   Cal File: N0381.D
Als bottle: 3   Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: all.sub
Target Version: 4.12

Concentration Formula: Amt * DF * Uf*(Vt/Vo*Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.000	Sample Volume (L)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

EP
3:57 pm, Dec 29, 2023

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
$	1 1,4-Dioxane-d8	96	2.709	2.741	(0.264)	13507	0.50000	0.450(a)	
	2 1,4-Dioxane	88	2.752	2.783	(0.416)	16668	0.50000	0.584(a)	
	3 N-Nitrosodimethylamine	74	3.237	3.216	(0.490)	13062	0.50000	0.371(M)	M6
	4 Pyridine	79	3.417	3.237	(0.517)	20271	0.50000	0.300(M)	M6
	5 Benzaldehyde	77	6.094	6.084	(0.921)	15500	0.50000	0.855	
	6 Phenol	94	6.260	6.240	(0.947)	137714	2.00000	1.82	
	7 Bis(2-Chloroethyl)ether	93	6.333	6.323	(0.958)	30336	0.50000	0.458	
	8 2-Chlorophenol	128	6.375	6.365	(0.964)	114402	2.00000	1.79	
	9 1,3-Dichlorobenzene	146	6.541	6.531	(0.989)	36459	0.50000	0.472	
*	10 1,4-Dichlorobenzene-D4	152	6.614	6.604	(1.000)	38753	0.80000	(a)	
	11 1,4-Dichlorobenzene	146	6.635	6.625	(1.003)	36449	0.50000	0.465	
	12 1,2-Dichlorobenzene	146	6.812	6.802	(1.030)	35834	0.50000	0.472	
	13 2,2'-Oxybis(1-chloropropane)	45	6.978	6.958	(1.055)	23390	0.50000	0.563(Q)	
	14 2-Methylphenol	108	6.978	6.958	(1.055)	118928	2.00000	2.00	
	15 Acetophenone	105	7.124	7.103	(0.874)	45397	0.50000	0.490	
	16 N-Nitroso-di-n-propylamine	70	7.155	7.124	(1.082)	17630	0.50000	0.434	
	17 3&4-Methylphenol	108	7.176	7.145	(1.085)	115999	2.00000	1.89	
	18 Hexachloroethane	117	7.207	7.197	(1.090)	14891	0.50000	0.487	
	19 Nitrobenzene	77	7.311	7.291	(0.897)	27650	0.50000	0.454	
	20 Isophorone	82	7.652	7.596	(0.939)	60272	0.50000	0.490	
	21 2-Nitrophenol	139	7.697	7.675	(0.945)	34686	2.00000	1.48	

Data File: \\target_server\gg\chem\gcms-n.i\N120723.b\N0381.D
Report Date: 08-Dec-2023 07:21

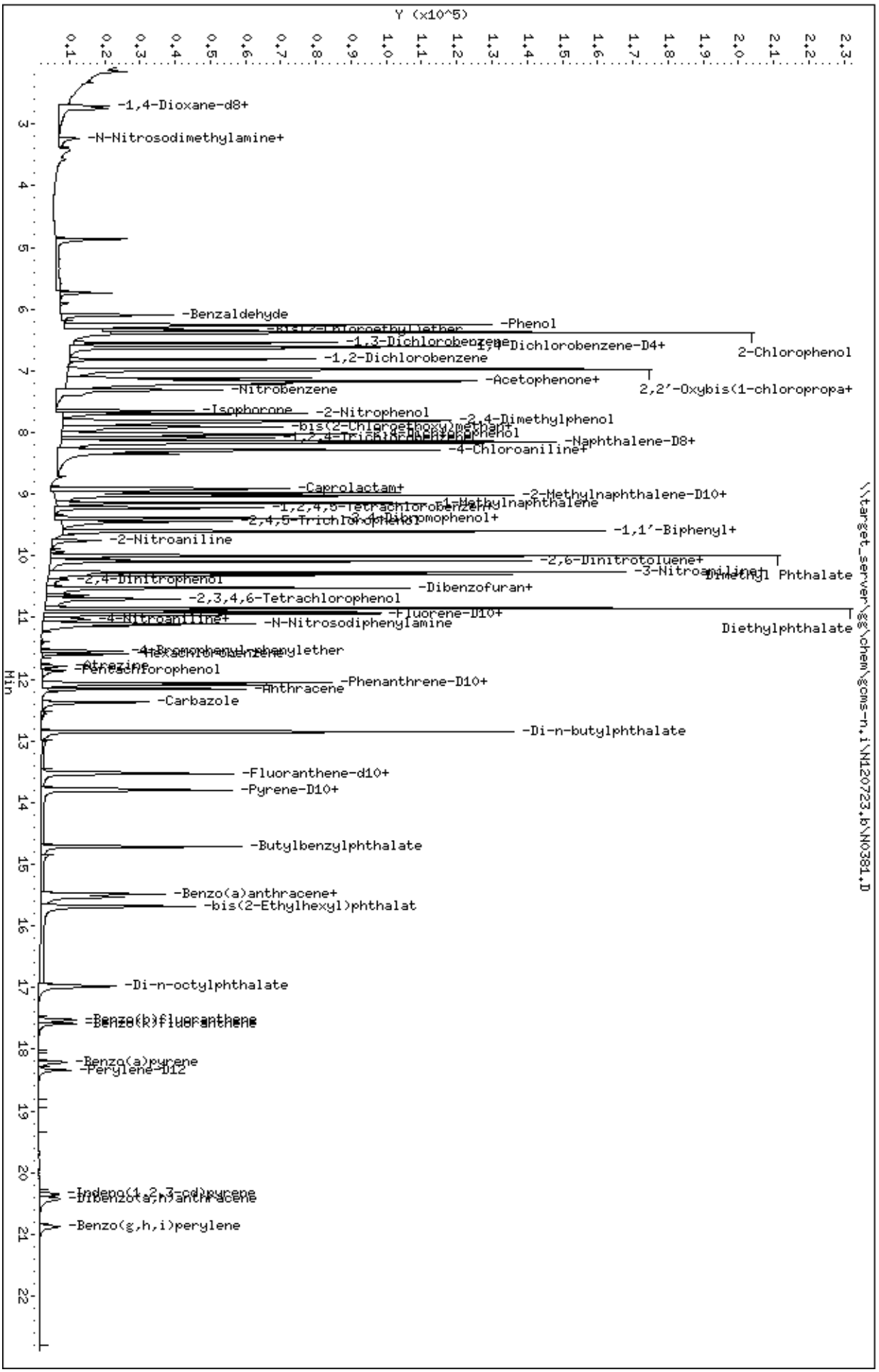
							AMOUNTS		
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
	22 2,4-Dimethylphenol	107	7.810	7.776	(0.959)	110983	2.00000	2.16	
	23 bis(2-Chloroethoxy)methane	93	7.911	7.877	(0.971)	37711	0.50000	0.494	
	24 Benzoic Acid	105	7.922	7.956	(0.972)	7140	0.50000	0.543(Q)	
	25 2,4-Dichlorophenol	162	8.024	7.979	(0.985)	81482	2.00000	1.41	
	26 1,2,4-Trichlorobenzene	180	8.080	8.069	(0.992)	28191	0.50000	0.458	
*	27 Naphthalene-D8	136	8.147	8.125	(1.000)	150720	0.80000	(a)	
	28 Naphthalene	128	8.170	8.147	(1.003)	101627	0.50000	0.493	
	29 4-Chloroaniline	127	8.293	8.282	(1.018)	23216	0.50000	0.608(a)	
	30 Hexachlorobutadiene	225	8.350	8.316	(1.025)	12267	0.50000	0.462	
	31 Caprolactam	113	8.720	8.699	(1.070)	6192	0.50000	0.419(Q)	
	32 4-Chloro-3-Methylphenol	107	8.900	8.869	(1.092)	84679	2.00000	1.82	
$	33 2-Methylnaphthalene-D10	152	8.985	8.953	(1.103)	47122	0.50000	0.476(a)	
	34 2-Methylnaphthalene	142	9.027	8.996	(1.108)	67694	0.50000	0.497	
	35 1-Methylnaphthalene	142	9.144	9.112	(1.122)	58466	0.50000	0.471	
	36 1,2,4,5-Tetrachlorobenzene	216	9.229	9.208	(0.899)	26132	0.50000	0.503	
	37 Hexachlorocyclopentadiene	237	9.218	9.186	(0.898)	9226	0.50000	0.423	
$	38 2,4-Dibromophenol	252	9.377	9.345	(0.914)	10184	0.50000	0.446(a)	
	39 2,4,6-Trichlorophenol	196	9.388	9.356	(0.915)	36861	2.00000	1.52	
	40 2,4,5-Trichlorophenol	196	9.440	9.419	(0.920)	46146	2.00000	1.67	
	41 1,1'-Biphenyl	154	9.599	9.578	(0.935)	71913	0.50000	0.495	
	42 2-Chloronaphthalene	164	9.610	9.578	(0.936)	17720	0.50000	0.463(Q)	
	43 2-Nitroaniline	65	9.749	9.728	(0.950)	6774	0.50000	0.291	
	44 Dimethyl Phthalate	163	9.996	9.975	(0.974)	179930	2.00000	1.82	
	45 2,6-Dinitrotoluene	165	10.050	10.039	(0.979)	7845	0.50000	0.309	
	46 Acenaphthylene	152	10.092	10.082	(0.983)	88132	0.50000	0.486	
	47 3-Nitroaniline	138	10.264	10.243	(1.000)	5569	0.50000	0.488	
*	48 Acenaphthene-D10	164	10.264	10.253	(1.000)	65064	0.80000	(a)	
	49 Acenaphthene	153	10.307	10.286	(1.004)	51305	0.50000	0.477	
	50 2,4-Dinitrophenol	184	10.393	10.371	(1.013)	2572	2.00000	0.875(a)	
	51 Dibenzofuran	168	10.521	10.500	(1.025)	71761	0.50000	0.496	
	52 4-Nitrophenol	109	10.554	10.489	(1.028)	3529	2.00000	0.595(aQ)	
	53 2,4-Dinitrotoluene	165	10.543	10.522	(1.027)	6143	0.50000	0.213(Q)	
	54 2,3,4,6-Tetrachlorophenol	232	10.693	10.672	(1.042)	17740	2.00000	1.11	
	55 Diethylphthalate	149	10.854	10.833	(1.057)	159197	2.00000	1.71	
$	56 Fluorene-D10	174	10.897	10.886	(1.062)	39852	0.50000	0.468(a)	
	57 Fluorene	166	10.940	10.918	(1.066)	49981	0.50000	0.465	
	58 4-Chlorophenyl-phenylether	204	10.961	10.940	(1.068)	23388	0.50000	0.492	
	59 4-Nitroaniline	138	11.015	10.983	(1.073)	3498	0.50000	0.325	
	60 4,6-Dinitro-2-Methylphenol	198	11.036	11.015	(0.915)	4158	2.00000	0.790(aQ)	
	61 N-Nitrosodiphenylamine	169	11.111	11.090	(0.921)	36493	0.50000	0.456	
	62 4-Bromophenyl-phenylether	248	11.549	11.528	(0.958)	10858	0.50000	0.450	
	63 Hexachlorobenzene	284	11.592	11.582	(0.961)	12507	0.50000	0.474	
	64 Atrazine	200	11.795	11.774	(0.978)	5906	0.50000	0.335	
	65 Pentachlorophenol	266	11.859	11.848	(0.983)	5841	2.00000	1.02	
*	66 Phenanthrene-D10	188	12.062	12.051	(1.000)	80907	0.80000	(a)	
	67 Phenanthrene	178	12.094	12.073	(1.003)	54775	0.50000	0.448	
	68 Anthracene	178	12.158	12.137	(1.008)	58060	0.50000	0.472	
	69 Carbazole	167	12.371	12.361	(1.026)	42710	0.50000	0.496	
	70 Di-n-butylphthalate	149	12.841	12.831	(1.065)	188171	2.00000	1.33	
$	71 Fluoranthene-d10	212	13.511	13.501	(1.120)	28575	0.50000	0.434	
	72 Fluoranthene	202	13.532	13.522	(1.122)	41588	0.50000	0.438	
$	73 Pyrene-D10	212	13.776	13.776	(0.889)	32413	0.50000	0.508(a)	
	74 Pyrene	202	13.797	13.797	(0.891)	42779	0.50000	0.508	
	75 Butylbenzylphthalate	149	14.713	14.703	(0.950)	43620	2.00000	1.24	

Data File: \\target_server\gg\chem\gcms-n.i\N120723.b\N0381.D
Report Date: 08-Dec-2023 07:21

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
	76 Benzo(a)anthracene	228	15.477	15.467	(0.999)	21017	0.50000	0.446	
	77 3,3'-Dichlorobenzidine	252	15.508	15.488	(1.001)	5524	0.50000	0.453	
*	78 Chrysene-D12	240	15.488	15.478	(1.000)	27240	0.80000	(a)	
	79 Chrysene	228	15.528	15.528	(1.003)	27665	0.50000	0.490	
	80 bis(2-Ethylhexyl)phthalate	149	15.681	15.671	(1.012)	54203	2.00000	1.20	
	81 Di-n-octylphthalate	149	16.975	16.965	(1.096)	58218	2.00000	1.12	
	82 Benzo(b)fluoranthene	252	17.520	17.521	(0.956)	15158	0.50000	0.425	
	83 Benzo(k)fluoranthene	252	17.582	17.572	(0.959)	22385	0.50000	0.485(H)	
	84 Benzo(a)pyrene	252	18.210	18.211	(0.993)	15655	0.50000	0.449	
*	85 Perylene-D12	264	18.334	18.324	(1.000)	19549	0.80000	(a)	
	86 Indeno(1,2,3-cd)pyrene	276	20.353	20.342	(1.110)	10473	0.50000	0.414	
	87 Dibenzo(a,h)anthracene	278	20.435	20.414	(1.115)	11407	0.50000	0.438	
	88 Benzo(g,h,i)perylene	276	20.878	20.878	(1.139)	12786	0.50000	0.449	
M	89 Total PAHs	100				750953	7.20000	(a)	

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.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Sample Info: WG346503-3
Volume Injected (uL): 1.0
Column phase: Rxi-5ViOms
Instrument: gcms-n,i
Operator: EP
Column diameter: 0.25
\\target_server\gg\chem\gcms-n,i\N120723,b\N0381.D
Y (x10^5)
Min
-1,4-Dioxane-d8+
-N-Nitrosodimethylamine+
-Benzaldehyde
-Phenol
-1,3-Dichlorobenzene
1,4-Dichlorobenzene-D4+
2-Chlorophenol
-1,2-Dichlorobenzene
-Acetophenone+
2,2'-Oxybis(1-chloropropa+
-Nitrobenzene
-Isophorone
-2-Nitrophenol
-2,4-Dimethylphenol
-bis(2-Chloroethoxy)methan+
-Naphthalene-D8+
-4-Chloroaniline+
-Caprolactam+
-2-Methylnaphthalene-D10+
-1-Methylnaphthalene
-1,2,4,5-Tetrachlorobenzen+
-2,4-Dibromophenol+
-2,4,5-Trichlorophenol
-1,1'-Biphenyl+
-2-Nitroaniline
-2,6-Dinitrotoluene+
-3-Nitroaniline+
Dimethyl Phthalate
-2,4-Dinitrophenol
-Dibenzofuran+
-2,3,4,6-Tetrachlorophenol
-Fluorene-D10+
-4-Nitroaniline+
-N-Nitrosodiphenylamine
Diethylphthalate
-4-Bromophenyl-phenylether
-Hexachlorobenzene
-Atrazine
-Pentachlorophenol
-Phenanthrene-D10+
-Anthracene
-Carbazole
-Di-n-butylphthalate
-Fluoranthene-d10+
-Pyrene-D10+
-Butylbenzylphthalate
-Benzo(a)anthracene+
-bis(2-Ethylhexyl)phthalat
-Di-n-octylphthalate
-Benzo(b)fluoranthene
-Benzo(k)fluoranthene
-Benzo(a)pyrene
-Perylene-D12
-Indeno(1,2,3-cd)pyrene
-Dibenz[a,h]anthracene
-Benzo(g,h,i)perylene

Data File: \\target_server\gg\chem\gcms-n.i\N120723.b\N0382.D
Report Date: 08-Dec-2023 07:21

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-n.i\N120723.b\N0382.D
Lab Smp Id: WG346503-2
Inj Date : 07-DEC-2023 13:11
Operator : EP   Inst ID: gcms-n.i
Smp Info : WG346503-2
Misc Info :
Comment   :
Method   : \\target_server\gg\chem\gcms-n.i\N120723.b\NSPSIM95.m
Meth Date : 08-Dec-2023 07:21 gcms-n.i   Quant Type: ISTD
Cal Date : 07-DEC-2023 13:11   Cal File: N0382.D
Als bottle: 4   Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: all.sub
Target Version: 4.12

Concentration Formula: Amt * DF * Uf*(Vt/Vo*Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.000	Sample Volume (L)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

EP
3:57 pm, Dec 29, 2023

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
$	1 1,4-Dioxane-d8	96	2.709	2.741	(0.264)	5480	0.20000	0.174(a)	
	2 1,4-Dioxane	88	2.741	2.783	(0.414)	10962	0.20000	0.380(a)	
	3 N-Nitrosodimethylamine	74	3.280	3.216	(0.495)	5429	0.20000	0.152(aM)	M6
	4 Pyridine	79	3.702	3.237	(0.559)	6353	0.20000	0.0930(aM)	M6
	5 Benzaldehyde	77	6.104	6.084	(0.921)	6413	0.20000	0.349	
	6 Phenol	94	6.271	6.240	(0.947)	64659	1.00000	0.843(a)	
	7 Bis(2-Chloroethyl)ether	93	6.354	6.323	(0.959)	15380	0.20000	0.229	
	8 2-Chlorophenol	128	6.385	6.365	(0.964)	50679	1.00000	0.781(a)	
	9 1,3-Dichlorobenzene	146	6.552	6.531	(0.989)	15438	0.20000	0.197(a)	
*	10 1,4-Dichlorobenzene-D4	152	6.625	6.604	(1.000)	39255	0.80000	(a)	
	11 1,4-Dichlorobenzene	146	6.645	6.625	(1.003)	16006	0.20000	0.202	
	12 1,2-Dichlorobenzene	146	6.822	6.802	(1.030)	15502	0.20000	0.202	
	13 2,2'-Oxybis(1-chloropropane)	45	6.999	6.958	(1.057)	9461	0.20000	0.225	
	14 2-Methylphenol	108	6.989	6.958	(1.055)	48397	1.00000	0.804(a)	
	15 Acetophenone	105	7.145	7.103	(0.877)	16028	0.20000	0.165(a)	
	16 N-Nitroso-di-n-propylamine	70	7.176	7.124	(1.083)	8868	0.20000	0.216	
	17 3&4-Methylphenol	108	7.197	7.145	(1.086)	30129	1.00000	0.484(a)	
	18 Hexachloroethane	117	7.218	7.197	(1.090)	6034	0.20000	0.195(a)	
	19 Nitrobenzene	77	7.322	7.291	(0.899)	11317	0.20000	0.177(a)	
	20 Isophorone	82	7.675	7.596	(0.942)	26577	0.20000	0.206	
	21 2-Nitrophenol	139	7.709	7.675	(0.946)	13095	1.00000	0.541(a)	

Data File: \\target_server\gg\chem\gcms-n.i\N120723.b\N0382.D
Report Date: 08-Dec-2023 07:21

EP
3:57 pm, Dec 29, 2023

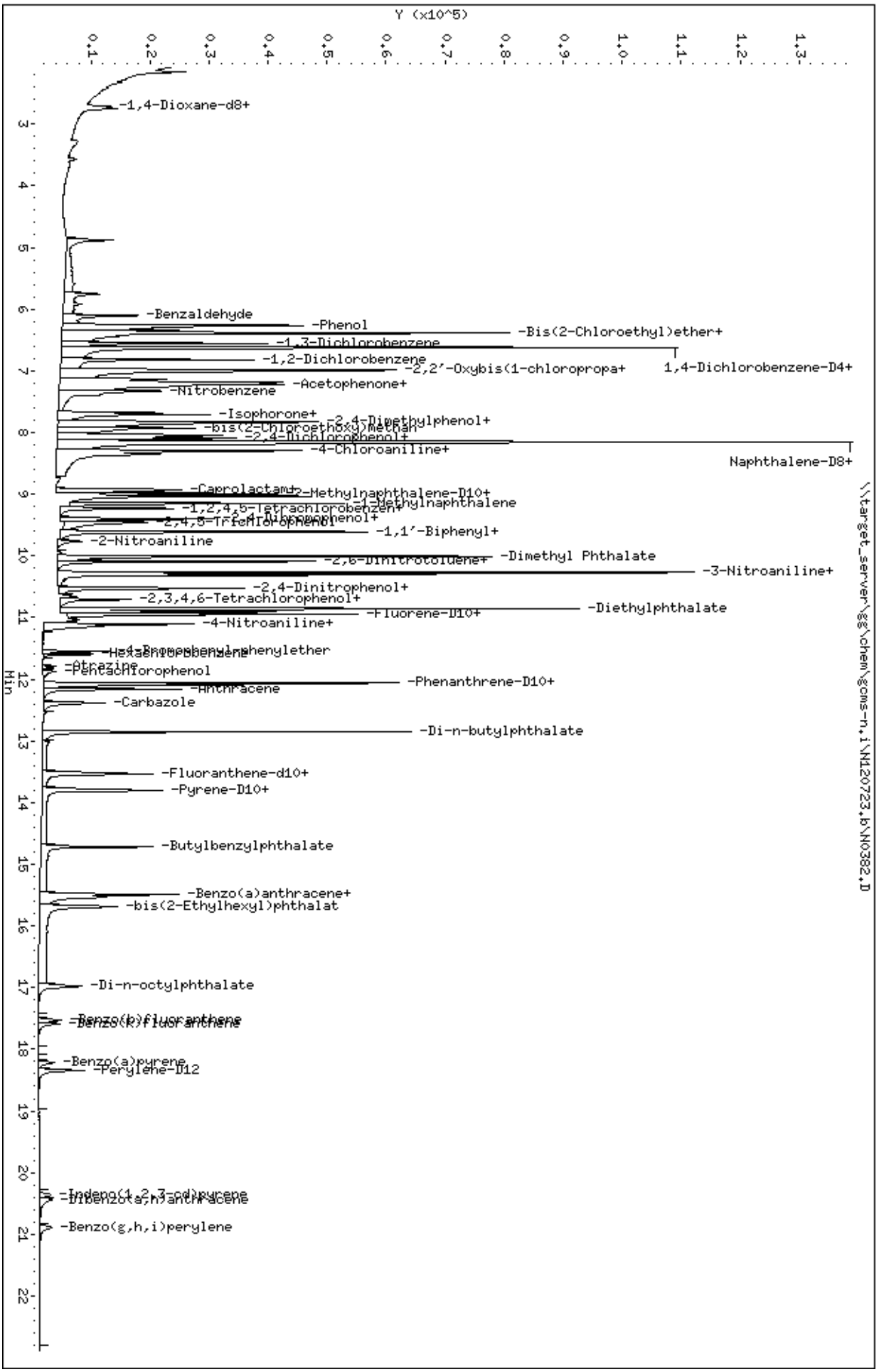
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
	22 2,4-Dimethylphenol	107	7.832	7.776	(0.961)	50775	1.00000	0.938	
	23 bis(2-Chloroethoxy)methane	93	7.934	7.877	(0.974)	14618	0.20000	0.182(a)	
	24 Benzoic Acid	105	7.832	7.956	(0.961)	1399	0.20000	0.101(aQ)	
	25 2,4-Dichlorophenol	162	8.046	7.979	(0.988)	35130	1.00000	0.580	
	26 1,2,4-Trichlorobenzene	180	8.091	8.069	(0.993)	12182	0.20000	0.188(a)	
*	27 Naphthalene-D8	136	8.147	8.125	(1.000)	158430	0.80000	(a)	
	28 Naphthalene	128	8.181	8.147	(1.004)	41613	0.20000	0.192(a)	
	29 4-Chloroaniline	127	8.305	8.282	(1.019)	10728	0.20000	0.267(a)	
	30 Hexachlorobutadiene	225	8.361	8.316	(1.026)	5229	0.20000	0.187(a)	
	31 Caprolactam	113	8.752	8.699	(1.074)	2518	0.20000	0.162(aQ)	
	32 4-Chloro-3-Methylphenol	107	8.922	8.869	(1.095)	37248	1.00000	0.760(a)	
$	33 2-Methylnaphthalene-D10	152	8.996	8.953	(1.104)	20543	0.20000	0.198(a)	
	34 2-Methylnaphthalene	142	9.038	8.996	(1.109)	32736	0.20000	0.228	
	35 1-Methylnaphthalene	142	9.144	9.112	(1.122)	29470	0.20000	0.226	
	36 1,2,4,5-Tetrachlorobenzene	216	9.239	9.208	(0.900)	11263	0.20000	0.206	
	37 Hexachlorocyclopentadiene	237	9.229	9.186	(0.899)	3504	0.20000	0.153(a)	
$	38 2,4-Dibromophenol	252	9.398	9.345	(0.916)	3836	0.20000	0.160(a)	
	39 2,4,6-Trichlorophenol	196	9.398	9.356	(0.916)	14696	1.00000	0.583(a)	
	40 2,4,5-Trichlorophenol	196	9.462	9.419	(0.922)	23805	1.00000	0.820(a)	
	41 1,1'-Biphenyl	154	9.600	9.578	(0.935)	29590	0.20000	0.194(a)	
	42 2-Chloronaphthalene	164	9.610	9.578	(0.936)	7825	0.20000	0.194(aQ)	
	43 2-Nitroaniline	65	9.771	9.728	(0.952)	2459	0.20000	0.100(a)	
	44 Dimethyl Phthalate	163	10.007	9.975	(0.975)	91809	1.00000	0.883(a)	
	45 2,6-Dinitrotoluene	165	10.060	10.039	(0.980)	2544	0.20000	0.0953(a)	
	46 Acenaphthylene	152	10.093	10.082	(0.983)	37896	0.20000	0.199(a)	
	47 3-Nitroaniline	138	10.275	10.243	(1.001)	1621	0.20000	0.135(aQ)	
*	48 Acenaphthene-D10	164	10.264	10.253	(1.000)	68396	0.80000	(a)	
	49 Acenaphthene	153	10.307	10.286	(1.004)	24150	0.20000	0.214	
	50 2,4-Dinitrophenol	184	10.404	10.371	(1.014)	907	1.00000	0.296(a)	
	51 Dibenzofuran	168	10.532	10.500	(1.026)	31420	0.20000	0.207	
	52 4-Nitrophenol	109	10.650	10.489	(1.038)	1172	1.00000	0.189(aQM)	M6
	53 2,4-Dinitrotoluene	165	10.554	10.522	(1.028)	1889	0.20000	0.0623(a)	
	54 2,3,4,6-Tetrachlorophenol	232	10.704	10.672	(1.043)	7262	1.00000	0.436(a)	
	55 Diethylphthalate	149	10.854	10.833	(1.057)	78439	1.00000	0.803(a)	
$	56 Fluorene-D10	174	10.908	10.886	(1.063)	18196	0.20000	0.203(a)	
	57 Fluorene	166	10.940	10.918	(1.066)	22256	0.20000	0.197(a)	
	58 4-Chlorophenyl-phenylether	204	10.961	10.940	(1.068)	9889	0.20000	0.198(a)	
	59 4-Nitroaniline	138	11.036	10.983	(1.075)	1426	0.20000	0.126(a)	
	60 4,6-Dinitro-2-Methylphenol	198	11.036	11.015	(0.915)	1471	1.00000	0.283(aQ)	
	61 N-Nitrosodiphenylamine	169	11.111	11.090	(0.921)	15531	0.20000	0.195(a)	
	62 4-Bromophenyl-phenylether	248	11.550	11.528	(0.958)	4683	0.20000	0.195(a)	
	63 Hexachlorobenzene	284	11.603	11.582	(0.962)	5849	0.20000	0.222	
	64 Atrazine	200	11.795	11.774	(0.978)	2163	0.20000	0.123(a)	
	65 Pentachlorophenol	266	11.870	11.848	(0.984)	2427	1.00000	0.428(a)	
*	66 Phenanthrene-D10	188	12.062	12.051	(1.000)	80569	0.80000	(a)	
	67 Phenanthrene	178	12.094	12.073	(1.003)	23836	0.20000	0.196(a)	
	68 Anthracene	178	12.158	12.137	(1.008)	24326	0.20000	0.199(a)	
	69 Carbazole	167	12.382	12.361	(1.027)	17760	0.20000	0.207	
	70 Di-n-butylphthalate	149	12.852	12.831	(1.065)	82670	1.00000	0.588(a)	
$	71 Fluoranthene-d10	212	13.511	13.501	(1.120)	11537	0.20000	0.176	
	72 Fluoranthene	202	13.532	13.522	(1.122)	17031	0.20000	0.180(a)	
$	73 Pyrene-D10	212	13.786	13.776	(0.890)	12955	0.20000	0.224(a)	
	74 Pyrene	202	13.807	13.797	(0.891)	17808	0.20000	0.233	
	75 Butylbenzylphthalate	149	14.714	14.703	(0.949)	15731	1.00000	0.495(a)	

Data File: \\target_server\gg\chem\gcms-n.i\N120723.b\N0382.D
Report Date: 08-Dec-2023 07:21

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)	REVIEW CODE
	76 Benzo(a)anthracene	228	15.478	15.467	(0.999)	7676	0.20000	0.179(a)	
	77 3,3'-Dichlorobenzidine	252	15.518	15.488	(1.001)	1625	0.20000	0.147(a)	
*	78 Chrysene-D12	240	15.498	15.478	(1.000)	24718	0.80000	(a)	
	79 Chrysene	228	15.539	15.528	(1.003)	11974	0.20000	0.233	
	80 bis(2-Ethylhexyl)phthalate	149	15.681	15.671	(1.012)	19587	1.00000	0.477(a)	
	81 Di-n-octylphthalate	149	16.975	16.965	(1.095)	18597	1.00000	0.400(a)	
	82 Benzo(b)fluoranthene	252	17.531	17.521	(0.956)	5838	0.20000	0.176(a)	
	83 Benzo(k)fluoranthene	252	17.593	17.572	(0.959)	8371	0.20000	0.195(aH)	
	84 Benzo(a)pyrene	252	18.221	18.211	(0.993)	5942	0.20000	0.183(a)	
*	85 Perylene-D12	264	18.344	18.324	(1.000)	18157	0.80000	(a)	
	86 Indeno(1,2,3-cd)pyrene	276	20.363	20.342	(1.110)	3880	0.20000	0.165(a)	
	87 Dibenzo(a,h)anthracene	278	20.445	20.414	(1.115)	3983	0.20000	0.164(a)	
	88 Benzo(g,h,i)perylene	276	20.888	20.878	(1.139)	5157	0.20000	0.195(a)	
M	89 Total PAHs	100				323943	3.60000	(a)	

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.


Data File: \\target_server\gg\chem\gcms-n,i\N120723,b\N0382.D
Date : 07-DEC-2023 13:11
Client ID:
Sample Info: WG346503-2
Volume Injected (uL): 1.0
Column phase: Rxi-5ViMS
Instrument: gcms-n,i
Operator: EP
Column diameter: 0.25
\\target_server\gg\chem\gcms-n,i\N120723,b\N0382.D
Y (x10^5)
Min
-1,4-Dioxane-d8+
-Benzaldehyde
-Phenol
-Bis(2-Chloroethyl)ether+
-1,3-Dichlorobenzene
-1,2-Dichlorobenzene
1,4-Dichlorobenzene-D4+
-2,2'-Oxybis(1-chloropropa+
-Acetophenone+
-Nitrobenzene
-Isophorone+
-2,4-Dimethylphenol+
-bis(2-Chloroethoxy)methan
-2,4-Dichlorophenol+
-4-Chloroaniline+
Naphthalene-D8+
-Caprolactam+
2-Methylnaphthalene-D10+
-2-Methylnaphthalene
-1,2,4,5-Tetrachlorobenzen+
-2,4,5-Trichlorophenol
-1,1'-Biphenyl+
-2-Nitroaniline
-2,6-Dinitrotoluene+
-Dimethyl Phthalate
-3-Nitroaniline+
-2,4-Dinitrophenol+
-2,3,4,6-Tetrachlorophenol+
-Diethylphthalate
-Fluorene-D10+
-4-Nitroaniline+
-Azobenzene
-Atrazine
-Pentachlorophenol
-Phenanthrene-D10+
-Anthracene
-Carbazole
-Di-n-butylphthalate
-Fluoranthene-d10+
-Pyrene-D10+
-Butylbenzylphthalate
-Benzo(a)anthracene+
-bis(2-Ethylhexyl)phthalat
-Di-n-octylphthalate
-Benzo(b)fluoranthene
-Benzo(k)fluoranthene
-Benzo(a)pyrene
-Perylene-D12
-Indeno(1,2,3-cd)pyrene
-Dibenzo(a,h)anthracene
-Benzo(g,h,i)perylene

Data File: \\target_server\gg\chem\gcms-n.i\N120723.b\N0383.D
Report Date: 08-Dec-2023 07:21

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-n.i\N120723.b\N0383.D
Lab Smp Id: WG346503-5
Inj Date : 07-DEC-2023 13:41
Operator : EP   Inst ID: gcms-n.i
Smp Info : WG346503-5
Misc Info :
Comment   :
Method   : \\target_server\gg\chem\gcms-n.i\N120723.b\NSPSIM95.m
Meth Date : 08-Dec-2023 07:21 gcms-n.i   Quant Type: ISTD
Cal Date : 07-DEC-2023 13:41   Cal File: N0383.D
Als bottle: 5   Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: all.sub
Target Version: 4.12

Concentration Formula: Amt * DF * Uf*(Vt/Vo*Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.000	Sample Volume (L)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

EP
3:57 pm, Dec 29, 2023

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
$	1 1,4-Dioxane-d8	96	2.741	2.741	(0.267)	283641	7.00000	6.91	
	2 1,4-Dioxane	88	2.773	2.783	(0.420)	291732	7.00000	6.64	
	3 N-Nitrosodimethylamine	74	3.216	3.216	(0.487)	407133	7.00000	7.51	
	4 Pyridine	79	3.248	3.237	(0.492)	614738	7.00000	5.91(TM)	M6
	5 Benzaldehyde	77	6.084	6.084	(0.921)	70281	7.00000	2.52	
	6 Phenol	94	6.240	6.240	(0.945)	888930	7.00000	7.62	
	7 Bis(2-Chloroethyl)ether	93	6.323	6.323	(0.957)	674342	7.00000	6.61	
	8 2-Chlorophenol	128	6.365	6.365	(0.964)	714225	7.00000	7.24	
	9 1,3-Dichlorobenzene	146	6.531	6.531	(0.989)	814380	7.00000	6.84	
*	10 1,4-Dichlorobenzene-D4	152	6.604	6.604	(1.000)	59705	0.80000	(a)	
	11 1,4-Dichlorobenzene	146	6.625	6.625	(1.003)	833185	7.00000	6.90	
	12 1,2-Dichlorobenzene	146	6.802	6.802	(1.030)	804441	7.00000	6.88	
	13 2,2'-Oxybis(1-chloropropane)	45	6.958	6.958	(1.054)	408801	7.00000	6.39(Q)	
	14 2-Methylphenol	108	6.958	6.958	(1.054)	661055	7.00000	7.22	
	15 Acetophenone	105	7.103	7.103	(0.874)	903173	7.00000	6.92	
	16 N-Nitroso-di-n-propylamine	70	7.124	7.124	(1.079)	433931	7.00000	6.93	
	17 3&4-Methylphenol	108	7.155	7.145	(1.083)	636883	7.00000	6.72	
	18 Hexachloroethane	117	7.197	7.197	(1.090)	322067	7.00000	6.84	
	19 Nitrobenzene	77	7.291	7.291	(0.897)	590046	7.00000	6.87	
	20 Isophorone	82	7.596	7.596	(0.935)	1149065	7.00000	6.63	
	21 2-Nitrophenol	139	7.686	7.675	(0.946)	230782	7.00000	6.43	

Data File: \\target_server\gg\chem\gcms-n.i\N120723.b\N0383.D
Report Date: 08-Dec-2023 07:21

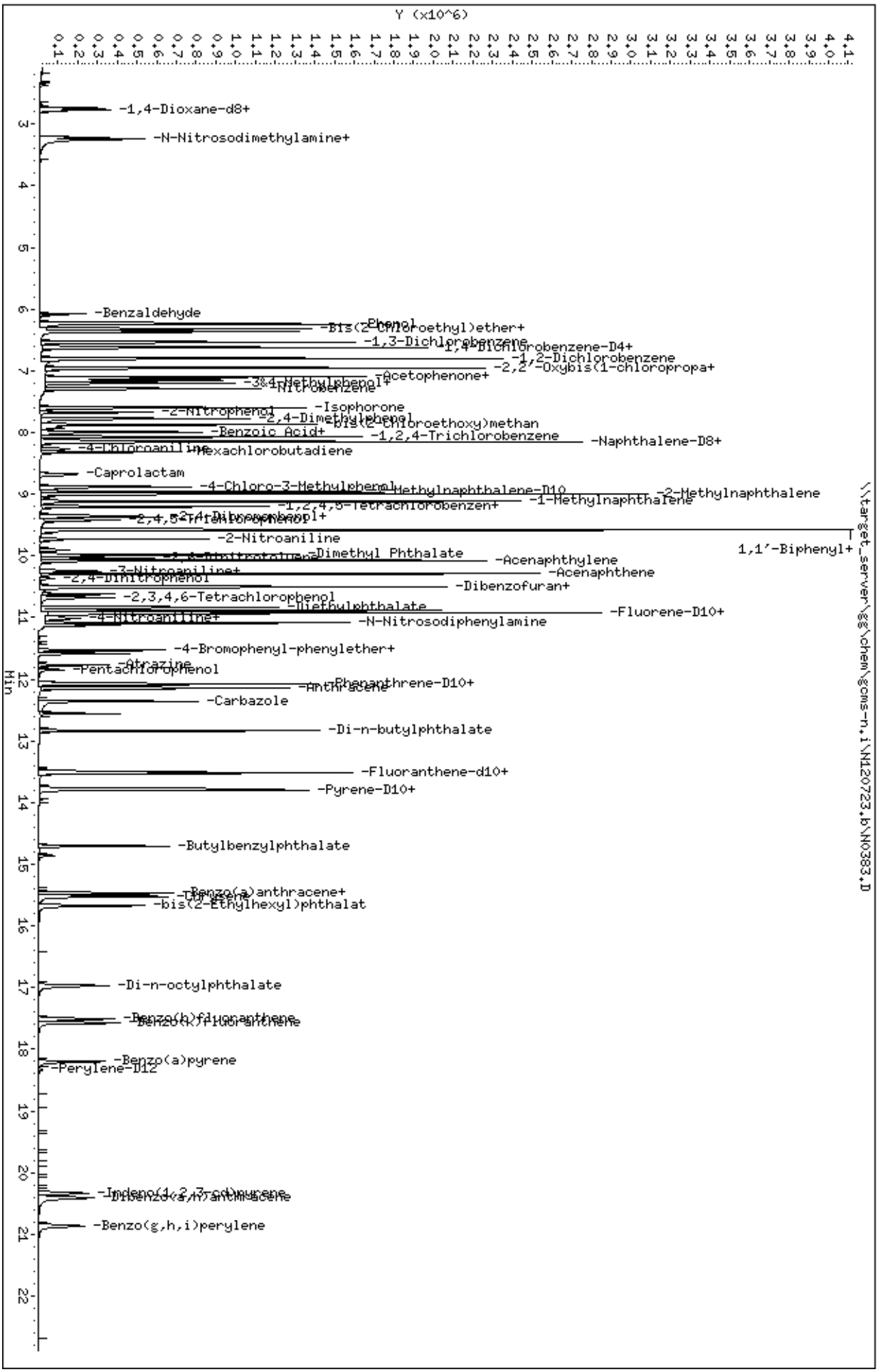
							AMOUNTS		
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
	22 2,4-Dimethylphenol	107	7.776	7.776	(0.957)	460067	7.00000	6.34	
	23 bis(2-Chloroethoxy)methane	93	7.877	7.877	(0.970)	714858	7.00000	6.64	
	24 Benzoic Acid	105	7.934	7.956	(0.976)	92774	7.00000	5.00(Q)	
	25 2,4-Dichlorophenol	162	7.990	7.979	(0.983)	504817	7.00000	6.21	
	26 1,2,4-Trichlorobenzene	180	8.069	8.069	(0.993)	598510	7.00000	6.90	
*	27 Naphthalene-D8	136	8.125	8.125	(1.000)	212506	0.80000	(a)	
	28 Naphthalene	128	8.147	8.147	(1.003)	1954386	7.00000	6.72	
	29 4-Chloroaniline	127	8.260	8.282	(1.017)	264125	7.00000	4.90	
	30 Hexachlorobutadiene	225	8.316	8.316	(1.024)	249815	7.00000	6.67	
	31 Caprolactam	113	8.687	8.699	(1.069)	151994	7.00000	7.29(Q)	
	32 4-Chloro-3-Methylphenol	107	8.879	8.869	(1.093)	460363	7.00000	7.00	
$	33 2-Methylnaphthalene-D10	152	8.953	8.953	(1.102)	932492	7.00000	6.68	
	34 2-Methylnaphthalene	142	8.996	8.996	(1.107)	1228294	7.00000	6.39	
	35 1-Methylnaphthalene	142	9.112	9.112	(1.122)	1144640	7.00000	6.54	
	36 1,2,4,5-Tetrachlorobenzene	216	9.208	9.208	(0.898)	461306	7.00000	6.50	
	37 Hexachlorocyclopentadiene	237	9.197	9.186	(0.897)	216344	7.00000	7.25	
$	38 2,4-Dibromophenol	252	9.345	9.345	(0.911)	218934	7.00000	7.00	
	39 2,4,6-Trichlorophenol	196	9.366	9.356	(0.913)	246254	7.00000	6.92(H)	
	40 2,4,5-Trichlorophenol	196	9.419	9.419	(0.919)	278269	7.00000	7.36	
	41 1,1'-Biphenyl	154	9.578	9.578	(0.934)	1366161	7.00000	6.88	
	42 2-Chloronaphthalene	164	9.589	9.578	(0.935)	363068	7.00000	6.93(Q)	
	43 2-Nitroaniline	65	9.728	9.728	(0.949)	209698	7.00000	6.59	
	44 Dimethyl Phthalate	163	9.975	9.975	(0.973)	958599	7.00000	7.09	
	45 2,6-Dinitrotoluene	165	10.039	10.039	(0.979)	225535	7.00000	6.49	
	46 Acenaphthylene	152	10.082	10.082	(0.983)	1660831	7.00000	6.70	
	47 3-Nitroaniline	138	10.243	10.243	(0.999)	117890	7.00000	7.55(Q)	
*	48 Acenaphthene-D10	164	10.253	10.253	(1.000)	89018	0.80000	(a)	
	49 Acenaphthene	153	10.286	10.286	(1.003)	970715	7.00000	6.60	
	50 2,4-Dinitrophenol	184	10.371	10.371	(1.012)	29188	7.00000	6.48	
	51 Dibenzofuran	168	10.500	10.500	(1.024)	1284614	7.00000	6.49	
	52 4-Nitrophenol	109	10.489	10.489	(1.023)	60374	7.00000	6.79(Q)	
	53 2,4-Dinitrotoluene	165	10.522	10.522	(1.026)	256670	7.00000	6.50(Q)	
	54 2,3,4,6-Tetrachlorophenol	232	10.672	10.672	(1.041)	162937	7.00000	6.90	
	55 Diethylphthalate	149	10.833	10.833	(1.056)	937029	7.00000	7.37	
$	56 Fluorene-D10	174	10.886	10.886	(1.062)	797363	7.00000	6.84	
	57 Fluorene	166	10.918	10.918	(1.065)	1014826	7.00000	6.90	
	58 4-Chlorophenyl-phenylether	204	10.940	10.940	(1.067)	432596	7.00000	6.65	
	59 4-Nitroaniline	138	11.004	10.983	(1.073)	109845	7.00000	6.74	
	60 4,6-Dinitro-2-Methylphenol	198	11.015	11.015	(0.914)	54694	7.00000	6.70(Q)	
	61 N-Nitrosodiphenylamine	169	11.090	11.090	(0.920)	747062	7.00000	6.74	
	62 4-Bromophenyl-phenylether	248	11.528	11.528	(0.957)	227909	7.00000	6.83	
	63 Hexachlorobenzene	284	11.582	11.582	(0.961)	238297	7.00000	6.52	
	64 Atrazine	200	11.774	11.774	(0.977)	166913	7.00000	6.84	
	65 Pentachlorophenol	266	11.848	11.848	(0.983)	65453	7.00000	8.30	
*	66 Phenanthrene-D10	188	12.051	12.051	(1.000)	111963	0.80000	(a)	
	67 Phenanthrene	178	12.083	12.073	(1.003)	1157948	7.00000	6.84	
	68 Anthracene	178	12.147	12.137	(1.008)	1159008	7.00000	6.82	
	69 Carbazole	167	12.361	12.361	(1.026)	842679	7.00000	7.06	
	70 Di-n-butylphthalate	149	12.831	12.831	(1.065)	1298562	7.00000	6.65	
$	71 Fluoranthene-d10	212	13.501	13.501	(1.120)	652524	7.00000	7.17	
	72 Fluoranthene	202	13.522	13.522	(1.122)	932436	7.00000	7.10	
$	73 Pyrene-D10	212	13.776	13.776	(0.890)	742364	7.00000	6.63	
	74 Pyrene	202	13.797	13.797	(0.891)	955625	7.00000	6.46	
	75 Butylbenzylphthalate	149	14.703	14.703	(0.950)	420090	7.00000	6.83	

Data File: \\target_server\gg\chem\gcms-n.i\N120723.b\N0383.D
Report Date: 08-Dec-2023 07:21

		Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
	76	Benzo(a)anthracene	228	15.467	15.467	(0.999)	596342	7.00000	7.20	
	77	3,3'-Dichlorobenzidine	252	15.488	15.488	(1.001)	158550	7.00000	7.40	
*	78	Chrysene-D12	240	15.478	15.478	(1.000)	47852	0.80000	(a)	
	79	Chrysene	228	15.528	15.528	(1.003)	652181	7.00000	6.57	
	80	bis(2-Ethylhexyl)phthalate	149	15.671	15.671	(1.013)	537768	7.00000	6.77	
	81	Di-n-octylphthalate	149	16.965	16.965	(1.096)	710411	7.00000	7.12	
	82	Benzo(b)fluoranthene	252	17.510	17.521	(0.956)	471228	7.00000	7.22	
	83	Benzo(k)fluoranthene	252	17.572	17.572	(0.959)	576245	7.00000	6.83(H)	
	84	Benzo(a)pyrene	252	18.200	18.211	(0.993)	451438	7.00000	7.07	
*	85	Perylene-D12	264	18.324	18.324	(1.000)	35764	0.80000	(a)	
	86	Indeno(1,2,3-cd)pyrene	276	20.332	20.342	(1.110)	353629	7.00000	7.65	
	87	Dibenzo(a,h)anthracene	278	20.414	20.414	(1.114)	358461	7.00000	7.52	
	88	Benzo(g,h,i)perylene	276	20.868	20.878	(1.139)	386742	7.00000	7.42	
M	89	Total PAHs	100				16024975	126.000	(a)	

QC Flag Legend

T - Target compound detected outside RT window.
a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.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Date : 07-DEC-2023 13:41
Client ID:
Sample Info: WG346503-5
Volume Injected (uL): 1.0
Column phase: Rxi-5ViMS
Instrument: gcms-n,i
Operator: EP
Column diameter: 0.25
\\target_server\gg\chem\gcms-n,i\N120723,b\N0383.D
Y (x10^6)
Min
-1,4-Dioxane-d8+
-N-Nitrosodimethylamine+
-Benzaldehyde
-Phenol
-Bis(2-Chloroethyl)ether+
-1,3-Dichlorobenzene
-1,4-Dichlorobenzene-D4+
-1,2-Dichlorobenzene
-2,2'-Oxybis(1-chloropropa+
-Acetophenone+
-3&4-Methylphenol+
-Nitrobenzene
-2-Nitrophenol
-Isophorone
-2,4-Dimethylphenol
-bis(2-Chloroethoxy)methan
-Benzoic Acid+
-1,2,4-Trichlorobenzene
-Naphthalene-D8+
-4-Chloroaniline
-Hexachlorobutadiene
-Caprolactam
-4-Chloro-3-Methylphenol
-2-Methylnaphthalene-D10
-2-Methylnaphthalene
-1-Methylnaphthalene
-1,2,4,5-Tetrachlorobenzen+
-2,4,5-Trichlorophenol
-2-Nitroaniline
1,1'-Biphenyl+
-Dimethyl Phthalate
-Acenaphthylene
-3-Nitroaniline+
-Acenaphthene
-2,4-Dinitrophenol
-Dibenzofuran+
-2,3,4,6-Tetrachlorophenol
-Diethylphthalate
-Fluorene-D10+
-4-Nitroaniline+
-N-Nitrosodiphenylamine
-4-Bromophenyl-phenylether+
-Atrazine
-Pentachlorophenol
-Phenanthrene-D10+
-Anthracene
-Carbazole
-Di-n-butylphthalate
-Fluoranthene-d10+
-Pyrene-D10+
-Butylbenzylphthalate
-Benzo(a)anthracene+
-Chrysene
-bis(2-Ethylhexyl)phthalat
-Di-n-octylphthalate
-Benzo(b)fluoranthene
-Benzo(k)fluoranthene
-Benzo(a)pyrene
-Perylene-D12
-Indeno(1,2,3-cd)pyrene
-Dibenzo(a,h)anthracene
-Benzo(g,h,i)perylene

Data File: \\target_server\gg\chem\gcms-n.i\N120723.b\N0384.D
Report Date: 08-Dec-2023 07:21

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-n.i\N120723.b\N0384.D
Lab Smp Id: WG346503-6
Inj Date : 07-DEC-2023 14:12
Operator : EP   Inst ID: gcms-n.i
Smp Info : WG346503-6
Misc Info :
Comment   :
Method   : \\target_server\gg\chem\gcms-n.i\N120723.b\NSPSIM95.m
Meth Date : 08-Dec-2023 07:21 gcms-n.i   Quant Type: ISTD
Cal Date : 07-DEC-2023 14:12   Cal File: N0384.D
Als bottle: 6   Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: all.sub
Target Version: 4.12

Concentration Formula: Amt * DF * Uf*(Vt/Vo*Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.000	Sample Volume (L)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
$	1 1,4-Dioxane-d8	96	2.741	2.741	(1.000)	380896	10.0000	10.6	
	2 1,4-Dioxane	88	2.773	2.783	(0.420)	399154	10.0000	10.2	
	3 N-Nitrosodimethylamine	74	3.216	3.216	(0.487)	569121	10.0000	11.8	
	4 Pyridine	79	3.248	3.237	(0.492)	930482	10.0000	10.0	
	5 Benzaldehyde	77	6.084	6.084	(0.921)	84896	10.0000	3.41	
	6 Phenol	94	6.240	6.240	(0.945)	1150502	10.0000	11.1	
	7 Bis(2-Chloroethyl)ether	93	6.323	6.323	(0.957)	883200	10.0000	9.71	
	8 2-Chlorophenol	128	6.364	6.365	(0.964)	998184	10.0000	11.4	
	9 1,3-Dichlorobenzene	146	6.531	6.531	(0.989)	1109919	10.0000	10.5	
*	10 1,4-Dichlorobenzene-D4	152	6.604	6.604	(1.000)	53196	0.80000	(aQ)	
	11 1,4-Dichlorobenzene	146	6.625	6.625	(1.003)	1120518	10.0000	10.4	
	12 1,2-Dichlorobenzene	146	6.801	6.802	(1.030)	1089926	10.0000	10.4	
	13 2,2'-Oxybis(1-chloropropane)	45	6.957	6.958	(1.054)	519258	10.0000	9.11	
	14 2-Methylphenol	108	6.957	6.958	(1.054)	882572	10.0000	10.8	
	15 Acetophenone	105	7.103	7.103	(0.874)	1216240	10.0000	10.7	
	16 N-Nitroso-di-n-propylamine	70	7.124	7.124	(1.079)	581661	10.0000	10.4	
	17 3&4-Methylphenol	108	7.155	7.145	(1.083)	872723	10.0000	10.3	
	18 Hexachloroethane	117	7.197	7.197	(1.090)	432116	10.0000	10.3	
	19 Nitrobenzene	77	7.290	7.291	(0.897)	801512	10.0000	10.7	
	20 Isophorone	82	7.596	7.596	(0.935)	1520033	10.0000	10.1	
	21 2-Nitrophenol	139	7.675	7.675	(0.945)	362047	10.0000	10.5	

Data File: \\target_server\gg\chem\gcms-n.i\N120723.b\N0384.D
Report Date: 08-Dec-2023 07:21

EP
3:57 pm, Dec 29, 2023

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
	22 2,4-Dimethylphenol	107	7.776	7.776	(0.957)	624702	10.0000	9.90	
	23 bis(2-Chloroethoxy)methane	93	7.877	7.877	(0.970)	967339	10.0000	10.3	
	24 Benzoic Acid	105	7.945	7.956	(0.978)	185174	10.0000	11.5	
	25 2,4-Dichlorophenol	162	7.990	7.979	(0.983)	705878	10.0000	9.99	
	26 1,2,4-Trichlorobenzene	180	8.069	8.069	(0.993)	799137	10.0000	10.6	
*	27 Naphthalene-D8	136	8.125	8.125	(1.000)	184763	0.80000	(a)	
	28 Naphthalene	128	8.147	8.147	(1.003)	2554908	10.0000	10.1	
	29 4-Chloroaniline	127	8.282	8.282	(1.019)	349141	10.0000	7.46	
	30 Hexachlorobutadiene	225	8.316	8.316	(1.024)	332407	10.0000	10.2	
	31 Caprolactam	113	8.687	8.699	(1.069)	207027	10.0000	11.4	
	32 4-Chloro-3-Methylphenol	107	8.879	8.869	(1.093)	635978	10.0000	11.1	
$	33 2-Methylnaphthalene-D10	152	8.953	8.953	(1.102)	1253013	10.0000	10.3	
	34 2-Methylnaphthalene	142	8.996	8.996	(1.107)	1638338	10.0000	9.81	
	35 1-Methylnaphthalene	142	9.112	9.112	(1.122)	1521038	10.0000	9.99	
	36 1,2,4,5-Tetrachlorobenzene	216	9.207	9.208	(1.000)	613041	10.0000	9.83	
	37 Hexachlorocyclopentadiene	237	9.197	9.186	(1.000)	294500	10.0000	11.2	
$	38 2,4-Dibromophenol	252	9.345	9.345	(1.000)	313155	10.0000	11.4	
	39 2,4,6-Trichlorophenol	196	9.366	9.356	(1.000)	340514	10.0000	10.3	
	40 2,4,5-Trichlorophenol	196	9.419	9.419	(1.000)	395455	10.0000	11.9	
	41 1,1'-Biphenyl	154	9.578	9.578	(1.000)	1786201	10.0000	10.2	
	42 2-Chloronaphthalene	164	9.589	9.578	(1.000)	477844	10.0000	10.4	
	43 2-Nitroaniline	65	9.728	9.728	(1.000)	292397	10.0000	10.5	
	44 Dimethyl Phthalate	163	9.975	9.975	(1.000)	1260199	10.0000	10.6	
	45 2,6-Dinitrotoluene	165	10.039	10.039	(1.000)	311274	10.0000	10.2	
	46 Acenaphthylene	152	10.082	10.082	(1.000)	2240772	10.0000	10.3	
	47 3-Nitroaniline	138	10.243	10.243	(1.000)	147430	10.0000	10.8	
*	48 Acenaphthene-D10	164	10.253	10.253	(1.000)	78164	0.80000	(aM)	M6
	49 Acenaphthene	153	10.286	10.286	(1.000)	1301457	10.0000	10.1	
	50 2,4-Dinitrophenol	184	10.371	10.371	(1.000)	49572	10.0000	10.9	
	51 Dibenzofuran	168	10.500	10.500	(1.000)	1729720	10.0000	9.95	
	52 4-Nitrophenol	109	10.489	10.489	(1.000)	88592	10.0000	10.5(Q)	
	53 2,4-Dinitrotoluene	165	10.521	10.522	(1.000)	352149	10.0000	10.2	
	54 2,3,4,6-Tetrachlorophenol	232	10.672	10.672	(1.000)	234473	10.0000	10.6	
	55 Diethylphthalate	149	10.832	10.833	(1.000)	1237817	10.0000	11.1	
$	56 Fluorene-D10	174	10.886	10.886	(1.000)	1038814	10.0000	10.2(A)	
	57 Fluorene	166	10.918	10.918	(1.000)	1325304	10.0000	10.3	
	58 4-Chlorophenyl-phenylether	204	10.940	10.940	(1.000)	580086	10.0000	10.2	
	59 4-Nitroaniline	138	11.004	10.983	(1.000)	155778	10.0000	10.1(Q)	
	60 4,6-Dinitro-2-Methylphenol	198	11.015	11.015	(0.914)	88850	10.0000	10.9	
	61 N-Nitrosodiphenylamine	169	11.090	11.090	(0.920)	1012741	10.0000	10.3	
	62 4-Bromophenyl-phenylether	248	11.528	11.528	(0.957)	304299	10.0000	10.3	
	63 Hexachlorobenzene	284	11.581	11.582	(0.961)	317309	10.0000	9.82	
	64 Atrazine	200	11.774	11.774	(0.977)	214800	10.0000	9.95	
	65 Pentachlorophenol	266	11.848	11.848	(0.983)	102590	10.0000	14.7	
*	66 Phenanthrene-D10	188	12.051	12.051	(1.000)	98970	0.80000	(a)	
	67 Phenanthrene	178	12.083	12.073	(1.003)	1535993	10.0000	10.3	
	68 Anthracene	178	12.147	12.137	(1.008)	1514017	10.0000	10.1	
	69 Carbazole	167	12.361	12.361	(1.026)	988896	10.0000	9.38	
	70 Di-n-butylphthalate	149	12.831	12.831	(1.065)	1707837	10.0000	9.90	
$	71 Fluoranthene-d10	212	13.501	13.501	(1.120)	830696	10.0000	10.3	
	72 Fluoranthene	202	13.521	13.522	(1.122)	1189885	10.0000	10.2	
$	73 Pyrene-D10	212	13.776	13.776	(0.889)	945824	10.0000	9.38	
	74 Pyrene	202	13.797	13.797	(0.891)	1226242	10.0000	9.20	
	75 Butylbenzylphthalate	149	14.703	14.703	(0.949)	552004	10.0000	9.96	

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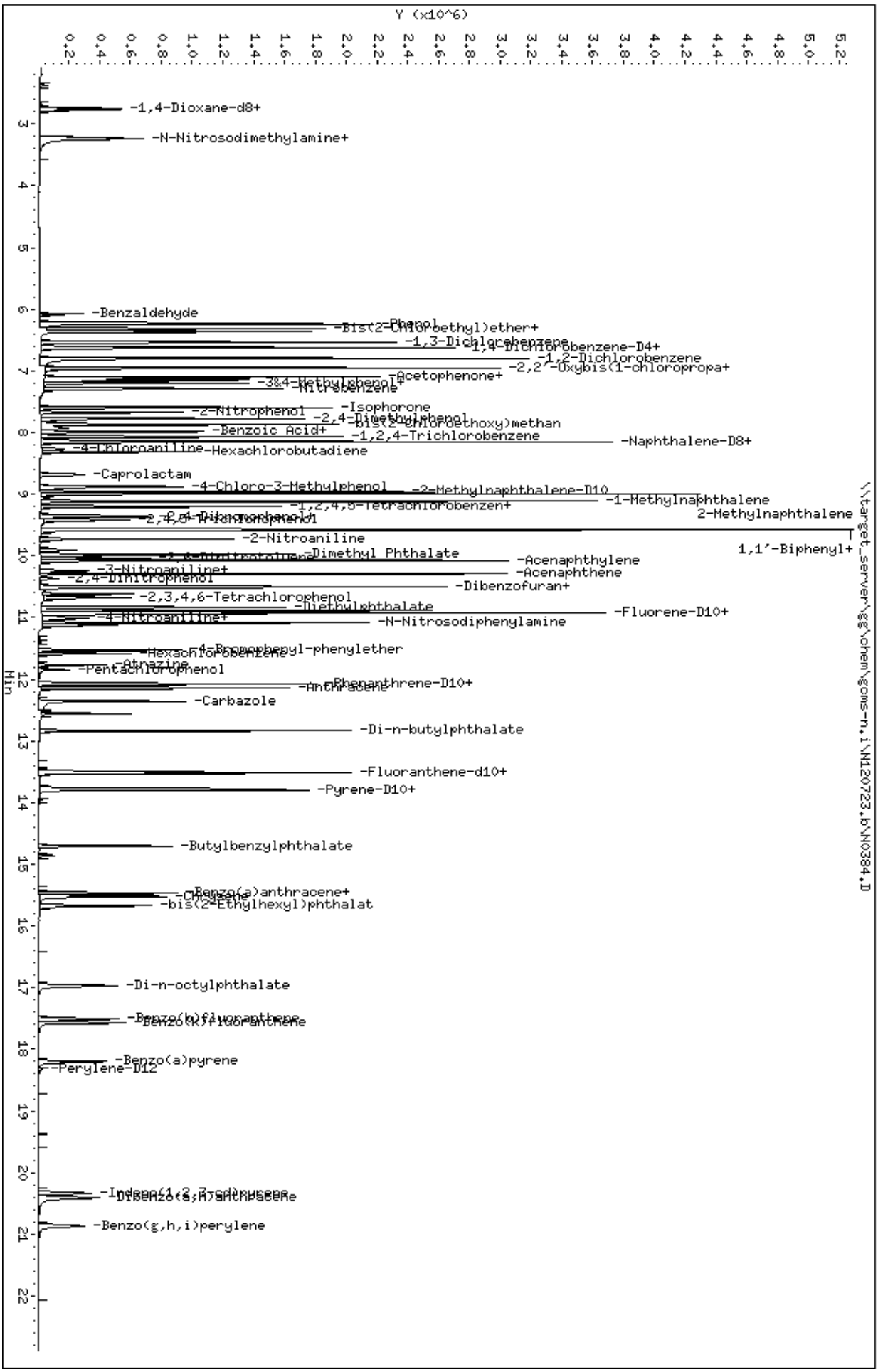
Report Date: 08-Dec-2023 07:21

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
	76 Benzo(a)anthracene	228	15.467	15.467	(0.999)	769265	10.0000	10.3	
	77 3,3'-Dichlorobenzidine	252	15.488	15.488	(1.000)	206923	10.0000	10.7	
*	78 Chrysene-D12	240	15.488	15.478	(1.000)	43106	0.80000	(a)	
	79 Chrysene	228	15.528	15.528	(1.003)	832495	10.0000	9.31	
	80 bis(2-Ethylhexyl)phthalate	149	15.671	15.671	(1.012)	706187	10.0000	9.86	
	81 Di-n-octylphthalate	149	16.965	16.965	(1.095)	970258	10.0000	10.1	
	82 Benzo(b)fluoranthene	252	17.510	17.521	(0.956)	639006	10.0000	10.9	
	83 Benzo(k)fluoranthene	252	17.572	17.572	(0.959)	769347	10.0000	10.1(H)	
	84 Benzo(a)pyrene	252	18.200	18.211	(0.993)	614618	10.0000	10.7	
*	85 Perylene-D12	264	18.324	18.324	(1.000)	32145	0.80000	(a)	
	86 Indeno(1,2,3-cd)pyrene	276	20.332	20.342	(1.110)	481280	10.0000	11.6	
	87 Dibenzo(a,h)anthracene	278	20.414	20.414	(1.114)	485273	10.0000	11.3	
	88 Benzo(g,h,i)perylene	276	20.867	20.878	(1.139)	515210	10.0000	11.0	
M	89 Total PAHs	100				21154448	180.000	(a)	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
A - Target compound detected but, quantitated amount
exceeded maximum amount.
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.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Column phase: Rxi-5ViOms
Instrument: gcms-n,i
Operator: EP
Column diameter: 0.25
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Y (x10^6)
Min
-1,4-Dioxane-d8+
-N-Nitrosodimethylamine+
-Benzaldehyde
-Phenol
-Bis(2-Chloroethyl)ether+
-1,3-Dichlorobenzene
-1,4-Dichlorobenzene-D4+
-1,2-Dichlorobenzene
-2,2'-Oxybis(1-chloropropa+
-Acetophenone+
-3&4-Methylphenol+
-Nitrobenzene
-2-Nitrophenol
-Isophorone
-2,4-Dimethylphenol
-bis(2-Chloroethoxy)methan
-Benzoic Acid+
-1,2,4-Trichlorobenzene
-Naphthalene-D8+
-4-Chloroaniline
-Hexachlorobutadiene
-Caprolactam
-4-Chloro-3-Methylphenol
-2-Methylnaphthalene-D10
-1-Methylnaphthalene
2-Methylnaphthalene
-1,2,4,5-Tetrachlorobenzen+
-2,4,6-Trichlorophenol
-2-Nitroaniline
1,1'-Biphenyl+
-Dimethyl Phthalate
-Acenaphthylene
-3-Nitroaniline+
-Acenaphthene
-2,4-Dinitrophenol
-Dibenzofuran+
-2,3,4,6-Tetrachlorophenol
-Diethylphthalate
-Fluorene-D10+
-4-Nitroaniline+
-N-Nitrosodiphenylamine
-4-Bromophenyl-phenylether
-Hexachlorobenzene
-Atrazine
-Pentachlorophenol
-Phenanthrene-D10+
-Anthracene
-Carbazole
-Di-n-butylphthalate
-Fluoranthene-d10+
-Pyrene-D10+
-Butylbenzylphthalate
-Benzo(a)anthracene+
-Chrysene
-bis(2-Ethylhexyl)phthalat
-Di-n-octylphthalate
-Benzo(b)fluoranthene
-Benzo(k)fluoranthene
-Benzo(a)pyrene
-Perylene-D12
-Indeno(1,2,3-cd)pyrene
-Dibenz(a,h)anthracene
-Benzo(g,h,i)perylene

Data File: \\target_server\gg\chem\gcms-n.i\N120723.b\N0385.D
Report Date: 08-Dec-2023 07:21

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-n.i\N120723.b\N0385.D
Lab Smp Id: WG346503-7
Inj Date : 07-DEC-2023 14:42
Operator : EP   Inst ID: gcms-n.i
Smp Info : WG346503-7
Misc Info :
Comment   :
Method   : \\target_server\gg\chem\gcms-n.i\N120723.b\NSPSIM95.m
Meth Date : 08-Dec-2023 07:21 gcms-n.i   Quant Type: ISTD
Cal Date : 07-DEC-2023 14:42   Cal File: N0385.D
Als bottle: 7   Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: all.sub
Target Version: 4.12

Concentration Formula: Amt * DF * Uf*(Vt/Vo*Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.000	Sample Volume (L)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
$	1 1,4-Dioxane-d8	96	2.741	2.741	(1.000)	553479	15.0000	16.9(A)	
	2 1,4-Dioxane	88	2.783	2.783	(0.422)	574707	15.0000	15.0	
	3 N-Nitrosodimethylamine	74	3.216	3.216	(0.487)	742767	15.0000	15.7(A)	
	4 Pyridine	79	3.237	3.237	(0.490)	1400900	15.0000	15.4(A)	
	5 Benzaldehyde	77	6.084	6.084	(0.921)	124001	15.0000	5.08	
	6 Phenol	94	6.240	6.240	(0.945)	1641450	15.0000	16.1(A)	
	7 Bis(2-Chloroethyl)ether	93	6.323	6.323	(0.957)	1307623	15.0000	14.6	
	8 2-Chlorophenol	128	6.365	6.365	(0.964)	1445431	15.0000	16.8(A)	
	9 1,3-Dichlorobenzene	146	6.531	6.531	(0.989)	1580391	15.0000	15.2(A)	
*	10 1,4-Dichlorobenzene-D4	152	6.604	6.604	(1.000)	52211	0.80000	(aQ)	
	11 1,4-Dichlorobenzene	146	6.625	6.625	(1.003)	1618608	15.0000	15.3(A)	
	12 1,2-Dichlorobenzene	146	6.802	6.802	(1.030)	1558822	15.0000	15.2(A)	
	13 2,2'-Oxybis(1-chloropropane)	45	6.958	6.958	(1.054)	684542	15.0000	12.2	
	14 2-Methylphenol	108	6.958	6.958	(1.054)	1218746	15.0000	15.2(A)	
	15 Acetophenone	105	7.103	7.103	(0.874)	1697573	15.0000	15.8(A)	
	16 N-Nitroso-di-n-propylamine	70	7.124	7.124	(1.079)	781831	15.0000	14.3	
	17 3&4-Methylphenol	108	7.145	7.145	(1.082)	1235344	15.0000	14.9	
	18 Hexachloroethane	117	7.197	7.197	(1.090)	623814	15.0000	15.2(A)	
	19 Nitrobenzene	77	7.291	7.291	(0.897)	1111558	15.0000	15.7(A)	
	20 Isophorone	82	7.596	7.596	(0.935)	2026482	15.0000	14.2	
	21 2-Nitrophenol	139	7.675	7.675	(0.945)	567923	15.0000	14.8	

Data File: \\target_server\gg\chem\gcms-n.i\N120723.b\N0385.D
Report Date: 08-Dec-2023 07:21

EP
3:58 pm, Dec 29, 2023

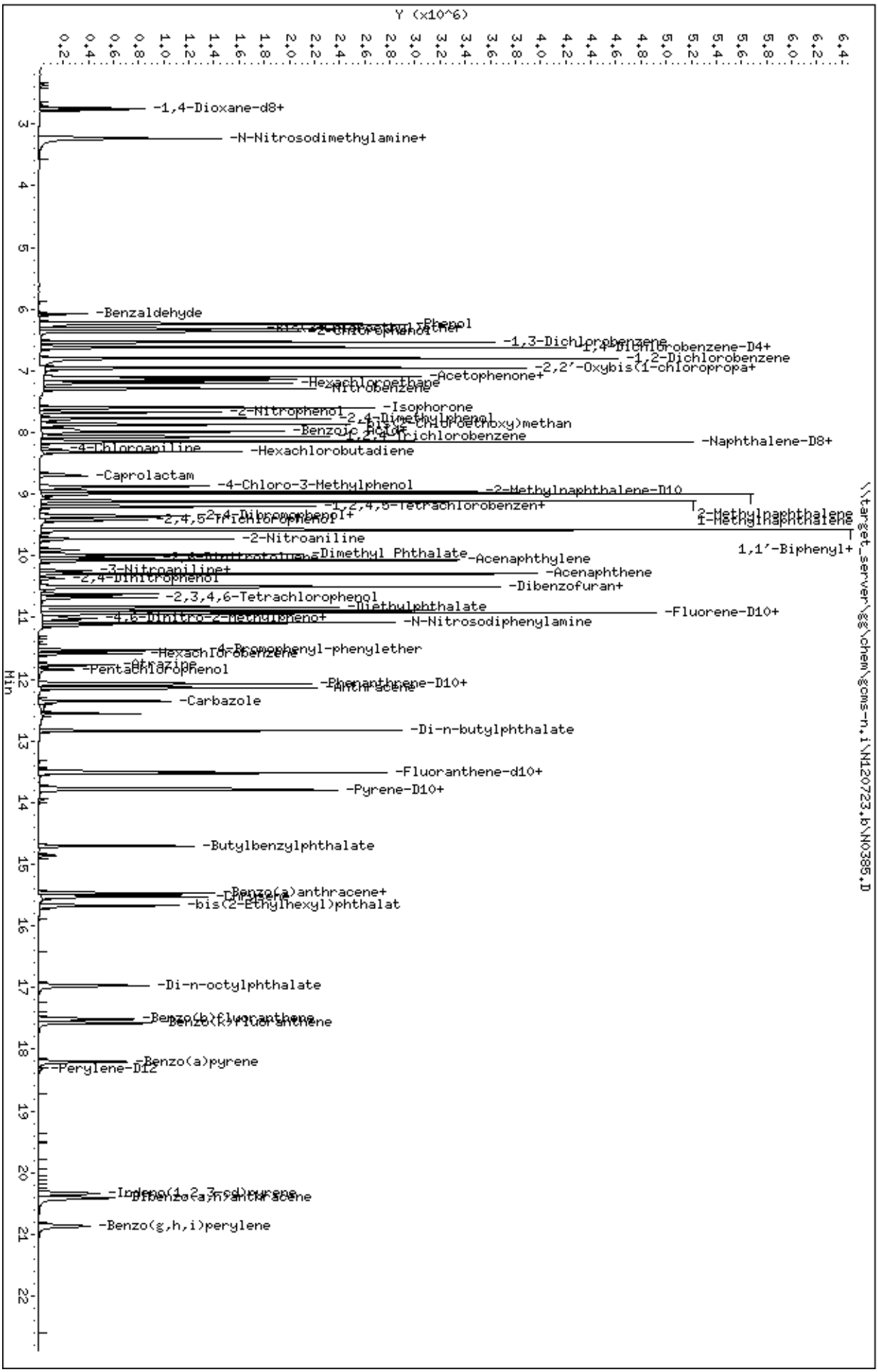
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
	22 2,4-Dimethylphenol	107	7.776	7.776	(0.957)	834808	15.0000	14.0	
	23 bis(2-Chloroethoxy)methane	93	7.877	7.877	(0.970)	1350793	15.0000	15.2(A)	
	24 Benzoic Acid	105	7.956	7.956	(0.979)	287414	15.0000	18.8(A)	
	25 2,4-Dichlorophenol	162	7.979	7.979	(0.982)	1032462	15.0000	15.4(A)	
	26 1,2,4-Trichlorobenzene	180	8.069	8.069	(0.993)	1102819	15.0000	15.4(A)	
*	27 Naphthalene-D8	136	8.125	8.125	(1.000)	175091	0.80000	(a)	
	28 Naphthalene	128	8.147	8.147	(1.003)	3460608	15.0000	14.4	
	29 4-Chloroaniline	127	8.282	8.282	(1.019)	432258	15.0000	9.74(M)	M6
	30 Hexachlorobutadiene	225	8.316	8.316	(1.024)	489560	15.0000	15.9(A)	
	31 Caprolactam	113	8.699	8.699	(1.071)	269741	15.0000	15.7(A)	
	32 4-Chloro-3-Methylphenol	107	8.869	8.869	(1.092)	869666	15.0000	16.0(A)	
$	33 2-Methylnaphthalene-D10	152	8.953	8.953	(1.102)	1667098	15.0000	14.5	
	34 2-Methylnaphthalene	142	8.996	8.996	(1.107)	2196331	15.0000	13.9	
	35 1-Methylnaphthalene	142	9.112	9.112	(1.122)	2021064	15.0000	14.0	
	36 1,2,4,5-Tetrachlorobenzene	216	9.208	9.208	(1.000)	860406	15.0000	15.2(A)	
	37 Hexachlorocyclopentadiene	237	9.186	9.186	(1.000)	417905	15.0000	17.5(A)	
$	38 2,4-Dibromophenol	252	9.345	9.345	(1.000)	440238	15.0000	17.6	
	39 2,4,6-Trichlorophenol	196	9.356	9.356	(1.000)	489612	15.0000	14.9	
	40 2,4,5-Trichlorophenol	196	9.419	9.419	(1.000)	442336	15.0000	14.6	
	41 1,1'-Biphenyl	154	9.578	9.578	(1.000)	2326443	15.0000	14.6	
	42 2-Chloronaphthalene	164	9.578	9.578	(1.000)	632503	15.0000	15.1(A)	
	43 2-Nitroaniline	65	9.728	9.728	(1.000)	378210	15.0000	14.9	
	44 Dimethyl Phthalate	163	9.975	9.975	(1.000)	1671306	15.0000	15.5(A)	
	45 2,6-Dinitrotoluene	165	10.039	10.039	(1.000)	419062	15.0000	15.1(A)	
	46 Acenaphthylene	152	10.082	10.082	(1.000)	2855097	15.0000	14.4	
	47 3-Nitroaniline	138	10.243	10.243	(1.000)	180394	15.0000	14.5	
*	48 Acenaphthene-D10	164	10.253	10.253	(1.000)	71113	0.80000	(aM)	M6
	49 Acenaphthene	153	10.286	10.286	(1.000)	1723050	15.0000	14.6	
	50 2,4-Dinitrophenol	184	10.371	10.371	(1.000)	79571	15.0000	14.8	
	51 Dibenzofuran	168	10.500	10.500	(1.000)	2285738	15.0000	14.4	
	52 4-Nitrophenol	109	10.489	10.489	(1.000)	127205	15.0000	14.8(Q)	
	53 2,4-Dinitrotoluene	165	10.522	10.522	(1.000)	476688	15.0000	15.1(A)	
	54 2,3,4,6-Tetrachlorophenol	232	10.672	10.672	(1.000)	323661	15.0000	14.8	
	55 Diethylphthalate	149	10.833	10.833	(1.000)	1597681	15.0000	15.7(A)	
$	56 Fluorene-D10	174	10.886	10.886	(1.000)	1368584	15.0000	14.7(A)	
	57 Fluorene	166	10.918	10.918	(1.000)	1711783	15.0000	14.6	
	58 4-Chlorophenyl-phenylether	204	10.940	10.940	(1.000)	749428	15.0000	14.4	
	59 4-Nitroaniline	138	10.983	10.983	(1.071)	244967	15.0000	15.0(M)	M9
	60 4,6-Dinitro-2-Methylphenol	198	11.015	11.015	(0.914)	127092	15.0000	14.7	
	61 N-Nitrosodiphenylamine	169	11.090	11.090	(0.920)	1291702	15.0000	15.2(A)	
	62 4-Bromophenyl-phenylether	248	11.528	11.528	(0.957)	395013	15.0000	15.4(A)	
	63 Hexachlorobenzene	284	11.582	11.582	(0.961)	413205	15.0000	14.7	
	64 Atrazine	200	11.774	11.774	(0.977)	283449	15.0000	15.1(A)	
	65 Pentachlorophenol	266	11.848	11.848	(0.983)	124134	15.0000	20.5(A)	
*	66 Phenanthrene-D10	188	12.051	12.051	(1.000)	86104	0.80000	(a)	
	67 Phenanthrene	178	12.073	12.073	(1.002)	1982899	15.0000	15.2(A)	
	68 Anthracene	178	12.137	12.137	(1.007)	1969246	15.0000	15.0(A)	
	69 Carbazole	167	12.361	12.361	(1.026)	1148837	15.0000	12.5	
	70 Di-n-butylphthalate	149	12.831	12.831	(1.065)	2297023	15.0000	15.3(A)	
$	71 Fluoranthene-d10	212	13.501	13.501	(1.120)	1117567	15.0000	16.0(A)	
	72 Fluoranthene	202	13.522	13.522	(1.122)	1581736	15.0000	15.6(A)	
$	73 Pyrene-D10	212	13.776	13.776	(0.890)	1275638	15.0000	13.1(A)	
	74 Pyrene	202	13.797	13.797	(0.891)	1671911	15.0000	13.0	
	75 Butylbenzylphthalate	149	14.703	14.703	(0.950)	815208	15.0000	15.2(A)	

Data File: \\target_server\gg\chem\gcms-n.i\N120723.b\N0385.D
Report Date: 08-Dec-2023 07:21

							AMOUNTS		
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
	76 Benzo(a)anthracene	228	15.467	15.467	(0.999)	1143219	15.0000	15.9(A)	
	77 3,3'-Dichlorobenzidine	252	15.488	15.488	(1.001)	320123	15.0000	17.2(A)	
*	78 Chrysene-D12	240	15.478	15.478	(1.000)	41639	0.80000	(a)	
	79 Chrysene	228	15.528	15.528	(1.003)	1213113	15.0000	14.0	
	80 bis(2-Ethylhexyl)phthalate	149	15.671	15.671	(1.013)	1061127	15.0000	15.3(A)	
	81 Di-n-octylphthalate	149	16.965	16.965	(1.096)	1581730	15.0000	14.9	
	82 Benzo(b)fluoranthene	252	17.521	17.521	(0.956)	1003315	15.0000	16.0(A)	
	83 Benzo(k)fluoranthene	252	17.572	17.572	(0.959)	1225972	15.0000	15.2(AH)	
	84 Benzo(a)pyrene	252	18.211	18.211	(0.994)	985174	15.0000	16.1(A)	
*	85 Perylene-D12	264	18.324	18.324	(1.000)	34308	0.80000	(a)	
	86 Indeno(1,2,3-cd)pyrene	276	20.342	20.342	(1.110)	704094	15.0000	15.9(A)	
	87 Dibenzo(a,h)anthracene	278	20.414	20.414	(1.114)	724610	15.0000	15.8(A)	
	88 Benzo(g,h,i)perylene	276	20.878	20.878	(1.139)	710516	15.0000	14.2	
M	89 Total PAHs	100				28883738	270.000	(a)	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
A - Target compound detected but, quantitated amount
exceeded maximum amount.
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.


Data File: \\target_server\gg\chem\gcms-n,i\N120723,b\N0385.D
Date : 07-DEC-2023 14:42
Client ID:
Sample Info: WG346503-7
Volume Injected (uL): 1.0
Column phase: Rxi-5ViOms
Instrument: gcms-n,i
Operator: EP
Column diameter: 0.25
\\target_server\gg\chem\gcms-n,i\N120723,b\N0385.D
Y (x10^6)
Min
-1,4-Dioxane-d8+
-N-Nitrosodimethylamine+
-Benzaldehyde
-1,3-Dichlorobenzene
-1,2-Dichlorobenzene
-2,2'-Oxybis(1-chloropropa+
-Acetophenone+
-Hexachloroethane
-Nitrobenzene
-2-Nitrophenol
-Isophorone
-Naphthalene-D8+
-4-Chloroaniline
-Hexachlorobutadiene
-Caprolactam
-4-Chloro-3-Methylphenol
-2-Methylnaphthalene-D10
-1,2,4,5-Tetrachlorobenzen+
2-Methylnaphthalene
1-Methylnaphthalene
-2,4,5-Trichlorophenol
-2-Nitroaniline
1,1'-Biphenyl+
-Dimethyl Phthalate
-Acenaphthylene
-3-Nitroaniline+
-Acenaphthene
-2,4-Dinitrophenol
-Dibenzofuran+
-2,3,4,6-Tetrachlorophenol
-Diethylphthalate
-Fluorene-D10+
-N-Nitrosodiphenylamine
-Hexachlorobenzene
-Pentachlorophenol
-Phenanthrene-D10+
-Carbazole
-Di-n-butylphthalate
-Fluoranthene-d10+
-Pyrene-D10+
-Butylbenzylphthalate
-Benzo(a)anthracene+
-bis(2-Ethylhexyl)phthalat
-Di-n-octylphthalate
-Benzo(b)fluoranthene
-Benzo(a)pyrene
-Perylene-D12
-Benzo(g,h,i)perylene

Data File: \\target_server\gg\chem\gcms-n.i\N120723.b\N0386.D
Report Date: 08-Dec-2023 07:19

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-n.i\N120723.b\N0386.D
Lab Smp Id: WG346503-8
Inj Date : 07-DEC-2023 15:12
Operator : EP   Inst ID: gcms-n.i
Smp Info : WG346503-8
Misc Info : WG346503,WG346503,WG346503-4
Comment   :
Method   : \\target_server\gg\chem\gcms-n.i\N120723.b\NSPSIM95.m
Meth Date : 07-Dec-2023 15:12 epelletier Quant Type: ISTD
Cal Date : 07-DEC-2023 14:42   Cal File: N0385.D
Als bottle: 8   QC Sample: INDSOURCE
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: all.sub
Target Version: 4.12
Processing Host: INSPIRON1

Concentration Formula: Amt * DF * Uf*(Vt/Vo*Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.000	Sample Volume (L)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

EP
7:24 am, Dec 08, 2023

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/L)	REVIEW CODE
2	1,4-Dioxane	88	2.773	2.784	(0.420)	201574	4.96336	4.96	
3	N-Nitrosodimethylamine	74	3.216	3.217	(0.487)	288885	5.76600	5.76	
4	Pyridine	79	3.248	3.238	(0.492)	427986	4.45418	4.45(M)	M6
5	Benzaldehyde	77	6.219	6.084	(0.942)	11115	0.43040	0.430(QR)	
6	Phenol	94	6.240	6.240	(0.945)	591252	5.48363	5.48	
7	Bis(2-Chloroethyl)ether	93	6.323	6.323	(0.957)	446480	4.73198	4.73	
8	2-Chlorophenol	128	6.364	6.365	(0.964)	467537	5.12739	5.13	
9	1,3-Dichlorobenzene	146	6.531	6.531	(0.989)	541326	4.92138	4.92	
* 10	1,4-Dichlorobenzene-D4	152	6.604	6.604	(1.000)	55194	0.80000	(aQ)	
11	1,4-Dichlorobenzene	146	6.625	6.625	(1.003)	563690	5.04882	5.05	
12	1,2-Dichlorobenzene	146	6.801	6.802	(1.030)	529978	4.90110	4.90	
13	2,2'-Oxybis(1-chloropropane)	45	6.968	6.958	(1.055)	220584	3.73025	3.73(R)	
14	2-Methylphenol	108	6.958	6.958	(1.054)	406671	4.80459	4.80	
15	Acetophenone	105	7.103	7.104	(0.874)	632510	5.03469	5.03	
16	N-Nitroso-di-n-propylamine	70	7.124	7.125	(1.079)	273201	4.72252	4.72	
17	3&4-Methylphenol	108	7.145	7.145	(1.082)	426984	4.87482	4.87	
18	Hexachloroethane	117	7.197	7.197	(1.090)	215901	4.96126	4.96	
19	Nitrobenzene	77	7.290	7.291	(0.897)	420499	5.08423	5.08	
20	Isophorone	82	7.596	7.597	(0.935)	706822	4.23723	4.24	
21	2-Nitrophenol	139	7.686	7.675	(0.946)	184468	5.44133	5.44	

Data File: \\target_server\gg\chem\gcms-n.i\N120723.b\N0386.D
Report Date: 08-Dec-2023 07:19

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	CONCENTRATIONS FINAL (ug/L)	REVIEW CODE
	22 2,4-Dimethylphenol	107	7.776	7.777	(0.957)	387346	5.54296	5.54	
	23 bis(2-Chloroethoxy)methane	93	7.877	7.878	(0.970)	487773	4.70314	4.70	
	24 Benzoic Acid	105	7.922	7.957	(0.975)	64619	3.62098	3.62	
	25 2,4-Dichlorophenol	162	7.990	7.979	(0.983)	355716	4.54584	4.54	
	26 1,2,4-Trichlorobenzene	180	8.069	8.069	(0.993)	397278	4.76008	4.76	
*	27 Naphthalene-D8	136	8.125	8.125	(1.000)	204573	0.80000	(a)	
	28 Naphthalene	128	8.147	8.148	(1.003)	1369796	4.89586	4.90	
	29 4-Chloroaniline	127	8.260	8.282	(1.017)	430527	8.30276	8.30(R)	
	30 Hexachlorobutadiene	225	8.316	8.317	(1.024)	171967	4.76941	4.77	
	31 Caprolactam	113	8.676	8.699	(1.068)	110541	5.51118	5.51	
	32 4-Chloro-3-Methylphenol	107	8.879	8.869	(1.093)	309626	4.89364	4.89	
	34 2-Methylnaphthalene	142	9.006	8.996	(1.108)	920774	4.97909	4.98	
	35 1-Methylnaphthalene	142	9.123	9.113	(1.123)	843359	5.00328	5.00	
	36 1,2,4,5-Tetrachlorobenzene	216	9.218	9.208	(0.899)	329346	4.66810	4.67	
	37 Hexachlorocyclopentadiene	237	9.197	9.187	(0.897)	168050	5.67208	5.67	
	39 2,4,6-Trichlorophenol	196	9.366	9.356	(0.913)	168853	4.91515	4.92	
	40 2,4,5-Trichlorophenol	196	9.419	9.420	(0.919)	186930	4.97772	4.98	
	41 1,1'-Biphenyl	154	9.578	9.579	(0.934)	969478	4.91258	4.91	
	42 2-Chloronaphthalene	164	9.589	9.579	(0.935)	252569	4.85495	4.85	
	43 2-Nitroaniline	65	9.728	9.728	(0.949)	153490	4.85570	4.86	
	44 Dimethyl Phthalate	163	9.985	9.975	(0.974)	678153	5.04760	5.05	
	45 2,6-Dinitrotoluene	165	10.039	10.039	(0.979)	148562	4.30324	4.30	
	46 Acenaphthylene	152	10.082	10.082	(0.983)	1087945	4.41948	4.42	
	47 3-Nitroaniline	138	10.243	10.243	(0.999)	92739	5.98118	5.98	
*	48 Acenaphthene-D10	164	10.253	10.254	(1.000)	88427	0.80000	(a)	
	49 Acenaphthene	153	10.296	10.286	(1.004)	691864	4.73254	4.73	
	50 2,4-Dinitrophenol	184	10.371	10.372	(1.012)	17488	4.11982	4.12	
	51 Dibenzofuran	168	10.511	10.501	(1.025)	986473	5.01790	5.02	
	52 4-Nitrophenol	109	10.500	10.490	(1.024)	39243	4.60157	4.60(Q)	
	53 2,4-Dinitrotoluene	165	10.522	10.522	(1.026)	168077	4.28859	4.29	
	54 2,3,4,6-Tetrachlorophenol	232	10.682	10.672	(1.042)	93437	4.14506	4.14	
	55 Diethylphthalate	149	10.843	10.833	(1.058)	641133	5.07499	5.07	
	57 Fluorene	166	10.918	10.919	(1.065)	701561	4.80245	4.80	
	58 4-Chlorophenyl-phenylether	204	10.950	10.940	(1.068)	311301	4.81516	4.82	
	59 4-Nitroaniline	138	11.004	10.983	(1.073)	67317	4.33622	4.34	
	60 4,6-Dinitro-2-Methylphenol	198	11.026	11.015	(0.915)	35790	4.57623	4.58	
	61 N-Nitrosodiphenylamine	169	11.101	11.090	(0.921)	412918	3.71756	3.72(R)	
	62 4-Bromophenyl-phenylether	248	11.539	11.529	(0.957)	163083	4.87367	4.87	
	63 Hexachlorobenzene	284	11.592	11.582	(0.962)	167286	4.56527	4.56	
	64 Atrazine	200	11.774	11.774	(0.977)	117888	4.81521	4.82	
	65 Pentachlorophenol	266	11.848	11.849	(0.983)	43266	5.46890	5.47	
*	66 Phenanthrene-D10	188	12.051	12.052	(1.000)	112279	0.80000	(a)	
	67 Phenanthrene	178	12.083	12.073	(1.003)	822423	4.84417	4.84	
	68 Anthracene	178	12.147	12.137	(1.008)	799993	4.69144	4.69	
	69 Carbazole	167	12.361	12.361	(1.026)	719996	6.02011	6.02(R)	
	70 Di-n-butylphthalate	149	12.841	12.831	(1.066)	944140	4.82307	4.82	
	72 Fluoranthene	202	13.522	13.522	(1.122)	601679	4.56574	4.56	
	74 Pyrene	202	13.797	13.797	(0.891)	647531	4.86739	4.87	
	75 Butylbenzylphthalate	149	14.703	14.704	(0.949)	256091	4.62698	4.63	
	76 Benzo(a)anthracene	228	15.467	15.468	(0.999)	347562	4.66542	4.66	
	77 3,3'-Dichlorobenzidine	252	15.488	15.488	(1.000)	58206	3.02248	3.02(R)	
*	78 Chrysene-D12	240	15.488	15.478	(1.000)	43035	0.80000	(a)	
	79 Chrysene	228	15.528	15.529	(1.003)	405829	4.54541	4.54	
	80 bis(2-Ethylhexyl)phthalate	149	15.671	15.672	(1.012)	309560	4.33110	4.33	

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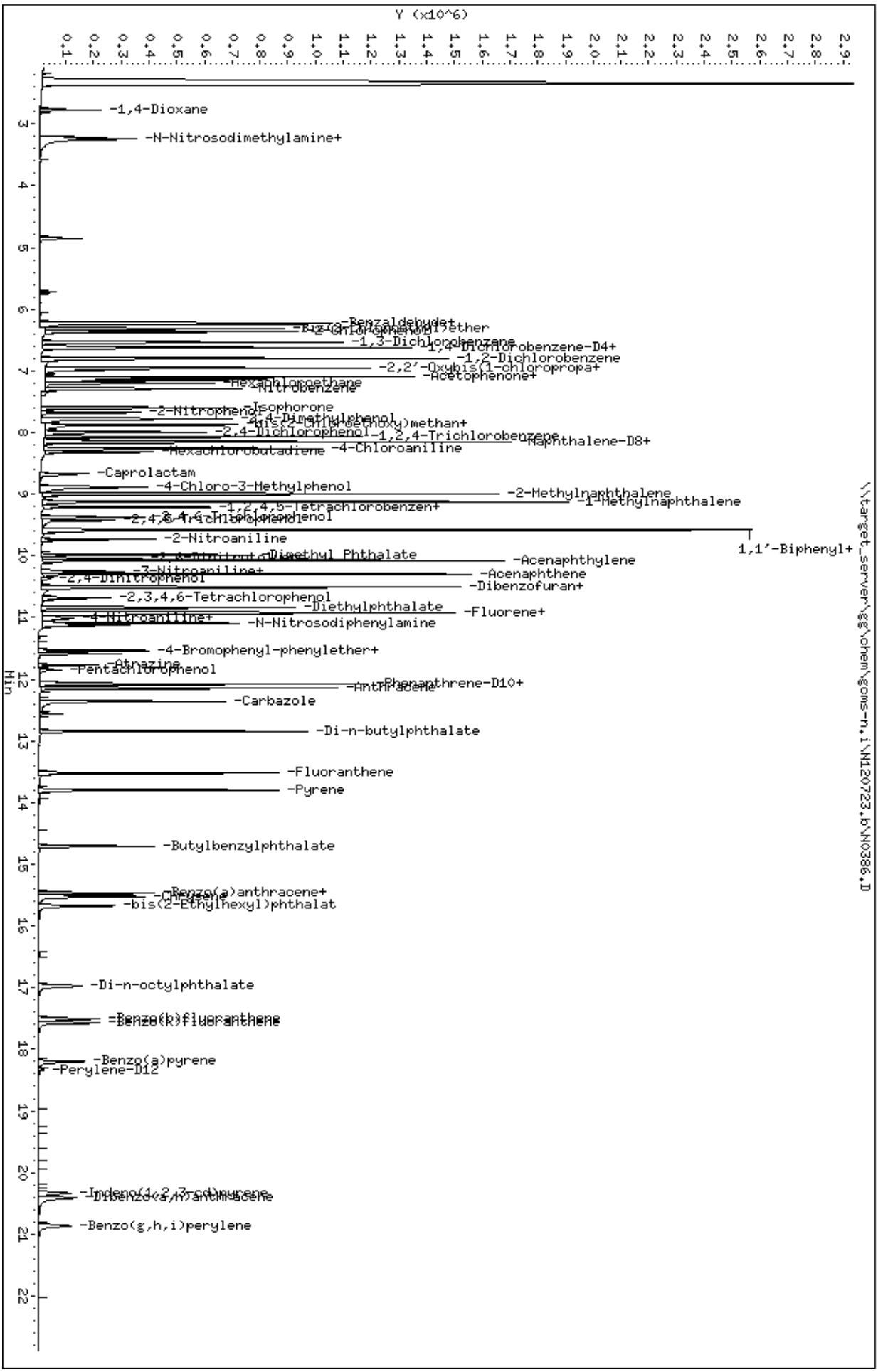
Report Date: 08-Dec-2023 07:19

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	CONCENTRATIONS FINAL (ug/L)	REVIEW CODE
	81 Di-n-octylphthalate	149	16.965	16.965	(1.095)	378598	4.41552	4.42	
	82 Benzo(b)fluoranthene	252	17.510	17.521	(0.955)	274156	5.00691	5.01	
	83 Benzo(k)fluoranthene	252	17.572	17.573	(0.958)	330580	4.66868	4.67(H)	
	84 Benzo(a)pyrene	252	18.211	18.211	(0.993)	245431	4.58176	4.58	
*	85 Perylene-D12	264	18.334	18.324	(1.000)	30020	0.80000	(a)	
	86 Indeno(1,2,3-cd)pyrene	276	20.332	20.343	(1.109)	179229	4.61743	4.62	
	87 Dibenzo(a,h)anthracene	278	20.414	20.415	(1.113)	193877	4.84498	4.84	
	88 Benzo(g,h,i)perylene	276	20.868	20.878	(1.138)	211549	4.83450	4.83	
M	89 Total PAHs	100				10675138	85.5665	85.6	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.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Volume Injected (uL): 1.0
Column phase: Rxi-5ViOms
Instrument: gcms-n,i
Operator: EP
Column diameter: 0.25
\\target_server\gg\chem\gcms-n,i\N120723,b\N0386,D
Y (x10^6)
Min
-1,4-Dioxane
-N-Nitrosodimethylamine+
-Benzaldehyde
-1,3-Dichlorobenzene
-1,4-Dichlorobenzene-D4+
-1,2-Dichlorobenzene
-2,2'-Oxybis(1-chloropropa+
-Acetophenone+
-Hexachloroethane
-Nitrobenzene
-Isophorone
-2-Nitrophenol
-2,4-Dimethylphenol
-2,4-Dichlorophenol
-1,2,4-Trichlorobenzene
-Naphthalene-D8+
-Hexachlorobutadiene
-4-Chloroaniline
-Caprolactam
-4-Chloro-3-Methylphenol
-2-Methylnaphthalene
-1-Methylnaphthalene
-1,2,4,5-Tetrachlorobenzen+
-2,4,6-Trichlorophenol
-2-Nitroaniline
1,1'-Biphenyl+
-Dimethyl Phthalate
-Acenaphthylene
-3-Nitroaniline+
-Acenaphthene
-2,4-Dinitrophenol
-Dibenzofuran+
-2,3,4,6-Tetrachlorophenol
-Diethylphthalate
-Fluorene+
-4-Nitroaniline+
-N-Nitrosodiphenylamine
-4-Bromophenyl-phenylether+
-Atrazine
-Pentachlorophenol
-Phenanthrene-D10+
-Anthracene
-Carbazole
-Di-n-butylphthalate
-Fluoranthene
-Pyrene
-Butylbenzylphthalate
-Benzo(a)anthracene+
-Chrysene
-bis(2-Ethylhexyl)phthalat
-Di-n-octylphthalate
-Benzo(b)fluoranthene
-Benzo(k)fluoranthene
-Benzo(a)pyrene
-Perylene-D12
-Indeno(1,2,3-cd)pyrene
-Dibenz(a,h)anthracene
-Benzo(g,h,i)perylene

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Injection Date: 07-DEC-2023 12:41
Instrument: gcms-n.i
Client Sample ID:

Compound: N-Nitrosodimethylamine
CAS Number: 62-75-9

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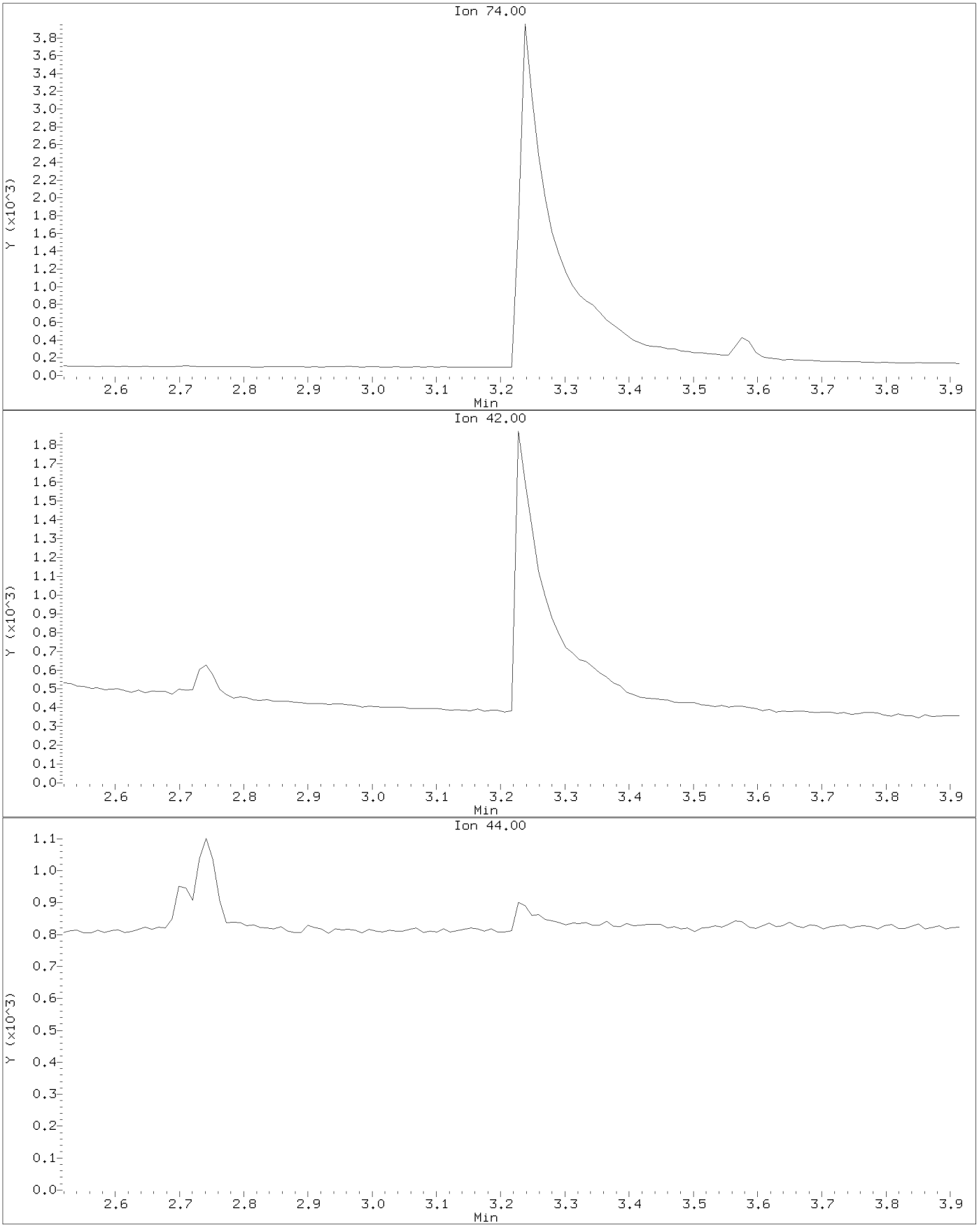

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Compound: N-Nitrosodimethylamine
CAS Number: 62-75-9

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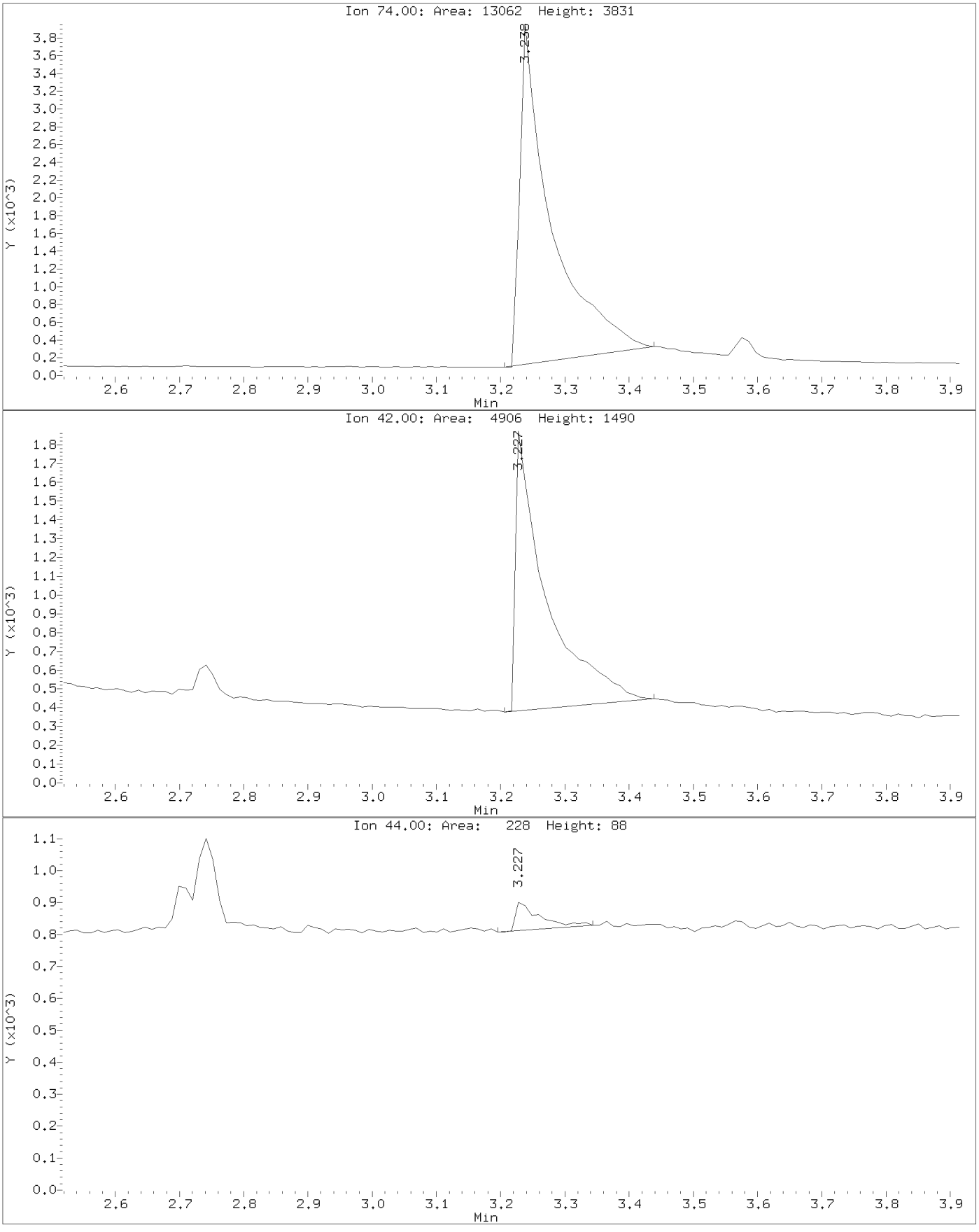

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Instrument: gcms-n.i
Client Sample ID:

Compound: Pyridine
CAS Number: 110-86-1

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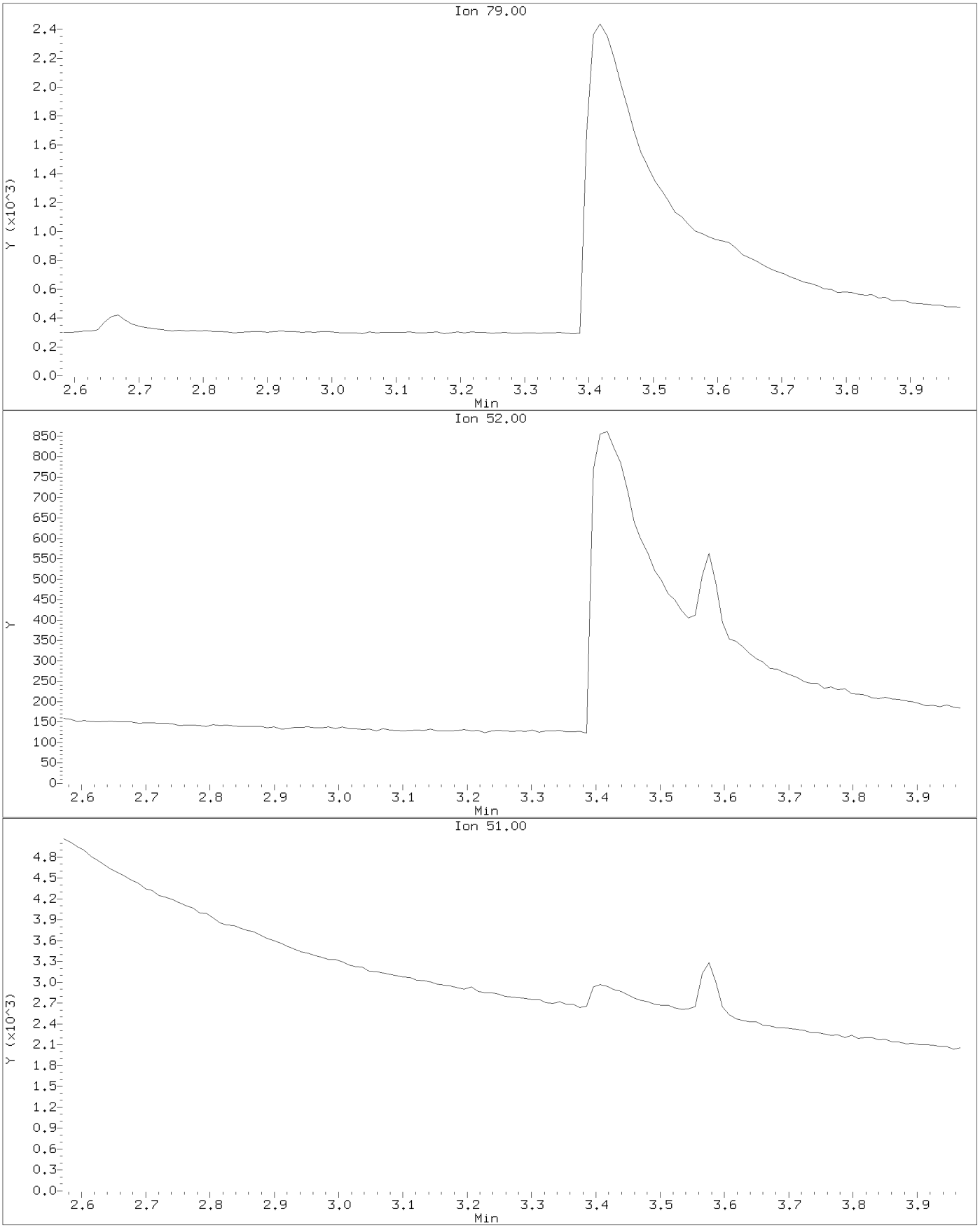

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Client Sample ID:

Compound: Pyridine
CAS Number: 110-86-1

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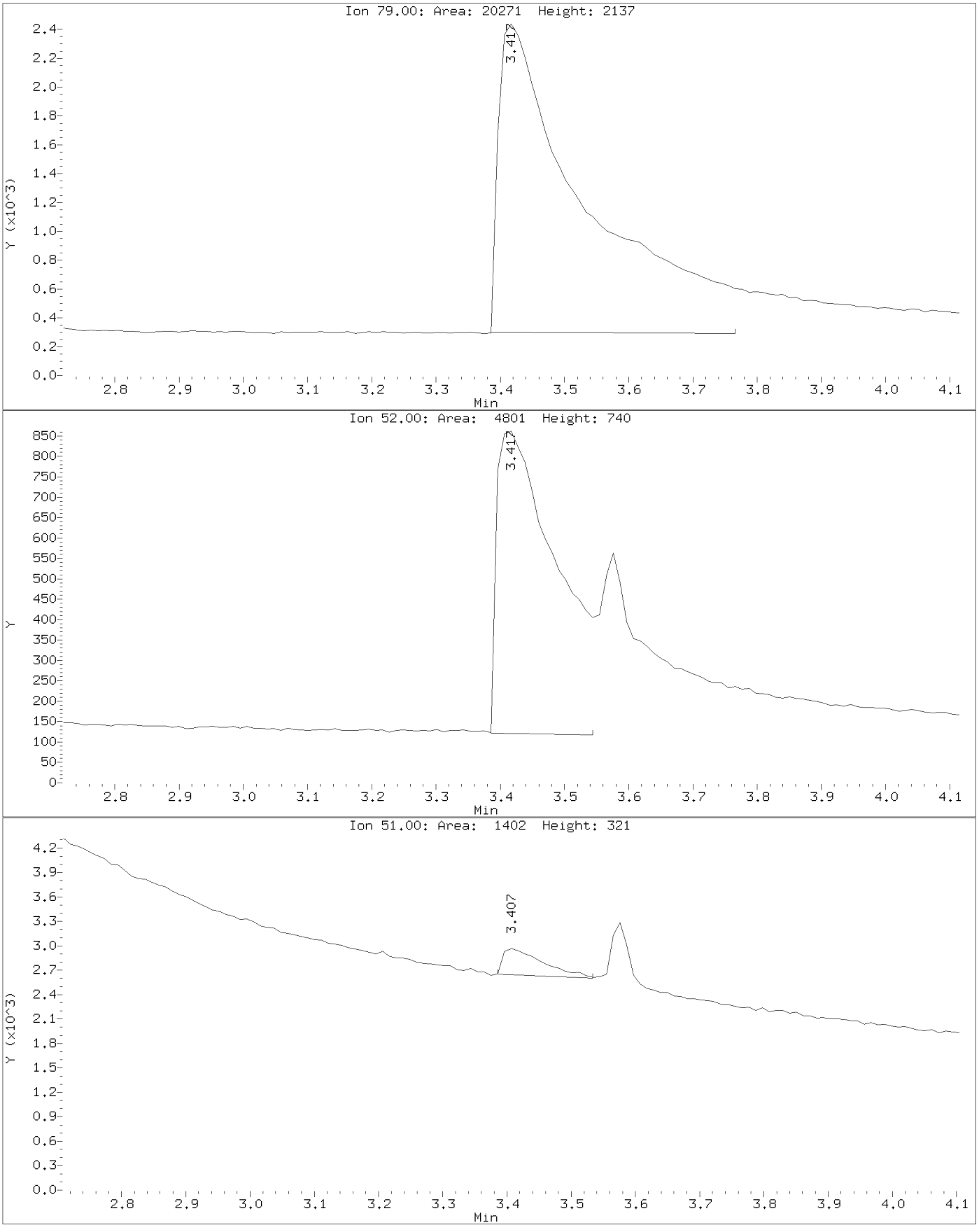

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Client Sample ID:

Compound: N-Nitrosodimethylamine
CAS Number: 62-75-9

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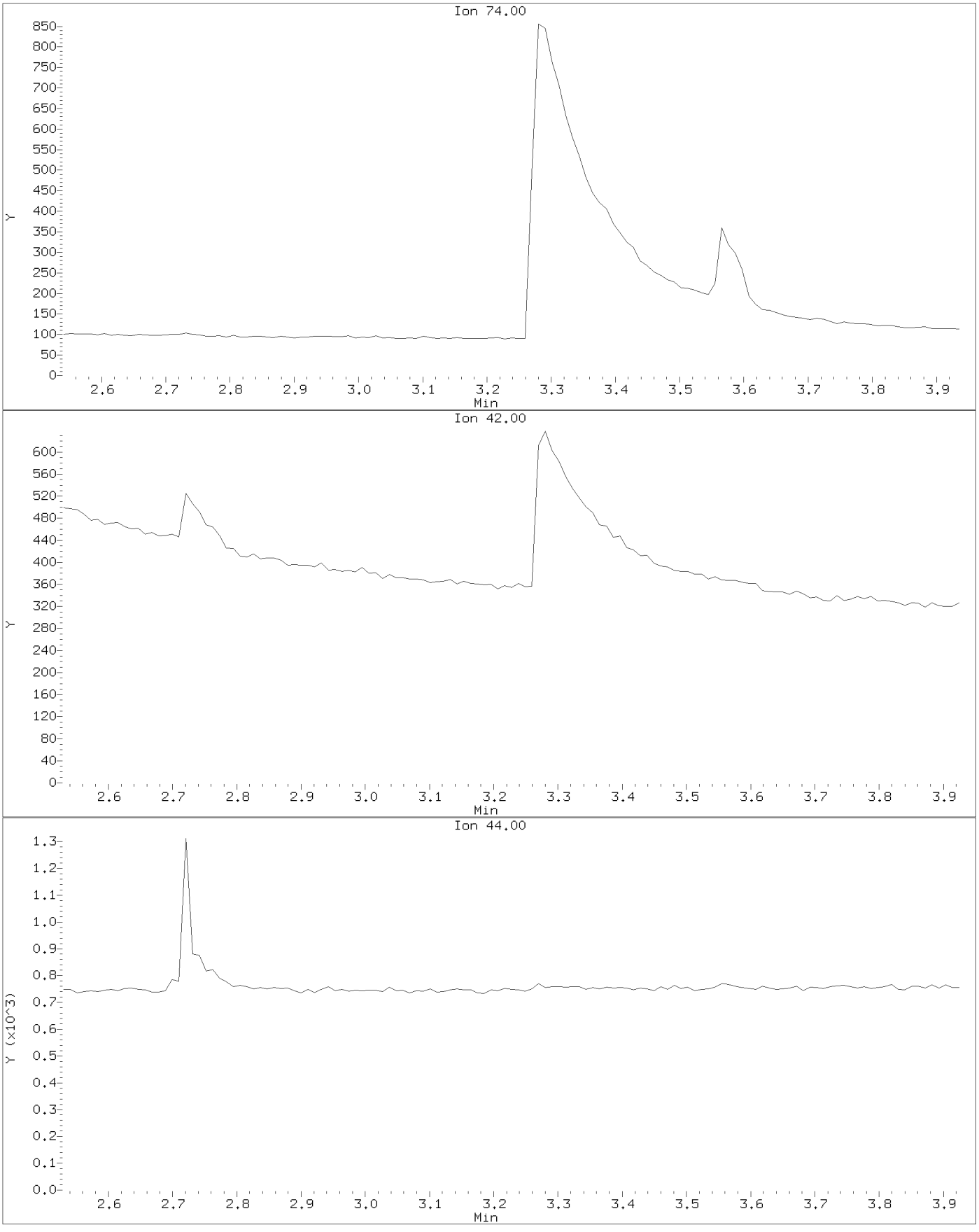

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Compound: N-Nitrosodimethylamine
CAS Number: 62-75-9

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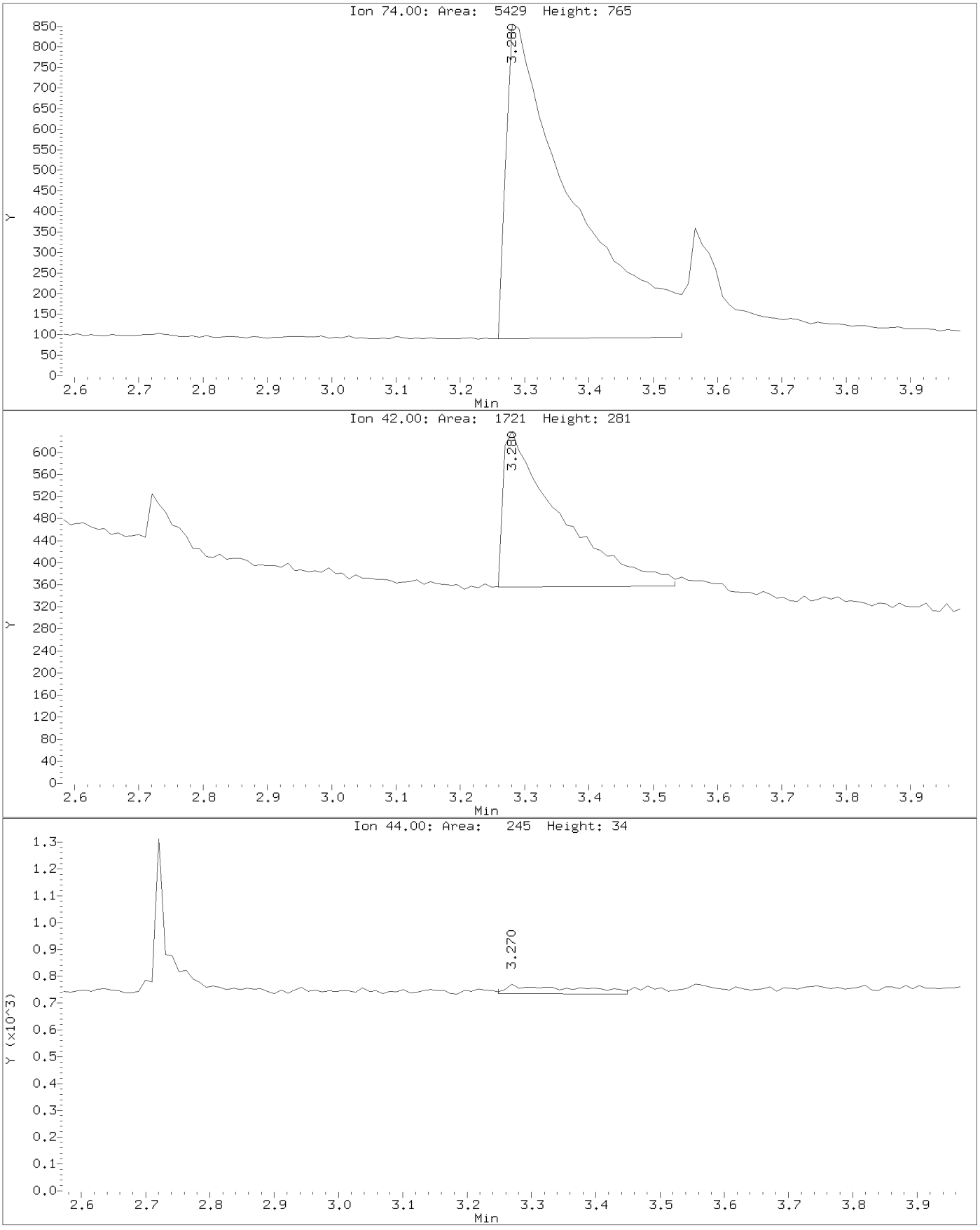

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Instrument: gcms-n.i
Client Sample ID:

Compound: Pyridine
CAS Number: 110-86-1

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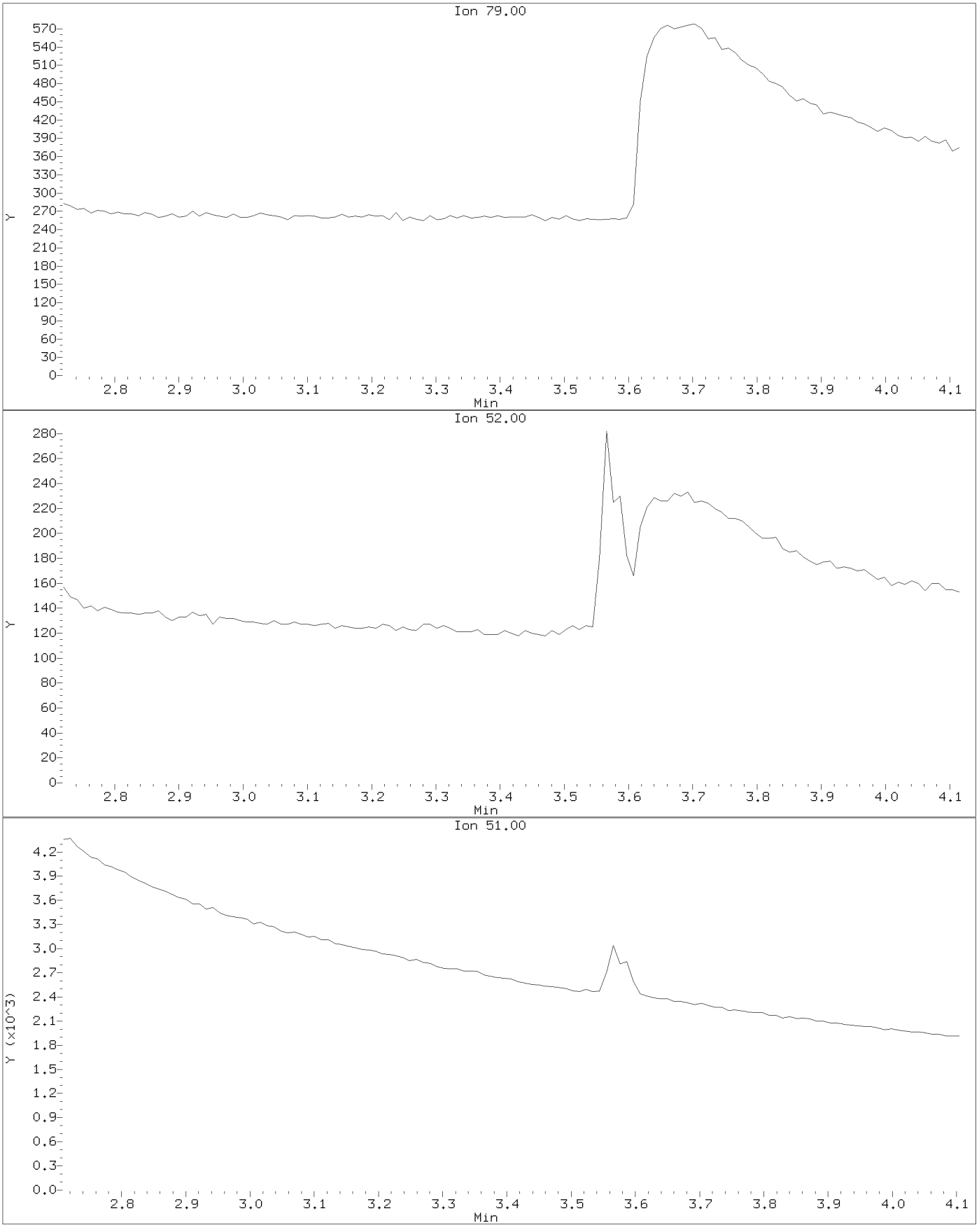

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Compound: Pyridine
CAS Number: 110-86-1

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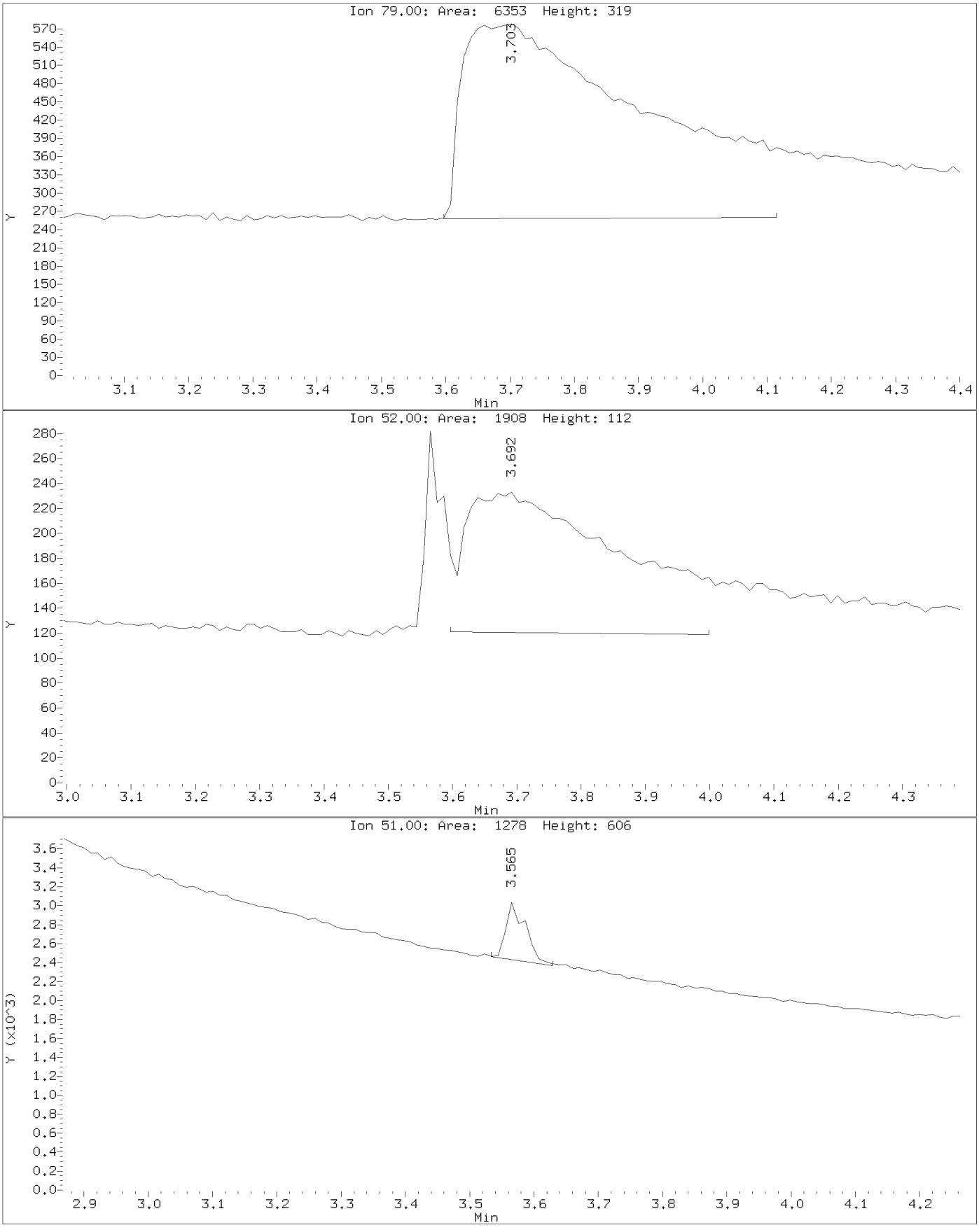

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Client Sample ID:

Compound: 4-Nitrophenol
CAS Number: 100-02-7

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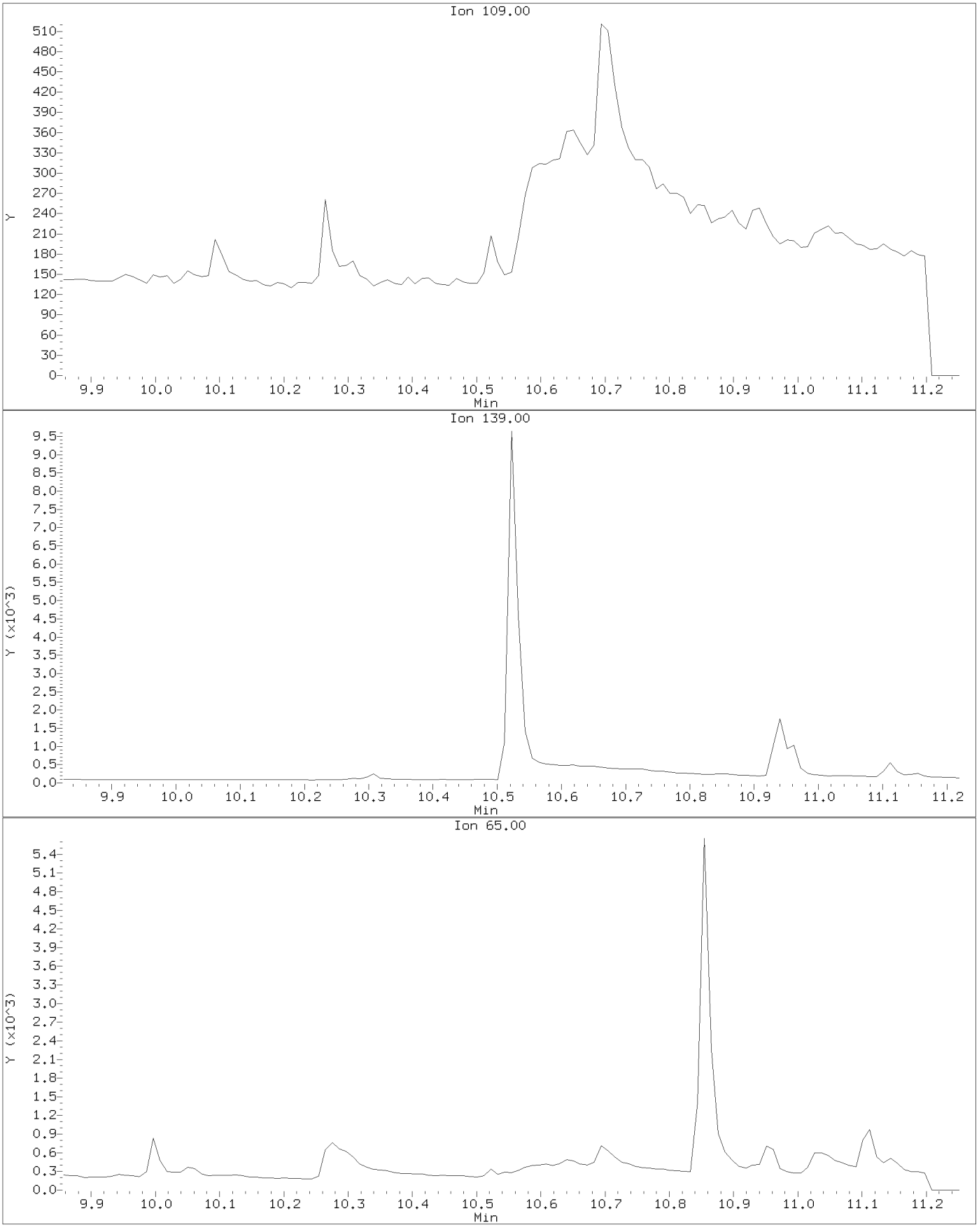

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Client Sample ID:

Compound: 4-Nitrophenol
CAS Number: 100-02-7

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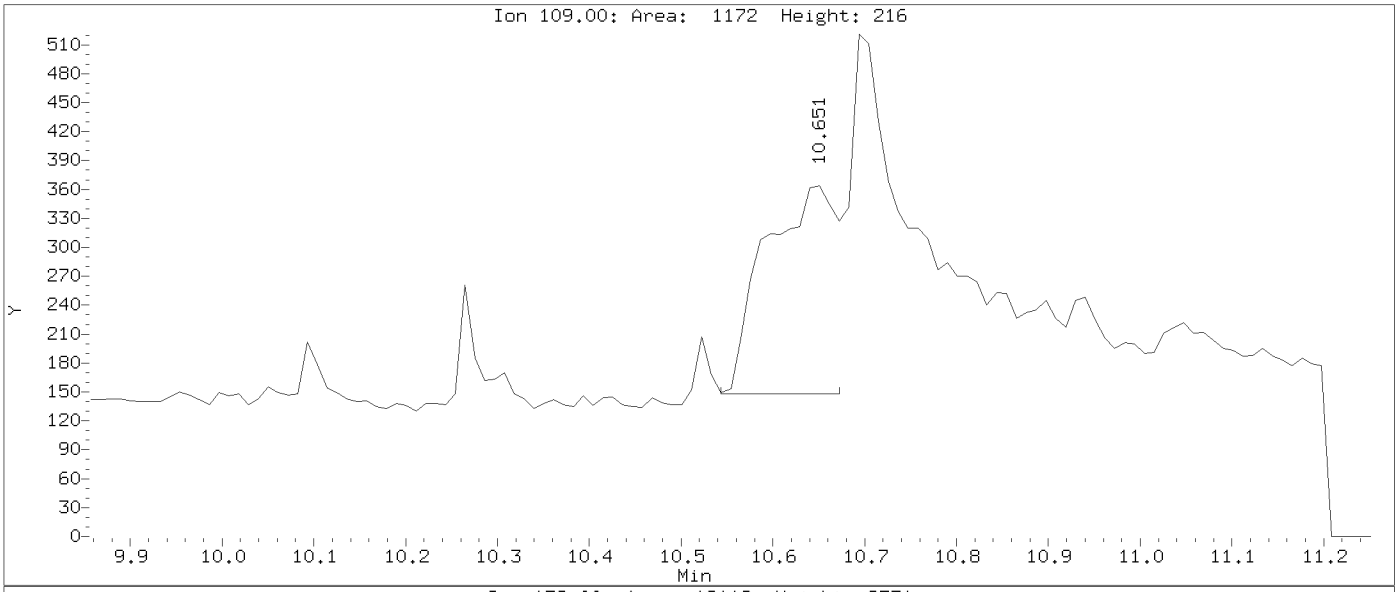

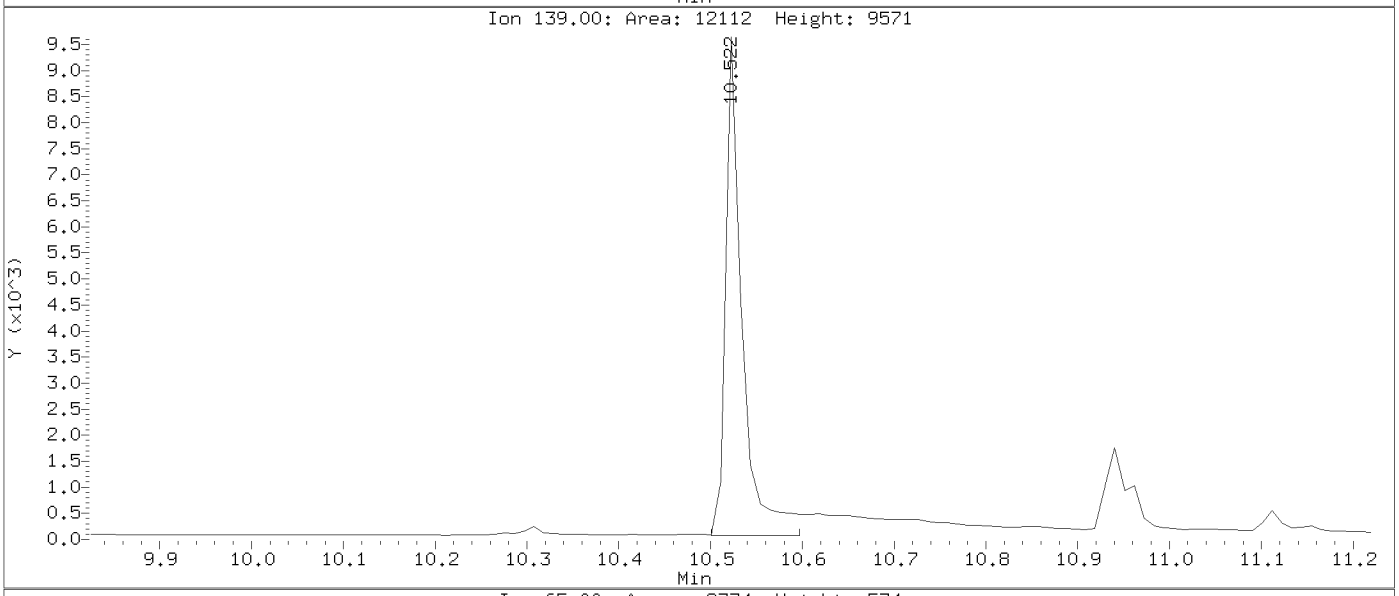

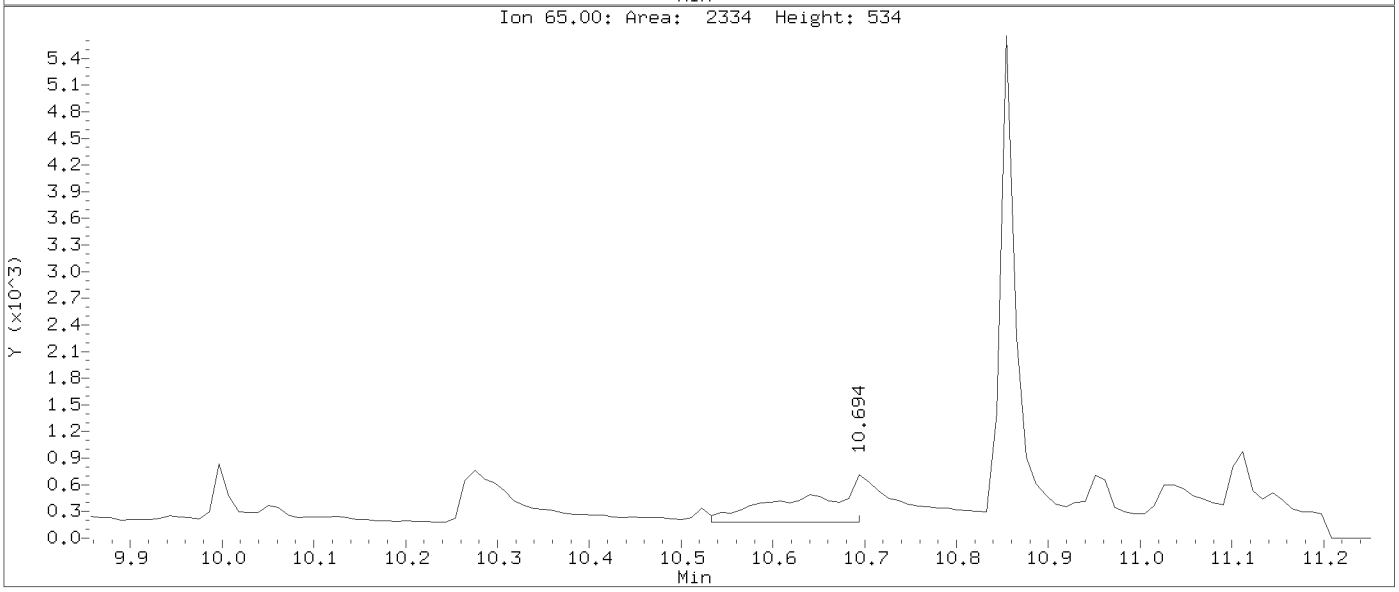

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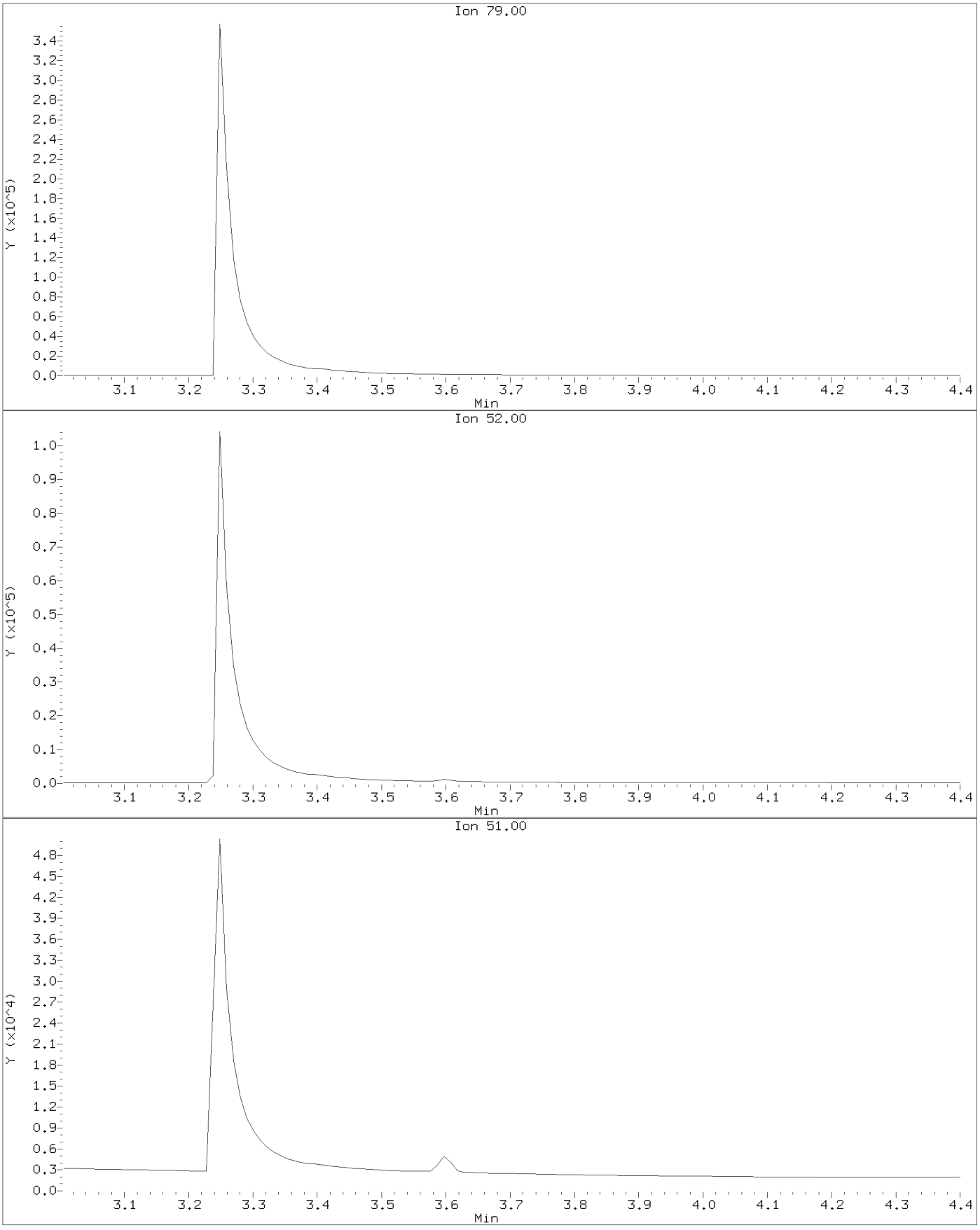
Injection Date: 07-DEC-2023 13:41
Instrument: gcms-n.i
Client Sample ID:

Compound: Pyridine
CAS Number: 110-86-1

BEFORE MANUAL INTEGRATION



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Instrument: gcms-n.i
Client Sample ID:

Compound: Pyridine
CAS Number: 110-86-1

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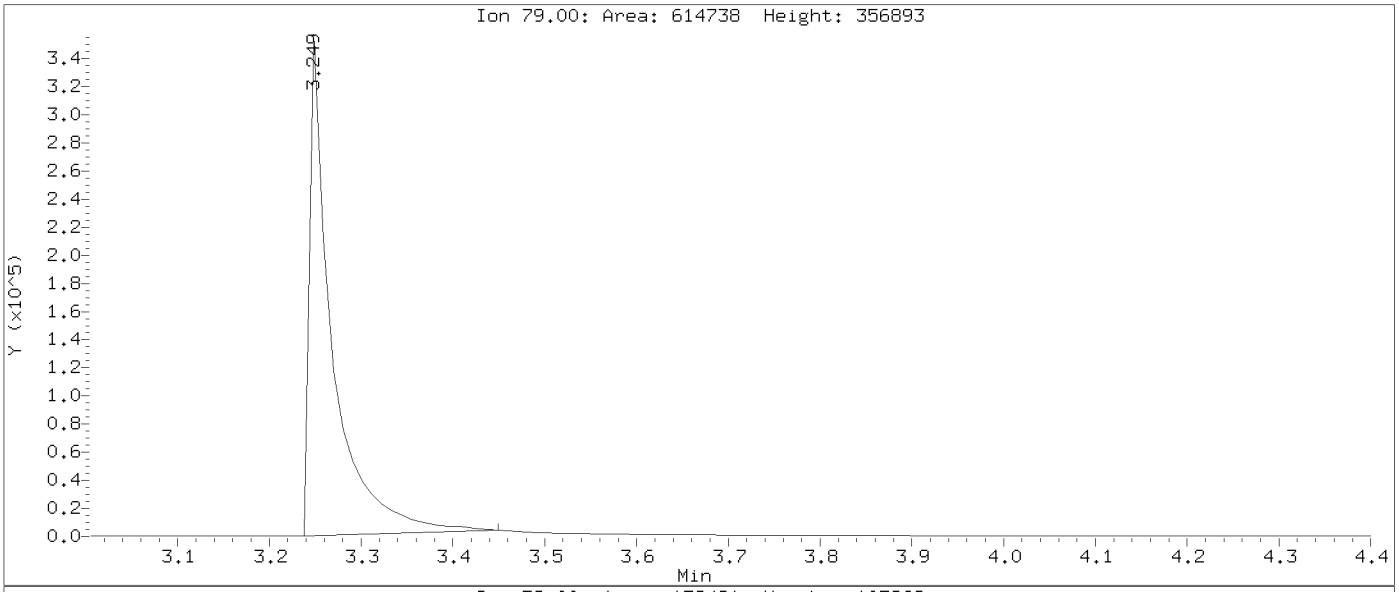

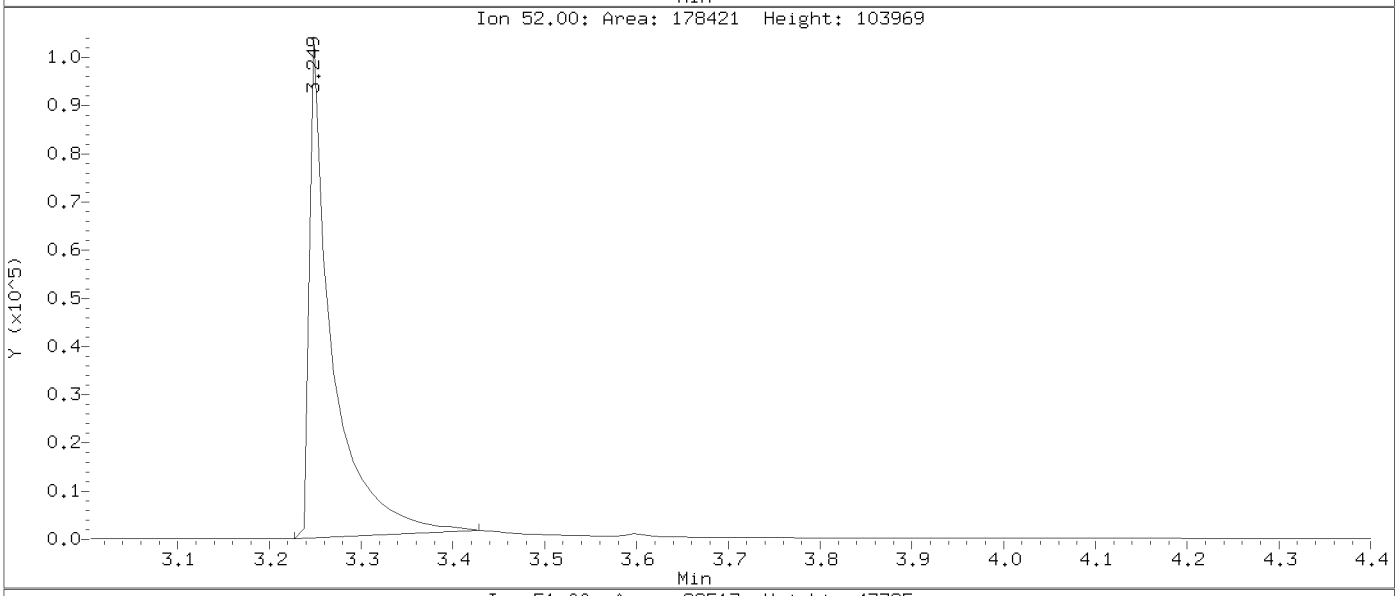

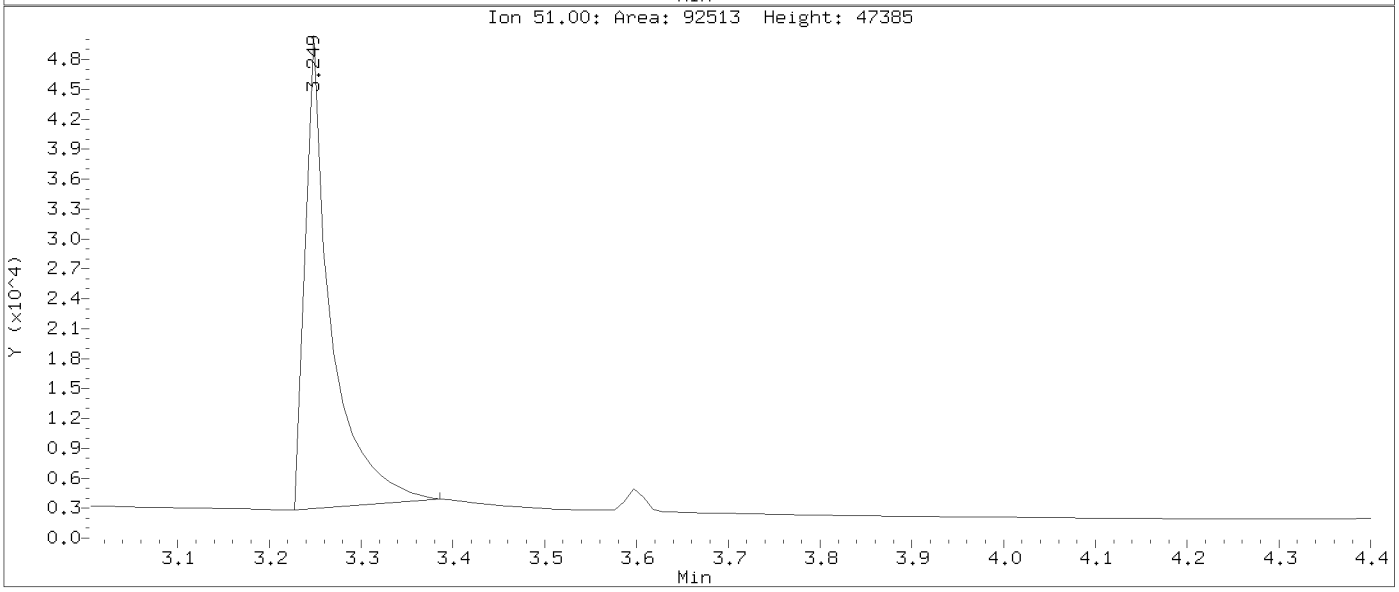

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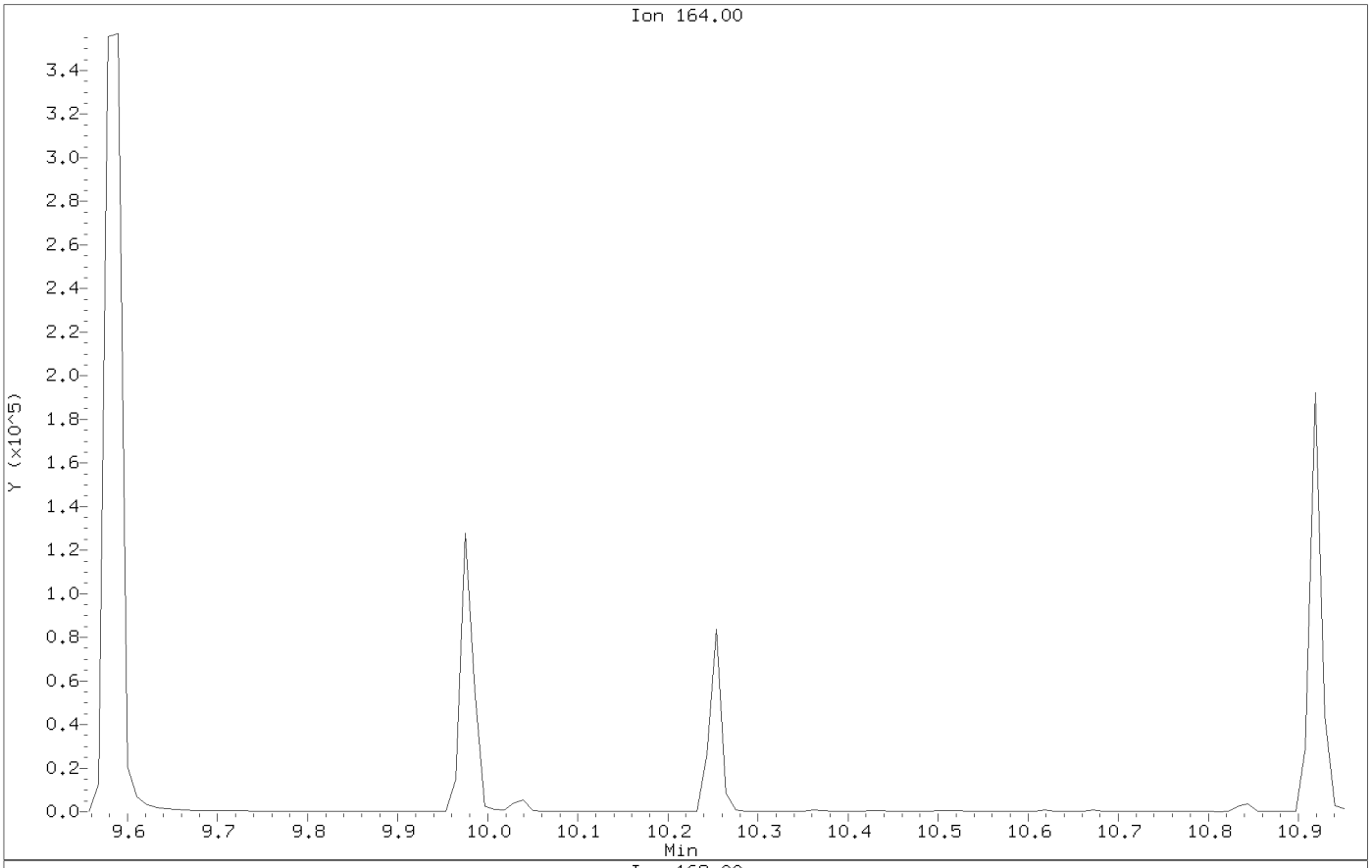
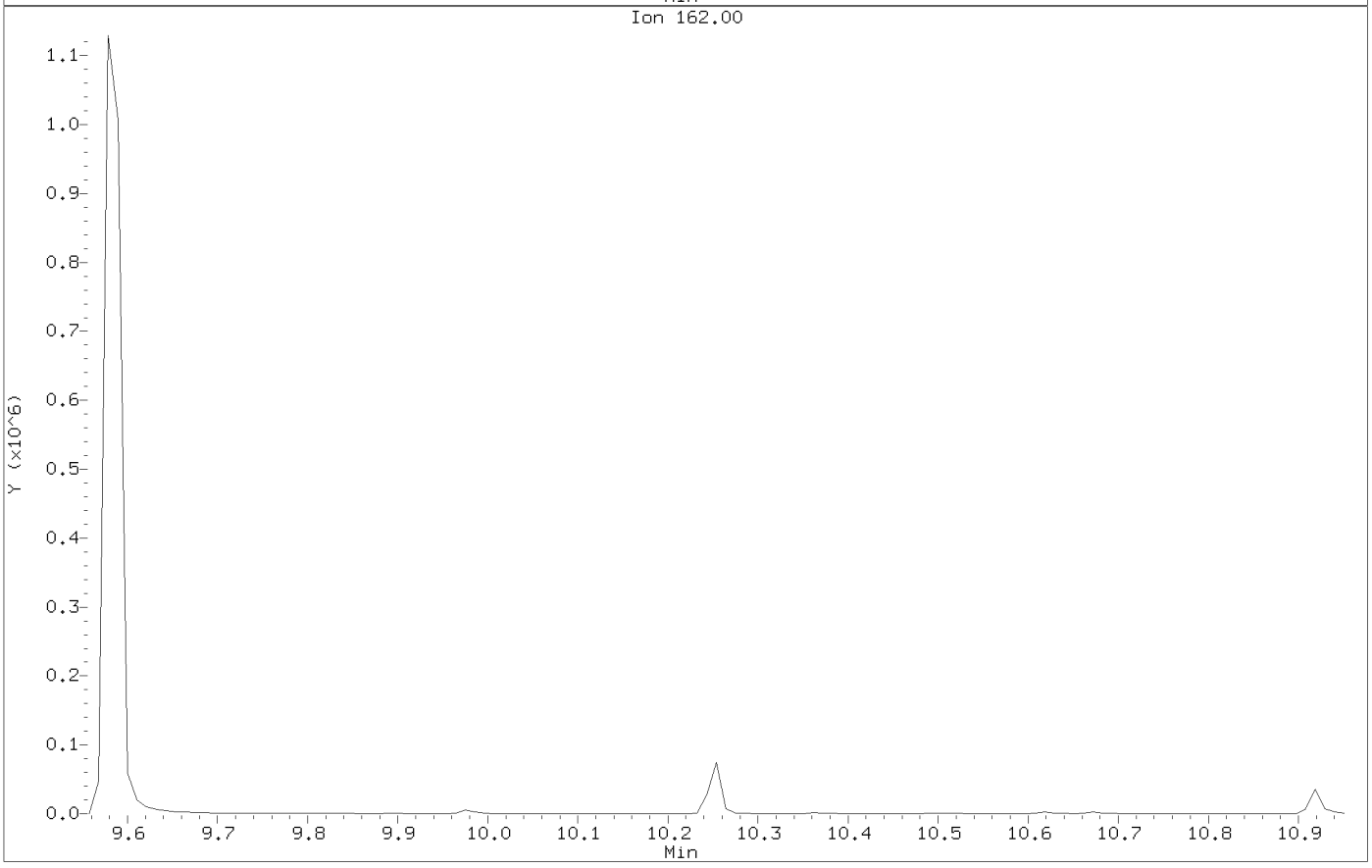
Injection Date: 07-DEC-2023 14:12
Instrument: gcms-n.i
Client Sample ID:

Compound: Acenaphthene-D10
CAS Number: 15067-26-2

BEFORE MANUAL INTEGRATION





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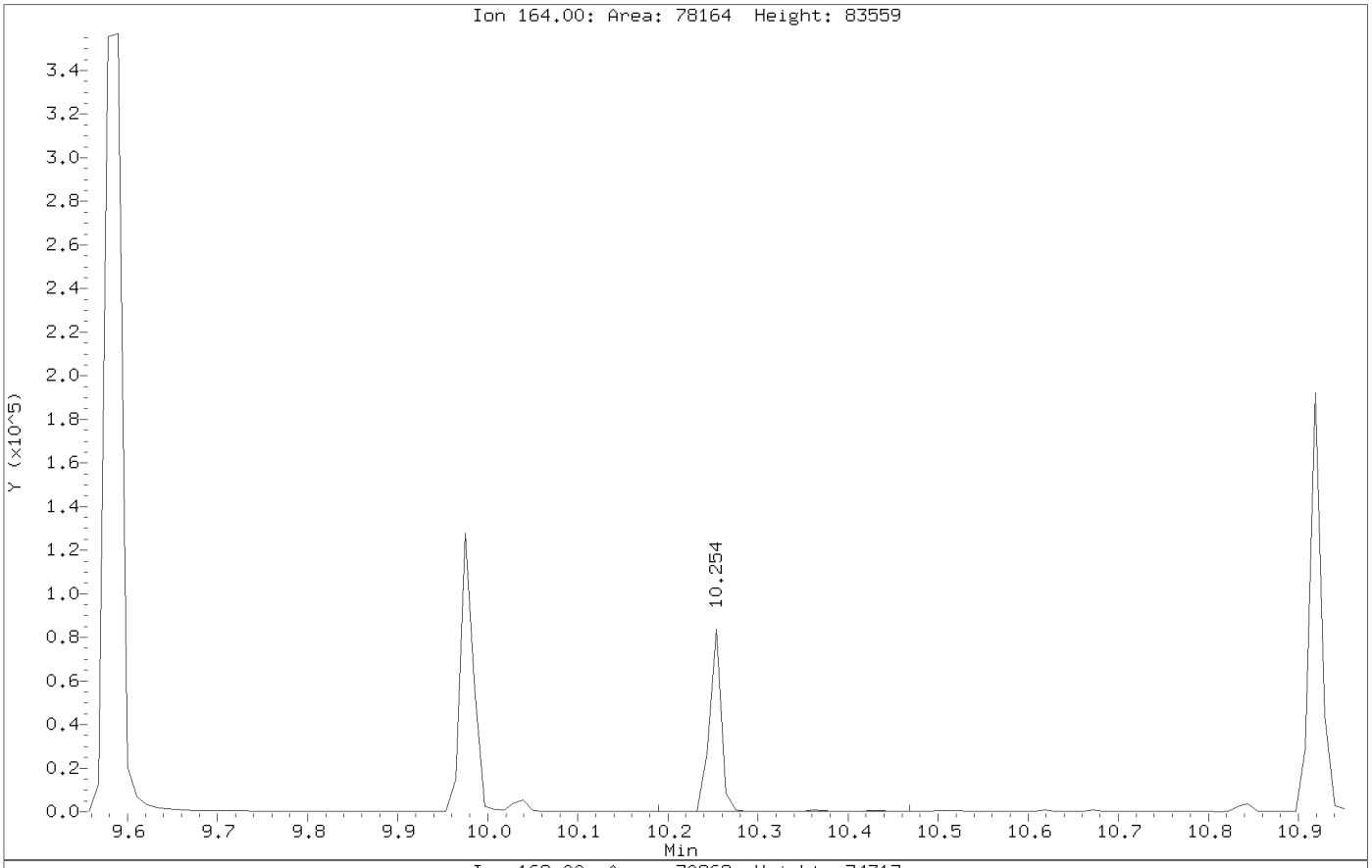
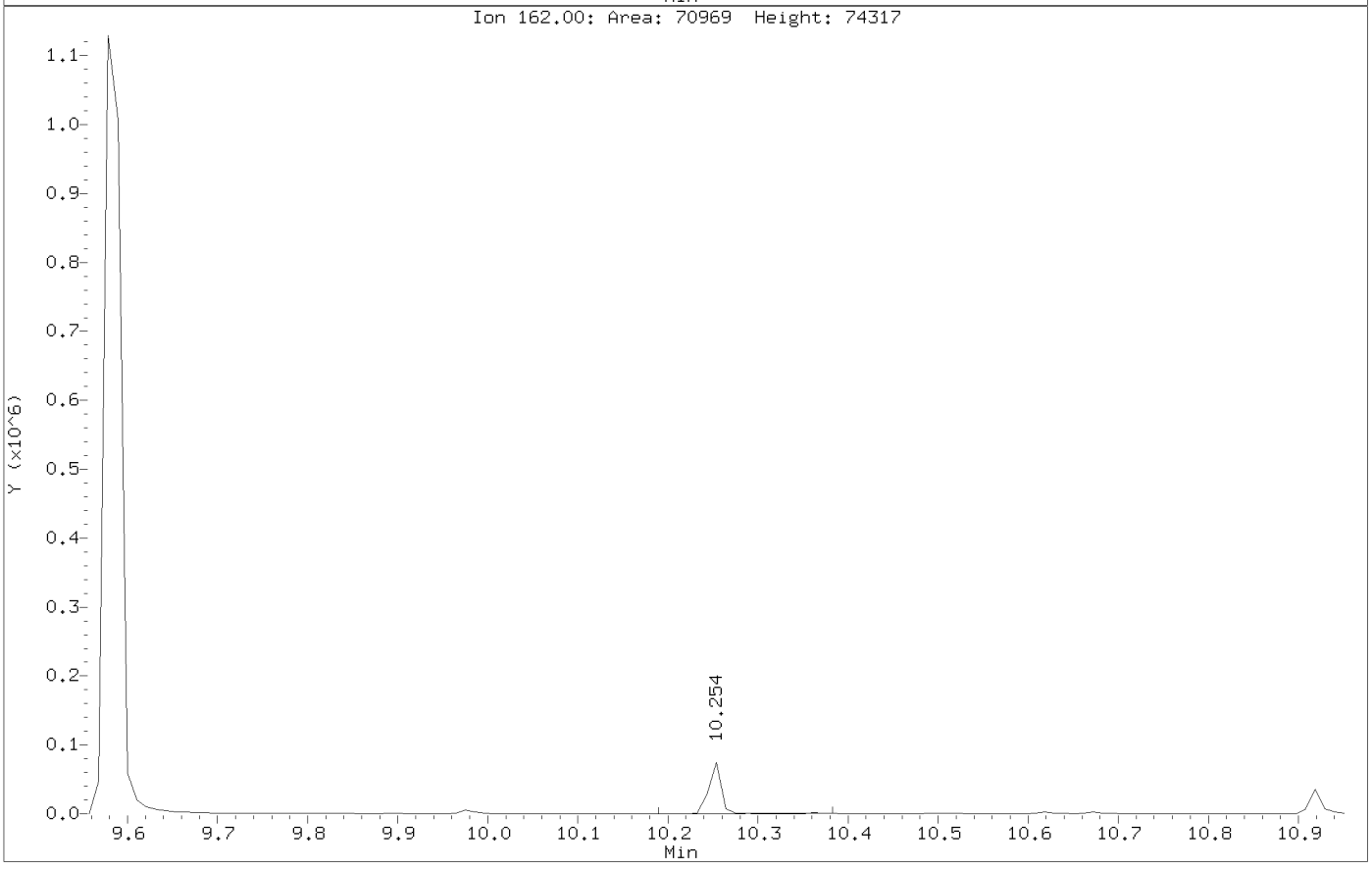
Compound: Acenaphthene-D10
CAS Number: 15067-26-2

AFTER MANUAL INTEGRATION





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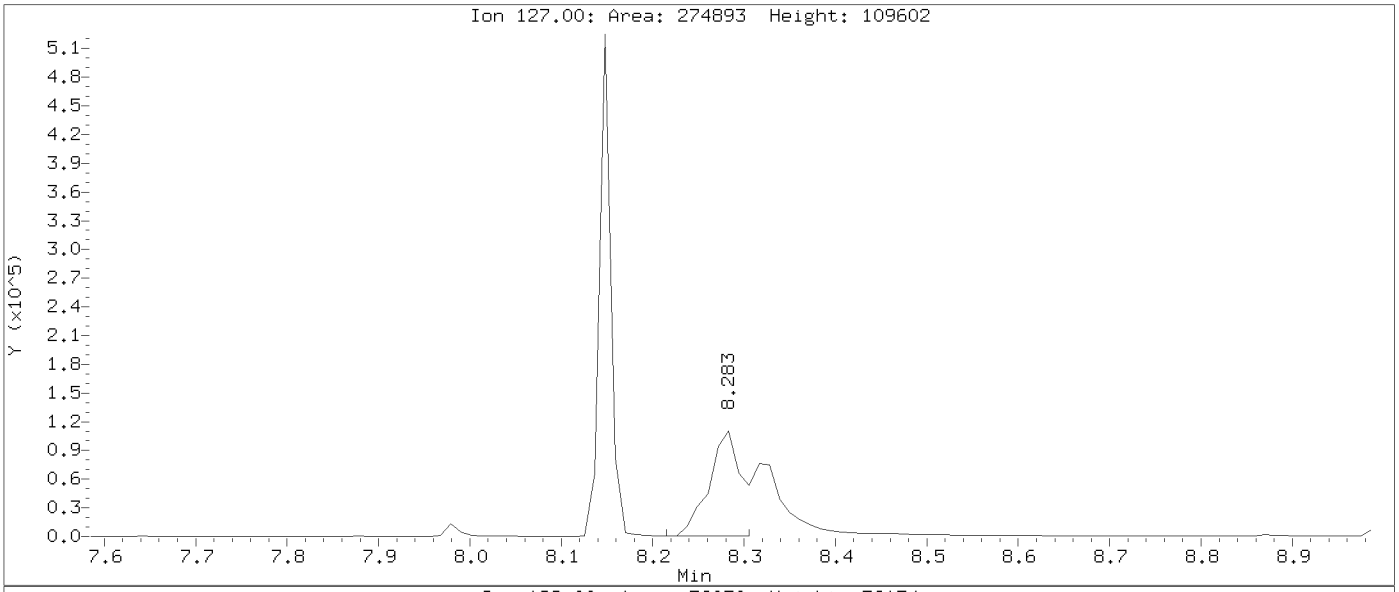
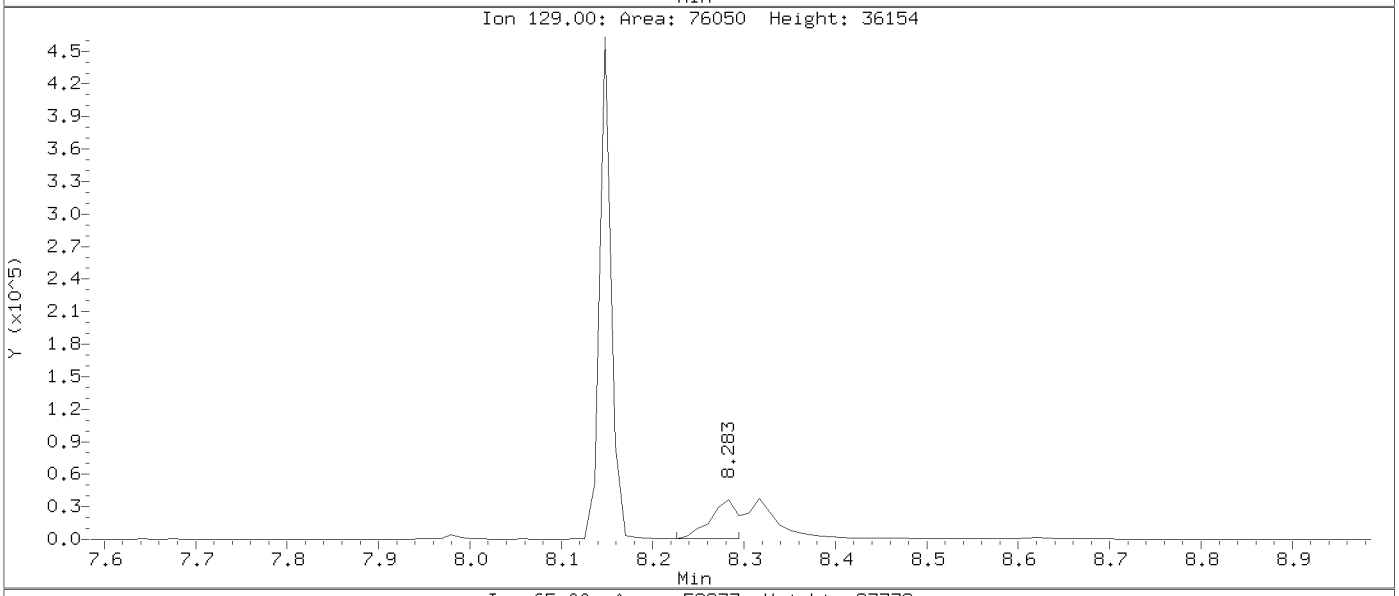
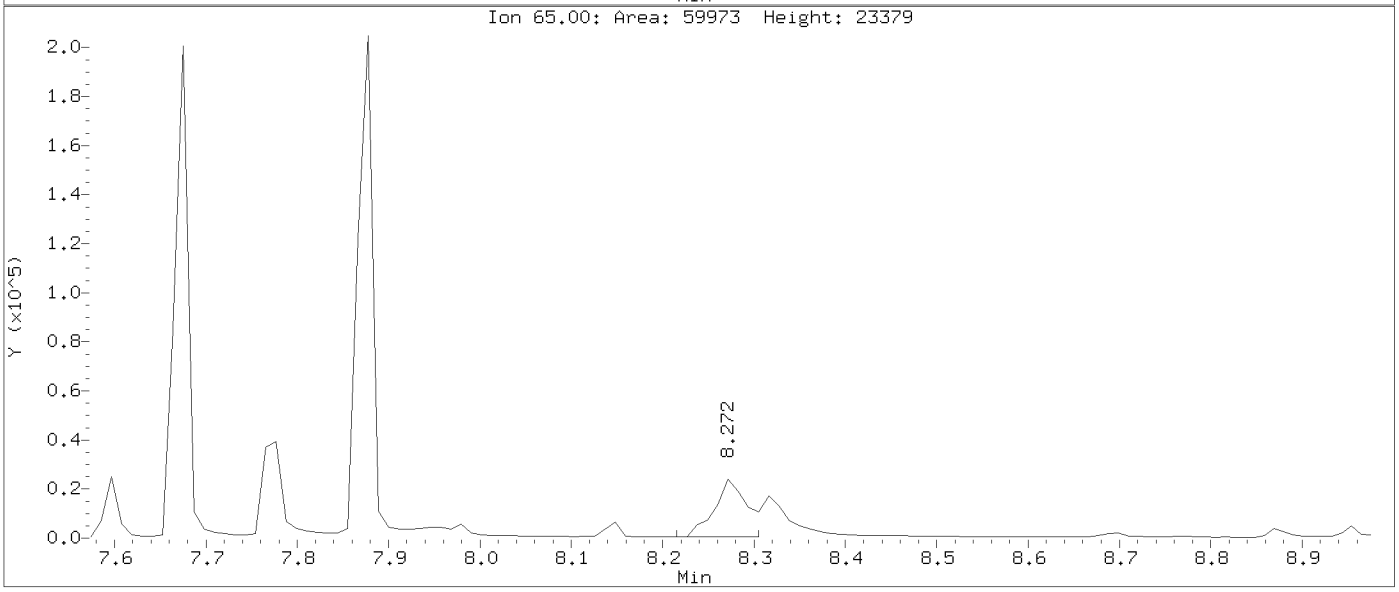
Injection Date: 07-DEC-2023 14:42
Instrument: gcms-n.i
Client Sample ID:

Compound: 4-Chloroaniline
CAS Number: 106-47-8

BEFORE MANUAL INTEGRATION







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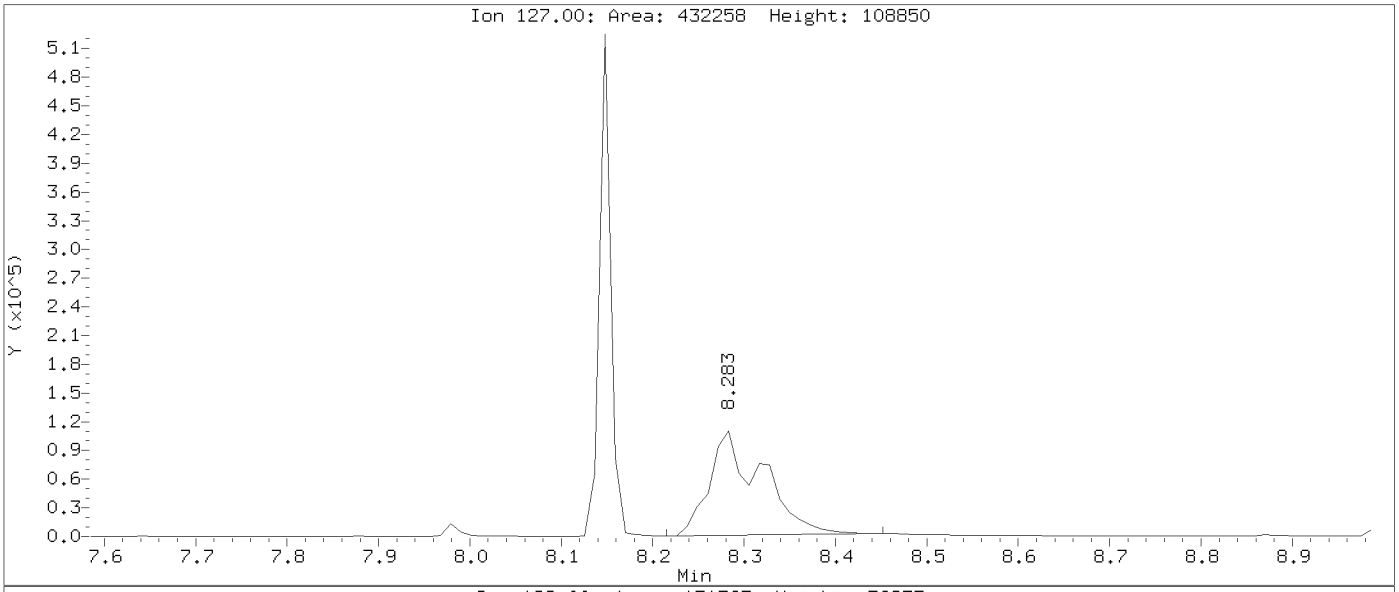
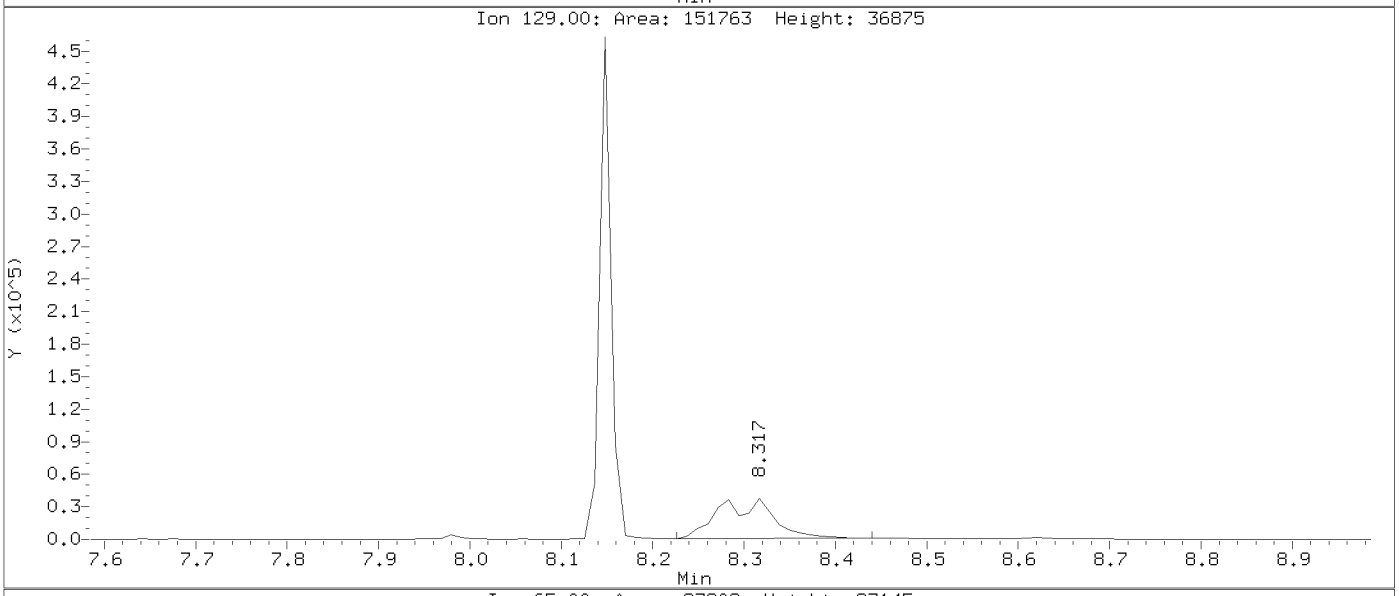
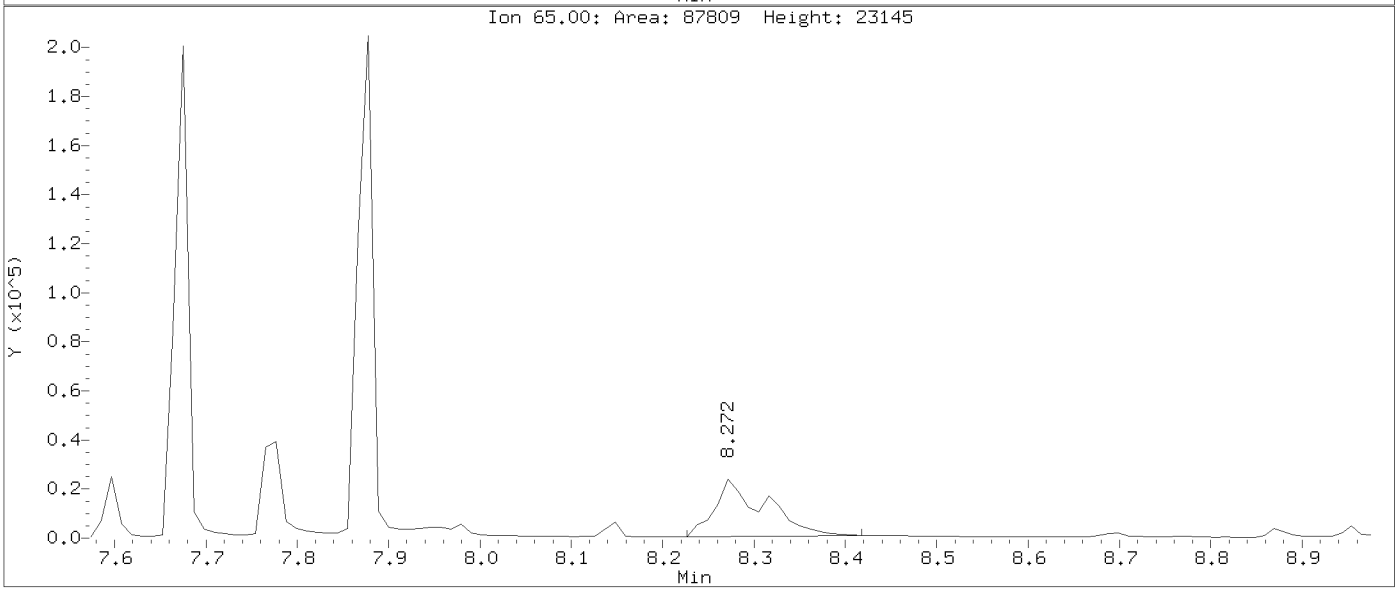
Compound: 4-Chloroaniline
CAS Number: 106-47-8

AFTER MANUAL INTEGRATION







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Instrument: gcms-n.i
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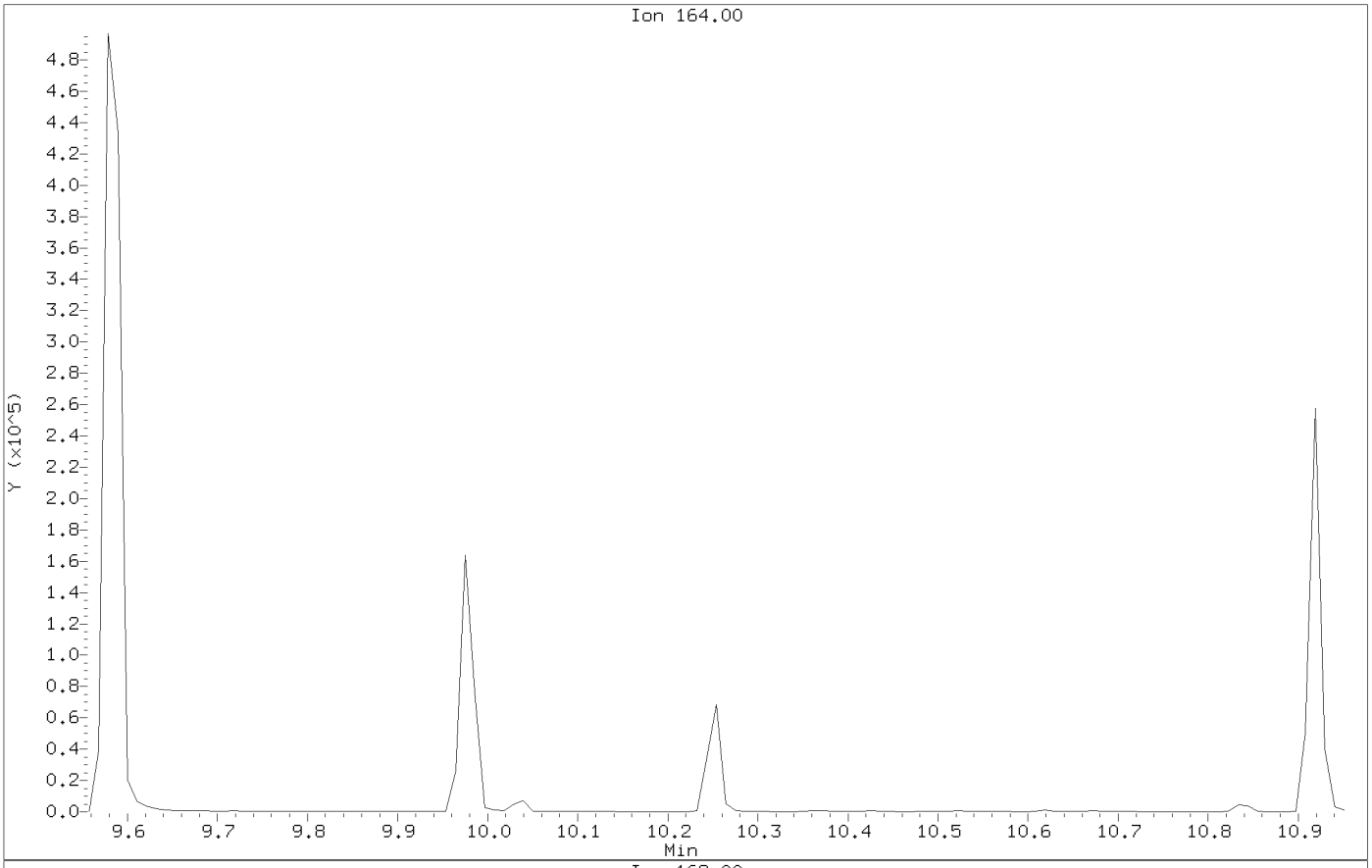
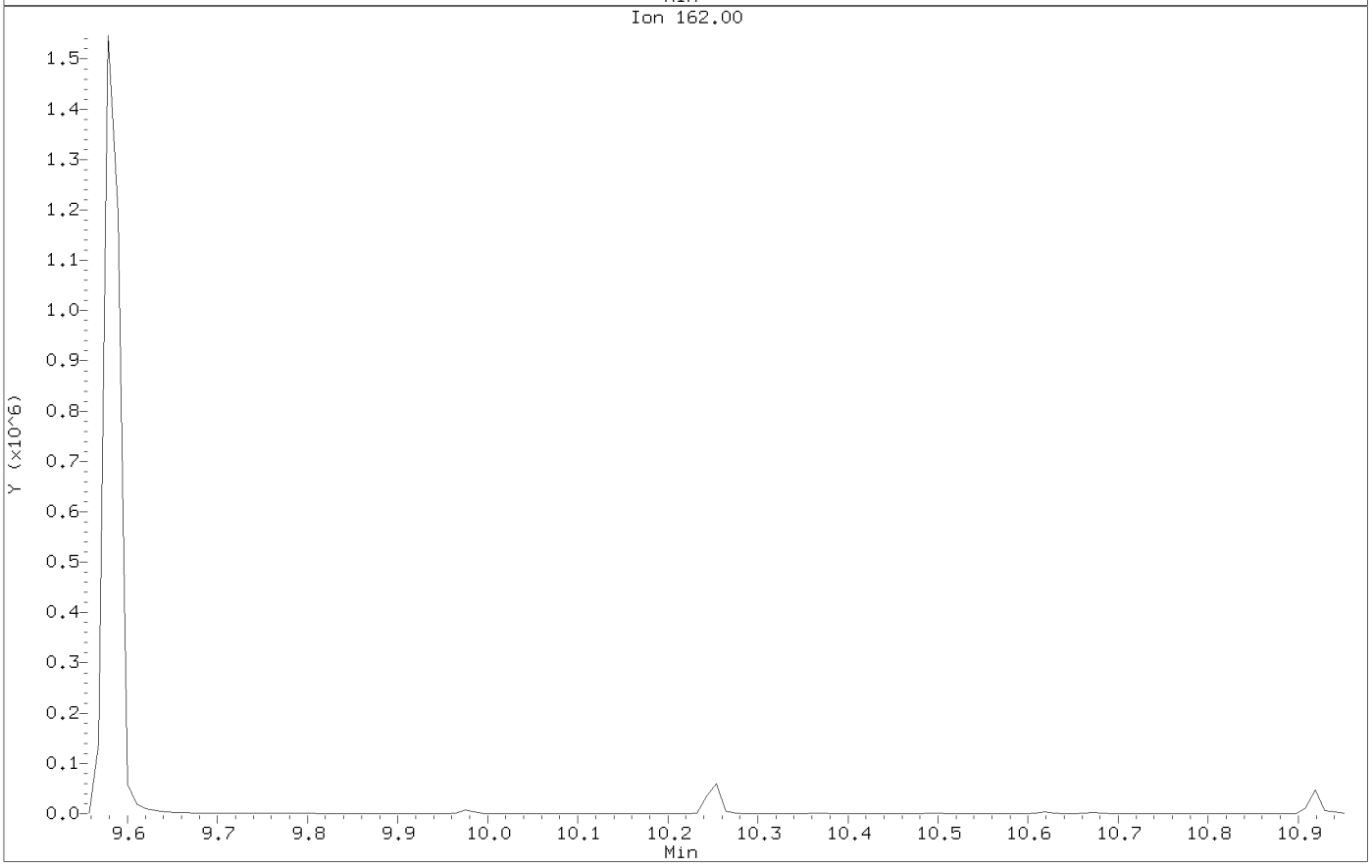
Compound: Acenaphthene-D10
CAS Number: 15067-26-2

BEFORE MANUAL INTEGRATION





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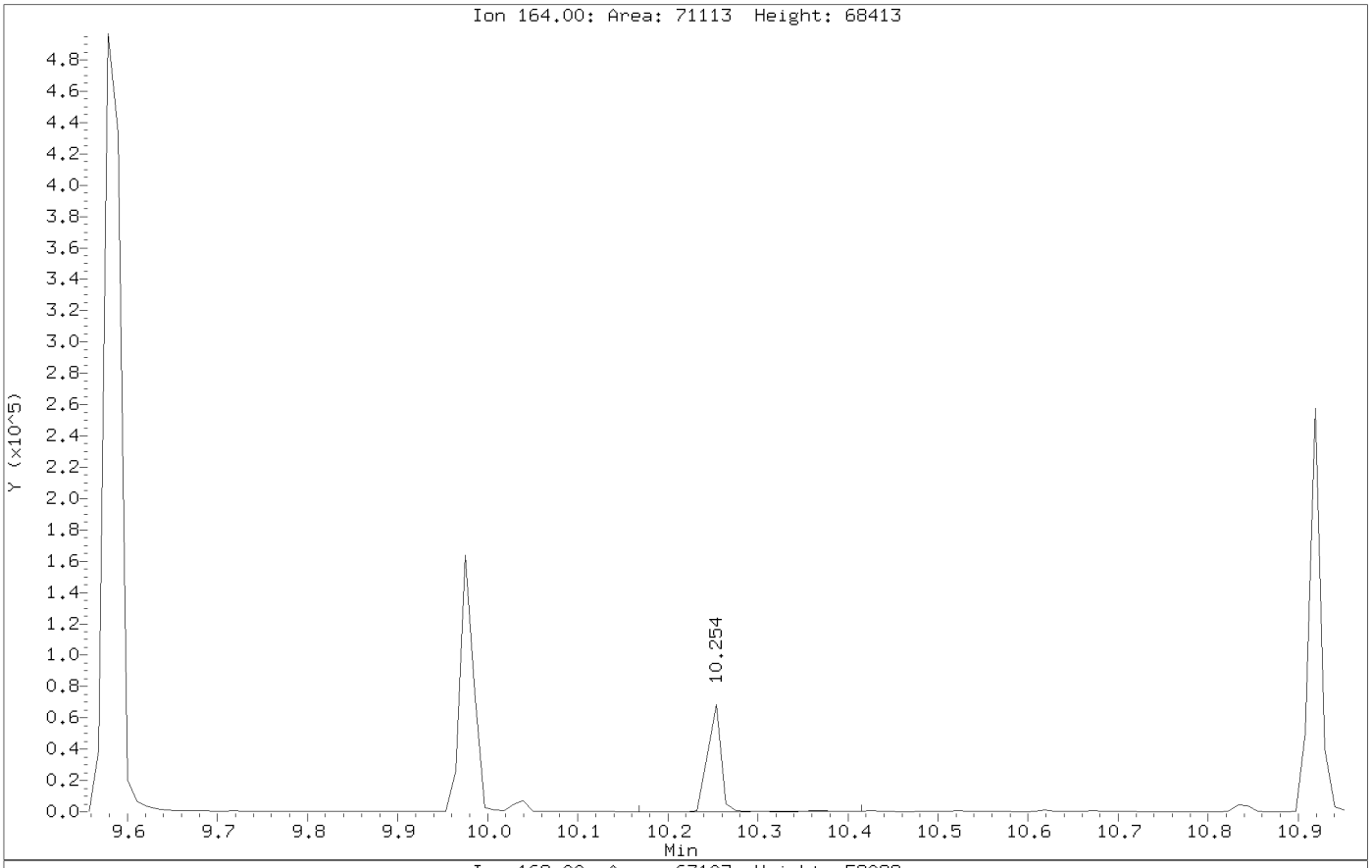
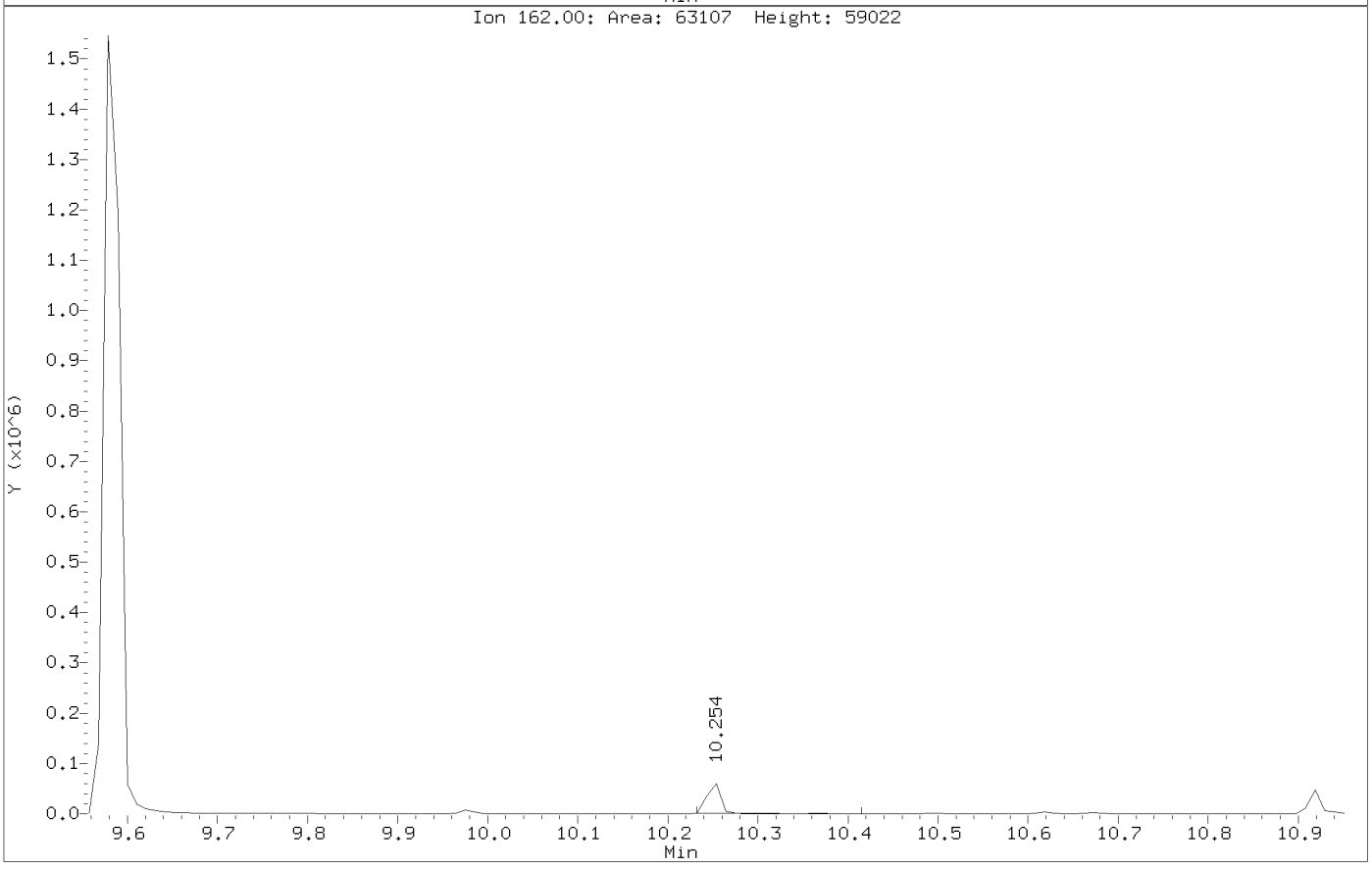
Injection Date: 07-DEC-2023 14:42
Instrument: gcms-n.i
Client Sample ID:

Compound: Acenaphthene-D10
CAS Number: 15067-26-2

AFTER MANUAL INTEGRATION





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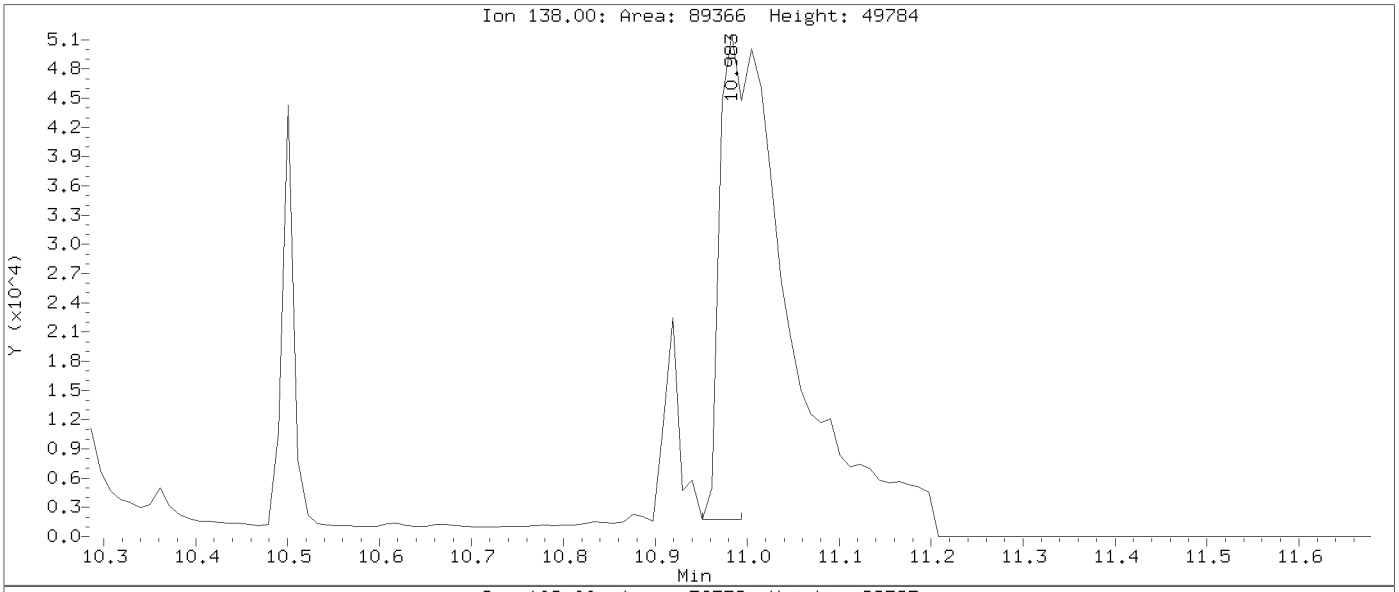
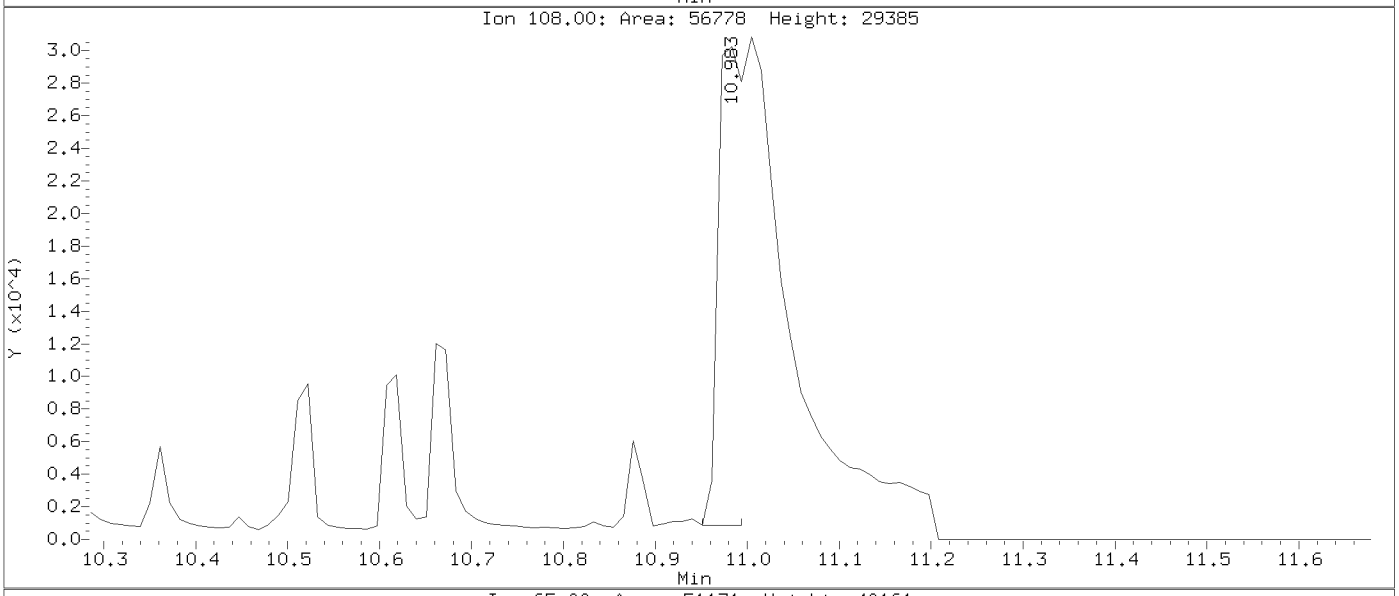
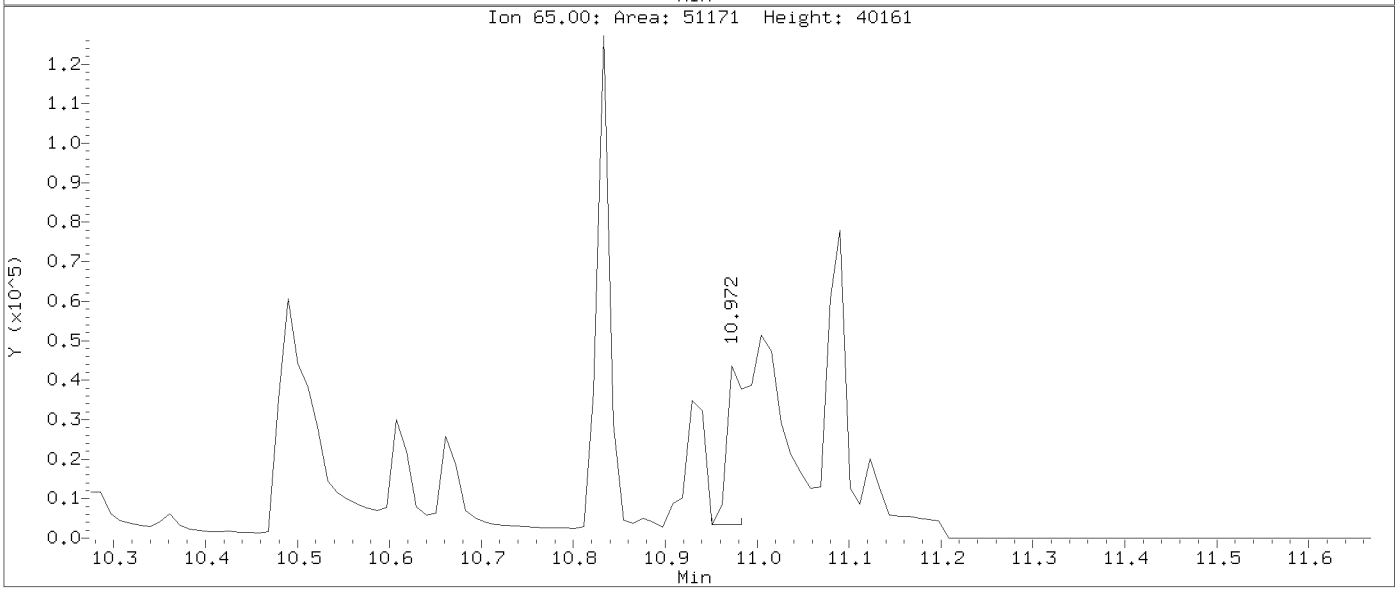
Injection Date: 07-DEC-2023 14:42
Instrument: gcms-n.i
Client Sample ID:

Compound: 4-Nitroaniline
CAS Number: 100-01-6

BEFORE MANUAL INTEGRATION







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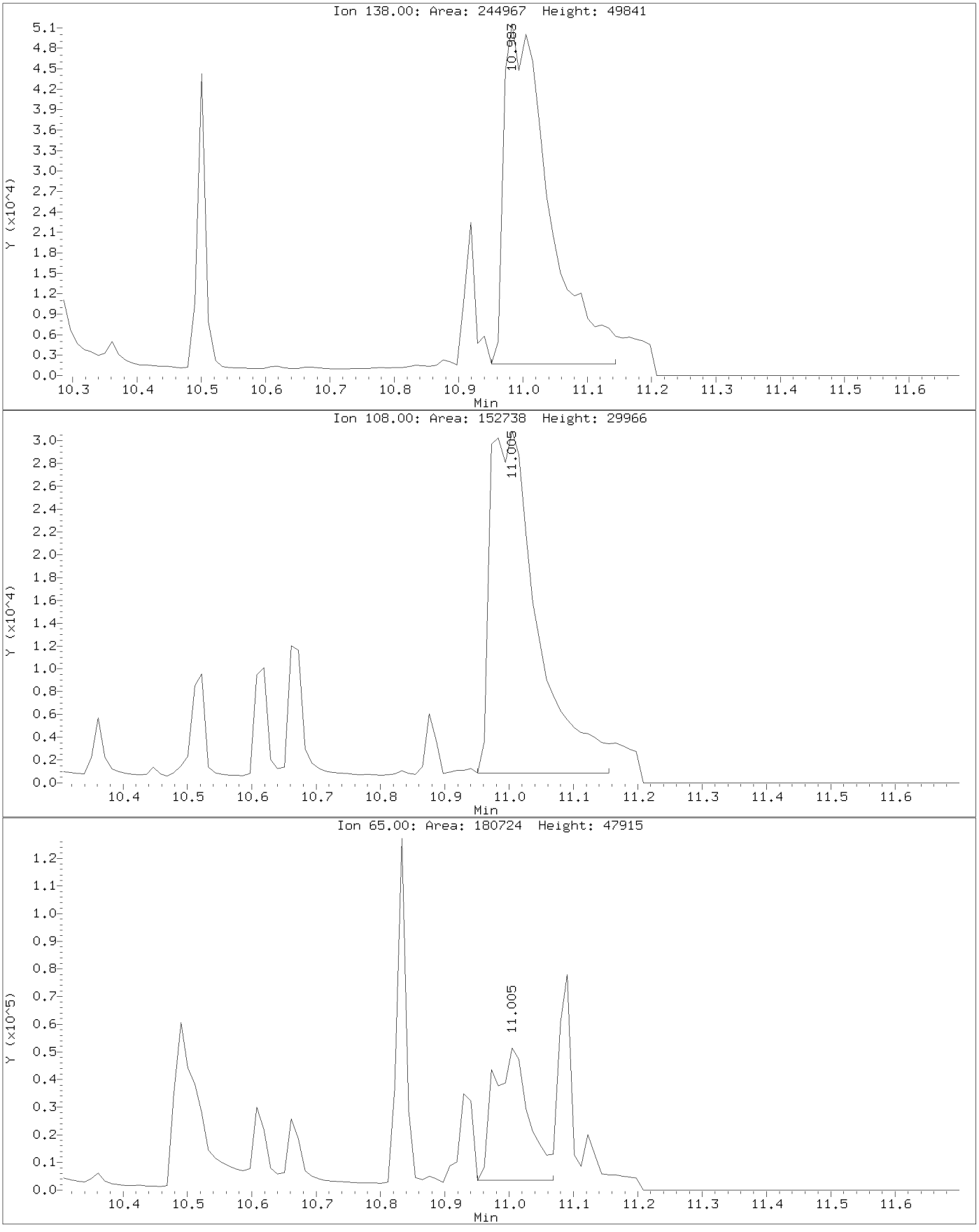
Injection Date: 07-DEC-2023 14:42
Instrument: gcms-n.i
Client Sample ID:

Compound: 4-Nitroaniline
CAS Number: 100-01-6

AFTER MANUAL INTEGRATION



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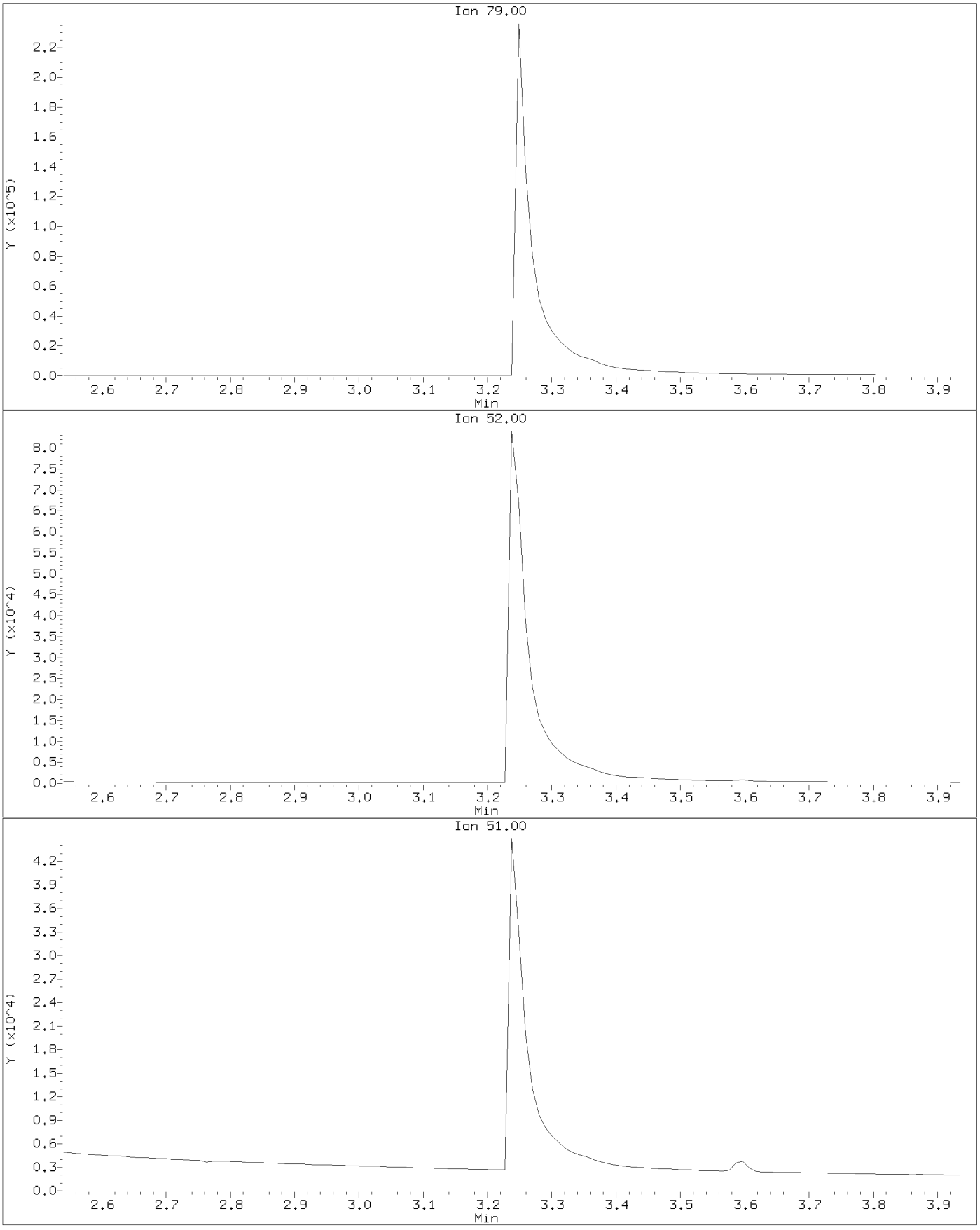
Injection Date: 07-DEC-2023 15:12
Instrument: gcms-n.i
Client Sample ID:

Compound: Pyridine
CAS Number: 110-86-1

BEFORE MANUAL INTEGRATION



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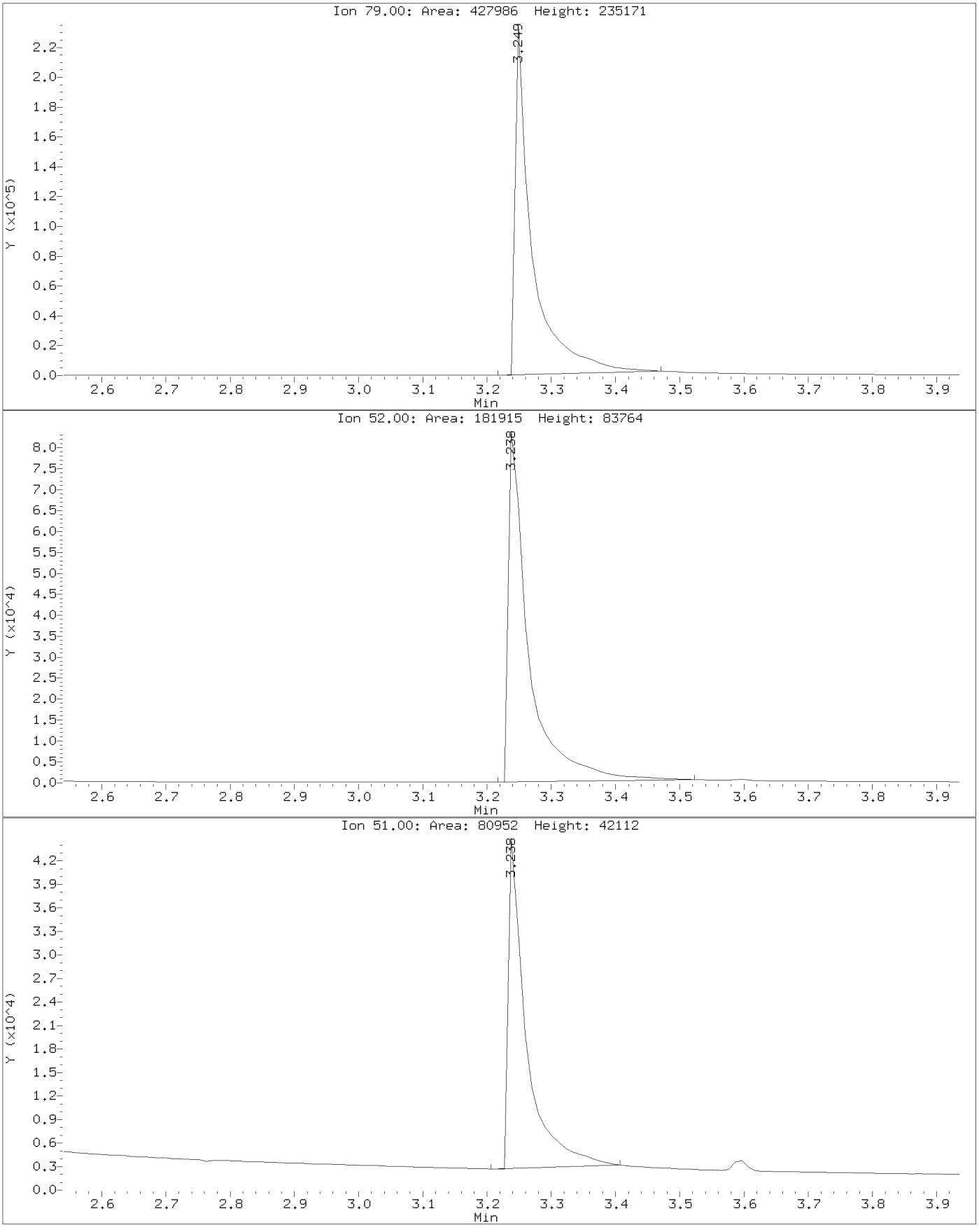
Injection Date: 07-DEC-2023 15:12
Instrument: gcms-n.i
Client Sample ID:

Compound: Pyridine
CAS Number: 110-86-1

AFTER MANUAL INTEGRATION



Form 7
Calibration Verification Summary

Lab Name: Katahdin Analytical Services
SDG: SQ6238
Lab ID: WG346778-2
Analytical Date: 12/11/23 12:16
Lab File ID: N0433.D
Instrument ID: GCMS-N
Initial Calibration Date(s): 12/07/23 12:11 12/07/23 14:42
Column ID:

Compound	RRF/Amount	RF2	CCAL RRF2	Min RF	%D/ %Drift	Max %D/ %Drift	Curve Type	Qual
Naphthalene	1.09413	1.06806	1.06806	0.010	-2.38228	20.000	Averaged	
2-Methylnaphthalene	0.72318	0.68605	0.68605	0.010	-5.13394	20.000	Averaged	
Acenaphthylene	2.22711	2.20676	2.20676	0.010	-0.91386	20.000	Averaged	
Acenaphthene	1.32261	1.32850	1.32850	0.010	0.44514	20.010	Averaged	
Fluorene	1.32162	1.36329	1.36329	0.010	3.15264	20.000	Averaged	
Phenanthrene	1.20967	1.20547	1.20547	0.010	-0.34693	20.000	Averaged	
Anthracene	1.21499	1.31114	1.31114	0.010	7.91356	20.000	Averaged	
Fluoranthene	0.93896	0.99220	0.99220	0.010	5.67078	20.010	Averaged	
Pyrene	2.47305	2.59127	2.59127	0.010	4.78048	20.000	Averaged	
Benzo(a)anthracene	1.38487	1.50100	1.50100	0.010	8.38527	20.000	Averaged	
Chrysene	1.65973	1.72324	1.72324	0.010	3.82602	20.000	Averaged	
Benzo(b)fluoranthene	1.45918	1.46391	1.46391	0.010	0.32481	20.000	Averaged	
Benzo(k)fluoranthene	1.88696	1.95043	1.95043	0.010	3.36384	20.000	Averaged	
Benzo(a)pyrene	1.42750	1.42668	1.42668	0.010	-0.05729	20.010	Averaged	
Indeno(1,2,3-cd)pyrene	1.03440	1.05245	1.05245	0.010	1.74551	20.000	Averaged	
Dibenzo(a,h)anthracene	1.06638	1.04405	1.04405	0.010	-2.09472	20.000	Averaged	
Benzo(g,h,i)perylene	1.16611	1.15134	1.15134	0.010	-1.26621	20.000	Averaged	
2-Methylnaphthalene-D10	0.52508	0.52309	0.52309	0.010	-0.37888	20.000	Averaged	
Fluorene-D10	1.04693	1.06675	1.06675	0.010	1.89268	20.000	Averaged	
Pyrene-D10	1.87184	1.95788	1.95788	0.010	4.59668	20.000	Averaged	

*** = Compound out of QC criteria**

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Data File: \\target_server\gg\chem\gcms-n.i\N121123.b\N0433.D
Report Date: 29-Dec-2023 15:34

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-n.i\N121123.b\N0433.D
Lab Smp Id: WG346778-2
Inj Date : 11-DEC-2023 12:16
Operator : EP   Inst ID: gcms-n.i
Smp Info : WG346778-2
Misc Info : WG346778,WG346778,WG346503-4,SQ6238-1
Comment   :
Method   : \\target_server\gg\chem\gcms-n.i\N121123.b\NSPSIM95.m
Meth Date : 12-Dec-2023 08:48 epelletier Quant Type: ISTD
Cal Date : 07-DEC-2023 14:42   Cal File: N0385.D
Als bottle: 2   Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: all.sub
Target Version: 4.12
Processing Host: INSPIRON1

Concentration Formula: Amt * DF * Uf*(Vt/Vo*Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.000	Sample Volume (L)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
$	1 1,4-Dioxane-d8	96	2.667	2.742	(0.260)	48259	2.00000	1.94	
	2 1,4-Dioxane	88	2.709	2.784	(0.410)	50488	2.00000	2.11	
	3 N-Nitrosodimethylamine	74	3.164	3.217	(0.479)	64392	2.00000	2.18	
	4 Pyridine	79	3.237	3.238	(0.490)	101816	2.00000	1.80	
	5 Benzaldehyde	77	6.084	6.084	(0.921)	50677	2.00000	3.33	
	6 Phenol	94	6.250	6.240	(0.946)	252562	4.50000	3.97	
	7 Bis(2-Chloroethyl)ether	93	6.323	6.323	(0.957)	109705	2.00000	1.97	
	8 2-Chlorophenol	128	6.364	6.365	(0.964)	248233	4.50000	4.62	
	9 1,3-Dichlorobenzene	146	6.531	6.531	(0.989)	127095	2.00000	1.96	
*	10 1,4-Dichlorobenzene-D4	152	6.604	6.604	(1.000)	32554	0.80000	(a)	
	11 1,4-Dichlorobenzene	146	6.625	6.625	(1.003)	127751	2.00000	1.94	
	12 1,2-Dichlorobenzene	146	6.801	6.802	(1.030)	124963	2.00000	1.96	
	13 2,2'-Oxybis(1-chloropropane)	45	6.968	6.958	(1.055)	77976	2.00000	2.24	
	14 2-Methylphenol	108	6.968	6.958	(1.055)	243958	4.50000	4.89	
	15 Acetophenone	105	7.114	7.104	(0.874)	155394	2.00000	1.92	
	16 N-Nitroso-di-n-propylamine	70	7.134	7.125	(1.080)	74229	2.00000	2.18	
	17 3&4-Methylphenol	108	7.166	7.145	(1.085)	234257	4.50000	4.53	
	18 Hexachloroethane	117	7.197	7.197	(1.090)	50997	2.00000	1.99	
	19 Nitrobenzene	77	7.301	7.291	(0.897)	103758	2.00000	1.95	
	20 Isophorone	82	7.630	7.597	(0.938)	191613	2.00000	1.78	

Data File: \\target_server\gg\chem\gcms-n.i\N121123.b\N0433.D
Report Date: 29-Dec-2023 15:34

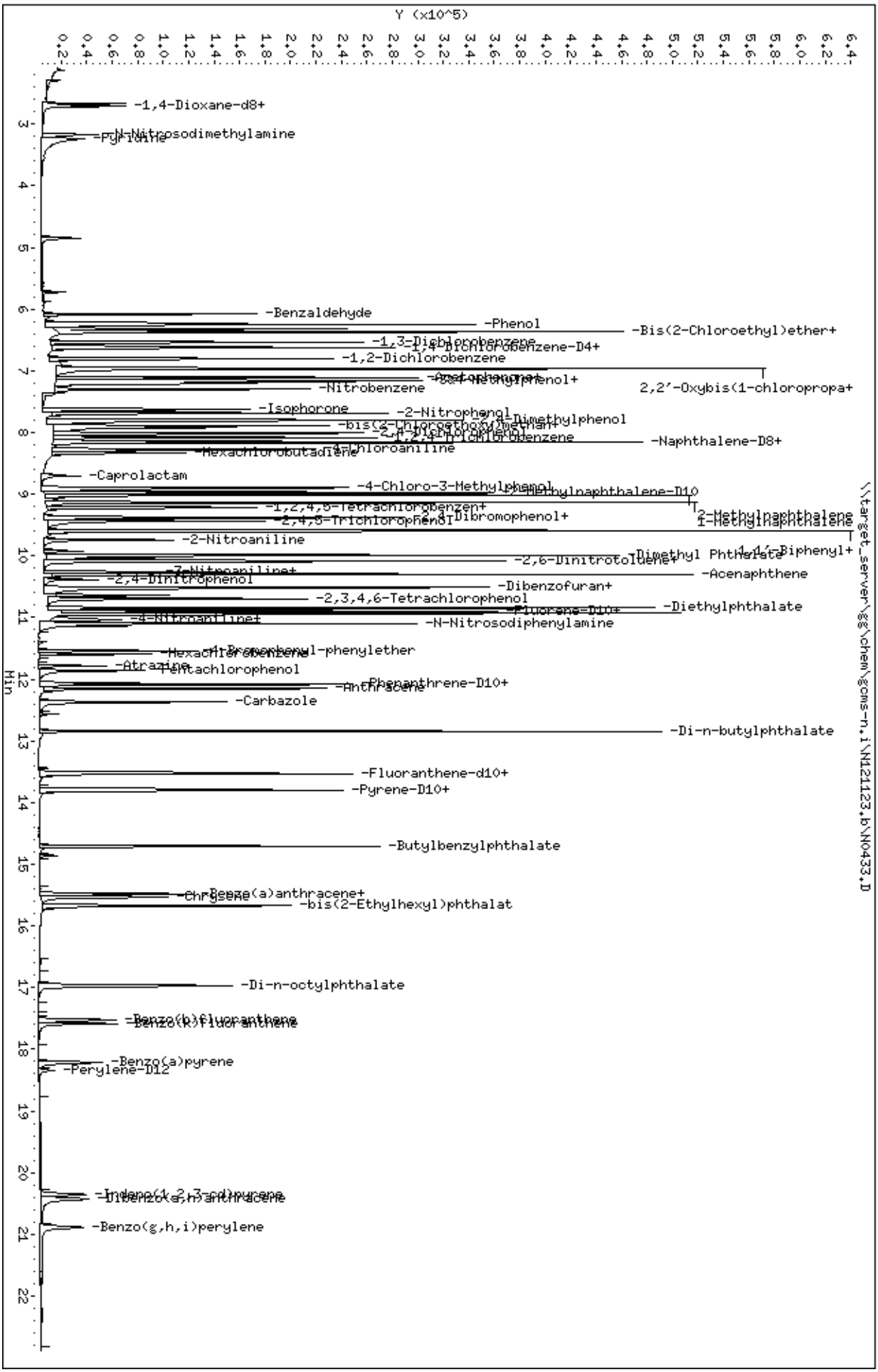
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
	21 2-Nitrophenol	139	7.697	7.675	(0.946)	123514	4.50000	5.64	
	22 2,4-Dimethylphenol	107	7.799	7.777	(0.959)	204317	4.50000	4.54	
	23 bis(2-Chloroethoxy)methane	93	7.900	7.878	(0.971)	117888	2.00000	1.76	
	24 Benzoic Acid	105	7.934	7.957	(0.975)	93427	2.00000	8.13	
	25 2,4-Dichlorophenol	162	8.012	7.979	(0.985)	198801	4.50000	3.95	
	26 1,2,4-Trichlorobenzene	180	8.080	8.069	(0.993)	100172	2.00000	1.86	
*	27 Naphthalene-D8	136	8.136	8.125	(1.000)	131703	0.80000	(a)	
	28 Naphthalene	128	8.159	8.148	(1.003)	351668	2.00000	1.95	
	29 4-Chloroaniline	127	8.282	8.282	(1.018)	85980	2.00000	2.58	
	30 Hexachlorobutadiene	225	8.327	8.317	(1.024)	45288	2.00000	1.95	
	31 Caprolactam	113	8.698	8.699	(1.069)	25780	2.00000	2.00	
	32 4-Chloro-3-Methylphenol	107	8.890	8.869	(1.093)	189150	4.50000	4.64	
$	33 2-Methylnaphthalene-D10	152	8.975	8.954	(1.103)	172231	2.00000	1.99	
	34 2-Methylnaphthalene	142	9.017	8.996	(1.108)	225887	2.00000	1.90	
	35 1-Methylnaphthalene	142	9.133	9.113	(1.123)	201723	2.00000	1.86	
	36 1,2,4,5-Tetrachlorobenzene	216	9.229	9.208	(0.899)	85436	2.00000	1.98	
	37 Hexachlorocyclopentadiene	237	9.208	9.187	(0.897)	39615	2.00000	2.18	
$	38 2,4-Dibromophenol	252	9.366	9.346	(0.913)	49738	2.00000	2.62	
	39 2,4,6-Trichlorophenol	196	9.377	9.356	(0.914)	118280	4.50000	5.58	
	40 2,4,5-Trichlorophenol	196	9.430	9.420	(0.919)	133876	4.50000	5.83	
	41 1,1'-Biphenyl	154	9.589	9.579	(0.934)	243782	2.00000	2.02	
	42 2-Chloronaphthalene	164	9.599	9.579	(0.935)	66041	2.00000	2.08	
	43 2-Nitroaniline	65	9.749	9.728	(0.950)	36140	2.00000	1.87	
	44 Dimethyl Phthalate	163	9.985	9.975	(0.973)	359439	4.50000	4.37	
	45 2,6-Dinitrotoluene	165	10.050	10.039	(0.979)	38817	2.00000	1.84	
	46 Acenaphthylene	152	10.093	10.082	(0.983)	298425	2.00000	1.98	
	47 3-Nitroaniline	138	10.253	10.243	(0.999)	25084	2.00000	2.64	
*	48 Acenaphthene-D10	164	10.264	10.254	(1.000)	54093	0.80000	(a)	
	49 Acenaphthene	153	10.296	10.286	(1.003)	179656	2.00000	2.01	
	50 2,4-Dinitrophenol	184	10.382	10.372	(1.011)	23683	4.50000	8.25	
	51 Dibenzofuran	168	10.511	10.501	(1.024)	242294	2.00000	2.01	
	52 4-Nitrophenol	109	10.522	10.490	(1.025)	24848	4.50000	4.75	
	53 2,4-Dinitrotoluene	165	10.532	10.522	(1.026)	45257	2.00000	1.89	
	54 2,3,4,6-Tetrachlorophenol	232	10.693	10.672	(1.042)	83044	4.50000	5.88	
	55 Diethylphthalate	149	10.843	10.833	(1.056)	338363	4.50000	4.38	
$	56 Fluorene-D10	174	10.897	10.887	(1.062)	144259	2.00000	2.04	
	57 Fluorene	166	10.929	10.919	(1.065)	184361	2.00000	2.06	
	58 4-Chlorophenyl-phenylether	204	10.950	10.940	(1.067)	81267	2.00000	2.05	
	59 4-Nitroaniline	138	11.004	10.983	(1.072)	17815	2.00000	1.95	
	60 4,6-Dinitro-2-Methylphenol	198	11.036	11.015	(0.915)	34427	4.50000	6.87	
	61 N-Nitrosodiphenylamine	169	11.101	11.090	(0.920)	138339	2.00000	2.04	
	62 4-Bromophenyl-phenylether	248	11.539	11.529	(0.957)	41364	2.00000	2.03	
	63 Hexachlorobenzene	284	11.592	11.582	(0.961)	44642	2.00000	2.00	
	64 Atrazine	200	11.784	11.774	(0.977)	29199	2.00000	1.96	
	65 Pentachlorophenol	266	11.859	11.849	(0.983)	46408	4.50000	9.63	
*	66 Phenanthrene-D10	188	12.062	12.052	(1.000)	68403	0.80000	(a)	
	67 Phenanthrene	178	12.083	12.073	(1.002)	206145	2.00000	1.99	
	68 Anthracene	178	12.147	12.137	(1.007)	224214	2.00000	2.16	
	69 Carbazole	167	12.372	12.361	(1.026)	162668	2.00000	2.23	
	70 Di-n-butylphthalate	149	12.841	12.831	(1.065)	461399	4.50000	3.87	
$	71 Fluoranthene-d10	212	13.511	13.502	(1.120)	117204	2.00000	2.11	
	72 Fluoranthene	202	13.532	13.522	(1.122)	169674	2.00000	2.11	
$	73 Pyrene-D10	212	13.776	13.777	(0.889)	133787	2.00000	2.09	
	74 Pyrene	202	13.797	13.797	(0.891)	177068	2.00000	2.10	

Data File: \\target_server\gg\chem\gcms-n.i\N121123.b\N0433.D
Report Date: 29-Dec-2023 15:34

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
	75 Butylbenzylphthalate	149	14.703	14.704	(0.949)	161179	4.50000	4.58	
	76 Benzo(a)anthracene	228	15.477	15.468	(0.999)	102567	2.00000	2.17	
	77 3,3'-Dichlorobenzidine	252	15.498	15.488	(1.001)	31866	2.00000	2.60	
*	78 Chrysene-D12	240	15.488	15.478	(1.000)	27333	0.80000	(a)	
	79 Chrysene	228	15.539	15.529	(1.003)	117753	2.00000	2.08	
	80 bis(2-Ethylhexyl)phthalate	149	15.671	15.672	(1.012)	191169	4.50000	4.21	
	81 Di-n-octylphthalate	149	16.965	16.965	(1.095)	279781	4.50000	5.08	
	82 Benzo(b)fluoranthene	252	17.520	17.521	(0.955)	77141	2.00000	2.01	
	83 Benzo(k)fluoranthene	252	17.582	17.573	(0.958)	102778	2.00000	2.07(H)	
	84 Benzo(a)pyrene	252	18.221	18.211	(0.993)	75179	2.00000	2.00	
*	85 Perylene-D12	264	18.344	18.324	(1.000)	21078	0.80000	(a)	
	86 Indeno(1,2,3-cd)pyrene	276	20.353	20.343	(1.109)	55459	2.00000	2.03	
	87 Dibenzo(a,h)anthracene	278	20.435	20.415	(1.114)	55016	2.00000	1.96	
	88 Benzo(g,h,i)perylene	276	20.888	20.878	(1.139)	60670	2.00000	1.97	
M	89 Total PAHs	100				2865384	36.0000	36.4	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
H - Operator selected an alternate compound hit.


Data File: \\target_server\gg\chem\gcms-n,i\N121123,b\N0433,D
Date : 11-DEC-2023 12:16
Client ID:
Sample Info: WG346778-2
Volume Injected (uL): 1.0
Column phase: Rxi-5ViMS
Instrument: gcms-n,i
Operator: EP
Column diameter: 0.25
\\target_server\gg\chem\gcms-n,i\N121123,b\N0433,D
Y (x10^5)
Min
-1,4-Dioxane-d8+
-N-Nitrosodimethylamine
-Pyridine
-Benzaldehyde
-Phenol
-Bis(2-Chloroethyl)ether+
-1,3-Dichlorobenzene
-1,4-Dichlorobenzene-D4+
-1,2-Dichlorobenzene
-Nitrobenzene
2,2'-Oxybis(1-chloropropa+
-Isophorone
-2-Nitrophenol
-2,4-Dimethylphenol
-Naphthalene-D8+
-Hexachlorobutadiene
-Caprolactam
-4-Chloro-3-Methylphenol
-1,2,4,5-Tetrachlorobenzen+
-2,4,5-Trichlorophenol
-2-Nitroaniline
-2,6-Dinitrotoluene+
-Dimethyl Phthalate
-Acenaphthene
-2,4-Dinitrophenol
-Dibenzofuran+
-2,3,4,6-Tetrachlorophenol
-Diethylphthalate
-N-Nitrosodiphenylamine
-Atrazine
-Carbazole
-Di-n-butylphthalate
-Fluoranthene-d10+
-Pyrene-D10+
-Butylbenzylphthalate
-Chrysene
-bis(2-Ethylhexyl)phthalat
-Di-n-octylphthalate
-Benzo(a)pyrene
-Perylene-D12
-Benzo(g,h,i)perylene

Form 7
Calibration Verification Summary

Lab Name: Katahdin Analytical Services
SDG: SQ6238
Lab ID: WG346778-3
Analytical Date: 12/11/23 22:43
Lab File ID: N0453.D
Instrument ID: GCMS-N
Initial Calibration Date(s): 12/07/23 12:11 12/07/23 14:42
Column ID:

Compound	RRF/Amount	RF2	CCAL RRF2	Min RF	%D/ %Drift	Max %D/ %Drift	Curve Type	Qual
Naphthalene	1.09413	1.11397	1.11397	0.010	1.81324	20.000	Averaged	
2-Methylnaphthalene	0.72318	0.67802	0.67802	0.010	-6.24488	20.000	Averaged	
Acenaphthylene	2.22711	2.24147	2.24147	0.010	0.64478	20.000	Averaged	
Acenaphthene	1.32261	1.31323	1.31323	0.010	-0.70923	20.010	Averaged	
Fluorene	1.32162	1.29439	1.29439	0.010	-2.06072	20.000	Averaged	
Phenanthrene	1.20967	1.28848	1.28848	0.010	6.51503	20.000	Averaged	
Anthracene	1.21499	1.36374	1.36374	0.010	12.24354	20.000	Averaged	
Fluoranthene	0.93896	0.90140	0.90140	0.010	-4.00005	20.010	Averaged	
Pyrene	2.47305	3.15111	3.15111	0.010	27.41800	20.000	Averaged	*
Benzo(a)anthracene	1.38487	1.45789	1.45789	0.010	5.27219	20.000	Averaged	
Chrysene	1.65973	1.74897	1.74897	0.010	5.37656	20.000	Averaged	
Benzo(b)fluoranthene	1.45918	1.43844	1.43844	0.010	-1.42125	20.000	Averaged	
Benzo(k)fluoranthene	1.88696	2.14431	2.14431	0.010	13.63863	20.000	Averaged	
Benzo(a)pyrene	1.42750	1.48257	1.48257	0.010	3.85795	20.010	Averaged	
Indeno(1,2,3-cd)pyrene	1.03440	0.90853	0.90853	0.010	-12.16790	20.000	Averaged	
Dibenzo(a,h)anthracene	1.06638	0.98765	0.98765	0.010	-7.38307	20.000	Averaged	
Benzo(g,h,i)perylene	1.16611	1.09152	1.09152	0.010	-6.39598	20.000	Averaged	
2-Methylnaphthalene-D10	0.52508	0.54531	0.54531	0.010	3.85378	20.000	Averaged	
Fluorene-D10	1.04693	1.04641	1.04641	0.010	-0.05019	20.000	Averaged	
Pyrene-D10	1.87184	2.33234	2.33234	0.010	24.60161	20.000	Averaged	*

*** = Compound out of QC criteria**

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Data File: \\target_server\gg\chem\gcms-n.i\N121123.b\N0453.D
Report Date: 29-Dec-2023 15:34

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-n.i\N121123.b\N0453.D
Lab Smp Id: WG346778-3
Inj Date : 11-DEC-2023 22:43
Operator : EP   Inst ID: gcms-n.i
Smp Info : WG346778-3
Misc Info : WG346778,WG346778,WG346503-4,SQ6238-1
Comment   :
Method   : \\target_server\gg\chem\gcms-n.i\N121123.b\NSPSIM95.m
Meth Date : 12-Dec-2023 08:48 epelletier Quant Type: ISTD
Cal Date : 07-DEC-2023 14:42   Cal File: N0385.D
Als bottle: 2   Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: all.sub
Target Version: 4.12
Processing Host: INSPIRON1

Concentration Formula: Amt * DF * Uf*(Vt/Vo*Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.000	Sample Volume (L)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

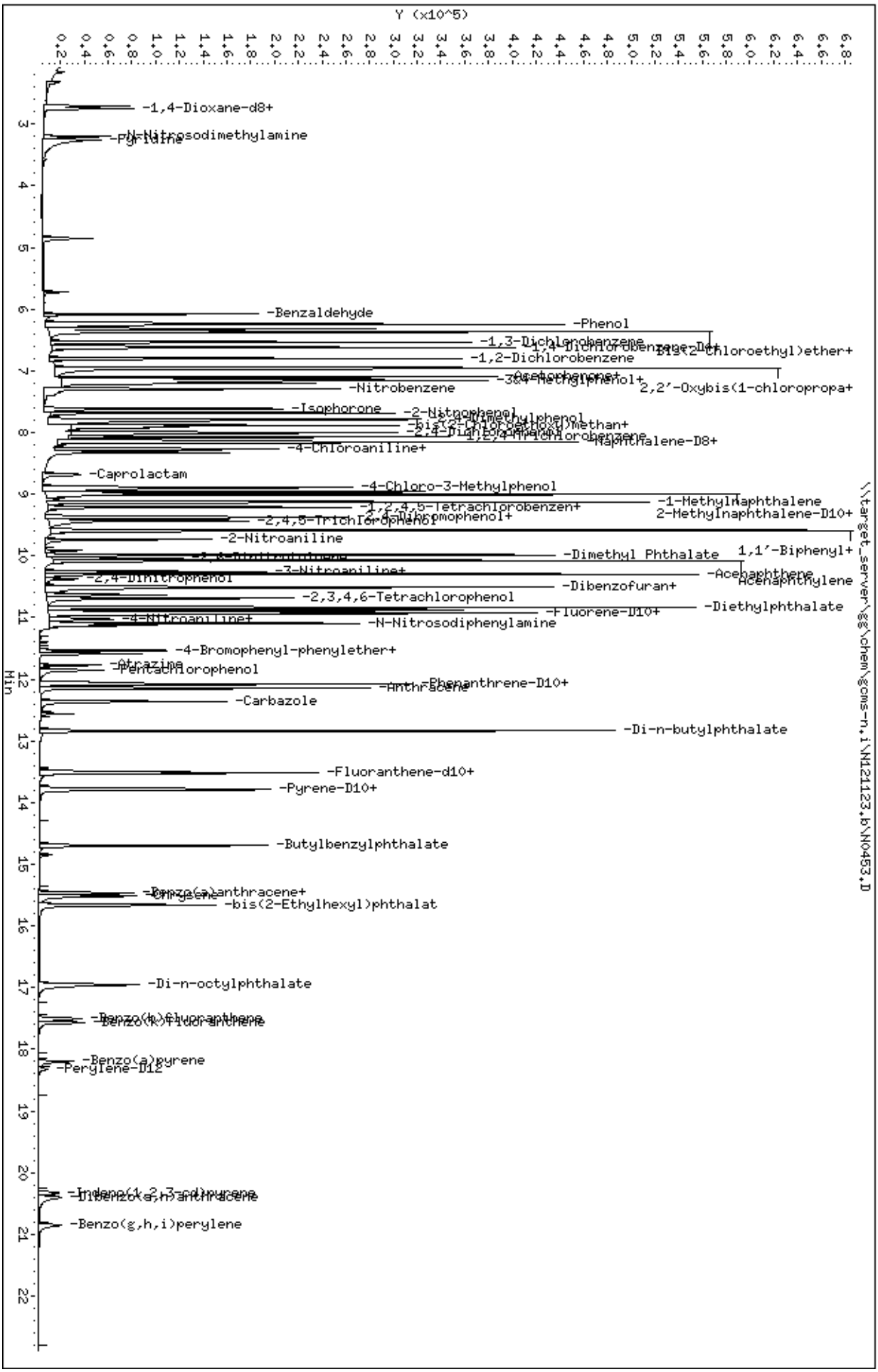
			QUANT SIG					AMOUNTS		
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
$	1	1,4-Dioxane-d8	96	2.709	2.742	(0.264)	56180	2.00000	1.92	
	2	1,4-Dioxane	88	2.741	2.784	(0.415)	61102	2.00000	2.05	
*	10	1,4-Dichlorobenzene-D4	152	6.604	6.604	(1.000)	40451	0.80000	(a)	
*	27	Naphthalene-D8	136	8.125	8.125	(1.000)	147350	0.80000	(a)	
	28	Naphthalene	128	8.159	8.148	(1.004)	410358	2.00000	2.04	
$	33	2-Methylnaphthalene-D10	152	8.964	8.954	(1.103)	200880	2.00000	2.08	
	34	2-Methylnaphthalene	142	9.006	8.996	(1.108)	249764	2.00000	1.88	
	35	1-Methylnaphthalene	142	9.123	9.113	(1.123)	234605	2.00000	1.93	
$	38	2,4-Dibromophenol	252	9.356	9.346	(0.912)	56792	2.00000	2.54	
	42	2-Chloronaphthalene	164	9.589	9.579	(0.935)	74442	2.00000	1.99	
	46	Acenaphthylene	152	10.082	10.082	(0.983)	356186	2.00000	2.01	
*	48	Acenaphthene-D10	164	10.254	10.254	(1.000)	63563	0.80000	(a)	
	49	Acenaphthene	153	10.296	10.286	(1.004)	208682	2.00000	1.98	
$	56	Fluorene-D10	174	10.886	10.887	(1.062)	166282	2.00000	2.00	
	57	Fluorene	166	10.929	10.919	(1.066)	205688	2.00000	1.96	
	65	Pentachlorophenol	266	11.859	11.849	(0.984)	38843	4.50000	7.80	
*	66	Phenanthrene-D10	188	12.051	12.052	(1.000)	70637	0.80000	(a)	
	67	Phenanthrene	178	12.083	12.073	(1.003)	227536	2.00000	2.13	
	68	Anthracene	178	12.147	12.137	(1.008)	240827	2.00000	2.24	
$	71	Fluoranthene-d10	212	13.501	13.502	(1.120)	107697	2.00000	1.88	

Data File: \\target_server\gg\chem\gcms-n.i\N121123.b\N0453.D
Report Date: 29-Dec-2023 15:34

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
	72 Fluoranthene	202	13.522	13.522	(1.122)	159180	2.00000	1.92	
$	73 Pyrene-D10	212	13.776	13.777	(0.890)	120069	2.00000	2.49	
	74 Pyrene	202	13.786	13.797	(0.891)	162219	2.00000	2.55	
	76 Benzo(a)anthracene	228	15.467	15.468	(0.999)	75052	2.00000	2.10	
*	78 Chrysene-D12	240	15.478	15.478	(1.000)	20592	0.80000	(a)	
	79 Chrysene	228	15.518	15.529	(1.003)	90037	2.00000	2.11	
	82 Benzo(b)fluoranthene	252	17.510	17.521	(0.956)	50615	2.00000	1.97	
	83 Benzo(k)fluoranthene	252	17.562	17.573	(0.958)	75453	2.00000	2.27(H)	
	84 Benzo(a)pyrene	252	18.200	18.211	(0.993)	52168	2.00000	2.08	
*	85 Perylene-D12	264	18.324	18.324	(1.000)	14075	0.80000	(a)	
	86 Indeno(1,2,3-cd)pyrene	276	20.332	20.343	(1.110)	31969	2.00000	1.76	
	87 Dibenzo(a,h)anthracene	278	20.415	20.415	(1.114)	34753	2.00000	1.85	
	88 Benzo(g,h,i)perylene	276	20.857	20.878	(1.138)	38408	2.00000	1.87	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
H - Operator selected an alternate compound hit.


Data File: \\target_server\gg\chem\gcms-n,i\N121123,b\N0453.D
Date : 11-DEC-2023 22:43
Client ID:
Sample Info: WG346778-3
Volume Injected (uL): 1.0
Column phase: Rxi-5ViOms
Instrument: gcms-n,i
Operator: EP
Column diameter: 0.25
\\target_server\gg\chem\gcms-n,i\N121123,b\N0453.D
Y (x10^5)
Min
-1,4-Dioxane-d8+
-N-Nitrosodimethylamine
-Pyridine
-Benzaldehyde
-Phenol
-1,3-Dichlorobenzene
-1,4-Dichlorobenzene-D4+
Bis(2-chloroethyl)ether+
-1,2-Dichlorobenzene
-Acetophenone+
-3&4-Methylphenol+
2,2'-Oxybis(1-chloropropa+
-Nitrobenzene
-Isophorone
-2-Nitrophenol
-2,4-Dimethylphenol
-bis(2-Chloroethoxy)Methan+
-2,4-Dichlorophenol
-1,2,4-Trichlorobenzene
-Naphthalene-D8+
-4-Chloroaniline+
-Caprolactam
-4-Chloro-3-Methylphenol
-1-Methylnaphthalene
-1,2,4,5-Tetrachlorobenzen+
2-Methylnaphthalene-D10+
-2,4-Dibromophenol+
-2,4,5-Trichlorophenol
-2-Nitroaniline
-Dimethyl Phthalate
1,1'-Biphenyl+
-2,6-Dinitrotoluene
-3-Nitroaniline+
-Acenaphthene
-2,4-Dinitrophenol
Acenaphthylene
-Dibenzofuran+
-2,3,4,6-Tetrachlorophenol
-Diethylphthalate
-Fluorene-D10+
-4-Nitroaniline+
-N-Nitrosodiphenylamine
-4-Bromophenyl-phenylether+
-Atrazine
-Pentachlorophenol
-Phenanthrene-D10+
-Anthracene
-Carbazole
-Di-n-butylphthalate
-Fluoranthene-d10+
-Pyrene-D10+
-Butylbenzylphthalate
-Benzo(a)anthracene+
-Chrysene
-bis(2-Ethylhexyl)phthalat
-Di-n-octylphthalate
-Benzo(b)fluoranthene
-Benzo(k)fluoranthene
-Benzo(a)pyrene
-Perylene-D12
-Indeno(1,2,3-cd)pyrene
-Dibenzo(a,h)anthracene
-Benzo(g,h,i)perylene

Form 7
Calibration Verification Summary

Lab Name: Katahdin Analytical Services
SDG: SQ6238
Lab ID: WG346778-4
Analytical Date: 12/11/23 23:16
Lab File ID: N0454.D
Instrument ID: GCMS-N
Initial Calibration Date(s): 12/07/23 12:11 12/07/23 14:42
Column ID:

Compound	$\overline{RRF}$/Amount	RF2	CCAL RRF2	Min RF	%D/ %Drift	Max %D/ %Drift	Curve Type	Qual
Naphthalene	1.09413	1.10398	1.10398	0.010	0.90026	20.000	Averaged	
2-Methylnaphthalene	0.72318	0.69013	0.69013	0.010	-4.56950	20.000	Averaged	
Acenaphthylene	2.22711	2.20148	2.20148	0.010	-1.15076	20.000	Averaged	
Acenaphthene	1.32261	1.29183	1.29183	0.010	-2.32738	20.010	Averaged	
Fluorene	1.32162	1.31920	1.31920	0.010	-0.18326	20.000	Averaged	
Phenanthrene	1.20967	1.28874	1.28874	0.010	6.53608	20.000	Averaged	
Anthracene	1.21499	1.35082	1.35082	0.010	11.18011	20.000	Averaged	
Fluoranthene	0.93896	0.90291	0.90291	0.010	-3.83896	20.010	Averaged	
Pyrene	2.47305	3.10869	3.10869	0.010	25.70283	20.000	Averaged	*
Benzo(a)anthracene	1.38487	1.43081	1.43081	0.010	3.31704	20.000	Averaged	
Chrysene	1.65973	1.79094	1.79094	0.010	7.90540	20.000	Averaged	
Benzo(b)fluoranthene	1.45918	1.56433	1.56433	0.010	7.20667	20.000	Averaged	
Benzo(k)fluoranthene	1.88696	2.05390	2.05390	0.010	8.84716	20.000	Averaged	
Benzo(a)pyrene	1.42750	1.48586	1.48586	0.010	4.08802	20.010	Averaged	
Indeno(1,2,3-cd)pyrene	1.03440	0.83327	0.83327	0.010	-19.44423	20.000	Averaged	
Dibenzo(a,h)anthracene	1.06638	0.90948	0.90948	0.010	-14.71343	20.000	Averaged	
Benzo(g,h,i)perylene	1.16611	1.02205	1.02205	0.010	-12.35344	20.000	Averaged	
2-Methylnaphthalene-D10	0.52508	0.54031	0.54031	0.010	2.90061	20.000	Averaged	
Fluorene-D10	1.04693	1.04757	1.04757	0.010	0.06061	20.000	Averaged	
Pyrene-D10	1.87184	2.35684	2.35684	0.010	25.91053	20.000	Averaged	*

*** = Compound out of QC criteria**

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Data File: \\target_server\gg\chem\gcms-n.i\N121123.b\N0454.D
Report Date: 29-Dec-2023 15:34

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-n.i\N121123.b\N0454.D
Lab Smp Id: WG346778-4
Inj Date : 11-DEC-2023 23:16
Operator : EP   Inst ID: gcms-n.i
Smp Info : WG346778-4
Misc Info : WG346778,WG346778,WG346503-4,SQ6238-1
Comment   :
Method   : \\target_server\gg\chem\gcms-n.i\N121123.b\NSPSIM95.m
Meth Date : 12-Dec-2023 08:48 epelletier Quant Type: ISTD
Cal Date : 07-DEC-2023 14:42   Cal File: N0385.D
Als bottle: 2   Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: all.sub
Target Version: 4.12
Processing Host: INSPIRON1

Concentration Formula: Amt * DF * Uf*(Vt/Vo*Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.000	Sample Volume (L)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

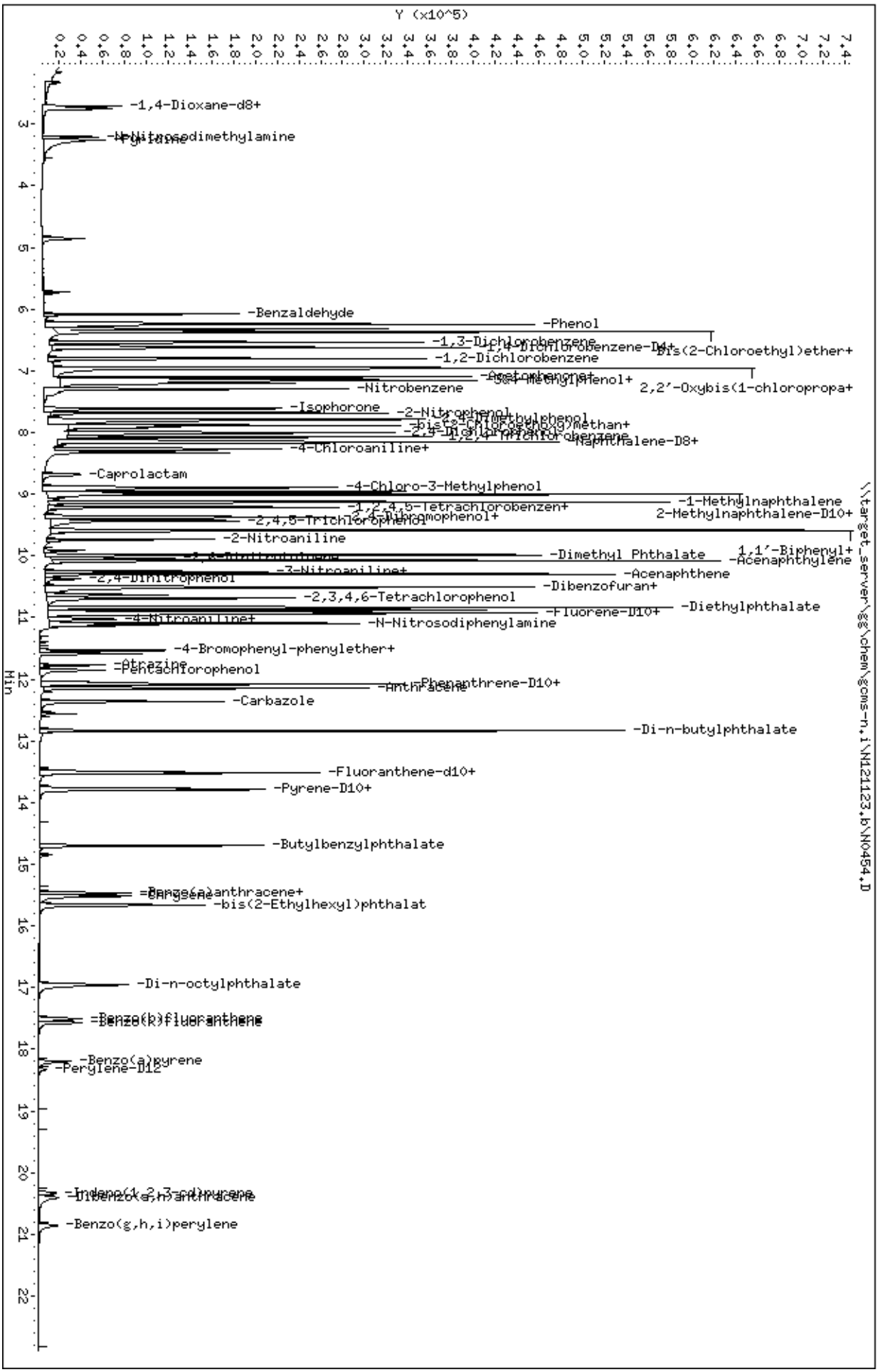
			QUANT SIG					AMOUNTS		
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
$	1	1,4-Dioxane-d8	96	2.709	2.742	(0.264)	60519	2.00000	1.91	
	2	1,4-Dioxane	88	2.752	2.784	(0.417)	67820	2.00000	2.11	
*	10	1,4-Dichlorobenzene-D4	152	6.604	6.604	(1.000)	43723	0.80000	(a)	
*	27	Naphthalene-D8	136	8.125	8.125	(1.000)	156449	0.80000	(a)	
	28	Naphthalene	128	8.159	8.148	(1.004)	431791	2.00000	2.02	
$	33	2-Methylnaphthalene-D10	152	8.975	8.954	(1.105)	211327	2.00000	2.06	
	34	2-Methylnaphthalene	142	9.006	8.996	(1.108)	269926	2.00000	1.91	
	35	1-Methylnaphthalene	142	9.123	9.113	(1.123)	254118	2.00000	1.97	
$	38	2,4-Dibromophenol	252	9.356	9.346	(0.912)	59529	2.00000	2.47	
	42	2-Chloronaphthalene	164	9.589	9.579	(0.935)	79407	2.00000	1.96	
	46	Acenaphthylene	152	10.082	10.082	(0.983)	378071	2.00000	1.98	
*	48	Acenaphthene-D10	164	10.254	10.254	(1.000)	68694	0.80000	(a)	
	49	Acenaphthene	153	10.296	10.286	(1.004)	221852	2.00000	1.95	
$	56	Fluorene-D10	174	10.886	10.887	(1.062)	179904	2.00000	2.00	
	57	Fluorene	166	10.918	10.919	(1.065)	226553	2.00000	2.00	
	65	Pentachlorophenol	266	11.849	11.849	(0.983)	43086	4.50000	8.01	
*	66	Phenanthrene-D10	188	12.051	12.052	(1.000)	76362	0.80000	(a)	
	67	Phenanthrene	178	12.083	12.073	(1.003)	246026	2.00000	2.13	
	68	Anthracene	178	12.147	12.137	(1.008)	257879	2.00000	2.22	
$	71	Fluoranthene-d10	212	13.501	13.502	(1.120)	116785	2.00000	1.88	

Data File: \\target_server\gg\chem\gcms-n.i\N121123.b\N0454.D
Report Date: 29-Dec-2023 15:34

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
	72 Fluoranthene	202	13.522	13.522	(1.122)	172370	2.00000	1.92	
$	73 Pyrene-D10	212	13.766	13.777	(0.889)	128283	2.00000	2.52	
	74 Pyrene	202	13.786	13.797	(0.891)	169206	2.00000	2.51	
	76 Benzo(a)anthracene	228	15.467	15.468	(0.999)	77879	2.00000	2.07	
*	78 Chrysene-D12	240	15.478	15.478	(1.000)	21772	0.80000	(a)	
	79 Chrysene	228	15.518	15.529	(1.003)	97481	2.00000	2.16	
	82 Benzo(b)fluoranthene	252	17.510	17.521	(0.956)	56711	2.00000	2.14	
	83 Benzo(k)fluoranthene	252	17.562	17.573	(0.958)	74459	2.00000	2.18(H)	
	84 Benzo(a)pyrene	252	18.200	18.211	(0.993)	53866	2.00000	2.08	
*	85 Perylene-D12	264	18.324	18.324	(1.000)	14501	0.80000	(a)	
	86 Indeno(1,2,3-cd)pyrene	276	20.332	20.343	(1.110)	30208	2.00000	1.61	
	87 Dibenzo(a,h)anthracene	278	20.414	20.415	(1.114)	32971	2.00000	1.70	
	88 Benzo(g,h,i)perylene	276	20.868	20.878	(1.139)	37052	2.00000	1.75	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
H - Operator selected an alternate compound hit.


Data File: \\target_server\gg\chem\gcms-n,i\N121123,b\N0454.D
Date : 11-DEC-2023 23:16
Client ID:
Sample Info: WG346778-4
Volume Injected (uL): 1.0
Column phase: Rxi-5ViOCms
Instrument: gcms-n,i
Operator: EP
Column diameter: 0.25
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Y (x10^5)
Min
-1,4-Dioxane-d8+
-N-Nitrosodimethylamine
-Pyridine
-Benzaldehyde
-Phenol
-1,3-Dichlorobenzene
-1,4-Dichlorobenzene-D4+
-Bis(2-Chloroethyl)ether+
-1,2-Dichlorobenzene
-Acetophenone+
-2+4-Methylphenol+
2,2'-Oxybis(1-chloropropa+
-Nitrobenzene
-Isophorone
-2-Nitrophenol
-bis(2-Chloroethoxy)methan+
-2,4-Dichlorophenol+
-1,2,4-Trichlorobenzene
-Naphthalene-D8+
-4-Chloroaniline+
-Caprolactam
-4-Chloro-3-Methylphenol
-1-Methylnaphthalene
-1,2,4,5-Tetrachlorobenzen+
2-Methylnaphthalene-D10+
-2,4-Dibromophenol+
-2,4,5-Trichlorophenol
-2-Nitroaniline
-Dimethyl Phthalate
1,1'-Biphenyl+
-Acenaphthylene
-3-Nitroaniline+
-Acenaphthene
-2,4-Dinitrophenol
-Dibenzofuran+
-2,3,4,6-Tetrachlorophenol
-Fluorene-D10+
-Diethylphthalate
-4-Nitroaniline+
-N-Nitrosodiphenylamine
-4-Bromophenyl-phenylether+
-Atrazine
-Pentachlorophenol
-Phenanthrene-D10+
-Anthracene
-Carbazole
-Di-n-butylphthalate
-Fluoranthene-d10+
-Pyrene-D10+
-Butylbenzylphthalate
-Benzo(a)anthracene+
-Chrysene
-bis(2-Ethylhexyl)phthalat
-Di-n-octylphthalate
-Benzo(k)fluoranthene
-Benzo(a)pyrene
-Perylene-D12
-Indeno(1,2,3-cd)pyrene
-Dibenzo(a,h)anthracene
-Benzo(g,h,i)perylene

Form 7
Calibration Verification Summary

Lab Name: Katahdin Analytical Services
SDG: SQ6238
Lab ID: WG346778-5
Analytical Date: 12/11/23 23:48
Lab File ID: N0455.D
Instrument ID: GCMS-N
Initial Calibration Date(s): 12/07/23 12:11 12/07/23 14:42
Column ID:

Compound	$\overline{RRF}$/Amount	RF2	CCAL RRF2	Min RF	%D/ %Drift	Max %D/ %Drift	Curve Type	Qual
Naphthalene	1.09413	1.10833	1.10833	0.010	1.29833	20.000	Averaged	
2-Methylnaphthalene	0.72318	0.69172	0.69172	0.010	-4.34962	20.000	Averaged	
Acenaphthylene	2.22711	2.20671	2.20671	0.010	-0.91576	20.000	Averaged	
Acenaphthene	1.32261	1.29620	1.29620	0.010	-1.99649	20.010	Averaged	
Fluorene	1.32162	1.30821	1.30821	0.010	-1.01500	20.000	Averaged	
Phenanthrene	1.20967	1.28102	1.28102	0.010	5.89798	20.000	Averaged	
Anthracene	1.21499	1.36876	1.36876	0.010	12.65632	20.000	Averaged	
Fluoranthene	0.93896	0.94816	0.94816	0.010	0.98011	20.010	Averaged	
Pyrene	2.47305	3.01830	3.01830	0.010	22.04783	20.000	Averaged	*
Benzo(a)anthracene	1.38487	1.41897	1.41897	0.010	2.46199	20.000	Averaged	
Chrysene	1.65973	1.77390	1.77390	0.010	6.87855	20.000	Averaged	
Benzo(b)fluoranthene	1.45918	1.56779	1.56779	0.010	7.44381	20.000	Averaged	
Benzo(k)fluoranthene	1.88696	2.09604	2.09604	0.010	11.08055	20.000	Averaged	
Benzo(a)pyrene	1.42750	1.41998	1.41998	0.010	-0.52643	20.010	Averaged	
Indeno(1,2,3-cd)pyrene	1.03440	0.82897	0.82897	0.010	-19.85969	20.000	Averaged	
Dibenzo(a,h)anthracene	1.06638	0.92455	0.92455	0.010	-13.30084	20.000	Averaged	
Benzo(g,h,i)perylene	1.16611	1.07680	1.07680	0.010	-7.65877	20.000	Averaged	
2-Methylnaphthalene-D10	0.52508	0.56764	0.56764	0.010	8.10605	20.000	Averaged	
Fluorene-D10	1.04693	1.05401	1.05401	0.010	0.67618	20.000	Averaged	
Pyrene-D10	1.87184	2.21587	2.21587	0.010	18.37903	20.000	Averaged	

*** = Compound out of QC criteria**

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Data File: \\target_server\gg\chem\gcms-n.i\N121123.b\N0455.D
Report Date: 29-Dec-2023 15:34

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-n.i\N121123.b\N0455.D
Lab Smp Id: WG346778-5
Inj Date : 11-DEC-2023 23:48
Operator : EP   Inst ID: gcms-n.i
Smp Info : WG346778-5
Misc Info : WG346778,WG346778,WG346503-4,SQ6238-1
Comment   :
Method   : \\target_server\gg\chem\gcms-n.i\N121123.b\NSPSIM95.m
Meth Date : 12-Dec-2023 08:48 epelletier Quant Type: ISTD
Cal Date : 07-DEC-2023 14:42   Cal File: N0385.D
Als bottle: 2   Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: all.sub
Target Version: 4.12
Processing Host: INSPIRON1

Concentration Formula: Amt * DF * Uf*(Vt/Vo*Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.000	Sample Volume (L)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

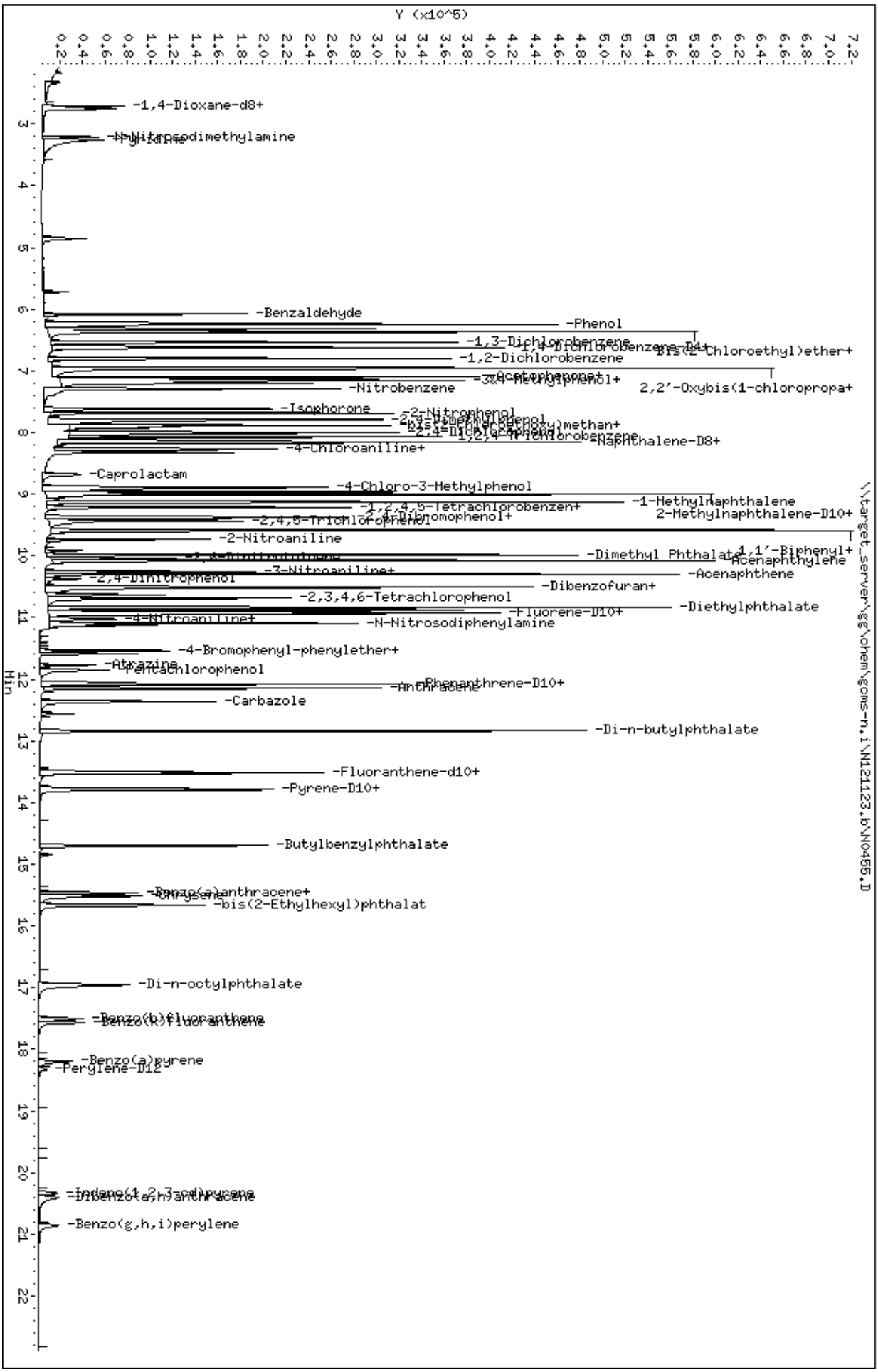
			QUANT SIG					AMOUNTS		
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
$	1	1,4-Dioxane-d8	96	2.709	2.742	(0.264)	60109	2.00000	2.00	
	2	1,4-Dioxane	88	2.751	2.784	(0.417)	64501	2.00000	2.08	
*	10	1,4-Dichlorobenzene-D4	152	6.604	6.604	(1.000)	42245	0.80000	(a)	
*	27	Naphthalene-D8	136	8.125	8.125	(1.000)	149958	0.80000	(a)	
	28	Naphthalene	128	8.158	8.148	(1.004)	415509	2.00000	2.02	
$	33	2-Methylnaphthalene-D10	152	8.974	8.954	(1.105)	212806	2.00000	2.16	
	34	2-Methylnaphthalene	142	9.006	8.996	(1.108)	259323	2.00000	1.91	
	35	1-Methylnaphthalene	142	9.123	9.113	(1.123)	241145	2.00000	1.95	
$	38	2,4-Dibromophenol	252	9.356	9.346	(0.912)	57392	2.00000	2.51	
	42	2-Chloronaphthalene	164	9.589	9.579	(0.935)	76251	2.00000	1.99	
	46	Acenaphthylene	152	10.082	10.082	(0.983)	358817	2.00000	1.98	
*	48	Acenaphthene-D10	164	10.253	10.254	(1.000)	65041	0.80000	(a)	
	49	Acenaphthene	153	10.296	10.286	(1.004)	210766	2.00000	1.96	
$	56	Fluorene-D10	174	10.886	10.887	(1.062)	171385	2.00000	2.01	
	57	Fluorene	166	10.929	10.919	(1.066)	212718	2.00000	1.98	
	65	Pentachlorophenol	266	11.848	11.849	(0.983)	43267	4.50000	8.48	
*	66	Phenanthrene-D10	188	12.051	12.052	(1.000)	72425	0.80000	(a)	
	67	Phenanthrene	178	12.083	12.073	(1.003)	231944	2.00000	2.12	
	68	Anthracene	178	12.147	12.137	(1.008)	247831	2.00000	2.25	
$	71	Fluoranthene-d10	212	13.501	13.502	(1.120)	116513	2.00000	1.98	

Data File: \\target_server\gg\chem\gcms-n.i\N121123.b\N0455.D
Report Date: 29-Dec-2023 15:34

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
	72 Fluoranthene	202	13.521	13.522	(1.122)	171676	2.00000	2.02	
$	73 Pyrene-D10	212	13.776	13.777	(0.890)	129257	2.00000	2.37	
	74 Pyrene	202	13.796	13.797	(0.891)	176065	2.00000	2.44	
	76 Benzo(a)anthracene	228	15.467	15.468	(0.999)	82772	2.00000	2.05	
*	78 Chrysene-D12	240	15.477	15.478	(1.000)	23333	0.80000	(a)	
	79 Chrysene	228	15.518	15.529	(1.003)	103476	2.00000	2.14	
	82 Benzo(b)fluoranthene	252	17.510	17.521	(0.956)	57150	2.00000	2.15	
	83 Benzo(k)fluoranthene	252	17.572	17.573	(0.959)	76406	2.00000	2.22(H)	
	84 Benzo(a)pyrene	252	18.200	18.211	(0.993)	51762	2.00000	1.99	
*	85 Perylene-D12	264	18.324	18.324	(1.000)	14581	0.80000	(a)	
	86 Indeno(1,2,3-cd)pyrene	276	20.332	20.343	(1.110)	30218	2.00000	1.60	
	87 Dibenzo(a,h)anthracene	278	20.414	20.415	(1.114)	33702	2.00000	1.73	
	88 Benzo(g,h,i)perylene	276	20.867	20.878	(1.139)	39252	2.00000	1.85	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
H - Operator selected an alternate compound hit.


Data File: \\target_server\gg\chem\gcms-n,i\N121123,b\N0455,D
Date : 11-DEC-2023 23:48
Client ID:
Sample Info: WG346778-5
Volume Injected (uL): 1.0
Column phase: Rxi-5ViOms
Instrument: gcms-n,i
Operator: EP
Column diameter: 0.25
\\target_server\gg\chem\gcms-n,i\N121123,b\N0455,D
Y (x10^5)
Min
-1,4-Dioxane-d8+
-Pyridine
-N-Nitrosodimethylamine
-Benzaldehyde
-Phenol
-1,3-Dichlorobenzene
-1,4-Dichlorobenzene-D4+
-1,2-Dichlorobenzene
-Acetophenone
-3&4-Methylphenol+
-Nitrobenzene
-Isophorone
-2-Nitrophenol
-2,4-Dimethylphenol
-bis(2-Chloroethoxy)methan+
-2,4-Dichlorophenol
-1,2,4-Trichlorobenzene
-Naphthalene-D8+
-4-Chloroaniline+
-Caprolactam
-4-Chloro-3-Methylphenol
-1-Methylnaphthalene
-1,2,4,5-Tetrachlorobenzen+
-2,4-Dibromophenol+
-2,4,5-Trichlorophenol
-2-Nitroaniline
-2,6-Dinitrotoluene
-3-Nitroaniline+
-2,4-Dinitrophenol
-2,3,4,6-Tetrachlorophenol
-4-Nitroaniline+
-N-Nitrosodiphenylamine
-4-Bromophenyl-phenylether+
-Atrazine
-Pentachlorophenol
-Anthracene
-Carbazole
-Di-n-butylphthalate
-Fluoranthene-d10+
-Pyrene-D10+
-Butylbenzylphthalate
-Benzo(a)anthracene+
-Chrysene
-bis(2-Ethylhexyl)phthalat
-Di-n-octylphthalate
-Benzo(b)fluoranthene
-Benzo(k)fluoranthene
-Benzo(a)pyrene
-Perylene-D12
-Indeno(1,2,3-cd)pyrene
-Dibenz(a,h)anthracene
-Benzo(g,h,i)perylene
2-Methylnaphthalene-D10+
-Acenaphthylene
-Acenaphthene
-Dibenzofuran+
-Fluorene-D10+
-Diethylphthalate
-4,1'-Biphenyl+
-Phenanthrene-D10+
-Chrysene-D12+
-bis(2-Chloroethyl)ether+
2,2'-Oxybis(1-chloropropa+

Form 7
Calibration Verification Summary

Lab Name: Katahdin Analytical Services
SDG: SQ6238
Lab ID: WG346831-2
Analytical Date: 12/12/23 13:17
Lab File ID: N0456.D
Instrument ID: GCMS-N
Initial Calibration Date(s): 12/07/23 12:11 12/07/23 14:42
Column ID:

Compound	$\overline{RRF}$/Amount	RF2	CCAL RRF2	Min RF	%D/ %Drift	Max %D/ %Drift	Curve Type	Qual
Naphthalene	1.09413	1.13351	1.13351	0.010	3.59891	20.000	Averaged	
2-Methylnaphthalene	0.72318	0.70244	0.70244	0.010	-2.86813	20.000	Averaged	
Acenaphthylene	2.22711	2.19362	2.19362	0.010	-1.50382	20.000	Averaged	
Acenaphthene	1.32261	1.30130	1.30130	0.010	-1.61107	20.010	Averaged	
Fluorene	1.32162	1.33307	1.33307	0.010	0.86591	20.000	Averaged	
Phenanthrene	1.20967	1.24433	1.24433	0.010	2.86557	20.000	Averaged	
Anthracene	1.21499	1.29242	1.29242	0.010	6.37304	20.000	Averaged	
Fluoranthene	0.93896	0.95208	0.95208	0.010	1.39756	20.010	Averaged	
Pyrene	2.47305	2.84559	2.84559	0.010	15.06422	20.000	Averaged	
Benzo(a)anthracene	1.38487	1.39329	1.39329	0.010	0.60765	20.000	Averaged	
Chrysene	1.65973	1.74060	1.74060	0.010	4.87239	20.000	Averaged	
Benzo(b)fluoranthene	1.45918	1.46277	1.46277	0.010	0.24609	20.000	Averaged	
Benzo(k)fluoranthene	1.88696	2.08704	2.08704	0.010	10.60365	20.000	Averaged	
Benzo(a)pyrene	1.42750	1.42944	1.42944	0.010	0.13585	20.010	Averaged	
Indeno(1,2,3-cd)pyrene	1.03440	0.97600	0.97600	0.010	-5.64526	20.000	Averaged	
Dibenzo(a,h)anthracene	1.06638	1.02822	1.02822	0.010	-3.57838	20.000	Averaged	
Benzo(g,h,i)perylene	1.16611	1.21600	1.21600	0.010	4.27834	20.000	Averaged	
2-Methylnaphthalene-D10	0.52508	0.56630	0.56630	0.010	7.85136	20.000	Averaged	
Fluorene-D10	1.04693	1.04860	1.04860	0.010	0.15942	20.000	Averaged	
Pyrene-D10	1.87184	2.10193	2.10193	0.010	12.29213	20.000	Averaged	

*** = Compound out of QC criteria**

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Data File: \\target_server\gg\chem\gcms-n.i\N121223.b\N0456.D
Report Date: 29-Dec-2023 15:35

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-n.i\N121223.b\N0456.D
Lab Smp Id: WG346831-2
Inj Date : 12-DEC-2023 13:17
Operator : EP   Inst ID: gcms-n.i
Smp Info : WG346831-2
Misc Info : WG346831,WG346831,WG346503-4,SQ6238-9
Comment   :
Method   : \\target_server\gg\chem\gcms-n.i\N121223.b\NSPSIM95.m
Meth Date : 13-Dec-2023 09:19 dtasker   Quant Type: ISTD
Cal Date : 07-DEC-2023 14:42   Cal File: N0385.D
Als bottle: 2   Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: all.sub
Target Version: 4.12
Processing Host: INSPIRON1

Concentration Formula: Amt * DF * Uf*(Vt/Vo*Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.000	Sample Volume (L)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)	REVIEW CODE
$	1 1,4-Dioxane-d8	96	2.699	2.742	(0.263)	52936	2.00000	1.89	
	2 1,4-Dioxane	88	2.730	2.784	(0.414)	56237	2.00000	2.00	
	3 N-Nitrosodimethylamine	74	3.185	3.217	(0.482)	69479	2.00000	2.01	
	4 Pyridine	79	3.248	3.238	(0.492)	116637	2.00000	1.76	
	5 Benzaldehyde	77	6.083	6.084	(0.921)	57880	2.00000	3.24	
	6 Phenol	94	6.240	6.240	(0.945)	293358	4.50000	3.94	
	7 Bis(2-Chloroethyl)ether	93	6.323	6.323	(0.957)	114796	2.00000	1.76	
	8 2-Chlorophenol	128	6.364	6.365	(0.964)	296757	4.50000	4.71	
	9 1,3-Dichlorobenzene	146	6.531	6.531	(0.989)	146094	2.00000	1.92	
*	10 1,4-Dichlorobenzene-D4	152	6.604	6.604	(1.000)	38147	0.80000	(a)	
	11 1,4-Dichlorobenzene	146	6.624	6.625	(1.003)	147558	2.00000	1.91	
	12 1,2-Dichlorobenzene	146	6.801	6.802	(1.030)	142058	2.00000	1.90	
	13 2,2'-Oxybis(1-chloropropane)	45	6.957	6.958	(1.054)	84423	2.00000	2.06	
	14 2-Methylphenol	108	6.957	6.958	(1.054)	261158	4.50000	4.46	
	15 Acetophenone	105	7.103	7.104	(0.874)	161267	2.00000	1.95	
	16 N-Nitroso-di-n-propylamine	70	7.134	7.125	(1.080)	80591	2.00000	2.02	
	17 3&4-Methylphenol	108	7.155	7.145	(1.083)	262730	4.50000	4.34	
	18 Hexachloroethane	117	7.197	7.197	(1.090)	57576	2.00000	1.91	
	19 Nitrobenzene	77	7.301	7.291	(0.899)	112812	2.00000	2.07	
	20 Isophorone	82	7.619	7.597	(0.938)	206601	2.00000	1.88	

Data File: \\target_server\gg\chem\gcms-n.i\N121223.b\N0456.D
Report Date: 29-Dec-2023 15:35

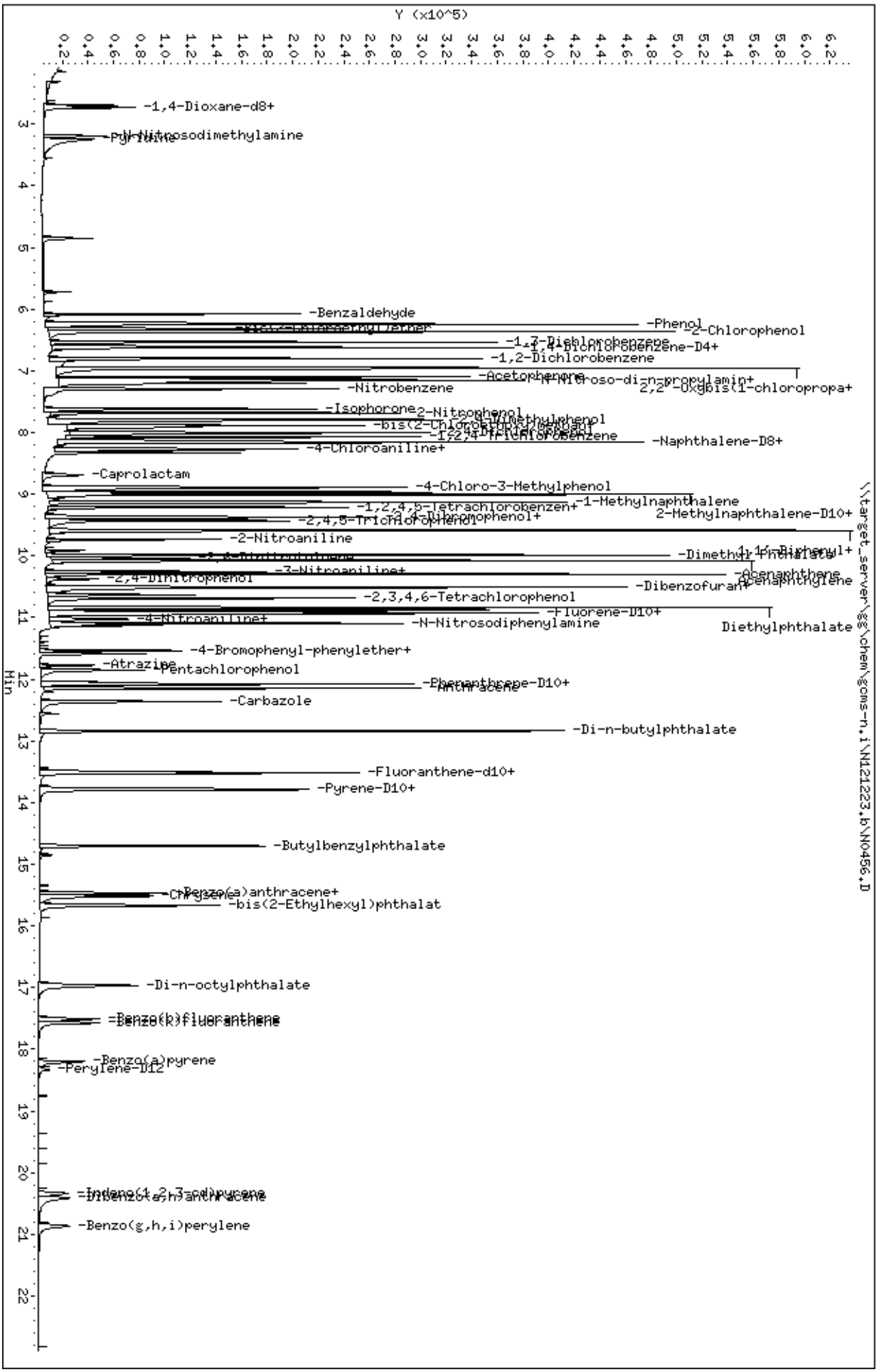
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
	21 2-Nitrophenol	139	7.686	7.675	(0.946)	144944	4.50000	6.38	
	22 2,4-Dimethylphenol	107	7.799	7.777	(0.960)	222253	4.50000	4.83	
	23 bis(2-Chloroethoxy)methane	93	7.888	7.878	(0.971)	133644	2.00000	1.96	
	24 Benzoic Acid	105	7.922	7.957	(0.975)	87773	2.00000	7.47	
	25 2,4-Dichlorophenol	162	8.001	7.979	(0.985)	216583	4.50000	4.20	
	26 1,2,4-Trichlorobenzene	180	8.068	8.069	(0.993)	110446	2.00000	2.01	
*	27 Naphthalene-D8	136	8.125	8.125	(1.000)	134676	0.80000	(a)	
	28 Naphthalene	128	8.158	8.148	(1.004)	381640	2.00000	2.07	
	29 4-Chloroaniline	127	8.282	8.282	(1.019)	80835	2.00000	2.37	
	30 Hexachlorobutadiene	225	8.327	8.317	(1.025)	50824	2.00000	2.14	
	31 Caprolactam	113	8.687	8.699	(1.069)	28147	2.00000	2.13	
	32 4-Chloro-3-Methylphenol	107	8.890	8.869	(1.094)	209801	4.50000	5.04	
$	33 2-Methylnaphthalene-D10	152	8.974	8.954	(1.105)	190669	2.00000	2.16	
	34 2-Methylnaphthalene	142	9.006	8.996	(1.108)	236503	2.00000	1.94	
	35 1-Methylnaphthalene	142	9.133	9.113	(1.124)	220753	2.00000	1.99	
	36 1,2,4,5-Tetrachlorobenzene	216	9.218	9.208	(0.899)	95327	2.00000	1.97	
	37 Hexachlorocyclopentadiene	237	9.207	9.187	(0.898)	41053	2.00000	2.02	
$	38 2,4-Dibromophenol	252	9.356	9.346	(0.912)	53766	2.00000	2.53	
	39 2,4,6-Trichlorophenol	196	9.377	9.356	(0.915)	131814	4.50000	5.55	
	40 2,4,5-Trichlorophenol	196	9.430	9.420	(0.920)	143766	4.50000	5.58	
	41 1,1'-Biphenyl	154	9.578	9.579	(0.934)	265728	2.00000	1.96	
	42 2-Chloronaphthalene	164	9.589	9.579	(0.935)	68567	2.00000	1.92	
	43 2-Nitroaniline	65	9.739	9.728	(0.950)	40645	2.00000	1.88	
	44 Dimethyl Phthalate	163	9.985	9.975	(0.974)	409757	4.50000	4.45	
	45 2,6-Dinitrotoluene	165	10.039	10.039	(0.979)	46824	2.00000	1.98	
	46 Acenaphthylene	152	10.082	10.082	(0.983)	332437	2.00000	1.97	
	47 3-Nitroaniline	138	10.253	10.243	(1.000)	23443	2.00000	2.20	
*	48 Acenaphthene-D10	164	10.253	10.254	(1.000)	60619	0.80000	(a)	
	49 Acenaphthene	153	10.296	10.286	(1.004)	197209	2.00000	1.97	
	50 2,4-Dinitrophenol	184	10.371	10.372	(1.012)	25007	4.50000	7.86	
	51 Dibenzofuran	168	10.511	10.501	(1.025)	275800	2.00000	2.05	
	52 4-Nitrophenol	109	10.511	10.490	(1.025)	28136	4.50000	4.80	
	53 2,4-Dinitrotoluene	165	10.532	10.522	(1.027)	50920	2.00000	1.90	
	54 2,3,4,6-Tetrachlorophenol	232	10.682	10.672	(1.042)	90378	4.50000	5.72	
	55 Diethylphthalate	149	10.843	10.833	(1.058)	386467	4.50000	4.46	
$	56 Fluorene-D10	174	10.886	10.887	(1.062)	158913	2.00000	2.00	
	57 Fluorene	166	10.929	10.919	(1.066)	202023	2.00000	2.02	
	58 4-Chlorophenyl-phenylether	204	10.950	10.940	(1.068)	89562	2.00000	2.02	
	59 4-Nitroaniline	138	10.993	10.983	(1.072)	20625	2.00000	2.01	
	60 4,6-Dinitro-2-Methylphenol	198	11.025	11.015	(0.915)	37423	4.50000	7.02	
	61 N-Nitrosodiphenylamine	169	11.100	11.090	(0.921)	154340	2.00000	2.15	
	62 4-Bromophenyl-phenylether	248	11.539	11.529	(0.957)	46068	2.00000	2.13	
	63 Hexachlorobenzene	284	11.592	11.582	(0.962)	49681	2.00000	2.10	
	64 Atrazine	200	11.784	11.774	(0.978)	30051	2.00000	1.90	
	65 Pentachlorophenol	266	11.848	11.849	(0.983)	48808	4.50000	9.55	
*	66 Phenanthrene-D10	188	12.051	12.052	(1.000)	72531	0.80000	(a)	
	67 Phenanthrene	178	12.083	12.073	(1.003)	225632	2.00000	2.06	
	68 Anthracene	178	12.147	12.137	(1.008)	234351	2.00000	2.13	
	69 Carbazole	167	12.361	12.361	(1.026)	164960	2.00000	2.14	
	70 Di-n-butylphthalate	149	12.831	12.831	(1.065)	488848	4.50000	3.86	
$	71 Fluoranthene-d10	212	13.501	13.502	(1.120)	116138	2.00000	1.97	
	72 Fluoranthene	202	13.521	13.522	(1.122)	172638	2.00000	2.03	
$	73 Pyrene-D10	212	13.776	13.777	(0.890)	131854	2.00000	2.24	
	74 Pyrene	202	13.796	13.797	(0.891)	178504	2.00000	2.30	

Data File: \\target_server\gg\chem\gcms-n.i\N121223.b\N0456.D
Report Date: 29-Dec-2023 15:35

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
	75 Butylbenzylphthalate	149	14.703	14.704	(0.950)	137069	4.50000	4.25	
	76 Benzo(a)anthracene	228	15.467	15.468	(0.999)	87401	2.00000	2.01	
	77 3,3'-Dichlorobenzidine	252	15.488	15.488	(1.001)	25722	2.00000	2.29	
*	78 Chrysene-D12	240	15.477	15.478	(1.000)	25092	0.80000	(a)	
	79 Chrysene	228	15.518	15.529	(1.003)	109188	2.00000	2.10	
	80 bis(2-Ethylhexyl)phthalate	149	15.671	15.672	(1.013)	151140	4.50000	3.63	
	81 Di-n-octylphthalate	149	16.965	16.965	(1.096)	188521	4.50000	3.81	
	82 Benzo(b)fluoranthene	252	17.510	17.521	(0.955)	62632	2.00000	2.00	
	83 Benzo(k)fluoranthene	252	17.572	17.573	(0.958)	89362	2.00000	2.21(H)	
	84 Benzo(a)pyrene	252	18.200	18.211	(0.993)	61205	2.00000	2.00	
*	85 Perylene-D12	264	18.334	18.324	(1.000)	17127	0.80000	(a)	
	86 Indeno(1,2,3-cd)pyrene	276	20.332	20.343	(1.109)	41790	2.00000	1.89	
	87 Dibenzo(a,h)anthracene	278	20.425	20.415	(1.114)	44026	2.00000	1.93	
	88 Benzo(g,h,i)perylene	276	20.867	20.878	(1.138)	52066	2.00000	2.08	
M	89 Total PAHs	100				2929360	36.0000	36.7	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
H - Operator selected an alternate compound hit.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Date : 12-DEC-2023 13:17
Client ID:
Sample Info: WG346831-2
Volume Injected (uL): 1.0
Column phase: Rxi-5ViOms
Instrument: gcms-n,i
Operator: EP
Column diameter: 0.25
\\target_server\gg\chem\gcms-n,i\N121223,b\N0456,D
Y (x10^5)
Min
-1,4-Dioxane-d8+
-N-Nitrosodimethylamine
-Pyridine
-Benzaldehyde
-Phenol
-2-Chlorophenol
-1,3-Dichlorobenzene
-1,4-Dichlorobenzene-D4+
-1,2-Dichlorobenzene
-Acetophenone
-N-Nitroso-di-n-propylamin+
-Nitrobenzene
-Isophorone
-2-Nitrophenol
-2,4-Dimethylphenol
-bis(2-Chloroethoxy)methan
-1,2,4-Trichlorobenzene
-Naphthalene-D8+
-4-Chloroaniline+
-Caprolactam
-4-Chloro-3-Methylphenol
-1-Methylnaphthalene
-1,2,4,5-Tetrachlorobenzen+
-2,4,6-Tribromophenol+
-2,4,5-Trichlorophenol
2-Methylnaphthalene-D10+
-2-Nitroaniline
-Dimethyl Phthalate
-1,4-Dinitrobenzene
-3-Nitroaniline+
-Acenaphthene
-2,4-Dinitrophenol
-Dibenzofuran
-Acenaphthylene
-2,3,4,6-Tetrachlorophenol
-Fluorene-D10+
-4-Nitroaniline+
-N-Nitrosodiphenylamine
Diethylphthalate
-4-Bromophenyl-phenylether+
-Atrazine
-Pentachlorophenol
-Phenanthrene-D10+
Anthracene
-Carbazole
-Di-n-butylphthalate
-Fluoranthene-d10+
-Pyrene-D10+
-Butylbenzylphthalate
-Benzo(a)anthracene+
Chrysene
-bis(2-Ethylhexyl)phthalat
-Di-n-octylphthalate
-Benzo(b)fluoranthene
Benzo(k)fluoranthene
-Benzo(a)pyrene
-Perylene-D12
-Indeno(1,2,3-cd)pyrene
Dibenz(a,h)anthracene
-Benzo(g,h,i)perylene

Form 7
Calibration Verification Summary

Lab Name: Katahdin Analytical Services
SDG: SQ6238
Lab ID: WG346831-3
Analytical Date: 12/12/23 23:46
Lab File ID: N0476.D
Instrument ID: GCMS-N
Initial Calibration Date(s): 12/07/23 12:11 12/07/23 14:42
Column ID:

Compound	$\overline{RRF}$/Amount	RF2	CCAL RRF2	Min RF	%D/ %Drift	Max %D/ %Drift	Curve Type	Qual
Naphthalene	1.09413	1.07439	1.07439	0.010	-1.80385	20.000	Averaged	
2-Methylnaphthalene	0.72318	0.63298	0.63298	0.010	-12.47232	20.000	Averaged	
Acenaphthylene	2.22711	2.27505	2.27505	0.010	2.15270	20.000	Averaged	
Acenaphthene	1.32261	1.27283	1.27283	0.010	-3.76403	20.010	Averaged	
Fluorene	1.32162	1.20318	1.20318	0.010	-8.96203	20.000	Averaged	
Phenanthrene	1.20967	1.15351	1.15351	0.010	-4.64277	20.000	Averaged	
Anthracene	1.21499	1.24100	1.24100	0.010	2.14063	20.000	Averaged	
Fluoranthene	0.93896	0.92372	0.92372	0.010	-1.62274	20.010	Averaged	
Pyrene	2.47305	2.47408	2.47408	0.010	0.04160	20.000	Averaged	
Benzo(a)anthracene	1.38487	1.38223	1.38223	0.010	-0.19090	20.000	Averaged	
Chrysene	1.65973	1.71684	1.71684	0.010	3.44043	20.000	Averaged	
Benzo(b)fluoranthene	1.45918	1.44801	1.44801	0.010	-0.76530	20.000	Averaged	
Benzo(k)fluoranthene	1.88696	1.94213	1.94213	0.010	2.92390	20.000	Averaged	
Benzo(a)pyrene	1.42750	1.36817	1.36817	0.010	-4.15621	20.010	Averaged	
Indeno(1,2,3-cd)pyrene	1.03440	0.94746	0.94746	0.010	-8.40420	20.000	Averaged	
Dibenzo(a,h)anthracene	1.06638	1.01449	1.01449	0.010	-4.86597	20.000	Averaged	
Benzo(g,h,i)perylene	1.16611	1.16484	1.16484	0.010	-0.10909	20.000	Averaged	
2-Methylnaphthalene-D10	0.52508	0.52559	0.52559	0.010	0.09771	20.000	Averaged	
Fluorene-D10	1.04693	0.97482	0.97482	0.010	-6.88792	20.000	Averaged	
Pyrene-D10	1.87184	1.85308	1.85308	0.010	-1.00229	20.000	Averaged	

*** = Compound out of QC criteria**

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Data File: \\target_server\gg\chem\gcms-n.i\N121223.b\N0476.D
Report Date: 29-Dec-2023 15:35

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-n.i\N121223.b\N0476.D
Lab Smp Id: WG346831-3
Inj Date : 12-DEC-2023 23:46
Operator : EP   Inst ID: gcms-n.i
Smp Info : WG346831-3
Misc Info : WG346831,WG346831,WG346503-4,SQ6238-9
Comment   :
Method   : \\target_server\gg\chem\gcms-n.i\N121223.b\NSPSIM95.m
Meth Date : 13-Dec-2023 09:19 dtasker   Quant Type: ISTD
Cal Date : 07-DEC-2023 14:42   Cal File: N0385.D
Als bottle: 2   Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: all.sub
Target Version: 4.12
Processing Host: INSPIRON1

Concentration Formula: Amt * DF * Uf*(Vt/Vo*Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.000	Sample Volume (L)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

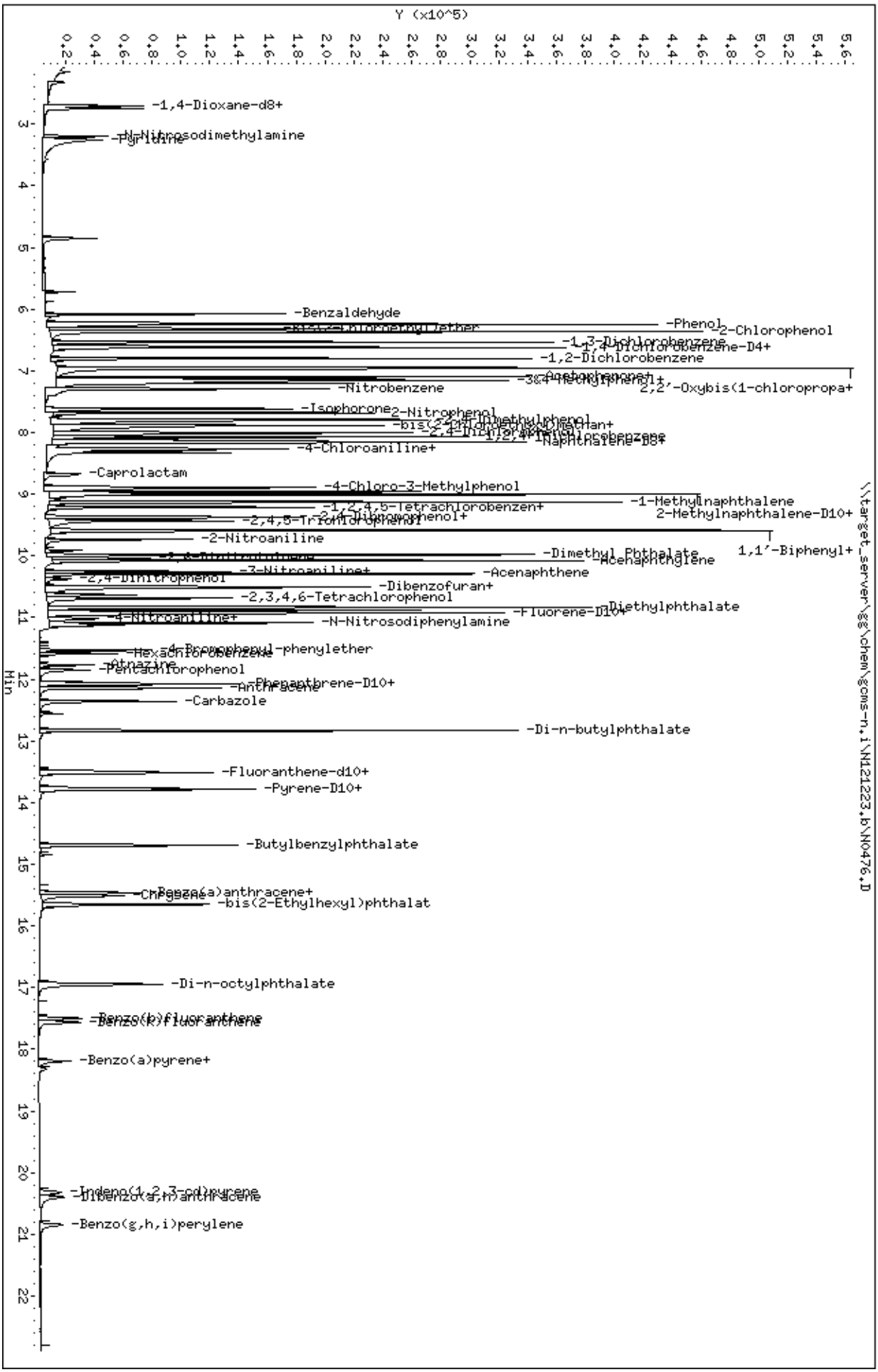
			QUANT SIG					AMOUNTS		
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
$	1	1,4-Dioxane-d8	96	2.699	2.742	(0.263)	53849	2.00000	2.63	
	2	1,4-Dioxane	88	2.741	2.784	(0.415)	56016	2.00000	2.07	
*	10	1,4-Dichlorobenzene-D4	152	6.604	6.604	(1.000)	36766	0.80000	(a)	
*	27	Naphthalene-D8	136	8.125	8.125	(1.000)	124881	0.80000	(a)	
	28	Naphthalene	128	8.158	8.148	(1.004)	335428	2.00000	1.96	
$	33	2-Methylnaphthalene-D10	152	8.964	8.954	(1.103)	164091	2.00000	2.00	
	34	2-Methylnaphthalene	142	9.006	8.996	(1.108)	197618	2.00000	1.75	
	35	1-Methylnaphthalene	142	9.123	9.113	(1.123)	182692	2.00000	1.78	
$	38	2,4-Dibromophenol	252	9.356	9.346	(0.912)	40956	2.00000	2.63	
	42	2-Chloronaphthalene	164	9.589	9.579	(0.935)	54382	2.00000	2.08	
	46	Acenaphthylene	152	10.082	10.082	(0.983)	252633	2.00000	2.04	
*	48	Acenaphthene-D10	164	10.253	10.254	(1.000)	44418	0.80000	(a)	
	49	Acenaphthene	153	10.296	10.286	(1.004)	141341	2.00000	1.92	
$	56	Fluorene-D10	174	10.886	10.887	(1.062)	108249	2.00000	1.86	
	57	Fluorene	166	10.918	10.919	(1.065)	133607	2.00000	1.82	
	65	Pentachlorophenol	266	11.848	11.849	(0.983)	24523	4.50000	7.88	
*	66	Phenanthrene-D10	188	12.051	12.052	(1.000)	44171	0.80000	(a)	
	67	Phenanthrene	178	12.083	12.073	(1.003)	127379	2.00000	1.91	
	68	Anthracene	178	12.137	12.137	(1.007)	137040	2.00000	2.04	
$	71	Fluoranthene-d10	212	13.491	13.502	(1.119)	70270	2.00000	1.96	

Data File: \\target_server\gg\chem\gcms-n.i\N121223.b\N0476.D
Report Date: 29-Dec-2023 15:35

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
	72 Fluoranthene	202	13.521	13.522	(1.122)	102004	2.00000	1.97	
$	73 Pyrene-D10	212	13.766	13.777	(0.890)	79826	2.00000	1.98	
	74 Pyrene	202	13.786	13.797	(0.891)	106577	2.00000	2.00	
	76 Benzo(a)anthracene	228	15.457	15.468	(0.999)	59543	2.00000	2.00	
*	78 Chrysene-D12	240	15.467	15.478	(1.000)	17231	0.80000	(a)	
	79 Chrysene	228	15.518	15.529	(1.003)	73957	2.00000	2.07	
	82 Benzo(b)fluoranthene	252	17.500	17.521	(0.956)	41261	2.00000	1.98	
	83 Benzo(k)fluoranthene	252	17.562	17.573	(0.959)	55341	2.00000	2.06(H)	
	84 Benzo(a)pyrene	252	18.190	18.211	(0.993)	38986	2.00000	1.92	
*	85 Perylene-D12	264	18.313	18.324	(1.000)	11398	0.80000	(a)	
	86 Indeno(1,2,3-cd)pyrene	276	20.322	20.343	(1.110)	26998	2.00000	1.83	
	87 Dibenzo(a,h)anthracene	278	20.404	20.415	(1.114)	28908	2.00000	1.90	
	88 Benzo(g,h,i)perylene	276	20.847	20.878	(1.138)	33192	2.00000	2.00	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
H - Operator selected an alternate compound hit.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Date : 12-DEC-2023 23:46
Client ID:
Sample Info: WG346831-3
Volume Injected (uL): 1.0
Column phase: Rxi-5ViMS
Instrument: gcms-n,i
Operator: EP
Column diameter: 0.25
\\target_server\gg\chem\gcms-n,i\N121223,b\N0476.D
Y (x10^5)
Min
-1,4-Dioxane-d8+
-Pyridine
-Benzaldehyde
-Phenol
-2-Chlorophenol
-1,3-Dichlorobenzene
-1,4-Dichlorobenzene-D4+
-1,2-Dichlorobenzene
-Nitrobenzene
-Isophorone
-2-Nitrophenol
-4-Chloroaniline+
-Caprolactam
-4-Chloro-3-Methylphenol
-1-Methylnaphthalene
2-Methylnaphthalene-D10+
-2-Nitroaniline
-Dimethyl Phthalate
1,1'-Biphenyl+
-Acenaphthene
-2,4-Dinitrophenol
-Dibenzofuran+
-2,3,4,6-Tetrachlorophenol
-Diethylphthalate
-4-Nitroaniline+
-N-Nitrosodiphenylamine
-Hexachlorobenzene
-Atrazine
-Pentachlorophenol
-Phenanthrene-D10+
-Anthracene
-Carbazole
-Di-n-butylphthalate
-Fluoranthene-d10+
-Pyrene-D10+
-Butylbenzylphthalate
-Benzo(a)anthracene+
-Chrysene
-bis(2-Ethylhexyl)phthalat
-Di-n-octylphthalate
-Benzo(b)fluoranthene
-Benzo(k)fluoranthene
-Benzo(a)pyrene+
-Indeno(1,2,3-cd)pyrene
-Dibenzo(a,h)anthracene
-Benzo(g,h,i)perylene

Form 7
Calibration Verification Summary

Lab Name: Katahdin Analytical Services
SDG: SQ6238
Lab ID: WG346831-4
Analytical Date: 12/13/23 00:18
Lab File ID: N0477.D
Instrument ID: GCMS-N
Initial Calibration Date(s): 12/07/23 12:11 12/07/23 14:42
Column ID:

Compound	$\overline{RRF}$/Amount	RF2	CCAL RRF2	Min RF	%D/ %Drift	Max %D/ %Drift	Curve Type	Qual
Naphthalene	1.09413	1.07053	1.07053	0.010	-2.15680	20.000	Averaged	
2-Methylnaphthalene	0.72318	0.62714	0.62714	0.010	-13.27985	20.000	Averaged	
Acenaphthylene	2.22711	2.26878	2.26878	0.010	1.87094	20.000	Averaged	
Acenaphthene	1.32261	1.24978	1.24978	0.010	-5.50661	20.010	Averaged	
Fluorene	1.32162	1.20472	1.20472	0.010	-8.84520	20.000	Averaged	
Phenanthrene	1.20967	1.16523	1.16523	0.010	-3.67413	20.000	Averaged	
Anthracene	1.21499	1.22318	1.22318	0.010	0.67435	20.000	Averaged	
Fluoranthene	0.93896	0.86381	0.86381	0.010	-8.00300	20.010	Averaged	
Pyrene	2.47305	2.52198	2.52198	0.010	1.97857	20.000	Averaged	
Benzo(a)anthracene	1.38487	1.36358	1.36358	0.010	-1.53736	20.000	Averaged	
Chrysene	1.65973	1.75377	1.75377	0.010	5.66570	20.000	Averaged	
Benzo(b)fluoranthene	1.45918	1.43019	1.43019	0.010	-1.98657	20.000	Averaged	
Benzo(k)fluoranthene	1.88696	2.00959	2.00959	0.010	6.49893	20.000	Averaged	
Benzo(a)pyrene	1.42750	1.38186	1.38186	0.010	-3.19742	20.010	Averaged	
Indeno(1,2,3-cd)pyrene	1.03440	0.97357	0.97357	0.010	-5.88034	20.000	Averaged	
Dibenzo(a,h)anthracene	1.06638	1.03057	1.03057	0.010	-3.35828	20.000	Averaged	
Benzo(g,h,i)perylene	1.16611	1.20245	1.20245	0.010	3.11694	20.000	Averaged	
2-Methylnaphthalene-D10	0.52508	0.52286	0.52286	0.010	-0.42174	20.000	Averaged	
Fluorene-D10	1.04693	0.96904	0.96904	0.010	-7.43985	20.000	Averaged	
Pyrene-D10	1.87184	1.90647	1.90647	0.010	1.84982	20.000	Averaged	

*** = Compound out of QC criteria**

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Data File: \\target_server\gg\chem\gcms-n.i\N121223.b\N0477.D
Report Date: 29-Dec-2023 15:35

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-n.i\N121223.b\N0477.D
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Inj Date : 13-DEC-2023 00:18
Operator : EP   Inst ID: gcms-n.i
Smp Info : WG346831-4
Misc Info : WG346831,WG346831,WG346503-4,SQ6238-9
Comment   :
Method   : \\target_server\gg\chem\gcms-n.i\N121223.b\NSPSIM95.m
Meth Date : 13-Dec-2023 09:19 dtasker   Quant Type: ISTD
Cal Date : 07-DEC-2023 14:42   Cal File: N0385.D
Als bottle: 2   Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: all.sub
Target Version: 4.12
Processing Host: INSPIRON1

Concentration Formula: Amt * DF * Uf*(Vt/Vo*Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.000	Sample Volume (L)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

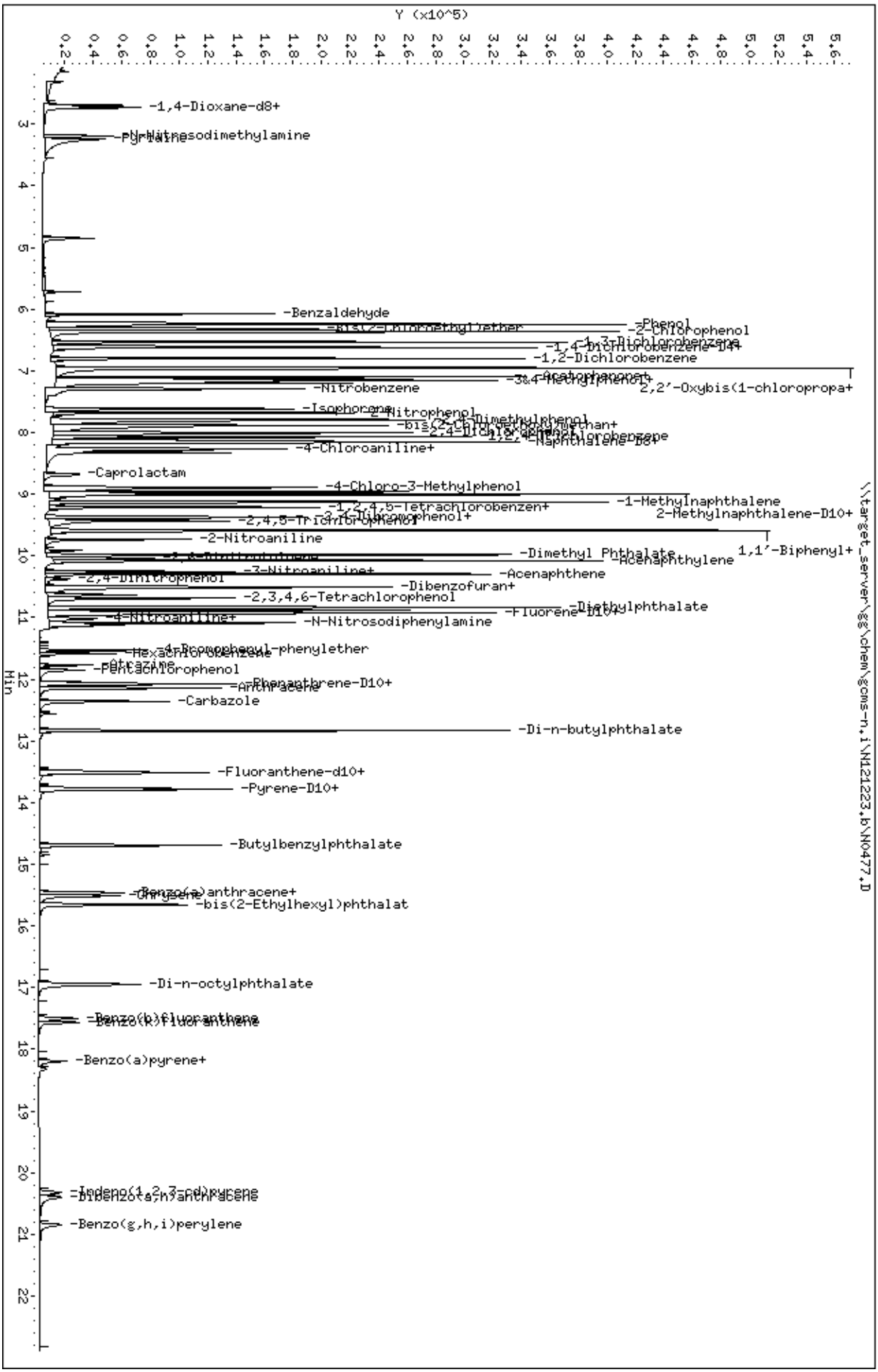
			QUANT SIG					AMOUNTS		
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
$	1	1,4-Dioxane-d8	96	2.699	2.742	(0.263)	52962	2.00000	2.52	
	2	1,4-Dioxane	88	2.730	2.784	(0.414)	55533	2.00000	2.01	
*	10	1,4-Dichlorobenzene-D4	152	6.604	6.604	(1.000)	37559	0.80000	(a)	
*	27	Naphthalene-D8	136	8.125	8.125	(1.000)	127051	0.80000	(a)	
	28	Naphthalene	128	8.159	8.148	(1.004)	340030	2.00000	1.96	
$	33	2-Methylnaphthalene-D10	152	8.964	8.954	(1.103)	166076	2.00000	1.99	
	34	2-Methylnaphthalene	142	9.006	8.996	(1.108)	199197	2.00000	1.73	
	35	1-Methylnaphthalene	142	9.123	9.113	(1.123)	185000	2.00000	1.77	
$	38	2,4-Dibromophenol	252	9.356	9.346	(0.912)	41335	2.00000	2.58	
	42	2-Chloronaphthalene	164	9.589	9.579	(0.935)	55636	2.00000	2.07	
	46	Acenaphthylene	152	10.082	10.082	(0.983)	258924	2.00000	2.04	
*	48	Acenaphthene-D10	164	10.253	10.254	(1.000)	45650	0.80000	(a)	
	49	Acenaphthene	153	10.296	10.286	(1.004)	142631	2.00000	1.89	
$	56	Fluorene-D10	174	10.886	10.887	(1.062)	110592	2.00000	1.85	
	57	Fluorene	166	10.918	10.919	(1.065)	137489	2.00000	1.82	
	65	Pentachlorophenol	266	11.848	11.849	(0.983)	22919	4.50000	7.42	
*	66	Phenanthrene-D10	188	12.051	12.052	(1.000)	43848	0.80000	(a)	
	67	Phenanthrene	178	12.083	12.073	(1.003)	127732	2.00000	1.93	
	68	Anthracene	178	12.147	12.137	(1.008)	134085	2.00000	2.01	
$	71	Fluoranthene-d10	212	13.501	13.502	(1.120)	65310	2.00000	1.83	

Data File: \\target_server\gg\chem\gcms-n.i\N121223.b\N0477.D
Report Date: 29-Dec-2023 15:35

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
	72 Fluoranthene	202	13.522	13.522	(1.122)	94691	2.00000	1.84	
$	73 Pyrene-D10	212	13.766	13.777	(0.889)	74600	2.00000	2.04	
	74 Pyrene	202	13.786	13.797	(0.891)	98685	2.00000	2.04	
	76 Benzo(a)anthracene	228	15.457	15.468	(0.999)	53357	2.00000	1.97	
*	78 Chrysene-D12	240	15.477	15.478	(1.000)	15652	0.80000	(a)	
	79 Chrysene	228	15.518	15.529	(1.003)	68625	2.00000	2.11	
	82 Benzo(b)fluoranthene	252	17.500	17.521	(0.956)	37285	2.00000	1.96	
	83 Benzo(k)fluoranthene	252	17.562	17.573	(0.959)	52390	2.00000	2.13(H)	
	84 Benzo(a)pyrene	252	18.200	18.211	(0.994)	36025	2.00000	1.94	
*	85 Perylene-D12	264	18.313	18.324	(1.000)	10428	0.80000	(a)	
	86 Indeno(1,2,3-cd)pyrene	276	20.322	20.343	(1.110)	25381	2.00000	1.88	
	87 Dibenzo(a,h)anthracene	278	20.404	20.415	(1.114)	26867	2.00000	1.93	
	88 Benzo(g,h,i)perylene	276	20.847	20.878	(1.138)	31348	2.00000	2.06	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
H - Operator selected an alternate compound hit.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Date : 13-DEC-2023 00:18
Client ID:
Sample Info: WG346831-4
Volume Injected (uL): 1.0
Column phase: Rxi-5ViOCms
Instrument: gcms-n,i
Operator: EP
Column diameter: 0.25
\\target_server\gg\chem\gcms-n,i\N121223,b\N0477.D
Y (x10^5)
Min
-1,4-Dioxane-d8+
-Pyridine
-N-Nitrosodimethylamine
-Benzaldehyde
-Phenol
-2-Chlorophenol
-1,3-Dichlorobenzene
-1,4-Dichlorobenzene-D4+
-1,2-Dichlorobenzene
-Acetophenone+
-3&4-Methylphenol+
-Nitrobenzene
2,2'-Oxybis(1-chloropropa+
-Isophorone
-2-Nitrophenol
-2,4-Dimethylphenol
-bis(2-Chloroethoxy)methan+
-2,4-Dichlorophenol+
-1,2,4-Trichlorobenzene
-Naphthalene-D8+
-4-Chloroaniline+
-Caprolactam
-4-Chloro-3-Methylphenol
-1-Methylnaphthalene
-1,2,4,5-Tetrachlorobenzen+
2-Methylnaphthalene-D10+
-2,4,6-Trichlorophenol
-2,4-Dibromophenol+
-2-Nitroaniline
-Dimethyl Phthalate
1,1'-Biphenyl+
-Acenaphthylene
-3-Nitroaniline+
-Acenaphthene
-2,4-Dinitrophenol
-Dibenzofuran+
-2,3,4,6-Tetrachlorophenol
-Fluorene-D10+
-Diethylphthalate
-4-Nitroaniline+
-N-Nitrosodiphenylamine
-4-Bromophenyl-phenylether
-Hexachlorobenzene
-Atrazine
-Pentachlorophenol
-Phenanthrene-D10+
-Anthracene
-Carbazole
-Di-n-butylphthalate
-Fluoranthene-d10+
-Pyrene-D10+
-Butylbenzylphthalate
-Benzo(a)anthracene+
-Chrysene
-bis(2-Ethylhexyl)phthalat
-Di-n-octylphthalate
-Benzo(b)fluoranthene
-Benzo(k)fluoranthene
-Benzo(a)pyrene+
-Indeno(1,2,3-cd)pyrene
-Dibenz[a,h]anthracene
-Benzo(g,h,i)perylene

Form 7
Calibration Verification Summary

Lab Name: Katahdin Analytical Services
SDG: SQ6238
Lab ID: WG346831-5
Analytical Date: 12/13/23 00:50
Lab File ID: N0478.D
Instrument ID: GCMS-N
Initial Calibration Date(s): 12/07/23 12:11 12/07/23 14:42
Column ID:

Compound	$\overline{RRF}$/Amount	RF2	CCAL RRF2	Min RF	%D/ %Drift	Max %D/ %Drift	Curve Type	Qual
Naphthalene	1.09413	1.08905	1.08905	0.010	-0.46441	20.000	Averaged	
2-Methylnaphthalene	0.72318	0.63528	0.63528	0.010	-12.15486	20.000	Averaged	
Acenaphthylene	2.22711	2.21153	2.21153	0.010	-0.69933	20.000	Averaged	
Acenaphthene	1.32261	1.28361	1.28361	0.010	-2.94899	20.010	Averaged	
Fluorene	1.32162	1.21243	1.21243	0.010	-8.26238	20.000	Averaged	
Phenanthrene	1.20967	1.14971	1.14971	0.010	-4.95707	20.000	Averaged	
Anthracene	1.21499	1.22379	1.22379	0.010	0.72448	20.000	Averaged	
Fluoranthene	0.93896	0.84932	0.84932	0.010	-9.54623	20.010	Averaged	
Pyrene	2.47305	2.52899	2.52899	0.010	2.26220	20.000	Averaged	
Benzo(a)anthracene	1.38487	1.33817	1.33817	0.010	-3.37244	20.000	Averaged	
Chrysene	1.65973	1.72332	1.72332	0.010	3.83112	20.000	Averaged	
Benzo(b)fluoranthene	1.45918	1.45619	1.45619	0.010	-0.20487	20.000	Averaged	
Benzo(k)fluoranthene	1.88696	2.03890	2.03890	0.010	8.05199	20.000	Averaged	
Benzo(a)pyrene	1.42750	1.37949	1.37949	0.010	-3.36299	20.010	Averaged	
Indeno(1,2,3-cd)pyrene	1.03440	0.94661	0.94661	0.010	-8.48645	20.000	Averaged	
Dibenzo(a,h)anthracene	1.06638	1.03288	1.03288	0.010	-3.14187	20.000	Averaged	
Benzo(g,h,i)perylene	1.16611	1.21169	1.21169	0.010	3.90900	20.000	Averaged	
2-Methylnaphthalene-D10	0.52508	0.53476	0.53476	0.010	1.84351	20.000	Averaged	
Fluorene-D10	1.04693	0.97899	0.97899	0.010	-6.48942	20.000	Averaged	
Pyrene-D10	1.87184	1.89525	1.89525	0.010	1.25081	20.000	Averaged	

*** = Compound out of QC criteria**

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Data File: \\target_server\gg\chem\gcms-n.i\N121223.b\N0478.D
Report Date: 29-Dec-2023 15:35

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-n.i\N121223.b\N0478.D
Lab Smp Id: WG346831-5
Inj Date : 13-DEC-2023 00:50
Operator : EP   Inst ID: gcms-n.i
Smp Info : WG346831-5
Misc Info : WG346831,WG346831,WG346503-4,SQ6238-9
Comment   :
Method   : \\target_server\gg\chem\gcms-n.i\N121223.b\NSPSIM95.m
Meth Date : 13-Dec-2023 09:19 dtasker   Quant Type: ISTD
Cal Date : 07-DEC-2023 14:42   Cal File: N0385.D
Als bottle: 2   Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: all.sub
Target Version: 4.12
Processing Host: INSPIRON1

Concentration Formula: Amt * DF * Uf*(Vt/Vo*Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.000	Sample Volume (L)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

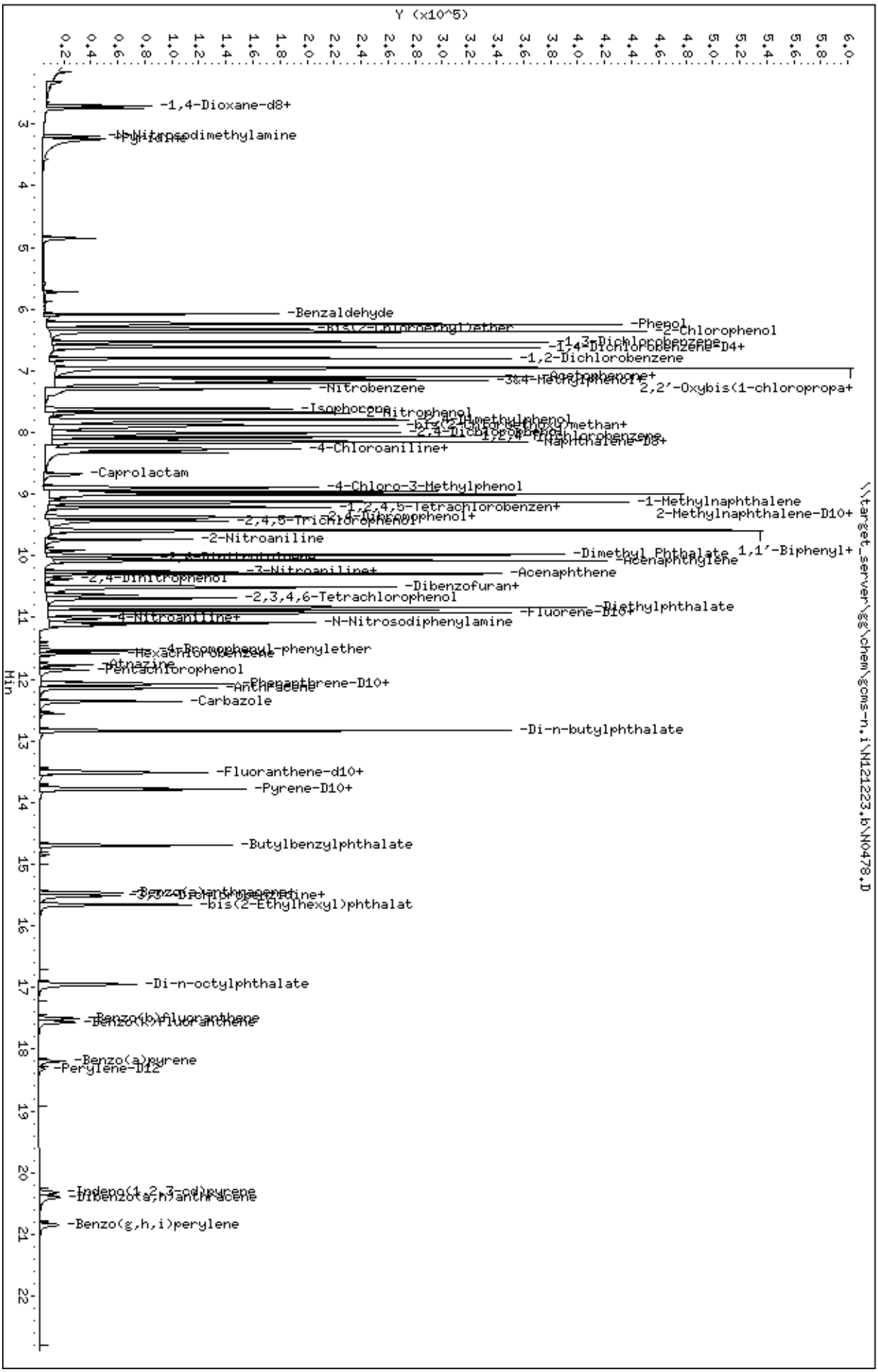
			QUANT SIG					AMOUNTS		
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
$	1	1,4-Dioxane-d8	96	2.699	2.742	(0.263)	56655	2.00000	2.54	
	2	1,4-Dioxane	88	2.741	2.784	(0.415)	59781	2.00000	2.08	
*	10	1,4-Dichlorobenzene-D4	152	6.604	6.604	(1.000)	39006	0.80000	(a)	
*	27	Naphthalene-D8	136	8.125	8.125	(1.000)	131177	0.80000	(a)	
	28	Naphthalene	128	8.159	8.148	(1.004)	357145	2.00000	1.99	
$	33	2-Methylnaphthalene-D10	152	8.964	8.954	(1.103)	175370	2.00000	2.04	
	34	2-Methylnaphthalene	142	9.006	8.996	(1.108)	208334	2.00000	1.76	
	35	1-Methylnaphthalene	142	9.123	9.113	(1.123)	194700	2.00000	1.80	
$	38	2,4-Dibromophenol	252	9.356	9.346	(0.912)	43895	2.00000	2.58	
	42	2-Chloronaphthalene	164	9.589	9.579	(0.935)	59112	2.00000	2.08	
	46	Acenaphthylene	152	10.082	10.082	(0.983)	267507	2.00000	1.99	
*	48	Acenaphthene-D10	164	10.253	10.254	(1.000)	48384	0.80000	(a)	
	49	Acenaphthene	153	10.286	10.286	(1.003)	155265	2.00000	1.94	
$	56	Fluorene-D10	174	10.886	10.887	(1.062)	118419	2.00000	1.87	
	57	Fluorene	166	10.918	10.919	(1.065)	146655	2.00000	1.83	
	65	Pentachlorophenol	266	11.848	11.849	(0.983)	24685	4.50000	7.41	
*	66	Phenanthrene-D10	188	12.051	12.052	(1.000)	47282	0.80000	(a)	
	67	Phenanthrene	178	12.083	12.073	(1.003)	135901	2.00000	1.90	
	68	Anthracene	178	12.147	12.137	(1.008)	144658	2.00000	2.01	
$	71	Fluoranthene-d10	212	13.501	13.502	(1.120)	67883	2.00000	1.77	

Data File: \\target_server\gg\chem\gcms-n.i\N121223.b\N0478.D
Report Date: 29-Dec-2023 15:35

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
	72 Fluoranthene	202	13.521	13.522	(1.122)	100394	2.00000	1.81	
$	73 Pyrene-D10	212	13.766	13.777	(0.889)	77857	2.00000	2.02	
	74 Pyrene	202	13.786	13.797	(0.891)	103891	2.00000	2.04	
	76 Benzo(a)anthracene	228	15.457	15.468	(0.999)	54972	2.00000	1.93	
*	78 Chrysene-D12	240	15.477	15.478	(1.000)	16432	0.80000	(a)	
	79 Chrysene	228	15.518	15.529	(1.003)	70794	2.00000	2.08	
	82 Benzo(b)fluoranthene	252	17.500	17.521	(0.956)	38487	2.00000	2.00	
	83 Benzo(k)fluoranthene	252	17.562	17.573	(0.959)	53888	2.00000	2.16(H)	
	84 Benzo(a)pyrene	252	18.190	18.211	(0.993)	36460	2.00000	1.93	
*	85 Perylene-D12	264	18.313	18.324	(1.000)	10572	0.80000	(a)	
	86 Indeno(1,2,3-cd)pyrene	276	20.322	20.343	(1.110)	25019	2.00000	1.83	
	87 Dibenzo(a,h)anthracene	278	20.404	20.415	(1.114)	27299	2.00000	1.94	
	88 Benzo(g,h,i)perylene	276	20.857	20.878	(1.139)	32025	2.00000	2.08	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
H - Operator selected an alternate compound hit.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Date : 13-DEC-2023 00:50
Client ID:
Sample Info: WG346831-5
Volume Injected (uL): 1.0
Column phase: Rxi-5ViMS
Instrument: gcms-n,i
Operator: EP
Column diameter: 0.25
\\target_server\gg\chem\gcms-n,i\N121223,b\N0478.D
Y (x10^5)
Min
-1,4-Dioxane-d8+
-N-Nitrosodimethylamine
-Pyridine
-Benzaldehyde
-Phenol
-2-Chlorophenol
-1,3-Dichlorobenzene
-1,4-Dichlorobenzene-D4+
-1,2-Dichlorobenzene
-Acetophenone+
-3&4-Methylphenol+
2,2'-Oxybis(1-chloropropa+
-Nitrobenzene
-Isophorone
-2-Nitrophenol
-2,4-Dimethylphenol
-4-Chloroaniline+
-Caprolactam
-4-Chloro-3-Methylphenol
-1-Methylnaphthalene
2-Methylnaphthalene-D10+
-2,4,5-Trichlorophenol
-2-Nitroaniline
-Dimethyl Phthalate
-1,1'-Biphenyl+
-Acenaphthylene
-3-Nitroaniline+
-Acenaphthene
-2,4-Dinitrophenol
-Dibenzofuran+
-2,3,4,6-Tetrachlorophenol
-Fluorene-D10+
-Diethylphthalate
-4-Nitroaniline+
-N-Nitrosodiphenylamine
-4-Bromophenyl-phenylether
-Hexachlorobenzene
-Atrazine
-Pentachlorophenol
-Phenanthrene-D10+
-Anthracene
-Carbazole
-Di-n-butylphthalate
-Fluoranthene-d10+
-Pyrene-D10+
-Butylbenzylphthalate
-Benzo(a)anthracene
-3,3'-Dichlorobenzidine+
-bis(2-Ethylhexyl)phthalat
-Di-n-octylphthalate
-Benzo(b)fluoranthene
-Benzo(k)fluoranthene
-Benzo(a)pyrene
-Perylene-D12
-Indeno(1,2,3-cd)pyrene
-Dibenz(a,h)anthracene
-Benzo(g,h,i)perylene

Data File: \\target_server\gg\chem\gcms-n.i\N120723.b\ND537.D

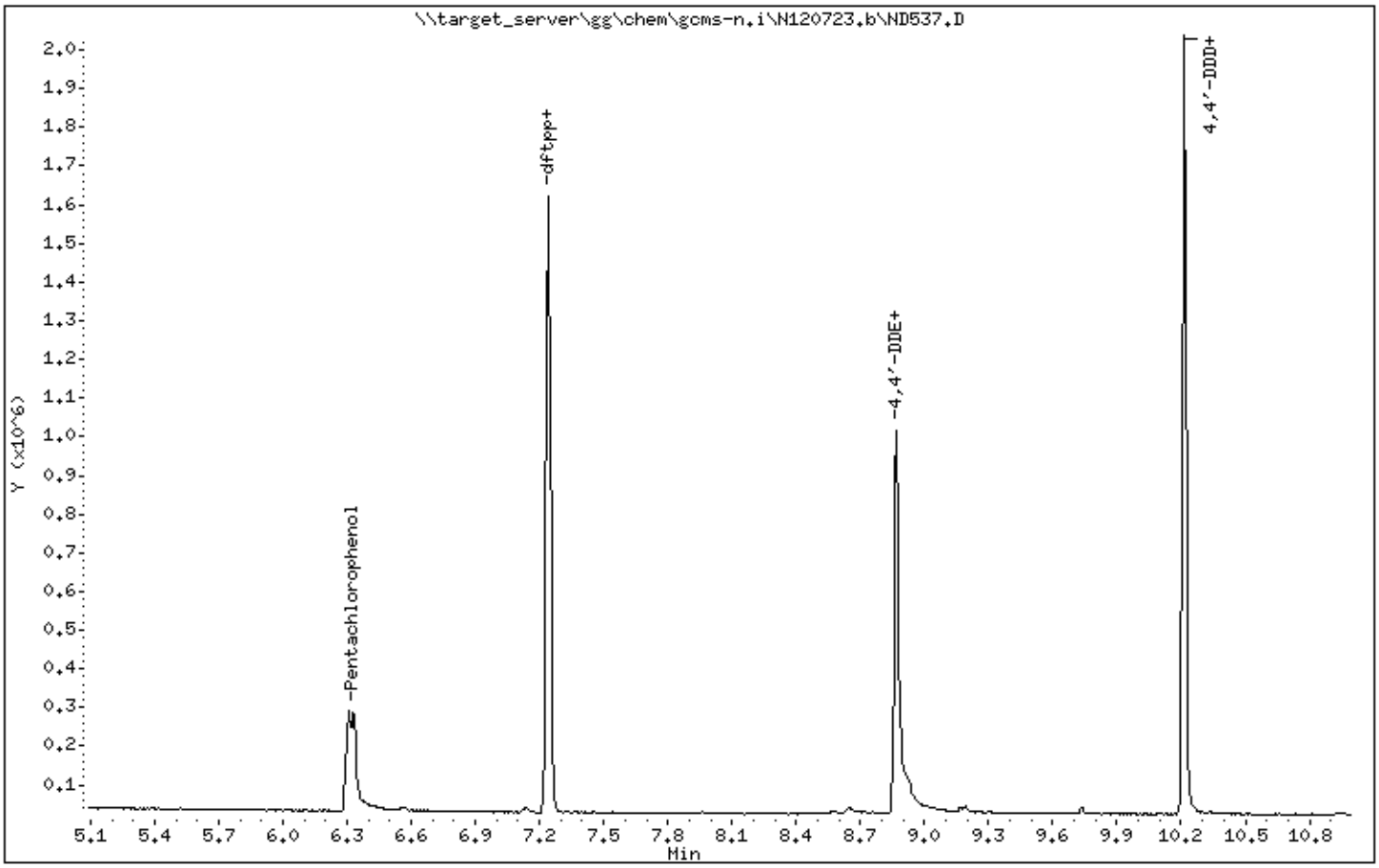
Date : 07-DEC-2023 11:53

Client ID: DFTPP02 Instrument: gcms-n.i

Sample Info: WG346503-1

Operator: EP

Column phase: Rxi-SVOCms Column diameter: 0.25



Data File: \\target_server\gg\chem\gcms-n.i\N120723.b\ND537.D

Date : 07-DEC-2023 11:53

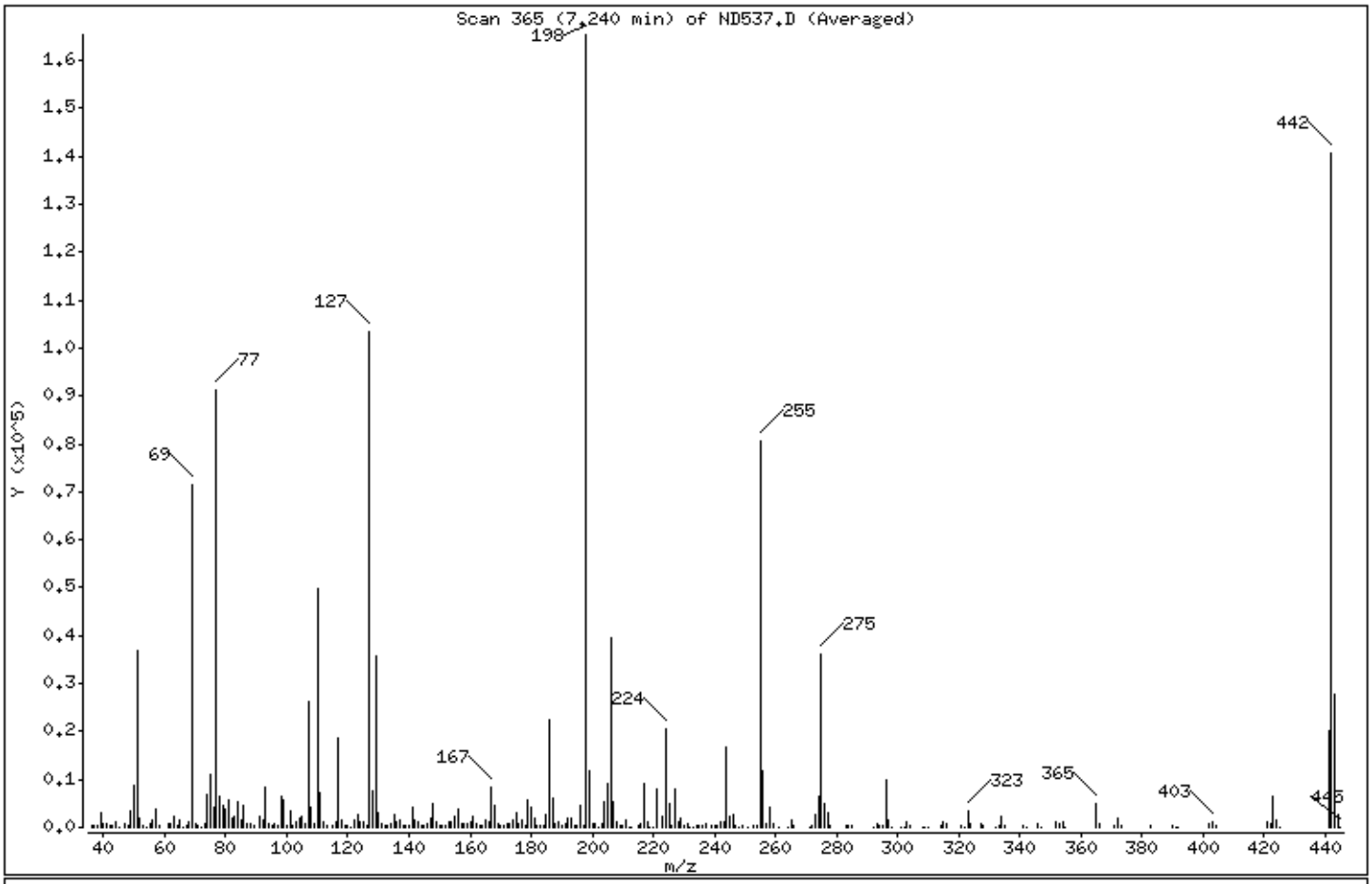
Client ID: DFTPP02 Instrument: gcms-n.i

Sample Info: WG346503-1

Operator: EP

Column phase: Rxi-SVOCms Column diameter: 0.25

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	10.00 - 80.00% of mass 198	22.22
68	Less than 2.00% of mass 69	0.74 (1.72)
69	Greater than 0.10% of mass 198	42.88
70	Less than 2.00% of mass 69	0.34 (0.79)
127	10.00 - 80.00% of mass 198	61.30
197	Less than 2.00% of mass 198	0.15
199	5.00 - 9.00% of mass 198	6.78
275	10.00 - 60.00% of mass 198	21.99
365	Greater than 1.00% of mass 198	2.99
441	0.01 - 100.00% of mass 443	13.07 (74.52)
442	Greater than 50.00% of mass 442	88.57 (100.00)
443	15.00 - 24.00% of mass 442	17.54 (19.80)

Data File: \\target_server\gg\chem\gcms-n.i\N120723.b\ND537.D

Date : 07-DEC-2023 11:53

Client ID: DFTPP02 Instrument: gcms-n.i

Sample Info: WG346503-1

Operator: EP

Column phase: Rxi-SVOCms Column diameter: 0.25

Data File: ND537.D
Spectrum: Scans 365-367 (7.240 min), Subtraction Scan 359
Location of Maximum: 198.00
Number of points: 279

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	88	118.00	1536	188.00	667	266.00	396
37.00	117	119.00	96	189.00	1262	271.00	168
38.00	531	120.00	426	190.00	235	272.00	281
39.00	2810	121.00	124	191.00	606	273.00	2571
40.00	30	122.00	1447	192.00	1793	274.00	6524
41.00	35	123.00	2602	193.00	2064	275.00	36074
45.00	50	124.00	1056	194.00	480	276.00	4935
48.00	21	125.00	1077	195.00	244	277.00	2915
50.00	8344	126.00	337	196.00	4551	278.00	464
51.00	35654	127.00	103280	197.00	407	283.00	303
52.00	1959	128.00	7597	198.00	165397	284.00	248
53.00	218	129.00	35704	199.00	11632	285.00	507
55.00	136	130.00	3053	200.00	835	292.00	67
56.00	1132	131.00	636	201.00	780	293.00	695
57.00	3196	132.00	320	202.00	109	294.00	201
58.00	208	133.00	130	203.00	942	295.00	222
61.00	683	134.00	899	204.00	5280	296.00	9951
62.00	776	135.00	2781	205.00	9166	297.00	1418
63.00	2200	136.00	1212	206.00	39437	298.00	110
64.00	422	137.00	1680	207.00	5279	301.00	153
65.00	1568	138.00	352	208.00	1208	302.00	132
66.00	105	139.00	204	209.00	367	303.00	1218
67.00	173	140.00	422	210.00	512	304.00	337
68.00	904	141.00	4046	211.00	1346	308.00	55
69.00	70940	142.00	1490	212.00	133	309.00	112
70.00	402	143.00	1033	213.00	108	310.00	64
71.00	17	144.00	265	215.00	363	314.00	499
72.00	67	145.00	337	216.00	720	315.00	1110
73.00	610	146.00	818	217.00	9250	316.00	656
74.00	6667	147.00	2041	218.00	1324	321.00	335
75.00	11188	148.00	4926	219.00	169	322.00	124
76.00	4000	149.00	1046	220.00	71	323.00	3572
77.00	91175	150.00	304	221.00	8125	324.00	713
78.00	6385	151.00	568	223.00	2167	327.00	629
79.00	4331	152.00	402	224.00	20416	328.00	317

Data File: \\target_server\gg\chem\gcms-n.i\N120723.b\ND537.D

Date : 07-DEC-2023 11:53

Client ID: DFTPP02 Instrument: gcms-n.i

Sample Info: WG346503-1

Operator: EP

Column phase: Rxi-SVOCms Column diameter: 0.25

Data File: ND537.D
Spectrum: Scans 365-367 (7.240 min), Subtraction Scan 359
Location of Maximum: 198.00
Number of points: 279

m/z	Y	m/z	Y	m/z	Y	m/z	Y
80.00	3637	153.00	1164	225.00	5047	332.00	140
81.00	5517	154.00	962	226.00	448	333.00	332
82.00	1596	155.00	2399	227.00	8049	334.00	2252
83.00	1597	156.00	3631	228.00	1206	335.00	524
85.00	992	157.00	873	229.00	1731	341.00	370
86.00	1042	158.00	731	230.00	312	342.00	51
87.00	777	159.00	687	231.00	766	346.00	917
88.00	263	160.00	1301	232.00	124	347.00	124
89.00	208	161.00	2093	233.00	50	352.00	1067
91.00	1329	162.00	663	234.00	533	353.00	798
92.00	1210	163.00	220	235.00	560	354.00	1047
93.00	8287	164.00	291	236.00	436	355.00	160
94.00	663	165.00	1385	237.00	656	365.00	4878
95.00	221	166.00	1098	239.00	297	366.00	697
96.00	532	167.00	8377	240.00	199	371.00	289
97.00	224	168.00	4718	241.00	431	372.00	2037
98.00	6135	169.00	805	242.00	1050	373.00	461
99.00	5615	170.00	273	243.00	1131	383.00	502
100.00	457	171.00	332	244.00	16916	390.00	314
101.00	3426	172.00	636	245.00	2236	391.00	165
102.00	197	173.00	938	246.00	2665	392.00	122
103.00	1039	174.00	1541	247.00	530	402.00	763
104.00	1974	175.00	3085	248.00	57	403.00	1175
105.00	1805	176.00	846	249.00	550	404.00	400
106.00	619	177.00	1384	251.00	52	421.00	1066
107.00	25951	178.00	475	253.00	310	422.00	914
108.00	4243	179.00	5663	254.00	331	423.00	6620
109.00	535	180.00	4254	255.00	80512	424.00	1426
110.00	49890	181.00	1987	256.00	11806	425.00	72
111.00	7066	182.00	290	257.00	854	441.00	20307
112.00	1016	183.00	222	258.00	4286	442.00	140704
113.00	375	184.00	479	259.00	689	443.00	27805
115.00	28	185.00	2743	261.00	115	444.00	2656
116.00	1247	186.00	22602	264.00	103	445.00	62
117.00	18618	187.00	6154	265.00	1668		

Data File: \\target_server\gg\chem\gcms-n.i\N121123.b\ND540.D

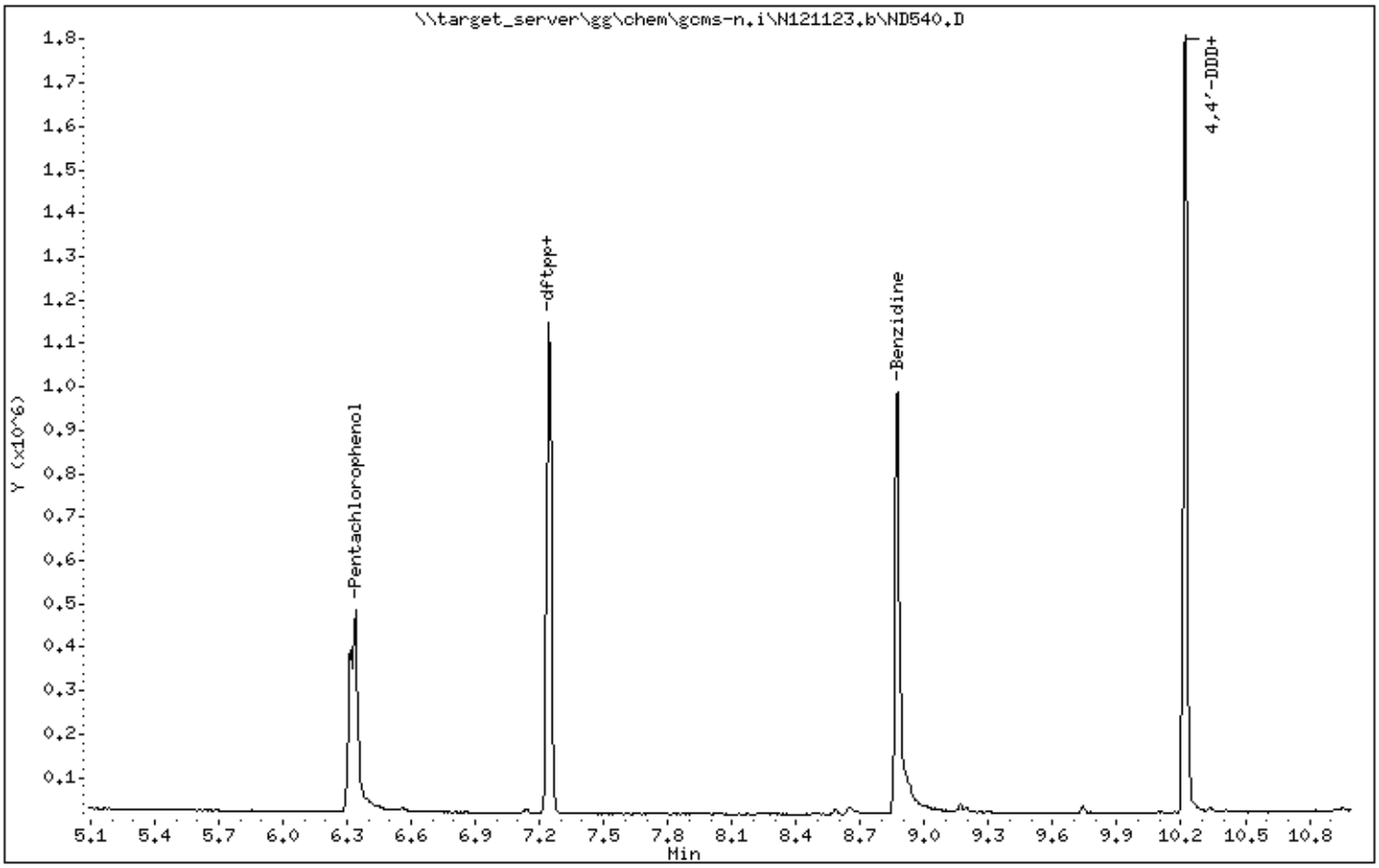
Date : 11-DEC-2023 11:58

Client ID: DFTPP02 Instrument: gcms-n.i

Sample Info: WG346778-1

Operator: EP

Column phase: Rxi-SVOCms Column diameter: 0.25



Data File: \\target_server\gg\chem\gcms-n.i\N121123.b\ND540.D

Date : 11-DEC-2023 11:58

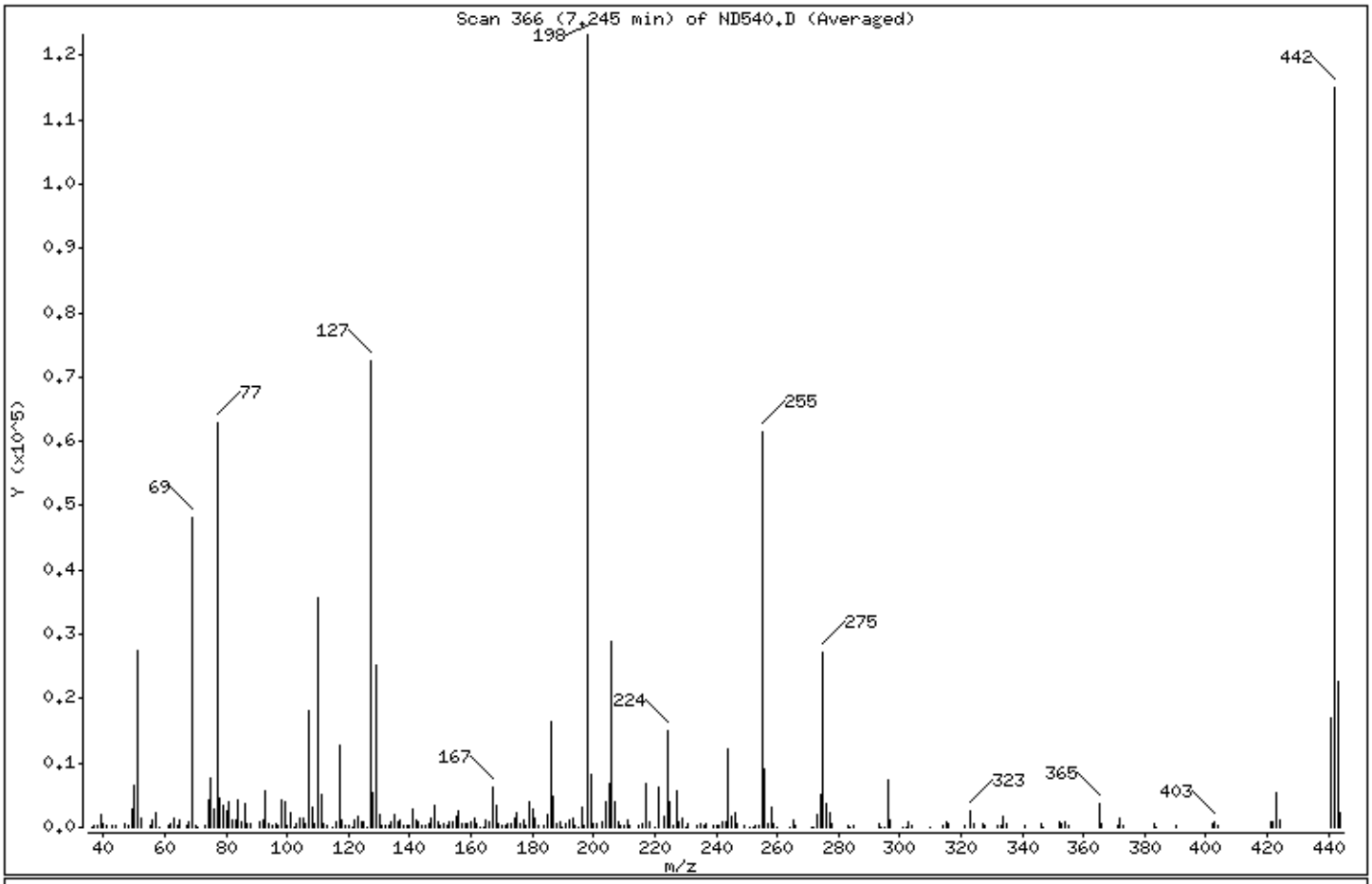
Client ID: DFTPP02 Instrument: gcms-n.i

Sample Info: WG346778-1

Operator: EP

Column phase: Rxi-SVOCms Column diameter: 0.25

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	10.00 - 80.00% of mass 198	21.97
68	Less than 2.00% of mass 69	0.64 (1.62)
69	Greater than 0.10% of mass 198	39.52
70	Less than 2.00% of mass 69	0.31 (0.78)
127	10.00 - 80.00% of mass 198	58.53
197	Less than 2.00% of mass 198	0.14
199	5.00 - 9.00% of mass 198	6.52
275	10.00 - 60.00% of mass 198	22.14
365	Greater than 1.00% of mass 198	2.94
441	0.01 - 100.00% of mass 443	13.92 (76.27)
442	Greater than 50.00% of mass 442	93.56 (100.00)
443	15.00 - 24.00% of mass 442	18.25 (19.50)

Data File: \\target_server\gg\chem\gcms-n.i\N121123.b\ND540.D

Date : 11-DEC-2023 11:58

Client ID: DFTPP02 Instrument: gcms-n.i

Sample Info: WG346778-1

Operator: EP

Column phase: Rxi-SVOCms Column diameter: 0.25

Data File: ND540.D
Spectrum: Scans 366-368 (7.245 min), Subtraction Scan 360
Location of Maximum: 198.00
Number of points: 259

m/z	Y	m/z	Y	m/z	Y	m/z	Y
37.00	122	118.00	1073	184.00	370	259.00	440
38.00	314	119.00	186	185.00	2021	260.00	107
39.00	1794	120.00	249	186.00	16499	264.00	124
41.00	23	121.00	51	187.00	4681	265.00	1237
43.00	18	122.00	1103	188.00	466	266.00	295
44.00	13	123.00	1783	189.00	867	271.00	105
48.00	25	124.00	832	190.00	60	272.00	121
50.00	6381	125.00	759	191.00	480	273.00	1917
51.00	26462	126.00	89	192.00	1263	274.00	5105
52.00	1384	127.00	72426	193.00	1549	275.00	27306
55.00	208	128.00	5306	194.00	321	276.00	3601
56.00	1020	129.00	25170	195.00	137	277.00	2191
57.00	2318	130.00	2057	196.00	3150	278.00	448
58.00	51	131.00	403	197.00	280	283.00	261
61.00	423	132.00	269	198.00	123192	284.00	71
62.00	541	133.00	192	199.00	8163	285.00	409
63.00	1533	134.00	718	200.00	645	293.00	587
64.00	289	135.00	2066	201.00	565	294.00	133
65.00	1047	136.00	867	203.00	834	295.00	54
67.00	67	137.00	1112	204.00	3990	296.00	7351
68.00	748	138.00	248	205.00	6819	297.00	1054
69.00	47786	139.00	168	206.00	29013	301.00	53
70.00	359	140.00	264	207.00	3767	302.00	68
71.00	81	141.00	2737	208.00	877	303.00	987
73.00	378	142.00	994	209.00	216	304.00	210
74.00	4309	143.00	746	210.00	394	310.00	50
75.00	7602	144.00	184	211.00	1095	314.00	364
76.00	2769	145.00	231	212.00	177	315.00	926
77.00	62952	146.00	512	215.00	243	316.00	571
78.00	4421	147.00	1502	216.00	546	321.00	279
79.00	3326	148.00	3375	217.00	6774	323.00	2683
80.00	2657	149.00	805	218.00	890	324.00	502
81.00	3682	150.00	246	220.00	72	327.00	478
82.00	1020	151.00	432	221.00	6171	328.00	308
83.00	1034	152.00	270	223.00	1580	332.00	209

Data File: \\target_server\gg\chem\gcms-n.i\N121123.b\ND540.D

Date : 11-DEC-2023 11:58

Client ID: DFTPP02 Instrument: gcms-n.i

Sample Info: WG346778-1

Operator: EP

Column phase: Rxi-SVOCms Column diameter: 0.25

Data File: ND540.D
Spectrum: Scans 366-368 (7.245 min), Subtraction Scan 360
Location of Maximum: 198.00
Number of points: 259

m/z	Y	m/z	Y	m/z	Y	m/z	Y
85.00	703	153.00	932	224.00	15143	333.00	260
86.00	572	154.00	736	225.00	3841	334.00	1705
87.00	519	155.00	1700	226.00	352	335.00	462
88.00	234	156.00	2668	227.00	5536	341.00	287
91.00	722	157.00	528	228.00	816	346.00	695
92.00	1017	158.00	441	229.00	1332	347.00	52
93.00	5768	159.00	484	230.00	83	352.00	823
94.00	477	160.00	980	231.00	597	353.00	590
95.00	176	161.00	1425	234.00	290	354.00	889
96.00	281	162.00	434	235.00	431	355.00	188
97.00	258	163.00	75	236.00	330	365.00	3656
98.00	4307	164.00	118	237.00	529	366.00	672
99.00	3835	165.00	1028	239.00	171	371.00	243
100.00	317	166.00	961	240.00	229	372.00	1556
101.00	2336	167.00	6221	241.00	291	373.00	377
102.00	108	168.00	3355	242.00	768	383.00	467
103.00	708	169.00	581	243.00	863	384.00	52
104.00	1289	170.00	231	244.00	12231	390.00	223
105.00	1341	171.00	260	245.00	1692	402.00	607
106.00	427	172.00	471	246.00	2171	403.00	774
107.00	18154	173.00	671	247.00	447	404.00	389
108.00	2978	174.00	1367	249.00	403	421.00	771
109.00	559	175.00	2383	251.00	51	422.00	712
110.00	35637	176.00	707	252.00	56	423.00	5370
111.00	5207	177.00	994	253.00	254	424.00	1140
112.00	658	178.00	345	254.00	258	441.00	17081
113.00	232	179.00	3881	255.00	61333	442.00	114914
115.00	72	180.00	2828	256.00	9106	443.00	22709
116.00	988	181.00	1453	257.00	570	444.00	2143
117.00	12863	182.00	269	258.00	3246		

Data File: \\target_server\gg\chem\gcms-n.i\N121223.b\ND541.D

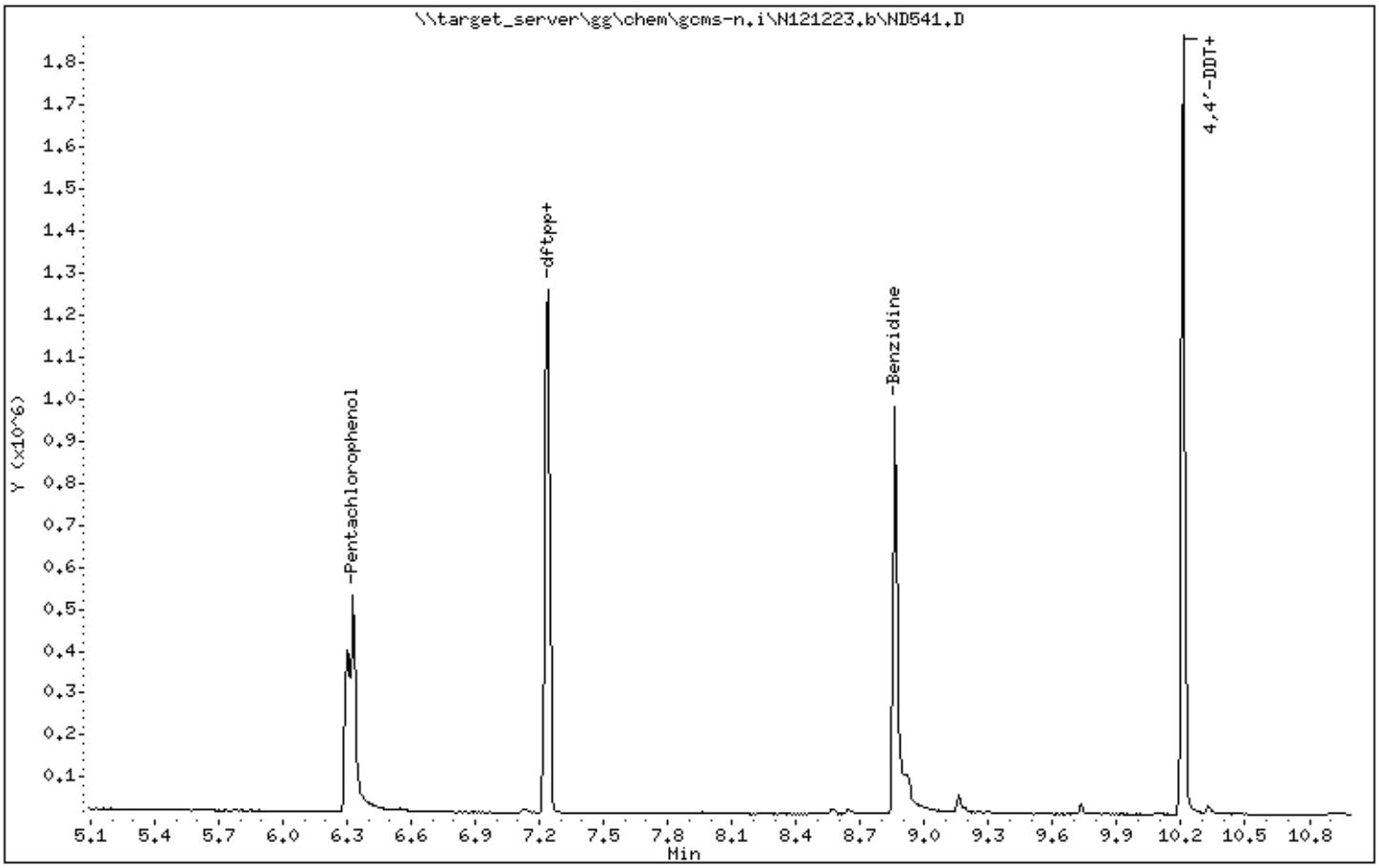
Date : 12-DEC-2023 12:59

Client ID: DFTPP02 Instrument: gcms-n.i

Sample Info: WG346831-1

Operator: EP

Column phase: Rxi-SVOCms Column diameter: 0.25



Data File: \\target_server\gg\chem\gcms-n.i\N121223.b\ND541.D

Date : 12-DEC-2023 12:59

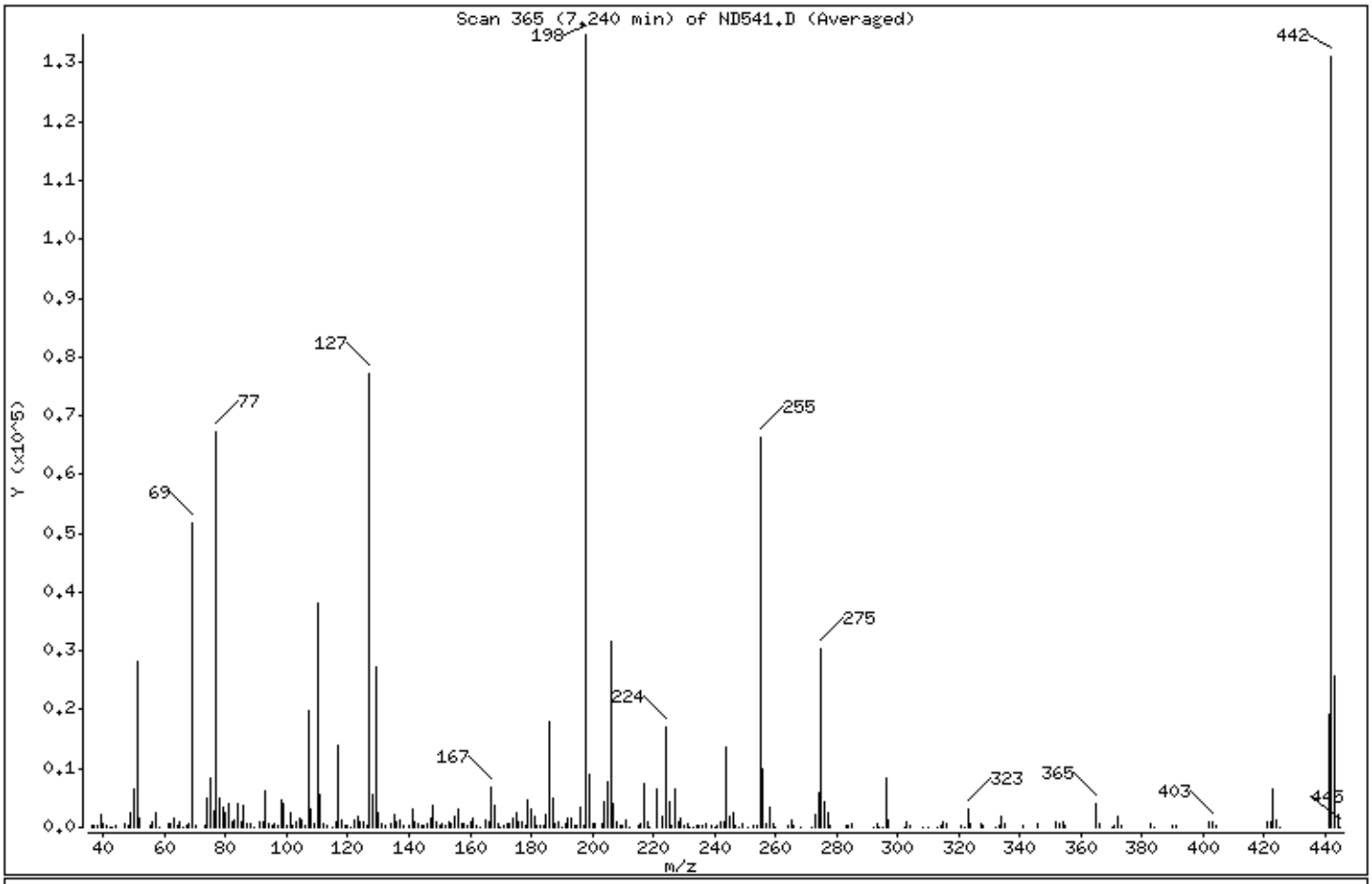
Client ID: DFTPP02 Instrument: gcms-n.i

Sample Info: WG346831-1

Operator: EP

Column phase: Rxi-SVOCms Column diameter: 0.25

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	10.00 - 80.00% of mass 198	20.90
68	Less than 2.00% of mass 69	0.58 (1.47)
69	Greater than 0.10% of mass 198	39.63
70	Less than 2.00% of mass 69	0.21 (0.54)
127	10.00 - 80.00% of mass 198	57.63
197	Less than 2.00% of mass 198	0.00
199	5.00 - 9.00% of mass 198	6.59
275	10.00 - 60.00% of mass 198	21.86
365	Greater than 1.00% of mass 198	2.99
441	0.01 - 100.00% of mass 443	13.48 (75.33)
442	Greater than 50.00% of mass 442	91.76 (100.00)
443	15.00 - 24.00% of mass 442	17.89 (19.50)

Data File: \\target_server\gg\chem\gcms-n.i\N121223.b\ND541.D

Date : 12-DEC-2023 12:59

Client ID: DFTPP02 Instrument: gcms-n.i

Sample Info: WG346831-1

Operator: EP

Column phase: Rxi-SVOCms Column diameter: 0.25

Data File: ND541.D
Spectrum: Scans 365-367 (7.240 min), Subtraction Scan 358
Location of Maximum: 198.00
Number of points: 267

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	18	118.00	1145	188.00	525	266.00	295
37.00	39	119.00	288	189.00	952	268.00	50
38.00	392	120.00	268	190.00	136	272.00	132
39.00	2130	121.00	129	191.00	514	273.00	2070
40.00	191	122.00	1194	192.00	1465	274.00	5750
41.00	24	123.00	1800	193.00	1591	275.00	30280
42.00	120	124.00	888	194.00	286	276.00	4238
50.00	6423	125.00	871	195.00	250	277.00	2533
51.00	27274	126.00	222	196.00	3375	278.00	419
52.00	1488	127.00	77221	197.00	183	283.00	298
55.00	129	128.00	5575	198.00	134794	284.00	229
56.00	1017	129.00	27288	199.00	8875	285.00	489
57.00	2350	130.00	2446	200.00	718	292.00	60
58.00	57	131.00	529	201.00	562	293.00	679
61.00	471	132.00	344	203.00	754	294.00	134
62.00	560	134.00	752	204.00	4322	295.00	122
63.00	1646	135.00	2157	205.00	7609	296.00	8393
64.00	250	136.00	781	206.00	31706	297.00	1273
65.00	1039	137.00	1186	207.00	4014	302.00	137
66.00	57	138.00	322	208.00	930	303.00	1009
67.00	221	140.00	255	209.00	278	304.00	302
68.00	680	141.00	3170	210.00	462	308.00	108
69.00	51898	142.00	1038	211.00	1195	310.00	50
70.00	199	143.00	768	212.00	58	313.00	50
73.00	397	144.00	238	215.00	349	314.00	426
74.00	4939	145.00	173	216.00	627	315.00	984
75.00	8439	146.00	509	217.00	7515	316.00	632
76.00	2882	147.00	1630	218.00	933	321.00	291
77.00	67376	148.00	3745	219.00	60	322.00	56
78.00	4821	149.00	836	221.00	6565	323.00	3245
79.00	3066	150.00	300	223.00	1819	324.00	559
80.00	2625	151.00	523	224.00	16899	327.00	521
81.00	3966	152.00	346	225.00	4305	328.00	308
82.00	1032	153.00	933	226.00	446	332.00	147
83.00	1128	154.00	774	227.00	6431	333.00	304

Data File: \\target_server\gg\chem\gcms-n.i\N121223.b\ND541.D

Date : 12-DEC-2023 12:59

Client ID: DFTPP02 Instrument: gcms-n.i

Sample Info: WG346831-1

Operator: EP

Column phase: Rxi-SVOCms Column diameter: 0.25

Data File: ND541.D
Spectrum: Scans 365-367 (7.240 min), Subtraction Scan 358
Location of Maximum: 198.00
Number of points: 267

m/z	Y	m/z	Y	m/z	Y	m/z	Y
84.00	405	155.00	1979	228.00	822	334.00	1985
85.00	770	156.00	3106	229.00	1438	335.00	491
86.00	798	157.00	542	230.00	234	341.00	374
87.00	518	158.00	540	231.00	582	346.00	719
88.00	235	159.00	449	232.00	52	352.00	914
89.00	108	160.00	1000	233.00	73	353.00	629
91.00	829	161.00	1690	234.00	412	354.00	952
92.00	987	162.00	383	235.00	438	355.00	197
93.00	6133	163.00	70	236.00	297	365.00	4137
94.00	546	165.00	1166	237.00	503	366.00	613
95.00	295	166.00	1011	239.00	270	370.00	51
96.00	466	167.00	6822	240.00	141	371.00	267
97.00	203	168.00	3722	241.00	271	372.00	1812
98.00	4595	169.00	648	242.00	917	373.00	356
99.00	4055	170.00	86	243.00	954	383.00	471
100.00	386	171.00	257	244.00	13693	384.00	112
101.00	2496	172.00	537	245.00	1949	390.00	257
102.00	193	173.00	751	246.00	2351	391.00	200
103.00	818	174.00	1456	247.00	450	402.00	775
104.00	1440	175.00	2628	248.00	60	403.00	920
105.00	1305	176.00	797	249.00	500	404.00	359
106.00	456	177.00	1034	251.00	50	421.00	865
107.00	19861	178.00	382	253.00	273	422.00	846
108.00	3140	179.00	4646	254.00	389	423.00	6400
109.00	564	180.00	3230	255.00	66197	424.00	1200
110.00	38056	181.00	1706	256.00	9846	425.00	61
111.00	5579	182.00	263	257.00	717	441.00	19216
112.00	673	183.00	235	258.00	3563	442.00	131109
113.00	236	184.00	398	259.00	623	443.00	25640
115.00	111	185.00	2216	260.00	54	444.00	2315
116.00	869	186.00	18091	264.00	178	445.00	110
117.00	14082	187.00	4976	265.00	1337		

Raw QC Data Section

Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

SDG: SQ6238
Lab ID: WG345531-1
Client ID: Method Blank
Matrix: AQ
Lab File ID: N0434.D

Sample Date: N/A
Extract Date: 16-NOV-23
Extracted By: AN/CMW
Extraction Method: SW846 3510C
Lab Prep Batch: WG345531

Report Date: 29-DEC-23
Analysis Date: 11-DEC-23
Analyst: EP
Analysis Method: SW846 8270D SIM
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Naphthalene	U	0.10	ug/L	1	.2	0.20	0.064	0.10
2-Methylnaphthalene	U	0.10	ug/L	1	.2	0.20	0.077	0.10
Acenaphthylene	U	0.10	ug/L	1	.2	0.20	0.054	0.10
Acenaphthene	U	0.10	ug/L	1	.2	0.20	0.064	0.10
Fluorene	U	0.10	ug/L	1	.2	0.20	0.061	0.10
Phenanthrene	U	0.10	ug/L	1	.2	0.20	0.051	0.10
Anthracene	U	0.10	ug/L	1	.2	0.20	0.044	0.10
Fluoranthene	U	0.10	ug/L	1	.2	0.20	0.073	0.10
Pyrene	U	0.10	ug/L	1	.2	0.20	0.059	0.10
Benzo(a)anthracene	U	0.10	ug/L	1	.2	0.20	0.046	0.10
Chrysene	U	0.10	ug/L	1	.2	0.20	0.036	0.10
Benzo(b)Fluoranthene	U	0.10	ug/L	1	.2	0.20	0.089	0.10
Benzo(k)fluoranthene	U	0.10	ug/L	1	.2	0.20	0.049	0.10
Benzo(a)pyrene	U	0.10	ug/L	1	.2	0.20	0.066	0.10
Indeno(1,2,3-cd)pyrene	U	0.10	ug/L	1	.2	0.20	0.052	0.10
Dibenzo(a,h)anthracene	U	0.10	ug/L	1	.2	0.20	0.070	0.10
Benzo(g,h,i)perylene	U	0.10	ug/L	1	.2	0.20	0.065	0.10
2-Methylnaphthalene-D10		75.2	%					
Fluorene-D10		73.5	%					
Pyrene-D10		79.8	%					

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029
http://www.katahdinlab.com

Data File: \\target_server\gg\chem\gcms-n.i\N121123.b\N0434.D
Report Date: 29-Dec-2023 15:34

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-n.i\N121123.b\N0434.D
Lab Smp Id: WG345531-1 Client Smp ID: WG345531-Blank
Inj Date : 11-DEC-2023 12:46
Operator : EP Inst ID: gcms-n.i
Smp Info : WG345531-1
Misc Info : WG346778,WG345531,WG346503-4,SQ6238-1
Comment :
Method : \\target_server\gg\chem\gcms-n.i\N121123.b\NSPSIM95.m
Meth Date : 12-Dec-2023 08:48 epelletier Quant Type: ISTD
Cal Date : 07-DEC-2023 14:42 Cal File: N0385.D
Als bottle: 3 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.12
Processing Host: INSPIRON1

Concentration Formula: Amt * DF * Uf*(Vt/Vo*Vi)*1000 * CpndVariable

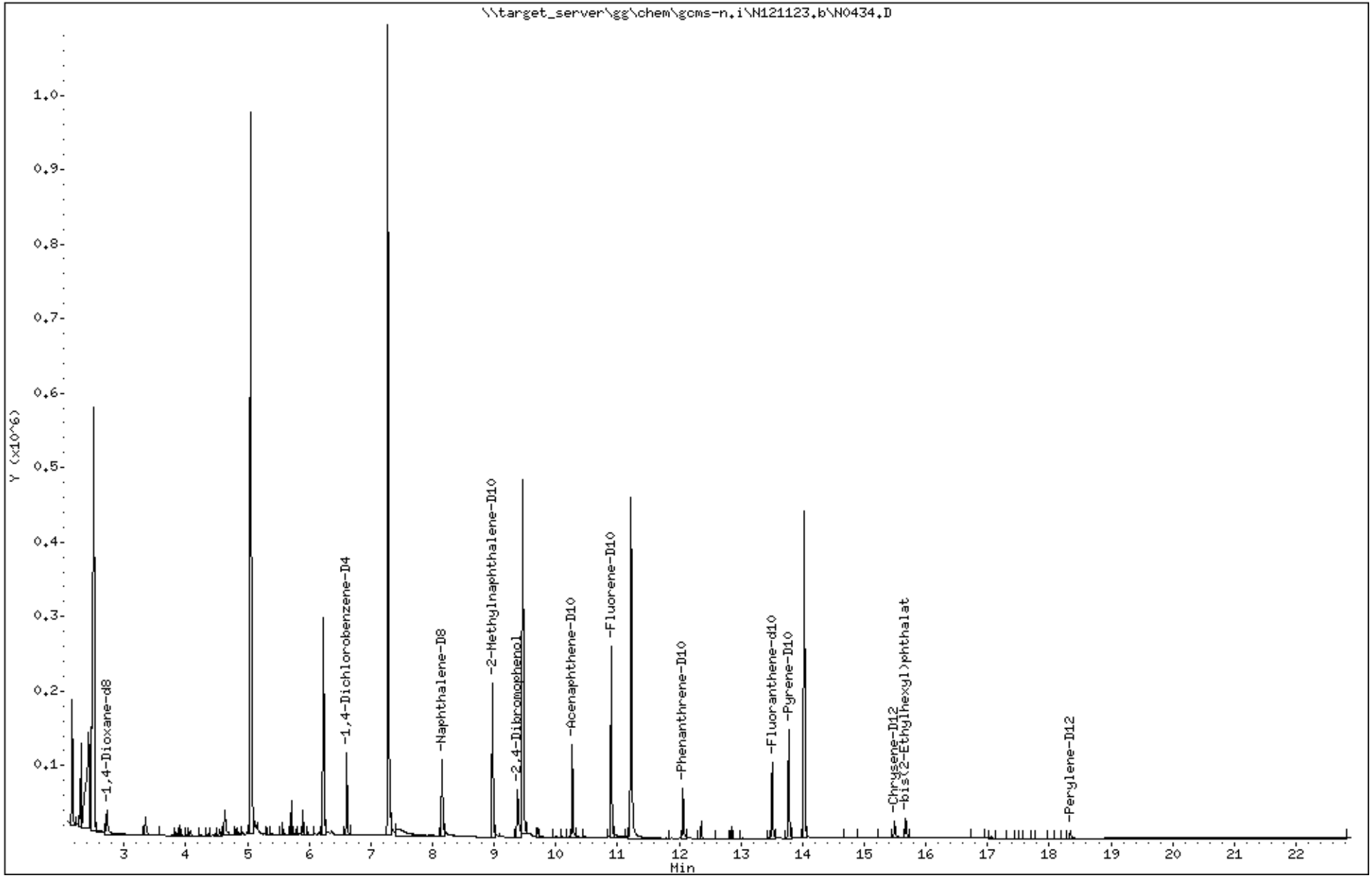
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.000	Sample Volume (L)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/L)	REVIEW CODE
$	1 1,4-Dioxane-d8	96	2.720	2.742	(0.265)	31262	1.17910	1.18(Q)	
*	10 1,4-Dichlorobenzene-D4	152	6.614	6.604	(1.000)	34555	0.80000	(aQ)	
*	27 Naphthalene-D8	136	8.147	8.125	(1.000)	129082	0.80000	(a)	
$	33 2-Methylnaphthalene-D10	152	8.975	8.954	(1.102)	127350	1.50314	1.50	
$	38 2,4-Dibromophenol	252	9.377	9.346	(0.914)	66420	3.28879	3.29	
*	48 Acenaphthene-D10	164	10.264	10.254	(1.000)	57527	0.80000	(a)	
$	56 Fluorene-D10	174	10.897	10.887	(1.062)	110622	1.46940	1.47	
*	66 Phenanthrene-D10	188	12.062	12.052	(1.000)	75979	0.80000	(a)	
$	71 Fluoranthene-d10	212	13.511	13.502	(1.120)	96167	1.55718	1.56	
$	73 Pyrene-D10	212	13.776	13.777	(0.889)	106184	1.59587	1.60	
*	78 Chrysene-D12	240	15.498	15.478	(1.000)	28437	0.80000	(a)	
	80 bis(2-Ethylhexyl)phthalate	149	15.671	15.672	(1.011)	27297	0.57797	0.578(a)	
*	85 Perylene-D12	264	18.344	18.324	(1.000)	22116	0.80000	(a)	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.

Data File: \\target_server\gg\chem\gcms-n.i\N121123.b\N0434.D
Date : 11-DEC-2023 12:46
Client ID: WG345531-Blank
Instrument: gcms-n.i
Sample Info: WG345531-1
Volume Injected (uL): 1.0
Operator: EP
Column phase: Rxi-SVOCms
Column diameter: 0.25



Katahdin Analytical Services SQ6238 Page 379 of 875

Data File: \\target_server\gg\chem\gcms-n.i\N121123.b\N0434.D

Date : 11-DEC-2023 12:46

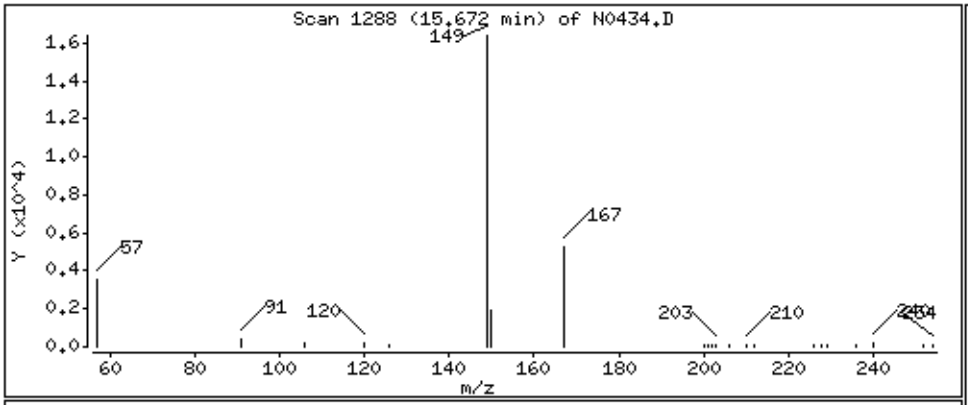
Client ID: WG345531-Blank | Instrument: gcms-n.i

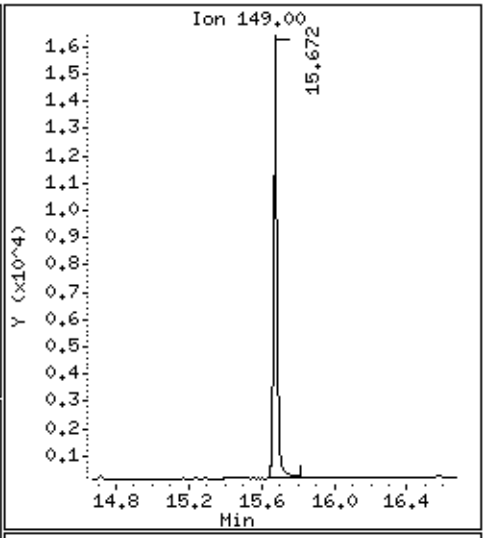
Sample Info: WG345531-1

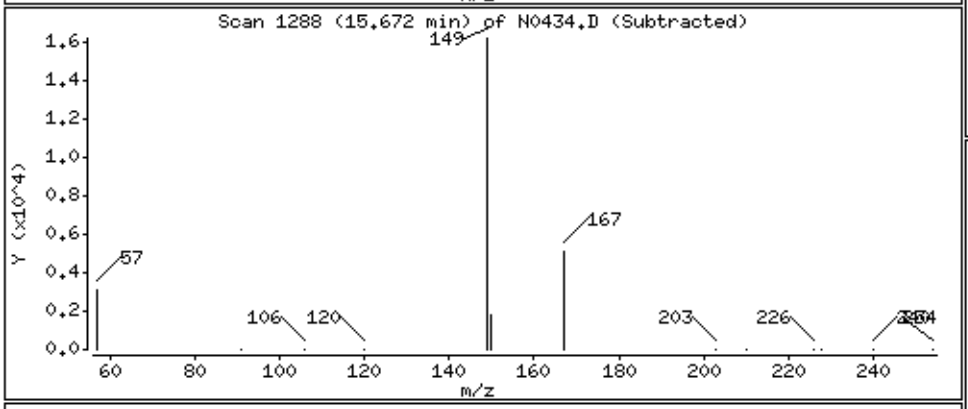
Volume Injected (uL): 1.0 | Operator: EP

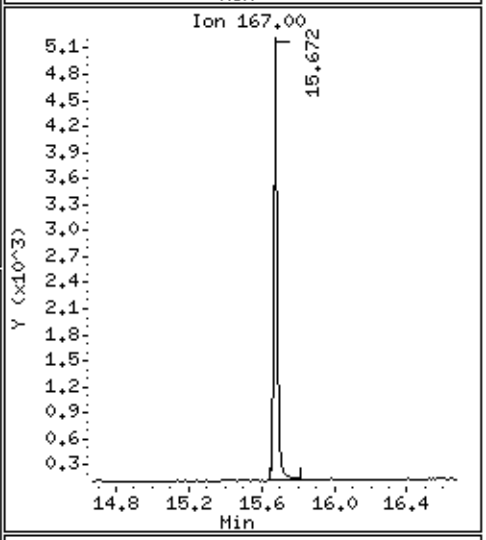
Column phase: Rxi-SVOCms | Column diameter: 0.25

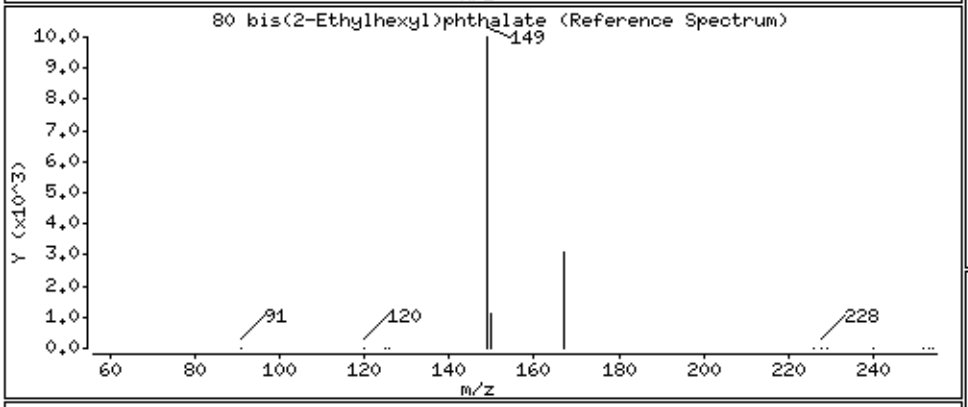
80 bis(2-Ethylhexyl)phthalate | Concentration: 0.578 ug/L

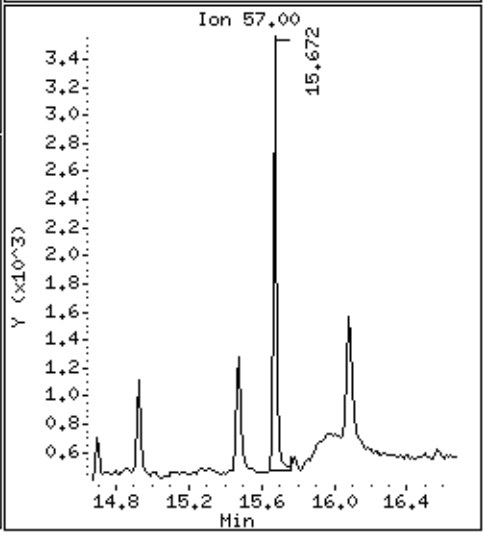


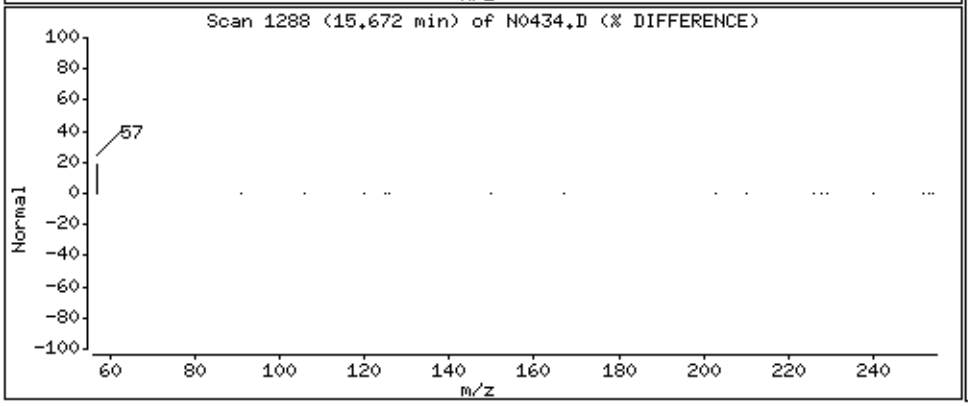












Katahdin
ANALYTICAL SERVICES

LCS Recovery Report

Lab ID: WG345531-2
Client ID: LCS
SDG: SQ6238
LCS File ID: N0435.D
Report Date: 29-DEC-23

Extract Date: 16-NOV-23
Extracted By: AN/CMW
Extraction Method: SW846 3510C
Lab Prep Batch: WG345531

Analysis Date: 11-DEC-23
Analyst: EP
Analysis Method: SW846 8270D SIM
Matrix: AQ

Compound	Recovery (%)	Conc Added	Conc Recovered	Conc Units	Limits
Naphthalene	81.6	5.00	4.08	ug/L	43-114
2-Methylnaphthalene	79.2	5.00	3.96	ug/L	39-114
Acenaphthylene	77.6	5.00	3.88	ug/L	35-121
Acenaphthene	84.8	5.00	4.24	ug/L	48-114
Fluorene	85.0	5.00	4.25	ug/L	50-118
Phenanthrene	92.0	5.00	4.60	ug/L	53-115
Anthracene	86.8	5.00	4.34	ug/L	53-119
Fluoranthene	93.6	5.00	4.68	ug/L	58-120
Pyrene	83.4	5.00	4.17	ug/L	53-121
Benzo(a)anthracene	92.8	5.00	4.64	ug/L	59-120
Chrysene	88.8	5.00	4.44	ug/L	57-120
Benzo(b)Fluoranthene	94.4	5.00	4.72	ug/L	53-126
Benzo(k)fluoranthene	79.2	5.00	3.96	ug/L	54-125
Benzo(a)pyrene	81.0	5.00	4.05	ug/L	53-120
Indeno(1,2,3-cd)pyrene	76.2	5.00	3.81	ug/L	48-130
Dibenzo(a,h)anthracene	73.2	5.00	3.66	ug/L	44-131
Benzo(g,h,i)perylene	75.2	5.00	3.76	ug/L	44-128
2-Methylnaphthalene-D10	* 98.5				43-92
Fluorene-D10	80.9				29-101
Pyrene-D10	83.5				53-166

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029
http://www.katahdinlab.com

Data File: \\target_server\gg\chem\gcms-n.i\N121123.b\N0435.D
Report Date: 29-Dec-2023 15:34

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-n.i\N121123.b\N0435.D
Lab Smp Id: WG345531-2 Client Smp ID: WG345531-LCS
Inj Date : 11-DEC-2023 13:16
Operator : EP Inst ID: gcms-n.i
Smp Info : WG345531-2
Misc Info : WG346778,WG345531,WG346503-4,SQ6238-1
Comment :
Method : \\target_server\gg\chem\gcms-n.i\N121123.b\NSPSIM95.m
Meth Date : 12-Dec-2023 08:48 epelletier Quant Type: ISTD
Cal Date : 07-DEC-2023 14:42 Cal File: N0385.D
Als bottle: 4 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.12
Processing Host: INSPIRON1

Concentration Formula: Amt * DF * Uf*(Vt/Vo*Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.000	Sample Volume (L)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

EP
3:58 pm, Dec 29, 2023

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/L)	REVIEW CODE
$ 1	1,4-Dioxane-d8	96	2.720	2.742	(0.265)	24858	0.93957	0.940(a)	
2	1,4-Dioxane	88	2.741	2.784	(0.415)	43228	1.66173	1.66(Q)	
3	N-Nitrosodimethylamine	74	3.195	3.217	(0.484)	57416	1.78910	1.79(M)	M6
4	Pyridine	79	3.280	3.238	(0.497)	76417	1.24160	1.24(M)	M6
5	Benzaldehyde	77	6.084	6.084	(0.921)	147877	8.93954	8.94(R)	
6	Phenol	94	6.240	6.240	(0.945)	159839	2.31436	2.31(Q)	
7	Bis(2-Chloroethyl)ether	93	6.323	6.323	(0.957)	248107	4.10519	4.10	
8	2-Chlorophenol	128	6.365	6.365	(0.964)	351881	6.02462	6.02	
9	1,3-Dichlorobenzene	146	6.531	6.531	(0.989)	246864	3.50380	3.50	
* 10	1,4-Dichlorobenzene-D4	152	6.604	6.604	(1.000)	35354	0.80000	(aQ)	
11	1,4-Dichlorobenzene	146	6.625	6.625	(1.003)	263025	3.67790	3.68	
12	1,2-Dichlorobenzene	146	6.801	6.802	(1.030)	250367	3.61465	3.61	
13	2,2'-Oxybis(1-chloropropane)	45	6.958	6.958	(1.054)	117164	3.09322	3.09	
14	2-Methylphenol	108	6.958	6.958	(1.054)	374586	6.90905	6.91	
15	Acetophenone	105	7.103	7.104	(0.874)	337951	4.27535	4.28	
16	N-Nitroso-di-n-propylamine	70	7.124	7.125	(1.079)	154650	4.17345	4.17	
17	3&4-Methylphenol	108	7.155	7.145	(1.083)	313880	5.59453	5.59	
18	Hexachloroethane	117	7.197	7.197	(1.090)	95175	3.41440	3.41	
19	Nitrobenzene	77	7.290	7.291	(0.897)	240285	4.61742	4.62	
20	Isophorone	82	7.607	7.597	(0.936)	405671	3.86508	3.86	

Data File: \\target_server\gg\chem\gcms-n.i\N121123.b\N0435.D
Report Date: 29-Dec-2023 15:34

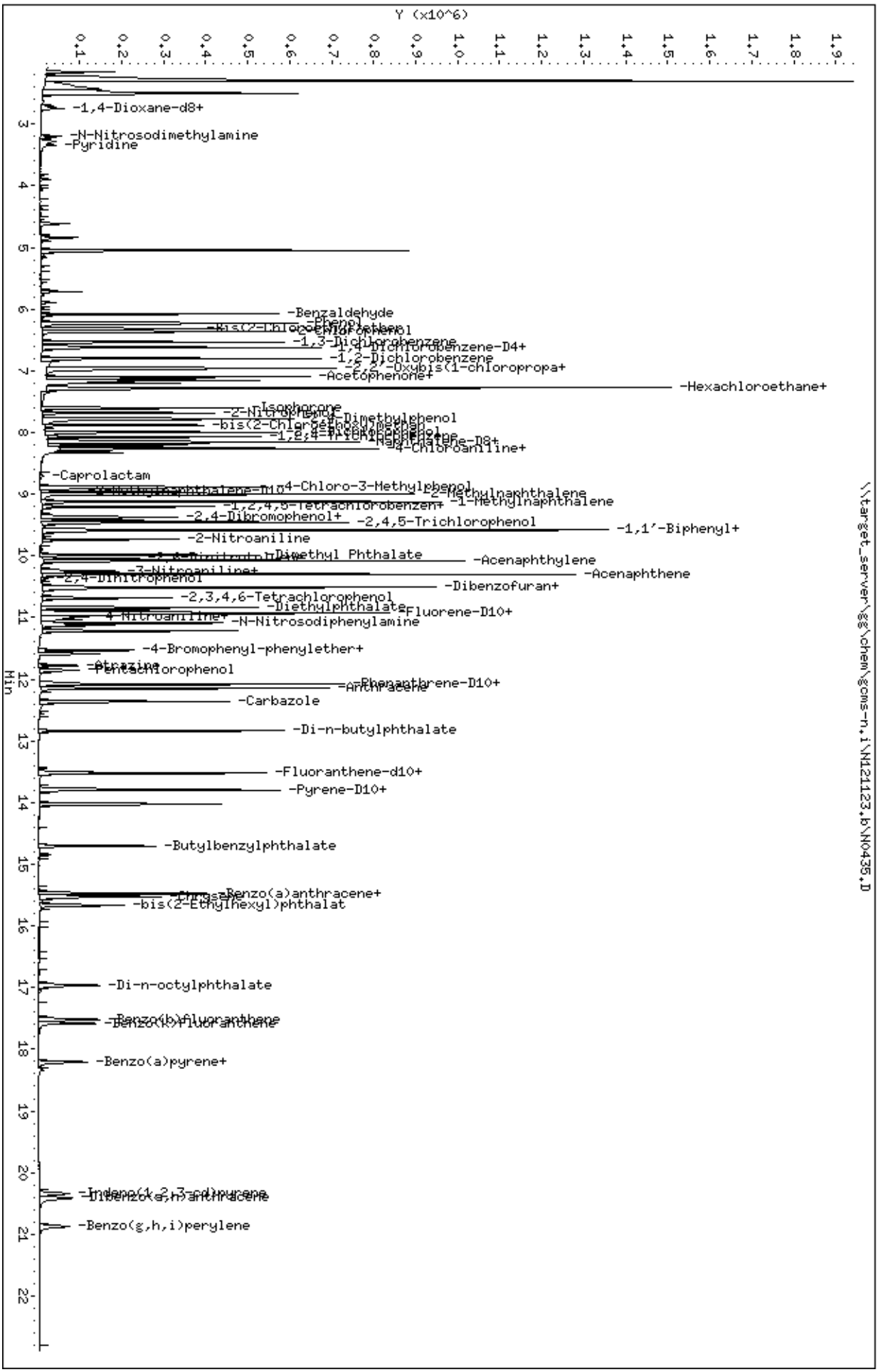
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	CONCENTRATIONS FINAL (ug/L)	REVIEW CODE
	21 2-Nitrophenol	139	7.686	7.675	(0.946)	213643	9.23460	9.23	
	22 2,4-Dimethylphenol	107	7.776	7.777	(0.957)	361989	8.23286	8.23	
	23 bis(2-Chloroethoxy)methane	93	7.889	7.878	(0.971)	277078	4.24604	4.25	
	25 2,4-Dichlorophenol	162	7.990	7.979	(0.983)	298625	6.06526	6.06	
	26 1,2,4-Trichlorobenzene	180	8.069	8.069	(0.993)	194826	3.71004	3.71	
*	27 Naphthalene-D8	136	8.125	8.125	(1.000)	128717	0.80000	(a)	
	28 Naphthalene	128	8.159	8.148	(1.004)	719074	4.08469	4.08	
	29 4-Chloroaniline	127	8.260	8.282	(1.017)	212223	6.50469	6.50(R)	
	30 Hexachlorobutadiene	225	8.327	8.317	(1.025)	79687	3.51253	3.51	
	31 Caprolactam	113	8.710	8.699	(1.072)	10547	0.83572	0.836	
	32 4-Chloro-3-Methylphenol	107	8.879	8.869	(1.093)	341555	8.57961	8.58	
$	33 2-Methylnaphthalene-D10	152	8.964	8.954	(1.103)	166427	1.96994	1.97(R)	
	34 2-Methylnaphthalene	142	9.006	8.996	(1.108)	460537	3.95798	3.96	
	35 1-Methylnaphthalene	142	9.123	9.113	(1.123)	441891	4.16649	4.17	
	36 1,2,4,5-Tetrachlorobenzene	216	9.208	9.208	(0.898)	170691	3.72684	3.73	
	37 Hexachlorocyclopentadiene	237	9.197	9.187	(0.897)	79111	4.11323	4.11(R)	
$	38 2,4-Dibromophenol	252	9.356	9.346	(0.912)	65793	3.26472	3.26	
	39 2,4,6-Trichlorophenol	196	9.377	9.356	(0.915)	162771	7.08139	7.08	
	40 2,4,5-Trichlorophenol	196	9.430	9.420	(0.920)	187846	7.70541	7.70	
	41 1,1'-Biphenyl	154	9.578	9.579	(0.934)	533343	4.16314	4.16	
	42 2-Chloronaphthalene	164	9.589	9.579	(0.935)	137731	4.07830	4.08	
	43 2-Nitroaniline	65	9.739	9.728	(0.950)	88506	4.31307	4.31	
	44 Dimethyl Phthalate	163	9.985	9.975	(0.974)	401275	4.60089	4.60	
	45 2,6-Dinitrotoluene	165	10.039	10.039	(0.979)	91843	4.09804	4.10	
	46 Acenaphthylene	152	10.082	10.082	(0.983)	619946	3.87936	3.88	
	47 3-Nitroaniline	138	10.243	10.243	(0.999)	79854	7.93348	7.93(R)	
*	48 Acenaphthene-D10	164	10.253	10.254	(1.000)	57404	0.80000	(a)	
	49 Acenaphthene	153	10.296	10.286	(1.004)	401926	4.23509	4.24	
	50 2,4-Dinitrophenol	184	10.382	10.372	(1.013)	9220	3.39535	3.40	
	51 Dibenzofuran	168	10.511	10.501	(1.025)	548013	4.29408	4.29	
	52 4-Nitrophenol	109	10.511	10.490	(1.025)	15410	2.85636	2.86(Q)	
	53 2,4-Dinitrotoluene	165	10.532	10.522	(1.027)	101811	4.00169	4.00	
	54 2,3,4,6-Tetrachlorophenol	232	10.682	10.672	(1.042)	103534	6.81319	6.81	
	55 Diethylphthalate	149	10.843	10.833	(1.058)	380625	4.64116	4.64	
$	56 Fluorene-D10	174	10.886	10.887	(1.062)	121572	1.61831	1.62	
	57 Fluorene	166	10.929	10.919	(1.066)	402810	4.24757	4.25	
	58 4-Chlorophenyl-phenylether	204	10.950	10.940	(1.068)	181093	4.31493	4.31	
	59 4-Nitroaniline	138	10.993	10.983	(1.072)	71519	6.79402	6.79	
	60 4,6-Dinitro-2-Methylphenol	198	11.026	11.015	(0.915)	44125	8.33224	8.33	
	61 N-Nitrosodiphenylamine	169	11.101	11.090	(0.921)	253971	3.68214	3.68	
	62 4-Bromophenyl-phenylether	248	11.539	11.529	(0.957)	94293	4.53784	4.54	
	63 Hexachlorobenzene	284	11.592	11.582	(0.962)	95560	4.19957	4.20	
	64 Atrazine	200	11.784	11.774	(0.978)	63726	4.19165	4.19	
	65 Pentachlorophenol	266	11.859	11.849	(0.984)	55760	11.3501	11.4	
*	66 Phenanthrene-D10	188	12.051	12.052	(1.000)	69723	0.80000	(a)	
	67 Phenanthrene	178	12.083	12.073	(1.003)	485095	4.60123	4.60	
	68 Anthracene	178	12.147	12.137	(1.008)	459269	4.33720	4.34	
	69 Carbazole	167	12.361	12.361	(1.026)	432275	5.82046	5.82	
	70 Di-n-butylphthalate	149	12.831	12.831	(1.065)	577263	4.74880	4.75	
$	71 Fluoranthene-d10	212	13.501	13.502	(1.120)	102355	1.80609	1.81	
	72 Fluoranthene	202	13.522	13.522	(1.122)	382984	4.68004	4.68	
$	73 Pyrene-D10	212	13.776	13.777	(0.889)	120385	1.67038	1.67	
	74 Pyrene	202	13.797	13.797	(0.891)	397352	4.17305	4.17	
	75 Butylbenzylphthalate	149	14.703	14.704	(0.949)	186587	4.71007	4.71	

Data File: \\target_server\gg\chem\gcms-n.i\N121123.b\N0435.D
Report Date: 29-Dec-2023 15:34

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	CONCENTRATIONS FINAL (ug/L)	REVIEW CODE
	76 Benzo(a)anthracene	228	15.467	15.468	(0.999)	247680	4.64507	4.64	
	77 3,3'-Dichlorobenzidine	252	15.478	15.488	(0.999)	193700	14.0530	14.0	
*	78 Chrysene-D12	240	15.488	15.478	(1.000)	30802	0.80000	(a)	
	79 Chrysene	228	15.528	15.529	(1.003)	283588	4.43773	4.44	
	80 bis(2-Ethylhexyl)phthalate	149	15.671	15.672	(1.012)	198697	3.88407	3.88	
	81 Di-n-octylphthalate	149	16.965	16.965	(1.095)	265336	4.32945	4.33	
	82 Benzo(b)fluoranthene	252	17.521	17.521	(0.956)	195142	4.71914	4.72	
	83 Benzo(k)fluoranthene	252	17.582	17.573	(0.959)	211872	3.96215	3.96(H)	
	84 Benzo(a)pyrene	252	18.211	18.211	(0.993)	163737	4.04753	4.05	
*	85 Perylene-D12	264	18.334	18.324	(1.000)	22671	0.80000	(a)	
	86 Indeno(1,2,3-cd)pyrene	276	20.342	20.343	(1.110)	111656	3.80903	3.81	
	87 Dibenzo(a,h)anthracene	278	20.425	20.415	(1.114)	110687	3.66271	3.66	
	88 Benzo(g,h,i)perylene	276	20.878	20.878	(1.139)	124256	3.76009	3.76	
M	89 Total PAHs	100				6219502	75.4061	75.4	

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.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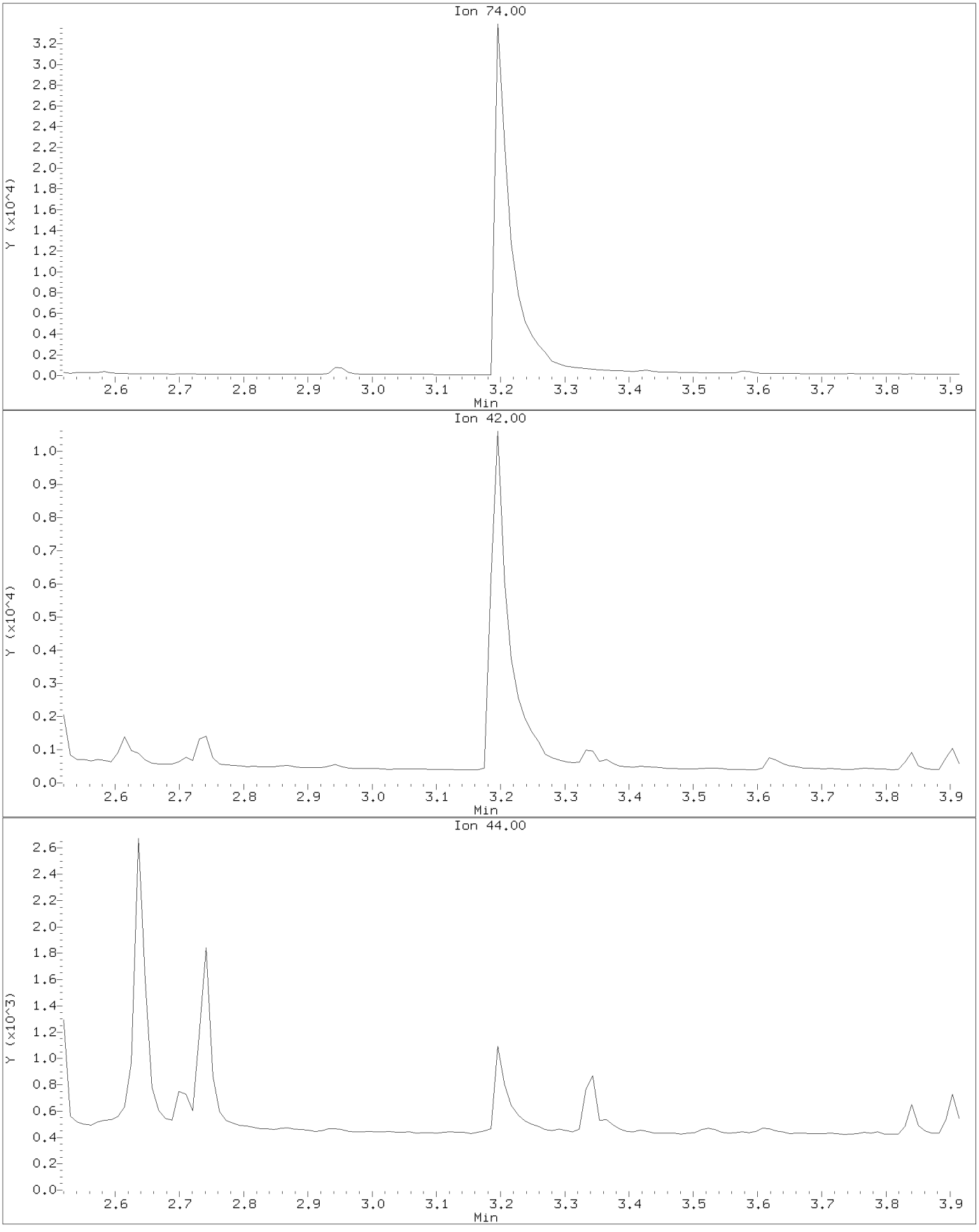
Date : 11-DEC-2023 13:16
Client ID: WG345531-LCS
Sample Info: WG345531-2
Volume Injected (uL): 1.0
Column phase: Rxi-5ViMS
Instrument: gcms-n,i
Operator: EP
Column diameter: 0.25
\\target_server\gg\chem\gcms-n,i\N121123,b\N0435,D
Y (x10^6)
Min
-1,4-Dioxane-d8+
-N-Nitrosodimethylamine
-Pyridine
-Benzaldehyde
-Phenol
-2-Chlorophenol
-1,3-Dichlorobenzene
-1,4-Dichlorobenzene-D4+
-1,2-Dichlorobenzene
-2,2'-Oxybis(1-chloropropa+
-Acetophenone+
-Hexachloroethane+
-Isophorone
-2-Nitrophenol
-2,4-Dimethylphenol
-bis(2-Chloroethoxy)methan
-1,2,4-Trichlorobenzene
-Naphthalene-D8+
-4-Chloroaniline+
-Caprolactam
-4-Chloro-3-Methylphenol
-2-Methylnaphthalene
-1-Methylnaphthalene
-1,2,4,5-Tetrachlorobenzen+
-2,4-Dibromophenol+
-2,4,5-Trichlorophenol
-1,1'-Biphenyl+
-2-Nitroaniline
-Dimethyl Phthalate
-Acenaphthylene
-3-Nitroaniline+
-Acenaphthene
-2,4-Dinitrophenol
-Dibenzofuran+
-2,3,4,6-Tetrachlorophenol
-Diethylphthalate
-Fluorene-D10+
-4-Nitroaniline+
-N-Nitrosodiphenylamine
-4-Bromophenyl-phenylether+
-Atrazine
-Pentachlorophenol
-Phenanthrene-D10+
-Anthracene
-Carbazole
-Di-n-butylphthalate
-Fluoranthene-d10+
-Pyrene-D10+
-Butylbenzylphthalate
-Benzo(a)anthracene+
-bis(2-Ethylhexyl)phthalat
-Di-n-octylphthalate
-Benzo(b)fluoranthene
-Benzo(k)fluoranthene
-Benzo(a)pyrene+
-Benzo(g,h,i)perylene

Data File: \\target_server\gg\chem\gcms-n.i\N121123.b\N0435.D
Injection Date: 11-DEC-2023 13:16
Instrument: gcms-n.i
Client Sample ID: WG345531-LCS

Compound: N-Nitrosodimethylamine
CAS Number: 62-75-9

BEFORE MANUAL INTEGRATION



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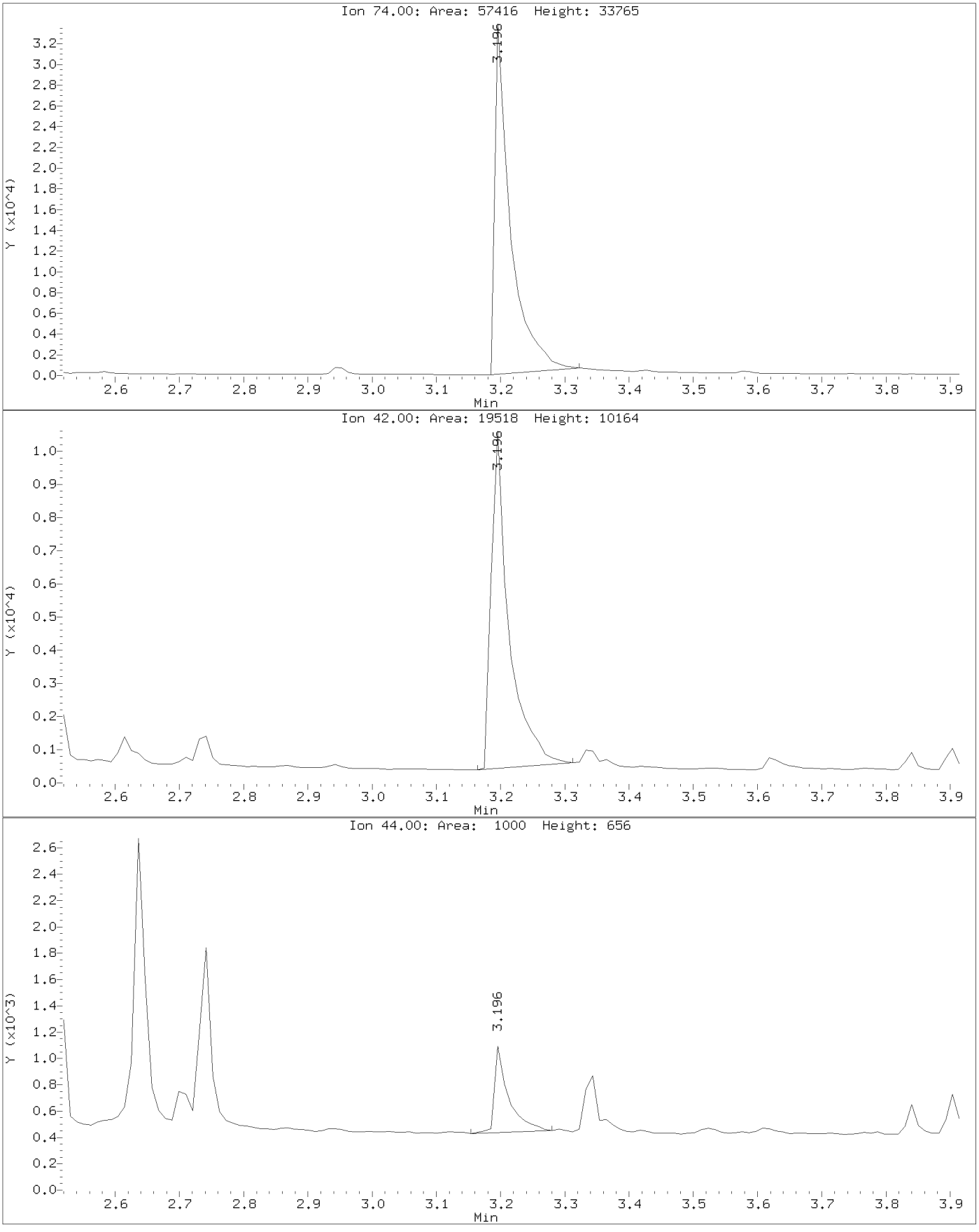
Injection Date: 11-DEC-2023 13:16
Instrument: gcms-n.i
Client Sample ID: WG345531-LCS

Compound: N-Nitrosodimethylamine
CAS Number: 62-75-9

AFTER MANUAL INTEGRATION



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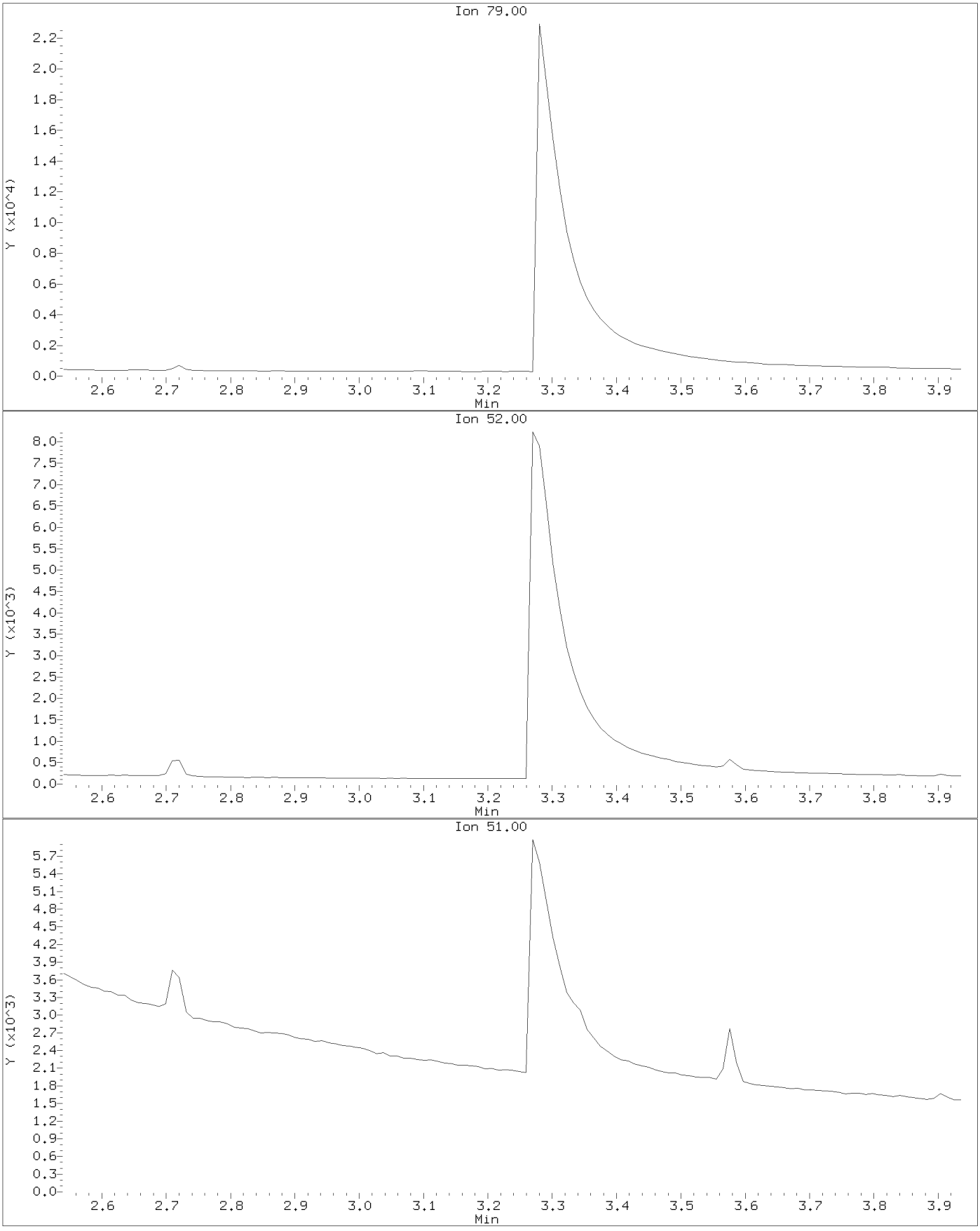
Injection Date: 11-DEC-2023 13:16
Instrument: gcms-n.i
Client Sample ID: WG345531-LCS

Compound: Pyridine
CAS Number: 110-86-1

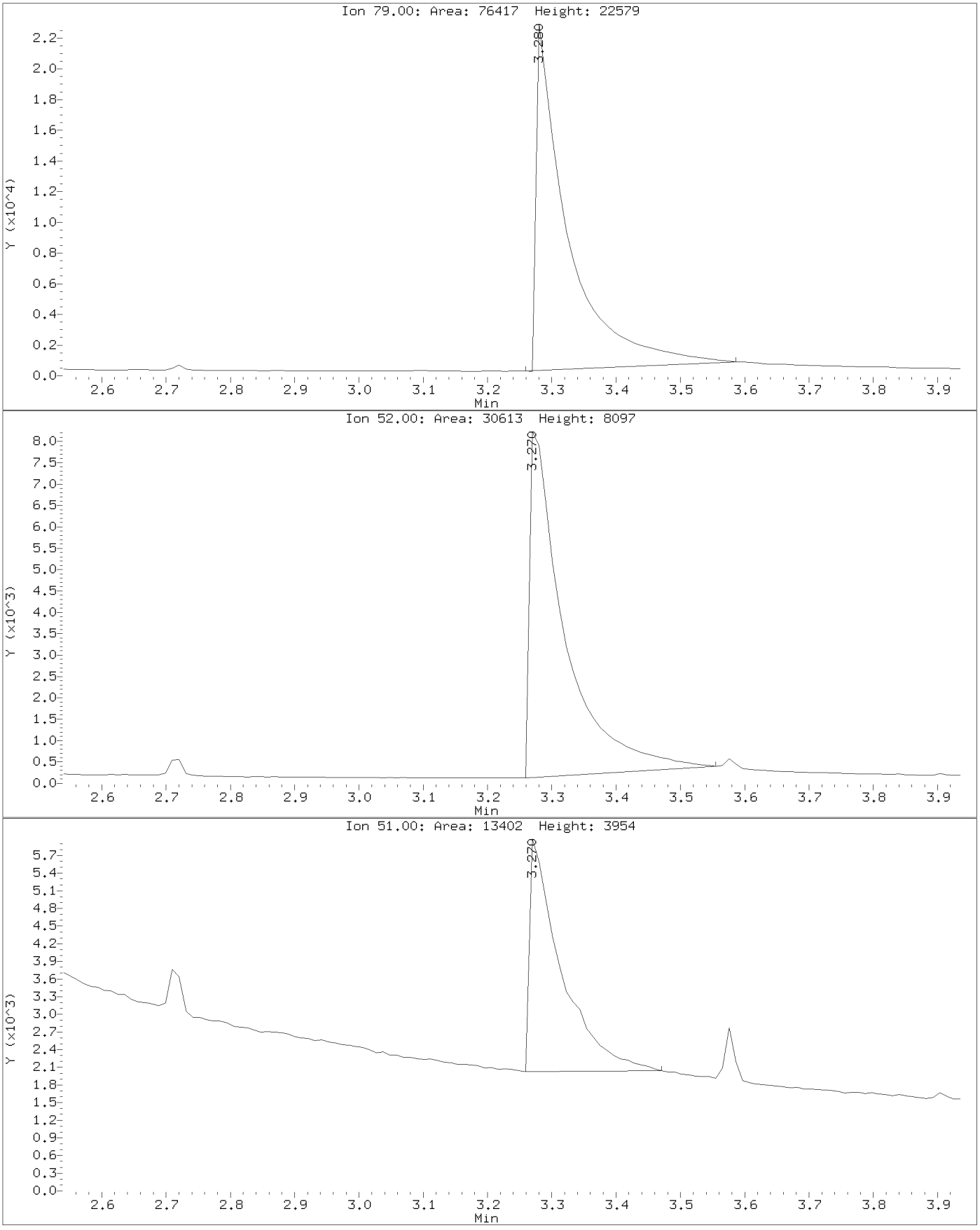
BEFORE MANUAL INTEGRATION



Data File: \\target_server\gg\chem\gcms-n.i\N121123.b\N0435.D
Injection Date: 11-DEC-2023 13:16
Instrument: gcms-n.i
Client Sample ID: WG345531-LCS

Compound: Pyridine
CAS Number: 110-86-1

AFTER MANUAL INTEGRATION



Logbooks and Supporting Documents

S|S
SEP

KATAHDIN ANALYTICAL SERVICES, LLC.
ORGANIC EXTRACTIONS LOG - AQUEOUS SEMI-VOLATILES

Extraction Method: (check one)	SW846 3510 (SEP) ✓	SW846 3520 (CLLE)	
Analytical Method:(check one)	SW846 8270	SW846 8270 SIM ✓	Other:
Surrogate ID: SV3183	Surrogate ID: —	Spike ID: SV3178 SVOA	Spike ID: SV3182 SIM
Methylene Chloride Lot #: EH362-05	pH Paper Lot # 02100005	KI Starch Paper ID: 03062023	If positive, note in comments and contact the PM, the client may need to resample.
pH (1st Extraction) ≤ 2	H_2SO_4 Lot # RE1036	pH (2nd Extraction) ≥ 11	NaOH Lot # UN1824
$NaSO_4$ Lot # RE1044	Filter Paper Lot #: CX0206	Boiling Stones ID: —	Vial Lot #: CX0173
Nitrogen Bath Temperature: 40°			Client ID vs KAS ID Verified: ✓
Prep Start Time: 9:30	Prep End Time: 10:15	CLLE Start Time: —	CLLE End Date & Time: —

Date Extracted	Ext. Init.	Sample ID	Initial Vol. mL	Surr. Vol.	Spike Vol.	Fraction SV	Fraction SIM	Final Vol. mL	Date Conc.	SV 182 Tray Location	Initials	R627302 Comments R627304
11/16/23	AN CMW	~~WG345532-1~~ WG345531-1	1000	1.0mL	NR	X	X	1.0	11/17/23	A3	VG	
		-2	1000		1.0mL					A4		LCS SIM
		-3	1070							A5		MS SQ6260-2
		-4	1010							A6		MSD SQ6260-2
		-5	1060							A7		MS SQ6133-8
		-6	1070							A8		MSD SQ6133-8
		SQ6238-1	1070		NR					A9		
		-2	1060							A10		
		-3	1060							B1		
		-4	1070							B2		
		-5	1060							B3		
		-6	1060							B4		

QAEX501_000892 0000160

Date Extracted	Ext. Init.	Sample ID	Initial Vol. mL	Surr. Vol.	Spike Vol.	Fraction SV	Fraction SIM	Final Vol. mL	Date Conc.	Tray, Location	Initials	Comments
11/16/23	AN CMW	-7	1060	1.0mL	NR		X	1.0	11/17/23	B5	VG	
		-8	1060							B6		
		-9	1050							B7		
		-10	1050							B8		
		-11	1050							B9		
		SQ6259-1	1060							B10		
		-2	1060							C1		
		-3	1060							C2		
		SQ6260-2	970			X				C3		MS/MSD
		-3	950							C4		
		-4	950							C5		
		-5	920							C6		
		WG345532-2	1000		1.0mL	X				C7		SVOA LCS
		-3	970							C8		MS SQ6260-2
		-4	1070							C9		MSD

SH
VG 11/17/23

Reviewed By_____ Date_____

DATE OF DFTPP INJECTION: 07Dec23

KATAHDIN ANALYTICAL SERVICES

GC/MS SVOA INJ LOG INSTRUMENT: 5975B - N

WORKGROUP	SAMPLE	DATAFILE	DF	VIAL #	METHOD	UL INJ	CHEMIST	COMMENTS
W6346503-1	50ng DFTPP	ND537	1	1	DFTPPSIM	2.0	EP	ok
-4	SSTD 20 NB07	N0380		2	NSPSIM95			✓
-3	05	81		3				✓
-2	0.7	82		4				✓
-5	7.0	83		5				✓
-6	10	84		6				✓
-7	15	85		7				✓
-8	IND	86		8				ok
								EP 08Dec23

STANDARD	CODE	MeCl2 Lot #
DFTPP	S4038	PH486-115
CAL. STD.	S4039 S4040	
ICV. STD.	S4041	
IS MIX	S4033	

REVIEWED AND APPROVED BY: _____

DATE: _____

KATAHDIN ANALYTICAL SERVICES

GC/MS SVOA INJ LOG INSTRUMENT: 5975B - N

DATE OF DFTPP INJECTION: 11Dec23

WORKGROUP	SAMPLE	DATAFILE	DF	VIAL #	METHOD	UL INJ	CHEMIST	COMMENTS
W6346778-1	50ng DFTPP	ND540	1	1	DFTPPSIM	2.0	⊛2.0-EP	Ok
1 -2	SSTD 2.0 N1211	N0433	1	2	NSPSIM95	1	1	Ok
	W6345539-1	34	1	3	1	1	1	Ok
	1 -2	35	1	4	1	1	1	Surr2↑ Ok
	SQ6133-8	36	1	5	1	1	1	✓
	W6345531-5	37	1	6	1	1	1	Surr2↑ Ok
	1 -6	38	1	7	1	1	1	5↓ Ok
	SQ6238-1	39	1	8	1	1	1	✓
1	-2	40	1	9	1	1	1	✓
1	-3	41	1	10	1	1	1	Surr2.1↓
1	-4	42	1	11	1	1	1	✓
1	-5	43	1	12	1	1	1	✓
1	-6	44	1	13	1	1	1	✓
1	-7	45	1	14	1	1	1	✓
1	-8	46	1	15	1	1	1	✓
1	-9	47	1	16	1	1	1	IS5.6↓ RR
1	-10	48	1	17	1	1	1	Surr6↓
1	-11	49	1	18	1	1	1	✓
	SQ6239-1	50	1	19	1	1	1	IS5.6↓ RR
	1 -2	51	1	20	1	1	1	IS5.6↓ RR
	1 -3	52	1	21	1	1	1	IS5.6↓ RR
W6346778-3	SSTD 2.0 N1211	53	1	2	1	1	1	IS5.6↓ using all
1 -4	1	54	1	1	1	1	1	IS6↓
1 -5	1	55	1	1	1	1	1	IS6↓ 1
								EP 12Dec23

STANDARD	CODE	MeCl2 Lot #
DFTPP	S4038	PH486-US
CAL. STD.	S4039 S4040	
ICV. STD.	—	
IS MIX	S4039	

⊛EP 11Dec23

REVIEWED AND APPROVED BY: _____

DATE: _____

KATAHDIN ANALYTICAL SERVICES

GC/MS SVOA INJ LOG INSTRUMENT: 5975B - N

DATE OF DFTPP INJECTION: 12Dec23

WORKGROUP	SAMPLE	DATAFILE	DF	VIAL #	METHOD	UL INJ	CHEMIST	COMMENTS
W6346831-1	50ng DFTPP	ND541	1	1	DFTPSIM	2.0	EP	OK
1 -2	SSTD 2.0 N1712	N0456		2	NSPSIM95			OK
	W6345817-4	57		3				LOD
	-5	58		4				LOQ
	-1	59		5				OK
	-2	60		6				OK
	-3	61		7				3L surr2R OK
	SQ6238-9RA	62		8				surr5L
	SQ6260-7	63		9				✓
W6345531(*)	~~W6344531-3~~	64		10				OK
1	1 -4	65		11				OK
	SQ6260-3	66		12				IS5.6L
	-4	67		13				IS5.6L
	-5	68		14				IS5.6L
	SQ5562-9RE	69		15				IS5.6L
	-10RE	70		16				IS3-6L
	-11RE	71		17				IS4-6L
	-12RE	72		18				IS4-6L surr6L
	SQ6259-1RA	73		19				IS4-6L
	-2RA	74		20				IS4-6L surr5.6L
	-3RA	75		21				IS5.6L
W6346831-3	SSTD 2.0 N1712	76		2				IS 4-6L using all
1 -4	1	77		1				IS4-6L
1 -5	1	78	1	1	1	1	1	IS4-6L
								EP 13Dec23

STANDARD	CODE	MeCl2 Lot #
DFTPP	54038	PH496-US
CAL. STD.	54039 54040	
ICV. STD.	—	
IS MIX	54039	

(*) EP 13Dec23

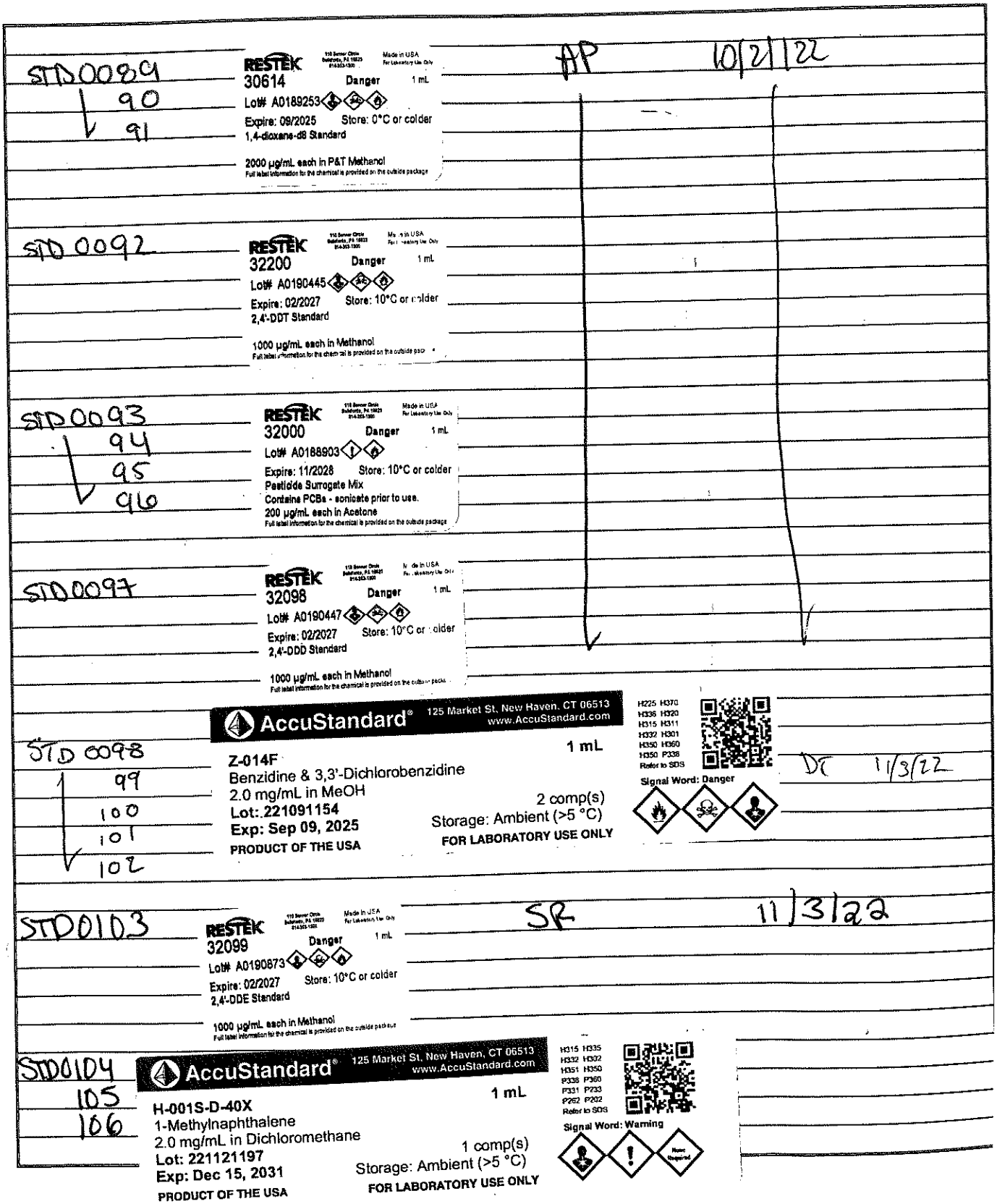
REVIEWED AND APPROVED BY:

DATE:

KATAHDIN ANALYTICAL SERVICES

STOCK STANDARDS RECEIVED

Extractions Laboratory



STD0089
90
91

RESTEK
30614 Danger 1 mL
Lot# A0189253
Expire: 09/2025 Store: 0°C or colder
1,4-dioxane-d8 Standard
2000 µg/mL each in P&T Methanol
Full label information for the chemical is provided on the outside package

AP 10/2/22

STD0092

RESTEK
32200 Danger 1 mL
Lot# A0190445
Expire: 02/2027 Store: 10°C or colder
2,4'-DDT Standard
1000 µg/mL each in Methanol
Full label information for the chemical is provided on the outside package

STD0093
94
95
96

RESTEK
32000 Danger 1 mL
Lot# A0188903
Expire: 11/2028 Store: 10°C or colder
Pesticide Surrogate Mix
Contains PCBs - sonicate prior to use.
200 µg/mL each in Acetone
Full label information for the chemical is provided on the outside package

STD0097

RESTEK
32098 Danger 1 mL
Lot# A0190447
Expire: 02/2027 Store: 10°C or colder
2,4'-DDD Standard
1000 µg/mL each in Methanol
Full label information for the chemical is provided on the outside package

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com
Z-014F
Benzidine & 3,3'-Dichlorobenzidine
2.0 mg/mL in MeOH
Lot: 221091154
Exp: Sep 09, 2025
PRODUCT OF THE USA
1 mL
2 comp(s)
Storage: Ambient (>5 °C)
FOR LABORATORY USE ONLY
H225 H370 H336 H320 H315 H311 H332 H301 H350 H360 H350 P338 Refer to SDS
Signal Word: Danger

STD0098
99
100
101
102

DT 11/3/22

STD0103

RESTEK
32099 Danger 1 mL
Lot# A0190873
Expire: 02/2027 Store: 10°C or colder
2,4'-DDE Standard
1000 µg/mL each in Methanol
Full label information for the chemical is provided on the outside package

SR 11/3/22

STD0104
105
106

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com
H-001S-D-40X
1-Methylnaphthalene
2.0 mg/mL in Dichloromethane
Lot: 221121197
Exp: Dec 15, 2031
PRODUCT OF THE USA
1 mL
1 comp(s)
Storage: Ambient (>5 °C)
FOR LABORATORY USE ONLY
H315 H335 H332 H302 H351 H350 P338 P360 P331 P233 P262 P202 Refer to SDS
Signal Word: Warning

KATAHDIN ANALYTICAL SERVICES

STOCK STANDARDS RECEIVED

Extractions Laboratory

STD0107
108
109
110
111

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com

APP-9-191-10X 1 mL
1,2,4,5-Tetrachlorobenzene
1000 µg/mL in MeOH
Lot: 219041253 1 comp(s)
Exp: Apr 09, 2029 Storage: Ambient (>5 °C)
PRODUCT OF THE USA FOR LABORATORY USE ONLY

H336 H225 H370 H320 H315 H311 H332 H301 H360 P338 P360 P331 Refer to SDS
Signal Word: Danger

SR 11/3/22

STD0112
113
114
115
116

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com

CLP-HC-A-R 1 mL
Acid Composite Mixture
2.0 mg/mL in CH2Cl2
Lot: 222041590 19 comp(s)
Exp: May 03, 2025 Storage: Ambient (>5 °C)
PRODUCT OF THE USA FOR LABORATORY USE ONLY

H315 H335 H332 H302 H350 H350 P338 P360 P331 P233 P262 P202 Refer to SDS
Signal Word: Danger

SR 11/3/22

STD0117
118
119

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com

Z-014E-R3 1 mL
Composite Mix #3
2.0 mg/mL in CH2Cl2
Lot: 221111178 10 comp(s)
Exp: Dec 10, 2023 Storage: Freeze (<-10 °C)/Sonicate
PRODUCT OF THE USA FOR LABORATORY USE ONLY

H315 H335 H332 H302 H351 H350 P338 P360 P331 P233 P262 P202 Refer to SDS
Signal Word: Warning

SR 11/3/22

STD0120
121
122
123
124

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com

CLP-HC-BN-R 1 mL
Base/Neutral Composite Mixture
2.0 mg/mL in Benzene:Dichloromethane:AcCN (2:2:1)
Lot: 222011220 44 comp(s)
Exp: Feb 18, 2024 Storage: Freeze (<-10 °C)/Sonicate
PRODUCT OF THE USA FOR LABORATORY USE ONLY

H225 H315 H335 H332 H302 H350 H360 H350 P338 P360 P331 P233 Refer to SDS
Signal Word: Danger

SR 11/3/22

STD0125
126
127
128
129

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com

S-7226 1 ml
Custom Standard
5000 µg/mL in CH2Cl2
Lot: 222111144 5 comp(s)
Exp: Dec 14, 2024 Storage: Freeze (<-10 °C)
PRODUCT OF THE USA FOR LABORATORY USE ONLY

H315 H335 H332 H302 H351 H360 H350 P338 P360 P331 P233 P262 Refer to SDS
Signal Word: Warning

SR 11/21/22

STD0130
131
132
133
134

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com

P-233S-A-10X 1 mL
bis(2-Ethylhexyl)adipate
1000 µg/mL in Acetone
Lot: 219071483-01 1 comp(s)
Exp: Nov 21, 2024 Storage: Refrig (0-5 °C)
PRODUCT OF THE USA FOR LABORATORY USE ONLY

H225 H336 H335 H319 H315 P338 P360 P331 P233 P260 P262 P202 Refer to SDS
Signal Word: Danger

SR 11/21/22

STD0135
136

CMW 1/26/23

KATAHDIN ANALYTICAL SERVICES

STOCK STANDARDS RECEIVED

Extractions Laboratory

STD 0157

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com

H315 H335 H332 H302 H351 H350 P338 P360 P331 P233 P262 P202 Refer to SDS

Signal Word: Warning

H-001S-D-40X 1 mL
1-Methylnaphthalene
2.0 mg/mL in Dichloromethane
Lot: 221121197 1 comp(s)
Exp: Dec 15, 2031 Storage: Ambient (>5 °C)
PRODUCT OF THE USA **FOR LABORATORY USE ONLY**

11/30 YAP

STD 0158
9
60

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com

H315 H335 H332 H302 H351 H350 P338 P360 P331 P233 P262 P202 Refer to SDS

Signal Word: Warning

Z-014E-R3 1 mL
Composite Mix #3
2.0 mg/mL in CH2Cl2
Lot: 221111178 10 comp(s)
Exp: Dec 10, 2023 Storage: Freeze (<-10 °C)/Sonicate
PRODUCT OF THE USA **FOR LABORATORY USE ONLY**

STD 0161
62
3
4
5

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com

H315 H335 H332 H302 H351 H360 H350 P338 P360 P331 P233 P262 Refer to SDS

Signal Word: Warning

S-7226 1 ml
Custom Standard
5000 µg/mL in CH2Cl2
Lot: 222111144 5 comp(s)
Exp: Dec 14, 2024 Storage: Freeze (<-10 °C)
PRODUCT OF THE USA **FOR LABORATORY USE ONLY**

STD 0166
7
8
9
70

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com

H336 H225 H370 H320 H315 H311 H332 H301 H360 P338 P360 P331 Refer to SDS

Signal Word: Danger

APP-9-191-10X 1 mL
1,2,4,5-Tetrachlorobenzene
1000 µg/mL in MeOH
Lot: 219041253 1 comp(s)
Exp: Apr 09, 2029 Storage: Ambient (>5 °C)
PRODUCT OF THE USA **FOR LABORATORY USE ONLY**

STD 0171
2
3
4
5

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com

H315 H335 H332 H302 H350 H350 P338 P360 P331 P233 P262 P202 Refer to SDS

Signal Word: Danger

CLP-HC-A-R 1 mL
Acid Composite Mixture
2.0 mg/mL in CH2Cl2
Lot: 222041590 19 comp(s)
Exp: May 03, 2025 Storage: Ambient (>5 °C)
PRODUCT OF THE USA **FOR LABORATORY USE ONLY**

KATAHDIN ANALYTICAL SERVICES

STOCK STANDARDS RECEIVED

Extractions Laboratory

3/27/23 CMW

STD 0283

4
5
6
7

AccuStandard® 125 Market St. New Haven, CT 06513 www.AccuStandard.com

Z-014F 1 mL
Benzidine & 3,3'-Dichlorobenzidine
2.0 mg/mL in MeOH
Lot: 223021429 2 comp(s)
Exp: Feb 22, 2027 Storage: Ambient (>5 °C)
PRODUCT OF THE USA **FOR LABORATORY USE ONLY**

H225 H370 H336 H320 H315 H311 H332 H301 H350 H360 H350 P336 Refer to SDS
Signal Word: Danger

STD 0288

89
90
1
2

AccuStandard® 125 Market St. New Haven, CT 06513 www.AccuStandard.com

CLP-HC-A-R 1 mL
Acid Composite Mixture
2.0 mg/mL in CH2Cl2
Lot: 222041590 19 comp(s)
Exp: May 03, 2025 Storage: Ambient (>5 °C)
PRODUCT OF THE USA **FOR LABORATORY USE ONLY**

H315 H335 H332 H302 H350 H350 P338 P360 P331 P233 P262 P202 Refer to SDS
Signal Word: Danger

STD 0293

4
5
6
7

AccuStandard® 125 Market St. New Haven, CT 06513 www.AccuStandard.com

H-001S-D-40X 1 mL
1-Methylnaphthalene
2.0 mg/mL in Dichloromethane
Lot: 221121197 1 comp(s)
Exp: Dec 15, 2031 Storage: Ambient (>5 °C)
PRODUCT OF THE USA **FOR LABORATORY USE ONLY**

H315 H335 H332 H302 H351 H350 P338 P360 P331 P233 P262 P202 Refer to SDS
Signal Word: Warning

STD 0298

9
300
01
02

AccuStandard® 125 Market St. New Haven, CT 06513 www.AccuStandard.com

P-233S-10X 1 mL STD 0
bis(2-Ethylhexyl)adipate
1000 µg/mL in MeOH
Lot: 222011504 1 comp(s)
Exp: Jan 25, 2032 Storage: Ambient (>5 °C)
PRODUCT OF THE USA **FOR LABORATORY USE ONLY**

H336 H225 H370 H320 H315 H311 H332 H301 H360 P338 P360 P331 Refer to SDS
Signal Word: Danger

STD 0303

4
5
6
7

AccuStandard® 125 Market St. New Haven, CT 06513 www.AccuStandard.com

APP-9-191-10X 1 mL
1,2,4,5-Tetrachlorobenzene
1000 µg/mL in MeOH
Lot: 219041253 1 comp(s)
Exp: Apr 09, 2029 Storage: Ambient (>5 °C)
PRODUCT OF THE USA **FOR LABORATORY USE ONLY**

H336 H225 H370 H320 H315 H311 H332 H301 H360 P338 P360 P331 Refer to SDS
Signal Word: Danger

STD 0308

9
10
11
12

AccuStandard® 125 Market St. New Haven, CT 06513 www.AccuStandard.com

APP-9-096-20X 1 mL
p-Dioxane Standard
2.0 mg/mL in MeOH
Lot: 222121106 1 comp(s)
Exp: Dec 20, 2032 Storage: Ambient (>5 °C)
PRODUCT OF THE USA **FOR LABORATORY USE ONLY**

H225 H336 H370 H320 H315 H311 H332 H301 H351 H360 H350 P338 Refer to SDS
Signal Word: Danger

KATAHDIN ANALYTICAL SERVICES

STOCK STANDARDS RECEIVED

Extractions Laboratory

STD0333
334
335
336
337

AccuStandard® 125 Market St. New Haven, CT 06513 www.AccuStandard.com

M-8150B-SS-10X 1 mL
2,4-Dichlorophenylacetic acid
1000 µg/mL in Acetone
Lot: 221051049-01
Exp: Jun 17, 2025
PRODUCT OF THE USA

1 comp(s)
Storage: Ambient (>5 °C)
FOR LABORATORY USE ONLY

H225 H336 H335 H315 P338 P260 P233 P262 P202 P264 P284
Refer to SDS
Signal Word: Danger

SR 5/4/23

STD0338 Silicic Acid ~80 Mesh SR 5/9/23
0339 3016363-25G

STD0340
341
342
343

31087 RESTEK
Acid Surrogate Mix (A89 SOW)
Lot# A0197037
Expire: 04/2031 Store: 10°C or colder
10000 µg/mL each in Methanol
Danger
Vial Label / Peel Here

SR 5/9/23

STD0344
345

RESTEK Made in USA
31889 Warning 5 mL
Lot# A0191955
Expire: 10/2028 Store: 10°C or colder
Revised B/N Surrogate Mix
Sonicate prior to use.
5000 µg/mL each in Methylene Chloride
Full label information for the chemical is provided on the outside package

SR 5/9/23

STD0346
347
348
349

32000 RESTEK
Pesticide Surrogate Mix
Lot# A0197094
Expire: 07/2029 Store: 10°C or colder
200 µg/mL each in Acetone
Contains PCBs - sonicate prior to use
Danger
Vial Label / Peel Here

SR 5/9/23

STD0350
351
352
353

31459 RESTEK
MA EPH Aliphatic Hydrocarbon Standard
Lot# A0195674
Expire: 04/2030 Store: 25°C nominal
1000 µg/mL each in Hexane
Danger
Vial Label / Peel Here

SR 5/9/23

STD 0354
355
356
357
358

1,2 Dibromoethane

KATAHDIN ANALYTICAL SERVICES

STOCK STANDARDS RECEIVED

Extractions Laboratory

STD 0359
34260
34761

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com

M-8240C-R6 1 mL
Appendix IX Volatiles Mix
Varied conc. in MeOH
Lot: 222061040
Exp: Jun 06, 2025 11 comp(s)
Storage: Refrig (0-5 °C)
PRODUCT OF THE USA FOR LABORATORY USE ONLY

H225 H370 H336 H320 H315 H311 H332 H301 H351 H360 H350 P336
Refer to SDS
Signal Word: Danger

STD 0362
63

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com

M-625-TS-20X 1 mL
GC/MS Tuning Std for EPA Method 624/625
1000 µg/mL in CH2Cl2
Lot: 222031198-01
Exp: May 28, 2025 4 comp(s)
Storage: Ambient (>5 °C)
PRODUCT OF THE USA FOR LABORATORY USE ONLY

H315 H335 H332 H302 H350 H360 H350 P308 P360 P331 P233 P262
Refer to SDS
Signal Word: Warning

STD 0364
65
66
67

RESTEK
33204
Danger 1 mL
Lot# A0191734
Expire: 11/2025 Store: 10°C or colder
8330B Nitroaromatics and Nitramine Mix
1000 µg/mL each in Acetonitrile
Full label information for the chemical is provided on the ... label package

STD 0368
69
70
71
72

31086 RESTEK
B/N Surrogate Mix (4/09 SOW)
Store: 10°C or colder
Methylene Chloride

5/23

STD 0373

14 RESTEK
A0195206
Expire 02/2025 Store: 0°C or colder
2000 µg/mL each in P&T Methanol
Danger
Peel Here

5/23

STD 0374 DRH-007-55
1-Chlorooctadecane

6/5/23

KATAHDIN ANALYTICAL SERVICES

STOCK STANDARDS RECEIVED

Extractions Laboratory

STD0375 Sodium Hexametaphosphate 1Kg, 65-70% 6/16/23 SR

STD0376

RESTEK
31601 Danger 1 mL
Lot# A0192460
Expire: 12/2027 Store: 10°C or colder
EGDN Standard
1000 µg/mL each in Methanol
Full label information for the chemicals is provided on the outside package

6/16/23 AL

STD0377

31498 RESTEK
Nitroglycerin Standard
Lot# A0197032
Expire 04/2028 Store 10°C or colder
1000 µg/mL each in Methanol
Danger
Peel Here

STD0378

31600 RESTEK
PETN Standard
Lot# A0194156
Expire 01/2028 Store 10°C or colder
1000 µg/mL each in Methanol
Sonicate prior to use
Danger
Peel Here

STD0379 0380 0381 0382

31480 RESTEK
MA Fractionation Surrogate Spike Mix
Lot# A0196246
Expire 02/2029 Store 10°C or colder
4000 µg/mL each in Hexane
Sonication required Mix is photosensitive
Danger
Peel Here

6/23/23 SR

STD0383 0384 0385

31087 RESTEK
Acid Surrogate Mix (4/89 SOW)
Lot# A0197037
Expire 04/2031 Store 10°C or colder
10000 µg/mL each in Methanol
Danger
Peel Here

STD0386 0387 0388

31086 RESTEK
B/N Surrogate Mix (4/89 SOW)
Lot# A0193606
Expire 12/2028 Store 10°C or colder
5000 µg/mL each in Methylene Chloride
Sonicate prior to use
Warning
Peel Here

STD0389 ~~0390~~

Agilent Technologies
Calibration Standard 1 ML
Item: PPM-8082-1 Danger
Lot: 0006740524
Expires: 30-Nov 2029
Full safety on outer box
Contains 2,2,4-trimethylpentane, aroclor 1260

6/28/23 AL

KATAHDIN ANALYTICAL SERVICES

STOCK STANDARDS RECEIVED

Extractions Laboratory

STD 0416	31086 RESTEK B/N Surrogate Mix (4/89 SOW) Lot# A0193806 Expire: 12/2028 Store: 10°C or colder 5000 µg/mL each in Methylene Chloride Sonicate prior to use Warning	SR/JS	7/12/23
0417			
0418			
0419			
STD 0420	APP-9-096-20X Lot: 222121106 Exp: Dec 20, 2032 Date Opened	SR/JS	7/12/23
0421			
0422			
0423			
0424			
STD 0425	31087 RESTEK Acid Surrogate Mix (4/89 SOW) Lot# A0197037 Expire: 04/2031 Store: 10°C or colder 10000 µg/mL each in Methanol Danger	JS	7/12/23
0426			
0427			
0428			
0429			
STD 0430	33912 US/EN alpha-Terpineol Standard Lot# A0190441 Expire: 10/2025 Store: 10°C or colder 1 mL 2000 µg/mL each in Methylene Chloride RESTEK	JS	7/12/23
0431			
0432			
0433			
0434			
0435			
0436			
0437			
0438			
0439			
STD 0440	30614 RESTEK 1,4-dioxane-d8 Standard Lot# A0195206 Expire: 02/2026 Store: 0°C or colder 2000 µg/mL each in P&T Methanol Danger	JS	7/12/23
0441			
STD 0442	APP-9-048-R1-20X Lot: 223071032 Exp: Aug 07, 2025 Date Opened	CMW	7/12/23
0443			
0444			

A JS 7/12/23

KATAHDIN ANALYTICAL SERVICES

STOCK STANDARDS RECEIVED

Extractions Laboratory

STD 0442	Z-014E-R3 Lot: 221111178-01 Exp: Jan 13, 2025 Date Opened	JS	7/12/23
0443			
0444			
0445			
0446			
0447			
0448			
0449			
~~0450~~			
0450			
0451			
STD 0452	CLP-HC-A-R Lot: 222111297 Exp: Nov 30, 2025 Date Opened	JS	7/12/23
0453			
0454			
0455			
0456			
0457			
0458			
0459			
0460			
0461			
STD 0462	CLP-HC-BN-R Lot: 222111137 Exp: Dec 11, 2024 Date Opened	JS	7/12/23
0463			
0464			
0465			
0466			
0467			
0468			
0469			
0470			
0471			

KATAHDIN ANALYTICAL SERVICES

STOCK STANDARDS RECEIVED

Extractions Laboratory

STD 0472	H-001S-D-40X Lot: 221121197 Exp: Dec 15, 2031 Date Opened	JS	7/12/23
0473			
0474			
0475			
0476			
0477			
0478			
0479			
STD 0480	Z-014F Lot: 223021429 Exp: Feb 22, 2027 Date Opened	JS	7/12/23
0481			
0482			
0483			
0484			
0485			
0486			
0487			
0488			
0489			
STD 0490	P-233S-10X Lot: 222011504 Exp: Jan 25, 2032 Date Opened	JS	7/12/23
0491			
0492			
0493			
0494			
0495			
0496			
0497			
0498			
0499			
0500			
0501			
0502			
0503			
0504			
0505			
0506			
0507			
0508			
0509			

KATAHDIN ANALYTICAL SERVICES

STOCK STANDARDS RECEIVED

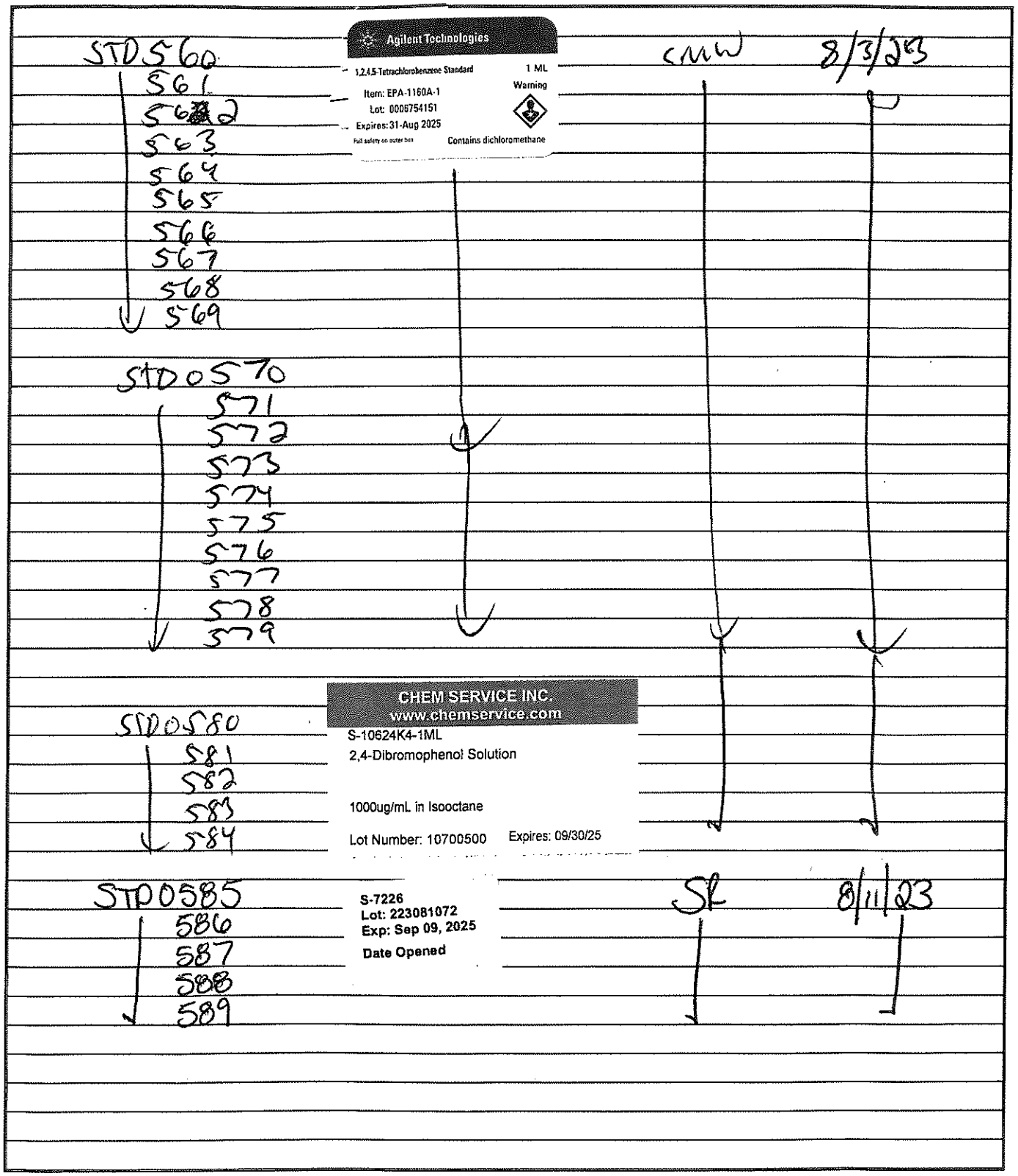
Extractions Laboratory

STD 0510 0511 0512 0513 0514	DRH-007-SS Lot: 223061651 Exp: Jul 10, 2033 Date Opened	CMW	7/13/23
STD 0515	BPA-A-S Lot: 221101223 Exp: Oct 14, 2025 Date Opened		
STD 0516 17 18 19	M-8330-SS Lot: 223031204 Exp: Mar 14, 2033 Date Opened	CMW	7/18/23
STD 0520 21 22 23 24	DRH-007S Lot: 223061309 Exp: Jun 19, 2033 Date Opened		
STD 0525 -26 -27 -28 -29	DRH-006S Lot: 223071038 Exp: Jul 12, 2033 Date Opened		
STD 0530 -31 -32 -33 -34	DRH-FTRPH Lot: 223011743 Exp: Feb 10, 2033 Date Opened		

KATAHDIN ANALYTICAL SERVICES

STOCK STANDARDS RECEIVED

Extractions Laboratory



KATAHDIN ANALYTICAL SERVICES

STOCK STANDARDS RECEIVED

Extractions Laboratory

10/24/23 CMM

STD0696
97
98
99

RESTEK 31459
110 Benner Circle Bellefonte, PA 16823
814-353-1300
www.restek.com
Danger
Lot# A0200172
Expire: 09/2030 Store: 25°C nominal
MA EPH Aliphatic Hydrocarbon Standard
1000 µg/mL each in Hexane
Notebook Label
Receipt Date:
Opened Date:
Made in USA
For Laboratory Use Only
1 mL
Full label information for the chemical is provided on the outside package

STD0700
701

RESTEK 31097
110 Benner Circle Bellefonte, PA 16823
814-353-1300
www.restek.com
Warning
Lot# A0201243
Expire: 03/2027 Store: 10°C or colder
o-Terphenyl Standard
10000 µg/mL each in Methylene Chloride
Sonicate prior to use
Notebook Label
Receipt Date:
Opened Date:
Made in USA
For Laboratory Use Only
1 mL
Full label information for the chemical is provided on the outside package

STD0702
703
704
705

RESTEK 30614
110 Benner Circle Bellefonte, PA 16823
814-353-1300
www.restek.com
Danger
Lot# A0199745
Expire: 07/2026 Store: 0°C or colder
1,4-dioxane-d8 Standard
2000 µg/mL each in P&T Methanol
Notebook Label
Receipt Date:
Opened Date:
Made in USA
For Laboratory Use Only
1 mL
Full label information for the chemical is provided on the outside package

STD0706

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com
1 mL
M-8270-09-ASL
Method 8270B - Organophosphorous Pesticide Mix
2.0 mg/mL in CH2Cl2
9 comp(s)
Lot: 218121268-03
Storage: Refrig (0-5 °C)
Exp: Mar 21, 2025
FOR LABORATORY USE ONLY
PRODUCT OF THE USA
H315 H335
H332 H302
H351 H350
P338 P360
P331 P233
P262 P202
Refer to SDS
Signal Word: Warning

STD0707
708

RESTEK 31661
110 Benner Circle Bellefonte, PA 16823
814-353-1300
www.restek.com
Danger
Lot# A0200245
Expire: 02/2029 Store: 10°C or colder
3,5-Dinitroaniline Standard
1000 µg/mL each in Acetonitrile
Notebook Label
Receipt Date:
Opened Date:
Made in USA
For Laboratory Use Only
1 mL
Full label information for the chemical is provided on the outside package

STD0709
710
711
712

RESTEK 31098
110 Benner Circle Bellefonte, PA 16823
814-353-1300
www.restek.com
Warning
Lot# A0201707
Expire: 09/2030 Store: 10°C or colder
1-Chlorooctadecane Standard
10000 µg/mL each in Methylene Chloride
Notebook Label
Receipt Date:
Opened Date:
Made in USA
For Laboratory Use Only
1 mL
Full label information for the chemical is provided on the outside package

0000082

KATAHDIN ANALYTICAL SERVICES

STOCK STANDARDS RECEIVED

GC and Semivolatile Extractables Laboratory

STK6340

33913 US/EN
SOM01.0 SIM Analysis Standard
Lot# A0186160
Expire. 05/2028 Store: 10°C or colder 1 mL
2000 µg/mL each in Methylene Chloride
RESTEK

STK6341
STK6342

33913 US/EN
SOM01.0 SIM Analysis Standard
Lot# A0186160
Expire. 05/2028 Store: 10°C or colder 1 mL
2000 µg/mL each in Methylene Chloride
RESTEK

STK6343 DLM-165-0 CAS 1718-52-1 Rec'd 9/6/22 DT
Pyrene-D10 Lot# PR-30304
CAMBRIDGE ISOTOPE

STK6344 DLM-1123-0 CAS 81103-79-9 Rec'd 9/6/22 DT
Fluorene-D10 Lot# PR-24453
CAMBRIDGE ISOTOPE

CHEM SERVICE INC.
PO Box 599, West Chester, PA 19381 800-452-9994

STK6345 N-10624-1G 2,4-Dibromophenol Rec'd 9/6 DT
Purity: 99.4%
DANGER
Lot Number: 13602300
Expires: 08/31/25
www.chemservice.com

31879 US/EN
Benzoic Acid Mix
Lot# A0180473
Expire: 01/2026 Store: 10°C or colder 1 ml
2000 µg/mL each in Methylene Chloride
RESTEK

STK6346 9/14

AccuStandard® 125 Market St. New Haven, CT 06513 www.AccuStandard.com

STK6347 AS-E0455 1 mL
Dinoseb
1000 µg/mL in AcCN
Lot: 221071576-01 1 comp(s)
Exp: Sep 12, 2026 Storage: Ambient (>5 °C)

FOR LABORATORY USE ONLY
H225 H315 H332 H319 H360 P338 P352 P340 P233 P260 P262 P202
Refer to SDS
Signal Word Danger

9/14

KATAHDIN ANALYTICAL SERVICES

STOCK STANDARDS RECEIVED

GC and Semivolatile Extractables Laboratory

STK6384
85
86
87
88

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com

Z-014J 1 mL
Internal Standard Mix
4.0 mg/mL in CH2Cl2
Lot: 222091463 6 comp(s)
Exp: Oct 03, 2032 Storage: Ambient (>5 °C)/Sonicate
PRODUCT OF THE USA FOR LABORATORY USE ONLY

H315 H335
H332 H302
H351 H350
P338 P360
P331 P233
P262 P202
Refer to SDS
Signal Word: Warning

11/29 DT

STK6389
L 90

31879 US/EN
Benzoic Acid Mix
Lot# A0183914
Expire: 04/2026 Store: 10°C or colder 1 mL
2000 µg/mL each in Methylene Chloride
RESTEK

R: 12/8/22 EP

STK6391

31850 US/EN
8270 MegaMix®
Lot# A0185274
Expire: 11/2023 Store: 0°C or colder 1 mL
500-1000 µg/mL each in Methylene Chloride
RESTEK

R: 12/21/22 EP

STK6392

31834 US/EN
Benzidine Mix
Lot# A0187252
Expire: 02/2027 Store: 10°C or colder 1 mL
2000 µg/mL each in Methylene Chloride
RESTEK

1/3/23 DT

STK6393

31031 US/EN
606 Phthalate Esters Calibration Mix
Lot# A0190160
Expire: 02/2027 Store: 10°C or colder 1 mL
2000 µg/mL each in Methanol
RESTEK

R: 1/6/23 EP

STK6394

32007 US/EN
Aroclor® 1221 Standard
Lot# A0187032
Expire: 10/2028 Store: 25°C nominal 1 mL
1000 µg/mL each in Hexane
RESTEK

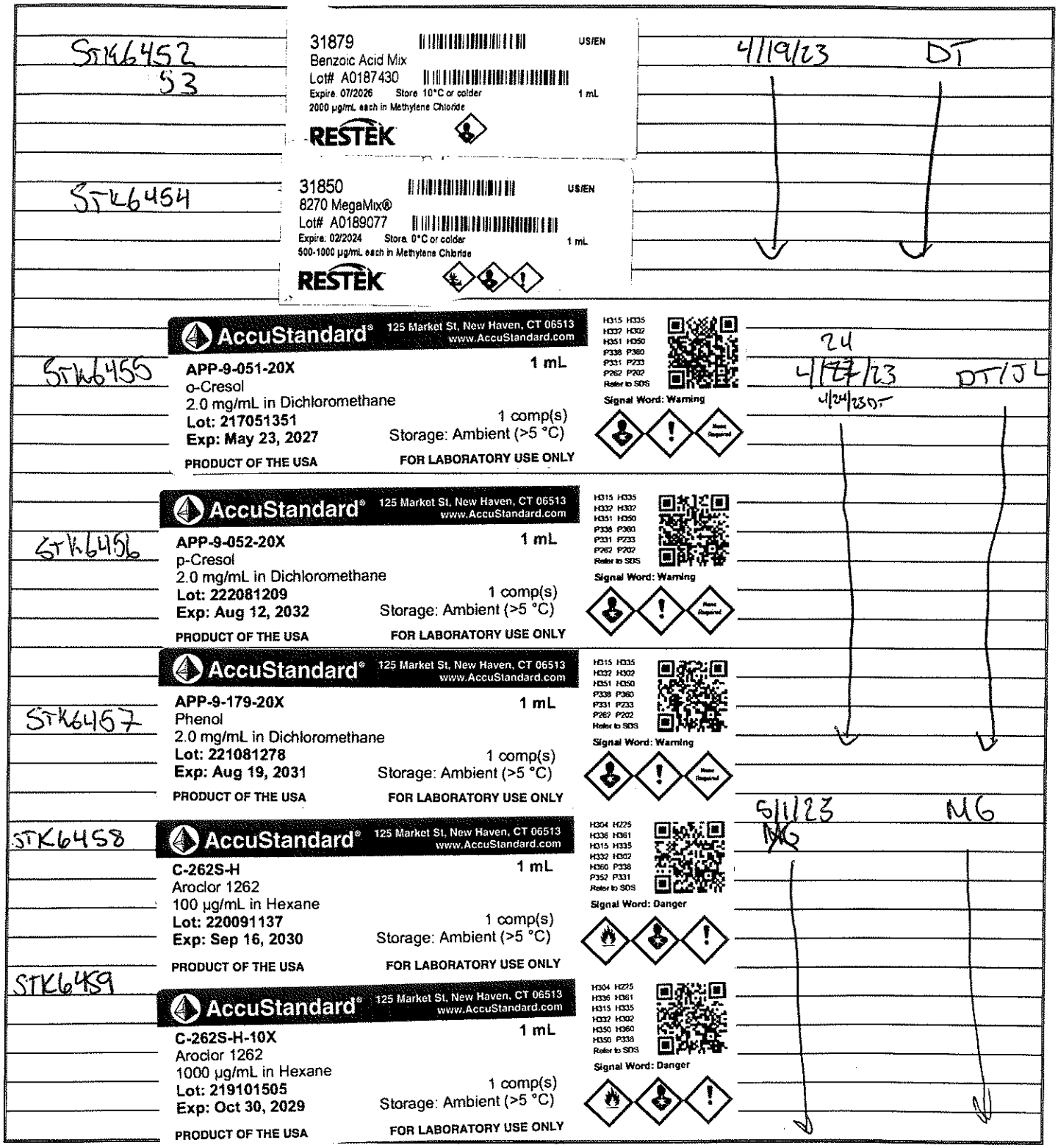
This product contains PCBs

R: 1/12/23 MG

KATAHDIN ANALYTICAL SERVICES

STOCK STANDARDS RECEIVED

GC and Semivolatile Extractables Laboratory



STK6452
53

31879 US/EN
Benzoic Acid Mix
Lot# A0187430
Expire. 07/2026 Store. 10°C or colder 1 mL
2000 µg/mL each in Methylene Chloride
RESTEK

4/19/23 DT

STK6454

31850 US/EN
8270 MegaMix®
Lot# A0189077
Expire. 02/2024 Store. 0°C or colder 1 mL
500-1000 µg/mL each in Methylene Chloride
RESTEK

STK6455

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com
APP-9-051-20X 1 mL
o-Cresol
2.0 mg/mL in Dichloromethane
Lot: 217051351 1 comp(s)
Exp: May 23, 2027 Storage: Ambient (>5 °C)
PRODUCT OF THE USA FOR LABORATORY USE ONLY
Signal Word: Warning

24
4/27/23 DT/JL
4/24/23 DT

STK6456

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com
APP-9-052-20X 1 mL
p-Cresol
2.0 mg/mL in Dichloromethane
Lot: 222081209 1 comp(s)
Exp: Aug 12, 2032 Storage: Ambient (>5 °C)
PRODUCT OF THE USA FOR LABORATORY USE ONLY
Signal Word: Warning

STK6457

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com
APP-9-179-20X 1 mL
Phenol
2.0 mg/mL in Dichloromethane
Lot: 221081278 1 comp(s)
Exp: Aug 19, 2031 Storage: Ambient (>5 °C)
PRODUCT OF THE USA FOR LABORATORY USE ONLY
Signal Word: Warning

5/1/23 MG
MG

STK6458

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com
C-262S-H 1 mL
Aroclor 1262
100 µg/mL in Hexane
Lot: 220091137 1 comp(s)
Exp: Sep 16, 2030 Storage: Ambient (>5 °C)
PRODUCT OF THE USA FOR LABORATORY USE ONLY
Signal Word: Danger

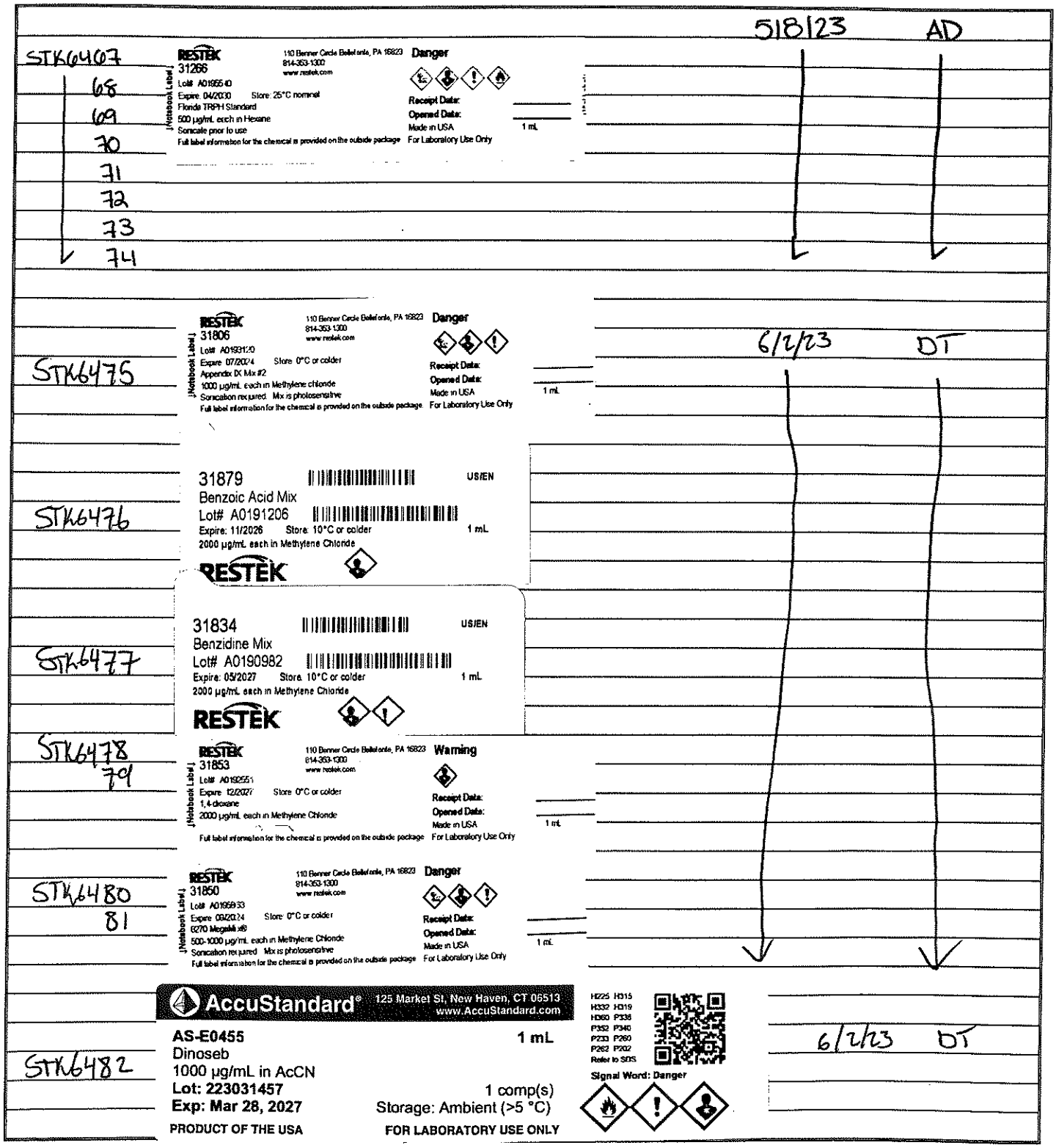
STK6459

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com
C-262S-H-10X 1 mL
Aroclor 1262
1000 µg/mL in Hexane
Lot: 219101505 1 comp(s)
Exp: Oct 30, 2029 Storage: Ambient (>5 °C)
PRODUCT OF THE USA FOR LABORATORY USE ONLY
Signal Word: Danger

KATAHDIN ANALYTICAL SERVICES

STOCK STANDARDS RECEIVED

GC and Semivolatile Extractables Laboratory



KATAHDIN ANALYTICAL SERVICES

STOCK STANDARDS RECEIVED

GC and Semivolatile Extractables Laboratory

6/6/23 DT
STK6482
3

AccuStandard® 125 Market St. New Haven, CT 06513 www.AccuStandard.com

APP-9-191-10X
1,2,4,5-Tetrachlorobenzene
1000 µg/mL in MeOH
Lot: 219041253
Exp: Apr 09, 2029
PRODUCT OF THE USA

1 mL
1 comp(s)
Storage: Ambient (>5 °C)
FOR LABORATORY USE ONLY

H336 H225
H370 H320
H315 H311
H332 H301
H360 P338
P360 P331
Refer to SDS
Signal Word: Danger

6/2/23 DT

STK6484
15
16

spex® certiprep

Part # : S-3480
Lot # : MP221219006
Date Opened:

6/20/23 AD

n-Tetratetracontane
Contains the following in **Cyclohexane:Dichloromethane(1:1)**

Concentration	Compound
1000 µg/mL	n-Tetratetracontane

S-3480
MP221219006

Warning

Storage: **Freezer**

Harmful if swallowed. Suspected of causing cancer.
Wash thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection. IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell. IF exposed or concerned: Get medical advice/attention. Dispose of contents/container in accordance with local/regional/national/international regulations.
Phone: 732-549-7144

For Laboratory Use Only

STK6487
88
89

RESTEK
33913
Lot# A0105662
Expire 02/2029 Store 10°C or colder
SOMDI 0 SIM Analysis Standard
2000 µg/mL each in Methylene Chloride
Sonication required Mix is photosensitive
Full label information for the chemical is provided on the outside package

110 Benner Circle Bellefonte, PA 16823
814-353-1300
www.restek.com

Warning

Receipt Date:
Opened Date:
Made in USA
For Laboratory Use Only

1 mL

6/26/23 DT

STK6490
91

31097 RESTEK
o-Terphenyl Standard
Lot# A0197729
Expire 12/2026 Store 10°C or colder
10000 µg/mL each in Methylene Chloride
Sonicate prior to use
Warning

Peel Here

6/28/23 AD

KATAHDIN ANALYTICAL SERVICES

STOCK STANDARDS RECEIVED

GC and Semivolatile Extractables Laboratory

STK6525

26
27
28

31266 RESTEK
Florida TRPH Standard
Lot# A0195540
Expire: 04/2030 Store: 25°C nominal
2000 µg/mL each in Hexane
Sonicate prior to use
Danger

AD 8/11/23

STK6529

30
31
32
33

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com

M-625-TS-20X 1 mL
GC/MS Tuning Std for EPA Method 624/625
1000 µg/mL in CH2Cl2
Lot: 222031198-01 4 comp(s)
Exp: May 28, 2025 Storage: Ambient (>5 °C)
PRODUCT OF THE USA FOR LABORATORY USE ONLY

H315 H335
H332 H302
H350 H360
H350 P308
P360 P331
P233 P262
Refer to SDS
Signal Word: Warning

EP 8/11/23

STK6534

35
36
37
38

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com

Z-014J 1 mL
Internal Standard Mix
4.0 mg/mL in CH2Cl2
Lot: 223061537 6 comp(s)
Exp: Jun 28, 2033 Storage: Ambient (>5 °C)/Sonicate
PRODUCT OF THE USA FOR LABORATORY USE ONLY

H315 H335
H332 H302
H351 H350
P338 P360
P331 P233
P262 P202
Refer to SDS
Signal Word: Warning

STK6539

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com

M-8270-SS 1 mL
Method 8270 - Surrogate Standard
4.0 mg/mL in CH2Cl2
Lot: 223021323 6 comp(s)
Exp: Feb 15, 2033 Storage: Ambient (>5 °C)
PRODUCT OF THE USA FOR LABORATORY USE ONLY

H315 H335
H332 H302
H351 H350
P338 P360
P331 P233
P262 P202
Refer to SDS
Signal Word: Warning

STK6540

32419 US/EN
EPA 8270 Organophosphorous Pesticides Mix
Lot# A0189840
Expire: 03/2024 Store: 10°C or colder 1 mL
2000 µg/mL each in Methylene Chloride
RESTEK

STK6541

32460 US/EN
Methapyrilene Standard
Lot# A0191563
Expire: 05/2024 Store: 0°C or colder 1 mL
2000 µg/mL each in Methylene Chloride
RESTEK

KATAHDIN ANALYTICAL SERVICES

STOCK STANDARDS RECEIVED

GC and Semivolatile Extractables Laboratory

STK6547
48
49

RESTEK 110 Benner Circle Bellefonte, PA 16823 814-353-1300 www.restek.com
33913
Lot# A0199849
Expire 09/2029 Store 10°C or colder
SOM01.0 SIM Analysis Standard
2000 µg/mL each in Methylene Chloride
Sonication required Mix is photosensitive
Full label information for the chemical is provided on the outside package
Warning
Receipt Date:
Opened Date:
Made in USA
For Laboratory Use Only
1 mL

Recieved: 9/11/23 DT

STK6550
51

RESTEK 110 Benner Circle Bellefonte, PA 16823 814-353-1300 www.restek.com
31834
Lot# A0197191
Expire 11/2027 Store 10°C or colder
Benzidine Mix
2000 µg/mL each in Methylene Chloride
Contains carcinogen/reproductive toxin
Full label information for the chemical is provided on the outside package
Danger
Receipt Date:
Opened Date:
Made in USA
For Laboratory Use Only
1 mL

10/12/23
Recieved: 10/12/23 DT

STK6552
53

RESTEK 110 Benner Circle Bellefonte, PA 16823 814-353-1300 www.restek.com
31850
Lot# A0197902
Expire 11/2024 Store 0°C or colder
8270 MegaMix®
500-1000 µg/mL each in Methylene Chloride
Sonication required Mix is photosensitive
Full label information for the chemical is provided on the outside package
Warning Danger
Receipt Date:
Opened Date:
Made in USA
For Laboratory Use Only
1 mL

Recieved: 10/12/23 DT

STK6554

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com
C-202S 1 mL
2,2',3,3',5,5',6,6'-Octachlorobiphenyl
35 µg/mL in Isooctane
Lot: 105-271-01 1 comp(s)
Exp: May 20, 2025 Storage: Ambient (>5 °C)/Sonicate
PRODUCT OF THE USA FOR LABORATORY USE ONLY
H305 H225 H336 H315 H302 H319 P338 P352 P331 P233 P260 P262 Refer to SDS
Signal Word: Danger

10/24/23 (MW)

STK6555

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com
C-200S-R1 1 mL
2,2',3,3',4,5,6,6'-Octachlorobiphenyl
35 µg/mL in Isooctane
Lot: 222021273 1 comp(s)
Exp: Feb 15, 2032 Storage: Ambient (>5 °C)/Sonicate
PRODUCT OF THE USA FOR LABORATORY USE ONLY
H225 H336 H304 H400 H413 H319 H315 H335 H302 P338 P352 P331 Refer to SDS
Signal Word: Danger

STK6556

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com
C-201S-R1 1 mL
2,2',3,3',4,5',6,6'-Octachlorobiphenyl
35 µg/mL in Isooctane
Lot: B5020150-01 1 comp(s)
Exp: Dec 04, 2029 Storage: Ambient (>5 °C)/Sonicate
PRODUCT OF THE USA FOR LABORATORY USE ONLY
H305 H225 H336 H315 H302 H319 P338 P352 P331 P233 P260 P262 Refer to SDS
Signal Word: Danger

GC/MS SVOA STANDARD PREP LOGBOOK

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	Amt Added	Stock Exp Date	Total Vol	Final Conc
S3915	8270 Stock	2/28/23	8/28/23	EP	STK6402	8270 Mega Mix	220 mL	2/17/24	1.8 mL	125 µg/mL
					STK6405	APPIX Mix #2		2/17/24		
					STK6395	Dinoseb		2/17/24		
					STK6348	8270 Surr Mix	55 mL	10/14/23		
					STK6332	Methapyrilene	110 mL	11/7/23		
					STK6390	Benzoic Acid Mix		2/17/24		
					STK6392	Benzidine Mix		1/24/24		
					STK6374	Org Phos Pest		12/2/23		
					STK6377	APPIX Mix #1		11/15/23		
					STD0966	α-terpineol		11/2/23		
					EF820-US	MeCl2	355 mL	—		
S3916	Fluorene-Dio Stock	2/28/23	2/28/24	DT	STK6344	Fluorene-Dio	19.5 mg	—	10 mL	1950 µg/mL
					EF820-US	MeCl2	-> 10 mL	—		
S3917	1,4-Dioxane	3/1/23	3/31/23	EP	S3899	1,4-dioxane Pre-stock	180 mL	3/31/23	1.8 mL	20 µg/mL
					EF820-US	MeCl2	1620 mL	—		
S3918	SIM IND	3/2/23	5/7/23	CO	S3887	SIM IND Prestock	90 mL	5/7/23	1.8 mL	5 µg/mL
					EF820-US	MeCl	1710 mL			
S3919	SIM Stock B	3/3/23	7/6/23	CO	S3872	SIM Prestock B	180 mL	~~5/7~~ 7/6/23	1.8 mL	20 µg/mL
					EF820-US	MeCl2	1620 mL			

Reviewed by/Date:

GC/MS SVOA STANDARD PREP LOGBOOK

Standard	Standard Name	Date Prep	Date Exp	Initials	Stock	Stock Name	Amt Added	Stock Exp Date	Total Vol	Final Conc
S4002	8270 Stock for PP	8/14/23	2/14/24	EP	STK6481	8270 MegaMix	220	8/14/24	1.8mL	125 µg/mL
					STK6424	8270 Surrogate	55	4/4/24		
					STK6476	Benzoic Acid Mix	210	6/27/24		
					STK6477	Benzidine Mix	1	6/27/24		
					S3951	o-toluene sulfonamide	113	4/17/24		
					S3952	p-toluene sulfonamide	106	4/17/24		
					S3953	2,6-dimethylphenol	111	4/17/24		
					EG266-US	$MeCl_2$	985	—		
S4003	SIM STOCK A	8/16/23	9/24/23	DT	STK6481	8270 Megamix	200µL	8/14/24	10mL	20µg/mL
					S3958	OLM COMPOUNDS		11/3/23		
					STD0555	1,2,4,5-TCB		7/31/24		
					STK6477	BENZIDINE MIX	100µL	6/27/24		
					STK6478	1,4-dioxane		6/2/24		
					STK6476	Benz~~idine~~ oic acid Mix 9/19/23 DT		6/27/23		
					S3932	SIM SURR MIX	1 ML	9/24/23		
					EH197-US	$MeCl_2$	→10mL	—		
S4004	SIM IND	8/18/23	11/9/23	DT	S3963	SIM IND PRE-STOCK	90µL	11/9/23	1.8mL	5µg/mL
					EH197-US	$MeCl_2$	1710µL	—		
S4005	Pyrene-D10	8/18/23	8/18/24	DT	STK6343	Pyrene-D10	0.0225g	—	10mL	2250 µg/mL
					EH197-US	$MeCl_2$	→10mL	—		

Reviewed by/Date:

QA-004 – Revision 1 – 11/10/10

GC/MS SVOA STANDARD PREP LOGBOOK

Standard #	Standard Name	Prep Date	Exp Date	Initials	Stock #	Stock Name	Amt Added	Stock Exp Date	Total Vol	Final Conc
S4014	8270 STOCK	9/13/23	1/31/24	DT	STK6431	8270 ~~STOC~~ 9/15/23 DT MegaMIX	220 uL	8/14/24	4.8 mL	125 ug/mL
					STK6475	APPIX MIX #2	↓	6/23/24		
					STK6482	DINOSEB	↓	6/28/24		
					STK6424	8270 SURR	55 uL	4/4/24		
					STK6541	Methapyrilene	110 uL	5/31/24		
					STK6476	Benzoic ACID MIX	↓	6/27/24		
					STK6477	BENZIDINE MIX	↓	6/19/24		
					STK6440	ORG PHOS PEST	↓	1/31/24		
					STK6543	APPIX MIX #1	↓	9/13/24		
					STD0269	X-Terpineol	↓	5/31/24		
					EH197-US	$MeCl_2$	355 uL	—		
S4015	SIM IS	9/15/23	3/15/24	DT	STK6429	INTERNAL STD MIX	100 uL	8/22/24	5 mL	80 ug/mL
					EH197-US	$MeCl_2$	→ 5 mL	—		
S4016	2,4-dibromophenol	9/15/23	9/15/24	DT	STK3868	2,4-dibromophenol	⊛ 22.2 mg ~~220 mg~~	—	10 mL	2220 ug/mL
↓	↓	↓	↓	↓	EH197-US	$MeCl_2$	→ 10 mL	—	↓	↓
S4017	SIM Surr Mix (6)	9/15/23	2/28/24	DT	S4016	2,4-dibromophenol	⊛ 900 uL ~~1.68 mL~~	9/15/24	10 mL	200 ug/mL
↓	↓	↓	↓	↓	S4005	Pyrene-d10	↓ 990 uL ~~950 mL~~	8/18/24	↓	↓
↓	↓	↓	↓	↓	S3916	Fluorene-d10	1.0 mL	2/28/24	↓	↓
↓	↓	↓	↓	↓	STD0373	1,4-dioxane-d8	↓	5/27/24	↓	↓
↓	↓	↓	↓	↓	STK6489	SOM1.0 SIM Analysis Std	↓	9/15/24	↓	↓
↓	↓	↓	↓	↓	EH197-US	$MeCl_2$	→ 10 mL	—	↓	↓

Reviewed by/Date:

⊛ EP 15Sep23

GC/MS SVOA STANDARD PREP LOGBOOK

•9/18/23 DT

Standard ID	Standard Name	Prep Date	Expiration Date	Prep By	Source #	Source Name	Amt Added	Stock # for Source	Final Vol	Final Conc
S4018	DFTPP	~~8~~/15/23	3/15/24	DT	STD0362	GCMS Tuning Std	250mL	7/4/24	10mL	25 ng/mL
1	1	9 1	1	1	EH197-US	$MeCl_2$	→10mL	—	1	1
S4019	Fluorene-D10	9/15/23	9/15/24	DT	STK6344	Fluorene-D10	21.0mg	—	10mL	2100 ug/mL
					EH197-US	$MeCl_2$	→10mL	—		
S4020	SIM STOCK A	9/18/23	11/3/23	DT	STK6481	8270 MegaMix	200mL	8/14/24	10mL	20 ug/mL
					S3958	OLM Compounds	↓	11/3/23		
					STD0655	1,2,4,5-TCB	↓	7/31/24		
					STK6477	Benzidine MIX	100mL	6/15/24		
					STK6478	1,4-Dioxane	↓	6/2/24		
					STK6476	Benzoic Acid MIX	↓	6/27/24		
					S4017	SIM SURR MIX	1mL	7/28/24		
					EH197-US	$MeCl_2$	→10mL	—		
S4021	SIM STOCK B	9/22/23	12/5/23	EP	S3976	PreStock-B	180mL	9/5/23	1.8mL	20 mg/mL
1	1	1	1	1	EH206-US	$MeCl_2$	1620mL	—	1	1
S4022	SIM IND	9/27/23	11/9/23	DT	S3963	SIM IND PRE-STOCK	90mL	11/9/23	1.8mL	5 ug/mL
					EH206-US	$MeCl_2$	1710mL	10/2/23 DT —		
S4023	SIM PreStock B	10/4/23	1/6/24	EP	STD0115	Acid Composite Mix	180mL	1/6/24	1.8mL	200 mg/mL
1	1	1	1	1	STK6393	606 Phthalate Esters	180mL	1/6/24	1	1
					EH206-US	$MeCl_2$	1440mL	—		

Reviewed by/Date:

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	Amt Added	Stock Exp Date	Total Vol	Final Conc
S4030	OLM Compounds	10/12/23	4/12/24	DT	STD0164	S-7226 Custom	360	9/22/24	1.8 mL	1000 ug/mL
					EH206-US	$MeCl_2$	1440	—		
S4031	SIM STOCK A	10/12/23	2/28/24	DT	STK6552	8270 Megamix	200	10/12/24	10 mL	20 ug/mL
					S4030	OLM Compounds	↓	4/12/24		
					STD0555	10/12/23 DT ~~1,4~~ 1,2,4,5-TCB	↓	7/31/24		
					STK6550	Benzidine Mix	100	10/12/24		
					STK6478	1,4-Dioxane	↓	6/2/24		
					STK6453	Benzoic Acid Mix	↓	10/12/24		
					S4017	SIM Surr Mix	1 mL	2/28/24		
					EH206-US	$MeCl_2$	→ 10 mL	—		
S4032	SIM Stock B	10/18/23	1/6/24	EP	S4023	Pre-Stock B	180 mL	1/6/24	1.8 mL	20 ug/mL
⊥	⊥	⊥	⊥	⊥	EH206-US	$MeCl_2$	1620 mL	—	⊥	⊥
S4033	SIM IS	10/27/23	4/27/24 ~~23~~ 10/27/23 DT	DT	STK6534	Internal Standard Mix	100 µL	10/10/24	5 mL	80 ug/mL
					EH206-US	$MeCl_2$	→ 5 mL	—		
S4034	SIM IND	11/1/23	11/9/23	EP	S3963	SIM IND Pre-stock	90 mL	11/9/23	1.8 mL	5 ug/mL
⊥	⊥	⊥	⊥	⊥	EH206-US	$MeCl_2$	1710 mL	—	⊥	⊥

Reviewed by/Date:

QA-004 Revision 1 11/10/10

(*) EP 10NOV23

GC/MS SVOA STANDARD PREP LOGBOOK

Standard #	Standard Name	Prep Date	Exp Date	Initials	Stock #	Stock Name	Amt Added	Stock Exp Date	Total Vol	Final Conc
S4035	SIM Pre-stock IND	~~11/10~~ 11/10/23	01/06/24	EP	STD0115	Acid Composite Mix	90 uL	01/06/24	1.8 mL	100 ug/mL
					STD0467	B/N Composite Mix		10/30/24		
					STD0446	Composite Mix #3		11/10/24		
					STD0489	Benzidine Mix		9/22/24		
					STD0473	1-Methylnaphthalene		9/22/24		
					STD0309	1,4-dioxane		11/10/23 (*)		
					STD0164	Custom OLM	36 uL	9/22/24		
					STD0520	1,2,4,5 TCB	180 uL	11/10/24		
					EH304-US	MeCl2	1044 uL	—		
S4036	SIM IND	11/10/23	01/06/24	EP	S4035	SIM IND Pre-stock	90 uL	01/06/24	1.8 mL	5 ug/mL
					EH304-US	MeCl2	1710 uL	—		
S4037	SIM Stock B	11/15/23	1/6/24	EP	S4023	Pre-stock B	180 uL	1/6/24	1.8 mL	20 ug/mL
					EH362-US	MeCl2	1620 uL	—		
S4038	DFTPP	11/17/23	5/17/24	EP	STD0362	GC/MS Tuning Mix	250 uL	7/4/24	10 mL	25 ug/mL
					EH362-US	MeCl2	→ 10 mL	—		

Reviewed by/Date:

GC/MS SVOA STANDARD PREP LOGBOOK

Standard ID	Standard Name	Prep Date	Exp Date	Initials	Stock	Stock Name	Amt Added	Stock Exp Date	Total Vol	Final Conc
S4039	SIM Stock A	11/29/23	2/28/24	EP	STK6552	8270 Mega Mix	200 mL	10/12/24	10 mL	20 ug/mL
					S4030	OLM Compounds		4/12/24		
					STD0520	1.2.4.5 -TCB		11/10/24		
					STK6550	Benzidine Mix	100 mL	10/12/24		
					STK6478	1,4-Dioxane		6/2/24		
					STK6453	Benzoic Acid Mix		10/10/24		
					S4017	SIM Surr Mix	1 mL	2/28/24		
					PH486-US	$MeCl_2$	→ 10 mL	—		
S4040	SIM Stock B	12/1/23	1/6/24	EP	S4023	Pre-Stock B	180 mL	1/6/24	1.8 mL	20 ug/mL
					PH486-US	$MeCl_2$	1620 mL	—		
S4041	SIM IND	12/7/23	1/6/24	EP	S4035	SIM IND Pre-Stock	90 mL	1/6/24	1.8 mL	5 ug/mL
					PH486-US	$MeCl_2$	1710 mL	—		
S4042	SIM IS	12/15/23	6/14/24	DT	STK6534	INTERNAL STD MIX	100 mL	10/10/24	5 mL	80 ug/mL
					PH486-US	$MeCl_2$	→ 5 mL			
S4043	DFTPP	12/20/23	6/20/24	DT	STK6529	GC/MS Tuning MIX	250 mL	12/20/24	10 mL	25 ug/mL
					PH486-US	$MeCl_2$	→ 10 mL			

Reviewed by/Date:

SVOA EXTRACTION SPIKE STANDARD PREPARATION

PREP INFO	STOCK NAME	AMT ADDED	STOCK CONC.	STOCK#
ID#: SV3174	**APP IX SPIKE**			
Prep Date: 9/5/23	CLP-HC-X1-R1	0.25 mL	2000 ug/mL ✓	STD0242 STD0622
Initials: JS	M-8270-07-R1	0.25 mL	2000 ug/mL ✓	STD0241
Exp. Date: ~~3/5/24~~	M-8270-08-R1	0.25 mL	2000 ug/mL ✓	STD9072, 617
X 2/3/24	M-8270-09-R1	0.25 mL	2000 ug/mL ✓	STD618,
JS 9/5/23	M-8270-10-R1	0.25 mL	2000 ug/mL ✓	STD620, 9074
	APP-9-014-D10X	0.25 mL	2000 ug/mL ✓	
	Diluted to 10mL in MeOH#		**F.C.: 50 ug/mL**	
	SIM SURR MIX			
ID#: SV3175	SOM 1.0 SIM	2 mL	2000ug/mL	STK6547, STK6548
Prep Date: 9/15/23	Pyrene-D10	1.78 mL	2250ug/mL	54005
Initials: DT	Fluorene-D10	1 mL	1950ug/mL	53916
Exp. Date: 3/15/24	Fluorene-D10	0.98 mL	2100ug/mL	54019
	Diluted to 10 mL in MeOH	#EG017-US		F.C. 400ug/mL BQ
	S/S SURR			
ID#: SV3176	SIM SURR Stock	2.5 mL	400 ug/mL	SV3175
Prep Date: 9/18/23	B/N Surr mix	5.0 mL	5000 ug/mL	STD0416
Initials: CMW	Acid Surr mix	5.0 mL	10,000 ug/mL	STD0383 340 428
Exp. Date: ~~3/18/24~~ 24	1,4-dioxane-D8	0.5 mL	2000 ug/mL	STD0441
9/19/23 DT	2,4-dibromphenol	2.0 mL	1000 ug/mL	STD0583 581
	Diluted to 500mL in acetone#		**F.C.: Various**	

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SVOA EXTRACTION SPIKE STANDARD PREPARATION

PREP INFO	STOCK NAME	AMT ADDED	STOCK CONC.	STOCK#
ID#: SV3178		1,4 D SUM		
Prep Date: 10/11/23	1,4 Dioxane	0.25 mL	2000 ug/mL	STD0089
Initials: CMW	Diluted to	250 mL in	MeOH EG001-US	
Exp. Date: ~~10~~ 3/11/24			F.C 2ug/mL	

SIM SPIKE	
SVOA SPIKE SV3178 5.0 mL	50/100 ug/mL
Diluted to 50 mL in MeOH#	**F.C.: 5/10 ug/mL**

ID#: SV3181
Prep Date: 10/18/23
Initials: SH/AC
Exp. Date: 4/18/23

SIM SPIKE	
SVOA SPIKE SV3178 5.0 mL	50/100 ug/mL
Diluted to 50 mL in MeOH# EG017-US	**F.C.: 5/10 ug/mL**

ID#: SV3182
Prep Date: 11/6/23
Initials: SH
Exp. Date: 5/6/24

SVOA EXTRACTION SPIKE STANDARD PREPARATION

PREP INFO	STOCK NAME	AMT ADDED	STOCK CONC	STOCK#
~~ID#:~~ SV3182				
Prep Date: 11/2/23				
Initials: SH				
Exp. Date: 5/2/24				

SVOA SPIKE		
CLP-HC-BN-R-PAK	2.5 mL	2000 ug/mL
Z-014E	2.5 mL	2000 ug/mL
CLP-HC-A-R-PAK	5.0 mL	2000 ug/mL
S-7226	1.0 mL	5000 ug/mL
H-001S-D40X	2.5 mL	2000 ug/mL

SH 11/2/23

~~ID#:~~	APP-9-096-20X	2.5 mL	2000 ug/mL
~~Prep Date:~~	P-233S-10X	5.0 mL	1000 ug/mL
Initials:	APP-9-191-10X	5.0 mL	1000 ug/mL
Exp. Date:	Z-014F-PAK	5.0 mL	2000 ug/mL
	α- TERP	~~2.5 mL~~	2000 ug/mL
	Diluted to 100 mL in MeOH#		**F.C.: 50/100 ug/mL**

S/S SURR			
ID#: SV3183	SIM SURR Stock	2.5 mL	400 ug/mL
Prep Date: 11/6/23	B/N Surr mix	5.0 mL	5000 ug/mL
Initials: SH	Acid Surr mix	5.0 mL	10,000 ug/mL
Exp. Date: 5/6/24	1,4-dioxane-D8	0.5 mL	2000 ug/mL
	2,4-dibromphenol	2.0 mL	1000 ug/mL
	Diluted to 500mL in acetone# 225567		**F.C.: Various**

SV3175
STD0371
STD0384, 0425
STD0441, 0705
STD0584

METHANE ETHANE ETHYLENE DATA BY METHOD RSK SOP 175

QC Summary Section

Form 4
Method Blank Summary

Lab File ID : 5QK20212.D
Instrument ID : GC05
Heated Purge : No
Prep Temperature (C) : 19.8

SDG : SQ6238
Lab Sample ID : WG345566-1
Date Analyzed : 16-NOV-23
Time Analyzed : 15:39

This Method Blank applies to the following samples and QC samples:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Prep Temp (C)
Laboratory Control S	WG345566-2	5QK20213.	11/16/23	15:57	19.8
SY-BRMW4-62-72-110923	SQ6238-1	5QK20220.	11/16/23	19:11	20.8
SY-BRMW40-62-72-110923	SQ6238-2	5QK20221.	11/16/23	19:28	20.8
SY-BRMW4-138-148-110923	SQ6238-3	5QK20222.	11/16/23	19:45	20.8
SY-BRMW3-47-62-110923	SQ6238-4	5QK20223.	11/16/23	20:02	20.8
SY-BRMW3-145-155-110923	SQ6238-5	5QK20225.	11/16/23	20:36	20.9
SY-BRMW3-287-297-110923	SQ6238-6	5QK20226.	11/16/23	20:53	20.9
SY-BRMW4-291-301-110923	SQ6238-7	5QK20227.	11/16/23	21:10	20.9
SY-BRMW1-42-52-110923	SQ6238-8	5QK20228.	11/16/23	21:27	20.9
SY-BRMW1-65-75-110923	SQ6238-9	5QK20229.	11/16/23	21:44	21
SY-BRMW10-65-75-110923	SQ6238-10	5QK20230.	11/16/23	22:01	21
SY-BRMW1-150-157-110923	SQ6238-11	5QK20231.	11/16/23	22:18	21
Sample Duplicate	WG345566-3	5QK20232.	11/16/23	22:35	21

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Form 8
Analytical Sequence

Lab Name: Katahdin Analytical Services **SDG:** SQ6238
Instrument ID: GC05 **Column ID:** A

Client Sample ID	Lab Sample ID	Date Analyzed	Time Analyzed
Initial Calibration	WG344993-1	11/07/23	08:28
Initial Calibration	WG344993-2	11/07/23	08:46
Initial Calibration	WG344993-3	11/07/23	09:03
Initial Calibration	WG344993-4	11/07/23	09:20
Initial Calibration	WG344993-5	11/07/23	09:37
Initial Calibration	WG344993-6	11/07/23	09:54
Initial Calibration	WG344993-7	11/07/23	10:11
Independent Source	WG344993-8	11/07/23	11:39
Continuing Calibrati	WG345566-4	11/16/23	14:53
Method Blank	WG345566-1	11/16/23	15:39
Laboratory Control S	WG345566-2	11/16/23	15:57
SY-BRMW4-62-72-110923	SQ6238-1	11/16/23	19:11
SY-BRMW40-62-72-110923	SQ6238-2	11/16/23	19:28
SY-BRMW4-138-148-110923	SQ6238-3	11/16/23	19:45
SY-BRMW3-47-62-110923	SQ6238-4	11/16/23	20:02
Continuing Calibrati	WG345566-5	11/16/23	20:19
SY-BRMW3-145-155-110923	SQ6238-5	11/16/23	20:36
SY-BRMW3-287-297-110923	SQ6238-6	11/16/23	20:53
SY-BRMW4-291-301-110923	SQ6238-7	11/16/23	21:10
SY-BRMW1-42-52-110923	SQ6238-8	11/16/23	21:27
SY-BRMW1-65-75-110923	SQ6238-9	11/16/23	21:44
SY-BRMW10-65-75-110923	SQ6238-10	11/16/23	22:01
SY-BRMW1-150-157-110923	SQ6238-11	11/16/23	22:18
Sample Duplicate	WG345566-3	11/16/23	22:35
Continuing Calibrati	WG345566-6	11/16/23	22:52

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Sample Data Section

KATAHDIN ANALYTICAL SERVICES - ORGANIC DATA QUALIFIERS

U Indicates the compound was analyzed for but not detected above the specified level. This level may be the Practical Quantitation Level (PQL) (also called Limit of Quantitation (LOQ)), the Limit of Detection (LOD) or Method Detection Limit (MDL) as required by the client.

Note: All results reported as "U" MDL have a 50% rate for false negatives compared to those results reported as "U" PQL, "U" LOQ or "U" LOD, where the rate of false negatives is <1%.

* Compound recovery or percent RPD (relative percent difference) was outside of quality control limits.

D Indicates the result was obtained from analysis of a diluted sample. Surrogate recoveries may not be calculable.

E Estimated value. This flag identifies compounds whose concentrations exceed the upper level of the calibration range of the instrument for that specific analysis.

J Estimated value. The analyte was detected in the sample at a concentration less than the laboratory Practical Quantitation Level (PQL) (also called Limit of Quantitation (LOQ)), but above the Method Detection Limit (MDL).

And/or

J Used for Dual Column analytes when there is a greater than 40% difference for detected concentrations between the two GC/HPLC columns.

B Indicates the analyte was detected in the laboratory method blank analyzed concurrently with the sample.

I Indicates that the flagged compound did not meet DoD criteria in the corresponding Initial Calibration (ICAL).

D Indicates that the flagged compound did not meet DoD criteria in the corresponding Initial Calibration Verification (ICV).

C Indicates that the flagged compound did not meet DoD criteria in the corresponding opening Calibration Verification (CV).

V Indicates that the flagged compound did not meet DoD criteria in the corresponding closing Calibration Verification (CV).

L/LL Indicates that the flagged compound did not meet DoD criteria in the corresponding Laboratory Control Sample (LCS) and/or Laboratory Control Sample Duplicate (LCSD) prepared and/or analyzed concurrently with the sample.

M/MM Indicates that the flagged compound did not meet DoD criteria in the Matrix Spike (MS) and/or Matrix Spike Duplicate MSD) prepared and/or analyzed concurrently with the native sample.

H Indicates the flagged compound was detected on the primary column but was not detected on the confirmation column therefore the compound is not reported as a positive detection. (SW846 8330A/B only)

Katahdin Analytical Services, Inc.

Manual Integration Codes For GC/MS, GC, HPLC and/or IC

M1	Peak splitting.
M2	Well defined peaks on the shoulders of the other peaks.
M3	There is additional area due to a coeluting interferant.
M4	There are negative spikes in the baseline.
M5	There are rising or falling baselines.
M6	The software has failed to detect a peak or misidentified a peak.
M7	Excessive peak tailing.
M8	Analysis such as GRO, DRO and TPH require a baseline hold.
M9	Peak was not completely integrated as in GC/MS.
M10	Primary ion was correctly integrated, but secondary or tertiary ion needed manual integration as in GC/MS.
M11	For GC analysis, when a sample is diluted by 1:10 or more, the surrogate is set to undetected and then the area under the surrogate is manually integrated.
M12	Manual integration saved in method due to TurboChrom floating point error.

Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

SDG: SQ6238
Lab ID: SQ6238-1
Client ID: SY-BRMW4-62-72-110923
Matrix: AQ
Lab File ID: 5QK20220.D

Sample Date: 09-NOV-23
Extract Date: 16-NOV-23
Extracted By: DL/SH
Extraction Method: RSK SOP 175
Lab Prep Batch: WG345566

Report Date: 01-DEC-23
Analysis Date: 16-NOV-23
Analyst: DL/SH
Analysis Method: RSK SOP 175 v.2
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Methane	J	6.1	ug/L	1	10.3	10.	2.6	5.2
Ethane	U	9.8	ug/L	1	13.1	13.	5.0	9.8
Ethene	U	9.8	ug/L	1	13.1	13.	5.0	9.8

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Data File: \\target_server\gg\chem\gc05.i\GC05QK16.b\5QK20220.D
Report Date: 01-Dec-2023 18:03

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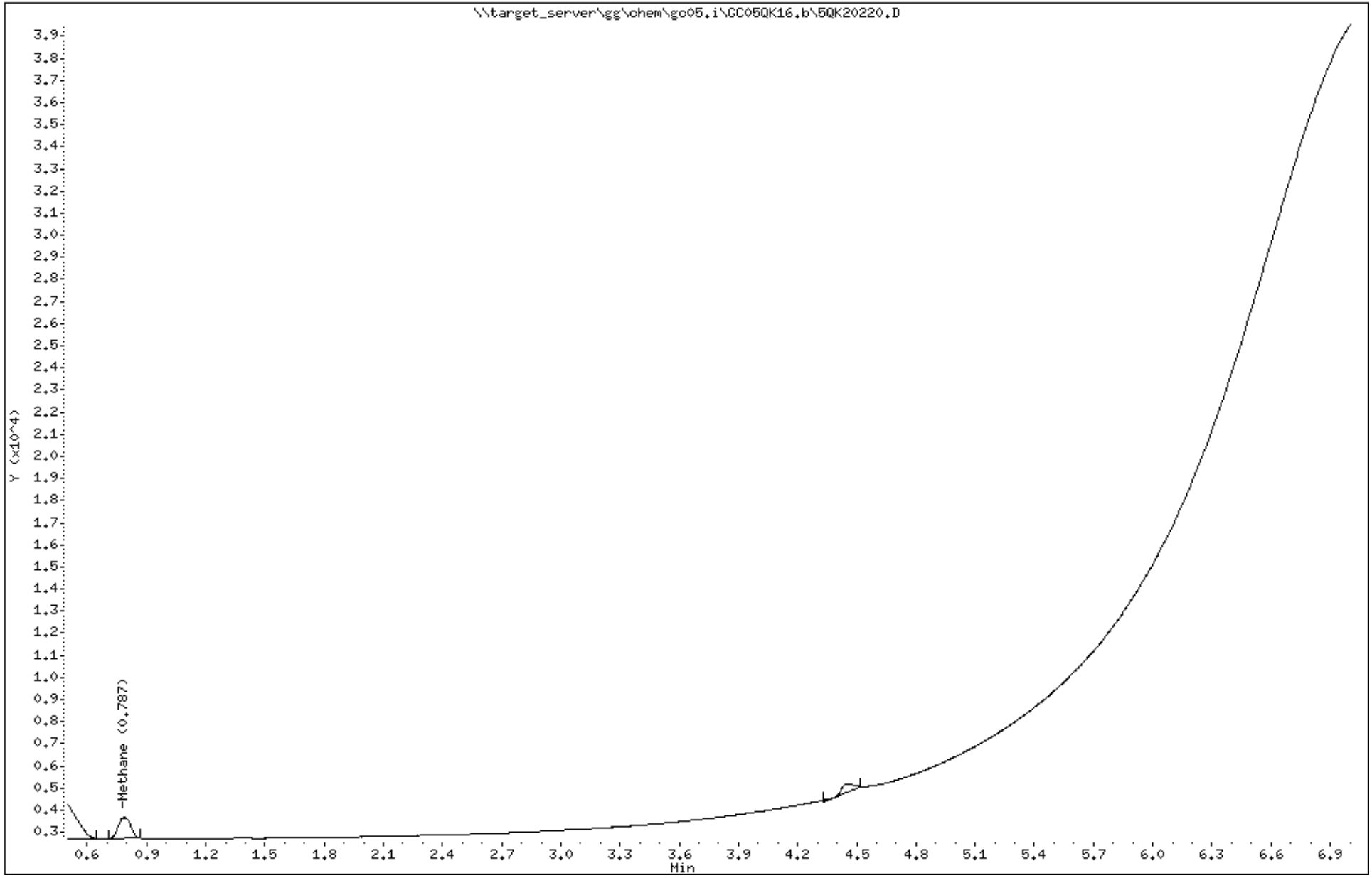
Data file : \\target_server\gg\chem\gc05.i\GC05QK16.b\5QK20220.D
Lab Smp Id: SQ6238-1 Client Smp ID: Y-BRMW4-62-72-11092
Inj Date : 16-NOV-2023 19:11
Operator : DL/SH Inst ID: gc05.i
Smp Info : SQ6238-1
Misc Info : WG345566,WG344993-4
Comment : RSK SOP 175
Method : \\target_server\gg\chem\gc05.i\GC05QK16.b\MEEB47A.m
Meth Date : 17-Nov-2023 05:58 dlewry Quant Type: ESTD
Cal Date : 07-NOV-2023 10:11 Cal File: 5QK20014.D
Als bottle: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSKSOP175-MEE.sub
Target Version: 4.12
Processing Host: V200T3

Concentration Formula: Amt * DF * 0.005/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	0.00500	sample purged (L)
Cpnd Variable		Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (PPM)	CONCENTRATIONS FINAL (PPM)	REVIEW CODE
1 Methane	0.786	0.760	0.026	4238	8.93197	8.93	

Data File: \\target_server\gg\chem\gc05.i\GC05QK16.b\5QK20220.D
Date : 16-NOV-2023 19:11
Client ID: Y-BRMW4-62-72-11092
Instrument: gc05.i
Sample Info: SQ6238-1
Purge Volume: 0.0
Operator: DL/SH
Column phase: Porapak Q
Column diameter: 0.00



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ANALYTICAL SERVICES

Report of Analytical Results

SDG: SQ6238
Lab ID: SQ6238-2
Client ID: SY-BRMW40-62-72-110923
Matrix: AQ
Lab File ID: 5QK20221.D

Sample Date: 09-NOV-23
Extract Date: 16-NOV-23
Extracted By: DL/SH
Extraction Method: RSK SOP 175
Lab Prep Batch: WG345566

Report Date: 01-DEC-23
Analysis Date: 16-NOV-23
Analyst: DL/SH
Analysis Method: RSK SOP 175 v.2
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Methane	J	5.3	ug/L	1	10.3	10.	2.6	5.2
Ethane	U	9.8	ug/L	1	13.1	13.	5.0	9.8
Ethene	U	9.8	ug/L	1	13.1	13.	5.0	9.8

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Data File: \\target_server\gg\chem\gc05.i\GC05QK16.b\5QK20221.D
Report Date: 01-Dec-2023 18:03

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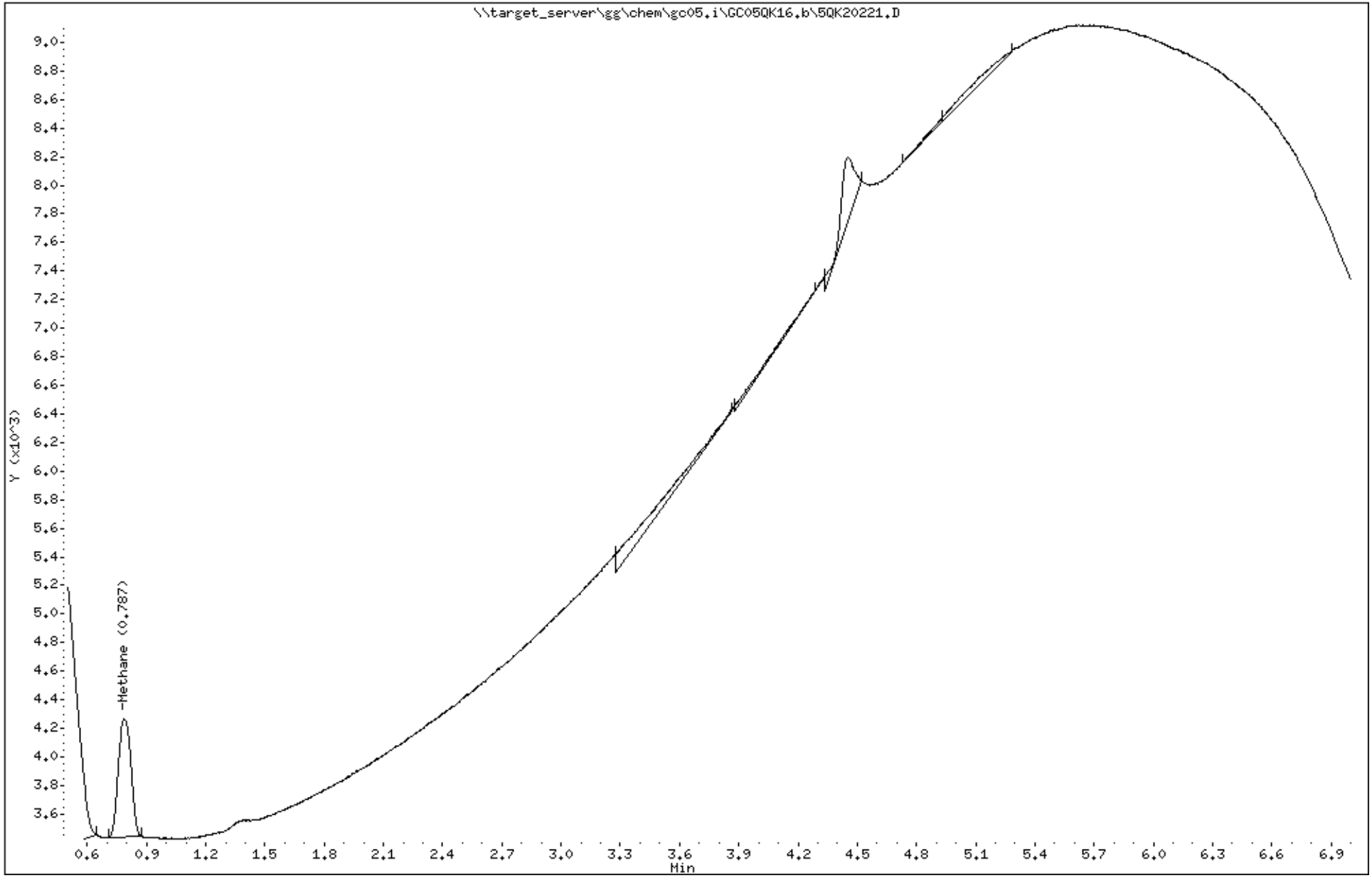
Data file : \\target_server\gg\chem\gc05.i\GC05QK16.b\5QK20221.D
Lab Smp Id: SQ6238-2 Client Smp ID: Y-BRMW40-62-72-1109
Inj Date : 16-NOV-2023 19:28
Operator : DL/SH Inst ID: gc05.i
Smp Info : SQ6238-2
Misc Info : WG345566,WG344993-4
Comment : RSK SOP 175
Method : \\target_server\gg\chem\gc05.i\GC05QK16.b\MEEB47A.m
Meth Date : 17-Nov-2023 05:58 dlewry Quant Type: ESTD
Cal Date : 07-NOV-2023 10:11 Cal File: 5QK20014.D
Als bottle: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSKSOP175-MEE.sub
Target Version: 4.12
Processing Host: V200T3

Concentration Formula: Amt * DF * 0.005/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	0.00500	sample purged (L)
Cpnd Variable		Local Compound Variable

					CONCENTRATIONS ON-COLUMN (PPM)	CONCENTRATIONS FINAL (PPM)	
Compounds	RT	EXP RT	DLT RT	RESPONSE			REVIEW CODE
1 Methane	0.786	0.760	0.026	3683	7.76226	7.76	

Data File: \\target_server\gg\chem\gc05.i\GC05QK16.b\5QK20221.D
Date : 16-NOV-2023 19:28
Client ID: Y-BRMW40-62-72-1109
Instrument: gc05.i
Sample Info: SQ6238-2
Purge Volume: 0.0
Operator: DL/SH
Column phase: Porapak Q
Column diameter: 0.00



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Report of Analytical Results

SDG: SQ6238
Lab ID: SQ6238-3
Client ID: SY-BRMW4-138-148-110923
Matrix: AQ
Lab File ID: 5QK20222.D

Sample Date: 09-NOV-23
Extract Date: 16-NOV-23
Extracted By: DL/SH
Extraction Method: RSK SOP 175
Lab Prep Batch: WG345566

Report Date: 01-DEC-23
Analysis Date: 16-NOV-23
Analyst: DL/SH
Analysis Method: RSK SOP 175 v.2
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Methane	J	3.8	ug/L	1	10.3	10.	2.6	5.2
Ethane	U	9.8	ug/L	1	13.1	13.	5.0	9.8
Ethene	U	9.8	ug/L	1	13.1	13.	5.0	9.8

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Data File: \\target_server\gg\chem\gc05.i\GC05QK16.b\5QK20222.D
Report Date: 01-Dec-2023 18:03

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Data file : \\target_server\gg\chem\gc05.i\GC05QK16.b\5QK20222.D
Lab Smp Id: SQ6238-3 Client Smp ID: Y-BRMW4-138-148-110
Inj Date : 16-NOV-2023 19:45
Operator : DL/SH Inst ID: gc05.i
Smp Info : SQ6238-3
Misc Info : WG345566,WG344993-4
Comment : RSK SOP 175
Method : \\target_server\gg\chem\gc05.i\GC05QK16.b\MEEB47A.m
Meth Date : 17-Nov-2023 05:58 dlewry Quant Type: ESTD
Cal Date : 07-NOV-2023 10:11 Cal File: 5QK20014.D
Als bottle: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSKSOP175-MEE.sub
Target Version: 4.12
Processing Host: V200T3

Concentration Formula: Amt * DF * 0.005/Vo * CpndVariable

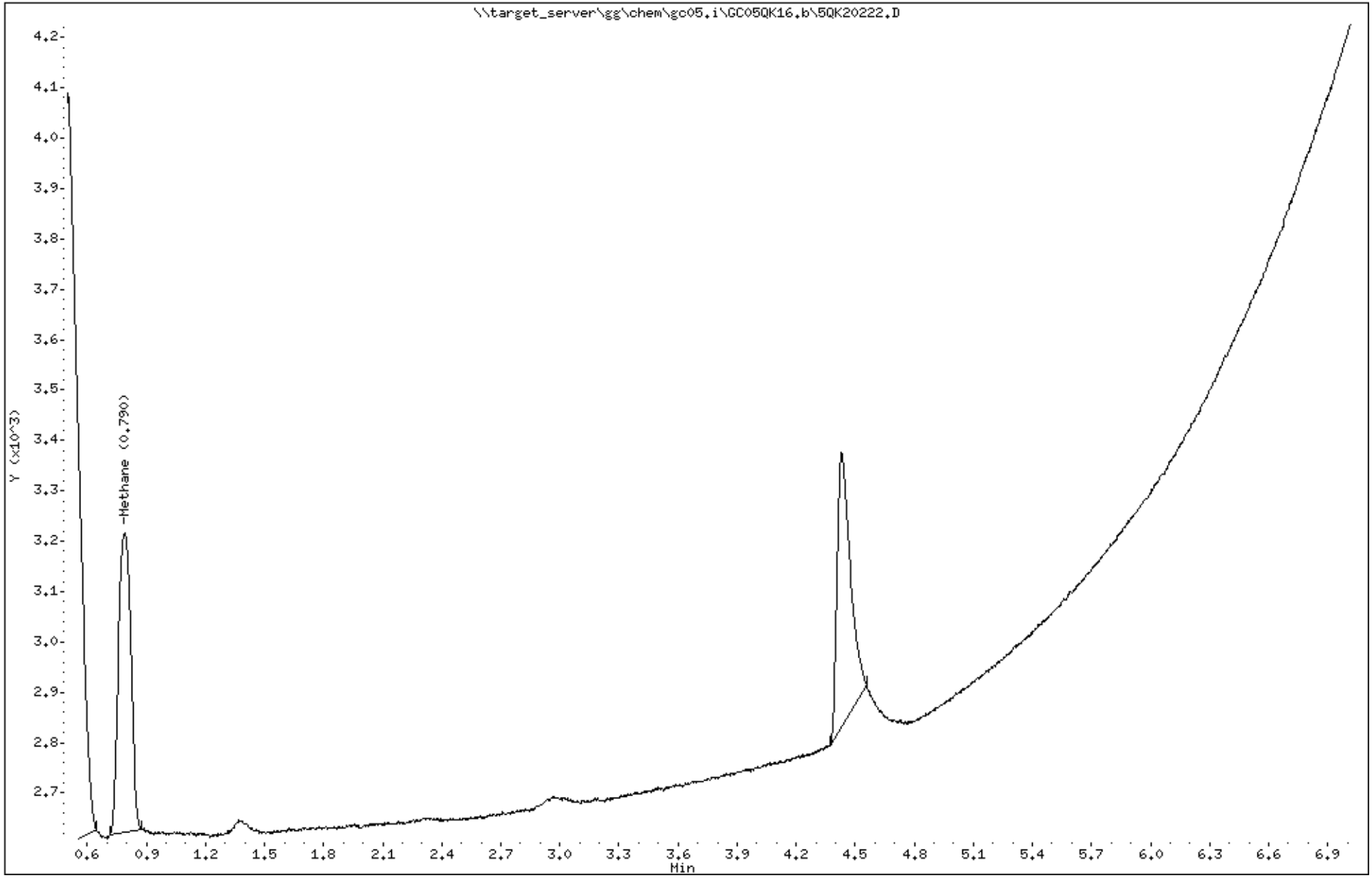
Name	Value	Description
DF	1.000	Dilution Factor
Vo	0.00500	sample purged (L)
Cpnd Variable		Local Compound Variable

					CONCENTRATIONS ON-COLUMN (PPM)	CONCENTRATIONS FINAL (PPM)	
Compounds	RT	EXP RT	DLT RT	RESPONSE			REVIEW CODE
1 Methane	0.790	0.760	0.030	2616	5.51346	5.51(a)	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: \\target_server\gg\chem\gc05.i\GC05QK16.b\5QK20222.D
Date : 16-NOV-2023 19:45
Client ID: Y-BRMW4-138-148-110
Instrument: gc05.i
Sample Info: SQ6238-3
Purge Volume: 0.0
Operator: DL/SH
Column phase: Porapak Q
Column diameter: 0.00



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Report of Analytical Results

SDG: SQ6238
Lab ID: SQ6238-4
Client ID: SY-BRMW3-47-62-110923
Matrix: AQ
Lab File ID: 5QK20223.D

Sample Date: 09-NOV-23
Extract Date: 16-NOV-23
Extracted By: DL/SH
Extraction Method: RSK SOP 175
Lab Prep Batch: WG345566

Report Date: 01-DEC-23
Analysis Date: 16-NOV-23
Analyst: DL/SH
Analysis Method: RSK SOP 175 v.2
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Methane		20	ug/L	1	10.3	10.	2.6	5.2
Ethane	U	9.8	ug/L	1	13.1	13.	5.0	9.8
Ethene	U	9.8	ug/L	1	13.1	13.	5.0	9.8

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Data File: \\target_server\gg\chem\gc05.i\GC05QK16.b\5QK20223.D
Report Date: 01-Dec-2023 18:03

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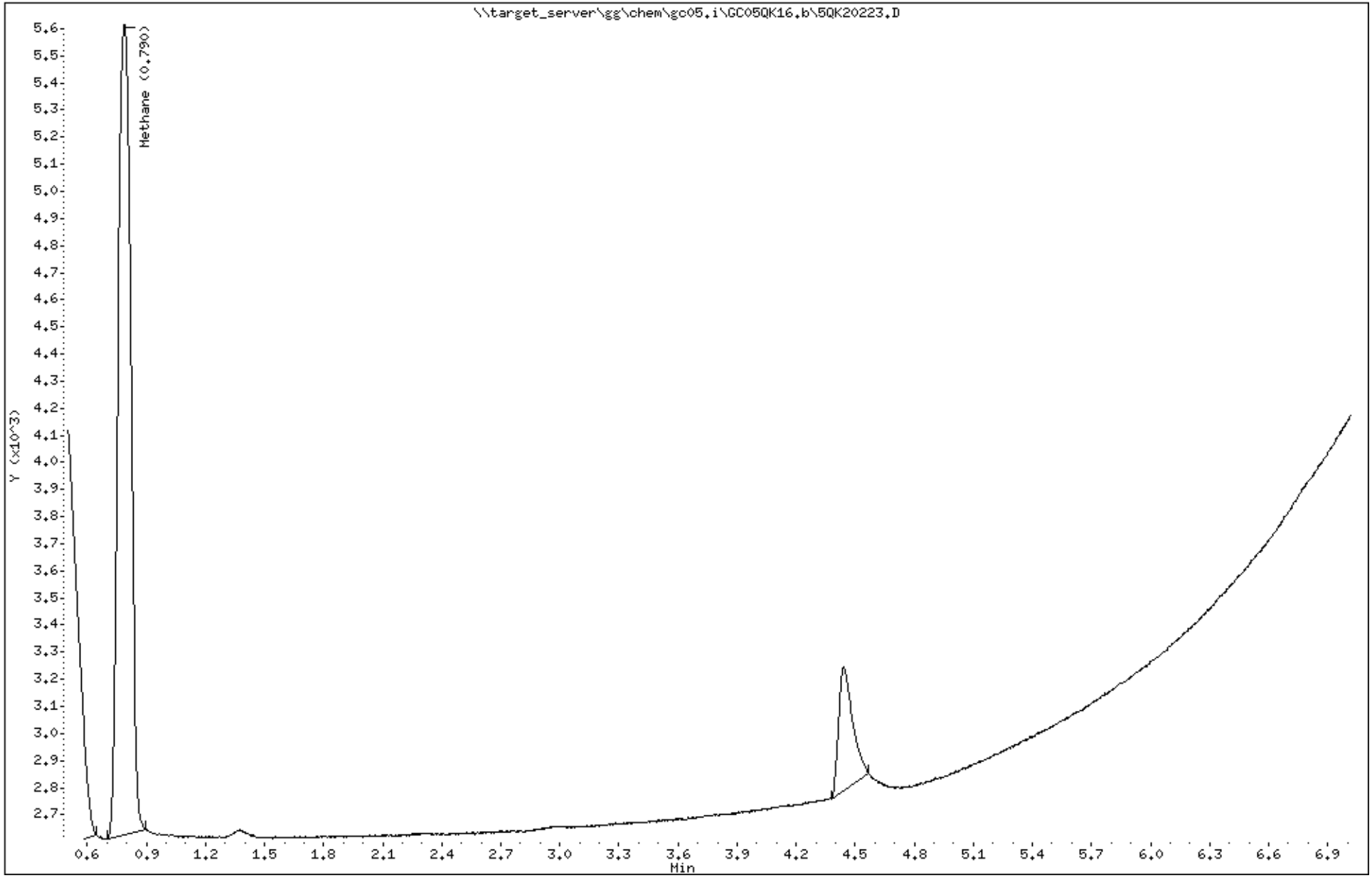
Data file : \\target_server\gg\chem\gc05.i\GC05QK16.b\5QK20223.D
Lab Smp Id: SQ6238-4 Client Smp ID: Y-BRMW3-47-62-11092
Inj Date : 16-NOV-2023 20:02
Operator : DL/SH Inst ID: gc05.i
Smp Info : SQ6238-4
Misc Info : WG345566,WG344993-4
Comment : RSK SOP 175
Method : \\target_server\gg\chem\gc05.i\GC05QK16.b\MEEB47A.m
Meth Date : 17-Nov-2023 05:58 dlewry Quant Type: ESTD
Cal Date : 07-NOV-2023 10:11 Cal File: 5QK20014.D
Als bottle: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSKSOP175-MEE.sub
Target Version: 4.12
Processing Host: V200T3

Concentration Formula: Amt * DF * 0.005/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	0.00500	sample purged (L)
Cpnd Variable		Local Compound Variable

					CONCENTRATIONS ON-COLUMN (PPM)	CONCENTRATIONS FINAL (PPM)	
Compounds	RT	EXP RT	DLT RT	RESPONSE			REVIEW CODE
1 Methane	0.790	0.760	0.030	13508	28.4693	28.5	

Data File: \\target_server\gg\chem\gc05.i\GC05QK16.b\5QK20223.D
Date : 16-NOV-2023 20:02
Client ID: Y-BRMW3-47-62-11092
Instrument: gc05.i
Sample Info: SQ6238-4
Purge Volume: 0.0
Operator: DL/SH
Column phase: Porapak Q
Column diameter: 0.00



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Report of Analytical Results

SDG: SQ6238
Lab ID: SQ6238-5
Client ID: SY-BRMW3-145-155-110923
Matrix: AQ
Lab File ID: 5QK20225.D

Sample Date: 09-NOV-23
Extract Date: 16-NOV-23
Extracted By: DL/SH
Extraction Method: RSK SOP 175
Lab Prep Batch: WG345566

Report Date: 01-DEC-23
Analysis Date: 16-NOV-23
Analyst: DL/SH
Analysis Method: RSK SOP 175 v.2
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Methane		14	ug/L	1	10.3	10.	2.6	5.2
Ethane	U	9.8	ug/L	1	13.1	13.	5.0	9.8
Ethene	U	9.8	ug/L	1	13.1	13.	5.0	9.8

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Data File: \\target_server\gg\chem\gc05.i\GC05QK16.b\5QK20225.D
Report Date: 01-Dec-2023 18:03

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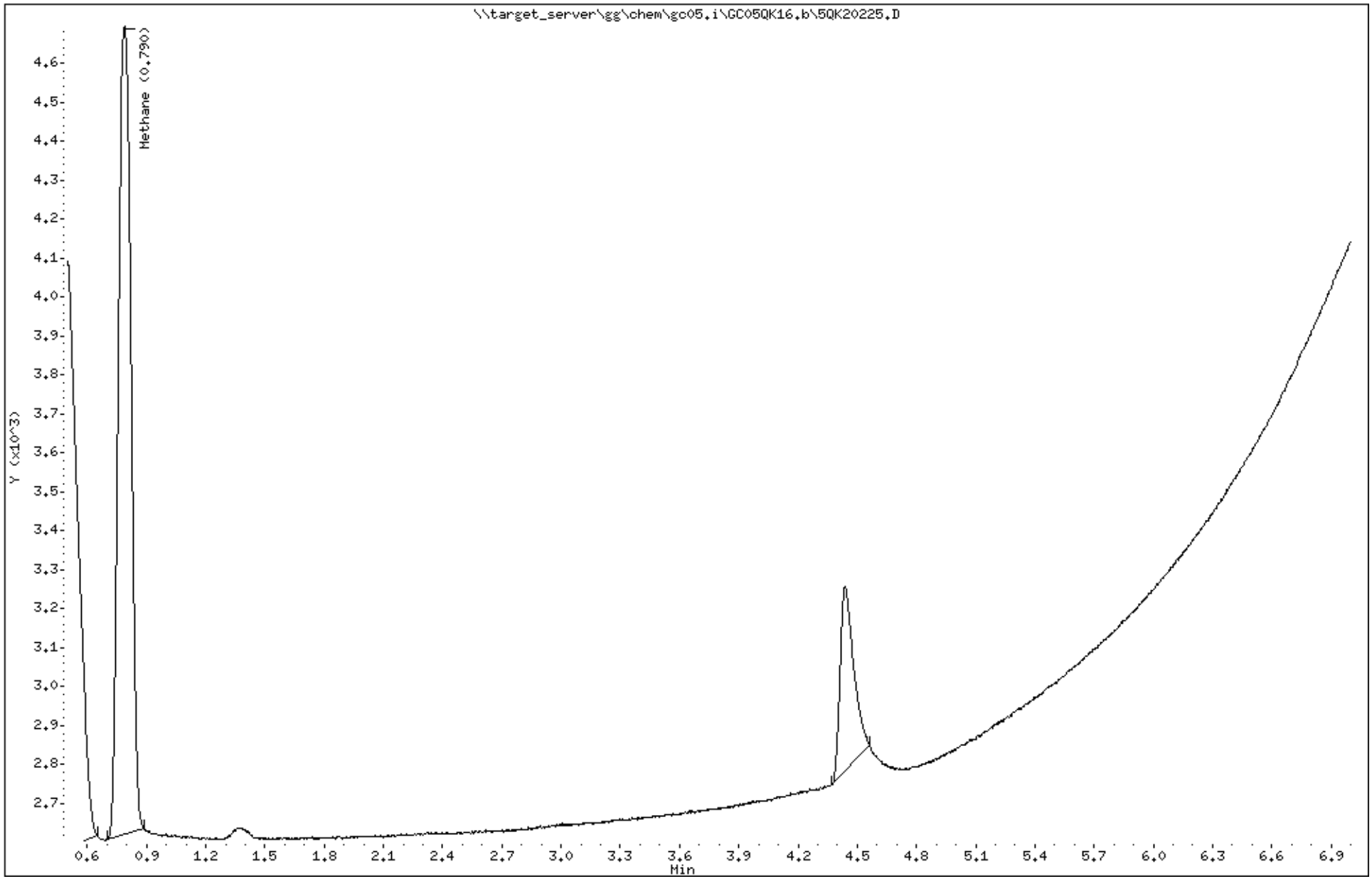
Data file : \\target_server\gg\chem\gc05.i\GC05QK16.b\5QK20225.D
Lab Smp Id: SQ6238-5 Client Smp ID: Y-BRMW3-145-155-110
Inj Date : 16-NOV-2023 20:36
Operator : DL/SH Inst ID: gc05.i
Smp Info : SQ6238-5
Misc Info : WG345566,WG344993-4
Comment : RSK SOP 175
Method : \\target_server\gg\chem\gc05.i\GC05QK16.b\MEEB47A.m
Meth Date : 17-Nov-2023 05:58 dlewry Quant Type: ESTD
Cal Date : 07-NOV-2023 10:11 Cal File: 5QK20014.D
Als bottle: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSKSOP175-MEE.sub
Target Version: 4.12
Processing Host: V200T3

Concentration Formula: Amt * DF * 0.005/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	0.00500	sample purged (L)
Cpnd Variable		Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (PPM)	CONCENTRATIONS FINAL (PPM)	REVIEW CODE
1 Methane	0.790	0.760	0.030	9290	19.5795	19.6	

Data File: \\target_server\gg\chem\gc05.i\GC05QK16.b\5QK20225.D
Date : 16-NOV-2023 20:36
Client ID: Y-BRMW3-145-155-110
Instrument: gc05.i
Sample Info: SQ6238-5
Purge Volume: 0.0
Operator: DL/SH
Column phase: Porapak Q
Column diameter: 0.00



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ANALYTICAL SERVICES

Report of Analytical Results

SDG: SQ6238
Lab ID: SQ6238-6
Client ID: SY-BRMW3-287-297-110923
Matrix: AQ
Lab File ID: 5QK20226.D

Sample Date: 09-NOV-23
Extract Date: 16-NOV-23
Extracted By: DL/SH
Extraction Method: RSK SOP 175
Lab Prep Batch: WG345566

Report Date: 01-DEC-23
Analysis Date: 16-NOV-23
Analyst: DL/SH
Analysis Method: RSK SOP 175 v.2
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Methane	J	9.2	ug/L	1	10.3	10.	2.6	5.2
Ethane	U	9.8	ug/L	1	13.1	13.	5.0	9.8
Ethene	U	9.8	ug/L	1	13.1	13.	5.0	9.8

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Data File: \\target_server\gg\chem\gc05.i\GC05QK16.b\5QK20226.D
Report Date: 01-Dec-2023 18:03

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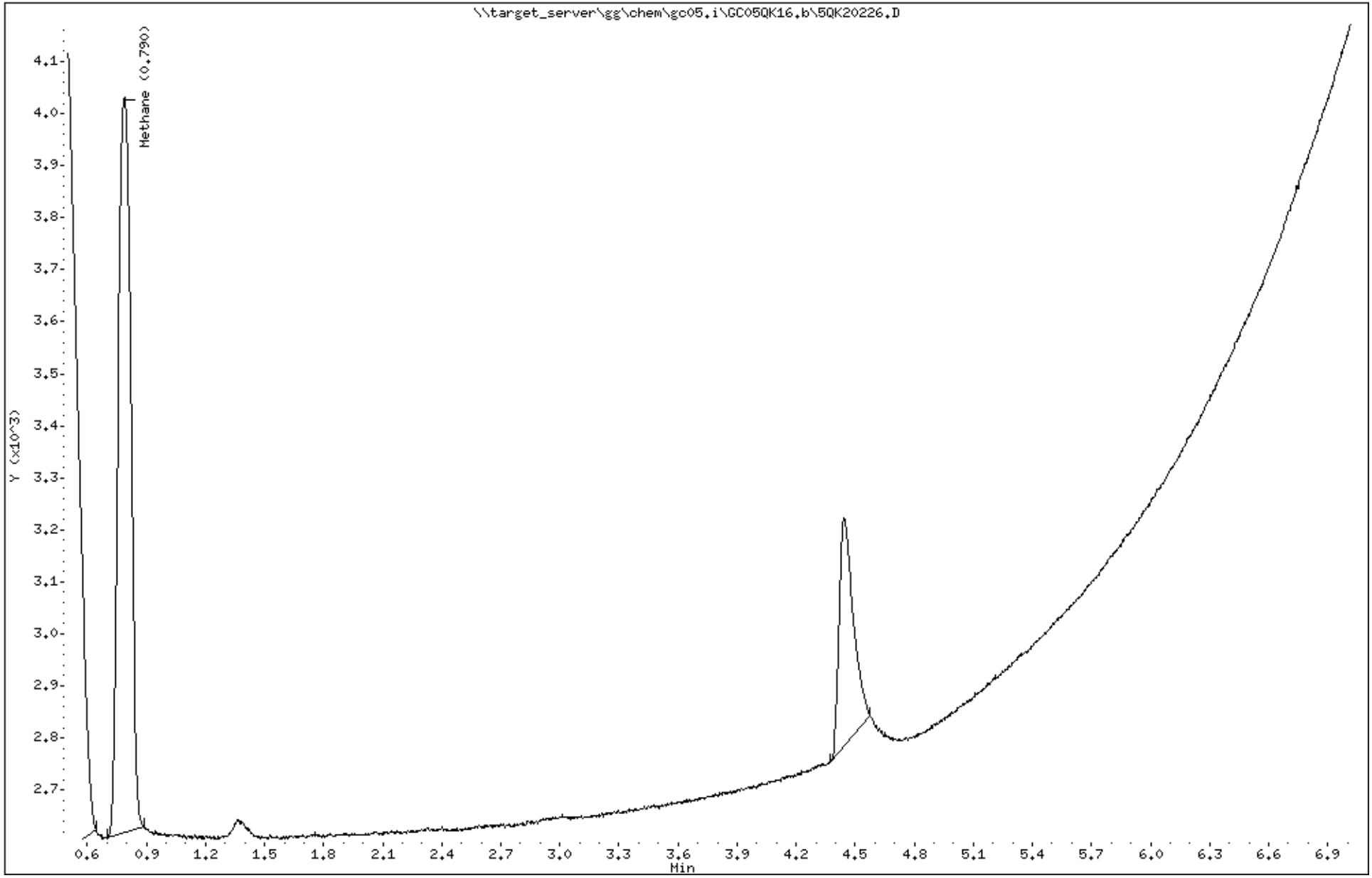
Data file : \\target_server\gg\chem\gc05.i\GC05QK16.b\5QK20226.D
Lab Smp Id: SQ6238-6 Client Smp ID: Y-BRMW3-287-297-110
Inj Date : 16-NOV-2023 20:53
Operator : DL/SH Inst ID: gc05.i
Smp Info : SQ6238-6
Misc Info : WG345566,WG344993-4
Comment : RSK SOP 175
Method : \\target_server\gg\chem\gc05.i\GC05QK16.b\MEEB47A.m
Meth Date : 17-Nov-2023 05:58 dlewry Quant Type: ESTD
Cal Date : 07-NOV-2023 10:11 Cal File: 5QK20014.D
Als bottle: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSKSOP175-MEE.sub
Target Version: 4.12
Processing Host: V200T3

Concentration Formula: Amt * DF * 0.005/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	0.00500	sample purged (L)
Cpnd Variable		Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (PPM)	CONCENTRATIONS FINAL (PPM)	REVIEW CODE
1 Methane	0.790	0.760	0.030	6339	13.3600	13.4	

Data File: \\target_server\gg\chem\gc05.i\GC05QK16.b\5QK20226.D
Date : 16-NOV-2023 20:53
Client ID: Y-BRMW3-287-297-110
Instrument: gc05.i
Sample Info: SQ6238-6
Purge Volume: 0.0
Operator: DL/SH
Column phase: Porapak Q
Column diameter: 0.00



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ANALYTICAL SERVICES

Report of Analytical Results

SDG: SQ6238
Lab ID: SQ6238-7
Client ID: SY-BRMW4-291-301-110923
Matrix: AQ
Lab File ID: 5QK20227.D

Sample Date: 09-NOV-23
Extract Date: 16-NOV-23
Extracted By: DL/SH
Extraction Method: RSK SOP 175
Lab Prep Batch: WG345566

Report Date: 01-DEC-23
Analysis Date: 16-NOV-23
Analyst: DL/SH
Analysis Method: RSK SOP 175 v.2
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Methane	J	3.9	ug/L	1	10.3	10.	2.6	5.2
Ethane	U	9.8	ug/L	1	13.1	13.	5.0	9.8
Ethene	U	9.8	ug/L	1	13.1	13.	5.0	9.8

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Data File: \\target_server\gg\chem\gc05.i\GC05QK16.b\5QK20227.D
Report Date: 01-Dec-2023 18:03

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Data file : \\target_server\gg\chem\gc05.i\GC05QK16.b\5QK20227.D
Lab Smp Id: SQ6238-7 Client Smp ID: Y-BRMW4-291-301-110
Inj Date : 16-NOV-2023 21:10
Operator : DL/SH Inst ID: gc05.i
Smp Info : SQ6238-7
Misc Info : WG345566,WG344993-4
Comment : RSK SOP 175
Method : \\target_server\gg\chem\gc05.i\GC05QK16.b\MEEB47A.m
Meth Date : 17-Nov-2023 05:58 dlewry Quant Type: ESTD
Cal Date : 07-NOV-2023 10:11 Cal File: 5QK20014.D
Als bottle: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSKSOP175-MEE.sub
Target Version: 4.12
Processing Host: V200T3

Concentration Formula: Amt * DF * 0.005/Vo * CpndVariable

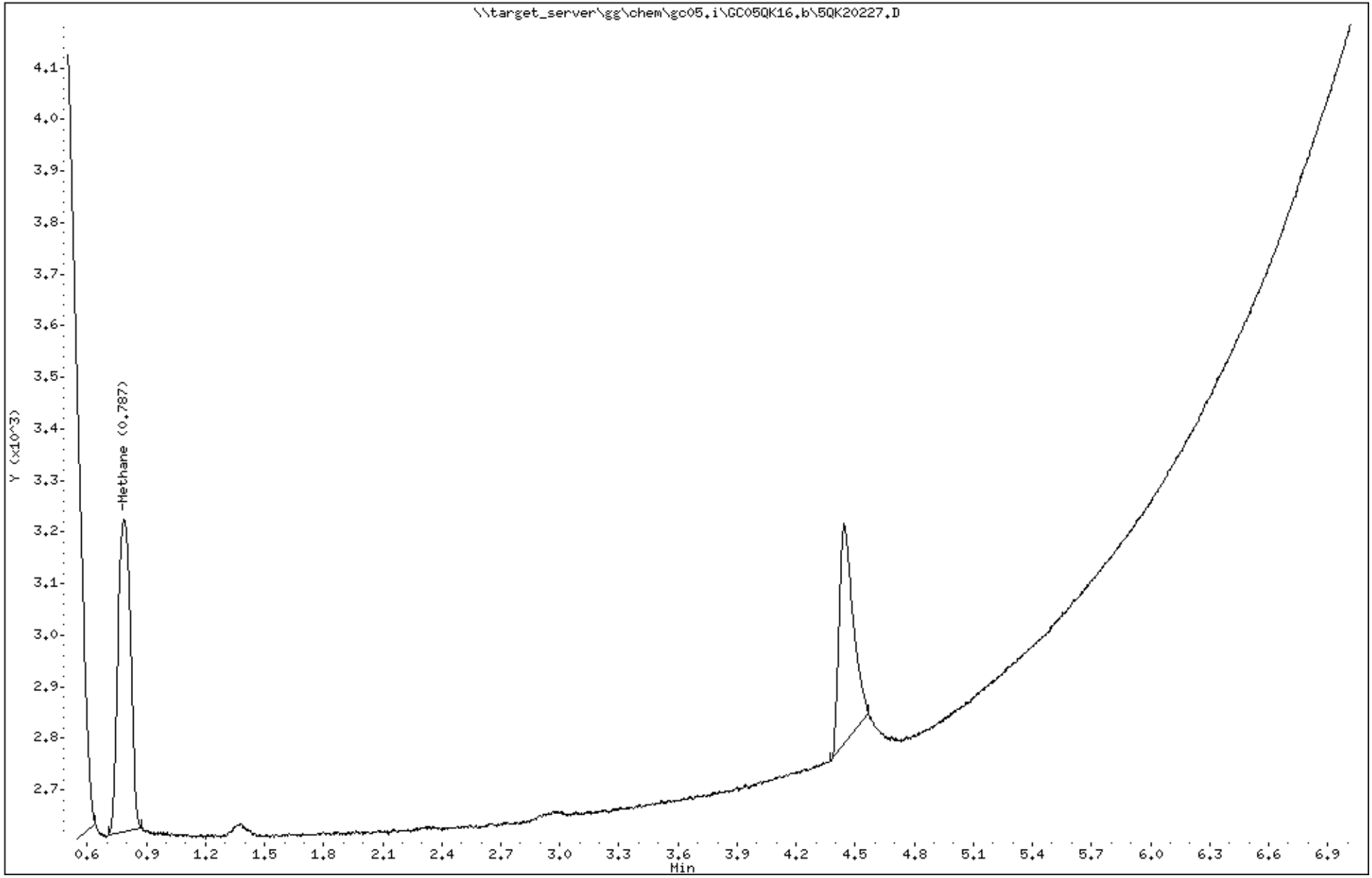
Name	Value	Description
DF	1.000	Dilution Factor
Vo	0.00500	sample purged (L)
Cpnd Variable		Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (PPM)	CONCENTRATIONS FINAL (PPM)	REVIEW CODE
1 Methane	0.786	0.760	0.026	2708	5.70736	5.71(a)	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: \\target_server\gg\chem\gc05.i\GC05QK16.b\5QK20227.D
Date : 16-NOV-2023 21:10
Client ID: Y-BRMW4-291-301-110
Instrument: gc05.i
Sample Info: SQ6238-7
Purge Volume: 0.0
Operator: DL/SH
Column phase: Porapak Q
Column diameter: 0.00



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Report of Analytical Results

SDG: SQ6238
Lab ID: SQ6238-8
Client ID: SY-BRMW1-42-52-110923
Matrix: AQ
Lab File ID: 5QK20228.D

Sample Date: 09-NOV-23
Extract Date: 16-NOV-23
Extracted By: DL/SH
Extraction Method: RSK SOP 175
Lab Prep Batch: WG345566

Report Date: 01-DEC-23
Analysis Date: 16-NOV-23
Analyst: DL/SH
Analysis Method: RSK SOP 175 v.2
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Methane	J	4.7	ug/L	1	10.3	10.	2.6	5.2
Ethane	U	9.8	ug/L	1	13.1	13.	5.0	9.8
Ethene	U	9.8	ug/L	1	13.1	13.	5.0	9.8

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Data File: \\target_server\gg\chem\gc05.i\GC05QK16.b\5QK20228.D
Report Date: 01-Dec-2023 18:04

Katahdin Analytical Services

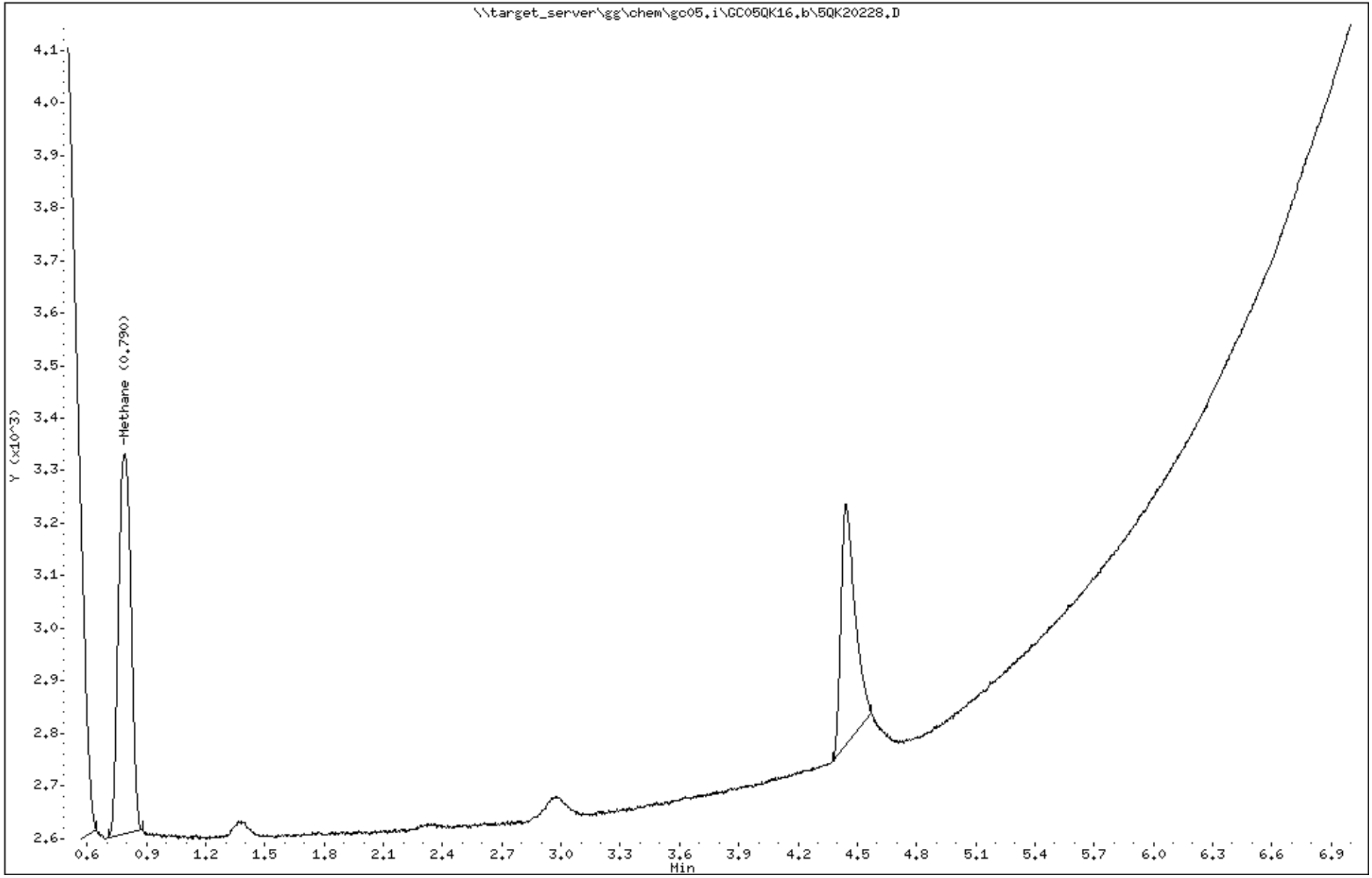
Data file : \\target_server\gg\chem\gc05.i\GC05QK16.b\5QK20228.D
Lab Smp Id: SQ6238-8 Client Smp ID: Y-BRMW1-42-52-11092
Inj Date : 16-NOV-2023 21:27
Operator : DL/SH Inst ID: gc05.i
Smp Info : SQ6238-8
Misc Info : WG345566,WG344993-4
Comment : RSK SOP 175
Method : \\target_server\gg\chem\gc05.i\GC05QK16.b\MEEB47A.m
Meth Date : 17-Nov-2023 05:58 dlewry Quant Type: ESTD
Cal Date : 07-NOV-2023 10:11 Cal File: 5QK20014.D
Als bottle: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSKSOP175-MEE.sub
Target Version: 4.12
Processing Host: V200T3

Concentration Formula: Amt * DF * 0.005/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	0.00500	sample purged (L)
Cpnd Variable		Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (PPM)	CONCENTRATIONS FINAL (PPM)	REVIEW CODE
1 Methane	0.790	0.760	0.030	3244	6.83703	6.84	

Data File: \\target_server\gg\chem\gc05.i\GC05QK16.b\5QK20228.D
Date : 16-NOV-2023 21:27
Client ID: Y-BRMW1-42-52-11092
Instrument: gc05.i
Sample Info: SQ6238-8
Purge Volume: 0.0
Operator: DL/SH
Column phase: Porapak Q
Column diameter: 0.00



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Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

SDG: SQ6238
Lab ID: SQ6238-9
Client ID: SY-BRMW1-65-75-110923
Matrix: AQ
Lab File ID: 5QK20229.D

Sample Date: 09-NOV-23
Extract Date: 16-NOV-23
Extracted By: DL/SH
Extraction Method: RSK SOP 175
Lab Prep Batch: WG345566

Report Date: 01-DEC-23
Analysis Date: 16-NOV-23
Analyst: DL/SH
Analysis Method: RSK SOP 175 v.2
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Methane	J	4.1	ug/L	1	10.3	10.	2.6	5.2
Ethane	U	9.8	ug/L	1	13	13.	5.0	9.8
Ethene	U	9.8	ug/L	1	13.1	13.	5.0	9.8

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Data File: \\target_server\gg\chem\gc05.i\GC05QK16.b\5QK20229.D
Report Date: 01-Dec-2023 18:04

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gc05.i\GC05QK16.b\5QK20229.D
Lab Smp Id: SQ6238-9 Client Smp ID: Y-BRMW1-65-75-11092
Inj Date : 16-NOV-2023 21:44
Operator : DL/SH Inst ID: gc05.i
Smp Info : SQ6238-9
Misc Info : WG345566,WG344993-4
Comment : RSK SOP 175
Method : \\target_server\gg\chem\gc05.i\GC05QK16.b\MEEB47A.m
Meth Date : 17-Nov-2023 05:58 dlewry Quant Type: ESTD
Cal Date : 07-NOV-2023 10:11 Cal File: 5QK20014.D
Als bottle: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSKSOP175-MEE.sub
Target Version: 4.12
Processing Host: V200T3

Concentration Formula: Amt * DF * 0.005/Vo * CpndVariable

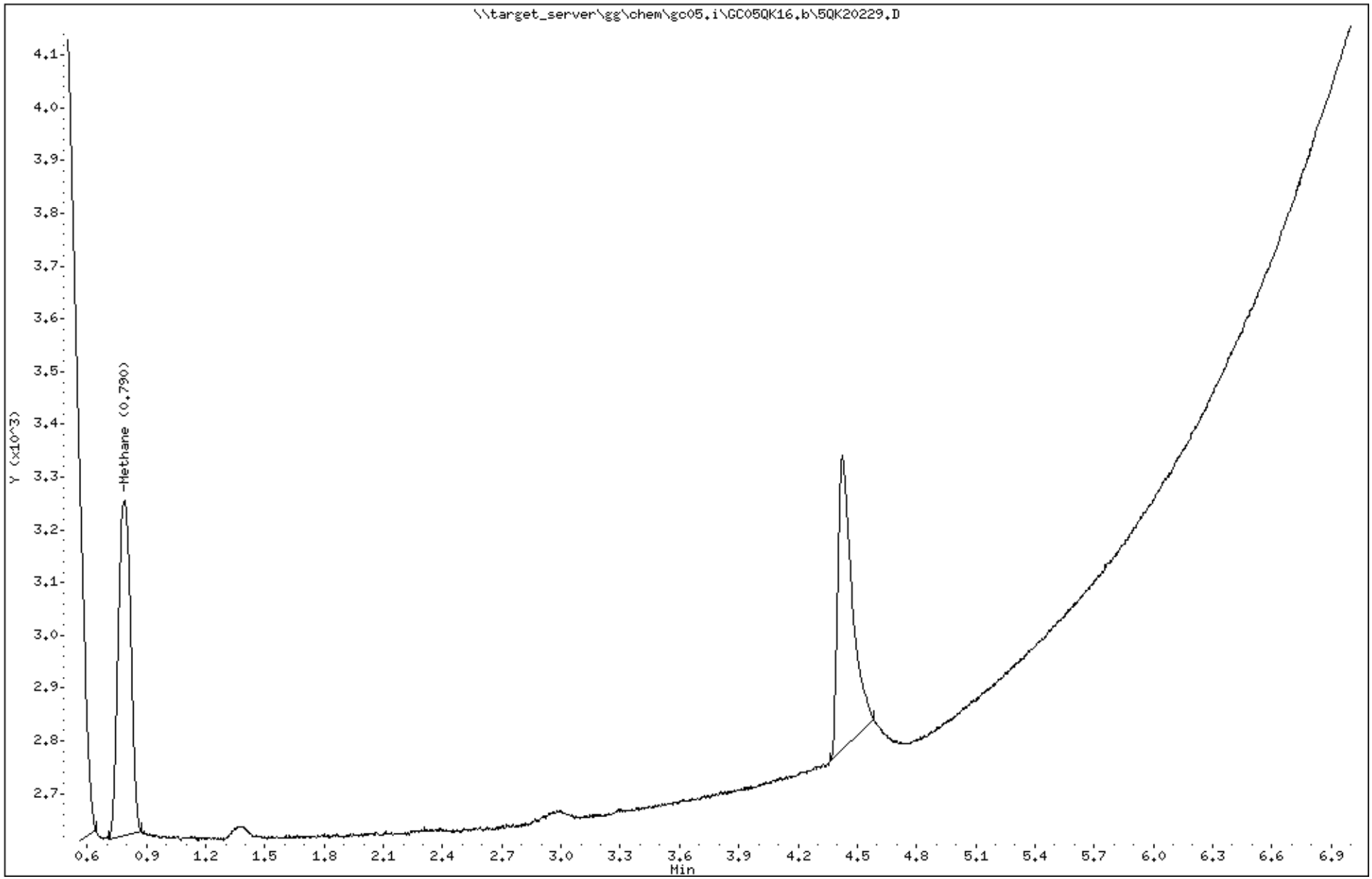
Name	Value	Description
DF	1.000	Dilution Factor
Vo	0.00500	sample purged (L)
Cpnd Variable		Local Compound Variable

					CONCENTRATIONS ON-COLUMN	CONCENTRATIONS FINAL	
Compounds	RT	EXP RT	DLT RT	RESPONSE	(PPM)	(PPM)	REVIEW CODE
1 Methane	0.790	0.760	0.030	2834	5.97291	5.97(a)	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: \\target_server\gg\chem\gc05.i\GC05QK16.b\5QK20229.D
Date : 16-NOV-2023 21:44
Client ID: Y-BRMW1-65-75-11092
Instrument: gc05.i
Sample Info: SQ6238-9
Purge Volume: 0.0
Operator: DL/SH
Column phase: Porapak Q
Column diameter: 0.00



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Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

SDG: SQ6238
Lab ID: SQ6238-10
Client ID: SY-BRMW10-65-75-110923
Matrix: AQ
Lab File ID: 5QK20230.D

Sample Date: 09-NOV-23
Extract Date: 16-NOV-23
Extracted By: DL/SH
Extraction Method: RSK SOP 175
Lab Prep Batch: WG345566

Report Date: 01-DEC-23
Analysis Date: 16-NOV-23
Analyst: DL/SH
Analysis Method: RSK SOP 175 v.2
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Methane	J	3.9	ug/L	1	10.3	10.	2.6	5.2
Ethane	U	9.8	ug/L	1	13	13.	5.0	9.8
Ethene	U	9.8	ug/L	1	13.1	13.	5.0	9.8

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Data File: \\target_server\gg\chem\gc05.i\GC05QK16.b\5QK20230.D
Report Date: 01-Dec-2023 18:04

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gc05.i\GC05QK16.b\5QK20230.D
Lab Smp Id: SQ6238-10 Client Smp ID: Y-BRMW1D-65-75-1109
Inj Date : 16-NOV-2023 22:01
Operator : DL/SH Inst ID: gc05.i
Smp Info : SQ6238-10
Misc Info : WG345566,WG344993-4
Comment : RSK SOP 175
Method : \\target_server\gg\chem\gc05.i\GC05QK16.b\MEEB47A.m
Meth Date : 17-Nov-2023 05:58 dlewry Quant Type: ESTD
Cal Date : 07-NOV-2023 10:11 Cal File: 5QK20014.D
Als bottle: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSKSOP175-MEE.sub
Target Version: 4.12
Processing Host: V200T3

Concentration Formula: Amt * DF * 0.005/Vo * CpndVariable

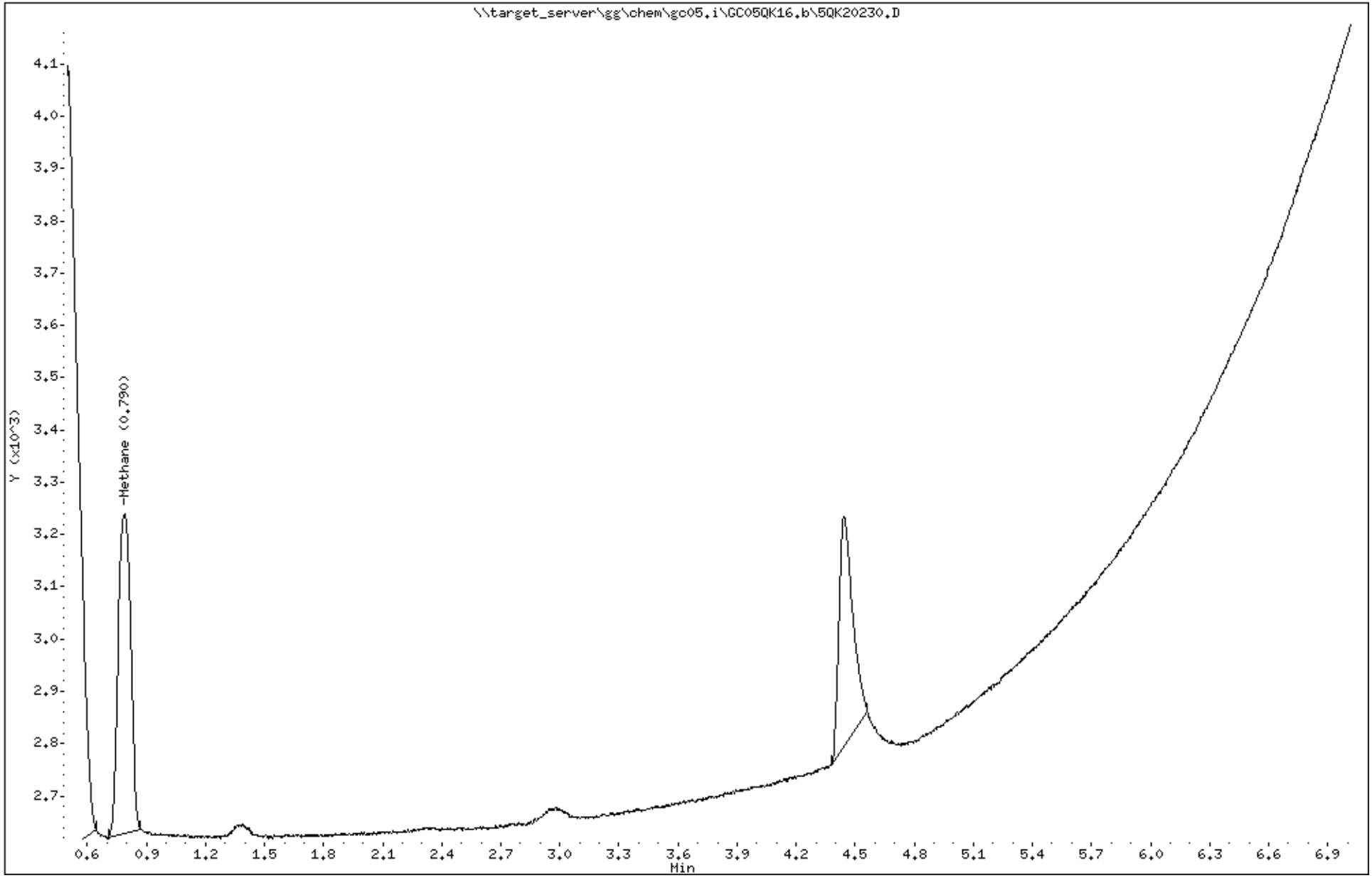
Name	Value	Description
DF	1.000	Dilution Factor
Vo	0.00500	sample purged (L)
Cpnd Variable		Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (PPM)	CONCENTRATIONS FINAL (PPM)	REVIEW CODE
1 Methane	0.790	0.760	0.030	2707	5.70525	5.70(a)	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: \\target_server\gg\chem\gc05.i\GC05QK16.b\5QK20230.D
Date : 16-NOV-2023 22:01
Client ID: Y-BRMW1D-65-75-1109
Instrument: gc05.i
Sample Info: SQ6238-10
Purge Volume: 0.0
Operator: DL/SH
Column phase: Porapak Q
Column diameter: 0.00



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Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

SDG: SQ6238
Lab ID: SQ6238-11
Client ID: SY-BRMW1-150-157-110923
Matrix: AQ
Lab File ID: 5QK20231.D

Sample Date: 09-NOV-23
Extract Date: 16-NOV-23
Extracted By: DL/SH
Extraction Method: RSK SOP 175
Lab Prep Batch: WG345566

Report Date: 01-DEC-23
Analysis Date: 16-NOV-23
Analyst: DL/SH
Analysis Method: RSK SOP 175 v.2
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Methane	J	6.4	ug/L	1	10.3	10.	2.6	5.2
Ethane	U	9.8	ug/L	1	13	13.	5.0	9.8
Ethene	U	9.8	ug/L	1	13.1	13.	5.0	9.8

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Data File: \\target_server\gg\chem\gc05.i\GC05QK16.b\5QK20231.D
Report Date: 01-Dec-2023 18:04

Katahdin Analytical Services

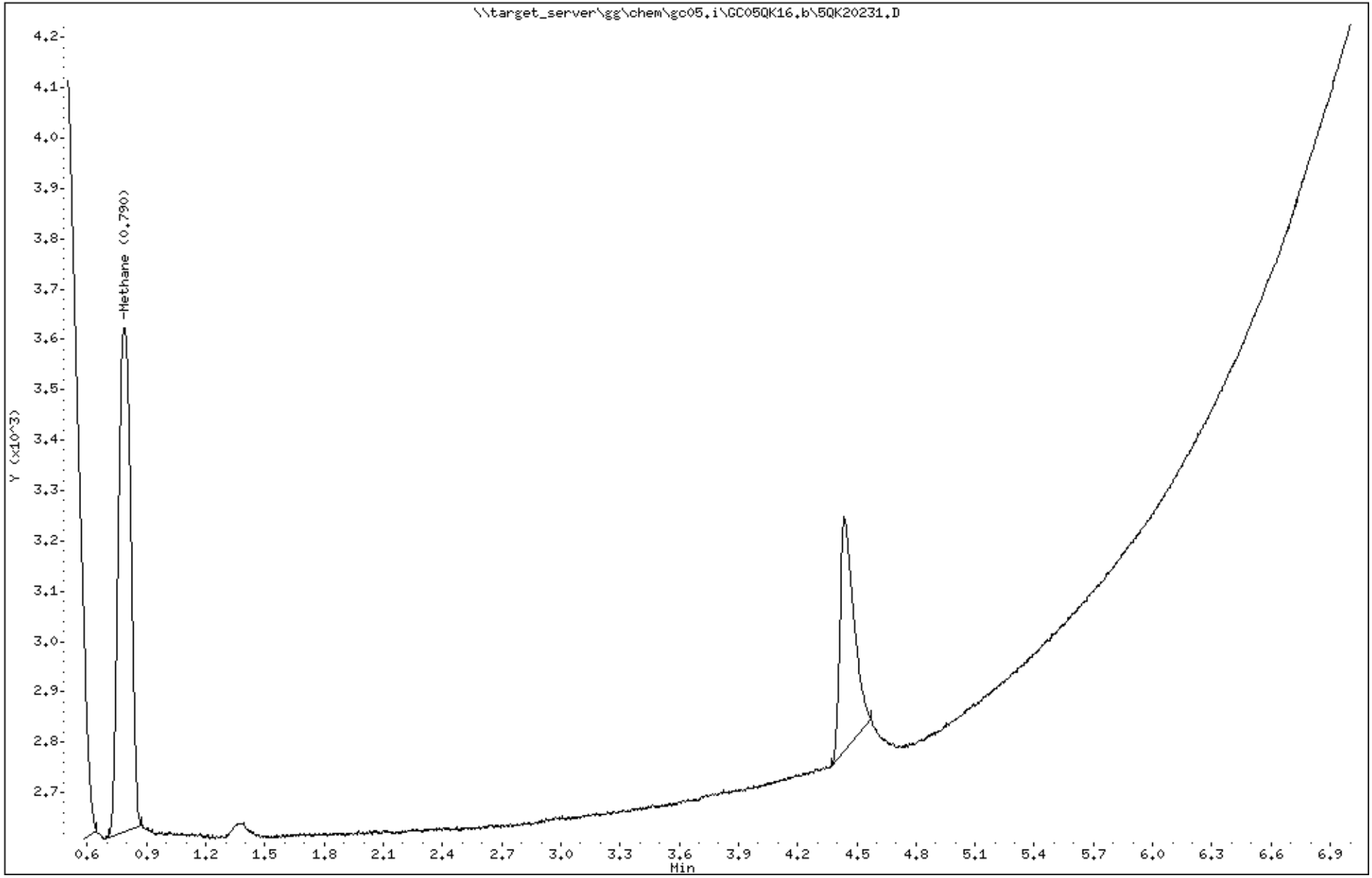
Data file : \\target_server\gg\chem\gc05.i\GC05QK16.b\5QK20231.D
Lab Smp Id: SQ6238-11 Client Smp ID: Y-BRMW1-150-157-110
Inj Date : 16-NOV-2023 22:18
Operator : DL/SH Inst ID: gc05.i
Smp Info : SQ6238-11
Misc Info : WG345566,WG344993-4
Comment : RSK SOP 175
Method : \\target_server\gg\chem\gc05.i\GC05QK16.b\MEEB47A.m
Meth Date : 17-Nov-2023 05:58 dlewry Quant Type: ESTD
Cal Date : 07-NOV-2023 10:11 Cal File: 5QK20014.D
Als bottle: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSKSOP175-MEE.sub
Target Version: 4.12
Processing Host: V200T3

Concentration Formula: Amt * DF * 0.005/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	0.00500	sample purged (L)
Cpnd Variable		Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (PPM)	CONCENTRATIONS FINAL (PPM)	REVIEW CODE
1 Methane	0.790	0.760	0.030	4457	9.39353	9.39	

Data File: \\target_server\gg\chem\gc05.i\GC05QK16.b\5QK20231.D
Date : 16-NOV-2023 22:18
Client ID: Y-BRMW1-150-157-110
Instrument: gc05.i
Sample Info: SQ6238-11
Purge Volume: 0.0
Operator: DL/SH
Column phase: Porapak Q
Column diameter: 0.00



Standards Data Section

Form 6
Initial Calibration Summary

Lab Name : Katahdin Analytical Services **SDG:** SQ6238

Instrument ID: GC05 **Column ID:** A

Lab File IDs : 5QK20008.D5QK20009.D5QK20010.D 5QK20011.D5QK20012.D5QK20013.D 5QK20014.D **Calibration Date(s):** 07-NOV-23 08:28 07-NOV-23 10:11

	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Level 7		Curve				%RSD or R^2		
	6.5000	10.0000	50.0000	100.0000	500.0000	1000.0000	1500.0000		Type	b	m1	m2	Result	Limit	
Methane	635	558	472	453	437	420	346		AVG		474		19.95879	25	O
Ethene	830	809	836	826	811	789	654		AVG		793		8.01360	25	O
Ethane	862	837	865	855	843	821	677		AVG		823		8.03115	25	O

Legend: O = Acceptable; W = Failed %RSD Value; X = Failed R^2 Value; Y = Failed Minimum RF

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sales@katahdinlab.com

Data File: \\target_server\gg\chem\gc05.i\GC05QK07.b\5QK20015.D
Report Date: 18-Nov-2023 10:15

Katahdin Analytical Services

RECOVERY REPORT

Client Name: Client SDG: SDGa00256
Sample Matrix: LIQUID Fraction: VOA
Lab Smp Id: WG344993-8
Level: LOW Operator: DL
Data Type: GC DATA SampleType: INDSOURCE
SpikeList File: ind.spk Quant Type: ESTD
Sublist File: all.sub
Method File: \\target_server\gg\chem\gc05.i\GC05QK07.b\MEEB47A.m
Misc Info: WG344993,WG344993-4

SPIKE COMPOUND	CONC ADDED PPM	CONC RECOVERED PPM	% RECOVERED	LIMITS
1 Methane	100	88.6	88.59	85-115
2 Ethene	100	96.0	96.05	85-115
3 Ethane	100	93.9	93.86	85-115

Data File: \\target_server\gg\chem\gc05.i\GC05QK07.b\5QK20008.D
Report Date: 18-Nov-2023 10:15

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gc05.i\GC05QK07.b\5QK20008.D
Lab Smp Id: WG344993-1
Inj Date : 07-NOV-2023 08:28
Operator : DL   Inst ID: gc05.i
Smp Info : WG344993-1
Misc Info :
Comment   : RSK SOP 175
Method   : \\target_server\gg\chem\gc05.i\GC05QK07.b\MEEB47A.m
Meth Date : 08-Nov-2023 06:10 dlewry   Quant Type: ESTD
Cal Date : 07-NOV-2023 08:28   Cal File: 5QK20008.D
Als bottle: 1   Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: Falcon   Compound Sublist: all.sub
Target Version: 4.12

Concentration Formula: Amt * DF * 0.005/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	0.00500	sample purged (L)
Cpnd Variable		Local Compound Variable

DL

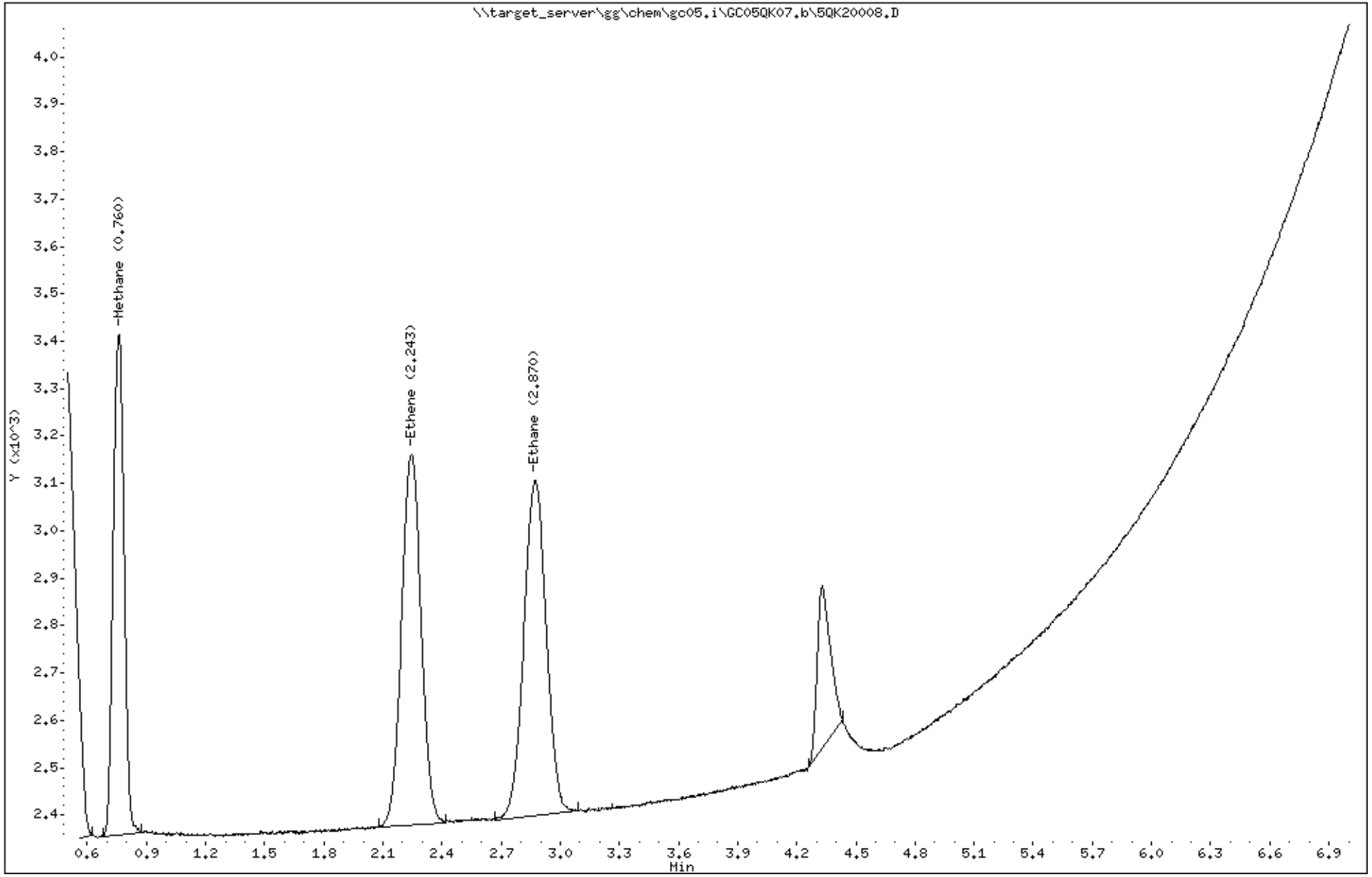
10:16 am, Nov 18, 2023

					AMOUNTS		
					CAL-AMT	ON-COL	
Compounds	RT	EXP RT	DLT RT	RESPONSE	(PPM)	(PPM)	REVIEW CODE
1 Methane	0.760	0.760	0.000	4126	6.50000	6.50(aM)	M9
2 Ethene	2.243	2.317	-0.074	5395	6.50000	6.50(aM)	M9
3 Ethane	2.870	2.957	-0.087	5600	6.50000	6.50(aM)	M9

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

Data File: \\target_server\gg\chem\gc05.i\GC05QK07.b\5QK20008.D
Date : 07-NOV-2023 08:28
Client ID:
Instrument: gc05.i
Sample Info: WG344993-1
Purge Volume: 0.0
Operator: DL
Column phase: Porapak Q
Column diameter: 0.00



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Data File: \\target_server\gg\chem\gc05.i\GC05QK07.b\5QK20009.D
Report Date: 18-Nov-2023 10:15

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gc05.i\GC05QK07.b\5QK20009.D
Lab Smp Id: WG344993-2
Inj Date : 07-NOV-2023 08:46
Operator : DL   Inst ID: gc05.i
Smp Info : WG344993-2
Misc Info :
Comment   : RSK SOP 175
Method   : \\target_server\gg\chem\gc05.i\GC05QK07.b\MEEB47A.m
Meth Date : 08-Nov-2023 06:10 dlewry   Quant Type: ESTD
Cal Date : 07-NOV-2023 08:46   Cal File: 5QK20009.D
Als bottle: 1   Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: Falcon   Compound Sublist: all.sub
Target Version: 4.12
Processing Host: V200T3

Concentration Formula: Amt * DF * 0.005/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	0.00500	sample purged (L)
Cpnd Variable		Local Compound Variable

DL

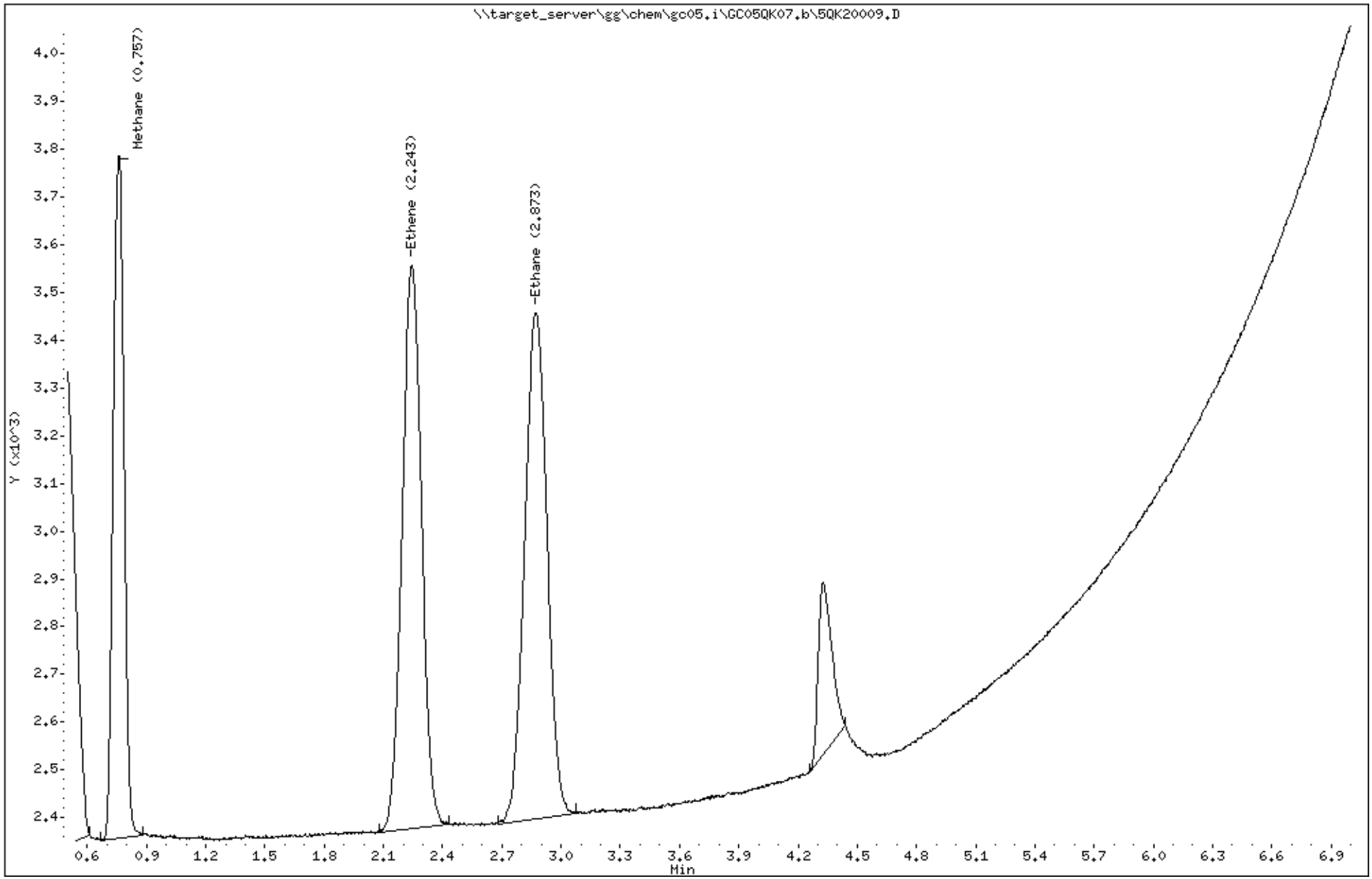
10:16 am, Nov 18, 2023

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (PPM)	AMOUNTS ON-COL (PPM)	REVIEW CODE
1 Methane	0.756	0.760	-0.004	5575	10.0000	12.2(M)	M9
2 Ethene	2.243	2.317	-0.074	8088	10.0000	13.1(M)	M9
3 Ethane	2.873	2.957	-0.084	8367	10.0000	13.1(M)	M9

QC Flag Legend

M - Compound response manually integrated.

Data File: \\target_server\gg\chem\gc05.i\GC05QK07.b\5QK20009.D
Date : 07-NOV-2023 08:46
Client ID:
Instrument: gc05.i
Sample Info: WG344993-2
Purge Volume: 0.0
Operator: DL
Column phase: Porapak Q
Column diameter: 0.00



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Data File: \\target_server\gg\chem\gc05.i\GC05QK07.b\5QK20010.D
Report Date: 18-Nov-2023 10:15

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gc05.i\GC05QK07.b\5QK20010.D
Lab Smp Id: WG344993-3
Inj Date : 07-NOV-2023 09:03
Operator : DL   Inst ID: gc05.i
Smp Info : WG344993-3
Misc Info :
Comment   : RSK SOP 175
Method   : \\target_server\gg\chem\gc05.i\GC05QK07.b\MEEB47A.m
Meth Date : 08-Nov-2023 06:10 dlewry   Quant Type: ESTD
Cal Date : 07-NOV-2023 09:03   Cal File: 5QK20010.D
Als bottle: 1   Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: Falcon   Compound Sublist: all.sub
Target Version: 4.12
Processing Host: V200T3

Concentration Formula: Amt * DF * 0.005/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	0.00500	sample purged (L)
Cpnd Variable		Local Compound Variable

DL

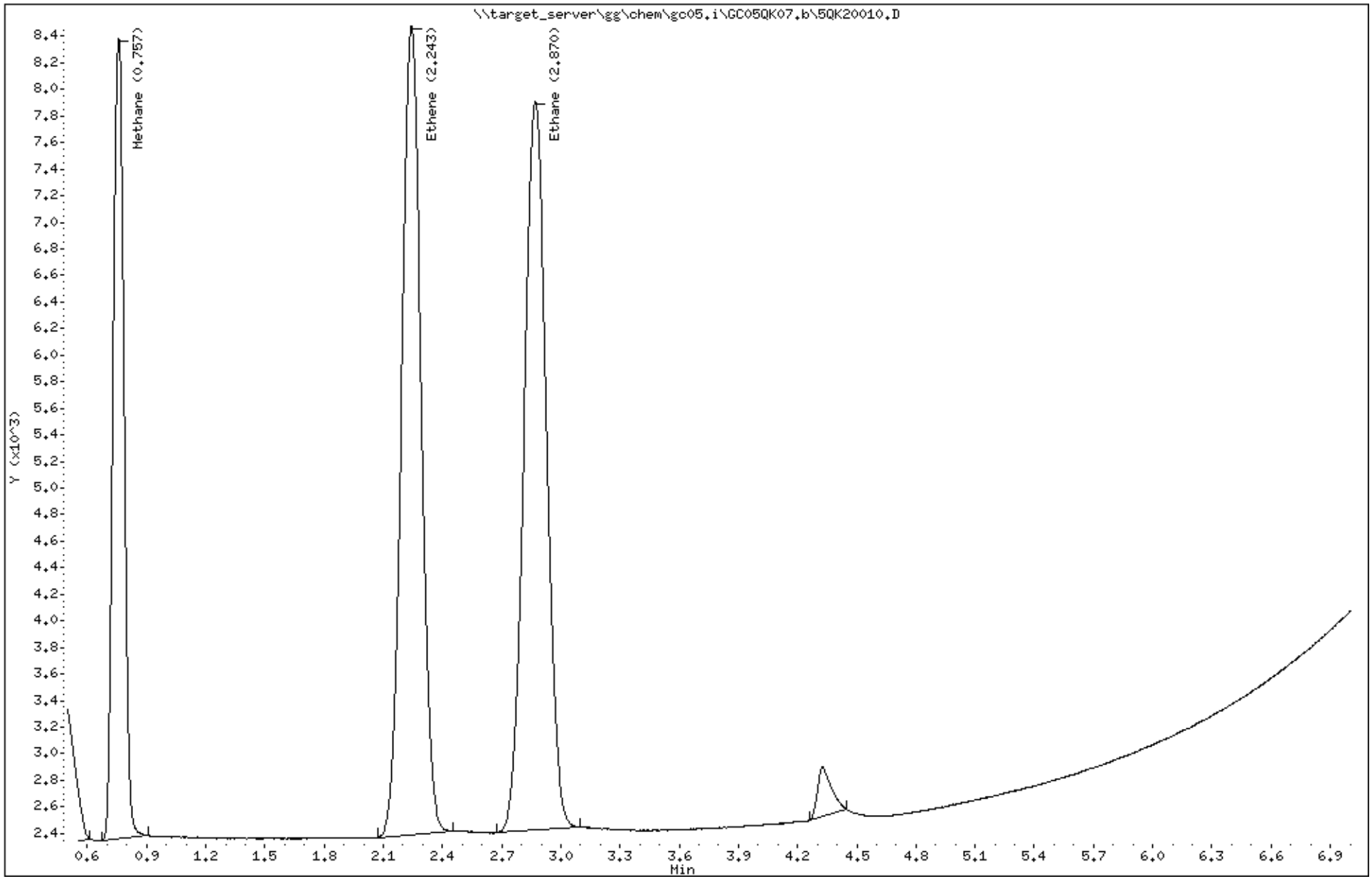
10:16 am, Nov 18, 2023

					AMOUNTS		
					CAL-AMT	ON-COL	
Compounds	RT	EXP RT	DLT RT	RESPONSE	(PPM)	(PPM)	REVIEW CODE
1 Methane	0.756	0.760	-0.004	23588	50.0000	49.8(M)	M9
2 Ethene	2.243	2.317	-0.074	41800	50.0000	50.7(M)	M9
3 Ethane	2.870	2.957	-0.087	43269	50.0000	50.6(M)	M9

QC Flag Legend

M - Compound response manually integrated.

Data File: \\target_server\gg\chem\gc05.i\GC05QK07.b\5QK20010.D
Date : 07-NOV-2023 09:03
Client ID:
Instrument: gc05.i
Sample Info: WG344993-3
Purge Volume: 0.0
Operator: DL
Column phase: Porapak Q
Column diameter: 0.00



Data File: \\target_server\gg\chem\gc05.i\GC05QK07.b\5QK20011.D
Report Date: 18-Nov-2023 10:15

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gc05.i\GC05QK07.b\5QK20011.D
Lab Smp Id: WG344993-4
Inj Date : 07-NOV-2023 09:20
Operator : DL   Inst ID: gc05.i
Smp Info : WG344993-4
Misc Info :
Comment   : RSK SOP 175
Method   : \\target_server\gg\chem\gc05.i\GC05QK07.b\MEEB47A.m
Meth Date : 08-Nov-2023 06:10 dlewry   Quant Type: ESTD
Cal Date : 07-NOV-2023 09:20   Cal File: 5QK20011.D
Als bottle: 1   Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: Falcon   Compound Sublist: all.sub
Target Version: 4.12
Processing Host: V200T3

Concentration Formula: Amt * DF * 0.005/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	0.00500	sample purged (L)
Cpnd Variable		Local Compound Variable

DL

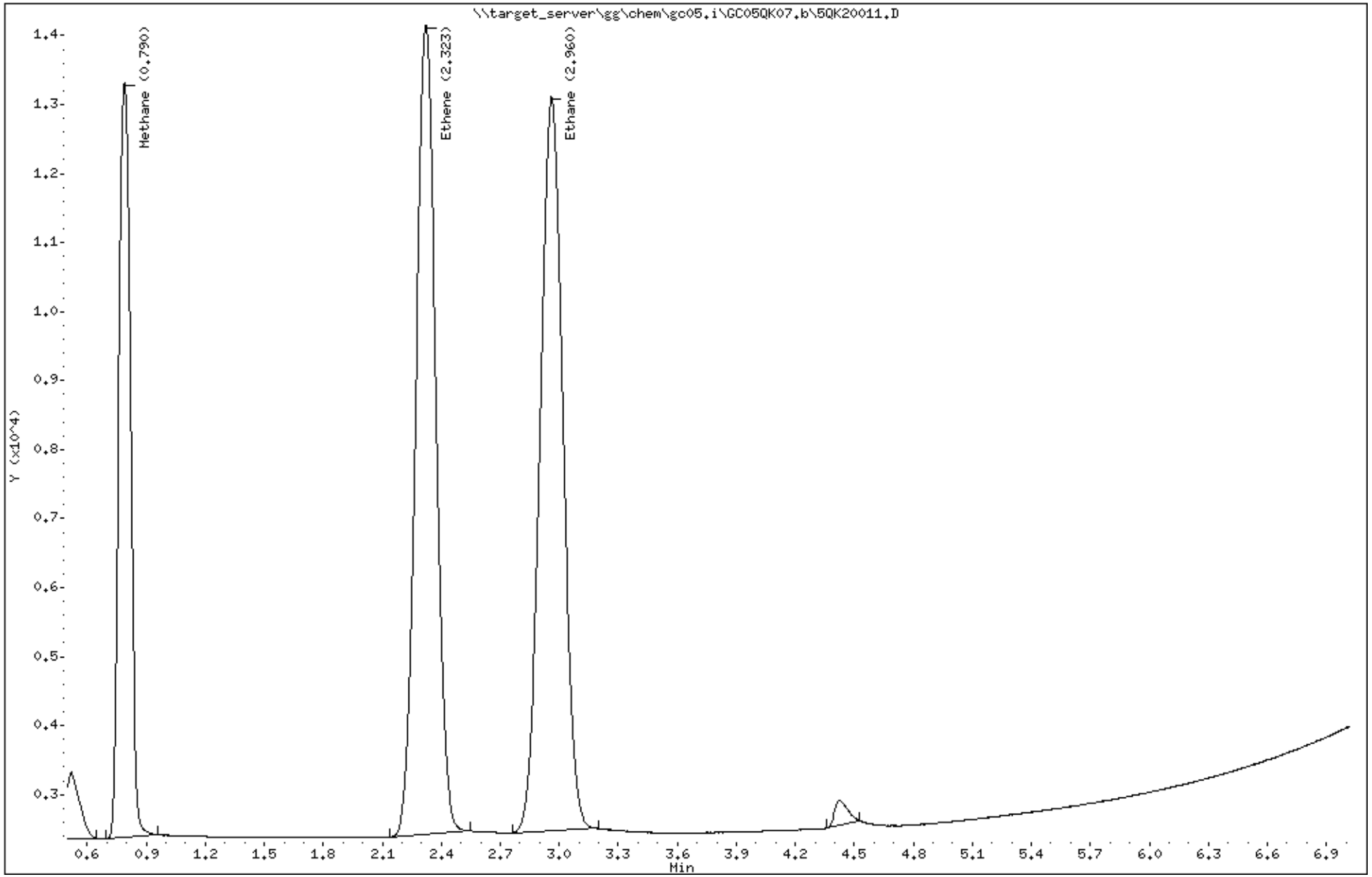
10:16 am, Nov 18, 2023

					AMOUNTS		
					CAL-AMT	ON-COL	
Compounds	RT	EXP RT	DLT RT	RESPONSE	(PPM)	(PPM)	REVIEW CODE
1 Methane	0.790	0.760	0.030	45348	100.000	95.6(M)	M9
2 Ethene	2.323	2.317	0.006	82636	100.000	100(M)	M9
3 Ethane	2.960	2.957	0.003	85497	100.000	100(M)	M9

QC Flag Legend

M - Compound response manually integrated.

Data File: \\target_server\gg\chem\gc05.i\GC05QK07.b\5QK20011.D
Date : 07-NOV-2023 09:20
Client ID:
Instrument: gc05.i
Sample Info: WG344993-4
Purge Volume: 0.0
Operator: DL
Column phase: Porapak Q
Column diameter: 0.00



Data File: \\target_server\gg\chem\gc05.i\GC05QK07.b\5QK20012.D
Report Date: 18-Nov-2023 10:15

Katahdin Analytical Services

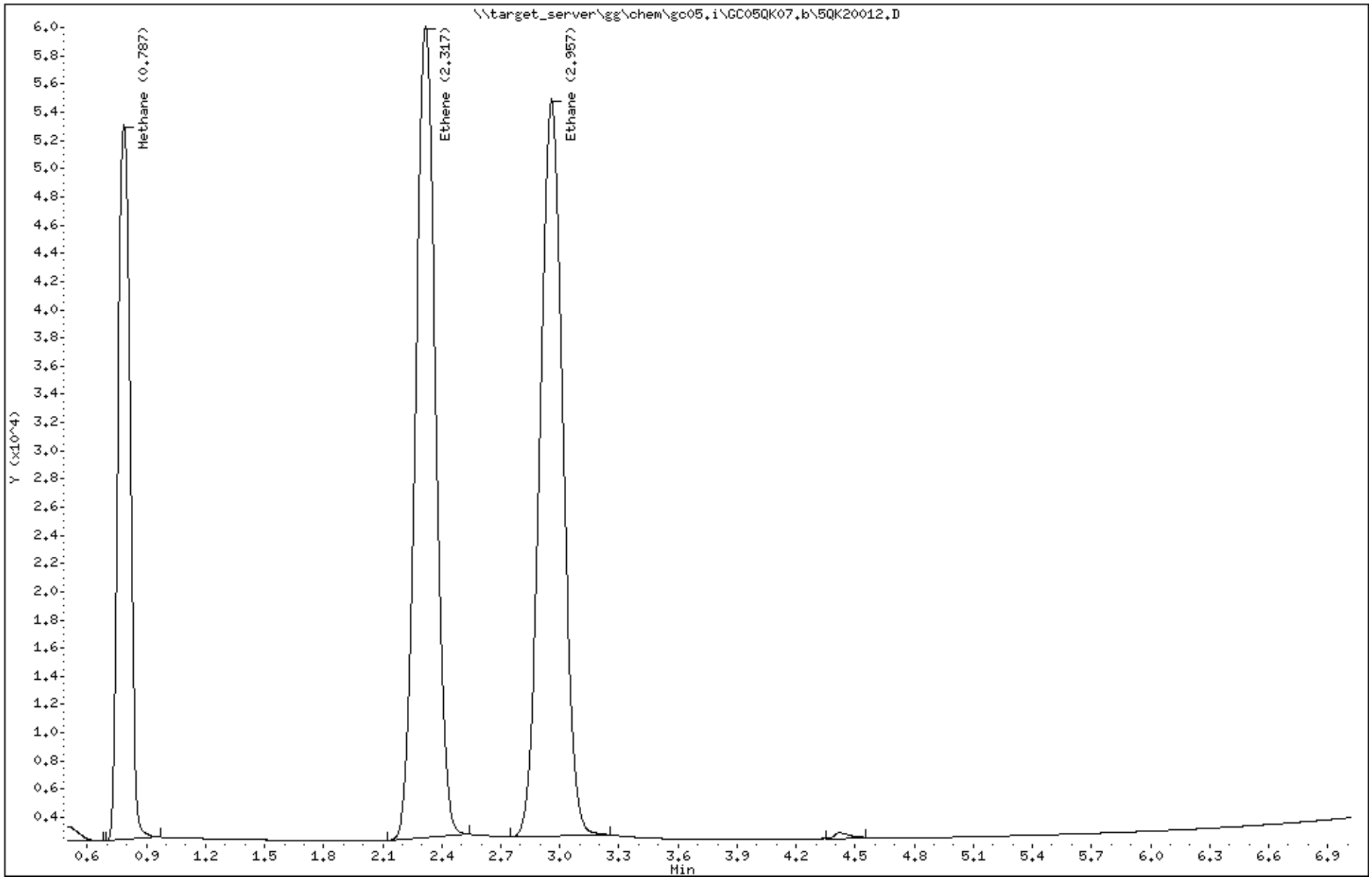
Data file : \\target_server\gg\chem\gc05.i\GC05QK07.b\5QK20012.D
Lab Smp Id: WG344993-5
Inj Date : 07-NOV-2023 09:37
Operator : DL   Inst ID: gc05.i
Smp Info : WG344993-5
Misc Info :
Comment   : RSK SOP 175
Method   : \\target_server\gg\chem\gc05.i\GC05QK07.b\MEEB47A.m
Meth Date : 08-Nov-2023 06:10 dlewry   Quant Type: ESTD
Cal Date : 07-NOV-2023 09:37   Cal File: 5QK20012.D
Als bottle: 1   Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: Falcon   Compound Sublist: all.sub
Target Version: 4.12
Processing Host: V200T3

Concentration Formula: Amt * DF * 0.005/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	0.00500	sample purged (L)
Cpnd Variable		Local Compound Variable

					AMOUNTS		
					CAL-AMT	ON-COL	
Compounds	RT	EXP RT	DLT RT	RESPONSE	(PPM)	(PPM)	REVIEW CODE
1 Methane	0.786	0.760	0.026	218681	500.000	461	
2 Ethene	2.316	2.317	-0.001	405356	500.000	493	
3 Ethane	2.956	2.957	-0.001	421667	500.000	495	

Data File: \\target_server\gg\chem\gc05.i\GC05QK07.b\5QK20012.D
Date : 07-NOV-2023 09:37
Client ID:
Instrument: gc05.i
Sample Info: WG344993-5
Purge Volume: 0.0
Operator: DL
Column phase: Porapak Q
Column diameter: 0.00



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Data File: \\target_server\gg\chem\gc05.i\GC05QK07.b\5QK20013.D
Report Date: 18-Nov-2023 10:15

Katahdin Analytical Services

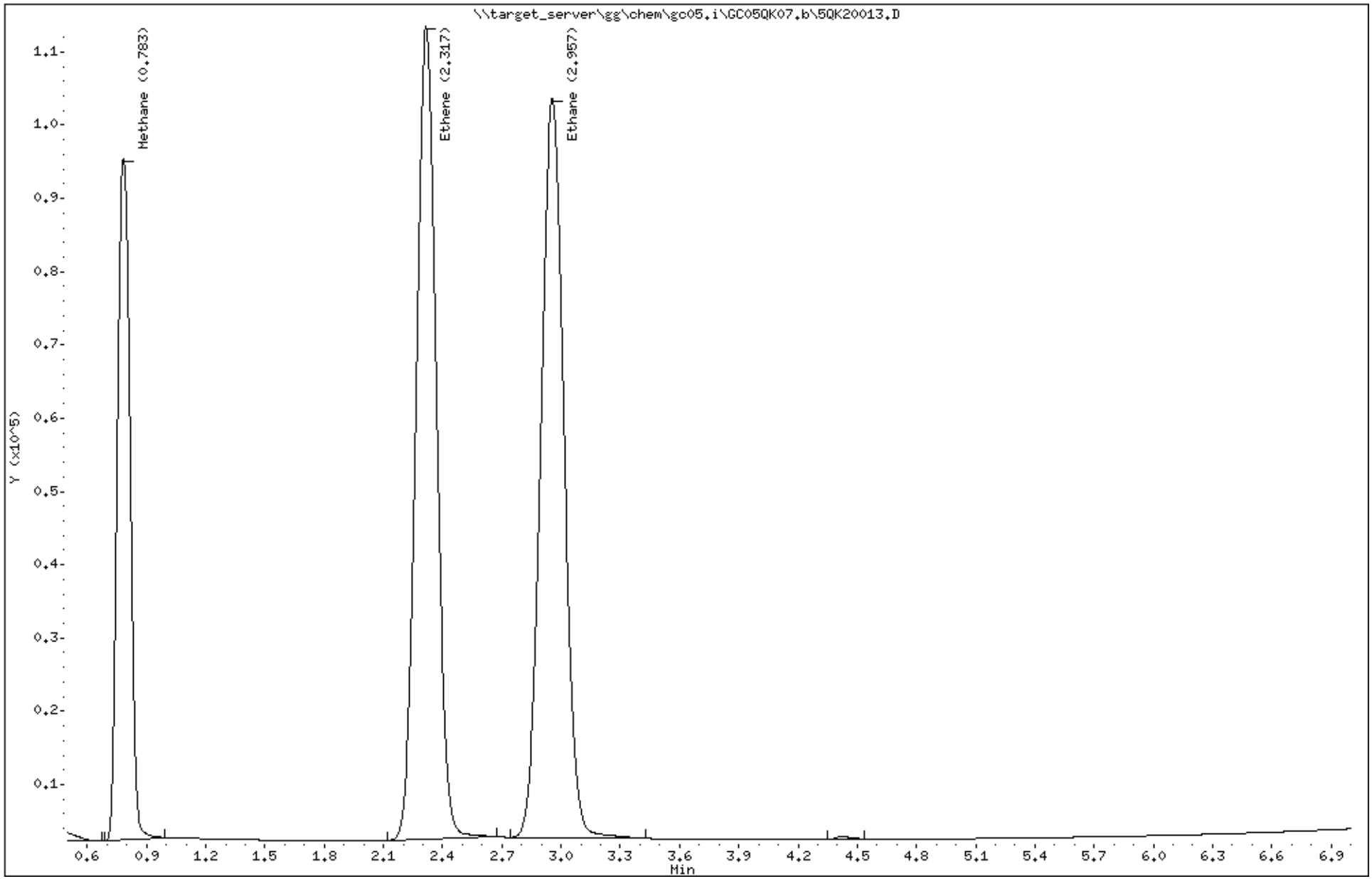
Data file : \\target_server\gg\chem\gc05.i\GC05QK07.b\5QK20013.D
Lab Smp Id: WG344993-6
Inj Date : 07-NOV-2023 09:54
Operator : DL   Inst ID: gc05.i
Smp Info : WG344993-6
Misc Info :
Comment   : RSK SOP 175
Method   : \\target_server\gg\chem\gc05.i\GC05QK07.b\MEEB47A.m
Meth Date : 08-Nov-2023 06:10 dlewry   Quant Type: ESTD
Cal Date : 07-NOV-2023 09:54   Cal File: 5QK20013.D
Als bottle: 1   Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: Falcon   Compound Sublist: all.sub
Target Version: 4.12
Processing Host: V200T3

Concentration Formula: Amt * DF * 0.005/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	0.00500	sample purged (L)
Cpnd Variable		Local Compound Variable

					AMOUNTS		
					CAL-AMT	ON-COL	
Compounds	RT	EXP RT	DLT RT	RESPONSE	(PPM)	(PPM)	REVIEW CODE
1 Methane	0.783	0.760	0.023	420262	1000.00	886	
2 Ethene	2.316	2.317	-0.001	788519	1000.00	965	
3 Ethane	2.956	2.957	-0.001	820746	1000.00	969	

Data File: \\target_server\gg\chem\gc05.i\GC05QK07.b\5QK20013.D
Date : 07-NOV-2023 09:54
Client ID:
Instrument: gc05.i
Sample Info: WG344993-6
Purge Volume: 0.0
Operator: DL
Column phase: Porapak Q
Column diameter: 0.00



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Data File: \\target_server\gg\chem\gc05.i\GC05QK07.b\5QK20014.D
Report Date: 13-Dec-2023 12:30

Katahdin Analytical Services

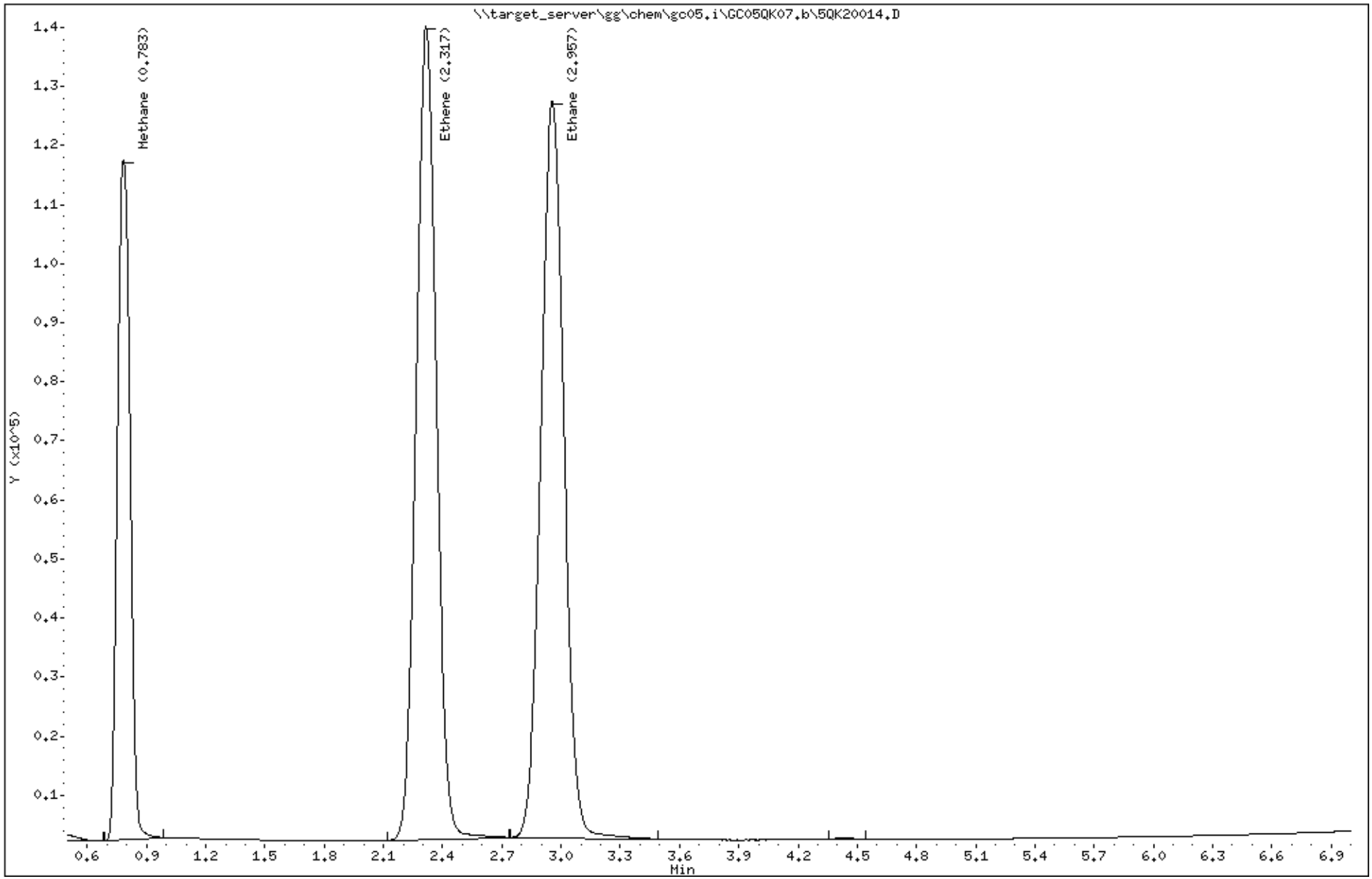
Data file : \\target_server\gg\chem\gc05.i\GC05QK07.b\5QK20014.D
Lab Smp Id: WG344993-7
Inj Date : 07-NOV-2023 10:11
Operator : DL   Inst ID: gc05.i
Smp Info : WG344993-7
Misc Info :
Comment   : RSK SOP 175
Method   : \\target_server\gg\chem\gc05.i\GC05QK07.b\MEEB47A.m
Meth Date : 08-Nov-2023 06:10 dlewry   Quant Type: ESTD
Cal Date : 07-NOV-2023 10:11   Cal File: 5QK20014.D
Als bottle: 1   Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: Falcon   Compound Sublist: all.sub
Target Version: 4.12
Processing Host: V200T3

Concentration Formula: Amt * DF * 0.005/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	0.00500	sample purged (L)
Cpnd Variable		Local Compound Variable

					AMOUNTS		
					CAL-AMT	ON-COL	
Compounds	RT	EXP RT	DLT RT	RESPONSE	(PPM)	(PPM)	REVIEW CODE
1 Methane	0.783	0.760	0.023	519291	1500.00	1090	
2 Ethene	2.316	2.317	-0.001	980865	1500.00	1240	
3 Ethane	2.956	2.957	-0.001	1015625	1500.00	1230	

Data File: \\target_server\gg\chem\gc05.i\GC05QK07.b\5QK20014.D
Date : 07-NOV-2023 10:11
Client ID:
Instrument: gc05.i
Sample Info: WG344993-7
Purge Volume: 0.0
Operator: DL
Column phase: Porapak Q
Column diameter: 0.00



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Data File: \\target_server\gg\chem\gc05.i\GC05QK07.b\5QK20015.D
Report Date: 18-Nov-2023 10:15

Katahdin Analytical Services

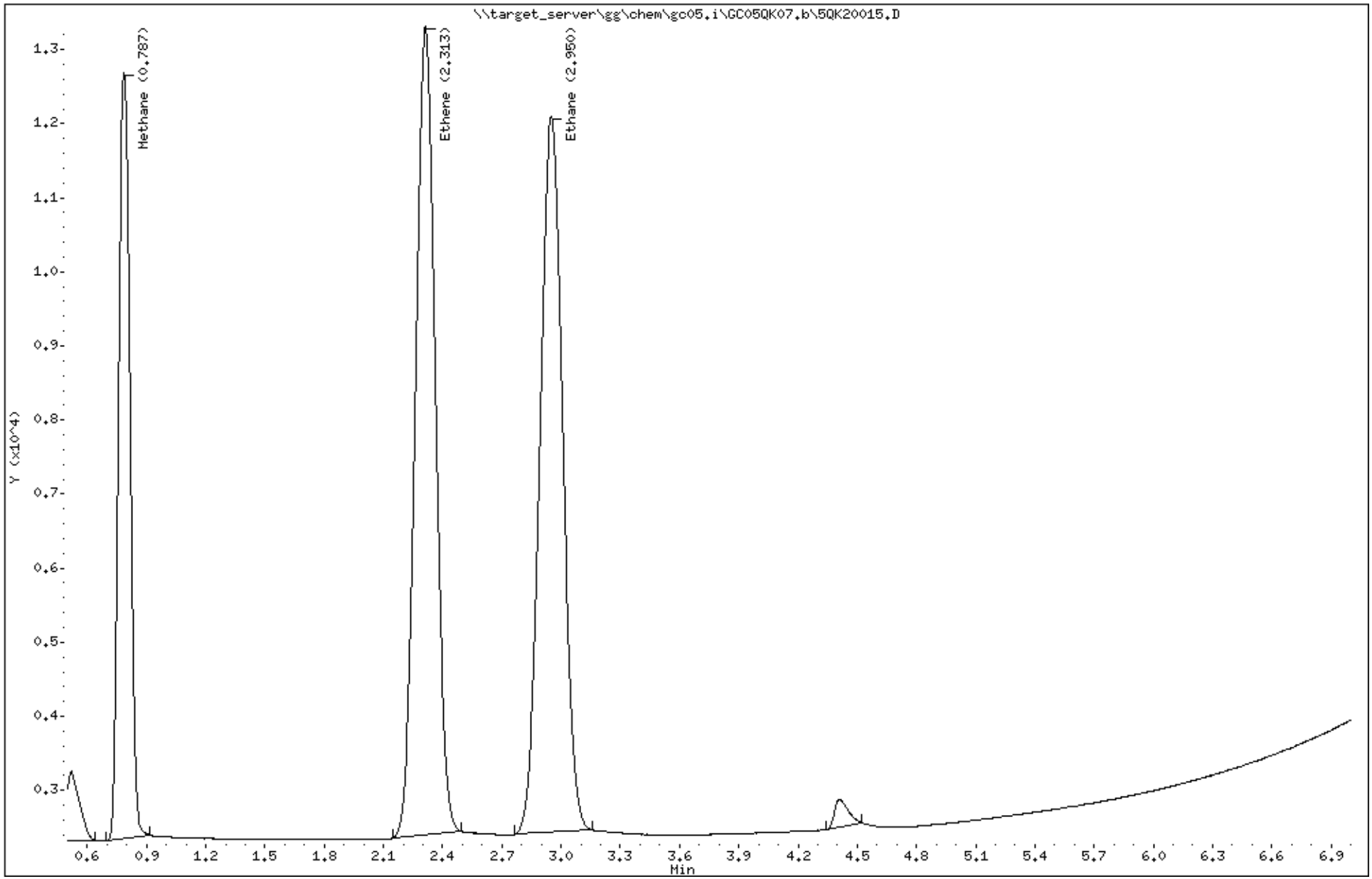
Data file : \\target_server\gg\chem\gc05.i\GC05QK07.b\5QK20015.D
Lab Smp Id: WG344993-8
Inj Date : 07-NOV-2023 11:39
Operator : DL   Inst ID: gc05.i
Smp Info : WG344993-8
Misc Info : WG344993,WG344993-4
Comment   : RSK SOP 175
Method   : \\target_server\gg\chem\gc05.i\GC05QK07.b\MEEB47A.m
Meth Date : 08-Nov-2023 06:10 dlewry   Quant Type: ESTD
Cal Date : 07-NOV-2023 10:11   Cal File: 5QK20014.D
Als bottle: 1   QC Sample: INDSOURCE
Dil Factor: 1.00000
Integrator: Falcon   Compound Sublist: all.sub
Target Version: 4.12
Processing Host: V200T3

Concentration Formula: Amt * DF * 0.005/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	0.00500	sample purged (L)
Cpnd Variable		Local Compound Variable

					CONCENTRATIONS ON-COLUMN (PPM)	CONCENTRATIONS FINAL (PPM)	
Compounds	RT	EXP RT	DLT RT	RESPONSE			REVIEW CODE
1 Methane	0.786	0.760	0.026	42036	88.5947	88.6	
2 Ethene	2.313	2.317	-0.004	76214	96.0513	96.0	
3 Ethane	2.950	2.957	-0.007	77231	93.8612	93.9	

Data File: \\target_server\gg\chem\gc05.i\GC05QK07.b\5QK20015.D
Date : 07-NOV-2023 11:39
Client ID:
Instrument: gc05.i
Sample Info: WG344993-8
Purge Volume: 0.0
Operator: DL
Column phase: Porapak Q
Column diameter: 0.00



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Form 7
Calibration Verification Summary

Lab Name: Katahdin Analytical Services
SDG: SQ6238
Lab ID: WG345566-4
Analytical Date: 11/16/23 14:53
Lab File ID: 5QK20211.D
Instrument ID: GC05
Initial Calibration Date(s): 11/07/23 08:28 11/07/23 10:11
Column ID: A

Compound	RRF/Amount	RF100	CCAL RRF100	Min RF	%D/ %Drift	Max %D/ %Drift	Curve Type	Qual
Methane	474	417	417	0.100	-12.19564	15.000	Averaged	
Ethene	793	754	754	0.100	-4.92917	15.000	Averaged	
Ethane	823	778	778	0.100	-5.47162	15.000	Averaged	

*** = Compound out of QC criteria**

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sales@katahdinlab.com

Data File: \\target_server\gg\chem\gc05.i\GC05QK16.b\5QK20211.D
Report Date: 01-Dec-2023 18:03

Katahdin Analytical Services

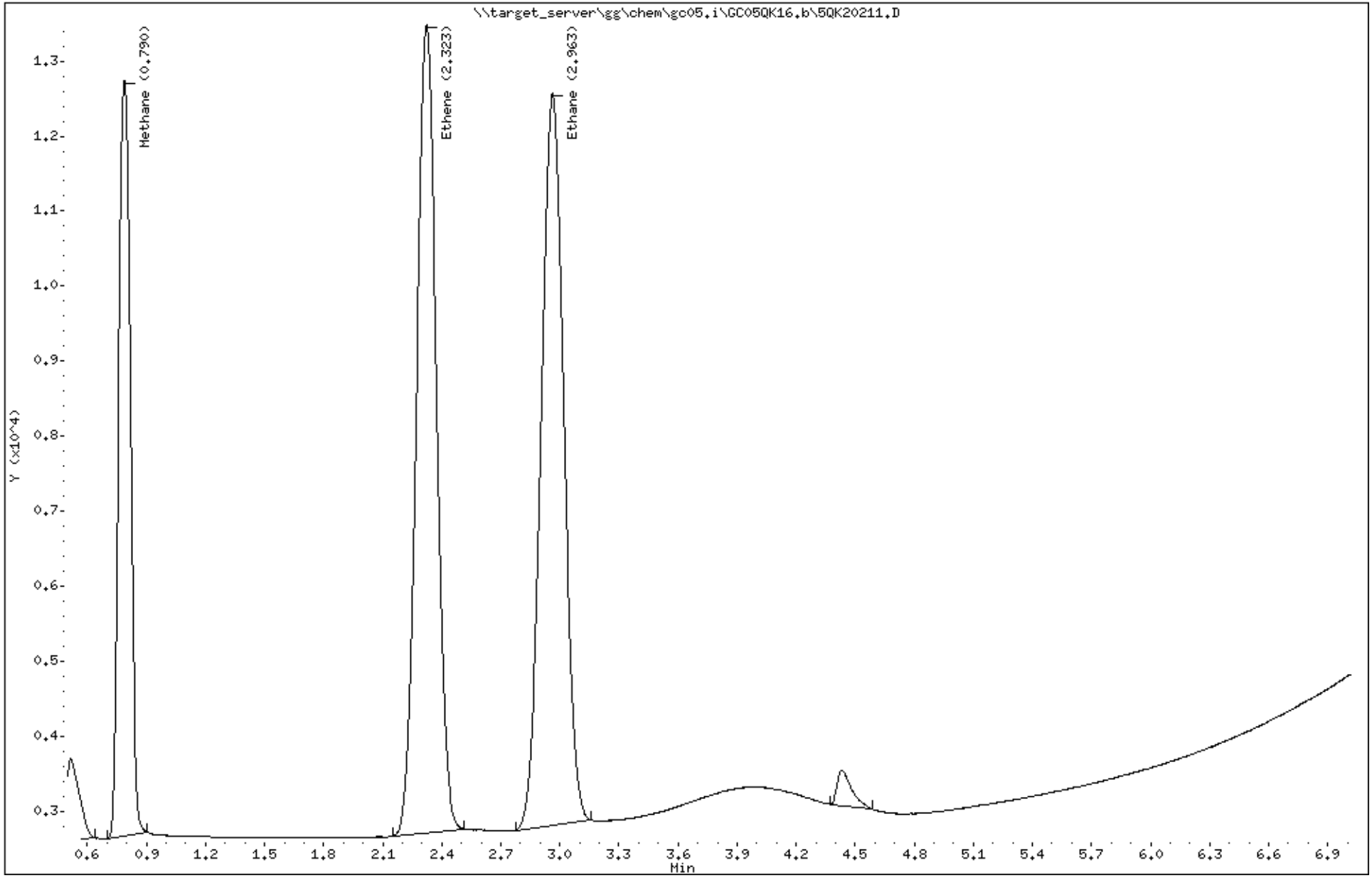
Data file : \\target_server\gg\chem\gc05.i\GC05QK16.b\5QK20211.D
Lab Smp Id: WG345566-4
Inj Date : 16-NOV-2023 14:53
Operator : DL/SH   Inst ID: gc05.i
Smp Info : WG345566-4
Misc Info : WG345566,WG344993-4,SQ6238-1
Comment   : RSK SOP 175
Method   : \\target_server\gg\chem\gc05.i\GC05QK16.b\MEEB47A.m
Meth Date : 17-Nov-2023 05:58 dlewry   Quant Type: ESTD
Cal Date : 07-NOV-2023 10:11   Cal File: 5QK20014.D
Als bottle: 1   Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon   Compound Sublist: all.sub
Target Version: 4.12
Processing Host: V200T3

Concentration Formula: Amt * DF * 0.005/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	0.00500	sample purged (L)
Cpnd Variable		Local Compound Variable

					AMOUNTS		
					CAL-AMT	ON-COL	
Compounds	RT	EXP RT	DLT RT	RESPONSE	(PPM)	(PPM)	REVIEW CODE
1 Methane	0.790	0.760	0.030	41661	100.000	87.8	
2 Ethene	2.323	2.317	0.006	75436	100.000	95.1	
3 Ethane	2.963	2.957	0.006	77780	100.000	94.5	

Data File: \\target_server\gg\chem\gc05.i\GC05QK16.b\5QK20211.D
Date : 16-NOV-2023 14:53
Client ID:
Instrument: gc05.i
Sample Info: WG345566-4
Purge Volume: 0.0
Operator: DL/SH
Column phase: Porapak Q
Column diameter: 0.00



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Form 7
Calibration Verification Summary

Lab Name: Katahdin Analytical Services
SDG: SQ6238
Lab ID: WG345566-5
Analytical Date: 11/16/23 20:19
Lab File ID: 5QK20224.D
Instrument ID: GC05
Initial Calibration Date(s): 11/07/23 08:28 11/07/23 10:11
Column ID: A

Compound	RRF/Amount	RF100	CCAL RRF100	Min RF	%D/ %Drift	Max %D/ %Drift	Curve Type	Qual
Methane	474	427	427	0.100	-9.95738	15.000	Averaged	
Ethene	793	775	775	0.100	-2.36701	15.000	Averaged	
Ethane	823	804	804	0.100	-2.25100	15.000	Averaged	

*** = Compound out of QC criteria**

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sales@katahdinlab.com

Data File: \\target_server\gg\chem\gc05.i\GC05QK16.b\5QK20224.D
Report Date: 01-Dec-2023 18:03

Katahdin Analytical Services

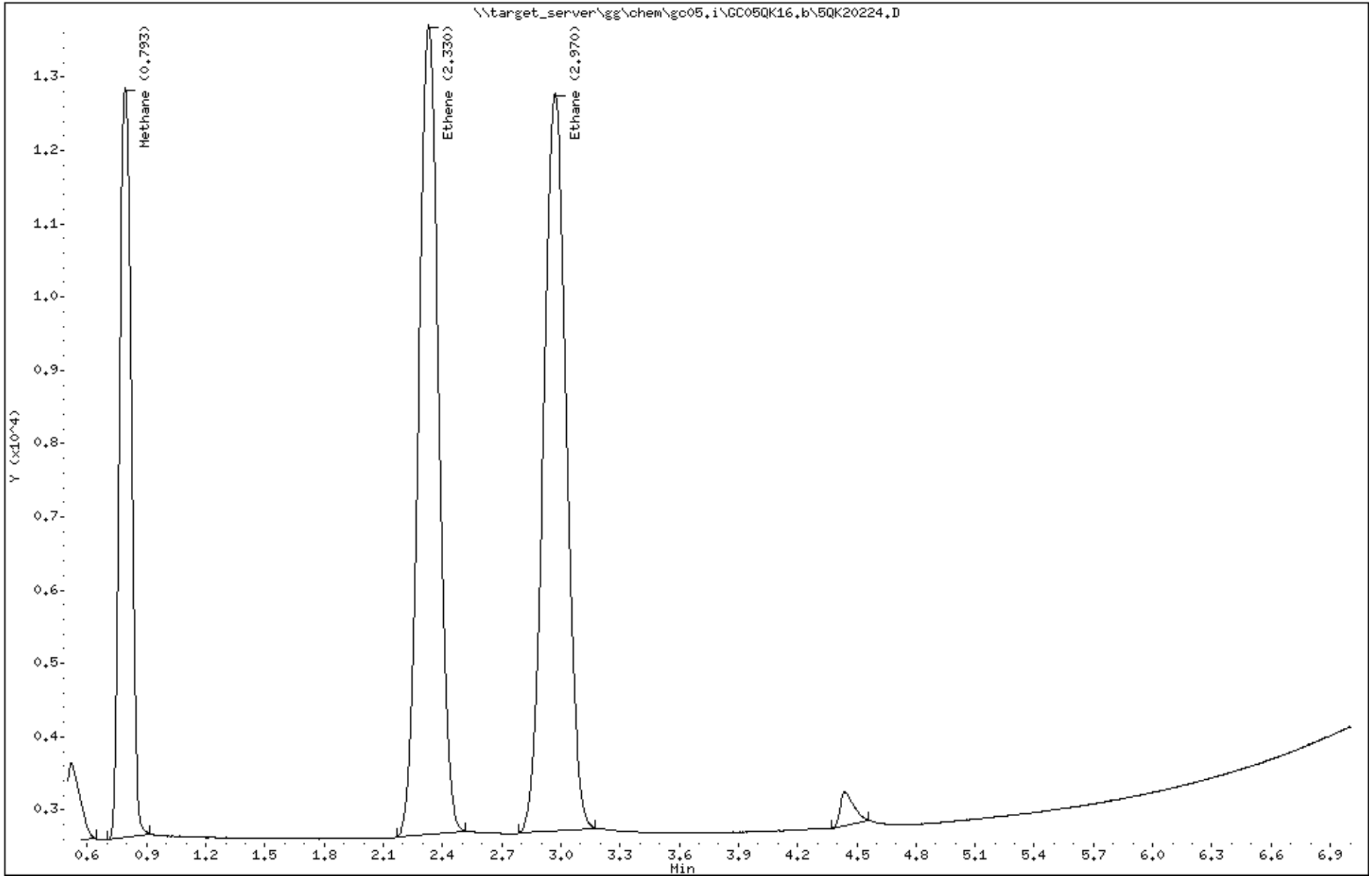
Data file : \\target_server\gg\chem\gc05.i\GC05QK16.b\5QK20224.D
Lab Smp Id: WG345566-5
Inj Date : 16-NOV-2023 20:19
Operator : DL/SH   Inst ID: gc05.i
Smp Info : WG345566-5
Misc Info : WG345566,WG344993-4,SQ6238-8
Comment   : RSK SOP 175
Method   : \\target_server\gg\chem\gc05.i\GC05QK16.b\MEEB47A.m
Meth Date : 17-Nov-2023 05:58 dlewry   Quant Type: ESTD
Cal Date : 07-NOV-2023 10:11   Cal File: 5QK20014.D
Als bottle: 1   Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon   Compound Sublist: all.sub
Target Version: 4.12
Processing Host: V200T3

Concentration Formula: Amt * DF * 0.005/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	0.00500	sample purged (L)
Cpnd Variable		Local Compound Variable

					AMOUNTS		
					CAL-AMT	ON-COL	
Compounds	RT	EXP RT	DLT RT	RESPONSE	(PPM)	(PPM)	REVIEW CODE
1 Methane	0.793	0.760	0.033	42723	100.000	90.0	
2 Ethene	2.330	2.317	0.013	77469	100.000	97.6	
3 Ethane	2.970	2.957	0.013	80430	100.000	97.7	

Data File: \\target_server\gg\chem\gc05.i\GC05QK16.b\5QK20224.D
Date : 16-NOV-2023 20:19
Client ID:
Instrument: gc05.i
Sample Info: WG345566-5
Purge Volume: 0.0
Operator: DL/SH
Column phase: Porapak Q
Column diameter: 0.00



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Form 7
Calibration Verification Summary

Lab Name: Katahdin Analytical Services
SDG: SQ6238
Lab ID: WG345566-6
Analytical Date: 11/16/23 22:52
Lab File ID: 5QK20233.D
Instrument ID: GC05
Initial Calibration Date(s): 11/07/23 08:28 11/07/23 10:11
Column ID: A

Compound	RRF/Amount	RF100	CCAL RRF100	Min RF	%D/ %Drift	Max %D/ %Drift	Curve Type	Qual
Methane	474	424	424	0.100	-10.65921	15.000	Averaged	
Ethene	793	767	767	0.100	-3.35129	15.000	Averaged	
Ethane	823	797	797	0.100	-3.11510	15.000	Averaged	

*** = Compound out of QC criteria**

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Data File: \\target_server\gg\chem\gc05.i\GC05QK16.b\5QK20233.D
Report Date: 01-Dec-2023 18:04

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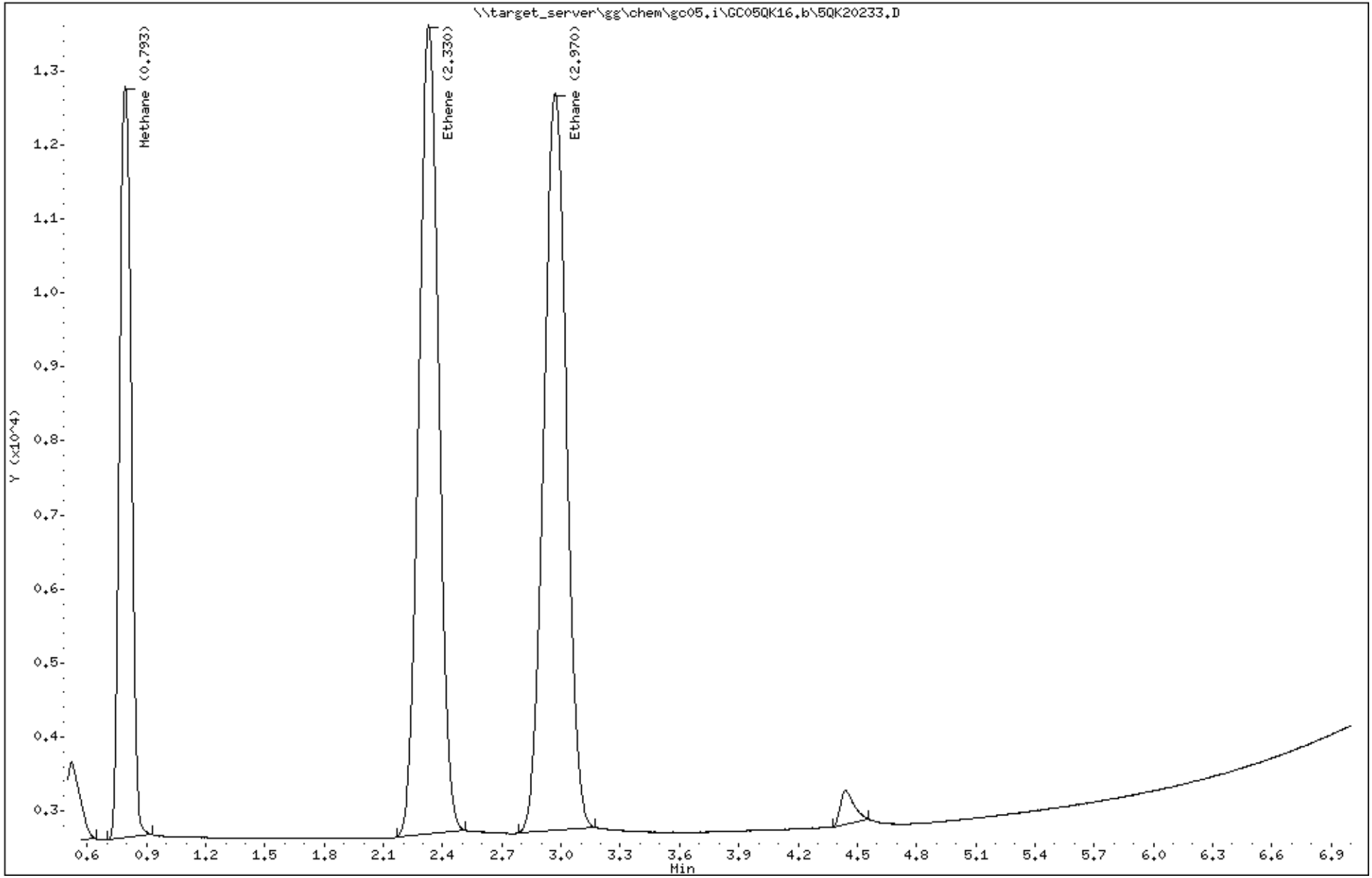
Data file : \\target_server\gg\chem\gc05.i\GC05QK16.b\5QK20233.D
Lab Smp Id: WG345566-6
Inj Date : 16-NOV-2023 22:52
Operator : DL/SH   Inst ID: gc05.i
Smp Info : WG345566-6
Misc Info : WG345566,WG344993-4,SQ6238-1
Comment   : RSK SOP 175
Method   : \\target_server\gg\chem\gc05.i\GC05QK16.b\MEEB47A.m
Meth Date : 17-Nov-2023 05:58 dlewry   Quant Type: ESTD
Cal Date : 07-NOV-2023 10:11   Cal File: 5QK20014.D
Als bottle: 1   Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon   Compound Sublist: all.sub
Target Version: 4.12
Processing Host: V200T3

Concentration Formula: Amt * DF * 0.005/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	0.00500	sample purged (L)
Cpnd Variable		Local Compound Variable

					AMOUNTS		
					CAL-AMT	ON-COL	
Compounds	RT	EXP RT	DLT RT	RESPONSE	(PPM)	(PPM)	REVIEW CODE
1 Methane	0.793	0.760	0.033	42390	100.000	89.3	
2 Ethene	2.330	2.317	0.013	76688	100.000	96.6	
3 Ethane	2.970	2.957	0.013	79719	100.000	96.9	

Data File: \\target_server\gg\chem\gc05.i\GC05QK16.b\5QK20233.D
Date : 16-NOV-2023 22:52
Client ID:
Instrument: gc05.i
Sample Info: WG345566-6
Purge Volume: 0.0
Operator: DL/SH
Column phase: Porapak Q
Column diameter: 0.00



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Raw QC Data Section

Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

SDG: SQ6238
Lab ID: WG345566-1
Client ID: Method Blank
Matrix: AQ
Lab File ID: 5QK20212.D

Sample Date: N/A
Extract Date: 16-NOV-23
Extracted By: DL/SH
Extraction Method: RSK SOP 175
Lab Prep Batch: WG345566

Report Date: 01-DEC-23
Analysis Date: 16-NOV-23
Analyst: DL/SH
Analysis Method: RSK SOP 175 v.2
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Methane	J	4.7	ug/L	1	10.4	10.	2.6	5.2
Ethane	U	9.8	ug/L	1	13.1	13.	5.0	9.8
Ethene	U	9.9	ug/L	1	13.1	13.	5.0	9.9

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Data File: \\target_server\gg\chem\gc05.i\GC05QK16.b\5QK20212.D
Report Date: 01-Dec-2023 18:03

Katahdin Analytical Services

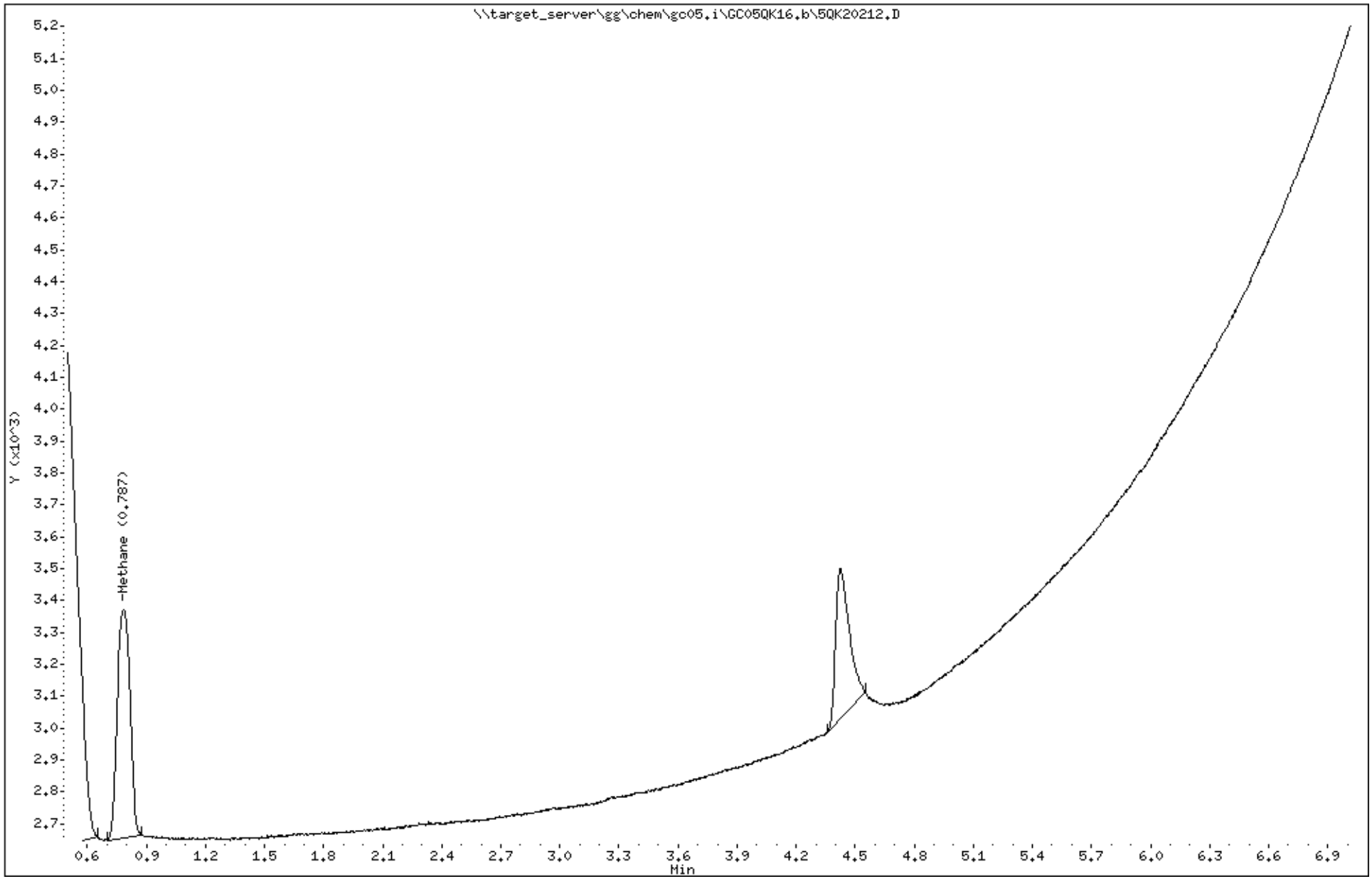
Data file : \\target_server\gg\chem\gc05.i\GC05QK16.b\5QK20212.D
Lab Smp Id: WG345566-1 Client Smp ID: WG345566-Blank
Inj Date : 16-NOV-2023 15:39
Operator : DL/SH Inst ID: gc05.i
Smp Info : WG345566-1
Misc Info : WG345566,WG344993-4,SQ6238-8
Comment : RSK SOP 175
Method : \\target_server\gg\chem\gc05.i\GC05QK16.b\MEEB47A.m
Meth Date : 17-Nov-2023 05:58 dlewry Quant Type: ESTD
Cal Date : 07-NOV-2023 10:11 Cal File: 5QK20014.D
Als bottle: 1 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSKSOP175-MEE.sub
Target Version: 4.12
Processing Host: V200T3

Concentration Formula: Amt * DF * 0.005/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	0.00500	sample purged (L)
Cpnd Variable		Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (PPM)	CONCENTRATIONS FINAL (PPM)	REVIEW CODE
1 Methane	0.786	0.760	0.026	3237	6.82227	6.82	

Data File: \\target_server\gg\chem\gc05.i\GC05QK16.b\5QK20212.D
Date : 16-NOV-2023 15:39
Client ID: WG345566-Blank
Instrument: gc05.i
Sample Info: WG345566-1
Purge Volume: 0.0
Operator: DL/SH
Column phase: Porapak Q
Column diameter: 0.00



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Katahdin
ANALYTICAL SERVICES

LCS Recovery Report

Lab ID: WG345566-2
Client ID: LCS
SDG: SQ6238
LCS File ID: 5QK20213.D
Report Date: 01-DEC-23

Extract Date: 16-NOV-23
Extracted By: DL/SH
Extraction Method: RSK SOP 175
Lab Prep Batch: WG345566

Analysis Date: 16-NOV-23
Analyst: DL/SH
Analysis Method: RSK SOP 175 v.2
Matrix: AQ

Compound	Recovery (%)	Conc Added	Conc Recovered	Conc Units	Limits
Methane	84.9	69.1	58.7	ug/L	85-115
Ethane	87.8	131.	115.	ug/L	85-115
Ethene	90.1	131.	118.	ug/L	85-115

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Data File: \\target_server\gg\chem\gc05.i\GC05QK16.b\5QK20213.D
Report Date: 01-Dec-2023 18:03

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gc05.i\GC05QK16.b\5QK20213.D
Lab Smp Id: WG345566-2 Client Smp ID: WG345566-LCS
Inj Date : 16-NOV-2023 15:57
Operator : DL/SH Inst ID: gc05.i
Smp Info : WG345566-2
Misc Info : WG345566,WG344993-4,SQ6238-8
Comment : RSK SOP 175
Method : \\target_server\gg\chem\gc05.i\GC05QK16.b\MEEB47A.m
Meth Date : 17-Nov-2023 05:58 dlewry Quant Type: ESTD
Cal Date : 07-NOV-2023 10:11 Cal File: 5QK20014.D
Als bottle: 1 QC Sample: LCS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSKSOP175-MEE.sub
Target Version: 4.12
Processing Host: V200T3

Concentration Formula: Amt * DF * 0.005/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	0.00500	sample purged (L)
Cpnd Variable		Local Compound Variable

DL

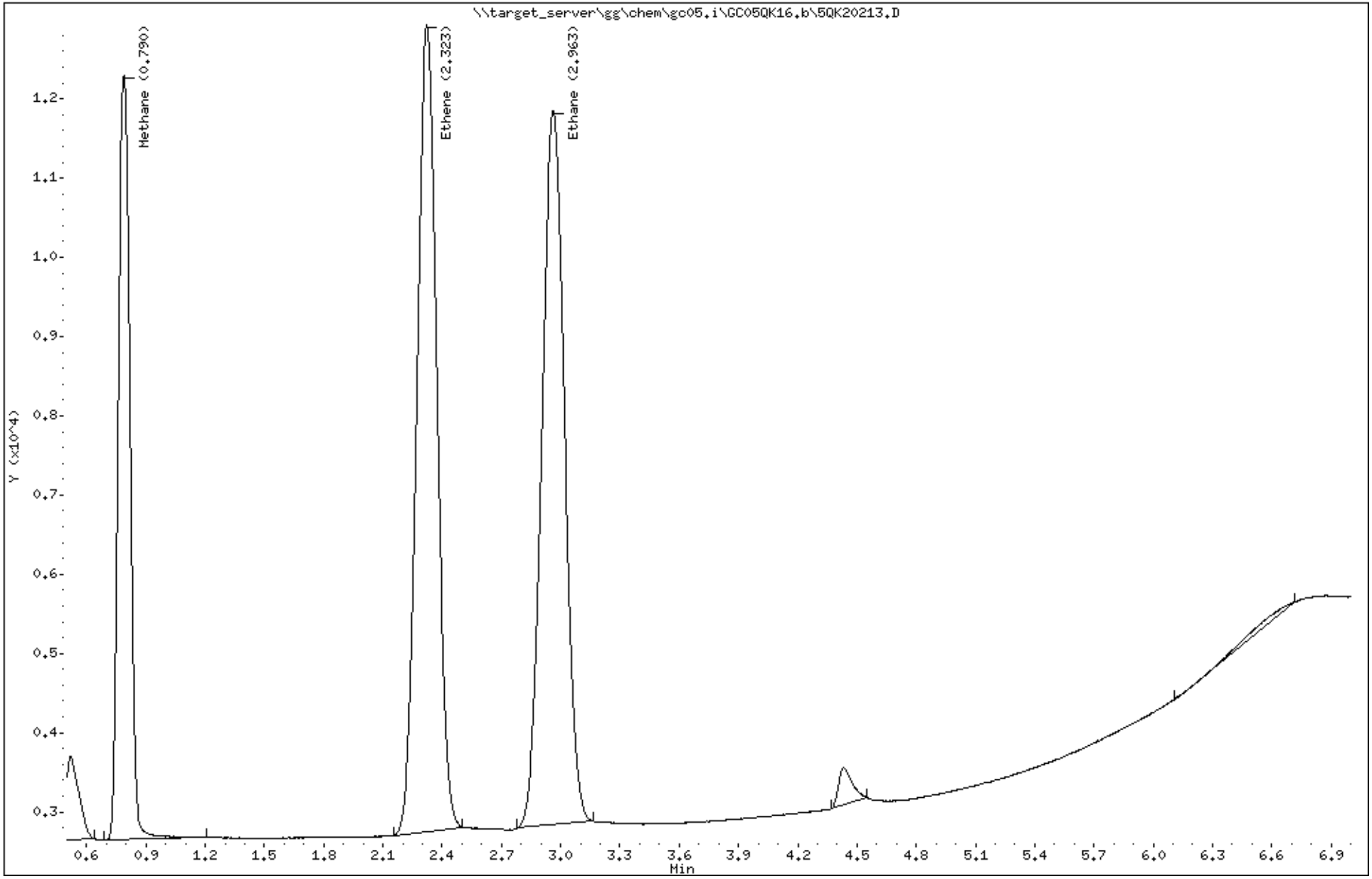
6:13 pm, Dec 01, 2023

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (PPM)	CONCENTRATIONS FINAL (PPM)	REVIEW CODE
1 Methane	0.790	0.760	0.030	40319	84.9760	85.0(RM)	M9
2 Ethene	2.323	2.317	0.006	71219	89.7562	89.8	
3 Ethane	2.963	2.957	0.006	71871	87.3470	87.3	

QC Flag Legend

R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

Data File: \\target_server\gg\chem\gc05.i\GC05QK16.b\5QK20213.D
Date : 16-NOV-2023 15:57
Client ID: WG345566-LCS
Instrument: gc05.i
Sample Info: WG345566-2
Purge Volume: 0.0
Operator: DL/SH
Column phase: Porapak Q
Column diameter: 0.00



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Katahdin
ANALYTICAL SERVICES

Sample Duplicate Report

Dup. ID: WG345566-3
Sample ID: SQ6238-11
Client ID: SY-BRMW1-150-157-110923
SDG: SQ6238
Dup. File ID: 5QK20232.D

Extract Date: 16-NOV-23
Extracted By: DL/SH
Extraction Method: RSK SOP 175
Lab Prep Batch: WG345566
Sample File ID: 5QK20231.D

Analysis Date: 16-NOV-23
Analyst: DL/SH
Analysis Method: RSK SOP 175 v.2
Matrix: AQ **% Solids:** N/A
Report Date: 01-DEC-23

Compound	Dup. Result	Sample Result	Units	RPD (%)	Limits
Methane	J6.7	J6.4	ug/L	4	30
Ethane	U9.8	U9.8	ug/L	NC	30
Ethene	U9.8	U9.8	ug/L	NC	30

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029
http://www.katahdinlab.com

Data File: \\target_server\gg\chem\gc05.i\GC05QK16.b\5QK20232.D
Report Date: 01-Dec-2023 18:04

Katahdin Analytical Services

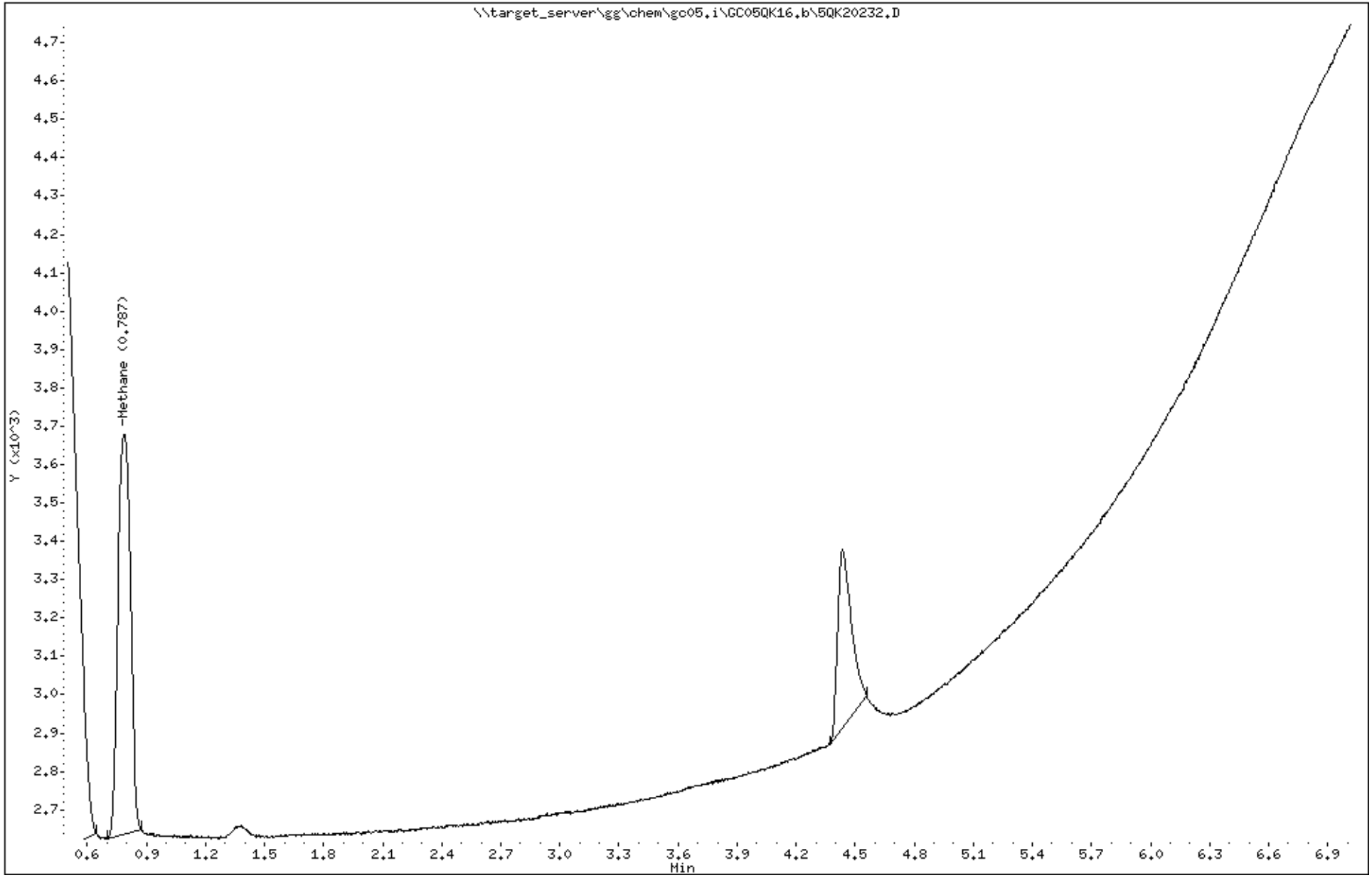
Data file : \\target_server\gg\chem\gc05.i\GC05QK16.b\5QK20232.D
Lab Smp Id: WG345566-3 Client Smp ID: Y-BRMW1-150-157-110
Inj Date : 16-NOV-2023 22:35
Operator : DL/SH Inst ID: gc05.i
Smp Info : WG345566-3
Misc Info : WG345566,WG344993-4,SQ6238-11
Comment : RSK SOP 175
Method : \\target_server\gg\chem\gc05.i\GC05QK16.b\MEEB47A.m
Meth Date : 17-Nov-2023 05:58 dlewry Quant Type: ESTD
Cal Date : 07-NOV-2023 10:11 Cal File: 5QK20014.D
Als bottle: 1 QC Sample: DUP
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSKSOP175-MEE.sub
Target Version: 4.12
Processing Host: V200T3

Concentration Formula: Amt * DF * 0.005/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	0.00500	sample purged (L)
Cpnd Variable		Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (PPM)	CONCENTRATIONS FINAL (PPM)	REVIEW CODE
1 Methane	0.786	0.760	0.026	4645	9.78976	9.79	

Data File: \\target_server\gg\chem\gc05.i\GC05QK16.b\5QK20232.D
Date : 16-NOV-2023 22:35
Client ID: Y-BRMW1-150-157-110
Instrument: gc05.i
Sample Info: WG345566-3
Purge Volume: 0.0
Operator: DL/SH
Column phase: Porapak Q
Column diameter: 0.00



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Logbooks and Supporting Documents

KATAHDIN ANALYTICAL SERVICES

STOCK STANDARDS RECEIVED

GCMS VOLATILES LABORATORY

REVIEWED BY/DATE:

Amp 6546

30201 US/EN
524 Internal Std / Surrogate Mix
Lot# A0163165
Expire: 09/2027 Store: 0°C or colder 1 mL
2000 µg/mL each in P&T Methanol
RESTEK

Rec'd 1-7-21 JR

Amp 6547
45
↓ 49

AccuStandard® 125 Market St. New Haven, CT 06513 www.AccuStandard.com
M-8240C-R6 1 mL
Appendix IX Volatiles Mix
Varied conc. in MeOH
Lot: 219051809 11 comp(s)
Exp: Jun 05, 2022 Storage: Refrig (0-5 °C)
FOR LABORATORY USE ONLY
H336 H225
H370 H320
H315 H311
H332 H301
H360, H350
H351 P338
Refer to SDS
Signal Word Danger
JR
RL
1-12-21

AMP 6550 Airgas Specialty Gases - Scott Mini-Mix JHR
14 Liters @ 240PSIG 1.0 % Rec'd 1-12-2021
Cylinder #: ST0000228564
Ex: 12/29/23 Lot #: 160-401985759-1

AMP 6551 Airgas Specialty Gases - Scott Mini-Mix JHR
14 Liters @ 240PSIG 1000 ppm Rec'd 1-12-2021
Cylinder #: ST0000228565
Ex: 12/29/23 Lot #: 160-401987240-1

Amp 6552
53
↓ 54

30619 US/EN
Oxygenates Standard
Lot# A0167816
Expire: 01/2024 Store: 0°C or colder 1 mL
2000-10,000 µg/mL each in P&T Methanol
RESTEK

CR Rec'd 1/19/21

Amp 6555
54
55

AccuStandard® 125 Market St. New Haven, CT 06513 www.AccuStandard.com
APP-9-048-R1-20X 1 mL
Chloroprene
2.0 mg/mL in MeOH
Lot: 220101123 1 comp(s)
Exp: Nov 09, 2022 Storage: Freeze (<-10 °C)
FOR LABORATORY USE ONLY
H225 H370
H336 H320
H315 H311
H332 H301
H360, H350
H351 P338
Refer to SDS
Signal Word Danger
RL
1/20/21

KATAHDIN ANALYTICAL SERVICES

STOCK STANDARDS RECEIVED

GCMS VOLATILES LABORATORY

REVIEWED BY/DATE:

Amp 6832 Airgas Specialty Gases - Scott Mini-mix JM
1HL@2240 PSIG 1000ppm Recd 1-10-22
Cylinder #= ST0000235789
Ex: 12/22/24 Lot #: 160-402299623-1

Amp 6833
34
35

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com
M-603-M-5X 1 mL
Acrolein & Acrylonitrile
5.0 mg/mL in MeOH:Water 90:10
Lot: 222011130 2 comp(s)
Exp: May 13, 2022 Storage: Freeze (<-10 °C)
FOR LABORATORY USE ONLY
H336 H225
H370 H320
H315 H311
H332 H301
H360, H350
H351 P338
Refer to SDS
Signal Word Danger

Recd 2-2-22 JJ

Amp 6836
37

30497 US/EN
Volatiles MegaMix(TM), EPA Method 624
Lot# A0171975
Expire: 05/2024 Store: 0°C or colder 1 mL
2000 µg/mL each in P&T Methanol
RESTEK

Recd 2-2-22 JJ

Amp 6838
39
40

AccuStandard® 125 Market St, New Haven, CT 06513 www.AccuStandard.com
S-457S-10X 1 mL
Tetrahydrofuran
2.0 mg/mL in MeOH
Lot: 221051701 1 comp(s)
Exp: Jun 01, 2031 Storage: Ambient (>5 °C)
FOR LABORATORY USE ONLY
H225 H370
H336 H320
H315 H311
H332 H301
H360 H351
P338 P360
Refer to SDS
Signal Word Danger

Recd. 2-8-22 JJ

Amp 6841
42

30619 US/EN
Oxygenates Standard
Lot# A0176238
Expire: 09/2024 Store: 0°C or colder 1 mL
2000-10,000 µg/mL each in P&T Methanol
RESTEK

2-8-22

Katahdin Analytical Services

GC Laboratory Instrument Runlog

Instrument: GC05

pH Paper Lot#: 6303005

Date: 11/7/23

Method: RSK SOP-175

Sample Name	Data File	Sample Amt.	DF	Method	Y/N	pH	Temp °C	DoD Y/N	Analyst	Comments
prime	5QK20007	5mL	1	MEEB47A	N	—	—	N	DL	
WG344993-1	8	32.5mL			Y		20.5	Y		ICAL 6.5
-2	9	50mL			Y		↓	Y		10
-3	5QK20010	250mL			Y		20.6	Y		50
-4	11	500mL			Y			Y		100
-5	12	2.5mL			Y		↓	Y		500
-6	13	5mL			Y		20.7	Y		1000
-7	14	7.5mL			Y		20.8	Y		1500
-8/10	15	50mL			Y		20.3	Y		INVLCS
-9	16	5mL			Y	↓	20.5	Y		
SQ5874-1D	17				Y	<2	↓	Y		
-2D	18				Y		20.6	Y		
-3D	19				Y		20.8	Y		
-4G	20				Y		21.0	Y		
-6E	21				Y		↓	Y		
SQ5899-1E	22				Y		21.1	Y		MOverCal
-2D	23				Y			Y		
-3D	24				Y			Y		
-6E	25				Y			Y		
WG344993-11	26	↓			Y	↓	↓	Y		DUP SQ5897-6
CV	27	500uL			Y	—	20.9	Y		WG344993-12
SQ5899-7L	28	5mL			Y	<2	21.0	Y		
CV	29	500uL	↓	↓	Y	—	20.9	Y	↓	WG344993-13 2X SPIKE
										DL 11/7/23

STANDARD	STOCK #	CONC.		AMOUNT
ICAL	Amp 6832	1000 ug/mL		see comments
CV	Amp 6832	1000 ug/mL		500 uL
LCS	AMPC550	10 000 ug/mL		50 uL

Katahdin Analytical Services

GC Laboratory Instrument Runlog

Instrument: GC05

DL 11/16/23

pH Paper Lot#: 630901

Date: 11/16/23

Method: RSK SOP-175

DL 11/16/23

Sample Name	Data File	Sample Amt.	DF	Method	Y/N	pH	Temp °C	DoD Y/N	Analyst	Comments
prime	SQ20198	5mL	1	MEEB47A	N	—	—	N	DL/SH	
CV	189	500uL			Y		20.5	Y		WG345521-6
WG345521-1	190	5mL			Y		19.9	Y		
↓ -2	191	50uL			Y	↓	↓	Y		
SQ6112-1B	192	5mL			Y	L2	20.2	Y		
↓ -2B	193				Y		20.3	Y		
SQ6124-1A	194				Y		20.4	Y		
WG345521-4	195				Y		20.5	Y		MS SQ6124-1B MS↓
↓ -5	196				Y			Y		MSD ↓ -1C ↓
SQ6124-2A	197				Y			Y		
-3A	198				Y			Y		
-4A	199				Y			Y		
-5A	200				Y			Y		
↓ -6A	201	↓			Y	↓	↓	Y		
CV	202	500uL			Y	—	20.1	Y		WG345521-7
SQ6124-7A	203	5mL			Y	L2	20.5	Y		
-8A	204				N			Y		MOverCal
↓ -9A	205				N			Y		
SQ6137-1A	206				Y			Y		
-2A	207				Y			Y		↓
-3A	208				Y			Y		MethaneOverCal
↓ -4A	209				Y			Y		MOverCal
WG345521-3	210	↓			Y	↓	↓	Y		DUPSQ6137-4B
CV	211	500uL	↓	↓	Y	—	20.1	Y	↓	WG345521-8/345566-4
										DL 11/16/23

Ethane Analysis

STANDARD	STOCK #	CONC.		AMOUNT
ICAL		1000 ug/mL		see comments
CV	AMP 6832	1000 ug/mL		500 uL
LCS	AMP6550	10 000 ug/mL		50 uL

Katahdin Analytical Services

GC Laboratory Instrument Runlog

Instrument: GC05

pH Paper Lot#: 6308041

Date: 11/16/23

Method: RSK SOP-175

Sample Name	Data File	Sample Amt.	DF	Method	Y/N	pH	Temp °C	DoD Y/N	Analyst	Comments
WG345566-1	SQ1620212	5mL	1	MEEB47A	Y	—	19.9	Y	DL/SH	
↓ -2	213	50mL	↓		Y	↓	↓	Y		
SQ6124-8DLB	214	500uL	10		Y	L2	20.8	Y		
↓ -9DLB	215	↓	↓		Y		↓	Y		
SQ6137-10LB	216	50mL	100		Y		20.9	Y		
-2DLB	217	100uL	50		Y		↓	Y		
-3DLB	218	↓	↓		Y		↓	Y		
↓ -4DLC	219	↓	↓		Y		20.7	Y		
SQ6238-1A	220	5mL	1		Y		20.8	Y		
-2A	221	↓	↓		Y		↓	Y		
-3A	222	↓	↓		Y		↓	Y		
↓ -4A	223	↓	↓		Y	↓	↓	Y		
CV	224	500uL	↓		Y	—	20.8	Y		WG345566-5
SQ6238-5A	225	5mL	↓		Y	L2	20.9	Y		
-6A	226	↓	↓		Y	↓	↓	Y		
-7A	227	↓	↓		Y	↓	↓	Y		
-8A	228	↓	↓		Y	↓	↓	Y		
-9A	229	↓	↓		Y	↓	21	Y		
-10A	230	↓	↓		Y	↓	↓	Y		
↓ -11A	231	↓	↓		Y	↓	↓	Y		
WG345566-3	232	↓	↓		Y	↓	↓	Y		DUP SQ6238-11B
CV	233	500uL	↓	↓	Y	—	20.8	Y	↓	WG345566-6
										DC 11/16/23

STANDARD	STOCK #	CONC.		AMOUNT
ICAL		1000 ug/mL		see comments
CV	AMP6832	1000 ug/mL		500 uL
LCS	AMP6550	10 000 ug/mL		50 uL

CONVENTIONAL AND PHYSICAL ANALYTICAL DATA

QC Summary Section

Katahdin
ANALYTICAL SERVICES

Quality Control Report

Blank Sample Summary Report

Alkalinity

QC Batch	Anal. Method	Anal. Date	Prep. Date	Result	Units	LOQ	MDL	LOD
WG345760	SM2320B	17-NOV-23	N/A	J2.4	mg/L	5.0	0.23	4.0

Chloride

QC Batch	Anal. Method	Anal. Date	Prep. Date	Result	Units	LOQ	MDL	LOD
WG345363	EPA 300.0	10-NOV-23	N/A	U1.0	mg/L	2.0	0.099	1.0
WG346358	EPA 300.0	01-DEC-23	N/A	U1.0	mg/L	2.0	0.099	1.0
WG346590	EPA 300.0	06-DEC-23	N/A	U1.0	mg/L	2.0	0.099	1.0

Chromium, Hexavalent

QC Batch	Anal. Method	Anal. Date	Prep. Date	Result	Units	LOQ	MDL	LOD
WG345317	SW846 7196A	10-NOV-23	N/A	J0.0013	mg/L	0.025	0.00076	0.012

Ferrous Iron

QC Batch	Anal. Method	Anal. Date	Prep. Date	Result	Units	LOQ	MDL	LOD
WG345198	SM3500D	10-NOV-23	N/A	U0.050	mg/L	0.10	0.026	0.050

Nitrate as N

QC Batch	Anal. Method	Anal. Date	Prep. Date	Result	Units	LOQ	MDL	LOD
WG345363	EPA 300.0	10-NOV-23	N/A	U0.025	mg/L	0.050	0.017	0.025

Sulfate

QC Batch	Anal. Method	Anal. Date	Prep. Date	Result	Units	LOQ	MDL	LOD
WG345363	EPA 300.0	10-NOV-23	N/A	J0.089	mg/L	1.0	0.064	0.50
WG346358	EPA 300.0	01-DEC-23	N/A	U0.50	mg/L	1.0	0.064	0.50
WG346590	EPA 300.0	06-DEC-23	N/A	U0.50	mg/L	1.0	0.064	0.50

Total Organic Carbon

QC Batch	Anal. Method	Anal. Date	Prep. Date	Result	Units	LOQ	MDL	LOD
WG346586	SM5310B	06-DEC-23	N/A	U0.70	mg/L	1.0	0.35	0.70

Quality Control Report

Laboratory Control Sample Summary Report

Alkalinity

Laboratory Sample ID	Sample Type	QC Batch	Analysis Date	Prep Date	Units	Spike Amount	Result	Recovery (%)	Acceptance Range	RPD
WG345760-2	LCS	WG345760	17-NOV-23	N/A	mg/L	120	120	104	80-120	
WG345760-3	LCSD	WG345760	17-NOV-23	N/A	mg/L	120	130	108	80-120	4

Chloride

Laboratory Sample ID	Sample Type	QC Batch	Analysis Date	Prep Date	Units	Spike Amount	Result	Recovery (%)	Acceptance Range	RPD
WG345363-2	LCS	WG345363	10-NOV-23	N/A	mg/L	3.75	3.62	96.5	90-110	
WG346358-2	LCS	WG346358	01-DEC-23	N/A	mg/L	3.75	3.64	97.1	90-110	
WG346358-3	LCSD	WG346358	02-DEC-23	N/A	mg/L	3.75	3.79	101.	90-110	4
WG346590-2	LCS	WG346590	06-DEC-23	N/A	mg/L	3.75	3.63	96.8	90-110	

Chromium, Hexavalent

Laboratory Sample ID	Sample Type	QC Batch	Analysis Date	Prep Date	Units	Spike Amount	Result	Recovery (%)	Acceptance Range	RPD
WG345317-2	LCS	WG345317	10-NOV-23	N/A	mg/L	.5	0.48	96	85-115	
WG345317-3	LCSD	WG345317	10-NOV-23	N/A	mg/L	.5	0.49	98	85-115	2

Ferrous Iron

Laboratory Sample ID	Sample Type	QC Batch	Analysis Date	Prep Date	Units	Spike Amount	Result	Recovery (%)	Acceptance Range	RPD
WG345198-2	LCS	WG345198	10-NOV-23	N/A	mg/L	139.95	140	99	80-120	
WG345198-3	LCSD	WG345198	10-NOV-23	N/A	mg/L	139.95	140	99	80-120	0

Nitrate as N

Laboratory Sample ID	Sample Type	QC Batch	Analysis Date	Prep Date	Units	Spike Amount	Result	Recovery (%)	Acceptance Range	RPD
WG345363-2	LCS	WG345363	10-NOV-23	N/A	mg/L	0.845	0.804	95.1	90-110	

Sulfate

Laboratory Sample ID	Sample Type	QC Batch	Analysis Date	Prep Date	Units	Spike Amount	Result	Recovery (%)	Acceptance Range	RPD
WG345363-2	LCS	WG345363	10-NOV-23	N/A	mg/L	3.75	3.67	97.9	90-110	
WG346358-2	LCS	WG346358	01-DEC-23	N/A	mg/L	3.75	3.72	99.2	90-110	
WG346358-3	LCSD	WG346358	02-DEC-23	N/A	mg/L	3.75	3.78	101.	90-110	2
WG346590-2	LCS	WG346590	06-DEC-23	N/A	mg/L	3.75	3.60	96.0	90-110	

Total Organic Carbon

Laboratory Sample ID	Sample Type	QC Batch	Analysis Date	Prep Date	Units	Spike Amount	Result	Recovery (%)	Acceptance Range	RPD
WG346586-2	LCS	WG346586	07-DEC-23	N/A	mg/L	50	52.1	104	80-120	
WG346586-3	LCSD	WG346586	07-DEC-23	N/A	mg/L	50	52.2	104	80-120	0

Quality Control Report

Duplicate Sample Summary Report

Alkalinity

Duplicate Sample ID	Original Sample ID	QC Batch	Analysis Date	Units	Sample Result	Duplicate Result	RPD	RPD Limit
WG345760-4	SQ6238-4	WG345760	17-NOV-23	mg/L	150	150	0	20

Chromium, Hexavalent

Duplicate Sample ID	Original Sample ID	QC Batch	Analysis Date	Units	Sample Result	Duplicate Result	RPD	RPD Limit
WG345317-4	SQ6238-9	WG345317	10-NOV-23	mg/L	U 0.012	J 0.0013	NC	20

Ferrous Iron

Duplicate Sample ID	Original Sample ID	QC Batch	Analysis Date	Units	Sample Result	Duplicate Result	RPD	RPD Limit
WG345198-4	SQ6238-8	WG345198	10-NOV-23	mg/L	2.6	2.6	0	20

Nitrate as N

Duplicate Sample ID	Original Sample ID	QC Batch	Analysis Date	Units	Sample Result	Duplicate Result	RPD	RPD Limit
WG345363-3	SQ6238-1	WG345363	10-NOV-23	mg/L	U 0.025	U 0.025	NC	20

Total Organic Carbon

Duplicate Sample ID	Original Sample ID	QC Batch	Analysis Date	Units	Sample Result	Duplicate Result	RPD	RPD Limit
WG346586-4	SQ6238-1	WG346586	07-DEC-23	mg/L	2.0	1.7	18	30

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Quality Control Report

Matrix Spike Sample Summary Report

Alkalinity

Matrix Spike Sample ID	Sample Type	Original Sample ID	QC Batch	Analysis Date	Units	Spike Amount	Sample Result	MS Result	Recovery (%)	Acceptance Range	RPD
WG345760-5	MS	SQ6238-4	WG345760	17-NOV-23	mg/L	120	150	270	112	75 - 125	

Chromium, Hexavalent

Matrix Spike Sample ID	Sample Type	Original Sample ID	QC Batch	Analysis Date	Units	Spike Amount	Sample Result	MS Result	Recovery (%)	Acceptance Range	RPD
WG345317-5	MS	SQ6238-9	WG345317	10-NOV-23	mg/L	.5	U 0.012	0.45	90	85 - 115	
WG345317-6	MS	SQ6238-10	WG345317	10-NOV-23	mg/L	.5	J 0.0014	0.46	91	85 - 115	

Nitrate as N

Matrix Spike Sample ID	Sample Type	Original Sample ID	QC Batch	Analysis Date	Units	Spike Amount	Sample Result	MS Result	Recovery (%)	Acceptance Range	RPD
WG345363-4	MS	SQ6238-1	WG345363	10-NOV-23	mg/L	0.889	U 0.025	* 0.778	87.5*	90 - 110	
WG345363-5	MS	SQ6238-2	WG345363	10-NOV-23	mg/L	0.889	U 0.025	0.830	93.4	90 - 110	

Total Organic Carbon

Matrix Spike Sample ID	Sample Type	Original Sample ID	QC Batch	Analysis Date	Units	Spike Amount	Sample Result	MS Result	Recovery (%)	Acceptance Range	RPD
WG346586-5	MS	SQ6238-2	WG346586	07-DEC-23	mg/L	50	2.2	52.6	101	75 - 125	
WG346586-6	MS	SQ6238-3	WG346586	07-DEC-23	mg/L	50	1.7	53.8	104	75 - 125	

Sample Data Section

KATAHDIN ANALYTICAL SERVICES – INORGANIC DATA QUALIFIERS

The sampled date indicated on the attached Report(s) of Analysis (ROA) is the date for which a grab sample was collected or the date for which a composite sample was completed. Beginning and start times for composite samples can be found on the Chain-of-Custody.

U Indicates the compound was analyzed for but not detected above the specified level. This level may be the Practical Quantitation Level (PQL) (also called Limit of Quantitation (LOQ)), the Limit of Detection (LOD) or Method Detection Limit (MDL) as required by the client. Note: All results reported as "U" MDL have a 50% rate for false negatives compared to those results reported as "U" PQL "U" LOQ or "U" LOD, where the rate of false negatives is <1%.

E Estimated value. This flag identifies compounds whose concentrations exceed the upper level of the calibration range of the instrument for that specific analysis.

J Estimated value. The analyte was detected in the sample at a concentration less than the laboratory Practical Quantitation Level (PQL) (also called Limit of Quantitation (LOQ)), but above the Method Detection Limit (MDL).

I-7 The laboratory's Practical Quantitation Level (PQL) or LOQ could not be achieved for this parameter due to sample composition, matrix effects, sample volume, or quantity used for analysis.

A-4 Please refer to cover letter or narrative for further information.

H_ Please note that the regulatory holding time for _____ is "analyze immediately". Ideally, this analysis must be performed in the field at the time of sample collection. _____ for this sample was not performed at the time of sample collection. The analysis was performed as soon as possible after receipt by the laboratory.

H1 - pH H2 - DO H3 - sulfite H4 - residual chlorine

T1 The client did not provide the full volume of at least one liter for analysis of TSS. Therefore, the PQL of 2.5 mg/L could not be achieved.

T2 The client provided the required volume of at least one liter for analysis of TSS, but the laboratory could not filter the full one liter volume due to the sample matrix. Therefore, the PQL of 2.5 mg/L could not be achieved.

M1 The matrix spike and/or matrix spike duplicate recovery performed on this sample was outside of the laboratory acceptance criteria. Sample matrix is suspected. The laboratory criteria was met for the Laboratory Control Sample (LCS) analyzed concurrently with this sample.

M2 The matrix spike and/or matrix spike duplicate recovery was outside of the laboratory acceptance criteria. The native sample concentration is greater than four times the spike added concentration so the spike added could not be distinguished from the native sample concentration.

R1 The relative percent difference (RPD) between the duplicate analyses performed on this sample was outside of the laboratory acceptance criteria (when both values are greater than ten times the PQL).

MCL	Maximum Contaminant Level	NL	No limit	NOD	No Odor Detected
NFL	No Free Liquid Present	FLP	Free Liquid Present	TON	Threshold Odor Number

D-1 As required by Method 5210B, APHA Standard Methods for the Examination of Water and Wastewater (21st edition), the BOD value reported for this sample is 'qualified' because the check standard run concurrently with the sample analysis did not meet the criteria specified in the method (198 +/- 30.5 mg/L). These results may not be reportable for compliance purposes.

D-2 The measured final dissolved oxygen concentrations of all dilutions were less than the method-specified limit of 1 mg/L. The reported BOD result was calculated assuming a final oxygen concentration equal to 1 mg/L. The reported value should be considered a minimum value.

D-3 The dilution water used to prepare this sample did not meet the method and/or regulatory criteria of less than 0.2 mg/L dissolved oxygen (DO) uptake over the five day period of incubation. These results may not be reportable for compliance purposes.

D-4 The dilution water used to prepare this sample did not meet the method and/or regulatory criteria of less than 0.4 mg/L dissolved oxygen (DO) uptake over the five day period of incubation. These results may not be reportable for compliance purposes.

D-5 The seed control factor did not meet the method criteria of greater than 2.0 mg/L of dissolved oxygen (DO) uptake over the five day period of incubation. The dilution closest to meeting the criteria was used to estimate the seed control factor.

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ANALYTICAL SERVICES

Report of Analytical Results

Lab Sample ID: SQ6238-1
Client ID: SY-BRMW4-62-72-110923
SDG: SQ6238
Report Date: 13-DEC-23

Matrix	Date Sampled	Date Received
AQ	09-NOV-23 09:00	10-NOV-23

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Alkalinity	110 mg/L	5.0	0.23	4.0	SM2320B	WG345760	17-NOV-23 13:39	N/A	N/A	
Chloride	320 mg/L	20.	0.99	10.	EPA 300.0	WG346358	01-DEC-23 17:30	N/A	N/A	
Chromium, Hexavalent	J0.0035 mg/L	0.025	0.00076	0.012	SW846 7196A	WG345317	10-NOV-23 09:26	N/A	N/A	
Ferrous Iron	J0.076 mg/L	0.10	0.026	0.050	SM3500D	WG345198	10-NOV-23 09:32	N/A	N/A	
Nitrate as N	U0.025 mg/L	0.050	0.017	0.025	EPA 300.0	WG345363	10-NOV-23 17:03	N/A	N/A	M1
Sulfate	92 mg/L	2.0	0.13	1.0	EPA 300.0	WG346358	01-DEC-23 17:48	N/A	N/A	
Total Organic Carbon	2.0 mg/L	1.0	0.37	0.75	SM5310B	WG346586	07-DEC-23 00:43	N/A	N/A	

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Report of Analytical Results

Lab Sample ID: SQ6238-2
Client ID: SY-BRMW40-62-72-110923
SDG: SQ6238
Report Date: 13-DEC-23

Matrix	Date Sampled	Date Received
AQ	09-NOV-23 09:05	10-NOV-23

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Alkalinity	110 mg/L	5.0	0.23	4.0	SM2320B	WG345760	17-NOV-23 13:42	N/A	N/A	
Chloride	320 mg/L	20.	0.99	10.	EPA 300.0	WG346358	01-DEC-23 18:05	N/A	N/A	
Chromium, Hexavalent	J0.00082 mg/L	0.025	0.00076	0.012	SW846 7196A	WG345317	10-NOV-23 09:26	N/A	N/A	
Ferrous Iron	J0.096 mg/L	0.10	0.026	0.050	SM3500D	WG345198	10-NOV-23 09:32	N/A	N/A	
Nitrate as N	U0.025 mg/L	0.050	0.017	0.025	EPA 300.0	WG345363	10-NOV-23 17:55	N/A	N/A	
Sulfate	94 mg/L	2.0	0.13	1.0	EPA 300.0	WG346358	01-DEC-23 18:22	N/A	N/A	
Total Organic Carbon	2.2 mg/L	1.0	0.37	0.75	SM5310B	WG346586	07-DEC-23 01:16	N/A	N/A	

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Report of Analytical Results

Lab Sample ID: SQ6238-3
Client ID: SY-BRMW4-138-148-110923
SDG: SQ6238
Report Date: 13-DEC-23

Matrix	Date Sampled	Date Received
AQ	09-NOV-23 09:40	10-NOV-23

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Alkalinity	120 mg/L	5.0	0.23	4.0	SM2320B	WG345760	17-NOV-23 13:46	N/A	N/A	
Chloride	410 mg/L	40.	2.0	20.	EPA 300.0	WG346358	01-DEC-23 18:39	N/A	N/A	
Chromium, Hexavalent	U0.012 mg/L	0.025	0.00076	0.012	SW846 7196A	WG345317	10-NOV-23 09:26	N/A	N/A	
Ferrous Iron	J0.096 mg/L	0.10	0.026	0.050	SM3500D	WG345198	10-NOV-23 09:32	N/A	N/A	
Nitrate as N	0.16 mg/L	0.050	0.017	0.025	EPA 300.0	WG345363	10-NOV-23 18:30	N/A	N/A	
Sulfate	66 mg/L	1.0	0.064	0.50	EPA 300.0	WG345363	10-NOV-23 18:30	N/A	N/A	
Total Organic Carbon	1.7 mg/L	1.0	0.37	0.75	SM5310B	WG346586	07-DEC-23 01:43	N/A	N/A	

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Report of Analytical Results

Lab Sample ID: SQ6238-4
Client ID: SY-BRMW3-47-62-110923
SDG: SQ6238
Report Date: 13-DEC-23

Matrix	Date Sampled	Date Received
AQ	09-NOV-23 09:45	10-NOV-23

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Alkalinity	150 mg/L	5.0	0.23	4.0	SM2320B	WG345760	17-NOV-23 13:49	N/A	N/A	
Chloride	65 mg/L	4.0	0.20	2.0	EPA 300.0	WG346358	01-DEC-23 18:57	N/A	N/A	
Chromium, Hexavalent	U0.012 mg/L	0.025	0.00076	0.012	SW846 7196A	WG345317	10-NOV-23 09:26	N/A	N/A	
Ferrous Iron	U0.050 mg/L	0.10	0.026	0.050	SM3500D	WG345198	10-NOV-23 09:32	N/A	N/A	
Nitrate as N	U0.025 mg/L	0.050	0.017	0.025	EPA 300.0	WG345363	10-NOV-23 18:47	N/A	N/A	
Sulfate	17 mg/L	1.0	0.064	0.50	EPA 300.0	WG345363	10-NOV-23 18:47	N/A	N/A	
Total Organic Carbon	4.4 mg/L	1.0	0.37	0.75	SM5310B	WG346586	07-DEC-23 02:23	N/A	N/A	

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Report of Analytical Results

Lab Sample ID: SQ6238-5
Client ID: SY-BRMW3-145-155-110923
SDG: SQ6238
Report Date: 13-DEC-23

Matrix	Date Sampled	Date Received
AQ	09-NOV-23 10:00	10-NOV-23

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Alkalinity	160 mg/L	5.0	0.23	4.0	SM2320B	WG345760	17-NOV-23 15:31	N/A	N/A	
Chloride	12 mg/L	2.0	0.099	1.0	EPA 300.0	WG345363	10-NOV-23 19:04	N/A	N/A	
Chromium, Hexavalent	U0.012 mg/L	0.025	0.00076	0.012	SW846 7196A	WG345317	10-NOV-23 09:26	N/A	N/A	
Ferrous Iron	U0.050 mg/L	0.10	0.026	0.050	SM3500D	WG345198	10-NOV-23 09:32	N/A	N/A	
Nitrate as N	U0.025 mg/L	0.050	0.017	0.025	EPA 300.0	WG345363	10-NOV-23 19:04	N/A	N/A	
Sulfate	5.9 mg/L	1.0	0.064	0.50	EPA 300.0	WG345363	10-NOV-23 19:04	N/A	N/A	
Total Organic Carbon	1.5 mg/L	1.0	0.37	0.75	SM5310B	WG346586	07-DEC-23 02:39	N/A	N/A	

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Report of Analytical Results

Lab Sample ID: SQ6238-6
Client ID: SY-BRMW3-287-297-110923
SDG: SQ6238
Report Date: 13-DEC-23

Matrix	Date Sampled	Date Received
AQ	09-NOV-23 10:15	10-NOV-23

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Alkalinity	180 mg/L	5.0	0.23	4.0	SM2320B	WG345760	17-NOV-23 15:35	N/A	N/A	
Chloride	23 mg/L	2.0	0.099	1.0	EPA 300.0	WG345363	10-NOV-23 19:21	N/A	N/A	
Chromium, Hexavalent	U0.012 mg/L	0.025	0.00076	0.012	SW846 7196A	WG345317	10-NOV-23 09:26	N/A	N/A	
Ferrous Iron	J0.056 mg/L	0.10	0.026	0.050	SM3500D	WG345198	10-NOV-23 09:32	N/A	N/A	
Nitrate as N	U0.025 mg/L	0.050	0.017	0.025	EPA 300.0	WG345363	10-NOV-23 19:21	N/A	N/A	
Sulfate	8.6 mg/L	1.0	0.064	0.50	EPA 300.0	WG345363	10-NOV-23 19:21	N/A	N/A	
Total Organic Carbon	4.7 mg/L	1.0	0.37	0.75	SM5310B	WG346586	07-DEC-23 03:21	N/A	N/A	

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Report of Analytical Results

Lab Sample ID: SQ6238-7
Client ID: SY-BRMW4-291-301-110923
SDG: SQ6238
Report Date: 13-DEC-23

Matrix	Date Sampled	Date Received
AQ	09-NOV-23 11:00	10-NOV-23

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Alkalinity	110 mg/L	5.0	0.23	4.0	SM2320B	WG345760	17-NOV-23 15:39	N/A	N/A	
Chloride	480 mg/L	40.	2.0	20.	EPA 300.0	WG346358	01-DEC-23 19:14	N/A	N/A	
Chromium, Hexavalent	U0.012 mg/L	0.025	0.00076	0.012	SW846 7196A	WG345317	10-NOV-23 09:26	N/A	N/A	
Ferrous Iron	J0.047 mg/L	0.10	0.026	0.050	SM3500D	WG345198	10-NOV-23 09:32	N/A	N/A	
Nitrate as N	J0.020 mg/L	0.050	0.017	0.025	EPA 300.0	WG345363	10-NOV-23 20:13	N/A	N/A	
Sulfate	68 mg/L	1.0	0.064	0.50	EPA 300.0	WG345363	10-NOV-23 20:13	N/A	N/A	
Total Organic Carbon	2.7 mg/L	1.0	0.37	0.75	SM5310B	WG346586	07-DEC-23 03:32	N/A	N/A	

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Report of Analytical Results

Lab Sample ID: SQ6238-8
Client ID: SY-BRMW1-42-52-110923
SDG: SQ6238
Report Date: 13-DEC-23

Matrix	Date Sampled	Date Received
AQ	09-NOV-23 11:45	10-NOV-23

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Alkalinity	140 mg/L	5.0	0.23	4.0	SM2320B	WG345760	17-NOV-23 15:42	N/A	N/A	
Chloride	760 mg/L	40.	2.0	20.	EPA 300.0	WG346358	01-DEC-23 19:31	N/A	N/A	
Chromium, Hexavalent	J0.0014 mg/L	0.025	0.00076	0.012	SW846 7196A	WG345317	10-NOV-23 09:26	N/A	N/A	
Ferrous Iron	2.6 mg/L	0.10	0.026	0.050	SM3500D	WG345198	10-NOV-23 09:32	N/A	N/A	
Nitrate as N	U0.025 mg/L	0.050	0.017	0.025	EPA 300.0	WG345363	10-NOV-23 20:30	N/A	N/A	
Sulfate	230 mg/L	5.0	0.32	2.5	EPA 300.0	WG346358	01-DEC-23 19:48	N/A	N/A	
Total Organic Carbon	3.9 mg/L	1.0	0.37	0.75	SM5310B	WG346586	07-DEC-23 03:43	N/A	N/A	

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Report of Analytical Results

Lab Sample ID: SQ6238-9
Client ID: SY-BRMW1-65-75-110923
SDG: SQ6238
Report Date: 13-DEC-23

Matrix	Date Sampled	Date Received
AQ	09-NOV-23 13:50	10-NOV-23

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Alkalinity	130 mg/L	5.0	0.23	4.0	SM2320B	WG345760	17-NOV-23 15:46	N/A	N/A	
Chloride	850 mg/L	100	5.0	50.	EPA 300.0	WG346590	06-DEC-23 18:49	N/A	N/A	
Chromium, Hexavalent	U0.012 mg/L	0.025	0.00076	0.012	SW846 7196A	WG345317	10-NOV-23 09:30	N/A	N/A	
Ferrous Iron	0.16 mg/L	0.10	0.026	0.050	SM3500D	WG345198	10-NOV-23 09:32	N/A	N/A	
Nitrate as N	J0.022 mg/L	0.050	0.017	0.025	EPA 300.0	WG345363	10-NOV-23 20:48	N/A	N/A	
Sulfate	240 mg/L	5.0	0.32	2.5	EPA 300.0	WG346590	06-DEC-23 19:06	N/A	N/A	
Total Organic Carbon	2.3 mg/L	1.0	0.37	0.75	SM5310B	WG346586	07-DEC-23 03:55	N/A	N/A	

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Report of Analytical Results

Lab Sample ID: SQ6238-10
Client ID: SY-BRMW10-65-75-110923
SDG: SQ6238
Report Date: 13-DEC-23

Matrix	Date Sampled	Date Received
AQ	09-NOV-23 13:55	10-NOV-23

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Alkalinity	130 mg/L	5.0	0.23	4.0	SM2320B	WG345760	17-NOV-23 15:50	N/A	N/A	
Chloride	860 mg/L	100	5.0	50.	EPA 300.0	WG346590	06-DEC-23 19:23	N/A	N/A	
Chromium, Hexavalent	J0.0014 mg/L	0.025	0.00076	0.012	SW846 7196A	WG345317	10-NOV-23 09:44	N/A	N/A	
Ferrous Iron	0.18 mg/L	0.10	0.026	0.050	SM3500D	WG345198	10-NOV-23 09:32	N/A	N/A	
Nitrate as N	J0.033 mg/L	0.050	0.017	0.025	EPA 300.0	WG345363	10-NOV-23 21:05	N/A	N/A	
Sulfate	250 mg/L	5.0	0.32	2.5	EPA 300.0	WG346590	06-DEC-23 19:40	N/A	N/A	
Total Organic Carbon	2.2 mg/L	1.0	0.37	0.75	SM5310B	WG346586	07-DEC-23 04:06	N/A	N/A	

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Report of Analytical Results

Lab Sample ID: SQ6238-11
Client ID: SY-BRMW1-150-157-110923
SDG: SQ6238
Report Date: 13-DEC-23

Matrix	Date Sampled	Date Received
AQ	09-NOV-23 12:40	10-NOV-23

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Alkalinity	160 mg/L	5.0	0.23	4.0	SM2320B	WG345760	17-NOV-23 15:53	N/A	N/A	
Chloride	140 mg/L	10.	0.50	5.0	EPA 300.0	WG346590	06-DEC-23 19:58	N/A	N/A	
Chromium, Hexavalent	J0.0017 mg/L	0.025	0.00076	0.012	SW846 7196A	WG345317	10-NOV-23 09:30	N/A	N/A	
Ferrous Iron	J0.027 mg/L	0.10	0.026	0.050	SM3500D	WG345198	10-NOV-23 09:32	N/A	N/A	
Nitrate as N	0.11 mg/L	0.050	0.017	0.025	EPA 300.0	WG345363	10-NOV-23 21:22	N/A	N/A	
Sulfate	32 mg/L	1.0	0.064	0.50	EPA 300.0	WG345363	10-NOV-23 21:22	N/A	N/A	
Total Organic Carbon	1.4 mg/L	1.0	0.37	0.75	SM5310B	WG346586	07-DEC-23 04:17	N/A	N/A	

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Raw Data Section

WET CHEMISTRY BATCH REPORT
Nov 10 2023, 10:58 am
Batch: WG345198 Run ID 1: R626762 Run ID 2: NONE

Parameter: Ferrous Iron

Date Analyzed:.10-NOV-23

Analyst Initials: RAD

Prep Date: N/A

Prep Method: N/A

Prep Chemist: N/A

Sample	Samp Type	Method	Initial Amt.	Final Amt.	Rpt. DF	Result	Rpt Result	TS(%)	PQL	MDL	Adj PQL	RPD	%Rec
SQ6238-1	SAMP	SM3500D	50.000mL	50.000mL	1	.076	J0.076 mg/L	NA	.1	0.026	0.10		
SQ6238-2	SAMP	SM3500D	50.000mL	50.000mL	1	.096	J0.096 mg/L	NA	.1	0.026	0.10		
SQ6238-3	SAMP	SM3500D	50.000mL	50.000mL	1	.096	J0.096 mg/L	NA	.1	0.026	0.10		
SQ6238-4	SAMP	SM3500D	50.000mL	50.000mL	1	-.012	U0.050 mg/L	NA	.1	0.026	0.10		
SQ6238-5	SAMP	SM3500D	50.000mL	50.000mL	1	-.003	U0.050 mg/L	NA	.1	0.026	0.10		
SQ6238-6	SAMP	SM3500D	50.000mL	50.000mL	1	.056	J0.056 mg/L	NA	.1	0.026	0.10		
SQ6238-7	SAMP	SM3500D	50.000mL	50.000mL	1	.047	J0.047 mg/L	NA	.1	0.026	0.10		
SQ6238-8	SAMP	SM3500D	50.000mL	50.000mL	1	2.647	2.6 mg/L	NA	.1	0.026	0.10		
SQ6238-9	SAMP	SM3500D	50.000mL	50.000mL	1	.155	0.16 mg/L	NA	.1	0.026	0.10		
SQ6238-10	SAMP	SM3500D	50.000mL	50.000mL	1	.175	0.18 mg/L	NA	.1	0.026	0.10		
SQ6238-11	SAMP	SM3500D	50.000mL	50.000mL	1	.027	J0.027 mg/L	NA	.1	0.026	0.10		
WG345198-1	MBLANK	SM3500D	50.000mL	50.000mL	1	-.012	U0.050 mg/L	NA	.1	0.026	0.10		
WG345198-2	LCS	SM3500D	50.000mL	50.000mL	1	139.06	140 mg/L	NA	.1	0.026	0.10		99
WG345198-3	LCSD	SM3500D	50.000mL	50.000mL	1	139.06	140 mg/L	NA	.1	0.026	0.10	0	99
WG345198-4	DUP	SM3500D	50.000mL	50.000mL	1	2.647	2.6 mg/L	NA	.1	0.026	0.10	0	

Comments:

SQ6238-1	Anions = NO3, SO4, Cl.
SQ6238-2	Anions = NO3, SO4, Cl.
SQ6238-3	Anions = NO3, SO4, Cl.
SQ6238-4	Anions = NO3, SO4, Cl.
SQ6238-5	Anions = NO3, SO4, Cl.
SQ6238-6	Anions = NO3, SO4, Cl.
SQ6238-7	Anions = NO3, SO4, Cl.
SQ6238-8	Anions = NO3, SO4, Cl.
SQ6238-9	Anions = NO3, SO4, Cl.
SQ6238-10	Anions = NO3, SO4, Cl.
SQ6238-11	Anions = NO3, SO4, Cl.
WG345198-1	SQ6238-1
WG345198-2	SQ6238-1
WG345198-3	SQ6238-1
WG345198-4	SQ6238-8

Entered by: RAD Date: 11/10/23 Accepted by: SS Date: 11/15/23

KATAHDIN ANALYTICAL SERVICES, INC.

Standard Stock Solution formulas below on p2

Ferrous Ammonium Sulfate (Fe(NH4)2(SO4)2-6H2O) Stock ID: W22304

Salt Weight (g): 0.702 Final Volume(mL): 500 Concentration ug Fe++/mL: 199.9

FAS Working Standard : mLs of Stock 10 Final Volume(mL): 100 Concentration ug Fe++/mL: 19.99

CCV TV= 20.02 MG/L

LCS Stock Solution

Ferrous Ammonium Sulfate (Fe(NH4)2(SO4)2-6H2O) Stock ID: W22303

Salt Weight (g): 4.902 Final Volume(mL): 500 Concentration ug Fe++/mL: 1396.1

FAS Working Standard : mLs of Stock 10 Final Volume(mL): 100 Concentration ug Fe++/mL: 139.61

LCS TV= 139.95 MG/L

Matrix Spike Addition as Fe++ Total ug: 2 mL added to Sample 279.9

STANDARD CURVE Date: 11/07/23 **All standards and samples prepared to 100 mL final volume**

Standard	Fe++ Stock mL	Fe++ Con mg/L	510 nm Abs	Fe++ Total ug
Blank	0	0.00	0.001	0.0
10 ug	0.5	0.20	0.021	10.0
25ug	1.25	0.50	0.053	25.0
100ug	5	2.00	0.205	100.1
200ug	10	4.00	0.407	200.2
300ug	15	6.00	0.611	300.3
350ug	17.5	7.00	0.713	350.3

Linear Regression y=ax+b

Correlation Coefficient= **1.00000**

Slope= **0.0020**

Intercept= **0.0013**

Client	Katahdin ID	Sample Vol(mLs)	Sample Blank	510 nm	Net Abs	Fe++ Total ug	Final Con. mg/L	Fe++ mg/L	
	CCV	10	0	0.397	0.397	194.89	19.49	3.898	97.3%
	CCB	50	0	0.000	0.000	-0.62	-0.01	-0.012	
	LCS	2	0	0.566	0.566	278.11	139.06	5.562	99.4%
	LCSD	2	0	0.566	0.566	278.11	139.06	5.562	99.4%
	SQ6238-1	50	0	0.009	0.009	3.81	0.08	0.076	
	SQ6238-2	50	0	0.011	0.011	4.79	0.10	0.096	
	SQ6238-3	50	0	0.011	0.011	4.79	0.10	0.096	
	SQ6238-4	50	0	0.000	0.000	-0.62	-0.01	-0.012	
	CCV	10	0	0.398	0.398	195.38	19.54	3.908	97.6%
	CCB	50	0	-0.001	-0.001	-1.12	-0.02	-0.022	
	SQ6238-5	50	0	0.001	0.001	-0.13	0.00	-0.003	
	SQ6238-6	50	0	0.007	0.007	2.82	0.06	0.056	
	SQ6238-7	50	0	0.006	0.006	2.33	0.05	0.047	
	SQ6238-8	50	0	0.270	0.270	132.34	2.65	2.647	
	SQ6238-11	50	0	0.004	0.004	1.35	0.03	0.027	
	SQ6238-9	50	0	0.017	0.017	7.75	0.15	0.155	
	SQ6238-10	50	0	0.019	0.019	8.73	0.17	0.175	
	SQ6238-8 DUP	50	0	0.270	0.270	132.34	2.65	2.647	
	CCV	10	0	0.400	0.400	196.36	19.64	3.927	98.1%
	CCB	50	0	0.001	0.001	-0.13	0.00	-0.003	

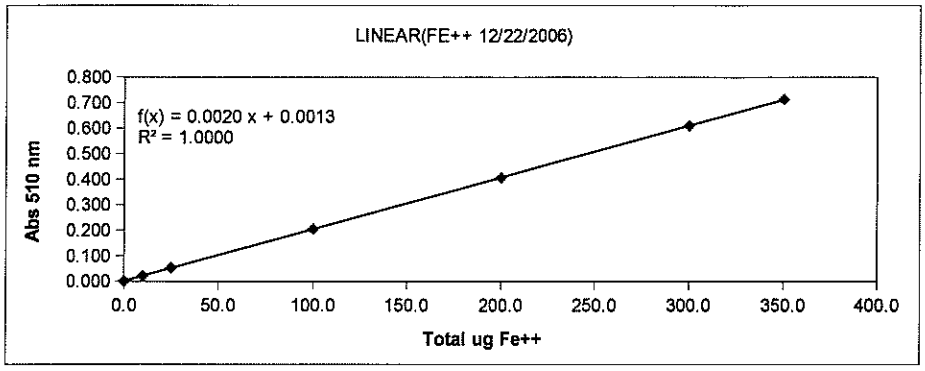
LCS RECOVERY (mg/L)

True Value	Measured Value	% Recovery
140.0	139.06	99.4%

ANALYST: RAD **DATE:** 11/10/2023

CHECKED BY: SS **DATE:** 11/15/23

Fe__ QAWL040_RE_



Fe++ ug	Abs
0.0	0.001
10.1	0.015
25.2	0.045
100.1	0.205
200.2	0.407
300.3	0.611
350.3	0.713
0.0	0.000

Fe++ ug	Abs
0.0	0.0012664
100.1	0.2045289
200.2	0.4077913
300.3	0.6110538
350.3	0.712685
0.0	0.0012664
	#VALUE!

FORMULAS

M3 STOCK Concentration ug Fe++/ [g FAS /mw FAS]x mw Fe x10exp6 {REM ug/g}/ volume in ml

M6 WORKING Concentration ug Fe++/mL: STOCK CONCENTRATION x DILUTION FACTOR

I12 LCS STOCK LCS Stock Concentration as Fe++ mg/mL: [vol x . normality of K2CrO7/ vol FAS] x mw OF Fe

I14 LCS WORKING Working LCS Stock Concentration as Fe++ ug/mL: STOCK CONCENTRATION x DILUTION FACTOR

KATAHDIN ANALYTICAL SERVICES

FERROUS IRON SM 3500-Fe B

Reagents Information:

Ammonium Acetate Buffer ID: L022302	Notes:
Phenanthroline Solution ID: W22321	WG345198 → R262762
Ferrous Ammonium Sulfate Stock ID: W22304	19.99 Conc (µg/mL)
Ferrous Ammonium Sulfate Working Standard/CCV ID: 111023	
LCS/ICV/MS Stock Standard ID: W22303	
LCS/ICV/MS Working Standard ID: 111023	139.61 Conc (µg/mL)
Spectronic 301: —	
Spectronic 401: —	SPEC 1
	★ Prepped a dup to confirm result

Distillation and Analysis Data:

KAS Sample ID	Initial Dilution	Prep Time	Phenanthroline Addition (V)	Sample Volume (mLs)	Abs 510nm	
CCV		9:32	✓	50	0.397	
CCB					0.000	
LCS					0.566	
LCSD					0.566	
SQ6238-1					0.009	900
-2					0.011	905
-3					0.011	940
-4					0.000	945
CCV					0.398	
CCB					-0.001	
6238-5					0.001	1000
-6					0.007	1015
-7					0.006	1100
-8					~~0.270~~ 0.270	1145 RAD 11/10/23
-11					0.004	1240
-9					0.017	1350
-10					0.019	1355
★ -8 DUP					0.270	1145DUP
CCV					0.400	
CCB					0.001	
					RAD 11/10/23	

Analyst: RAD Date: 11/10/23

Reviewed by: SS Date: 11/15/23

WET CHEMISTRY BATCH REPORT
Nov 14 2023, 09:38 am
Batch: WG345317 Run ID 1: R626956 Run ID 2: NONE

Parameter: Chromium, Hexavalent

Date Analyzed: 10-NOV-23

Analyst Initials: SS

Prep Date: N/A

Prep Method: N/A

Prep Chemist: N/A

Sample	Samp Type	Method	Initial Amt.	Final Amt.	Rpt. DF	Result	Rpt Result	TS(%)	PQL	MDL	Adj PQL	RPD	%Rec
SQ6237-1	SAMP	SW846 7196A	95.000mL	95.000mL	1	-.00351	U0.025 mg/L	NA	.025	0.00076	0.025		
SQ6238-1	SAMP	SW846 7196A	95.000mL	95.000mL	1	.00346	J0.0035 mg/L	NA	.025	0.00076	0.025		
SQ6238-2	SAMP	SW846 7196A	95.000mL	95.000mL	1	.00081	J0.00082 mg/L	NA	.025	0.00076	0.025		
SQ6238-3	SAMP	SW846 7196A	95.000mL	95.000mL	1	.00067	U0.012 mg/L	NA	.025	0.00076	0.025		
SQ6238-4	SAMP	SW846 7196A	95.000mL	95.000mL	1	.0006	U0.012 mg/L	NA	.025	0.00076	0.025		
SQ6238-5	SAMP	SW846 7196A	95.000mL	95.000mL	1	.00047	U0.012 mg/L	NA	.025	0.00076	0.025		
SQ6238-6	SAMP	SW846 7196A	95.000mL	95.000mL	1	.00053	U0.012 mg/L	NA	.025	0.00076	0.025		
SQ6238-7	SAMP	SW846 7196A	95.000mL	95.000mL	1	.00046	U0.012 mg/L	NA	.025	0.00076	0.025		
SQ6238-8	SAMP	SW846 7196A	95.000mL	95.000mL	1	.00135	J0.0014 mg/L	NA	.025	0.00076	0.025		
SQ6238-9	SAMP	SW846 7196A	95.000mL	95.000mL	1	.00044	U0.012 mg/L	NA	.025	0.00076	0.025		
SQ6238-10	SAMP	SW846 7196A	95.000mL	95.000mL	1	.00143	J0.0014 mg/L	NA	.025	0.00076	0.025		
SQ6238-11	SAMP	SW846 7196A	95.000mL	95.000mL	1	.00174	J0.0017 mg/L	NA	.025	0.00076	0.025		
WG345317-1	MBLANK	SW846 7196A	95.000mL	95.000mL	1	.00127	J0.0013 mg/L	NA	.025	0.00076	0.025		
WG345317-2	LCS	SW846 7196A	95.000mL	95.000mL	1	.48116	0.48 mg/L	NA	.025	0.00076	0.025		96
WG345317-3	LCSD	SW846 7196A	95.000mL	95.000mL	1	.49215	0.49 mg/L	NA	.025	0.00076	0.025	2	98
WG345317-4	DUP	SW846 7196A	95.000mL	95.000mL	1	.00132	J0.0013 mg/L	NA	.025	0.00076	0.025	NC	
WG345317-5	MS	SW846 7196A	95.000mL	95.000mL	1	.45161	0.45 mg/L	NA	.025	0.00076	0.025		90
WG345317-6	MS	SW846 7196A	95.000mL	95.000mL	1	.45637	0.46 mg/L	NA	.025	0.00076	0.025		91

Comments:

SQ6238-1	Anions = NO3, SO4, Cl.
SQ6238-2	Anions = NO3, SO4, Cl.
SQ6238-3	Anions = NO3, SO4, Cl.
SQ6238-4	Anions = NO3, SO4, Cl.
SQ6238-5	Anions = NO3, SO4, Cl.
SQ6238-6	Anions = NO3, SO4, Cl.
SQ6238-7	Anions = NO3, SO4, Cl.
SQ6238-8	Anions = NO3, SO4, Cl.
SQ6238-9	Anions = NO3, SO4, Cl.
SQ6238-10	Anions = NO3, SO4, Cl.
SQ6238-11	Anions = NO3, SO4, Cl.
WG345317-1	SQ6237-1
WG345317-2	SQ6237-1
WG345317-3	SQ6237-1
WG345317-4	SQ6238-9
WG345317-5	SQ6238-9
WG345317-6	SQ6238-10

Entered by: SS Date: 11/14/23 Accepted by: RAD Date: 11/14/23

Katahdin Analytical Services SQ6238 Page 533 of 875

KATAHDIN ANALYTICAL SERVICES, LLC
Wet Chemistry Analysis Run Information Sheet

Analyte: HEXAVALENT CHROMIUM	**Analyst:** SS
Instrument: KONELAB 20	**Analysis Date:** 11/10/23

Analytical Method (Check all that apply): W6345317 → R626956

☑ SW846 7196A ☐ SM 3500-Cr B ☐ Other (list): _____

Reagent Information:

Reagent Name	Reagent ID	Expiration Date
Diphenylcarbazide Solution	**W22305**	**5/7/2024**
10% v/v Sulfuric Acid	**W21629**	**2/14/2024**

Standards Information:

Standard Name	Concentration (mg/L as Cr^6)	ID	Expiration Date
Cal. Standard / CCV Stock	1000.0	**SWL5065**	**4/28/2024**
Cal. Std. / CCV Intermediate	25.0	**W21820**	**11/28/2023**
1.0 mg/L Calibration Standard - (1.00 mL / 25.0 mL dilution of Cal. Standard / CCV Intermediate)	1.00	HC_Cal111023	Day of use only
CCV - (0.50 mL / 25.0 mL dilution of Cal. Standard / CCV Intermediate)	0.50	HC_CCV111023	Day of use only
LCS / MS Stock	1000.0	**SWL5048**	**12/31/2023**
LCS / MS Intermediate	25.0	**W21961**	**12/20/2023**
LCS - (0.50 mL / 25.0 mL dilution of LCS / MS Intermediate)	0.50	HC_LCS111023	Day of use only

Notes:

1) Additional calibration standards (0.50, 0.10, 0.050, 0.020, 0.010 mg/L) are automatically prepared by the instrument during analysis through dilution of the 1.0 mg/L Calibration Standard.
2) Matrix spikes are prepared prior to analysis by adding 0.5 mL of LCS / MS Intermediate to 25 mL of sample. Matrix spike added = 0.50 mg/L as Cr6.

Comments:

Pipettes: W7, W8, W10

Aquakem v. 7.2									
Results from time period:									
Fri Nov 10 09:09:01 2023									
Fri Nov 10 09:46:49 2023									
Sample Id	Test short name	Result	Result unit	Result date and time	Dil. Factor	Response	Blank init abs. (A)	Main abs. 1	Comments
CRVI-0	Chromium	0.0006175	mg/l	11/10/23 9:09:01	1	0.00022	-0.00032	-0.0001	CAL POINT
CRVI-1.0	Chromium	0.0107226	mg/l	11/10/23 9:09:02	100	0.0068	-0.00061	0.00618	CAL POINT
CRVI-1.0	Chromium	0.0201967	mg/l	11/10/23 9:09:03	50	0.01297	-0.00051	0.01245	CAL POINT
CRVI-1.0	Chromium	0.0498558	mg/l	11/10/23 9:09:04	20	0.03228	-0.00046	0.03182	CAL POINT
CRVI-1.0	Chromium	0.1029373	mg/l	11/10/23 9:09:05	10	0.06685	0.00025	0.0671	CAL POINT
CRVI-1.0	Chromium	0.4919356	mg/l	11/10/23 9:09:06	2	0.32018	-0.0004	0.31979	CAL POINT
CRVI-1.0	Chromium	1.0037346	mg/l	11/10/23 9:09:07	1	0.65349	0.00041	0.6539	CAL POINT
CRVI-CCV	Chromium	0.4869993	mg/l	11/10/23 9:25:57	1	0.31697	0.00032	0.31729	97%
CRVI-CCB	Chromium	0.0012705	mg/l	11/10/23 9:25:58	1	0.00064	-0.00045	0.00019	
CRVI LCS	Chromium	0.4811628	mg/l	11/10/23 9:25:59	1	0.31317	-0.00047	0.3127	ACCEPTED
CRVI LCSD	Chromium	0.4921565	mg/l	11/10/23 9:26:00	1	0.32033	-0.00054	0.31978	ACCEPTED
SQ6238 900	Chromium	0.0034672	mg/l	11/10/23 9:26:01	1	0.00207	-0.00047	0.0016	ACCEPTED
SQ6238 0905	Chromium	0.0008161	mg/l	11/10/23 9:26:02	1	0.00034	-0.0004	-0.00006	ACCEPTED
SQ6238 0940	Chromium	0.000676	mg/l	11/10/23 9:26:03	1	0.00025	-0.00039	-0.00014	ACCEPTED
SQ6238 0945	Chromium	0.000606	mg/l	11/10/23 9:26:04	1	0.00021	-0.00029	-0.00008	ACCEPTED
SQ6238 1000	Chromium	0.0004738	mg/l	11/10/23 9:26:05	1	0.00012	-0.00016	-0.00004	ACCEPTED
SQ6238 1015	Chromium	0.0005361	mg/l	11/10/23 9:26:06	1	0.00016	-0.00013	0.00003	ACCEPTED
SQ6238 1100	Chromium	0.0004699	mg/l	11/10/23 9:26:07	1	0.00012	-0.00008	0.00004	ACCEPTED
SQ6238 1145	Chromium	0.0013508	mg/l	11/10/23 9:26:08	1	0.00069	0.00065	0.00135	ACCEPTED
CRVI-CCV	Chromium	0.4933181	mg/l	11/10/23 9:30:16	1	0.32108	0.00042	0.3215	99%
CRVI-CCB	Chromium	0.0011377	mg/l	11/10/23 9:30:17	1	0.00055	-0.00042	0.00014	
SQ6238 1240	Chromium	0.0017493	mg/l	11/10/23 9:30:18	1	0.00095	-0.00046	0.0005	ACCEPTED
SQ6238 1350	Chromium	0.0004476	mg/l	11/10/23 9:30:19	1	0.0001	-0.00047	-0.00037	ACCEPTED
CRVI-CCV	Chromium	0.492193	mg/l	11/10/23 9:32:30	1	0.32035	0.00045	0.3208	98%
CRVI-CCB	Chromium	0.0006951	mg/l	11/10/23 9:32:31	1	0.00027	-0.00026	0.00001	
CRVI-CCV	Chromium	0.4982148	mg/l	11/10/23 9:44:30	1	0.32427	-0.00059	0.32368	100%
CRVI-CCB	Chromium	0.0012943	mg/l	11/10/23 9:44:31	1	0.00066	-0.00075	-0.00009	
SQ6238 1350 DUP	Chromium	0.0013274	mg/l	11/10/23 9:44:32	1	0.00068	-0.00045	0.00023	ACCEPTED
SQ6238 1350 MS	Chromium	0.4516154	mg/l	11/10/23 9:44:33	1	0.29392	-0.0004	0.29353	ACCEPTED
SQ6238 1355	Chromium	0.0014331	mg/l	11/10/23 9:44:34	1	0.00075	0.00117	0.00192	ACCEPTED
SQ6238 1355 MS	Chromium	0.4563777	mg/l	11/10/23 9:44:35	1	0.29703	-0.00033	0.29669	ACCEPTED
SQ6237	Chromium	-0.003517	mg/l	11/10/23 9:44:36	1	-0.00248	0.00221	-0.00027	ACCEPTED
CRVI-CCV	Chromium	0.4959018	mg/l	11/10/23 9:46:48	1	0.32277	-0.00056	0.32221	99%
CRVI-CCB	Chromium	0.0009775	mg/l	11/10/23 9:46:49	1	0.00045	-0.00079	-0.00034	

SS
11/14/23

Result Report | Aquakem 7.2 | Page: 1

Laboratory
Analyzer User

Date : 11/10/2023
Time : 10:15

Test: Chromium
Unit: mg/l

	Sample ID:	Result	Date and Time	Note
	CRVI-CCV	0.486999	11/10/2023 9:25	
	CRVI-CCB	0.001271	11/10/2023 9:25	
	CRVI LCS	0.481163	11/10/2023 9:25	
	CRVI LCSD	0.492156	11/10/2023 9:26	
-1	SQ6238 900	0.003467	11/10/2023 9:26	
-2	SQ6238 0905	0.000816	11/10/2023 9:26	
-3	SQ6238 0940	0.000676	11/10/2023 9:26	
-4	SQ6238 0945	0.000606	11/10/2023 9:26	
-5	SQ6238 1000	0.000474	11/10/2023 9:26	
-6	SQ6238 1015	0.000536	11/10/2023 9:26	
-7	SQ6238 1100	0.000470	11/10/2023 9:26	
-8	SQ6238 1145	0.001351	11/10/2023 9:26	
	CRVI-CCV	0.493318	11/10/2023 9:30	
	CRVI-CCB	0.001138	11/10/2023 9:30	
-11	SQ6238 1240	0.001749	11/10/2023 9:30	
-9	SQ6238 1350	0.000448	11/10/2023 9:30	
	CRVI-CCV	0.492193	11/10/2023 9:32	
	CRVI-CCB	0.000695	11/10/2023 9:32	
	CRVI-CCV	0.498215	11/10/2023 9:44	
	CRVI-CCB	0.001294	11/10/2023 9:44	
-9	SQ6238 1350 DUP	0.001327	11/10/2023 9:44	
-9	SQ6238 1350 MS	0.451615	11/10/2023 9:44	
-10	SQ6238 1355	0.001433	11/10/2023 9:44	
-10	SQ6238 1355 MS	0.456378	11/10/2023 9:44	
-1	SQ6237	-0.004	11/10/2023 9:44	
	CRVI-CCV	0.495902	11/10/2023 9:46	
	CRVI-CCB	0.000977	11/10/2023 9:46	

SS 11/13/23

Laboratory
Analyzer User

11/10/2023 9:10

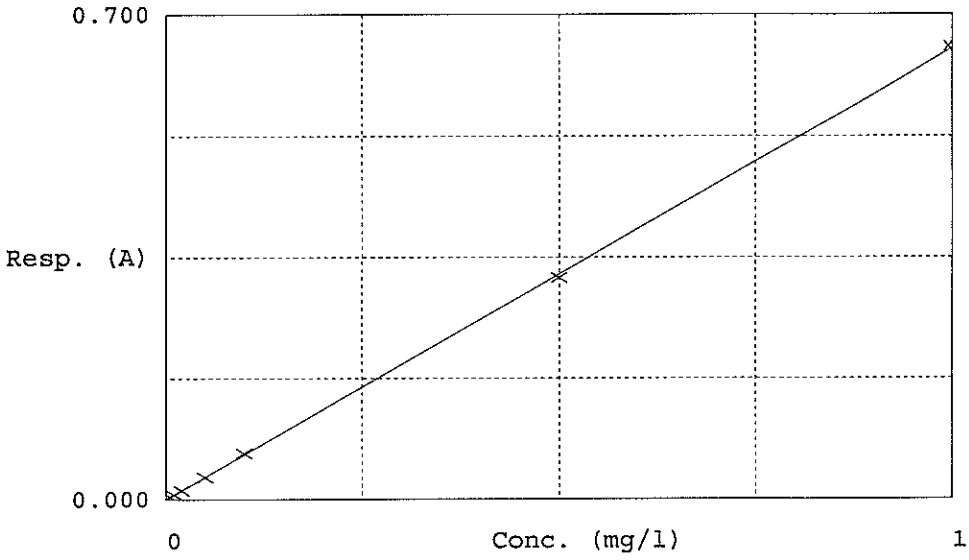
Test Chromium

Accepted 11/10/2023 9:10

Factor 1.536
Bias 0

Coeff. of det. 0.999897

Errors Meas. error



	Calibrator	Response	Calc. con.	Conc.	Errors
1	CRVI-0	0.000	0.0006175	0.0000000	Init abs.
2	CRVI-1.0	0.007	0.0107226	0.0100000	
3	CRVI-1.0	0.013	0.0201967	0.0200000	
4	CRVI-1.0	0.032	0.0498558	0.0500000	
5	CRVI-1.0	0.067	0.1029373	0.1000000	
6	CRVI-1.0	0.320	0.4919356	0.5000000	
7	CRVI-1.0	0.653	1.0037346	1.0000000	

Katahdin
ANALYTICAL SERVICES

Accredited in accordance with nelac
Cert No E87604

Wet Chemistry Batch Report

Analyst Initials: RAD
Date Analyzed: 10-NOV-23

Batch: WG345363
Prep Method: N/A
Prep Chemist: RAD

Sample	Samp Type	Method	Parameter	DF	Result	Rpt. Result	Units	PQL	Adj. PQL	MDL	Adj. MDL	RPD	Rec.
SQ6238-1	SAMP	EPA 300.0	Nitrate as N	1	.0111	U 0.025	mg/L	.05	0.050	.0174	0.017		
SQ6238-10	SAMP	EPA 300.0	Nitrate as N	1	.0334	J 0.033	mg/L	.05	0.050	.0174	0.017		
SQ6238-11	SAMP	EPA 300.0	Nitrate as N	1	.1145	0.11	mg/L	.05	0.050	.0174	0.017		
SQ6238-11	SAMP	EPA 300.0	Sulfate	1	32.1053	32	mg/L	1	1.0	.0637	0.064		
SQ6238-2	SAMP	EPA 300.0	Nitrate as N	1	.0042	U 0.025	mg/L	.05	0.050	.0174	0.017		
SQ6238-3	SAMP	EPA 300.0	Nitrate as N	1	.159	0.16	mg/L	.05	0.050	.0174	0.017		
SQ6238-3	SAMP	EPA 300.0	Sulfate	1	66.5919	66	mg/L	1	1.0	.0637	0.064		
SQ6238-4	SAMP	EPA 300.0	Nitrate as N	1	.0047	U 0.025	mg/L	.05	0.050	.0174	0.017		
SQ6238-4	SAMP	EPA 300.0	Sulfate	1	16.8725	17	mg/L	1	1.0	.0637	0.064		
SQ6238-5	SAMP	EPA 300.0	Chloride	1	11.515	12	mg/L	2	2.0	.0993	0.099		
SQ6238-5	SAMP	EPA 300.0	Nitrate as N	1	.0048	U 0.025	mg/L	.05	0.050	.0174	0.017		
SQ6238-5	SAMP	EPA 300.0	Sulfate	1	5.9226	5.9	mg/L	1	1.0	.0637	0.064		
SQ6238-6	SAMP	EPA 300.0	Chloride	1	22.9683	23	mg/L	2	2.0	.0993	0.099		
SQ6238-6	SAMP	EPA 300.0	Nitrate as N	1	.0056	U 0.025	mg/L	.05	0.050	.0174	0.017		
SQ6238-6	SAMP	EPA 300.0	Sulfate	1	8.6068	8.6	mg/L	1	1.0	.0637	0.064		
SQ6238-7	SAMP	EPA 300.0	Nitrate as N	1	.0197	J 0.020	mg/L	.05	0.050	.0174	0.017		
SQ6238-7	SAMP	EPA 300.0	Sulfate	1	67.7214	68	mg/L	1	1.0	.0637	0.064		
SQ6238-8	SAMP	EPA 300.0	Nitrate as N	1	.0169	U 0.025	mg/L	.05	0.050	.0174	0.017		
SQ6238-9	SAMP	EPA 300.0	Nitrate as N	1	.0217	J 0.022	mg/L	.05	0.050	.0174	0.017		
WG345363-1	MBLANK	EPA 300.0	Chloride	1	.0093	U 1.0	mg/L	2	2.0	.0993	0.099		
WG345363-1	MBLANK	EPA 300.0	Nitrate as N	1	.0134	U 0.025	mg/L	.05	0.050	.0174	0.017		
WG345363-1	MBLANK	EPA 300.0	Sulfate	1	.0887	J 0.089	mg/L	1	1.0	.0637	0.064		
WG345363-2	LCS	EPA 300.0	Chloride	1	3.616	3.62	mg/L	2	2.0	.0993	0.099		96.5
WG345363-2	LCS	EPA 300.0	Nitrate as N	1	.8043	0.804	mg/L	.05	0.050	.0174	0.017		95.1
WG345363-2	LCS	EPA 300.0	Sulfate	1	3.6689	3.67	mg/L	1	1.0	.0637	0.064		97.9
WG345363-3	DUP	EPA 300.0	Nitrate as N	1	.0116	U 0.025	mg/L	.05	0.050	.0174	0.017	NC	
WG345363-4	MS	EPA 300.0	Nitrate as N	1	.778105	* 0.778	mg/L	.05	0.050	.0174	0.017		87.5
WG345363-5	MS	EPA 300.0	Nitrate as N	1	.830105	0.830	mg/L	.05	0.050	.0174	0.017		93.4

Comments:

SQ6238-1	Anions = NO3, SO4,
SQ6238-10	Anions = NO3, SO4,
SQ6238-11	Anions = NO3, SO4,
SQ6238-2	Anions = NO3, SO4,
SQ6238-3	Anions = NO3, SO4,
SQ6238-4	Anions = NO3, SO4,
SQ6238-5	Anions = NO3, SO4,
SQ6238-6	Anions = NO3, SO4,
SQ6238-7	Anions = NO3, SO4,
SQ6238-8	Anions = NO3, SO4,
SQ6238-9	Anions = NO3, SO4,
WG345363-1	SQ6238-1
WG345363-2	SQ6238-1
WG345363-3	SQ6238-1
WG345363-4	SQ6238-1

Entered by: RAD Date: 11/13/23

Accepted by: SS Date: 11/15/23

Katahdin
ANALYTICAL SERVICES

Accredited in accordance with nelac
Cert No E87604

Wet Chemistry Batch Report

Analyst Initials: RAD
Date Analyzed: 10-NOV-23

Batch: WG345363
Prep Method: N/A
Prep Chemist: RAD

Sample	Samp Type	Method	Parameter	DF	Result	Rpt. Result	Units	PQL	Adj. PQL	MDL	Adj. MDL	RPD	Rec.
WG345363-5		SQ6238-2											

Entered by: RAD Date: 11/13/23 Accepted by: SS Date: 11/15/23

Katahdin Analytical Services SQ6238 Page 539 of 875

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Wet Chemistry Batch Report

Analyst Initials: RAD
Date Analyzed: 10-NOV-23

Batch: WG345364
Prep Method: N/A
Prep Chemist: RAD

Sample	Samp Type	Method	Parameter	DF	Result	Rpt. Result	Units	PQL	Adj. PQL	MDL	Adj. MDL	RPD	Rec.
SQ6259-1	SAMP	SW846 9056A	Nitrate as N	1	.0067	U 0.025	mg/L	.05	0.050	.0174	0.017		
SQ6259-1	SAMP	SW846 9056A	Sulfate	1	10.0423	10	mg/L	1	1.0	.0637	0.064		
SQ6259-2	SAMP	SW846 9056A	Nitrate as N	1	.0958	0.096	mg/L	.05	0.050	.0174	0.017		
SQ6259-2	SAMP	SW846 9056A	Sulfate	1	7.6169	7.6	mg/L	1	1.0	.0637	0.064		
SQ6259-3	SAMP	SW846 9056A	Nitrate as N	1	.0052	U 0.025	mg/L	.05	0.050	.0174	0.017		
SQ6259-3	SAMP	SW846 9056A	Sulfate	1	27.5353	28	mg/L	1	1.0	.0637	0.064		
WG345364-1	MBLANK	SW846 9056A	Nitrate as N	1	.0134	U 0.025	mg/L	.05	0.050	.0174	0.017		
WG345364-1	MBLANK	SW846 9056A	Sulfate	1	.0887	J 0.089	mg/L	1	1.0	.0637	0.064		
WG345364-2	LCS	SW846 9056A	Nitrate as N	1	.8043	0.804	mg/L	.05	0.050	.0174	0.017		95.1
WG345364-2	LCS	SW846 9056A	Sulfate	1	3.6689	3.67	mg/L	1	1.0	.0637	0.064		97.9

Comments:

SQ6259-1	Anions: SO4 + NO3.
SQ6259-2	Anions: SO4 + NO3.
SQ6259-3	Anions: SO4 + NO3.
WG345364-1	SQ6259-1
WG345364-2	SQ6259-1

Entered by: RAD Date: 11/13/23 Accepted by: SS Date: 11/15/23

IC STANDARDS PREPARATION

Fill sheet in completely and file with each batch of samples analyzed.

IC8 MIX ID:	EXPIRATION DATE:	ICAL DATE:	CCV STOCK ID:	EXPIRATION DATE:
W22233	10/23/23	10/12/23	W22318	11/22/23

ALALYTE	INITIAL AMOUNT (mL)	OF	STOCK CONC. (mg/L)	TO	FINAL VOLUME (mL)	=	FINAL CONC. (mg/L)
Cl	2.0	OF	1000	TO	100	=	20
NO2 (as N)	0.8		1000				8
NO3 (as N)	0.8		1000				8
Br	4.0		1000				40
SO4	4.0		1000				40
F	1.0		1000				10
PO4 (as P)	1.0		1000				10

WORKING STANDARDS

Standards prepared on each day of use.

STD.	INITIAL AMOUNT (mL)	OF	FINAL VOLUME (mL)	FINAL CONC. (mg/L)							STD ID*
				Cl	NO2	NO3	Br	SO4	PO4	F	
IC8	5	IC8	5	40	16	16	80	80	20	20	IC8-101223
IC7	2.5	IC8	5	20	8	8	40	40	10	10	IC7-101223
IC6	2.5	IC7	5	10	4	4	20	20	5	5	IC6-101223
IC5	1.25	IC7	5	5	2	2	10	10	2.5	2.5	IC5-101223
IC4	1.25	IC6	5	2.5	1	1	5	5	1.25	1.25	IC4-101223
IC3	0.5	IC6	5	1	0.4	0.4	2	2	0.5	0.5	IC3-101223
IC2	0.5	IC3	5	0.1	0.04	0.04	0.2	0.2	0.05	0.05	IC2-101223
CCV	2.5	IC7	5	10	4	4	20	20	5	5	CCV-111023

* STD ID is prefix followed by the date of preparation (ie. IC6-020216)

LCS/MATRIX SPIKE MIX ID: W22324	EXPIRATION DATE: 11/23/23

3.75 mL of High Purity Multi-Element IC Standard Solution "A" and 3.75 mL of High Purity Multi-Element IC Standard Solution "B" diluted to 50 mL. For MS, add 0.25 mL of mix to 4.75 mL of sample. For LCS, add 0.25 mL of mix to 4.75 mL of DI water.

FINAL CONCENTRATIONS (mg/L)

Cl	NO2 (as N)	NO3 (as N)	Br	SO4	PO4 (as P)	F	STD ID*
3.75	1.14	0.845	3.75	3.75	1.22	3.75	IC-LCS-111023

PIPETTES: W00, W16

2x dil = 2.5mL samp + 2.5mL DI	**5x dil** = 1.0mL samp + 4.0mL DI	**10x dil** = 0.5mL samp + 4.5mL DI
20x dil = 0.25mL samp + 4.75mL DI	**50x dil** = 0.1mL samp + 4.9mL DI	**100x dil** = 0.05mL samp + 4.95mL DI
200x dil = 0.025mL samp + 4.975mL DI	**500x dil** = 0.01mL samp + 4.99mL DI	**1000x dil** = 0.005mL samp + 4.995mL DI

Katahdin Analytical Services

ION CHROMATOGRAPHY RUNLOG

Dionex ICS-2100 (Instrument IC-3)

Analysis Date: 11/10/23	**Analytical Column S/N:** 220503194	**Calibration Date:** 10/12/23
Analysis Sequence: 111023 A	**Guard Column S/N:** 220406208	**Calibration Sequence:** 101223 CAL
Analyst: RAD	**Suppressor S/N:** 221117086	☐ If box at left is checked, continued from previous page. Refer to previous page for header information.

Reporting / Reanalysis Codes:
✓ Report without manipulation
S Report, peak automatically reintegrated with SmartPeak
M Report, peak manually integrated
A Report, peak manually assigned
R Do not report, reanalyze sample

Method Codes:
E EPA 300.0
SW SW846 9056A

Katahdin Sample Number	Dilution Factor	Method Code	Report or Reanalyze (enter appropriate code): F	Cl	NO_2	SO_4	Br	NO_3	PO_4	Comments
CCV			✓	✓	✓	✓	✓	✓		
CCB			M	✓	✓	M	M	✓		
LCS			✓	✓	✓	✓	R	✓		
SQ6238-1	1	E		R		R		✓		Cl=10x SO4=2x
-1 DUP				—		—		✓		
-1 MS				—		—		✓		
-2				R		R		M		Cl=10x SO4=2x
-2 MS				—		—		✓		
-3				R		✓		✓		Cl=20x
-4				R		✓		✓		Cl=2x
-5				✓		✓		M		
-6				✓		✓		M		
CCV			✓	✓	✓	✓	✓	✓		
CCB			M	✓	✓	M	M	✓		
6238-7	1	E		R		✓		✓		Cl=20x
-8				R		R		✓		Cl=20x SO4=5x
-9				R		R		M		Cl=50x SO4=5x
-10				R		R		M		Cl=50x SO4=5x
-11				R		✓		✓		Cl=5x
6259-1		S				✓		M		
-2						✓		✓		
-3						✓		✓		

E: WG345363 → R626937
S: WG345364 → R626934

WL-069-Revision 1 – 04/12/20016

Reviewed by: SS

Review Date: 11/15/23

QAWL1114 - 000893

0000004

Katahdin Analytical Services **ION CHROMATOGRAPHY RUNLOG** Dionex ICS-2100 (Instrument IC-3)

Analysis Date:	**Analytical Column S/N:**	**Calibration Date:**
Analysis Sequence:	**Guard Column S/N:**	**Calibration Sequence:**
Analyst:	**Suppressor S/N:**	☑ If box at left is checked, continued from previous page. Refer to previous page for header information.

Reporting / Reanalysis Codes:
✓ Report without manipulation
S Report, peak automatically reintegrated with SmartPeak
M Report, peak manually integrated
A Report, peak manually assigned
R Do not report, reanalyze sample

Method Codes:
E EPA 300.0
SW SW846 9056A

Katahdin Sample Number	Dilution Factor	Method Code	Report or Reanalyze (enter appropriate code): F	Cl	NO_2	SO_4	Br	NO_3	PO_4	Comments
CCV			✓	✓	✓	✓	✓	✓		
CCB			M	✓	✓	M	M	✓		
										RAD 11/13/23

Reviewed by: SS
QAWL1114 - 000893

Review Date: 11/15/23

Sequence Overview

Sequence Details

Name:	**111023 A REPROC**	*Created On:*	**28/Dec/22 13:33:49**
Directory:	**2023\11-NOV**	*Created By:*	**wetlab**
Data Vault:	**ChromeleonLocal**	*Updated On:*	**13/Nov/23 16:17:51**
No. of Injections:	**24**	*Updated By:*	**wetlab**

Injection Details

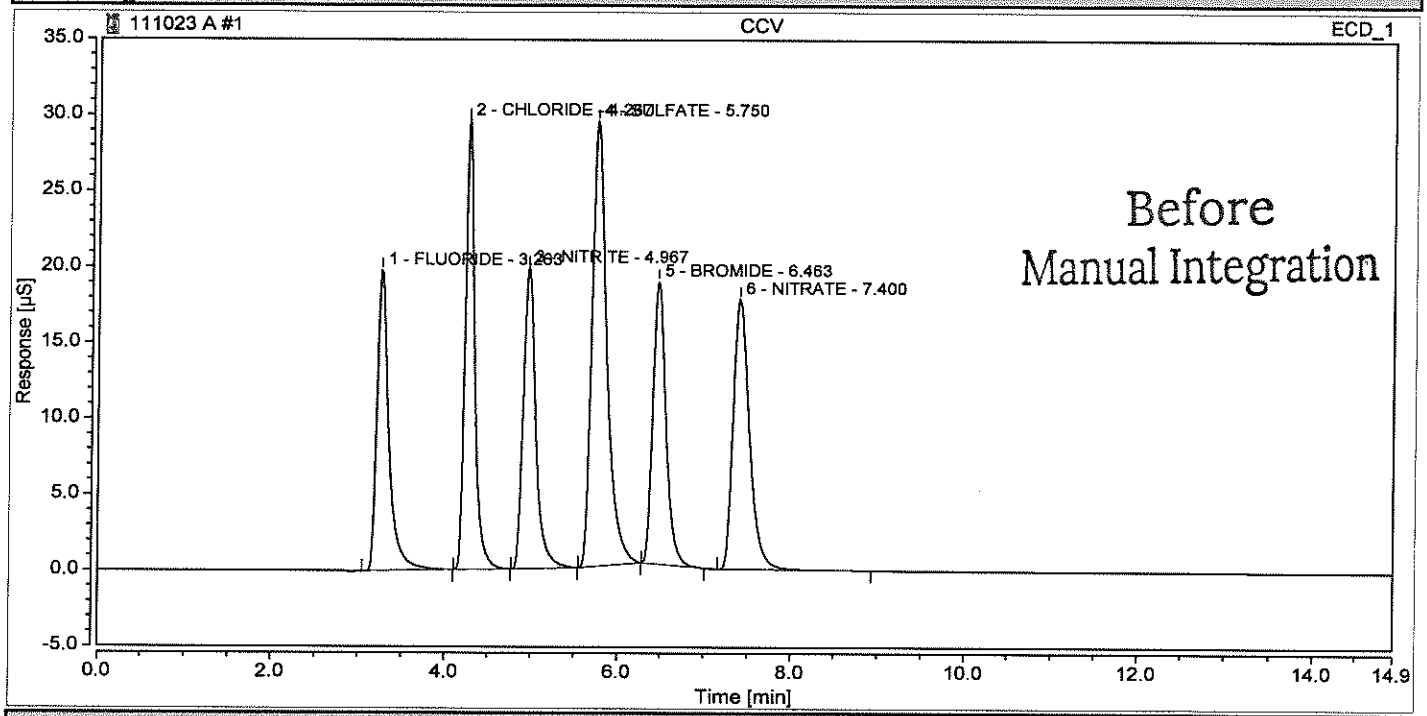
No.	Injection Name	Position	Type	Level	Inject Time	Status
1	CCV	1	Check Standard	06	10/Nov/23 16:12:37	Finished
2	CCB	2	Blank		10/Nov/23 16:29:23	Finished
3	LCS	3	Check Standard	09	10/Nov/23 16:46:39	Finished
4	SQ6238-1	4	Unknown		10/Nov/23 17:03:54	Finished
5	SQ6238-1 DUP	5	Unknown		10/Nov/23 17:21:09	Finished
6	SQ6238-1 MS	6	Unknown		10/Nov/23 17:38:24	Finished
7	SQ6238-2	7	Unknown		10/Nov/23 17:55:40	Finished
8	SQ6238-2 MS	8	Unknown		10/Nov/23 18:12:55	Finished
9	SQ6238-3	9	Unknown		10/Nov/23 18:30:11	Finished
10	SQ6238-4	10	Unknown		10/Nov/23 18:47:27	Finished
11	SQ6238-5	11	Unknown		10/Nov/23 19:04:42	Finished
12	SQ6238-6	12	Unknown		10/Nov/23 19:21:57	Finished
13	CCV	13	Check Standard	06	10/Nov/23 19:39:13	Finished
14	CCB	14	Blank		10/Nov/23 19:56:28	Finished
15	SQ6238-7	15	Unknown		10/Nov/23 20:13:43	Finished
16	SQ6238-8	16	Unknown		10/Nov/23 20:30:58	Finished
17	SQ6238-9	17	Unknown		10/Nov/23 20:48:13	Finished
18	SQ6238-10	18	Unknown		10/Nov/23 21:05:29	Finished
19	SQ6238-11	19	Unknown		10/Nov/23 21:22:44	Finished
20	SQ6259-1	20	Unknown		10/Nov/23 21:39:59	Finished
21	SQ6259-2	21	Unknown		10/Nov/23 21:57:15	Finished
22	SQ6259-3	22	Unknown		10/Nov/23 22:14:30	Finished
23	CCV	25	Check Standard	06	10/Nov/23 22:32:21	Finished
24	CCB	26	Blank		10/Nov/23 22:49:10	Finished

Chromatogram and Results

Injection Details

Injection Name:	**CCV**	*Run Time (min):*	**14.95**
Vial Number:	**1**	*Injection Volume:*	**200.00**
Injection Type:	**Check Standard**	*Channel:*	**ECD_1**
Calibration Level:	**06**	*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**10/Nov/23 16:12**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

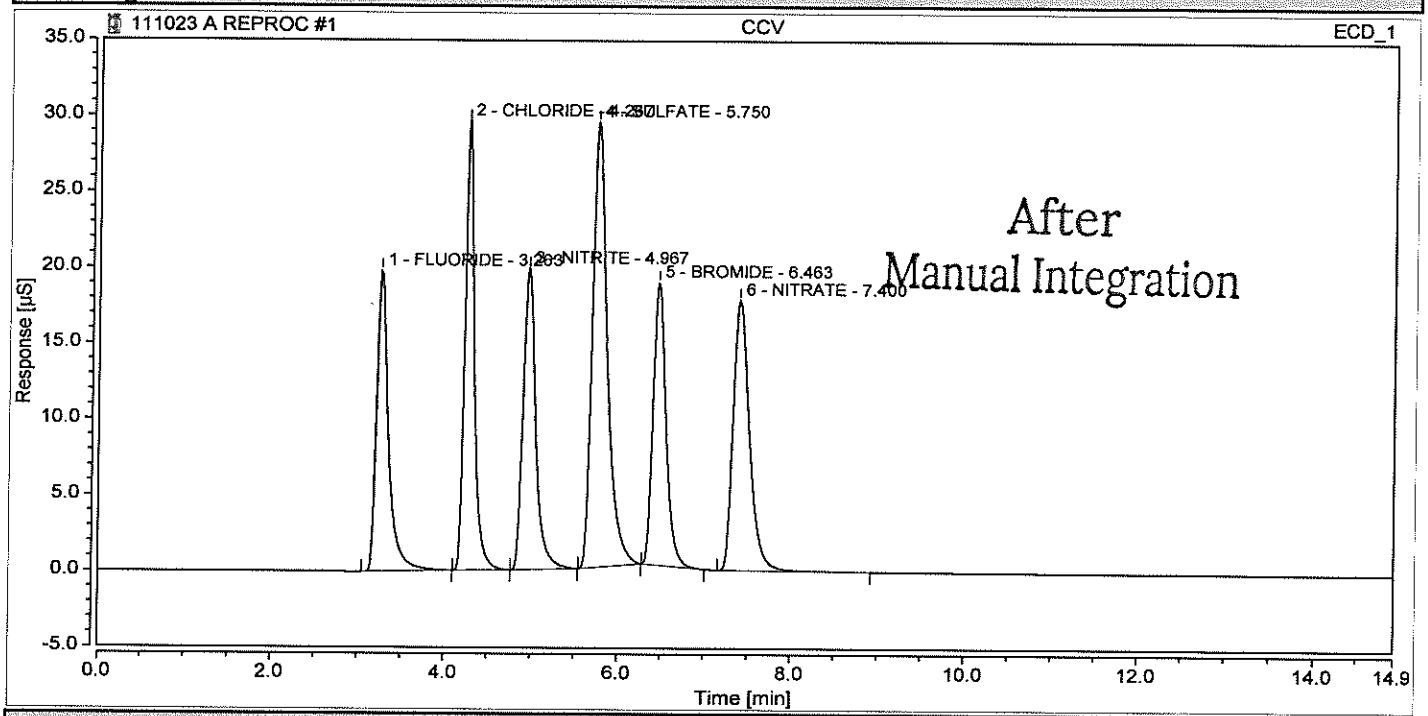
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.263	3.143	19.812	13.48	14.68	5.1042	2.0843
2	CHLORIDE	4.267	3.846	29.583	16.50	21.92	9.8692	-1.3079
3	NITRITE	4.967	3.375	19.840	14.48	14.70	4.0668	1.6706
4	SULFATE	5.750	5.788	29.324	24.83	21.73	20.3602	1.8008
5	BROMIDE	6.463	3.305	18.626	14.18	13.80	19.4392	-2.8038
6	NITRATE	7.400	3.854	17.788	16.53	13.18	3.9383	-1.5432
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**23.311**	**134.973**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**CCV**	*Run Time (min):*	**14.95**
Vial Number:	**1**	*Injection Volume:*	**200.00**
Injection Type:	**Check Standard**	*Channel:*	**ECD_1**
Calibration Level:	**06**	*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**10/Nov/23 16:12**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

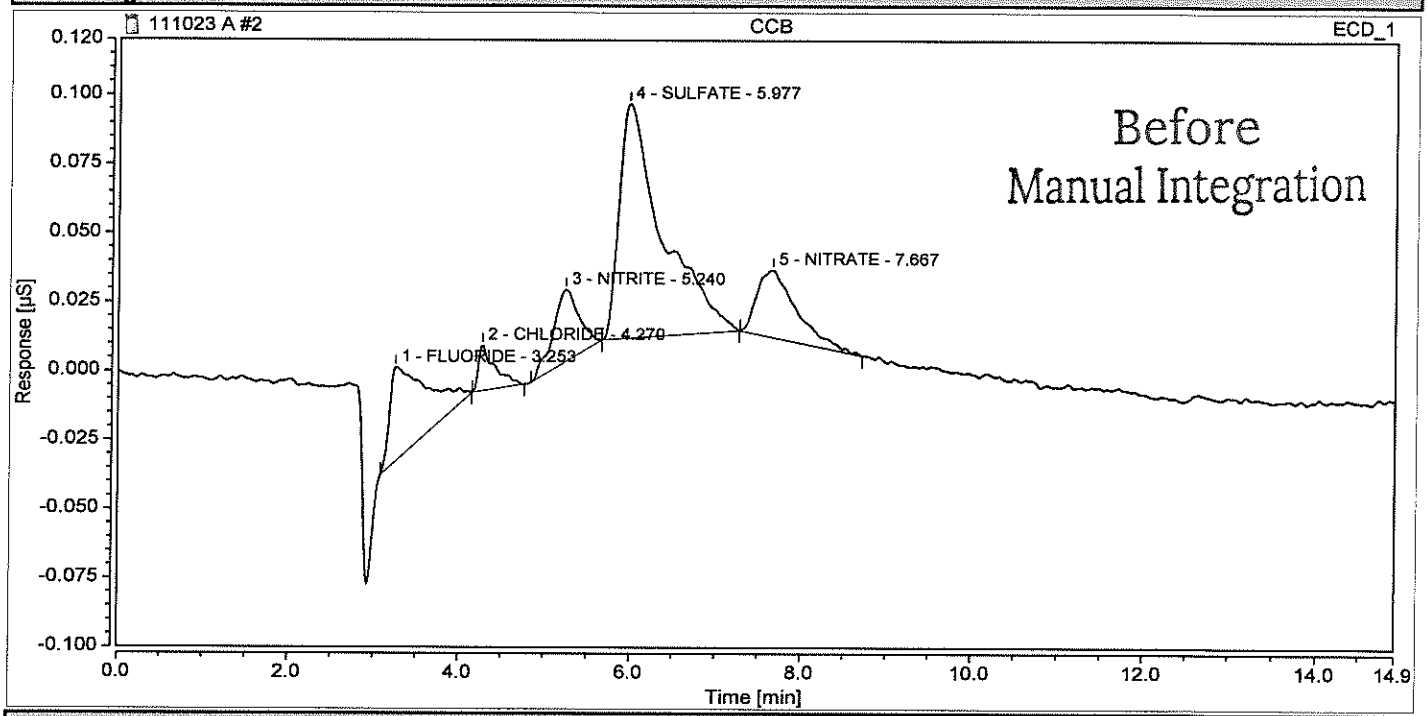
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.263	3.143	19.812	13.48	14.68	5.1042	2.0843
2	CHLORIDE	4.267	3.846	29.583	16.50	21.92	9.8692	-1.3079
3	NITRITE	4.967	3.375	19.840	14.48	14.70	4.0668	1.6706
4	SULFATE	5.750	5.788	29.324	24.83	21.73	20.3602	1.8008
5	BROMIDE	6.463	3.305	18.626	14.18	13.80	19.4392	-2.8038
6	NITRATE	7.400	3.854	17.788	16.53	13.18	3.9383	-1.5432
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**23.311**	**134.973**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**CCB**	*Run Time (min):*	**14.95**
Vial Number:	**2**	*Injection Volume:*	**200.00**
Injection Type:	**Blank**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**10/Nov/23 16:29**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

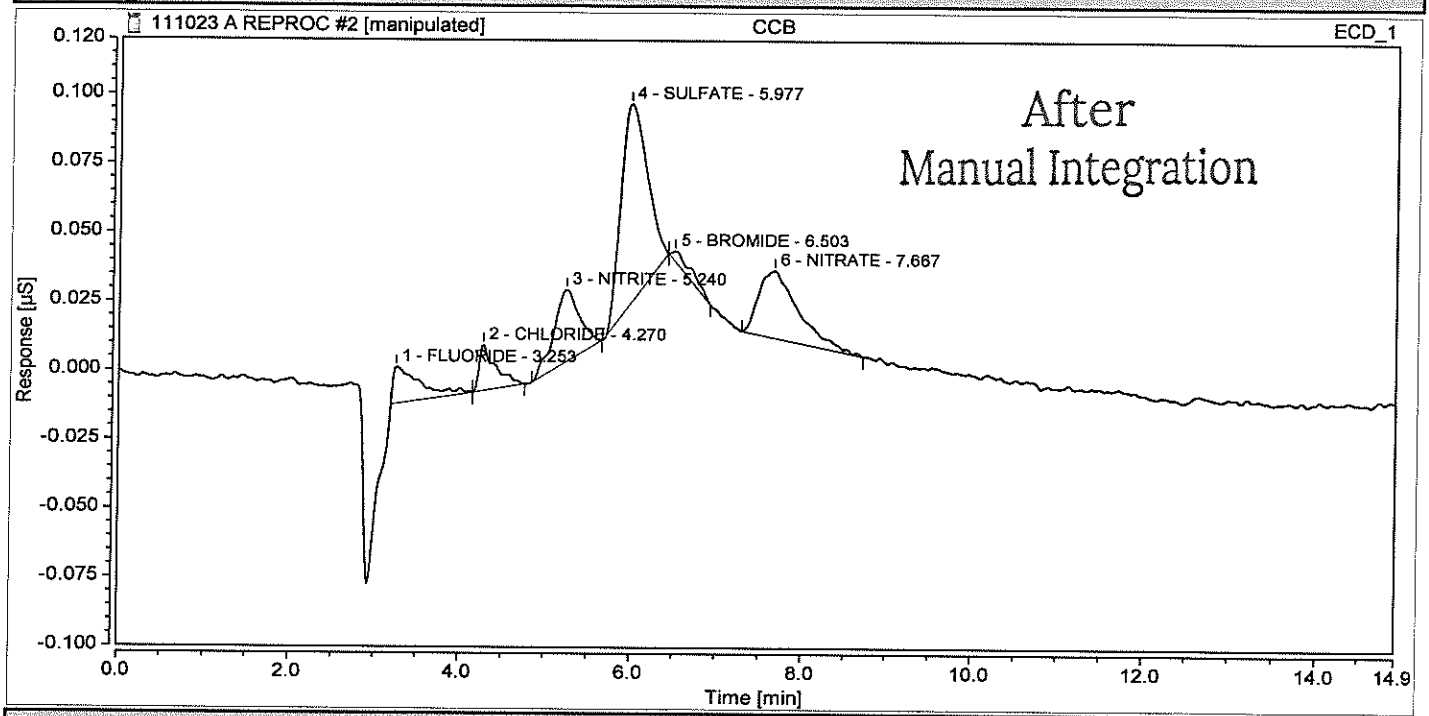
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.253	0.016	0.034	17.74	18.30	0.0423	n.a.
2	CHLORIDE	4.270	0.004	0.017	3.96	8.89	0.0093	n.a.
3	NITRITE	5.240	0.009	0.026	9.97	14.06	0.0189	n.a.
4	SULFATE	5.977	0.050	0.085	54.03	45.61	0.1747	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5	NITRATE	7.667	0.013	0.024	14.30	13.15	0.0134	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.092**	**0.186**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**CCB**	*Run Time (min):*	**14.95**
Vial Number:	**2**	*Injection Volume:*	**200.00**
Injection Type:	**Blank**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**10/Nov/23 16:29**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

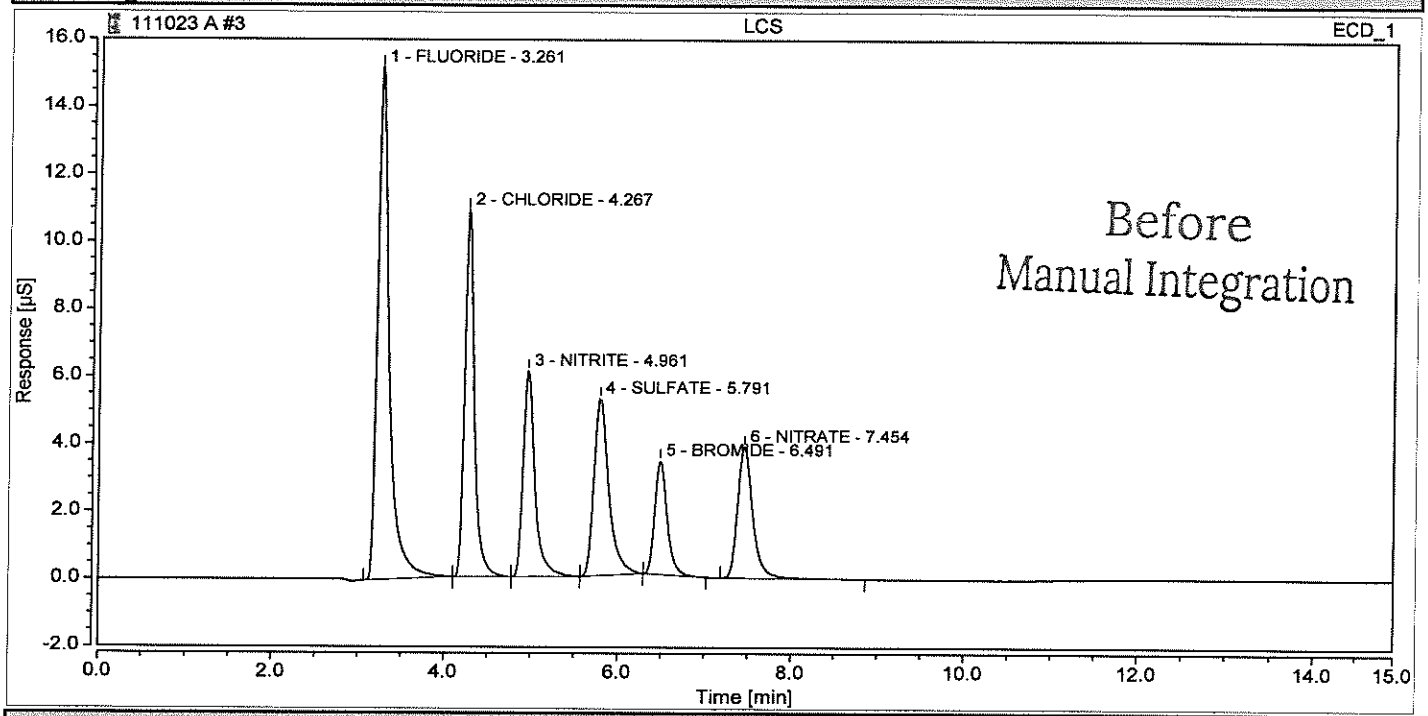
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.253	0.005	0.013	8.39	8.48	0.0242	n.a.
2	CHLORIDE	4.270	0.004	0.017	6.34	10.54	0.0093	n.a.
3	NITRITE	5.240	0.009	0.026	15.97	16.68	0.0189	n.a.
4	SULFATE	5.977	0.025	0.073	43.97	46.22	0.0887	n.a.
5	BROMIDE	6.503	0.001	0.004	2.42	2.49	0.0082	n.a.
6	NITRATE	7.667	0.013	0.024	22.91	15.60	0.0134	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.057**	**0.157**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**LCS**	*Run Time (min):*	**14.95**
Vial Number:	**3**	*Injection Volume:*	**200.00**
Injection Type:	**Check Standard**	*Channel:*	**ECD_1**
Calibration Level:	**09**	*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**10/Nov/23 16:46**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

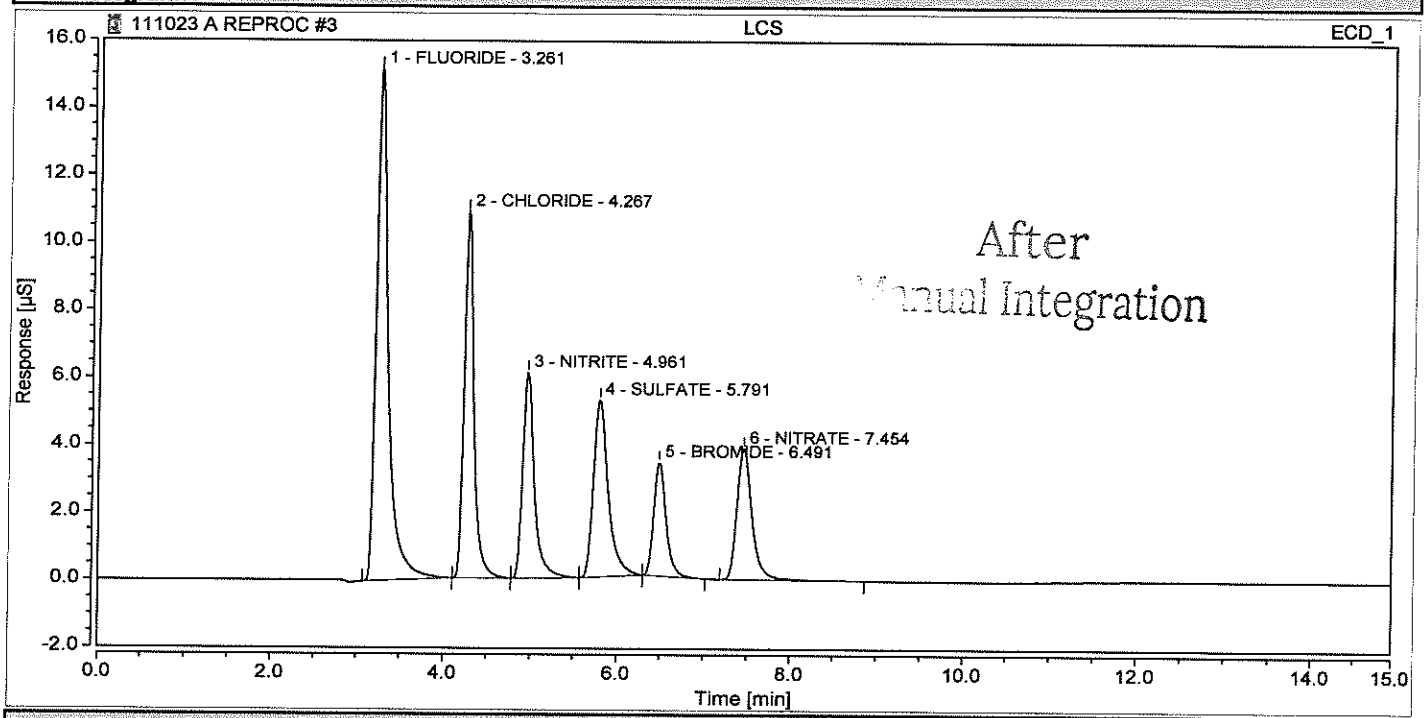
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.261	2.445	15.182	33.87	33.99	3.9478	5.2735
2	CHLORIDE	4.267	1.409	10.872	19.52	24.34	3.6160	-3.5745
3	NITRITE	4.961	0.966	6.103	13.38	13.66	1.1425	0.2173
4	SULFATE	5.791	1.043	5.252	14.45	11.76	3.6689	-2.1637
5	BROMIDE	6.491	0.569	3.376	7.88	7.56	3.3467	-10.7558
6	NITRATE	7.454	0.787	3.881	10.90	8.69	0.8043	-4.8194
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**7.219**	**44.667**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**LCS**	*Run Time (min):*	**14.95**
Vial Number:	**3**	*Injection Volume:*	**200.00**
Injection Type:	**Check Standard**	*Channel:*	**ECD_1**
Calibration Level:	**09**	*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**10/Nov/23 16:46**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

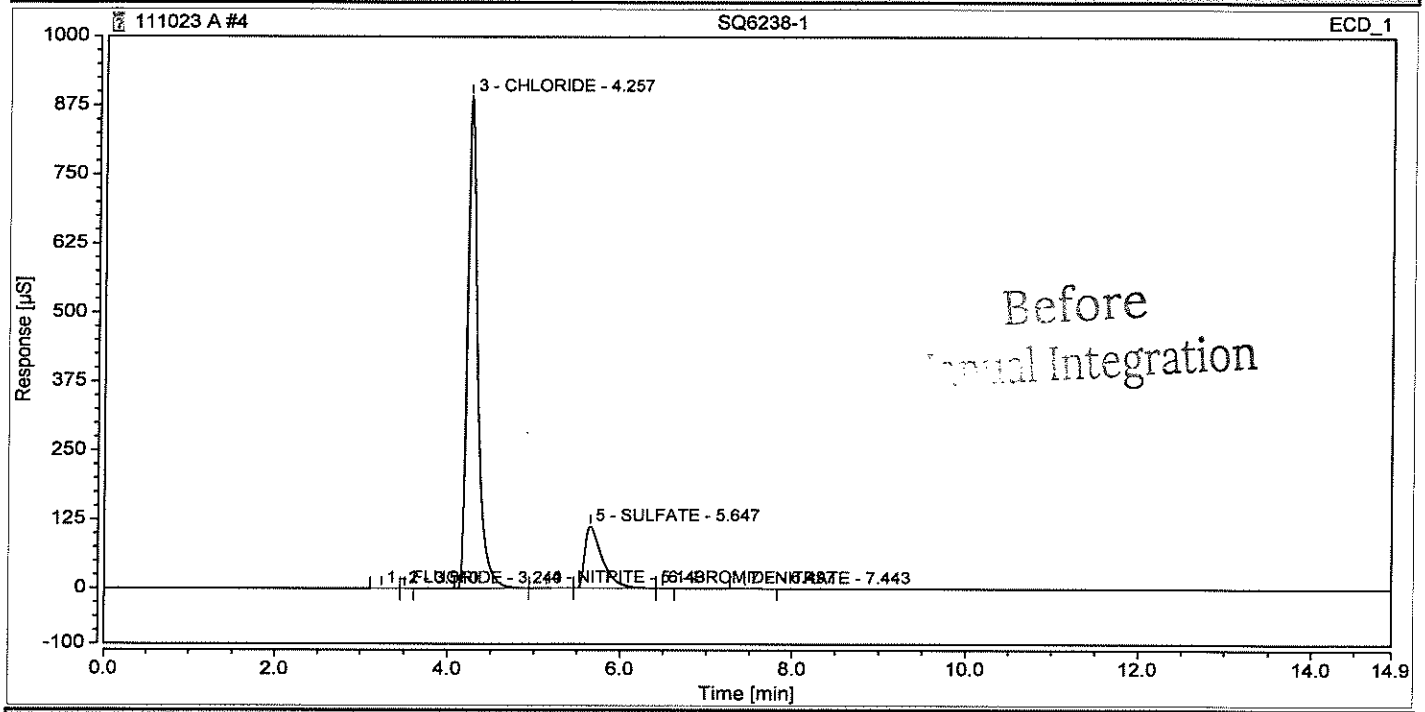
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.261	2.445	15.182	33.87	33.99	3.9478	5.2735
2	CHLORIDE	4.267	1.409	10.872	19.52	24.34	3.6160	-3.5745
3	NITRITE	4.961	0.966	6.103	13.38	13.66	1.1425	0.2173
4	SULFATE	5.791	1.043	5.252	14.45	11.76	3.6689	-2.1637
5	BROMIDE	6.491	0.569	3.376	7.88	7.56	3.3467	-10.7558
6	NITRATE	7.454	0.787	3.881	10.90	8.69	0.8043	-4.8194
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**7.219**	**44.667**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6238-1**	*Run Time (min):*	**14.95**
Vial Number:	**4**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**10/Nov/23 17:03**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

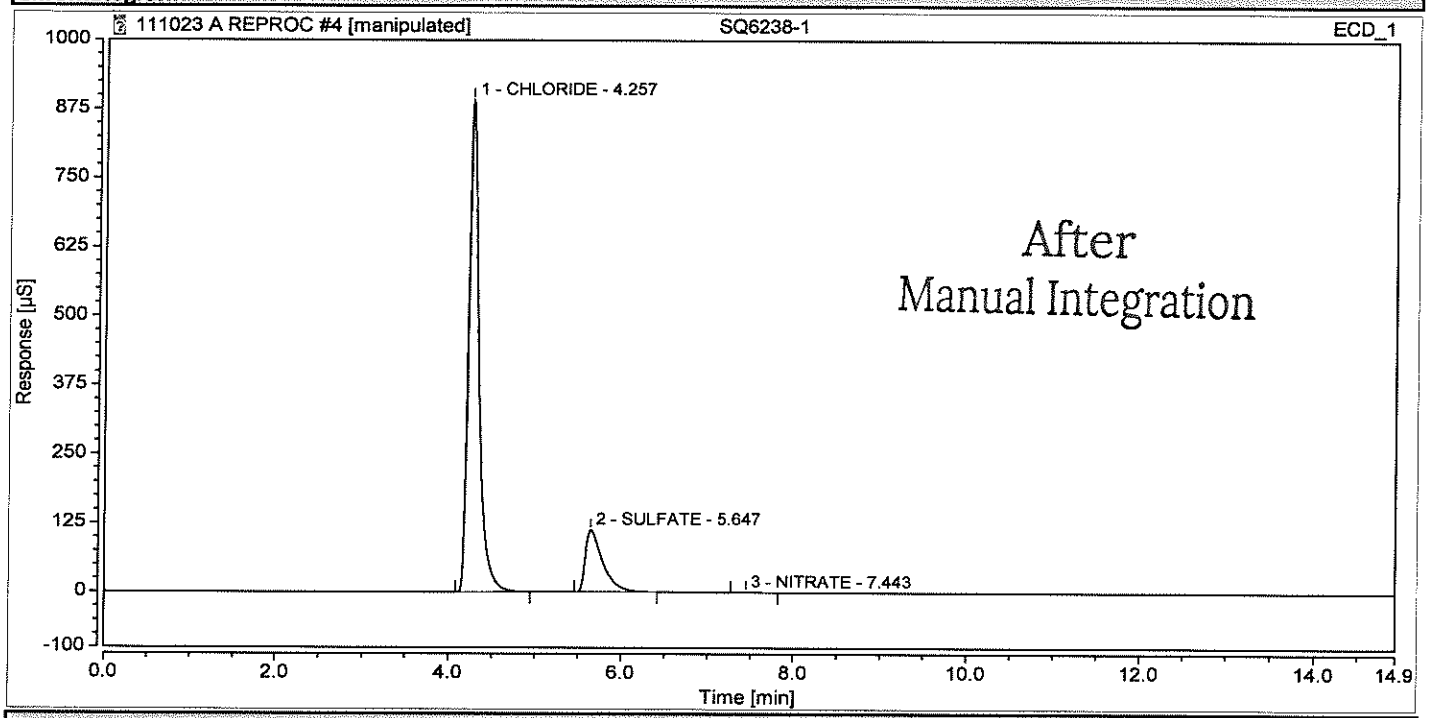
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.240	0.061	0.473	0.04	0.05	0.1121	n.a.
2		3.510	0.001	0.010	0.00	0.00	n.a.	n.a.
3	CHLORIDE	4.257	123.776	891.586	82.57	88.75	317.5794	n.a.
4	NITRITE	5.143	0.125	0.452	0.08	0.05	0.1536	n.a.
5	SULFATE	5.647	25.927	111.964	17.30	11.15	91.2014	n.a.
6	BROMIDE	6.497	0.004	0.040	0.00	0.00	0.0250	n.a.
7	NITRATE	7.443	0.011	0.057	0.01	0.01	0.0111	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**149.903**	**1004.582**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6238-1**	*Run Time (min):*	**14.95**
Vial Number:	**4**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**10/Nov/23 17:03**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

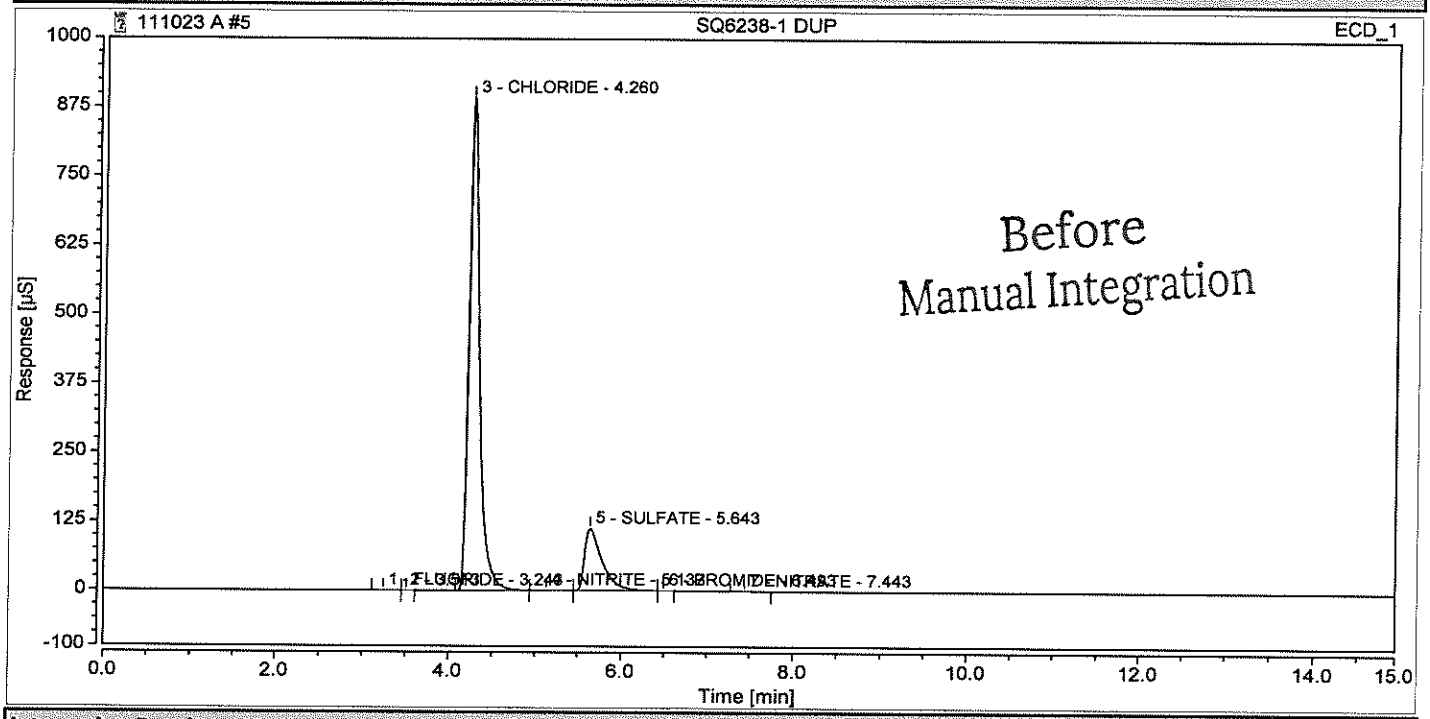
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.257	123.776	891.586	82.68	88.84	317.5794	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2	SULFATE	5.647	25.927	111.964	17.32	11.16	91.2014	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
3	NITRATE	7.443	0.011	0.057	0.01	0.01	0.0111	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**149.713**	**1003.607**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6238-1 DUP**	*Run Time (min):*	**14.95**
Vial Number:	**5**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**10/Nov/23 17:21**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

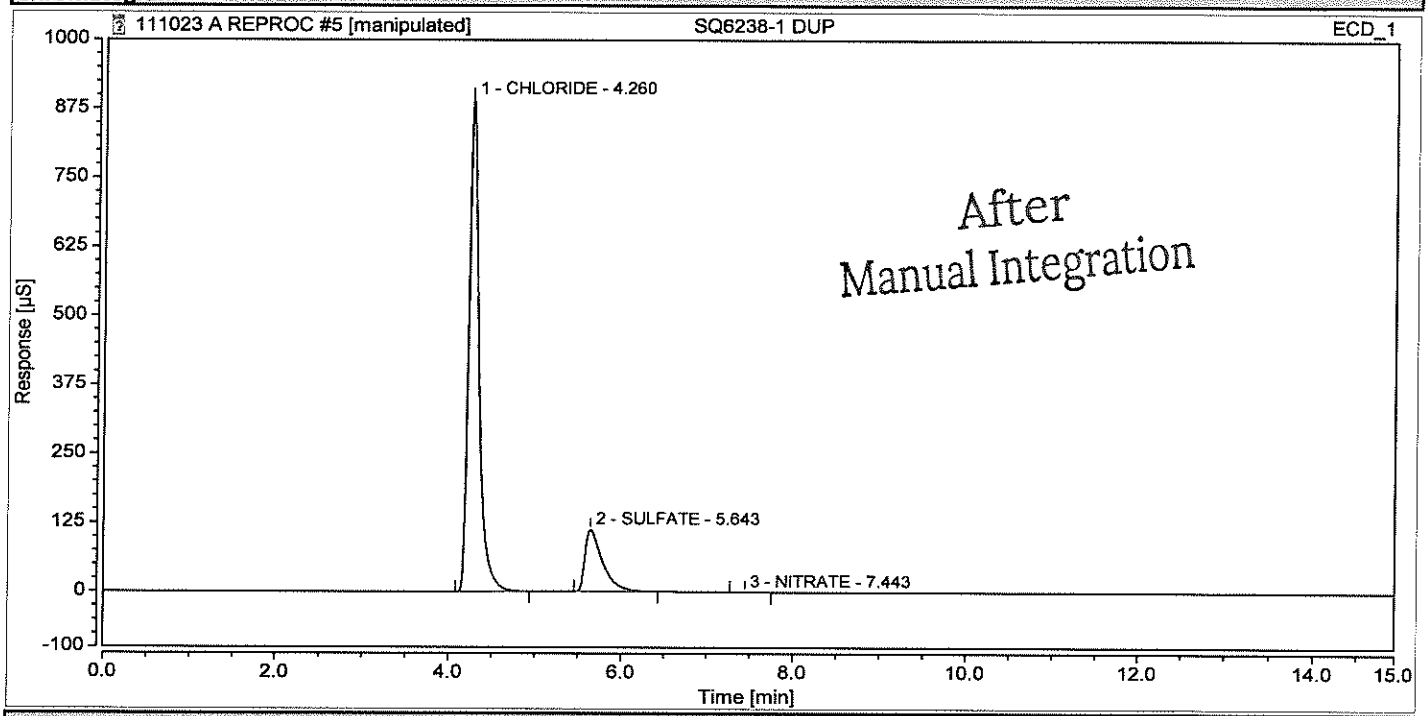
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.243	0.058	0.459	0.04	0.05	0.1077	n.a.
2		3.513	0.001	0.010	0.00	0.00	n.a.	n.a.
3	CHLORIDE	4.260	123.691	892.280	82.51	88.76	317.3627	n.a.
4	NITRITE	5.137	0.122	0.440	0.08	0.04	0.1500	n.a.
5	SULFATE	5.643	26.025	111.955	17.36	11.14	91.5468	n.a.
6	BROMIDE	6.493	0.004	0.039	0.00	0.00	0.0229	n.a.
7	NITRATE	7.443	0.011	0.059	0.01	0.01	0.0116	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**149.911**	**1005.242**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6238-1 DUP**	*Run Time (min):*	**14.95**
Vial Number:	**5**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**10/Nov/23 17:21**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

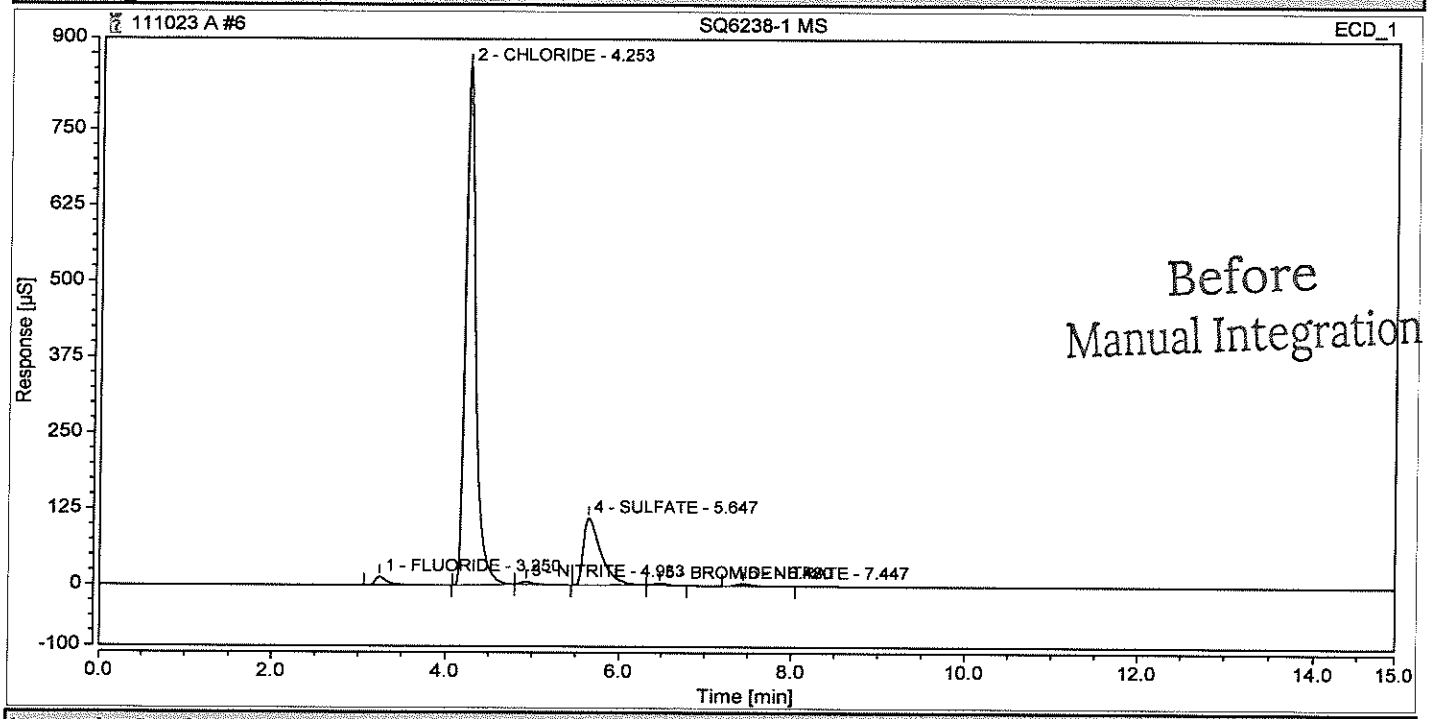
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.260	123.691	892.280	82.61	88.85	317.3627	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2	SULFATE	5.643	26.025	111.955	17.38	11.15	91.5468	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
3	NITRATE	7.443	0.011	0.059	0.01	0.01	0.0116	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**149.727**	**1004.294**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6238-1 MS**	*Run Time (min):*	**14.95**
Vial Number:	**6**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**10/Nov/23 17:38**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

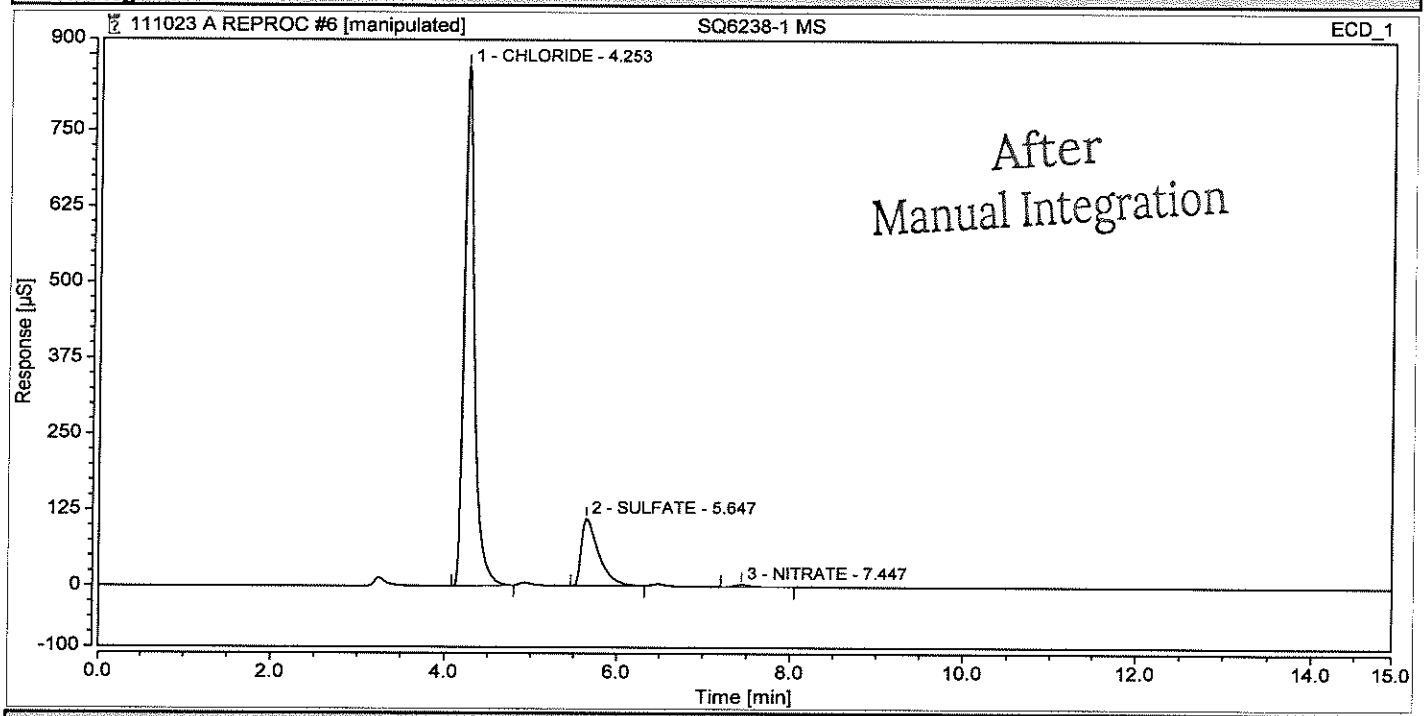
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.250	2.390	14.266	1.61	1.44	3.8572	n.a.
2	CHLORIDE	4.253	118.473	855.396	79.80	86.25	303.9738	n.a.
3	NITRITE	4.933	0.805	4.884	0.54	0.49	0.9525	n.a.
4	SULFATE	5.647	25.571	110.428	17.22	11.13	89.9500	n.a.
5	BROMIDE	6.480	0.499	3.123	0.34	0.31	2.9350	n.a.
6	NITRATE	7.447	0.723	3.708	0.49	0.37	0.7392	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**148.461**	**991.805**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6238-1 MS**	*Run Time (min):*	**14.95**
Vial Number:	**6**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**10/Nov/23 17:38**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

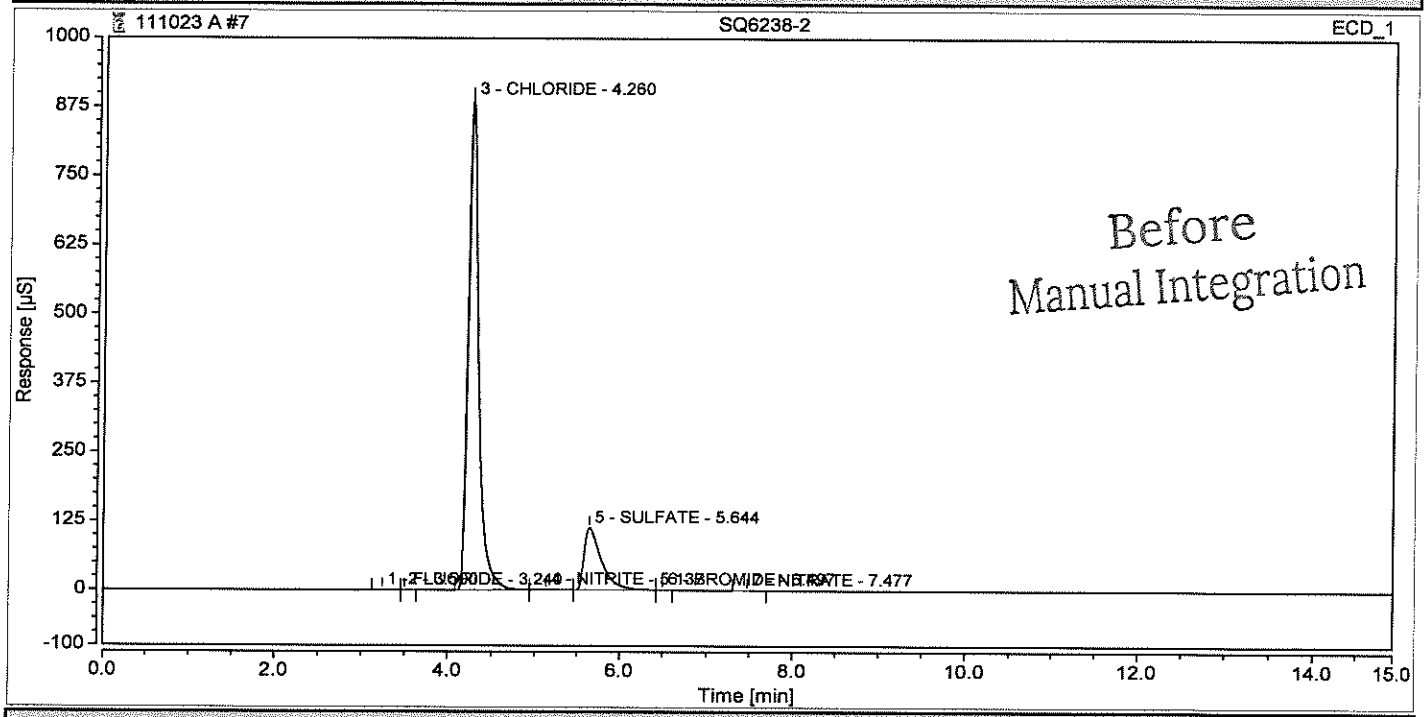
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.253	118.473	855.396	81.84	88.23	303.9738	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2	SULFATE	5.647	25.571	110.428	17.66	11.39	89.9500	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
3	NITRATE	7.447	0.723	3.708	0.50	0.38	0.7392	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**144.767**	**969.532**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6238-2**	*Run Time (min):*	**14.95**
Vial Number:	**7**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**10/Nov/23 17:55**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

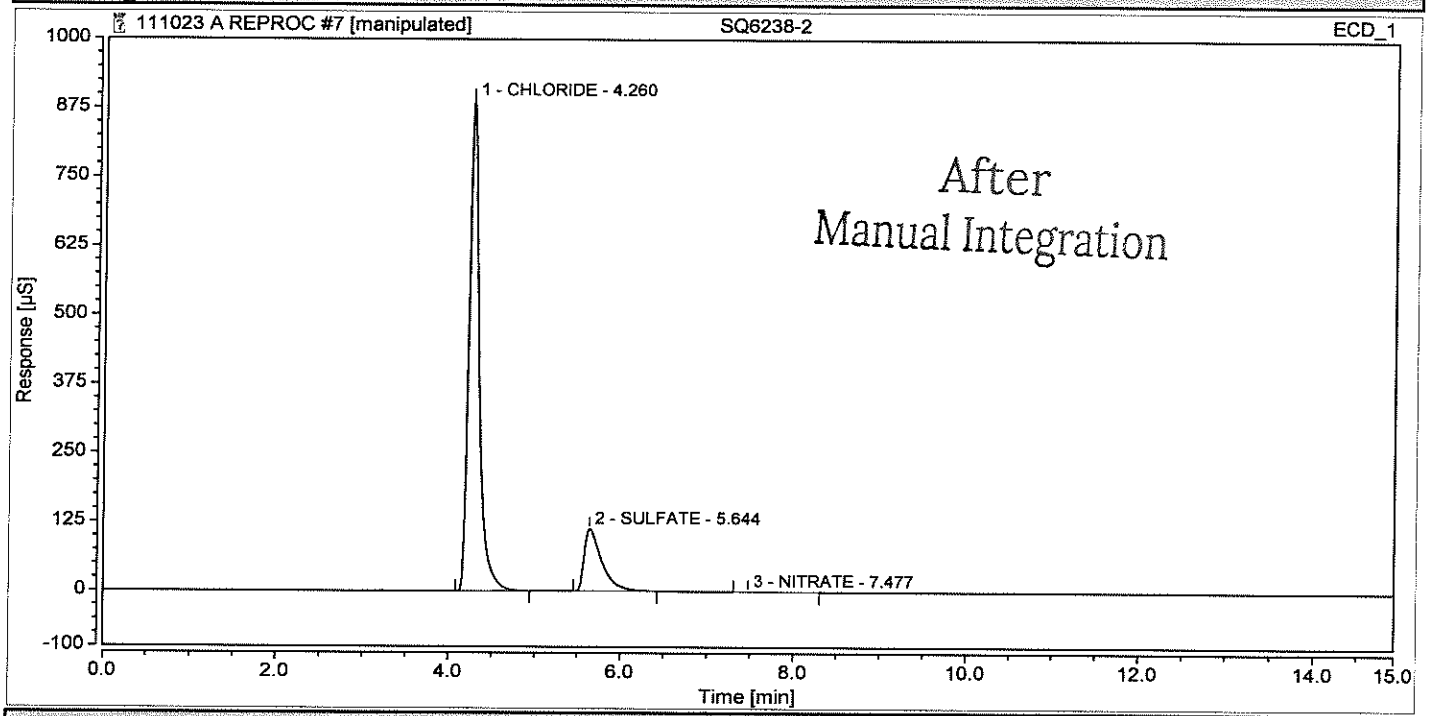
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.240	0.064	0.510	0.04	0.05	0.1169	n.a.
2		3.500	0.002	0.025	0.00	0.00	n.a.	n.a.
3	CHLORIDE	4.260	123.331	888.524	82.32	88.67	316.4386	n.a.
4	NITRITE	5.137	0.118	0.435	0.08	0.04	0.1459	n.a.
5	SULFATE	5.644	26.305	112.490	17.56	11.23	92.5312	n.a.
6	BROMIDE	6.497	0.004	0.036	0.00	0.00	0.0208	n.a.
7	NITRATE	7.477	0.004	0.022	0.00	0.00	0.0037	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**149.827**	**1002.043**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6238-2**	*Run Time (min):*	**14.95**
Vial Number:	**7**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**10/Nov/23 17:55**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

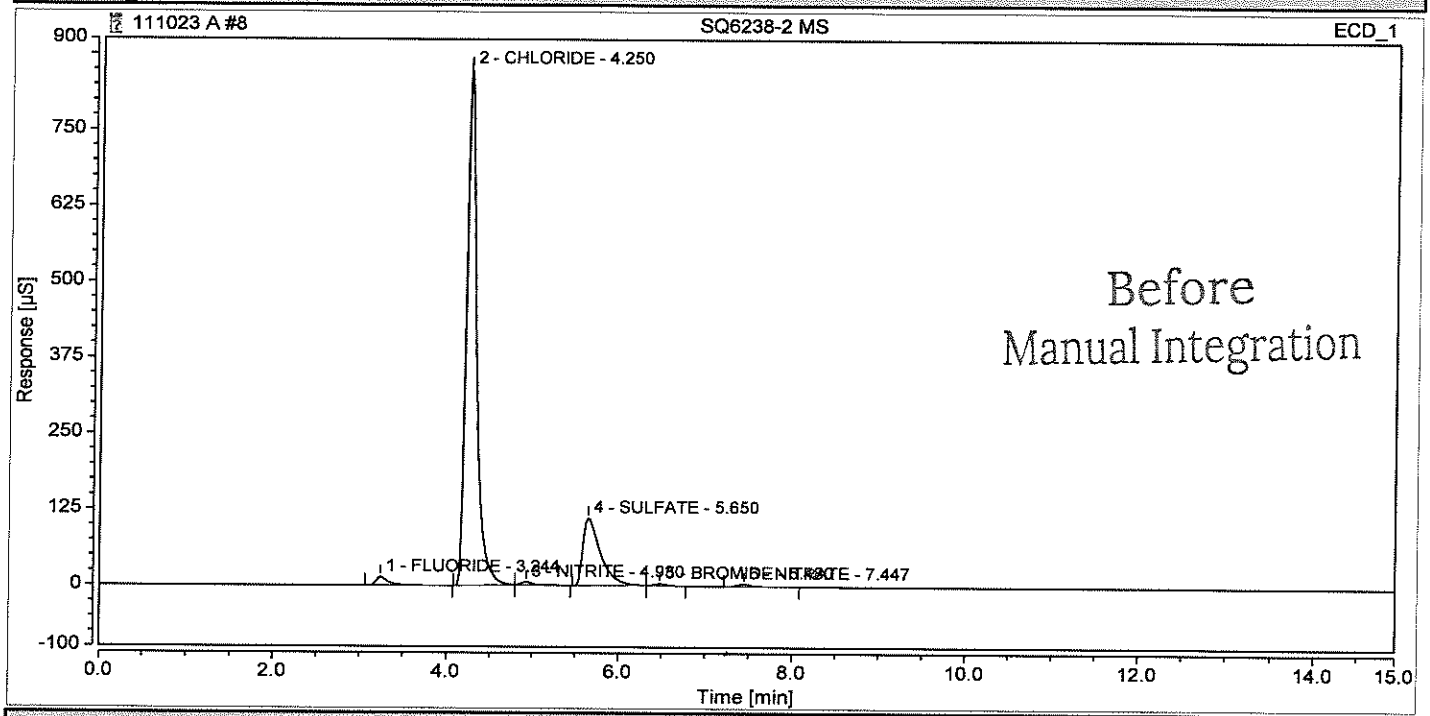
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.260	123.331	888.524	82.42	88.76	316.4386	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2	SULFATE	5.644	26.305	112.490	17.58	11.24	92.5312	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
3	NITRATE	7.477	0.004	0.018	0.00	0.00	0.0042	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**149.640**	**1001.032**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6238-2 MS**	*Run Time (min):*	**14.95**
Vial Number:	**8**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**10/Nov/23 18:12**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

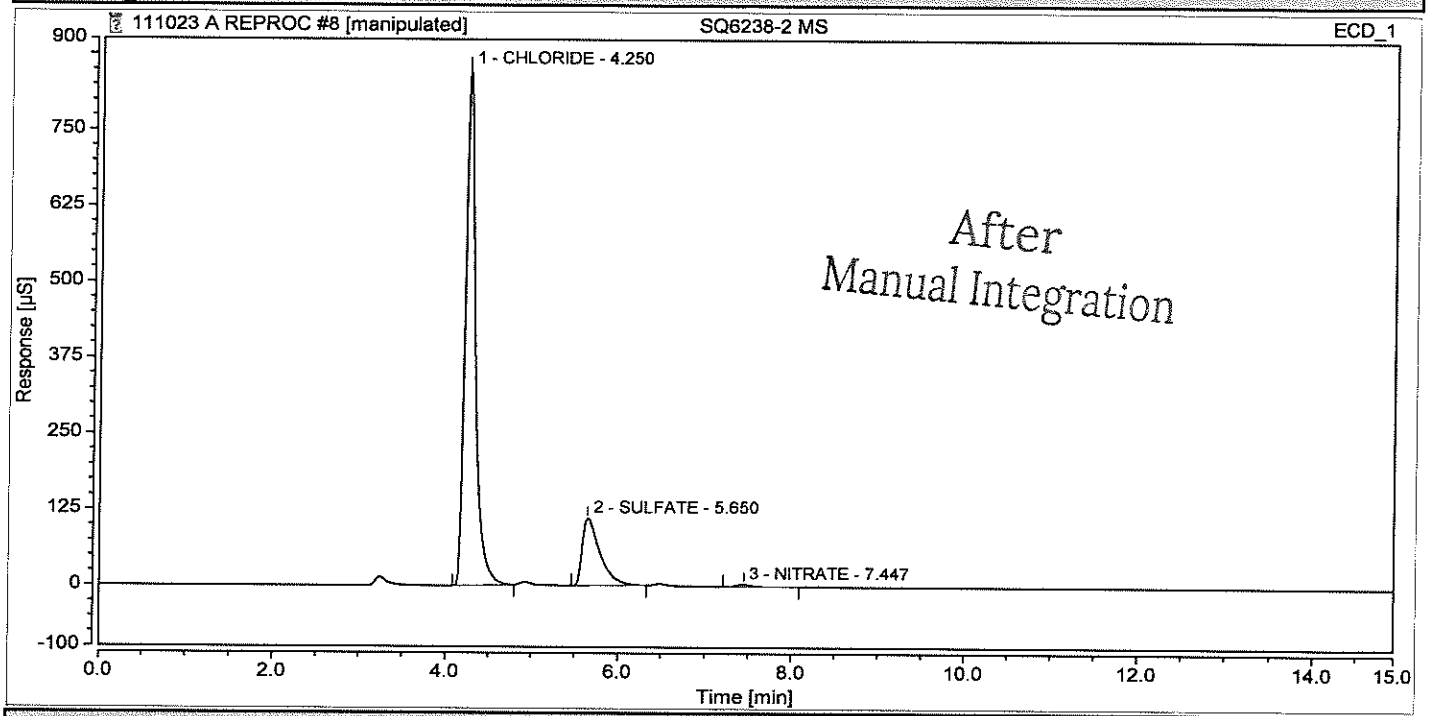
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.244	2.405	14.518	1.62	1.47	3.8822	n.a.
2	CHLORIDE	4.250	118.260	851.059	79.59	86.10	303.4268	n.a.
3	NITRITE	4.930	0.778	4.814	0.52	0.49	0.9203	n.a.
4	SULFATE	5.650	25.886	111.025	17.42	11.23	91.0600	n.a.
5	BROMIDE	6.480	0.487	3.081	0.33	0.31	2.8640	n.a.
6	NITRATE	7.447	0.772	3.943	0.52	0.40	0.7886	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**148.588**	**988.439**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6238-2 MS**	*Run Time (min):*	**14.95**
Vial Number:	**8**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**10/Nov/23 18:12**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

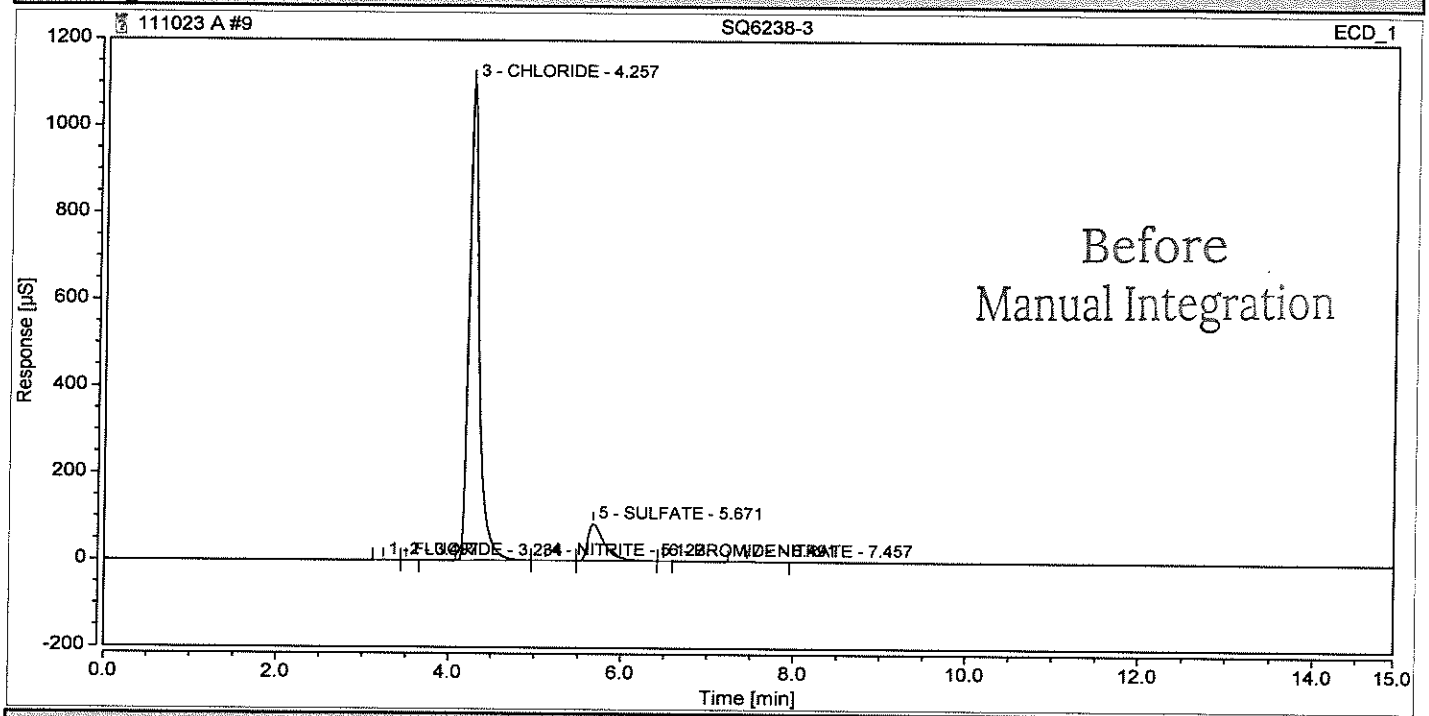
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.250	118.260	851.059	81.60	88.10	303.4268	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2	SULFATE	5.650	25.886	111.025	17.86	11.49	91.0600	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
3	NITRATE	7.447	0.772	3.943	0.53	0.41	0.7886	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**144.918**	**966.027**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6238-3**	*Run Time (min):*	**14.95**
Vial Number:	**9**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**10/Nov/23 18:30**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

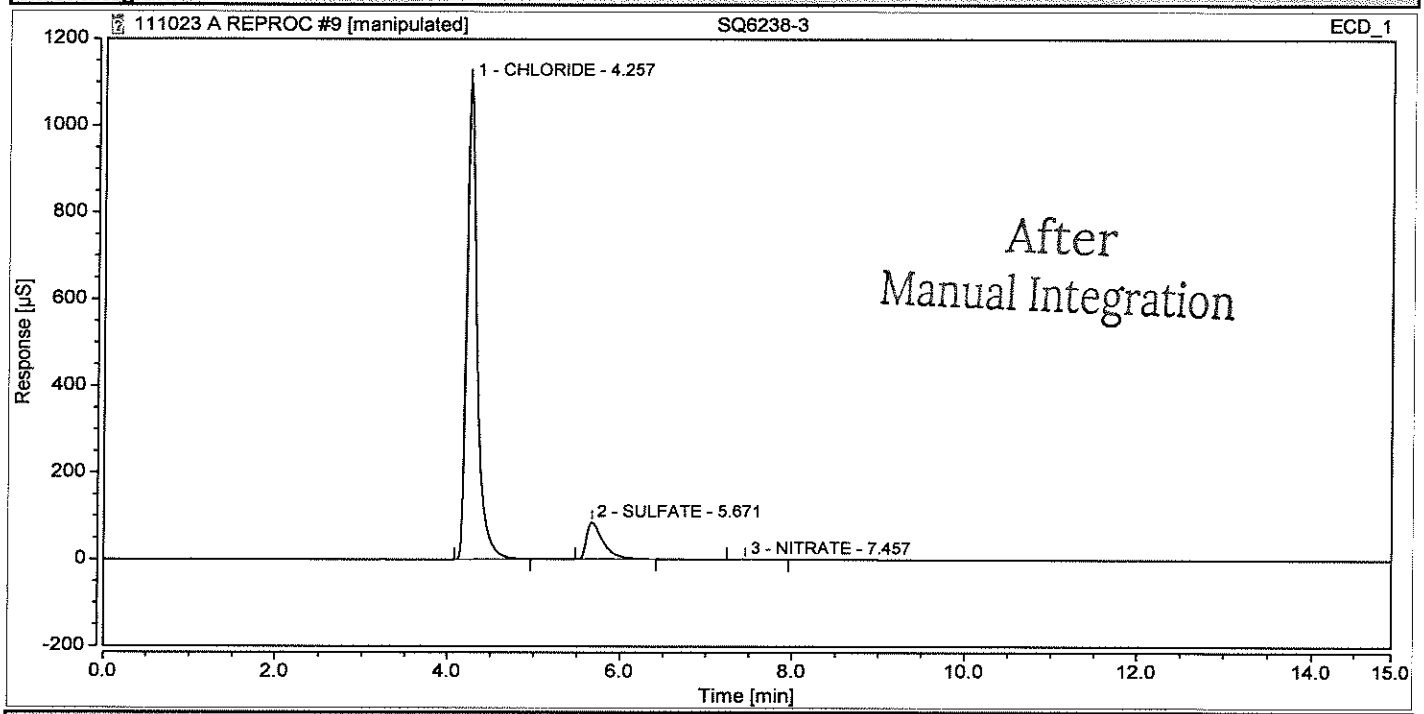
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.234	0.041	0.323	0.02	0.03	0.0808	n.a.
2		3.497	0.003	0.033	0.00	0.00	n.a.	n.a.
3	CHLORIDE	4.257	154.070	1104.208	88.90	92.72	395.3080	n.a.
4	NITRITE	5.127	0.101	0.371	0.06	0.03	0.1259	n.a.
5	SULFATE	5.671	18.931	85.111	10.92	7.15	66.5919	n.a.
6	BROMIDE	6.491	0.002	0.023	0.00	0.00	0.0116	n.a.
7	NITRATE	7.457	0.156	0.805	0.09	0.07	0.1590	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**173.303**	**1190.874**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6238-3**	*Run Time (min):*	**14.95**
Vial Number:	**9**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**10/Nov/23 18:30**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

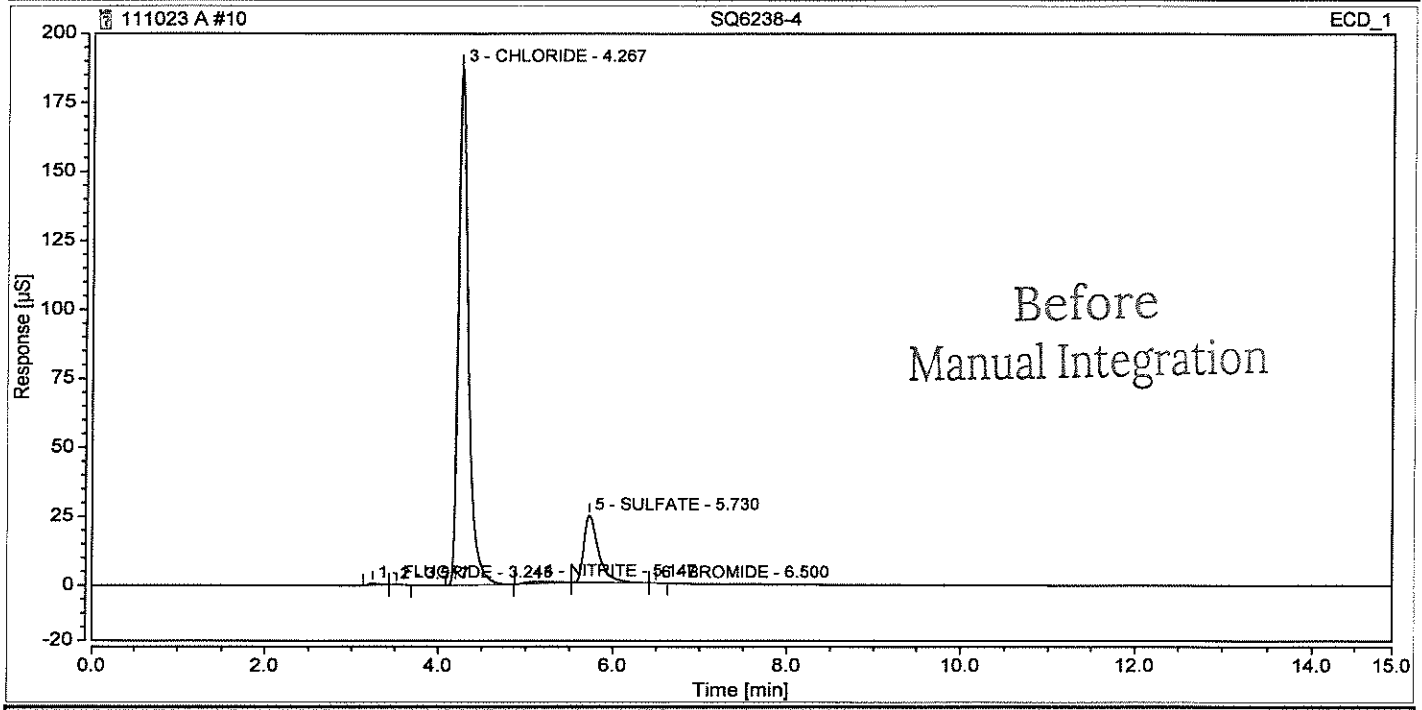
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.257	154.070	1104.208	88.98	92.78	395.3080	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2	SULFATE	5.671	18.931	85.111	10.93	7.15	66.5919	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
3	NITRATE	7.457	0.156	0.805	0.09	0.07	0.1590	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**173.156**	**1190.124**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6238-4**	*Run Time (min):*	**14.95**
Vial Number:	**10**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**10/Nov/23 18:47**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

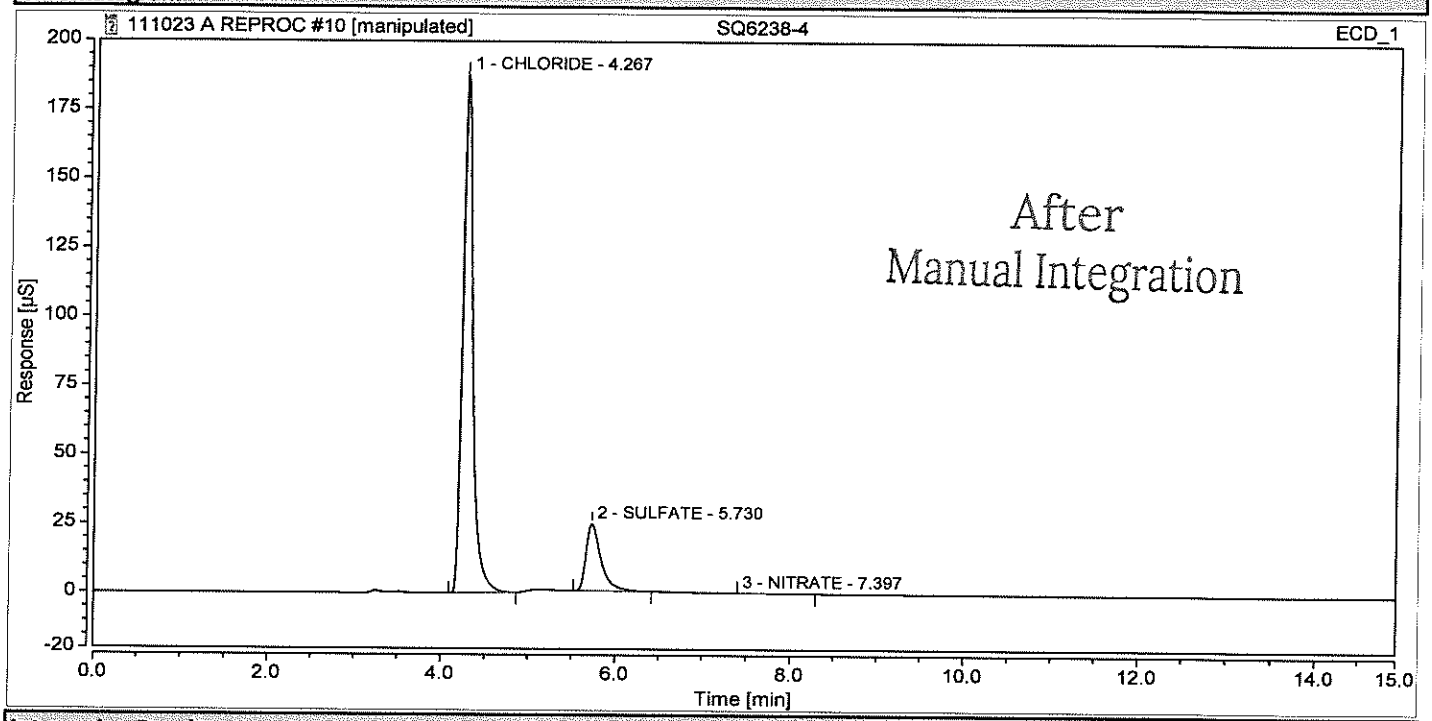
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.243	0.099	0.825	0.32	0.39	0.1728	n.a.
2		3.517	0.028	0.284	0.09	0.13	n.a.	n.a.
3	CHLORIDE	4.267	25.383	187.872	83.01	87.70	65.1276	n.a.
4	NITRITE	5.147	0.270	0.773	0.88	0.36	0.3230	n.a.
5	SULFATE	5.730	4.796	24.438	15.69	11.41	16.8725	n.a.
6	BROMIDE	6.500	0.002	0.021	0.01	0.01	0.0136	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**30.579**	**214.213**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6238-4**	*Run Time (min):*	**14.95**
Vial Number:	**10**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**10/Nov/23 18:47**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

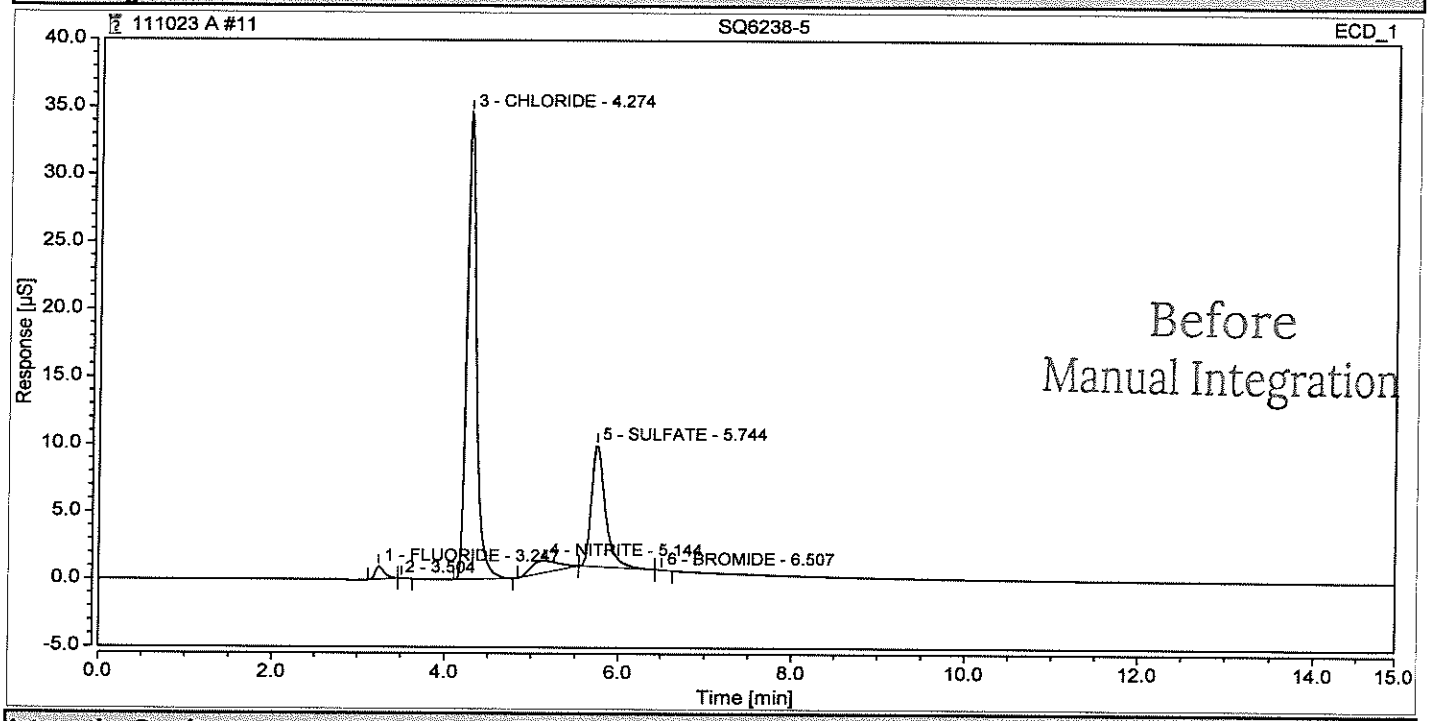
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.267	25.383	187.872	84.09	88.49	65.1276	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2	SULFATE	5.730	4.796	24.438	15.89	11.51	16.8725	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
3	NITRATE	7.397	0.005	0.000	0.02	0.00	0.0047	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**30.184**	**212.310**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6238-5**	*Run Time (min):*	**14.95**
Vial Number:	**11**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**10/Nov/23 19:04**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

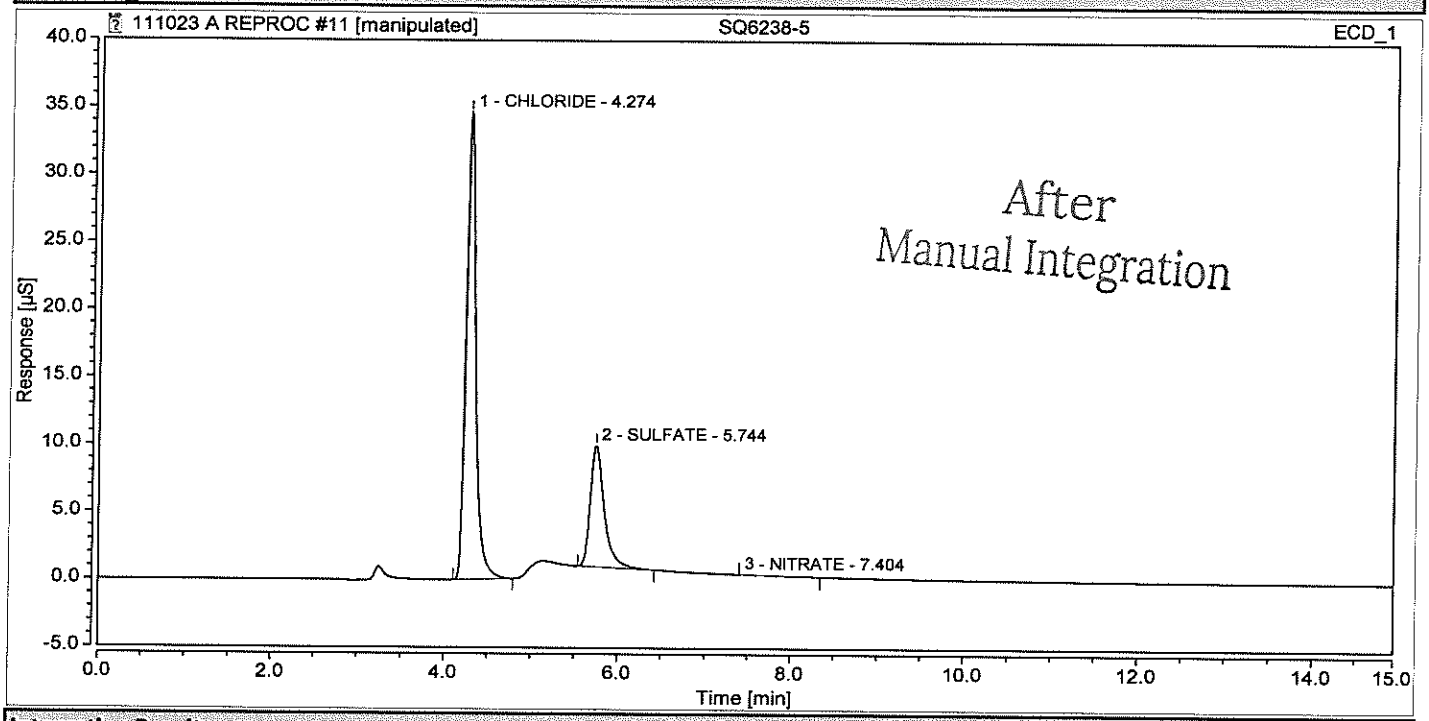
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.247	0.115	0.959	1.73	2.11	0.1971	n.a.
2		3.504	0.002	0.022	0.03	0.05	n.a.	n.a.
3	CHLORIDE	4.274	4.488	34.656	67.80	76.10	11.5150	n.a.
4	NITRITE	5.144	0.330	0.888	4.98	1.95	0.3933	n.a.
5	SULFATE	5.744	1.684	9.009	25.44	19.78	5.9226	n.a.
6	BROMIDE	6.507	0.001	0.009	0.01	0.02	0.0055	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**6.619**	**45.543**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6238-5**	*Run Time (min):*	**14.95**
Vial Number:	**11**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**10/Nov/23 19:04**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

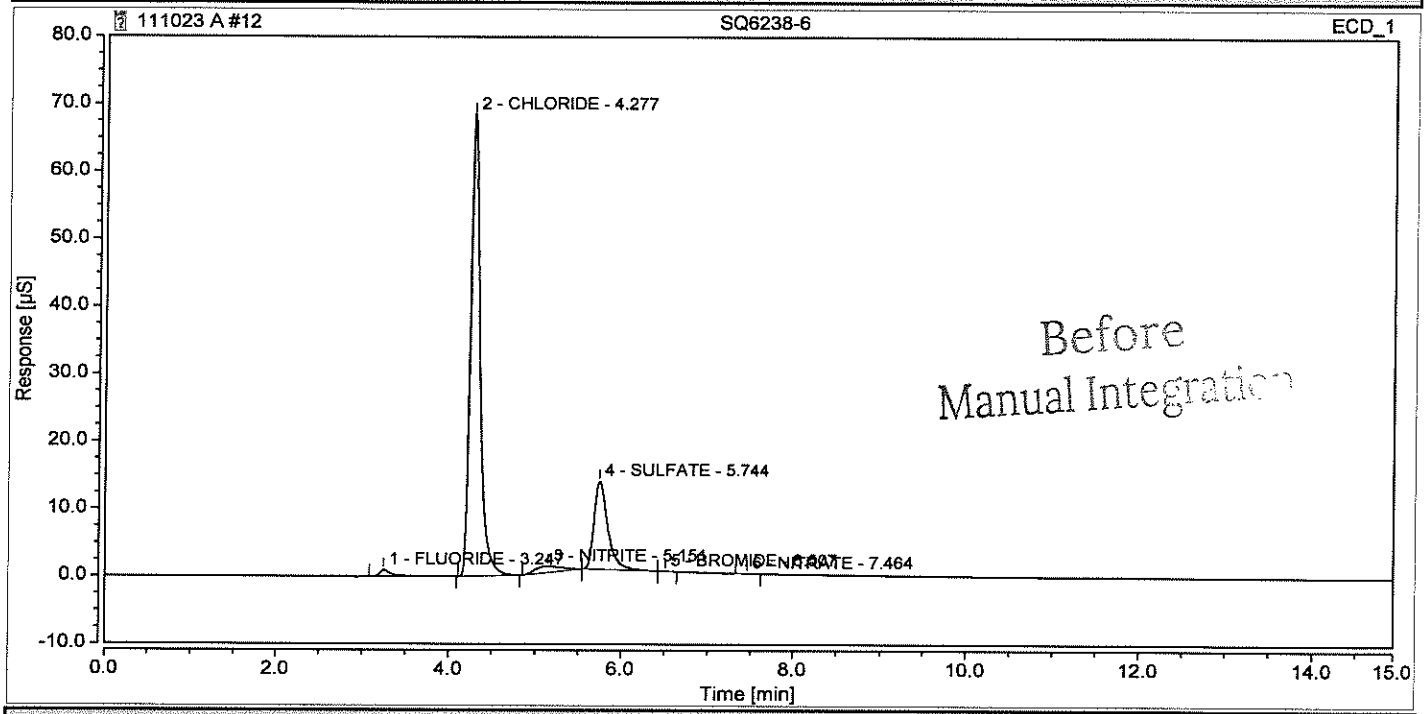
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.274	4.488	34.656	72.66	79.37	11.5150	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2	SULFATE	5.744	1.684	9.009	27.26	20.63	5.9226	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
3	NITRATE	7.404	0.005	0.000	0.08	0.00	0.0048	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**6.176**	**43.664**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6238-6**	*Run Time (min):*	**14.95**
Vial Number:	**12**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**10/Nov/23 19:21**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

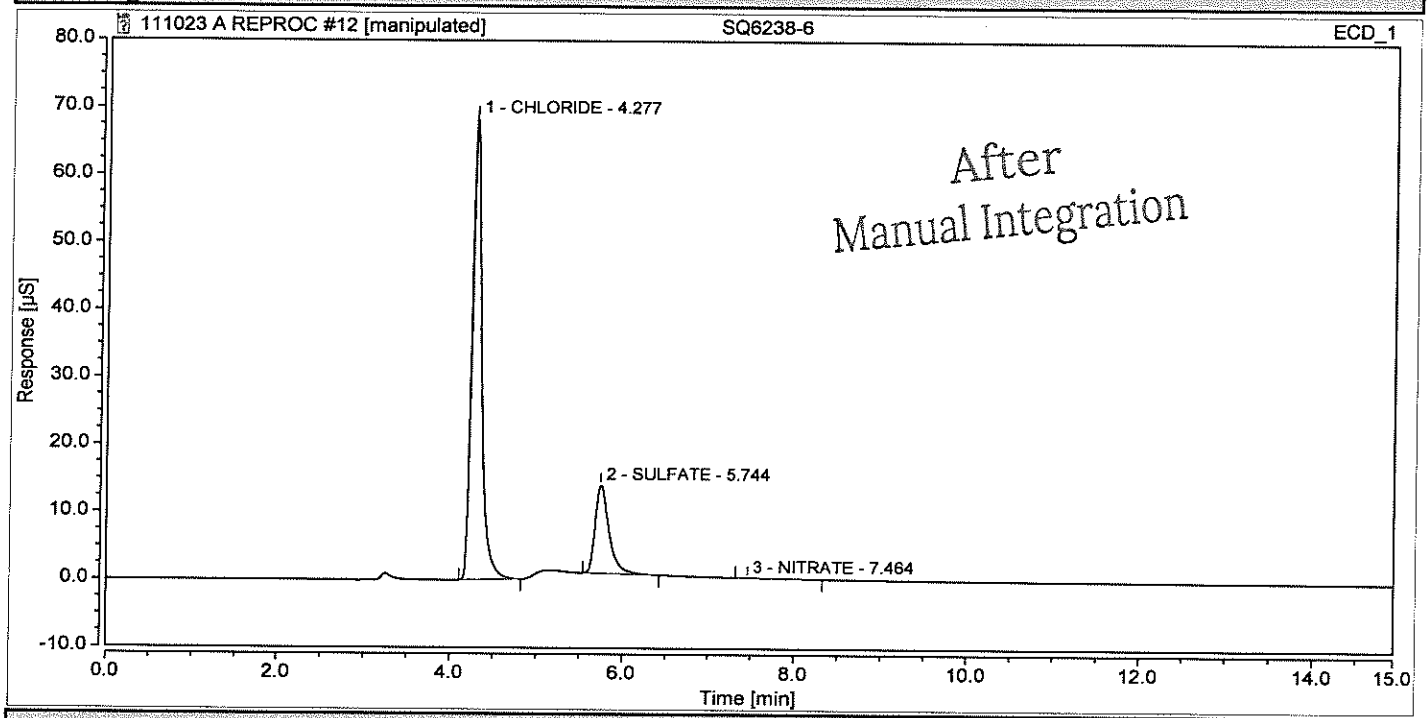
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.247	0.161	1.022	1.35	1.22	0.2698	n.a.
2	CHLORIDE	4.277	8.952	68.444	75.21	81.98	22.9683	n.a.
3	NITRITE	5.151	0.342	0.910	2.87	1.09	0.4073	n.a.
4	SULFATE	5.744	2.447	13.099	20.56	15.69	8.6068	n.a.
5	BROMIDE	6.507	0.001	0.012	0.01	0.01	0.0075	n.a.
6	NITRATE	7.464	0.000	0.003	0.00	0.00	0.0004	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**11.903**	**83.489**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6238-6**	*Run Time (min):*	**14.95**
Vial Number:	**12**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**10/Nov/23 19:21**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

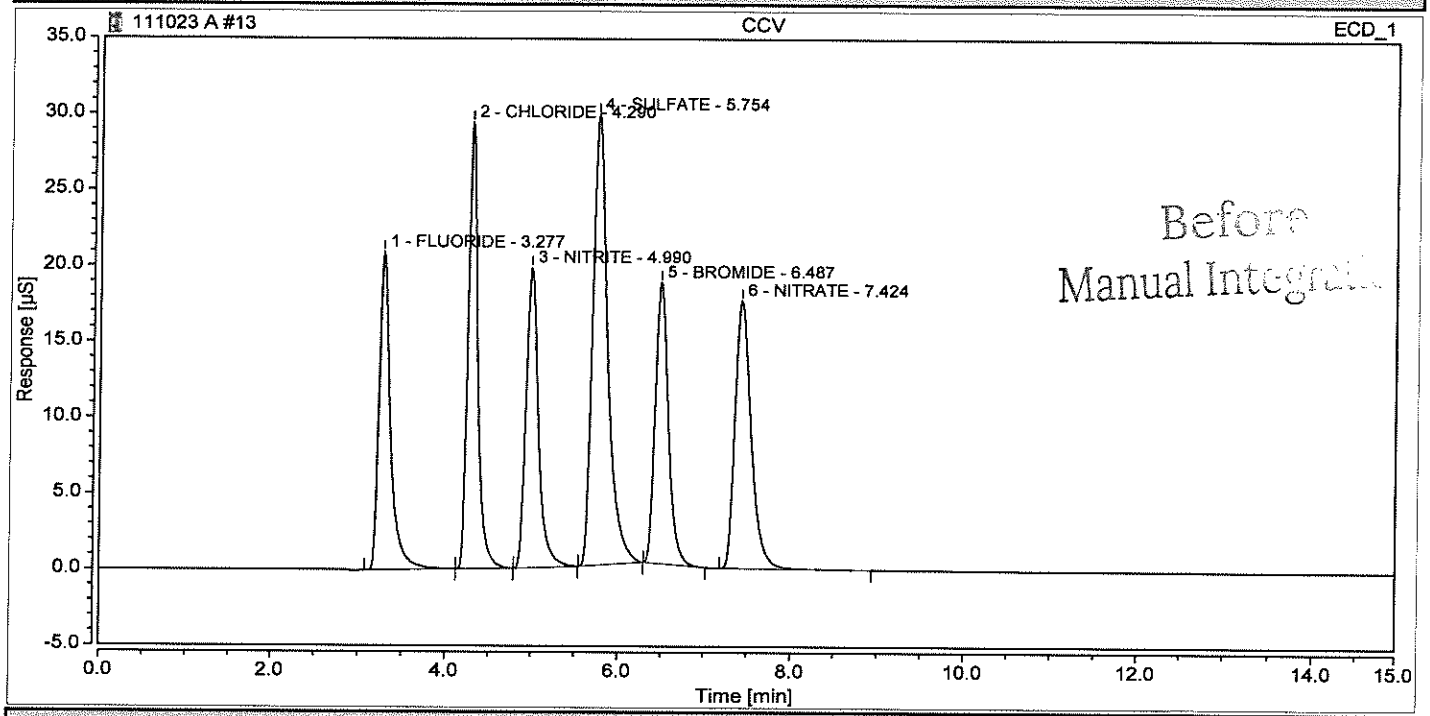
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.277	8.952	68.444	78.50	83.94	22.9683	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2	SULFATE	5.744	2.447	13.099	21.46	16.06	8.6068	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
3	NITRATE	7.464	0.005	0.000	0.05	0.00	0.0056	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**11.404**	**81.543**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**CCV**	*Run Time (min):*	**14.97**
Vial Number:	**13**	*Injection Volume:*	**200.00**
Injection Type:	**Check Standard**	*Channel:*	**ECD_1**
Calibration Level:	**06**	*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**10/Nov/23 19:39**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

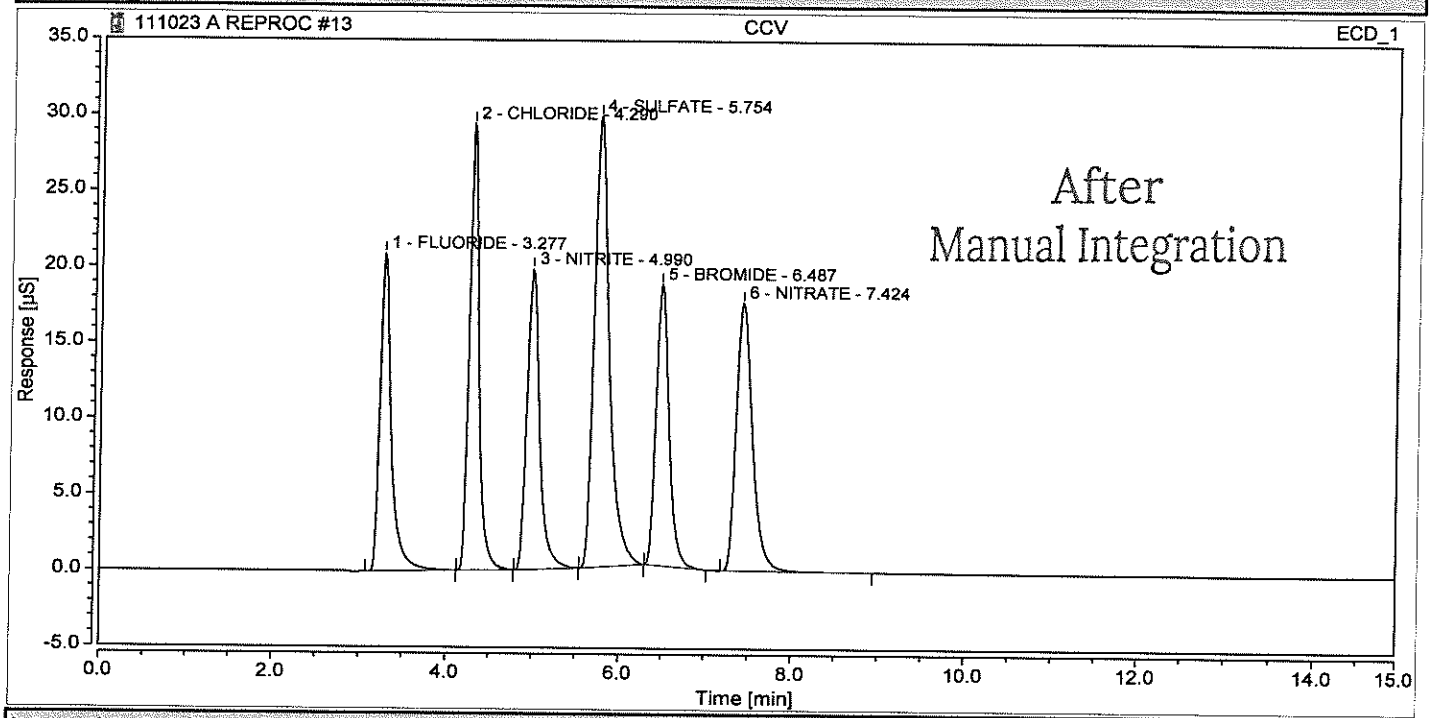
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.277	3.186	20.918	13.56	15.40	5.1768	3.5369
2	CHLORIDE	4.290	3.857	29.387	16.41	21.63	9.8956	-1.0443
3	NITRITE	4.990	3.364	19.769	14.31	14.55	4.0534	1.3355
4	SULFATE	5.754	5.979	29.651	25.44	21.83	21.0306	5.1530
5	BROMIDE	6.487	3.290	18.510	14.00	13.62	19.3533	-3.2336
6	NITRATE	7.424	3.823	17.619	16.27	12.97	3.9069	-2.3265
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**23.499**	**135.853**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**CCV**	*Run Time (min):*	**14.97**
Vial Number:	**13**	*Injection Volume:*	**200.00**
Injection Type:	**Check Standard**	*Channel:*	**ECD_1**
Calibration Level:	**06**	*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**10/Nov/23 19:39**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

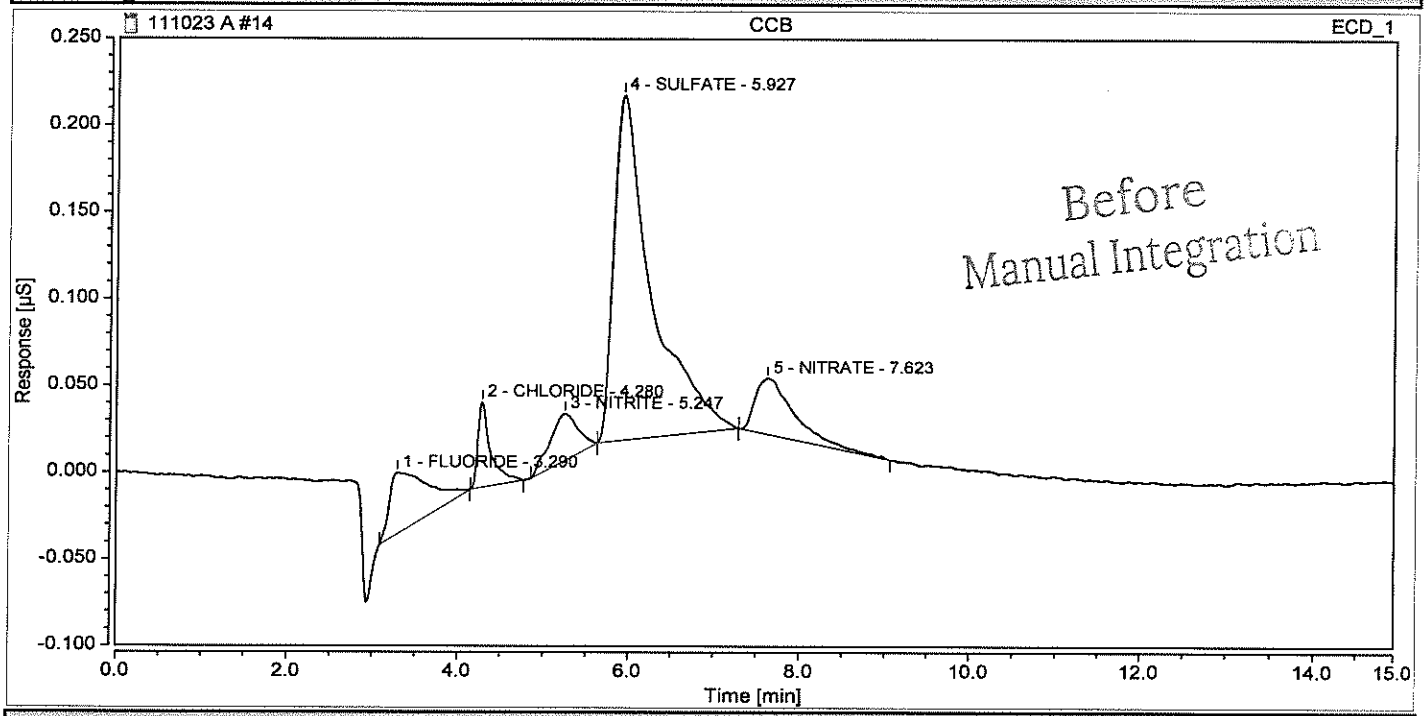
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.277	3.186	20.918	13.56	15.40	5.1768	3.5369
2	CHLORIDE	4.290	3.857	29.387	16.41	21.63	9.8956	-1.0443
3	NITRITE	4.990	3.364	19.769	14.31	14.55	4.0534	1.3355
4	SULFATE	5.754	5.979	29.651	25.44	21.83	21.0306	5.1530
5	BROMIDE	6.487	3.290	18.510	14.00	13.62	19.3533	-3.2336
6	NITRATE	7.424	3.823	17.619	16.27	12.97	3.9069	-2.3265
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**23.499**	**135.853**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**CCB**	*Run Time (min):*	**14.96**
Vial Number:	**14**	*Injection Volume:*	**200.00**
Injection Type:	**Blank**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**10/Nov/23 19:56**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

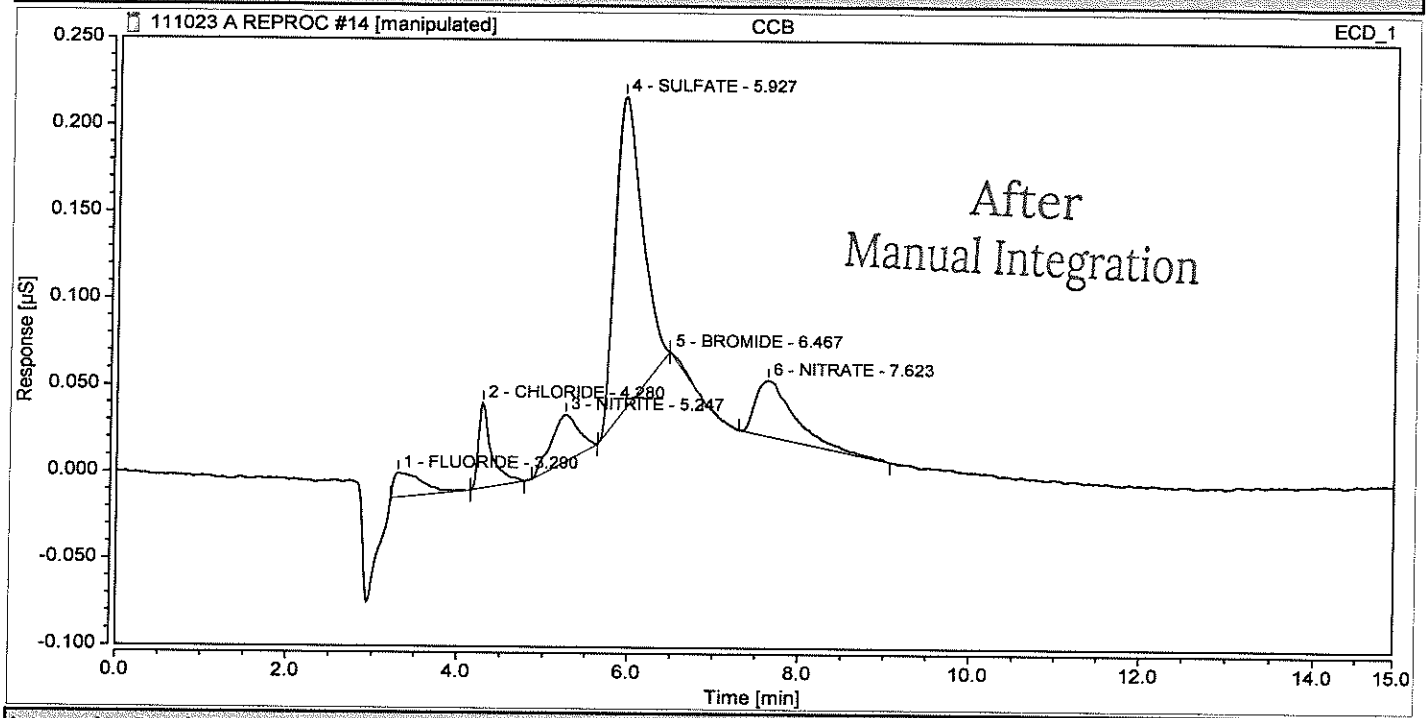
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.290	0.017	0.035	11.09	10.33	0.0440	n.a.
2	CHLORIDE	4.280	0.009	0.049	5.49	14.36	0.0221	n.a.
3	NITRITE	5.247	0.010	0.027	6.57	7.84	0.0202	n.a.
4	SULFATE	5.927	0.103	0.199	65.70	58.02	0.3622	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5	NITRATE	7.623	0.017	0.032	11.15	9.44	0.0179	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.157**	**0.343**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**CCB**	*Run Time (min):*	**14.96**
Vial Number:	**14**	*Injection Volume:*	**200.00**
Injection Type:	**Blank**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**10/Nov/23 19:56**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

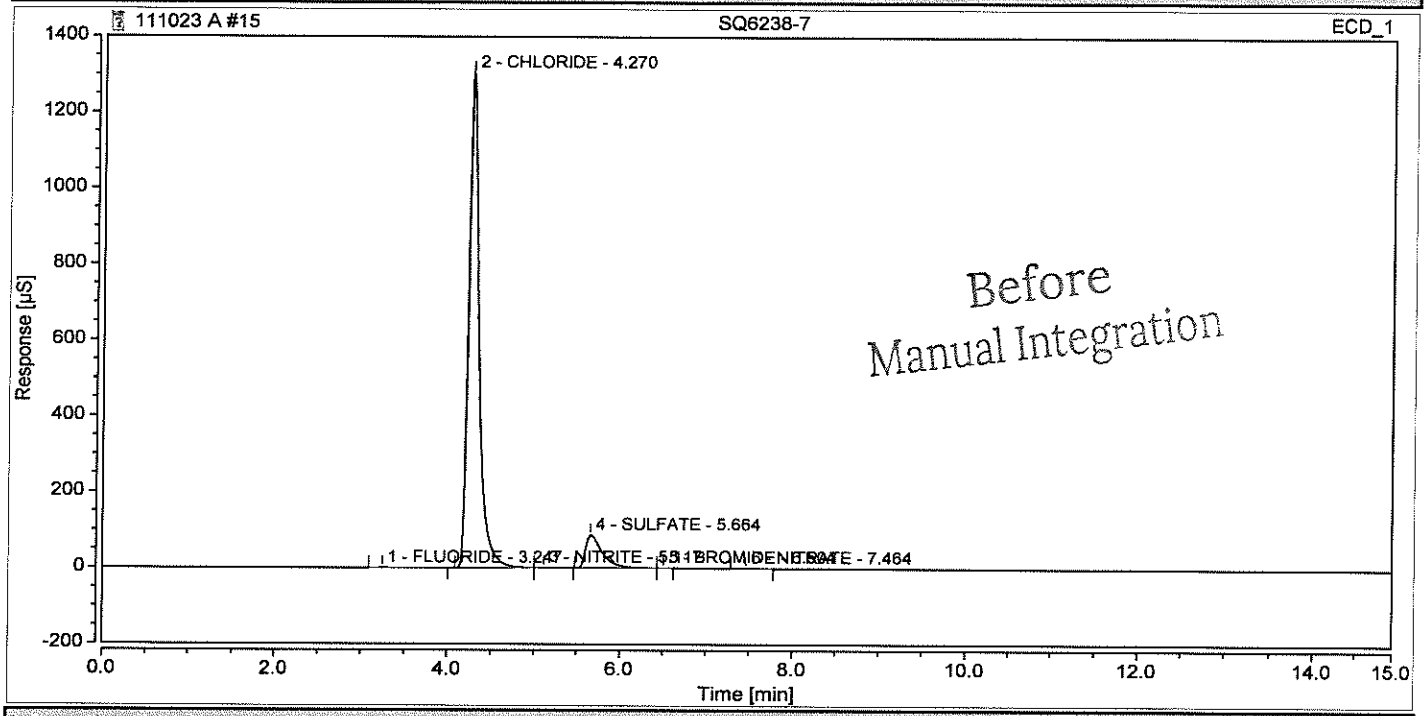
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.290	0.005	0.014	5.02	4.65	0.0251	n.a.
2	CHLORIDE	4.280	0.009	0.049	8.02	16.18	0.0221	n.a.
3	NITRITE	5.247	0.010	0.027	9.61	8.84	0.0202	n.a.
4	SULFATE	5.927	0.065	0.182	60.66	59.69	0.2288	n.a.
5	BROMIDE	6.467	0.000	0.000	0.38	0.00	0.0024	n.a.
6	NITRATE	7.623	0.017	0.032	16.31	10.63	0.0179	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.107**	**0.304**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6238-7**	*Run Time (min):*	**14.95**
Vial Number:	**15**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**10/Nov/23 20:13**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

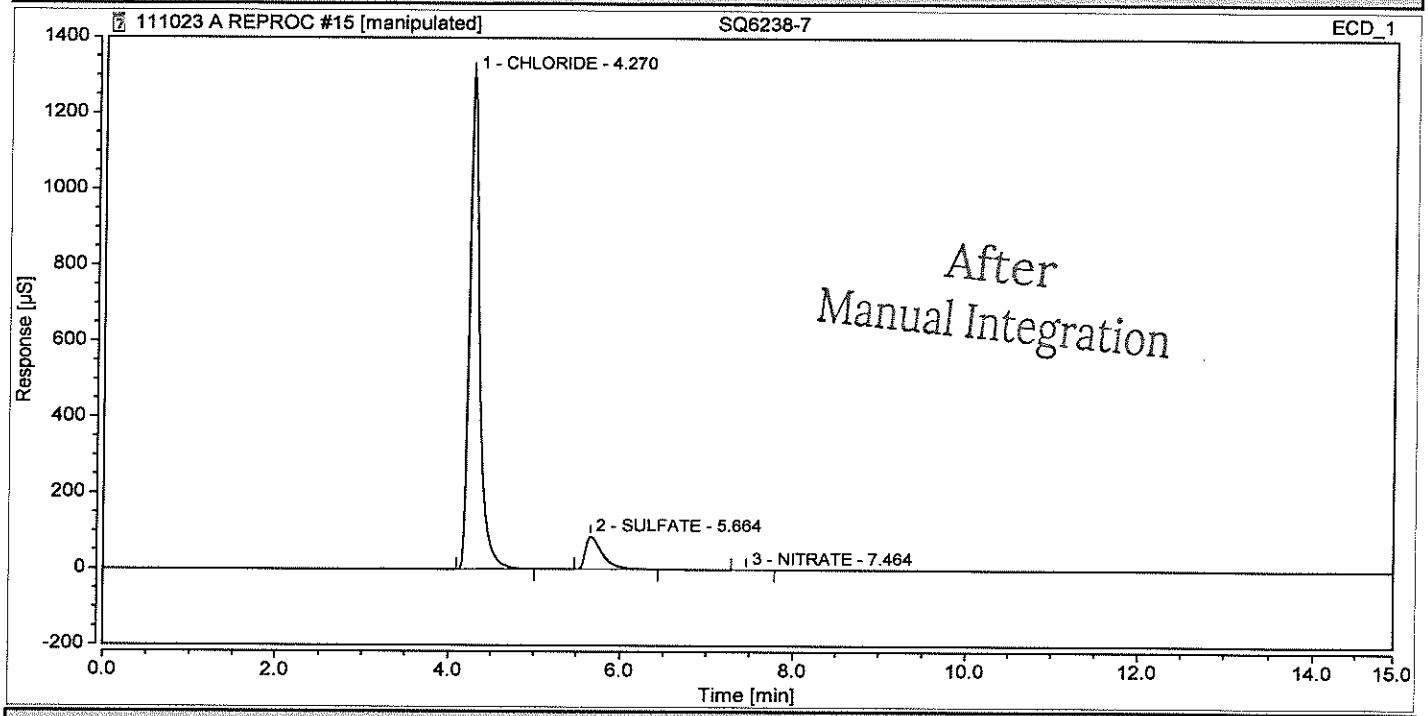
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.247	0.063	0.326	0.03	0.02	0.1150	n.a.
2	CHLORIDE	4.270	181.527	1304.695	90.35	93.73	465.7566	n.a.
3	NITRITE	5.117	0.051	0.210	0.03	0.02	0.0681	n.a.
4	SULFATE	5.664	19.252	86.679	9.58	6.23	67.7214	n.a.
5	BROMIDE	6.504	0.002	0.026	0.00	0.00	0.0146	n.a.
6	NITRATE	7.464	0.019	0.105	0.01	0.01	0.0197	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**200.915**	**1392.041**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6238-7**	*Run Time (min):*	**14.95**
Vial Number:	**15**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**10/Nov/23 20:13**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

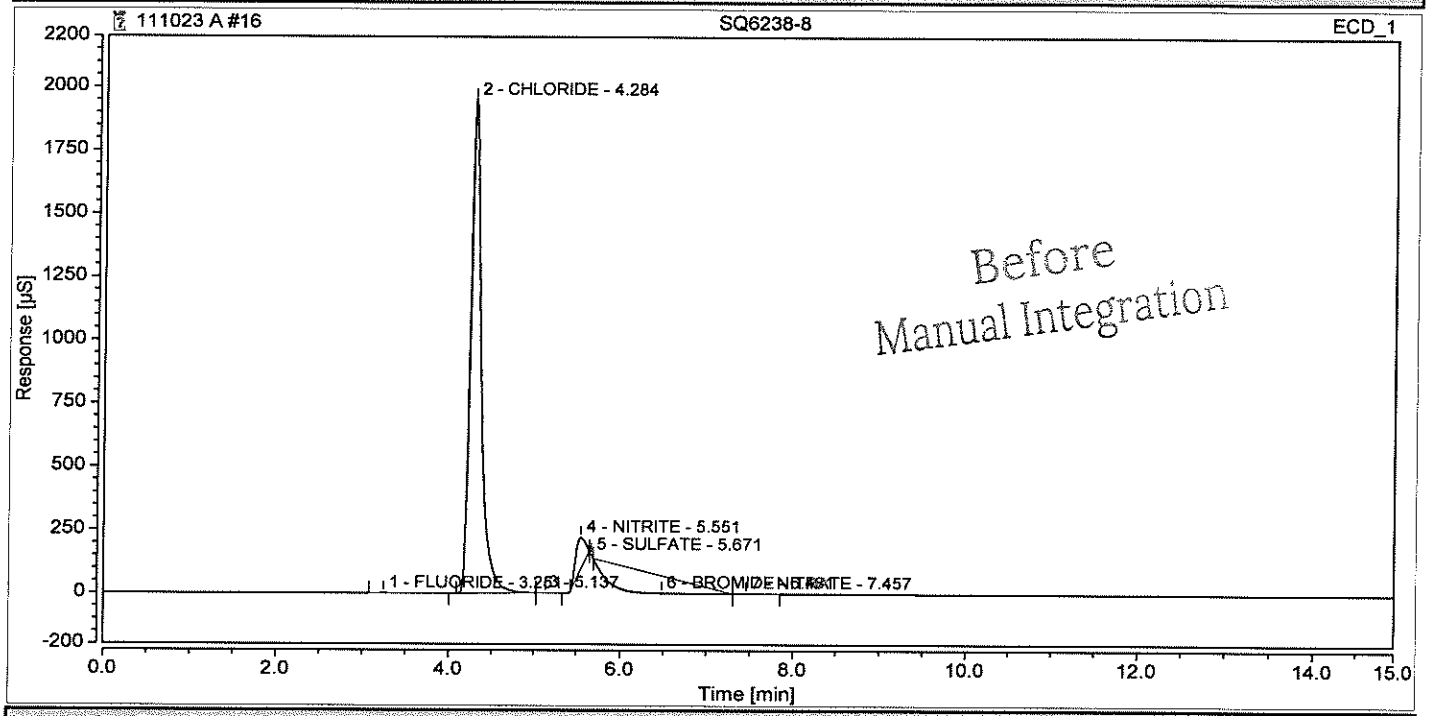
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.270	181.527	1304.695	90.40	93.76	465.7566	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2	SULFATE	5.664	19.252	86.679	9.59	6.23	67.7214	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
3	NITRATE	7.464	0.019	0.105	0.01	0.01	0.0197	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**200.798**	**1391.478**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6238-8**	*Run Time (min):*	**14.96**
Vial Number:	**16**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**10/Nov/23 20:30**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

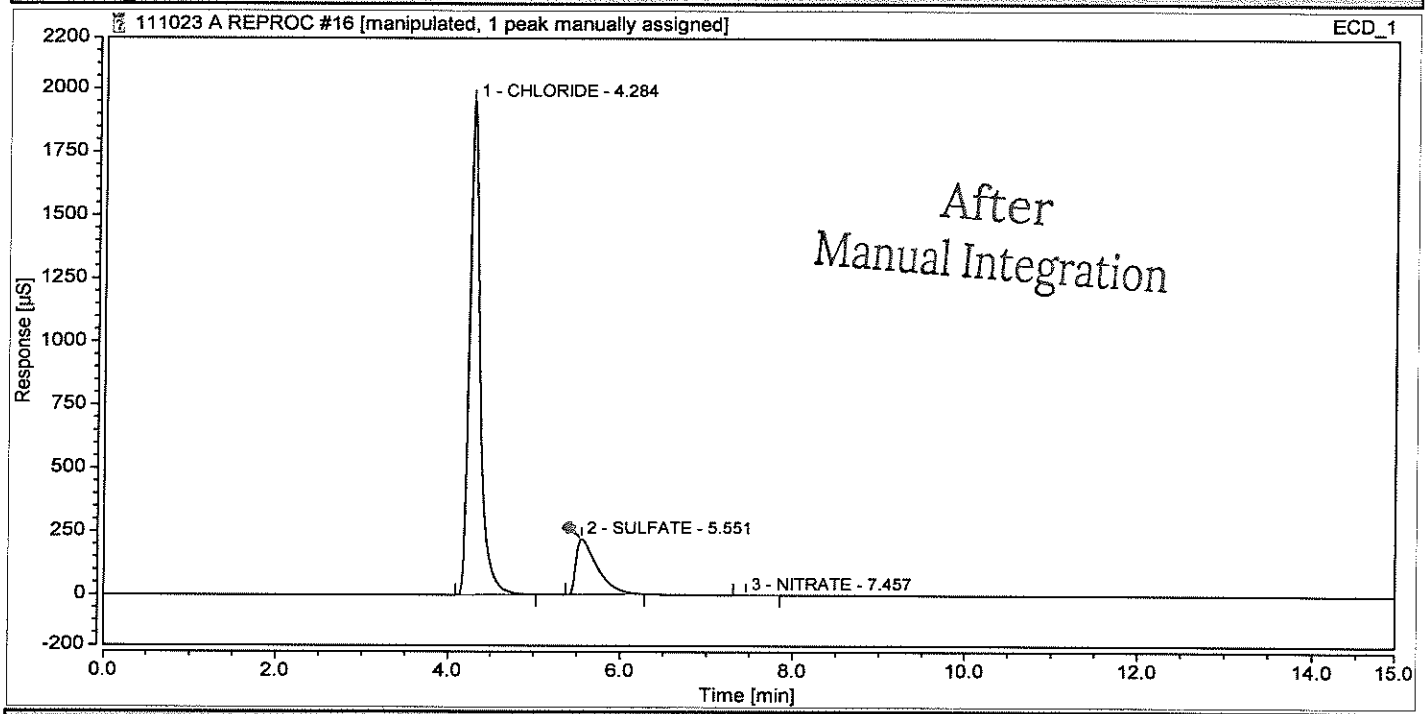
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.251	0.091	0.446	0.02	0.02	0.1592	n.a.
2	CHLORIDE	4.284	284.938	1949.312	73.26	90.99	731.0845	n.a.
3		5.137	0.012	0.077	0.00	0.00	n.a.	n.a.
4	NITRITE	5.551	15.843	123.533	4.07	5.77	22.4169	n.a.
5	SULFATE	5.671	0.006	0.302	0.00	0.01	0.0213	n.a.
6	BROMIDE	6.481	88.028	68.475	22.63	3.20	517.7691	n.a.
7	NITRATE	7.457	0.017	0.087	0.00	0.00	0.0169	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**388.934**	**2142.232**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6238-8**	*Run Time (min):*	**14.96**
Vial Number:	**16**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**10/Nov/23 20:30**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

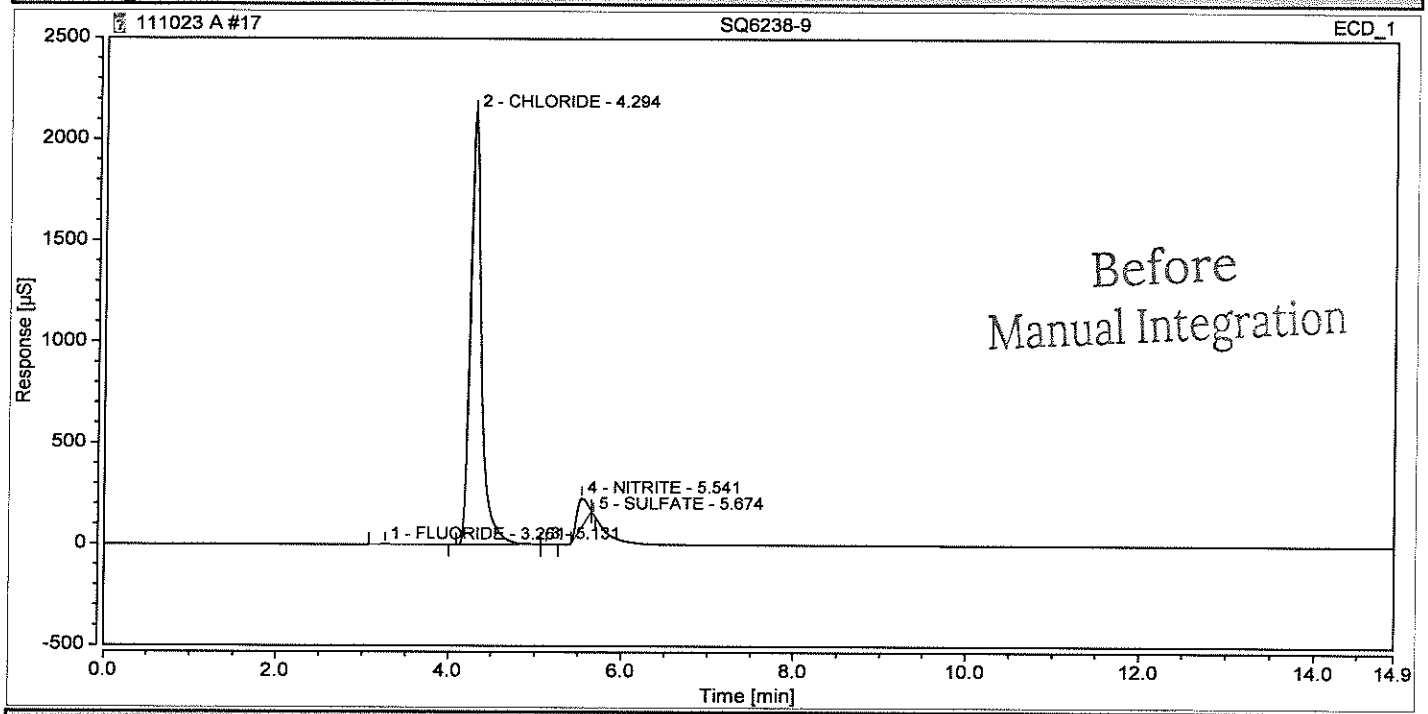
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.284	284.938	1949.312	82.14	89.87	731.0845	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2	SULFATE	5.551	61.936	219.702	17.85	10.13	217.8714	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
3	NITRATE	7.457	0.017	0.087	0.00	0.00	0.0169	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**346.890**	**2169.102**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6238-9**	*Run Time (min):*	**14.95**
Vial Number:	**17**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**10/Nov/23 20:48**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

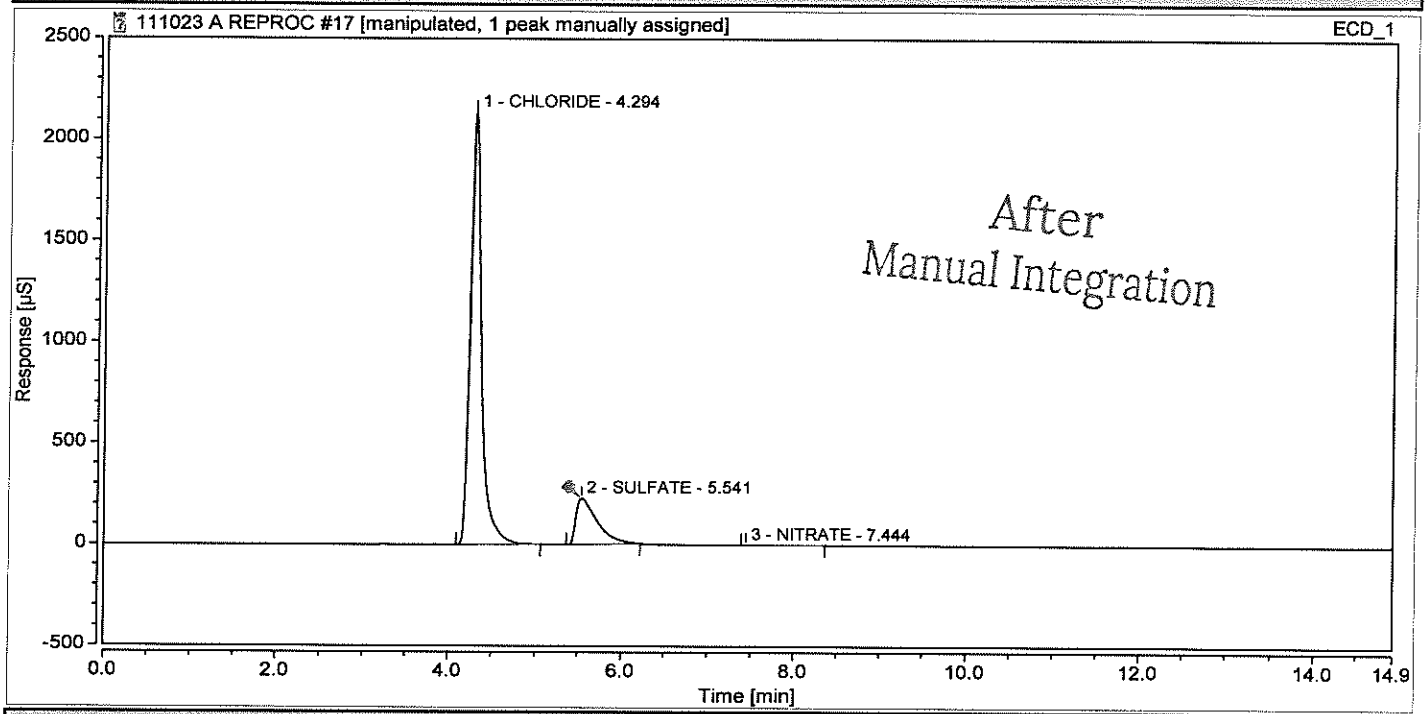
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.261	0.081	0.418	0.02	0.02	0.1443	n.a.
2	CHLORIDE	4.294	318.745	2135.151	94.49	93.89	817.8260	n.a.
3		5.131	0.012	0.129	0.00	0.01	n.a.	n.a.
4	NITRITE	5.541	18.486	138.164	5.48	6.08	27.4950	n.a.
5	SULFATE	5.674	0.006	0.297	0.00	0.01	0.0211	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**337.331**	**2274.159**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6238-9**	*Run Time (min):*	**14.95**
Vial Number:	**17**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**10/Nov/23 20:48**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

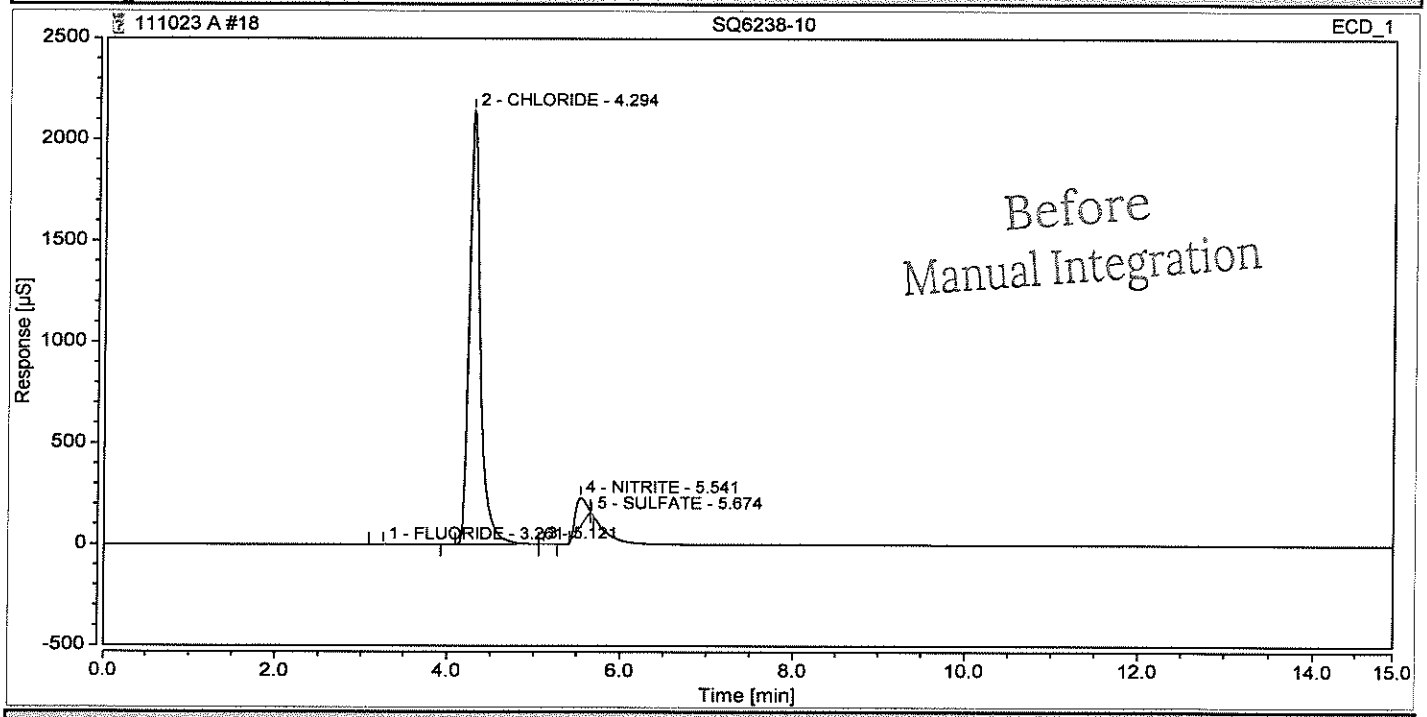
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.294	318.745	2135.151	83.21	90.36	817.8260	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2	SULFATE	5.541	64.301	227.786	16.79	9.64	226.1917	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
3	NITRATE	7.444	0.021	0.025	0.01	0.00	0.0217	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**383.068**	**2362.963**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6238-10**	*Run Time (min):*	**14.96**
Vial Number:	**18**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**10/Nov/23 21:05**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

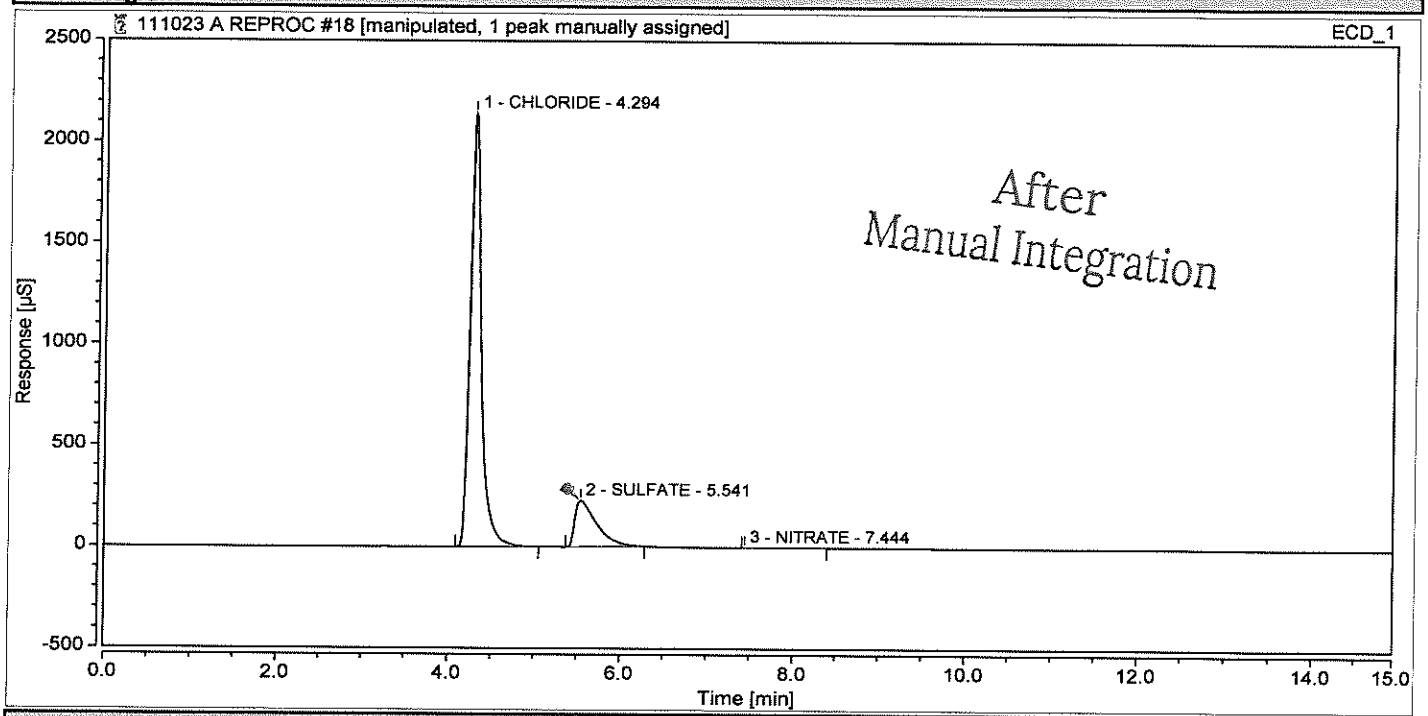
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.261	0.079	0.409	0.02	0.02	0.1407	n.a.
2	CHLORIDE	4.294	321.113	2142.619	94.38	93.81	823.9012	n.a.
3		5.121	0.003	0.026	0.00	0.00	n.a.	n.a.
4	NITRITE	5.541	19.053	140.750	5.60	6.16	28.6810	n.a.
5	SULFATE	5.674	0.004	0.223	0.00	0.01	0.0131	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**340.252**	**2284.027**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6238-10**	*Run Time (min):*	**14.96**
Vial Number:	**18**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**10/Nov/23 21:05**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

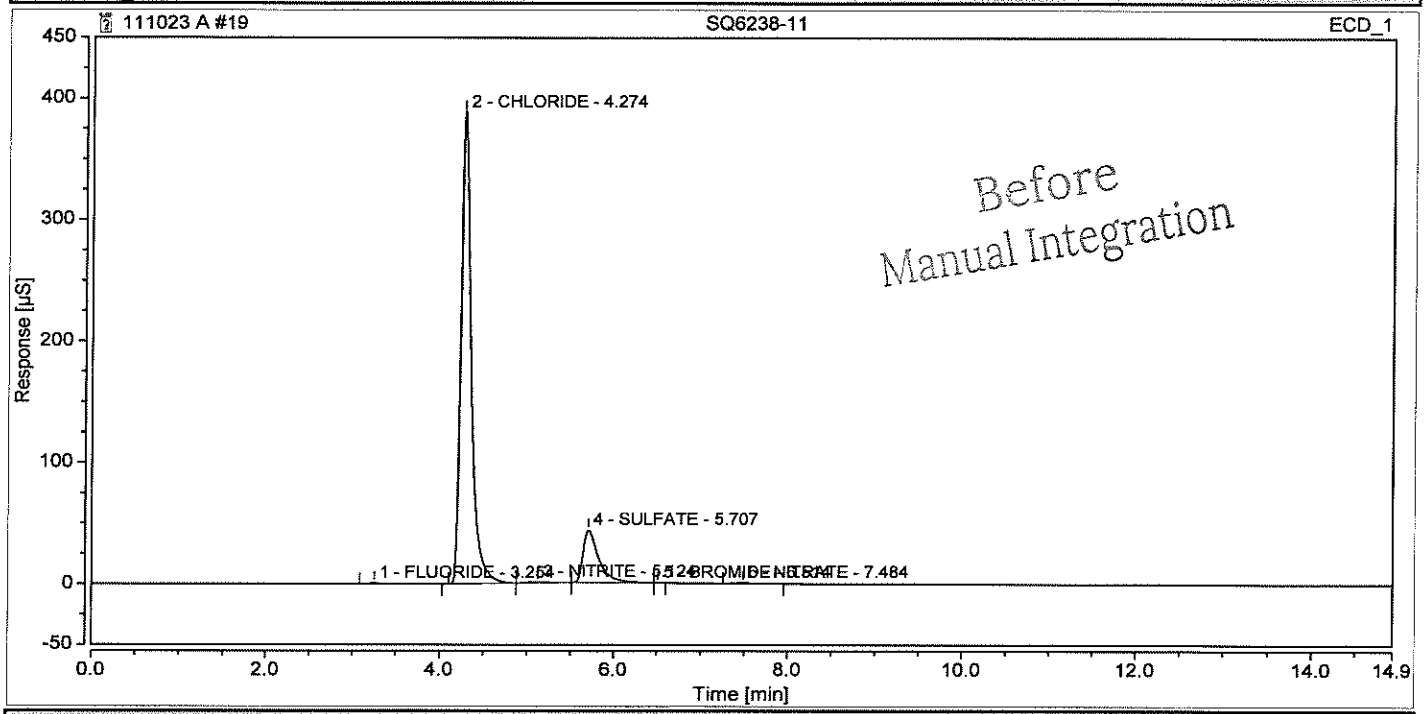
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.294	321.113	2142.619	82.99	90.35	823.9012	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2	SULFATE	5.541	65.793	228.925	17.00	9.65	231.4375	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
3	NITRATE	7.444	0.033	0.018	0.01	0.00	0.0334	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**386.938**	**2371.562**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6238-11**	*Run Time (min):*	**14.94**
Vial Number:	**19**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**10/Nov/23 21:22**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

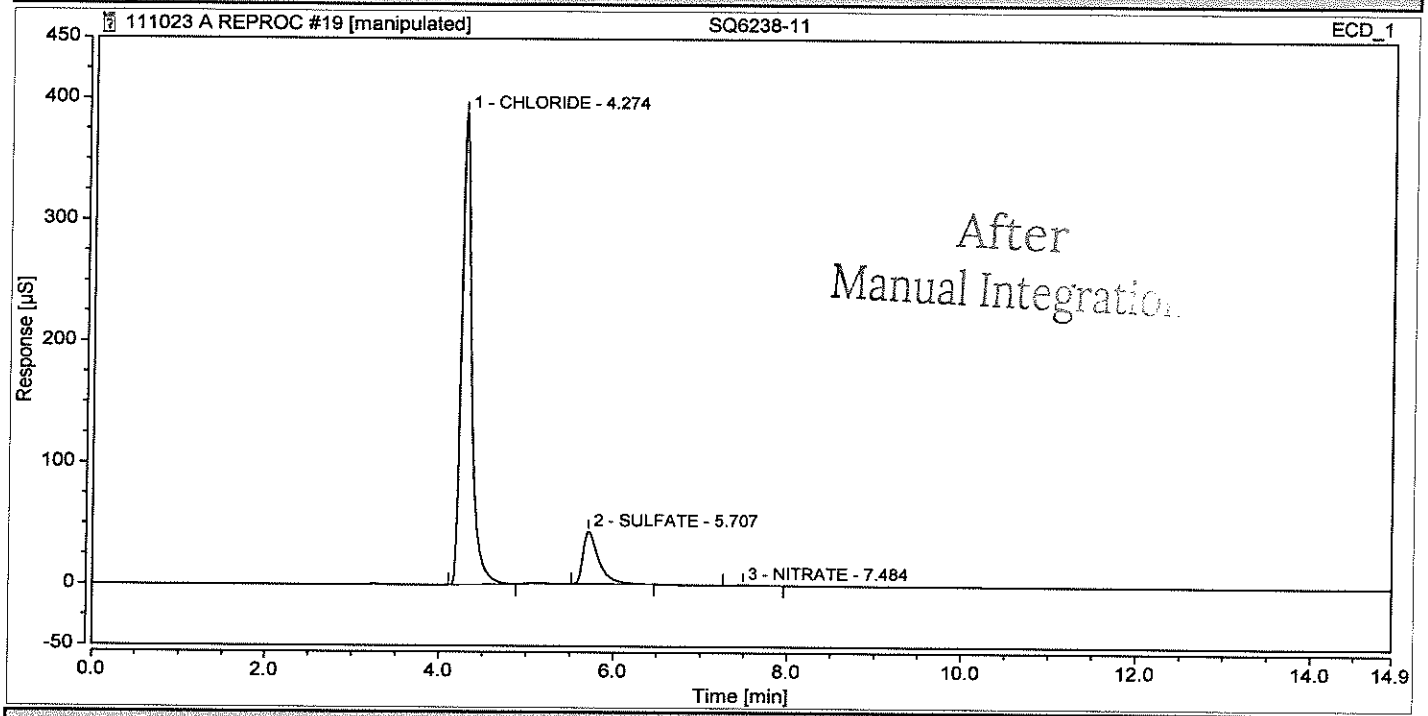
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.254	0.124	0.780	0.20	0.18	0.2124	n.a.
2	CHLORIDE	4.274	53.338	388.182	84.77	89.54	136.8541	n.a.
3	NITRITE	5.124	0.221	0.663	0.35	0.15	0.2659	n.a.
4	SULFATE	5.707	9.127	43.296	14.50	9.99	32.1053	n.a.
5	BROMIDE	6.514	0.000	0.005	0.00	0.00	0.0022	n.a.
6	NITRATE	7.484	0.112	0.581	0.18	0.13	0.1145	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**62.923**	**433.507**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6238-11**	*Run Time (min):*	**14.94**
Vial Number:	**19**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**10/Nov/23 21:22**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

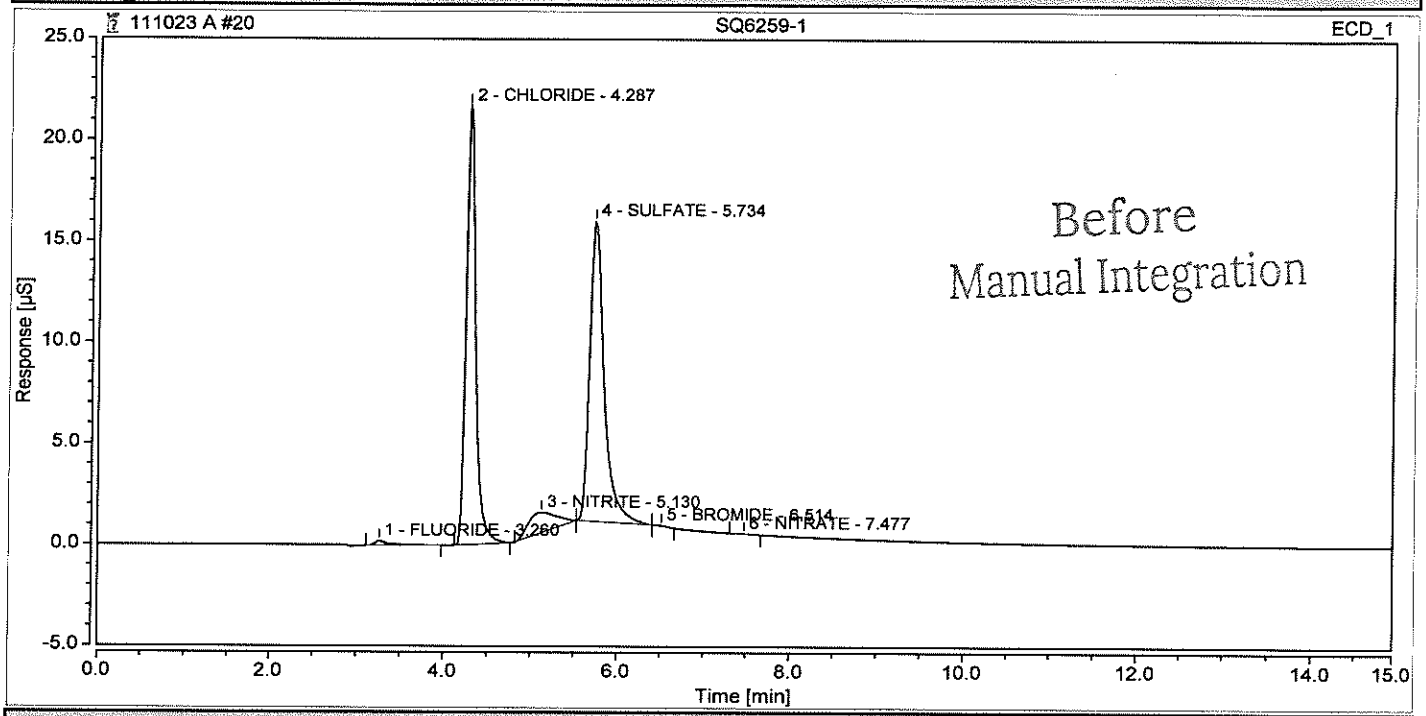
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.274	53.338	388.182	85.24	89.84	136.8541	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2	SULFATE	5.707	9.127	43.296	14.58	10.02	32.1053	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
3	NITRATE	7.484	0.112	0.581	0.18	0.13	0.1145	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**62.577**	**432.059**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6259-1**	*Run Time (min):*	**14.96**
Vial Number:	**20**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**10/Nov/23 21:39**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

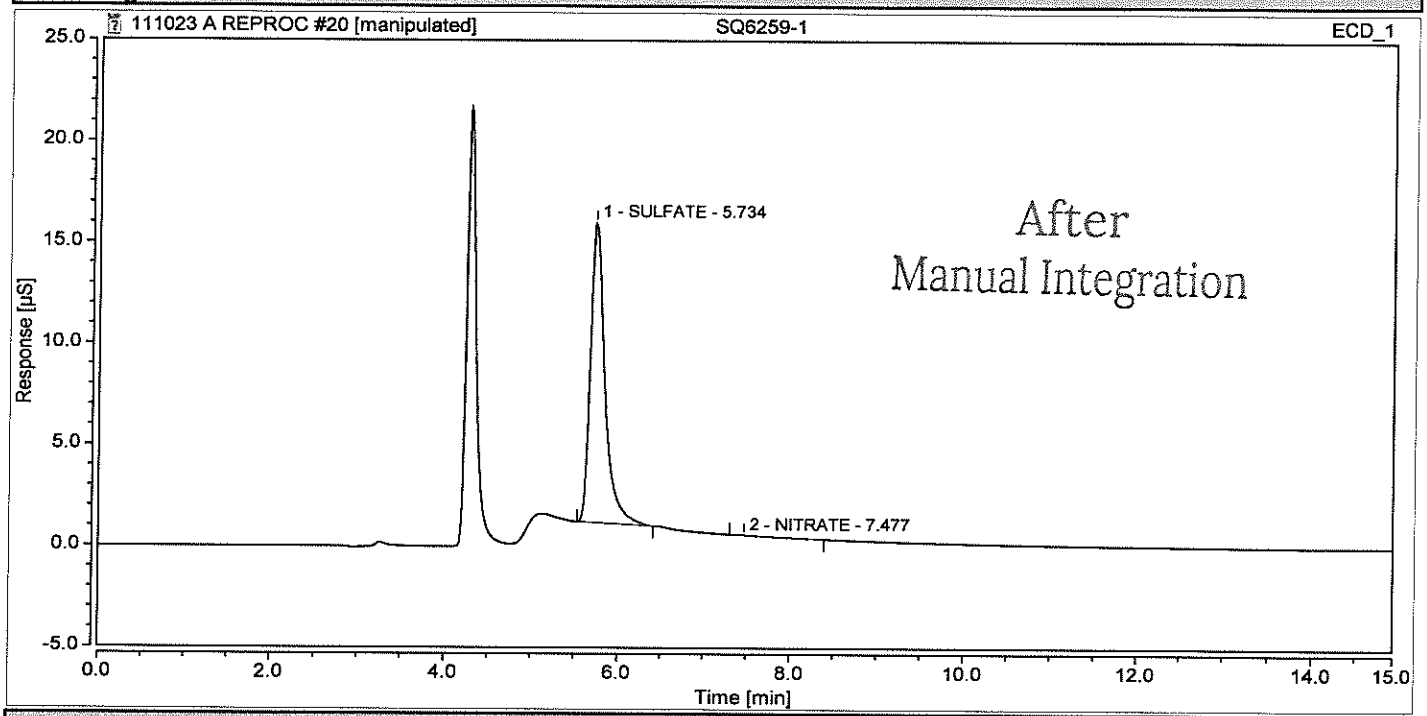
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.260	0.042	0.223	0.69	0.59	0.0826	n.a.
2	CHLORIDE	4.287	2.769	21.688	45.76	57.40	7.1053	n.a.
3	NITRITE	5.130	0.381	0.999	6.29	2.64	0.4529	n.a.
4	SULFATE	5.734	2.855	14.833	47.17	39.25	10.0423	n.a.
5	BROMIDE	6.514	0.005	0.038	0.08	0.10	0.0272	n.a.
6	NITRATE	7.477	0.001	0.006	0.02	0.02	0.0010	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**6.052**	**37.786**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6259-1**	*Run Time (min):*	**14.96**
Vial Number:	**20**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**10/Nov/23 21:39**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

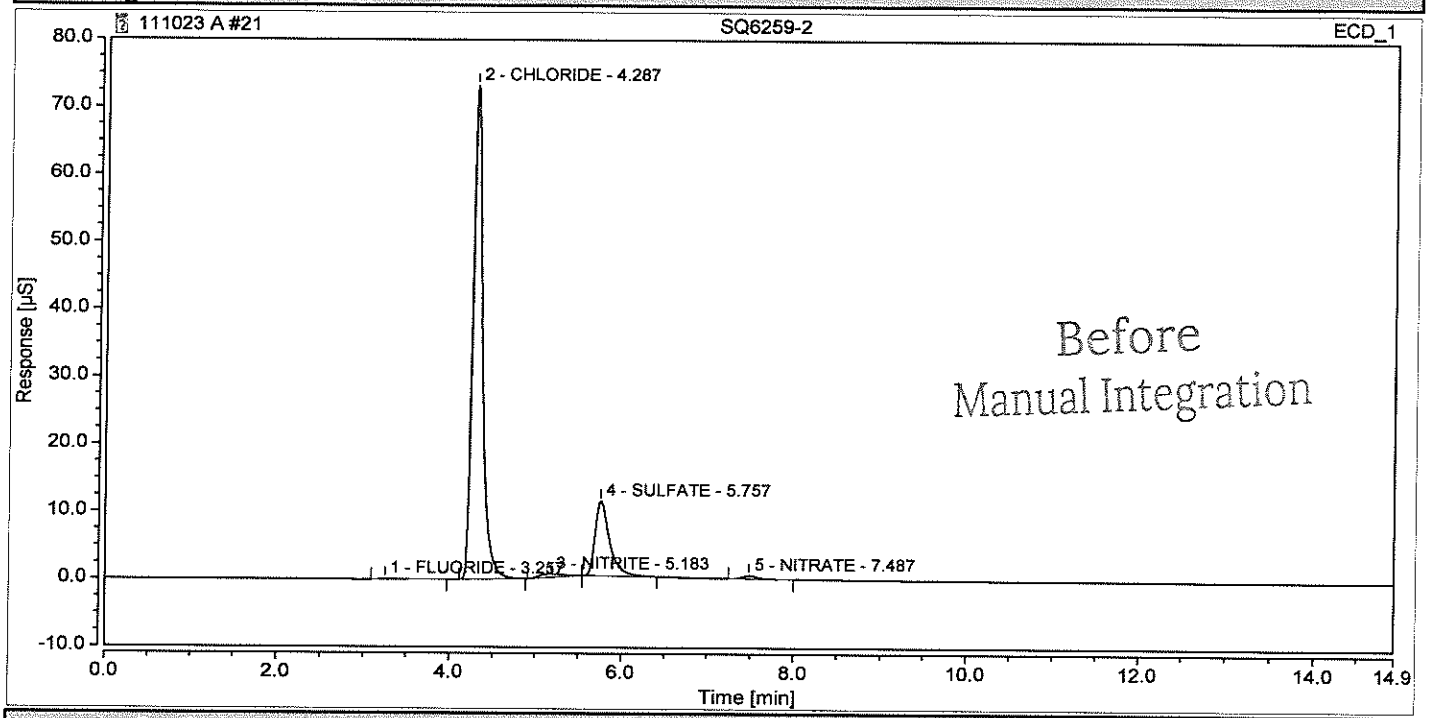
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	CHLORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	SULFATE	5.734	2.855	14.833	99.77	99.99	10.0423	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2	NITRATE	7.477	0.007	0.002	0.23	0.01	0.0067	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**2.861**	**14.835**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6259-2**	*Run Time (min):*	**14.95**
Vial Number:	**21**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**10/Nov/23 21:57**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

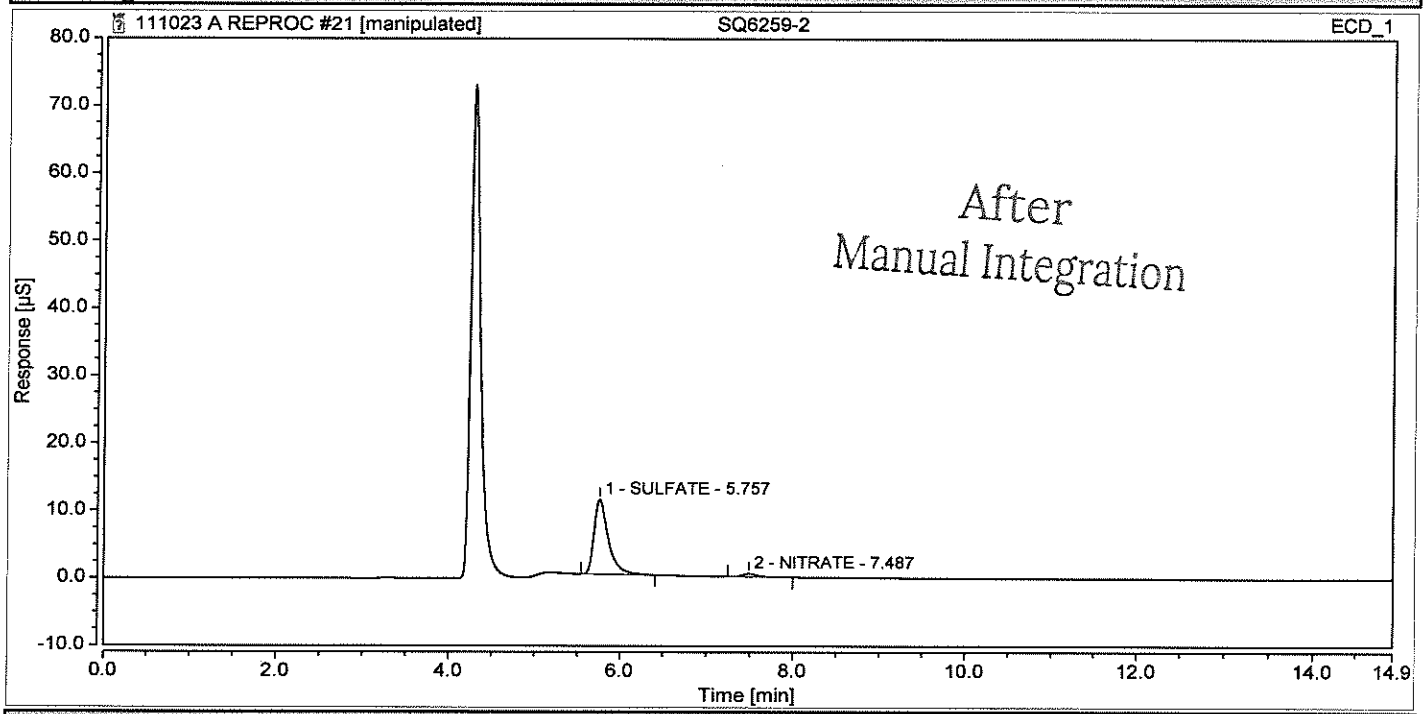
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.257	0.029	0.143	0.24	0.17	0.0624	n.a.
2	CHLORIDE	4.287	9.715	73.209	79.76	85.66	24.9269	n.a.
3	NITRITE	5.183	0.177	0.531	1.45	0.62	0.2143	n.a.
4	SULFATE	5.757	2.165	11.103	17.78	12.99	7.6169	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5	NITRATE	7.487	0.094	0.482	0.77	0.56	0.0958	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**12.180**	**85.467**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6259-2**	*Run Time (min):*	**14.95**
Vial Number:	**21**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**10/Nov/23 21:57**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

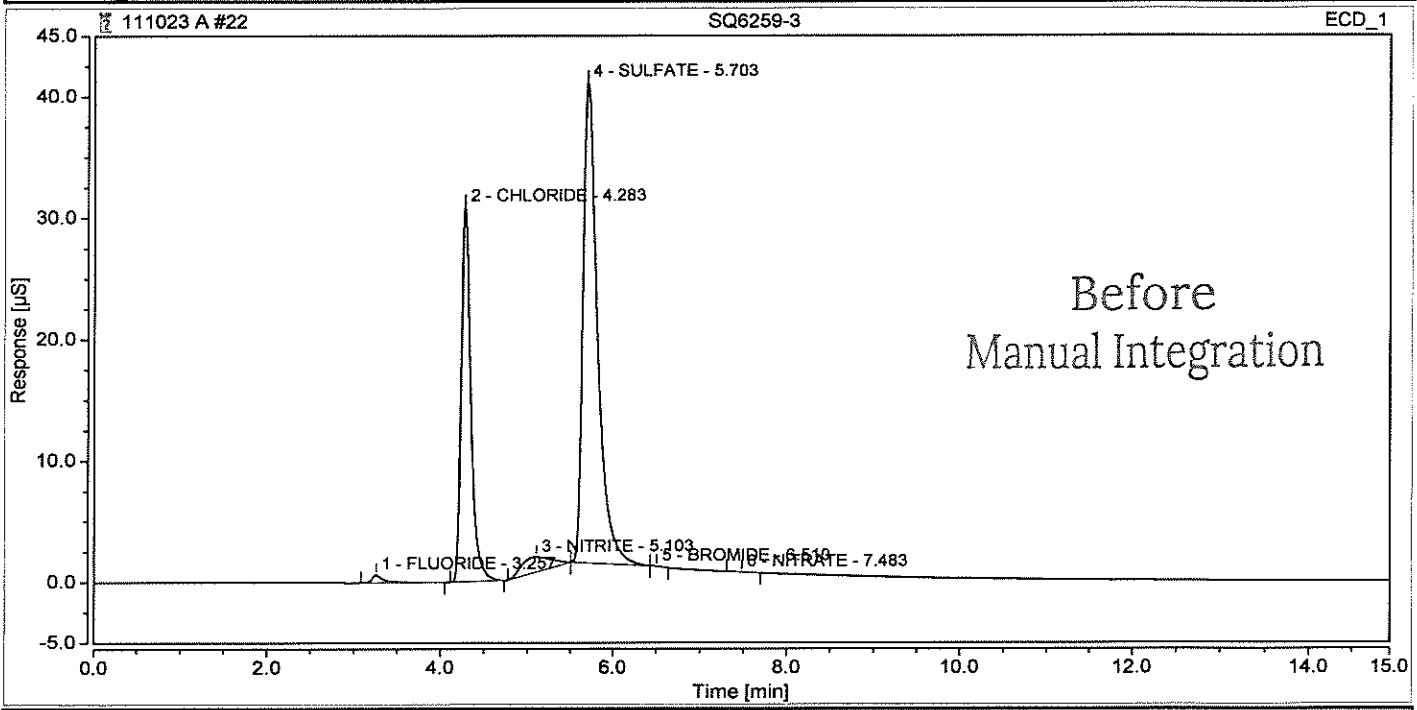
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	CHLORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	SULFATE	5.757	2.165	11.103	95.85	95.84	7.6169	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2	NITRATE	7.487	0.094	0.482	4.15	4.16	0.0958	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**2.259**	**11.584**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6259-3**	*Run Time (min):*	**14.95**
Vial Number:	**22**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**10/Nov/23 22:14**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

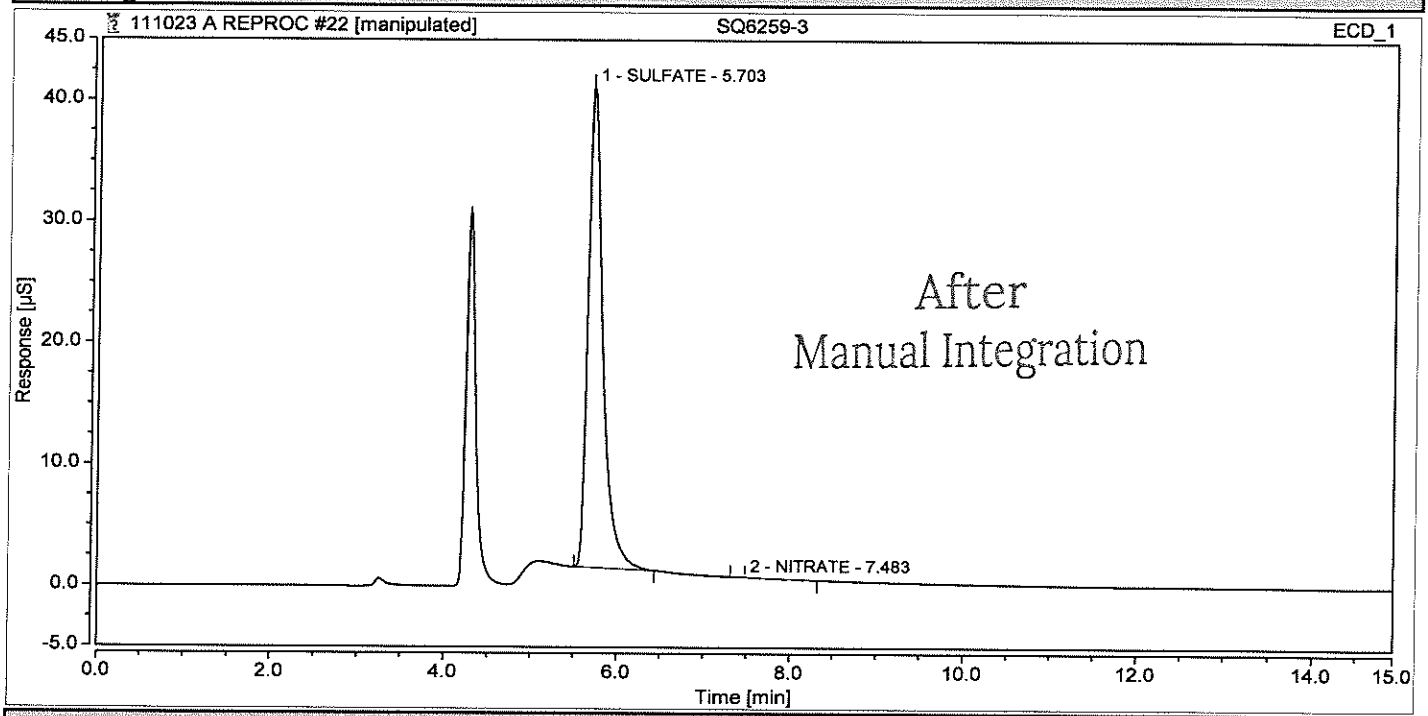
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.257	0.107	0.660	0.87	0.91	0.1855	n.a.
2	CHLORIDE	4.283	3.962	30.928	31.94	42.66	10.1667	n.a.
3	NITRITE	5.103	0.506	1.250	4.07	1.72	0.5995	n.a.
4	SULFATE	5.703	7.828	39.634	63.09	54.66	27.5353	n.a.
5	BROMIDE	6.510	0.002	0.021	0.02	0.03	0.0125	n.a.
6	NITRATE	7.483	0.002	0.013	0.02	0.02	0.0021	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**12.407**	**72.506**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6259-3**	*Run Time (min):*	**14.95**
Vial Number:	**22**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**10/Nov/23 22:14**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

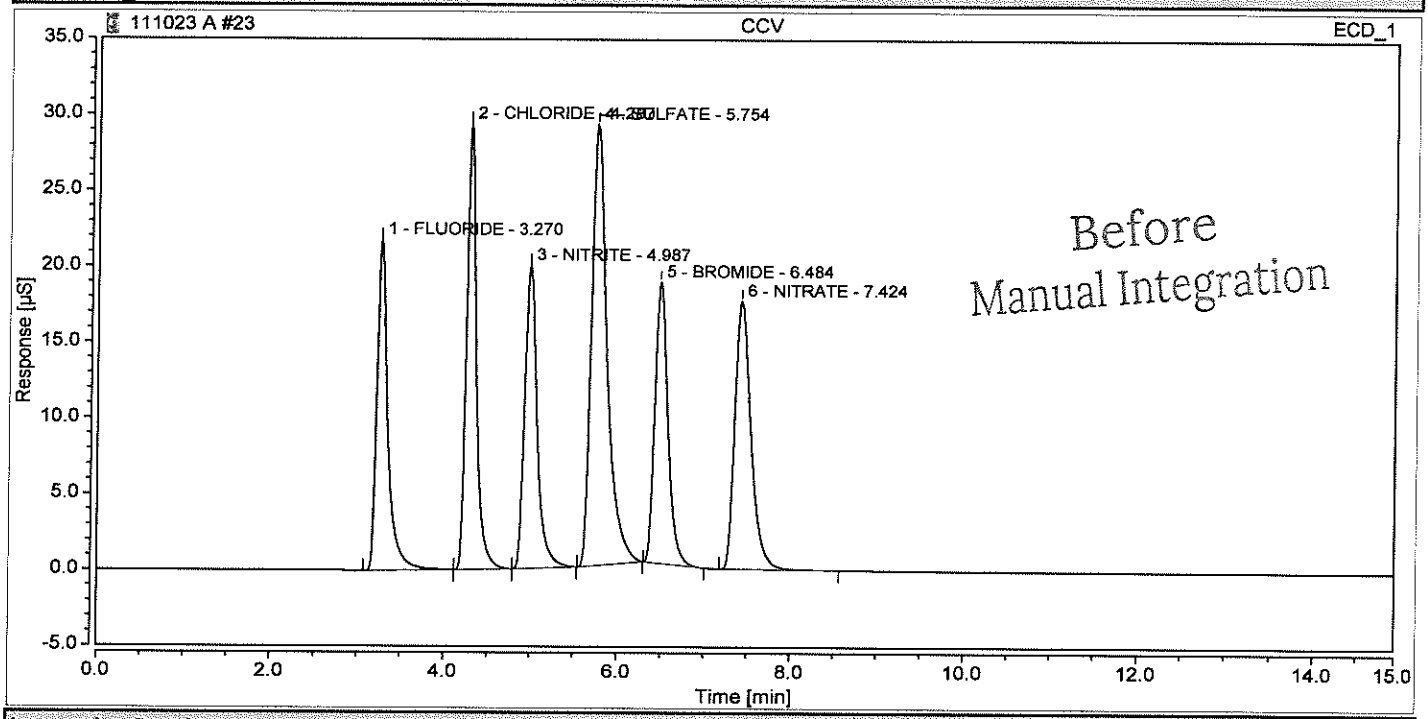
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	CHLORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	SULFATE	5.703	7.828	39.634	99.94	99.98	27.5353	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2	NITRATE	7.483	0.005	0.009	0.06	0.02	0.0052	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**7.833**	**39.642**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**CCV**	*Run Time (min):*	**14.95**
Vial Number:	**25**	*Injection Volume:*	**200.00**
Injection Type:	**Check Standard**	*Channel:*	**ECD_1**
Calibration Level:	**06**	*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**10/Nov/23 22:32**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

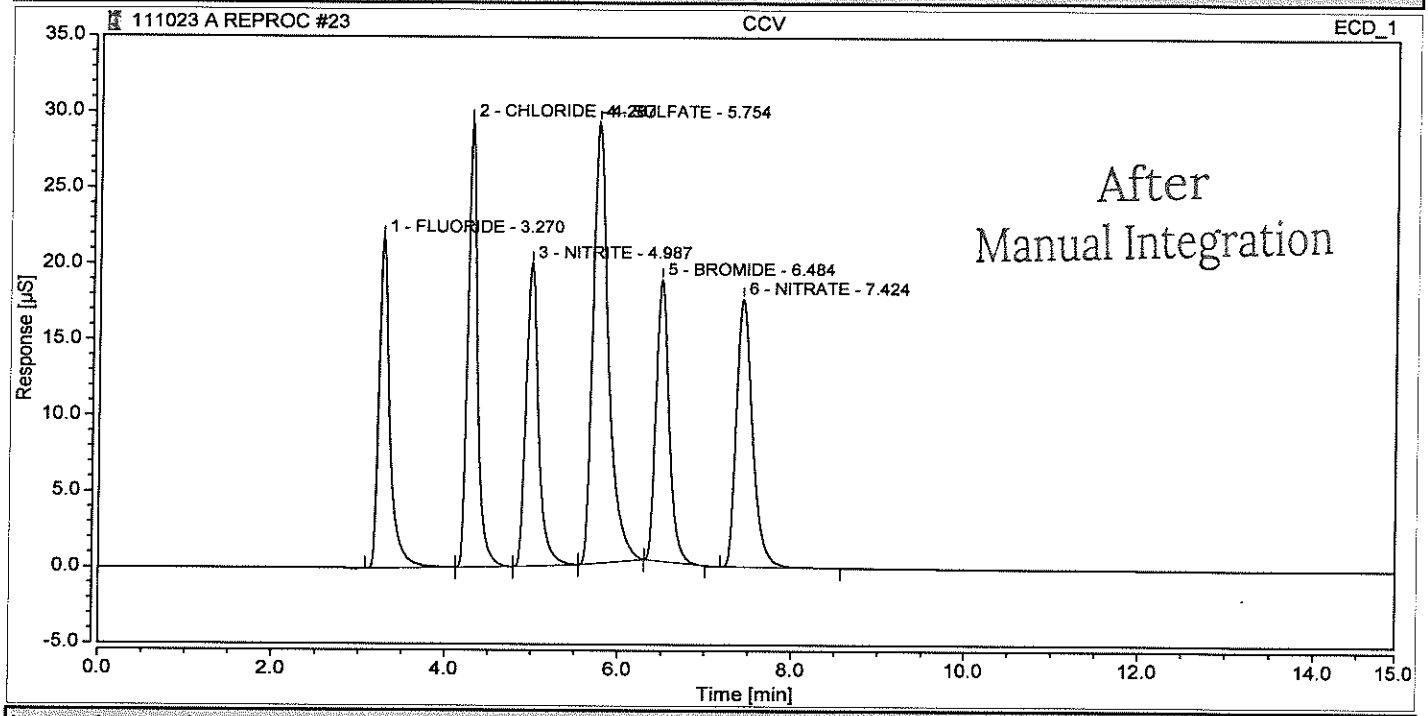
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.270	3.219	21.791	13.66	15.99	5.2311	4.6212
2	CHLORIDE	4.287	3.855	29.360	16.37	21.54	9.8908	-1.0923
3	NITRITE	4.987	3.381	19.960	14.36	14.64	4.0753	1.8837
4	SULFATE	5.754	5.995	29.048	25.45	21.31	21.0895	5.4473
5	BROMIDE	6.484	3.281	18.516	13.93	13.58	19.2983	-3.5083
6	NITRATE	7.424	3.824	17.627	16.24	12.93	3.9078	-2.3052
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**23.555**	**136.302**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**CCV**	*Run Time (min):*	**14.95**
Vial Number:	**25**	*Injection Volume:*	**200.00**
Injection Type:	**Check Standard**	*Channel:*	**ECD_1**
Calibration Level:	**06**	*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**10/Nov/23 22:32**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

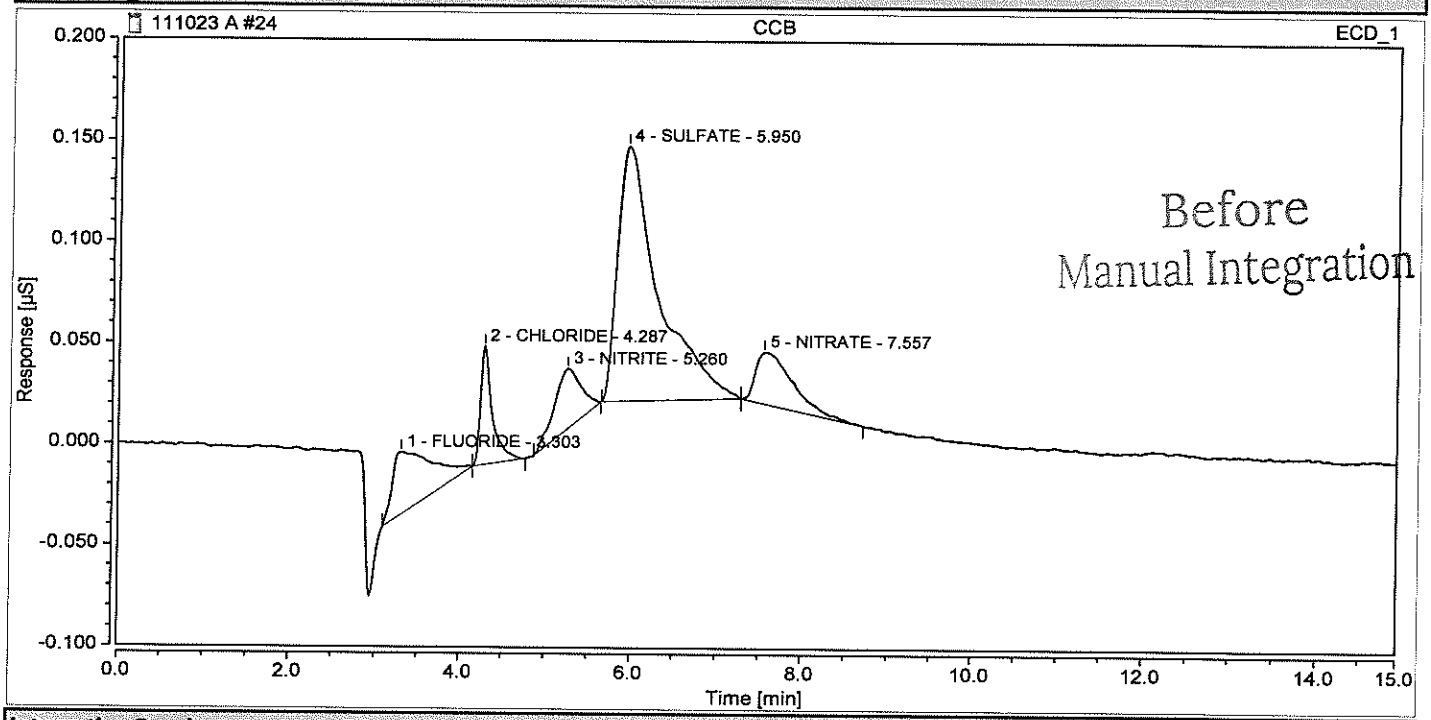
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.270	3.219	21.791	13.66	15.99	5.2311	4.6212
2	CHLORIDE	4.287	3.855	29.360	16.37	21.54	9.8908	-1.0923
3	NITRITE	4.987	3.381	19.960	14.36	14.64	4.0753	1.8837
4	SULFATE	5.754	5.995	29.048	25.45	21.31	21.0895	5.4473
5	BROMIDE	6.484	3.281	18.516	13.93	13.58	19.2983	-3.5083
6	NITRATE	7.424	3.824	17.627	16.24	12.93	3.9078	-2.3052
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**23.555**	**136.302**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**CCB**	*Run Time (min):*	**14.95**
Vial Number:	**26**	*Injection Volume:*	**200.00**
Injection Type:	**Blank**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**10/Nov/23 22:49**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

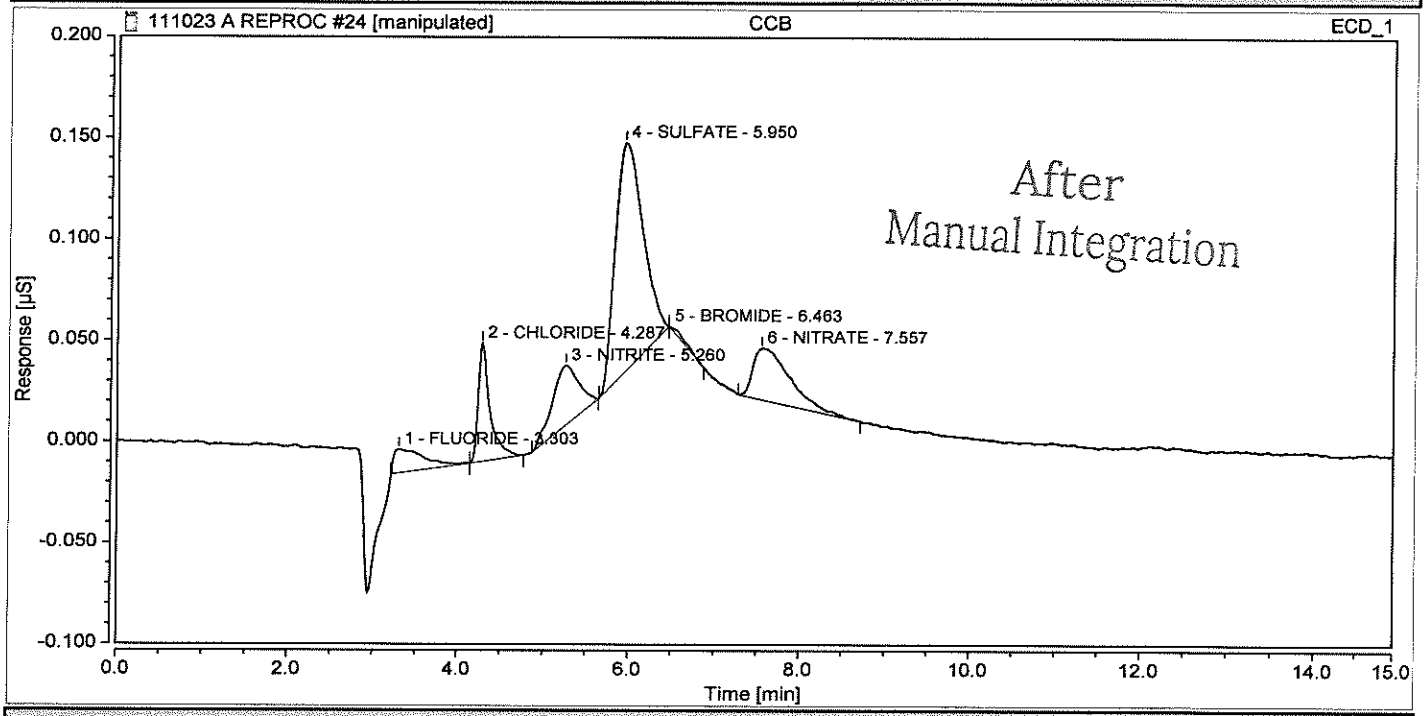
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.303	0.016	0.031	13.24	11.41	0.0412	n.a.
2	CHLORIDE	4.287	0.009	0.058	7.92	21.62	0.0239	n.a.
3	NITRITE	5.260	0.011	0.029	9.02	10.92	0.0206	n.a.
4	SULFATE	5.950	0.069	0.126	58.65	46.63	0.2430	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5	NITRATE	7.557	0.013	0.025	11.17	9.42	0.0134	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.118**	**0.270**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**CCB**	*Run Time (min):*	**14.95**
Vial Number:	**26**	*Injection Volume:*	**200.00**
Injection Type:	**Blank**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**10/Nov/23 22:49**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.303	0.005	0.012	5.89	4.92	0.0241	n.a.
2	CHLORIDE	4.287	0.009	0.058	11.57	24.51	0.0239	n.a.
3	NITRITE	5.260	0.011	0.029	13.18	12.38	0.0206	n.a.
4	SULFATE	5.950	0.042	0.113	52.39	47.51	0.1486	n.a.
5	BROMIDE	6.463	0.001	0.000	0.63	0.00	0.0030	n.a.
6	NITRATE	7.557	0.013	0.025	16.33	10.68	0.0134	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.081**	**0.238**	**100.00**	**100.00**		

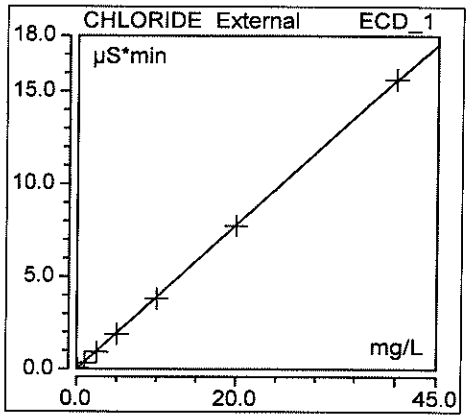
Calibration Batch Report

Sequence:	**101223 CAL REPROC**	*Injection Volume:*	**200.00**
Instrument Method:	**32mM80mA**	*Operator:*	**wetlab**
Inj. Date / Time:	**12-Oct-2023 / 13:07**	*Run Time:*	**14.946667**

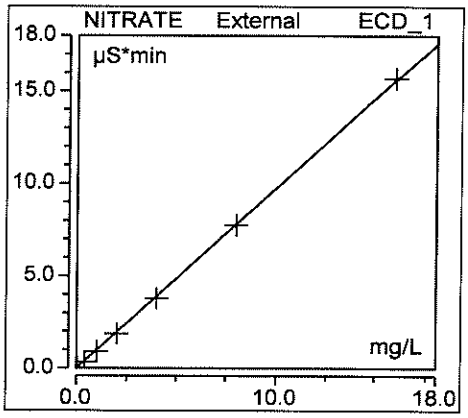
Calibration Summary

Peak Name	Eval.Type	Cal.Type	Points	Offset (C0)	Slope (C1)	Curve (C2)	Coeff.Det. %
FLUORIDE	Area	ly2, WithOff	8.000	-0.011	0.637	-0.004	99.9990
CHLORIDE	Area	Lin	8.000	0.000	0.390	0.000	99.9875
NITRITE	Area	ly2, WithOff	8.000	-0.007	0.859	-0.007	99.9990
SULFATE	Area	Lin	8.000	0.000	0.284	0.000	99.9981
BROMIDE	Area	Lin	8.000	0.000	0.170	0.000	99.9752
NITRATE	Area	Lin	8.000	0.000	0.976	0.000	99.9814
		AVERAGE:		-0.0029	0.5526	-0.0018	99.9900

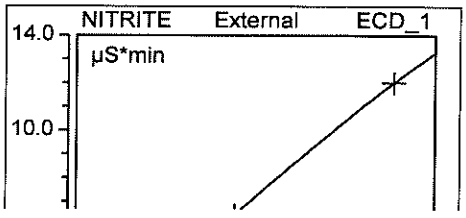
Injection Name **CHLORIDE**	Ret.Time min CHLORIDE	Area µS*min CHLORIDE	Height µS CHLORIDE	Amount mg/L CHLORIDE
	ECD_1	ECD_1	ECD_1	ECD_1
IC1	4.310	0.0013	0.007	0.003
IC2	4.290	0.0319	0.236	0.082
IC3	4.280	0.3373	2.649	0.865
IC4	4.277	0.9117	7.111	2.339
IC5	4.277	1.8945	14.718	4.861
IC6	4.280	3.7977	29.083	9.744
IC7	4.274	7.7443	58.666	19.870
IC8	4.273	15.6522	117.462	40.160
Average	4.283			
Rel. Std. Dev.	0.287 %			



Injection Name **NITRATE**	Ret.Time min NITRATE	Area µS*min NITRATE	Height µS NITRATE	Amount mg/L NITRATE
	ECD_1	ECD_1	ECD_1	ECD_1
IC1	7.577	0.0011	0.005	0.001
IC2	7.557	0.0307	0.152	0.031
IC3	7.537	0.3315	1.685	0.340
IC4	7.521	0.8936	4.512	0.916
IC5	7.500	1.8681	9.167	1.915
IC6	7.470	3.7881	17.516	3.883
IC7	7.420	7.7471	32.517	7.941
IC8	7.347	15.6832	56.804	16.076
Average	7.491			
Rel. Std. Dev.	1.022 %			

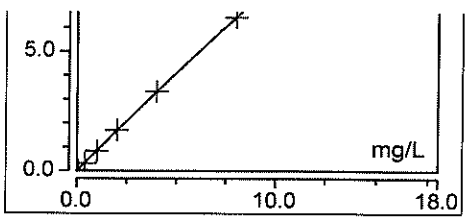


Injection Name **NITRITE**	Ret.Time min NITRITE	Area µS*min NITRITE	Height µS NITRITE	Amount mg/L NITRITE
	ECD_1	ECD_1	ECD_1	ECD_1
IC1	5.277	0.0081	0.032	0.018
IC2	4.990	0.0315	0.165	0.045



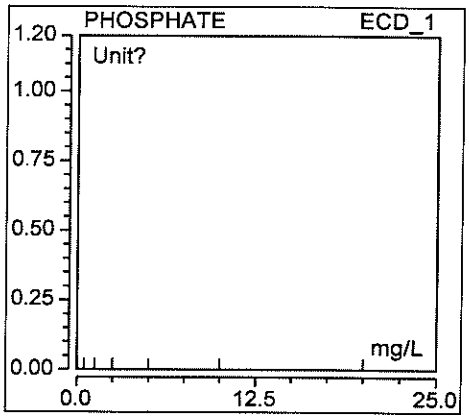
IC3	4.984	0.3130	1.968	0.374
IC4	4.984	0.8317	5.253	0.984
IC5	4.984	1.7014	10.467	2.021
IC6	4.990	3.3244	19.408	4.004
IC7	4.990	6.4268	34.736	7.994
IC8	4.990	12.0030	58.725	16.001

Average	5.024
Rel. Std. Dev.	2.038 %



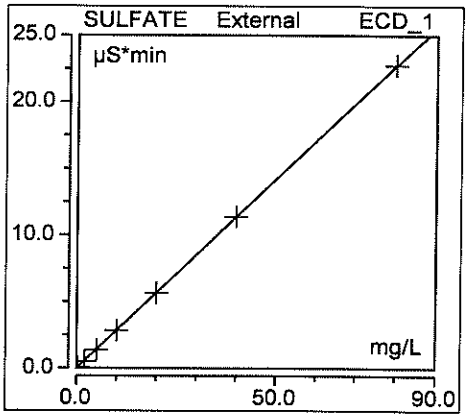
Injection Name **PHOSPHATE**	Ret.Time min PHOSPHATE	Area µS*min PHOSPHATE	Height µS PHOSPHATE	Amount mg/L PHOSPHATE
	ECD_1	ECD_1	ECD_1	ECD_1
IC1	n.a.	n.a.	n.a.	n.a.
IC2	n.a.	n.a.	n.a.	n.a.
IC3	n.a.	n.a.	n.a.	n.a.
IC4	n.a.	n.a.	n.a.	n.a.
IC5	n.a.	n.a.	n.a.	n.a.
IC6	n.a.	n.a.	n.a.	n.a.
IC7	n.a.	n.a.	n.a.	n.a.
IC8	n.a.	n.a.	n.a.	n.a.

Average	#DIV/0!
Rel. Std. Dev.	#DIV/0!



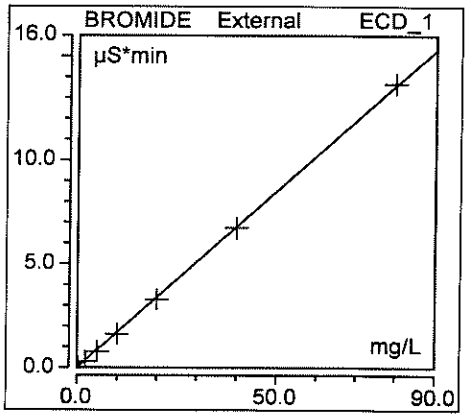
Injection Name **SULFATE**	Ret.Time min SULFATE	Area µS*min SULFATE	Height µS SULFATE	Amount mg/L SULFATE
	ECD_1	ECD_1	ECD_1	ECD_1
IC1	5.844	0.0009	0.004	0.003
IC2	5.834	0.0454	0.229	0.160
IC3	5.820	0.5026	2.833	1.768
IC4	5.817	1.3714	7.732	4.824
IC5	5.797	2.8380	15.881	9.983
IC6	5.777	5.6533	31.045	19.887
IC7	5.744	11.3826	59.540	40.040
IC8	5.687	22.7500	108.379	80.027

Average	5.790
Rel. Std. Dev.	0.911 %

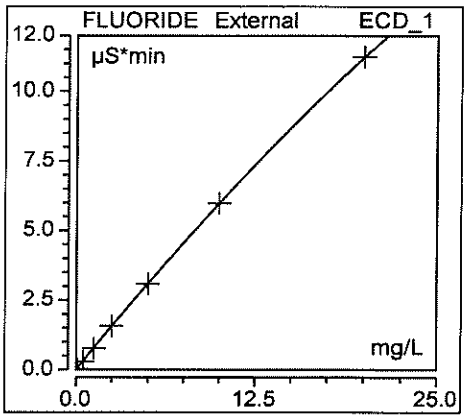


Injection Name **BROMIDE**	Ret.Time min BROMIDE	Area µS*min BROMIDE	Height µS BROMIDE	Amount mg/L BROMIDE
	ECD_1	ECD_1	ECD_1	ECD_1
IC1	6.407	0.0004	0.001	0.002
IC2	6.560	0.0257	0.144	0.151
IC3	6.544	0.2814	1.655	1.655
IC4	6.537	0.7709	4.533	4.535
IC5	6.527	1.6186	9.363	9.521
IC6	6.514	3.2868	18.367	19.333
IC7	6.484	6.7353	35.656	39.616
IC8	6.433	13.6787	65.681	80.456

Average	6.501
Rel. Std. Dev.	0.847 %



Injection Name FLUORIDE	Ret.Time min FLUORIDE	Area µS*min FLUORIDE	Height µS FLUORIDE	Amount mg/L FLUORIDE
	ECD_1	ECD_1	ECD_1	ECD_1
IC1	3.524	0.0033	0.007	0.022
IC2	3.244	0.0233	0.162	0.053
IC3	3.240	0.2885	2.065	0.471
IC4	3.237	0.7656	5.555	1.228
IC5	3.244	1.5767	11.214	2.530
IC6	3.250	3.0811	21.013	5.001
IC7	3.254	5.9813	38.517	9.993
IC8	3.267	11.2370	67.145	20.001
Average	3.282			
Rel. Std. Dev.	2.982 %			



Anion Summary Report

No. CHLORIDE	Name CHLORIDE	Time min CHLORIDE ECD_1	Area µS*min CHLORIDE ECD_1	Rel.Area % CHLORIDE ECD_1	Height µS CHLORIDE ECD_1	Rel.Height % CHLORIDE ECD_1	Amount mg/L CHLORIDE ECD_1
1	IC1	4.310	0.0013	8.64	0.01	12.08	0.0033
2	IC2	4.290	0.0319	16.92	0.24	21.69	0.0818
3	IC3	4.280	0.3373	16.42	2.65	20.61	0.8653
4	IC4	4.277	0.9117	16.44	7.11	20.50	2.3392
5	IC5	4.277	1.8945	16.48	14.72	20.79	4.8610
6	IC6	4.280	3.7977	16.56	29.08	21.32	9.7441
7	IC7	4.274	7.7443	16.83	58.67	22.60	19.8700
8	IC8	4.273	15.6522	17.20	117.46	24.77	40.1598
	Sum:	34.262	30.371	125.488	229.932	164.342	77.924
	Average:	4.283	3.796	15.686	28.741	20.543	9.741
	Rel.Std.Dev:	0.287 %	143.802 %	18.229 %	142.552 %	17.997 %	143.802 %

No. NITRATE	Name NITRATE	Time min NITRATE ECD_1	Area µS*min NITRATE ECD_1	Rel.Area % NITRATE ECD_1	Height µS NITRATE ECD_1	Rel.Height % NITRATE ECD_1	Amount mg/L NITRATE ECD_1
1	IC1	7.577	0.0011	7.29	0.01	9.24	0.0011
2	IC2	7.557	0.0307	16.31	0.15	13.97	0.0315
3	IC3	7.537	0.3315	16.14	1.69	13.11	0.3398
4	IC4	7.521	0.8936	16.12	4.51	13.00	0.9160
5	IC5	7.500	1.8681	16.25	9.17	12.95	1.9149
6	IC6	7.470	3.7881	16.52	17.52	12.84	3.8830
7	IC7	7.420	7.7471	16.84	32.52	12.52	7.9412
8	IC8	7.347	15.6832	17.23	56.80	11.98	16.0761
	Sum:	59.929	30.344	122.694	122.358	99.612	31.104
	Average:	7.491	3.793	15.337	15.295	12.451	3.888
	Rel.Std.Dev:	1.022 %	144.282 %	21.338 %	131.385 %	11.350 %	144.282 %

No. NITRITE	Name NITRITE	Time min NITRITE ECD_1	Area µS*min NITRITE ECD_1	Rel.Area % NITRITE ECD_1	Height µS NITRITE ECD_1	Rel.Height % NITRITE ECD_1	Amount mg/L NITRITE ECD_1
1	IC1	5.277	0.0081	53.65	0.03	57.13	0.0176
2	IC2	4.990	0.0315	16.72	0.17	15.17	0.0449
3	IC3	4.984	0.3130	15.24	1.97	15.31	0.3737
4	IC4	4.984	0.8317	15.00	5.25	15.14	0.9839
5	IC5	4.984	1.7014	14.80	10.47	14.78	2.0208
6	IC6	4.990	3.3244	14.50	19.41	14.23	4.0043
7	IC7	4.990	6.4268	13.97	34.74	13.38	7.9935
8	IC8	4.990	12.0030	13.19	58.73	12.38	16.0012
	Sum:	40.189	24.640	157.051	130.754	157.526	31.440
	Average:	5.024	3.080	19.631	16.344	19.691	3.930
	Rel.Std.Dev:	2.038 %	136.774 %	70.208 %	127.418 %	77.003 %	141.871 %

No. PHOSPHATE	Name PHOSPHATE	Time min PHOSPHATE ECD_1	Area µS*min PHOSPHATE ECD_1	Rel.Area % PHOSPHATE ECD_1	Height µS PHOSPHATE ECD_1	Rel.Height % PHOSPHATE ECD_1	Amount mg/L PHOSPHATE ECD_1
1	IC1	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2	IC2	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

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Version 7.1.0.898

3	IC3	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
4	IC4	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5	IC5	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
6	IC6	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
7	IC7	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
8	IC8	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
	Sum:	0.000	0.000	0.000	0.000	0.000	0.000
	Average:	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
	Rel.Std.Dev:	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

No. SULFATE	Name SULFATE	Time min SULFATE ECD_1	Area µS*min SULFATE ECD_1	Rel.Area % SULFATE ECD_1	Height µS SULFATE ECD_1	Rel.Height % SULFATE ECD_1	Amount mg/L SULFATE ECD_1
1	IC1	5.844	0.0009	6.16	0.00	7.25	0.0033
2	IC2	5.834	0.0454	24.09	0.23	21.06	0.1596
3	IC3	5.820	0.5026	24.47	2.83	22.04	1.7679
4	IC4	5.817	1.3714	24.73	7.73	22.29	4.8243
5	IC5	5.797	2.8380	24.68	15.88	22.43	9.9833
6	IC6	5.777	5.6533	24.65	31.04	22.75	19.8866
7	IC7	5.744	11.3826	24.74	59.54	22.93	40.0405
8	IC8	5.687	22.7500	25.00	108.38	22.86	80.0271
	Sum:	46.319	44.544	178.521	225.643	163.599	156.693
	Average:	5.790	5.568	22.315	28.205	20.450	19.587
	Rel.Std.Dev:	0.911 %	142.591 %	29.274 %	135.408 %	26.248 %	142.591 %

No. BROMIDE	Name BROMIDE	Time min BROMIDE ECD_1	Area µS*min BROMIDE ECD_1	Rel.Area % BROMIDE ECD_1	Height µS BROMIDE ECD_1	Rel.Height % BROMIDE ECD_1	Amount mg/L BROMIDE ECD_1
1	IC1	6.407	0.0004	2.57	0.00	2.09	0.0023
2	IC2	6.560	0.0257	13.62	0.14	13.22	0.1509
3	IC3	6.544	0.2814	13.70	1.65	12.87	1.6554
4	IC4	6.537	0.7709	13.90	4.53	13.07	4.5345
5	IC5	6.527	1.6186	14.08	9.36	13.22	9.5207
6	IC6	6.514	3.2868	14.33	18.37	13.46	19.3328
7	IC7	6.484	6.7353	14.64	35.66	13.73	39.6161
8	IC8	6.433	13.6787	15.03	65.68	13.85	80.4565
	Sum:	52.006	26.398	101.871	135.400	95.522	155.269
	Average:	6.501	3.300	12.734	16.925	11.940	19.409
	Rel.Std.Dev:	0.847 %	144.644 %	32.456 %	136.608 %	33.434 %	144.644 %

No. FLUORIDE	Name FLUORIDE	Time min FLUORIDE ECD_1	Area µS*min FLUORIDE ECD_1	Rel.Area % FLUORIDE ECD_1	Height µS FLUORIDE ECD_1	Rel.Height % FLUORIDE ECD_1	Amount mg/L FLUORIDE ECD_1
1	IC1	3.524	0.0033	21.68	0.01	12.21	0.0218
2	IC2	3.244	0.0233	12.35	0.16	14.89	0.0532
3	IC3	3.240	0.2885	14.04	2.06	16.06	0.4710
4	IC4	3.237	0.7656	13.81	5.55	16.01	1.2278
5	IC5	3.244	1.5767	13.71	11.21	15.84	2.5301
6	IC6	3.250	3.0811	13.44	21.01	15.40	5.0014
7	IC7	3.254	5.9813	13.00	38.52	14.84	9.9933
8	IC8	3.267	11.2370	12.35	67.15	14.16	20.0014
	Sum:	26.259	22.957	114.375	145.677	119.399	39.300
	Average:	3.282	2.870	14.297	18.210	14.925	4.913
	Rel.Std.Dev:	2.982 %	137.399 %	21.345 %	130.315 %	8.595 %	141.871 %

WET CHEMISTRY BATCH REPORT
Nov 20 2023, 09:49 am
Batch: WG345760 Run ID 1: R627542 Run ID 2: NONE

Parameter: Alkalinity
Prep Date: N/A

Date Analyzed: 17-NOV-23
Prep Method: N/A

Analyst Initials: BL
Prep Chemist: N/A

Sample	Samp Type	Method	Initial Amt.	Final Amt.	Rpt. DF	Result	Rpt Result	TS(%)	PQL	MDL	Adj PQL	RPD	%Rec
SQ6234-1	SAMP	SM2320B	50.0mL	50.0mL	1	499.552	500 mg/L	NA	5	0.23	5.0		
SQ6234-2	SAMP	SM2320B	50.0mL	50.0mL	1	315.906	320 mg/L	NA	5	0.23	5.0		
SQ6234-3	SAMP	SM2320B	50.0mL	50.0mL	1	312.995	310 mg/L	NA	5	0.23	5.0		
SQ6238-1	SAMP	SM2320B	50.0mL	50.0mL	1	110.158	110 mg/L	NA	5	0.23	5.0		
SQ6238-2	SAMP	SM2320B	50.0mL	50.0mL	1	111.196	110 mg/L	NA	5	0.23	5.0		
SQ6238-3	SAMP	SM2320B	50.0mL	50.0mL	1	115.783	120 mg/L	NA	5	0.23	5.0		
SQ6238-4	SAMP	SM2320B	50.0mL	50.0mL	1	152.489	150 mg/L	NA	5	0.23	5.0		
SQ6238-5	SAMP	SM2320B	50.0mL	50.0mL	1	159.108	160 mg/L	NA	5	0.23	5.0		
SQ6238-6	SAMP	SM2320B	50.0mL	50.0mL	1	175.732	180 mg/L	NA	5	0.23	5.0		
SQ6238-7	SAMP	SM2320B	50.0mL	50.0mL	1	108.763	110 mg/L	NA	5	0.23	5.0		
SQ6238-8	SAMP	SM2320B	50.0mL	50.0mL	1	143.971	140 mg/L	NA	5	0.23	5.0		
SQ6238-9	SAMP	SM2320B	50.0mL	50.0mL	1	126.217	130 mg/L	NA	5	0.23	5.0		
SQ6238-10	SAMP	SM2320B	50.0mL	50.0mL	1	128.302	130 mg/L	NA	5	0.23	5.0		
SQ6238-11	SAMP	SM2320B	50.0mL	50.0mL	1	156.195	160 mg/L	NA	5	0.23	5.0		
SQ6257-1	SAMP	SM2320B	50.0mL	50.0mL	1	45.545	46. mg/L	NA	5	0.23	5.0		
SQ6257-3	SAMP	SM2320B	50.0mL	50.0mL	1	62.51	62. mg/L	NA	5	0.23	5.0		
SQ6257-5	SAMP	SM2320B	50.0mL	50.0mL	1	68.9	69. mg/L	NA	5	0.23	5.0		
SQ6295-1	SAMP	SM2320B	50.0mL	50.0mL	1	335.233	340 mg/L	NA	5	0.23	5.0		
SQ6295-2	SAMP	SM2320B	50.0mL	50.0mL	1	182.699	180 mg/L	NA	5	0.23	5.0		
SQ6295-3	SAMP	SM2320B	50.0mL	50.0mL	1	237.525	240 mg/L	NA	5	0.23	5.0		
WG345760-1	MBLANK	SM2320B	50.0mL	50.0mL	1	2.364	J2.4 mg/L	NA	5	0.23	5.0		
WG345760-2	LCS	SM2320B	50.0mL	50.0mL	1	124.487	120 mg/L	NA	5	0.23	5.0		104
WG345760-3	LCSD	SM2320B	50.0mL	50.0mL	1	130.275	130 mg/L	NA	5	0.23	5.0	4	108
WG345760-4	DUP	SM2320B	50.0mL	50.0mL	1	153.235	150 mg/L	NA	5	0.23	5.0	0	
WG345760-5	MS	SM2320B	50.0mL	50.0mL	1	268.246	270 mg/L	NA	5	0.23	5.0		112
WG345760-6	MS	SM2320B	50.0mL	50.0mL	1	280.835	280 mg/L	NA	5	0.23	5.0		100

Comments:

SQ6238-1	Anions = NO3, SO4, Cl.
SQ6238-2	Anions = NO3, SO4, Cl.
SQ6238-3	Anions = NO3, SO4, Cl.
SQ6238-4	Anions = NO3, SO4, Cl.
SQ6238-5	Anions = NO3, SO4, Cl.
SQ6238-6	Anions = NO3, SO4, Cl.
SQ6238-7	Anions = NO3, SO4, Cl.
SQ6238-8	Anions = NO3, SO4, Cl.
SQ6238-9	Anions = NO3, SO4, Cl.
SQ6238-10	Anions = NO3, SO4, Cl.
SQ6238-11	Anions = NO3, SO4, Cl.
SQ6295-1	Anions = SO4, Cl.
SQ6295-2	Anions = SO4, Cl.
SQ6295-3	Anions = SO4, Cl.

Entered by: BL Date: 11/20/23 Accepted by: RAD Date: 11/20/23

Katahdin Analytical Services SQ6238 Page 598 of 875

WET CHEMISTRY BATCH REPORT
Nov 20 2023, 09:49 am
Batch: WG345760 Run ID 1: R627542 Run ID 2: NONE

WG345760-1	SQ6234-1
WG345760-2	SQ6234-1
WG345760-3	SQ6234-1
WG345760-4	SQ6238-4
WG345760-5	SQ6238-4
WG345760-6	SQ6295-2

Entered by: BL Date: 11/20/23 Accepted by: RAD Date: 11/20/23

WET CHEMISTRY BATCH REPORT - BICARBONATE
Nov 20 2023, 09:49 am
Batch: WG345761 Run ID 1: R627543 Run ID 2: NONE

Parameter: Bicarbonate (As CaCO3)

Date Analyzed: 17-NOV-23

Analyst Initials: BL

Prep Date: N/A

Prep Method: N/A

Prep Chemist: N/A

Sample	Samp Type	Method	Alkalinity	pH	Rpt. DF	Result	Rpt Result	TS(%)	PQL	MDL	Adj PQL	RPD	%Rec
SQ6234-1	SAMP	SM4500CO2 D	499.552	7.368	1	498.44701	500 mg/L	NA	5	.497	5		
SQ6234-2	SAMP	SM4500CO2 D	315.906	6.626	1	315.77842	320 mg/L	NA	5	.497	5		
SQ6234-3	SAMP	SM4500CO2 D	312.995	6.658	1	312.85892	310 mg/L	NA	5	.497	5		
WG345761-1	MBLANK	SM4500CO2 D	2.36400	5.727	1	2.36361	U5.0 mg/L	NA	5	.497	5		

Comments:

WG345761-1 SQ6234-1

Entered by: BL Date: 11/20/23 Accepted by: RAD Date: 11/20/23

WET CHEMISTRY BATCH REPORT - CARBONATE
Nov 20 2023, 09:50 am
Batch: WG345762 Run ID 1: R627544 Run ID 2: NONE

Parameter: Carbonate (As CaCO3) Prep Date: N/A

Date Analyzed: 17-NOV-23 Prep Method: N/A

Analyst Initials: BL Prep Chemist: N/A

Sample	Samp Type	Method	Bicarb	pH	Rpt. DF	Result	Rpt Result	TS(%)	PQL	MDL	Adj PQL	RPD	%Rec
SQ6234-1	SAMP	SM4500CO2 D	498.447	7.368	1	1.09332	U5.0 mg/L	NA	5	.497	5		
SQ6234-2	SAMP	SM4500CO2 D	315.778	6.626	1	.12546	U5.0 mg/L	NA	5	.497	5		
SQ6234-3	SAMP	SM4500CO2 D	312.859	6.658	1	.13381	U5.0 mg/L	NA	5	.497	5		
WG345762-1	MBLANK	SM4500CO2 D	2.36361	5.727	1	.00012	U5.0 mg/L	NA	5	.497	5		

Comments:

WG345762-1 SQ6234-1

Entered by: BL Date: 11/20/23 Accepted by: RAD Date: 11/20/23

(TBICARB)WG345761 → R627543 (TCARB)WG345762 → R627544
(ALK)WG345760 → R627542

KATAHDIN ANALYTICAL SERVICES

ALKALINITY, BICARBONATE, CARBONATE, FREE CO2 - DL 25 AUTOTITRATOR

Analysis: EPA 310.1 (SM2320B) Calculations: (SM 4500-CO2 D)

pH Probe ID: DG111-SC	
Sulfuric Acid Titrant Reagent ID: W22103	Buffer pH 4 ID: SWL 5132
Sulfuric Acid Concentration: 0.02N	Buffer pH 7 ID: 5115
Alkalinity Check Standard (CCV): W22333 TV= 125	Buffer pH 10 ID: 5094
Alkalinity LCS/MS ID: W22326 TV= 120	Pipette IDs: W3

Sample ID	Run #	Sample Volume (mL)	Sample ID	Run #	Sample Volume (mL)	Comments - Must indicate which sample
CCV	1	50	CCV	11	50	
CCB	2	"	CCB	12	"	
LCS	3	"	SQ6257-5	13	"	
LCSD	4	"	6295-1	14	"	
SQ6234-1	1	50	-2	15	"	
-2	2	"	-3	16	"	
-3	3	"	6295-2MS	17	"	
6238-1	4	"	CCV	18	"	BL 11/17/23
-2	5	"	CCB	2	"	
-3	6	"				
-4	7	"				
6238-4 DUP	8	"				
CCV	9	"				
CCB	10	"				
SQ6238-4MS	1	50				
6238-5	2	50				
-6	3	"				
-7	4	"				
-8	5	"				
-9	6	"				
-10	7	"				
-11	8	"				
6257-1	9	"	BL		11/17/23	
-3	10	"				

Analyst: BL Date: 11/17/23

Checked By: RAD Date: 11/20/23

Start time: 11/17/2023 12:16

Results

No.	Comment / ID	Start time	Rx	Result	Unit	Name	
1/4	CCV	11/17/2023 12:17:08 PM	R1 =	3.241	mg/L	P Alkalinity- pH8.2	**99.08%**
			R2 =	123.854	mg/L	Total Alkalinity	
			R3 =	8.479	pH	pH	
			R4 =	19.7	oC	TEMPERATURE	
2/4	CCB	11/17/2023 12:21:19 PM	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	2.364	mg/L	Total Alkalinity	
			R3 =	5.727	pH	pH	
			R4 =	21.2	oC	TEMPERATURE	
3/4	LCS	11/17/2023 12:23:09 PM	R1 =	67.392	mg/L	P Alkalinity- pH8.2	**103.74%**
			R2 =	124.487	mg/L	Total Alkalinity	
			R3 =	10.514	pH	pH	
			R4 =	21.1	oC	TEMPERATURE	
4/4	LCSD	11/17/2023 12:26:46 PM	R1 =	71.779	mg/L	P Alkalinity- pH8.2	**108.56%**
			R2 =	130.275	mg/L	Total Alkalinity	
			R3 =	10.51	pH	pH	
			R4 =	21.2	oC	TEMPERATURE	

Start time: 11/17/2023 13:21

Results

No.	Comment / ID	Start time	Rx	Result	Unit	Name	
1/10	SQ6234-1	11/17/2023 1:22:30 PM	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	499.552	mg/L	Total Alkalinity	
			R3 =	7.368	pH	pH	
			R4 =	10.5	oC	TEMPERATURE	
2/10	SQ6234-2	11/17/2023 1:29:10 PM	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	315.906	mg/L	Total Alkalinity	
			R3 =	6.626	pH	pH	
			R4 =	10.9	oC	TEMPERATURE	
3/10	SQ6234-3	11/17/2023 1:34:00 PM	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	312.995	mg/L	Total Alkalinity	
			R3 =	6.658	pH	pH	
			R4 =	11.8	oC	TEMPERATURE	
4/10	SQ6238-1	11/17/2023 1:39:02 PM	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	110.158	mg/L	Total Alkalinity	
			R3 =	7.414	pH	pH	
			R4 =	12.4	oC	TEMPERATURE	
5/10	SQ6238-2	11/17/2023 1:42:32 PM	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	111.196	mg/L	Total Alkalinity	
			R3 =	7.388	pH	pH	
			R4 =	12.7	oC	TEMPERATURE	
6/10	SQ6238-3	11/17/2023 1:46:16 PM	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	115.783	mg/L	Total Alkalinity	
			R3 =	7.229	pH	pH	
			R4 =	13.2	oC	TEMPERATURE	
7/10	SQ6238-4	11/17/2023 1:49:51 PM	R1 =	9.249	mg/L	P Alkalinity- pH8.2	
			R2 =	152.489	mg/L	Total Alkalinity	
			R3 =	8.617	pH	pH	
			R4 =	13.4	oC	TEMPERATURE	
8/10	SQ6238-4 DUP	11/17/2023 1:53:46 PM	R1 =	9.383	mg/L	P Alkalinity- pH8.2	
			R2 =	153.235	mg/L	Total Alkalinity	
			R3 =	8.613	pH	pH	
			R4 =	14	oC	TEMPERATURE	
9/10	CCV	11/17/2023 1:57:39 PM	R1 =	4.129	mg/L	P Alkalinity- pH8.2	**104.56%**
			R2 =	130.704	mg/L	Total Alkalinity	
			R3 =	8.559	pH	pH	
			R4 =	20.2	oC	TEMPERATURE	

10/10	CCB	11/17/2023 2:02:29 PM	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	2.407	mg/L	Total Alkalinity	
			R3 =	5.641	pH	pH	
			R4 =	21.2	oC	TEMPERATURE	

Start time: 11/17/2023 15:25

Results

No.	Comment / ID	Start time	Rx	Result	Unit	Name	
1/17	SQ6238-4 MS	11/17/2023 3:27:00 PM	R1 =	86.199	mg/L	P Alkalinity- pH8.2	
			R2 =	268.246	mg/L	Total Alkalinity	
			R3 =	9.709	pH	pH	
			R4 =	16.9	oC	TEMPERATURE	
2/17	SQ6238-5	11/17/2023 3:31:42 PM	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	159.108	mg/L	Total Alkalinity	
			R3 =	7.698	pH	pH	
			R4 =	15.9	oC	TEMPERATURE	
3/17	SQ6238-6	11/17/2023 3:35:37 PM	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	175.732	mg/L	Total Alkalinity	
			R3 =	7.661	pH	pH	
			R4 =	16.2	oC	TEMPERATURE	
4/17	SQ6238-7	11/17/2023 3:39:35 PM	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	108.763	mg/L	Total Alkalinity	
			R3 =	7.472	pH	pH	
			R4 =	16.7	oC	TEMPERATURE	
5/17	SQ6238-8	11/17/2023 3:42:55 PM	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	143.971	mg/L	Total Alkalinity	
			R3 =	7.299	pH	pH	
			R4 =	17.2	oC	TEMPERATURE	
6/17	SQ6238-9	11/17/2023 3:46:35 PM	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	126.217	mg/L	Total Alkalinity	
			R3 =	7.439	pH	pH	
			R4 =	16.6	oC	TEMPERATURE	
7/17	SQ6238-10	11/17/2023 3:50:04 PM	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	128.302	mg/L	Total Alkalinity	
			R3 =	7.464	pH	pH	
			R4 =	17.4	oC	TEMPERATURE	
8/17	SQ6238-11	11/17/2023 3:53:32 PM	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	156.195	mg/L	Total Alkalinity	
			R3 =	7.697	pH	pH	
			R4 =	17.8	oC	TEMPERATURE	
9/17	SQ6257-1	11/17/2023 3:57:15 PM	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	45.545	mg/L	Total Alkalinity	
			R3 =	6.341	pH	pH	
			R4 =	17.4	oC	TEMPERATURE	
10/17	SQ6257-3	11/17/2023 4:00:10 PM	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	62.51	mg/L	Total Alkalinity	
			R3 =	6.756	pH	pH	
			R4 =	17.6	oC	TEMPERATURE	
11/17	CCV	11/17/2023 4:03:14 PM	R1 =	4.304	mg/L	P Alkalinity- pH8.2	**106.16%**
			R2 =	132.699	mg/L	Total Alkalinity	
			R3 =	8.555	pH	pH	
			R4 =	21.4	oC	TEMPERATURE	
12/17	CCB	11/17/2023 4:07:32 PM	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	2.228	mg/L	Total Alkalinity	
			R3 =	5.673	pH	pH	
			R4 =	21.9	oC	TEMPERATURE	

13/17	SQ6257-5	11/17/2023 4:09:20 PM	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	68.9	mg/L	Total Alkalinity	
			R3 =	6.201	pH	pH	
			R4 =	18.3	oC	TEMPERATURE	
14/17	SQ6295-1	11/17/2023 4:12:46 PM	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	335.233	mg/L	Total Alkalinity	
			R3 =	6.951	pH	pH	
			R4 =	18.6	oC	TEMPERATURE	
15/17	SQ6295-2	11/17/2023 4:17:55 PM	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	182.699	mg/L	Total Alkalinity	
			R3 =	7.303	pH	pH	
			R4 =	20.1	oC	TEMPERATURE	
16/17	SQ6295-3	11/17/2023 4:21:44 PM	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	237.525	mg/L	Total Alkalinity	
			R3 =	7.443	pH	pH	
			R4 =	19.4	oC	TEMPERATURE	
17/17	SQ6295-2 MS	11/17/2023 4:26:14 PM	R1 =	54.954	mg/L	P Alkalinity- pH8.2	
			R2 =	280.835	mg/L	Total Alkalinity	
			R3 =	9.26	pH	pH	
			R4 =	20.8	oC	TEMPERATURE	

Start time: 11/17/2023 16:34

Results

No.	Comment / ID	Start time	Rx	Result	Unit	Name	
1/2	CCV	11/17/2023 4:35:59 PM	R1 =	2.797	mg/L	P Alkalinity- pH8.2	**99.32%**
			R2 =	124.149	mg/L	Total Alkalinity	
			R3 =	8.425	pH	pH	
			R4 =	22	oC	TEMPERATURE	
2/2	CCB	11/17/2023 4:40:35 PM	R1 =	0	mg/L	P Alkalinity- pH8.2	
			R2 =	2.419	mg/L	Total Alkalinity	
			R3 =	5.712	pH	pH	
			R4 =	22.2	oC	TEMPERATURE	

Start time: 11/17/2023 12:03

Results

No.	Comment / ID	Start time	Rx	Result	Unit	Name

Calibration data

Number of segments	1	
Slope	-58.26 mV/pH	
Zero point	7.034 pH	
Calibration temperature	25.0 oC	

Katahdin
ANALYTICAL SERVICES

ACCREDITED IN ACCORDANCE WITH nelac
Cert No E87604

Wet Chemistry Batch Report

Analyst Initials: RAD
Date Analyzed: 02-DEC-23
01-DEC-23

Batch: WG346358
Prep Method: N/A
Prep Chemist: RAD

Sample	Samp Type	Method	Parameter	DF	Result	Rpt. Result	Units	PQL	Adj. PQL	MDL	Adj. MDL	RPD	Rec.
SQ6238-1DLA	SAMP	EPA 300.0	Chloride	10	325.9724	320	mg/L	2	20.	.0993	0.99		
SQ6238-1DLB	SAMP	EPA 300.0	Sulfate	2	91.5857	92	mg/L	1	2.0	.0637	0.13		
SQ6238-2DLA	SAMP	EPA 300.0	Chloride	10	323.6992	320	mg/L	2	20.	.0993	0.99		
SQ6238-2DLB	SAMP	EPA 300.0	Sulfate	2	93.9721	94	mg/L	1	2.0	.0637	0.13		
SQ6238-3DL	SAMP	EPA 300.0	Chloride	20	407.6223	410	mg/L	2	40.	.0993	2.0		
SQ6238-4DL	SAMP	EPA 300.0	Chloride	2	65.0196	65	mg/L	2	4.0	.0993	0.20		
SQ6238-7DL	SAMP	EPA 300.0	Chloride	20	482.1767	480	mg/L	2	40.	.0993	2.0		
SQ6238-8DLA	SAMP	EPA 300.0	Chloride	20	759.6058	760	mg/L	2	40.	.0993	2.0		
SQ6238-8DLB	SAMP	EPA 300.0	Sulfate	5	232.6636	230	mg/L	1	5.0	.0637	0.32		
WG346358-1	MBLANK	EPA 300.0	Chloride	1	.0106	U 1.0	mg/L	2	2.0	.0993	0.099		
WG346358-1	MBLANK	EPA 300.0	Sulfate	1	.0481	U 0.50	mg/L	1	1.0	.0637	0.064		
WG346358-2	LCS	EPA 300.0	Chloride	1	3.641	3.64	mg/L	2	2.00	.0993	0.0990		97.1
WG346358-2	LCS	EPA 300.0	Sulfate	1	3.7152	3.72	mg/L	1	1.00	.0637	0.0640		99.2
WG346358-3	LCSD	EPA 300.0	Chloride	1	3.7938	3.79	mg/L	2	2.00	.0993	0.0990	4	101.
WG346358-3	LCSD	EPA 300.0	Sulfate	1	3.7787	3.78	mg/L	1	1.00	.0637	0.0640	2	101.

Comments:

SQ6238-1	Anions = NO3, SO4,
SQ6238-2	Anions = NO3, SO4,
SQ6238-3	Anions = NO3, SO4,
SQ6238-4	Anions = NO3, SO4,
SQ6238-7	Anions = NO3, SO4,
SQ6238-8	Anions = NO3, SO4,
WG346358-1	SQ6238-1
WG346358-2	SQ6238-1
WG346358-3	SQ6238-1

Entered by: RAD Date: 12/4/23 Accepted by: SS Date: 12/5/23

Katahdin
ANALYTICAL SERVICES

Accredited in accordance with nelac
Cert No E87604

Wet Chemistry Batch Report

Analyst Initials: RAD
Date Analyzed: 02-DEC-23
01-DEC-23

Batch: WG346359
Prep Method: N/A
Prep Chemist: RAD

Sample	Samp Type	Method	Parameter	DF	Result	Rpt. Result	Units	PQL	Adj. PQL	MDL	Adj. MDL	RPD	Rec.
SQ6602-2	SAMP	SW846 9056A	Nitrate as N	1	.0961	0.096	mg/L	.05	0.050	.02	0.020		
SQ6602-2	SAMP	SW846 9056A	Nitrite as N	1	.0712	0.071	mg/L	.05	0.050	.013	0.013		
SQ6602-3	SAMP	SW846 9056A	Nitrate as N	1	.0674	0.067	mg/L	.05	0.050	.02	0.020		
SQ6602-3	SAMP	SW846 9056A	Nitrite as N	1	.2099	0.21	mg/L	.05	0.050	.013	0.013		
SQ6602-4	SAMP	SW846 9056A	Nitrate as N	1	.0053	U 0.040	mg/L	.05	0.050	.02	0.020		
SQ6602-4	SAMP	SW846 9056A	Nitrite as N	1	.1597	0.16	mg/L	.05	0.050	.013	0.013		
SQ6602-5	SAMP	SW846 9056A	Nitrate as N	1	.0045	U 0.040	mg/L	.05	0.050	.02	0.020		
SQ6602-5	SAMP	SW846 9056A	Nitrite as N	1	.5865	0.59	mg/L	.05	0.050	.013	0.013		
SQ6602-6	SAMP	SW846 9056A	Nitrate as N	1	.0035	U 0.040	mg/L	.05	0.050	.02	0.020		
SQ6602-6	SAMP	SW846 9056A	Nitrite as N	1	.2477	0.25	mg/L	.05	0.050	.013	0.013		
SQ6602-7	SAMP	SW846 9056A	Nitrate as N	1	.0066	U 0.040	mg/L	.05	0.050	.02	0.020		
SQ6602-7	SAMP	SW846 9056A	Nitrite as N	1	.2096	0.21	mg/L	.05	0.050	.013	0.013		
SQ6602-9	SAMP	SW846 9056A	Chloride	1	3.9383	3.9	mg/L	2	2.0	.5	0.50		
SQ6602-9	SAMP	SW846 9056A	Nitrate as N	1	.1209	0.12	mg/L	.05	0.050	.02	0.020		
SQ6602-9	SAMP	SW846 9056A	Nitrite as N	1	.1183	0.12	mg/L	.05	0.050	.013	0.013		
SQ6602-9	SAMP	SW846 9056A	Sulfate	1	10.5682	10	mg/L	1	1.0	.25	0.25		
SQ6603-1	SAMP	SW846 9056A	Chloride	1	7.0224	7.0	mg/L	2	2.0	.5	0.50		
SQ6603-1	SAMP	SW846 9056A	Nitrate as N	1	1.04	1.0	mg/L	.05	0.050	.02	0.020		
SQ6603-1	SAMP	SW846 9056A	Nitrite as N	1	.2921	0.29	mg/L	.05	0.050	.013	0.013		
SQ6603-1	SAMP	SW846 9056A	Sulfate	1	17.3865	17	mg/L	1	1.0	.25	0.25		
SQ6603-2	SAMP	SW846 9056A	Chloride	1	16.7219	17	mg/L	2	2.0	.5	0.50		
SQ6603-2	SAMP	SW846 9056A	Nitrate as N	1	.0049	U 0.040	mg/L	.05	0.050	.02	0.020		
SQ6603-2	SAMP	SW846 9056A	Nitrite as N	1	.2451	0.24	mg/L	.05	0.050	.013	0.013		
SQ6603-2	SAMP	SW846 9056A	Sulfate	1	8.729	8.7	mg/L	1	1.0	.25	0.25		
SQ6603-3	SAMP	SW846 9056A	Nitrate as N	1	.0036	U 0.040	mg/L	.05	0.050	.02	0.020		
SQ6603-3	SAMP	SW846 9056A	Nitrite as N	1	.2041	0.20	mg/L	.05	0.050	.013	0.013		
SQ6603-3	SAMP	SW846 9056A	Sulfate	1	6.5554	6.6	mg/L	1	1.0	.25	0.25		
WG346359-1	MBLANK	SW846 9056A	Chloride	1	.0106	U 1.0	mg/L	2	2.0	.5	0.50		
WG346359-1	MBLANK	SW846 9056A	Nitrate as N	1	.0181	U 0.040	mg/L	.05	0.050	.02	0.020		
WG346359-1	MBLANK	SW846 9056A	Nitrite as N	1	.0221	J 0.022	mg/L	.05	0.050	.013	0.013		
WG346359-1	MBLANK	SW846 9056A	Sulfate	1	.0481	U 0.50	mg/L	1	1.0	.25	0.25		
WG346359-2	LCS	SW846 9056A	Chloride	1	3.641	3.64	mg/L	2	2.00	.5	0.500		97.1
WG346359-2	LCS	SW846 9056A	Nitrate as N	1	.8279	0.828	mg/L	.05	0.0500	.02	0.0200		98.0
WG346359-2	LCS	SW846 9056A	Nitrite as N	1	1.1525	1.15	mg/L	.05	0.0500	.013	0.0130		101.
WG346359-2	LCS	SW846 9056A	Sulfate	1	3.7152	3.72	mg/L	1	1.00	.25	0.250		99.2
WG346359-3	LCSD	SW846 9056A	Chloride	1	3.7938	3.79	mg/L	2	2.00	.5	0.500	4	101.
WG346359-3	LCSD	SW846 9056A	Nitrate as N	1	.8267	0.827	mg/L	.05	0.0500	.02	0.0200	0	97.9
WG346359-3	LCSD	SW846 9056A	Nitrite as N	1	1.1613	1.16	mg/L	.05	0.0500	.013	0.0130	1	102.
WG346359-3	LCSD	SW846 9056A	Sulfate	1	3.7787	3.78	mg/L	1	1.00	.25	0.250	2	101.
WG346359-4	DUP	SW846 9056A	Nitrate as N	1	.092	0.092	mg/L	.05	0.050	.02	0.020	4	
WG346359-4	DUP	SW846 9056A	Nitrite as N	1	.0874	0.087	mg/L	.05	0.050	.013	0.013	20	
WG346359-5	MS	SW846 9056A	Nitrate as N	1	.922842	0.923	mg/L	.05	0.0500	.02	0.0200		93
WG346359-5	MS	SW846 9056A	Nitrite as N	1	1.212	1.21	mg/L	.05	0.0500	.013	0.0130		95.1
WG346359-6	MS	SW846 9056A	Nitrate as N	1	.878737	0.879	mg/L	.05	0.0500	.02	0.0200		91.3
WG346359-6	MS	SW846 9056A	Nitrite as N	1	1.23358	* 1.23	mg/L	.05	0.0500	.013	0.0130		85.3

Entered by: RAD Date: 12/4/23

Accepted by: SS Date: 12/5/23

Katahdin
ANALYTICAL SERVICES

ACCREDITED IN ACCORDANCE WITH nelac
Cert No E87604

Wet Chemistry Batch Report

Analyst Initials: RAD
Date Analyzed: 02-DEC-23
01-DEC-23

Batch: WG346359
Prep Method: N/A
Prep Chemist: RAD

Sample	Samp Type	Method	Parameter	DF	Result	Rpt. Result	Units	PQL	Adj. PQL	MDL	Adj. MDL	RPD	Rec.

Comments:

SQ6602-2	Anions=Cl, NO3, NO
SQ6602-3	Anions=Cl, NO3, NO
SQ6602-4	Anions=Cl, NO3, NO
SQ6602-5	Anions=Cl, NO3, NO
SQ6602-6	Anions=Cl, NO3, NO
SQ6602-7	Anions=Cl, NO3, NO
SQ6602-9	Anions=Cl, NO3, NO
SQ6603-1	Anions=Cl, NO3, NO
SQ6603-2	Anions=Cl, NO3, NO
SQ6603-3	Anions=Cl, NO3, NO
WG346359-1	SQ6602-2
WG346359-2	SQ6602-2
WG346359-3	SQ6602-2
WG346359-4	SQ6602-2
WG346359-5	SQ6602-2
WG346359-6	SQ6602-3

Entered by: RAD Date: 12/4/23 Accepted by: SS Date: 12/5/23

Katahdin
ANALYTICAL SERVICES

ACCREDITED IN ACCORDANCE WITH nelac
Cert No E87604

Wet Chemistry Batch Report

Analyst Initials: RAD
Date Analyzed: 02-DEC-23
01-DEC-23

Batch: WG346360
Prep Method: N/A
Prep Chemist: RAD

Sample	Samp Type	Method	Parameter	DF	Result	Rpt. Result	Units	PQL	Adj. PQL	MDL	Adj. MDL	RPD	Rec.
SQ6611-1	SAMP	EPA 300.0	Chloride	1	9.4603	9.5	mg/L	2	2.0	.0993	0.099		
SQ6611-1	SAMP	EPA 300.0	Nitrate as N	1	.0223	U 0.050	mg/L	.05	0.050	.0174	0.017		
SQ6611-1	SAMP	EPA 300.0	Nitrite as N	1	.2642	0.26	mg/L	.05	0.050	.0092	0.0092		
WG346360-1	MBLANK	EPA 300.0	Chloride	1	.0106	U 1.0	mg/L	2	2.0	.0993	0.099		
WG346360-1	MBLANK	EPA 300.0	Nitrate as N	1	.0181	J 0.018	mg/L	.05	0.050	.0174	0.017		
WG346360-1	MBLANK	EPA 300.0	Nitrite as N	1	.0221	J 0.022	mg/L	.05	0.050	.0092	0.0092		
WG346360-2	LCS	EPA 300.0	Chloride	1	3.641	3.64	mg/L	2	2.0	.0993	0.099		97.1
WG346360-2	LCS	EPA 300.0	Nitrate as N	1	.8279	0.828	mg/L	.05	0.050	.0174	0.017		98.0
WG346360-2	LCS	EPA 300.0	Nitrite as N	1	1.1525	1.15	mg/L	.05	0.050	.0092	0.0092		101.
WG346360-3	LCSD	EPA 300.0	Chloride	1	3.7938	3.79	mg/L	2	2.0	.0993	0.099	4	101.
WG346360-3	LCSD	EPA 300.0	Nitrate as N	1	.8267	0.827	mg/L	.05	0.050	.0174	0.017	0	97.9
WG346360-3	LCSD	EPA 300.0	Nitrite as N	1	1.1613	1.16	mg/L	.05	0.050	.0092	0.0092	1	102.

Comments:

WG346360-1	SQ6611-1
WG346360-2	SQ6611-1
WG346360-3	SQ6611-1

Entered by: RAD Date: 12/4/23

Accepted by: SS Date: 12/5/23

IC STANDARDS PREPARATION

Fill sheet in completely and file with each batch of samples analyzed.

IC8 MIX ID:	EXPIRATION DATE:	ICAL DATE:	CCV STOCK ID:	EXPIRATION DATE:
W22233	10/23/23	10/12/23	W22360	12/11/23

ALALYTE	INITIAL AMOUNT (mL)	OF	STOCK CONC. (mg/L)	TO	FINAL VOLUME (mL)	=	FINAL CONC. (mg/L)
Cl	2.0	OF	1000	TO	100	=	20
NO2 (as N)	0.8		1000				8
NO3 (as N)	0.8		1000				8
Br	4.0		1000				40
SO4	4.0		1000				40
F	1.0		1000				10
PO4 (as P)	1.0		1000				10

WORKING STANDARDS

Standards prepared on each day of use.

STD.	INITIAL AMOUNT (mL)	OF	FINAL VOLUME (mL)	FINAL CONC. (mg/L)							STD ID*
				Cl	NO2	NO3	Br	SO4	PO4	F	
IC8	5	IC8	5	40	16	16	80	80	20	20	IC8-101223
IC7	2.5	IC8	5	20	8	8	40	40	10	10	IC7-101223
IC6	2.5	IC7	5	10	4	4	20	20	5	5	IC6-101223
IC5	1.25	IC7	5	5	2	2	10	10	2.5	2.5	IC5-101223
IC4	1.25	IC6	5	2.5	1	1	5	5	1.25	1.25	IC4-101223
IC3	0.5	IC6	5	1	0.4	0.4	2	2	0.5	0.5	IC3-101223
IC2	0.5	IC3	5	0.1	0.04	0.04	0.2	0.2	0.05	0.05	IC2-101223
CCV	2.5	IC7	5	10	4	4	20	20	5	5	CCV-120123

* STD ID is prefix followed by the date of preparation (ie. IC6-020216)

LCS/MATRIX SPIKE MIX ID: W22361	EXPIRATION DATE: 12/11/23

3.75 mL of High Purity Multi-Element IC Standard Solution "A" and 3.75 mL of High Purity Multi-Element IC Standard Solution "B" diluted to 50 mL. For MS, add 0.25 mL of mix to 4.75 mL of sample. For LCS, add 0.25 mL of mix to 4.75 mL of DI water.

FINAL CONCENTRATIONS (mg/L)

Cl	NO2 (as N)	NO3 (as N)	Br	SO4	PO4 (as P)	F	STD ID*
3.75	1.14	0.845	3.75	3.75	1.22	3.75	IC-LCS-120123

PIPETTES: W00, W16

2x dil = 2.5mL samp + 2.5mL DI	**5x dil** = 1.0mL samp + 4.0mL DI	**10x dil** = 0.5mL samp + 4.5mL DI
20x dil = 0.25mL samp + 4.75mL DI	**50x dil** = 0.1mL samp + 4.9mL DI	**100x dil** = 0.05mL samp + 4.95mL DI
200x dil = 0.025mL samp + 4.975mL DI	**500x dil** = 0.01mL samp + 4.99mL DI	**1000x dil** = 0.005mL samp + 4.995mL DI

Katahdin Analytical Services **ION CHROMATOGRAPHY RUNLOG** Dionex ICS-2100 (Instrument IC-3)

Analysis Date: 12/1/23	**Analytical Column S/N:** 220503194	**Calibration Date:** 10/12/23
Analysis Sequence: 120123 A	**Guard Column S/N:** 220406208	**Calibration Sequence:** 101223 CAL
Analyst: RAD	**Suppressor S/N:** 221117086	☐ If box at left is checked, continued from previous page. Refer to previous page for header information.

Reporting / Reanalysis Codes: ✓ Report without manipulation; S Report, peak automatically reintegrated with SmartPeak; M Report, peak manually integrated; A Report, peak manually assigned; R Do not report, reanalyze sample

Method Codes: E EPA 300.0; SW SW846 9056A

Katahdin Sample Number	Dilution Factor	Method Code	Report or Reanalyze (enter appropriate code): F	Cl	NO_2	SO_4	Br	NO_3	PO_4	Comments
CCV			✓	✓	✓	✓	✓	✓		
CCB			M	✓	✓	M	M	✓		
LCS			✓	✓	✓	✓	✓	✓		
SQ 6238-1	10	E		✓						
-1	2					M				
-2	10			✓						
-2	2					✓				
-3	20			✓						
-4	2			✓						
-7	20			✓						
-8	20			✓						
-8	5					M				
CCV			✓	✓	✓	✓	✓	✓		
CCB			M	✓	✓	M	M	✓		
6238 -9	50	E		R						Cl & SO_4 CCV fail RR
-9	5					R				
-10	50			R						
-10	5					R				
-11	5			R						
6382 -1	1	E		R		R				Cl=500x SO_4=20x
-1MS				R		R				
-1MSD				R		R				

S: WG346359 → R628546
DW: WG346360 → R628547

WL-069-Revision 1 – 04/12/20016

Reviewed by: SS

Review Date: 12/5/23

QAWL1114 - 000893

0000016

Katahdin Analytical Services **ION CHROMATOGRAPHY RUNLOG** Dionex ICS-2100 (Instrument IC-3)

Analysis Date:	Analytical Column S/N:	Calibration Date:
Analysis Sequence:	Guard Column S/N:	Calibration Sequence:
Analyst:	Suppressor S/N:	☑ If box at left is checked, continued from previous page. Refer to previous page for header information.

Reporting / Reanalysis Codes:
✓ Report without manipulation
S Report, peak automatically reintegrated with SmartPeak
M Report, peak manually integrated
A Report, peak manually assigned
R Do not report, reanalyze sample

Method Codes:
E EPA 300.0
SW SW846 9056A

Katahdin Sample Number	Dilution Factor	Method Code	Report or Reanalyze (enter appropriate code): F	Cl	NO_2	SO_4	Br	NO_3	PO_4	Comments
6382 -3	1	E		R		R				Cl & SO4 CCV fail RR Cl=500x SO4=20x
-5				R		R				
CCV			R	R	✓	R	✓	✓		
CCB			M	✓	✓	M	M	✓		
6382-7	1	E		R		R				Cl & SO4 CCV fail RR Cl=500x SO4=20x
6602-2		S		R	✓	R		✓		Cl & SO4 = 1x
-2 DUP				-	✓	-		✓		
-2 MS				-	✓	-		✓		
-3				R	✓	R		✓		Cl & SO4 = 1x
-3 MS				-	✓	-		✓		
-4				R	✓	R		M		Cl & SO4 = 1x
-5				R	✓	R		M		Cl & SO4 = 1x
-6				R	✓	R		M		Cl & SO4 = 1x
-7				R	✓	R		M		Cl = 2x SO4 = 1x
CCV			✓	✓	✓	✓	✓	✓		
CCB			✓	✓	✓	✓	✓	✓		
LCS			✓	✓	✓	✓	✓	✓		
6602-9	1	S		✓	✓	✓		✓		
6603-1		S		✓	✓	✓		✓		
-2				✓	✓	✓		M		
-3				R	✓	✓		✓		Cl = 2x
6611-1		DW		✓	✓			✓		

Reviewed by: SS
QAWL1114 - 000893

Review Date: 12/5/23

Katahdin Analytical Services **ION CHROMATOGRAPHY RUNLOG** Dionex ICS-2100 (Instrument IC-3)

Analysis Date:	**Analytical Column S/N:**	**Calibration Date:**
Analysis Sequence:	**Guard Column S/N:**	**Calibration Sequence:**
Analyst:	**Suppressor S/N:**	☑ **If box at left is checked, continued from previous page. Refer to previous page for header information.**

Reporting / Reanalysis Codes:
✓ Report without manipulation
S Report, peak automatically reintegrated with SmartPeak
M Report, peak manually integrated
A Report, peak manually assigned
R Do not report, reanalyze sample

Method Codes:
E EPA 300.0
SW SW846 9056A

Katahdin Sample Number	Dilution Factor	Method Code	Report or Reanalyze (enter appropriate code): F	Cl	NO_2	SO_4	Br	NO_3	PO_4	Comments
CCV			✓	✓	✓	✓	✓	✓		
CCB			M	✓	✓	✓	✓	✓		
										RAD 12/4/23

Reviewed by: SS **Review Date:** 12/5/23

QAWL1114 - 000893

Sequence Overview

Sequence Details

Name:	**120123 A REPROC**	*Created On:*	**28/Dec/22 13:33:49**
Directory:	**2023\12-DEC**	*Created By:*	**wetlab**
Data Vault:	**ChromeleonLocal**	*Updated On:*	**04/Dec/23 12:21:04**
No. of Injections:	**46**	*Updated By:*	**wetlab**

Injection Details

No.	Injection Name	Position	Type	Level	Inject Time	Status
1	CCV	1	Check Standard	06	01/Dec/23 16:39:27	Finished
2	CCB	2	Blank		01/Dec/23 16:56:13	Finished
3	LCS	3	Check Standard	09	01/Dec/23 17:13:29	Finished
4	SQ6238-1DLA	4	Unknown		01/Dec/23 17:30:45	Finished
5	SQ6238-1DLB	5	Unknown		01/Dec/23 17:48:01	Finished
6	SQ6238-2DLA	6	Unknown		01/Dec/23 18:05:17	Finished
7	SQ6238-2DLB	7	Unknown		01/Dec/23 18:22:33	Finished
8	SQ6238-3DL	8	Unknown		01/Dec/23 18:39:49	Finished
9	SQ6238-4DL	9	Unknown		01/Dec/23 18:57:05	Finished
10	SQ6238-7DL	10	Unknown		01/Dec/23 19:14:21	Finished
11	SQ6238-8DLA	11	Unknown		01/Dec/23 19:31:37	Finished
12	SQ6238-8DLB	12	Unknown		01/Dec/23 19:48:53	Finished
13	CCV	13	Check Standard	06	01/Dec/23 20:06:09	Finished
14	CCB	14	Blank		01/Dec/23 20:23:25	Finished
15	SQ6238-9DLA	15	Unknown		01/Dec/23 20:40:41	Finished
16	SQ6238-9DLB	16	Unknown		01/Dec/23 20:57:57	Finished
17	SQ6238-10DLA	17	Unknown		01/Dec/23 21:15:12	Finished
18	SQ6238-10DLB	18	Unknown		01/Dec/23 21:32:28	Finished
19	SQ6238-11DL	19	Unknown		01/Dec/23 21:49:44	Finished
20	SQ6382-1	20	Unknown		01/Dec/23 22:07:00	Finished
21	SQ6382-1 MS	21	Unknown		01/Dec/23 22:24:16	Finished
22	SQ6382-1 MSD	22	Unknown		01/Dec/23 22:41:32	Finished
23	SQ6382-3	23	Unknown		01/Dec/23 22:58:48	Finished
24	SQ6382-5	24	Unknown		01/Dec/23 23:16:04	Finished
25	CCV	25	Check Standard	06	01/Dec/23 23:33:20	Finished
26	CCB	26	Blank		01/Dec/23 23:50:36	Finished
27	SQ6382-7	27	Unknown		02/Dec/23 00:07:52	Finished
28	SQ6602-2	28	Unknown		02/Dec/23 00:25:08	Finished
29	SQ6602-2 DUP	29	Unknown		02/Dec/23 00:42:24	Finished
30	SQ6602-2 MS	30	Unknown		02/Dec/23 00:59:40	Finished
31	SQ6602-3	31	Unknown		02/Dec/23 01:16:56	Finished
32	SQ6602-3 MS	32	Unknown		02/Dec/23 01:34:12	Finished
33	SQ6602-4	33	Unknown		02/Dec/23 01:51:27	Finished
34	SQ6602-5	34	Unknown		02/Dec/23 02:08:43	Finished
35	SQ6602-6	35	Unknown		02/Dec/23 02:25:59	Finished
36	SQ6602-7	36	Unknown		02/Dec/23 02:43:15	Finished
37	CCV	37	Check Standard	06	02/Dec/23 03:00:31	Finished
38	CCB	38	Blank		02/Dec/23 03:17:47	Finished
39	LCS	39	Check Standard	09	02/Dec/23 03:35:02	Finished
40	SQ6602-9	40	Unknown		02/Dec/23 03:52:18	Finished
41	SQ6603-1	41	Unknown		02/Dec/23 04:09:35	Finished
42	SQ6603-2	42	Unknown		02/Dec/23 04:26:50	Finished

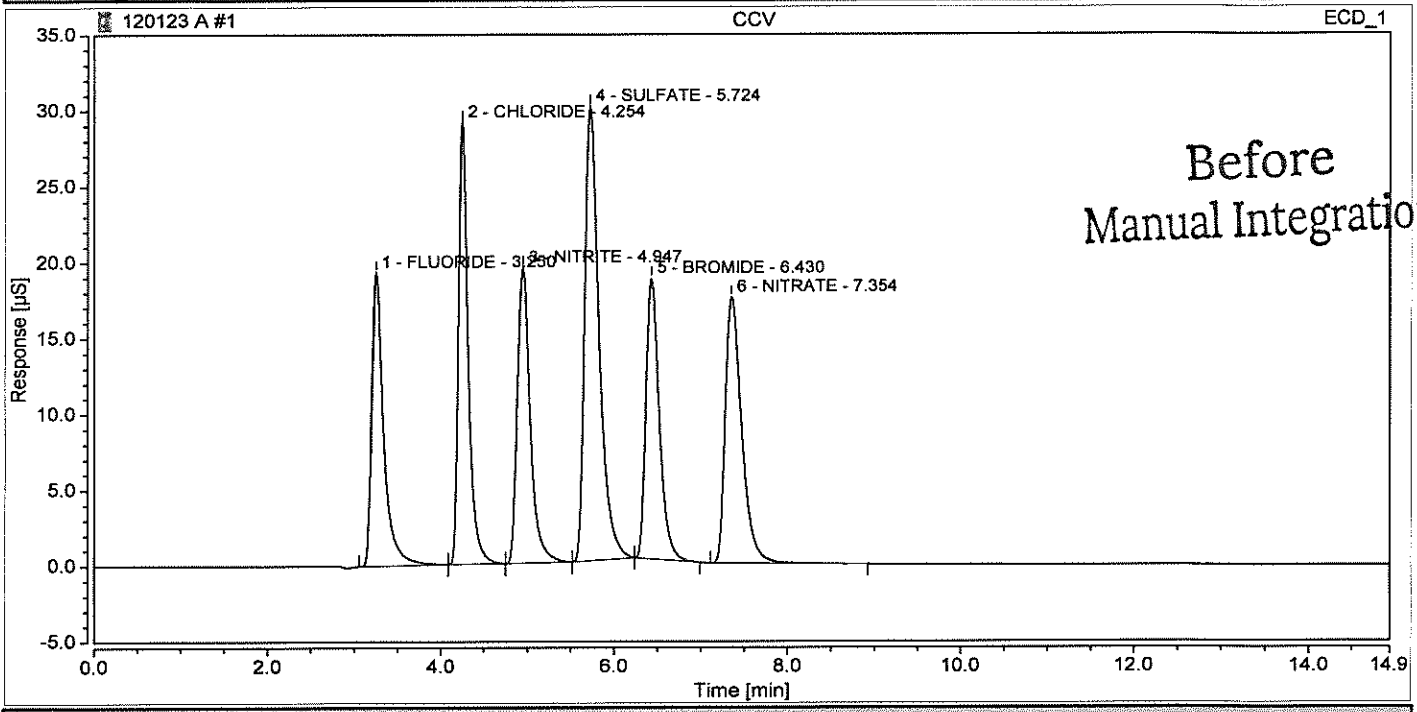
43	SQ6603-3	43	Unknown		02/Dec/23 04:44:06	Finished
44	SQ6611-1	44	Unknown		02/Dec/23 05:01:22	Finished
45	CCV	49	Check Standard	06	02/Dec/23 05:18:38	Finished
46	CCB	50	Blank		02/Dec/23 05:35:55	Finished

Chromatogram and Results

Injection Details

Injection Name:	**CCV**	*Run Time (min):*	**14.95**
Vial Number:	**1**	*Injection Volume:*	**200.00**
Injection Type:	**Check Standard**	*Channel:*	**ECD_1**
Calibration Level:	**06**	*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**01/Dec/23 16:39**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

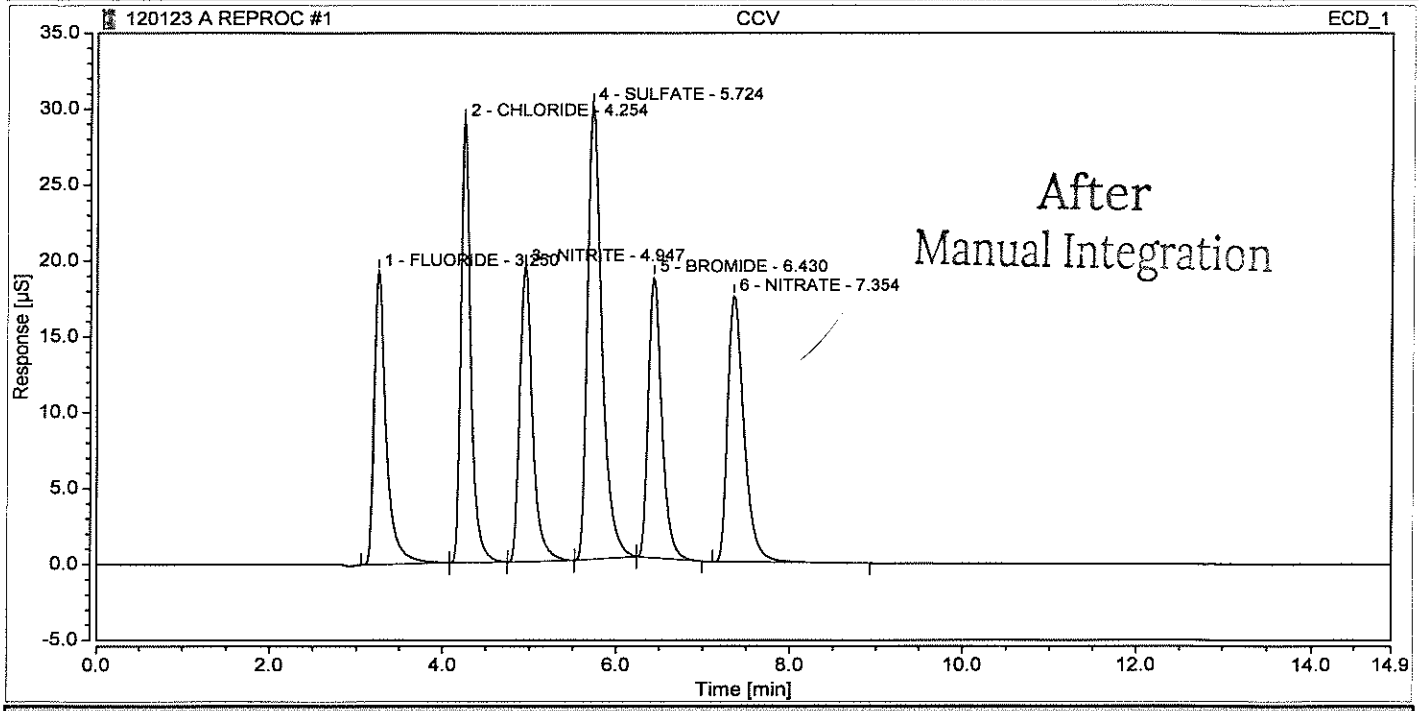
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.250	3.141	19.331	13.46	14.44	5.1012	2.0244
2	CHLORIDE	4.254	3.883	29.096	16.64	21.74	9.9627	-0.3733
3	NITRITE	4.947	3.356	19.469	14.39	14.54	4.0441	1.1030
4	SULFATE	5.724	5.754	29.953	24.66	22.38	20.2405	1.2027
5	BROMIDE	6.430	3.341	18.491	14.32	13.81	19.6507	-1.7464
6	NITRATE	7.354	3.855	17.517	16.53	13.09	3.9395	-1.5115
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**23.330**	**133.857**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**CCV**	*Run Time (min):*	**14.95**
Vial Number:	**1**	*Injection Volume:*	**200.00**
Injection Type:	**Check Standard**	*Channel:*	**ECD_1**
Calibration Level:	**06**	*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**01/Dec/23 16:39**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

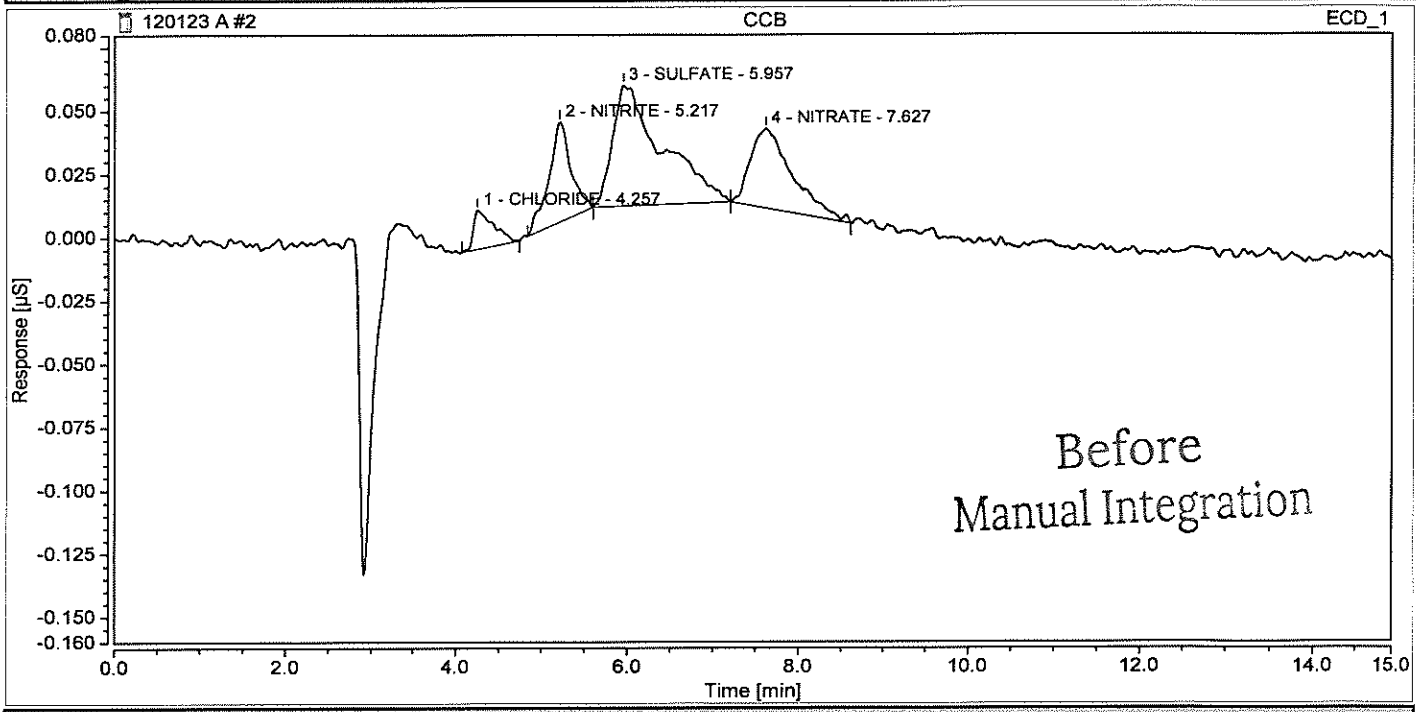
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.250	3.141	19.331	13.46	14.44	5.1012	2.0244
2	CHLORIDE	4.254	3.883	29.096	16.64	21.74	9.9627	-0.3733
3	NITRITE	4.947	3.356	19.469	14.39	14.54	4.0441	1.1030
4	SULFATE	5.724	5.754	29.953	24.66	22.38	20.2405	1.2027
5	BROMIDE	6.430	3.341	18.491	14.32	13.81	19.6507	-1.7464
6	NITRATE	7.354	3.855	17.517	16.53	13.09	3.9395	-1.5115
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**23.330**	**133.857**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**CCB**	*Run Time (min):*	**14.95**
Vial Number:	**2**	*Injection Volume:*	**200.00**
Injection Type:	**Blank**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**01/Dec/23 16:56**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

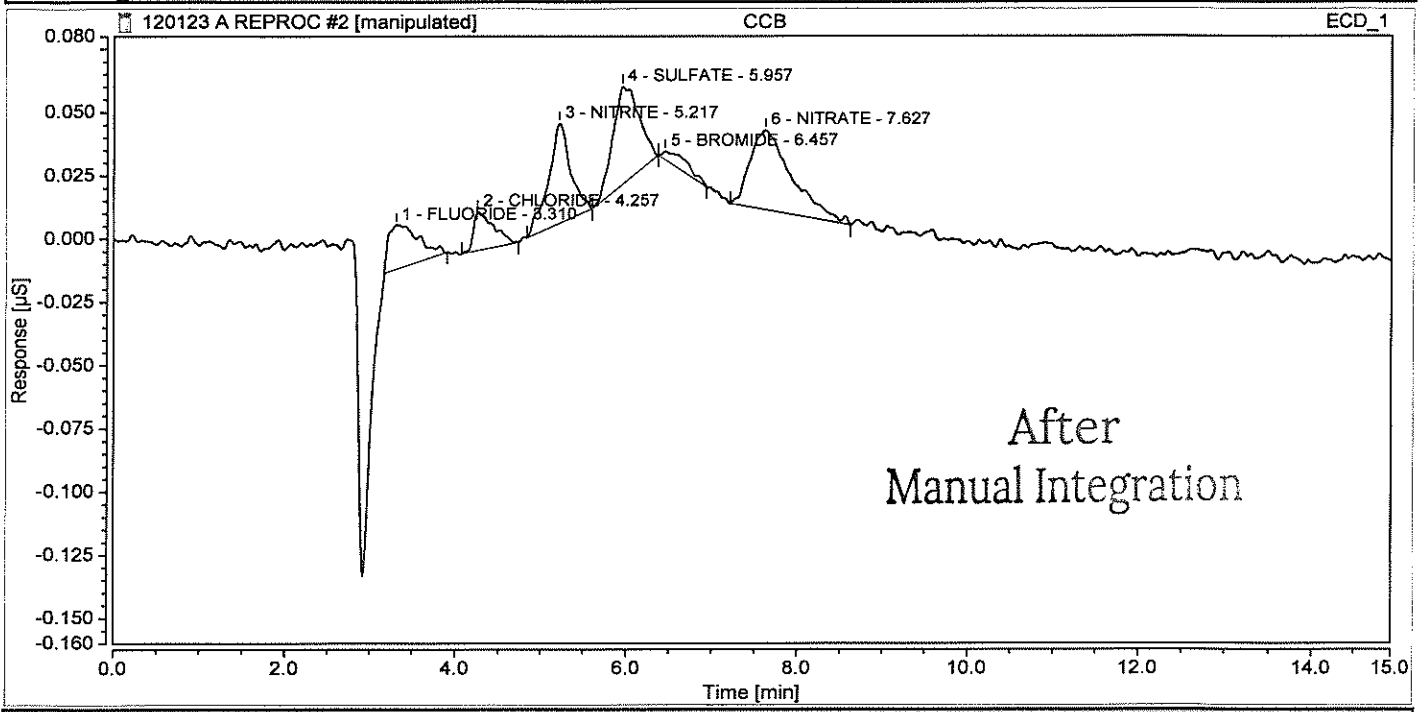
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.257	0.004	0.015	6.28	11.53	0.0106	n.a.
2	NITRITE	5.217	0.012	0.040	18.21	29.43	0.0221	n.a.
3	SULFATE	5.957	0.032	0.048	48.51	35.61	0.1119	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
4	NITRATE	7.627	0.018	0.031	27.00	23.44	0.0181	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.066**	**0.134**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**CCB**	*Run Time (min):*	**14.95**
Vial Number:	**2**	*Injection Volume:*	**200.00**
Injection Type:	**Blank**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**01/Dec/23 16:56**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

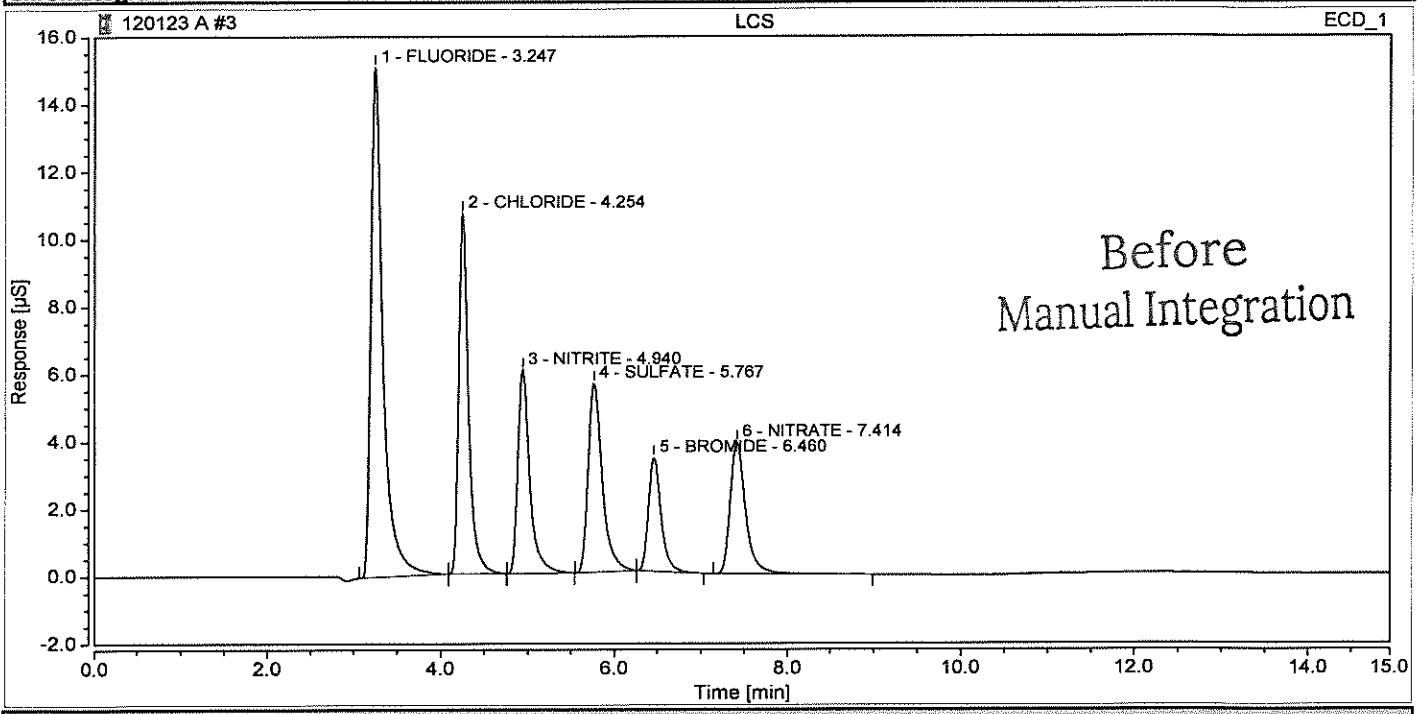
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.310	0.007	0.018	12.35	12.02	0.0276	n.a.
2	CHLORIDE	4.257	0.004	0.015	7.34	10.60	0.0106	n.a.
3	NITRITE	5.217	0.012	0.040	21.29	27.06	0.0221	n.a.
4	SULFATE	5.957	0.014	0.039	24.34	26.43	0.0481	n.a.
5	BROMIDE	6.457	0.002	0.003	3.13	2.32	0.0103	n.a.
6	NITRATE	7.627	0.018	0.031	31.56	21.56	0.0181	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.056**	**0.146**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**LCS**	*Run Time (min):*	**14.96**
Vial Number:	**3**	*Injection Volume:*	**200.00**
Injection Type:	**Check Standard**	*Channel:*	**ECD_1**
Calibration Level:	**09**	*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**01/Dec/23 17:13**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

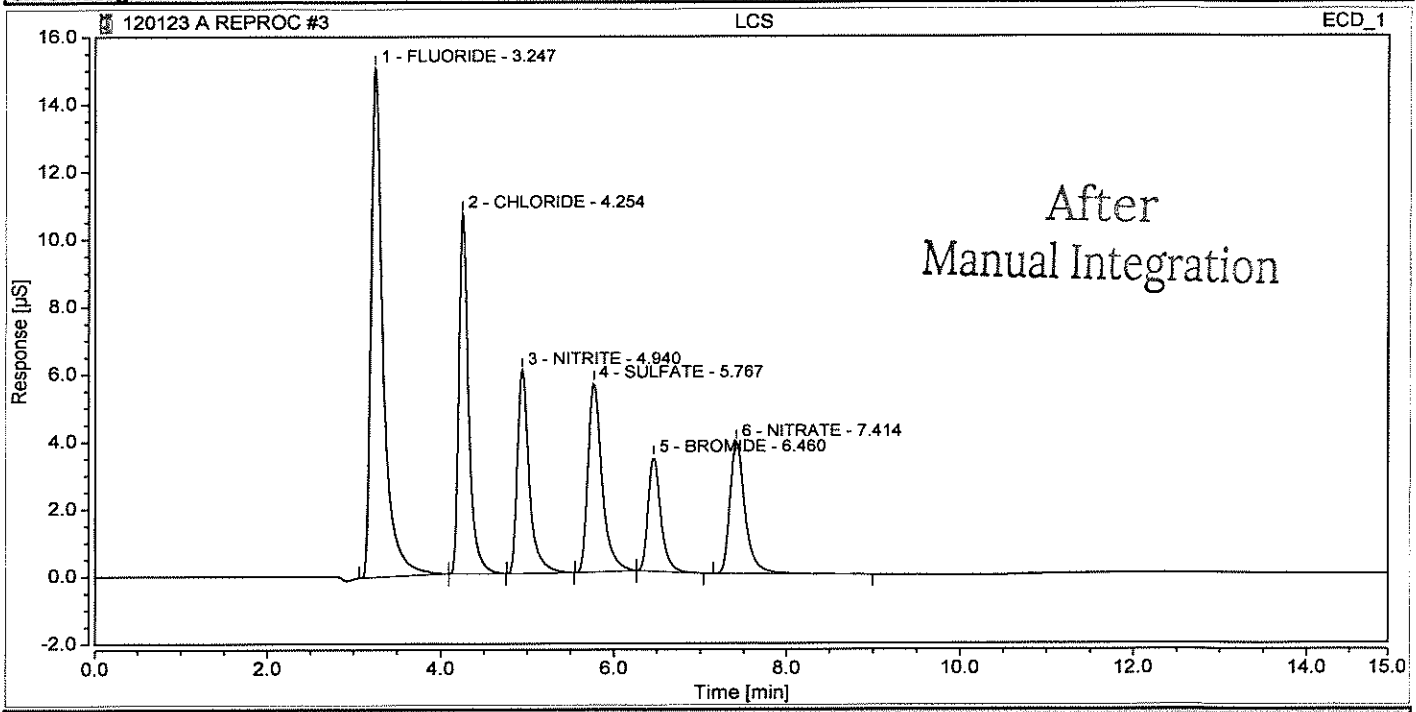
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.247	2.450	15.124	33.60	33.79	3.9552	5.4710
2	CHLORIDE	4.254	1.419	10.698	19.46	23.90	3.6410	-2.9064
3	NITRITE	4.940	0.974	6.044	13.36	13.50	1.1525	1.0935
4	SULFATE	5.767	1.056	5.608	14.49	12.53	3.7152	-0.9271
5	BROMIDE	6.460	0.582	3.375	7.98	7.54	3.4222	-8.7406
6	NITRATE	7.414	0.810	3.908	11.11	8.73	0.8279	-2.0239
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**7.291**	**44.756**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**LCS**	*Run Time (min):*	**14.96**
Vial Number:	**3**	*Injection Volume:*	**200.00**
Injection Type:	**Check Standard**	*Channel:*	**ECD_1**
Calibration Level:	**09**	*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**01/Dec/23 17:13**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

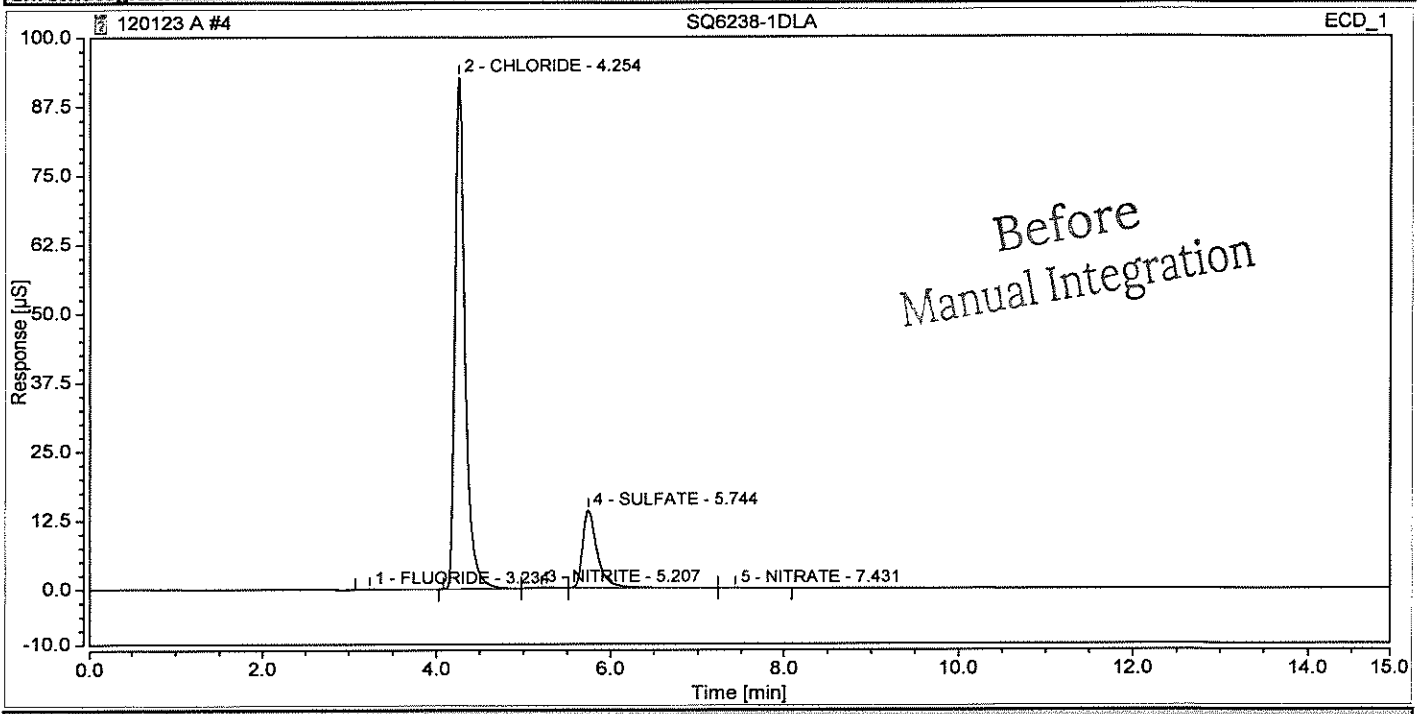
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.247	2.450	15.124	33.60	33.79	3.9552	5.4710
2	CHLORIDE	4.254	1.419	10.698	19.46	23.90	3.6410	-2.9064
3	NITRITE	4.940	0.974	6.044	13.36	13.50	1.1525	1.0935
4	SULFATE	5.767	1.056	5.608	14.49	12.53	3.7152	-0.9271
5	BROMIDE	6.460	0.582	3.375	7.98	7.54	3.4222	-8.7406
6	NITRATE	7.414	0.810	3.908	11.11	8.73	0.8279	-2.0239
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**7.291**	**44.756**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6238-1DLA**	*Run Time (min):*	**14.95**
Vial Number:	**4**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**10.0000**
Injection Date/Time:	**01/Dec/23 17:30**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

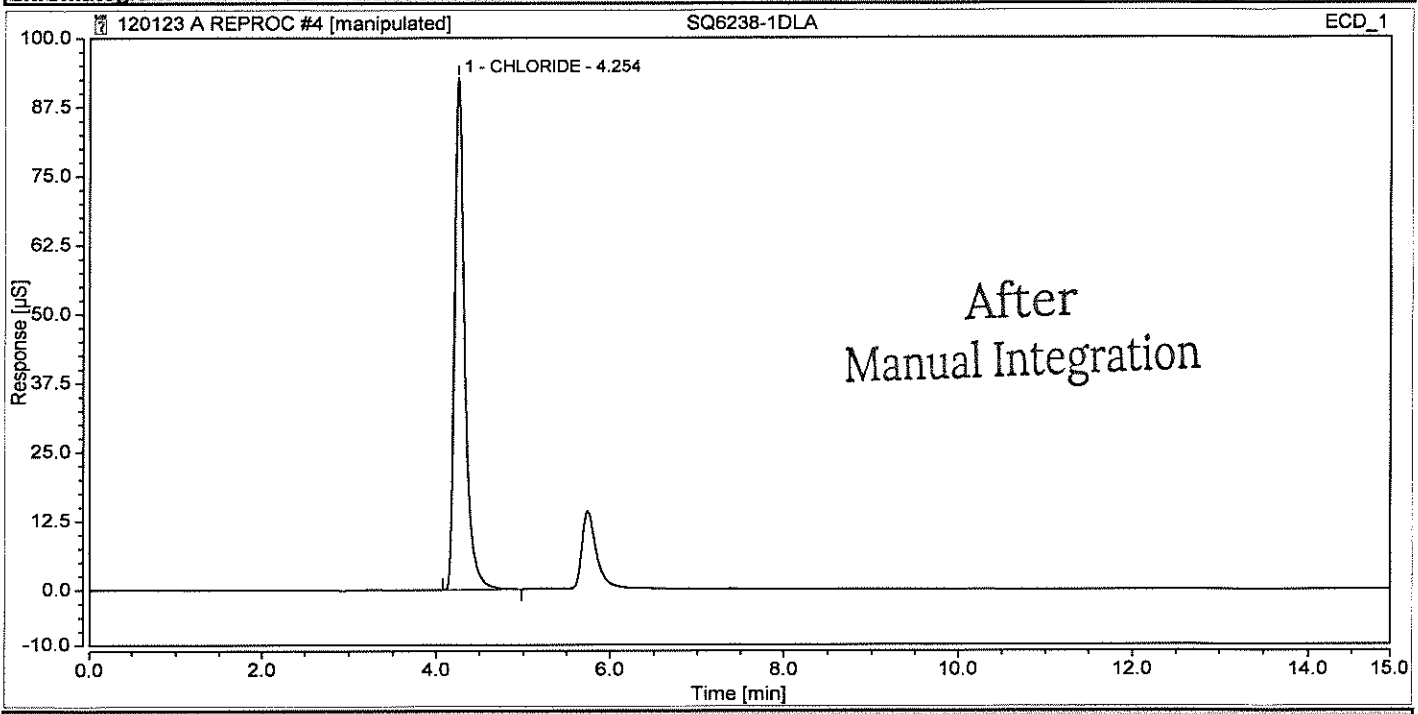
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.234	0.030	0.096	0.19	0.09	0.6323	n.a.
2	CHLORIDE	4.254	12.705	92.805	81.69	86.60	325.9724	n.a.
3	NITRITE	5.207	0.041	0.149	0.27	0.14	0.5630	n.a.
4	SULFATE	5.744	2.769	14.082	17.80	13.14	97.4098	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5	NITRATE	7.431	0.008	0.035	0.05	0.03	0.0851	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**15.553**	**107.166**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6238-1DLA**	*Run Time (min):*	**14.95**
Vial Number:	**4**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**10.0000**
Injection Date/Time:	**01/Dec/23 17:30**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

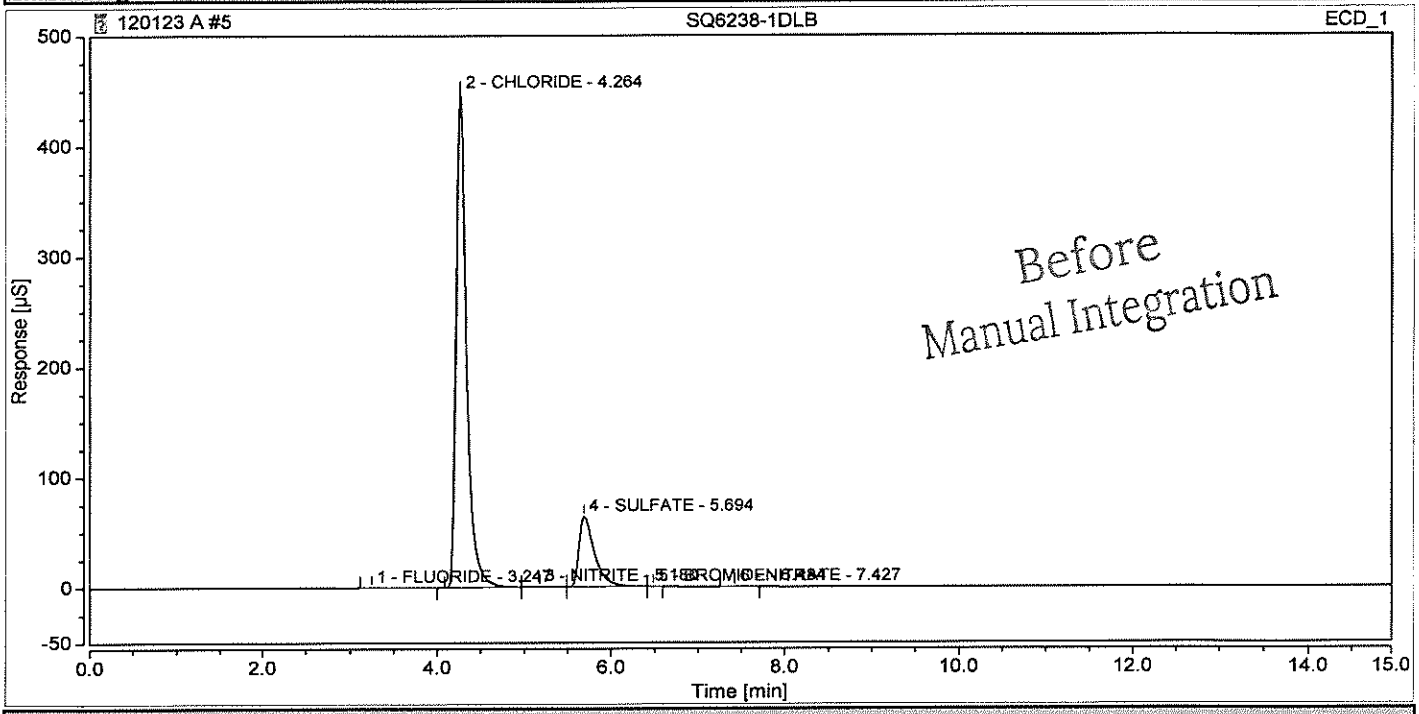
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.254	12.705	92.805	100.00	100.00	325.9724	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	SULFATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**12.705**	**92.805**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6238-1DLB**	*Run Time (min):*	**14.96**
Vial Number:	**5**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**2.0000**
Injection Date/Time:	**01/Dec/23 17:48**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

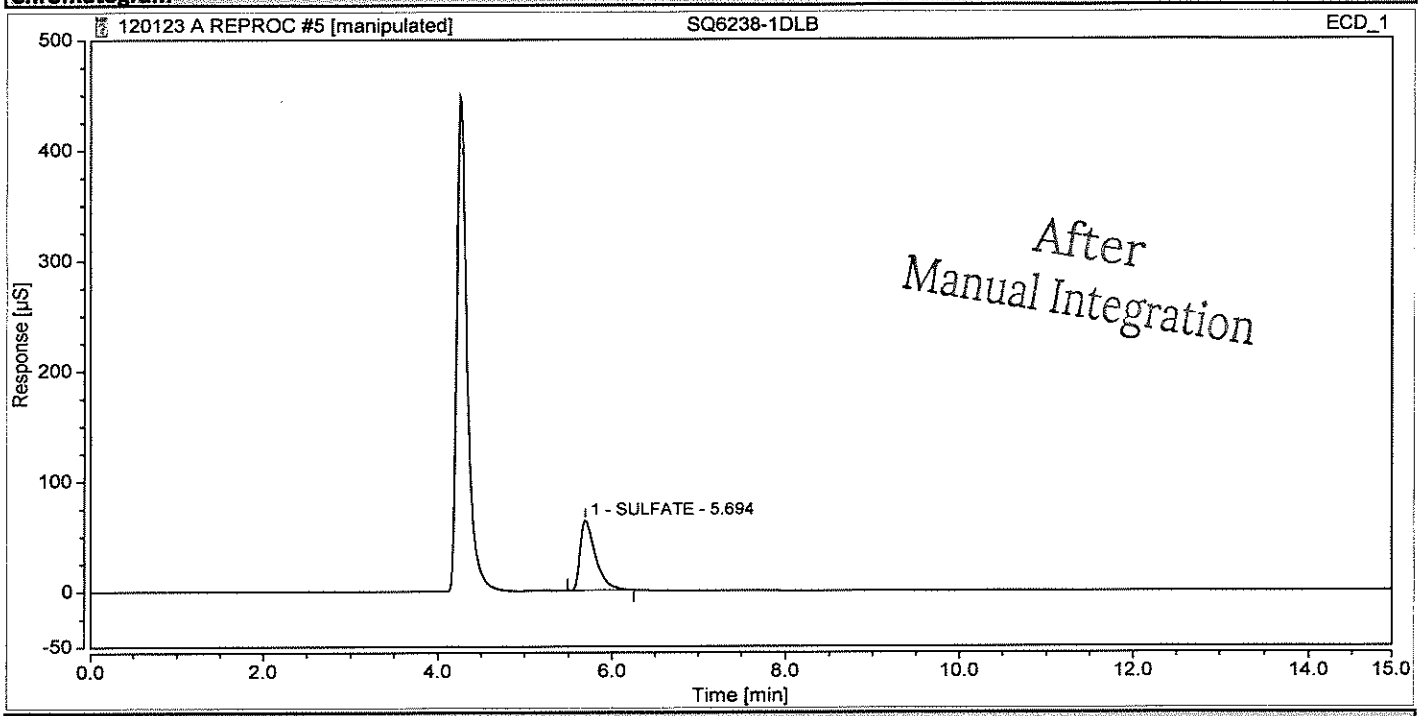
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.247	0.052	0.276	0.07	0.05	0.1971	n.a.
2	CHLORIDE	4.264	62.221	447.967	82.36	87.43	319.2917	n.a.
3	NITRITE	5.180	0.099	0.356	0.13	0.07	0.2467	n.a.
4	SULFATE	5.694	13.167	63.687	17.43	12.43	92.6358	n.a.
5	BROMIDE	6.484	0.002	0.021	0.00	0.00	0.0239	n.a.
6	NITRATE	7.427	0.007	0.039	0.01	0.01	0.0143	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**75.549**	**512.345**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6238-1DLB**	*Run Time (min):*	**14.96**
Vial Number:	**5**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**2.0000**
Injection Date/Time:	**01/Dec/23 17:48**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

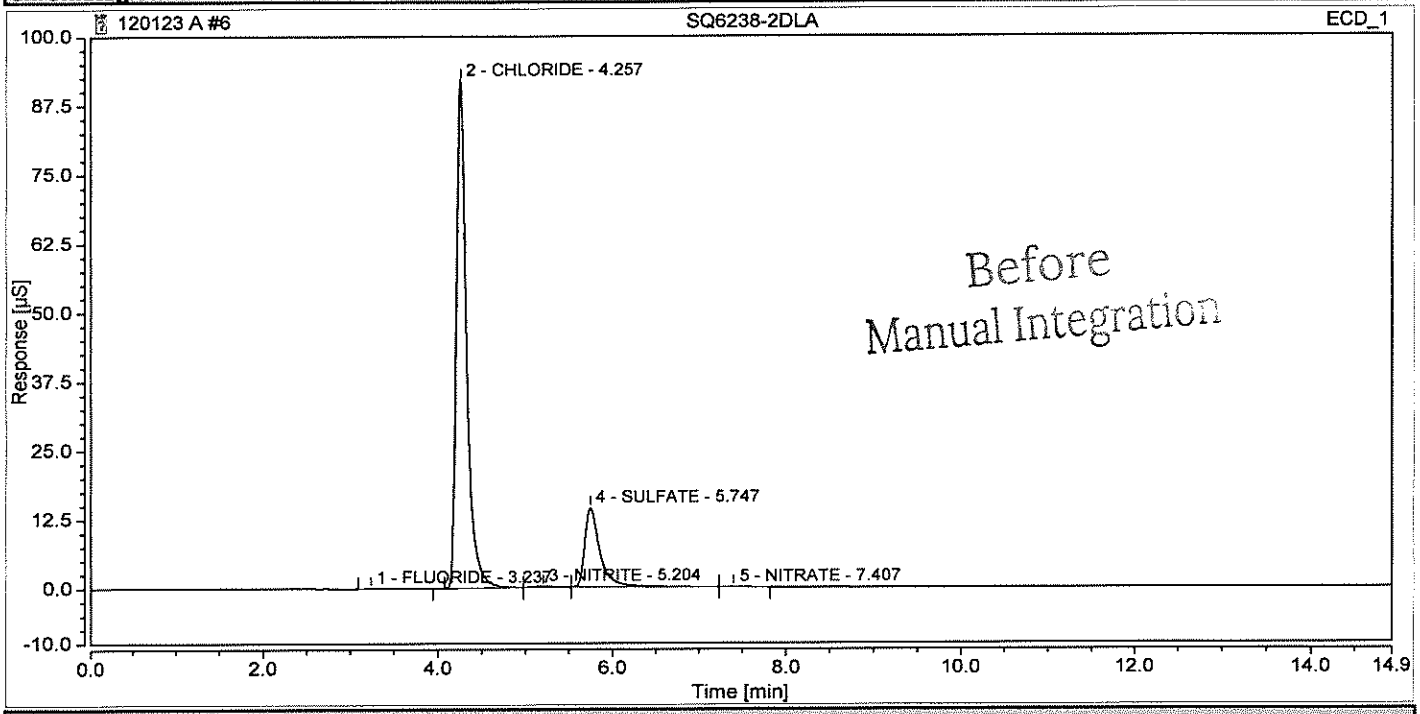
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	CHLORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	SULFATE	5.694	13.018	63.597	100.00	100.00	91.5857	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**13.018**	**63.597**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6238-2DLA**	*Run Time (min):*	**14.95**
Vial Number:	**6**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**10.0000**
Injection Date/Time:	**01/Dec/23 18:05**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

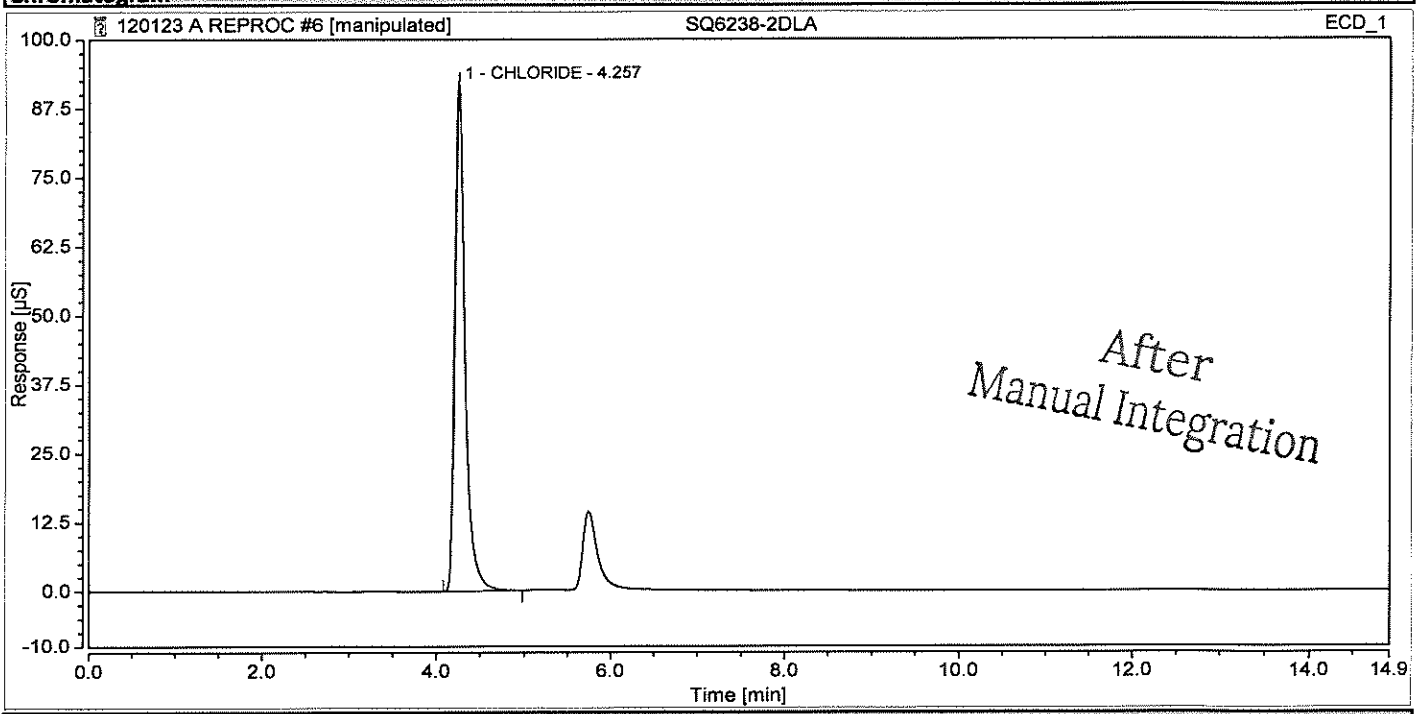
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.237	0.021	0.077	0.14	0.07	0.5042	n.a.
2	CHLORIDE	4.257	12.616	91.941	80.98	86.32	323.6992	n.a.
3	NITRITE	5.204	0.038	0.137	0.25	0.13	0.5271	n.a.
4	SULFATE	5.747	2.898	14.323	18.60	13.45	101.9466	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5	NITRATE	7.407	0.006	0.028	0.04	0.03	0.0594	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**15.580**	**106.507**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6238-2DLA**	*Run Time (min):*	**14.95**
Vial Number:	**6**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**10.0000**
Injection Date/Time:	**01/Dec/23 18:05**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

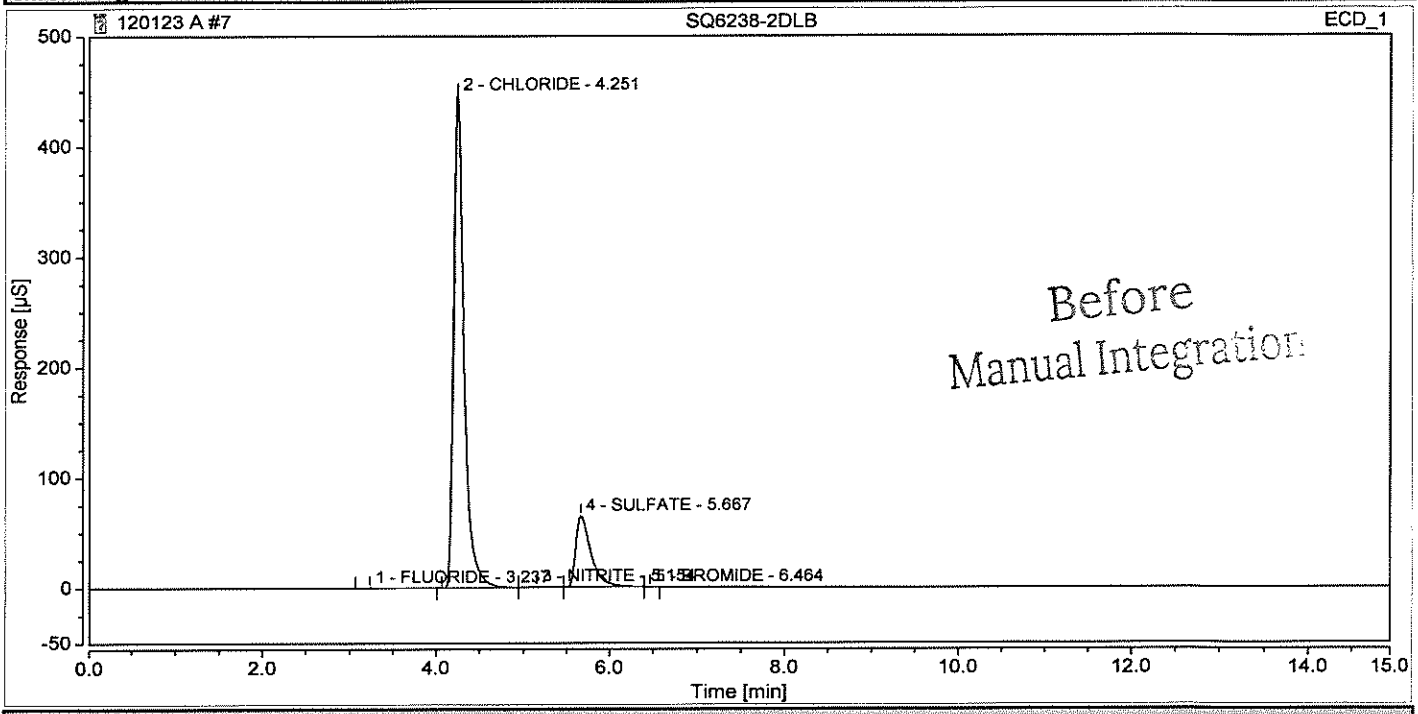
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.257	12.616	91.941	100.00	100.00	323.6992	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	SULFATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**12.616**	**91.941**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6238-2DLB**	*Run Time (min):*	**14.96**
Vial Number:	**7**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**2.0000**
Injection Date/Time:	**01/Dec/23 18:22**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

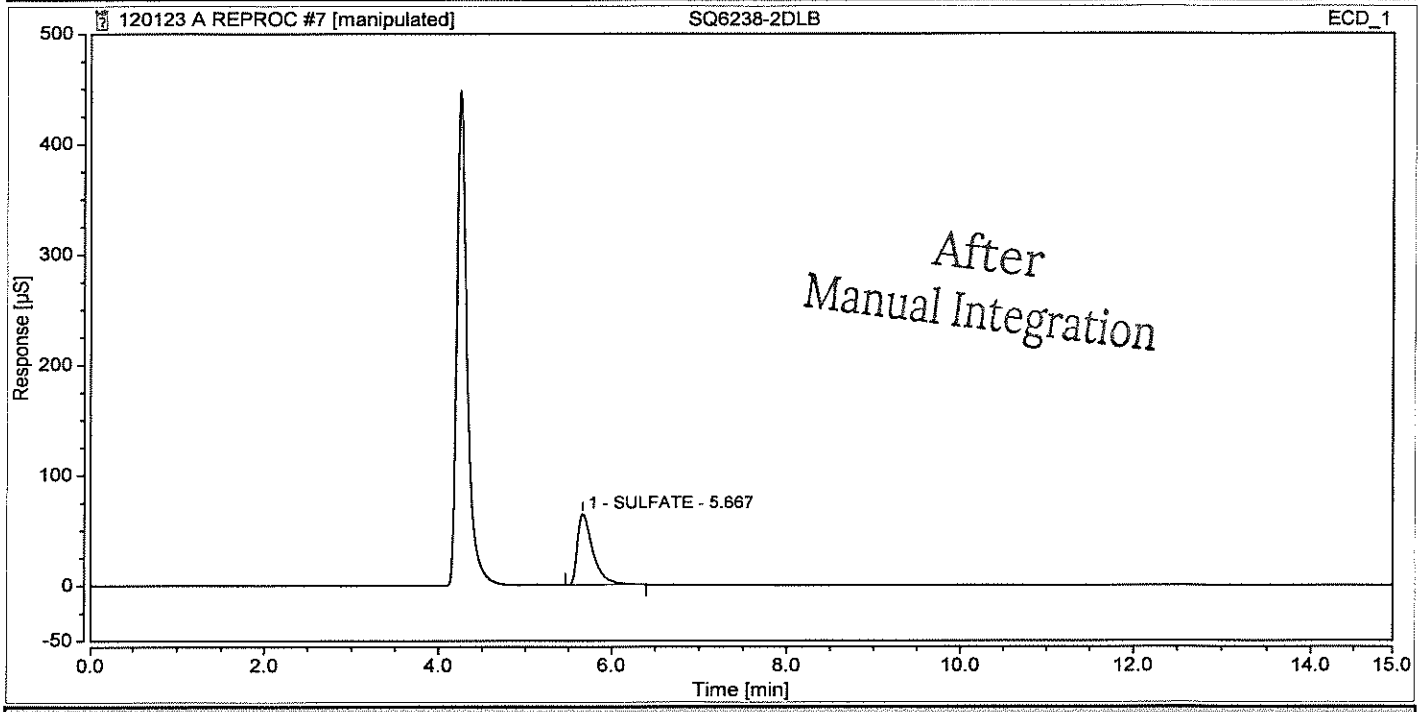
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.237	0.059	0.294	0.08	0.06	0.2185	n.a.
2	CHLORIDE	4.251	62.307	446.408	82.18	87.26	319.7298	n.a.
3	NITRITE	5.154	0.097	0.353	0.13	0.07	0.2419	n.a.
4	SULFATE	5.667	13.357	64.517	17.62	12.61	93.9721	n.a.
5	BROMIDE	6.464	0.002	0.017	0.00	0.00	0.0192	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**75.821**	**511.590**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6238-2DLB**	*Run Time (min):*	**14.96**
Vial Number:	**7**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**2.0000**
Injection Date/Time:	**01/Dec/23 18:22**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

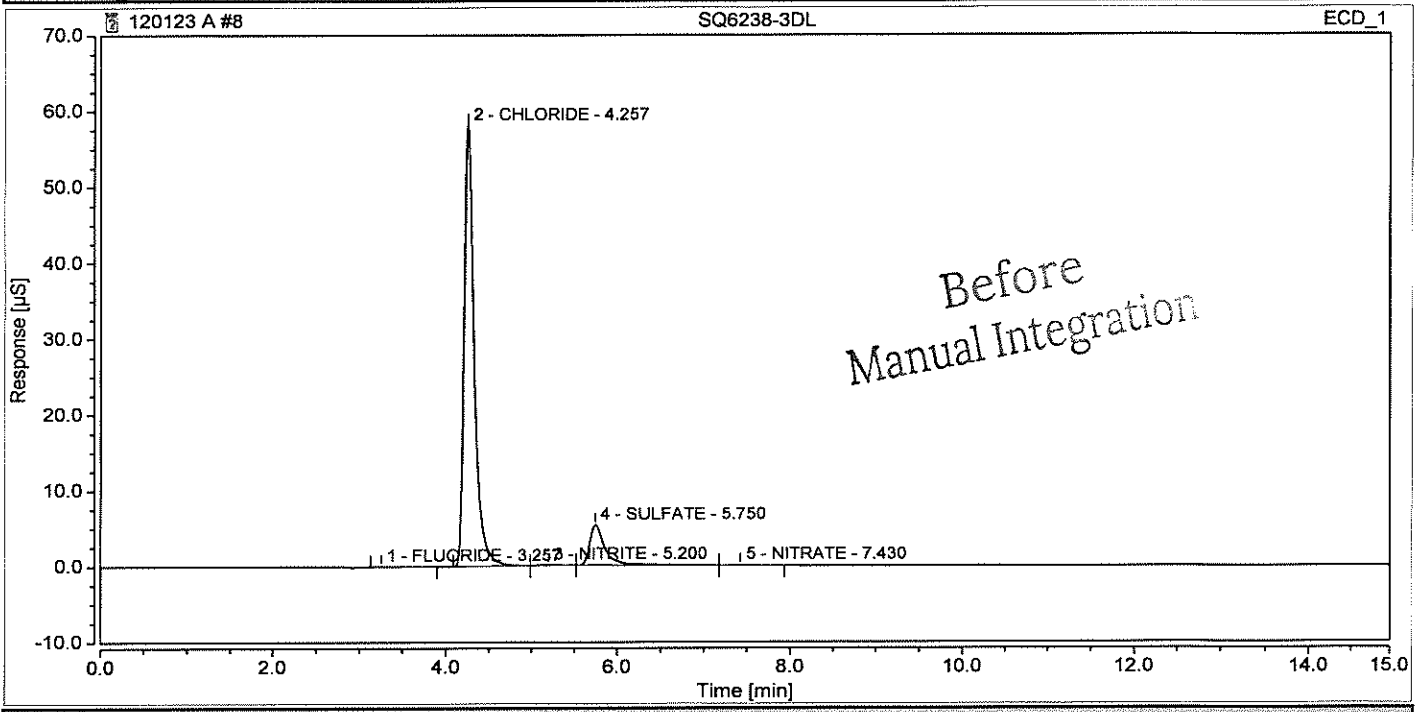
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	CHLORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	SULFATE	5.667	13.357	64.517	100.00	100.00	93.9721	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**13.357**	**64.517**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6238-3DL**	*Run Time (min):*	**14.96**
Vial Number:	**8**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**20.0000**
Injection Date/Time:	**01/Dec/23 18:39**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

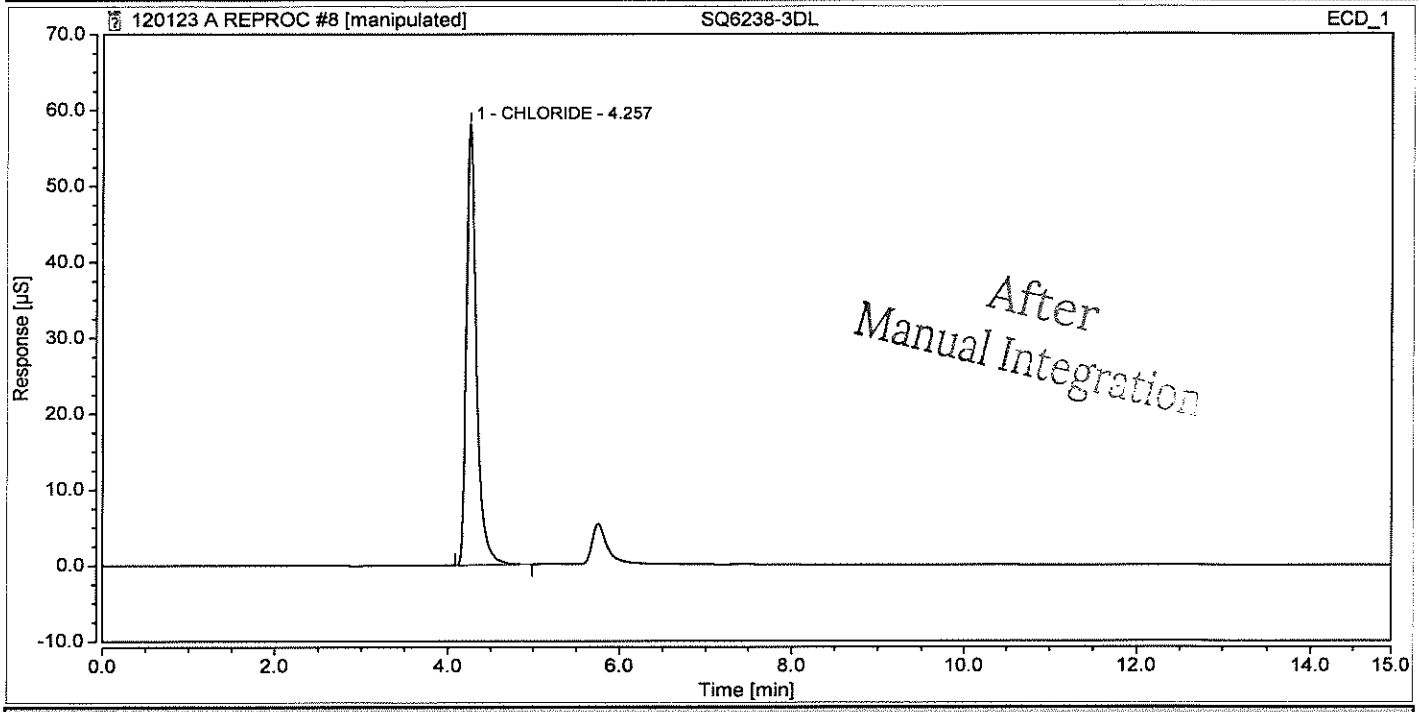
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.257	0.012	0.034	0.13	0.05	0.6990	n.a.
2	CHLORIDE	4.257	7.943	58.107	87.25	91.33	407.6223	n.a.
3	NITRITE	5.200	0.025	0.090	0.27	0.14	0.7367	n.a.
4	SULFATE	5.750	1.110	5.323	12.19	8.37	78.0607	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5	NITRATE	7.430	0.015	0.069	0.16	0.11	0.3039	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**9.104**	**63.623**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6238-3DL**	*Run Time (min):*	**14.96**
Vial Number:	**8**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**20.0000**
Injection Date/Time:	**01/Dec/23 18:39**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

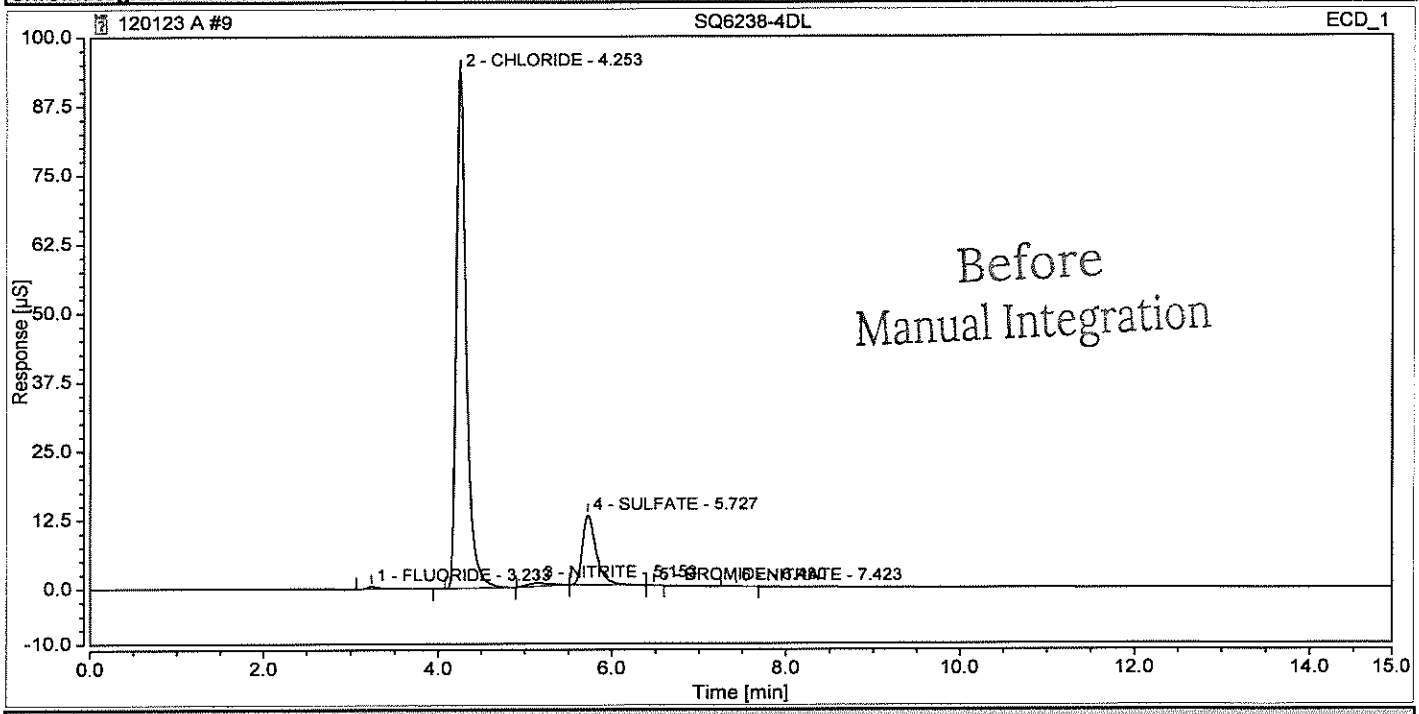
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.257	7.943	58.107	100.00	100.00	407.6223	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	SULFATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**7.943**	**58.107**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6238-4DL**	*Run Time (min):*	**14.96**
Vial Number:	**9**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**2.0000**
Injection Date/Time:	**01/Dec/23 18:57**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

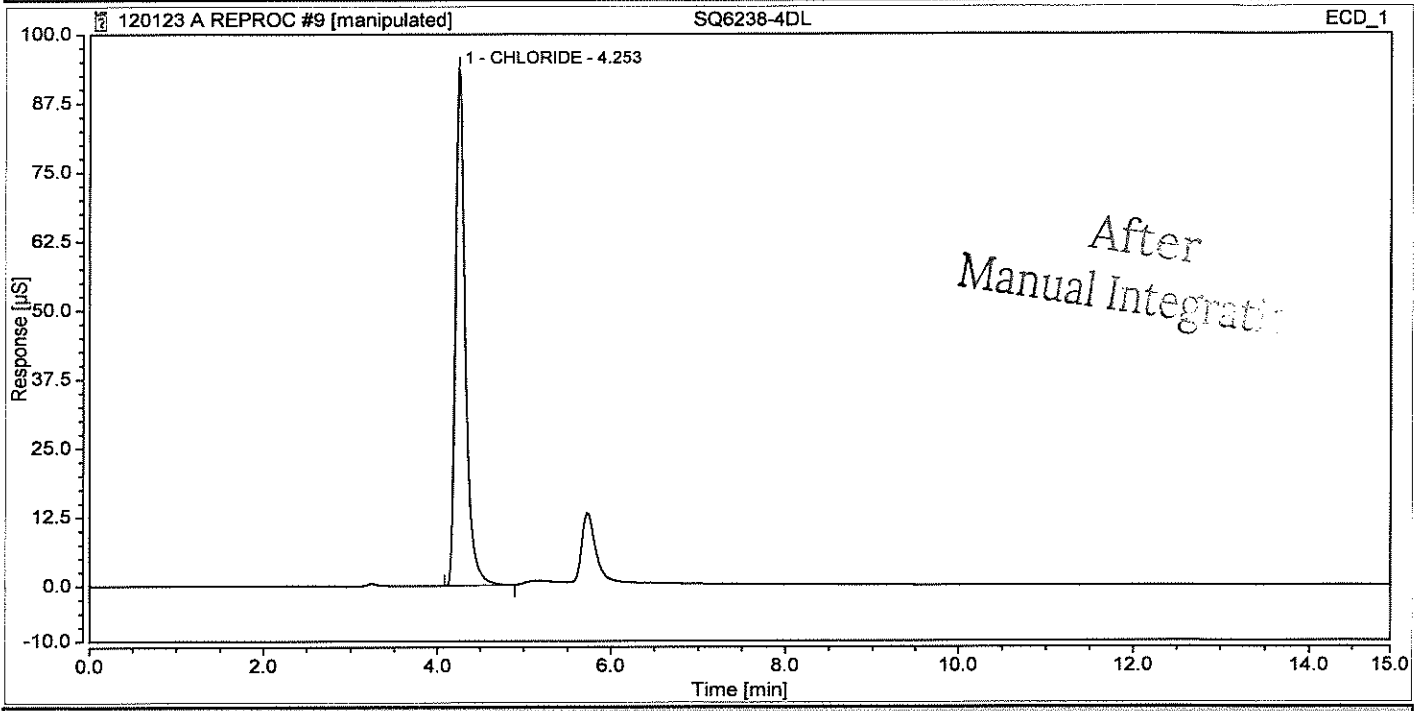
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.233	0.084	0.472	0.55	0.44	0.2977	n.a.
2	CHLORIDE	4.253	12.671	93.683	83.01	87.26	65.0196	n.a.
3	NITRITE	5.153	0.178	0.554	1.16	0.52	0.4305	n.a.
4	SULFATE	5.727	2.329	12.628	15.26	11.76	16.3850	n.a.
5	BROMIDE	6.480	0.001	0.010	0.01	0.01	0.0136	n.a.
6	NITRATE	7.423	0.002	0.011	0.01	0.01	0.0043	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**15.264**	**107.360**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6238-4DL**	*Run Time (min):*	**14.96**
Vial Number:	**9**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**2.0000**
Injection Date/Time:	**01/Dec/23 18:57**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

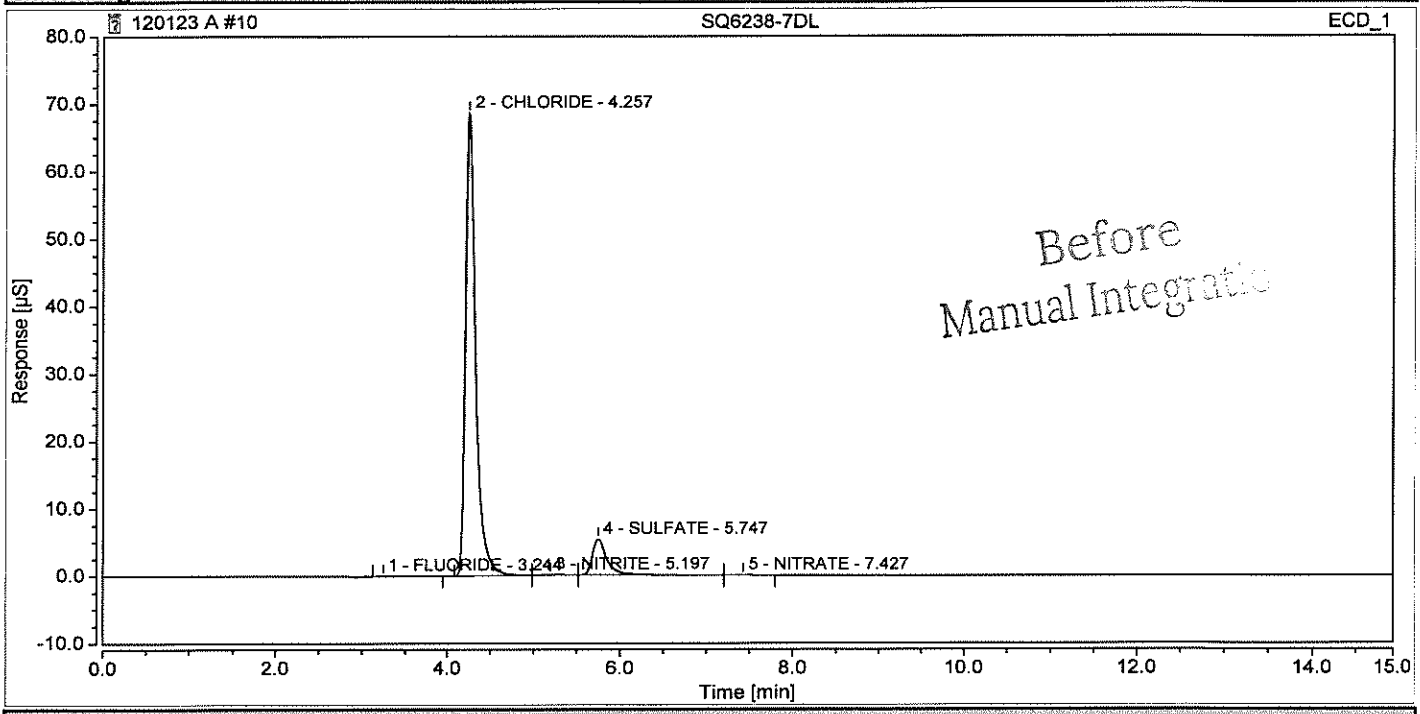
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.253	12.671	93.683	100.00	100.00	65.0196	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	SULFATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**12.671**	**93.683**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6238-7DL**	*Run Time (min):*	**14.95**
Vial Number:	**10**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**20.0000**
Injection Date/Time:	**01/Dec/23 19:14**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

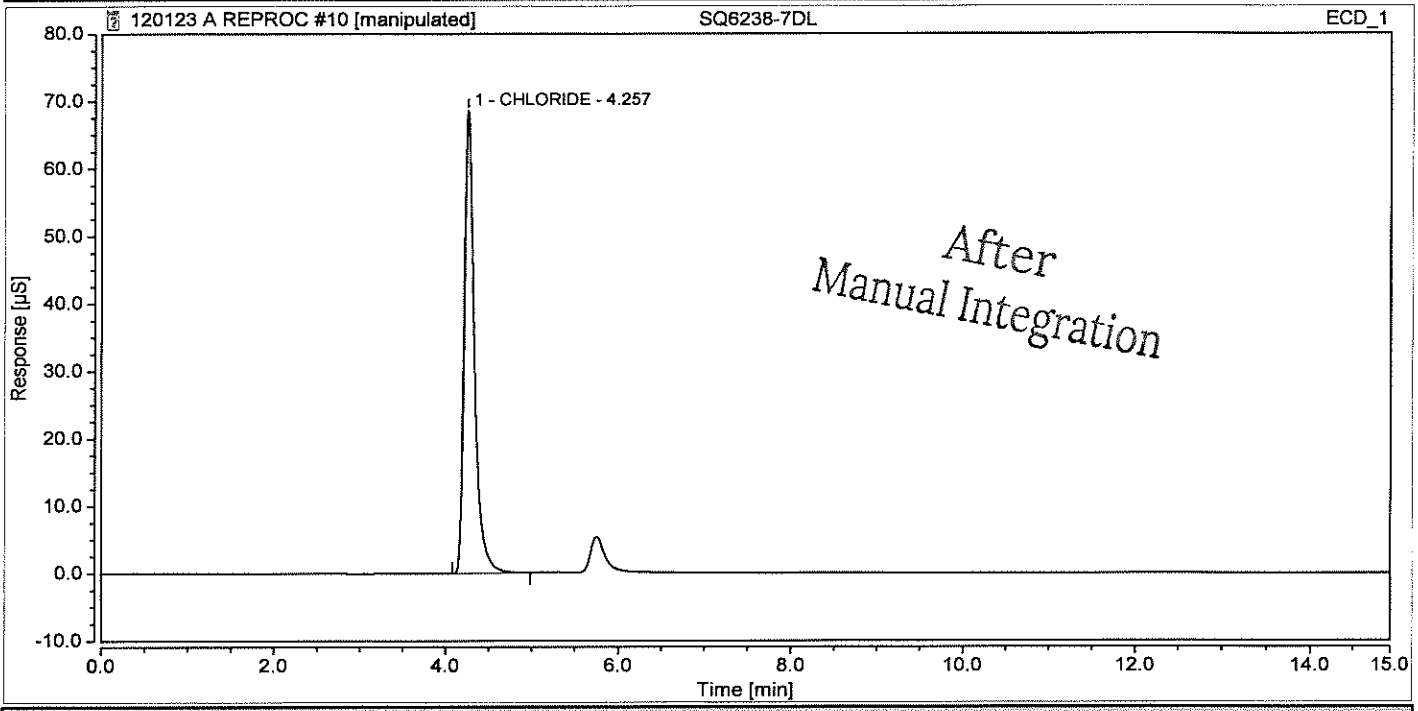
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.244	0.013	0.035	0.13	0.05	0.7485	n.a.
2	CHLORIDE	4.257	9.396	68.610	89.47	92.62	482.1767	n.a.
3	NITRITE	5.197	0.024	0.088	0.23	0.12	0.7202	n.a.
4	SULFATE	5.747	1.062	5.313	10.11	7.17	74.7088	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5	NITRATE	7.427	0.006	0.031	0.06	0.04	0.1319	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**10.502**	**74.077**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6238-7DL**	*Run Time (min):*	**14.95**
Vial Number:	**10**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**20.0000**
Injection Date/Time:	**01/Dec/23 19:14**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

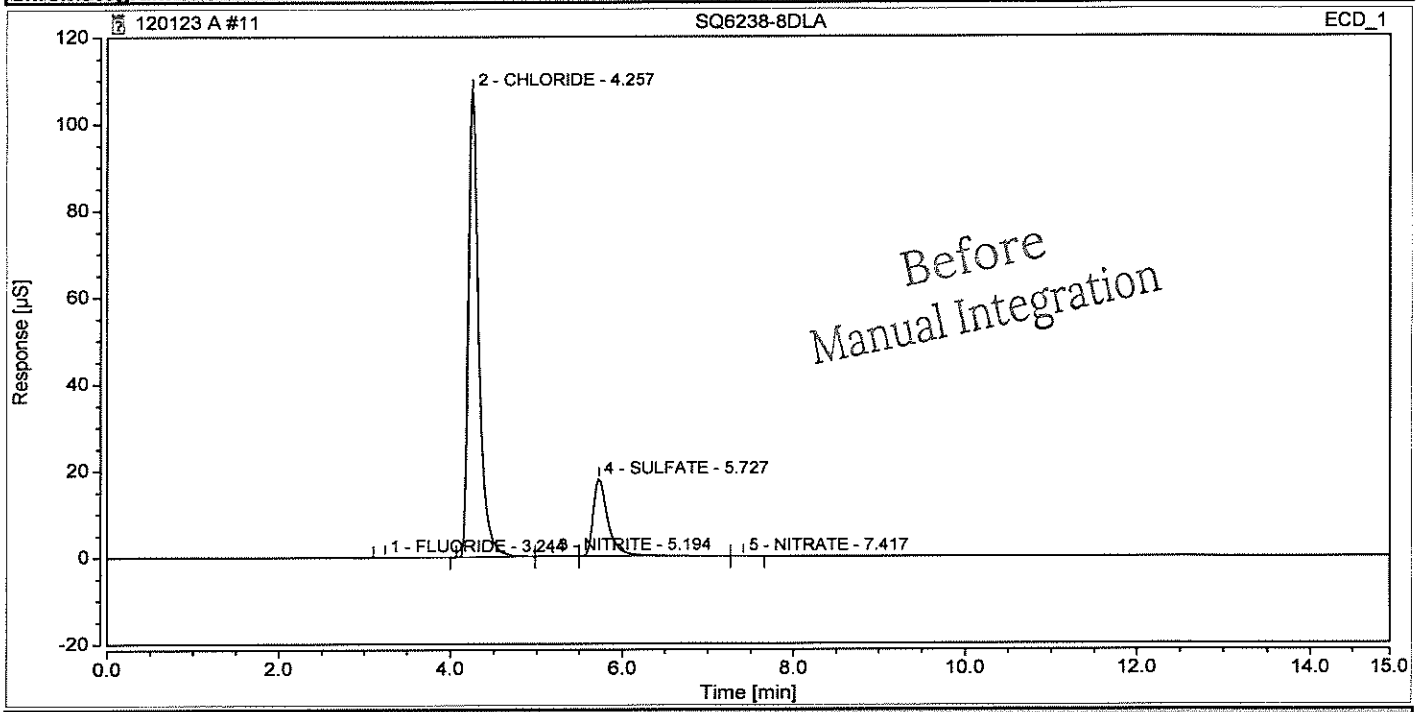
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.257	9.396	68.610	100.00	100.00	482.1767	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	SULFATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**9.396**	**68.610**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6238-8DLA**	*Run Time (min):*	**14.95**
Vial Number:	**11**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**20.0000**
Injection Date/Time:	**01/Dec/23 19:31**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

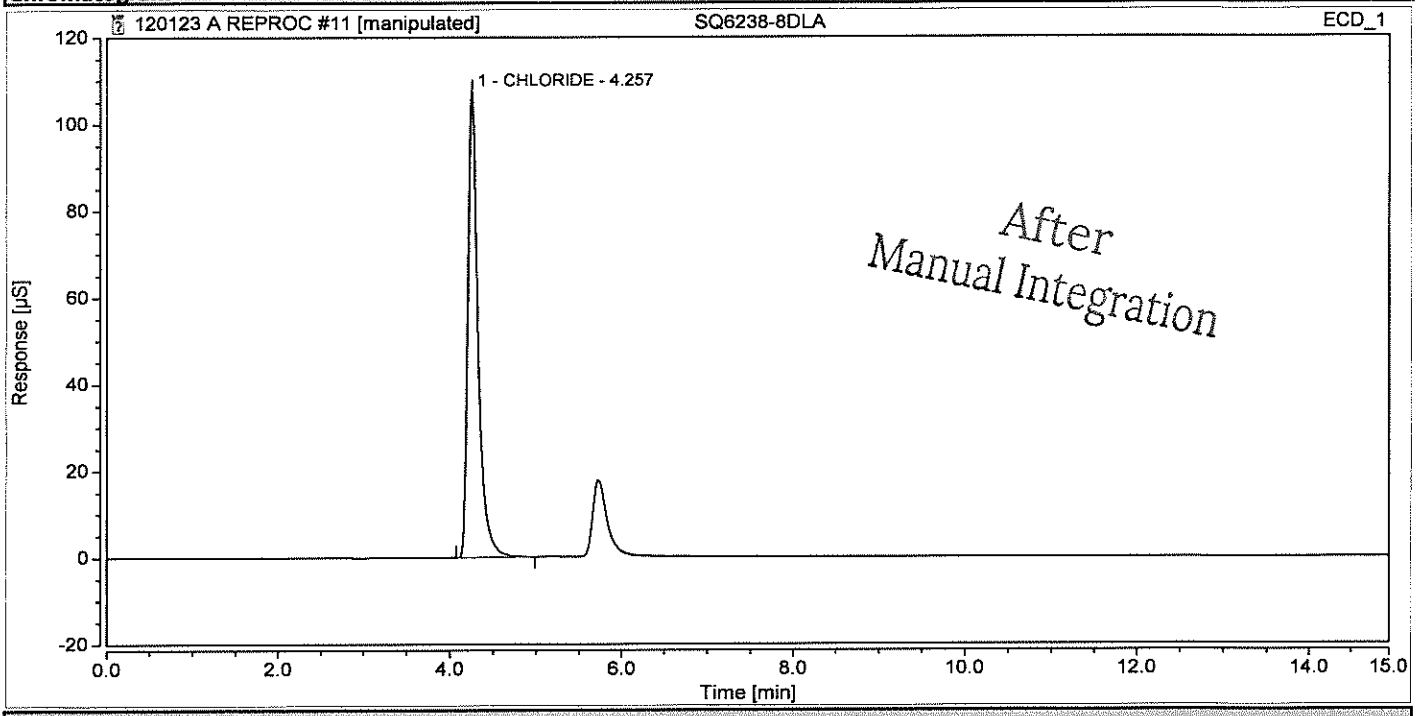
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.244	0.017	0.049	0.09	0.04	0.8708	n.a.
2	CHLORIDE	4.257	14.803	107.491	80.41	85.72	759.6058	n.a.
3	NITRITE	5.194	0.026	0.099	0.14	0.08	0.7769	n.a.
4	SULFATE	5.727	3.560	17.735	19.34	14.14	250.4851	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5	NITRATE	7.417	0.003	0.017	0.02	0.01	0.0643	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**18.410**	**125.390**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6238-8DLA**	*Run Time (min):*	**14.95**
Vial Number:	**11**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**20.0000**
Injection Date/Time:	**01/Dec/23 19:31**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

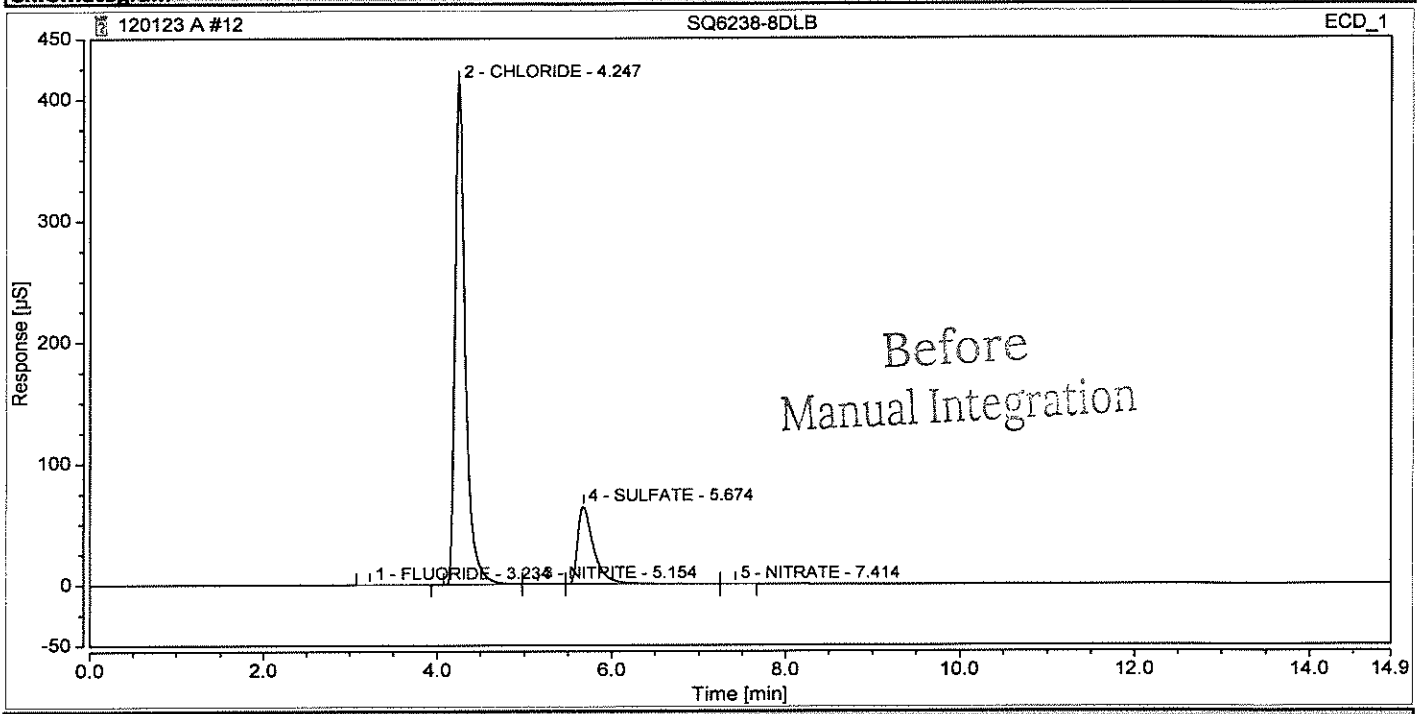
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.257	14.803	107.491	100.00	100.00	759.6058	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	SULFATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**14.803**	**107.491**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6238-8DLB**	*Run Time (min):*	**14.94**
Vial Number:	**12**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**5.0000**
Injection Date/Time:	**01/Dec/23 19:48**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

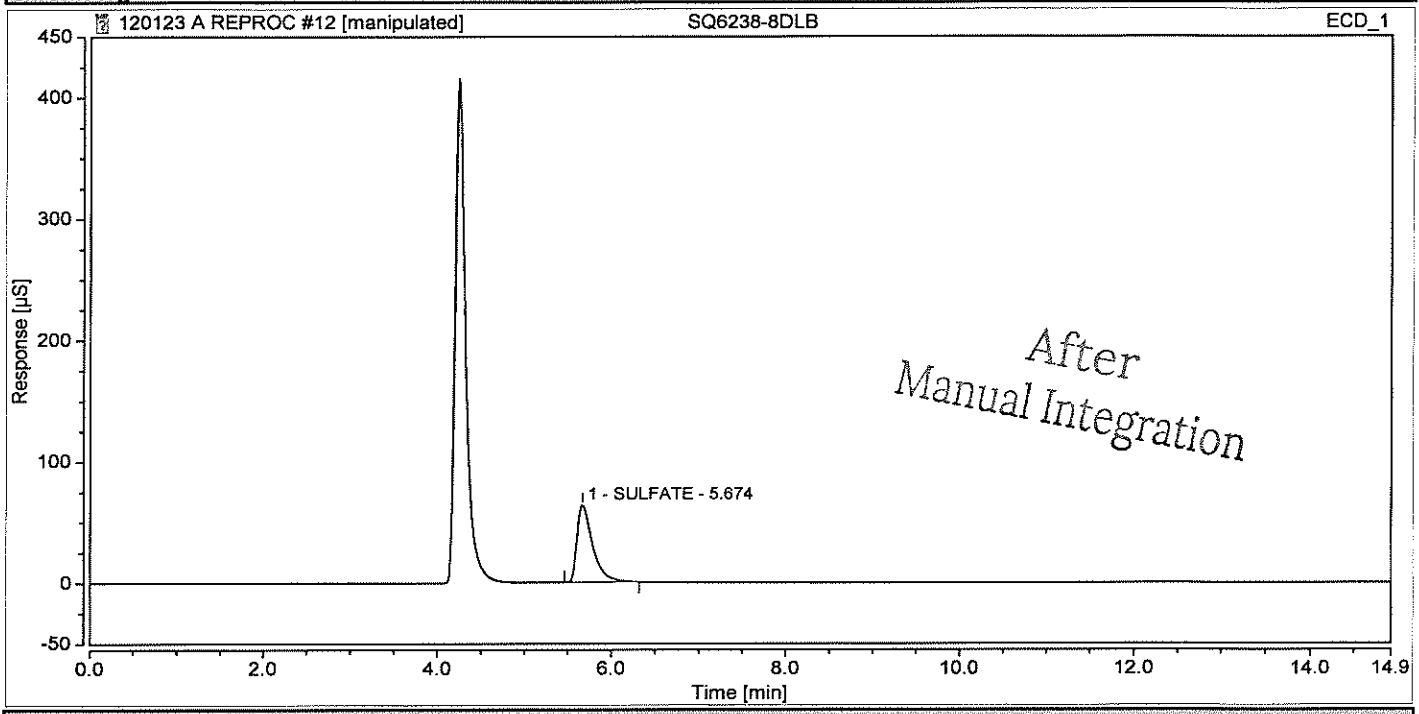
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.234	0.029	0.129	0.04	0.03	0.3141	n.a.
2	CHLORIDE	4.247	57.976	413.514	80.87	86.55	743.7702	n.a.
3	NITRITE	5.154	0.055	0.218	0.08	0.05	0.3633	n.a.
4	SULFATE	5.674	13.618	63.895	19.00	13.37	239.5256	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5	NITRATE	7.414	0.009	0.045	0.01	0.01	0.0452	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**71.688**	**477.802**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6238-8DLB**	*Run Time (min):*	**14.94**
Vial Number:	**12**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**5.0000**
Injection Date/Time:	**01/Dec/23 19:48**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

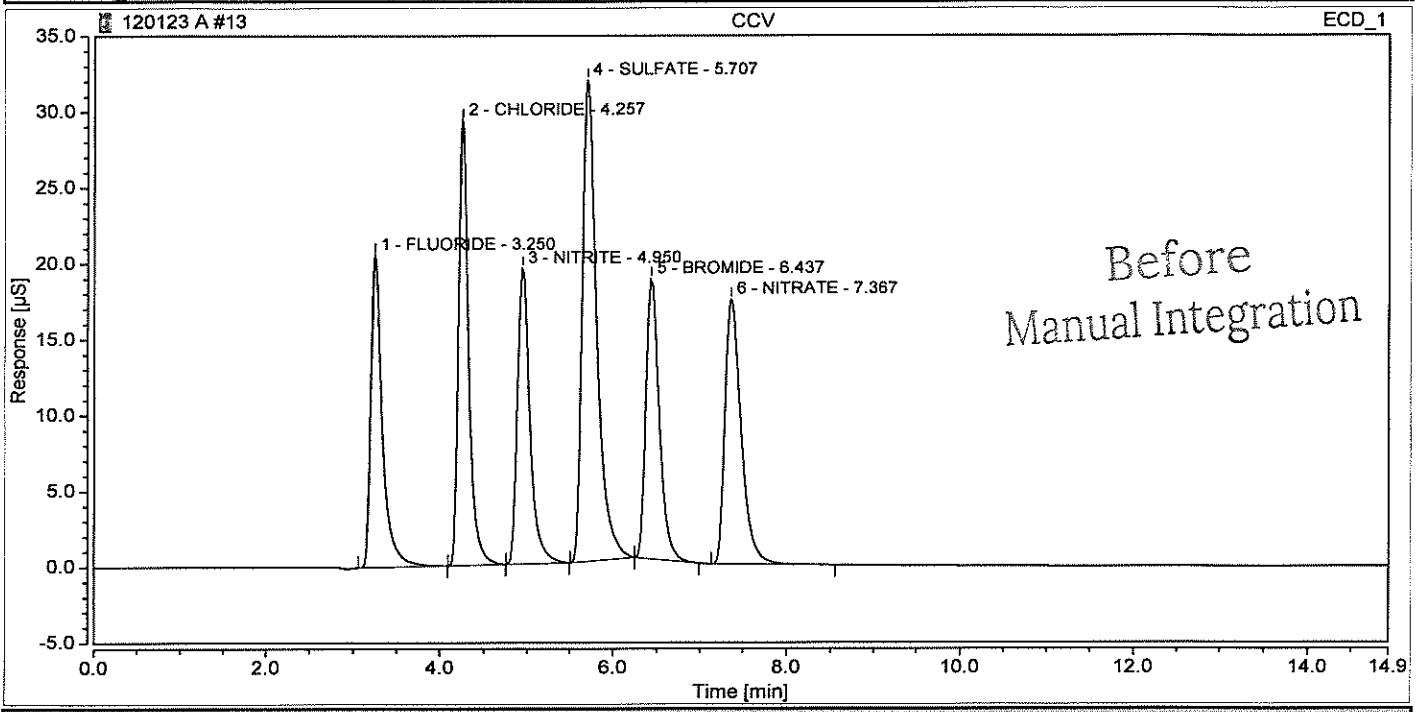
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	CHLORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	SULFATE	5.674	13.228	63.758	100.00	100.00	232.6636	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**13.228**	**63.758**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**CCV**	*Run Time (min):*	**14.95**
Vial Number:	**13**	*Injection Volume:*	**200.00**
Injection Type:	**Check Standard**	*Channel:*	**ECD_1**
Calibration Level:	**06**	*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**01/Dec/23 20:06**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

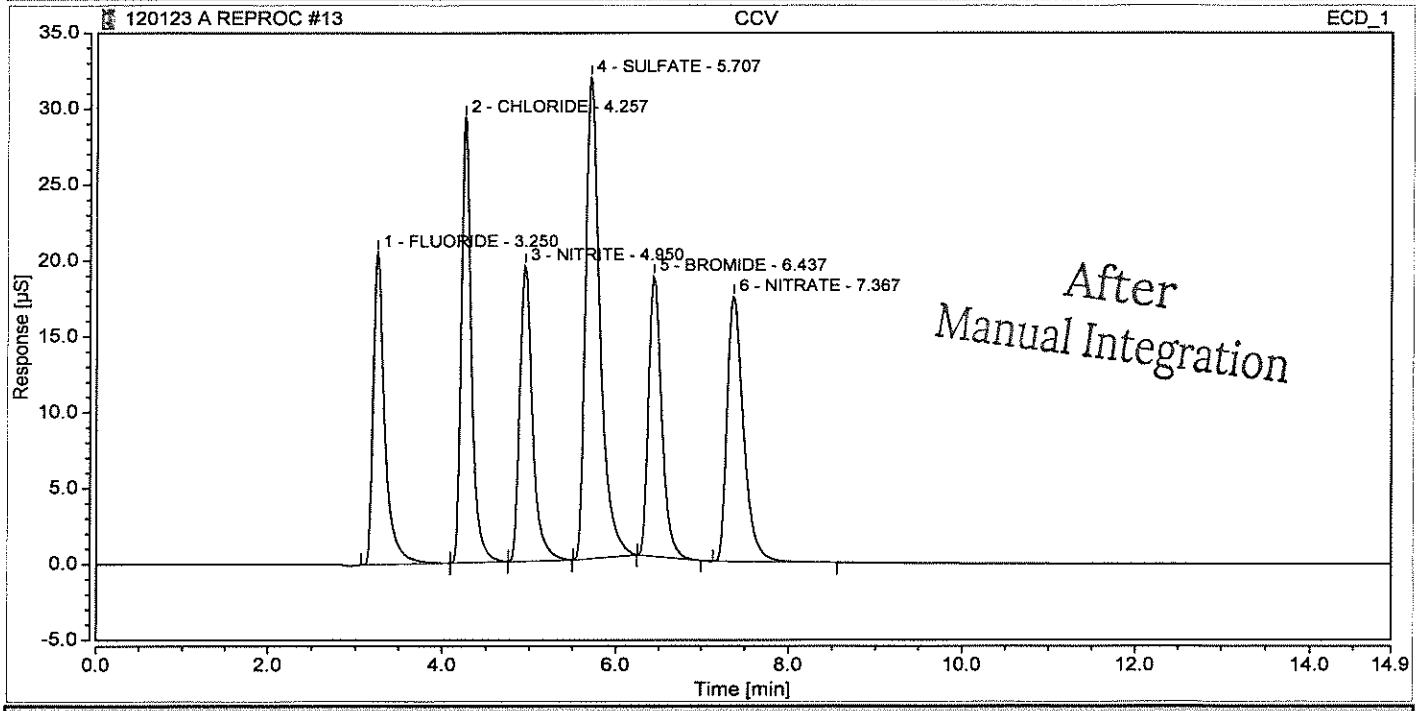
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.250	3.197	20.582	13.43	15.02	5.1942	3.8845
2	CHLORIDE	4.257	3.922	29.343	16.48	21.41	10.0619	0.6192
3	NITRITE	4.950	3.364	19.480	14.13	14.22	4.0538	1.3454
4	SULFATE	5.707	6.135	31.699	25.78	23.13	21.5811	7.9054
5	BROMIDE	6.437	3.339	18.474	14.03	13.48	19.6422	-1.7892
6	NITRATE	7.367	3.845	17.447	16.15	12.73	3.9286	-1.7859
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**23.801**	**137.024**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**CCV**	*Run Time (min):*	**14.95**
Vial Number:	**13**	*Injection Volume:*	**200.00**
Injection Type:	**Check Standard**	*Channel:*	**ECD_1**
Calibration Level:	**06**	*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**01/Dec/23 20:06**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

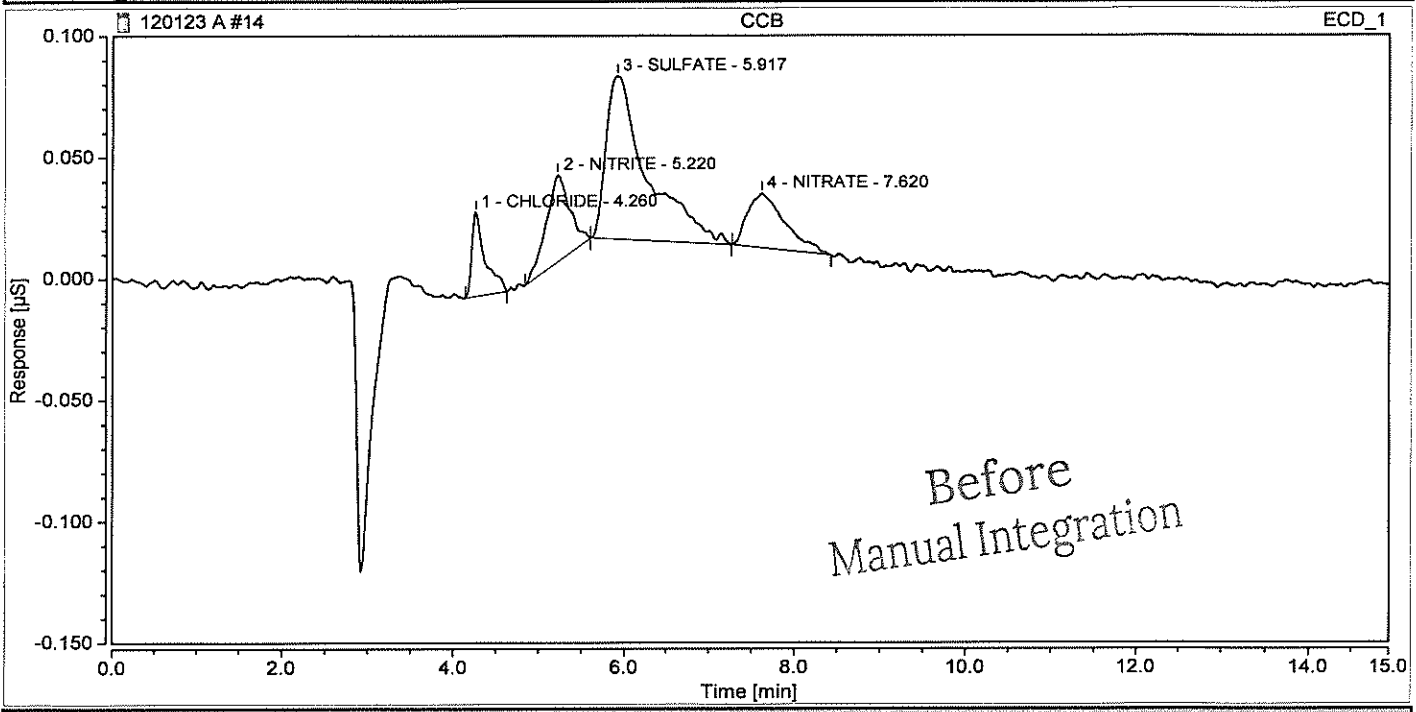
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.250	3.197	20.582	13.43	15.02	5.1942	3.8845
2	CHLORIDE	4.257	3.922	29.343	16.48	21.41	10.0619	0.6192
3	NITRITE	4.950	3.364	19.480	14.13	14.22	4.0538	1.3454
4	SULFATE	5.707	6.135	31.699	25.78	23.13	21.5811	7.9054
5	BROMIDE	6.437	3.339	18.474	14.03	13.48	19.6422	-1.7892
6	NITRATE	7.367	3.845	17.447	16.15	12.73	3.9286	-1.7859
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**23.801**	**137.024**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**CCB**	*Run Time (min):*	**14.95**
Vial Number:	**14**	*Injection Volume:*	**200.00**
Injection Type:	**Blank**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**01/Dec/23 20:23**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

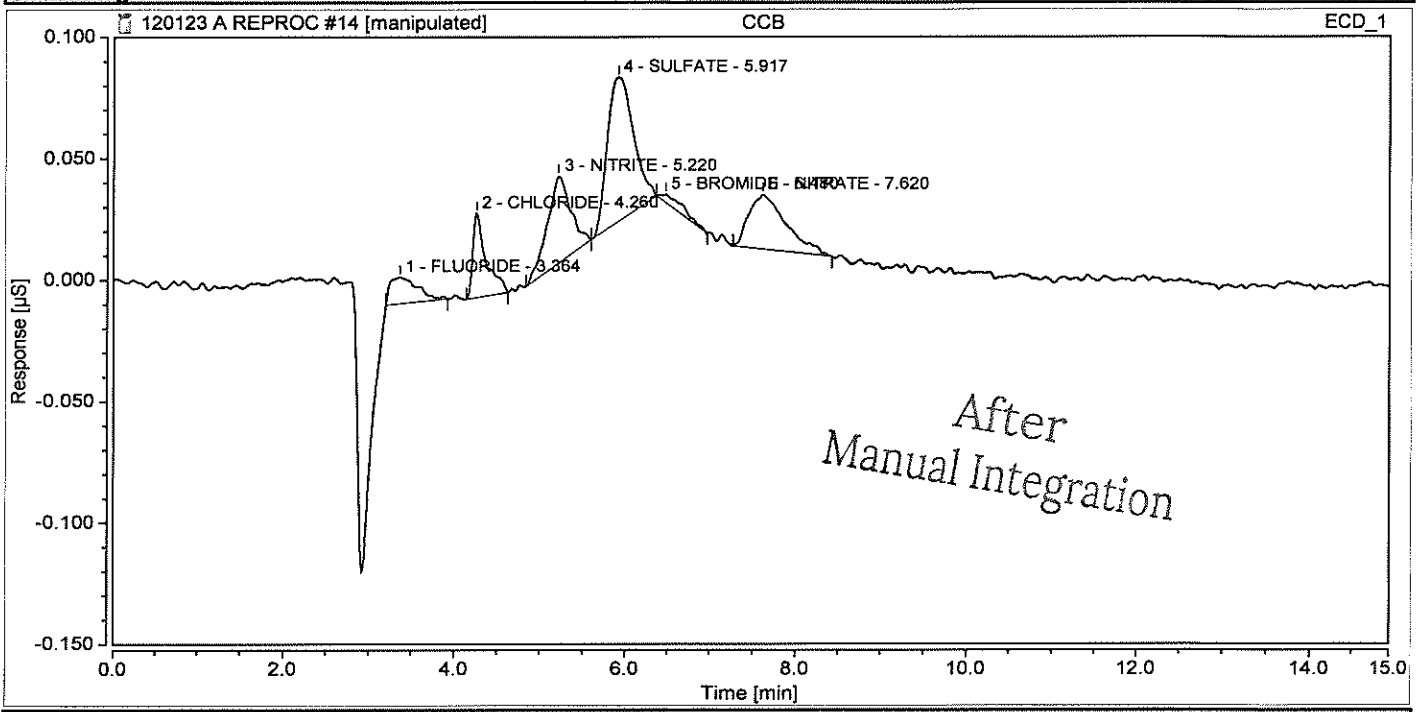
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.260	0.006	0.035	9.50	21.66	0.0163	n.a.
2	NITRITE	5.220	0.011	0.036	16.87	22.27	0.0214	n.a.
3	SULFATE	5.917	0.038	0.067	56.58	41.99	0.1333	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
4	NITRATE	7.620	0.011	0.023	17.05	14.07	0.0117	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.067**	**0.160**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**CCB**	*Run Time (min):*	**14.95**
Vial Number:	**14**	*Injection Volume:*	**200.00**
Injection Type:	**Blank**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**01/Dec/23 20:23**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

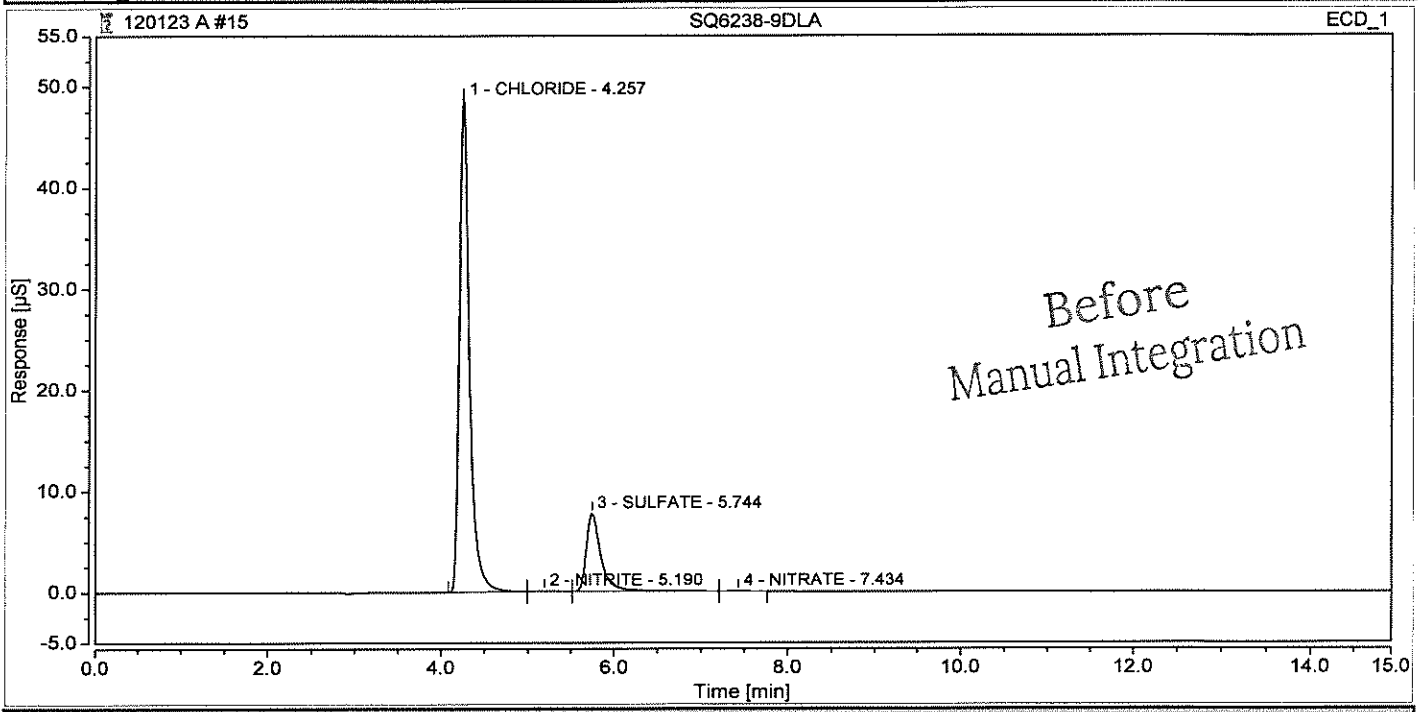
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.364	0.004	0.011	7.37	6.55	0.0231	n.a.
2	CHLORIDE	4.260	0.006	0.035	11.44	20.84	0.0163	n.a.
3	NITRITE	5.220	0.011	0.036	20.31	21.42	0.0214	n.a.
4	SULFATE	5.917	0.021	0.059	38.04	35.65	0.0744	n.a.
5	BROMIDE	6.480	0.001	0.003	2.31	2.00	0.0076	n.a.
6	NITRATE	7.620	0.011	0.023	20.53	13.54	0.0117	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.056**	**0.166**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6238-9DLA**	*Run Time (min):*	**14.95**
Vial Number:	**15**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**50.0000**
Injection Date/Time:	**01/Dec/23 20:40**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

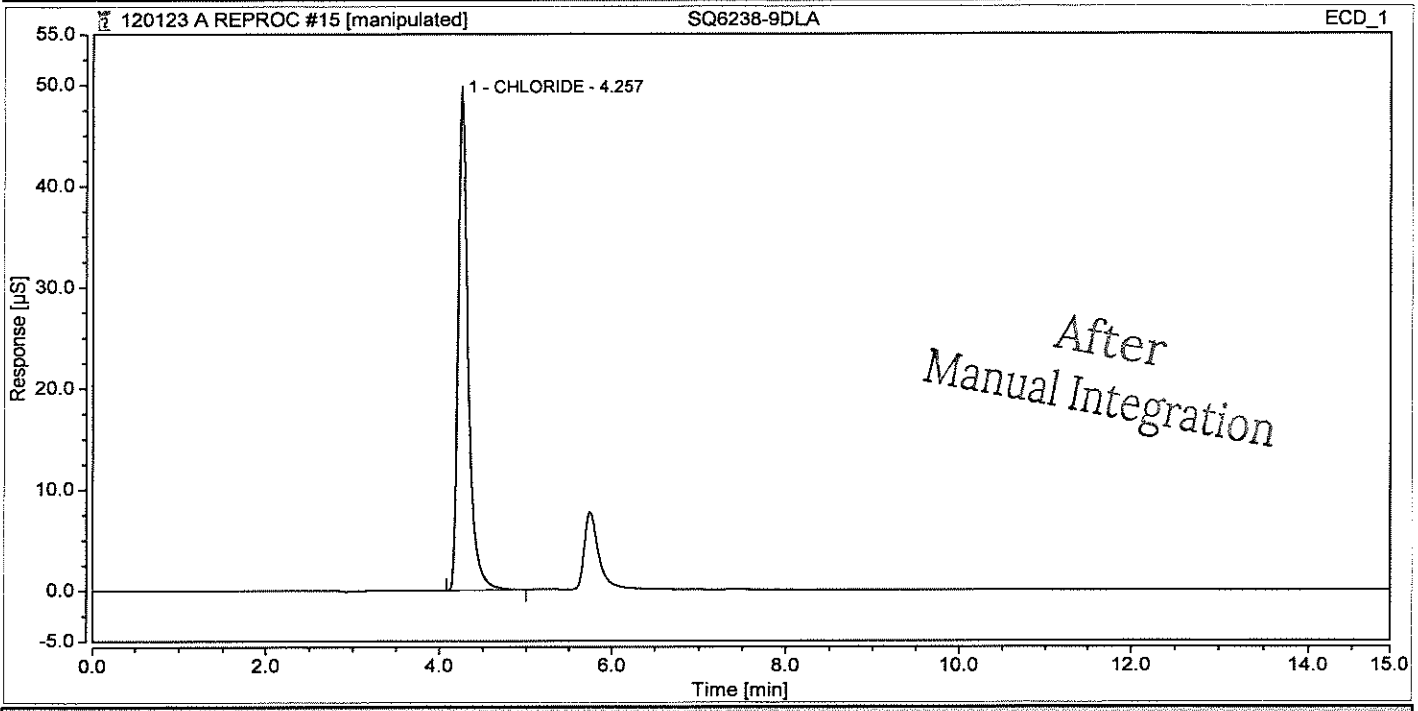
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.257	6.654	48.681	81.08	86.20	853.5722	n.a.
2	NITRITE	5.190	0.012	0.047	0.15	0.08	1.1133	n.a.
3	SULFATE	5.744	1.531	7.695	18.66	13.63	269.2739	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
4	NITRATE	7.434	0.010	0.050	0.12	0.09	0.5034	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**8.206**	**56.473**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6238-9DLA**	*Run Time (min):*	**14.95**
Vial Number:	**15**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**50.0000**
Injection Date/Time:	**01/Dec/23 20:40**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

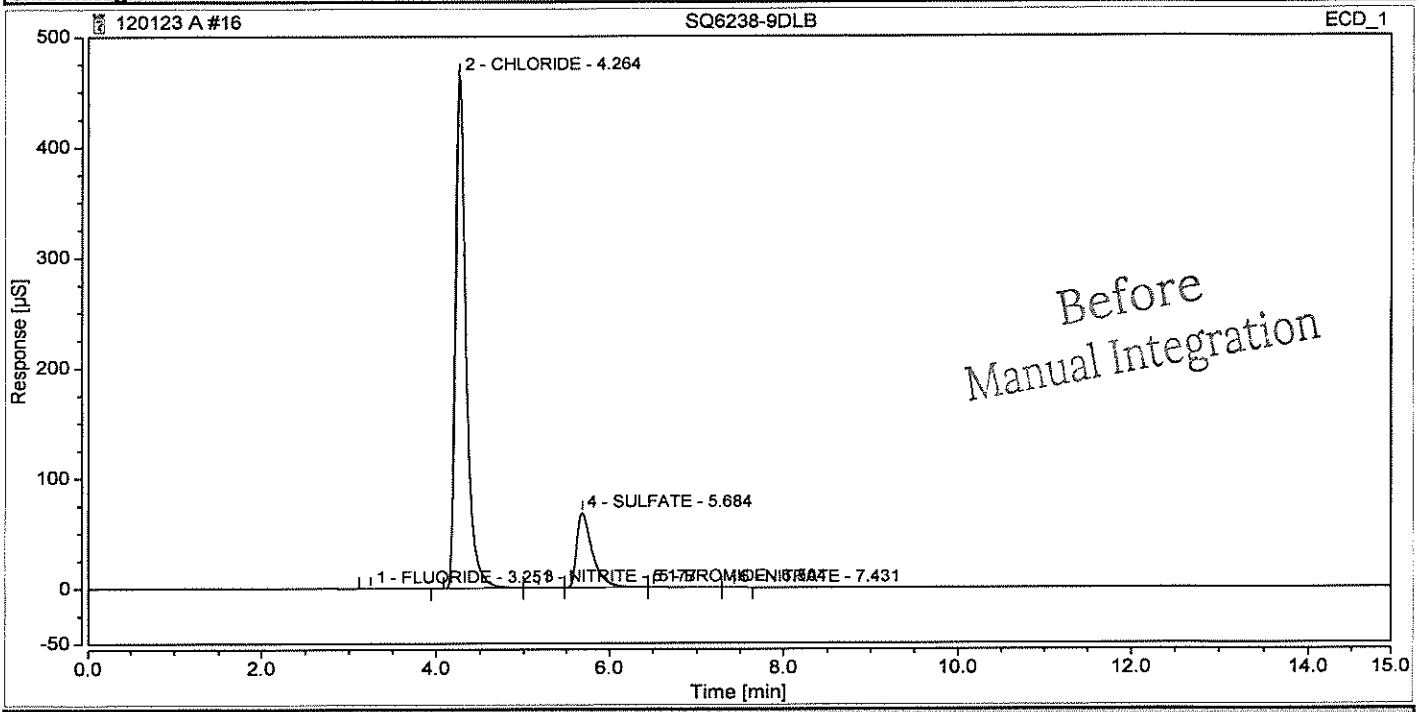
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.257	6.654	48.681	100.00	100.00	853.5722	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	SULFATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**6.654**	**48.681**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6238-9DLB**	*Run Time (min):*	**14.96**
Vial Number:	**16**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**5.0000**
Injection Date/Time:	**01/Dec/23 20:57**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

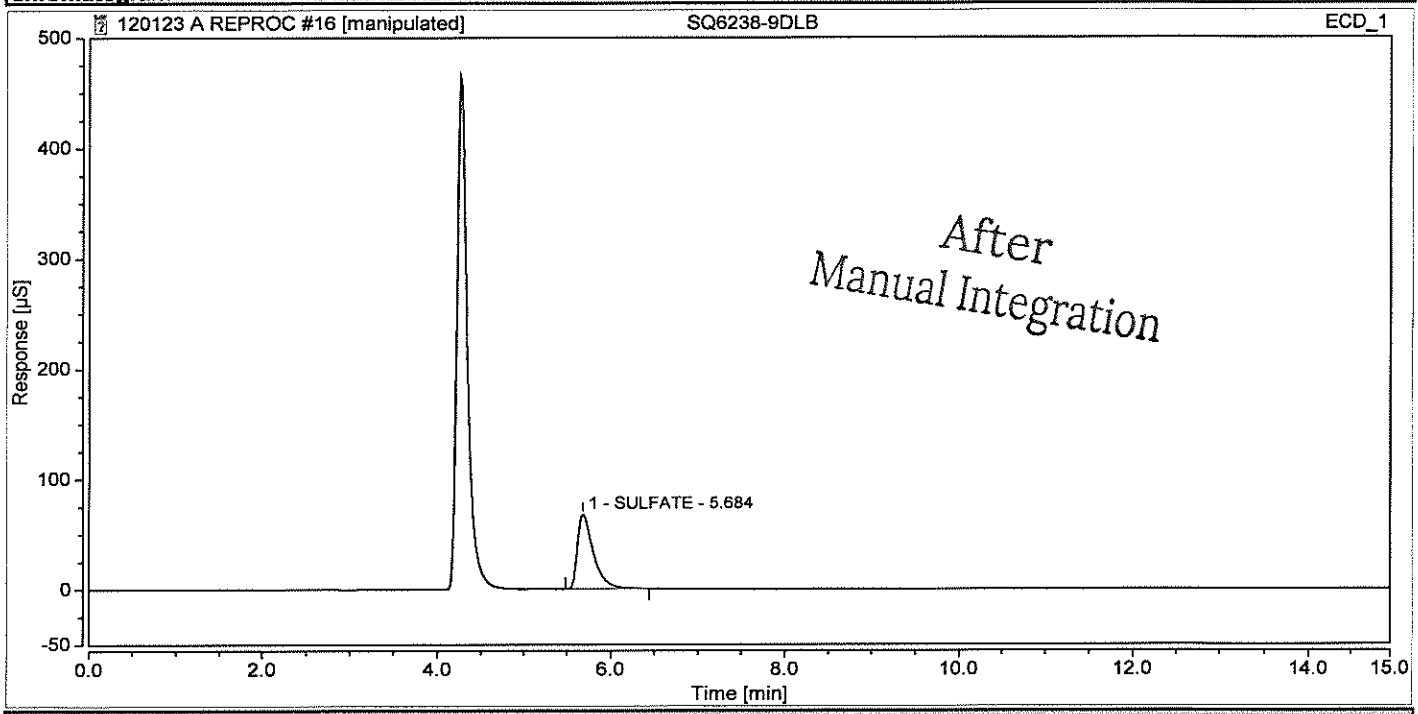
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.251	0.026	0.122	0.03	0.02	0.2900	n.a.
2	CHLORIDE	4.264	64.820	464.899	81.93	87.24	831.5718	n.a.
3	NITRITE	5.177	0.048	0.191	0.06	0.04	0.3219	n.a.
4	SULFATE	5.684	14.161	67.656	17.90	12.70	249.0703	n.a.
5	BROMIDE	6.504	0.054	0.026	0.07	0.00	1.5908	n.a.
6	NITRATE	7.431	0.005	0.032	0.01	0.01	0.0269	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**79.115**	**532.926**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6238-9DLB**	*Run Time (min):*	**14.96**
Vial Number:	**16**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**5.0000**
Injection Date/Time:	**01/Dec/23 20:57**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

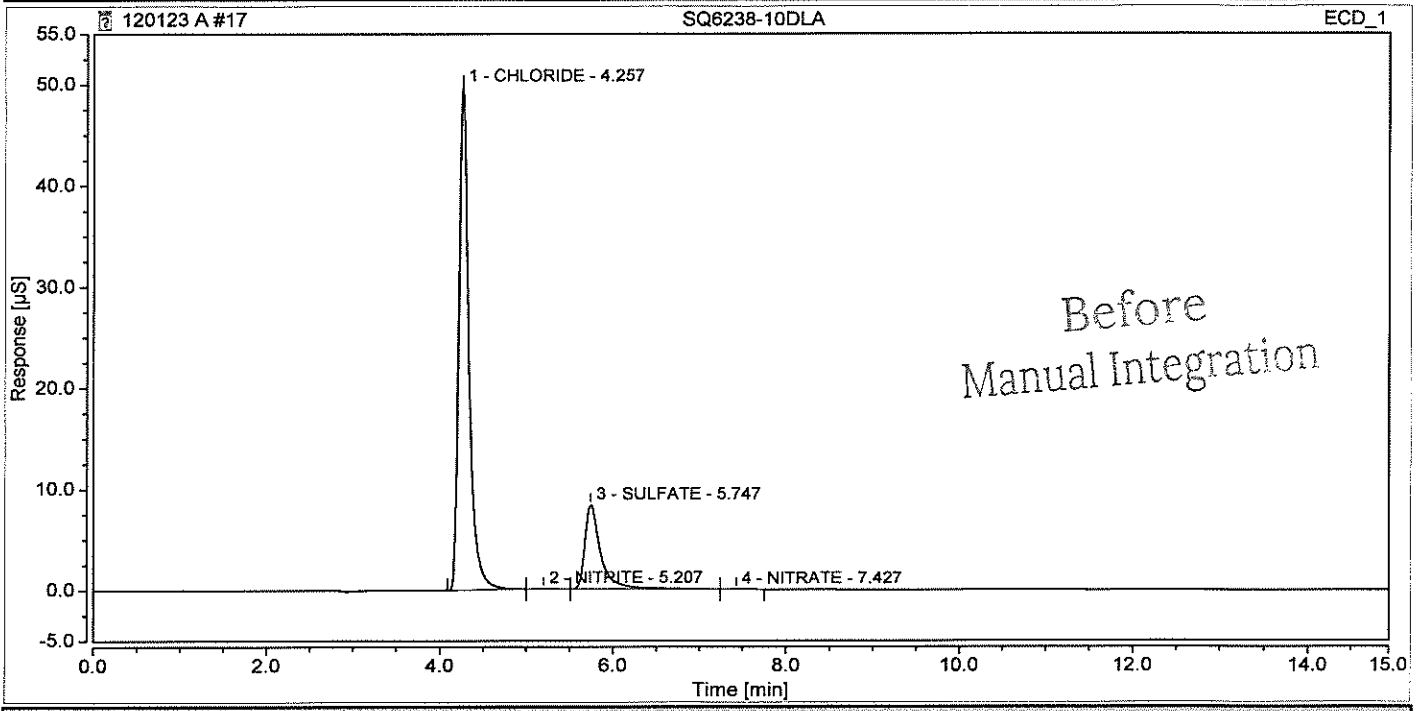
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	CHLORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	SULFATE	5.684	14.161	67.656	100.00	100.00	249.0703	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**14.161**	**67.656**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6238-10DLA**	*Run Time (min):*	**14.95**
Vial Number:	**17**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**50.0000**
Injection Date/Time:	**01/Dec/23 21:15**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

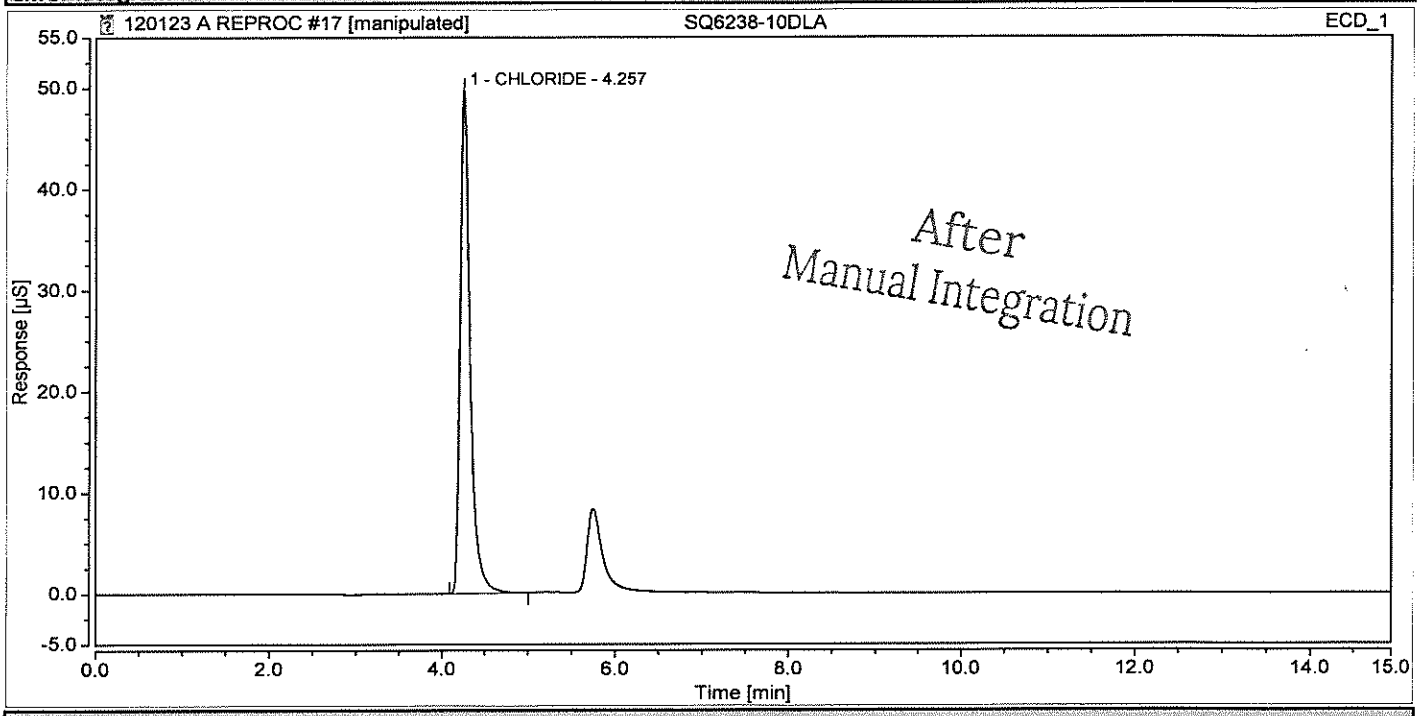
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.257	6.786	49.760	79.19	85.52	870.5755	n.a.
2	NITRITE	5.207	0.014	0.057	0.17	0.10	1.2516	n.a.
3	SULFATE	5.747	1.763	8.338	20.57	14.33	310.0725	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
4	NITRATE	7.427	0.006	0.029	0.06	0.05	0.2843	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**8.569**	**58.185**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6238-10DLA**	*Run Time (min):*	**14.95**
Vial Number:	**17**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**50.0000**
Injection Date/Time:	**01/Dec/23 21:15**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

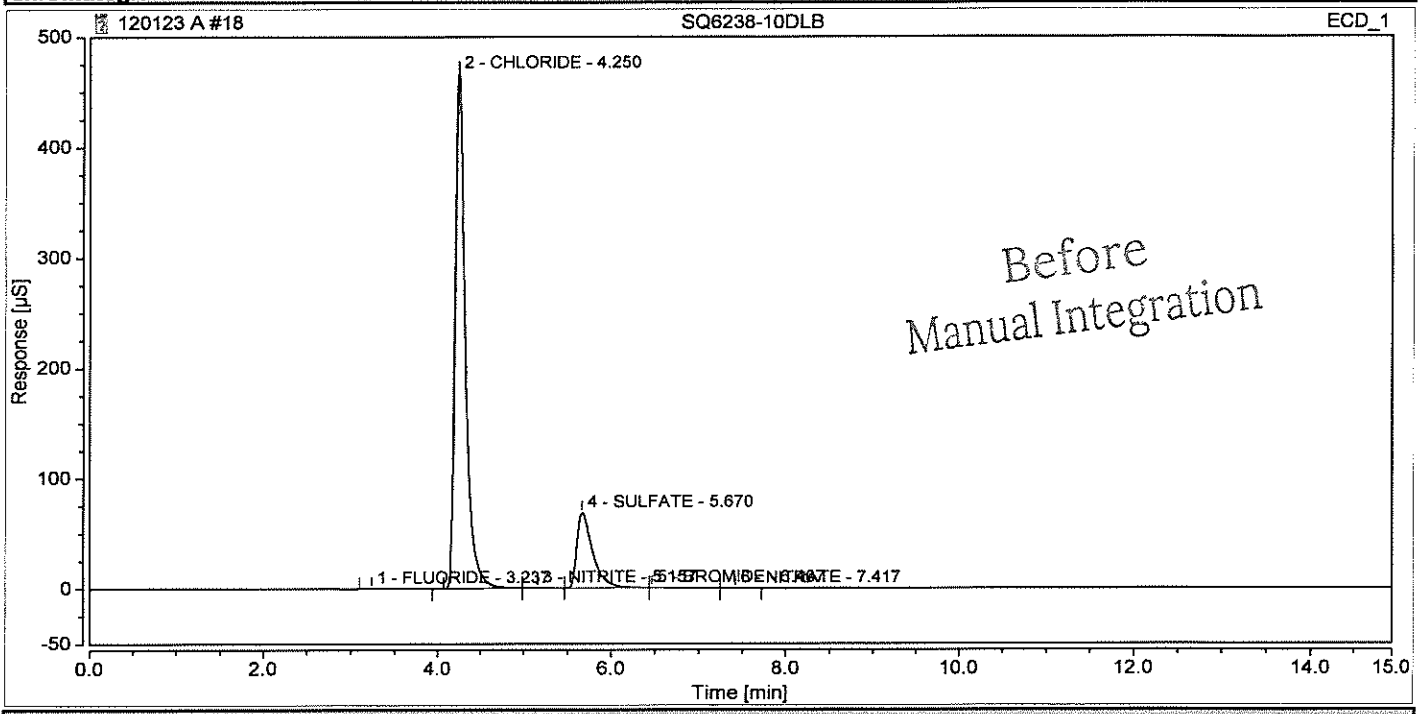
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.257	6.786	49.760	100.00	100.00	870.5755	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	SULFATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**6.786**	**49.760**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6238-10DLB**	*Run Time (min):*	**14.95**
Vial Number:	**18**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**5.0000**
Injection Date/Time:	**01/Dec/23 21:32**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

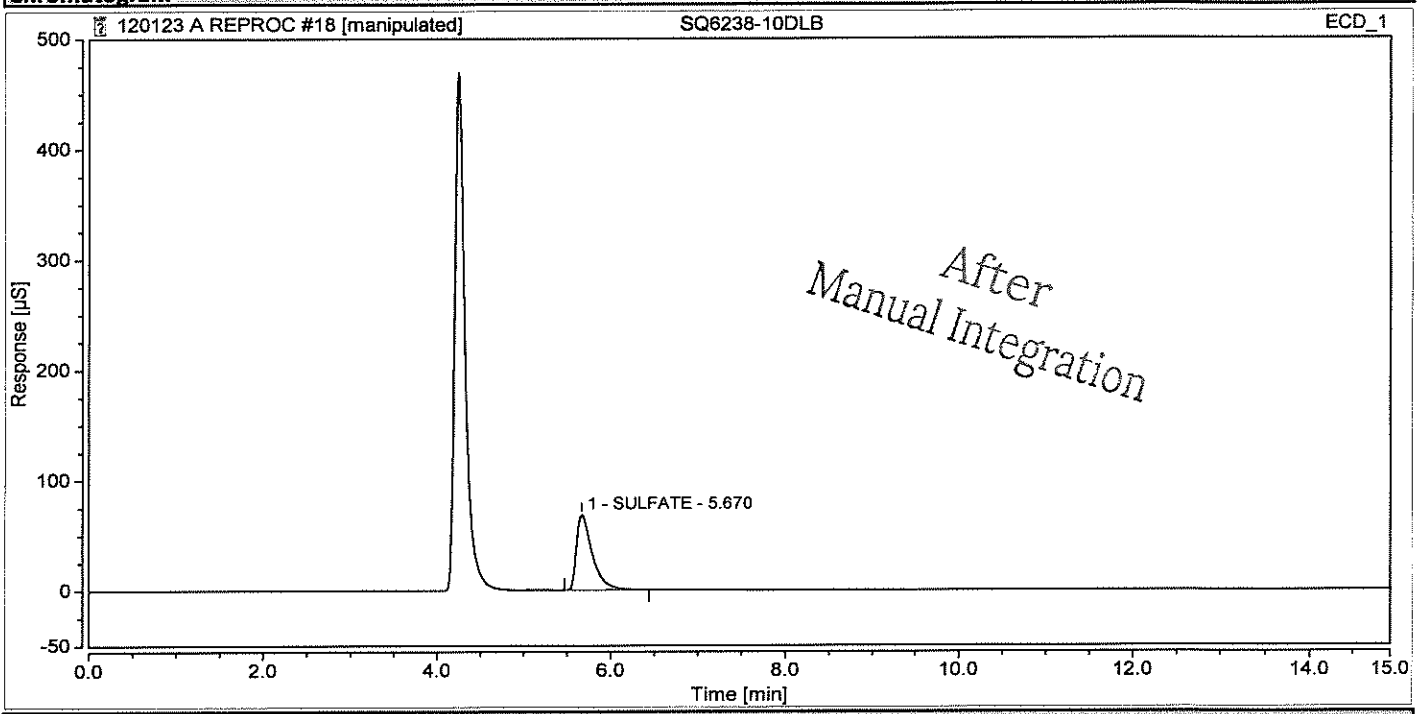
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.237	0.026	0.118	0.03	0.02	0.2869	n.a.
2	CHLORIDE	4.250	65.037	466.865	81.84	87.19	834.3515	n.a.
3	NITRITE	5.157	0.045	0.181	0.06	0.03	0.3049	n.a.
4	SULFATE	5.670	14.302	68.262	18.00	12.75	251.5477	n.a.
5	BROMIDE	6.467	0.050	0.012	0.06	0.00	1.4579	n.a.
6	NITRATE	7.417	0.007	0.038	0.01	0.01	0.0361	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**79.467**	**535.477**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6238-10DLB**	*Run Time (min):*	**14.95**
Vial Number:	**18**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**5.0000**
Injection Date/Time:	**01/Dec/23 21:32**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

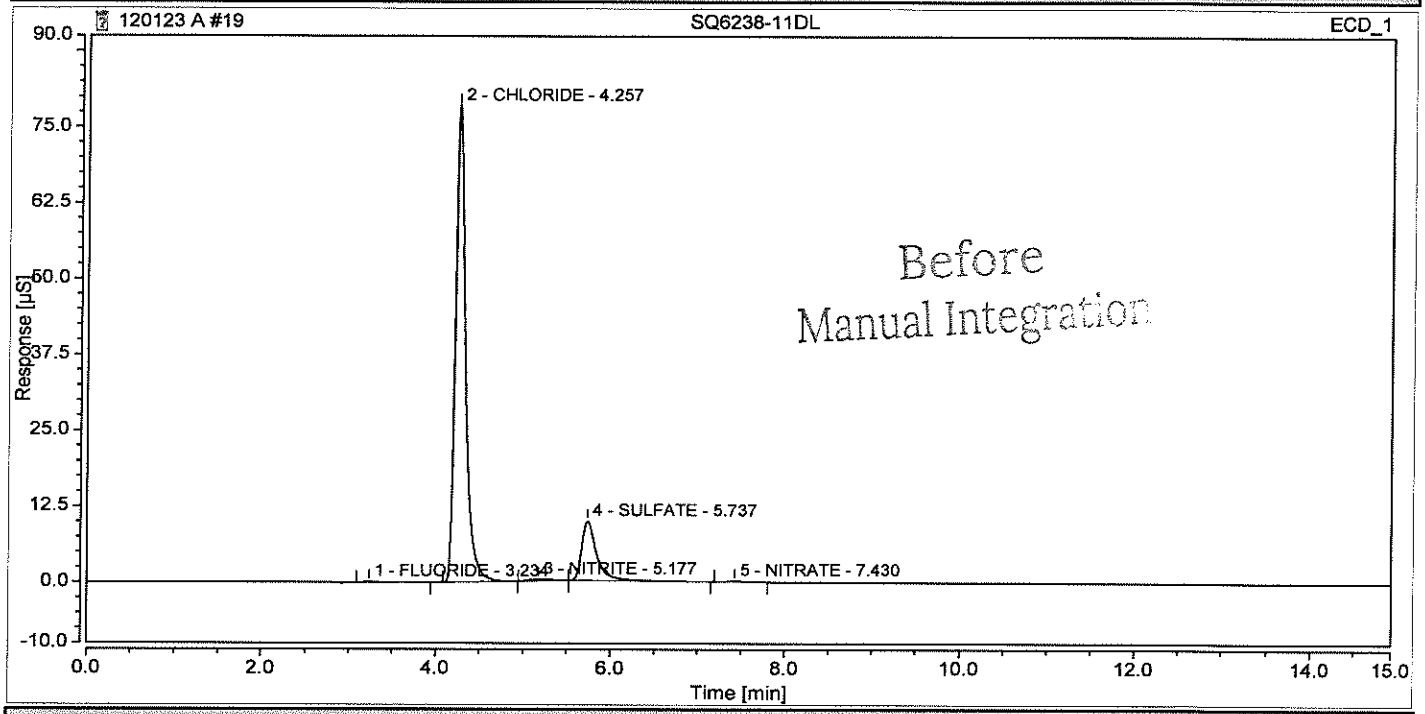
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	CHLORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	SULFATE	5.670	14.302	68.262	100.00	100.00	251.5477	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**14.302**	**68.262**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6238-11DL**	*Run Time (min):*	**14.96**
Vial Number:	**19**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**5.0000**
Injection Date/Time:	**01/Dec/23 21:49**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

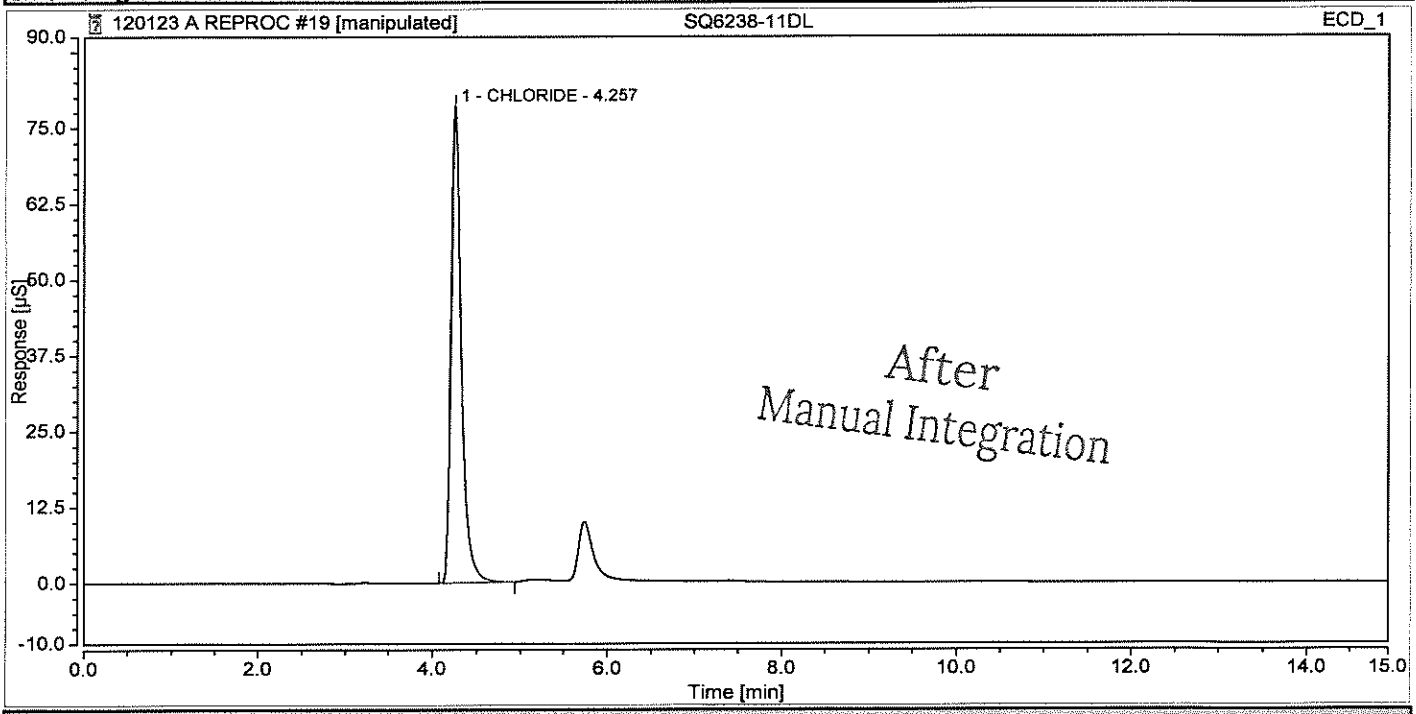
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.234	0.035	0.168	0.27	0.19	0.3574	n.a.
2	CHLORIDE	4.257	10.600	78.496	83.38	88.29	135.9802	n.a.
3	NITRITE	5.177	0.090	0.298	0.71	0.34	0.5633	n.a.
4	SULFATE	5.737	1.961	9.802	15.42	11.02	34.4888	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5	NITRATE	7.430	0.028	0.144	0.22	0.16	0.1430	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**12.713**	**88.907**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6238-11DL**	*Run Time (min):*	**14.96**
Vial Number:	**19**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**5.0000**
Injection Date/Time:	**01/Dec/23 21:49**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

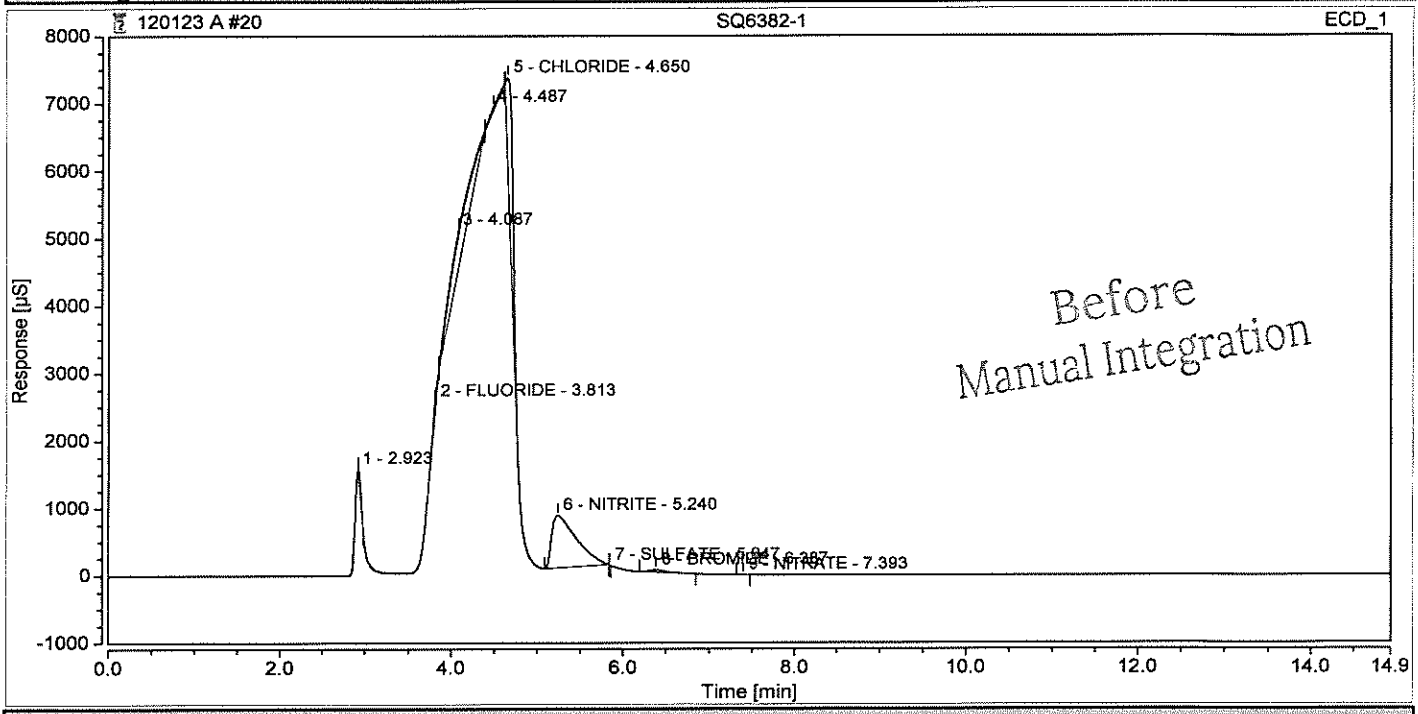
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.257	10.600	78.496	100.00	100.00	135.9802	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	SULFATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**10.600**	**78.496**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6382-1**	*Run Time (min):*	**14.94**
Vial Number:	**20**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**01/Dec/23 22:07**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

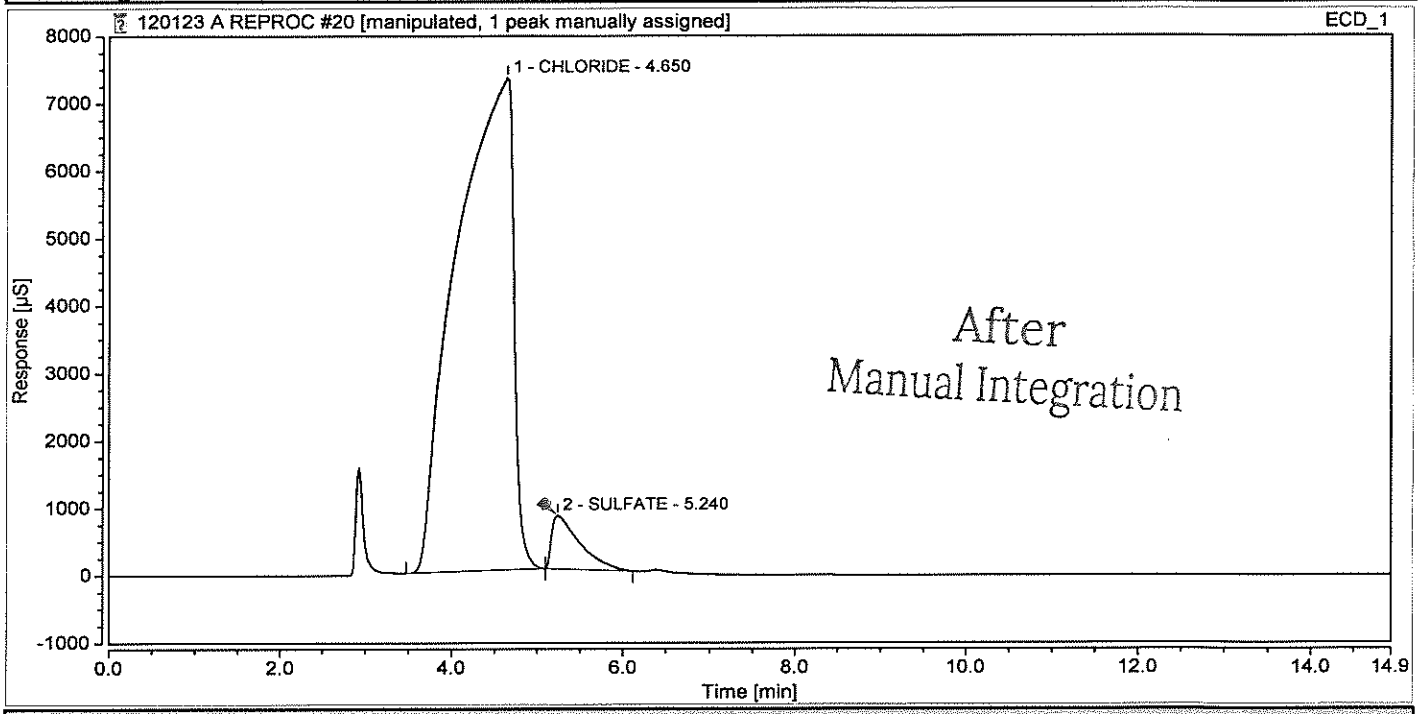
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1		2.923	5.945	57.638	0.92	1.94	n.a.	n.a.
2	FLUORIDE	3.813	13.171	160.011	2.05	5.39	24.0933	n.a.
3		4.087	180.721	522.135	28.09	17.58	n.a.	n.a.
4		4.487	6.004	37.718	0.93	1.27	n.a.	n.a.
5	CHLORIDE	4.650	170.116	1373.470	26.44	46.25	436.4772	n.a.
6	NITRITE	5.240	259.987	780.345	40.41	26.28	n.a.	n.a.
7	SULFATE	5.847	0.002	0.129	0.00	0.00	0.0053	n.a.
8	BROMIDE	6.387	7.490	38.161	1.16	1.29	44.0550	n.a.
9	NITRATE	7.393	0.003	0.031	0.00	0.00	0.0028	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**643.438**	**2969.638**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6382-1**	*Run Time (min):*	**14.94**
Vial Number:	**20**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**01/Dec/23 22:07**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

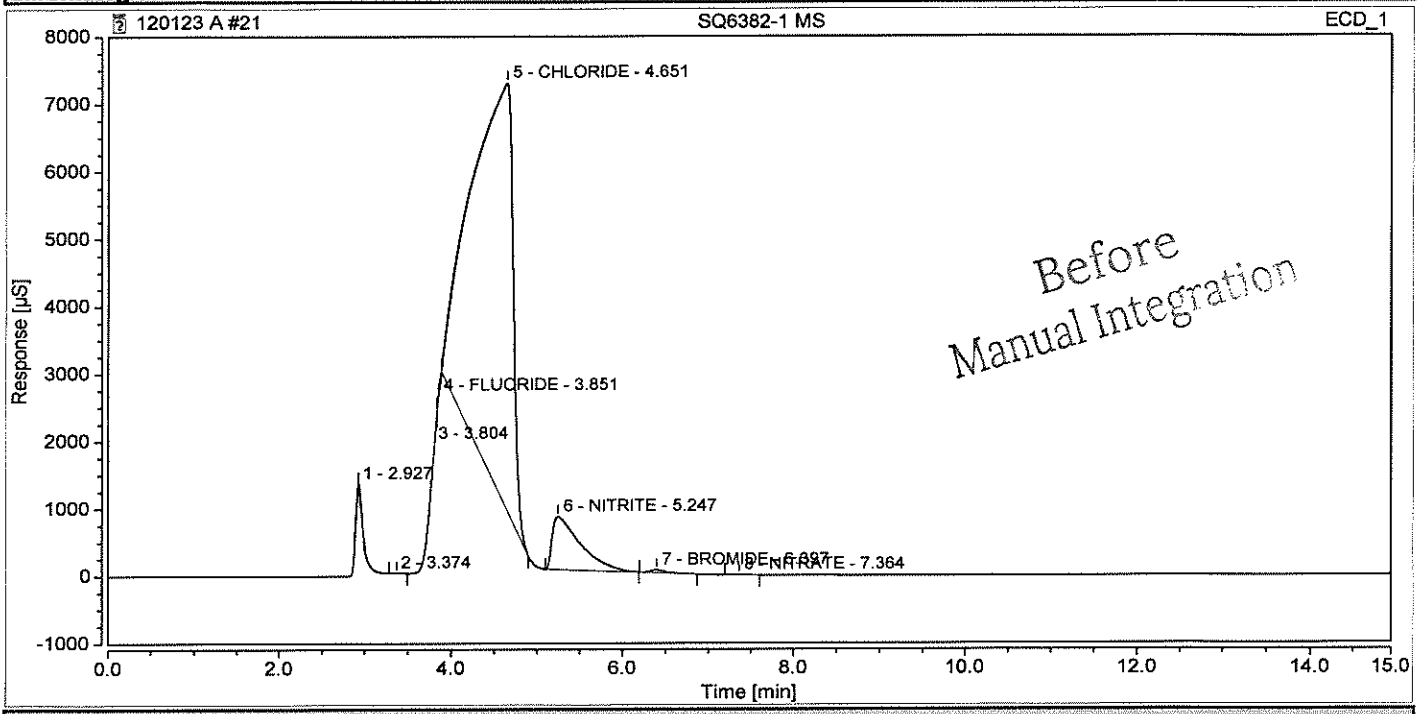
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.650	5579.515	7298.976	94.92	90.20	#########	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2	SULFATE	5.240	298.869	793.331	5.08	9.80	1051.3257	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**5878.384**	**8092.307**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6382-1 MS**	*Run Time (min):*	**14.95**
Vial Number:	**21**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**01/Dec/23 22:24**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

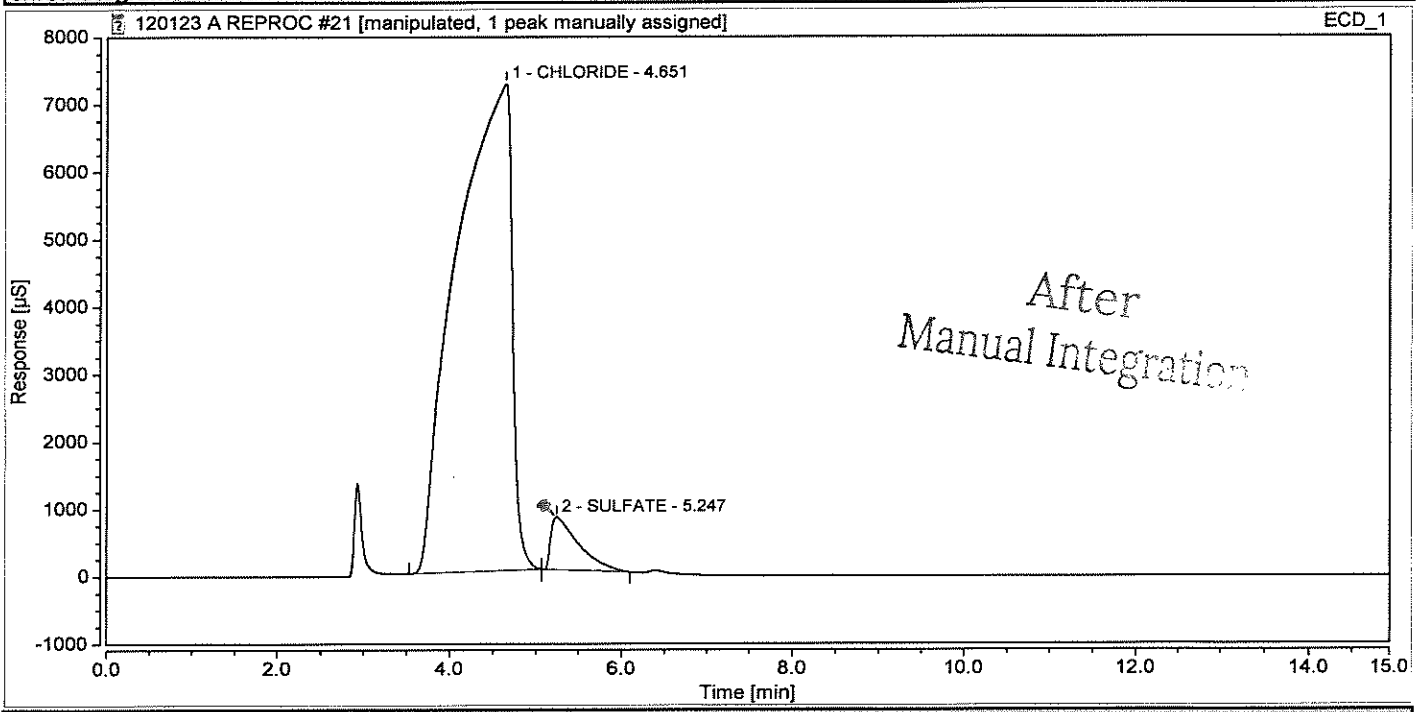
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1		2.927	5.593	58.698	0.15	0.80	n.a.	n.a.
2		3.374	0.162	1.527	0.00	0.02	n.a.	n.a.
3		3.804	1.232	24.973	0.03	0.34	n.a.	n.a.
4	FLUORIDE	3.851	1.791	56.632	0.05	0.77	2.8776	n.a.
5	CHLORIDE	4.651	3387.354	6347.820	91.43	86.70	8691.1663	n.a.
6	NITRITE	5.247	300.095	789.478	8.10	10.78	n.a.	n.a.
n.a.	SULFATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
7	BROMIDE	6.397	8.129	40.225	0.22	0.55	47.8114	n.a.
8	NITRATE	7.364	0.466	2.524	0.01	0.03	0.4765	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**3704.821**	**7321.877**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6382-1 MS**	*Run Time (min):*	**14.95**
Vial Number:	**21**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**01/Dec/23 22:24**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

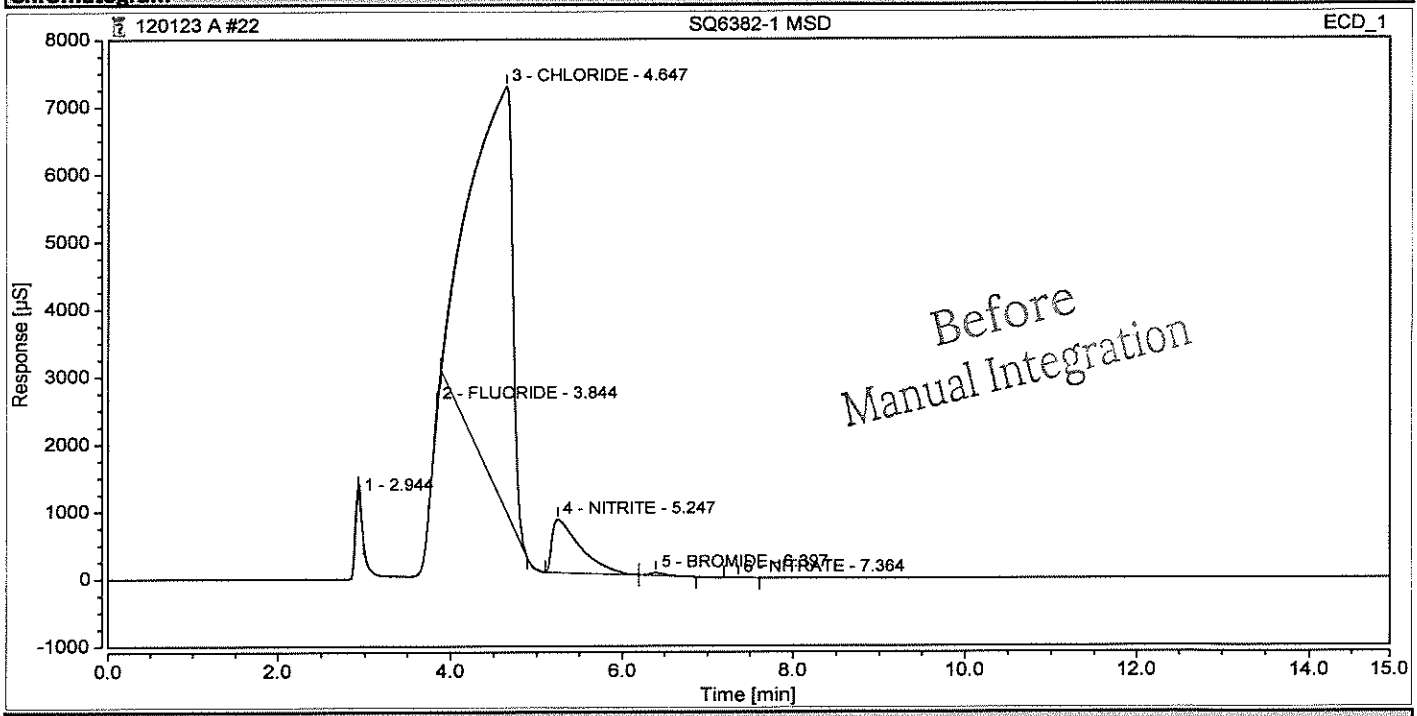
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.651	5337.256	7226.606	94.78	90.20	##########	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2	SULFATE	5.247	293.884	784.828	5.22	9.80	1033.7898	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**5631.141**	**8011.434**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6382-1 MSD**	*Run Time (min):*	**14.95**
Vial Number:	**22**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**01/Dec/23 22:41**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

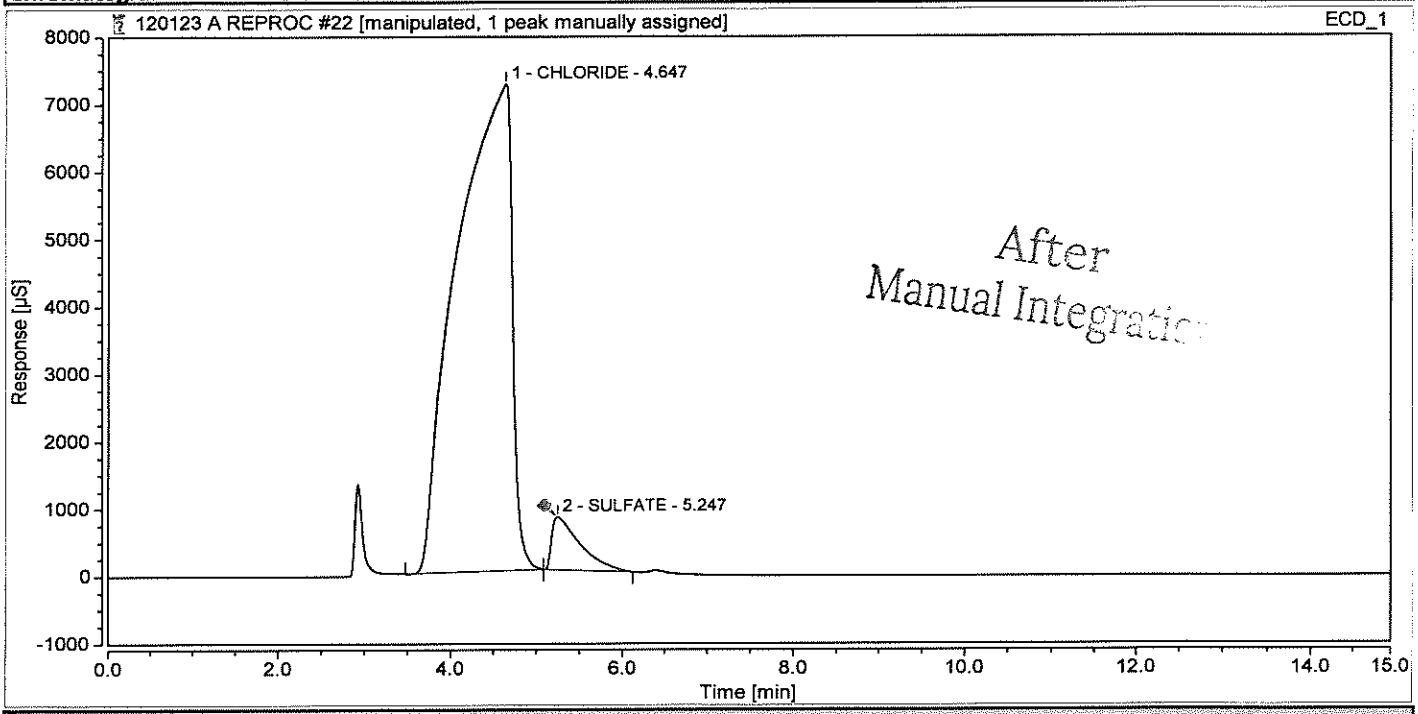
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1		2.944	4.398	134.603	0.12	1.81	n.a.	n.a.
2	FLUORIDE	3.844	13.490	163.710	0.37	2.20	24.7947	n.a.
3	CHLORIDE	4.647	3342.928	6310.449	91.05	84.78	8577.1791	n.a.
4	NITRITE	5.247	302.259	791.537	8.23	10.63	n.a.	n.a.
n.a.	SULFATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5	BROMIDE	6.397	8.069	39.996	0.22	0.54	47.4602	n.a.
6	NITRATE	7.364	0.492	2.628	0.01	0.04	0.5027	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**3671.636**	**7442.923**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6382-1 MSD**	*Run Time (min):*	**14.95**
Vial Number:	**22**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**01/Dec/23 22:41**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

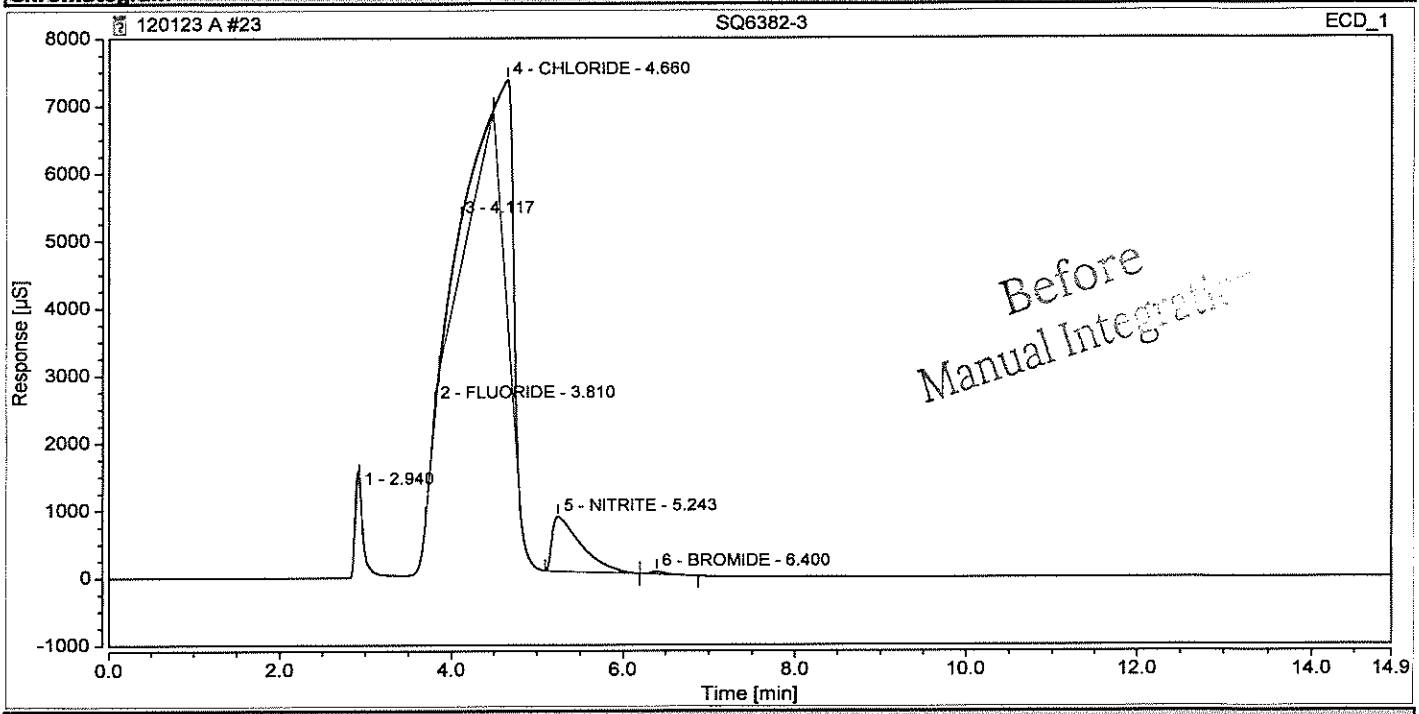
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.647	5334.040	7218.054	94.70	90.14	#########	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2	SULFATE	5.247	298.725	789.393	5.30	9.86	1050.8184	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**5632.766**	**8007.447**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6382-3**	*Run Time (min):*	**14.95**
Vial Number:	**23**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**01/Dec/23 22:58**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

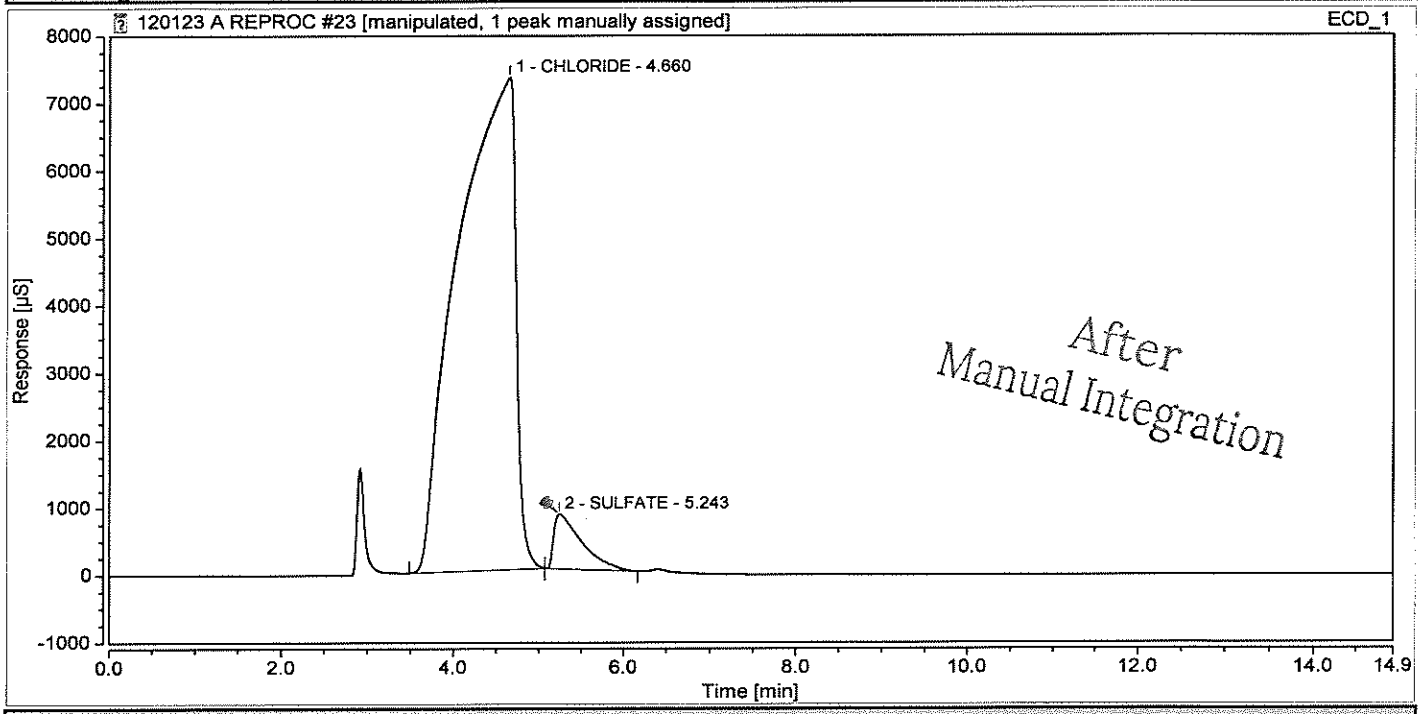
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1		2.940	1.167	51.130	0.10	0.96	n.a.	n.a.
2	FLUORIDE	3.810	13.394	161.443	1.11	3.02	24.5820	n.a.
3		4.117	276.885	664.262	23.04	12.44	n.a.	n.a.
4	CHLORIDE	4.660	589.369	3607.553	49.05	67.58	1512.1849	n.a.
5	NITRITE	5.243	312.743	814.513	26.03	15.26	n.a.	n.a.
n.a.	SULFATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
6	BROMIDE	6.400	8.024	39.451	0.67	0.74	47.1958	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**1201.582**	**5338.352**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6382-3**	*Run Time (min):*	**14.95**
Vial Number:	**23**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**01/Dec/23 22:58**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

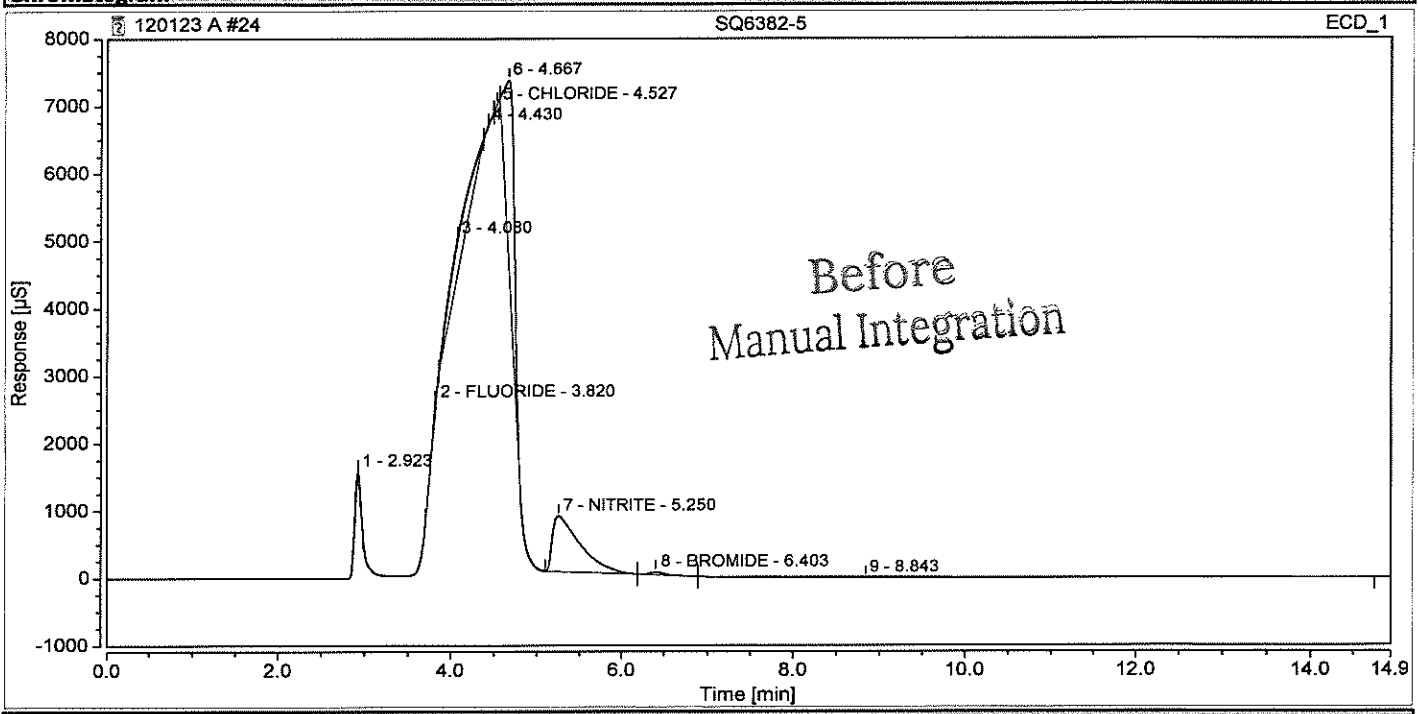
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.660	5650.110	7301.262	94.80	90.00	##########	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2	SULFATE	5.243	310.160	811.317	5.20	10.00	1091.0434	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**5960.270**	**8112.579**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6382-5**	*Run Time (min):*	**14.95**
Vial Number:	**24**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**01/Dec/23 23:16**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

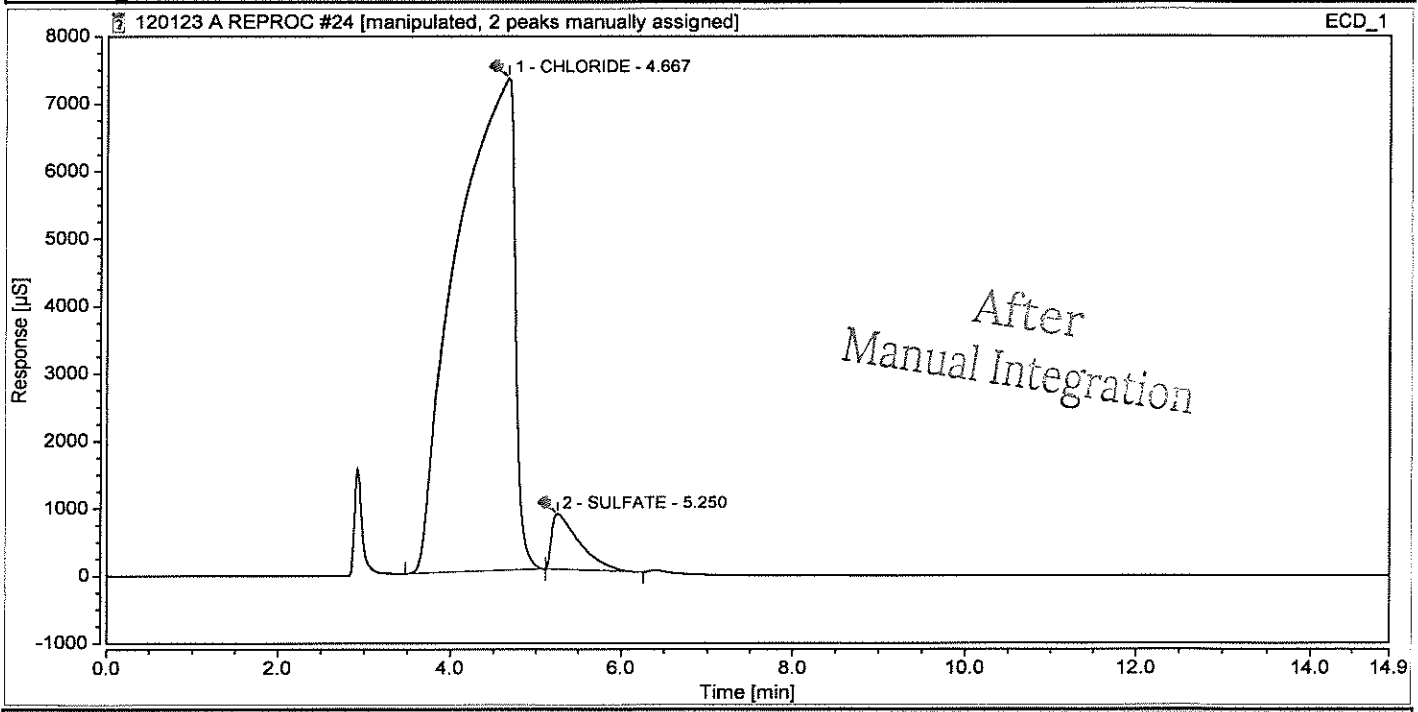
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1		2.923	5.466	55.782	0.57	1.27	n.a.	n.a.
2	FLUORIDE	3.820	12.686	153.177	1.33	3.48	23.0416	n.a.
3		4.080	171.586	511.015	18.00	11.61	n.a.	n.a.
4		4.430	1.090	14.836	0.11	0.34	n.a.	n.a.
5	CHLORIDE	4.527	0.163	3.715	0.02	0.08	0.4183	n.a.
6		4.667	374.494	2780.600	39.29	63.20	n.a.	n.a.
7	NITRITE	5.250	312.608	826.377	32.79	18.78	n.a.	n.a.
n.a.	SULFATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
8	BROMIDE	6.403	8.301	40.619	0.87	0.92	48.8256	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
9		8.843	66.881	13.551	7.02	0.31	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**953.275**	**4399.670**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6382-5**	*Run Time (min):*	**14.95**
Vial Number:	**24**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**01/Dec/23 23:16**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

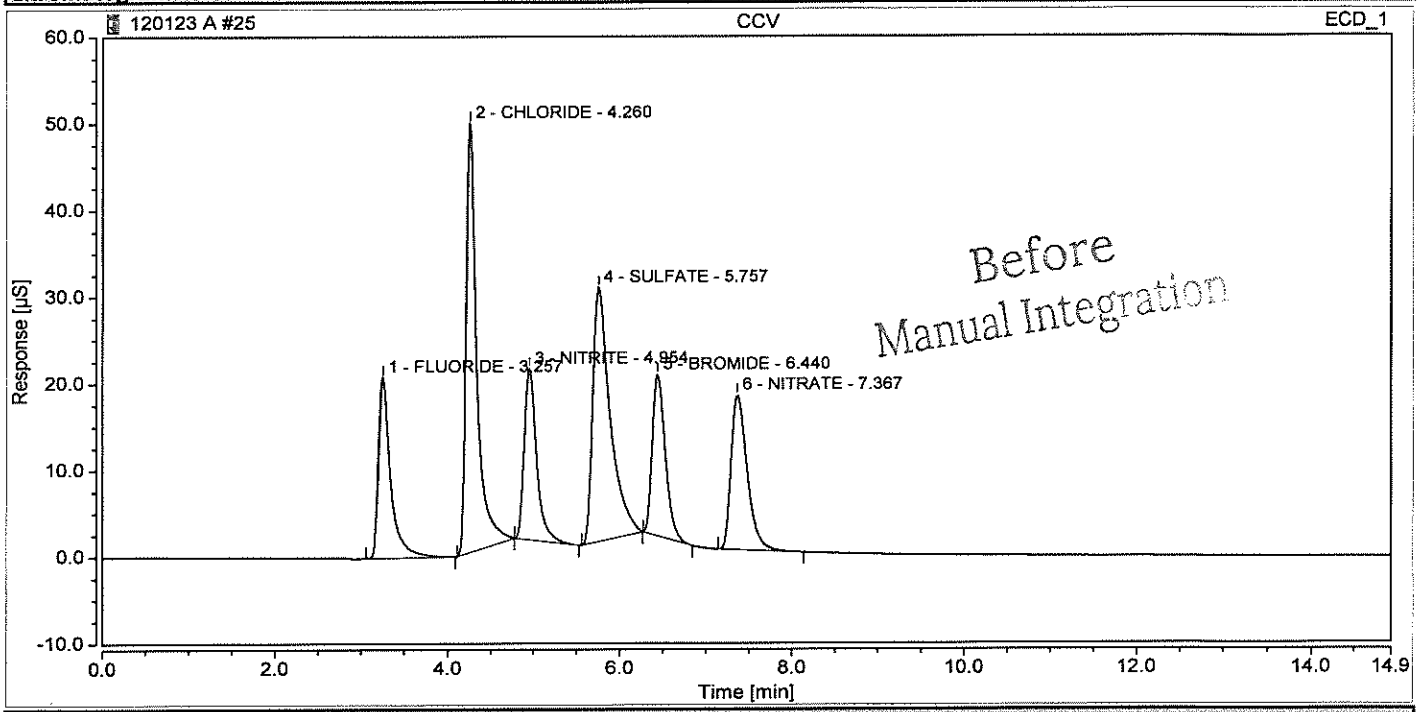
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.667	5650.240	7306.258	94.81	89.88	##########	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2	SULFATE	5.250	309.268	822.620	5.19	10.12	1087.9036	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**5959.507**	**8128.878**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**CCV**	*Run Time (min):*	**14.94**
Vial Number:	**25**	*Injection Volume:*	**200.00**
Injection Type:	**Check Standard**	*Channel:*	**ECD_1**
Calibration Level:	**06**	*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**01/Dec/23 23:33**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

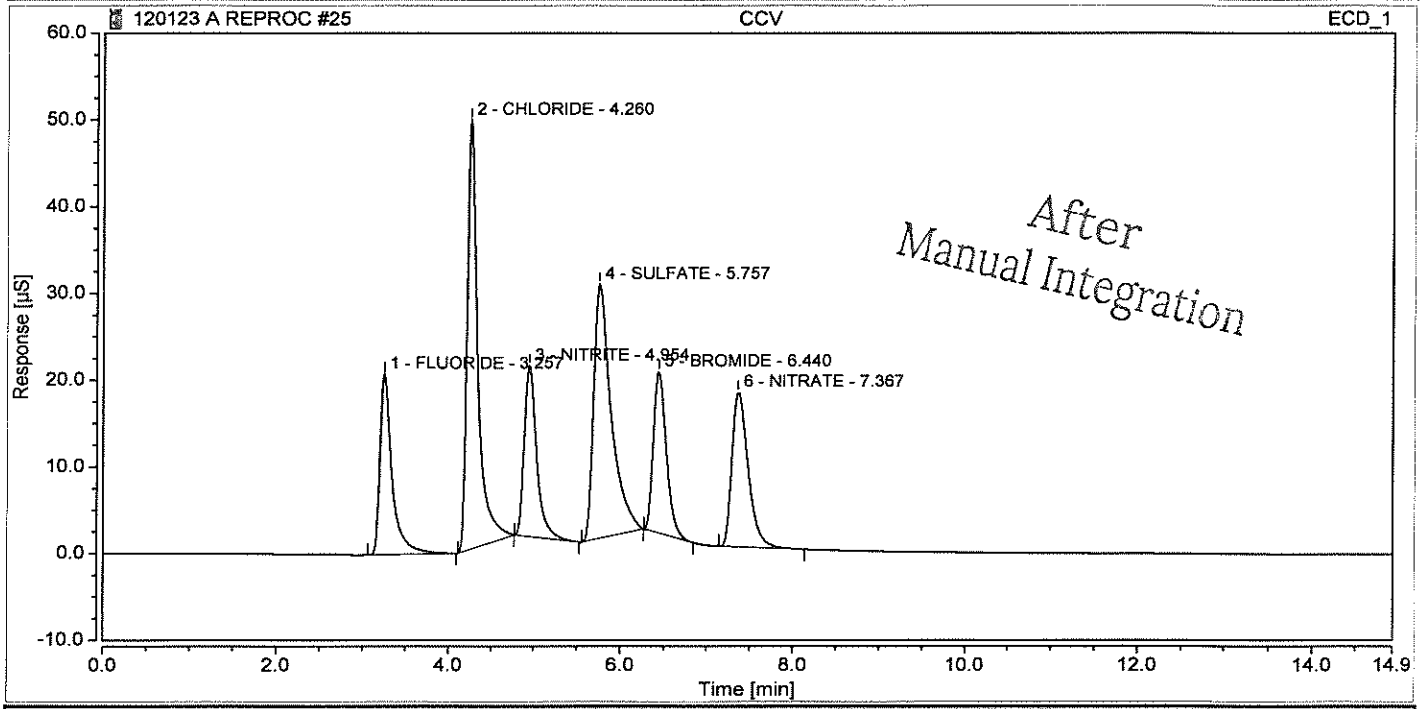
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.257	3.407	20.800	12.19	13.36	5.5476	10.9515
2	CHLORIDE	4.260	7.223	49.497	25.83	31.78	18.5322	85.3217
3	NITRITE	4.954	3.360	19.721	12.02	12.66	4.0488	1.2195
4	SULFATE	5.757	6.809	29.303	24.35	18.81	23.9520	19.7599
5	BROMIDE	6.440	3.264	18.584	11.67	11.93	19.1956	-4.0220
6	NITRATE	7.367	3.896	17.840	13.93	11.45	3.9809	-0.4763
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**27.959**	**155.745**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**CCV**	*Run Time (min):*	**14.94**
Vial Number:	**25**	*Injection Volume:*	**200.00**
Injection Type:	**Check Standard**	*Channel:*	**ECD_1**
Calibration Level:	**06**	*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**01/Dec/23 23:33**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

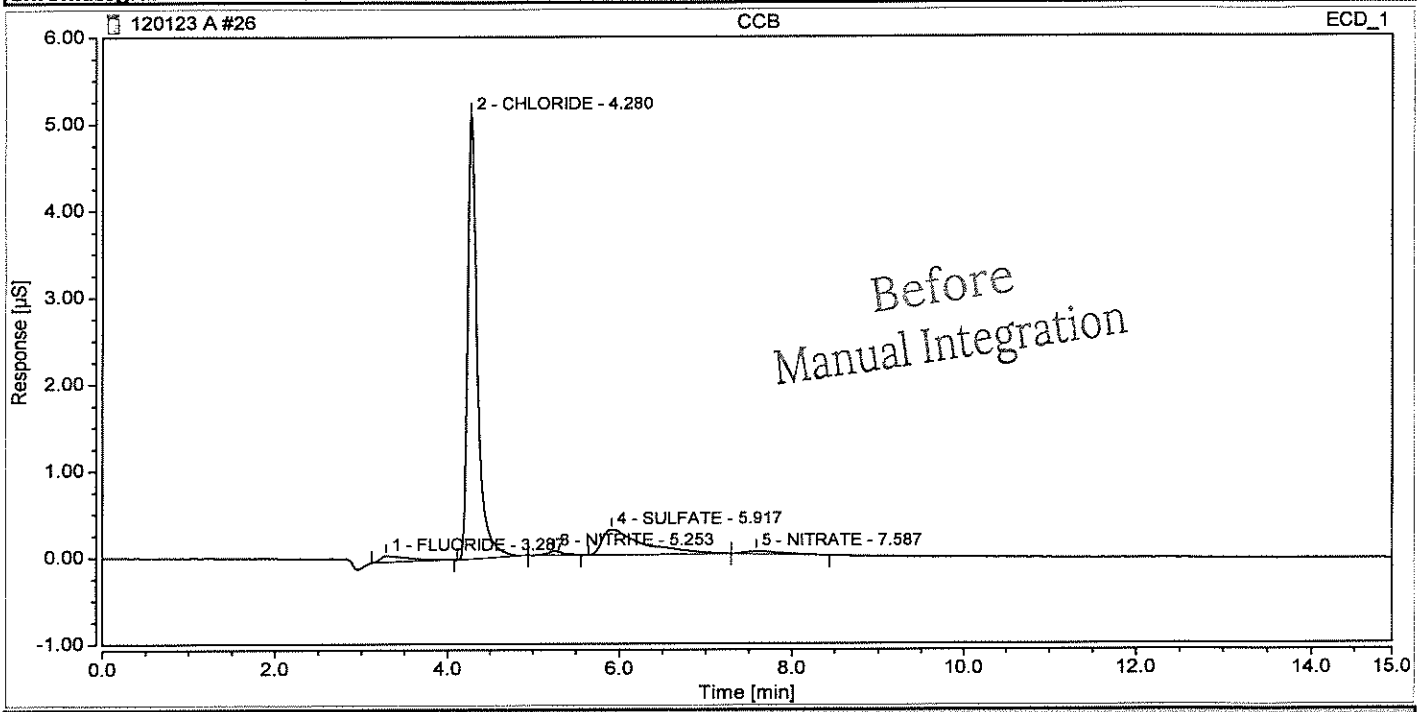
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.257	3.407	20.800	12.19	13.36	5.5476	10.9515
2	CHLORIDE	4.260	7.223	49.497	25.83	31.78	18.5322	85.3217
3	NITRITE	4.954	3.360	19.721	12.02	12.66	4.0488	1.2195
4	SULFATE	5.757	6.809	29.303	24.35	18.81	23.9520	19.7599
5	BROMIDE	6.440	3.264	18.584	11.67	11.93	19.1956	-4.0220
6	NITRATE	7.367	3.896	17.840	13.93	11.45	3.9809	-0.4763
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**27.959**	**155.745**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**CCB**	*Run Time (min):*	**14.95**
Vial Number:	**26**	*Injection Volume:*	**200.00**
Injection Type:	**Blank**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**01/Dec/23 23:50**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

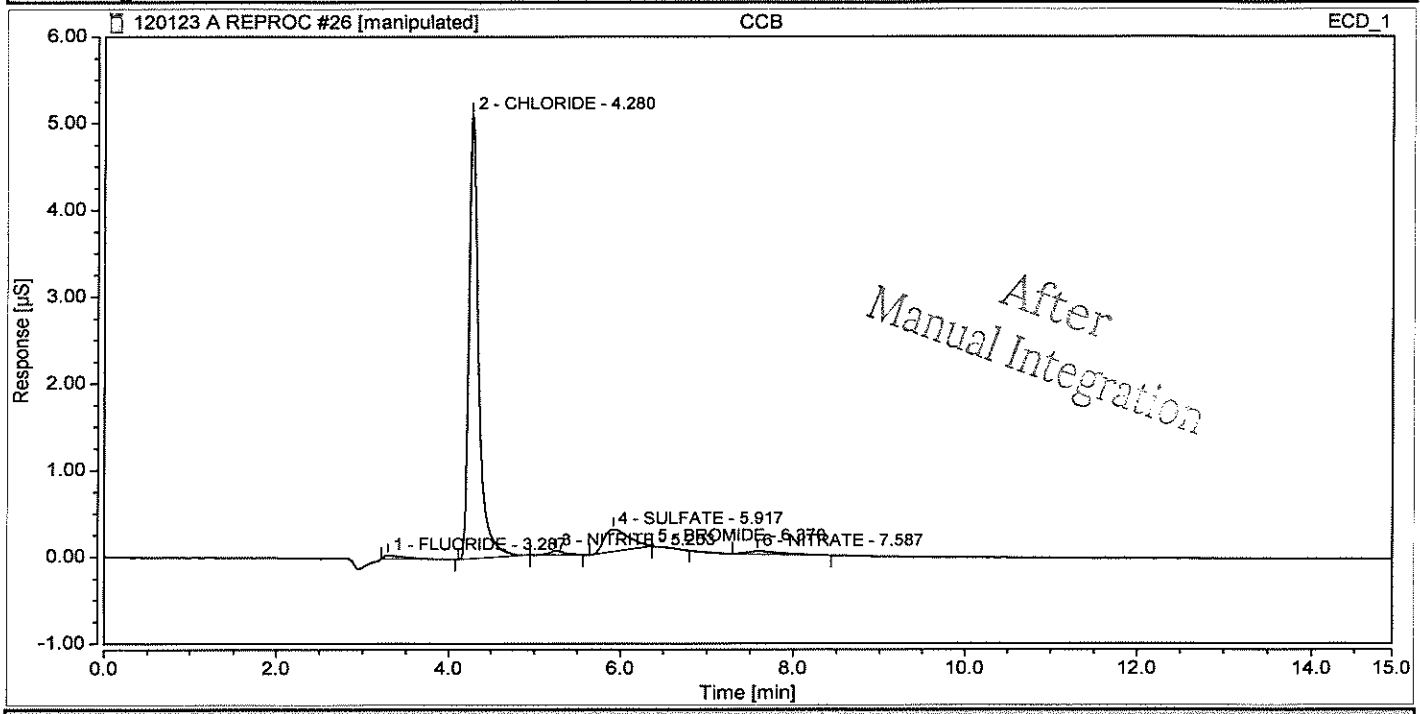
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.287	0.028	0.072	3.16	1.30	0.0612	n.a.
2	CHLORIDE	4.280	0.679	5.122	75.66	92.00	1.7427	n.a.
3	NITRITE	5.253	0.010	0.046	1.06	0.83	0.0193	n.a.
4	SULFATE	5.917	0.164	0.294	18.25	5.27	0.5764	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5	NITRATE	7.587	0.017	0.033	1.86	0.60	0.0171	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.898**	**5.568**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**CCB**	*Run Time (min):*	**14.95**
Vial Number:	**26**	*Injection Volume:*	**200.00**
Injection Type:	**Blank**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**01/Dec/23 23:50**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

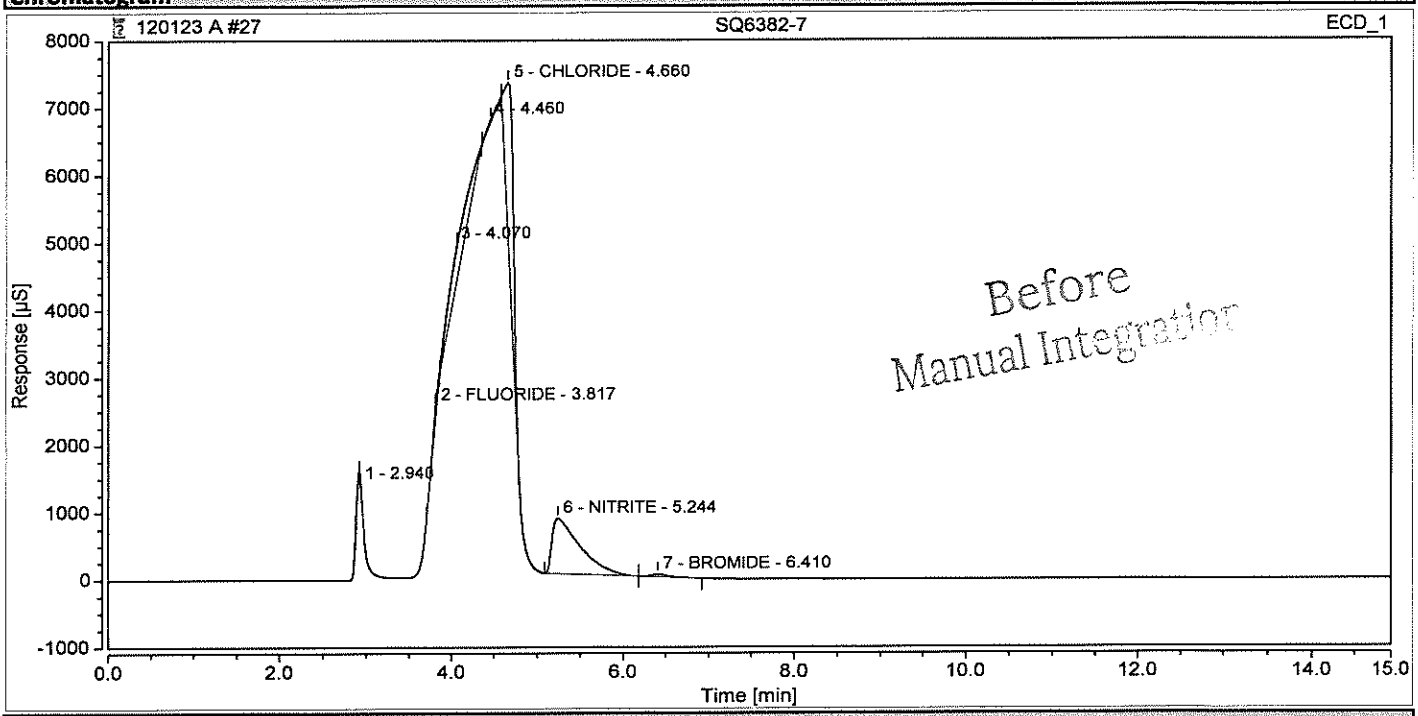
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.287	0.013	0.042	1.59	0.76	0.0368	n.a.
2	CHLORIDE	4.280	0.679	5.122	84.04	93.12	1.7427	n.a.
3	NITRITE	5.253	0.010	0.046	1.18	0.84	0.0193	n.a.
4	SULFATE	5.917	0.089	0.257	10.96	4.67	0.3115	n.a.
5	BROMIDE	6.370	0.001	0.000	0.16	0.00	0.0078	n.a.
6	NITRATE	7.587	0.017	0.033	2.06	0.61	0.0171	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.808**	**5.501**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6382-7**	*Run Time (min):*	**14.95**
Vial Number:	**27**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**02/Dec/23 00:07**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

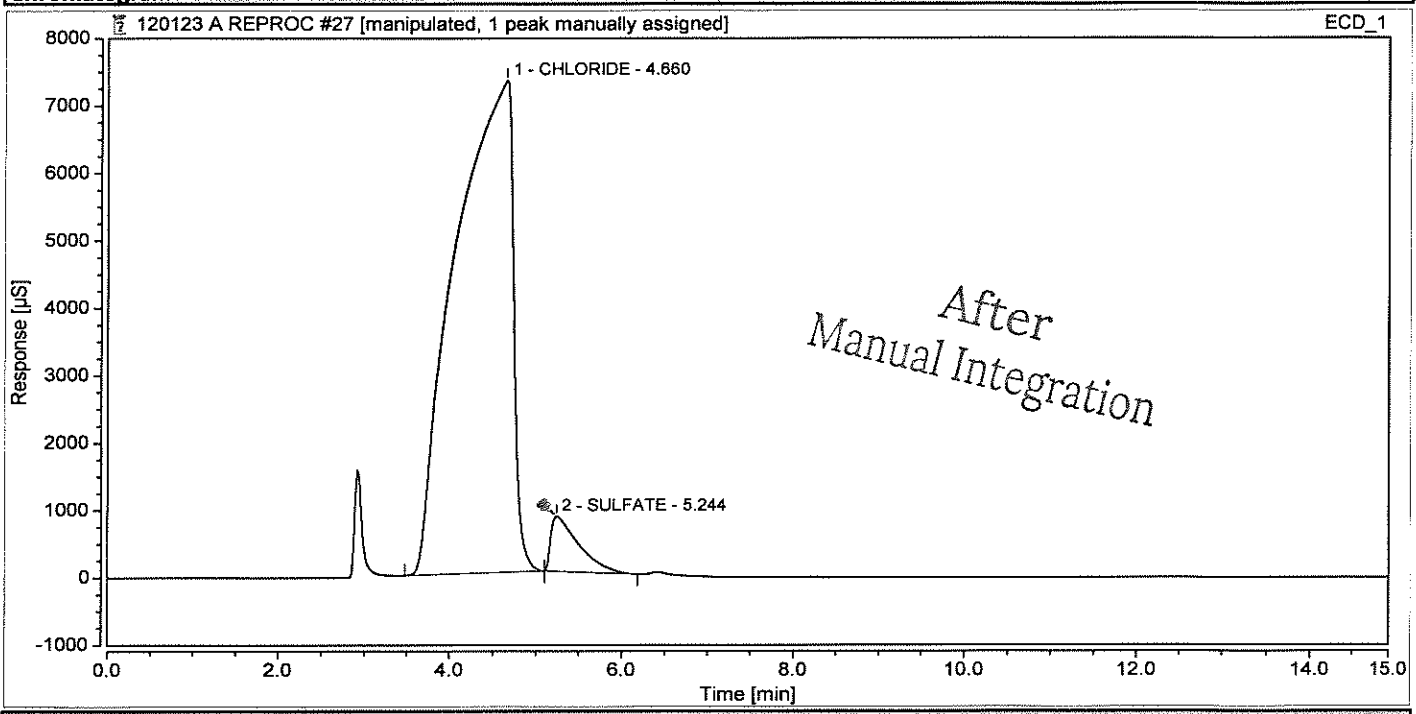
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1		2.940	3.717	123.042	0.46	3.02	n.a.	n.a.
2	FLUORIDE	3.817	12.144	150.176	1.51	3.69	21.8883	n.a.
3		4.070	162.275	495.642	20.24	12.17	n.a.	n.a.
4		4.460	5.568	38.452	0.69	0.94	n.a.	n.a.
5	CHLORIDE	4.660	297.926	2401.399	37.15	58.97	764.4094	n.a.
6	NITRITE	5.244	311.330	822.013	38.83	20.18	n.a.	n.a.
n.a.	SULFATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
7	BROMIDE	6.410	8.887	41.805	1.11	1.03	52.2743	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**801.847**	**4072.527**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6382-7**	*Run Time (min):*	**14.95**
Vial Number:	**27**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**02/Dec/23 00:07**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

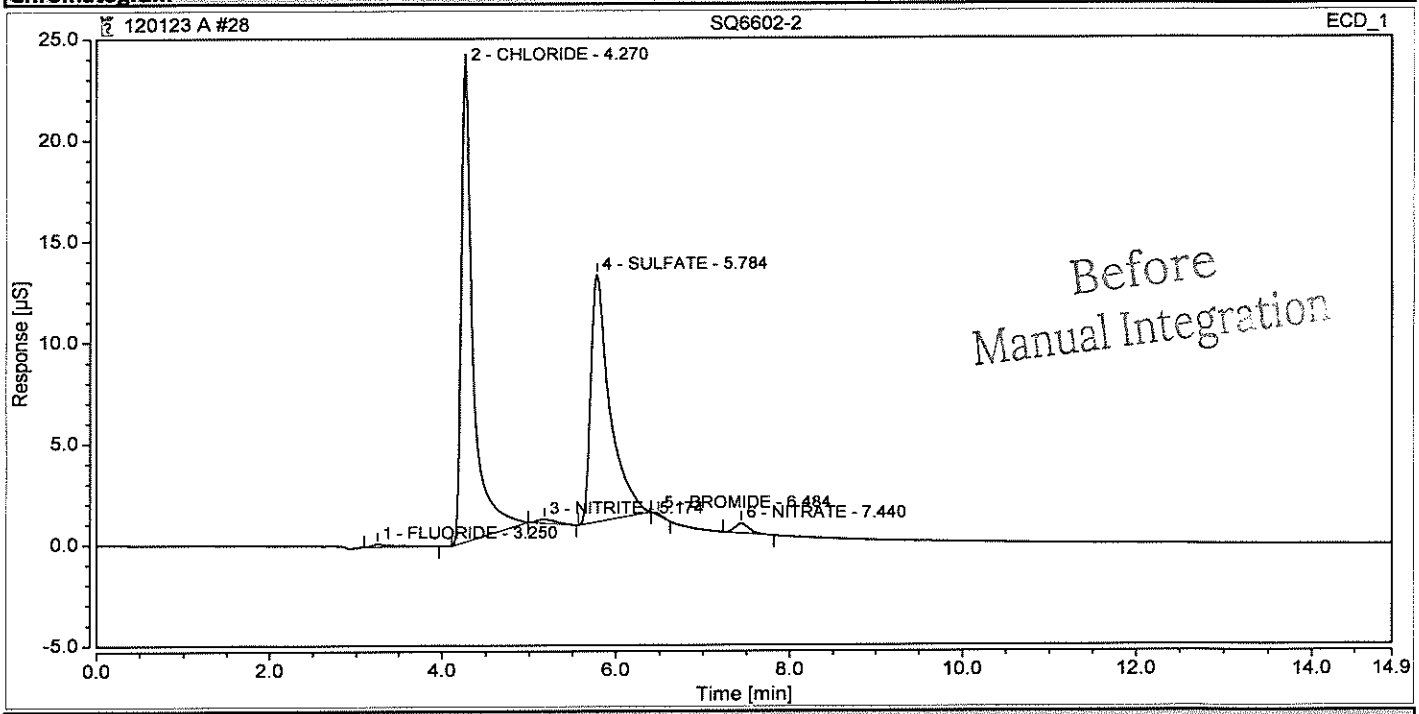
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.660	5611.769	7296.452	94.76	89.89	#########	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2	SULFATE	5.244	310.205	820.223	5.24	10.11	1091.2001	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**5921.974**	**8116.675**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6602-2**	*Run Time (min):*	**14.95**
Vial Number:	**28**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**02/Dec/23 00:25**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

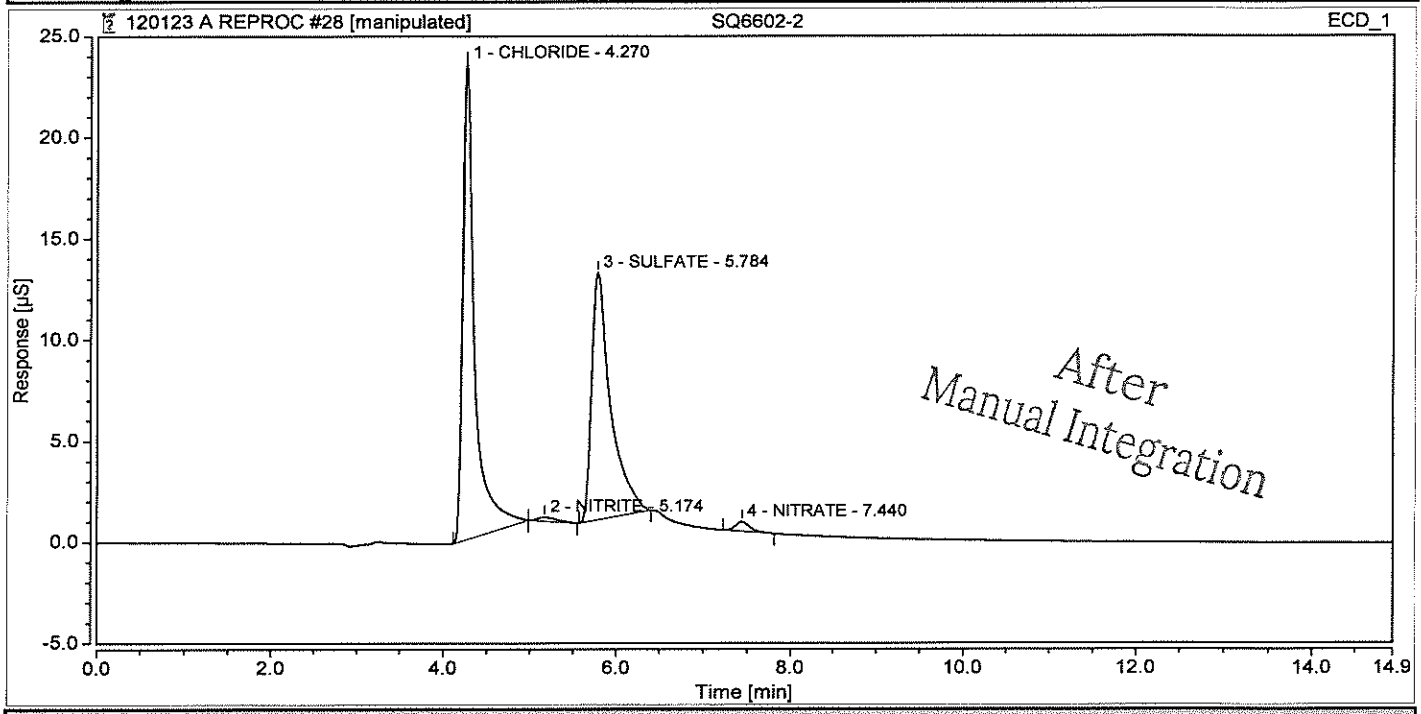
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.250	0.038	0.143	0.54	0.39	0.0764	n.a.
2	CHLORIDE	4.270	3.732	23.545	52.97	64.16	9.5756	n.a.
3	NITRITE	5.174	0.054	0.195	0.77	0.53	0.0712	n.a.
4	SULFATE	5.784	3.116	12.217	44.22	33.29	10.9614	n.a.
5	BROMIDE	6.484	0.012	0.112	0.17	0.31	0.0708	n.a.
6	NITRATE	7.440	0.094	0.486	1.33	1.32	0.0961	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**7.046**	**36.698**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6602-2**	*Run Time (min):*	**14.95**
Vial Number:	**28**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**02/Dec/23 00:25**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

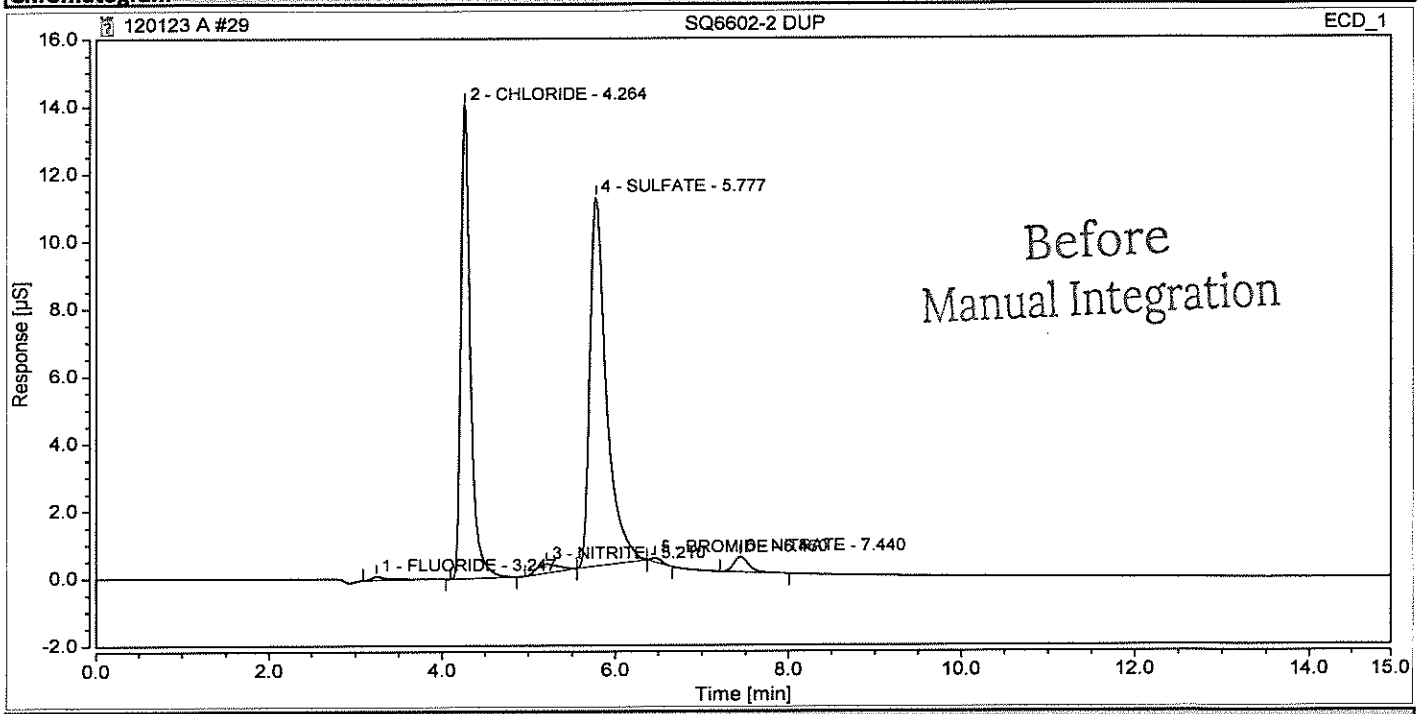
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.270	3.732	23.545	53.34	64.61	9.5756	n.a.
2	NITRITE	5.174	0.054	0.195	0.77	0.54	0.0712	n.a.
3	SULFATE	5.784	3.116	12.217	44.54	33.52	10.9614	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
4	NITRATE	7.440	0.094	0.486	1.34	1.33	0.0961	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**6.996**	**36.443**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6602-2 DUP**	*Run Time (min):*	**14.95**
Vial Number:	**29**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**02/Dec/23 00:42**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

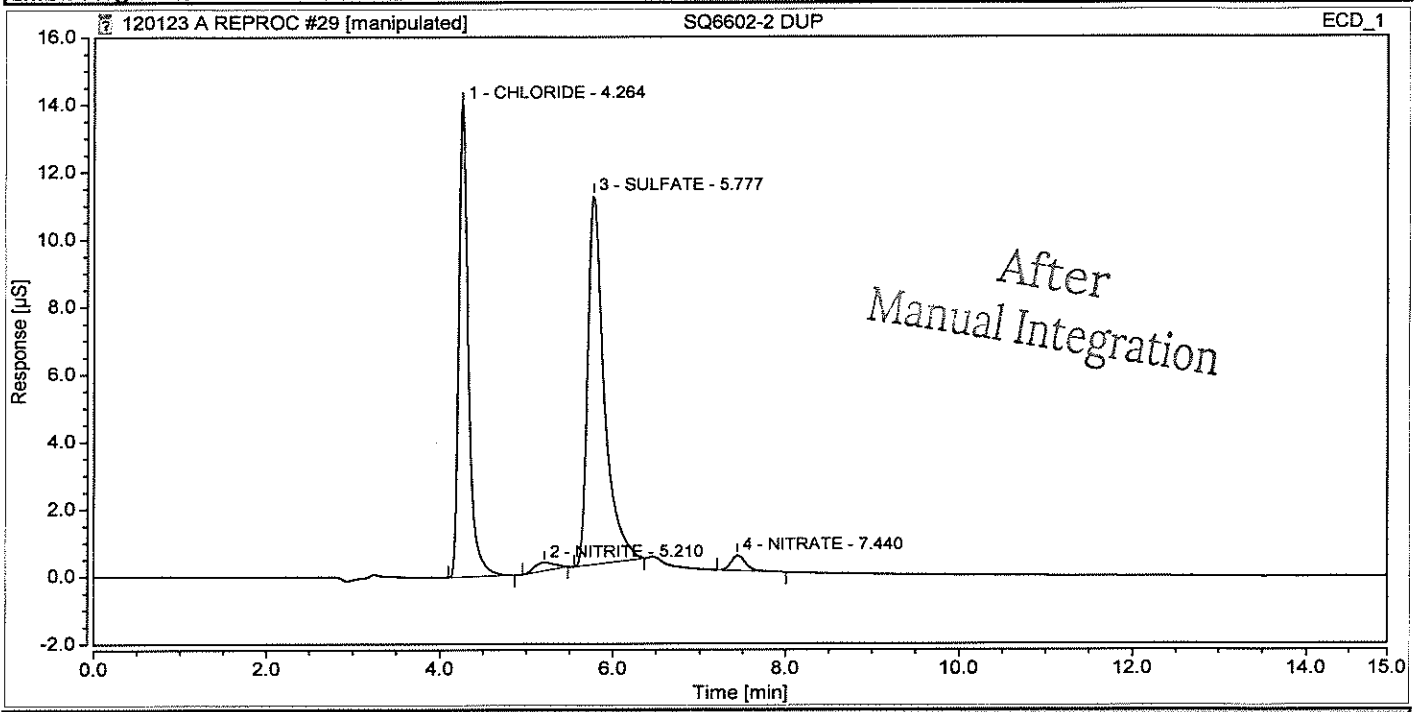
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.247	0.031	0.115	0.69	0.45	0.0649	n.a.
2	CHLORIDE	4.264	1.821	14.036	40.92	54.13	4.6721	n.a.
3	NITRITE	5.210	0.079	0.264	1.78	1.02	0.1006	n.a.
4	SULFATE	5.777	2.412	10.937	54.20	42.18	8.4843	n.a.
5	BROMIDE	6.460	0.017	0.124	0.39	0.48	0.1023	n.a.
6	NITRATE	7.440	0.090	0.452	2.02	1.74	0.0920	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**4.450**	**25.929**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6602-2 DUP**	*Run Time (min):*	**14.95**
Vial Number:	**29**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**02/Dec/23 00:42**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

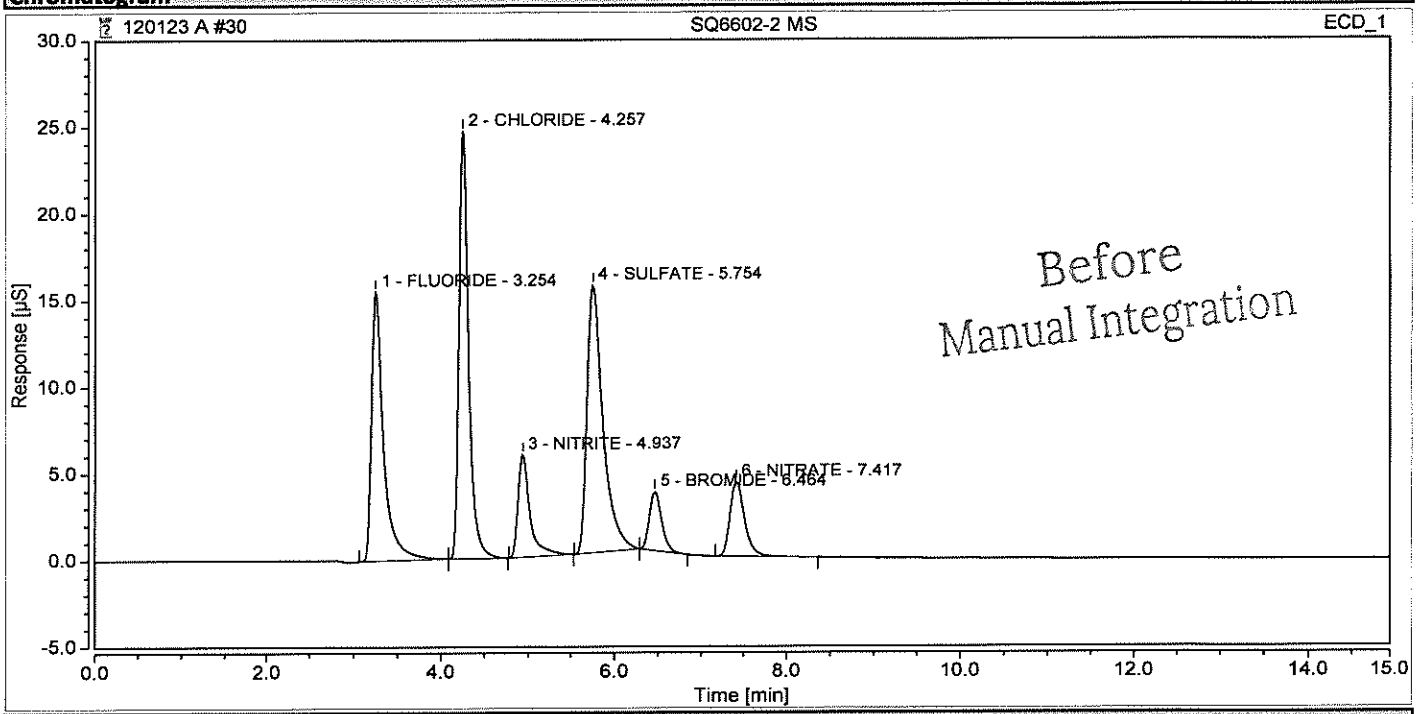
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.264	1.821	14.036	41.47	54.68	4.6721	n.a.
2	NITRITE	5.210	0.068	0.246	1.55	0.96	0.0874	n.a.
3	SULFATE	5.777	2.412	10.937	54.93	42.60	8.4843	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
4	NITRATE	7.440	0.090	0.452	2.05	1.76	0.0920	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**4.391**	**25.671**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6602-2 MS**	*Run Time (min):*	**14.95**
Vial Number:	**30**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**02/Dec/23 00:59**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

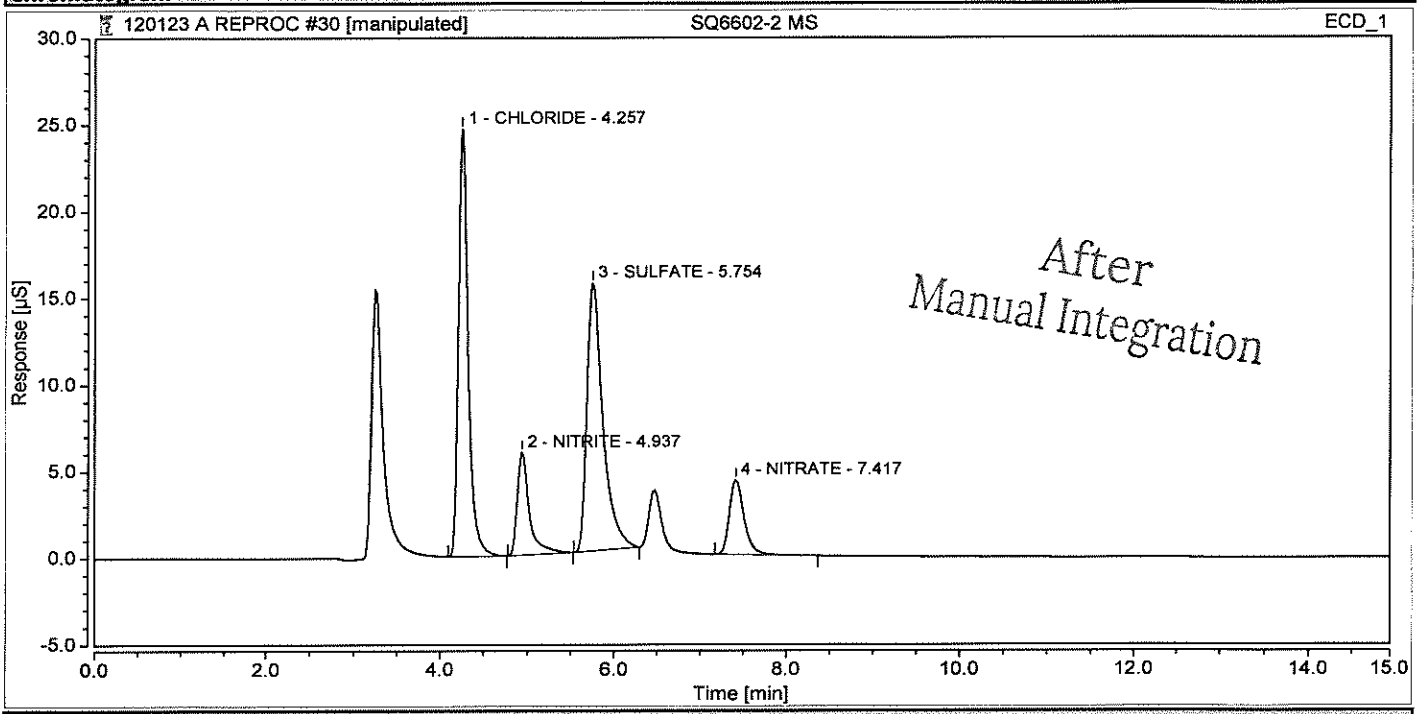
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.254	2.497	15.559	21.97	22.44	4.0325	n.a.
2	CHLORIDE	4.257	3.195	24.671	28.11	35.59	8.1980	n.a.
3	NITRITE	4.937	0.973	5.935	8.56	8.56	1.1514	n.a.
4	SULFATE	5.754	3.284	15.455	28.90	22.29	11.5522	n.a.
5	BROMIDE	6.464	0.558	3.403	4.91	4.91	3.2830	n.a.
6	NITRATE	7.417	0.858	4.304	7.55	6.21	0.8767	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**11.365**	**69.326**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6602-2 MS**	*Run Time (min):*	**14.95**
Vial Number:	**30**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**02/Dec/23 00:59**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

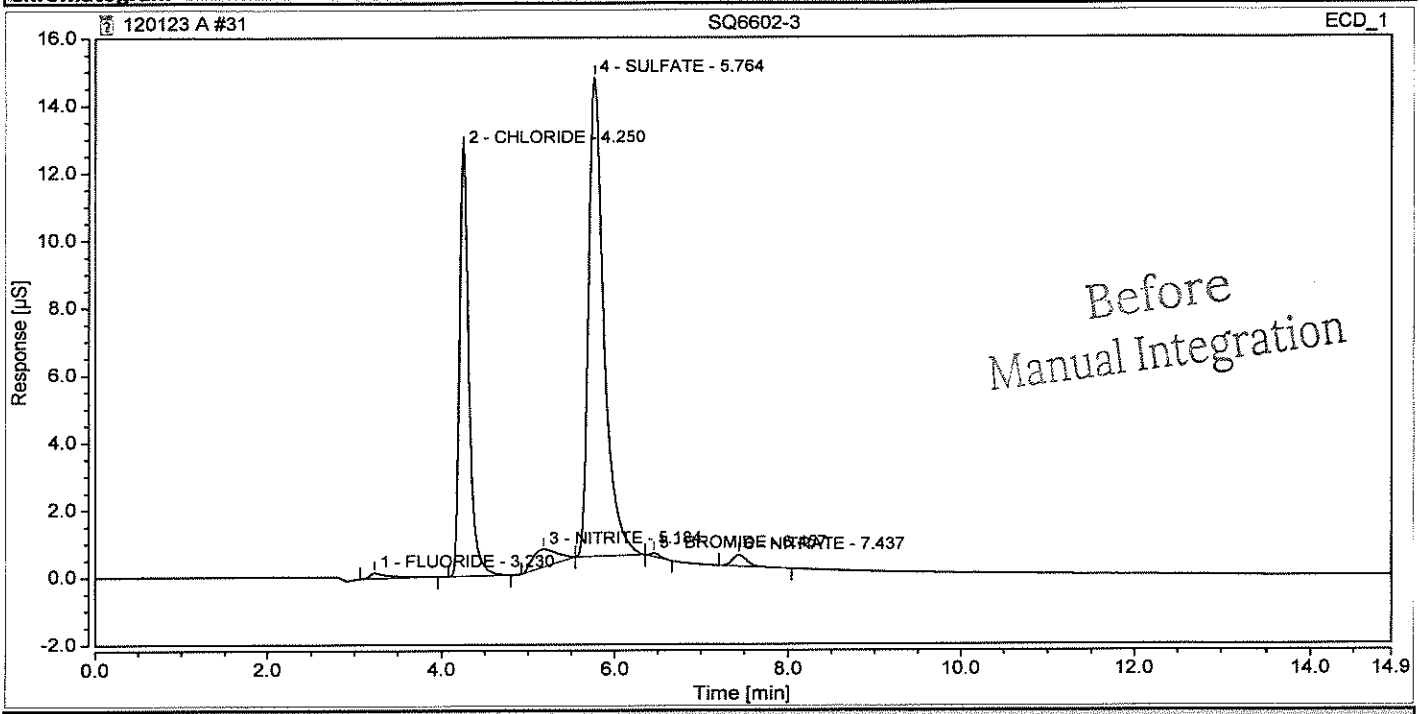
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.257	3.195	24.671	38.45	48.98	8.1980	n.a.
2	NITRITE	4.937	0.973	5.935	11.71	11.78	1.1514	n.a.
3	SULFATE	5.754	3.284	15.455	39.52	30.69	11.5522	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
4	NITRATE	7.417	0.858	4.304	10.32	8.55	0.8767	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**8.310**	**50.364**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6602-3**	*Run Time (min):*	**14.94**
Vial Number:	**31**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**02/Dec/23 01:16**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

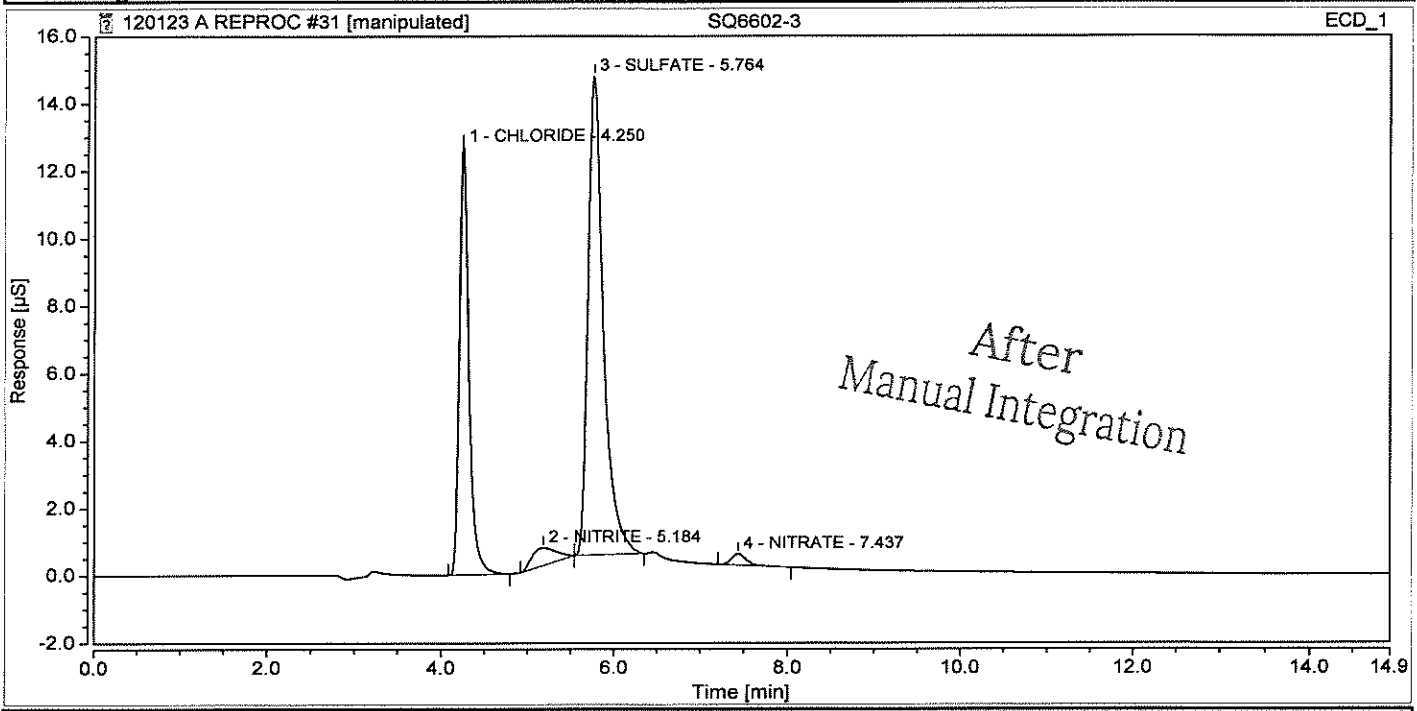
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.230	0.047	0.172	0.97	0.61	0.0904	n.a.
2	CHLORIDE	4.250	1.631	12.700	33.66	45.30	4.1859	n.a.
3	NITRITE	5.184	0.173	0.525	3.57	1.87	0.2099	n.a.
4	SULFATE	5.764	2.915	14.202	60.14	50.66	10.2534	n.a.
5	BROMIDE	6.457	0.015	0.103	0.30	0.37	0.0863	n.a.
6	NITRATE	7.437	0.066	0.333	1.36	1.19	0.0674	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**4.847**	**28.035**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6602-3**	*Run Time (min):*	**14.94**
Vial Number:	**31**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**02/Dec/23 01:16**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

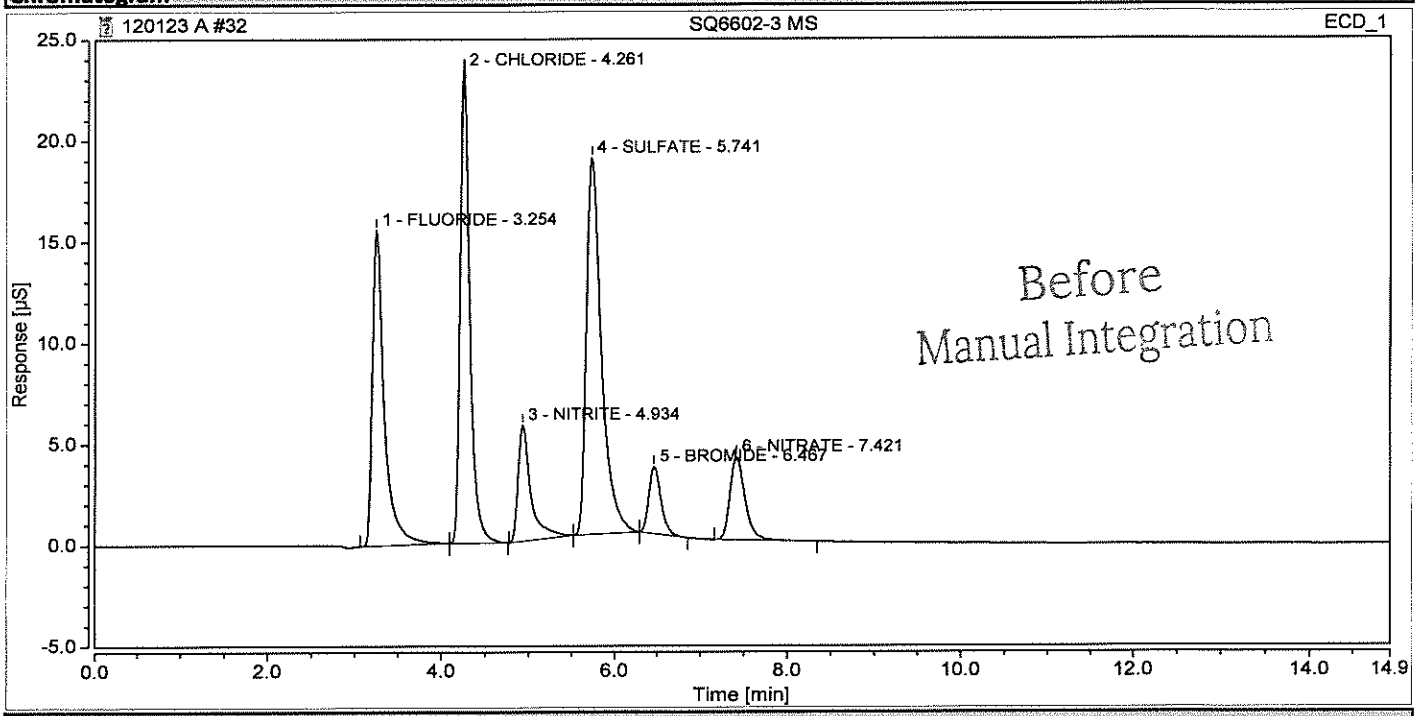
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.250	1.631	12.700	34.09	45.75	4.1859	n.a.
2	NITRITE	5.184	0.173	0.525	3.61	1.89	0.2099	n.a.
3	SULFATE	5.764	2.915	14.202	60.91	51.16	10.2534	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
4	NITRATE	7.437	0.066	0.333	1.38	1.20	0.0674	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**4.785**	**27.760**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6602-3 MS**	*Run Time (min):*	**14.95**
Vial Number:	**32**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**02/Dec/23 01:34**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

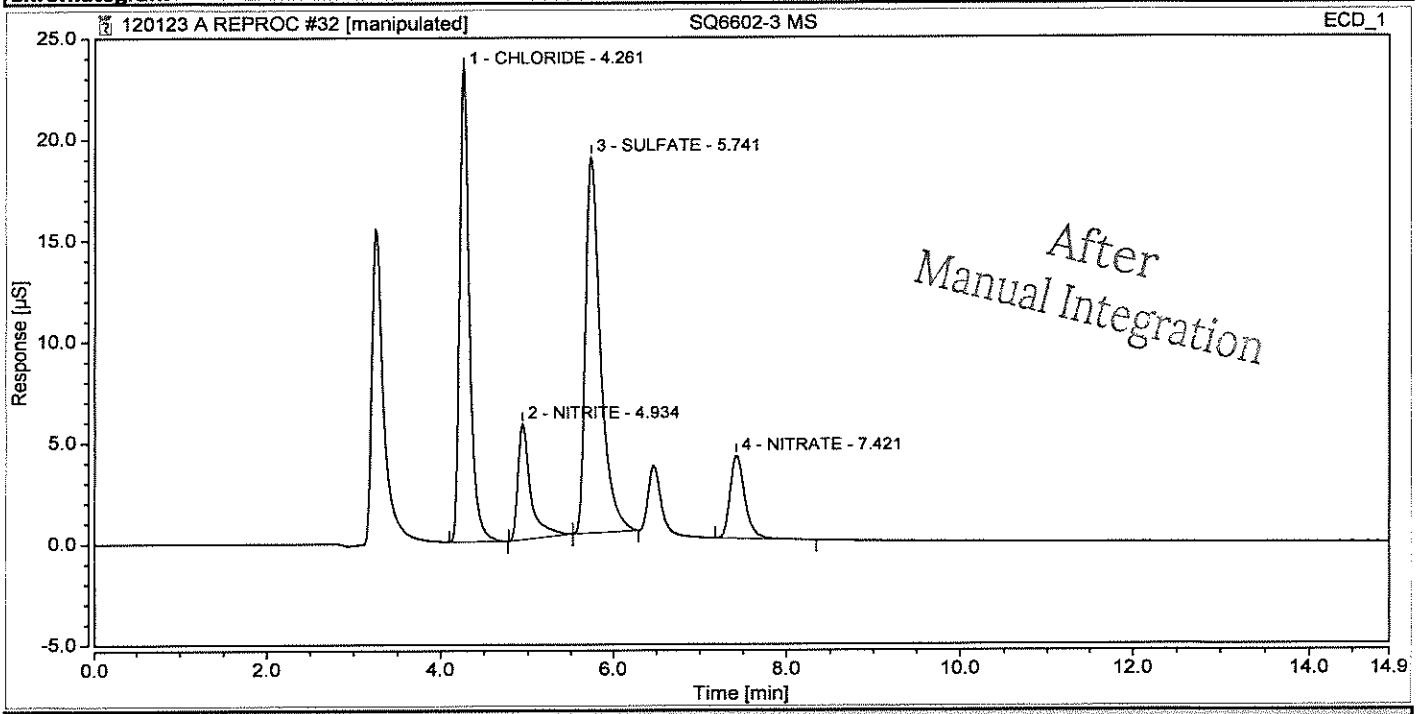
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.254	2.474	15.598	21.16	22.06	3.9947	n.a.
2	CHLORIDE	4.261	3.040	23.368	26.01	33.05	7.7994	n.a.
3	NITRITE	4.934	0.990	5.724	8.47	8.10	1.1719	n.a.
4	SULFATE	5.741	3.821	18.607	32.69	26.32	13.4426	n.a.
5	BROMIDE	6.467	0.547	3.312	4.68	4.68	3.2149	n.a.
6	NITRATE	7.421	0.817	4.095	6.99	5.79	0.8348	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**11.689**	**70.705**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6602-3 MS**	*Run Time (min):*	**14.95**
Vial Number:	**32**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**02/Dec/23 01:34**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

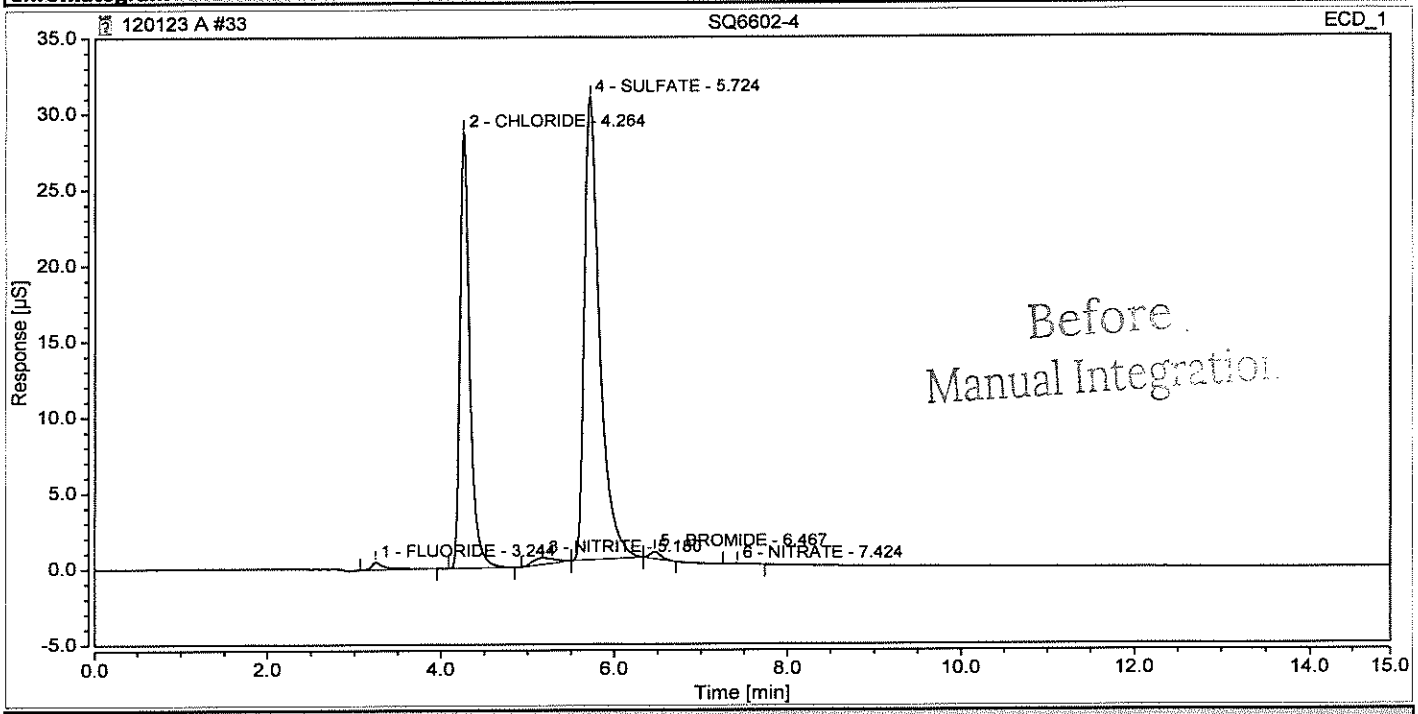
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.261	3.040	23.368	35.07	45.12	7.7994	n.a.
2	NITRITE	4.934	0.990	5.724	11.43	11.05	1.1719	n.a.
3	SULFATE	5.741	3.821	18.607	44.08	35.93	13.4426	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
4	NITRATE	7.421	0.817	4.095	9.42	7.91	0.8348	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**8.669**	**51.794**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6602-4**	*Run Time (min):*	**14.95**
Vial Number:	**33**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**02/Dec/23 01:51**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

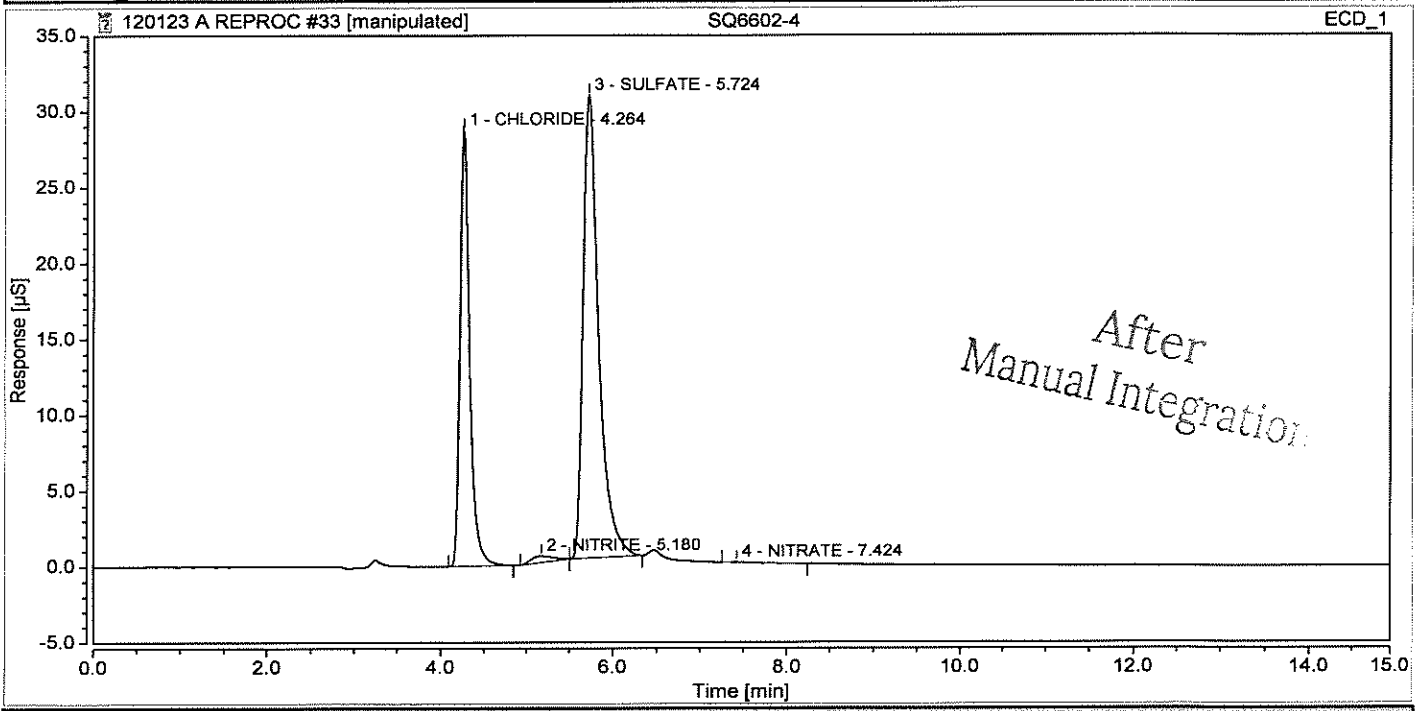
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.244	0.097	0.501	0.93	0.83	0.1693	n.a.
2	CHLORIDE	4.264	3.770	28.741	36.25	47.38	9.6740	n.a.
3	NITRITE	5.180	0.130	0.424	1.25	0.70	0.1597	n.a.
4	SULFATE	5.724	6.326	30.484	60.82	50.26	22.2544	n.a.
5	BROMIDE	6.467	0.071	0.469	0.68	0.77	0.4187	n.a.
6	NITRATE	7.424	0.007	0.035	0.07	0.06	0.0071	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**10.402**	**60.654**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6602-4**	*Run Time (min):*	**14.95**
Vial Number:	**33**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**02/Dec/23 01:51**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

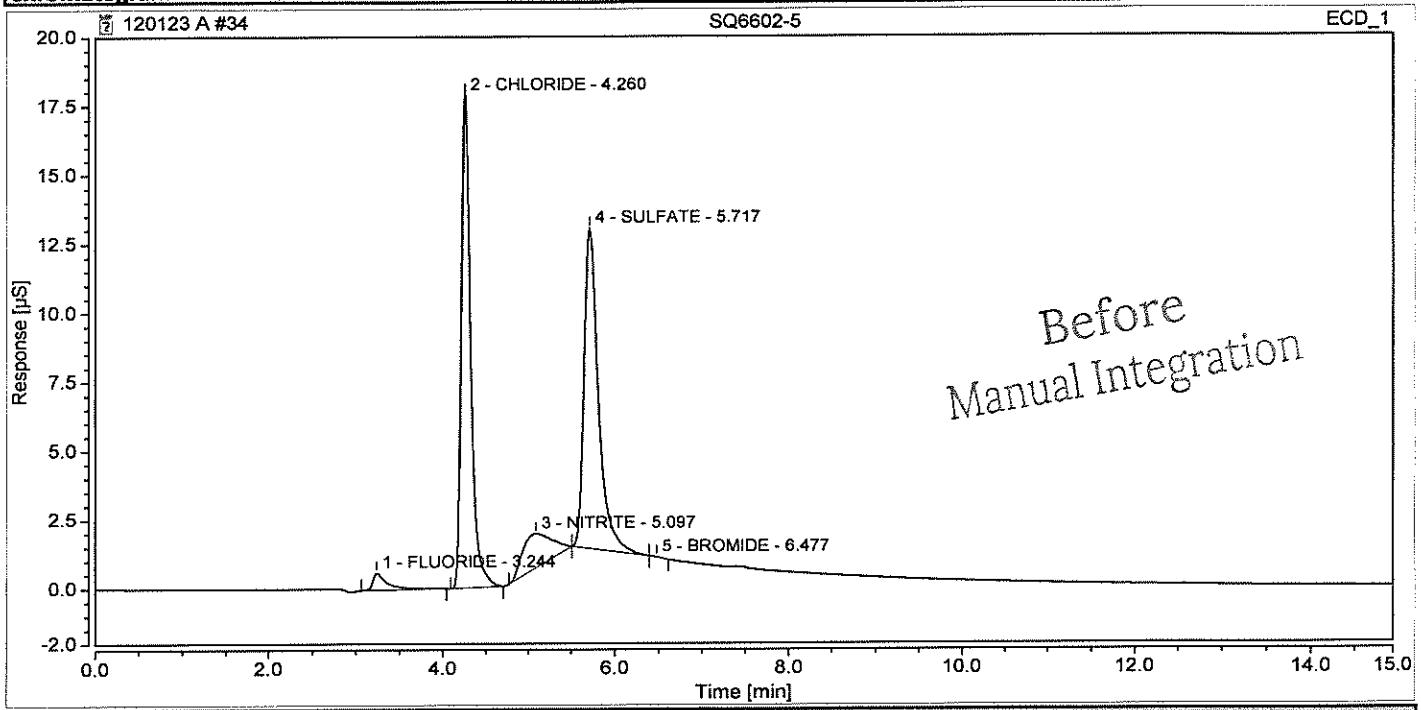
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.264	3.770	28.741	36.85	48.16	9.6740	n.a.
2	NITRITE	5.180	0.130	0.424	1.27	0.71	0.1597	n.a.
3	SULFATE	5.724	6.326	30.484	61.83	51.08	22.2544	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
4	NITRATE	7.424	0.005	0.033	0.05	0.06	0.0053	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**10.232**	**59.682**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6602-5**	*Run Time (min):*	**14.96**
Vial Number:	**34**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**02/Dec/23 02:08**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

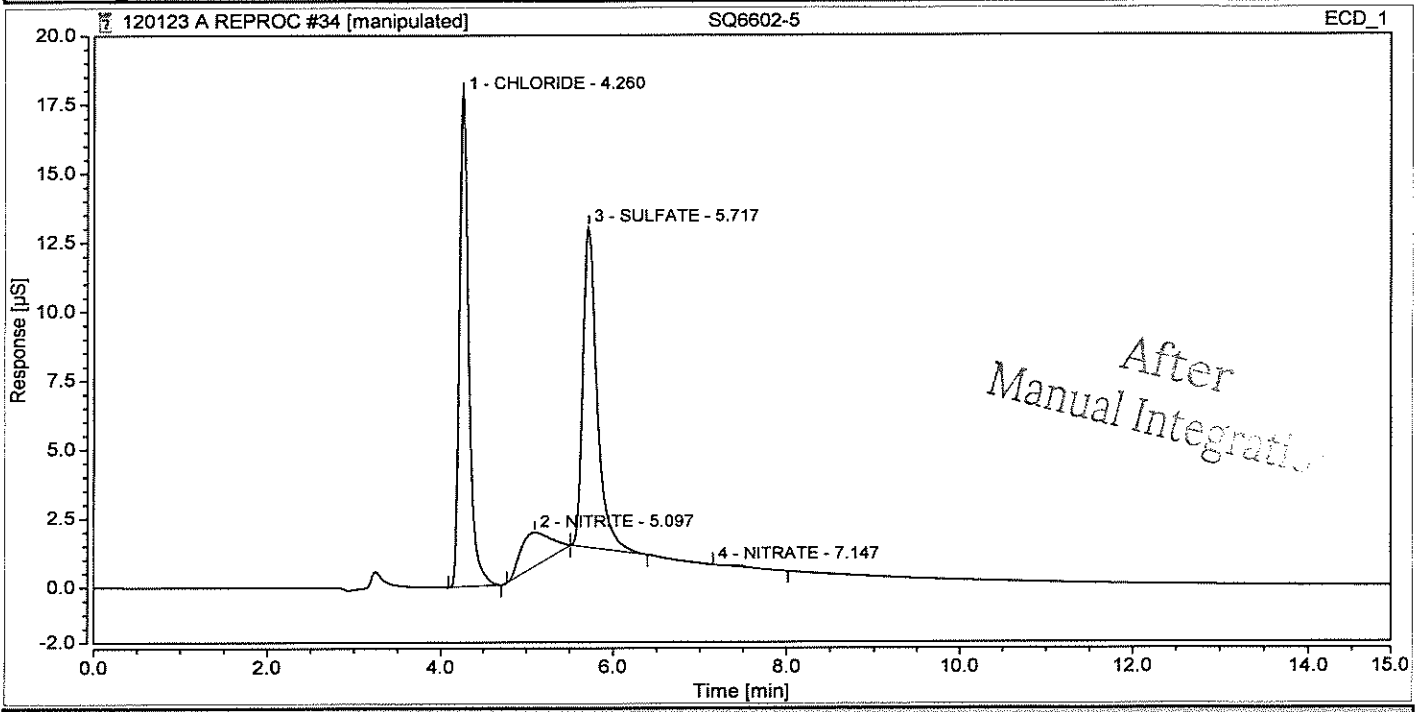
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.244	0.126	0.625	2.46	2.00	0.2140	n.a.
2	CHLORIDE	4.260	2.287	17.845	44.78	56.98	5.8684	n.a.
3	NITRITE	5.097	0.494	1.228	9.68	3.92	0.5865	n.a.
4	SULFATE	5.717	2.199	11.610	43.06	37.07	7.7349	n.a.
5	BROMIDE	6.477	0.001	0.010	0.02	0.03	0.0059	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**5.107**	**31.318**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6602-5**	*Run Time (min):*	**14.96**
Vial Number:	**34**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**02/Dec/23 02:08**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

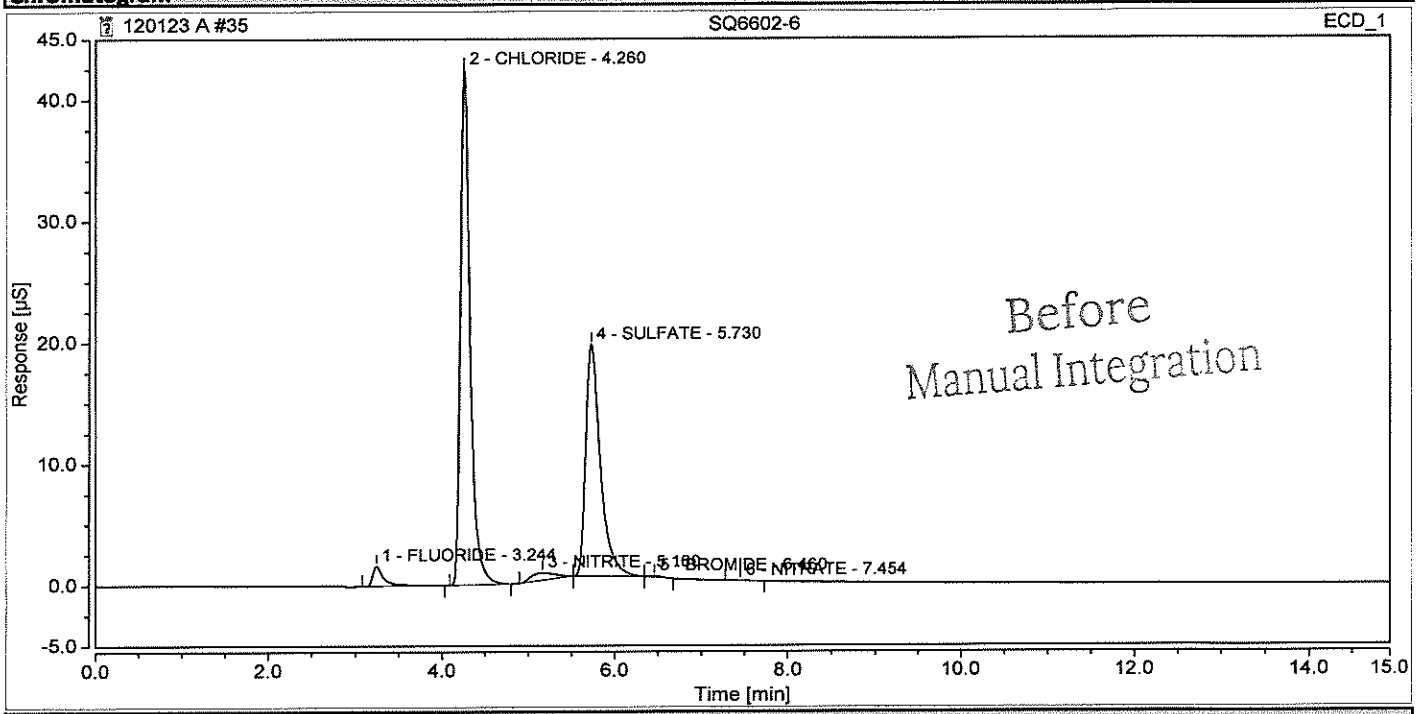
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.260	2.287	17.845	45.88	58.16	5.8684	n.a.
2	NITRITE	5.097	0.494	1.228	9.92	4.00	0.5865	n.a.
3	SULFATE	5.717	2.199	11.610	44.11	37.84	7.7349	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
4	NITRATE	7.147	0.004	0.000	0.09	0.00	0.0045	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**4.985**	**30.684**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6602-6**	*Run Time (min):*	**14.95**
Vial Number:	**35**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**02/Dec/23 02:25**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

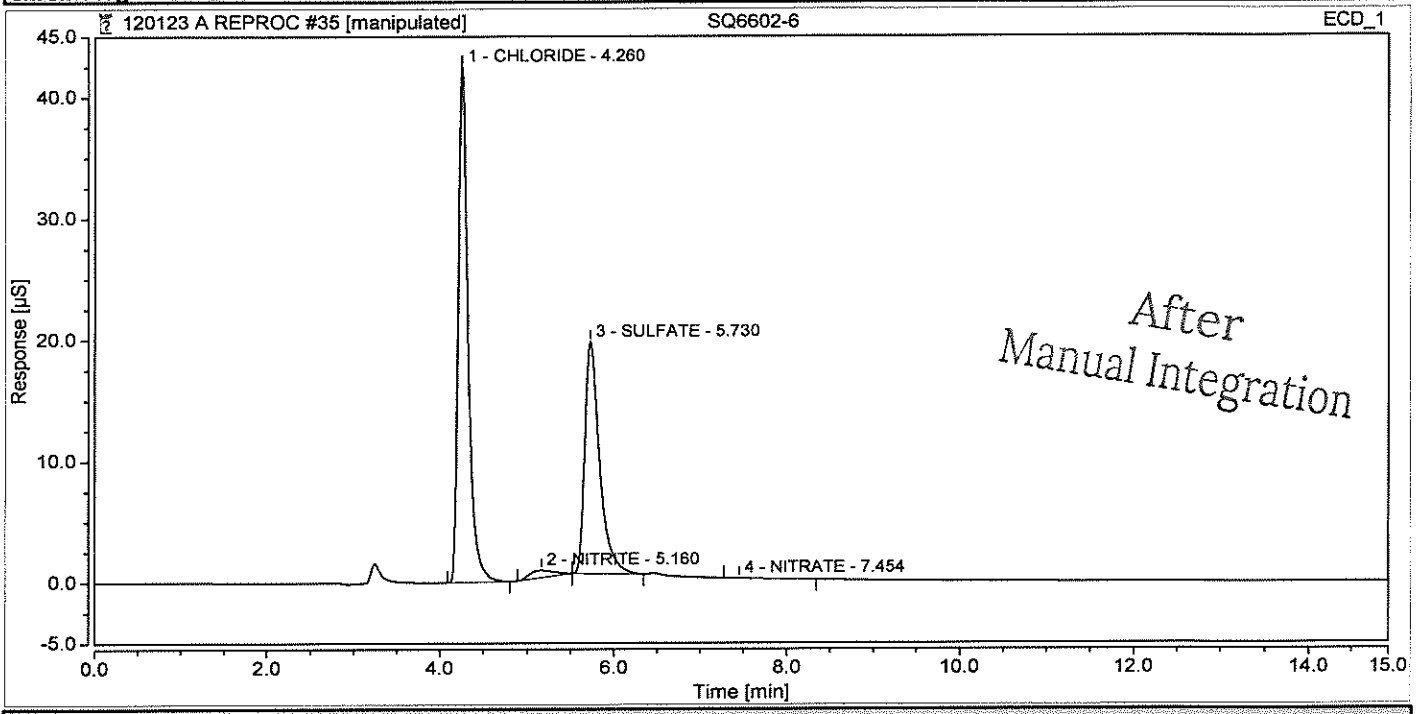
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.244	0.253	1.639	2.57	2.56	0.4154	n.a.
2	CHLORIDE	4.260	5.583	42.494	56.65	66.43	14.3237	n.a.
3	NITRITE	5.160	0.205	0.616	2.08	0.96	0.2477	n.a.
4	SULFATE	5.730	3.795	19.095	38.51	29.85	13.3488	n.a.
5	BROMIDE	6.460	0.018	0.115	0.18	0.18	0.1035	n.a.
6	NITRATE	7.454	0.001	0.008	0.01	0.01	0.0015	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**9.855**	**63.968**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6602-6**	*Run Time (min):*	**14.95**
Vial Number:	**35**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**02/Dec/23 02:25**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

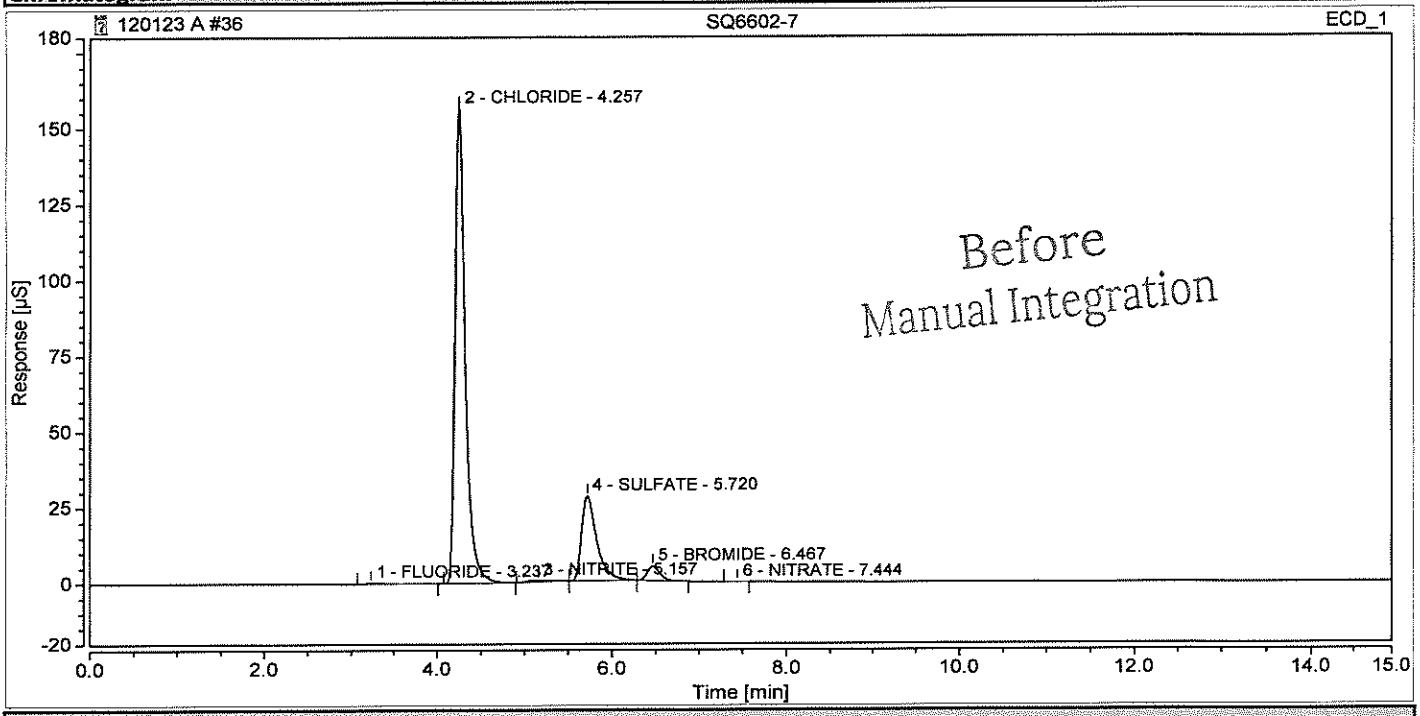
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.260	5.583	42.494	58.24	68.31	14.3237	n.a.
2	NITRITE	5.160	0.205	0.616	2.14	0.99	0.2477	n.a.
3	SULFATE	5.730	3.795	19.095	39.59	30.69	13.3488	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
4	NITRATE	7.454	0.003	0.005	0.04	0.01	0.0035	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**9.586**	**62.211**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6602-7**	*Run Time (min):*	**14.95**
Vial Number:	**36**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**02/Dec/23 02:43**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

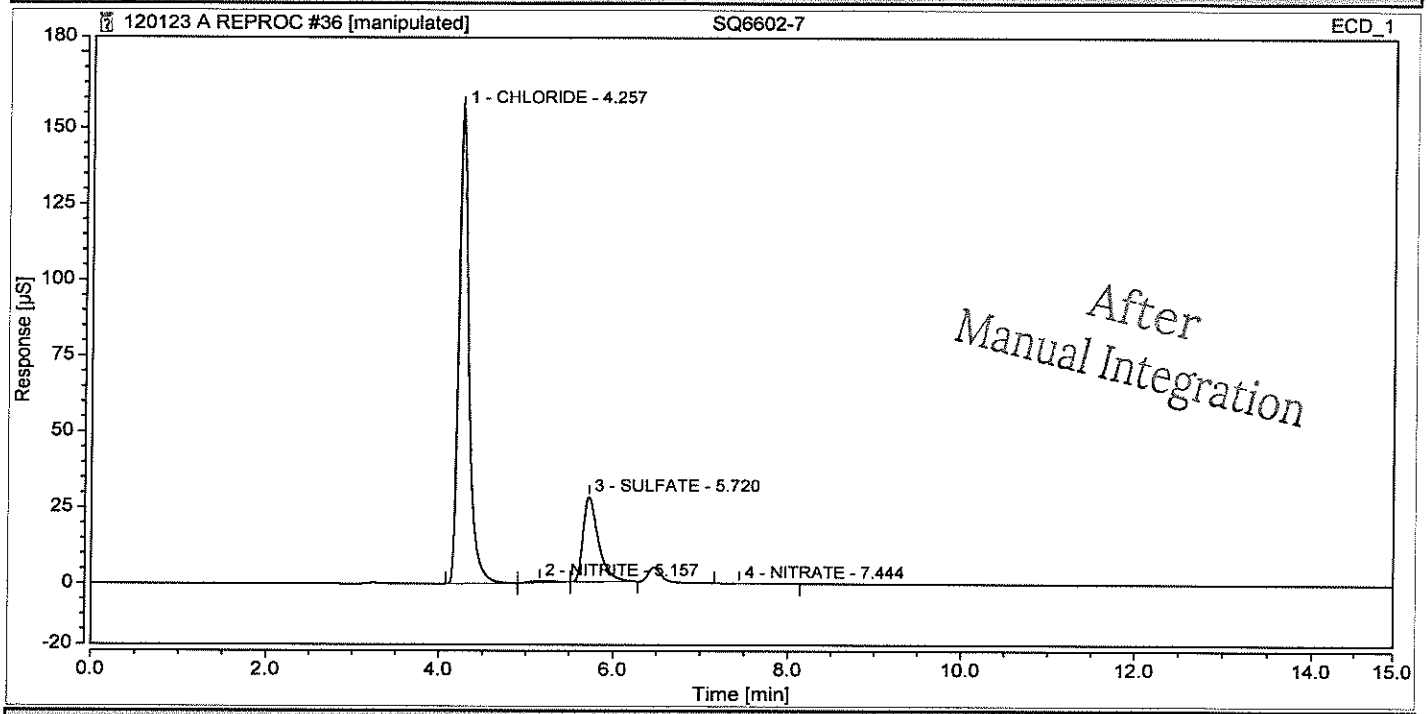
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.237	0.075	0.388	0.27	0.20	0.1350	n.a.
2	CHLORIDE	4.257	21.020	156.648	75.83	82.27	53.9322	n.a.
3	NITRITE	5.157	0.173	0.544	0.62	0.29	0.2096	n.a.
4	SULFATE	5.720	5.650	28.009	20.38	14.71	19.8740	n.a.
5	BROMIDE	6.467	0.803	4.812	2.90	2.53	4.7210	n.a.
6	NITRATE	7.444	0.001	0.007	0.00	0.00	0.0009	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**27.721**	**190.408**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6602-7**	*Run Time (min):*	**14.95**
Vial Number:	**36**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**02/Dec/23 02:43**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

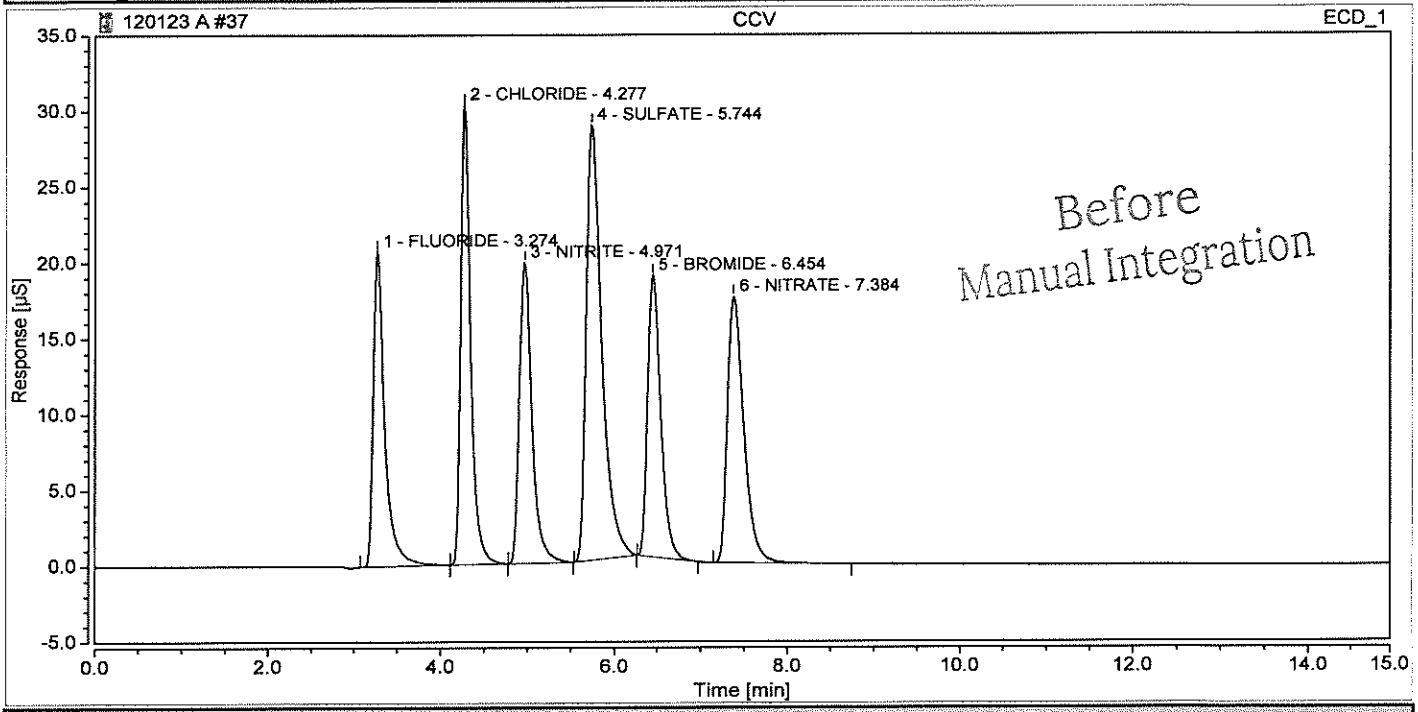
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.257	21.020	156.648	78.29	84.58	53.9322	n.a.
2	NITRITE	5.157	0.173	0.544	0.64	0.29	0.2096	n.a.
3	SULFATE	5.720	5.650	28.009	21.04	15.12	19.8740	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
4	NITRATE	7.444	0.006	0.002	0.02	0.00	0.0066	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**26.849**	**185.203**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**CCV**	*Run Time (min):*	**14.96**
Vial Number:	**37**	*Injection Volume:*	**200.00**
Injection Type:	**Check Standard**	*Channel:*	**ECD_1**
Calibration Level:	**06**	*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**02/Dec/23 03:00**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

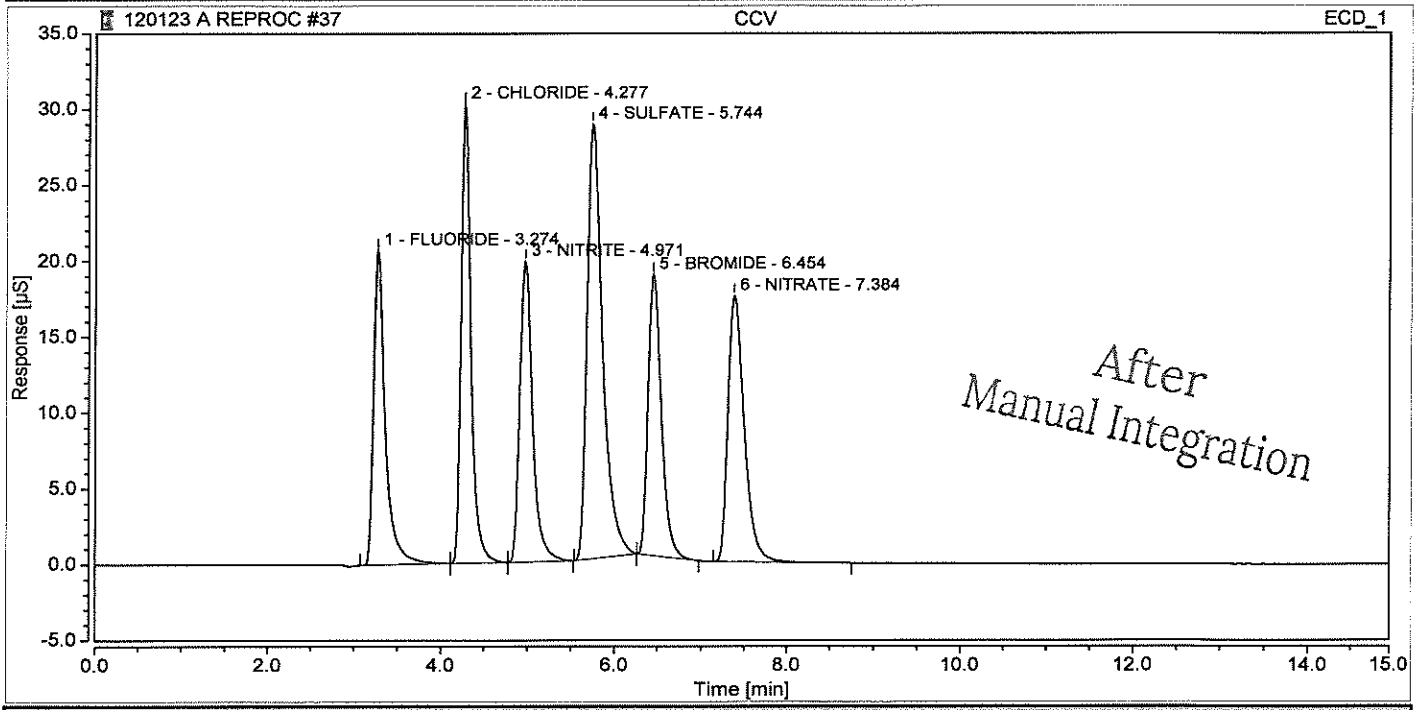
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.274	3.206	20.745	13.53	15.30	5.2093	4.1852
2	CHLORIDE	4.277	3.989	30.280	16.84	22.33	10.2346	2.3461
3	NITRITE	4.971	3.369	19.825	14.22	14.62	4.0597	1.4913
4	SULFATE	5.744	5.947	28.671	25.11	21.14	20.9197	4.5987
5	BROMIDE	6.454	3.324	18.541	14.03	13.67	19.5515	-2.2427
6	NITRATE	7.384	3.852	17.535	16.26	12.93	3.9356	-1.6088
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**23.686**	**135.597**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**CCV**	*Run Time (min):*	**14.96**
Vial Number:	**37**	*Injection Volume:*	**200.00**
Injection Type:	**Check Standard**	*Channel:*	**ECD_1**
Calibration Level:	**06**	*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**02/Dec/23 03:00**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

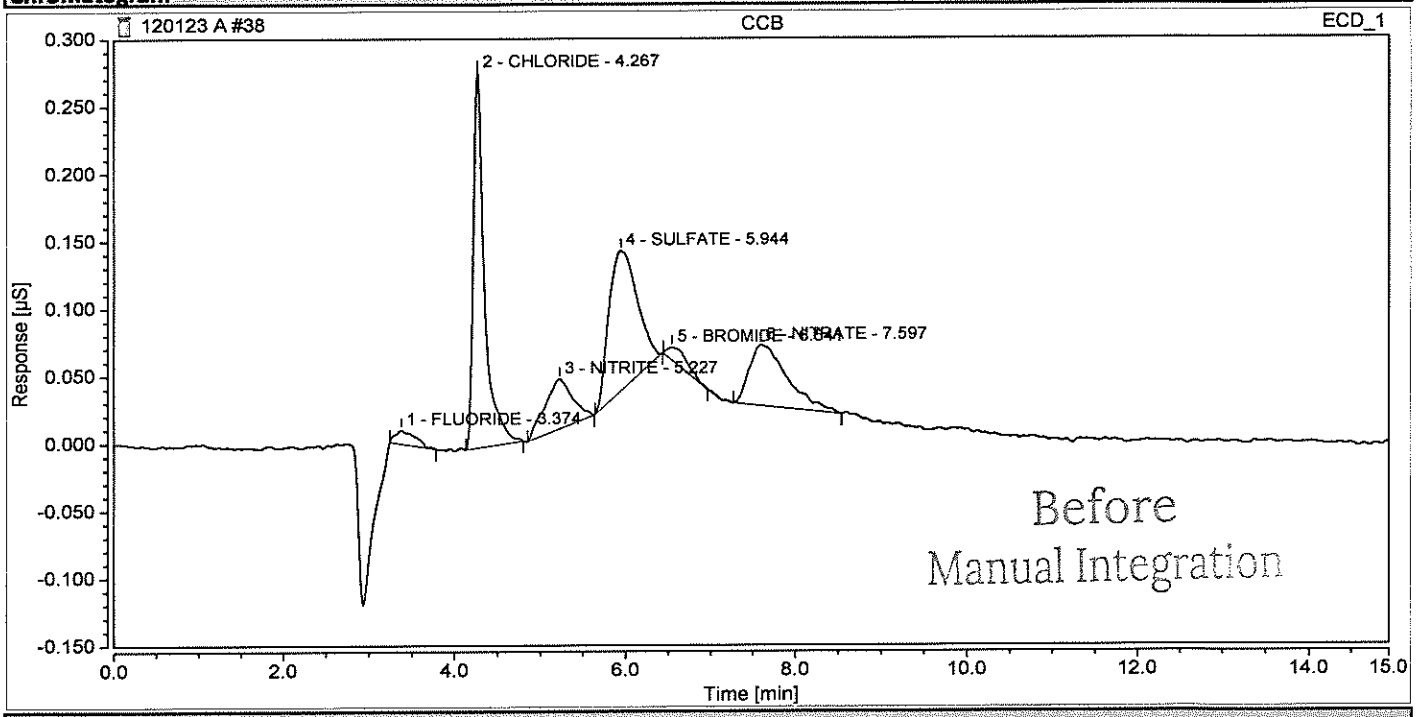
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.274	3.206	20.745	13.53	15.30	5.2093	4.1852
2	CHLORIDE	4.277	3.989	30.280	16.84	22.33	10.2346	2.3461
3	NITRITE	4.971	3.369	19.825	14.22	14.62	4.0597	1.4913
4	SULFATE	5.744	5.947	28.671	25.11	21.14	20.9197	4.5987
5	BROMIDE	6.454	3.324	18.541	14.03	13.67	19.5515	-2.2427
6	NITRATE	7.384	3.852	17.535	16.26	12.93	3.9356	-1.6088
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**23.686**	**135.597**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**CCB**	*Run Time (min):*	**14.95**
Vial Number:	**38**	*Injection Volume:*	**200.00**
Injection Type:	**Blank**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**02/Dec/23 03:17**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

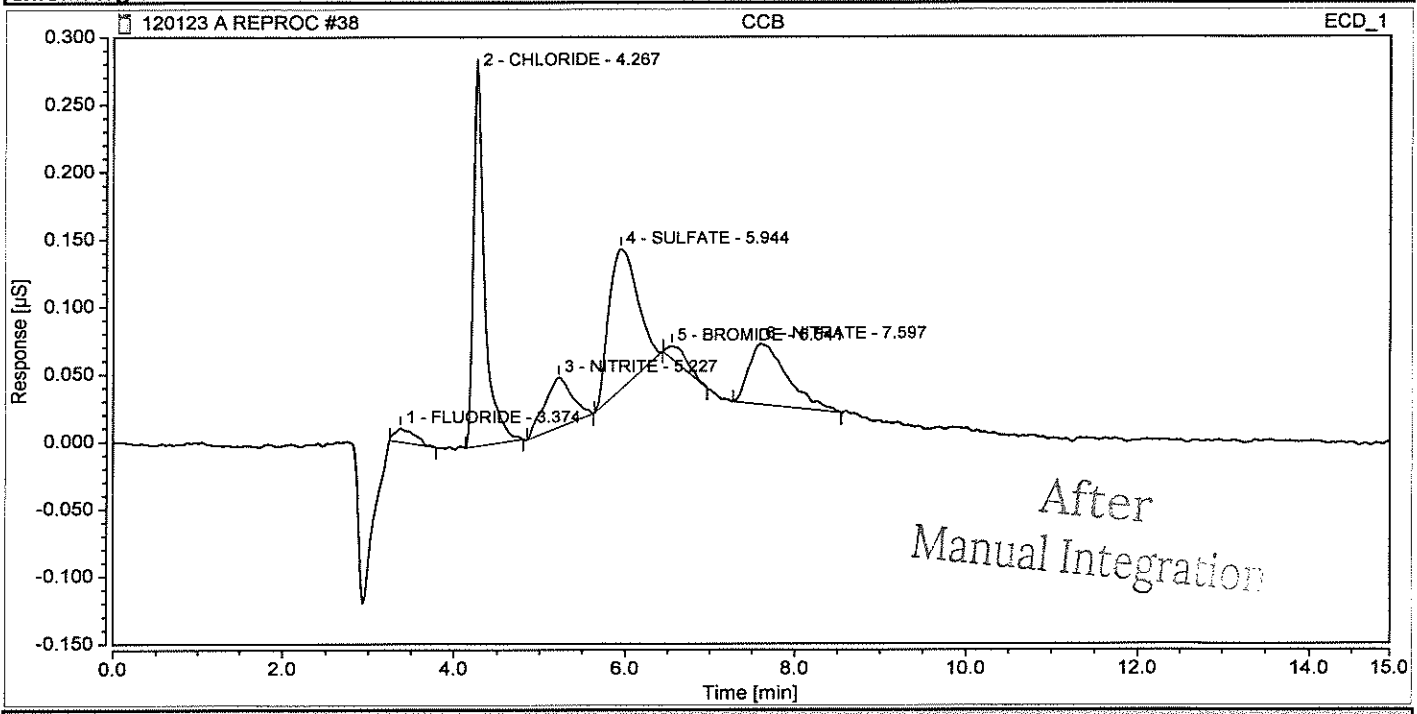
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.374	0.003	0.010	2.34	2.15	0.0213	n.a.
2	CHLORIDE	4.267	0.042	0.279	33.33	57.50	0.1071	n.a.
3	NITRITE	5.227	0.014	0.037	11.29	7.62	0.0247	n.a.
4	SULFATE	5.944	0.040	0.104	31.77	21.53	0.1399	n.a.
5	BROMIDE	6.541	0.003	0.009	2.44	1.96	0.0180	n.a.
6	NITRATE	7.597	0.024	0.045	18.83	9.25	0.0241	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.125**	**0.484**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**CCB**	*Run Time (min):*	**14.95**
Vial Number:	**38**	*Injection Volume:*	**200.00**
Injection Type:	**Blank**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**02/Dec/23 03:17**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

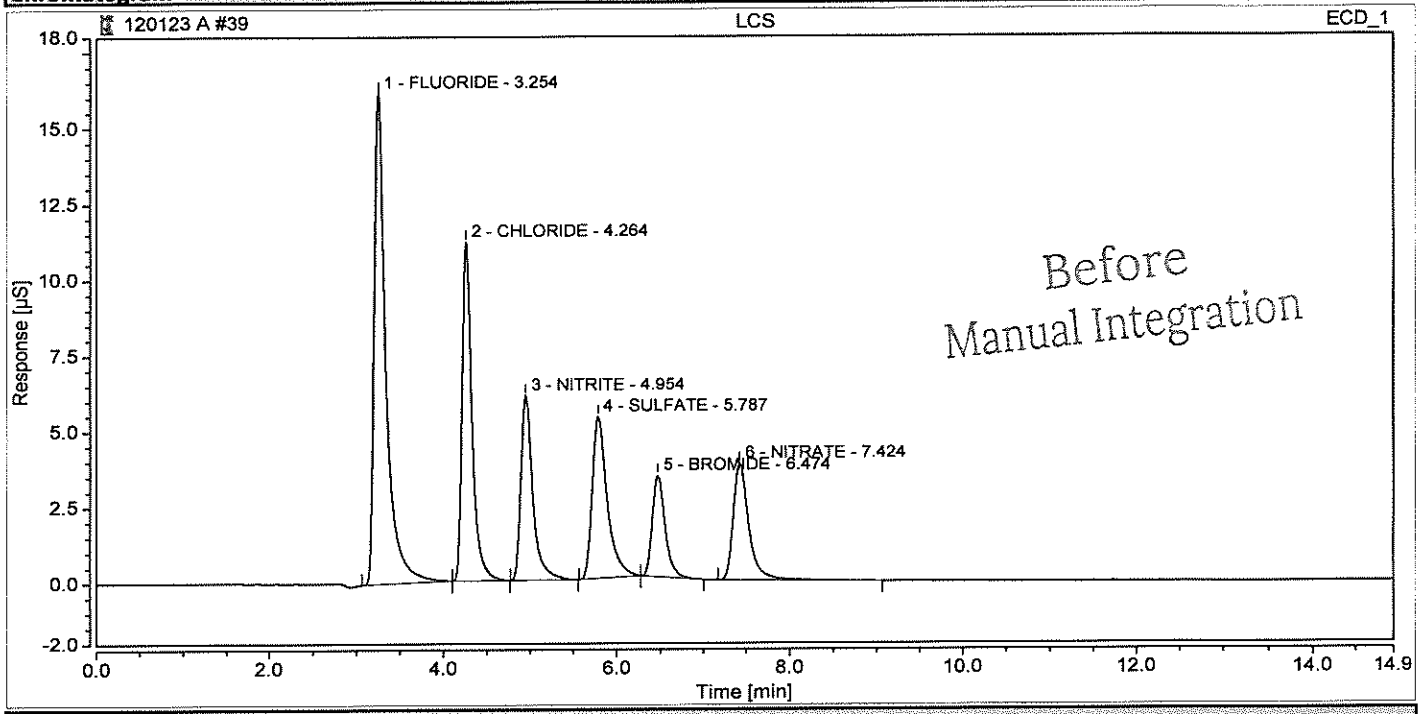
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.374	0.003	0.010	2.34	2.15	0.0213	n.a.
2	CHLORIDE	4.267	0.042	0.279	33.33	57.50	0.1071	n.a.
3	NITRITE	5.227	0.014	0.037	11.29	7.62	0.0247	n.a.
4	SULFATE	5.944	0.040	0.104	31.77	21.53	0.1399	n.a.
5	BROMIDE	6.541	0.003	0.009	2.44	1.96	0.0180	n.a.
6	NITRATE	7.597	0.024	0.045	18.83	9.25	0.0241	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.125**	**0.484**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**LCS**	*Run Time (min):*	**14.94**
Vial Number:	**39**	*Injection Volume:*	**200.00**
Injection Type:	**Check Standard**	*Channel:*	**ECD_1**
Calibration Level:	**09**	*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**02/Dec/23 03:35**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

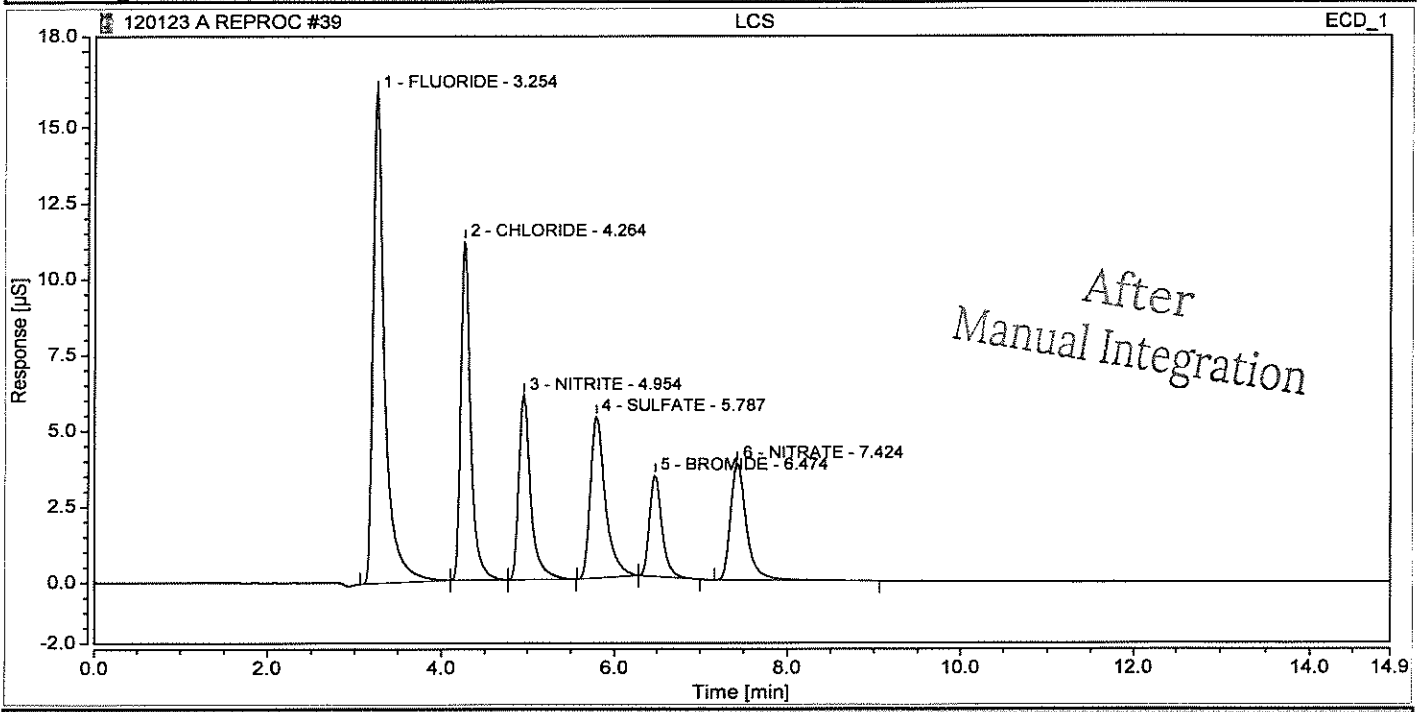
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.254	2.543	16.177	34.08	35.21	4.1095	9.5879
2	CHLORIDE	4.264	1.479	11.166	19.82	24.30	3.7938	1.1681
3	NITRITE	4.954	0.982	6.082	13.15	13.24	1.1613	1.8711
4	SULFATE	5.787	1.074	5.335	14.40	11.61	3.7787	0.7657
5	BROMIDE	6.474	0.575	3.341	7.71	7.27	3.3835	-9.7722
6	NITRATE	7.424	0.809	3.843	10.84	8.36	0.8267	-2.1660
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**7.462**	**45.944**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**LCS**	*Run Time (min):*	**14.94**
Vial Number:	**39**	*Injection Volume:*	**200.00**
Injection Type:	**Check Standard**	*Channel:*	**ECD_1**
Calibration Level:	**09**	*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**02/Dec/23 03:35**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

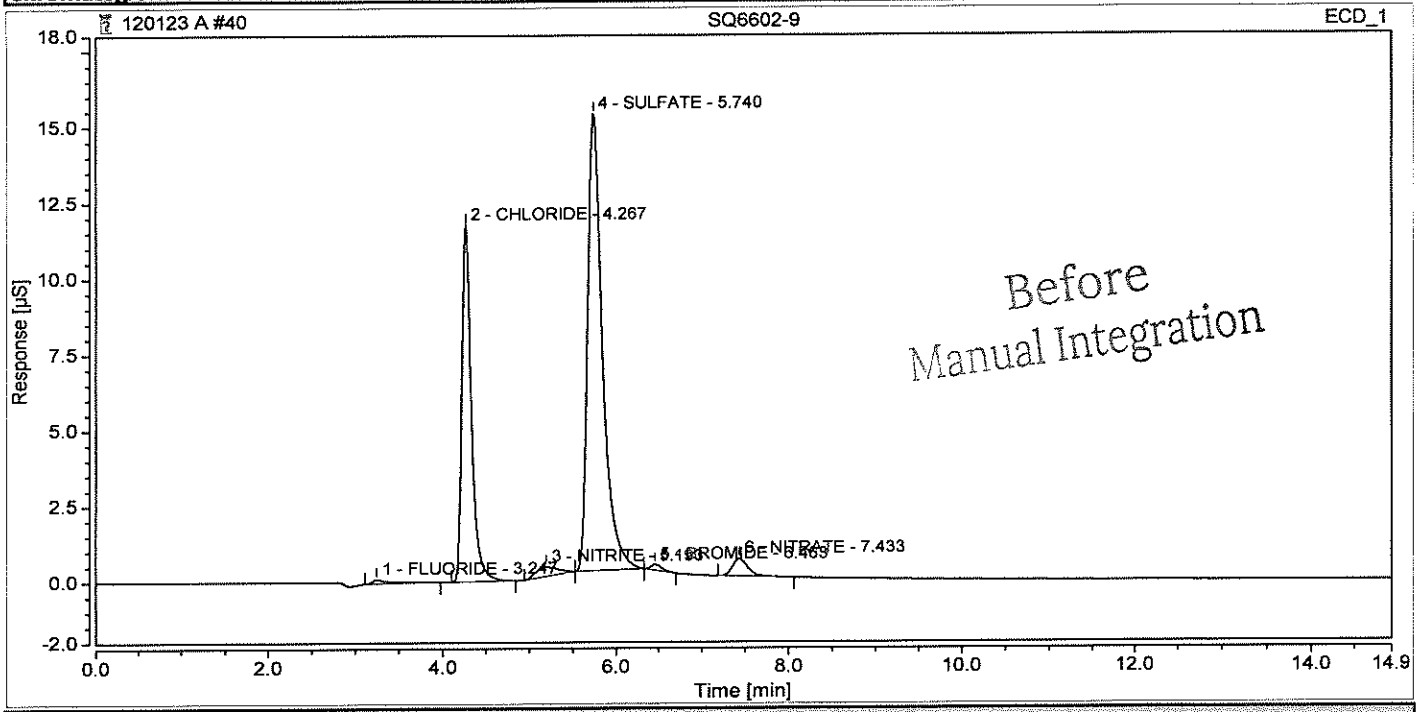
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.254	2.543	16.177	34.08	35.21	4.1095	9.5879
2	CHLORIDE	4.264	1.479	11.166	19.82	24.30	3.7938	1.1681
3	NITRITE	4.954	0.982	6.082	13.15	13.24	1.1613	1.8711
4	SULFATE	5.787	1.074	5.335	14.40	11.61	3.7787	0.7657
5	BROMIDE	6.474	0.575	3.341	7.71	7.27	3.3835	-9.7722
6	NITRATE	7.424	0.809	3.843	10.84	8.36	0.8267	-2.1660
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**7.462**	**45.944**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6602-9**	*Run Time (min):*	**14.94**
Vial Number:	**40**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**02/Dec/23 03:52**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

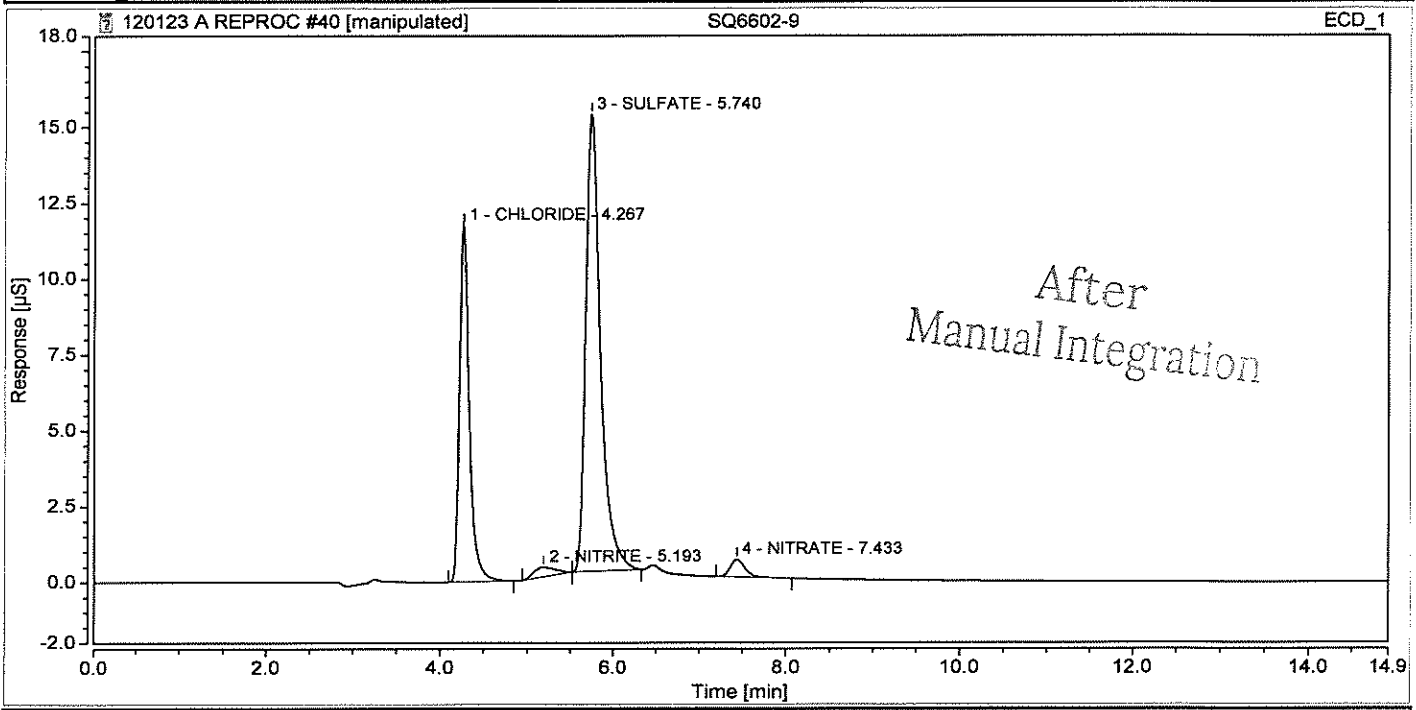
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.247	0.034	0.132	0.71	0.47	0.0704	n.a.
2	CHLORIDE	4.267	1.535	11.750	31.88	41.92	3.9383	n.a.
3	NITRITE	5.193	0.094	0.315	1.96	1.12	0.1183	n.a.
4	SULFATE	5.740	3.004	15.055	62.39	53.72	10.5682	n.a.
5	BROMIDE	6.463	0.029	0.193	0.61	0.69	0.1717	n.a.
6	NITRATE	7.433	0.118	0.582	2.46	2.08	0.1209	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**4.815**	**28.027**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6602-9**	*Run Time (min):*	**14.94**
Vial Number:	**40**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**02/Dec/23 03:52**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

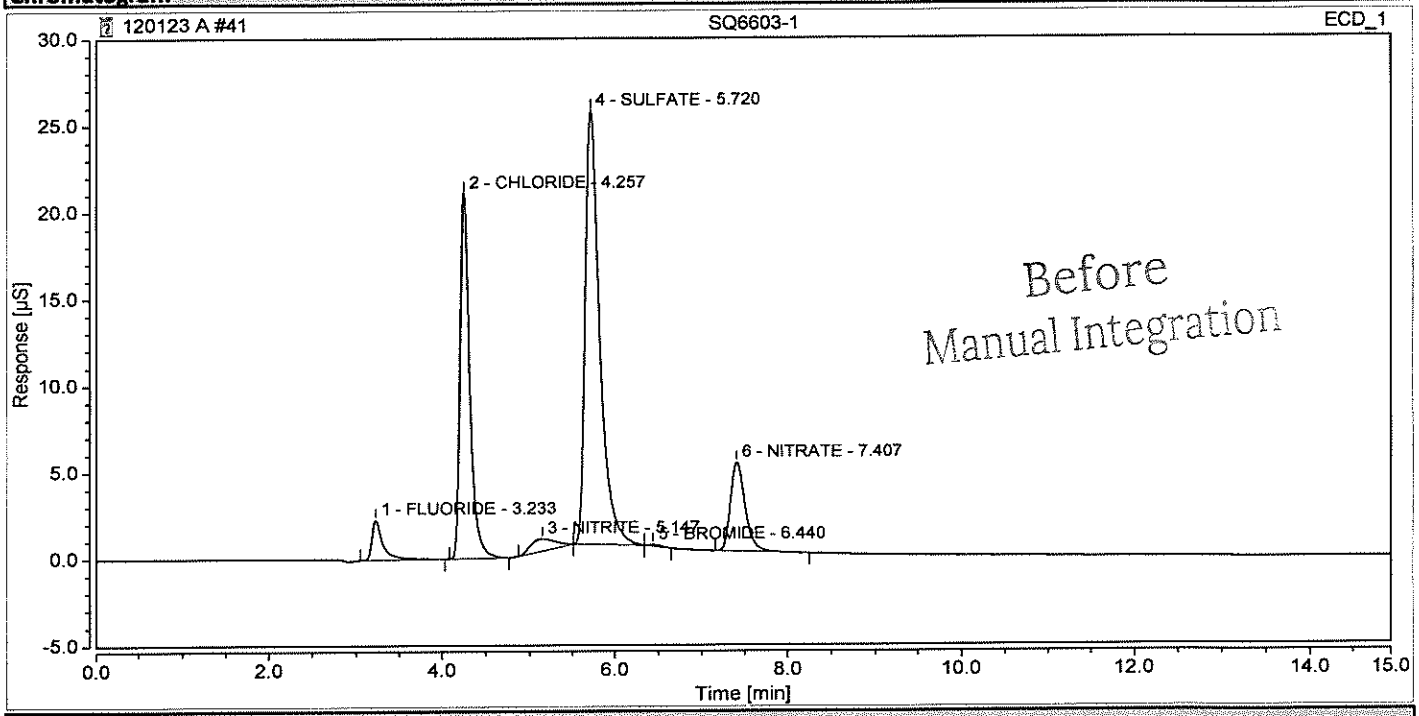
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.267	1.535	11.750	32.30	42.42	3.9383	n.a.
2	NITRITE	5.193	0.094	0.315	1.99	1.14	0.1183	n.a.
3	SULFATE	5.740	3.004	15.055	63.22	54.35	10.5682	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
4	NITRATE	7.433	0.118	0.582	2.49	2.10	0.1209	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**4.752**	**27.701**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6603-1**	*Run Time (min):*	**14.96**
Vial Number:	**41**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**02/Dec/23 04:09**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

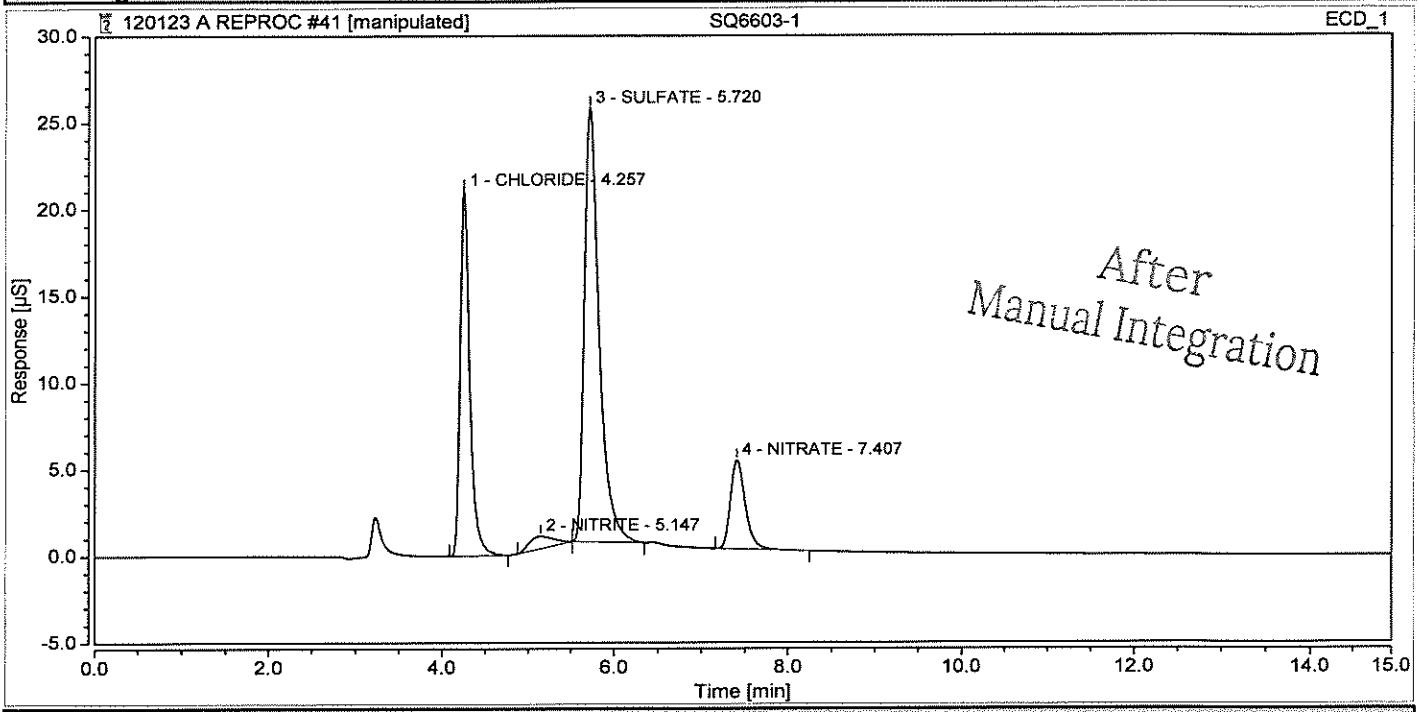
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.233	0.345	2.314	3.71	4.26	0.5609	n.a.
2	CHLORIDE	4.257	2.737	21.058	29.43	38.78	7.0224	n.a.
3	NITRITE	5.147	0.243	0.712	2.62	1.31	0.2921	n.a.
4	SULFATE	5.720	4.943	25.016	53.15	46.08	17.3865	n.a.
5	BROMIDE	6.440	0.013	0.084	0.14	0.16	0.0753	n.a.
6	NITRATE	7.407	1.018	5.110	10.95	9.41	1.0400	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**9.299**	**54.293**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6603-1**	*Run Time (min):*	**14.96**
Vial Number:	**41**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**02/Dec/23 04:09**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

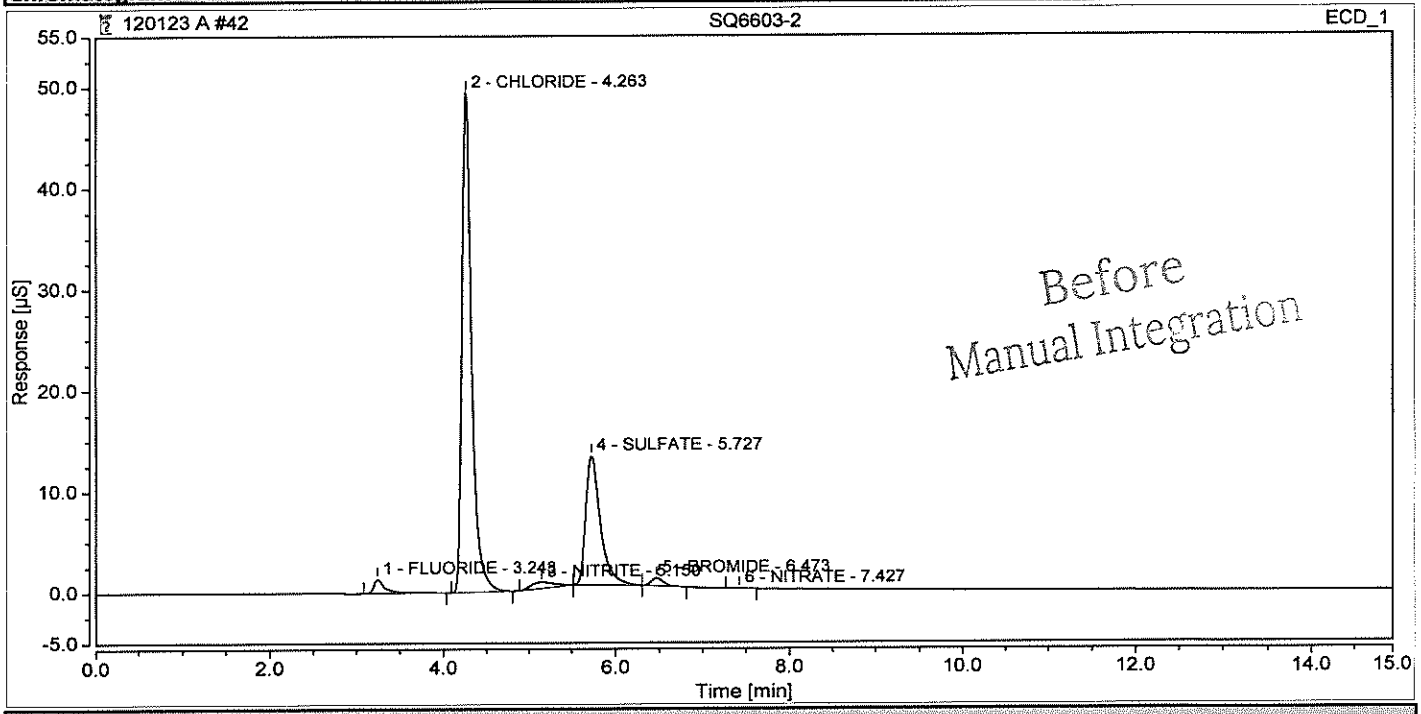
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.257	2.737	21.058	30.61	40.58	7.0224	n.a.
2	NITRITE	5.147	0.243	0.712	2.72	1.37	0.2921	n.a.
3	SULFATE	5.720	4.943	25.016	55.28	48.20	17.3865	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
4	NITRATE	7.407	1.018	5.110	11.38	9.85	1.0400	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**8.941**	**51.895**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6603-2**	*Run Time (min):*	**14.95**
Vial Number:	**42**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**02/Dec/23 04:26**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

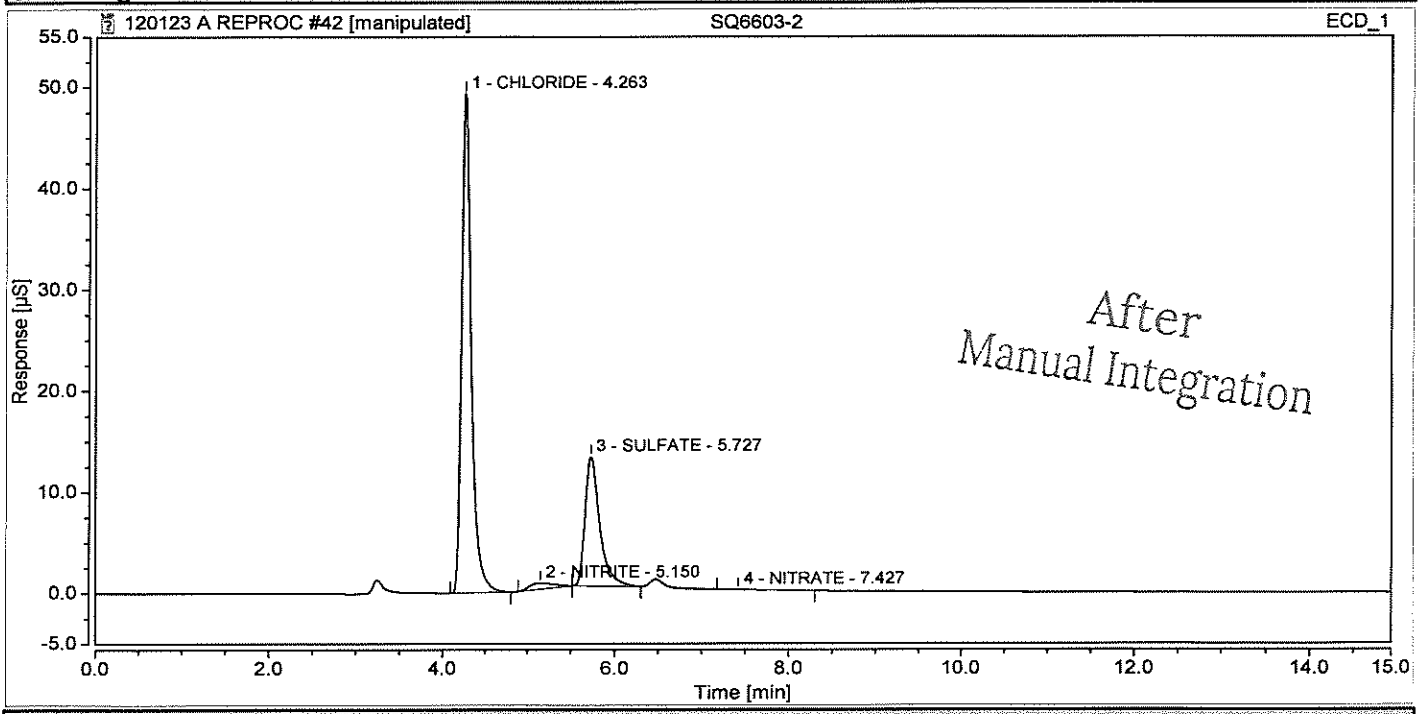
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.243	0.216	1.401	2.26	2.16	0.3560	n.a.
2	CHLORIDE	4.263	6.517	49.366	68.25	75.96	16.7219	n.a.
3	NITRITE	5.150	0.203	0.615	2.13	0.95	0.2451	n.a.
4	SULFATE	5.727	2.481	12.799	25.99	19.69	8.7290	n.a.
5	BROMIDE	6.473	0.131	0.796	1.37	1.23	0.7678	n.a.
6	NITRATE	7.427	0.002	0.010	0.02	0.01	0.0015	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**9.550**	**64.988**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6603-2**	*Run Time (min):*	**14.95**
Vial Number:	**42**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**02/Dec/23 04:26**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

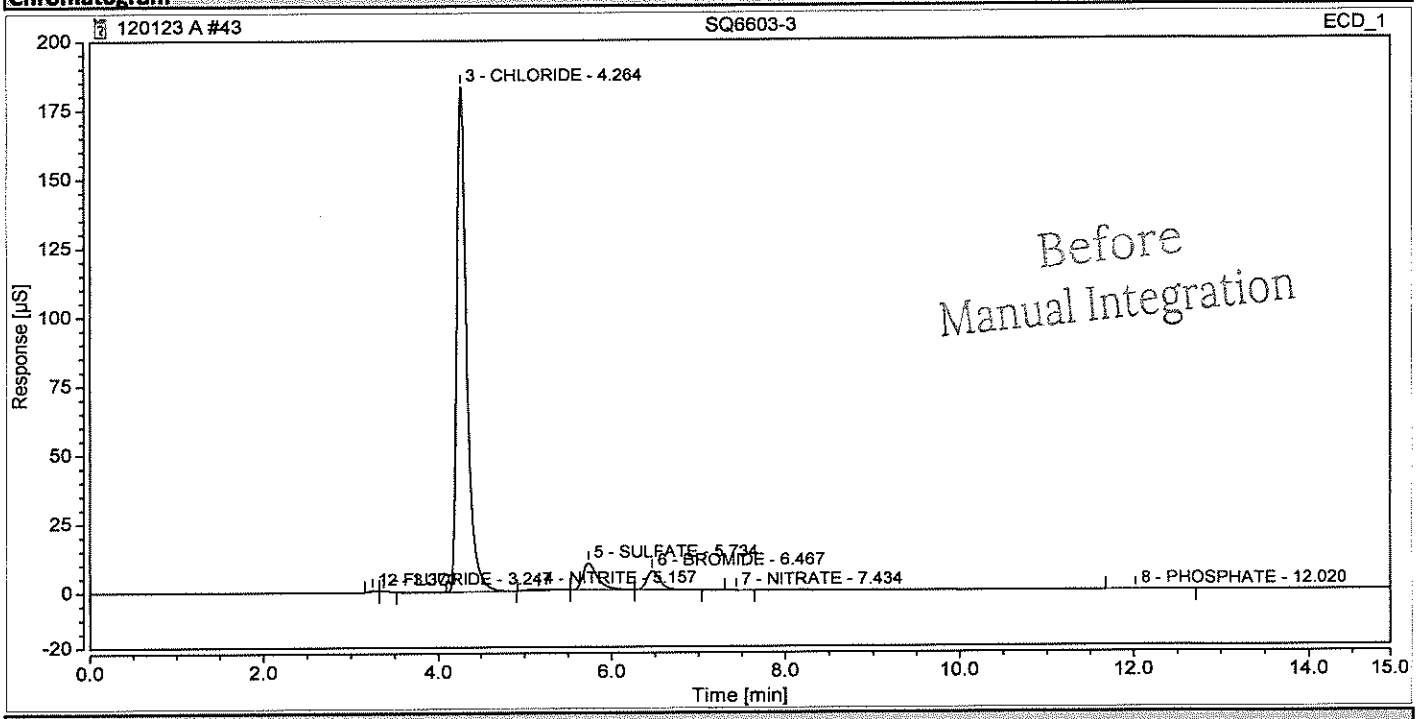
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.263	6.517	49.366	70.79	78.63	16.7219	n.a.
2	NITRITE	5.150	0.203	0.615	2.21	0.98	0.2451	n.a.
3	SULFATE	5.727	2.481	12.799	26.95	20.39	8.7290	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
4	NITRATE	7.427	0.005	0.004	0.05	0.01	0.0049	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**9.207**	**62.784**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6603-3**	*Run Time (min):*	**14.95**
Vial Number:	**43**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**02/Dec/23 04:44**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

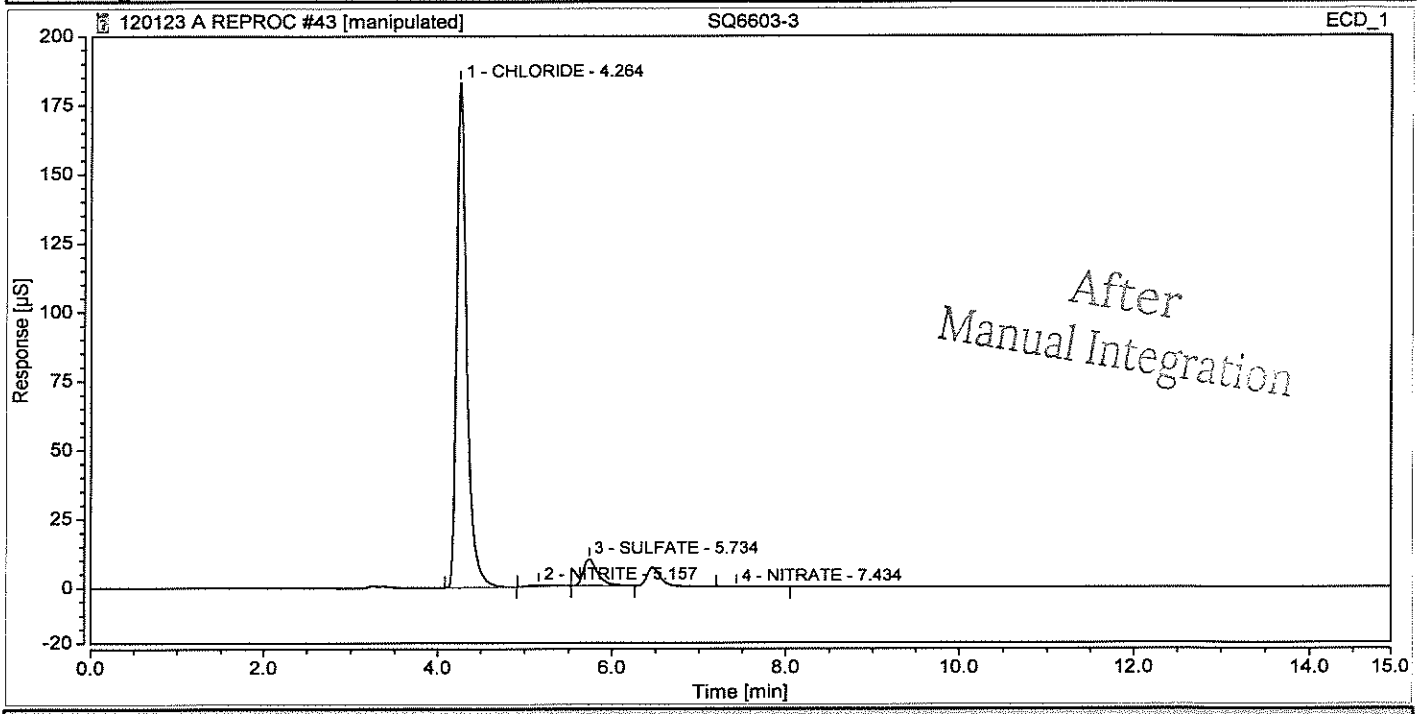
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.247	0.038	0.472	0.13	0.24	0.0765	n.a.
2		3.370	0.016	0.161	0.06	0.08	n.a.	n.a.
3	CHLORIDE	4.264	25.002	183.224	88.43	91.19	64.1502	n.a.
4	NITRITE	5.157	0.168	0.527	0.59	0.26	0.2041	n.a.
5	SULFATE	5.734	1.864	9.681	6.59	4.82	6.5554	n.a.
6	BROMIDE	6.467	1.171	6.804	4.14	3.39	6.8866	n.a.
7	NITRATE	7.434	0.001	0.005	0.00	0.00	0.0008	n.a.
8	PHOSPHATE	12.020	0.015	0.040	0.05	0.02	n.a.	n.a.
Total:			**28.274**	**200.915**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6603-3**	*Run Time (min):*	**14.95**
Vial Number:	**43**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**02/Dec/23 04:44**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

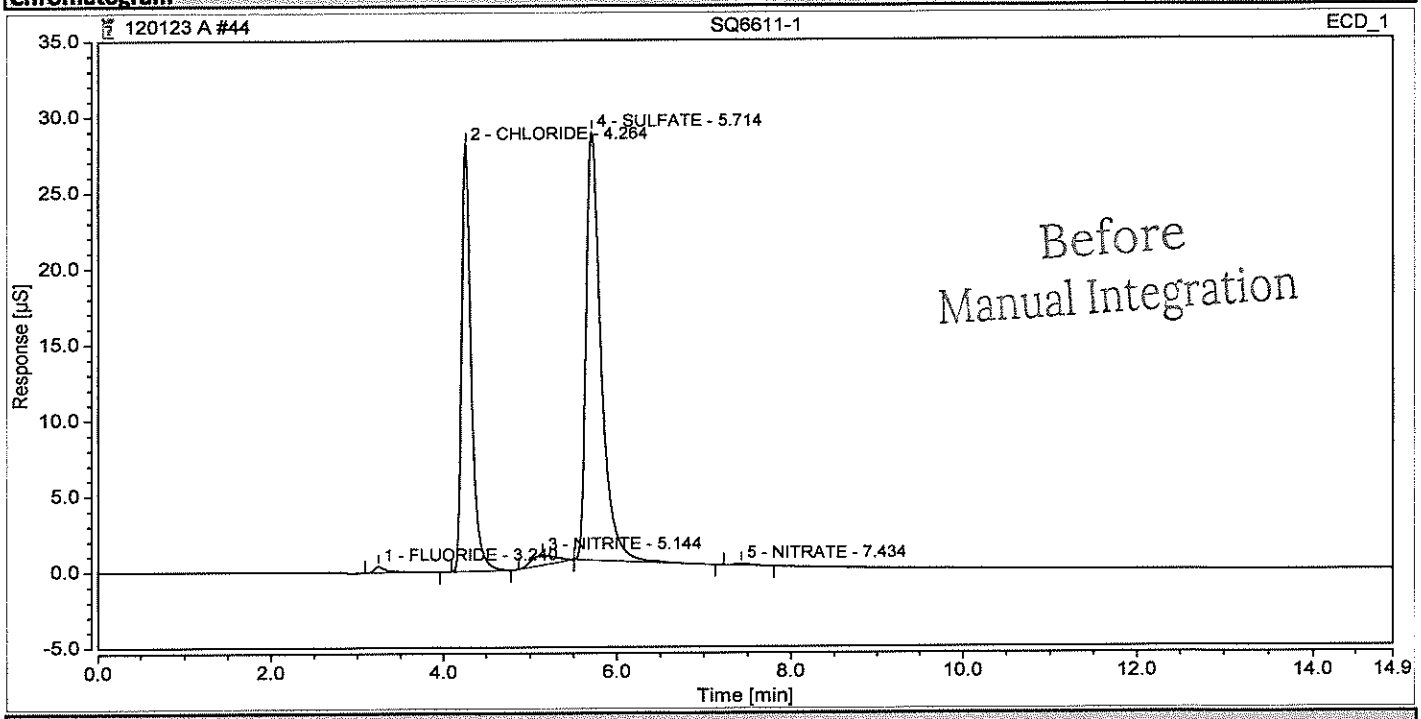
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.264	25.002	183.224	92.47	94.72	64.1502	n.a.
2	NITRITE	5.157	0.168	0.527	0.62	0.27	0.2041	n.a.
3	SULFATE	5.734	1.864	9.681	6.89	5.01	6.5554	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
4	NITRATE	7.434	0.004	0.000	0.01	0.00	0.0036	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**27.037**	**193.432**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6611-1**	*Run Time (min):*	**14.95**
Vial Number:	**44**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**02/Dec/23 05:01**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

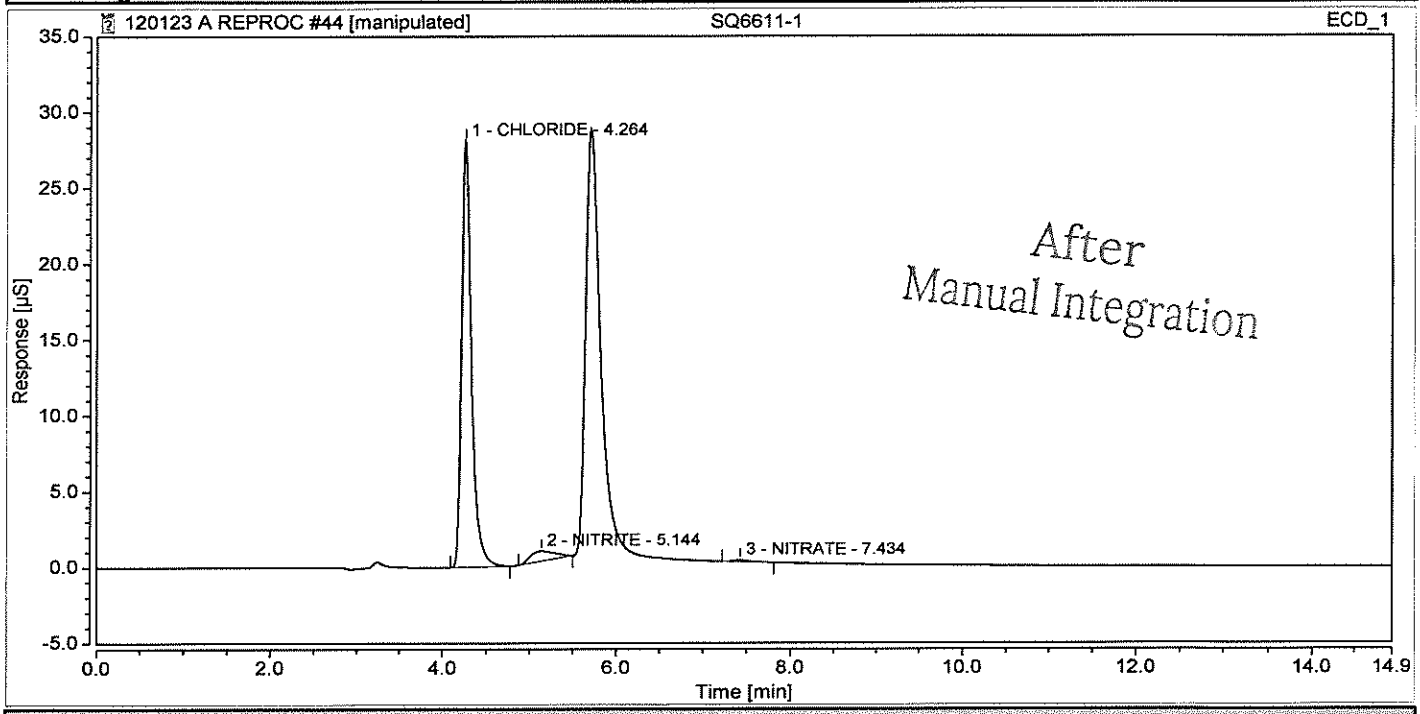
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.240	0.072	0.426	0.74	0.74	0.1298	n.a.
2	CHLORIDE	4.264	3.687	28.118	38.12	48.86	9.4603	n.a.
3	NITRITE	5.144	0.219	0.662	2.27	1.15	0.2642	n.a.
4	SULFATE	5.714	5.673	28.233	58.64	49.06	19.9552	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5	NITRATE	7.434	0.022	0.112	0.23	0.19	0.0223	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**9.673**	**57.551**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6611-1**	*Run Time (min):*	**14.95**
Vial Number:	**44**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**02/Dec/23 05:01**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

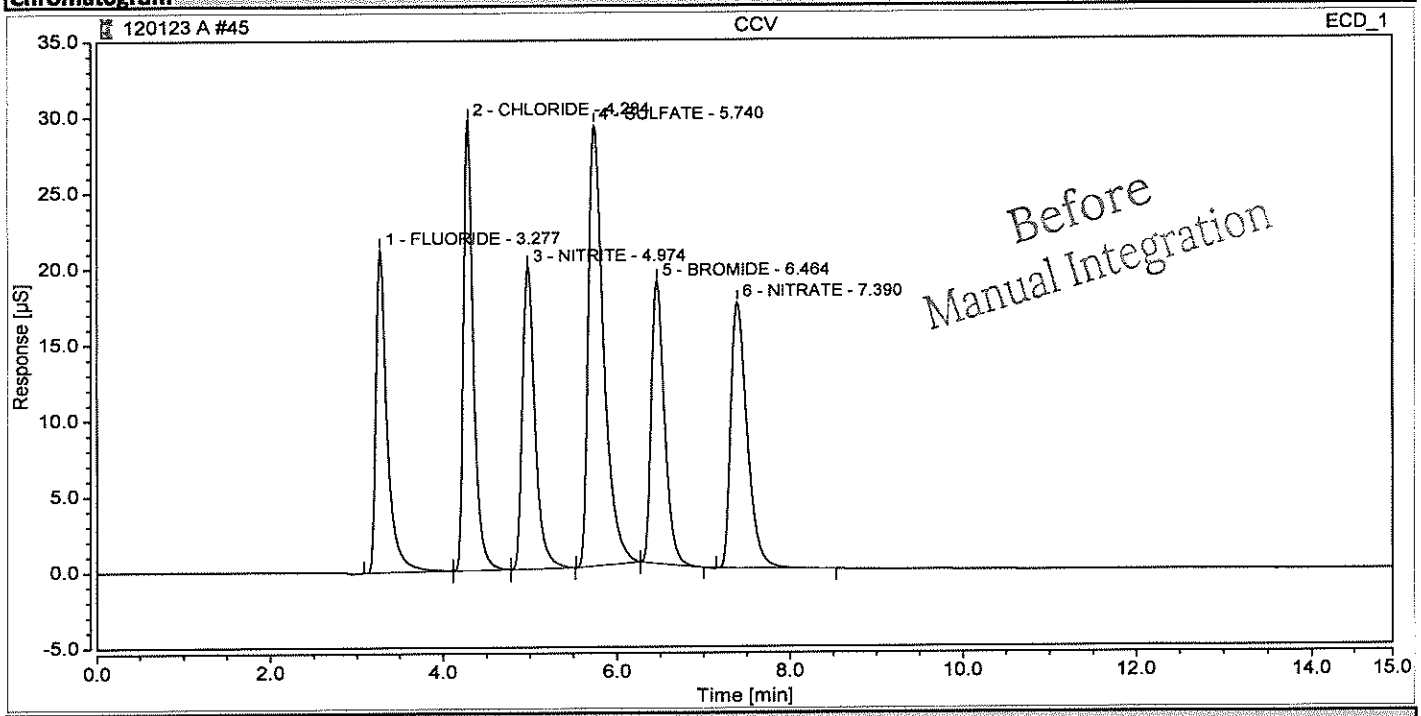
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.264	3.687	28.118	93.86	97.32	9.4603	n.a.
2	NITRITE	5.144	0.219	0.662	5.59	2.29	0.2642	n.a.
n.a.	SULFATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
3	NITRATE	7.434	0.022	0.112	0.56	0.39	0.0223	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**3.928**	**28.892**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**CCV**	*Run Time (min):*	**14.95**
Vial Number:	**49**	*Injection Volume:*	**200.00**
Injection Type:	**Check Standard**	*Channel:*	**ECD_1**
Calibration Level:	**06**	*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**02/Dec/23 05:18**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

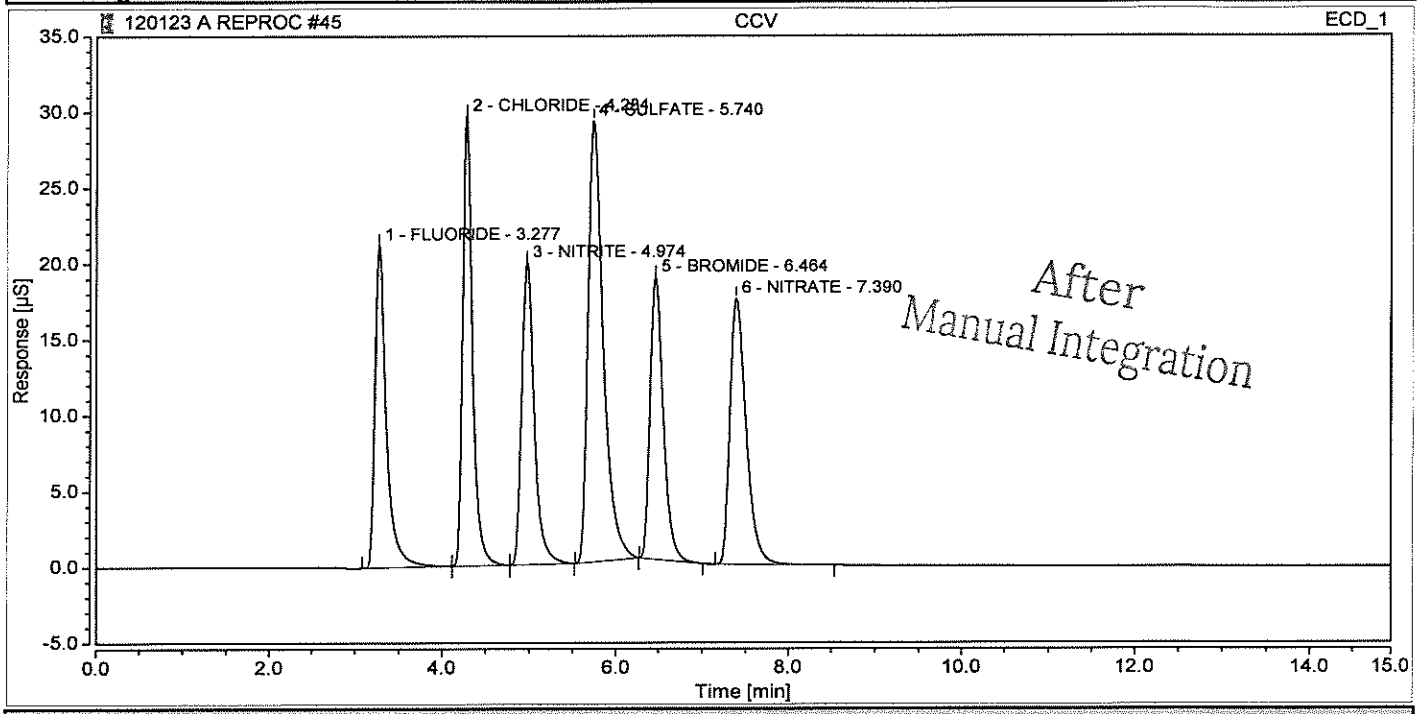
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.277	3.215	21.257	13.63	15.62	5.2251	4.5016
2	CHLORIDE	4.284	3.901	29.649	16.53	21.79	10.0083	0.0825
3	NITRITE	4.974	3.374	19.935	14.30	14.65	4.0659	1.6479
4	SULFATE	5.740	5.926	29.082	25.12	21.37	20.8465	4.2323
5	BROMIDE	6.464	3.339	18.609	14.15	13.68	19.6388	-1.8061
6	NITRATE	7.390	3.836	17.529	16.26	12.88	3.9199	-2.0030
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**23.591**	**136.061**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**CCV**	*Run Time (min):*	**14.95**
Vial Number:	**49**	*Injection Volume:*	**200.00**
Injection Type:	**Check Standard**	*Channel:*	**ECD_1**
Calibration Level:	**06**	*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**02/Dec/23 05:18**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

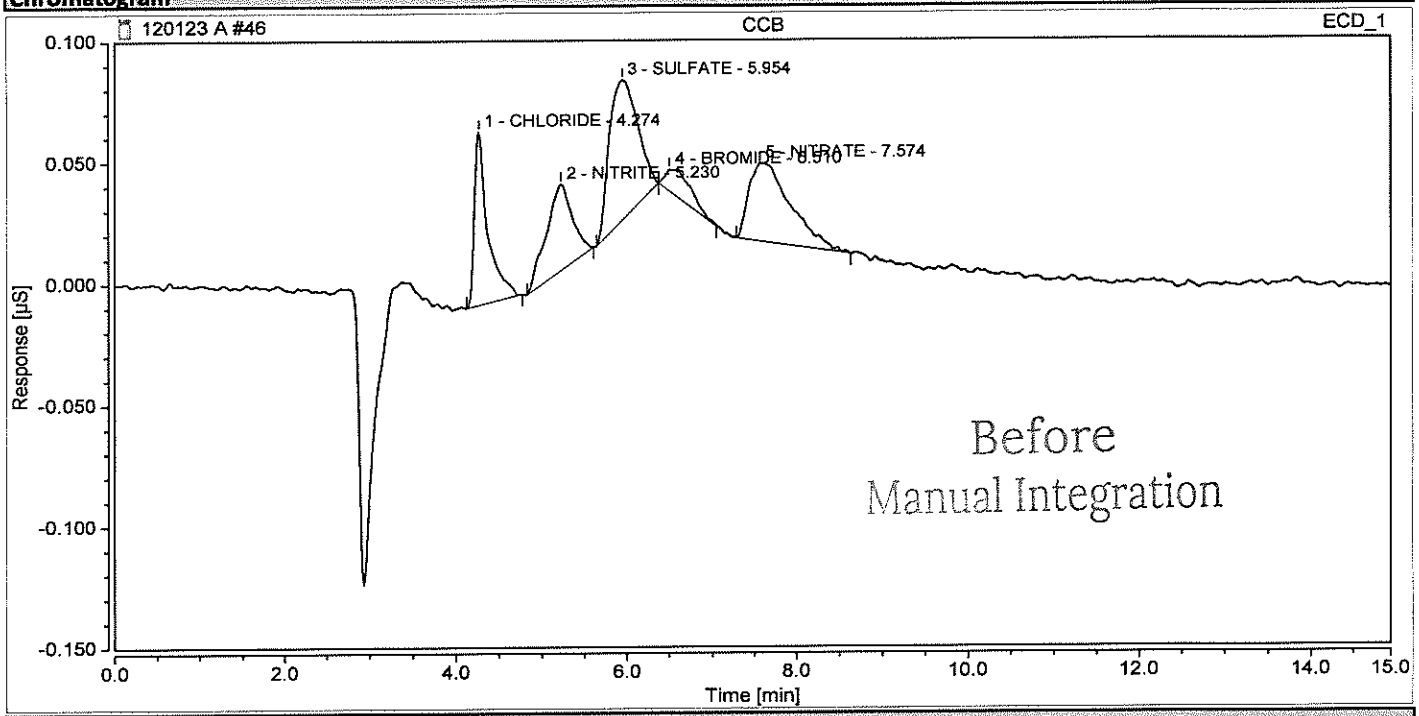
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.277	3.215	21.257	13.63	15.62	5.2251	4.5016
2	CHLORIDE	4.284	3.901	29.649	16.53	21.79	10.0083	0.0825
3	NITRITE	4.974	3.374	19.935	14.30	14.65	4.0659	1.6479
4	SULFATE	5.740	5.926	29.082	25.12	21.37	20.8465	4.2323
5	BROMIDE	6.464	3.339	18.609	14.15	13.68	19.6388	-1.8061
6	NITRATE	7.390	3.836	17.529	16.26	12.88	3.9199	-2.0030
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**23.591**	**136.061**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**CCB**	*Run Time (min):*	**14.95**
Vial Number:	**50**	*Injection Volume:*	**200.00**
Injection Type:	**Blank**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**02/Dec/23 05:35**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

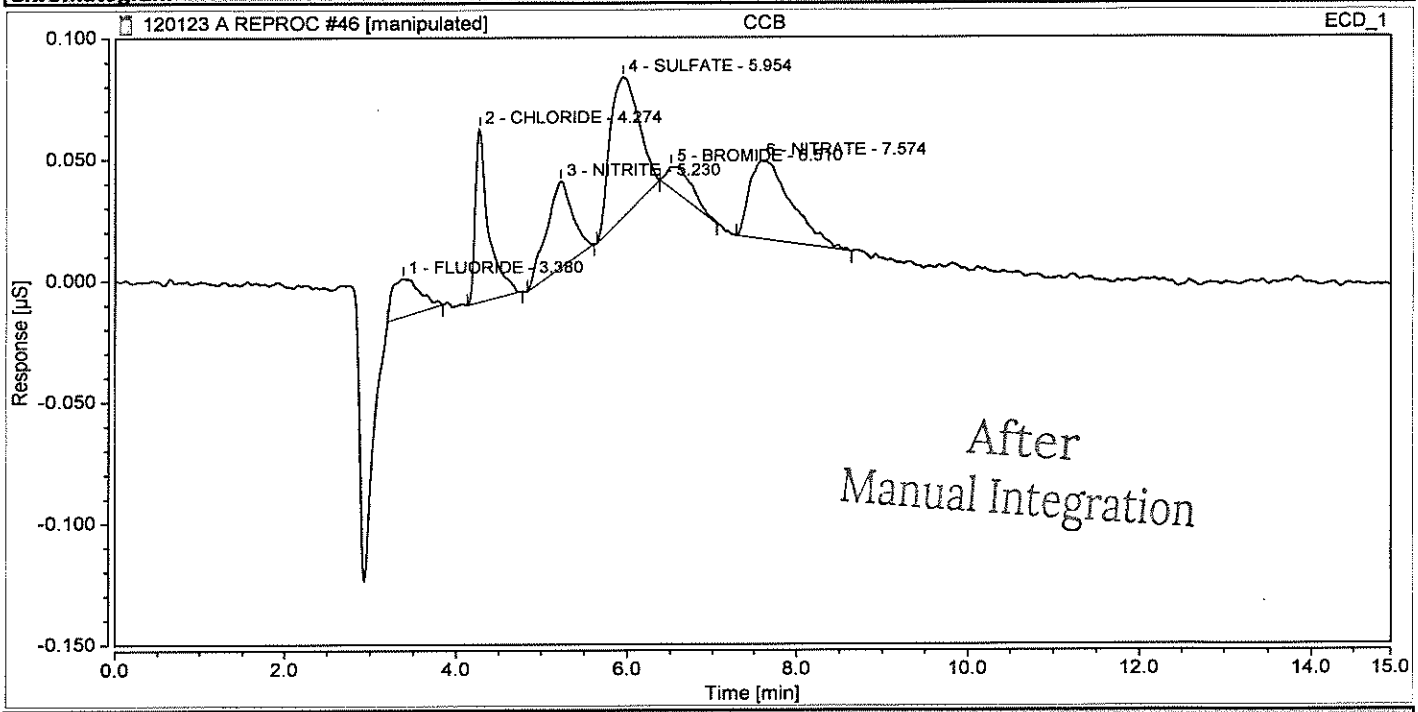
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.274	0.013	0.071	18.43	34.78	0.0333	n.a.
2	NITRITE	5.230	0.013	0.035	18.01	17.23	0.0230	n.a.
3	SULFATE	5.954	0.023	0.058	31.99	27.99	0.0793	n.a.
4	BROMIDE	6.510	0.004	0.009	5.20	4.34	0.0216	n.a.
5	NITRATE	7.574	0.019	0.032	26.37	15.67	0.0190	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.070**	**0.206**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**CCB**	*Run Time (min):*	**14.95**
Vial Number:	**50**	*Injection Volume:*	**200.00**
Injection Type:	**Blank**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**02/Dec/23 05:35**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.380	0.006	0.016	7.56	7.11	0.0257	n.a.
2	CHLORIDE	4.274	0.013	0.071	17.04	32.30	0.0333	n.a.
3	NITRITE	5.230	0.013	0.035	16.65	16.00	0.0230	n.a.
4	SULFATE	5.954	0.023	0.058	29.57	26.00	0.0793	n.a.
5	BROMIDE	6.510	0.004	0.009	4.81	4.03	0.0216	n.a.
6	NITRATE	7.574	0.019	0.032	24.37	14.56	0.0190	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.076**	**0.221**	**100.00**	**100.00**		

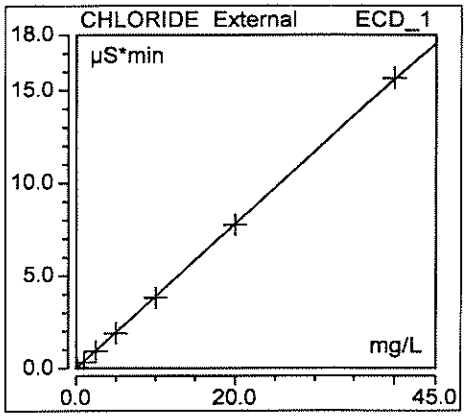
Calibration Batch Report

Sequence:	**101223 CAL REPROC**	*Injection Volume:*	**200.00**
Instrument Method:	**32mM80mA**	*Operator:*	**wetlab**
Inj. Date / Time:	**12-Oct-2023 / 13:07**	*Run Time:*	**14.946667**

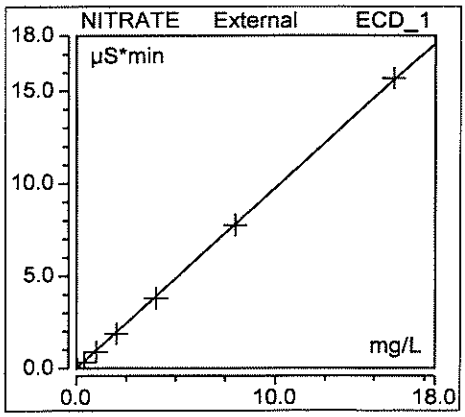
Calibration Summary

Peak Name	Eval.Type	Cal.Type	Points	Offset (C0)	Slope (C1)	Curve (C2)	Coeff.Det. %
FLUORIDE	Area	ly2, WithOff:	8.000	-0.011	0.637	-0.004	99.9990
CHLORIDE	Area	Lin	8.000	0.000	0.390	0.000	99.9875
NITRITE	Area	ly2, WithOff:	8.000	-0.007	0.859	-0.007	99.9990
SULFATE	Area	Lin	8.000	0.000	0.284	0.000	99.9981
BROMIDE	Area	Lin	8.000	0.000	0.170	0.000	99.9752
NITRATE	Area	Lin	8.000	0.000	0.976	0.000	99.9814
		AVERAGE:		-0.0029	0.5526	-0.0018	99.9900

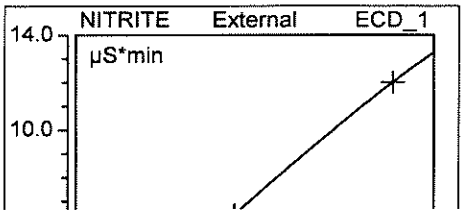
Injection Name / CHLORIDE	Ret.Time min CHLORIDE	Area µS*min CHLORIDE	Height µS CHLORIDE	Amount mg/L CHLORIDE
	ECD_1	ECD_1	ECD_1	ECD_1
IC1	4.310	0.0013	0.007	0.003
IC2	4.290	0.0319	0.236	0.082
IC3	4.280	0.3373	2.649	0.865
IC4	4.277	0.9117	7.111	2.339
IC5	4.277	1.8945	14.718	4.861
IC6	4.280	3.7977	29.083	9.744
IC7	4.274	7.7443	58.666	19.870
IC8	4.273	15.6522	117.462	40.160
Average	4.283			
Rel. Std. Dev.	0.287 %			



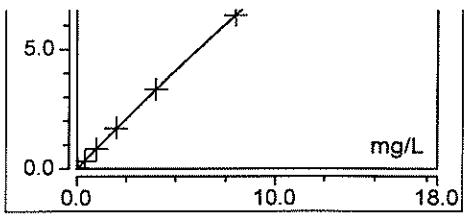
Injection Name / NITRATE	Ret.Time min NITRATE	Area µS*min NITRATE	Height µS NITRATE	Amount mg/L NITRATE
	ECD_1	ECD_1	ECD_1	ECD_1
IC1	7.577	0.0011	0.005	0.001
IC2	7.557	0.0307	0.152	0.031
IC3	7.537	0.3315	1.685	0.340
IC4	7.521	0.8936	4.512	0.916
IC5	7.500	1.8681	9.167	1.915
IC6	7.470	3.7881	17.516	3.883
IC7	7.420	7.7471	32.517	7.941
IC8	7.347	15.6832	56.804	16.076
Average	7.491			
Rel. Std. Dev.	1.022 %			



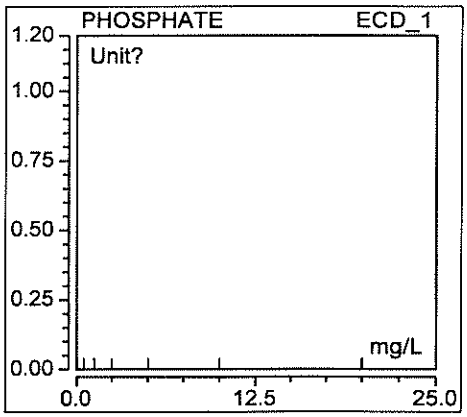
Injection Name / NITRITE	Ret.Time min NITRITE	Area µS*min NITRITE	Height µS NITRITE	Amount mg/L NITRITE
	ECD_1	ECD_1	ECD_1	ECD_1
IC1	5.277	0.0081	0.032	0.018
IC2	4.990	0.0315	0.165	0.045



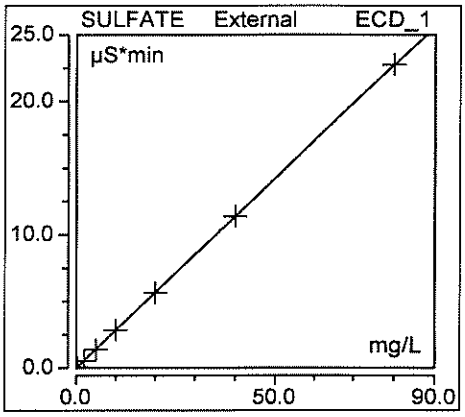
IC3	4.984	0.3130	1.968	0.374
IC4	4.984	0.8317	5.253	0.984
IC5	4.984	1.7014	10.467	2.021
IC6	4.990	3.3244	19.408	4.004
IC7	4.990	6.4268	34.736	7.994
IC8	4.990	12.0030	58.725	16.001
Average	5.024			
Rel. Std. Dev.	2.038 %			



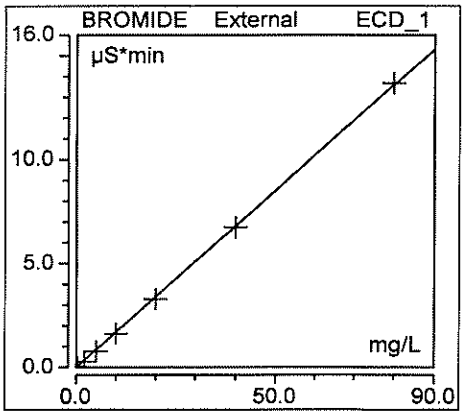
Injection Name **PHOSPHATE**	Ret.Time min PHOSPHATE	Area µS*min PHOSPHATE	Height µS PHOSPHATE	Amount mg/L PHOSPHATE
	ECD_1	ECD_1	ECD_1	ECD_1
IC1	n.a.	n.a.	n.a.	n.a.
IC2	n.a.	n.a.	n.a.	n.a.
IC3	n.a.	n.a.	n.a.	n.a.
IC4	n.a.	n.a.	n.a.	n.a.
IC5	n.a.	n.a.	n.a.	n.a.
IC6	n.a.	n.a.	n.a.	n.a.
IC7	n.a.	n.a.	n.a.	n.a.
IC8	n.a.	n.a.	n.a.	n.a.
Average	#DIV/0!			
Rel. Std. Dev.	#DIV/0!			



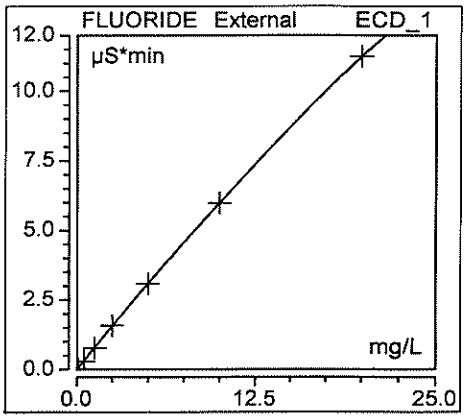
Injection Name **SULFATE**	Ret.Time min SULFATE	Area µS*min SULFATE	Height µS SULFATE	Amount mg/L SULFATE
	ECD_1	ECD_1	ECD_1	ECD_1
IC1	5.844	0.0009	0.004	0.003
IC2	5.834	0.0454	0.229	0.160
IC3	5.820	0.5026	2.833	1.768
IC4	5.817	1.3714	7.732	4.824
IC5	5.797	2.8380	15.881	9.983
IC6	5.777	5.6533	31.045	19.887
IC7	5.744	11.3826	59.540	40.040
IC8	5.687	22.7500	108.379	80.027
Average	5.790			
Rel. Std. Dev.	0.911 %			



Injection Name **BROMIDE**	Ret.Time min BROMIDE	Area µS*min BROMIDE	Height µS BROMIDE	Amount mg/L BROMIDE
	ECD_1	ECD_1	ECD_1	ECD_1
IC1	6.407	0.0004	0.001	0.002
IC2	6.560	0.0257	0.144	0.151
IC3	6.544	0.2814	1.655	1.655
IC4	6.537	0.7709	4.533	4.535
IC5	6.527	1.6186	9.363	9.521
IC6	6.514	3.2868	18.367	19.333
IC7	6.484	6.7353	35.656	39.616
IC8	6.433	13.6787	65.681	80.456
Average	6.501			
Rel. Std. Dev.	0.847 %			



Injection Name FLUORIDE	Ret.Time min FLUORIDE	Area µS*min FLUORIDE	Height µS FLUORIDE	Amount mg/L FLUORIDE
	ECD_1	ECD_1	ECD_1	ECD_1
IC1	3.524	0.0033	0.007	0.022
IC2	3.244	0.0233	0.162	0.053
IC3	3.240	0.2885	2.065	0.471
IC4	3.237	0.7656	5.555	1.228
IC5	3.244	1.5767	11.214	2.530
IC6	3.250	3.0811	21.013	5.001
IC7	3.254	5.9813	38.517	9.993
IC8	3.267	11.2370	67.145	20.001
Average	3.282			
Rel. Std. Dev.	2.982 %			



Anion Summary Report

No. CHLORIDE	Name CHLORIDE	Time min CHLORIDE ECD_1	Area µS*min CHLORIDE ECD_1	Rel.Area % CHLORIDE ECD_1	Height µS CHLORIDE ECD_1	Rel.Height % CHLORIDE ECD_1	Amount mg/L CHLORIDE ECD_1
1	IC1	4.310	0.0013	8.64	0.01	12.08	0.0033
2	IC2	4.290	0.0319	16.92	0.24	21.69	0.0818
3	IC3	4.280	0.3373	16.42	2.65	20.61	0.8653
4	IC4	4.277	0.9117	16.44	7.11	20.50	2.3392
5	IC5	4.277	1.8945	16.48	14.72	20.79	4.8610
6	IC6	4.280	3.7977	16.56	29.08	21.32	9.7441
7	IC7	4.274	7.7443	16.83	58.67	22.60	19.8700
8	IC8	4.273	15.6522	17.20	117.46	24.77	40.1598
	Sum:	34.262	30.371	125.488	229.932	164.342	77.924
	Average:	4.283	3.796	15.686	28.741	20.543	9.741
	Rel.Std.Dev:	0.287 %	143.802 %	18.229 %	142.552 %	17.997 %	143.802 %

No. NITRATE	Name NITRATE	Time min NITRATE ECD_1	Area µS*min NITRATE ECD_1	Rel.Area % NITRATE ECD_1	Height µS NITRATE ECD_1	Rel.Height % NITRATE ECD_1	Amount mg/L NITRATE ECD_1
1	IC1	7.577	0.0011	7.29	0.01	9.24	0.0011
2	IC2	7.557	0.0307	16.31	0.15	13.97	0.0315
3	IC3	7.537	0.3315	16.14	1.69	13.11	0.3398
4	IC4	7.521	0.8936	16.12	4.51	13.00	0.9160
5	IC5	7.500	1.8681	16.25	9.17	12.95	1.9149
6	IC6	7.470	3.7881	16.52	17.52	12.84	3.8830
7	IC7	7.420	7.7471	16.84	32.52	12.52	7.9412
8	IC8	7.347	15.6832	17.23	56.80	11.98	16.0761
	Sum:	59.929	30.344	122.694	122.358	99.612	31.104
	Average:	7.491	3.793	15.337	15.295	12.451	3.888
	Rel.Std.Dev:	1.022 %	144.282 %	21.338 %	131.385 %	11.350 %	144.282 %

No. NITRITE	Name NITRITE	Time min NITRITE ECD_1	Area µS*min NITRITE ECD_1	Rel.Area % NITRITE ECD_1	Height µS NITRITE ECD_1	Rel.Height % NITRITE ECD_1	Amount mg/L NITRITE ECD_1
1	IC1	5.277	0.0081	53.65	0.03	57.13	0.0176
2	IC2	4.990	0.0315	16.72	0.17	15.17	0.0449
3	IC3	4.984	0.3130	15.24	1.97	15.31	0.3737
4	IC4	4.984	0.8317	15.00	5.25	15.14	0.9839
5	IC5	4.984	1.7014	14.80	10.47	14.78	2.0208
6	IC6	4.990	3.3244	14.50	19.41	14.23	4.0043
7	IC7	4.990	6.4268	13.97	34.74	13.38	7.9935
8	IC8	4.990	12.0030	13.19	58.73	12.38	16.0012
	Sum:	40.189	24.640	157.051	130.754	157.526	31.440
	Average:	5.024	3.080	19.631	16.344	19.691	3.930
	Rel.Std.Dev:	2.038 %	136.774 %	70.208 %	127.418 %	77.003 %	141.871 %

No. PHOSPHATE	Name PHOSPHATE	Time min PHOSPHATE ECD_1	Area µS*min PHOSPHATE ECD_1	Rel.Area % PHOSPHATE ECD_1	Height µS PHOSPHATE ECD_1	Rel.Height % PHOSPHATE ECD_1	Amount mg/L PHOSPHATE ECD_1
1	IC1	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2	IC2	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

3	IC3	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
4	IC4	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5	IC5	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
6	IC6	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
7	IC7	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
8	IC8	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
	Sum:	0.000	0.000	0.000	0.000	0.000	0.000
	Average:	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
	Rel.Std.Dev:	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

No. SULFATE	Name SULFATE	Time min SULFATE ECD_1	Area µS*min SULFATE ECD_1	Rel.Area % SULFATE ECD_1	Height µS SULFATE ECD_1	Rel.Height % SULFATE ECD_1	Amount mg/L SULFATE ECD_1
1	IC1	5.844	0.0009	6.16	0.00	7.25	0.0033
2	IC2	5.834	0.0454	24.09	0.23	21.06	0.1596
3	IC3	5.820	0.5026	24.47	2.83	22.04	1.7679
4	IC4	5.817	1.3714	24.73	7.73	22.29	4.8243
5	IC5	5.797	2.8380	24.68	15.88	22.43	9.9833
6	IC6	5.777	5.6533	24.65	31.04	22.75	19.8866
7	IC7	5.744	11.3826	24.74	59.54	22.93	40.0405
8	IC8	5.687	22.7500	25.00	108.38	22.86	80.0271
	Sum:	46.319	44.544	178.521	225.643	163.599	156.693
	Average:	5.790	5.568	22.315	28.205	20.450	19.587
	Rel.Std.Dev:	0.911 %	142.591 %	29.274 %	135.408 %	26.248 %	142.591 %

No. BROMIDE	Name BROMIDE	Time min BROMIDE ECD_1	Area µS*min BROMIDE ECD_1	Rel.Area % BROMIDE ECD_1	Height µS BROMIDE ECD_1	Rel.Height % BROMIDE ECD_1	Amount mg/L BROMIDE ECD_1
1	IC1	6.407	0.0004	2.57	0.00	2.09	0.0023
2	IC2	6.560	0.0257	13.62	0.14	13.22	0.1509
3	IC3	6.544	0.2814	13.70	1.65	12.87	1.6554
4	IC4	6.537	0.7709	13.90	4.53	13.07	4.5345
5	IC5	6.527	1.6186	14.08	9.36	13.22	9.5207
6	IC6	6.514	3.2868	14.33	18.37	13.46	19.3328
7	IC7	6.484	6.7353	14.64	35.66	13.73	39.6161
8	IC8	6.433	13.6787	15.03	65.68	13.85	80.4565
	Sum:	52.006	26.398	101.871	135.400	95.522	155.269
	Average:	6.501	3.300	12.734	16.925	11.940	19.409
	Rel.Std.Dev:	0.847 %	144.644 %	32.456 %	136.608 %	33.434 %	144.644 %

No. FLUORIDE	Name FLUORIDE	Time min FLUORIDE ECD_1	Area µS*min FLUORIDE ECD_1	Rel.Area % FLUORIDE ECD_1	Height µS FLUORIDE ECD_1	Rel.Height % FLUORIDE ECD_1	Amount mg/L FLUORIDE ECD_1
1	IC1	3.524	0.0033	21.68	0.01	12.21	0.0218
2	IC2	3.244	0.0233	12.35	0.16	14.89	0.0532
3	IC3	3.240	0.2885	14.04	2.06	16.06	0.4710
4	IC4	3.237	0.7656	13.81	5.55	16.01	1.2278
5	IC5	3.244	1.5767	13.71	11.21	15.84	2.5301
6	IC6	3.250	3.0811	13.44	21.01	15.40	5.0014
7	IC7	3.254	5.9813	13.00	38.52	14.84	9.9933
8	IC8	3.267	11.2370	12.35	67.15	14.16	20.0014
	Sum:	26.259	22.957	114.375	145.677	119.399	39.300
	Average:	3.282	2.870	14.297	18.210	14.925	4.913
	Rel.Std.Dev:	2.982 %	137.399 %	21.345 %	130.315 %	8.595 %	141.871 %

WET CHEMISTRY BATCH REPORT - TOC
Dec 07 2023, 12:10 pm
Batch: WG346586 Run ID 1: R629068 Run ID 2: NONE

Parameter: Total Organic Carbon

Date Analyzed: 07-DEC-23

Analyst Initials: CJB

Prep Date: N/A

Prep Method: N/A

Prep Chemist: N/A

Sample	Samp Type	Method	Initial Amt.	Final Amt.	Rpt. DF	Result	Rpt Result	TS(%)	PQL	MDL	Adj PQL	RPD	%Rec
SQ6238-1	SAMP	SM5310B	20mL	20mL	1	1.98982	2.0 mg/L	NA	1	0.37	1.0		
SQ6238-2	SAMP	SM5310B	20mL	20mL	1	2.17849	2.2 mg/L	NA	1	0.37	1.0		
SQ6238-3	SAMP	SM5310B	20mL	20mL	1	1.69642	1.7 mg/L	NA	1	0.37	1.0		
SQ6238-4	SAMP	SM5310B	20mL	20mL	1	4.43541	4.4 mg/L	NA	1	0.37	1.0		
SQ6238-5	SAMP	SM5310B	20mL	20mL	1	1.46774	1.5 mg/L	NA	1	0.37	1.0		
SQ6238-6	SAMP	SM5310B	20mL	20mL	1	4.70641	4.7 mg/L	NA	1	0.37	1.0		
SQ6238-7	SAMP	SM5310B	20mL	20mL	1	2.69906	2.7 mg/L	NA	1	0.37	1.0		
SQ6238-8	SAMP	SM5310B	20mL	20mL	1	3.86759	3.9 mg/L	NA	1	0.37	1.0		
SQ6238-9	SAMP	SM5310B	20mL	20mL	1	2.29371	2.3 mg/L	NA	1	0.37	1.0		
SQ6238-10	SAMP	SM5310B	20mL	20mL	1	2.1794	2.2 mg/L	NA	1	0.37	1.0		
SQ6238-11	SAMP	SM5310B	20mL	20mL	1	1.40355	1.4 mg/L	NA	1	0.37	1.0		
SQ6257-1	SAMP	SM5310B	20mL	20mL	1	1.06649	1.1 mg/L	NA	1	0.35	1.0		
SQ6257-3	SAMP	SM5310B	20mL	20mL	1	1.30123	1.3 mg/L	NA	1	0.35	1.0		
SQ6257-5	SAMP	SM5310B	20mL	20mL	1	2.18913	2.2 mg/L	NA	1	0.35	1.0		
WG346586-2	LCS	SM5310B	20mL	20mL	1	52.13714	52.1 mg/L	NA	1	0.350	1.00		104
WG346586-3	LCSD	SM5310B	20mL	20mL	1	52.19519	52.2 mg/L	NA	1	0.350	1.00	0	104
WG346586-4	DUP	SM5310B	20mL	20mL	1	1.66869	1.7 mg/L	NA	1	0.35	1.0	18	
WG346586-5	MS	SM5310B	20mL	20mL	1	52.58964	52.6 mg/L	NA	1	0.350	1.00		101
WG346586-6	MS	SM5310B	20mL	20mL	1	53.75724	53.8 mg/L	NA	1	0.350	1.00		104

Comments:

SQ6238-1	Anions = NO3, SO4, Cl.
SQ6238-2	Anions = NO3, SO4, Cl.
SQ6238-3	Anions = NO3, SO4, Cl.
SQ6238-4	Anions = NO3, SO4, Cl.
SQ6238-5	Anions = NO3, SO4, Cl.
SQ6238-6	Anions = NO3, SO4, Cl.
SQ6238-7	Anions = NO3, SO4, Cl.
SQ6238-8	Anions = NO3, SO4, Cl.
SQ6238-9	Anions = NO3, SO4, Cl.
SQ6238-10	Anions = NO3, SO4, Cl.
SQ6238-11	Anions = NO3, SO4, Cl.
WG346586-1	SQ6238-1
WG346586-2	SQ6238-1
WG346586-3	SQ6238-1
WG346586-4	SQ6238-1
WG346586-5	SQ6238-2
WG346586-6	SQ6238-3

Entered by: CJB Date: 12-7-23 Accepted by: RAD Date: 12/7/23

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WET CHEMISTRY BATCH REPORT - TOC
Dec 07 2023, 12:10 pm
Batch: WG346586 Run ID 1: R629068 Run ID 2: NONE

Parameter: Total Organic Carbon
Prep Date: N/A

Date Analyzed: 06-DEC-23
Prep Method: N/A

Analyst Initials: CJB
Prep Chemist: N/A

Sample	Samp Type	Method	Initial Amt.	Final Amt.	Rpt. DF	Result	Rpt Result	TS(%)	PQL	MDL	Adj PQL	RPD	%Rec
WG346586-1	MBLANK	SM5310B	20mL	20mL	1	0	U0.70 mg/L	NA	1	0.35	1.0		

Comments:

SQ6238-1	Anions = NO3, SO4, Cl.
SQ6238-2	Anions = NO3, SO4, Cl.
SQ6238-3	Anions = NO3, SO4, Cl.
SQ6238-4	Anions = NO3, SO4, Cl.
SQ6238-5	Anions = NO3, SO4, Cl.
SQ6238-6	Anions = NO3, SO4, Cl.
SQ6238-7	Anions = NO3, SO4, Cl.
SQ6238-8	Anions = NO3, SO4, Cl.
SQ6238-9	Anions = NO3, SO4, Cl.
SQ6238-10	Anions = NO3, SO4, Cl.
SQ6238-11	Anions = NO3, SO4, Cl.
WG346586-1	SQ6238-1
WG346586-2	SQ6238-1
WG346586-3	SQ6238-1
WG346586-4	SQ6238-1
WG346586-5	SQ6238-2
WG346586-6	SQ6238-3

Entered by: CJB Date: 12-7-23 Accepted by: RAD Date: 12/7/23

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KATAHDIN ANALYTICAL SERVICES, LLC
CARBON ANALYSIS RUN INFORMATION SHEET

INSTR. ID: analytikjena multi N/C **ANALYST:** CJB **DATE:** 12-06-23

FILE NAME: 120623 **METHOD(S):**

TOC	DOC	TIC
• EPA 415.1	• EPA 415.1	• EPA 415.1
• SM5310B	• SM5310B	• SM5310B
• SW9060	• SW9060	• SW9060

CALIBRATION DATE: 08/24/23 **CALIBRATION ANALYST:** CJB

Calibration standards were prepared by performing dilutions of the following standard on the day of calibration:

Calibration Source Standard ID	Prep Date	~~Expiration Date~~ ~~A~~	Standard Conc. (mg/L)
W22102	08/24/23	~~11/24/23~~	1000

~~A~~ No longer applicable due to procedure updates RAD 12/7/23

Note: Calibration must be performed quarterly or whenever a change in analysis conditions warrant. A copy of the associated calibration data is attached to this run.

STANDARDS USED:

Standard Name	Standard ID	Prep Date	Expiration Date	Standard Conc.
CCV #	W22343	11/16/23	2/16/24	1000 mg C/L
LCS	W22391	12/06/23	03/06/24	50 mg C/L
MS Stock Std. *	W22343	11/16/23	2/16/24	1000 mg C/L
Alkalinity Check	W22285	11/02/23	02/02/24	15 mg/L (Inorg. C)

CCV prepared by adding 4.0 mL of CCV Std. to 36 mL of DI.
* Matrix spikes are prepared by adding 2.0 mL of MS Stock Std. to 38 mL of sample.

Additional Comments and Notes:

aj-Analyzer multi N/C 3100; multiWin 4.12; Serial No: N3-2320/AX

AnalysesTable

AnalysesTable: 120623

Sample ID	Time of analysis	Method	TC/NPOC/POC		Sample volume	Dilute
alk	12/6/2023 3:45:33 P	TOC_Method_101223	503.3µg/l ± 1.01%		500.0µl	1 in 1
CCV	12/6/2023 11:40:53 P	TOC_Method_101223	103.3mg/l ± 0.43%	103%	500.0µl	1 in 1
CCB	12/6/2023 11:56:40 P	TOC_Method_101223	0mg/l		500.0µl	1 in 1
LCS	12/7/2023 12:11:49	TOC_Method_101223	52.14mg/l ± 0.65%	104%	500.0µl	1 in 1
LCSD	12/7/2023 12:27:37	TOC_Method_101223	52.20mg/l ± 0.34%	104%	500.0µl	1 in 1
SQ6238-1	12/7/2023 12:43:14	TOC_Method_101223	1.99mg/l ± 0.60%		500.0µl	1 in 1
SQ6238-1DUP	12/7/2023 12:59:16	TOC_Method_101223	1.67mg/l ± 1.25%		500.0µl	1 in 1
SQ6238-2	12/7/2023 1:16:23 A	TOC_Method_101223	2.18mg/l ± 0.13%		500.0µl	1 in 1
SQ6238-2MS	12/7/2023 1:28:00 A	TOC_Method_101223	52.59mg/l ± 0.72%		500.0µl	1 in 1
SQ6238-3	12/7/2023 1:43:13 A	TOC_Method_101223	1.70mg/l ± 1.58%		500.0µl	1 in 1
SQ6238-3MS	12/7/2023 1:59:02 A	TOC_Method_101223	53.76mg/l ± 0.41%		500.0µl	1 in 1
SQ6238-4	12/7/2023 2:23:43 A	TOC_Method_101223	4.44mg/l ± 0.05%		500.0µl	1 in 1
SQ6238-5	12/7/2023 2:39:35 A	TOC_Method_101223	1.47mg/l ± 0.18%		500.0µl	1 in 1
CCV	12/7/2023 2:50:39 A	TOC_Method_101223	104.2mg/l ± 0.66%	104%	500.0µl	1 in 1
CCB	12/7/2023 3:06:42 A	TOC_Method_101223	0mg/l		500.0µl	1 in 1
SQ6238-6	12/7/2023 3:21:30 A	TOC_Method_101223	4.71mg/l ± 0.43%		500.0µl	1 in 1
SQ6238-7	12/7/2023 3:32:45 A	TOC_Method_101223	2.70mg/l ± 0.69%		500.0µl	1 in 1
SQ6238-8	12/7/2023 3:43:39 A	TOC_Method_101223	3.87mg/l ± 0.32%		500.0µl	1 in 1
SQ6238-9	12/7/2023 3:55:28 A	TOC_Method_101223	2.29mg/l ± 1.13%		500.0µl	1 in 1
SQ6238-10	12/7/2023 4:06:43 A	TOC_Method_101223	2.18mg/l ± 1.56%		500.0µl	1 in 1
SQ6238-11	12/7/2023 4:17:55 A	TOC_Method_101223	1.40mg/l ± 0.46%		500.0µl	1 in 1
SQ6257-1	12/7/2023 4:37:36 A	TOC_Method_101223	1.07mg/l ± 2.24%		500.0µl	1 in 1
SQ6257-3	12/7/2023 4:48:23 A	TOC_Method_101223	1.30mg/l ± 0.18%		500.0µl	1 in 1
SQ6257-5	12/7/2023 4:59:07 A	TOC_Method_101223	2.19mg/l ± 0.47%		500.0µl	1 in 1
CCV	12/7/2023 5:10:32 A	TOC_Method_101223	103.4mg/l ± 0.68%	103%	500.0µl	1 in 1
CCB	12/7/2023 5:26:36 A	TOC_Method_101223	0mg/l		500.0µl	1 in 1

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aj-Analyzer multi N/C 3100; multiWin 4.12; Serial No: N3-2320/AX

AnalysisReport

Sample ID: alk

Time of analysis: 12/6/2023 3:45:33 PM -0500
Directory: C:\ProgramData\IDC\multiWin\Analyses\2023\12
File name: 231206154533.ajd
User: Admin
Sample type: Sample
Status: Measurement completed successfully

Method: TOC_Method_101223

Sample volume: 500.0µl
Dilution: 1 in 1
Determinations: 2-3
Furnace temperature: 800°C

	c	I eff	SD	CV	k0	k1	k2	DF
NPOC	503.3µg/l	572.9AU B!	5.06µg/l	1.01%	-0.15993	7.184E-4	-	1

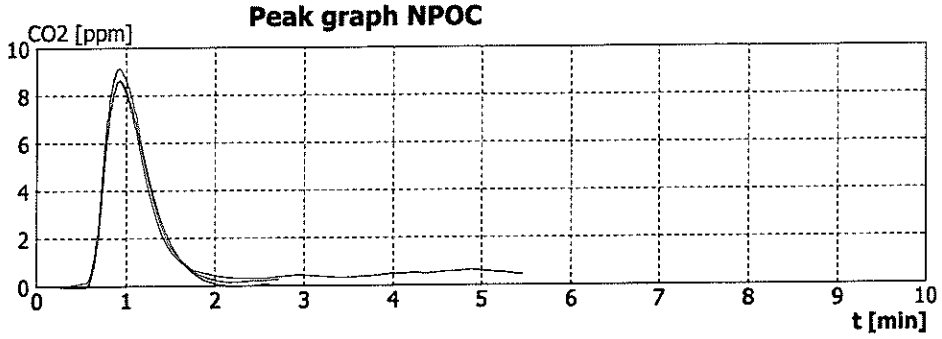
Blank values

NPOC	Diluent blank	0AU/ml

Single replicates:

	Rep.	1	2	3
NPOC	c [µg/l]	499.7	~~456.1~~	506.9
NPOC	I [AU]	570.4	~~540.1~~	575.4

Peak graph NPOC



AnalysisReport

Sample ID:	CCV		
Time of analysis:	12/6/2023 11:40:53 PM -0500	**Method:**	TOC_Method_101223
Directory:	C:\ProgramData\IDC\multiWin\Analyses\2023\12		
File name:	231206234053.ajd		
User:	Admin	**Sample volume:**	500.0µl
Sample type:	Sample	**Dilution:**	1 in 1
Status:	Measurement completed successfully	**Determinations:**	2-3
		Furnace temperature:	800°C

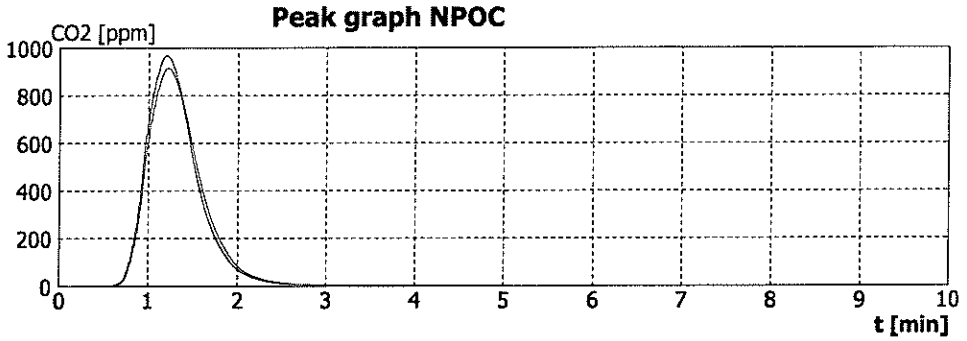
	c	I eff	SD	CV	k0	k1	k2	DF
NPOC	**103.3mg/l**	**7.21E4AU**	439.2µg/l	0.43%	-0.15993	7.184E-4	-	1

Blank values

NPOC	Diluent blank	0AU/ml

Single replicates:

	Rep.	1	2
NPOC	**c [mg/l]**	103.0	103.6
NPOC	**I [AU]**	7.189E4	7.232E4



AnalysisReport

Sample ID:	CCB		
Time of analysis:	12/6/2023 11:56:40 PM -0500	**Method:**	TOC_Method_101223
Directory:	C:\ProgramData\IDC\multiWin\Analyses\2023\12		
File name:	231206235640.ajd		
User:	Admin	**Sample volume:**	500.0µl
Sample type:	Sample	**Dilution:**	1 in 1
Status:	Measurement completed successfully	**Determinations:**	2-3
		Furnace temperature:	800°C

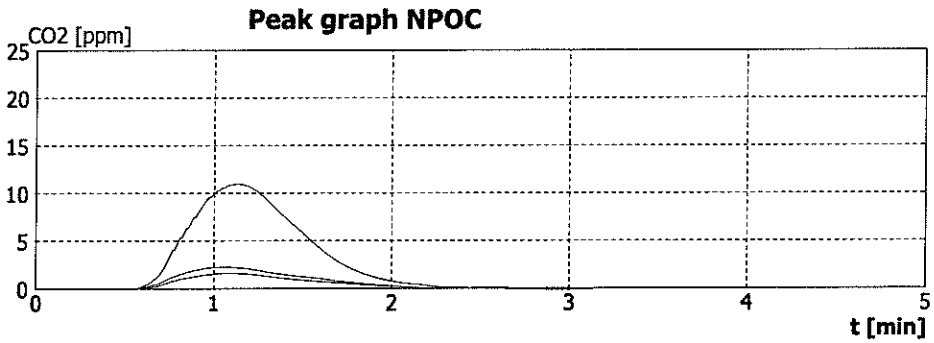
	c	I eff	SD	CV	k0	k1	k2	DF
NPOC	0mg/l	185.7AU B!			-0.15993	7.184E-4	-	1

Blank values

NPOC	Diluent blank	0AU/ml

Single replicates:

	Rep.	1	2	3
NPOC	c [mg/l]	~~0.999~~	0	0
NPOC	I [AU]	~~917.7~~	202.1	169.4



AnalysisReport

Sample ID: LCS

Time of analysis:	12/7/2023 12:11:49 AM -0500	**Method:**	TOC_Method_101223
Directory:	C:\ProgramData\IDC\multiWin\Analyses\2023\12		
File name:	231207001149.ajd		
User:	Admin	**Sample volume:**	500.0µl
Sample type:	Sample	**Dilution:**	1 in 1
Status:	Measurement completed successfully	**Determinations:**	2-3
		Furnace temperature:	800°C

	c	I eff	SD	CV	k0	k1	k2	DF
NPOC	**52.14mg/l**	**3.651E4AU**	338.7µg/l	0.65%	-0.15993	7.184E-4	-	1

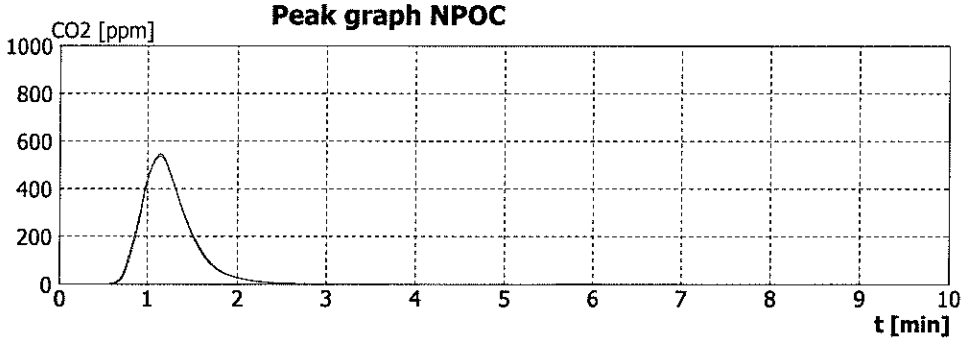
Blank values

NPOC	Diluent blank	0AU/ml

Single replicates:

	Rep.	1	2
NPOC	**c [mg/l]**	51.90	52.38
NPOC	**I [AU]**	3.634E4	3.668E4

Peak graph NPOC



aj-Analyzer multi N/C 3100; multiWin 4.12; Serial No: N3-2320/AX

AnalysisReport

Sample ID:	LCSD		
Time of analysis:	12/7/2023 12:27:37 AM -0500	**Method:**	TOC_Method_101223
Directory:	C:\ProgramData\IDC\multiWin\Analyses\2023\12		
File name:	231207002737.ajd		
User:	Admin	**Sample volume:**	500.0µl
Sample type:	Sample	**Dilution:**	1 in 1
Status:	Measurement completed successfully	**Determinations:**	2-3
		Furnace temperature:	800°C

	c	I eff	SD	CV	k0	k1	k2	DF
NPOC	**52.20mg/l**	**3.655E4AU**	179.8µg/l	0.34%	-0.15993	7.184E-4	-	1

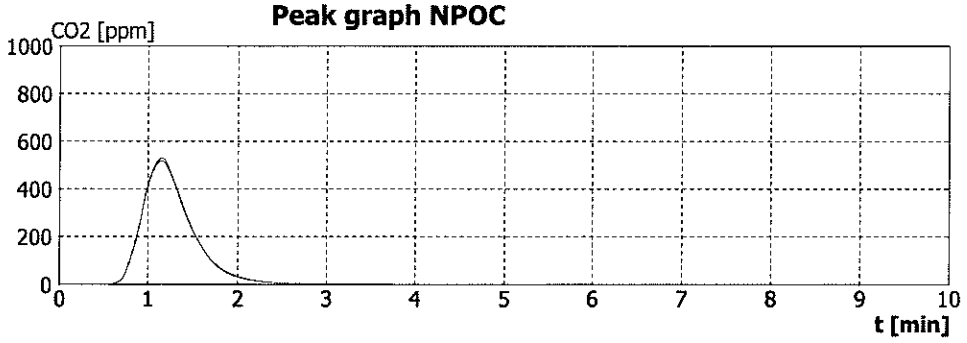
Blank values

NPOC	Diluent blank	0AU/ml

Single replicates:

	Rep.	1	2
NPOC	**c [mg/l]**	52.07	52.32
NPOC	**I [AU]**	3.646E4	3.664E4

Peak graph NPOC



aj-Analyzer multi N/C 3100; multiWin 4.12; Serial No: N3-2320/AX

AnalysisReport

Sample ID:	SQ6238-1		
Time of analysis:	12/7/2023 12:43:14 AM -0500	**Method:**	TOC_Method_101223
Directory:	C:\ProgramData\IDC\multiWin\Analyses\2023\12		
File name:	231207004314.ajd		
User:	Admin	**Sample volume:**	500.0µl
Sample type:	Sample	**Dilution:**	1 in 1
Status:	Measurement completed successfully	**Determinations:**	2-3
		Furnace temperature:	800°C

	c	I eff	SD	CV	k0	k1	k2	DF
NPOC	1.99mg/l	1,608AU	11.99µg/l	0.60%	-0.15993	7.184E-4	-	1

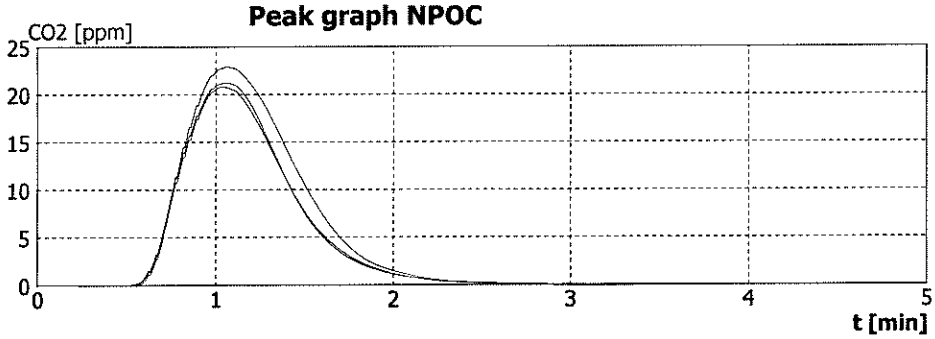
Blank values

NPOC	Diluent blank	0AU/ml

Single replicates:

	Rep.	1	2	3
NPOC	c [mg/l]	~~2.39~~	1.98	2.00
NPOC	I [AU]	~~1,884~~	1,602	1,613

Peak graph NPOC



AnalysisReport

Sample ID:	SQ6238-1DUP		
Time of analysis:	12/7/2023 12:59:16 AM -0500	**Method:**	TOC_Method_101223
Directory:	C:\ProgramData\IDC\multiWin\Analyses\2023\12		
File name:	231207005916.ajd		
User:	Admin	**Sample volume:**	500.0µl
Sample type:	Sample	**Dilution:**	1 in 1
Status:	Measurement completed successfully	**Determinations:**	2-3
		Furnace temperature:	800°C

	c	I eff	SD	CV	k0	k1	k2	DF
NPOC	**1.67mg/l**	**1,384AU**	20.84µg/l	1.25%	-0.15993	7.184E-4	-	1

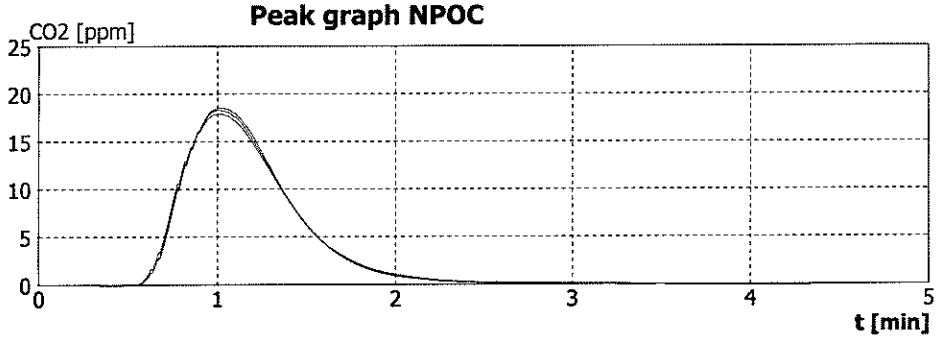
Blank values

NPOC	Diluent blank	0AU/ml

Single replicates:

	Rep.	1	2	3
NPOC	c [mg/l]	~~1.73~~	1.65	1.68
NPOC	I [AU]	~~1,426~~	1,374	1,394

Peak graph NPOC



AnalysisReport

Sample ID:	SQ6238-2		
Time of analysis:	12/7/2023 1:16:23 AM -0500	**Method:**	TOC_Method_101223
Directory:	C:\ProgramData\IDC\multiWin\Analyses\2023\12		
File name:	231207011623.ajd		
User:	Admin	**Sample volume:**	500.0µl
Sample type:	Sample	**Dilution:**	1 in 1
Status:	Measurement completed successfully	**Determinations:**	2-3
		Furnace temperature:	800°C

	c	I eff	SD	CV	k0	k1	k2	DF
NPOC	**2.18mg/l**	**1,739AU**	2.74µg/l	0.13%	-0.15993	7.184E-4	-	1

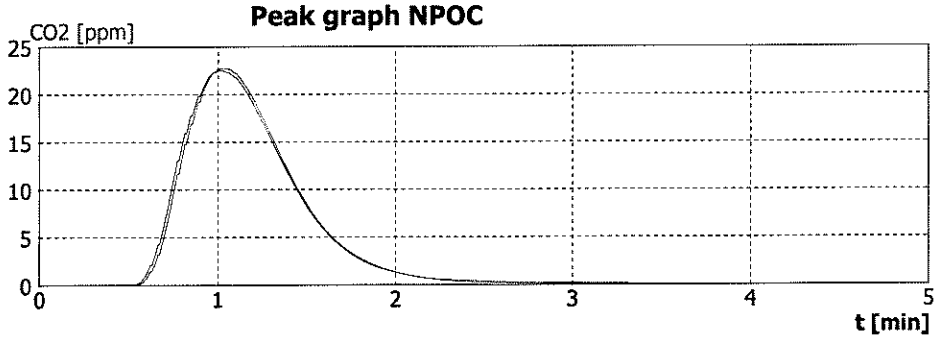
Blank values

NPOC	Diluent blank	0AU/ml

Single replicates:

	Rep.	1	2
NPOC	c [mg/l]	2.18	2.18
NPOC	I [AU]	1,740	1,737

Peak graph NPOC



AnalysisReport

Sample ID:	SQ6238-2MS		
Time of analysis:	12/7/2023 1:28:00 AM -0500	**Method:**	TOC_Method_101223
Directory:	C:\ProgramData\IDC\multiWin\Analyses\2023\12		
File name:	231207012800.ajd		
User:	Admin	**Sample volume:**	500.0µl
Sample type:	Sample	**Dilution:**	1 in 1
Status:	Measurement completed successfully	**Determinations:**	2-3
		Furnace temperature:	800°C

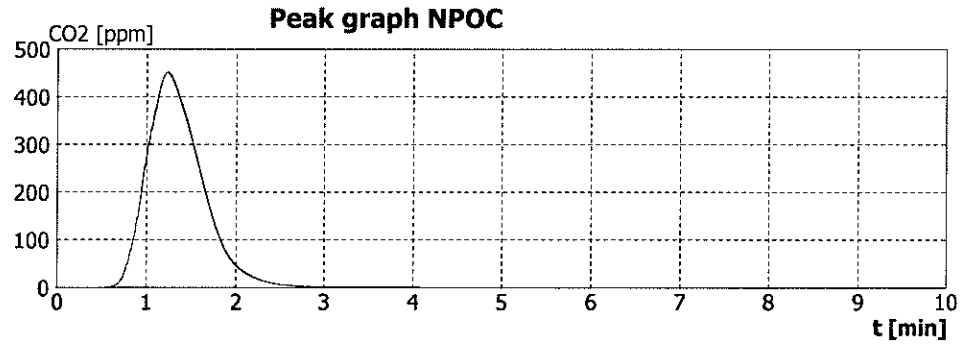
	c	I eff	SD	CV	k0	k1	k2	DF
NPOC	52.59mg/l	3.682E4AU	378.6µg/l	0.72%	-0.15993	7.184E-4	-	1

Blank values

NPOC	Diluent blank	0AU/ml

Single replicates:

	Rep.	1	2
NPOC	c [mg/l]	52.32	52.86
NPOC	I [AU]	3.664E4	3.701E4



aj-Analyzer multi N/C 3100; multiWin 4.12; Serial No: N3-2320/AX

AnalysisReport

Sample ID:	SQ6238-3		
Time of analysis:	12/7/2023 1:43:13 AM -0500	**Method:**	TOC_Method_101223
Directory:	C:\ProgramData\IDC\multiWin\Analyses\2023\12		
File name:	231207014313.ajd		
User:	Admin	**Sample volume:**	500.0µl
Sample type:	Sample	**Dilution:**	1 in 1
Status:	Measurement completed successfully	**Determinations:**	2-3
		Furnace temperature:	800°C

	c	I eff	SD	CV	k0	k1	k2	DF
NPOC	**1.70mg/l**	**1,403AU**	26.73µg/l	1.58%	-0.15993	7.184E-4	-	1

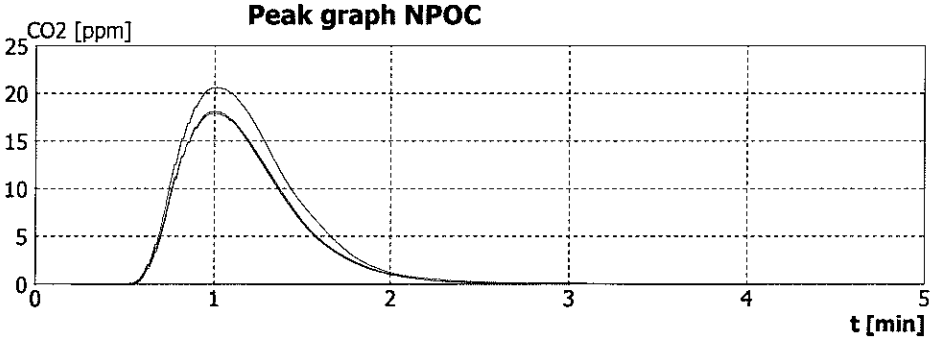
Blank values

NPOC	Diluent blank	0AU/ml

Single replicates:

	Rep.	1	2	3
NPOC	c [mg/l]	~~2.06~~	1.72	1.68
NPOC	I [AU]	~~1,657~~	1,416	1,390

Peak graph NPOC



AnalysisReport

Sample ID:	SQ6238-3MS		
Time of analysis:	12/7/2023 1:59:02 AM -0500	**Method:**	TOC_Method_101223
Directory:	C:\ProgramData\IDC\multiWin\Analyses\2023\12		
File name:	231207015902.ajd		
User:	Admin	**Sample volume:**	500.0µl
Sample type:	Sample	**Dilution:**	1 in 1
Status:	Measurement completed successfully	**Determinations:**	2-3
		Furnace temperature:	800°C

	c	I eff	SD	CV	k0	k1	k2	DF
NPOC	**53.76mg/l**	**3.764E4AU**	222.7µg/l	0.41%	-0.15993	7.184E-4	-	1

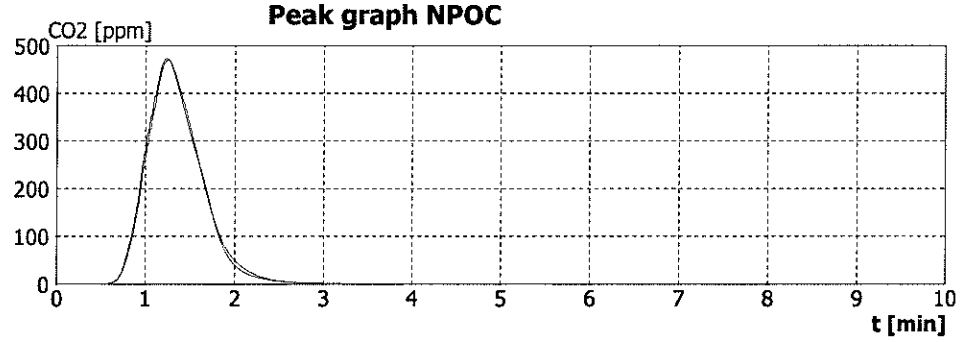
Blank values

NPOC	Diluent blank	0AU/ml

Single replicates:

	Rep.	1	2
NPOC	c [mg/l]	53.60	53.91
NPOC	I [AU]	3.753E4	3.775E4

Peak graph NPOC



AnalysisReport

Sample ID:	SQ6238-4		
Time of analysis:	12/7/2023 2:23:43 AM -0500	**Method:**	TOC_Method_101223
Directory:	C:\ProgramData\IDC\multiWin\Analyses\2023\12		
File name:	231207022343.ajd		
User:	Admin	**Sample volume:**	500.0µl
Sample type:	Sample	**Dilution:**	1 in 1
Status:	Measurement completed successfully	**Determinations:**	2-3
		Furnace temperature:	800°C

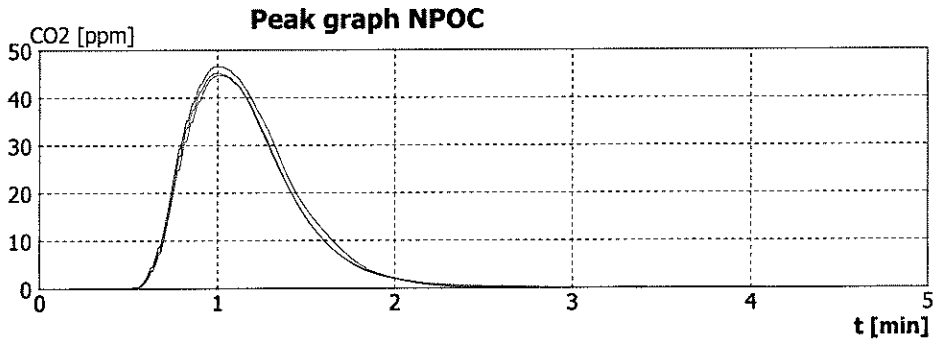
	c	I eff	SD	CV	k0	k1	k2	DF
NPOC	**4.44mg/l**	**3,310AU**	2.16µg/l	0.05%	-0.15993	7.184E-4	-	1

Blank values

NPOC	Diluent blank	0AU/ml

Single replicates:

	Rep.	1	2	3
NPOC	c [mg/l]	~~4.80~~	4.44	4.43
NPOC	I [AU]	~~3,563~~	3,311	3,309



AnalysisReport

Sample ID:	SQ6238-5		
Time of analysis:	12/7/2023 2:39:35 AM -0500	**Method:**	TOC_Method_101223
Directory:	C:\ProgramData\IDC\multiWin\Analyses\2023\12		
File name:	231207023935.ajd		
User:	Admin	**Sample volume:**	500.0µl
Sample type:	Sample	**Dilution:**	1 in 1
Status:	Measurement completed successfully	**Determinations:**	2-3
		Furnace temperature:	800°C

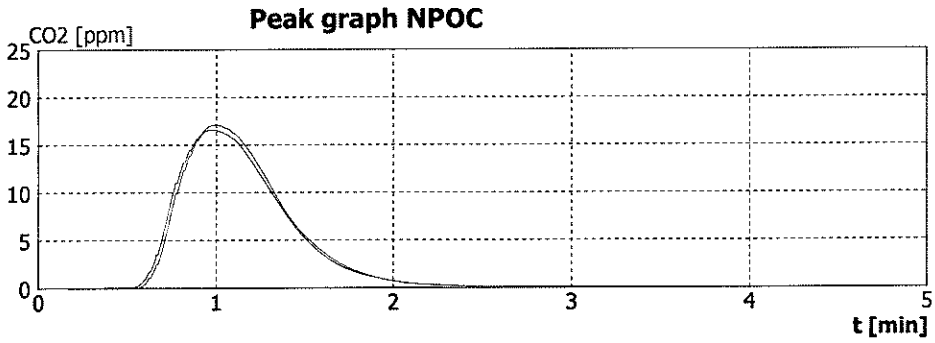
	c	I eff	SD	CV	k0	k1	k2	DF
NPOC	1.47mg/l	1,244AU	2.63µg/l	0.18%	-0.15993	7.184E-4	-	1

Blank values

NPOC	Diluent blank	0AU/ml

Single replicates:

	Rep.	1	2
NPOC	c [mg/l]	1.47	1.47
NPOC	I [AU]	1,245	1,243



AnalysisReport

Sample ID: CCV

Time of analysis:	12/7/2023 2:50:39 AM -0500	**Method:**	TOC_Method_101223
Directory:	C:\ProgramData\IDC\multiWin\Analyses\2023\12		
File name:	231207025039.ajd		
User:	Admin	**Sample volume:**	500.0µl
Sample type:	Sample	**Dilution:**	1 in 1
Status:	Measurement completed successfully	**Determinations:**	2-3
		Furnace temperature:	800°C

	c	I eff	SD	CV	k0	k1	k2	DF
NPOC	**104.2mg/l**	**7.277E4AU**	684.3µg/l	0.66%	-0.15993	7.184E-4	-	1

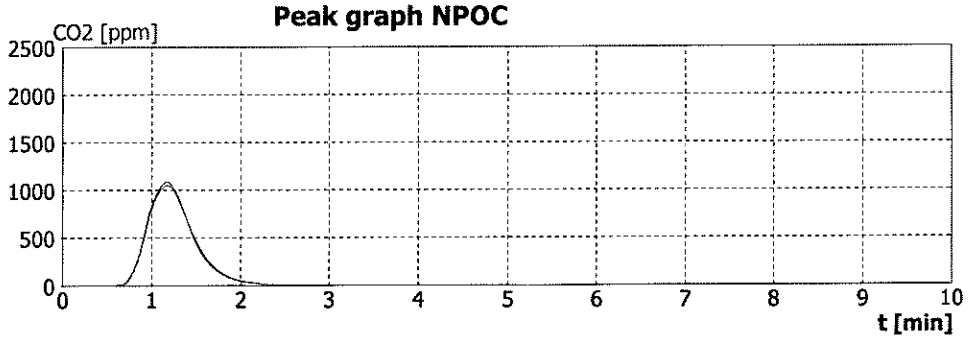
Blank values

NPOC	Diluent blank	0AU/ml

Single replicates:

	Rep.	1	2
NPOC	**c [mg/l]**	103.8	104.7
NPOC	**I [AU]**	7.244E4	7.311E4

Peak graph NPOC



aj-Analyzer multi N/C 3100; multiWin 4.12; Serial No: N3-2320/AX

AnalysisReport

Sample ID: CCB

Time of analysis:	12/7/2023 3:06:42 AM -0500	**Method:**	TOC_Method_101223
Directory:	C:\ProgramData\IDC\multiWin\Analyses\2023\12		
File name:	231207030642.ajd		
User:	Admin	**Sample volume:**	500.0µl
Sample type:	Sample	**Dilution:**	1 in 1
Status:	Measurement completed successfully	**Determinations:**	2-3
		Furnace temperature:	800°C

	c	I eff	SD	CV	k0	k1	k2	DF
NPOC	**0mg/l**	**141.2AU B!**			-0.15993	7.184E-4	-	1

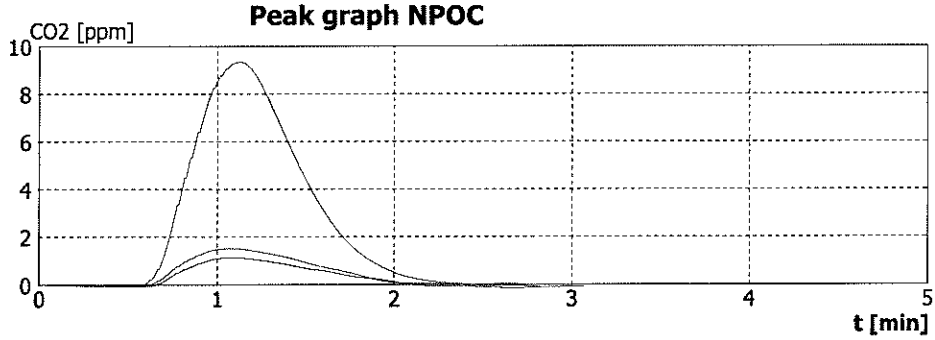
Blank values

NPOC	Diluent blank	0AU/ml

Single replicates:

	Rep.	1	2	3
NPOC	**c [mg/l]**	~~0.743~~	0	0
NPOC	**I [AU]**	~~739.6~~	167.3	115.2

Peak graph NPOC



AnalysisReport

Sample ID:	SQ6238-6		
Time of analysis:	12/7/2023 3:21:30 AM -0500	**Method:**	TOC_Method_101223
Directory:	C:\ProgramData\IDC\multiWin\Analyses\2023\12		
File name:	231207032130.ajd		
User:	Admin	**Sample volume:**	500.0µl
Sample type:	Sample	**Dilution:**	1 in 1
Status:	Measurement completed successfully	**Determinations:**	2-3
		Furnace temperature:	800°C

	c	I eff	SD	CV	k0	k1	k2	DF
NPOC	**4.71mg/l**	**3,498AU**	20.15µg/l	0.43%	-0.15993	7.184E-4	-	1

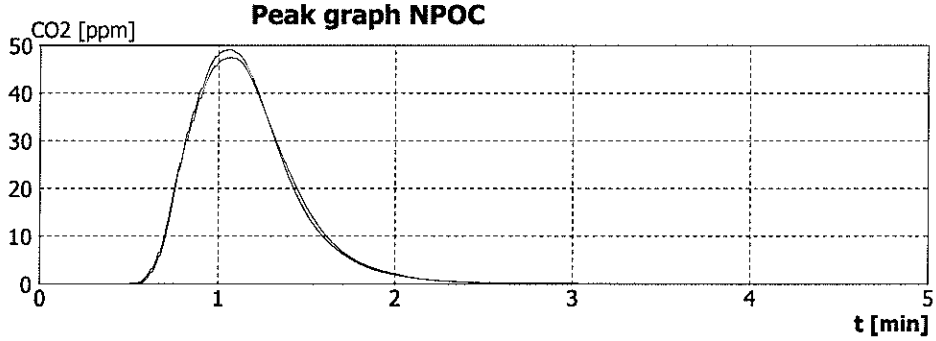
Blank values

NPOC	Diluent blank	0AU/ml

Single replicates:

	Rep.	1	2
NPOC	**c [mg/l]**	4.69	4.72
NPOC	**I [AU]**	3,488	3,508

Peak graph NPOC



AnalysisReport

Sample ID:	SQ6238-7		
Time of analysis:	12/7/2023 3:32:45 AM -0500	**Method:**	TOC_Method_101223
Directory:	C:\ProgramData\IDC\multiWin\Analyses\2023\12		
File name:	231207033245.ajd		
User:	Admin	**Sample volume:**	500.0µl
Sample type:	Sample	**Dilution:**	1 in 1
Status:	Measurement completed successfully	**Determinations:**	2-3
		Furnace temperature:	800°C

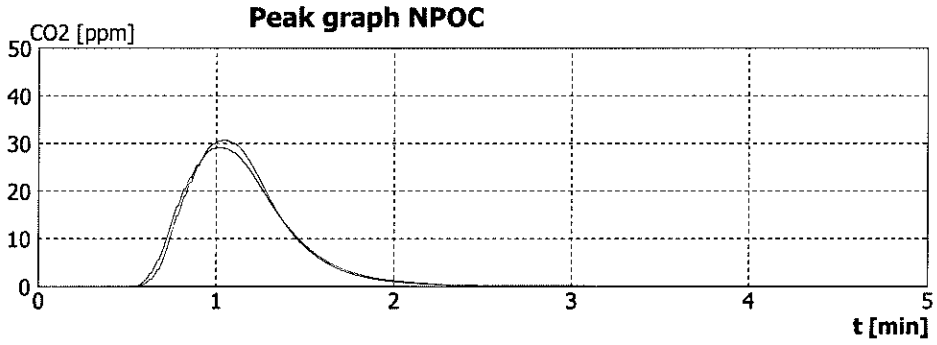
	c	I eff	SD	CV	k0	k1	k2	DF
NPOC	**2.70mg/l**	**2,101AU**	18.54µg/l	0.69%	-0.15993	7.184E-4	-	1

Blank values

NPOC	Diluent blank	0AU/ml

Single replicates:

	Rep.	1	2
NPOC	**c [mg/l]**	2.69	2.71
NPOC	**I [AU]**	2,092	2,110



AnalysisReport

Sample ID:	SQ6238-8		
Time of analysis:	12/7/2023 3:43:39 AM -0500	**Method:**	TOC_Method_101223
Directory:	C:\ProgramData\IDC\multiWin\Analyses\2023\12		
File name:	231207034339.ajd		
User:	Admin	**Sample volume:**	500.0µl
Sample type:	Sample	**Dilution:**	1 in 1
Status:	Measurement completed successfully	**Determinations:**	2-3
		Furnace temperature:	800°C

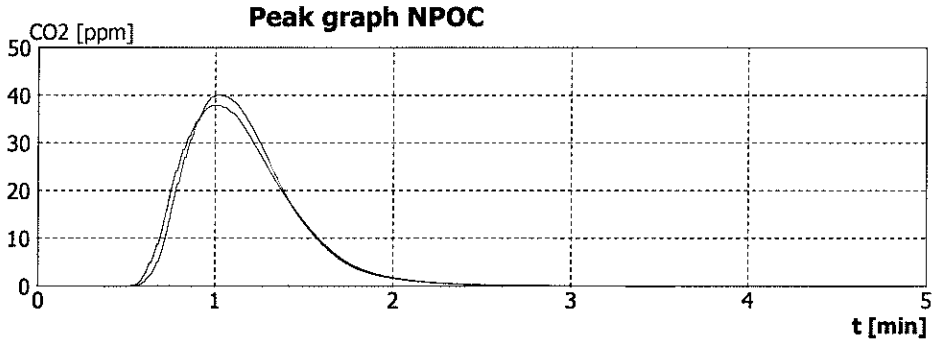
	c	I eff	SD	CV	k0	k1	k2	DF
NPOC	3,87mg/l	2,914AU	12.46µg/l	0.32%	-0.15993	7.184E-4	-	1

Blank values

NPOC	Diluent blank	0AU/ml

Single replicates:

	Rep.	1	2
NPOC	c [mg/l]	3.88	3.86
NPOC	I [AU]	2,921	2,908



AnalysisReport

Sample ID:	SQ6238-9		
Time of analysis:	12/7/2023 3:55:28 AM -0500	**Method:**	TOC_Method_101223
Directory:	C:\ProgramData\IDC\multiWin\Analyses\2023\12		
File name:	231207035528.ajd		
User:	Admin	**Sample volume:**	500.0µl
Sample type:	Sample	**Dilution:**	1 in 1
Status:	Measurement completed successfully	**Determinations:**	2-3
		Furnace temperature:	800°C

	c	I eff	SD	CV	k0	k1	k2	DF
NPOC	**2.29mg/l**	**1,819AU**	25.94µg/l	1.13%	-0.15993	7.184E-4	-	1

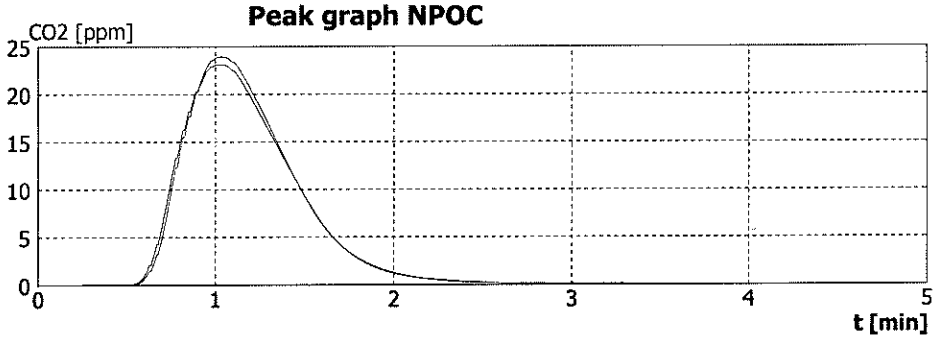
Blank values

NPOC	Diluent blank	0AU/ml

Single replicates:

	Rep.	1	2
NPOC	**c [mg/l]**	2.28	2.31
NPOC	**I [AU]**	1,806	1,832

Peak graph NPOC



AnalysisReport

Sample ID:	SQ6238-10		
Time of analysis:	12/7/2023 4:06:43 AM -0500	**Method:**	TOC_Method_101223
Directory:	C:\ProgramData\IDC\multiWin\Analyses\2023\12		
File name:	231207040643.ajd		
User:	Admin	**Sample volume:**	500.0µl
Sample type:	Sample	**Dilution:**	1 in 1
Status:	Measurement completed successfully	**Determinations:**	2-3
		Furnace temperature:	800°C

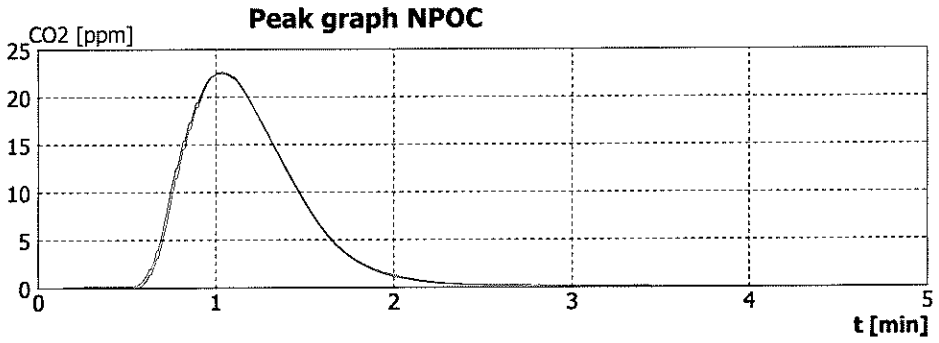
	c	I eff	SD	CV	k0	k1	k2	DF
NPOC	2,18mg/l	1,739AU	33.92µg/l	1.56%	-0.15993	7.184E-4	-	1

Blank values

NPOC	Diluent blank	0AU/ml

Single replicates:

	Rep.	1	2
NPOC	c [mg/l]	2.16	2.20
NPOC	I [AU]	1,723	1,756



AnalysisReport

Sample ID:	SQ6238-11		
Time of analysis:	12/7/2023 4:17:55 AM -0500	**Method:**	TOC_Method_101223
Directory:	C:\ProgramData\IDC\multiWin\Analyses\2023\12		
File name:	231207041755.ajd		
User:	Admin	**Sample volume:**	500.0µl
Sample type:	Sample	**Dilution:**	1 in 1
Status:	Measurement completed successfully	**Determinations:**	2-3
		Furnace temperature:	800°C

	c	I eff	SD	CV	k0	k1	k2	DF
NPOC	**1.40mg/l**	**1,199AU**	6.49µg/l	0.46%	-0.15993	7.184E-4	-	1

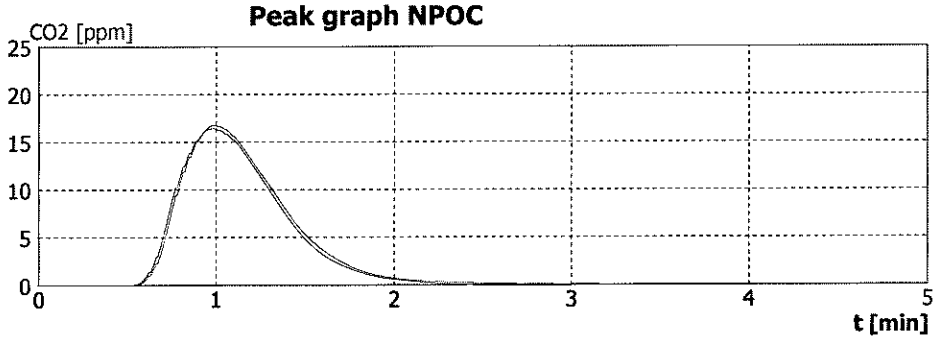
Blank values

NPOC	Diluent blank	0AU/ml

Single replicates:

	Rep.	1	2
NPOC	**c [mg/l]**	1.40	1.41
NPOC	**I [AU]**	1,196	1,203

Peak graph NPOC



AnalysisReport

Sample ID: SQ6257-1

Time of analysis:	12/7/2023 4:37:36 AM -0500	**Method:**	TOC_Method_101223
Directory:	C:\ProgramData\IDC\multiWin\Analyses\2023\12		
File name:	231207043736.ajd		
User:	Admin	**Sample volume:**	500.0µl
Sample type:	Sample	**Dilution:**	1 in 1
Status:	Measurement completed successfully	**Determinations:**	2-3
		Furnace temperature:	800°C

	c	I eff	SD	CV	k0	k1	k2	DF
NPOC	**1.07mg/l**	**964.9AU**	23.86µg/l	2.24%	-0.15993	7.184E-4	-	1

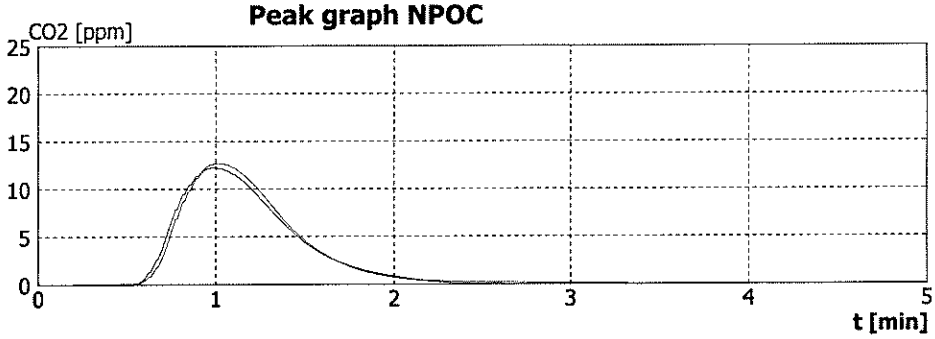
Blank values

NPOC	Diluent blank	0AU/ml

Single replicates:

	Rep.	1	2
NPOC	c [mg/l]	1.05	1.08
NPOC	I [AU]	953.1	976.6

Peak graph NPOC



AnalysisReport

Sample ID:	SQ6257-3		
Time of analysis:	12/7/2023 4:48:23 AM -0500	**Method:**	TOC_Method_101223
Directory:	C:\ProgramData\IDC\multiWin\Analyses\2023\12		
File name:	231207044823.ajd		
User:	Admin	**Sample volume:**	500.0µl
Sample type:	Sample	**Dilution:**	1 in 1
Status:	Measurement completed successfully	**Determinations:**	2-3
		Furnace temperature:	800°C

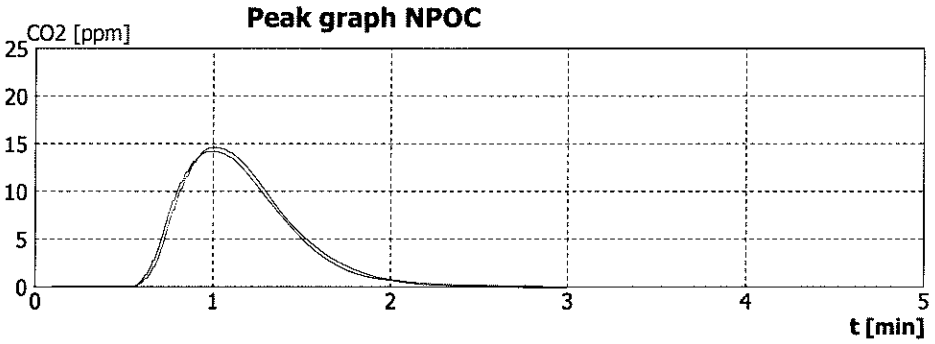
	c	I eff	SD	CV	k0	k1	k2	DF
NPOC	1.30mg/l	1,128AU	2.40µg/l	0.18%	-0.15993	7.184E-4	-	1

Blank values

NPOC	Diluent blank	0AU/ml

Single replicates:

	Rep.	1	2
NPOC	c [mg/l]	1.30	1.30
NPOC	I [AU]	1,127	1,129



AnalysisReport

Sample ID:	SQ6257-5		
Time of analysis:	12/7/2023 4:59:07 AM -0500	**Method:**	TOC_Method_101223
Directory:	C:\ProgramData\IDC\multiWin\Analyses\2023\12		
File name:	231207045907.ajd		
User:	Admin	**Sample volume:**	500.0µl
Sample type:	Sample	**Dilution:**	1 in 1
Status:	Measurement completed successfully	**Determinations:**	2-3
		Furnace temperature:	800°C

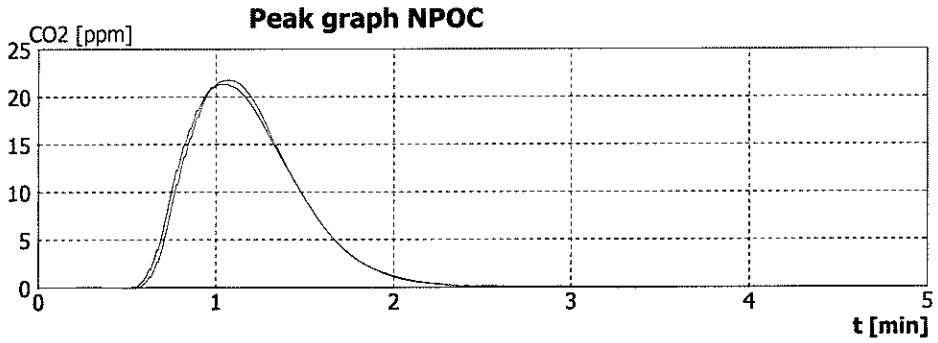
	c	I eff	SD	CV	k0	k1	k2	DF
NPOC	2.19mg/l	1,746AU	10.28µg/l	0.47%	-0.15993	7.184E-4	-	1

Blank values

NPOC	Diluent blank	0AU/ml

Single replicates:

	Rep.	1	2
NPOC	c [mg/l]	2.18	2.20
NPOC	I [AU]	1,741	1,751



AnalysisReport

Sample ID: CCV

Time of analysis:	12/7/2023 5:10:32 AM -0500	**Method:**	TOC_Method_101223
Directory:	C:\ProgramData\IDC\multiWin\Analyses\2023\12		
File name:	231207051032.ajd		
User:	Admin	**Sample volume:**	500.0µl
Sample type:	Sample	**Dilution:**	1 in 1
Status:	Measurement completed successfully	**Determinations:**	2-3
		Furnace temperature:	800°C

	c	I eff	SD	CV	k0	k1	k2	DF
NPOC	**103.4mg/l**	**7.218E4AU**	699.6µg/l	0.68%	-0.15993	7.184E-4	-	1

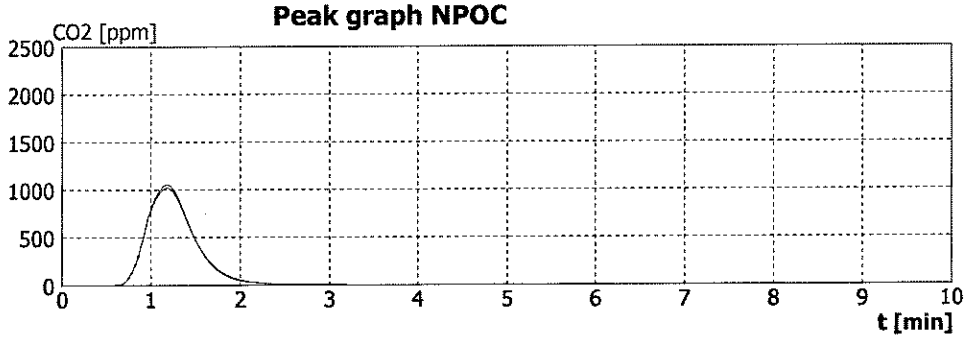
Blank values

NPOC	Diluent blank	0AU/ml

Single replicates:

	Rep.	1	2
NPOC	c [mg/l]	102.9	103.9
NPOC	I [AU]	7.184E4	7.253E4

Peak graph NPOC



AnalysisReport

Sample ID: CCB

Time of analysis:	12/7/2023 5:26:36 AM -0500	**Method:**	TOC_Method_101223
Directory:	C:\ProgramData\IDC\multiWin\Analyses\2023\12		
File name:	231207052636.ajd		
User:	Admin	**Sample volume:**	500.0µl
Sample type:	Sample	**Dilution:**	1 in 1
Status:	Measurement completed successfully	**Determinations:**	2-3
		Furnace temperature:	800°C

	c	I eff	SD	CV	k0	k1	k2	DF
NPOC	**0mg/l**	**129.3AU B!**			-0.15993	7.184E-4	-	1

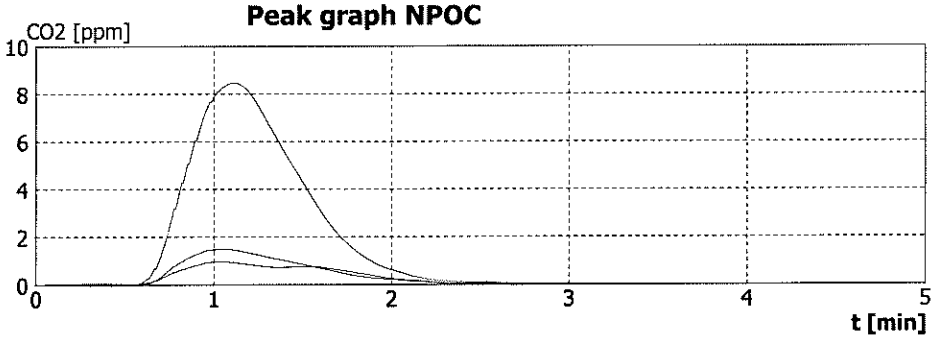
Blank values

NPOC	Diluent blank	0AU/ml

Single replicates:

	Rep.	1	2	3
NPOC	**c [mg/l]**	~~0.658~~	0	0
NPOC	**I [AU]**	~~680.5~~	146.3	112.4

Peak graph NPOC



aj-Analyzer multi N/C 3100; multiWin 4.12; Serial No: N3-2320/AX

CalibrationReport

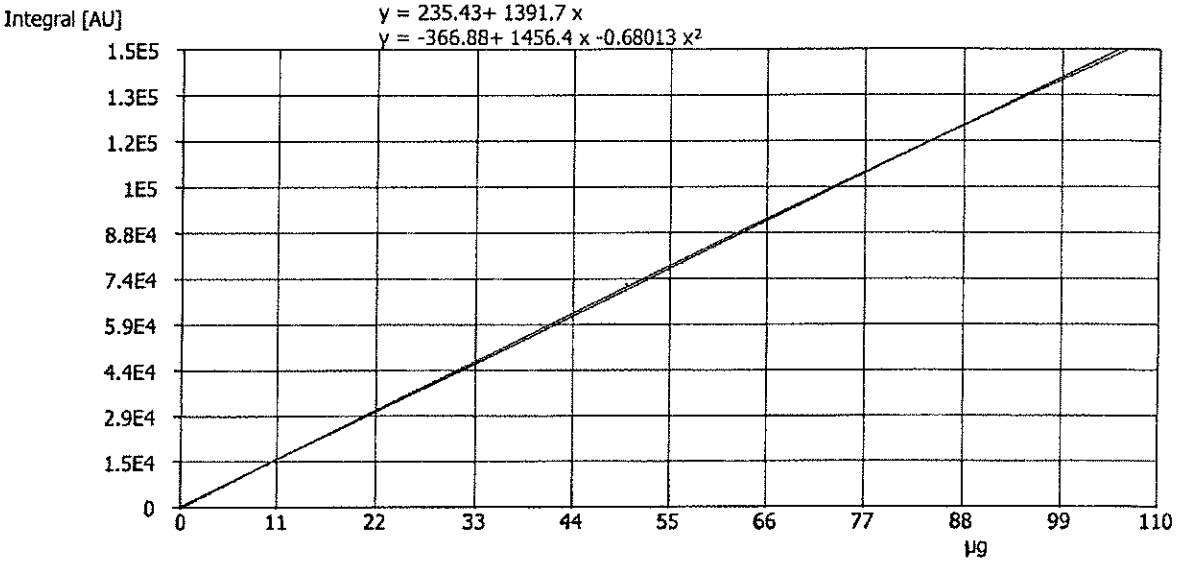
Calibration: Cal_NPOC_Test_8MAY2023_230824_1145
Calibration of: 8/24/2023 11:45:49 AM -0400 **Method:** NPOC_Test_8MAY2023
Directory: C:\ProgramData\IDC\multiWin\Calibration\2023\08
File name: 230824114549.ajc

User: Admin
Calibration channel: **NPOC**
Linear regression [µg]: c = (k1·Ieff + k0) / V
k0 = -0.15993 k1 = 7.184E-4

Residual standard deviation:	922.84AU		
Method standard deviation:	1.33mg/l		
Method variation coefficient:	1.765%	**Detection limit:**	2.13mg/l
Quality of replicates:	0.99976	**Identification limit:**	4.25mg/l
Correlation coefficient:	0.99988	**Quantification limit:**	7.98mg/l

Calibration with fixed sample volume: 500.0µl

No.	Rep.	c-nom.	m-Nominal	I-Net	c-act.	c-delta
BV	3-3			491.4AU/ml		
1	3-3	1.000mg/l	0.500µg	814.0AU	0.850mg/l	-15.03%
2	3-3	5.000mg/l	2.50µg	3,299AU	4.420mg/l	-11.61%
3	3-3	20.000mg/l	10.00µg	1.379E4AU	19.499mg/l	-2.50%
4	3-3	50.000mg/l	25.00µg	3.493E4AU	49.868mg/l	-0.26%
5	3-3	100.000mg/l	50.00µg	7.154E4AU	102.480mg/l	2.48%
6	3-3	150.000mg/l	75.00µg	1.048E5AU	150.290mg/l	0.19%
7	3-3	200.000mg/l	100.0µg	1.384E5AU	198.600mg/l	-0.70%



CalibrationReport

Calibration:	Cal_NPOC_Test_8MAY2023_230824_1145		
Calibration of:	8/24/2023 11:45:49 AM -0400	**Method:**	NPOC_Test_8MAY2023
Directory:	C:\ProgramData\IDC\multiWin\Calibration\2023\08		
File name:	230824114549.ajc		

User:	Admin		
Calibration channel:	**NPOC**		
Linear regression [µg]:	c = (k1·Ieff + k0) / V		
	k0 = -0.15993	k1 = 7.184E-4	
Residual standard deviation:	922.84AU		
Method standard deviation:	1.33mg/l		
Method variation coefficient:	1.765%	**Detection limit:**	2.13mg/l
Quality of replicates:	0.99976	**Identification limit:**	4.25mg/l
Correlation coefficient:	0.99988	**Quantification limit:**	7.98mg/l

Replicate area units

No.	Avg.	1	2	3	4	5
		6	7	8	9	10
H2O	245.7	277.8	242.2	217.2		
1	814.0	819.1	818.6	804.3		
2	3,299	3,257	3,351	3,288		
3	1.379E4	1.364E4	1.392E4	1.382E4		
4	3.493E4	3.459E4	3.519E4	3.501E4		
5	7.154E4	7.104E4	7.192E4	7.167E4		
6	1.048E5	1.047E5	1.053E5	1.045E5		
7	1.384E5	1.373E5	1.395E5	1.386E5		

aj-Analyzer multi N/C 3100; multiWin 4.12; Serial No: N3-2320/AX

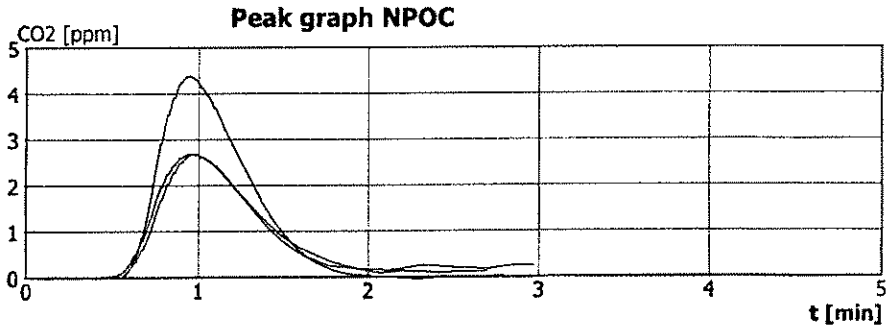
AnalysisReport

Sample ID:	Cal_NPOC_Test_8MAY2023_230824_1145_Konz00		
Time of analysis:	8/24/2023 12:03:41 PM -0400	**Method:**	NPOC_Test_8MAY20
Directory:	C:\ProgramData\IDC\multiWin\Analyses\2023\08		
File name:	230824120341.ajd		
User:	Admin	**Sample volume:**	500.0µl
Sample type:	Determination Preparation blank	**Dilution:**	1 in 1
Status:	Measurement completed successfully	**Determinations:**	3-3
		Furnace temperature:	800°C

	c	I eff	SD	CV
NPOC		245.7AU		

Single replicates:

	Rep.	1	2	3
NPOC	I [AU]	277.8	242.2	217.2



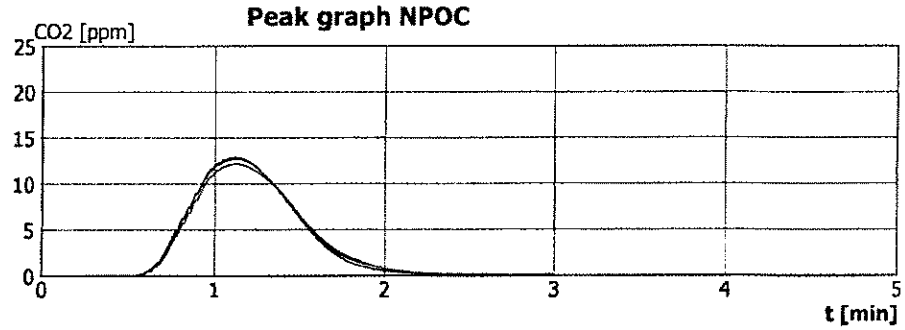
AnalysisReport

Sample ID:	Cal_NPOC_Test_8MAY2023_230824_1145_Konz01		
Time of analysis:	8/24/2023 12:24:21 PM -0400	**Method:**	NPOC_Test_8MAY20
Directory:	C:\ProgramData\IDC\multiWin\Analyses\2023\08		
File name:	230824122421.ajd		
User:	Admin	**Sample volume:**	500.0µl
Sample type:	Calibration measurement	**Dilution:**	1 in 1
Status:	Measurement completed successfully	**Determinations:**	3-3
		Furnace temperature:	800°C

	c	I eff	SD	CV
NPOC		1,060AU		

Single replicates:

	Rep.	1	2	3
NPOC	I [AU]	1,065	1,064	1,050



AnalysisReport

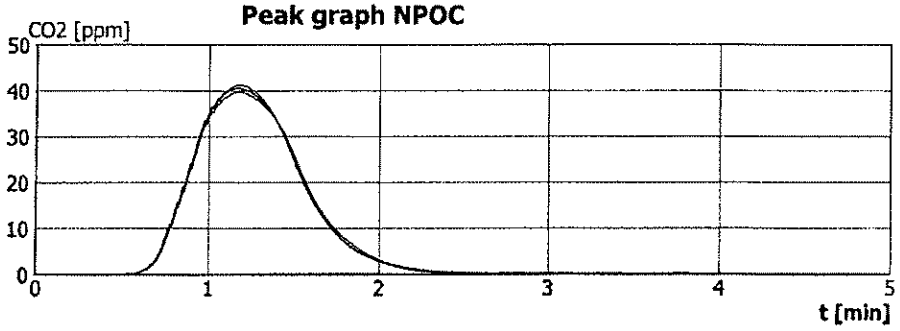
Sample ID:	Cal_NPOC_Test_8MAY2023_230824_1145_Konz02		
Time of analysis:	8/24/2023 12:39:12 PM -0400	**Method:**	NPOC_Test_8MAY20
Directory:	C:\ProgramData\IDC\multiWin\Analyses\2023\08		
File name:	230824123912.ajd		
User:	Admin	**Sample volume:**	500.0µl
Sample type:	Calibration measurement	**Dilution:**	1 in 1
Status:	Measurement completed successfully	**Determinations:**	3-3
		Furnace temperature:	800°C

	c	I eff	SD	CV
NPOC		3,544AU		

Single replicates:

	Rep.	1	2	3
NPOC	I [AU]	3,502	3,597	3,534

Peak graph NPOC



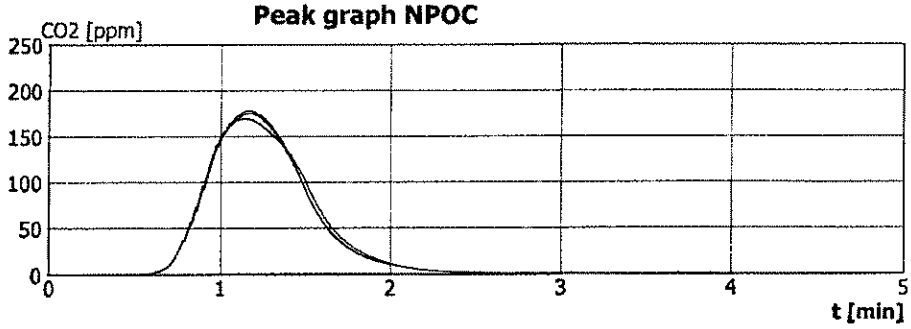
AnalysisReport

Sample ID:	Cal_NPOC_Test_8MAY2023_230824_1145_Konz03		
Time of analysis:	8/24/2023 12:55:21 PM -0400	**Method:**	NPOC_Test_8MAY20
Directory:	C:\ProgramData\IDC\multiWin\Analyses\2023\08		
File name:	230824125521.ajd		
User:	Admin	**Sample volume:**	500.0µl
Sample type:	Calibration measurement	**Dilution:**	1 in 1
Status:	Measurement completed successfully	**Determinations:**	3-3
		Furnace temperature:	800°C

	c	I eff	SD	CV
NPOC		1.404E4AU		

Single replicates:

	Rep.	1	2	3
NPOC	I [AU]	1.389E4	1.417E4	1.407E4



AnalysisReport

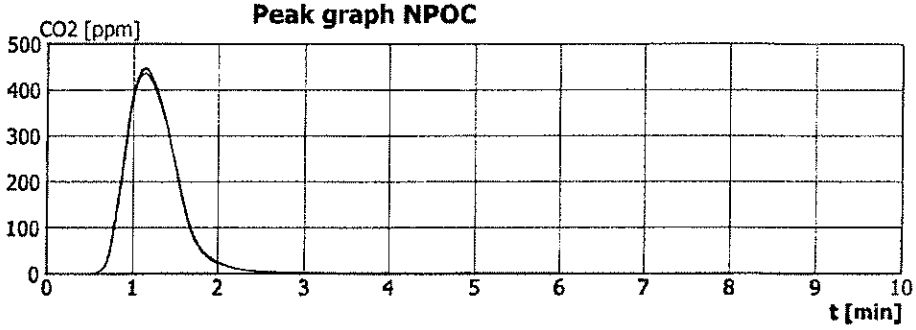
Sample ID:	Cal_NPOC_Test_8MAY2023_230824_1145_Konz04		
Time of analysis:	8/24/2023 1:13:55 PM -0400	**Method:**	NPOC_Test_8MAY20
Directory:	C:\ProgramData\IDC\multiWin\Analyses\2023\08		
File name:	230824131355.ajd		
User:	Admin	**Sample volume:**	500.0µl
Sample type:	Calibration measurement	**Dilution:**	1 in 1
Status:	Measurement completed successfully	**Determinations:**	3-3
		Furnace temperature:	800°C

	c	I eff	SD	CV
NPOC		3.518E4AU		

Single replicates:

	Rep.	1	2	3
NPOC	I [AU]	3.484E4	3.544E4	3.525E4

Peak graph NPOC



aj-Analyzer multi N/C 3100; multiWin 4.12; Serial No: N3-2320/AX

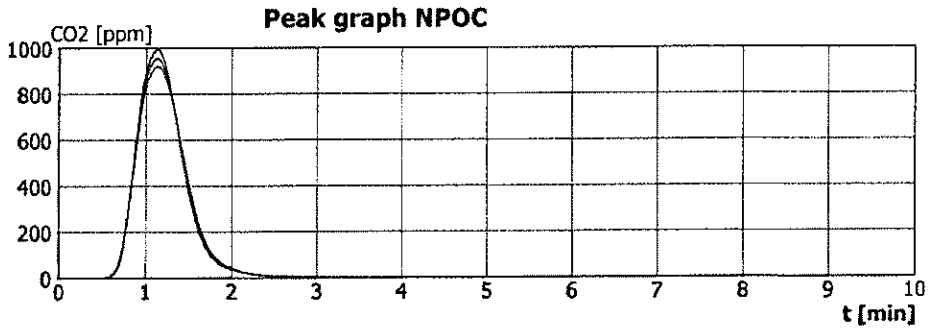
AnalysisReport

Sample ID:	Cal_NPOC_Test_8MAY2023_230824_1145_Konz05		
Time of analysis:	8/24/2023 1:36:32 PM -0400	**Method:**	NPOC_Test_8MAY20
Directory:	C:\ProgramData\IDC\multiWin\Analyses\2023\08		
File name:	230824133632.ajd		
User:	Admin	**Sample volume:**	500.0µl
Sample type:	Calibration measurement	**Dilution:**	1 in 1
Status:	Measurement completed successfully	**Determinations:**	3-3
		Furnace temperature:	800°C

	c	I eff	SD	CV
NPOC		7.179E4AU		

Single replicates:

	Rep.	1	2	3
NPOC	I [AU]	7.129E4	7.217E4	7.192E4



aj-Analyzer multi N/C 3100; multiWin 4.12; Serial No: N3-2320/AX

AnalysisReport

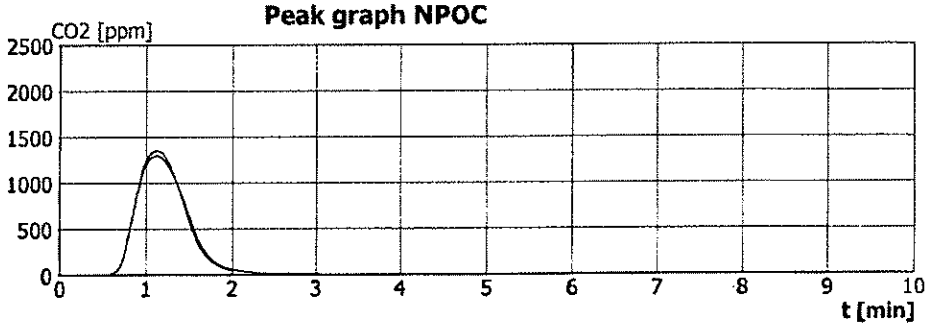
Sample ID:	Cal_NPOC_Test_8MAY2023_230824_1145_Konz06		
Time of analysis:	8/24/2023 1:59:18 PM -0400	**Method:**	NPOC_Test_8MAY20
Directory:	C:\ProgramData\IDC\multiWin\Analyses\2023\08		
File name:	230824135918.ajd		
User:	Admin	**Sample volume:**	500.0µl
Sample type:	Calibration measurement	**Dilution:**	1 in 1
Status:	Measurement completed successfully	**Determinations:**	3-3
		Furnace temperature:	800°C

	c	I eff	SD	CV
NPOC		1.051E5AU		

Single replicates:

	Rep.	1	2	3
NPOC	I [AU]	1.049E5	1.055E5	1.048E5

Peak graph NPOC



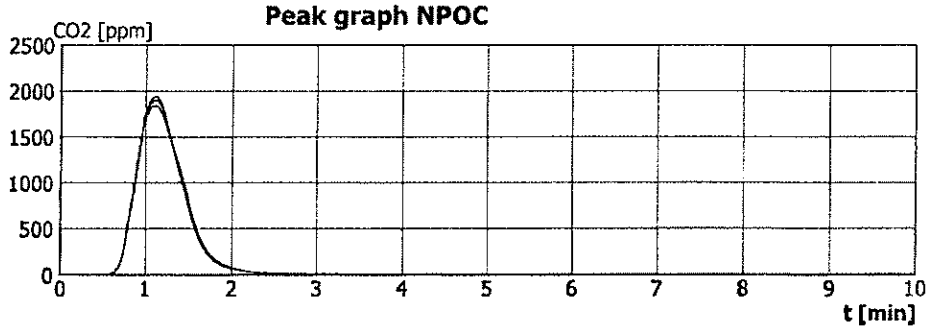
AnalysisReport

Sample ID:	Cal_NPOC_Test_8MAY2023_230824_1145_Konz07		
Time of analysis:	8/24/2023 2:22:02 PM -0400	**Method:**	NPOC_Test_8MAY20
Directory:	C:\ProgramData\IDC\multiWin\Analyses\2023\08		
File name:	230824142202.ajd		
User:	Admin	**Sample volume:**	500.0µl
Sample type:	Calibration measurement	**Dilution:**	1 in 1
Status:	Measurement completed successfully	**Determinations:**	3-3
		Furnace temperature:	800°C

	c	I eff	SD	CV
NPOC		1.387E5AU		

Single replicates:

	Rep.	1	2	3
NPOC	I [AU]	1.375E5	1.397E5	1.388E5



Katahdin
ANALYTICAL SERVICES

Cert No E87604

Wet Chemistry Batch Report

Analyst Initials: RAD
Date Analyzed: 06-DEC-23

Batch: WG346589
Prep Method: N/A
Prep Chemist: RAD

Sample	Samp Type	Method	Parameter	DF	Result		Rpt. Result	Units	PQL	Adj. PQL	MDL	Adj. MDL	RPD	Rec.
SQ6662-1	SAMP	EPA 300.0	Nitrate as N	1	.119		0.12	mg/L	.05	0.050	.0174	0.017		
SQ6662-1	SAMP	EPA 300.0	Nitrite as N	1	.2902		0.29	mg/L	.05	0.050	.0092	0.0092		
WG346589-1	MBLANK	EPA 300.0	Nitrate as N	1	.0186	J	0.019	mg/L	.05	0.050	.0174	0.017		
WG346589-1	MBLANK	EPA 300.0	Nitrite as N	1	.027	J	0.027	mg/L	.05	0.050	.0092	0.0092		
WG346589-2	LCS	EPA 300.0	Nitrate as N	1	.8263		0.826	mg/L	.05	0.050	.0174	0.017		97.8
WG346589-2	LCS	EPA 300.0	Nitrite as N	1	1.155		1.16	mg/L	.05	0.050	.0092	0.0092		102.

Comments:

WG346589-1	SQ6662-1
WG346589-2	SQ6662-1

Entered by: RAD Date: 12/7/23 Accepted by: SS Date: 12/7/23

Katahdin Analytical Services SQ6238 Page 753 of 875

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Wet Chemistry Batch Report

Analyst Initials: RAD
Date Analyzed: 06-DEC-23
07-DEC-23

Batch: WG346590
Prep Method: N/A
Prep Chemist: RAD

Sample	Samp Type	Method	Parameter	DF	Result		Rpt. Result	Units	PQL	Adj. PQL	MDL	Adj. MDL	RPD	Rec.
SQ6238-10DLA	SAMP	EPA 300.0	Chloride	50	857.1746		860	mg/L	2	100	.0993	5.0		
SQ6238-10DLB	SAMP	EPA 300.0	Sulfate	5	246.7068		250	mg/L	1	5.0	.0637	0.32		
SQ6238-11DL	SAMP	EPA 300.0	Chloride	5	137.7992		140	mg/L	2	10.	.0993	0.50		
SQ6238-9DLA	SAMP	EPA 300.0	Chloride	50	847.1909		850	mg/L	2	100	.0993	5.0		
SQ6238-9DLB	SAMP	EPA 300.0	Sulfate	5	242.7443		240	mg/L	1	5.0	.0637	0.32		
SQ6382-1DLA	SAMP	EPA 300.0	Chloride	500	16213.1125		16000	mg/L	2	1000	.0993	50.		
SQ6382-1DLA	SAMP	EPA 300.0	Sulfate	500	2211.7727		2200	mg/L	1	500	.0637	32.		
SQ6382-3DLA	SAMP	EPA 300.0	Chloride	500	16664.9926		17000	mg/L	2	1000	.0993	50.		
SQ6382-3DLA	SAMP	EPA 300.0	Sulfate	500	2387.4155		2400	mg/L	1	500	.0637	32.		
SQ6382-5DLA	SAMP	EPA 300.0	Chloride	500	16589.141		16000	mg/L	2	1000	.0993	50.		
SQ6382-5DLA	SAMP	EPA 300.0	Sulfate	500	2322.9846		2300	mg/L	1	500	.0637	32.		
SQ6382-7DLA	SAMP	EPA 300.0	Chloride	500	16294.3895		16000	mg/L	2	1000	.0993	50.		
SQ6382-7DLA	SAMP	EPA 300.0	Sulfate	500	2312.369		2300	mg/L	1	500	.0637	32.		
WG346590-1	MBLANK	EPA 300.0	Chloride	1	.0162	U	1.0	mg/L	2	2.0	.0993	0.099		
WG346590-1	MBLANK	EPA 300.0	Sulfate	1	.0557	U	0.50	mg/L	1	1.0	.0637	0.064		
WG346590-2	LCS	EPA 300.0	Chloride	1	3.6336		3.63	mg/L	2	2.00	.0993	0.0990		96.8
WG346590-2	LCS	EPA 300.0	Sulfate	1	3.5979		3.60	mg/L	1	1.00	.0637	0.0640		96.0
WG346590-3	MS	EPA 300.0	Chloride	500	18056.9		18000	mg/L	2	1000	.0993	50.0		93.6
WG346590-3	MS	EPA 300.0	Sulfate	500	4241.88		4240	mg/L	1	500.	.0637	32.0		103
WG346590-4	MSD	EPA 300.0	Chloride	500	18048.6		18000	mg/L	2	1000	.0993	50.0	0	93.2
WG346590-4	MSD	EPA 300.0	Sulfate	500	4267.37		4270	mg/L	1	500.	.0637	32.0	0	104

Comments:

SQ6238-10	Anions = NO3, SO4, C
SQ6238-11	Anions = NO3, SO4, C
SQ6238-9	Anions = NO3, SO4, C
SQ6382-1	MS/MSD Anions: SC
SQ6382-3	Anions: SO4, Cl. Sam
SQ6382-5	Anions: SO4, Cl. Sam
SQ6382-7	Anions: SO4, Cl. Sam
WG346590-1	SQ6238-10
WG346590-2	SQ6238-10
WG346590-3	SQ6382-1
WG346590-4	SQ6382-1

Entered by: RAD Date: 12/7/23 Accepted by: SS Date: 12/7/23

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Wet Chemistry Batch Report

Analyst Initials: RAD
Date Analyzed: 06-DEC-23
07-DEC-23

Batch: WG346591
Prep Method: N/A
Prep Chemist: RAD

Sample	Samp Type	Method	Parameter	DF	Result		Rpt. Result	Units	PQL	Adj. PQL	MDL	Adj. MDL	RPD	Rec.
SQ6602-2A	SAMP	SW846 9056A	Chloride	1	3.6819		3.7	mg/L	2	2.0	.5	0.50		
SQ6602-2A	SAMP	SW846 9056A	Sulfate	1	8.2054		8.2	mg/L	1	1.0	.25	0.25		
SQ6602-3A	SAMP	SW846 9056A	Chloride	1	3.6643		3.7	mg/L	2	2.0	.5	0.50		
SQ6602-3A	SAMP	SW846 9056A	Sulfate	1	10.243		10	mg/L	1	1.0	.25	0.25		
SQ6602-4A	SAMP	SW846 9056A	Chloride	1	9.3143		9.3	mg/L	2	2.0	.5	0.50		
SQ6602-4A	SAMP	SW846 9056A	Sulfate	1	22.1779		22	mg/L	1	1.0	.25	0.25		
SQ6602-5A	SAMP	SW846 9056A	Chloride	1	5.5722		5.6	mg/L	2	2.0	.5	0.50		
SQ6602-5A	SAMP	SW846 9056A	Sulfate	1	7.6542		7.6	mg/L	1	1.0	.25	0.25		
SQ6602-6A	SAMP	SW846 9056A	Chloride	1	14.1516		14	mg/L	2	2.0	.5	0.50		
SQ6602-6A	SAMP	SW846 9056A	Sulfate	1	13.4548		13	mg/L	1	1.0	.25	0.25		
SQ6602-7A	SAMP	SW846 9056A	Sulfate	1	19.9169		20	mg/L	1	1.0	.25	0.25		
SQ6602-7DL	SAMP	SW846 9056A	Chloride	2	53.6619		54	mg/L	2	4.0	.5	1.0		
SQ6603-3DL	SAMP	SW846 9056A	Chloride	2	63.7321		64	mg/L	2	4.0	.5	1.0		
WG346591-1	MBLANK	SW846 9056A	Chloride	1	.0162	U	1.0	mg/L	2	2.0	.5	0.50		
WG346591-1	MBLANK	SW846 9056A	Sulfate	1	.0557	U	0.50	mg/L	1	1.0	.25	0.25		
WG346591-2	LCS	SW846 9056A	Chloride	1	3.6336		3.63	mg/L	2	2.00	.5	0.500		96.8
WG346591-2	LCS	SW846 9056A	Sulfate	1	3.5979		3.60	mg/L	1	1.00	.25	0.250		96.0

Comments:

SQ6602-2	Anions=Cl, NO3, NO
SQ6602-3	Anions=Cl, NO3, NO
SQ6602-4	Anions=Cl, NO3, NO
SQ6602-5	Anions=Cl, NO3, NO
SQ6602-6	Anions=Cl, NO3, NO
SQ6602-7	Anions=Cl, NO3, NO
SQ6603-3	Anions=Cl, NO3, NO
WG346591-1	SQ6602-2
WG346591-2	SQ6602-2

Entered by: RAD Date: 12/7/23

Accepted by: SS Date: 12/7/23

IC STANDARDS PREPARATION

Fill sheet in completely and file with each batch of samples analyzed.

IC8 MIX ID:	EXPIRATION DATE:	ICAL DATE:	CCV STOCK ID:	EXPIRATION DATE:
W22233	10/23/23	10/12/23	W22360	12/11/23

ALALYTE	INITIAL AMOUNT (mL)	OF	STOCK CONC. (mg/L)	TO	FINAL VOLUME (mL)	=	FINAL CONC. (mg/L)
Cl	2.0	OF	1000	TO	100	=	20
NO2 (as N)	0.8		1000				8
NO3 (as N)	0.8		1000				8
Br	4.0		1000				40
SO4	4.0		1000				40
F	1.0		1000				10
PO4 (as P)	1.0		1000				10

WORKING STANDARDS

Standards prepared on each day of use.

STD.	INITIAL AMOUNT (mL)	OF	FINAL VOLUME (mL)	FINAL CONC. (mg/L)							STD ID*
				Cl	NO2	NO3	Br	SO4	PO4	F	
IC8	5	IC8	5	40	16	16	80	80	20	20	IC8-101223
IC7	2.5	IC8	5	20	8	8	40	40	10	10	IC7-101223
IC6	2.5	IC7	5	10	4	4	20	20	5	5	IC6-101223
IC5	1.25	IC7	5	5	2	2	10	10	2.5	2.5	IC5-101223
IC4	1.25	IC6	5	2.5	1	1	5	5	1.25	1.25	IC4-101223
IC3	0.5	IC6	5	1	0.4	0.4	2	2	0.5	0.5	IC3-101223
IC2	0.5	IC3	5	0.1	0.04	0.04	0.2	0.2	0.05	0.05	IC2-101223
CCV	2.5	IC7	5	10	4	4	20	20	5	5	CCV-120623

* STD ID is prefix followed by the date of preparation (ie. IC6-020216)

LCS/MATRIX SPIKE MIX ID: W22361	EXPIRATION DATE: 12/11/23

3.75 mL of High Purity Multi-Element IC Standard Solution "A" and 3.75 mL of High Purity Multi-Element IC Standard Solution "B" diluted to 50 mL. For MS, add 0.25 mL of mix to 4.75 mL of sample. For LCS, add 0.25 mL of mix to 4.75 mL of DI water.

FINAL CONCENTRATIONS (mg/L)

Cl	NO2 (as N)	NO3 (as N)	Br	SO4	PO4 (as P)	F	STD ID*
3.75	1.14	0.845	3.75	3.75	1.22	3.75	IC-LCS-120623

PIPETTES: W00, W16

2x dil = 2.5mL samp + 2.5mL DI	**5x dil** = 1.0mL samp + 4.0mL DI	**10x dil** = 0.5mL samp + 4.5mL DI
20x dil = 0.25mL samp + 4.75mL DI	**50x dil** = 0.1mL samp + 4.9mL DI	**100x dil** = 0.05mL samp + 4.95mL DI
200x dil = 0.025mL samp + 4.975mL DI	**500x dil** = 0.01mL samp + 4.99mL DI	**1000x dil** = 0.005mL samp + 4.995mL DI

Katahdin Analytical Services **ION CHROMATOGRAPHY RUNLOG** Dionex ICS-2100 (Instrument IC-3)

Analysis Date: 12/6/23	**Analytical Column S/N:** 220503194	**Calibration Date:** 10/12/23
Analysis Sequence: 120623 A	**Guard Column S/N:** 2204006208	**Calibration Sequence:** 101223 CAL
Analyst: RAD	**Suppressor S/N:** 2211170806	☐ If box at left is checked, continued from previous page. Refer to previous page for header information.

Reporting / Reanalysis Codes: ✓ Report without manipulation; **S** Report, peak automatically reintegrated with SmartPeak; **M** Report, peak manually integrated; **A** Report, peak manually assigned; **R** Do not report, reanalyze sample

Method Codes: **E** EPA 300.0; **SW** SW846 9056A

Katahdin Sample Number	Dilution Factor	Method Code	Report or Reanalyze (enter appropriate code): F	Cl	NO_2	SO_4	Br	NO_3	PO_4	Comments
CCV			✓	✓	✓	✓	✓	✓		
CCB			✓	✓	✓	✓	M	✓		
LCS			✓	✓	✓	✓	✓	✓		
SQ 6662 -1	1	DW		R	✓			✓		Cl=2X
6238 -9	50	E		✓						
-9	5	"				M				
-10	50			✓						
-10	5					M				
-11	5			✓						
CCV			✓	✓	✓	✓	✓	✓		
CCB			✓	✓	✓	✓	M	✓		
6382 -1	500	E		M		M				
-1 MS	"	"		✓		✓				
-1 MSD	"	"		✓		✓				
-1	20									DID NOT NEED
-1 MS	"	"								"
-1 MSD	"	"								"
DI RINSE										
6382 -3	500	E		M		M				
-3	20	"								DID NOT NEED
DI RINSE										
CCV			✓	✓	✓	✓	✓	✓		

Dup: WG346589 → R629073
E: WG346590 → R629071
S: WG346591 → R629072

Reviewed by: SS Review Date: 12/7/23

Katahdin Analytical Services **ION CHROMATOGRAPHY RUNLOG** Dionex ICS-2100 (Instrument IC-3)

Analysis Date:	**Analytical Column S/N:**	**Calibration Date:**
Analysis Sequence:	**Guard Column S/N:**	**Calibration Sequence:**
Analyst:	**Suppressor S/N:**	☑ If box at left is checked, continued from previous page. Refer to previous page for header information.

Reporting / Reanalysis Codes: ✓ Report without manipulation; **S** Report, peak automatically reintegrated with SmartPeak; **M** Report, peak manually integrated; **A** Report, peak manually assigned; **R** Do not report, reanalyze sample

Method Codes: **E** EPA 300.0; **SW** SW846 9056A

Katahdin Sample Number	Dilution Factor	Method Code	Report or Reanalyze (enter appropriate code): F	Cl	NO_2	SO_4	Br	NO_3	PO_4	Comments
CCB			M	✓	✓	✓	M	✓		
6382 -5	500	E		M		M				
" -5	20	"								DID NOT NEED
DI RINSE										
6382 -7	500	E		M		M				
" -7	20	"								DID NOT NEED
DI RINSE										
6602 -2	1	S		✓		✓				
-3	"	"		✓		✓				
-4	"	"		✓		✓				
" -5	"	"		✓		✓				
CCV			✓	✓	✓	✓	✓	✓		
CCB			M	✓	✓	✓	✓	✓		
6602 -6	1	S		✓		✓				
" -7	2	"		✓						
" -7	1	"				✓				
6603 -3	2	S		✓						
CCV			✓	✓	✓	✓	✓	✓		
CCB			M	✓	✓	✓	✓	✓		
										RAD 12/7/23

WL-069-Revision 1 – 04/12/20016

Reviewed by: SS **Review Date:** 12/7/23

QAWL1114 - 000893

0000020

Sequence Overview

Sequence Details

Name:	**120623 A REPROC**	*Created On:*	**28/Dec/22 13:33:49**
Directory:	**2023\12-DEC**	*Created By:*	**wetlab**
Data Vault:	**ChromeleonLocal**	*Updated On:*	**07/Dec/23 12:27:46**
No. of Injections:	**41**	*Updated By:*	**wetlab**

Injection Details

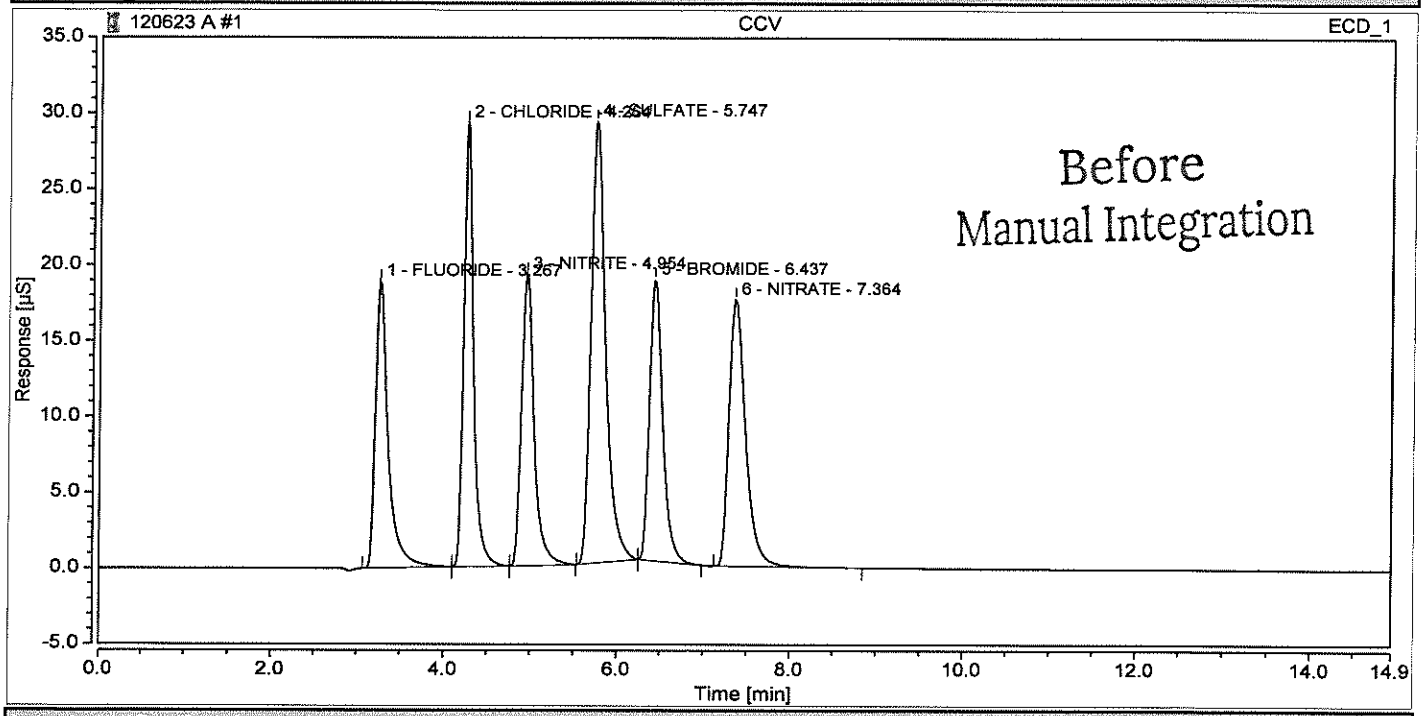
No.	Injection Name	Position	Type	Level	Inject Time	Status
1	CCV	1	Check Standard	06	06/Dec/23 17:40:29	Finished
2	CCB	2	Blank		06/Dec/23 17:57:14	Finished
3	LCS	3	Check Standard	09	06/Dec/23 18:14:30	Finished
4	SQ6662-1	4	Unknown		06/Dec/23 18:31:46	Finished
5	SQ6238-9DLA	5	Unknown		06/Dec/23 18:49:02	Finished
6	SQ6238-9DLB	6	Unknown		06/Dec/23 19:06:18	Finished
7	SQ6238-10DLA	7	Unknown		06/Dec/23 19:23:34	Finished
8	SQ6238-10DLB	8	Unknown		06/Dec/23 19:40:50	Finished
9	SQ6238-11DL	9	Unknown		06/Dec/23 19:58:06	Finished
10	CCV	13	Check Standard	06	06/Dec/23 20:15:22	Finished
11	CCB	14	Blank		06/Dec/23 20:32:39	Finished
12	SQ6382-1DLA	15	Unknown		06/Dec/23 20:49:55	Finished
13	SQ6382-1DLA MS	16	Unknown		06/Dec/23 21:07:11	Finished
14	SQ6382-1DLA MSD	17	Unknown		06/Dec/23 21:24:26	Finished
15	SQ6382-1DLB	18	Unknown		06/Dec/23 21:41:42	Finished
16	SQ6382-1DLB MS	19	Unknown		06/Dec/23 21:58:58	Finished
17	SQ6382-1DLB MSD	20	Unknown		06/Dec/23 22:16:14	Finished
18	DI RINSE	21	Unknown		06/Dec/23 22:33:30	Finished
19	SQ6382-3DLA	22	Unknown		06/Dec/23 22:50:46	Finished
20	SQ6382-3DLB	23	Unknown		06/Dec/23 23:08:02	Finished
21	DI RINSE	24	Unknown		06/Dec/23 23:25:18	Finished
22	CCV	25	Check Standard	06	06/Dec/23 23:42:34	Finished
23	CCB	26	Blank		06/Dec/23 23:59:50	Finished
24	SQ6382-5DLA	27	Unknown		07/Dec/23 00:17:06	Finished
25	SQ6382-5DLB	28	Unknown		07/Dec/23 00:34:22	Finished
26	DI RINSE	29	Unknown		07/Dec/23 00:51:38	Finished
27	SQ6382-7DLA	30	Unknown		07/Dec/23 01:08:54	Finished
28	SQ6382-7DLB	31	Unknown		07/Dec/23 01:26:09	Finished
29	DI RINSE	32	Unknown		07/Dec/23 01:43:31	Finished
30	SQ6602-2A	33	Unknown		07/Dec/23 02:00:47	Finished
31	SQ6602-3A	34	Unknown		07/Dec/23 02:18:03	Finished
32	SQ6602-4A	35	Unknown		07/Dec/23 02:35:19	Finished
33	SQ6602-5A	36	Unknown		07/Dec/23 02:52:35	Finished
34	CCV	37	Check Standard	06	07/Dec/23 03:09:51	Finished
35	CCB	38	Blank		07/Dec/23 03:27:07	Finished
36	SQ6602-6A	39	Unknown		07/Dec/23 03:44:23	Finished
37	SQ6602-7DL	40	Unknown		07/Dec/23 04:01:39	Finished
38	SQ6602-7A	41	Unknown		07/Dec/23 04:18:55	Finished
39	SQ6603-3DL	42	Unknown		07/Dec/23 04:36:11	Finished
40	CCV	49	Check Standard	06	07/Dec/23 04:53:27	Finished
41	CCB	50	Blank		07/Dec/23 05:10:45	Finished

Chromatogram and Results

Injection Details

Injection Name:	**CCV**	*Run Time (min):*	**14.94**
Vial Number:	**1**	*Injection Volume:*	**200.00**
Injection Type:	**Check Standard**	*Channel:*	**ECD_1**
Calibration Level:	**06**	*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**06/Dec/23 17:40**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

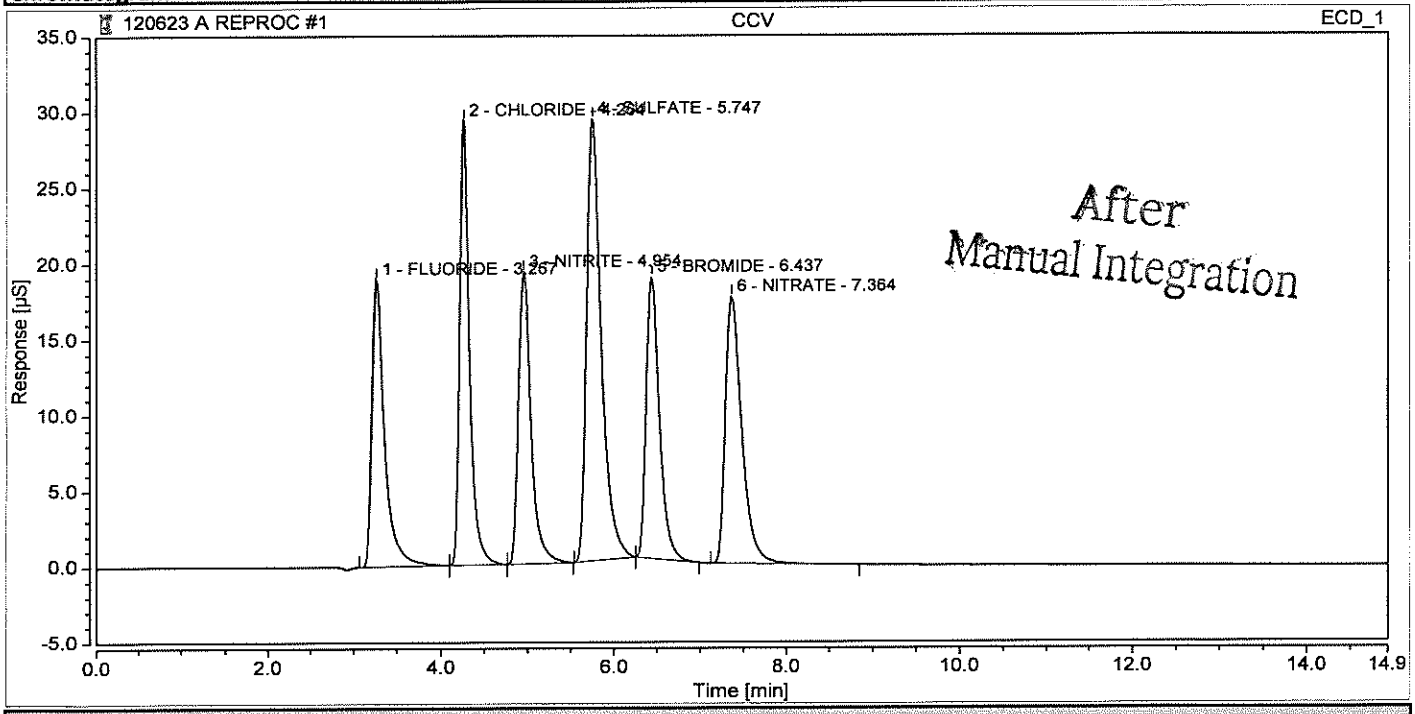
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.267	3.194	18.918	13.71	14.26	5.1908	3.8154
2	CHLORIDE	4.264	3.888	29.282	16.69	22.06	9.9756	-0.2444
3	NITRITE	4.954	3.270	19.245	14.04	14.50	3.9366	-1.5852
4	SULFATE	5.747	5.737	29.141	24.63	21.96	20.1805	0.9027
5	BROMIDE	6.437	3.330	18.545	14.30	13.97	19.5874	-2.0630
6	NITRATE	7.364	3.876	17.580	16.64	13.25	3.9608	-0.9806
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**23.295**	**132.712**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**CCV**	*Run Time (min):*	**14.94**
Vial Number:	**1**	*Injection Volume:*	**200.00**
Injection Type:	**Check Standard**	*Channel:*	**ECD_1**
Calibration Level:	**06**	*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**06/Dec/23 17:40**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

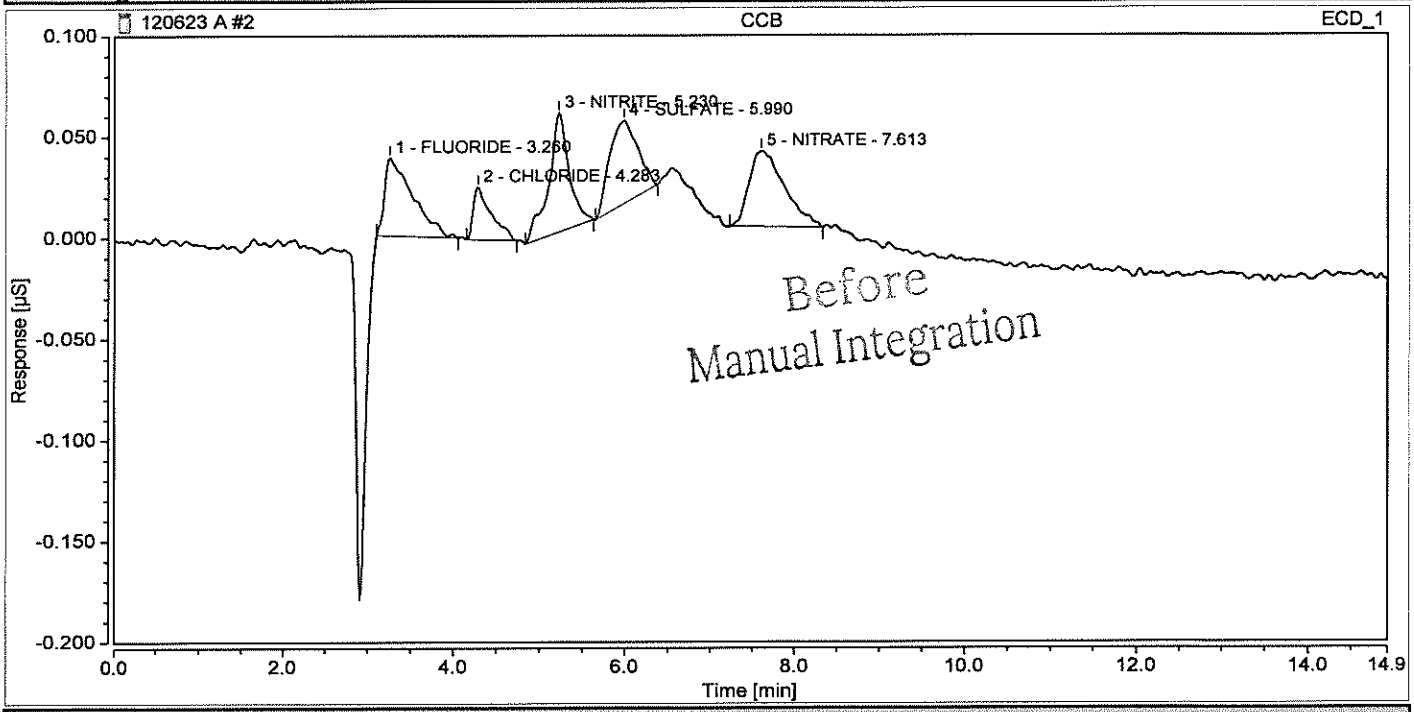
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.267	3.194	18.918	13.71	14.26	5.1908	3.8154
2	CHLORIDE	4.264	3.888	29.282	16.69	22.06	9.9756	-0.2444
3	NITRITE	4.954	3.270	19.245	14.04	14.50	3.9366	-1.5852
4	SULFATE	5.747	5.737	29.141	24.63	21.96	20.1805	0.9027
5	BROMIDE	6.437	3.330	18.545	14.30	13.97	19.5874	-2.0630
6	NITRATE	7.364	3.876	17.580	16.64	13.25	3.9608	-0.9806
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**23.295**	**132.712**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**CCB**	*Run Time (min):*	**14.94**
Vial Number:	**2**	*Injection Volume:*	**200.00**
Injection Type:	**Blank**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**06/Dec/23 17:57**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

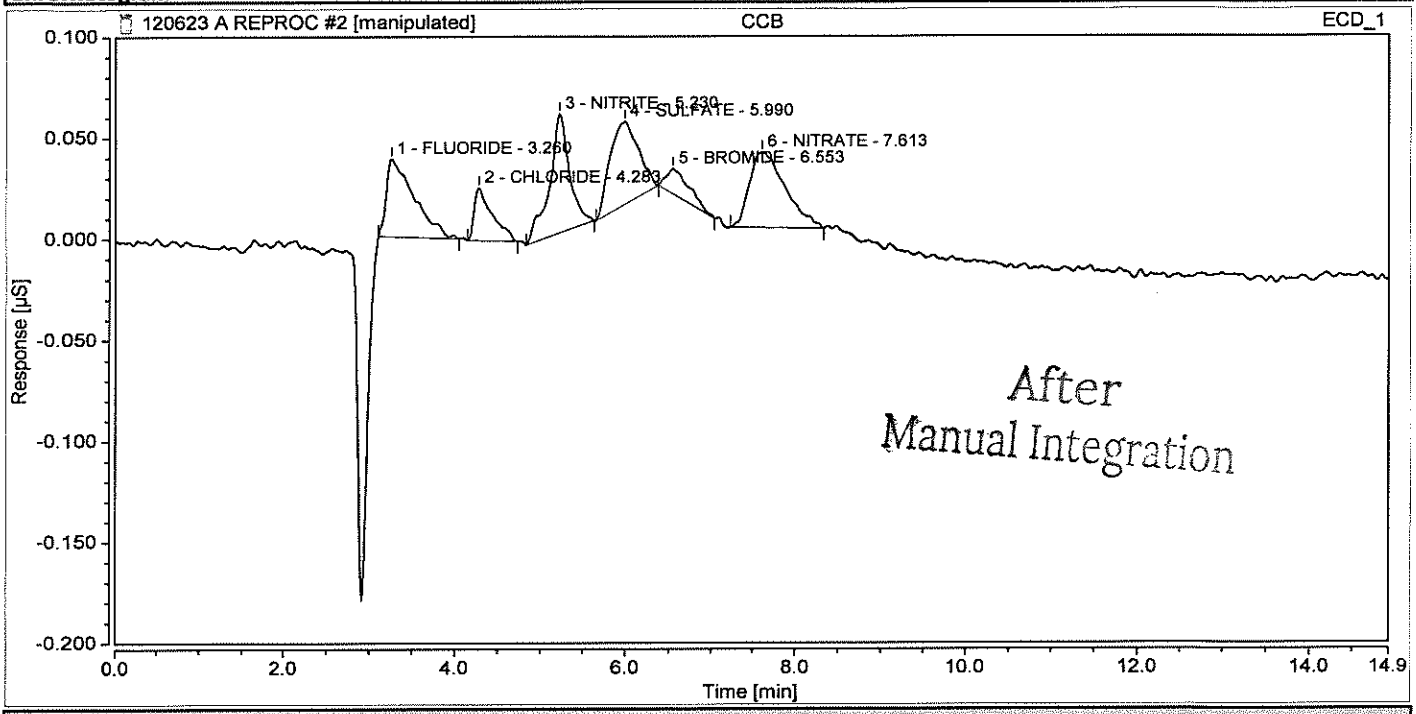
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.260	0.015	0.038	20.51	19.08	0.0396	n.a.
2	CHLORIDE	4.283	0.006	0.026	8.89	12.91	0.0162	n.a.
3	NITRITE	5.230	0.016	0.059	22.72	29.17	0.0270	n.a.
4	SULFATE	5.990	0.016	0.041	22.25	20.37	0.0557	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5	NITRATE	7.613	0.018	0.037	25.64	18.47	0.0186	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.071**	**0.202**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**CCB**	*Run Time (min):*	**14.94**
Vial Number:	**2**	*Injection Volume:*	**200.00**
Injection Type:	**Blank**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**06/Dec/23 17:57**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

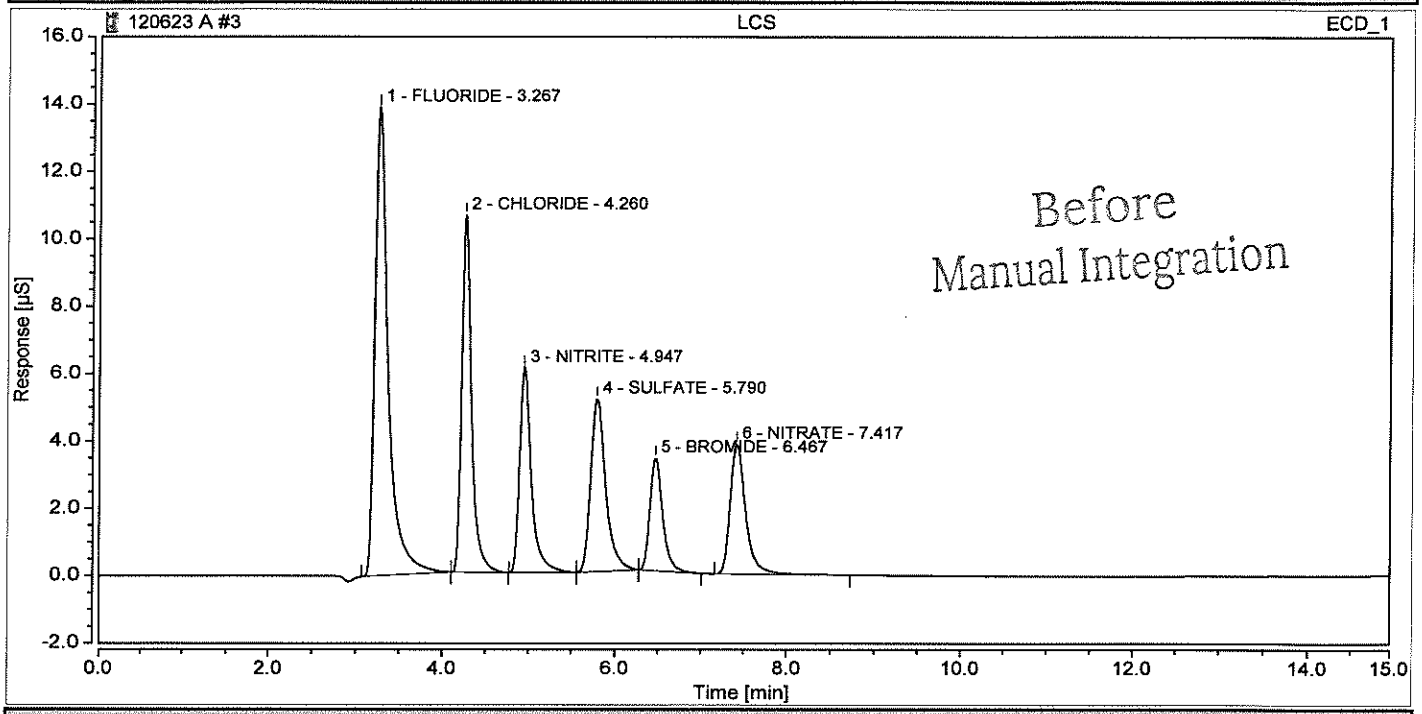
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.260	0.015	0.038	19.41	17.98	0.0396	n.a.
2	CHLORIDE	4.283	0.006	0.026	8.41	12.17	0.0162	n.a.
3	NITRITE	5.230	0.016	0.059	21.49	27.49	0.0270	n.a.
4	SULFATE	5.990	0.016	0.041	21.05	19.19	0.0557	n.a.
5	BROMIDE	6.553	0.004	0.012	5.40	5.76	0.0239	n.a.
6	NITRATE	7.613	0.018	0.037	24.25	17.41	0.0186	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.075**	**0.214**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**LCS**	*Run Time (min):*	**14.96**
Vial Number:	**3**	*Injection Volume:*	**200.00**
Injection Type:	**Check Standard**	*Channel:*	**ECD_1**
Calibration Level:	**09**	*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**06/Dec/23 18:14**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

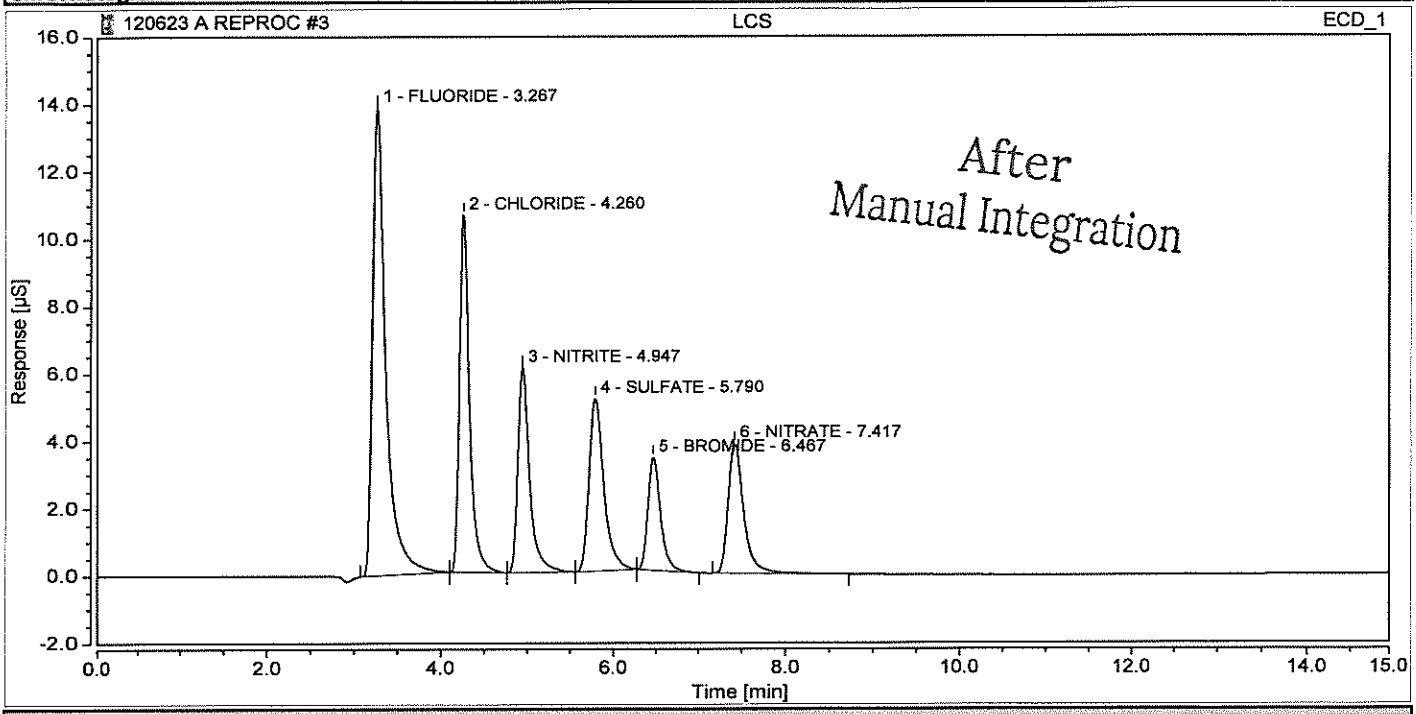
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.267	2.466	13.911	33.91	32.36	3.9822	6.1909
2	CHLORIDE	4.260	1.416	10.615	19.47	24.69	3.6336	-3.1050
3	NITRITE	4.947	0.976	6.094	13.42	14.17	1.1550	1.3159
4	SULFATE	5.790	1.023	5.139	14.07	11.95	3.5979	-4.0549
5	BROMIDE	6.467	0.582	3.358	8.00	7.81	3.4228	-8.7263
6	NITRATE	7.417	0.809	3.873	11.12	9.01	0.8263	-2.2129
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**7.272**	**42.992**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**LCS**	*Run Time (min):*	**14.96**
Vial Number:	**3**	*Injection Volume:*	**200.00**
Injection Type:	**Check Standard**	*Channel:*	**ECD_1**
Calibration Level:	**09**	*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**06/Dec/23 18:14**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

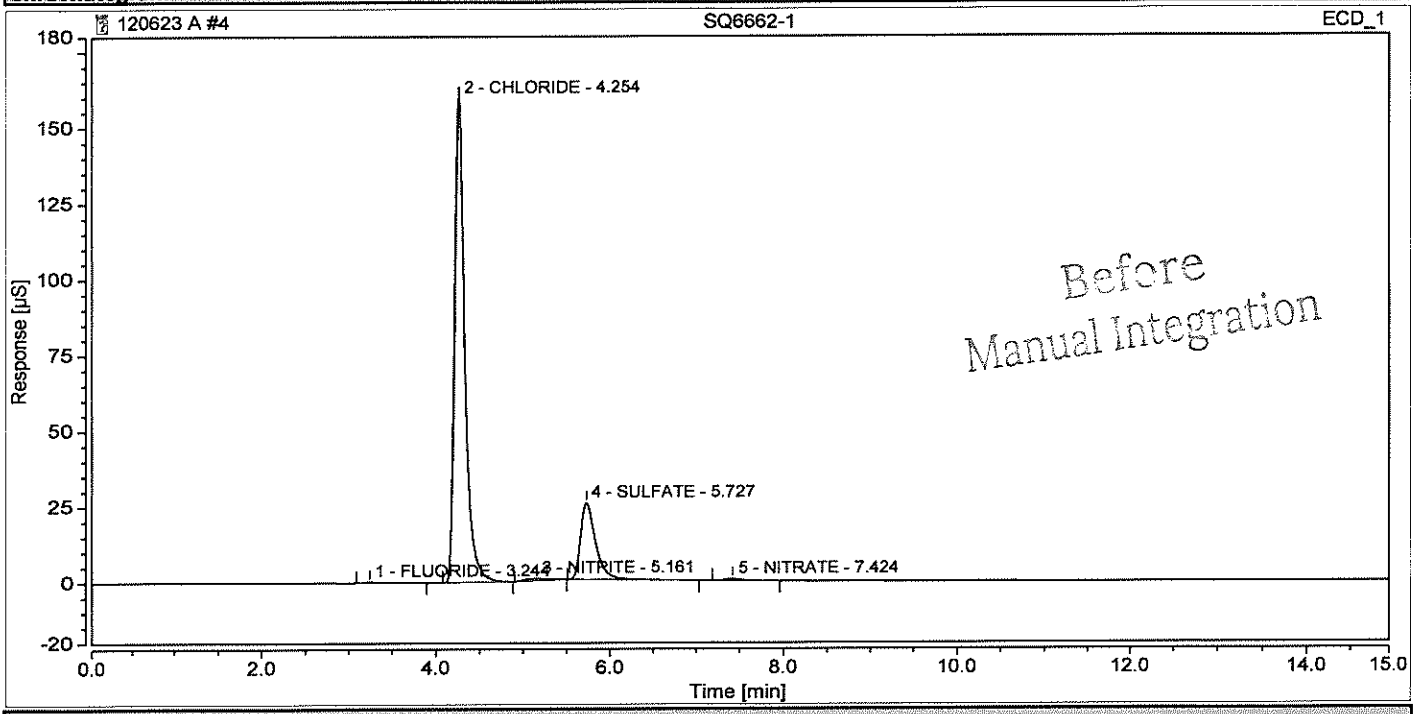
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.267	2.466	13.911	33.91	32.36	3.9822	6.1909
2	CHLORIDE	4.260	1.416	10.615	19.47	24.69	3.6336	-3.1050
3	NITRITE	4.947	0.976	6.094	13.42	14.17	1.1550	1.3159
4	SULFATE	5.790	1.023	5.139	14.07	11.95	3.5979	-4.0549
5	BROMIDE	6.467	0.582	3.358	8.00	7.81	3.4228	-8.7263
6	NITRATE	7.417	0.809	3.873	11.12	9.01	0.8263	-2.2129
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**7.272**	**42.992**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6662-1**	*Run Time (min):*	**14.96**
Vial Number:	**4**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**06/Dec/23 18:31**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

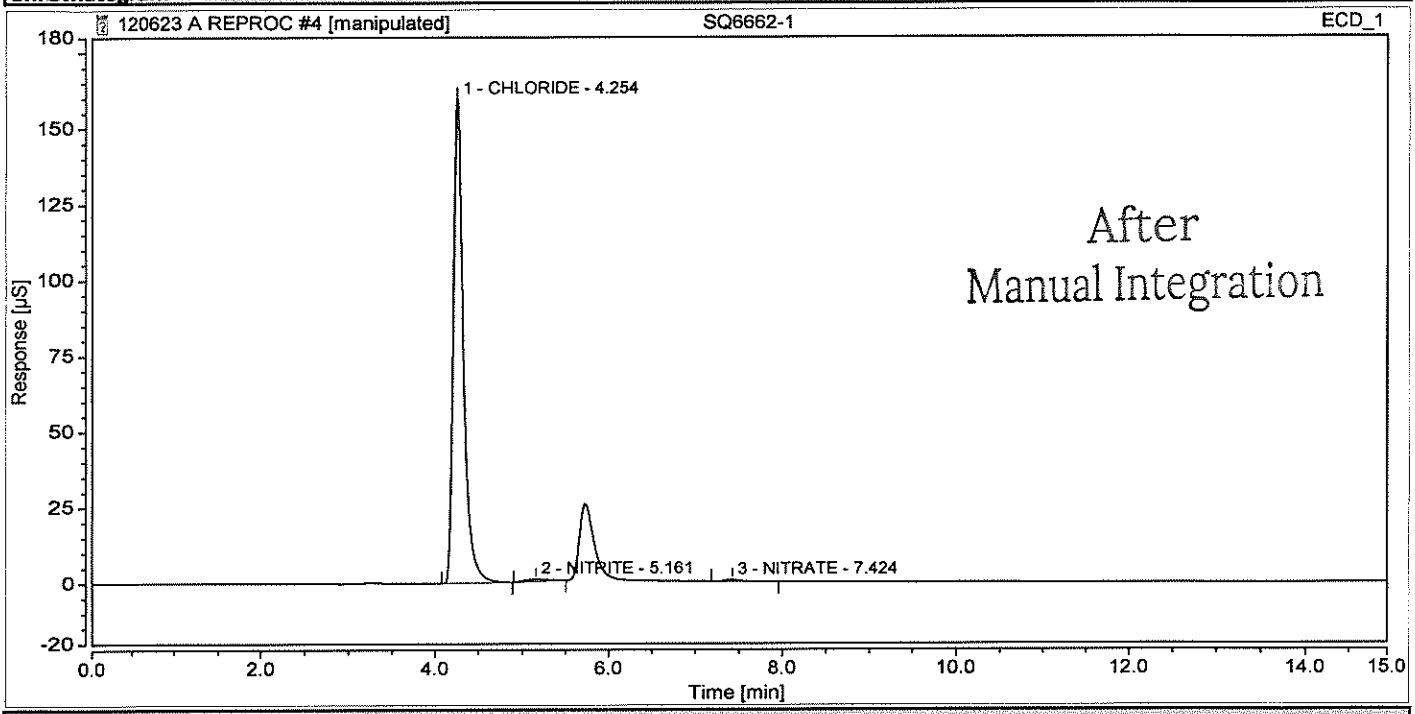
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.244	0.051	0.246	0.19	0.13	0.0963	n.a.
2	CHLORIDE	4.254	21.584	159.572	79.61	85.57	55.3799	n.a.
3	NITRITE	5.161	0.242	0.723	0.89	0.39	0.2902	n.a.
4	SULFATE	5.727	5.118	25.362	18.88	13.60	18.0047	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5	NITRATE	7.424	0.116	0.588	0.43	0.32	0.1190	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**27.111**	**186.490**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6662-1**	*Run Time (min):*	**14.96**
Vial Number:	**4**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**06/Dec/23 18:31**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

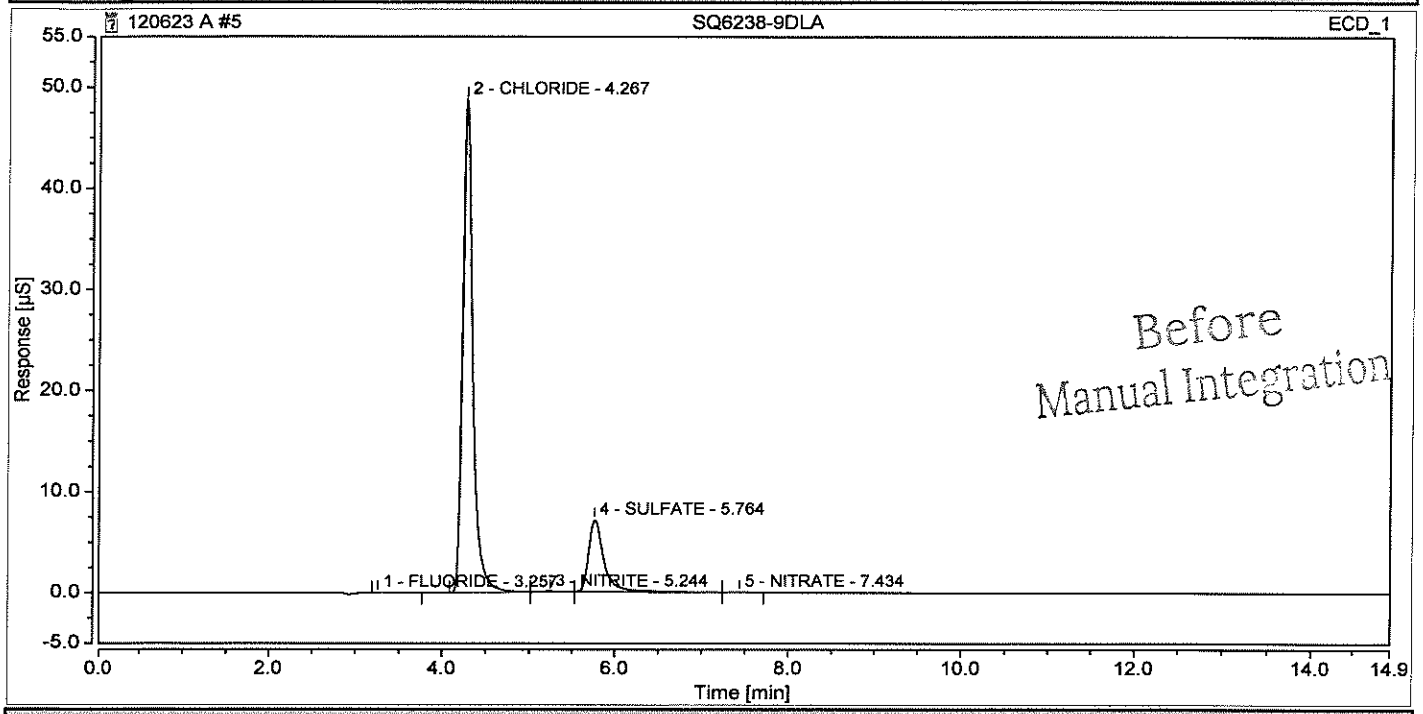
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.254	21.584	159.572	98.37	99.19	55.3799	n.a.
2	NITRITE	5.161	0.242	0.723	1.10	0.45	0.2902	n.a.
n.a.	SULFATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
3	NITRATE	7.424	0.116	0.588	0.53	0.37	0.1190	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**21.942**	**160.883**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6238-9DLA**	*Run Time (min):*	**14.95**
Vial Number:	**5**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**50.0000**
Injection Date/Time:	**06/Dec/23 18:49**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

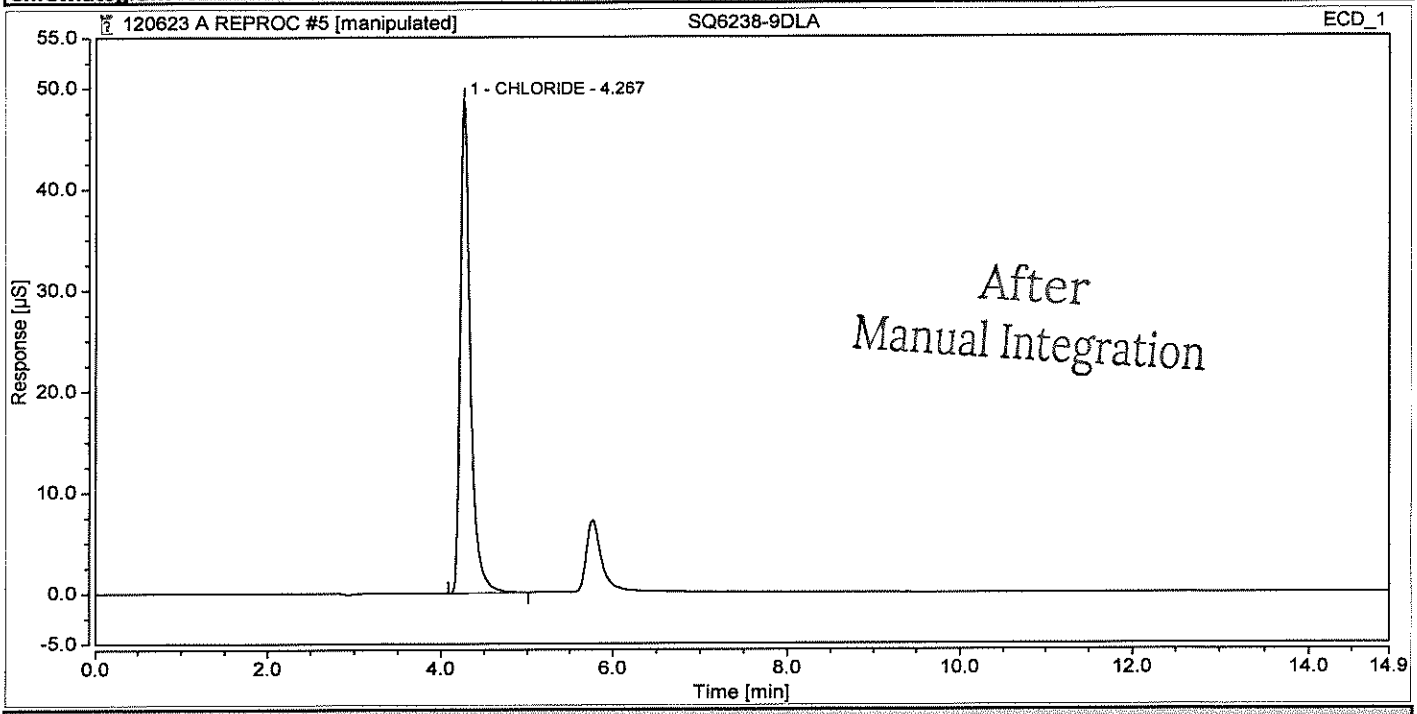
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.257	0.004	0.016	0.05	0.03	1.1655	n.a.
2	CHLORIDE	4.267	6.604	48.778	81.28	87.07	847.1909	n.a.
3	NITRITE	5.244	0.015	0.056	0.18	0.10	1.2785	n.a.
4	SULFATE	5.764	1.495	7.137	18.41	12.74	263.0208	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5	NITRATE	7.434	0.006	0.032	0.07	0.06	0.3086	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**8.124**	**56.019**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6238-9DLA**	*Run Time (min):*	**14.95**
Vial Number:	**5**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**50.0000**
Injection Date/Time:	**06/Dec/23 18:49**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

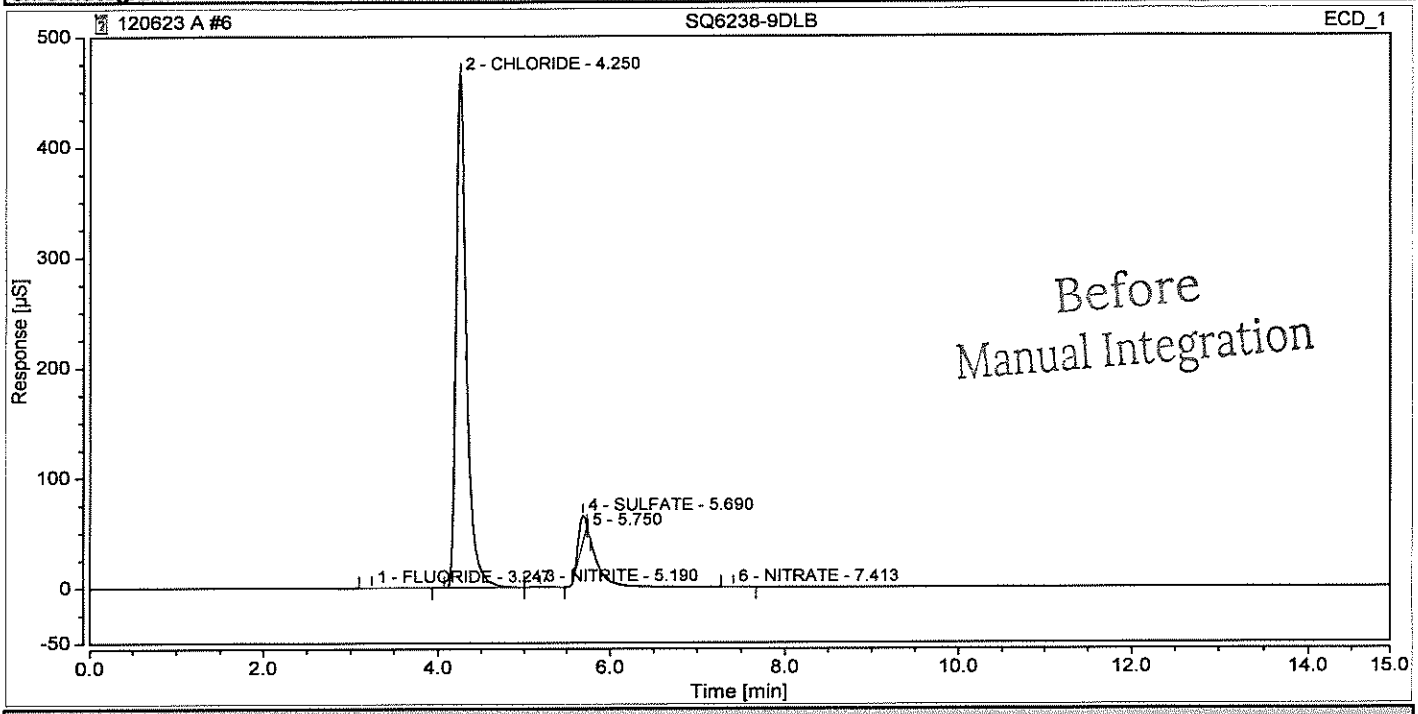
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.267	6.604	48.778	100.00	100.00	847.1909	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	SULFATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**6.604**	**48.778**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6238-9DLB**	*Run Time (min):*	**14.95**
Vial Number:	**6**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**5.0000**
Injection Date/Time:	**06/Dec/23 19:06**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

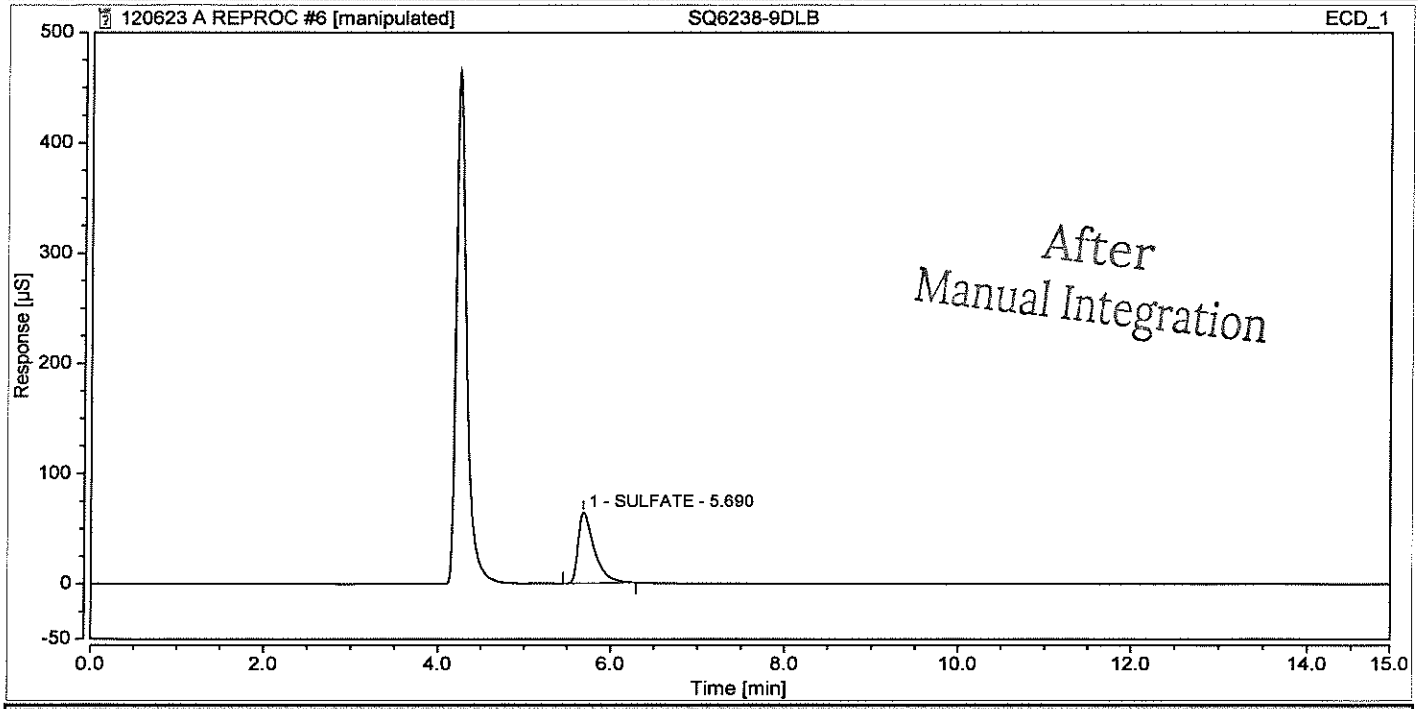
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.247	0.030	0.123	0.05	0.03	0.3224	n.a.
2	CHLORIDE	4.250	64.846	465.149	96.42	95.15	831.9017	n.a.
3	NITRITE	5.190	0.047	0.191	0.07	0.04	0.3176	n.a.
4	SULFATE	5.690	2.325	23.287	3.46	4.76	40.8912	n.a.
5		5.750	0.002	0.086	0.00	0.02	n.a.	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
6	NITRATE	7.413	0.006	0.032	0.01	0.01	0.0293	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**67.256**	**488.867**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6238-9DLB**	*Run Time (min):*	**14.95**
Vial Number:	**6**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**5.0000**
Injection Date/Time:	**06/Dec/23 19:06**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

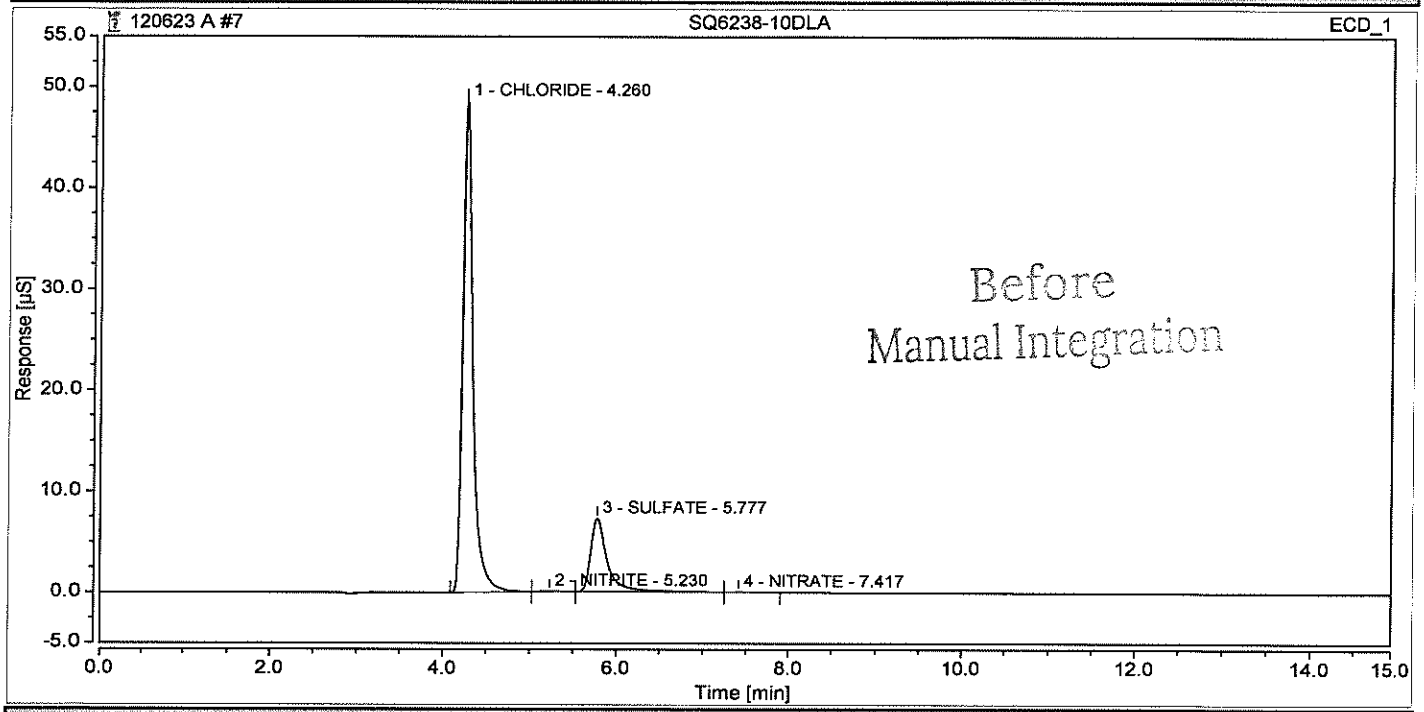
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	CHLORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	SULFATE	5.690	13.801	64.337	100.00	100.00	242.7443	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**13.801**	**64.337**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6238-10DLA**	*Run Time (min):*	**14.95**
Vial Number:	**7**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**50.0000**
Injection Date/Time:	**06/Dec/23 19:23**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

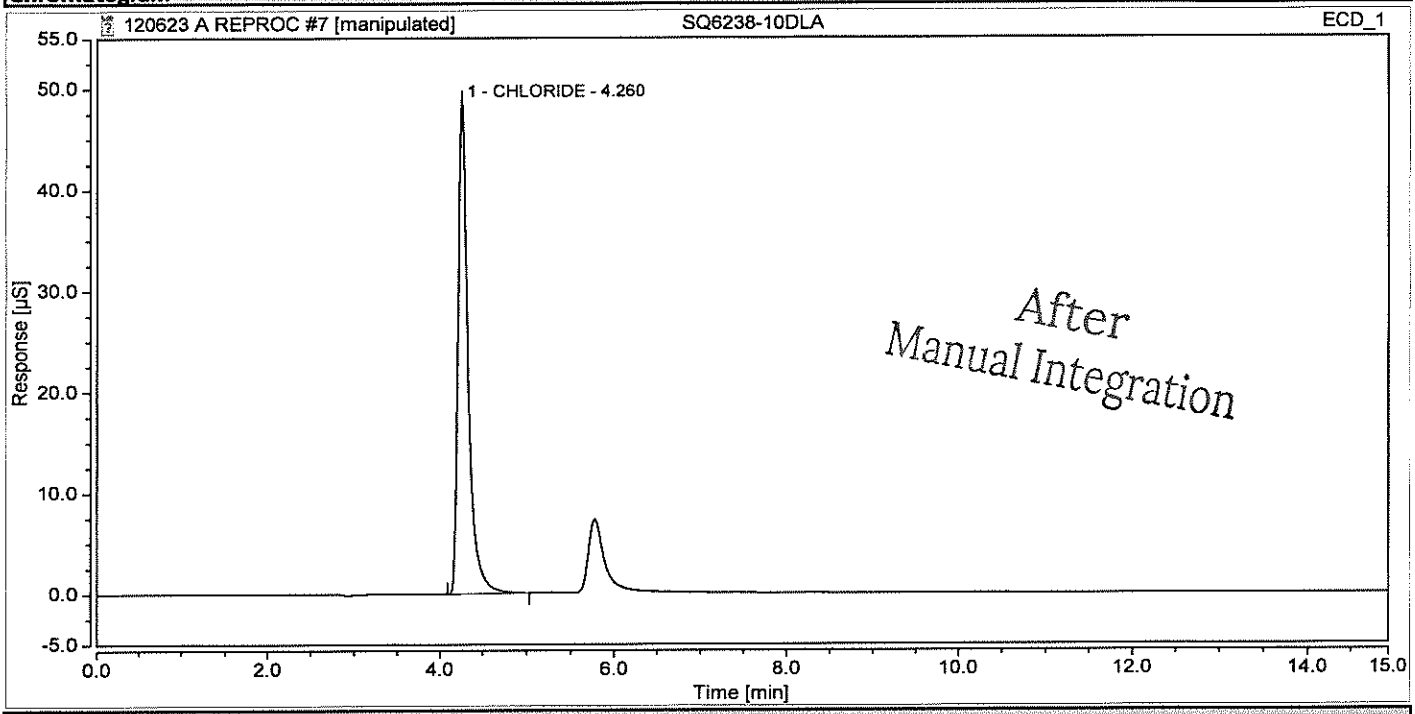
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.260	6.682	48.641	80.24	86.89	857.1746	n.a.
2	NITRITE	5.230	0.015	0.061	0.18	0.11	1.2797	n.a.
3	SULFATE	5.777	1.626	7.253	19.52	12.96	285.9488	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
4	NITRATE	7.417	0.005	0.024	0.06	0.04	0.2628	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**8.327**	**55.979**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6238-10DLA**	*Run Time (min):*	**14.95**
Vial Number:	**7**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**50.0000**
Injection Date/Time:	**06/Dec/23 19:23**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

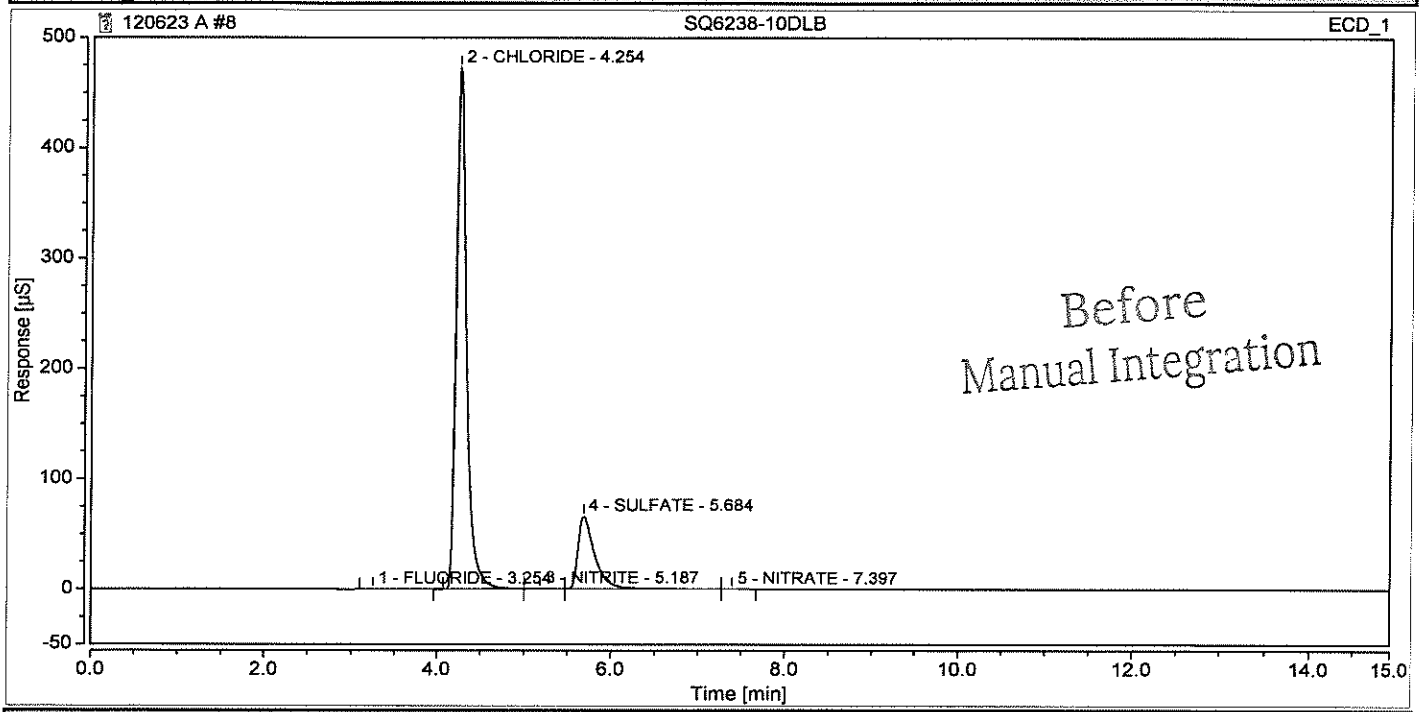
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.260	6.682	48.641	100.00	100.00	857.1746	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	SULFATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**6.682**	**48.641**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6238-10DLB**	*Run Time (min):*	**14.96**
Vial Number:	**8**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**5.0000**
Injection Date/Time:	**06/Dec/23 19:40**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

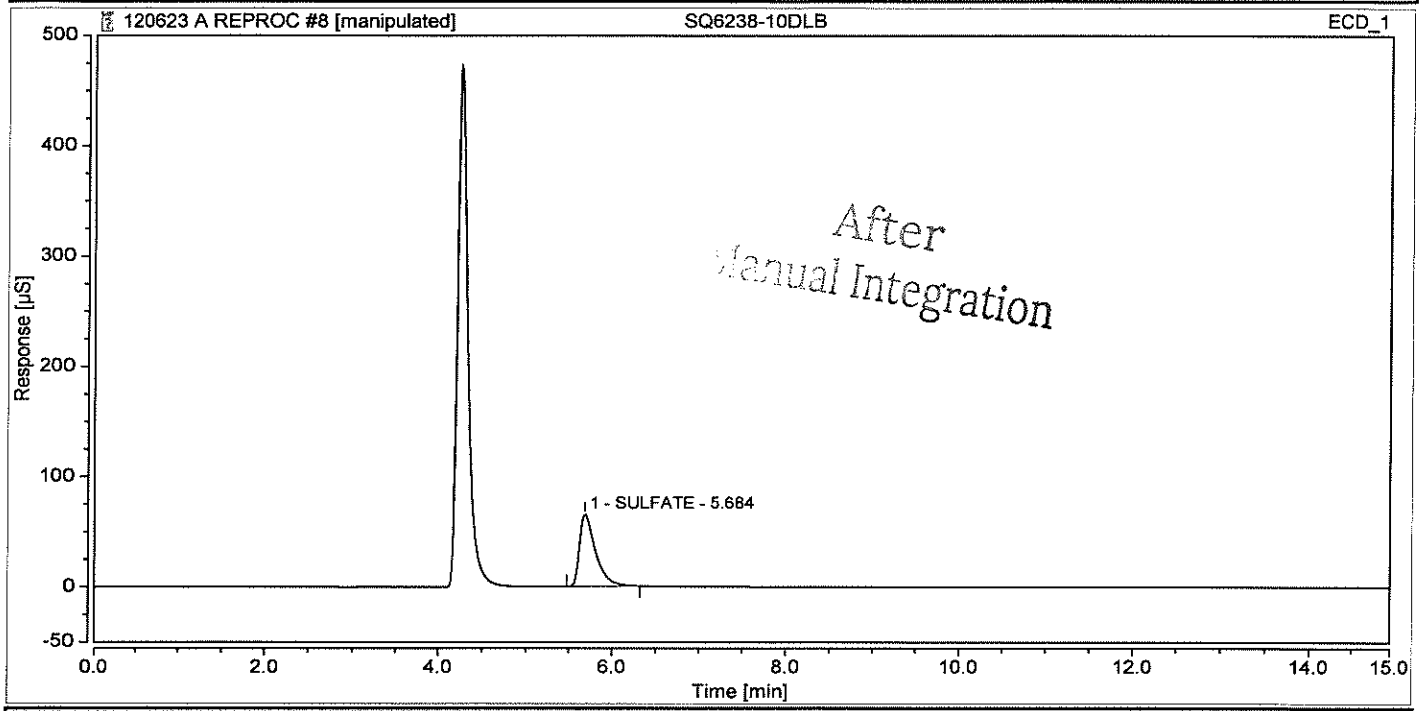
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.254	0.028	0.114	0.04	0.02	0.3047	n.a.
2	CHLORIDE	4.254	65.374	472.728	81.77	87.74	838.6769	n.a.
3	NITRITE	5.187	0.049	0.198	0.06	0.04	0.3259	n.a.
4	SULFATE	5.684	14.492	65.714	18.13	12.20	254.8927	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5	NITRATE	7.397	0.005	0.025	0.01	0.00	0.0255	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**79.948**	**538.779**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6238-10DLB**	*Run Time (min):*	**14.96**
Vial Number:	**8**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**5.0000**
Injection Date/Time:	**06/Dec/23 19:40**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

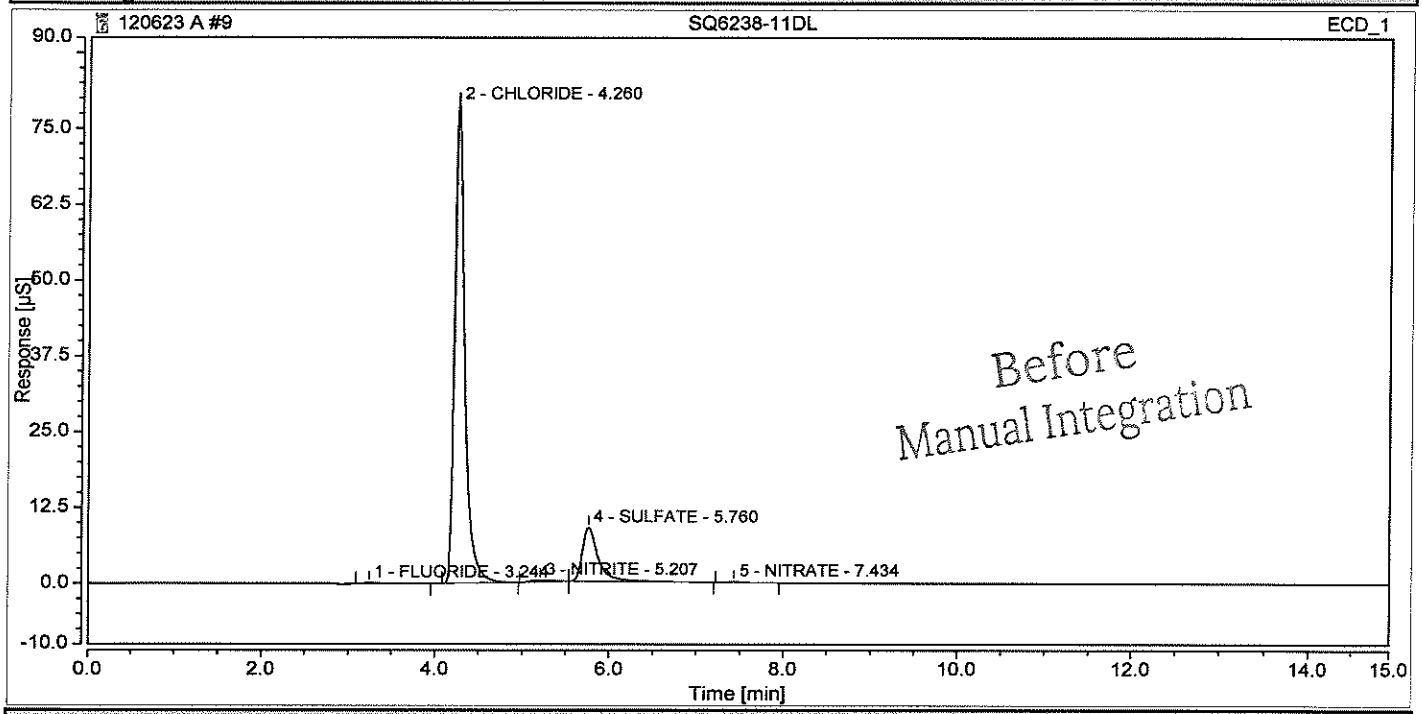
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	CHLORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	SULFATE	5.684	14.027	65.557	100.00	100.00	246.7068	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**14.027**	**65.557**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6238-11DL**	*Run Time (min):*	**14.96**
Vial Number:	**9**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**5.0000**
Injection Date/Time:	**06/Dec/23 19:58**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

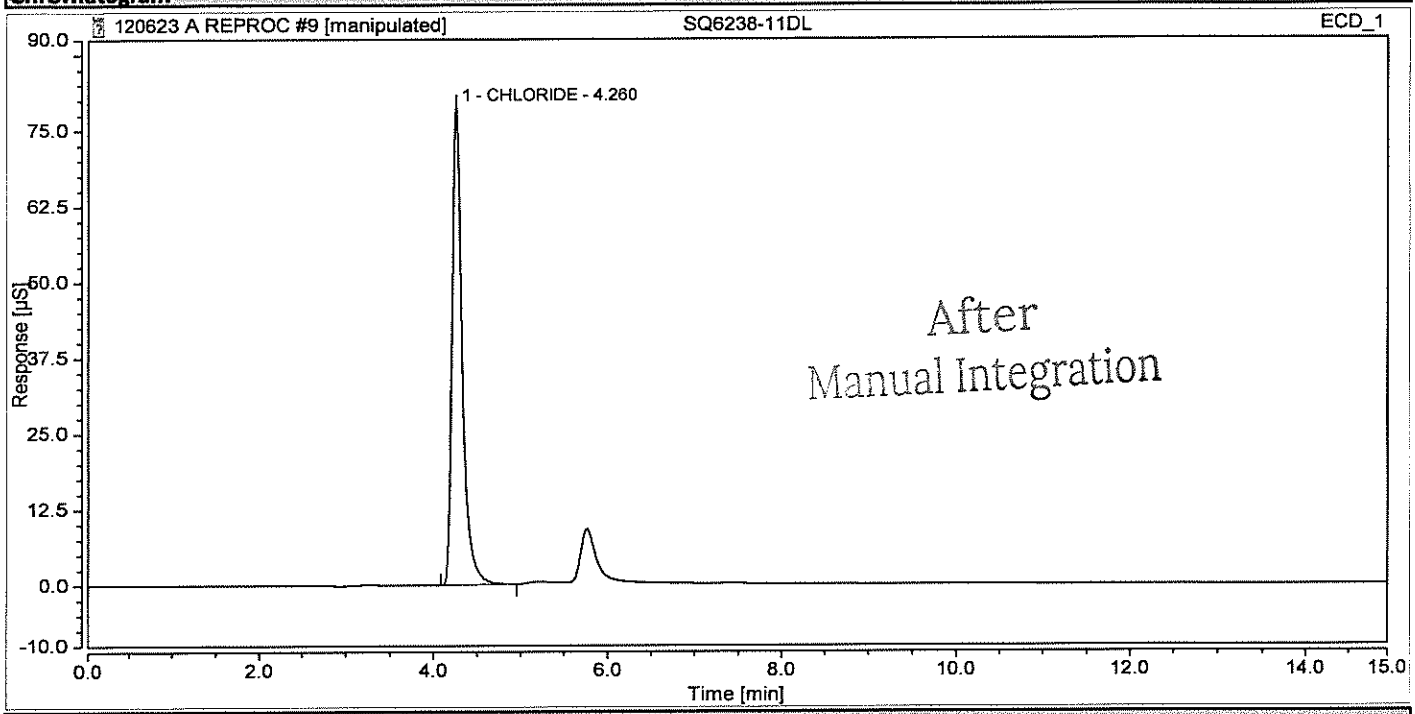
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.244	0.037	0.163	0.29	0.18	0.3758	n.a.
2	CHLORIDE	4.260	10.741	78.973	83.91	89.27	137.7992	n.a.
3	NITRITE	5.207	0.090	0.301	0.70	0.34	0.5633	n.a.
4	SULFATE	5.760	1.903	8.881	14.87	10.04	33.4782	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5	NITRATE	7.434	0.030	0.148	0.23	0.17	0.1529	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**12.802**	**88.467**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6238-11DL**	*Run Time (min):*	**14.96**
Vial Number:	**9**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**5.0000**
Injection Date/Time:	**06/Dec/23 19:58**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

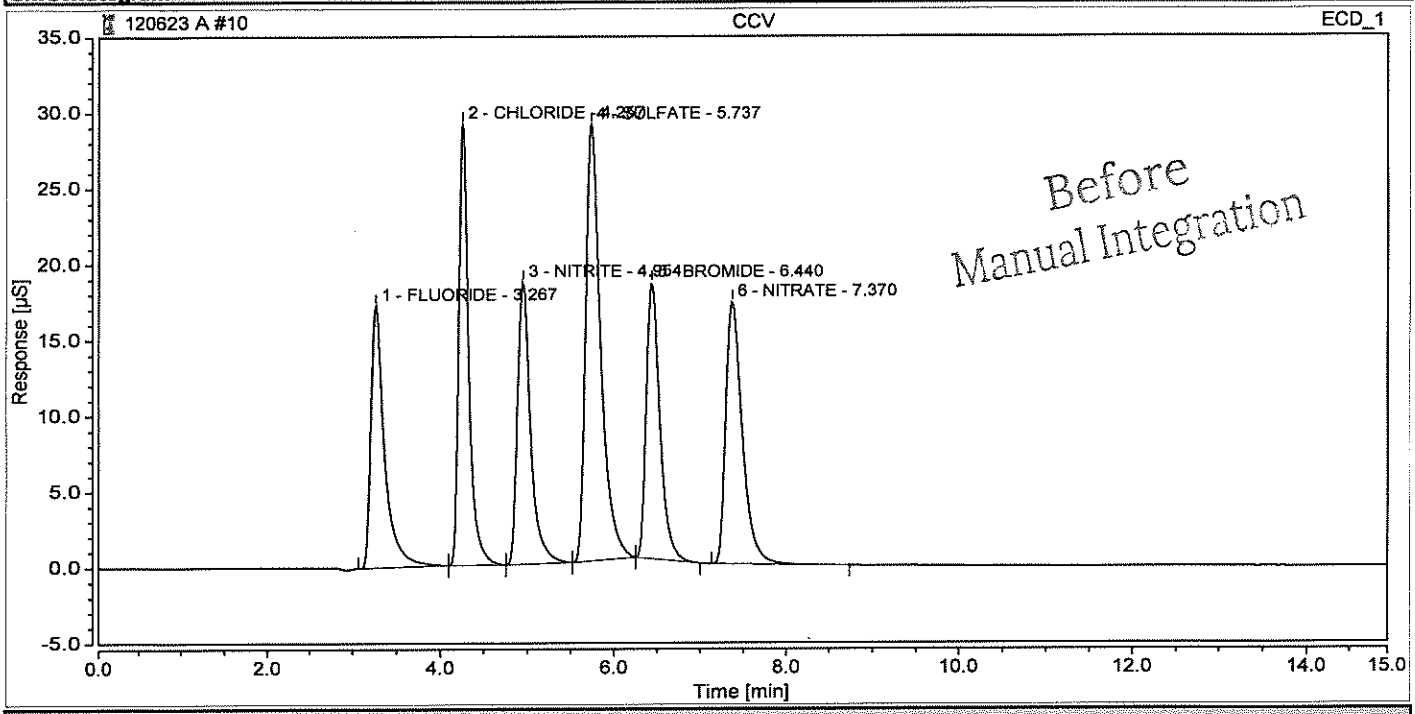
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.260	10.741	78.973	100.00	100.00	137.7992	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	SULFATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**10.741**	**78.973**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**CCV**	*Run Time (min):*	**14.96**
Vial Number:	**13**	*Injection Volume:*	**200.00**
Injection Type:	**Check Standard**	*Channel:*	**ECD_1**
Calibration Level:	**06**	*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**06/Dec/23 20:15**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

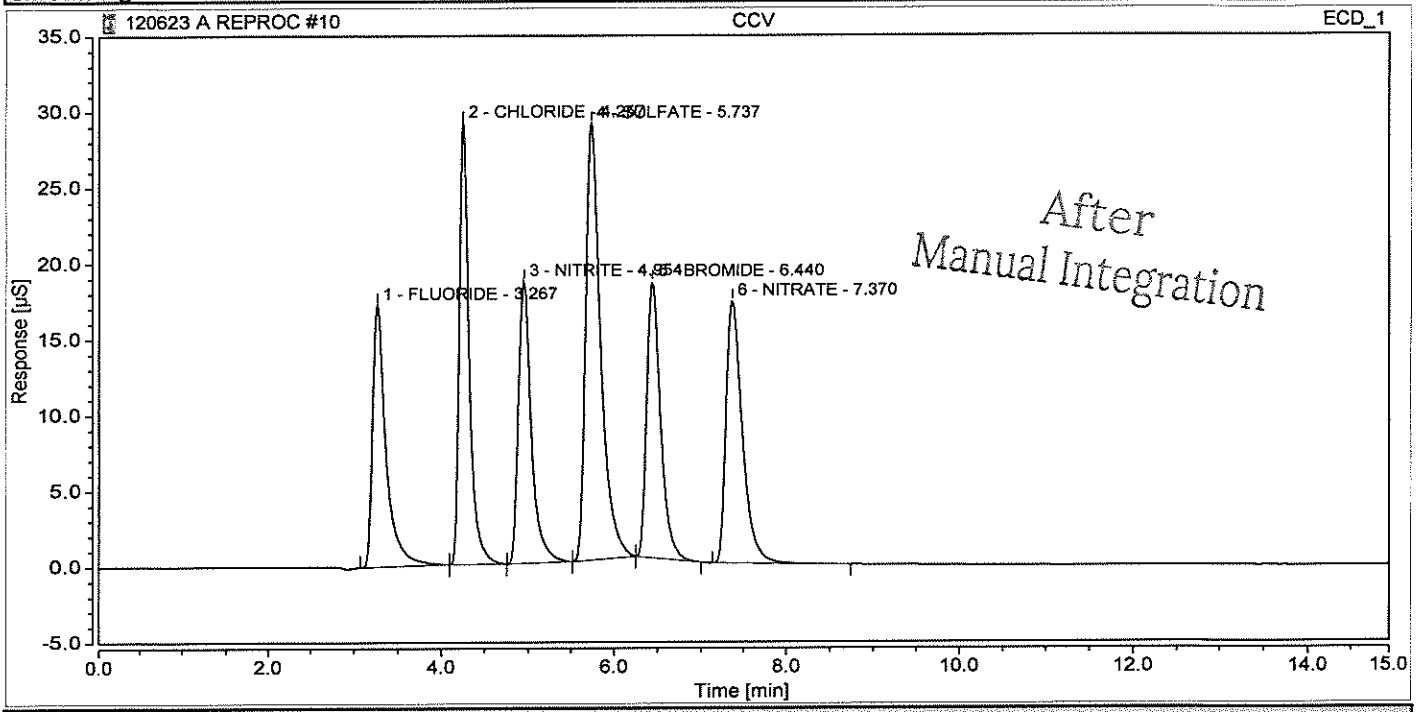
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.267	3.116	17.283	13.38	13.37	5.0592	1.1847
2	CHLORIDE	4.257	3.898	29.118	16.75	22.52	10.0025	0.0253
3	NITRITE	4.954	3.248	18.605	13.95	14.39	3.9102	-2.2460
4	SULFATE	5.737	5.833	28.803	25.06	22.27	20.5195	2.5974
5	BROMIDE	6.440	3.328	18.211	14.29	14.08	19.5721	-2.1395
6	NITRATE	7.370	3.856	17.291	16.56	13.37	3.9402	-1.4949
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**23.279**	**129.310**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**CCV**	*Run Time (min):*	**14.96**
Vial Number:	**13**	*Injection Volume:*	**200.00**
Injection Type:	**Check Standard**	*Channel:*	**ECD_1**
Calibration Level:	**06**	*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**06/Dec/23 20:15**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

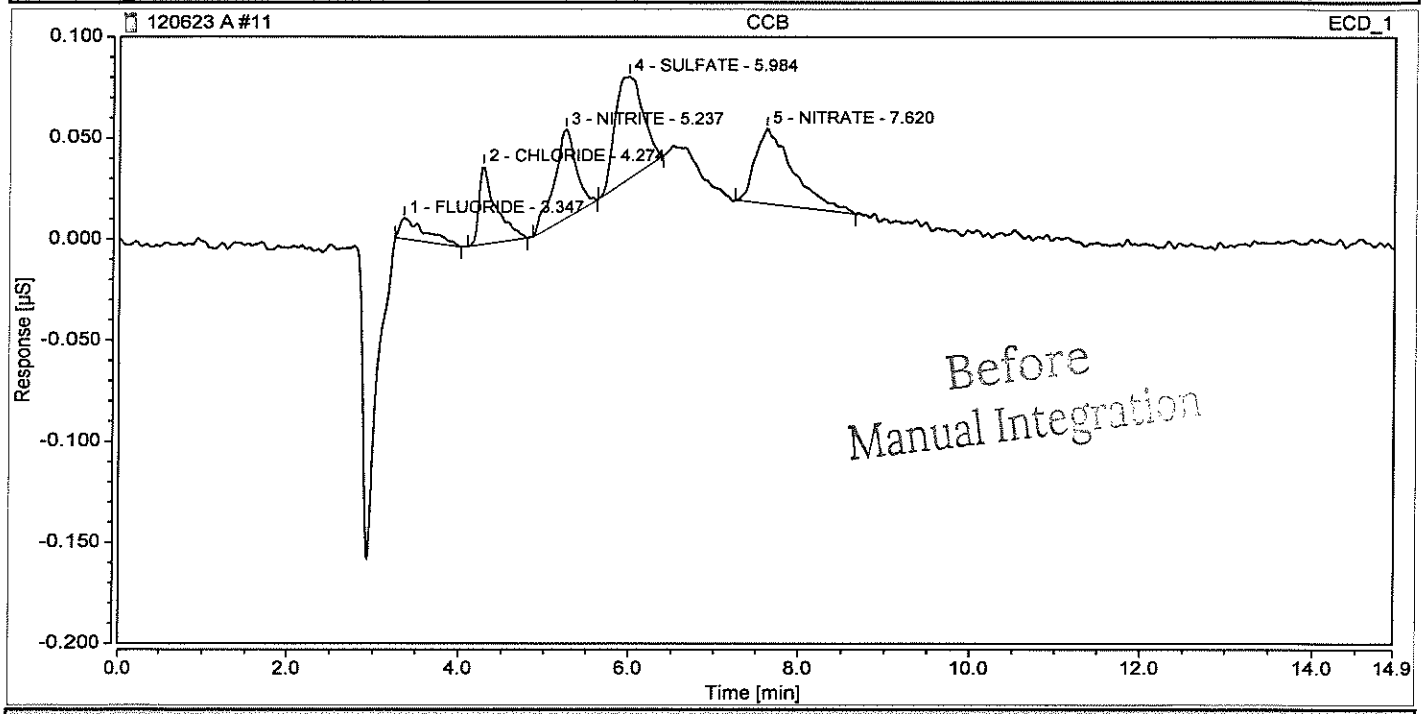
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.267	3.116	17.283	13.38	13.37	5.0592	1.1847
2	CHLORIDE	4.257	3.898	29.118	16.75	22.52	10.0025	0.0253
3	NITRITE	4.954	3.248	18.605	13.95	14.39	3.9102	-2.2460
4	SULFATE	5.737	5.833	28.803	25.06	22.27	20.5195	2.5974
5	BROMIDE	6.440	3.328	18.211	14.29	14.08	19.5721	-2.1395
6	NITRATE	7.370	3.856	17.291	16.56	13.37	3.9402	-1.4949
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**23.279**	**129.310**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**CCB**	*Run Time (min):*	**14.94**
Vial Number:	**14**	*Injection Volume:*	**200.00**
Injection Type:	**Blank**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**06/Dec/23 20:32**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

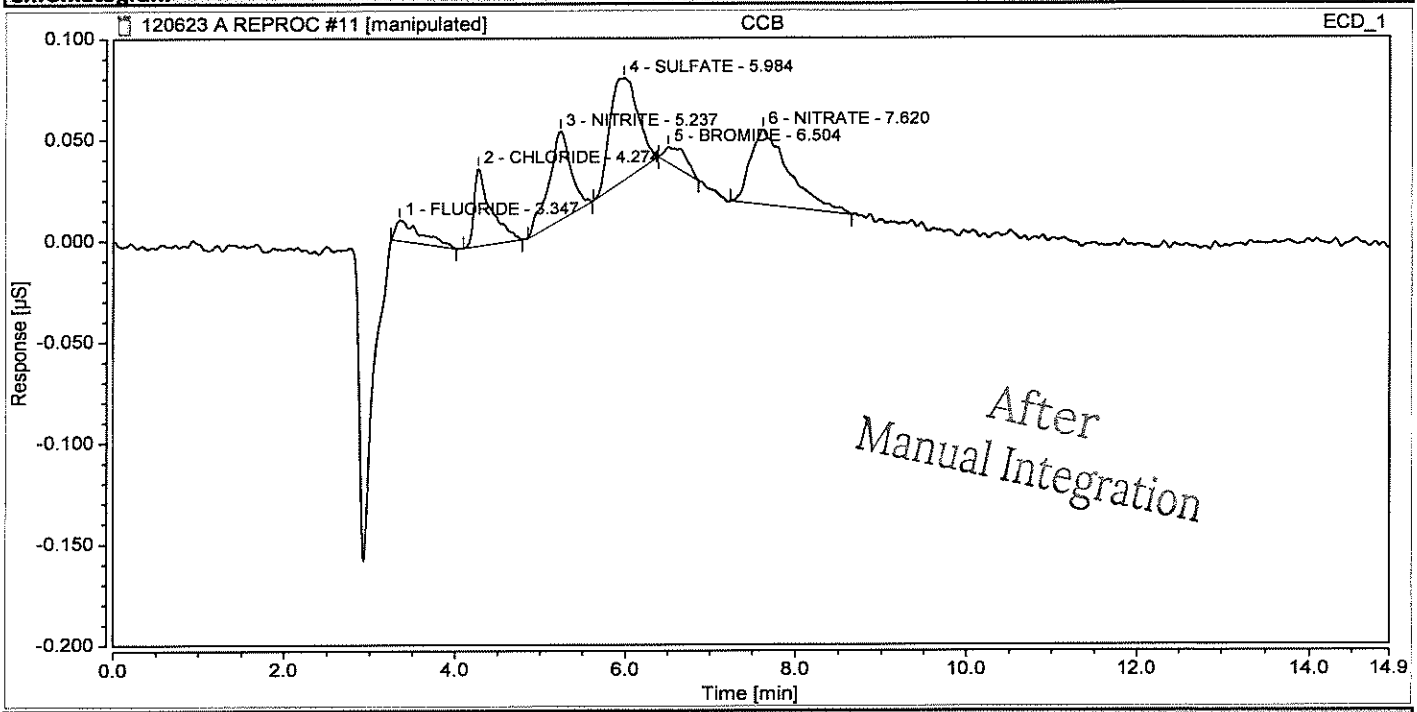
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.347	0.004	0.010	5.81	5.72	0.0226	n.a.
2	CHLORIDE	4.274	0.009	0.038	13.62	21.33	0.0226	n.a.
3	NITRITE	5.237	0.013	0.044	20.71	24.30	0.0238	n.a.
4	SULFATE	5.984	0.019	0.051	29.93	28.02	0.0681	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5	NITRATE	7.620	0.019	0.037	29.93	20.63	0.0198	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.065**	**0.180**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**CCB**	*Run Time (min):*	**14.94**
Vial Number:	**14**	*Injection Volume:*	**200.00**
Injection Type:	**Blank**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**06/Dec/23 20:32**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

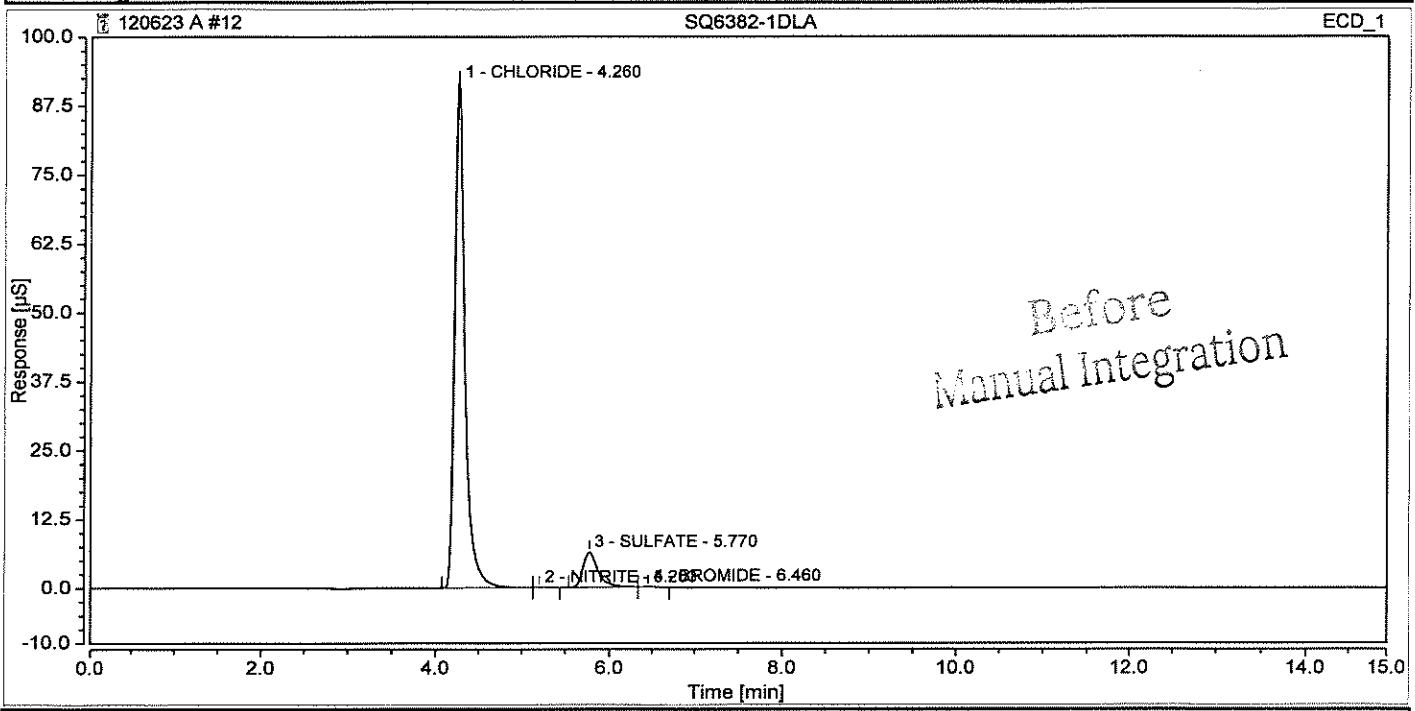
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.347	0.004	0.010	5.57	5.48	0.0226	n.a.
2	CHLORIDE	4.274	0.009	0.038	13.06	20.45	0.0226	n.a.
3	NITRITE	5.237	0.013	0.044	19.85	23.30	0.0238	n.a.
4	SULFATE	5.984	0.019	0.050	28.68	26.86	0.0681	n.a.
5	BROMIDE	6.504	0.003	0.008	4.16	4.12	0.0165	n.a.
6	NITRATE	7.620	0.019	0.037	28.69	19.78	0.0198	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.067**	**0.188**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6382-1DLA**	*Run Time (min):*	**14.95**
Vial Number:	**15**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**500.0000**
Injection Date/Time:	**06/Dec/23 20:49**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.260	12.680	91.608	90.78	93.43 ★	##########	n.a.
2	NITRITE	5.203	0.002	0.009	0.01	0.01	5.1336	n.a.
3	SULFATE	5.770	1.275	6.362	9.13	6.49	2243.2598	n.a.
4	BROMIDE	6.460	0.011	0.071	0.08	0.07	32.5462	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**13.968**	**98.050**	**100.00**	**100.00**		

★ Cl = 162666.5343

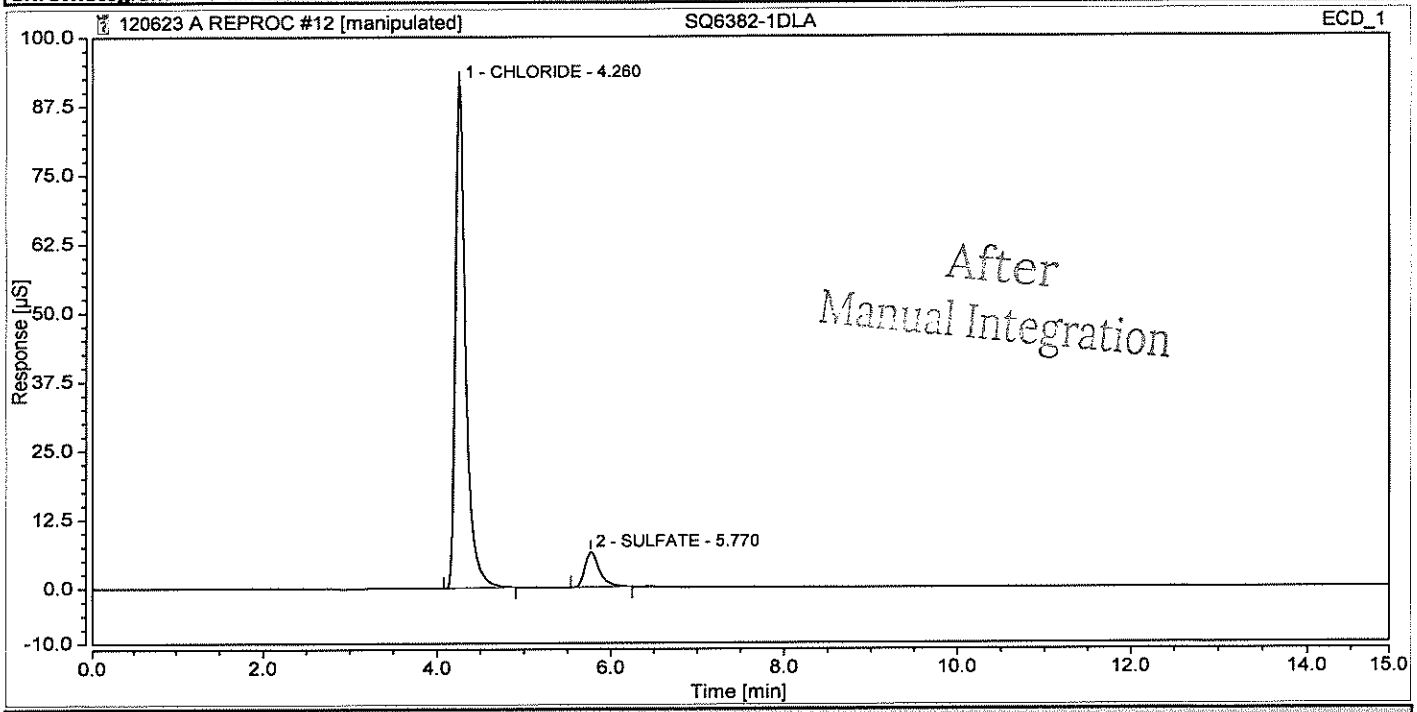
RAD 12/7/23

Chromatogram and Results

Injection Details

Injection Name:	**SQ6382-1DLA**	*Run Time (min):*	**14.95**
Vial Number:	**15**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**500.0000**
Injection Date/Time:	**06/Dec/23 20:49**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.260	12.638	91.589	90.95	93.52	##########	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2	SULFATE	5.770	1.258	6.348	9.05	6.48	2211.7727	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**13.896**	**97.937**	**100.00**	**100.00**		

~~A~~ 16213.1125 = Cl

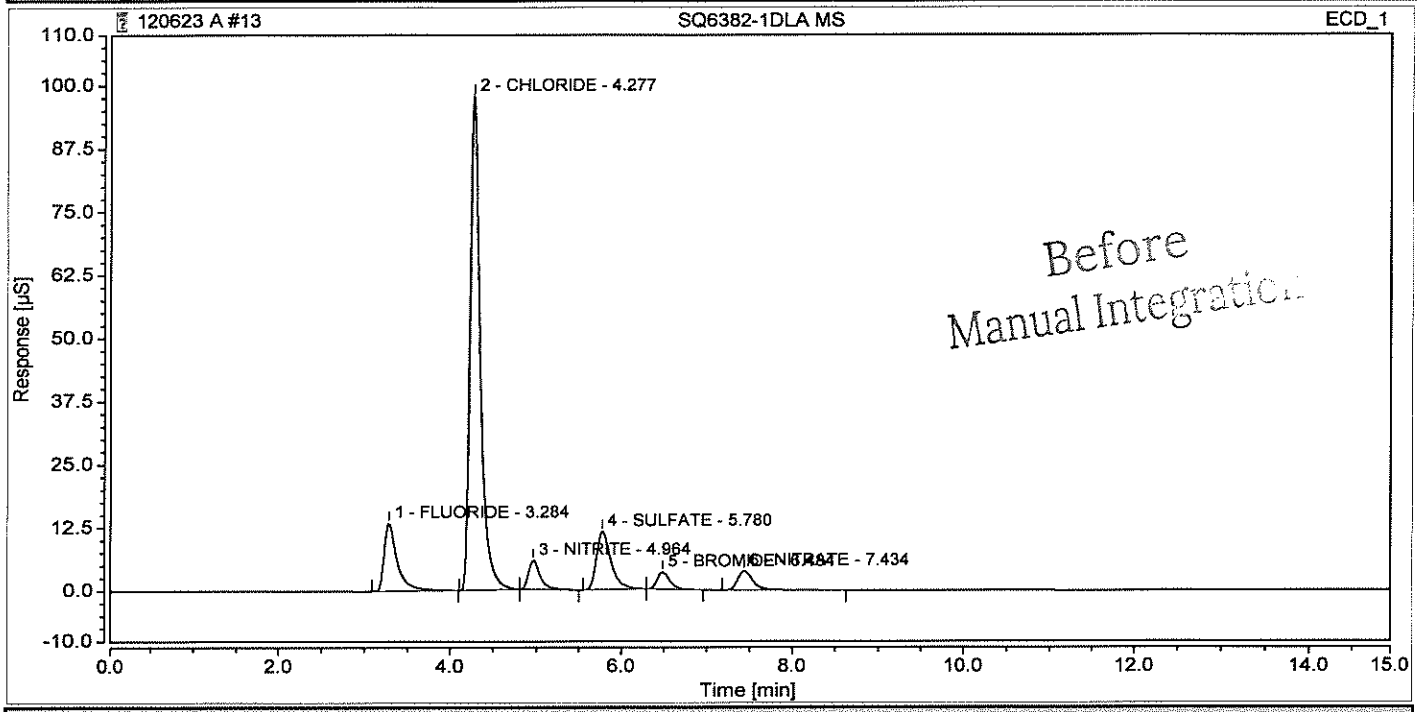
TAD 12/7/23

Chromatogram and Results

Injection Details

Injection Name:	**SQ6382-1DLA MS**	*Run Time (min):*	**14.97**
Vial Number:	**16**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**500.0000**
Injection Date/Time:	**06/Dec/23 21:07**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.284	2.408	13.470	11.83	9.93	1943.1468	n.a.
2	CHLORIDE	4.277	13.371	97.735	65.69	72.03 ★	##########	n.a.
3	NITRITE	4.964	0.907	5.757	4.46	4.24	536.6967	n.a.
4	SULFATE	5.780	2.291	11.515	11.26	8.49	4029.7900	n.a.
5	BROMIDE	6.484	0.587	3.404	2.88	2.51	1726.4071	n.a.
6	NITRATE	7.434	0.789	3.797	3.88	2.80	403.2131	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**20.354**	**135.678**	**100.00**	**100.00**		

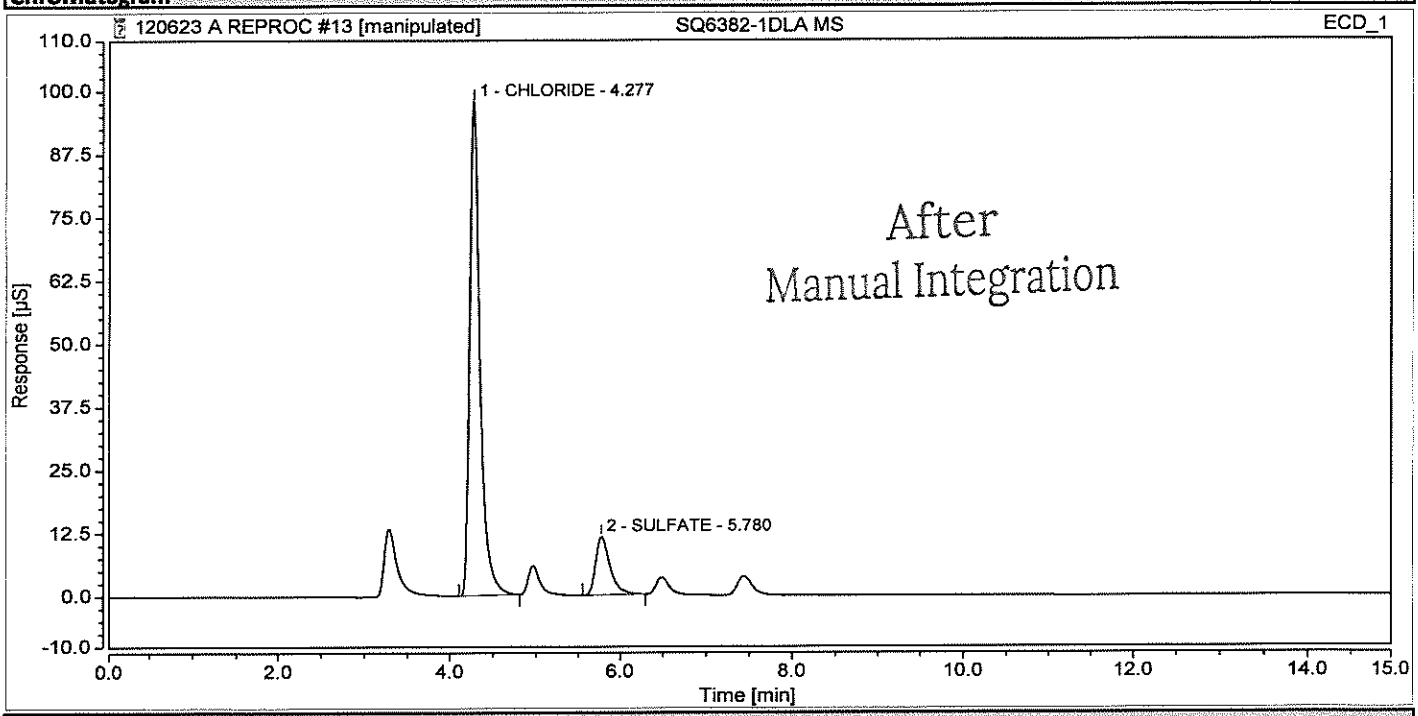
★ Cl=17154.0781
RAD 12/7/23

Chromatogram and Results

Injection Details

Injection Name:	**SQ6382-1DLA MS**	*Run Time (min):*	**14.97**
Vial Number:	**16**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**500.0000**
Injection Date/Time:	**06/Dec/23 21:07**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.277	13.371	97.735	85.37	89.46	##########	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2	SULFATE	5.780	2.291	11.515	14.63	10.54	4029.7900	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**15.663**	**109.250**	**100.00**	**100.00**		

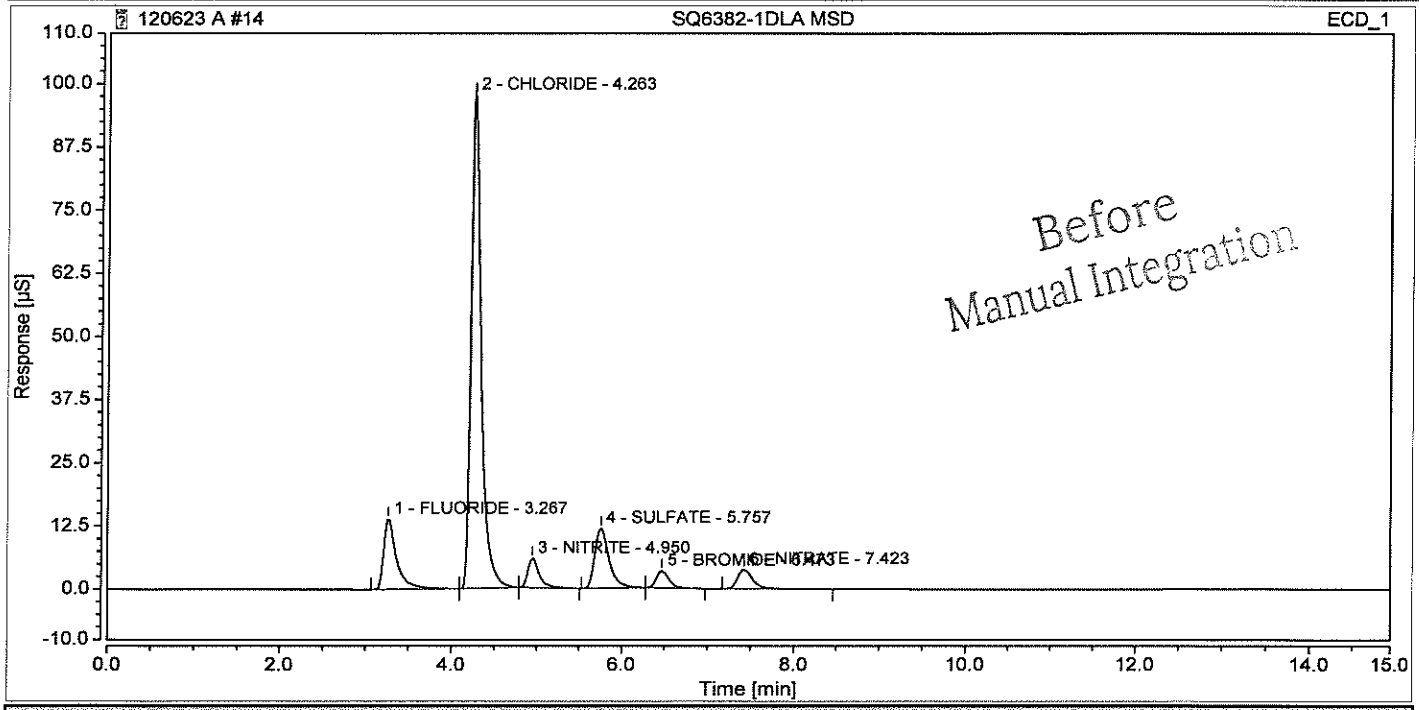
★ 19715H.0781
BAD 12/7/23

Chromatogram and Results

Injection Details

Injection Name:	**SQ6382-1DLA MSD**	*Run Time (min):*	**14.96**
Vial Number:	**17**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**500.0000**
Injection Date/Time:	**06/Dec/23 21:24**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.267	2.427	13.940	11.90	10.21	1959.0778	n.a.
2	CHLORIDE	4.263	13.365	97.704	65.50	71.54	##########	n.a.
3	NITRITE	4.950	0.924	5.816	4.53	4.26	546.6898	n.a.
4	SULFATE	5.757	2.305	11.884	11.30	8.70	4054.0013	n.a.
5	BROMIDE	6.473	0.593	3.422	2.91	2.51	1743.8258	n.a.
6	NITRATE	7.423	0.789	3.808	3.87	2.79	403.3086	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**20.404**	**136.574**	**100.00**	**100.00**		

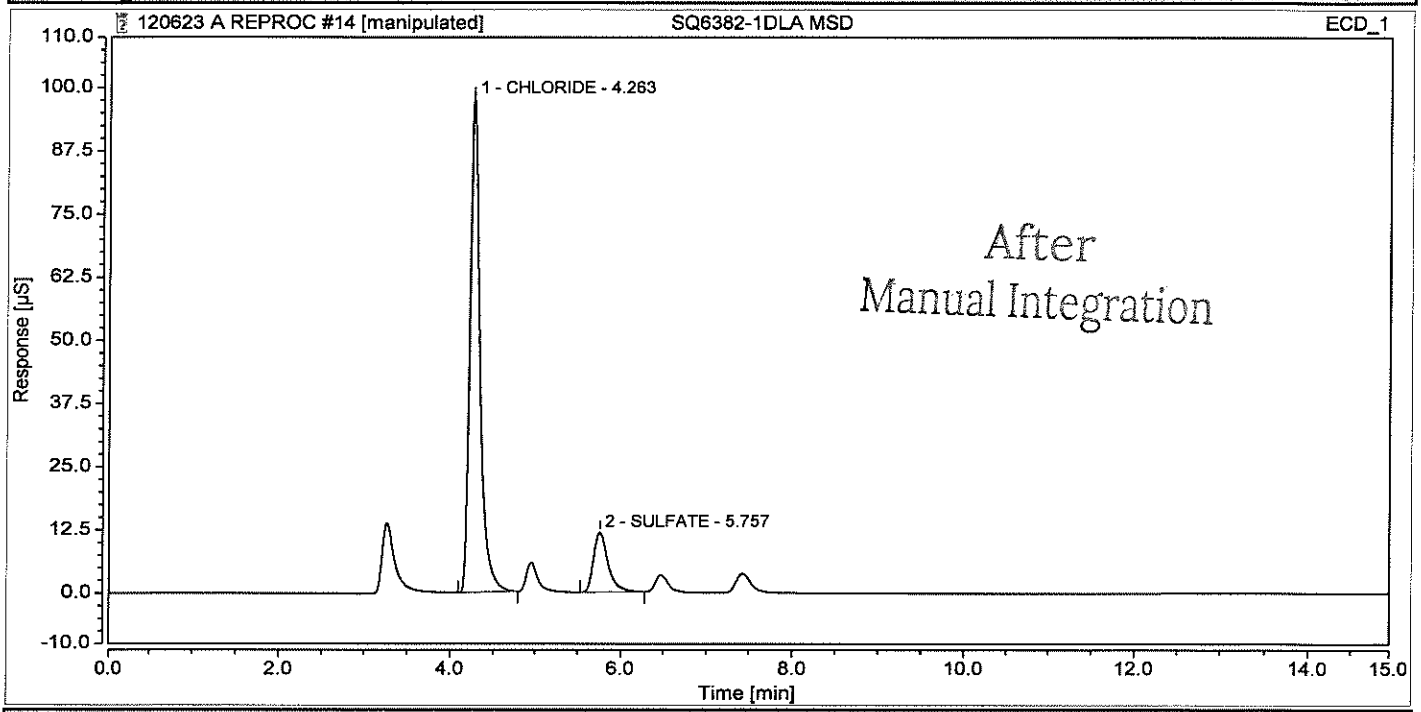
★ Cl = 17146.1644
RAD 12/7/23

Chromatogram and Results

Injection Details

Injection Name:	**SQ6382-1DLA MSD**	*Run Time (min):*	**14.96**
Vial Number:	**17**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**500.0000**
Injection Date/Time:	**06/Dec/23 21:24**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.263	13.365	97.704	85.29	89.16 ★	##########	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2	SULFATE	5.757	2.305	11.884	14.71	10.84	4054.0013	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**15.670**	**109.588**	**100.00**	**100.00**		

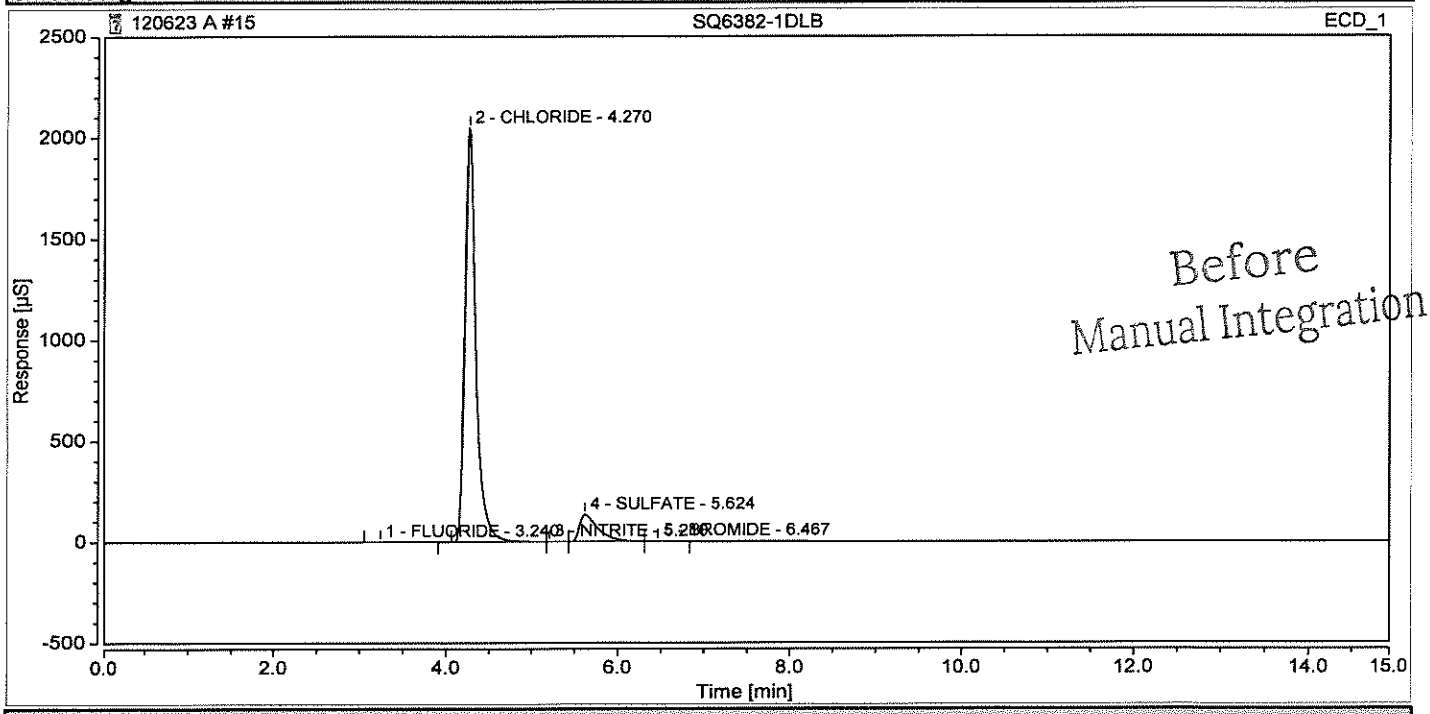
★ Cl = 197146.1644
RAD 12/7/23

Chromatogram and Results

Injection Details

Injection Name:	**SQ6382-1DLB**	*Run Time (min):*	**14.95**
Vial Number:	**18**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**20.0000**
Injection Date/Time:	**06/Dec/23 21:41**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

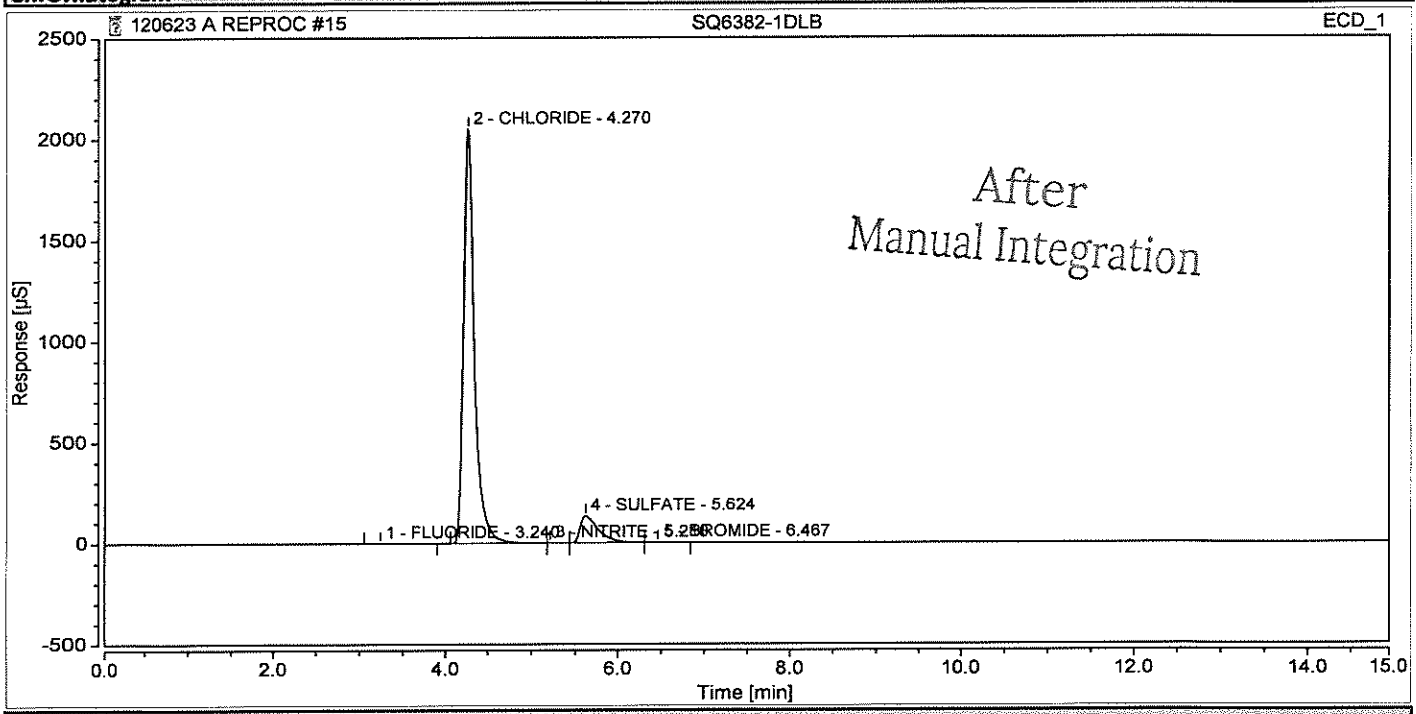
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.240	0.034	0.160	0.01	0.01	1.3961	n.a.
2	CHLORIDE	4.270	308.549	2047.805	90.31	93.76	##########	n.a.
3	NITRITE	5.210	0.008	0.009	0.00	0.00	0.3421	n.a.
4	SULFATE	5.624	32.652	133.886	9.56	6.13	2297.1777	n.a.
5	BROMIDE	6.467	0.398	2.323	0.12	0.11	46.8595	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**341.641**	**2184.182**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6382-1DLB**	*Run Time (min):*	**14.95**
Vial Number:	**18**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**20.0000**
Injection Date/Time:	**06/Dec/23 21:41**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

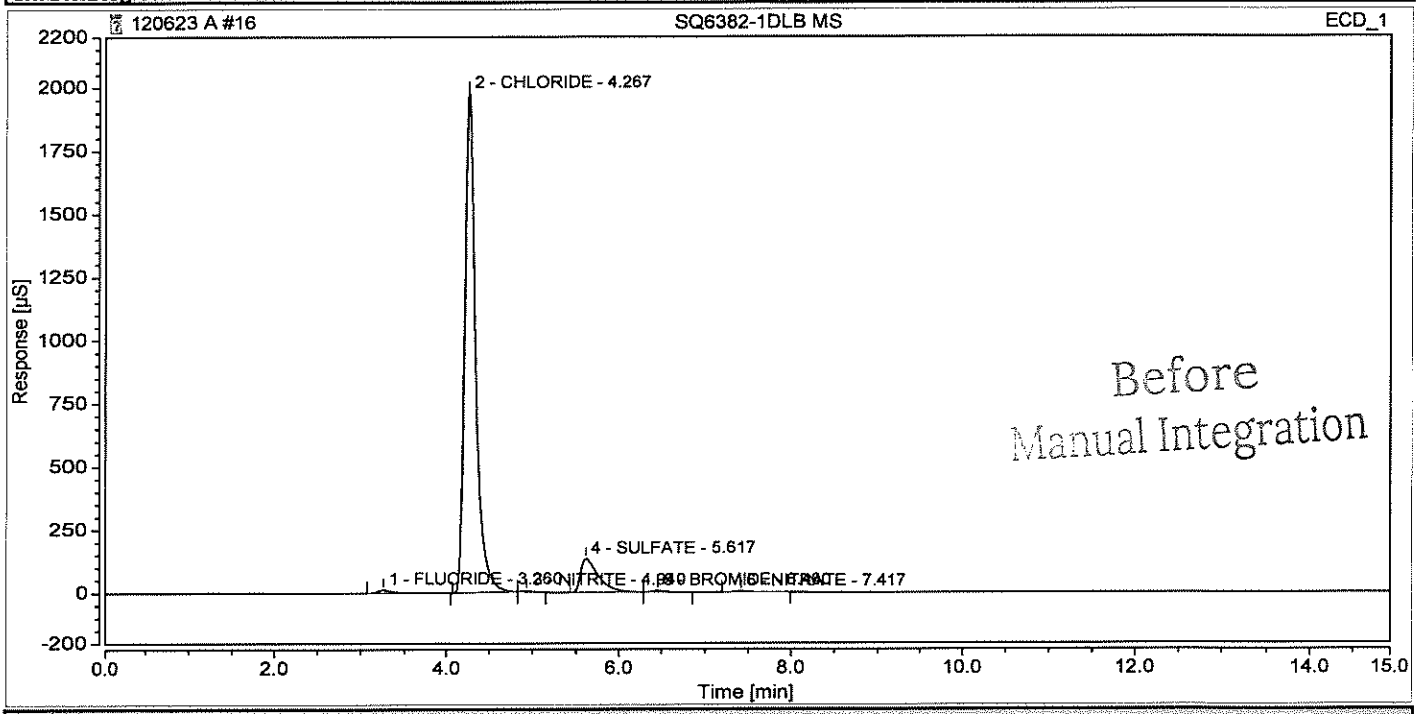
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.240	0.034	0.160	0.01	0.01	1.3961	n.a.
2	CHLORIDE	4.270	308.549	2047.805	90.31	93.76	##########	n.a.
3	NITRITE	5.210	0.008	0.009	0.00	0.00	0.3421	n.a.
4	SULFATE	5.624	32.652	133.886	9.56	6.13	2297.1777	n.a.
5	BROMIDE	6.467	0.398	2.323	0.12	0.11	46.8595	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**341.641**	**2184.182**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6382-1DLB MS**	*Run Time (min):*	**14.95**
Vial Number:	**19**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**20.0000**
Injection Date/Time:	**06/Dec/23 21:58**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.260	2.300	12.284	0.70	0.58	74.1709	n.a.
2	CHLORIDE	4.267	293.929	1976.790	88.87	92.54	#########	n.a.
3	NITRITE	4.940	0.613	4.745	0.19	0.22	14.5282	n.a.
4	SULFATE	5.617	32.150	133.021	9.72	6.23	2261.8562	n.a.
5	BROMIDE	6.460	0.990	5.639	0.30	0.26	116.5083	n.a.
6	NITRATE	7.417	0.764	3.760	0.23	0.18	15.6147	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**330.747**	**2136.238**	**100.00**	**100.00**		

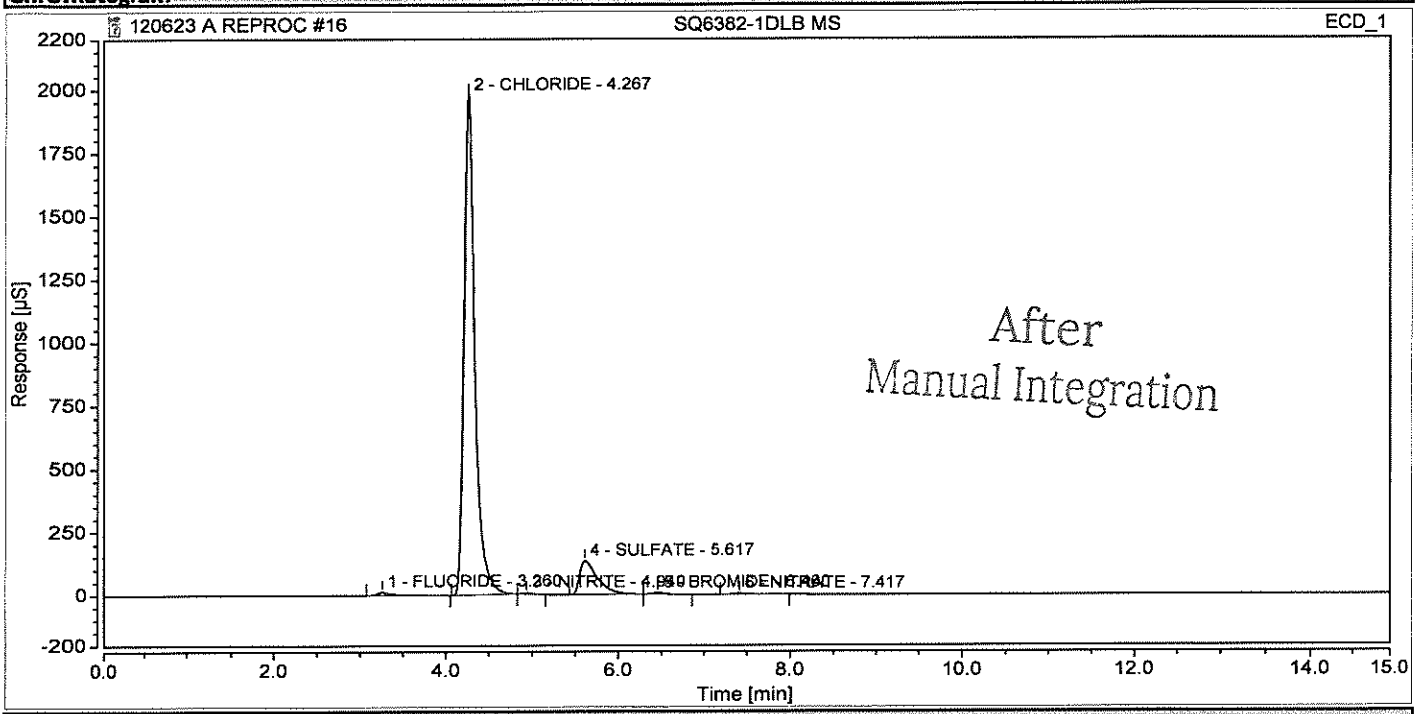
Before
Manual Integration

Chromatogram and Results

Injection Details

Injection Name:	**SQ6382-1DLB MS**	*Run Time (min):*	**14.95**
Vial Number:	**19**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**20.0000**
Injection Date/Time:	**06/Dec/23 21:58**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.260	2.300	12.284	0.70	0.58	74.1709	n.a.
2	CHLORIDE	4.267	293.929	1976.790	88.87	92.54	##########	n.a.
3	NITRITE	4.940	0.613	4.745	0.19	0.22	14.5282	n.a.
4	SULFATE	5.617	32.150	133.021	9.72	6.23	2261.8562	n.a.
5	BROMIDE	6.460	0.990	5.639	0.30	0.26	116.5083	n.a.
6	NITRATE	7.417	0.764	3.760	0.23	0.18	15.6147	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**330.747**	**2136.238**	**100.00**	**100.00**		

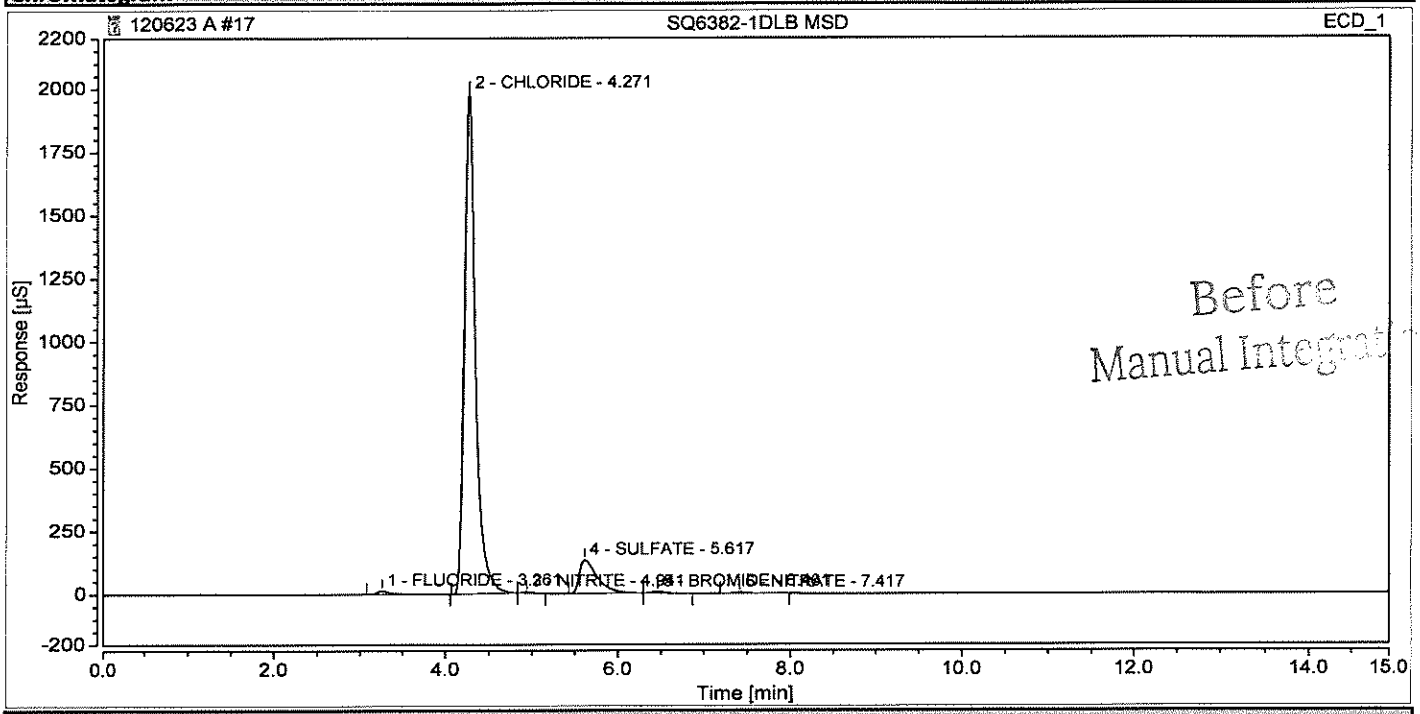
After
Manual Integration

Chromatogram and Results

Injection Details

Injection Name:	**SQ6382-1DLB MSD**	*Run Time (min):*	**14.95**
Vial Number:	**20**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**20.0000**
Injection Date/Time:	**06/Dec/23 22:16**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

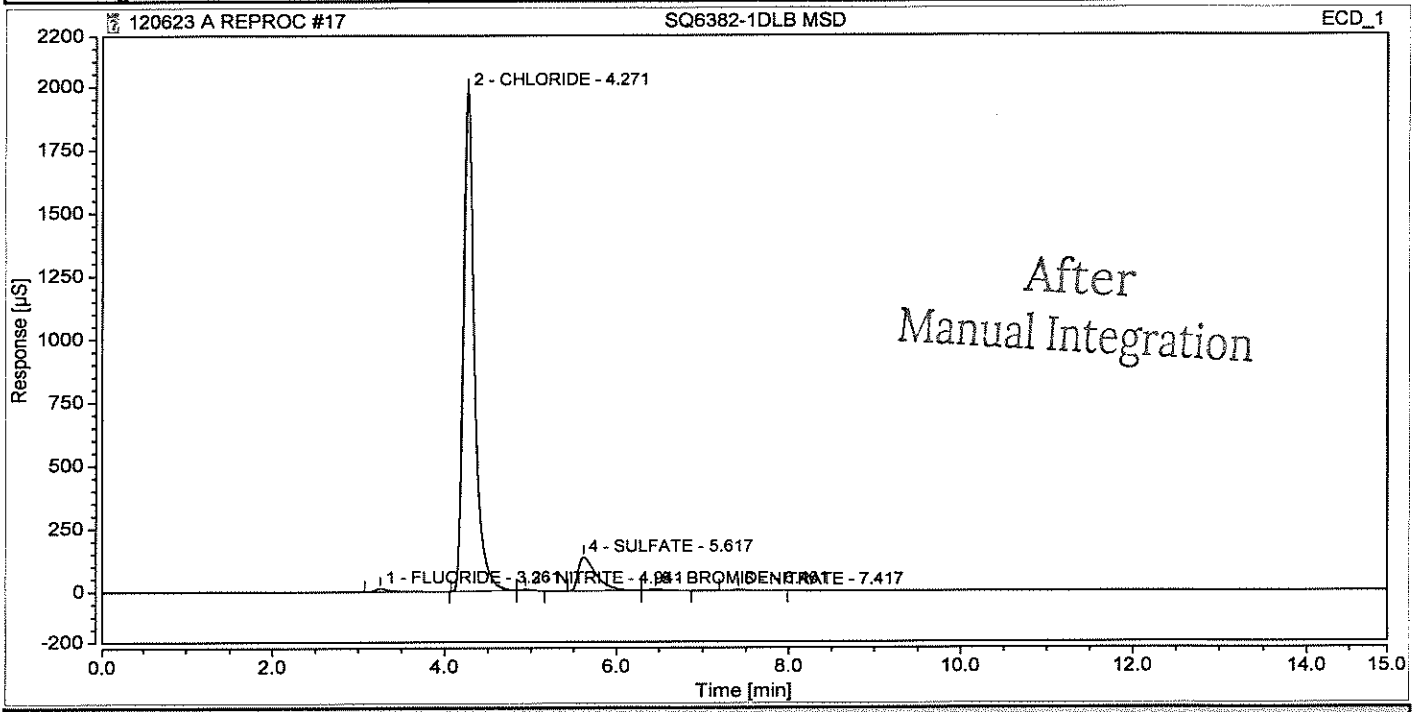
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.261	2.335	12.561	0.71	0.59	75.3211	n.a.
2	CHLORIDE	4.271	293.962	1981.216	88.85	92.53	##########	n.a.
3	NITRITE	4.941	0.624	4.793	0.19	0.22	14.7661	n.a.
4	SULFATE	5.617	32.190	133.168	9.73	6.22	2264.6562	n.a.
5	BROMIDE	6.461	0.996	5.674	0.30	0.26	117.1464	n.a.
6	NITRATE	7.417	0.763	3.776	0.23	0.18	15.6033	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**330.869**	**2141.189**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6382-1DLB MSD**	*Run Time (min):*	**14.95**
Vial Number:	**20**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**20.0000**
Injection Date/Time:	**06/Dec/23 22:16**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

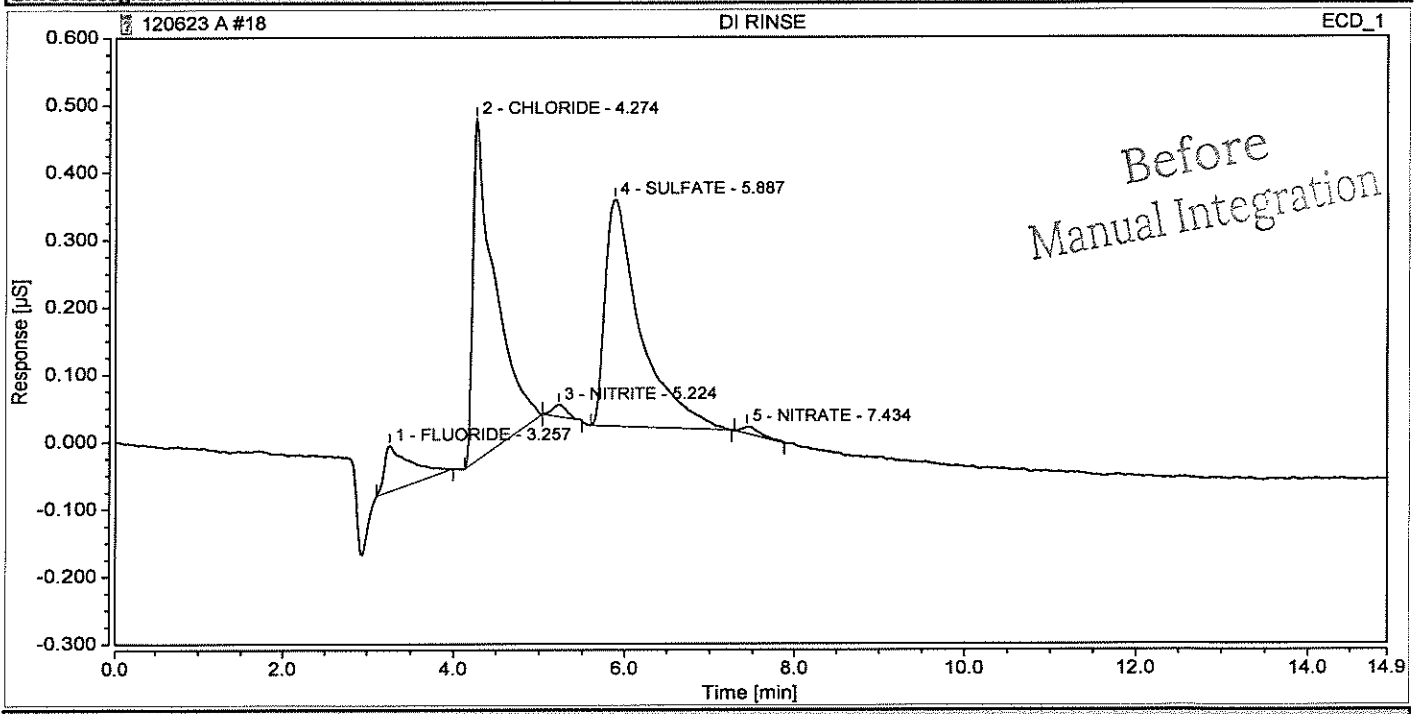
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.261	2.335	12.561	0.71	0.59	75.3211	n.a.
2	CHLORIDE	4.271	293.962	1981.216	88.85	92.53	##########	n.a.
3	NITRITE	4.941	0.624	4.793	0.19	0.22	14.7661	n.a.
4	SULFATE	5.617	32.190	133.168	9.73	6.22	2264.6562	n.a.
5	BROMIDE	6.461	0.996	5.674	0.30	0.26	117.1464	n.a.
6	NITRATE	7.417	0.763	3.776	0.23	0.18	15.6033	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**330.869**	**2141.189**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**DI RINSE**	*Run Time (min):*	**14.95**
Vial Number:	**21**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**06/Dec/23 22:33**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

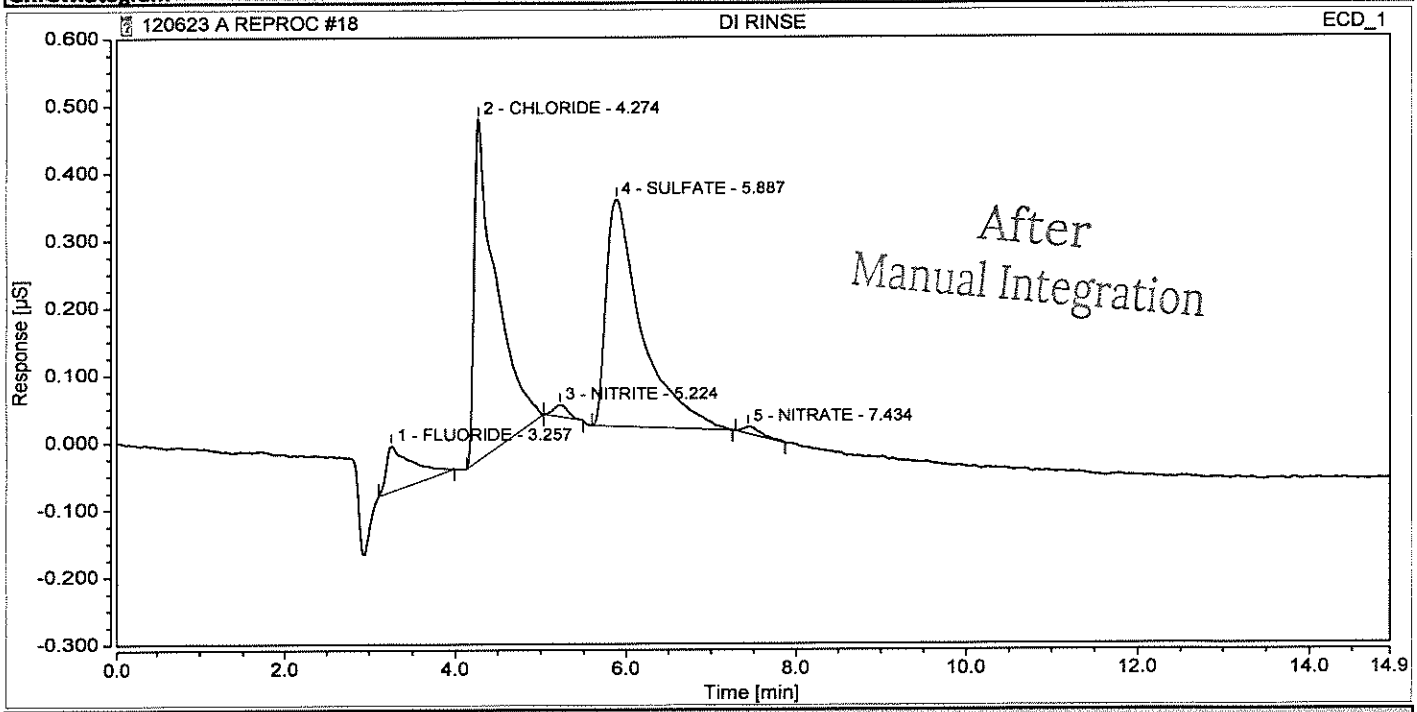
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.257	0.023	0.068	6.80	7.23	0.0534	n.a.
2	CHLORIDE	4.274	0.150	0.507	43.76	53.95	0.3858	n.a.
3	NITRITE	5.224	0.004	0.018	1.05	1.89	0.0124	n.a.
4	SULFATE	5.887	0.163	0.336	47.58	35.83	0.5750	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5	NITRATE	7.434	0.003	0.010	0.82	1.09	0.0029	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.344**	**0.939**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**DI RINSE**	*Run Time (min):*	**14.95**
Vial Number:	**21**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**06/Dec/23 22:33**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

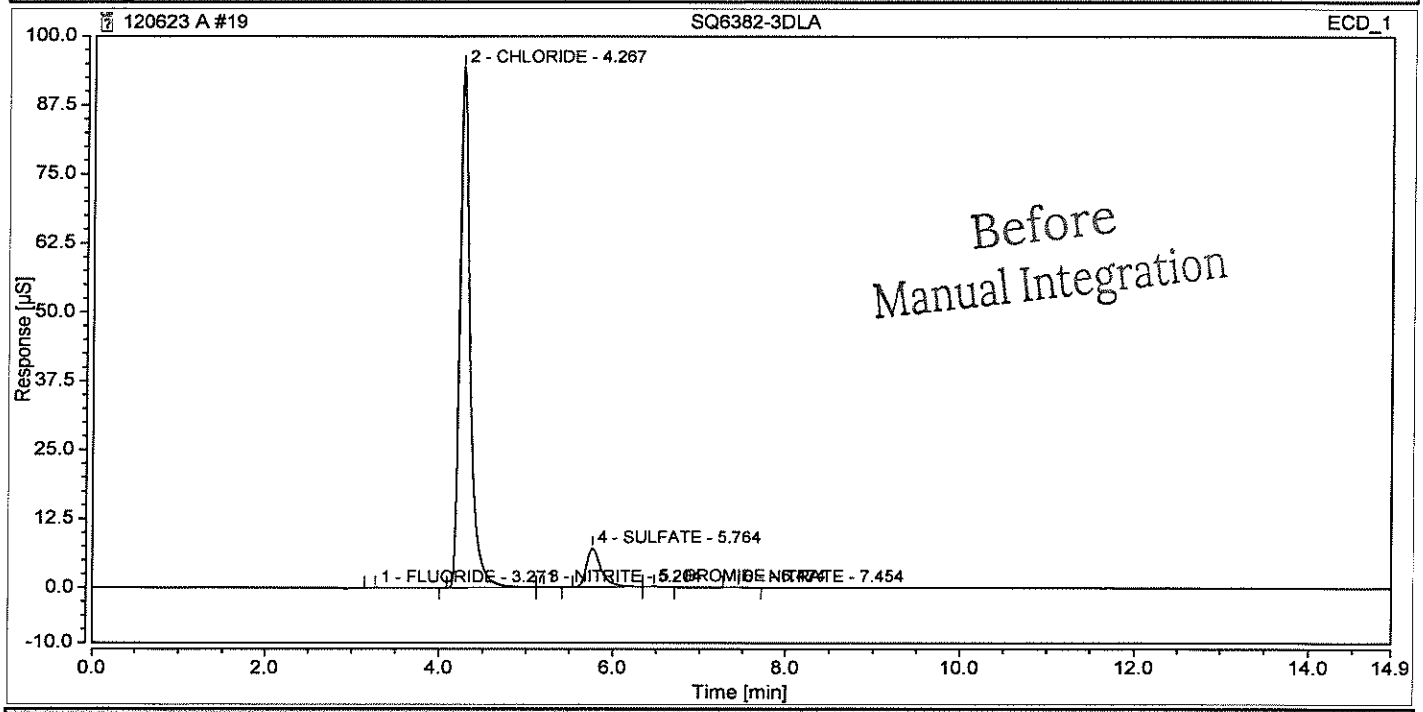
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.257	0.023	0.068	6.80	7.23	0.0534	n.a.
2	CHLORIDE	4.274	0.150	0.507	43.76	53.95	0.3858	n.a.
3	NITRITE	5.224	0.004	0.018	1.05	1.89	0.0124	n.a.
4	SULFATE	5.887	0.163	0.336	47.58	35.83	0.5750	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5	NITRATE	7.434	0.003	0.010	0.82	1.09	0.0029	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.344**	**0.939**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6382-3DLA**	*Run Time (min):*	**14.95**
Vial Number:	**22**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**500.0000**
Injection Date/Time:	**06/Dec/23 22:50**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.271	0.013	0.030	0.09	0.03	18.1636	n.a.
2	CHLORIDE	4.267	13.038	94.297	90.29	92.91 ★	##########	n.a.
3	NITRITE	5.204	0.002	0.014	0.02	0.01	5.4367	n.a.
4	SULFATE	5.764	1.373	7.064	9.51	6.96	2414.5132	n.a.
5	BROMIDE	6.474	0.011	0.070	0.07	0.07	31.5000	n.a.
6	NITRATE	7.454	0.003	0.018	0.02	0.02	1.6248	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**14.439**	**101.493**	**100.00**	**100.00**		

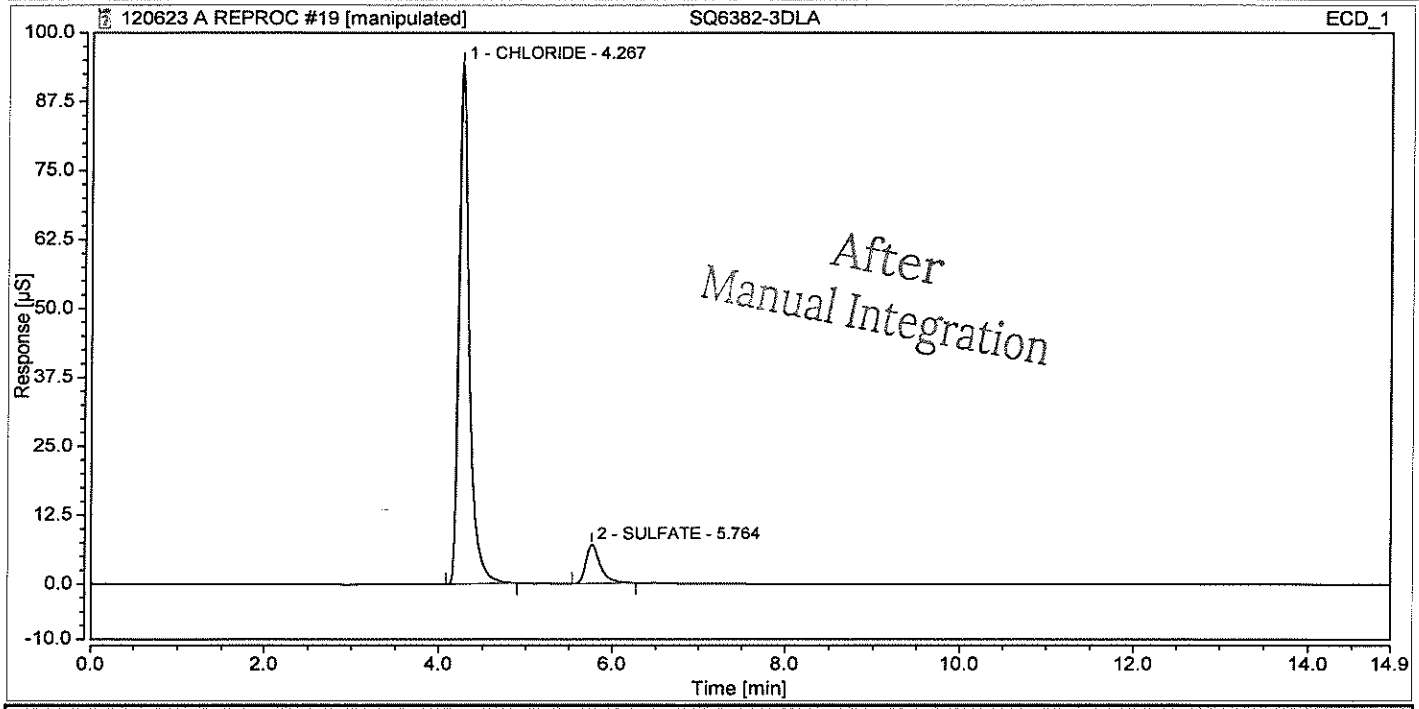
★ Cl = 16725.8157
RAD 12/7/23

Chromatogram and Results

Injection Details

Injection Name:	**SQ6382-3DLA**	*Run Time (min):*	**14.95**
Vial Number:	**22**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**500.0000**
Injection Date/Time:	**06/Dec/23 22:50**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.267	12.990	94.275	90.54	93.04	########## *	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2	SULFATE	5.764	1.357	7.052	9.46	6.96	2387.4155	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**14.348**	**101.327**	**100.00**	**100.00**		

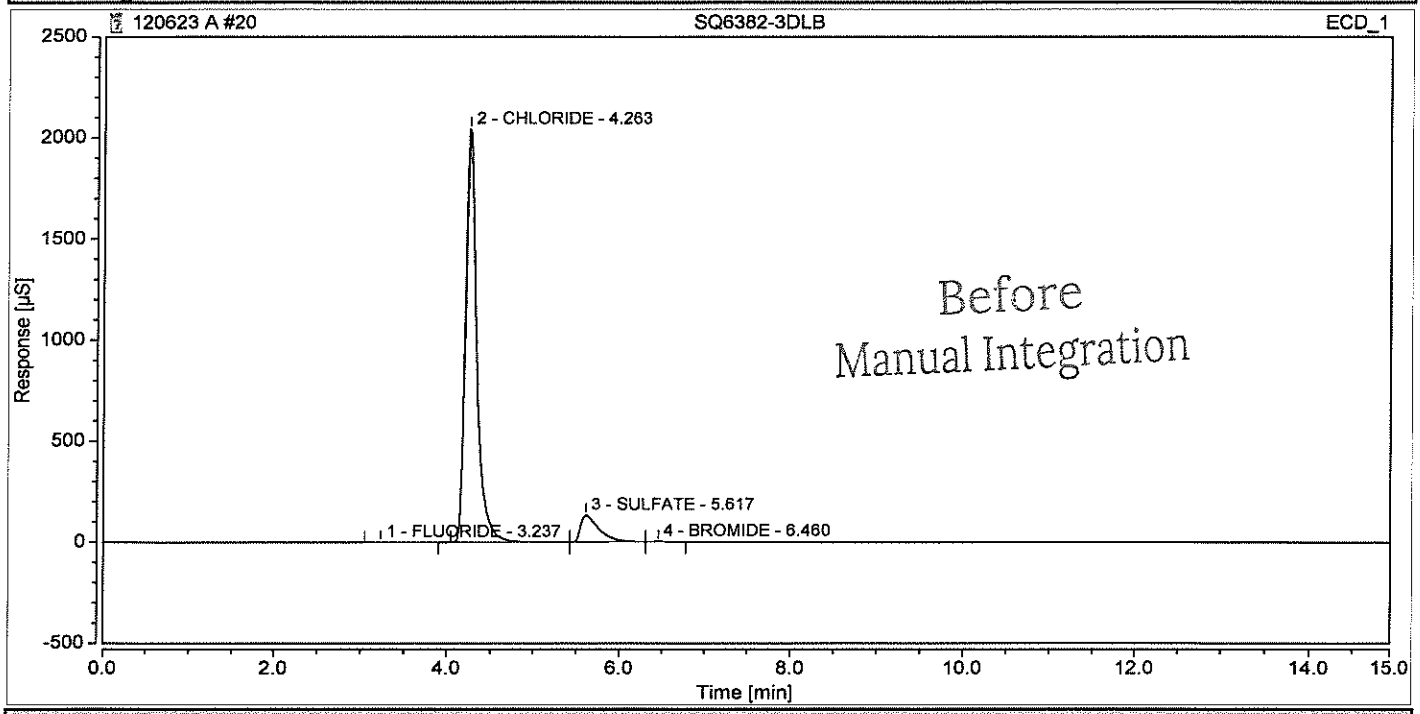
* Cl = 16664.9926
SS, 12/7/23

Chromatogram and Results

Injection Details

Injection Name:	**SQ6382-3DLB**	*Run Time (min):*	**14.95**
Vial Number:	**23**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**20.0000**
Injection Date/Time:	**06/Dec/23 23:08**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

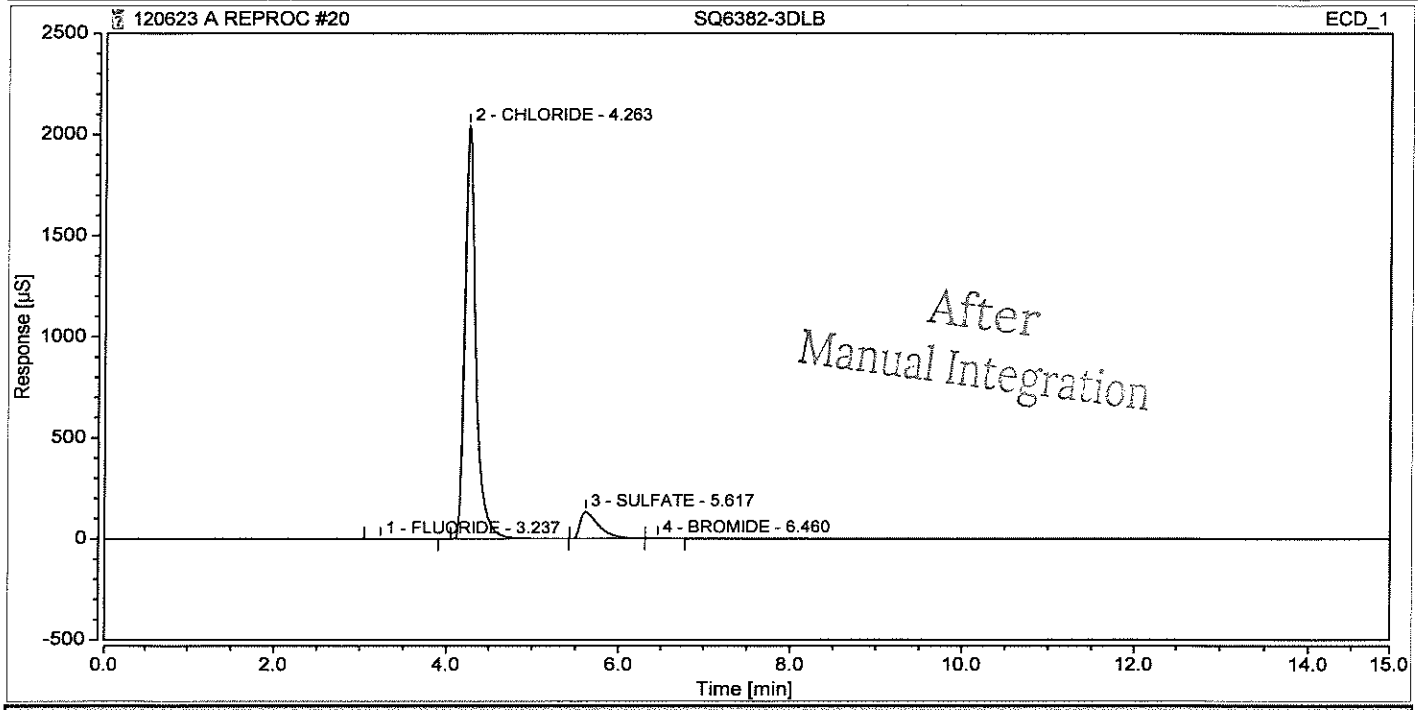
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.237	0.034	0.157	0.01	0.01	1.3925	n.a.
2	CHLORIDE	4.263	307.844	2043.012	90.28	93.76	##########	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
3	SULFATE	5.617	32.720	133.430	9.60	6.12	2301.9934	n.a.
4	BROMIDE	6.460	0.383	2.282	0.11	0.10	45.1027	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**340.982**	**2178.881**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6382-3DLB**	*Run Time (min):*	**14.95**
Vial Number:	**23**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**20.0000**
Injection Date/Time:	**06/Dec/23 23:08**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.237	0.034	0.157	0.01	0.01	1.3925	n.a.
2	CHLORIDE	4.263	307.844	2043.012	90.28	93.76	#########	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
3	SULFATE	5.617	32.720	133.430	9.60	6.12	2301.9934	n.a.
4	BROMIDE	6.460	0.383	2.282	0.11	0.10	45.1027	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**340.982**	**2178.881**	**100.00**	**100.00**		

~~A 61-106664.99926~~

RAD 12/7/23

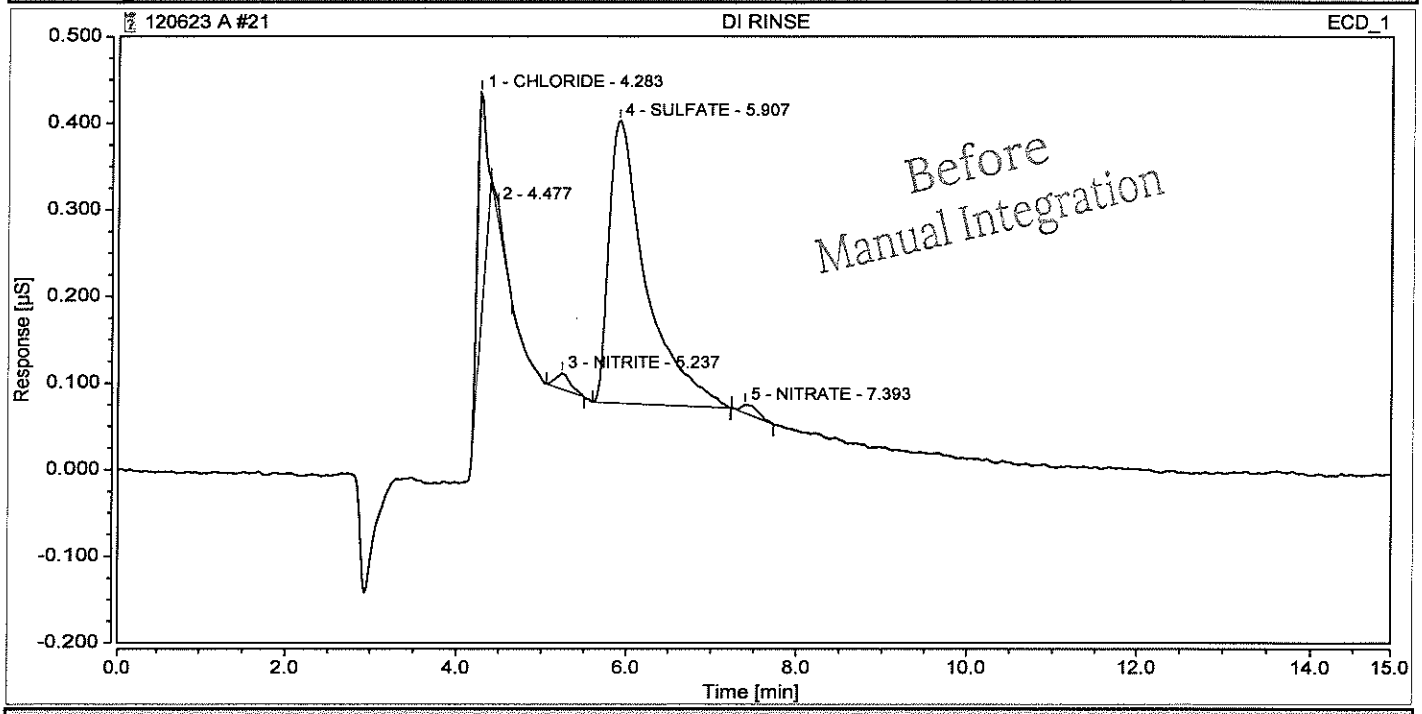
SS 12/7/23

Chromatogram and Results

Injection Details

Injection Name:	**DI RINSE**	*Run Time (min):*	**14.95**
Vial Number:	**24**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**06/Dec/23 23:25**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

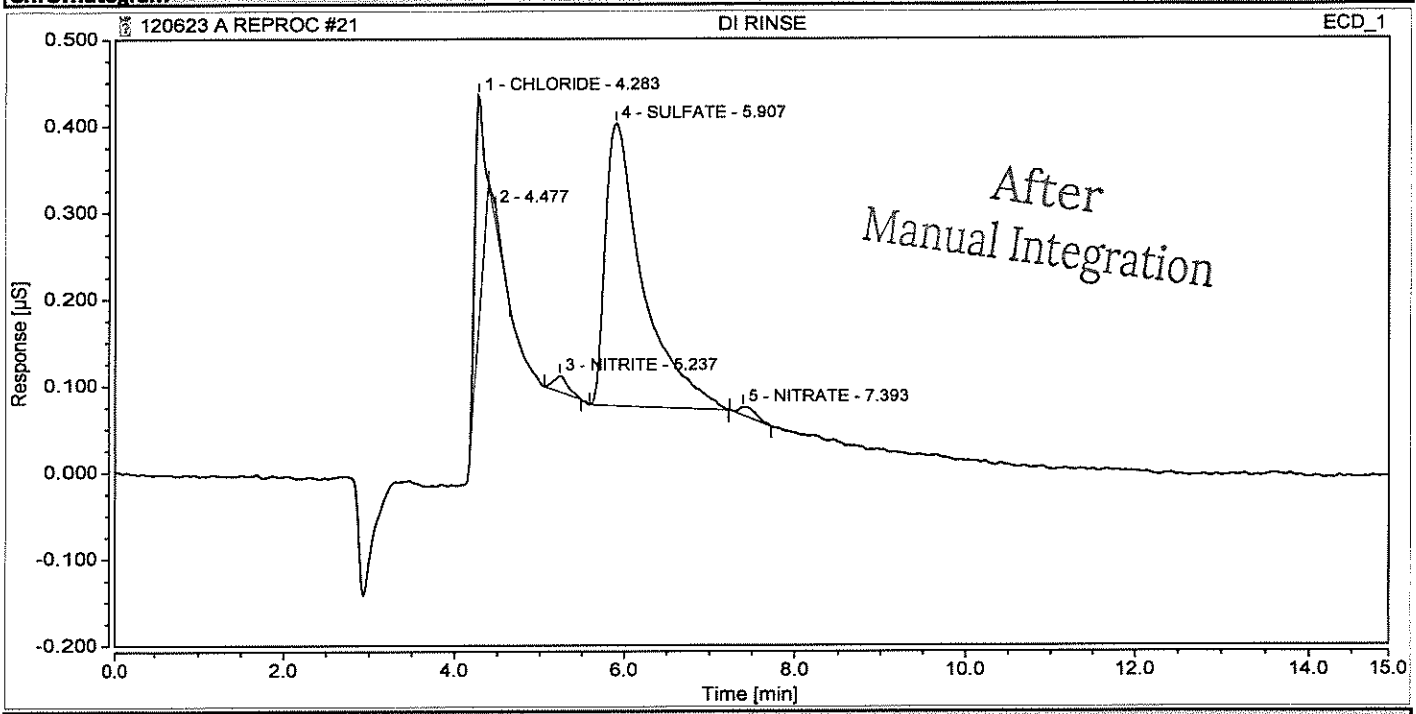
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.283	0.030	0.262	14.35	41.33	0.0757	n.a.
2		4.477	0.002	0.018	0.99	2.86	n.a.	n.a.
3	NITRITE	5.237	0.004	0.019	1.86	2.95	0.0127	n.a.
4	SULFATE	5.907	0.168	0.326	81.55	51.34	0.5899	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5	NITRATE	7.393	0.003	0.010	1.25	1.53	0.0026	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.206**	**0.635**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**DI RINSE**	*Run Time (min):*	**14.95**
Vial Number:	**24**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**06/Dec/23 23:25**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

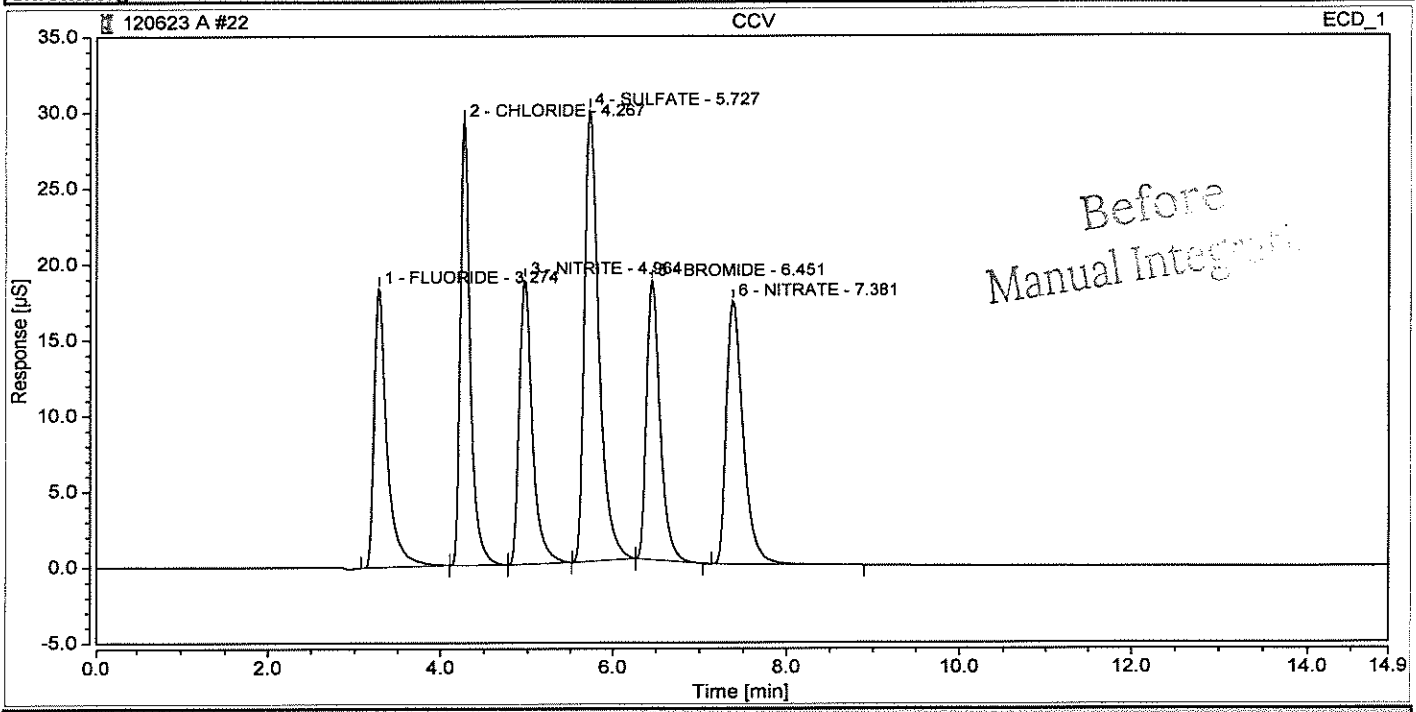
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.283	0.030	0.262	14.35	41.33	0.0757	n.a.
2		4.477	0.002	0.018	0.99	2.86	n.a.	n.a.
3	NITRITE	5.237	0.004	0.019	1.86	2.95	0.0127	n.a.
4	SULFATE	5.907	0.168	0.326	81.55	51.34	0.5899	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5	NITRATE	7.393	0.003	0.010	1.25	1.53	0.0026	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.206**	**0.635**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**CCV**	*Run Time (min):*	**14.95**
Vial Number:	**25**	*Injection Volume:*	**200.00**
Injection Type:	**Check Standard**	*Channel:*	**ECD_1**
Calibration Level:	**06**	*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**06/Dec/23 23:42**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

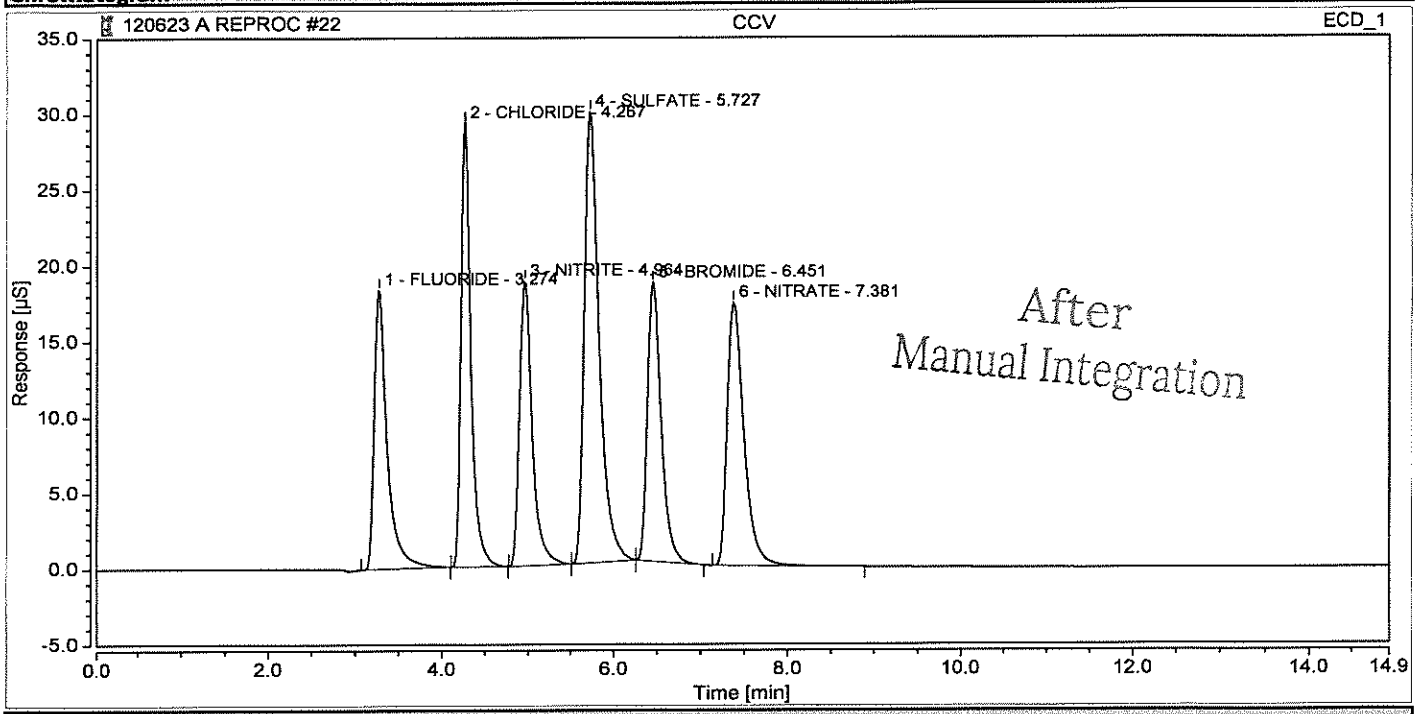
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.274	3.186	18.406	13.55	13.96	5.1771	3.5420
2	CHLORIDE	4.267	3.929	29.246	16.71	22.18	10.0814	0.8140
3	NITRITE	4.964	3.280	18.774	13.95	14.24	3.9497	-1.2565
4	SULFATE	5.727	5.876	29.739	24.98	22.55	20.6694	3.3470
5	BROMIDE	6.451	3.365	18.365	14.31	13.93	19.7921	-1.0394
6	NITRATE	7.381	3.882	17.332	16.51	13.14	3.9672	-0.8200
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**23.519**	**131.862**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**CCV**	*Run Time (min):*	**14.95**
Vial Number:	**25**	*Injection Volume:*	**200.00**
Injection Type:	**Check Standard**	*Channel:*	**ECD_1**
Calibration Level:	**06**	*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**06/Dec/23 23:42**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

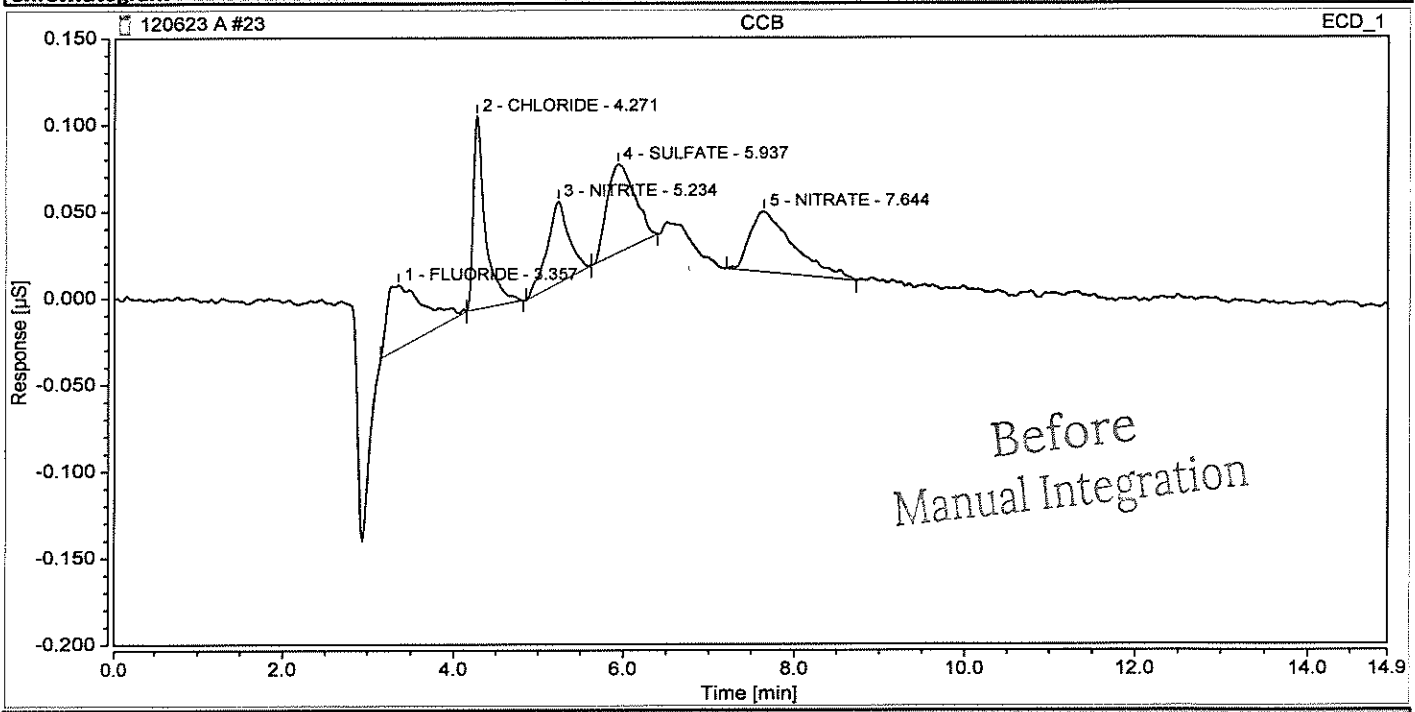
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.274	3.186	18.406	13.55	13.96	5.1771	3.5420
2	CHLORIDE	4.267	3.929	29.246	16.71	22.18	10.0814	0.8140
3	NITRITE	4.964	3.280	18.774	13.95	14.24	3.9497	-1.2565
4	SULFATE	5.727	5.876	29.739	24.98	22.55	20.6694	3.3470
5	BROMIDE	6.451	3.365	18.365	14.31	13.93	19.7921	-1.0394
6	NITRATE	7.381	3.882	17.332	16.51	13.14	3.9672	-0.8200
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**23.519**	**131.862**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**CCB**	*Run Time (min):*	**14.95**
Vial Number:	**26**	*Injection Volume:*	**200.00**
Injection Type:	**Blank**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**06/Dec/23 23:59**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

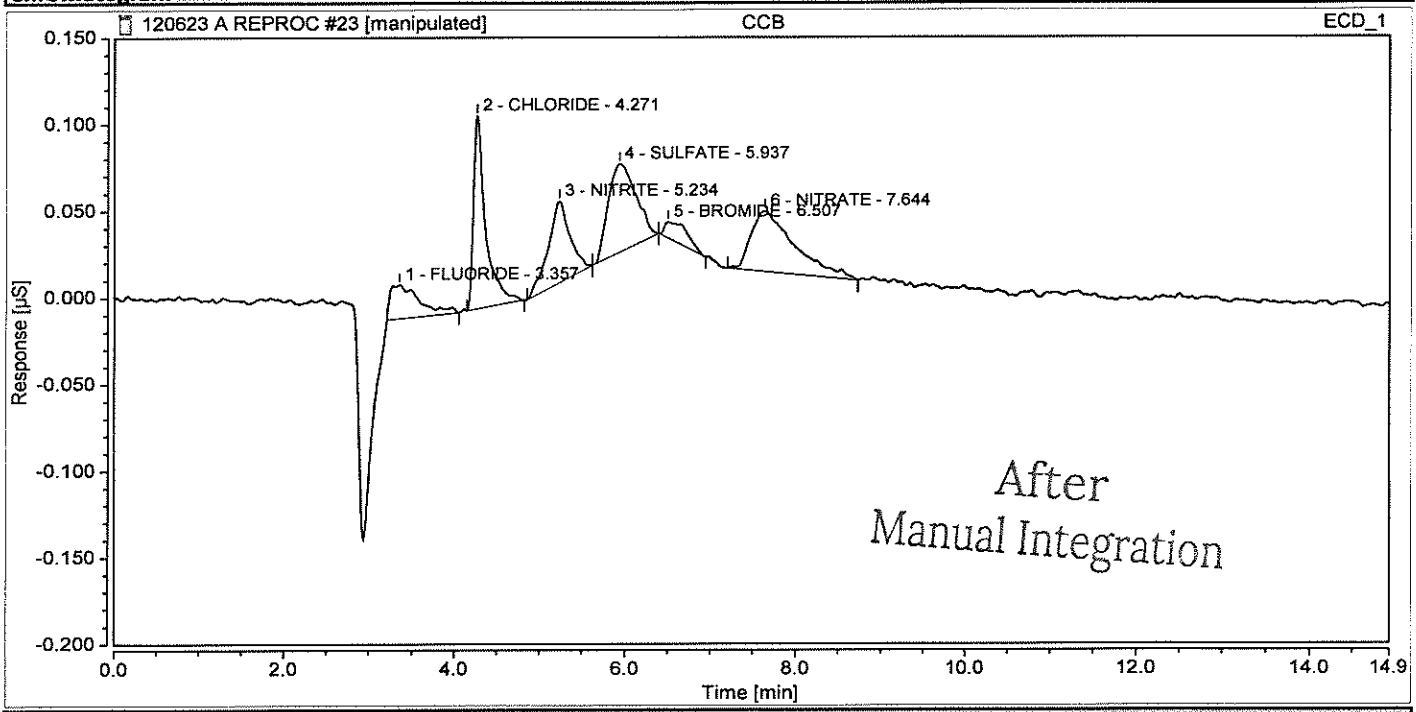
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.357	0.018	0.036	19.63	12.97	0.0443	n.a.
2	CHLORIDE	4.271	0.018	0.111	20.55	39.73	0.0472	n.a.
3	NITRITE	5.234	0.014	0.047	15.53	16.74	0.0244	n.a.
4	SULFATE	5.937	0.019	0.051	21.09	18.12	0.0664	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5	NITRATE	7.644	0.021	0.035	23.20	12.44	0.0212	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.090**	**0.280**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**CCB**	*Run Time (min):*	**14.95**
Vial Number:	**26**	*Injection Volume:*	**200.00**
Injection Type:	**Blank**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**06/Dec/23 23:59**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

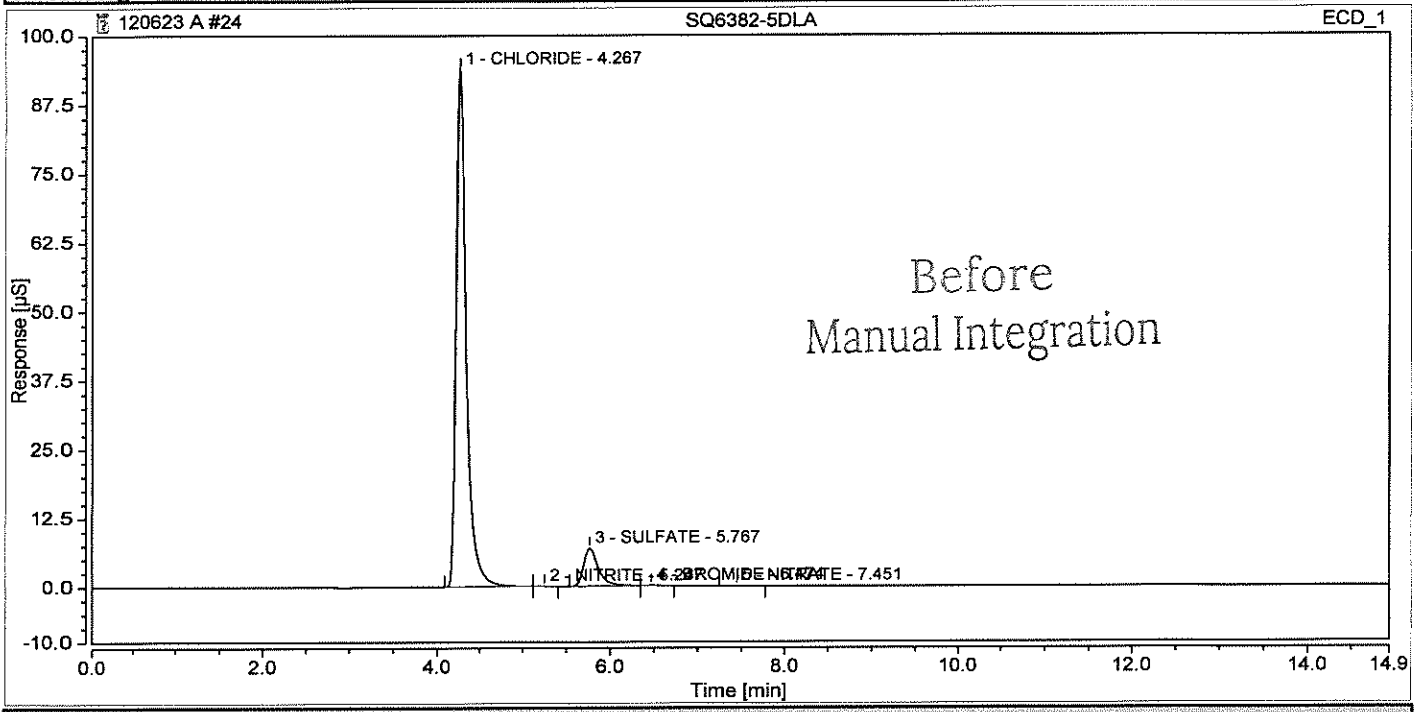
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.357	0.008	0.019	9.30	7.12	0.0288	n.a.
2	CHLORIDE	4.271	0.018	0.111	22.16	40.84	0.0472	n.a.
3	NITRITE	5.234	0.014	0.047	16.74	17.21	0.0244	n.a.
4	SULFATE	5.937	0.019	0.051	22.74	18.62	0.0664	n.a.
5	BROMIDE	6.507	0.003	0.009	4.06	3.41	0.0198	n.a.
6	NITRATE	7.644	0.021	0.035	25.01	12.79	0.0212	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.083**	**0.273**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6382-5DLA**	*Run Time (min):*	**14.95**
Vial Number:	**27**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**500.0000**
Injection Date/Time:	**07/Dec/23 00:17**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.267	13.001	93.865	90.53	93.05 ★	##########	n.a.
2	NITRITE	5.247	0.001	0.009	0.01	0.01	4.8283	n.a.
3	SULFATE	5.767	1.341	6.896	9.34	6.84	2358.8063	n.a.
4	BROMIDE	6.474	0.011	0.071	0.08	0.07	32.0069	n.a.
5	NITRATE	7.451	0.006	0.031	0.04	0.03	3.1053	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**14.361**	**100.872**	**100.00**	**100.00**		

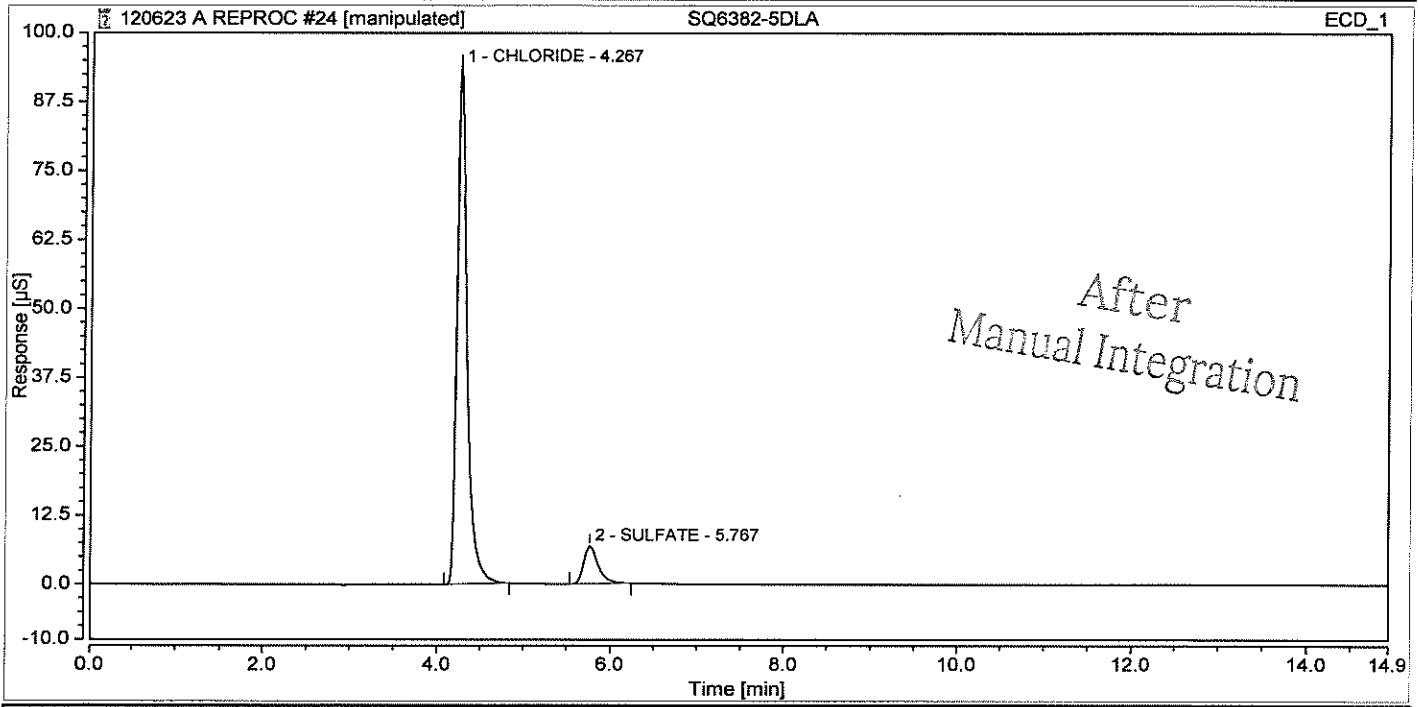
★ Cl = 166779.07762
BAD 12/7/23

Chromatogram and Results

Injection Details

Injection Name:	**SQ6382-5DLA**	*Run Time (min):*	**14.95**
Vial Number:	**27**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**500.0000**
Injection Date/Time:	**07/Dec/23 00:17**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.267	12.931	93.830	90.73	93.17	##########	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2	SULFATE	5.767	1.321	6.879	9.27	6.83	2322.9846	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**14.252**	**100.709**	**100.00**	**100.00**		

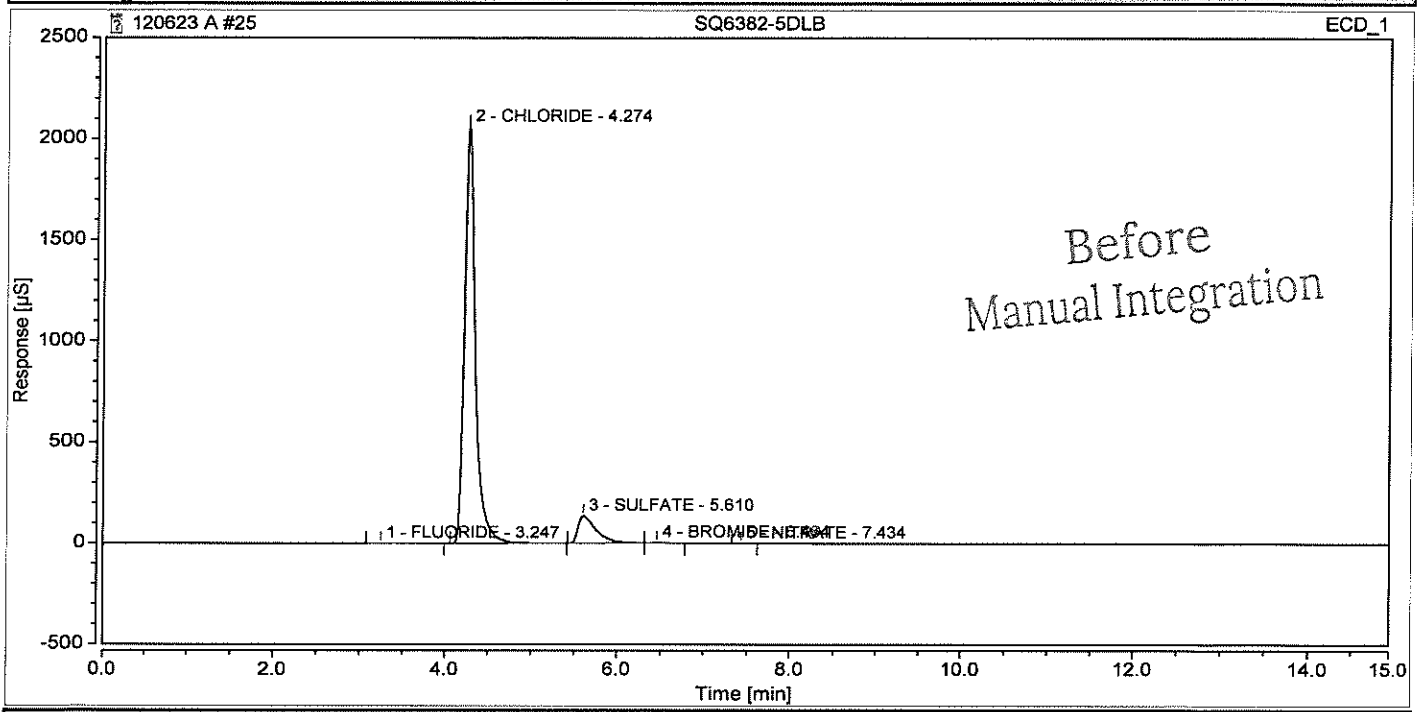
Cl = 16589.1410
RAD 12/7/23

Chromatogram and Results

Injection Details

Injection Name:	**SQ6382-5DLB**	*Run Time (min):*	**14.95**
Vial Number:	**28**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**20.0000**
Injection Date/Time:	**07/Dec/23 00:34**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

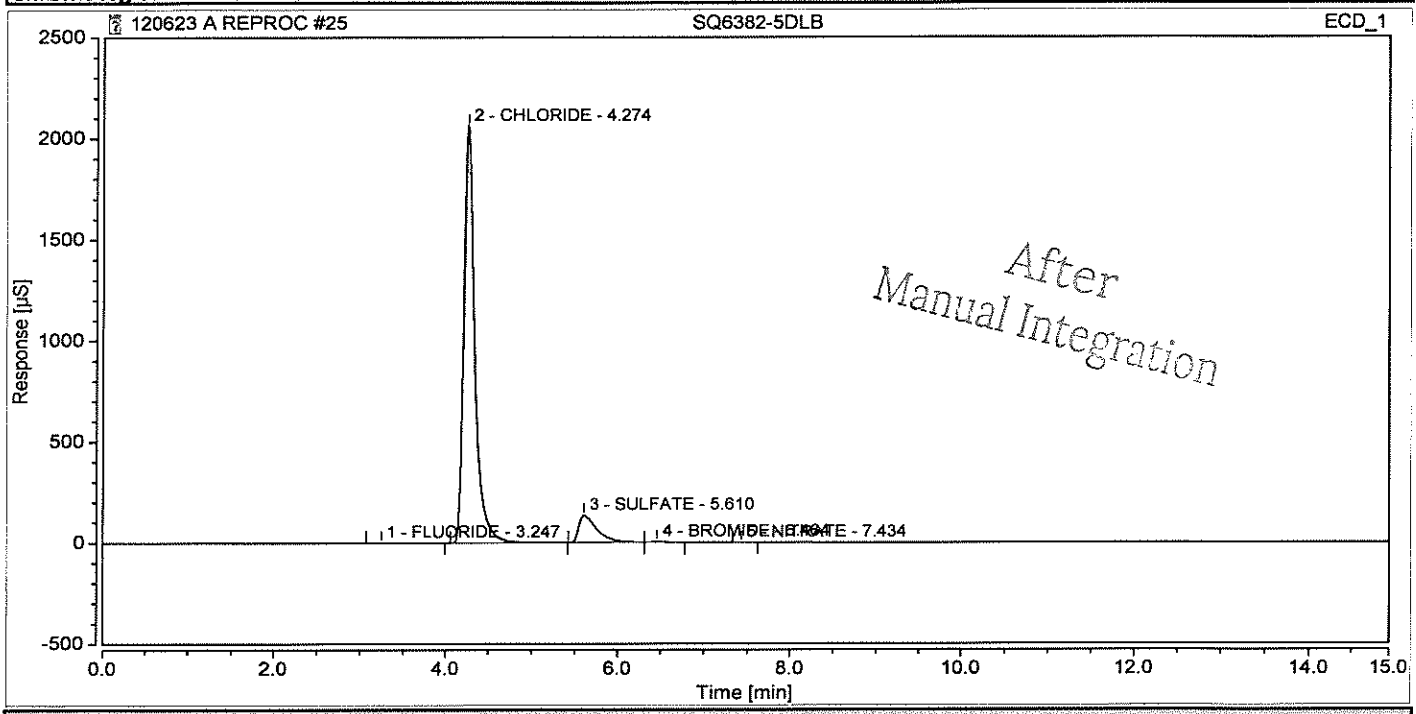
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.247	0.031	0.150	0.01	0.01	1.3036	n.a.
2	CHLORIDE	4.274	309.676	2060.118	90.32	93.75	##########	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
3	SULFATE	5.610	32.792	134.932	9.56	6.14	2307.0324	n.a.
4	BROMIDE	6.464	0.374	2.266	0.11	0.10	44.0455	n.a.
5	NITRATE	7.434	0.001	0.008	0.00	0.00	0.0234	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**342.874**	**2197.475**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6382-5DLB**	*Run Time (min):*	**14.95**
Vial Number:	**28**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**20.0000**
Injection Date/Time:	**07/Dec/23 00:34**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

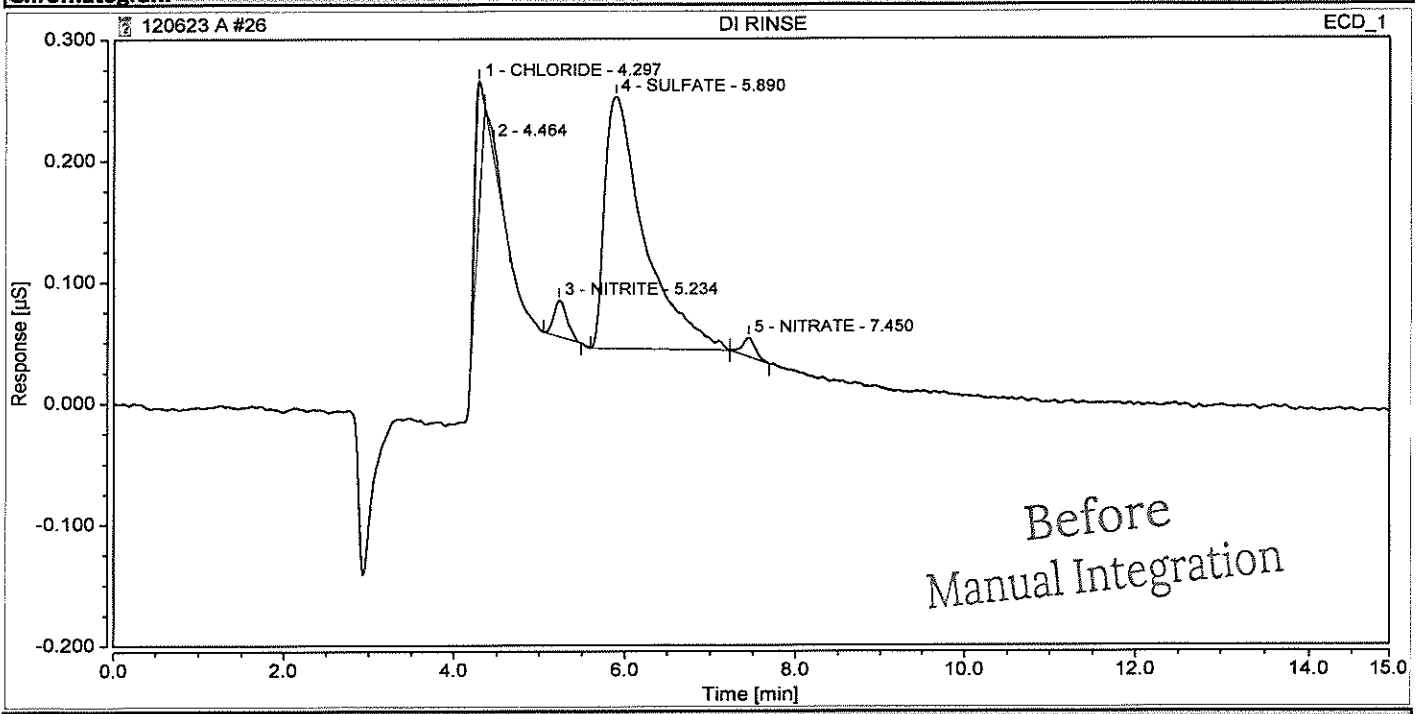
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.247	0.031	0.150	0.01	0.01	1.3036	n.a.
2	CHLORIDE	4.274	309.676	2060.118	90.32	93.75	##########	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
3	SULFATE	5.610	32.792	134.932	9.56	6.14	2307.0324	n.a.
4	BROMIDE	6.464	0.374	2.266	0.11	0.10	44.0455	n.a.
5	NITRATE	7.434	0.001	0.008	0.00	0.00	0.0234	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**342.874**	**2197.475**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**DI RINSE**	*Run Time (min):*	**14.95**
Vial Number:	**29**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**07/Dec/23 00:51**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

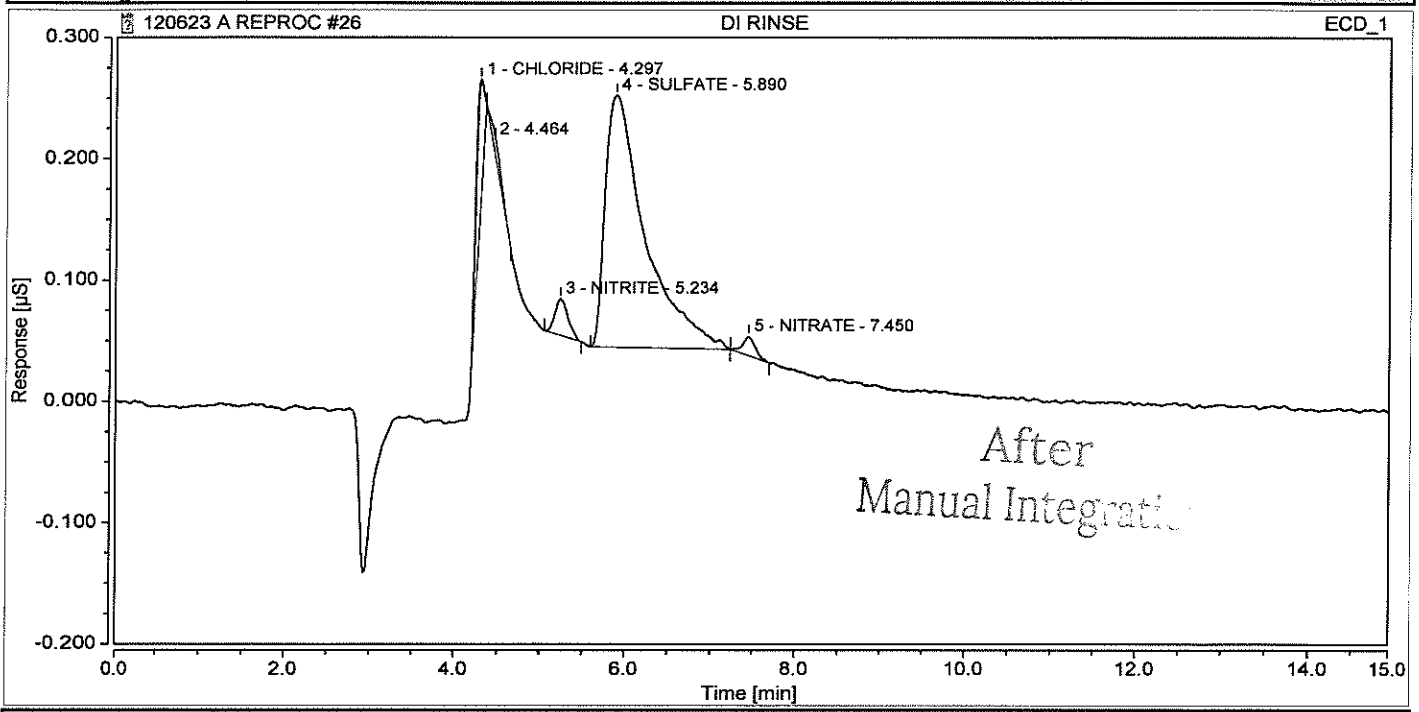
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.297	0.011	0.103	8.52	27.86	0.0293	n.a.
2		4.464	0.002	0.014	1.51	3.78	n.a.	n.a.
3	NITRITE	5.234	0.005	0.030	4.04	8.12	0.0145	n.a.
4	SULFATE	5.890	0.112	0.208	83.85	55.96	0.3947	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5	NITRATE	7.450	0.003	0.016	2.07	4.27	0.0028	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.134**	**0.371**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**DI RINSE**	*Run Time (min):*	**14.95**
Vial Number:	**29**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**07/Dec/23 00:51**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

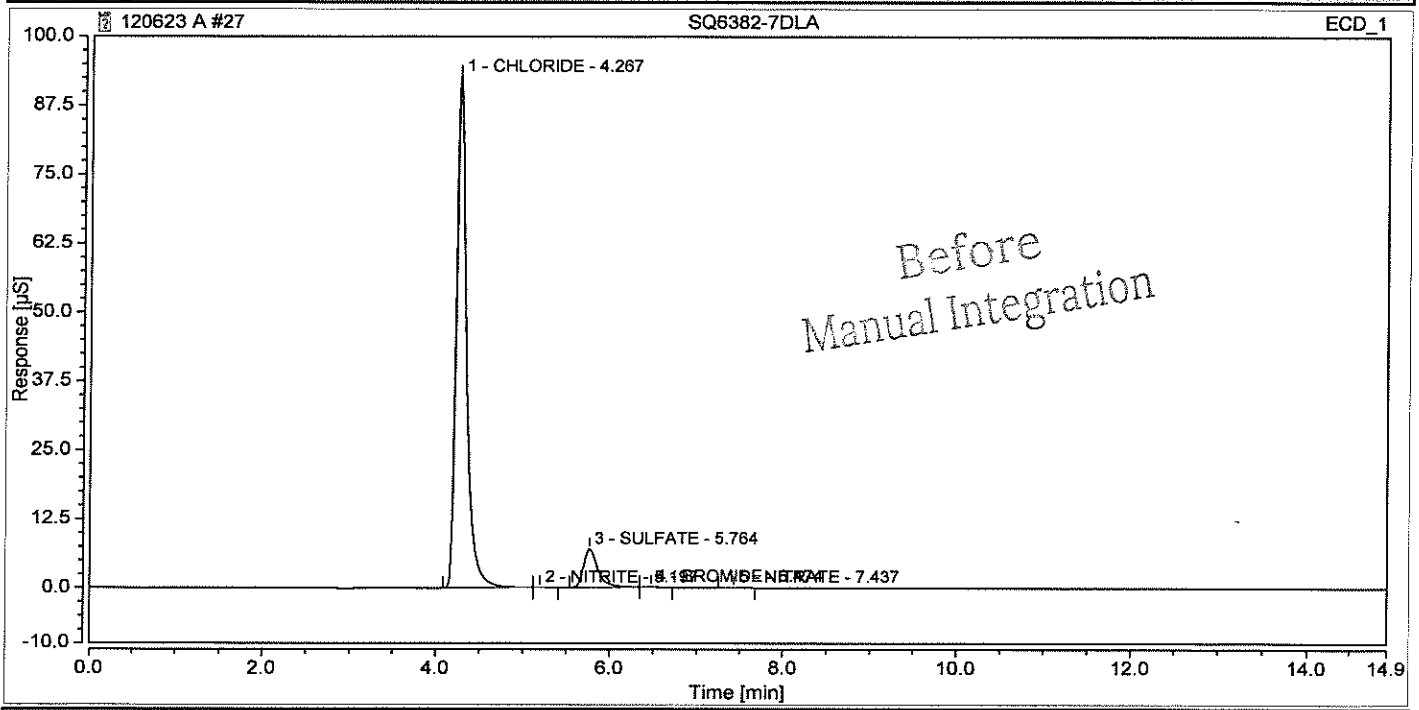
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.297	0.011	0.103	8.52	27.86	0.0293	n.a.
2		4.464	0.002	0.014	1.51	3.78	n.a.	n.a.
3	NITRITE	5.234	0.005	0.030	4.04	8.12	0.0145	n.a.
4	SULFATE	5.890	0.112	0.208	83.85	55.96	0.3947	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5	NITRATE	7.450	0.003	0.016	2.07	4.27	0.0028	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.134**	**0.371**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6382-7DLA**	*Run Time (min):*	**14.95**
Vial Number:	**30**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**500.0000**
Injection Date/Time:	**07/Dec/23 01:08**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.267	12.766	92.711	90.34	92.92 ☆	##########	n.a.
2	NITRITE	5.197	0.002	0.010	0.01	0.01	5.1695	n.a.
3	SULFATE	5.764	1.349	6.968	9.55	6.98	2373.3890	n.a.
4	BROMIDE	6.474	0.011	0.071	0.08	0.07	32.8019	n.a.
5	NITRATE	7.437	0.002	0.013	0.02	0.01	1.2241	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**14.131**	**99.773**	**100.00**	**100.00**		

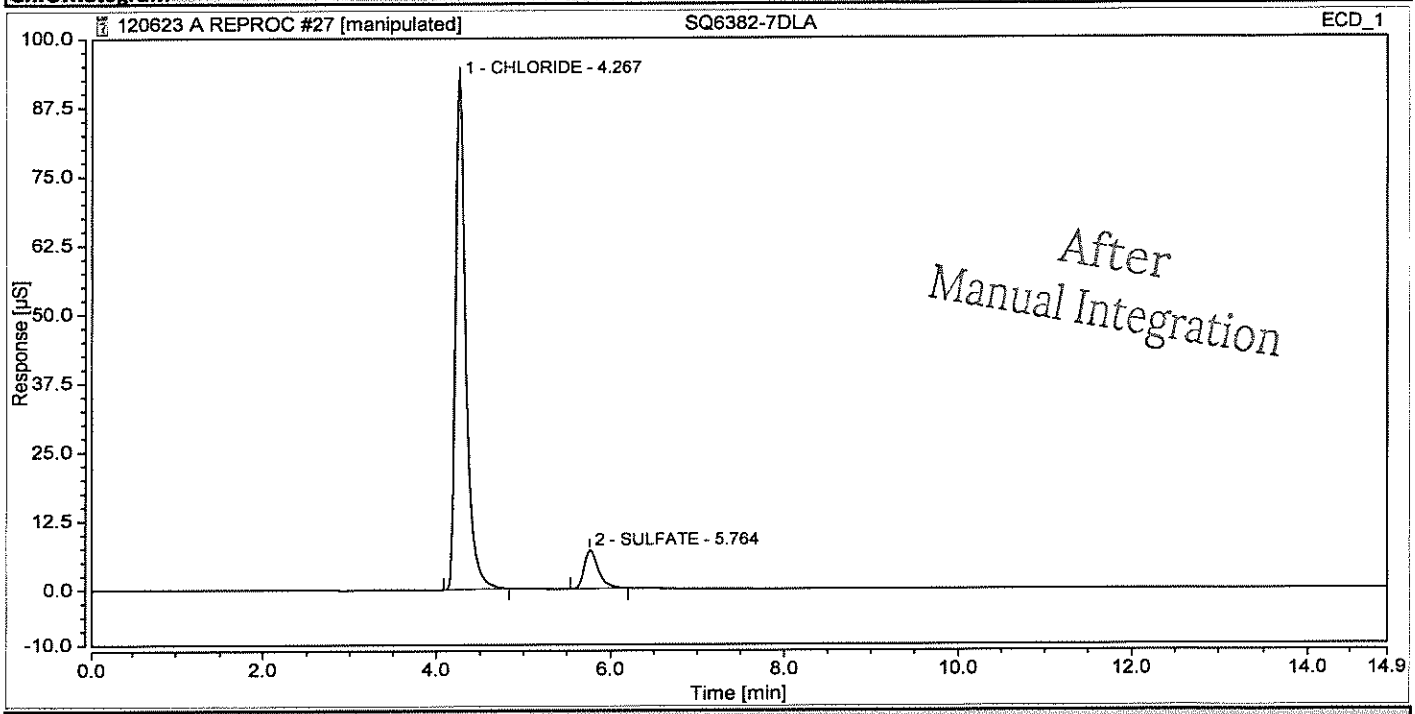
Cl= 163777.8644
RAD 12/7/23

Chromatogram and Results

Injection Details

Injection Name:	**SQ6382-7DLA**	*Run Time (min):*	**14.95**
Vial Number:	**30**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**500.0000**
Injection Date/Time:	**07/Dec/23 01:08**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.267	12.701	92.677	90.62	93.04 ★	##########	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2	SULFATE	5.764	1.315	6.937	9.38	6.96	2312.3690	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**14.016**	**99.615**	**100.00**	**100.00**		

Cl=16294.3895

★ ~~Cl=16377.8644~~

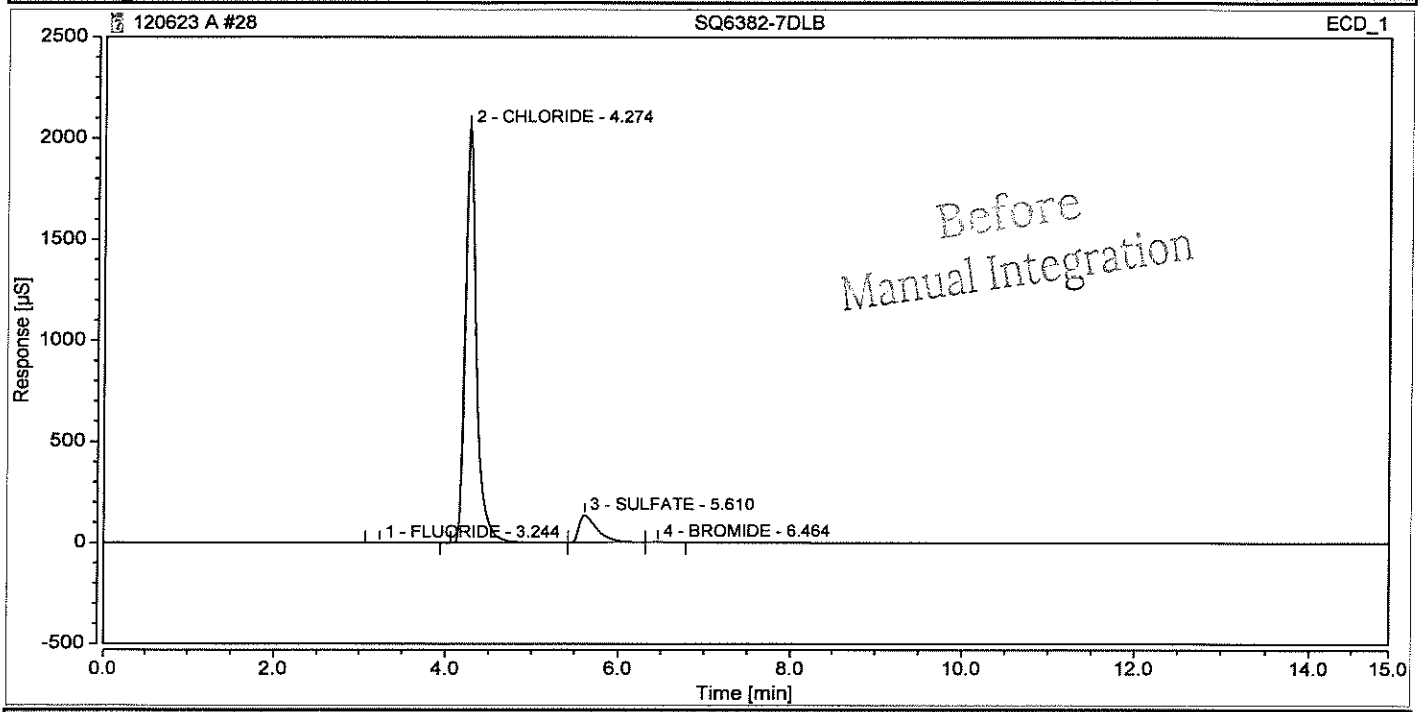
RAD 12/7/23

Chromatogram and Results

Injection Details

Injection Name:	**SQ6382-7DLB**	*Run Time (min):*	**14.95**
Vial Number:	**31**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**20.0000**
Injection Date/Time:	**07/Dec/23 01:26**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

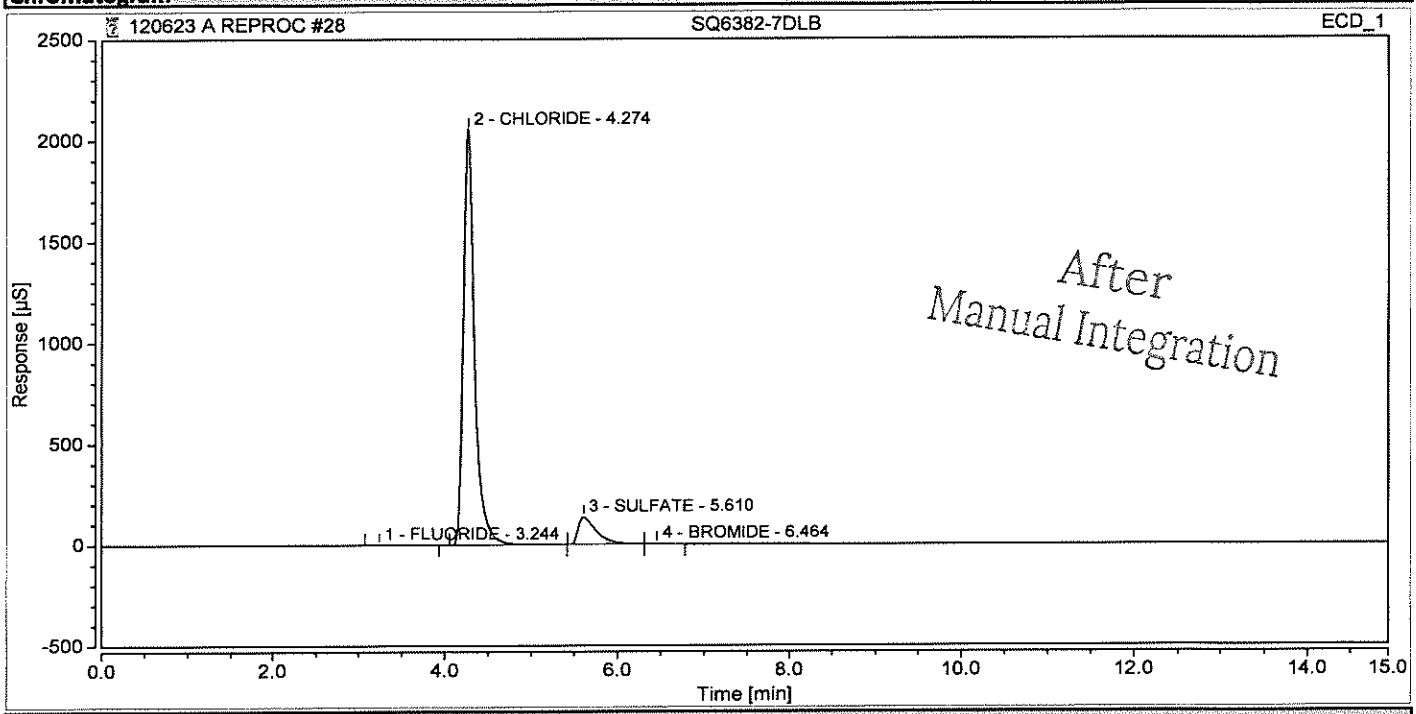
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.244	0.032	0.151	0.01	0.01	1.3322	n.a.
2	CHLORIDE	4.274	307.621	2053.168	90.28	93.73	##########	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
3	SULFATE	5.610	32.701	135.010	9.60	6.16	2300.6294	n.a.
4	BROMIDE	6.464	0.377	2.266	0.11	0.10	44.3217	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**340.731**	**2190.596**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6382-7DLB**	*Run Time (min):*	**14.95**
Vial Number:	**31**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**20.0000**
Injection Date/Time:	**07/Dec/23 01:26**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

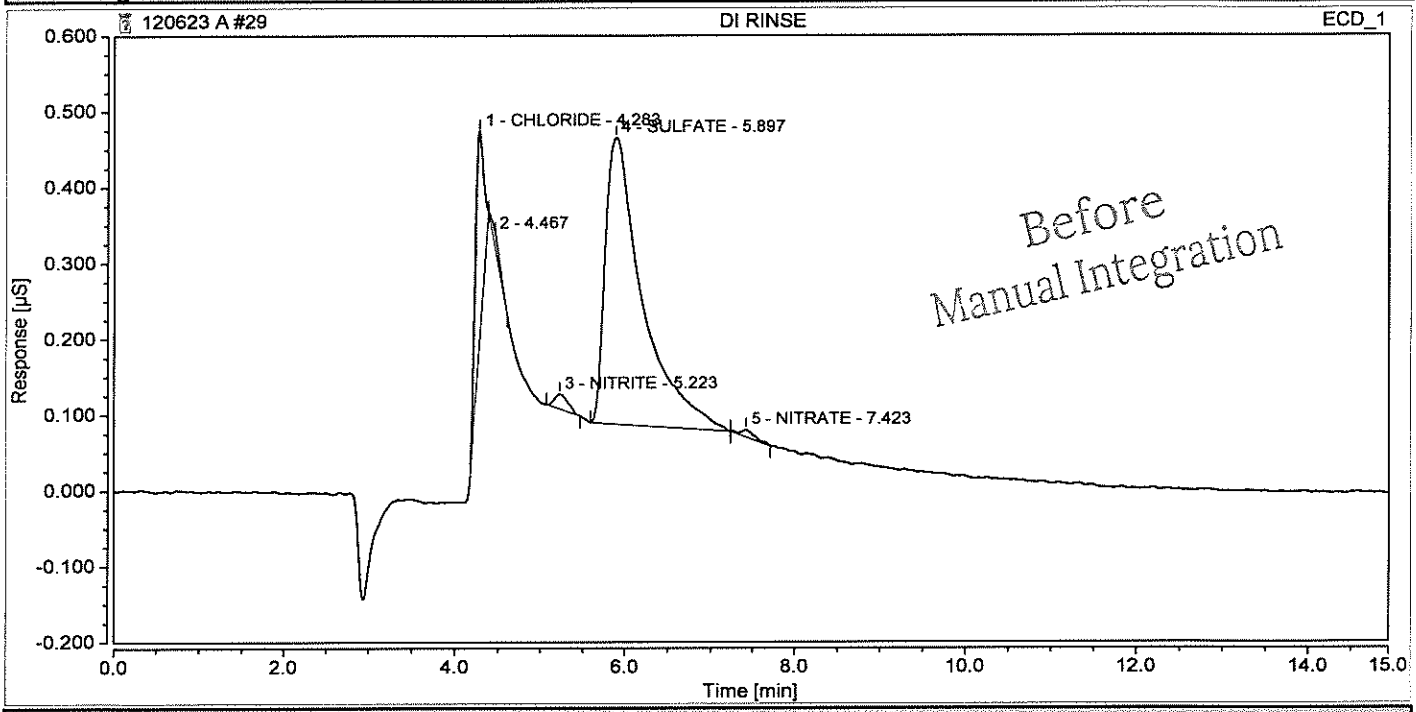
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.244	0.032	0.151	0.01	0.01	1.3322	n.a.
2	CHLORIDE	4.274	307.621	2053.168	90.28	93.73	##########	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
3	SULFATE	5.610	32.701	135.010	9.60	6.16	2300.6294	n.a.
4	BROMIDE	6.464	0.377	2.266	0.11	0.10	44.3217	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**340.731**	**2190.596**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**DI RINSE**	*Run Time (min):*	**14.95**
Vial Number:	**32**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**07/Dec/23 01:43**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

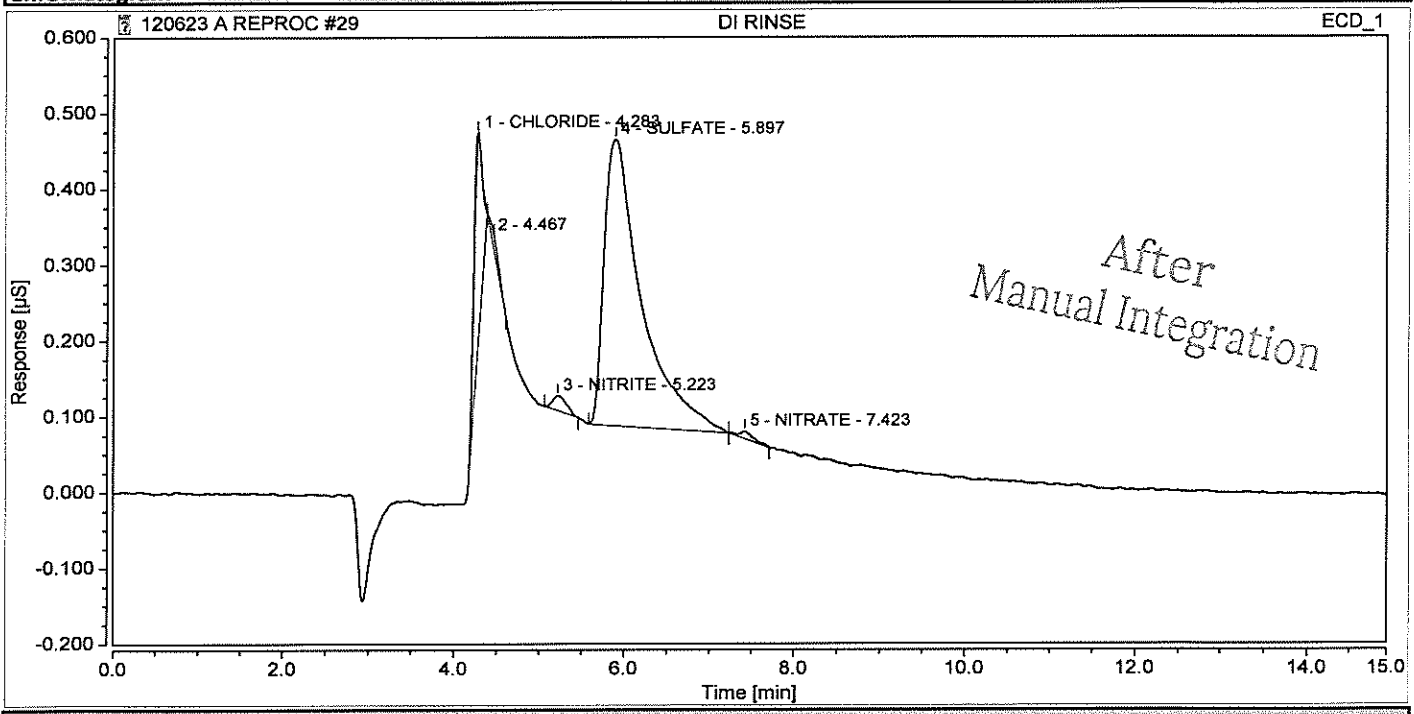
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.283	0.031	0.279	13.43	39.48	0.0795	n.a.
2		4.467	0.002	0.020	0.96	2.79	n.a.	n.a.
3	NITRITE	5.223	0.004	0.020	1.64	2.77	0.0126	n.a.
4	SULFATE	5.897	0.192	0.378	83.11	53.55	0.6742	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5	NITRATE	7.423	0.002	0.010	0.86	1.41	0.0020	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.231**	**0.706**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**DI RINSE**	*Run Time (min):*	**14.95**
Vial Number:	**32**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**07/Dec/23 01:43**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

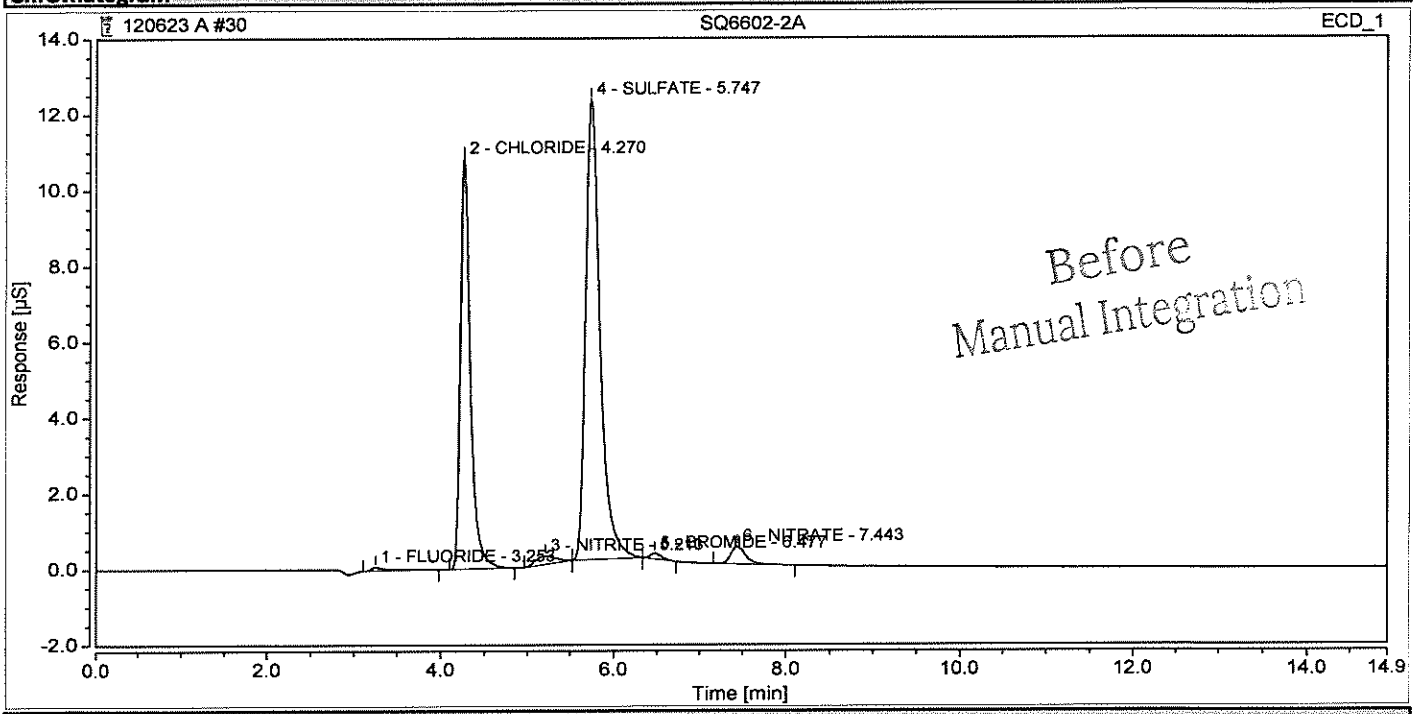
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.283	0.031	0.279	13.43	39.48	0.0795	n.a.
2		4.467	0.002	0.020	0.96	2.79	n.a.	n.a.
3	NITRITE	5.223	0.004	0.020	1.64	2.77	0.0126	n.a.
4	SULFATE	5.897	0.192	0.378	83.11	53.55	0.6742	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5	NITRATE	7.423	0.002	0.010	0.86	1.41	0.0020	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.231**	**0.706**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6602-2A**	*Run Time (min):*	**14.94**
Vial Number:	**33**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**07/Dec/23 02:00**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

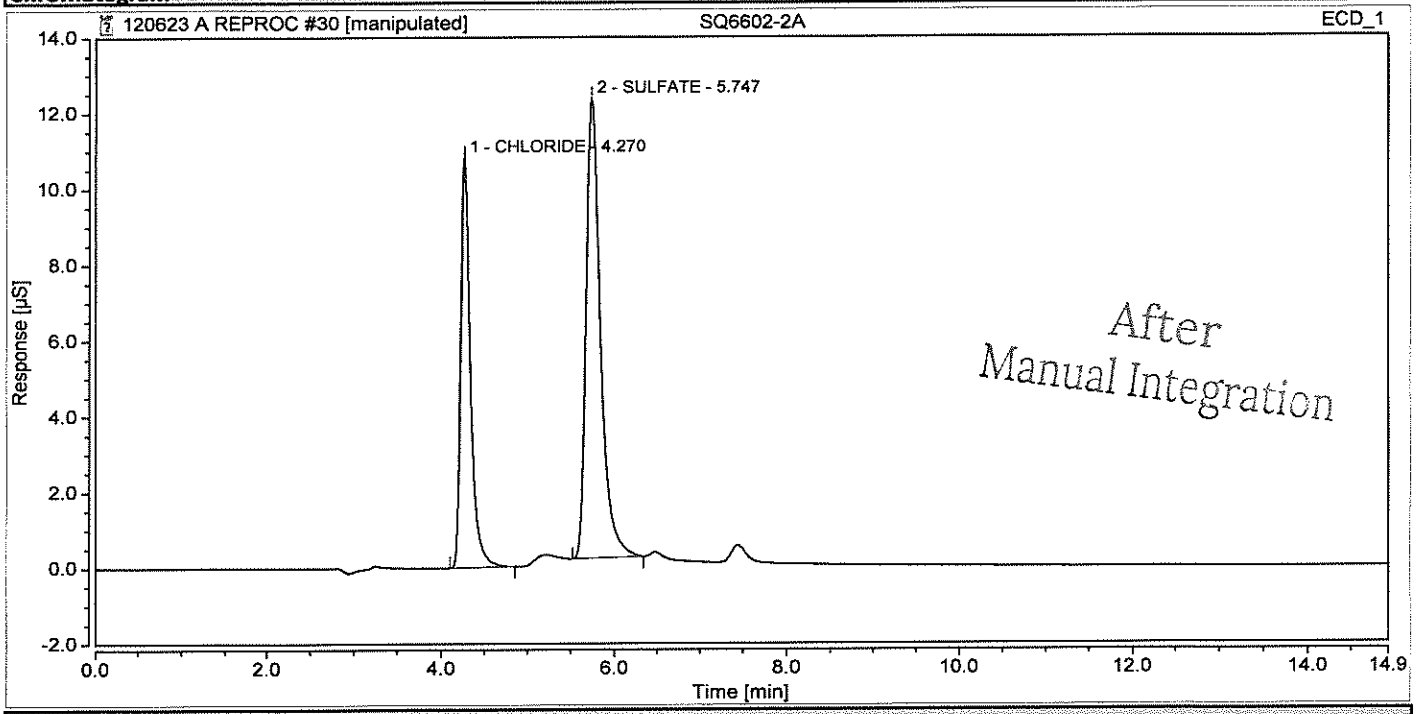
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.253	0.024	0.092	0.60	0.39	0.0544	n.a.
2	CHLORIDE	4.270	1.435	10.827	36.12	45.32	3.6819	n.a.
3	NITRITE	5.213	0.063	0.223	1.60	0.93	0.0821	n.a.
4	SULFATE	5.747	2.333	12.132	58.72	50.78	8.2054	n.a.
5	BROMIDE	6.477	0.023	0.150	0.59	0.63	0.1376	n.a.
6	NITRATE	7.443	0.094	0.465	2.37	1.94	0.0960	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**3.972**	**23.890**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6602-2A**	*Run Time (min):*	**14.94**
Vial Number:	**33**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**07/Dec/23 02:00**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

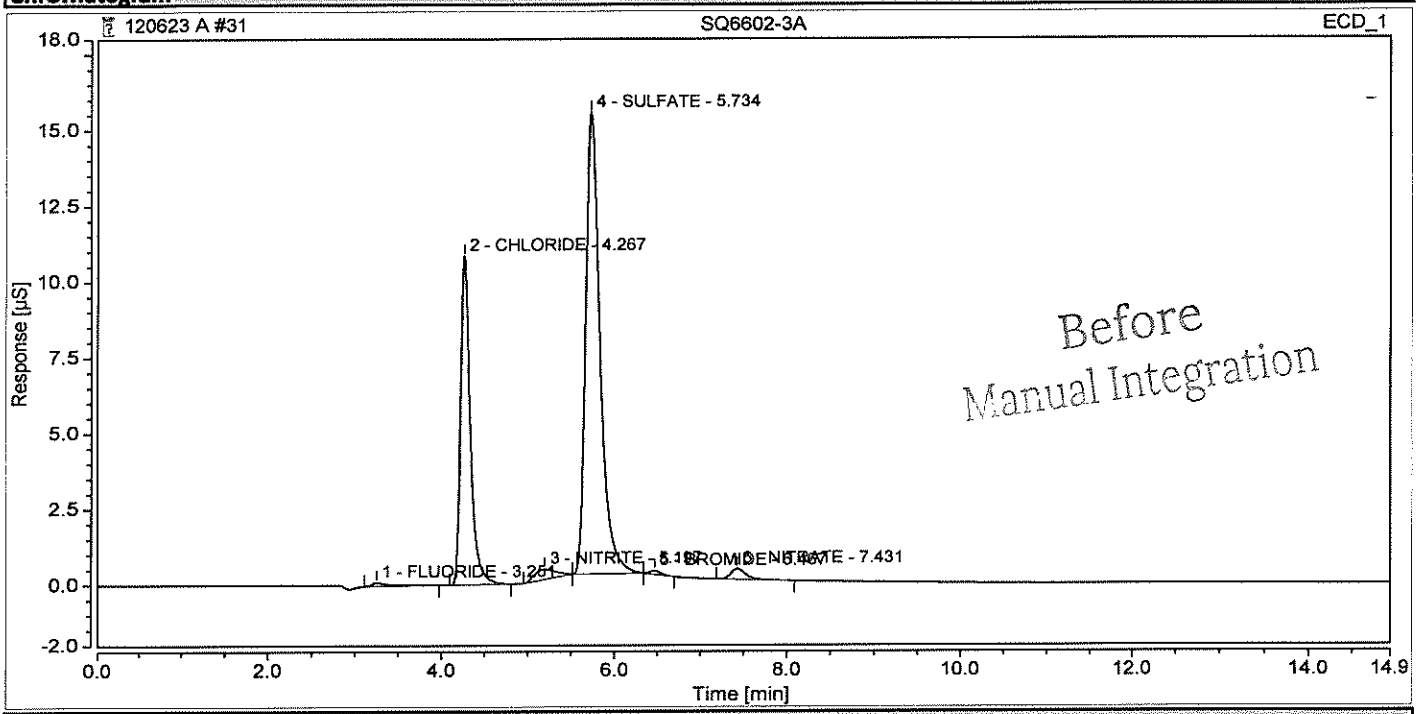
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.270	1.435	10.827	38.09	47.16	3.6819	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2	SULFATE	5.747	2.333	12.132	61.91	52.84	8.2054	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**3.768**	**22.959**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6602-3A**	*Run Time (min):*	**14.94**
Vial Number:	**34**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**07/Dec/23 02:18**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

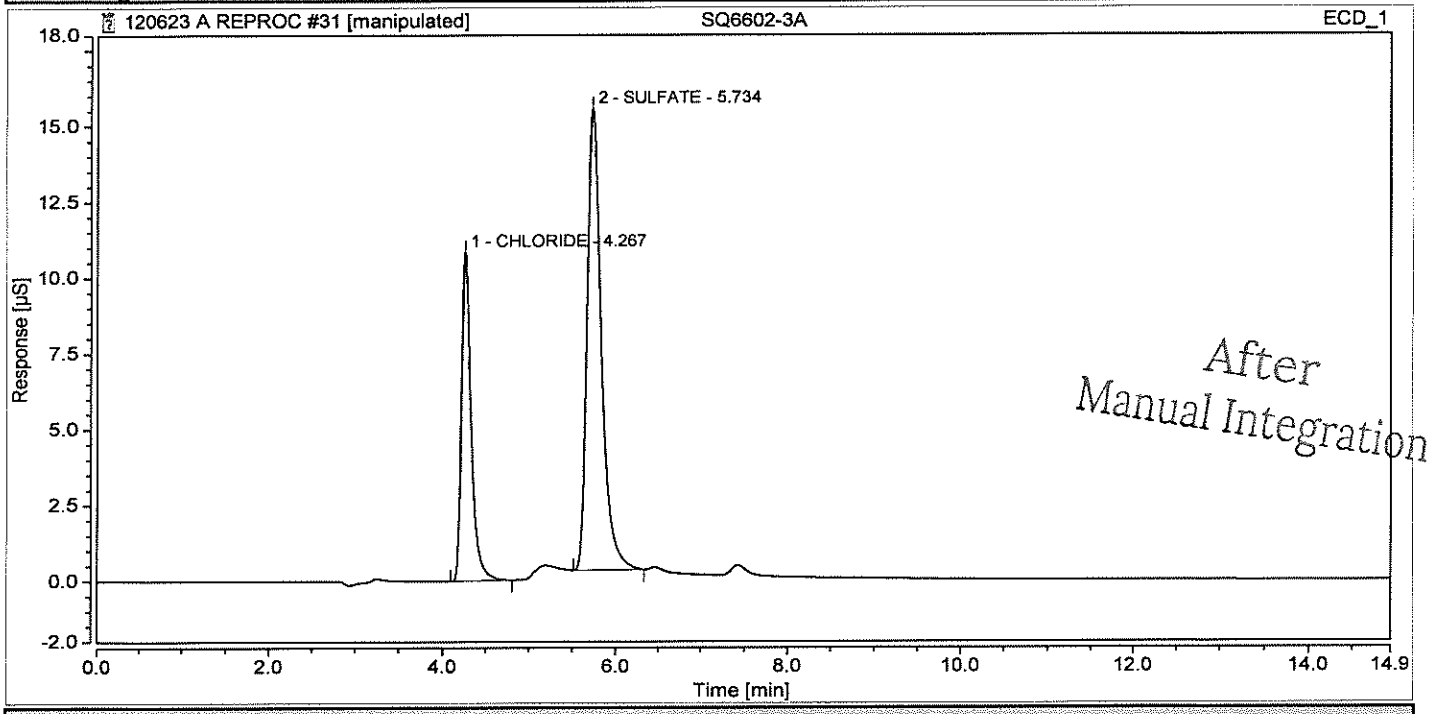
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.251	0.029	0.119	0.63	0.44	0.0616	n.a.
2	CHLORIDE	4.267	1.428	10.842	31.33	40.16	3.6643	n.a.
3	NITRITE	5.197	0.099	0.336	2.16	1.25	0.1232	n.a.
4	SULFATE	5.734	2.912	15.220	63.87	56.38	10.2430	n.a.
5	BROMIDE	6.467	0.019	0.125	0.41	0.46	0.1104	n.a.
6	NITRATE	7.431	0.073	0.354	1.60	1.31	0.0743	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**4.559**	**26.995**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6602-3A**	*Run Time (min):*	**14.94**
Vial Number:	**34**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**07/Dec/23 02:18**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

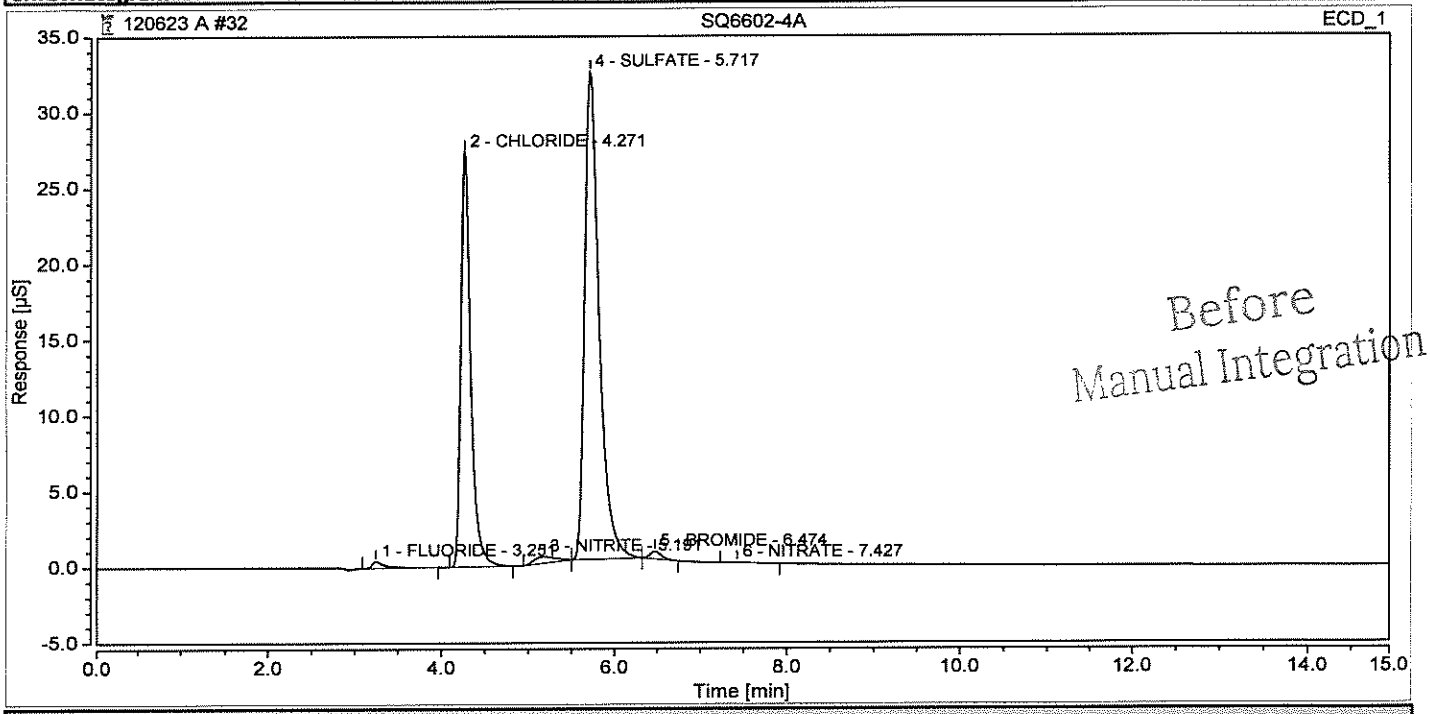
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.267	1.428	10.842	32.91	41.60	3.6643	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2	SULFATE	5.734	2.912	15.220	67.09	58.40	10.2430	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**4.340**	**26.062**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6602-4A**	*Run Time (min):*	**14.95**
Vial Number:	**35**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**07/Dec/23 02:35**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

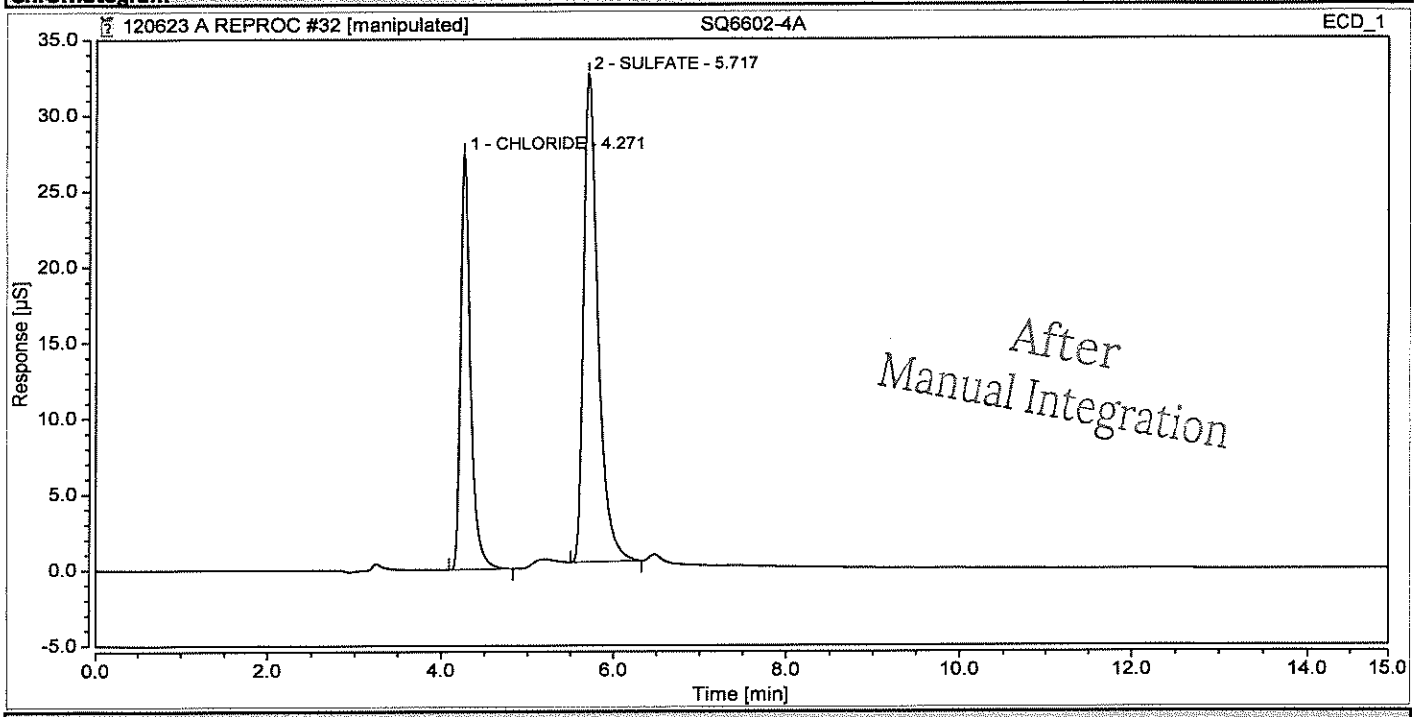
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.251	0.079	0.441	0.77	0.72	0.1412	n.a.
2	CHLORIDE	4.271	3.630	27.365	35.50	44.93	9.3143	n.a.
3	NITRITE	5.191	0.127	0.429	1.25	0.70	0.1567	n.a.
4	SULFATE	5.717	6.305	32.147	61.65	52.78	22.1779	n.a.
5	BROMIDE	6.474	0.078	0.492	0.76	0.81	0.4585	n.a.
6	NITRATE	7.427	0.008	0.036	0.07	0.06	0.0078	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**10.227**	**60.911**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6602-4A**	*Run Time (min):*	**14.95**
Vial Number:	**35**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**07/Dec/23 02:35**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

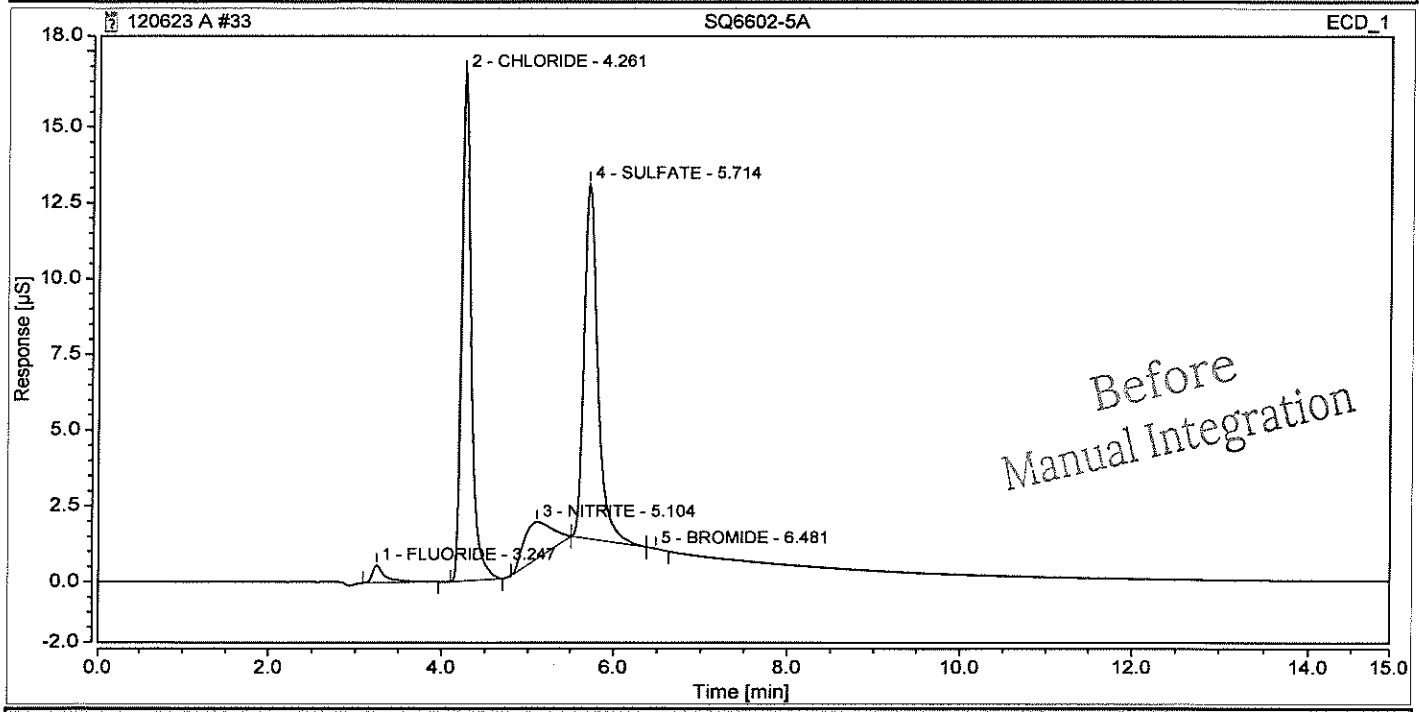
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.271	3.630	27.365	36.54	45.98	9.3143	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2	SULFATE	5.717	6.305	32.147	63.46	54.02	22.1779	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**9.935**	**59.512**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6602-5A**	*Run Time (min):*	**14.95**
Vial Number:	**36**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**07/Dec/23 02:52**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

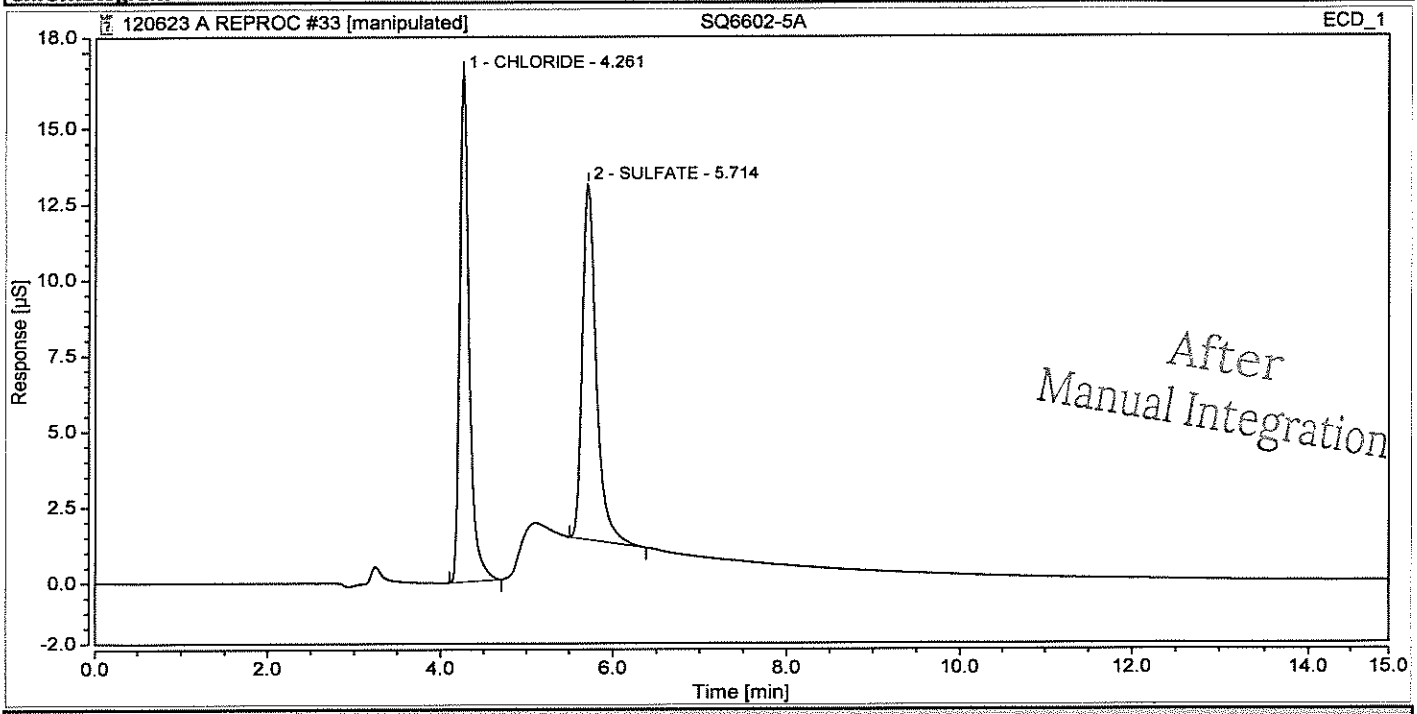
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.247	0.102	0.581	2.08	1.92	0.1773	n.a.
2	CHLORIDE	4.261	2.172	16.774	44.14	55.40	5.5722	n.a.
3	NITRITE	5.104	0.469	1.202	9.53	3.97	0.5565	n.a.
4	SULFATE	5.714	2.176	11.709	44.22	38.67	7.6542	n.a.
5	BROMIDE	6.481	0.002	0.015	0.04	0.05	0.0104	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**4.920**	**30.281**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6602-5A**	*Run Time (min):*	**14.95**
Vial Number:	**36**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**07/Dec/23 02:52**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

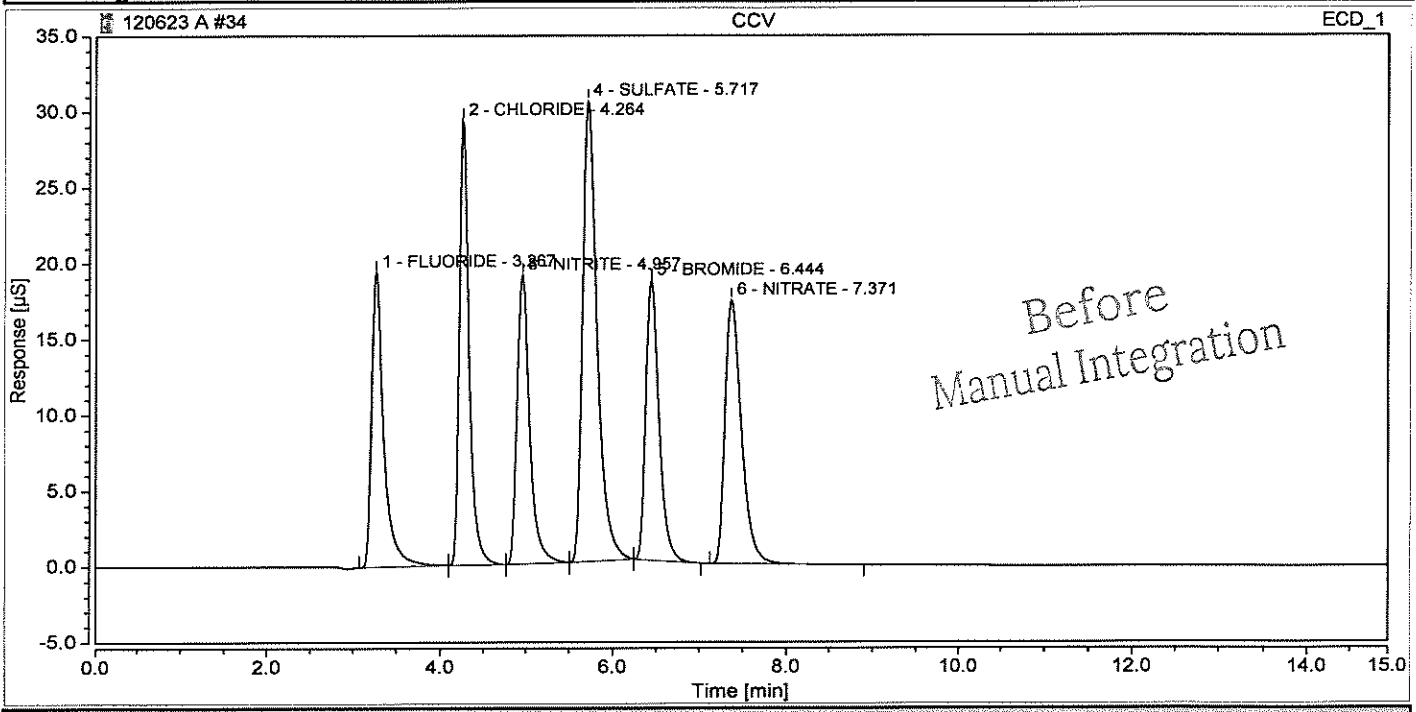
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.261	2.172	16.774	49.95	58.89	5.5722	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2	SULFATE	5.714	2.176	11.709	50.05	41.11	7.6542	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**4.348**	**28.483**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**CCV**	*Run Time (min):*	**14.95**
Vial Number:	**37**	*Injection Volume:*	**200.00**
Injection Type:	**Check Standard**	*Channel:*	**ECD_1**
Calibration Level:	**06**	*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**07/Dec/23 03:09**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

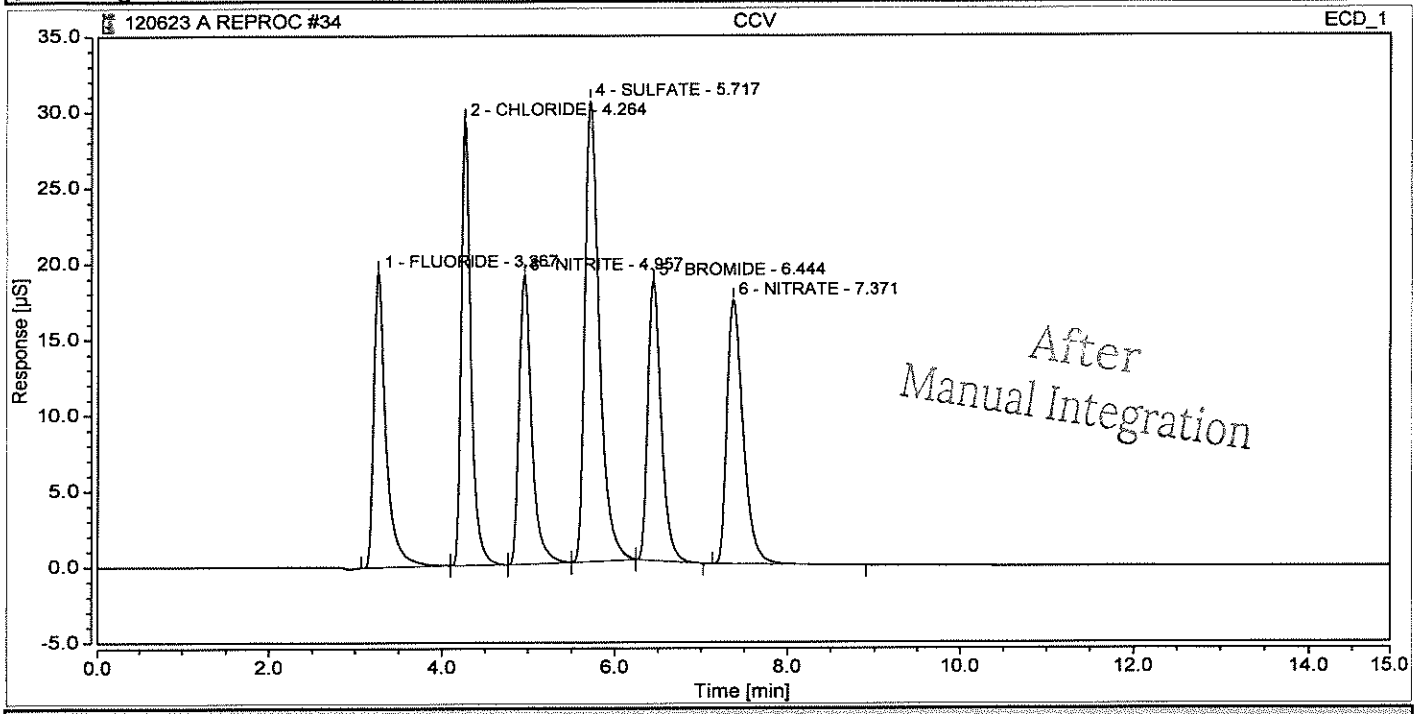
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.267	3.163	19.449	13.56	14.51	5.1376	2.7522
2	CHLORIDE	4.264	3.879	29.313	16.64	21.87	9.9521	-0.4790
3	NITRITE	4.957	3.251	19.054	13.94	14.21	3.9133	-2.1665
4	SULFATE	5.717	5.884	30.387	25.23	22.67	20.6965	3.4827
5	BROMIDE	6.444	3.328	18.448	14.27	13.76	19.5766	-2.1169
6	NITRATE	7.371	3.812	17.389	16.35	12.97	3.8948	-2.6301
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**23.316**	**134.039**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**CCV**	*Run Time (min):*	**14.95**
Vial Number:	**37**	*Injection Volume:*	**200.00**
Injection Type:	**Check Standard**	*Channel:*	**ECD_1**
Calibration Level:	**06**	*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**07/Dec/23 03:09**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

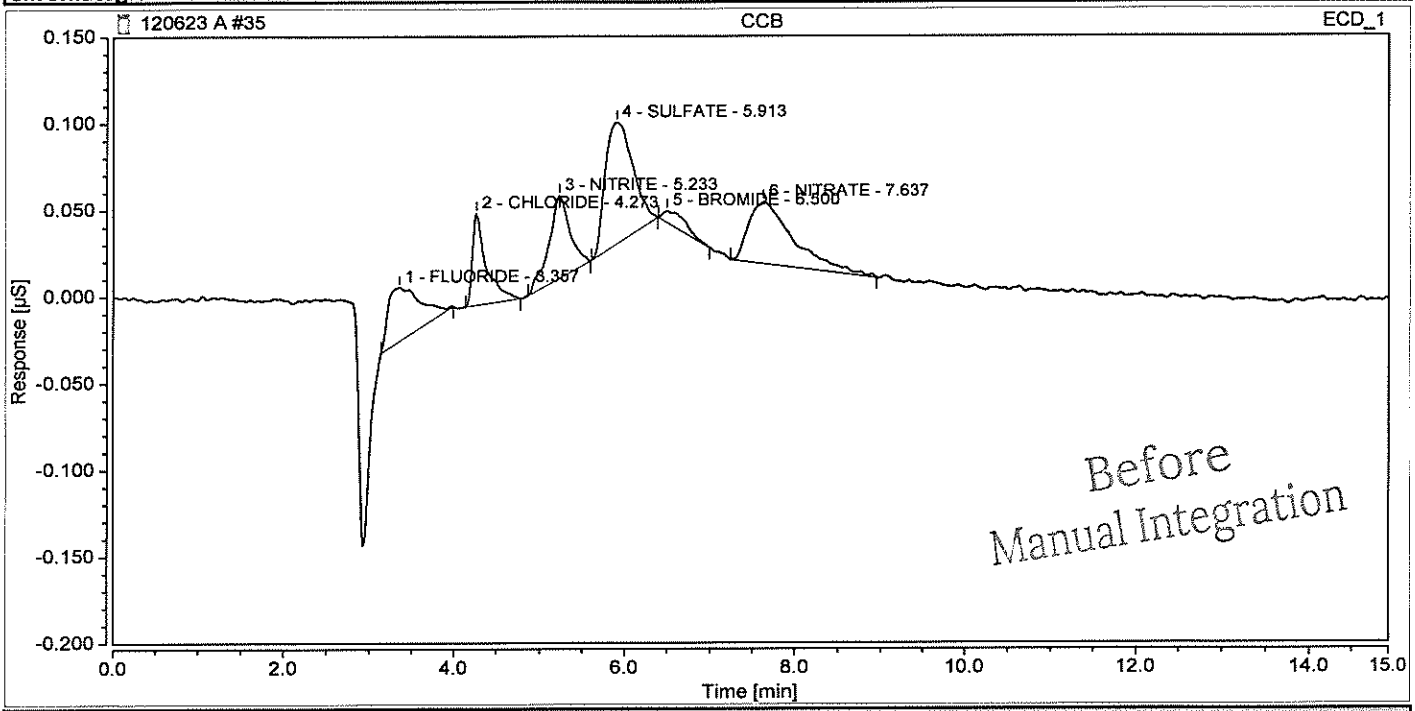
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.267	3.163	19.449	13.56	14.51	5.1376	2.7522
2	CHLORIDE	4.264	3.879	29.313	16.64	21.87	9.9521	-0.4790
3	NITRITE	4.957	3.251	19.054	13.94	14.21	3.9133	-2.1665
4	SULFATE	5.717	5.884	30.387	25.23	22.67	20.6965	3.4827
5	BROMIDE	6.444	3.328	18.448	14.27	13.76	19.5766	-2.1169
6	NITRATE	7.371	3.812	17.389	16.35	12.97	3.8948	-2.6301
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**23.316**	**134.039**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**CCB**	*Run Time (min):*	**14.95**
Vial Number:	**38**	*Injection Volume:*	**200.00**
Injection Type:	**Blank**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**07/Dec/23 03:27**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

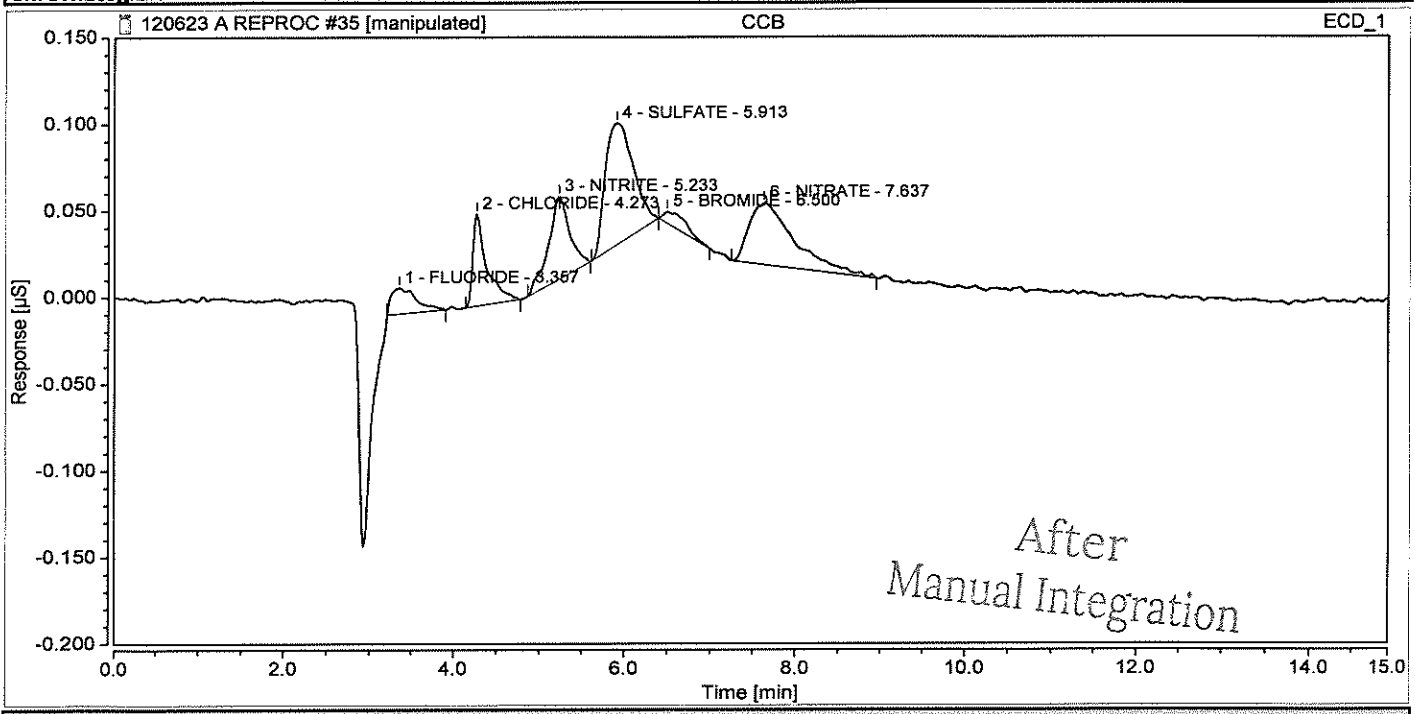
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.357	0.013	0.031	15.19	12.73	0.0377	n.a.
2	CHLORIDE	4.273	0.010	0.053	11.42	21.73	0.0258	n.a.
3	NITRITE	5.233	0.014	0.048	15.79	19.54	0.0244	n.a.
4	SULFATE	5.913	0.026	0.070	30.10	28.65	0.0931	n.a.
5	BROMIDE	6.500	0.003	0.007	2.87	2.76	0.0149	n.a.
6	NITRATE	7.637	0.022	0.036	24.63	14.60	0.0221	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.088**	**0.244**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**CCB**	*Run Time (min):*	**14.95**
Vial Number:	**38**	*Injection Volume:*	**200.00**
Injection Type:	**Blank**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**07/Dec/23 03:27**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

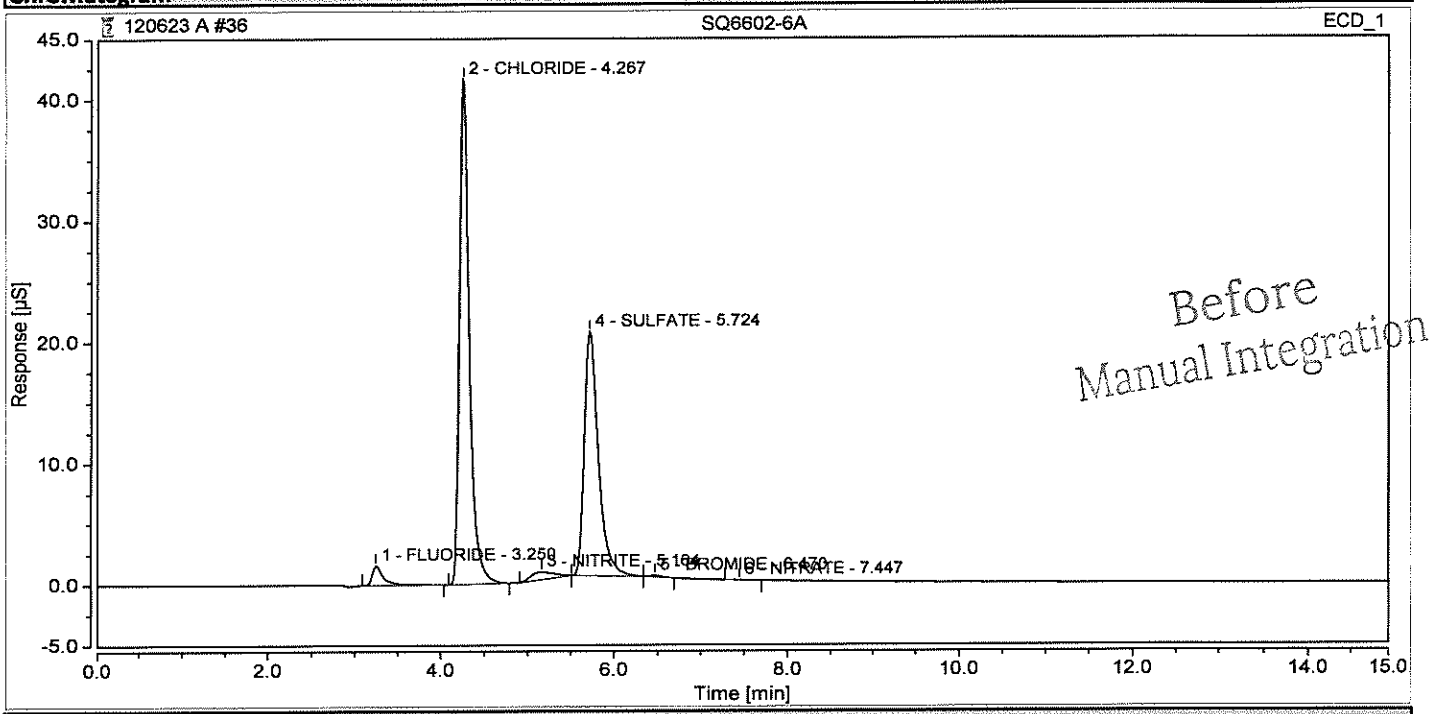
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.357	0.005	0.015	6.59	6.55	0.0249	n.a.
2	CHLORIDE	4.273	0.010	0.053	12.58	23.27	0.0258	n.a.
3	NITRITE	5.233	0.014	0.048	17.39	20.92	0.0244	n.a.
4	SULFATE	5.913	0.026	0.070	33.15	30.68	0.0931	n.a.
5	BROMIDE	6.500	0.003	0.007	3.16	2.96	0.0149	n.a.
6	NITRATE	7.637	0.022	0.036	27.13	15.63	0.0221	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.080**	**0.228**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6602-6A**	*Run Time (min):*	**14.96**
Vial Number:	**39**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**07/Dec/23 03:44**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

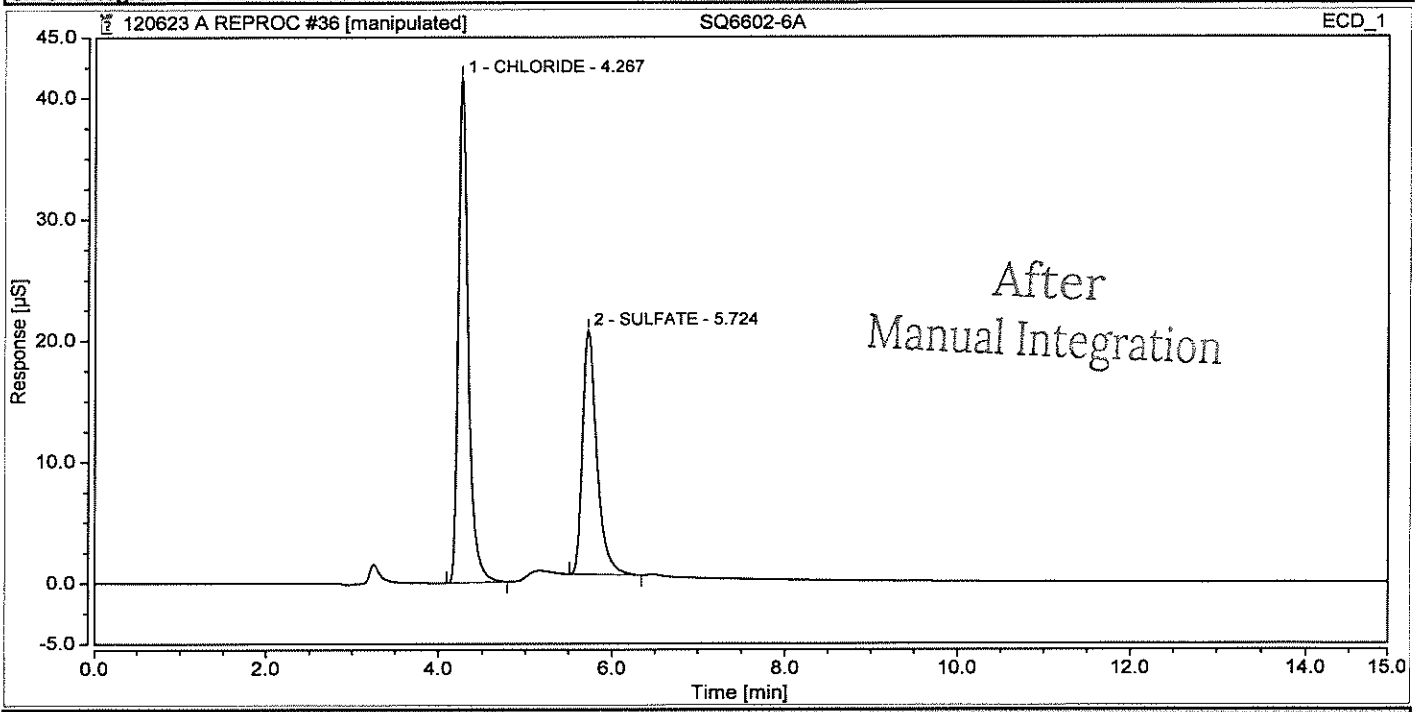
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.250	0.254	1.616	2.59	2.52	0.4172	n.a.
2	CHLORIDE	4.267	5.516	41.627	56.17	64.92	14.1516	n.a.
3	NITRITE	5.164	0.202	0.630	2.05	0.98	0.2435	n.a.
4	SULFATE	5.724	3.825	20.105	38.96	31.36	13.4548	n.a.
5	BROMIDE	6.470	0.020	0.132	0.20	0.21	0.1184	n.a.
6	NITRATE	7.447	0.002	0.009	0.02	0.01	0.0018	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**9.819**	**64.119**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6602-6A**	*Run Time (min):*	**14.96**
Vial Number:	**39**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**07/Dec/23 03:44**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

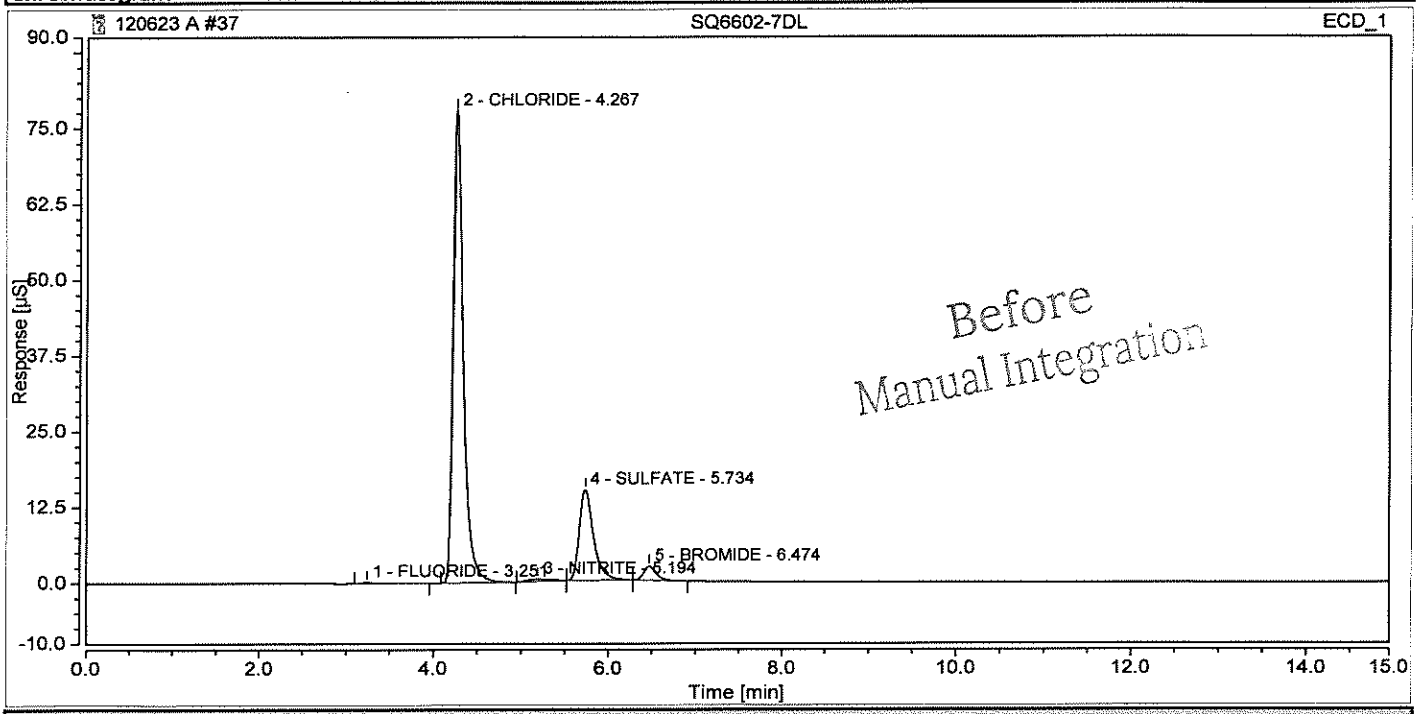
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.267	5.516	41.627	59.05	67.43	14.1516	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2	SULFATE	5.724	3.825	20.105	40.95	32.57	13.4548	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**9.340**	**61.732**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6602-7DL**	*Run Time (min):*	**14.95**
Vial Number:	**40**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**2.0000**
Injection Date/Time:	**07/Dec/23 04:01**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

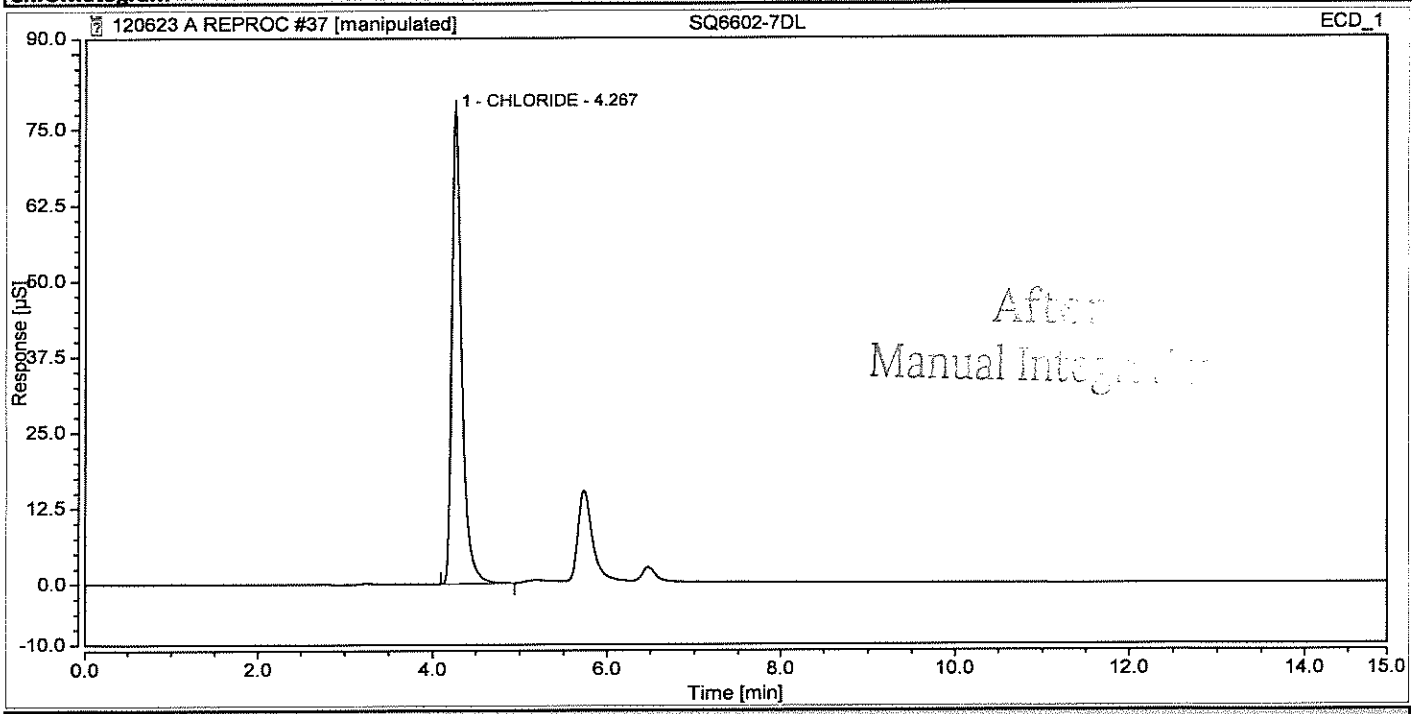
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.251	0.038	0.196	0.27	0.20	0.1517	n.a.
2	CHLORIDE	4.267	10.457	77.867	75.64	81.32	53.6619	n.a.
3	NITRITE	5.194	0.109	0.367	0.79	0.38	0.2694	n.a.
4	SULFATE	5.734	2.828	14.982	20.45	15.65	19.8945	n.a.
5	BROMIDE	6.474	0.393	2.337	2.85	2.44	4.6275	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**13.825**	**95.750**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6602-7DL**	*Run Time (min):*	**14.95**
Vial Number:	**40**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**2.0000**
Injection Date/Time:	**07/Dec/23 04:01**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

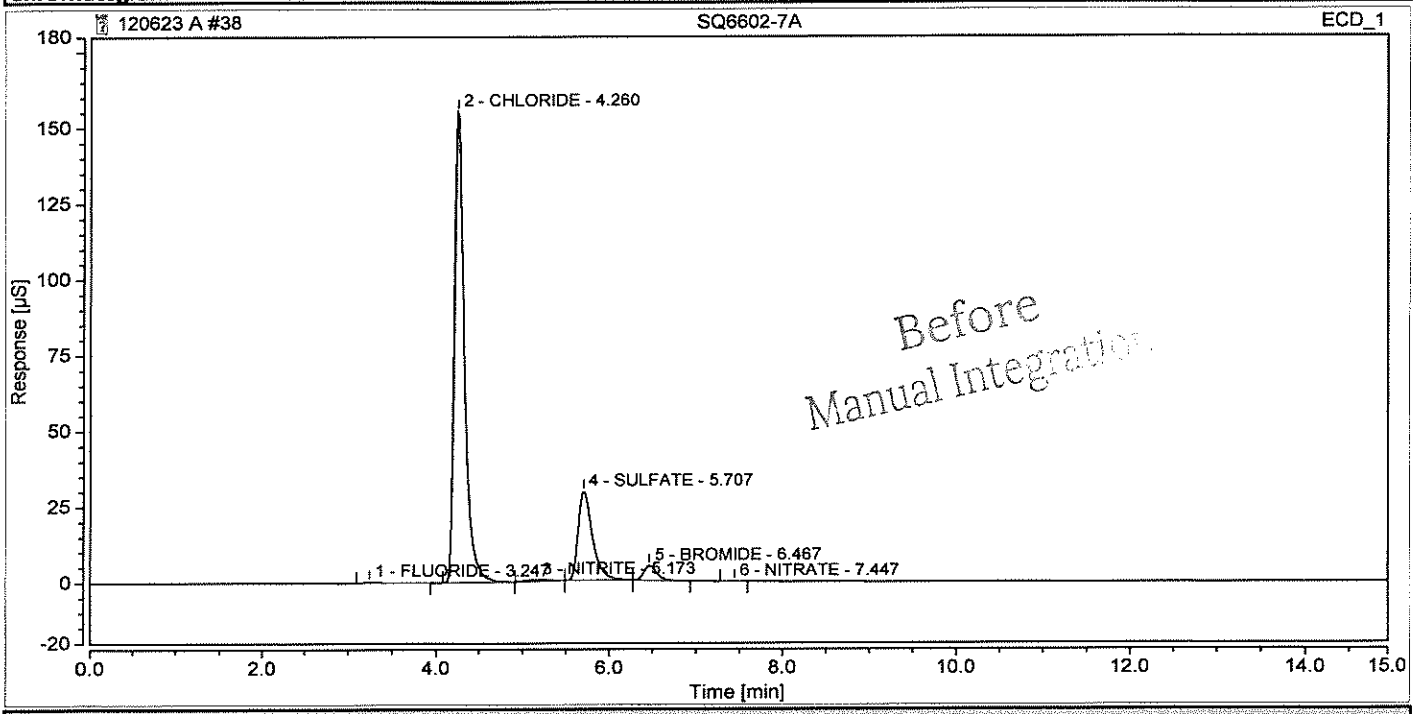
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.267	10.457	77.867	100.00	100.00	53.6619	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	SULFATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**10.457**	**77.867**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6602-7A**	*Run Time (min):*	**14.95**
Vial Number:	**41**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**07/Dec/23 04:18**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

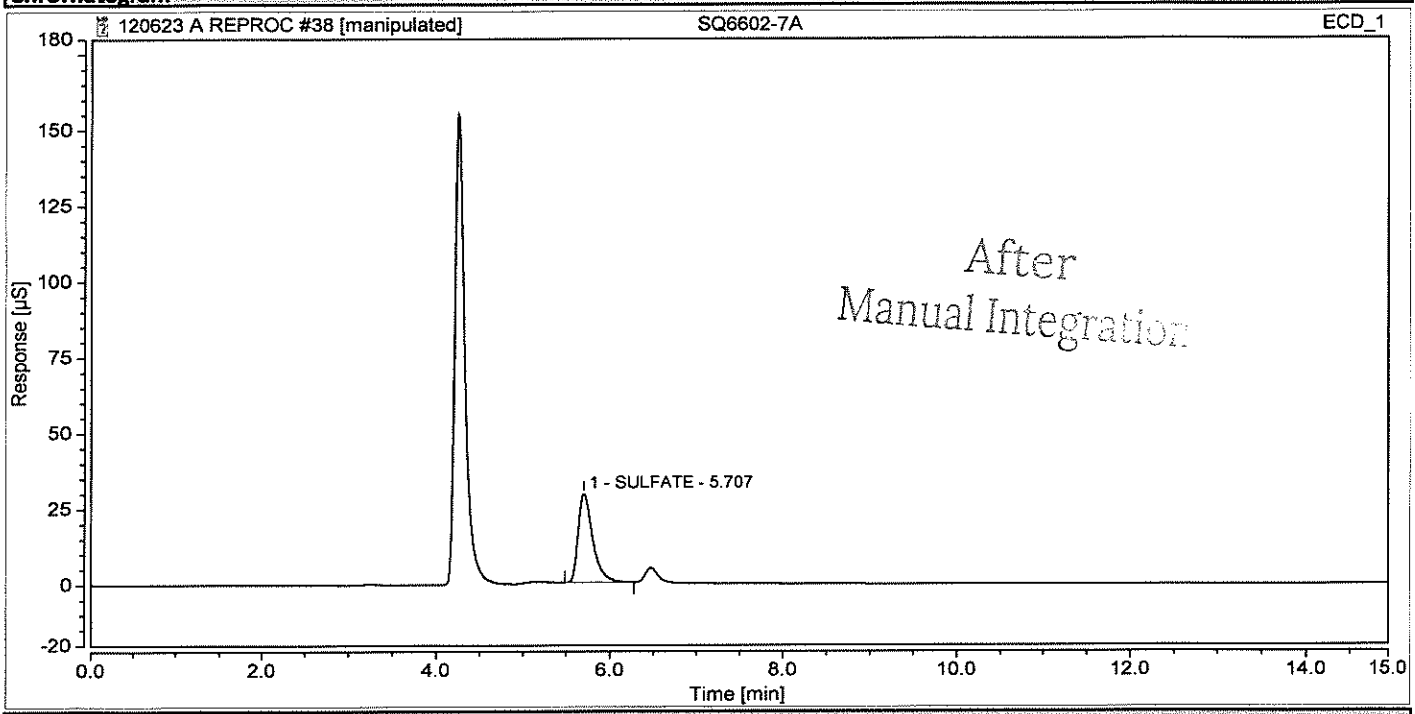
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.247	0.066	0.378	0.24	0.20	0.1211	n.a.
2	CHLORIDE	4.260	21.007	155.407	75.74	81.55	53.8987	n.a.
3	NITRITE	5.173	0.171	0.550	0.62	0.29	0.2081	n.a.
4	SULFATE	5.707	5.662	29.370	20.41	15.41	19.9169	n.a.
5	BROMIDE	6.467	0.827	4.855	2.98	2.55	4.8649	n.a.
6	NITRATE	7.447	0.001	0.008	0.00	0.00	0.0012	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**27.735**	**190.567**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6602-7A**	*Run Time (min):*	**14.95**
Vial Number:	**41**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**07/Dec/23 04:18**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

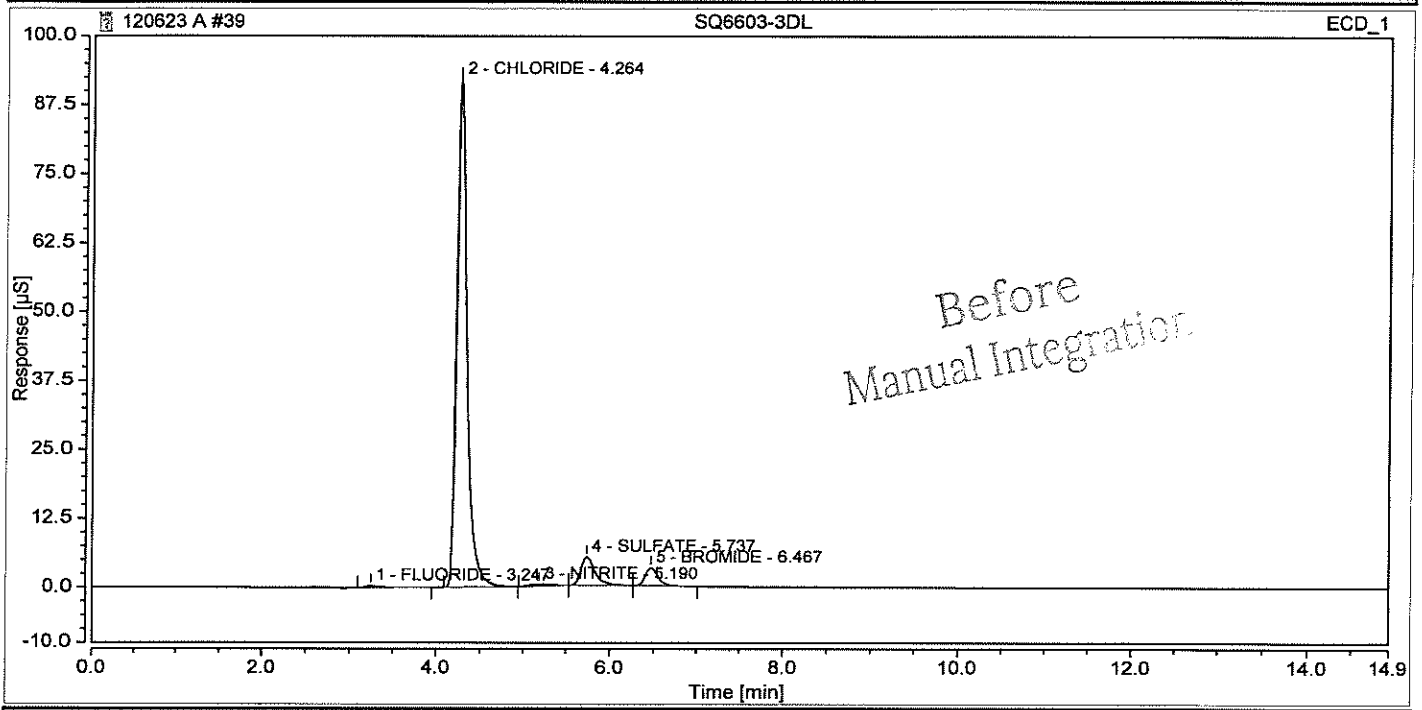
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	CHLORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	SULFATE	5.707	5.662	29.370	100.00	100.00	19.9169	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**5.662**	**29.370**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6603-3DL**	*Run Time (min):*	**14.95**
Vial Number:	**42**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**2.0000**
Injection Date/Time:	**07/Dec/23 04:36**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

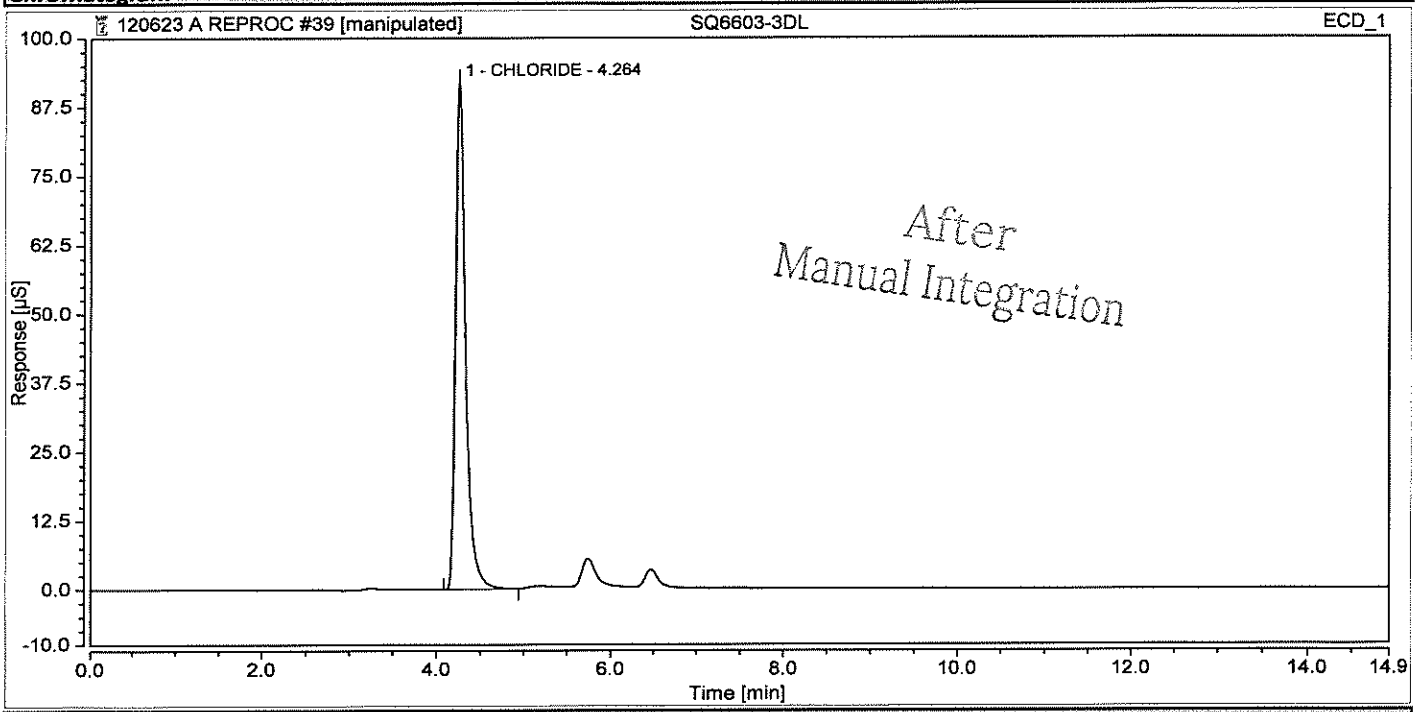
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.247	0.067	0.381	0.48	0.38	0.2448	n.a.
2	CHLORIDE	4.264	12.420	92.168	87.89	90.92	63.7321	n.a.
3	NITRITE	5.190	0.106	0.354	0.75	0.35	0.2645	n.a.
4	SULFATE	5.737	0.973	5.191	6.89	5.12	6.8467	n.a.
5	BROMIDE	6.467	0.564	3.281	3.99	3.24	6.6309	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**14.130**	**101.376**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**SQ6603-3DL**	*Run Time (min):*	**14.95**
Vial Number:	**42**	*Injection Volume:*	**200.00**
Injection Type:	**Unknown**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**2.0000**
Injection Date/Time:	**07/Dec/23 04:36**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

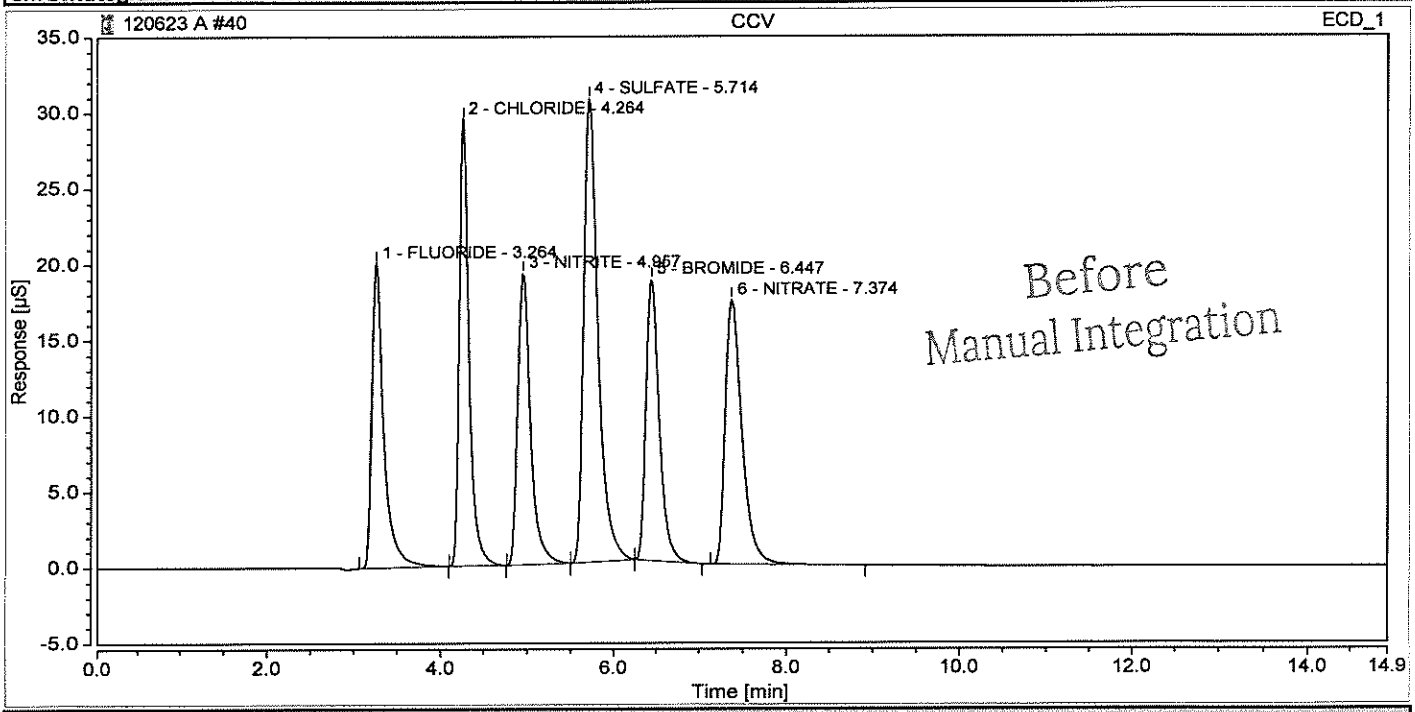
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
n.a.	FLUORIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	CHLORIDE	4.264	12.420	92.168	100.00	100.00	63.7321	n.a.
n.a.	NITRITE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	SULFATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	BROMIDE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	NITRATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**12.420**	**92.168**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**CCV**	*Run Time (min):*	**14.95**
Vial Number:	**49**	*Injection Volume:*	**200.00**
Injection Type:	**Check Standard**	*Channel:*	**ECD_1**
Calibration Level:	**06**	*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**07/Dec/23 04:53**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

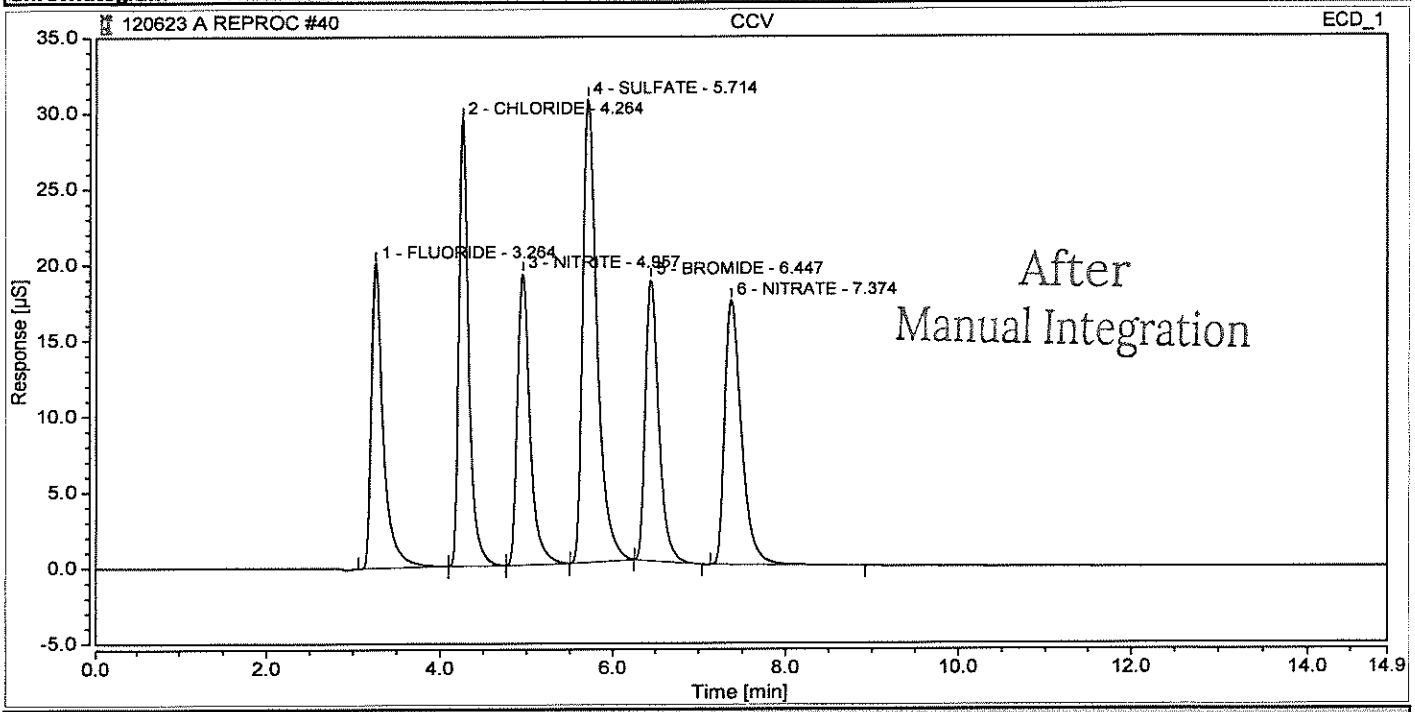
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.264	3.193	20.085	13.56	14.84	5.1890	3.7790
2	CHLORIDE	4.264	3.916	29.452	16.63	21.77	10.0486	0.4858
3	NITRITE	4.957	3.285	19.238	13.95	14.22	3.9552	-1.1200
4	SULFATE	5.714	5.922	30.558	25.14	22.59	20.8333	4.1666
5	BROMIDE	6.447	3.366	18.535	14.29	13.70	19.7993	-1.0037
6	NITRATE	7.374	3.871	17.432	16.44	12.88	3.9558	-1.1049
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**23.554**	**135.300**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**CCV**	*Run Time (min):*	**14.95**
Vial Number:	**49**	*Injection Volume:*	**200.00**
Injection Type:	**Check Standard**	*Channel:*	**ECD_1**
Calibration Level:	**06**	*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**07/Dec/23 04:53**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

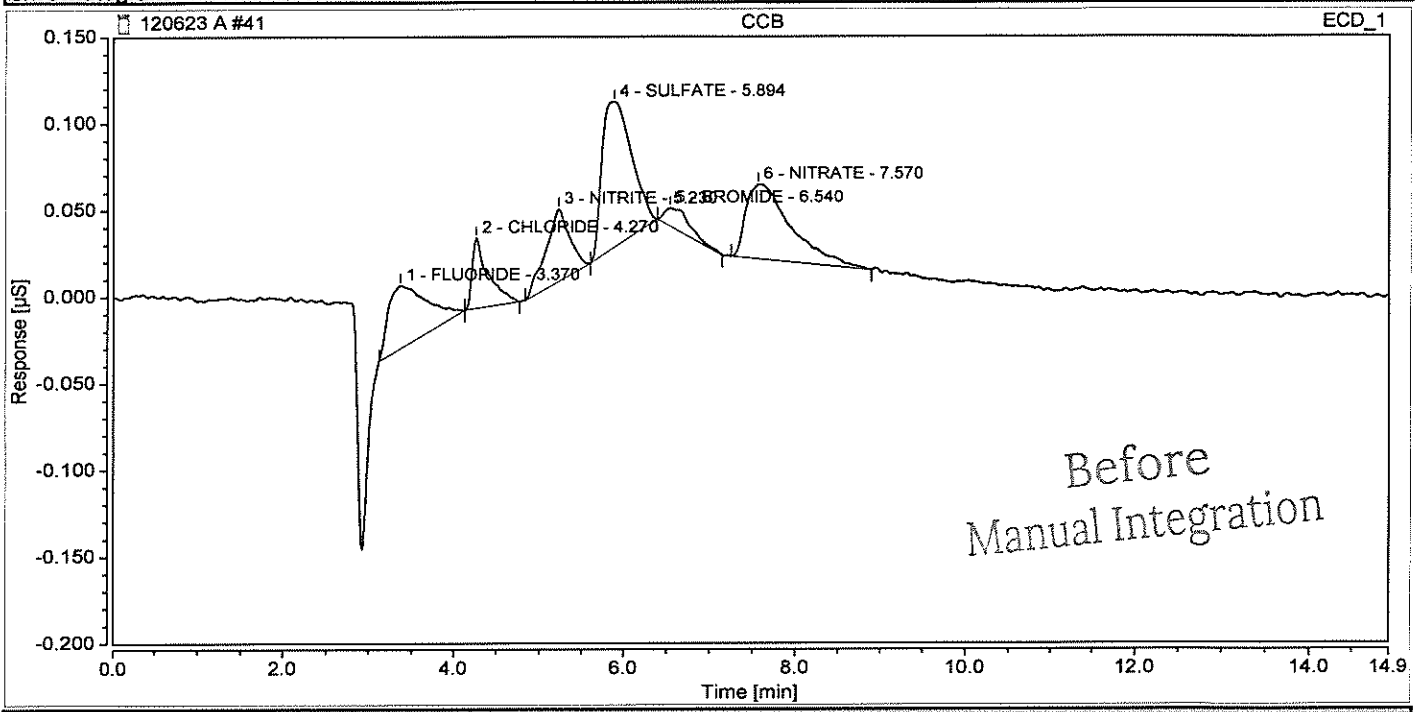
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.264	3.193	20.085	13.56	14.84	5.1890	3.7790
2	CHLORIDE	4.264	3.916	29.452	16.63	21.77	10.0486	0.4858
3	NITRITE	4.957	3.285	19.238	13.95	14.22	3.9552	-1.1200
4	SULFATE	5.714	5.922	30.558	25.14	22.59	20.8333	4.1666
5	BROMIDE	6.447	3.366	18.535	14.29	13.70	19.7993	-1.0037
6	NITRATE	7.374	3.871	17.432	16.44	12.88	3.9558	-1.1049
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**23.554**	**135.300**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**CCB**	*Run Time (min):*	**14.95**
Vial Number:	**50**	*Injection Volume:*	**200.00**
Injection Type:	**Blank**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**07/Dec/23 05:10**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

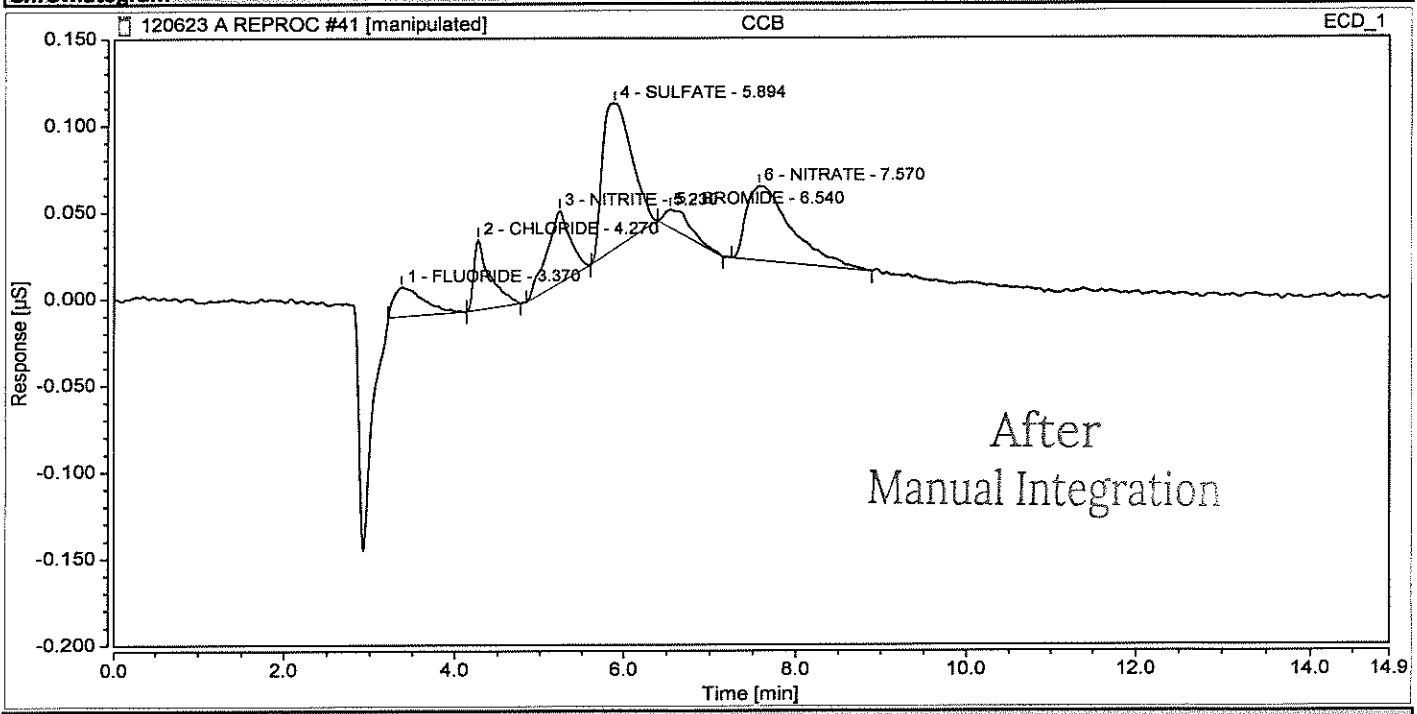
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.370	0.019	0.036	17.67	14.19	0.0460	n.a.
2	CHLORIDE	4.270	0.009	0.040	8.43	15.85	0.0228	n.a.
3	NITRITE	5.230	0.014	0.042	13.02	16.27	0.0242	n.a.
4	SULFATE	5.894	0.034	0.084	32.08	32.74	0.1191	n.a.
5	BROMIDE	6.540	0.004	0.010	3.83	4.11	0.0238	n.a.
6	NITRATE	7.570	0.026	0.043	24.97	16.84	0.0269	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.106**	**0.255**	**100.00**	**100.00**		

Chromatogram and Results

Injection Details

Injection Name:	**CCB**	*Run Time (min):*	**14.95**
Vial Number:	**50**	*Injection Volume:*	**200.00**
Injection Type:	**Blank**	*Channel:*	**ECD_1**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**32mM80mA**	*Bandwidth:*	**n.a.**
Processing Method:	**KAT01**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**07/Dec/23 05:10**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount mg/L	Amnt.Dev. mg/L
1	FLUORIDE	3.370	0.007	0.017	7.48	7.19	0.0277	n.a.
2	CHLORIDE	4.270	0.009	0.040	9.47	17.14	0.0228	n.a.
3	NITRITE	5.230	0.014	0.042	14.63	17.60	0.0242	n.a.
4	SULFATE	5.894	0.034	0.084	36.05	35.41	0.1191	n.a.
5	BROMIDE	6.540	0.004	0.010	4.30	4.44	0.0238	n.a.
6	NITRATE	7.570	0.026	0.043	28.06	18.21	0.0269	n.a.
n.a.	PHOSPHATE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.094**	**0.236**	**100.00**	**100.00**		

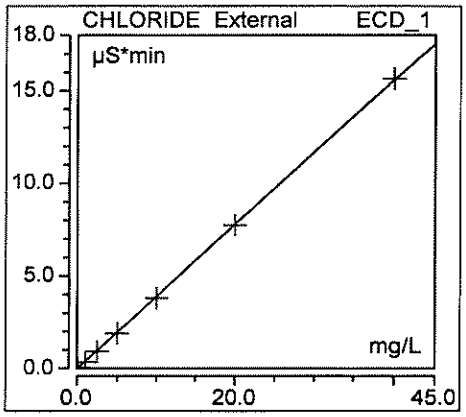
Calibration Batch Report

Sequence:	**101223 CAL REPROC**	*Injection Volume:*	**200.00**
Instrument Method:	**32mM80mA**	*Operator:*	**wetlab**
Inj. Date / Time:	**12-Oct-2023 / 13:07**	*Run Time:*	**14.946667**

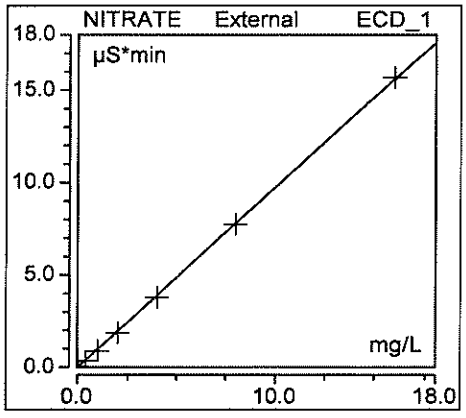
Calibration Summary

Peak Name	Eval.Type	Cal.Type	Points	Offset (C0)	Slope (C1)	Curve (C2)	Coeff.Det. %
FLUORIDE	Area	ly2, WithOff	8.000	-0.011	0.637	-0.004	99.9990
CHLORIDE	Area	Lin	8.000	0.000	0.390	0.000	99.9875
NITRITE	Area	ly2, WithOff	8.000	-0.007	0.859	-0.007	99.9990
SULFATE	Area	Lin	8.000	0.000	0.284	0.000	99.9981
BROMIDE	Area	Lin	8.000	0.000	0.170	0.000	99.9752
NITRATE	Area	Lin	8.000	0.000	0.976	0.000	99.9814
AVERAGE:				-0.0029	0.5526	-0.0018	99.9900

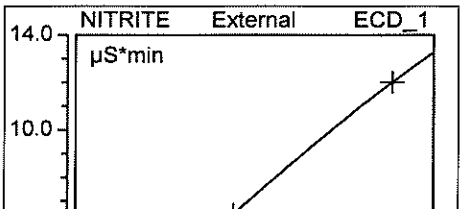
Injection Name **CHLORIDE**	Ret.Time min CHLORIDE	Area µS*min CHLORIDE	Height µS CHLORIDE	Amount mg/L CHLORIDE
	ECD_1	ECD_1	ECD_1	ECD_1
IC1	4.310	0.0013	0.007	0.003
IC2	4.290	0.0319	0.236	0.082
IC3	4.280	0.3373	2.649	0.865
IC4	4.277	0.9117	7.111	2.339
IC5	4.277	1.8945	14.718	4.861
IC6	4.280	3.7977	29.083	9.744
IC7	4.274	7.7443	58.666	19.870
IC8	4.273	15.6522	117.462	40.160
Average	4.283			
Rel. Std. Dev.	0.287 %			



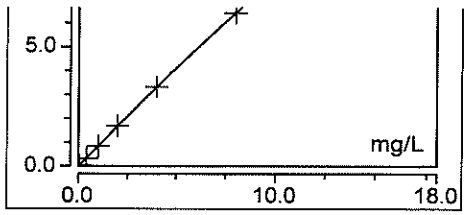
Injection Name **NITRATE**	Ret.Time min NITRATE	Area µS*min NITRATE	Height µS NITRATE	Amount mg/L NITRATE
	ECD_1	ECD_1	ECD_1	ECD_1
IC1	7.577	0.0011	0.005	0.001
IC2	7.557	0.0307	0.152	0.031
IC3	7.537	0.3315	1.685	0.340
IC4	7.521	0.8936	4.512	0.916
IC5	7.500	1.8681	9.167	1.915
IC6	7.470	3.7881	17.516	3.883
IC7	7.420	7.7471	32.517	7.941
IC8	7.347	15.6832	56.804	16.076
Average	7.491			
Rel. Std. Dev.	1.022 %			



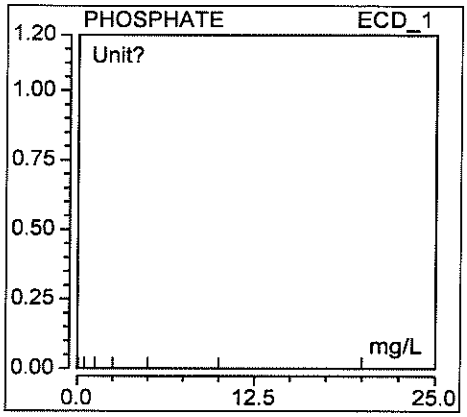
Injection Name **NITRITE**	Ret.Time min NITRITE	Area µS*min NITRITE	Height µS NITRITE	Amount mg/L NITRITE
	ECD_1	ECD_1	ECD_1	ECD_1
IC1	5.277	0.0081	0.032	0.018
IC2	4.990	0.0315	0.165	0.045



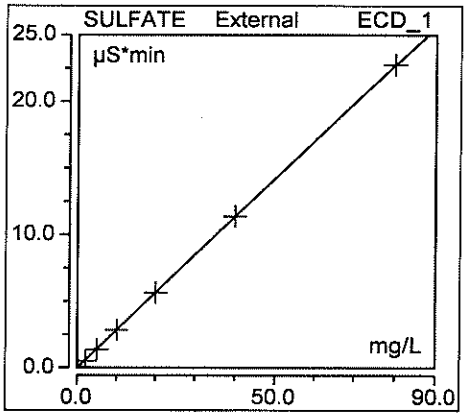
IC3	4.984	0.3130	1.968	0.374
IC4	4.984	0.8317	5.253	0.984
IC5	4.984	1.7014	10.467	2.021
IC6	4.990	3.3244	19.408	4.004
IC7	4.990	6.4268	34.736	7.994
IC8	4.990	12.0030	58.725	16.001
Average	5.024			
Rel. Std. Dev.	2.038 %			



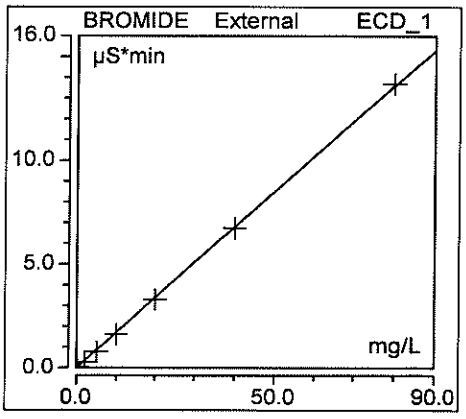
Injection Name **PHOSPHATE**	Ret.Time min PHOSPHATE	Area µS*min PHOSPHATE	Height µS PHOSPHATE	Amount mg/L PHOSPHATE
	ECD_1	ECD_1	ECD_1	ECD_1
IC1	n.a.	n.a.	n.a.	n.a.
IC2	n.a.	n.a.	n.a.	n.a.
IC3	n.a.	n.a.	n.a.	n.a.
IC4	n.a.	n.a.	n.a.	n.a.
IC5	n.a.	n.a.	n.a.	n.a.
IC6	n.a.	n.a.	n.a.	n.a.
IC7	n.a.	n.a.	n.a.	n.a.
IC8	n.a.	n.a.	n.a.	n.a.
Average	#DIV/0!			
Rel. Std. Dev.	#DIV/0!			



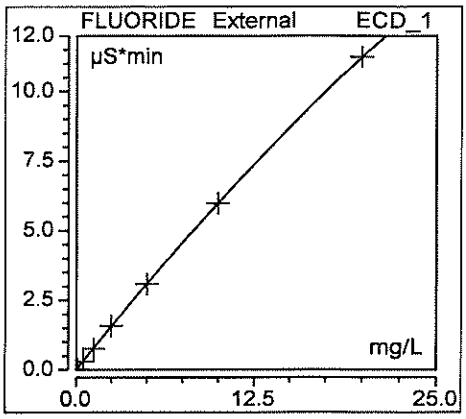
Injection Name **SULFATE**	Ret.Time min SULFATE	Area µS*min SULFATE	Height µS SULFATE	Amount mg/L SULFATE
	ECD_1	ECD_1	ECD_1	ECD_1
IC1	5.844	0.0009	0.004	0.003
IC2	5.834	0.0454	0.229	0.160
IC3	5.820	0.5026	2.833	1.768
IC4	5.817	1.3714	7.732	4.824
IC5	5.797	2.8380	15.881	9.983
IC6	5.777	5.6533	31.045	19.887
IC7	5.744	11.3826	59.540	40.040
IC8	5.687	22.7500	108.379	80.027
Average	5.790			
Rel. Std. Dev.	0.911 %			



Injection Name **BROMIDE**	Ret.Time min BROMIDE	Area µS*min BROMIDE	Height µS BROMIDE	Amount mg/L BROMIDE
	ECD_1	ECD_1	ECD_1	ECD_1
IC1	6.407	0.0004	0.001	0.002
IC2	6.560	0.0257	0.144	0.151
IC3	6.544	0.2814	1.655	1.655
IC4	6.537	0.7709	4.533	4.535
IC5	6.527	1.6186	9.363	9.521
IC6	6.514	3.2868	18.367	19.333
IC7	6.484	6.7353	35.656	39.616
IC8	6.433	13.6787	65.681	80.456
Average	6.501			
Rel. Std. Dev.	0.847 %			



Injection Name FLUORIDE	Ret.Time min FLUORIDE	Area µS*min FLUORIDE	Height µS FLUORIDE	Amount mg/L FLUORIDE
	ECD_1	ECD_1	ECD_1	ECD_1
IC1	3.524	0.0033	0.007	0.022
IC2	3.244	0.0233	0.162	0.053
IC3	3.240	0.2885	2.065	0.471
IC4	3.237	0.7656	5.555	1.228
IC5	3.244	1.5767	11.214	2.530
IC6	3.250	3.0811	21.013	5.001
IC7	3.254	5.9813	38.517	9.993
IC8	3.267	11.2370	67.145	20.001
Average	3.282			
Rel. Std. Dev.	2.982 %			



Anion Summary Report

No. CHLORIDE	Name CHLORIDE	Time min CHLORIDE ECD_1	Area µS*min CHLORIDE ECD_1	Rel.Area % CHLORIDE ECD_1	Height µS CHLORIDE ECD_1	Rel.Height % CHLORIDE ECD_1	Amount mg/L CHLORIDE ECD_1
1	IC1	4.310	0.0013	8.64	0.01	12.08	0.0033
2	IC2	4.290	0.0319	16.92	0.24	21.69	0.0818
3	IC3	4.280	0.3373	16.42	2.65	20.61	0.8653
4	IC4	4.277	0.9117	16.44	7.11	20.50	2.3392
5	IC5	4.277	1.8945	16.48	14.72	20.79	4.8610
6	IC6	4.280	3.7977	16.56	29.08	21.32	9.7441
7	IC7	4.274	7.7443	16.83	58.67	22.60	19.8700
8	IC8	4.273	15.6522	17.20	117.46	24.77	40.1598
	Sum:	34.262	30.371	125.488	229.932	164.342	77.924
	Average:	4.283	3.796	15.686	28.741	20.543	9.741
	Rel.Std.Dev:	0.287 %	143.802 %	18.229 %	142.552 %	17.997 %	143.802 %

No. NITRATE	Name NITRATE	Time min NITRATE ECD_1	Area µS*min NITRATE ECD_1	Rel.Area % NITRATE ECD_1	Height µS NITRATE ECD_1	Rel.Height % NITRATE ECD_1	Amount mg/L NITRATE ECD_1
1	IC1	7.577	0.0011	7.29	0.01	9.24	0.0011
2	IC2	7.557	0.0307	16.31	0.15	13.97	0.0315
3	IC3	7.537	0.3315	16.14	1.69	13.11	0.3398
4	IC4	7.521	0.8936	16.12	4.51	13.00	0.9160
5	IC5	7.500	1.8681	16.25	9.17	12.95	1.9149
6	IC6	7.470	3.7881	16.52	17.52	12.84	3.8830
7	IC7	7.420	7.7471	16.84	32.52	12.52	7.9412
8	IC8	7.347	15.6832	17.23	56.80	11.98	16.0761
	Sum:	59.929	30.344	122.694	122.358	99.612	31.104
	Average:	7.491	3.793	15.337	15.295	12.451	3.888
	Rel.Std.Dev:	1.022 %	144.282 %	21.338 %	131.385 %	11.350 %	144.282 %

No. NITRITE	Name NITRITE	Time min NITRITE ECD_1	Area µS*min NITRITE ECD_1	Rel.Area % NITRITE ECD_1	Height µS NITRITE ECD_1	Rel.Height % NITRITE ECD_1	Amount mg/L NITRITE ECD_1
1	IC1	5.277	0.0081	53.65	0.03	57.13	0.0176
2	IC2	4.990	0.0315	16.72	0.17	15.17	0.0449
3	IC3	4.984	0.3130	15.24	1.97	15.31	0.3737
4	IC4	4.984	0.8317	15.00	5.25	15.14	0.9839
5	IC5	4.984	1.7014	14.80	10.47	14.78	2.0208
6	IC6	4.990	3.3244	14.50	19.41	14.23	4.0043
7	IC7	4.990	6.4268	13.97	34.74	13.38	7.9935
8	IC8	4.990	12.0030	13.19	58.73	12.38	16.0012
	Sum:	40.189	24.640	157.051	130.754	157.526	31.440
	Average:	5.024	3.080	19.631	16.344	19.691	3.930
	Rel.Std.Dev:	2.038 %	136.774 %	70.208 %	127.418 %	77.003 %	141.871 %

No. PHOSPHATE	Name PHOSPHATE	Time min PHOSPHATE ECD_1	Area µS*min PHOSPHATE ECD_1	Rel.Area % PHOSPHATE ECD_1	Height µS PHOSPHATE ECD_1	Rel.Height % PHOSPHATE ECD_1	Amount mg/L PHOSPHATE ECD_1
1	IC1	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2	IC2	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

3	IC3	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
4	IC4	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5	IC5	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
6	IC6	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
7	IC7	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
8	IC8	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
	Sum:	0.000	0.000	0.000	0.000	0.000	0.000
	Average:	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
	Rel.Std.Dev:	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

No. SULFATE	Name SULFATE	Time min SULFATE ECD_1	Area µS*min SULFATE ECD_1	Rel.Area % SULFATE ECD_1	Height µS SULFATE ECD_1	Rel.Height % SULFATE ECD_1	Amount mg/L SULFATE ECD_1
1	IC1	5.844	0.0009	6.16	0.00	7.25	0.0033
2	IC2	5.834	0.0454	24.09	0.23	21.06	0.1596
3	IC3	5.820	0.5026	24.47	2.83	22.04	1.7679
4	IC4	5.817	1.3714	24.73	7.73	22.29	4.8243
5	IC5	5.797	2.8380	24.68	15.88	22.43	9.9833
6	IC6	5.777	5.6533	24.65	31.04	22.75	19.8866
7	IC7	5.744	11.3826	24.74	59.54	22.93	40.0405
8	IC8	5.687	22.7500	25.00	108.38	22.86	80.0271
	Sum:	46.319	44.544	178.521	225.643	163.599	156.693
	Average:	5.790	5.568	22.315	28.205	20.450	19.587
	Rel.Std.Dev:	0.911 %	142.591 %	29.274 %	135.408 %	26.248 %	142.591 %

No. BROMIDE	Name BROMIDE	Time min BROMIDE ECD_1	Area µS*min BROMIDE ECD_1	Rel.Area % BROMIDE ECD_1	Height µS BROMIDE ECD_1	Rel.Height % BROMIDE ECD_1	Amount mg/L BROMIDE ECD_1
1	IC1	6.407	0.0004	2.57	0.00	2.09	0.0023
2	IC2	6.560	0.0257	13.62	0.14	13.22	0.1509
3	IC3	6.544	0.2814	13.70	1.65	12.87	1.6554
4	IC4	6.537	0.7709	13.90	4.53	13.07	4.5345
5	IC5	6.527	1.6186	14.08	9.36	13.22	9.5207
6	IC6	6.514	3.2868	14.33	18.37	13.46	19.3328
7	IC7	6.484	6.7353	14.64	35.66	13.73	39.6161
8	IC8	6.433	13.6787	15.03	65.68	13.85	80.4565
	Sum:	52.006	26.398	101.871	135.400	95.522	155.269
	Average:	6.501	3.300	12.734	16.925	11.940	19.409
	Rel.Std.Dev:	0.847 %	144.644 %	32.456 %	136.608 %	33.434 %	144.644 %

No. FLUORIDE	Name FLUORIDE	Time min FLUORIDE ECD_1	Area µS*min FLUORIDE ECD_1	Rel.Area % FLUORIDE ECD_1	Height µS FLUORIDE ECD_1	Rel.Height % FLUORIDE ECD_1	Amount mg/L FLUORIDE ECD_1
1	IC1	3.524	0.0033	21.68	0.01	12.21	0.0218
2	IC2	3.244	0.0233	12.35	0.16	14.89	0.0532
3	IC3	3.240	0.2885	14.04	2.06	16.06	0.4710
4	IC4	3.237	0.7656	13.81	5.55	16.01	1.2278
5	IC5	3.244	1.5767	13.71	11.21	15.84	2.5301
6	IC6	3.250	3.0811	13.44	21.01	15.40	5.0014
7	IC7	3.254	5.9813	13.00	38.52	14.84	9.9933
8	IC8	3.267	11.2370	12.35	67.15	14.16	20.0014
	Sum:	26.259	22.957	114.375	145.677	119.399	39.300
	Average:	3.282	2.870	14.297	18.210	14.925	4.913
	Rel.Std.Dev:	2.982 %	137.399 %	21.345 %	130.315 %	8.595 %	141.871 %

Katahdin Analytical Services - Wet Chemistry Lab

REAGENT, INTERMEDIATE AND WORKING STANDARDS PREPARATION LOGBOOK

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Standard ID	Reagent Name	Prep. Date	Prep. Inits.	Exp. Date:	Component	I.D. or Lot Number	Amount Added	Units	Bal./Pipette ID	Final Vol. (mL)	Prep Notes
W21622	0.01N H_2SO_4 JRS 2/13/23	~~2/13/22~~ 2/13/23	JRS	2/13/24	0.10N H_2SO_4	W21322	200	mL	grad cyl	2000	DI
—	~~Phenol Buffer~~	~~2/13/23~~	~~RAD~~	~~2/14/23~~							RAD 2/13/23
W21623	Copper Sulfate for Phenols	2/13/23	RAD	8/13/23	$CuSO_4$	SWL4951	50.1230	g	bal 01	500	
W21624	LLCOD LCS	2/14/23	EIR	2/14/23	COD Standard	SWL5019	15	mL	W21	200	DI
W21625	LL COD MS	2/14/23	EIR	2/14/23	COD Standard	SWL5019	60	mL	W21	200	DI
W21626	HL COD CCV	2/14/23	EIR	5/14/23	KHP	SWL4116	0.850	g	bal 01	1,000	DI
W21627	LL COD CCV	2/14/23	EIR	5/14/23	HL COD CCV	W21626	50	mL	grad cylinder	1,000	DI
W21628	MBAS Wash Soln	2/14/23	RAD	2/14/24	6N H_2SO_4	W21494	41	mL	grad cyl	1000	
↓	↓	↓	↓	↓	$NaH_2PO_4 \cdot H_2O$	SWL5029	50.0089	g	bal 01	↓	
W21629	10% H_2SO_4	2/14/23	STM	2/14/24	H_2SO_4	SWL5041	10	mL	W00	100	DI
W21630	TPO4 Digestion Solution	2/16/23	CJB	2/16/24	Potassium Sulfate	SWL4953	133.0038	g	bal 01	1000	
↓	↓	↓	↓	↓	Sulfuric Acid	SWL5041	200	mL	grad cyl.	↓	
↓	↓	↓	↓	↓	Mercuric Sulfate	W21131	25	mL	grad cyl.	↓	
W21631	Phenol Buffer	2/16/23	RAD	2/17/23	NH_4Cl	SWL4226	116.9064	g	bal 01	250	
↓	↓	↓	↓	↓	NH_4OH	SWL5015	143	mL	grad cyl	↓	
W21632	Phenol 4AAP	2/16/23	RAD	2/17/23	4AAP	SWL4488	2.010	g	bal 20	100	
W21633	Phenol K Ferricyanide	2/16/23	RAD	2/17/23	$K_3Fe(CN)_6$	SWL4992	8.070	g	bal	100	

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W21809	Tcc cal std 20.0	4/25/23	SS	4/12/24	1000 mg/L KHP Std	W2176C	2.0	ml	W21	200	
W21810	50.0						5.0				
W21811	100.0						10.0				
W21812	150.0						15.0				
W21813	200.0						20.0				
W21814	TPO4 Ascorbic Acid	4/26/23	RAD	4/27/23	Ascorbic Acid	SWL4970	15.008	g	bal 20	250	
					Na dodecyl sulfate	SWL 3043	0.253				
W21815	$NO_{2/3}$ COLOR	4/27/23	BL	5/27/23	SULFANILAMIDE	SWL5043	40.059	g	BAL 20	1000	
					NED	SWL4660	1.008				
					H_3PO_4	SWL4952	100	mL	grad cyl		
W21816	Ammonium molybdate	4/27/23	STM	6/27/23	Ammonium molybdate	SWL4969	40.006	g	BAL 20	1000	
W21817	K Antimonyl Tartrate	4/27/23	STM	6/27/23	K Antimonyl tartrate	SWL3851	1.372	g	BAL 20	500	
W21818	5N H_2SO_4	4/27/23	STM	4/27/24	H_2SO_4	MSE307	70	mL	grad cyl	500	
W21819	NO_2 CCV	4/27/23	BL	5/27/23	NO_2 1000 ppm	SWL4985	0.1	mL	W8	200	
W21820	CrVI Cal ~~Std~~ Std	4/28/23	STM	11/28/23	CrVI	SWL5065	2.5	mL	W00	100	
W21821	Alk CCV	4/28/23	RAD	5/28/23	$CaCO_3$	SWL5062	125	mL	grad cyl	1000	
~~W21822~~	~~CN Std~~	~~4/28/23~~	~~STM~~	~~11/04/24~~							

STM 5/10/23

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W21958	~~35~~ 35ppm Cl LCS	6/19/23	SS	7/19/23	1000 ppm Cl LCS int. Stock	W21763	3.5	mL	W10	100	
W21959	TOC LCS (AQ) 50mg/L	6/20/23	CJB	9/20/23	KHP	SWL2834	0.1092	g	Bal01	1000	
〃	〃	〃	〃	〃	H_3PO_4	SWL4952	1	mL	W16	〃	
W21960	Diphenyl Carbazide	6/20/23	SS	12/20/23	Diphenyl Carbazide	SWL4724	0.2503	g	Bal01	50	Acetone
W21961	Cr^6 LCS int.	6/20/23	SS	12/20/23	1000ppm Cr^6 Std.	SWL5048	2.5	ml	W10	100	
W21962	TSS LCS	6/20/23	SS	6/20/24	Celite	SWL4564	1.098	g	Bal01	1000	
W21963	NO_2 0.05ppm	6/22/23	BL	7/22/23	NO_2 1000ppm	SWL4985	0.01	mL	W17	200	
W21964	NO_2 0.25ppm	6/22/23	BL	7/22/23	〃	〃	0.05	〃	W8	〃	
W21965	NO_2 2.0ppm	6/22/23	BL	7/22/23	〃	〃	0.4	〃	W28	〃	
W21966	CN Buffer	6/22/23	SS	6/7/22/23	$NaPO_3$ mono mono	SWL5029	13.638	g	Bal20	100	
	Comp A	6/22/23	JRS	6/22/24	N-N-dimethyl-p-phenylenediamine	SWL5069	2.257	g	Bal20	1000	
	Comp B	〃	〃	〃	Ferric Chloride	SWL1774	5.457	g	Bal20	200	
	〃	〃	〃	〃	HCl	MSR306	100	mL	grad	〃	
	Comp A	〃	〃	〃	H_2SO_4	MSR307	660	mL	grad cyl	1000	DI
W21967	MDR Reagent	6/22/23	JRS	6/22/24	Comp A+B	see above				〃	
W21968	IC LCS	6/23/23	~~RAD~~	7/7/23	multielement A	SWL5660	3.75	mL	W10	50	
〃	〃	〃	〃	〃	multielement B	〃 5059	〃	〃	〃	〃	

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W22096	0.25N NaOH	8/9/23	SS	8/9/24	10N NaOH	SWL4994	50	mL	grad cyl	2000	
W220977	Phenol Buffer	8/10/23	RAD	8/15/23	NH_4Cl	SWL 4226	16.9048	g	bal 01	250	
〃	〃	〃	〃	〃	NH_4^+OH	〃 5104	143	mL	grad cyl	〃	RAD 8/10/23
W22098	Phenol 4-AAP	〃	〃	〃	4AAP	SWL 4488	2.0014	g	bal 01	100	
W22099	Phenol K Ferricyanide	〃	〃	〃	$K_3Fe(CN)_6$	SWL 4992	8.0059	g	bal 01	100	
W22100	TPO4 Ascorbic Acid	8/11/23	BL	8/12/23	Ascorbic Acid	SWL5072	15.006	g	Bal 20	250	
〃	〃	〃	〃	〃	Na Dodecyl Sulfate	SWL 30043	0.250	〃	〃	〃	BL 8/11/23
W22101	TPO4 NaOH/NaCl	8/11/23	BL	~~8~~ 9/11/23	NaOH	SWL4928	~~5~~ 2.585	g	Bal	125 ~~250~~	BL 8/11/23 BL 8/11/23 BL 8/11/23
〃	〃	〃	〃	〃	NaCl	MSR285	20.93 ~~40~~	〃	〃	〃	HALF BATCH BL 8/11/23
W22102	TCC Cal Stock	8/11/23	CJB	11/11/23	KHP	SWL4116	2.0323	g	Bal01	1000	
〃	〃	〃	〃	〃	H_3PO_4	SWL5061	1.0	mL	W28	〃	
W22103	LOW ALK TITRANT	8/11/23	BL	9/11/23	H_2SO_4	MSR307	6.72	mL	W00	12000	
W22104	NO_2 CCV	8/11/23	BL	9/11/23	NO_2 1000ppm	SWL4985	0.1	mL	W8	200	
W22105	NO_3 CCV	〃	〃	〃	NO_3 CCV	SWL4986	0.1	mL	W8	200	
W22106	HDR TSS LCS	8/15/23	BF	9/15/23	Celite	SWL4564	C.09886	g	Bal01	1000	
W22107	〃 〃 LCSD	〃	〃	〃	〃	〃	C.09884	g	〃	〃	

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W22232	IC CCV	10/9/23	RAD	10/23/23	Cl	SWL 5127	2.0	mL	W21	100	
					NO_2	5129	0.8		W22		
					NO_3	5128	0.8		W22		
					Br	5063	4.0		W21		
					SO_4	5053	4.0		W21		
					F	4961	1.0		W22		
											RAD 10/9/23
W22233	IC8	10/9/23	RAD	10/23/23	Cl	SWL 5127	2.0	mL	W21	50	
					NO_2	5129	0.8		W22		
					NO_3	5128	0.8		W22		
					Br	5063	4.0		W21		
					SO_4	5053	4.0		W21		
					F	4961	1.0		W22		
W22234	TOC LCS Standard	10/9/23	CJB	11/9/24	Dextrose Anhydrous Powder	SWL4892	50018	g	BAL01	50	
W22235	5N H_2SO_4 for LL. Phos	10/10/23	RAD	10/10/24	H_2SO_4	MSR307	70	mL	~~grad cyl~~	500	CB041 RAD 10/10/23
W22236	11N H_2SO_4 for LL Phos						62	mL	CB041	200	
W22237	0.1M Ascorbic Acid (LL. Phos)			10/17/23	Ascorbic Acid	SWL5072	~~1.776~~ 1.7612	g	bal 01	100	RAD 10/10/23

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Standard ID	Reagent Name	Prep. Date	Prep. Inits.	Exp. Date:	Component	I.D. or Lot Number	Amount Added	Units	Bal./Pipette ID	Final Vol. (mL)	Prep Notes
3↓ 11/2/23 W22281	TPO4 COLOR	11/2/23	BL	~~11/3/~~ 12/2/23	AMMONIUM MOLYBDATE	W22178	53.25	mL	CB042 + W00	250	
↓	↓	↓	↓	↓	ANTIMONYL TARTATE	W22179	18	↓	W3	↓	
CJB 11/2/23 WGW22282	TOC LCS (AQ)	11/2/23	CJB	2/2/24	KHP	SWL4116	0.1066	g	B101	1000	
↓	↓	↓	↓	↓	H_3PO_4	SWL5061	1.0	mL	W20	↓	
W22283	0.25N NaOH	11/2/23	JRS	11/2/24	10N NaOH	SWL4994	100	mL	grad cyl	4000	
W22284	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	
W22285	TOC Alk Check Std	11/2/23	CJB	2/2/24	1N $NaCO_3$	SWL5075	2.5	mL	W21	1000	
W22286	NH_3 MS 50ppm	11/3/23	SS	5/3/24	1000 ppm NH_3 LCS Std.	SWL5124	2.5	mL	W00	50	
W22287	NH_3 1.5 LCS working Std	11/3/23	SS	12/3/23	NH_3 100 ppm LCS STOCK	W22189	3	mL	W10	200	0.2% H_2SO_4 W22145
W22288	NO_3 MATRIX SPIKE	11/3/23	BL	11/3/24	MW LT ELEMENT A	SWL5058	11	mL	W3	25	
W22289	NO_2 MATRIX SPIKE	11/3/23	BL	11/3/24	MW LT ELEMENT B	SWL5059	8.22	↓	W00	↓	
W22290	6N HCl (De Air)	11/01/23	JRS	11/01/24	conc. HCl	SWL5090	500	mL	grad cyl	1000	
W22291	HIGH LEVEL ALK CCV	11/5/23	BL	12/5/23	Na_2CO_3 1N	SWL5075	12.5	mL	W3 + W20	500	
W22292	NO_2 0.05 ppm	11/5/23	BL	12/5/23	NO_2 1000 ppm	SWL5129	0.01	mL	W17	200	
W22293	NO_2 0.25 ppm	↓	↓	↓	↓	↓	0.05	↓	W8	↓	
W22294	NO_2 1.00 ppm	↓	↓	↓	↓	↓	0.2	↓	↓	↓	
W22295	NO_2 2.0 ppm	↓	↓	↓	↓	↓	0.4	↓	W20	↓	

Katahdin Analytical Services - Wet Chemistry Lab

REAGENT, INTERMEDIATE AND WORKING STANDARDS PREPARATION LOGBOOK

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Standard ID	Reagent Name	Prep. Date	Prep. Inits.	Exp. Date:	Component	I.D. or Lot Number	Amount Added	Units	Bal./Pipette ID	Final Vol. (mL)	Prep Notes
W22296	NO_2 CCV	11/5/23	BL	12/5/23	NO_2 1000 ppm	SWCS129	0.1	mL	WB	200	
W22297	NO_3 CCV				NO_3 1000 ppm	SWCS128	0.1				
W22298	NO_2 LCS				MULTIELEMENT B	SWL5059	0.656		W20		
W22299	NO_3 LCS				MULTIELEMENT A	SWL5058	0.833				
W22300	TKN DIGESTION SOL	11/6/23	BL	12/6/23	H_2SO_4	MSR307	268	mL	CB041	2000	
					K_2SO_4	SWL4953	268.1276	g	Bal01		
					$CuSO_4$	SWL4951	14.6006				
W22301	Fe^{2+} Phenanthroline Stk	11/6/23	RAD	11/6/24	1,10-Phenanthroline, 99+%	SWL4423	1.0020	g	bal01	1000	
	~~HCl~~				HCl	SWL5093	20	drops	disposable pipette		RAD 11/6/23
W22302	Fe^{2+} Ammonium Acetate Buffer	11/6/23	RAD	11/6/24	Ammonium Acetate	SWL4957	250.006	g	bal 20	1000	
					Acetic Acid Cglacial)	MSR236	700	mL	CB045		
W22303	Fe^{2+} LCS Stock	11/6/23	RAD	11/6/24	FAS	SWL2104	4.9015	g	bal 01	500	
W22304	Fe^{2+} CCV Stock	11/6/23	RAD	11/6/24	FAS	SWL1961	0.7020	g	bal 01	500	
W22305	Diphenyl-Carbazide	11/7/23	SS	5/7/24	Diphenyl-Carbazide	SWL4724	0.2508	g	Bal01	50	Acetone
W22306	TKN BUFFER	11/7/23	BL	12/1/23	NaOH	SWL4928	50.038	g	Bal20	1000	
					EDTA	SWL4964	20.003				
					Sodium Phos. Dibasic	SWL5087	35.080				

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W22318	IC CCV	11/8/23	RAD	11/22/23	Cl	SWL 5127	2.0	mL	W00	100	
					NO_2	5129	0.8		W20		
					NO_3	5128	0.8		〃		
					Br	5063	4.0		W00		
					SO_4	5053	4.0		〃		
					F	4961	1.0		W20		
W22319	TDS/TS-AQ LCS	11/8/23	JRS	11/8/24	KCl	SWL1705	1.5009	g	bal 01	2000	
W22320	〃	〃	〃	〃	〃	〃	〃	〃	〃	〃	
W22321	Fe2+ Phenanthroline Stn	11/9/23	RAD	11/9/24	1,10 Phenan-throline, 99%	SWL4423	1.0063	g	bal 01	1000	
〃	〃	〃	〃	〃	HCl	SWL5093	20	drops	disposable pipette	〃	
W22322	0.01N H_2SO_4	11/9/23	JRS	11/9/24	0.1N H_2SO_4	W22113	400	mL	grad cyl	4000	
W22323	〃	〃	〃	〃	〃	〃	〃	〃	〃	〃	
W22324	IC LCS	11/9/23	RAD	11/23/23	multielement A	SWL5113	3.75	mL	W10	50	
〃	〃	〃	〃	〃	multielement B	SWL5059	3.75	〃	〃	〃	
W22325	Ascorbic Acid TPO	11/10/23	BL	11/11/23	Ascorbic Acid	SWL5072	15.018	g	Bal 20	250	
〃	〃	〃	〃	〃	Na Dodecyl Sulfate	SWL3043	0.238	〃	〃	〃	
W22326	ALKALINITY LCS/MS	11/10/23 BL 11/10/23	12/10/23 BL 11/10/23	BL	Na_2CO_3	SWL5076	1.069	g	Bal 20	1000	

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W22327	NO_2/NO_3 BUFFER	11/10/23	BL	12/10/23	EDTA	SWL4964	4.027	g	Bal20	4000	
⊥	⊥	⊥	⊥	⊥	HCl	SWLS093	420	mL	CB034	⊥	
⊥	⊥	⊥	⊥	⊥	NH_4OH	SWLS104	380	⊥	CB041	⊥	
W22328	0.25N NaOH	11/13/23	JRS	11/13/24	10N NaOH	SWL 4994	100 mL	mL	grad cyl	4000	JRS 11/13/23
W22329	⊥	⊥	⊥	⊥	⊥	⊥	⊥	⊥	⊥	⊥	
W22330	NH_3 Trapping Sol'n	11/13/23	SS	2/13/24	0.1 M H_2SO_4	W22113	40	mL	CB042	250	SS 11/13/23
W22331	NH_3 preferred Reagent Sol'n	11/13/23	⊥	2/13/24	Na tetraborate dehydrate	SWL4647	4.7518	g	BalC1	500	
⊥	⊥	⊥	⊥	⊥	NaOH	SWL4928	11.0947	⊥	⊥	⊥	
W22332	NH_3 alt prepared Reagent Sol'n	11/13/23	SS	2/13/24	Na tetraborate dehydrate	SWL4647	5.2003	g	Bal0	500	
⊥	⊥	⊥	⊥	⊥	NaOH	SWL4928	30.514	⊥	⊥	⊥	
W22333	LOW LEVEL ALK CCV	11/14/23	BL	12/14/23	$CaCO_3$	SWLS107	125	mL	CB042	1000	
W22334	TPO4 ASCORBIC ACID	11/15/23	BL	11/16/23	ASCORBIC ACID	SWLS072	15.0105	g	Bal01	250	
⊥	⊥	⊥	⊥	⊥	Na DODECYL SULFATE	SWL3043	0.2556	⊥	⊥	⊥	
W22335	TPO4 COLOR	11/15/23	BL	~~11/15/24~~ 11/15/23	AMMONIUM MOLYBDATE	W22178	53.25	mL	CB042 W10	250	
⊥	⊥	⊥	⊥	⊥	ANTIMONYL K TARTATE	W22179	18	⊥	W10	⊥	
W22336	TPO4 CAL/CCV ~~CCB~~	11/16/23	BL	5/16/24	PPO4 1000ppm	SWLS140	10	mL	W00	200	
W22337	0.01N H_2SO_4	11/16/23	JRS	11/16/24	0.1N H_2SO_4	~~S~~ W22113	200	mL	grad cyl	2000	

JRS 11/16/23

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REAGENT, INTERMEDIATE AND WORKING STANDARDS PREPARATION LOGBOOK

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W22338	0.25N NaOH	11/16/23	JRS	11/16/24	10N NaOH	SWL 4994	100	mL	grad cyl	4000	
W22339	〃	〃	〃	〃	〃	〃	〃	〃	〃	〃	
W22340	Color Con Std. Set	11/16/23	SS	5/16/24	Color Conc Stock	SWL5114	0.5, 1, 1.5, 2, 2.5, 3, 3.5, 4, 4.5, 5, 6	mL	W22 W101	50	
W22341	TSS LCS	11/16/23	RAD	11/16/24	Celite	SWL4564	1.0018	g	bal 01	1000	
W22342	0.2% H_2SO_4	11/16/23	SS	11/16/24	H_2SO_4	MSR307	2	mL	W00	1000	
W22343	TOC Cal Stock	11/16/23	CJB	2/16/24	KHP	SWL4116	2.032	g	Bal20	1000	
〃	〃	〃	〃	〃	H_3PO_4	SWL5061	1.0	mL	W22	〃	
W22344	TPO4 Ascorbic Acid	11/17/23	BL	11/18/23	Ascorbic Acid	SWC5072	15.077	g	Bal20	250	
〃	〃	〃	〃	〃	Na Dodecyl Sulfate	SWL3043	0.256	〃	〃	〃	
W22345	TPO4 Carrier	11/17/23	BL	12/17/23	K_2SO_4	SWL4953	15.074	g	Bal20	500	
〃	〃	〃	〃	〃	H_2SO_4	MSR307	20	mL	CB009	〃	
~~W22346~~	~~TPO4 NaOH/NaCl~~	~~11/17/23~~	~~BL~~	~~12/17/23~~	~~NaOH~~	~~SWL4928~~	~~50.065~~	~~g~~	~~Bal20~~	~~250~~	BL 11/17/23 NEW PACK REMADE ON BL 11/17/23
~~〃~~	~~〃~~	~~〃~~	~~〃~~	~~〃~~	~~NaCl~~	~~SWL5120~~	~~40.049~~	~~〃~~	~~〃~~	~~〃~~	
W22347	BaCl for SO4	11/17/23	SS	11/17/24	BaCl	SWL2129	1.0161	g	Bal01	100	
〃	〃	〃	〃	〃	NaCl	SWC5120	2.0803	〃	〃	〃	
〃	〃	〃	〃	〃	HCL	SWL5135	0.5	ml	W20	〃	
〃	〃	〃	〃	〃	Gelatine	SWL4873	0.0583	g	Bal01	〃	

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W22360	IC CCV	11/27/23	RAD	12/11/23	Cl	SWL5127	2.0	mL	W00	100	
					NO_2	5129	0.8		W22		
					NO_3	5128	0.8				
					Br	5063	4.0		W00		
					SO_4	5126	4.0				
					F	4961	1.0		W22		
W22361	IC LCS	11/27/23	RAD	12/11/23	multielement A	SWL5113	3.75	mL	W00	50	
					multielement B	5059	3.75				
W22362	AMMONIUM MOLYBDATE	11/27/23	BL	11/27/24	AMMONIUM MOLYBDATE	SWL4969	40.015	g	Bal 20	1000	BL 11/27/23
W22363	K ANTIMONYL TARTATE	11/27/23	BL	11/27/24	K ANTIMONYL TARTRATE	SWL3851	1.3711	g	Bal 01	500	
W22364	TPOH ASCORBIC ACID	11/28/23	BL	11/29/23	ASCORBIC ACID	SWL5072	15.007	g	Bal 20	250	
					Na DODECYL SULFATE	SWL3043	0.251				
W22365	TPOH COLOR	11/28/23	BL	12/28/23	AMMONIUM MOLYBDATE	W22362	53.25	mL	CB042 W00	250	
					ANTIMONYL K TARTHE	W22363	18		W3		
W22366	HL COD CCV	11/28/23	CJB	2/28/24	KHP	SWL4116	.8503	g	Bal 01	500	
W22367	LL COD CCV	11/28/23	CJB	2/28/24	HL COD CCV	W22366	50	mL	CB046	1000	
W22368	LL COD LCS	11/28/23	CJB	2/28/24	COD Standard	SWL5019	15	mL	CB046	200	

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W22379	TOC Soil CCV	12/5/23	CJB	3/5/24	Glucose	SWL4891	25.001	g	Bal20	250	.5 mL HCl
W22380	NO_2 0.05 ppm	12/5/23	BL	1/5/24 ~~23~~	NO_2 1000ppm	SWLS129	0.01	mL	W17	200	BC 12/5/23
W22381	NO_2 0.25ppm	↓	↓	↓	↓	↓	0.05	↓	WB	↓	
W22382	NO_2 1.00 ppm						0.2		WB		
W22383	NO_2 2.0 ppm						0.4		W22		
W22384	NO_2 CCV 0.5ppm						0.1		WB		
W22385	NO_3 CCV	12/5/23	BL	1/5/24 ~~23~~	NO_3 1000ppm	SWLS128	0.1	mL	WB		BC 12/5/23
W22386	NO_2 LCS	12/5/23	BL	1/5/24 ~~23~~	MULTI ELEMENT B	SWLS059	0.656	↓	W22		BL 12/5/23
W22387	NO_3 LCS	12/5/23	BL	1/5/24 ~~23~~	MULTI ELEMENT A	SWLS113	0.833	↓	W22	↓	BL 12/5/23
W22388	NH_3 1.5ppm LCS	12/6/23	SS	1/6/24	LCS Stock 100ppm NH_3	W22189	3	mL	W00	200	0.2% H_2SO_4 W22542
W22389	Zn Acetate	12/6/23	JCB	12/6/24	Zn Acetate	SWL4537	44.027	g	Bal01	200	
W22390	Sodium Phenolate	12/6/23	SS	12/6/24	Phenol	SWL4909	~~8.336~~ 8.335	g	Bal20	100	SS 12/6/23
↓	↓	↓	↓	↓	NaOH	SWL4928	3.29	↓	↓	↓	
W22391	TOC LCS (AQ)	12/6/23	CJB	3/6/24	KHP	SWL4916	.1066	g	Bal01	1000	
↓	↓	↓	↓	↓	H_3PO_4	SWL5061	1.0	mL	W20	↓	
W22392	Cl Cal Stock 10,000 mg/L	12/8/23	SS	6/8/28	NaCl	SWL5120	4.1213	g	Bal01	250	
W22393	Cl Cal Working Std. 100 mg/L	↓	↓	3/8/28	Cl Cal Stock 10,000 mg/L	W22392	2	mL	W00	200	

SS
12/8/23

Katahdin Analytical Services - Wet Chemistry Lab
Reagents and Stock Standards Receipt Logbook

Katahdin STD. ID.	Standard Name	Mfr.	Catalog Number	Mfr. Lot Number	Receipt Initials	Receipt Date	Expiration Date	COA Scanned?
SWL5050	Turbidity std.	Ricca	R8819050-500	1210770	STM	2/15/23	10/23	✓
SWL5051	TISAB II w/ CDTA	Thermo	940909	BZ1	RAD	2/21/23	2/21/28	✓
SWL5052	BOD Nutrient Buffer Pillow	HACH	1486398	A2178	EIR	02/27/23	9/27	✓
SWL5053	SO4 std	inorganic ventures	ICS041	S2-SOX701648	RAD	3/15/23	3/15/24	✓
SWL5054	BOD Nutrient Buffer Pillow	Hach	1486398	A2198	EIR	03/27/23	9/27	✓
SWL5055	pH Buffer Solution 4.00	Fisher	SB101-500	224881	CJB	03/27/23	8/24~~01/24~~	✓
SWL5056	pH Buffer Solution 10.00	Fisher	SB115-500	224638	CJB	03/27/23	10/24	✓
SWL5057	136C Plain Granules	Hengar	1344-28-1	215-691-6	CJB	03/27/23	03/27/28	
SWL5058	Multielement A	enviro express	HP-IC-2-A-100	2303029-100EE	RAD	4/3/23	3/31/24	✓
SWL5059	Multielement B	〃	HP-IC-2-B-100	2225522-100EE	〃	〃	〃	✓
SWL5060	Cold HR Vials	Envior. Express	B1015	13831	EIR	04/04/23	11/01/27	✓
SWL5061	Phosphoric Acid	Fisher	A242-212	224167	SS	4/19/23	4/19/28	✓
SWL5062	Alk, $CaCO_3$	sigma aldrich	ALK1000-500mL	LEAP4309	SS	4/20/23	1/31/26	✓
SWL 5063	Bromide std. for IC 1000ppm	sigma aldrich	43147-100mL	BCCF8024	RAD	4/21/23	3/24	✓
SWL 5064	BOD Nutrient Buffers	Hach	1486398	A2195	CJB	4/24/23	4/24/27	✓
SWL5065	Cr^{+6} ccv/cal Stock	inorganic ventures	CGCR(6)1	T2-CR722437	STM	4/28/23	4/28/24	✓
SWL5066	Glass Fibre Prefilters (TDS)	Merck Millipore	AP4004705	0000194371	RAD	4/28/23	4/28/28	✓

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Katahdin STD. ID.	Standard Name	Mfr.	Catalog Number	Mfr. Lot Number	Receipt Initials	Receipt Date	Expiration Date	COA Scanned?
SWL5067	CN Standard	ACCU Standard	WC-CN-10X-1	223015037	STH	4/28/23	7/10/24	✓
SWL5068	pH 7 Buffer (yellow)	Fisher	SB107-500	226063	SS	5/3/23	01/25	✓
SWL5069	N-N-Dimethyl-1,4-phenylenediamine oxalate	TCI	D0781	SF5BB-JC	SS	5/3/23	5/3/28	✓
SWL5070	LR COD Vials	ENV EXP	~~13886~~ B1010	13886	CJB	5/8/23	5/18/28	✓ RAD 10/24/23
SWL5071	Cadmium Column for NO_3	Hach	502237 A	3094C	RAD	5/9/23	10/2023	✓
SWL5072	Ascorbic Acid, 99+%	Thermo	A15613.36	M04J019	RAD	5/12/23	5/12/28	✓
SWL5073	Phenol 1000ppm std	Ricca	5740-4	421 1D00	RAD	5/12/23	10/24	✓
SWL5074	Sodium Sulfide nonahydrate	Thermo	42442-5000	B0154446	SS	5/16/23	5/16/28	✓
SWL5075	Sodium Carbonate	Ricca	7190-16	2305F59	SS	5/16/23	10/24	✓
SWL5076	Sodium Carbonate Anhydrous	Fisher	S263-1	219130	SS	5/16/23	5/16/28	✓
SWL5077	pH 2.00 Buffer	Fisher	SB96-500	224625	SS	5/16/23	01/25	✓
SWL5078	pH 4.00 Buffer	Fisher	SB101-500	230419	SS	5/17/23	3/25	✓
SWL5079	Phenol standard 1000ppm	Lab Chem	LC183307	M353-21	RAD	5/25/23	12/18/24	✓
SWL5080	Sodium Thiosulfate, 0.0375N	Ricca	7925-1	2305L08	RAD	5/25/23	11/24	✓
SWL5081	pH 7 BUFFER (YELLOW)	FISHER	SB107-500	226063	BL	5/25/23	1/25	✓
SWL5082	NED	THERMO	42399-1000	B0152963	BL	5/26/23	5/26	✓
SWL5083	SULFANILAMIDE	THERMO	13285-5000	B0152912	BL	5/31/23	5/31/28	✓

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Reagents and Stock Standards Receipt Logbook

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SWL5084	HR COD Vials	environmental express	B1015	13882	SS	6/2/23	1/28	✓
SWL5085	LR COD Vials	"	B1010	13907	"	~~1/28~~	"	✓
SWL5086	Chloroform	fisher	C606-4	230806	~~RAD~~	6/8/23	6/8/28	✓
SWL5087	SODIUM PHOSPHATE DIBASIC HEPTAHYDRATE	FISHER	7782-85-6	215467	BL	6/28/23	6/28/28	✓
SWL5088	CHLORIDE COLOR REAGENT	RICCA	1940-16	4211C10	BL	6/28/23	10/23	✓
SWL5089	SAND	SPECTRUM	14808-60-7	1DID227	BL	6/30/23	6/30/28	✓
SWL5090	POTASSIUM IODIDE	THERMO	373655000	A0449576	BL	7/5/23	7/5/28	✓
SWL5091	SODIUM CYANIDE CN 1000ppm	INORGANIC VENTURES	~~CN-1000-25~~ 143-33-4	V2-CN7277IY	BL	7/5/23	~~7/5/24~~ 7/25/25	✓
SWL5092	SODIUM SALICYLATE	THERMO	A17056.0B	Z021D18	BL	7/5/23	7/5/28	✓
SWL5093	HCL, 36.5-38%	J.T. Baker	UN1789	23E1262011	SS	7/6/23	4/3/28	
SWL5094	BUFFER SOLUTION pH 10	FISHER	SB115-500	226060	BL	7/10/23	1/25	✓
SWL5095	SAND - LAB GRADE	FISHER	14808-60-7	3GB220721111A	BL	7/11/23	7/11/28	N/A
SWL5096	HR COD Vials	environmental express	B1015	13923	CJB	7/11/23	03/28	✓
SWL5097	TISAB II	fisher	15-2009-08	BV2	~~RAD~~	7/13/23	7/13/28	✓
SWL5098	LR COD Vials	environmental express	B1010	13929	CJB	7/19/23	03/14/28	✓
SWL5099	MULTIELEMENT B	ENVIRONMENTAL EXPRESS	HP-IC-N-M-100	230A146-100EE	BL	7/19/23	7/31/24	✓
SWL5100	BUFFER SOLUTION pH 4	FISHER	SB101-500	230419	BL	7/20/23	~~3~~/25	✓

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Katahdin Analytical Services - Wet Chemistry Lab
Reagents and Stock Standards Receipt Logbook

Katahdin STD. ID.	Standard Name	Mfr.	Catalog Number	Mfr. Lot Number	Receipt Initials	Receipt Date	Expiration Date	COA Scanned?
SWLS101	Glass Fibre Prefilters(TDS)	Merck Millipore	AP9004705	0000215925	JRS	7/21/23	7/21/28	✓
SWLS102	CADMIUM COLUMN FOR NITRATE	HACH	50237A	3186D	BL	7/31/23	01/24	✓
SWLS103	PLAIN GRANULES	HENGAR	1344-28-1	901800	BL	8/1/23	8/1/28	
SWLS104	AMMONIUM HYDROXIDE	FISHER	A669-212	226397	BL	8/1/23	8/1/28	✓
SWLS105	POTASSIUM CHLORIDE CONDUCTIVITY	RICCA	S888.01-16	2303P78	BL	8/1/23	2/25	✓
SWLS106	COLOR STANDARD	RICCA	2230-4	4304L09	BL	8/1/23	4/25	✓
SWLS107	ALKALINITY $CaCO_3$	SIGMA ALDRICH	ALK1000-500mL	LRAD5850	BL	8/4/23	6/30/26	✓
SWLS108	Potassium Chloride Conductivity	Fisher Brand	09-328-911774226	CC23998	JRS	8/4/23	3/30/24	✓
SWLS109	BOD Nutrient Buffer Pillows	HACH	1486398	A2287	CJB	8/8/23	6/8/28	✓
SWLS110	Nitrification Inhibitor	Lovibond	194920	XA6A0724	CJB	8/14/23	7/M/24	✓
~~SWLS111~~	~~HDR TSS LCS~~	~~Hach~~						
~~SWLS112~~	~~HDR TSS LCSD~~							
SWLS111	HR COD Vials	Env. Exp.	B1015	13807	CJB	8/22/23	10/27/27	✓
SWLS112	MULTIELEMENT B	ENV. EXPRESS	HP-IC-2-B-100	2308942-100EE	BL	8/24/23	8/31/24	
SWLS113	MULTIELEMENT A	ENV. EXPRESS	HP-IC-2-A-100	2303029-100EE	BL	8/24/23	8/31/24	✓
SWLS114	COLOR STANDARD	RICCA	2230-200	4308F05	BL	8/24/23	7/25	✓
SWLS115	pH7 BUFFER SOLUTION (YELLOW)	FISHER	SB107-500	231058	BL	8/29/23	4/25	✓

RAD 10/24/23

RAD 10/24/23

Katahdin Analytical Services - Wet Chemistry Lab
Reagents and Stock Standards Receipt Logbook

Katahdin STD. ID.	Standard Name	Mfr.	Catalog Number	Mfr. Lot Number	Receipt Initials	Receipt Date	Expiration Date	COA Scanned?
SWL5116	LINEAR ALKYLBENZENE 10ppm SULFONATE STANDARD	BICCA	4348-16	1305R81	BL	9/1/23	5/24	✓
SWL5117	LINEAR ALKYLBENZENE SULFONATE STANDARD 1000ppm	BICCA	4350-4	1303J30	BL	9/1/23	3/24	✓
~~SWL5118~~	~~Glucose for TOC Soils~~ AC 9-1-23							RAD 10/2/23
SWL5118	Paint Filters	TCP Global	PS-190B	N/A	CJB	9/5/23	9/5/28	N/A
SWL5119	Chloroform	fisher	C606-4	231658	RAD	9/7/23	9/7/28	✓ on bottl
SWL5120	SODIUM CHLORIDE	FISHER	S642-212	223943	BL	9/8/23	9/8/28	✓
SWL5121	PH BUFFER 4, 7, 10	FISHER	NC2402248	225069	BL	9/8/23	10/23	✓
SWL5122	SODIUM NITROFERRICYANIDE	THERMO	211640250	A0443695	BL	9/14/23	9/14/28	✓
SWL5123	Glass Fibre Prefilters (TPS)	Merck Millipore	AP4004705	0000205684	JRS	9/14/23	9/14/28	✓
SWL5124	AMMONIA STANDARD	ORION	ORION 951007	BX1	BL	9/18/23	3/25	✓
SWL5125	ANTIFOAM B EMULSION	SIGMA ALDRICH	1003624953	MKCT0859	BL	9/26/23	8/26/24	✓
SWL5126	SO4 Standard 1000 ppm	inorganic ventures	ICS041	T2-SOX722793	RAD	10/2/23	10/2/24	✓
SWL5127	Cl Std 1000ppm		ICCL1	U2-CL731103				✓
SWL5128	NO3 Std 1000ppm		ICNN031	T2-NOX723937				✓
SWL5129	NO2 Std 1000ppm		ICNN021	T2-NOX721185				✓
SWL5130	Sand Lab Grade	fisher	S25516B	3GH23040507A	RAD	10/2/23	8/28	N/A
SWL5131	T-CAL STANDARD 10NTU	TINTOMETER	48011212	2E9A0925	BL	10/10/23	9/25	✓

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Katahdin Analytical Services - Wet Chemistry Lab
Reagents and Stock Standards Receipt Logbook

Katahdin STD. ID.	Standard Name	Mfr.	Catalog Number	Mfr. Lot Number	Receipt Initials	Receipt Date	Expiration Date	COA Scanned?	
~~SWLS132~~			~~SO-00-0~~				BL 10/25/23		
SWLS132	PH 4 BUFFER SOL.	FISHER	SB101-500	233052	BL	10/25/23	7/25	✓	
SWLS133	CHLORIDE COLOR REAGENT	RICCA	1940-16	4301H76	BL	10/26/23	1/24	✓	
SWLS134	BOD Nutrient Buffer Pillows	HACH	1486398	A3169	CJB	10/30/23	8/28	✓	
SWLS135	HCL	J.T. Baker	UN1789	23HZ862017	SS	10/31/23	8/1/28		
SWL5136	LR COD Vials	ENV EXP.	B1010	3G60011	CJB	10/31/23	7/31/28	✓	
SWL5137	HR COD Vials	ENV EXP.	B1015	3GE0544	CJB	10/31/23	5/31/28	✓	
SWLS138	TURBIDITY STANDARD, 50NTU	RICCA	R6819050-500G	1308J19	BL	11/7/23	7/24	✓	
SWLS139	TISAB II	fisher	15-2009-08	BS2	TAD	11/13/23	11/13/28		
SWLS140	PPO_4 1000 ppm	INORGANIC VENTURES	ICPPO41	U2-P0X729089	BL	11/14/23	~~11/14/24~~ 11/14/28		BL 11/14/2
SWLS141	CADMIUM COLUMN	HACH	50237A	3297A	BL	11/14/23	4/24		
SWLS142	DH 12.46 BUFFER	FISHER	IS-2009-15	BQ1	BL	11/16/23	10/25		
SWLS143	PH 10 BUFFER	FISHER	SB115-500	233928	BL	11/20/23	9/25		
SWLS144	PH 7 BUFFER	FISHER	SB108-1	234774	BL	11/21/23	10/25		
SWL5145	Sodium Thiosulfate (0.0375N)	RICCA	7925-1	2310P43	JRS	11/29/23	~~10/~~ 04/25		JRS 11/29/2
SWLS146	PLAIN GRANULES	HENGAR	1344-28-1	21S-691-6	BL	11/30/23	11/30/28		
SWLS147	ALKALINITY $CaCO_3$	SIGMA ALDRICH	ALK1000-500ML	LRAD7087	BL	12/1/23	11/30/26		

Katahdin Analytical Services, Inc. - Wet Chemistry Lab

STOCK STANDARDS LOGBOOK

Katahdin Std. ID	Standard Name	Manu-facturer	Mfr. Lot Number	Receipt Initials	Receipt Date	Expiration Date
SWL1940	Cupric Sulfate	fisher	0466649	SJC	10/5/05	10/5/10
SWL1944	Nitrite STD	LabChem	3287-10	SJC	10/19/05	1/17/06
SWL1945	Sodium Carbonate	LabChem	5126-07	SJC	10/19/05	5/6/06
SWL1962	Ferrous Ammonium sulfate	Fisher	057085	KGT	102505	10/25/11
SWL1962	Ferrous Ammonium Sulfate .25N	LabChem	5263-14	SJC	11/1/05	3/22/06
SWL1990	Sodium Carbonate 1N	fisher	055959-24	CP	11/30/05	11/30/07
SWL1991	Sodium Carbonate 1N	fisher	055959-24	CP	11/30/05	11/30/07
SWL1992	Sodium Phosphate 500gm	fisher	054177	CP	11/30/05	11/30/10
SWL1993	Conductivity STD	fisher	3442	SJC	12/1/05	8/18/06
SWL1994	↓	↓	3458	↓	↓	9/06/06
SWL1995	↓	↓	3445	↓	↓	8/18/06
SWL2009	Nitrite STD	LabChem	6009-06	SJC	01/17/06	04/10/06
SWL2012	Buffer Solution pH 7	fisher	054999-24	CP	1/24/06	10/31/07
SWL2013	Conductivity STD 1409µmho	LabChem	5332-15	SJC	013106	12/05/07
SWL2014	pH 4.00 Buffer	fisher	055000-24	SJC	013106	10/31/07
SWL2015	Phenolate - Mtg	EST	1006859	KGT	020206	020107
SWL2016	Chloramine - T	EST	1006322	KGT	020206	100106
SWL2017	Nitroprusside	↓	1006779	↓	↓	020107
SWL2018	EDTA Buffer		1006780			↓
SWL2019	Hypochlorite	↓	1006778	↓	↓	↓

WCStockStd.xls

Katahdin Analytical Services, Inc. - Wet Chemistry Lab
Reagent Receipt Logbook

Katahdin Reagent. ID.	Reagent Name	Manu-facturer	Mfr. Lot Number	Receipt Initials	Receipt Date	Expiration Date
SWL4091	H.L. COD vials	E.E.	12434	SC	12-14-16	10.31.021
SWL4092	Sodium Thiosulfate	Ricca	2609057	SC	↓	3.31.18
SWL4093	1000 µS/cm Spec. Con. Std.	Traceable	~~CC15215~~	↓	↓	8/8/17
SWL4094	100 µS/cm ↓	↓	CC15259	↓	↓	9.2.17
SWL4095	10,000 µS/cm ↓	↓	CC15217	↓	↓	8.19.17
SWL4100	Ferrous Sulfate heptahydrate	Fisher	160768	ZF	12-23-16	12-23-21
SWL4102	Ammonium Hydroxide	Acros	A0372135	AP	1/6/17	1/31/22
SWL4103	Sodium Carbonate	Acros	A0375201	AP	1/6/17	1/6/27
SWL4106	Sodium L-(+)-Tartrate dihydrate	fisher	157480	SC	1.30.17	1.30.27
SWL4110	HL COD vials	Env. Express	12462	SC	2.2.17	12.31.21
SWL4111	Ammonia Std 1000 ppm	Orion	UQ1	ZF	2-2-17	10-31-18
SWL4113	Cadmium Column	Lachat	6354	AP	022317	022318
SWL4114	magnesium chloride hexahydrate	fisher	162613	SC	3-1-17	3-1-22
SWL4115	TISAB	Orion	9409001	↓	3-1-17	↓
SWL4116	Potassium hydrogen phthalate	Acros	A0376652	ZF	3-6-17	NA
SWL4118	HL COD vials	Env. Express	12489	SC	3.13.17	1.31.2022
SWL4119	HL COD vials	↓	12475	↓	↓	↓

EE 12-14-16 wrong logbook

Katahdin Analytical Services, Inc. - Wet Chemistry Lab
Reagent Receipt Logbook

Katahdin Reagent. ID.	Reagent Name	Manu-facturer	Mfr. Lot Number	Receipt Initials	Receipt Date	Expiration Date
SWL 4402	Cadmium Column	lachat	8276	ZF	10/22/18	4/30/19
SWL4403	high level COD vials	Env. Express	12869	ZF	10/24/18	8/1/20
SWL4404	Phosphate buffer soln	Fisher	179167	SC	10-14-18	8-30-19
SWL4405	Potassium Iodide	Acros	A0390896	ZF	10/26/18	10/26/23
SWL4407	Sodium Carbonate	Acros	A0388522	ZF	10/30/18	10/30/23
SWL4408	Potassium Sulfate	Acros	A0390084	ZF	1	1
~~———~~	~~Sodium hydroxide~~					ZF 10/30/18
SWL4409	Plain Granules	hengar	215-691-6	ZF	11/21/18	NA
SWL 4411	low level COD vials	Envi. Express	12584	ZF	12/6/18	6/31/22
SWL4412	high level COD vials	Env. Express	12515	AB	12/6/18	3/31/22
SWL4415	Sodium Phenolate Soln	Thermo	1112036	AP	12/20/18	7/14/19
SWL4416	TISAB II w/CDTA	Orion	LQ2	AP	1	1
SWL4422	Ammonium Acetate	Fisher	181537	ZF	12/20/18	12/20/23
SWL4423	1, 10- Phenanthroline	Acros	A0388924	ZF	12/20/18	12/20/23
SWL4424	Iodine	Acros	B0138702	ZF	1	1
SWL4425	10 N NaOH	Fisher	184664	AP	12/20/18	11/30/20 AP 12/21/18
SWL4426	Sodium Thiosulfate Solution 0.0375N	Fisher	175890	JS	12.21.18	8.31.19

Katahdin Analytical Services, Inc. - Wet Chemistry Lab
Reagent Receipt Logbook

Katahdin Reagent. ID.	Reagent Name	Manu-facturer	Mfr. Lot Number	Receipt Initials	Receipt Date	Expiration Date
SWL4951	Cupric Sulfate Pentahydrate	fisher chemical	190706	MH	5/9/22	5/9/27
SwL4949	Pyridine	Fisher	216630	SS	5/11/22	5/11/27
SwLY952	Phosphoric Acid	Fisher	214306	SS	5/18/22	5/18/27
SWL4953	Potassium sulfate	Thermo	10238938	MH	5/26/22	5/26/27
SwL4954	Chloride R1 (984364)	Thermo	U667	SS	5/26/22	6/30/23
SwL4957	Ammonium Acetate	Fisher	208075	SS	6/8/22	6/8/27
SwL4958	Potassium Sodium tartrate	Thermo	A0431849	SS	6/8/22	6/8/27
SWL4963	Boiling stones/ plain granules	Hengar	215 - 691 - 6	MH	6/20/22	6/20/27
SWL4964	Ethylenediaminetetraacetic acid	thermo	A0384660	RD	6/21/22	6/21/27
SWL4965	Conductivity standard (LCS 4)	Thermo	CC22291	MH	6/27/22	2/11/23
SWL4966	Conductivity standard (LCS 3)	Thermo	CC22425	MH	6/27/22	3/9/23
SWL4967	Conductivity standard (LCS 2)	Thermo	CC22340	MH	6/27/22	2/24/23
SwL4969	Ammonium molybdate	Thermo	A0428276	SS	6/28/22	6/28/27
SwL4970	Ascabic Acid	Thermo	208H035	SS	6/28/22	6/28/27
SwL4974	Cadmium Reduction Colomn	Lachat	20660	RAD	7/13/22	9/30/22
SWL4975	Sulfanilamide	Thermo	B0152173	RAD	7/29/22	7/29/27
SWL4976	Ammonium Hydroxide	Fisher	216954	RAD	8/3/22	8/3/27

Katahdin Analytical Services, Inc. - Wet Chemistry Lab
Stock Standards Receipt Logbook

Katahdin STD. ID.	Standard Name	Manu-facturer	Mfr. Lot Number	Receipt Initials	Receipt Date	Expiration Date
SWL 4724	sym-diphenylcarbazide	ACROS	A0411427	es	1/13/21	1/13/26
✓ SWL 4725	CrVI +6 LCS STD 1000 ug/mL	ENVR express	2031534-100	es	1/15/21	1/31/22
SWL 4728	TISAB II	ORION	940909	es	12/10/21	2/10/25
SWL 4729	Color Std	RICCA	401 1J97	es	2/17/21	2/17/23
✓ SWL 4730	sulfate	inorganic ventures	P2-SO4X089601	es	〃	〃
✓ SWL 4731	Chromium +6	〃	P2-CR6839607	es	〃	〃
SWL 4732	Buffer 12 pH	Specpure	N10H006	es	〃	〃
✓ SWL4733	Buffer 7 PH	Fisher	212-739	ZL	6/8/21	03/23
✓ SWL 4766	F Std.	Inorg. Ventures	P2-F656382	ZF	6/9/21	6/9/23
SWL4769	Alk $CaCO_3$ 1000mg/L	Sigma-Aldrich	LRAC8778	ZF	6/9/21	1/31/21
✓ SWL4770	Ferric Chloride Solution	fisher	206707	JL/KD	6/29/21	01/23
SWL4771	COD Standard	Labchem	L089-23	JL/KD	6/29/21	4/9/23
✓ SWL4772	COD Vials High level.	Env. Express	13479	JL/KD	6/30/21	5/26
✓ SWL4773	colors LCS standerd	Ricca	2105C44	JJ/KD	6/30/21	5/2023
✓ SWL 4774	Colors CCV standerd	Ricca	2105C44	JJ/KD	6/30/21	5/2023
✓ SWL4775	Buffer 7 pH yellow	Fisher	212739	ZL	7/2/21	03/2023
SWL4784	Spec. Con. LCS 1	Ricca	1106752	JJ/KD	7/13/21	05/2023

Katahdin Analytical Services, Inc. - Wet Chemistry Lab
Stock Standards Receipt Logbook

Katahdin STD. ID.	Standard Name	Manu-facturer	Mfr. Lot Number	Receipt Initials	Receipt Date	Expiration Date
SWL4938	pH 10 buffer	Fisher	220003	~~ZF~~	4/4/22	1/31/24
SWL4944	Alk CaCO3 1000	sigma aldrich	LRAD0045	SS	4/20/22	7/31/24
SWL4947	COD Vials Low Level	Env. Exp.	13636	JB	4/21/22	~~7/31/26~~ 1/2027
SWL4948	Buffer Solution pH 7.00 (clear)	Fisher	220002	SS	5/11/22	02/24
SWL4955	pH 7 Buffer (yellow)	Fisher	220007	SS	5/27/22	01/24
SWL4956	Alk CaCO3 1000 mg/L	Sigma Aldrich	LRAD2410	SS	6/8/22	4/30/25
SWL4959	Ammonia Standard 1000 ppm	Fisher	Av2	SS	6/8/22	05/24
SWL4960	Cn Standard	Inorganic ventures	52-CN 707222	SS	6/8/22	10/7/23
SWL4961	F Standard 1000 ppm	Environmentex express (nps)	2202534-100	SS	6/8/22	11/30/23
SWL4962	NO2 1000 ppm Std. Multi element B	Environmentex express (nps)	2206143-100	SS	6/8/22	5/31/23
SWL4968	pH 7 Buffer (yellow)	Fisher	221685 (SB107-500)	SS	6/28/22	03/24
SWL4971	Color Standard	Ricca	4204B44	SS	6/28/22	3/24
SWL4972	pH 4 Buffer	Fisher	221684	SS	7/8/22	4/24
SWL4973	pH 10 Buffer	Fisher	220003	SS	9/8/22	1/24
SWL4977	pH 7 Buffer (yellow)	Fisher	221685 (SB107-500)	RAD	8/5/22	3/24
SWL4978	Mercury(II) oxide, 99+%, red	Acros	A0426593	RAD	8/8/22	
SWL4979	Potassium Iodide	Thermo	A0430239	SS	8/26/22	8/26/27

Katahdin Analytical Services, Inc. - Wet Chemistry Lab
Stock Standards Receipt Logbook

Katahdin STD. ID.	Standard Name	Manu-facturer	Mfr. Lot Number	Receipt Initials	Receipt Date	Expiration Date
SWL 5046	~~W21524~~ P-Xylene 99%	thermo scientific	10241202	ER	12/30/22	12/30/27
SWL 5047	~~W21525~~ Sulfate	inorganic Ventures	S2-SO4X712629	ER	12/30/22	12/30/23
SWL 5048	~~W21526~~ Chromium +6	ENV. Express	2212933-250	ER	12/30/22	12/31/23
					SS 2/13/25	

RAD 1/2/23

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Katahdin Analytical Services, Inc. - Wet Chemistry Lab
Reagent Receipt Logbook

Katahdin Reagent. ID.	Reagent Name	Manu-facturer	Mfr. Lot Number	Receipt Initials	Receipt Date	Expiration Date
SWL5041	Sulfuric Acid (9681-03)	J.T. Baker	22507620 15	1/13/23 ↵ SS		9/5/27
SWL5042	Sodium Thiosulfate	RICCA	2212C80	ER	1/13/23	6/1/24
SWL5043	Sulfanilamide	thermo scientific	B0152912	ER	01/13/23	01/13/27
SWL5044	Magnesium Chloride Hexahydrate	fisher bioreagents	219274	ER	01/13/23	01/13/27
SWL5045	Iodine Extra Pure 99.5%	ACROS Organics	B01460824	ER	01/13/23	01/13/27
SWL5049	Glass Fibre Prefilters (TDS)	Merck Millipore	0000150777	SS	11/21/22	11/21/27
					SS 2/13/23	

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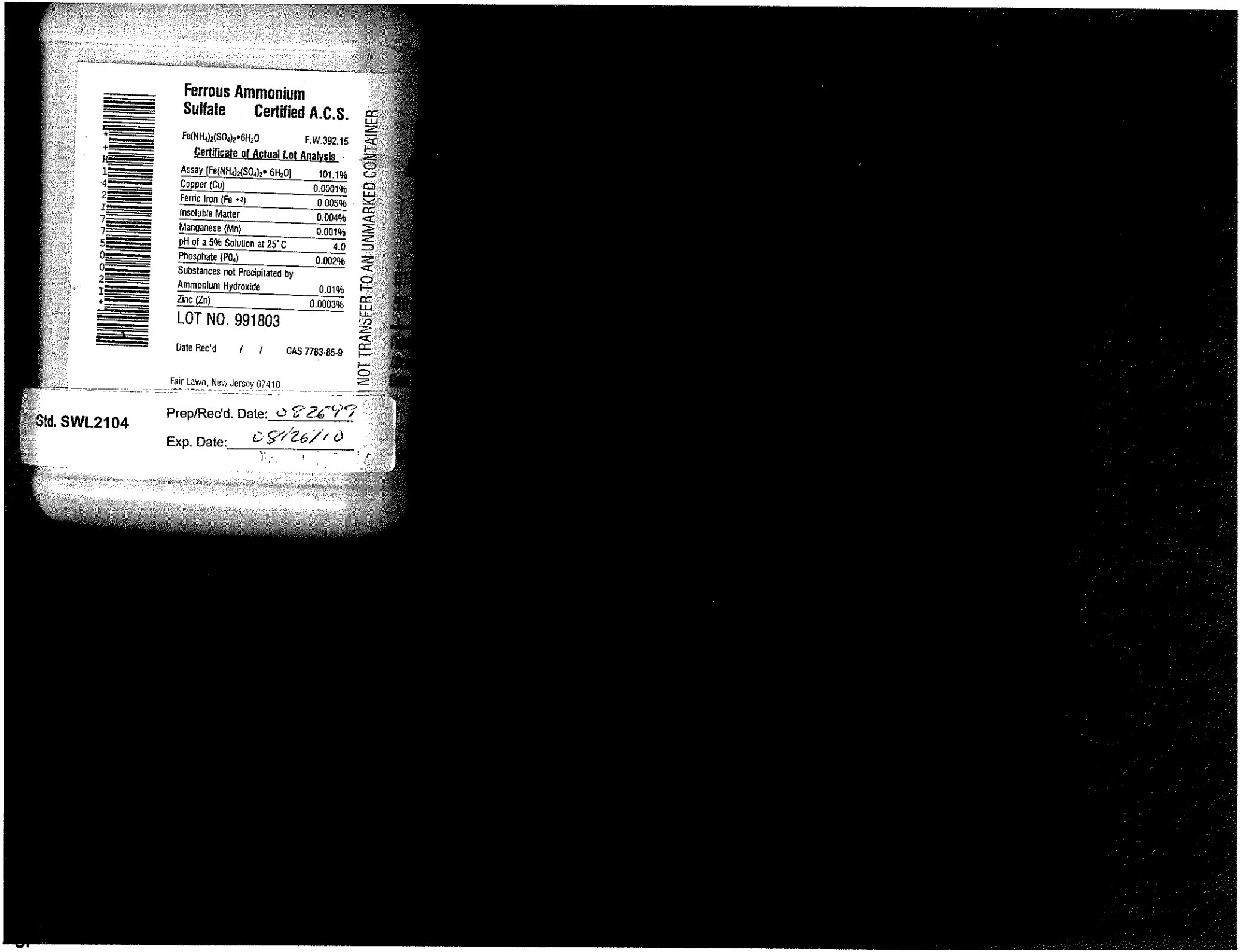
Katahdin Analytical Services, LLC. - Metals Laboratory
Reagent Receipt Logbook

Katahdin Reagent. ID.	Reagent Name	Manu-facturer	Mfr. Lot Number	Receipt Initials	Receipt Date	Expiration Date
SF 4/12/21 MSR232 ~~MSR231~~	HNO_3	JT baker	0000267725	CD	4-11-21	8-11-25
MSR233	PTFE Boiling stones	chem ware	27769405	SF	4/27/21	N/A
MSR234	HNO_3	JT baker	0000266572	SF	5/4/21	7/23/25
MSR235	HCl	JT baker	0000275677	SF	↓	12/15/25
MSR236	Acetic Acid, Glacial	JT baker	0000281457	SF	5/14/21	3/5/26
MSR237	HCl	JT baker	0000281827	SF	6/8/21	7/29/26
MSR238	HNO_3	↓	0000277202	↓	↓	1/14/26
MSR239	H_2SO_4	JT baker	0000280957	SF	6/10/21	2/25/26
MSR240	$SnCl_2$	JT baker	0000293024	EP	6/17/21	11/11/21
MSR241	HCl	JT baker	0000281827	SF	7/14/21	3/29/26
MSR242	HNO_3	Fisher	1121040	SF	7/14/21	4/15/23
MSR243	HNO_3	Fisher	1126080	SF	7/23/21	8/20/22

Katahdin Analytical Services, LLC. - Metals Laboratory
Reagent Receipt Logbook

Katahdin Reagent. ID.	Reagent Name	Manu-facturer	Mfr. Lot Number	Receipt Initials	Receipt Date	Expiration Date
MSR800	HNO_3 - Nitric Acid	JT Baker	22I0062093	CD	10-3-22	8-30-27
MSR 301	HNO_3 - Nitric Acid	JT Baker	↓	BCF	10-4-22	8-30-27
MSR 302	H_2SO_4 - Sulfuric Acid	JT Baker	22D0862015	BCF	10-4-22	2-22-27
~~MSR303~~	~~Hg IA~~					
~~MSR~~ 303	Hydrochloric Acid 36.5-38%	JT Baker	22L0562004	BCF	01-04-23	10-24-27
MSR304	PTFE Boiling Chips		W122687	CD	1-4-23	1-4-2027
MSR 305	Stannous Chloride, Dihydrate	LabChem	M333-26	BCF	1-11-23	
MSR306	HCl - Baker analyzed (wetchem)	JT Baker	22E0662002	CD	1-24-23	4-10-27
MSR307	Sulfuric Acid - H_2SO_4 (Baker analyzed)	JT Baker	22J0768016	CD	2-6-23	9-5-27
MSR308	Sulfuric acid - H_2SO_4) Baker-instra analyzed	JT Baker	2210962010	CD	2-13-23	10-9-27
↓	↓	↓	↓	↓	2-27-23	↓
MSR309	Nitric Acid (HNO_3)	Cmc materials	10048258	CD	CD 3-1 23-1-23	8-2023

BCF 1-4-23



Ferrous Ammonium Sulfate Certified A.C.S.

$Fe(NH_4)_2(SO_4)_2 \cdot 6H_2O$ F.W.392.15

Certificate of Actual Lot Analysis

Assay [$Fe(NH_4)_2(SO_4)_2 \cdot 6H_2O$]	101.1%
Copper (Cu)	0.0001%
Ferric Iron (Fe^{+3})	0.005%
Insoluble Matter	0.004%
Manganese (Mn)	0.001%
pH of a 5% Solution at 25°C	4.0
Phosphate (PO_4)	0.002%
Substances not Precipitated by Ammonium Hydroxide	0.01%
Zinc (Zn)	0.0003%

LOT NO. 991803

Date Rec'd / / CAS 7783-85-9

Fair Lawn, New Jersey 07410

NOT TRANSFER TO AN UNMARKED CONTAINER

Std. SWL2104

Prep/Rec'd. Date: 082699

Exp. Date: 08/26/10

APPENDIX G

DATA VALIDATION REPORTS AND DATA USABILITY ASSESSMENT

LABORATORY DATA CONSULTANTS, INC.
2701 Loker Ave. West, Suite 220, Carlsbad, CA 92010 Bus: 760-827-1100 Fax: 760-827-1099

Credere Associates, LLC
776 Main Street
Westbrook, ME 04092
ATTN: Allison Drouin
adrouin@crederellc.com

August 7, 2023

SUBJECT: D01ME0004-07, Dow Military Airfield, Salvage Yard - Data Validation

Dear Ms. Drouin,

Enclosed are the final validation reports for the fractions listed below. These SDGs were received on March 31, 2022. Attachment 1 is a summary of the samples that were reviewed for each analysis.

LDC Project #56396_RV1:

SDG #	Fraction
SQ0595/410-114770-1	Polynuclear Aromatic Hydrocarbons, Wet Chemistry, Extractable Petroleum Hydrocarbons, Volatile Petroleum Hydrocarbons,
64446	Polychlorinated Biphenyls, Volatiles, Semivolatile, Total Organic Carbon, Chromium, Hexavalent

The data validation was performed under Stage 2A guidelines. The analyses were validated using the following document, as applicable to each method:

- Final UFP QAPP Revision No. 1 Remedial Investigation Former Salvage Yard Former Dow Military Airfield 233 Odlin Road, Bangor, Maine December 2022
- EPA SW 846, Third Edition, Test Methods for Evaluating Solid Waste, update 1, July 1992; update IIA, August 1993; update II, September 1994; update IIB, January 1995; update III, December 1996; update IIIA, April 1998; IIIB, November 2004; update IV, February 2007; update V, July 2014; update VI, July 2018

Please feel free to contact us if you have any questions.

Sincerely,

Pei Geng
pgeng@lab-data.com
Project Manager/Senior Chemist

39 pages-ADV (no worksheets) Attachment 1

Stage 2A FUDSChem **LDC# 56396 (CREDERE, Westbrook, ME / Former DOW Military Airfield Salvage Yard)**

LDC	SDG#	DATE REC'D	(3) DATE DUE	PAHs (8270D -SIM)		Cr(VI) (7196A)		TOC (5310B)		VOA (8260D)		SVOA (8270E)		Metals (6020A /7470A)		VPH (MA-VPH)		EPH (MA-EPH)															
Matrix:	Water/Soil			W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S
A	SQ0595/ 410-114770-1	03/31/23	04/21/23	0	4	0	3	0	3	-	-	-	-	-	-	-	-	-	-														
B	64446	03/31/23	04/21/23	-	-	-	-	-	-	1	3	0	3	0	3	0	3	0	3														
Total	TR/PG			0	4	0	3	0	3	1	3	0	3	0	3	0	3	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	26

Shaded cells indicate Stage 4 validation (all other cells are ADR validation). These sample counts do not include MS/MSD, and DUPs

Data Validation Report for SQ0595

Facility:	D01ME0004-07, Dow Military Airfield, Salvage Yard
Event:	Dow SY RI 2023, Solids
SDG:	SQ0595
Guidance Document:	Final UFP QAPP Revision No. 1 Remedial Investigation Former Salvage Yard Former Dow Military Airfield 233 Odlin Road, Bangor, Maine December 2022
Prime Contractor:	Credere Associates, LLC, Westbrook, ME
Project Manager:	Peter Thompson
Contract Laboratory(ies):	Katahdin Analytical Services, Scarborough, ME
Data Review Contractor:	Laboratory Data Consultants, Inc.
Data Review Level:	S2AVEM
Primary Data Reviewer:	Long Ngo, Environmental Scientist
Second Reviewer:	Pei Geng, Senior Scientist
Date Submitted:	April 14, 2023

Field Sample ID	Lab Sample ID	Matrix	Type/Type Code	BNASIM	SW7196A
SY-SB4R-1	SQ0595-1	Soil	Field Sample/N	X	X
SY-SB4R-10	SQ0595-2	Soil	Field Duplicate/FD	X	X
SY-SB4R-2	SQ0595-3	Soil	Field Sample/N	X	X

This report assesses the analytical data quality associated with the analyses listed on the preceding cover page at S2AVEM data validation level. This assessment has been made through a combination of automated data review (ADR) and supplemental manual review, the details of which are described below. The approach taken in the review of this data set is consistent with the requirements contained in the Final UFP QAPP Revision No. 1 Remedial Investigation Former Salvage Yard Former Dow Military Airfield 233 Odlin Road, Bangor, Maine December 2022 and the additional guidance documents incorporated by reference to the extent possible. Where definitive guidance is not provided, results have been evaluated in a conservative manner using professional judgment.

Sample collection was managed and directed by Credere Associates, LLC, Westbrook, ME; analyses were performed by Katahdin Analytical Services, Scarborough, ME and were reported under sample delivery group (SDG) SQ0595. Data have been evaluated electronically based on electronic data deliverables (EDDs) provided by the laboratory, and hard copy data summary forms have also been reviewed during this effort and compared to the automated review output by the reviewers whose signatures appear on the following page. Findings based on the automated data submission and manual data verification processes are detailed in the ADR narrative and throughout this report.

All quality control (QC) elements associated with this SDG have been reviewed by a project chemist in accordance with the requirements defined for the project. This review is documented in the attached Data Review Checklists. The QC elements listed below were supported by the electronic deliverable and were evaluated using ADR processes.

- Blank - Negative
- Field Duplicate RPD
- Lab Blank
- LCS Recovery
- LCS RPD
- MS Recovery
- Prep Hold Time
- Surrogate
- Test Hold Time

Results of the ADR process were subsequently reviewed and updated as applicable by the data review chemists identified on the signature page. Quality control elements that were not included in the electronic deliverable were reviewed manually and findings are documented within this report. Summaries of findings and associated qualified results are documented throughout this report.

A total of 3 results (5.56%) out of the 54 results (sample and field QC samples) reported are qualified based on review and 0 results (0.00%) have been rejected or deemed a serious deficiency (X qualifier). Trace values, defined as results that are qualified as estimated because they fall between the detection limit and the reporting limit/limit of quantitation, are not counted as qualified results in the above count. The qualified results are detailed throughout this report and discussed in the narrative below, where appropriate.

Narrative Comments

Analytical Method	Data Reviewer Comment
BNASIM	No additional comments; see Checklist for detail.
SW7196A	No additional comments; see Checklist for detail.



April 14, 2023

Reviewed by Long Ngo, Environmental Scientist, Laboratory Data Consultants, Inc.

As the First Reviewer, I certify that I have performed a data review process in accordance with the requirements of the project guidance document, and have compared the electronic data to the laboratory's hard copy report and have verified the consistency of the reported sample results and method quality control data between the two deliverables.



Reviewed by Pei Geng, Senior Scientist, Laboratory Data Consultants, Inc.

August 07, 2023

As the Second Reviewer, I certify that I have performed a quality assurance review of the report generated by the First Reviewer.

Quality Control Outliers for test method SW7196A, Test Hold Time

Hold times are ascertained based on project requirements. Holding times were determined by comparing the chain of custody records with the dates of analysis found in the electronic data deliverable and laboratory summary forms. Findings of this review, and any associated qualified results, are listed below.

Sample ID/ Lab Sample ID	Analyte	Result	Warning Limits	Control Limits	Units	Qualifier	Reason Code	Comment
SY-SB4R-1 (N)		42.2	< 28	< 56	days	J/UJ	H1	Test Exceeds UWL
SY-SB4R-10 (FD)		42.2	< 28	< 56	days	J/UJ	H1	Test Exceeds UWL
SY-SB4R-2 (N)		42.2	< 28	< 56	days	J/UJ	H1	Test Exceeds UWL

Where two qualifiers are listed, such as 'J/UJ', the first applies to positive results, and the second to non-detect results.
Upper and Lower Warning and Control Limits are abbreviated UWL, LWL, UCL, and LCL in the Comment field.

Qualified Results associated with the Test Hold Time for SW7196A

FieldSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
SY-SB4R-1 SQ0595-1	N	Hexavalent Chromium	0.56	0.26 J	0.26 J	-	mg/kg	H1/TR
SY-SB4R-10 SQ0595-2	FD	Hexavalent Chromium	0.55	0.33 U	0.33 UJ		mg/kg	H1
SY-SB4R-2 SQ0595-3	N	Hexavalent Chromium	0.57	0.32 J	0.32 J	-	mg/kg	H1/TR

Analytes not found in project samples are reported as not detected at the limit of detection (LOD) unless blank contamination occurs and then the sample may be reported as not detected at the (LOD) or (LOQ) based on the sample concentration and the validation guidance. In instances where no LOD is provided, results are reported down to the LOQ.

Table of All Qualified Results

Test Method: SW7196A		Extraction Method: SW3060A						
FieldSample ID / LabSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
SY-SB4R-1 SQ0595-1	N	Hexavalent Chromium	0.56	0.26 J	0.26 J	-	mg/kg	H1/TR
SY-SB4R-10 SQ0595-2	FD	Hexavalent Chromium	0.55	0.33 U	0.33 UJ		mg/kg	H1
SY-SB4R-2 SQ0595-3	N	Hexavalent Chromium	0.57	0.32 J	0.32 J	-	mg/kg	H1/TR

Analytes not found in project samples are reported as not detected at the limit of detection (LOD) unless blank contamination occurs and then the sample may be reported as not detected at the (LOQ) based on the sample concentration.
In instances where no LOD is provided, results are reported down to the LOQ.
Trace values are not included in the qualified results table unless additional reason codes are associated.

Results with Modified Qualifiers

No qualifiers associated with this sample delivery group were modified manually.

Reason Code Definitions

Code	Definition
H1	Test Hold Time
TR	Trace Level Detect

Flag Code and Definitions

Flag	Definition
J	Estimated Value
N	The analysis indicates the presence of an analyte for which there was presumptive evidence to make a tentative identification.
NJ	The analyte has been tentatively identified or presumptively as present and the associated numerical value was the estimated concentration in the sample.
R	The data are rejected due to deficiencies in meeting QC criteria and may not be used for decision making.
U	Undetected: The analyte was analyzed for, but not detected.
UJ	The analyte was not detected; however, the result is estimated due to discrepancies in meeting certain analyte-specific quality control criteria.
X	Result may require rejection; PDT attention required

Bias

-	The result may be biased low
+	The result may be biased high

Note - The bias field is a separate field; however, it is an integral part of the final flag (qualifier) on the sample result

Review Questions

Method: BNASIM (GC/MS-SIM Analysis by SW8270)

Review Questions	Yes	No	NA	Comment
Were there discrepancies between the COC and the samples received?		•		
Were there discrepancies between the COC and the sample labels?		•		
Were samples relinquished properly on the COC?	•			
Were all samples properly preserved?	•			
Were sampling dates/times, date and time of laboratory receipt of samples, and sample conditions upon receipt at the laboratory (including preservation, pH, and temperature) documented?	•			
Were sample results reported with percent moisture correction if required?	•			
Were analytical methods performed and analysis dates present?	•			
Were all requested target analytes reported?	•			
Were QAPP specified Project Quantitation Limit Goals achieved? (The laboratory LOQ is compared to the QAPP Project Quantitation Goal)	•			
Were holding times met?	•			
Were trip blanks analyzed at the proper frequency and in control?			•	Not applicable to this method.
Were field blanks analyzed at the proper frequency and in control?			•	Not applicable to this method.
Were equipment blanks analyzed at the proper frequency and in control?			•	Not applicable to this method.
Was a method blank prepared and analyzed with each batch?	•			
Were target analytes in the method blank less than DL?				
Was an LCS/LCSD pair prepared and analyzed with each batch?	•			
Were LCS/LCSD recoveries within project acceptance limits?	•			
Was the LCS/LCSD RPD within project acceptance limits?	•			
Was a MS/MSD pair prepared with each batch?	•			No MS/MSD was requested on the COC and no MS/MSD was performed with the batch. LCS/LCSD was performed and was reviewed to be in control
Were MS/MSD recoveries within project acceptance limits?	•			
Was the MS/MSD RPD within project acceptance limits?	•			
If ISM was used for sample collection, were laboratory triplicates analyzed and within project acceptance limits?			•	Not applicable to this method.
Were surrogate recoveries within project acceptance limits?	•			
Were field replicates (duplicates, triplicates, etc.) analyzed at the proper frequency and in control?	•			
Were reported sample concentrations within calibration range?	•			
Have all Laboratory Case Narrative comments/findings been addressed in the data review process?	•			
Were DoD QSM corrective actions followed if deviations were noted?	•			

Review Questions

Method: BNASIM (GC/MS-SIM Analysis by SW8270)				
Review Questions	Yes	No	NA	Comment
Were any data recommended for exclusion in the data validation process?		•		Data acceptable as reported and qualified.

Review Questions

Method: SW7196A (Chromium, Hexavalent (Colorimetric))				
Review Questions	Yes	No	NA	Comment
Were there discrepancies between the COC and the samples received?		•		
Were there discrepancies between the COC and the sample labels?		•		
Were samples relinquished properly on the COC?	•			
Were all samples properly preserved?	•			
Were sampling dates/times, date and time of laboratory receipt of samples, and sample conditions upon receipt at the laboratory (including preservation, pH, and temperature) documented?	•			
Were sample results reported with percent moisture correction if required?	•			
Were analytical methods performed and analysis dates present?	•			
Were all requested target analytes reported?	•			
Were QAPP specified Project Quantitation Limit Goals achieved? (The laboratory LOQ is compared to the QAPP Project Quantitation Goal)	•			
Were holding times met?		•		Several results qualified J-, one result qualified UJ due to analysis outside of 28 day holding time.
Were trip blanks analyzed at the proper frequency and in control?			•	Not applicable to this method.
Were field blanks analyzed at the proper frequency and in control?			•	Not applicable to this method.
Were equipment blanks analyzed at the proper frequency and in control?			•	Not applicable to this method.
Was a method blank prepared and analyzed with each batch?	•			
Were target analytes in the method blank less than DL?	•			
Was an LCS/LCSD pair prepared and analyzed with each batch?	•			
Were LCS/LCSD recoveries within project acceptance limits?	•			
Was the LCS/LCSD RPD within project acceptance limits?	•			
Was a MS/MSD pair prepared with each batch?	•			No MS/MSD was requested on the COC; however, the laboratory used a project sample for the MS/MSD, results were within the limits
Were MS/MSD recoveries within project acceptance limits?	•			
Was the MS/MSD RPD within project acceptance limits?	•			
Were Post Spike (PS) recoveries within project acceptance limits?			•	Not applicable to this method.
If ISM was used for sample collection, were laboratory triplicates analyzed and within project acceptance limits?			•	Not applicable to this method.
Were field replicates (duplicates, triplicates, etc.) analyzed at the proper frequency and in control?	•			
Were reported sample concentrations within calibration range?	•			
Have all Laboratory Case Narrative comments/findings been addressed in the data review process?	•			
Were DoD QSM corrective actions followed if deviations were noted?	•			

Review Questions

Method: SW7196A (Chromium, Hexavalent (Colorimetric))				
Review Questions	Yes	No	NA	Comment
Were any data recommended for exclusion in the data validation process?		•		Data acceptable as reported and qualified.

Data Validation Report for 410-114770-1_FUDSChem

Facility:	D01ME0004-07, Dow Military Airfield, Salvage Yard
Event:	Dow SY RI 2023, Solids
SDG:	410-114770-1_FUDSChem
Guidance Document:	Final UFP QAPP Revision No. 1 Remedial Investigation Former Salvage Yard Former Dow Military Airfield 233 Odlin Road, Bangor, Maine December 2022
Prime Contractor:	Credere Associates, LLC, Westbrook, ME
Project Manager:	Peter Thompson
Contract Laboratory(ies):	Eurofins Lancaster Laboratories Environmental, LLC, Lancaster, PA
Data Review Contractor:	Laboratory Data Consultants, Inc.
Data Review Level:	S2AVEM
Primary Data Reviewer:	Long Ngo, Environmental Scientist
Second Reviewer:	Pei Geng, Senior Scientist
Date Submitted:	April 14, 2023

Field Sample ID	Lab Sample ID	Matrix	Type/Type Code	LYDKHN
SY-SB4R-1	410-114770-1	Soil	Field Sample/N	X
SY-SB4R-10	410-114770-2	Soil	Field Duplicate/FD	X
SY-SB4R-2	410-114770-3	Soil	Field Sample/N	X

This report assesses the analytical data quality associated with the analyses listed on the preceding cover page at S2AVEM data validation level. This assessment has been made through a combination of automated data review (ADR) and supplemental manual review, the details of which are described below. The approach taken in the review of this data set is consistent with the requirements contained in the Final UFP QAPP Revision No. 1 Remedial Investigation Former Salvage Yard Former Dow Military Airfield 233 Odlin Road, Bangor, Maine December 2022 and the additional guidance documents incorporated by reference to the extent possible. Where definitive guidance is not provided, results have been evaluated in a conservative manner using professional judgment.

Sample collection was managed and directed by Credere Associates, LLC, Westbrook, ME; analyses were performed by Eurofins Lancaster Laboratories Environmental, LLC, Lancaster, PA and were reported under sample delivery group (SDG) 410-114770-1_FUDSChem. Data have been evaluated electronically based on electronic data deliverables (EDDs) provided by the laboratory, and hard copy data summary forms have also been reviewed during this effort and compared to the automated review output by the reviewers whose signatures appear on the following page. Findings based on the automated data submission and manual data verification processes are detailed in the ADR narrative and throughout this report.

All quality control (QC) elements associated with this SDG have been reviewed by a project chemist in accordance with the requirements defined for the project. This review is documented in the attached Data Review Checklists. The QC elements listed below were supported by the electronic deliverable and were evaluated using ADR processes.

- Field Duplicate RPD
- Lab Blank
- LCS Recovery
- Prep Hold Time
- Test Hold Time

Results of the ADR process were subsequently reviewed and updated as applicable by the data review chemists identified on the signature page. Quality control elements that were not included in the electronic deliverable were reviewed manually and findings are documented within this report. Summaries of findings and associated qualified results are documented throughout this report.

A total of 3 results (100.00%) out of the 3 results (sample and field QC samples) reported are qualified based on review and 0 results (0.00%) have been rejected or deemed a serious deficiency (X qualifier). Trace values, defined as results that are qualified as estimated because they fall between the detection limit and the reporting limit/limit of quantitation, are not counted as qualified results in the above count. The qualified results are detailed throughout this report and discussed in the narrative below, where appropriate.

Narrative Comments

Analytical Method	Data Reviewer Comment
LYDKHN	No additional comments; see Checklist for detail.



April 14, 2023

Reviewed by Long Ngo, Environmental Scientist, Laboratory Data Consultants, Inc.

As the First Reviewer, I certify that I have performed a data review process in accordance with the requirements of the project guidance document, and have compared the electronic data to the laboratory's hard copy report and have verified the consistency of the reported sample results and method quality control data between the two deliverables.



Reviewed by Pei Geng, Senior Scientist, Laboratory Data Consultants, Inc.

August 07, 2023

As the Second Reviewer, I certify that I have performed a quality assurance review of the report generated by the First Reviewer.

Quality Control Outliers for test method LYDKHN, Field Duplicate RPD

Field duplicate analyses are performed in order to assess sample collection/laboratory precision for each sample matrix. Summary forms were evaluated and compared to electronic data deliverables. Field duplicate results that were outside of the acceptance criteria are listed below.

Sample ID/ Lab Sample ID	Analyte	Result	Warning Limits	Control Limits	Units	Qualifier	Reason Code	Comment
SY-SB4R-10 (N)	Total Organic Carbon	191	< 350	< 350	mg/kg	J/UJ	D3	

Where two qualifiers are listed, such as 'J/UJ', the first applies to positive results, and the second to non-detect results.
Upper and Lower Warning and Control Limits are abbreviated UWL, LWL, UCL, and LCL in the Comment field.

No results associated with this QC element required qualification.

Quality Control Outliers for test method LYDKHN, LCS Recovery

The laboratory control sample/laboratory control sample duplicate (LCS/LCSD) serves as a monitor of the overall performance of each step during the analysis, including the sample preparation. Reported results were evaluated to determine compliance with the required acceptance criteria, and summary forms were evaluated and compared to electronic data deliverables. Findings of this review, and any associated qualified results, are listed below.

Sample ID/ Lab Sample ID	Analyte	Result	Warning Limits	Control Limits	Units	Qualifier	Reason Code	Comment
LCS 410-344728/3 (BS)	Total Organic Carbon	122	80 - 120	40 - 120	percent	J/None	C	

Where two qualifiers are listed, such as 'J/UJ', the first applies to positive results, and the second to non-detect results.
Upper and Lower Warning and Control Limits are abbreviated UWL, LWL, UCL, and LCL in the Comment field.

Qualified Results associated with the LCS Recovery for LYDKHN

FieldSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
SY-SB4R-1 410-114770-1	N	Total Organic Carbon	350	35000	35000 J	+	mg/kg	C
SY-SB4R-10 410-114770-2	FD	Total Organic Carbon	350	810	810 J	+	mg/kg	C
SY-SB4R-2 410-114770-3	N	Total Organic Carbon	370	1700	1700 J	+	mg/kg	C

Analytes not found in project samples are reported as not detected at the limit of detection (LOD) unless blank contamination occurs and then the sample may be reported as not detected at the (LOD) or (LOQ) based on the sample concentration and the validation guidance. In instances where no LOD is provided, results are reported down to the LOQ.

Table of All Qualified Results

Test Method: LYDKHN		Extraction Method: NONE						
FieldSample ID / LabSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
SY-SB4R-1 410-114770-1	N	Total Organic Carbon	350	35000	35000 J	+	mg/kg	C
SY-SB4R-10 410-114770-2	FD	Total Organic Carbon	350	810	810 J	+	mg/kg	C
SY-SB4R-2 410-114770-3	N	Total Organic Carbon	370	1700	1700 J	+	mg/kg	C

Analytes not found in project samples are reported as not detected at the limit of detection (LOD) unless blank contamination occurs and then the sample may be reported as not detected at the (LOQ) based on the sample concentration.
In instances where no LOD is provided, results are reported down to the LOQ.
Trace values are not included in the qualified results table unless additional reason codes are associated.

Table of Results with Modified Qualifiers

Modified Qualifiers for test method LYDKHN

FieldSample ID / LabSample ID	Type	Analyte	LOQ	Lab Result	ADR Result	Modified Result	Reason
SY-SB4R-1 410-114770-1	N	Total Organic Carbon	350	35000	35000 J	35000 J	C
SY-SB4R-10 410-114770-2	FD	Total Organic Carbon	350	810	810 J	810 J	C

Analytes not found in project samples are reported as not detected at the limit of detection (LOD) unless blank contamination occurs and then the sample may be reported as not detected at the (LOQ) based on the sample concentration.
In instances where no LOD is provided, results are reported down to the LOQ.
Trace values are not included in the qualified results table unless additional reason codes are associated.

Reason Code Definitions

Code	Definition
C	LCS Recovery
D3	Field Duplicate RPD

Flag Code and Definitions

Flag	Definition
J	Estimated Value
N	The analysis indicates the presence of an analyte for which there was presumptive evidence to make a tentative identification.
NJ	The analyte has been tentatively identified or presumptively as present and the associated numerical value was the estimated concentration in the sample.
R	The data are rejected due to deficiencies in meeting QC criteria and may not be used for decision making.
U	Undetected: The analyte was analyzed for, but not detected.
UJ	The analyte was not detected; however, the result is estimated due to discrepancies in meeting certain analyte-specific quality control criteria.
X	Result may require rejection; PDT attention required

Bias

-	The result may be biased low
+	The result may be biased high

Note - The bias field is a separate field; however, it is an integral part of the final flag (qualifier) on the sample result

Review Questions

Method: LYDKHN (Lloyd Kahn Method for the Determination of Total Organic Carbon in Sediment, USEPA Region II Method)

Review Questions	Yes	No	NA	Comment
Were there discrepancies between the COC and the samples received?		•		
Were there discrepancies between the COC and the sample labels?		•		
Were samples relinquished properly on the COC?	•			
Were all samples properly preserved?	•			
Were sampling dates/times, date and time of laboratory receipt of samples, and sample conditions upon receipt at the laboratory (including preservation, pH, and temperature) documented?	•			
Were sample results reported with percent moisture correction if required?	•			
Were analytical methods performed and analysis dates present?	•			
Were all requested target analytes reported?	•			
Were QAPP specified Project Quantitation Limit Goals achieved? (The laboratory LOQ is compared to the QAPP Project Quantitation Goal)	•			
Were holding times met?	•			
Were trip blanks analyzed at the proper frequency and in control?			•	Not applicable to this method.
Were field blanks analyzed at the proper frequency and in control?			•	Not applicable to this method.
Were equipment blanks analyzed at the proper frequency and in control?			•	Not applicable to this method.
Was a method blank prepared and analyzed with each batch?	•			
Were target analytes in the method blank less than DL?	•			
Was an LCS/LCSD pair prepared and analyzed with each batch?	•			
Were LCS/LCSD recoveries within project acceptance limits?		•		Several results qualified J+ due to LCS/LCSD %R greater than %R limits.
Was the LCS/LCSD RPD within project acceptance limits?	•			
Was a MS/MSD pair prepared with each batch?			•	Not applicable to this method.
Were MS/MSD recoveries within project acceptance limits?			•	Not applicable to this method.
Was the MS/MSD RPD within project acceptance limits?			•	Not applicable to this method.
Were Post Spike (PS) recoveries within project acceptance limits?			•	Not applicable to this method.
If ISM was used for sample collection, were laboratory triplicates analyzed and within project acceptance limits?			•	Not applicable to this method.
Were field replicates (duplicates, triplicates, etc.) analyzed at the proper frequency and in control?		•		Field duplicate RPD was greater than RPD limits but results were not qualified due to one result being less than 5x the LOQ.
Were reported sample concentrations within calibration range?	•			
Have all Laboratory Case Narrative comments/findings been addressed in the data review process?	•			
Were DoD QSM corrective actions followed if deviations were noted?	•			
Were any data recommended for exclusion in the data validation process?		•		Data acceptable as reported and qualified.

Data Validation Report for 64446

Facility:	D01ME0004-07, Dow Military Airfield, Salvage Yard
Event:	Dow SY RI 2023, Solids
SDG:	64446
Guidance Document:	Final UFP QAPP Revision No. 1 Remedial Investigation Former Salvage Yard Former Dow Military Airfield 233 Odlin Road, Bangor, Maine December 2022
Prime Contractor:	Credere Associates, LLC, Westbrook, ME
Project Manager:	Peter Thompson
Contract Laboratory(ies):	Absolute Resource Associates, LLC, Portsmouth, NH
Data Review Contractor:	Laboratory Data Consultants, Inc.
Data Review Level:	S2AVEM
Primary Data Reviewer:	Long Ngo, Environmental Scientist
Second Reviewer:	Pei Geng, Senior Scientist
Date Submitted:	April 14, 2023

Field Sample ID	Lab Sample ID	Matrix	Type/Type Code	MADEPEP	MADEPVP	SW6020A	SW7471B	SW8082A	SW8260D	SW8270E
SY-SB4R-1	64446-001	Soil	Field Sample/N	X	X	X	X	X	X	X
SY-SB4R-10	64446-002	Soil	Field Duplicate/FD	X	X	X	X	X	X	X
SY-SB4R-2	64446-003	Soil	Field Sample/N	X	X	X	X	X	X	X
Trip Blank	64446-004	Solid	Trip Blank/TB						X	

This report assesses the analytical data quality associated with the analyses listed on the preceding cover page at S2AVEM data validation level. This assessment has been made through a combination of automated data review (ADR) and supplemental manual review, the details of which are described below. The approach taken in the review of this data set is consistent with the requirements contained in the Final UFP QAPP Revision No. 1 Remedial Investigation Former Salvage Yard Former Dow Military Airfield 233 Odlin Road, Bangor, Maine December 2022 and the additional guidance documents incorporated by reference to the extent possible. Where definitive guidance is not provided, results have been evaluated in a conservative manner using professional judgment.

Sample collection was managed and directed by Credere Associates, LLC, Westbrook, ME; analyses were performed by Absolute Resource Associates, LLC, Portsmouth, NH and were reported under sample delivery group (SDG) 64446. Data have been evaluated electronically based on electronic data deliverables (EDDs) provided by the laboratory, and hard copy data summary forms have also been reviewed during this effort and compared to the automated review output by the reviewers whose signatures appear on the following page. Findings based on the automated data submission and manual data verification processes are detailed in the ADR narrative and throughout this report.

All quality control (QC) elements associated with this SDG have been reviewed by a project chemist in accordance with the requirements defined for the project. This review is documented in the attached Data Review Checklists. The QC elements listed below were supported by the electronic deliverable and were evaluated using ADR processes.

- Blank - Negative
- Field Duplicate RPD
- Lab Blank
- LCS Recovery
- LCS RPD
- MS Recovery
- MS RPD
- Prep Hold Time
- Surrogate
- Test Hold Time
- Trip Blank

Results of the ADR process were subsequently reviewed and updated as applicable by the data review chemists identified on the signature page. Quality control elements that were not included in the electronic deliverable were reviewed manually and findings are documented within this report. Summaries of findings and associated qualified results are documented throughout this report.

A total of 64 results (10.13%) out of the 632 results (sample and field QC samples) reported are qualified based on review and 4 results (0.63%) have been rejected or deemed a serious deficiency (X qualifier). Trace values, defined as results that are qualified as estimated because they fall between the detection limit and the reporting limit/limit of quantitation, are not counted as qualified results in the above count. The qualified results are detailed throughout this report and discussed in the narrative below, where appropriate.

Narrative Comments

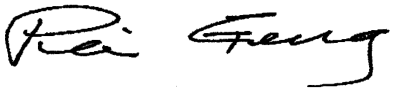
Analytical Method	Data Reviewer Comment
MADEPEP	No additional comments; see Checklist for detail.
MADEPVP	No additional comments; see Checklist for detail.
SW6020A	No additional comments; see Checklist for detail.
SW7471B	No additional comments; see Checklist for detail.
SW8082A	No additional comments; see Checklist for detail.
SW8260D	No additional comments; see Checklist for detail.
SW8270E	No additional comments; see Checklist for detail.



April 14, 2023

Reviewed by Long Ngo, Environmental Scientist, Laboratory Data Consultants, Inc.

As the First Reviewer, I certify that I have performed a data review process in accordance with the requirements of the project guidance document, and have compared the electronic data to the laboratory's hard copy report and have verified the consistency of the reported sample results and method quality control data between the two deliverables.



Reviewed by Pei Geng, Senior Scientist, Laboratory Data Consultants, Inc.

August 07, 2023

As the Second Reviewer, I certify that I have performed a quality assurance review of the report generated by the First Reviewer.

Quality Control Outliers for test method MADEPEP, Lab Blank

The purpose of laboratory blanks is to determine the existence and magnitude of cross-contamination problems resulting from laboratory activities. Reported results were evaluated to determine compliance with the required acceptance criteria. Summary forms were evaluated and compared to electronic data deliverables. Findings of this review, and contaminants found in laboratory blanks are listed below along with any associated qualified results.

Sample ID/ Lab Sample ID	Analyte	Result	Warning Limits	Control Limits	Units	Qualifier	Reason Code	Comment
15928PB15928 (LB)	C11-C22 Extractable Petroleum Hydrocarbons, Aromatic	4.86	< 4	< 20	ug/g	U/None*	L	
15928PB15928 (LB)	C11-C22 Extractable Petroleum Hydrocarbons, Aromatic (Unadjusted)	4.86	< 4	< 20	ug/g	U/None*	L	
15928PB15928 (LB)	C19-C36 Extractable Petroleum Hydrocarbons, Aliphatic	3.83	< 2.1	< 20	ug/g	U/None*	L	

Where two qualifiers are listed, such as 'J/UJ', the first applies to positive results, and the second to non-detect results.
Upper and Lower Warning and Control Limits are abbreviated UWL, LWL, UCL, and LCL in the Comment field.

*Blank flags displayed in the above table identify qualification of the sample result when it is less than or equal to the LOQ/RL. Sample results above the LOD or LOQ will be qualified based on the validation guidance assigned in the project setup.

Qualified Results associated with the Lab Blank for MADEPEP

FieldSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
SY-SB4R-1 64446-001	N	C11-C22 Extractable Petroleum Hydrocarbons, Aromatic	23	7.2 J	23 U		ug/g	L
SY-SB4R-1 64446-001	N	C11-C22 Extractable Petroleum Hydrocarbons, Aromatic (Unadjusted)	23	7.5 J	23 U		ug/g	L
SY-SB4R-1 64446-001	N	C19-C36 Extractable Petroleum Hydrocarbons, Aliphatic	23	5.3 J	23 U		ug/g	L
SY-SB4R-10 64446-002	FD	C11-C22 Extractable Petroleum Hydrocarbons, Aromatic	31	31	31 U		ug/g	L
SY-SB4R-10 64446-002	FD	C11-C22 Extractable Petroleum Hydrocarbons, Aromatic (Unadjusted)	34	34	34 U		ug/g	L
SY-SB4R-10 64446-002	FD	C19-C36 Extractable Petroleum Hydrocarbons, Aliphatic	22	14 J	22 U		ug/g	L
SY-SB4R-2 64446-003	N	C11-C22 Extractable Petroleum Hydrocarbons, Aromatic	23	6.3 J	23 U		ug/g	L
SY-SB4R-2 64446-003	N	C11-C22 Extractable Petroleum Hydrocarbons, Aromatic (Unadjusted)	23	6.4 J	23 U		ug/g	L

Qualified Results associated with the Lab Blank for MADEPEP

FieldSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
SY-SB4R-2 64446-003	N	C19-C36 Extractable Petroleum Hydrocarbons, Aliphatic	23	4.8 J	23 U		ug/g	L

Analytes not found in project samples are reported as not detected at the limit of detection (LOD) unless blank contamination occurs and then the sample may be reported as not detected at the (LOD) or (LOQ) based on the sample concentration and the validation guidance. In instances where no LOD is provided, results are reported down to the LOQ.

Quality Control Outliers for test method MADEPVP, Lab Blank

The purpose of laboratory blanks is to determine the existence and magnitude of cross-contamination problems resulting from laboratory activities. Reported results were evaluated to determine compliance with the required acceptance criteria. Summary forms were evaluated and compared to electronic data deliverables. Findings of this review, and contaminants found in laboratory blanks are listed below along with any associated qualified results.

Sample ID/ Lab Sample ID	Analyte	Result	Warning Limits	Control Limits	Units	Qualifier	Reason Code	Comment
15934MB15934 (LB)	C5-C8 Volatile Petroleum Hydrocarbons Aliphatic, Adjusted for Target Analytes, Surrogates and Internal Standards	4.26	< 3.9	< 5	ug/g	U/None*	L	
15934MB15934 (LB)	C5-C8 Volatile Petroleum Hydrocarbons, Aliphatic	4.28	< 3.9	< 5	ug/g	U/None*	L	
15934MB15934 (LB)	o-Xylene	0.00890	< 0.0023	< 0.1	ug/g	U/None*	L	

Where two qualifiers are listed, such as 'J/UJ', the first applies to positive results, and the second to non-detect results.
Upper and Lower Warning and Control Limits are abbreviated UWL, LWL, UCL, and LCL in the Comment field.

*Blank flags displayed in the above table identify qualification of the sample result when it is less than or equal to the LOQ/RL. Sample results above the LOD or LOQ will be qualified based on the validation guidance assigned in the project setup.

Qualified Results associated with the Lab Blank for MADEPVP

FieldSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
SY-SB4R-1 64446-001	N	C5-C8 Volatile Petroleum Hydrocarbons Aliphatic, Adjusted for Target Analytes, Surrogates and Internal Standards	5.4	5.1 J	5.4 U		ug/g	L
SY-SB4R-1 64446-001	N	C5-C8 Volatile Petroleum Hydrocarbons, Aliphatic	5.4	5.3 J	5.4 U		ug/g	L
SY-SB4R-1 64446-001	N	o-Xylene	0.11	0.061 J	0.11 U		ug/g	L
SY-SB4R-10 64446-002	FD	C5-C8 Volatile Petroleum Hydrocarbons Aliphatic, Adjusted for Target Analytes, Surrogates and Internal Standards	5.1	4.2 J	5.1 U		ug/g	L
SY-SB4R-10 64446-002	FD	C5-C8 Volatile Petroleum Hydrocarbons, Aliphatic	5.1	4.2 J	5.1 U		ug/g	L
SY-SB4R-10 64446-002	FD	o-Xylene	0.10	0.023 J	0.10 U		ug/g	L
SY-SB4R-2 64446-003	N	o-Xylene	0.10	0.0069 J	0.10 U		ug/g	L

Analytes not found in project samples are reported as not detected at the limit of detection (LOD) unless blank contamination occurs and then the sample may be reported as not detected at the (LOD) or (LOQ) based on the sample concentration and the validation guidance. In instances where no LOD is provided, results are reported down to the LOQ.

Quality Control Outliers for test method SW6020A, Lab Blank

The purpose of laboratory blanks is to determine the existence and magnitude of cross-contamination problems resulting from laboratory activities. Reported results were evaluated to determine compliance with the required acceptance criteria. Summary forms were evaluated and compared to electronic data deliverables. Findings of this review, and contaminants found in laboratory blanks are listed below along with any associated qualified results.

Sample ID/ Lab Sample ID	Analyte	Result	Warning Limits	Control Limits	Units	Qualifier	Reason Code	Comment
15957PB 15957 (LB)	Aluminum	4.89	< 1.3	< 25	ug/g	J/UJ	L	
15957PB 15957 (LB)	Antimony	0.0772	< 0.047	< 0.5	ug/g	J/UJ	L	
15957PB 15957 (LB)	Barium	0.173	< 0.13	< 5	ug/g	J/UJ	L	
15957PB 15957 (LB)	Beryllium	0.173	< 0.0092	< 0.5	ug/g	J/UJ	L	
15957PB 15957 (LB)	Cadmium	0.0614	< 0.0064	< 0.5	ug/g	J/UJ	L	
15957PB 15957 (LB)	Chromium	0.246	< 0.02	< 5	ug/g	J/UJ	L	
15957PB 15957 (LB)	Cobalt	0.0194	< 0.012	< 5	ug/g	J/UJ	L	
15957PB 15957 (LB)	Copper	0.0534	< 0.05	< 5	ug/g	J/UJ	L	
15957PB 15957 (LB)	Magnesium	10.7	< 0.7	< 50	ug/g	J/UJ	L	
15957PB 15957 (LB)	Manganese	1.31	< 0.08	< 5	ug/g	J/UJ	L	
15957PB 15957 (LB)	Silver	0.0382	< 0.0055	< 2.5	ug/g	J/UJ	L	
15957PB 15957 (LB)	Sodium	36.4	< 10	< 500	ug/g	J/UJ	L	
15957PB 15957 (LB)	Zinc	0.511	< 0.46	< 5	ug/g	J/UJ	L	

Where two qualifiers are listed, such as 'J/UJ', the first applies to positive results, and the second to non-detect results.
Upper and Lower Warning and Control Limits are abbreviated UWL, LWL, UCL, and LCL in the Comment field.

Qualified Results associated with the Lab Blank for SW6020A

FieldSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
SY-SB4R-1 64446-001	N	Cadmium	0.52	0.098 J	0.098 J	+	ug/g	L
SY-SB4R-1 64446-001	N	Silver	2.6	0.11 J	2.6 U		ug/g	L
SY-SB4R-10 64446-002	FD	Cadmium	0.55	0.14 J	0.14 J	+	ug/g	L
SY-SB4R-10 64446-002	FD	Silver	2.7	0.16 J	2.7 U		ug/g	L
SY-SB4R-2 64446-003	N	Cadmium	0.54	0.094 J	0.094 J	+	ug/g	L
SY-SB4R-2 64446-003	N	Silver	2.7	0.14 J	2.7 U		ug/g	L

Analytes not found in project samples are reported as not detected at the limit of detection (LOD) unless blank contamination occurs and then the sample may be reported as not detected at the (LOD) or (LOQ) based on the sample concentration and the validation guidance. In instances where no LOD is provided, results are reported down to the LOQ.

Quality Control Outliers for test method SW6020A, LCS RPD

The objective of laboratory control sample/laboratory control sample duplicate (LCS/LCSD) RPD analysis is to demonstrate acceptable method precision by the laboratory at the time of analysis. LCS/LCSD analyses are also performed to generate data that determines the long-term precision of the analytical method on various matrices. Non-homogenous samples can impact the apparent method precision. Summary forms were evaluated and compared to electronic data deliverables. Laboratory control sample/laboratory control sample duplicate RPD results that were outside of the acceptance criteria are listed below.

Sample ID/ Lab Sample ID	Analyte	Result	Warning Limits	Control Limits	Units	Qualifier	Reason Code	Comment
15957CRMD 15957 (BD)	Aluminum	28.9	< 20	< 20	rpd	J/None	Z	
15957CRMD 15957 (BD)	Iron	29.4	< 20	< 20	rpd	J/None	Z	
15957CRMD 15957 (BD)	Potassium	20.0	< 20	< 20	rpd	J/None	Z	

Where two qualifiers are listed, such as 'J/UJ', the first applies to positive results, and the second to non-detect results.
Upper and Lower Warning and Control Limits are abbreviated UWL, LWL, UCL, and LCL in the Comment field.

Qualified Results associated with the LCS RPD for SW6020A

FieldSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
SY-SB4R-1 64446-001	N	Aluminum	26	19000	19000 J		ug/g	Z
SY-SB4R-1 64446-001	N	Iron	26	29000	29000 J		ug/g	Z
SY-SB4R-10 64446-002	FD	Aluminum	27	17000	17000 J		ug/g	Z
SY-SB4R-10 64446-002	FD	Iron	27	28000	28000 J		ug/g	Z
SY-SB4R-2 64446-003	N	Aluminum	27	18000	18000 J		ug/g	Z
SY-SB4R-2 64446-003	N	Iron	27	29000	29000 J		ug/g	Z

Analytes not found in project samples are reported as not detected at the limit of detection (LOD) unless blank contamination occurs and then the sample may be reported as not detected at the (LOD) or (LOQ) based on the sample concentration and the validation guidance. In instances where no LOD is provided, results are reported down to the LOQ.

Quality Control Outliers for test method SW6020A, MS Recovery

Data for matrix spikes/matrix spike duplicates (MS/MSD) are generated to determine long-term precision and accuracy of the analytical method on various matrices and to demonstrate acceptable compound recovery by the laboratory at the time of sample analysis. These data alone cannot be used to evaluate the precision and accuracy of individual samples. However, when exercising professional judgment, MS/MSD data can be used in conjunction with other available QC information. Reported results were evaluated to determine compliance with the required acceptance criteria, and summary forms were evaluated and compared to electronic data deliverables. Findings of this review, and any associated qualified results, are listed below.

Sample ID/ Lab Sample ID	Analyte	Result	Warning Limits	Control Limits	Units	Qualifier	Reason Code	Comment
SY-SB4R-1 (MS)	Aluminum	-82.0	78 - 124	30 - 125	percent	J/X	M	Spike amount Insignificant
SY-SB4R-1 (SD)	Aluminum	5.00	78 - 124	30 - 125	percent	J/X	M	Spike amount Insignificant
SY-SB4R-1 (MS)	Iron	-268	81 - 124	30 - 125	percent	J/X	M	Spike amount Insignificant
SY-SB4R-1 (SD)	Iron	-1060	81 - 124	30 - 125	percent	J/X	M	Spike amount Insignificant
SY-SB4R-1 (MS)	Magnesium	-172	80 - 123	30 - 125	percent	J/X	M	Spike amount Insignificant
SY-SB4R-1 (SD)	Magnesium	71.0	80 - 123	30 - 125	percent	J/UJ	M	Spike amount Insignificant
SY-SB4R-1 (MS)	Manganese	117	85 - 116	30 - 125	percent	J/None	M	
SY-SB4R-1 (MS)	Potassium	82.0	85 - 119	30 - 125	percent	J/UJ	M	
SY-SB4R-1 (MS)	Selenium	75.0	80 - 119	30 - 125	percent	J/UJ	M	
SY-SB4R-1 (MS)	Zinc	76.0	82 - 119	30 - 125	percent	J/UJ	M	
SY-SB4R-1 (SD)	Zinc	77.0	82 - 119	30 - 125	percent	J/UJ	M	

Where two qualifiers are listed, such as 'J/UJ', the first applies to positive results, and the second to non-detect results.
Upper and Lower Warning and Control Limits are abbreviated UWL, LWL, UCL, and LCL in the Comment field.

Qualified Results associated with the MS Recovery for SW6020A

FieldSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
SY-SB4R-1 64446-001	N	Manganese	5.2	400 M	400 J	+	ug/g	M
SY-SB4R-1 64446-001	N	Potassium	52	1600 M	1600 J	-	ug/g	M
SY-SB4R-1 64446-001	N	Selenium	5.2	3.5 JM	3.5 J	-	ug/g	M/TR
SY-SB4R-1 64446-001	N	Zinc	5.2	47 M	47 J	-	ug/g	M

Analytes not found in project samples are reported as not detected at the limit of detection (LOD) unless blank contamination occurs and then the sample may be reported as not detected at the (LOD) or (LOQ) based on the sample concentration and the validation guidance. In instances where no LOD is provided, results are reported down to the LOQ.

Quality Control Outliers for test method SW6020A, MS RPD

The objective of matrix spikes/matrix spike duplicates (MS/MSD) RPD analysis is to demonstrate acceptable method precision by the laboratory at the time of analysis. MS/MSD analyses are also performed to generate data that determines the long-term precision of the analytical method on various matrices. Non-homogenous samples can impact the apparent method precision. Summary forms were evaluated and compared to electronic data deliverables. Matrix spikes/matrix spike duplicates results that were outside of the acceptance criteria are listed below.

Sample ID/ Lab Sample ID	Analyte	Result	Warning Limits	Control Limits	Units	Qualifier	Reason Code	Comment
SY-SB4R-1 (SD)	Antimony	21.1	< 20	< 20	rpd	J/None	D	

Where two qualifiers are listed, such as 'J/UJ', the first applies to positive results, and the second to non-detect results.
Upper and Lower Warning and Control Limits are abbreviated UWL, LWL, UCL, and LCL in the Comment field.

Qualified Results associated with the MS RPD for SW6020A

FieldSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
SY-SB4R-1 64446-001	N	Antimony	0.52	0.44 JM	0.44 J		ug/g	D

Analytes not found in project samples are reported as not detected at the limit of detection (LOD) unless blank contamination occurs and then the sample may be reported as not detected at the (LOD) or (LOQ) based on the sample concentration and the validation guidance. In instances where no LOD is provided, results are reported down to the LOQ.

Quality Control Outliers for test method SW7471B, LCS Recovery

The laboratory control sample/laboratory control sample duplicate (LCS/LCSD) serves as a monitor of the overall performance of each step during the analysis, including the sample preparation. Reported results were evaluated to determine compliance with the required acceptance criteria, and summary forms were evaluated and compared to electronic data deliverables. Findings of this review, and any associated qualified results, are listed below.

Sample ID/ Lab Sample ID	Analyte	Result	Warning Limits	Control Limits	Units	Qualifier	Reason Code	Comment
15941CRM 15941 (BS)	Mercury	69.0	80 - 124	40 - 124	percent	J/UJ	C	
15941CRMD 15941 (BD)	Mercury	69.0	80 - 124	40 - 124	percent	J/UJ	C	

Where two qualifiers are listed, such as 'J/UJ', the first applies to positive results, and the second to non-detect results.
Upper and Lower Warning and Control Limits are abbreviated UWL, LWL, UCL, and LCL in the Comment field.

Qualified Results associated with the LCS Recovery for SW7471B

FieldSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
SY-SB4R-1 64446-001	N	Mercury	0.14	0.077 U	0.077 UJ		ug/g	C
SY-SB4R-10 64446-002	FD	Mercury	0.16	0.091 U	0.091 UJ		ug/g	C
SY-SB4R-2 64446-003	N	Mercury	0.15	0.083 U	0.083 UJ		ug/g	C

Analytes not found in project samples are reported as not detected at the limit of detection (LOD) unless blank contamination occurs and then the sample may be reported as not detected at the (LOD) or (LOQ) based on the sample concentration and the validation guidance. In instances where no LOD is provided, results are reported down to the LOQ.

Quality Control Outliers for test method SW8260D, Lab Blank

The purpose of laboratory blanks is to determine the existence and magnitude of cross-contamination problems resulting from laboratory activities. Reported results were evaluated to determine compliance with the required acceptance criteria. Summary forms were evaluated and compared to electronic data deliverables. Findings of this review, and contaminants found in laboratory blanks are listed below along with any associated qualified results.

Sample ID/ Lab Sample ID	Analyte	Result	Warning Limits	Control Limits	Units	Qualifier	Reason Code	Comment
15933MB15933 (LB)	Naphthalene	0.0257	< 0.016	< 0.1	ug/g	U/None*	L	

Where two qualifiers are listed, such as 'J/UJ', the first applies to positive results, and the second to non-detect results.
Upper and Lower Warning and Control Limits are abbreviated UWL, LWL, UCL, and LCL in the Comment field.

*Blank flags displayed in the above table identify qualification of the sample result when it is less than or equal to the LOQ/RL. Sample results above the LOD or LOQ will be qualified based on the validation guidance assigned in the project setup.

Qualified Results associated with the Lab Blank for SW8260D

FieldSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
SY-SB4R-1 64446-001	N	Naphthalene	0.11	0.080 J	0.11 U		ug/g	L
SY-SB4R-10 64446-002	FD	Naphthalene	0.10	0.051 J	0.10 U		ug/g	L
Trip Blank 64446-004	TB	Naphthalene	0.10	0.021 J	0.10 U		ug/g	L

Analytes not found in project samples are reported as not detected at the limit of detection (LOD) unless blank contamination occurs and then the sample may be reported as not detected at the (LOD) or (LOQ) based on the sample concentration and the validation guidance. In instances where no LOD is provided, results are reported down to the LOQ.

Quality Control Outliers for test method SW8260D, LCS Recovery

The laboratory control sample/laboratory control sample duplicate (LCS/LCSD) serves as a monitor of the overall performance of each step during the analysis, including the sample preparation. Reported results were evaluated to determine compliance with the required acceptance criteria, and summary forms were evaluated and compared to electronic data deliverables. Findings of this review, and any associated qualified results, are listed below.

Sample ID/ Lab Sample ID	Analyte	Result	Warning Limits	Control Limits	Units	Qualifier	Reason Code	Comment
15933MLCS15933 (BS)	Diethyl ether (Ethyl ether)	69.0	71 - 129	20 - 129	percent	J/UJ	C	
15933MLCSD15933 (BD)	Diethyl ether (Ethyl ether)	64.0	71 - 129	20 - 129	percent	J/UJ	C	
15933MLCSD15933 (BD)	Methyl tert-butyl ether (MTBE)	72.0	73 - 125	20 - 125	percent	J/UJ	C	
15933MLCSD15933 (BD)	tert-Amyl methyl ether	71.0	73 - 126	20 - 126	percent	J/UJ	C	

Where two qualifiers are listed, such as 'J/UJ', the first applies to positive results, and the second to non-detect results.
Upper and Lower Warning and Control Limits are abbreviated UWL, LWL, UCL, and LCL in the Comment field.

Qualified Results associated with the LCS Recovery for SW8260D

FieldSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
SY-SB4R-1 64446-001	N	Diethyl ether (Ethyl ether)	0.11	0.027 U#	0.027 UJ		ug/g	C
SY-SB4R-1 64446-001	N	Methyl tert-butyl ether (MTBE)	0.11	0.027 U#	0.027 UJ		ug/g	C
SY-SB4R-1 64446-001	N	tert-Amyl methyl ether	0.11	0.027 U#	0.027 UJ		ug/g	C
SY-SB4R-10 64446-002	FD	Diethyl ether (Ethyl ether)	0.10	0.026 U#	0.026 UJ		ug/g	C
SY-SB4R-10 64446-002	FD	Methyl tert-butyl ether (MTBE)	0.10	0.026 U#	0.026 UJ		ug/g	C
SY-SB4R-10 64446-002	FD	tert-Amyl methyl ether	0.10	0.026 U#	0.026 UJ		ug/g	C
SY-SB4R-2 64446-003	N	Diethyl ether (Ethyl ether)	0.10	0.025 U#	0.025 UJ		ug/g	C
SY-SB4R-2 64446-003	N	Methyl tert-butyl ether (MTBE)	0.10	0.025 U#	0.025 UJ		ug/g	C
SY-SB4R-2 64446-003	N	tert-Amyl methyl ether	0.10	0.025 U#	0.025 UJ		ug/g	C
Trip Blank 64446-004	TB	Diethyl ether (Ethyl ether)	0.10	0.025 U#	0.025 UJ		ug/g	C
Trip Blank 64446-004	TB	Methyl tert-butyl ether (MTBE)	0.10	0.025 U#	0.025 UJ		ug/g	C
Trip Blank 64446-004	TB	tert-Amyl methyl ether	0.10	0.025 U#	0.025 UJ		ug/g	C

Analytes not found in project samples are reported as not detected at the limit of detection (LOD) unless blank contamination occurs and then the sample may be reported as not detected at the (LOD) or (LOQ) based on the sample concentration and the validation guidance. In instances where no LOD is provided, results are reported down to the LOQ.

Quality Control Outliers for test method SW8260D, Trip Blank

The purpose of trip blanks is to determine the existence and magnitude of cross-contamination problems resulting from the shipping of samples. Reported results were evaluated to determine compliance with the required acceptance criteria. Summary forms were evaluated and compared to electronic data deliverables. Findings of this review, and contaminants found in trip blanks are listed below along with any associated qualified results.

Sample ID/ Lab Sample ID	Analyte	Result	Warning Limits	Control Limits	Units	Qualifier	Reason Code	Comment
TRIP BLANK (TB)	Naphthalene	0.0212	< 0.016	< 0.1	ug/g	U/None*	T	

Where two qualifiers are listed, such as 'J/UJ', the first applies to positive results, and the second to non-detect results.
Upper and Lower Warning and Control Limits are abbreviated UWL, LWL, UCL, and LCL in the Comment field.

*Blank flags displayed in the above table identify qualification of the sample result when it is less than or equal to the LOQ/RL. Sample results above the LOD or LOQ will be qualified based on the validation guidance assigned in the project setup.

No results associated with this QC element required qualification.

Quality Control Outliers for test method SW8270E, LCS Recovery

The laboratory control sample/laboratory control sample duplicate (LCS/LCSD) serves as a monitor of the overall performance of each step during the analysis, including the sample preparation. Reported results were evaluated to determine compliance with the required acceptance criteria, and summary forms were evaluated and compared to electronic data deliverables. Findings of this review, and any associated qualified results, are listed below.

Sample ID/ Lab Sample ID	Analyte	Result	Warning Limits	Control Limits	Units	Qualifier	Reason Code	Comment
15930LCS15930 (BS)	2,4-Dinitrophenol	9.00	48 - 126	20 - 126	percent	J/X	C	
15930LCS15930 (BS)	4,6-Dinitro-2-methylphenol	24.0	29 - 132	20 - 132	percent	J/UJ	C	
15930LCS15930 (BS)	Benzidine	0.00	43 - 134	20 - 134	percent	J/X	C	
15930LCS15930 (BS)	Benzoic acid	0.00	47 - 132	20 - 132	percent	J/X	C	

Where two qualifiers are listed, such as 'J/UJ', the first applies to positive results, and the second to non-detect results.
Upper and Lower Warning and Control Limits are abbreviated UWL, LWL, UCL, and LCL in the Comment field.

Qualified Results associated with the LCS Recovery for SW8270E

FieldSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
SY-SB4R-1 64446-001	N	2,4-Dinitrophenol	5.3	2.1 UM#	2.1 X		ug/g	C/M
SY-SB4R-1 64446-001	N	4,6-Dinitro-2-methylphenol	2.1	1.1 U#	1.1 UJ		ug/g	C
SY-SB4R-1 64446-001	N	Benzidine	3.2	2.6 UM#	2.6 X		ug/g	C/M
SY-SB4R-1 64446-001	N	Benzoic acid	5.3	4.7 U#	4.7 UJ		ug/g	C
SY-SB4R-10 64446-002	FD	2,4-Dinitrophenol	5.2	2.1 U#	2.1 X		ug/g	C
SY-SB4R-10 64446-002	FD	4,6-Dinitro-2-methylphenol	2.1	1.0 U#	1.0 UJ		ug/g	C
SY-SB4R-10 64446-002	FD	Benzidine	3.1	2.6 U#	2.6 UJ		ug/g	C
SY-SB4R-10 64446-002	FD	Benzoic acid	5.2	4.7 U#	4.7 UJ		ug/g	C
SY-SB4R-2 64446-003	N	2,4-Dinitrophenol	5.7	2.3 U#	2.3 X		ug/g	C
SY-SB4R-2 64446-003	N	4,6-Dinitro-2-methylphenol	2.3	1.1 U#	1.1 UJ		ug/g	C
SY-SB4R-2 64446-003	N	Benzidine	3.4	2.9 U#	2.9 UJ		ug/g	C
SY-SB4R-2 64446-003	N	Benzoic acid	5.7	5.2 U#	5.2 UJ		ug/g	C

Analytes not found in project samples are reported as not detected at the limit of detection (LOD) unless blank contamination occurs and then the sample may be reported as not detected at the (LOD) or (LOQ) based on the sample concentration and the validation guidance. In instances where no LOD is provided, results are reported down to the LOQ.

Quality Control Outliers for test method SW8270E, MS Recovery

Data for matrix spikes/matrix spike duplicates (MS/MSD) are generated to determine long-term precision and accuracy of the analytical method on various matrices and to demonstrate acceptable compound recovery by the laboratory at the time of sample analysis. These data alone cannot be used to evaluate the precision and accuracy of individual samples. However, when exercising professional judgment, MS/MSD data can be used in conjunction with other available QC information. Reported results were evaluated to determine compliance with the required acceptance criteria, and summary forms were evaluated and compared to electronic data deliverables. Findings of this review, and any associated qualified results, are listed below.

Sample ID/ Lab Sample ID	Analyte	Result	Warning Limits	Control Limits	Units	Qualifier	Reason Code	Comment
SY-SB4R-1 (MS)	2,4-Dinitrophenol	39.0	48 - 126	20 - 126	percent	J/UJ	M	
SY-SB4R-1 (SD)	2,4-Dinitrophenol	33.0	48 - 126	20 - 126	percent	J/UJ	M	
SY-SB4R-1 (SD)	Aniline (Phenylamine, Aminobenzene)	39.0	40 - 140	20 - 140	percent	J/UJ	M	
SY-SB4R-1 (MS)	Benzidine	0.00	43 - 134	20 - 134	percent	J/X	M	
SY-SB4R-1 (SD)	Benzidine	0.00	43 - 134	20 - 134	percent	J/X	M	

Where two qualifiers are listed, such as 'J/UJ', the first applies to positive results, and the second to non-detect results.
Upper and Lower Warning and Control Limits are abbreviated UWL, LWL, UCL, and LCL in the Comment field.

Qualified Results associated with the MS Recovery for SW8270E

FieldSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
SY-SB4R-1 64446-001	N	2,4-Dinitrophenol	5.3	2.1 UM#	2.1 X		ug/g	C/M
SY-SB4R-1 64446-001	N	Aniline (Phenylamine, Aminobenzene)	0.21	0.11 UM	0.11 UJ		ug/g	M
SY-SB4R-1 64446-001	N	Benzidine	3.2	2.6 UM#	2.6 X		ug/g	C/M

Analytes not found in project samples are reported as not detected at the limit of detection (LOD) unless blank contamination occurs and then the sample may be reported as not detected at the (LOD) or (LOQ) based on the sample concentration and the validation guidance. In instances where no LOD is provided, results are reported down to the LOQ.

Table of All Qualified Results

Test Method: MADEPEP		**Extraction Method: METHOD**						
FieldSample ID / LabSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
SY-SB4R-1 64446-001	N	C11-C22 Extractable Petroleum Hydrocarbons, Aromatic	23	7.2 J	23 U		ug/g	L
SY-SB4R-1 64446-001	N	C11-C22 Extractable Petroleum Hydrocarbons, Aromatic (Unadjusted)	23	7.5 J	23 U		ug/g	L
SY-SB4R-1 64446-001	N	C19-C36 Extractable Petroleum Hydrocarbons, Aliphatic	23	5.3 J	23 U		ug/g	L
SY-SB4R-10 64446-002	FD	C11-C22 Extractable Petroleum Hydrocarbons, Aromatic	31	31	31 U		ug/g	L
SY-SB4R-10 64446-002	FD	C11-C22 Extractable Petroleum Hydrocarbons, Aromatic (Unadjusted)	34	34	34 U		ug/g	L
SY-SB4R-10 64446-002	FD	C19-C36 Extractable Petroleum Hydrocarbons, Aliphatic	22	14 J	22 U		ug/g	L
SY-SB4R-2 64446-003	N	C11-C22 Extractable Petroleum Hydrocarbons, Aromatic	23	6.3 J	23 U		ug/g	L
SY-SB4R-2 64446-003	N	C11-C22 Extractable Petroleum Hydrocarbons, Aromatic (Unadjusted)	23	6.4 J	23 U		ug/g	L
SY-SB4R-2 64446-003	N	C19-C36 Extractable Petroleum Hydrocarbons, Aliphatic	23	4.8 J	23 U		ug/g	L

Test Method: MADEPVP		**Extraction Method: METHOD**						
FieldSample ID / LabSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
SY-SB4R-1 64446-001	N	C5-C8 Volatile Petroleum Hydrocarbons Aliphatic, Adjusted for Target Analytes, Surrogates and Internal Standards	5.4	5.1 J	5.4 U		ug/g	L
SY-SB4R-1 64446-001	N	C5-C8 Volatile Petroleum Hydrocarbons, Aliphatic	5.4	5.3 J	5.4 U		ug/g	L
SY-SB4R-1 64446-001	N	o-Xylene	0.11	0.061 J	0.11 U		ug/g	L
SY-SB4R-10 64446-002	FD	C5-C8 Volatile Petroleum Hydrocarbons Aliphatic, Adjusted for Target Analytes, Surrogates and Internal Standards	5.1	4.2 J	5.1 U		ug/g	L
SY-SB4R-10 64446-002	FD	C5-C8 Volatile Petroleum Hydrocarbons, Aliphatic	5.1	4.2 J	5.1 U		ug/g	L
SY-SB4R-10 64446-002	FD	o-Xylene	0.10	0.023 J	0.10 U		ug/g	L
SY-SB4R-2 64446-003	N	o-Xylene	0.10	0.0069 J	0.10 U		ug/g	L

Table of All Qualified Results

Test Method: SW6020A		Extraction Method: SW3051A						
FieldSample ID / LabSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
SY-SB4R-1 64446-001	N	Aluminum	26	19000	19000 J		ug/g	Z
SY-SB4R-1 64446-001	N	Antimony	0.52	0.44 JM	0.44 J		ug/g	D
SY-SB4R-1 64446-001	N	Cadmium	0.52	0.098 J	0.098 J	+	ug/g	L
SY-SB4R-1 64446-001	N	Iron	26	29000	29000 J		ug/g	Z
SY-SB4R-1 64446-001	N	Manganese	5.2	400 M	400 J	+	ug/g	M
SY-SB4R-1 64446-001	N	Potassium	52	1600 M	1600 J	-	ug/g	M
SY-SB4R-1 64446-001	N	Selenium	5.2	3.5 JM	3.5 J	-	ug/g	M/TR
SY-SB4R-1 64446-001	N	Silver	2.6	0.11 J	2.6 U		ug/g	L
SY-SB4R-1 64446-001	N	Zinc	5.2	47 M	47 J	-	ug/g	M
SY-SB4R-10 64446-002	FD	Aluminum	27	17000	17000 J		ug/g	Z
SY-SB4R-10 64446-002	FD	Cadmium	0.55	0.14 J	0.14 J	+	ug/g	L
SY-SB4R-10 64446-002	FD	Iron	27	28000	28000 J		ug/g	Z
SY-SB4R-10 64446-002	FD	Silver	2.7	0.16 J	2.7 U		ug/g	L
SY-SB4R-2 64446-003	N	Aluminum	27	18000	18000 J		ug/g	Z
SY-SB4R-2 64446-003	N	Cadmium	0.54	0.094 J	0.094 J	+	ug/g	L
SY-SB4R-2 64446-003	N	Iron	27	29000	29000 J		ug/g	Z
SY-SB4R-2 64446-003	N	Silver	2.7	0.14 J	2.7 U		ug/g	L

Test Method: SW7471B		Extraction Method: METHOD						
FieldSample ID / LabSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
SY-SB4R-1 64446-001	N	Mercury	0.14	0.077 U	0.077 UJ		ug/g	C
SY-SB4R-10 64446-002	FD	Mercury	0.16	0.091 U	0.091 UJ		ug/g	C
SY-SB4R-2 64446-003	N	Mercury	0.15	0.083 U	0.083 UJ		ug/g	C

Test Method: SW8260D		Extraction Method: SW5035A						
FieldSample ID / LabSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
SY-SB4R-1 64446-001	N	Diethyl ether (Ethyl ether)	0.11	0.027 U#	0.027 UJ		ug/g	C
SY-SB4R-1 64446-001	N	Methyl tert-butyl ether (MTBE)	0.11	0.027 U#	0.027 UJ		ug/g	C
SY-SB4R-1 64446-001	N	Naphthalene	0.11	0.080 J	0.11 U		ug/g	L

Table of All Qualified Results

Test Method: SW8260D		Extraction Method: SW5035A						
FieldSample ID / LabSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
SY-SB4R-1 64446-001	N	tert-Amyl methyl ether	0.11	0.027 U#	0.027 UJ		ug/g	C
SY-SB4R-10 64446-002	FD	Diethyl ether (Ethyl ether)	0.10	0.026 U#	0.026 UJ		ug/g	C
SY-SB4R-10 64446-002	FD	Methyl tert-butyl ether (MTBE)	0.10	0.026 U#	0.026 UJ		ug/g	C
SY-SB4R-10 64446-002	FD	Naphthalene	0.10	0.051 J	0.10 U		ug/g	L
SY-SB4R-10 64446-002	FD	tert-Amyl methyl ether	0.10	0.026 U#	0.026 UJ		ug/g	C
SY-SB4R-2 64446-003	N	Diethyl ether (Ethyl ether)	0.10	0.025 U#	0.025 UJ		ug/g	C
SY-SB4R-2 64446-003	N	Methyl tert-butyl ether (MTBE)	0.10	0.025 U#	0.025 UJ		ug/g	C
SY-SB4R-2 64446-003	N	tert-Amyl methyl ether	0.10	0.025 U#	0.025 UJ		ug/g	C
Trip Blank 64446-004	TB	Diethyl ether (Ethyl ether)	0.10	0.025 U#	0.025 UJ		ug/g	C
Trip Blank 64446-004	TB	Methyl tert-butyl ether (MTBE)	0.10	0.025 U#	0.025 UJ		ug/g	C
Trip Blank 64446-004	TB	Naphthalene	0.10	0.021 J	0.10 U		ug/g	L
Trip Blank 64446-004	TB	tert-Amyl methyl ether	0.10	0.025 U#	0.025 UJ		ug/g	C

Test Method: SW8270E		Extraction Method: SW3546						
FieldSample ID / LabSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
SY-SB4R-1 64446-001	N	2,4-Dinitrophenol	5.3	2.1 UM#	2.1 X		ug/g	C/M
SY-SB4R-1 64446-001	N	4,6-Dinitro-2-methylphenol	2.1	1.1 U#	1.1 UJ		ug/g	C
SY-SB4R-1 64446-001	N	Aniline (Phenylamine, Aminobenzene)	0.21	0.11 UM	0.11 UJ		ug/g	M
SY-SB4R-1 64446-001	N	Benzidine	3.2	2.6 UM#	2.6 X		ug/g	C/M
SY-SB4R-1 64446-001	N	Benzoic acid	5.3	4.7 U#	4.7 UJ		ug/g	C
SY-SB4R-10 64446-002	FD	2,4-Dinitrophenol	5.2	2.1 U#	2.1 X		ug/g	C
SY-SB4R-10 64446-002	FD	4,6-Dinitro-2-methylphenol	2.1	1.0 U#	1.0 UJ		ug/g	C
SY-SB4R-10 64446-002	FD	Benzidine	3.1	2.6 U#	2.6 UJ		ug/g	C
SY-SB4R-10 64446-002	FD	Benzoic acid	5.2	4.7 U#	4.7 UJ		ug/g	C
SY-SB4R-2 64446-003	N	2,4-Dinitrophenol	5.7	2.3 U#	2.3 X		ug/g	C
SY-SB4R-2 64446-003	N	4,6-Dinitro-2-methylphenol	2.3	1.1 U#	1.1 UJ		ug/g	C
SY-SB4R-2 64446-003	N	Benzidine	3.4	2.9 U#	2.9 UJ		ug/g	C

Table of All Qualified Results

Test Method: SW8270E		Extraction Method: SW3546						
FieldSample ID / LabSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
SY-SB4R-2 64446-003	N	Benzoic acid	5.7	5.2 U#	5.2 UJ		ug/g	C

Analytes not found in project samples are reported as not detected at the limit of detection (LOD) unless blank contamination occurs and then the sample may be reported as not detected at the (LOQ) based on the sample concentration.
In instances where no LOD is provided, results are reported down to the LOQ.
Trace values are not included in the qualified results table unless additional reason codes are associated.

Table of Results with Modified Qualifiers

Modified Qualifiers for test method SW6020A

FieldSample ID / LabSample ID	Type	Analyte	LOQ	Lab Result	ADR Result	Modified Result	Reason
SY-SB4R-1 64446-001	N	Antimony	0.52	0.44 JM	0.052 J	0.44 J	D
SY-SB4R-1 64446-001	N	Potassium	52	1600 M	1600 J	1600 J	M
SY-SB4R-1 64446-001	N	Silver	2.6	0.11 J	0.26 J	2.6 U	L
SY-SB4R-1 64446-001	N	Sodium	520	380 J#	26 J	380 J	
SY-SB4R-10 64446-002	FD	Potassium	55	1700	1700 J	1700	
SY-SB4R-10 64446-002	FD	Silver	2.7	0.16 J	0.27 J	2.7 U	L
SY-SB4R-10 64446-002	FD	Sodium	550	500 J#	27 J	500 J	
SY-SB4R-2 64446-003	N	Antimony	0.54	0.51 J	0.054 J	0.51 J	
SY-SB4R-2 64446-003	N	Potassium	54	2600	2600 J	2600	
SY-SB4R-2 64446-003	N	Silver	2.7	0.14 J	0.27 J	2.7 U	L

Modified Qualifiers for test method SW8270E

FieldSample ID / LabSample ID	Type	Analyte	LOQ	Lab Result	ADR Result	Modified Result	Reason
SY-SB4R-1 64446-001	N	Benzoic acid	5.3	4.7 U#	4.7 X	4.7 UJ	C
SY-SB4R-10 64446-002	FD	Benzidine	3.1	2.6 U#	2.6 X	2.6 UJ	C
SY-SB4R-10 64446-002	FD	Benzoic acid	5.2	4.7 U#	4.7 X	4.7 UJ	C
SY-SB4R-2 64446-003	N	Benzidine	3.4	2.9 U#	2.9 X	2.9 UJ	C
SY-SB4R-2 64446-003	N	Benzoic acid	5.7	5.2 U#	5.2 X	5.2 UJ	C

Analytes not found in project samples are reported as not detected at the limit of detection (LOD) unless blank contamination occurs and then the sample may be reported as not detected at the (LOQ) based on the sample concentration.
In instances where no LOD is provided, results are reported down to the LOQ.
Trace values are not included in the qualified results table unless additional reason codes are associated.

Reason Code Definitions

Code	Definition
C	LCS Recovery
D	MS RPD
L	Lab Blank
M	MS Recovery
T	Trip Blank
TR	Trace Level Detect
Z	LCS RPD

Flag Code and Definitions

Flag	Definition
J	Estimated Value
N	The analysis indicates the presence of an analyte for which there was presumptive evidence to make a tentative identification.
NJ	The analyte has been tentatively identified or presumptively as present and the associated numerical value was the estimated concentration in the sample.
R	The data are rejected due to deficiencies in meeting QC criteria and may not be used for decision making.
U	Undetected: The analyte was analyzed for, but not detected.
UJ	The analyte was not detected; however, the result is estimated due to discrepancies in meeting certain analyte-specific quality control criteria.
X	Result may require rejection; PDT attention required

Bias	
-	The result may be biased low
+	The result may be biased high
Note - The bias field is a separate field; however, it is an integral part of the final flag (qualifier) on the sample result	

Review Questions

Method: MADEPEP (Method for the Determination of Extractable Petroleum Hydrocarbons (EPH))

Review Questions	Yes	No	NA	Comment
Were there discrepancies between the COC and the samples received?		•		
Were there discrepancies between the COC and the sample labels?		•		
Were samples relinquished properly on the COC?	•			
Were all samples properly preserved?	•			
Were sampling dates/times, date and time of laboratory receipt of samples, and sample conditions upon receipt at the laboratory (including preservation, pH, and temperature) documented?	•			
Were sample results reported with percent moisture correction if required?	•			
Were analytical methods performed and analysis dates present?	•			
Were all requested target analytes reported?	•			
Were QAPP specified Project Quantitation Limit Goals achieved? (The laboratory LOQ is compared to the QAPP Project Quantitation Goal)	•			
Were holding times met?	•			
Were trip blanks analyzed at the proper frequency and in control?			•	
Were field blanks analyzed at the proper frequency and in control?			•	
Were equipment blanks analyzed at the proper frequency and in control?			•	
Was a method blank prepared and analyzed with each batch?	•			
Were target analytes in the method blank less than DL?		•		Several results qualified U at the LOQ due to method blank contamination.
Was an LCS/LCSD pair prepared and analyzed with each batch?	•			
Were LCS/LCSD recoveries within project acceptance limits?	•			
Was the LCS/LCSD RPD within project acceptance limits?	•			
Was a MS/MSD pair prepared with each batch?	•			
Were MS/MSD recoveries within project acceptance limits?	•			
Was the MS/MSD RPD within project acceptance limits?	•			
If ISM was used for sample collection, were laboratory triplicates analyzed and within project acceptance limits?			•	Not applicable to this method.
Were surrogate recoveries within project acceptance limits?	•			
Were field replicates (duplicates, triplicates, etc.) analyzed at the proper frequency and in control?	•			
Were reported sample concentrations within calibration range?	•			
Have all Laboratory Case Narrative comments/findings been addressed in the data review process?	•			
Were DoD QSM corrective actions followed if deviations were noted?	•			
Were any data recommended for exclusion in the data validation process?		•		Data acceptable as reported and qualified.

Review Questions

Method: MADEPVP (Method for the Determination of Volatile Petroleum Hydrocarbons (VPH))				
Review Questions	Yes	No	NA	Comment
Were there discrepancies between the COC and the samples received?		•		
Were there discrepancies between the COC and the sample labels?		•		
Were samples relinquished properly on the COC?	•			
Were all samples properly preserved?	•			
Were sampling dates/times, date and time of laboratory receipt of samples, and sample conditions upon receipt at the laboratory (including preservation, pH, and temperature) documented?	•			
Were sample results reported with percent moisture correction if required?	•			
Were analytical methods performed and analysis dates present?	•			
Were all requested target analytes reported?	•			
Were QAPP specified Project Quantitation Limit Goals achieved? (The laboratory LOQ is compared to the QAPP Project Quantitation Goal)	•			
Were holding times met?	•			
Were trip blanks analyzed at the proper frequency and in control?			•	Not applicable to this method.
Were field blanks analyzed at the proper frequency and in control?			•	Not applicable to this method.
Were equipment blanks analyzed at the proper frequency and in control?			•	Not applicable to this method.
Was a method blank prepared and analyzed with each batch?	•			
Were target analytes in the method blank less than DL?		•		Several results qualified U at the LOQ due to method blank contamination.
Was an LCS/LCSD pair prepared and analyzed with each batch?	•			
Were LCS/LCSD recoveries within project acceptance limits?	•			
Was the LCS/LCSD RPD within project acceptance limits?	•			
Was a MS/MSD pair prepared with each batch?	•			
Were MS/MSD recoveries within project acceptance limits?	•			
Was the MS/MSD RPD within project acceptance limits?	•			
If ISM was used for sample collection, were laboratory triplicates analyzed and within project acceptance limits?			•	Not applicable to this method.
Were surrogate recoveries within project acceptance limits?	•			
Were field replicates (duplicates, triplicates, etc.) analyzed at the proper frequency and in control?	•			
Were reported sample concentrations within calibration range?	•			
Have all Laboratory Case Narrative comments/findings been addressed in the data review process?	•			
Were DoD QSM corrective actions followed if deviations were noted?	•			
Were any data recommended for exclusion in the data validation process?		•		Data acceptable as reported and qualified.

Review Questions

Method: SW6020A (Trace Metals by Inductively Coupled Plasma/Mass Spectrometry)

Review Questions	Yes	No	NA	Comment
Were there discrepancies between the COC and the samples received?		•		
Were there discrepancies between the COC and the sample labels?		•		
Were samples relinquished properly on the COC?	•			
Were all samples properly preserved?	•			
Were sampling dates/times, date and time of laboratory receipt of samples, and sample conditions upon receipt at the laboratory (including preservation, pH, and temperature) documented?	•			
Were sample results reported with percent moisture correction if required?	•			
Were analytical methods performed and analysis dates present?	•			
Were all requested target analytes reported?	•			
Were QAPP specified Project Quantitation Limit Goals achieved? (The laboratory LOQ is compared to the QAPP Project Quantitation Goal)	•			
Were holding times met?	•			
Were trip blanks analyzed at the proper frequency and in control?			•	Not applicable to this method.
Were field blanks analyzed at the proper frequency and in control?			•	Not applicable to this method.
Were equipment blanks analyzed at the proper frequency and in control?			•	Not applicable to this method.
Was a method blank prepared and analyzed with each batch?	•			
Were target analytes in the method blank less than DL?		•		Several results qualified U at the LOQ or J+ due to method blank contamination.
Was an LCS/LCSD pair prepared and analyzed with each batch?	•			
Were LCS/LCSD recoveries within project acceptance limits?	•			
Was the LCS/LCSD RPD within project acceptance limits?		•		Several results qualified J due to LCS/LCSD RPD greater than RPD limits.
Was a MS/MSD pair prepared with each batch?	•			
Were MS/MSD recoveries within project acceptance limits?		•		Several results qualified J- due to MS/MSD %R lower than %R limits. One result qualified J+ due to MS/MSD %R greater than %R limits.
Was the MS/MSD RPD within project acceptance limits?		•		One result qualified J due to MS/MSD RPD greater than RPD limits
Were Post Spike (PS) recoveries within project acceptance limits?			•	Not applicable to this method.
Was a Dilution Test/Serial Dilution performed and within project acceptance criteria?			•	Not applicable to this method.
If ISM was used for sample collection, were laboratory triplicates analyzed and within project acceptance limits?			•	Not applicable to this method.
Were field replicates (duplicates, triplicates, etc.) analyzed at the proper frequency and in control?	•			
Were reported sample concentrations within calibration range?	•			
Have all Laboratory Case Narrative comments/findings been addressed in the data review process?	•			

Review Questions

Method: SW6020A (Trace Metals by Inductively Coupled Plasma/Mass Spectrometry)				
Review Questions	Yes	No	NA	Comment
Were DoD QSM corrective actions followed if deviations were noted?	•			
Were any data recommended for exclusion in the data validation process?		•		Data acceptable as reported and qualified.

Review Questions

Method: SW7471B (Mercury in Soil (Manual Cold-Vapor Technique))				
Review Questions	Yes	No	NA	Comment
Were there discrepancies between the COC and the samples received?		•		
Were there discrepancies between the COC and the sample labels?		•		
Were samples relinquished properly on the COC?	•			
Were all samples properly preserved?	•			
Were sampling dates/times, date and time of laboratory receipt of samples, and sample conditions upon receipt at the laboratory (including preservation, pH, and temperature) documented?	•			
Were sample results reported with percent moisture correction if required?	•			
Were analytical methods performed and analysis dates present?	•			
Were all requested target analytes reported?	•			
Were QAPP specified Project Quantitation Limit Goals achieved? (The laboratory LOQ is compared to the QAPP Project Quantitation Goal)	•			
Were holding times met?	•			
Were trip blanks analyzed at the proper frequency and in control?			•	Not applicable to this method.
Were field blanks analyzed at the proper frequency and in control?			•	Not applicable to this method.
Were equipment blanks analyzed at the proper frequency and in control?			•	Not applicable to this method.
Was a method blank prepared and analyzed with each batch?	•			
Were target analytes in the method blank less than DL?	•			
Was an LCS/LCSD pair prepared and analyzed with each batch?	•			
Were LCS/LCSD recoveries within project acceptance limits?		•		Several results qualified UJ due to LCS/LCSD %R lower than %R limits.
Was the LCS/LCSD RPD within project acceptance limits?	•			
Was a MS/MSD pair prepared with each batch?	•			
Were MS/MSD recoveries within project acceptance limits?	•			
Was the MS/MSD RPD within project acceptance limits?	•			
If ISM was used for sample collection, were laboratory triplicates analyzed and within project acceptance limits?			•	Not applicable to this method.
Were field replicates (duplicates, triplicates, etc.) analyzed at the proper frequency and in control?	•			
Were reported sample concentrations within calibration range?	•			
Have all Laboratory Case Narrative comments/findings been addressed in the data review process?	•			
Were DoD QSM corrective actions followed if deviations were noted?	•			
Were any data recommended for exclusion in the data validation process?		•		Data acceptable as reported and qualified.

Review Questions

Method: SW8082A (Polychlorinated Biphenyls (PCB))

Review Questions	Yes	No	NA	Comment
Were there discrepancies between the COC and the samples received?		•		
Were there discrepancies between the COC and the sample labels?		•		
Were samples relinquished properly on the COC?	•			
Were all samples properly preserved?	•			
Were sampling dates/times, date and time of laboratory receipt of samples, and sample conditions upon receipt at the laboratory (including preservation, pH, and temperature) documented?	•			
Were sample results reported with percent moisture correction if required?	•			
Were analytical methods performed and analysis dates present?	•			
Were all requested target analytes reported?	•			
Were QAPP specified Project Quantitation Limit Goals achieved? (The laboratory LOQ is compared to the QAPP Project Quantitation Goal)	•			
Were holding times met?	•			
Were trip blanks analyzed at the proper frequency and in control?			•	Not applicable to this method.
Were field blanks analyzed at the proper frequency and in control?			•	Not applicable to this method.
Were equipment blanks analyzed at the proper frequency and in control?			•	Not applicable to this method.
Was a method blank prepared and analyzed with each batch?	•			
Were target analytes in the method blank less than DL?	•			
Was an LCS/LCSD pair prepared and analyzed with each batch?	•			
Were LCS/LCSD recoveries within project acceptance limits?	•			
Was the LCS/LCSD RPD within project acceptance limits?	•			
Was a MS/MSD pair prepared with each batch?	•			
Were MS/MSD recoveries within project acceptance limits?	•			
Was the MS/MSD RPD within project acceptance limits?	•			
If ISM was used for sample collection, were laboratory triplicates analyzed and within project acceptance limits?			•	Not applicable to this method.
Were surrogate recoveries within project acceptance limits?	•			
Were field replicates (duplicates, triplicates, etc.) analyzed at the proper frequency and in control?	•			
Were reported sample concentrations within calibration range?	•			
Have all Laboratory Case Narrative comments/findings been addressed in the data review process?	•			
Were DoD QSM corrective actions followed if deviations were noted?	•			
Were any data recommended for exclusion in the data validation process?		•		Data acceptable as reported and qualified.

Review Questions

Method: SW8260D (Volatile Organic Compounds by GC/MS)				
Review Questions	Yes	No	NA	Comment
Were there discrepancies between the COC and the samples received?		•		
Were there discrepancies between the COC and the sample labels?		•		
Were samples relinquished properly on the COC?	•			
Were all samples properly preserved?	•			
Were sampling dates/times, date and time of laboratory receipt of samples, and sample conditions upon receipt at the laboratory (including preservation, pH, and temperature) documented?	•			
Were sample results reported with percent moisture correction if required?	•			
Were analytical methods performed and analysis dates present?	•			
Were all requested target analytes reported?	•			
Were QAPP specified Project Quantitation Limit Goals achieved? (The laboratory LOQ is compared to the QAPP Project Quantitation Goal)	•			
Were holding times met?	•			
Were trip blanks analyzed at the proper frequency and in control?		•		Analyte detected in the trip blank but no results were qualified.
Were field blanks analyzed at the proper frequency and in control?			•	Not applicable to this method.
Were equipment blanks analyzed at the proper frequency and in control?			•	Not applicable to this method.
Was a method blank prepared and analyzed with each batch?	•			
Were target analytes in the method blank less than DL?		•		Several results qualified U at the LOQ due to method blank contamination.
Was an LCS/LCSD pair prepared and analyzed with each batch?	•			
Were LCS/LCSD recoveries within project acceptance limits?		•		Several results qualified UJ due to LCS/LCSD %R lower than %R limits.
Was the LCS/LCSD RPD within project acceptance limits?	•			
Was a MS/MSD pair prepared with each batch?	•			
Were MS/MSD recoveries within project acceptance limits?	•			
Was the MS/MSD RPD within project acceptance limits?	•			
If ISM was used for sample collection, were laboratory triplicates analyzed and within project acceptance limits?			•	Not applicable to this method.
Were surrogate recoveries within project acceptance limits?	•			
Were field replicates (duplicates, triplicates, etc.) analyzed at the proper frequency and in control?	•			
Were reported sample concentrations within calibration range?	•			
Have all Laboratory Case Narrative comments/findings been addressed in the data review process?	•			
Were DoD QSM corrective actions followed if deviations were noted?	•			
Were any data recommended for exclusion in the data validation process?		•		Data acceptable as reported and qualified.

Review Questions

Method: SW8270E (Semivolatile Organic Compounds by Gas Chromatography/Mass Spectrometry)				
Review Questions	Yes	No	NA	Comment
Were there discrepancies between the COC and the samples received?		•		
Were there discrepancies between the COC and the sample labels?		•		
Were samples relinquished properly on the COC?	•			
Were all samples properly preserved?	•			
Were sampling dates/times, date and time of laboratory receipt of samples, and sample conditions upon receipt at the laboratory (including preservation, pH, and temperature) documented?	•			
Were sample results reported with percent moisture correction if required?	•			
Were analytical methods performed and analysis dates present?	•			
Were all requested target analytes reported?	•			
Were QAPP specified Project Quantitation Limit Goals achieved? (The laboratory LOQ is compared to the QAPP Project Quantitation Goal)	•			
Were holding times met?	•			
Were trip blanks analyzed at the proper frequency and in control?			•	Not applicable to this method.
Were field blanks analyzed at the proper frequency and in control?			•	Not applicable to this method.
Were equipment blanks analyzed at the proper frequency and in control?			•	Not applicable to this method.
Was a method blank prepared and analyzed with each batch?	•			
Were target analytes in the method blank less than DL?	•			
Was an LCS/LCSD pair prepared and analyzed with each batch?	•			
Were LCS/LCSD recoveries within project acceptance limits?		•		Several results qualified UJ due to LCS/LCSD %R below %R limits. Several results qualified X due to LCS/LCSD %R below 10%. %R for Benzidine and Benzoic acid could not be calculated by ADR due to being input as 0. LCS/LCSD were reviewed manually in the laboratory report and found to be out of limits. Benzidine and Benzoic acid results were qualified UJ due to LCS/LCSD %R lower than %R limits but above 10%.
Was the LCS/LCSD RPD within project acceptance limits?	•			
Was a MS/MSD pair prepared with each batch?	•			
Were MS/MSD recoveries within project acceptance limits?		•		Results qualified UJ due to MS/MSD %R below %R limits. %R for Benzidine could not be calculated by ADR due to being input as 0. MS/MSD were reviewed manually in the laboratory report and found to be out of limits. Benzidine result qualified X due to MS/MSD %R below 10%.
Was the MS/MSD RPD within project acceptance limits?	•			
If ISM was used for sample collection, were laboratory triplicates analyzed and within project acceptance limits?			•	Not applicable to this method.
Were surrogate recoveries within project acceptance limits?	•			

Review Questions

Method: SW8270E (Semivolatile Organic Compounds by Gas Chromatography/Mass Spectrometry)				
Review Questions	Yes	No	NA	Comment
Were field replicates (duplicates, triplicates, etc.) analyzed at the proper frequency and in control?	•			
Were reported sample concentrations within calibration range?	•			
Have all Laboratory Case Narrative comments/findings been addressed in the data review process?	•			
Were DoD QSM corrective actions followed if deviations were noted?	•			
Were any data recommended for exclusion in the data validation process?	•			Several results recommended for exclusion due to LCS/LCSD or MS/MSD %R below %R limit of 10%.

Data Usability Summary

Facility:	D01ME0004-07, Dow Military Airfield, Salvage Yard
Event:	Dow SY RI 2023, Solids
Guidance Document:	Final UFP QAPP Revision No. 1 Remedial Investigation Former Salvage Yard Former Dow Military Airfield 233 Odlin Road, Bangor, Maine December 2022
Prime Contractor:	Credere Associates, LLC, Westbrook, ME
Organization Preparing DUA:	Credere Associates, LLC
DUA Release Date:	2024-06-18
Project Manager:	William Humphries
Contract Laboratory(ies):	Eurofins Lancaster Laboratories Environmental, LLC, Lancaster, PA | Absolute Resource Associates, LLC, Portsmouth, NH | Katahdin Analytical Services, Scarborough, ME
Data Review Contractor:	Laboratory Data Consultants, Inc.
Data Review Level:	S2AVEM
Sample Collection Date Range:	2023-02-01 to 2023-02-01

SDG	BNASIM	LYDKHN	MADEPEP	MADEPVP	SW6020A	SW7196A	SW7471B	SW8082A	SW8260D	SW8270E
410-114770-1_FUDSChem		X								
64446			X	X	X		X	X	X	X
SQ0595	X					X				

QA objectives for measuring data are expressed in terms of precision, accuracy, representativeness, comparability, completeness, and sensitivity (PARCCS). The QA objectives provide a mechanism for ongoing control and evaluating and measuring data quality throughout the project.

A review of the collected data is necessary in order to identify if data measurement objectives established in the seven-step data quality objective (DQO) process have been met. In general, the following data measurement objectives were considered:

•Specification of particular analytical method and reporting detection limit requirements
•Identification of the appropriate laboratory analytical QC requirements
•Verify if appropriate levels of other PARCCS criteria for the data has been met
•Delineation of specific sample-handling issues or other project-specific issues

The data validation review of the QA objectives verifies if the collected data are of sufficient quality to support their intended use.

A total of 4 results (0.58 %) out of the 689 results (sample and field QC samples) reported have had qualifiers modified during this Data Usability Assessment and 4 results (0.58 %) have been rejected or deemed a serious deficiency. 70 results were qualified during the data review process. Trace values, defined as results that are qualified as estimated because they fall between the detection limit and the reporting limit/limit of quantitation, are not counted as qualified results in the above count.

2024-06-18

Reviewed by Allison Drouin, Credere Associates, LLC

Data Usability Summary

Data Usability Assessment Modifications to Qualifiers

Test Method: SW8270E Extraction Method: SW3546 Leach Method: NONE

FieldSample ID	Type	Analyte	LOQ	Lab Result	Validation Result	Modified Result	Units	Final Reason
SY-SB4R-1	N	2,4-Dinitrophenol	5.3	2.1 UM#	2.1 X	2.1 R	ug/g	C/M
SY-SB4R-1	N	Benzidine	3.2	2.6 UM#	2.6 X	2.6 R	ug/g	C/M
SY-SB4R-10	FD	2,4-Dinitrophenol	5.2	2.1 U#	2.1 X	2.1 R	ug/g	C
SY-SB4R-2	N	2,4-Dinitrophenol	5.7	2.3 U#	2.3 X	2.3 R	ug/g	C

General Note: Qualified analytes in samples are reported as estimated, not detected (UJ) at the Limit of Detection (LOD).

Rejected Results

Test Method: SW8270E Extraction Method: SW3546 Leach Method: NONE

Field Sample ID	Type	Analyte	LOQ	Lab Result	Modified Result	Units	Final Reason
SY-SB4R-1	N	2,4-Dinitrophenol	5.3	2.1 UM#	2.1 R	ug/g	C/M
SY-SB4R-1	N	Benzidine	3.2	2.6 UM#	2.6 R	ug/g	C/M
SY-SB4R-10	FD	2,4-Dinitrophenol	5.2	2.1 U#	2.1 R	ug/g	C
SY-SB4R-2	N	2,4-Dinitrophenol	5.7	2.3 U#	2.3 R	ug/g	C

Reason Code Definitions

Code	Definition
C	LCS Recovery
D	MS RPD
H1	Test Hold Time
L	Lab Blank
M	MS Recovery
TR	Trace Level Detect
Z	LCS RPD

Flag Code and Definitions

Flag	Definition
J	Estimated Value
R	The data are rejected due to deficiencies in meeting QC criteria and may not be used for decision making.
U	Undetected: The analyte was analyzed for, but not detected.
UJ	The analyte was not detected; however, the result is estimated due to discrepancies in meeting certain analyte-specific quality control criteria.
X	Result may require rejection; PDT attention required

Sample Type Code and Definitions

Type	Definition
BD	Blank Spike Duplicate
BS	Blank Spike
FD	Field Duplicate

LB	Laboratory Blank
MS	Matrix Spike
N	Normal
SD	Matrix Spike Duplicate
TB	Trip Blank

Data Usability Summary

Narrative Comments

Review Questions	Yes	No	NA	Comment
Review Objective/Sampling Design				
Is the Final UFP QAPP associated with the event present in the Planning folder of the FUDSChem library for the project?	•			Loaded to FUDSChem as "Dow_SalvageYard_QAPP_FINAL_9-18-2019_W912WJ-18-C0019, Credere Associates, LLC, 2019-09-18"
Were key outputs defined during systematic planning (e.g.,PQOs or DQOs and MPCs) reviewed to make sure they are still applicable? Refer to the UFP QAPP for the projects, and to the worksheets found in REPORTS | UFP QAPP Worksheets.	•			
Refer to summary reports found in REPORTS | Event Tracking Reports | Event Status: All Data Types, Event Status: Chemistry Detail, and Unplanned Samples to review planned and unplanned samples and test methods.	•			All locations planned to be sampled have associated data and are highlighted green. Unplanned samples lists only trip blanks.
Was the sampling design reviewed for consistency with stated objectives? Refer to MAPS | Export to Google Earth to review sampling locations.	•			
Were data quality indicators (DQIs) from the DoD QSM used for this event? Review and discuss any DQIs that deviated from the DoD QSM. Refer to the UFP QAPP and to REPORTS | Environmental Setup Reports | Analyte Criteria, which highlights items that were modified from the original templates based on the DoD QSM.	•			All method were completed under QSM.
Review Data				
If Event Planning was performed in FUDSChem, were all samples and measurements identified in REPORTS | Event Tracking Reports | Event Status: All Data Types completed and approved (all checked cells are green)?	•			Yes, there is discrepency between the SB4R and OBMW4R LTD loading; however, these are the same location/boring.
If Event Planning was performed in FUDSChem, were all samples identified in REPORTS | Event Tracking Reports | Event Status: Chemistry Detail collected and approved (all checked cells are green), or notated to explain discrepancies?	•			All are green
If Event Planning was performed in FUDSChem, were all samples identified in REPORTS | Event Tracking Reports | Unplanned Samples reviewed to ensure correct completeness calculations?	•			Only one trip blank listed
Were deviations from planned activities (e.g., number and locations of samples, holding time exceedances, damaged samples, non-compliant PT sample results, and SOP deviations) reviewed to determine their impacts on the data usability? If Event Planning was performed in FUDSChem, refer to REPORTS | Data Usability Assessment Reports | Project Completeness.	•			Field completeness is 100% . Analytical completeness is 99.3%; therefore, the overall completeness meets the goal of 95%.
Have all Location related placeholders, such as centroid coordinates, been resolved? Review REPORTS | Data Assessment Reports | Locations.	•			
Were laboratory and data review reports for each Sample Delivery Group (SDG) associated with the event present in the FUDSChem library for the project? Refer to the list of SDGs listed on the cover page of the Data Usability Assessment Summary Report found under REPORTS | Data Usability Assessment Reports.	•			

Data Usability Summary

Review Questions	Yes	No	NA	Comment
Review Data				
Were all data review reports reviewed? Look for patterns, trends, and anomalies (e.g., unexpected results). Refer to the Data Review Reports in the project library as well as the event summary reports located in REPORTS | Data Usability Assessment Reports.	•			• Hexavalent chromium was analyzed outside the hold time due to hood failure at the laboratory and inability to safely extract the samples. These results have been qualified as estimated. Based on results generally consistent with other nearby locations (SY-SB4), these qualifications do not impact the usability of these results. • Detections in various blank samples (mainly method blanks) resulted in qualification of associated sample results as 'U' at the limit of quantification (LOQ) or as estimated concentrations with a potential false positive (J). Qualifications were review and applied only to MNA parameters or VOC analytes with no project action limits (PALs), and where PALs were available, the LOQ or detected concentrations sufficiently met/were below the sensitivity goals. As this qualification was applied to trace concentrations, the usability of the data is not considered impacted. • Surrogate, LCS/LCSD, and MS/MSD recovery nonconformances resulted in qualifications of associated results as estimated with bias (J or UJ). Estimated results' impact on the usability of the data was evaluated by comparing the estimated result to the associated PAL. Generally, estimated results were either below or exceeding the PAL and were not in proximity to the respective PAL value. Therefore, these qualifications do not affect the usability of the results relative to the objectives.
Were all data review reports associated with an approved eQAPP? Review the footer of the Data Review report in the Library to identify the version of the eQAPP that was used.	•			eQAPP_USNAE-D01ME0004-07-RIFS.106740
Were there any implications of unacceptable QC sample results and does this impact sample results? If so, did any qualifiers require revision using the Sample Qualification tab of this interface?	•			Some X qualifiers were changed to R.
Were sensitivity requirements met, as compared to regulatory Project Action or Screening Limits? Review REPORTS | Data Usability Assessment Reports | Sensitivity Summary.		•		Benzo(a)anthracene did not meet the PAL goal for the three samples; however, these were anticipated in the QAPP and are already analyzed by SIM.
Were any sample results recommended for rejection during validation (X qualified)? If so, have all X qualifiers been revised to R or J using the Sample Qualification tab of this interface?	•			Several X qualifiers were changed to R.
Were all LTM related parameters required for the project, such as groundwater measurements, environmental parameters, and well screen intervals found to be complete and correctly reported?	•			
Have all sections of the Dashboard linked Project Tracking Report been documented as complete?	•			LTD pending final clarification
Document Usability/Draw Conclusions				
Based on the previous 'Review Data' documentation, are there any limitations on the use of the data associated with this event?		•		

Data Usability Summary

Review Questions	Yes	No	NA	Comment
Document Usability/Draw Conclusions				
Describe the conclusions reached during this Data Usability Assessment.	•			Considering the results of this report, the data collected as part of the SY-SB4R soil sampling event are usable for making project decisions relative to the established objectives
Lessons Learned/Recommendations				
Were any Program level Lessons Learned identified? (e.g., SW8330 was not the best fit for this site and MS/MS should be considered)		•		
Were any Project level Lessons Learned identified? (e.g., ISM sampling resulted in anomalies to be resolved in the future, or current locations not comparable to historical data)		•		
Are there any additional items associated with this sampling event that need clarification?	•			SY-SB4R (boring) and SY-OBMW4R (final installed well) are the same location
Were any Sample level Lessons Learned identified? (e.g., a particular well may be expected to be dry in the future)		•		

Data Validation Report for 67797

Facility:	D01ME0004-07, Dow Military Airfield, Salvage Yard
Event:	Dow SY Groundwater Nov 2023
SDG:	67797
Guidance Document:	Final UFP QAPP Revision No. 1 Remedial Investigation Former Salvage Yard Former Dow Military Airfield 233 Odlin Road, Bangor, Maine December 2022
Prime Contractor:	Credere Associates, LLC, Westbrook, ME
Project Manager:	Peter Thompson
Contract Laboratory(ies):	Absolute Resource Associates, LLC, Portsmouth, NH
Data Review Contractor:	EnSafe Inc
Data Review Level:	S2AVEM
Primary Data Reviewer:	Christina Ashdown, Senior Chemist
Second Reviewer:	Kevin Kha, Environmental Scientist
Date Submitted:	January 24, 2024

Field Sample ID	Lab Sample ID	Matrix	Type/Type Code	MADEPEP	MADEPVP	SW6020A	SW6020A - Dissolved	SW7470A	SW7470A - Dissolved	SW8082A	SW8260D	SW8270E
SY-OBMW10-110623	67797-002	Water	Field Sample/N	X	X	X		X		X	X	X
SY-OBMW10-110623	67797-005	Water	Field Sample/N				X		X			
SY-OBMW7-110623	67797-001	Water	Field Sample/N	X	X	X		X			X	X
SY-OBMW7-110623	67797-004	Water	Field Sample/N				X		X			
TB30-110623	67797-003	Water	Trip Blank/TB		X						X	

This report assesses the analytical data quality associated with the analyses listed on the preceding cover page at S2AVEM data validation level. This assessment has been made through a combination of automated data review (ADR) and supplemental manual review, the details of which are described below. The approach taken in the review of this data set is consistent with the requirements contained in the Final UFP QAPP Revision No. 1 Remedial Investigation Former Salvage Yard Former Dow Military Airfield 233 Odlin Road, Bangor, Maine December 2022 and the additional guidance documents incorporated by reference to the extent possible. Where definitive guidance is not provided, results have been evaluated in a conservative manner using professional judgment.

Sample collection was managed and directed by Credere Associates, LLC, Westbrook, ME; analyses were performed by Absolute Resource Associates, LLC, Portsmouth, NH and were reported under sample delivery group (SDG) 67797. Data have been evaluated electronically based on electronic data deliverables (EDDs) provided by the laboratory, and hard copy data summary forms have also been reviewed during this effort and compared to the automated review output by the reviewers whose signatures appear on the following page. Findings based on the automated data submission and manual data verification processes are detailed in the ADR narrative and throughout this report.

All quality control (QC) elements associated with this SDG have been reviewed by a project chemist in accordance with the requirements defined for the project. This review is documented in the attached Data Review Checklists. The QC elements listed below were supported by the electronic deliverable and were evaluated using ADR processes.

- Blank - Negative
- Lab Blank
- LCS Recovery
- LCS RPD
- Prep Hold Time
- Surrogate
- Test Hold Time
- Trip Blank

Results of the ADR process were subsequently reviewed and updated as applicable by the data review chemists identified on the signature page. Quality control elements that were not included in the electronic deliverable were reviewed manually and findings are documented within this report. Summaries of findings and associated qualified results are documented throughout this report.

A total of 36 results (7.29%) out of the 494 results (sample and field QC samples) reported are qualified based on review and 0 results (0.00%) have been rejected or deemed a serious deficiency (X qualifier). Trace values, defined as results that are qualified as estimated because they fall between the detection limit and the reporting limit/limit of quantitation, are not counted as qualified results in the above count. The qualified results are detailed throughout this report and discussed in the narrative below, where appropriate.

Narrative Comments

Analytical Method	Data Reviewer Comment
MADEPEP	The laboratory case narrative indicates the following: "The LCS/D17110 did not meet the acceptance criteria for naphthalene, 2-methylnaphthalene, indeno(1,2,3-cd)pyrene, dibenzo(a,h)anthracene, and C9-C18 Aliphatics. These compounds showed low recoveries. The relative percent difference between the LCS and LCSD17110 was outside the acceptance criteria for C19-C36 Aliphatics. No additional sample volume remains for re-analysis. The results have been qualified accordingly." Sample results were qualified accordingly during data validation.
MADEPVP	No additional comments; see Checklist for detail.
SW6020A	This includes both total and dissolved 6020A results.
SW7470A	This includes both total and dissolved 7470A results.
SW8082A	No additional comments; see Checklist for detail.
SW8260D	The laboratory case narrative indicates the following: "The LCS2303694 did not meet the acceptance criteria for carbon disulfide and t-butanol (TBA). These compounds showed high recoveries. The relative percent difference between the LCS and LCSD2303694 was outside the acceptance criteria for t-butanol (TBA) and 1,1,2-trichloroethane. There is no impact to the data as these analytes were not detected in the associated samples." The associated results were non-detect so sample qualification was not warranted.
SW8270E	The laboratory case narrative indicates the following: "The LCS/D17096 did not meet the acceptance criteria for several compounds. These compounds showed low recoveries. The relative percent difference between the LCS and LCSD17096 was outside the acceptance criteria for several compounds. No additional sample volume remains for re-analysis. The results have been qualified accordingly." Sample results were qualified accordingly during data validation.

Christina Rink-Ashdown

January 10, 2024

Reviewed by Christina Ashdown, Senior Chemist, EnSafe Inc

As the First Reviewer, I certify that I have performed a data review process in accordance with the requirements of the project guidance document, and have compared the electronic data to the laboratory's hard copy report and have verified the consistency of the reported sample results and method quality control data between the two deliverables.

Kevin Kha

Reviewed by Kevin Kha, Environmental Scientist, EnSafe Inc

February 14, 2024

As the Second Reviewer, I certify that I have performed a quality assurance review of the report generated by the First Reviewer.

Quality Control Outliers for test method MADEPEP, LCS Recovery

The laboratory control sample/laboratory control sample duplicate (LCS/LCSD) serves as a monitor of the overall performance of each step during the analysis, including the sample preparation. Reported results were evaluated to determine compliance with the required acceptance criteria, and summary forms were evaluated and compared to electronic data deliverables. Findings of this review, and any associated qualified results, are listed below.

Sample ID/ Lab Sample ID	Analyte	Result	Warning Limits	Control Limits	Units	Qualifier	Reason Code	Comment
17110LCS17110 (BS)	2-Methylnaphthalene	36.0	40 - 140	20 - 140	percent	J/UJ	C	
17110LCS17110 (BS)	C9-C18 Extractable Petroleum Hydrocarbons, Aliphatic	36.0	40 - 140	20 - 140	percent	J/UJ	C	
17110LCS17110 (BS)	Dibenz (a,h)anthracene	39.0	40 - 140	20 - 140	percent	J/UJ	C	
17110LCS17110 (BS)	Indeno(1,2,3-c,d)pyrene	39.0	40 - 140	20 - 140	percent	J/UJ	C	
17110LCS17110 (BS)	Naphthalene	32.0	40 - 140	20 - 140	percent	J/UJ	C	
17110LCSD17110 (BD)	2-Methylnaphthalene	36.0	40 - 140	20 - 140	percent	J/UJ	C	
17110LCSD17110 (BD)	Naphthalene	34.0	40 - 140	20 - 140	percent	J/UJ	C	

Where two qualifiers are listed, such as 'J/UJ', the first applies to positive results, and the second to non-detect results.
Upper and Lower Warning and Control Limits are abbreviated UWL, LWL, UCL, and LCL in the Comment field.

Qualified Results associated with the LCS Recovery for MADEPEP

FieldSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
SY-OBMW10-110623 67797-002	N	2-Methylnaphthalene	1.0	0.70 U#	0.70 UJ		ug/l	C
SY-OBMW10-110623 67797-002	N	C9-C18 Extractable Petroleum Hydrocarbons, Aliphatic	100	95 U#	95 UJ		ug/l	C
SY-OBMW10-110623 67797-002	N	Dibenz(a,h)anthracene	1.0	0.50 U#	0.50 UJ		ug/l	C
SY-OBMW10-110623 67797-002	N	Indeno(1,2,3-c,d)pyrene	1.0	0.50 U#	0.50 UJ		ug/l	C
SY-OBMW10-110623 67797-002	N	Naphthalene	1.0	0.70 U#	0.70 UJ		ug/l	C
SY-OBMW7-110623 67797-001	N	2-Methylnaphthalene	1.0	0.70 U#	0.70 UJ		ug/l	C
SY-OBMW7-110623 67797-001	N	C9-C18 Extractable Petroleum Hydrocarbons, Aliphatic	100	95 U#	95 UJ		ug/l	C
SY-OBMW7-110623 67797-001	N	Dibenz(a,h)anthracene	1.0	0.50 U#	0.50 UJ		ug/l	C
SY-OBMW7-110623 67797-001	N	Indeno(1,2,3-c,d)pyrene	1.0	0.50 U#	0.50 UJ		ug/l	C
SY-OBMW7-110623 67797-001	N	Naphthalene	1.0	0.70 U#	0.70 UJ		ug/l	C

Analytes not found in project samples are reported as not detected at the limit of detection (LOD) unless blank contamination occurs and then the sample may be reported as not detected at the (LOD) or (LOQ) based on the sample concentration and the validation guidance. In instances where no LOD is provided, results are reported down to the LOQ.

Quality Control Outliers for test method MADEPEP, LCS RPD

The objective of laboratory control sample/laboratory control sample duplicate (LCS/LCSD) RPD analysis is to demonstrate acceptable method precision by the laboratory at the time of analysis. LCS/LCSD analyses are also performed to generate data that determines the long-term precision of the analytical method on various matrices. Non-homogenous samples can impact the apparent method precision. Summary forms were evaluated and compared to electronic data deliverables. Laboratory control sample/laboratory control sample duplicate RPD results that were outside of the acceptance criteria are listed below.

Sample ID/ Lab Sample ID	Analyte	Result	Warning Limits	Control Limits	Units	Qualifier	Reason Code	Comment
17110LCSD17110 (BD)	C19-C36 Extractable Petroleum Hydrocarbons, Aliphatic	28.5	< 25	< 25	rpd	J/None	Z	

Where two qualifiers are listed, such as 'J/UJ', the first applies to positive results, and the second to non-detect results.
Upper and Lower Warning and Control Limits are abbreviated UWL, LWL, UCL, and LCL in the Comment field.

No results associated with this QC element required qualification.

Quality Control Outliers for test method MADEPVP, Lab Blank

The purpose of laboratory blanks is to determine the existence and magnitude of cross-contamination problems resulting from laboratory activities. Reported results were evaluated to determine compliance with the required acceptance criteria. Summary forms were evaluated and compared to electronic data deliverables. Findings of this review, and contaminants found in laboratory blanks are listed below along with any associated qualified results.

Sample ID/ Lab Sample ID	Analyte	Result	Warning Limits	Control Limits	Units	Qualifier	Reason Code	Comment
2303773BLK111623A (LB)	Ethylbenzene	0.410	< 0.404	< 2	ug/l	U/None*	L	

Where two qualifiers are listed, such as 'J/UJ', the first applies to positive results, and the second to non-detect results.
Upper and Lower Warning and Control Limits are abbreviated UWL, LWL, UCL, and LCL in the Comment field.

*Blank flags displayed in the above table identify qualification of the sample result when it is less than or equal to the LOQ/RL. Sample results above the LOD or LOQ will be qualified based on the validation guidance assigned in the project setup.

No results associated with this QC element required qualification.

Quality Control Outliers for test method SW8260D, LCS Recovery

The laboratory control sample/laboratory control sample duplicate (LCS/LCSD) serves as a monitor of the overall performance of each step during the analysis, including the sample preparation. Reported results were evaluated to determine compliance with the required acceptance criteria, and summary forms were evaluated and compared to electronic data deliverables. Findings of this review, and any associated qualified results, are listed below.

Sample ID/ Lab Sample ID	Analyte	Result	Warning Limits	Control Limits	Units	Qualifier	Reason Code	Comment
2303694LCS111323G (BS)	Carbon disulfide	135	64 - 133	20 - 133	percent	J/None	C	
2303694LCS111323G (BS)	tert-Butyl alcohol	131	68 - 129	20 - 129	percent	J/None	C	

Where two qualifiers are listed, such as 'J/UJ', the first applies to positive results, and the second to non-detect results.
Upper and Lower Warning and Control Limits are abbreviated UWL, LWL, UCL, and LCL in the Comment field.

No results associated with this QC element required qualification.

Quality Control Outliers for test method SW8260D, LCS RPD

The objective of laboratory control sample/laboratory control sample duplicate (LCS/LCSD) RPD analysis is to demonstrate acceptable method precision by the laboratory at the time of analysis. LCS/LCSD analyses are also performed to generate data that determines the long-term precision of the analytical method on various matrices. Non-homogenous samples can impact the apparent method precision. Summary forms were evaluated and compared to electronic data deliverables. Laboratory control sample/laboratory control sample duplicate RPD results that were outside of the acceptance criteria are listed below.

Sample ID/ Lab Sample ID	Analyte	Result	Warning Limits	Control Limits	Units	Qualifier	Reason Code	Comment
2303694LCSD111323G (BD)	1,1,2-Trichloroethane	21.6	< 20	< 20	rpd	J/None	Z	
2303694LCSD111323G (BD)	tert-Butyl alcohol	25.0	< 20	< 20	rpd	J/None	Z	

Where two qualifiers are listed, such as 'J/UJ', the first applies to positive results, and the second to non-detect results.
Upper and Lower Warning and Control Limits are abbreviated UWL, LWL, UCL, and LCL in the Comment field.

No results associated with this QC element required qualification.

Quality Control Outliers for test method SW8260D, Trip Blank

The purpose of trip blanks is to determine the existence and magnitude of cross-contamination problems resulting from the shipping of samples. Reported results were evaluated to determine compliance with the required acceptance criteria. Summary forms were evaluated and compared to electronic data deliverables. Findings of this review, and contaminants found in trip blanks are listed below along with any associated qualified results.

Sample ID/ Lab Sample ID	Analyte	Result	Warning Limits	Control Limits	Units	Qualifier	Reason Code	Comment
TB30-110623 (TB)	2-Butanone (MEK)	9.44	< 0.667527	< 10	ug/l	U/None*	T	
TB30-110623 (TB)	2-Hexanone	0.907	< 0.724505	< 10	ug/l	U/None*	T	
TB30-110623 (TB)	Acetone	7.08	< 1.93968	< 50	ug/l	U/None*	T	

Where two qualifiers are listed, such as 'J/UJ', the first applies to positive results, and the second to non-detect results.
Upper and Lower Warning and Control Limits are abbreviated UWL, LWL, UCL, and LCL in the Comment field.

*Blank flags displayed in the above table identify qualification of the sample result when it is less than or equal to the LOQ/RL. Sample results above the LOD or LOQ will be qualified based on the validation guidance assigned in the project setup.

No results associated with this QC element required qualification.

Quality Control Outliers for test method SW8270E, LCS Recovery

The laboratory control sample/laboratory control sample duplicate (LCS/LCSD) serves as a monitor of the overall performance of each step during the analysis, including the sample preparation. Reported results were evaluated to determine compliance with the required acceptance criteria, and summary forms were evaluated and compared to electronic data deliverables. Findings of this review, and any associated qualified results, are listed below.

Sample ID/ Lab Sample ID	Analyte	Result	Warning Limits	Control Limits	Units	Qualifier	Reason Code	Comment
17096LCS17096 (BS)	4-Chloro-3-methylphenol	43.0	52 - 119	20 - 119	percent	J/UJ	C	
17096LCS17096 (BS)	4-Nitrophenol	22.0	61 - 133	20 - 133	percent	J/UJ	C	
17096LCS17096 (BS)	Benzoic acid	23.0	57 - 129	20 - 129	percent	J/UJ	C	
17096LCS17096 (BS)	Diethyl phthalate	53.0	56 - 125	20 - 125	percent	J/UJ	C	
17096LCS17096 (BS)	Dimethyl phthalate	23.0	45 - 127	20 - 127	percent	J/UJ	C	
17096LCS17096 (BS)	Hexachlorocyclopentadiene	27.0	53 - 135	20 - 135	percent	J/UJ	C	
17096LCS17096 (BS)	N-Nitrosodimethylamine (NDMA)	39.0	43 - 121	20 - 121	percent	J/UJ	C	
17096LCS17096 (BS)	Phenol	22.0	72 - 132	20 - 132	percent	J/UJ	C	
17096LCSD17096 (BD)	1,2-Dichlorobenzene	30.0	32 - 111	20 - 111	percent	J/UJ	C	
17096LCSD17096 (BD)	1,3-Dichlorobenzene	25.0	28 - 110	20 - 110	percent	J/UJ	C	
17096LCSD17096 (BD)	1,4-Dichlorobenzene	26.0	29 - 112	20 - 112	percent	J/UJ	C	
17096LCSD17096 (BD)	4-Nitrophenol	32.0	61 - 133	20 - 133	percent	J/UJ	C	
17096LCSD17096 (BD)	Benzoic acid	33.0	57 - 129	20 - 129	percent	J/UJ	C	
17096LCSD17096 (BD)	Diethyl phthalate	54.0	56 - 125	20 - 125	percent	J/UJ	C	
17096LCSD17096 (BD)	Dimethyl phthalate	25.0	45 - 127	20 - 127	percent	J/UJ	C	
17096LCSD17096 (BD)	Hexachlorobutadiene	20.0	22 - 124	20 - 124	percent	J/UJ	C	
17096LCSD17096 (BD)	Hexachlorocyclopentadiene	22.0	53 - 135	20 - 135	percent	J/UJ	C	
17096LCSD17096 (BD)	Hexachloroethane	18.0	21 - 115	20 - 115	percent	J/X	C	
17096LCSD17096 (BD)	Phenol	30.0	72 - 132	20 - 132	percent	J/UJ	C	

Where two qualifiers are listed, such as 'J/UJ', the first applies to positive results, and the second to non-detect results.
Upper and Lower Warning and Control Limits are abbreviated UWL, LWL, UCL, and LCL in the Comment field.

Qualified Results associated with the LCS Recovery for SW8270E

FieldSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
SY-OBMW10-110623 67797-002	N	1,2-Dichlorobenzene	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-OBMW10-110623 67797-002	N	1,3-Dichlorobenzene	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-OBMW10-110623 67797-002	N	1,4-Dichlorobenzene	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-OBMW10-110623 67797-002	N	4-Chloro-3-methylphenol	2.0	1.0 U#	1.0 UJ		ug/l	C

Qualified Results associated with the LCS Recovery for SW8270E

FieldSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
SY-OBMW10-110623 67797-002	N	4-Nitrophenol	10	5.0 U#	5.0 UJ		ug/l	C
SY-OBMW10-110623 67797-002	N	Benzoic acid	50	45 U#	45 UJ		ug/l	C
SY-OBMW10-110623 67797-002	N	Diethyl phthalate	5.0	1.0 U#	1.0 UJ		ug/l	C
SY-OBMW10-110623 67797-002	N	Dimethyl phthalate	5.0	1.0 U#	1.0 UJ		ug/l	C
SY-OBMW10-110623 67797-002	N	Hexachlorobutadiene	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-OBMW10-110623 67797-002	N	Hexachlorocyclopentadiene	10	4.0 U#	4.0 UJ		ug/l	C
SY-OBMW10-110623 67797-002	N	Hexachloroethane	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-OBMW10-110623 67797-002	N	N-Nitrosodimethylamine (NDMA)	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-OBMW10-110623 67797-002	N	Phenol	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-OBMW7-110623 67797-001	N	1,2-Dichlorobenzene	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-OBMW7-110623 67797-001	N	1,3-Dichlorobenzene	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-OBMW7-110623 67797-001	N	1,4-Dichlorobenzene	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-OBMW7-110623 67797-001	N	4-Chloro-3-methylphenol	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-OBMW7-110623 67797-001	N	4-Nitrophenol	10	5.0 U#	5.0 UJ		ug/l	C
SY-OBMW7-110623 67797-001	N	Benzoic acid	50	45 U#	45 UJ		ug/l	C
SY-OBMW7-110623 67797-001	N	Diethyl phthalate	5.0	1.0 U#	1.0 UJ		ug/l	C
SY-OBMW7-110623 67797-001	N	Dimethyl phthalate	5.0	1.0 U#	1.0 UJ		ug/l	C
SY-OBMW7-110623 67797-001	N	Hexachlorobutadiene	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-OBMW7-110623 67797-001	N	Hexachlorocyclopentadiene	10	4.0 U#	4.0 UJ		ug/l	C
SY-OBMW7-110623 67797-001	N	Hexachloroethane	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-OBMW7-110623 67797-001	N	N-Nitrosodimethylamine (NDMA)	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-OBMW7-110623 67797-001	N	Phenol	2.0	1.0 U#	1.0 UJ		ug/l	C

Analytes not found in project samples are reported as not detected at the limit of detection (LOD) unless blank contamination occurs and then the sample may be reported as not detected at the (LOD) or (LOQ) based on the sample concentration and the validation guidance. In instances where no LOD is provided, results are reported down to the LOQ.

Quality Control Outliers for test method SW8270E, LCS RPD

The objective of laboratory control sample/laboratory control sample duplicate (LCS/LCSD) RPD analysis is to demonstrate acceptable method precision by the laboratory at the time of analysis. LCS/LCSD analyses are also performed to generate data that determines the long-term precision of the analytical method on various matrices. Non-homogenous samples can impact the apparent method precision. Summary forms were evaluated and compared to electronic data deliverables. Laboratory control sample/laboratory control sample duplicate RPD results that were outside of the acceptance criteria are listed below.

Sample ID/ Lab Sample ID	Analyte	Result	Warning Limits	Control Limits	Units	Qualifier	Reason Code	Comment
17096LCSD17096 (BD)	2,4,5-Trichlorophenol	25.6	< 20	< 20	rpd	J/None	Z	
17096LCSD17096 (BD)	2,4,6-Trichlorophenol	24.9	< 20	< 20	rpd	J/None	Z	
17096LCSD17096 (BD)	2,4-Dichlorophenol	36.3	< 20	< 20	rpd	J/None	Z	
17096LCSD17096 (BD)	2,4-Dinitrophenol	30.9	< 20	< 20	rpd	J/None	Z	
17096LCSD17096 (BD)	2-Chlorophenol	43.4	< 20	< 20	rpd	J/None	Z	
17096LCSD17096 (BD)	2-Methylphenol (o-Cresol)	36.9	< 20	< 20	rpd	J/None	Z	
17096LCSD17096 (BD)	2-Nitrophenol	23.4	< 20	< 20	rpd	J/None	Z	
17096LCSD17096 (BD)	4-Chloro-3-methylphenol	42.2	< 20	< 20	rpd	J/None	Z	
17096LCSD17096 (BD)	4-Methylphenol (p-Cresol)	41.3	< 20	< 20	rpd	J/None	Z	
17096LCSD17096 (BD)	4-Nitrophenol	34.7	< 20	< 20	rpd	J/None	Z	
17096LCSD17096 (BD)	Benzoic acid	38.3	< 20	< 20	rpd	J/None	Z	
17096LCSD17096 (BD)	Hexachlorocyclopentadiene	20.6	< 20	< 20	rpd	J/None	Z	
17096LCSD17096 (BD)	Phenol	28.8	< 20	< 20	rpd	J/None	Z	

Where two qualifiers are listed, such as 'J/UJ', the first applies to positive results, and the second to non-detect results.
Upper and Lower Warning and Control Limits are abbreviated UWL, LWL, UCL, and LCL in the Comment field.

No results associated with this QC element required qualification.

Table of All Qualified Results

Test Method: MADEPEP		Extraction Method: METHOD						
FieldSample ID / LabSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
SY-OBMW10-110623 67797-002	N	2-Methylnaphthalene	1.0	0.70 U#	0.70 UJ		ug/l	C
SY-OBMW10-110623 67797-002	N	C9-C18 Extractable Petroleum Hydrocarbons, Aliphatic	100	95 U#	95 UJ		ug/l	C
SY-OBMW10-110623 67797-002	N	Dibenz(a,h)anthracene	1.0	0.50 U#	0.50 UJ		ug/l	C
SY-OBMW10-110623 67797-002	N	Indeno(1,2,3-c,d)pyrene	1.0	0.50 U#	0.50 UJ		ug/l	C
SY-OBMW10-110623 67797-002	N	Naphthalene	1.0	0.70 U#	0.70 UJ		ug/l	C
SY-OBMW7-110623 67797-001	N	2-Methylnaphthalene	1.0	0.70 U#	0.70 UJ		ug/l	C
SY-OBMW7-110623 67797-001	N	C9-C18 Extractable Petroleum Hydrocarbons, Aliphatic	100	95 U#	95 UJ		ug/l	C
SY-OBMW7-110623 67797-001	N	Dibenz(a,h)anthracene	1.0	0.50 U#	0.50 UJ		ug/l	C
SY-OBMW7-110623 67797-001	N	Indeno(1,2,3-c,d)pyrene	1.0	0.50 U#	0.50 UJ		ug/l	C
SY-OBMW7-110623 67797-001	N	Naphthalene	1.0	0.70 U#	0.70 UJ		ug/l	C

Test Method: SW8270E		Extraction Method: SW3510C						
FieldSample ID / LabSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
SY-OBMW10-110623 67797-002	N	1,2-Dichlorobenzene	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-OBMW10-110623 67797-002	N	1,3-Dichlorobenzene	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-OBMW10-110623 67797-002	N	1,4-Dichlorobenzene	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-OBMW10-110623 67797-002	N	4-Chloro-3-methylphenol	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-OBMW10-110623 67797-002	N	4-Nitrophenol	10	5.0 U#	5.0 UJ		ug/l	C
SY-OBMW10-110623 67797-002	N	Benzoic acid	50	45 U#	45 UJ		ug/l	C
SY-OBMW10-110623 67797-002	N	Diethyl phthalate	5.0	1.0 U#	1.0 UJ		ug/l	C
SY-OBMW10-110623 67797-002	N	Dimethyl phthalate	5.0	1.0 U#	1.0 UJ		ug/l	C
SY-OBMW10-110623 67797-002	N	Hexachlorobutadiene	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-OBMW10-110623 67797-002	N	Hexachlorocyclopentadiene	10	4.0 U#	4.0 UJ		ug/l	C
SY-OBMW10-110623 67797-002	N	Hexachloroethane	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-OBMW10-110623 67797-002	N	N-Nitrosodimethylamine (NDMA)	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-OBMW10-110623 67797-002	N	Phenol	2.0	1.0 U#	1.0 UJ		ug/l	C

Table of All Qualified Results

Test Method: SW8270E		Extraction Method: SW3510C						
FieldSample ID / LabSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
SY-OBMW7-110623 67797-001	N	1,2-Dichlorobenzene	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-OBMW7-110623 67797-001	N	1,3-Dichlorobenzene	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-OBMW7-110623 67797-001	N	1,4-Dichlorobenzene	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-OBMW7-110623 67797-001	N	4-Chloro-3-methylphenol	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-OBMW7-110623 67797-001	N	4-Nitrophenol	10	5.0 U#	5.0 UJ		ug/l	C
SY-OBMW7-110623 67797-001	N	Benzoic acid	50	45 U#	45 UJ		ug/l	C
SY-OBMW7-110623 67797-001	N	Diethyl phthalate	5.0	1.0 U#	1.0 UJ		ug/l	C
SY-OBMW7-110623 67797-001	N	Dimethyl phthalate	5.0	1.0 U#	1.0 UJ		ug/l	C
SY-OBMW7-110623 67797-001	N	Hexachlorobutadiene	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-OBMW7-110623 67797-001	N	Hexachlorocyclopentadiene	10	4.0 U#	4.0 UJ		ug/l	C
SY-OBMW7-110623 67797-001	N	Hexachloroethane	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-OBMW7-110623 67797-001	N	N-Nitrosodimethylamine (NDMA)	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-OBMW7-110623 67797-001	N	Phenol	2.0	1.0 U#	1.0 UJ		ug/l	C

Analytes not found in project samples are reported as not detected at the limit of detection (LOD) unless blank contamination occurs and then the sample may be reported as not detected at the (LOQ) based on the sample concentration.
In instances where no LOD is provided, results are reported down to the LOQ.
Trace values are not included in the qualified results table unless additional reason codes are associated.

Table of Results with Modified Qualifiers

Modified Qualifiers for test method SW8270E

FieldSample ID / LabSample ID	Type	Analyte	LOQ	Lab Result	ADR Result	ADR Reason	Modified Result	Reason
SY-OBMW10-110623 67797-002	N	Hexachloroethane	2.0	1.0 U#	1.0 X	C	1.0 UJ	C
SY-OBMW7-110623 67797-001	N	Hexachloroethane	2.0	1.0 U#	1.0 X	C	1.0 UJ	C

Analytes not found in project samples are reported as not detected at the limit of detection (LOD) unless blank contamination occurs and then the sample may be reported as not detected at the (LOQ) based on the sample concentration.
In instances where no LOD is provided, results are reported down to the LOQ.
Trace values are not included in the qualified results table unless additional reason codes are associated.

Reason Code Definitions

Code	Definition
C	LCS Recovery
L	Lab Blank
T	Trip Blank
TR	Trace Level Detect
Z	LCS RPD

Flag Code and Definitions

Flag	Definition
J	Estimated Value
N	The analysis indicates the presence of an analyte for which there was presumptive evidence to make a tentative identification.
NJ	The analyte has been tentatively identified or presumptively as present and the associated numerical value was the estimated concentration in the sample.
R	The data are rejected due to deficiencies in meeting QC criteria and may not be used for decision making.
U	Undetected: The analyte was analyzed for, but not detected.
UJ	The analyte was not detected; however, the result is estimated due to discrepancies in meeting certain analyte-specific quality control criteria.
X	Result may require rejection; PDT attention required

Bias

-	The result may be biased low
+	The result may be biased high

Note - The bias field is a separate field; however, it is an integral part of the final flag (qualifier) on the sample result

Review Questions

Method: MADEPEP (Method for the Determination of Extractable Petroleum Hydrocarbons (EPH))				
Review Questions	Yes	No	NA	Comment
Were there discrepancies between the COC and the samples received?		•		No discrepancies were noted between the COC and the samples received.
Were there discrepancies between the COC and the sample labels?		•		No discrepancies were noted between the COC and the samples received.
Were samples relinquished properly on the COC?	•			
Were all samples properly preserved?	•			
Were sampling dates/times, date and time of laboratory receipt of samples, and sample conditions upon receipt at the laboratory (including preservation, pH, and temperature) documented?	•			
Were sample results reported with percent moisture correction if required?			•	Only water samples were collected.
Were analytical methods performed and analysis dates present?	•			
Were all requested target analytes reported?	•			
Were QAPP specified Project Quantitation Limit Goals achieved? (The laboratory LOQ is compared to the QAPP Project Quantitation Goal)	•			
Were holding times met?	•			
Were trip blanks analyzed at the proper frequency and in control?			•	Trip blanks were not collected for this analysis.
Were field blanks analyzed at the proper frequency and in control?			•	Field blanks were not collected.
Were equipment blanks analyzed at the proper frequency and in control?			•	Equipment blanks were not collected.
Was a method blank prepared and analyzed with each batch?	•			
Were target analytes in the method blank less than DL?	•			
Was an LCS/LCSD pair prepared and analyzed with each batch?	•			
Were LCS/LCSD recoveries within project acceptance limits?		•		Due to low LCS/LCSD %R, several non-detect results were qualified as estimated (UJ).
Was the LCS/LCSD RPD within project acceptance limits?		•		Although the LCS/LCSD RPD was high, the associated results were non-detect so sample qualification was not required.
Was a MS/MSD pair prepared with each batch?			•	MS/MSD was not performed on a sample from this SDG, but a project sample from another SDG was used in some batches.
Were MS/MSD recoveries within project acceptance limits?			•	MS/MSD was not performed on a sample from this SDG, but a project sample from another SDG was used in some batches.
Was the MS/MSD RPD within project acceptance limits?			•	MS/MSD was not performed on a sample from this SDG, but a project sample from another SDG was used in some batches.
If ISM was used for sample collection, were laboratory triplicates analyzed and within project acceptance limits?			•	ISM was not performed.
Were surrogate recoveries within project acceptance limits?	•			
Were field replicates (duplicates, triplicates, etc.) analyzed at the proper frequency and in control?			•	Field replicates were not collected in this SDG.
Were reported sample concentrations within calibration range?	•			
Have all Laboratory Case Narrative comments/findings been addressed in the data review process?	•			

Review Questions

Method: MADEPEP (Method for the Determination of Extractable Petroleum Hydrocarbons (EPH))				
Review Questions	Yes	No	NA	Comment
Were DoD QSM corrective actions followed if deviations were noted?	•			
Were any data recommended for exclusion in the data validation process?		•		All data is acceptable as reported or as qualified during data validation.

Review Questions

Method: MADEPVP (Method for the Determination of Volatile Petroleum Hydrocarbons (VPH))				
Review Questions	Yes	No	NA	Comment
Were there discrepancies between the COC and the samples received?		•		No discrepancies were noted between the COC and the samples received.
Were there discrepancies between the COC and the sample labels?		•		No discrepancies were noted between the COC and the samples received.
Were samples relinquished properly on the COC?	•			
Were all samples properly preserved?	•			
Were sampling dates/times, date and time of laboratory receipt of samples, and sample conditions upon receipt at the laboratory (including preservation, pH, and temperature) documented?	•			
Were sample results reported with percent moisture correction if required?			•	Only water samples were collected.
Were analytical methods performed and analysis dates present?	•			
Were all requested target analytes reported?	•			
Were QAPP specified Project Quantitation Limit Goals achieved? (The laboratory LOQ is compared to the QAPP Project Quantitation Goal)	•			
Were holding times met?	•			
Were trip blanks analyzed at the proper frequency and in control?	•			
Were field blanks analyzed at the proper frequency and in control?			•	Field blanks were not collected.
Were equipment blanks analyzed at the proper frequency and in control?			•	Equipment blanks were not collected.
Was a method blank prepared and analyzed with each batch?	•			
Were target analytes in the method blank less than DL?		•		Although ethylbenzene was detected in the method blank, the associated results were non-detect so sample qualification was not necessary.
Was an LCS/LCSD pair prepared and analyzed with each batch?	•			
Were LCS/LCSD recoveries within project acceptance limits?	•			
Was the LCS/LCSD RPD within project acceptance limits?	•			
Was a MS/MSD pair prepared with each batch?			•	MS/MSD was not performed on a sample from this SDG, but a project sample from another SDG was used in some batches.
Were MS/MSD recoveries within project acceptance limits?			•	MS/MSD was not performed on a sample from this SDG, but a project sample from another SDG was used in some batches.
Was the MS/MSD RPD within project acceptance limits?			•	MS/MSD was not performed on a sample from this SDG, but a project sample from another SDG was used in some batches.
If ISM was used for sample collection, were laboratory triplicates analyzed and within project acceptance limits?			•	ISM was not performed.
Were surrogate recoveries within project acceptance limits?	•			
Were field replicates (duplicates, triplicates, etc.) analyzed at the proper frequency and in control?			•	Field replicates were not collected in this SDG.
Were reported sample concentrations within calibration range?	•			

Review Questions

Method: MADEPVP (Method for the Determination of Volatile Petroleum Hydrocarbons (VPH))				
Review Questions	Yes	No	NA	Comment
Have all Laboratory Case Narrative comments/findings been addressed in the data review process?	•			
Were DoD QSM corrective actions followed if deviations were noted?	•			
Were any data recommended for exclusion in the data validation process?		•		All data is acceptable as reported.

Review Questions

Method: SW6020A (Trace Metals by Inductively Coupled Plasma/Mass Spectrometry)				
Review Questions	Yes	No	NA	Comment
Were there discrepancies between the COC and the samples received?		•		No discrepancies were noted between the COC and the samples received.
Were there discrepancies between the COC and the sample labels?		•		No discrepancies were noted between the COC and the samples received.
Were samples relinquished properly on the COC?	•			
Were all samples properly preserved?	•			
Were sampling dates/times, date and time of laboratory receipt of samples, and sample conditions upon receipt at the laboratory (including preservation, pH, and temperature) documented?	•			
Were sample results reported with percent moisture correction if required?			•	Only water samples were collected.
Were analytical methods performed and analysis dates present?	•			
Were all requested target analytes reported?	•			
Were QAPP specified Project Quantitation Limit Goals achieved? (The laboratory LOQ is compared to the QAPP Project Quantitation Goal)	•			
Were holding times met?	•			
Were trip blanks analyzed at the proper frequency and in control?			•	Trip blanks were not collected for this method.
Were field blanks analyzed at the proper frequency and in control?			•	Field blanks were not collected.
Were equipment blanks analyzed at the proper frequency and in control?			•	Equipment blanks were not collected.
Was a method blank prepared and analyzed with each batch?	•			
Were target analytes in the method blank less than DL?	•			
Was an LCS/LCSD pair prepared and analyzed with each batch?	•			
Were LCS/LCSD recoveries within project acceptance limits?	•			
Was the LCS/LCSD RPD within project acceptance limits?	•			
Was a MS/MSD pair prepared with each batch?			•	MS/MSD was not performed on a sample from this SDG, but a project sample from another SDG was used in some batches.
Were MS/MSD recoveries within project acceptance limits?			•	MS/MSD was not performed on a sample from this SDG, but a project sample from another SDG was used in some batches.
Was the MS/MSD RPD within project acceptance limits?			•	MS/MSD was not performed on a sample from this SDG, but a project sample from another SDG was used in some batches.
Were Post Spike (PS) recoveries within project acceptance limits?			•	PS was not reported.
Was a Dilution Test/Serial Dilution performed and within project acceptance criteria?			•	Serial dilution was not reported.
If ISM was used for sample collection, were laboratory triplicates analyzed and within project acceptance limits?			•	ISM was not collected.
Were field replicates (duplicates, triplicates, etc.) analyzed at the proper frequency and in control?			•	Field replicates were not collected in this SDG.
Were reported sample concentrations within calibration range?	•			

Review Questions

Method: SW6020A (Trace Metals by Inductively Coupled Plasma/Mass Spectrometry)				
Review Questions	Yes	No	NA	Comment
Have all Laboratory Case Narrative comments/findings been addressed in the data review process?	•			
Were DoD QSM corrective actions followed if deviations were noted?	•			
Were any data recommended for exclusion in the data validation process?		•		All results are acceptable as reported.

Review Questions

Method: SW7470A (Mercury in Water (Manual Cold-Vapor Technique))

Review Questions	Yes	No	NA	Comment
Were there discrepancies between the COC and the samples received?		•		No discrepancies were noted between the COC and the samples received.
Were there discrepancies between the COC and the sample labels?		•		No discrepancies were noted between the COC and the samples received.
Were samples relinquished properly on the COC?	•			
Were all samples properly preserved?	•			
Were sampling dates/times, date and time of laboratory receipt of samples, and sample conditions upon receipt at the laboratory (including preservation, pH, and temperature) documented?	•			
Were sample results reported with percent moisture correction if required?			•	Only water samples were collected.
Were analytical methods performed and analysis dates present?	•			
Were all requested target analytes reported?	•			
Were QAPP specified Project Quantitation Limit Goals achieved? (The laboratory LOQ is compared to the QAPP Project Quantitation Goal)	•			
Were holding times met?	•			
Were trip blanks analyzed at the proper frequency and in control?			•	Trip blanks were not collected for this method.
Were field blanks analyzed at the proper frequency and in control?			•	Field blanks were not collected.
Were equipment blanks analyzed at the proper frequency and in control?			•	Equipment blanks were not collected.
Was a method blank prepared and analyzed with each batch?	•			
Were target analytes in the method blank less than DL?	•			
Was an LCS/LCSD pair prepared and analyzed with each batch?	•			
Were LCS/LCSD recoveries within project acceptance limits?	•			
Was the LCS/LCSD RPD within project acceptance limits?	•			
Was a MS/MSD pair prepared with each batch?			•	MS/MSD was not performed on a sample from this SDG, but a project sample from another SDG was used in some batches.
Were MS/MSD recoveries within project acceptance limits?			•	MS/MSD was not performed on a sample from this SDG, but a project sample from another SDG was used in some batches.
Was the MS/MSD RPD within project acceptance limits?			•	MS/MSD was not performed on a sample from this SDG, but a project sample from another SDG was used in some batches.
If ISM was used for sample collection, were laboratory triplicates analyzed and within project acceptance limits?			•	ISM was not performed.
Were field replicates (duplicates, triplicates, etc.) analyzed at the proper frequency and in control?			•	Field replicates were not collected in this SDG.
Were reported sample concentrations within calibration range?	•			
Have all Laboratory Case Narrative comments/findings been addressed in the data review process?	•			
Were DoD QSM corrective actions followed if deviations were noted?	•			

Review Questions

Method: SW7470A (Mercury in Water (Manual Cold-Vapor Technique))				
Review Questions	Yes	No	NA	Comment
Were any data recommended for exclusion in the data validation process?		•		All data is acceptable as reported.

Review Questions

Method: SW8082A (Polychlorinated Biphenyls (PCB))

Review Questions	Yes	No	NA	Comment
Were there discrepancies between the COC and the samples received?		•		No discrepancies were noted between the COC and the samples received.
Were there discrepancies between the COC and the sample labels?		•		No discrepancies were noted between the COC and the samples received.
Were samples relinquished properly on the COC?	•			
Were all samples properly preserved?	•			
Were sampling dates/times, date and time of laboratory receipt of samples, and sample conditions upon receipt at the laboratory (including preservation, pH, and temperature) documented?	•			
Were sample results reported with percent moisture correction if required?			•	Only water samples were collected.
Were analytical methods performed and analysis dates present?	•			
Were all requested target analytes reported?	•			
Were QAPP specified Project Quantitation Limit Goals achieved? (The laboratory LOQ is compared to the QAPP Project Quantitation Goal)	•			
Were holding times met?	•			
Were trip blanks analyzed at the proper frequency and in control?			•	Trip blanks were not collected for this method.
Were field blanks analyzed at the proper frequency and in control?			•	Field blanks were not collected.
Were equipment blanks analyzed at the proper frequency and in control?			•	Equipment blanks were not collected.
Was a method blank prepared and analyzed with each batch?	•			
Were target analytes in the method blank less than DL?	•			
Was an LCS/LCSD pair prepared and analyzed with each batch?	•			
Were LCS/LCSD recoveries within project acceptance limits?	•			
Was the LCS/LCSD RPD within project acceptance limits?	•			
Was a MS/MSD pair prepared with each batch?			•	MS/MSD was not performed on a sample from this SDG, but a project sample from another SDG was used in some batches.
Were MS/MSD recoveries within project acceptance limits?			•	MS/MSD was not performed on a sample from this SDG, but a project sample from another SDG was used in some batches.
Was the MS/MSD RPD within project acceptance limits?			•	MS/MSD was not performed on a sample from this SDG, but a project sample from another SDG was used in some batches.
If ISM was used for sample collection, were laboratory triplicates analyzed and within project acceptance limits?			•	ISM was not performed.
Were surrogate recoveries within project acceptance limits?	•			
Were field replicates (duplicates, triplicates, etc.) analyzed at the proper frequency and in control?			•	Field replicates were not collected in this SDG.
Were reported sample concentrations within calibration range?	•			
Have all Laboratory Case Narrative comments/findings been addressed in the data review process?	•			

Review Questions

Method: SW8082A (Polychlorinated Biphenyls (PCB))				
Review Questions	Yes	No	NA	Comment
Were DoD QSM corrective actions followed if deviations were noted?	•			
Were any data recommended for exclusion in the data validation process?		•		All data is acceptable as reported.

Review Questions

Method: SW8260D (Volatile Organic Compounds by GC/MS)

Review Questions	Yes	No	NA	Comment
Were there discrepancies between the COC and the samples received?		•		No discrepancies were noted between the COC and the samples received.
Were there discrepancies between the COC and the sample labels?		•		No discrepancies were noted between the COC and the samples received.
Were samples relinquished properly on the COC?	•			
Were all samples properly preserved?	•			
Were sampling dates/times, date and time of laboratory receipt of samples, and sample conditions upon receipt at the laboratory (including preservation, pH, and temperature) documented?	•			
Were sample results reported with percent moisture correction if required?			•	Only water samples were collected.
Were analytical methods performed and analysis dates present?	•			
Were all requested target analytes reported?	•			
Were QAPP specified Project Quantitation Limit Goals achieved? (The laboratory LOQ is compared to the QAPP Project Quantitation Goal)	•			
Were holding times met?	•			
Were trip blanks analyzed at the proper frequency and in control?		•		Although several detects were in the trip blank, the associated results were non-detect so sample qualification was not necessary.
Were field blanks analyzed at the proper frequency and in control?			•	Field blanks were not collected.
Were equipment blanks analyzed at the proper frequency and in control?			•	Equipment blanks were not collected.
Was a method blank prepared and analyzed with each batch?	•			
Were target analytes in the method blank less than DL?	•			
Was an LCS/LCSD pair prepared and analyzed with each batch?	•			
Were LCS/LCSD recoveries within project acceptance limits?		•		Although several analytes recovered high, the associated results were non-detect so sample qualification was not necessary.
Was the LCS/LCSD RPD within project acceptance limits?		•		Although several analytes had high RPDs, the associated results were non-detect so sample qualification was not necessary.
Was a MS/MSD pair prepared with each batch?		•		MS/MSD analysis was not performed.
Were MS/MSD recoveries within project acceptance limits?			•	MS/MSD analysis was not performed.
Was the MS/MSD RPD within project acceptance limits?			•	MS/MSD analysis was not performed.
If ISM was used for sample collection, were laboratory triplicates analyzed and within project acceptance limits?			•	ISM was not performed.
Were surrogate recoveries within project acceptance limits?	•			
Were field replicates (duplicates, triplicates, etc.) analyzed at the proper frequency and in control?			•	Field replicates were not collected in this SDG.
Were reported sample concentrations within calibration range?	•			
Have all Laboratory Case Narrative comments/findings been addressed in the data review process?	•			
Were DoD QSM corrective actions followed if deviations were noted?	•			

Review Questions

Method: SW8260D (Volatile Organic Compounds by GC/MS)				
Review Questions	Yes	No	NA	Comment
Were any data recommended for exclusion in the data validation process?		•		All data is acceptable as reported.

Review Questions

Method: SW8270E (Semivolatile Organic Compounds by Gas Chromatography/Mass Spectrometry)				
Review Questions	Yes	No	NA	Comment
Were there discrepancies between the COC and the samples received?		•		No discrepancies were noted between the COC and the samples received.
Were there discrepancies between the COC and the sample labels?		•		No discrepancies were noted between the COC and the samples received.
Were samples relinquished properly on the COC?	•			
Were all samples properly preserved?	•			
Were sampling dates/times, date and time of laboratory receipt of samples, and sample conditions upon receipt at the laboratory (including preservation, pH, and temperature) documented?	•			
Were sample results reported with percent moisture correction if required?			•	Only water samples were collected.
Were analytical methods performed and analysis dates present?	•			
Were all requested target analytes reported?	•			
Were QAPP specified Project Quantitation Limit Goals achieved? (The laboratory LOQ is compared to the QAPP Project Quantitation Goal)	•			
Were holding times met?	•			
Were trip blanks analyzed at the proper frequency and in control?			•	Trip blank was not collected for this method.
Were field blanks analyzed at the proper frequency and in control?			•	Field blanks were not collected.
Were equipment blanks analyzed at the proper frequency and in control?			•	Equipment blanks were not collected.
Was a method blank prepared and analyzed with each batch?	•			
Were target analytes in the method blank less than DL?	•			
Was an LCS/LCSD pair prepared and analyzed with each batch?	•			
Were LCS/LCSD recoveries within project acceptance limits?		•		Due to low LCS/LCSD %R, several non-detected analytes were qualified as estimated (UJ). Although hexachloroethane in the LCSD recovered, below 20%, the LCS recovered within the control limit. Based on professional judgement, the X qualifier for hexachloroethane was changed to UJ during data validation.
Was the LCS/LCSD RPD within project acceptance limits?		•		Although several LCS/LCSD RPDs were high, the associated results were non-detect so sample qualification was not necessary.
Was a MS/MSD pair prepared with each batch?			•	MS/MSD was not performed on a sample from this SDG, but a project sample from another SDG was used in some batches.
Were MS/MSD recoveries within project acceptance limits?			•	MS/MSD was not performed on a sample from this SDG, but a project sample from another SDG was used in some batches.
Was the MS/MSD RPD within project acceptance limits?			•	MS/MSD was not performed on a sample from this SDG, but a project sample from another SDG was used in some batches.
If ISM was used for sample collection, were laboratory triplicates analyzed and within project acceptance limits?			•	ISM was not performed.
Were surrogate recoveries within project acceptance limits?	•			
Were field replicates (duplicates, triplicates, etc.) analyzed at the proper frequency and in control?			•	Field replicates were not collected in this SDG.

Review Questions

Method: SW8270E (Semivolatile Organic Compounds by Gas Chromatography/Mass Spectrometry)				
Review Questions	Yes	No	NA	Comment
Were reported sample concentrations within calibration range?	•			
Have all Laboratory Case Narrative comments/findings been addressed in the data review process?	•			
Were DoD QSM corrective actions followed if deviations were noted?	•			
Were any data recommended for exclusion in the data validation process?		•		All data is acceptable as reported or as qualified during data validation.

Data Validation Report for 67798

Facility:	D01ME0004-07, Dow Military Airfield, Salvage Yard
Event:	Dow SY Groundwater Nov 2023
SDG:	67798
Guidance Document:	Final UFP QAPP Revision No. 1 Remedial Investigation Former Salvage Yard Former Dow Military Airfield 233 Odlin Road, Bangor, Maine December 2022
Prime Contractor:	Credere Associates, LLC, Westbrook, ME
Project Manager:	Peter Thompson
Contract Laboratory(ies):	Absolute Resource Associates, LLC, Portsmouth, NH
Data Review Contractor:	EnSafe, Inc.
Data Review Level:	S2AVEM
Primary Data Reviewer:	Christina Ashdown, Senior Chemist
Second Reviewer:	Kevin Kha, Environmental Scientist
Date Submitted:	January 24, 2024

Field Sample ID	Lab Sample ID	Matrix	Type/Type Code	MADEPEP	MADEPVP	SW6020A	SW6020A - Dissolved	SW7470A	SW7470A - Dissolved	SW8082A	SW8260D	SW8270E
SY-BRMW2-252.5-262.5-110723	67798-010	Water	Field Sample/N	X	X	X		X		X	X	X
SY-BRMW2-252.5-262.5-110723	67798-021	Water	Field Sample/N				X		X			
SY-BRMW2-60.5-70.5-110723	67798-004	Water	Field Sample/N	X	X	X		X		X	X	X
SY-BRMW2-60.5-70.5-110723	67798-015	Water	Field Sample/N				X		X			
SY-BRMW2-80.5-95.5-110723	67798-007	Water	Field Sample/N	X	X	X		X		X	X	X
SY-BRMW2-80.5-95.5-110723	67798-018	Water	Field Sample/N				X		X			
SY-OBMW12-110723	67798-001	Water	Field Sample/N	X	X	X		X		X	X	X
SY-OBMW12-110723	67798-012	Water	Field Sample/N				X		X			
SY-OBMW13-110723	67798-008	Water	Field Sample/N	X	X	X		X		X	X	X
SY-OBMW13-110723	67798-019	Water	Field Sample/N				X		X			
SY-OBMW14-110723	67798-009	Water	Field Sample/N	X	X	X		X		X	X	X
SY-OBMW14-110723	67798-020	Water	Field Sample/N				X		X			
SY-OBMW15-110723	67798-005	Water	Field Sample/N	X	X	X		X		X	X	X
SY-OBMW15-110723	67798-016	Water	Field Sample/N				X		X			
SY-OBMW4R-110723	67798-003	Water	Field Sample/N	X	X	X		X		X	X	X
SY-OBMW4R-110723	67798-014	Water	Field Sample/N				X		X			
SY-OBMW5-110723	67798-006	Water	Field Sample/N	X	X	X		X		X	X	X
SY-OBMW5-110723	67798-017	Water	Field Sample/N				X		X			

Field Sample ID	Lab Sample ID	Matrix	Type/Type Code	MADEPEP	MADEPVP	SW6020A	SW6020A - Dissolved	SW7470A	SW7470A - Dissolved	SW8082A	SW8260D	SW8270E
SY-OBMW6-110723	67798-002	Water	Field Sample/N	X	X	X		X		X	X	X
SY-OBMW6-110723	67798-013	Water	Field Sample/N				X		X			
TB31-110723	67798-011	Water	Trip Blank/TB		X						X	

This report assesses the analytical data quality associated with the analyses listed on the preceding cover page at S2AVEM data validation level. This assessment has been made through a combination of automated data review (ADR) and supplemental manual review, the details of which are described below. The approach taken in the review of this data set is consistent with the requirements contained in the Final UFP QAPP Revision No. 1 Remedial Investigation Former Salvage Yard Former Dow Military Airfield 233 Odlin Road, Bangor, Maine December 2022 and the additional guidance documents incorporated by reference to the extent possible. Where definitive guidance is not provided, results have been evaluated in a conservative manner using professional judgment.

Sample collection was managed and directed by Credere Associates, LLC, Westbrook, ME; analyses were performed by Absolute Resource Associates, LLC, Portsmouth, NH and were reported under sample delivery group (SDG) 67798. Data have been evaluated electronically based on electronic data deliverables (EDDs) provided by the laboratory, and hard copy data summary forms have also been reviewed during this effort and compared to the automated review output by the reviewers whose signatures appear on the following page. Findings based on the automated data submission and manual data verification processes are detailed in the ADR narrative and throughout this report.

All quality control (QC) elements associated with this SDG have been reviewed by a project chemist in accordance with the requirements defined for the project. This review is documented in the attached Data Review Checklists. The QC elements listed below were supported by the electronic deliverable and were evaluated using ADR processes.

- Blank - Negative
- Lab Blank
- LCS Recovery
- LCS RPD
- MS Recovery
- MS RPD
- Prep Hold Time
- Surrogate
- Test Hold Time
- Trip Blank

Results of the ADR process were subsequently reviewed and updated as applicable by the data review chemists identified on the signature page. Quality control elements that were not included in the electronic deliverable were reviewed manually and findings are documented within this report. Summaries of findings and associated qualified results are documented throughout this report.

A total of 210 results (9.66%) out of the 2173 results (sample and field QC samples) reported are qualified based on review and 7 results (0.32%) have been rejected or deemed a serious deficiency (X qualifier). Trace values, defined as results that are qualified as estimated because they fall between the detection limit and the reporting limit/limit of quantitation, are not counted as qualified results in the above count. The qualified results are detailed throughout this report and discussed in the narrative below, where appropriate.

Narrative Comments

Analytical Method	Data Reviewer Comment
MADEPEP	The laboratory case narrative indicates the following: "Samples 67798-007 through -010 did not meet acceptance criteria for the extraction surrogate 1-chlorooctadecane. No additional sample volume remains for re-analysis. The results have been qualified accordingly." The sample results were qualified accordingly during data validation. "The LCS/D17110 did not meet the acceptance criteria for naphthalene, 2-methylnaphthalene, indeno(1,2,3-cd)pyrene, dibenzo(a,h)anthracene, and C9-C18 Aliphatics. These compounds showed low recoveries. The relative percent difference between the LCS and LCSD17110 was outside the acceptance criteria for C19-C36 Aliphatics. No additional sample volume remains for re-analysis. The results have been qualified accordingly." The sample results were qualified accordingly during data validation. "The matrix spike/duplicate for 67798-001 and -007 did not meet the acceptance criteria for naphthalene, 2-methylnaphthalene, acenaphthylene, and C19-C36 Aliphatics. These compounds showed low recoveries. Similar recoveries were observed in the associated LCS/D. No additional sample volume remains for re-analysis. The results have been qualified accordingly." The sample results were qualified accordingly during data validation.
MADEPVP	The laboratory case narrative indicates the following: "The matrix spike/duplicate for 67798-001 and -007 did not meet the acceptance criteria for Unadjusted C9-C12 Aliphatics, C5-C8 Aliphatics, C9-C12 Aliphatics, and C9-C10 Aromatics. The associated LCS/D met the method acceptance criteria. Compounds that exhibited recoveries outside the acceptance criteria have been qualified with an "M." Matrix interference suspected." The associated sample results were non-detect so sample qualification was not warranted.
SW6020A	This includes both total and dissolved 6020A results. The laboratory case narrative indicates the following: "The matrix spike for 67798-007 and -012 did not meet the acceptance criteria for Potassium. The percent recovery was acceptable in the associated LCS/D. The recovery for the PDS for is provided with the results. Matrix interference suspected. Sample results have been qualified accordingly. Magnesium was not able to be evaluated as the native sample concentration is greater than 4 times the spike concentration." The sample results were qualified accordingly during data validation.
SW7470A	This includes both total and dissolved 7470A results.
SW8082A	The laboratory case narrative indicates the following: "The sample extract for 67798-003 (SY-OBMW4R-110723) PCB analysis was spilled during the final stages of sample concentration losing an unknown amount. No additional sample volume remains for re-analysis. The results have been reported, but based on the extremely low surrogate recoveries, a significant portion of the extract was lost during the spill." Due to loss of sample and the low surrogate recoveries, the PCB results for this sample were recommended for exclusion (X).

SW8260D	The laboratory case narrative indicates the following: "The LCS2303675 did not meet the acceptance criteria for t-butanol (TBA), 1,4-dioxane, and 1,2,3-trichloropropane. The LCS2303675 did not meet the acceptance criteria for chloroethane, diethyl ether, t-butanol (TBA), toluene, 1,3-dichloropropane, and 1,2,3-trichloropropane. These compounds showed high recoveries. There is no impact to the data as these analytes were not detected in the associated samples." The sample results were qualified accordingly during data validation. "The matrix spike/duplicate for 67798-001 and -007 did not meet the acceptance criteria for several compounds. The associated LCS/D met the method acceptance criteria. Compounds that exhibited recoveries outside the acceptance criteria have been qualified with an "M." Matrix interference suspected." The sample results were qualified accordingly during data validation.
SW8270E	The laboratory case narrative indicates the following: "The LCS/D17096 did not meet the acceptance criteria for several compounds. These compounds showed low recoveries. The relative percent difference between the LCS and LCSD17096 was outside the acceptance criteria for several compounds. No additional sample volume remains for re-analysis. The results have been qualified accordingly." The results were qualified accordingly during data validation. "The matrix spike/duplicate for 67798-001 and -007 did not meet the acceptance criteria for several compounds. These compounds showed low recoveries. Similar recoveries were observed in the associated LCS/D. No additional sample volume remains for re-analysis. The results have been qualified accordingly." The results were qualified accordingly during data validation.

Christina Ashdown

January 10, 2024

Reviewed by Christina Ashdown, Senior Chemist, EnSafe, Inc.

As the First Reviewer, I certify that I have performed a data review process in accordance with the requirements of the project guidance document, and have compared the electronic data to the laboratory's hard copy report and have verified the consistency of the reported sample results and method quality control data between the two deliverables.

Kevin Kha

Reviewed by Kevin Kha, Environmental Scientist, EnSafe, Inc. February 14, 2024

As the Second Reviewer, I certify that I have performed a quality assurance review of the report generated by the First Reviewer.

Quality Control Outliers for test method MADEPEP, LCS Recovery

The laboratory control sample/laboratory control sample duplicate (LCS/LCSD) serves as a monitor of the overall performance of each step during the analysis, including the sample preparation. Reported results were evaluated to determine compliance with the required acceptance criteria, and summary forms were evaluated and compared to electronic data deliverables. Findings of this review, and any associated qualified results, are listed below.

Sample ID/ Lab Sample ID	Analyte	Result	Warning Limits	Control Limits	Units	Qualifier	Reason Code	Comment
17110LCS17110 (BS)	2-Methylnaphthalene	36.0	40 - 140	20 - 140	percent	J/UJ	C	
17110LCS17110 (BS)	C9-C18 Extractable Petroleum Hydrocarbons, Aliphatic	36.0	40 - 140	20 - 140	percent	J/UJ	C	
17110LCS17110 (BS)	Dibenz (a,h)anthracene	39.0	40 - 140	20 - 140	percent	J/UJ	C	
17110LCS17110 (BS)	Indeno(1,2,3-c,d)pyrene	39.0	40 - 140	20 - 140	percent	J/UJ	C	
17110LCS17110 (BS)	Naphthalene	32.0	40 - 140	20 - 140	percent	J/UJ	C	
17110LCSD17110 (BD)	2-Methylnaphthalene	36.0	40 - 140	20 - 140	percent	J/UJ	C	
17110LCSD17110 (BD)	Naphthalene	34.0	40 - 140	20 - 140	percent	J/UJ	C	

Where two qualifiers are listed, such as 'J/UJ', the first applies to positive results, and the second to non-detect results.
Upper and Lower Warning and Control Limits are abbreviated UWL, LWL, UCL, and LCL in the Comment field.

Qualified Results associated with the LCS Recovery for MADEPEP

FieldSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
SY-BRMW2-252.5-262.5-110723 67798-010	N	2-Methylnaphthalene	1.0	0.70 U#	0.70 UJ		ug/l	C
SY-BRMW2-252.5-262.5-110723 67798-010	N	C9-C18 Extractable Petroleum Hydrocarbons, Aliphatic	100	95 U#	95 UJ		ug/l	C/I
SY-BRMW2-252.5-262.5-110723 67798-010	N	Dibenz(a,h)anthracene	1.0	0.50 U#	0.50 UJ		ug/l	C
SY-BRMW2-252.5-262.5-110723 67798-010	N	Indeno(1,2,3-c,d)pyrene	1.0	0.50 U#	0.50 UJ		ug/l	C
SY-BRMW2-252.5-262.5-110723 67798-010	N	Naphthalene	1.0	0.70 U#	0.70 UJ		ug/l	C
SY-BRMW2-60.5-70.5-110723 67798-004	N	2-Methylnaphthalene	1.0	0.70 U#	0.70 UJ		ug/l	C
SY-BRMW2-60.5-70.5-110723 67798-004	N	C9-C18 Extractable Petroleum Hydrocarbons, Aliphatic	100	95 U#	95 UJ		ug/l	C
SY-BRMW2-60.5-70.5-110723 67798-004	N	Dibenz(a,h)anthracene	1.0	0.50 U#	0.50 UJ		ug/l	C
SY-BRMW2-60.5-70.5-110723 67798-004	N	Indeno(1,2,3-c,d)pyrene	1.0	0.50 U#	0.50 UJ		ug/l	C

Qualified Results associated with the LCS Recovery for MADEPEP

FieldSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
SY-BRMW2-60.5-70.5-110723 67798-004	N	Naphthalene	1.0	0.70 U#	0.70 UJ		ug/l	C
SY-BRMW2-80.5-95.5-110723 67798-007	N	2-Methylnaphthalene	1.0	0.70 UJM	0.70 UJ		ug/l	C/M
SY-BRMW2-80.5-95.5-110723 67798-007	N	C9-C18 Extractable Petroleum Hydrocarbons, Aliphatic	100	95 UJM	95 UJ		ug/l	C/I/M
SY-BRMW2-80.5-95.5-110723 67798-007	N	Dibenz(a,h)anthracene	1.0	0.50 U#	0.50 UJ		ug/l	C
SY-BRMW2-80.5-95.5-110723 67798-007	N	Indeno(1,2,3-c,d)pyrene	1.0	0.50 U#	0.50 UJ		ug/l	C
SY-BRMW2-80.5-95.5-110723 67798-007	N	Naphthalene	1.0	0.70 U#M	0.70 UJ		ug/l	C/M
SY-OBMW12-110723 67798-001	N	2-Methylnaphthalene	1.0	0.70 UJM	0.70 UJ		ug/l	C/M
SY-OBMW12-110723 67798-001	N	C9-C18 Extractable Petroleum Hydrocarbons, Aliphatic	100	95 UJM	95 UJ		ug/l	C/M
SY-OBMW12-110723 67798-001	N	Dibenz(a,h)anthracene	1.0	0.50 U#	0.50 UJ		ug/l	C
SY-OBMW12-110723 67798-001	N	Indeno(1,2,3-c,d)pyrene	1.0	0.50 U#	0.50 UJ		ug/l	C
SY-OBMW12-110723 67798-001	N	Naphthalene	1.0	0.70 U#M	0.70 UJ		ug/l	C/M
SY-OBMW13-110723 67798-008	N	2-Methylnaphthalene	1.0	0.70 U#	0.70 UJ		ug/l	C
SY-OBMW13-110723 67798-008	N	C9-C18 Extractable Petroleum Hydrocarbons, Aliphatic	100	95 U#	95 UJ		ug/l	C/I
SY-OBMW13-110723 67798-008	N	Dibenz(a,h)anthracene	1.0	0.50 U#	0.50 UJ		ug/l	C
SY-OBMW13-110723 67798-008	N	Indeno(1,2,3-c,d)pyrene	1.0	0.50 U#	0.50 UJ		ug/l	C
SY-OBMW13-110723 67798-008	N	Naphthalene	1.0	0.70 U#	0.70 UJ		ug/l	C
SY-OBMW14-110723 67798-009	N	2-Methylnaphthalene	1.0	0.70 U#	0.70 UJ		ug/l	C
SY-OBMW14-110723 67798-009	N	C9-C18 Extractable Petroleum Hydrocarbons, Aliphatic	100	95 U#	95 UJ		ug/l	C/I
SY-OBMW14-110723 67798-009	N	Dibenz(a,h)anthracene	1.0	0.50 U#	0.50 UJ		ug/l	C
SY-OBMW14-110723 67798-009	N	Indeno(1,2,3-c,d)pyrene	1.0	0.50 U#	0.50 UJ		ug/l	C
SY-OBMW14-110723 67798-009	N	Naphthalene	1.0	0.70 U#	0.70 UJ		ug/l	C
SY-OBMW15-110723 67798-005	N	2-Methylnaphthalene	1.0	0.70 U#	0.70 UJ		ug/l	C
SY-OBMW15-110723 67798-005	N	C9-C18 Extractable Petroleum Hydrocarbons, Aliphatic	100	95 U#	95 UJ		ug/l	C

Qualified Results associated with the LCS Recovery for MADEPEP

FieldSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
SY-OBMW15-110723 67798-005	N	Dibenz(a,h)anthracene	1.0	0.50 U#	0.50 UJ		ug/l	C
SY-OBMW15-110723 67798-005	N	Indeno(1,2,3-c,d)pyrene	1.0	0.50 U#	0.50 UJ		ug/l	C
SY-OBMW15-110723 67798-005	N	Naphthalene	1.0	0.70 U#	0.70 UJ		ug/l	C
SY-OBMW4R-110723 67798-003	N	2-Methylnaphthalene	1.0	0.70 U#	0.70 UJ		ug/l	C
SY-OBMW4R-110723 67798-003	N	C9-C18 Extractable Petroleum Hydrocarbons, Aliphatic	100	95 U#	95 UJ		ug/l	C
SY-OBMW4R-110723 67798-003	N	Dibenz(a,h)anthracene	1.0	0.50 U#	0.50 UJ		ug/l	C
SY-OBMW4R-110723 67798-003	N	Indeno(1,2,3-c,d)pyrene	1.0	0.50 U#	0.50 UJ		ug/l	C
SY-OBMW4R-110723 67798-003	N	Naphthalene	1.0	0.70 U#	0.70 UJ		ug/l	C
SY-OBMW5-110723 67798-006	N	2-Methylnaphthalene	1.0	0.70 U#	0.70 UJ		ug/l	C
SY-OBMW5-110723 67798-006	N	C9-C18 Extractable Petroleum Hydrocarbons, Aliphatic	100	95 U#	95 UJ		ug/l	C
SY-OBMW5-110723 67798-006	N	Dibenz(a,h)anthracene	1.0	0.50 U#	0.50 UJ		ug/l	C
SY-OBMW5-110723 67798-006	N	Indeno(1,2,3-c,d)pyrene	1.0	0.50 U#	0.50 UJ		ug/l	C
SY-OBMW5-110723 67798-006	N	Naphthalene	1.0	0.70 U#	0.70 UJ		ug/l	C
SY-OBMW6-110723 67798-002	N	2-Methylnaphthalene	1.0	0.70 U#	0.70 UJ		ug/l	C
SY-OBMW6-110723 67798-002	N	C9-C18 Extractable Petroleum Hydrocarbons, Aliphatic	100	95 U#	95 UJ		ug/l	C
SY-OBMW6-110723 67798-002	N	Dibenz(a,h)anthracene	1.0	0.50 U#	0.50 UJ		ug/l	C
SY-OBMW6-110723 67798-002	N	Indeno(1,2,3-c,d)pyrene	1.0	0.50 U#	0.50 UJ		ug/l	C
SY-OBMW6-110723 67798-002	N	Naphthalene	1.0	0.70 U#	0.70 UJ		ug/l	C

Analytes not found in project samples are reported as not detected at the limit of detection (LOD) unless blank contamination occurs and then the sample may be reported as not detected at the (LOD) or (LOQ) based on the sample concentration and the validation guidance. In instances where no LOD is provided, results are reported down to the LOQ.

Quality Control Outliers for test method MADEPEP, LCS RPD

The objective of laboratory control sample/laboratory control sample duplicate (LCS/LCSD) RPD analysis is to demonstrate acceptable method precision by the laboratory at the time of analysis. LCS/LCSD analyses are also performed to generate data that determines the long-term precision of the analytical method on various matrices. Non-homogenous samples can impact the apparent method precision. Summary forms were evaluated and compared to electronic data deliverables. Laboratory control sample/laboratory control sample duplicate RPD results that were outside of the acceptance criteria are listed below.

Sample ID/ Lab Sample ID	Analyte	Result	Warning Limits	Control Limits	Units	Qualifier	Reason Code	Comment
17110LCSD17110 (BD)	C19-C36 Extractable Petroleum Hydrocarbons, Aliphatic	28.5	< 25	< 25	rpd	J/None	Z	

Where two qualifiers are listed, such as 'J/UJ', the first applies to positive results, and the second to non-detect results.
Upper and Lower Warning and Control Limits are abbreviated UWL, LWL, UCL, and LCL in the Comment field.

Qualified Results associated with the LCS RPD for MADEPEP

FieldSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
SY-OBMW14-110723 67798-009	N	C19-C36 Extractable Petroleum Hydrocarbons, Aliphatic	100	120	120 J	-	ug/l	I/Z

Analytes not found in project samples are reported as not detected at the limit of detection (LOD) unless blank contamination occurs and then the sample may be reported as not detected at the (LOD) or (LOQ) based on the sample concentration and the validation guidance. In instances where no LOD is provided, results are reported down to the LOQ.

Quality Control Outliers for test method MADEPEP, MS Recovery

Data for matrix spikes/matrix spike duplicates (MS/MSD) are generated to determine long-term precision and accuracy of the analytical method on various matrices and to demonstrate acceptable compound recovery by the laboratory at the time of sample analysis. These data alone cannot be used to evaluate the precision and accuracy of individual samples. However, when exercising professional judgment, MS/MSD data can be used in conjunction with other available QC information. Reported results were evaluated to determine compliance with the required acceptance criteria, and summary forms were evaluated and compared to electronic data deliverables. Findings of this review, and any associated qualified results, are listed below.

Sample ID/ Lab Sample ID	Analyte	Result	Warning Limits	Control Limits	Units	Qualifier	Reason Code	Comment
SY-BRMW2-80.5-95.5-110723 (MS)	2-Methylnaphthalene	34.0	40 - 140	20 - 140	percent	J/UJ	M	
SY-BRMW2-80.5-95.5-110723 (SD)	2-Methylnaphthalene	25.0	40 - 140	20 - 140	percent	J/UJ	M	
SY-BRMW2-80.5-95.5-110723 (SD)	Acenaphthylene	37.0	40 - 140	20 - 140	percent	J/UJ	M	
SY-BRMW2-80.5-95.5-110723 (SD)	C9-C18 Extractable Petroleum Hydrocarbons, Aliphatic	36.0	40 - 140	20 - 140	percent	J/UJ	M	
SY-BRMW2-80.5-95.5-110723 (MS)	Naphthalene	28.0	40 - 140	20 - 140	percent	J/UJ	M	
SY-BRMW2-80.5-95.5-110723 (SD)	Naphthalene	21.0	40 - 140	20 - 140	percent	J/UJ	M	
SY-OBMW12-110723 (MS)	2-Methylnaphthalene	34.0	40 - 140	20 - 140	percent	J/UJ	M	
SY-OBMW12-110723 (SD)	2-Methylnaphthalene	32.0	40 - 140	20 - 140	percent	J/UJ	M	
SY-OBMW12-110723 (SD)	C9-C18 Extractable Petroleum Hydrocarbons, Aliphatic	37.0	40 - 140	20 - 140	percent	J/UJ	M	
SY-OBMW12-110723 (MS)	Naphthalene	26.0	40 - 140	20 - 140	percent	J/UJ	M	
SY-OBMW12-110723 (SD)	Naphthalene	26.0	40 - 140	20 - 140	percent	J/UJ	M	

Where two qualifiers are listed, such as 'J/UJ', the first applies to positive results, and the second to non-detect results.
Upper and Lower Warning and Control Limits are abbreviated UWL, LWL, UCL, and LCL in the Comment field.

Qualified Results associated with the MS Recovery for MADEPEP

FieldSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
SY-BRMW2-80.5-95.5-110723 67798-007	N	2-Methylnaphthalene	1.0	0.70 UJM	0.70 UJ		ug/l	C/M
SY-BRMW2-80.5-95.5-110723 67798-007	N	Acenaphthylene	1.0	0.50 UM	0.50 UJ		ug/l	M
SY-BRMW2-80.5-95.5-110723 67798-007	N	C9-C18 Extractable Petroleum Hydrocarbons, Aliphatic	100	95 UJM	95 UJ		ug/l	C/I/M
SY-BRMW2-80.5-95.5-110723 67798-007	N	Naphthalene	1.0	0.70 U#M	0.70 UJ		ug/l	C/M
SY-OBMW12-110723 67798-001	N	2-Methylnaphthalene	1.0	0.70 UJM	0.70 UJ		ug/l	C/M

Qualified Results associated with the MS Recovery for MADEPEP

FieldSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
SY-OBMW12-110723 67798-001	N	C9-C18 Extractable Petroleum Hydrocarbons, Aliphatic	100	95 UJM	95 UJ		ug/l	C/M
SY-OBMW12-110723 67798-001	N	Naphthalene	1.0	0.70 U#M	0.70 UJ		ug/l	C/M

Analytes not found in project samples are reported as not detected at the limit of detection (LOD) unless blank contamination occurs and then the sample may be reported as not detected at the (LOD) or (LOQ) based on the sample concentration and the validation guidance. In instances where no LOD is provided, results are reported down to the LOQ.

Quality Control Outliers for test method MADEPEP, Surrogate

Method performance for individual samples is demonstrated through spiking activities. All samples are spiked with surrogate compounds prior to sample preparation. The sample itself may produce effects due to such factors as interferences and high concentrations of analytes. Summary forms were evaluated and compared to electronic data deliverables. Surrogate results that were outside of the acceptance criteria are listed below.

Sample ID/ Lab Sample ID	Analyte	Result	Warning Limits	Control Limits	Units	Qualifier	Reason Code	Comment
SY-BRMW2-252.5-262.5-110723 (N)	1-Chlorooctadecane (Stearyl chloride)	36.0	40 - 140	10 - 140	percent	J/UJ	I	
SY-BRMW2-80.5-95.5-110723 (N)	1-Chlorooctadecane (Stearyl chloride)	39.0	40 - 140	10 - 140	percent	J/UJ	I	
SY-OBMW13-110723 (N)	1-Chlorooctadecane (Stearyl chloride)	25.0	40 - 140	10 - 140	percent	J/UJ	I	
SY-OBMW14-110723 (N)	1-Chlorooctadecane (Stearyl chloride)	39.0	40 - 140	10 - 140	percent	J/UJ	I	

Where two qualifiers are listed, such as 'J/UJ', the first applies to positive results, and the second to non-detect results.
Upper and Lower Warning and Control Limits are abbreviated UWL, LWL, UCL, and LCL in the Comment field.

Qualified Results associated with the Surrogate for MADEPEP

FieldSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
SY-BRMW2-252.5-262.5-110723 67798-010	N	C11-C22 Extractable Petroleum Hydrocarbons, Aromatic	100	85 U	85 UJ		ug/l	I
SY-BRMW2-252.5-262.5-110723 67798-010	N	C11-C22 Extractable Petroleum Hydrocarbons, Aromatic (Unadjusted)	100	85 U	85 UJ		ug/l	I
SY-BRMW2-252.5-262.5-110723 67798-010	N	C19-C36 Extractable Petroleum Hydrocarbons, Aliphatic	100	97 U	97 UJ		ug/l	I
SY-BRMW2-252.5-262.5-110723 67798-010	N	C9-C18 Extractable Petroleum Hydrocarbons, Aliphatic	100	95 U#	95 UJ		ug/l	C/I
SY-BRMW2-80.5-95.5-110723 67798-007	N	C11-C22 Extractable Petroleum Hydrocarbons, Aromatic	100	85 U	85 UJ		ug/l	I
SY-BRMW2-80.5-95.5-110723 67798-007	N	C11-C22 Extractable Petroleum Hydrocarbons, Aromatic (Unadjusted)	100	85 U	85 UJ		ug/l	I
SY-BRMW2-80.5-95.5-110723 67798-007	N	C19-C36 Extractable Petroleum Hydrocarbons, Aliphatic	100	97 U	97 UJ		ug/l	I
SY-BRMW2-80.5-95.5-110723 67798-007	N	C9-C18 Extractable Petroleum Hydrocarbons, Aliphatic	100	95 UJM	95 UJ		ug/l	C/I/M
SY-OBMW13-110723 67798-008	N	C11-C22 Extractable Petroleum Hydrocarbons, Aromatic	100	62 J	62 J	-	ug/l	I/TR
SY-OBMW13-110723 67798-008	N	C11-C22 Extractable Petroleum Hydrocarbons, Aromatic (Unadjusted)	100	62 J	62 J	-	ug/l	I/TR

Qualified Results associated with the Surrogate for MADEPEP

FieldSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
SY-OBMW13-110723 67798-008	N	C19-C36 Extractable Petroleum Hydrocarbons, Aliphatic	100	97 U	97 UJ		ug/l	I
SY-OBMW13-110723 67798-008	N	C9-C18 Extractable Petroleum Hydrocarbons, Aliphatic	100	95 U#	95 UJ		ug/l	C/I
SY-OBMW14-110723 67798-009	N	C11-C22 Extractable Petroleum Hydrocarbons, Aromatic	100	60 J	60 J	-	ug/l	I/TR
SY-OBMW14-110723 67798-009	N	C11-C22 Extractable Petroleum Hydrocarbons, Aromatic (Unadjusted)	100	60 J	60 J	-	ug/l	I/TR
SY-OBMW14-110723 67798-009	N	C19-C36 Extractable Petroleum Hydrocarbons, Aliphatic	100	120	120 J	-	ug/l	I/Z
SY-OBMW14-110723 67798-009	N	C9-C18 Extractable Petroleum Hydrocarbons, Aliphatic	100	95 U#	95 UJ		ug/l	C/I

Analytes not found in project samples are reported as not detected at the limit of detection (LOD) unless blank contamination occurs and then the sample may be reported as not detected at the (LOD) or (LOQ) based on the sample concentration and the validation guidance. In instances where no LOD is provided, results are reported down to the LOQ.

Quality Control Outliers for test method MADEPVP, Lab Blank

The purpose of laboratory blanks is to determine the existence and magnitude of cross-contamination problems resulting from laboratory activities. Reported results were evaluated to determine compliance with the required acceptance criteria. Summary forms were evaluated and compared to electronic data deliverables. Findings of this review, and contaminants found in laboratory blanks are listed below along with any associated qualified results.

Sample ID/ Lab Sample ID	Analyte	Result	Warning Limits	Control Limits	Units	Qualifier	Reason Code	Comment
2303773BLK111623A (LB)	Ethylbenzene	0.410	< 0.404	< 2	ug/l	U/None*	L	

Where two qualifiers are listed, such as 'J/UJ', the first applies to positive results, and the second to non-detect results.
Upper and Lower Warning and Control Limits are abbreviated UWL, LWL, UCL, and LCL in the Comment field.

*Blank flags displayed in the above table identify qualification of the sample result when it is less than or equal to the LOQ/RL. Sample results above the LOD or LOQ will be qualified based on the validation guidance assigned in the project setup.

Qualified Results associated with the Lab Blank for MADEPVP

FieldSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
SY-OBMW13-110723 67798-008	N	Ethylbenzene	2.0	0.46 J	2.0 U		ug/l	L
SY-OBMW6-110723 67798-002	N	Ethylbenzene	2.0	0.46 J	2.0 U		ug/l	L

Analytes not found in project samples are reported as not detected at the limit of detection (LOD) unless blank contamination occurs and then the sample may be reported as not detected at the (LOD) or (LOQ) based on the sample concentration and the validation guidance. In instances where no LOD is provided, results are reported down to the LOQ.

Quality Control Outliers for test method MADEPVP, MS Recovery

Data for matrix spikes/matrix spike duplicates (MS/MSD) are generated to determine long-term precision and accuracy of the analytical method on various matrices and to demonstrate acceptable compound recovery by the laboratory at the time of sample analysis. These data alone cannot be used to evaluate the precision and accuracy of individual samples. However, when exercising professional judgment, MS/MSD data can be used in conjunction with other available QC information. Reported results were evaluated to determine compliance with the required acceptance criteria, and summary forms were evaluated and compared to electronic data deliverables. Findings of this review, and any associated qualified results, are listed below.

Sample ID/ Lab Sample ID	Analyte	Result	Warning Limits	Control Limits	Units	Qualifier	Reason Code	Comment
SY-BRMW2-80.5-95.5-110723 (MS)	C9-C10 Volatile Petroleum Hydrocarbons, Aromatic	174	70 - 130	20 - 130	percent	J/None	M	
SY-BRMW2-80.5-95.5-110723 (SD)	C9-C10 Volatile Petroleum Hydrocarbons, Aromatic	178	70 - 130	20 - 130	percent	J/None	M	
SY-BRMW2-80.5-95.5-110723 (MS)	C9-C12 Volatile Petroleum Hydrocarbons, Aliphatic	131	70 - 130	20 - 130	percent	J/None	M	
SY-BRMW2-80.5-95.5-110723 (SD)	C9-C12 Volatile Petroleum Hydrocarbons, Aliphatic	132	70 - 130	20 - 130	percent	J/None	M	
SY-OBMW12-110723 (MS)	C9-C10 Volatile Petroleum Hydrocarbons, Aromatic	190	70 - 130	20 - 130	percent	J/None	M	
SY-OBMW12-110723 (SD)	C9-C10 Volatile Petroleum Hydrocarbons, Aromatic	184	70 - 130	20 - 130	percent	J/None	M	
SY-OBMW12-110723 (MS)	C9-C12 Volatile Petroleum Hydrocarbons, Aliphatic	136	70 - 130	20 - 130	percent	J/None	M	
SY-OBMW12-110723 (SD)	C9-C12 Volatile Petroleum Hydrocarbons, Aliphatic	134	70 - 130	20 - 130	percent	J/None	M	

Where two qualifiers are listed, such as 'J/UJ', the first applies to positive results, and the second to non-detect results.
Upper and Lower Warning and Control Limits are abbreviated UWL, LWL, UCL, and LCL in the Comment field.

No results associated with this QC element required qualification.

Quality Control Outliers for test method SW6020A, Dissolved, MS Recovery

Data for matrix spikes/matrix spike duplicates (MS/MSD) are generated to determine long-term precision and accuracy of the analytical method on various matrices and to demonstrate acceptable compound recovery by the laboratory at the time of sample analysis. These data alone cannot be used to evaluate the precision and accuracy of individual samples. However, when exercising professional judgment, MS/MSD data can be used in conjunction with other available QC information. Reported results were evaluated to determine compliance with the required acceptance criteria, and summary forms were evaluated and compared to electronic data deliverables. Findings of this review, and any associated qualified results, are listed below.

Sample ID/ Lab Sample ID	Analyte	Result	Warning Limits	Control Limits	Units	Qualifier	Reason Code	Comment
SY-OBMW12-110723 (MS)	Magnesium	29.0	83 - 118	30 - 125	percent	J/X	M	Spike amount Insignificant
SY-OBMW12-110723 (SD)	Magnesium	50.0	83 - 118	30 - 125	percent	J/UJ	M	Spike amount Insignificant
SY-OBMW12-110723 (SD)	Potassium	86.0	87 - 115	30 - 125	percent	J/UJ	M	

Where two qualifiers are listed, such as 'J/UJ', the first applies to positive results, and the second to non-detect results.
Upper and Lower Warning and Control Limits are abbreviated UWL, LWL, UCL, and LCL in the Comment field.

Qualified Results associated with the MS Recovery for SW6020A, Dissolved

FieldSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
SY-OBMW12-110723 67798-012	N	Potassium	0.54	2.6 M	2.6 J	-	mg/l	M

Analytes not found in project samples are reported as not detected at the limit of detection (LOD) unless blank contamination occurs and then the sample may be reported as not detected at the (LOD) or (LOQ) based on the sample concentration and the validation guidance. In instances where no LOD is provided, results are reported down to the LOQ.

Quality Control Outliers for test method SW6020A, Total, MS Recovery

Data for matrix spikes/matrix spike duplicates (MS/MSD) are generated to determine long-term precision and accuracy of the analytical method on various matrices and to demonstrate acceptable compound recovery by the laboratory at the time of sample analysis. These data alone cannot be used to evaluate the precision and accuracy of individual samples. However, when exercising professional judgment, MS/MSD data can be used in conjunction with other available QC information. Reported results were evaluated to determine compliance with the required acceptance criteria, and summary forms were evaluated and compared to electronic data deliverables. Findings of this review, and any associated qualified results, are listed below.

Sample ID/ Lab Sample ID	Analyte	Result	Warning Limits	Control Limits	Units	Qualifier	Reason Code	Comment
SY-BRMW2-80.5-95.5-110723 (SD)	Potassium	86.0	87 - 115	30 - 125	percent	J/UJ	M	
SY-OBMW12-110723 (MS)	Magnesium	-95.0	83 - 118	30 - 125	percent	J/X	M	Spike amount Insignificant
SY-OBMW12-110723 (SD)	Magnesium	-6.00	83 - 118	30 - 125	percent	J/X	M	Spike amount Insignificant

Where two qualifiers are listed, such as 'J/UJ', the first applies to positive results, and the second to non-detect results.
Upper and Lower Warning and Control Limits are abbreviated UWL, LWL, UCL, and LCL in the Comment field.

Qualified Results associated with the MS Recovery for SW6020A, Total

FieldSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
SY-BRMW2-80.5-95.5-110723 67798-007	N	Potassium	0.50	1.2 M	1.2 J	-	mg/l	M

Analytes not found in project samples are reported as not detected at the limit of detection (LOD) unless blank contamination occurs and then the sample may be reported as not detected at the (LOD) or (LOQ) based on the sample concentration and the validation guidance. In instances where no LOD is provided, results are reported down to the LOQ.

Quality Control Outliers for test method SW8082A, Surrogate

Method performance for individual samples is demonstrated through spiking activities. All samples are spiked with surrogate compounds prior to sample preparation. The sample itself may produce effects due to such factors as interferences and high concentrations of analytes. Summary forms were evaluated and compared to electronic data deliverables. Surrogate results that were outside of the acceptance criteria are listed below.

Sample ID/ Lab Sample ID	Analyte	Result	Warning Limits	Control Limits	Units	Qualifier	Reason Code	Comment
SY-OBMW4R-110723 (N)	2,4,5,6-Tetrachloro-meta-xylene	3.00	30 - 150	10 - 150	percent	J/X	I	
SY-OBMW4R-110723 (N)	Decachlorobiphenyl	3.00	30 - 150	10 - 150	percent	J/X	I	

Where two qualifiers are listed, such as 'J/UJ', the first applies to positive results, and the second to non-detect results.
Upper and Lower Warning and Control Limits are abbreviated UWL, LWL, UCL, and LCL in the Comment field.

Qualified Results associated with the Surrogate for SW8082A

FieldSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
SY-OBMW4R-110723 67798-003	N	PCB-1016 (Aroclor 1016)	0.10	0.062 U	0.062 X		ug/l	I/P2
SY-OBMW4R-110723 67798-003	N	PCB-1221 (Aroclor 1221)	0.10	0.062 U	0.062 X		ug/l	I/P2
SY-OBMW4R-110723 67798-003	N	PCB-1232 (Aroclor 1232)	0.10	0.062 U	0.062 X		ug/l	I/P2
SY-OBMW4R-110723 67798-003	N	PCB-1242 (Aroclor 1242)	0.10	0.062 U	0.062 X		ug/l	I/P2
SY-OBMW4R-110723 67798-003	N	PCB-1248 (Aroclor 1248)	0.10	0.062 U	0.062 X		ug/l	I/P2
SY-OBMW4R-110723 67798-003	N	PCB-1254 (Aroclor 1254)	0.10	0.062 U	0.062 X		ug/l	I/P2
SY-OBMW4R-110723 67798-003	N	PCB-1260 (Aroclor 1260)	0.10	0.062 U	0.062 X		ug/l	I/P2

Analytes not found in project samples are reported as not detected at the limit of detection (LOD) unless blank contamination occurs and then the sample may be reported as not detected at the (LOD) or (LOQ) based on the sample concentration and the validation guidance. In instances where no LOD is provided, results are reported down to the LOQ.

Quality Control Outliers for test method SW8260D, Lab Blank

The purpose of laboratory blanks is to determine the existence and magnitude of cross-contamination problems resulting from laboratory activities. Reported results were evaluated to determine compliance with the required acceptance criteria. Summary forms were evaluated and compared to electronic data deliverables. Findings of this review, and contaminants found in laboratory blanks are listed below along with any associated qualified results.

Sample ID/ Lab Sample ID	Analyte	Result	Warning Limits	Control Limits	Units	Qualifier	Reason Code	Comment
2303675BLK111023G (LB)	Carbon disulfide	0.363	< 0.333713	< 2	ug/l	U/None*	L	

Where two qualifiers are listed, such as 'J/UJ', the first applies to positive results, and the second to non-detect results.
Upper and Lower Warning and Control Limits are abbreviated UWL, LWL, UCL, and LCL in the Comment field.

*Blank flags displayed in the above table identify qualification of the sample result when it is less than or equal to the LOQ/RL. Sample results above the LOD or LOQ will be qualified based on the validation guidance assigned in the project setup.

Qualified Results associated with the Lab Blank for SW8260D

FieldSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
SY-OBMW5-110723 67798-006	N	Carbon disulfide	2.0	0.39 J	2.0 U		ug/l	L

Analytes not found in project samples are reported as not detected at the limit of detection (LOD) unless blank contamination occurs and then the sample may be reported as not detected at the (LOD) or (LOQ) based on the sample concentration and the validation guidance. In instances where no LOD is provided, results are reported down to the LOQ.

Quality Control Outliers for test method SW8260D, LCS Recovery

The laboratory control sample/laboratory control sample duplicate (LCS/LCSD) serves as a monitor of the overall performance of each step during the analysis, including the sample preparation. Reported results were evaluated to determine compliance with the required acceptance criteria, and summary forms were evaluated and compared to electronic data deliverables. Findings of this review, and any associated qualified results, are listed below.

Sample ID/ Lab Sample ID	Analyte	Result	Warning Limits	Control Limits	Units	Qualifier	Reason Code	Comment
2303675LCS111023G (BS)	1,2,3-Trichloropropane	124	73 - 122	20 - 122	percent	J/None	C	
2303675LCS111023G (BS)	1,4-Dioxane	144	59 - 139	20 - 139	percent	J/None	C	
2303675LCS111023G (BS)	tert-Butyl alcohol	130	68 - 129	20 - 129	percent	J/None	C	
2303675LCSD111023G (BD)	1,2,3-Trichloropropane	129	73 - 122	20 - 122	percent	J/None	C	
2303675LCSD111023G (BD)	1,3-Dichloropropane	121	80 - 119	20 - 119	percent	J/None	C	
2303675LCSD111023G (BD)	Carbon disulfide	146	64 - 133	20 - 133	percent	J/None	C	
2303675LCSD111023G (BD)	Chloroethane	150	60 - 138	20 - 138	percent	J/None	C	
2303675LCSD111023G (BD)	Diethyl ether (Ethyl ether)	131	68 - 129	20 - 129	percent	J/None	C	
2303675LCSD111023G (BD)	tert-Butyl alcohol	134	68 - 129	20 - 129	percent	J/None	C	
2303675LCSD111023G (BD)	Toluene	122	80 - 121	20 - 121	percent	J/None	C	

Where two qualifiers are listed, such as 'J/UJ', the first applies to positive results, and the second to non-detect results.
Upper and Lower Warning and Control Limits are abbreviated UWL, LWL, UCL, and LCL in the Comment field.

Qualified Results associated with the LCS Recovery for SW8260D

FieldSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
SY-BRMW2-252.5-262.5-110723 67798-010	N	Toluene	2.0	1.3 J	1.3 J	+	ug/l	C/TR
SY-BRMW2-60.5-70.5-110723 67798-004	N	Toluene	2.0	6.3	6.3 J	+	ug/l	C
SY-BRMW2-80.5-95.5-110723 67798-007	N	Toluene	2.0	1.8 J	1.8 J	+	ug/l	C/M/TR

Analytes not found in project samples are reported as not detected at the limit of detection (LOD) unless blank contamination occurs and then the sample may be reported as not detected at the (LOD) or (LOQ) based on the sample concentration and the validation guidance. In instances where no LOD is provided, results are reported down to the LOQ.

Quality Control Outliers for test method SW8260D, MS Recovery

Data for matrix spikes/matrix spike duplicates (MS/MSD) are generated to determine long-term precision and accuracy of the analytical method on various matrices and to demonstrate acceptable compound recovery by the laboratory at the time of sample analysis. These data alone cannot be used to evaluate the precision and accuracy of individual samples. However, when exercising professional judgment, MS/MSD data can be used in conjunction with other available QC information. Reported results were evaluated to determine compliance with the required acceptance criteria, and summary forms were evaluated and compared to electronic data deliverables. Findings of this review, and any associated qualified results, are listed below.

Sample ID/ Lab Sample ID	Analyte	Result	Warning Limits	Control Limits	Units	Qualifier	Reason Code	Comment
SY-BRMW2-80.5-95.5-110723 (MS)	1,3-Dichloropropane	120	80 - 119	20 - 119	percent	J/None	M	
SY-BRMW2-80.5-95.5-110723 (MS)	1,4-Dioxane	140	59 - 139	20 - 139	percent	J/None	M	
SY-BRMW2-80.5-95.5-110723 (MS)	Carbon disulfide	143	64 - 133	20 - 133	percent	J/None	M	
SY-BRMW2-80.5-95.5-110723 (SD)	Carbon disulfide	145	64 - 133	20 - 133	percent	J/None	M	
SY-BRMW2-80.5-95.5-110723 (MS)	Chloroethane	148	60 - 138	20 - 138	percent	J/None	M	
SY-BRMW2-80.5-95.5-110723 (SD)	Chloroethane	147	60 - 138	20 - 138	percent	J/None	M	
SY-BRMW2-80.5-95.5-110723 (MS)	Diethyl ether (Ethyl ether)	130	68 - 129	20 - 129	percent	J/None	M	
SY-BRMW2-80.5-95.5-110723 (SD)	Diethyl ether (Ethyl ether)	130	68 - 129	20 - 129	percent	J/None	M	
SY-BRMW2-80.5-95.5-110723 (MS)	m,p-Xylene	123	80 - 121	20 - 121	percent	J/None	M	
SY-BRMW2-80.5-95.5-110723 (SD)	Toluene	123	80 - 121	20 - 121	percent	J/None	M	
SY-OBMW12-110723 (MS)	1,2,3-Trichloropropane	124	73 - 122	20 - 122	percent	J/None	M	
SY-OBMW12-110723 (SD)	1,2,3-Trichloropropane	128	73 - 122	20 - 122	percent	J/None	M	
SY-OBMW12-110723 (SD)	1,3-Dichloropropane	120	80 - 119	20 - 119	percent	J/None	M	
SY-OBMW12-110723 (SD)	2-Chlorotoluene	127	79 - 122	20 - 122	percent	J/None	M	
SY-OBMW12-110723 (MS)	Carbon disulfide	140	64 - 133	20 - 133	percent	J/None	M	
SY-OBMW12-110723 (SD)	Carbon disulfide	149	64 - 133	20 - 133	percent	J/None	M	
SY-OBMW12-110723 (MS)	Chloroethane	144	60 - 138	20 - 138	percent	J/None	M	
SY-OBMW12-110723 (SD)	Chloroethane	153	60 - 138	20 - 138	percent	J/None	M	
SY-OBMW12-110723 (MS)	Diethyl ether (Ethyl ether)	137	68 - 129	20 - 129	percent	J/None	M	
SY-OBMW12-110723 (SD)	Diethyl ether (Ethyl ether)	135	68 - 129	20 - 129	percent	J/None	M	
SY-OBMW12-110723 (SD)	Ethylbenzene	122	79 - 121	20 - 121	percent	J/None	M	
SY-OBMW12-110723 (SD)	m,p-Xylene	125	80 - 121	20 - 121	percent	J/None	M	
SY-OBMW12-110723 (MS)	tert-Butyl alcohol	131	68 - 129	20 - 129	percent	J/None	M	

Where two qualifiers are listed, such as 'J/UJ', the first applies to positive results, and the second to non-detect results.
Upper and Lower Warning and Control Limits are abbreviated UWL, LWL, UCL, and LCL in the Comment field.

Qualified Results associated with the MS Recovery for SW8260D

Qualified Results associated with the MS Recovery for SW8260D

FieldSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
SY-BRMW2-80.5-95.5-110723 67798-007	N	Toluene	2.0	1.8 J	1.8 J	+	ug/l	C/M/TR

Analytes not found in project samples are reported as not detected at the limit of detection (LOD) unless blank contamination occurs and then the sample may be reported as not detected at the (LOD) or (LOQ) based on the sample concentration and the validation guidance. In instances where no LOD is provided, results are reported down to the LOQ.

Quality Control Outliers for test method SW8260D, MS RPD

The objective of matrix spikes/matrix spike duplicates (MS/MSD) RPD analysis is to demonstrate acceptable method precision by the laboratory at the time of analysis. MS/MSD analyses are also performed to generate data that determines the long-term precision of the analytical method on various matrices. Non-homogenous samples can impact the apparent method precision. Summary forms were evaluated and compared to electronic data deliverables. Matrix spikes/matrix spike duplicates results that were outside of the acceptance criteria are listed below.

Sample ID/ Lab Sample ID	Analyte	Result	Warning Limits	Control Limits	Units	Qualifier	Reason Code	Comment
SY-OBMW12-110723 (SD)	1,1,2-Trichloroethane	21.7	< 20	< 20	rpd	J/None	D	

Where two qualifiers are listed, such as 'J/UJ', the first applies to positive results, and the second to non-detect results.
Upper and Lower Warning and Control Limits are abbreviated UWL, LWL, UCL, and LCL in the Comment field.

No results associated with this QC element required qualification.

Quality Control Outliers for test method SW8270E, LCS Recovery

The laboratory control sample/laboratory control sample duplicate (LCS/LCSD) serves as a monitor of the overall performance of each step during the analysis, including the sample preparation. Reported results were evaluated to determine compliance with the required acceptance criteria, and summary forms were evaluated and compared to electronic data deliverables. Findings of this review, and any associated qualified results, are listed below.

Sample ID/ Lab Sample ID	Analyte	Result	Warning Limits	Control Limits	Units	Qualifier	Reason Code	Comment
17096LCS17096 (BS)	4-Chloro-3-methylphenol	43.0	52 - 119	20 - 119	percent	J/UJ	C	
17096LCS17096 (BS)	4-Nitrophenol	22.0	61 - 133	20 - 133	percent	J/UJ	C	
17096LCS17096 (BS)	Benzoic acid	23.0	57 - 129	20 - 129	percent	J/UJ	C	
17096LCS17096 (BS)	Diethyl phthalate	53.0	56 - 125	20 - 125	percent	J/UJ	C	
17096LCS17096 (BS)	Dimethyl phthalate	23.0	45 - 127	20 - 127	percent	J/UJ	C	
17096LCS17096 (BS)	Hexachlorocyclopentadiene	27.0	53 - 135	20 - 135	percent	J/UJ	C	
17096LCS17096 (BS)	N-Nitrosodimethylamine (NDMA)	39.0	43 - 121	20 - 121	percent	J/UJ	C	
17096LCS17096 (BS)	Phenol	22.0	72 - 132	20 - 132	percent	J/UJ	C	
17096LCSD17096 (BD)	1,2-Dichlorobenzene	30.0	32 - 111	20 - 111	percent	J/UJ	C	
17096LCSD17096 (BD)	1,3-Dichlorobenzene	25.0	28 - 110	20 - 110	percent	J/UJ	C	
17096LCSD17096 (BD)	1,4-Dichlorobenzene	26.0	29 - 112	20 - 112	percent	J/UJ	C	
17096LCSD17096 (BD)	4-Nitrophenol	32.0	61 - 133	20 - 133	percent	J/UJ	C	
17096LCSD17096 (BD)	Benzoic acid	33.0	57 - 129	20 - 129	percent	J/UJ	C	
17096LCSD17096 (BD)	Diethyl phthalate	54.0	56 - 125	20 - 125	percent	J/UJ	C	
17096LCSD17096 (BD)	Dimethyl phthalate	25.0	45 - 127	20 - 127	percent	J/UJ	C	
17096LCSD17096 (BD)	Hexachlorobutadiene	20.0	22 - 124	20 - 124	percent	J/UJ	C	
17096LCSD17096 (BD)	Hexachlorocyclopentadiene	22.0	53 - 135	20 - 135	percent	J/UJ	C	
17096LCSD17096 (BD)	Hexachloroethane	18.0	21 - 115	20 - 115	percent	J/X	C	
17096LCSD17096 (BD)	Phenol	30.0	72 - 132	20 - 132	percent	J/UJ	C	

Where two qualifiers are listed, such as 'J/UJ', the first applies to positive results, and the second to non-detect results.
Upper and Lower Warning and Control Limits are abbreviated UWL, LWL, UCL, and LCL in the Comment field.

Qualified Results associated with the LCS Recovery for SW8270E

FieldSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
SY-BRMW2-252.5-262.5-110723 67798-010	N	1,2-Dichlorobenzene	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-BRMW2-252.5-262.5-110723 67798-010	N	1,3-Dichlorobenzene	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-BRMW2-252.5-262.5-110723 67798-010	N	1,4-Dichlorobenzene	2.0	1.0 U#	1.0 UJ		ug/l	C

Qualified Results associated with the LCS Recovery for SW8270E

FieldSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
SY-BRMW2-252.5-262.5-110723 67798-010	N	4-Chloro-3-methylphenol	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-BRMW2-252.5-262.5-110723 67798-010	N	4-Nitrophenol	10	5.0 U#	5.0 UJ		ug/l	C
SY-BRMW2-252.5-262.5-110723 67798-010	N	Benzoic acid	50	45 U#	45 UJ		ug/l	C
SY-BRMW2-252.5-262.5-110723 67798-010	N	Diethyl phthalate	5.0	1.0 U#	1.0 UJ		ug/l	C
SY-BRMW2-252.5-262.5-110723 67798-010	N	Dimethyl phthalate	5.0	1.0 U#	1.0 UJ		ug/l	C
SY-BRMW2-252.5-262.5-110723 67798-010	N	Hexachlorobutadiene	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-BRMW2-252.5-262.5-110723 67798-010	N	Hexachlorocyclopentadiene	10	4.0 U#	4.0 UJ		ug/l	C
SY-BRMW2-252.5-262.5-110723 67798-010	N	Hexachloroethane	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-BRMW2-252.5-262.5-110723 67798-010	N	N-Nitrosodimethylamine (NDMA)	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-BRMW2-252.5-262.5-110723 67798-010	N	Phenol	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-BRMW2-60.5-70.5-110723 67798-004	N	1,2-Dichlorobenzene	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-BRMW2-60.5-70.5-110723 67798-004	N	1,3-Dichlorobenzene	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-BRMW2-60.5-70.5-110723 67798-004	N	1,4-Dichlorobenzene	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-BRMW2-60.5-70.5-110723 67798-004	N	4-Chloro-3-methylphenol	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-BRMW2-60.5-70.5-110723 67798-004	N	4-Nitrophenol	10	5.0 U#	5.0 UJ		ug/l	C
SY-BRMW2-60.5-70.5-110723 67798-004	N	Benzoic acid	50	45 U#	45 UJ		ug/l	C
SY-BRMW2-60.5-70.5-110723 67798-004	N	Diethyl phthalate	5.0	1.0 U#	1.0 UJ		ug/l	C
SY-BRMW2-60.5-70.5-110723 67798-004	N	Dimethyl phthalate	5.0	1.0 U#	1.0 UJ		ug/l	C
SY-BRMW2-60.5-70.5-110723 67798-004	N	Hexachlorobutadiene	2.0	1.0 U#	1.0 UJ		ug/l	C

Qualified Results associated with the LCS Recovery for SW8270E

FieldSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
SY-BRMW2-60.5-70.5-110723 67798-004	N	Hexachlorocyclopentadiene	10	4.0 U#	4.0 UJ		ug/l	C
SY-BRMW2-60.5-70.5-110723 67798-004	N	Hexachloroethane	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-BRMW2-60.5-70.5-110723 67798-004	N	N-Nitrosodimethylamine (NDMA)	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-BRMW2-60.5-70.5-110723 67798-004	N	Phenol	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-BRMW2-80.5-95.5-110723 67798-007	N	1,2-Dichlorobenzene	2.0	1.0 UM	1.0 UJ		ug/l	C/M
SY-BRMW2-80.5-95.5-110723 67798-007	N	1,3-Dichlorobenzene	2.0	1.0 UM	1.0 UJ		ug/l	C/M
SY-BRMW2-80.5-95.5-110723 67798-007	N	1,4-Dichlorobenzene	2.0	1.0 U#M	1.0 UJ		ug/l	C/M
SY-BRMW2-80.5-95.5-110723 67798-007	N	4-Chloro-3-methylphenol	2.0	1.0 U#M	1.0 UJ		ug/l	C/M
SY-BRMW2-80.5-95.5-110723 67798-007	N	4-Nitrophenol	10	5.0 U#M	5.0 UJ		ug/l	C/M
SY-BRMW2-80.5-95.5-110723 67798-007	N	Benzoic acid	50	45 U#M	45 UJ		ug/l	C/M
SY-BRMW2-80.5-95.5-110723 67798-007	N	Diethyl phthalate	5.0	1.0 U#	1.0 UJ		ug/l	C
SY-BRMW2-80.5-95.5-110723 67798-007	N	Dimethyl phthalate	5.0	1.0 U#M	1.0 UJ		ug/l	C/M
SY-BRMW2-80.5-95.5-110723 67798-007	N	Hexachlorobutadiene	2.0	1.0 U#M	1.0 UJ		ug/l	C
SY-BRMW2-80.5-95.5-110723 67798-007	N	Hexachlorocyclopentadiene	10	4.0 U#M	4.0 UJ		ug/l	C/M
SY-BRMW2-80.5-95.5-110723 67798-007	N	Hexachloroethane	2.0	1.0 U#M	1.0 UJ		ug/l	C/M
SY-BRMW2-80.5-95.5-110723 67798-007	N	N-Nitrosodimethylamine (NDMA)	2.0	1.0 U#M	1.0 UJ		ug/l	C/M
SY-BRMW2-80.5-95.5-110723 67798-007	N	Phenol	2.0	1.0 U#M	1.0 UJ		ug/l	C/M
SY-OBMW12-110723 67798-001	N	1,2-Dichlorobenzene	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-OBMW12-110723 67798-001	N	1,3-Dichlorobenzene	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-OBMW12-110723 67798-001	N	1,4-Dichlorobenzene	2.0	1.0 U#	1.0 UJ		ug/l	C

Qualified Results associated with the LCS Recovery for SW8270E

FieldSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
SY-OBMW12-110723 67798-001	N	4-Chloro-3-methylphenol	2.0	1.0 U#M	1.0 UJ		ug/l	C/M
SY-OBMW12-110723 67798-001	N	4-Nitrophenol	10	5.0 U#M	5.0 UJ		ug/l	C/M
SY-OBMW12-110723 67798-001	N	Benzoic acid	50	45 U#M	45 UJ		ug/l	C/M
SY-OBMW12-110723 67798-001	N	Diethyl phthalate	5.0	1.0 U#	1.0 UJ		ug/l	C
SY-OBMW12-110723 67798-001	N	Dimethyl phthalate	5.0	1.0 U#	1.0 UJ		ug/l	C
SY-OBMW12-110723 67798-001	N	Hexachlorobutadiene	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-OBMW12-110723 67798-001	N	Hexachlorocyclopentadiene	10	4.0 U#M	4.0 UJ		ug/l	C/M
SY-OBMW12-110723 67798-001	N	Hexachloroethane	2.0	1.0 U#M	1.0 UJ		ug/l	C
SY-OBMW12-110723 67798-001	N	N-Nitrosodimethylamine (NDMA)	2.0	1.0 U#M	1.0 UJ		ug/l	C/M
SY-OBMW12-110723 67798-001	N	Phenol	2.0	1.0 U#M	1.0 UJ		ug/l	C/M
SY-OBMW13-110723 67798-008	N	1,2-Dichlorobenzene	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-OBMW13-110723 67798-008	N	1,3-Dichlorobenzene	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-OBMW13-110723 67798-008	N	1,4-Dichlorobenzene	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-OBMW13-110723 67798-008	N	4-Chloro-3-methylphenol	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-OBMW13-110723 67798-008	N	4-Nitrophenol	10	5.0 U#	5.0 UJ		ug/l	C
SY-OBMW13-110723 67798-008	N	Benzoic acid	50	45 U#	45 UJ		ug/l	C
SY-OBMW13-110723 67798-008	N	Diethyl phthalate	5.0	1.0 U#	1.0 UJ		ug/l	C
SY-OBMW13-110723 67798-008	N	Dimethyl phthalate	5.0	1.0 U#	1.0 UJ		ug/l	C
SY-OBMW13-110723 67798-008	N	Hexachlorobutadiene	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-OBMW13-110723 67798-008	N	Hexachlorocyclopentadiene	10	4.0 U#	4.0 UJ		ug/l	C
SY-OBMW13-110723 67798-008	N	Hexachloroethane	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-OBMW13-110723 67798-008	N	N-Nitrosodimethylamine (NDMA)	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-OBMW13-110723 67798-008	N	Phenol	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-OBMW14-110723 67798-009	N	1,2-Dichlorobenzene	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-OBMW14-110723 67798-009	N	1,3-Dichlorobenzene	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-OBMW14-110723 67798-009	N	1,4-Dichlorobenzene	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-OBMW14-110723 67798-009	N	4-Chloro-3-methylphenol	2.0	1.0 U#	1.0 UJ		ug/l	C

Qualified Results associated with the LCS Recovery for SW8270E

FieldSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
SY-OBMW14-110723 67798-009	N	4-Nitrophenol	10	5.0 U#	5.0 UJ		ug/l	C
SY-OBMW14-110723 67798-009	N	Benzoic acid	50	45 U#	45 UJ		ug/l	C
SY-OBMW14-110723 67798-009	N	Diethyl phthalate	5.0	1.0 U#	1.0 UJ		ug/l	C
SY-OBMW14-110723 67798-009	N	Dimethyl phthalate	5.0	1.0 U#	1.0 UJ		ug/l	C
SY-OBMW14-110723 67798-009	N	Hexachlorobutadiene	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-OBMW14-110723 67798-009	N	Hexachlorocyclopentadiene	10	4.0 U#	4.0 UJ		ug/l	C
SY-OBMW14-110723 67798-009	N	Hexachloroethane	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-OBMW14-110723 67798-009	N	N-Nitrosodimethylamine (NDMA)	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-OBMW14-110723 67798-009	N	Phenol	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-OBMW15-110723 67798-005	N	1,2-Dichlorobenzene	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-OBMW15-110723 67798-005	N	1,3-Dichlorobenzene	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-OBMW15-110723 67798-005	N	1,4-Dichlorobenzene	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-OBMW15-110723 67798-005	N	4-Chloro-3-methylphenol	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-OBMW15-110723 67798-005	N	4-Nitrophenol	10	5.0 U#	5.0 UJ		ug/l	C
SY-OBMW15-110723 67798-005	N	Benzoic acid	50	45 U#	45 UJ		ug/l	C
SY-OBMW15-110723 67798-005	N	Diethyl phthalate	5.0	1.0 U#	1.0 UJ		ug/l	C
SY-OBMW15-110723 67798-005	N	Dimethyl phthalate	5.0	1.0 U#	1.0 UJ		ug/l	C
SY-OBMW15-110723 67798-005	N	Hexachlorobutadiene	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-OBMW15-110723 67798-005	N	Hexachlorocyclopentadiene	10	4.0 U#	4.0 UJ		ug/l	C
SY-OBMW15-110723 67798-005	N	Hexachloroethane	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-OBMW15-110723 67798-005	N	N-Nitrosodimethylamine (NDMA)	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-OBMW15-110723 67798-005	N	Phenol	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-OBMW4R-110723 67798-003	N	1,2-Dichlorobenzene	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-OBMW4R-110723 67798-003	N	1,3-Dichlorobenzene	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-OBMW4R-110723 67798-003	N	1,4-Dichlorobenzene	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-OBMW4R-110723 67798-003	N	4-Chloro-3-methylphenol	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-OBMW4R-110723 67798-003	N	4-Nitrophenol	10	5.0 U#	5.0 UJ		ug/l	C

Qualified Results associated with the LCS Recovery for SW8270E

FieldSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
SY-OBMW4R-110723 67798-003	N	Benzoic acid	50	45 U#	45 UJ		ug/l	C
SY-OBMW4R-110723 67798-003	N	Diethyl phthalate	5.0	1.0 U#	1.0 UJ		ug/l	C
SY-OBMW4R-110723 67798-003	N	Dimethyl phthalate	5.0	1.0 U#	1.0 UJ		ug/l	C
SY-OBMW4R-110723 67798-003	N	Hexachlorobutadiene	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-OBMW4R-110723 67798-003	N	Hexachlorocyclopentadiene	10	4.0 U#	4.0 UJ		ug/l	C
SY-OBMW4R-110723 67798-003	N	Hexachloroethane	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-OBMW4R-110723 67798-003	N	N-Nitrosodimethylamine (NDMA)	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-OBMW4R-110723 67798-003	N	Phenol	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-OBMW5-110723 67798-006	N	1,2-Dichlorobenzene	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-OBMW5-110723 67798-006	N	1,3-Dichlorobenzene	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-OBMW5-110723 67798-006	N	1,4-Dichlorobenzene	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-OBMW5-110723 67798-006	N	4-Chloro-3-methylphenol	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-OBMW5-110723 67798-006	N	4-Nitrophenol	10	5.0 U#	5.0 UJ		ug/l	C
SY-OBMW5-110723 67798-006	N	Benzoic acid	50	45 U#	45 UJ		ug/l	C
SY-OBMW5-110723 67798-006	N	Diethyl phthalate	5.0	1.0 U#	1.0 UJ		ug/l	C
SY-OBMW5-110723 67798-006	N	Dimethyl phthalate	5.0	1.0 U#	1.0 UJ		ug/l	C
SY-OBMW5-110723 67798-006	N	Hexachlorobutadiene	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-OBMW5-110723 67798-006	N	Hexachlorocyclopentadiene	10	4.0 U#	4.0 UJ		ug/l	C
SY-OBMW5-110723 67798-006	N	Hexachloroethane	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-OBMW5-110723 67798-006	N	N-Nitrosodimethylamine (NDMA)	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-OBMW5-110723 67798-006	N	Phenol	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-OBMW6-110723 67798-002	N	1,2-Dichlorobenzene	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-OBMW6-110723 67798-002	N	1,3-Dichlorobenzene	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-OBMW6-110723 67798-002	N	1,4-Dichlorobenzene	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-OBMW6-110723 67798-002	N	4-Chloro-3-methylphenol	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-OBMW6-110723 67798-002	N	4-Nitrophenol	10	5.0 U#	5.0 UJ		ug/l	C
SY-OBMW6-110723 67798-002	N	Benzoic acid	50	45 U#	45 UJ		ug/l	C

Qualified Results associated with the LCS Recovery for SW8270E

FieldSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
SY-OBMW6-110723 67798-002	N	Diethyl phthalate	5.0	1.0 U#	1.0 UJ		ug/l	C
SY-OBMW6-110723 67798-002	N	Dimethyl phthalate	5.0	1.0 U#	1.0 UJ		ug/l	C
SY-OBMW6-110723 67798-002	N	Hexachlorobutadiene	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-OBMW6-110723 67798-002	N	Hexachlorocyclopentadiene	10	4.0 U#	4.0 UJ		ug/l	C
SY-OBMW6-110723 67798-002	N	Hexachloroethane	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-OBMW6-110723 67798-002	N	N-Nitrosodimethylamine (NDMA)	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-OBMW6-110723 67798-002	N	Phenol	2.0	1.0 U#	1.0 UJ		ug/l	C

Analytes not found in project samples are reported as not detected at the limit of detection (LOD) unless blank contamination occurs and then the sample may be reported as not detected at the (LOD) or (LOQ) based on the sample concentration and the validation guidance. In instances where no LOD is provided, results are reported down to the LOQ.

Quality Control Outliers for test method SW8270E, LCS RPD

The objective of laboratory control sample/laboratory control sample duplicate (LCS/LCSD) RPD analysis is to demonstrate acceptable method precision by the laboratory at the time of analysis. LCS/LCSD analyses are also performed to generate data that determines the long-term precision of the analytical method on various matrices. Non-homogenous samples can impact the apparent method precision. Summary forms were evaluated and compared to electronic data deliverables. Laboratory control sample/laboratory control sample duplicate RPD results that were outside of the acceptance criteria are listed below.

Sample ID/ Lab Sample ID	Analyte	Result	Warning Limits	Control Limits	Units	Qualifier	Reason Code	Comment
17096LCSD17096 (BD)	2,4,5-Trichlorophenol	25.6	< 20	< 20	rpd	J/None	Z	
17096LCSD17096 (BD)	2,4,6-Trichlorophenol	24.9	< 20	< 20	rpd	J/None	Z	
17096LCSD17096 (BD)	2,4-Dichlorophenol	36.3	< 20	< 20	rpd	J/None	Z	
17096LCSD17096 (BD)	2,4-Dinitrophenol	30.9	< 20	< 20	rpd	J/None	Z	
17096LCSD17096 (BD)	2-Chlorophenol	43.4	< 20	< 20	rpd	J/None	Z	
17096LCSD17096 (BD)	2-Methylphenol (o-Cresol)	36.9	< 20	< 20	rpd	J/None	Z	
17096LCSD17096 (BD)	2-Nitrophenol	23.4	< 20	< 20	rpd	J/None	Z	
17096LCSD17096 (BD)	4-Chloro-3-methylphenol	42.2	< 20	< 20	rpd	J/None	Z	
17096LCSD17096 (BD)	4-Methylphenol (p-Cresol)	41.3	< 20	< 20	rpd	J/None	Z	
17096LCSD17096 (BD)	4-Nitrophenol	34.7	< 20	< 20	rpd	J/None	Z	
17096LCSD17096 (BD)	Benzoic acid	38.3	< 20	< 20	rpd	J/None	Z	
17096LCSD17096 (BD)	Hexachlorocyclopentadiene	20.6	< 20	< 20	rpd	J/None	Z	
17096LCSD17096 (BD)	Phenol	28.8	< 20	< 20	rpd	J/None	Z	

Where two qualifiers are listed, such as 'J/UJ', the first applies to positive results, and the second to non-detect results.
Upper and Lower Warning and Control Limits are abbreviated UWL, LWL, UCL, and LCL in the Comment field.

No results associated with this QC element required qualification.

Quality Control Outliers for test method SW8270E, MS Recovery

Data for matrix spikes/matrix spike duplicates (MS/MSD) are generated to determine long-term precision and accuracy of the analytical method on various matrices and to demonstrate acceptable compound recovery by the laboratory at the time of sample analysis. These data alone cannot be used to evaluate the precision and accuracy of individual samples. However, when exercising professional judgment, MS/MSD data can be used in conjunction with other available QC information. Reported results were evaluated to determine compliance with the required acceptance criteria, and summary forms were evaluated and compared to electronic data deliverables. Findings of this review, and any associated qualified results, are listed below.

Sample ID/ Lab Sample ID	Analyte	Result	Warning Limits	Control Limits	Units	Qualifier	Reason Code	Comment
SY-BRMW2-80.5-95.5-110723 (MS)	1,2-Dichlorobenzene	29.0	32 - 111	20 - 111	percent	J/UJ	M	
SY-BRMW2-80.5-95.5-110723 (MS)	1,3-Dichlorobenzene	23.0	28 - 110	20 - 110	percent	J/UJ	M	
SY-BRMW2-80.5-95.5-110723 (MS)	1,4-Dichlorobenzene	25.0	29 - 112	20 - 112	percent	J/UJ	M	
SY-BRMW2-80.5-95.5-110723 (SD)	2,4,5-Trichlorophenol	50.0	53 - 123	20 - 123	percent	J/UJ	M	
SY-BRMW2-80.5-95.5-110723 (SD)	2,4-Dichlorophenol	44.0	47 - 121	20 - 121	percent	J/UJ	M	
SY-BRMW2-80.5-95.5-110723 (MS)	4-Chloro-3-methylphenol	45.0	52 - 119	20 - 119	percent	J/UJ	M	
SY-BRMW2-80.5-95.5-110723 (SD)	4-Chloro-3-methylphenol	38.0	52 - 119	20 - 119	percent	J/UJ	M	
SY-BRMW2-80.5-95.5-110723 (MS)	4-Nitrophenol	22.0	61 - 133	20 - 133	percent	J/UJ	M	
SY-BRMW2-80.5-95.5-110723 (SD)	4-Nitrophenol	22.0	61 - 133	20 - 133	percent	J/UJ	M	
SY-BRMW2-80.5-95.5-110723 (MS)	Benzoic acid	12.0	57 - 129	20 - 129	percent	J/X	M	
SY-BRMW2-80.5-95.5-110723 (SD)	Benzoic acid	26.0	57 - 129	20 - 129	percent	J/UJ	M	
SY-BRMW2-80.5-95.5-110723 (MS)	Dimethyl phthalate	44.0	45 - 127	20 - 127	percent	J/UJ	M	
SY-BRMW2-80.5-95.5-110723 (SD)	Dimethyl phthalate	44.0	45 - 127	20 - 127	percent	J/UJ	M	
SY-BRMW2-80.5-95.5-110723 (MS)	Hexachlorocyclopentadiene	35.0	53 - 135	20 - 135	percent	J/UJ	M	
SY-BRMW2-80.5-95.5-110723 (SD)	Hexachlorocyclopentadiene	34.0	53 - 135	20 - 135	percent	J/UJ	M	
SY-BRMW2-80.5-95.5-110723 (MS)	Hexachloroethane	15.0	21 - 115	20 - 115	percent	J/X	M	
SY-BRMW2-80.5-95.5-110723 (SD)	Hexachloroethane	20.0	21 - 115	20 - 115	percent	J/UJ	M	
SY-BRMW2-80.5-95.5-110723 (MS)	N-Nitrosodimethylamine (NDMA)	39.0	43 - 121	20 - 121	percent	J/UJ	M	
SY-BRMW2-80.5-95.5-110723 (SD)	N-Nitrosodimethylamine (NDMA)	39.0	43 - 121	20 - 121	percent	J/UJ	M	
SY-BRMW2-80.5-95.5-110723 (MS)	Phenol	23.0	72 - 132	20 - 132	percent	J/UJ	M	
SY-BRMW2-80.5-95.5-110723 (SD)	Phenol	22.0	72 - 132	20 - 132	percent	J/UJ	M	
SY-OBMW12-110723 (MS)	4-Chloro-3-methylphenol	28.0	52 - 119	20 - 119	percent	J/UJ	M	
SY-OBMW12-110723 (SD)	4-Chloro-3-methylphenol	28.0	52 - 119	20 - 119	percent	J/UJ	M	

Quality Control Outliers for test method SW8270E, MS Recovery

Data for matrix spikes/matrix spike duplicates (MS/MSD) are generated to determine long-term precision and accuracy of the analytical method on various matrices and to demonstrate acceptable compound recovery by the laboratory at the time of sample analysis. These data alone cannot be used to evaluate the precision and accuracy of individual samples. However, when exercising professional judgment, MS/MSD data can be used in conjunction with other available QC information. Reported results were evaluated to determine compliance with the required acceptance criteria, and summary forms were evaluated and compared to electronic data deliverables. Findings of this review, and any associated qualified results, are listed below.

Sample ID/ Lab Sample ID	Analyte	Result	Warning Limits	Control Limits	Units	Qualifier	Reason Code	Comment
SY-OBMW12-110723 (MS)	4-Nitrophenol	26.0	61 - 133	20 - 133	percent	J/UJ	M	
SY-OBMW12-110723 (SD)	4-Nitrophenol	26.0	61 - 133	20 - 133	percent	J/UJ	M	
SY-OBMW12-110723 (MS)	Benzoic acid	27.0	57 - 129	20 - 129	percent	J/UJ	M	
SY-OBMW12-110723 (SD)	Benzoic acid	19.0	57 - 129	20 - 129	percent	J/X	M	
SY-OBMW12-110723 (MS)	Hexachlorocyclopentadiene	42.0	53 - 135	20 - 135	percent	J/UJ	M	
SY-OBMW12-110723 (SD)	Hexachlorocyclopentadiene	41.0	53 - 135	20 - 135	percent	J/UJ	M	
SY-OBMW12-110723 (SD)	N-Nitrosodimethylamine (NDMA)	41.0	43 - 121	20 - 121	percent	J/UJ	M	
SY-OBMW12-110723 (MS)	Phenol	22.0	72 - 132	20 - 132	percent	J/UJ	M	
SY-OBMW12-110723 (SD)	Phenol	19.0	72 - 132	20 - 132	percent	J/X	M	

Where two qualifiers are listed, such as 'J/UJ', the first applies to positive results, and the second to non-detect results.
Upper and Lower Warning and Control Limits are abbreviated UWL, LWL, UCL, and LCL in the Comment field.

Qualified Results associated with the MS Recovery for SW8270E

FieldSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
SY-BRMW2-80.5-95.5-110723 67798-007	N	1,2-Dichlorobenzene	2.0	1.0 UM	1.0 UJ		ug/l	C/M
SY-BRMW2-80.5-95.5-110723 67798-007	N	1,3-Dichlorobenzene	2.0	1.0 UM	1.0 UJ		ug/l	C/M
SY-BRMW2-80.5-95.5-110723 67798-007	N	1,4-Dichlorobenzene	2.0	1.0 U#M	1.0 UJ		ug/l	C/M
SY-BRMW2-80.5-95.5-110723 67798-007	N	2,4,5-Trichlorophenol	2.0	1.0 U#M	1.0 UJ		ug/l	M
SY-BRMW2-80.5-95.5-110723 67798-007	N	2,4-Dichlorophenol	5.0	1.0 U#M	1.0 UJ		ug/l	M
SY-BRMW2-80.5-95.5-110723 67798-007	N	4-Chloro-3-methylphenol	2.0	1.0 U#M	1.0 UJ		ug/l	C/M
SY-BRMW2-80.5-95.5-110723 67798-007	N	4-Nitrophenol	10	5.0 U#M	5.0 UJ		ug/l	C/M
SY-BRMW2-80.5-95.5-110723 67798-007	N	Benzoic acid	50	45 U#M	45 UJ		ug/l	C/M

Qualified Results associated with the MS Recovery for SW8270E

FieldSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
SY-BRMW2-80.5-95.5-110723 67798-007	N	Dimethyl phthalate	5.0	1.0 U#M	1.0 UJ		ug/l	C/M
SY-BRMW2-80.5-95.5-110723 67798-007	N	Hexachlorocyclopentadiene	10	4.0 U#M	4.0 UJ		ug/l	C/M
SY-BRMW2-80.5-95.5-110723 67798-007	N	Hexachloroethane	2.0	1.0 U#M	1.0 UJ		ug/l	C/M
SY-BRMW2-80.5-95.5-110723 67798-007	N	N-Nitrosodimethylamine (NDMA)	2.0	1.0 U#M	1.0 UJ		ug/l	C/M
SY-BRMW2-80.5-95.5-110723 67798-007	N	Phenol	2.0	1.0 U#M	1.0 UJ		ug/l	C/M
SY-OBMW12-110723 67798-001	N	4-Chloro-3-methylphenol	2.0	1.0 U#M	1.0 UJ		ug/l	C/M
SY-OBMW12-110723 67798-001	N	4-Nitrophenol	10	5.0 U#M	5.0 UJ		ug/l	C/M
SY-OBMW12-110723 67798-001	N	Benzoic acid	50	45 U#M	45 UJ		ug/l	C/M
SY-OBMW12-110723 67798-001	N	Hexachlorocyclopentadiene	10	4.0 U#M	4.0 UJ		ug/l	C/M
SY-OBMW12-110723 67798-001	N	N-Nitrosodimethylamine (NDMA)	2.0	1.0 U#M	1.0 UJ		ug/l	C/M
SY-OBMW12-110723 67798-001	N	Phenol	2.0	1.0 U#M	1.0 UJ		ug/l	C/M

Analytes not found in project samples are reported as not detected at the limit of detection (LOD) unless blank contamination occurs and then the sample may be reported as not detected at the (LOD) or (LOQ) based on the sample concentration and the validation guidance. In instances where no LOD is provided, results are reported down to the LOQ.

Quality Control Outliers for test method SW8270E, MS RPD

The objective of matrix spikes/matrix spike duplicates (MS/MSD) RPD analysis is to demonstrate acceptable method precision by the laboratory at the time of analysis. MS/MSD analyses are also performed to generate data that determines the long-term precision of the analytical method on various matrices. Non-homogenous samples can impact the apparent method precision. Summary forms were evaluated and compared to electronic data deliverables. Matrix spikes/matrix spike duplicates results that were outside of the acceptance criteria are listed below.

Sample ID/ Lab Sample ID	Analyte	Result	Warning Limits	Control Limits	Units	Qualifier	Reason Code	Comment
SY-BRMW2-80.5-95.5-110723 (SD)	2,4,5-Trichlorophenol	20.4	< 20	< 20	rpd	J/None	D	
SY-BRMW2-80.5-95.5-110723 (SD)	Benzidine	20.2	< 20	< 20	rpd	J/None	D	
SY-BRMW2-80.5-95.5-110723 (SD)	Benzoic acid	74.2	< 20	< 20	rpd	J/None	D	
SY-BRMW2-80.5-95.5-110723 (SD)	Hexachlorobutadiene	23.3	< 20	< 20	rpd	J/None	D	
SY-BRMW2-80.5-95.5-110723 (SD)	Hexachloroethane	28.1	< 20	< 20	rpd	J/None	D	
SY-BRMW2-80.5-95.5-110723 (SD)	Pentachlorophenol	26.3	< 20	< 20	rpd	J/None	D	
SY-OBMW12-110723 (SD)	Benzoic acid	34.7	< 20	< 20	rpd	J/None	D	
SY-OBMW12-110723 (SD)	Hexachloroethane	22.8	< 20	< 20	rpd	J/None	D	

Where two qualifiers are listed, such as 'J/UJ', the first applies to positive results, and the second to non-detect results.
Upper and Lower Warning and Control Limits are abbreviated UWL, LWL, UCL, and LCL in the Comment field.

No results associated with this QC element required qualification.

Table of All Qualified Results

Test Method: MADEPEP		**Extraction Method: METHOD**						
FieldSample ID / LabSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
SY-BRMW2-252.5-262.5-110723 67798-010	N	2-Methylnaphthalene	1.0	0.70 U#	0.70 UJ		ug/l	C
SY-BRMW2-252.5-262.5-110723 67798-010	N	C11-C22 Extractable Petroleum Hydrocarbons, Aromatic	100	85 U	85 UJ		ug/l	I
SY-BRMW2-252.5-262.5-110723 67798-010	N	C11-C22 Extractable Petroleum Hydrocarbons, Aromatic (Unadjusted)	100	85 U	85 UJ		ug/l	I
SY-BRMW2-252.5-262.5-110723 67798-010	N	C19-C36 Extractable Petroleum Hydrocarbons, Aliphatic	100	97 U	97 UJ		ug/l	I
SY-BRMW2-252.5-262.5-110723 67798-010	N	C9-C18 Extractable Petroleum Hydrocarbons, Aliphatic	100	95 U#	95 UJ		ug/l	C/I
SY-BRMW2-252.5-262.5-110723 67798-010	N	Dibenz(a,h)anthracene	1.0	0.50 U#	0.50 UJ		ug/l	C
SY-BRMW2-252.5-262.5-110723 67798-010	N	Indeno(1,2,3-c,d)pyrene	1.0	0.50 U#	0.50 UJ		ug/l	C
SY-BRMW2-252.5-262.5-110723 67798-010	N	Naphthalene	1.0	0.70 U#	0.70 UJ		ug/l	C
SY-BRMW2-60.5-70.5-110723 67798-004	N	2-Methylnaphthalene	1.0	0.70 U#	0.70 UJ		ug/l	C
SY-BRMW2-60.5-70.5-110723 67798-004	N	C9-C18 Extractable Petroleum Hydrocarbons, Aliphatic	100	95 U#	95 UJ		ug/l	C
SY-BRMW2-60.5-70.5-110723 67798-004	N	Dibenz(a,h)anthracene	1.0	0.50 U#	0.50 UJ		ug/l	C
SY-BRMW2-60.5-70.5-110723 67798-004	N	Indeno(1,2,3-c,d)pyrene	1.0	0.50 U#	0.50 UJ		ug/l	C
SY-BRMW2-60.5-70.5-110723 67798-004	N	Naphthalene	1.0	0.70 U#	0.70 UJ		ug/l	C
SY-BRMW2-80.5-95.5-110723 67798-007	N	2-Methylnaphthalene	1.0	0.70 UJM	0.70 UJ		ug/l	C/M
SY-BRMW2-80.5-95.5-110723 67798-007	N	Acenaphthylene	1.0	0.50 UM	0.50 UJ		ug/l	M
SY-BRMW2-80.5-95.5-110723 67798-007	N	C11-C22 Extractable Petroleum Hydrocarbons, Aromatic	100	85 U	85 UJ		ug/l	I
SY-BRMW2-80.5-95.5-110723 67798-007	N	C11-C22 Extractable Petroleum Hydrocarbons, Aromatic (Unadjusted)	100	85 U	85 UJ		ug/l	I
SY-BRMW2-80.5-95.5-110723 67798-007	N	C19-C36 Extractable Petroleum Hydrocarbons, Aliphatic	100	97 U	97 UJ		ug/l	I

Table of All Qualified Results

Test Method: MADEPEP		Extraction Method: METHOD						
FieldSample ID / LabSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
SY-BRMW2-80.5-95.5-110723 67798-007	N	C9-C18 Extractable Petroleum Hydrocarbons, Aliphatic	100	95 UJM	95 UJ		ug/l	C/I/M
SY-BRMW2-80.5-95.5-110723 67798-007	N	Dibenz(a,h)anthracene	1.0	0.50 U#	0.50 UJ		ug/l	C
SY-BRMW2-80.5-95.5-110723 67798-007	N	Indeno(1,2,3-c,d)pyrene	1.0	0.50 U#	0.50 UJ		ug/l	C
SY-BRMW2-80.5-95.5-110723 67798-007	N	Naphthalene	1.0	0.70 U#M	0.70 UJ		ug/l	C/M
SY-OBMW12-110723 67798-001	N	2-Methylnaphthalene	1.0	0.70 UJM	0.70 UJ		ug/l	C/M
SY-OBMW12-110723 67798-001	N	C9-C18 Extractable Petroleum Hydrocarbons, Aliphatic	100	95 UJM	95 UJ		ug/l	C/M
SY-OBMW12-110723 67798-001	N	Dibenz(a,h)anthracene	1.0	0.50 U#	0.50 UJ		ug/l	C
SY-OBMW12-110723 67798-001	N	Indeno(1,2,3-c,d)pyrene	1.0	0.50 U#	0.50 UJ		ug/l	C
SY-OBMW12-110723 67798-001	N	Naphthalene	1.0	0.70 U#M	0.70 UJ		ug/l	C/M
SY-OBMW13-110723 67798-008	N	2-Methylnaphthalene	1.0	0.70 U#	0.70 UJ		ug/l	C
SY-OBMW13-110723 67798-008	N	C11-C22 Extractable Petroleum Hydrocarbons, Aromatic	100	62 J	62 J	-	ug/l	I/TR
SY-OBMW13-110723 67798-008	N	C11-C22 Extractable Petroleum Hydrocarbons, Aromatic (Unadjusted)	100	62 J	62 J	-	ug/l	I/TR
SY-OBMW13-110723 67798-008	N	C19-C36 Extractable Petroleum Hydrocarbons, Aliphatic	100	97 U	97 UJ		ug/l	I
SY-OBMW13-110723 67798-008	N	C9-C18 Extractable Petroleum Hydrocarbons, Aliphatic	100	95 U#	95 UJ		ug/l	C/I
SY-OBMW13-110723 67798-008	N	Dibenz(a,h)anthracene	1.0	0.50 U#	0.50 UJ		ug/l	C
SY-OBMW13-110723 67798-008	N	Indeno(1,2,3-c,d)pyrene	1.0	0.50 U#	0.50 UJ		ug/l	C
SY-OBMW13-110723 67798-008	N	Naphthalene	1.0	0.70 U#	0.70 UJ		ug/l	C
SY-OBMW14-110723 67798-009	N	2-Methylnaphthalene	1.0	0.70 U#	0.70 UJ		ug/l	C
SY-OBMW14-110723 67798-009	N	C11-C22 Extractable Petroleum Hydrocarbons, Aromatic	100	60 J	60 J	-	ug/l	I/TR
SY-OBMW14-110723 67798-009	N	C11-C22 Extractable Petroleum Hydrocarbons, Aromatic (Unadjusted)	100	60 J	60 J	-	ug/l	I/TR
SY-OBMW14-110723 67798-009	N	C19-C36 Extractable Petroleum Hydrocarbons, Aliphatic	100	120	120 J	-	ug/l	I/Z

Table of All Qualified Results

Test Method: MADEPEP		Extraction Method: METHOD						
FieldSample ID / LabSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
SY-OBMW14-110723 67798-009	N	C9-C18 Extractable Petroleum Hydrocarbons, Aliphatic	100	95 U#	95 UJ		ug/l	C/I
SY-OBMW14-110723 67798-009	N	Dibenz(a,h)anthracene	1.0	0.50 U#	0.50 UJ		ug/l	C
SY-OBMW14-110723 67798-009	N	Indeno(1,2,3-c,d)pyrene	1.0	0.50 U#	0.50 UJ		ug/l	C
SY-OBMW14-110723 67798-009	N	Naphthalene	1.0	0.70 U#	0.70 UJ		ug/l	C
SY-OBMW15-110723 67798-005	N	2-Methylnaphthalene	1.0	0.70 U#	0.70 UJ		ug/l	C
SY-OBMW15-110723 67798-005	N	C9-C18 Extractable Petroleum Hydrocarbons, Aliphatic	100	95 U#	95 UJ		ug/l	C
SY-OBMW15-110723 67798-005	N	Dibenz(a,h)anthracene	1.0	0.50 U#	0.50 UJ		ug/l	C
SY-OBMW15-110723 67798-005	N	Indeno(1,2,3-c,d)pyrene	1.0	0.50 U#	0.50 UJ		ug/l	C
SY-OBMW15-110723 67798-005	N	Naphthalene	1.0	0.70 U#	0.70 UJ		ug/l	C
SY-OBMW4R-110723 67798-003	N	2-Methylnaphthalene	1.0	0.70 U#	0.70 UJ		ug/l	C
SY-OBMW4R-110723 67798-003	N	C9-C18 Extractable Petroleum Hydrocarbons, Aliphatic	100	95 U#	95 UJ		ug/l	C
SY-OBMW4R-110723 67798-003	N	Dibenz(a,h)anthracene	1.0	0.50 U#	0.50 UJ		ug/l	C
SY-OBMW4R-110723 67798-003	N	Indeno(1,2,3-c,d)pyrene	1.0	0.50 U#	0.50 UJ		ug/l	C
SY-OBMW4R-110723 67798-003	N	Naphthalene	1.0	0.70 U#	0.70 UJ		ug/l	C
SY-OBMW5-110723 67798-006	N	2-Methylnaphthalene	1.0	0.70 U#	0.70 UJ		ug/l	C
SY-OBMW5-110723 67798-006	N	C9-C18 Extractable Petroleum Hydrocarbons, Aliphatic	100	95 U#	95 UJ		ug/l	C
SY-OBMW5-110723 67798-006	N	Dibenz(a,h)anthracene	1.0	0.50 U#	0.50 UJ		ug/l	C
SY-OBMW5-110723 67798-006	N	Indeno(1,2,3-c,d)pyrene	1.0	0.50 U#	0.50 UJ		ug/l	C
SY-OBMW5-110723 67798-006	N	Naphthalene	1.0	0.70 U#	0.70 UJ		ug/l	C
SY-OBMW6-110723 67798-002	N	2-Methylnaphthalene	1.0	0.70 U#	0.70 UJ		ug/l	C
SY-OBMW6-110723 67798-002	N	C9-C18 Extractable Petroleum Hydrocarbons, Aliphatic	100	95 U#	95 UJ		ug/l	C
SY-OBMW6-110723 67798-002	N	Dibenz(a,h)anthracene	1.0	0.50 U#	0.50 UJ		ug/l	C
SY-OBMW6-110723 67798-002	N	Indeno(1,2,3-c,d)pyrene	1.0	0.50 U#	0.50 UJ		ug/l	C
SY-OBMW6-110723 67798-002	N	Naphthalene	1.0	0.70 U#	0.70 UJ		ug/l	C

Table of All Qualified Results

Test Method: MADEPVP		Extraction Method: METHOD						
FieldSample ID / LabSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
SY-OBMW13-110723 67798-008	N	Ethylbenzene	2.0	0.46 J	2.0 U		ug/l	L
SY-OBMW6-110723 67798-002	N	Ethylbenzene	2.0	0.46 J	2.0 U		ug/l	L

Test Method: SW6020A		Extraction Method: FLDFLT						
FieldSample ID / LabSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
SY-OBMW12-110723 67798-012	N	Potassium	0.54	2.6 M	2.6 J	-	mg/l	M

Test Method: SW6020A		Extraction Method: TOTAL						
FieldSample ID / LabSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
SY-BRMW2-80.5-95.5-110723 67798-007	N	Potassium	0.50	1.2 M	1.2 J	-	mg/l	M

Test Method: SW8082A		Extraction Method: SW3510C						
FieldSample ID / LabSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
SY-OBMW4R-110723 67798-003	N	PCB-1016 (Aroclor 1016)	0.10	0.062 U	0.062 X		ug/l	I/P2
SY-OBMW4R-110723 67798-003	N	PCB-1221 (Aroclor 1221)	0.10	0.062 U	0.062 X		ug/l	I/P2
SY-OBMW4R-110723 67798-003	N	PCB-1232 (Aroclor 1232)	0.10	0.062 U	0.062 X		ug/l	I/P2
SY-OBMW4R-110723 67798-003	N	PCB-1242 (Aroclor 1242)	0.10	0.062 U	0.062 X		ug/l	I/P2
SY-OBMW4R-110723 67798-003	N	PCB-1248 (Aroclor 1248)	0.10	0.062 U	0.062 X		ug/l	I/P2
SY-OBMW4R-110723 67798-003	N	PCB-1254 (Aroclor 1254)	0.10	0.062 U	0.062 X		ug/l	I/P2
SY-OBMW4R-110723 67798-003	N	PCB-1260 (Aroclor 1260)	0.10	0.062 U	0.062 X		ug/l	I/P2

Test Method: SW8260D		Extraction Method: SW5030C						
FieldSample ID / LabSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
SY-BRMW2-252.5-262.5-110723 67798-010	N	Toluene	2.0	1.3 J	1.3 J	+	ug/l	C/TR
SY-BRMW2-60.5-70.5-110723 67798-004	N	Toluene	2.0	6.3	6.3 J	+	ug/l	C
SY-BRMW2-80.5-95.5-110723 67798-007	N	Toluene	2.0	1.8 J	1.8 J	+	ug/l	C/M/TR
SY-OBMW5-110723 67798-006	N	Carbon disulfide	2.0	0.39 J	2.0 U		ug/l	L

Table of All Qualified Results

Test Method: SW8270E		Extraction Method: SW3510C						
FieldSample ID / LabSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
SY-BRMW2-252.5-262.5-110723 67798-010	N	1,2-Dichlorobenzene	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-BRMW2-252.5-262.5-110723 67798-010	N	1,3-Dichlorobenzene	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-BRMW2-252.5-262.5-110723 67798-010	N	1,4-Dichlorobenzene	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-BRMW2-252.5-262.5-110723 67798-010	N	4-Chloro-3-methylphenol	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-BRMW2-252.5-262.5-110723 67798-010	N	4-Nitrophenol	10	5.0 U#	5.0 UJ		ug/l	C
SY-BRMW2-252.5-262.5-110723 67798-010	N	Benzoic acid	50	45 U#	45 UJ		ug/l	C
SY-BRMW2-252.5-262.5-110723 67798-010	N	Diethyl phthalate	5.0	1.0 U#	1.0 UJ		ug/l	C
SY-BRMW2-252.5-262.5-110723 67798-010	N	Dimethyl phthalate	5.0	1.0 U#	1.0 UJ		ug/l	C
SY-BRMW2-252.5-262.5-110723 67798-010	N	Hexachlorobutadiene	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-BRMW2-252.5-262.5-110723 67798-010	N	Hexachlorocyclopentadiene	10	4.0 U#	4.0 UJ		ug/l	C
SY-BRMW2-252.5-262.5-110723 67798-010	N	Hexachloroethane	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-BRMW2-252.5-262.5-110723 67798-010	N	N-Nitrosodimethylamine (NDMA)	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-BRMW2-252.5-262.5-110723 67798-010	N	Phenol	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-BRMW2-60.5-70.5-110723 67798-004	N	1,2-Dichlorobenzene	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-BRMW2-60.5-70.5-110723 67798-004	N	1,3-Dichlorobenzene	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-BRMW2-60.5-70.5-110723 67798-004	N	1,4-Dichlorobenzene	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-BRMW2-60.5-70.5-110723 67798-004	N	4-Chloro-3-methylphenol	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-BRMW2-60.5-70.5-110723 67798-004	N	4-Nitrophenol	10	5.0 U#	5.0 UJ		ug/l	C
SY-BRMW2-60.5-70.5-110723 67798-004	N	Benzoic acid	50	45 U#	45 UJ		ug/l	C

Table of All Qualified Results

Test Method: SW8270E		Extraction Method: SW3510C						
FieldSample ID / LabSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
SY-BRMW2-60.5-70.5-110723 67798-004	N	Diethyl phthalate	5.0	1.0 U#	1.0 UJ		ug/l	C
SY-BRMW2-60.5-70.5-110723 67798-004	N	Dimethyl phthalate	5.0	1.0 U#	1.0 UJ		ug/l	C
SY-BRMW2-60.5-70.5-110723 67798-004	N	Hexachlorobutadiene	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-BRMW2-60.5-70.5-110723 67798-004	N	Hexachlorocyclopentadiene	10	4.0 U#	4.0 UJ		ug/l	C
SY-BRMW2-60.5-70.5-110723 67798-004	N	Hexachloroethane	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-BRMW2-60.5-70.5-110723 67798-004	N	N-Nitrosodimethylamine (NDMA)	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-BRMW2-60.5-70.5-110723 67798-004	N	Phenol	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-BRMW2-80.5-95.5-110723 67798-007	N	1,2-Dichlorobenzene	2.0	1.0 UM	1.0 UJ		ug/l	C/M
SY-BRMW2-80.5-95.5-110723 67798-007	N	1,3-Dichlorobenzene	2.0	1.0 UM	1.0 UJ		ug/l	C/M
SY-BRMW2-80.5-95.5-110723 67798-007	N	1,4-Dichlorobenzene	2.0	1.0 U#M	1.0 UJ		ug/l	C/M
SY-BRMW2-80.5-95.5-110723 67798-007	N	2,4,5-Trichlorophenol	2.0	1.0 U#M	1.0 UJ		ug/l	M
SY-BRMW2-80.5-95.5-110723 67798-007	N	2,4-Dichlorophenol	5.0	1.0 U#M	1.0 UJ		ug/l	M
SY-BRMW2-80.5-95.5-110723 67798-007	N	4-Chloro-3-methylphenol	2.0	1.0 U#M	1.0 UJ		ug/l	C/M
SY-BRMW2-80.5-95.5-110723 67798-007	N	4-Nitrophenol	10	5.0 U#M	5.0 UJ		ug/l	C/M
SY-BRMW2-80.5-95.5-110723 67798-007	N	Benzoic acid	50	45 U#M	45 UJ		ug/l	C/M
SY-BRMW2-80.5-95.5-110723 67798-007	N	Diethyl phthalate	5.0	1.0 U#	1.0 UJ		ug/l	C
SY-BRMW2-80.5-95.5-110723 67798-007	N	Dimethyl phthalate	5.0	1.0 U#M	1.0 UJ		ug/l	C/M
SY-BRMW2-80.5-95.5-110723 67798-007	N	Hexachlorobutadiene	2.0	1.0 U#M	1.0 UJ		ug/l	C
SY-BRMW2-80.5-95.5-110723 67798-007	N	Hexachlorocyclopentadiene	10	4.0 U#M	4.0 UJ		ug/l	C/M

Table of All Qualified Results

Test Method: SW8270E		Extraction Method: SW3510C						
FieldSample ID / LabSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
SY-BRMW2-80.5-95.5-110723 67798-007	N	Hexachloroethane	2.0	1.0 U#M	1.0 UJ		ug/l	C/M
SY-BRMW2-80.5-95.5-110723 67798-007	N	N-Nitrosodimethylamine (NDMA)	2.0	1.0 U#M	1.0 UJ		ug/l	C/M
SY-BRMW2-80.5-95.5-110723 67798-007	N	Phenol	2.0	1.0 U#M	1.0 UJ		ug/l	C/M
SY-OBMW12-110723 67798-001	N	1,2-Dichlorobenzene	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-OBMW12-110723 67798-001	N	1,3-Dichlorobenzene	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-OBMW12-110723 67798-001	N	1,4-Dichlorobenzene	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-OBMW12-110723 67798-001	N	4-Chloro-3-methylphenol	2.0	1.0 U#M	1.0 UJ		ug/l	C/M
SY-OBMW12-110723 67798-001	N	4-Nitrophenol	10	5.0 U#M	5.0 UJ		ug/l	C/M
SY-OBMW12-110723 67798-001	N	Benzoic acid	50	45 U#M	45 UJ		ug/l	C/M
SY-OBMW12-110723 67798-001	N	Diethyl phthalate	5.0	1.0 U#	1.0 UJ		ug/l	C
SY-OBMW12-110723 67798-001	N	Dimethyl phthalate	5.0	1.0 U#	1.0 UJ		ug/l	C
SY-OBMW12-110723 67798-001	N	Hexachlorobutadiene	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-OBMW12-110723 67798-001	N	Hexachlorocyclopentadiene	10	4.0 U#M	4.0 UJ		ug/l	C/M
SY-OBMW12-110723 67798-001	N	Hexachloroethane	2.0	1.0 U#M	1.0 UJ		ug/l	C
SY-OBMW12-110723 67798-001	N	N-Nitrosodimethylamine (NDMA)	2.0	1.0 U#M	1.0 UJ		ug/l	C/M
SY-OBMW12-110723 67798-001	N	Phenol	2.0	1.0 U#M	1.0 UJ		ug/l	C/M
SY-OBMW13-110723 67798-008	N	1,2-Dichlorobenzene	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-OBMW13-110723 67798-008	N	1,3-Dichlorobenzene	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-OBMW13-110723 67798-008	N	1,4-Dichlorobenzene	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-OBMW13-110723 67798-008	N	4-Chloro-3-methylphenol	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-OBMW13-110723 67798-008	N	4-Nitrophenol	10	5.0 U#	5.0 UJ		ug/l	C
SY-OBMW13-110723 67798-008	N	Benzoic acid	50	45 U#	45 UJ		ug/l	C
SY-OBMW13-110723 67798-008	N	Diethyl phthalate	5.0	1.0 U#	1.0 UJ		ug/l	C
SY-OBMW13-110723 67798-008	N	Dimethyl phthalate	5.0	1.0 U#	1.0 UJ		ug/l	C
SY-OBMW13-110723 67798-008	N	Hexachlorobutadiene	2.0	1.0 U#	1.0 UJ		ug/l	C

Table of All Qualified Results

Test Method: SW8270E		Extraction Method: SW3510C						
FieldSample ID / LabSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
SY-OBMW13-110723 67798-008	N	Hexachlorocyclopentadiene	10	4.0 U#	4.0 UJ		ug/l	C
SY-OBMW13-110723 67798-008	N	Hexachloroethane	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-OBMW13-110723 67798-008	N	N-Nitrosodimethylamine (NDMA)	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-OBMW13-110723 67798-008	N	Phenol	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-OBMW14-110723 67798-009	N	1,2-Dichlorobenzene	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-OBMW14-110723 67798-009	N	1,3-Dichlorobenzene	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-OBMW14-110723 67798-009	N	1,4-Dichlorobenzene	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-OBMW14-110723 67798-009	N	4-Chloro-3-methylphenol	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-OBMW14-110723 67798-009	N	4-Nitrophenol	10	5.0 U#	5.0 UJ		ug/l	C
SY-OBMW14-110723 67798-009	N	Benzoic acid	50	45 U#	45 UJ		ug/l	C
SY-OBMW14-110723 67798-009	N	Diethyl phthalate	5.0	1.0 U#	1.0 UJ		ug/l	C
SY-OBMW14-110723 67798-009	N	Dimethyl phthalate	5.0	1.0 U#	1.0 UJ		ug/l	C
SY-OBMW14-110723 67798-009	N	Hexachlorobutadiene	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-OBMW14-110723 67798-009	N	Hexachlorocyclopentadiene	10	4.0 U#	4.0 UJ		ug/l	C
SY-OBMW14-110723 67798-009	N	Hexachloroethane	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-OBMW14-110723 67798-009	N	N-Nitrosodimethylamine (NDMA)	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-OBMW14-110723 67798-009	N	Phenol	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-OBMW15-110723 67798-005	N	1,2-Dichlorobenzene	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-OBMW15-110723 67798-005	N	1,3-Dichlorobenzene	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-OBMW15-110723 67798-005	N	1,4-Dichlorobenzene	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-OBMW15-110723 67798-005	N	4-Chloro-3-methylphenol	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-OBMW15-110723 67798-005	N	4-Nitrophenol	10	5.0 U#	5.0 UJ		ug/l	C
SY-OBMW15-110723 67798-005	N	Benzoic acid	50	45 U#	45 UJ		ug/l	C
SY-OBMW15-110723 67798-005	N	Diethyl phthalate	5.0	1.0 U#	1.0 UJ		ug/l	C
SY-OBMW15-110723 67798-005	N	Dimethyl phthalate	5.0	1.0 U#	1.0 UJ		ug/l	C
SY-OBMW15-110723 67798-005	N	Hexachlorobutadiene	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-OBMW15-110723 67798-005	N	Hexachlorocyclopentadiene	10	4.0 U#	4.0 UJ		ug/l	C

Table of All Qualified Results

Test Method: SW8270E		Extraction Method: SW3510C						
FieldSample ID / LabSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
SY-OBMW15-110723 67798-005	N	Hexachloroethane	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-OBMW15-110723 67798-005	N	N-Nitrosodimethylamine (NDMA)	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-OBMW15-110723 67798-005	N	Phenol	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-OBMW4R-110723 67798-003	N	1,2-Dichlorobenzene	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-OBMW4R-110723 67798-003	N	1,3-Dichlorobenzene	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-OBMW4R-110723 67798-003	N	1,4-Dichlorobenzene	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-OBMW4R-110723 67798-003	N	4-Chloro-3-methylphenol	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-OBMW4R-110723 67798-003	N	4-Nitrophenol	10	5.0 U#	5.0 UJ		ug/l	C
SY-OBMW4R-110723 67798-003	N	Benzoic acid	50	45 U#	45 UJ		ug/l	C
SY-OBMW4R-110723 67798-003	N	Diethyl phthalate	5.0	1.0 U#	1.0 UJ		ug/l	C
SY-OBMW4R-110723 67798-003	N	Dimethyl phthalate	5.0	1.0 U#	1.0 UJ		ug/l	C
SY-OBMW4R-110723 67798-003	N	Hexachlorobutadiene	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-OBMW4R-110723 67798-003	N	Hexachlorocyclopentadiene	10	4.0 U#	4.0 UJ		ug/l	C
SY-OBMW4R-110723 67798-003	N	Hexachloroethane	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-OBMW4R-110723 67798-003	N	N-Nitrosodimethylamine (NDMA)	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-OBMW4R-110723 67798-003	N	Phenol	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-OBMW5-110723 67798-006	N	1,2-Dichlorobenzene	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-OBMW5-110723 67798-006	N	1,3-Dichlorobenzene	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-OBMW5-110723 67798-006	N	1,4-Dichlorobenzene	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-OBMW5-110723 67798-006	N	4-Chloro-3-methylphenol	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-OBMW5-110723 67798-006	N	4-Nitrophenol	10	5.0 U#	5.0 UJ		ug/l	C
SY-OBMW5-110723 67798-006	N	Benzoic acid	50	45 U#	45 UJ		ug/l	C
SY-OBMW5-110723 67798-006	N	Diethyl phthalate	5.0	1.0 U#	1.0 UJ		ug/l	C
SY-OBMW5-110723 67798-006	N	Dimethyl phthalate	5.0	1.0 U#	1.0 UJ		ug/l	C
SY-OBMW5-110723 67798-006	N	Hexachlorobutadiene	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-OBMW5-110723 67798-006	N	Hexachlorocyclopentadiene	10	4.0 U#	4.0 UJ		ug/l	C
SY-OBMW5-110723 67798-006	N	Hexachloroethane	2.0	1.0 U#	1.0 UJ		ug/l	C

Table of All Qualified Results

Test Method: SW8270E		Extraction Method: SW3510C						
FieldSample ID / LabSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
SY-OBMW5-110723 67798-006	N	N-Nitrosodimethylamine (NDMA)	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-OBMW5-110723 67798-006	N	Phenol	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-OBMW6-110723 67798-002	N	1,2-Dichlorobenzene	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-OBMW6-110723 67798-002	N	1,3-Dichlorobenzene	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-OBMW6-110723 67798-002	N	1,4-Dichlorobenzene	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-OBMW6-110723 67798-002	N	4-Chloro-3-methylphenol	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-OBMW6-110723 67798-002	N	4-Nitrophenol	10	5.0 U#	5.0 UJ		ug/l	C
SY-OBMW6-110723 67798-002	N	Benzoic acid	50	45 U#	45 UJ		ug/l	C
SY-OBMW6-110723 67798-002	N	Diethyl phthalate	5.0	1.0 U#	1.0 UJ		ug/l	C
SY-OBMW6-110723 67798-002	N	Dimethyl phthalate	5.0	1.0 U#	1.0 UJ		ug/l	C
SY-OBMW6-110723 67798-002	N	Hexachlorobutadiene	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-OBMW6-110723 67798-002	N	Hexachlorocyclopentadiene	10	4.0 U#	4.0 UJ		ug/l	C
SY-OBMW6-110723 67798-002	N	Hexachloroethane	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-OBMW6-110723 67798-002	N	N-Nitrosodimethylamine (NDMA)	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-OBMW6-110723 67798-002	N	Phenol	2.0	1.0 U#	1.0 UJ		ug/l	C

Analytes not found in project samples are reported as not detected at the limit of detection (LOD) unless blank contamination occurs and then the sample may be reported as not detected at the (LOQ) based on the sample concentration.
In instances where no LOD is provided, results are reported down to the LOQ.
Trace values are not included in the qualified results table unless additional reason codes are associated.

Table of Results with Modified Qualifiers

Modified Qualifiers for test method SW8082A

FieldSample ID / LabSample ID	Type	Analyte	LOQ	Lab Result	ADR Result	ADR Reason	Modified Result	Reason
SY-OBMW4R-110723 67798-003	N	PCB-1016 (Aroclor 1016)	0.10	0.062 U	0.062 X	I	0.062 X	I/P2
SY-OBMW4R-110723 67798-003	N	PCB-1221 (Aroclor 1221)	0.10	0.062 U	0.062 X	I	0.062 X	I/P2
SY-OBMW4R-110723 67798-003	N	PCB-1232 (Aroclor 1232)	0.10	0.062 U	0.062 X	I	0.062 X	I/P2
SY-OBMW4R-110723 67798-003	N	PCB-1242 (Aroclor 1242)	0.10	0.062 U	0.062 X	I	0.062 X	I/P2
SY-OBMW4R-110723 67798-003	N	PCB-1248 (Aroclor 1248)	0.10	0.062 U	0.062 X	I	0.062 X	I/P2
SY-OBMW4R-110723 67798-003	N	PCB-1254 (Aroclor 1254)	0.10	0.062 U	0.062 X	I	0.062 X	I/P2
SY-OBMW4R-110723 67798-003	N	PCB-1260 (Aroclor 1260)	0.10	0.062 U	0.062 X	I	0.062 X	I/P2

Modified Qualifiers for test method SW8270E

FieldSample ID / LabSample ID	Type	Analyte	LOQ	Lab Result	ADR Result	ADR Reason	Modified Result	Reason
SY-BRMW2-252.5-262.5-110723 67798-010	N	Hexachloroethane	2.0	1.0 U#	1.0 X	C	1.0 UJ	C
SY-BRMW2-60.5-70.5-110723 67798-004	N	Hexachloroethane	2.0	1.0 U#	1.0 X	C	1.0 UJ	C
SY-BRMW2-80.5-95.5-110723 67798-007	N	Benzoic acid	50	45 U#M	45 X	C/M	45 UJ	C/M
SY-BRMW2-80.5-95.5-110723 67798-007	N	Hexachloroethane	2.0	1.0 U#M	1.0 X	C/M	1.0 UJ	C/M
SY-OBMW12-110723 67798-001	N	Benzoic acid	50	45 U#M	45 X	C/M	45 UJ	C/M
SY-OBMW12-110723 67798-001	N	Hexachloroethane	2.0	1.0 U#M	1.0 X	C	1.0 UJ	C
SY-OBMW12-110723 67798-001	N	Phenol	2.0	1.0 U#M	1.0 X	C/M	1.0 UJ	C/M
SY-OBMW13-110723 67798-008	N	Hexachloroethane	2.0	1.0 U#	1.0 X	C	1.0 UJ	C
SY-OBMW14-110723 67798-009	N	Hexachloroethane	2.0	1.0 U#	1.0 X	C	1.0 UJ	C
SY-OBMW15-110723 67798-005	N	Hexachloroethane	2.0	1.0 U#	1.0 X	C	1.0 UJ	C
SY-OBMW4R-110723 67798-003	N	Hexachloroethane	2.0	1.0 U#	1.0 X	C	1.0 UJ	C
SY-OBMW5-110723 67798-006	N	Hexachloroethane	2.0	1.0 U#	1.0 X	C	1.0 UJ	C
SY-OBMW6-110723 67798-002	N	Hexachloroethane	2.0	1.0 U#	1.0 X	C	1.0 UJ	C

Analytes not found in project samples are reported as not detected at the limit of detection (LOD) unless blank contamination occurs and then the sample may be reported as not detected at the (LOQ) based on the sample concentration.
In instances where no LOD is provided, results are reported down to the LOQ.
Trace values are not included in the qualified results table unless additional reason codes are associated.

Reason Code Definitions

Code	Definition
C	LCS Recovery
D	MS RPD
I	Surrogate recovery outside project limits.
L	Lab Blank
M	MS Recovery
P2	Improper preparation/extraction
TR	Trace Level Detect
Z	LCS RPD

Flag Code and Definitions

Flag	Definition
J	Estimated Value
N	The analysis indicates the presence of an analyte for which there was presumptive evidence to make a tentative identification.
NJ	The analyte has been tentatively identified or presumptively as present and the associated numerical value was the estimated concentration in the sample.
R	The data are rejected due to deficiencies in meeting QC criteria and may not be used for decision making.
U	Undetected: The analyte was analyzed for, but not detected.
UJ	The analyte was not detected; however, the result is estimated due to discrepancies in meeting certain analyte-specific quality control criteria.
X	Result may require rejection; PDT attention required

Bias

-	The result may be biased low
+	The result may be biased high

Note - The bias field is a separate field; however, it is an integral part of the final flag (qualifier) on the sample result

Review Questions

Method: MADEPEP (Method for the Determination of Extractable Petroleum Hydrocarbons (EPH))

Review Questions	Yes	No	NA	Comment
Were there discrepancies between the COC and the samples received?		•		No discrepancies were noted between the COC and the samples received.
Were there discrepancies between the COC and the sample labels?		•		No discrepancies were noted between the COC and the samples received.
Were samples relinquished properly on the COC?	•			
Were all samples properly preserved?	•			
Were sampling dates/times, date and time of laboratory receipt of samples, and sample conditions upon receipt at the laboratory (including preservation, pH, and temperature) documented?	•			
Were sample results reported with percent moisture correction if required?			•	Only water samples were collected.
Were analytical methods performed and analysis dates present?	•			
Were all requested target analytes reported?	•			
Were QAPP specified Project Quantitation Limit Goals achieved? (The laboratory LOQ is compared to the QAPP Project Quantitation Goal)	•			
Were holding times met?	•			
Were trip blanks analyzed at the proper frequency and in control?			•	Trip blanks were not collected for this method.
Were field blanks analyzed at the proper frequency and in control?			•	Field blanks were not collected.
Were equipment blanks analyzed at the proper frequency and in control?			•	Equipment blanks were not collected.
Was a method blank prepared and analyzed with each batch?	•			
Were target analytes in the method blank less than DL?	•			
Was an LCS/LCSD pair prepared and analyzed with each batch?	•			
Were LCS/LCSD recoveries within project acceptance limits?		•		Due to low LCS/LCSD %R, several associated non-detect results were qualified as estimated (UJ).
Was the LCS/LCSD RPD within project acceptance limits?		•		Due to high LCS/LCSD RPD, one result was qualified as estimated (J).
Was a MS/MSD pair prepared with each batch?	•			
Were MS/MSD recoveries within project acceptance limits?		•		Due to low MS/MSD %R, several non-detect analytes were qualified as estimated (UJ).
Was the MS/MSD RPD within project acceptance limits?	•			
If ISM was used for sample collection, were laboratory triplicates analyzed and within project acceptance limits?			•	ISM was not performed.
Were surrogate recoveries within project acceptance limits?		•		Due to low surrogate percent recovery, several associated detect and non-detect sample results were qualified as estimated with a low bias (J-/UJ).
Were field replicates (duplicates, triplicates, etc.) analyzed at the proper frequency and in control?			•	Field replicates were not collected for this SDG.
Were reported sample concentrations within calibration range?	•			
Have all Laboratory Case Narrative comments/findings been addressed in the data review process?	•			
Were DoD QSM corrective actions followed if deviations were noted?	•			

Review Questions

Method: MADEPEP (Method for the Determination of Extractable Petroleum Hydrocarbons (EPH))				
Review Questions	Yes	No	NA	Comment
Were any data recommended for exclusion in the data validation process?		•		All data is acceptable as reported or as qualified during data validation.

Review Questions

Method: MADEPVP (Method for the Determination of Volatile Petroleum Hydrocarbons (VPH))

Review Questions	Yes	No	NA	Comment
Were there discrepancies between the COC and the samples received?		•		No discrepancies were noted between the COC and the samples received.
Were there discrepancies between the COC and the sample labels?		•		No discrepancies were noted between the COC and the samples received.
Were samples relinquished properly on the COC?	•			
Were all samples properly preserved?	•			
Were sampling dates/times, date and time of laboratory receipt of samples, and sample conditions upon receipt at the laboratory (including preservation, pH, and temperature) documented?	•			
Were sample results reported with percent moisture correction if required?			•	Only water samples were collected.
Were analytical methods performed and analysis dates present?	•			
Were all requested target analytes reported?	•			
Were QAPP specified Project Quantitation Limit Goals achieved? (The laboratory LOQ is compared to the QAPP Project Quantitation Goal)	•			
Were holding times met?	•			
Were trip blanks analyzed at the proper frequency and in control?	•			
Were field blanks analyzed at the proper frequency and in control?			•	Field blanks were not collected.
Were equipment blanks analyzed at the proper frequency and in control?			•	Equipment blanks were not collected.
Was a method blank prepared and analyzed with each batch?	•			
Were target analytes in the method blank less than DL?		•		Due to ethylbenzene in the method blank, two results were qualified as non-detect (U).
Was an LCS/LCSD pair prepared and analyzed with each batch?	•			
Were LCS/LCSD recoveries within project acceptance limits?	•			
Was the LCS/LCSD RPD within project acceptance limits?	•			
Was a MS/MSD pair prepared with each batch?	•			
Were MS/MSD recoveries within project acceptance limits?		•		Although several MS/MSDs recovered high, the associated sample results were non-detect so sample qualification was not necessary.
Was the MS/MSD RPD within project acceptance limits?	•			
If ISM was used for sample collection, were laboratory triplicates analyzed and within project acceptance limits?			•	ISM was not performed.
Were surrogate recoveries within project acceptance limits?	•			
Were field replicates (duplicates, triplicates, etc.) analyzed at the proper frequency and in control?			•	Field replicates were not collected in this SDG.
Were reported sample concentrations within calibration range?	•			
Have all Laboratory Case Narrative comments/findings been addressed in the data review process?	•			
Were DoD QSM corrective actions followed if deviations were noted?	•			

Review Questions

Method: MADEPVP (Method for the Determination of Volatile Petroleum Hydrocarbons (VPH))				
Review Questions	Yes	No	NA	Comment
Were any data recommended for exclusion in the data validation process?		•		All data is acceptable as reported or as qualified during data validation.

Review Questions

Method: SW6020A (Trace Metals by Inductively Coupled Plasma/Mass Spectrometry)				
Review Questions	Yes	No	NA	Comment
Were there discrepancies between the COC and the samples received?		•		No discrepancies were noted between the COC and the samples received.
Were there discrepancies between the COC and the sample labels?		•		No discrepancies were noted between the COC and the samples received.
Were samples relinquished properly on the COC?	•			
Were all samples properly preserved?	•			
Were sampling dates/times, date and time of laboratory receipt of samples, and sample conditions upon receipt at the laboratory (including preservation, pH, and temperature) documented?	•			
Were sample results reported with percent moisture correction if required?			•	Only water samples were collected.
Were analytical methods performed and analysis dates present?	•			
Were all requested target analytes reported?	•			
Were QAPP specified Project Quantitation Limit Goals achieved? (The laboratory LOQ is compared to the QAPP Project Quantitation Goal)	•			
Were holding times met?	•			
Were trip blanks analyzed at the proper frequency and in control?			•	Trip blanks were not collected for this method.
Were field blanks analyzed at the proper frequency and in control?			•	Field blanks were not collected.
Were equipment blanks analyzed at the proper frequency and in control?			•	Equipment blanks were not collected.
Was a method blank prepared and analyzed with each batch?	•			
Were target analytes in the method blank less than DL?	•			
Was an LCS/LCSD pair prepared and analyzed with each batch?	•			
Were LCS/LCSD recoveries within project acceptance limits?	•			
Was the LCS/LCSD RPD within project acceptance limits?				
Was a MS/MSD pair prepared with each batch?	•			
Were MS/MSD recoveries within project acceptance limits?		•		Due to low MSD recovery, one total and one dissolved potassium results were qualified as estimated with a low bias (J-). Although magnesium was out for the total and dissolved MS/MSD, the native sample concentration was greater than four times the spike concentration so sample qualification was not necessary.
Was the MS/MSD RPD within project acceptance limits?	•			
Were Post Spike (PS) recoveries within project acceptance limits?			•	PS was not reported.
Was a Dilution Test/Serial Dilution performed and within project acceptance criteria?			•	Serial dilution was not reported.
If ISM was used for sample collection, were laboratory triplicates analyzed and within project acceptance limits?			•	ISM was not performed.
Were field replicates (duplicates, triplicates, etc.) analyzed at the proper frequency and in control?			•	Field replicates were not collected for this SDG.
Were reported sample concentrations within calibration range?	•			

Review Questions

Method: SW6020A (Trace Metals by Inductively Coupled Plasma/Mass Spectrometry)				
Review Questions	Yes	No	NA	Comment
Have all Laboratory Case Narrative comments/findings been addressed in the data review process?	•			
Were DoD QSM corrective actions followed if deviations were noted?	•			
Were any data recommended for exclusion in the data validation process?		•		All data is acceptable as reported or as qualified during data validation.

Review Questions

Method: SW7470A (Mercury in Water (Manual Cold-Vapor Technique))				
Review Questions	Yes	No	NA	Comment
Were there discrepancies between the COC and the samples received?		•		No discrepancies were noted between the COC and the samples received.
Were there discrepancies between the COC and the sample labels?		•		No discrepancies were noted between the COC and the samples received.
Were samples relinquished properly on the COC?	•			
Were all samples properly preserved?	•			
Were sampling dates/times, date and time of laboratory receipt of samples, and sample conditions upon receipt at the laboratory (including preservation, pH, and temperature) documented?	•			
Were sample results reported with percent moisture correction if required?			•	Only water samples were collected.
Were analytical methods performed and analysis dates present?	•			
Were all requested target analytes reported?	•			
Were QAPP specified Project Quantitation Limit Goals achieved? (The laboratory LOQ is compared to the QAPP Project Quantitation Goal)	•			
Were holding times met?	•			
Were trip blanks analyzed at the proper frequency and in control?			•	Trip blanks were not collected for this method.
Were field blanks analyzed at the proper frequency and in control?			•	Field blanks were not collected.
Were equipment blanks analyzed at the proper frequency and in control?			•	Equipment blanks were not collected.
Was a method blank prepared and analyzed with each batch?	•			
Were target analytes in the method blank less than DL?	•			
Was an LCS/LCSD pair prepared and analyzed with each batch?	•			
Were LCS/LCSD recoveries within project acceptance limits?	•			
Was the LCS/LCSD RPD within project acceptance limits?	•			
Was a MS/MSD pair prepared with each batch?	•			
Were MS/MSD recoveries within project acceptance limits?	•			
Was the MS/MSD RPD within project acceptance limits?	•			
If ISM was used for sample collection, were laboratory triplicates analyzed and within project acceptance limits?			•	ISM was not performed.
Were field replicates (duplicates, triplicates, etc.) analyzed at the proper frequency and in control?			•	Field replicates were not collected for this SDG.
Were reported sample concentrations within calibration range?	•			
Have all Laboratory Case Narrative comments/findings been addressed in the data review process?	•			
Were DoD QSM corrective actions followed if deviations were noted?	•			
Were any data recommended for exclusion in the data validation process?		•		All data is acceptable as reported.

Review Questions

Method: SW8082A (Polychlorinated Biphenyls (PCB))

Review Questions	Yes	No	NA	Comment
Were there discrepancies between the COC and the samples received?		•		No discrepancies were noted between the COC and the samples received.
Were there discrepancies between the COC and the sample labels?		•		No discrepancies were noted between the COC and the samples received.
Were samples relinquished properly on the COC?	•			
Were all samples properly preserved?	•			
Were sampling dates/times, date and time of laboratory receipt of samples, and sample conditions upon receipt at the laboratory (including preservation, pH, and temperature) documented?	•			
Were sample results reported with percent moisture correction if required?			•	Only water samples were collected.
Were analytical methods performed and analysis dates present?	•			
Were all requested target analytes reported?	•			
Were QAPP specified Project Quantitation Limit Goals achieved? (The laboratory LOQ is compared to the QAPP Project Quantitation Goal)	•			
Were holding times met?	•			
Were trip blanks analyzed at the proper frequency and in control?			•	Trip blanks were not collected for this method.
Were field blanks analyzed at the proper frequency and in control?			•	Field blanks were not collected.
Were equipment blanks analyzed at the proper frequency and in control?			•	Equipment blanks were not collected.
Was a method blank prepared and analyzed with each batch?	•			
Were target analytes in the method blank less than DL?	•			
Was an LCS/LCSD pair prepared and analyzed with each batch?	•			
Were LCS/LCSD recoveries within project acceptance limits?	•			
Was the LCS/LCSD RPD within project acceptance limits?	•			
Was a MS/MSD pair prepared with each batch?	•			
Were MS/MSD recoveries within project acceptance limits?	•			
Was the MS/MSD RPD within project acceptance limits?	•			
If ISM was used for sample collection, were laboratory triplicates analyzed and within project acceptance limits?			•	ISM was not performed.
Were surrogate recoveries within project acceptance limits?		•		Sample SY-OBMW4R-110723 was spilled during extraction loosing an unknown quantity, which resulted in low surrogate recoveries. Due to the surrogates recovering below 10%, the non-detected results were qualified as recommended for exclusion (X).
Were field replicates (duplicates, triplicates, etc.) analyzed at the proper frequency and in control?			•	Field replicates were not collected for this SDG.
Were reported sample concentrations within calibration range?	•			
Have all Laboratory Case Narrative comments/findings been addressed in the data review process?	•			

Review Questions

Method: SW8082A (Polychlorinated Biphenyls (PCB))				
Review Questions	Yes	No	NA	Comment
Were DoD QSM corrective actions followed if deviations were noted?	•			Due to sample SY-OBMW4R-110723 loosing an unknown quantity of volume during extraction due to a laboratory error, the results have been qualified as recommended for exclusion (X) and assigned reason code P2. Although the surrogate recovered low in SY-OBMW4R-110723, there was not enough sample volume left for re-analysis.
Were any data recommended for exclusion in the data validation process?	•			Due to the surrogates recovering below 10% in sample SY-OBMW4R-110723 and an error occurring resulting in loss of the sample extract, the non-detected results were qualified as recommended for exclusion (X). All remaining data is acceptable as reported.

Review Questions

Method: SW8260D (Volatile Organic Compounds by GC/MS)				
Review Questions	Yes	No	NA	Comment
Were there discrepancies between the COC and the samples received?		•		No discrepancies were noted between the COC and the samples received.
Were there discrepancies between the COC and the sample labels?		•		No discrepancies were noted between the COC and the samples received.
Were samples relinquished properly on the COC?	•			
Were all samples properly preserved?	•			
Were sampling dates/times, date and time of laboratory receipt of samples, and sample conditions upon receipt at the laboratory (including preservation, pH, and temperature) documented?	•			
Were sample results reported with percent moisture correction if required?			•	Only water samples were collected.
Were analytical methods performed and analysis dates present?	•			
Were all requested target analytes reported?	•			
Were QAPP specified Project Quantitation Limit Goals achieved? (The laboratory LOQ is compared to the QAPP Project Quantitation Goal)	•			
Were holding times met?	•			
Were trip blanks analyzed at the proper frequency and in control?	•			
Were field blanks analyzed at the proper frequency and in control?			•	Field blanks were not collected.
Were equipment blanks analyzed at the proper frequency and in control?			•	Equipment blanks were not collected.
Was a method blank prepared and analyzed with each batch?	•			
Were target analytes in the method blank less than DL?		•		Due to carbon disulfide in the method blank, one result was qualified as non-detect (U).
Was an LCS/LCSD pair prepared and analyzed with each batch?	•			
Were LCS/LCSD recoveries within project acceptance limits?		•		Due to high LCS/LCSD percent recovery, several detected results were qualified as estimated with a high bias (J+). Associated non-detect results were not qualified due to the high LCS/LCSD recoveries.
Was the LCS/LCSD RPD within project acceptance limits?	•			
Was a MS/MSD pair prepared with each batch?	•			
Were MS/MSD recoveries within project acceptance limits?		•		Due to high MS/MSD percent recovery, one toluene result was qualified as estimated with a high bias (J+). Associated non-detect results were not qualified due to the high MS/MSD recoveries.
Was the MS/MSD RPD within project acceptance limits?		•		Although 1,1,2-trichloroethane had high MS/MSD RPD, the associated result was non-detect so sample qualification was not necessary.
If ISM was used for sample collection, were laboratory triplicates analyzed and within project acceptance limits?			•	ISM was not performed.
Were surrogate recoveries within project acceptance limits?	•			
Were field replicates (duplicates, triplicates, etc.) analyzed at the proper frequency and in control?			•	Field replicates were not collected in this SDG.
Were reported sample concentrations within calibration range?	•			

Review Questions

Method: SW8260D (Volatile Organic Compounds by GC/MS)				
Review Questions	Yes	No	NA	Comment
Have all Laboratory Case Narrative comments/findings been addressed in the data review process?	•			
Were DoD QSM corrective actions followed if deviations were noted?	•			
Were any data recommended for exclusion in the data validation process?		•		All data is acceptable as reported or as qualified during data validation.

Review Questions

Method: SW8270E (Semivolatile Organic Compounds by Gas Chromatography/Mass Spectrometry)				
Review Questions	Yes	No	NA	Comment
Were there discrepancies between the COC and the samples received?		•		No discrepancies were noted between the COC and the samples received.
Were there discrepancies between the COC and the sample labels?		•		No discrepancies were noted between the COC and the samples received.
Were samples relinquished properly on the COC?	•			
Were all samples properly preserved?	•			
Were sampling dates/times, date and time of laboratory receipt of samples, and sample conditions upon receipt at the laboratory (including preservation, pH, and temperature) documented?	•			
Were sample results reported with percent moisture correction if required?			•	Only water samples were collected.
Were analytical methods performed and analysis dates present?	•			
Were all requested target analytes reported?	•			
Were QAPP specified Project Quantitation Limit Goals achieved? (The laboratory LOQ is compared to the QAPP Project Quantitation Goal)	•			
Were holding times met?	•			
Were trip blanks analyzed at the proper frequency and in control?			•	Trip blanks were not collected for this method.
Were field blanks analyzed at the proper frequency and in control?			•	Field blanks were not collected.
Were equipment blanks analyzed at the proper frequency and in control?			•	Equipment blanks were not collected.
Was a method blank prepared and analyzed with each batch?	•			
Were target analytes in the method blank less than DL?	•			
Was an LCS/LCSD pair prepared and analyzed with each batch?	•			
Were LCS/LCSD recoveries within project acceptance limits?		•		Due to low LCS/LCSD %R, several non-detected analytes were qualified as estimated (UJ). Although hexachloroethane in the LCSD recovered, below 20%, the LCS recovered within the control limit. Based on professional judgement, the X qualifier for hexachloroethane was changed to UJ during data validation.
Was the LCS/LCSD RPD within project acceptance limits?		•		Although several LCS/LCSD RPDs were high, the associated results were non-detect so sample qualification was not necessary.
Was a MS/MSD pair prepared with each batch?	•			
Were MS/MSD recoveries within project acceptance limits?		•		Although benzoic acid, hexachloroethane, and phenol recovered below 20%, all had percent recoveries greater than 10%, which is the rejection point in DoD Module 1. Based on professional judgement, the X qualifier for benzoic acid, hexachloroethane, and phenol was changed to UJ during data validation. Additionally, there were several analytes that recovered low in the MS/MSDs which resulted in the associated non-detect results being qualified as estimated (UJ).
Was the MS/MSD RPD within project acceptance limits?		•		Although several MS/MSD RPDs were high, the associated results were non-detect so sample qualification was not necessary.

Review Questions

Method: SW8270E (Semivolatile Organic Compounds by Gas Chromatography/Mass Spectrometry)				
Review Questions	Yes	No	NA	Comment
If ISM was used for sample collection, were laboratory triplicates analyzed and within project acceptance limits?			•	ISM was not performed.
Were surrogate recoveries within project acceptance limits?	•			
Were field replicates (duplicates, triplicates, etc.) analyzed at the proper frequency and in control?			•	Field replicates were not collected.
Were reported sample concentrations within calibration range?	•			
Have all Laboratory Case Narrative comments/findings been addressed in the data review process?	•			
Were DoD QSM corrective actions followed if deviations were noted?	•			
Were any data recommended for exclusion in the data validation process?		•		All data is acceptable as reported or as qualified during data validation.

Data Validation Report for 67839

Facility:	D01ME0004-07, Dow Military Airfield, Salvage Yard
Event:	Dow SY Groundwater Nov 2023
SDG:	67839
Guidance Document:	Final UFP QAPP Revision No. 1 Remedial Investigation Former Salvage Yard Former Dow Military Airfield 233 Odlin Road, Bangor, Maine December 2022
Prime Contractor:	Credere Associates, LLC, Westbrook, ME
Project Manager:	Peter Thompson
Contract Laboratory(ies):	Absolute Resource Associates, LLC, Portsmouth, NH
Data Review Contractor:	EnSafe, Inc.
Data Review Level:	S2AVEM
Primary Data Reviewer:	Christina Ashdown, Senior Chemist
Second Reviewer:	Kevin Kha, Environmental Scientist
Date Submitted:	January 24, 2024

Field Sample ID	Lab Sample ID	Matrix	Type/Type Code	MADEPEP	MADEPVP	SW6020A	SW6020A - Dissolved	SW7470A	SW7470A - Dissolved	SW8082A	SW8260D	SW8270E
SY-BRMW10-65-75-110923	67839-011	Water	Field Duplicate/FD	X	X	X		X		X	X	X
SY-BRMW10-65-75-110923	67839-022	Water	Field Duplicate/FD				X		X			
SY-BRMW1-150-157-110923	67839-009	Water	Field Sample/N	X	X	X		X		X	X	X
SY-BRMW1-150-157-110923	67839-020	Water	Field Sample/N				X		X			
SY-BRMW1-42-52-110923	67839-008	Water	Field Sample/N	X	X	X		X		X	X	X
SY-BRMW1-42-52-110923	67839-019	Water	Field Sample/N				X		X			
SY-BRMW1-65-75-110923	67839-010	Water	Field Sample/N	X	X	X		X		X	X	X
SY-BRMW1-65-75-110923	67839-021	Water	Field Sample/N				X		X			
SY-BRMW3-145-155-110923	67839-005	Water	Field Sample/N	X	X	X		X		X	X	X
SY-BRMW3-145-155-110923	67839-016	Water	Field Sample/N				X		X			
SY-BRMW3-287-297-110923	67839-006	Water	Field Sample/N	X	X	X		X		X	X	X
SY-BRMW3-287-297-110923	67839-017	Water	Field Sample/N				X		X			
SY-BRMW3-47-62-110923	67839-004	Water	Field Sample/N	X	X	X		X		X	X	X
SY-BRMW3-47-62-110923	67839-015	Water	Field Sample/N				X		X			
SY-BRMW40-62-72-110923	67839-002	Water	Field Duplicate/FD	X	X	X		X		X	X	X
SY-BRMW40-62-72-110923	67839-013	Water	Field Duplicate/FD				X		X			
SY-BRMW4-138-148-110923	67839-003	Water	Field Sample/N	X	X	X		X		X	X	X
SY-BRMW4-138-148-110923	67839-014	Water	Field Sample/N				X		X			
SY-BRMW4-291-301-110923	67839-007	Water	Field Sample/N	X	X	X		X		X	X	X

Field Sample ID	Lab Sample ID	Matrix	Type/Type Code	MADEPEP	MADEPVP	SW6020A	SW6020A - Dissolved	SW7470A	SW7470A - Dissolved	SW8082A	SW8260D	SW8270E
SY-BRMW4-291-301-110923	67839-018	Water	Field Sample/N				X		X			
SY-BRMW4-62-72-110923	67839-001	Water	Field Sample/N	X	X	X		X		X	X	X
SY-BRMW4-62-72-110923	67839-012	Water	Field Sample/N				X		X			
TB33-110923	67839-024	Water	Trip Blank/TB		X						X	

This report assesses the analytical data quality associated with the analyses listed on the preceding cover page at S2AVEM data validation level. This assessment has been made through a combination of automated data review (ADR) and supplemental manual review, the details of which are described below. The approach taken in the review of this data set is consistent with the requirements contained in the Final UFP QAPP Revision No. 1 Remedial Investigation Former Salvage Yard Former Dow Military Airfield 233 Odlin Road, Bangor, Maine December 2022 and the additional guidance documents incorporated by reference to the extent possible. Where definitive guidance is not provided, results have been evaluated in a conservative manner using professional judgment.

Sample collection was managed and directed by Credere Associates, LLC, Westbrook, ME; analyses were performed by Absolute Resource Associates, LLC, Portsmouth, NH and were reported under sample delivery group (SDG) 67839. Data have been evaluated electronically based on electronic data deliverables (EDDs) provided by the laboratory, and hard copy data summary forms have also been reviewed during this effort and compared to the automated review output by the reviewers whose signatures appear on the following page. Findings based on the automated data submission and manual data verification processes are detailed in the ADR narrative and throughout this report.

All quality control (QC) elements associated with this SDG have been reviewed by a project chemist in accordance with the requirements defined for the project. This review is documented in the attached Data Review Checklists. The QC elements listed below were supported by the electronic deliverable and were evaluated using ADR processes.

- Blank - Negative
- Field Duplicate RPD
- Lab Blank
- LCS Recovery
- LCS RPD
- MS Recovery
- MS RPD
- Prep Hold Time
- Surrogate
- Test Hold Time
- Trip Blank

Results of the ADR process were subsequently reviewed and updated as applicable by the data review chemists identified on the signature page. Quality control elements that were not included in the electronic deliverable were reviewed manually and findings are documented within this report. Summaries of findings and associated qualified results are documented throughout this report.

A total of 111 results (4.66%) out of the 2382 results (sample and field QC samples) reported are qualified based on review and 8 results (0.34%) have been rejected or deemed a serious deficiency (X qualifier). Trace values, defined as results that are qualified as estimated because they fall between the detection limit and the reporting limit/limit of quantitation, are not counted as qualified results in the above count. The qualified results are detailed throughout this report and discussed in the narrative below, where appropriate.

Narrative Comments

Analytical Method	Data Reviewer Comment
MADEPEP	The laboratory case narrative indicates the following: "A reportable concentration of the range, Unadjusted C11-C22 Aromatics and C11-C22 Aromatics, was detected in the BLK17157. There is no impact to the data as these ranges were not detected above the LOQ in the associated field samples." Associated samples were qualified according during data validation. "The sample 67836-011 and LCSD17156 did not meet acceptance criteria for the extraction surrogate 1-chloro-octadecane. No additional sample volume remains for re-analysis. The results have been qualified accordingly." Associated results were qualified accordingly during data validation. "The LCS17156 did not meet the acceptance criteria for C9-C18 Aliphatics. This range showed low recovery. No additional sample volume remains for re-analysis. The results have been qualified accordingly. The relative percent difference between the LCS and LCSD17156 was outside the acceptance criteria for naphthalene and 2-methylnaphthalene. There is no impact to the data as these compounds were not detected in the associated samples." Associated results were qualified accordingly during data validation. "The LCS/D17157 did not meet the acceptance criteria for C9-C18 Aliphatics and C19-C36 Aliphatics. These ranges showed low recoveries. No additional sample volume remains for re-analysis. The results have been qualified accordingly." Associated results were qualified accordingly during data validation.
MADEPVP	The laboratory case narrative indicates the following: "The relative percent difference between the LCS and LCSD2303859 was outside the acceptance criteria for Unadjusted C9-C12 Aliphatics. There is no impact to the data as this range was not detected in the associated samples." The associated results were non-detect so sample qualification was not warranted.
SW6020A	This includes both total and dissolved 6020A results. The case narrative indicates the following: "Samples associated with continuing calibration verifications (CCV) that do not meet the acceptance criteria are re-analyzed for those particular elements. In circumstances where the same elements do not meet the acceptance criteria in the re-analysis, the results are reported with qualifiers. (Percent recovery range between 75% and 125%)" CCV review is not encompassed in Stage 2A data validation.
SW7470A	This includes both total and dissolved 7470A results.
SW8082A	No additional comments; see Checklist for detail.
SW8260D	The laboratory case narrative indicates the following: "The LCSD2303756 did not meet the acceptance criteria for m&p-xylenes. This compound showed high recovery. There is no impact to the data as this analyte was not detected in the associated samples." The associated samples were non-detect so sample qualification was not warranted. "The LCS/D2303766 did not meet the acceptance criteria for diethyl ether, 1,3-dichloropropane, and m&p-xylenes. These compounds showed high recoveries. The relative percent difference between the LCS and LCSD2303766 was outside the acceptance criteria for 1,1,2-trichloroethane. There is no impact to the data as this analyte was not detected in the associated samples." The associated samples were non-detect so sample qualification was not warranted.

SW8270E	The laboratory case narrative indicates the following: "The LCS/D17124 did not meet the acceptance criteria for several compounds. These compounds showed low recoveries. The relative percent difference between the LCS and LCSD17124 was outside the acceptance criteria for one compound. No additional sample volume remains for re-analysis. The results have been qualified accordingly." The associated sample results were qualified accordingly during data validation. "The LCS/D17145 did not meet the acceptance criteria for several compounds. These compounds showed low recoveries. The relative percent difference between the LCS and LCSD17145 was outside the acceptance criteria for several compounds. No additional sample volume remains for re-analysis. The results have been qualified accordingly." The associated sample results were qualified accordingly during data validation.

Christina Rink-Ashdown

Reviewed by Christina Ashdown, Senior Chemist, EnSafe, Inc. February 01, 2024

As the First Reviewer, I certify that I have performed a data review process in accordance with the requirements of the project guidance document, and have compared the electronic data to the laboratory's hard copy report and have verified the consistency of the reported sample results and method quality control data between the two deliverables.

Kevin Kha

Reviewed by Kevin Kha, Environmental Scientist, EnSafe, Inc. February 14, 2024

As the Second Reviewer, I certify that I have performed a quality assurance review of the report generated by the First Reviewer.

Quality Control Outliers for test method MADEPEP, Lab Blank

The purpose of laboratory blanks is to determine the existence and magnitude of cross-contamination problems resulting from laboratory activities. Reported results were evaluated to determine compliance with the required acceptance criteria. Summary forms were evaluated and compared to electronic data deliverables. Findings of this review, and contaminants found in laboratory blanks are listed below along with any associated qualified results.

Sample ID/ Lab Sample ID	Analyte	Result	Warning Limits	Control Limits	Units	Qualifier	Reason Code	Comment
17156PB17156 (LB)	C11-C22 Extractable Petroleum Hydrocarbons, Aromatic	78.2	< 53.968	< 100	ug/l	U/None*	L	
17156PB17156 (LB)	C11-C22 Extractable Petroleum Hydrocarbons, Aromatic (Unadjusted)	78.2	< 59.968	< 100	ug/l	U/None*	L	
17157PB17157 (LB)	C11-C22 Extractable Petroleum Hydrocarbons, Aromatic	101	< 53.968	< 100	ug/l	U/None*	L	
17157PB17157 (LB)	C11-C22 Extractable Petroleum Hydrocarbons, Aromatic (Unadjusted)	101	< 59.968	< 100	ug/l	U/None*	L	

Where two qualifiers are listed, such as 'J/UJ', the first applies to positive results, and the second to non-detect results.
Upper and Lower Warning and Control Limits are abbreviated UWL, LWL, UCL, and LCL in the Comment field.

*Blank flags displayed in the above table identify qualification of the sample result when it is less than or equal to the LOQ/RL. Sample results above the LOD or LOQ will be qualified based on the validation guidance assigned in the project setup.

Qualified Results associated with the Lab Blank for MADEPEP

FieldSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
SY-BRMW3-145-155-110923 67839-005	N	C11-C22 Extractable Petroleum Hydrocarbons, Aromatic	100	57 J	100 U		ug/l	L
SY-BRMW40-62-72-110923 67839-002	FD	C11-C22 Extractable Petroleum Hydrocarbons, Aromatic	100	59 J	100 U		ug/l	L

Analytes not found in project samples are reported as not detected at the limit of detection (LOD) unless blank contamination occurs and then the sample may be reported as not detected at the (LOD) or (LOQ) based on the sample concentration and the validation guidance. In instances where no LOD is provided, results are reported down to the LOQ.

Quality Control Outliers for test method MADEPEP, LCS Recovery

The laboratory control sample/laboratory control sample duplicate (LCS/LCSD) serves as a monitor of the overall performance of each step during the analysis, including the sample preparation. Reported results were evaluated to determine compliance with the required acceptance criteria, and summary forms were evaluated and compared to electronic data deliverables. Findings of this review, and any associated qualified results, are listed below.

Sample ID/ Lab Sample ID	Analyte	Result	Warning Limits	Control Limits	Units	Qualifier	Reason Code	Comment
17156LCS17156 (BS)	C9-C18 Extractable Petroleum Hydrocarbons, Aliphatic	37.0	40 - 140	20 - 140	percent	J/UJ	C	
17157LCS17157 (BS)	C19-C36 Extractable Petroleum Hydrocarbons, Aliphatic	36.0	40 - 140	20 - 140	percent	J/UJ	C	
17157LCS17157 (BS)	C9-C18 Extractable Petroleum Hydrocarbons, Aliphatic	17.0	40 - 140	20 - 140	percent	J/X	C	
17157LCSD17157 (BD)	C19-C36 Extractable Petroleum Hydrocarbons, Aliphatic	38.0	40 - 140	20 - 140	percent	J/UJ	C	
17157LCSD17157 (BD)	C9-C18 Extractable Petroleum Hydrocarbons, Aliphatic	15.0	40 - 140	20 - 140	percent	J/X	C	

Where two qualifiers are listed, such as 'J/UJ', the first applies to positive results, and the second to non-detect results.
Upper and Lower Warning and Control Limits are abbreviated UWL, LWL, UCL, and LCL in the Comment field.

Qualified Results associated with the LCS Recovery for MADEPEP

FieldSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
SY-BRMW10-65-75-110923 67839-011	FD	C19-C36 Extractable Petroleum Hydrocarbons, Aliphatic	100	97 U#	97 UJ		ug/l	C
SY-BRMW10-65-75-110923 67839-011	FD	C9-C18 Extractable Petroleum Hydrocarbons, Aliphatic	100	95 U#	95 X		ug/l	C
SY-BRMW1-150-157-110923 67839-009	N	C9-C18 Extractable Petroleum Hydrocarbons, Aliphatic	100	95 U#	95 UJ		ug/l	C
SY-BRMW1-42-52-110923 67839-008	N	C9-C18 Extractable Petroleum Hydrocarbons, Aliphatic	100	95 U#	95 UJ		ug/l	C
SY-BRMW1-65-75-110923 67839-010	N	C9-C18 Extractable Petroleum Hydrocarbons, Aliphatic	100	95 U#	95 UJ		ug/l	C
SY-BRMW3-145-155-110923 67839-005	N	C9-C18 Extractable Petroleum Hydrocarbons, Aliphatic	100	95 U#	95 UJ		ug/l	C

Qualified Results associated with the LCS Recovery for MADEPEP

FieldSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
SY-BRMW3-287-297-110923 67839-006	N	C9-C18 Extractable Petroleum Hydrocarbons, Aliphatic	100	95 U#	95 UJ		ug/l	C
SY-BRMW3-47-62-110923 67839-004	N	C9-C18 Extractable Petroleum Hydrocarbons, Aliphatic	100	95 U#	95 UJ		ug/l	C
SY-BRMW40-62-72-110923 67839-002	FD	C9-C18 Extractable Petroleum Hydrocarbons, Aliphatic	100	95 U#	95 UJ		ug/l	C
SY-BRMW4-138-148-110923 67839-003	N	C9-C18 Extractable Petroleum Hydrocarbons, Aliphatic	100	95 U#	95 UJ		ug/l	C
SY-BRMW4-291-301-110923 67839-007	N	C9-C18 Extractable Petroleum Hydrocarbons, Aliphatic	100	95 U#	95 UJ		ug/l	C
SY-BRMW4-62-72-110923 67839-001	N	C9-C18 Extractable Petroleum Hydrocarbons, Aliphatic	100	95 U#	95 UJ		ug/l	C

Analytes not found in project samples are reported as not detected at the limit of detection (LOD) unless blank contamination occurs and then the sample may be reported as not detected at the (LOD) or (LOQ) based on the sample concentration and the validation guidance. In instances where no LOD is provided, results are reported down to the LOQ.

Quality Control Outliers for test method MADEPEP, LCS RPD

The objective of laboratory control sample/laboratory control sample duplicate (LCS/LCSD) RPD analysis is to demonstrate acceptable method precision by the laboratory at the time of analysis. LCS/LCSD analyses are also performed to generate data that determines the long-term precision of the analytical method on various matrices. Non-homogenous samples can impact the apparent method precision. Summary forms were evaluated and compared to electronic data deliverables. Laboratory control sample/laboratory control sample duplicate RPD results that were outside of the acceptance criteria are listed below.

Sample ID/ Lab Sample ID	Analyte	Result	Warning Limits	Control Limits	Units	Qualifier	Reason Code	Comment
17156LCSD17156 (BD)	2-Methylnaphthalene	27.7	< 25	< 25	rpd	J/None	Z	
17156LCSD17156 (BD)	Naphthalene	27.6	< 25	< 25	rpd	J/None	Z	

Where two qualifiers are listed, such as 'J/UJ', the first applies to positive results, and the second to non-detect results.
Upper and Lower Warning and Control Limits are abbreviated UWL, LWL, UCL, and LCL in the Comment field.

No results associated with this QC element required qualification.

Quality Control Outliers for test method MADEPVP, Lab Blank

The purpose of laboratory blanks is to determine the existence and magnitude of cross-contamination problems resulting from laboratory activities. Reported results were evaluated to determine compliance with the required acceptance criteria. Summary forms were evaluated and compared to electronic data deliverables. Findings of this review, and contaminants found in laboratory blanks are listed below along with any associated qualified results.

Sample ID/ Lab Sample ID	Analyte	Result	Warning Limits	Control Limits	Units	Qualifier	Reason Code	Comment
2303859BLK112023A (LB)	Ethylbenzene	0.489	< 0.404	< 2	ug/l	U/None*	L	
2303861BLK112023A (LB)	Ethylbenzene	0.469	< 0.404	< 2	ug/l	U/None*	L	

Where two qualifiers are listed, such as 'J/UJ', the first applies to positive results, and the second to non-detect results.
Upper and Lower Warning and Control Limits are abbreviated UWL, LWL, UCL, and LCL in the Comment field.

*Blank flags displayed in the above table identify qualification of the sample result when it is less than or equal to the LOQ/RL. Sample results above the LOD or LOQ will be qualified based on the validation guidance assigned in the project setup.

No results associated with this QC element required qualification.

Quality Control Outliers for test method MADEPVP, LCS RPD

The objective of laboratory control sample/laboratory control sample duplicate (LCS/LCSD) RPD analysis is to demonstrate acceptable method precision by the laboratory at the time of analysis. LCS/LCSD analyses are also performed to generate data that determines the long-term precision of the analytical method on various matrices. Non-homogenous samples can impact the apparent method precision. Summary forms were evaluated and compared to electronic data deliverables. Laboratory control sample/laboratory control sample duplicate RPD results that were outside of the acceptance criteria are listed below.

Sample ID/ Lab Sample ID	Analyte	Result	Warning Limits	Control Limits	Units	Qualifier	Reason Code	Comment
2303859LCSD112023A (BD)	C9-C12 Volatile Petroleum Hydrocarbons, Aliphatic	36.6	< 25	< 25	rpd	J/None	Z	

Where two qualifiers are listed, such as 'J/UJ', the first applies to positive results, and the second to non-detect results.
Upper and Lower Warning and Control Limits are abbreviated UWL, LWL, UCL, and LCL in the Comment field.

No results associated with this QC element required qualification.

Quality Control Outliers for test method SW6020A, Dissolved, Field Duplicate RPD

Field duplicate analyses are performed in order to assess sample collection/laboratory precision for each sample matrix. Summary forms were evaluated and compared to electronic data deliverables. Field duplicate results that were outside of the acceptance criteria are listed below.

Sample ID/ Lab Sample ID	Analyte	Result	Warning Limits	Control Limits	Units	Qualifier	Reason Code	Comment
SY-BRMW40-62-72-110923 (N)	Iron	0.135	< 0.054	< 0.054	mg/l	J/UJ	D3	
SY-BRMW40-62-72-110923 (N)	Manganese	50.8	< 30	< 30	rpd	J/UJ	D3	

Where two qualifiers are listed, such as 'J/UJ', the first applies to positive results, and the second to non-detect results.
Upper and Lower Warning and Control Limits are abbreviated UWL, LWL, UCL, and LCL in the Comment field.

Qualified Results associated with the Field Duplicate RPD for SW6020A, Dissolved

FieldSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
SY-BRMW40-62-72-110923 67839-013	FD	Iron	0.054	0.074	0.074 J		mg/l	D3
SY-BRMW40-62-72-110923 67839-013	FD	Manganese	0.011	0.33	0.33 J		mg/l	D3
SY-BRMW4-62-72-110923 67839-012	N	Iron	0.054	0.21	0.21 J		mg/l	D3
SY-BRMW4-62-72-110923 67839-012	N	Manganese	0.011	0.55	0.55 J		mg/l	D3

Analytes not found in project samples are reported as not detected at the limit of detection (LOD) unless blank contamination occurs and then the sample may be reported as not detected at the (LOD) or (LOQ) based on the sample concentration and the validation guidance. In instances where no LOD is provided, results are reported down to the LOQ.

Quality Control Outliers for test method SW6020A, Dissolved, Lab Blank

The purpose of laboratory blanks is to determine the existence and magnitude of cross-contamination problems resulting from laboratory activities. Reported results were evaluated to determine compliance with the required acceptance criteria. Summary forms were evaluated and compared to electronic data deliverables. Findings of this review, and contaminants found in laboratory blanks are listed below along with any associated qualified results.

Sample ID/ Lab Sample ID	Analyte	Result	Warning Limits	Control Limits	Units	Qualifier	Reason Code	Comment
17205PB 17205 (LB)	Aluminum	0.0204	< 0.01012	< 0.05	mg/l	J/UJ	L	

Where two qualifiers are listed, such as 'J/UJ', the first applies to positive results, and the second to non-detect results.
Upper and Lower Warning and Control Limits are abbreviated UWL, LWL, UCL, and LCL in the Comment field.

No results associated with this QC element required qualification.

Quality Control Outliers for test method SW6020A, Dissolved, MS Recovery

Data for matrix spikes/matrix spike duplicates (MS/MSD) are generated to determine long-term precision and accuracy of the analytical method on various matrices and to demonstrate acceptable compound recovery by the laboratory at the time of sample analysis. These data alone cannot be used to evaluate the precision and accuracy of individual samples. However, when exercising professional judgment, MS/MSD data can be used in conjunction with other available QC information. Reported results were evaluated to determine compliance with the required acceptance criteria, and summary forms were evaluated and compared to electronic data deliverables. Findings of this review, and any associated qualified results, are listed below.

Sample ID/ Lab Sample ID	Analyte	Result	Warning Limits	Control Limits	Units	Qualifier	Reason Code	Comment
SY-BRMW3-47-62-110923 (SD)	Magnesium	80.0	83 - 118	30 - 125	percent	J/UJ	M	Spike amount Insignificant

Where two qualifiers are listed, such as 'J/UJ', the first applies to positive results, and the second to non-detect results.
Upper and Lower Warning and Control Limits are abbreviated UWL, LWL, UCL, and LCL in the Comment field.

No results associated with this QC element required qualification.

Quality Control Outliers for test method SW6020A, Total, Lab Blank

The purpose of laboratory blanks is to determine the existence and magnitude of cross-contamination problems resulting from laboratory activities. Reported results were evaluated to determine compliance with the required acceptance criteria. Summary forms were evaluated and compared to electronic data deliverables. Findings of this review, and contaminants found in laboratory blanks are listed below along with any associated qualified results.

Sample ID/ Lab Sample ID	Analyte	Result	Warning Limits	Control Limits	Units	Qualifier	Reason Code	Comment
17218PB 17218 (LB)	Aluminum	0.0186	< 0.01012	< 0.05	mg/l	J/UJ	L	
17218PB 17218 (LB)	Antimony	0.000219	< 0.00014	< 0.001	mg/l	J/UJ	L	
17218PB 17218 (LB)	Cobalt	0.0000210	< 2e-005	< 0.01	mg/l	J/UJ	L	
17218PB 17218 (LB)	Potassium	0.0592	< 0.03922	< 0.5	mg/l	J/UJ	L	
17218PB 17218 (LB)	Zinc	0.00324	< 0.00206	< 0.01	mg/l	J/UJ	L	

Where two qualifiers are listed, such as 'J/UJ', the first applies to positive results, and the second to non-detect results.
Upper and Lower Warning and Control Limits are abbreviated UWL, LWL, UCL, and LCL in the Comment field.

Qualified Results associated with the Lab Blank for SW6020A, Total

FieldSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
SY-BRMW10-65-75-110923 67839-011	FD	Antimony	0.0010	0.00094 J	0.00094 J	+	mg/l	L
SY-BRMW10-65-75-110923 67839-011	FD	Zinc	0.010	0.0036 J	0.010 U		mg/l	L
SY-BRMW1-150-157-110923 67839-009	N	Aluminum	0.050	0.028 J	0.028 J	+	mg/l	L
SY-BRMW1-150-157-110923 67839-009	N	Antimony	0.0010	0.00053 J	0.00053 J	+	mg/l	L
SY-BRMW1-150-157-110923 67839-009	N	Zinc	0.010	0.0024 J	0.010 U		mg/l	L
SY-BRMW1-42-52-110923 67839-008	N	Antimony	0.0010	0.00077 J	0.00077 J	+	mg/l	L
SY-BRMW1-42-52-110923 67839-008	N	Zinc	0.010	0.0035 J	0.010 U		mg/l	L
SY-BRMW1-65-75-110923 67839-010	N	Aluminum	0.050	0.018 J	0.050 U		mg/l	L
SY-BRMW1-65-75-110923 67839-010	N	Antimony	0.0010	0.00084 J	0.00084 J	+	mg/l	L
SY-BRMW1-65-75-110923 67839-010	N	Zinc	0.010	0.0035 J	0.010 U		mg/l	L
SY-BRMW3-145-155-110923 67839-005	N	Antimony	0.0010	0.00064 J	0.00064 J	+	mg/l	L
SY-BRMW3-287-297-110923 67839-006	N	Aluminum	0.050	0.010 J	0.050 U		mg/l	L

Qualified Results associated with the Lab Blank for SW6020A, Total

FieldSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
SY-BRMW3-287-297-110923 67839-006	N	Antimony	0.0010	0.0014	0.0014 J	+	mg/l	L
SY-BRMW3-47-62-110923 67839-004	N	Aluminum	0.050	0.011 J	0.050 U		mg/l	L
SY-BRMW3-47-62-110923 67839-004	N	Cobalt	0.010	0.00046 J	0.010 U		mg/l	L
SY-BRMW4-291-301-110923 67839-007	N	Antimony	0.0010	0.00092 J	0.00092 J	+	mg/l	L
SY-BRMW4-291-301-110923 67839-007	N	Zinc	0.010	0.0024 J	0.010 U		mg/l	L

Analytes not found in project samples are reported as not detected at the limit of detection (LOD) unless blank contamination occurs and then the sample may be reported as not detected at the (LOD) or (LOQ) based on the sample concentration and the validation guidance. In instances where no LOD is provided, results are reported down to the LOQ.

Quality Control Outliers for test method SW6020A, Total, MS Recovery

Data for matrix spikes/matrix spike duplicates (MS/MSD) are generated to determine long-term precision and accuracy of the analytical method on various matrices and to demonstrate acceptable compound recovery by the laboratory at the time of sample analysis. These data alone cannot be used to evaluate the precision and accuracy of individual samples. However, when exercising professional judgment, MS/MSD data can be used in conjunction with other available QC information. Reported results were evaluated to determine compliance with the required acceptance criteria, and summary forms were evaluated and compared to electronic data deliverables. Findings of this review, and any associated qualified results, are listed below.

Sample ID/ Lab Sample ID	Analyte	Result	Warning Limits	Control Limits	Units	Qualifier	Reason Code	Comment
SY-BRMW3-47-62-110923 (MS)	Magnesium	218	83 - 118	30 - 125	percent	J/None	M	Spike amount Insignificant
SY-BRMW3-47-62-110923 (SD)	Magnesium	32.0	83 - 118	30 - 125	percent	J/UJ	M	Spike amount Insignificant
SY-BRMW3-47-62-110923 (SD)	Sodium	82.0	85 - 117	30 - 125	percent	J/UJ	M	Spike amount Insignificant

Where two qualifiers are listed, such as 'J/UJ', the first applies to positive results, and the second to non-detect results.
Upper and Lower Warning and Control Limits are abbreviated UWL, LWL, UCL, and LCL in the Comment field.

No results associated with this QC element required qualification.

Quality Control Outliers for test method SW8260D, Field Duplicate RPD

Field duplicate analyses are performed in order to assess sample collection/laboratory precision for each sample matrix. Summary forms were evaluated and compared to electronic data deliverables. Field duplicate results that were outside of the acceptance criteria are listed below.

Sample ID/ Lab Sample ID	Analyte	Result	Warning Limits	Control Limits	Units	Qualifier	Reason Code	Comment
SY-BRMW40-62-72-110923 (N)	Tetrahydrofuran	3.35	< 2	< 2	ug/l	J/UJ	D3	

Where two qualifiers are listed, such as 'J/UJ', the first applies to positive results, and the second to non-detect results.
Upper and Lower Warning and Control Limits are abbreviated UWL, LWL, UCL, and LCL in the Comment field.

No results associated with this QC element required qualification.

Quality Control Outliers for test method SW8260D, LCS Recovery

The laboratory control sample/laboratory control sample duplicate (LCS/LCSD) serves as a monitor of the overall performance of each step during the analysis, including the sample preparation. Reported results were evaluated to determine compliance with the required acceptance criteria, and summary forms were evaluated and compared to electronic data deliverables. Findings of this review, and any associated qualified results, are listed below.

Sample ID/ Lab Sample ID	Analyte	Result	Warning Limits	Control Limits	Units	Qualifier	Reason Code	Comment
2303756LCSD111623G (BD)	m,p-Xylene	125	80 - 121	20 - 121	percent	J/None	C	
2303766LCSD111623H (BD)	1,3-Dichloropropane	124	80 - 119	20 - 119	percent	J/None	C	
2303766LCSD111623H (BD)	Diethyl ether (Ethyl ether)	130	68 - 129	20 - 129	percent	J/None	C	
2303766LCSD111623H (BD)	m,p-Xylene	124	80 - 121	20 - 121	percent	J/None	C	

Where two qualifiers are listed, such as 'J/UJ', the first applies to positive results, and the second to non-detect results.
Upper and Lower Warning and Control Limits are abbreviated UWL, LWL, UCL, and LCL in the Comment field.

No results associated with this QC element required qualification.

Quality Control Outliers for test method SW8260D, LCS RPD

The objective of laboratory control sample/laboratory control sample duplicate (LCS/LCSD) RPD analysis is to demonstrate acceptable method precision by the laboratory at the time of analysis. LCS/LCSD analyses are also performed to generate data that determines the long-term precision of the analytical method on various matrices. Non-homogenous samples can impact the apparent method precision. Summary forms were evaluated and compared to electronic data deliverables. Laboratory control sample/laboratory control sample duplicate RPD results that were outside of the acceptance criteria are listed below.

Sample ID/ Lab Sample ID	Analyte	Result	Warning Limits	Control Limits	Units	Qualifier	Reason Code	Comment
2303766LCSD111623H (BD)	1,1,2-Trichloroethane	21.3	< 20	< 20	rpd	J/None	Z	

Where two qualifiers are listed, such as 'J/UJ', the first applies to positive results, and the second to non-detect results.
Upper and Lower Warning and Control Limits are abbreviated UWL, LWL, UCL, and LCL in the Comment field.

No results associated with this QC element required qualification.

Quality Control Outliers for test method SW8270E, Field Duplicate RPD

Field duplicate analyses are performed in order to assess sample collection/laboratory precision for each sample matrix. Summary forms were evaluated and compared to electronic data deliverables. Field duplicate results that were outside of the acceptance criteria are listed below.

Sample ID/ Lab Sample ID	Analyte	Result	Warning Limits	Control Limits	Units	Qualifier	Reason Code	Comment
SY-BRMW10-65-75-110923 (N)	Bis(2-ethylhexyl)phthalate	119	< 25	< 25	ug/l	J/UJ	D3	

Where two qualifiers are listed, such as 'J/UJ', the first applies to positive results, and the second to non-detect results.
Upper and Lower Warning and Control Limits are abbreviated UWL, LWL, UCL, and LCL in the Comment field.

Qualified Results associated with the Field Duplicate RPD for SW8270E

FieldSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
SY-BRMW10-65-75-110923 67839-011	FD	Bis(2-ethylhexyl)phthalate	5.0	3.0 U	3.0 UJ		ug/l	D3
SY-BRMW1-65-75-110923 67839-010	N	Bis(2-ethylhexyl)phthalate	25	120	120 J		ug/l	D3

Analytes not found in project samples are reported as not detected at the limit of detection (LOD) unless blank contamination occurs and then the sample may be reported as not detected at the (LOD) or (LOQ) based on the sample concentration and the validation guidance. In instances where no LOD is provided, results are reported down to the LOQ.

Quality Control Outliers for test method SW8270E, LCS Recovery

The laboratory control sample/laboratory control sample duplicate (LCS/LCSD) serves as a monitor of the overall performance of each step during the analysis, including the sample preparation. Reported results were evaluated to determine compliance with the required acceptance criteria, and summary forms were evaluated and compared to electronic data deliverables. Findings of this review, and any associated qualified results, are listed below.

Sample ID/ Lab Sample ID	Analyte	Result	Warning Limits	Control Limits	Units	Qualifier	Reason Code	Comment
17124LCS17124 (BS)	4-Nitrophenol	32.0	61 - 133	20 - 133	percent	J/UJ	C	
17124LCS17124 (BS)	Benzoic acid	22.0	57 - 129	20 - 129	percent	J/UJ	C	
17124LCS17124 (BS)	Benzyl butyl phthalate	44.0	53 - 134	20 - 134	percent	J/UJ	C	
17124LCS17124 (BS)	Dimethyl phthalate	29.0	45 - 127	20 - 127	percent	J/UJ	C	
17124LCS17124 (BS)	Hexachlorocyclopentadiene	41.0	53 - 135	20 - 135	percent	J/UJ	C	
17124LCS17124 (BS)	N-Nitrosodimethylamine (NDMA)	41.0	43 - 121	20 - 121	percent	J/UJ	C	
17124LCS17124 (BS)	Phenol	28.0	72 - 132	20 - 132	percent	J/UJ	C	
17124LCSD17124 (BD)	4-Nitrophenol	29.0	61 - 133	20 - 133	percent	J/UJ	C	
17124LCSD17124 (BD)	Benzoic acid	26.0	57 - 129	20 - 129	percent	J/UJ	C	
17124LCSD17124 (BD)	Benzyl butyl phthalate	43.0	53 - 134	20 - 134	percent	J/UJ	C	
17124LCSD17124 (BD)	Diethyl phthalate	55.0	56 - 125	20 - 125	percent	J/UJ	C	
17124LCSD17124 (BD)	Dimethyl phthalate	28.0	45 - 127	20 - 127	percent	J/UJ	C	
17124LCSD17124 (BD)	Hexachlorocyclopentadiene	45.0	53 - 135	20 - 135	percent	J/UJ	C	
17124LCSD17124 (BD)	N-Nitrosodimethylamine (NDMA)	42.0	43 - 121	20 - 121	percent	J/UJ	C	
17124LCSD17124 (BD)	Phenol	27.0	72 - 132	20 - 132	percent	J/UJ	C	
17145LCS17145 (BS)	4-Chloro-3-methylphenol	44.0	52 - 119	20 - 119	percent	J/UJ	C	
17145LCS17145 (BS)	4-Nitrophenol	22.0	61 - 133	20 - 133	percent	J/UJ	C	
17145LCS17145 (BS)	Benzoic acid	11.0	57 - 129	20 - 129	percent	J/X	C	
17145LCS17145 (BS)	Dimethyl phthalate	39.0	45 - 127	20 - 127	percent	J/UJ	C	
17145LCS17145 (BS)	Hexachlorocyclopentadiene	41.0	53 - 135	20 - 135	percent	J/UJ	C	
17145LCS17145 (BS)	Phenol	26.0	72 - 132	20 - 132	percent	J/UJ	C	
17145LCSD17145 (BD)	4-Nitrophenol	25.0	61 - 133	20 - 133	percent	J/UJ	C	
17145LCSD17145 (BD)	Benzoic acid	0.00	57 - 129	20 - 129	percent	J/X	C	
17145LCSD17145 (BD)	Dimethyl phthalate	27.0	45 - 127	20 - 127	percent	J/UJ	C	
17145LCSD17145 (BD)	Hexachlorocyclopentadiene	37.0	53 - 135	20 - 135	percent	J/UJ	C	
17145LCSD17145 (BD)	Phenol	27.0	72 - 132	20 - 132	percent	J/UJ	C	

Where two qualifiers are listed, such as 'J/UJ', the first applies to positive results, and the second to non-detect results.
Upper and Lower Warning and Control Limits are abbreviated UWL, LWL, UCL, and LCL in the Comment field.

Qualified Results associated with the LCS Recovery for SW8270E

Qualified Results associated with the LCS Recovery for SW8270E

FieldSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
SY-BRMW10-65-75-110923 67839-011	FD	4-Chloro-3-methylphenol	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-BRMW10-65-75-110923 67839-011	FD	4-Nitrophenol	10	5.0 U#	5.0 UJ		ug/l	C
SY-BRMW10-65-75-110923 67839-011	FD	Benzoic acid	50	45 U#	45 X		ug/l	C
SY-BRMW10-65-75-110923 67839-011	FD	Dimethyl phthalate	5.0	1.0 U#	1.0 UJ		ug/l	C
SY-BRMW10-65-75-110923 67839-011	FD	Hexachlorocyclopentadiene	10	4.0 U#	4.0 UJ		ug/l	C
SY-BRMW10-65-75-110923 67839-011	FD	Phenol	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-BRMW1-150-157-110923 67839-009	N	4-Chloro-3-methylphenol	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-BRMW1-150-157-110923 67839-009	N	4-Nitrophenol	10	5.0 U#	5.0 UJ		ug/l	C
SY-BRMW1-150-157-110923 67839-009	N	Benzoic acid	50	45 U#	45 X		ug/l	C
SY-BRMW1-150-157-110923 67839-009	N	Dimethyl phthalate	5.0	1.0 U#	1.0 UJ		ug/l	C
SY-BRMW1-150-157-110923 67839-009	N	Hexachlorocyclopentadiene	10	4.0 U#	4.0 UJ		ug/l	C
SY-BRMW1-150-157-110923 67839-009	N	Phenol	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-BRMW1-42-52-110923 67839-008	N	4-Chloro-3-methylphenol	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-BRMW1-42-52-110923 67839-008	N	4-Nitrophenol	10	5.0 U#	5.0 UJ		ug/l	C
SY-BRMW1-42-52-110923 67839-008	N	Benzoic acid	50	45 U#	45 X		ug/l	C
SY-BRMW1-42-52-110923 67839-008	N	Dimethyl phthalate	5.0	1.0 U#	1.0 UJ		ug/l	C
SY-BRMW1-42-52-110923 67839-008	N	Hexachlorocyclopentadiene	10	4.0 U#	4.0 UJ		ug/l	C
SY-BRMW1-42-52-110923 67839-008	N	Phenol	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-BRMW1-65-75-110923 67839-010	N	4-Chloro-3-methylphenol	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-BRMW1-65-75-110923 67839-010	N	4-Nitrophenol	10	5.0 U#	5.0 UJ		ug/l	C
SY-BRMW1-65-75-110923 67839-010	N	Benzoic acid	50	45 U#	45 X		ug/l	C
SY-BRMW1-65-75-110923 67839-010	N	Dimethyl phthalate	5.0	1.0 U#	1.0 UJ		ug/l	C

Qualified Results associated with the LCS Recovery for SW8270E

FieldSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
SY-BRMW1-65-75-110923 67839-010	N	Hexachlorocyclopentadiene	10	4.0 U#	4.0 UJ		ug/l	C
SY-BRMW1-65-75-110923 67839-010	N	Phenol	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-BRMW3-145-155-110923 67839-005	N	4-Chloro-3-methylphenol	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-BRMW3-145-155-110923 67839-005	N	4-Nitrophenol	10	5.0 U#	5.0 UJ		ug/l	C
SY-BRMW3-145-155-110923 67839-005	N	Benzoic acid	50	45 U#	45 X		ug/l	C
SY-BRMW3-145-155-110923 67839-005	N	Dimethyl phthalate	5.0	1.0 U#	1.0 UJ		ug/l	C
SY-BRMW3-145-155-110923 67839-005	N	Hexachlorocyclopentadiene	10	4.0 U#	4.0 UJ		ug/l	C
SY-BRMW3-145-155-110923 67839-005	N	Phenol	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-BRMW3-287-297-110923 67839-006	N	4-Chloro-3-methylphenol	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-BRMW3-287-297-110923 67839-006	N	4-Nitrophenol	10	5.0 U#	5.0 UJ		ug/l	C
SY-BRMW3-287-297-110923 67839-006	N	Benzoic acid	50	45 U#	45 X		ug/l	C
SY-BRMW3-287-297-110923 67839-006	N	Dimethyl phthalate	5.0	1.0 U#	1.0 UJ		ug/l	C
SY-BRMW3-287-297-110923 67839-006	N	Hexachlorocyclopentadiene	10	4.0 U#	4.0 UJ		ug/l	C
SY-BRMW3-287-297-110923 67839-006	N	Phenol	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-BRMW3-47-62-110923 67839-004	N	4-Nitrophenol	10	5.0 U#	5.0 UJ		ug/l	C
SY-BRMW3-47-62-110923 67839-004	N	Benzoic acid	50	45 U#	45 UJ		ug/l	C
SY-BRMW3-47-62-110923 67839-004	N	Benzyl butyl phthalate	5.0	3.0 U#	3.0 UJ		ug/l	C
SY-BRMW3-47-62-110923 67839-004	N	Diethyl phthalate	5.0	0.83 J	0.83 J	-	ug/l	C/TR
SY-BRMW3-47-62-110923 67839-004	N	Dimethyl phthalate	5.0	1.0 U#	1.0 UJ		ug/l	C
SY-BRMW3-47-62-110923 67839-004	N	Hexachlorocyclopentadiene	10	4.0 U#	4.0 UJ		ug/l	C
SY-BRMW3-47-62-110923 67839-004	N	N-Nitrosodimethylamine (NDMA)	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-BRMW3-47-62-110923 67839-004	N	Phenol	2.0	1.0 U#	1.0 UJ		ug/l	C

Qualified Results associated with the LCS Recovery for SW8270E

FieldSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
SY-BRMW40-62-72-110923 67839-002	FD	4-Nitrophenol	10	5.0 U#	5.0 UJ		ug/l	C
SY-BRMW40-62-72-110923 67839-002	FD	Benzoic acid	50	45 U#	45 UJ		ug/l	C
SY-BRMW40-62-72-110923 67839-002	FD	Benzyl butyl phthalate	5.0	3.0 U#	3.0 UJ		ug/l	C
SY-BRMW40-62-72-110923 67839-002	FD	Diethyl phthalate	5.0	0.37 J	0.37 J	-	ug/l	C/TR
SY-BRMW40-62-72-110923 67839-002	FD	Dimethyl phthalate	5.0	1.0 U#	1.0 UJ		ug/l	C
SY-BRMW40-62-72-110923 67839-002	FD	Hexachlorocyclopentadiene	10	4.0 U#	4.0 UJ		ug/l	C
SY-BRMW40-62-72-110923 67839-002	FD	N-Nitrosodimethylamine (NDMA)	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-BRMW40-62-72-110923 67839-002	FD	Phenol	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-BRMW4-138-148-110923 67839-003	N	4-Nitrophenol	10	5.0 U#	5.0 UJ		ug/l	C
SY-BRMW4-138-148-110923 67839-003	N	Benzoic acid	50	45 U#	45 UJ		ug/l	C
SY-BRMW4-138-148-110923 67839-003	N	Benzyl butyl phthalate	5.0	3.0 U#	3.0 UJ		ug/l	C
SY-BRMW4-138-148-110923 67839-003	N	Diethyl phthalate	5.0	5.8	5.8 J	-	ug/l	C
SY-BRMW4-138-148-110923 67839-003	N	Dimethyl phthalate	5.0	1.0 U#	1.0 UJ		ug/l	C
SY-BRMW4-138-148-110923 67839-003	N	Hexachlorocyclopentadiene	10	4.0 U#	4.0 UJ		ug/l	C
SY-BRMW4-138-148-110923 67839-003	N	N-Nitrosodimethylamine (NDMA)	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-BRMW4-138-148-110923 67839-003	N	Phenol	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-BRMW4-291-301-110923 67839-007	N	4-Chloro-3-methylphenol	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-BRMW4-291-301-110923 67839-007	N	4-Nitrophenol	10	5.0 U#	5.0 UJ		ug/l	C
SY-BRMW4-291-301-110923 67839-007	N	Benzoic acid	50	45 U#	45 X		ug/l	C

Qualified Results associated with the LCS Recovery for SW8270E

FieldSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
SY-BRMW4-291-301-110923 67839-007	N	Dimethyl phthalate	5.0	1.0 U#	1.0 UJ		ug/l	C
SY-BRMW4-291-301-110923 67839-007	N	Hexachlorocyclopentadiene	10	4.0 U#	4.0 UJ		ug/l	C
SY-BRMW4-291-301-110923 67839-007	N	Phenol	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-BRMW4-62-72-110923 67839-001	N	4-Nitrophenol	10	5.0 U#	5.0 UJ		ug/l	C
SY-BRMW4-62-72-110923 67839-001	N	Benzoic acid	50	45 U#	45 UJ		ug/l	C
SY-BRMW4-62-72-110923 67839-001	N	Benzyl butyl phthalate	5.0	3.0 U#	3.0 UJ		ug/l	C
SY-BRMW4-62-72-110923 67839-001	N	Diethyl phthalate	5.0	0.46 J	0.46 J	-	ug/l	C/TR
SY-BRMW4-62-72-110923 67839-001	N	Dimethyl phthalate	5.0	1.0 U#	1.0 UJ		ug/l	C
SY-BRMW4-62-72-110923 67839-001	N	Hexachlorocyclopentadiene	10	4.0 U#	4.0 UJ		ug/l	C
SY-BRMW4-62-72-110923 67839-001	N	N-Nitrosodimethylamine (NDMA)	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-BRMW4-62-72-110923 67839-001	N	Phenol	2.0	1.0 U#	1.0 UJ		ug/l	C

Analytes not found in project samples are reported as not detected at the limit of detection (LOD) unless blank contamination occurs and then the sample may be reported as not detected at the (LOD) or (LOQ) based on the sample concentration and the validation guidance. In instances where no LOD is provided, results are reported down to the LOQ.

Quality Control Outliers for test method SW8270E, LCS RPD

The objective of laboratory control sample/laboratory control sample duplicate (LCS/LCSD) RPD analysis is to demonstrate acceptable method precision by the laboratory at the time of analysis. LCS/LCSD analyses are also performed to generate data that determines the long-term precision of the analytical method on various matrices. Non-homogenous samples can impact the apparent method precision. Summary forms were evaluated and compared to electronic data deliverables. Laboratory control sample/laboratory control sample duplicate RPD results that were outside of the acceptance criteria are listed below.

Sample ID/ Lab Sample ID	Analyte	Result	Warning Limits	Control Limits	Units	Qualifier	Reason Code	Comment
17124LCSD17124 (BD)	Benzidine	30.5	< 20	< 20	rpd	J/None	Z	
17145LCSD17145 (BD)	1,2,4-Trichlorobenzene	25.6	< 20	< 20	rpd	J/None	Z	
17145LCSD17145 (BD)	1,2-Dichlorobenzene	24.3	< 20	< 20	rpd	J/None	Z	
17145LCSD17145 (BD)	1,3-Dichlorobenzene	31.4	< 20	< 20	rpd	J/None	Z	
17145LCSD17145 (BD)	1,4-Dichlorobenzene	29.1	< 20	< 20	rpd	J/None	Z	
17145LCSD17145 (BD)	4-Chloro-3-methylphenol	28.0	< 20	< 20	rpd	J/None	Z	
17145LCSD17145 (BD)	Benzoic acid	199	< 20	< 20	rpd	J/None	Z	
17145LCSD17145 (BD)	Benzyl butyl phthalate	21.3	< 20	< 20	rpd	J/None	Z	
17145LCSD17145 (BD)	Dimethyl phthalate	35.3	< 20	< 20	rpd	J/None	Z	
17145LCSD17145 (BD)	Hexachlorobutadiene	36.8	< 20	< 20	rpd	J/None	Z	
17145LCSD17145 (BD)	Hexachloroethane	42.4	< 20	< 20	rpd	J/None	Z	

Where two qualifiers are listed, such as 'J/UJ', the first applies to positive results, and the second to non-detect results.
Upper and Lower Warning and Control Limits are abbreviated UWL, LWL, UCL, and LCL in the Comment field.

No results associated with this QC element required qualification.

Quality Control Outliers for test method SW8270E, Test Hold Time

Hold times are ascertained based on project requirements. Holding times were determined by comparing the chain of custody records with the dates of analysis found in the electronic data deliverable and laboratory summary forms. Findings of this review, and any associated qualified results, are listed below.

Sample ID/ Lab Sample ID	Analyte	Result	Warning Limits	Control Limits	Units	Qualifier	Reason Code	Comment
SY-BRMW1-65-75-110923 (N)		16.3	< 14	< 28	days	J/UJ	H1	Prep to Test Exceeds UWL
SY-BRMW3-47-62-110923 (N)		17.3	< 14	< 28	days	J/UJ	H1	Prep to Test Exceeds UWL
SY-BRMW40-62-72-110923 (FD)		17.2	< 14	< 28	days	J/UJ	H1	Prep to Test Exceeds UWL
SY-BRMW4-138-148-110923 (N)		17.3	< 14	< 28	days	J/UJ	H1	Prep to Test Exceeds UWL
SY-BRMW4-62-72-110923 (N)		17.2	< 14	< 28	days	J/UJ	H1	Prep to Test Exceeds UWL

Where two qualifiers are listed, such as 'J/UJ', the first applies to positive results, and the second to non-detect results.
Upper and Lower Warning and Control Limits are abbreviated UWL, LWL, UCL, and LCL in the Comment field.

No results associated with this QC element required qualification.

Table of All Qualified Results

Test Method: MADEPEP		Extraction Method: METHOD						
FieldSample ID / LabSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
SY-BRMW10-65-75-110923 67839-011	FD	C19-C36 Extractable Petroleum Hydrocarbons, Aliphatic	100	97 U#	97 UJ		ug/l	C
SY-BRMW10-65-75-110923 67839-011	FD	C9-C18 Extractable Petroleum Hydrocarbons, Aliphatic	100	95 U#	95 X		ug/l	C
SY-BRMW1-150-157-110923 67839-009	N	C9-C18 Extractable Petroleum Hydrocarbons, Aliphatic	100	95 U#	95 UJ		ug/l	C
SY-BRMW1-42-52-110923 67839-008	N	C9-C18 Extractable Petroleum Hydrocarbons, Aliphatic	100	95 U#	95 UJ		ug/l	C
SY-BRMW1-65-75-110923 67839-010	N	C9-C18 Extractable Petroleum Hydrocarbons, Aliphatic	100	95 U#	95 UJ		ug/l	C
SY-BRMW3-145-155-110923 67839-005	N	C11-C22 Extractable Petroleum Hydrocarbons, Aromatic	100	57 J	100 U		ug/l	L
SY-BRMW3-145-155-110923 67839-005	N	C9-C18 Extractable Petroleum Hydrocarbons, Aliphatic	100	95 U#	95 UJ		ug/l	C
SY-BRMW3-287-297-110923 67839-006	N	C9-C18 Extractable Petroleum Hydrocarbons, Aliphatic	100	95 U#	95 UJ		ug/l	C
SY-BRMW3-47-62-110923 67839-004	N	C9-C18 Extractable Petroleum Hydrocarbons, Aliphatic	100	95 U#	95 UJ		ug/l	C
SY-BRMW40-62-72-110923 67839-002	FD	C11-C22 Extractable Petroleum Hydrocarbons, Aromatic	100	59 J	100 U		ug/l	L
SY-BRMW40-62-72-110923 67839-002	FD	C9-C18 Extractable Petroleum Hydrocarbons, Aliphatic	100	95 U#	95 UJ		ug/l	C
SY-BRMW4-138-148-110923 67839-003	N	C9-C18 Extractable Petroleum Hydrocarbons, Aliphatic	100	95 U#	95 UJ		ug/l	C
SY-BRMW4-291-301-110923 67839-007	N	C9-C18 Extractable Petroleum Hydrocarbons, Aliphatic	100	95 U#	95 UJ		ug/l	C
SY-BRMW4-62-72-110923 67839-001	N	C9-C18 Extractable Petroleum Hydrocarbons, Aliphatic	100	95 U#	95 UJ		ug/l	C

Test Method: SW6020A		Extraction Method: FLDFLT						
FieldSample ID / LabSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
SY-BRMW40-62-72-110923 67839-013	FD	Iron	0.054	0.074	0.074 J		mg/l	D3
SY-BRMW40-62-72-110923 67839-013	FD	Manganese	0.011	0.33	0.33 J		mg/l	D3
SY-BRMW4-62-72-110923 67839-012	N	Iron	0.054	0.21	0.21 J		mg/l	D3

Table of All Qualified Results

Test Method: SW6020A		Extraction Method: FLDFLT						
FieldSample ID / LabSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
SY-BRMW4-62-72-110923 67839-012	N	Manganese	0.011	0.55	0.55 J		mg/l	D3

Test Method: SW6020A		Extraction Method: TOTAL						
FieldSample ID / LabSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
SY-BRMW10-65-75-110923 67839-011	FD	Antimony	0.0010	0.00094 J	0.00094 J	+	mg/l	L
SY-BRMW10-65-75-110923 67839-011	FD	Zinc	0.010	0.0036 J	0.010 U		mg/l	L
SY-BRMW1-150-157-110923 67839-009	N	Aluminum	0.050	0.028 J	0.028 J	+	mg/l	L
SY-BRMW1-150-157-110923 67839-009	N	Antimony	0.0010	0.00053 J	0.00053 J	+	mg/l	L
SY-BRMW1-150-157-110923 67839-009	N	Zinc	0.010	0.0024 J	0.010 U		mg/l	L
SY-BRMW1-42-52-110923 67839-008	N	Antimony	0.0010	0.00077 J	0.00077 J	+	mg/l	L
SY-BRMW1-42-52-110923 67839-008	N	Zinc	0.010	0.0035 J	0.010 U		mg/l	L
SY-BRMW1-65-75-110923 67839-010	N	Aluminum	0.050	0.018 J	0.050 U		mg/l	L
SY-BRMW1-65-75-110923 67839-010	N	Antimony	0.0010	0.00084 J	0.00084 J	+	mg/l	L
SY-BRMW1-65-75-110923 67839-010	N	Zinc	0.010	0.0035 J	0.010 U		mg/l	L
SY-BRMW3-145-155-110923 67839-005	N	Antimony	0.0010	0.00064 J	0.00064 J	+	mg/l	L
SY-BRMW3-287-297-110923 67839-006	N	Aluminum	0.050	0.010 J	0.050 U		mg/l	L
SY-BRMW3-287-297-110923 67839-006	N	Antimony	0.0010	0.0014	0.0014 J	+	mg/l	L
SY-BRMW3-47-62-110923 67839-004	N	Aluminum	0.050	0.011 J	0.050 U		mg/l	L
SY-BRMW3-47-62-110923 67839-004	N	Cobalt	0.010	0.00046 J	0.010 U		mg/l	L
SY-BRMW4-291-301-110923 67839-007	N	Antimony	0.0010	0.00092 J	0.00092 J	+	mg/l	L
SY-BRMW4-291-301-110923 67839-007	N	Zinc	0.010	0.0024 J	0.010 U		mg/l	L

Table of All Qualified Results

Test Method: SW8270E		Extraction Method: SW3510C						
FieldSample ID / LabSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
SY-BRMW10-65-75-110923 67839-011	FD	4-Chloro-3-methylphenol	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-BRMW10-65-75-110923 67839-011	FD	4-Nitrophenol	10	5.0 U#	5.0 UJ		ug/l	C
SY-BRMW10-65-75-110923 67839-011	FD	Benzoic acid	50	45 U#	45 X		ug/l	C
SY-BRMW10-65-75-110923 67839-011	FD	Bis(2-ethylhexyl)phthalate	5.0	3.0 U	3.0 UJ		ug/l	D3
SY-BRMW10-65-75-110923 67839-011	FD	Dimethyl phthalate	5.0	1.0 U#	1.0 UJ		ug/l	C
SY-BRMW10-65-75-110923 67839-011	FD	Hexachlorocyclopentadiene	10	4.0 U#	4.0 UJ		ug/l	C
SY-BRMW10-65-75-110923 67839-011	FD	Phenol	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-BRMW1-150-157-110923 67839-009	N	4-Chloro-3-methylphenol	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-BRMW1-150-157-110923 67839-009	N	4-Nitrophenol	10	5.0 U#	5.0 UJ		ug/l	C
SY-BRMW1-150-157-110923 67839-009	N	Benzoic acid	50	45 U#	45 X		ug/l	C
SY-BRMW1-150-157-110923 67839-009	N	Dimethyl phthalate	5.0	1.0 U#	1.0 UJ		ug/l	C
SY-BRMW1-150-157-110923 67839-009	N	Hexachlorocyclopentadiene	10	4.0 U#	4.0 UJ		ug/l	C
SY-BRMW1-150-157-110923 67839-009	N	Phenol	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-BRMW1-42-52-110923 67839-008	N	4-Chloro-3-methylphenol	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-BRMW1-42-52-110923 67839-008	N	4-Nitrophenol	10	5.0 U#	5.0 UJ		ug/l	C
SY-BRMW1-42-52-110923 67839-008	N	Benzoic acid	50	45 U#	45 X		ug/l	C
SY-BRMW1-42-52-110923 67839-008	N	Dimethyl phthalate	5.0	1.0 U#	1.0 UJ		ug/l	C
SY-BRMW1-42-52-110923 67839-008	N	Hexachlorocyclopentadiene	10	4.0 U#	4.0 UJ		ug/l	C
SY-BRMW1-42-52-110923 67839-008	N	Phenol	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-BRMW1-65-75-110923 67839-010	N	4-Chloro-3-methylphenol	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-BRMW1-65-75-110923 67839-010	N	4-Nitrophenol	10	5.0 U#	5.0 UJ		ug/l	C

Table of All Qualified Results

Test Method: SW8270E		Extraction Method: SW3510C						
FieldSample ID / LabSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
SY-BRMW1-65-75-110923 67839-010	N	Benzoic acid	50	45 U#	45 X		ug/l	C
SY-BRMW1-65-75-110923 67839-010	N	Bis(2-ethylhexyl)phthalate	25	120	120 J		ug/l	D3
SY-BRMW1-65-75-110923 67839-010	N	Dimethyl phthalate	5.0	1.0 U#	1.0 UJ		ug/l	C
SY-BRMW1-65-75-110923 67839-010	N	Hexachlorocyclopentadiene	10	4.0 U#	4.0 UJ		ug/l	C
SY-BRMW1-65-75-110923 67839-010	N	Phenol	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-BRMW3-145-155-110923 67839-005	N	4-Chloro-3-methylphenol	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-BRMW3-145-155-110923 67839-005	N	4-Nitrophenol	10	5.0 U#	5.0 UJ		ug/l	C
SY-BRMW3-145-155-110923 67839-005	N	Benzoic acid	50	45 U#	45 X		ug/l	C
SY-BRMW3-145-155-110923 67839-005	N	Dimethyl phthalate	5.0	1.0 U#	1.0 UJ		ug/l	C
SY-BRMW3-145-155-110923 67839-005	N	Hexachlorocyclopentadiene	10	4.0 U#	4.0 UJ		ug/l	C
SY-BRMW3-145-155-110923 67839-005	N	Phenol	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-BRMW3-287-297-110923 67839-006	N	4-Chloro-3-methylphenol	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-BRMW3-287-297-110923 67839-006	N	4-Nitrophenol	10	5.0 U#	5.0 UJ		ug/l	C
SY-BRMW3-287-297-110923 67839-006	N	Benzoic acid	50	45 U#	45 X		ug/l	C
SY-BRMW3-287-297-110923 67839-006	N	Dimethyl phthalate	5.0	1.0 U#	1.0 UJ		ug/l	C
SY-BRMW3-287-297-110923 67839-006	N	Hexachlorocyclopentadiene	10	4.0 U#	4.0 UJ		ug/l	C
SY-BRMW3-287-297-110923 67839-006	N	Phenol	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-BRMW3-47-62-110923 67839-004	N	4-Nitrophenol	10	5.0 U#	5.0 UJ		ug/l	C
SY-BRMW3-47-62-110923 67839-004	N	Benzoic acid	50	45 U#	45 UJ		ug/l	C
SY-BRMW3-47-62-110923 67839-004	N	Benzyl butyl phthalate	5.0	3.0 U#	3.0 UJ		ug/l	C
SY-BRMW3-47-62-110923 67839-004	N	Diethyl phthalate	5.0	0.83 J	0.83 J	-	ug/l	C/TR
SY-BRMW3-47-62-110923 67839-004	N	Dimethyl phthalate	5.0	1.0 U#	1.0 UJ		ug/l	C

Table of All Qualified Results

Test Method: SW8270E		Extraction Method: SW3510C						
FieldSample ID / LabSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
SY-BRMW3-47-62-110923 67839-004	N	Hexachlorocyclopentadiene	10	4.0 U#	4.0 UJ		ug/l	C
SY-BRMW3-47-62-110923 67839-004	N	N-Nitrosodimethylamine (NDMA)	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-BRMW3-47-62-110923 67839-004	N	Phenol	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-BRMW40-62-72-110923 67839-002	FD	4-Nitrophenol	10	5.0 U#	5.0 UJ		ug/l	C
SY-BRMW40-62-72-110923 67839-002	FD	Benzoic acid	50	45 U#	45 UJ		ug/l	C
SY-BRMW40-62-72-110923 67839-002	FD	Benzyl butyl phthalate	5.0	3.0 U#	3.0 UJ		ug/l	C
SY-BRMW40-62-72-110923 67839-002	FD	Diethyl phthalate	5.0	0.37 J	0.37 J	-	ug/l	C/TR
SY-BRMW40-62-72-110923 67839-002	FD	Dimethyl phthalate	5.0	1.0 U#	1.0 UJ		ug/l	C
SY-BRMW40-62-72-110923 67839-002	FD	Hexachlorocyclopentadiene	10	4.0 U#	4.0 UJ		ug/l	C
SY-BRMW40-62-72-110923 67839-002	FD	N-Nitrosodimethylamine (NDMA)	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-BRMW40-62-72-110923 67839-002	FD	Phenol	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-BRMW4-138-148-110923 67839-003	N	4-Nitrophenol	10	5.0 U#	5.0 UJ		ug/l	C
SY-BRMW4-138-148-110923 67839-003	N	Benzoic acid	50	45 U#	45 UJ		ug/l	C
SY-BRMW4-138-148-110923 67839-003	N	Benzyl butyl phthalate	5.0	3.0 U#	3.0 UJ		ug/l	C
SY-BRMW4-138-148-110923 67839-003	N	Diethyl phthalate	5.0	5.8	5.8 J	-	ug/l	C
SY-BRMW4-138-148-110923 67839-003	N	Dimethyl phthalate	5.0	1.0 U#	1.0 UJ		ug/l	C
SY-BRMW4-138-148-110923 67839-003	N	Hexachlorocyclopentadiene	10	4.0 U#	4.0 UJ		ug/l	C
SY-BRMW4-138-148-110923 67839-003	N	N-Nitrosodimethylamine (NDMA)	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-BRMW4-138-148-110923 67839-003	N	Phenol	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-BRMW4-291-301-110923 67839-007	N	4-Chloro-3-methylphenol	2.0	1.0 U#	1.0 UJ		ug/l	C

Table of All Qualified Results

Test Method: SW8270E		Extraction Method: SW3510C						
FieldSample ID / LabSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
SY-BRMW4-291-301-110923 67839-007	N	4-Nitrophenol	10	5.0 U#	5.0 UJ		ug/l	C
SY-BRMW4-291-301-110923 67839-007	N	Benzoic acid	50	45 U#	45 X		ug/l	C
SY-BRMW4-291-301-110923 67839-007	N	Dimethyl phthalate	5.0	1.0 U#	1.0 UJ		ug/l	C
SY-BRMW4-291-301-110923 67839-007	N	Hexachlorocyclopentadiene	10	4.0 U#	4.0 UJ		ug/l	C
SY-BRMW4-291-301-110923 67839-007	N	Phenol	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-BRMW4-62-72-110923 67839-001	N	4-Nitrophenol	10	5.0 U#	5.0 UJ		ug/l	C
SY-BRMW4-62-72-110923 67839-001	N	Benzoic acid	50	45 U#	45 UJ		ug/l	C
SY-BRMW4-62-72-110923 67839-001	N	Benzyl butyl phthalate	5.0	3.0 U#	3.0 UJ		ug/l	C
SY-BRMW4-62-72-110923 67839-001	N	Diethyl phthalate	5.0	0.46 J	0.46 J	-	ug/l	C/TR
SY-BRMW4-62-72-110923 67839-001	N	Dimethyl phthalate	5.0	1.0 U#	1.0 UJ		ug/l	C
SY-BRMW4-62-72-110923 67839-001	N	Hexachlorocyclopentadiene	10	4.0 U#	4.0 UJ		ug/l	C
SY-BRMW4-62-72-110923 67839-001	N	N-Nitrosodimethylamine (NDMA)	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-BRMW4-62-72-110923 67839-001	N	Phenol	2.0	1.0 U#	1.0 UJ		ug/l	C

Analytes not found in project samples are reported as not detected at the limit of detection (LOD) unless blank contamination occurs and then the sample may be reported as not detected at the (LOQ) based on the sample concentration.
In instances where no LOD is provided, results are reported down to the LOQ.
Trace values are not included in the qualified results table unless additional reason codes are associated.

Table of Results with Modified Qualifiers

Modified Qualifiers for test method SW6020A, Dissolved

FieldSample ID / LabSample ID	Type	Analyte	LOQ	Lab Result	ADR Result	ADR Reason	Modified Result	Reason
SY-BRMW10-65-75-110923 67839-022	FD	Aluminum	0.054	0.027 U	0.054 UJ	L	0.027 U	
SY-BRMW1-150-157-110923 67839-020	N	Aluminum	0.054	0.027 U	0.054 UJ	L	0.027 U	
SY-BRMW1-42-52-110923 67839-019	N	Aluminum	0.054	0.027 U	0.054 UJ	L	0.027 U	
SY-BRMW1-65-75-110923 67839-021	N	Aluminum	0.054	0.027 U	0.054 UJ	L	0.027 U	
SY-BRMW3-145-155-110923 67839-016	N	Aluminum	0.054	0.027 U	0.054 UJ	L	0.027 U	
SY-BRMW3-287-297-110923 67839-017	N	Aluminum	0.054	0.027 U	0.054 UJ	L	0.027 U	
SY-BRMW3-47-62-110923 67839-015	N	Aluminum	0.054	0.027 U	0.054 UJ	L	0.027 U	
SY-BRMW4-291-301-110923 67839-018	N	Aluminum	0.054	0.027 U	0.054 UJ	L	0.027 U	

Modified Qualifiers for test method SW6020A, Total

FieldSample ID / LabSample ID	Type	Analyte	LOQ	Lab Result	ADR Result	ADR Reason	Modified Result	Reason
SY-BRMW10-65-75-110923 67839-011	FD	Aluminum	0.050	0.025 U	0.050 UJ	L	0.025 U	
SY-BRMW10-65-75-110923 67839-011	FD	Cobalt	0.010	0.0019 J	0.00050 J	L	0.0019	
SY-BRMW10-65-75-110923 67839-011	FD	Zinc	0.010	0.0036 J	0.0040 J	L	0.010 U	L
SY-BRMW1-150-157-110923 67839-009	N	Cobalt	0.010	0.00050 U	0.010 UJ	L	0.00050 U	
SY-BRMW1-150-157-110923 67839-009	N	Zinc	0.010	0.0024 J	0.0040 J	L	0.010 U	L
SY-BRMW1-42-52-110923 67839-008	N	Aluminum	0.050	0.025 U	0.050 UJ	L	0.025 U	
SY-BRMW1-42-52-110923 67839-008	N	Cobalt	0.010	0.0014 J	0.00050 J	L	0.0014	
SY-BRMW1-42-52-110923 67839-008	N	Zinc	0.010	0.0035 J	0.0040 J	L	0.010 U	L
SY-BRMW1-65-75-110923 67839-010	N	Aluminum	0.050	0.018 J	0.025 J	L	0.050 U	L
SY-BRMW1-65-75-110923 67839-010	N	Cobalt	0.010	0.0020 J	0.00050 J	L	0.0020	
SY-BRMW1-65-75-110923 67839-010	N	Zinc	0.010	0.0035 J	0.0040 J	L	0.010 U	L
SY-BRMW3-145-155-110923 67839-005	N	Aluminum	0.050	0.025 U	0.050 UJ	L	0.025 U	
SY-BRMW3-145-155-110923 67839-005	N	Cobalt	0.010	0.00065 J	0.00050 J	L	0.00065	

Table of Results with Modified Qualifiers

Modified Qualifiers for test method SW6020A, Total

FieldSample ID / LabSample ID	Type	Analyte	LOQ	Lab Result	ADR Result	ADR Reason	Modified Result	Reason
SY-BRMW3-145-155-110923 67839-005	N	Zinc	0.010	0.0040 U	0.010 UJ	L	0.0040 U	
SY-BRMW3-287-297-110923 67839-006	N	Aluminum	0.050	0.010 J	0.025 J	L	0.050 U	L
SY-BRMW3-287-297-110923 67839-006	N	Cobalt	0.010	0.0012 J	0.00050 J	L	0.0012	
SY-BRMW3-287-297-110923 67839-006	N	Zinc	0.010	0.0040 U	0.010 UJ	L	0.0040 U	
SY-BRMW3-47-62-110923 67839-004	N	Aluminum	0.050	0.011 J	0.025 J	L	0.050 U	L
SY-BRMW3-47-62-110923 67839-004	N	Cobalt	0.010	0.00046 J	0.00050 J	L	0.010 U	L
SY-BRMW3-47-62-110923 67839-004	N	Zinc	0.010	0.0040 U	0.010 UJ	L	0.0040 U	
SY-BRMW4-291-301-110923 67839-007	N	Aluminum	0.050	0.025 U	0.050 UJ	L	0.025 U	
SY-BRMW4-291-301-110923 67839-007	N	Cobalt	0.010	0.0027 J	0.00050 J	L	0.0027	
SY-BRMW4-291-301-110923 67839-007	N	Zinc	0.010	0.0024 J	0.0040 J	L	0.010 U	L

Modified Qualifiers for test method SW8260D

FieldSample ID / LabSample ID	Type	Analyte	LOQ	Lab Result	ADR Result	ADR Reason	Modified Result	Reason
SY-BRMW40-62-72-110923 67839-002	FD	Tetrahydrofuran	2.0	3.4	3.4 J	D3	3.4	
SY-BRMW4-62-72-110923 67839-001	N	Tetrahydrofuran	2.0	1.5 U	1.5 UJ	D3	1.5 U	

Modified Qualifiers for test method SW8270E

FieldSample ID / LabSample ID	Type	Analyte	LOQ	Lab Result	ADR Result	ADR Reason	Modified Result	Reason
SY-BRMW1-65-75-110923 67839-010	N	Bis(2-ethylhexyl)phthalate	25	120	120 J	D3/H1	120 J	D3
SY-BRMW3-47-62-110923 67839-004	N	Bis(2-ethylhexyl)phthalate	25	190 #	190 J	H1	190	
SY-BRMW40-62-72-110923 67839-002	FD	Bis(2-ethylhexyl)phthalate	25	130 #	130 J	H1	130	
SY-BRMW4-138-148-110923 67839-003	N	Bis(2-ethylhexyl)phthalate	25	120 #	120 J	H1	120	
SY-BRMW4-62-72-110923 67839-001	N	Bis(2-ethylhexyl)phthalate	25	160 #	160 J	H1	160	

Analytes not found in project samples are reported as not detected at the limit of detection (LOD) unless blank contamination occurs and then the sample may be reported as not detected at the (LOQ) based on the sample concentration.
In instances where no LOD is provided, results are reported down to the LOQ.
Trace values are not included in the qualified results table unless additional reason codes are associated.

Reason Code Definitions

Code	Definition
C	LCS Recovery
D3	Field Duplicate RPD
H1	Test Hold Time
L	Lab Blank
M	MS Recovery
TR	Trace Level Detect
Z	LCS RPD

Flag Code and Definitions

Flag	Definition
J	Estimated Value
N	The analysis indicates the presence of an analyte for which there was presumptive evidence to make a tentative identification.
NJ	The analyte has been tentatively identified or presumptively as present and the associated numerical value was the estimated concentration in the sample.
R	The data are rejected due to deficiencies in meeting QC criteria and may not be used for decision making.
U	Undetected: The analyte was analyzed for, but not detected.
UJ	The analyte was not detected; however, the result is estimated due to discrepancies in meeting certain analyte-specific quality control criteria.
X	Result may require rejection; PDT attention required

Bias

-	The result may be biased low
+	The result may be biased high

Note - The bias field is a separate field; however, it is an integral part of the final flag (qualifier) on the sample result

Review Questions

Method: MADEPEP (Method for the Determination of Extractable Petroleum Hydrocarbons (EPH))				
Review Questions	Yes	No	NA	Comment
Were there discrepancies between the COC and the samples received?		•		No discrepancies were noted between the COC and the samples received.
Were there discrepancies between the COC and the sample labels?		•		No discrepancies were noted between the COC and the samples received.
Were samples relinquished properly on the COC?	•			
Were all samples properly preserved?	•			
Were sampling dates/times, date and time of laboratory receipt of samples, and sample conditions upon receipt at the laboratory (including preservation, pH, and temperature) documented?	•			
Were sample results reported with percent moisture correction if required?			•	Only water samples were collected.
Were analytical methods performed and analysis dates present?	•			
Were all requested target analytes reported?	•			
Were QAPP specified Project Quantitation Limit Goals achieved? (The laboratory LOQ is compared to the QAPP Project Quantitation Goal)	•			
Were holding times met?	•			
Were trip blanks analyzed at the proper frequency and in control?			•	Trip blanks were not collected for this method.
Were field blanks analyzed at the proper frequency and in control?			•	Field blanks were not collected.
Were equipment blanks analyzed at the proper frequency and in control?			•	Equipment blanks were not collected.
Was a method blank prepared and analyzed with each batch?	•			
Were target analytes in the method blank less than DL?		•		Due to detects in the method blank, several results were qualified as non-detect (U).
Was an LCS/LCSD pair prepared and analyzed with each batch?	•			
Were LCS/LCSD recoveries within project acceptance limits?		•		Due to low LCS/LCSD recoveries, several non-detect analytes were qualified as estimated (UJ). Due to C9-C18 EPH, Aliphatic recovering below 20% in both the LCS and LCSD for batch 17157, the non-detect result for SY-BRMW10-65-75-110923 was qualified as recommended for exclusion (X).
Was the LCS/LCSD RPD within project acceptance limits?		•		Although several LCS/LCSD RPD were high, the associated results were non-detect so sample qualification was not necessary.
Was a MS/MSD pair prepared with each batch?			•	A MS/MSD was not reported.
Were MS/MSD recoveries within project acceptance limits?			•	A MS/MSD was not reported.
Was the MS/MSD RPD within project acceptance limits?			•	A MS/MSD was not reported.
If ISM was used for sample collection, were laboratory triplicates analyzed and within project acceptance limits?			•	ISM was not performed.
Were surrogate recoveries within project acceptance limits?	•			
Were field replicates (duplicates, triplicates, etc.) analyzed at the proper frequency and in control?	•			
Were reported sample concentrations within calibration range?	•			

Review Questions

Method: MADEPEP (Method for the Determination of Extractable Petroleum Hydrocarbons (EPH))				
Review Questions	Yes	No	NA	Comment
Have all Laboratory Case Narrative comments/findings been addressed in the data review process?	•			
Were DoD QSM corrective actions followed if deviations were noted?	•			
Were any data recommended for exclusion in the data validation process?	•			Due to C9-C18 EPH, Aliphatic recovering below 20% in both the LCS and LCSD for batch 17157, the non-detect result for SY-BRMW10-65-75-110923 was qualified as recommended for exclusion (X). All remaining results were acceptable as reported or as qualified during data validation.

Review Questions

Method: MADEPVP (Method for the Determination of Volatile Petroleum Hydrocarbons (VPH))

Review Questions	Yes	No	NA	Comment
Were there discrepancies between the COC and the samples received?		•		No discrepancies were noted between the COC and the samples received.
Were there discrepancies between the COC and the sample labels?		•		No discrepancies were noted between the COC and the samples received.
Were samples relinquished properly on the COC?	•			
Were all samples properly preserved?	•			
Were sampling dates/times, date and time of laboratory receipt of samples, and sample conditions upon receipt at the laboratory (including preservation, pH, and temperature) documented?	•			
Were sample results reported with percent moisture correction if required?			•	Only water samples were collected.
Were analytical methods performed and analysis dates present?	•			
Were all requested target analytes reported?	•			
Were QAPP specified Project Quantitation Limit Goals achieved? (The laboratory LOQ is compared to the QAPP Project Quantitation Goal)	•			
Were holding times met?	•			
Were trip blanks analyzed at the proper frequency and in control?	•			
Were field blanks analyzed at the proper frequency and in control?			•	Field blanks were not collected.
Were equipment blanks analyzed at the proper frequency and in control?			•	Equipment blanks were not collected.
Was a method blank prepared and analyzed with each batch?	•			
Were target analytes in the method blank less than DL?		•		Although ethylbenzene was detected in the method blanks, the associated results were non-detect so sample qualification was not necessary.
Was an LCS/LCSD pair prepared and analyzed with each batch?	•			
Were LCS/LCSD recoveries within project acceptance limits?	•			
Was the LCS/LCSD RPD within project acceptance limits?		•		Although one analyte displayed high LCS/LCSD RPD, the associated results were non-detect so sample qualification was not necessary.
Was a MS/MSD pair prepared with each batch?			•	A MS/MSD was not reported.
Were MS/MSD recoveries within project acceptance limits?			•	A MS/MSD was not reported.
Was the MS/MSD RPD within project acceptance limits?			•	A MS/MSD was not reported.
If ISM was used for sample collection, were laboratory triplicates analyzed and within project acceptance limits?			•	ISM was not performed.
Were surrogate recoveries within project acceptance limits?	•			
Were field replicates (duplicates, triplicates, etc.) analyzed at the proper frequency and in control?	•			
Were reported sample concentrations within calibration range?	•			
Have all Laboratory Case Narrative comments/findings been addressed in the data review process?	•			
Were DoD QSM corrective actions followed if deviations were noted?	•			

Review Questions

Method: MADEPVP (Method for the Determination of Volatile Petroleum Hydrocarbons (VPH))				
Review Questions	Yes	No	NA	Comment
Were any data recommended for exclusion in the data validation process?		•		All data is acceptable as reported.

Review Questions

Method: SW6020A (Trace Metals by Inductively Coupled Plasma/Mass Spectrometry)				
Review Questions	Yes	No	NA	Comment
Were there discrepancies between the COC and the samples received?		•		No discrepancies were noted between the COC and the samples received.
Were there discrepancies between the COC and the sample labels?		•		No discrepancies were noted between the COC and the samples received.
Were samples relinquished properly on the COC?	•			
Were all samples properly preserved?	•			
Were sampling dates/times, date and time of laboratory receipt of samples, and sample conditions upon receipt at the laboratory (including preservation, pH, and temperature) documented?	•			
Were sample results reported with percent moisture correction if required?			•	Only water samples were collected.
Were analytical methods performed and analysis dates present?	•			
Were all requested target analytes reported?	•			
Were QAPP specified Project Quantitation Limit Goals achieved? (The laboratory LOQ is compared to the QAPP Project Quantitation Goal)	•			
Were holding times met?	•			
Were trip blanks analyzed at the proper frequency and in control?			•	Trip blanks were not collected for this method.
Were field blanks analyzed at the proper frequency and in control?			•	Field blanks were not collected.
Were equipment blanks analyzed at the proper frequency and in control?			•	Equipment blanks were not collected.
Was a method blank prepared and analyzed with each batch?	•			
Were target analytes in the method blank less than DL?		•		Due to detects in the method blank for total metals, three aluminum, one cobalt, and five zinc results were qualified as non-detect (U) and one aluminum and seven antimony results were qualified as estimated with a high bias (J+). No qualification was necessary for total potassium since all results were significantly higher than the blank. Although dissolved aluminum was detected in the method blank, the associated results were non-detect so sample qualification was not necessary. FUDSChem ADR qualified the non-detect results as estimated (UJ) and this qualifier was removed during data validation.
Was an LCS/LCSD pair prepared and analyzed with each batch?	•			
Were LCS/LCSD recoveries within project acceptance limits?	•			
Was the LCS/LCSD RPD within project acceptance limits?	•			
Was a MS/MSD pair prepared with each batch?	•			
Were MS/MSD recoveries within project acceptance limits?		•		Although dissolved magnesium, total magnesium, and total sodium were not within the acceptance criteria for the MS/MSD recovery, the native sample concentrations were greater than four times the spike concentrations so sample qualification was not necessary.
Was the MS/MSD RPD within project acceptance limits?	•			
Were Post Spike (PS) recoveries within project acceptance limits?			•	PS was not reported.

Review Questions

Method: SW6020A (Trace Metals by Inductively Coupled Plasma/Mass Spectrometry)				
Review Questions	Yes	No	NA	Comment
Was a Dilution Test/Serial Dilution performed and within project acceptance criteria?			•	Serial dilution was not reported.
If ISM was used for sample collection, were laboratory triplicates analyzed and within project acceptance limits?			•	ISM was not collected.
Were field replicates (duplicates, triplicates, etc.) analyzed at the proper frequency and in control?		•		Due to the absolute difference of dissolved iron between SY-BRMW4-62-72-110923 and SY-BRMW40-62-72-110923 exceeding 1X the LOQ, the results in these samples were qualified as estimated (J). Due to high RPD between between SY-BRMW4-62-72-110923 and SY-BRMW40-62-72-110923 for dissolved manganese, the results in these samples were qualified as estimated (J).
Were reported sample concentrations within calibration range?	•			
Have all Laboratory Case Narrative comments/findings been addressed in the data review process?	•			
Were DoD QSM corrective actions followed if deviations were noted?	•			
Were any data recommended for exclusion in the data validation process?		•		All data is acceptable as reported or as qualified during data validation.

Review Questions

Method: SW7470A (Mercury in Water (Manual Cold-Vapor Technique))				
Review Questions	Yes	No	NA	Comment
Were there discrepancies between the COC and the samples received?		•		No discrepancies were noted between the COC and the samples received.
Were there discrepancies between the COC and the sample labels?		•		No discrepancies were noted between the COC and the samples received.
Were samples relinquished properly on the COC?	•			
Were all samples properly preserved?	•			
Were sampling dates/times, date and time of laboratory receipt of samples, and sample conditions upon receipt at the laboratory (including preservation, pH, and temperature) documented?	•			
Were sample results reported with percent moisture correction if required?			•	Only water samples were collected.
Were analytical methods performed and analysis dates present?	•			
Were all requested target analytes reported?	•			
Were QAPP specified Project Quantitation Limit Goals achieved? (The laboratory LOQ is compared to the QAPP Project Quantitation Goal)	•			
Were holding times met?	•			
Were trip blanks analyzed at the proper frequency and in control?			•	Trip blanks were not collected for this method.
Were field blanks analyzed at the proper frequency and in control?			•	Field blanks were not collected.
Were equipment blanks analyzed at the proper frequency and in control?			•	Equipment blanks were not collected.
Was a method blank prepared and analyzed with each batch?	•			
Were target analytes in the method blank less than DL?	•			
Was an LCS/LCSD pair prepared and analyzed with each batch?	•			
Were LCS/LCSD recoveries within project acceptance limits?	•			
Was the LCS/LCSD RPD within project acceptance limits?	•			
Was a MS/MSD pair prepared with each batch?			•	MS/MSD was not performed on a sample from this SDG, but a project sample from another SDG was used in some batches.
Were MS/MSD recoveries within project acceptance limits?			•	MS/MSD was not performed on a sample from this SDG, but a project sample from another SDG was used in some batches.
Was the MS/MSD RPD within project acceptance limits?			•	MS/MSD was not performed on a sample from this SDG, but a project sample from another SDG was used in some batches.
If ISM was used for sample collection, were laboratory triplicates analyzed and within project acceptance limits?			•	ISM was not collected.
Were field replicates (duplicates, triplicates, etc.) analyzed at the proper frequency and in control?	•			
Were reported sample concentrations within calibration range?	•			
Have all Laboratory Case Narrative comments/findings been addressed in the data review process?	•			
Were DoD QSM corrective actions followed if deviations were noted?	•			

Review Questions

Method: SW7470A (Mercury in Water (Manual Cold-Vapor Technique))				
Review Questions	Yes	No	NA	Comment
Were any data recommended for exclusion in the data validation process?		•		All data is acceptable as reported.

Review Questions

Method: SW8082A (Polychlorinated Biphenyls (PCB))

Review Questions	Yes	No	NA	Comment
Were there discrepancies between the COC and the samples received?		•		No discrepancies were noted between the COC and the samples received.
Were there discrepancies between the COC and the sample labels?		•		No discrepancies were noted between the COC and the samples received.
Were samples relinquished properly on the COC?	•			
Were all samples properly preserved?	•			
Were sampling dates/times, date and time of laboratory receipt of samples, and sample conditions upon receipt at the laboratory (including preservation, pH, and temperature) documented?	•			
Were sample results reported with percent moisture correction if required?			•	Only water samples were collected.
Were analytical methods performed and analysis dates present?	•			
Were all requested target analytes reported?	•			
Were QAPP specified Project Quantitation Limit Goals achieved? (The laboratory LOQ is compared to the QAPP Project Quantitation Goal)	•			
Were holding times met?	•			
Were trip blanks analyzed at the proper frequency and in control?			•	Trip blanks were not collected for this method.
Were field blanks analyzed at the proper frequency and in control?			•	Field blanks were not collected.
Were equipment blanks analyzed at the proper frequency and in control?			•	Equipment blanks were not collected.
Was a method blank prepared and analyzed with each batch?	•			
Were target analytes in the method blank less than DL?	•			
Was an LCS/LCSD pair prepared and analyzed with each batch?	•			
Were LCS/LCSD recoveries within project acceptance limits?	•			
Was the LCS/LCSD RPD within project acceptance limits?	•			
Was a MS/MSD pair prepared with each batch?			•	A MS/MSD was not reported.
Were MS/MSD recoveries within project acceptance limits?			•	A MS/MSD was not reported.
Was the MS/MSD RPD within project acceptance limits?			•	A MS/MSD was not reported.
If ISM was used for sample collection, were laboratory triplicates analyzed and within project acceptance limits?			•	ISM was not performed.
Were surrogate recoveries within project acceptance limits?	•			
Were field replicates (duplicates, triplicates, etc.) analyzed at the proper frequency and in control?	•			
Were reported sample concentrations within calibration range?	•			
Have all Laboratory Case Narrative comments/findings been addressed in the data review process?	•			
Were DoD QSM corrective actions followed if deviations were noted?	•			
Were any data recommended for exclusion in the data validation process?		•		All data is acceptable as reported.

Review Questions

Method: SW8260D (Volatile Organic Compounds by GC/MS)				
Review Questions	Yes	No	NA	Comment
Were there discrepancies between the COC and the samples received?		•		No discrepancies were noted between the COC and the samples received.
Were there discrepancies between the COC and the sample labels?		•		No discrepancies were noted between the COC and the samples received.
Were samples relinquished properly on the COC?	•			
Were all samples properly preserved?	•			
Were sampling dates/times, date and time of laboratory receipt of samples, and sample conditions upon receipt at the laboratory (including preservation, pH, and temperature) documented?	•			
Were sample results reported with percent moisture correction if required?			•	Only water samples were collected.
Were analytical methods performed and analysis dates present?	•			
Were all requested target analytes reported?	•			
Were QAPP specified Project Quantitation Limit Goals achieved? (The laboratory LOQ is compared to the QAPP Project Quantitation Goal)	•			
Were holding times met?	•			
Were trip blanks analyzed at the proper frequency and in control?	•			
Were field blanks analyzed at the proper frequency and in control?			•	Field blanks were not collected.
Were equipment blanks analyzed at the proper frequency and in control?			•	Equipment blanks were not collected.
Was a method blank prepared and analyzed with each batch?	•			
Were target analytes in the method blank less than DL?		•		Although carbon disulfide was detected in BLK2303756 at a concentration of 0.33 ug/L, the associated results were non-detect so sample qualification was not necessary.
Was an LCS/LCSD pair prepared and analyzed with each batch?	•			
Were LCS/LCSD recoveries within project acceptance limits?		•		Although several analytes recovered high in the LCS/LCSD, the associated results were non-detect so sample qualification was not necessary.
Was the LCS/LCSD RPD within project acceptance limits?		•		Although one analyte displayed high LCS/LCSD RPD, the associated results were non-detect so sample qualification was not necessary.
Was a MS/MSD pair prepared with each batch?			•	A MS/MSD was not reported.
Were MS/MSD recoveries within project acceptance limits?			•	A MS/MSD was not reported.
Was the MS/MSD RPD within project acceptance limits?			•	A MS/MSD was not reported.
If ISM was used for sample collection, were laboratory triplicates analyzed and within project acceptance limits?			•	ISM was not performed.
Were surrogate recoveries within project acceptance limits?	•			

Review Questions

Method: SW8260D (Volatile Organic Compounds by GC/MS)				
Review Questions	Yes	No	NA	Comment
Were field replicates (duplicates, triplicates, etc.) analyzed at the proper frequency and in control?		•		The tetrahydrofuran results for samples SY-BRMW4-62-72-110923 and SY-BRMW40-62-72-110923 were qualified by FUDSChem ADR because one result was non-detect and one was detected. When the LOD was used in absolute difference calculation for the non-detect result, the difference was less then than 1X the LOQ; therefore, this qualifier was removed during data validation.
Were reported sample concentrations within calibration range?	•			
Have all Laboratory Case Narrative comments/findings been addressed in the data review process?	•			
Were DoD QSM corrective actions followed if deviations were noted?	•			
Were any data recommended for exclusion in the data validation process?		•		All results are acceptable as reported or as qualified during data validation.

Review Questions

Method: SW8270E (Semivolatile Organic Compounds by Gas Chromatography/Mass Spectrometry)				
Review Questions	Yes	No	NA	Comment
Were there discrepancies between the COC and the samples received?		•		No discrepancies were noted between the COC and the samples received.
Were there discrepancies between the COC and the sample labels?		•		No discrepancies were noted between the COC and the samples received.
Were samples relinquished properly on the COC?	•			
Were all samples properly preserved?	•			
Were sampling dates/times, date and time of laboratory receipt of samples, and sample conditions upon receipt at the laboratory (including preservation, pH, and temperature) documented?	•			
Were sample results reported with percent moisture correction if required?			•	Only water samples were collected.
Were analytical methods performed and analysis dates present?	•			
Were all requested target analytes reported?	•			
Were QAPP specified Project Quantitation Limit Goals achieved? (The laboratory LOQ is compared to the QAPP Project Quantitation Goal)	•			
Were holding times met?	•			Although FUDSChem ADR flagged five samples for being out of holding time (the collection to analysis dates were used for evaluation), the samples were extracted within 14 days from collection and analyzed within 40 days from extraction. No sample qualification was necessary and the qualifier was removed during data validation.
Were trip blanks analyzed at the proper frequency and in control?			•	Trip blanks were not collected for this method.
Were field blanks analyzed at the proper frequency and in control?			•	Field blanks were not collected.
Were equipment blanks analyzed at the proper frequency and in control?			•	Equipment blanks were not collected.
Was a method blank prepared and analyzed with each batch?	•			
Were target analytes in the method blank less than DL?	•			
Was an LCS/LCSD pair prepared and analyzed with each batch?	•			
Were LCS/LCSD recoveries within project acceptance limits?		•		Due to low LCS/LCSD %R, several analytes were qualified as estimated with a low bias (J-/UJ). Due to benzoic acid recovering at 11% and 0% in the LCS and LCSD, respectively, seven associated non-detect benzoic acid results were qualified as recommended for exclusion (X).
Was the LCS/LCSD RPD within project acceptance limits?		•		Although several LCS/LCSD RPDs were high, the associated results were non-detect so sample qualification was not necessary.
Was a MS/MSD pair prepared with each batch?			•	A MS/MSD was not reported.
Were MS/MSD recoveries within project acceptance limits?			•	A MS/MSD was not reported.
Was the MS/MSD RPD within project acceptance limits?			•	A MS/MSD was not reported.
If ISM was used for sample collection, were laboratory triplicates analyzed and within project acceptance limits?			•	ISM was not performed.
Were surrogate recoveries within project acceptance limits?	•			

Review Questions

Method: SW8270E (Semivolatile Organic Compounds by Gas Chromatography/Mass Spectrometry)				
Review Questions	Yes	No	NA	Comment
Were field replicates (duplicates, triplicates, etc.) analyzed at the proper frequency and in control?		•		Due to the absolute difference of bis(2-ethylhexyl)phthalate between SY-BRMW10-65-75-110923 and SY-BRMW1-65-75-110923 exceeding 1X the LOQ, the bis(2-ethylhexyl)phthalate results in these samples were qualified as estimated (J/UJ).
Were reported sample concentrations within calibration range?	•			
Have all Laboratory Case Narrative comments/findings been addressed in the data review process?	•			
Were DoD QSM corrective actions followed if deviations were noted?	•			
Were any data recommended for exclusion in the data validation process?	•			Due to benzoic acid recovering severely low in the LCS and LCSD, seven non-detect benzoic acid results were qualified as recommended for exclusion (X). The remaining results were acceptable as reported or as qualified during data validation.

Field Duplicate Report By SDG
D01ME0004-07, Dow Military Airfield, Salvage Yard
Dow SY Groundwater Nov 2023
Field Duplicates for SDG: 67836

Location	Analysis
SY-OBMW11	MADEPEP

Field ID - Primary/Field Dup	Lab ID - Primary/Field Dup	Analyte	Primary Result	FD Result	RL	RPD	RPD Criteria	RPD Check	RL Check
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	2-Methylnaphthalene	ND	ND	1.00	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	Acenaphthene	ND	ND	1.00	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	Acenaphthylene	ND	ND	1.00	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	Anthracene	ND	ND	1.00	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	Benzo(a)anthracene	ND	ND	1.00	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	Benzo(a)pyrene	ND	ND	1.00	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	Benzo(b)fluoranthene	ND	ND	1.00	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	Benzo(g,h,i)perylene	ND	ND	1.00	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	Benzo(k)fluoranthene	ND	ND	1.00	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	C11-C22 Extractable Petroleum Hydrocarbons, Aromatic	ND	ND	100	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	C11-C22 Extractable Petroleum Hydrocarbons, Aromatic (Unadjusted)	ND	ND	100	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	C19-C36 Extractable Petroleum Hydrocarbons, Aliphatic	ND	ND	100	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	C9-C18 Extractable Petroleum Hydrocarbons, Aliphatic	ND	ND	100	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	Chrysene	ND	ND	1.00	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	Dibenz(a,h)anthracene	ND	ND	1.00	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	Fluoranthene	ND	ND	1.00	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	Fluorene	ND	ND	1.00	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	Indeno(1,2,3-c,d)pyrene	ND	ND	1.00	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	Naphthalene	ND	ND	1.00	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	Phenanthrene	ND	ND	1.00	NA	30	NA	OK

FD = Field Duplicate
RL = Reporting Limit
RPD = Relative Percent Difference

RL Check = If either the primary sample or field duplicate result is less than 5 times the RL then the criteria used to determine if the field duplicate is outside QC limits is +/- RL for Water and +/- 2 times RL for Soil"

Field Duplicate Report By SDG
D01ME0004-07, Dow Military Airfield, Salvage Yard
Dow SY Groundwater Nov 2023
Field Duplicates for SDG: 67836

Location	Analysis
SY-OBMW11	MADEPEP

Field ID - Primary/Field Dup	Lab ID - Primary/Field Dup	Analyte	Primary Result	FD Result	RL	RPD	RPD Criteria	RPD Check	RL Check
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	Pyrene	ND	ND	1.00	NA	30	NA	OK

Location	Analysis
SY-OBMW11	MADEPVP

Field ID - Primary/Field Dup	Lab ID - Primary/Field Dup	Analyte	Primary Result	FD Result	RL	RPD	RPD Criteria	RPD Check	RL Check
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	Benzene	ND	ND	1.00	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	C5-C8 Volatile Petroleum Hydrocarbons Aliphatic, Adjusted for Target Analytes, Surrogates and Internal Standards	ND	ND	100	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	C5-C8 Volatile Petroleum Hydrocarbons, Aliphatic	ND	ND	100	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	C9-C10 Volatile Petroleum Hydrocarbons, Aromatic	ND	ND	100	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	C9-C12 Volatile Petroleum Hydrocarbons Aliphatic, Adjusted for Target Analytes, Surrogates and Internal Standards	ND	ND	100	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	C9-C12 Volatile Petroleum Hydrocarbons, Aliphatic	ND	ND	100	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	Ethylbenzene	ND	ND	2.00	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	m,p-Xylene	ND	ND	2.00	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	Methyl tert-butyl ether (MTBE)	ND	ND	2.00	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	Naphthalene	ND	ND	5.00	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	o-Xylene	ND	ND	2.00	NA	30	NA	OK

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Field Duplicate Report By SDG
D01ME0004-07, Dow Military Airfield, Salvage Yard
Dow SY Groundwater Nov 2023
Field Duplicates for SDG: 67836

Location	Analysis
SY-OBMW11	MADEPVP

Field ID - Primary/Field Dup	Lab ID - Primary/Field Dup	Analyte	Primary Result	FD Result	RL	RPD	RPD Criteria	RPD Check	RL Check
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	Toluene	ND	ND	2.00	NA	30	NA	OK

Location	Analysis
SY-OBMW11	SW6020A

Field ID - Primary/Field Dup	Lab ID - Primary/Field Dup	Analyte	Primary Result	FD Result	RL	RPD	RPD Criteria	RPD Check	RL Check
SY-OBMW11-110823 / SY-OBMW110-110823	67836-019 / 67836-020	Aluminum (FLDFLT)	ND	ND	0.0540	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	Aluminum (TOTAL)	0.0152	0.0103	0.0500	38.4	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-019 / 67836-020	Antimony (FLDFLT)	ND	ND	0.00110	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	Antimony (TOTAL)	ND	ND	0.00100	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-019 / 67836-020	Arsenic (FLDFLT)	0.000947	0.00103	0.00270	8.49	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	Arsenic (TOTAL)	0.00151	0.00143	0.00250	5.32	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-019 / 67836-020	Barium (FLDFLT)	0.0222	0.0221	0.0110	0.871	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	Barium (TOTAL)	0.0214	0.0207	0.0100	2.93	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-019 / 67836-020	Beryllium (FLDFLT)	ND	ND	0.00110	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	Beryllium (TOTAL)	ND	ND	0.00100	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-019 / 67836-020	Cadmium (FLDFLT)	ND	ND	0.00110	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	Cadmium (TOTAL)	ND	ND	0.00100	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-019 / 67836-020	Chromium (FLDFLT)	ND	ND	0.0540	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	Chromium (TOTAL)	ND	ND	0.0500	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-019 / 67836-020	Cobalt (FLDFLT)	0.000396	0.000421	0.0110	6.12	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	Cobalt (TOTAL)	0.000466	0.000467	0.0100	0.214	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-019 / 67836-020	Copper (FLDFLT)	ND	ND	0.0110	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	Copper (TOTAL)	ND	ND	0.0100	NA	30	NA	OK

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Field Duplicate Report By SDG
D01ME0004-07, Dow Military Airfield, Salvage Yard
Dow SY Groundwater Nov 2023
Field Duplicates for SDG: 67836

Location	Analysis
SY-OBMW11	SW6020A

Field ID - Primary/Field Dup	Lab ID - Primary/Field Dup	Analyte	Primary Result	FD Result	RL	RPD	RPD Criteria	RPD Check	RL Check
SY-OBMW11-110823 / SY-OBMW110-110823	67836-019 / 67836-020	Iron (FLDFLT)	0.0386	0.0475	0.0540	20.7	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	Iron (TOTAL)	0.0746	0.0607	0.0500	20.6	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-019 / 67836-020	Lead (FLDFLT)	ND	ND	0.00540	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	Lead (TOTAL)	ND	ND	0.00500	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-019 / 67836-020	Magnesium (FLDFLT)	85.4	83.3	0.110	2.51	30	OK	NA
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	Magnesium (TOTAL)	88.8	88.3	0.500	0.571	30	OK	NA
SY-OBMW11-110823 / SY-OBMW110-110823	67836-019 / 67836-020	Manganese (FLDFLT)	0.302	0.296	0.0110	1.97	30	OK	NA
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	Manganese (TOTAL)	0.309	0.310	0.0100	0.549	30	OK	NA
SY-OBMW11-110823 / SY-OBMW110-110823	67836-019 / 67836-020	Nickel (FLDFLT)	ND	ND	0.0540	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	Nickel (TOTAL)	ND	ND	0.0500	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-019 / 67836-020	Potassium (FLDFLT)	3.60	3.65	0.540	1.39	30	OK	NA
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	Potassium (TOTAL)	3.91	3.77	0.500	3.65	30	OK	NA
SY-OBMW11-110823 / SY-OBMW110-110823	67836-019 / 67836-020	Selenium (FLDFLT)	ND	ND	0.0110	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	Selenium (TOTAL)	ND	ND	0.0100	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-019 / 67836-020	Silver (FLDFLT)	ND	ND	0.00540	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	Silver (TOTAL)	ND	ND	0.00500	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-019 / 67836-020	Sodium (FLDFLT)	201	202	0.110	0.740	30	OK	NA
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	Sodium (TOTAL)	223	211	0.100	5.70	30	OK	NA
SY-OBMW11-110823 / SY-OBMW110-110823	67836-019 / 67836-020	Thallium (FLDFLT)	ND	ND	0.00110	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	Thallium (TOTAL)	ND	ND	0.00100	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-019 / 67836-020	Vanadium (FLDFLT)	ND	ND	0.0110	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	Vanadium (TOTAL)	ND	ND	0.0100	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-019 / 67836-020	Zinc (FLDFLT)	ND	ND	0.0110	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	Zinc (TOTAL)	ND	ND	0.0100	NA	30	NA	OK

FD = Field Duplicate
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RL Check = If either the primary sample or field duplicate result is less than 5 times the RL then the criteria used to determine if the field duplicate is outside QC limits is +/- RL for Water and +/- 2 times RL for Soil"

Field Duplicate Report By SDG
D01ME0004-07, Dow Military Airfield, Salvage Yard
Dow SY Groundwater Nov 2023
Field Duplicates for SDG: 67836

Location	Analysis
SY-OBMW11	SW7470A

Field ID - Primary/Field Dup	Lab ID - Primary/Field Dup	Analyte	Primary Result	FD Result	RL	RPD	RPD Criteria	RPD Check	RL Check
SY-OBMW11-110823 / SY-OBMW110-110823	67836-019 / 67836-020	Mercury (FLDFLT)	ND	ND	0.000200	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	Mercury (TOTAL)	ND	ND	0.000200	NA	30	NA	OK

Location	Analysis
SY-OBMW11	SW8082A

Field ID - Primary/Field Dup	Lab ID - Primary/Field Dup	Analyte	Primary Result	FD Result	RL	RPD	RPD Criteria	RPD Check	RL Check
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	PCB-1016 (Aroclor 1016)	ND	ND	0.200	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	PCB-1221 (Aroclor 1221)	ND	ND	0.200	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	PCB-1232 (Aroclor 1232)	ND	ND	0.200	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	PCB-1242 (Aroclor 1242)	ND	ND	0.200	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	PCB-1248 (Aroclor 1248)	ND	ND	0.200	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	PCB-1254 (Aroclor 1254)	ND	ND	0.200	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	PCB-1260 (Aroclor 1260)	ND	ND	0.200	NA	30	NA	OK

Location	Analysis
SY-OBMW11	SW8260D

Field ID - Primary/Field Dup	Lab ID - Primary/Field Dup	Analyte	Primary Result	FD Result	RL	RPD	RPD Criteria	RPD Check	RL Check
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	1,1,1,2-Tetrachloroethane	ND	ND	2.00	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	1,1,1-Trichloroethane	ND	ND	2.00	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	1,1,2,2-Tetrachloroethane	ND	ND	2.00	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	1,1,2-Trichloroethane	ND	ND	2.00	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	1,1-Dichloroethane	ND	ND	2.00	NA	30	NA	OK

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Field Duplicate Report By SDG
D01ME0004-07, Dow Military Airfield, Salvage Yard
Dow SY Groundwater Nov 2023
Field Duplicates for SDG: 67836

Location	Analysis
SY-OBMW11	SW8260D

Field ID - Primary/Field Dup	Lab ID - Primary/Field Dup	Analyte	Primary Result	FD Result	RL	RPD	RPD Criteria	RPD Check	RL Check
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	1,1-Dichloroethene	ND	ND	1.00	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	1,1-Dichloropropene	ND	ND	2.00	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	1,2,3-Trichlorobenzene	ND	ND	2.00	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	1,2,3-Trichloropropane	ND	ND	2.00	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	1,2,4-Trichlorobenzene	ND	ND	2.00	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	1,2,4-Trimethylbenzene	ND	ND	2.00	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	1,2-Dibromo-3-chloropropane	ND	ND	2.00	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	1,2-Dibromoethane (EDB)	ND	ND	2.00	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	1,2-Dichlorobenzene	ND	ND	2.00	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	1,2-Dichloroethane	ND	ND	2.00	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	1,2-Dichloropropane	ND	ND	2.00	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	1,3,5-Trimethylbenzene	ND	ND	2.00	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	1,3-Dichlorobenzene	ND	ND	2.00	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	1,3-Dichloropropane	ND	ND	2.00	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	1,4-Dichlorobenzene	ND	ND	2.00	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	1,4-Dioxane	ND	ND	50.0	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	2,2-Dichloropropane	ND	ND	2.00	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	2-Butanone (MEK)	ND	ND	10.0	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	2-Chlorotoluene	ND	ND	2.00	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	2-Hexanone	ND	ND	10.0	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	4-Chlorotoluene	ND	ND	2.00	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	4-Methyl-2-pentanone (MIBK)	ND	ND	10.0	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	Acetone	ND	ND	50.0	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	Benzene	ND	ND	2.00	NA	30	NA	OK

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Field Duplicate Report By SDG
D01ME0004-07, Dow Military Airfield, Salvage Yard
Dow SY Groundwater Nov 2023
Field Duplicates for SDG: 67836

Location	Analysis
SY-OBMW11	SW8260D

Field ID - Primary/Field Dup	Lab ID - Primary/Field Dup	Analyte	Primary Result	FD Result	RL	RPD	RPD Criteria	RPD Check	RL Check
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	Bromobenzene	ND	ND	2.00	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	Bromochloromethane	ND	ND	2.00	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	Bromodichloromethane	ND	ND	0.600	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	Bromoform	ND	ND	2.00	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	Bromomethane	ND	ND	2.00	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	Carbon disulfide	ND	ND	2.00	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	Carbon Tetrachloride	ND	ND	2.00	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	Chlorobenzene	ND	ND	2.00	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	Chloroethane	ND	ND	2.00	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	Chloroform	ND	ND	2.00	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	Chloromethane	ND	ND	2.00	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	cis-1,2-Dichloroethene	ND	ND	2.00	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	cis-1,3-Dichloropropene	ND	ND	2.00	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	Cumene	ND	ND	2.00	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	Dibromochloromethane	ND	ND	2.00	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	Dibromomethane	ND	ND	2.00	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	Dichlorodifluoromethane	ND	ND	2.00	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	Diethyl ether (Ethyl ether)	ND	ND	2.00	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	Ethylbenzene	ND	ND	2.00	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	Hexachlorobutadiene	ND	ND	0.500	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	m,p-Xylene	ND	ND	2.00	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	Methyl tert-butyl ether (MTBE)	ND	ND	2.00	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	Methylene chloride	ND	ND	2.00	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	n-Butylbenzene	ND	ND	2.00	NA	30	NA	OK

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Field Duplicate Report By SDG
D01ME0004-07, Dow Military Airfield, Salvage Yard
Dow SY Groundwater Nov 2023
Field Duplicates for SDG: 67836

Location	Analysis
SY-OBMW11	SW8260D

Field ID - Primary/Field Dup	Lab ID - Primary/Field Dup	Analyte	Primary Result	FD Result	RL	RPD	RPD Criteria	RPD Check	RL Check
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	n-Propylbenzene	ND	ND	2.00	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	Naphthalene	ND	ND	2.00	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	o-Xylene	ND	ND	2.00	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	p-Cymene (p-Isopropyltoluene)	ND	ND	2.00	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	sec-Butylbenzene	ND	ND	2.00	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	Styrene	ND	ND	2.00	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	tert-Amyl methyl ether	ND	ND	2.00	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	tert-Butyl alcohol	ND	ND	30.0	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	tert-Butyl ethyl ether	ND	ND	2.00	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	tert-Butylbenzene	ND	ND	2.00	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	Tetrachloroethene (PCE)	ND	ND	2.00	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	Tetrahydrofuran	ND	ND	2.00	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	Toluene	ND	ND	2.00	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	trans-1,2-Dichloroethene	ND	ND	2.00	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	trans-1,3-Dichloropropene	ND	ND	2.00	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	Trichloroethene (TCE)	6.03	5.87	2.00	2.67	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	Trichlorofluoromethane	ND	ND	2.00	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	Vinyl chloride	ND	ND	2.00	NA	30	NA	OK

Location	Analysis
SY-OBMW11	SW8270E

Field ID - Primary/Field Dup	Lab ID - Primary/Field Dup	Analyte	Primary Result	FD Result	RL	RPD	RPD Criteria	RPD Check	RL Check
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	1,2,4-Trichlorobenzene	ND	ND	5.00	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	1,2-Dichlorobenzene	ND	ND	2.00	NA	30	NA	OK

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Field Duplicate Report By SDG
D01ME0004-07, Dow Military Airfield, Salvage Yard
Dow SY Groundwater Nov 2023
Field Duplicates for SDG: 67836

Location	Analysis
SY-OBMW11	SW8270E

Field ID - Primary/Field Dup	Lab ID - Primary/Field Dup	Analyte	Primary Result	FD Result	RL	RPD	RPD Criteria	RPD Check	RL Check
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	1,3-Dichlorobenzene	ND	ND	2.00	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	1,4-Dichlorobenzene	ND	ND	2.00	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	2,2'-Oxybis(1-chloropropane)	ND	ND	2.00	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	2,4,5-Trichlorophenol	ND	ND	2.00	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	2,4,6-Trichlorophenol	ND	ND	2.00	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	2,4-Dichlorophenol	ND	ND	5.00	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	2,4-Dimethylphenol	ND	ND	5.00	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	2,4-Dinitrophenol	ND	ND	50.0	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	2,4-Dinitrotoluene	ND	ND	5.00	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	2,6-Dinitrotoluene	ND	ND	5.00	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	2-Chloronaphthalene	ND	ND	5.00	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	2-Chlorophenol	ND	ND	5.00	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	2-Methylphenol (o-Cresol)	ND	ND	5.00	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	2-Nitroaniline	ND	ND	2.00	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	2-Nitrophenol	ND	ND	2.00	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	3,3'-Dichlorobenzidine	ND	ND	30.0	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	3-Nitroaniline	ND	ND	2.00	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	4,6-Dinitro-2-methylphenol	ND	ND	20.0	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	4-Bromophenyl phenyl ether	ND	ND	2.00	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	4-Chloro-3-methylphenol	ND	ND	2.00	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	4-Chloroaniline	ND	ND	2.00	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	4-Chlorophenyl phenyl ether	ND	ND	5.00	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	4-Methylphenol (p-Cresol)	ND	ND	2.00	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	4-Nitroaniline	ND	ND	5.00	NA	30	NA	OK

FD = Field Duplicate
RL = Reporting Limit
RPD = Relative Percent Difference

RL Check = If either the primary sample or field duplicate result is less than 5 times the RL then the criteria used to determine if the field duplicate is outside QC limits is +/- RL for Water and +/- 2 times RL for Soil"

Field Duplicate Report By SDG
D01ME0004-07, Dow Military Airfield, Salvage Yard
Dow SY Groundwater Nov 2023
Field Duplicates for SDG: 67836

Location	Analysis
SY-OBMW11	SW8270E

Field ID - Primary/Field Dup	Lab ID - Primary/Field Dup	Analyte	Primary Result	FD Result	RL	RPD	RPD Criteria	RPD Check	RL Check
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	4-Nitrophenol	ND	ND	10.0	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	Aniline (Phenylamine, Aminobenzene)	ND	ND	2.00	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	Azobenzene	ND	ND	2.00	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	Benzidine	ND	ND	30.0	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	Benzoic acid	ND	ND	50.0	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	Benzyl alcohol	ND	ND	2.00	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	Benzyl butyl phthalate	ND	ND	5.00	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	Bis(2-chloroethoxy)methane	ND	ND	5.00	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	Bis(2-chloroethyl) ether (2-Chloroethyl ether)	ND	ND	2.00	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	Bis(2-ethylhexyl)phthalate	202	259	25.0	24.8	30	OK	NA
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	Carbazole	ND	ND	2.00	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	di-n-Butyl phthalate	ND	ND	5.00	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	di-n-Octyl phthalate	ND	ND	5.00	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	Dibenzofuran	ND	ND	0.500	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	Diethyl phthalate	2.90	2.90	5.00	0.00345	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	Dimethyl phthalate	ND	ND	5.00	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	Hexachlorobenzene	ND	ND	2.00	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	Hexachlorobutadiene	ND	ND	2.00	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	Hexachlorocyclopentadiene	ND	ND	10.0	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	Hexachloroethane	ND	ND	2.00	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	Isophorone	ND	ND	5.00	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	N-Nitrosodi-n-propylamine	ND	ND	2.00	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	N-Nitrosodimethylamine (NDMA)	ND	ND	2.00	NA	30	NA	OK

FD = Field Duplicate
RL = Reporting Limit
RPD = Relative Percent Difference

RL Check = If either the primary sample or field duplicate result is less than 5 times the RL then the criteria used to determine if the field duplicate is outside QC limits is +/- RL for Water and +/- 2 times RL for Soil"

Field Duplicate Report By SDG
D01ME0004-07, Dow Military Airfield, Salvage Yard
Dow SY Groundwater Nov 2023
Field Duplicates for SDG: 67836

Location	Analysis
SY-OBMW11	SW8270E

Field ID - Primary/Field Dup	Lab ID - Primary/Field Dup	Analyte	Primary Result	FD Result	RL	RPD	RPD Criteria	RPD Check	RL Check
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	N-Nitrosodiphenylamine	ND	ND	2.00	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	Nitrobenzene	ND	ND	2.00	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	Pentachlorophenol	ND	ND	10.0	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	Phenol	ND	ND	2.00	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	67836-008 / 67836-009	Pyridine	ND	ND	2.00	NA	30	NA	OK

FD = Field Duplicate
RL = Reporting Limit
RPD = Relative Percent Difference

RL Check = If either the primary sample or field duplicate result is less than 5 times the RL then the criteria used to determine if the field duplicate is outside QC limits is +/- RL for Water and +/- 2 times RL for Soil"

Data Validation Report for 67839

Facility:	D01ME0004-07, Dow Military Airfield, Salvage Yard
Event:	Dow SY Groundwater Nov 2023
SDG:	67839
Guidance Document:	Final UFP QAPP Revision No. 1 Remedial Investigation Former Salvage Yard Former Dow Military Airfield 233 Odlin Road, Bangor, Maine December 2022
Prime Contractor:	Credere Associates, LLC, Westbrook, ME
Project Manager:	Peter Thompson
Contract Laboratory(ies):	Absolute Resource Associates, LLC, Portsmouth, NH
Data Review Contractor:	EnSafe, Inc.
Data Review Level:	S2AVEM
Primary Data Reviewer:	Christina Ashdown, Senior Chemist
Second Reviewer:	Kevin Kha, Environmental Scientist
Date Submitted:	January 24, 2024

Field Sample ID	Lab Sample ID	Matrix	Type/Type Code	MADEPEP	MADEPVP	SW6020A	SW6020A - Dissolved	SW7470A	SW7470A - Dissolved	SW8082A	SW8260D	SW8270E
SY-BRMW10-65-75-110923	67839-011	Water	Field Duplicate/FD	X	X	X		X		X	X	X
SY-BRMW10-65-75-110923	67839-022	Water	Field Duplicate/FD				X		X			
SY-BRMW1-150-157-110923	67839-009	Water	Field Sample/N	X	X	X		X		X	X	X
SY-BRMW1-150-157-110923	67839-020	Water	Field Sample/N				X		X			
SY-BRMW1-42-52-110923	67839-008	Water	Field Sample/N	X	X	X		X		X	X	X
SY-BRMW1-42-52-110923	67839-019	Water	Field Sample/N				X		X			
SY-BRMW1-65-75-110923	67839-010	Water	Field Sample/N	X	X	X		X		X	X	X
SY-BRMW1-65-75-110923	67839-021	Water	Field Sample/N				X		X			
SY-BRMW3-145-155-110923	67839-005	Water	Field Sample/N	X	X	X		X		X	X	X
SY-BRMW3-145-155-110923	67839-016	Water	Field Sample/N				X		X			
SY-BRMW3-287-297-110923	67839-006	Water	Field Sample/N	X	X	X		X		X	X	X
SY-BRMW3-287-297-110923	67839-017	Water	Field Sample/N				X		X			
SY-BRMW3-47-62-110923	67839-004	Water	Field Sample/N	X	X	X		X		X	X	X
SY-BRMW3-47-62-110923	67839-015	Water	Field Sample/N				X		X			
SY-BRMW40-62-72-110923	67839-002	Water	Field Duplicate/FD	X	X	X		X		X	X	X
SY-BRMW40-62-72-110923	67839-013	Water	Field Duplicate/FD				X		X			
SY-BRMW4-138-148-110923	67839-003	Water	Field Sample/N	X	X	X		X		X	X	X
SY-BRMW4-138-148-110923	67839-014	Water	Field Sample/N				X		X			
SY-BRMW4-291-301-110923	67839-007	Water	Field Sample/N	X	X	X		X		X	X	X

Field Sample ID	Lab Sample ID	Matrix	Type/Type Code	MADEPEP	MADEPVP	SW6020A	SW6020A - Dissolved	SW7470A	SW7470A - Dissolved	SW8082A	SW8260D	SW8270E
SY-BRMW4-291-301-110923	67839-018	Water	Field Sample/N				X		X			
SY-BRMW4-62-72-110923	67839-001	Water	Field Sample/N	X	X	X		X		X	X	X
SY-BRMW4-62-72-110923	67839-012	Water	Field Sample/N				X		X			
TB33-110923	67839-024	Water	Trip Blank/TB		X						X	

This report assesses the analytical data quality associated with the analyses listed on the preceding cover page at S2AVEM data validation level. This assessment has been made through a combination of automated data review (ADR) and supplemental manual review, the details of which are described below. The approach taken in the review of this data set is consistent with the requirements contained in the Final UFP QAPP Revision No. 1 Remedial Investigation Former Salvage Yard Former Dow Military Airfield 233 Odlin Road, Bangor, Maine December 2022 and the additional guidance documents incorporated by reference to the extent possible. Where definitive guidance is not provided, results have been evaluated in a conservative manner using professional judgment.

Sample collection was managed and directed by Credere Associates, LLC, Westbrook, ME; analyses were performed by Absolute Resource Associates, LLC, Portsmouth, NH and were reported under sample delivery group (SDG) 67839. Data have been evaluated electronically based on electronic data deliverables (EDDs) provided by the laboratory, and hard copy data summary forms have also been reviewed during this effort and compared to the automated review output by the reviewers whose signatures appear on the following page. Findings based on the automated data submission and manual data verification processes are detailed in the ADR narrative and throughout this report.

All quality control (QC) elements associated with this SDG have been reviewed by a project chemist in accordance with the requirements defined for the project. This review is documented in the attached Data Review Checklists. The QC elements listed below were supported by the electronic deliverable and were evaluated using ADR processes.

- Blank - Negative
- Field Duplicate RPD
- Lab Blank
- LCS Recovery
- LCS RPD
- MS Recovery
- MS RPD
- Prep Hold Time
- Surrogate
- Test Hold Time
- Trip Blank

Results of the ADR process were subsequently reviewed and updated as applicable by the data review chemists identified on the signature page. Quality control elements that were not included in the electronic deliverable were reviewed manually and findings are documented within this report. Summaries of findings and associated qualified results are documented throughout this report.

A total of 111 results (4.66%) out of the 2382 results (sample and field QC samples) reported are qualified based on review and 8 results (0.34%) have been rejected or deemed a serious deficiency (X qualifier). Trace values, defined as results that are qualified as estimated because they fall between the detection limit and the reporting limit/limit of quantitation, are not counted as qualified results in the above count. The qualified results are detailed throughout this report and discussed in the narrative below, where appropriate.

Narrative Comments

Analytical Method	Data Reviewer Comment
MADEPEP	The laboratory case narrative indicates the following: "A reportable concentration of the range, Unadjusted C11-C22 Aromatics and C11-C22 Aromatics, was detected in the BLK17157. There is no impact to the data as these ranges were not detected above the LOQ in the associated field samples." Associated samples were qualified according during data validation. "The sample 67836-011 and LCSD17156 did not meet acceptance criteria for the extraction surrogate 1-chloro-octadecane. No additional sample volume remains for re-analysis. The results have been qualified accordingly." Associated results were qualified accordingly during data validation. "The LCS17156 did not meet the acceptance criteria for C9-C18 Aliphatics. This range showed low recovery. No additional sample volume remains for re-analysis. The results have been qualified accordingly. The relative percent difference between the LCS and LCSD17156 was outside the acceptance criteria for naphthalene and 2-methylnaphthalene. There is no impact to the data as these compounds were not detected in the associated samples." Associated results were qualified accordingly during data validation. "The LCS/D17157 did not meet the acceptance criteria for C9-C18 Aliphatics and C19-C36 Aliphatics. These ranges showed low recoveries. No additional sample volume remains for re-analysis. The results have been qualified accordingly." Associated results were qualified accordingly during data validation.
MADEPVP	The laboratory case narrative indicates the following: "The relative percent difference between the LCS and LCSD2303859 was outside the acceptance criteria for Unadjusted C9-C12 Aliphatics. There is no impact to the data as this range was not detected in the associated samples." The associated results were non-detect so sample qualification was not warranted.
SW6020A	This includes both total and dissolved 6020A results. The case narrative indicates the following: "Samples associated with continuing calibration verifications (CCV) that do not meet the acceptance criteria are re-analyzed for those particular elements. In circumstances where the same elements do not meet the acceptance criteria in the re-analysis, the results are reported with qualifiers. (Percent recovery range between 75% and 125%)" CCV review is not encompassed in Stage 2A data validation.
SW7470A	This includes both total and dissolved 7470A results.
SW8082A	No additional comments; see Checklist for detail.
SW8260D	The laboratory case narrative indicates the following: "The LCSD2303756 did not meet the acceptance criteria for m&p-xylenes. This compound showed high recovery. There is no impact to the data as this analyte was not detected in the associated samples." The associated samples were non-detect so sample qualification was not warranted. "The LCS/D2303766 did not meet the acceptance criteria for diethyl ether, 1,3-dichloropropane, and m&p-xylenes. These compounds showed high recoveries. The relative percent difference between the LCS and LCSD2303766 was outside the acceptance criteria for 1,1,2-trichloroethane. There is no impact to the data as this analyte was not detected in the associated samples." The associated samples were non-detect so sample qualification was not warranted.

SW8270E	The laboratory case narrative indicates the following: "The LCS/D17124 did not meet the acceptance criteria for several compounds. These compounds showed low recoveries. The relative percent difference between the LCS and LCSD17124 was outside the acceptance criteria for one compound. No additional sample volume remains for re-analysis. The results have been qualified accordingly." The associated sample results were qualified accordingly during data validation. "The LCS/D17145 did not meet the acceptance criteria for several compounds. These compounds showed low recoveries. The relative percent difference between the LCS and LCSD17145 was outside the acceptance criteria for several compounds. No additional sample volume remains for re-analysis. The results have been qualified accordingly." The associated sample results were qualified accordingly during data validation.

Christina Rink-Ashdown

Reviewed by Christina Ashdown, Senior Chemist, EnSafe, Inc. February 01, 2024

As the First Reviewer, I certify that I have performed a data review process in accordance with the requirements of the project guidance document, and have compared the electronic data to the laboratory's hard copy report and have verified the consistency of the reported sample results and method quality control data between the two deliverables.

Kevin Kha

Reviewed by Kevin Kha, Environmental Scientist, EnSafe, Inc. February 14, 2024

As the Second Reviewer, I certify that I have performed a quality assurance review of the report generated by the First Reviewer.

Quality Control Outliers for test method MADEPEP, Lab Blank

The purpose of laboratory blanks is to determine the existence and magnitude of cross-contamination problems resulting from laboratory activities. Reported results were evaluated to determine compliance with the required acceptance criteria. Summary forms were evaluated and compared to electronic data deliverables. Findings of this review, and contaminants found in laboratory blanks are listed below along with any associated qualified results.

Sample ID/ Lab Sample ID	Analyte	Result	Warning Limits	Control Limits	Units	Qualifier	Reason Code	Comment
17156PB17156 (LB)	C11-C22 Extractable Petroleum Hydrocarbons, Aromatic	78.2	< 53.968	< 100	ug/l	U/None*	L	
17156PB17156 (LB)	C11-C22 Extractable Petroleum Hydrocarbons, Aromatic (Unadjusted)	78.2	< 59.968	< 100	ug/l	U/None*	L	
17157PB17157 (LB)	C11-C22 Extractable Petroleum Hydrocarbons, Aromatic	101	< 53.968	< 100	ug/l	U/None*	L	
17157PB17157 (LB)	C11-C22 Extractable Petroleum Hydrocarbons, Aromatic (Unadjusted)	101	< 59.968	< 100	ug/l	U/None*	L	

Where two qualifiers are listed, such as 'J/UJ', the first applies to positive results, and the second to non-detect results.
Upper and Lower Warning and Control Limits are abbreviated UWL, LWL, UCL, and LCL in the Comment field.

*Blank flags displayed in the above table identify qualification of the sample result when it is less than or equal to the LOQ/RL. Sample results above the LOD or LOQ will be qualified based on the validation guidance assigned in the project setup.

Qualified Results associated with the Lab Blank for MADEPEP

FieldSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
SY-BRMW3-145-155-110923 67839-005	N	C11-C22 Extractable Petroleum Hydrocarbons, Aromatic	100	57 J	100 U		ug/l	L
SY-BRMW40-62-72-110923 67839-002	FD	C11-C22 Extractable Petroleum Hydrocarbons, Aromatic	100	59 J	100 U		ug/l	L

Analytes not found in project samples are reported as not detected at the limit of detection (LOD) unless blank contamination occurs and then the sample may be reported as not detected at the (LOD) or (LOQ) based on the sample concentration and the validation guidance. In instances where no LOD is provided, results are reported down to the LOQ.

Quality Control Outliers for test method MADEPEP, LCS Recovery

The laboratory control sample/laboratory control sample duplicate (LCS/LCSD) serves as a monitor of the overall performance of each step during the analysis, including the sample preparation. Reported results were evaluated to determine compliance with the required acceptance criteria, and summary forms were evaluated and compared to electronic data deliverables. Findings of this review, and any associated qualified results, are listed below.

Sample ID/ Lab Sample ID	Analyte	Result	Warning Limits	Control Limits	Units	Qualifier	Reason Code	Comment
17156LCS17156 (BS)	C9-C18 Extractable Petroleum Hydrocarbons, Aliphatic	37.0	40 - 140	20 - 140	percent	J/UJ	C	
17157LCS17157 (BS)	C19-C36 Extractable Petroleum Hydrocarbons, Aliphatic	36.0	40 - 140	20 - 140	percent	J/UJ	C	
17157LCS17157 (BS)	C9-C18 Extractable Petroleum Hydrocarbons, Aliphatic	17.0	40 - 140	20 - 140	percent	J/X	C	
17157LCSD17157 (BD)	C19-C36 Extractable Petroleum Hydrocarbons, Aliphatic	38.0	40 - 140	20 - 140	percent	J/UJ	C	
17157LCSD17157 (BD)	C9-C18 Extractable Petroleum Hydrocarbons, Aliphatic	15.0	40 - 140	20 - 140	percent	J/X	C	

Where two qualifiers are listed, such as 'J/UJ', the first applies to positive results, and the second to non-detect results.
Upper and Lower Warning and Control Limits are abbreviated UWL, LWL, UCL, and LCL in the Comment field.

Qualified Results associated with the LCS Recovery for MADEPEP

FieldSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
SY-BRMW10-65-75-110923 67839-011	FD	C19-C36 Extractable Petroleum Hydrocarbons, Aliphatic	100	97 U#	97 UJ		ug/l	C
SY-BRMW10-65-75-110923 67839-011	FD	C9-C18 Extractable Petroleum Hydrocarbons, Aliphatic	100	95 U#	95 X		ug/l	C
SY-BRMW1-150-157-110923 67839-009	N	C9-C18 Extractable Petroleum Hydrocarbons, Aliphatic	100	95 U#	95 UJ		ug/l	C
SY-BRMW1-42-52-110923 67839-008	N	C9-C18 Extractable Petroleum Hydrocarbons, Aliphatic	100	95 U#	95 UJ		ug/l	C
SY-BRMW1-65-75-110923 67839-010	N	C9-C18 Extractable Petroleum Hydrocarbons, Aliphatic	100	95 U#	95 UJ		ug/l	C
SY-BRMW3-145-155-110923 67839-005	N	C9-C18 Extractable Petroleum Hydrocarbons, Aliphatic	100	95 U#	95 UJ		ug/l	C

Qualified Results associated with the LCS Recovery for MADEPEP

FieldSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
SY-BRMW3-287-297-110923 67839-006	N	C9-C18 Extractable Petroleum Hydrocarbons, Aliphatic	100	95 U#	95 UJ		ug/l	C
SY-BRMW3-47-62-110923 67839-004	N	C9-C18 Extractable Petroleum Hydrocarbons, Aliphatic	100	95 U#	95 UJ		ug/l	C
SY-BRMW40-62-72-110923 67839-002	FD	C9-C18 Extractable Petroleum Hydrocarbons, Aliphatic	100	95 U#	95 UJ		ug/l	C
SY-BRMW4-138-148-110923 67839-003	N	C9-C18 Extractable Petroleum Hydrocarbons, Aliphatic	100	95 U#	95 UJ		ug/l	C
SY-BRMW4-291-301-110923 67839-007	N	C9-C18 Extractable Petroleum Hydrocarbons, Aliphatic	100	95 U#	95 UJ		ug/l	C
SY-BRMW4-62-72-110923 67839-001	N	C9-C18 Extractable Petroleum Hydrocarbons, Aliphatic	100	95 U#	95 UJ		ug/l	C

Analytes not found in project samples are reported as not detected at the limit of detection (LOD) unless blank contamination occurs and then the sample may be reported as not detected at the (LOD) or (LOQ) based on the sample concentration and the validation guidance. In instances where no LOD is provided, results are reported down to the LOQ.

Quality Control Outliers for test method MADEPEP, LCS RPD

The objective of laboratory control sample/laboratory control sample duplicate (LCS/LCSD) RPD analysis is to demonstrate acceptable method precision by the laboratory at the time of analysis. LCS/LCSD analyses are also performed to generate data that determines the long-term precision of the analytical method on various matrices. Non-homogenous samples can impact the apparent method precision. Summary forms were evaluated and compared to electronic data deliverables. Laboratory control sample/laboratory control sample duplicate RPD results that were outside of the acceptance criteria are listed below.

Sample ID/ Lab Sample ID	Analyte	Result	Warning Limits	Control Limits	Units	Qualifier	Reason Code	Comment
17156LCSD17156 (BD)	2-Methylnaphthalene	27.7	< 25	< 25	rpd	J/None	Z	
17156LCSD17156 (BD)	Naphthalene	27.6	< 25	< 25	rpd	J/None	Z	

Where two qualifiers are listed, such as 'J/UJ', the first applies to positive results, and the second to non-detect results.
Upper and Lower Warning and Control Limits are abbreviated UWL, LWL, UCL, and LCL in the Comment field.

No results associated with this QC element required qualification.

Quality Control Outliers for test method MADEPVP, Lab Blank

The purpose of laboratory blanks is to determine the existence and magnitude of cross-contamination problems resulting from laboratory activities. Reported results were evaluated to determine compliance with the required acceptance criteria. Summary forms were evaluated and compared to electronic data deliverables. Findings of this review, and contaminants found in laboratory blanks are listed below along with any associated qualified results.

Sample ID/ Lab Sample ID	Analyte	Result	Warning Limits	Control Limits	Units	Qualifier	Reason Code	Comment
2303859BLK112023A (LB)	Ethylbenzene	0.489	< 0.404	< 2	ug/l	U/None*	L	
2303861BLK112023A (LB)	Ethylbenzene	0.469	< 0.404	< 2	ug/l	U/None*	L	

Where two qualifiers are listed, such as 'J/UJ', the first applies to positive results, and the second to non-detect results.
Upper and Lower Warning and Control Limits are abbreviated UWL, LWL, UCL, and LCL in the Comment field.

*Blank flags displayed in the above table identify qualification of the sample result when it is less than or equal to the LOQ/RL. Sample results above the LOD or LOQ will be qualified based on the validation guidance assigned in the project setup.

No results associated with this QC element required qualification.

Quality Control Outliers for test method MADEPVP, LCS RPD

The objective of laboratory control sample/laboratory control sample duplicate (LCS/LCSD) RPD analysis is to demonstrate acceptable method precision by the laboratory at the time of analysis. LCS/LCSD analyses are also performed to generate data that determines the long-term precision of the analytical method on various matrices. Non-homogenous samples can impact the apparent method precision. Summary forms were evaluated and compared to electronic data deliverables. Laboratory control sample/laboratory control sample duplicate RPD results that were outside of the acceptance criteria are listed below.

Sample ID/ Lab Sample ID	Analyte	Result	Warning Limits	Control Limits	Units	Qualifier	Reason Code	Comment
2303859LCSD112023A (BD)	C9-C12 Volatile Petroleum Hydrocarbons, Aliphatic	36.6	< 25	< 25	rpd	J/None	Z	

Where two qualifiers are listed, such as 'J/UJ', the first applies to positive results, and the second to non-detect results.
Upper and Lower Warning and Control Limits are abbreviated UWL, LWL, UCL, and LCL in the Comment field.

No results associated with this QC element required qualification.

Quality Control Outliers for test method SW6020A, Dissolved, Field Duplicate RPD

Field duplicate analyses are performed in order to assess sample collection/laboratory precision for each sample matrix. Summary forms were evaluated and compared to electronic data deliverables. Field duplicate results that were outside of the acceptance criteria are listed below.

Sample ID/ Lab Sample ID	Analyte	Result	Warning Limits	Control Limits	Units	Qualifier	Reason Code	Comment
SY-BRMW40-62-72-110923 (N)	Iron	0.135	< 0.054	< 0.054	mg/l	J/UJ	D3	
SY-BRMW40-62-72-110923 (N)	Manganese	50.8	< 30	< 30	rpd	J/UJ	D3	

Where two qualifiers are listed, such as 'J/UJ', the first applies to positive results, and the second to non-detect results.
Upper and Lower Warning and Control Limits are abbreviated UWL, LWL, UCL, and LCL in the Comment field.

Qualified Results associated with the Field Duplicate RPD for SW6020A, Dissolved

FieldSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
SY-BRMW40-62-72-110923 67839-013	FD	Iron	0.054	0.074	0.074 J		mg/l	D3
SY-BRMW40-62-72-110923 67839-013	FD	Manganese	0.011	0.33	0.33 J		mg/l	D3
SY-BRMW4-62-72-110923 67839-012	N	Iron	0.054	0.21	0.21 J		mg/l	D3
SY-BRMW4-62-72-110923 67839-012	N	Manganese	0.011	0.55	0.55 J		mg/l	D3

Analytes not found in project samples are reported as not detected at the limit of detection (LOD) unless blank contamination occurs and then the sample may be reported as not detected at the (LOD) or (LOQ) based on the sample concentration and the validation guidance. In instances where no LOD is provided, results are reported down to the LOQ.

Quality Control Outliers for test method SW6020A, Dissolved, Lab Blank

The purpose of laboratory blanks is to determine the existence and magnitude of cross-contamination problems resulting from laboratory activities. Reported results were evaluated to determine compliance with the required acceptance criteria. Summary forms were evaluated and compared to electronic data deliverables. Findings of this review, and contaminants found in laboratory blanks are listed below along with any associated qualified results.

Sample ID/ Lab Sample ID	Analyte	Result	Warning Limits	Control Limits	Units	Qualifier	Reason Code	Comment
17205PB 17205 (LB)	Aluminum	0.0204	< 0.01012	< 0.05	mg/l	J/UJ	L	

Where two qualifiers are listed, such as 'J/UJ', the first applies to positive results, and the second to non-detect results.
Upper and Lower Warning and Control Limits are abbreviated UWL, LWL, UCL, and LCL in the Comment field.

No results associated with this QC element required qualification.

Quality Control Outliers for test method SW6020A, Dissolved, MS Recovery

Data for matrix spikes/matrix spike duplicates (MS/MSD) are generated to determine long-term precision and accuracy of the analytical method on various matrices and to demonstrate acceptable compound recovery by the laboratory at the time of sample analysis. These data alone cannot be used to evaluate the precision and accuracy of individual samples. However, when exercising professional judgment, MS/MSD data can be used in conjunction with other available QC information. Reported results were evaluated to determine compliance with the required acceptance criteria, and summary forms were evaluated and compared to electronic data deliverables. Findings of this review, and any associated qualified results, are listed below.

Sample ID/ Lab Sample ID	Analyte	Result	Warning Limits	Control Limits	Units	Qualifier	Reason Code	Comment
SY-BRMW3-47-62-110923 (SD)	Magnesium	80.0	83 - 118	30 - 125	percent	J/UJ	M	Spike amount Insignificant

Where two qualifiers are listed, such as 'J/UJ', the first applies to positive results, and the second to non-detect results.
Upper and Lower Warning and Control Limits are abbreviated UWL, LWL, UCL, and LCL in the Comment field.

No results associated with this QC element required qualification.

Quality Control Outliers for test method SW6020A, Total, Lab Blank

The purpose of laboratory blanks is to determine the existence and magnitude of cross-contamination problems resulting from laboratory activities. Reported results were evaluated to determine compliance with the required acceptance criteria. Summary forms were evaluated and compared to electronic data deliverables. Findings of this review, and contaminants found in laboratory blanks are listed below along with any associated qualified results.

Sample ID/ Lab Sample ID	Analyte	Result	Warning Limits	Control Limits	Units	Qualifier	Reason Code	Comment
17218PB 17218 (LB)	Aluminum	0.0186	< 0.01012	< 0.05	mg/l	J/UJ	L	
17218PB 17218 (LB)	Antimony	0.000219	< 0.00014	< 0.001	mg/l	J/UJ	L	
17218PB 17218 (LB)	Cobalt	0.0000210	< 2e-005	< 0.01	mg/l	J/UJ	L	
17218PB 17218 (LB)	Potassium	0.0592	< 0.03922	< 0.5	mg/l	J/UJ	L	
17218PB 17218 (LB)	Zinc	0.00324	< 0.00206	< 0.01	mg/l	J/UJ	L	

Where two qualifiers are listed, such as 'J/UJ', the first applies to positive results, and the second to non-detect results.
Upper and Lower Warning and Control Limits are abbreviated UWL, LWL, UCL, and LCL in the Comment field.

Qualified Results associated with the Lab Blank for SW6020A, Total

FieldSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
SY-BRMW10-65-75-110923 67839-011	FD	Antimony	0.0010	0.00094 J	0.00094 J	+	mg/l	L
SY-BRMW10-65-75-110923 67839-011	FD	Zinc	0.010	0.0036 J	0.010 U		mg/l	L
SY-BRMW1-150-157-110923 67839-009	N	Aluminum	0.050	0.028 J	0.028 J	+	mg/l	L
SY-BRMW1-150-157-110923 67839-009	N	Antimony	0.0010	0.00053 J	0.00053 J	+	mg/l	L
SY-BRMW1-150-157-110923 67839-009	N	Zinc	0.010	0.0024 J	0.010 U		mg/l	L
SY-BRMW1-42-52-110923 67839-008	N	Antimony	0.0010	0.00077 J	0.00077 J	+	mg/l	L
SY-BRMW1-42-52-110923 67839-008	N	Zinc	0.010	0.0035 J	0.010 U		mg/l	L
SY-BRMW1-65-75-110923 67839-010	N	Aluminum	0.050	0.018 J	0.050 U		mg/l	L
SY-BRMW1-65-75-110923 67839-010	N	Antimony	0.0010	0.00084 J	0.00084 J	+	mg/l	L
SY-BRMW1-65-75-110923 67839-010	N	Zinc	0.010	0.0035 J	0.010 U		mg/l	L
SY-BRMW3-145-155-110923 67839-005	N	Antimony	0.0010	0.00064 J	0.00064 J	+	mg/l	L
SY-BRMW3-287-297-110923 67839-006	N	Aluminum	0.050	0.010 J	0.050 U		mg/l	L

Qualified Results associated with the Lab Blank for SW6020A, Total

FieldSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
SY-BRMW3-287-297-110923 67839-006	N	Antimony	0.0010	0.0014	0.0014 J	+	mg/l	L
SY-BRMW3-47-62-110923 67839-004	N	Aluminum	0.050	0.011 J	0.050 U		mg/l	L
SY-BRMW3-47-62-110923 67839-004	N	Cobalt	0.010	0.00046 J	0.010 U		mg/l	L
SY-BRMW4-291-301-110923 67839-007	N	Antimony	0.0010	0.00092 J	0.00092 J	+	mg/l	L
SY-BRMW4-291-301-110923 67839-007	N	Zinc	0.010	0.0024 J	0.010 U		mg/l	L

Analytes not found in project samples are reported as not detected at the limit of detection (LOD) unless blank contamination occurs and then the sample may be reported as not detected at the (LOD) or (LOQ) based on the sample concentration and the validation guidance. In instances where no LOD is provided, results are reported down to the LOQ.

Quality Control Outliers for test method SW6020A, Total, MS Recovery

Data for matrix spikes/matrix spike duplicates (MS/MSD) are generated to determine long-term precision and accuracy of the analytical method on various matrices and to demonstrate acceptable compound recovery by the laboratory at the time of sample analysis. These data alone cannot be used to evaluate the precision and accuracy of individual samples. However, when exercising professional judgment, MS/MSD data can be used in conjunction with other available QC information. Reported results were evaluated to determine compliance with the required acceptance criteria, and summary forms were evaluated and compared to electronic data deliverables. Findings of this review, and any associated qualified results, are listed below.

Sample ID/ Lab Sample ID	Analyte	Result	Warning Limits	Control Limits	Units	Qualifier	Reason Code	Comment
SY-BRMW3-47-62-110923 (MS)	Magnesium	218	83 - 118	30 - 125	percent	J/None	M	Spike amount Insignificant
SY-BRMW3-47-62-110923 (SD)	Magnesium	32.0	83 - 118	30 - 125	percent	J/UJ	M	Spike amount Insignificant
SY-BRMW3-47-62-110923 (SD)	Sodium	82.0	85 - 117	30 - 125	percent	J/UJ	M	Spike amount Insignificant

Where two qualifiers are listed, such as 'J/UJ', the first applies to positive results, and the second to non-detect results.
Upper and Lower Warning and Control Limits are abbreviated UWL, LWL, UCL, and LCL in the Comment field.

No results associated with this QC element required qualification.

Quality Control Outliers for test method SW8260D, Field Duplicate RPD

Field duplicate analyses are performed in order to assess sample collection/laboratory precision for each sample matrix. Summary forms were evaluated and compared to electronic data deliverables. Field duplicate results that were outside of the acceptance criteria are listed below.

Sample ID/ Lab Sample ID	Analyte	Result	Warning Limits	Control Limits	Units	Qualifier	Reason Code	Comment
SY-BRMW40-62-72-110923 (N)	Tetrahydrofuran	3.35	< 2	< 2	ug/l	J/UJ	D3	

Where two qualifiers are listed, such as 'J/UJ', the first applies to positive results, and the second to non-detect results.
Upper and Lower Warning and Control Limits are abbreviated UWL, LWL, UCL, and LCL in the Comment field.

No results associated with this QC element required qualification.

Quality Control Outliers for test method SW8260D, LCS Recovery

The laboratory control sample/laboratory control sample duplicate (LCS/LCSD) serves as a monitor of the overall performance of each step during the analysis, including the sample preparation. Reported results were evaluated to determine compliance with the required acceptance criteria, and summary forms were evaluated and compared to electronic data deliverables. Findings of this review, and any associated qualified results, are listed below.

Sample ID/ Lab Sample ID	Analyte	Result	Warning Limits	Control Limits	Units	Qualifier	Reason Code	Comment
2303756LCSD111623G (BD)	m,p-Xylene	125	80 - 121	20 - 121	percent	J/None	C	
2303766LCSD111623H (BD)	1,3-Dichloropropane	124	80 - 119	20 - 119	percent	J/None	C	
2303766LCSD111623H (BD)	Diethyl ether (Ethyl ether)	130	68 - 129	20 - 129	percent	J/None	C	
2303766LCSD111623H (BD)	m,p-Xylene	124	80 - 121	20 - 121	percent	J/None	C	

Where two qualifiers are listed, such as 'J/UJ', the first applies to positive results, and the second to non-detect results.
Upper and Lower Warning and Control Limits are abbreviated UWL, LWL, UCL, and LCL in the Comment field.

No results associated with this QC element required qualification.

Quality Control Outliers for test method SW8260D, LCS RPD

The objective of laboratory control sample/laboratory control sample duplicate (LCS/LCSD) RPD analysis is to demonstrate acceptable method precision by the laboratory at the time of analysis. LCS/LCSD analyses are also performed to generate data that determines the long-term precision of the analytical method on various matrices. Non-homogenous samples can impact the apparent method precision. Summary forms were evaluated and compared to electronic data deliverables. Laboratory control sample/laboratory control sample duplicate RPD results that were outside of the acceptance criteria are listed below.

Sample ID/ Lab Sample ID	Analyte	Result	Warning Limits	Control Limits	Units	Qualifier	Reason Code	Comment
2303766LCSD111623H (BD)	1,1,2-Trichloroethane	21.3	< 20	< 20	rpd	J/None	Z	

Where two qualifiers are listed, such as 'J/UJ', the first applies to positive results, and the second to non-detect results.
Upper and Lower Warning and Control Limits are abbreviated UWL, LWL, UCL, and LCL in the Comment field.

No results associated with this QC element required qualification.

Quality Control Outliers for test method SW8270E, Field Duplicate RPD

Field duplicate analyses are performed in order to assess sample collection/laboratory precision for each sample matrix. Summary forms were evaluated and compared to electronic data deliverables. Field duplicate results that were outside of the acceptance criteria are listed below.

Sample ID/ Lab Sample ID	Analyte	Result	Warning Limits	Control Limits	Units	Qualifier	Reason Code	Comment
SY-BRMW10-65-75-110923 (N)	Bis(2-ethylhexyl)phthalate	119	< 25	< 25	ug/l	J/UJ	D3	

Where two qualifiers are listed, such as 'J/UJ', the first applies to positive results, and the second to non-detect results.
Upper and Lower Warning and Control Limits are abbreviated UWL, LWL, UCL, and LCL in the Comment field.

Qualified Results associated with the Field Duplicate RPD for SW8270E

FieldSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
SY-BRMW10-65-75-110923 67839-011	FD	Bis(2-ethylhexyl)phthalate	5.0	3.0 U	3.0 UJ		ug/l	D3
SY-BRMW1-65-75-110923 67839-010	N	Bis(2-ethylhexyl)phthalate	25	120	120 J		ug/l	D3

Analytes not found in project samples are reported as not detected at the limit of detection (LOD) unless blank contamination occurs and then the sample may be reported as not detected at the (LOD) or (LOQ) based on the sample concentration and the validation guidance. In instances where no LOD is provided, results are reported down to the LOQ.

Quality Control Outliers for test method SW8270E, LCS Recovery

The laboratory control sample/laboratory control sample duplicate (LCS/LCSD) serves as a monitor of the overall performance of each step during the analysis, including the sample preparation. Reported results were evaluated to determine compliance with the required acceptance criteria, and summary forms were evaluated and compared to electronic data deliverables. Findings of this review, and any associated qualified results, are listed below.

Sample ID/ Lab Sample ID	Analyte	Result	Warning Limits	Control Limits	Units	Qualifier	Reason Code	Comment
17124LCS17124 (BS)	4-Nitrophenol	32.0	61 - 133	20 - 133	percent	J/UJ	C	
17124LCS17124 (BS)	Benzoic acid	22.0	57 - 129	20 - 129	percent	J/UJ	C	
17124LCS17124 (BS)	Benzyl butyl phthalate	44.0	53 - 134	20 - 134	percent	J/UJ	C	
17124LCS17124 (BS)	Dimethyl phthalate	29.0	45 - 127	20 - 127	percent	J/UJ	C	
17124LCS17124 (BS)	Hexachlorocyclopentadiene	41.0	53 - 135	20 - 135	percent	J/UJ	C	
17124LCS17124 (BS)	N-Nitrosodimethylamine (NDMA)	41.0	43 - 121	20 - 121	percent	J/UJ	C	
17124LCS17124 (BS)	Phenol	28.0	72 - 132	20 - 132	percent	J/UJ	C	
17124LCSD17124 (BD)	4-Nitrophenol	29.0	61 - 133	20 - 133	percent	J/UJ	C	
17124LCSD17124 (BD)	Benzoic acid	26.0	57 - 129	20 - 129	percent	J/UJ	C	
17124LCSD17124 (BD)	Benzyl butyl phthalate	43.0	53 - 134	20 - 134	percent	J/UJ	C	
17124LCSD17124 (BD)	Diethyl phthalate	55.0	56 - 125	20 - 125	percent	J/UJ	C	
17124LCSD17124 (BD)	Dimethyl phthalate	28.0	45 - 127	20 - 127	percent	J/UJ	C	
17124LCSD17124 (BD)	Hexachlorocyclopentadiene	45.0	53 - 135	20 - 135	percent	J/UJ	C	
17124LCSD17124 (BD)	N-Nitrosodimethylamine (NDMA)	42.0	43 - 121	20 - 121	percent	J/UJ	C	
17124LCSD17124 (BD)	Phenol	27.0	72 - 132	20 - 132	percent	J/UJ	C	
17145LCS17145 (BS)	4-Chloro-3-methylphenol	44.0	52 - 119	20 - 119	percent	J/UJ	C	
17145LCS17145 (BS)	4-Nitrophenol	22.0	61 - 133	20 - 133	percent	J/UJ	C	
17145LCS17145 (BS)	Benzoic acid	11.0	57 - 129	20 - 129	percent	J/X	C	
17145LCS17145 (BS)	Dimethyl phthalate	39.0	45 - 127	20 - 127	percent	J/UJ	C	
17145LCS17145 (BS)	Hexachlorocyclopentadiene	41.0	53 - 135	20 - 135	percent	J/UJ	C	
17145LCS17145 (BS)	Phenol	26.0	72 - 132	20 - 132	percent	J/UJ	C	
17145LCSD17145 (BD)	4-Nitrophenol	25.0	61 - 133	20 - 133	percent	J/UJ	C	
17145LCSD17145 (BD)	Benzoic acid	0.00	57 - 129	20 - 129	percent	J/X	C	
17145LCSD17145 (BD)	Dimethyl phthalate	27.0	45 - 127	20 - 127	percent	J/UJ	C	
17145LCSD17145 (BD)	Hexachlorocyclopentadiene	37.0	53 - 135	20 - 135	percent	J/UJ	C	
17145LCSD17145 (BD)	Phenol	27.0	72 - 132	20 - 132	percent	J/UJ	C	

Where two qualifiers are listed, such as 'J/UJ', the first applies to positive results, and the second to non-detect results.
Upper and Lower Warning and Control Limits are abbreviated UWL, LWL, UCL, and LCL in the Comment field.

Qualified Results associated with the LCS Recovery for SW8270E

Qualified Results associated with the LCS Recovery for SW8270E

FieldSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
SY-BRMW10-65-75-110923 67839-011	FD	4-Chloro-3-methylphenol	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-BRMW10-65-75-110923 67839-011	FD	4-Nitrophenol	10	5.0 U#	5.0 UJ		ug/l	C
SY-BRMW10-65-75-110923 67839-011	FD	Benzoic acid	50	45 U#	45 X		ug/l	C
SY-BRMW10-65-75-110923 67839-011	FD	Dimethyl phthalate	5.0	1.0 U#	1.0 UJ		ug/l	C
SY-BRMW10-65-75-110923 67839-011	FD	Hexachlorocyclopentadiene	10	4.0 U#	4.0 UJ		ug/l	C
SY-BRMW10-65-75-110923 67839-011	FD	Phenol	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-BRMW1-150-157-110923 67839-009	N	4-Chloro-3-methylphenol	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-BRMW1-150-157-110923 67839-009	N	4-Nitrophenol	10	5.0 U#	5.0 UJ		ug/l	C
SY-BRMW1-150-157-110923 67839-009	N	Benzoic acid	50	45 U#	45 X		ug/l	C
SY-BRMW1-150-157-110923 67839-009	N	Dimethyl phthalate	5.0	1.0 U#	1.0 UJ		ug/l	C
SY-BRMW1-150-157-110923 67839-009	N	Hexachlorocyclopentadiene	10	4.0 U#	4.0 UJ		ug/l	C
SY-BRMW1-150-157-110923 67839-009	N	Phenol	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-BRMW1-42-52-110923 67839-008	N	4-Chloro-3-methylphenol	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-BRMW1-42-52-110923 67839-008	N	4-Nitrophenol	10	5.0 U#	5.0 UJ		ug/l	C
SY-BRMW1-42-52-110923 67839-008	N	Benzoic acid	50	45 U#	45 X		ug/l	C
SY-BRMW1-42-52-110923 67839-008	N	Dimethyl phthalate	5.0	1.0 U#	1.0 UJ		ug/l	C
SY-BRMW1-42-52-110923 67839-008	N	Hexachlorocyclopentadiene	10	4.0 U#	4.0 UJ		ug/l	C
SY-BRMW1-42-52-110923 67839-008	N	Phenol	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-BRMW1-65-75-110923 67839-010	N	4-Chloro-3-methylphenol	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-BRMW1-65-75-110923 67839-010	N	4-Nitrophenol	10	5.0 U#	5.0 UJ		ug/l	C
SY-BRMW1-65-75-110923 67839-010	N	Benzoic acid	50	45 U#	45 X		ug/l	C
SY-BRMW1-65-75-110923 67839-010	N	Dimethyl phthalate	5.0	1.0 U#	1.0 UJ		ug/l	C

Qualified Results associated with the LCS Recovery for SW8270E

FieldSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
SY-BRMW1-65-75-110923 67839-010	N	Hexachlorocyclopentadiene	10	4.0 U#	4.0 UJ		ug/l	C
SY-BRMW1-65-75-110923 67839-010	N	Phenol	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-BRMW3-145-155-110923 67839-005	N	4-Chloro-3-methylphenol	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-BRMW3-145-155-110923 67839-005	N	4-Nitrophenol	10	5.0 U#	5.0 UJ		ug/l	C
SY-BRMW3-145-155-110923 67839-005	N	Benzoic acid	50	45 U#	45 X		ug/l	C
SY-BRMW3-145-155-110923 67839-005	N	Dimethyl phthalate	5.0	1.0 U#	1.0 UJ		ug/l	C
SY-BRMW3-145-155-110923 67839-005	N	Hexachlorocyclopentadiene	10	4.0 U#	4.0 UJ		ug/l	C
SY-BRMW3-145-155-110923 67839-005	N	Phenol	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-BRMW3-287-297-110923 67839-006	N	4-Chloro-3-methylphenol	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-BRMW3-287-297-110923 67839-006	N	4-Nitrophenol	10	5.0 U#	5.0 UJ		ug/l	C
SY-BRMW3-287-297-110923 67839-006	N	Benzoic acid	50	45 U#	45 X		ug/l	C
SY-BRMW3-287-297-110923 67839-006	N	Dimethyl phthalate	5.0	1.0 U#	1.0 UJ		ug/l	C
SY-BRMW3-287-297-110923 67839-006	N	Hexachlorocyclopentadiene	10	4.0 U#	4.0 UJ		ug/l	C
SY-BRMW3-287-297-110923 67839-006	N	Phenol	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-BRMW3-47-62-110923 67839-004	N	4-Nitrophenol	10	5.0 U#	5.0 UJ		ug/l	C
SY-BRMW3-47-62-110923 67839-004	N	Benzoic acid	50	45 U#	45 UJ		ug/l	C
SY-BRMW3-47-62-110923 67839-004	N	Benzyl butyl phthalate	5.0	3.0 U#	3.0 UJ		ug/l	C
SY-BRMW3-47-62-110923 67839-004	N	Diethyl phthalate	5.0	0.83 J	0.83 J	-	ug/l	C/TR
SY-BRMW3-47-62-110923 67839-004	N	Dimethyl phthalate	5.0	1.0 U#	1.0 UJ		ug/l	C
SY-BRMW3-47-62-110923 67839-004	N	Hexachlorocyclopentadiene	10	4.0 U#	4.0 UJ		ug/l	C
SY-BRMW3-47-62-110923 67839-004	N	N-Nitrosodimethylamine (NDMA)	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-BRMW3-47-62-110923 67839-004	N	Phenol	2.0	1.0 U#	1.0 UJ		ug/l	C

Qualified Results associated with the LCS Recovery for SW8270E

FieldSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
SY-BRMW40-62-72-110923 67839-002	FD	4-Nitrophenol	10	5.0 U#	5.0 UJ		ug/l	C
SY-BRMW40-62-72-110923 67839-002	FD	Benzoic acid	50	45 U#	45 UJ		ug/l	C
SY-BRMW40-62-72-110923 67839-002	FD	Benzyl butyl phthalate	5.0	3.0 U#	3.0 UJ		ug/l	C
SY-BRMW40-62-72-110923 67839-002	FD	Diethyl phthalate	5.0	0.37 J	0.37 J	-	ug/l	C/TR
SY-BRMW40-62-72-110923 67839-002	FD	Dimethyl phthalate	5.0	1.0 U#	1.0 UJ		ug/l	C
SY-BRMW40-62-72-110923 67839-002	FD	Hexachlorocyclopentadiene	10	4.0 U#	4.0 UJ		ug/l	C
SY-BRMW40-62-72-110923 67839-002	FD	N-Nitrosodimethylamine (NDMA)	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-BRMW40-62-72-110923 67839-002	FD	Phenol	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-BRMW4-138-148-110923 67839-003	N	4-Nitrophenol	10	5.0 U#	5.0 UJ		ug/l	C
SY-BRMW4-138-148-110923 67839-003	N	Benzoic acid	50	45 U#	45 UJ		ug/l	C
SY-BRMW4-138-148-110923 67839-003	N	Benzyl butyl phthalate	5.0	3.0 U#	3.0 UJ		ug/l	C
SY-BRMW4-138-148-110923 67839-003	N	Diethyl phthalate	5.0	5.8	5.8 J	-	ug/l	C
SY-BRMW4-138-148-110923 67839-003	N	Dimethyl phthalate	5.0	1.0 U#	1.0 UJ		ug/l	C
SY-BRMW4-138-148-110923 67839-003	N	Hexachlorocyclopentadiene	10	4.0 U#	4.0 UJ		ug/l	C
SY-BRMW4-138-148-110923 67839-003	N	N-Nitrosodimethylamine (NDMA)	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-BRMW4-138-148-110923 67839-003	N	Phenol	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-BRMW4-291-301-110923 67839-007	N	4-Chloro-3-methylphenol	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-BRMW4-291-301-110923 67839-007	N	4-Nitrophenol	10	5.0 U#	5.0 UJ		ug/l	C
SY-BRMW4-291-301-110923 67839-007	N	Benzoic acid	50	45 U#	45 X		ug/l	C

Qualified Results associated with the LCS Recovery for SW8270E

FieldSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
SY-BRMW4-291-301-110923 67839-007	N	Dimethyl phthalate	5.0	1.0 U#	1.0 UJ		ug/l	C
SY-BRMW4-291-301-110923 67839-007	N	Hexachlorocyclopentadiene	10	4.0 U#	4.0 UJ		ug/l	C
SY-BRMW4-291-301-110923 67839-007	N	Phenol	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-BRMW4-62-72-110923 67839-001	N	4-Nitrophenol	10	5.0 U#	5.0 UJ		ug/l	C
SY-BRMW4-62-72-110923 67839-001	N	Benzoic acid	50	45 U#	45 UJ		ug/l	C
SY-BRMW4-62-72-110923 67839-001	N	Benzyl butyl phthalate	5.0	3.0 U#	3.0 UJ		ug/l	C
SY-BRMW4-62-72-110923 67839-001	N	Diethyl phthalate	5.0	0.46 J	0.46 J	-	ug/l	C/TR
SY-BRMW4-62-72-110923 67839-001	N	Dimethyl phthalate	5.0	1.0 U#	1.0 UJ		ug/l	C
SY-BRMW4-62-72-110923 67839-001	N	Hexachlorocyclopentadiene	10	4.0 U#	4.0 UJ		ug/l	C
SY-BRMW4-62-72-110923 67839-001	N	N-Nitrosodimethylamine (NDMA)	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-BRMW4-62-72-110923 67839-001	N	Phenol	2.0	1.0 U#	1.0 UJ		ug/l	C

Analytes not found in project samples are reported as not detected at the limit of detection (LOD) unless blank contamination occurs and then the sample may be reported as not detected at the (LOD) or (LOQ) based on the sample concentration and the validation guidance. In instances where no LOD is provided, results are reported down to the LOQ.

Quality Control Outliers for test method SW8270E, LCS RPD

The objective of laboratory control sample/laboratory control sample duplicate (LCS/LCSD) RPD analysis is to demonstrate acceptable method precision by the laboratory at the time of analysis. LCS/LCSD analyses are also performed to generate data that determines the long-term precision of the analytical method on various matrices. Non-homogenous samples can impact the apparent method precision. Summary forms were evaluated and compared to electronic data deliverables. Laboratory control sample/laboratory control sample duplicate RPD results that were outside of the acceptance criteria are listed below.

Sample ID/ Lab Sample ID	Analyte	Result	Warning Limits	Control Limits	Units	Qualifier	Reason Code	Comment
17124LCSD17124 (BD)	Benzidine	30.5	< 20	< 20	rpd	J/None	Z	
17145LCSD17145 (BD)	1,2,4-Trichlorobenzene	25.6	< 20	< 20	rpd	J/None	Z	
17145LCSD17145 (BD)	1,2-Dichlorobenzene	24.3	< 20	< 20	rpd	J/None	Z	
17145LCSD17145 (BD)	1,3-Dichlorobenzene	31.4	< 20	< 20	rpd	J/None	Z	
17145LCSD17145 (BD)	1,4-Dichlorobenzene	29.1	< 20	< 20	rpd	J/None	Z	
17145LCSD17145 (BD)	4-Chloro-3-methylphenol	28.0	< 20	< 20	rpd	J/None	Z	
17145LCSD17145 (BD)	Benzoic acid	199	< 20	< 20	rpd	J/None	Z	
17145LCSD17145 (BD)	Benzyl butyl phthalate	21.3	< 20	< 20	rpd	J/None	Z	
17145LCSD17145 (BD)	Dimethyl phthalate	35.3	< 20	< 20	rpd	J/None	Z	
17145LCSD17145 (BD)	Hexachlorobutadiene	36.8	< 20	< 20	rpd	J/None	Z	
17145LCSD17145 (BD)	Hexachloroethane	42.4	< 20	< 20	rpd	J/None	Z	

Where two qualifiers are listed, such as 'J/UJ', the first applies to positive results, and the second to non-detect results.
Upper and Lower Warning and Control Limits are abbreviated UWL, LWL, UCL, and LCL in the Comment field.

No results associated with this QC element required qualification.

Quality Control Outliers for test method SW8270E, Test Hold Time

Hold times are ascertained based on project requirements. Holding times were determined by comparing the chain of custody records with the dates of analysis found in the electronic data deliverable and laboratory summary forms. Findings of this review, and any associated qualified results, are listed below.

Sample ID/ Lab Sample ID	Analyte	Result	Warning Limits	Control Limits	Units	Qualifier	Reason Code	Comment
SY-BRMW1-65-75-110923 (N)		16.3	< 14	< 28	days	J/UJ	H1	Prep to Test Exceeds UWL
SY-BRMW3-47-62-110923 (N)		17.3	< 14	< 28	days	J/UJ	H1	Prep to Test Exceeds UWL
SY-BRMW40-62-72-110923 (FD)		17.2	< 14	< 28	days	J/UJ	H1	Prep to Test Exceeds UWL
SY-BRMW4-138-148-110923 (N)		17.3	< 14	< 28	days	J/UJ	H1	Prep to Test Exceeds UWL
SY-BRMW4-62-72-110923 (N)		17.2	< 14	< 28	days	J/UJ	H1	Prep to Test Exceeds UWL

Where two qualifiers are listed, such as 'J/UJ', the first applies to positive results, and the second to non-detect results.
Upper and Lower Warning and Control Limits are abbreviated UWL, LWL, UCL, and LCL in the Comment field.

No results associated with this QC element required qualification.

Table of All Qualified Results

Test Method: MADEPEP		Extraction Method: METHOD						
FieldSample ID / LabSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
SY-BRMW10-65-75-110923 67839-011	FD	C19-C36 Extractable Petroleum Hydrocarbons, Aliphatic	100	97 U#	97 UJ		ug/l	C
SY-BRMW10-65-75-110923 67839-011	FD	C9-C18 Extractable Petroleum Hydrocarbons, Aliphatic	100	95 U#	95 X		ug/l	C
SY-BRMW1-150-157-110923 67839-009	N	C9-C18 Extractable Petroleum Hydrocarbons, Aliphatic	100	95 U#	95 UJ		ug/l	C
SY-BRMW1-42-52-110923 67839-008	N	C9-C18 Extractable Petroleum Hydrocarbons, Aliphatic	100	95 U#	95 UJ		ug/l	C
SY-BRMW1-65-75-110923 67839-010	N	C9-C18 Extractable Petroleum Hydrocarbons, Aliphatic	100	95 U#	95 UJ		ug/l	C
SY-BRMW3-145-155-110923 67839-005	N	C11-C22 Extractable Petroleum Hydrocarbons, Aromatic	100	57 J	100 U		ug/l	L
SY-BRMW3-145-155-110923 67839-005	N	C9-C18 Extractable Petroleum Hydrocarbons, Aliphatic	100	95 U#	95 UJ		ug/l	C
SY-BRMW3-287-297-110923 67839-006	N	C9-C18 Extractable Petroleum Hydrocarbons, Aliphatic	100	95 U#	95 UJ		ug/l	C
SY-BRMW3-47-62-110923 67839-004	N	C9-C18 Extractable Petroleum Hydrocarbons, Aliphatic	100	95 U#	95 UJ		ug/l	C
SY-BRMW40-62-72-110923 67839-002	FD	C11-C22 Extractable Petroleum Hydrocarbons, Aromatic	100	59 J	100 U		ug/l	L
SY-BRMW40-62-72-110923 67839-002	FD	C9-C18 Extractable Petroleum Hydrocarbons, Aliphatic	100	95 U#	95 UJ		ug/l	C
SY-BRMW4-138-148-110923 67839-003	N	C9-C18 Extractable Petroleum Hydrocarbons, Aliphatic	100	95 U#	95 UJ		ug/l	C
SY-BRMW4-291-301-110923 67839-007	N	C9-C18 Extractable Petroleum Hydrocarbons, Aliphatic	100	95 U#	95 UJ		ug/l	C
SY-BRMW4-62-72-110923 67839-001	N	C9-C18 Extractable Petroleum Hydrocarbons, Aliphatic	100	95 U#	95 UJ		ug/l	C

Test Method: SW6020A		Extraction Method: FLDFLT						
FieldSample ID / LabSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
SY-BRMW40-62-72-110923 67839-013	FD	Iron	0.054	0.074	0.074 J		mg/l	D3
SY-BRMW40-62-72-110923 67839-013	FD	Manganese	0.011	0.33	0.33 J		mg/l	D3
SY-BRMW4-62-72-110923 67839-012	N	Iron	0.054	0.21	0.21 J		mg/l	D3

Table of All Qualified Results

Test Method: SW6020A		Extraction Method: FLDFLT						
FieldSample ID / LabSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
SY-BRMW4-62-72-110923 67839-012	N	Manganese	0.011	0.55	0.55 J		mg/l	D3

Test Method: SW6020A		Extraction Method: TOTAL						
FieldSample ID / LabSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
SY-BRMW10-65-75-110923 67839-011	FD	Antimony	0.0010	0.00094 J	0.00094 J	+	mg/l	L
SY-BRMW10-65-75-110923 67839-011	FD	Zinc	0.010	0.0036 J	0.010 U		mg/l	L
SY-BRMW1-150-157-110923 67839-009	N	Aluminum	0.050	0.028 J	0.028 J	+	mg/l	L
SY-BRMW1-150-157-110923 67839-009	N	Antimony	0.0010	0.00053 J	0.00053 J	+	mg/l	L
SY-BRMW1-150-157-110923 67839-009	N	Zinc	0.010	0.0024 J	0.010 U		mg/l	L
SY-BRMW1-42-52-110923 67839-008	N	Antimony	0.0010	0.00077 J	0.00077 J	+	mg/l	L
SY-BRMW1-42-52-110923 67839-008	N	Zinc	0.010	0.0035 J	0.010 U		mg/l	L
SY-BRMW1-65-75-110923 67839-010	N	Aluminum	0.050	0.018 J	0.050 U		mg/l	L
SY-BRMW1-65-75-110923 67839-010	N	Antimony	0.0010	0.00084 J	0.00084 J	+	mg/l	L
SY-BRMW1-65-75-110923 67839-010	N	Zinc	0.010	0.0035 J	0.010 U		mg/l	L
SY-BRMW3-145-155-110923 67839-005	N	Antimony	0.0010	0.00064 J	0.00064 J	+	mg/l	L
SY-BRMW3-287-297-110923 67839-006	N	Aluminum	0.050	0.010 J	0.050 U		mg/l	L
SY-BRMW3-287-297-110923 67839-006	N	Antimony	0.0010	0.0014	0.0014 J	+	mg/l	L
SY-BRMW3-47-62-110923 67839-004	N	Aluminum	0.050	0.011 J	0.050 U		mg/l	L
SY-BRMW3-47-62-110923 67839-004	N	Cobalt	0.010	0.00046 J	0.010 U		mg/l	L
SY-BRMW4-291-301-110923 67839-007	N	Antimony	0.0010	0.00092 J	0.00092 J	+	mg/l	L
SY-BRMW4-291-301-110923 67839-007	N	Zinc	0.010	0.0024 J	0.010 U		mg/l	L

Table of All Qualified Results

Test Method: SW8270E		Extraction Method: SW3510C						
FieldSample ID / LabSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
SY-BRMW10-65-75-110923 67839-011	FD	4-Chloro-3-methylphenol	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-BRMW10-65-75-110923 67839-011	FD	4-Nitrophenol	10	5.0 U#	5.0 UJ		ug/l	C
SY-BRMW10-65-75-110923 67839-011	FD	Benzoic acid	50	45 U#	45 X		ug/l	C
SY-BRMW10-65-75-110923 67839-011	FD	Bis(2-ethylhexyl)phthalate	5.0	3.0 U	3.0 UJ		ug/l	D3
SY-BRMW10-65-75-110923 67839-011	FD	Dimethyl phthalate	5.0	1.0 U#	1.0 UJ		ug/l	C
SY-BRMW10-65-75-110923 67839-011	FD	Hexachlorocyclopentadiene	10	4.0 U#	4.0 UJ		ug/l	C
SY-BRMW10-65-75-110923 67839-011	FD	Phenol	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-BRMW1-150-157-110923 67839-009	N	4-Chloro-3-methylphenol	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-BRMW1-150-157-110923 67839-009	N	4-Nitrophenol	10	5.0 U#	5.0 UJ		ug/l	C
SY-BRMW1-150-157-110923 67839-009	N	Benzoic acid	50	45 U#	45 X		ug/l	C
SY-BRMW1-150-157-110923 67839-009	N	Dimethyl phthalate	5.0	1.0 U#	1.0 UJ		ug/l	C
SY-BRMW1-150-157-110923 67839-009	N	Hexachlorocyclopentadiene	10	4.0 U#	4.0 UJ		ug/l	C
SY-BRMW1-150-157-110923 67839-009	N	Phenol	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-BRMW1-42-52-110923 67839-008	N	4-Chloro-3-methylphenol	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-BRMW1-42-52-110923 67839-008	N	4-Nitrophenol	10	5.0 U#	5.0 UJ		ug/l	C
SY-BRMW1-42-52-110923 67839-008	N	Benzoic acid	50	45 U#	45 X		ug/l	C
SY-BRMW1-42-52-110923 67839-008	N	Dimethyl phthalate	5.0	1.0 U#	1.0 UJ		ug/l	C
SY-BRMW1-42-52-110923 67839-008	N	Hexachlorocyclopentadiene	10	4.0 U#	4.0 UJ		ug/l	C
SY-BRMW1-42-52-110923 67839-008	N	Phenol	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-BRMW1-65-75-110923 67839-010	N	4-Chloro-3-methylphenol	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-BRMW1-65-75-110923 67839-010	N	4-Nitrophenol	10	5.0 U#	5.0 UJ		ug/l	C

Table of All Qualified Results

Test Method: SW8270E		Extraction Method: SW3510C						
FieldSample ID / LabSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
SY-BRMW1-65-75-110923 67839-010	N	Benzoic acid	50	45 U#	45 X		ug/l	C
SY-BRMW1-65-75-110923 67839-010	N	Bis(2-ethylhexyl)phthalate	25	120	120 J		ug/l	D3
SY-BRMW1-65-75-110923 67839-010	N	Dimethyl phthalate	5.0	1.0 U#	1.0 UJ		ug/l	C
SY-BRMW1-65-75-110923 67839-010	N	Hexachlorocyclopentadiene	10	4.0 U#	4.0 UJ		ug/l	C
SY-BRMW1-65-75-110923 67839-010	N	Phenol	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-BRMW3-145-155-110923 67839-005	N	4-Chloro-3-methylphenol	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-BRMW3-145-155-110923 67839-005	N	4-Nitrophenol	10	5.0 U#	5.0 UJ		ug/l	C
SY-BRMW3-145-155-110923 67839-005	N	Benzoic acid	50	45 U#	45 X		ug/l	C
SY-BRMW3-145-155-110923 67839-005	N	Dimethyl phthalate	5.0	1.0 U#	1.0 UJ		ug/l	C
SY-BRMW3-145-155-110923 67839-005	N	Hexachlorocyclopentadiene	10	4.0 U#	4.0 UJ		ug/l	C
SY-BRMW3-145-155-110923 67839-005	N	Phenol	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-BRMW3-287-297-110923 67839-006	N	4-Chloro-3-methylphenol	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-BRMW3-287-297-110923 67839-006	N	4-Nitrophenol	10	5.0 U#	5.0 UJ		ug/l	C
SY-BRMW3-287-297-110923 67839-006	N	Benzoic acid	50	45 U#	45 X		ug/l	C
SY-BRMW3-287-297-110923 67839-006	N	Dimethyl phthalate	5.0	1.0 U#	1.0 UJ		ug/l	C
SY-BRMW3-287-297-110923 67839-006	N	Hexachlorocyclopentadiene	10	4.0 U#	4.0 UJ		ug/l	C
SY-BRMW3-287-297-110923 67839-006	N	Phenol	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-BRMW3-47-62-110923 67839-004	N	4-Nitrophenol	10	5.0 U#	5.0 UJ		ug/l	C
SY-BRMW3-47-62-110923 67839-004	N	Benzoic acid	50	45 U#	45 UJ		ug/l	C
SY-BRMW3-47-62-110923 67839-004	N	Benzyl butyl phthalate	5.0	3.0 U#	3.0 UJ		ug/l	C
SY-BRMW3-47-62-110923 67839-004	N	Diethyl phthalate	5.0	0.83 J	0.83 J	-	ug/l	C/TR
SY-BRMW3-47-62-110923 67839-004	N	Dimethyl phthalate	5.0	1.0 U#	1.0 UJ		ug/l	C

Table of All Qualified Results

Test Method: SW8270E		Extraction Method: SW3510C						
FieldSample ID / LabSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
SY-BRMW3-47-62-110923 67839-004	N	Hexachlorocyclopentadiene	10	4.0 U#	4.0 UJ		ug/l	C
SY-BRMW3-47-62-110923 67839-004	N	N-Nitrosodimethylamine (NDMA)	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-BRMW3-47-62-110923 67839-004	N	Phenol	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-BRMW40-62-72-110923 67839-002	FD	4-Nitrophenol	10	5.0 U#	5.0 UJ		ug/l	C
SY-BRMW40-62-72-110923 67839-002	FD	Benzoic acid	50	45 U#	45 UJ		ug/l	C
SY-BRMW40-62-72-110923 67839-002	FD	Benzyl butyl phthalate	5.0	3.0 U#	3.0 UJ		ug/l	C
SY-BRMW40-62-72-110923 67839-002	FD	Diethyl phthalate	5.0	0.37 J	0.37 J	-	ug/l	C/TR
SY-BRMW40-62-72-110923 67839-002	FD	Dimethyl phthalate	5.0	1.0 U#	1.0 UJ		ug/l	C
SY-BRMW40-62-72-110923 67839-002	FD	Hexachlorocyclopentadiene	10	4.0 U#	4.0 UJ		ug/l	C
SY-BRMW40-62-72-110923 67839-002	FD	N-Nitrosodimethylamine (NDMA)	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-BRMW40-62-72-110923 67839-002	FD	Phenol	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-BRMW4-138-148-110923 67839-003	N	4-Nitrophenol	10	5.0 U#	5.0 UJ		ug/l	C
SY-BRMW4-138-148-110923 67839-003	N	Benzoic acid	50	45 U#	45 UJ		ug/l	C
SY-BRMW4-138-148-110923 67839-003	N	Benzyl butyl phthalate	5.0	3.0 U#	3.0 UJ		ug/l	C
SY-BRMW4-138-148-110923 67839-003	N	Diethyl phthalate	5.0	5.8	5.8 J	-	ug/l	C
SY-BRMW4-138-148-110923 67839-003	N	Dimethyl phthalate	5.0	1.0 U#	1.0 UJ		ug/l	C
SY-BRMW4-138-148-110923 67839-003	N	Hexachlorocyclopentadiene	10	4.0 U#	4.0 UJ		ug/l	C
SY-BRMW4-138-148-110923 67839-003	N	N-Nitrosodimethylamine (NDMA)	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-BRMW4-138-148-110923 67839-003	N	Phenol	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-BRMW4-291-301-110923 67839-007	N	4-Chloro-3-methylphenol	2.0	1.0 U#	1.0 UJ		ug/l	C

Table of All Qualified Results

Test Method: SW8270E		Extraction Method: SW3510C						
FieldSample ID / LabSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
SY-BRMW4-291-301-110923 67839-007	N	4-Nitrophenol	10	5.0 U#	5.0 UJ		ug/l	C
SY-BRMW4-291-301-110923 67839-007	N	Benzoic acid	50	45 U#	45 X		ug/l	C
SY-BRMW4-291-301-110923 67839-007	N	Dimethyl phthalate	5.0	1.0 U#	1.0 UJ		ug/l	C
SY-BRMW4-291-301-110923 67839-007	N	Hexachlorocyclopentadiene	10	4.0 U#	4.0 UJ		ug/l	C
SY-BRMW4-291-301-110923 67839-007	N	Phenol	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-BRMW4-62-72-110923 67839-001	N	4-Nitrophenol	10	5.0 U#	5.0 UJ		ug/l	C
SY-BRMW4-62-72-110923 67839-001	N	Benzoic acid	50	45 U#	45 UJ		ug/l	C
SY-BRMW4-62-72-110923 67839-001	N	Benzyl butyl phthalate	5.0	3.0 U#	3.0 UJ		ug/l	C
SY-BRMW4-62-72-110923 67839-001	N	Diethyl phthalate	5.0	0.46 J	0.46 J	-	ug/l	C/TR
SY-BRMW4-62-72-110923 67839-001	N	Dimethyl phthalate	5.0	1.0 U#	1.0 UJ		ug/l	C
SY-BRMW4-62-72-110923 67839-001	N	Hexachlorocyclopentadiene	10	4.0 U#	4.0 UJ		ug/l	C
SY-BRMW4-62-72-110923 67839-001	N	N-Nitrosodimethylamine (NDMA)	2.0	1.0 U#	1.0 UJ		ug/l	C
SY-BRMW4-62-72-110923 67839-001	N	Phenol	2.0	1.0 U#	1.0 UJ		ug/l	C

Analytes not found in project samples are reported as not detected at the limit of detection (LOD) unless blank contamination occurs and then the sample may be reported as not detected at the (LOQ) based on the sample concentration.
In instances where no LOD is provided, results are reported down to the LOQ.
Trace values are not included in the qualified results table unless additional reason codes are associated.

Table of Results with Modified Qualifiers

Modified Qualifiers for test method SW6020A, Dissolved

FieldSample ID / LabSample ID	Type	Analyte	LOQ	Lab Result	ADR Result	ADR Reason	Modified Result	Reason
SY-BRMW10-65-75-110923 67839-022	FD	Aluminum	0.054	0.027 U	0.054 UJ	L	0.027 U	
SY-BRMW1-150-157-110923 67839-020	N	Aluminum	0.054	0.027 U	0.054 UJ	L	0.027 U	
SY-BRMW1-42-52-110923 67839-019	N	Aluminum	0.054	0.027 U	0.054 UJ	L	0.027 U	
SY-BRMW1-65-75-110923 67839-021	N	Aluminum	0.054	0.027 U	0.054 UJ	L	0.027 U	
SY-BRMW3-145-155-110923 67839-016	N	Aluminum	0.054	0.027 U	0.054 UJ	L	0.027 U	
SY-BRMW3-287-297-110923 67839-017	N	Aluminum	0.054	0.027 U	0.054 UJ	L	0.027 U	
SY-BRMW3-47-62-110923 67839-015	N	Aluminum	0.054	0.027 U	0.054 UJ	L	0.027 U	
SY-BRMW4-291-301-110923 67839-018	N	Aluminum	0.054	0.027 U	0.054 UJ	L	0.027 U	

Modified Qualifiers for test method SW6020A, Total

FieldSample ID / LabSample ID	Type	Analyte	LOQ	Lab Result	ADR Result	ADR Reason	Modified Result	Reason
SY-BRMW10-65-75-110923 67839-011	FD	Aluminum	0.050	0.025 U	0.050 UJ	L	0.025 U	
SY-BRMW10-65-75-110923 67839-011	FD	Cobalt	0.010	0.0019 J	0.00050 J	L	0.0019	
SY-BRMW10-65-75-110923 67839-011	FD	Zinc	0.010	0.0036 J	0.0040 J	L	0.010 U	L
SY-BRMW1-150-157-110923 67839-009	N	Cobalt	0.010	0.00050 U	0.010 UJ	L	0.00050 U	
SY-BRMW1-150-157-110923 67839-009	N	Zinc	0.010	0.0024 J	0.0040 J	L	0.010 U	L
SY-BRMW1-42-52-110923 67839-008	N	Aluminum	0.050	0.025 U	0.050 UJ	L	0.025 U	
SY-BRMW1-42-52-110923 67839-008	N	Cobalt	0.010	0.0014 J	0.00050 J	L	0.0014	
SY-BRMW1-42-52-110923 67839-008	N	Zinc	0.010	0.0035 J	0.0040 J	L	0.010 U	L
SY-BRMW1-65-75-110923 67839-010	N	Aluminum	0.050	0.018 J	0.025 J	L	0.050 U	L
SY-BRMW1-65-75-110923 67839-010	N	Cobalt	0.010	0.0020 J	0.00050 J	L	0.0020	
SY-BRMW1-65-75-110923 67839-010	N	Zinc	0.010	0.0035 J	0.0040 J	L	0.010 U	L
SY-BRMW3-145-155-110923 67839-005	N	Aluminum	0.050	0.025 U	0.050 UJ	L	0.025 U	
SY-BRMW3-145-155-110923 67839-005	N	Cobalt	0.010	0.00065 J	0.00050 J	L	0.00065	

Table of Results with Modified Qualifiers

Modified Qualifiers for test method SW6020A, Total

FieldSample ID / LabSample ID	Type	Analyte	LOQ	Lab Result	ADR Result	ADR Reason	Modified Result	Reason
SY-BRMW3-145-155-110923 67839-005	N	Zinc	0.010	0.0040 U	0.010 UJ	L	0.0040 U	
SY-BRMW3-287-297-110923 67839-006	N	Aluminum	0.050	0.010 J	0.025 J	L	0.050 U	L
SY-BRMW3-287-297-110923 67839-006	N	Cobalt	0.010	0.0012 J	0.00050 J	L	0.0012	
SY-BRMW3-287-297-110923 67839-006	N	Zinc	0.010	0.0040 U	0.010 UJ	L	0.0040 U	
SY-BRMW3-47-62-110923 67839-004	N	Aluminum	0.050	0.011 J	0.025 J	L	0.050 U	L
SY-BRMW3-47-62-110923 67839-004	N	Cobalt	0.010	0.00046 J	0.00050 J	L	0.010 U	L
SY-BRMW3-47-62-110923 67839-004	N	Zinc	0.010	0.0040 U	0.010 UJ	L	0.0040 U	
SY-BRMW4-291-301-110923 67839-007	N	Aluminum	0.050	0.025 U	0.050 UJ	L	0.025 U	
SY-BRMW4-291-301-110923 67839-007	N	Cobalt	0.010	0.0027 J	0.00050 J	L	0.0027	
SY-BRMW4-291-301-110923 67839-007	N	Zinc	0.010	0.0024 J	0.0040 J	L	0.010 U	L

Modified Qualifiers for test method SW8260D

FieldSample ID / LabSample ID	Type	Analyte	LOQ	Lab Result	ADR Result	ADR Reason	Modified Result	Reason
SY-BRMW40-62-72-110923 67839-002	FD	Tetrahydrofuran	2.0	3.4	3.4 J	D3	3.4	
SY-BRMW4-62-72-110923 67839-001	N	Tetrahydrofuran	2.0	1.5 U	1.5 UJ	D3	1.5 U	

Modified Qualifiers for test method SW8270E

FieldSample ID / LabSample ID	Type	Analyte	LOQ	Lab Result	ADR Result	ADR Reason	Modified Result	Reason
SY-BRMW1-65-75-110923 67839-010	N	Bis(2-ethylhexyl)phthalate	25	120	120 J	D3/H1	120 J	D3
SY-BRMW3-47-62-110923 67839-004	N	Bis(2-ethylhexyl)phthalate	25	190 #	190 J	H1	190	
SY-BRMW40-62-72-110923 67839-002	FD	Bis(2-ethylhexyl)phthalate	25	130 #	130 J	H1	130	
SY-BRMW4-138-148-110923 67839-003	N	Bis(2-ethylhexyl)phthalate	25	120 #	120 J	H1	120	
SY-BRMW4-62-72-110923 67839-001	N	Bis(2-ethylhexyl)phthalate	25	160 #	160 J	H1	160	

Analytes not found in project samples are reported as not detected at the limit of detection (LOD) unless blank contamination occurs and then the sample may be reported as not detected at the (LOQ) based on the sample concentration.
In instances where no LOD is provided, results are reported down to the LOQ.
Trace values are not included in the qualified results table unless additional reason codes are associated.

Reason Code Definitions

Code	Definition
C	LCS Recovery
D3	Field Duplicate RPD
H1	Test Hold Time
L	Lab Blank
M	MS Recovery
TR	Trace Level Detect
Z	LCS RPD

Flag Code and Definitions

Flag	Definition
J	Estimated Value
N	The analysis indicates the presence of an analyte for which there was presumptive evidence to make a tentative identification.
NJ	The analyte has been tentatively identified or presumptively as present and the associated numerical value was the estimated concentration in the sample.
R	The data are rejected due to deficiencies in meeting QC criteria and may not be used for decision making.
U	Undetected: The analyte was analyzed for, but not detected.
UJ	The analyte was not detected; however, the result is estimated due to discrepancies in meeting certain analyte-specific quality control criteria.
X	Result may require rejection; PDT attention required

Bias

-	The result may be biased low
+	The result may be biased high

Note - The bias field is a separate field; however, it is an integral part of the final flag (qualifier) on the sample result

Review Questions

Method: MADEPEP (Method for the Determination of Extractable Petroleum Hydrocarbons (EPH))				
Review Questions	Yes	No	NA	Comment
Were there discrepancies between the COC and the samples received?		•		No discrepancies were noted between the COC and the samples received.
Were there discrepancies between the COC and the sample labels?		•		No discrepancies were noted between the COC and the samples received.
Were samples relinquished properly on the COC?	•			
Were all samples properly preserved?	•			
Were sampling dates/times, date and time of laboratory receipt of samples, and sample conditions upon receipt at the laboratory (including preservation, pH, and temperature) documented?	•			
Were sample results reported with percent moisture correction if required?			•	Only water samples were collected.
Were analytical methods performed and analysis dates present?	•			
Were all requested target analytes reported?	•			
Were QAPP specified Project Quantitation Limit Goals achieved? (The laboratory LOQ is compared to the QAPP Project Quantitation Goal)	•			
Were holding times met?	•			
Were trip blanks analyzed at the proper frequency and in control?			•	Trip blanks were not collected for this method.
Were field blanks analyzed at the proper frequency and in control?			•	Field blanks were not collected.
Were equipment blanks analyzed at the proper frequency and in control?			•	Equipment blanks were not collected.
Was a method blank prepared and analyzed with each batch?	•			
Were target analytes in the method blank less than DL?		•		Due to detects in the method blank, several results were qualified as non-detect (U).
Was an LCS/LCSD pair prepared and analyzed with each batch?	•			
Were LCS/LCSD recoveries within project acceptance limits?		•		Due to low LCS/LCSD recoveries, several non-detect analytes were qualified as estimated (UJ). Due to C9-C18 EPH, Aliphatic recovering below 20% in both the LCS and LCSD for batch 17157, the non-detect result for SY-BRMW10-65-75-110923 was qualified as recommended for exclusion (X).
Was the LCS/LCSD RPD within project acceptance limits?		•		Although several LCS/LCSD RPD were high, the associated results were non-detect so sample qualification was not necessary.
Was a MS/MSD pair prepared with each batch?			•	A MS/MSD was not reported.
Were MS/MSD recoveries within project acceptance limits?			•	A MS/MSD was not reported.
Was the MS/MSD RPD within project acceptance limits?			•	A MS/MSD was not reported.
If ISM was used for sample collection, were laboratory triplicates analyzed and within project acceptance limits?			•	ISM was not performed.
Were surrogate recoveries within project acceptance limits?	•			
Were field replicates (duplicates, triplicates, etc.) analyzed at the proper frequency and in control?	•			
Were reported sample concentrations within calibration range?	•			

Review Questions

Method: MADEPEP (Method for the Determination of Extractable Petroleum Hydrocarbons (EPH))				
Review Questions	Yes	No	NA	Comment
Have all Laboratory Case Narrative comments/findings been addressed in the data review process?	•			
Were DoD QSM corrective actions followed if deviations were noted?	•			
Were any data recommended for exclusion in the data validation process?	•			Due to C9-C18 EPH, Aliphatic recovering below 20% in both the LCS and LCSD for batch 17157, the non-detect result for SY-BRMW10-65-75-110923 was qualified as recommended for exclusion (X). All remaining results were acceptable as reported or as qualified during data validation.

Review Questions

Method: MADEPVP (Method for the Determination of Volatile Petroleum Hydrocarbons (VPH))

Review Questions	Yes	No	NA	Comment
Were there discrepancies between the COC and the samples received?		•		No discrepancies were noted between the COC and the samples received.
Were there discrepancies between the COC and the sample labels?		•		No discrepancies were noted between the COC and the samples received.
Were samples relinquished properly on the COC?	•			
Were all samples properly preserved?	•			
Were sampling dates/times, date and time of laboratory receipt of samples, and sample conditions upon receipt at the laboratory (including preservation, pH, and temperature) documented?	•			
Were sample results reported with percent moisture correction if required?			•	Only water samples were collected.
Were analytical methods performed and analysis dates present?	•			
Were all requested target analytes reported?	•			
Were QAPP specified Project Quantitation Limit Goals achieved? (The laboratory LOQ is compared to the QAPP Project Quantitation Goal)	•			
Were holding times met?	•			
Were trip blanks analyzed at the proper frequency and in control?	•			
Were field blanks analyzed at the proper frequency and in control?			•	Field blanks were not collected.
Were equipment blanks analyzed at the proper frequency and in control?			•	Equipment blanks were not collected.
Was a method blank prepared and analyzed with each batch?	•			
Were target analytes in the method blank less than DL?		•		Although ethylbenzene was detected in the method blanks, the associated results were non-detect so sample qualification was not necessary.
Was an LCS/LCSD pair prepared and analyzed with each batch?	•			
Were LCS/LCSD recoveries within project acceptance limits?	•			
Was the LCS/LCSD RPD within project acceptance limits?		•		Although one analyte displayed high LCS/LCSD RPD, the associated results were non-detect so sample qualification was not necessary.
Was a MS/MSD pair prepared with each batch?			•	A MS/MSD was not reported.
Were MS/MSD recoveries within project acceptance limits?			•	A MS/MSD was not reported.
Was the MS/MSD RPD within project acceptance limits?			•	A MS/MSD was not reported.
If ISM was used for sample collection, were laboratory triplicates analyzed and within project acceptance limits?			•	ISM was not performed.
Were surrogate recoveries within project acceptance limits?	•			
Were field replicates (duplicates, triplicates, etc.) analyzed at the proper frequency and in control?	•			
Were reported sample concentrations within calibration range?	•			
Have all Laboratory Case Narrative comments/findings been addressed in the data review process?	•			
Were DoD QSM corrective actions followed if deviations were noted?	•			

Review Questions

Method: MADEPVP (Method for the Determination of Volatile Petroleum Hydrocarbons (VPH))				
Review Questions	Yes	No	NA	Comment
Were any data recommended for exclusion in the data validation process?		•		All data is acceptable as reported.

Review Questions

Method: SW6020A (Trace Metals by Inductively Coupled Plasma/Mass Spectrometry)				
Review Questions	Yes	No	NA	Comment
Were there discrepancies between the COC and the samples received?		•		No discrepancies were noted between the COC and the samples received.
Were there discrepancies between the COC and the sample labels?		•		No discrepancies were noted between the COC and the samples received.
Were samples relinquished properly on the COC?	•			
Were all samples properly preserved?	•			
Were sampling dates/times, date and time of laboratory receipt of samples, and sample conditions upon receipt at the laboratory (including preservation, pH, and temperature) documented?	•			
Were sample results reported with percent moisture correction if required?			•	Only water samples were collected.
Were analytical methods performed and analysis dates present?	•			
Were all requested target analytes reported?	•			
Were QAPP specified Project Quantitation Limit Goals achieved? (The laboratory LOQ is compared to the QAPP Project Quantitation Goal)	•			
Were holding times met?	•			
Were trip blanks analyzed at the proper frequency and in control?			•	Trip blanks were not collected for this method.
Were field blanks analyzed at the proper frequency and in control?			•	Field blanks were not collected.
Were equipment blanks analyzed at the proper frequency and in control?			•	Equipment blanks were not collected.
Was a method blank prepared and analyzed with each batch?	•			
Were target analytes in the method blank less than DL?		•		Due to detects in the method blank for total metals, three aluminum, one cobalt, and five zinc results were qualified as non-detect (U) and one aluminum and seven antimony results were qualified as estimated with a high bias (J+). No qualification was necessary for total potassium since all results were significantly higher than the blank. Although dissolved aluminum was detected in the method blank, the associated results were non-detect so sample qualification was not necessary. FUDSChem ADR qualified the non-detect results as estimated (UJ) and this qualifier was removed during data validation.
Was an LCS/LCSD pair prepared and analyzed with each batch?	•			
Were LCS/LCSD recoveries within project acceptance limits?	•			
Was the LCS/LCSD RPD within project acceptance limits?	•			
Was a MS/MSD pair prepared with each batch?	•			
Were MS/MSD recoveries within project acceptance limits?		•		Although dissolved magnesium, total magnesium, and total sodium were not within the acceptance criteria for the MS/MSD recovery, the native sample concentrations were greater than four times the spike concentrations so sample qualification was not necessary.
Was the MS/MSD RPD within project acceptance limits?	•			
Were Post Spike (PS) recoveries within project acceptance limits?			•	PS was not reported.

Review Questions

Method: SW6020A (Trace Metals by Inductively Coupled Plasma/Mass Spectrometry)				
Review Questions	Yes	No	NA	Comment
Was a Dilution Test/Serial Dilution performed and within project acceptance criteria?			•	Serial dilution was not reported.
If ISM was used for sample collection, were laboratory triplicates analyzed and within project acceptance limits?			•	ISM was not collected.
Were field replicates (duplicates, triplicates, etc.) analyzed at the proper frequency and in control?		•		Due to the absolute difference of dissolved iron between SY-BRMW4-62-72-110923 and SY-BRMW40-62-72-110923 exceeding 1X the LOQ, the results in these samples were qualified as estimated (J). Due to high RPD between between SY-BRMW4-62-72-110923 and SY-BRMW40-62-72-110923 for dissolved manganese, the results in these samples were qualified as estimated (J).
Were reported sample concentrations within calibration range?	•			
Have all Laboratory Case Narrative comments/findings been addressed in the data review process?	•			
Were DoD QSM corrective actions followed if deviations were noted?	•			
Were any data recommended for exclusion in the data validation process?		•		All data is acceptable as reported or as qualified during data validation.

Review Questions

Method: SW7470A (Mercury in Water (Manual Cold-Vapor Technique))				
Review Questions	Yes	No	NA	Comment
Were there discrepancies between the COC and the samples received?		•		No discrepancies were noted between the COC and the samples received.
Were there discrepancies between the COC and the sample labels?		•		No discrepancies were noted between the COC and the samples received.
Were samples relinquished properly on the COC?	•			
Were all samples properly preserved?	•			
Were sampling dates/times, date and time of laboratory receipt of samples, and sample conditions upon receipt at the laboratory (including preservation, pH, and temperature) documented?	•			
Were sample results reported with percent moisture correction if required?			•	Only water samples were collected.
Were analytical methods performed and analysis dates present?	•			
Were all requested target analytes reported?	•			
Were QAPP specified Project Quantitation Limit Goals achieved? (The laboratory LOQ is compared to the QAPP Project Quantitation Goal)	•			
Were holding times met?	•			
Were trip blanks analyzed at the proper frequency and in control?			•	Trip blanks were not collected for this method.
Were field blanks analyzed at the proper frequency and in control?			•	Field blanks were not collected.
Were equipment blanks analyzed at the proper frequency and in control?			•	Equipment blanks were not collected.
Was a method blank prepared and analyzed with each batch?	•			
Were target analytes in the method blank less than DL?	•			
Was an LCS/LCSD pair prepared and analyzed with each batch?	•			
Were LCS/LCSD recoveries within project acceptance limits?	•			
Was the LCS/LCSD RPD within project acceptance limits?	•			
Was a MS/MSD pair prepared with each batch?			•	MS/MSD was not performed on a sample from this SDG, but a project sample from another SDG was used in some batches.
Were MS/MSD recoveries within project acceptance limits?			•	MS/MSD was not performed on a sample from this SDG, but a project sample from another SDG was used in some batches.
Was the MS/MSD RPD within project acceptance limits?			•	MS/MSD was not performed on a sample from this SDG, but a project sample from another SDG was used in some batches.
If ISM was used for sample collection, were laboratory triplicates analyzed and within project acceptance limits?			•	ISM was not collected.
Were field replicates (duplicates, triplicates, etc.) analyzed at the proper frequency and in control?	•			
Were reported sample concentrations within calibration range?	•			
Have all Laboratory Case Narrative comments/findings been addressed in the data review process?	•			
Were DoD QSM corrective actions followed if deviations were noted?	•			

Review Questions

Method: SW7470A (Mercury in Water (Manual Cold-Vapor Technique))				
Review Questions	Yes	No	NA	Comment
Were any data recommended for exclusion in the data validation process?		•		All data is acceptable as reported.

Review Questions

Method: SW8082A (Polychlorinated Biphenyls (PCB))

Review Questions	Yes	No	NA	Comment
Were there discrepancies between the COC and the samples received?		•		No discrepancies were noted between the COC and the samples received.
Were there discrepancies between the COC and the sample labels?		•		No discrepancies were noted between the COC and the samples received.
Were samples relinquished properly on the COC?	•			
Were all samples properly preserved?	•			
Were sampling dates/times, date and time of laboratory receipt of samples, and sample conditions upon receipt at the laboratory (including preservation, pH, and temperature) documented?	•			
Were sample results reported with percent moisture correction if required?			•	Only water samples were collected.
Were analytical methods performed and analysis dates present?	•			
Were all requested target analytes reported?	•			
Were QAPP specified Project Quantitation Limit Goals achieved? (The laboratory LOQ is compared to the QAPP Project Quantitation Goal)	•			
Were holding times met?	•			
Were trip blanks analyzed at the proper frequency and in control?			•	Trip blanks were not collected for this method.
Were field blanks analyzed at the proper frequency and in control?			•	Field blanks were not collected.
Were equipment blanks analyzed at the proper frequency and in control?			•	Equipment blanks were not collected.
Was a method blank prepared and analyzed with each batch?	•			
Were target analytes in the method blank less than DL?	•			
Was an LCS/LCSD pair prepared and analyzed with each batch?	•			
Were LCS/LCSD recoveries within project acceptance limits?	•			
Was the LCS/LCSD RPD within project acceptance limits?	•			
Was a MS/MSD pair prepared with each batch?			•	A MS/MSD was not reported.
Were MS/MSD recoveries within project acceptance limits?			•	A MS/MSD was not reported.
Was the MS/MSD RPD within project acceptance limits?			•	A MS/MSD was not reported.
If ISM was used for sample collection, were laboratory triplicates analyzed and within project acceptance limits?			•	ISM was not performed.
Were surrogate recoveries within project acceptance limits?	•			
Were field replicates (duplicates, triplicates, etc.) analyzed at the proper frequency and in control?	•			
Were reported sample concentrations within calibration range?	•			
Have all Laboratory Case Narrative comments/findings been addressed in the data review process?	•			
Were DoD QSM corrective actions followed if deviations were noted?	•			
Were any data recommended for exclusion in the data validation process?		•		All data is acceptable as reported.

Review Questions

Method: SW8260D (Volatile Organic Compounds by GC/MS)				
Review Questions	Yes	No	NA	Comment
Were there discrepancies between the COC and the samples received?		•		No discrepancies were noted between the COC and the samples received.
Were there discrepancies between the COC and the sample labels?		•		No discrepancies were noted between the COC and the samples received.
Were samples relinquished properly on the COC?	•			
Were all samples properly preserved?	•			
Were sampling dates/times, date and time of laboratory receipt of samples, and sample conditions upon receipt at the laboratory (including preservation, pH, and temperature) documented?	•			
Were sample results reported with percent moisture correction if required?			•	Only water samples were collected.
Were analytical methods performed and analysis dates present?	•			
Were all requested target analytes reported?	•			
Were QAPP specified Project Quantitation Limit Goals achieved? (The laboratory LOQ is compared to the QAPP Project Quantitation Goal)	•			
Were holding times met?	•			
Were trip blanks analyzed at the proper frequency and in control?	•			
Were field blanks analyzed at the proper frequency and in control?			•	Field blanks were not collected.
Were equipment blanks analyzed at the proper frequency and in control?			•	Equipment blanks were not collected.
Was a method blank prepared and analyzed with each batch?	•			
Were target analytes in the method blank less than DL?		•		Although carbon disulfide was detected in BLK2303756 at a concentration of 0.33 ug/L, the associated results were non-detect so sample qualification was not necessary.
Was an LCS/LCSD pair prepared and analyzed with each batch?	•			
Were LCS/LCSD recoveries within project acceptance limits?		•		Although several analytes recovered high in the LCS/LCSD, the associated results were non-detect so sample qualification was not necessary.
Was the LCS/LCSD RPD within project acceptance limits?		•		Although one analyte displayed high LCS/LCSD RPD, the associated results were non-detect so sample qualification was not necessary.
Was a MS/MSD pair prepared with each batch?			•	A MS/MSD was not reported.
Were MS/MSD recoveries within project acceptance limits?			•	A MS/MSD was not reported.
Was the MS/MSD RPD within project acceptance limits?			•	A MS/MSD was not reported.
If ISM was used for sample collection, were laboratory triplicates analyzed and within project acceptance limits?			•	ISM was not performed.
Were surrogate recoveries within project acceptance limits?	•			

Review Questions

Method: SW8260D (Volatile Organic Compounds by GC/MS)				
Review Questions	Yes	No	NA	Comment
Were field replicates (duplicates, triplicates, etc.) analyzed at the proper frequency and in control?		•		The tetrahydrofuran results for samples SY-BRMW4-62-72-110923 and SY-BRMW40-62-72-110923 were qualified by FUDSChem ADR because one result was non-detect and one was detected. When the LOD was used in absolute difference calculation for the non-detect result, the difference was less then than 1X the LOQ; therefore, this qualifier was removed during data validation.
Were reported sample concentrations within calibration range?	•			
Have all Laboratory Case Narrative comments/findings been addressed in the data review process?	•			
Were DoD QSM corrective actions followed if deviations were noted?	•			
Were any data recommended for exclusion in the data validation process?		•		All results are acceptable as reported or as qualified during data validation.

Review Questions

Method: SW8270E (Semivolatile Organic Compounds by Gas Chromatography/Mass Spectrometry)				
Review Questions	Yes	No	NA	Comment
Were there discrepancies between the COC and the samples received?		•		No discrepancies were noted between the COC and the samples received.
Were there discrepancies between the COC and the sample labels?		•		No discrepancies were noted between the COC and the samples received.
Were samples relinquished properly on the COC?	•			
Were all samples properly preserved?	•			
Were sampling dates/times, date and time of laboratory receipt of samples, and sample conditions upon receipt at the laboratory (including preservation, pH, and temperature) documented?	•			
Were sample results reported with percent moisture correction if required?			•	Only water samples were collected.
Were analytical methods performed and analysis dates present?	•			
Were all requested target analytes reported?	•			
Were QAPP specified Project Quantitation Limit Goals achieved? (The laboratory LOQ is compared to the QAPP Project Quantitation Goal)	•			
Were holding times met?	•			Although FUDSChem ADR flagged five samples for being out of holding time (the collection to analysis dates were used for evaluation), the samples were extracted within 14 days from collection and analyzed within 40 days from extraction. No sample qualification was necessary and the qualifier was removed during data validation.
Were trip blanks analyzed at the proper frequency and in control?			•	Trip blanks were not collected for this method.
Were field blanks analyzed at the proper frequency and in control?			•	Field blanks were not collected.
Were equipment blanks analyzed at the proper frequency and in control?			•	Equipment blanks were not collected.
Was a method blank prepared and analyzed with each batch?	•			
Were target analytes in the method blank less than DL?	•			
Was an LCS/LCSD pair prepared and analyzed with each batch?	•			
Were LCS/LCSD recoveries within project acceptance limits?		•		Due to low LCS/LCSD %R, several analytes were qualified as estimated with a low bias (J-/UJ). Due to benzoic acid recovering at 11% and 0% in the LCS and LCSD, respectively, seven associated non-detect benzoic acid results were qualified as recommended for exclusion (X).
Was the LCS/LCSD RPD within project acceptance limits?		•		Although several LCS/LCSD RPDs were high, the associated results were non-detect so sample qualification was not necessary.
Was a MS/MSD pair prepared with each batch?			•	A MS/MSD was not reported.
Were MS/MSD recoveries within project acceptance limits?			•	A MS/MSD was not reported.
Was the MS/MSD RPD within project acceptance limits?			•	A MS/MSD was not reported.
If ISM was used for sample collection, were laboratory triplicates analyzed and within project acceptance limits?			•	ISM was not performed.
Were surrogate recoveries within project acceptance limits?	•			

Review Questions

Method: SW8270E (Semivolatile Organic Compounds by Gas Chromatography/Mass Spectrometry)				
Review Questions	Yes	No	NA	Comment
Were field replicates (duplicates, triplicates, etc.) analyzed at the proper frequency and in control?		•		Due to the absolute difference of bis(2-ethylhexyl)phthalate between SY-BRMW10-65-75-110923 and SY-BRMW1-65-75-110923 exceeding 1X the LOQ, the bis(2-ethylhexyl)phthalate results in these samples were qualified as estimated (J/UJ).
Were reported sample concentrations within calibration range?	•			
Have all Laboratory Case Narrative comments/findings been addressed in the data review process?	•			
Were DoD QSM corrective actions followed if deviations were noted?	•			
Were any data recommended for exclusion in the data validation process?	•			Due to benzoic acid recovering severely low in the LCS and LCSD, seven non-detect benzoic acid results were qualified as recommended for exclusion (X). The remaining results were acceptable as reported or as qualified during data validation.

Field Duplicate Report By SDG
D01ME0004-07, Dow Military Airfield, Salvage Yard
Dow SY Groundwater Nov 2023
Field Duplicates for SDG: 67839

Location	Analysis
SY-BRMW1	MADEPEP

Field ID - Primary/Field Dup	Lab ID - Primary/Field Dup	Analyte	Primary Result	FD Result	RL	RPD	RPD Criteria	RPD Check	RL Check
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	2-Methylnaphthalene	ND	ND	1.00	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	Acenaphthene	ND	ND	1.00	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	Acenaphthylene	ND	ND	1.00	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	Anthracene	ND	ND	1.00	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	Benzo(a)anthracene	ND	ND	1.00	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	Benzo(a)pyrene	ND	ND	1.00	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	Benzo(b)fluoranthene	ND	ND	1.00	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	Benzo(g,h,i)perylene	ND	ND	1.00	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	Benzo(k)fluoranthene	ND	ND	1.00	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	C11-C22 Extractable Petroleum Hydrocarbons, Aromatic	ND	ND	100	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	C11-C22 Extractable Petroleum Hydrocarbons, Aromatic (Unadjusted)	ND	ND	100	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	C19-C36 Extractable Petroleum Hydrocarbons, Aliphatic	ND	ND	100	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	C9-C18 Extractable Petroleum Hydrocarbons, Aliphatic	ND	ND	100	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	Chrysene	ND	ND	1.00	NA	30	NA	OK

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RPD = Relative Percent Difference

RL Check = If either the primary sample or field duplicate result is less than 5 times the RL then the criteria used to determine if the field duplicate is outside QC limits is +/- RL for Water and +/- 2 times RL for Soil"

Field Duplicate Report By SDG
D01ME0004-07, Dow Military Airfield, Salvage Yard
Dow SY Groundwater Nov 2023
Field Duplicates for SDG: 67839

Location	Analysis
SY-BRMW1	MADEPEP

Field ID - Primary/Field Dup	Lab ID - Primary/Field Dup	Analyte	Primary Result	FD Result	RL	RPD	RPD Criteria	RPD Check	RL Check
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	Dibenz(a,h)anthracene	ND	ND	1.00	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	Fluoranthene	ND	ND	1.00	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	Fluorene	ND	ND	1.00	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	Indeno(1,2,3-c,d)pyrene	ND	ND	1.00	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	Naphthalene	ND	ND	1.00	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	Phenanthrene	ND	ND	1.00	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	Pyrene	ND	ND	1.00	NA	30	NA	OK

Location	Analysis
SY-BRMW1	MADEPVP

Field ID - Primary/Field Dup	Lab ID - Primary/Field Dup	Analyte	Primary Result	FD Result	RL	RPD	RPD Criteria	RPD Check	RL Check
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	Benzene	ND	ND	1.00	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	C5-C8 Volatile Petroleum Hydrocarbons Aliphatic, Adjusted for Target Analytes, Surrogates and Internal Standards	ND	ND	100	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	C5-C8 Volatile Petroleum Hydrocarbons, Aliphatic	ND	ND	100	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	C9-C10 Volatile Petroleum Hydrocarbons, Aromatic	ND	ND	100	NA	30	NA	OK

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Field Duplicate Report By SDG
D01ME0004-07, Dow Military Airfield, Salvage Yard
Dow SY Groundwater Nov 2023
Field Duplicates for SDG: 67839

Location	Analysis
SY-BRMW1	MADEPVP

Field ID - Primary/Field Dup	Lab ID - Primary/Field Dup	Analyte	Primary Result	FD Result	RL	RPD	RPD Criteria	RPD Check	RL Check
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	C9-C12 Volatile Petroleum Hydrocarbons Aliphatic, Adjusted for Target Analytes, Surrogates and Internal Standards	ND	ND	100	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	C9-C12 Volatile Petroleum Hydrocarbons, Aliphatic	ND	ND	100	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	Ethylbenzene	ND	ND	2.00	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	m,p-Xylene	ND	ND	2.00	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	Methyl tert-butyl ether (MTBE)	ND	ND	2.00	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	Naphthalene	ND	ND	5.00	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	o-Xylene	ND	ND	2.00	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	Toluene	8.38	9.57	2.00	13.3	30	NA	OK

Location	Analysis
SY-BRMW1	SW6020A

Field ID - Primary/Field Dup	Lab ID - Primary/Field Dup	Analyte	Primary Result	FD Result	RL	RPD	RPD Criteria	RPD Check	RL Check
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-021 / 67839-022	Aluminum (FLDFLT)	ND	ND	0.0540	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	Aluminum (TOTAL)	ND	ND	0.0500	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-021 / 67839-022	Antimony (FLDFLT)	0.000610	0.000586	0.00110	4.01	30	NA	OK

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Field Duplicate Report By SDG
D01ME0004-07, Dow Military Airfield, Salvage Yard
Dow SY Groundwater Nov 2023
Field Duplicates for SDG: 67839

Location	Analysis
SY-BRMW1	SW6020A

Field ID - Primary/Field Dup	Lab ID - Primary/Field Dup	Analyte	Primary Result	FD Result	RL	RPD	RPD Criteria	RPD Check	RL Check
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	Antimony (TOTAL)	ND	ND	0.00100	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-021 / 67839-022	Arsenic (FLDFLT)	0.00139	0.00149	0.00270	6.68	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	Arsenic (TOTAL)	0.00191	0.00198	0.00250	3.64	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-021 / 67839-022	Barium (FLDFLT)	0.0246	0.0241	0.0110	1.89	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	Barium (TOTAL)	0.0299	0.0288	0.0100	3.69	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-021 / 67839-022	Beryllium (FLDFLT)	ND	ND	0.00110	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	Beryllium (TOTAL)	ND	ND	0.00100	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-021 / 67839-022	Cadmium (FLDFLT)	ND	ND	0.00110	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	Cadmium (TOTAL)	ND	ND	0.00100	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-021 / 67839-022	Chromium (FLDFLT)	ND	ND	0.0540	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	Chromium (TOTAL)	ND	ND	0.0500	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-021 / 67839-022	Cobalt (FLDFLT)	0.00151	0.00150	0.0110	1.06	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	Cobalt (TOTAL)	ND	ND	0.0100	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-021 / 67839-022	Copper (FLDFLT)	ND	ND	0.0110	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	Copper (TOTAL)	ND	ND	0.0100	NA	30	NA	OK

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Field Duplicate Report By SDG
D01ME0004-07, Dow Military Airfield, Salvage Yard
Dow SY Groundwater Nov 2023
Field Duplicates for SDG: 67839

Location	Analysis
SY-BRMW1	SW6020A

Field ID - Primary/Field Dup	Lab ID - Primary/Field Dup	Analyte	Primary Result	FD Result	RL	RPD	RPD Criteria	RPD Check	RL Check
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-021 / 67839-022	Iron (FLDFLT)	0.121	0.154	0.0540	24.3	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	Iron (TOTAL)	0.199	0.212	0.0500	6.58	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-021 / 67839-022	Lead (FLDFLT)	0.000258	ND	0.00540	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	Lead (TOTAL)	0.00477	0.00396	0.00500	18.7	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-021 / 67839-022	Magnesium (FLDFLT)	133	135	0.540	1.46	30	OK	NA
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	Magnesium (TOTAL)	128	130	0.500	1.11	30	OK	NA
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-021 / 67839-022	Manganese (FLDFLT)	0.957	0.948	0.0110	0.895	30	OK	NA
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	Manganese (TOTAL)	1.20	1.17	0.0100	2.56	30	OK	NA
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-021 / 67839-022	Nickel (FLDFLT)	ND	ND	0.0540	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	Nickel (TOTAL)	ND	ND	0.0500	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-021 / 67839-022	Potassium (FLDFLT)	6.06	6.16	0.540	1.58	30	OK	NA
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	Potassium (TOTAL)	6.58	6.58	0.500	0.0517	30	OK	NA
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-021 / 67839-022	Selenium (FLDFLT)	ND	ND	0.0110	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	Selenium (TOTAL)	ND	ND	0.0100	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-021 / 67839-022	Silver (FLDFLT)	ND	ND	0.00540	NA	30	NA	OK

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Field Duplicate Report By SDG
D01ME0004-07, Dow Military Airfield, Salvage Yard
Dow SY Groundwater Nov 2023
Field Duplicates for SDG: 67839

Location	Analysis
SY-BRMW1	SW6020A

Field ID - Primary/Field Dup	Lab ID - Primary/Field Dup	Analyte	Primary Result	FD Result	RL	RPD	RPD Criteria	RPD Check	RL Check
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	Silver (TOTAL)	ND	ND	0.00500	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-021 / 67839-022	Sodium (FLDFLT)	131	132	0.110	1.07	30	OK	NA
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	Sodium (TOTAL)	134	132	0.100	1.06	30	OK	NA
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-021 / 67839-022	Thallium (FLDFLT)	ND	ND	0.00110	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	Thallium (TOTAL)	ND	ND	0.00100	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-021 / 67839-022	Vanadium (FLDFLT)	ND	ND	0.0110	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	Vanadium (TOTAL)	ND	ND	0.0100	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-021 / 67839-022	Zinc (FLDFLT)	0.00362	ND	0.0110	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	Zinc (TOTAL)	ND	ND	0.0100	NA	30	NA	OK

Location	Analysis
SY-BRMW1	SW7470A

Field ID - Primary/Field Dup	Lab ID - Primary/Field Dup	Analyte	Primary Result	FD Result	RL	RPD	RPD Criteria	RPD Check	RL Check
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-021 / 67839-022	Mercury (FLDFLT)	ND	ND	0.000200	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	Mercury (TOTAL)	ND	ND	0.000200	NA	30	NA	OK

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Field Duplicate Report By SDG

D01ME0004-07, Dow Military Airfield, Salvage Yard
Dow SY Groundwater Nov 2023
Field Duplicates for SDG: 67839

Location	Analysis
SY-BRMW1	SW8082A

Field ID - Primary/Field Dup	Lab ID - Primary/Field Dup	Analyte	Primary Result	FD Result	RL	RPD	RPD Criteria	RPD Check	RL Check
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	PCB-1016 (Aroclor 1016)	ND	ND	0.200	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	PCB-1221 (Aroclor 1221)	ND	ND	0.200	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	PCB-1232 (Aroclor 1232)	ND	ND	0.200	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	PCB-1242 (Aroclor 1242)	ND	ND	0.200	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	PCB-1248 (Aroclor 1248)	ND	ND	0.200	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	PCB-1254 (Aroclor 1254)	ND	ND	0.200	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	PCB-1260 (Aroclor 1260)	ND	ND	0.200	NA	30	NA	OK

Location	Analysis
SY-BRMW1	SW8260D

Field ID - Primary/Field Dup	Lab ID - Primary/Field Dup	Analyte	Primary Result	FD Result	RL	RPD	RPD Criteria	RPD Check	RL Check
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	1,1,1,2-Tetrachloroethane	ND	ND	2.00	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	1,1,1-Trichloroethane	ND	ND	2.00	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	1,1,2,2-Tetrachloroethane	ND	ND	2.00	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	1,1,2-Trichloroethane	ND	ND	2.00	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	1,1-Dichloroethane	ND	ND	2.00	NA	30	NA	OK

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Field Duplicate Report By SDG
D01ME0004-07, Dow Military Airfield, Salvage Yard
Dow SY Groundwater Nov 2023
Field Duplicates for SDG: 67839

Location	Analysis
SY-BRMW1	SW8260D

Field ID - Primary/Field Dup	Lab ID - Primary/Field Dup	Analyte	Primary Result	FD Result	RL	RPD	RPD Criteria	RPD Check	RL Check
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	1,1-Dichloroethene	ND	ND	1.00	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	1,1-Dichloropropene	ND	ND	2.00	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	1,2,3-Trichlorobenzene	ND	ND	2.00	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	1,2,3-Trichloropropane	ND	ND	2.00	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	1,2,4-Trichlorobenzene	ND	ND	2.00	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	1,2,4-Trimethylbenzene	ND	ND	2.00	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	1,2-Dibromo-3-chloropropane	ND	ND	2.00	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	1,2-Dibromoethane (EDB)	ND	ND	2.00	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	1,2-Dichlorobenzene	ND	ND	2.00	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	1,2-Dichloroethane	ND	ND	2.00	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	1,2-Dichloropropane	ND	ND	2.00	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	1,3,5-Trimethylbenzene	ND	ND	2.00	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	1,3-Dichlorobenzene	ND	ND	2.00	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	1,3-Dichloropropane	ND	ND	2.00	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	1,4-Dichlorobenzene	ND	ND	2.00	NA	30	NA	OK

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Field Duplicate Report By SDG
D01ME0004-07, Dow Military Airfield, Salvage Yard
Dow SY Groundwater Nov 2023
Field Duplicates for SDG: 67839

Location	Analysis
SY-BRMW1	SW8260D

Field ID - Primary/Field Dup	Lab ID - Primary/Field Dup	Analyte	Primary Result	FD Result	RL	RPD	RPD Criteria	RPD Check	RL Check
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	1,4-Dioxane	ND	ND	50.0	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	2,2-Dichloropropane	ND	ND	2.00	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	2-Butanone (MEK)	4.43	6.30	10.0	35.0	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	2-Chlorotoluene	ND	ND	2.00	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	2-Hexanone	ND	ND	10.0	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	4-Chlorotoluene	ND	ND	2.00	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	4-Methyl-2-pentanone (MIBK)	ND	ND	10.0	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	Acetone	ND	4.20	50.0	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	Benzene	ND	ND	2.00	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	Bromobenzene	ND	ND	2.00	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	Bromochloromethane	ND	ND	2.00	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	Bromodichloromethane	ND	ND	0.600	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	Bromoform	ND	ND	2.00	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	Bromomethane	ND	ND	2.00	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	Carbon disulfide	ND	ND	2.00	NA	30	NA	OK

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Field Duplicate Report By SDG
D01ME0004-07, Dow Military Airfield, Salvage Yard
Dow SY Groundwater Nov 2023
Field Duplicates for SDG: 67839

Location	Analysis
SY-BRMW1	SW8260D

Field ID - Primary/Field Dup	Lab ID - Primary/Field Dup	Analyte	Primary Result	FD Result	RL	RPD	RPD Criteria	RPD Check	RL Check
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	Carbon Tetrachloride	ND	ND	2.00	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	Chlorobenzene	ND	ND	2.00	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	Chloroethane	ND	ND	2.00	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	Chloroform	ND	ND	2.00	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	Chloromethane	ND	ND	2.00	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	cis-1,2-Dichloroethene	ND	ND	2.00	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	cis-1,3-Dichloropropene	ND	ND	2.00	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	Cumene	ND	ND	2.00	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	Dibromochloromethane	ND	ND	2.00	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	Dibromomethane	ND	ND	2.00	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	Dichlorodifluoromethane	ND	ND	2.00	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	Diethyl ether (Ethyl ether)	ND	ND	2.00	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	Ethylbenzene	ND	ND	2.00	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	Hexachlorobutadiene	ND	ND	0.500	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	m,p-Xylene	ND	ND	2.00	NA	30	NA	OK

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Field Duplicate Report By SDG
D01ME0004-07, Dow Military Airfield, Salvage Yard
Dow SY Groundwater Nov 2023
Field Duplicates for SDG: 67839

Location	Analysis
SY-BRMW1	SW8260D

Field ID - Primary/Field Dup	Lab ID - Primary/Field Dup	Analyte	Primary Result	FD Result	RL	RPD	RPD Criteria	RPD Check	RL Check
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	Methyl tert-butyl ether (MTBE)	ND	ND	2.00	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	Methylene chloride	ND	ND	2.00	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	n-Butylbenzene	ND	ND	2.00	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	n-Propylbenzene	ND	ND	2.00	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	Naphthalene	ND	ND	2.00	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	o-Xylene	ND	ND	2.00	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	p-Cymene (p-Isopropyltoluene)	ND	ND	2.00	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	sec-Butylbenzene	ND	ND	2.00	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	Styrene	ND	ND	2.00	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	tert-Amyl methyl ether	ND	ND	2.00	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	tert-Butyl alcohol	ND	ND	30.0	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	tert-Butyl ethyl ether	ND	ND	2.00	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	tert-Butylbenzene	ND	ND	2.00	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	Tetrachloroethene (PCE)	ND	ND	2.00	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	Tetrahydrofuran	4.07	3.71	2.00	9.04	30	NA	OK

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Field Duplicate Report By SDG
D01ME0004-07, Dow Military Airfield, Salvage Yard
Dow SY Groundwater Nov 2023
Field Duplicates for SDG: 67839

Location	Analysis
SY-BRMW1	SW8260D

Field ID - Primary/Field Dup	Lab ID - Primary/Field Dup	Analyte	Primary Result	FD Result	RL	RPD	RPD Criteria	RPD Check	RL Check
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	Toluene	7.94	9.43	2.00	17.1	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	trans-1,2-Dichloroethene	ND	ND	2.00	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	trans-1,3-Dichloropropene	ND	ND	2.00	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	Trichloroethene (TCE)	ND	ND	2.00	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	Trichlorofluoromethane	ND	ND	2.00	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	Vinyl chloride	ND	ND	2.00	NA	30	NA	OK

Location	Analysis
SY-BRMW1	SW8270E

Field ID - Primary/Field Dup	Lab ID - Primary/Field Dup	Analyte	Primary Result	FD Result	RL	RPD	RPD Criteria	RPD Check	RL Check
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	1,2,4-Trichlorobenzene	ND	ND	5.00	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	1,2-Dichlorobenzene	ND	ND	2.00	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	1,3-Dichlorobenzene	ND	ND	2.00	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	1,4-Dichlorobenzene	ND	ND	2.00	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	2,2'-Oxybis(1-chloropropane)	ND	ND	2.00	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	2,4,5-Trichlorophenol	ND	ND	2.00	NA	30	NA	OK

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Field Duplicate Report By SDG
D01ME0004-07, Dow Military Airfield, Salvage Yard
Dow SY Groundwater Nov 2023
Field Duplicates for SDG: 67839

Location	Analysis
SY-BRMW1	SW8270E

Field ID - Primary/Field Dup	Lab ID - Primary/Field Dup	Analyte	Primary Result	FD Result	RL	RPD	RPD Criteria	RPD Check	RL Check
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	2,4,6-Trichlorophenol	ND	ND	2.00	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	2,4-Dichlorophenol	ND	ND	5.00	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	2,4-Dimethylphenol	ND	ND	5.00	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	2,4-Dinitrophenol	ND	ND	50.0	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	2,4-Dinitrotoluene	ND	ND	5.00	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	2,6-Dinitrotoluene	ND	ND	5.00	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	2-Chloronaphthalene	ND	ND	5.00	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	2-Chlorophenol	ND	ND	5.00	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	2-Methylphenol (o-Cresol)	ND	ND	5.00	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	2-Nitroaniline	ND	ND	2.00	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	2-Nitrophenol	ND	ND	2.00	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	3,3'-Dichlorobenzidine	ND	ND	30.0	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	3-Nitroaniline	ND	ND	2.00	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	4,6-Dinitro-2-methylphenol	ND	ND	20.0	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	4-Bromophenyl phenyl ether	ND	ND	2.00	NA	30	NA	OK

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Field Duplicate Report By SDG
D01ME0004-07, Dow Military Airfield, Salvage Yard
Dow SY Groundwater Nov 2023
Field Duplicates for SDG: 67839

Location	Analysis
SY-BRMW1	SW8270E

Field ID - Primary/Field Dup	Lab ID - Primary/Field Dup	Analyte	Primary Result	FD Result	RL	RPD	RPD Criteria	RPD Check	RL Check
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	4-Chloro-3-methylphenol	ND	ND	2.00	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	4-Chloroaniline	ND	ND	2.00	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	4-Chlorophenyl phenyl ether	ND	ND	5.00	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	4-Methylphenol (p-Cresol)	ND	ND	2.00	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	4-Nitroaniline	ND	ND	5.00	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	4-Nitrophenol	ND	ND	10.0	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	Aniline (Phenylamine, Aminobenzene)	ND	ND	2.00	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	Azobenzene	ND	ND	2.00	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	Benzidine	ND	ND	30.0	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	Benzoic acid	ND	ND	50.0	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	Benzyl alcohol	ND	ND	2.00	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	Benzyl butyl phthalate	ND	ND	5.00	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	Bis(2-chloroethoxy)methane	ND	ND	5.00	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	Bis(2-chloroethyl) ether (2-Chloroethyl ether)	ND	ND	2.00	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	Bis(2-ethylhexyl)phthalate	119	ND	25.0	NA	30	NA	119

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Field Duplicate Report By SDG
D01ME0004-07, Dow Military Airfield, Salvage Yard
Dow SY Groundwater Nov 2023
Field Duplicates for SDG: 67839

Location	Analysis
SY-BRMW1	SW8270E

Field ID - Primary/Field Dup	Lab ID - Primary/Field Dup	Analyte	Primary Result	FD Result	RL	RPD	RPD Criteria	RPD Check	RL Check
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	Carbazole	ND	ND	2.00	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	di-n-Butyl phthalate	ND	ND	5.00	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	di-n-Octyl phthalate	ND	ND	5.00	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	Dibenzofuran	ND	ND	0.500	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	Diethyl phthalate	0.541	3.43	5.00	146	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	Dimethyl phthalate	ND	ND	5.00	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	Hexachlorobenzene	ND	ND	2.00	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	Hexachlorobutadiene	ND	ND	2.00	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	Hexachlorocyclopentadiene	ND	ND	10.0	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	Hexachloroethane	ND	ND	2.00	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	Isophorone	ND	ND	5.00	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	N-Nitrosodi-n-propylamine	ND	ND	2.00	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	N-Nitrosodimethylamine (NDMA)	ND	ND	2.00	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	N-Nitrosodiphenylamine	ND	ND	2.00	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	Nitrobenzene	ND	ND	2.00	NA	30	NA	OK

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Field Duplicate Report By SDG
D01ME0004-07, Dow Military Airfield, Salvage Yard
Dow SY Groundwater Nov 2023
Field Duplicates for SDG: 67839

Location	Analysis
SY-BRMW1	SW8270E

Field ID - Primary/Field Dup	Lab ID - Primary/Field Dup	Analyte	Primary Result	FD Result	RL	RPD	RPD Criteria	RPD Check	RL Check
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	Pentachlorophenol	ND	ND	10.0	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	Phenol	ND	ND	2.00	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	67839-010 / 67839-011	Pyridine	ND	ND	2.00	NA	30	NA	OK

Location	Analysis
SY-BRMW4	MADEPEP

Field ID - Primary/Field Dup	Lab ID - Primary/Field Dup	Analyte	Primary Result	FD Result	RL	RPD	RPD Criteria	RPD Check	RL Check
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	2-Methylnaphthalene	ND	ND	1.00	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	Acenaphthene	ND	ND	1.00	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	Acenaphthylene	ND	ND	1.00	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	Anthracene	ND	ND	1.00	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	Benzo(a)anthracene	ND	ND	1.00	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	Benzo(a)pyrene	ND	ND	1.00	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	Benzo(b)fluoranthene	ND	ND	1.00	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	Benzo(g,h,i)perylene	ND	ND	1.00	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	Benzo(k)fluoranthene	ND	ND	1.00	NA	30	NA	OK

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Field Duplicate Report By SDG
D01ME0004-07, Dow Military Airfield, Salvage Yard
Dow SY Groundwater Nov 2023
Field Duplicates for SDG: 67839

Location	Analysis
SY-BRMW4	MADEPEP

Field ID - Primary/Field Dup	Lab ID - Primary/Field Dup	Analyte	Primary Result	FD Result	RL	RPD	RPD Criteria	RPD Check	RL Check
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	C11-C22 Extractable Petroleum Hydrocarbons, Aromatic	ND	ND	100	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	C11-C22 Extractable Petroleum Hydrocarbons, Aromatic (Unadjusted)	ND	ND	100	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	C19-C36 Extractable Petroleum Hydrocarbons, Aliphatic	ND	ND	100	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	C9-C18 Extractable Petroleum Hydrocarbons, Aliphatic	ND	ND	100	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	Chrysene	ND	ND	1.00	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	Dibenz(a,h)anthracene	ND	ND	1.00	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	Fluoranthene	ND	ND	1.00	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	Fluorene	ND	ND	1.00	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	Indeno(1,2,3-c,d)pyrene	ND	ND	1.00	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	Naphthalene	ND	ND	1.00	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	Phenanthrene	ND	ND	1.00	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	Pyrene	ND	ND	1.00	NA	30	NA	OK

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Field Duplicate Report By SDG
D01ME0004-07, Dow Military Airfield, Salvage Yard
Dow SY Groundwater Nov 2023
Field Duplicates for SDG: 67839

Location	Analysis
SY-BRMW4	MADEPVP

Field ID - Primary/Field Dup	Lab ID - Primary/Field Dup	Analyte	Primary Result	FD Result	RL	RPD	RPD Criteria	RPD Check	RL Check
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	Benzene	ND	ND	1.00	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	C5-C8 Volatile Petroleum Hydrocarbons Aliphatic, Adjusted for Target Analytes, Surrogates and Internal Standards	ND	ND	100	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	C5-C8 Volatile Petroleum Hydrocarbons, Aliphatic	ND	ND	100	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	C9-C10 Volatile Petroleum Hydrocarbons, Aromatic	ND	ND	100	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	C9-C12 Volatile Petroleum Hydrocarbons Aliphatic, Adjusted for Target Analytes, Surrogates and Internal Standards	ND	ND	100	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	C9-C12 Volatile Petroleum Hydrocarbons, Aliphatic	ND	ND	100	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	Ethylbenzene	ND	ND	2.00	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	m,p-Xylene	ND	ND	2.00	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	Methyl tert-butyl ether (MTBE)	ND	ND	2.00	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	Naphthalene	ND	ND	5.00	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	o-Xylene	ND	ND	2.00	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	Toluene	1.67	1.99	2.00	17.6	30	NA	OK

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Field Duplicate Report By SDG
D01ME0004-07, Dow Military Airfield, Salvage Yard
Dow SY Groundwater Nov 2023
Field Duplicates for SDG: 67839

Location	Analysis
SY-BRMW4	SW6020A

Field ID - Primary/Field Dup	Lab ID - Primary/Field Dup	Analyte	Primary Result	FD Result	RL	RPD	RPD Criteria	RPD Check	RL Check
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-012 / 67839-013	Aluminum (FLDFLT)	0.0111	ND	0.0540	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	Aluminum (TOTAL)	ND	ND	0.0500	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-012 / 67839-013	Antimony (FLDFLT)	0.000741	0.000497	0.00110	39.4	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	Antimony (TOTAL)	0.000495	0.000478	0.00100	3.49	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-012 / 67839-013	Arsenic (FLDFLT)	0.00372	0.00222	0.00270	50.7	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	Arsenic (TOTAL)	0.00285	0.00280	0.00250	1.80	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-012 / 67839-013	Barium (FLDFLT)	0.0400	0.0334	0.0110	18.0	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	Barium (TOTAL)	0.0340	0.0344	0.0100	0.968	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-012 / 67839-013	Beryllium (FLDFLT)	ND	ND	0.00110	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	Beryllium (TOTAL)	ND	ND	0.00100	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-012 / 67839-013	Cadmium (FLDFLT)	ND	ND	0.00110	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	Cadmium (TOTAL)	ND	ND	0.00100	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-012 / 67839-013	Chromium (FLDFLT)	ND	ND	0.0540	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	Chromium (TOTAL)	ND	ND	0.0500	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-012 / 67839-013	Cobalt (FLDFLT)	0.00172	0.00108	0.0110	45.9	30	NA	OK

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Field Duplicate Report By SDG
D01ME0004-07, Dow Military Airfield, Salvage Yard
Dow SY Groundwater Nov 2023
Field Duplicates for SDG: 67839

Location	Analysis
SY-BRMW4	SW6020A

Field ID - Primary/Field Dup	Lab ID - Primary/Field Dup	Analyte	Primary Result	FD Result	RL	RPD	RPD Criteria	RPD Check	RL Check
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	Cobalt (TOTAL)	0.00123	0.00128	0.0100	4.47	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-012 / 67839-013	Copper (FLDFLT)	ND	ND	0.0110	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	Copper (TOTAL)	ND	ND	0.0100	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-012 / 67839-013	Iron (FLDFLT)	0.210	0.0745	0.0540	95.2	30	NA	0.14
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	Iron (TOTAL)	0.114	0.121	0.0500	6.57	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-012 / 67839-013	Lead (FLDFLT)	0.000170	0.00191	0.00540	167	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	Lead (TOTAL)	0.00146	0.00142	0.00500	2.91	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-012 / 67839-013	Magnesium (FLDFLT)	54.7	55.4	0.110	1.35	30	OK	NA
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	Magnesium (TOTAL)	59.5	57.5	0.100	3.34	30	OK	NA
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-012 / 67839-013	Manganese (FLDFLT)	0.547	0.325	0.0110	50.8	30	Out	NA
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	Manganese (TOTAL)	0.383	0.392	0.0100	2.25	30	OK	NA
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-012 / 67839-013	Nickel (FLDFLT)	ND	ND	0.0540	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	Nickel (TOTAL)	ND	ND	0.0500	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-012 / 67839-013	Potassium (FLDFLT)	4.95	4.40	0.540	11.7	30	OK	NA
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	Potassium (TOTAL)	4.84	4.73	0.500	2.28	30	OK	NA

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Field Duplicate Report By SDG
D01ME0004-07, Dow Military Airfield, Salvage Yard
Dow SY Groundwater Nov 2023
Field Duplicates for SDG: 67839

Location	Analysis
SY-BRMW4	SW6020A

Field ID - Primary/Field Dup	Lab ID - Primary/Field Dup	Analyte	Primary Result	FD Result	RL	RPD	RPD Criteria	RPD Check	RL Check
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-012 / 67839-013	Selenium (FLDFLT)	ND	ND	0.0110	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	Selenium (TOTAL)	ND	ND	0.0100	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-012 / 67839-013	Silver (FLDFLT)	ND	ND	0.00540	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	Silver (TOTAL)	ND	ND	0.00500	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-012 / 67839-013	Sodium (FLDFLT)	46.3	48.0	0.110	3.57	30	OK	NA
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	Sodium (TOTAL)	49.7	48.7	0.100	1.89	30	OK	NA
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-012 / 67839-013	Thallium (FLDFLT)	ND	ND	0.00110	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	Thallium (TOTAL)	ND	ND	0.00100	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-012 / 67839-013	Vanadium (FLDFLT)	ND	ND	0.0110	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	Vanadium (TOTAL)	ND	ND	0.0100	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-012 / 67839-013	Zinc (FLDFLT)	0.00255	ND	0.0110	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	Zinc (TOTAL)	ND	ND	0.0100	NA	30	NA	OK

FD = Field Duplicate
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RL Check = If either the primary sample or field duplicate result is less than 5 times the RL then the criteria used to determine if the field duplicate is outside QC limits is +/- RL for Water and +/- 2 times RL for Soil"

Field Duplicate Report By SDG
D01ME0004-07, Dow Military Airfield, Salvage Yard
Dow SY Groundwater Nov 2023
Field Duplicates for SDG: 67839

Location	Analysis
SY-BRMW4	SW7470A

Field ID - Primary/Field Dup	Lab ID - Primary/Field Dup	Analyte	Primary Result	FD Result	RL	RPD	RPD Criteria	RPD Check	RL Check
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-012 / 67839-013	Mercury (FLDFLT)	ND	ND	0.000200	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	Mercury (TOTAL)	ND	ND	0.000200	NA	30	NA	OK

Location	Analysis
SY-BRMW4	SW8082A

Field ID - Primary/Field Dup	Lab ID - Primary/Field Dup	Analyte	Primary Result	FD Result	RL	RPD	RPD Criteria	RPD Check	RL Check
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	PCB-1016 (Aroclor 1016)	ND	ND	0.200	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	PCB-1221 (Aroclor 1221)	ND	ND	0.200	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	PCB-1232 (Aroclor 1232)	ND	ND	0.200	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	PCB-1242 (Aroclor 1242)	ND	ND	0.200	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	PCB-1248 (Aroclor 1248)	ND	ND	0.200	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	PCB-1254 (Aroclor 1254)	ND	ND	0.200	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	PCB-1260 (Aroclor 1260)	ND	ND	0.200	NA	30	NA	OK

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Field Duplicate Report By SDG
D01ME0004-07, Dow Military Airfield, Salvage Yard
Dow SY Groundwater Nov 2023
Field Duplicates for SDG: 67839

Location	Analysis
SY-BRMW4	SW8260D

Field ID - Primary/Field Dup	Lab ID - Primary/Field Dup	Analyte	Primary Result	FD Result	RL	RPD	RPD Criteria	RPD Check	RL Check
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	1,1,1,2-Tetrachloroethane	ND	ND	2.00	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	1,1,1-Trichloroethane	ND	ND	2.00	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	1,1,2,2-Tetrachloroethane	ND	ND	2.00	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	1,1,2-Trichloroethane	ND	ND	2.00	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	1,1-Dichloroethane	ND	ND	2.00	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	1,1-Dichloroethene	ND	ND	1.00	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	1,1-Dichloropropene	ND	ND	2.00	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	1,2,3-Trichlorobenzene	ND	ND	2.00	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	1,2,3-Trichloropropane	ND	ND	2.00	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	1,2,4-Trichlorobenzene	ND	ND	2.00	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	1,2,4-Trimethylbenzene	ND	ND	2.00	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	1,2-Dibromo-3-chloropropane	ND	ND	2.00	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	1,2-Dibromoethane (EDB)	ND	ND	2.00	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	1,2-Dichlorobenzene	ND	ND	2.00	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	1,2-Dichloroethane	ND	ND	2.00	NA	30	NA	OK

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Field Duplicate Report By SDG
D01ME0004-07, Dow Military Airfield, Salvage Yard
Dow SY Groundwater Nov 2023
Field Duplicates for SDG: 67839

Location	Analysis
SY-BRMW4	SW8260D

Field ID - Primary/Field Dup	Lab ID - Primary/Field Dup	Analyte	Primary Result	FD Result	RL	RPD	RPD Criteria	RPD Check	RL Check
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	1,2-Dichloropropane	ND	ND	2.00	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	1,3,5-Trimethylbenzene	ND	ND	2.00	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	1,3-Dichlorobenzene	ND	ND	2.00	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	1,3-Dichloropropane	ND	ND	2.00	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	1,4-Dichlorobenzene	ND	ND	2.00	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	1,4-Dioxane	ND	ND	50.0	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	2,2-Dichloropropane	ND	ND	2.00	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	2-Butanone (MEK)	12.7	14.2	10.0	11.2	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	2-Chlorotoluene	ND	ND	2.00	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	2-Hexanone	ND	ND	10.0	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	4-Chlorotoluene	ND	ND	2.00	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	4-Methyl-2-pentanone (MIBK)	ND	ND	10.0	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	Acetone	2.71	3.47	50.0	24.6	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	Benzene	ND	ND	2.00	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	Bromobenzene	ND	ND	2.00	NA	30	NA	OK

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Field Duplicate Report By SDG
D01ME0004-07, Dow Military Airfield, Salvage Yard
Dow SY Groundwater Nov 2023
Field Duplicates for SDG: 67839

Location	Analysis
SY-BRMW4	SW8260D

Field ID - Primary/Field Dup	Lab ID - Primary/Field Dup	Analyte	Primary Result	FD Result	RL	RPD	RPD Criteria	RPD Check	RL Check
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	Bromochloromethane	ND	ND	2.00	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	Bromodichloromethane	ND	ND	0.600	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	Bromoform	ND	ND	2.00	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	Bromomethane	ND	ND	2.00	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	Carbon disulfide	ND	ND	2.00	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	Carbon Tetrachloride	ND	ND	2.00	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	Chlorobenzene	ND	ND	2.00	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	Chloroethane	ND	ND	2.00	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	Chloroform	ND	ND	2.00	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	Chloromethane	ND	ND	2.00	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	cis-1,2-Dichloroethene	ND	ND	2.00	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	cis-1,3-Dichloropropene	ND	ND	2.00	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	Cumene	ND	ND	2.00	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	Dibromochloromethane	ND	ND	2.00	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	Dibromomethane	ND	ND	2.00	NA	30	NA	OK

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Field Duplicate Report By SDG
D01ME0004-07, Dow Military Airfield, Salvage Yard
Dow SY Groundwater Nov 2023
Field Duplicates for SDG: 67839

Location	Analysis
SY-BRMW4	SW8260D

Field ID - Primary/Field Dup	Lab ID - Primary/Field Dup	Analyte	Primary Result	FD Result	RL	RPD	RPD Criteria	RPD Check	RL Check
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	Dichlorodifluoromethane	ND	ND	2.00	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	Diethyl ether (Ethyl ether)	ND	ND	2.00	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	Ethylbenzene	ND	ND	2.00	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	Hexachlorobutadiene	ND	ND	0.500	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	m,p-Xylene	ND	ND	2.00	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	Methyl tert-butyl ether (MTBE)	ND	ND	2.00	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	Methylene chloride	ND	ND	2.00	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	n-Butylbenzene	ND	ND	2.00	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	n-Propylbenzene	ND	ND	2.00	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	Naphthalene	ND	ND	2.00	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	o-Xylene	ND	ND	2.00	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	p-Cymene (p-Isopropyltoluene)	ND	ND	2.00	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	sec-Butylbenzene	ND	ND	2.00	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	Styrene	ND	ND	2.00	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	tert-Amyl methyl ether	ND	ND	2.00	NA	30	NA	OK

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Field Duplicate Report By SDG
D01ME0004-07, Dow Military Airfield, Salvage Yard
Dow SY Groundwater Nov 2023
Field Duplicates for SDG: 67839

Location	Analysis
SY-BRMW4	SW8260D

Field ID - Primary/Field Dup	Lab ID - Primary/Field Dup	Analyte	Primary Result	FD Result	RL	RPD	RPD Criteria	RPD Check	RL Check
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	tert-Butyl alcohol	ND	ND	30.0	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	tert-Butyl ethyl ether	ND	ND	2.00	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	tert-Butylbenzene	ND	ND	2.00	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	Tetrachloroethene (PCE)	ND	ND	2.00	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	Tetrahydrofuran	ND	3.35	2.00	NA	30	NA	3.4
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	Toluene	1.52	1.57	2.00	3.21	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	trans-1,2-Dichloroethene	ND	ND	2.00	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	trans-1,3-Dichloropropene	ND	ND	2.00	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	Trichloroethene (TCE)	ND	ND	2.00	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	Trichlorofluoromethane	ND	ND	2.00	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	Vinyl chloride	ND	ND	2.00	NA	30	NA	OK

Location	Analysis
SY-BRMW4	SW8270E

Field ID - Primary/Field Dup	Lab ID - Primary/Field Dup	Analyte	Primary Result	FD Result	RL	RPD	RPD Criteria	RPD Check	RL Check
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	1,2,4-Trichlorobenzene	ND	ND	5.00	NA	30	NA	OK

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Field Duplicate Report By SDG
D01ME0004-07, Dow Military Airfield, Salvage Yard
Dow SY Groundwater Nov 2023
Field Duplicates for SDG: 67839

Location	Analysis
SY-BRMW4	SW8270E

Field ID - Primary/Field Dup	Lab ID - Primary/Field Dup	Analyte	Primary Result	FD Result	RL	RPD	RPD Criteria	RPD Check	RL Check
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	1,2-Dichlorobenzene	ND	ND	2.00	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	1,3-Dichlorobenzene	ND	ND	2.00	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	1,4-Dichlorobenzene	ND	ND	2.00	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	2,2'-Oxybis(1-chloropropane)	ND	ND	2.00	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	2,4,5-Trichlorophenol	ND	ND	2.00	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	2,4,6-Trichlorophenol	ND	ND	2.00	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	2,4-Dichlorophenol	ND	ND	5.00	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	2,4-Dimethylphenol	ND	ND	5.00	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	2,4-Dinitrophenol	ND	ND	50.0	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	2,4-Dinitrotoluene	ND	ND	5.00	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	2,6-Dinitrotoluene	ND	ND	5.00	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	2-Chloronaphthalene	ND	ND	5.00	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	2-Chlorophenol	ND	ND	5.00	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	2-Methylphenol (o-Cresol)	ND	ND	5.00	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	2-Nitroaniline	ND	ND	2.00	NA	30	NA	OK

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Field Duplicate Report By SDG
D01ME0004-07, Dow Military Airfield, Salvage Yard
Dow SY Groundwater Nov 2023
Field Duplicates for SDG: 67839

Location	Analysis
SY-BRMW4	SW8270E

Field ID - Primary/Field Dup	Lab ID - Primary/Field Dup	Analyte	Primary Result	FD Result	RL	RPD	RPD Criteria	RPD Check	RL Check
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	2-Nitrophenol	ND	ND	2.00	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	3,3'-Dichlorobenzidine	ND	ND	30.0	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	3-Nitroaniline	ND	ND	2.00	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	4,6-Dinitro-2-methylphenol	ND	ND	20.0	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	4-Bromophenyl phenyl ether	ND	ND	2.00	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	4-Chloro-3-methylphenol	ND	ND	2.00	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	4-Chloroaniline	ND	ND	2.00	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	4-Chlorophenyl phenyl ether	ND	ND	5.00	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	4-Methylphenol (p-Cresol)	ND	ND	2.00	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	4-Nitroaniline	ND	ND	5.00	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	4-Nitrophenol	ND	ND	10.0	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	Aniline (Phenylamine, Aminobenzene)	ND	ND	2.00	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	Azobenzene	ND	ND	2.00	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	Benzidine	ND	ND	30.0	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	Benzoic acid	ND	ND	50.0	NA	30	NA	OK

FD = Field Duplicate
RL = Reporting Limit
RPD = Relative Percent Difference

RL Check = If either the primary sample or field duplicate result is less than 5 times the RL then the criteria used to determine if the field duplicate is outside QC limits is +/- RL for Water and +/- 2 times RL for Soil"

Field Duplicate Report By SDG
D01ME0004-07, Dow Military Airfield, Salvage Yard
Dow SY Groundwater Nov 2023
Field Duplicates for SDG: 67839

Location	Analysis
SY-BRMW4	SW8270E

Field ID - Primary/Field Dup	Lab ID - Primary/Field Dup	Analyte	Primary Result	FD Result	RL	RPD	RPD Criteria	RPD Check	RL Check
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	Benzyl alcohol	ND	ND	2.00	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	Benzyl butyl phthalate	ND	ND	5.00	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	Bis(2-chloroethoxy)methane	ND	ND	5.00	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	Bis(2-chloroethyl) ether (2-Chloroethyl ether)	ND	ND	2.00	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	Bis(2-ethylhexyl)phthalate	158	133	25.0	17.3	30	OK	NA
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	Carbazole	ND	ND	2.00	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	di-n-Butyl phthalate	ND	ND	5.00	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	di-n-Octyl phthalate	ND	ND	5.00	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	Dibenzofuran	ND	ND	0.500	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	Diethyl phthalate	0.457	0.373	5.00	20.4	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	Dimethyl phthalate	ND	ND	5.00	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	Hexachlorobenzene	ND	ND	2.00	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	Hexachlorobutadiene	ND	ND	2.00	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	Hexachlorocyclopentadiene	ND	ND	10.0	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	Hexachloroethane	ND	ND	2.00	NA	30	NA	OK

FD = Field Duplicate
RL = Reporting Limit
RPD = Relative Percent Difference

RL Check = If either the primary sample or field duplicate result is less than 5 times the RL then the criteria used to determine if the field duplicate is outside QC limits is +/- RL for Water and +/- 2 times RL for Soil"

Field Duplicate Report By SDG
D01ME0004-07, Dow Military Airfield, Salvage Yard
Dow SY Groundwater Nov 2023
Field Duplicates for SDG: 67839

Location	Analysis
SY-BRMW4	SW8270E

Field ID - Primary/Field Dup	Lab ID - Primary/Field Dup	Analyte	Primary Result	FD Result	RL	RPD	RPD Criteria	RPD Check	RL Check
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	Isophorone	ND	ND	5.00	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	N-Nitrosodi-n-propylamine	ND	ND	2.00	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	N-Nitrosodimethylamine (NDMA)	ND	ND	2.00	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	N-Nitrosodiphenylamine	ND	ND	2.00	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	Nitrobenzene	ND	ND	2.00	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	Pentachlorophenol	ND	ND	10.0	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	Phenol	ND	ND	2.00	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	67839-001 / 67839-002	Pyridine	ND	ND	2.00	NA	30	NA	OK

FD = Field Duplicate
RL = Reporting Limit
RPD = Relative Percent Difference

RL Check = If either the primary sample or field duplicate result is less than 5 times the RL then the criteria used to determine if the field duplicate is outside QC limits is +/- RL for Water and +/- 2 times RL for Soil"

Data Validation Report for SQ6112

Facility:	D01ME0004-07, Dow Military Airfield, Salvage Yard
Event:	Dow SY Groundwater Nov 2023
SDG:	SQ6112
Guidance Document:	Final UFP QAPP Revision No. 1 Remedial Investigation Former Salvage Yard Former Dow Military Airfield 233 Odlin Road, Bangor, Maine December 2022
Prime Contractor:	Credere Associates, LLC, Westbrook, ME
Project Manager:	Peter Thompson
Contract Laboratory(ies):	Katahdin Analytical Services, Scarborough, ME
Data Review Contractor:	EnSafe, Inc.
Data Review Level:	S2AVEM
Primary Data Reviewer:	Kevin Kha, Environmental Chemist
Second Reviewer:	Christina Ashdown, Senior Scientist
Date Submitted:	January 25, 2024

Field Sample ID	Lab Sample ID	Matrix	Type/Type Code	A2320B	A3500B	A5310B	BNASIM	E300	RSK175	SW7196A	SW8260C
SY-OBMW10-110623	SQ6112-2	Water	Field Sample/N	X	X	X	X	X	X	X	X
SY-OBMW7-110623	SQ6112-1	Water	Field Sample/N	X	X	X	X	X	X	X	X
TB30-110623	SQ6112-3	Water	Trip Blank/TB								X

This report assesses the analytical data quality associated with the analyses listed on the preceding cover page at S2AVEM data validation level. This assessment has been made through a combination of automated data review (ADR) and supplemental manual review, the details of which are described below. The approach taken in the review of this data set is consistent with the requirements contained in the Final UFP QAPP Revision No. 1 Remedial Investigation Former Salvage Yard Former Dow Military Airfield 233 Odlin Road, Bangor, Maine December 2022 and the additional guidance documents incorporated by reference to the extent possible. Where definitive guidance is not provided, results have been evaluated in a conservative manner using professional judgment.

Sample collection was managed and directed by Credere Associates, LLC, Westbrook, ME; analyses were performed by Katahdin Analytical Services, Scarborough, ME and were reported under sample delivery group (SDG) SQ6112. Data have been evaluated electronically based on electronic data deliverables (EDDs) provided by the laboratory, and hard copy data summary forms have also been reviewed during this effort and compared to the automated review output by the reviewers whose signatures appear on the following page. Findings based on the automated data submission and manual data verification processes are detailed in the ADR narrative and throughout this report.

All quality control (QC) elements associated with this SDG have been reviewed by a project chemist in accordance with the requirements defined for the project. This review is documented in the attached Data Review Checklists. The QC elements listed below were supported by the electronic deliverable and were evaluated using ADR processes.

- Blank - Negative
- Lab Blank
- Lab Replicate RPD
- LCS Recovery
- LCS RPD
- MS Recovery
- Prep Hold Time
- Surrogate
- Test Hold Time
- Trip Blank

Results of the ADR process were subsequently reviewed and updated as applicable by the data review chemists identified on the signature page. Quality control elements that were not included in the electronic deliverable were reviewed manually and findings are documented within this report. Summaries of findings and associated qualified results are documented throughout this report.

A total of 19 results (26.39%) out of the 72 results (sample and field QC samples) reported are qualified based on review and 0 results (0.00%) have been rejected or deemed a serious deficiency (X qualifier). Trace values, defined as results that are qualified as estimated because they fall between the detection limit and the reporting limit/limit of quantitation, are not counted as qualified results in the above count. The qualified results are detailed throughout this report and discussed in the narrative below, where appropriate.

Narrative Comments

Analytical Method	Data Reviewer Comment
A2320B	No additional comments; see Checklist for detail.
A3500B	No additional comments; see Checklist for detail.
A5310B	The laboratory case narrative indicates the following: "On the raw data packet for the total organic carbon (TOC) analysis, the calibration curve used for processing the TOC data for the samples of word order SQ6112 is marked as having expired on 11/24/23 (the samples were analyzed on 12/1/23). Katahdin's Standard Operating Procedure for TOC analysis states that calibration curves are only valid for 3 months, but this is in the process of being updated to the most current standards which state that these calibration curves do not have a 3-month expiration date." Calibration curves were not reviewed for Stage 2A validation. therefore no data were qualified.
BNASIM	The laboratory case narrative indicates the following: "Sample SQ6112-2RA has low recoveries for the extraction surrogates 2-methylnaphthalene-d10 and pyrene-d10 that were outside of the DoD QSM acceptance limits. The client was contacted on 12/06/2023 and the laboratory was instructed to proceed with narration." The associated results in sample SY-OBMW10-110623 were qualified as estimated (UJ) during data validation. "The method blank WG345173-1 had a high recovery for the extraction surrogate 2-methylnaphthalene-d10 that was outside of the DoD QSM acceptance limits. As this would indicate a high bias, and there were no target analytes detected in the method blank, no further action was taken." Laboratory quality control samples were not qualified during data validation. "The LCS WG345173-2RA had a high recovery for the extraction surrogate 2-methylnaphthalene-d10 that was outside of the DoD QSM acceptance limits. Since the recoveries of the spiked target analytes were acceptable, no further action was taken." Laboratory quality control samples were not qualified during data validation.
E300	No additional comments; see Checklist for detail.
RSK175	The laboratory case narrative indicates the following: "The target analyte methane was detected below 1/2 the LOQ in the method blank WG345521-1. According to the DoD QSM, a method blank is considered to be contaminated if the concentration of any target analyte in the blank exceeds 1/2 the reporting limit and is greater than 1/10 the amount measured in any sample. Since the method blank was acceptable, no further action was taken." The associated methane results were qualified as nondetected during data validation.
SW7196A	No additional comments; see Checklist for detail.
SW8260C	No additional comments; see Checklist for detail.



January 22, 2024

Reviewed by Kevin Kha, Environmental Chemist, EnSafe, Inc.

As the First Reviewer, I certify that I have performed a data review process in accordance with the requirements of the project guidance document, and have compared the electronic data to the laboratory's hard copy report and have verified the consistency of the reported sample results and method quality control data between the two deliverables.



Reviewed by Christina Ashdown, Senior Scientist, EnSafe, Inc. February 14, 2024

As the Second Reviewer, I certify that I have performed a quality assurance review of the report generated by the First Reviewer.

Quality Control Outliers for test method A2320B, Lab Blank

The purpose of laboratory blanks is to determine the existence and magnitude of cross-contamination problems resulting from laboratory activities. Reported results were evaluated to determine compliance with the required acceptance criteria. Summary forms were evaluated and compared to electronic data deliverables. Findings of this review, and contaminants found in laboratory blanks are listed below along with any associated qualified results.

Sample ID/ Lab Sample ID	Analyte	Result	Warning Limits	Control Limits	Units	Qualifier	Reason Code	Comment
WG345360-1 (LB)	Alkalinity, Total (as CaCO3)	2.00	< 0.23	< 5	mg/l	U/None*	L	

Where two qualifiers are listed, such as 'J/UJ', the first applies to positive results, and the second to non-detect results.
Upper and Lower Warning and Control Limits are abbreviated UWL, LWL, UCL, and LCL in the Comment field.

*Blank flags displayed in the above table identify qualification of the sample result when it is less than or equal to the LOQ/RL. Sample results above the LOD or LOQ will be qualified based on the validation guidance assigned in the project setup.

No results associated with this QC element required qualification.

Quality Control Outliers for test method BNASIM, Surrogate

Method performance for individual samples is demonstrated through spiking activities. All samples are spiked with surrogate compounds prior to sample preparation. The sample itself may produce effects due to such factors as interferences and high concentrations of analytes. Summary forms were evaluated and compared to electronic data deliverables. Surrogate results that were outside of the acceptance criteria are listed below.

Sample ID/ Lab Sample ID	Analyte	Result	Warning Limits	Control Limits	Units	Qualifier	Reason Code	Comment
SY-OBMW10-110623 (N)	2-Methylnaphthalene-d10	39.1	43 - 92	10 - 92	percent	J/UJ	I	
SY-OBMW10-110623 (N)	Pyrene-d10	44.2	53 - 166	10 - 166	percent	J/UJ	I	

Where two qualifiers are listed, such as 'J/UJ', the first applies to positive results, and the second to non-detect results.
Upper and Lower Warning and Control Limits are abbreviated UWL, LWL, UCL, and LCL in the Comment field.

Qualified Results associated with the Surrogate for BNASIM

FieldSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
SY-OBMW10-110623 SQ6112-2	N	2-Methylnaphthalene	0.19	0.093 U	0.093 UJ		ug/l	I
SY-OBMW10-110623 SQ6112-2	N	Acenaphthene	0.19	0.093 U	0.093 UJ		ug/l	I
SY-OBMW10-110623 SQ6112-2	N	Acenaphthylene	0.19	0.093 U	0.093 UJ		ug/l	I
SY-OBMW10-110623 SQ6112-2	N	Anthracene	0.19	0.093 U	0.093 UJ		ug/l	I
SY-OBMW10-110623 SQ6112-2	N	Benzo(a)anthracene	0.19	0.093 U	0.093 UJ		ug/l	I
SY-OBMW10-110623 SQ6112-2	N	Benzo(a)pyrene	0.19	0.093 U	0.093 UJ		ug/l	I
SY-OBMW10-110623 SQ6112-2	N	Benzo(b)fluoranthene	0.19	0.093 U	0.093 UJ		ug/l	I
SY-OBMW10-110623 SQ6112-2	N	Benzo(g,h,i)perylene	0.19	0.093 U	0.093 UJ		ug/l	I
SY-OBMW10-110623 SQ6112-2	N	Benzo(k)fluoranthene	0.19	0.093 U	0.093 UJ		ug/l	I
SY-OBMW10-110623 SQ6112-2	N	Chrysene	0.19	0.093 U	0.093 UJ		ug/l	I
SY-OBMW10-110623 SQ6112-2	N	Dibenz(a,h)anthracene	0.19	0.093 U	0.093 UJ		ug/l	I
SY-OBMW10-110623 SQ6112-2	N	Fluoranthene	0.19	0.093 U	0.093 UJ		ug/l	I
SY-OBMW10-110623 SQ6112-2	N	Fluorene	0.19	0.093 U	0.093 UJ		ug/l	I
SY-OBMW10-110623 SQ6112-2	N	Indeno(1,2,3-c,d)pyrene	0.19	0.093 U	0.093 UJ		ug/l	I
SY-OBMW10-110623 SQ6112-2	N	Naphthalene	0.19	0.093 U	0.093 UJ		ug/l	I
SY-OBMW10-110623 SQ6112-2	N	Phenanthrene	0.19	0.093 U	0.093 UJ		ug/l	I

Qualified Results associated with the Surrogate for BNASIM

FieldSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
SY-OBMW10-110623 SQ6112-2	N	Pyrene	0.19	0.093 U	0.093 UJ		ug/l	I

Analytes not found in project samples are reported as not detected at the limit of detection (LOD) unless blank contamination occurs and then the sample may be reported as not detected at the (LOD) or (LOQ) based on the sample concentration and the validation guidance. In instances where no LOD is provided, results are reported down to the LOQ.

Quality Control Outliers for test method E300, Lab Blank

The purpose of laboratory blanks is to determine the existence and magnitude of cross-contamination problems resulting from laboratory activities. Reported results were evaluated to determine compliance with the required acceptance criteria. Summary forms were evaluated and compared to electronic data deliverables. Findings of this review, and contaminants found in laboratory blanks are listed below along with any associated qualified results.

Sample ID/ Lab Sample ID	Analyte	Result	Warning Limits	Control Limits	Units	Qualifier	Reason Code	Comment
WG345075-1 (LB)	Sulfate	0.0730	< 0.064	< 1	mg/l	U/None*	L	

Where two qualifiers are listed, such as 'J/UJ', the first applies to positive results, and the second to non-detect results.
Upper and Lower Warning and Control Limits are abbreviated UWL, LWL, UCL, and LCL in the Comment field.

*Blank flags displayed in the above table identify qualification of the sample result when it is less than or equal to the LOQ/RL. Sample results above the LOD or LOQ will be qualified based on the validation guidance assigned in the project setup.

No results associated with this QC element required qualification.

Quality Control Outliers for test method RSK175, Lab Blank

The purpose of laboratory blanks is to determine the existence and magnitude of cross-contamination problems resulting from laboratory activities. Reported results were evaluated to determine compliance with the required acceptance criteria. Summary forms were evaluated and compared to electronic data deliverables. Findings of this review, and contaminants found in laboratory blanks are listed below along with any associated qualified results.

Sample ID/ Lab Sample ID	Analyte	Result	Warning Limits	Control Limits	Units	Qualifier	Reason Code	Comment
WG345521-1 (LB)	Methane	3.40	< 2.6	< 10	ug/l	U/None*	L	

Where two qualifiers are listed, such as 'J/UJ', the first applies to positive results, and the second to non-detect results.
Upper and Lower Warning and Control Limits are abbreviated UWL, LWL, UCL, and LCL in the Comment field.

*Blank flags displayed in the above table identify qualification of the sample result when it is less than or equal to the LOQ/RL. Sample results above the LOD or LOQ will be qualified based on the validation guidance assigned in the project setup.

Qualified Results associated with the Lab Blank for RSK175

FieldSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
SY-OBMW10-110623 SQ6112-2	N	Methane	10	4.5 J	10 U		ug/l	L
SY-OBMW7-110623 SQ6112-1	N	Methane	10	7.2 J	7.2 J	+	ug/l	L

Analytes not found in project samples are reported as not detected at the limit of detection (LOD) unless blank contamination occurs and then the sample may be reported as not detected at the (LOD) or (LOQ) based on the sample concentration and the validation guidance. In instances where no LOD is provided, results are reported down to the LOQ.

Table of All Qualified Results

Test Method: BNASIM		**Extraction Method: SW3510C**						
FieldSample ID / LabSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
SY-OBMW10-110623 SQ6112-2	N	2-Methylnaphthalene	0.19	0.093 U	0.093 UJ		ug/l	I
SY-OBMW10-110623 SQ6112-2	N	Acenaphthene	0.19	0.093 U	0.093 UJ		ug/l	I
SY-OBMW10-110623 SQ6112-2	N	Acenaphthylene	0.19	0.093 U	0.093 UJ		ug/l	I
SY-OBMW10-110623 SQ6112-2	N	Anthracene	0.19	0.093 U	0.093 UJ		ug/l	I
SY-OBMW10-110623 SQ6112-2	N	Benzo(a)anthracene	0.19	0.093 U	0.093 UJ		ug/l	I
SY-OBMW10-110623 SQ6112-2	N	Benzo(a)pyrene	0.19	0.093 U	0.093 UJ		ug/l	I
SY-OBMW10-110623 SQ6112-2	N	Benzo(b)fluoranthene	0.19	0.093 U	0.093 UJ		ug/l	I
SY-OBMW10-110623 SQ6112-2	N	Benzo(g,h,i)perylene	0.19	0.093 U	0.093 UJ		ug/l	I
SY-OBMW10-110623 SQ6112-2	N	Benzo(k)fluoranthene	0.19	0.093 U	0.093 UJ		ug/l	I
SY-OBMW10-110623 SQ6112-2	N	Chrysene	0.19	0.093 U	0.093 UJ		ug/l	I
SY-OBMW10-110623 SQ6112-2	N	Dibenz(a,h)anthracene	0.19	0.093 U	0.093 UJ		ug/l	I
SY-OBMW10-110623 SQ6112-2	N	Fluoranthene	0.19	0.093 U	0.093 UJ		ug/l	I
SY-OBMW10-110623 SQ6112-2	N	Fluorene	0.19	0.093 U	0.093 UJ		ug/l	I
SY-OBMW10-110623 SQ6112-2	N	Indeno(1,2,3-c,d)pyrene	0.19	0.093 U	0.093 UJ		ug/l	I
SY-OBMW10-110623 SQ6112-2	N	Naphthalene	0.19	0.093 U	0.093 UJ		ug/l	I
SY-OBMW10-110623 SQ6112-2	N	Phenanthrene	0.19	0.093 U	0.093 UJ		ug/l	I
SY-OBMW10-110623 SQ6112-2	N	Pyrene	0.19	0.093 U	0.093 UJ		ug/l	I

Test Method: RSK175		**Extraction Method: METHOD**						
FieldSample ID / LabSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
SY-OBMW10-110623 SQ6112-2	N	Methane	10	4.5 J	10 U		ug/l	L
SY-OBMW7-110623 SQ6112-1	N	Methane	10	7.2 J	7.2 J	+	ug/l	L

Analytes not found in project samples are reported as not detected at the limit of detection (LOD) unless blank contamination occurs and then the sample may be reported as not detected at the (LOQ) based on the sample concentration.
In instances where no LOD is provided, results are reported down to the LOQ.
Trace values are not included in the qualified results table unless additional reason codes are associated.

Table of Results with Modified Qualifiers

Modified Qualifiers for test method RSK175								
FieldSample ID / LabSample ID	Type	Analyte	LOQ	Lab Result	ADR Result	ADR Reason	Modified Result	Reason
SY-OBMW7-110623 SQ6112-1	N	Methane	10	7.2 J	10 U	L	7.2 J	L

Analytes not found in project samples are reported as not detected at the limit of detection (LOD) unless blank contamination occurs and then the sample may be reported as not detected at the (LOQ) based on the sample concentration.
In instances where no LOD is provided, results are reported down to the LOQ.
Trace values are not included in the qualified results table unless additional reason codes are associated.

Reason Code Definitions

Code	Definition
I	Surrogate recovery outside project limits.
L	Lab Blank
TR	Trace Level Detect

Flag Code and Definitions

Flag	Definition
J	Estimated Value
N	The analysis indicates the presence of an analyte for which there was presumptive evidence to make a tentative identification.
NJ	The analyte has been tentatively identified or presumptively as present and the associated numerical value was the estimated concentration in the sample.
R	The data are rejected due to deficiencies in meeting QC criteria and may not be used for decision making.
U	Undetected: The analyte was analyzed for, but not detected.
UJ	The analyte was not detected; however, the result is estimated due to discrepancies in meeting certain analyte-specific quality control criteria.
X	Result may require rejection; PDT attention required

Bias

-	The result may be biased low
+	The result may be biased high

Note - The bias field is a separate field; however, it is an integral part of the final flag (qualifier) on the sample result

Review Questions

Method: A2320B (Alkalinity by Titrimetric Method)

Review Questions	Yes	No	NA	Comment
Were there discrepancies between the COC and the samples received?		•		No discrepancies were noted between the COC and the samples received.
Were there discrepancies between the COC and the sample labels?		•		No discrepancies were noted between the COC and the sample labels.
Were samples relinquished properly on the COC?	•			
Were all samples properly preserved?	•			
Were sampling dates/times, date and time of laboratory receipt of samples, and sample conditions upon receipt at the laboratory (including preservation, pH, and temperature) documented?	•			
Were sample results reported with percent moisture correction if required?			•	Only water samples were collected.
Were analytical methods performed and analysis dates present?	•			
Were all requested target analytes reported?	•			
Were QAPP specified Project Quantitation Limit Goals achieved? (The laboratory LOQ is compared to the QAPP Project Quantitation Goal)	•			
Were holding times met?	•			
Were trip blanks analyzed at the proper frequency and in control?			•	Trip blank not analyzed for this method.
Were field blanks analyzed at the proper frequency and in control?			•	No field blanks were submitted with these samples.
Were equipment blanks analyzed at the proper frequency and in control?			•	No equipment blanks were submitted with these samples.
Was a method blank prepared and analyzed with each batch?	•			
Were target analytes in the method blank less than DL?		•		Although alkalinity was detected in the method blank, the associated results were significantly greater than the method blank, therefore no data were qualified.
Was an LCS/LCSD pair prepared and analyzed with each batch?	•			
Were LCS/LCSD recoveries within project acceptance limits?	•			
Was the LCS/LCSD RPD within project acceptance limits?	•			
Was a MS/MSD pair prepared with each batch?			•	MS/MSD not reported.
Were MS/MSD recoveries within project acceptance limits?			•	MS/MSD not reported.
Was the MS/MSD RPD within project acceptance limits?			•	MS/MSD not reported.
Were Post Spike (PS) recoveries within project acceptance limits?			•	PS not required per the method.
If ISM was used for sample collection, were laboratory triplicates analyzed and within project acceptance limits?			•	ISM not perormed.
Were field replicates (duplicates, triplicates, etc.) analyzed at the proper frequency and in control?			•	No field replicates were submitted with these samples.
Were reported sample concentrations within calibration range?	•			
Have all Laboratory Case Narrative comments/findings been addressed in the data review process?	•			
Were DoD QSM corrective actions followed if deviations were noted?	•			

Review Questions

Method: A2320B (Alkalinity by Titrimetric Method)				
Review Questions	Yes	No	NA	Comment
Were any data recommended for exclusion in the data validation process?		•		All data is acceptable as reported.

Review Questions

Method: A3500B (The Determination of Ferrous Iron, Phenanthroline Method)				
Review Questions	Yes	No	NA	Comment
Were there discrepancies between the COC and the samples received?		•		No discrepancies were noted between the COC and the samples received.
Were there discrepancies between the COC and the sample labels?		•		No discrepancies were noted between the COC and the sample labels.
Were samples relinquished properly on the COC?	•			
Were all samples properly preserved?	•			
Were sampling dates/times, date and time of laboratory receipt of samples, and sample conditions upon receipt at the laboratory (including preservation, pH, and temperature) documented?	•			
Were analytical methods performed and analysis dates present?	•			
Were all requested target analytes reported?	•			
Were QAPP specified Project Quantitation Limit Goals achieved? (The laboratory LOQ is compared to the QAPP Project Quantitation Goal)	•			
Were holding times met?	•			
Were trip blanks analyzed at the proper frequency and in control?			•	Trip blank not analyzed for this method.
Were field blanks analyzed at the proper frequency and in control?			•	No field blanks were submitted with these samples.
Were equipment blanks analyzed at the proper frequency and in control?			•	No equipment blanks were submitted with these samples.
Was a method blank prepared and analyzed with each batch?	•			
Were target analytes in the method blank less than DL?	•			
Was an LCS/LCSD pair prepared and analyzed with each batch?	•			
Were LCS/LCSD recoveries within project acceptance limits?	•			
Was the LCS/LCSD RPD within project acceptance limits?	•			
Was a MS/MSD pair prepared with each batch?			•	MS/MSD not reported.
Were MS/MSD recoveries within project acceptance limits?			•	MS/MSD not reported.
Was the MS/MSD RPD within project acceptance limits?			•	MS/MSD not reported.
Were Post Spike (PS) recoveries within project acceptance limits?			•	PS not required per the method.
If ISM was used for sample collection, were laboratory triplicates analyzed and within project acceptance limits?			•	ISM not performed.
Were field replicates (duplicates, triplicates, etc.) analyzed at the proper frequency and in control?			•	No field replicates were submitted with these samples.
Were reported sample concentrations within calibration range?	•			
Have all Laboratory Case Narrative comments/findings been addressed in the data review process?	•			
Were DoD QSM corrective actions followed if deviations were noted?	•			
Were any data recommended for exclusion in the data validation process?		•		All data is acceptable as reported.

Review Questions

Method: A5310B (Standard Method for the Determination of Total Organic Carbon, Combustion IR Method)				
Review Questions	Yes	No	NA	Comment
Were there discrepancies between the COC and the samples received?		•		No discrepancies were noted between the COC and the samples received.
Were there discrepancies between the COC and the sample labels?		•		No discrepancies were noted between the COC and the sample labels.
Were samples relinquished properly on the COC?	•			
Were all samples properly preserved?	•			
Were sampling dates/times, date and time of laboratory receipt of samples, and sample conditions upon receipt at the laboratory (including preservation, pH, and temperature) documented?	•			
Were sample results reported with percent moisture correction if required?			•	Only water samples were collected.
Were analytical methods performed and analysis dates present?	•			
Were all requested target analytes reported?	•			
Were QAPP specified Project Quantitation Limit Goals achieved? (The laboratory LOQ is compared to the QAPP Project Quantitation Goal)	•			
Were holding times met?	•			
Were trip blanks analyzed at the proper frequency and in control?			•	Trip blank not analyzed for this method.
Were field blanks analyzed at the proper frequency and in control?			•	No field blanks were submitted with these samples.
Were equipment blanks analyzed at the proper frequency and in control?			•	No equipment blanks were submitted with these samples.
Was a method blank prepared and analyzed with each batch?	•			
Were target analytes in the method blank less than DL?	•			
Was an LCS/LCSD pair prepared and analyzed with each batch?	•			
Were LCS/LCSD recoveries within project acceptance limits?	•			
Was the LCS/LCSD RPD within project acceptance limits?	•			
Was a MS/MSD pair prepared with each batch?			•	MS/MSD not reported.
Were MS/MSD recoveries within project acceptance limits?			•	MS/MSD not reported.
Was the MS/MSD RPD within project acceptance limits?			•	MS/MSD not reported.
Were Post Spike (PS) recoveries within project acceptance limits?			•	PS not required per the method.
If ISM was used for sample collection, were laboratory triplicates analyzed and within project acceptance limits?			•	ISM not performed.
Were field replicates (duplicates, triplicates, etc.) analyzed at the proper frequency and in control?			•	No field replicates were submitted with these samples.
Were reported sample concentrations within calibration range?	•			
Have all Laboratory Case Narrative comments/findings been addressed in the data review process?	•			
Were DoD QSM corrective actions followed if deviations were noted?	•			
Were any data recommended for exclusion in the data validation process?		•		All data is acceptable as reported.

Review Questions

Method: BNASIM (GC/MS-SIM Analysis by SW8270)

Review Questions	Yes	No	NA	Comment
Were there discrepancies between the COC and the samples received?		•		No discrepancies were noted between the COC and the samples received.
Were there discrepancies between the COC and the sample labels?		•		No discrepancies were noted between the COC and the sample labels.
Were samples relinquished properly on the COC?	•			
Were all samples properly preserved?	•			
Were sampling dates/times, date and time of laboratory receipt of samples, and sample conditions upon receipt at the laboratory (including preservation, pH, and temperature) documented?	•			
Were sample results reported with percent moisture correction if required?			•	Only was samples were collected.
Were analytical methods performed and analysis dates present?	•			
Were all requested target analytes reported?	•			
Were QAPP specified Project Quantitation Limit Goals achieved? (The laboratory LOQ is compared to the QAPP Project Quantitation Goal)	•			
Were holding times met?	•			
Were trip blanks analyzed at the proper frequency and in control?			•	Trip blank not analyzed for this method.
Were field blanks analyzed at the proper frequency and in control?			•	No field blanks were submitted with these samples.
Were equipment blanks analyzed at the proper frequency and in control?			•	No equipment blanks were submitted with these samples.
Was a method blank prepared and analyzed with each batch?	•			
Were target analytes in the method blank less than DL?	•			
Was an LCS/LCSD pair prepared and analyzed with each batch?	•			
Were LCS/LCSD recoveries within project acceptance limits?	•			
Was the LCS/LCSD RPD within project acceptance limits?			•	LCSD not performed.
Was a MS/MSD pair prepared with each batch?			•	MS/MSD not reported.
Were MS/MSD recoveries within project acceptance limits?			•	MS/MSD not reported.
Was the MS/MSD RPD within project acceptance limits?			•	MS/MSD not reported.
If ISM was used for sample collection, were laboratory triplicates analyzed and within project acceptance limits?			•	ISM not performed.
Were surrogate recoveries within project acceptance limits?		•		Due to surrogate %R below criteria, sample SY-OBMW10-110623 was qualified as nondetected estimated (UJ).
Were field replicates (duplicates, triplicates, etc.) analyzed at the proper frequency and in control?			•	No field replicates were submitted with these samples.
Were reported sample concentrations within calibration range?	•			
Have all Laboratory Case Narrative comments/findings been addressed in the data review process?	•			
Were DoD QSM corrective actions followed if deviations were noted?	•			
Were any data recommended for exclusion in the data validation process?		•		All data is acceptable as reported or as qualified during data validation.

Review Questions

Method: E300 (Inorganic Anions In Water By Ion Chromatography)

Review Questions	Yes	No	NA	Comment
Were there discrepancies between the COC and the samples received?		•		No discrepancies were noted between the COC and the samples received.
Were there discrepancies between the COC and the sample labels?		•		No discrepancies were noted between the COC and the sample labels.
Were samples relinquished properly on the COC?	•			
Were all samples properly preserved?	•			
Were sampling dates/times, date and time of laboratory receipt of samples, and sample conditions upon receipt at the laboratory (including preservation, pH, and temperature) documented?	•			
Were sample results reported with percent moisture correction if required?			•	Only water samples were collected.
Were analytical methods performed and analysis dates present?	•			
Were all requested target analytes reported?	•			
Were QAPP specified Project Quantitation Limit Goals achieved? (The laboratory LOQ is compared to the QAPP Project Quantitation Goal)	•			
Were holding times met?	•			
Were trip blanks analyzed at the proper frequency and in control?			•	Trip blank not analyzed for this method.
Were field blanks analyzed at the proper frequency and in control?			•	No field blanks were submitted with these samples.
Were equipment blanks analyzed at the proper frequency and in control?			•	No equipment blanks were submitted with these samples.
Was a method blank prepared and analyzed with each batch?	•			
Were target analytes in the method blank less than DL?		•		Although sulfate was detected in the method blank, the associated sample results were significantly greater than the result found in the blank, therefore no data were qualified.
Was an LCS/LCSD pair prepared and analyzed with each batch?	•			
Were LCS/LCSD recoveries within project acceptance limits?	•			
Was the LCS/LCSD RPD within project acceptance limits?			•	LCSD not performed.
Was a MS/MSD pair prepared with each batch?			•	MS/MSD not reported.
Were MS/MSD recoveries within project acceptance limits?			•	MS/MSD not reported.
Was the MS/MSD RPD within project acceptance limits?			•	MS/MSD not reported.
Were Post Spike (PS) recoveries within project acceptance limits?			•	PS not required per the method.
If ISM was used for sample collection, were laboratory triplicates analyzed and within project acceptance limits?			•	ISM not performed.
Were field replicates (duplicates, triplicates, etc.) analyzed at the proper frequency and in control?			•	No field replicates were submitted with these samples.
Were reported sample concentrations within calibration range?	•			
Have all Laboratory Case Narrative comments/findings been addressed in the data review process?	•			
Were DoD QSM corrective actions followed if deviations were noted?	•			

Review Questions

Method: E300 (Inorganic Anions In Water By Ion Chromatography)				
Review Questions	Yes	No	NA	Comment
Were any data recommended for exclusion in the data validation process?		•		All data is acceptable as reported.

Review Questions

Method: RSK175 (Dissolved Gas Analysis in Water Samples Using a GC Headspace Equilibrium Technique)				
Review Questions	Yes	No	NA	Comment
Were there discrepancies between the COC and the samples received?		•		No discrepancies were noted between the COC and the samples received.
Were there discrepancies between the COC and the sample labels?		•		No discrepancies were noted between the COC and the sample labels.
Were samples relinquished properly on the COC?	•			
Were all samples properly preserved?	•			
Were sampling dates/times, date and time of laboratory receipt of samples, and sample conditions upon receipt at the laboratory (including preservation, pH, and temperature) documented?	•			
Were sample results reported with percent moisture correction if required?			•	Only water samples were collected.
Were analytical methods performed and analysis dates present?	•			
Were all requested target analytes reported?	•			
Were QAPP specified Project Quantitation Limit Goals achieved? (The laboratory LOQ is compared to the QAPP Project Quantitation Goal)	•			
Were holding times met?	•			
Were trip blanks analyzed at the proper frequency and in control?			•	Trip blank not analyzed for this method.
Were field blanks analyzed at the proper frequency and in control?			•	No field blanks were submitted with these samples.
Were equipment blanks analyzed at the proper frequency and in control?			•	No equipment blanks were submitted with these samples.
Was a method blank prepared and analyzed with each batch?	•			
Were target analytes in the method blank less than DL?		•		Due to method blank contamination, several methane results were qualified as estimated (J) with a high bias (+) or nondetect (U) at the LOQ.
Was an LCS/LCSD pair prepared and analyzed with each batch?	•			
Were LCS/LCSD recoveries within project acceptance limits?	•			
Was the LCS/LCSD RPD within project acceptance limits?		•		LCSD not performed.
Was a MS/MSD pair prepared with each batch?			•	MS/MSD not reported.
Were MS/MSD recoveries within project acceptance limits?			•	MS/MSD not reported.
Was the MS/MSD RPD within project acceptance limits?			•	MS/MSD not reported.
If ISM was used for sample collection, were laboratory triplicates analyzed and within project acceptance limits?			•	ISM not performed.
Were surrogate recoveries within project acceptance limits?			•	Surrogates not required for the requested analyzed.
Were field replicates (duplicates, triplicates, etc.) analyzed at the proper frequency and in control?			•	No field replicates were submitted with these samples.
Were reported sample concentrations within calibration range?	•			
Have all Laboratory Case Narrative comments/findings been addressed in the data review process?	•			
Were DoD QSM corrective actions followed if deviations were noted?	•			

Review Questions

Method: RSK175 (Dissolved Gas Analysis in Water Samples Using a GC Headspace Equilibrium Technique)				
Review Questions	Yes	No	NA	Comment
Were any data recommended for exclusion in the data validation process?		•		All data is acceptable as reported or as qualified during data validation.

Review Questions

Method: SW7196A (Chromium, Hexavalent (Colorimetric))				
Review Questions	Yes	No	NA	Comment
Were there discrepancies between the COC and the samples received?		•		No discrepancies were noted between the COC and the samples received.
Were there discrepancies between the COC and the sample labels?		•		No discrepancies were noted between the COC and the sample labels.
Were samples relinquished properly on the COC?	•			
Were all samples properly preserved?	•			
Were sampling dates/times, date and time of laboratory receipt of samples, and sample conditions upon receipt at the laboratory (including preservation, pH, and temperature) documented?	•			
Were sample results reported with percent moisture correction if required?			•	Only water samples were collected.
Were analytical methods performed and analysis dates present?	•			
Were all requested target analytes reported?	•			
Were QAPP specified Project Quantitation Limit Goals achieved? (The laboratory LOQ is compared to the QAPP Project Quantitation Goal)	•			
Were holding times met?	•			
Were trip blanks analyzed at the proper frequency and in control?			•	Trip blank not analyzed for this method.
Were field blanks analyzed at the proper frequency and in control?			•	No field blanks were submitted with these samples.
Were equipment blanks analyzed at the proper frequency and in control?			•	No equipment blanks were submitted with these samples.
Was a method blank prepared and analyzed with each batch?	•			
Were target analytes in the method blank less than DL?	•			
Was an LCS/LCSD pair prepared and analyzed with each batch?	•			
Were LCS/LCSD recoveries within project acceptance limits?	•			
Was the LCS/LCSD RPD within project acceptance limits?	•			
Was a MS/MSD pair prepared with each batch?	•			
Were MS/MSD recoveries within project acceptance limits?	•			
Was the MS/MSD RPD within project acceptance limits?	•			MSD not performed. Laboratory DUP performed and RPD was within QC criteria.
Were Post Spike (PS) recoveries within project acceptance limits?			•	PS not required per the method.
If ISM was used for sample collection, were laboratory triplicates analyzed and within project acceptance limits?			•	ISM not performed.
Were field replicates (duplicates, triplicates, etc.) analyzed at the proper frequency and in control?			•	No field replicates were submitted with these samples.
Were reported sample concentrations within calibration range?	•			
Have all Laboratory Case Narrative comments/findings been addressed in the data review process?	•			
Were DoD QSM corrective actions followed if deviations were noted?	•			
Were any data recommended for exclusion in the data validation process?		•		All data is acceptable as reported.

Review Questions

Method: SW8260C (Volatile Organic Compounds by GC/MS)				
Review Questions	Yes	No	NA	Comment
Were there discrepancies between the COC and the samples received?		•		No discrepancies were noted between the COC and the samples received.
Were there discrepancies between the COC and the sample labels?		•		No discrepancies were noted between the COC and the sample labels.
Were samples relinquished properly on the COC?	•			
Were all samples properly preserved?	•			
Were sampling dates/times, date and time of laboratory receipt of samples, and sample conditions upon receipt at the laboratory (including preservation, pH, and temperature) documented?	•			
Were sample results reported with percent moisture correction if required?			•	Only water samples were collected.
Were analytical methods performed and analysis dates present?	•			
Were all requested target analytes reported?	•			
Were QAPP specified Project Quantitation Limit Goals achieved? (The laboratory LOQ is compared to the QAPP Project Quantitation Goal)	•			
Were holding times met?	•			
Were trip blanks analyzed at the proper frequency and in control?	•			
Were field blanks analyzed at the proper frequency and in control?			•	No field blanks were submitted with these samples.
Were equipment blanks analyzed at the proper frequency and in control?			•	No equipment blanks were submitted with these samples.
Was a method blank prepared and analyzed with each batch?	•			
Were target analytes in the method blank less than DL?	•			
Was an LCS/LCSD pair prepared and analyzed with each batch?	•			
Were LCS/LCSD recoveries within project acceptance limits?	•			
Was the LCS/LCSD RPD within project acceptance limits?	•			
Was a MS/MSD pair prepared with each batch?			•	MS/MSD not reported.
Were MS/MSD recoveries within project acceptance limits?			•	MS/MSD not reported.
Was the MS/MSD RPD within project acceptance limits?			•	MS/MSD not reported.
If ISM was used for sample collection, were laboratory triplicates analyzed and within project acceptance limits?			•	ISM not performed.
Were surrogate recoveries within project acceptance limits?	•			
Were field replicates (duplicates, triplicates, etc.) analyzed at the proper frequency and in control?			•	No field replicates were submitted with these samples.
Were reported sample concentrations within calibration range?	•			
Have all Laboratory Case Narrative comments/findings been addressed in the data review process?	•			
Were DoD QSM corrective actions followed if deviations were noted?	•			
Were any data recommended for exclusion in the data validation process?		•		All data is acceptable as reported.

Data Validation Report for SQ6133

Facility:	D01ME0004-07, Dow Military Airfield, Salvage Yard
Event:	Dow SY Groundwater Nov 2023
SDG:	SQ6133
Guidance Document:	Final UFP QAPP Revision No. 1 Remedial Investigation Former Salvage Yard Former Dow Military Airfield 233 Odlin Road, Bangor, Maine December 2022
Prime Contractor:	Credere Associates, LLC, Westbrook, ME
Project Manager:	Peter Thompson
Contract Laboratory(ies):	Katahdin Analytical Services, Scarborough, ME
Data Review Contractor:	EnSafe, Inc.
Data Review Level:	S2AVEM
Primary Data Reviewer:	Kevin Kha, Environmental Chemist
Second Reviewer:	Christina Ashdown, Senior Scientist
Date Submitted:	January 25, 2024

Field Sample ID	Lab Sample ID	Matrix	Type/Type Code	A2320B	A3500B	A5310B	BNASIM	E300	RSK175	SW7196A	SW8260C
SY-BRMW2-252.5-262.5-110723	SQ6133-10	Water	Field Sample/N	X	X	X	X	X	X	X	X
SY-BRMW2-60.5-70.5-110723	SQ6133-4	Water	Field Sample/N	X	X	X	X	X	X	X	X
SY-BRMW2-80.5-95.5-110723	SQ6133-8	Water	Field Sample/N	X	X	X	X	X	X	X	X
SY-OBMW12-110723	SQ6133-3	Water	Field Sample/N	X	X	X	X	X	X	X	X
SY-OBMW13-110723	SQ6133-7	Water	Field Sample/N	X	X	X	X	X	X	X	X
SY-OBMW14-110723	SQ6133-9	Water	Field Sample/N	X	X	X	X	X	X	X	X
SY-OBMW15-110723	SQ6133-5	Water	Field Sample/N	X	X	X	X	X	X	X	X
SY-OBMW4R-110723	SQ6133-2	Water	Field Sample/N	X	X	X	X	X	X	X	X
SY-OBMW5-110723	SQ6133-6	Water	Field Sample/N	X	X	X	X	X	X	X	X
SY-OBMW6-110723	SQ6133-1	Water	Field Sample/N	X	X	X	X	X	X	X	X
TB31-110723	SQ6133-11	Water	Trip Blank/TB								X

This report assesses the analytical data quality associated with the analyses listed on the preceding cover page at S2AVEM data validation level. This assessment has been made through a combination of automated data review (ADR) and supplemental manual review, the details of which are described below. The approach taken in the review of this data set is consistent with the requirements contained in the Final UFP QAPP Revision No. 1 Remedial Investigation Former Salvage Yard Former Dow Military Airfield 233 Odlin Road, Bangor, Maine December 2022 and the additional guidance documents incorporated by reference to the extent possible. Where definitive guidance is not provided, results have been evaluated in a conservative manner using professional judgment.

Sample collection was managed and directed by Credere Associates, LLC, Westbrook, ME; analyses were performed by Katahdin Analytical Services, Scarborough, ME and were reported under sample delivery group (SDG) SQ6133. Data have been evaluated electronically based on electronic data deliverables (EDDs) provided by the laboratory, and hard copy data summary forms have also been reviewed during this effort and compared to the automated review output by the reviewers whose signatures appear on the following page. Findings based on the automated data submission and manual data verification processes are detailed in the ADR narrative and throughout this report.

All quality control (QC) elements associated with this SDG have been reviewed by a project chemist in accordance with the requirements defined for the project. This review is documented in the attached Data Review Checklists. The QC elements listed below were supported by the electronic deliverable and were evaluated using ADR processes.

- Blank - Negative
- Lab Blank
- Lab Replicate RPD
- LCS Recovery
- LCS RPD
- MS Recovery
- MS RPD
- Prep Hold Time
- Surrogate
- Test Hold Time
- Trip Blank

Results of the ADR process were subsequently reviewed and updated as applicable by the data review chemists identified on the signature page. Quality control elements that were not included in the electronic deliverable were reviewed manually and findings are documented within this report. Summaries of findings and associated qualified results are documented throughout this report.

A total of 17 results (5.06%) out of the 336 results (sample and field QC samples) reported are qualified based on review and 0 results (0.00%) have been rejected or deemed a serious deficiency (X qualifier). Trace values, defined as results that are qualified as estimated because they fall between the detection limit and the reporting limit/limit of quantitation, are not counted as qualified results in the above count. The qualified results are detailed throughout this report and discussed in the narrative below, where appropriate.

Narrative Comments

Analytical Method	Data Reviewer Comment
A2320B	No additional comments; see Checklist for detail.
A3500B	No additional comments; see Checklist for detail.
A5310B	No additional comments; see Checklist for detail.
BNASIM	The laboratory case narrative indicates the following: "Due to a laboratory error, the MS/MSD WG345531-5 and 6 were extracted two days out of hold time." The affected samples were laboratory quality control samples and no data were qualified. "The MS WG345301-5 and MS WG345531-5 had high recoveries for the extraction surrogate 2-methylnaphthalene-d10 that were outside of the DoD QSM acceptance limits." The affected samples were laboratory quality control samples and no data were qualified.
E300	The laboratory case narrative indicates the following: "The nitrate matrix spike (WG345141-4) and matrix spike duplicate (WG345141-5) on sample SQ6133-3 both had low recoveries that were outside of the acceptance limits." The MS/MSD %R were within the project acceptance limits of 80-120% and no data were qualified. "The sulfate matrix spike (WG345141-4) on sample SQ6133-3 had a low recovery that was outside of the acceptance limits." The MS %R was within the project acceptance limits of 80-120% and no data were qualified.
RSK175	The laboratory case narrative indicates the following: "The target analyte methane was detected below 1/2 the LOQ in the method blank WG345593-1. According to the DoD QSM, a method blank is considered to be contaminated if the concentration of any target analyte in the blank exceeds 1/2 the reporting limit and is greater than 1/10 the amount measured in any sample. Since the method blank was acceptable, no further action was taken." The associated methane results were qualified as nondetected during data validation.
SW7196A	No additional comments; see Checklist for detail.
SW8260C	The laboratory case narrative indicates the following: "The reported percent recovery acceptance limits for the Laboratory Control Samples (LCSs) were evaluated using DoD QSM acceptance limits. The recoveries of the spiked analytes in the LCS, LCSD, Matrix Spike (MS) and Matrix Spike Duplicate (MSD) are compared to these acceptance limits. Katahdin standard operating procedure is to take corrective action only if the number of spiked analytes in the LCS that are outside of the QC limits is greater than the DoD QSM allowable number of exceedances. If the associated MS/MSD has greater than the allowable number of exceedances, no corrective action is taken, as long as the LCS is acceptable." The MS/MSD %R for vinyl chloride in sample SY-OBMW12-110723 was outside of DoD QSM acceptance criteria and was qualified during data validation.



January 22, 2024

Reviewed by Kevin Kha, Environmental Chemist, EnSafe, Inc.

As the First Reviewer, I certify that I have performed a data review process in accordance with the requirements of the project guidance document, and have compared the electronic data to the laboratory's hard copy report and have verified the consistency of the reported sample results and method quality control data between the two deliverables.



Reviewed by Christina Ashdown, Senior Scientist, EnSafe, Inc. February 14, 2024

As the Second Reviewer, I certify that I have performed a quality assurance review of the report generated by the First Reviewer.

Quality Control Outliers for test method A2320B, Lab Blank

The purpose of laboratory blanks is to determine the existence and magnitude of cross-contamination problems resulting from laboratory activities. Reported results were evaluated to determine compliance with the required acceptance criteria. Summary forms were evaluated and compared to electronic data deliverables. Findings of this review, and contaminants found in laboratory blanks are listed below along with any associated qualified results.

Sample ID/ Lab Sample ID	Analyte	Result	Warning Limits	Control Limits	Units	Qualifier	Reason Code	Comment
WG345360-1 (LB)	Alkalinity, Total (as CaCO3)	2.00	< 0.23	< 5	mg/l	U/None*	L	
WG345462-1 (LB)	Alkalinity, Total (as CaCO3)	2.80	< 0.23	< 5	mg/l	U/None*	L	

Where two qualifiers are listed, such as 'J/UJ', the first applies to positive results, and the second to non-detect results.
Upper and Lower Warning and Control Limits are abbreviated UWL, LWL, UCL, and LCL in the Comment field.

*Blank flags displayed in the above table identify qualification of the sample result when it is less than or equal to the LOQ/RL. Sample results above the LOD or LOQ will be qualified based on the validation guidance assigned in the project setup.

No results associated with this QC element required qualification.

Quality Control Outliers for test method BNASIM, MS Recovery

Data for matrix spikes/matrix spike duplicates (MS/MSD) are generated to determine long-term precision and accuracy of the analytical method on various matrices and to demonstrate acceptable compound recovery by the laboratory at the time of sample analysis. These data alone cannot be used to evaluate the precision and accuracy of individual samples. However, when exercising professional judgment, MS/MSD data can be used in conjunction with other available QC information. Reported results were evaluated to determine compliance with the required acceptance criteria, and summary forms were evaluated and compared to electronic data deliverables. Findings of this review, and any associated qualified results, are listed below.

Sample ID/ Lab Sample ID	Analyte	Result	Warning Limits	Control Limits	Units	Qualifier	Reason Code	Comment
SY-BRMW2-80.5-95.5-110723 (SD)	Benzo(a)pyrene	50.5	53 - 120	20 - 120	percent	J/UJ	M	
SY-BRMW2-80.5-95.5-110723 (SD)	Benzo (g,h,i)perylene	38.5	44 - 128	20 - 128	percent	J/UJ	M	
SY-BRMW2-80.5-95.5-110723 (SD)	Benzo (k)fluoranthene	49.4	54 - 125	20 - 125	percent	J/UJ	M	
SY-BRMW2-80.5-95.5-110723 (SD)	Dibenz (a,h)anthracene	38.5	44 - 131	20 - 131	percent	J/UJ	M	
SY-BRMW2-80.5-95.5-110723 (SD)	Indeno(1,2,3-c,d)pyrene	40.4	48 - 130	20 - 130	percent	J/UJ	M	
SY-OBMW12-110723 (MS)	Benzo (g,h,i)perylene	40.5	44 - 128	20 - 128	percent	J/UJ	M	
SY-OBMW12-110723 (SD)	Benzo (g,h,i)perylene	40.7	44 - 128	20 - 128	percent	J/UJ	M	
SY-OBMW12-110723 (MS)	Dibenz (a,h)anthracene	39.4	44 - 131	20 - 131	percent	J/UJ	M	
SY-OBMW12-110723 (SD)	Dibenz (a,h)anthracene	40.7	44 - 131	20 - 131	percent	J/UJ	M	
SY-OBMW12-110723 (MS)	Indeno(1,2,3-c,d)pyrene	41.8	48 - 130	20 - 130	percent	J/UJ	M	
SY-OBMW12-110723 (SD)	Indeno(1,2,3-c,d)pyrene	42.8	48 - 130	20 - 130	percent	J/UJ	M	

Where two qualifiers are listed, such as 'J/UJ', the first applies to positive results, and the second to non-detect results.
Upper and Lower Warning and Control Limits are abbreviated UWL, LWL, UCL, and LCL in the Comment field.

Qualified Results associated with the MS Recovery for BNASIM

FieldSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
SY-BRMW2-80.5-95.5-110723 SQ6133-8	N	Benzo(a)pyrene	0.19	0.094 UM	0.094 UJ		ug/l	M
SY-BRMW2-80.5-95.5-110723 SQ6133-8	N	Benzo(g,h,i)perylene	0.19	0.094 UM	0.094 UJ		ug/l	M
SY-BRMW2-80.5-95.5-110723 SQ6133-8	N	Benzo(k)fluoranthene	0.19	0.094 UM	0.094 UJ		ug/l	M
SY-BRMW2-80.5-95.5-110723 SQ6133-8	N	Dibenz(a,h)anthracene	0.19	0.094 UM	0.094 UJ		ug/l	M
SY-BRMW2-80.5-95.5-110723 SQ6133-8	N	Indeno(1,2,3-c,d)pyrene	0.19	0.094 UM	0.094 UJ		ug/l	M
SY-OBMW12-110723 SQ6133-3	N	Benzo(g,h,i)perylene	0.19	0.094 UMM	0.094 UJ		ug/l	M

Qualified Results associated with the MS Recovery for BNASIM

FieldSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
SY-OBMW12-110723 SQ6133-3	N	Dibenz(a,h)anthracene	0.19	0.094 UMM	0.094 UJ		ug/l	M
SY-OBMW12-110723 SQ6133-3	N	Indeno(1,2,3-c,d)pyrene	0.19	0.094 UMM	0.094 UJ		ug/l	M

Analytes not found in project samples are reported as not detected at the limit of detection (LOD) unless blank contamination occurs and then the sample may be reported as not detected at the (LOD) or (LOQ) based on the sample concentration and the validation guidance. In instances where no LOD is provided, results are reported down to the LOQ.

Quality Control Outliers for test method BNASIM, MS RPD

The objective of matrix spikes/matrix spike duplicates (MS/MSD) RPD analysis is to demonstrate acceptable method precision by the laboratory at the time of analysis. MS/MSD analyses are also performed to generate data that determines the long-term precision of the analytical method on various matrices. Non-homogenous samples can impact the apparent method precision. Summary forms were evaluated and compared to electronic data deliverables. Matrix spikes/matrix spike duplicates results that were outside of the acceptance criteria are listed below.

Sample ID/ Lab Sample ID	Analyte	Result	Warning Limits	Control Limits	Units	Qualifier	Reason Code	Comment
SY-BRMW2-80.5-95.5-110723 (SD)	Acenaphthene	21.4	< 20	< 20	rpd	J/None	D	
SY-BRMW2-80.5-95.5-110723 (SD)	Acenaphthylene	21.3	< 20	< 20	rpd	J/None	D	
SY-BRMW2-80.5-95.5-110723 (SD)	Anthracene	23.0	< 20	< 20	rpd	J/None	D	
SY-BRMW2-80.5-95.5-110723 (SD)	Benzo (a)anthracene	21.4	< 20	< 20	rpd	J/None	D	
SY-BRMW2-80.5-95.5-110723 (SD)	Benzo(a)pyrene	29.3	< 20	< 20	rpd	J/None	D	
SY-BRMW2-80.5-95.5-110723 (SD)	Benzo (b)fluoranthene	27.8	< 20	< 20	rpd	J/None	D	
SY-BRMW2-80.5-95.5-110723 (SD)	Benzo (g,h,i)perylene	41.8	< 20	< 20	rpd	J/None	D	
SY-BRMW2-80.5-95.5-110723 (SD)	Benzo (k)fluoranthene	31.7	< 20	< 20	rpd	J/None	D	
SY-BRMW2-80.5-95.5-110723 (SD)	Chrysene	24.3	< 20	< 20	rpd	J/None	D	
SY-BRMW2-80.5-95.5-110723 (SD)	Dibenz (a,h)anthracene	38.9	< 20	< 20	rpd	J/None	D	
SY-BRMW2-80.5-95.5-110723 (SD)	Indeno(1,2,3-c,d)pyrene	38.5	< 20	< 20	rpd	J/None	D	
SY-BRMW2-80.5-95.5-110723 (SD)	Naphthalene	20.3	< 20	< 20	rpd	J/None	D	

Where two qualifiers are listed, such as 'J/UJ', the first applies to positive results, and the second to non-detect results.
Upper and Lower Warning and Control Limits are abbreviated UWL, LWL, UCL, and LCL in the Comment field.

No results associated with this QC element required qualification.

Quality Control Outliers for test method BNASIM, Surrogate

Method performance for individual samples is demonstrated through spiking activities. All samples are spiked with surrogate compounds prior to sample preparation. The sample itself may produce effects due to such factors as interferences and high concentrations of analytes. Summary forms were evaluated and compared to electronic data deliverables. Surrogate results that were outside of the acceptance criteria are listed below.

Sample ID/ Lab Sample ID	Analyte	Result	Warning Limits	Control Limits	Units	Qualifier	Reason Code	Comment
SY-BRMW2-80.5-95.5-110723 (MS)	2-Methylnaphthalene-d10	102	43 - 92	10 - 92	percent	J/None	I	No Qualifiers Applied
SY-OBMW12-110723 (MS)	2-Methylnaphthalene-d10	100	43 - 92	10 - 92	percent	J/None	I	No Qualifiers Applied
SY-OBMW12-110723 (SD)	2-Methylnaphthalene-d10	95.0	43 - 92	10 - 92	percent	J/None	I	No Qualifiers Applied

Where two qualifiers are listed, such as 'J/UJ', the first applies to positive results, and the second to non-detect results.
Upper and Lower Warning and Control Limits are abbreviated UWL, LWL, UCL, and LCL in the Comment field.

No results associated with this QC element required qualification.

Quality Control Outliers for test method E300, Lab Blank

The purpose of laboratory blanks is to determine the existence and magnitude of cross-contamination problems resulting from laboratory activities. Reported results were evaluated to determine compliance with the required acceptance criteria. Summary forms were evaluated and compared to electronic data deliverables. Findings of this review, and contaminants found in laboratory blanks are listed below along with any associated qualified results.

Sample ID/ Lab Sample ID	Analyte	Result	Warning Limits	Control Limits	Units	Qualifier	Reason Code	Comment
WG345141-1 (LB)	Sulfate	0.0680	< 0.064	< 1	mg/l	U/None*	L	

Where two qualifiers are listed, such as 'J/UJ', the first applies to positive results, and the second to non-detect results.
Upper and Lower Warning and Control Limits are abbreviated UWL, LWL, UCL, and LCL in the Comment field.

*Blank flags displayed in the above table identify qualification of the sample result when it is less than or equal to the LOQ/RL. Sample results above the LOD or LOQ will be qualified based on the validation guidance assigned in the project setup.

No results associated with this QC element required qualification.

Quality Control Outliers for test method RSK175, Lab Blank

The purpose of laboratory blanks is to determine the existence and magnitude of cross-contamination problems resulting from laboratory activities. Reported results were evaluated to determine compliance with the required acceptance criteria. Summary forms were evaluated and compared to electronic data deliverables. Findings of this review, and contaminants found in laboratory blanks are listed below along with any associated qualified results.

Sample ID/ Lab Sample ID	Analyte	Result	Warning Limits	Control Limits	Units	Qualifier	Reason Code	Comment
WG345593-1 (LB)	Methane	3.10	< 2.6	< 10	ug/l	U/None*	L	

Where two qualifiers are listed, such as 'J/UJ', the first applies to positive results, and the second to non-detect results.
Upper and Lower Warning and Control Limits are abbreviated UWL, LWL, UCL, and LCL in the Comment field.

*Blank flags displayed in the above table identify qualification of the sample result when it is less than or equal to the LOQ/RL. Sample results above the LOD or LOQ will be qualified based on the validation guidance assigned in the project setup.

Qualified Results associated with the Lab Blank for RSK175

FieldSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
SY-BRMW2-252.5-262.5-110723 SQ6133-10	N	Methane	10	3.4 J	10 U		ug/l	L
SY-BRMW2-60.5-70.5-110723 SQ6133-4	N	Methane	10	3.4 J	10 U		ug/l	L
SY-BRMW2-80.5-95.5-110723 SQ6133-8	N	Methane	10	3.4 J	10 U		ug/l	L
SY-OBMW13-110723 SQ6133-7	N	Methane	10	3.2 J	10 U		ug/l	L
SY-OBMW15-110723 SQ6133-5	N	Methane	10	9.1 J	9.1 J	+	ug/l	L
SY-OBMW4R-110723 SQ6133-2	N	Methane	10	4.6 J	10 U		ug/l	L
SY-OBMW5-110723 SQ6133-6	N	Methane	10	3.6 J	10 U		ug/l	L
SY-OBMW6-110723 SQ6133-1	N	Methane	10	3.7 J	10 U		ug/l	L

Analytes not found in project samples are reported as not detected at the limit of detection (LOD) unless blank contamination occurs and then the sample may be reported as not detected at the (LOD) or (LOQ) based on the sample concentration and the validation guidance. In instances where no LOD is provided, results are reported down to the LOQ.

Quality Control Outliers for test method SW8260C, MS Recovery

Data for matrix spikes/matrix spike duplicates (MS/MSD) are generated to determine long-term precision and accuracy of the analytical method on various matrices and to demonstrate acceptable compound recovery by the laboratory at the time of sample analysis. These data alone cannot be used to evaluate the precision and accuracy of individual samples. However, when exercising professional judgment, MS/MSD data can be used in conjunction with other available QC information. Reported results were evaluated to determine compliance with the required acceptance criteria, and summary forms were evaluated and compared to electronic data deliverables. Findings of this review, and any associated qualified results, are listed below.

Sample ID/ Lab Sample ID	Analyte	Result	Warning Limits	Control Limits	Units	Qualifier	Reason Code	Comment
SY-OBMW12-110723 (MS)	Vinyl chloride	48.2	70 - 130	20 - 130	percent	J/UJ	M	
SY-OBMW12-110723 (SD)	Vinyl chloride	52.2	70 - 130	20 - 130	percent	J/UJ	M	

Where two qualifiers are listed, such as 'J/UJ', the first applies to positive results, and the second to non-detect results.
Upper and Lower Warning and Control Limits are abbreviated UWL, LWL, UCL, and LCL in the Comment field.

Qualified Results associated with the MS Recovery for SW8260C

FieldSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
SY-OBMW12-110723 SQ6133-3	N	Vinyl chloride	0.10	0.15 MM	0.15 J	-	ug/l	M

Analytes not found in project samples are reported as not detected at the limit of detection (LOD) unless blank contamination occurs and then the sample may be reported as not detected at the (LOD) or (LOQ) based on the sample concentration and the validation guidance. In instances where no LOD is provided, results are reported down to the LOQ.

Table of All Qualified Results

Test Method: BNASIM		Extraction Method: SW3510C						
FieldSample ID / LabSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
SY-BRMW2-80.5-95.5-110723 SQ6133-8	N	Benzo(a)pyrene	0.19	0.094 UM	0.094 UJ		ug/l	M
SY-BRMW2-80.5-95.5-110723 SQ6133-8	N	Benzo(g,h,i)perylene	0.19	0.094 UM	0.094 UJ		ug/l	M
SY-BRMW2-80.5-95.5-110723 SQ6133-8	N	Benzo(k)fluoranthene	0.19	0.094 UM	0.094 UJ		ug/l	M
SY-BRMW2-80.5-95.5-110723 SQ6133-8	N	Dibenz(a,h)anthracene	0.19	0.094 UM	0.094 UJ		ug/l	M
SY-BRMW2-80.5-95.5-110723 SQ6133-8	N	Indeno(1,2,3-c,d)pyrene	0.19	0.094 UM	0.094 UJ		ug/l	M
SY-OBMW12-110723 SQ6133-3	N	Benzo(g,h,i)perylene	0.19	0.094 UMM	0.094 UJ		ug/l	M
SY-OBMW12-110723 SQ6133-3	N	Dibenz(a,h)anthracene	0.19	0.094 UMM	0.094 UJ		ug/l	M
SY-OBMW12-110723 SQ6133-3	N	Indeno(1,2,3-c,d)pyrene	0.19	0.094 UMM	0.094 UJ		ug/l	M

Test Method: RSK175		Extraction Method: METHOD						
FieldSample ID / LabSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
SY-BRMW2-252.5-262.5-110723 SQ6133-10	N	Methane	10	3.4 J	10 U		ug/l	L
SY-BRMW2-60.5-70.5-110723 SQ6133-4	N	Methane	10	3.4 J	10 U		ug/l	L
SY-BRMW2-80.5-95.5-110723 SQ6133-8	N	Methane	10	3.4 J	10 U		ug/l	L
SY-OBMW13-110723 SQ6133-7	N	Methane	10	3.2 J	10 U		ug/l	L
SY-OBMW15-110723 SQ6133-5	N	Methane	10	9.1 J	9.1 J	+	ug/l	L
SY-OBMW4R-110723 SQ6133-2	N	Methane	10	4.6 J	10 U		ug/l	L
SY-OBMW5-110723 SQ6133-6	N	Methane	10	3.6 J	10 U		ug/l	L
SY-OBMW6-110723 SQ6133-1	N	Methane	10	3.7 J	10 U		ug/l	L

Table of All Qualified Results

Test Method: SW8260C		Extraction Method: SW5030B						
FieldSample ID / LabSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
SY-OBMW12-110723 SQ6133-3	N	Vinyl chloride	0.10	0.15 MM	0.15 J	-	ug/l	M

Analytes not found in project samples are reported as not detected at the limit of detection (LOD) unless blank contamination occurs and then the sample may be reported as not detected at the (LOQ) based on the sample concentration.
In instances where no LOD is provided, results are reported down to the LOQ.
Trace values are not included in the qualified results table unless additional reason codes are associated.

Table of Results with Modified Qualifiers

Modified Qualifiers for test method RSK175

FieldSample ID / LabSample ID	Type	Analyte	LOQ	Lab Result	ADR Result	ADR Reason	Modified Result	Reason
SY-OBMW12-110723 SQ6133-3	N	Methane	10	17	10 U	L	17	
SY-OBMW14-110723 SQ6133-9	N	Methane	10	18	10 U	L	18	
SY-OBMW15-110723 SQ6133-5	N	Methane	10	9.1 J	10 U	L	9.1 J	L

Analytes not found in project samples are reported as not detected at the limit of detection (LOD) unless blank contamination occurs and then the sample may be reported as not detected at the (LOQ) based on the sample concentration.
In instances where no LOD is provided, results are reported down to the LOQ.
Trace values are not included in the qualified results table unless additional reason codes are associated.

Reason Code Definitions

Code	Definition
D	MS RPD
I	Surrogate recovery outside project limits.
L	Lab Blank
M	MS Recovery
TR	Trace Level Detect

Flag Code and Definitions

Flag	Definition
J	Estimated Value
N	The analysis indicates the presence of an analyte for which there was presumptive evidence to make a tentative identification.
NJ	The analyte has been tentatively identified or presumptively as present and the associated numerical value was the estimated concentration in the sample.
R	The data are rejected due to deficiencies in meeting QC criteria and may not be used for decision making.
U	Undetected: The analyte was analyzed for, but not detected.
UJ	The analyte was not detected; however, the result is estimated due to discrepancies in meeting certain analyte-specific quality control criteria.
X	Result may require rejection; PDT attention required

Bias

-	The result may be biased low
+	The result may be biased high

Note - The bias field is a separate field; however, it is an integral part of the final flag (qualifier) on the sample result

Review Questions

Method: A2320B (Alkalinity by Titrimetric Method)

Review Questions	Yes	No	NA	Comment
Were there discrepancies between the COC and the samples received?		•		No discrepancies were noted between the COC and the samples received.
Were there discrepancies between the COC and the sample labels?		•		No discrepancies were noted between the COC and the sample labels.
Were samples relinquished properly on the COC?	•			
Were all samples properly preserved?	•			
Were sampling dates/times, date and time of laboratory receipt of samples, and sample conditions upon receipt at the laboratory (including preservation, pH, and temperature) documented?	•			
Were sample results reported with percent moisture correction if required?			•	Only water samples were collected.
Were analytical methods performed and analysis dates present?	•			
Were all requested target analytes reported?	•			
Were QAPP specified Project Quantitation Limit Goals achieved? (The laboratory LOQ is compared to the QAPP Project Quantitation Goal)	•			
Were holding times met?	•			
Were trip blanks analyzed at the proper frequency and in control?			•	Trip blank was not analyzed for this method.
Were field blanks analyzed at the proper frequency and in control?			•	No field blanks were submitted with these samples.
Were equipment blanks analyzed at the proper frequency and in control?			•	No equipment blanks were submitted with these samples.
Was a method blank prepared and analyzed with each batch?	•			
Were target analytes in the method blank less than DL?		•		Although alkalinity was detected in two method blanks, the associated sample results were significantly greater than result found in the blanks, therefore no data were qualified.
Was an LCS/LCSD pair prepared and analyzed with each batch?	•			
Were LCS/LCSD recoveries within project acceptance limits?	•			
Was the LCS/LCSD RPD within project acceptance limits?	•			
Was a MS/MSD pair prepared with each batch?	•			
Were MS/MSD recoveries within project acceptance limits?	•			
Was the MS/MSD RPD within project acceptance limits?	•			
Were Post Spike (PS) recoveries within project acceptance limits?			•	PS not required per the method.
If ISM was used for sample collection, were laboratory triplicates analyzed and within project acceptance limits?			•	ISM not performed.
Were field replicates (duplicates, triplicates, etc.) analyzed at the proper frequency and in control?			•	No field replicates were submitted with these samples.
Were reported sample concentrations within calibration range?	•			
Have all Laboratory Case Narrative comments/findings been addressed in the data review process?	•			
Were DoD QSM corrective actions followed if deviations were noted?	•			

Review Questions

Method: A2320B (Alkalinity by Titrimetric Method)				
Review Questions	Yes	No	NA	Comment
Were any data recommended for exclusion in the data validation process?		•		All data is acceptable as reported.

Review Questions

Method: A3500B (The Determination of Ferrous Iron, Phenanthroline Method)				
Review Questions	Yes	No	NA	Comment
Were there discrepancies between the COC and the samples received?		•		No discrepancies were noted between the COC and the samples received.
Were there discrepancies between the COC and the sample labels?		•		No discrepancies were noted between the COC and the sample labels.
Were samples relinquished properly on the COC?	•			
Were all samples properly preserved?	•			
Were sampling dates/times, date and time of laboratory receipt of samples, and sample conditions upon receipt at the laboratory (including preservation, pH, and temperature) documented?	•			
Were analytical methods performed and analysis dates present?	•			
Were all requested target analytes reported?	•			
Were QAPP specified Project Quantitation Limit Goals achieved? (The laboratory LOQ is compared to the QAPP Project Quantitation Goal)	•			
Were holding times met?	•			
Were trip blanks analyzed at the proper frequency and in control?			•	Trip blank not analyzed for this method.
Were field blanks analyzed at the proper frequency and in control?			•	No field blanks were submitted with these samples.
Were equipment blanks analyzed at the proper frequency and in control?			•	No equipment blanks were submitted with these samples.
Was a method blank prepared and analyzed with each batch?	•			
Were target analytes in the method blank less than DL?	•			
Was an LCS/LCSD pair prepared and analyzed with each batch?	•			
Were LCS/LCSD recoveries within project acceptance limits?	•			
Was the LCS/LCSD RPD within project acceptance limits?		•		LCSD not performed.
Was a MS/MSD pair prepared with each batch?	•			
Were MS/MSD recoveries within project acceptance limits?	•			
Was the MS/MSD RPD within project acceptance limits?	•			
Were Post Spike (PS) recoveries within project acceptance limits?			•	PS not required per the method.
If ISM was used for sample collection, were laboratory triplicates analyzed and within project acceptance limits?			•	ISM not performed.
Were field replicates (duplicates, triplicates, etc.) analyzed at the proper frequency and in control?			•	No field replicates were submitted with these samples.
Were reported sample concentrations within calibration range?	•			
Have all Laboratory Case Narrative comments/findings been addressed in the data review process?	•			
Were DoD QSM corrective actions followed if deviations were noted?	•			
Were any data recommended for exclusion in the data validation process?		•		All data is acceptable as reported.

Review Questions

Method: A5310B (Standard Method for the Determination of Total Organic Carbon, Combustion IR Method)				
Review Questions	Yes	No	NA	Comment
Were there discrepancies between the COC and the samples received?		•		No discrepancies were noted between the COC and the samples received.
Were there discrepancies between the COC and the sample labels?		•		No discrepancies were noted between the COC and the sample labels.
Were samples relinquished properly on the COC?	•			
Were all samples properly preserved?	•			
Were sampling dates/times, date and time of laboratory receipt of samples, and sample conditions upon receipt at the laboratory (including preservation, pH, and temperature) documented?	•			
Were sample results reported with percent moisture correction if required?			•	Only water samples were collected.
Were analytical methods performed and analysis dates present?	•			
Were all requested target analytes reported?	•			
Were QAPP specified Project Quantitation Limit Goals achieved? (The laboratory LOQ is compared to the QAPP Project Quantitation Goal)	•			
Were holding times met?	•			
Were trip blanks analyzed at the proper frequency and in control?			•	Trip blank was not analyzed for this method.
Were field blanks analyzed at the proper frequency and in control?			•	No field blanks were submitted with these samples.
Were equipment blanks analyzed at the proper frequency and in control?			•	No equipment blanks were submitted with these samples.
Was a method blank prepared and analyzed with each batch?	•			
Were target analytes in the method blank less than DL?	•			
Was an LCS/LCSD pair prepared and analyzed with each batch?	•			
Were LCS/LCSD recoveries within project acceptance limits?	•			
Was the LCS/LCSD RPD within project acceptance limits?	•			
Was a MS/MSD pair prepared with each batch?	•			
Were MS/MSD recoveries within project acceptance limits?	•			
Was the MS/MSD RPD within project acceptance limits?	•			Laboratory DUP was also analyzed on a project sample. The DUP RPD was within control limits.
Were Post Spike (PS) recoveries within project acceptance limits?			•	PS not required per the method.
If ISM was used for sample collection, were laboratory triplicates analyzed and within project acceptance limits?			•	ISM not performed.
Were field replicates (duplicates, triplicates, etc.) analyzed at the proper frequency and in control?			•	No field replicates were submitted with these samples.
Were reported sample concentrations within calibration range?	•			
Have all Laboratory Case Narrative comments/findings been addressed in the data review process?	•			
Were DoD QSM corrective actions followed if deviations were noted?	•			
Were any data recommended for exclusion in the data validation process?		•		All data is acceptable as reported.

Review Questions

Method: BNASIM (GC/MS-SIM Analysis by SW8270)				
Review Questions	Yes	No	NA	Comment
Were there discrepancies between the COC and the samples received?		•		No discrepancies were noted between the COC and the samples received.
Were there discrepancies between the COC and the sample labels?		•		No discrepancies were noted between the COC and the sample labels.
Were samples relinquished properly on the COC?	•			
Were all samples properly preserved?	•			
Were sampling dates/times, date and time of laboratory receipt of samples, and sample conditions upon receipt at the laboratory (including preservation, pH, and temperature) documented?	•			
Were sample results reported with percent moisture correction if required?			•	Only water samples were collected.
Were analytical methods performed and analysis dates present?	•			
Were all requested target analytes reported?	•			
Were QAPP specified Project Quantitation Limit Goals achieved? (The laboratory LOQ is compared to the QAPP Project Quantitation Goal)	•			
Were holding times met?	•			
Were trip blanks analyzed at the proper frequency and in control?			•	Trip blank not analyzed for this method.
Were field blanks analyzed at the proper frequency and in control?			•	No field blanks were submitted with these samples.
Were equipment blanks analyzed at the proper frequency and in control?			•	No equipment blanks were submitted with these samples.
Was a method blank prepared and analyzed with each batch?	•			
Were target analytes in the method blank less than DL?	•			
Was an LCS/LCSD pair prepared and analyzed with each batch?	•			
Were LCS/LCSD recoveries within project acceptance limits?	•			
Was the LCS/LCSD RPD within project acceptance limits?	•			
Was a MS/MSD pair prepared with each batch?	•			
Were MS/MSD recoveries within project acceptance limits?		•		Due to low MS/MSD %R, several PAHs in samples SY-BRMW2-80.5-95.5-110723 and SY-OBMW12-110723 were qualified as nondetected estimated (UJ).
Was the MS/MSD RPD within project acceptance limits?		•		Although MS/MSD RPD was above criteria for several PAHs in sample SY-BRMW2-80.5-95.5-110723, the associated sample results were nondetect, therefore no data were qualified.
If ISM was used for sample collection, were laboratory triplicates analyzed and within project acceptance limits?			•	ISM not performed.
Were surrogate recoveries within project acceptance limits?	•			Although the FUDSChem DVR shows several surrogates above criteria, the affected samples were quality control samples, therefore no client sample results were qualified.
Were field replicates (duplicates, triplicates, etc.) analyzed at the proper frequency and in control?			•	No field replicates were submitted with these samples.
Were reported sample concentrations within calibration range?	•			

Review Questions

Method: BNASIM (GC/MS-SIM Analysis by SW8270)				
Review Questions	Yes	No	NA	Comment
Have all Laboratory Case Narrative comments/findings been addressed in the data review process?	•			
Were DoD QSM corrective actions followed if deviations were noted?	•			
Were any data recommended for exclusion in the data validation process?		•		All data is acceptable as reported or as qualified during data validation.

Review Questions

Method: E300 (Inorganic Anions In Water By Ion Chromatography)

Review Questions	Yes	No	NA	Comment
Were there discrepancies between the COC and the samples received?		•		No discrepancies were noted between the COC and the samples received.
Were there discrepancies between the COC and the sample labels?		•		No discrepancies were noted between the COC and the sample labels.
Were samples relinquished properly on the COC?	•			
Were all samples properly preserved?	•			
Were sampling dates/times, date and time of laboratory receipt of samples, and sample conditions upon receipt at the laboratory (including preservation, pH, and temperature) documented?	•			
Were sample results reported with percent moisture correction if required?			•	Only water samples were collected.
Were analytical methods performed and analysis dates present?	•			
Were all requested target analytes reported?	•			
Were QAPP specified Project Quantitation Limit Goals achieved? (The laboratory LOQ is compared to the QAPP Project Quantitation Goal)	•			
Were holding times met?	•			
Were trip blanks analyzed at the proper frequency and in control?			•	Trip blank not analyzed for this method.
Were field blanks analyzed at the proper frequency and in control?			•	No field blanks were submitted with these samples.
Were equipment blanks analyzed at the proper frequency and in control?			•	No equipment blanks were submitted with these samples.
Was a method blank prepared and analyzed with each batch?	•			
Were target analytes in the method blank less than DL?		•		Although sulfate was detected in the method blank, the associated sample results were significantly greater than the blank, therefore no data were qualified.
Was an LCS/LCSD pair prepared and analyzed with each batch?	•			
Were LCS/LCSD recoveries within project acceptance limits?	•			
Was the LCS/LCSD RPD within project acceptance limits?	•			
Was a MS/MSD pair prepared with each batch?	•			
Were MS/MSD recoveries within project acceptance limits?	•			
Was the MS/MSD RPD within project acceptance limits?	•			
Were Post Spike (PS) recoveries within project acceptance limits?			•	PS not required per the method.
If ISM was used for sample collection, were laboratory triplicates analyzed and within project acceptance limits?			•	ISM not performed.
Were field replicates (duplicates, triplicates, etc.) analyzed at the proper frequency and in control?			•	No field replicates were submitted with these samples.
Were reported sample concentrations within calibration range?	•			
Have all Laboratory Case Narrative comments/findings been addressed in the data review process?	•			
Were DoD QSM corrective actions followed if deviations were noted?	•			

Review Questions

Method: E300 (Inorganic Anions In Water By Ion Chromatography)				
Review Questions	Yes	No	NA	Comment
Were any data recommended for exclusion in the data validation process?		•		All data is acceptable as reported.

Review Questions

Method: RSK175 (Dissolved Gas Analysis in Water Samples Using a GC Headspace Equilibrium Technique)				
Review Questions	Yes	No	NA	Comment
Were there discrepancies between the COC and the samples received?		•		No discrepancies were noted between the COC and the samples received.
Were there discrepancies between the COC and the sample labels?		•		No discrepancies were noted beteeen the COC and the sample labels
Were samples relinquished properly on the COC?	•			
Were all samples properly preserved?	•			
Were sampling dates/times, date and time of laboratory receipt of samples, and sample conditions upon receipt at the laboratory (including preservation, pH, and temperature) documented?	•			
Were sample results reported with percent moisture correction if required?			•	Only water samples were collected.
Were analytical methods performed and analysis dates present?	•			
Were all requested target analytes reported?	•			
Were QAPP specified Project Quantitation Limit Goals achieved? (The laboratory LOQ is compared to the QAPP Project Quantitation Goal)	•			
Were holding times met?	•			
Were trip blanks analyzed at the proper frequency and in control?			•	Trip blank not analyzed for this method.
Were field blanks analyzed at the proper frequency and in control?			•	No field blanks were submitted with these samples.
Were equipment blanks analyzed at the proper frequency and in control?			•	No equipment blanks were submitted with these samples.
Was a method blank prepared and analyzed with each batch?	•			
Were target analytes in the method blank less than DL?		•		Due to method blank contamination, several methane results were qualified as estimated (J) with a high bias (+) or nondetect (U) at the LOQ.
Was an LCS/LCSD pair prepared and analyzed with each batch?	•			
Were LCS/LCSD recoveries within project acceptance limits?	•			
Was the LCS/LCSD RPD within project acceptance limits?			•	LCSD not performed.
Was a MS/MSD pair prepared with each batch?	•			
Were MS/MSD recoveries within project acceptance limits?	•			
Was the MS/MSD RPD within project acceptance limits?	•			
If ISM was used for sample collection, were laboratory triplicates analyzed and within project acceptance limits?			•	ISM not performed.
Were surrogate recoveries within project acceptance limits?			•	Surrogates not required for the requested analytes.
Were field replicates (duplicates, triplicates, etc.) analyzed at the proper frequency and in control?			•	No field blanks were submitted with these samples.
Were reported sample concentrations within calibration range?	•			
Have all Laboratory Case Narrative comments/findings been addressed in the data review process?	•			
Were DoD QSM corrective actions followed if deviations were noted?	•			

Review Questions

Method: RSK175 (Dissolved Gas Analysis in Water Samples Using a GC Headspace Equilibrium Technique)				
Review Questions	Yes	No	NA	Comment
Were any data recommended for exclusion in the data validation process?		•		All data is acceptable as reported or as qualified during data validation.

Review Questions

Method: SW7196A (Chromium, Hexavalent (Colorimetric))				
Review Questions	Yes	No	NA	Comment
Were there discrepancies between the COC and the samples received?		•		No discrepancies were noted between the COC and the samples received.
Were there discrepancies between the COC and the sample labels?		•		No discrepancies were noted between the COC and the sample labels.
Were samples relinquished properly on the COC?	•			
Were all samples properly preserved?	•			
Were sampling dates/times, date and time of laboratory receipt of samples, and sample conditions upon receipt at the laboratory (including preservation, pH, and temperature) documented?	•			
Were sample results reported with percent moisture correction if required?			•	Only water samples were collected.
Were analytical methods performed and analysis dates present?	•			
Were all requested target analytes reported?	•			
Were QAPP specified Project Quantitation Limit Goals achieved? (The laboratory LOQ is compared to the QAPP Project Quantitation Goal)	•			
Were holding times met?	•			
Were trip blanks analyzed at the proper frequency and in control?			•	Trip blank not analyzed for this method.
Were field blanks analyzed at the proper frequency and in control?			•	No field blanks were submitted with these samples.
Were equipment blanks analyzed at the proper frequency and in control?			•	No equipment blanks were submitted with these samples.
Was a method blank prepared and analyzed with each batch?	•			
Were target analytes in the method blank less than DL?	•			
Was an LCS/LCSD pair prepared and analyzed with each batch?	•			
Were LCS/LCSD recoveries within project acceptance limits?	•			
Was the LCS/LCSD RPD within project acceptance limits?	•			
Was a MS/MSD pair prepared with each batch?	•			
Were MS/MSD recoveries within project acceptance limits?	•			
Was the MS/MSD RPD within project acceptance limits?	•			
Were Post Spike (PS) recoveries within project acceptance limits?			•	PS not required per the method.
If ISM was used for sample collection, were laboratory triplicates analyzed and within project acceptance limits?			•	ISM not performed.
Were field replicates (duplicates, triplicates, etc.) analyzed at the proper frequency and in control?			•	No field replicates were submitted with these samples.
Were reported sample concentrations within calibration range?	•			
Have all Laboratory Case Narrative comments/findings been addressed in the data review process?	•			
Were DoD QSM corrective actions followed if deviations were noted?	•			
Were any data recommended for exclusion in the data validation process?		•		All data is acceptable as reported.

Review Questions

Method: SW8260C (Volatile Organic Compounds by GC/MS)				
Review Questions	Yes	No	NA	Comment
Were there discrepancies between the COC and the samples received?		•		No discrepancies were noted between the COC and the samples received.
Were there discrepancies between the COC and the sample labels?		•		No discrepancies were noted between the COC and the sample labels.
Were samples relinquished properly on the COC?	•			
Were all samples properly preserved?	•			
Were sampling dates/times, date and time of laboratory receipt of samples, and sample conditions upon receipt at the laboratory (including preservation, pH, and temperature) documented?	•			
Were sample results reported with percent moisture correction if required?			•	Only water samples were collected.
Were analytical methods performed and analysis dates present?	•			
Were all requested target analytes reported?	•			
Were QAPP specified Project Quantitation Limit Goals achieved? (The laboratory LOQ is compared to the QAPP Project Quantitation Goal)	•			
Were holding times met?	•			
Were trip blanks analyzed at the proper frequency and in control?	•			
Were field blanks analyzed at the proper frequency and in control?			•	No field blanks were submitted with these samples.
Were equipment blanks analyzed at the proper frequency and in control?			•	No equipment blanks were submitted with these samples.
Was a method blank prepared and analyzed with each batch?	•			
Were target analytes in the method blank less than DL?	•			
Was an LCS/LCSD pair prepared and analyzed with each batch?	•			
Were LCS/LCSD recoveries within project acceptance limits?	•			
Was the LCS/LCSD RPD within project acceptance limits?	•			
Was a MS/MSD pair prepared with each batch?	•			
Were MS/MSD recoveries within project acceptance limits?		•		Due to low MS/MSD %R, the vinyl chloride result in sample SY-OBMW12-110723 was qualified as detected estimated (J) with a low bias (-).
Was the MS/MSD RPD within project acceptance limits?	•			
If ISM was used for sample collection, were laboratory triplicates analyzed and within project acceptance limits?			•	ISM not performed.
Were surrogate recoveries within project acceptance limits?	•			
Were field replicates (duplicates, triplicates, etc.) analyzed at the proper frequency and in control?			•	No field replicates were submitted with these samples.
Were reported sample concentrations within calibration range?	•			
Have all Laboratory Case Narrative comments/findings been addressed in the data review process?	•			
Were DoD QSM corrective actions followed if deviations were noted?	•			
Were any data recommended for exclusion in the data validation process?		•		All data is acceptable as reported or as qualified during data validation.

Data Validation Report for SQ6179

Facility:	D01ME0004-07, Dow Military Airfield, Salvage Yard
Event:	Dow SY Groundwater Nov 2023
SDG:	SQ6179
Guidance Document:	Final UFP QAPP Revision No. 1 Remedial Investigation Former Salvage Yard Former Dow Military Airfield 233 Odlin Road, Bangor, Maine December 2022
Prime Contractor:	Credere Associates, LLC, Westbrook, ME
Project Manager:	Peter Thompson
Contract Laboratory(ies):	Katahdin Analytical Services, Scarborough, ME
Data Review Contractor:	EnSafe, Inc.
Data Review Level:	S2AVEM
Primary Data Reviewer:	Kevin Kha, Environmental Chemist
Second Reviewer:	Christina Ashdown, Senior Scientist
Date Submitted:	January 25, 2024

Field Sample ID	Lab Sample ID	Matrix	Type/Type Code	A2320B	A3500B	A5310B	BNASIM	E300	RSK175	SW7196A	SW8260C
SY-BRMW5-123-133-110823	SQ6179-6	Water	Field Sample/N	X	X	X	X	X	X	X	X
SY-BRMW5-29-44-110823	SQ6179-4	Water	Field Sample/N	X	X	X	X	X	X	X	X
SY-BRMW5-56-66-110823	SQ6179-5	Water	Field Sample/N	X	X	X	X	X	X	X	X
SY-OBMW110-110823	SQ6179-9	Water	Field Duplicate/FD	X	X	X	X	X	X	X	X
SY-OBMW1-110823	SQ6179-2	Water	Field Sample/N	X	X	X	X	X	X	X	X
SY-OBMW11-110823	SQ6179-8	Water	Field Sample/N	X	X	X	X	X	X	X	X
SY-OBMW2-110823	SQ6179-1	Water	Field Sample/N	X	X	X	X	X	X	X	X
SY-OBMW3-110823	SQ6179-10	Water	Field Sample/N	X	X	X	X	X	X	X	X
SY-OBMW8-110823	SQ6179-7	Water	Field Sample/N	X	X	X	X	X	X	X	X
SY-OBMW9-110823	SQ6179-3	Water	Field Sample/N	X	X	X	X	X	X	X	X

This report assesses the analytical data quality associated with the analyses listed on the preceding cover page at S2AVEM data validation level. This assessment has been made through a combination of automated data review (ADR) and supplemental manual review, the details of which are described below. The approach taken in the review of this data set is consistent with the requirements contained in the Final UFP QAPP Revision No. 1 Remedial Investigation Former Salvage Yard Former Dow Military Airfield 233 Odlin Road, Bangor, Maine December 2022 and the additional guidance documents incorporated by reference to the extent possible. Where definitive guidance is not provided, results have been evaluated in a conservative manner using professional judgment.

Sample collection was managed and directed by Credere Associates, LLC, Westbrook, ME; analyses were performed by Katahdin Analytical Services, Scarborough, ME and were reported under sample delivery group (SDG) SQ6179. Data have been evaluated electronically based on electronic data deliverables (EDDs) provided by the laboratory, and hard copy data summary forms have also been reviewed during this effort and compared to the automated review output by the reviewers whose signatures appear on the following page. Findings based on the automated data submission and manual data verification processes are detailed in the ADR narrative and throughout this report.

All quality control (QC) elements associated with this SDG have been reviewed by a project chemist in accordance with the requirements defined for the project. This review is documented in the attached Data Review Checklists. The QC elements listed below were supported by the electronic deliverable and were evaluated using ADR processes.

- Blank - Negative
- Field Duplicate RPD
- Lab Blank
- Lab Replicate RPD
- LCS Recovery
- LCS RPD
- MS Recovery
- Prep Hold Time
- Surrogate
- Test Hold Time

Results of the ADR process were subsequently reviewed and updated as applicable by the data review chemists identified on the signature page. Quality control elements that were not included in the electronic deliverable were reviewed manually and findings are documented within this report. Summaries of findings and associated qualified results are documented throughout this report.

A total of 41 results (12.42%) out of the 330 results (sample and field QC samples) reported are qualified based on review and 0 results (0.00%) have been rejected or deemed a serious deficiency (X qualifier). Trace values, defined as results that are qualified as estimated because they fall between the detection limit and the reporting limit/limit of quantitation, are not counted as qualified results in the above count. The qualified results are detailed throughout this report and discussed in the narrative below, where appropriate.

Narrative Comments

Analytical Method	Data Reviewer Comment
A2320B	No additional comments; see Checklist for detail.
A3500B	The laboratory case narrative indicates the following: "The samples SQ6179-1 and 2 were received by the lab with less than 1 hours left of the method-specified 24-hour holding time for ferrous iron analysis. SQ6179-1 was run 42 minutes out of hold and SQ6179-2 was run 12 minutes out of hold." The samples were analyzed within the 24th hour of the hold time and are considered within hold.
A5310B	No additional comments; see Checklist for detail.
BNASIM	The laboratory case narrative indicates the following: "Samples SQ6179-1 and 4 had low recoveries for the extraction surrogate pyrene-d10 that were outside of the DoD QSM acceptance limits. The client was contacted on 12/11/2023 and the laboratory was instructed to proceed with narration." The data was qualified accordingly during data validation. "Samples SQ6179-2, 6, and 8 had high recoveries for the extraction surrogates 2-methylnaphthalene-d10 that were outside of the DoD QSM acceptance limits. As this would indicate a high bias, and there were no target analytes detected in the samples, no further action was taken." No data were qualified since the associated results were nondetected. "The LCS WG345459-2 had a high recovery for the extraction surrogate 2-methylnaphthalene-d10 that was outside of the DoD QSM acceptance limits. Since the recoveries of the spiked target analytes were acceptable, no further action was taken." Laboratory QC is not qualified during data validation.
E300	No additional comments; see Checklist for detail.
RSK175	The laboratory case narrative indicates the following: "The target analyte methane was detected below 1/2 the LOQ in the method blank WG345654-1. According to the DoD QSM, a method blank is considered to be contaminated if the concentration of any target analyte in the blank exceeds 1/2 the reporting limit and is greater than 1/10 the amount measured in any sample. Since the method blank was acceptable, no further action was taken." The associated methane results were qualified as nondetected during data validation.
SW7196A	The laboratory case narrative indicates the following: "The samples SQ6179-1 and 2 were received by the lab with less than 1 hour left of the method-specified 24-hour holding time for hexavalent chromium analysis. SQ6179-1 was run 41 minutes out of hold and SQ6179-2 was run 11 minutes out of hold." The samples were analyzed within the 24th hour of the hold time and is considered within hold.
SW8260C	No additional comments; see Checklist for detail.



January 23, 2024

Reviewed by Kevin Kha, Environmental Chemist, EnSafe, Inc.

As the First Reviewer, I certify that I have performed a data review process in accordance with the requirements of the project guidance document, and have compared the electronic data to the laboratory's hard copy report and have verified the consistency of the reported sample results and method quality control data between the two deliverables.



Reviewed by Christina Ashdown, Senior Scientist, EnSafe, Inc. February 14, 2024

As the Second Reviewer, I certify that I have performed a quality assurance review of the report generated by the First Reviewer.

Quality Control Outliers for test method A2320B, Lab Blank

The purpose of laboratory blanks is to determine the existence and magnitude of cross-contamination problems resulting from laboratory activities. Reported results were evaluated to determine compliance with the required acceptance criteria. Summary forms were evaluated and compared to electronic data deliverables. Findings of this review, and contaminants found in laboratory blanks are listed below along with any associated qualified results.

Sample ID/ Lab Sample ID	Analyte	Result	Warning Limits	Control Limits	Units	Qualifier	Reason Code	Comment
WG345462-1 (LB)	Alkalinity, Total (as CaCO3)	2.80	< 0.23	< 5	mg/l	U/None*	L	

Where two qualifiers are listed, such as 'J/UJ', the first applies to positive results, and the second to non-detect results.
Upper and Lower Warning and Control Limits are abbreviated UWL, LWL, UCL, and LCL in the Comment field.

*Blank flags displayed in the above table identify qualification of the sample result when it is less than or equal to the LOQ/RL. Sample results above the LOD or LOQ will be qualified based on the validation guidance assigned in the project setup.

No results associated with this QC element required qualification.

Quality Control Outliers for test method BNASIM, Surrogate

Method performance for individual samples is demonstrated through spiking activities. All samples are spiked with surrogate compounds prior to sample preparation. The sample itself may produce effects due to such factors as interferences and high concentrations of analytes. Summary forms were evaluated and compared to electronic data deliverables. Surrogate results that were outside of the acceptance criteria are listed below.

Sample ID/ Lab Sample ID	Analyte	Result	Warning Limits	Control Limits	Units	Qualifier	Reason Code	Comment
SY-BRMW5-123-133-110823 (N)	2-Methylnaphthalene-d10	95.6	43 - 92	10 - 92	percent	J/None	I	
SY-BRMW5-29-44-110823 (STD)	Pyrene-d10	50.1	53 - 166	10 - 166	%	J/UJ	I	
SY-OBMW1-110823 (N)	2-Methylnaphthalene-d10	99.7	43 - 92	10 - 92	percent	J/None	I	
SY-OBMW11-110823 (N)	2-Methylnaphthalene-d10	95.6	43 - 92	10 - 92	percent	J/None	I	
SY-OBMW2-110823 (STD)	Pyrene-d10	52.1	53 - 166	10 - 166	%	J/UJ	I	

Where two qualifiers are listed, such as 'J/UJ', the first applies to positive results, and the second to non-detect results.
Upper and Lower Warning and Control Limits are abbreviated UWL, LWL, UCL, and LCL in the Comment field.

Qualified Results associated with the Surrogate for BNASIM

FieldSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
SY-BRMW5-29-44-110823 SQ6179-4	N	2-Methylnaphthalene	0.19	0.093 U	0.093 UJ		ug/l	I
SY-BRMW5-29-44-110823 SQ6179-4	N	Acenaphthene	0.19	0.093 U	0.093 UJ		ug/l	I
SY-BRMW5-29-44-110823 SQ6179-4	N	Acenaphthylene	0.19	0.093 U	0.093 UJ		ug/l	I
SY-BRMW5-29-44-110823 SQ6179-4	N	Anthracene	0.19	0.093 U	0.093 UJ		ug/l	I
SY-BRMW5-29-44-110823 SQ6179-4	N	Benzo(a)anthracene	0.19	0.093 U	0.093 UJ		ug/l	I
SY-BRMW5-29-44-110823 SQ6179-4	N	Benzo(a)pyrene	0.19	0.093 U	0.093 UJ		ug/l	I
SY-BRMW5-29-44-110823 SQ6179-4	N	Benzo(b)fluoranthene	0.19	0.093 U	0.093 UJ		ug/l	I
SY-BRMW5-29-44-110823 SQ6179-4	N	Benzo(g,h,i)perylene	0.19	0.093 U	0.093 UJ		ug/l	I
SY-BRMW5-29-44-110823 SQ6179-4	N	Benzo(k)fluoranthene	0.19	0.093 U	0.093 UJ		ug/l	I
SY-BRMW5-29-44-110823 SQ6179-4	N	Chrysene	0.19	0.093 U	0.093 UJ		ug/l	I
SY-BRMW5-29-44-110823 SQ6179-4	N	Dibenz(a,h)anthracene	0.19	0.093 U	0.093 UJ		ug/l	I
SY-BRMW5-29-44-110823 SQ6179-4	N	Fluoranthene	0.19	0.093 U	0.093 UJ		ug/l	I
SY-BRMW5-29-44-110823 SQ6179-4	N	Fluorene	0.19	0.093 U	0.093 UJ		ug/l	I
SY-BRMW5-29-44-110823 SQ6179-4	N	Indeno(1,2,3-c,d)pyrene	0.19	0.093 U	0.093 UJ		ug/l	I
SY-BRMW5-29-44-110823 SQ6179-4	N	Naphthalene	0.19	0.093 U	0.093 UJ		ug/l	I

Qualified Results associated with the Surrogate for BNASIM

FieldSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
SY-BRMW5-29-44-110823 SQ6179-4	N	Phenanthrene	0.19	0.093 U	0.093 UJ		ug/l	I
SY-BRMW5-29-44-110823 SQ6179-4	N	Pyrene	0.19	0.093 U	0.093 UJ		ug/l	I
SY-OBMW2-110823 SQ6179-1	N	2-Methylnaphthalene	0.19	0.094 U	0.094 UJ		ug/l	I
SY-OBMW2-110823 SQ6179-1	N	Acenaphthene	0.19	0.094 U	0.094 UJ		ug/l	I
SY-OBMW2-110823 SQ6179-1	N	Acenaphthylene	0.19	0.094 U	0.094 UJ		ug/l	I
SY-OBMW2-110823 SQ6179-1	N	Anthracene	0.19	0.094 U	0.094 UJ		ug/l	I
SY-OBMW2-110823 SQ6179-1	N	Benzo(a)anthracene	0.19	0.094 U	0.094 UJ		ug/l	I
SY-OBMW2-110823 SQ6179-1	N	Benzo(a)pyrene	0.19	0.094 U	0.094 UJ		ug/l	I
SY-OBMW2-110823 SQ6179-1	N	Benzo(b)fluoranthene	0.19	0.094 U	0.094 UJ		ug/l	I
SY-OBMW2-110823 SQ6179-1	N	Benzo(g,h,i)perylene	0.19	0.094 U	0.094 UJ		ug/l	I
SY-OBMW2-110823 SQ6179-1	N	Benzo(k)fluoranthene	0.19	0.094 U	0.094 UJ		ug/l	I
SY-OBMW2-110823 SQ6179-1	N	Chrysene	0.19	0.094 U	0.094 UJ		ug/l	I
SY-OBMW2-110823 SQ6179-1	N	Dibenz(a,h)anthracene	0.19	0.094 U	0.094 UJ		ug/l	I
SY-OBMW2-110823 SQ6179-1	N	Fluoranthene	0.19	0.094 U	0.094 UJ		ug/l	I
SY-OBMW2-110823 SQ6179-1	N	Fluorene	0.19	0.094 U	0.094 UJ		ug/l	I
SY-OBMW2-110823 SQ6179-1	N	Indeno(1,2,3-c,d)pyrene	0.19	0.094 U	0.094 UJ		ug/l	I
SY-OBMW2-110823 SQ6179-1	N	Naphthalene	0.19	0.094 U	0.094 UJ		ug/l	I
SY-OBMW2-110823 SQ6179-1	N	Phenanthrene	0.19	0.094 U	0.094 UJ		ug/l	I
SY-OBMW2-110823 SQ6179-1	N	Pyrene	0.19	0.094 U	0.094 UJ		ug/l	I

Analytes not found in project samples are reported as not detected at the limit of detection (LOD) unless blank contamination occurs and then the sample may be reported as not detected at the (LOD) or (LOQ) based on the sample concentration and the validation guidance. In instances where no LOD is provided, results are reported down to the LOQ.

Quality Control Outliers for test method E300, Lab Blank

The purpose of laboratory blanks is to determine the existence and magnitude of cross-contamination problems resulting from laboratory activities. Reported results were evaluated to determine compliance with the required acceptance criteria. Summary forms were evaluated and compared to electronic data deliverables. Findings of this review, and contaminants found in laboratory blanks are listed below along with any associated qualified results.

Sample ID/ Lab Sample ID	Analyte	Result	Warning Limits	Control Limits	Units	Qualifier	Reason Code	Comment
WG345207-1 (LB)	Sulfate	0.0680	< 0.064	< 1	mg/l	U/None*	L	
WG346307-1 (LB)	Sulfate	0.110	< 0.064	< 1	mg/l	U/None*	L	

Where two qualifiers are listed, such as 'J/UJ', the first applies to positive results, and the second to non-detect results.
Upper and Lower Warning and Control Limits are abbreviated UWL, LWL, UCL, and LCL in the Comment field.

*Blank flags displayed in the above table identify qualification of the sample result when it is less than or equal to the LOQ/RL. Sample results above the LOD or LOQ will be qualified based on the validation guidance assigned in the project setup.

No results associated with this QC element required qualification.

Quality Control Outliers for test method RSK175, Lab Blank

The purpose of laboratory blanks is to determine the existence and magnitude of cross-contamination problems resulting from laboratory activities. Reported results were evaluated to determine compliance with the required acceptance criteria. Summary forms were evaluated and compared to electronic data deliverables. Findings of this review, and contaminants found in laboratory blanks are listed below along with any associated qualified results.

Sample ID/ Lab Sample ID	Analyte	Result	Warning Limits	Control Limits	Units	Qualifier	Reason Code	Comment
WG345654-1 (LB)	Methane	3.10	< 2.6	< 10	ug/l	U/None*	L	

Where two qualifiers are listed, such as 'J/UJ', the first applies to positive results, and the second to non-detect results.
Upper and Lower Warning and Control Limits are abbreviated UWL, LWL, UCL, and LCL in the Comment field.

*Blank flags displayed in the above table identify qualification of the sample result when it is less than or equal to the LOQ/RL. Sample results above the LOD or LOQ will be qualified based on the validation guidance assigned in the project setup.

Qualified Results associated with the Lab Blank for RSK175

FieldSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
SY-BRMW5-56-66-110823 SQ6179-5	N	Methane	10	3.7 J	10 U		ug/l	L
SY-OBMW110-110823 SQ6179-9	FD	Methane	10	5.8 J	5.8 J	+	ug/l	L
SY-OBMW1-110823 SQ6179-2	N	Methane	10	5.5 J	5.5 J	+	ug/l	L
SY-OBMW11-110823 SQ6179-8	N	Methane	10	5.3 J	5.3 J	+	ug/l	L
SY-OBMW2-110823 SQ6179-1	N	Methane	10	3.8 J	10 U		ug/l	L
SY-OBMW3-110823 SQ6179-10	N	Methane	10	3.2 J	10 U		ug/l	L
SY-OBMW8-110823 SQ6179-7	N	Methane	10	6.6 J	6.6 J	+	ug/l	L

Analytes not found in project samples are reported as not detected at the limit of detection (LOD) unless blank contamination occurs and then the sample may be reported as not detected at the (LOD) or (LOQ) based on the sample concentration and the validation guidance. In instances where no LOD is provided, results are reported down to the LOQ.

Table of All Qualified Results

Test Method: BNASIM		Extraction Method: SW3510C						
FieldSample ID / LabSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
SY-BRMW5-29-44-110823 SQ6179-4	N	2-Methylnaphthalene	0.19	0.093 U	0.093 UJ		ug/l	I
SY-BRMW5-29-44-110823 SQ6179-4	N	Acenaphthene	0.19	0.093 U	0.093 UJ		ug/l	I
SY-BRMW5-29-44-110823 SQ6179-4	N	Acenaphthylene	0.19	0.093 U	0.093 UJ		ug/l	I
SY-BRMW5-29-44-110823 SQ6179-4	N	Anthracene	0.19	0.093 U	0.093 UJ		ug/l	I
SY-BRMW5-29-44-110823 SQ6179-4	N	Benzo(a)anthracene	0.19	0.093 U	0.093 UJ		ug/l	I
SY-BRMW5-29-44-110823 SQ6179-4	N	Benzo(a)pyrene	0.19	0.093 U	0.093 UJ		ug/l	I
SY-BRMW5-29-44-110823 SQ6179-4	N	Benzo(b)fluoranthene	0.19	0.093 U	0.093 UJ		ug/l	I
SY-BRMW5-29-44-110823 SQ6179-4	N	Benzo(g,h,i)perylene	0.19	0.093 U	0.093 UJ		ug/l	I
SY-BRMW5-29-44-110823 SQ6179-4	N	Benzo(k)fluoranthene	0.19	0.093 U	0.093 UJ		ug/l	I
SY-BRMW5-29-44-110823 SQ6179-4	N	Chrysene	0.19	0.093 U	0.093 UJ		ug/l	I
SY-BRMW5-29-44-110823 SQ6179-4	N	Dibenz(a,h)anthracene	0.19	0.093 U	0.093 UJ		ug/l	I
SY-BRMW5-29-44-110823 SQ6179-4	N	Fluoranthene	0.19	0.093 U	0.093 UJ		ug/l	I
SY-BRMW5-29-44-110823 SQ6179-4	N	Fluorene	0.19	0.093 U	0.093 UJ		ug/l	I
SY-BRMW5-29-44-110823 SQ6179-4	N	Indeno(1,2,3-c,d)pyrene	0.19	0.093 U	0.093 UJ		ug/l	I
SY-BRMW5-29-44-110823 SQ6179-4	N	Naphthalene	0.19	0.093 U	0.093 UJ		ug/l	I
SY-BRMW5-29-44-110823 SQ6179-4	N	Phenanthrene	0.19	0.093 U	0.093 UJ		ug/l	I
SY-BRMW5-29-44-110823 SQ6179-4	N	Pyrene	0.19	0.093 U	0.093 UJ		ug/l	I
SY-OBMW2-110823 SQ6179-1	N	2-Methylnaphthalene	0.19	0.094 U	0.094 UJ		ug/l	I
SY-OBMW2-110823 SQ6179-1	N	Acenaphthene	0.19	0.094 U	0.094 UJ		ug/l	I
SY-OBMW2-110823 SQ6179-1	N	Acenaphthylene	0.19	0.094 U	0.094 UJ		ug/l	I
SY-OBMW2-110823 SQ6179-1	N	Anthracene	0.19	0.094 U	0.094 UJ		ug/l	I
SY-OBMW2-110823 SQ6179-1	N	Benzo(a)anthracene	0.19	0.094 U	0.094 UJ		ug/l	I
SY-OBMW2-110823 SQ6179-1	N	Benzo(a)pyrene	0.19	0.094 U	0.094 UJ		ug/l	I
SY-OBMW2-110823 SQ6179-1	N	Benzo(b)fluoranthene	0.19	0.094 U	0.094 UJ		ug/l	I
SY-OBMW2-110823 SQ6179-1	N	Benzo(g,h,i)perylene	0.19	0.094 U	0.094 UJ		ug/l	I
SY-OBMW2-110823 SQ6179-1	N	Benzo(k)fluoranthene	0.19	0.094 U	0.094 UJ		ug/l	I

Table of All Qualified Results

Test Method: BNASIM		Extraction Method: SW3510C						
FieldSample ID / LabSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
SY-OBMW2-110823 SQ6179-1	N	Chrysene	0.19	0.094 U	0.094 UJ		ug/l	I
SY-OBMW2-110823 SQ6179-1	N	Dibenz(a,h)anthracene	0.19	0.094 U	0.094 UJ		ug/l	I
SY-OBMW2-110823 SQ6179-1	N	Fluoranthene	0.19	0.094 U	0.094 UJ		ug/l	I
SY-OBMW2-110823 SQ6179-1	N	Fluorene	0.19	0.094 U	0.094 UJ		ug/l	I
SY-OBMW2-110823 SQ6179-1	N	Indeno(1,2,3-c,d)pyrene	0.19	0.094 U	0.094 UJ		ug/l	I
SY-OBMW2-110823 SQ6179-1	N	Naphthalene	0.19	0.094 U	0.094 UJ		ug/l	I
SY-OBMW2-110823 SQ6179-1	N	Phenanthrene	0.19	0.094 U	0.094 UJ		ug/l	I
SY-OBMW2-110823 SQ6179-1	N	Pyrene	0.19	0.094 U	0.094 UJ		ug/l	I

Test Method: RSK175		Extraction Method: METHOD						
FieldSample ID / LabSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
SY-BRMW5-56-66-110823 SQ6179-5	N	Methane	10	3.7 J	10 U		ug/l	L
SY-OBMW110-110823 SQ6179-9	FD	Methane	10	5.8 J	5.8 J	+	ug/l	L
SY-OBMW1-110823 SQ6179-2	N	Methane	10	5.5 J	5.5 J	+	ug/l	L
SY-OBMW11-110823 SQ6179-8	N	Methane	10	5.3 J	5.3 J	+	ug/l	L
SY-OBMW2-110823 SQ6179-1	N	Methane	10	3.8 J	10 U		ug/l	L
SY-OBMW3-110823 SQ6179-10	N	Methane	10	3.2 J	10 U		ug/l	L
SY-OBMW8-110823 SQ6179-7	N	Methane	10	6.6 J	6.6 J	+	ug/l	L

Analytes not found in project samples are reported as not detected at the limit of detection (LOD) unless blank contamination occurs and then the sample may be reported as not detected at the (LOQ) based on the sample concentration.
In instances where no LOD is provided, results are reported down to the LOQ.
Trace values are not included in the qualified results table unless additional reason codes are associated.

Table of Results with Modified Qualifiers

Modified Qualifiers for test method BNASIM

FieldSample ID / LabSample ID	Type	Analyte	LOQ	Lab Result	ADR Result	ADR Reason	Modified Result	Reason
SY-BRMW5-29-44-110823 SQ6179-4	N	2-Methylnaphthalene	0.19	0.093 U	0.093 U		0.093 UJ	I
SY-BRMW5-29-44-110823 SQ6179-4	N	Acenaphthene	0.19	0.093 U	0.093 U		0.093 UJ	I
SY-BRMW5-29-44-110823 SQ6179-4	N	Acenaphthylene	0.19	0.093 U	0.093 U		0.093 UJ	I
SY-BRMW5-29-44-110823 SQ6179-4	N	Anthracene	0.19	0.093 U	0.093 U		0.093 UJ	I
SY-BRMW5-29-44-110823 SQ6179-4	N	Benzo(a)anthracene	0.19	0.093 U	0.093 U		0.093 UJ	I
SY-BRMW5-29-44-110823 SQ6179-4	N	Benzo(a)pyrene	0.19	0.093 U	0.093 U		0.093 UJ	I
SY-BRMW5-29-44-110823 SQ6179-4	N	Benzo(b)fluoranthene	0.19	0.093 U	0.093 U		0.093 UJ	I
SY-BRMW5-29-44-110823 SQ6179-4	N	Benzo(g,h,i)perylene	0.19	0.093 U	0.093 U		0.093 UJ	I
SY-BRMW5-29-44-110823 SQ6179-4	N	Benzo(k)fluoranthene	0.19	0.093 U	0.093 U		0.093 UJ	I
SY-BRMW5-29-44-110823 SQ6179-4	N	Chrysene	0.19	0.093 U	0.093 U		0.093 UJ	I
SY-BRMW5-29-44-110823 SQ6179-4	N	Dibenz(a,h)anthracene	0.19	0.093 U	0.093 U		0.093 UJ	I
SY-BRMW5-29-44-110823 SQ6179-4	N	Fluoranthene	0.19	0.093 U	0.093 U		0.093 UJ	I
SY-BRMW5-29-44-110823 SQ6179-4	N	Fluorene	0.19	0.093 U	0.093 U		0.093 UJ	I
SY-BRMW5-29-44-110823 SQ6179-4	N	Indeno(1,2,3-c,d)pyrene	0.19	0.093 U	0.093 U		0.093 UJ	I
SY-BRMW5-29-44-110823 SQ6179-4	N	Naphthalene	0.19	0.093 U	0.093 U		0.093 UJ	I
SY-BRMW5-29-44-110823 SQ6179-4	N	Phenanthrene	0.19	0.093 U	0.093 U		0.093 UJ	I
SY-BRMW5-29-44-110823 SQ6179-4	N	Pyrene	0.19	0.093 U	0.093 U		0.093 UJ	I
SY-OBMW2-110823 SQ6179-1	N	2-Methylnaphthalene	0.19	0.094 U	0.094 U		0.094 UJ	I
SY-OBMW2-110823 SQ6179-1	N	Acenaphthene	0.19	0.094 U	0.094 U		0.094 UJ	I
SY-OBMW2-110823 SQ6179-1	N	Acenaphthylene	0.19	0.094 U	0.094 U		0.094 UJ	I
SY-OBMW2-110823 SQ6179-1	N	Anthracene	0.19	0.094 U	0.094 U		0.094 UJ	I
SY-OBMW2-110823 SQ6179-1	N	Benzo(a)anthracene	0.19	0.094 U	0.094 U		0.094 UJ	I
SY-OBMW2-110823 SQ6179-1	N	Benzo(a)pyrene	0.19	0.094 U	0.094 U		0.094 UJ	I
SY-OBMW2-110823 SQ6179-1	N	Benzo(b)fluoranthene	0.19	0.094 U	0.094 U		0.094 UJ	I
SY-OBMW2-110823 SQ6179-1	N	Benzo(g,h,i)perylene	0.19	0.094 U	0.094 U		0.094 UJ	I
SY-OBMW2-110823 SQ6179-1	N	Benzo(k)fluoranthene	0.19	0.094 U	0.094 U		0.094 UJ	I

Table of Results with Modified Qualifiers

Modified Qualifiers for test method BNASIM

FieldSample ID / LabSample ID	Type	Analyte	LOQ	Lab Result	ADR Result	ADR Reason	Modified Result	Reason
SY-OBMW2-110823 SQ6179-1	N	Chrysene	0.19	0.094 U	0.094 U		0.094 UJ	I
SY-OBMW2-110823 SQ6179-1	N	Dibenz(a,h)anthracene	0.19	0.094 U	0.094 U		0.094 UJ	I
SY-OBMW2-110823 SQ6179-1	N	Fluoranthene	0.19	0.094 U	0.094 U		0.094 UJ	I
SY-OBMW2-110823 SQ6179-1	N	Fluorene	0.19	0.094 U	0.094 U		0.094 UJ	I
SY-OBMW2-110823 SQ6179-1	N	Indeno(1,2,3-c,d)pyrene	0.19	0.094 U	0.094 U		0.094 UJ	I
SY-OBMW2-110823 SQ6179-1	N	Naphthalene	0.19	0.094 U	0.094 U		0.094 UJ	I
SY-OBMW2-110823 SQ6179-1	N	Phenanthrene	0.19	0.094 U	0.094 U		0.094 UJ	I
SY-OBMW2-110823 SQ6179-1	N	Pyrene	0.19	0.094 U	0.094 U		0.094 UJ	I

Modified Qualifiers for test method RSK175

FieldSample ID / LabSample ID	Type	Analyte	LOQ	Lab Result	ADR Result	ADR Reason	Modified Result	Reason
SY-OBMW110-110823 SQ6179-9	FD	Methane	10	5.8 J	10 U	L	5.8 J	L
SY-OBMW1-110823 SQ6179-2	N	Methane	10	5.5 J	10 U	L	5.5 J	L
SY-OBMW11-110823 SQ6179-8	N	Methane	10	5.3 J	10 U	L	5.3 J	L
SY-OBMW8-110823 SQ6179-7	N	Methane	10	6.6 J	10 U	L	6.6 J	L
SY-OBMW9-110823 SQ6179-3	N	Methane	10	24	10 U	L	24	

Analytes not found in project samples are reported as not detected at the limit of detection (LOD) unless blank contamination occurs and then the sample may be reported as not detected at the (LOQ) based on the sample concentration.
In instances where no LOD is provided, results are reported down to the LOQ.
Trace values are not included in the qualified results table unless additional reason codes are associated.

Reason Code Definitions

Code	Definition
I	Surrogate recovery outside project limits.
L	Lab Blank
TR	Trace Level Detect

Flag Code and Definitions

Flag	Definition
J	Estimated Value
N	The analysis indicates the presence of an analyte for which there was presumptive evidence to make a tentative identification.
NJ	The analyte has been tentatively identified or presumptively as present and the associated numerical value was the estimated concentration in the sample.
R	The data are rejected due to deficiencies in meeting QC criteria and may not be used for decision making.

U	Undetected: The analyte was analyzed for, but not detected.
UJ	The analyte was not detected; however, the result is estimated due to discrepancies in meeting certain analyte-specific quality control criteria.
X	Result may require rejection; PDT attention required

Bias	
-	The result may be biased low
+	The result may be biased high
Note - The bias field is a separate field; however, it is an integral part of the final flag (qualifier) on the sample result	

Review Questions

Method: A2320B (Alkalinity by Titrimetric Method)

Review Questions	Yes	No	NA	Comment
Were there discrepancies between the COC and the samples received?		•		No discrepancies were noted between the COC and the samples received.
Were there discrepancies between the COC and the sample labels?		•		No discrepancies were noted between the COC and the sample labels.
Were samples relinquished properly on the COC?	•			
Were all samples properly preserved?	•			
Were sampling dates/times, date and time of laboratory receipt of samples, and sample conditions upon receipt at the laboratory (including preservation, pH, and temperature) documented?	•			
Were sample results reported with percent moisture correction if required?			•	Only water samples were collected.
Were analytical methods performed and analysis dates present?	•			
Were all requested target analytes reported?	•			
Were QAPP specified Project Quantitation Limit Goals achieved? (The laboratory LOQ is compared to the QAPP Project Quantitation Goal)	•			
Were holding times met?	•			
Were trip blanks analyzed at the proper frequency and in control?			•	Trip blank not analyzed for this method.
Were field blanks analyzed at the proper frequency and in control?			•	No field blanks were submitted with these samples.
Were equipment blanks analyzed at the proper frequency and in control?			•	No equipment blanks were submitted with these samples.
Was a method blank prepared and analyzed with each batch?	•			
Were target analytes in the method blank less than DL?		•		Although alkalinity was detected in the method blank, the associated sample results were significantly greater than the concentration found in the blank, therefore no data were qualified.
Was an LCS/LCSD pair prepared and analyzed with each batch?	•			
Were LCS/LCSD recoveries within project acceptance limits?	•			
Was the LCS/LCSD RPD within project acceptance limits?	•			
Was a MS/MSD pair prepared with each batch?			•	MS/MSD not reported.
Were MS/MSD recoveries within project acceptance limits?			•	MS/MSD not reported.
Was the MS/MSD RPD within project acceptance limits?			•	MS/MSD not reported.
Were Post Spike (PS) recoveries within project acceptance limits?			•	PS not required per the method.
If ISM was used for sample collection, were laboratory triplicates analyzed and within project acceptance limits?			•	ISM not performed.
Were field replicates (duplicates, triplicates, etc.) analyzed at the proper frequency and in control?	•			
Were reported sample concentrations within calibration range?	•			
Have all Laboratory Case Narrative comments/findings been addressed in the data review process?	•			
Were DoD QSM corrective actions followed if deviations were noted?	•			

Review Questions

Method: A2320B (Alkalinity by Titrimetric Method)				
Review Questions	Yes	No	NA	Comment
Were any data recommended for exclusion in the data validation process?		•		All data is acceptable as reported.

Review Questions

Method: A3500B (The Determination of Ferrous Iron, Phenanthroline Method)				
Review Questions	Yes	No	NA	Comment
Were there discrepancies between the COC and the samples received?		•		No discrepancies were noted between the COC and the samples received.
Were there discrepancies between the COC and the sample labels?		•		No discrepancies were noted between the COC and the sample labels.
Were samples relinquished properly on the COC?	•			
Were all samples properly preserved?	•			
Were sampling dates/times, date and time of laboratory receipt of samples, and sample conditions upon receipt at the laboratory (including preservation, pH, and temperature) documented?	•			
Were analytical methods performed and analysis dates present?	•			
Were all requested target analytes reported?	•			
Were QAPP specified Project Quantitation Limit Goals achieved? (The laboratory LOQ is compared to the QAPP Project Quantitation Goal)	•			
Were holding times met?	•			Although the laboratory case narrative indicated 2 samples were analyzed outside of the 24-hour holding time, the samples were analyzed within the 24th hour and are considered within hold.
Were trip blanks analyzed at the proper frequency and in control?			•	Trip blank not analyzed for this method.
Were field blanks analyzed at the proper frequency and in control?			•	No field blanks were submitted with these samples.
Were equipment blanks analyzed at the proper frequency and in control?			•	No equipment blanks were submitted with these samples.
Was a method blank prepared and analyzed with each batch?	•			
Were target analytes in the method blank less than DL?	•			
Was an LCS/LCSD pair prepared and analyzed with each batch?	•			
Were LCS/LCSD recoveries within project acceptance limits?	•			
Was the LCS/LCSD RPD within project acceptance limits?	•			
Was a MS/MSD pair prepared with each batch?			•	MS/MSD not reported.
Were MS/MSD recoveries within project acceptance limits?			•	MS/MSD not reported.
Was the MS/MSD RPD within project acceptance limits?			•	MS/MSD not reported.
Were Post Spike (PS) recoveries within project acceptance limits?			•	PS not required per the method.
If ISM was used for sample collection, were laboratory triplicates analyzed and within project acceptance limits?			•	ISM not performed.
Were field replicates (duplicates, triplicates, etc.) analyzed at the proper frequency and in control?	•			
Were reported sample concentrations within calibration range?	•			
Have all Laboratory Case Narrative comments/findings been addressed in the data review process?	•			
Were DoD QSM corrective actions followed if deviations were noted?	•			
Were any data recommended for exclusion in the data validation process?		•		All data is acceptable as reported.

Review Questions

Method: A5310B (Standard Method for the Determination of Total Organic Carbon, Combustion IR Method)				
Review Questions	Yes	No	NA	Comment
Were there discrepancies between the COC and the samples received?		•		No discrepancies were noted between the COC and the samples received.
Were there discrepancies between the COC and the sample labels?		•		No discrepancies were noted between the COC and the sample labels.
Were samples relinquished properly on the COC?	•			
Were all samples properly preserved?	•			
Were sampling dates/times, date and time of laboratory receipt of samples, and sample conditions upon receipt at the laboratory (including preservation, pH, and temperature) documented?	•			
Were sample results reported with percent moisture correction if required?			•	Only water samples were collected.
Were analytical methods performed and analysis dates present?	•			
Were all requested target analytes reported?	•			
Were QAPP specified Project Quantitation Limit Goals achieved? (The laboratory LOQ is compared to the QAPP Project Quantitation Goal)	•			
Were holding times met?	•			
Were trip blanks analyzed at the proper frequency and in control?			•	Trip blank not analyzed for this method.
Were field blanks analyzed at the proper frequency and in control?			•	No field blanks were submitted with these samples.
Were equipment blanks analyzed at the proper frequency and in control?			•	No equipment blanks were submitted with these samples.
Was a method blank prepared and analyzed with each batch?	•			
Were target analytes in the method blank less than DL?	•			
Was an LCS/LCSD pair prepared and analyzed with each batch?	•			
Were LCS/LCSD recoveries within project acceptance limits?	•			
Was the LCS/LCSD RPD within project acceptance limits?	•			
Was a MS/MSD pair prepared with each batch?	•			
Were MS/MSD recoveries within project acceptance limits?	•			
Was the MS/MSD RPD within project acceptance limits?	•			MSD not performed. A laboratory DUP was analyzed and DUP RPD was within control criteria.
Were Post Spike (PS) recoveries within project acceptance limits?			•	PS not required per the method.
If ISM was used for sample collection, were laboratory triplicates analyzed and within project acceptance limits?			•	ISM not performed.
Were field replicates (duplicates, triplicates, etc.) analyzed at the proper frequency and in control?	•			
Were reported sample concentrations within calibration range?	•			
Have all Laboratory Case Narrative comments/findings been addressed in the data review process?	•			
Were DoD QSM corrective actions followed if deviations were noted?	•			

Review Questions

Method: A5310B (Standard Method for the Determination of Total Organic Carbon, Combustion IR Method)				
Review Questions	Yes	No	NA	Comment
Were any data recommended for exclusion in the data validation process?		•		All data is acceptable as reported.

Review Questions

Method: BNASIM (GC/MS-SIM Analysis by SW8270)

Review Questions	Yes	No	NA	Comment
Were there discrepancies between the COC and the samples received?		•		No discrepancies were noted between the COC and the samples received.
Were there discrepancies between the COC and the sample labels?		•		No discrepancies were noted between the COC and the sample labels.
Were samples relinquished properly on the COC?	•			
Were all samples properly preserved?	•			
Were sampling dates/times, date and time of laboratory receipt of samples, and sample conditions upon receipt at the laboratory (including preservation, pH, and temperature) documented?	•			
Were sample results reported with percent moisture correction if required?			•	Only water samples were collected.
Were analytical methods performed and analysis dates present?	•			
Were all requested target analytes reported?	•			
Were QAPP specified Project Quantitation Limit Goals achieved? (The laboratory LOQ is compared to the QAPP Project Quantitation Goal)	•			
Were holding times met?	•			
Were trip blanks analyzed at the proper frequency and in control?			•	Trip blank not analyzed for this method.
Were field blanks analyzed at the proper frequency and in control?			•	No field blanks were submitted with these samples.
Were equipment blanks analyzed at the proper frequency and in control?			•	No equipment blanks were submitted with these samples.
Was a method blank prepared and analyzed with each batch?	•			
Were target analytes in the method blank less than DL?	•			
Was an LCS/LCSD pair prepared and analyzed with each batch?	•			
Were LCS/LCSD recoveries within project acceptance limits?	•			
Was the LCS/LCSD RPD within project acceptance limits?			•	LCSD not performed.
Was a MS/MSD pair prepared with each batch?			•	MS/MSD not reported.
Were MS/MSD recoveries within project acceptance limits?			•	MS/MSD not reported.
Was the MS/MSD RPD within project acceptance limits?			•	MS/MSD not reported.
If ISM was used for sample collection, were laboratory triplicates analyzed and within project acceptance limits?			•	ISM not performed.
Were surrogate recoveries within project acceptance limits?		•		Due to surrogate %R below criteria, samples SY-BRMW5-29-44-110823 and SY-OBMW2-110823 were qualified as nondetected estimated (UJ). Although surrogate %R was above criteria in several samples, the associated results were nondetected, therefore no data were qualified.
Were field replicates (duplicates, triplicates, etc.) analyzed at the proper frequency and in control?	•			
Were reported sample concentrations within calibration range?	•			
Have all Laboratory Case Narrative comments/findings been addressed in the data review process?	•			

Review Questions

Method: BNASIM (GC/MS-SIM Analysis by SW8270)				
Review Questions	Yes	No	NA	Comment
Were DoD QSM corrective actions followed if deviations were noted?	•			
Were any data recommended for exclusion in the data validation process?		•		All data is acceptable as reported or as qualified during data validation.

Review Questions

Method: E300 (Inorganic Anions In Water By Ion Chromatography)

Review Questions	Yes	No	NA	Comment
Were there discrepancies between the COC and the samples received?		•		No discrepancies were noted between the COC and the samples received.
Were there discrepancies between the COC and the sample labels?		•		No discrepancies were noted between the COC and the sample labels.
Were samples relinquished properly on the COC?	•			
Were all samples properly preserved?	•			
Were sampling dates/times, date and time of laboratory receipt of samples, and sample conditions upon receipt at the laboratory (including preservation, pH, and temperature) documented?	•			
Were sample results reported with percent moisture correction if required?			•	Only water samples were collected.
Were analytical methods performed and analysis dates present?	•			
Were all requested target analytes reported?	•			
Were QAPP specified Project Quantitation Limit Goals achieved? (The laboratory LOQ is compared to the QAPP Project Quantitation Goal)	•			
Were holding times met?	•			
Were trip blanks analyzed at the proper frequency and in control?			•	Trip blank not analyzed for this method.
Were field blanks analyzed at the proper frequency and in control?			•	No field blanks were submitted with these samples.
Were equipment blanks analyzed at the proper frequency and in control?			•	No equipment blanks were submitted with these samples.
Was a method blank prepared and analyzed with each batch?	•			
Were target analytes in the method blank less than DL?		•		Although sulfate was detected in the method blanks, the associated sample results were significantly greater than the concentration found in the blank, therefore no data were qualified.
Was an LCS/LCSD pair prepared and analyzed with each batch?	•			
Were LCS/LCSD recoveries within project acceptance limits?	•			
Was the LCS/LCSD RPD within project acceptance limits?			•	LCSD not performed.
Was a MS/MSD pair prepared with each batch?	•			
Were MS/MSD recoveries within project acceptance limits?	•			Only chloride was analyzed for MS analysis.
Was the MS/MSD RPD within project acceptance limits?	•			MSD not performed. Laboratory DUP performed and DUP RPD was within control criteria.
Were Post Spike (PS) recoveries within project acceptance limits?			•	PS not required per the method.
If ISM was used for sample collection, were laboratory triplicates analyzed and within project acceptance limits?			•	ISM not performed.
Were field replicates (duplicates, triplicates, etc.) analyzed at the proper frequency and in control?	•			
Were reported sample concentrations within calibration range?	•			
Have all Laboratory Case Narrative comments/findings been addressed in the data review process?	•			
Were DoD QSM corrective actions followed if deviations were noted?	•			

Review Questions

Method: E300 (Inorganic Anions In Water By Ion Chromatography)				
Review Questions	Yes	No	NA	Comment
Were any data recommended for exclusion in the data validation process?		•		All data is acceptable as reported.

Review Questions

Method: RSK175 (Dissolved Gas Analysis in Water Samples Using a GC Headspace Equilibrium Technique)				
Review Questions	Yes	No	NA	Comment
Were there discrepancies between the COC and the samples received?		•		No discrepancies were noted between the COC and the samples received.
Were there discrepancies between the COC and the sample labels?		•		No discrepancies were noted between the COC and the sample labels.
Were samples relinquished properly on the COC?	•			
Were all samples properly preserved?	•			
Were sampling dates/times, date and time of laboratory receipt of samples, and sample conditions upon receipt at the laboratory (including preservation, pH, and temperature) documented?	•			
Were sample results reported with percent moisture correction if required?			•	Only water samples were collected.
Were analytical methods performed and analysis dates present?	•			
Were all requested target analytes reported?	•			
Were QAPP specified Project Quantitation Limit Goals achieved? (The laboratory LOQ is compared to the QAPP Project Quantitation Goal)	•			
Were holding times met?	•			
Were trip blanks analyzed at the proper frequency and in control?			•	Trip blank not analyzed for this method.
Were field blanks analyzed at the proper frequency and in control?			•	No field blanks were submitted with these samples.
Were equipment blanks analyzed at the proper frequency and in control?			•	No equipment blanks were submitted with these samples.
Was a method blank prepared and analyzed with each batch?	•			
Were target analytes in the method blank less than DL?		•		Due to method blank contamination, several methane results were qualified as estimated (J) with a high bias (+) or nondetect (U) at the LOQ.
Was an LCS/LCSD pair prepared and analyzed with each batch?	•			
Were LCS/LCSD recoveries within project acceptance limits?	•			
Was the LCS/LCSD RPD within project acceptance limits?			•	LCSD not performed.
Was a MS/MSD pair prepared with each batch?			•	MS/MSD not performed.
Were MS/MSD recoveries within project acceptance limits?			•	MS/MSD not performed.
Was the MS/MSD RPD within project acceptance limits?	•			A laboratory DUP was performed. DUP RPD was within control criteria.
If ISM was used for sample collection, were laboratory triplicates analyzed and within project acceptance limits?			•	ISM not performed.
Were surrogate recoveries within project acceptance limits?			•	Surrogates not required for the requested analytes.
Were field replicates (duplicates, triplicates, etc.) analyzed at the proper frequency and in control?	•			
Were reported sample concentrations within calibration range?	•			
Have all Laboratory Case Narrative comments/findings been addressed in the data review process?	•			
Were DoD QSM corrective actions followed if deviations were noted?	•			

Review Questions

Method: RSK175 (Dissolved Gas Analysis in Water Samples Using a GC Headspace Equilibrium Technique)				
Review Questions	Yes	No	NA	Comment
Were any data recommended for exclusion in the data validation process?		•		All data is acceptable as reported or as qualified during data validation.

Review Questions

Method: SW7196A (Chromium, Hexavalent (Colorimetric))				
Review Questions	Yes	No	NA	Comment
Were there discrepancies between the COC and the samples received?		•		No discrepancies were noted between the COC and the samples received.
Were there discrepancies between the COC and the sample labels?		•		No discrepancies were noted between the COC and the sample labels.
Were samples relinquished properly on the COC?	•			
Were all samples properly preserved?	•			
Were sampling dates/times, date and time of laboratory receipt of samples, and sample conditions upon receipt at the laboratory (including preservation, pH, and temperature) documented?	•			
Were sample results reported with percent moisture correction if required?			•	Only water samples were collected.
Were analytical methods performed and analysis dates present?	•			
Were all requested target analytes reported?	•			
Were QAPP specified Project Quantitation Limit Goals achieved? (The laboratory LOQ is compared to the QAPP Project Quantitation Goal)	•			
Were holding times met?	•			Although the laboratory case narrative indicated 2 samples were analyzed outside of the 24-hour holding time, the samples were analyzed within the 24th hour and are considered within hold.
Were trip blanks analyzed at the proper frequency and in control?			•	Trip blank not analyzed for this method.
Were field blanks analyzed at the proper frequency and in control?			•	No field blanks were submitted with these samples.
Were equipment blanks analyzed at the proper frequency and in control?			•	No equipment blanks were submitted with these samples.
Was a method blank prepared and analyzed with each batch?	•			
Were target analytes in the method blank less than DL?	•			
Was an LCS/LCSD pair prepared and analyzed with each batch?	•			
Were LCS/LCSD recoveries within project acceptance limits?	•			
Was the LCS/LCSD RPD within project acceptance limits?	•			
Was a MS/MSD pair prepared with each batch?	•			
Were MS/MSD recoveries within project acceptance limits?	•			
Was the MS/MSD RPD within project acceptance limits?	•			MSD not performed. A laboratory DUP was performed and DUP RPD was within control criteria.
Were Post Spike (PS) recoveries within project acceptance limits?			•	PS not required per the method.
If ISM was used for sample collection, were laboratory triplicates analyzed and within project acceptance limits?			•	ISM not performed.
Were field replicates (duplicates, triplicates, etc.) analyzed at the proper frequency and in control?	•			
Were reported sample concentrations within calibration range?	•			
Have all Laboratory Case Narrative comments/findings been addressed in the data review process?	•			

Review Questions

Method: SW7196A (Chromium, Hexavalent (Colorimetric))				
Review Questions	Yes	No	NA	Comment
Were DoD QSM corrective actions followed if deviations were noted?	•			
Were any data recommended for exclusion in the data validation process?		•		All data is acceptable as reported.

Review Questions

Method: SW8260C (Volatile Organic Compounds by GC/MS)				
Review Questions	Yes	No	NA	Comment
Were there discrepancies between the COC and the samples received?		•		No discrepancies were noted between the COC and the samples received.
Were there discrepancies between the COC and the sample labels?		•		No discrepancies were noted between the COC and the sample labels.
Were samples relinquished properly on the COC?	•			
Were all samples properly preserved?	•			
Were sampling dates/times, date and time of laboratory receipt of samples, and sample conditions upon receipt at the laboratory (including preservation, pH, and temperature) documented?	•			
Were sample results reported with percent moisture correction if required?			•	Only water samples were collected.
Were analytical methods performed and analysis dates present?	•			
Were all requested target analytes reported?	•			
Were QAPP specified Project Quantitation Limit Goals achieved? (The laboratory LOQ is compared to the QAPP Project Quantitation Goal)	•			
Were holding times met?	•			
Were trip blanks analyzed at the proper frequency and in control?	•			
Were field blanks analyzed at the proper frequency and in control?			•	No field blanks were submitted with these samples.
Were equipment blanks analyzed at the proper frequency and in control?			•	No equipment blanks were submitted with these samples.
Was a method blank prepared and analyzed with each batch?	•			
Were target analytes in the method blank less than DL?	•			
Was an LCS/LCSD pair prepared and analyzed with each batch?	•			
Were LCS/LCSD recoveries within project acceptance limits?	•			
Was the LCS/LCSD RPD within project acceptance limits?	•			
Was a MS/MSD pair prepared with each batch?			•	MS/MSD not reported.
Were MS/MSD recoveries within project acceptance limits?			•	MS/MSD not reported.
Was the MS/MSD RPD within project acceptance limits?			•	MS/MSD not reported.
If ISM was used for sample collection, were laboratory triplicates analyzed and within project acceptance limits?			•	ISM not performed.
Were surrogate recoveries within project acceptance limits?	•			
Were field replicates (duplicates, triplicates, etc.) analyzed at the proper frequency and in control?	•			
Were reported sample concentrations within calibration range?	•			
Have all Laboratory Case Narrative comments/findings been addressed in the data review process?	•			
Were DoD QSM corrective actions followed if deviations were noted?	•			
Were any data recommended for exclusion in the data validation process?		•		All data is acceptable as reported.

Field Duplicate Report By SDG
D01ME0004-07, Dow Military Airfield, Salvage Yard
Dow SY Groundwater Nov 2023
Field Duplicates for SDG: SQ6179.xml

Location	Analysis
SY-OBMW11	A2320B

Field ID - Primary/Field Dup	Lab ID - Primary/Field Dup	Analyte	Primary Result	FD Result	RL	RPD	RPD Criteria	RPD Check	RL Check
SY-OBMW11-110823 / SY-OBMW110-110823	SQ6179-8 / SQ6179-9	Alkalinity, Total (as CaCO3)	200	200	5.00	0.00	30	OK	NA

Location	Analysis
SY-OBMW11	A3500B

Field ID - Primary/Field Dup	Lab ID - Primary/Field Dup	Analyte	Primary Result	FD Result	RL	RPD	RPD Criteria	RPD Check	RL Check
SY-OBMW11-110823 / SY-OBMW110-110823	SQ6179-8 / SQ6179-9	Iron, Ferrous	0.0370	0.0560	0.100	40.9	30	NA	OK

Location	Analysis
SY-OBMW11	A5310B

Field ID - Primary/Field Dup	Lab ID - Primary/Field Dup	Analyte	Primary Result	FD Result	RL	RPD	RPD Criteria	RPD Check	RL Check
SY-OBMW11-110823 / SY-OBMW110-110823	SQ6179-8 / SQ6179-9	Total Organic Carbon	1.60	1.50	1.00	6.45	30	NA	OK

Location	Analysis
SY-OBMW11	BNASIM

Field ID - Primary/Field Dup	Lab ID - Primary/Field Dup	Analyte	Primary Result	FD Result	RL	RPD	RPD Criteria	RPD Check	RL Check
SY-OBMW11-110823 / SY-OBMW110-110823	SQ6179-8 / SQ6179-9	2-Methylnaphthalene	ND	ND	0.190	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	SQ6179-8 / SQ6179-9	Acenaphthene	ND	ND	0.190	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	SQ6179-8 / SQ6179-9	Acenaphthylene	ND	ND	0.190	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	SQ6179-8 / SQ6179-9	Anthracene	ND	ND	0.190	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	SQ6179-8 / SQ6179-9	Benzo(a)anthracene	ND	ND	0.190	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	SQ6179-8 / SQ6179-9	Benzo(a)pyrene	ND	ND	0.190	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	SQ6179-8 / SQ6179-9	Benzo(b)fluoranthene	ND	ND	0.190	NA	30	NA	OK

FD = Field Duplicate
RL = Reporting Limit
RPD = Relative Percent Difference

RL Check = If either the primary sample or field duplicate result is less than 5 times the RL then the criteria used to determine if the field duplicate is outside QC limits is +/- RL for Water and +/- 2 times RL for Soil"

Field Duplicate Report By SDG
D01ME0004-07, Dow Military Airfield, Salvage Yard
Dow SY Groundwater Nov 2023
Field Duplicates for SDG: SQ6179.xml

Location	Analysis
SY-OBMW11	BNASIM

Field ID - Primary/Field Dup	Lab ID - Primary/Field Dup	Analyte	Primary Result	FD Result	RL	RPD	RPD Criteria	RPD Check	RL Check
SY-OBMW11-110823 / SY-OBMW110-110823	SQ6179-8 / SQ6179-9	Benzo(g,h,i)perylene	ND	ND	0.190	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	SQ6179-8 / SQ6179-9	Benzo(k)fluoranthene	ND	ND	0.190	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	SQ6179-8 / SQ6179-9	Chrysene	ND	ND	0.190	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	SQ6179-8 / SQ6179-9	Dibenz(a,h)anthracene	ND	ND	0.190	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	SQ6179-8 / SQ6179-9	Fluoranthene	ND	ND	0.190	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	SQ6179-8 / SQ6179-9	Fluorene	ND	ND	0.190	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	SQ6179-8 / SQ6179-9	Indeno(1,2,3-c,d)pyrene	ND	ND	0.190	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	SQ6179-8 / SQ6179-9	Naphthalene	ND	ND	0.190	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	SQ6179-8 / SQ6179-9	Phenanthrene	ND	ND	0.190	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	SQ6179-8 / SQ6179-9	Pyrene	ND	ND	0.190	NA	30	NA	OK

Location	Analysis
SY-OBMW11	E300

Field ID - Primary/Field Dup	Lab ID - Primary/Field Dup	Analyte	Primary Result	FD Result	RL	RPD	RPD Criteria	RPD Check	RL Check
SY-OBMW11-110823 / SY-OBMW110-110823	SQ6179-8 / SQ6179-9	Chloride	650	650	40.0	0.00	30	OK	NA
SY-OBMW11-110823 / SY-OBMW110-110823	SQ6179-8 / SQ6179-9	Nitrate	1.80	1.80	0.0500	0.00	30	OK	NA
SY-OBMW11-110823 / SY-OBMW110-110823	SQ6179-8 / SQ6179-9	Sulfate	200	200	5.00	0.00	30	OK	NA

Location	Analysis
SY-OBMW11	RSK175

Field ID - Primary/Field Dup	Lab ID - Primary/Field Dup	Analyte	Primary Result	FD Result	RL	RPD	RPD Criteria	RPD Check	RL Check
SY-OBMW11-110823 / SY-OBMW110-110823	SQ6179-8 / SQ6179-9	Ethane	ND	ND	13.0	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	SQ6179-8 / SQ6179-9	Ethene	ND	ND	13.0	NA	30	NA	OK

FD = Field Duplicate
RL = Reporting Limit
RPD = Relative Percent Difference

RL Check = If either the primary sample or field duplicate result is less than 5 times the RL then the criteria used to determine if the field duplicate is outside QC limits is +/- RL for Water and +/- 2 times RL for Soil"

Field Duplicate Report By SDG
D01ME0004-07, Dow Military Airfield, Salvage Yard
Dow SY Groundwater Nov 2023
Field Duplicates for SDG: SQ6179.xml

Location	Analysis
SY-OBMW11	RSK175

Field ID - Primary/Field Dup	Lab ID - Primary/Field Dup	Analyte	Primary Result	FD Result	RL	RPD	RPD Criteria	RPD Check	RL Check
SY-OBMW11-110823 / SY-OBMW110-110823	SQ6179-8 / SQ6179-9	Methane	ND	ND	10.0	NA	30	NA	OK

Location	Analysis
SY-OBMW11	SW7196A

Field ID - Primary/Field Dup	Lab ID - Primary/Field Dup	Analyte	Primary Result	FD Result	RL	RPD	RPD Criteria	RPD Check	RL Check
SY-OBMW11-110823 / SY-OBMW110-110823	SQ6179-8 / SQ6179-9	Hexavalent Chromium	ND	ND	0.0250	NA	30	NA	OK

Location	Analysis
SY-OBMW11	SW8260C

Field ID - Primary/Field Dup	Lab ID - Primary/Field Dup	Analyte	Primary Result	FD Result	RL	RPD	RPD Criteria	RPD Check	RL Check
SY-OBMW11-110823 / SY-OBMW110-110823	SQ6179-8 / SQ6179-9	1,1-Dichloroethene	0.0480	0.0520	0.0500	8.00	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	SQ6179-8 / SQ6179-9	cis-1,2-Dichloroethene	0.0880	0.0780	0.0500	12.0	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	SQ6179-8 / SQ6179-9	Tetrachloroethene (PCE)	ND	ND	0.0500	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	SQ6179-8 / SQ6179-9	trans-1,2-Dichloroethene	ND	ND	0.0500	NA	30	NA	OK
SY-OBMW11-110823 / SY-OBMW110-110823	SQ6179-8 / SQ6179-9	Trichloroethene (TCE)	5.40	5.00	0.500	7.69	30	OK	NA
SY-OBMW11-110823 / SY-OBMW110-110823	SQ6179-8 / SQ6179-9	Vinyl chloride	ND	ND	0.100	NA	30	NA	OK

FD = Field Duplicate
RL = Reporting Limit
RPD = Relative Percent Difference

RL Check = If either the primary sample or field duplicate result is less than 5 times the RL then the criteria used to determine if the field duplicate is outside QC limits is +/- RL for Water and +/- 2 times RL for Soil"

Data Validation Report for SQ6238

Facility:	D01ME0004-07, Dow Military Airfield, Salvage Yard
Event:	Dow SY Groundwater Nov 2023
SDG:	SQ6238
Guidance Document:	Final UFP QAPP Revision No. 1 Remedial Investigation Former Salvage Yard Former Dow Military Airfield 233 Odlin Road, Bangor, Maine December 2022
Prime Contractor:	Credere Associates, LLC, Westbrook, ME
Project Manager:	Peter Thompson
Contract Laboratory(ies):	Katahdin Analytical Services, Scarborough, ME
Data Review Contractor:	EnSafe, Inc.
Data Review Level:	S2AVEM
Primary Data Reviewer:	Kevin Kha, Environmental Chemist
Second Reviewer:	Christina Ashdown, Senior Scientist
Date Submitted:	February 05, 2024

Field Sample ID	Lab Sample ID	Matrix	Type/Type Code	A2320B	A3500B	A5310B	BNASIM	E300	RSK175	SW7196A	SW8260C
SY-BRMW10-65-75-110923	SQ6238-10	Water	Field Duplicate/FD	X	X	X	X	X	X	X	X
SY-BRMW1-150-157-110923	SQ6238-11	Water	Field Sample/N	X	X	X	X	X	X	X	X
SY-BRMW1-42-52-110923	SQ6238-8	Water	Field Sample/N	X	X	X	X	X	X	X	X
SY-BRMW1-65-75-110923	SQ6238-9	Water	Field Sample/N	X	X	X	X	X	X	X	X
SY-BRMW3-145-155-110923	SQ6238-5	Water	Field Sample/N	X	X	X	X	X	X	X	X
SY-BRMW3-287-297-110923	SQ6238-6	Water	Field Sample/N	X	X	X	X	X	X	X	X
SY-BRMW3-47-62-110923	SQ6238-4	Water	Field Sample/N	X	X	X	X	X	X	X	X
SY-BRMW40-62-72-110923	SQ6238-2	Water	Field Duplicate/FD	X	X	X	X	X	X	X	X
SY-BRMW4-138-148-110923	SQ6238-3	Water	Field Sample/N	X	X	X	X	X	X	X	X
SY-BRMW4-291-301-110923	SQ6238-7	Water	Field Sample/N	X	X	X	X	X	X	X	X
SY-BRMW4-62-72-110923	SQ6238-1	Water	Field Sample/N	X	X	X	X	X	X	X	X
TB33-110923	SQ6238-12	Water	Trip Blank/TB								X

This report assesses the analytical data quality associated with the analyses listed on the preceding cover page at S2AVEM data validation level. This assessment has been made through a combination of automated data review (ADR) and supplemental manual review, the details of which are described below. The approach taken in the review of this data set is consistent with the requirements contained in the Final UFP QAPP Revision No. 1 Remedial Investigation Former Salvage Yard Former Dow Military Airfield 233 Odlin Road, Bangor, Maine December 2022 and the additional guidance documents incorporated by reference to the extent possible. Where definitive guidance is not provided, results have been evaluated in a conservative manner using professional judgment.

Sample collection was managed and directed by Credere Associates, LLC, Westbrook, ME; analyses were performed by Katahdin Analytical Services, Scarborough, ME and were reported under sample delivery group (SDG) SQ6238. Data have been evaluated electronically based on electronic data deliverables (EDDs) provided by the laboratory, and hard copy data summary forms have also been reviewed during this effort and compared to the automated review output by the reviewers whose signatures appear on the following page. Findings based on the automated data submission and manual data verification processes are detailed in the ADR narrative and throughout this report.

All quality control (QC) elements associated with this SDG have been reviewed by a project chemist in accordance with the requirements defined for the project. This review is documented in the attached Data Review Checklists. The QC elements listed below were supported by the electronic deliverable and were evaluated using ADR processes.

- Blank - Negative
- Field Duplicate RPD
- Lab Blank
- Lab Replicate RPD
- LCS Recovery
- LCS RPD
- MS Recovery
- Prep Hold Time
- Surrogate
- Test Hold Time
- Trip Blank

Results of the ADR process were subsequently reviewed and updated as applicable by the data review chemists identified on the signature page. Quality control elements that were not included in the electronic deliverable were reviewed manually and findings are documented within this report. Summaries of findings and associated qualified results are documented throughout this report.

A total of 50 results (13.55%) out of the 369 results (sample and field QC samples) reported are qualified based on review and 0 results (0.00%) have been rejected or deemed a serious deficiency (X qualifier). Trace values, defined as results that are qualified as estimated because they fall between the detection limit and the reporting limit/limit of quantitation, are not counted as qualified results in the above count. The qualified results are detailed throughout this report and discussed in the narrative below, where appropriate.

Narrative Comments

Analytical Method	Data Reviewer Comment
A2320B	No additional comments; see Checklist for detail.
A3500B	The laboratory case narrative indicates the following: "The samples SQ6238-1 and 2 were received by the laboratory with less than 15 minutes left of the method-specified 24-hour holding time for ferrous iron analysis. SQ6238-1 was run 32 minutes out of hold and SQ6238-2 was run 27 minutes out of hold." The samples were analyzed within the 24th hour of the hold time and are considered within hold.
A5310B	No additional comments; see Checklist for detail.
BNASIM	The laboratory case narrative indicates the following: "Samples SQ6238-3 and 10 had low recoveries for the extraction surrogates 2-methylnaphthalene-d10 and/or pyrene-d10 that were outside of the DoD QSM acceptance limits. The client was contacted on 12/15/2023 and the laboratory was instructed to proceed with narration." "The LCS WG345531-2 had a high recovery for the extraction surrogate 2-methylnaphthalene-d10 that was outside of the DoD QSM acceptance limits. Since the recoveries of the spiked target analytes were acceptable, no further action was taken."
E300	The laboratory case narrative indicates the following: "The nitrate matrix spike (WG345363-4) on sample SQ6238-1 had a low recovery that was outside of the acceptance limits." The MS %R was within the project acceptance limits of 80-120% and no data was qualified.
RSK175	The laboratory case narrative indicates the following: "The target analyte methane was detected below 1/2 the LOQ in the method blank WG345566-1. According to the DoD QSM, a method blank is considered to be contaminated if the concentration of any target analyte in the blank exceeds 1/2 the reporting limit and is greater than 1/10 the amount measured in any sample. Since the method blank was acceptable, no further action was taken." The associated methane results were qualified as nondetected during data validation.
SW7196A	The laboratory case narrative indicates the following: "The samples SQ6238-1 and 2 were received by the lab with less than 15 minutes left of the method-specified 24-hour holding time for hexavalent chromium analysis. SQ6238-1 was run 26 minutes out of hold and SQ6238-2 was run 21 minutes out of hold." The samples were analyzed within the 24th hour of the hold time and is considered within hold.
SW8260C	The laboratory case narrative indicates the following: "Samples SQ6238-1, 6, and 7 were manually integrated for the target analytes trichloroethane, trans-1,2-dichloroethene and/or the surrogate 1,2-dichloroethane-D4. The specific reasons for the manual integrations are indicated on the raw data by the manual integration codes (M1-M11). These codes are further explained in the attachment following this narrative." Manual integrations were not reviewed in Stage 2A validation and no data were qualified.



January 23, 2024

Reviewed by Kevin Kha, Environmental Chemist, EnSafe, Inc.

As the First Reviewer, I certify that I have performed a data review process in accordance with the requirements of the project guidance document, and have compared the electronic data to the laboratory's hard copy report and have verified the consistency of the reported sample results and method quality control data between the two deliverables.



Reviewed by Christina Ashdown, Senior Scientist, EnSafe, Inc. February 14, 2024

As the Second Reviewer, I certify that I have performed a quality assurance review of the report generated by the First Reviewer.

Quality Control Outliers for test method A2320B, Lab Blank

The purpose of laboratory blanks is to determine the existence and magnitude of cross-contamination problems resulting from laboratory activities. Reported results were evaluated to determine compliance with the required acceptance criteria. Summary forms were evaluated and compared to electronic data deliverables. Findings of this review, and contaminants found in laboratory blanks are listed below along with any associated qualified results.

Sample ID/ Lab Sample ID	Analyte	Result	Warning Limits	Control Limits	Units	Qualifier	Reason Code	Comment
WG345760-1 (LB)	Alkalinity, Total (as CaCO3)	2.40	< 0.23	< 5	mg/l	U/None*	L	

Where two qualifiers are listed, such as 'J/UJ', the first applies to positive results, and the second to non-detect results.
Upper and Lower Warning and Control Limits are abbreviated UWL, LWL, UCL, and LCL in the Comment field.

*Blank flags displayed in the above table identify qualification of the sample result when it is less than or equal to the LOQ/RL. Sample results above the LOD or LOQ will be qualified based on the validation guidance assigned in the project setup.

No results associated with this QC element required qualification.

Quality Control Outliers for test method BNASIM, Field Duplicate RPD

Field duplicate analyses are performed in order to assess sample collection/laboratory precision for each sample matrix. Summary forms were evaluated and compared to electronic data deliverables. Field duplicate results that were outside of the acceptance criteria are listed below.

Sample ID/ Lab Sample ID	Analyte	Result	Warning Limits	Control Limits	Units	Qualifier	Reason Code	Comment
SY-BRMW10-65-75-110923 (N)	Benzo (b)fluoranthene	0.200	< 0.19	< 0.19	ug/l	J/UJ	D3	
SY-BRMW10-65-75-110923 (N)	Benzo (k)fluoranthene	0.220	< 0.19	< 0.19	ug/l	J/UJ	D3	
SY-BRMW10-65-75-110923 (N)	Chrysene	0.230	< 0.19	< 0.19	ug/l	J/UJ	D3	
SY-BRMW10-65-75-110923 (N)	Fluoranthene	0.270	< 0.19	< 0.19	ug/l	J/UJ	D3	
SY-BRMW10-65-75-110923 (N)	Pyrene	0.270	< 0.19	< 0.19	ug/l	J/UJ	D3	

Where two qualifiers are listed, such as 'J/UJ', the first applies to positive results, and the second to non-detect results.
Upper and Lower Warning and Control Limits are abbreviated UWL, LWL, UCL, and LCL in the Comment field.

No results associated with this QC element required qualification.

Quality Control Outliers for test method BNASIM, Surrogate

Method performance for individual samples is demonstrated through spiking activities. All samples are spiked with surrogate compounds prior to sample preparation. The sample itself may produce effects due to such factors as interferences and high concentrations of analytes. Summary forms were evaluated and compared to electronic data deliverables. Surrogate results that were outside of the acceptance criteria are listed below.

Sample ID/ Lab Sample ID	Analyte	Result	Warning Limits	Control Limits	Units	Qualifier	Reason Code	Comment
SY-BRMW10-65-75-110923 (FD)	Pyrene-d10	48.4	53 - 166	10 - 166	percent	J/UJ	I	
SY-BRMW4-138-148-110923 (STD)	2-Methylnaphthalene-d10	41.7	43 - 92	10 - 92	percent	J/UJ	I	
SY-BRMW4-138-148-110923 (N)	Pyrene-d10	46.6	53 - 166	10 - 166	percent	J/UJ	I	

Where two qualifiers are listed, such as 'J/UJ', the first applies to positive results, and the second to non-detect results.
Upper and Lower Warning and Control Limits are abbreviated UWL, LWL, UCL, and LCL in the Comment field.

Qualified Results associated with the Surrogate for BNASIM

FieldSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
SY-BRMW10-65-75-110923 SQ6238-10	FD	2-Methylnaphthalene	0.19	0.095 U	0.095 UJ		ug/l	I
SY-BRMW10-65-75-110923 SQ6238-10	FD	Acenaphthene	0.19	0.095 U	0.095 UJ		ug/l	I
SY-BRMW10-65-75-110923 SQ6238-10	FD	Acenaphthylene	0.19	0.095 U	0.095 UJ		ug/l	I
SY-BRMW10-65-75-110923 SQ6238-10	FD	Anthracene	0.19	0.095 U	0.095 UJ		ug/l	I
SY-BRMW10-65-75-110923 SQ6238-10	FD	Benzo(a)anthracene	0.19	0.095 U	0.095 UJ		ug/l	I
SY-BRMW10-65-75-110923 SQ6238-10	FD	Benzo(a)pyrene	0.19	0.095 U	0.095 UJ		ug/l	I
SY-BRMW10-65-75-110923 SQ6238-10	FD	Benzo(b)fluoranthene	0.19	0.095 U	0.095 UJ		ug/l	I
SY-BRMW10-65-75-110923 SQ6238-10	FD	Benzo(g,h,i)perylene	0.19	0.095 U	0.095 UJ		ug/l	I
SY-BRMW10-65-75-110923 SQ6238-10	FD	Benzo(k)fluoranthene	0.19	0.095 U	0.095 UJ		ug/l	I
SY-BRMW10-65-75-110923 SQ6238-10	FD	Chrysene	0.19	0.095 U	0.095 UJ		ug/l	I
SY-BRMW10-65-75-110923 SQ6238-10	FD	Dibenz(a,h)anthracene	0.19	0.095 U	0.095 UJ		ug/l	I
SY-BRMW10-65-75-110923 SQ6238-10	FD	Fluoranthene	0.19	0.095 U	0.095 UJ		ug/l	I

Qualified Results associated with the Surrogate for BNASIM

FieldSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
SY-BRMW10-65-75-110923 SQ6238-10	FD	Fluorene	0.19	0.095 U	0.095 UJ		ug/l	I
SY-BRMW10-65-75-110923 SQ6238-10	FD	Indeno(1,2,3-c,d)pyrene	0.19	0.095 U	0.095 UJ		ug/l	I
SY-BRMW10-65-75-110923 SQ6238-10	FD	Naphthalene	0.19	0.095 U	0.095 UJ		ug/l	I
SY-BRMW10-65-75-110923 SQ6238-10	FD	Phenanthrene	0.19	0.095 U	0.095 UJ		ug/l	I
SY-BRMW10-65-75-110923 SQ6238-10	FD	Pyrene	0.19	0.095 U	0.095 UJ		ug/l	I
SY-BRMW4-138-148-110923 SQ6238-3	N	2-Methylnaphthalene	0.19	0.094 U	0.094 UJ		ug/l	I
SY-BRMW4-138-148-110923 SQ6238-3	N	Acenaphthene	0.19	0.094 U	0.094 UJ		ug/l	I
SY-BRMW4-138-148-110923 SQ6238-3	N	Acenaphthylene	0.19	0.094 U	0.094 UJ		ug/l	I
SY-BRMW4-138-148-110923 SQ6238-3	N	Anthracene	0.19	0.094 U	0.094 UJ		ug/l	I
SY-BRMW4-138-148-110923 SQ6238-3	N	Benzo(a)anthracene	0.19	0.094 U	0.094 UJ		ug/l	I
SY-BRMW4-138-148-110923 SQ6238-3	N	Benzo(a)pyrene	0.19	0.094 U	0.094 UJ		ug/l	I
SY-BRMW4-138-148-110923 SQ6238-3	N	Benzo(b)fluoranthene	0.19	0.094 U	0.094 UJ		ug/l	I
SY-BRMW4-138-148-110923 SQ6238-3	N	Benzo(g,h,i)perylene	0.19	0.094 U	0.094 UJ		ug/l	I
SY-BRMW4-138-148-110923 SQ6238-3	N	Benzo(k)fluoranthene	0.19	0.094 U	0.094 UJ		ug/l	I
SY-BRMW4-138-148-110923 SQ6238-3	N	Chrysene	0.19	0.035 J	0.035 J	-	ug/l	I/TR
SY-BRMW4-138-148-110923 SQ6238-3	N	Dibenz(a,h)anthracene	0.19	0.094 U	0.094 UJ		ug/l	I
SY-BRMW4-138-148-110923 SQ6238-3	N	Fluoranthene	0.19	0.094 U	0.094 UJ		ug/l	I
SY-BRMW4-138-148-110923 SQ6238-3	N	Fluorene	0.19	0.094 U	0.094 UJ		ug/l	I
SY-BRMW4-138-148-110923 SQ6238-3	N	Indeno(1,2,3-c,d)pyrene	0.19	0.094 U	0.094 UJ		ug/l	I

Qualified Results associated with the Surrogate for BNASIM

FieldSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
SY-BRMW4-138-148-110923 SQ6238-3	N	Naphthalene	0.19	0.094 U	0.094 UJ		ug/l	I
SY-BRMW4-138-148-110923 SQ6238-3	N	Phenanthrene	0.19	0.094 U	0.094 UJ		ug/l	I
SY-BRMW4-138-148-110923 SQ6238-3	N	Pyrene	0.19	0.094 U	0.094 UJ		ug/l	I

Analytes not found in project samples are reported as not detected at the limit of detection (LOD) unless blank contamination occurs and then the sample may be reported as not detected at the (LOD) or (LOQ) based on the sample concentration and the validation guidance. In instances where no LOD is provided, results are reported down to the LOQ.

Quality Control Outliers for test method E300, Lab Blank

The purpose of laboratory blanks is to determine the existence and magnitude of cross-contamination problems resulting from laboratory activities. Reported results were evaluated to determine compliance with the required acceptance criteria. Summary forms were evaluated and compared to electronic data deliverables. Findings of this review, and contaminants found in laboratory blanks are listed below along with any associated qualified results.

Sample ID/ Lab Sample ID	Analyte	Result	Warning Limits	Control Limits	Units	Qualifier	Reason Code	Comment
WG345363-1 (LB)	Sulfate	0.0890	< 0.064	< 1	mg/l	U/None*	L	

Where two qualifiers are listed, such as 'J/UJ', the first applies to positive results, and the second to non-detect results.
Upper and Lower Warning and Control Limits are abbreviated UWL, LWL, UCL, and LCL in the Comment field.

*Blank flags displayed in the above table identify qualification of the sample result when it is less than or equal to the LOQ/RL. Sample results above the LOD or LOQ will be qualified based on the validation guidance assigned in the project setup.

No results associated with this QC element required qualification.

Quality Control Outliers for test method RSK175, Lab Blank

The purpose of laboratory blanks is to determine the existence and magnitude of cross-contamination problems resulting from laboratory activities. Reported results were evaluated to determine compliance with the required acceptance criteria. Summary forms were evaluated and compared to electronic data deliverables. Findings of this review, and contaminants found in laboratory blanks are listed below along with any associated qualified results.

Sample ID/ Lab Sample ID	Analyte	Result	Warning Limits	Control Limits	Units	Qualifier	Reason Code	Comment
WG345566-1 (LB)	Methane	4.70	< 2.6	< 10	ug/l	U/None*	L	

Where two qualifiers are listed, such as 'J/UJ', the first applies to positive results, and the second to non-detect results.
Upper and Lower Warning and Control Limits are abbreviated UWL, LWL, UCL, and LCL in the Comment field.

*Blank flags displayed in the above table identify qualification of the sample result when it is less than or equal to the LOQ/RL. Sample results above the LOD or LOQ will be qualified based on the validation guidance assigned in the project setup.

Qualified Results associated with the Lab Blank for RSK175

FieldSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
SY-BRMW10-65-75-110923 SQ6238-10	FD	Methane	10	3.9 J	10 U		ug/l	L
SY-BRMW1-150-157-110923 SQ6238-11	N	Methane	10	6.4 J	6.4 J	+	ug/l	L
SY-BRMW1-42-52-110923 SQ6238-8	N	Methane	10	4.7 J	10 U		ug/l	L
SY-BRMW1-65-75-110923 SQ6238-9	N	Methane	10	4.1 J	10 U		ug/l	L
SY-BRMW3-145-155-110923 SQ6238-5	N	Methane	10	14	14 J	+	ug/l	L
SY-BRMW3-287-297-110923 SQ6238-6	N	Methane	10	9.2 J	9.2 J	+	ug/l	L
SY-BRMW3-47-62-110923 SQ6238-4	N	Methane	10	20	20 J	+	ug/l	L
SY-BRMW40-62-72-110923 SQ6238-2	FD	Methane	10	5.3 J	5.3 J	+	ug/l	L
SY-BRMW4-138-148-110923 SQ6238-3	N	Methane	10	3.8 J	10 U		ug/l	L
SY-BRMW4-291-301-110923 SQ6238-7	N	Methane	10	3.9 J	10 U		ug/l	L
SY-BRMW4-62-72-110923 SQ6238-1	N	Methane	10	6.1 J	6.1 J	+	ug/l	L

Analytes not found in project samples are reported as not detected at the limit of detection (LOD) unless blank contamination occurs and then the sample may be reported as not detected at the (LOD) or (LOQ) based on the sample concentration and the validation guidance. In instances where no LOD is provided, results are reported down to the LOQ.

Quality Control Outliers for test method SW7196A, Lab Blank

The purpose of laboratory blanks is to determine the existence and magnitude of cross-contamination problems resulting from laboratory activities. Reported results were evaluated to determine compliance with the required acceptance criteria. Summary forms were evaluated and compared to electronic data deliverables. Findings of this review, and contaminants found in laboratory blanks are listed below along with any associated qualified results.

Sample ID/ Lab Sample ID	Analyte	Result	Warning Limits	Control Limits	Units	Qualifier	Reason Code	Comment
WG345317-1 (LB)	Hexavalent Chromium	0.00130	< 0.00076	< 0.025	mg/l	U/None*	L	

Where two qualifiers are listed, such as 'J/UJ', the first applies to positive results, and the second to non-detect results.
Upper and Lower Warning and Control Limits are abbreviated UWL, LWL, UCL, and LCL in the Comment field.

*Blank flags displayed in the above table identify qualification of the sample result when it is less than or equal to the LOQ/RL. Sample results above the LOD or LOQ will be qualified based on the validation guidance assigned in the project setup.

Qualified Results associated with the Lab Blank for SW7196A

FieldSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
SY-BRMW10-65-75-110923 SQ6238-10	FD	Hexavalent Chromium	0.025	0.0014 J	0.025 U		mg/l	L
SY-BRMW1-150-157-110923 SQ6238-11	N	Hexavalent Chromium	0.025	0.0017 J	0.025 U		mg/l	L
SY-BRMW1-42-52-110923 SQ6238-8	N	Hexavalent Chromium	0.025	0.0014 J	0.025 U		mg/l	L
SY-BRMW40-62-72-110923 SQ6238-2	FD	Hexavalent Chromium	0.025	0.00082 J	0.025 U		mg/l	L
SY-BRMW4-62-72-110923 SQ6238-1	N	Hexavalent Chromium	0.025	0.0035 J	0.025 U		mg/l	L

Analytes not found in project samples are reported as not detected at the limit of detection (LOD) unless blank contamination occurs and then the sample may be reported as not detected at the (LOD) or (LOQ) based on the sample concentration and the validation guidance. In instances where no LOD is provided, results are reported down to the LOQ.

Table of All Qualified Results

Test Method: BNASIM		Extraction Method: SW3510C						
FieldSample ID / LabSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
SY-BRMW10-65-75-110923 SQ6238-10	FD	2-Methylnaphthalene	0.19	0.095 U	0.095 UJ		ug/l	I
SY-BRMW10-65-75-110923 SQ6238-10	FD	Acenaphthene	0.19	0.095 U	0.095 UJ		ug/l	I
SY-BRMW10-65-75-110923 SQ6238-10	FD	Acenaphthylene	0.19	0.095 U	0.095 UJ		ug/l	I
SY-BRMW10-65-75-110923 SQ6238-10	FD	Anthracene	0.19	0.095 U	0.095 UJ		ug/l	I
SY-BRMW10-65-75-110923 SQ6238-10	FD	Benzo(a)anthracene	0.19	0.095 U	0.095 UJ		ug/l	I
SY-BRMW10-65-75-110923 SQ6238-10	FD	Benzo(a)pyrene	0.19	0.095 U	0.095 UJ		ug/l	I
SY-BRMW10-65-75-110923 SQ6238-10	FD	Benzo(b)fluoranthene	0.19	0.095 U	0.095 UJ		ug/l	I
SY-BRMW10-65-75-110923 SQ6238-10	FD	Benzo(g,h,i)perylene	0.19	0.095 U	0.095 UJ		ug/l	I
SY-BRMW10-65-75-110923 SQ6238-10	FD	Benzo(k)fluoranthene	0.19	0.095 U	0.095 UJ		ug/l	I
SY-BRMW10-65-75-110923 SQ6238-10	FD	Chrysene	0.19	0.095 U	0.095 UJ		ug/l	I
SY-BRMW10-65-75-110923 SQ6238-10	FD	Dibenz(a,h)anthracene	0.19	0.095 U	0.095 UJ		ug/l	I
SY-BRMW10-65-75-110923 SQ6238-10	FD	Fluoranthene	0.19	0.095 U	0.095 UJ		ug/l	I
SY-BRMW10-65-75-110923 SQ6238-10	FD	Fluorene	0.19	0.095 U	0.095 UJ		ug/l	I
SY-BRMW10-65-75-110923 SQ6238-10	FD	Indeno(1,2,3-c,d)pyrene	0.19	0.095 U	0.095 UJ		ug/l	I
SY-BRMW10-65-75-110923 SQ6238-10	FD	Naphthalene	0.19	0.095 U	0.095 UJ		ug/l	I
SY-BRMW10-65-75-110923 SQ6238-10	FD	Phenanthrene	0.19	0.095 U	0.095 UJ		ug/l	I
SY-BRMW10-65-75-110923 SQ6238-10	FD	Pyrene	0.19	0.095 U	0.095 UJ		ug/l	I
SY-BRMW4-138-148-110923 SQ6238-3	N	2-Methylnaphthalene	0.19	0.094 U	0.094 UJ		ug/l	I

Table of All Qualified Results

Test Method: BNASIM		Extraction Method: SW3510C						
FieldSample ID / LabSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
SY-BRMW4-138-148-110923 SQ6238-3	N	Acenaphthene	0.19	0.094 U	0.094 UJ		ug/l	I
SY-BRMW4-138-148-110923 SQ6238-3	N	Acenaphthylene	0.19	0.094 U	0.094 UJ		ug/l	I
SY-BRMW4-138-148-110923 SQ6238-3	N	Anthracene	0.19	0.094 U	0.094 UJ		ug/l	I
SY-BRMW4-138-148-110923 SQ6238-3	N	Benzo(a)anthracene	0.19	0.094 U	0.094 UJ		ug/l	I
SY-BRMW4-138-148-110923 SQ6238-3	N	Benzo(a)pyrene	0.19	0.094 U	0.094 UJ		ug/l	I
SY-BRMW4-138-148-110923 SQ6238-3	N	Benzo(b)fluoranthene	0.19	0.094 U	0.094 UJ		ug/l	I
SY-BRMW4-138-148-110923 SQ6238-3	N	Benzo(g,h,i)perylene	0.19	0.094 U	0.094 UJ		ug/l	I
SY-BRMW4-138-148-110923 SQ6238-3	N	Benzo(k)fluoranthene	0.19	0.094 U	0.094 UJ		ug/l	I
SY-BRMW4-138-148-110923 SQ6238-3	N	Chrysene	0.19	0.035 J	0.035 J	-	ug/l	I/TR
SY-BRMW4-138-148-110923 SQ6238-3	N	Dibenz(a,h)anthracene	0.19	0.094 U	0.094 UJ		ug/l	I
SY-BRMW4-138-148-110923 SQ6238-3	N	Fluoranthene	0.19	0.094 U	0.094 UJ		ug/l	I
SY-BRMW4-138-148-110923 SQ6238-3	N	Fluorene	0.19	0.094 U	0.094 UJ		ug/l	I
SY-BRMW4-138-148-110923 SQ6238-3	N	Indeno(1,2,3-c,d)pyrene	0.19	0.094 U	0.094 UJ		ug/l	I
SY-BRMW4-138-148-110923 SQ6238-3	N	Naphthalene	0.19	0.094 U	0.094 UJ		ug/l	I
SY-BRMW4-138-148-110923 SQ6238-3	N	Phenanthrene	0.19	0.094 U	0.094 UJ		ug/l	I
SY-BRMW4-138-148-110923 SQ6238-3	N	Pyrene	0.19	0.094 U	0.094 UJ		ug/l	I

Test Method: RSK175		Extraction Method: METHOD						
FieldSample ID / LabSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
SY-BRMW10-65-75-110923 SQ6238-10	FD	Methane	10	3.9 J	10 U		ug/l	L

Table of All Qualified Results

Test Method: RSK175		Extraction Method: METHOD						
FieldSample ID / LabSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
SY-BRMW1-150-157-110923 SQ6238-11	N	Methane	10	6.4 J	6.4 J	+	ug/l	L
SY-BRMW1-42-52-110923 SQ6238-8	N	Methane	10	4.7 J	10 U		ug/l	L
SY-BRMW1-65-75-110923 SQ6238-9	N	Methane	10	4.1 J	10 U		ug/l	L
SY-BRMW3-145-155-110923 SQ6238-5	N	Methane	10	14	14 J	+	ug/l	L
SY-BRMW3-287-297-110923 SQ6238-6	N	Methane	10	9.2 J	9.2 J	+	ug/l	L
SY-BRMW3-47-62-110923 SQ6238-4	N	Methane	10	20	20 J	+	ug/l	L
SY-BRMW40-62-72-110923 SQ6238-2	FD	Methane	10	5.3 J	5.3 J	+	ug/l	L
SY-BRMW4-138-148-110923 SQ6238-3	N	Methane	10	3.8 J	10 U		ug/l	L
SY-BRMW4-291-301-110923 SQ6238-7	N	Methane	10	3.9 J	10 U		ug/l	L
SY-BRMW4-62-72-110923 SQ6238-1	N	Methane	10	6.1 J	6.1 J	+	ug/l	L

Test Method: SW7196A		Extraction Method: NONE						
FieldSample ID / LabSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
SY-BRMW10-65-75-110923 SQ6238-10	FD	Hexavalent Chromium	0.025	0.0014 J	0.025 U		mg/l	L
SY-BRMW1-150-157-110923 SQ6238-11	N	Hexavalent Chromium	0.025	0.0017 J	0.025 U		mg/l	L
SY-BRMW1-42-52-110923 SQ6238-8	N	Hexavalent Chromium	0.025	0.0014 J	0.025 U		mg/l	L
SY-BRMW40-62-72-110923 SQ6238-2	FD	Hexavalent Chromium	0.025	0.00082 J	0.025 U		mg/l	L
SY-BRMW4-62-72-110923 SQ6238-1	N	Hexavalent Chromium	0.025	0.0035 J	0.025 U		mg/l	L

Analytes not found in project samples are reported as not detected at the limit of detection (LOD) unless blank contamination occurs and then the sample may be reported as not detected at the (LOQ) based on the sample concentration.
In instances where no LOD is provided, results are reported down to the LOQ.
Trace values are not included in the qualified results table unless additional reason codes are associated.

Table of Results with Modified Qualifiers

Modified Qualifiers for test method BNASIM

FieldSample ID / LabSample ID	Type	Analyte	LOQ	Lab Result	ADR Result	ADR Reason	Modified Result	Reason
SY-BRMW10-65-75-110923 SQ6238-10	FD	Benzo(b)fluoranthene	0.19	0.095 U	0.095 UJ	D3/I	0.095 UJ	I
SY-BRMW10-65-75-110923 SQ6238-10	FD	Benzo(k)fluoranthene	0.19	0.095 U	0.095 UJ	D3/I	0.095 UJ	I
SY-BRMW10-65-75-110923 SQ6238-10	FD	Chrysene	0.19	0.095 U	0.095 UJ	D3/I	0.095 UJ	I
SY-BRMW10-65-75-110923 SQ6238-10	FD	Fluoranthene	0.19	0.095 U	0.095 UJ	D3/I	0.095 UJ	I
SY-BRMW10-65-75-110923 SQ6238-10	FD	Pyrene	0.19	0.095 U	0.095 UJ	D3/I	0.095 UJ	I
SY-BRMW1-65-75-110923 SQ6238-9	N	Benzo(b)fluoranthene	0.19	0.20	0.20 J	D3	0.20	
SY-BRMW1-65-75-110923 SQ6238-9	N	Benzo(k)fluoranthene	0.19	0.22	0.22 J	D3	0.22	
SY-BRMW1-65-75-110923 SQ6238-9	N	Chrysene	0.19	0.23	0.23 J	D3	0.23	
SY-BRMW1-65-75-110923 SQ6238-9	N	Fluoranthene	0.19	0.27	0.27 J	D3	0.27	
SY-BRMW1-65-75-110923 SQ6238-9	N	Pyrene	0.19	0.27	0.27 J	D3	0.27	

Modified Qualifiers for test method RSK175

FieldSample ID / LabSample ID	Type	Analyte	LOQ	Lab Result	ADR Result	ADR Reason	Modified Result	Reason
SY-BRMW1-150-157-110923 SQ6238-11	N	Methane	10	6.4 J	10 U	L	6.4 J	L
SY-BRMW3-145-155-110923 SQ6238-5	N	Methane	10	14	10 U	L	14 J	L
SY-BRMW3-287-297-110923 SQ6238-6	N	Methane	10	9.2 J	10 U	L	9.2 J	L
SY-BRMW3-47-62-110923 SQ6238-4	N	Methane	10	20	10 U	L	20 J	L
SY-BRMW40-62-72-110923 SQ6238-2	FD	Methane	10	5.3 J	10 U	L	5.3 J	L
SY-BRMW4-62-72-110923 SQ6238-1	N	Methane	10	6.1 J	10 U	L	6.1 J	L

Analytes not found in project samples are reported as not detected at the limit of detection (LOD) unless blank contamination occurs and then the sample may be reported as not detected at the (LOQ) based on the sample concentration.
In instances where no LOD is provided, results are reported down to the LOQ.
Trace values are not included in the qualified results table unless additional reason codes are associated.

Reason Code Definitions

Code	Definition
D3	Field Duplicate RPD
I	Surrogate recovery outside project limits.
L	Lab Blank

Reason Code Definitions

Code	Definition
TR	Trace Level Detect

Flag Code and Definitions

Flag	Definition
J	Estimated Value
N	The analysis indicates the presence of an analyte for which there was presumptive evidence to make a tentative identification.
NJ	The analyte has been tentatively identified or presumptively as present and the associated numerical value was the estimated concentration in the sample.
R	The data are rejected due to deficiencies in meeting QC criteria and may not be used for decision making.
U	Undetected: The analyte was analyzed for, but not detected.
UJ	The analyte was not detected; however, the result is estimated due to discrepancies in meeting certain analyte-specific quality control criteria.
X	Result may require rejection; PDT attention required

Bias

-	The result may be biased low
+	The result may be biased high

Note - The bias field is a separate field; however, it is an integral part of the final flag (qualifier) on the sample result

Review Questions

Method: A2320B (Alkalinity by Titrimetric Method)

Review Questions	Yes	No	NA	Comment
Were there discrepancies between the COC and the samples received?		•		No discrepancies were noted between the COC and the samples received.
Were there discrepancies between the COC and the sample labels?		•		No discrepancies were noted between the COC and the sample labels.
Were samples relinquished properly on the COC?	•			
Were all samples properly preserved?	•			
Were sampling dates/times, date and time of laboratory receipt of samples, and sample conditions upon receipt at the laboratory (including preservation, pH, and temperature) documented?	•			
Were sample results reported with percent moisture correction if required?			•	Only water samples were collected.
Were analytical methods performed and analysis dates present?	•			
Were all requested target analytes reported?	•			
Were QAPP specified Project Quantitation Limit Goals achieved? (The laboratory LOQ is compared to the QAPP Project Quantitation Goal)	•			
Were holding times met?	•			
Were trip blanks analyzed at the proper frequency and in control?			•	Trip blank not analyzed for this method.
Were field blanks analyzed at the proper frequency and in control?			•	No field blanks were submitted with these samples.
Were equipment blanks analyzed at the proper frequency and in control?			•	No equipment blanks were submitted with these samples.
Was a method blank prepared and analyzed with each batch?	•			
Were target analytes in the method blank less than DL?		•		Although alkalinity was detected in the method blank, the associated sample results were significantly greater than the concentration found in the blank, therefore no data were qualified.
Was an LCS/LCSD pair prepared and analyzed with each batch?	•			
Were LCS/LCSD recoveries within project acceptance limits?	•			
Was the LCS/LCSD RPD within project acceptance limits?	•			
Was a MS/MSD pair prepared with each batch?	•			
Were MS/MSD recoveries within project acceptance limits?	•			
Was the MS/MSD RPD within project acceptance limits?	•			MSD not performed. A laboratory DUP was performed and DUP RPD was within control criteria.
Were Post Spike (PS) recoveries within project acceptance limits?			•	PS not required per the method.
If ISM was used for sample collection, were laboratory triplicates analyzed and within project acceptance limits?			•	ISM not performed.
Were field replicates (duplicates, triplicates, etc.) analyzed at the proper frequency and in control?	•			
Were reported sample concentrations within calibration range?	•			
Have all Laboratory Case Narrative comments/findings been addressed in the data review process?	•			

Review Questions

Method: A2320B (Alkalinity by Titrimetric Method)				
Review Questions	Yes	No	NA	Comment
Were DoD QSM corrective actions followed if deviations were noted?	•			
Were any data recommended for exclusion in the data validation process?		•		All data is acceptable as reported.

Review Questions

Method: A3500B (The Determination of Ferrous Iron, Phenanthroline Method)				
Review Questions	Yes	No	NA	Comment
Were there discrepancies between the COC and the samples received?		•		No discrepancies were noted between the COC and the samples received.
Were there discrepancies between the COC and the sample labels?		•		No discrepancies were noted between the COC and the sample labels.
Were samples relinquished properly on the COC?	•			
Were all samples properly preserved?	•			
Were sampling dates/times, date and time of laboratory receipt of samples, and sample conditions upon receipt at the laboratory (including preservation, pH, and temperature) documented?	•			
Were analytical methods performed and analysis dates present?	•			
Were all requested target analytes reported?	•			
Were QAPP specified Project Quantitation Limit Goals achieved? (The laboratory LOQ is compared to the QAPP Project Quantitation Goal)	•			
Were holding times met?	•			Although the laboratory case narrative indicated 2 samples were analyzed outside of the 24-hour holding time, the samples were analyzed within the 24th hour and are considered within hold.
Were trip blanks analyzed at the proper frequency and in control?			•	Trip blank not analyzed for this method.
Were field blanks analyzed at the proper frequency and in control?			•	No field blanks were submitted with these samples.
Were equipment blanks analyzed at the proper frequency and in control?			•	No equipment blanks were submitted with these samples.
Was a method blank prepared and analyzed with each batch?	•			
Were target analytes in the method blank less than DL?	•			
Was an LCS/LCSD pair prepared and analyzed with each batch?	•			
Were LCS/LCSD recoveries within project acceptance limits?	•			
Was the LCS/LCSD RPD within project acceptance limits?	•			
Was a MS/MSD pair prepared with each batch?			•	MS/MSD not reported.
Were MS/MSD recoveries within project acceptance limits?			•	MS/MSD not reported.
Was the MS/MSD RPD within project acceptance limits?	•			A laboratory DUP was performed and DUP RPD was within control criteria.
Were Post Spike (PS) recoveries within project acceptance limits?			•	PS not required per the method.
If ISM was used for sample collection, were laboratory triplicates analyzed and within project acceptance limits?			•	ISM not performed.
Were field replicates (duplicates, triplicates, etc.) analyzed at the proper frequency and in control?	•			
Were reported sample concentrations within calibration range?	•			
Have all Laboratory Case Narrative comments/findings been addressed in the data review process?	•			
Were DoD QSM corrective actions followed if deviations were noted?	•			
Were any data recommended for exclusion in the data validation process?		•		All data is acceptable as reported.

Review Questions

Method: A5310B (Standard Method for the Determination of Total Organic Carbon, Combustion IR Method)				
Review Questions	Yes	No	NA	Comment
Were there discrepancies between the COC and the samples received?		•		No discrepancies were noted between the COC and the samples received.
Were there discrepancies between the COC and the sample labels?		•		No discrepancies were noted between the COC and the sample labels.
Were samples relinquished properly on the COC?	•			
Were all samples properly preserved?	•			
Were sampling dates/times, date and time of laboratory receipt of samples, and sample conditions upon receipt at the laboratory (including preservation, pH, and temperature) documented?	•			
Were sample results reported with percent moisture correction if required?			•	Only water samples were collected.
Were analytical methods performed and analysis dates present?	•			
Were all requested target analytes reported?	•			
Were QAPP specified Project Quantitation Limit Goals achieved? (The laboratory LOQ is compared to the QAPP Project Quantitation Goal)	•			
Were holding times met?	•			
Were trip blanks analyzed at the proper frequency and in control?			•	Trip blank not analyzed for this method.
Were field blanks analyzed at the proper frequency and in control?			•	No field blanks were submitted with these samples.
Were equipment blanks analyzed at the proper frequency and in control?			•	No equipment blanks were submitted with these samples.
Was a method blank prepared and analyzed with each batch?	•			
Were target analytes in the method blank less than DL?	•			
Was an LCS/LCSD pair prepared and analyzed with each batch?	•			
Were LCS/LCSD recoveries within project acceptance limits?	•			
Was the LCS/LCSD RPD within project acceptance limits?	•			
Was a MS/MSD pair prepared with each batch?	•			
Were MS/MSD recoveries within project acceptance limits?	•			
Was the MS/MSD RPD within project acceptance limits?	•			MSD not performed. A laboratory DUP was performed and DUP RPD was within control criteria.
Were Post Spike (PS) recoveries within project acceptance limits?			•	PS not required per the method.
If ISM was used for sample collection, were laboratory triplicates analyzed and within project acceptance limits?			•	ISM not performed.
Were field replicates (duplicates, triplicates, etc.) analyzed at the proper frequency and in control?	•			
Were reported sample concentrations within calibration range?	•			
Have all Laboratory Case Narrative comments/findings been addressed in the data review process?	•			
Were DoD QSM corrective actions followed if deviations were noted?	•			

Review Questions

Method: A5310B (Standard Method for the Determination of Total Organic Carbon, Combustion IR Method)				
Review Questions	Yes	No	NA	Comment
Were any data recommended for exclusion in the data validation process?		•		All data is acceptable as reported.

Review Questions

Method: BNASIM (GC/MS-SIM Analysis by SW8270)				
Review Questions	Yes	No	NA	Comment
Were there discrepancies between the COC and the samples received?		•		No discrepancies were noted between the COC and the samples received.
Were there discrepancies between the COC and the sample labels?		•		No discrepancies were noted between the COC and the sample labels.
Were samples relinquished properly on the COC?	•			
Were all samples properly preserved?	•			
Were sampling dates/times, date and time of laboratory receipt of samples, and sample conditions upon receipt at the laboratory (including preservation, pH, and temperature) documented?	•			
Were sample results reported with percent moisture correction if required?			•	Only water samples were collected.
Were analytical methods performed and analysis dates present?	•			
Were all requested target analytes reported?	•			
Were QAPP specified Project Quantitation Limit Goals achieved? (The laboratory LOQ is compared to the QAPP Project Quantitation Goal)	•			
Were holding times met?	•			
Were trip blanks analyzed at the proper frequency and in control?			•	Trip blank not analyzed for this method.
Were field blanks analyzed at the proper frequency and in control?			•	No field blanks were submitted with these samples.
Were equipment blanks analyzed at the proper frequency and in control?			•	No equipment blanks were submitted with these samples.
Was a method blank prepared and analyzed with each batch?	•			
Were target analytes in the method blank less than DL?	•			
Was an LCS/LCSD pair prepared and analyzed with each batch?	•			
Were LCS/LCSD recoveries within project acceptance limits?	•			
Was the LCS/LCSD RPD within project acceptance limits?			•	LCSD not performed.
Was a MS/MSD pair prepared with each batch?			•	MS/MSD not reported.
Were MS/MSD recoveries within project acceptance limits?			•	MS/MSD not reported.
Was the MS/MSD RPD within project acceptance limits?			•	MS/MSD not reported.
If ISM was used for sample collection, were laboratory triplicates analyzed and within project acceptance limits?			•	ISM not performed.
Were surrogate recoveries within project acceptance limits?		•		Due to surrogate %R below criteria, samples SY-BRMW10-65-75-110923 and SY-BRMW4-138-148-110923 were qualified as nondetect estimated (UJ) and one chrysene result was qualified as estimated with a low bias (J-).
Were field replicates (duplicates, triplicates, etc.) analyzed at the proper frequency and in control?		•		Several PAH results for samples SY-BRMW1-65-75-110923 and SY-BRMW10-65-75-110923 were qualified by FUDSChem ADR because one result was non-detect and one was detected. When the LOD was used in absolute difference calculation for the non-detect result, the difference was less then than 1X the LOQ; therefore, these qualifiers were removed during data validation.

Review Questions

Method: BNASIM (GC/MS-SIM Analysis by SW8270)				
Review Questions	Yes	No	NA	Comment
Were reported sample concentrations within calibration range?	•			
Have all Laboratory Case Narrative comments/findings been addressed in the data review process?	•			
Were DoD QSM corrective actions followed if deviations were noted?	•			
Were any data recommended for exclusion in the data validation process?		•		All data is acceptable as reported or as qualified during data validation.

Review Questions

Method: E300 (Inorganic Anions In Water By Ion Chromatography)				
Review Questions	Yes	No	NA	Comment
Were there discrepancies between the COC and the samples received?		•		No discrepancies were noted between the COC and the samples received.
Were there discrepancies between the COC and the sample labels?		•		No discrepancies were noted between the COC and the sample labels.
Were samples relinquished properly on the COC?	•			
Were all samples properly preserved?	•			
Were sampling dates/times, date and time of laboratory receipt of samples, and sample conditions upon receipt at the laboratory (including preservation, pH, and temperature) documented?	•			
Were sample results reported with percent moisture correction if required?			•	Only water samples were collected.
Were analytical methods performed and analysis dates present?	•			
Were all requested target analytes reported?	•			
Were QAPP specified Project Quantitation Limit Goals achieved? (The laboratory LOQ is compared to the QAPP Project Quantitation Goal)	•			
Were holding times met?	•			
Were trip blanks analyzed at the proper frequency and in control?			•	Trip blank was not analyzed for this method.
Were field blanks analyzed at the proper frequency and in control?			•	No field blanks were submitted with these samples.
Were equipment blanks analyzed at the proper frequency and in control?			•	No equipment blanks were submitted with these samples.
Was a method blank prepared and analyzed with each batch?	•			
Were target analytes in the method blank less than DL?		•		Although sulfate was detected in the method blank, the associated sample results were significantly greater than the blank, therefore no data were qualified.
Was an LCS/LCSD pair prepared and analyzed with each batch?	•			
Were LCS/LCSD recoveries within project acceptance limits?	•			
Was the LCS/LCSD RPD within project acceptance limits?	•			
Was a MS/MSD pair prepared with each batch?	•			MS only performed on nitrate.
Were MS/MSD recoveries within project acceptance limits?	•			
Was the MS/MSD RPD within project acceptance limits?	•			MSD not performed. A laboratory DUP was performed and DUP RPD was within control criteria.
Were Post Spike (PS) recoveries within project acceptance limits?			•	PS not required per the method.
If ISM was used for sample collection, were laboratory triplicates analyzed and within project acceptance limits?			•	ISM not performed.
Were field replicates (duplicates, triplicates, etc.) analyzed at the proper frequency and in control?	•			
Were reported sample concentrations within calibration range?	•			
Have all Laboratory Case Narrative comments/findings been addressed in the data review process?	•			

Review Questions

Method: E300 (Inorganic Anions In Water By Ion Chromatography)				
Review Questions	Yes	No	NA	Comment
Were DoD QSM corrective actions followed if deviations were noted?	•			
Were any data recommended for exclusion in the data validation process?		•		All data is acceptable as reported.

Review Questions

Method: RSK175 (Dissolved Gas Analysis in Water Samples Using a GC Headspace Equilibrium Technique)				
Review Questions	Yes	No	NA	Comment
Were there discrepancies between the COC and the samples received?		•		No discrepancies were noted between the COC and the samples received.
Were there discrepancies between the COC and the sample labels?		•		No discrepancies were noted between the COC and the sample labels.
Were samples relinquished properly on the COC?	•			
Were all samples properly preserved?	•			
Were sampling dates/times, date and time of laboratory receipt of samples, and sample conditions upon receipt at the laboratory (including preservation, pH, and temperature) documented?	•			
Were sample results reported with percent moisture correction if required?			•	Only water samples were collected.
Were analytical methods performed and analysis dates present?	•			
Were all requested target analytes reported?	•			
Were QAPP specified Project Quantitation Limit Goals achieved? (The laboratory LOQ is compared to the QAPP Project Quantitation Goal)	•			
Were holding times met?	•			
Were trip blanks analyzed at the proper frequency and in control?			•	Trip blank not analyzed for this method.
Were field blanks analyzed at the proper frequency and in control?			•	No field blanks were submitted with these samples.
Were equipment blanks analyzed at the proper frequency and in control?			•	No equipment blanks were submitted with these samples.
Was a method blank prepared and analyzed with each batch?	•			
Were target analytes in the method blank less than DL?		•		Due to method blank contamination, several methane results were qualified as estimated (J) with a high bias (+) or nondetect (U) at the LOQ.
Was an LCS/LCSD pair prepared and analyzed with each batch?	•			
Were LCS/LCSD recoveries within project acceptance limits?	•			
Was the LCS/LCSD RPD within project acceptance limits?			•	LCSD not performed.
Was a MS/MSD pair prepared with each batch?			•	MS/MSD not reported.
Were MS/MSD recoveries within project acceptance limits?			•	MS/MSD not reported.
Was the MS/MSD RPD within project acceptance limits?	•			A laboratory DUP was performed and DUP RPD was within control criteria.
If ISM was used for sample collection, were laboratory triplicates analyzed and within project acceptance limits?			•	ISM not performed.
Were surrogate recoveries within project acceptance limits?			•	Surrogates not required for the requested analytes.
Were field replicates (duplicates, triplicates, etc.) analyzed at the proper frequency and in control?	•			
Were reported sample concentrations within calibration range?	•			
Have all Laboratory Case Narrative comments/findings been addressed in the data review process?	•			
Were DoD QSM corrective actions followed if deviations were noted?	•			

Review Questions

Method: RSK175 (Dissolved Gas Analysis in Water Samples Using a GC Headspace Equilibrium Technique)				
Review Questions	Yes	No	NA	Comment
Were any data recommended for exclusion in the data validation process?		•		All data is acceptable as reported or as qualified during data validation.

Review Questions

Method: SW7196A (Chromium, Hexavalent (Colorimetric))				
Review Questions	Yes	No	NA	Comment
Were there discrepancies between the COC and the samples received?		•		No discrepancies were noted between the COC and the samples received.
Were there discrepancies between the COC and the sample labels?		•		No discrepancies were noted between the COC and the sample labels.
Were samples relinquished properly on the COC?	•			
Were all samples properly preserved?	•			
Were sampling dates/times, date and time of laboratory receipt of samples, and sample conditions upon receipt at the laboratory (including preservation, pH, and temperature) documented?	•			
Were sample results reported with percent moisture correction if required?			•	Only water samples were collected.
Were analytical methods performed and analysis dates present?	•			
Were all requested target analytes reported?	•			
Were QAPP specified Project Quantitation Limit Goals achieved? (The laboratory LOQ is compared to the QAPP Project Quantitation Goal)	•			
Were holding times met?	•			Although the laboratory case narrative indicated 2 samples were analyzed outside of the 24-hour holding time, the samples were analyzed within the 24th hour and are considered within hold.
Were trip blanks analyzed at the proper frequency and in control?			•	Trip blank not analyzed for this method.
Were field blanks analyzed at the proper frequency and in control?			•	No field blanks were submitted with these samples.
Were equipment blanks analyzed at the proper frequency and in control?			•	No equipment blanks were submitted with these samples.
Was a method blank prepared and analyzed with each batch?	•			
Were target analytes in the method blank less than DL?		•		Due to method blank contamination, several hexavalent chromium results were qualified as nondetect (U).
Was an LCS/LCSD pair prepared and analyzed with each batch?	•			
Were LCS/LCSD recoveries within project acceptance limits?	•			
Was the LCS/LCSD RPD within project acceptance limits?	•			
Was a MS/MSD pair prepared with each batch?	•			
Were MS/MSD recoveries within project acceptance limits?	•			
Was the MS/MSD RPD within project acceptance limits?	•			MSD not performed. A laboratory DUP was performed and DUP RPD was within control criteria.
Were Post Spike (PS) recoveries within project acceptance limits?			•	PS not required per the method.
If ISM was used for sample collection, were laboratory triplicates analyzed and within project acceptance limits?			•	ISM not performed.
Were field replicates (duplicates, triplicates, etc.) analyzed at the proper frequency and in control?	•			
Were reported sample concentrations within calibration range?	•			

Review Questions

Method: SW7196A (Chromium, Hexavalent (Colorimetric))				
Review Questions	Yes	No	NA	Comment
Have all Laboratory Case Narrative comments/findings been addressed in the data review process?	•			
Were DoD QSM corrective actions followed if deviations were noted?	•			
Were any data recommended for exclusion in the data validation process?		•		All data is acceptable as reported or as qualified during data validation.

Review Questions

Method: SW8260C (Volatile Organic Compounds by GC/MS)				
Review Questions	Yes	No	NA	Comment
Were there discrepancies between the COC and the samples received?		•		No discrepancies were noted between the COC and the samples received.
Were there discrepancies between the COC and the sample labels?		•		No discrepancies were noted between the COC and the sample labels.
Were samples relinquished properly on the COC?	•			
Were all samples properly preserved?	•			
Were sampling dates/times, date and time of laboratory receipt of samples, and sample conditions upon receipt at the laboratory (including preservation, pH, and temperature) documented?	•			
Were sample results reported with percent moisture correction if required?			•	Only water samples were collected.
Were analytical methods performed and analysis dates present?	•			
Were all requested target analytes reported?	•			
Were QAPP specified Project Quantitation Limit Goals achieved? (The laboratory LOQ is compared to the QAPP Project Quantitation Goal)	•			
Were holding times met?	•			
Were trip blanks analyzed at the proper frequency and in control?	•			
Were field blanks analyzed at the proper frequency and in control?			•	No field blanks were submitted with these samples.
Were equipment blanks analyzed at the proper frequency and in control?			•	No equipment blanks were submitted with these samples.
Was a method blank prepared and analyzed with each batch?	•			
Were target analytes in the method blank less than DL?	•			
Was an LCS/LCSD pair prepared and analyzed with each batch?	•			
Were LCS/LCSD recoveries within project acceptance limits?	•			
Was the LCS/LCSD RPD within project acceptance limits?			•	LCSD not performed.
Was a MS/MSD pair prepared with each batch?			•	MS/MSD not reported.
Were MS/MSD recoveries within project acceptance limits?			•	MS/MSD not reported.
Was the MS/MSD RPD within project acceptance limits?			•	MS/MSD not reported.
If ISM was used for sample collection, were laboratory triplicates analyzed and within project acceptance limits?			•	ISM not performed.
Were surrogate recoveries within project acceptance limits?	•			
Were field replicates (duplicates, triplicates, etc.) analyzed at the proper frequency and in control?	•			
Were reported sample concentrations within calibration range?	•			
Have all Laboratory Case Narrative comments/findings been addressed in the data review process?	•			
Were DoD QSM corrective actions followed if deviations were noted?	•			
Were any data recommended for exclusion in the data validation process?		•		All data is acceptable as reported.

Field Duplicate Report By SDG
D01ME0004-07, Dow Military Airfield, Salvage Yard
Dow SY Groundwater Nov 2023
Field Duplicates for SDG: SQ6238.xml

Location	Analysis
SY-BRMW1	A2320B

Field ID - Primary/Field Dup	Lab ID - Primary/Field Dup	Analyte	Primary Result	FD Result	RL	RPD	RPD Criteria	RPD Check	RL Check
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	SQ6238-9 / SQ6238-10	Alkalinity, Total (as CaCO3)	130	130	5.00	0.00	30	OK	NA

Location	Analysis
SY-BRMW1	A3500B

Field ID - Primary/Field Dup	Lab ID - Primary/Field Dup	Analyte	Primary Result	FD Result	RL	RPD	RPD Criteria	RPD Check	RL Check
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	SQ6238-9 / SQ6238-10	Iron, Ferrous	0.160	0.180	0.100	11.8	30	NA	OK

Location	Analysis
SY-BRMW1	A5310B

Field ID - Primary/Field Dup	Lab ID - Primary/Field Dup	Analyte	Primary Result	FD Result	RL	RPD	RPD Criteria	RPD Check	RL Check
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	SQ6238-9 / SQ6238-10	Total Organic Carbon	2.30	2.20	1.00	4.44	30	NA	OK

Location	Analysis
SY-BRMW1	BNASIM

Field ID - Primary/Field Dup	Lab ID - Primary/Field Dup	Analyte	Primary Result	FD Result	RL	RPD	RPD Criteria	RPD Check	RL Check
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	SQ6238-9 / SQ6238-10	2-Methylnaphthalene	ND	ND	0.190	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	SQ6238-9 / SQ6238-10	Acenaphthene	ND	ND	0.190	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	SQ6238-9 / SQ6238-10	Acenaphthylene	ND	ND	0.190	NA	30	NA	OK

FD = Field Duplicate
RL = Reporting Limit
RPD = Relative Percent Difference

RL Check = If either the primary sample or field duplicate result is less than 5 times the RL then the criteria used to determine if the field duplicate is outside QC limits is +/- RL for Water and +/- 2 times RL for Soil"

Field Duplicate Report By SDG
D01ME0004-07, Dow Military Airfield, Salvage Yard
Dow SY Groundwater Nov 2023
Field Duplicates for SDG: SQ6238.xml

Location	Analysis
SY-BRMW1	BNASIM

Field ID - Primary/Field Dup	Lab ID - Primary/Field Dup	Analyte	Primary Result	FD Result	RL	RPD	RPD Criteria	RPD Check	RL Check
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	SQ6238-9 / SQ6238-10	Anthracene	0.120	ND	0.190	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	SQ6238-9 / SQ6238-10	Benzo(a)anthracene	0.180	ND	0.190	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	SQ6238-9 / SQ6238-10	Benzo(a)pyrene	0.0730	ND	0.190	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	SQ6238-9 / SQ6238-10	Benzo(b)fluoranthene	0.200	ND	0.190	NA	30	NA	0.20
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	SQ6238-9 / SQ6238-10	Benzo(g,h,i)perylene	0.110	ND	0.190	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	SQ6238-9 / SQ6238-10	Benzo(k)fluoranthene	0.220	ND	0.190	NA	30	NA	0.22
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	SQ6238-9 / SQ6238-10	Chrysene	0.230	ND	0.190	NA	30	NA	0.23
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	SQ6238-9 / SQ6238-10	Dibenz(a,h)anthracene	0.150	ND	0.190	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	SQ6238-9 / SQ6238-10	Fluoranthene	0.270	ND	0.190	NA	30	NA	0.27
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	SQ6238-9 / SQ6238-10	Fluorene	0.0890	ND	0.190	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	SQ6238-9 / SQ6238-10	Indeno(1,2,3-c,d)pyrene	0.110	ND	0.190	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	SQ6238-9 / SQ6238-10	Naphthalene	ND	ND	0.190	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	SQ6238-9 / SQ6238-10	Phenanthrene	0.160	ND	0.190	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	SQ6238-9 / SQ6238-10	Pyrene	0.270	ND	0.190	NA	30	NA	0.27

FD = Field Duplicate
RL = Reporting Limit
RPD = Relative Percent Difference

RL Check = If either the primary sample or field duplicate result is less than 5 times the RL then the criteria used to determine if the field duplicate is outside QC limits is +/- RL for Water and +/- 2 times RL for Soil"

Field Duplicate Report By SDG
D01ME0004-07, Dow Military Airfield, Salvage Yard
Dow SY Groundwater Nov 2023
Field Duplicates for SDG: SQ6238.xml

Location	Analysis
SY-BRMW1	E300

Field ID - Primary/Field Dup	Lab ID - Primary/Field Dup	Analyte	Primary Result	FD Result	RL	RPD	RPD Criteria	RPD Check	RL Check
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	SQ6238-9 / SQ6238-10	Chloride	850	860	100	1.17	30	OK	NA
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	SQ6238-9 / SQ6238-10	Nitrate	0.0220	0.0330	0.0500	40.0	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	SQ6238-9 / SQ6238-10	Sulfate	240	250	5.00	4.08	30	OK	NA

Location	Analysis
SY-BRMW1	RSK175

Field ID - Primary/Field Dup	Lab ID - Primary/Field Dup	Analyte	Primary Result	FD Result	RL	RPD	RPD Criteria	RPD Check	RL Check
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	SQ6238-9 / SQ6238-10	Ethane	ND	ND	13.0	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	SQ6238-9 / SQ6238-10	Ethene	ND	ND	13.0	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	SQ6238-9 / SQ6238-10	Methane	ND	ND	10.0	NA	30	NA	OK

Location	Analysis
SY-BRMW1	SW7196A

Field ID - Primary/Field Dup	Lab ID - Primary/Field Dup	Analyte	Primary Result	FD Result	RL	RPD	RPD Criteria	RPD Check	RL Check
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	SQ6238-9 / SQ6238-10	Hexavalent Chromium	ND	ND	0.0250	NA	30	NA	OK

FD = Field Duplicate
RL = Reporting Limit
RPD = Relative Percent Difference

RL Check = If either the primary sample or field duplicate result is less than 5 times the RL then the criteria used to determine if the field duplicate is outside QC limits is +/- RL for Water and +/- 2 times RL for Soil"

Field Duplicate Report By SDG
D01ME0004-07, Dow Military Airfield, Salvage Yard
Dow SY Groundwater Nov 2023
Field Duplicates for SDG: SQ6238.xml

Location	Analysis
SY-BRMW1	SW8260C

Field ID - Primary/Field Dup	Lab ID - Primary/Field Dup	Analyte	Primary Result	FD Result	RL	RPD	RPD Criteria	RPD Check	RL Check
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	SQ6238-9 / SQ6238-10	1,1-Dichloroethene	ND	ND	0.0500	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	SQ6238-9 / SQ6238-10	cis-1,2-Dichloroethene	ND	ND	0.0500	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	SQ6238-9 / SQ6238-10	Tetrachloroethene (PCE)	ND	ND	0.0500	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	SQ6238-9 / SQ6238-10	trans-1,2-Dichloroethene	0.0220	ND	0.0500	NA	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	SQ6238-9 / SQ6238-10	Trichloroethene (TCE)	0.0810	0.0820	0.0500	1.23	30	NA	OK
SY-BRMW1-65-75-110923 / SY-BRMW10-65-75-110923	SQ6238-9 / SQ6238-10	Vinyl chloride	ND	ND	0.100	NA	30	NA	OK

Location	Analysis
SY-BRMW4	A2320B

Field ID - Primary/Field Dup	Lab ID - Primary/Field Dup	Analyte	Primary Result	FD Result	RL	RPD	RPD Criteria	RPD Check	RL Check
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	SQ6238-1 / SQ6238-2	Alkalinity, Total (as CaCO3)	110	110	5.00	0.00	30	OK	NA

Location	Analysis
SY-BRMW4	A3500B

Field ID - Primary/Field Dup	Lab ID - Primary/Field Dup	Analyte	Primary Result	FD Result	RL	RPD	RPD Criteria	RPD Check	RL Check
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	SQ6238-1 / SQ6238-2	Iron, Ferrous	0.0760	0.0960	0.100	23.3	30	NA	OK

FD = Field Duplicate
RL = Reporting Limit
RPD = Relative Percent Difference

RL Check = If either the primary sample or field duplicate result is less than 5 times the RL then the criteria used to determine if the field duplicate is outside QC limits is +/- RL for Water and +/- 2 times RL for Soil"

Field Duplicate Report By SDG
D01ME0004-07, Dow Military Airfield, Salvage Yard
Dow SY Groundwater Nov 2023
Field Duplicates for SDG: SQ6238.xml

Location	Analysis
SY-BRMW4	A5310B

Field ID - Primary/Field Dup	Lab ID - Primary/Field Dup	Analyte	Primary Result	FD Result	RL	RPD	RPD Criteria	RPD Check	RL Check
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	SQ6238-1 / SQ6238-2	Total Organic Carbon	2.00	2.20	1.00	9.52	30	NA	OK

Location	Analysis
SY-BRMW4	BNASIM

Field ID - Primary/Field Dup	Lab ID - Primary/Field Dup	Analyte	Primary Result	FD Result	RL	RPD	RPD Criteria	RPD Check	RL Check
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	SQ6238-1 / SQ6238-2	2-Methylnaphthalene	ND	ND	0.190	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	SQ6238-1 / SQ6238-2	Acenaphthene	ND	ND	0.190	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	SQ6238-1 / SQ6238-2	Acenaphthylene	ND	ND	0.190	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	SQ6238-1 / SQ6238-2	Anthracene	ND	ND	0.190	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	SQ6238-1 / SQ6238-2	Benzo(a)anthracene	ND	ND	0.190	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	SQ6238-1 / SQ6238-2	Benzo(a)pyrene	ND	ND	0.190	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	SQ6238-1 / SQ6238-2	Benzo(b)fluoranthene	ND	ND	0.190	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	SQ6238-1 / SQ6238-2	Benzo(g,h,i)perylene	ND	ND	0.190	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	SQ6238-1 / SQ6238-2	Benzo(k)fluoranthene	ND	ND	0.190	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	SQ6238-1 / SQ6238-2	Chrysene	ND	ND	0.190	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	SQ6238-1 / SQ6238-2	Dibenz(a,h)anthracene	ND	ND	0.190	NA	30	NA	OK

FD = Field Duplicate
RL = Reporting Limit
RPD = Relative Percent Difference

RL Check = If either the primary sample or field duplicate result is less than 5 times the RL then the criteria used to determine if the field duplicate is outside QC limits is +/- RL for Water and +/- 2 times RL for Soil"

Field Duplicate Report By SDG
D01ME0004-07, Dow Military Airfield, Salvage Yard
Dow SY Groundwater Nov 2023
Field Duplicates for SDG: SQ6238.xml

Location	Analysis
SY-BRMW4	BNASIM

Field ID - Primary/Field Dup	Lab ID - Primary/Field Dup	Analyte	Primary Result	FD Result	RL	RPD	RPD Criteria	RPD Check	RL Check
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	SQ6238-1 / SQ6238-2	Fluoranthene	ND	ND	0.190	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	SQ6238-1 / SQ6238-2	Fluorene	ND	ND	0.190	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	SQ6238-1 / SQ6238-2	Indeno(1,2,3-c,d)pyrene	ND	ND	0.190	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	SQ6238-1 / SQ6238-2	Naphthalene	ND	ND	0.190	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	SQ6238-1 / SQ6238-2	Phenanthrene	ND	ND	0.190	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	SQ6238-1 / SQ6238-2	Pyrene	ND	ND	0.190	NA	30	NA	OK

Location	Analysis
SY-BRMW4	E300

Field ID - Primary/Field Dup	Lab ID - Primary/Field Dup	Analyte	Primary Result	FD Result	RL	RPD	RPD Criteria	RPD Check	RL Check
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	SQ6238-1 / SQ6238-2	Chloride	320	320	20.0	0.00	30	OK	NA
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	SQ6238-1 / SQ6238-2	Nitrate	ND	ND	0.0500	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	SQ6238-1 / SQ6238-2	Sulfate	92.0	94.0	2.00	2.15	30	OK	NA

FD = Field Duplicate
RL = Reporting Limit
RPD = Relative Percent Difference

RL Check = If either the primary sample or field duplicate result is less than 5 times the RL then the criteria used to determine if the field duplicate is outside QC limits is +/- RL for Water and +/- 2 times RL for Soil"

Field Duplicate Report By SDG
D01ME0004-07, Dow Military Airfield, Salvage Yard
Dow SY Groundwater Nov 2023
Field Duplicates for SDG: SQ6238.xml

Location	Analysis
SY-BRMW4	RSK175

Field ID - Primary/Field Dup	Lab ID - Primary/Field Dup	Analyte	Primary Result	FD Result	RL	RPD	RPD Criteria	RPD Check	RL Check
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	SQ6238-1 / SQ6238-2	Ethane	ND	ND	13.0	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	SQ6238-1 / SQ6238-2	Ethene	ND	ND	13.0	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	SQ6238-1 / SQ6238-2	Methane	ND	ND	10.0	NA	30	NA	OK

Location	Analysis
SY-BRMW4	SW7196A

Field ID - Primary/Field Dup	Lab ID - Primary/Field Dup	Analyte	Primary Result	FD Result	RL	RPD	RPD Criteria	RPD Check	RL Check
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	SQ6238-1 / SQ6238-2	Hexavalent Chromium	ND	ND	0.0250	NA	30	NA	OK

Location	Analysis
SY-BRMW4	SW8260C

Field ID - Primary/Field Dup	Lab ID - Primary/Field Dup	Analyte	Primary Result	FD Result	RL	RPD	RPD Criteria	RPD Check	RL Check
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	SQ6238-1 / SQ6238-2	1,1-Dichloroethene	ND	ND	0.0500	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	SQ6238-1 / SQ6238-2	cis-1,2-Dichloroethene	ND	ND	0.0500	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	SQ6238-1 / SQ6238-2	Tetrachloroethene (PCE)	ND	ND	0.0500	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	SQ6238-1 / SQ6238-2	trans-1,2-Dichloroethene	ND	ND	0.0500	NA	30	NA	OK
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	SQ6238-1 / SQ6238-2	Trichloroethene (TCE)	ND	ND	0.0500	NA	30	NA	OK

FD = Field Duplicate
RL = Reporting Limit
RPD = Relative Percent Difference

RL Check = If either the primary sample or field duplicate result is less than 5 times the RL then the criteria used to determine if the field duplicate is outside QC limits is +/- RL for Water and +/- 2 times RL for Soil"

Field Duplicate Report By SDG
D01ME0004-07, Dow Military Airfield, Salvage Yard
Dow SY Groundwater Nov 2023
Field Duplicates for SDG: SQ6238.xml

Location	Analysis
SY-BRMW4	SW8260C

Field ID - Primary/Field Dup	Lab ID - Primary/Field Dup	Analyte	Primary Result	FD Result	RL	RPD	RPD Criteria	RPD Check	RL Check
SY-BRMW4-62-72-110923 / SY-BRMW40-62-72-110923	SQ6238-1 / SQ6238-2	Vinyl chloride	ND	ND	0.100	NA	30	NA	OK

FD = Field Duplicate
RL = Reporting Limit
RPD = Relative Percent Difference

RL Check = If either the primary sample or field duplicate result is less than 5 times the RL then the criteria used to determine if the field duplicate is outside QC limits is +/- RL for Water and +/- 2 times RL for Soil"

Data Usability Summary

Facility:	D01ME0004-07, Dow Military Airfield, Salvage Yard
Event:	Dow SY Groundwater Nov 2023
Guidance Document:	Final UFP QAPP Revision No. 1 Remedial Investigation Former Salvage Yard Former Dow Military Airfield 233 Odlin Road, Bangor, Maine December 2022
Prime Contractor:	Credere Associates, LLC, Westbrook, ME
Organization Preparing DUA:	Credere Associates, LLC
DUA Release Date:	2024-06-18
Project Manager:	William Humphries
Contract Laboratory(ies):	Absolute Resource Associates, LLC, Portsmouth, NH | Katahdin Analytical Services, Scarborough, ME
Data Review Contractor:	EnSafe Inc | EnSafe, Inc.
Data Review Level:	S2AVEM
Sample Collection Date Range:	2023-11-06 to 2023-11-09

SDG	A2320B	A3500B	A5310B	BNASIM	E300	MADEPEP	MADEPVP	RSK175	SW6020A	SW7196A	SW7470A	SW8082A	SW8260C	SW8260D	SW8270E
67797						X	X		X		X	X		X	X
67798						X	X		X		X	X		X	X
67836						X	X		X		X	X		X	X
67839						X	X		X		X	X		X	X
SQ6112	X	X	X	X	X			X		X			X		
SQ6133	X	X	X	X	X			X		X			X		
SQ6179	X	X	X	X	X			X		X			X		
SQ6238	X	X	X	X	X			X		X			X		

QA objectives for measuring data are expressed in terms of precision, accuracy, representativeness, comparability, completeness, and sensitivity (PARCCS). The QA objectives provide a mechanism for ongoing control and evaluating and measuring data quality throughout the project.

A review of the collected data is necessary in order to identify if data measurement objectives established in the seven-step data quality objective (DQO) process have been met. In general, the following data measurement objectives were considered:

•Specification of particular analytical method and reporting detection limit requirements
•Identification of the appropriate laboratory analytical QC requirements
•Verify if appropriate levels of other PARCCS criteria for the data has been met
•Delineation of specific sample-handling issues or other project-specific issues

The data validation review of the QA objectives verifies if the collected data are of sufficient quality to support their intended use.

A total of 15 results (0.18 %) out of the 8329 results (sample and field QC samples) reported have had qualifiers modified during this Data Usability Assessment and 15 results (0.18 %) have been rejected or deemed a serious deficiency. 613 results were qualified during the data review process. Trace values, defined as results that are qualified as estimated because they fall between the detection limit and the reporting limit/limit of quantitation, are not counted as qualified results in the above count.

2024-06-18

Reviewed by Allison Drouin, Credere Associates, LLC

Data Usability Summary

Data Usability Assessment Modifications to Qualifiers

Test Method: MADEPEP Extraction Method: METHOD Leach Method: NONE

FieldSample ID	Type	Analyte	LOQ	Lab Result	Validation Result	Modified Result	Units	Final Reason
SY-BRMW10-65-75-110923	FD	C9-C18 Extractable Petroleum Hydrocarbons, Aliphatic	100	95 U#	95 X	95 R	ug/L	C

Test Method: SW8082A Extraction Method: SW3510C Leach Method: NONE

FieldSample ID	Type	Analyte	LOQ	Lab Result	Validation Result	Modified Result	Units	Final Reason
SY-OBMW4R-110723	N	PCB-1016 (Aroclor 1016)	0.10	0.062 U	0.062 X	0.062 R	ug/L	I
SY-OBMW4R-110723	N	PCB-1221 (Aroclor 1221)	0.10	0.062 U	0.062 X	0.062 R	ug/L	I
SY-OBMW4R-110723	N	PCB-1232 (Aroclor 1232)	0.10	0.062 U	0.062 X	0.062 R	ug/L	I
SY-OBMW4R-110723	N	PCB-1242 (Aroclor 1242)	0.10	0.062 U	0.062 X	0.062 R	ug/L	I
SY-OBMW4R-110723	N	PCB-1248 (Aroclor 1248)	0.10	0.062 U	0.062 X	0.062 R	ug/L	I
SY-OBMW4R-110723	N	PCB-1254 (Aroclor 1254)	0.10	0.062 U	0.062 X	0.062 R	ug/L	I
SY-OBMW4R-110723	N	PCB-1260 (Aroclor 1260)	0.10	0.062 U	0.062 X	0.062 R	ug/L	I

Test Method: SW8270E Extraction Method: SW3510C Leach Method: NONE

FieldSample ID	Type	Analyte	LOQ	Lab Result	Validation Result	Modified Result	Units	Final Reason
SY-BRMW10-65-75-110923	FD	Benzoic acid	50	45 U#	45 X	45 R	ug/L	C
SY-BRMW1-150-157-110923	N	Benzoic acid	50	45 U#	45 X	45 R	ug/L	C
SY-BRMW1-42-52-110923	N	Benzoic acid	50	45 U#	45 X	45 R	ug/L	C
SY-BRMW1-65-75-110923	N	Benzoic acid	50	45 U#	45 X	45 R	ug/L	C
SY-BRMW3-145-155-110923	N	Benzoic acid	50	45 U#	45 X	45 R	ug/L	C
SY-BRMW3-287-297-110923	N	Benzoic acid	50	45 U#	45 X	45 R	ug/L	C
SY-BRMW4-291-301-110923	N	Benzoic acid	50	45 U#	45 X	45 R	ug/L	C

General Note: Qualified analytes in samples are reported as estimated, not detected (UJ) at the Limit of Detection (LOD).

Rejected Results

Test Method: MADEPEP Extraction Method: METHOD Leach Method: NONE

Field Sample ID	Type	Analyte	LOQ	Lab Result	Modified Result	Units	Final Reason
SY-BRMW10-65-75-110923	FD	C9-C18 Extractable Petroleum Hydrocarbons, Aliphatic	100	95 U#	95 R	ug/L	C

Data Usability Summary

Rejected Results

Test Method: SW8082A Extraction Method: SW3510C Leach Method: NONE

Field Sample ID	Type	Analyte	LOQ	Lab Result	Modified Result	Units	Final Reason
SY-OBMW4R-110723	N	PCB-1016 (Aroclor 1016)	0.10	0.062 U	0.062 R	ug/L	I
SY-OBMW4R-110723	N	PCB-1221 (Aroclor 1221)	0.10	0.062 U	0.062 R	ug/L	I
SY-OBMW4R-110723	N	PCB-1232 (Aroclor 1232)	0.10	0.062 U	0.062 R	ug/L	I
SY-OBMW4R-110723	N	PCB-1242 (Aroclor 1242)	0.10	0.062 U	0.062 R	ug/L	I
SY-OBMW4R-110723	N	PCB-1248 (Aroclor 1248)	0.10	0.062 U	0.062 R	ug/L	I
SY-OBMW4R-110723	N	PCB-1254 (Aroclor 1254)	0.10	0.062 U	0.062 R	ug/L	I
SY-OBMW4R-110723	N	PCB-1260 (Aroclor 1260)	0.10	0.062 U	0.062 R	ug/L	I

Test Method: SW8270E Extraction Method: SW3510C Leach Method: NONE

Field Sample ID	Type	Analyte	LOQ	Lab Result	Modified Result	Units	Final Reason
SY-BRMW10-65-75-110923	FD	Benzoic acid	50	45 U#	45 R	ug/L	C
SY-BRMW1-150-157-110923	N	Benzoic acid	50	45 U#	45 R	ug/L	C
SY-BRMW1-42-52-110923	N	Benzoic acid	50	45 U#	45 R	ug/L	C
SY-BRMW1-65-75-110923	N	Benzoic acid	50	45 U#	45 R	ug/L	C
SY-BRMW3-145-155-110923	N	Benzoic acid	50	45 U#	45 R	ug/L	C
SY-BRMW3-287-297-110923	N	Benzoic acid	50	45 U#	45 R	ug/L	C
SY-BRMW4-291-301-110923	N	Benzoic acid	50	45 U#	45 R	ug/L	C

Reason Code Definitions

Code	Definition
C	LCS Recovery
D3	Field Duplicate RPD
I	Surrogate recovery outside project limits.
L	Lab Blank
M	MS Recovery
TR	Trace Level Detect
V4	Sample Receipt Condition
Z	LCS RPD

Flag Code and Definitions

Flag	Definition
J	Estimated Value
R	The data are rejected due to deficiencies in meeting QC criteria and may not be used for decision making.
U	Undetected: The analyte was analyzed for, but not detected.
UJ	The analyte was not detected; however, the result is estimated due to discrepancies in meeting certain analyte-specific quality control criteria.
X	Result may require rejection; PDT attention required

Data Usability Summary

Sample Type Code and Definitions

Type	Definition
BD	Blank Spike Duplicate
BS	Blank Spike
FD	Field Duplicate
LB	Laboratory Blank
LR	Laboratory Replicate
MS	Matrix Spike
N	Normal
SD	Matrix Spike Duplicate
TB	Trip Blank

Data Usability Summary

Narrative Comments

Review Questions	Yes	No	NA	Comment
Review Objective/Sampling Design				
Is the Final UFP QAPP associated with the event present in the Planning folder of the FUDSChem library for the project?	•			Loaded to FUDSChem as "Dow_Salvage-Yard_QAPP_FINAL_9-18-2019_W912WJ-18-C-0019, Credere Associates, LLC, 2019-09-18"
Were key outputs defined during systematic planning (e.g.,PQOs or DQOs and MPCs) reviewed to make sure they are still applicable? Refer to the UFP QAPP for the projects, and to the worksheets found in REPORTS | UFP QAPP Worksheets.	•			
Refer to summary reports found in REPORTS | Event Tracking Reports | Event Status: All Data Types, Event Status: Chemistry Detail, and Unplanned Samples to review planned and unplanned samples and test methods.	•			All locations planned to be sampled have associated data and are highlighted green. Unplanned samples lists only trip blanks.
Was the sampling design reviewed for consistency with stated objectives? Refer to MAPS | Export to Google Earth to review sampling locations.	•			
Were data quality indicators (DQIs) from the DoD QSM used for this event? Review and discuss any DQIs that deviated from the DoD QSM. Refer to the UFP QAPP and to REPORTS | Environmental Setup Reports | Analyte Criteria, which highlights items that were modified from the original templates based on the DoD QSM.	•			All methods were completed under QSM. In a few instances samples that failed QC were not reextracted due to being well outside hold time or having no further volume. In all cases, the reextraction/analysis outside hold time would result in the same qualification or additional qualification. In these instances, the data were narrated in the lab reports, qualified accordingly during validation, and reviewed during the DUA. Data usability was not considered impacted.
Review Data				
If Event Planning was performed in FUDSChem, were all samples and measurements identified in REPORTS | Event Tracking Reports | Event Status: All Data Types completed and approved (all checked cells are green)?	•			LTD is pending approval and we are still working through a way to add the GWD for each port considering the way the FLUTe construction details were entered. But all lab, EMI, WCI, WINT, and LDI updates needed have been loaded and approved.
If Event Planning was performed in FUDSChem, were all samples identified in REPORTS | Event Tracking Reports | Event Status: Chemistry Detail collected and approved (all checked cells are green), or notated to explain discrepancies?	•			All are green
If Event Planning was performed in FUDSChem, were all samples identified in REPORTS | Event Tracking Reports | Unplanned Samples reviewed to ensure correct completeness calculations?	•			Only trip blanks are listed as unplanned samples
Were deviations from planned activities (e.g., number and locations of samples, holding time exceedances, damaged samples, non-compliant PT sample results, and SOP deviations) reviewed to determine their impacts on the data usability? If Event Planning was performed in FUDSChem, refer to REPORTS | Data Usability Assessment Reports | Project Completeness.	•			Field completeness is 100% . Analytical completeness is 99.8%; therefore, the overall completeness meets the goal of 95%.
Have all Location related placeholders, such as centroid coordinates, been resolved? Review REPORTS | Data Assessment Reports | Locations.	•			

Data Usability Summary

Review Questions	Yes	No	NA	Comment
Review Data				
Were laboratory and data review reports for each Sample Delivery Group (SDG) associated with the event present in the FUDSChem library for the project? Refer to the list of SDGs listed on the cover page of the Data Usability Assessment Summary Report found under REPORTS | Data Usability Assessment Reports.	•			
Were all data review reports reviewed? Look for patterns, trends, and anomalies (e.g., unexpected results). Refer to the Data Review Reports in the project library as well as the event summary reports located in REPORTS | Data Usability Assessment Reports.	•			See text in Q1 November 2023 Field report. Generally, normal trends in qualifications for blank detections or %R nonconformance.
Were all data review reports associated with an approved eQAPP? Review the footer of the Data Review report in the Library to identify the version of the eQAPP that was used.	•			eQAPP_USNAE-D01ME0004-07-RIFS.106740
Were there any implications of unacceptable QC sample results and does this impact sample results? If so, did any qualifiers require revision using the Sample Qualification tab of this interface?	•			Several X qualifiers changed to R.
Were sensitivity requirements met, as compared to regulatory Project Action or Screening Limits? Review REPORTS | Data Usability Assessment Reports | Sensitivity Summary.		•		Benzo(a)anthracene, dibenzo(a,h)anthracene, naphthalene in all samples analyzed by PAH SIM exceeded the PAL; however, these were anticipated in the QAPP and are already analyzed by SIM.
Were any sample results recommended for rejection during validation (X qualified)? If so, have all X qualifiers been revised to R or J using the Sample Qualification tab of this interface?	•			Several PCB aroclors were rejected for sample SY-OBMW4R-110723 due to a low surrogate as a result of spilled sample in the lab. EPH C9-C18 aliphatics in sample SY-BRMW10-65-75-110923 and benzoic acid in several samples were rejected due to LCS or LCSD %R below the lower rejection limit.
Were all LTM related parameters required for the project, such as groundwater measurements, environmental parameters, and well screen intervals found to be complete and correctly reported?	•			GWD is still pending a way to load for each interval.
Have all sections of the Dashboard linked Project Tracking Report been documented as complete?		•		Field parameters are still pending per comments above. (GWD issue)
Document Usability/Draw Conclusions				
Based on the previous 'Review Data' documentation, are there any limitations on the use of the data associated with this event?		•		
Describe the conclusions reached during this Data Usability Assessment.	•			Considering the results of this report, the data collected as part of the November 2023 sampling event (Q1) are usable for making project decisions relative to the established objectives.
Lessons Learned/Recommendations				
Were any Program level Lessons Learned identified? (e.g., SW8330 was not the best fit for this site and MS/MS should be considered)	•			Analysis of the CVOC list of VOCs by SIM has resulted in detection of additional CVOC analytes at additional wells. This additional method has added value to the program results.
Were any Project level Lessons Learned identified? (e.g., ISM sampling resulted in anomalies to be resolved in the future, or current locations not comparable to historical data)		•		
Are there any additional items associated with this sampling event that need clarification?		•		

Data Usability Summary

Review Questions	Yes	No	NA	Comment
Lessons Learned/Recommendations				
Were any Sample level Lessons Learned identified? (e.g., a particular well may be expected to be dry in the future)		•		